

11-18-2022 LETTING ITEM 001

FOR INDEX OF SHEETS, SEE SHEET NO. 2

FOR LIST OF HIGHWAY STANDARDS, SEE SHEET NO. 2

PROJECT IS LOCATED IN THE CITY OF DES PLAINES

TRAFFIC DATA:

U.S. ROUTE 14 (MINER STREET)
S.N. 019-0238 2019 ADT = 21,300

DESIGN CLASSIFICATION = MINOR ARTERIAL

DESIGN SPEED = 30 MPH (ASSUMED)

POSTED SPEED = 25 MPH

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

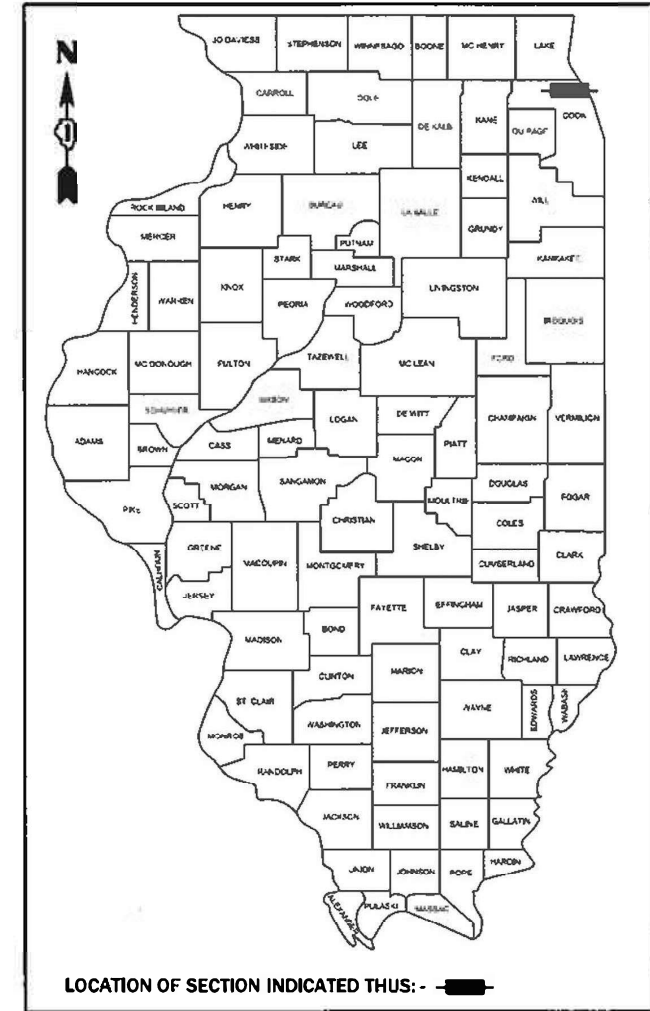
PROPOSED
HIGHWAY PLANS

F.A.U. ROUTE 3512 (U.S. ROUTE 14)
OVER DES PLAINES RIVER
SECTION 2020-174-BR
PROJECT: STP-RSQK(528)
BRIDGE DECK OVERLAY AND JOINT REPAIR
COOK COUNTY

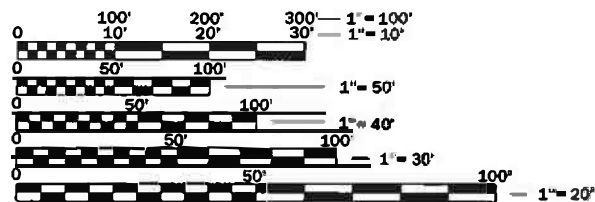
C-91-381-20

F.A.U. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3512	2020-174-BR	COOK	63	1
		ILLINOIS	CONTRACT NO. 62M56	

D-91-582-20



LI LIN ENGINEERING, LTD.
Consulting Engineers
West Loop, Illinois

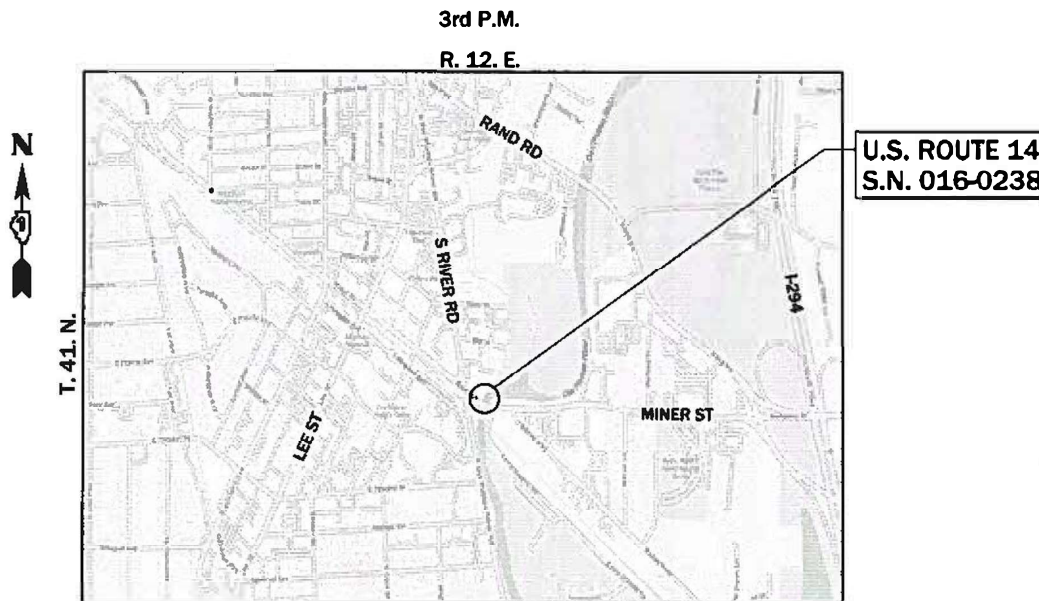


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

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

CONTRACT NO. 62M56



MAINE TOWNSHIP
LOCATION MAP
NOT TO SCALE

GROSS LENGTH = 2,738 FT. = 0.51 MILES
NET LENGTH = 384 FT. = 0.07 MILES



[Signature]
Shiraz Tarique Date 8/22/2022
Illinois Registered Engineer No. 062-064219
Registration Expires Nov. 30, 2023

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED August 24, 2022
Jose Ruiz (CRS) REGIONAL ENGINEER
October 14, 2022 [Signature]
ENGINEER OF DESIGN AND ENVIRONMENT
October 14, 2022 [Signature]
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

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HIGHWAY STANDARDS

000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
424001-11	PERPENDICULAR CURB RAMPS FOR SIDEWALKS
424021-06	DEPRESSED CORNER FOR SIDEWALKS
606001-08	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
701101-05	OFF-RD OPERATIONS, MULTILANE, 15' (4.5M) TO 24" (600MM) FROM PAVEMENT EDGE
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE 2L, 2W MOVING OPERATIONS - DAY ONLY
701427-05	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS <40 MPH
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701606-10	URBAN SINGLE LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701611-01	URBAN HALF ROAD CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-08	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
782006-01	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS
880001-01	SPAN WIRE MOUNTED SIGNALS

DISTRICT STANDARDS

BD-33	HMA TAPER AT EDGE OF P.C.C. PAVEMENT
TC-10	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
TC-11	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)
TC-13	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
TC-14	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)
TC-16	SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS
TC-21	DETOUR SIGNING FOR CLOSING STATE HIGHWAYS
TC-26	DRIVEWAY ENTRANCE SIGNING
TS-05	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS

GENERAL NOTES

THE THICKNESS OF HMA SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE HMA IS PLACED.

SODDING WILL NOT BE PERMITTED AT ANY TIME WHEN THEN GROUND IS FROZEN, WET, OR IN AN UNTILLABLE CONDITION. LOCATIONS TO BE SODDED WILL BE DETERMINED BY THE ENGINEER.

ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER SHOWN IN THE LIST OF STANDARDS OR THE COPY INCLUDED IN THESE PLANS.

THE CONTRACTOR SHALL CALL "J.U.L.I.E" AT (800) 892-0123 OR 811 AT LEAST 48 HOURS PRIOR TO EXCAVATION TO DETERMINE WHICH BURIED ELECTRIC, TELEPHONE, AND GAS UTILITIES ARE IN THE AREA. 48 HOUR NOTIFICATION IS REQUIRED.

BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES AND RAISED REFLECTIVE PAVEMENT MARKERS THAT CONFLICT WITH TEMPORARY MARKINGS, IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR PROPOSED STRIPING AT THE COMPLETION OF THIS CONTRACT. EXACT LOCATIONS OF ALL PROPOSED PAVEMENT MARKINGS SHALL BE DIRECTED BY THE RESIDENT ENGINEER.

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

IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING MATERIALS.

ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT NO ADDITIONAL COST TO THE DEPARTMENT.

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH AFFECTED UTILITY COMPANIES AND THE VILLAGE OF DES PLAINES.

THE CONTRACTOR SHALL MAINTAIN ALL ROADWAYS OPEN TO TRAFFIC AS SHOWN ON THE MAINTENANCE OF TRAFFIC PLANS.

THE CONTRACTOR SHALL USE CARE NEAR ANY AND ALL EXISTING ITEMS THAT WILL NOT BE REMOVED. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S OWN EXPENSE.

THE SUBGRADE STABILITY SHALL BE VERIFIED BY PROOF ROLLING WITH A FULL LOADED TANDEM AXLE TRUCK.

DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

DURING CONSTRUCTION OPERATIONS, IF ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF DRAINAGE STRUCTURES SUCH THAT THE NATURAL FLOW OF WATER IS OBSTRUCTED, THE MATERIAL SHALL BE REMOVED AT THE CLOSE OF EACH WORKDAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL UTILITY STRUCTURES SHALL BE FREE FROM DUST AND DEBRIS. THE WORK SPECIFIED ABOVE WILL NOT BE PAID SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE CONTRACT.

PERMANENT PAVEMENT MARKINGS SHALL BE AS SPECIFIED IN THE PLANS AND SHALL BE PLACED IN ACCORDANCE WITH THE "DISTRICT ONE TYPICAL PAVEMENT MARKINGS" DETAILS. (TC-13, DISTRICT ONE TYPICAL PAVEMENT MARKINGS).

TWO WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKINGS, THE ENGINEER SHALL CONTACT FADI SULTAN THE AREA TRAFFIC FIELD ENGINEER, AT FADI.SULTAN@ILLINOIS.GOV.

ANY AGGREGATE SUBGRADE IMPROVEMENT CONTAMINATED AND/OR DAMAGED BY THE CONTRACTORS VEHICLES AND/OR EQUIPMENT IS TO BE REMOVED AND REPLACED AS DIRECTED BY THE ENGINEER AT THE CONTRACTOR'S EXPENSE.

THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE ARTERIAL TRAFFIC CONTROL SUPERVISOR AT KALPANA.KANNAN-HOSADURGA@ILLINOIS.GOV A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING ANY WORK.

ANY DAMAGE TO EXISTING TRAFFIC SIGNAL EQUIPMENT WILL HAVE TO BE RESTORED TO ORIGINAL CONDITIONS AND TO THE SATISFACTION OF THE ENGINEER AT NO COST TO THE DEPARTMENT.

THE AGGREGATE GRADATION FOR THE AGGREGATE SUBGRADE IMPROVEMENT 12" LOWER LIFT SHALL BE CS 1 OR RR 1.

COMMITMENTS

NONE.

HOT- MIX ASPHALT MIXTURE REQUIREMENTS		
MIXTURE TYPE	AIR VOIDS @ NDES	QUALITY MANAGEMENT PROGRAM (QMP)
BUTT JOINT		
POLYMERIZED HMA SURFACE COURSE, IL-9.5, MIX "E" N70	4% @ 70 GYR.	QC/QA
US ROUTE 14 RESURFACING		
POLYMERIZED HMA SURFACE COURSE, IL-9.5, MIX "E" N70	4% @ 70 GYR.	QC/QA
QMP DESIGNATION: QUALITY CONTROL/QUALITY ASSURANCE (QC/QA); QUALITY CONTROL FOR PERFORMANCE (QCP)		

MIXTURE TABLE NOTES

- THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURE QUANTITIES IS 112 LBS/SQYD/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 RECLAIMED MATERIALS SPECIFICATIONS.

FACTORS FOR ESTIMATING PLAN QUANTITIES ARE AS FOLLOWS AND SHALL NOT BE USED FOR THE BASIS OF FINAL QUANTITIES:

SHORT TERM PAVEMENT MARKING	10 FT/100 FT
GRANULAR MATERIAL	2.05 TONS/CU YD

 LIN ENGINEERING, LTD. Consulting Engineers Westmont, Illinois	USER NAME = 14nho	DESIGNED - NH	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	F.A.U. 3512 (U.S. ROUTE 14) OVER DES PLAINES RIVER INDEX, HIGHWAY STANDARDS & GENERAL NOTES	F.A.U. RTE. = 3512	SECTION = 2020-174-BR	COUNTY = COOK	TOTAL SHEETS = 63	SHEET NO. = 2	
	PLOT SCALE = 2,000' / in.	CHECKED - ST	REVISED -			SCALE: N.T.S.	SHEET 1 OF 1 SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT		CONTRACT NO. 62M56
	PLOT DATE = 8/23/2022	DATE - 8/2022	REVISED -								

CODE NO.	ITEM	UNIT	TOTAL QUANTITY RURAL	CONSTRUCTION CODE	
				80% FED/20% STATE	
				SN 016-0238	
				0047	
				BRIDGE	
20200100	EARTH EXCAVATION	CU YD	20	20	
* 25200110	SODDING, SALT TOLERANT	SQ YD	21	21	
25200200	SUPPLEMENTAL WATERING	UNIT	1	1	
* 28000510	INLET FILTERS	EACH	2	2	
30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	11	11	
31101200	SUBBASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	37	37	
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	718	718	
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	330	330	
40600985	PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT	SQ YD	271	271	
40604172	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "E", N70	TON	150	150	
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	307	307	
42400800	DETECTABLE WARNINGS	SQ FT	20	20	
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	37	37	
44000600	SIDEWALK REMOVAL	SQ FT	267	267	

* SPECIALTY ITEM



USER NAME = 14nh	DESIGNED - NH	REVISED -
	DRAWN - NH	REVISED -
PLOT SCALE = 2.0000' / in.	CHECKED - ST	REVISED -
PLOT DATE = 8/25/2022	DATE - 8/2022	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**F.A.U. 3512 (U.S. ROUTE 14) OVER DES PLAINES RIVER
SUMMARY OF QUANTITIES**

SCALE: N.T.S. SHEET 1 OF 6 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3512	2020-174-BR	COOK	63	3
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62M56	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY RURAL	CONSTRUCTION CODE
				80% FED/20% STATE SN 016-0238 0047 BRIDGE
50102400	CONCRETE REMOVAL	CU YD	10.2	10.2
50300255	CONCRETE SUPERSTRUCTURE	CU YD	11.8	11.8
50300300	PROTECTIVE COAT	SQ YD	1,098	1,098
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	1,320	1,320
50800515	BAR SPLICERS	EACH	12	12
52000110	PREFORMED JOINT STRIP SEAL	FOOT	211	211
59000200	EPOXY CRACK INJECTION	FOOT	17	17
60250200	CATCH BASINS TO BE ADJUSTED	EACH	1	1
60255500	MANHOLES TO BE ADJUSTED	EACH	2	2
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	37	37
* 66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	15	15
* 66900530	SOIL DISPOSAL ANALYSIS	EACH	3	3
* 66901001	REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN	LSUM	1	1
* 66901003	REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	LSUM	1	1

* SPECIALTY ITEM



USER NAME = 14nh	DESIGNED - NH	REVISED -
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**F.A.U. 3512 (U.S. ROUTE 14) OVER DES PLAINES RIVER
SUMMARY OF QUANTITIES**

SCALE: N.T.S. SHEET 2 OF 6 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3512	2020-174-BR	COOK	63	4
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62M56	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY RURAL	CONSTRUCTION CODE
				80% FED/20% STATE
				SN 016-0238
				0047
				BRIDGE
* 66901006	REGULATED SUBSTANCES MONITORING	CAL DA	10	10
67100100	MOBILIZATION	L SUM	1	1
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	55	55
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	110	110
70300100	SHORT TERM PAVEMENT MARKING	FOOT	1,421	1,421
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	5,208	5,208
70307100	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS - TYPE IV TAPE	SQ FT	1,069	1,069
70307120	TEMPORARY PAVEMENT MARKING - LINE 4" - TYPE IV TAPE	FOOT	12,671	12,671
70307130	TEMPORARY PAVEMENT MARKING - LINE 6" - TYPE IV TAPE	FOOT	1,125	1,125
70307160	TEMPORARY PAVEMENT MARKING - LINE 12" - TYPE IV TAPE	FOOT	121	121
70307210	TEMPORARY PAVEMENT MARKING - LINE 24" - TYPE IV TAPE	FOOT	286	286
70400100	TEMPORARY CONCRETE BARRIER	FOOT	475	475
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	388	388
70600255	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	2	2

