

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	2020-008-BR	COOK	62	1
		ILLINOIS	CONTRACT NO. 62K79	

PROJECT IS LOCATED IN THE VILLAGES OF
GLENWOOD AND LYNWOOD

TRAFFIC DATA

IL 394:
2017 ADT = 49,300
POSTED SPEED = 55 MPH

GLENWOOD DYER RD:
2018 ADT = 11,000
POSTED SPEED = 40 MPH

**PROPOSED
HIGHWAY PLANS**

FAP ROUTE 332: IL 394 (BISHOP FORD EXPWY)
AT GLENWOOD-DYER RD AND RAMPS (SN 016-0624)
SECTION 2020-008-BR
PROJECT NHPP-9UF1(446)
BRIDGE REPAIR, BRIDGE JOINT RECONSTRUCTION,
BRIDGE DECK OVERLAY AND TRAFFIC SIGNAL REPLACEMENT
COOK COUNTY

C-91-197-20

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

Robert T. Boro
DATE: March 10, 2021



SIGNATURE AND SEAL
APPLY TO DRAWINGS: EXPIRATION DATE: 11-30-2021
1, 3-6

CRAF ENGINEERING
THOMAS N. STEVENS, P.E.
*062-046898

Thomas N. Stevens
DATE: March 10, 2021



SIGNATURE AND SEAL
APPLY TO DRAWINGS: EXPIRATION DATE: 11-30-2021
2, 7-12, 54-62

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

Moussa A. Issa
DATE: March 10, 2021



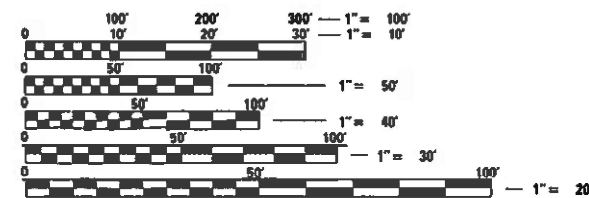
SIGNATURE AND SEAL EXPIRATION DATE: 11-30-2022
APPLY TO DRAWINGS:
33-53

GANDHI AND ASSOCIATES, INC.
NARENDRA C. THAKKAR, P.E.
#062-035883

Narendra C. Thakkar
DATE: March 10, 2021



SIGNATURE AND SEAL EXPIRATION DATE: 11-30-2021
APPLY TO DRAWINGS:
13-32

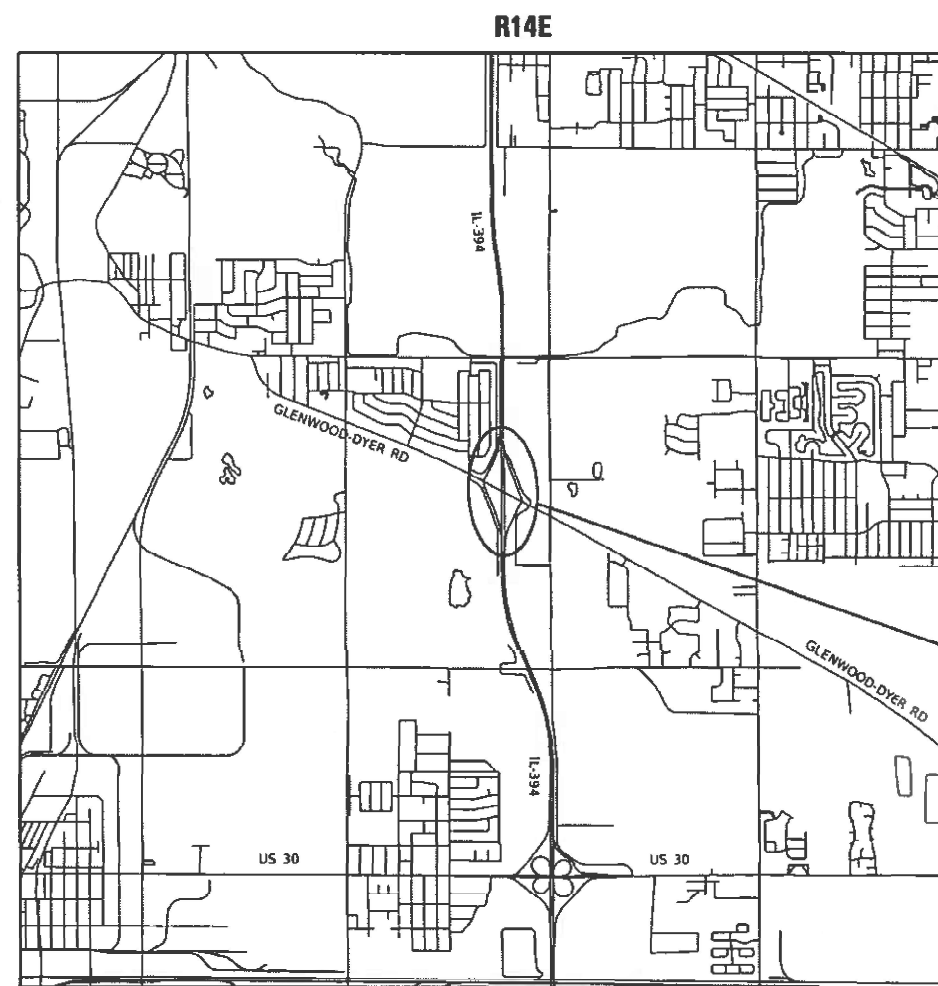


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD
ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT
CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS
ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

PROJECT ENGINEER: PRAVEEN KAINI, PE, (847) 705-4237
PROJECT MANAGER: J. ALAIN MIDY, PE, (847) 221-3056

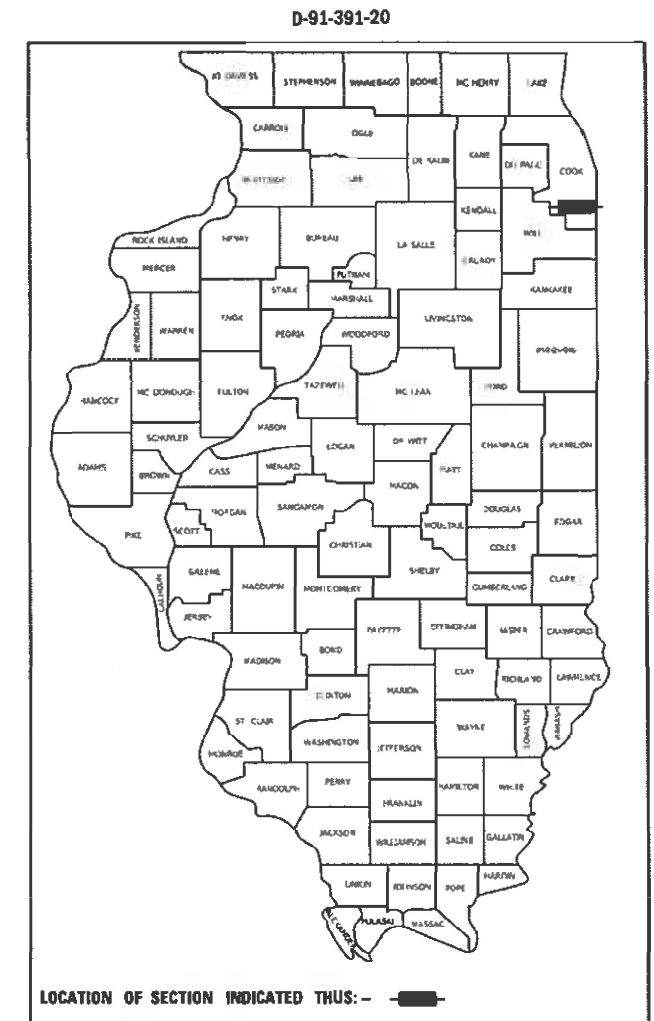
CONTRACT NO. 62K79



BLOOM TOWNSHIP
GROSS AND NET LENGTH = 1160 FT. = 0.22 MILE

IL 394 AT GLENWOOD-DYER RD
(3.1 MI S OF I-80)
SN 016-0624

HBM
ENGINEERING GROUP, LLC



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED *March 15, 2021*
Jose Rivero
REGIONAL ENGINEER

May 7, 2021
Joe A. Etk
ENGINEER OF DESIGN AND ENVIRONMENT

May 7, 2021
James J. Gu
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

INDEX OF SHEETS

SHEET NO.	SHEET DESCRIPTION
1	COVER SHEET
2	GENERAL NOTES AND INDEX OF SHEETS
3-6	SUMMARY OF QUANTITIES
7	TYPICAL SECTION MOT
8-10	SUGGESTED MAINTENANCE OF TRAFFIC
11	ROADWAY DETAILS AND MIX TABLE
12	ROADWAY AND PAVEMENT MARKING PLAN
13-32	TRAFFIC SIGNAL PLANS
33-53	S.N. 016-0624 GLENWOOD-DYER RD. OVER IL RTE. 394
54	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT (BD-22)
55	BUTT JOINT HMA TAPER DETAILS (BD-32)
56	ENTRANCE AND EXIT RAMP CLOSURE DETAILS (TC-08)
57	TRAFFIC CONTROL DETAILS FOR FREEWAY SINGLE AND MULT-LANE WEAVE (TC-9)
58	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS (TC-10)
59	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) (TC-11)
60	DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13)
61	TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES (TC-17)
62	ARTERIAL ROAD INFORMATION SIGN (TC-22)

STATE STANDARDS

000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
442201-03	CLASS C AND D PATCHES
630001-12	STEEL PLATE BEAM GUARDRAIL
701006-05	OFF-RD OPERATIONS, 2L, 2W, 15' (4.5m) TO 24" (600mm) FROM PAVEMENT EDGE
701106-02	OFF-RD OPERATIONS, MULTILANE, MORE THAN 15' (4.5m) AWAY
701400-10	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
701401-12	LANE CLOSURE, FREEWAY/EXPRESSWAY
701411-09	LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP, FOR SPEEDS \geq 45 MPH
701428-01	TRAFFIC CONTROL SETUP AND REMOVAL FREEWAY/EXPRESSWAY
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701502-09	URBAN LANE CLOSURE, 2L, 2W, WITH BIDIRECTIONAL LEFT TURN LANE
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701901-08	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
780001-05	TYPICAL PAVEMENT MARKINGS
782006-01	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS
814001-03	HANDHOLES
814006-03	DOUBLE HANDHOLES
862001-01	UNINTERRUPTABLE POWER SUPPLY (UPS)
873001-02	TRAFFIC SIGNAL GROUNDING & BONDING
877001-08	STEEL MAST ARM ASSEMBLY AND POLE 16' THROUGH 55'
878001-11	CONCRETE FOUNDATION DETAILS
880006-01	TRAFFIC SIGNAL MOUNTING DETAILS
886001-01	DETECTOR LOOP INSTALLATIONS

GENERAL NOTES

- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT 1-800-892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES. 48 HOUR NOTIFICATION IS REQUIRED.
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, COOK COUNTY AND THE VILLAGES OF GLENWOOD AND LYNWOOD.
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT), IN ACCORDANCE WITH THE PLAN DETAIL AND THE DISTRICT ONE "BUTT JOINT AND HMA DETAILS" (BD-32).
- ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE PLACED AT NO ADDITIONAL COST TO THE DEPARTMENT.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION. THIS SHALL INCLUDE LOCATING THE MAST ARM FOUNDATIONS AND VERIFYING THE MAST ARM LENGTHS.
- THE CONTRACTOR SHALL REQUEST AND GAIN APPROVAL FROM THE ILLINOIS DEPARTMENT OF TRANSPORTATION'S EXPRESSWAY TRAFFIC OPERATION ENGINEER AT www.idotks.com TWENTY-FOUR (24) HOURS IN ADVANCE OF ALL DAILY LANE, RAMP AND SHOULDER CLOSURES AND 7 DAYS IN ADVANCE OF ALL PERMANENT AND WEEKEND CLOSURES ON ALL FREEWAYS AND/OR EXPRESSWAYS IN DISTRICT ONE. THIS ADVANCE NOTIFICATION IS CALCULATED BASED ON WORKWEEK OF MONDAY THROUGH FRIDAY AND SHALL NOT INCLUDE WEEKENDS OR HOLIDAYS.
- ALL STAGE CHANGES REQUIRING THE STOPPING AND/OR THE PACING OF TRAFFIC SHALL TAKE PLACE DURING THE ALLOWABLE HOURS FOR FULL EXPRESSWAY CLOSURES AND SHALL BE APPROVED BY THE DEPARTMENT. THE CONTRACTOR SHALL NOTIFY THE THE DISTRICT ONE EXPRESSWAY TRAFFIC CONTROL SUPERVISOR AT LEAST 3 WORKING DAYS (WEEKENDS AND HOLIDAYS DO NOT COUNT INTO THIS 72 HOURS NOTIFICATION) IN ADVANCE OF ANY PROPOSED STAGE CHANGE.
- A MAINTENANCE OF TRAFFIC PLAN SHALL BE SUBMITTED TO THE DISTRICT ONE EXPRESSWAY TRAFFIC CONTROL SUPERVISOR 14 DAYS IN ADVANCE OF ANY STAGE CHANGES OR FULL EXPRESSWAY CLOSURES. THE MAINTENANCE OF TRAFFIC PLAN SHALL INCLUDE, BUT NOT BE LIMITED TO: LANE AND RAMP CLOSURES, EXISTING GEOMETRICS, AND EQUIPMENT AND MATERIAL LOCATION.
- THE RESIDENT ENGINEER SHALL VERIFY THE LOCATIONS OF ALL EXISTING PAVEMENT MARKINGS PRIOR TO IMPLEMENTING MAINTENANCE OF TRAFFIC OPERATIONS.
- THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE ARTERIAL TRAFFIC CONTROL SUPERVISOR AT KALPANA.KANNAN-HOSADURGA@ILLINOIS.GOV AND THE DISTRICT ONE EXPRESSWAY TRAFFIC CONTROL SUPERVISOR AT CARLOS.MUNOZ@ILLINOIS.GOV A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
- PAVEMENT MARKING TAPE, TYPE IV SHALL BE USED FOR TEMPORARY PAVEMENT MARKINGS ON ALL FINAL SURFACES.
- IDOT FACILITIES ARE NOT LOCATED BY JULIE OR DIGGER. IDOT ELECTRICAL FACILITIES INCLUDING ROADWAY LIGHTING, FIBER OPTIC, ITS EQUIPMENT, TRAFFIC SIGNAL AND PUMP STATION FACILITIES ARE LOCATED BY THE DEPARTMENT'S ELECTRICAL MAINTENANCE CONTRACTOR. AS OF THE LETTING DATE, CONTACT THE MEADE ELECTRIC COMPANY AT 773-287-7672.
- THE RESIDENT ENGINEER SHALL CONTACT PATRICE HARRIS, AREA TRAFFIC FIELD TECHNICIAN, AT Patrice.harris@illinois.gov A MINIMUM OF TWO WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKINGS AS SHOWN ON PLAN.
- LOCATIONS OF DAMAGED GUARDRAIL TO BE REMOVED AND REPLACED WILL BE DETERMINED IN THE FIELD BY THE ENGINEER. THE PROPOSED GUARDRAIL SHALL MATCH THE HEIGHT OF THE EXISTING GUARDRAIL.
- THE CONTRACTOR SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 72 HOURS IN ADVANCE OF BEGINNING WORK.
- THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE ORDERING ANY MATERIALS AND STARTING ANY WORK. FOR LOCATIONS OF UTILITIES, LOCALLY OWNED EQUIPMENT, LEASED ENFORCEMENT CAMERA SYSTEM FACILITIES AND IDOT UNDERGROUND FACILITIES, CONTACT THE LOCAL COUNTIES, MUNICIPALITIES AND IDOT FOR LOCATES. THE CONTRACTOR SHALL CALL "JULIE" AT (800) 892-0123 OR 811, IN THE CITY OF CHICAGO CONTACT DIGGER AT (312) 744-7000 FOR FIELD LOCATIONS OF BURIED UTILITIES (48 HOURS NOTIFICATION REQUIRED).
- 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.
- THE CONTRACTOR SHALL CHECK THE PROPOSED TRAFFIC SIGNAL EQUIPMENT LOCATIONS FOR OVERHEAD UTILITY CONFLICTS. THE CONTRACTOR SHALL COORDINATE ANY CONFLICTS WITH THE UTILITY COMPANIES AND THE RESIDENT ENGINEER BEFORE ORDERING MATERIALS.
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, LOCAL GOVERNMENT AGENCIES AND IDOT.
- RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIAN, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.
- A CONCRETE APRON SHALL NOT BE REQUIRED FOR NEW UPS INSTALLATIONS ADJACENT TO EXISTING IMPERVIOUS SURFACES THAT SATISFY THE NEED OF CONCRETE APRON, AS DIRECTED BY THE ENGINEER.

MODEL NUMBER: NMM16
FILE NAME: 311115



USER NAME = \$USERS	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = \$SCALES	CHECKED -	REVISED -
PLOT DATE = \$DATES	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GENERAL NOTES AND INDEX OF SHEETS
GLENWOOD-DYER RD OVER IL-394**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	2020-008-BR	COOK	62	2
				CONTRACT NO. 62K79
		ILLINOIS	FED. AID PROJECT	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				80% FED 20% STATE		***
				BRIDGE	SAFETY	SAFETY
				0059	0021	0021
				SN 016-0624	URBAN	URBAN
				URBAN		
28000510	INLET FILTERS	EACH	8	8		
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	267	267		
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	298	298		
40604062	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70	TON	58	58		
50102400	CONCRETE REMOVAL	CU YD	17.6	17.6		
50157300	PROTECTIVE SHIELD	SQ YD	528	528		
50300255	CONCRETE SUPERSTRUCTURE	CU YD	23	23		
50300260	BRIDGE DECK GROOVING	SQ YD	1049	1049		
50300300	PROTECTIVE COAT	SQ YD	1571	1571		
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	2880	2880		
50800515	BAR SPLICERS	EACH	64	64		
52000110	PREFORMED JOINT STRIP SEAL	FOOT	122	122		
59000200	EPOXY CRACK INJECTION	FOOT	84	84		
* 63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	50		50	
63200310	GUARDRAIL REMOVAL	FOOT	50		50	

* SPECIALTY ITEM

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				80% FED 20% STATE		***
				BRIDGE	SAFETY	SAFETY
				0059	0021	0021
				SN 016-0624	URBAN	URBAN
				URBAN		
* 66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	40		40	
* 66900530	SOIL DISPOSAL ANALYSIS	EACH	2		2	
* 66901001	REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN	LSUM	1		1	
* 66901003	REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	LSUM	1		1	
* 66901006	REGULATED SUBSTANCES MONITORING	CAL DA	4		4	
* 67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	12	12		
67100100	MOBILIZATION	L SUM	1	1		
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	30	30		
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	150	150		
70300900	PAVEMENT MARKING TAPE, TYPE IV - LETTERS AND SYMBOLS	SQ FT	218	218		
70300904	PAVEMENT MARKING TAPE, TYPE IV 4"	FOOT	8574	8574		
70300906	PAVEMENT MARKING TAPE, TYPE IV 6"	FOOT	809	809		
70300912	PAVEMENT MARKING TAPE, TYPE IV 12"	FOOT	29	29		
70400100	TEMPORARY CONCRETE BARRIER	FOOT	992	992		
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	728	728		

MODEL: D:\p4\hbm\1707-732_Accurate_PFE1814-010\WO_#33.dwg User: allissa Date: 3/19/2021



USER NAME = allissa
 PLOT SCALE = 100,0000' / in.
 PLOT DATE = 3/19/2021

DESIGNED - AMI
 DRAWN - AMI
 CHECKED - RTB
 DATE - 3/19/2021

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES
 GLENWOOD-DYER RD OVER IL-394**

SCALE: 100,0000' / in SHEET 1 OF 4 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	2020-008-BR	COOK	62	3
CONTRACT NO. 62K79			REV-SEP	
ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				80% FED	20% STATE	***
				BRIDGE	SAFETY	SAFETY
				0059	0021	0021
				SN 016-0624	URBAN	URBAN
				URBAN		
70600255	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	4	4		
70600270	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, WIDE), TEST LEVEL 3	EACH	2	2		
70600322	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	4	4		
70600330	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE), TEST LEVEL 3	EACH	1	1		
* 72000200	SIGN PANEL - TYPE 2	SQ FT	24		24	
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	109	109		
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	2995	2995		
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	329	329		
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	121	121		
* 78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	916	916		
* 78009012	MODIFIED URETHANE PAVEMENT MARKING - LINE 12"	FOOT	120	120		
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	52	52		
* 78200011	BARRIER WALL REFLECTORS, TYPE C	EACH	80	80		
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	43	43		
* 81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	3433		3433	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				80% FED	20% STATE	***
				BRIDGE	SAFETY	SAFETY
				0059	0021	0021
				SN 016-0624	URBAN	URBAN
				URBAN		
* 81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	227		227	
* 81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	689		689	
* 81100600	CONDUIT ATTACHED TO STRUCTURE, 2" DIA., GALVANIZED STEEL	FOOT	260		260	
* 81400100	HANDHOLE	EACH	9		9	
* 81400200	HEAVY-DUTY HANDHOLE	EACH	7		7	
* 81400300	DOUBLE HANDHOLE	EACH	3		3	
* 85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	3		3	
* 86400100	TRANSCEIVER - FIBER OPTIC	EACH	2		2	
* 87300925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	2205		2205	
* 87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	661			661
* 87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	4115		4115	
* 87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	679		679	
* 87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	3435		3435	
* 87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	979		979	
* 87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	2153		2153	

* SPECIALTY ITEM

MODEL Path: P:\107-732 Accurate PFE\1814-010\WO #32 Glenwood Dyer Rd IL RTE 294\Sheet\Glenwood_Sheet10150624-503-5001.dwg



USER NAME = allissa	DESIGNED - AMI	REVISED -
PLOT SCALE = 100,0000' / in.	DRAWN - AMI	REVISED -
PLOT DATE = 3/19/2021	CHECKED - RTB	REVISED -
	DATE - 3/19/2021	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES
GLENWOOD-DYER RD OVER IL-394**

SCALE: 100,0000' / in SHEET 2 OF 4 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	2020-008-BR	COOK	62	4
			CONTRACT NO. 62K79	
ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				80% FED 20% STATE		***
				BRIDGE	SAFETY	SAFETY
				0059	0021	0021
				SN 016-0624	URBAN	URBAN
* 87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	6		6	
* 87700150	STEEL MAST ARM ASSEMBLY AND POLE, 22 FT.	EACH	1		1	
* 87700160	STEEL MAST ARM ASSEMBLY AND POLE, 24 FT.	EACH	1		1	
* 87700170	STEEL MAST ARM ASSEMBLY AND POLE, 26 FT.	EACH	4		4	
* 87700200	STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	1		1	
* 87700240	STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.	EACH	1		1	
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	32		32	
87800150	CONCRETE FOUNDATION, TYPE C	FOOT	8		8	
87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	73.5		73.5	
87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	13		13	
* 87900200	DRILL EXISTING HANDHOLE	EACH	1		1	
* 88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	14		14	
* 88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	8		8	
* 88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2		2	
* 88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2		2	

* SPECIALTY ITEM

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				80% FED 20% STATE		***
				BRIDGE	SAFETY	SAFETY
				0059	0021	0021
				SN 016-0624	URBAN	URBAN
* 88200410	TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	16		16	
* 88500100	INDUCTIVE LOOP DETECTOR	EACH	14		14	
* 88600100	DETECTOR LOOP, TYPE I	FOOT	964		964	
* 88700200	LIGHT DETECTOR	EACH	4			4
* 88700300	LIGHT DETECTOR AMPLIFIER	EACH	2			2
* 89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	2		2	
* X0324085	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	661			661
X0326766	CLEAN & RESEAL RELIEF JOINT	FOOT	84	84		
* X0327577	PROTECT AND MAINTAIN EXISTING UNDERPASS LUMINAIRE	L SUM	1	1		
78300202	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	1818	1818		
* X1400081	FULL-ACTUATED CONTROLLER AND TYPE SUPER P CABINET (SPECIAL)	EACH	2		2	
* X1400150	SERVICE INSTALLATION, GROUND MOUNTED, METERED	EACH	2		2	
* X4421791	CLASS D PATCHES, TYPE IV, 12 INCH (SPECIAL)	SQ YD	400	400		
* X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1		
* X7011015	TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS)	L SUM	1	1		

MODEL: D:\cvt\... FILE NAME: P11707-732 Accurate P1184-010W0 #32 Glenwood Dyer Rd. IL RTE 394 Sheets\Civil Sheets\0160614-504-5002.dgn



USER NAME = all.issa	DESIGNED - AMI	REVISED -
PLOT SCALE = 100.0000' / in.	DRAWN - AMI	REVISED -
PLOT DATE = 3/19/2021	CHECKED - RTB	REVISED -
	DATE - 3/19/2021	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES
GLENWOOD-DYER RD OVER IL-394**

SCALE: 100.0000' / 1" SHEET 3 OF 4 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	2020-008-BR	COOK	62	5
			CONTRACT NO. 62K79	
ILLINOIS FED. AID PROJECT				

REV-SEP

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				80% FED 20% STATE		***
				BRIDGE	SAFETY	SAFETY
				0059	0021	0021
				SN 016-0624	URBAN	URBAN
				URBAN		
X7030005	TEMPORARY PAVEMENT MARKING REMOVAL	SQ FT	3510	3510		
X7040125	PINNING TEMPORARY CONCRETE BARRIER	EACH	314	314		
* X8620200	UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	2		2	
* X8710024	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F	FOOT	2205		2205	
Z0001800	APPROACH SLAB REPAIR (PARTIAL DEPTH)	SQ YD	2	2		
Z0001905	STRUCTURAL STEEL REPAIR	POUND	1720	1720		
Z0006014	BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/2 INCHES	SQ YD	1055	1055		
Z0012130	BRIDGE DECK SCARIFICATION 3/4"	SQ YD	1055	1055		
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	238	238		
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	43	43		
* Z0033028	MAINTENANCE OF LIGHTING SYSTEM	CAL MO	6	6		
* Z0033056	OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1		1	
* Z0073200	TEMPORARY SHORING AND CRIBBING	EACH	11	11		
* Z0073510	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	2		2	

* SPECIALTY ITEM

** 0042

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				80% FED 20% STATE		***
				BRIDGE	SAFETY	SAFETY
				0059	0021	0021
				SN 016-0624	URBAN	URBAN
				URBAN		
Ø Z0076600	TRAINEES	HOUR	500	500		
Ø Z0076604	TRAINEES - TRAINING PROGRAM GRADUATE	HOUR	500	500		
X4421701	CLASS D PATCHES, TYPE I, 5 INCH (SPECIAL)	SQ YD	8	8		

MODEL: D:\civ\11707-732 Accurate PTE184-010WV0 #32 Glenwood Dyer Rd IL RTE 394\Sheets\Civil Sheets\0160624-505-5003.dgn



USER NAME = all.issa	DESIGNED - AMI	REVISED -
PLOT SCALE = 100.0000' / in.	DRAWN - AMI	REVISED -
PLOT DATE = 3/19/2021	CHECKED - RTB	REVISED -
	DATE - 3/19/2021	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

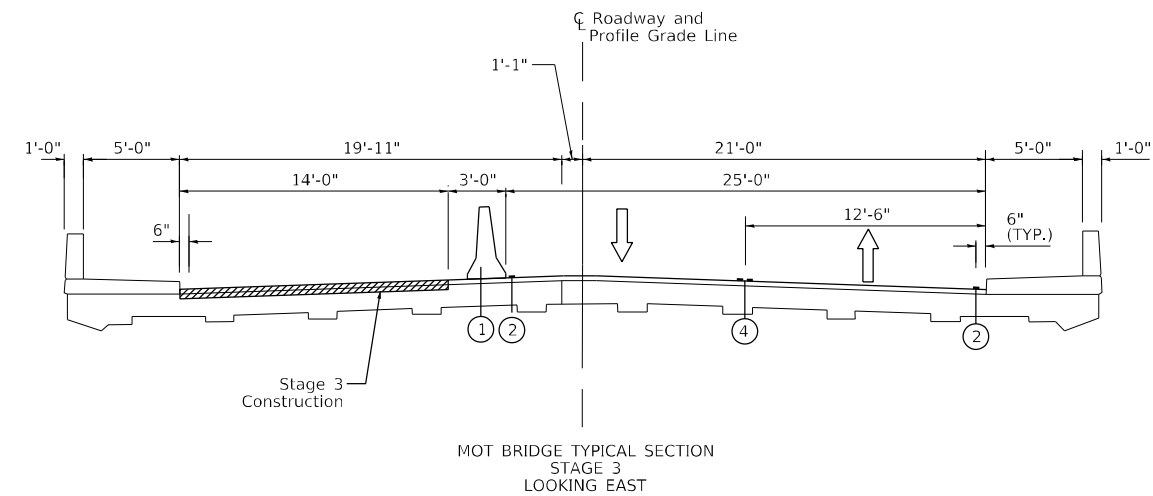
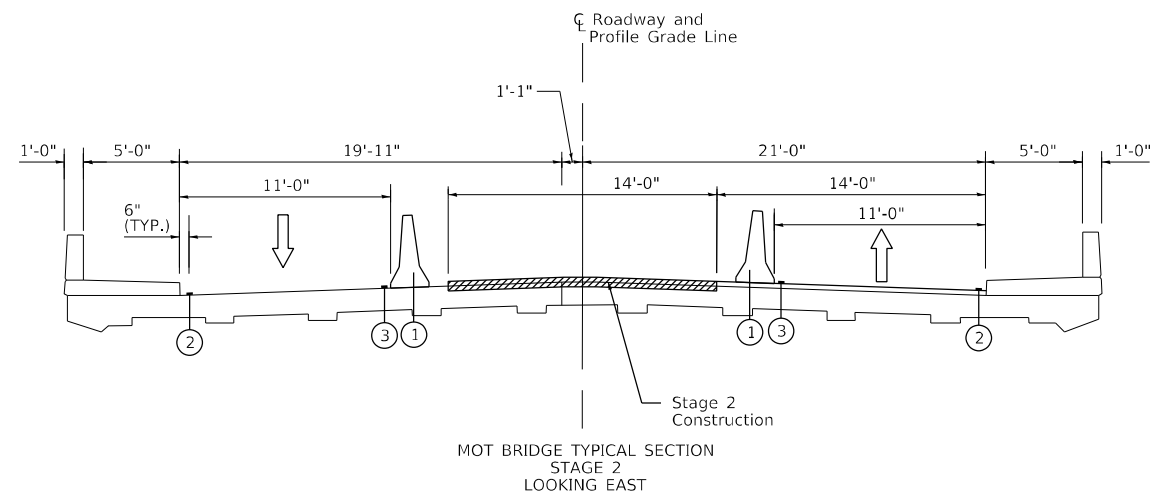
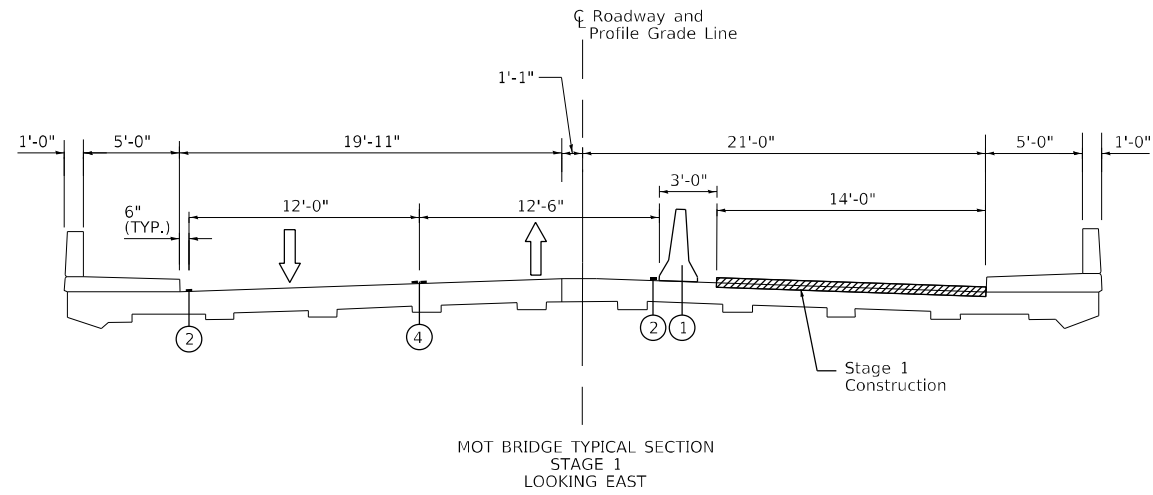
**SUMMARY OF QUANTITIES
GLENWOOD-DYER RD OVER IL-394**

SCALE: 100.0000' / 1" SHEET 4 OF 4 SHEETS STA. TO STA.

F.A.P. RTE. 332	SECTION 2020-008-BR	COUNTY COOK	TOTAL SHEETS 62	SHEET NO. 6
			CONTRACT NO. 62K79	
ILLINOIS FED. AID PROJECT				

00042

REV-SEP



MOT LEGEND

- ① TEMPORARY CONCRETE BARRIER
- ② TEMPORARY PAVEMENT MARKING - LINE 4" (WHITE)
- ③ TEMPORARY PAVEMENT MARKING - LINE 4" (YELLOW)
- ④ TEMPORARY PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW)

MODEL NUMBER: M1M1M5
FILE NUMBER: 311515



USER NAME = \$USERS	DESIGNED -	REVISED -
PLOT SCALE = \$SCALES	DRAWN -	REVISED -
PLOT DATE = \$DATES	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

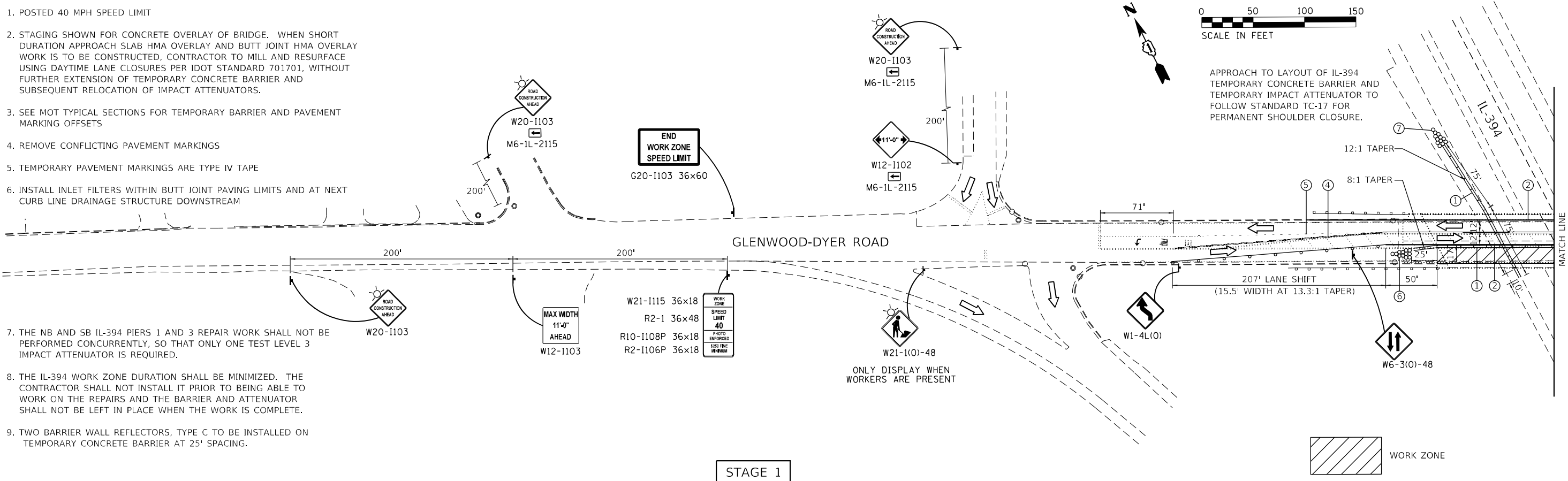
**TYPICAL SECTION MOT
GLENWOOD-DYER RD OVER IL-394**

SCALE: SHEET OF SHEETS STA. TO STA.

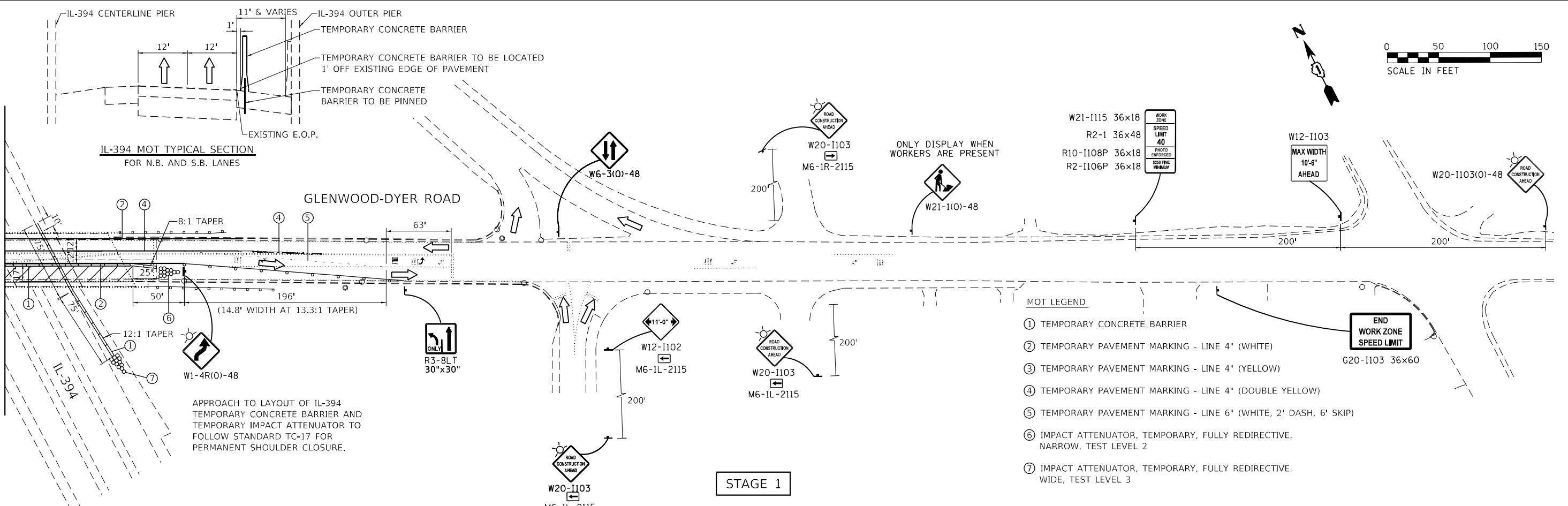
F.A.P. RTE. 332	SECTION 2020-008-BR	COUNTY COOK	TOTAL SHEETS 62	SHEET NO. 7
			CONTRACT NO. 62K79	
		ILLINOIS FED. AID PROJECT		

NOTES

1. POSTED 40 MPH SPEED LIMIT
2. STAGING SHOWN FOR CONCRETE OVERLAY OF BRIDGE. WHEN SHORT DURATION APPROACH SLAB HMA OVERLAY AND BUTT JOINT HMA OVERLAY WORK IS TO BE CONSTRUCTED, CONTRACTOR TO MILL AND RESURFACE USING DAYTIME LANE CLOSURES PER IDOT STANDARD 701701, WITHOUT FURTHER EXTENSION OF TEMPORARY CONCRETE BARRIER AND SUBSEQUENT RELOCATION OF IMPACT ATTENUATORS.
3. SEE MOT TYPICAL SECTIONS FOR TEMPORARY BARRIER AND PAVEMENT MARKING OFFSETS
4. REMOVE CONFLICTING PAVEMENT MARKINGS
5. TEMPORARY PAVEMENT MARKINGS ARE TYPE IV TAPE
6. INSTALL INLET FILTERS WITHIN BUTT JOINT PAVING LIMITS AND AT NEXT CURB LINE DRAINAGE STRUCTURE DOWNSTREAM
7. THE NB AND SB IL-394 PIERS 1 AND 3 REPAIR WORK SHALL NOT BE PERFORMED CONCURRENTLY, SO THAT ONLY ONE TEST LEVEL 3 IMPACT ATTENUATOR IS REQUIRED.
8. THE IL-394 WORK ZONE DURATION SHALL BE MINIMIZED. THE CONTRACTOR SHALL NOT INSTALL IT PRIOR TO BEING ABLE TO WORK ON THE REPAIRS AND THE BARRIER AND ATTENUATOR SHALL NOT BE LEFT IN PLACE WHEN THE WORK IS COMPLETE.
9. TWO BARRIER WALL REFLECTORS, TYPE C TO BE INSTALLED ON TEMPORARY CONCRETE BARRIER AT 25' SPACING.



STAGE 1



STAGE 1

MOT LEGEND

- ① TEMPORARY CONCRETE BARRIER
- ② TEMPORARY PAVEMENT MARKING - LINE 4" (WHITE)
- ③ TEMPORARY PAVEMENT MARKING - LINE 4" (YELLOW)
- ④ TEMPORARY PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW)
- ⑤ TEMPORARY PAVEMENT MARKING - LINE 6" (WHITE, 2' DASH, 6' SKIP)
- ⑥ IMPACT ATTENUATOR, TEMPORARY, FULLY REDIRECTIVE, NARROW, TEST LEVEL 2
- ⑦ IMPACT ATTENUATOR, TEMPORARY, FULLY REDIRECTIVE, WIDE, TEST LEVEL 3

MODEL NUMBER/NAME
FILE NUMBER/FILES



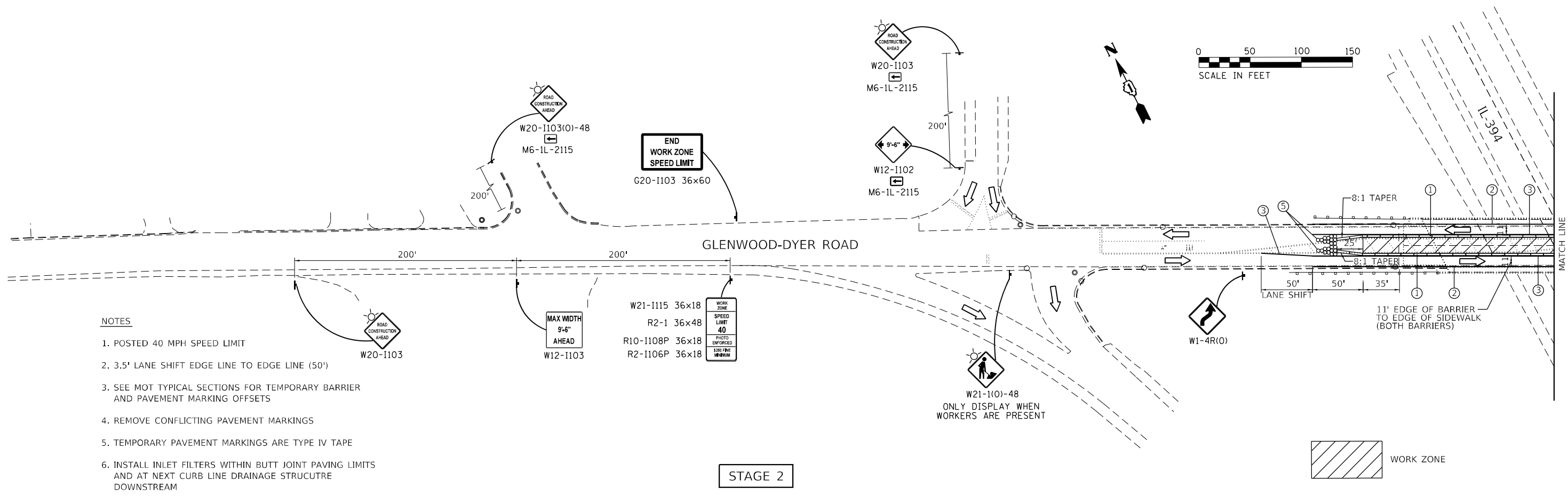
USER NAME = \$USERS	DESIGNED -	REVISED -
PLOT SCALE = \$SCALES	DRAWN -	REVISED -
PLOT DATE = \$DATES	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUGGESTED STAGE 1 MAINTENANCE OF TRAFFIC
GLENWOOD-DYER RD OVER IL-394

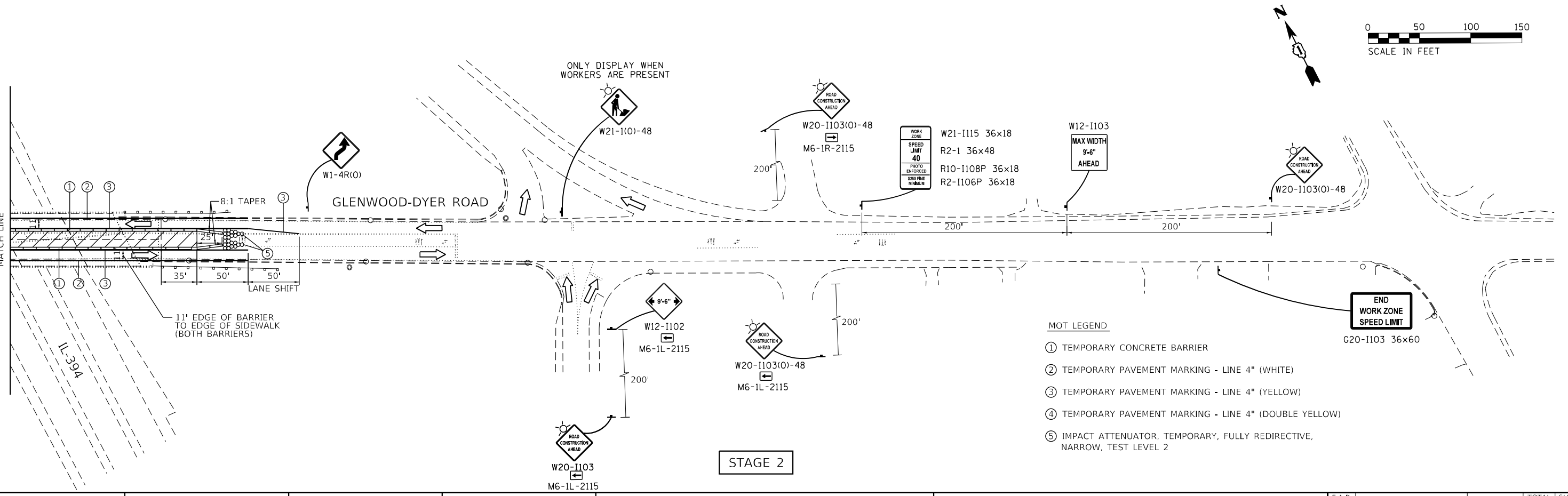
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE. 332	SECTION 2020-008-BR	COUNTY COOK	TOTAL SHEETS 62	SHEET NO. 8
CONTRACT NO. 62K79				
ILLINOIS FED. AID PROJECT				



- NOTES**
1. POSTED 40 MPH SPEED LIMIT
 2. 3.5' LANE SHIFT EDGE LINE TO EDGE LINE (50')
 3. SEE MOT TYPICAL SECTIONS FOR TEMPORARY BARRIER AND PAVEMENT MARKING OFFSETS
 4. REMOVE CONFLICTING PAVEMENT MARKINGS
 5. TEMPORARY PAVEMENT MARKINGS ARE TYPE IV TAPE
 6. INSTALL INLET FILTERS WITHIN BUTT JOINT PAVING LIMITS AND AT NEXT CURB LINE DRAINAGE STRUCTURE DOWNSTREAM

STAGE 2



- MOT LEGEND**
- ① TEMPORARY CONCRETE BARRIER
 - ② TEMPORARY PAVEMENT MARKING - LINE 4" (WHITE)
 - ③ TEMPORARY PAVEMENT MARKING - LINE 4" (YELLOW)
 - ④ TEMPORARY PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW)
 - ⑤ IMPACT ATTENUATOR, TEMPORARY, FULLY REDIRECTIVE, NARROW, TEST LEVEL 2

STAGE 2

MODEL NUMBER/NAME
FILE NUMBER/FILES



USER NAME = \$USERS	DESIGNED -	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN -	REVISED -
PLOT DATE = \$DATE\$	CHECKED -	REVISED -
	DATE -	REVISED -

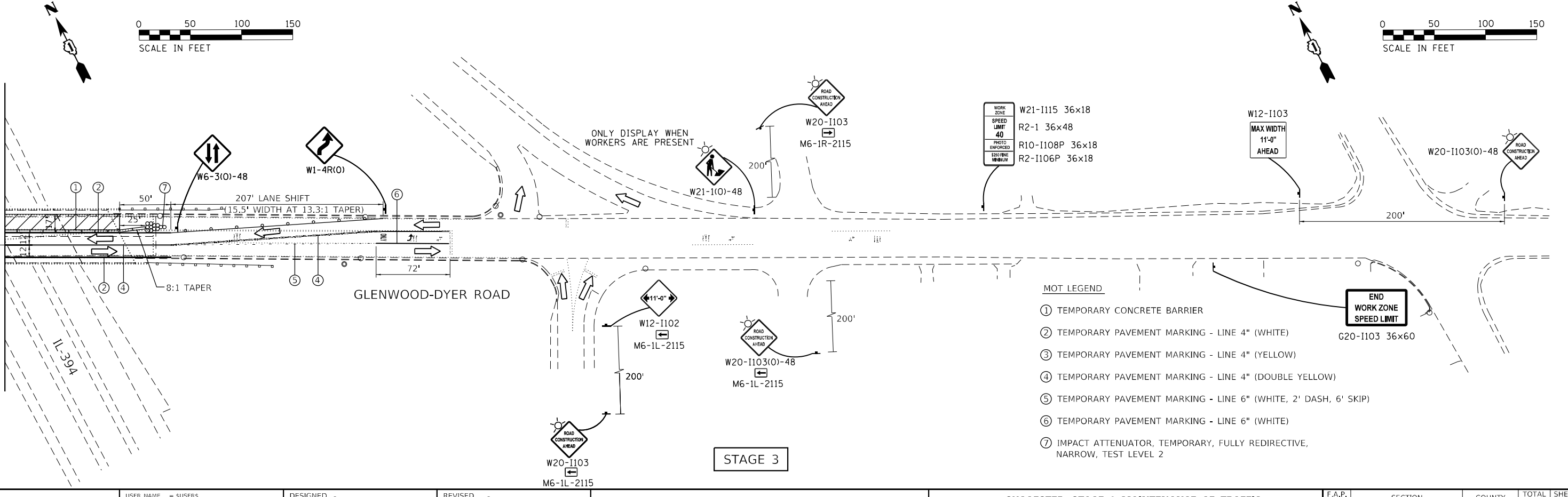
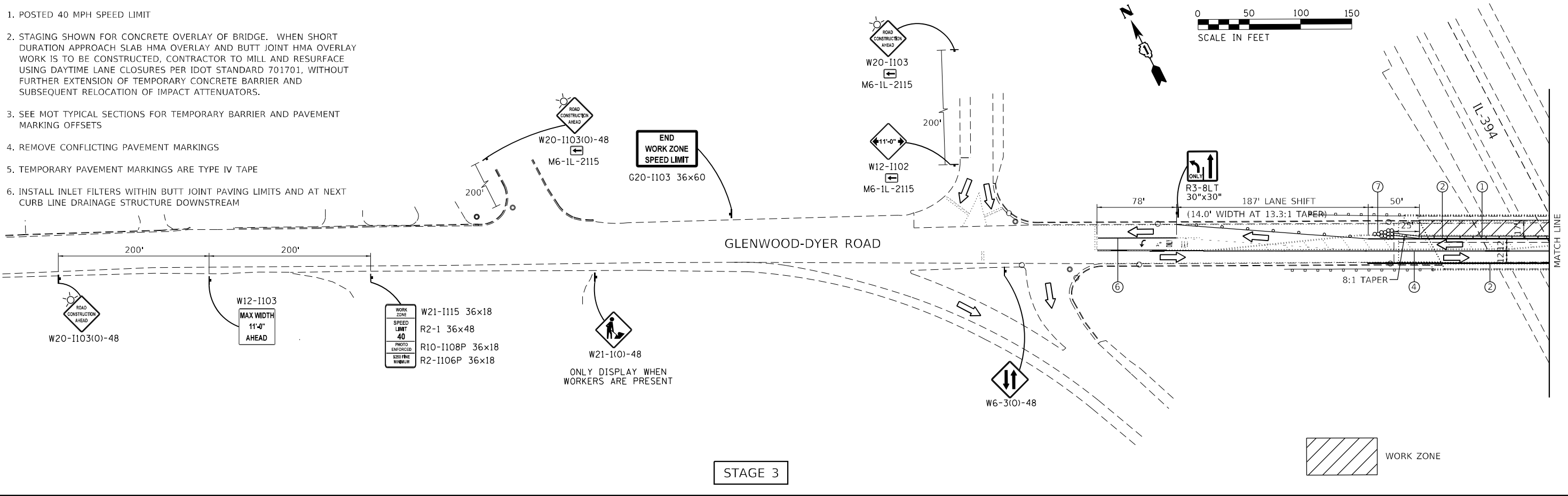
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUGGESTED STAGE 2 MAINTENANCE OF TRAFFIC GLENWOOD-DYER RD OVER IL-394			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A.P. RTE. 332	SECTION 2020-008-BR	COUNTY COOK	TOTAL SHEETS 62	SHEET NO. 9
CONTRACT NO. 62K79				
ILLINOIS FED. AID PROJECT				

NOTES

1. POSTED 40 MPH SPEED LIMIT
2. STAGING SHOWN FOR CONCRETE OVERLAY OF BRIDGE. WHEN SHORT DURATION APPROACH SLAB HMA OVERLAY AND BUTT JOINT HMA OVERLAY WORK IS TO BE CONSTRUCTED, CONTRACTOR TO MILL AND RESURFACE USING DAYTIME LANE CLOSURES PER IDOT STANDARD 701701, WITHOUT FURTHER EXTENSION OF TEMPORARY CONCRETE BARRIER AND SUBSEQUENT RELOCATION OF IMPACT ATTENUATORS.
3. SEE MOT TYPICAL SECTIONS FOR TEMPORARY BARRIER AND PAVEMENT MARKING OFFSETS
4. REMOVE CONFLICTING PAVEMENT MARKINGS
5. TEMPORARY PAVEMENT MARKINGS ARE TYPE IV TAPE
6. INSTALL INLET FILTERS WITHIN BUTT JOINT PAVING LIMITS AND AT NEXT CURB LINE DRAINAGE STRUCTURE DOWNSTREAM



MODEL NUMBER/NAME
FILE NUMBER/FILES



USER NAME = \$USERS	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = \$SCALES	CHECKED -	REVISED -
PLOT DATE = \$DATES	DATE -	REVISED -

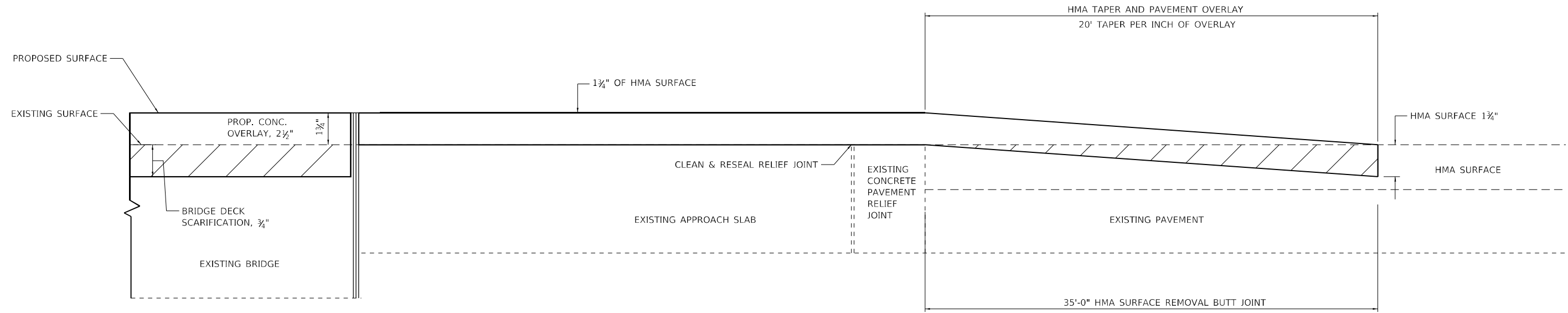
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUGGESTED STAGE 3 MAINTENANCE OF TRAFFIC GLENWOOD-DYER RD OVER IL-394			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A.P. RTE. 332	SECTION 2020-008-BR	COUNTY COOK	TOTAL SHEETS 62	SHEET NO. 10
CONTRACT NO. 62K79				
ILLINOIS FED. AID PROJECT				

NOTES:

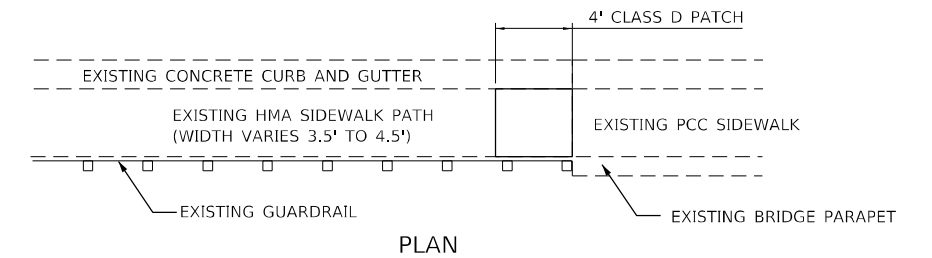
1. SEE BUTT JOINT AND HMA TAPER DETAILS (BD32) FOR ADDITIONAL NOTES AND DETAILS.