* SPECIALTY ITEM



USER NAME = 14nh	DESIGNED - NH	REVISED -
	DRAWN - NH	REVISED -
PLOT SCALE = 2.0000' / in.	CHECKED - ST	REVISED -
PLOT DATE = 8/25/2022	DATE - 8/2022	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**F.A.U. 3512 (U.S. ROUTE 14) OVER DES PLAINES RIVER
SUMMARY OF QUANTITIES**

SCALE: N.T.S. SHEET 3 OF 6 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3512	2020-174-BR	COOK	63	5
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62M56	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY RURAL	CONSTRUCTION CODE	
				80% FED/20% STATE	SN 016-0238
				0047	BRIDGE
70600322	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	2	2	
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	171	171	
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	4,552	4,552	
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	401	401	
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	89	89	
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	175	175	
* 78009000	MODIFIED URETHANE PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	171	171	
* 78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	990	990	
* 78009006	MODIFIED URETHANE PAVEMENT MARKING - LINE 6"	FOOT	601	601	
* 78009012	MODIFIED URETHANE PAVEMENT MARKING - LINE 12"	FOOT	22	22	
* 78009024	MODIFIED URETHANE PAVEMENT MARKING - LINE 24"	FOOT	132	132	
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	49	49	
* 78100300	REPLACEMENT REFLECTOR	EACH	173	173	
* 78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	49	49	

* SPECIALTY ITEM



USER NAME = 14nh	DESIGNED - NH	REVISED -
	DRAWN - NH	REVISED -
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PLOT DATE = 8/25/2022	DATE - 8/2022	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**F.A.U. 3512 (U.S. ROUTE 14) OVER DES PLAINES RIVER
SUMMARY OF QUANTITIES**

SCALE: N.T.S. SHEET 4 OF 6 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3512	2020-174-BR	COOK	63	6
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62M56	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY RURAL	CONSTRUCTION CODE
				80% FED/20% STATE
				SN 016-0238
				0047
				BRIDGE
* 78300202	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	3,559	3,559
* 85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1	1
88600600	DETECTOR LOOP REPLACEMENT	FOOT	264	264
* 89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	2	2
X0326766	CLEAN & RESEAL RELIEF JOINT	FOOT	55	55
X5030250	BRIDGE DECK GROOVING (LONGITUDINAL)	SQ YD	851	851
X5060601	CONTAINMENT AND DISPOSAL OF NON-LEAD PAINTING RESIDUES NO.1	L SUM	1	1
X6700407	ENGINEERS' FIELD OFFICE, TYPE A (D1)	CAL MO	12	12
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1
* X7830050	RAISED REFLECTIVE PAVEMENT MARKER, REFLECTOR REMOVAL	EACH	173	173
Z0001700	APPROACH SLAB REPAIR (FULL DEPTH)	SQ YD	9	9
Z0001800	APPROACH SLAB REPAIR (PARTIAL DEPTH)	SQ YD	4	4
Z0006016	BRIDGE DECK LATEX CONCRETE OVERLAY, 2 3/4 INCHES	SQ YD	872	872
Z0010501	CLEANING AND PAINTING STEEL BRIDGE NO. 1	L SUM	1	1

* SPECIALTY ITEM



USER NAME = 14nh	DESIGNED - NH	REVISED -
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**F.A.U. 3512 (U.S. ROUTE 14) OVER DES PLAINES RIVER
SUMMARY OF QUANTITIES**

SCALE: N.T.S. SHEET 5 OF 6 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3512	2020-174-BR	COOK	63	7
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62M56	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY RURAL	CONSTRUCTION CODE	
				80% FED/20% STATE	
				SN 016-0238	
				0047	
				BRIDGE	
Z0012130	BRIDGE DECK SCARIFICATION 3/4"	SQ YD	872	872	
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	30	30	
Z0012755	STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)	SQ FT	12	12	
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1	
Z0015802	PLUG EXISTING DECK DRAINS	EACH	1	1	
Z0029090	DIAMOND GRINDING (BRIDGE SECTION)	SQ YD	813	813	
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	125	125	
Z0038114	PORTLAND CEMENT CONCRETE SURFACE REMOVAL 1/4"	SQ YD	1,095	1,095	
Z0041895	POLYMER CONCRETE	CU FT	5.8	5.8	
Z0042300	PORTLAND CEMENT CONCRETE SIDEWALK CURB	FOOT	13	13	
Z0073510	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	17	17	
∅ Z0076600	TRAINEES	HOURS	500	500	
∅ Z0076604	TRAINEES - TRAINING PROGRAM GRADUATE	HOURS	500	500	

* SPECIALTY ITEM



USER NAME = 14nhc	DESIGNED - NH	REVISED -
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

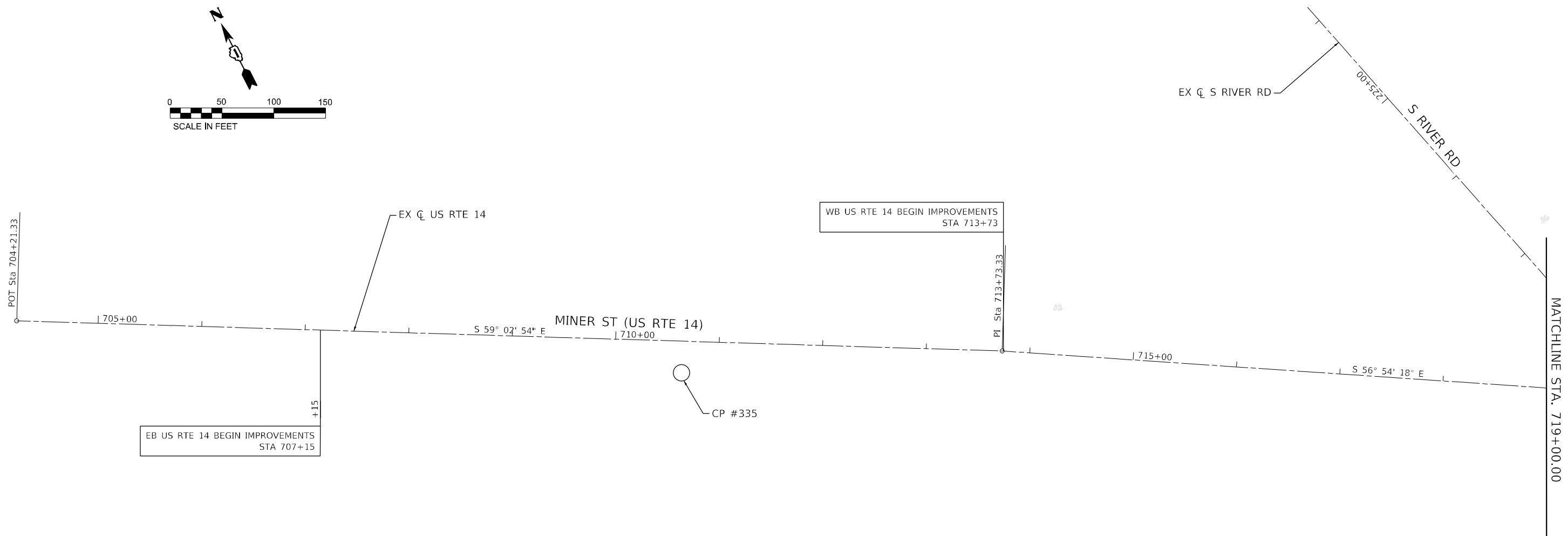
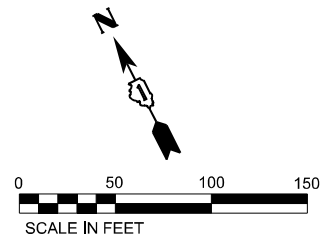
**F.A.U. 3512 (U.S. ROUTE 14) OVER DES PLAINES RIVER
SUMMARY OF QUANTITIES**

SCALE: N.T.S. SHEET 6 OF 6 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3512	2020-174-BR	COOK	63	8
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62M56	

∅ 0042

REV-SEP



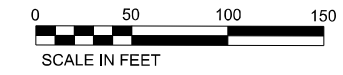
USER NAME = l4nho	DESIGNED - NH	REVISED -
	DRAWN - NH	REVISED -
PLOT SCALE = 100,0000' / in.	CHECKED - ST	REVISED -
PLOT DATE = 8/25/2022	DATE - 8/2022	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**F.A.U. 3512 (U.S. ROUTE 14) OVER DES PLAINES RIVER
ALIGNMENT, TIES AND BENCHMARKS**

SCALE: 1"=50' SHEET 1 OF 3 SHEETS STA. 704+21.33 TO STA. 719+00.00

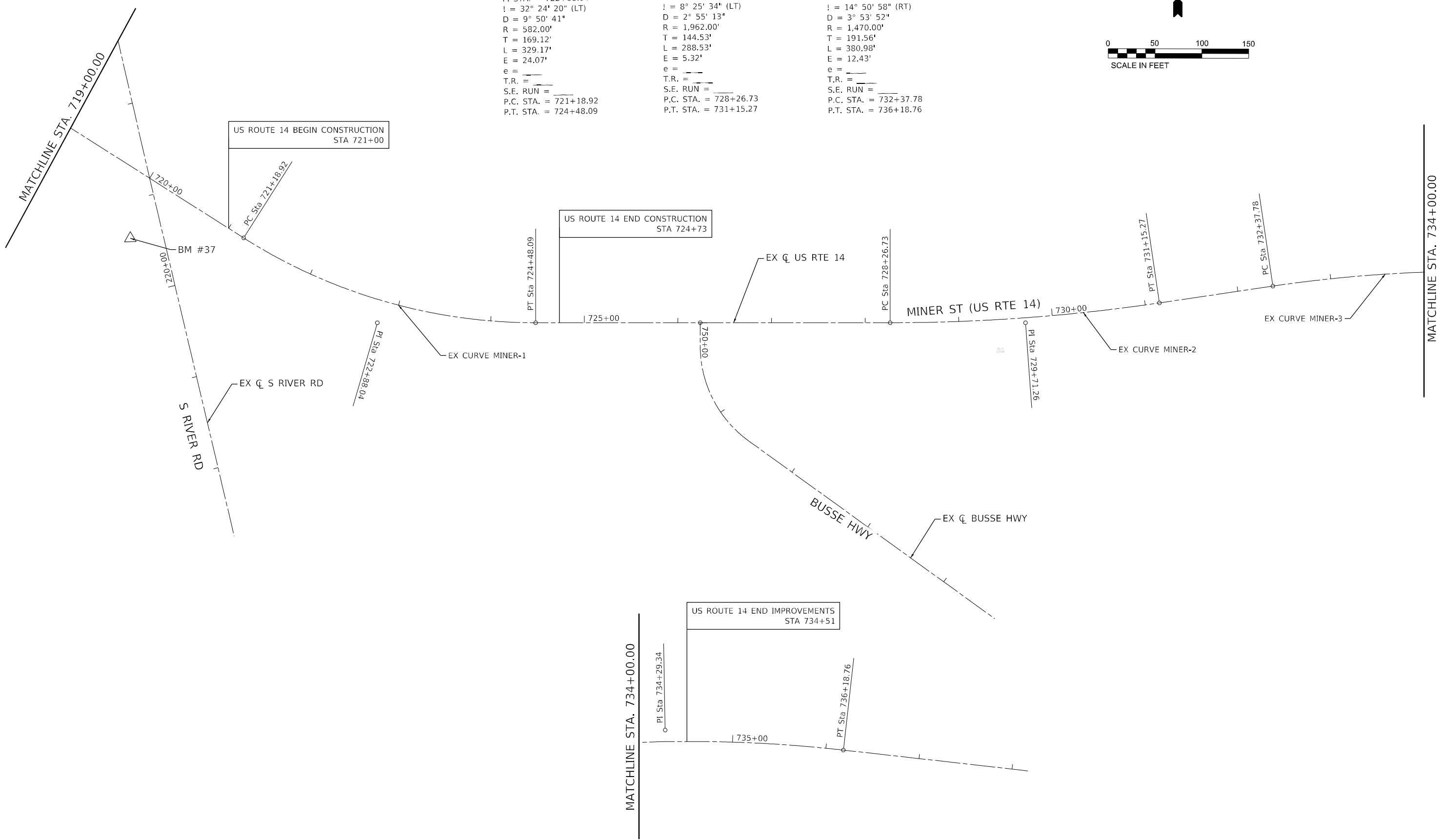
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3512	2020-174-BR	COOK	63	9
CONTRACT NO. 62M56			ILLINOIS FED. AID PROJECT	



EX. CURVE MINER-1
 PI STA. = 722+88.04
 ! = 32° 24' 20" (LT)
 D = 9° 50' 41"
 R = 582.00'
 T = 169.12'
 L = 329.17'
 E = 24.07'
 e = _____
 T.R. = _____
 S.E. RUN = _____
 P.C. STA. = 721+18.92
 P.T. STA. = 724+48.09

EX. CURVE MINER-2
 PI STA. = 729+71.26
 ! = 8° 25' 34" (LT)
 D = 2° 55' 13"
 R = 1,962.00'
 T = 144.53'
 L = 288.53'
 E = 5.32'
 e = _____
 T.R. = _____
 S.E. RUN = _____
 P.C. STA. = 728+26.73
 P.T. STA. = 731+15.27

EX. CURVE MINER-3
 PI STA. = 734+29.34
 ! = 14° 50' 58" (RT)
 D = 3° 53' 52"
 R = 1,470.00'
 T = 191.56'
 L = 380.98'
 E = 12.43'
 e = _____
 T.R. = _____
 S.E. RUN = _____
 P.C. STA. = 732+37.78
 P.T. STA. = 736+18.76



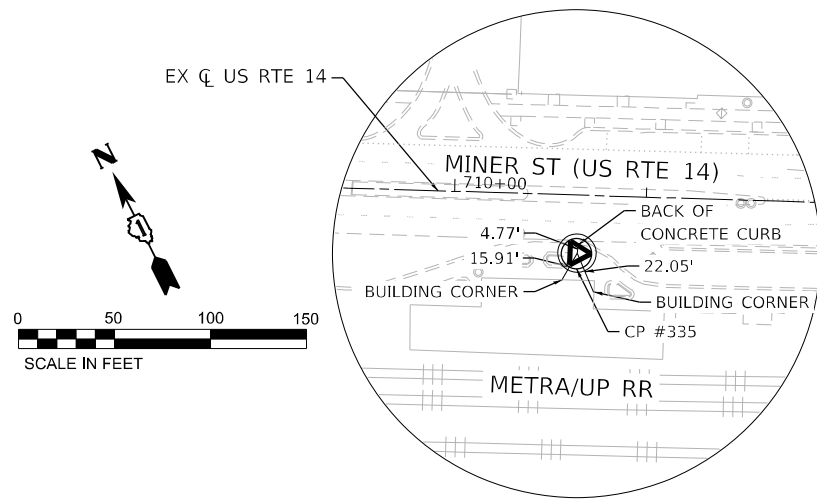
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DRAWN - NH	REVISIONS -	
PLOT SCALE = 100,0000' / in.	CHECKED - ST	REVISED -
PLOT DATE = 8/23/2022	DATE - 8/2022	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**F.A.U. 3512 (U.S. ROUTE 14) OVER DES PLAINES RIVER
 ALIGNMENT, TIES AND BENCHMARKS**

SCALE: 1"=50' SHEET 2 OF 3 SHEETS STA. 719+00.00 TO STA. 736+18.76

F.A.U. RTE. 3512	SECTION 2020-174-BR	COUNTY COOK	TOTAL SHEETS 63	SHEET NO. 10
			CONTRACT NO. 62M56	
ILLINOIS FED. AID PROJECT				



ALL ELEVATIONS ARE BASED ON NAVD 88 DATUM.

CONTROL POINT 335

STA 710+64.75 30.25' RT

CUT "X" ON CONCRETE SIDEWALK

N: 1957804.12

E: 621409.21

EL = 640.04

BENCHMARK 12

EL = 631.58 (NAVD 88)

TAG BOLT ON FIRE HYDRANT LOCATED ON THE NORTH-WEST CORNER OF OAKWOOD AVE. AND DES PLAINES RIVER ROAD.

BENCHMARK 14

EL = 632.33 (NAVD 88)

TAG BOLT ON FIRE HYDRANT LOCATED ON THE EAST SIDE OF DES PLAINES RIVER ROAD IN FRONT OF THE FIRE DEPARTMENT BUILDING #405 SOUTH DES PLAINES RIVER ROAD.

BENCHMARK 13

EL = 636.24 (NAVD 88)

TAG BOLT ON FIRE HYDRANT LOCATED ON THE EAST SIDE OF DES PLAINES IN RIVER ROAD FRONT OF RESIDENCE #585.