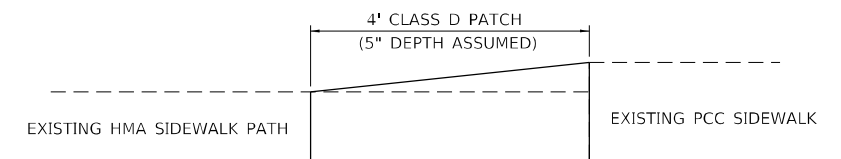
APPROACH PAVEMENT HMA OVERLAY DETAIL

HOT-MIX ASPHALT MIXTURE REQUIREMENTS		
MIXTURE TYPE	AIR Voids @ Ndes	QUALITY MANAGEMENT PROGRAM (QMP)
OVERLAY TO APPROACH SLAB		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", IL-9.5, N70 (1 3/4")	4.0% @ 70 Gyr.	QC/QA
CLASS D PATCHES 12" (SPECIAL) (FOR ROAD PATCHING)		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL-9.5mm); TOP 2"	4.0% @ 70 Gyr.	QC/QA
HOT-MIX ASPHALT BINDER (IL-19mm)	4.0% @ 70 Gyr.	QC/QA
CLASS D PATCHES 5" (SPECIAL) (FOR SIDEWALK)		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL-9.5mm); TOP 2"	4.0% @ 70 Gyr.	QC/QA
HOT-MIX ASPHALT BINDER (IL-19mm)	4.0% @ 70 Gyr.	QC/QA
QMP DESIGNATION: QUALITY CONTROL / QUALITY ASSURANCE (QC/QA); QUALITY CONTROL FOR PERFORMANCE (QCP); PAY FOR PERFORMANCE (PFP)		

THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURES IS 112 LBS/SQ YD/IN. THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY 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.



PLAN



PROFILE

HMA SIDEWALK PATH PATCHING DETAIL

MODEL NUMBER: NMMMS
FILE NAME: 311215



USER NAME = \$USERS	DESIGNED -	REVISED -
PLOT SCALE = \$SCALES	DRAWN -	REVISED -
PLOT DATE = \$DATES	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

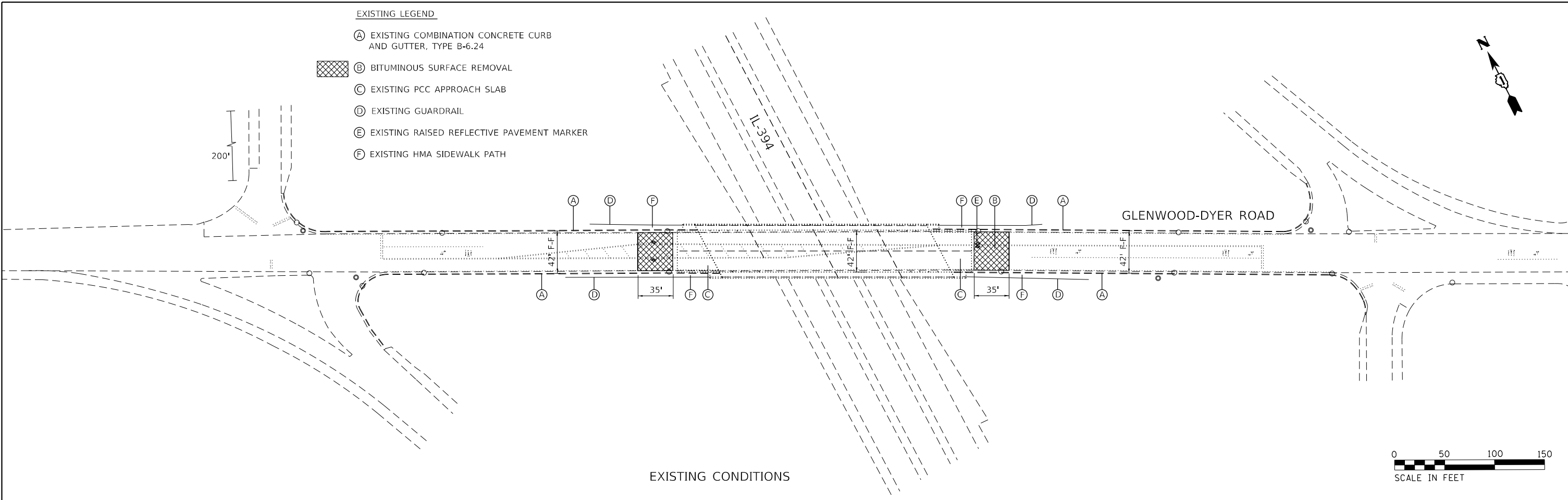
ROADWAY DETAILS AND MIX TABLE
GLENWOOD-DYER RD OVER IL-394

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	2020-008-BR	COOK	62	11
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62K79	

EXISTING LEGEND

- (A) EXISTING COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
- (B) BITUMINOUS SURFACE REMOVAL
- (C) EXISTING PCC APPROACH SLAB
- (D) EXISTING GUARDRAIL
- (E) EXISTING RAISED REFLECTIVE PAVEMENT MARKER
- (F) EXISTING HMA SIDEWALK PATH



EXISTING CONDITIONS

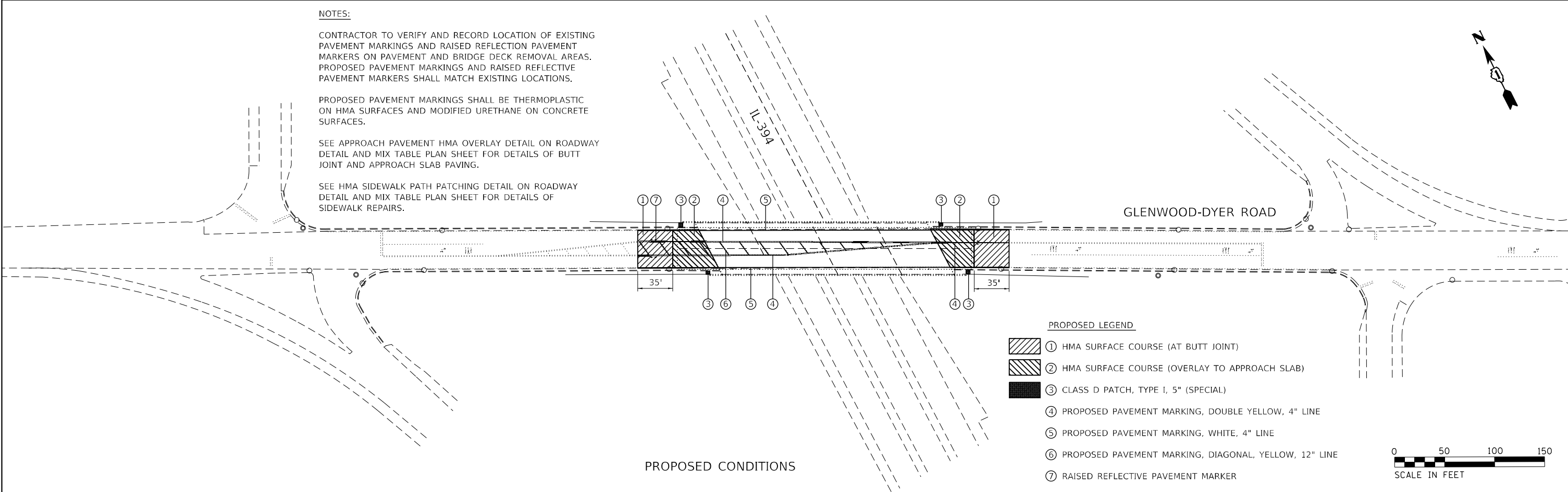
NOTES:

CONTRACTOR TO VERIFY AND RECORD LOCATION OF EXISTING PAVEMENT MARKINGS AND RAISED REFLECTION PAVEMENT MARKERS ON PAVEMENT AND BRIDGE DECK REMOVAL AREAS. PROPOSED PAVEMENT MARKINGS AND RAISED REFLECTIVE PAVEMENT MARKERS SHALL MATCH EXISTING LOCATIONS.

PROPOSED PAVEMENT MARKINGS SHALL BE THERMOPLASTIC ON HMA SURFACES AND MODIFIED URETHANE ON CONCRETE SURFACES.

SEE APPROACH PAVEMENT HMA OVERLAY DETAIL ON ROADWAY DETAIL AND MIX TABLE PLAN SHEET FOR DETAILS OF BUTT JOINT AND APPROACH SLAB PAVING.

SEE HMA SIDEWALK PATH PATCHING DETAIL ON ROADWAY DETAIL AND MIX TABLE PLAN SHEET FOR DETAILS OF SIDEWALK REPAIRS.



PROPOSED CONDITIONS

PROPOSED LEGEND

- (1) HMA SURFACE COURSE (AT BUTT JOINT)
- (2) HMA SURFACE COURSE (OVERLAY TO APPROACH SLAB)
- (3) CLASS D PATCH, TYPE I, 5" (SPECIAL)
- (4) PROPOSED PAVEMENT MARKING, DOUBLE YELLOW, 4" LINE
- (5) PROPOSED PAVEMENT MARKING, WHITE, 4" LINE
- (6) PROPOSED PAVEMENT MARKING, DIAGONAL, YELLOW, 12" LINE
- (7) RAISED REFLECTIVE PAVEMENT MARKER

MODEL NUMBER: MAMF5
FILE NAME: 011515



USER NAME = \$USERS	DESIGNED -	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN -	REVISED -
PLOT DATE = \$DATE\$	CHECKED -	REVISED -
	DATE -	REVISED -

DESIGNED -	REVISED -
DRAWN -	REVISED -
CHECKED -	REVISED -
DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY AND PAVEMENT MARKING PLAN
GLENWOOD-DYER RD OVER IL-394

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	2020-008-BR	COOK	62	12
CONTRACT NO. 62K79				
ILLINOIS FED. AID PROJECT				

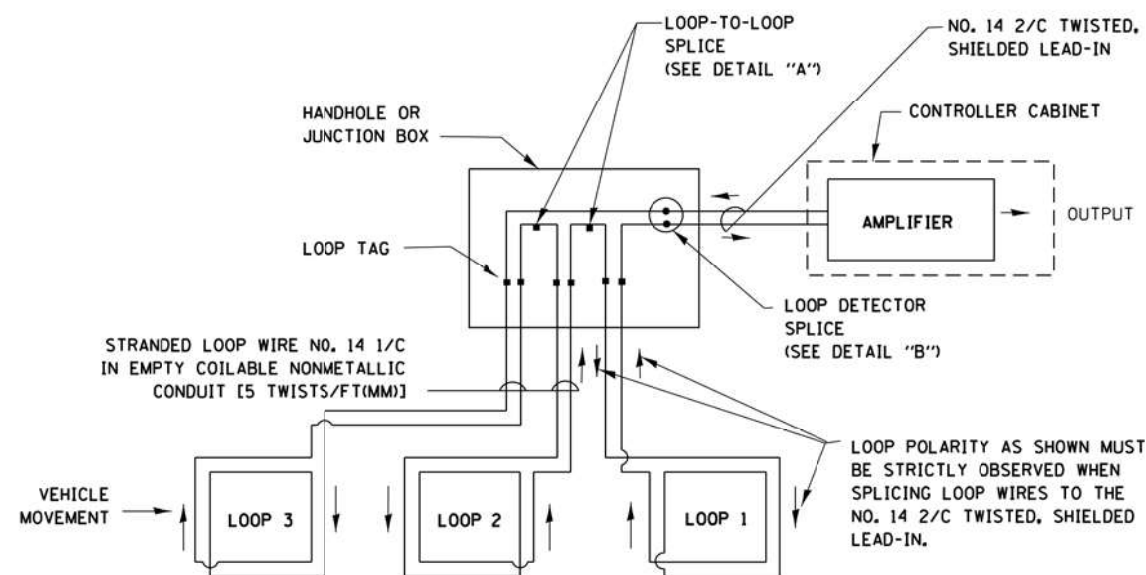
TRAFFIC SIGNAL LEGEND

(NOT TO SCALE)

ITEM	EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED
CONTROLLER CABINET			HANDHOLE -SQUARE -ROUND	 	 	SIGNAL HEAD -(P) PROGRAMMABLE SIGNAL HEAD		
COMMUNICATION CABINET			HEAVY DUTY HANDHOLE -SQUARE -ROUND	 	 	SIGNAL HEAD WITH BACKPLATE -(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE		
MASTER CONTROLLER			DOUBLE HANDHOLE			PEDESTRIAN SIGNAL HEAD AT RAILROAD INTERSECTIONS		
MASTER MASTER CONTROLLER			JUNCTION BOX			PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER		
UNINTERRUPTABLE POWER SUPPLY			RAILROAD CANTILEVER MAST ARM			ILLUMINATED SIGN "NO LEFT TURN"/"NO RIGHT TURN"		
SERVICE INSTALLATION -(P) POLE MOUNTED			RAILROAD FLASHING SIGNAL			NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE. ALL DETECTOR LOOP CABLE TO BE SHIELDED		
SERVICE INSTALLATION -(G) GROUND MOUNTED -(GM) GROUND MOUNTED METERED	 	 	RAILROAD CROSSING GATE			GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN)		
TELEPHONE CONNECTION			RAILROAD CROSSBUCK			ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1/C		
STEEL MAST ARM ASSEMBLY AND POLE			RAILROAD CONTROLLER CABINET			COAXIAL CABLE		
ALUMINUM MAST ARM ASSEMBLY AND POLE			UNDERGROUND CONDUIT (UC), GALVANIZED STEEL			VENDOR CABLE		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE			TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE			COPPER INTERCONNECT CABLE, NO. 18, 3 PAIR TWISTED, SHIELDED		
SIGNAL POST -(BM) BARREL MOUNTED - TEMPORARY			SYSTEM ITEM			FIBER OPTIC CABLE -NO. 62.5/125, MM12F -NO. 62.5/125, MM12F SM12F -NO. 62.5/125, MM12F SM24F		
WOOD POLE			INTERSECTION ITEM			GROUND ROD -(C) CONTROLLER -(M) MAST ARM -(P) POST -(S) SERVICE		
GUY WIRE			REMOVE ITEM					
SIGNAL HEAD			RELOCATE ITEM					
SIGNAL HEAD WITH BACKPLATE			ABANDON ITEM					
SIGNAL HEAD OPTICALLY PROGRAMMED			CONTROLLER CABINET AND FOUNDATION TO BE REMOVED					
FLASHER INSTALLATION -(FS) SOLAR POWERED	 	 	MAST ARM POLE AND FOUNDATION TO BE REMOVED					
PEDESTRIAN SIGNAL HEAD			SIGNAL POST AND FOUNDATION TO BE REMOVED					
PEDESTRIAN PUSH BUTTON -(APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON			DETECTOR LOOP, TYPE I					
RADAR DETECTION SENSOR			PERFORMED DETECTOR LOOP					
VIDEO DETECTION CAMERA			SAMPLING (SYSTEM) DETECTOR					
RADAR/VIDEO DETECTION ZONE			INTERSECTION AND SAMPLING (SYSTEM) DETECTOR					
PAN, TILT, ZOOM (PTZ) CAMERA			QUEUE AND SAMPLING (SYSTEM) DETECTOR					
EMERGENCY VEHICLE LIGHT DETECTOR			WIRELESS DETECTOR SENSOR					
CONFIRMATION BEACON			WIRELESS ACCESS POINT					
WIRELESS INTERCONNECT								
WIRELESS INTERCONNECT RADIO REPEATER								

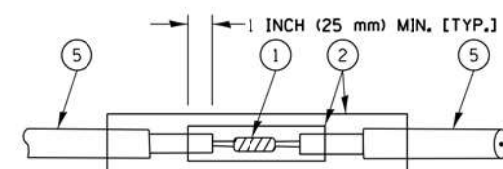
LOOP DETECTOR NOTES

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 DIVEHOLES 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.

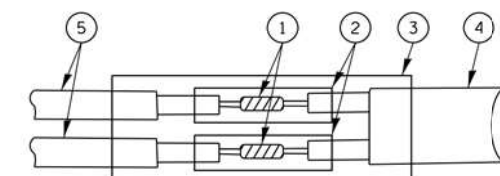


DETECTOR LOOP WIRING SCHEMATIC

- 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.



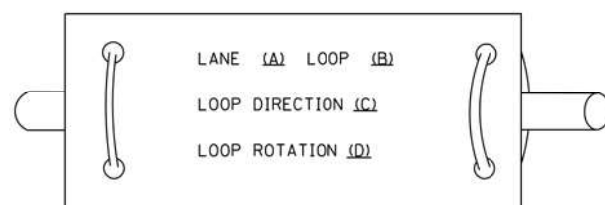
**DETAIL "A"
LOOP-TO-LOOP SPLICE**



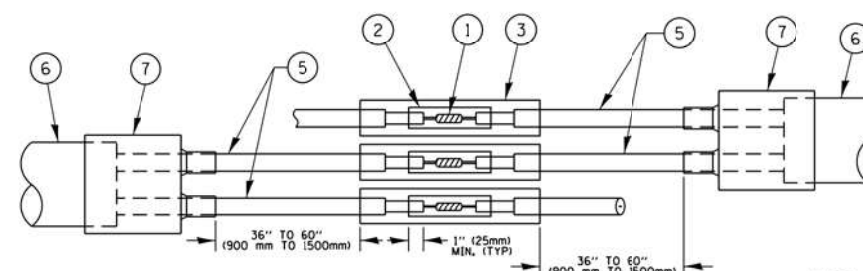
**DETAIL "B"
LOOP-TO-CONTROLLER SPLICE**

TYPE I LOOP

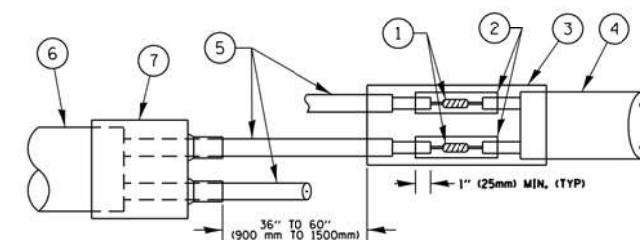
LOOP LEAD-IN CABLE TAG



- 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.



**DETAIL "A"
LOOP-TO-LOOP SPLICE**



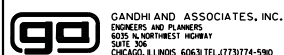
**DETAIL "B"
LOOP-TO-CONTROLLER SPLICE**

PRE-FORMED 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.
- ⑥ PRE-FORMED LOOP
- ⑦ XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS, TYCO CBR-2 OR APPROVED EQUAL

FILE NAME =
#FILE#



USER NAME = #USER#	DESIGNED - EA	REVISED -
PLOT SCALE = #SCALE#	DRAWN - EA, AV	REVISED -
PLOT DATE = #DATE#	CHECKED - NT, MA	REVISED -
	DATE - 3/16/2021	REVISED -

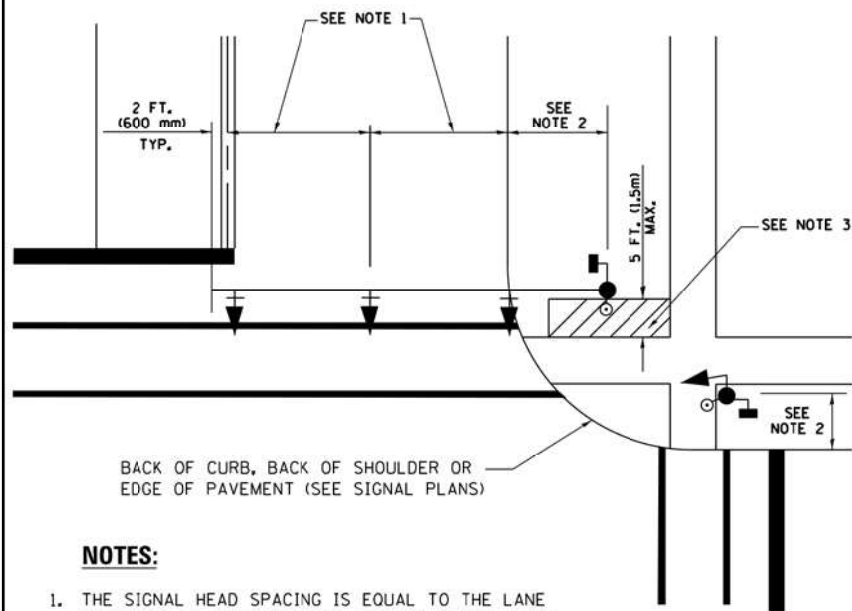
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	2020-008-BR	COOK	62	14
CONTRACT NO. 62K79				
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT				

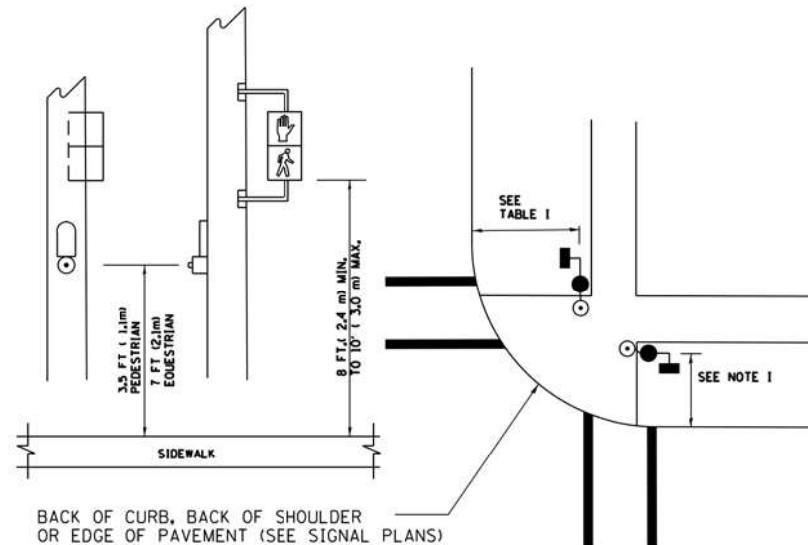
**TRAFFIC SIGNAL MAST ARM AND SIGNAL POST
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR
FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN
WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.**



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."

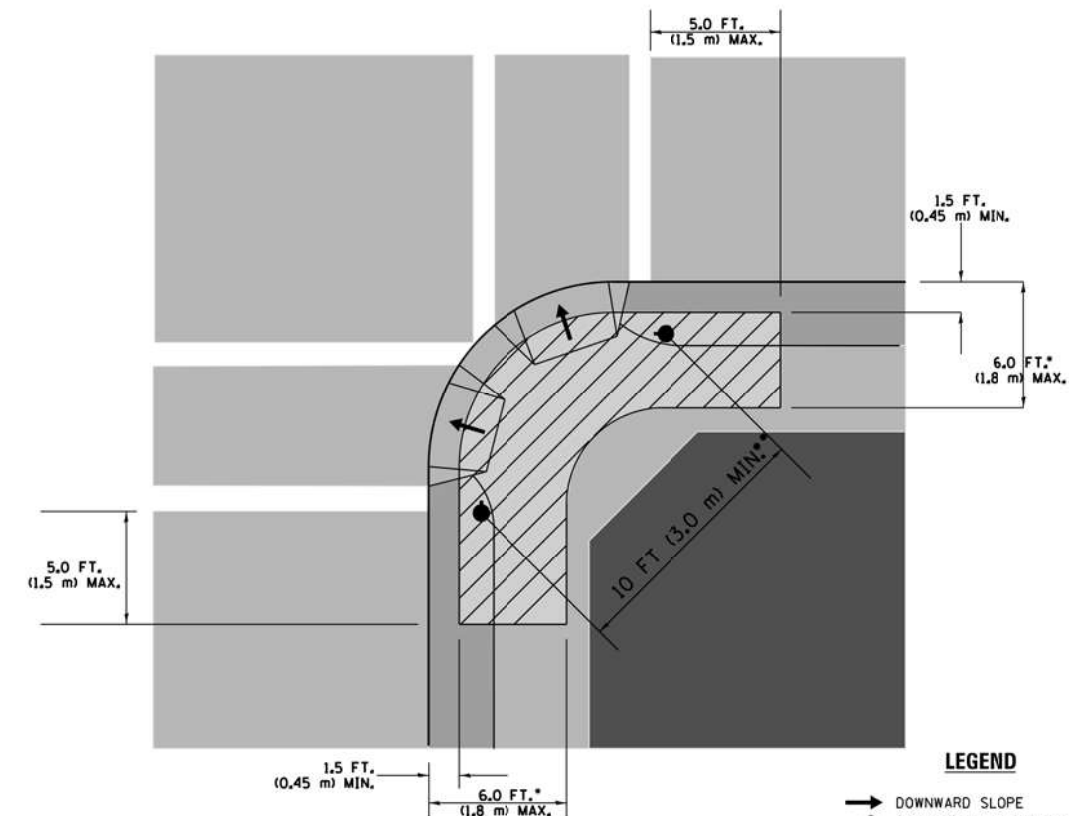
**PEDESTRIAN SIGNAL POST
AND
PEDESTRIAN PUSH BUTTON POST**



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) SEPARATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

NOTES:

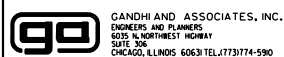
1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM 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.



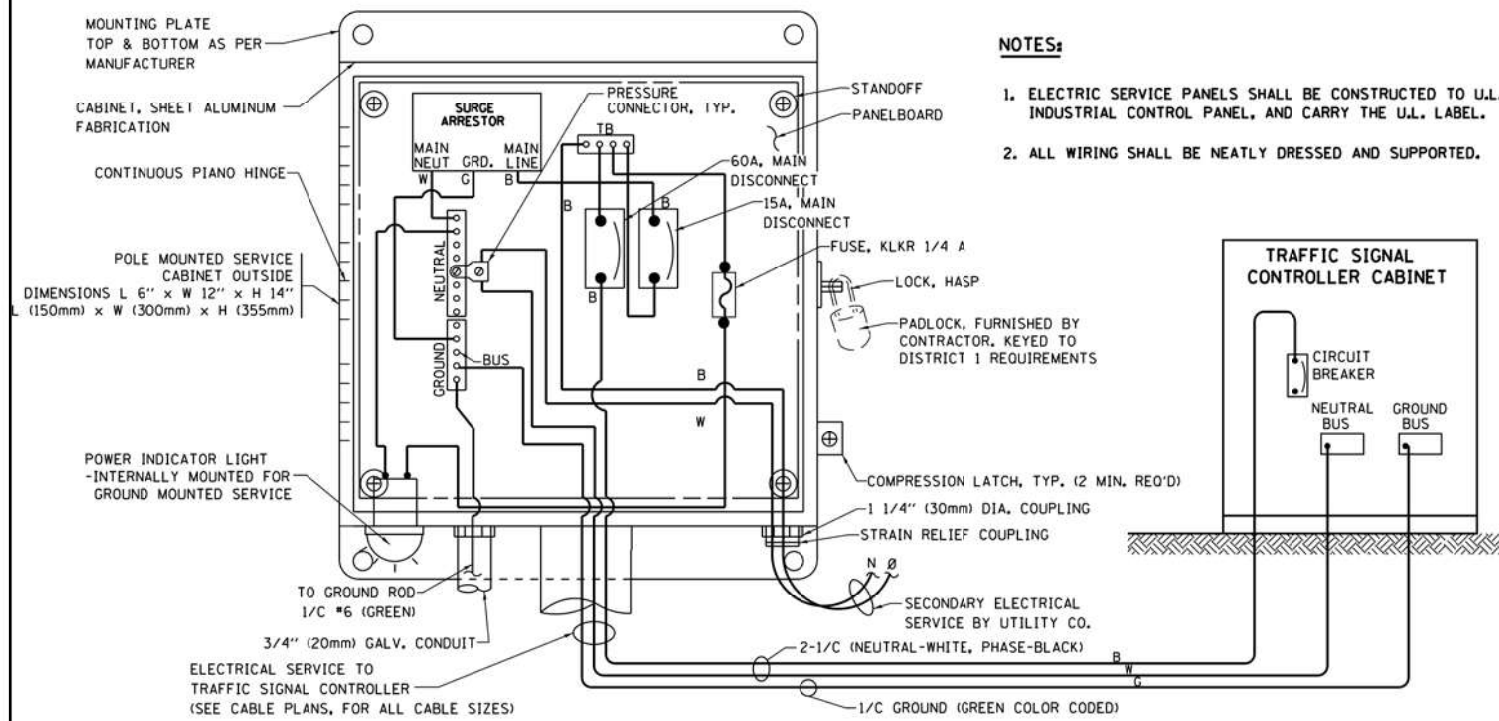
USER NAME = *USER*	DESIGNED - EA	REVISED -
PLOT SCALE = *SCALE*	DRAWN - EA, AV	REVISED -
PLOT DATE = *DATE*	CHECKED - NT, MA	REVISED -
	DATE - 3/16/2021	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

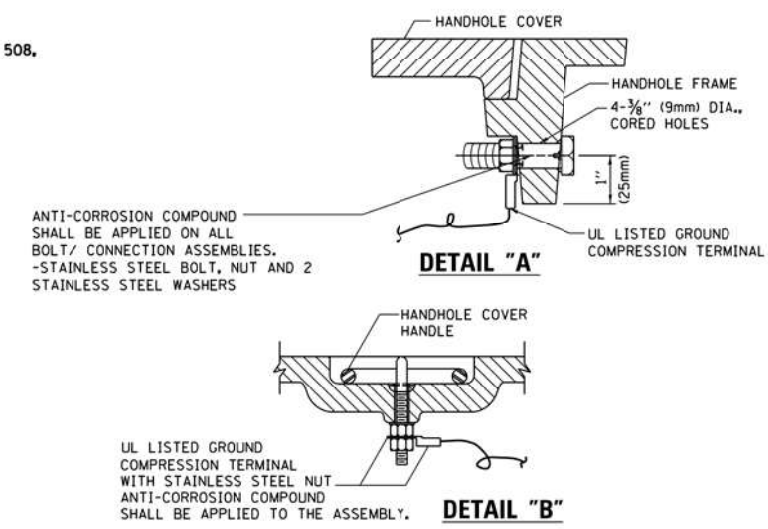
**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	2020-008-BR	COOK	62	15
CONTRACT NO. 62K79				
FED. ROAD DIST. NO. - [ILLINOIS] FED. AID PROJECT				

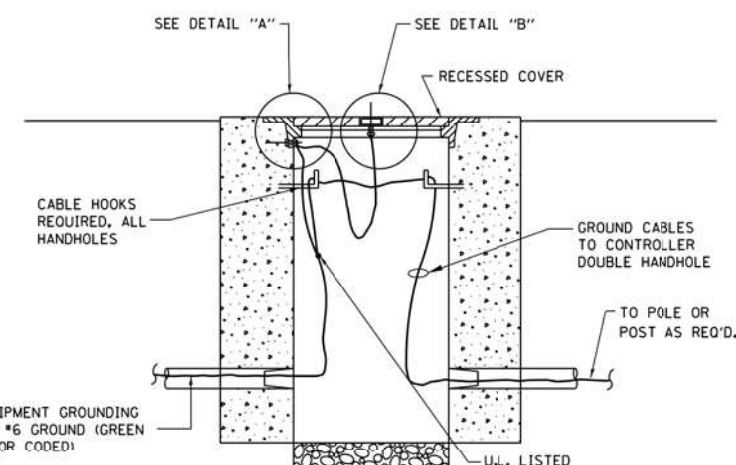


**ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)
SERVICE INSTALLATION POLE MOUNT (SHOWN)
(NOT TO SCALE)**

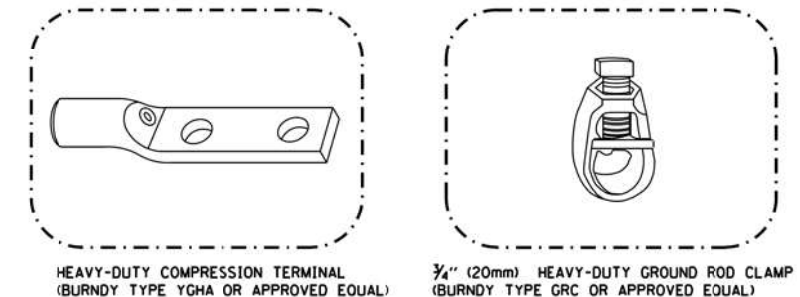


**NOTES:
GROUNDING SYSTEM**

1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
2. THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
3. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.

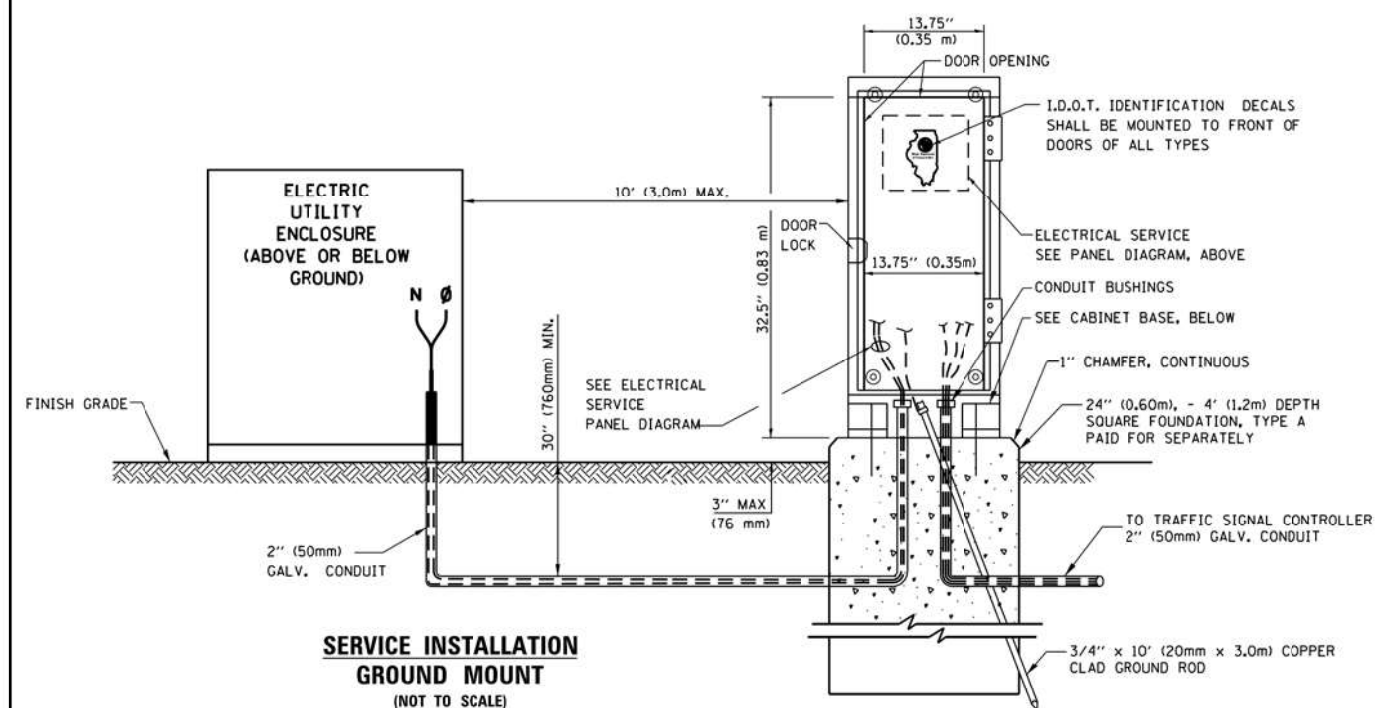


**HANDHOLE COVER & FRAME - GROUNDING DETAIL
(NOT TO SCALE)**

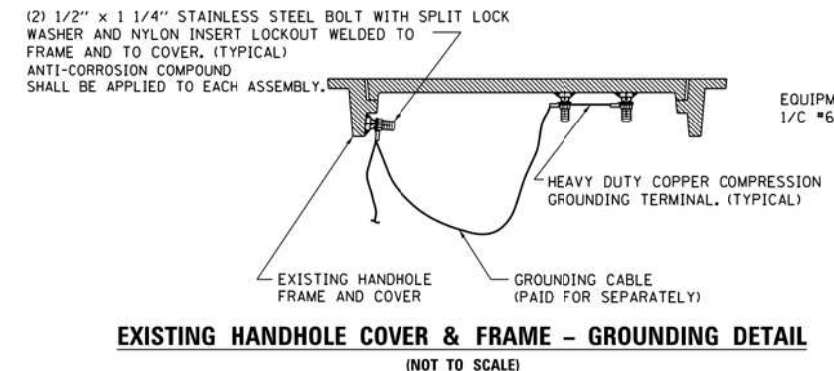


NOTES:

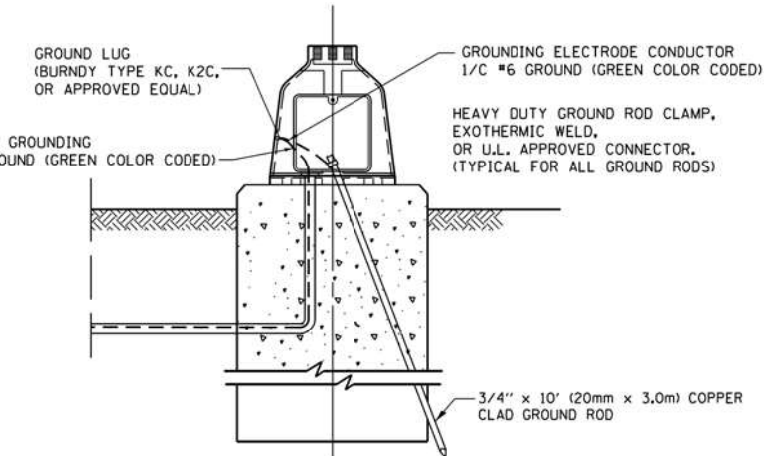
- ALL CLAMPS SHALL BE BRONZE OR COPPER, U.L. APPROVED.
- GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



**SERVICE INSTALLATION GROUND MOUNT
(NOT TO SCALE)**

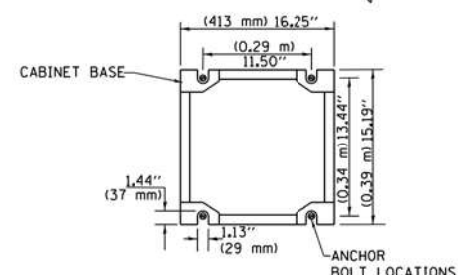


**EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL
(NOT TO SCALE)**



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

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



FILE NAME =
#FILE#

GA GANDHI AND ASSOCIATES, INC.
ENGINEERS AND PLANNERS
5015 N. NORTHWEST HIGHWAY
SUITE 206
CHICAGO, ILLINOIS 60631 TEL: (773) 774-590

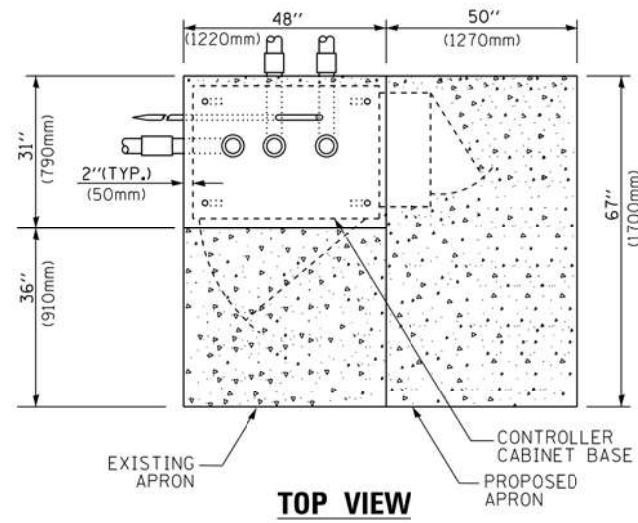
USER NAME = *USER*	DESIGNED - EA	REVISED -
PLOT SCALE = *SCALE*	DRAWN - EA, AV	REVISED -
PLOT DATE = *DATE*	CHECKED - NT, MA	REVISED -
	DATE - 3/16/2021	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

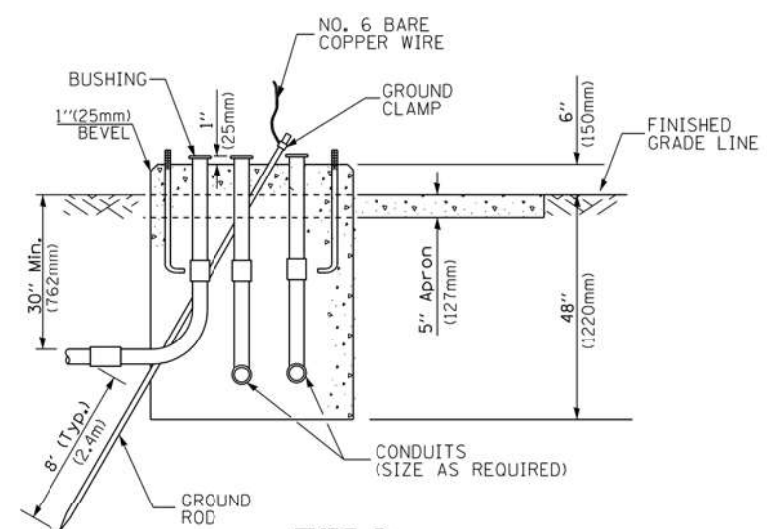
**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

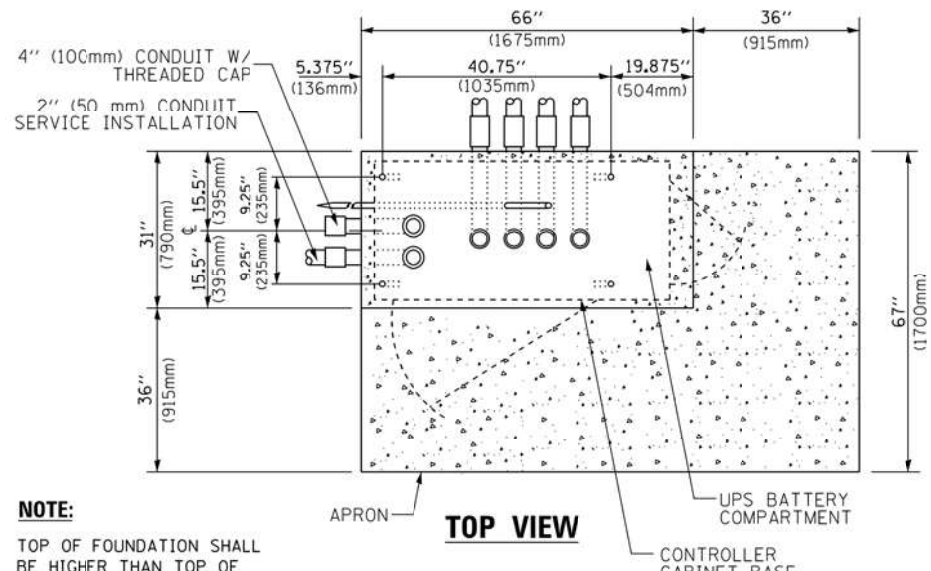
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	2020-008-BR	COOK	62	16
CONTRACT NO. 62K79				
FED. ROAD DIST. NO. - [ILLINOIS] FED. AID PROJECT				



TOP VIEW

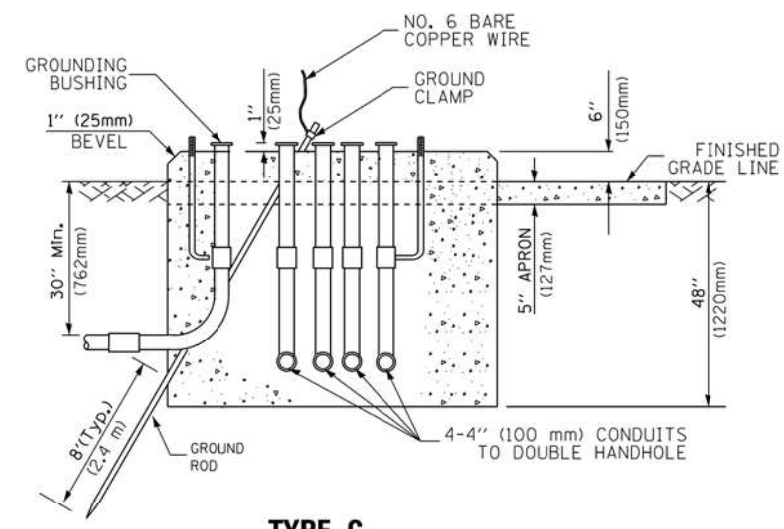


**TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET**

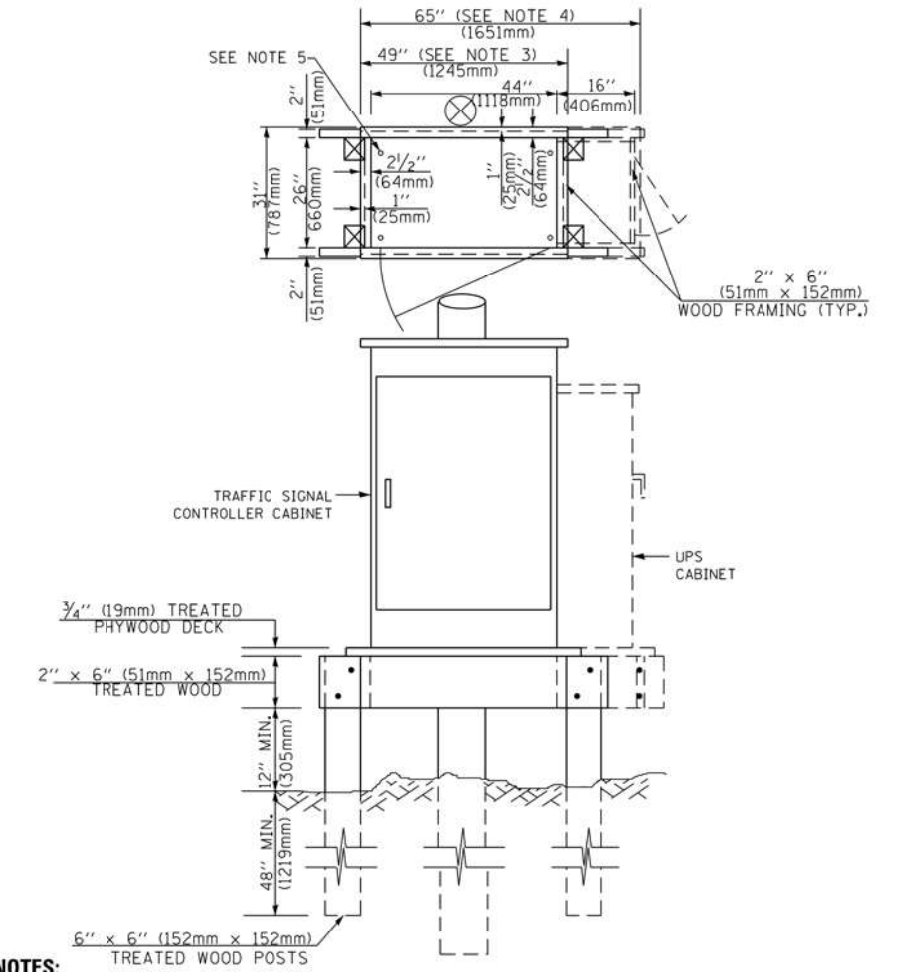


TOP VIEW

NOTE:
TOP OF FOUNDATION SHALL BE HIGHER THAN TOP OF DOUBLE HANDHOLE



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



NOTES:

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

**TEMPORARY SIGNAL CONTROLLER
WOOD SUPPORT PLATFORM**

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

CABLE SLACK

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

VERTICAL CABLE LENGTH

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

DEPTH OF FOUNDATION

MAST ARM LENGTH	① FOUNDATION DEPTH	FOUNDATION DIAMETER	SPIRAL DIAMETER	QUANTITY OF REBARS	SIZE OF REBARS
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	11'-0" (3.4 m)	36" (900mm)	24" (600mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 55' (16.8 m) and up to 65' (19.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 65' (19.8 m) and less than 75' (22.9 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 75' (22.9 m) and up to 85' (25.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

NOTES:

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

DEPTH OF MAST ARM FOUNDATIONS, TYPE E

FILE NAME = 8FILEL8



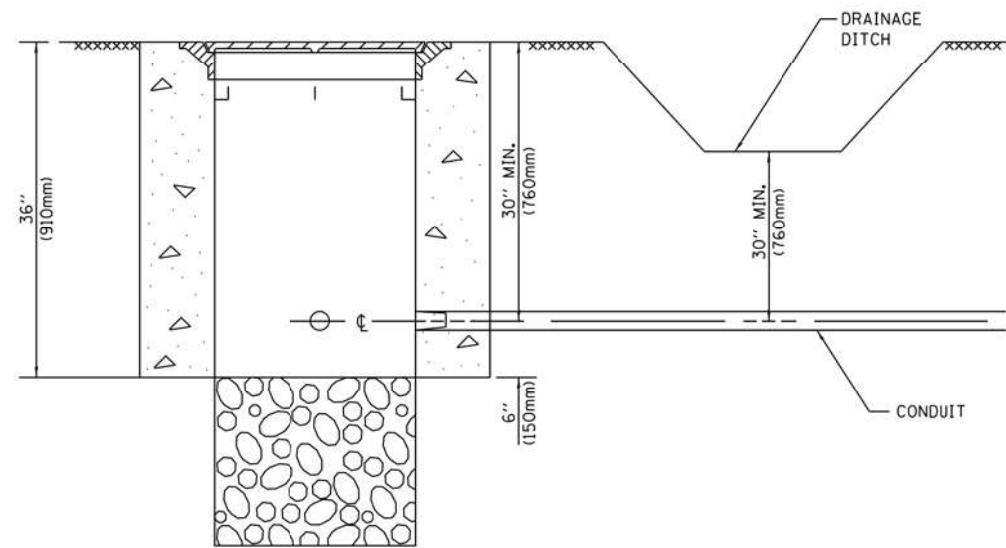
USER NAME = *USER*	DESIGNED - EA	REVISED -
PLOT SCALE = *SCALE*	DRAWN - EA, AV	REVISED -
PLOT DATE = *DATE*	CHECKED - NT, MA	REVISED -
	DATE - 3/16/2021	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

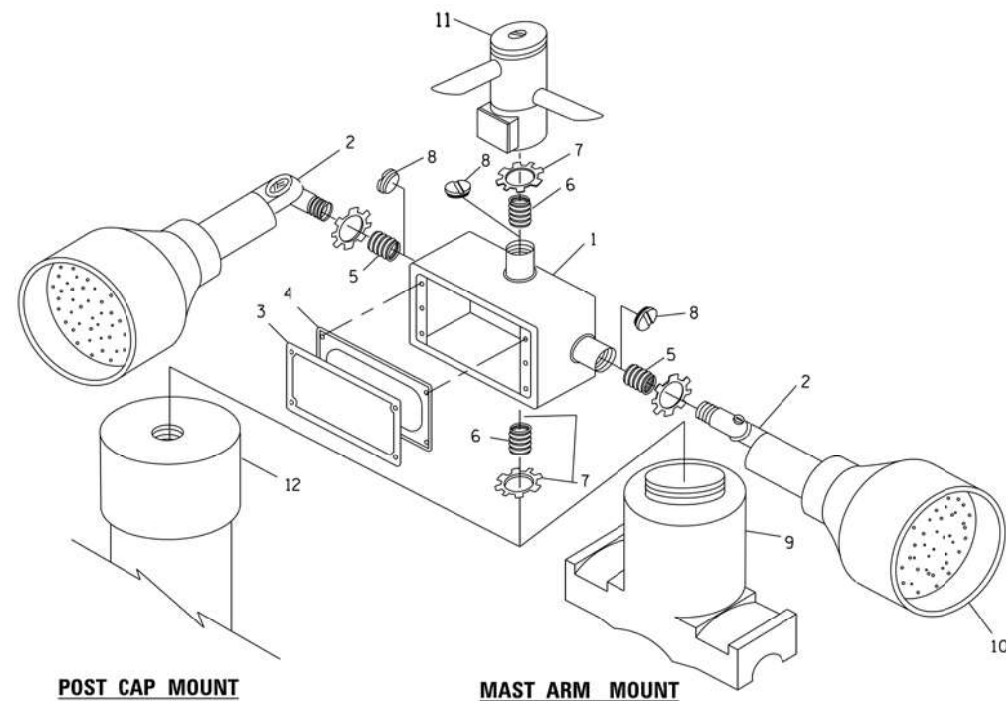
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	2020-008-BR	COOK	62	17
CONTRACT NO. 62K79				
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT				



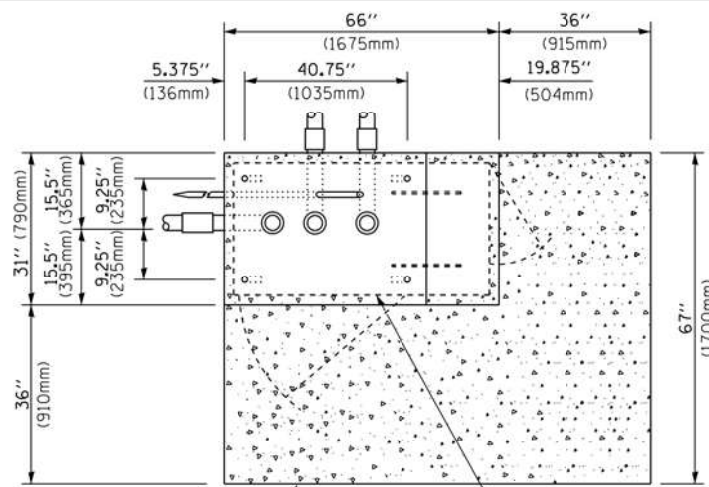
NOTES:

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.