BENCHMARK POINT 37

EL = 636.40 (NAVD 88)

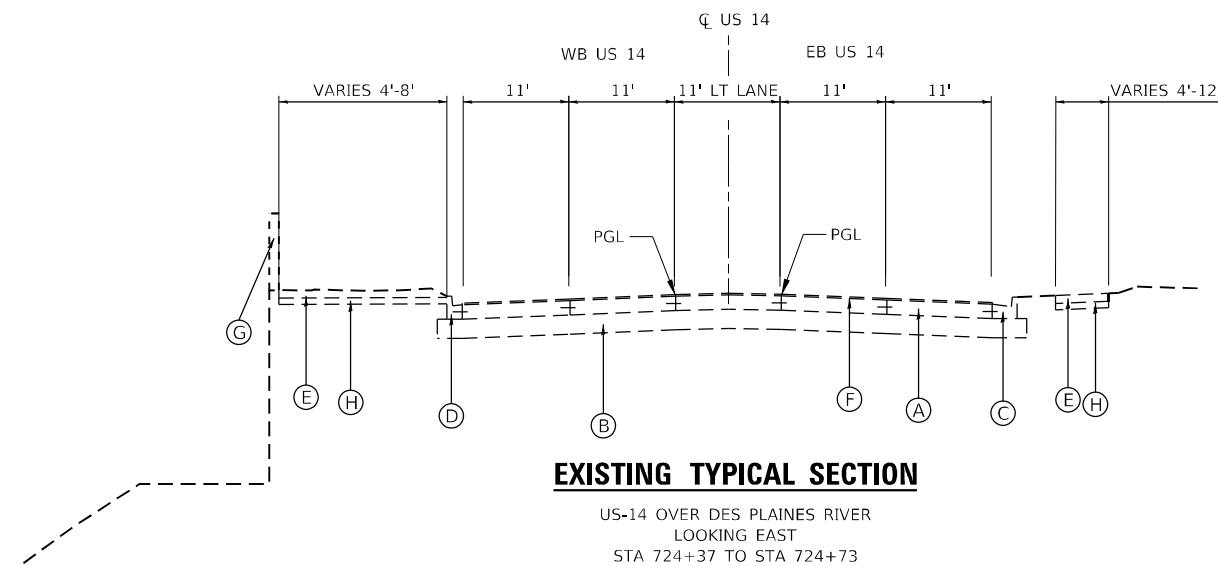
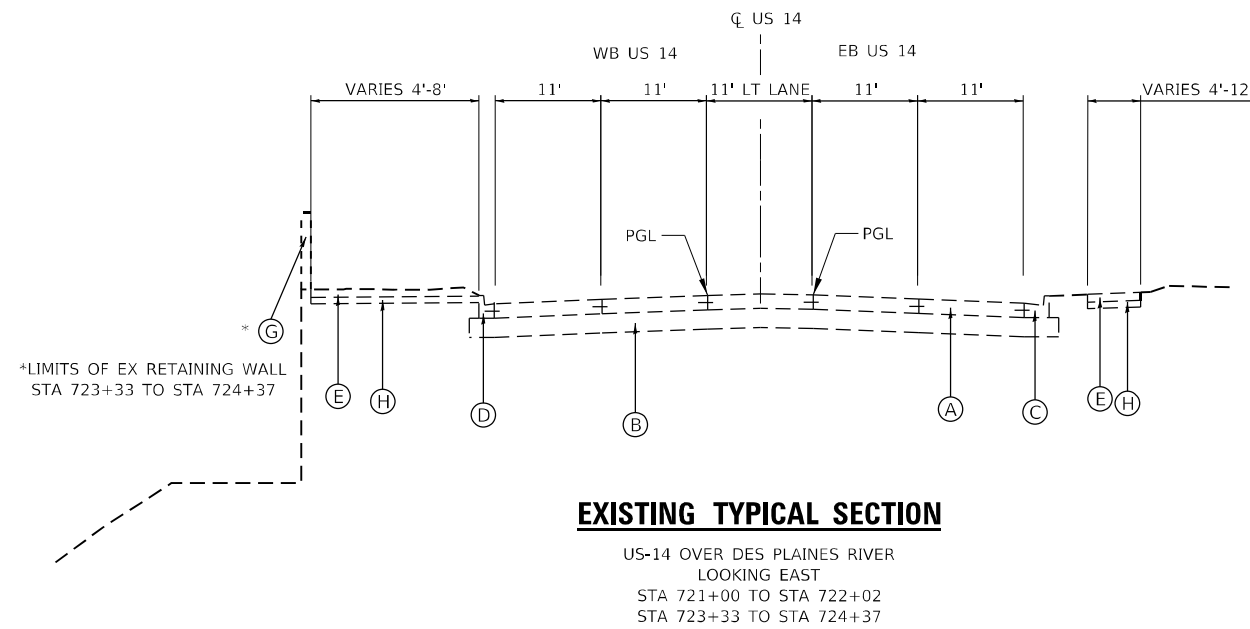
X-CUT ON CONCRETE WALK NORTH -WEST CORNER OF DES PLAINES RIVER ROAD AND ELLINWOOD AVE., 44.6' FROM THE CENTER OF VALVE VAULT MANHOLE NO. 863 AND 39.8' FROM NORTHEAST CORNER.

ALIGNMENT COORDIANTES

	STATION	NORTHING	EASTING
POT	704+21.33	1958206.45	1105103.48
PI	713+73.33	1957716.82	1105919.93
PC	721+18.92	1957309.70	1106544.55
PT	724+48.09	1957215.33	1106855.34
PC	728+26.73	1957210.77	1107233.96
PT	731+15.27	1957228.49	1107521.69
PC	732+37.78	1957244.98	1107643.08
PT	736+18.76	1957247.04	1108022.98

CURVE DATA

CURVE NO.	CURVE NAME	CENTERLINE	PC		PI		PT	
			NORTH	EAST	NORTH	EAST	NORTH	EAST
US 14 CURVE 1	EX. CURVE MINER-1	US 14	1957309.70	1106544.55	1957217.36	1106686.23	1957215.33	1106855.34
US 14 CURVE 2	EX. CURVE MINER-2	US 14	1957210.77	1107233.96	1957209.03	1107378.47	1957228.49	1107521.69
US 14 CURVE 3	EX. CURVE MINER-3	US 14	1957244.98	1107643.08	1957270.77	1107832.90	1957247.05	1108022.99

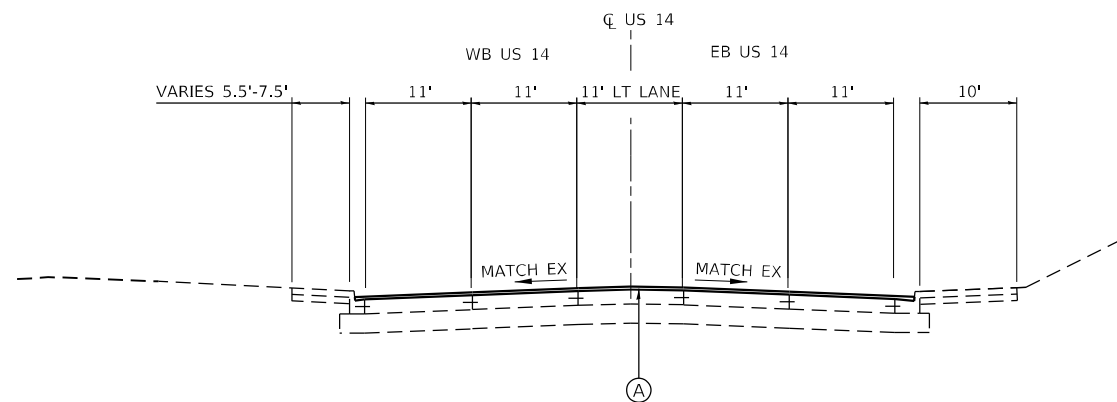


EXISTING LEGEND

- (A) EXISTING P.C.C PAVEMENT 9"
- (B) EXISTING AGGREGATE SUBGRADE IMPROVEMENT 12"
- (C) EXISTING COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.24
- (D) EXISTING COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.12
- (E) EXISTING SIDEWALK
- (F) EXISTING HMA PAVEMENT 2 1/2"
- (G) EXISTING RETAINING WALL
- (H) EXISTING SUBBASE GRANULAR MATERIAL, TYPE B 4"

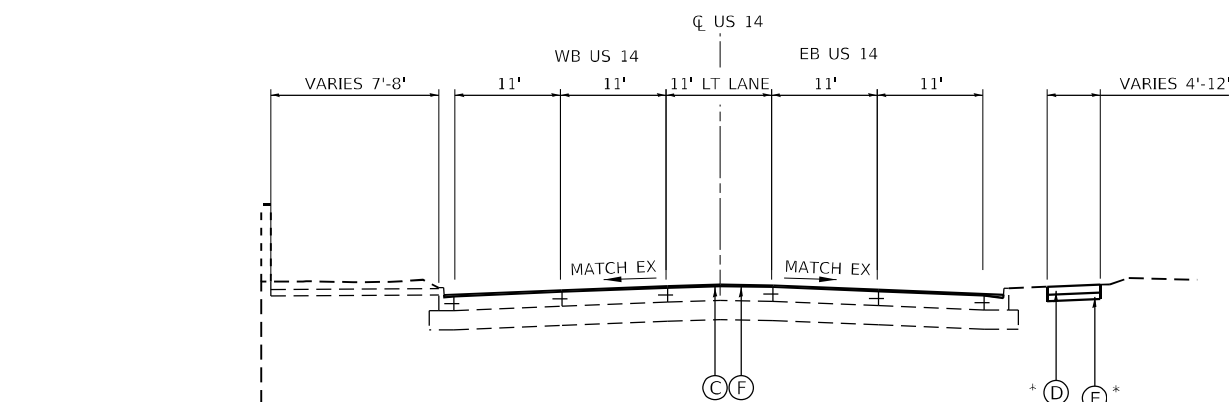
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PLOT DATE = 8/25/2022	DATE - 8/2022	REVISED -

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3512	2020-174-BR	COOK	63	12
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62M56	



PROPOSED TYPICAL SECTION

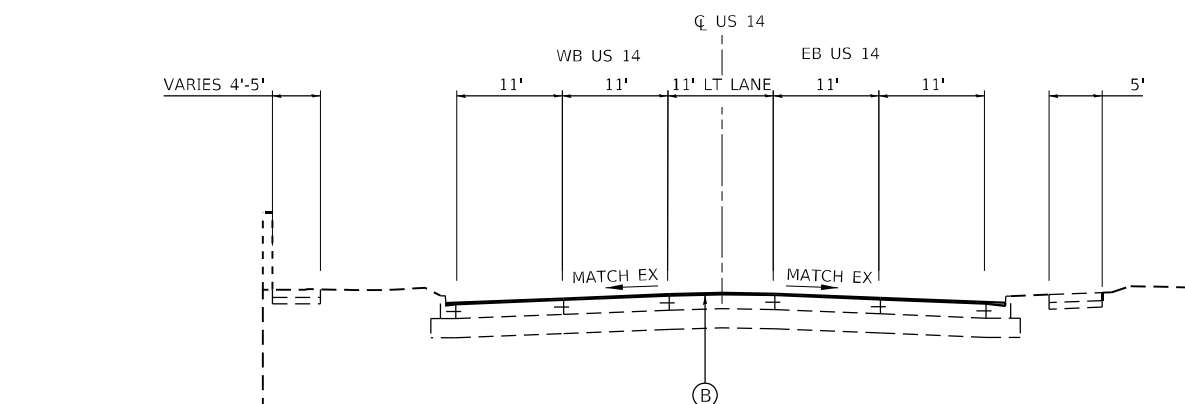
US-14 OVER DES PLAINES RIVER
LOOKING EAST
STA 721+00 TO STA 721+36



PROPOSED TYPICAL SECTION

US-14 OVER DES PLAINES RIVER
LOOKING EAST
STA 721+36 TO STA 722+02
STA 723+33 TO STA 724+37

*LIMITS OF PR PCC SIDEWALK 5"
STA 723+50 TO STA 723+60
STA 723+82 TO STA 724+05



PROPOSED TYPICAL SECTION

US-14 OVER DES PLAINES RIVER
LOOKING EAST
STA 724+37 TO STA 724+73

PROPOSED LEGEND

- (A) PROPOSED PCC BUTT JOINT
- (B) PROPOSED HMA BUTT JOINT
- (C) PROPOSED POLYMERIZED HMA SURFACE COURSE, IL-9.5, MIX "E", N70, 2"
- (D) PROPOSED PCC SIDEWALK 5"
- (E) PROPOSED SUBBASE GRANULAR MATERIAL, TYPE B 4"
- (F) PROPOSED PCC SURFACE REMOVAL 1/4"

USER NAME = 14nho	DESIGNED - NH	REVISED -
	DRAWN - NH	REVISED -
PLOT SCALE = 20,0000 * / in.	CHECKED - ST	REVISED -
PLOT DATE = 8/25/2022	DATE - 8/2022	REVISED -

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3512	2020-174-BR	COOK	63	13
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62M56	

MAINTENANCE OR TRAFFIC GENERAL NOTES

1. THE MAINTENANCE OF TRAFFIC PLANS SHALL SERVE AS A GUIDE FOR THE SAFE DIVERSION OF TRAFFIC DURING THE EXECUTION OF THIS CONTRACT. THE CONTRACTOR MAY MODIFY THE MAINTENANCE OF TRAFFIC PLANS TO MEET CONSTRUCTION NEEDS BUT NOT AT THE EXPENSE OF PUBLIC SAFETY OR CONVENIENCE. ANY CHANGES TO THE TRAFFIC CONTROL PLANS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
2. EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH TEMPORARY MARKINGS SHALL BE REMOVED. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT FOR PAVEMENT MARKING REMOVAL - WATER BLASTING.
3. ALL EXISTING PAVEMENT MARKING LINES AND EXISTING RAISED REFLECTIVE PAVEMENT MARKER REFLECTORS ALONG U.S. ROUTE 14 THAT ARE REMOVED AS A RESULT OF A CONFLICT WITH THE REVISED TRAFFIC PATTERNS, OUTSIDE OF THE PAVEMENT MARKING LIMITS SHOWN IN THE PLANS, SHALL BE RE-ESTABLISHED FOR PROPOSED STRIPING AT THE COMPLETION OF THIS CONTRACT. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF PAVEMENT MARKING REMOVAL - WATER BLASTING AND RAISED REFLECTIVE PAVEMENT MARKER, REFLECTOR REMOVAL. THE EXACT LOCATIONS OF ALL PROPOSED PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE RESIDENT ENGINEER.
4. THE REMOVAL OF ALL PAVEMENT MARKING TAPE WILL BE PAID FOR AT THE CONTRACT UNIT PRICE SQUARE FOOT FOR SHORT TERM PAVEMENT MARKING REMOVAL.
5. PAVEMENT MARKING TAPE, TYPE III SHALL BE USED FOR ANY SHORT TERM PAVEMENT MARKINGS ON FINAL SURFACES. THIS WORK WILL BE PAID FOR AT THE CONTRACT PRICE PER FOOT FOR SHORT TERM PAVEMENT MARKING.
6. ALL TRAFFIC CONTROL DEVICES SHALL BE REFLECTORIZED PRIOR TO INSTALLATION AND CLEANED AS SPECIFIED IN THE TRAFFIC CONTROL SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.
7. FOR STABILIZATION, ANY REQUIRED TYPE III BARRICADES SHALL REQUIRE A MINIMUM OF FOUR SAND BAGS PER BARRICADE.
8. EXISTING SIGNS WITHIN THE LIMITS OF TRAFFIC CONTROL WHICH ARE OBSTRUCTED BY OR OTHERWISE INTERFERED WITH BY CONSTRUCTION OPERATIONS OF DESIGNATED TRAFFIC CONTROL, SHALL BE COVERED OR REMOVED BY THE CONTRACTOR UNLESS SPECIFIED IN THE PLANS OR WHEN DIRECTED BY THE ENGINEER. THIS WORK SHALL BE AS SPECIFIED IN ARTICLE 107.25 OF THE STANDARD SPECIFICATIONS.
9. CHANGEABLE MESSAGE SIGNS WILL BE PLACED 2 WEEKS PRIOR TO START OF WORK, AT LOCATIONS DETERMINED BY THE ENGINEER, FOR ADVANCED WARNING.
10. SEE STRUCTURAL PLANS FOR BRIDGE DECK OVERLAY AND JOINT REPAIR INFORMATION.
11. THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE ARTERIAL TRAFFIC CONTROL SUPERVISOR AT KALPANA.KANNAN-HOSADURGA@ILLINOIS.GOV A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING ANY WORK.
12. THE ENGINEER SHALL COORDINATE CLOSURES WITH PACE AT LEAST TWO WEEKS PRIOR TO BEGINNING OF CONSTRUCTION. THE ENGINEER SHALL ALSO COORDINATE WITH PACE THE CLOSURE OF BUS STOP EAST OF THE BUSSE HWY INTERSECTION ALONG THE RT SIDE OF EB US ROUTE 14.
13. ALL DRIVEWAY ENTRANCE SIGNING REQUIRED PER DISTRICT STANDARD TC-26 SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT FOR TEMPORARY INFORMATION SIGNING.
14. CONTRACTOR MUST MAINTAIN SAFE ACCESS TO THE DES PLAINES RIVER TRAIL MULTI-USE PATH DURING CONSTRUCTION. SEE STRUCTURAL PLANS.