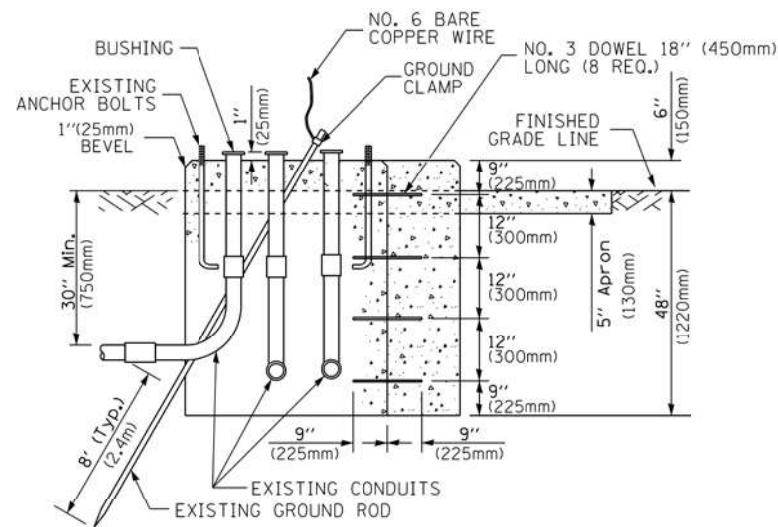
HANDHOLE WITH MINIMUM CONDUIT DEPTH
(NOT TO SCALE)



EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL



TOP VIEW
(NOT TO SCALE)

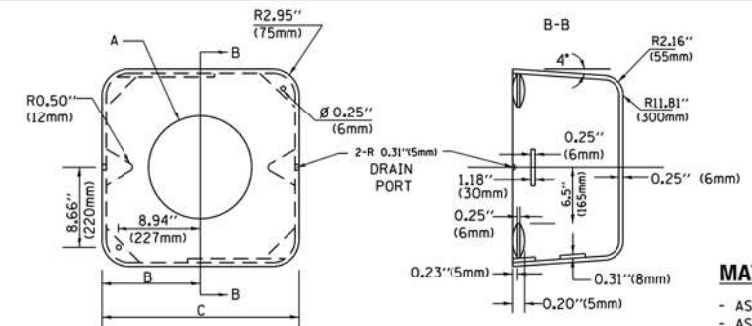


MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION
(NOT TO SCALE)

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.



MATERIAL:
- ASTM A36 STEEL
- ASTM A-123 HOT DIPPED GALVANIZED

A	B	C	HEIGHT	WEIGHT
VARIES	9.5"(241mm)	19"(483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
VARIES	10.75"(273mm)	21.5"(546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
VARIES	13.0"(330mm)	26"(660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
VARIES	18.5"(470mm)	37"(940mm)	7" (178mm) - 12" (300mm)	126 lbs (57 kg)

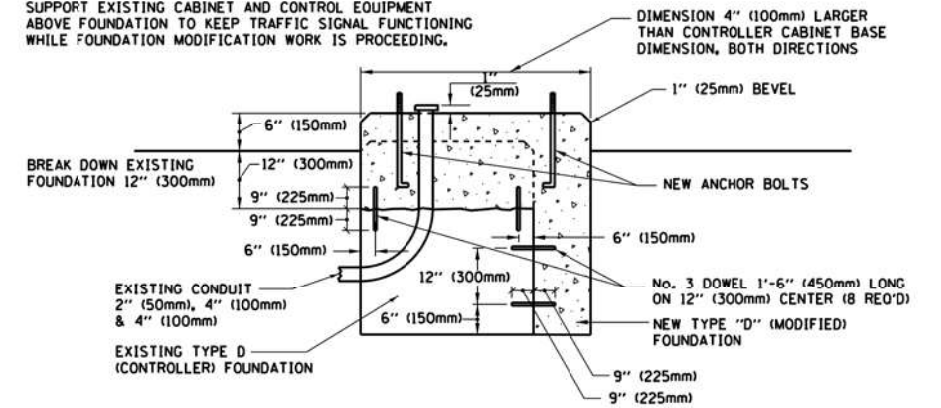
SHROUD

NOTES:

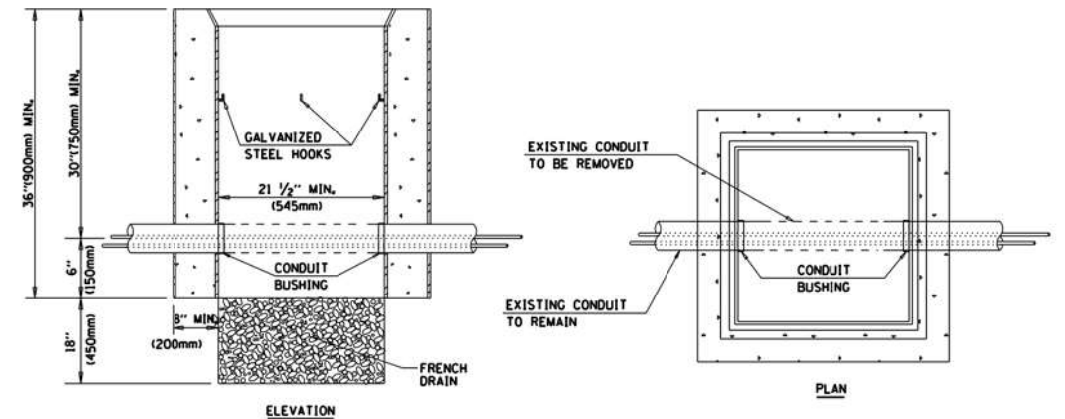
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFIED THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

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

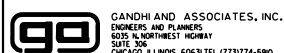


NOTES:

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

FILE NAME =
#FILE#



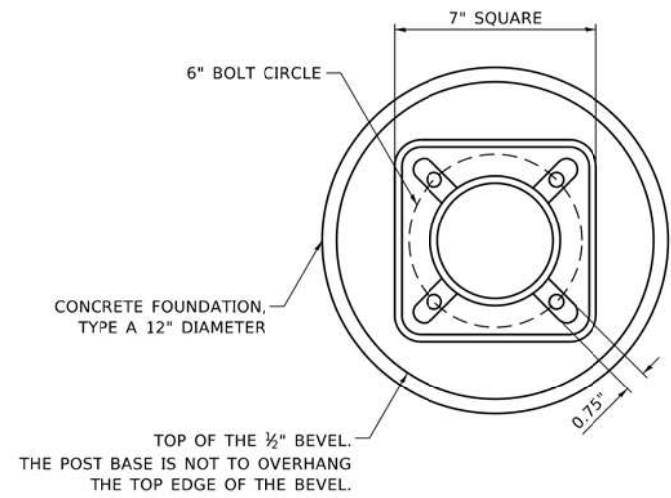
USER NAME = *USER*	DESIGNED - EA	REVISED -
PLOT SCALE = *SCALE*	DRAWN - EA, AV	REVISED -
PLOT DATE = *DATE*	CHECKED - NT, MA	REVISED -
	DATE - 3/16/2021	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

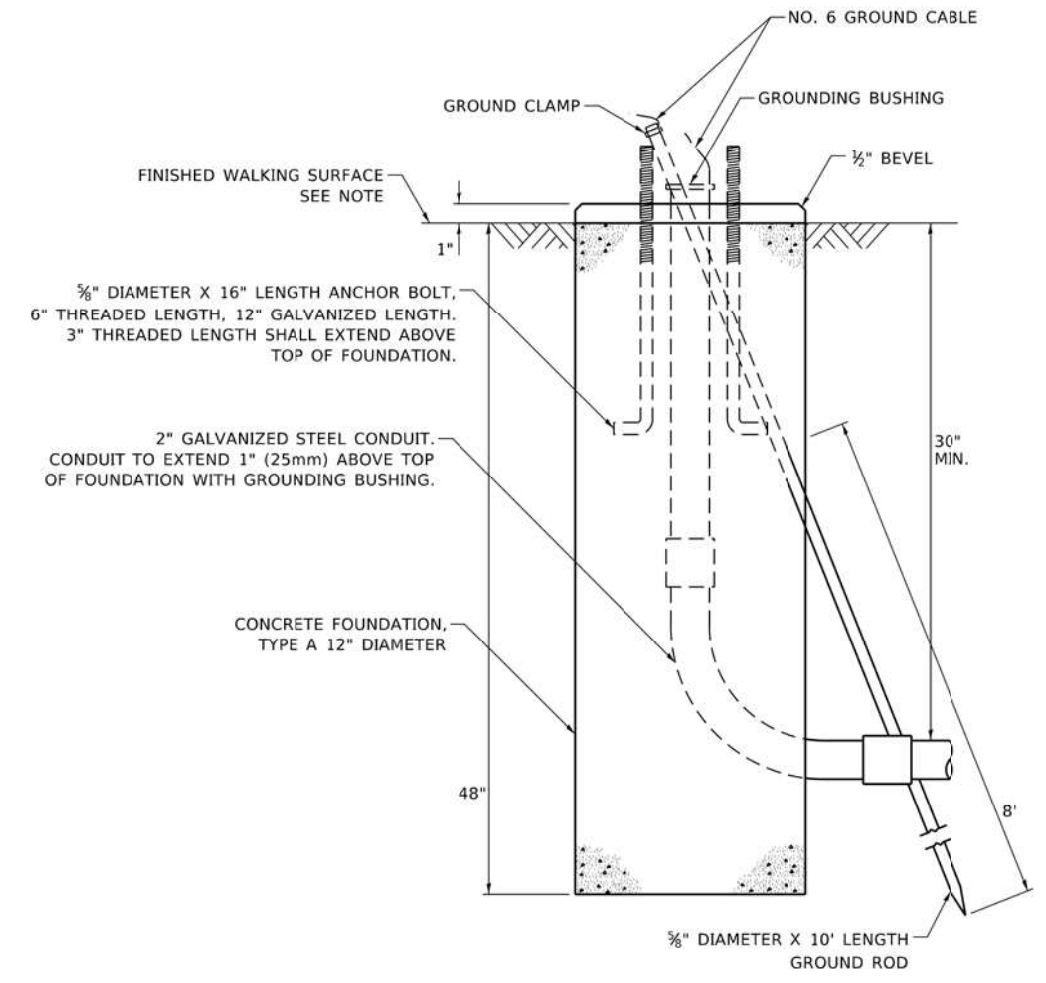
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	2020-008-BR	COOK	62	18
CONTRACT NO. 62K79				
FED. ROAD DIST. NO. - [ILLINOIS] FED. AID PROJECT				

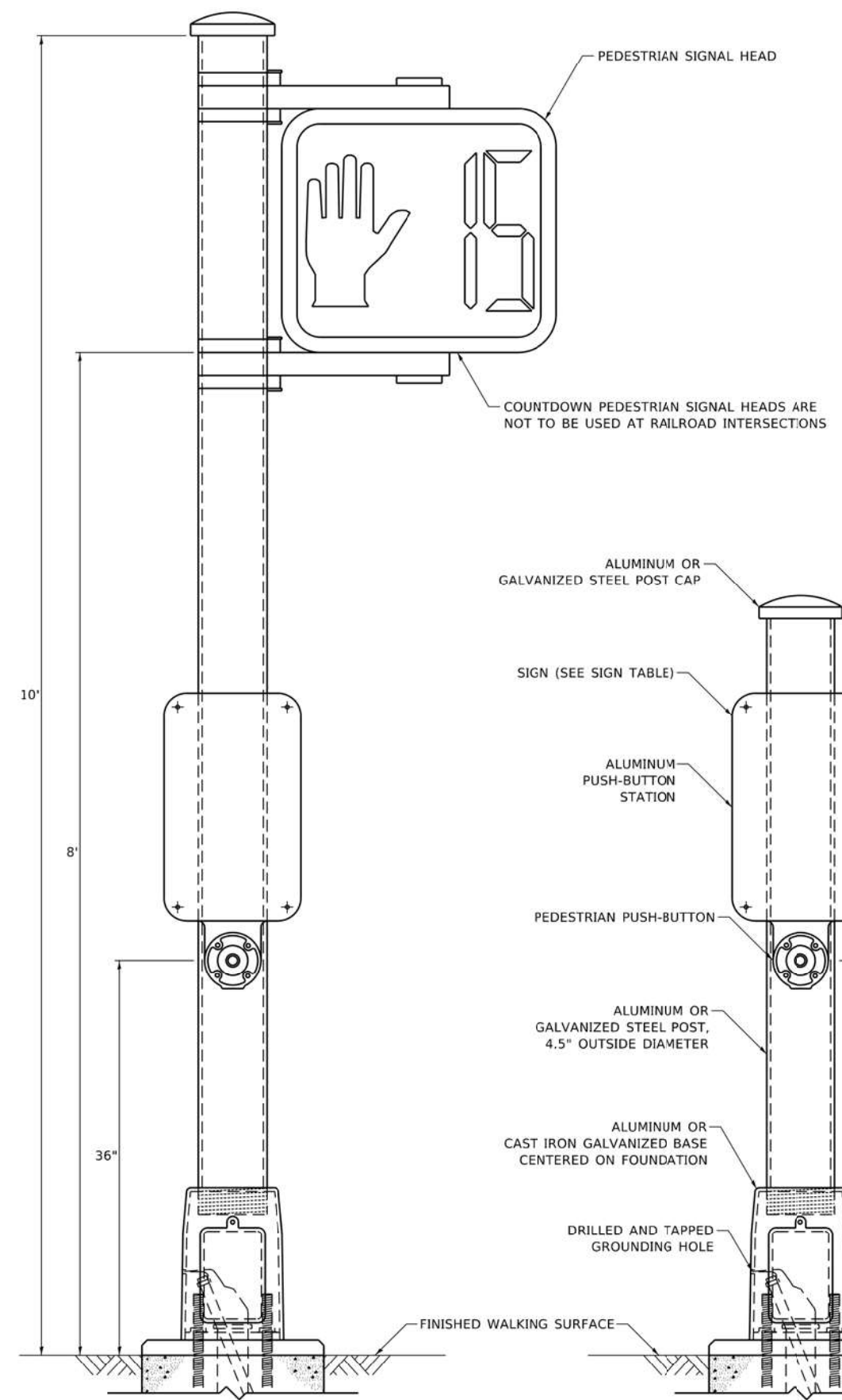


BOLT PATTERN

NOTE:
 1. IF THE PEDESTRIAN SIGNAL POST FOUNDATION IS INSTALLED WITHIN OR BEHIND A BARRIER CURB, THE TOP OF THE FOUNDATION SHALL BE INSTALLED FLUSH WITH THE TOP OF THE BARRIER CURB.

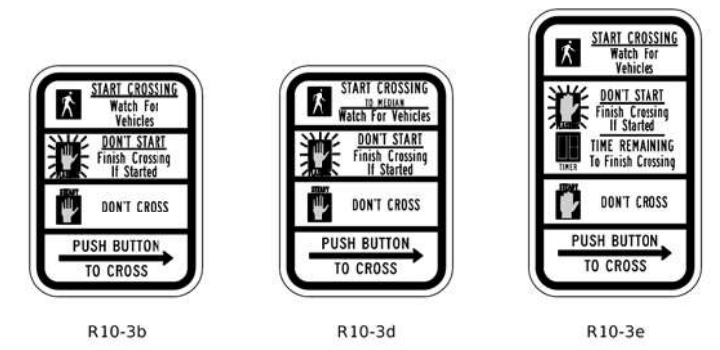


CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER



PEDESTRIAN SIGNAL POST, 10 FT.

PEDESTRIAN SIGNAL POST, 5 FT.

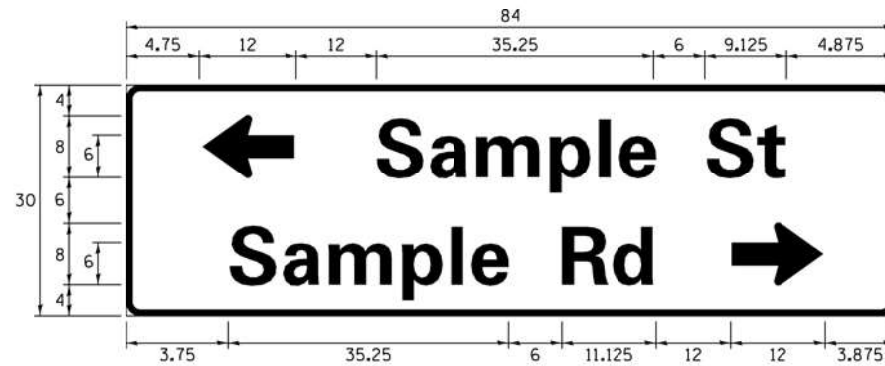
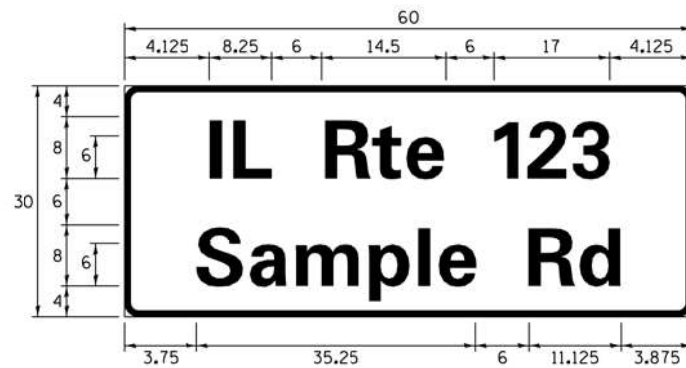
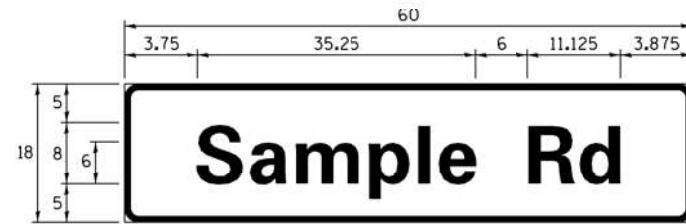


SIGN TABLE

SIGN	DIMENSIONS
R10-3b (RAILROAD ONLY)	9" X 12"
R10-3d (RAILROAD ONLY)	9" X 12"
R10-3e	9" X 15"

NOTES:
 1. THE SIGN PANELS SHALL BE TYPE AP SHEETING.
 2. THE ARROW ON SIGNS FOR PUSH-BUTTONS SERVING TWO DIRECTIONS ON THE SAME PHASE SHALL BE BI-DIRECTIONAL.
 3. THE SIGN FOR DUAL-CALL PUSH-BUTTONS SHALL HAVE NO ARROW.

SIGN PANEL – TYPE 1 OR TYPE 2



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D OR C	-	1 OR 2	ZZ	-

ALL DIMENSIONS ARE IN INCHES EXCEPT NOTED OTHERWISE

COMMON STREET NAME ABBREVIATIONS AND WIDTHS

NAME	ABBREVIATION	WIDTH (INCH)	
		SERIES "C"	SERIES "D"
AVENUE	Ave	15.000	18.250
BOULEVARD	Blvd	17.125	20.000
CIRCLE	Cir	11.125	13.000
COURT	Ct	8.250	9.625
DRIVE	Dr	8.625	10.125
HIGHWAY	Hwy	18.375	22.000
ILLINOIS	IL	7.000	8.250
LANE	Ln	9.125	10.750
PARKWAY	Pkwy	23.375	27.375
PLACE	Pl	7.125	7.750
ROAD	Rd	9.625	11.125
ROUTE	Rte	12.625	14.500
STREET	St	8.000	9.125
TERRACE	Ter	12.625	14.625
TRAIL	Tr	7.750	9.125
UNITED STATES	US	10.375	12.250

GENERAL NOTES

- WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 877001, 877002, 877006, 877011 AND 877012, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" x 8'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.
- ALL SIGNS SHALL CONSIST OF A WHITE LEGEND AND BORDER (TYPE ZZ SHEETING) ON A GREEN BACKGROUND (TYPE ZZ SHEETING)
- THE SIGN LENGTH SHALL BE IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHALL NOT EXCEED 8'-0". ALL BORDERS SHALL BE 3/4" WIDE. CORNER RADIUS SHALL BE 1-7/8". THE SPACING BETWEEN THE WORDS SHOULD BE 6", IF POSSIBLE, BUT MAY BE REDUCED TO 5" WHEN SPACING IS CRITICAL. A MINIMUM OF 2-1/2" SHALL BE INCLUDED BETWEEN THE WORD AND THE RIGHT AND LEFT EDGES OF THE SIGN.
- A PREFERRED METHOD FOR THE SIGN DESIGN IS TO USE SERIES "D" LETTER ON A ONE-LINE SIGN 18" IN HEIGHT AND A MAXIMUM OF 8'-0" IN WIDTH. IF SERIES "D" DOES NOT FIT ON A 8'-0" SIGN, THEN SERIES "C" SHOULD BE TRIED. IF SERIES "C" DOES NOT FIT ON A 8'-0" SIGN, A 30" HIGH TWO-LINE SIGN CAN BE USED. THE CROSSROAD DESIGNATION AS TO STREET, AVENUE, ETC. SHOULD BE SPELLED OUT ON THE SECOND LINE, IF THE ABBREVIATION CANNOT FIT ON THE FIRST LINE.
- LED ILLUMINATED STREET NAME SIGNS CAN BE USED IN PLACE OF REGULAR SIGN PANELS BUT ANY SPECIAL WORDING AND SYMBOLGY MUST BE APPROVED BY THE DEPARTMENT. GENERAL DESIGN REQUIREMENT AS LISTED ABOVE (COLOR, FONT, SIZE, ETC.) MUST BE FOLLOWED.
- SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS.

LOCAL SUPPLIERS:

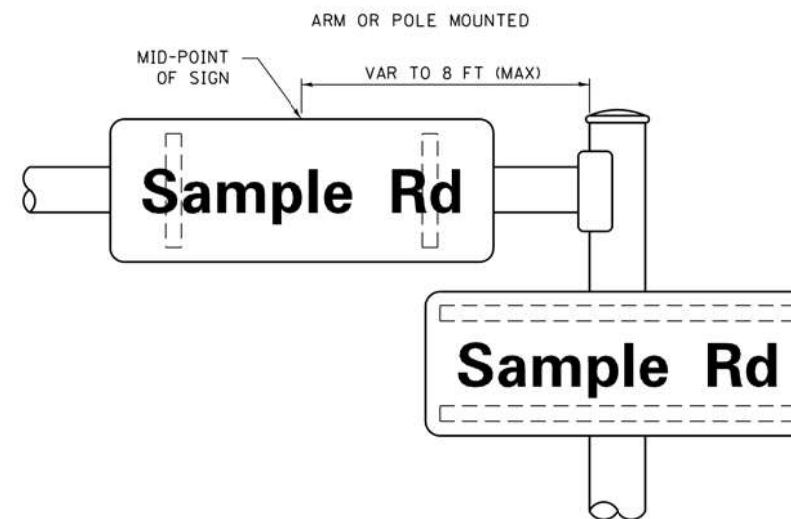
- J.O. HERBERT COMPANY, INC
MIDLOTHIAN, VA
- WESTERN REMAC, INC.
WOODRIDGE, IL

PARTS LISTING:

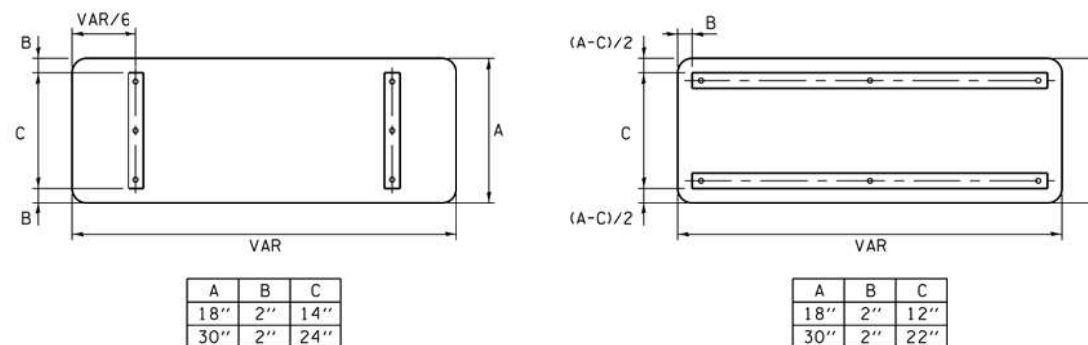
- SIGN CHANNEL PART #HPN053 (MED. CHANNEL)
1/4" x 14 x 1" H.W.H. #3
SELF TAPPING WITH NEOPRENE WASHER
- SIGN SCREWS PART #HPN034 (UNIVERSAL)
CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING
- BRACKETS

OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BACKET OF THE ABOVE PRODUCT.

MOUNTING LOCATION



SUPPORTING CHANNELS



STANDARD ALPHABETS SPACING CHART

(8") UPPER CASE AND (6") LOWER CASE

FHWA SERIES "C"				FHWA SERIES "D"			
CHARACTER	LEFT SPACING (INCH)	WIDTH (INCH)	RIGHT SPACING (INCH)	CHARACTER	LEFT SPACING (INCH)	WIDTH (INCH)	RIGHT SPACING (INCH)
A	0.240	5.122	0.240	A	0.240	6.804	0.240
B	0.880	4.482	0.480	B	0.960	5.446	0.400
C	0.720	4.482	0.720	C	0.800	5.446	0.800
D	0.880	4.482	0.720	D	0.960	5.446	0.800
E	0.880	4.082	0.480	E	0.960	4.962	0.400
F	0.880	4.082	0.240	F	0.960	4.962	0.240
G	0.720	4.482	0.720	G	0.800	5.446	0.800
H	0.880	4.482	0.880	H	0.960	5.446	0.960
I	0.880	1.120	0.880	I	0.960	1.280	0.960
J	0.240	4.082	0.880	J	0.240	5.122	0.960
K	0.880	4.482	0.480	K	0.960	5.604	0.400
L	0.880	4.082	0.240	L	0.960	4.962	0.240
M	0.880	5.284	0.880	M	0.960	6.244	0.960
N	0.880	4.482	0.880	N	0.960	5.446	0.960
O	0.720	4.722	0.720	O	0.800	5.684	0.800
P	0.880	4.482	0.720	P	0.960	5.446	0.240
Q	0.720	4.722	0.720	Q	0.800	5.684	0.800
R	0.880	4.482	0.480	R	0.960	5.446	0.400
S	0.480	4.482	0.480	S	0.400	5.446	0.400
T	0.240	4.082	0.240	T	0.240	4.962	0.240
U	0.880	4.482	0.880	U	0.960	5.446	0.960
V	0.240	4.962	0.240	V	0.240	6.084	0.240
W	0.240	6.084	0.240	W	0.240	7.124	0.240
X	0.240	4.722	0.240	X	0.400	5.446	0.400
Y	0.240	5.122	0.240	Y	0.240	6.884	0.240
Z	0.480	4.482	0.480	Z	0.400	5.446	0.400
a	0.320	3.842	0.640	a	0.400	4.562	0.720
b	0.720	4.082	0.480	b	0.800	4.802	0.480
c	0.480	4.002	0.240	c	0.480	4.722	0.240
d	0.480	4.082	0.720	d	0.480	4.802	0.800
e	0.480	4.082	0.320	e	0.480	4.722	0.320
f	0.320	2.480	0.160	f	0.320	2.882	0.160
g	0.480	4.082	0.720	g	0.480	4.802	0.800
h	0.720	4.082	0.640	h	0.800	4.722	0.720
i	0.720	1.120	0.720	i	0.800	1.280	0.800
j	0.000	2.320	0.720	j	0.000	2.642	0.800
k	0.720	4.322	0.160	k	0.800	5.122	0.160
l	0.720	1.120	0.720	l	0.800	1.280	0.800
m	0.720	6.724	0.640	m	0.800	7.926	0.720
n	0.720	4.082	0.640	n	0.800	4.722	0.720
o	0.480	4.082	0.480	o	0.480	4.882	0.480
p	0.720	4.082	0.480	p	0.800	4.802	0.480
q	0.480	4.082	0.720	q	0.480	4.802	0.800
r	0.720	2.642	0.160	r	0.800	3.042	0.160
s	0.320	3.362	0.240	s	0.320	3.762	0.240
t	0.080	2.882	0.080	t	0.080	3.202	0.080
u	0.640	4.082	0.720	u	0.720	4.722	0.800
v	0.160	4.722	0.160	v	0.160	5.684	0.160
w	0.160	7.524	0.160	w	0.160	9.046	0.160
x	0.000	5.202	0.000	x	0.000	6.244	0.000
y	0.160	4.962	0.160	y	0.160	6.004	0.160
z	0.240	3.362	0.240	z	0.240	4.002	0.240
1	0.720	1.680	0.880	1	0.800	2.000	0.960
2	0.480	4.482	0.480	2	0.800	5.446	0.800
3	0.480	4.482	0.480	3	1.440	5.446	0.800
4	0.240	4.962	0.720	4	0.160	6.004	0.960
5	0.480	4.482	0.480	5	0.800	5.446	0.800
6	0.720	4.482	0.720	6	0.800	5.446	0.800
7	0.240	4.482	0.720	7	0.560	5.446	0.560
8	0.480	4.482	0.480	8	0.800	5.446	0.800
9	0.480	4.482	0.480	9	0.800	5.446	0.800
0	0.720	4.722	0.720	0	0.800	5.684	0.800
-	0.240	2.802	0.240	-	0.240	2.802	0.240

FILE NAME = 8FILEL8



USER NAME = *USER*	DESIGNED - EA	REVISED -
PLOT SCALE = *SCALE*	DRAWN - EA, AV	REVISED -
PLOT DATE = *DATE*	CHECKED - NT, MA	REVISED -
	DATE - 3/16/2021	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE. 332	SECTION 2020-008-BR	COUNTY COOK	TOTAL SHEETS 62	SHEET NO. 20
CONTRACT NO. 62K79			FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT	



REMOVAL NOTES:

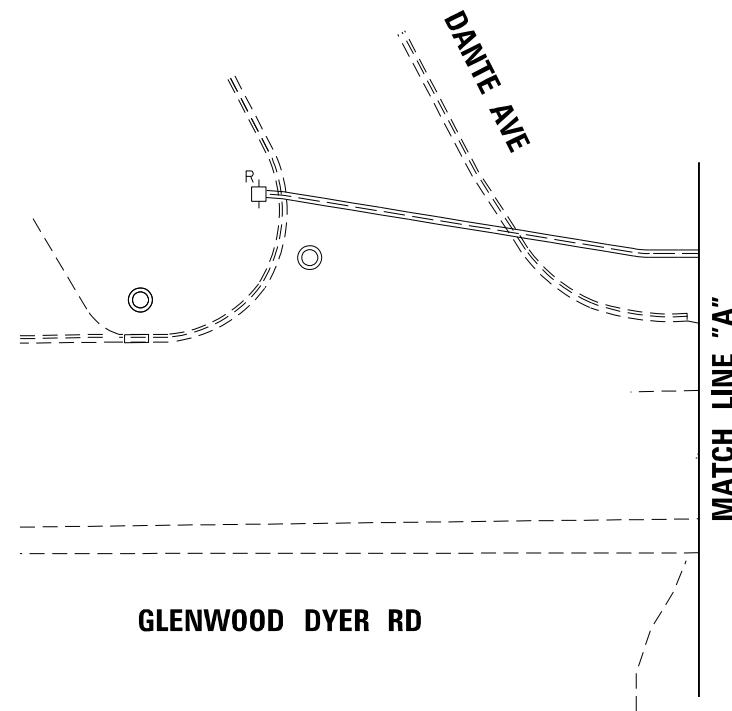
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 1 EACH TEMPORARY TRAFFIC SIGNAL INSTALLATION
- 1 EACH VIDEO DETECTION SYSTEM (COMPLETE INTERSECTION)
- 1 EACH SERVICE INSTALLATION
- 1 EACH WIRELESS INTERCONNECT SYSTEM

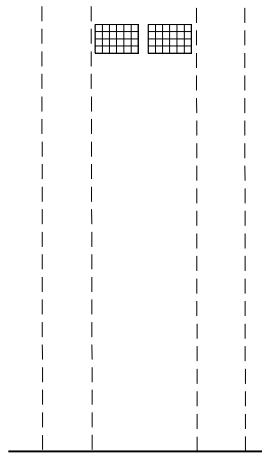
NOTES:

1. THE EXISTING TEMPORARY TRAFFIC SIGNAL INSTALLATION SHALL REMAIN IN PLACE AND BE USED AS THE TEMPORARY TRAFFIC SIGNAL INSTALLATION FOR THIS CONTRACT. THE EXISTING TEMPORARY TRAFFIC SIGNAL INSTALLATION SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL INSTALLATION IS FULLY OPERATIONAL OR AS THE DIRECTED BY THE ENGINEER.

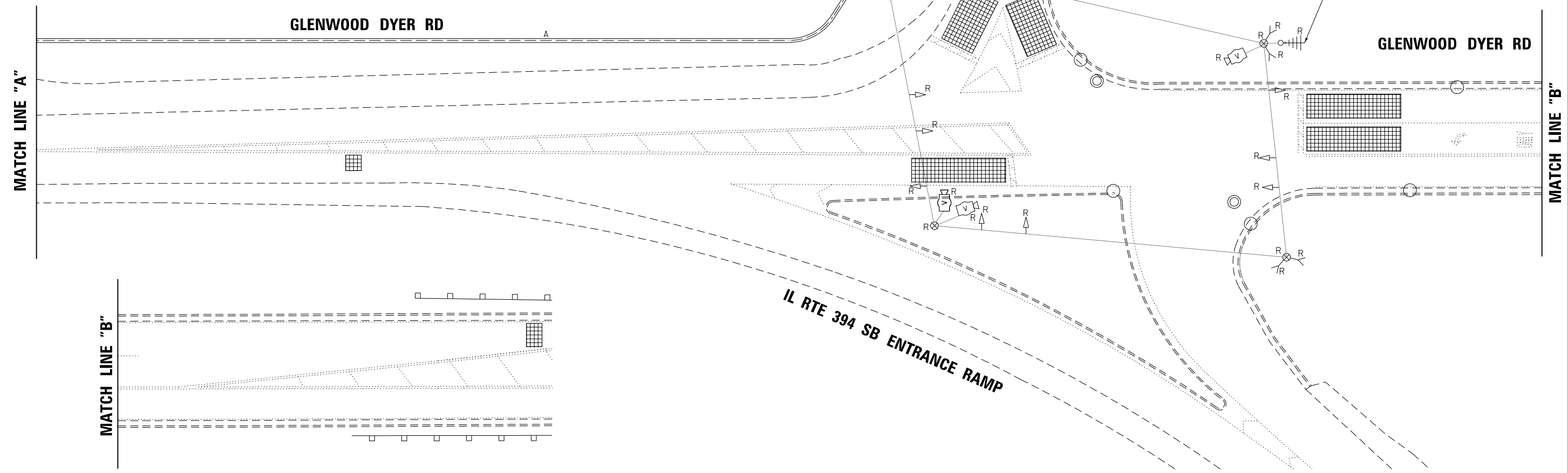
2. THE CONTRACTOR SHALL RELOCATE THE EXISTING TEMPORARY TRAFFIC SIGNAL HEADS AS NECESSARY TO MATCH THE MOT PLANS. ALL MODIFICATIONS MADE TO THE EXISTING TEMPORARY TRAFFIC SIGNAL INSTALLATION SHALL BE INCLUDED IN THE PAY ITEM MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION.



MATCH LINE "C"

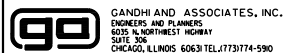


MATCH LINE "C"



EX. WIRELESS INTERCONNECT TO IL RTE 394 NB RAMPS

FILE NAME =
\$FILEL\$



USER NAME = \$USER\$	DESIGNED - EA	REVISED -
	DRAWN - EA, AV	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - NT, MA	REVISED -
PLOT DATE = \$DATE\$	DATE - 3/16/2021	REVISED -

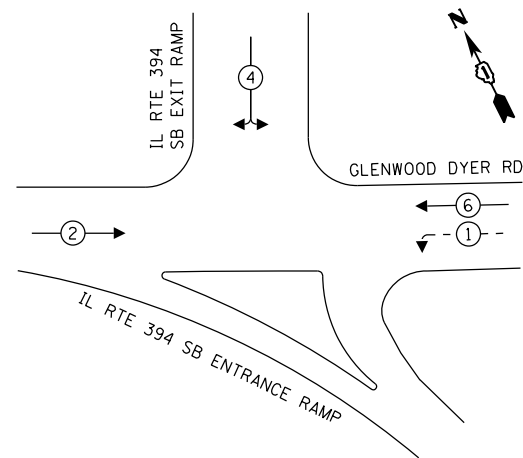
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL PLAN AND
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT PLAN
IL RTE 394 SB RAMPS AT GLENWOOD DYER RD
SCALE: 1"=20' SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	2020-008-BR	COOK	62	21
CONTRACT NO. 62K79				
FED. ROAD DIST. NO. - [ILLINOIS] FED. AID PROJECT				

TS 5128
ECON 176

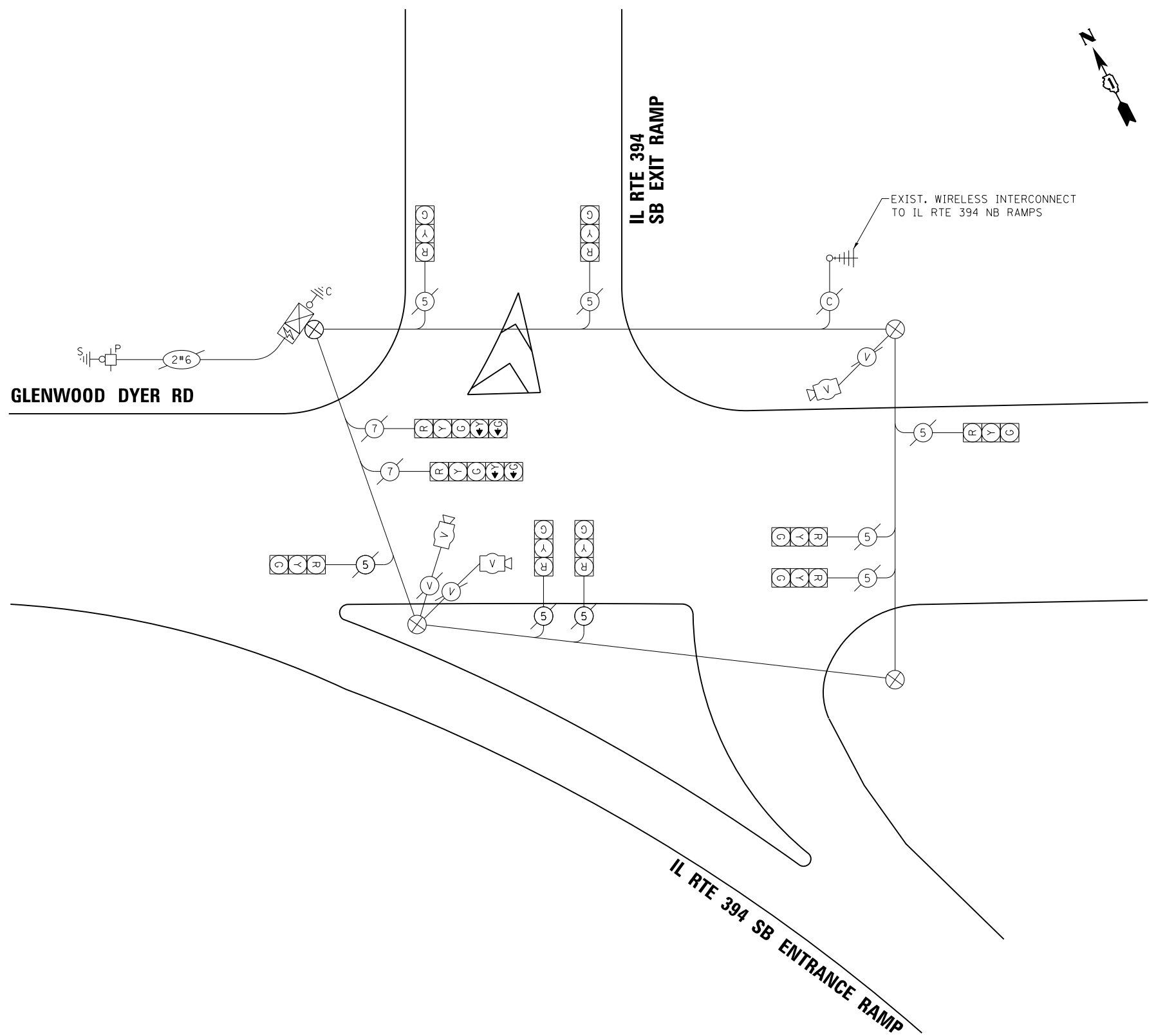
EXISTING CONTROLLER SEQUENCE



- LEGEND:**
- ← ⊙ ← PROTECTED PHASE
 - ← ⊙ ⊖ ← PROTECTED/PERMITTED PHASE
 - ← ⊙ ⊕ → PEDESTRIAN PHASE
 - ⊙ OL OVERLAP

TEMPORARY PHASE DESIGNATION DIAGRAM

GLENWOOD DYER RD



CABLE PLAN
(NOT TO SCALE)

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	10	11	50	55.0
(YELLOW)	10	20	5	10.0
(GREEN)	10	12	45	54.0
PERMISSIVE ARROW	4	10	10	4.0
PED. SIGNAL	-	20	100	-
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	-	240	50	-
TOTAL =				398.0

ENERGY COSTS TO:

VILLAGE OF GLENWOOD
ONE ASSELBORN WAY
GLENWOOD, IL 60425

ENERGY SUPPLY: CONTACT: STEPHANIE HINES
PHONE: (708) 235-2331
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: Q885071308

USER NAME = *USER*	DESIGNED - EA	REVISED -
PLOT SCALE = *SCALE*	DRAWN - EA, AV	REVISED -
PLOT DATE = *DATE*	CHECKED - NT, MA	REVISED -
	DATE - 3/16/2021	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

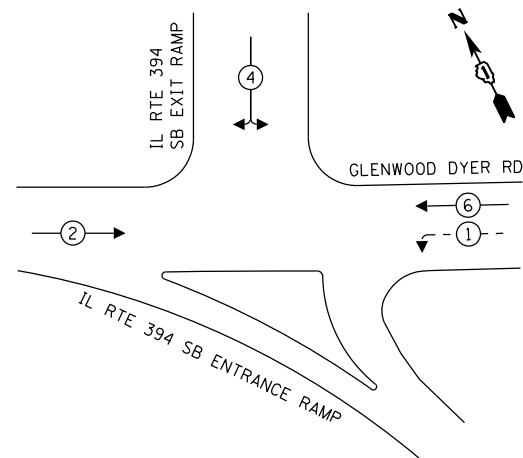
EXISTING /TEMPORARY CABLE PLAN AND
EXISTING /TEMPORARY PHASE DESIGNATION DIAGRAM
IL RTE 394 SB RAMPS AT GLENWOOD DYER RD

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	2020-008-BR	COOK	62	22
CONTRACT NO. 62K79				
FED. ROAD DIST. NO. - [ILLINOIS] FED. AID PROJECT				

TS 5128
ECON 176

PROPOSED CONTROLLER SEQUENCE

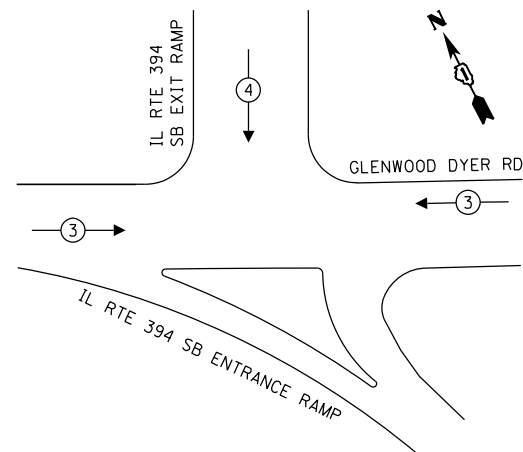


LEGEND:

- ← ⊙ → PROTECTED PHASE
- ← ⊙ ⊖ → PROTECTED/PERMITTED PHASE
- ← ⊙ ⊕ → PEDESTRIAN PHASE
- ⊙ OL OVERLAP

PROPOSED PHASE DESIGNATION DIAGRAM

**PROPOSED EMERGENCY VEHICLE
PREEMPTION SEQUENCE**



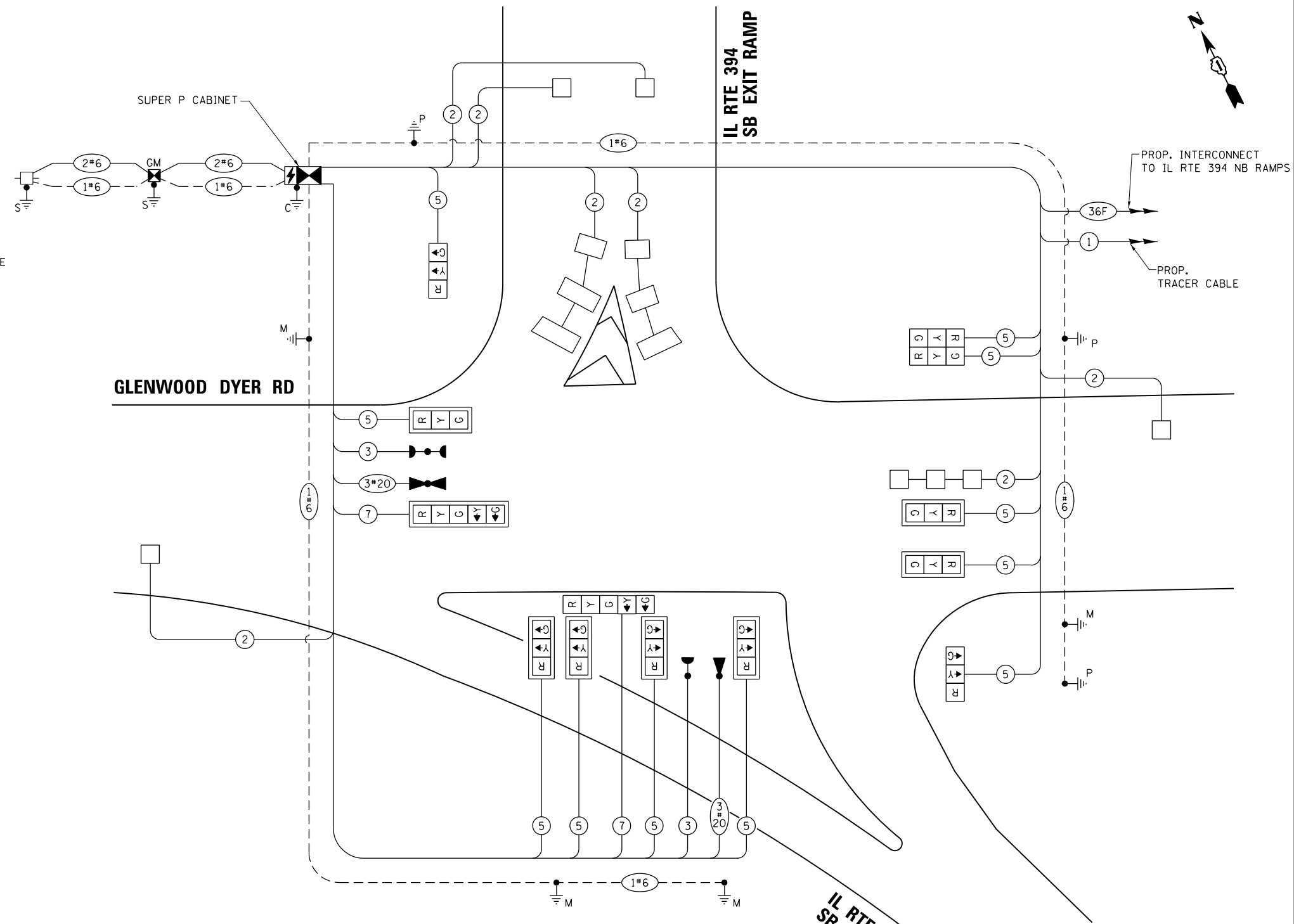
**TRAFFIC SIGNAL
ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	13	11	50	71.5
(YELLOW)	13	20	5	13.0
(GREEN)	13	12	45	70.2
PERMISSIVE ARROW	4	10	10	4.0
PED. SIGNAL	-	20	100	-
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	240	50	-
TOTAL =				283.7

ENERGY COSTS TO:

VILLAGE OF GLENWOOD
ONE ASSELBORN WAY
GLENWOOD, IL 60425

ENERGY SUPPLY: CONTACT: STEPHANIE HINES
PHONE: (708) 235-2331
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: Q885071308



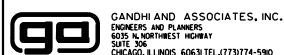
CABLE PLAN
(NOT TO SCALE)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**CABLE PLAN, PHASE DESIGNATION DIAGRAM,
AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL RTE 394 SB RAMPS AT GLENWOOD DYER RD**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	2020-008-BR	COOK	62	24
CONTRACT NO. 62K79				
FED. ROAD DIST. NO. - [ILLINOIS] FED. AID PROJECT				

TS 5128
ECON 176



DESIGNED - EA	REVISD -
DRAWN - EA, AV	REVISD -
CHECKED - NT, MA	REVISD -
DATE - 3/16/2021	REVISD -

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

FILE NAME =
#FILE#

SIGN PANEL – TYPE 2

ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	12.0	2	ZZ	1

NOTE: FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION PLEASE SEE DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGNS DETAIL.

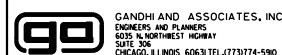
SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY.
SIGN PANEL - TYPE 2	SQ FT	12
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	1181
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	79
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	332
HANDHOLE	EACH	4
HEAVY-DUTY HANDHOLE	EACH	3
DOUBLE HANDHOLE	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRANSCIVER - FIBER OPTIC	EACH	1
* ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	276
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2130
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	249
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1635
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	462
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	970
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	3
STEEL MAST ARM ASSEMBLY AND POLE, 26 FT.	EACH	3
STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	16
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	30
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	13
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	7
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	1
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	8
INDUCTIVE LOOP DETECTOR	EACH	7
DETECTOR LOOP, TYPE I	FOOT	554
* LIGHT DETECTOR	EACH	2
* LIGHT DETECTOR AMPLIFIER	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
* EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	276
FULL-ACTUATED CONTROLLER AND TYPE SUPER P CABINET (SPECIAL)	EACH	1
SERVICE INSTALLATION, GROUND MOUNTED, METERED	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1

* 100% COST TO VILLAGE OF GLENWOOD

TS 5128
ECON 176

FILE NAME =
#FILE#



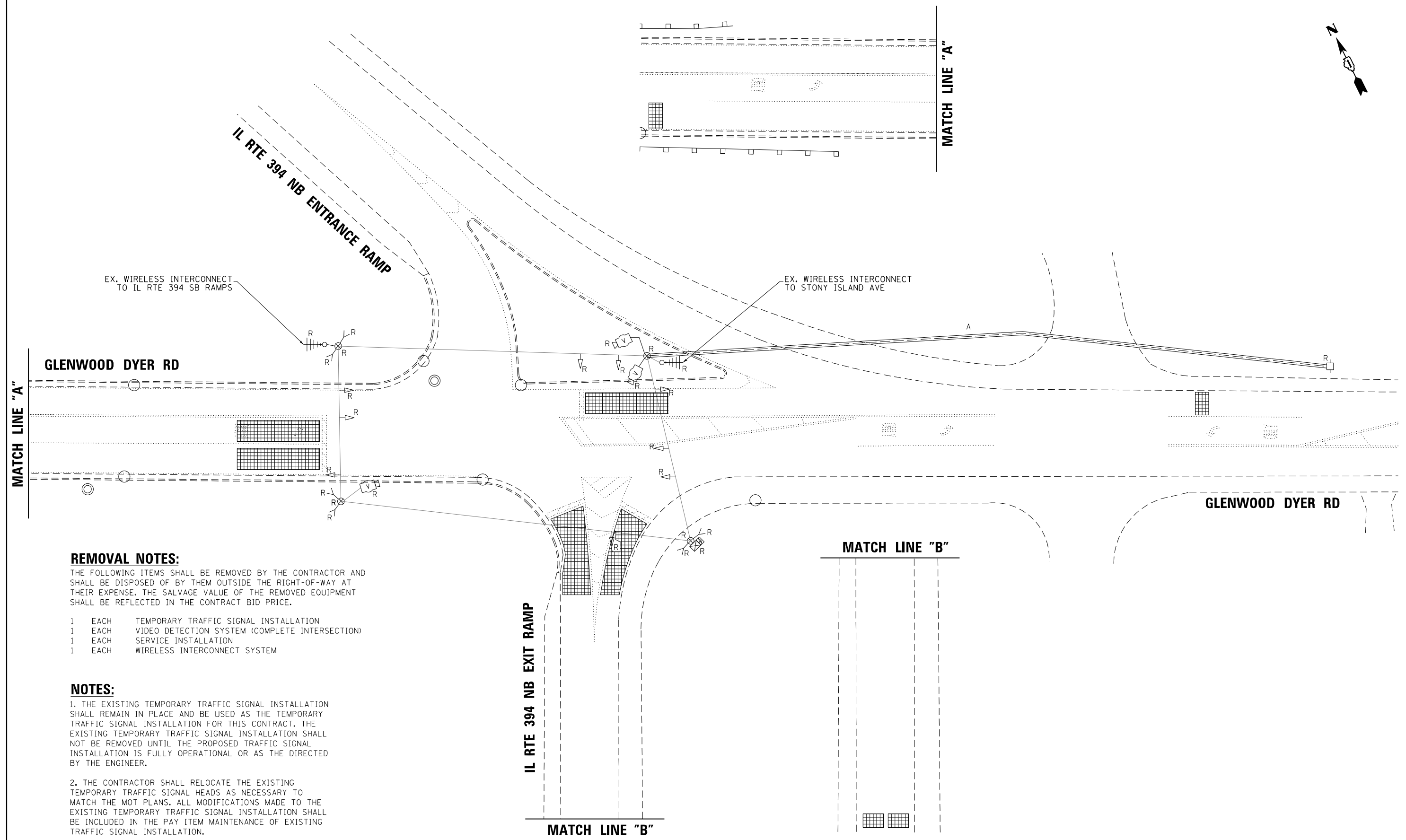
USER NAME = #USER#	DESIGNED - EA	REVISED -
PLOT SCALE = #SCALE#	DRAWN - EA, AV	REVISED -
PLOT DATE = #DATE#	CHECKED - NT, MA	REVISED -
	DATE - 3/16/2021	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAST ARM MOUNTED STREET NAME SIGNS
AND SCHEDULE OF QUANTITIES
IL RTE 394 SB RAMPS AT GLENWOOD DYER RD

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	2020-008-BR	COOK	62	25
CONTRACT NO. 62K79				
FED. ROAD DIST. NO. - [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.

- 1 EACH TEMPORARY TRAFFIC SIGNAL INSTALLATION
- 1 EACH VIDEO DETECTION SYSTEM (COMPLETE INTERSECTION)
- 1 EACH SERVICE INSTALLATION
- 1 EACH WIRELESS INTERCONNECT SYSTEM

NOTES:

1. THE EXISTING TEMPORARY TRAFFIC SIGNAL INSTALLATION SHALL REMAIN IN PLACE AND BE USED AS THE TEMPORARY TRAFFIC SIGNAL INSTALLATION FOR THIS CONTRACT. THE EXISTING TEMPORARY TRAFFIC SIGNAL INSTALLATION SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL INSTALLATION IS FULLY OPERATIONAL OR AS THE DIRECTED BY THE ENGINEER.
2. THE CONTRACTOR SHALL RELOCATE THE EXISTING TEMPORARY TRAFFIC SIGNAL HEADS AS NECESSARY TO MATCH THE MOT PLANS. ALL MODIFICATIONS MADE TO THE EXISTING TEMPORARY TRAFFIC SIGNAL INSTALLATION SHALL BE INCLUDED IN THE PAY ITEM MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION.

FILE NAME =
\$FILEL\$



USER NAME = \$USER\$	DESIGNED - EA	REVISED -
DRAWN - EA, AV	CHECKED - NT, MA	REVISED -
PLOT SCALE = \$SCALE\$	DATE - 3/16/2021	REVISED -
PLOT DATE = \$DATE\$		

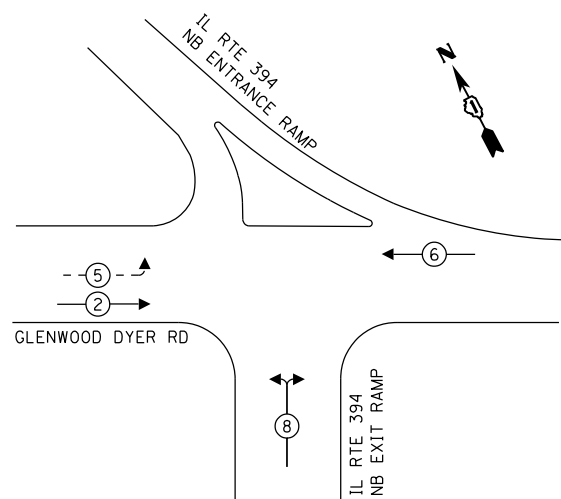
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL PLAN AND REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT PLAN IL RTE 394 NB RAMPS AT GLENWOOD DYER RD			
SCALE: 1"=20'	SHEET NO. OF SHEETS	STA. TO STA.	

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	2020-008-BR	COOK	62	26
CONTRACT NO. 62K79				
FED. ROAD DIST. NO. - [ILLINOIS] FED. AID PROJECT				

TS 5127
ECON 176

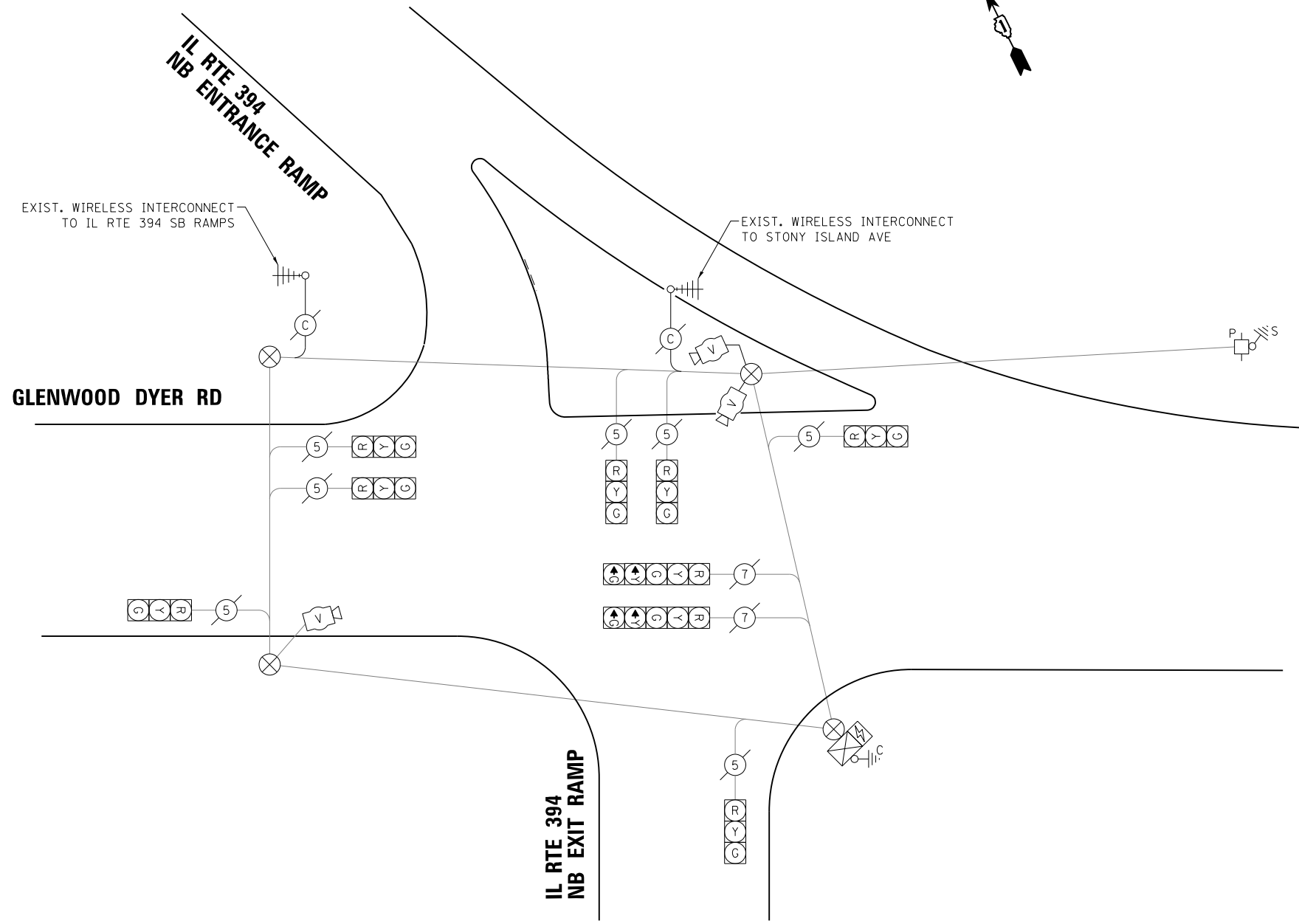
EXISTING CONTROLLER SEQUENCE



LEGEND:

- ⊗ — PROTECTED PHASE
- ⊗ — PROTECTED/PERMITTED PHASE
- ⊗ — PEDESTRIAN PHASE
- OL — OVERLAP

TEMPORARY PHASE DESIGNATION DIAGRAM



CABLE PLAN
(NOT TO SCALE)

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	9	11	50	49.5
(YELLOW)	9	20	5	9.0
(GREEN)	9	12	45	48.6
PERMISSIVE ARROW	4	10	10	4.0
PED. SIGNAL	-	20	100	-
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	-	240	50	-
			TOTAL =	386.1

ENERGY COSTS TO:

VILLAGE OF GLENWOOD
ONE ASSELBORN WAY
GLENWOOD, IL 60425

ENERGY SUPPLY: CONTACT: STEPHANIE HINES
PHONE: (708) 235-2331
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: Q885071308

USER NAME = \$USER*	DESIGNED - EA	REVISED -
PLOT SCALE = \$SCALE*	DRAWN - EA, AV	REVISED -
PLOT DATE = \$DATE*	CHECKED - NT, MA	REVISED -
	DATE - 3/16/2021	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EXISTING /TEMPORARY CABLE PLAN AND
EXISTING /TEMPORARY PHASE DESIGNATION DIAGRAM
IL RTE 394 NB RAMPS AT GLENWOOD DYER RD**

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

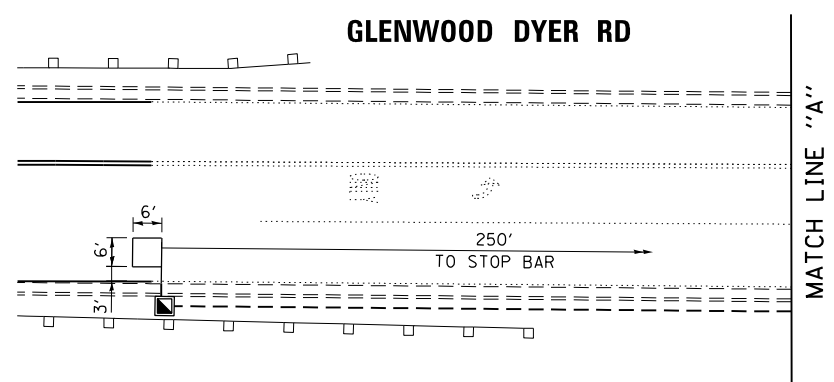
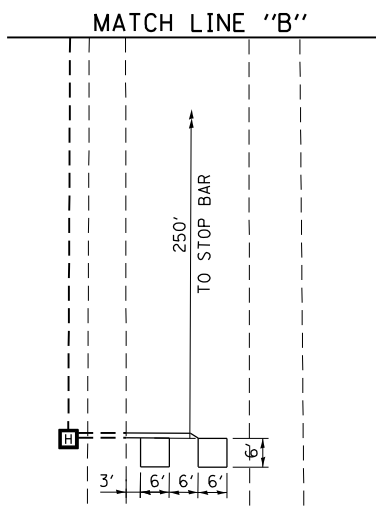
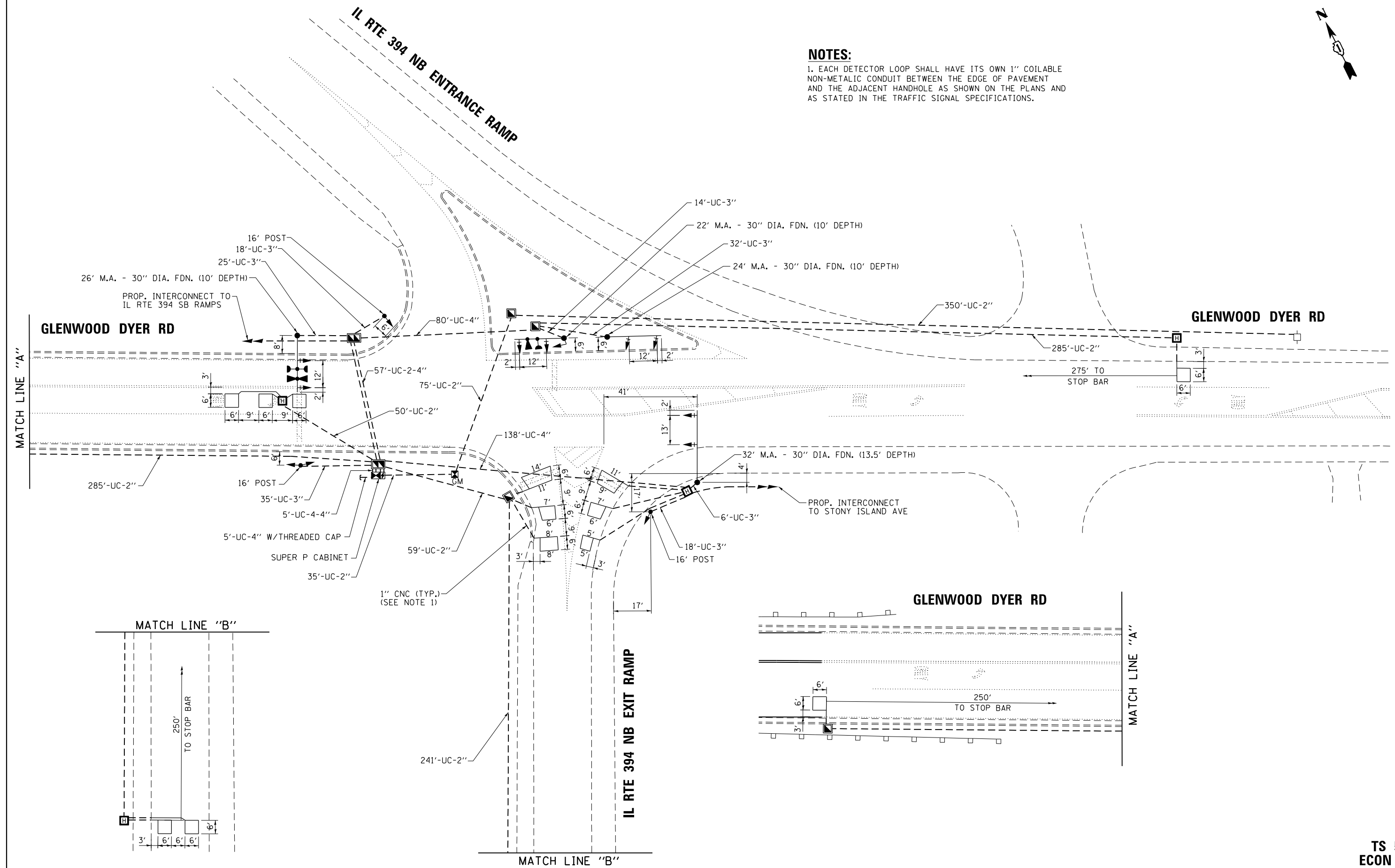
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	2020-008-BR	COOK	62	27
CONTRACT NO. 62K79				
FED. ROAD DIST. NO. - [ILLINOIS] FED. AID PROJECT				

**TS 5127
ECON 176**



NOTES:

1. EACH DETECTOR LOOP SHALL HAVE ITS OWN 1" COILABLE NON-METALIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND THE ADJACENT HANDHOLE AS SHOWN ON THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.



FILE NAME =
#FILE#



USER NAME = #USER#	DESIGNED - EA	REVISED -
PLOT SCALE = #SCALE#	DRAWN - EA, AV	REVISED -
PLOT DATE = #DATE#	CHECKED - NT, MA	REVISED -
	DATE - 3/16/2021	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

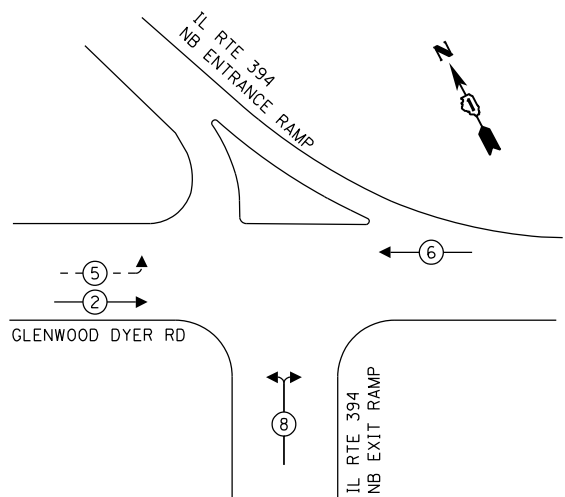
TRAFFIC SIGNAL MODERNIZATION PLAN
IL RTE 394 NB RAMPS AT GLENWOOD DYER RD

SCALE: 1"=20' SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	2020-008-BR	COOK	62	28
CONTRACT NO. 62K79				
FED. ROAD DIST. NO. - [ILLINOIS] FED. AID PROJECT				

TS 5127
ECON 176

PROPOSED CONTROLLER SEQUENCE

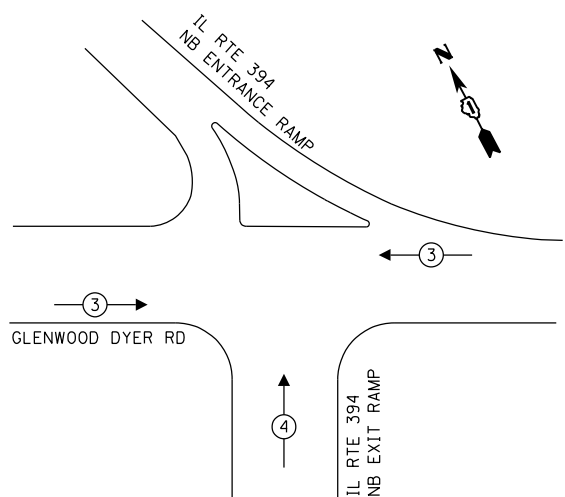


LEGEND:

- ← ⊙ → PROTECTED PHASE
- ← ⊙ - - ⊙ → PROTECTED/PERMITTED PHASE
- ← ⊙ ⊙ → PEDESTRIAN PHASE
- ← ⊙ ⊙ OL → OVERLAP

PROPOSED PHASE DESIGNATION DIAGRAM

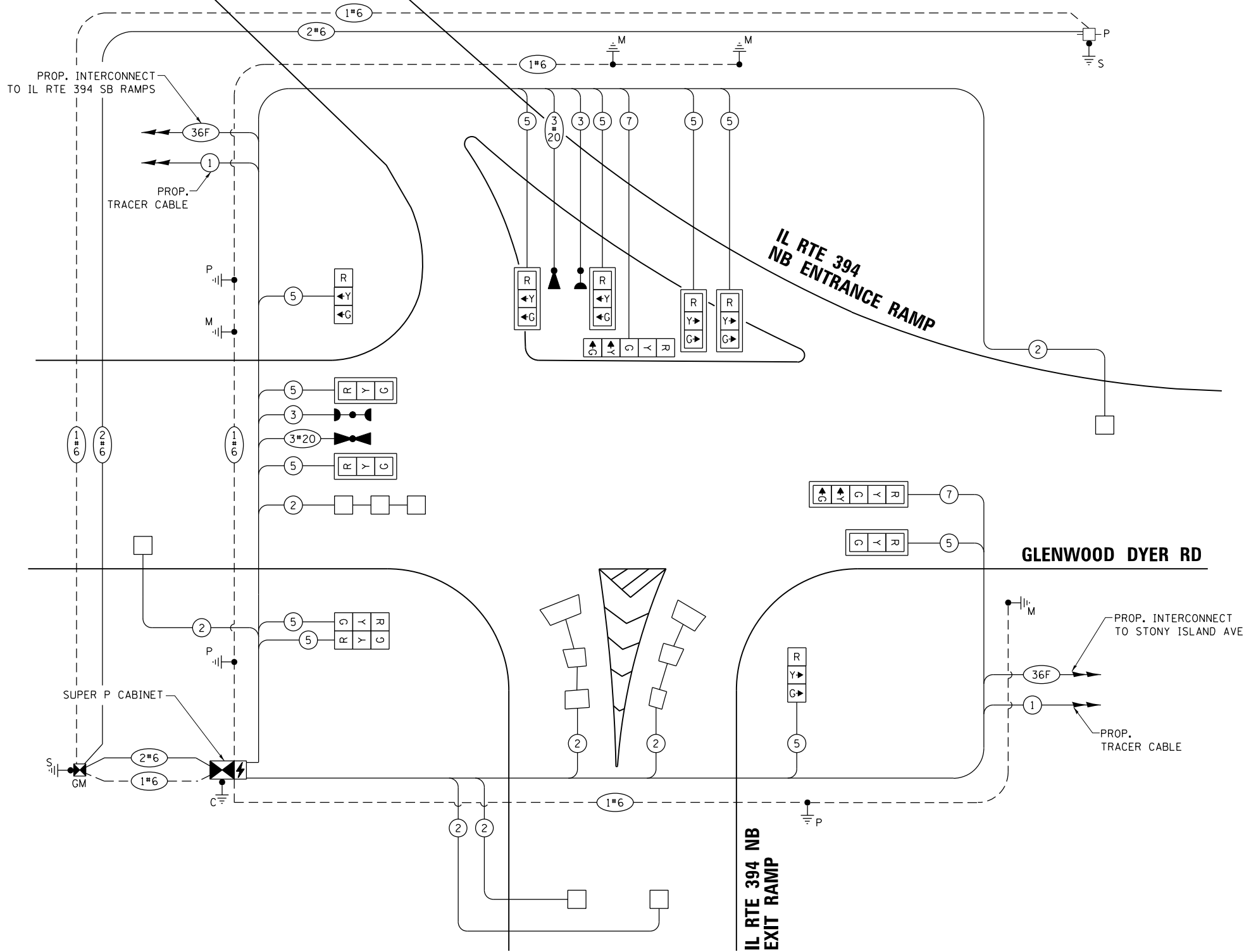
PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	13	11	50	71.5
(YELLOW)	13	20	5	13.0
(GREEN)	13	12	45	70.2
PERMISSIVE ARROW	4	10	10	4.0
PED. SIGNAL	-	20	100	-
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	240	50	-
TOTAL =				283.7

ENERGY COSTS TO:
 VILLAGE OF GLENWOOD
 ONE ASSELBORN WAY
 GLENWOOD, IL 60425
 ENERGY SUPPLY: CONTACT: STEPHANIE HINES
 PHONE: (708) 235-2331
 COMPANY: COMMONWEALTH EDISON
 ACCOUNT NUMBER: 0885071308



CABLE PLAN
(NOT TO SCALE)

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

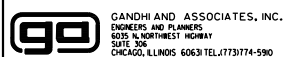
**CABLE PLAN, PHASE DESIGNATION DIAGRAM,
 AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
 IL RTE 394 NB RAMPS AT GLENWOOD DYER RD**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	2020-008-BR	COOK	62	29

CONTRACT NO. 62K79

TS 5127
 ECON 176

FILE NAME =
 \$FILEL\$



DESIGNED - EA	REVISED -
DRAWN - EA, AV	REVISED -
CHECKED - NT, MA	REVISED -
DATE - 3/16/2021	REVISED -

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

FED. ROAD DIST. NO. - [ILLINOIS] FED. AID PROJECT

SIGN PANEL – TYPE 2

ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	12.0	2	ZZ	1

NOTE: FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION PLEASE SEE DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGNS DETAIL.

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY.
SIGN PANEL - TYPE 2	SQ FT	12.0
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	1380
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	148
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	357
HANDHOLE	EACH	4
HEAVY-DUTY HANDHOLE	EACH	4
DOUBLE HANDHOLE	EACH	2
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
* ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	385
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1985
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	430
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1800
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	517
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1183
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	3
STEEL MAST ARM ASSEMBLY AND POLE, 22 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 24 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 26 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	16
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	43.5
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	7
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	1
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	8
INDUCTIVE LOOP DETECTOR	EACH	7
DETECTOR LOOP, TYPE I	FOOT	410
* LIGHT DETECTOR	EACH	2
* LIGHT DETECTOR AMPLIFIER	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
* EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	385
FULL-ACTUATED CONTROLLER AND TYPE SUPER P CABINET (SPECIAL)	EACH	1
SERVICE INSTALLATION, GROUND MOUNTED, METERED	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1

* 100% COST TO VILLAGE OF GLENWOOD

TS 5127
ECON 176

FILE NAME =
#FILE#



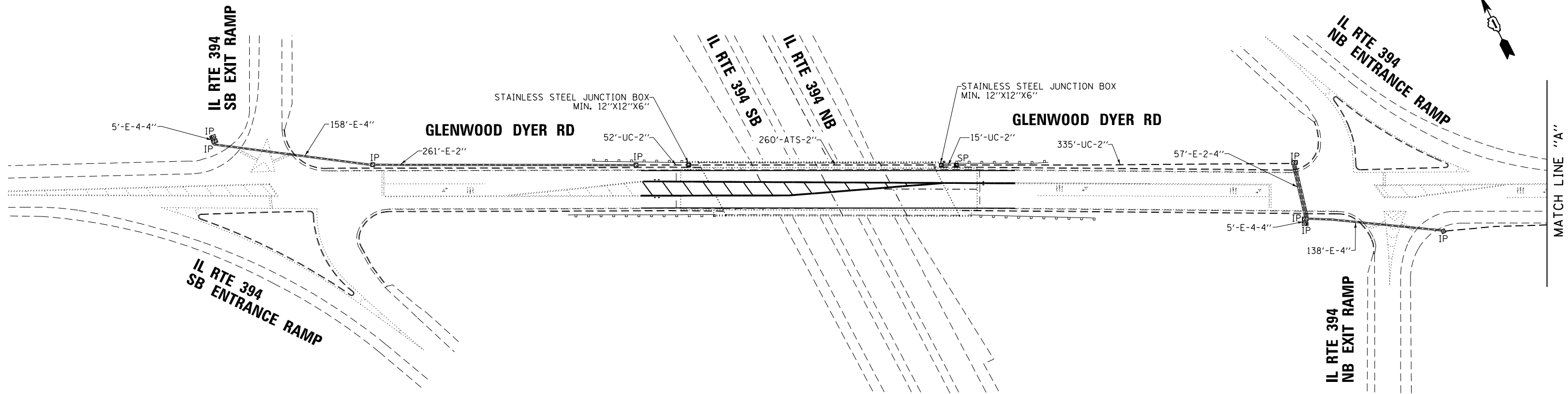
USER NAME = #USER#	DESIGNED - EA	REVISED -
PLOT SCALE = #SCALE#	DRAWN - EA, AV	REVISED -
PLOT DATE = #DATE#	CHECKED - NT, MA	REVISED -
	DATE - 3/16/2021	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAST ARM MOUNTED STREET NAME SIGNS
AND SCHEDULE OF QUANTITIES
IL RTE 394 NB RAMPS AT GLENWOOD DYER RD

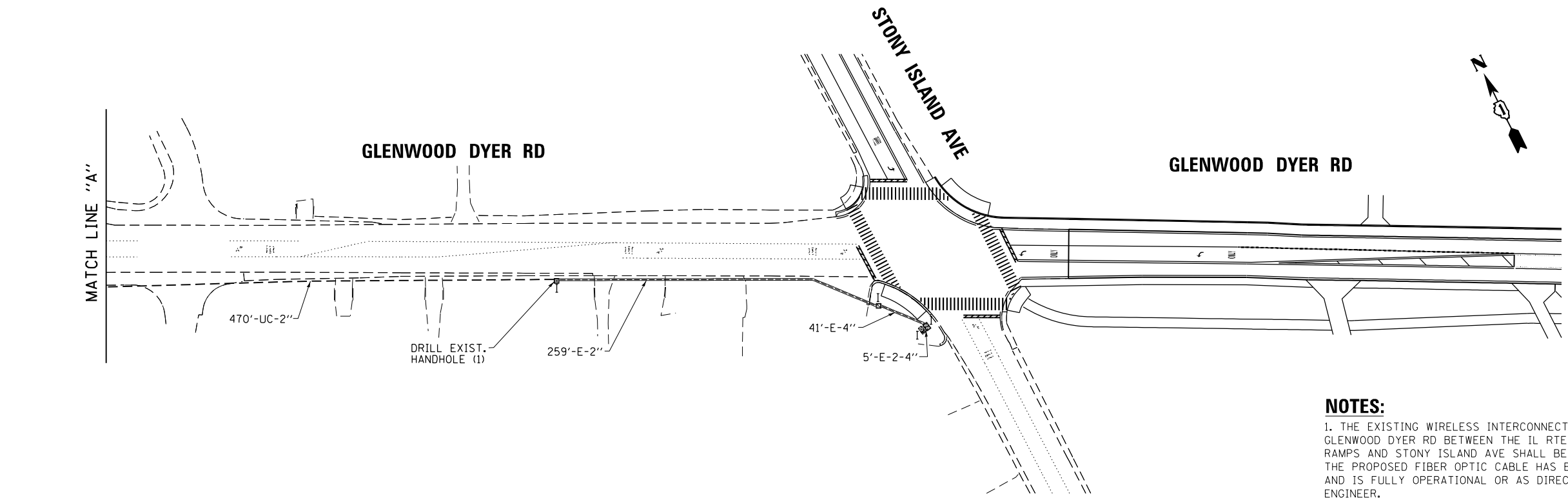
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	2020-008-BR	COOK	62	30
CONTRACT NO. 62K79				
FED. ROAD DIST. NO. - [ILLINOIS] FED. AID PROJECT				



MATCH LINE "A"

MATCH LINE "A"



NOTES:

1. THE EXISTING WIRELESS INTERCONNECT SYSTEM ALONG GLENWOOD DYER RD BETWEEN THE IL RTE 394 SOUTHBOUND RAMPS AND STONY ISLAND AVE SHALL BE MAINTAINED UNTIL THE PROPOSED FIBER OPTIC CABLE HAS BEEN INSTALLED AND IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
2. THE CONTRACTOR SHALL COORDINATE INTERCONNECT TO STONY ISLAND AVE WITH CONTRACT 62F84.

ECON 176

FILE NAME =
\$FILES\$

GO GANDHI AND ASSOCIATES, INC.
ENGINEERS AND PLANNERS
6035 N. NORTHWEST HIGHWAY
SUITE 306
CHICAGO, ILLINOIS 60630 TEL: 773.774.5500

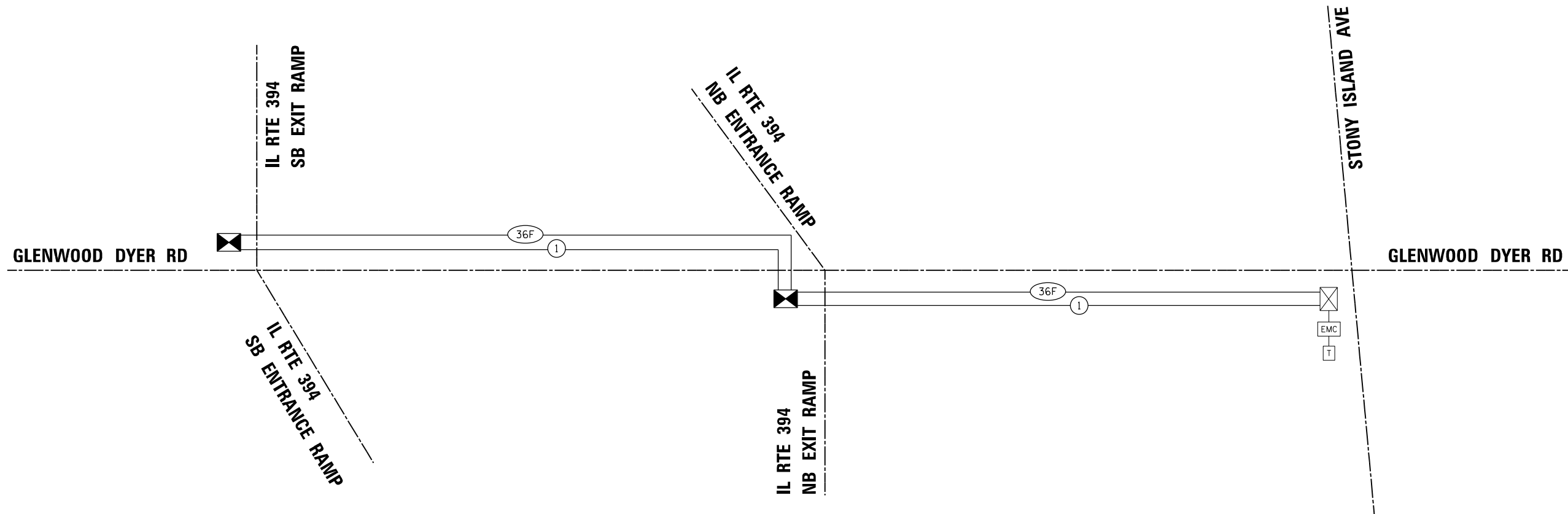
USER NAME = \$USER\$	DESIGNED - EA	REVISED -
DRAWN - EA, AV	CHECKED - NT, MA	REVISED -
PLOT SCALE = \$SCALE\$	DATE - 3/16/2021	REVISED -
PLOT DATE = \$DATE\$		

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PROPOSED INTERCONNECT PLAN
GLENWOOD DYER RD -
IL RTE 394 SB RAMPS TO STONY ISLAND AVE**

SCALE: 1"=50' SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	2020-008-BR	COOK	62	31
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 62K79	



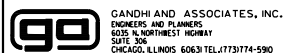
NOTE:
THE SCAT CONSULTANT WILL
DETERMINE THE LOCATION OF
THE SYSTEM DETECTORS.

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY.
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	872
CONDUIT ATTACHED TO STRUCTURE, 2" DIA., GALVANIZED STEEL	FOOT	260
HANDHOLE	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	2205
DRILL EXISTING HANDHOLE	EACH	1
FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F	FOOT	2205
OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1

ECON 176

FILE NAME =
\$FILEL\$



USER NAME = \$USER\$	DESIGNED - EA	REVISED -
	DRAWN - EA, AV	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - NT, MA	REVISED -
PLOT DATE = \$DATE\$	DATE - 3/16/2021	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PROPOSED INTERCONNECT SCHEMATIC PLAN
GLENWOOD DYER RD -
IL RTE 394 SB RAMPS TO STONY ISLAND AVE**

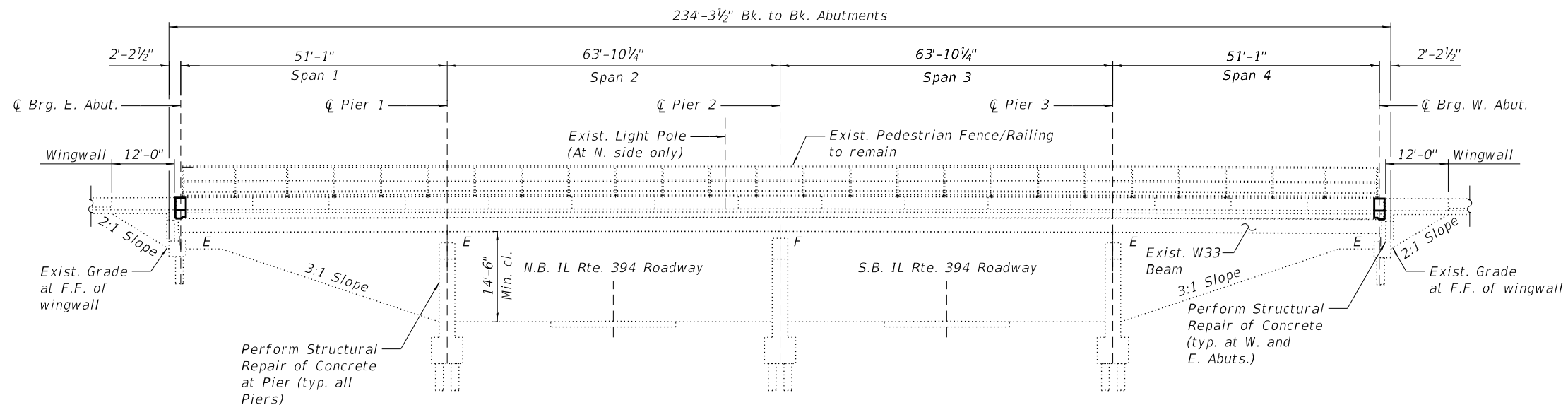
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	2020-008-BR	COOK	62	32
CONTRACT NO. 62K79				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

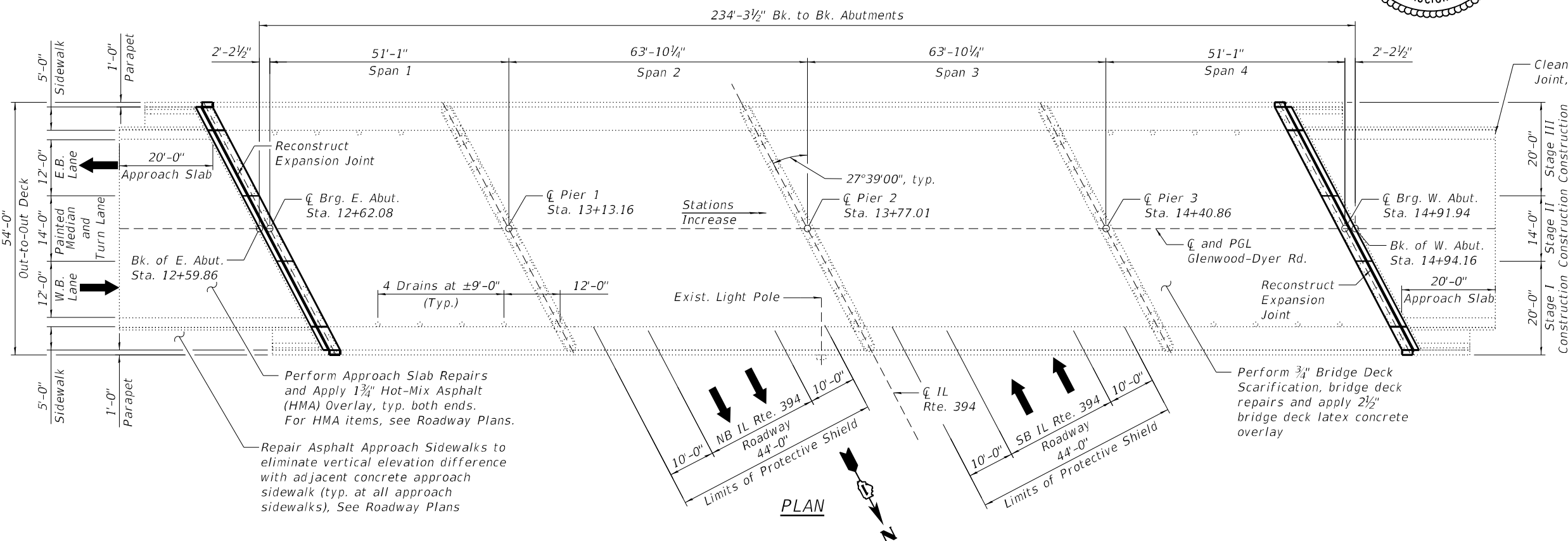
Existing Structure: Structure No. 016-0624 was originally constructed in 1954. In 1991, rehabilitation was performed and consisted of substructure/superstructure widening and deck replacement. The current bridge is a four-span structure (51'-1"/63'-10¼"/63'-10¼"/51'-1") with total length of 234'-3½" (back-to-back abutments) and an overall width of 54'-0" (out-to-out deck). The superstructure consists of a 7½"-thick reinforced concrete deck on continuous steel W33 wide-flange beams. The substructure consists of reinforced concrete abutments on 27-ton and HP 10x42 piles, reinforced concrete wingwalls on 16-ton and HP10x42 piles and reinforced concrete multi-column piers on 17-ton and HP 10x42 piles.

Traffic is to be maintained utilizing staged construction.

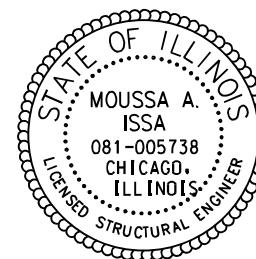
No salvage.



ELEVATION



PLAN



Signed Moussa A. Issa
 Dr. Moussa. Issa, S.E. II. Lic. No. 081-005738
 Expires 11-30-2022
 Date 04/01/2021

LOADING
 HS 20-44

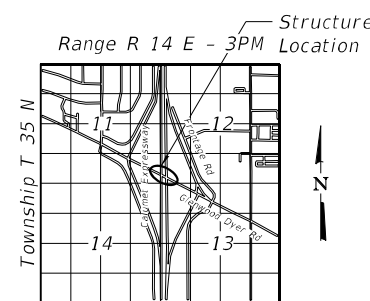
DESIGN SPECIFICATION
 2002 AASHTO Standard Specification for Highway Bridges, 17th Edition

RECONSTRUCTION
 1983 AASHTO Standard Specifications with 1984, 1985, 1986 Interims.
 1983 Guide Specifications for Seismic Design of Highway Bridges with 1985 and 1988 Interim Specifications as Applicable to Rehabilitation of Existing Structure.

DESIGN STRESSES
 FIELD UNITS
 f'c= 4,000 psi (Superstructure)
 f'c= 3,500 psi
 fy= 60,000 psi (Reinforcement)

ORIGINAL CONSTRUCTION (1954)
 f'c=1,200 psi
 fs= 20,000 psi (Reinforcement)
 fs= 18,000 psi (Structural Steel)

RECONSTRUCTION (1991)
 f'c=3,500 psi
 fy= 60,000 psi (Reinforcement)
 fs= 18,000 psi



LOCATION SKETCH

GENERAL PLAN AND ELEVATION
 GLENWOOD-DYER RD.
 OVER IL RTE. 394
 SECTION 2020-008-BR
 COOK COUNTY
 STATION 13+77.01
 S.N. 016-0624

MODEL: Default
 FILE NAME: P:\1707*732 Accurate: PTB184+010\WO #32 Glenwood Dyer Rd at IL RTE.394\Sheets\0160624-501-GeneralPlan&Elev.dgn
 4/2/2021 10:24:13 AM



USER NAME =	DESIGNED - AMS	REVISED -
CHECKED - MI, MAI	REVISED -	
PLOT SCALE =	DRAWN - AMS	REVISED -
PLOT DATE =	DATE - 4/2/2021	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SHEET S-01 OF S-21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	2020-008-BR	COOK	62	33
CONTRACT NO. 62K79				
ILLINOIS FED. AID PROJECT				

GENERAL NOTES

- Fasteners shall be high strength bolts. Bolts 3/4"Ø, open holes 13/16"Ø, unless otherwise noted.
- 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 joint 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. As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer. Any cracks that cannot be removed by grinding 1/4" deep shall be identified and reported to the Bureau of Bridges and Structures for further dispositions. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.
- 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.
- The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
- All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.
- The Engineer shall report clearances under the bridge after beam repairs are complete.
- 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.
- Where underpass lighting is present on a structure, the contractor shall adjust the protective shielding to ride above the existing lighting fixtures in order to maintain the existing level of lighting on the roadway underneath. Details shall be approved by the engineer before installation.
- Any adjustment done to the protective shield system must not change the load carrying capacity as indicated in the Std Specs. Cost of adjusting shielding is included in the cost of protective shield.
- Existing pedestrian fence/railing shall be protected and re-anchored to new concrete. Cost included in Concrete Removal.

SCOPE OF WORK

- Perform Beam Repair at the location, and to the limits, indicated on the Plans.
- Provide protective shield within limits indicated on the plans.
- Perform 3/4" Bridge Deck Scarification.
- Perform Deck Slab Repairs and Approach Slab Repairs as required.
- Reconstruct bridge deck expansion joints at the East and West Abutments and install new performed joint strip seal.
- Perform parapet repairs.
- 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 existing Parapets, sidewalks, Reconstructed joint area, and to the surface of the new overlay.
- Clean and reseal relief joints.
- Perform Structural Repair of Concrete to the Abutments and Piers as noted on the plans.
- Repaint lane markings. See Roadway Plans.