SUGGESTED SEQUENCE OF OPERATIONS

PRE-STAGE

1. INSTALL TEMPORARY TRAFFIC SIGNALS AS SHOWN IN THE TRAFFIC SIGNAL PLANS.

STAGE 1

1. INSTALL TRAFFIC CONTROL DEVICES AND TEMPORARY PAVEMENT MARKINGS AS SHOWN ON THE STAGE 1 STAGING PLANS AND IN THE ADVANCED WIDTH RESTRICTION SIGNING DETAIL BELOW.
2. CONVERT THE RIGHT LANE OF EB US 14 TO RIGHT TURN ONLY LANE AND CLOSE THE LEFT LANE OF WB US 14 AS WELL AS THE NB RIVER RD RIGHT LANE. SHIFT EB US 14 THROUGH TRAFFIC ONTO THE LEFT LANE OF WB US 14 AND CLOSE EB US 14 AS SHOWN IN THE STAGE 1 STAGING PLANS.
3. CONSTRUCT BRIDGE DECK OVERLAY, HMA RESURFACING, AND SIDEWALK RECONSTRUCTION ALONG EB US 14 AS SHOWN ON THE STAGE 1 STAGING, ROADWAY, AND STRUCTURAL PLANS.
4. CONSTRUCT HMA BUTT JOINT AT CAMPGROUND RD APRON AS SHOWN ON THE ROADWAY PLAN.
5. ADJUST EXISTING DRAINAGE STRUCTURES ALONG EB US 14 AS SHOWN ON THE ROADWAY PLAN.

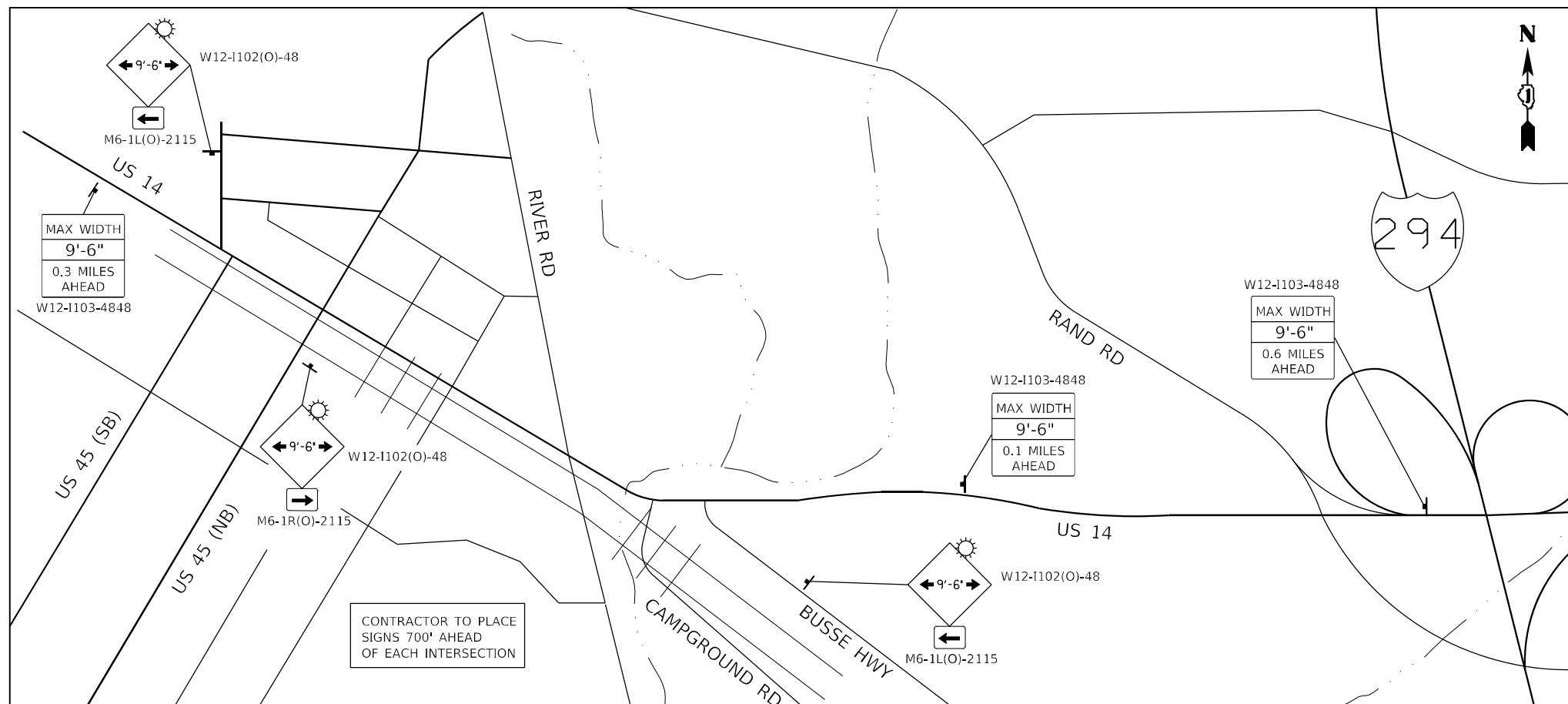
STAGE 2

1. INSTALL TRAFFIC CONTROL DEVICES AND TEMPORARY PAVEMENT MARKINGS AS SHOWN ON THE STAGE 2 STAGING PLANS.
2. CONVERT THE LEFT LANE OF EB US 14 TO LEFT TURN ONLY LANE AT PEARSON ST AND CLOSE THE RIGHT LANE OF WB US 14 AND EB US 14 LEFT LANE EAST OF PEARSON ST. SHIFT WB US 14 THROUGH TRAFFIC ONTO THE LEFT LANE OF EB US 14 AND CLOSE WB US 14 AS SHOWN IN THE STAGE 1 STAGING PLANS.
3. CONSTRUCT BRIDGE DECK OVERLAY AND HMA RESURFACING ALONG WB US 14 AS SHOWN ON THE STAGE 2 STAGING, ROADWAY, AND STRUCTURAL PLANS.
4. ADJUST EXISTING DRAINAGE STRUCTURES ALONG WB US 14 AS SHOWN ON THE ROADWAY PLAN.

POST STAGE

1. UTILIZING APPLICABLE DISTRICT AND HIGHWAY STANDARDS, PLACE PERMANENT PAVEMENT MARKINGS ALONG EB AND WB US 14 AND CAMPGROUND RD AT THE LOCATIONS SHOWN IN THE PLANS.
2. PERFORM TRAFFIC SIGNAL MODERNIZATION AT THE LOCATIONS SHOWN IN THE PLANS.

ADVANCED WIDTH RESTRICTION SIGNING DETAIL



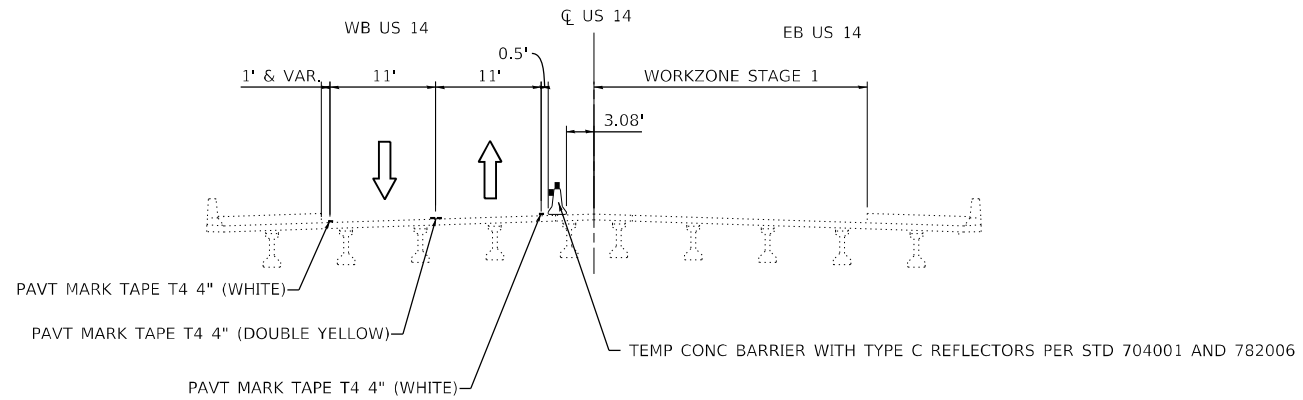
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PLOT DATE = 8/23/2022	DATE - 8/2022	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**F.A.U 3512 (U.S. ROUTE 14) OVER DES PLAINES RIVER
STAGING AND CONSTRUCTION SEQUENCES**

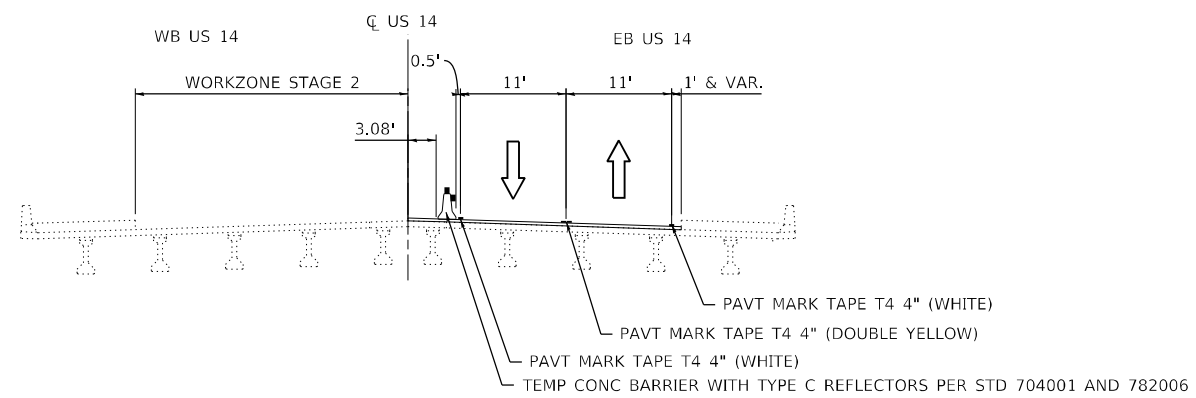
SCALE: N.T.S. SHEET 1 OF 6 SHEETS STA. TO STA.

F.A.U. RTE. 3512	SECTION 2020-174-BR	COUNTY COOK	TOTAL SHEETS 63	SHEET NO. 14
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62M56	



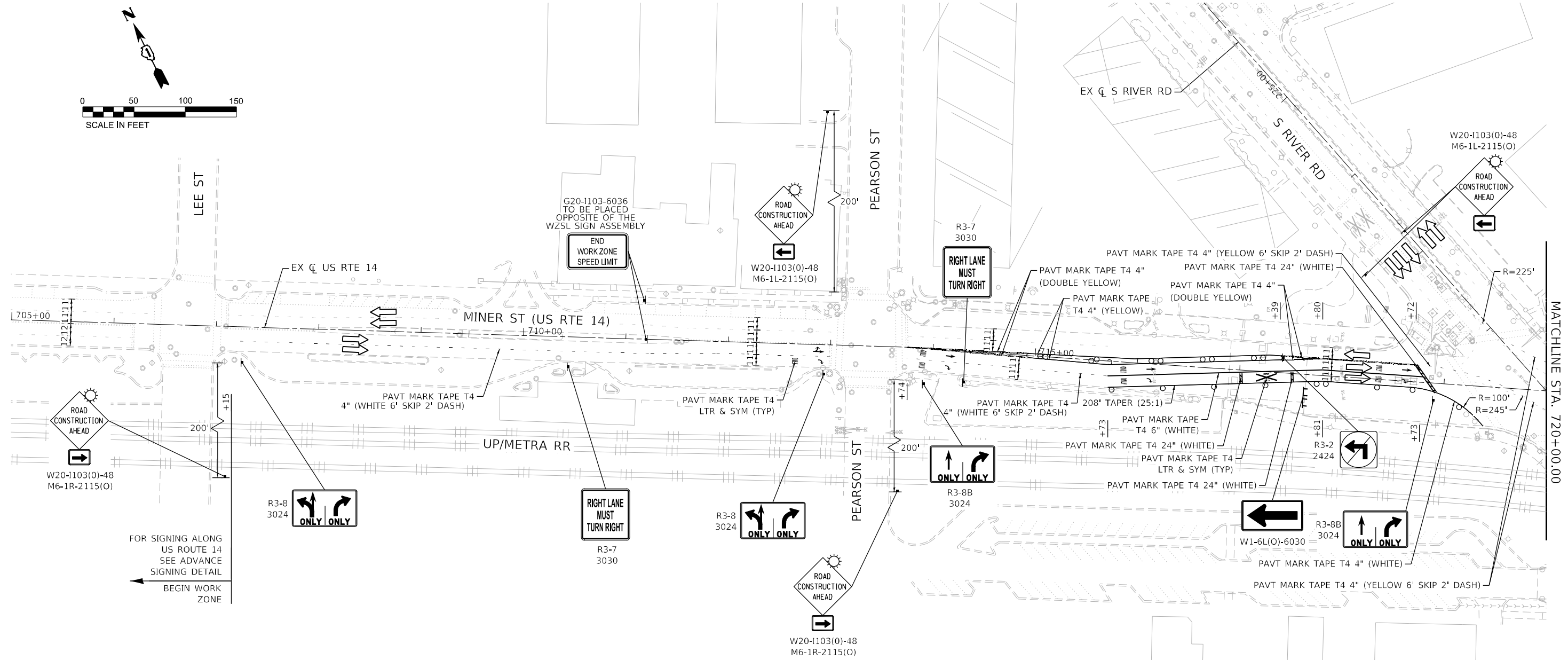
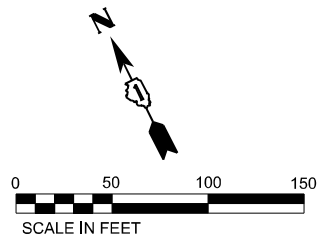
S.N. 016-0238 STAGE 1 TYPICAL SECTION

US-14 OVER DES PLAINES RIVER
LOOKING EAST



S.N. 016-0238 STAGE 2 TYPICAL SECTION

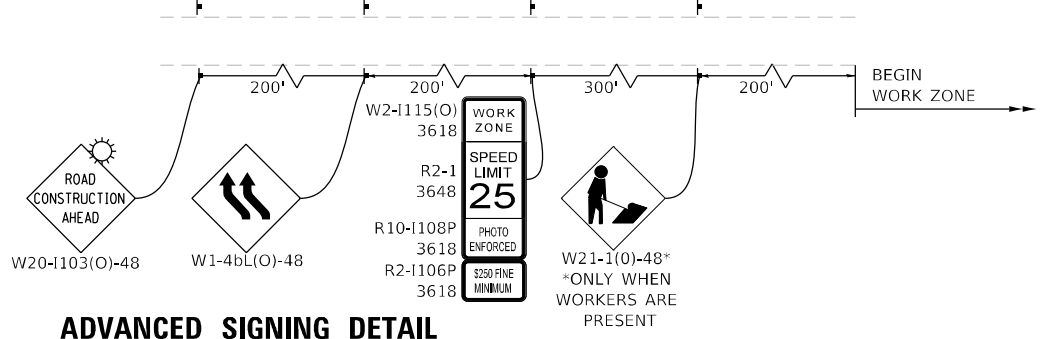
US-14 OVER DES PLAINES RIVER
LOOKING EAST



FOR SIGNING ALONG US ROUTE 14 SEE ADVANCE SIGNING DETAIL
 BEGIN WORK ZONE

LEGEND

- WORK ZONE
- DIRECTION OF TRAFFIC
- IMPACT ATTENUATOR, TEST LEVEL 2 (TEMPORARY)
- TEMPORARY CONCRETE BARRIER
- DRUMS
- SIGN
- FLASHING ARROW BOARD
- TYPE III BARRICADE
- TYPE I BARRICADE



NOTE:
 1. EB US 14 TO NB RIVER RD LT TRAFFIC WILL BE DETOURED AS SHOWN ON DETOUR PLANS.