INDEX OF SHEETS

- S-01 General Plan and Elevation
- S-02 General Notes, Index of Sheets and Total Bill of Material
- S-03 Stage Construction (Sheet 1 of 2)
- S-04 Stage Construction (Sheet 2 of 2)
- S-05 Temporary Concrete Barrier for Stage Construction
- S-06 Deck Repair Plan
- S-07 Parapet and Railing Repairs
- S-08 E. Abut. Jt. Removal and Reconstruction (Sht. 1 of 2)
- S-09 E. Abut. Jt. Removal and Reconstruction (Sht. 2 of 2)
- S-10 W. Abut. Jt. Removal and Reconstruction (Sht. 1 of 2)
- S-11 W. Abut. Jt. Removal and Reconstruction (Sht. 2 of 2)
- S-12 Prefomed Joint Strip Seal - Sidewalk (Sheet 1 of 3)
- S-13 Prefomed Joint Strip Seal - Sidewalk (Sheet 2 of 3)
- S-14 Prefomed Joint Strip Seal - Sidewalk (Sheet 3 of 3)
- S-15 Framing Plan and Beam Repairs
- S-16 East Abutment Repairs
- S-17 West Abutment Repairs
- S-18 Pier 1 Repairs
- S-19 Pier 2 Repairs
- S-20 Pier 3 Repairs
- S-21 Bar Splicer Assembly and Mechanical Splicer Details

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	CU YD	17.6	-	17.6
Protective Shield	SQ YD	528	-	528
Concrete Superstructure	CU YD	23.0	-	23.0
Bridge Deck Grooving	SQ YD	1,049	-	1,049
Protective Coat	SQ YD	1,571	-	1,571
Reinforcement Bars, Epoxy Coated	POUND	2,880	-	2,880
Bar Splicers	EACH	64	-	64
Prefomed Joint Strip Seal	FOOT	122	-	122
Epoxy Crack Injection	FOOT	35	49	84
Clean & Reseal Relief Joint	FOOT	84	-	84
Approach Slab Repair (Partial Depth)	SQ YD	2	-	2
Structural Steel Repair	POUND	1,720	-	1,720
Bridge Deck Latex Concrete Overlay, 2 1/2 Inches	SQ YD	1,055	-	1,055
Bridge Deck Scarification 3/4"	SQ YD	1,055	-	1,055
Structural Repair Of Concrete (Depth Equal To Or Less Than 5 Inches)	SQ FT	3	235	238
Temporary Shoring And Cribbing	EACH	11	-	11

MODEL: Default
FILE NAME: P:\1707*732_Accurate_PTB184+Q10\WO #32_Glenwood Dyer Rd at IL RTE.394\Sheets\0160624-502-General Notes_Index Sheet_BOM.dgn



USER NAME =	DESIGNED - SK, JMI	REVISED -
	CHECKED - MI, MAI	REVISED -
PLOT SCALE =	DRAWN - JMI	REVISED -
PLOT DATE =	DATE - 4/2/2021	REVISED -

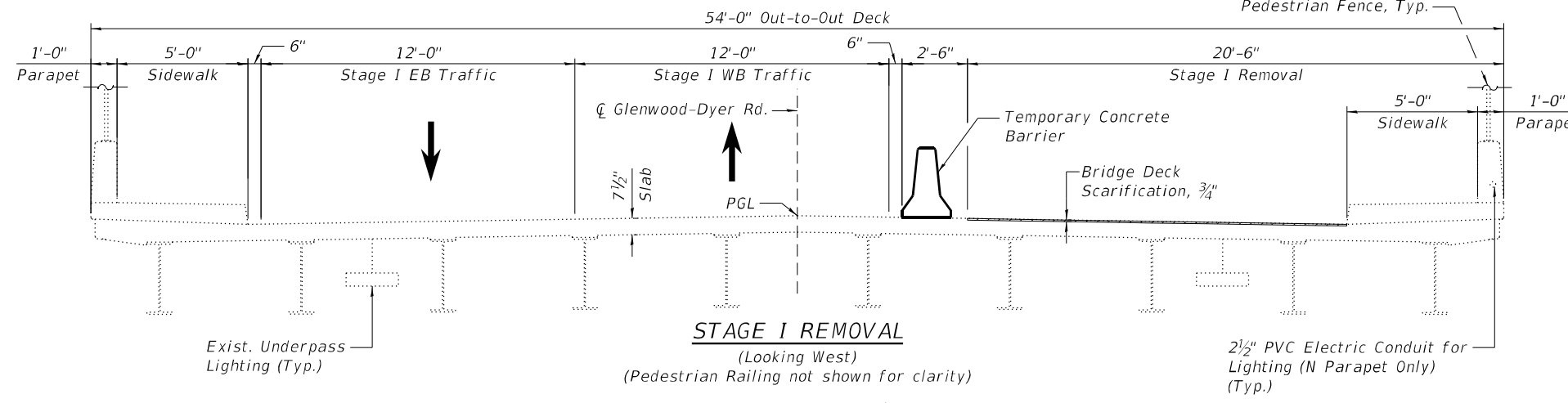
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GENERAL NOTES, INDEX OF SHEETS AND TOTAL BILL OF MATERIAL
STRUCTURE NO. 016-0624**

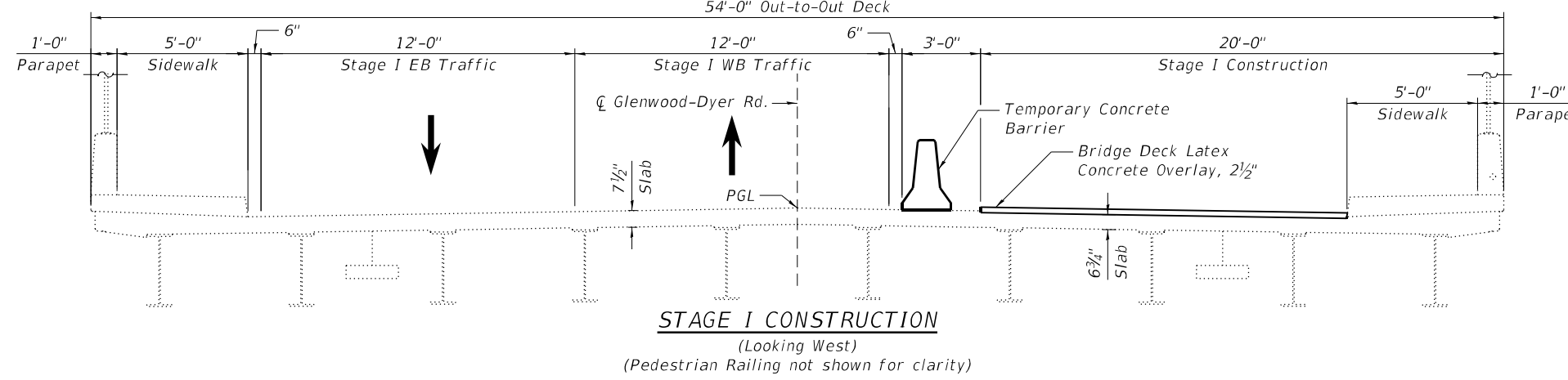
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	2020-008-BR	COOK	62	34
CONTRACT NO. 62K79				
ILLINOIS		FED. AID PROJECT		

SHEET S-02 OF S-21 SHEETS

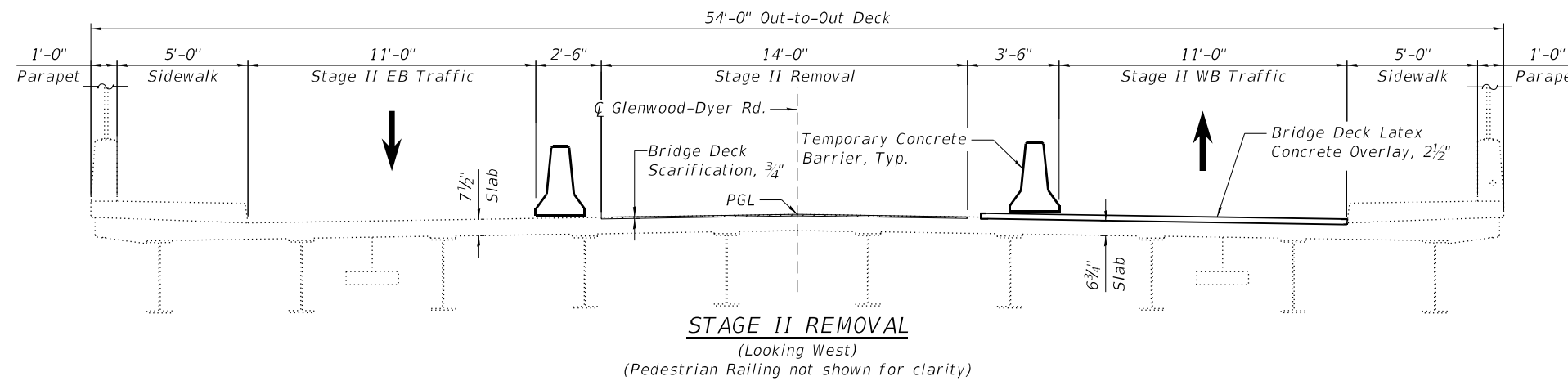
MODEL: Default
 FILE NAME: P:\1707*732_Accurate_PTB184-010\WO_#32_Glenwood-Dyer_Rd.at.IL RTE.394\Sheets\0160624-503-Stage_Construction [Sheet 1 of 2].dgn
 3/18/2021 10:56:41 AM



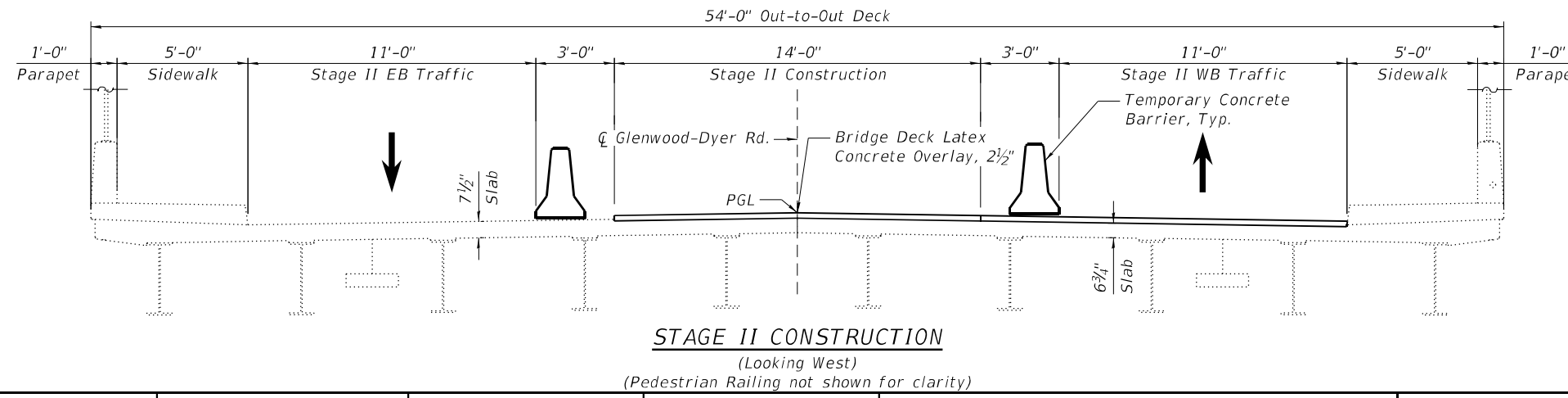
STAGE I REMOVAL
 (Looking West)
 (Pedestrian Railing not shown for clarity)



STAGE I CONSTRUCTION
 (Looking West)
 (Pedestrian Railing not shown for clarity)



STAGE II REMOVAL
 (Looking West)
 (Pedestrian Railing not shown for clarity)



STAGE II CONSTRUCTION
 (Looking West)
 (Pedestrian Railing not shown for clarity)

STAGE I REMOVAL

1. Install temporary concrete barrier as shown to locate traffic lanes on the south side of the existing structure.
2. Perform 3/4" bridge deck scarification.
3. Remove areas of existing deck for full-depth deck slab and remove areas of concrete for approach slab repairs at locations shown in the plans.
4. Remove portions of bridge deck/approach slab adjacent to expansion joints at the West and East Abutments.
5. Perform temporary shoring and cribbing, at locations shown in the plans within the limits of Stage I Removal.

STAGE I CONSTRUCTION

1. Perform bridge deck slab and approach slab repairs.
2. Reconstruct expansion joints and install new preformed joint strip seals with the limits of Stage I Construction.
3. Perform structural repair of concrete for the abutments and piers.
4. Apply 2 1/2" bridge deck latex concrete overlay.
5. Perform bridge deck grooving for the 2 1/2" bridge deck latex concrete overlay and reconstructed abutment expansion joint areas.
6. Apply 1 3/4" Hot-Mix Asphalt (HMA) Overlay to approach slab. See Roadway Plans.
7. Repair northeast and northwest asphalt approach sidewalks. See Roadway Plans.
8. Clean and Reseal Relief joints.
9. Perform parapet repairs at north side of structure.
10. Apply protective coat to top and inside faces of north parapet and sidewalk, reconstructed abutment expansion joint areas and to the surface of the new overlay.

STAGE II REMOVAL

1. Install temporary concrete barriers as shown to locate traffic lanes on the north and south sides of the existing structure.
2. Perform 3/4" bridge deck scarification.
3. Remove areas of existing deck for full-depth deck slab repairs and remove areas of concrete for approach slab repairs at locations shown in the plans.
4. Remove portions of bridge deck/approach slab adjacent to expansion joints at the West and East Abutments.
5. Perform temporary shoring and cribbing at locations shown in the plans, within the limits of Stage II Removal.

STAGE II CONSTRUCTION

1. Perform bridge deck slab and approach slab repairs.
2. Reconstruct expansion joints and install new preformed joint strip seals within the limits of Stage II Construction.
3. Perform structural repairs of concrete for the abutments and piers.
4. Apply 2 1/2" bridge deck latex concrete overlay.
5. Perform bridge deck grooving for the 2 1/2" bridge deck latex concrete overlay and reconstructed abutment expansion joint areas.
6. Apply 1 3/4" Hot-Mix Asphalt (HMA) Overlay to approach slab. See Roadway Plans.
7. Clean and Reseal Relief joints.
8. Apply protective coat to the surface of the new overlay.



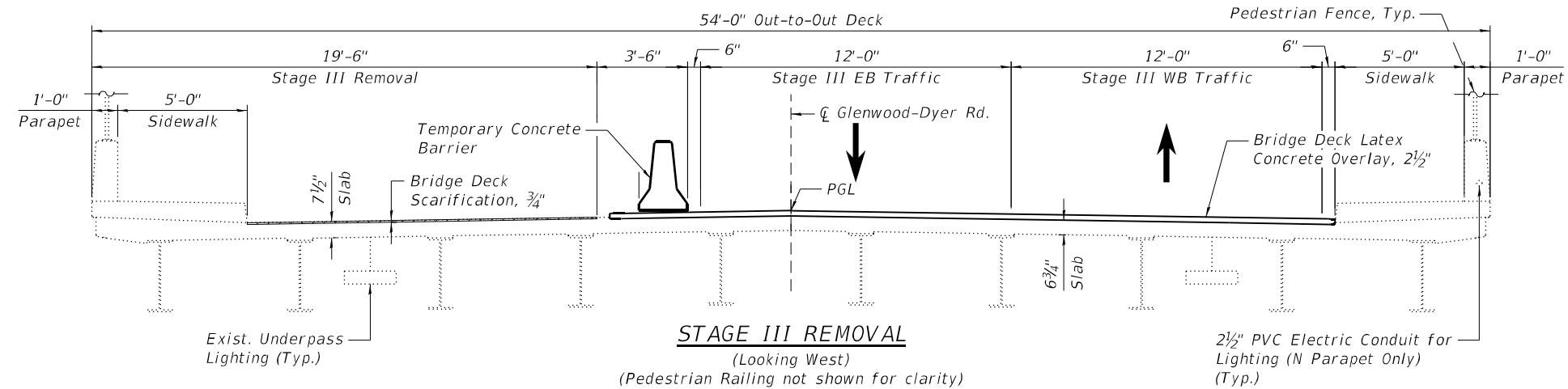
USER NAME =	DESIGNED - SK	REVISED -
	CHECKED - MI, MAI	REVISED -
PLOT SCALE =	DRAWN - JMI	REVISED -
PLOT DATE =	DATE - 3/18/2021	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

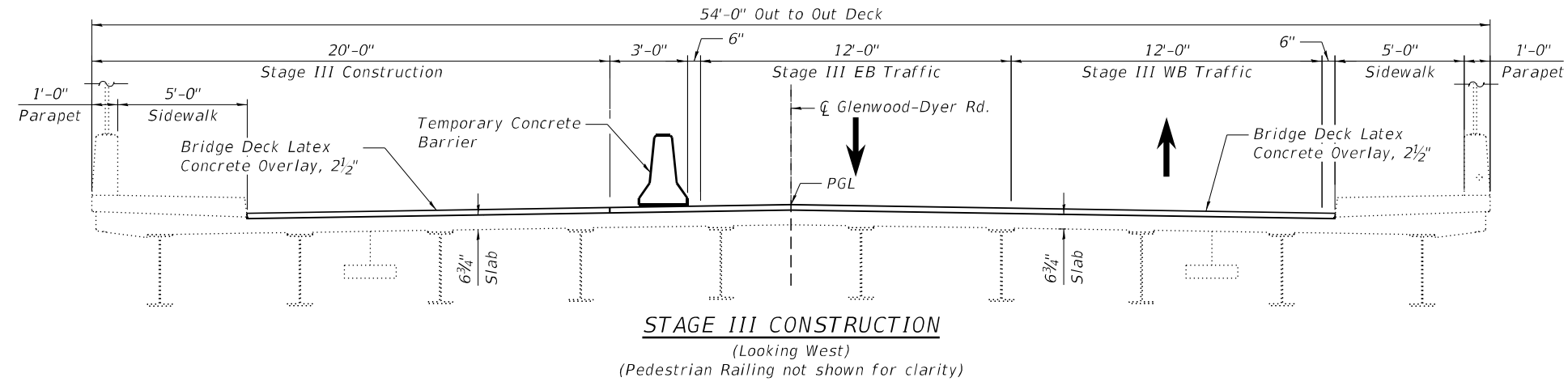
STAGE CONSTRUCTION (SHEET 1 OF 2)
 STRUCTURE NO. 016-0624

SHEET S-03 OF S-21 SHEETS

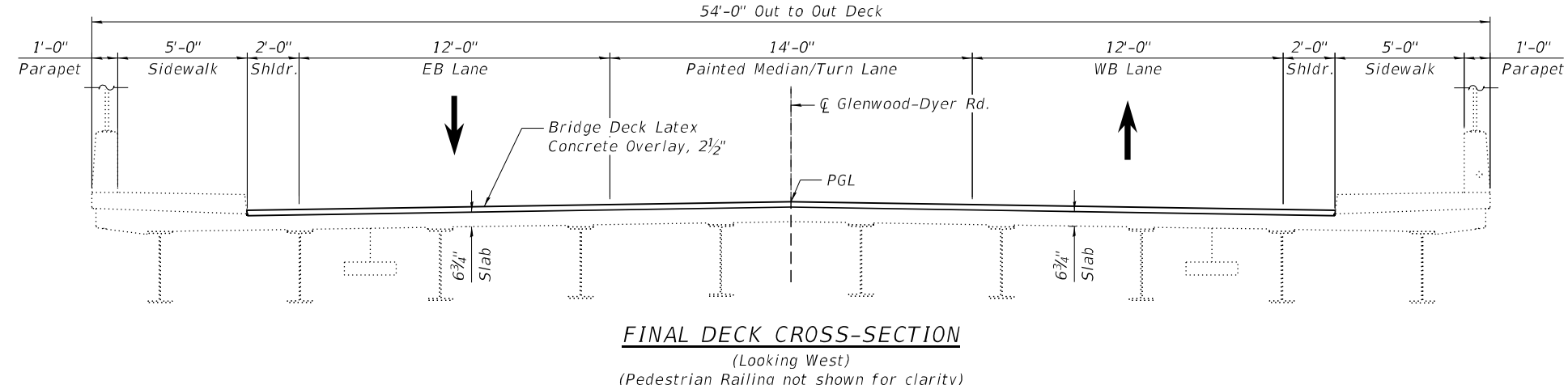
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	2020-008-BR	COOK	62	35
CONTRACT NO. 62K79				
ILLINOIS FED. AID PROJECT				



STAGE III REMOVAL
(Looking West)
(Pedestrian Railing not shown for clarity)



STAGE III CONSTRUCTION
(Looking West)
(Pedestrian Railing not shown for clarity)



FINAL DECK CROSS-SECTION
(Looking West)
(Pedestrian Railing not shown for clarity)

STAGE III REMOVAL

1. Install temporary concrete barrier as shown to locate traffic lanes on the north side of the existing structure.
2. Perform 3/4" bridge deck scarification.
3. Remove areas of existing deck for full-depth deck slab repairs and remove areas of concrete for approach slab repairs at locations shown in the plans.
4. Remove portions of bridge concrete deck/approach slab adjacent to expansion joints at the West and East Abutments.
5. Perform temporary shoring and cribbing at locations shown in the Plans within the limits of Stage II Removal.

STAGE III CONSTRUCTION

1. Perform bridge deck and approach slab repairs.
2. Reconstruct expansion joints and install new preformed joint strip seals within the limits of Stage III Construction.
3. Perform structural repair of concrete for the abutments and piers.
4. Apply 2 1/2" bridge deck latex concrete overlay.
5. Perform bridge deck grooving for the 2 1/2" bridge deck latex concrete overlay and reconstructed transverse expansion joint areas.
6. Apply 1 3/4" Hot-Mix Asphalt (HMA) Overlay to Approach slabs. See Roadway Plans.
7. Repair southeast and southwest asphalt approach sidewalks. see Roadway Plans.
8. Clean and Reseal Relief joints.
9. Perform parapet repairs at south side of structure.
10. Apply protective coat to top and inside faces of south parapet and sidewalk, and reconstructed transverse expansion joint areas and to the surface of the new overlay.

MODEL: Default
FILE NAME: P:\1707*732_Accurate_PTB184*010\WO #32_Glenwood Dyer Rd at IL RTE.394\Sheets\0160624-504-Stage Construction (Sheet 2 of 2).dgn
3/18/2021 10:56:42 AM

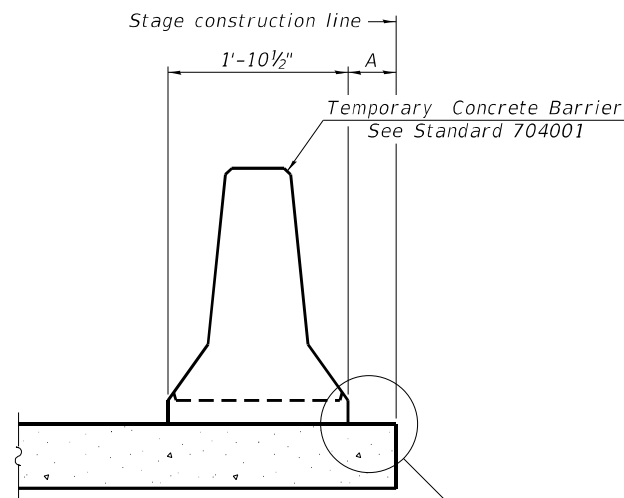


USER NAME =	DESIGNED - SK	REVISED -
	CHECKED - MI, MAI	REVISED -
PLOT SCALE =	DRAWN - JMI	REVISED -
PLOT DATE =	DATE - 3/18/2021	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

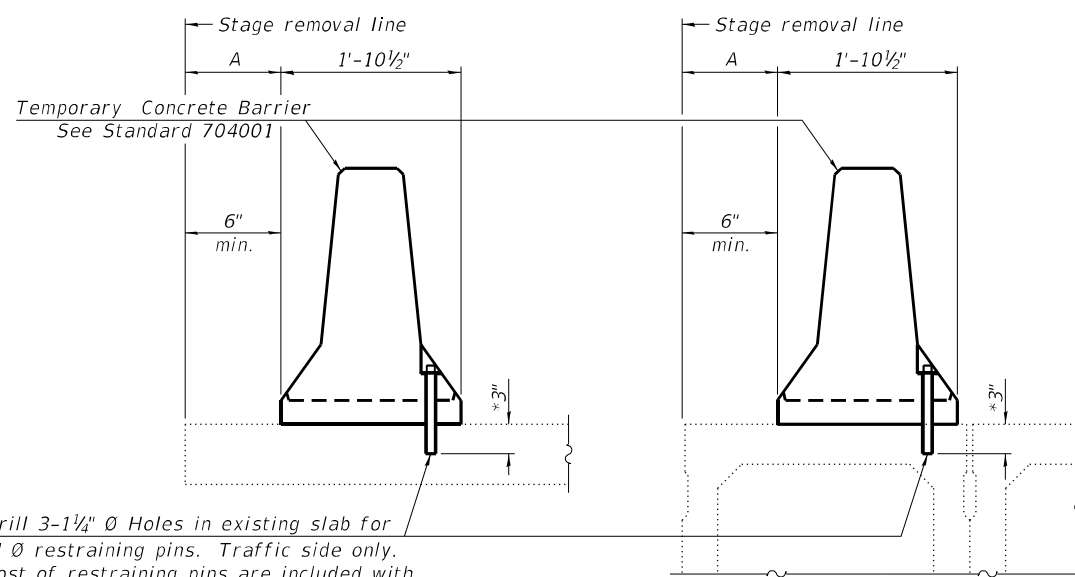
**STAGE CONSTRUCTION (SHEET 2 OF 2)
STRUCTURE NO. 016-0624**

F.A.P. RTE. 332	SECTION 2020-008-BR	COUNTY COOK	TOTAL SHEETS 62	SHEET NO. 36
CONTRACT NO. 62K79				
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

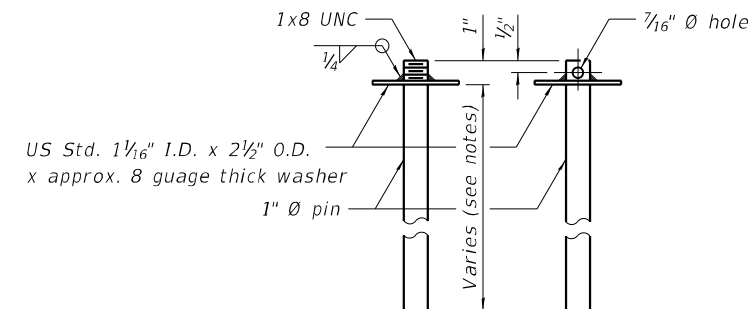


Drill 3-1 1/4" Ø Holes in existing slab for 1" Ø restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

EXISTING SLAB

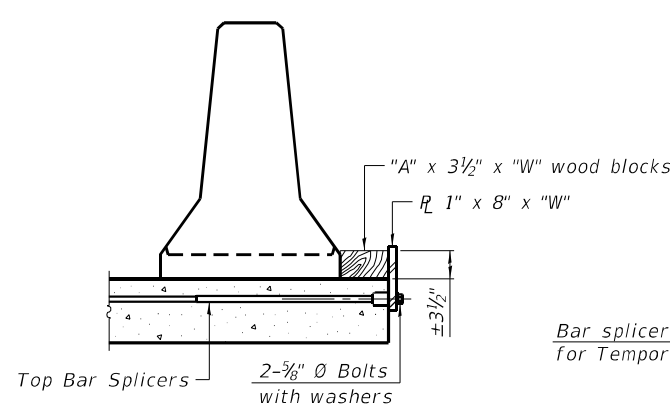
EXISTING DECK BEAM

SECTIONS THRU SLAB OR DECK BEAM

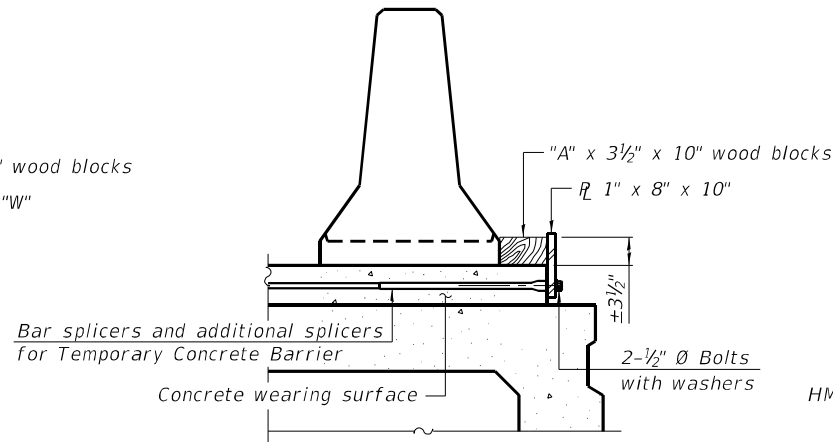


RESTRAINING PIN

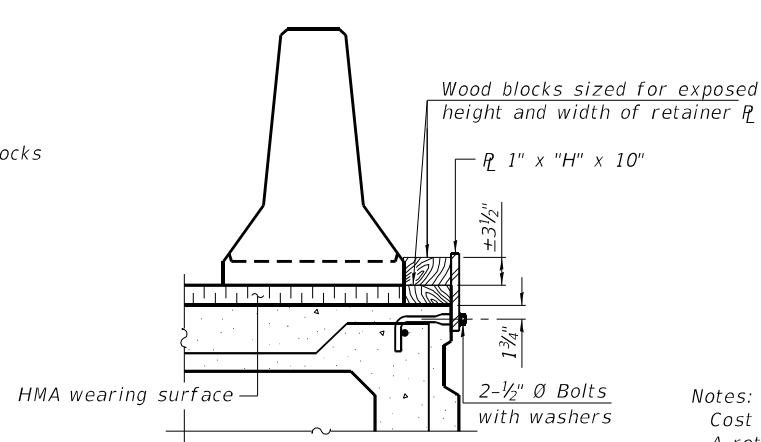
* When hot-mix asphalt wearing surface is present, embedment shall be 3" plus the wearing surface depth.



DETAIL I

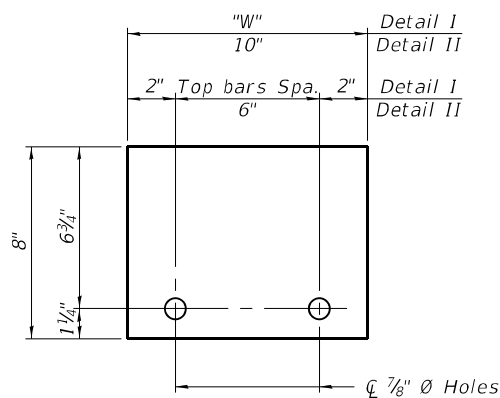


DETAIL II

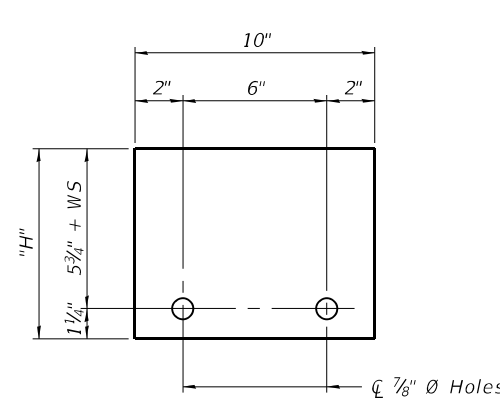


DETAIL III

BAR SPLICER FOR #4 BAR - DETAIL III



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



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

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

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

R-27 2-17-2017

MODEL: Default
FILE NAME: P:\1707\732 Accurate PTB184\010\WO #32 Glenwood Dyer Rd at IL RTE.394\Sheets\0160624-505-Temporary Concrete Barrier for Stage Construction.dgn
3/18/2021 10:56:43 AM



USER NAME =	DESIGNED - JMI	REVISED -
PLOT SCALE =	CHECKED - MI, MAI	REVISED -
PLOT DATE =	DRAWN - JMI	REVISED -
	DATE - 3/18/2021	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

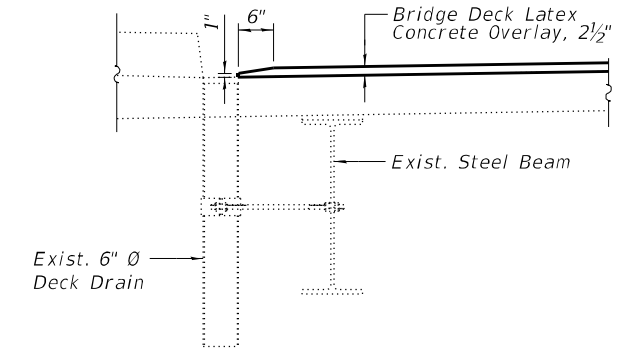
TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
STRUCTURE NO. 016-0624

SHEET S-05 OF S-21 SHEETS

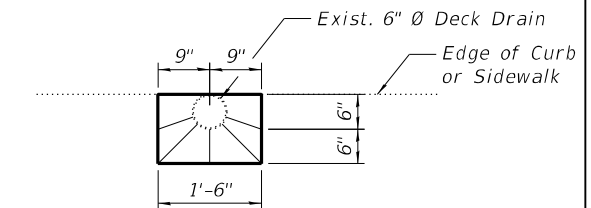
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	2020-008-BR	COOK	62	37
CONTRACT NO. 62K79				
ILLINOIS FED. AID PROJECT				

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Protective Shield	SQ YD	528
Bridge Deck Grooving	SQ YD	1,049
Protective Coat	SQ YD	1,571
Clean & Reseal Relief Joint	FOOT	84
Approach Slab Repair (Partial Depth)	SQ YD	2
Bridge Deck Latex Concrete Overlay, 2 1/2 Inches	SQ YD	1,055
Bridge Deck Scarification 3/4"	SQ YD	1,055



SECTION AT DECK DRAIN



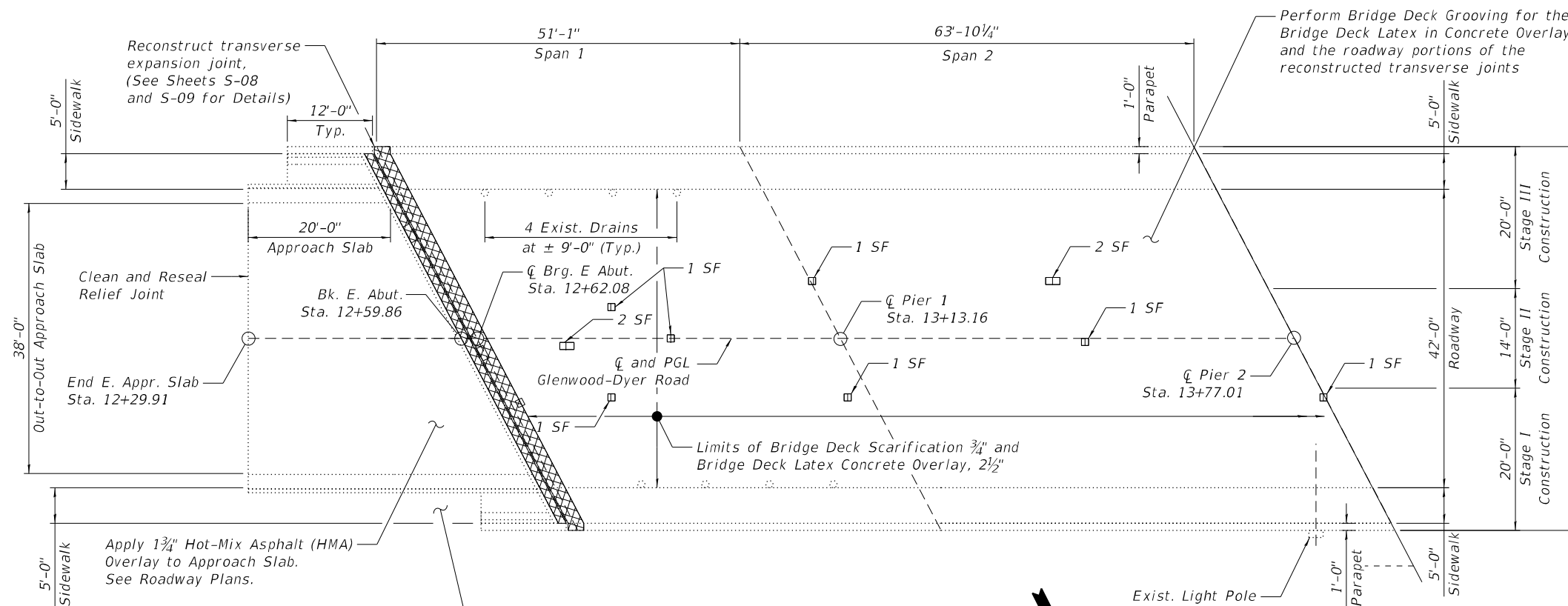
TOP PLAN

NOTES:

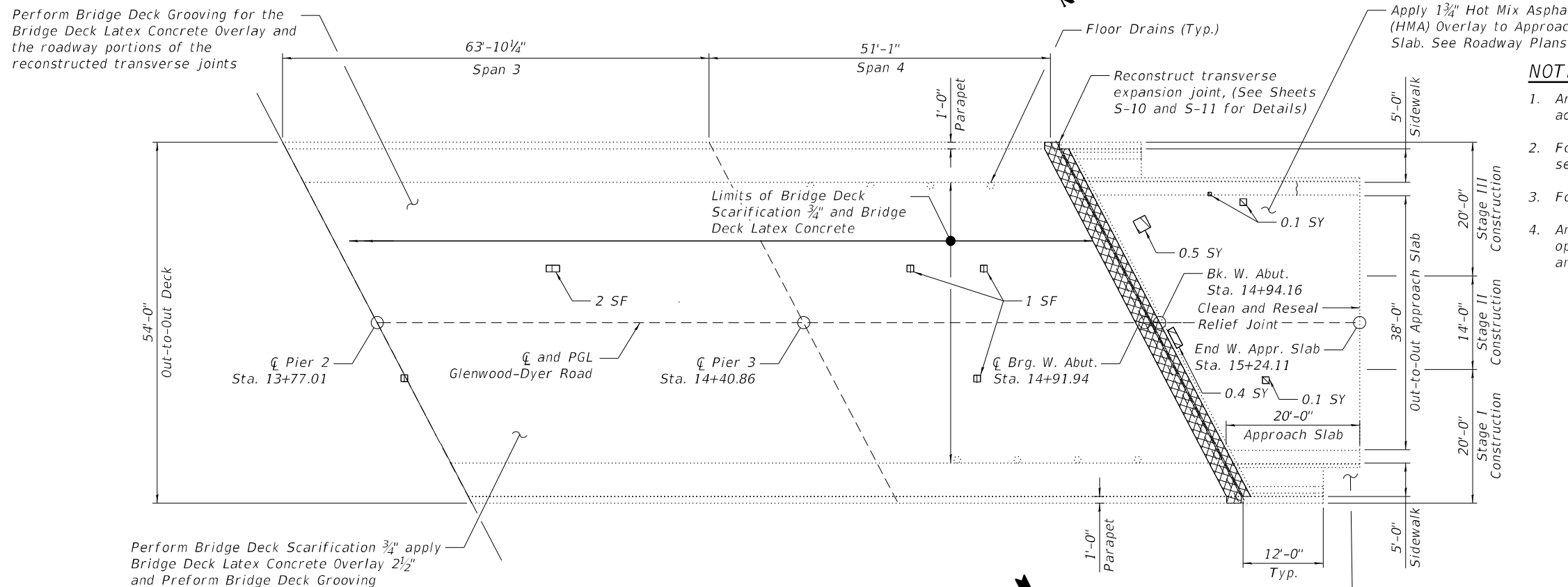
1. Areas of deck repairs shown are estimated. The Engineer shall show actual locations of deck repairs on As-Built Plans.
2. For East and West Abutment Expansion Joint removal and reconstruction, see Sheets S-08 thru S-11.
3. For Parapet Repairs, see Sheet S-07.
4. Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost incidental to Concrete Removal.

LEGEND

- Approach Slab Repair (Partial Depth)
- Deck Slab Repair (Partial)*
- Concrete Removal



DECK PLAN (SPAN 1 AND SPAN 2)



DECK PLAN (SPAN 3 AND SPAN 4)

*Areas of Deck Slab Repair (Partial) are provided for information only to assist Contractor in bidding. See Special Provisions for "Bridge Deck Latex Concrete Overlay".

MODEL: Default
FILE NAME: P:\1707\732_Accurate_PTB184-010\WO #32_Glenwood Dyer Rd at IL RTE.394\Sheets\0160624-506-Deck Repair_Plan.dgn
3/18/2021 10:56:44 AM



USER NAME =	DESIGNED - AMS, JMI	REVISED -
	CHECKED - MI, MAI	REVISED -
PLOT SCALE =	DRAWN - AMS	REVISED -
PLOT DATE =	DATE - 3/18/2021	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DECK REPAIR PLAN
STRUCTURE NO. 016-0624**

SHEET S-06 OF S-21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	2020-008-BR	COOK	62	38
CONTRACT NO. 62K79				
ILLINOIS FED. AID PROJECT				

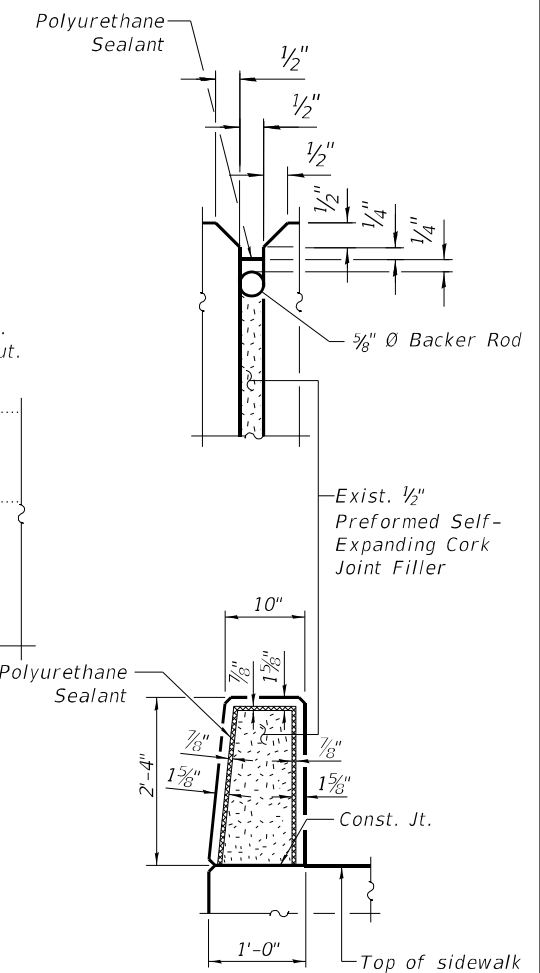
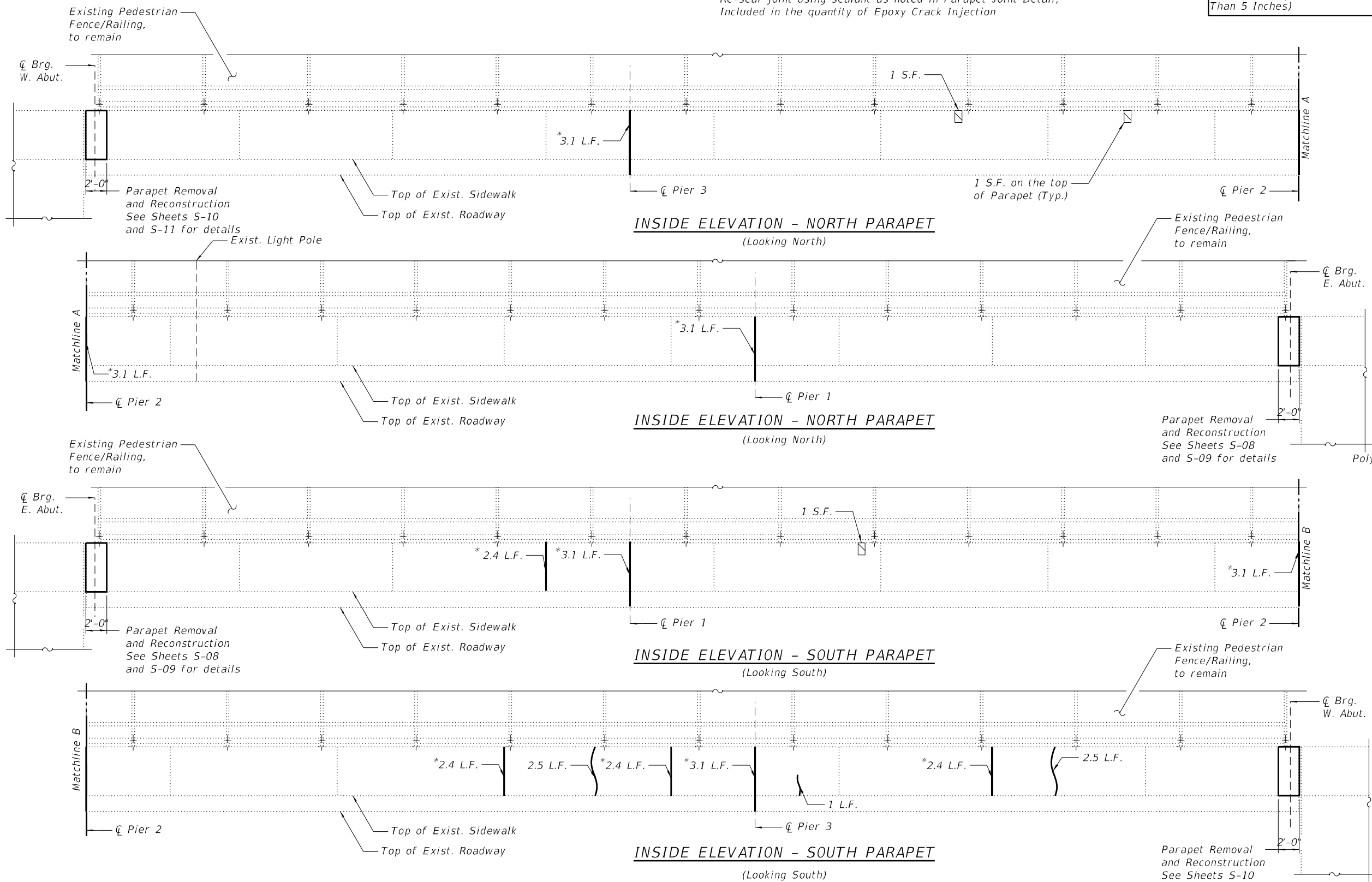
NOTES:

- For parapet removal and reconstruction, see Sheets S-08 thru S-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.

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Epoxy Crack Injection	FOOT	35
Structural Repair Of Concrete (Depth Equal To Or Less Than 5 Inches)	SQ FT	3

* Re-seal joint using sealant as noted in Parapet Joint Detail;
Included in the quantity of Epoxy Crack Injection



PARAPET JOINT DETAILS

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

LEGEND

- Structural Repair of Concrete (Depth Equal to or Less than 5 inches)
- Epoxy Crack Injection
- S.F. Square Foot
- L.F. Linear Foot

MODEL: Default
FILE NAME: P:\1707*732_Accurate_PTB184+010\WO #32_Glenwood Dyer Rd at IL RTE.394\Sheets\0160624-507*Parapet and Railing Repairs.dgn
3/18/2021 10:56:46 AM



USER NAME =	DESIGNED - JMI	REVISED -
	CHECKED - MI, MAI	REVISED -
PLOT SCALE =	DRAWN - JMI	REVISED -
PLOT DATE =	DATE - 3/18/2021	REVISED -

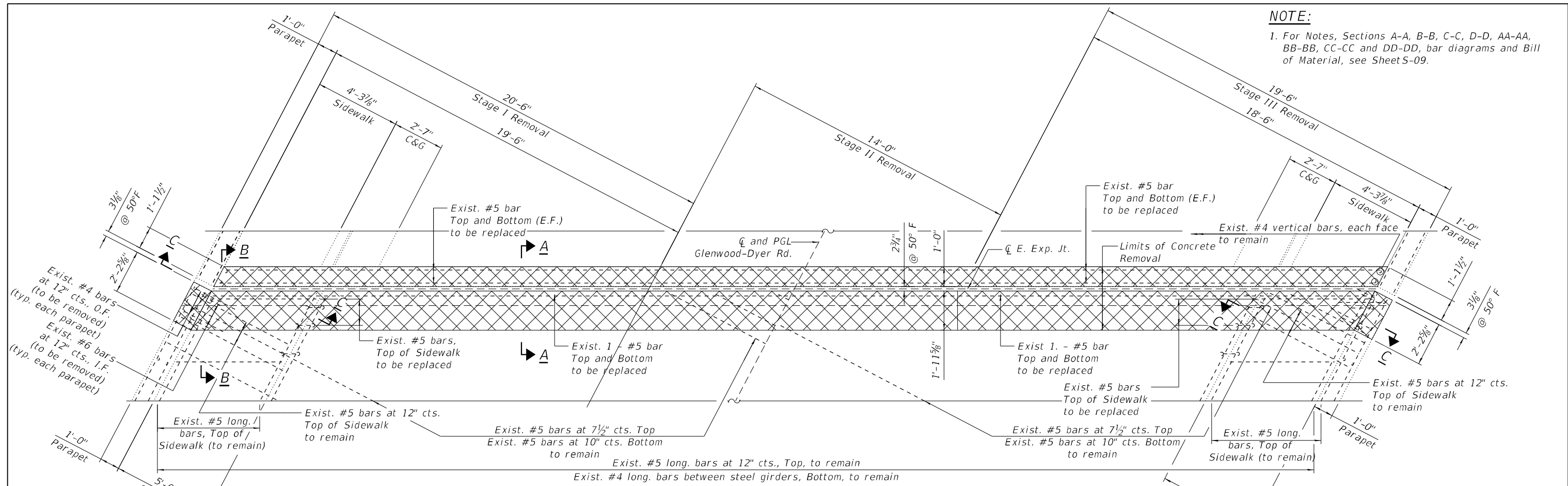
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PARAPET AND RAILING REPAIRS
STRUCTURE NO. 016-0624**

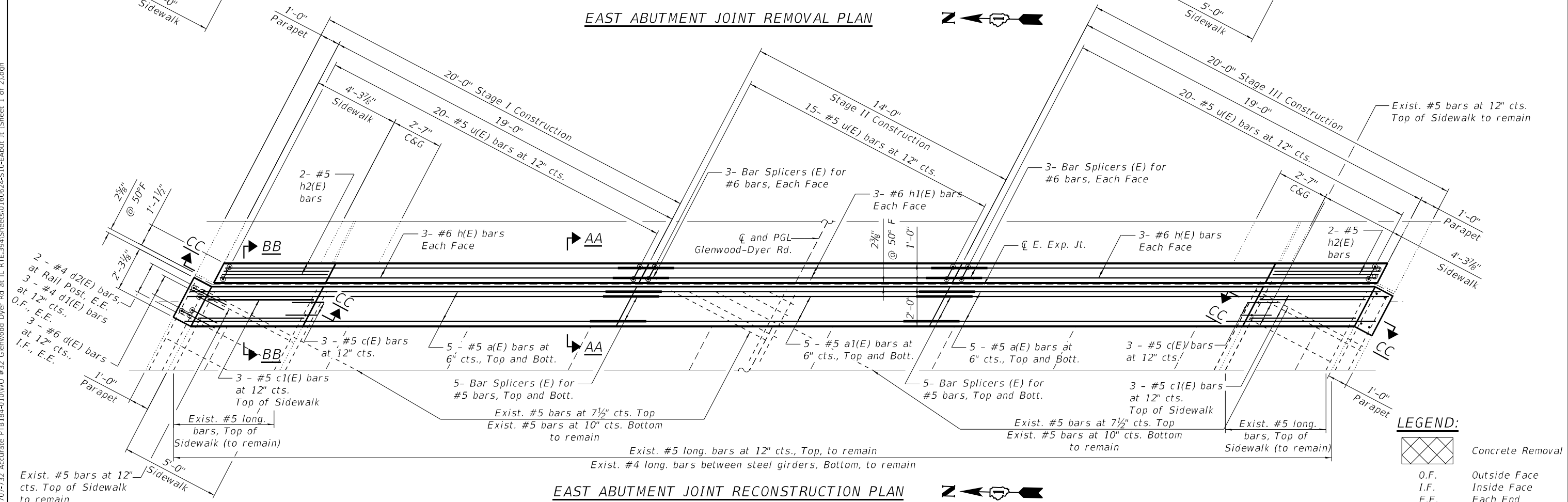
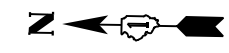
SHEET S-07 OF S-21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	2020-008-BR	COOK	62	39
CONTRACT NO. 62K79				
ILLINOIS FED. AID PROJECT				

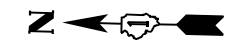
NOTE:
 1. For Notes, Sections A-A, B-B, C-C, D-D, AA-AA, BB-BB, CC-CC and DD-DD, bar diagrams and Bill of Material, see Sheet S-09.

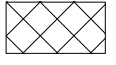


EAST ABUTMENT JOINT REMOVAL PLAN



EAST ABUTMENT JOINT RECONSTRUCTION PLAN



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

MODEL: Default
 FILE NAME: P:\1707\732_Accurate_PTB184-010\WO #32_Glenwood Dyer rd at IL RTE.394\Sheets\0160624-S10-EAbut. I (Sheet 1 of 2).dgn
 4/2/2021 10:24:27 AM



USER NAME =	DESIGNED - AMS, SK	REVISED -
CHECKED - MI, MAI	REVISED -	
PLOT SCALE =	DRAWN - AMS	REVISED -
PLOT DATE =	DATE - 4/2/2021	REVISED -

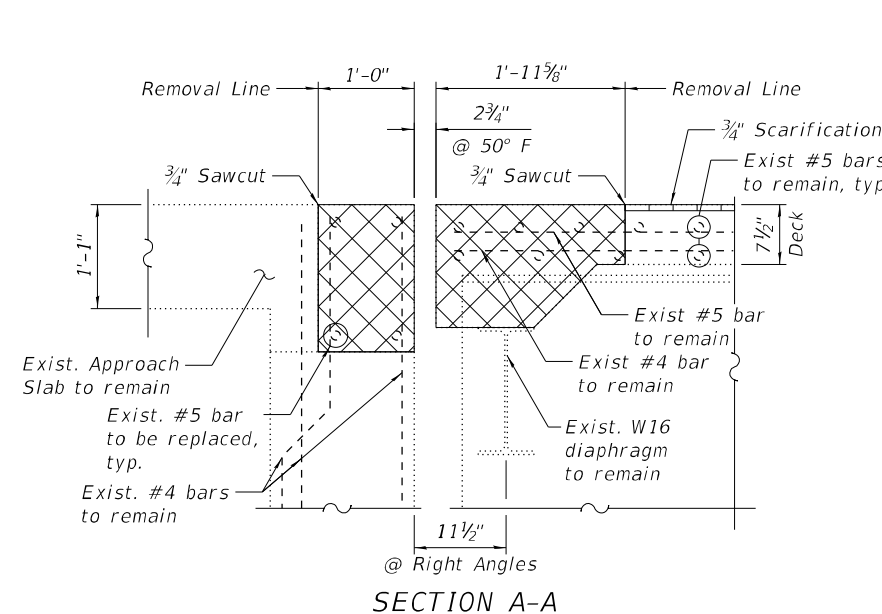
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**E. ABUT. JT. REMOVAL AND RECONSTRUCTION (SHT. 1 OF 2)
 STRUCTURE NO. 016-0624**

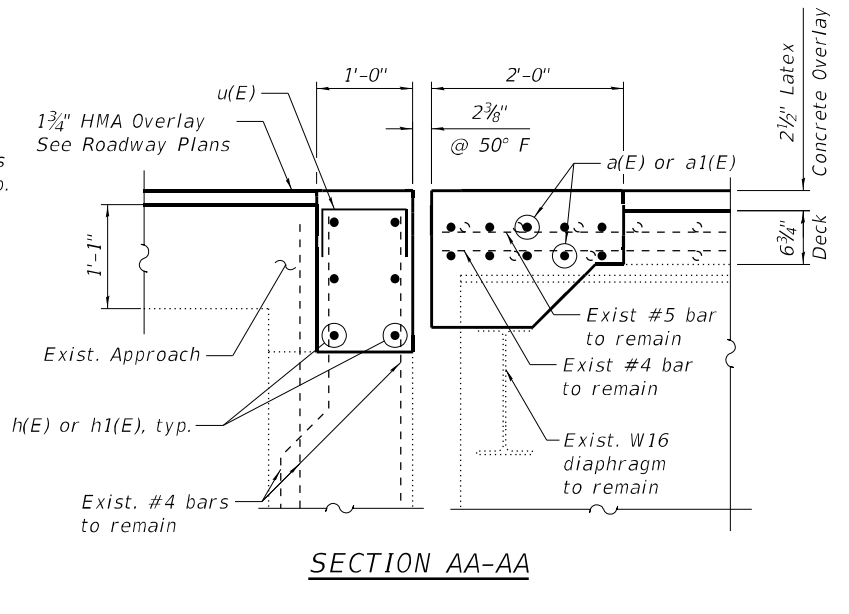
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	2020-008-BR	COOK	62	40
CONTRACT NO. 62K79				
ILLINOIS FED. AID PROJECT				

SHEET S-08 OF S-21 SHEETS

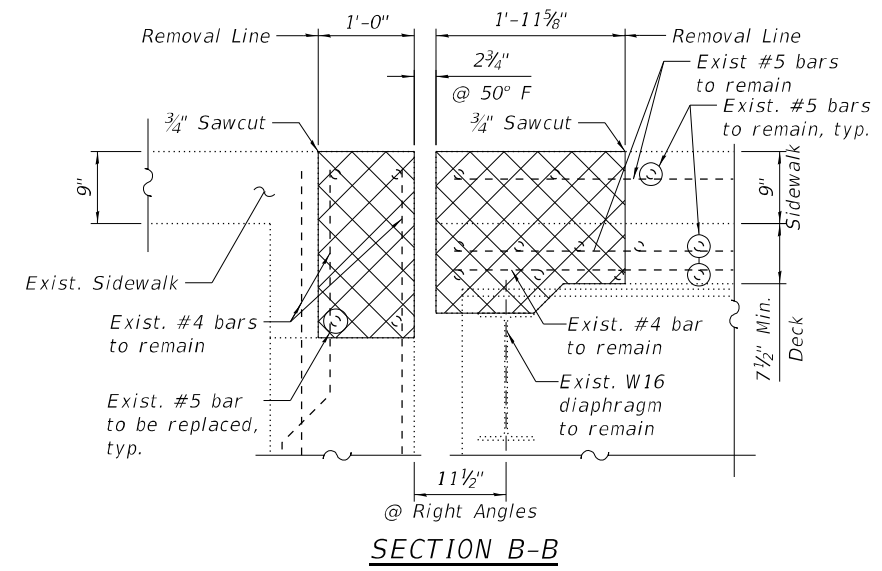
MODEL: Default
 FILE NAME: P:\1707\732_Accurate_PTB184-010\WO #32_Glenwood Dyer Rd at IL RTE.394\Sheets\0160624-S11-EAbut. 1 (Sheet 2 of 2).dgn
 4/2/2021 10:24:29 AM



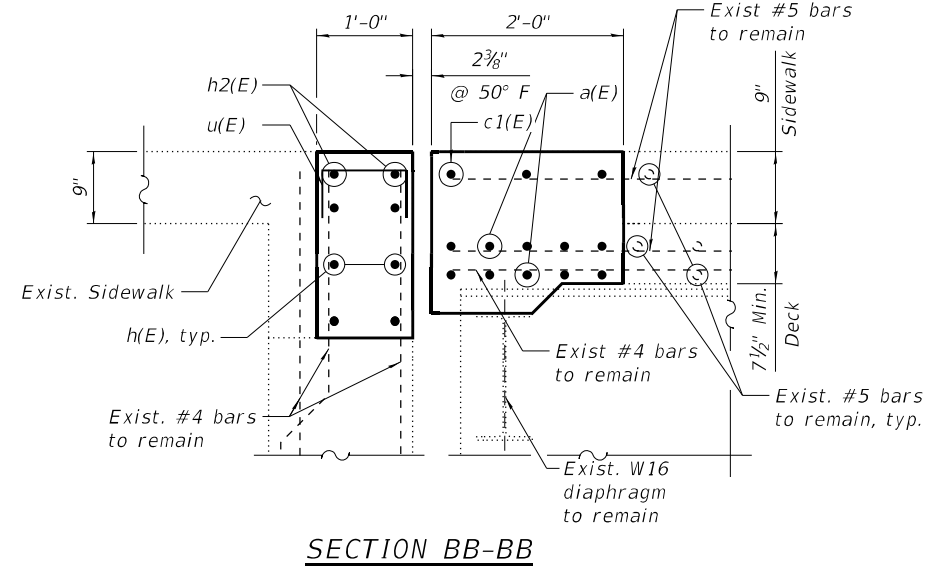
SECTION A-A
 @ Right Angles



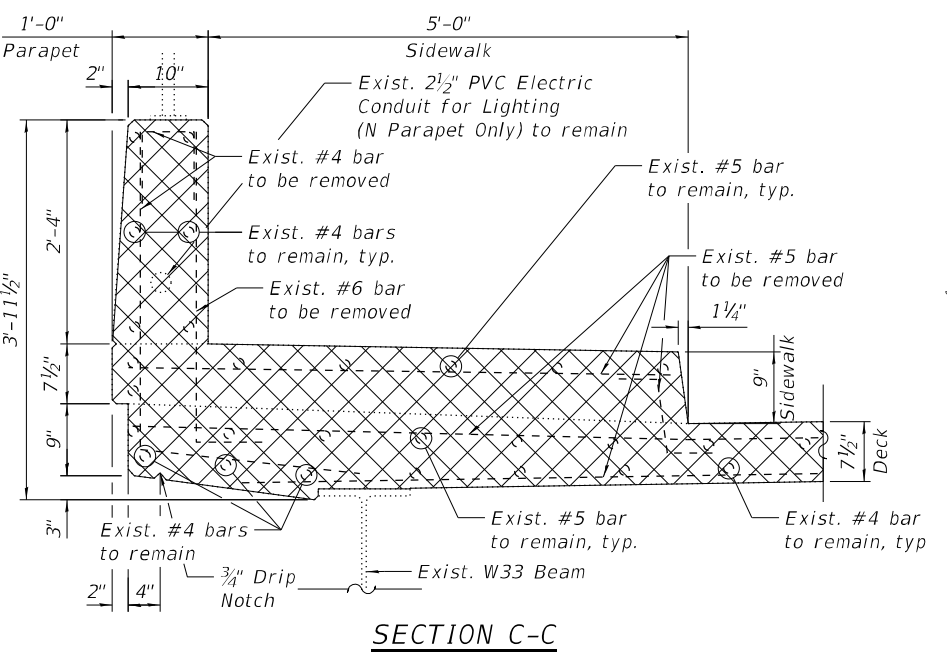
SECTION AA-AA



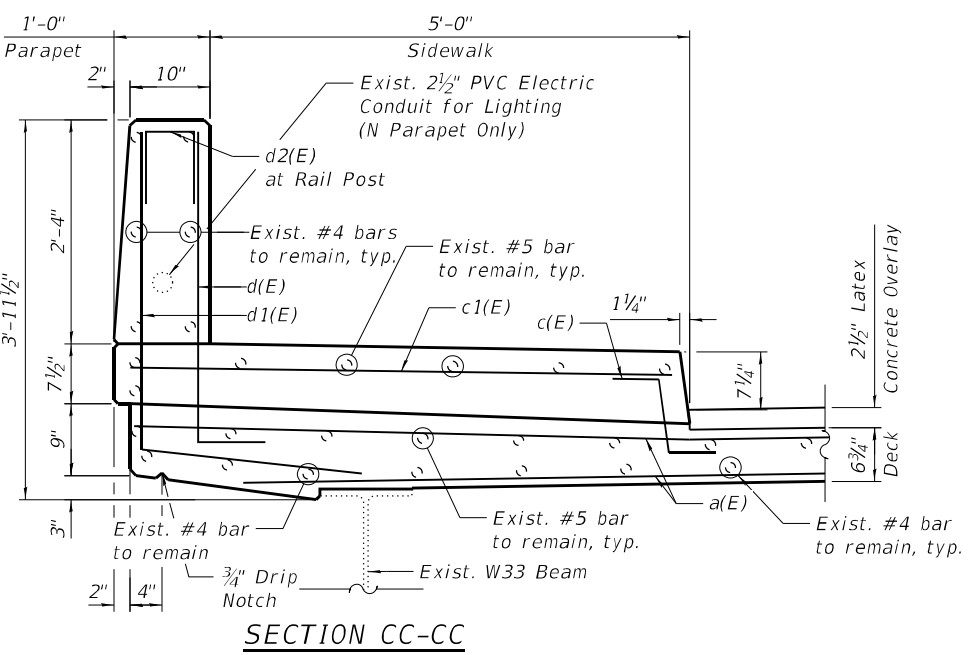
SECTION B-B
 @ Right Angles



SECTION BB-BB



SECTION C-C



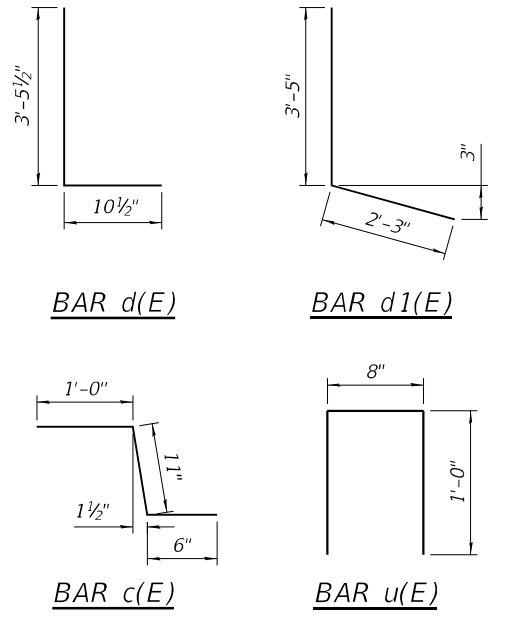
SECTION CC-CC

NOTES:

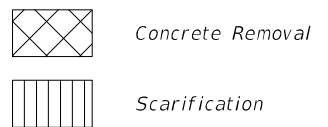
- For preformed joint strip seal details, see Sheets S-12 thru S-14.
- For bar splicer assembly details, see Sheet S-21.
- Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.
- The Contractor shall exercise extreme caution during Concrete Removal to avoid damaging the existing steel beams and diaphragms to remain. Any damage to the existing 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

Bar	No.	Size	Length	Shape	
a(E)	20	#5	22'-4"	—	
a1(E)	10	#5	15'-6"	—	
c(E)	6	#5	2'-5"	└	
c1(E)	6	#5	5'-4"	—	
d(E)	6	#6	4'-4"	└	
d1(E)	6	#4	5'-8"	└	
d2(E)	4	#4	2'-0"	└	
h(E)	12	#6	21'-2"	—	
h1(E)	6	#6	15'-6"	—	
h2(E)	4	#5	5'-4"	—	
u(E)	55	#5	2'-8"	└	
Concrete Removal				Cu. Yd.	8.8
Concrete Superstructure				Cu. Yd.	11.5
Protective Coat				Sq. Yd.	15
Reinforcement Bars, Epoxy Coated				Pound	1,440



LEGEND:



USER NAME =	DESIGNED - AMS, SK	REVISED -
PLOT SCALE =	CHECKED - MI, MAI	REVISED -
PLOT DATE =	DRAWN - AMS	REVISED -
	DATE - 4/2/2021	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

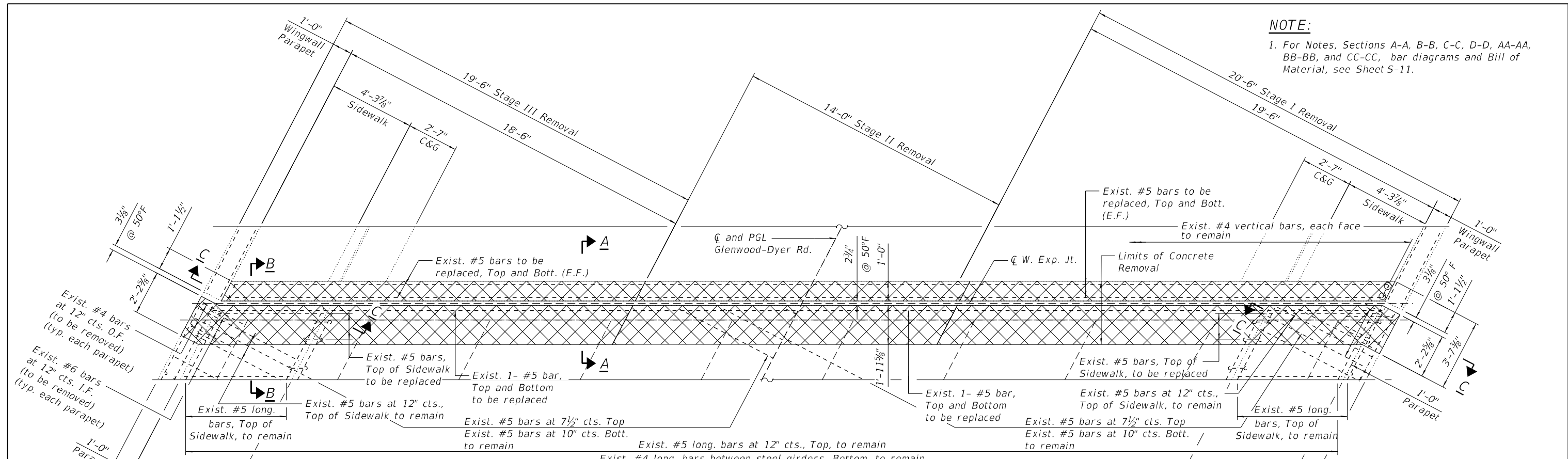
E. ABUT. JT. REMOVAL AND RECONSTRUCTION (SHT. 2 OF 2)
 STRUCTURE NO. 016-0624

SHEET S-09 OF S-21 SHEETS

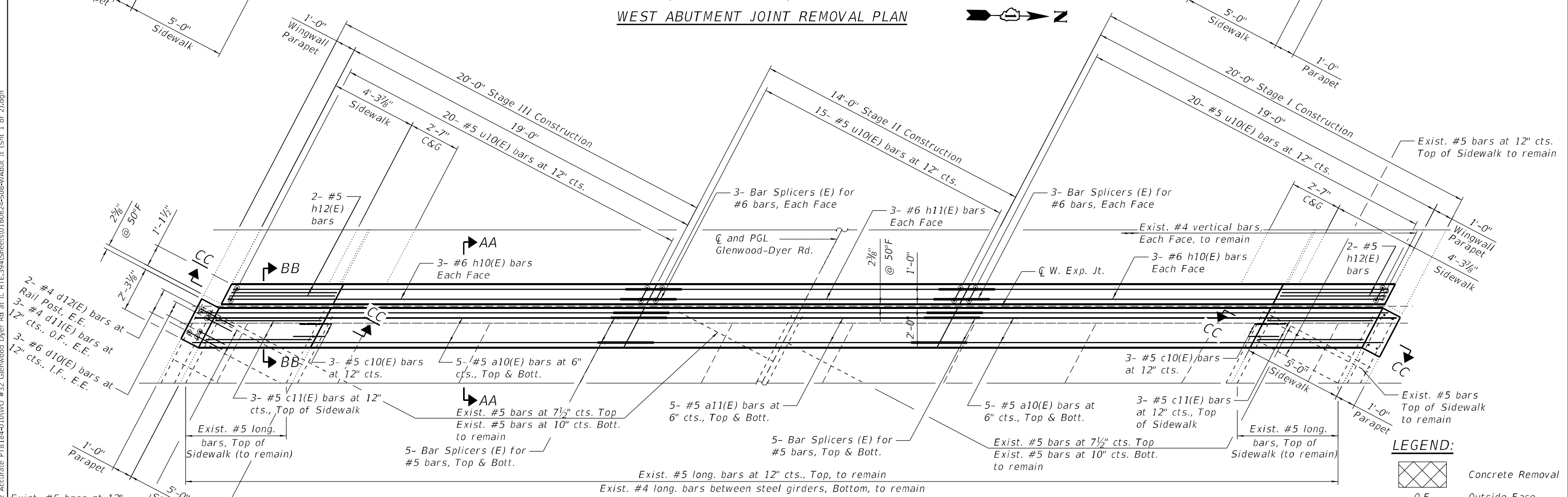
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	2020-008-BR	COOK	62	41
CONTRACT NO. 62K79				
ILLINOIS FED. AID PROJECT				

NOTE:

1. For Notes, Sections A-A, B-B, C-C, D-D, AA-AA, BB-BB, and CC-CC, bar diagrams and Bill of Material, see Sheet S-11.



WEST ABUTMENT JOINT REMOVAL PLAN



WEST ABUTMENT JOINT RECONSTRUCTION PLAN

LEGEND:

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

MODEL: Default
 FILE NAME: P:\1707\732 Accurate: PTB184-010\WO #32 Glenwood Dyer Rd at IL RTE.394\Sheets\0160624-508-W\Abut. II (Sht. 1 of 2).dgn
 3/18/2021 10:56:48 AM



USER NAME =	DESIGNED - EBK, SK	REVISED -
CHECKED - MI, MAI	REVISED -	
PLOT SCALE =	DRAWN - EBK	REVISED -
PLOT DATE =	DATE - 3/18/2021	REVISED -

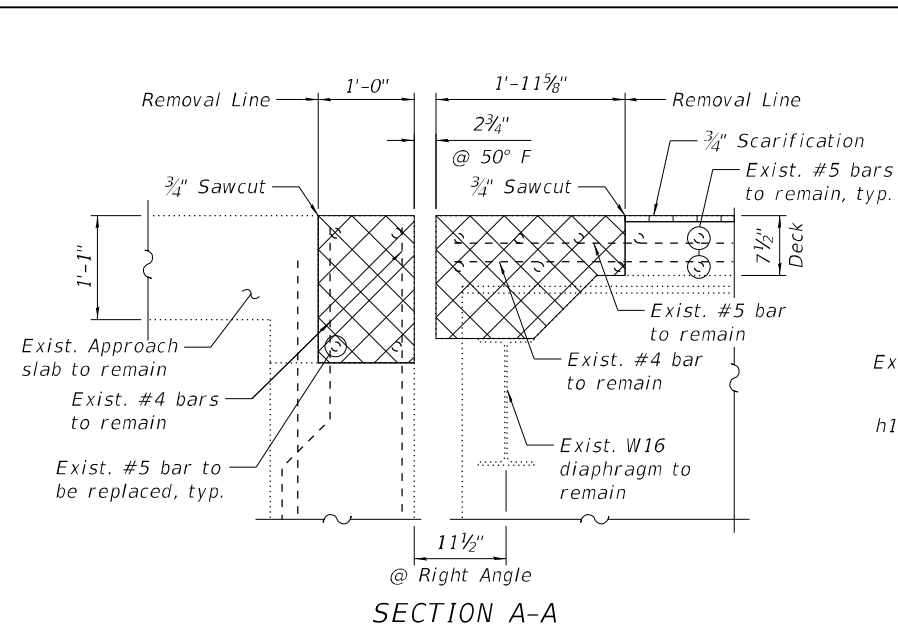
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

W. ABUT. JT. REMOVAL AND RECONSTRUCTION (SHT. 1 OF 2)
STRUCTURE NO. 016-0624

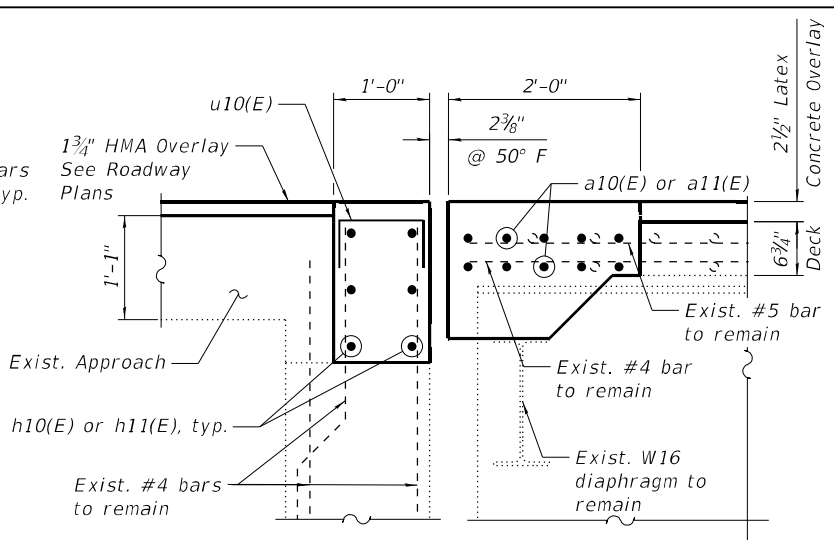
SHEET S-10 OF S-21 SHEETS

F.A.P. RTE. 332	SECTION 2020-008-BR	COUNTY COOK	TOTAL SHEETS 62	SHEET NO. 42
CONTRACT NO. 62K79				
ILLINOIS FED. AID PROJECT				

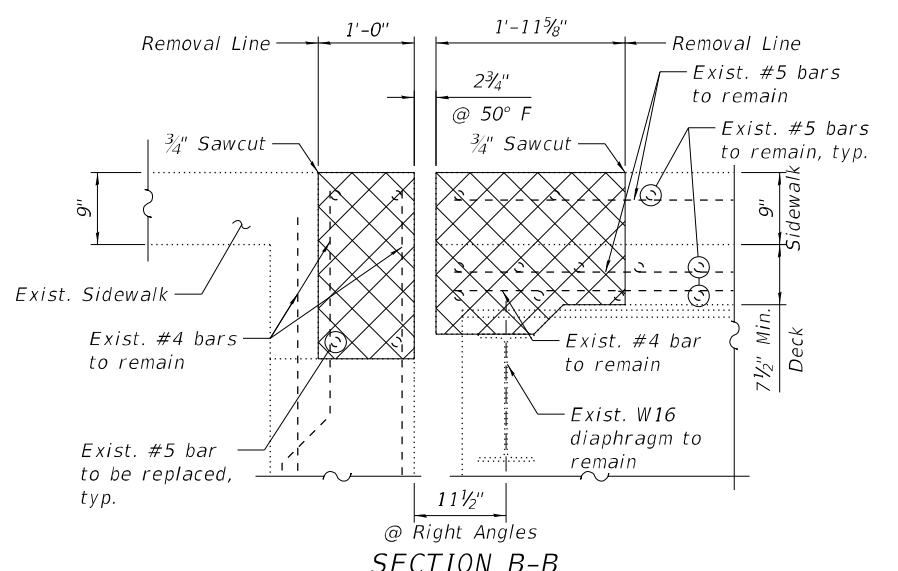
MODEL: Default
 FILE NAME: P:\1707\732 Accurate.PTB184-010\WO #32 Glenwood Dyer Rd at IL RTE.394\Sheets\0160624-509-W\Abut. II (Sht. 2 of 2).dgn
 3/18/2021 10:56:50 AM



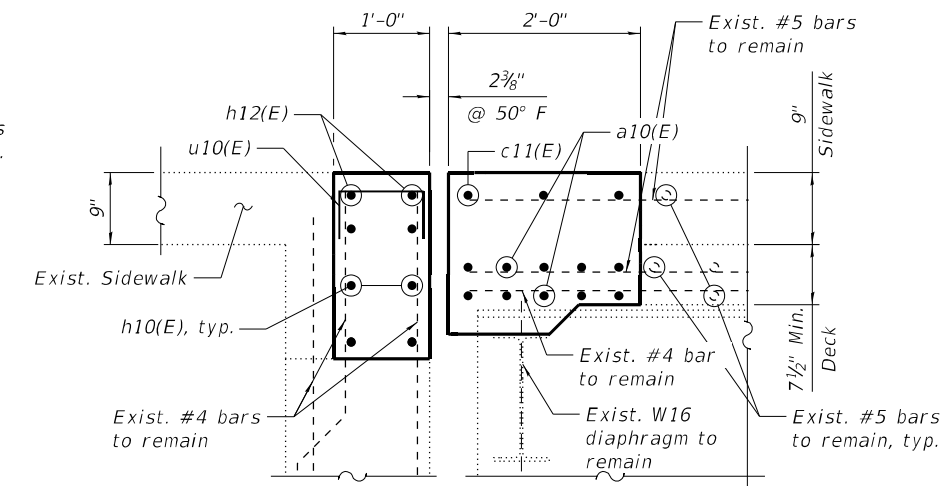
SECTION A-A
 @ Right Angle



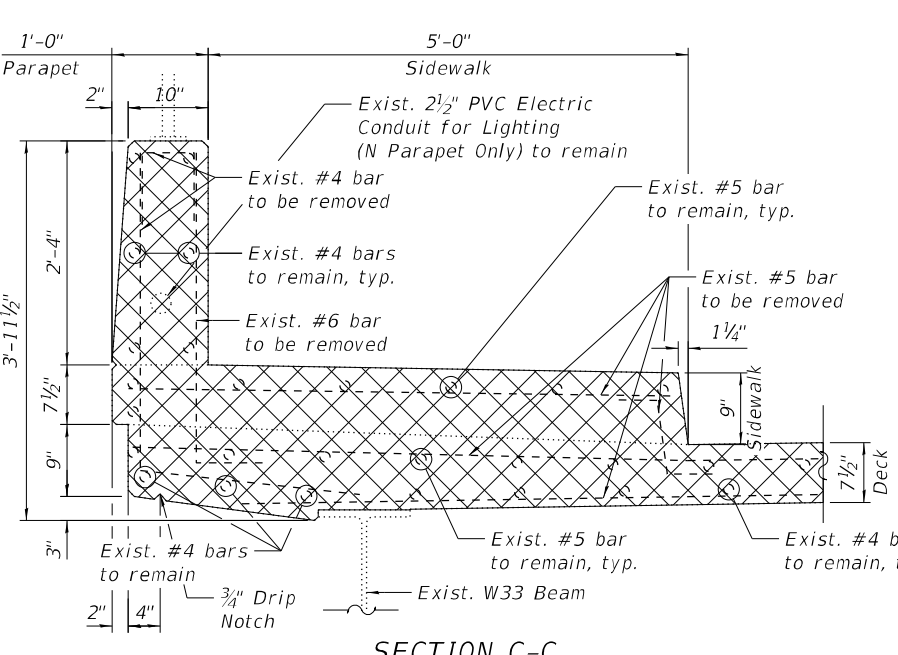
SECTION AA-AA



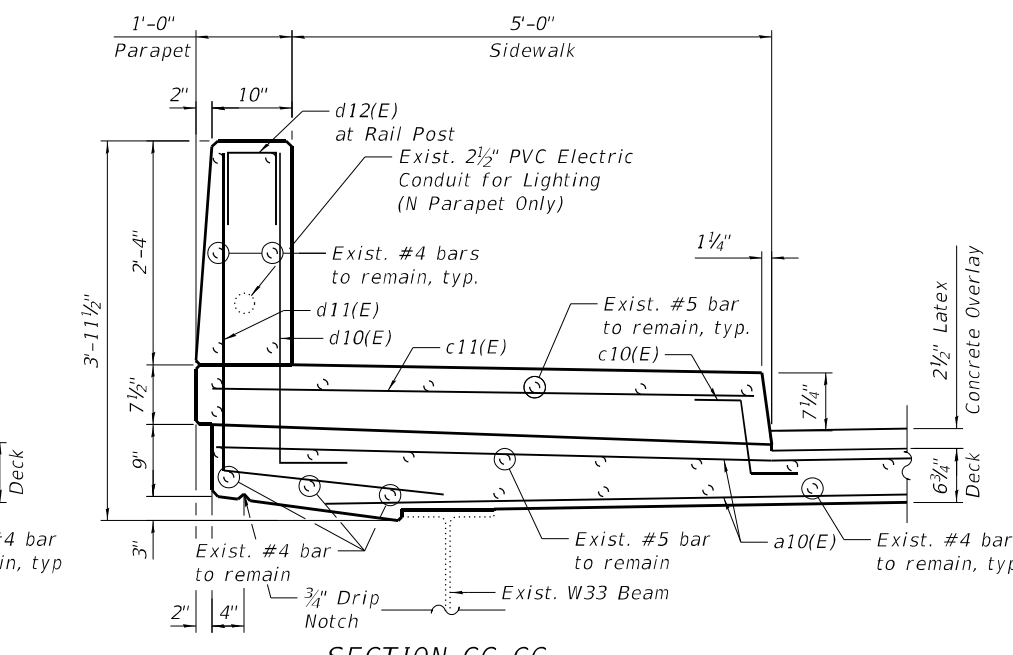
SECTION B-B
 @ Right Angles



SECTION BB-BB



SECTION C-C



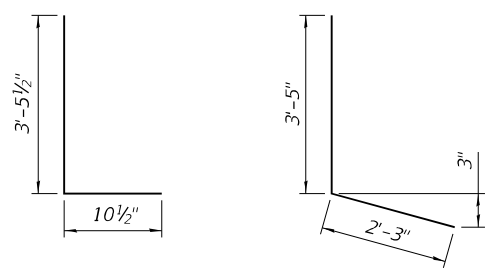
SECTION CC-CC

NOTES:

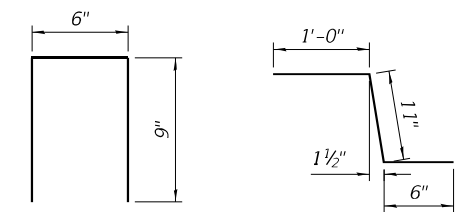
- For preformed joint strip seal details, see Sheets S-12 thru S-14.
- For bar splicer assembly details, see Sheet S-21.
- Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.
- The Contractor shall exercise extreme caution during Concrete Removal to avoid damaging the existing steel beams and diaphragms to remain. Any damage to the existing 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

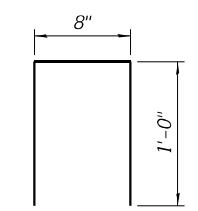
Bar	No.	Size	Length	Shape
a10(E)	20	#5	22'-4"	—
a11(E)	10	#5	15'-6"	—
c10(E)	6	#5	2'-5"	└
c11(E)	6	#5	5'-4"	└
d10(E)	6	#6	4'-4"	└
d11(E)	6	#4	5'-8"	└
d12(E)	4	#4	2'-0"	└
h10(E)	12	#6	21'-2"	—
h11(E)	6	#6	15'-6"	—
h12(E)	4	#5	5'-4"	—
u10(E)	55	#5	2'-8"	└
Concrete Removal			Cu. Yd.	8.8
Concrete Superstructure			Cu. Yd.	11.5
Protective Coat			Sq. Yd.	15
Reinforcement Bars, Epoxy Coated			Pound	1,440



BAR d10(E) BAR d11(E)



BAR d12(E) BAR c10(E)



BAR u10(E)

LEGEND:

- Concrete Removal
- Scarification



USER NAME =	DESIGNED - EBK, SK	REVISED -
CHECKED - MI, MAI	REVISED -	
PLOT SCALE =	DRAWN - EBK	REVISED -
PLOT DATE =	DATE - 3/18/2021	REVISED -

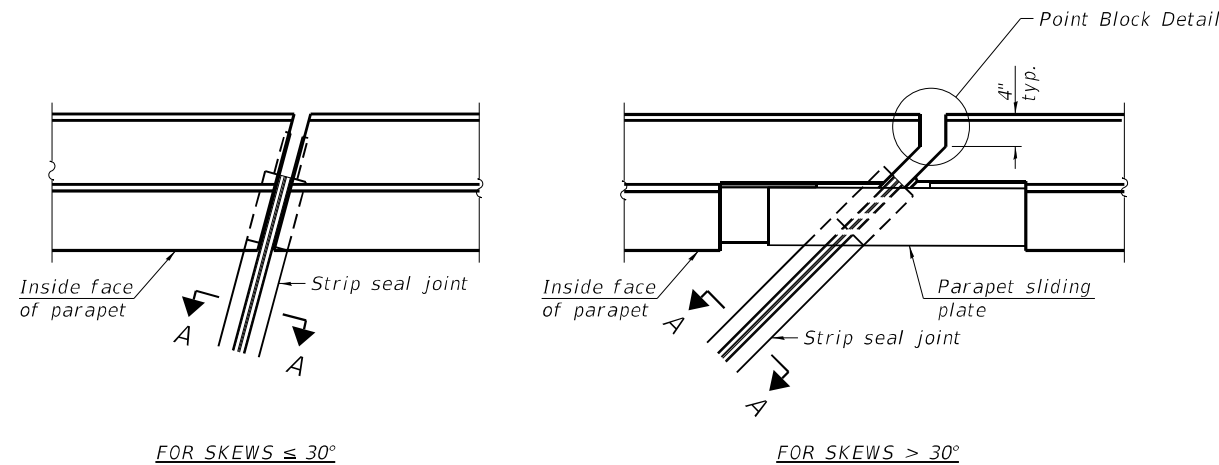
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

W. ABUT. JT. REMOVAL AND RECONSTRUCTION (SHT. 2 OF 2)
 STRUCTURE NO. 016-0624

SHEET S-11 OF S-21 SHEETS

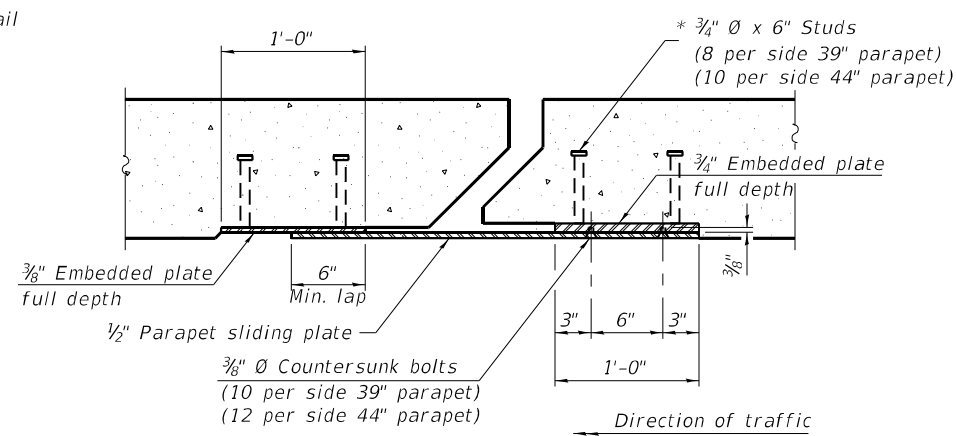
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	2020-008-BR	COOK	62	43
CONTRACT NO. 62K79				
ILLINOIS FED. AID PROJECT				

MODEL: Default
 FILE NAME: P:\1707\732 Accurate: PTB184-010\WO #32 Glenwood Dyer Rd at IL RTE.394\Sheets\0160624-S12-Preformed Joint Seal (Sheet 1 of 3).dgn
 3/18/2021 10:56:55 AM

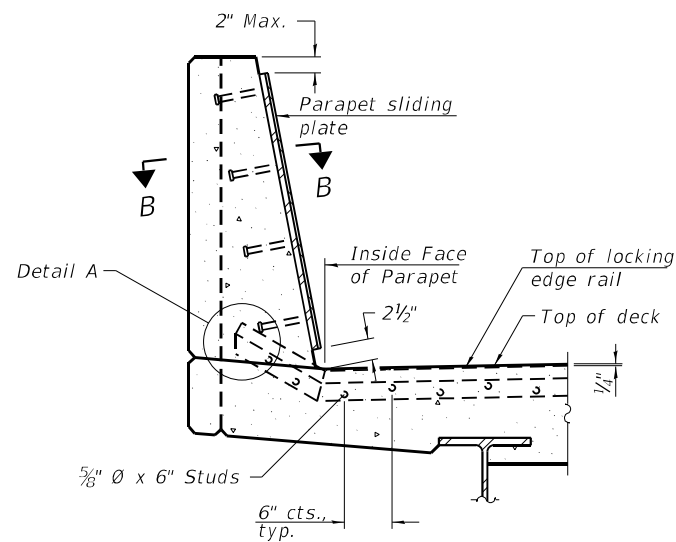


FOR SKEWS $\leq 30^\circ$

PLAN AT PARAPET

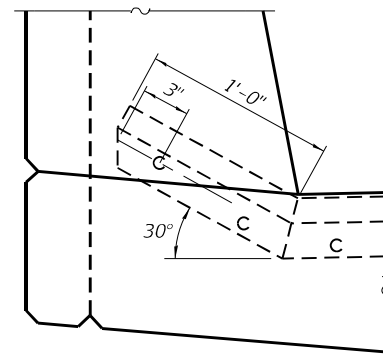


SECTION B-B

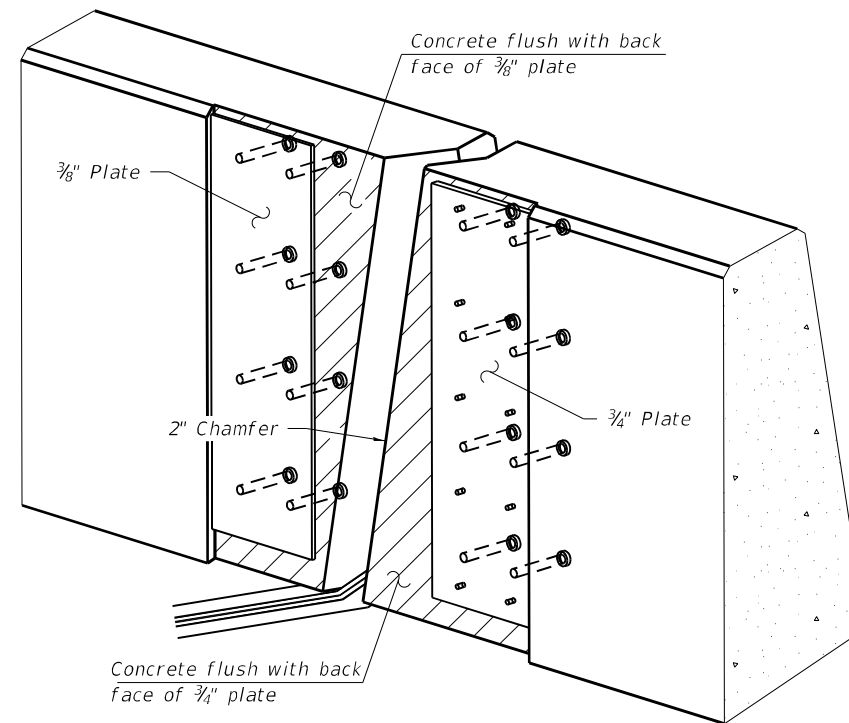


SECTION AT PARAPET

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

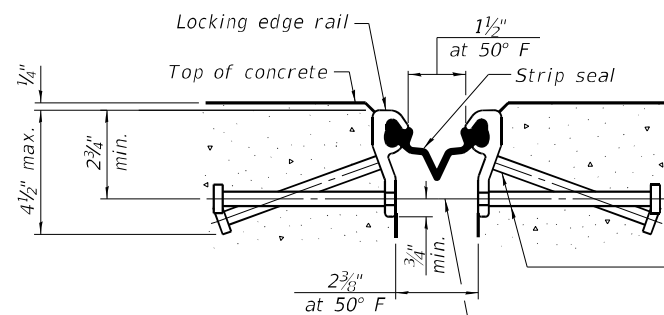


DETAIL A



TRIMETRIC VIEW

(Showing embedded plates only)



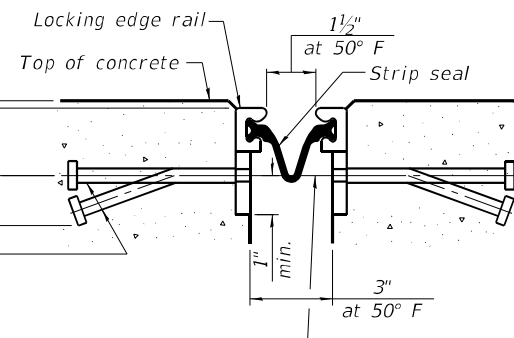
SHOWING ROLLED RAIL JOINT

* 3/8" Ø x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

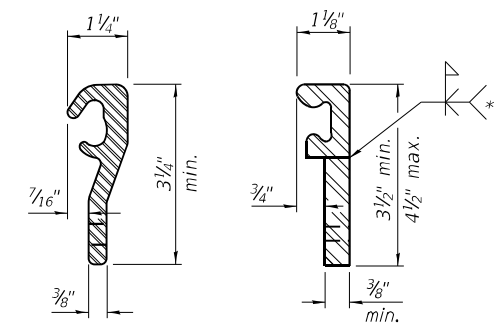
3/8" Ø threaded rods in 1/16" Ø holes at $\pm 4'-0"$ cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

SECTION A-A

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



SHOWING WELDED RAIL JOINT

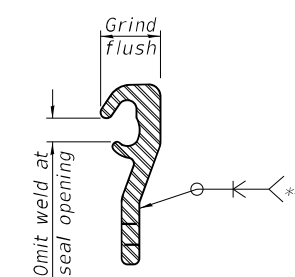


ROLLED (EXTRUDED) RAIL

WELDED RAIL

LOCKING EDGE RAILS

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



LOCKING EDGE RAIL SPLICE

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

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	122

EJ-SS-S

1-1-2020

(Sheet 1 of 3)



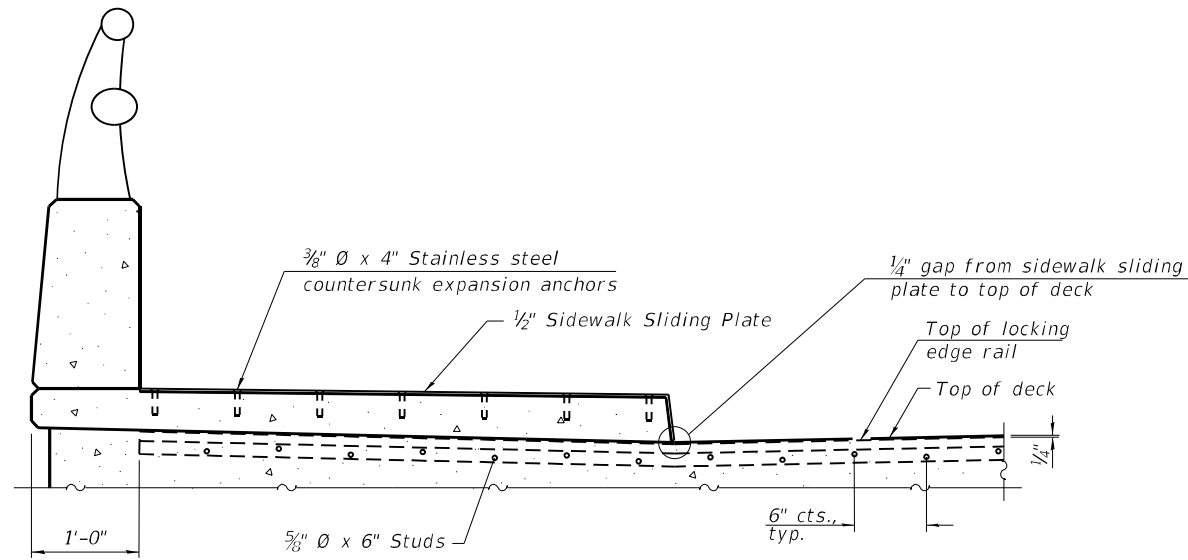
USER NAME =	DESIGNED - JMI	REVISED -
PLOT SCALE =	CHECKED - MI, MAI	REVISED -
PLOT DATE =	DRAWN - JMI	REVISED -
	DATE - 3/18/2021	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

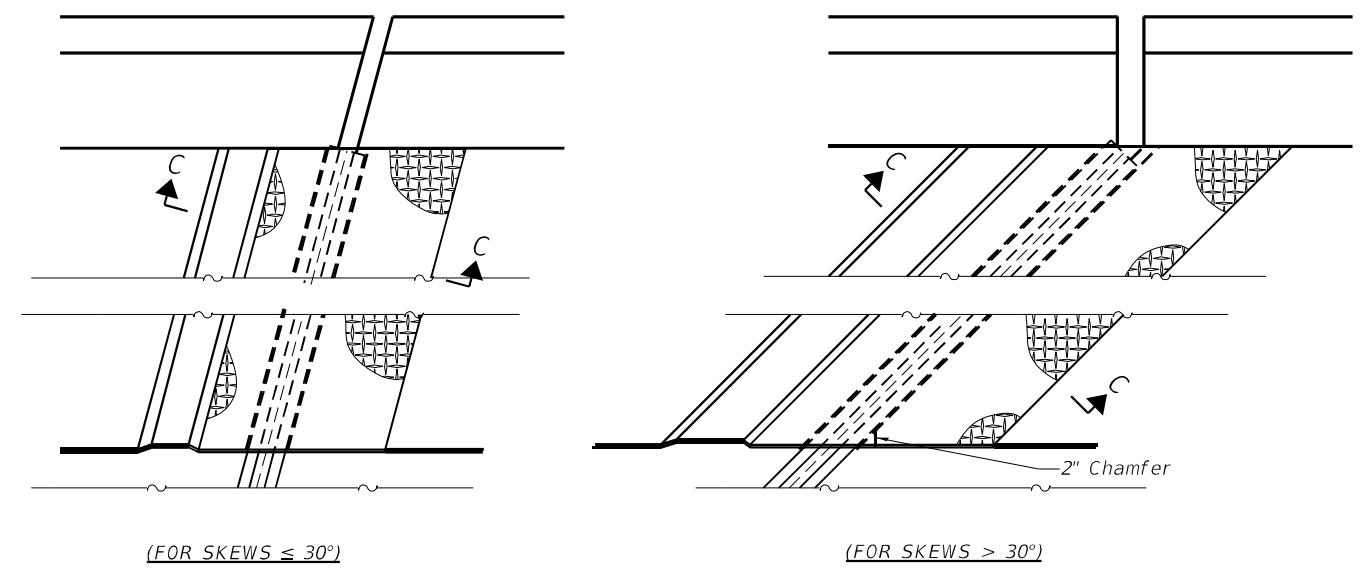
PREFORMED JOINT STRIP SEAL - SIDEWALK (SHEET 1 OF 3)
STRUCTURE NO. 016-0624

SHEET S-12 OF S-21 SHEETS

F.A.P. RTE. 332	SECTION 2020-008-BR	COUNTY COOK	TOTAL SHEETS 62	SHEET NO. 44
CONTRACT NO. 62K79				
ILLINOIS FED. AID PROJECT				



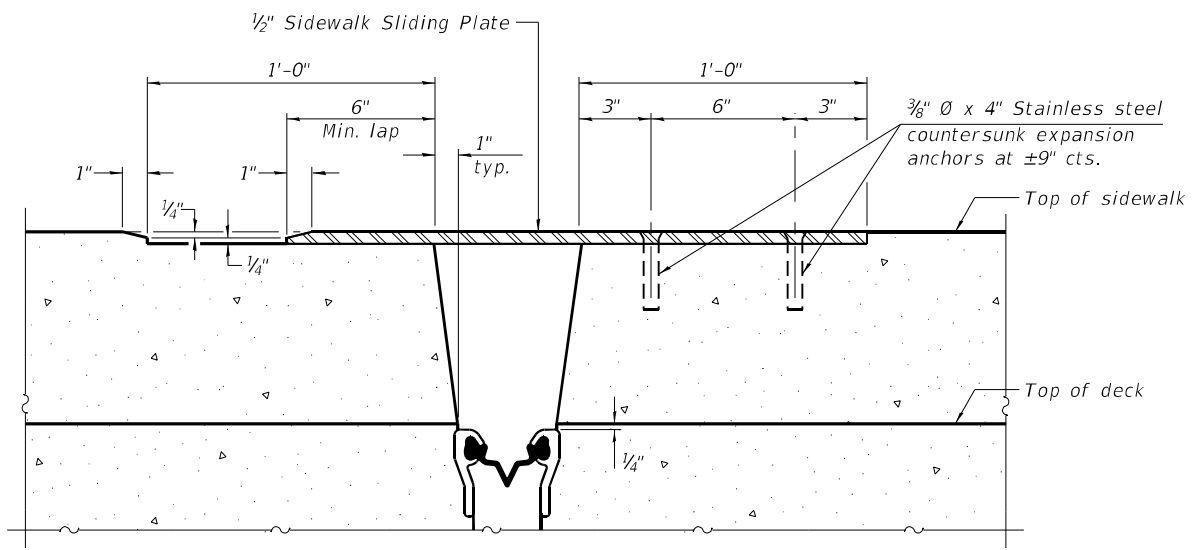
SECTION AT RAISED SIDEWALK



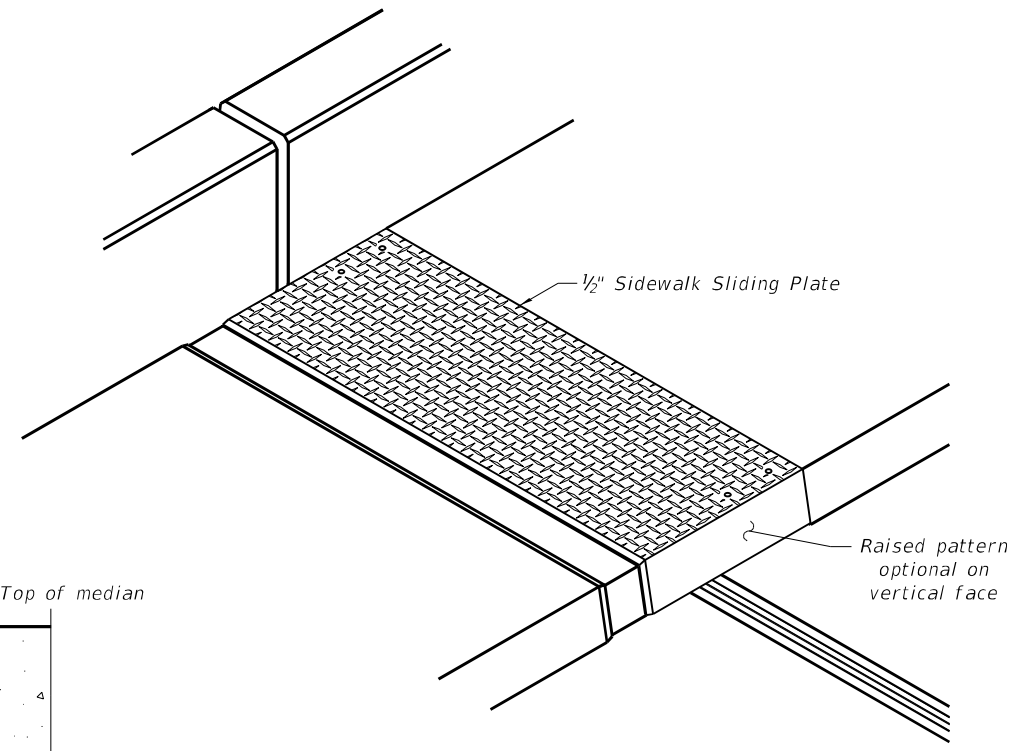
(FOR SKEWS ≤ 30°)

(FOR SKEWS > 30°)

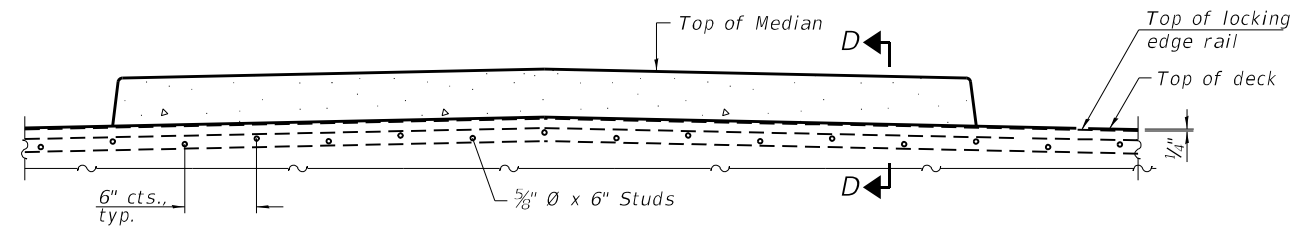
PLAN AT RAISED SIDEWALK



SECTION C-C

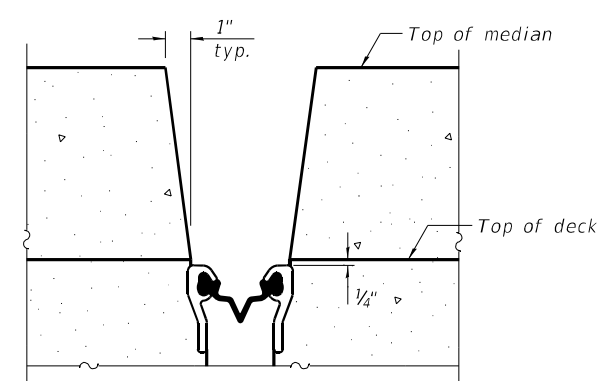


TRIMETRIC VIEW



SECTION AT MEDIAN

For skews > 30°, chamfer acute corners 2" similar to sidewalk.