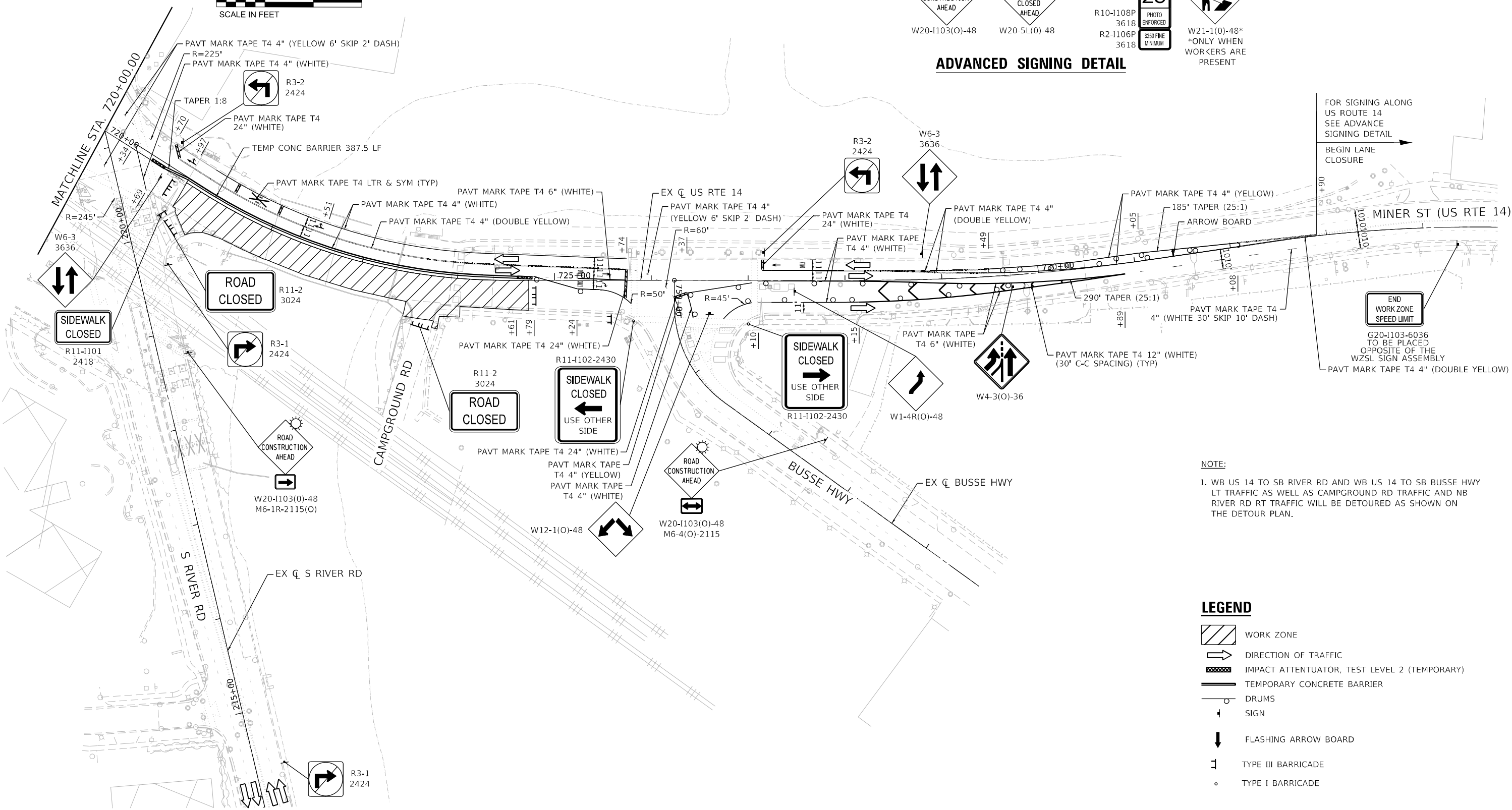
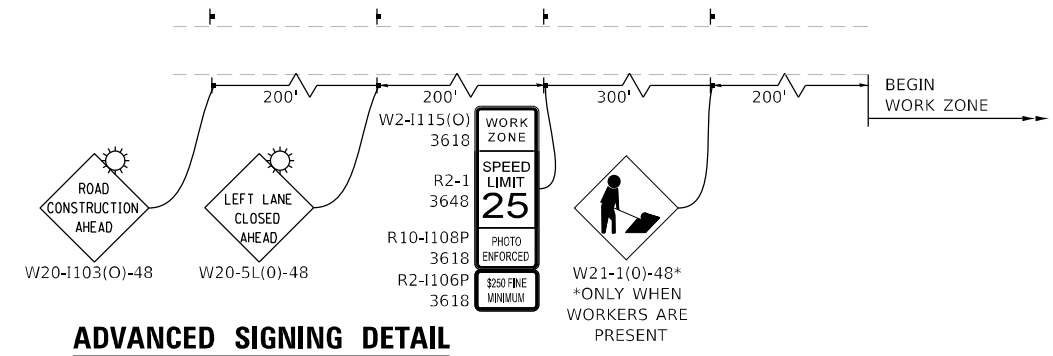


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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

F.A.U 3512 (U.S. ROUTE 14) OVER DES PLAINES RIVER
 STAGE 1
 SCALE: 1"=50' SHEET 3 OF 6 SHEETS STA. 707+15.00 TO STA. 720+00.00

F.A.U. RTE. 3512	SECTION 2020-174-BR	COUNTY COOK	TOTAL SHEETS 63	SHEET NO. 16
CONTRACT NO. 62M56			ILLINOIS FED. AID PROJECT	



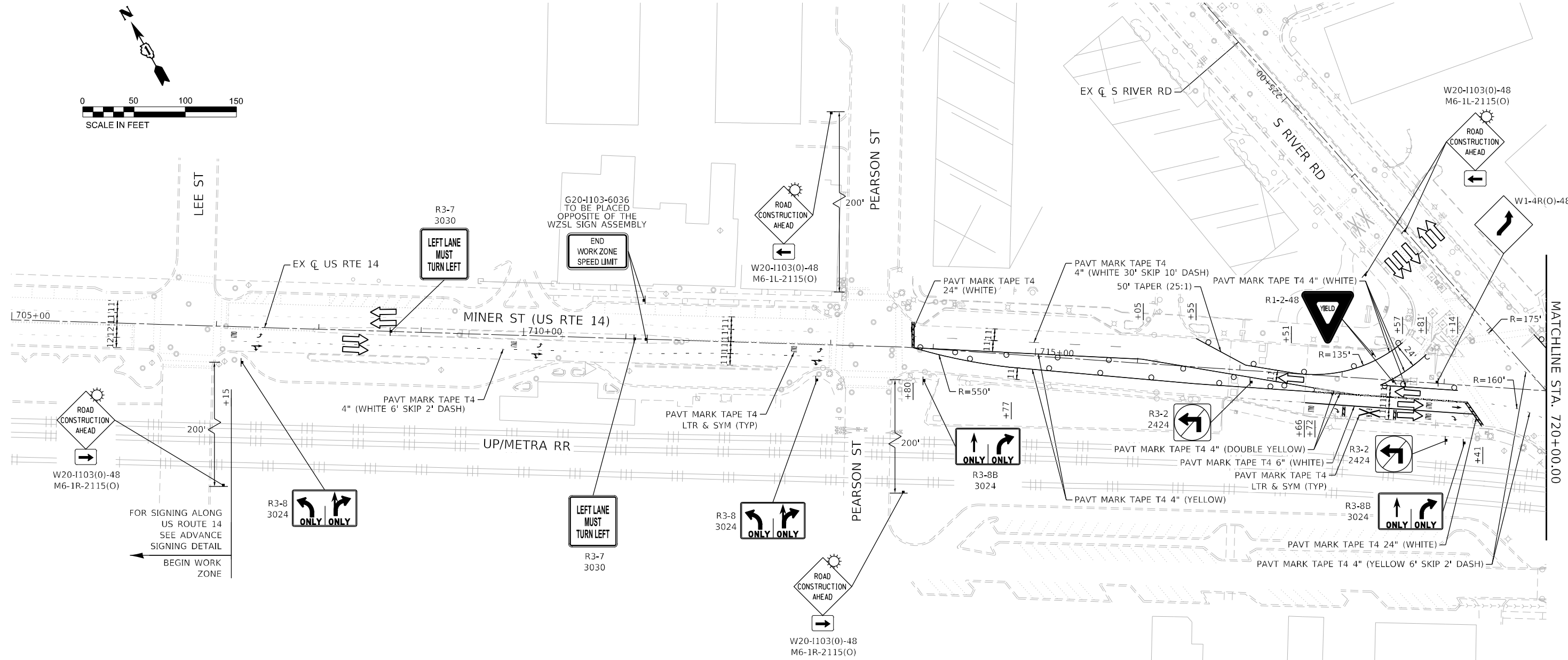
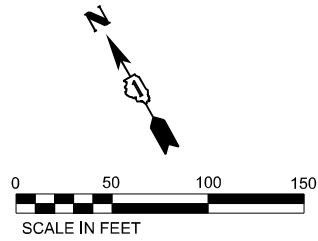
NOTE:
1. WB US 14 TO SB RIVER RD AND WB US 14 TO SB BUSSE HWY LT TRAFFIC AS WELL AS CAMPGROUND RD TRAFFIC AND NB RIVER RD RT TRAFFIC WILL BE DETOURED AS SHOWN ON THE DETOUR PLAN.

LEGEND

	WORK ZONE
	DIRECTION OF TRAFFIC
	IMPACT ATTENUATOR, TEST LEVEL 2 (TEMPORARY)
	TEMPORARY CONCRETE BARRIER
	DRUMS
	SIGN
	FLASHING ARROW BOARD
	TYPE III BARRICADE
	TYPE I BARRICADE

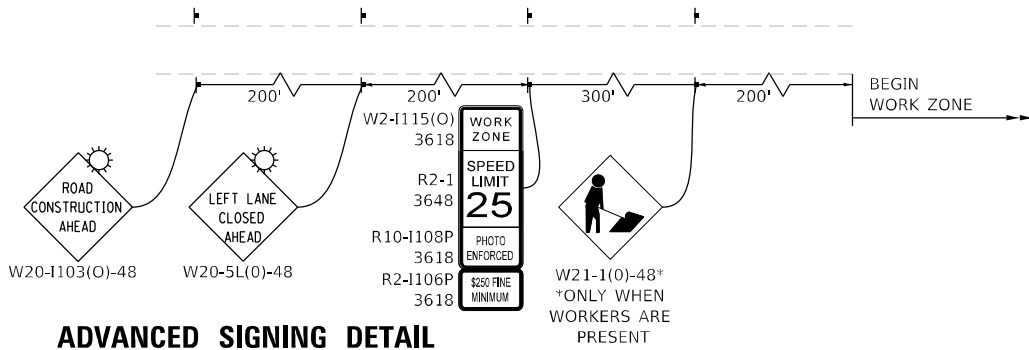
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F.A.U. RTE. 3512	SECTION 2020-174-BR	COUNTY COOK	TOTAL SHEETS 63	SHEET NO. 17
ILLINOIS FED. AID PROJECT				CONTRACT NO. 62M56



LEGEND

- WORK ZONE
- DIRECTION OF TRAFFIC
- IMPACT ATTENUATOR, TEST LEVEL 2 (TEMPORARY)
- TEMPORARY CONCRETE BARRIER
- DRUMS
- SIGN
- FLASHING ARROW BOARD
- TYPE III BARRICADE
- TYPE I BARRICADE



NOTE:
1. EB US 14 TO NB RIVER RD LT TRAFFIC WILL BE DETOURED AS SHOWN ON DETOUR PLANS.



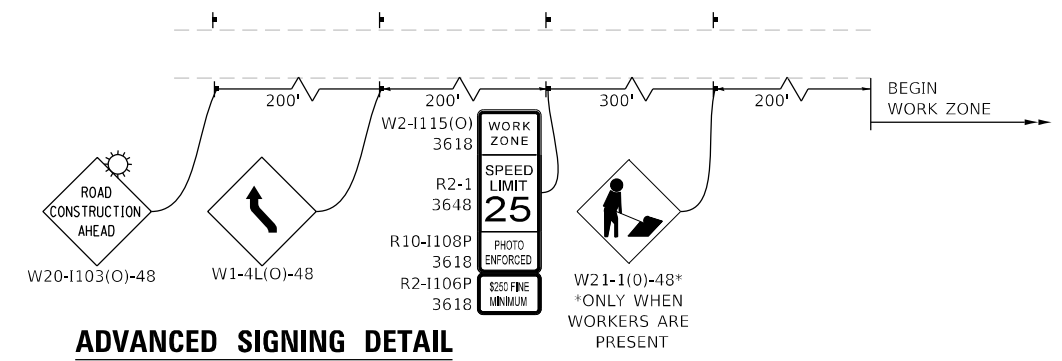
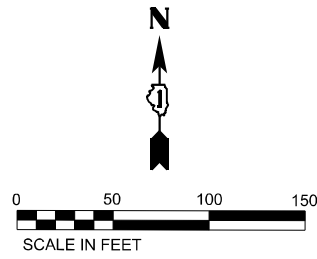
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	DATE - 8/2022	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

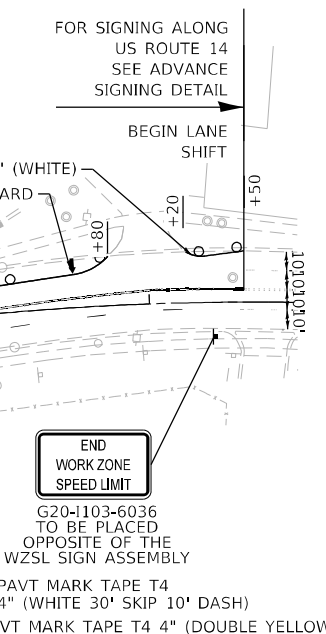
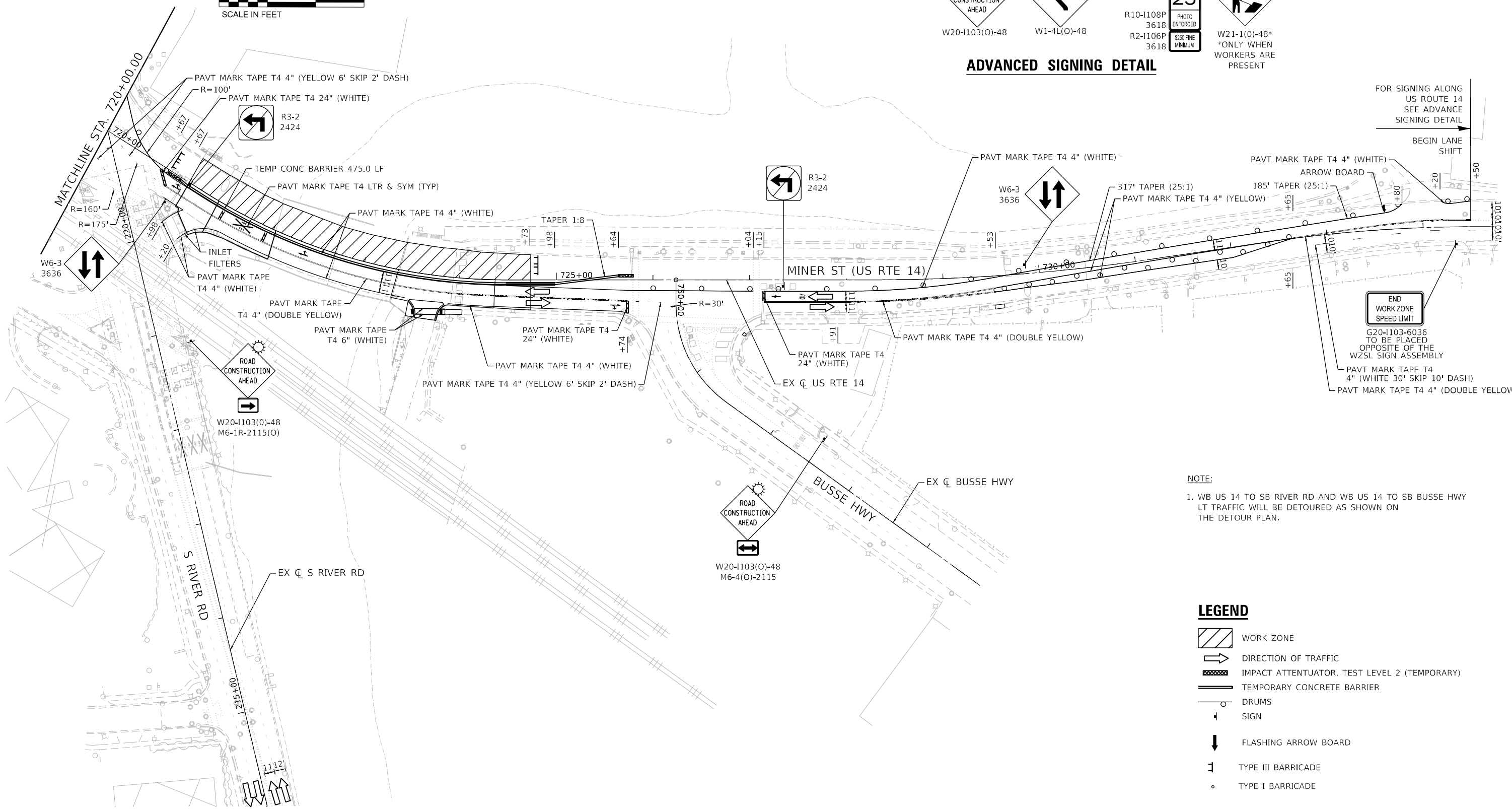
**F.A.U 3512 (U.S. ROUTE 14) OVER DES PLAINES RIVER
STAGE 2**

SCALE: 1"=50' SHEET 5 OF 6 SHEETS STA. 707+15.00 TO STA. 720+00.00

F.A.U. RTE. 3512	SECTION 2020-174-BR	COUNTY COOK	TOTAL SHEETS 63	SHEET NO. 18
CONTRACT NO. 62M56			ILLINOIS FED. AID PROJECT	



ADVANCED SIGNING DETAIL



NOTE:
 1. WB US 14 TO SB RIVER RD AND WB US 14 TO SB BUSSE HWY LT TRAFFIC WILL BE DETOURED AS SHOWN ON THE DETOUR PLAN.