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

EJ-SS-S

1-1-2020

(Sheet 2 of 3)

MODEL: Default
FILE NAME: P:\1707\732 Accurate PTB184-010\WO #32 Glenwood Dyer Rd at IL RTE.394\Sheets\0160624-5\3-Preformed Joint Seal (Sheet 2 of 3).dgn
3/18/2021 10:56:57 AM



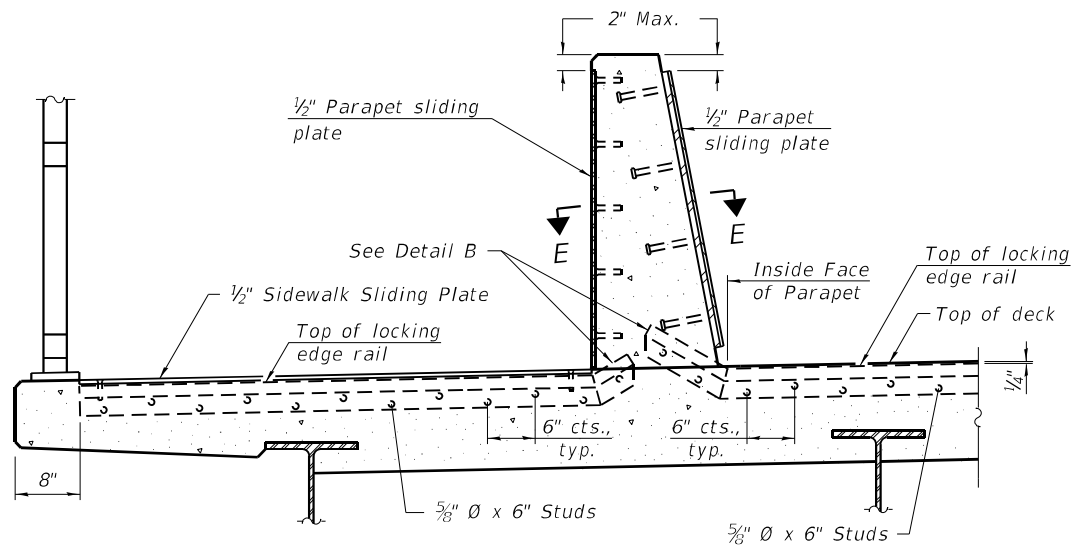
USER NAME =	DESIGNED - JMI	REVISED -
PLOT SCALE =	CHECKED - MI, MAI	REVISED -
PLOT DATE =	DRAWN - JMI	REVISED -
	DATE - 3/18/2021	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PREFORMED JOINT STRIP SEAL - SIDEWALK (SHEET 2 OF 2)
STRUCTURE NO. 016-0624**

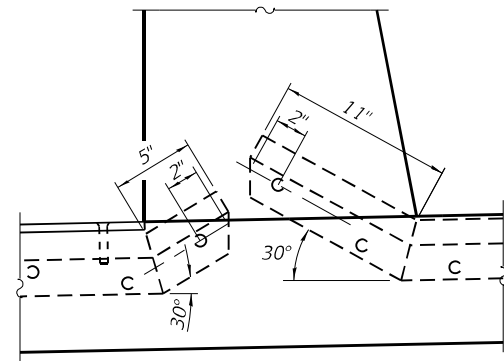
SHEET S-13 OF S-21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	2020-008-BR	COOK	62	45
CONTRACT NO. 62K79				
ILLINOIS FED. AID PROJECT				

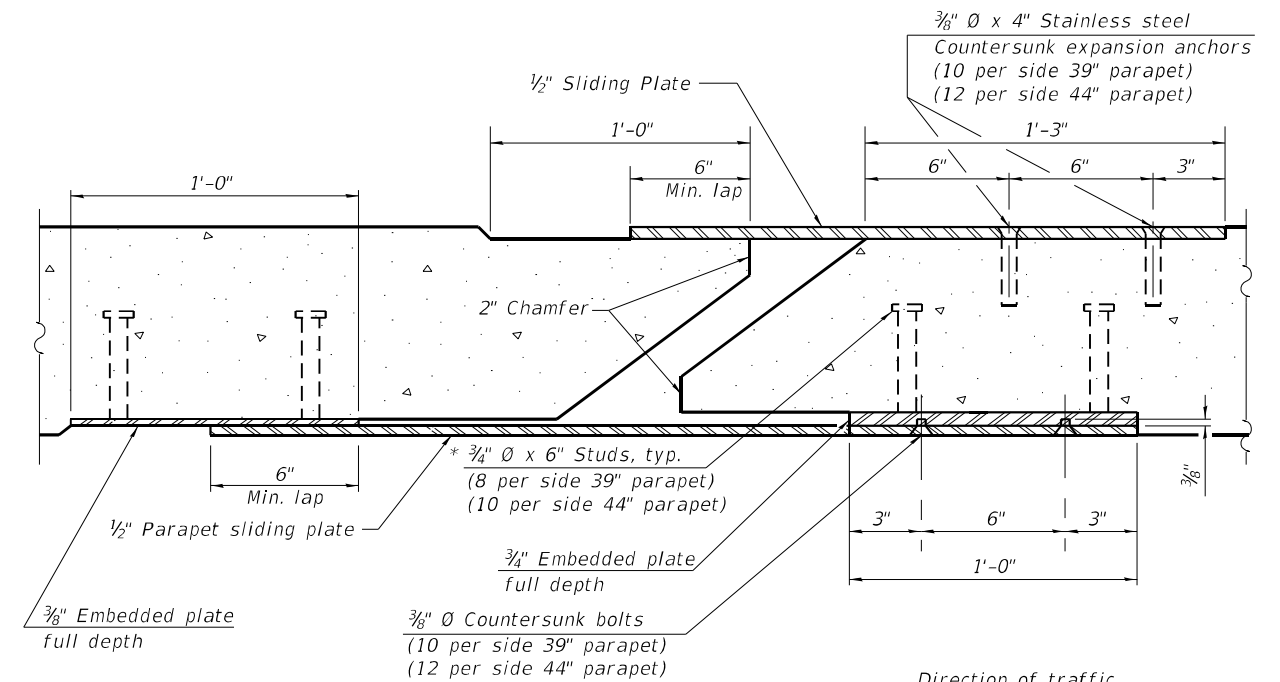


SECTION AT DECK LEVEL SIDEWALK

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

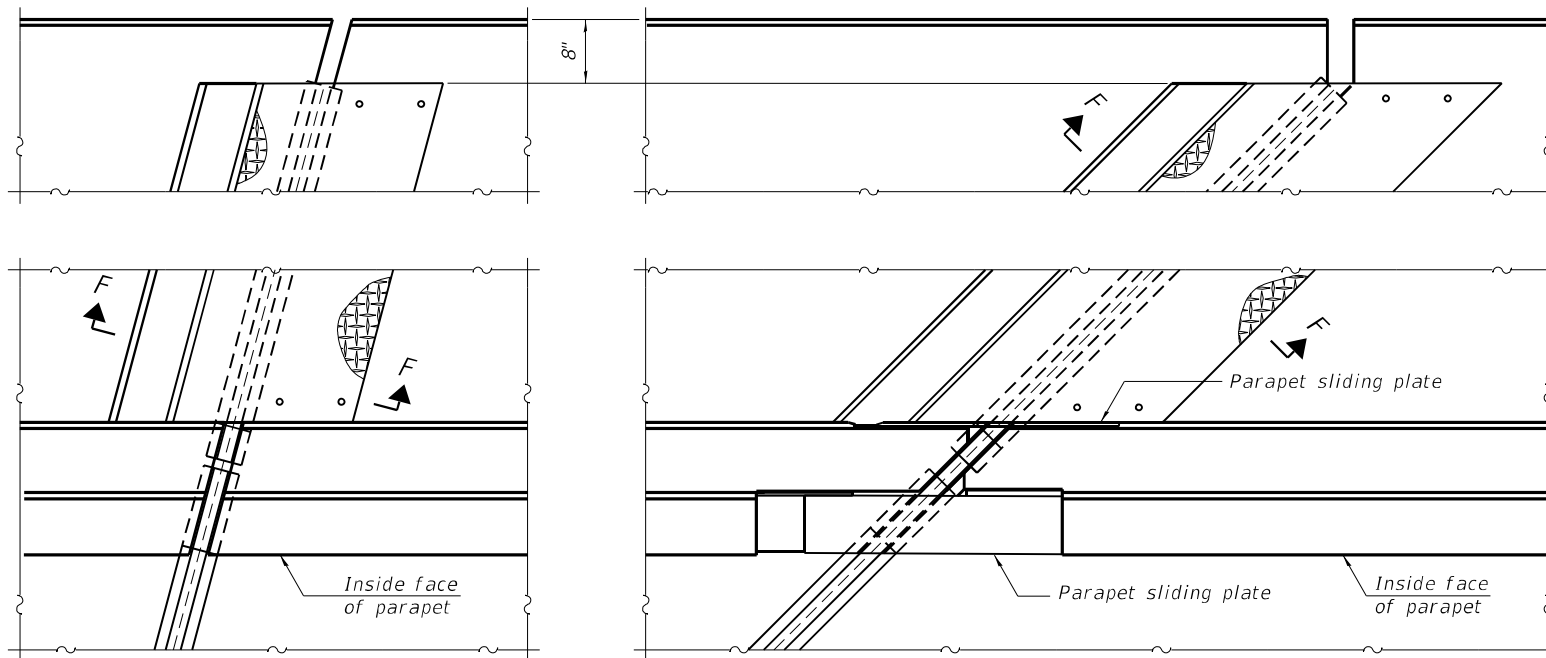


DETAIL B



SECTION E-E

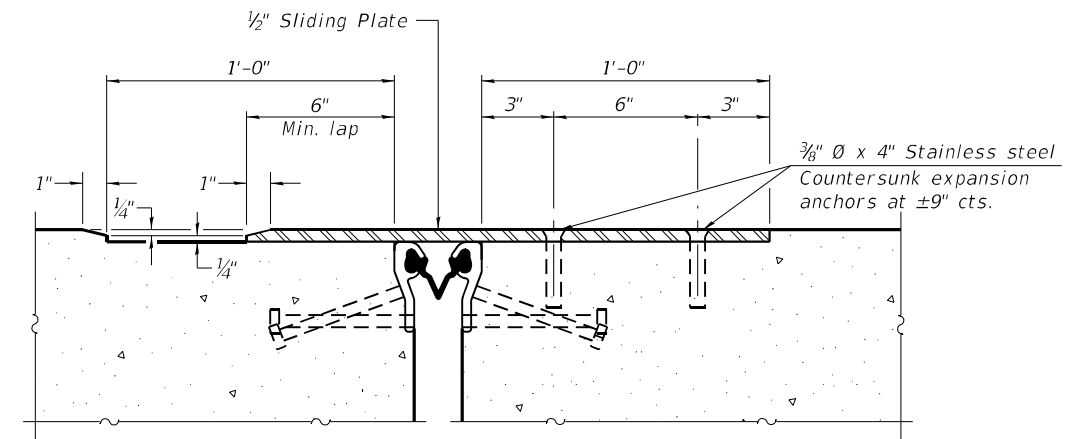
Direction of traffic



(FOR SKEWS ≤ 30°)

(FOR SKEWS > 30°)

PLAN AT DECK LEVEL SIDEWALK



SECTION F-F

EJ-SS-S

1-1-2020

(Sheet 3 of 3)



USER NAME =	DESIGNED - JMI	REVISED -
PLOT SCALE =	CHECKED - MI, MAI	REVISED -
PLOT DATE =	DRAWN - JMI	REVISED -
	DATE - 3/18/2021	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

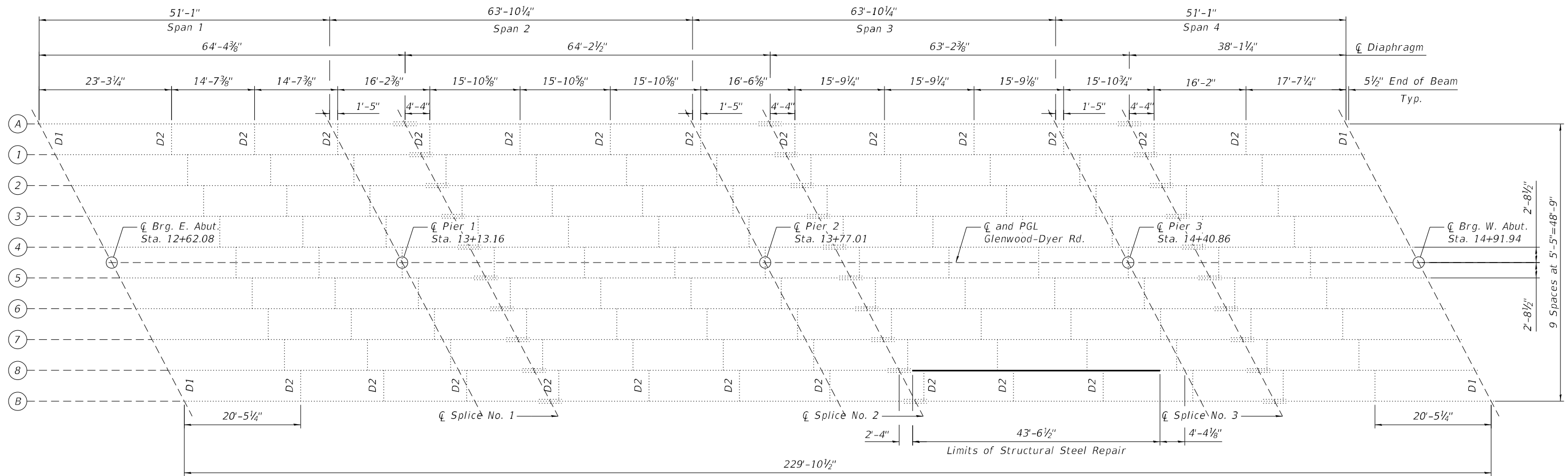
PREFORMED JOINT STRIP SEAL - SIDEWALK (SHEET 3 OF 3)
STRUCTURE NO. 016-0624

F.A.P. RTE. 332	SECTION 2020-008-BR	COUNTY COOK	TOTAL SHEETS 62	SHEET NO. 46
CONTRACT NO. 62K79				

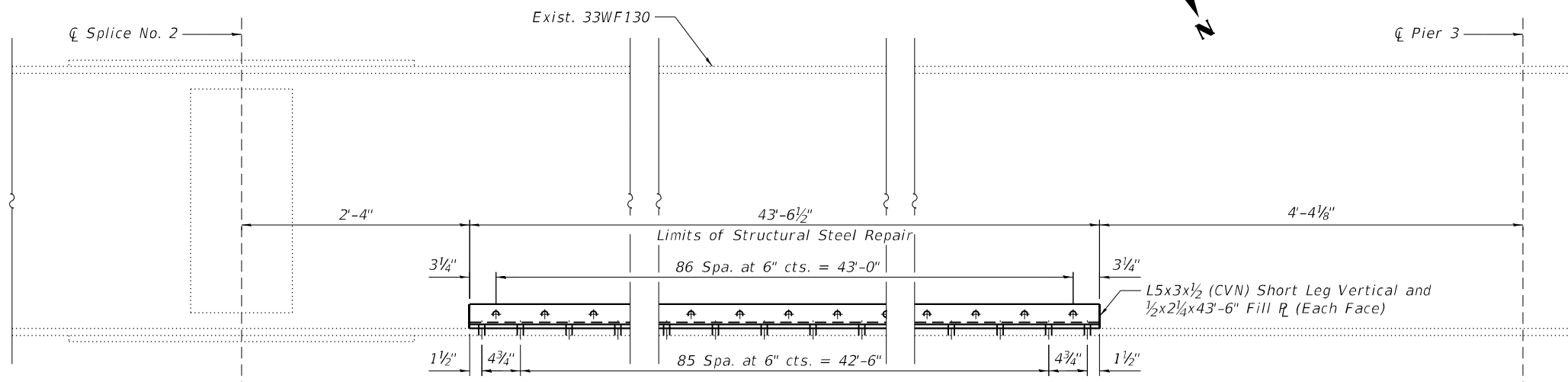
SHEET S-14 OF S-21 SHEETS

ILLINOIS FED. AID PROJECT

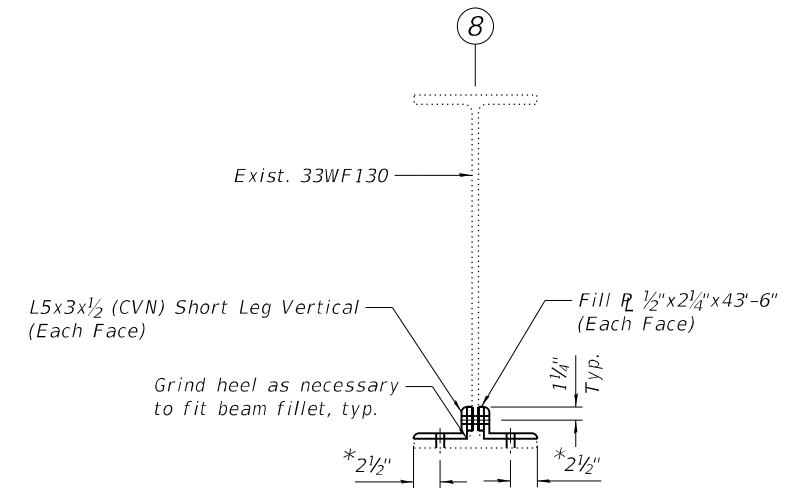
MODEL: Default
FILE NAME: P:\1707\732_Accurate_PTB184\010\WO_#32_Glenwood Dyer Rd at IL RTE.394\Sheets\0160624-S14-Prefomed Joint Seal (Sheet 3 of 3).dgn
3/18/2021 10:56:58 AM



FRAMING PLAN



PROPOSED BEAM 8 REPAIR PARTIAL ELEVATION
(Existing diaphragms not shown for clarity)



SECTION A-A

NOTES:

- All proposed beam repair angles shall conform to the requirements of AASHTO M270 Grade 50.
- All proposed beam repair angles, fill plates and associated bolts and fasteners shall be paid for as Structural Steel Repair.
- Load-carrying components designated "CVN" shall conform to the Impact Testing Requirement, Zone 2.
- All new structural steel and bearing assembly shall be hot-dip galvanized. See Special Provisions for "Hot Dip Galvanized for Structural Steel".
- 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".
- Fasteners shall be high strength bolts. Bolts 7/8" Ø, open holes 1 5/16" Ø, unless otherwise noted.

*Measured from toe of angle leg to centerline of bolt hole

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structural Steel Repair	POUND	1,720

MODEL: Default
FILE NAME: P:\1707\732 Accurate.PTB184-Q10\WO #32 Glenwood Dyer Rd at IL RTE.394\Sheets\0160624-S15-Framing Plans.dgn



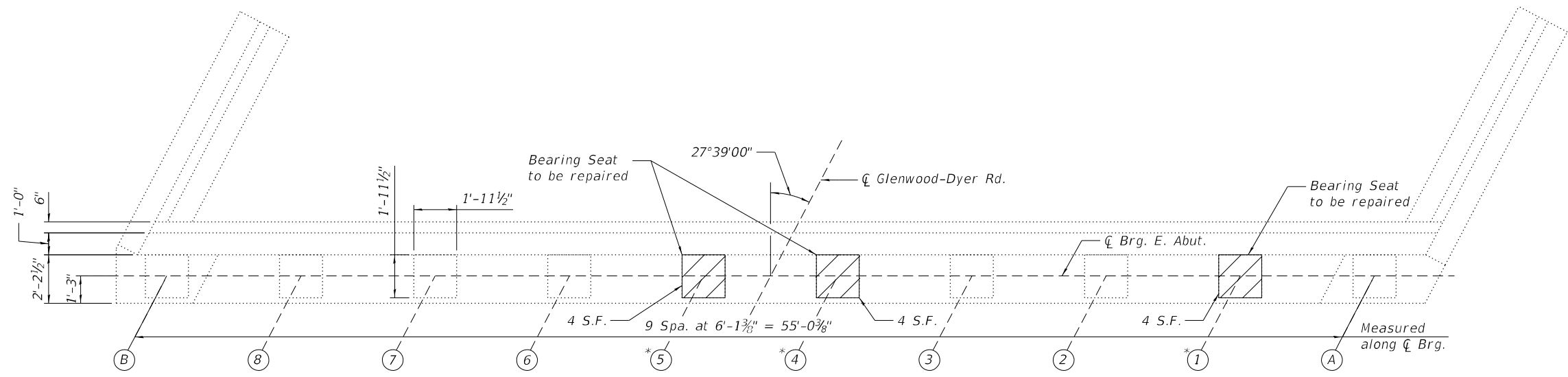
USER NAME =	DESIGNED - AMS	REVISED -
	CHECKED - MI, MAI	REVISED -
PLOT SCALE =	DRAWN - AMS	REVISED -
PLOT DATE =	DATE - 4/2/2021	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**FRAMING PLAN AND BEAM REPAIRS
STRUCTURE NO. 016-0624**

SHEET S-15 OF S-21 SHEETS

F.A.P. RTE. 332	SECTION 2020-008-BR	COUNTY COOK	TOTAL SHEETS 62	SHEET NO. 47
CONTRACT NO. 62K79				
ILLINOIS		FED. AID PROJECT		



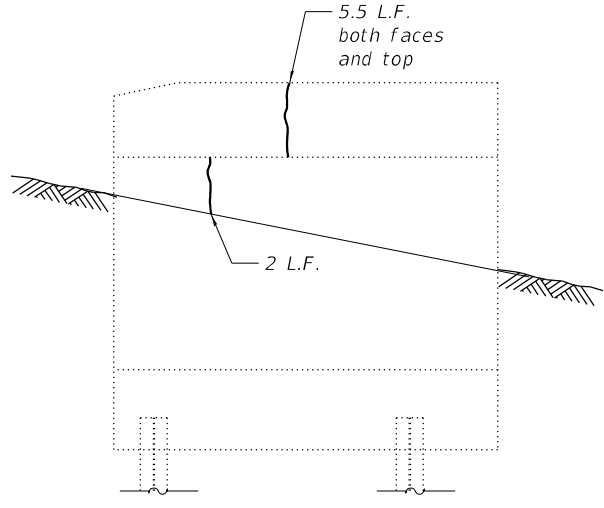
*Temporary Shoring and Cribbing shall be provided at this location

PLAN-EAST ABUTMENT

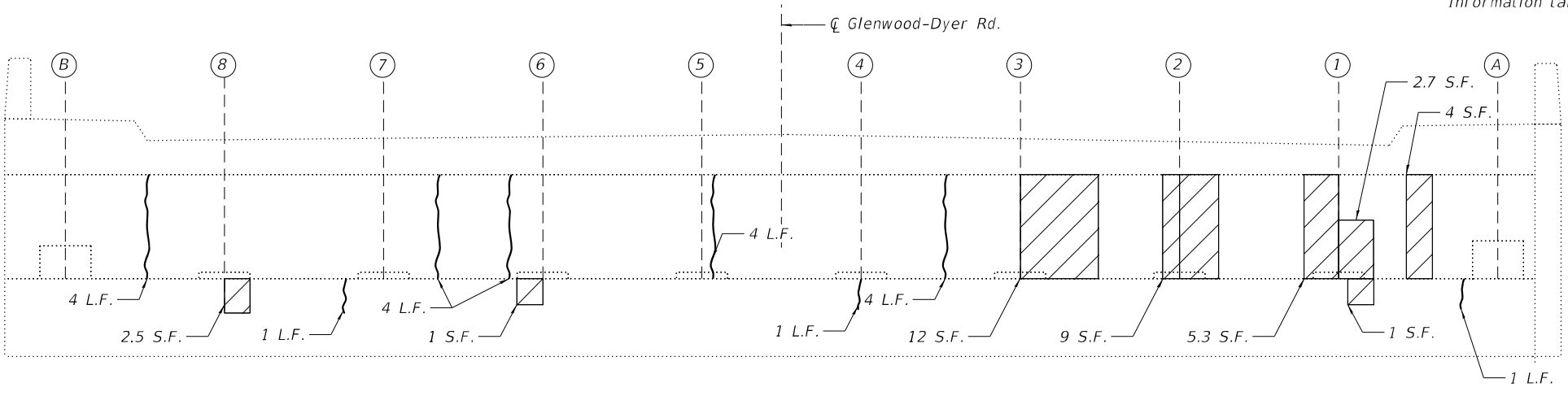


INTERIOR BEAM REACTION TABLE				
		Abut.	Pier 1 or 3	Pier 2
RDL	(k)	18.7	62.6	63.0
RLL	(k)	27.9	33.6	33.7
Imp	(k)	11.1	12.7	12.2
RTotal	(k)	57.7	108.9	108.9

Information taken from existing plans



ELEVATION - NE WINGWALL



ELEVATION - EAST ABUTMENT

(Looking East)

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.

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Epoxy Crack Injection	Foot	31
Structural Repair of Concrete (Depth Equal to or Less than 5 inches)	Sq Ft	50
Temporary Shoring and Cribbing	Each	3

LEGEND

- Structural Repair of Concrete (Depth Equal to or Less than 5 Inches)
- Epoxy Crack Injection
- S.F. Square Foot
- L.F. Linear Foot

MODEL: Default
FILE NAME: P:\1707*732_Accurate_PTB184*010\WO #32_Glenwood Dyer Rd at IL RTE.394\Sheets\0160624-S16-EAbut_Repairs.dgn
3/18/2021 10:57:02 AM



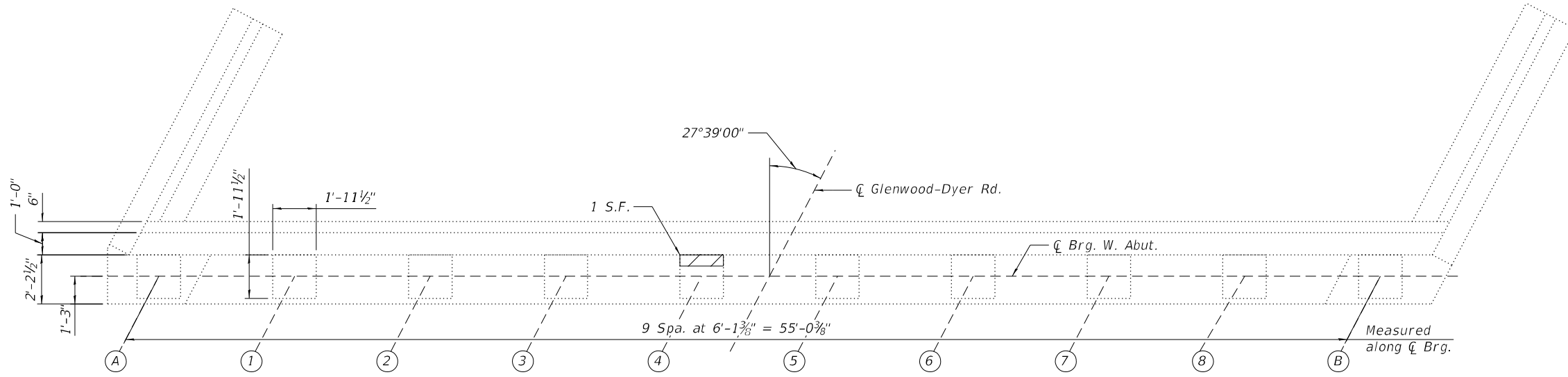
USER NAME =	DESIGNED - JMI	REVISED -
	CHECKED - MI, MAI	REVISED -
PLOT SCALE =	DRAWN - JMI	REVISED -
PLOT DATE =	DATE - 3/18/2021	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

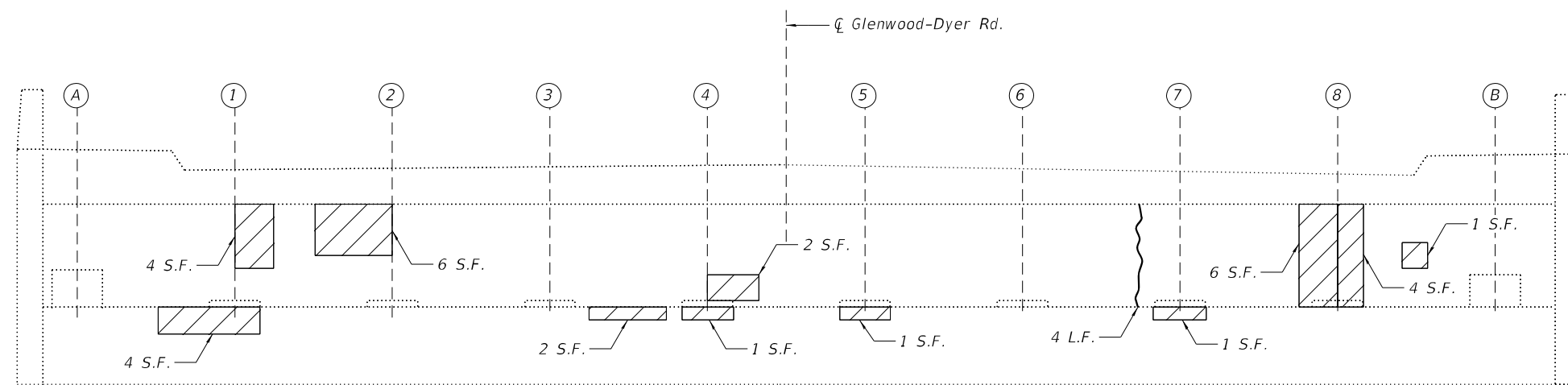
EAST ABUTMENT REPAIRS
STRUCTURE NO. 016-0624

SHEET S-16 OF S-21 SHEETS

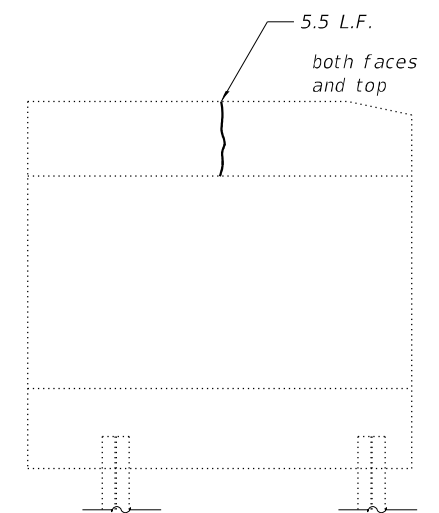
F.A.P. RTE. 332	SECTION 2020-008-BR	COUNTY COOK	TOTAL SHEETS 62	SHEET NO. 48
CONTRACT NO. 62K79				
ILLINOIS FED. AID PROJECT				



PLAN-WEST ABUTMENT



ELEVATION - WEST ABUTMENT
(Looking West)



ELEVATION - NW WINGWALL

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.

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Epoxy Crack Injection	FOOT	10
Structural Repair Of Concrete (Depth Equal To Or Less Than 5 Inches)	SQ FT	33

LEGEND

- Structural Repair of Concrete (Depth Equal to or Less than 5 Inches)
- Epoxy Crack Injection
- S.F. Square Foot
- L.F. Linear Foot

MODEL: Default
FILE NAME: P:\1707\732 Accurate_PTB184-010\WO #32 Glenwood Dyer Rd at IL RTE.394\Sheets\0160624-517\WAbut Repairs.dgn
3/18/2021 10:57:04 AM



USER NAME =	DESIGNED - JMI	REVISED -
	CHECKED - MI, MAI	REVISED -
PLOT SCALE =	DRAWN - JMI	REVISED -
PLOT DATE =	DATE - 3/18/2021	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

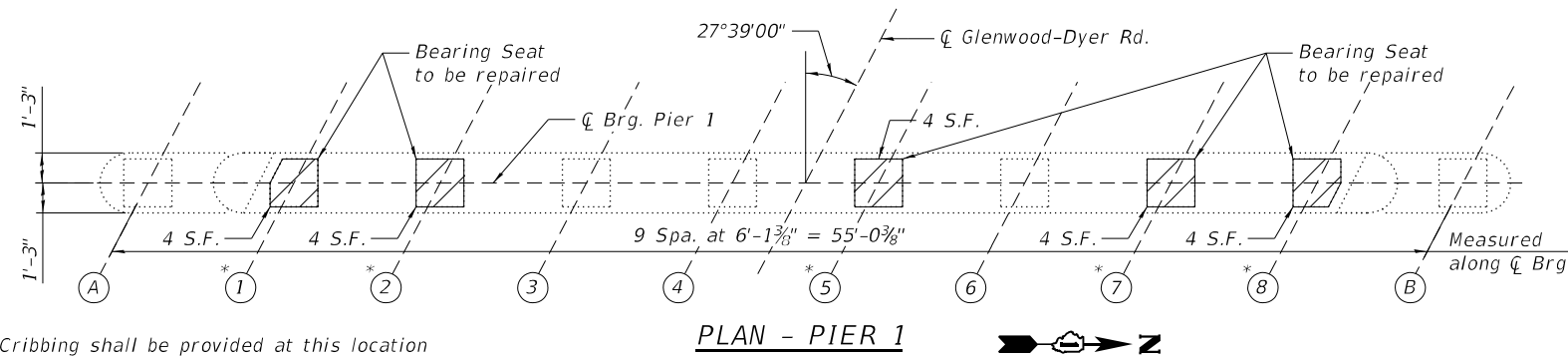
**WEST ABUTMENT REPAIRS
STRUCTURE NO. 016-0624**

SHEET S-17 OF S-21 SHEETS

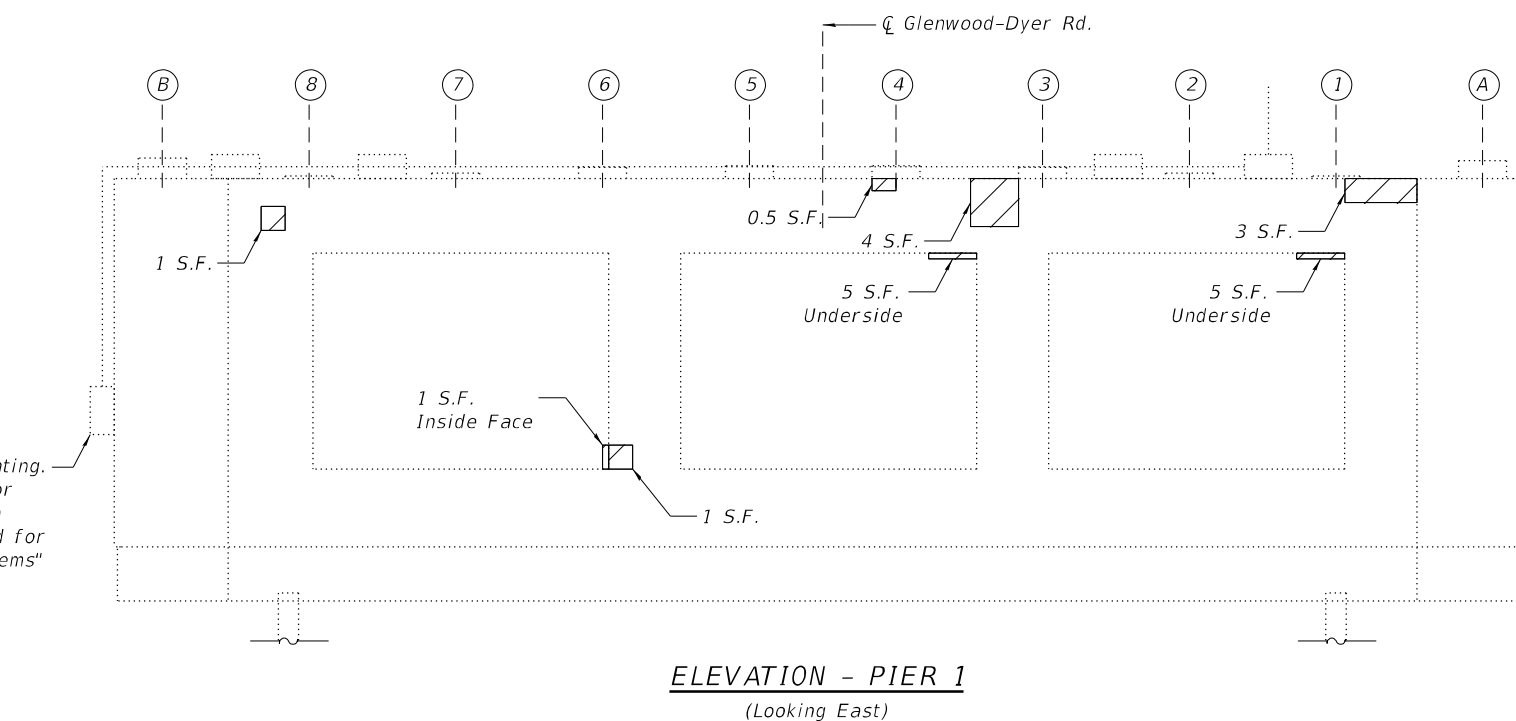
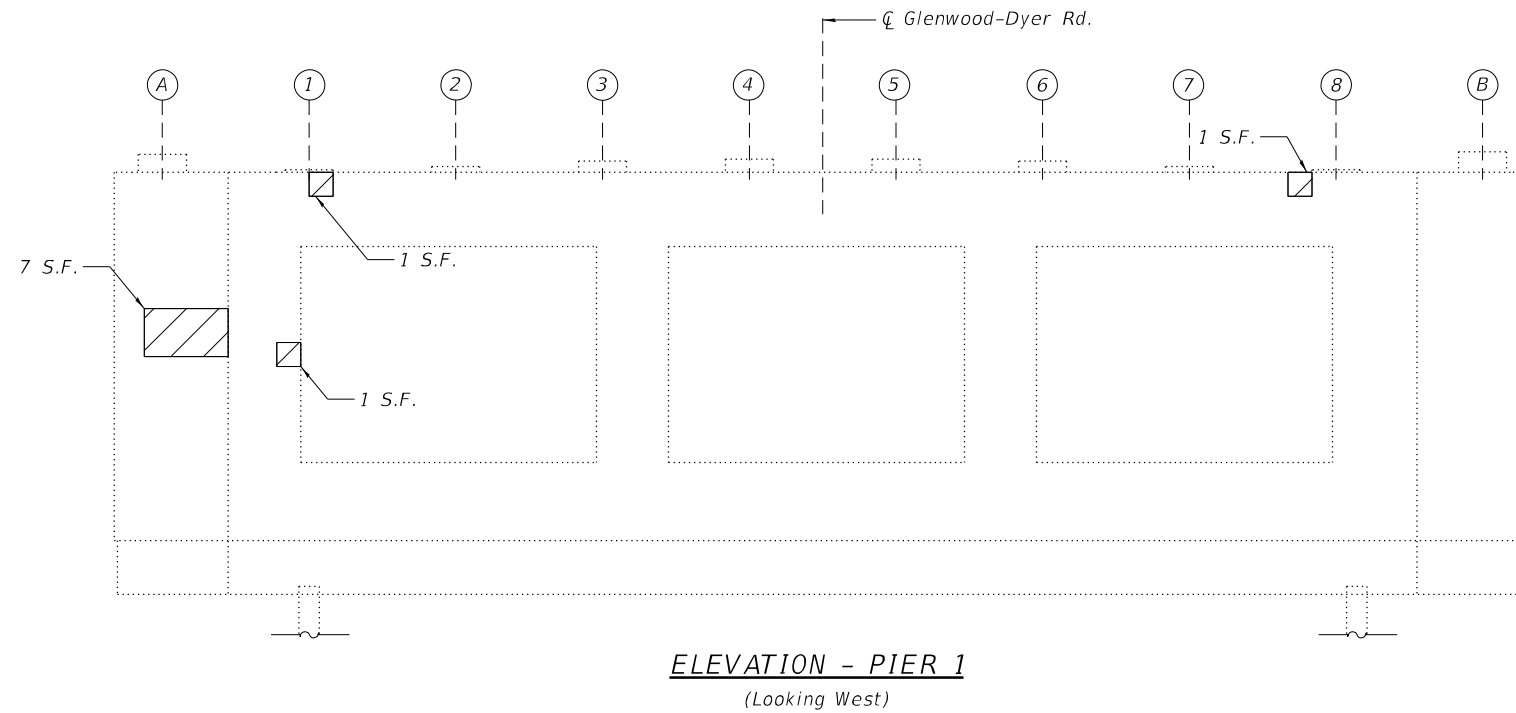
F.A.P. RTE. 332	SECTION 2020-008-BR	COUNTY COOK	TOTAL SHEETS 62	SHEET NO. 49
CONTRACT NO. 62K79				
ILLINOIS FED. AID PROJECT				

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.



*Temporary Shoring and Cribbing shall be provided at this location



Elec. Jct. Box for underpass lighting. Any temp. relocation of conduit or junction box in order to perform substructure repairs will be paid for as "Maintenance of Lighting Systems" (Typ.)

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structural Repair of Concrete (Depth Equal to or Less than 5 inches)	Sq Ft	51
Temporary Shoring and Cribbing	Each	5

LEGEND

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

S.F. Square Foot

MODEL: Default
FILE NAME: P:\1707\732_Accurate_PTB184-Q10\WO #32_Glenwood Dyer Rd at IL RTE.394\Sheets\0160624-S18-Pier 1 Repairs.dgn



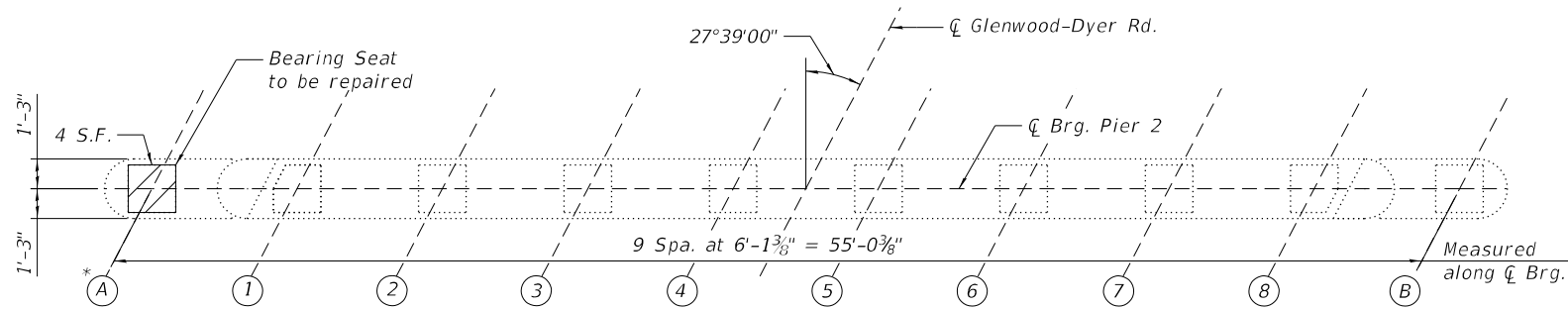
USER NAME =	DESIGNED - JMI	REVISED -
	CHECKED - MI, MAI	REVISED -
PLOT SCALE =	DRAWN - JMI	REVISED -
PLOT DATE =	DATE - 4/2/2021	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 1 REPAIRS
STRUCTURE NO. 016-0624

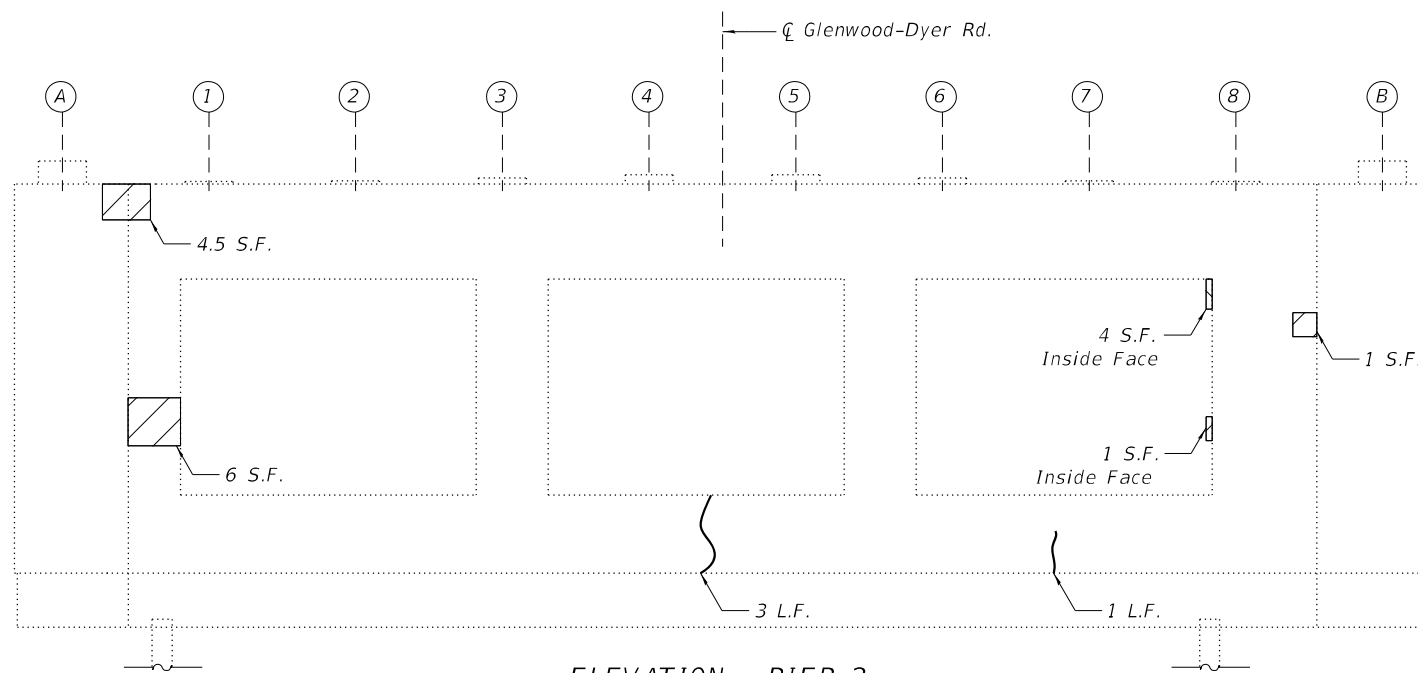
SHEET S-18 OF S-21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	2020-008-BR	COOK	62	50
CONTRACT NO. 62K79				
ILLINOIS FED. AID PROJECT				

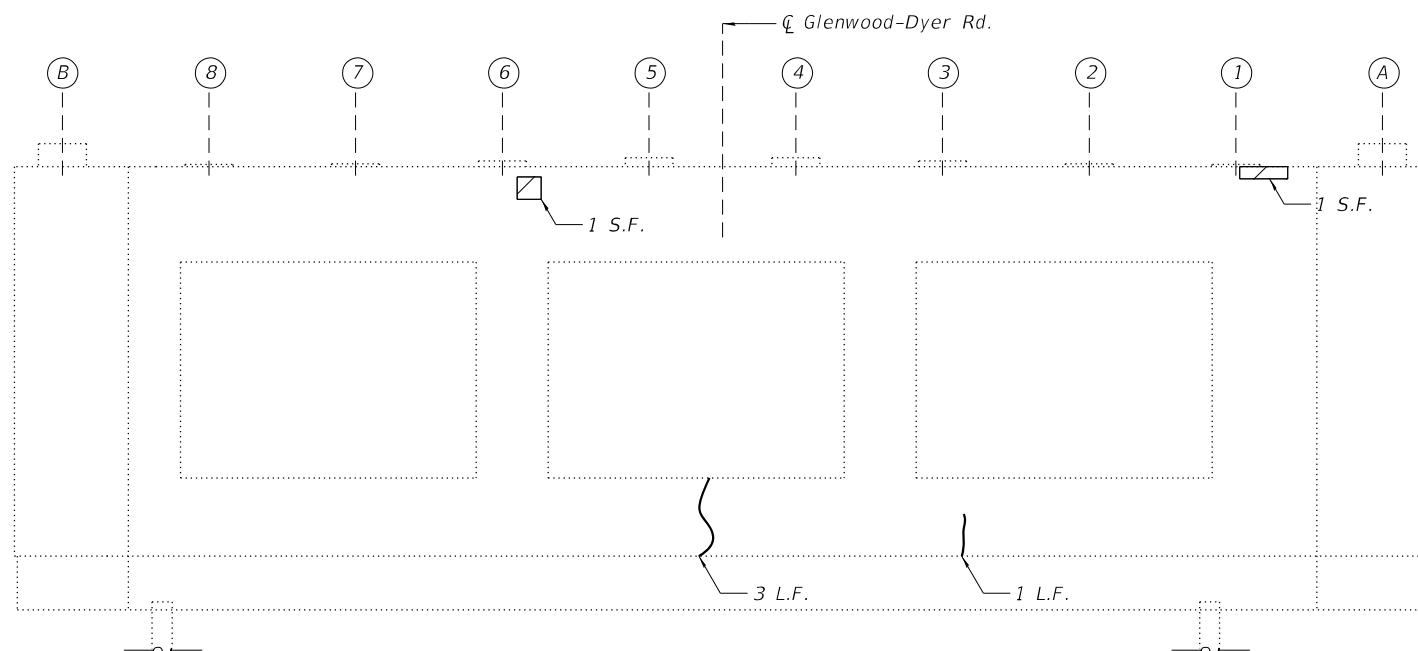


*Temporary Shoring and Cribbing shall be provided at this location

PLAN - PIER 2



ELEVATION - PIER 2
(Looking West)



ELEVATION - PIER 2
(Looking East)

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.

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Epoxy Crack Injection	Foot	8
Structural Repair of Concrete (Depth Equal to or Less than 5 inches)	Sq Ft	23
Temporary Shoring and Cribbing	Each	1

LEGEND

- Structural Repair of Concrete
(Depth Equal to or Less than 5 inches)
- Epoxy Crack Injection
- S.F. Square Foot
- L.F. Linear Foot

MODEL: Default
FILE NAME: P:\1707*732 Accurate PTB184*010\WO #32 Glenwood Dyer Rd at IL RTE.394\Sheets\0160624-S19-Pier 2 Repairs.dgn
3/18/2021 10:57:06 AM



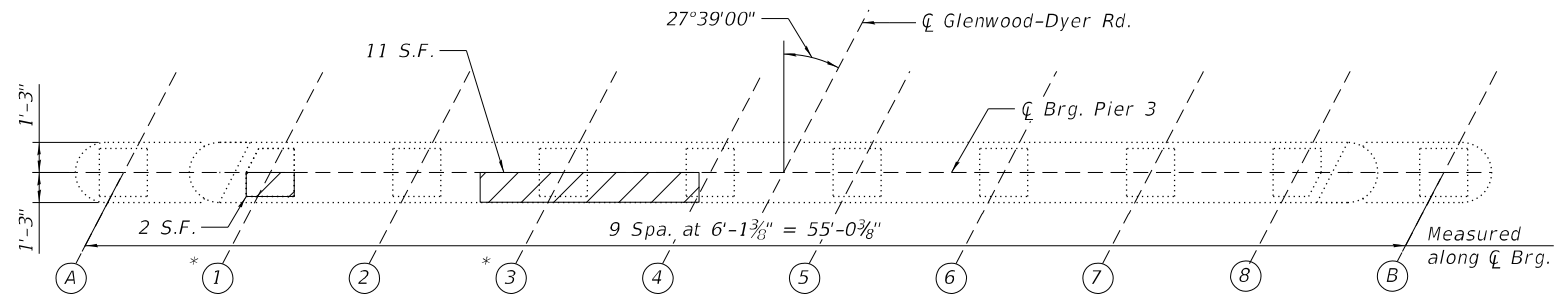
USER NAME =	DESIGNED - JMI	REVISED -
	CHECKED - MI, MAI	REVISED -
PLOT SCALE =	DRAWN - JMI	REVISED -
PLOT DATE =	DATE - 3/18/2021	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 2 REPAIRS
STRUCTURE NO. 016-0624

SHEET S-19 OF S-21 SHEETS

F.A.P. RTE. 332	SECTION 2020-008-BR	COUNTY COOK	TOTAL SHEETS 62	SHEET NO. 51
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62K79	

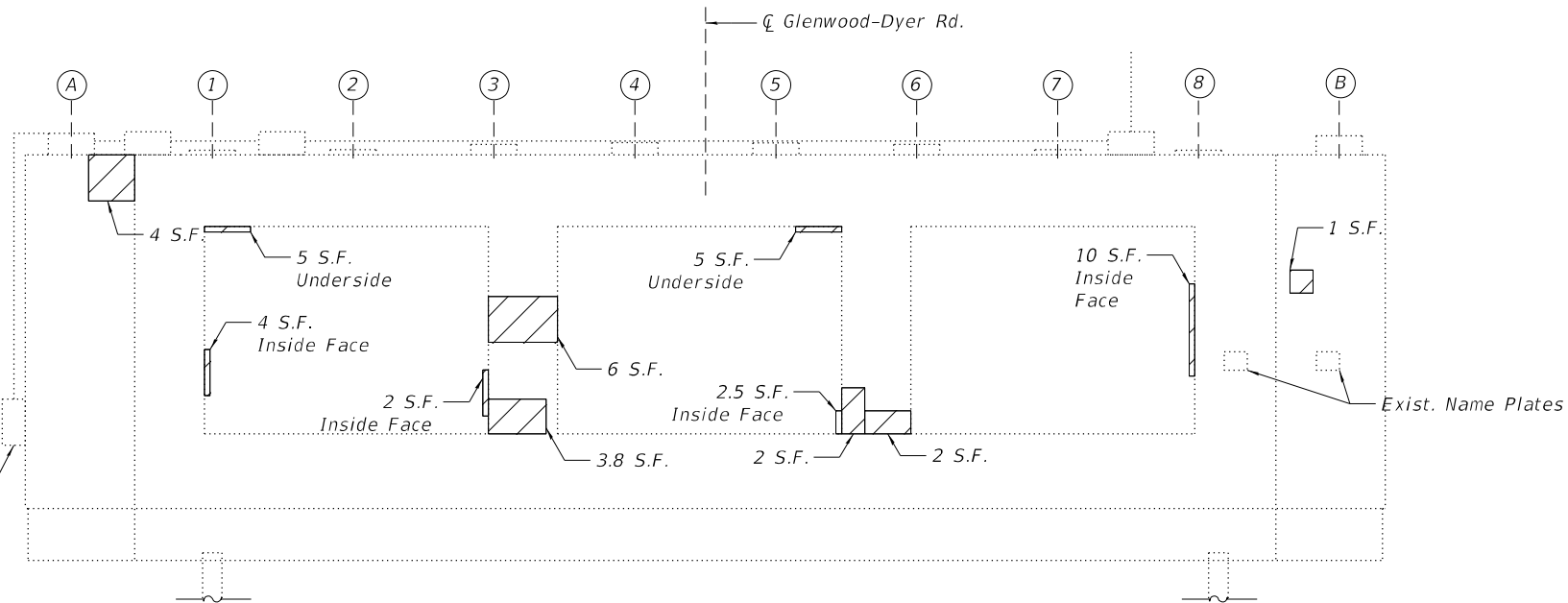


*Temporary Shoring and Cribbing shall be provided at this location

PLAN - PIER 3

NOTE:

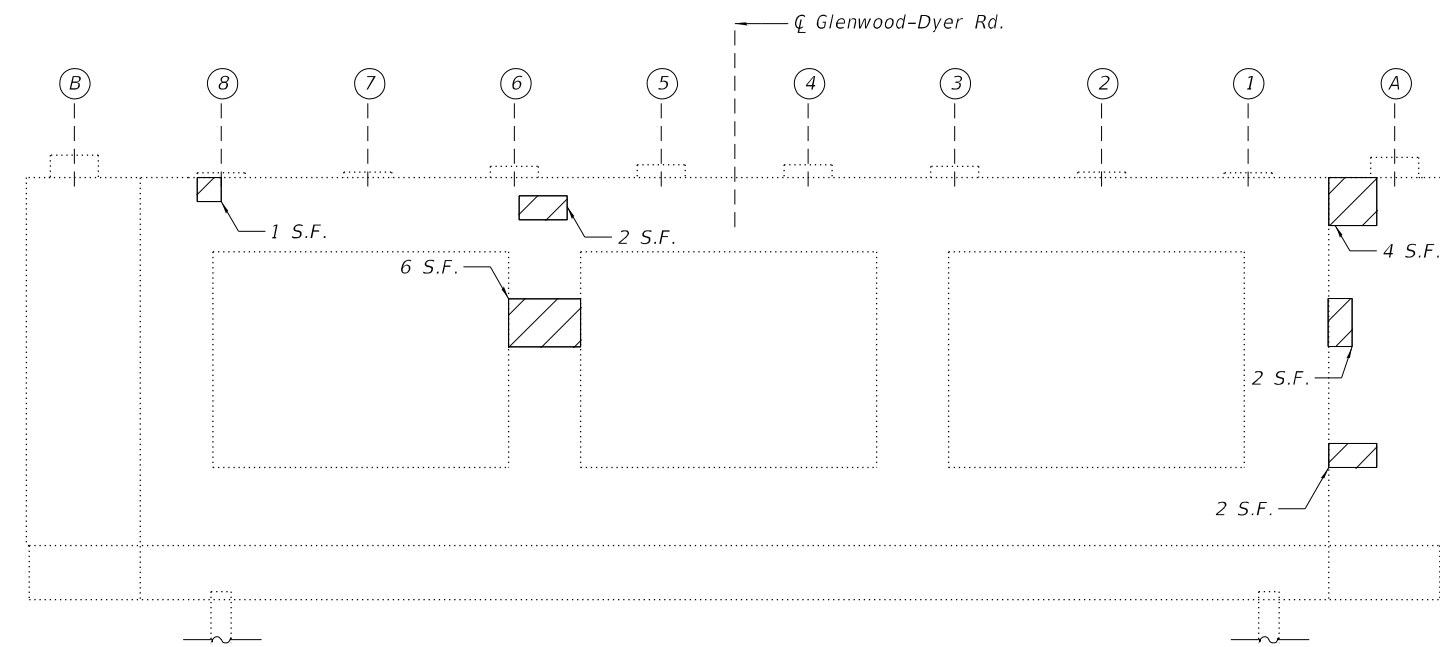
1. Quantities and limits shown are estimated for bidding purposes only. The actual areas to be repaired, and the type(s) of repairs to be used, will be determined by the Engineer in the field at the time of construction.