LEGEND

- WORK ZONE
- DIRECTION OF TRAFFIC
- IMPACT ATTENUATOR, TEST LEVEL 2 (TEMPORARY)
- TEMPORARY CONCRETE BARRIER
- DRUMS
- SIGN
- FLASHING ARROW BOARD
- TYPE III BARRICADE
- TYPE I BARRICADE

USER NAME = l14nho	DESIGNED - RC	REVISED -
PLOT SCALE = 100,0000' / in.	DRAWN - RC	REVISED -
PLOT DATE = 8/23/2022	CHECKED - IS	REVISED -
	DATE - 8/2022	REVISED -

F.A.U. RTE. 3512	SECTION 2020-174-BR	COUNTY COOK	TOTAL SHEETS 63	SHEET NO. 19
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62M56	

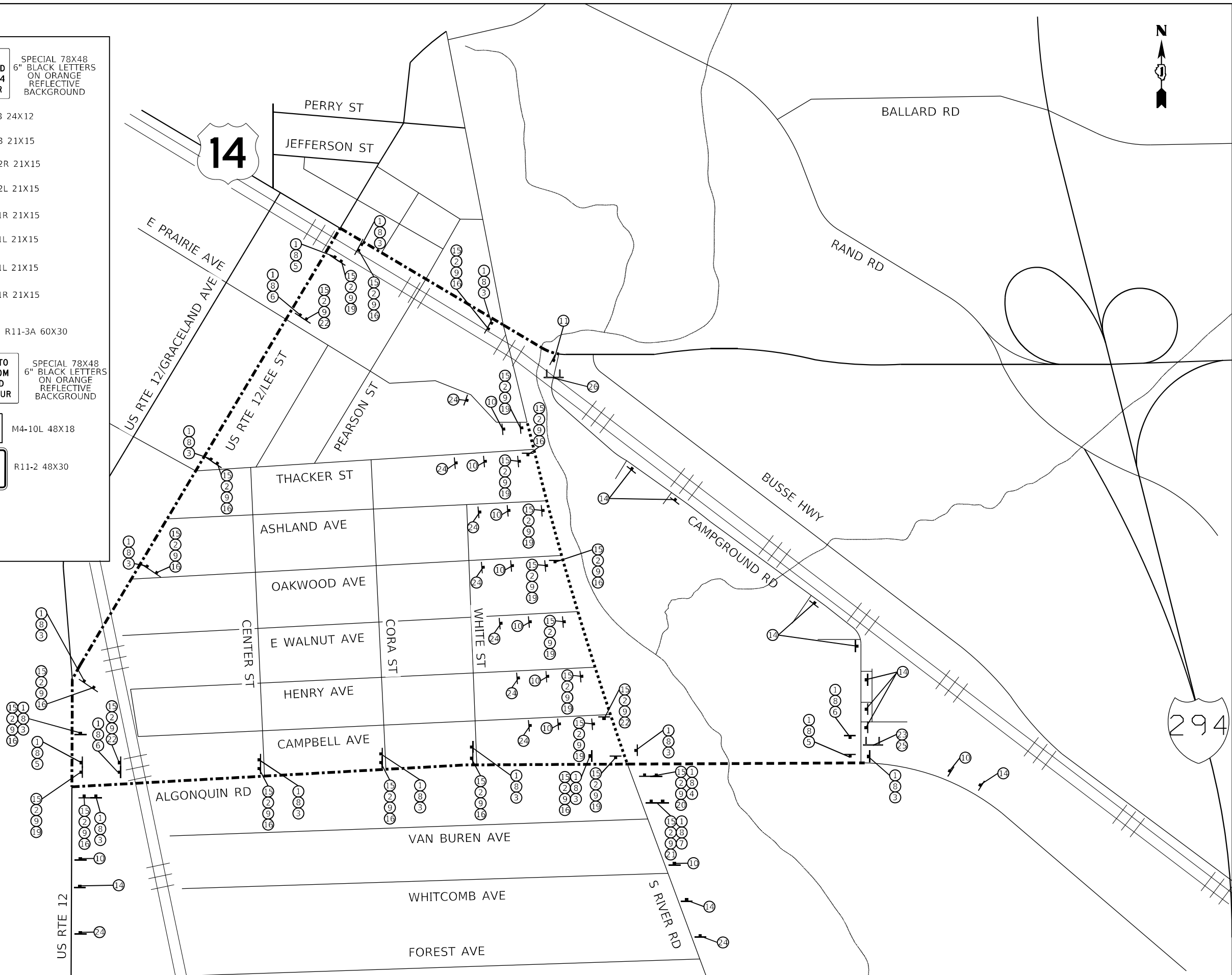
SIGN LEGEND

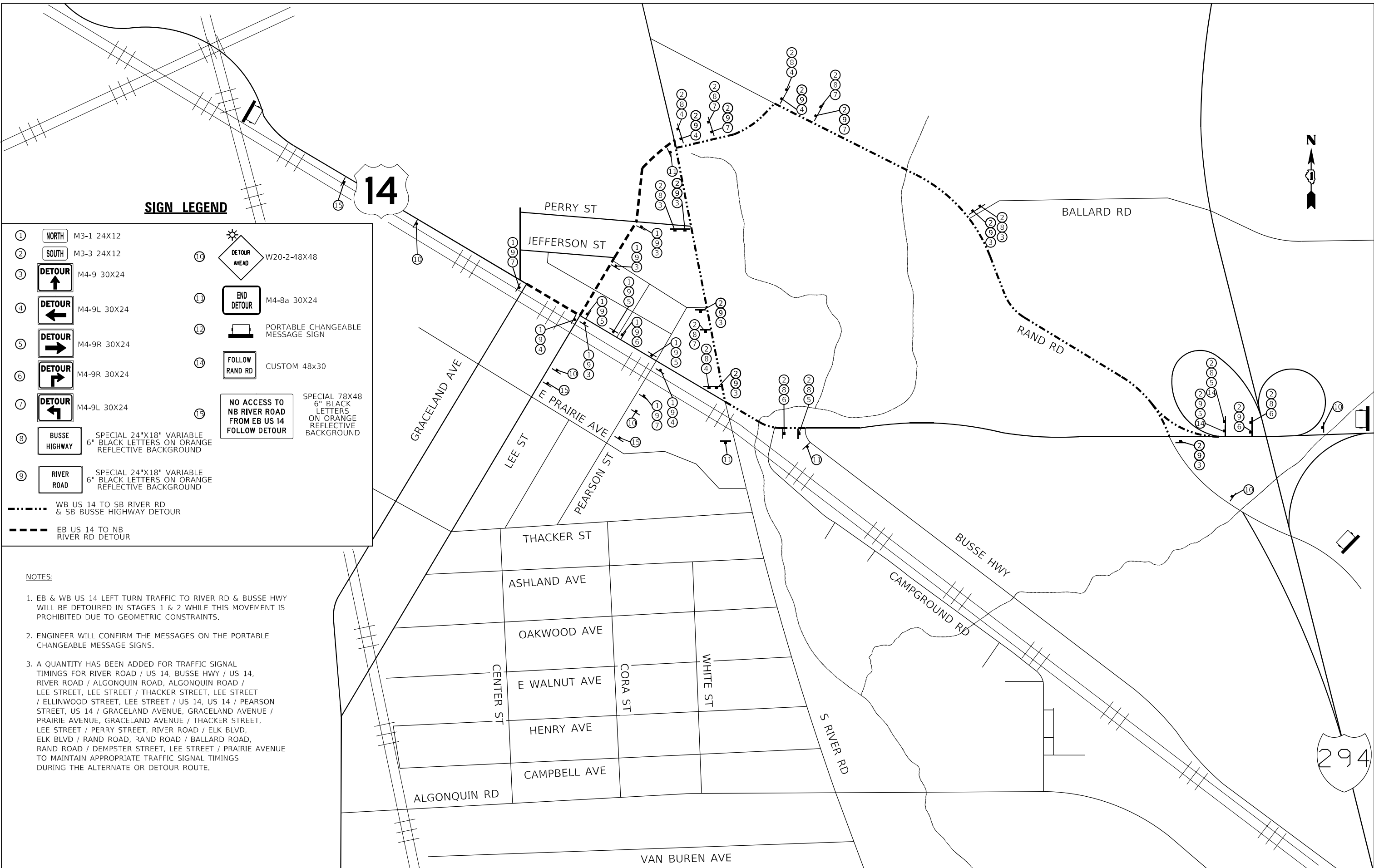
- ① NORTH M3-1 24X12
- ② EAST M3-2 24X12
- ③ DETOUR M4-9 30X24
- ④ DETOUR M4-9L 30X24
- ⑤ DETOUR M4-9R 30X24
- ⑥ DETOUR M4-9R 30X24
- ⑦ DETOUR M4-9L 30X24
- ⑧ CAMPGROUND ROAD SPECIAL 24"x18" VARIABLE 6" BLACK LETTERS ON ORANGE REFLECTIVE BACKGROUND
- ⑨ 14 M1-4 24X24
- ⑩ DETOUR AHEAD W20-2-48X48
- ⑪ END DETOUR M4-8a 30X24
- ⑫ PORTABLE CHANGEABLE MESSAGE SIGN
- ⑬ NORTHBOUND CAMPGROUND RD CLOSED AT US-14 FOLLOW DETOUR SPECIAL 78X48 6" BLACK LETTERS ON ORANGE REFLECTIVE BACKGROUND
- ⑭ DETOUR M4-8 24X12
- ⑮ M6-3 21X15
- ⑯ M6-2R 21X15
- ⑰ M6-2L 21X15
- ⑱ M6-1R 21X15
- ⑲ M6-1L 21X15
- ⑳ M5-1L 21X15
- ㉑ M5-1R 21X15
- ㉒ ROAD CLOSED 0.7 MILES AHEAD LOCAL TRAFFIC ONLY R11-3A 60X30
- ㉓ NO ACCESS TO EB US 14 FROM NB RIVER RD FOLLOW DETOUR SPECIAL 78X48 6" BLACK LETTERS ON ORANGE REFLECTIVE BACKGROUND
- ㉔ DETOUR M4-10L 48X18
- ㉕ ROAD CLOSED R11-2 48X30

- NORTHBOUND RIVER RD TO EASTBOUND US 14 DETOUR
- NORTHBOUND CAMPGROUND RD TO US 14 DETOUR
- - - - - NORTHBOUND CAMPGROUND RD & NORTHBOUD RIVER RD DETOUR

NOTES:

1. NB CAMPGROUND RD TO US 14 TRAFFIC WILL BE DETOURED IN STAGE 1 WHILE CAMPGROUND RD IS CLOSED AT US 14.
2. NB RIVER RD RIGHT TURN TRAFFIC TO EB US 14 WILL BE DETOURED IN STAGE 1 WHILE THIS MOVEMENT IS PROHIBITED DUE TO GEOMETRIC CONSTRAINTS.
3. A QUANTITY HAS BEEN ADDED FOR TRAFFIC SIGNAL TIMINGS FOR RIVER ROAD / US 14, BUSSE HWY / US 14, RIVER ROAD / ALGONQUIN ROAD, ALGONQUIN ROAD / LEE STREET, LEE STREET / THACKER STREET, LEE STREET / ELLINWOOD STREET, LEE STREET / US 14, US 14 / PEARSON STREET, US 14 / GRACELAND AVENUE, GRACELAND AVENUE / PRAIRIE AVENUE, GRACELAND AVENUE / THACKER STREET, LEE STREET / PERRY STREET, RIVER ROAD / ELK BLVD, ELK BLVD / RAND ROAD, RAND ROAD / BALLARD ROAD, RAND ROAD / DEMPSTER STREET, LEE STREET / PRAIRIE AVENUE TO MAINTAIN APPROPRIATE TRAFFIC SIGNAL TIMINGS DURING THE ALTERNATE OR DETOUR ROUTE.





SIGN LEGEND

1		M3-1 24X12	10		W20-2-48X48
2		M3-3 24X12	11		M4-8a 30X24
3		M4-9 30X24	12		PORTABLE CHANGEABLE MESSAGE SIGN
4		M4-9L 30X24	14		CUSTOM 48x30
5		M4-9R 30X24	15		SPECIAL 78X48 6" BLACK LETTERS ON ORANGE REFLECTIVE BACKGROUND
6		M4-9R 30X24			
7		M4-9L 30X24			
8		SPECIAL 24"x18" VARIABLE 6" BLACK LETTERS ON ORANGE REFLECTIVE BACKGROUND			
9		SPECIAL 24"x18" VARIABLE 6" BLACK LETTERS ON ORANGE REFLECTIVE BACKGROUND			
- - - - -		WB US 14 TO SB RIVER RD & SB BUSSE HIGHWAY DETOUR			
- - - - -		EB US 14 TO NB RIVER RD DETOUR			

NOTES:

1. EB & WB US 14 LEFT TURN TRAFFIC TO RIVER RD & BUSSE HWY WILL BE DETOURED IN STAGES 1 & 2 WHILE THIS MOVEMENT IS PROHIBITED DUE TO GEOMETRIC CONSTRAINTS.
2. ENGINEER WILL CONFIRM THE MESSAGES ON THE PORTABLE CHANGEABLE MESSAGE SIGNS.
3. A QUANTITY HAS BEEN ADDED FOR TRAFFIC SIGNAL TIMINGS FOR RIVER ROAD / US 14, BUSSE HWY / US 14, RIVER ROAD / ALGONQUIN ROAD, ALGONQUIN ROAD / LEE STREET, LEE STREET / THACKER STREET, LEE STREET / ELLINWOOD STREET, LEE STREET / US 14, US 14 / PEARSON STREET, US 14 / GRACELAND AVENUE, GRACELAND AVENUE / PRAIRIE AVENUE, GRACELAND AVENUE / THACKER STREET, LEE STREET / PERRY STREET, RIVER ROAD / ELK BLVD, ELK BLVD / RAND ROAD, RAND ROAD / BALLARD ROAD, RAND ROAD / DEMPSTER STREET, LEE STREET / PRAIRIE AVENUE TO MAINTAIN APPROPRIATE TRAFFIC SIGNAL TIMINGS DURING THE ALTERNATE OR DETOUR ROUTE.



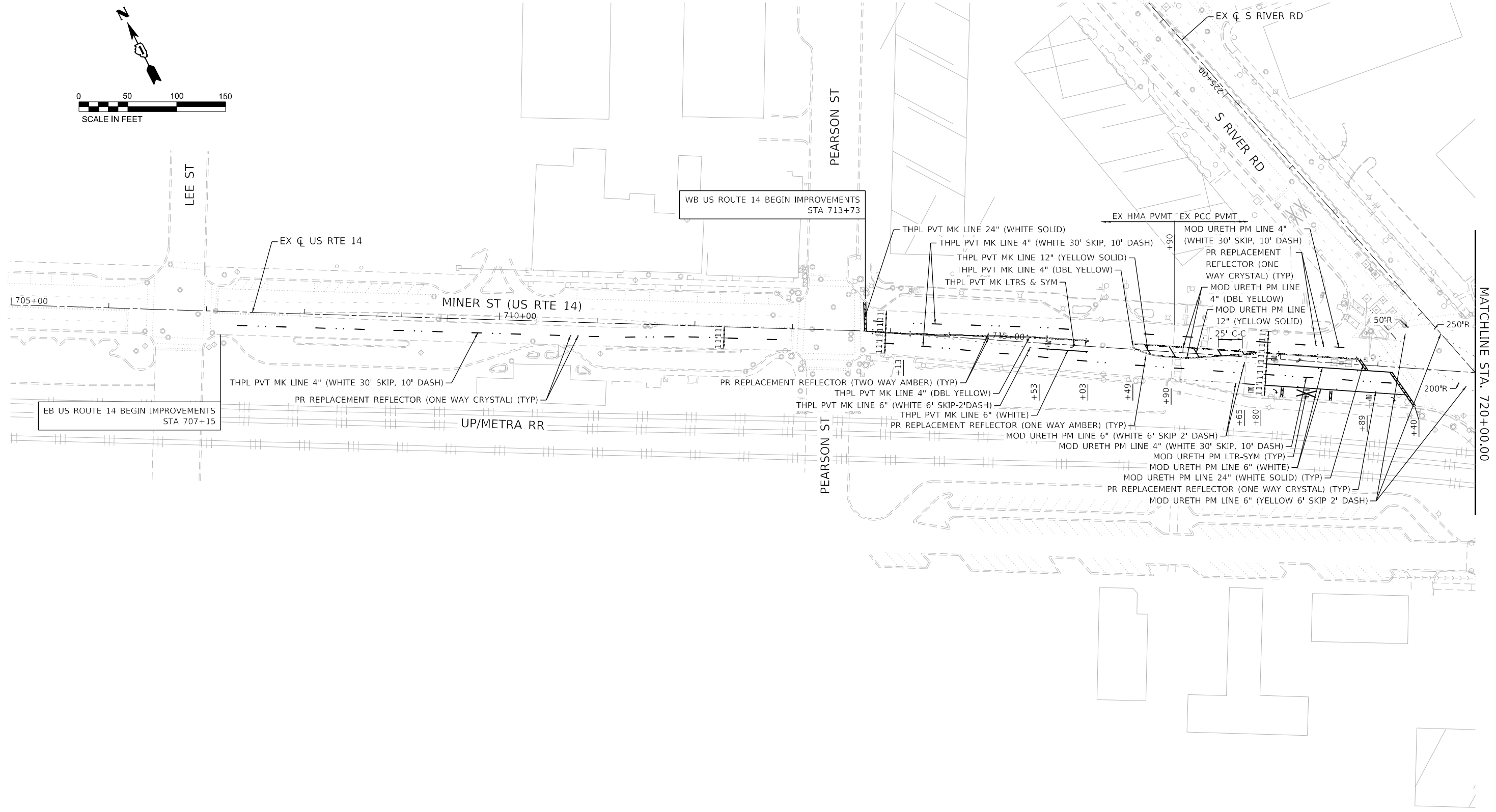
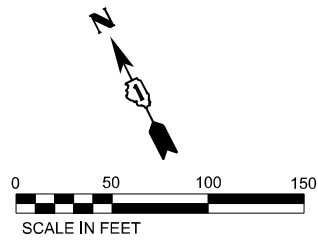
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	DATE - 8/2022	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**F.A.U 3512 (U.S. ROUTE 14) OVER DES PLAINES RIVER
DETOUR PLAN**

SCALE: N.T.S. SHEET 3 OF 3 SHEETS STA. TO STA.

F.A.U. RTE. 3512	SECTION 2020-174-BR	COUNTY COOK	TOTAL SHEETS 63	SHEET NO. 22
CONTRACT NO. 62M56			ILLINOIS FED. AID PROJECT	



EB US ROUTE 14 BEGIN IMPROVEMENTS
STA 707+15

WB US ROUTE 14 BEGIN IMPROVEMENTS
STA 713+73

MATCHLINE STA. 720+00.00



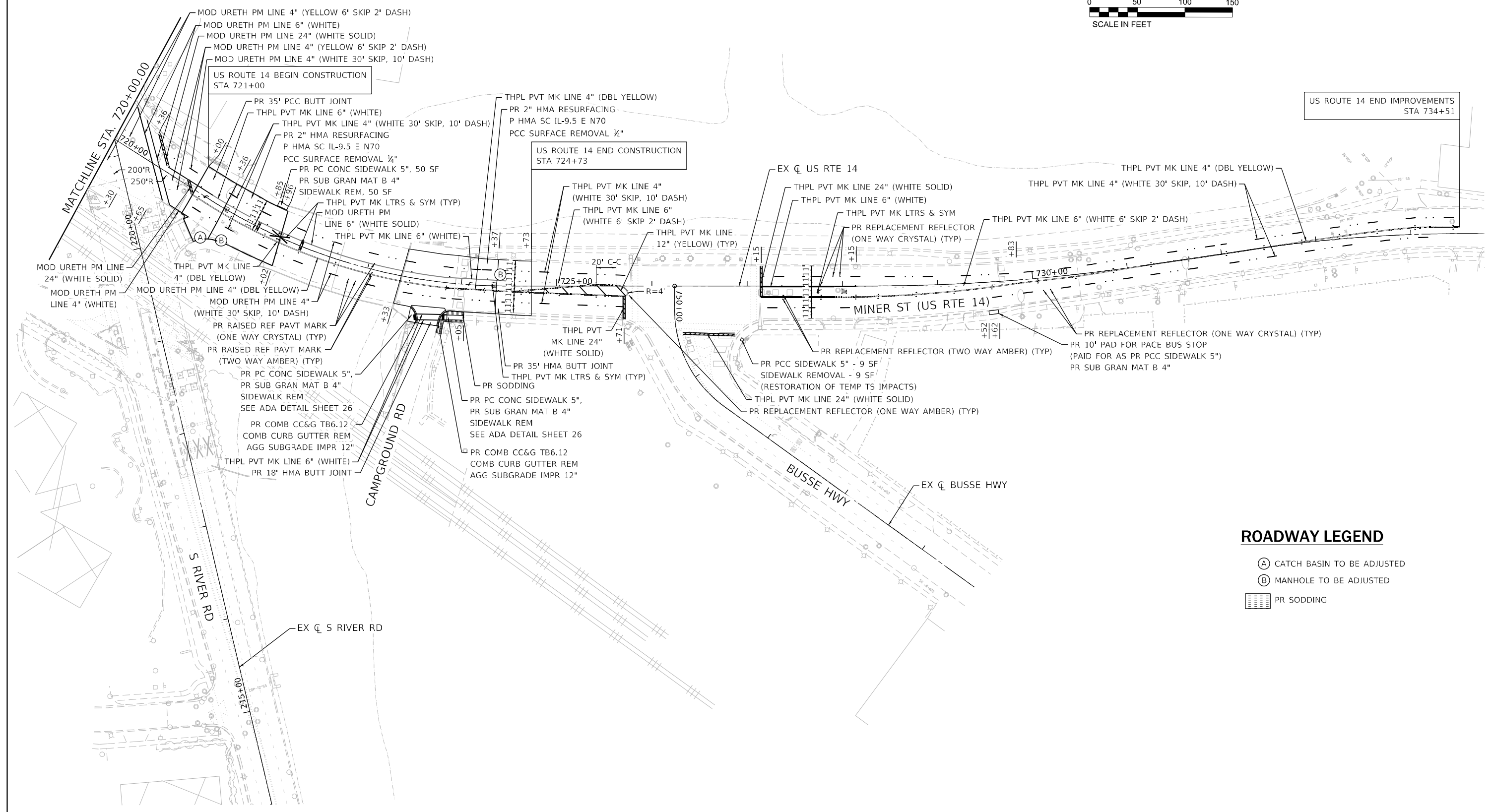
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PLOT DATE = 8/23/2022	DATE - 8/2022	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**F.A.U 3512 (U.S. ROUTE 14) OVER DES PLAINES RIVER
ROADWAY PLAN**

SCALE: 1"=50' SHEET 1 OF 2 SHEETS STA. 707+15.00 TO STA. 720+00.00

F.A.U. RTE. 3512	SECTION 2020-174-BR	COUNTY COOK	TOTAL SHEETS 63	SHEET NO. 23
			CONTRACT NO. 62M56	
ILLINOIS FED. AID PROJECT				



ROADWAY LEGEND

- (A) CATCH BASIN TO BE ADJUSTED
- (B) MANHOLE TO BE ADJUSTED
- PR SODDING



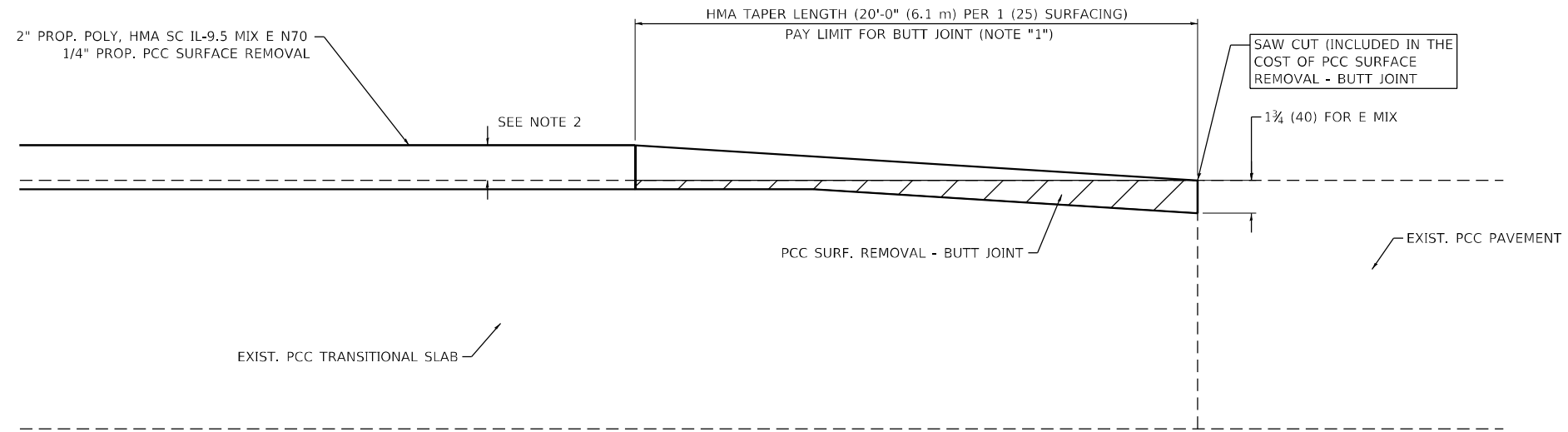
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PLOT DATE = 8/23/2022	DATE - 8/2022	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

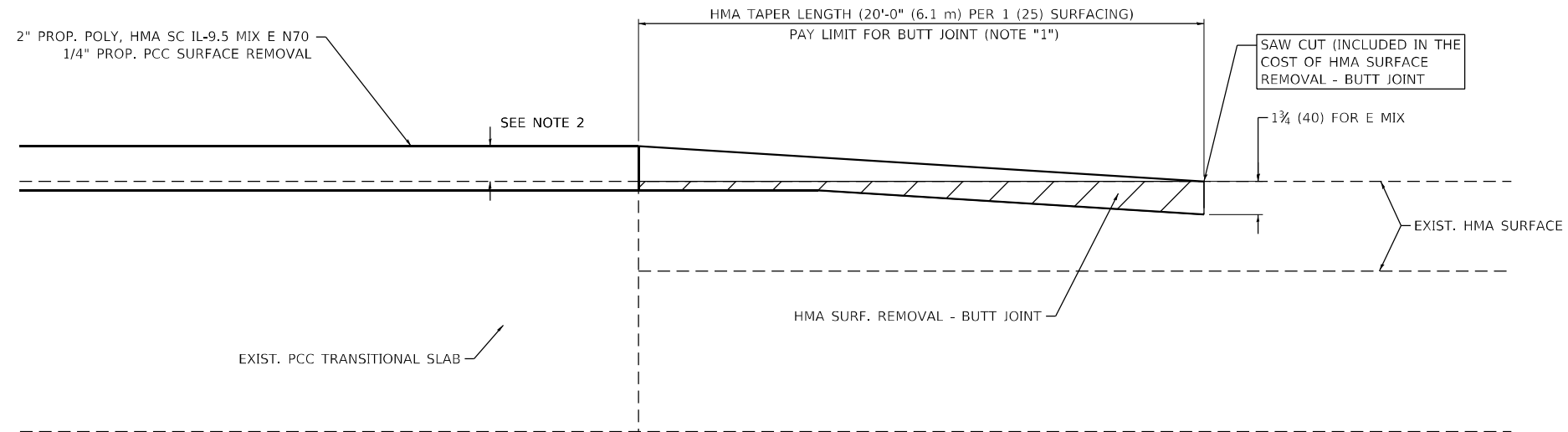
**F.A.U 3512 (U.S. ROUTE 14) OVER DES PLAINES RIVER
ROADWAY PLAN**

SCALE: 1"=50' SHEET 2 OF 2 SHEETS STA. 720+00.00 TO STA. 734+51.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3512	2020-174-BR	COOK	63	24
			CONTRACT NO. 62M56	
ILLINOIS FED. AID PROJECT				



PCC BUTT JOINT AND HMA TAPER FOR SCARIFICATION AND RESURFACING



HMA BUTT JOINT AND HMA TAPER FOR SCARIFICATION AND RESURFACING

NOTES:

1. THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
2. SEE BRIDGE PLANS FOR SCARIFICATION THICKNESS.
3. SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".

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



USER NAME = l4nho	DESIGNED - NH	REVISED -
	DRAWN - NH	REVISED -
PLOT SCALE = 2,0000' / in.	CHECKED - ST	REVISED -
PLOT DATE = 8/25/2022	DATE - 8/2022	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BUTT JOINT AND
HMA TAPER DETAILS**

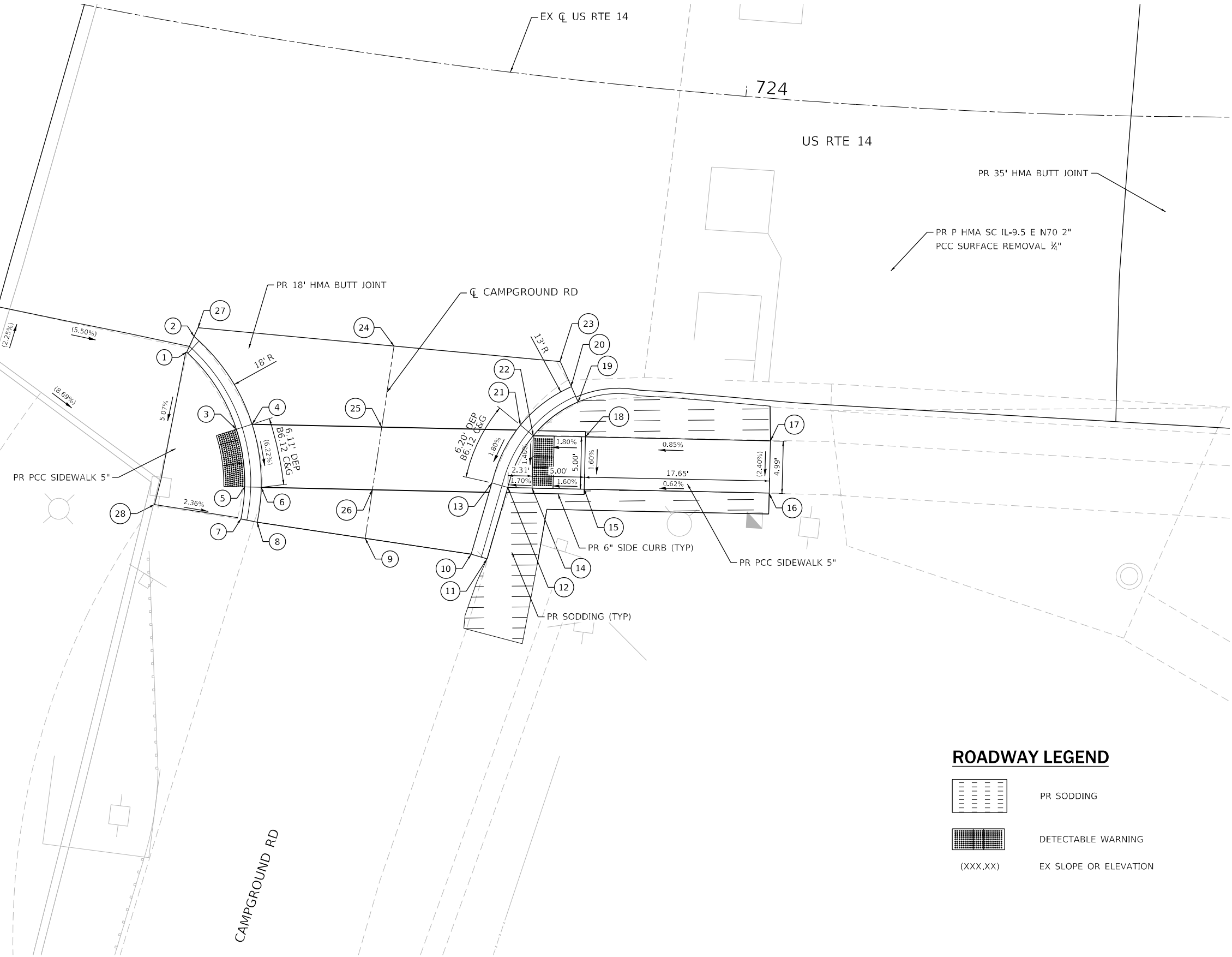
SCALE: 1"=10' SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3512	2020-174-BR	COOK	63	25
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62M56	



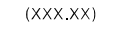


SCALE IN FEET

POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	1957194.10	1106753.61	637.55 (EX)	BK CURB
2	1957195.59	1106754.33	637.44	EOP
3	1957186.68	1106758.27	636.80	BK DEP CURB
4	1957187.15	1106759.79	636.81	EOP
5	1957181.17	1106758.99	636.41	BK DEP CURB
6	1957181.12	1106760.58	636.43	EOP
7	1957178.13	1106758.61	636.22 (EX)	BK CURB
8	1957177.79	1106760.15	636.17 (EX)	EOP
9	1957176.13	1106770.36	636.12 (EX)	EOP
10	1957174.48	1106780.56	636.01 (EX)	EOP
11	1957174.02	1106782.07	636.45	BK CURB
12	1957180.81	1106784.13	636.42	BK DEP CURB
13	1957181.27	1106782.62	636.43	EOP
14	1957180.73	1106786.43	636.46	SIDEWALK
15	1957180.56	1106791.44	636.54	SIDEWALK
16	1957179.98	1106809.09	636.65 (EX)	SIDEWALK
17	1957184.96	1106809.28	636.77 (EX)	SIDEWALK
18	1957185.55	1106791.61	636.62	SIDEWALK
19	1957188.90	1106790.93	636.99 (EX)	BK CURB
20	1957190.36	1106790.32	636.69	EOP
21	1957186.75	1106785.41	636.54	EOP
22	1957185.73	1106786.62	636.53	BK DEP CURB
23	1957192.77	1106789.30	636.71	EOP
24	1957194.45	1106773.32	637.09	EOP
25	1957186.72	1106772.07	636.87	CL PVMT
26	1957180.75	1106771.10	636.51	CL PVMT
27	1957196.41	1106754.72	637.44	EOP
28	1957179.59	1106750.37	636.42	SIDEWALK