Elec. Jct. Box for underpass lighting. Any temp. relocation of conduit or junction box in order to perform substructure repairs will be paid for as "Maintenance of Lighting Systems" (Typ.)

ELEVATION - PIER 3

(Looking West)



ELEVATION - PIER 3

(Looking East)

LEGEND

- Structural Repair of Concrete (Depth Equal to or Less Than 5 inches)
- S.F. Square Foot

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Repair of Concrete (Depth Equal to or Less than 5 inches)	Sq Ft	78
Temporary Shoring and Cribbing	Each	2

MODEL: Default
FILE NAME: P:\1707+732_Accurate_PTB18+Q10\WO #32_Glenwood Dyer Rd at IL RTE.394\Sheets\0160624-520-Pier 3 Repairs.dgn



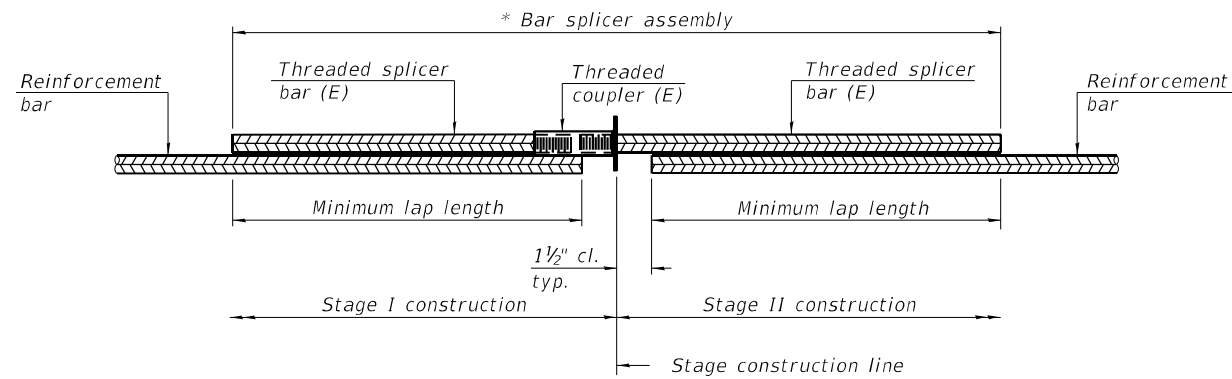
USER NAME =	DESIGNED - JMI	REVISED -
	CHECKED - MI, MAI	REVISED -
PLOT SCALE =	DRAWN - JMI	REVISED -
PLOT DATE =	DATE - 4/2/2021	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 3 REPAIRS
STRUCTURE NO. 016-0624

SHEET S-20 OF S-21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	2020-008-BR	COOK	62	52
CONTRACT NO. 62K79				
		ILLINOIS	FED. AID PROJECT	

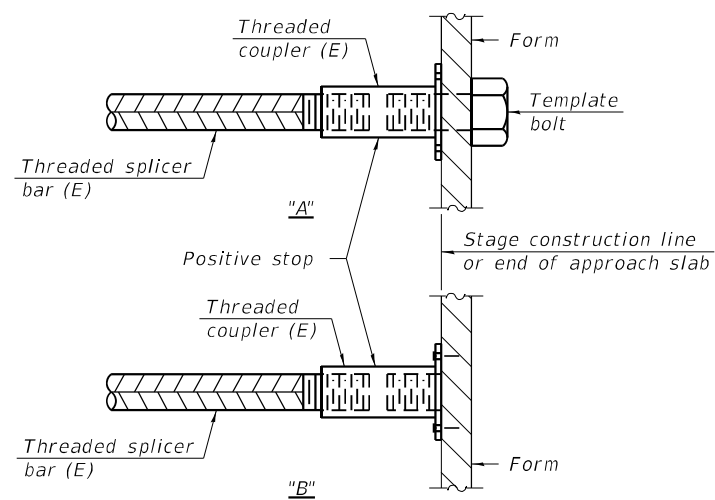


STANDARD BAR SPLICER ASSEMBLY PLAN
 (All components shall be provided from one supplier)

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

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

Location	Bar size	No. assemblies required	Minimum lap length
Deck	#5	40	3'-6"
East Abut.	#6	12	3'-10"
West Abut.	#6	12	3'-10"



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.

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.

MODEL: Default
 FILE NAME: P:\1707*732_Accurate_PTB184+0\10\WO #32_Glenwood Dyer Rd at IL RTE.394\Sheets\0160624-521-Bar Splicer Assembly and Mechanical Splicer Details.dgn

BSD-1

1-1-2020



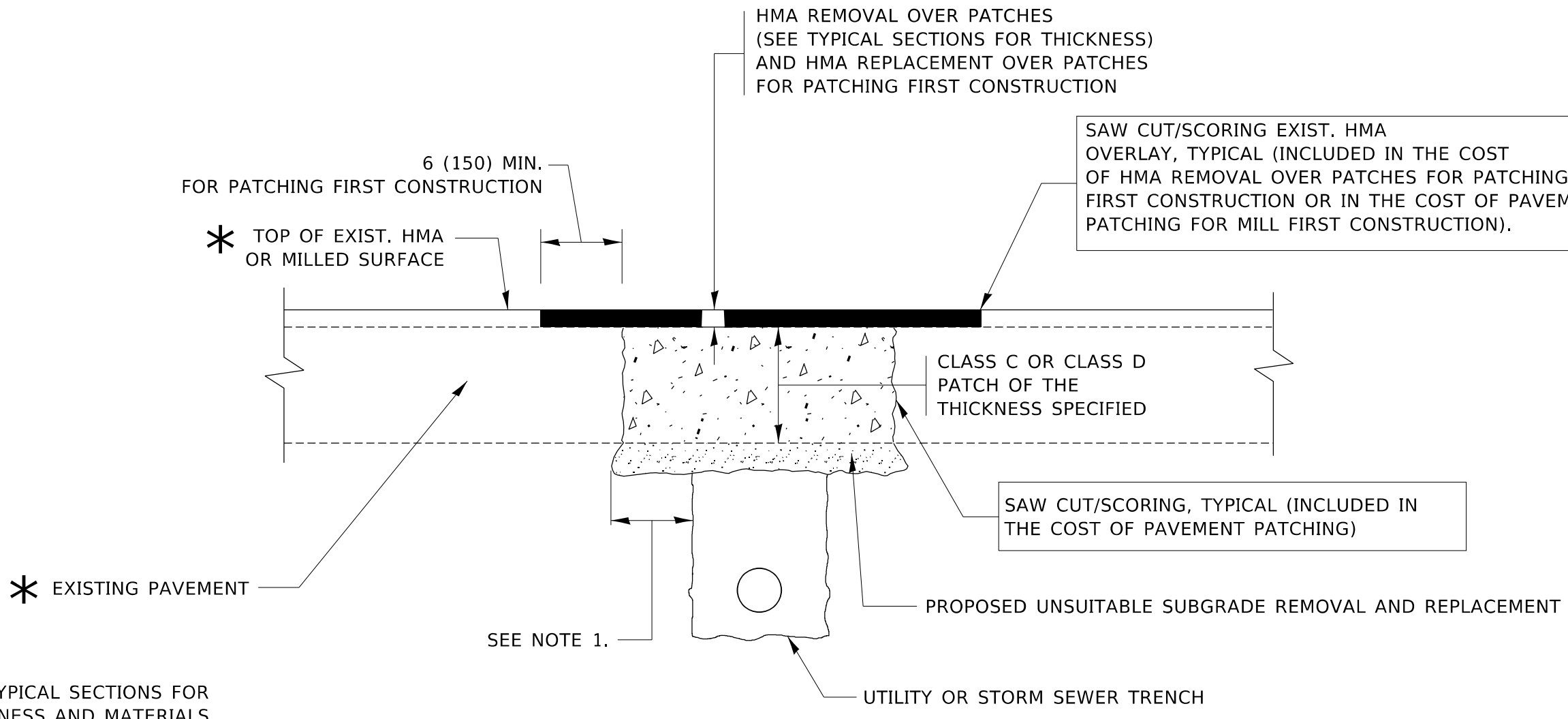
USER NAME =	DESIGNED - JMI	REVISED -
	CHECKED - MI, MAI	REVISED -
PLOT SCALE =	DRAWN - JMI	REVISED -
PLOT DATE =	DATE - 3/18/2021	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
 STRUCTURE NO. 016-0624

SHEET S-21 OF S-21 SHEETS

F.A.P. RTE. 332	SECTION 2020-008-BR	COUNTY COOK	TOTAL SHEETS 62	SHEET NO. 53
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62K79	



NOTES:

1. THE WIDTH OF THE FULL DEPTH PATCH OVER A TRENCH SHALL BE 12 (300) WIDER ON EACH SIDE OF THE TRENCH.
2. FOR METHOD OF MEASUREMENT AND BASIS OF PAYMENT, SEE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL".

SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

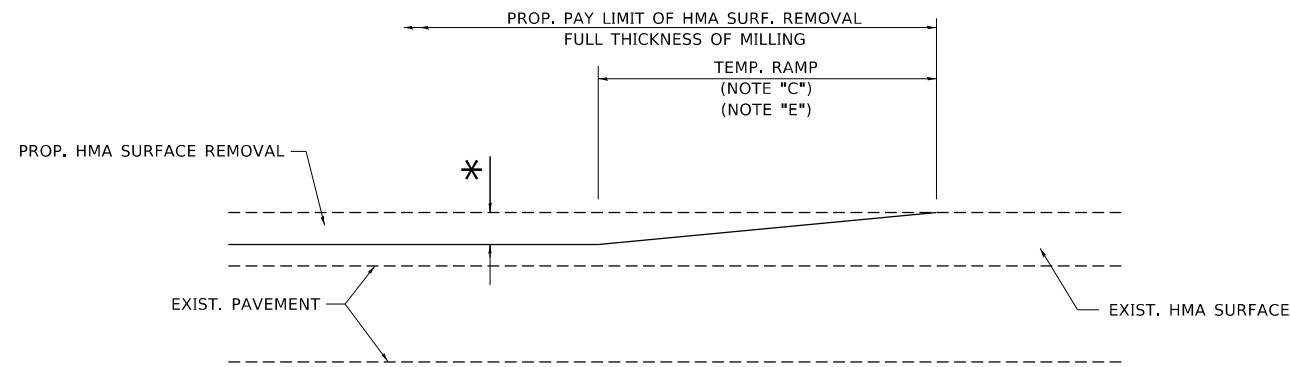
SEQUENCE OF CONSTRUCTION (MILLING FIRST)

1. MILL HMA FIRST IF THERE IS AT LEAST 4½ INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

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

MODEL: D:\ref\...
 FILE: hma\p...

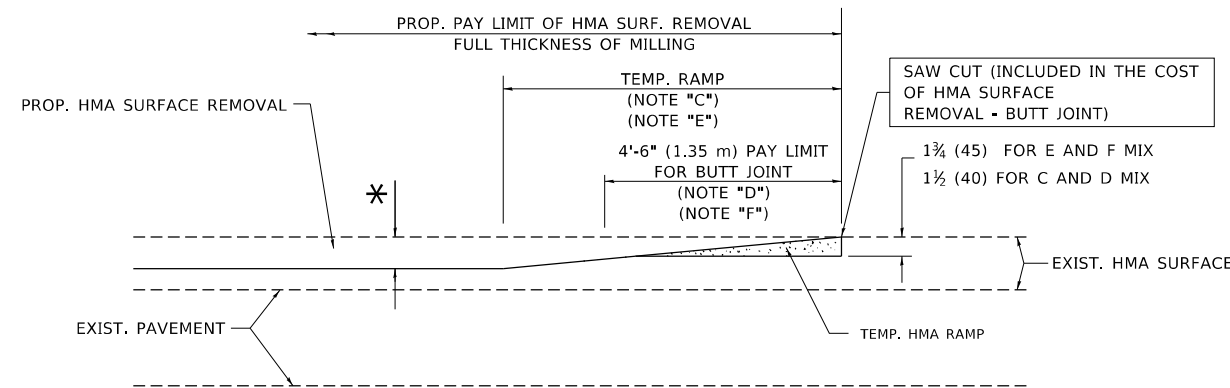
USER NAME ■ footemj DESIGNED - R. SHAH DRAWN - PLOT SCALE ■ 50,0000 * / in. PLOT DATE ■ 3/27/2019				REVISED - A. ABBAS 04-27-98 REVISED - R. BORO 01-01-07 REVISED - R. BORO 09-04-07 REVISED - K. ENG 10-27-08				STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION				PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT				F.A. RTE. 332 SECTION 2020-008-BR COUNTY COOK TOTAL SHEETS 62 SHEET NO. 54	
DATE - 10-25-94								SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.				CONTRACT NO. 62K79 ILLINOIS FED. AID PROJECT					



MILLED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 1

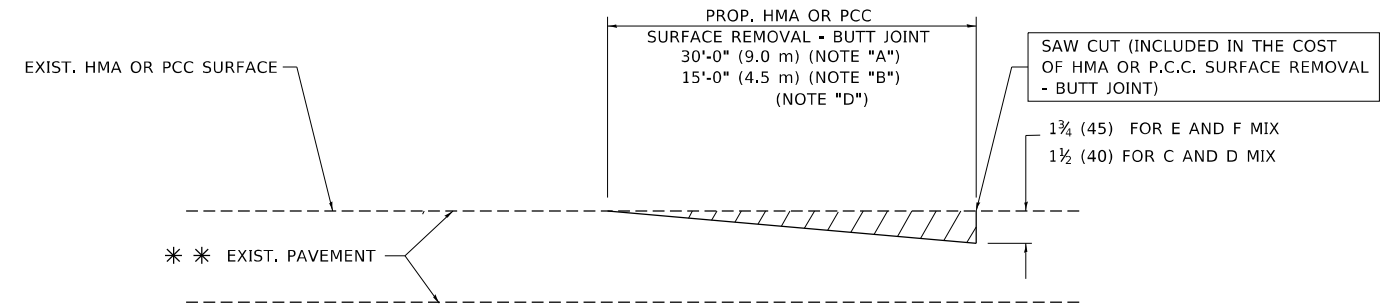


HMA CONSTRUCTED TEMPORARY RAMP

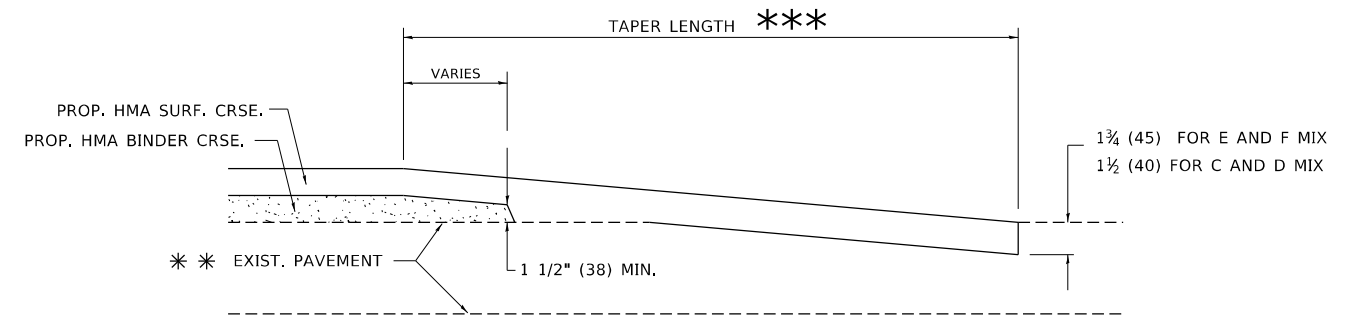
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 2

TYPICAL TEMPORARY RAMP



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

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

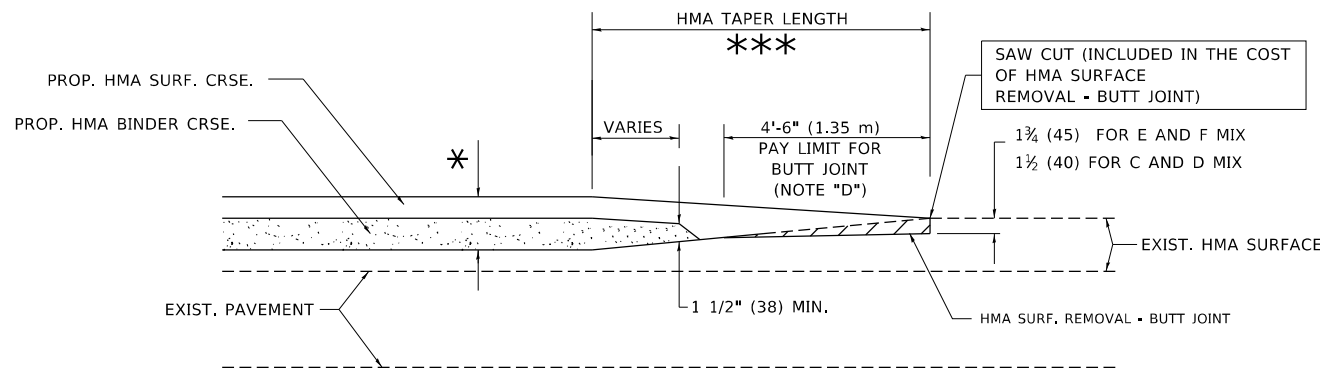
NOTES

- 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.
* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- G. SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
*** 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.



BUTT JOINT AND HMA TAPER

TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

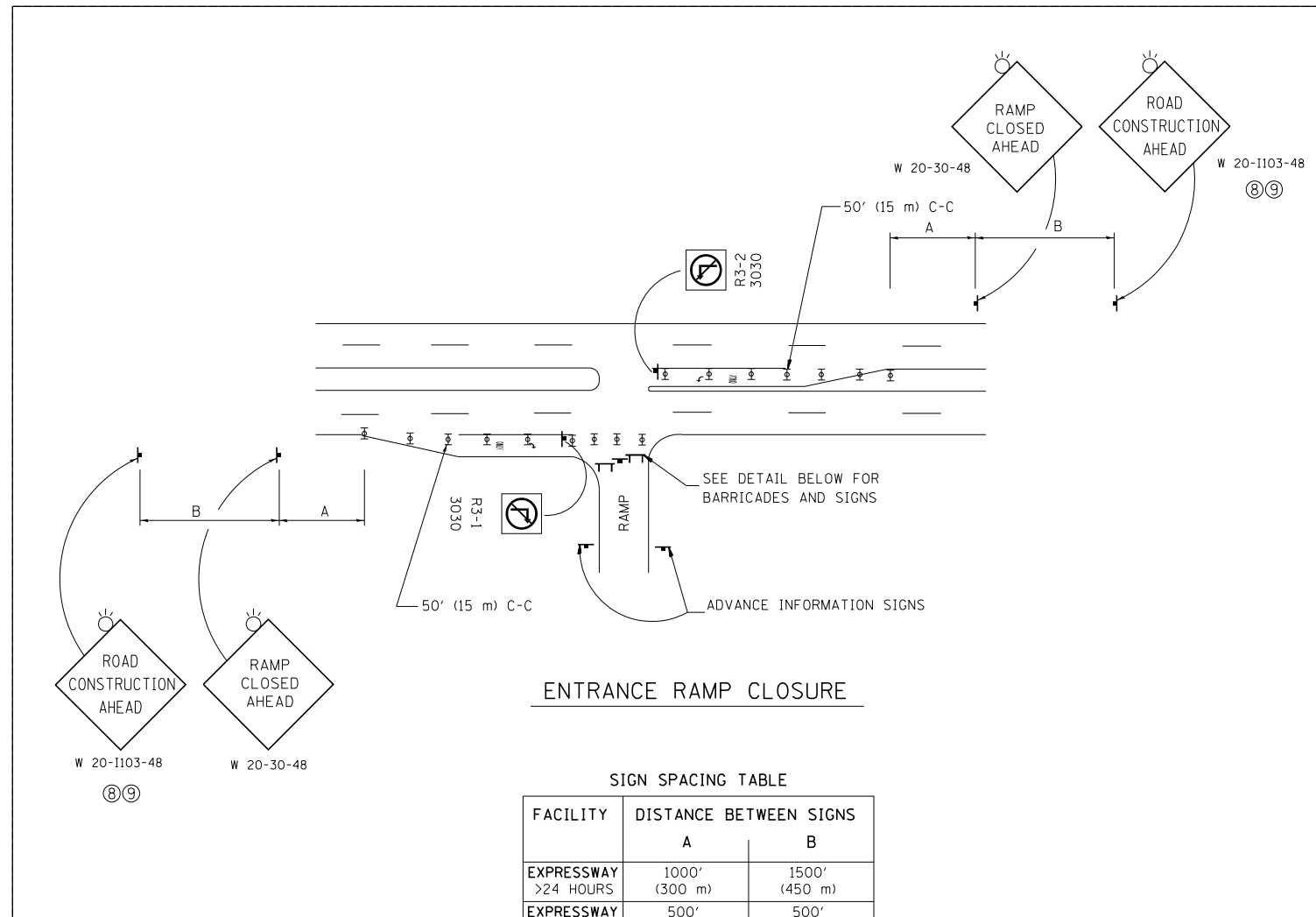
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND
HMA TAPER DETAILS

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	2020-008-BR	COOK	62	55
BD400-05 BD32		CONTRACT NO. 62K79		
ILLINOIS FED. AID PROJECT				

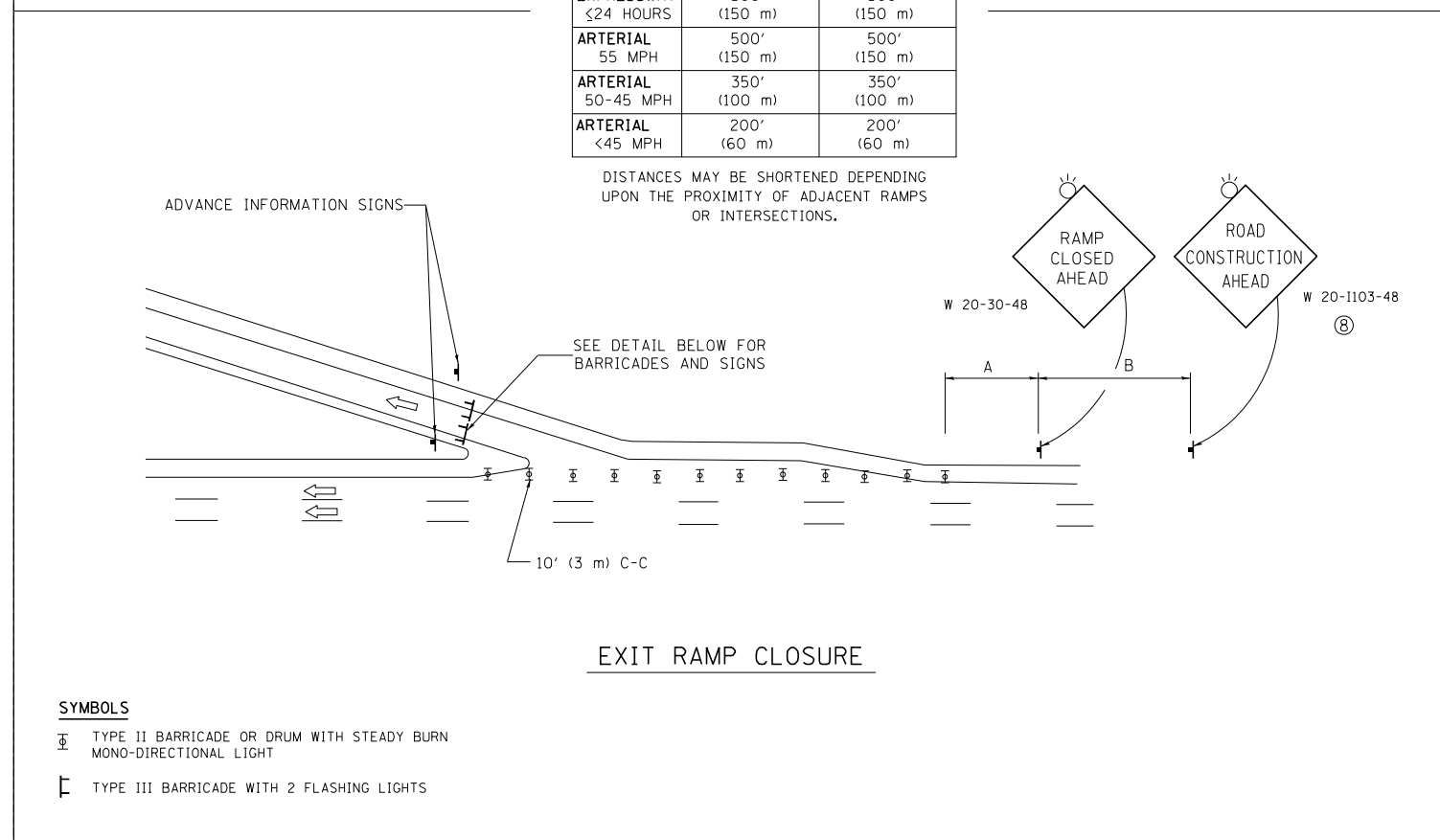
USER NAME	DESIGNED	REVISED	REVISED
footemj	M. DE YONG	R. SHAH 10-25-94	R. SHAH 10-25-94
	DRAWN	REVISED	REVISED
	A. ABBAS 03-21-97	A. ABBAS 03-21-97	A. ABBAS 03-21-97
PLOT SCALE	CHECKED	REVISED	REVISED
50,0000 * / in.	M. GOMEZ 04-06-01	M. GOMEZ 04-06-01	M. GOMEZ 04-06-01
PLOT DATE	DATE	REVISED	REVISED
3/27/2019	06-13-90	R. BORO 01-01-07	R. BORO 01-01-07



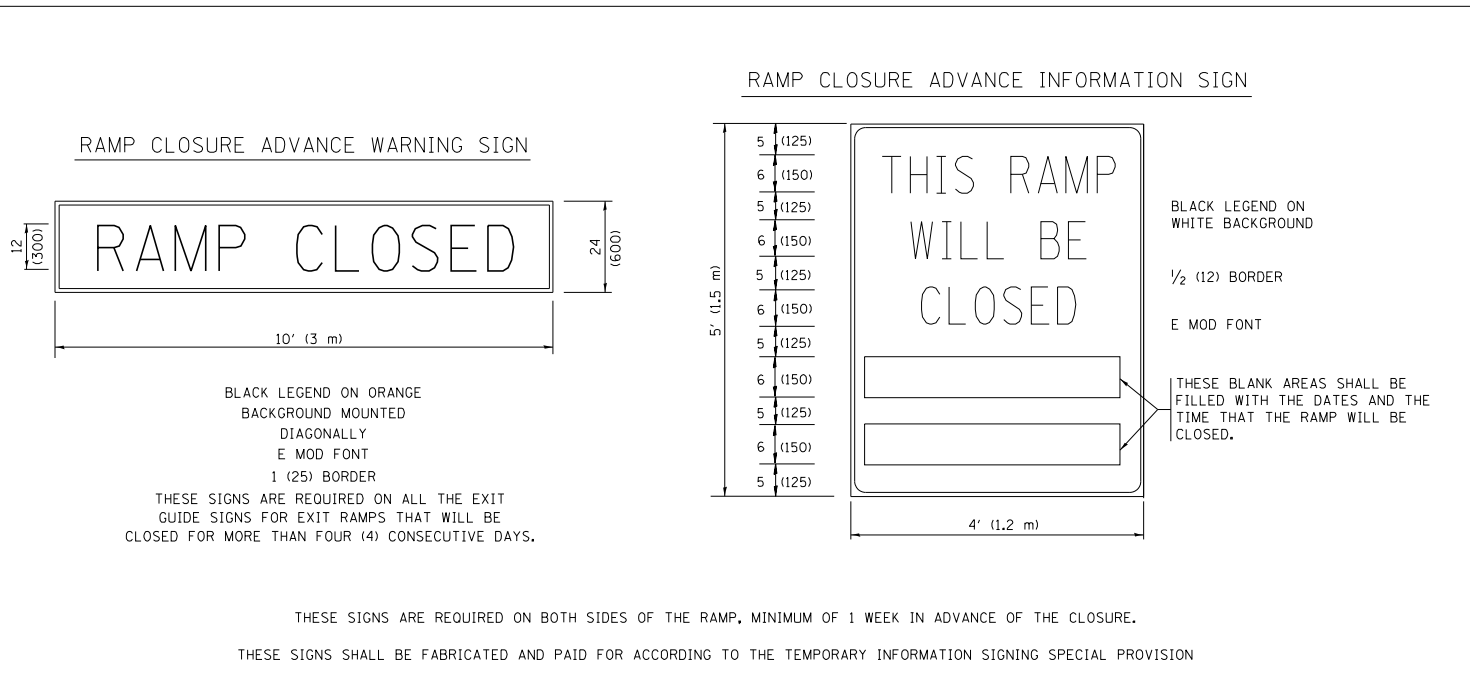
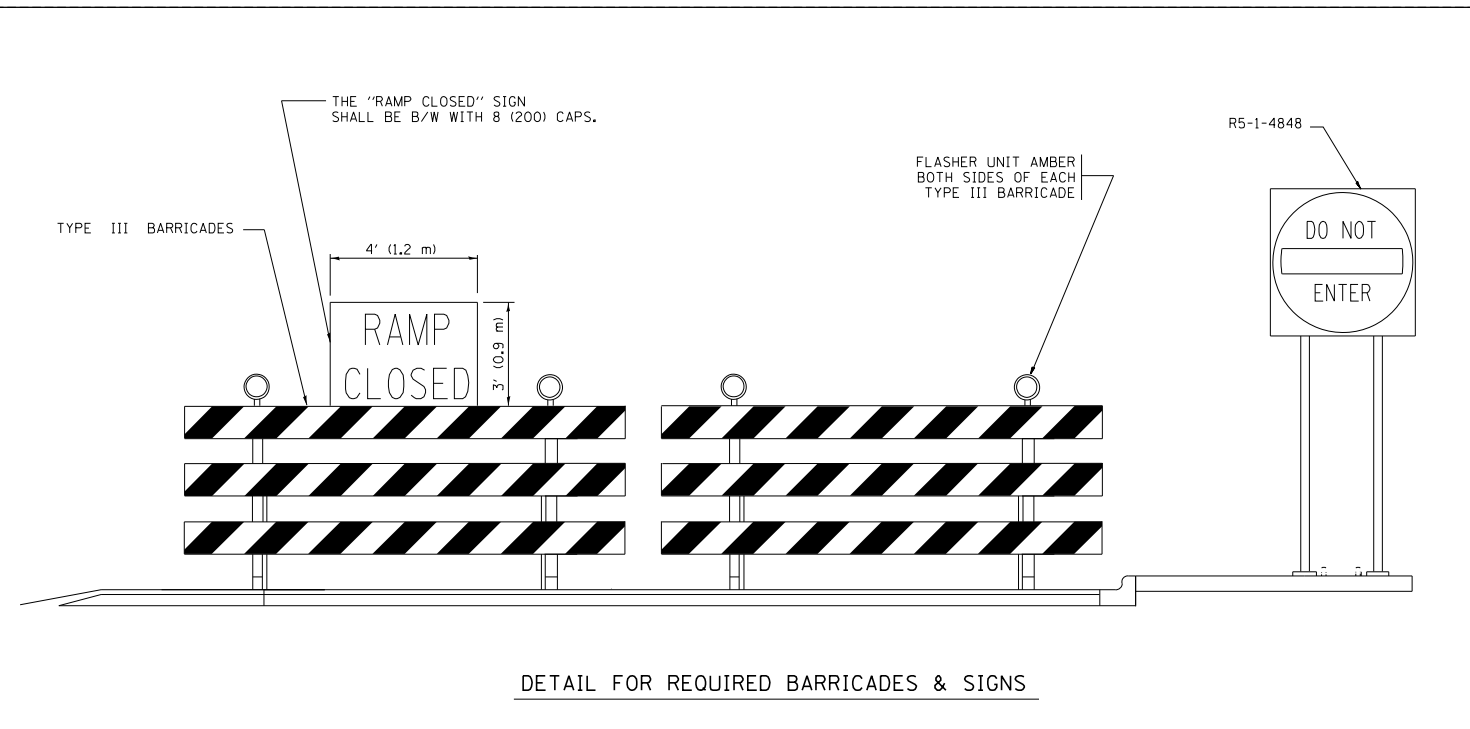
SIGN SPACING TABLE

FACILITY	DISTANCE BETWEEN SIGNS	
	A	B
EXPRESSWAY >24 HOURS	1000' (300 m)	1500' (450 m)
EXPRESSWAY <24 HOURS	500' (150 m)	500' (150 m)
ARTERIAL 55 MPH	500' (150 m)	500' (150 m)
ARTERIAL 50-45 MPH	350' (100 m)	350' (100 m)
ARTERIAL <45 MPH	200' (60 m)	200' (60 m)

DISTANCES MAY BE SHORTENED DEPENDING UPON THE PROXIMITY OF ADJACENT RAMPS OR INTERSECTIONS.



- SYMBOLS**
- ⊥ TYPE II BARRICADE OR DRUM WITH STEADY BURN MONO-DIRECTIONAL LIGHT
 - ⊥ TYPE III BARRICADE WITH 2 FLASHING LIGHTS



- GENERAL NOTES:**
- ① CONES MAY BE SUBSTITUTED FOR DRUMS OR TYPE II BARRICADES DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (700) HIGH.
 - ② STEADY BURN LIGHTS WILL NOT BE REQUIRED FOR DAY OPERATIONS.
 - ③ A FLAGGER SHALL BE POSITIONED AT EACH CLOSED RAMP THAT IS OPEN TO CONSTRUCTION VEHICLES, PRECEDED BY A W20-7 FLAGGER WARNING SIGN.
 - ④ ALL ROUTE MARKERS AND TRAILBLAZER ASSEMBLIES WHICH DIRECT MOTORISTS TO A CLOSED ENTRANCE RAMP SHALL BE COVERED WHEN THE RAMP IS CLOSED FOR MORE THAN FOUR (4) DAYS.
 - ⑤ THE SIGNING AND BARRICADING WHICH IS REQUIRED BY THIS DETAIL SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS).
 - ⑥ AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL RAMP CLOSURES.
 - ⑦ THE RAMP CLOSURE ADVANCE INFORMATION SIGNS SHALL BE ERECTED IF THE CLOSURE TIME EXCEEDS TWENTY-FOUR (24) HOURS. ADDITIONAL ADVANCE WARNING SIGNS ON EXIT GUIDE SIGNING WILL BE REQUIRED FOR EXIT RAMP CLOSURES THAT EXCEED FOUR (4) DAYS IN LENGTH.
 - ⑧ ROAD CONSTRUCTION AHEAD SIGNS MAY BE OMITTED WHEN THIS DETAIL IS USED IN CONJUNCTION WITH OTHER TRAFFIC CONTROL THAT ALREADY INCLUDES A ROAD CONSTRUCTION AHEAD SIGN.
 - ⑨ ARTERIAL ROAD CONSTRUCTION AHEAD SIGNS SHALL BE INSTALLED ON THE LEFT SIDE OF TRAFFIC IF THE MEDIAN IS MORE THAN 10 FT WIDE.

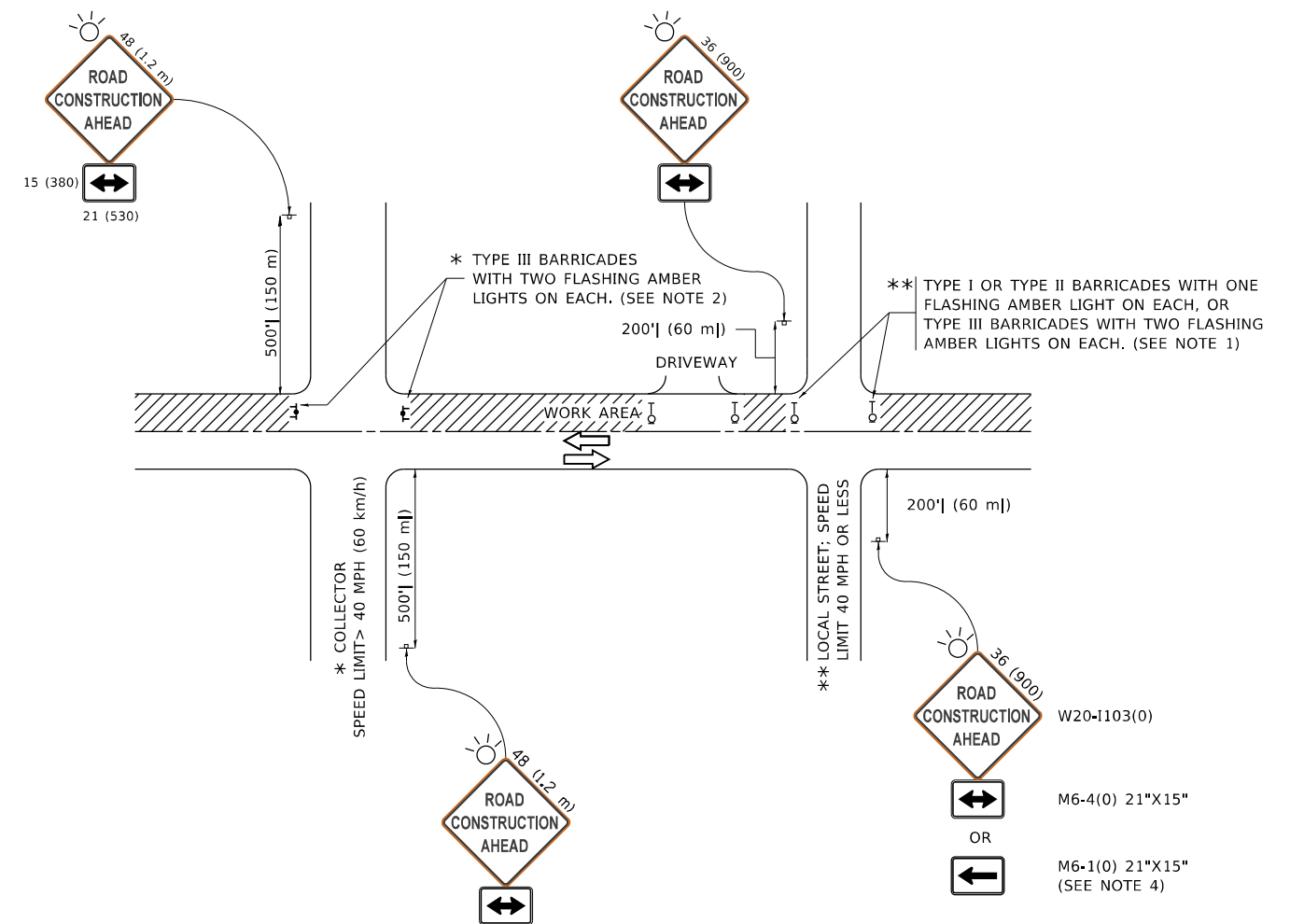
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = footemj	DESIGNED - DWS	REVISED - JAF 02-06
ct:\pwork\pwork\dot\footemj\0108315\tc08.dgn		DRAWN -	REVISED - SPB 01-07
	PLOT SCALE = 50.000' / in.	CHECKED -	REVISED - SPB 12-09
	PLOT DATE = 7/8/2013	DATE - 02-83	REVISED - MD 06-13

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

ENTRANCE AND EXIT RAMP CLOSURE DETAILS			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A. RTE. 332	SECTION 2020-008-BR	COUNTY COOK	TOTAL SHEETS 62	SHEET NO. 56
TC-08		CONTRACT NO. 62K79		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



NOTES:

- 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:
 - 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.
 - 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.
- SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - 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.
 - 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.
- 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.
- SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
- 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.
- ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
- 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.

MODEL: D:\ref\... FILE: \name\... PROJECT: ...

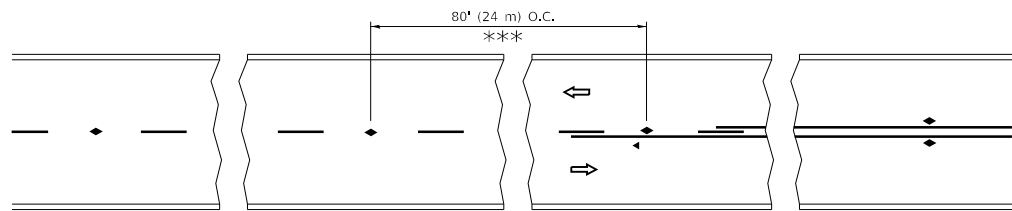
USER NAME	DESIGNED	REVISED
footemj	L.H.A.	A. HOUSEH 10-15-96
PLOT SCALE	CHECKED	REVISED
50,0000 * / in.	-	T. RAMMACHER 01-06-00
PLOT DATE	DATE	REVISED
3/4/2019	06-89	A. SCHUETZE 07-01-13
		A. SCHUETZE 09-15-16

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

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

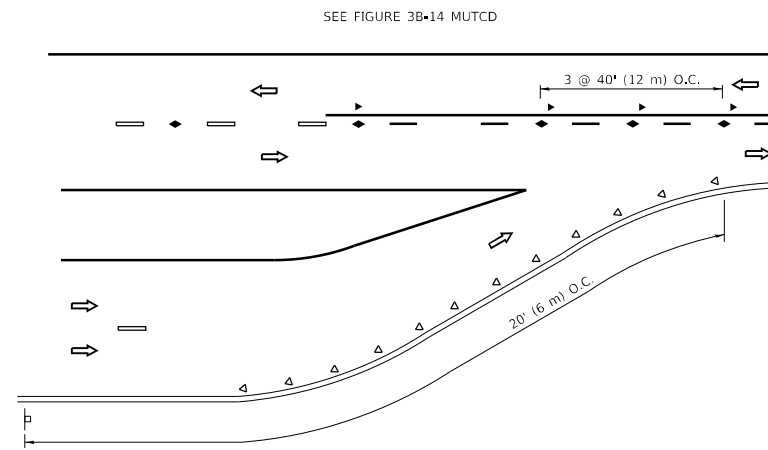
SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	2020-008-BR	COOK	62	58
TC-10			CONTRACT NO. 62K79	
ILLINOIS FED. AID PROJECT				

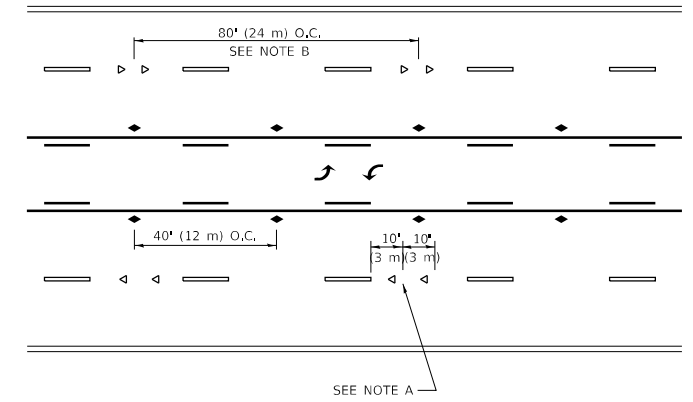


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

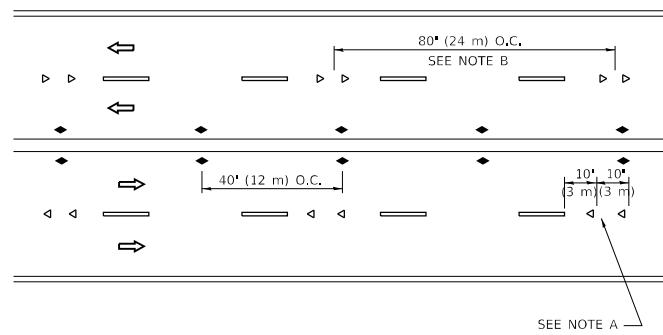
TWO-LANE/TWO-WAY



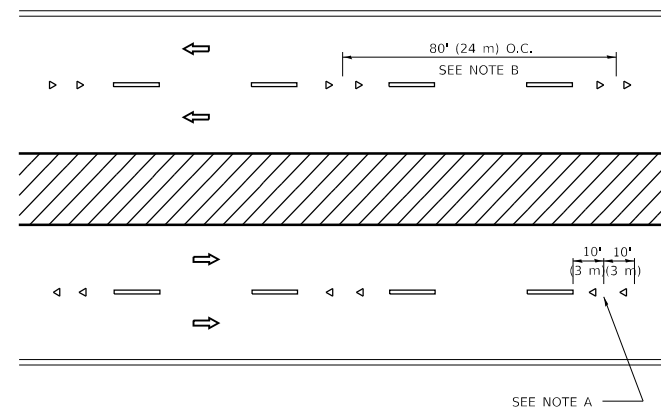
LANE REDUCTION TRANSITION



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.
4. MARKERS ARE TO BE USED ADJACENT TO BOTH SOLID WHITE LINES IN DUAL LEFT TURN LANES

SYMBOLS

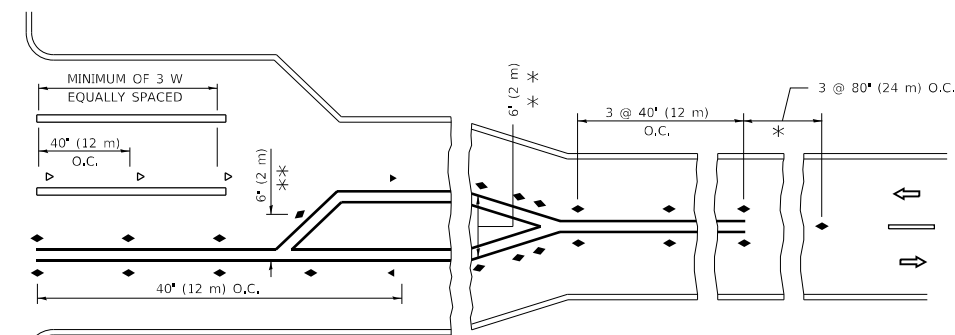
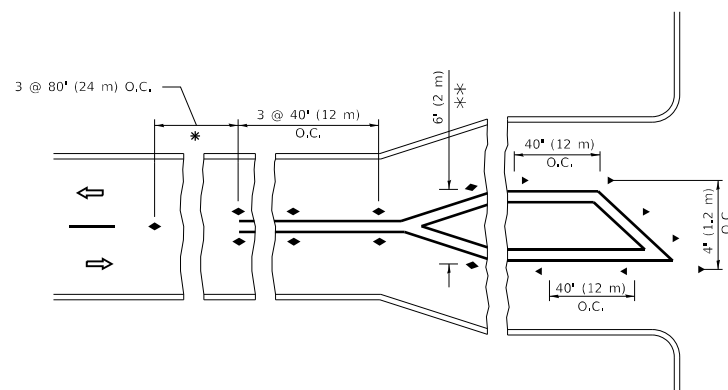
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◀ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

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.

TURN LANES

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

MODEL: D:\ref\... FILE: M:\M&E\... PROJECT: I:\Projects\... DRAWN: T. RAMMACHER

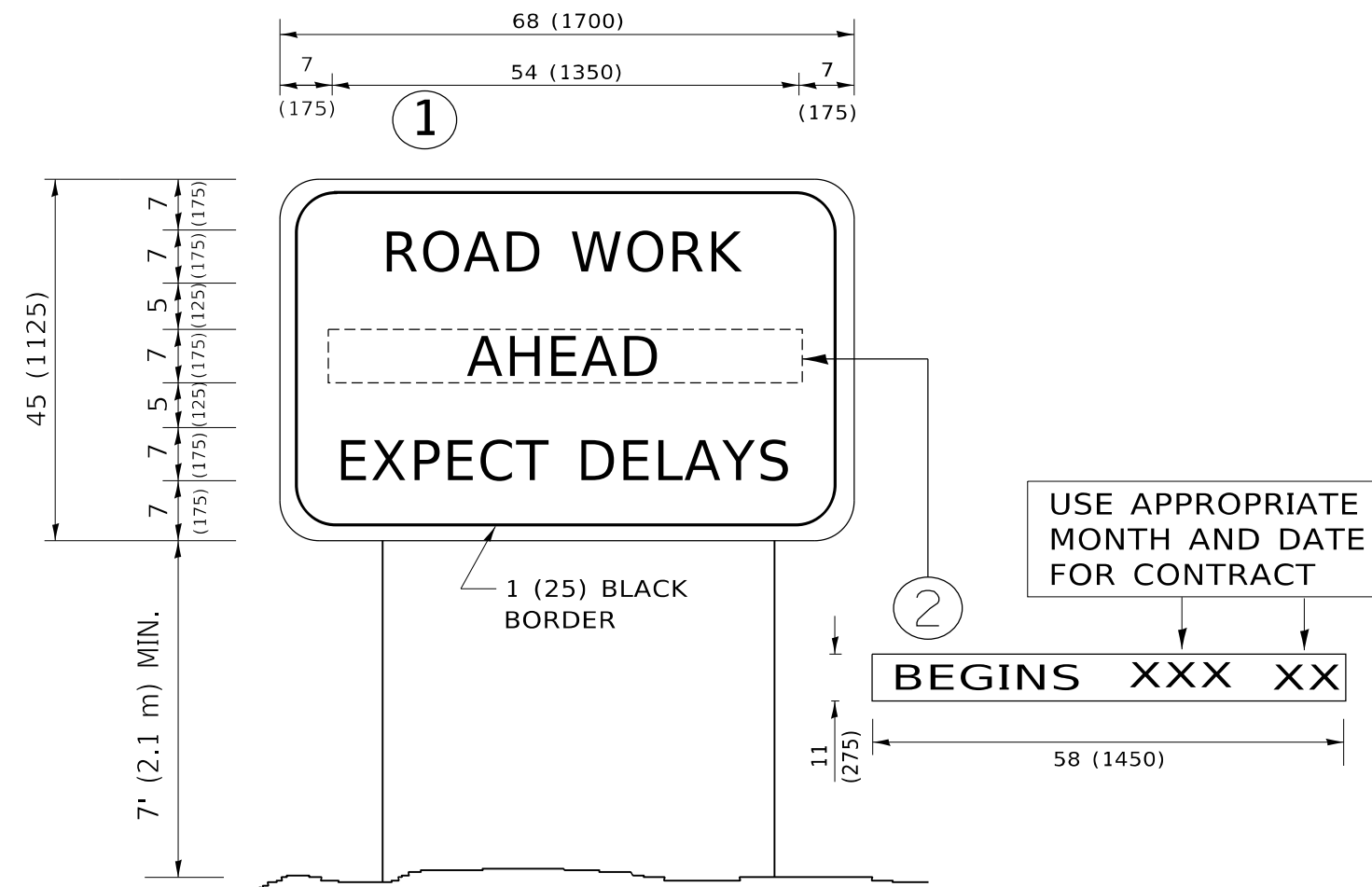
USER NAME	DESIGNED	REVISED
DRAWN	REVISION	DATE
PLOT SCALE	CHECKED	REVISION
PLOT DATE	DATE	REVISION

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

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

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	2020-008-BR	COOK	62	59
TC-11		CONTRACT NO. 62K79		
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.

MODEL: D:\ref\...
 FILE: \name\...

USER NAME	DESIGNED	REVISED
footemj	-	R. MIRS 09-15-97
	DRAWN	REVISED
	-	R. MIRS 12-11-97
PLOT SCALE	CHECKED	REVISED
50,0000 * / in.	-	T. RAMMACHER 02-02-99
PLOT DATE	DATE	REVISED
3/4/2019	-	C. JUCIUS 01-31-07

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD
INFORMATION SIGN**

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	2020-008-BR	COOK	62	62
TC-22			CONTRACT NO. 62K79	
ILLINOIS FED. AID PROJECT				