ROADWAY LEGEND

-  PR SODDING
-  DETECTABLE WARNING
-  (XXX.XX) EX SLOPE OR ELEVATION



USER NAME = 14nho
 PLOT SCALE = 10,0003' / in.
 PLOT DATE = 8/25/2022

DESIGNED - NH
 DRAWN - NH
 CHECKED - ST
 DATE - 8/2022

REVISED -
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 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**F.A.U 3512 (U.S. ROUTE 14) OVER DES PLAINES RIVER
 ADA SIDEWALK DETAIL**

SCALE: 1"=10' SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3512	2020-174-BR	COOK	63	26
CONTRACT NO. 62M56			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			PREFORMED 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								

TS SHT NO. 1

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

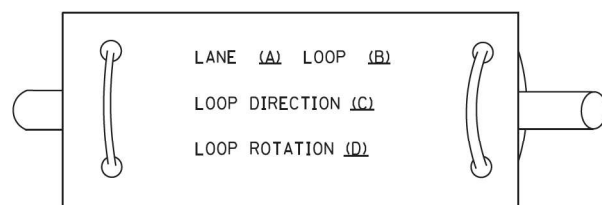
SCALE: NONE SHEET 1 OF 7 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3512	2020-174-BR	COOK	63	27
TS-05			CONTRACT NO. 62M56	
ILLINOIS FED. AID PROJECT				

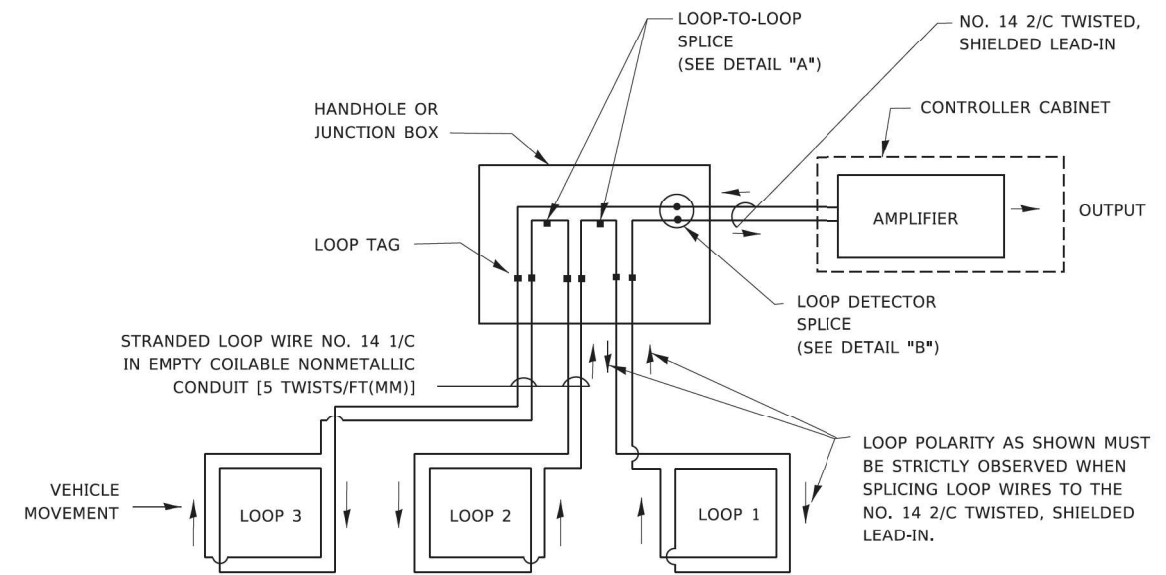
LOOP DETECTOR NOTES

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

LOOP LEAD-IN CABLE TAG

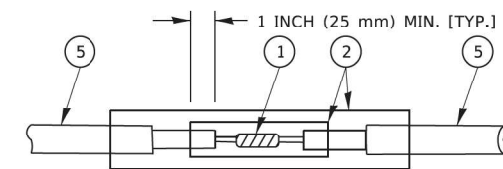


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

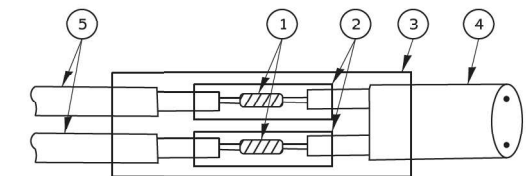


DETECTOR LOOP WIRING SCHEMATIC

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

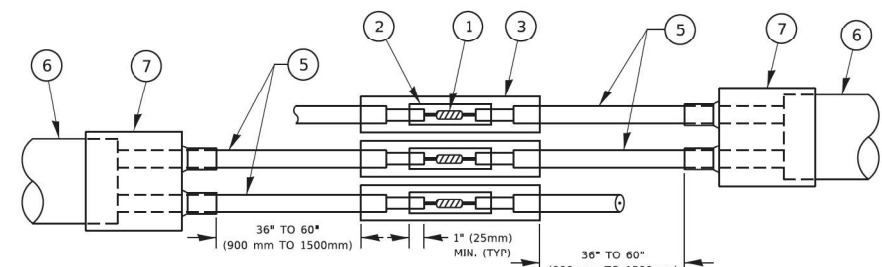


DETAIL "A"
LOOP-TO-LOOP SPLICE

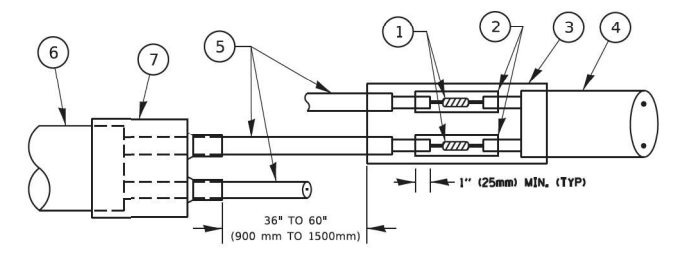


DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

PREFORMED LOOP

LOOP DETECTOR SPLICE

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

TS SHT NO. 2

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PLOT DATE = 3/4/2019	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

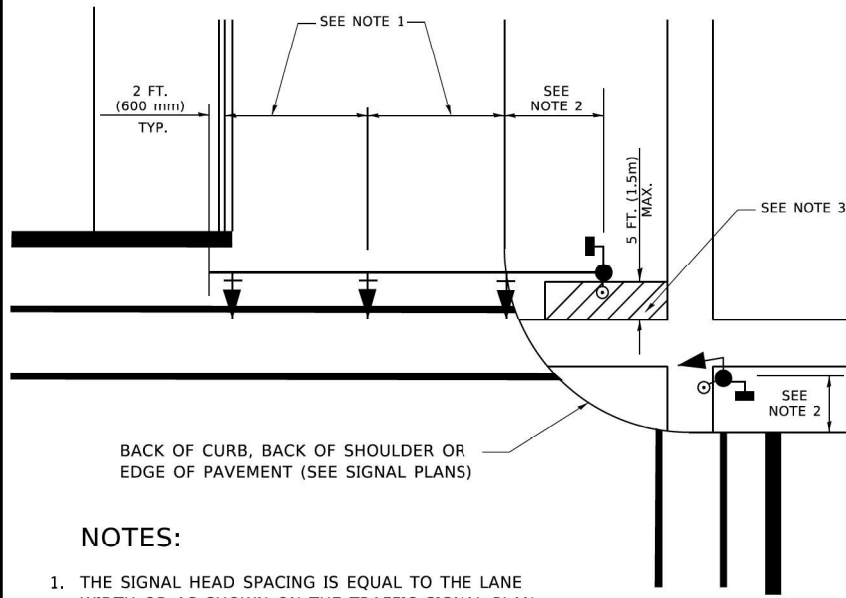
**DISTRICT ONE
 STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

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

F.A.U. RTE. 3512	SECTION 2020-174-BR	COUNTY COOK	TOTAL SHEETS 63	SHEET NO. 28
TS-05		CONTRACT NO. 62M56		
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.

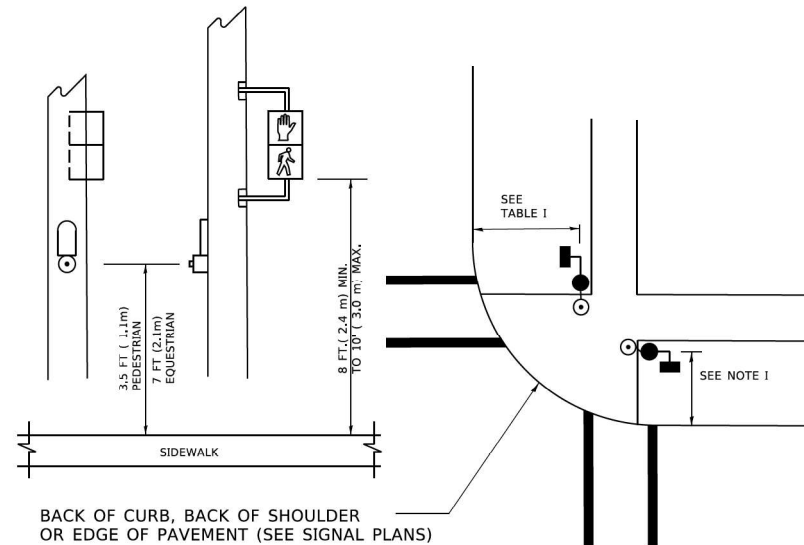


BACK OF CURB, BACK OF SHOULDER OR EDGE OF PAVEMENT (SEE SIGNAL PLANS)

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

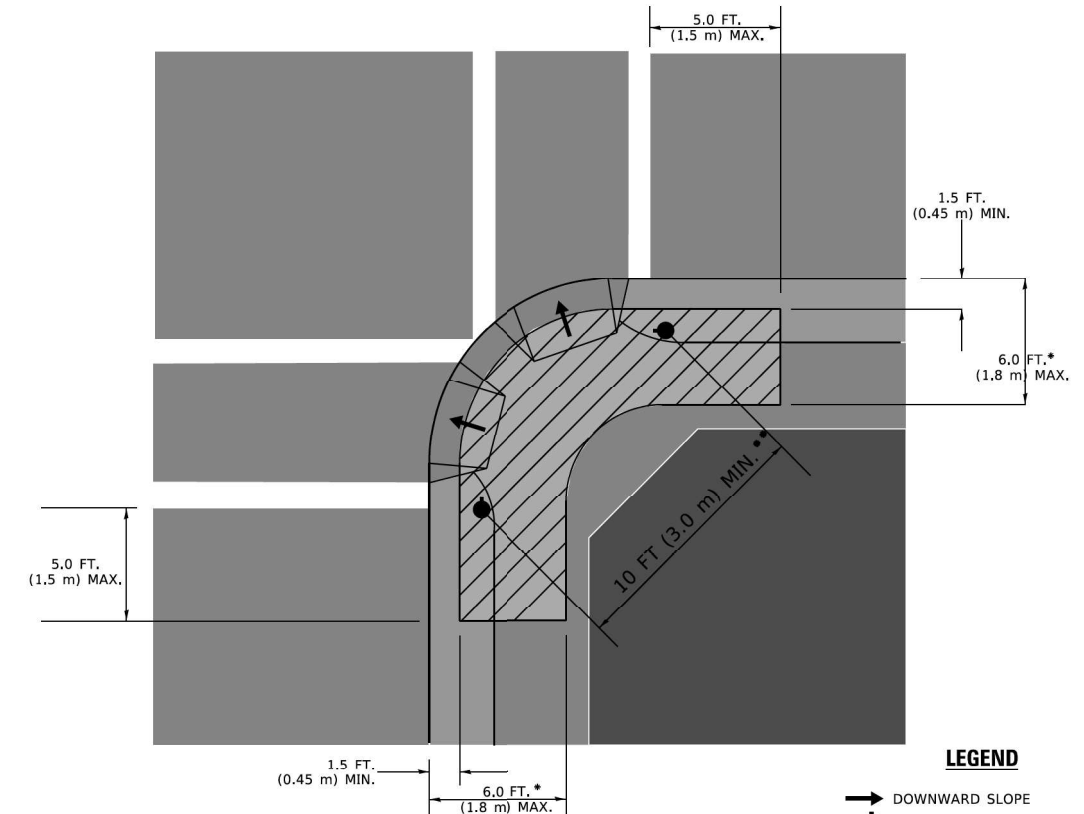


BACK OF CURB, BACK OF SHOULDER OR EDGE OF PAVEMENT (SEE SIGNAL PLANS)

NOTES:

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

RECOMMENDED PUSHBUTTON LOCATIONS



LEGEND

- DOWNWARD SLOPE
- PEDESTRIAN PUSHBUTTON
- ▨ RECOMMENDED PUSHBUTTON LOCATIONS

* WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT (1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.

** WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPERATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

NOTES:

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

TRAFFIC SIGNAL EQUIPMENT OFFSET

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

NOTES:

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

TS SHT NO. 3

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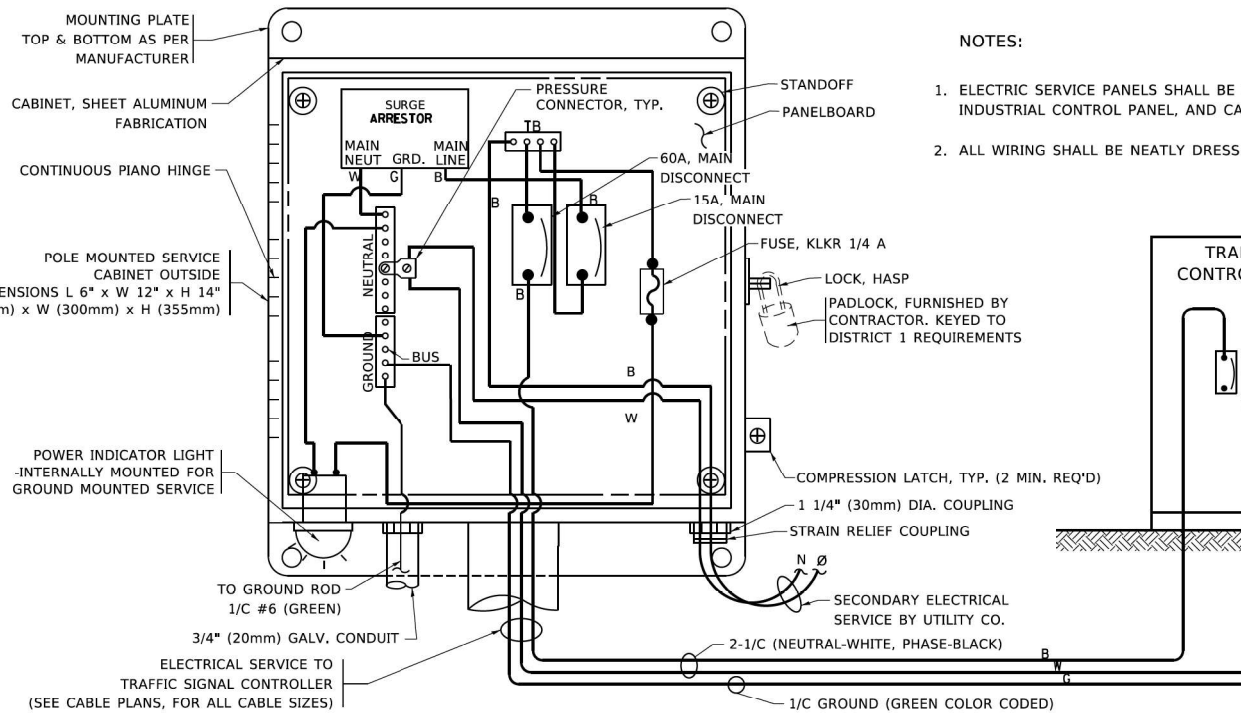
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

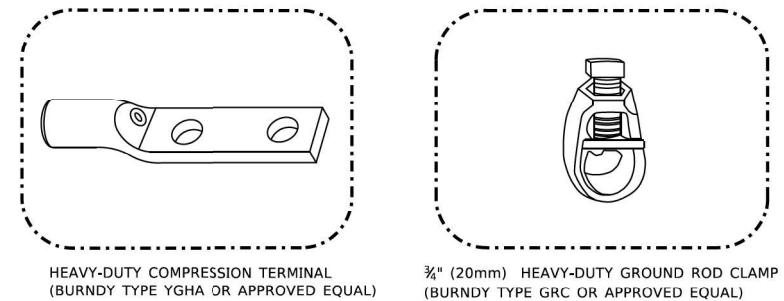
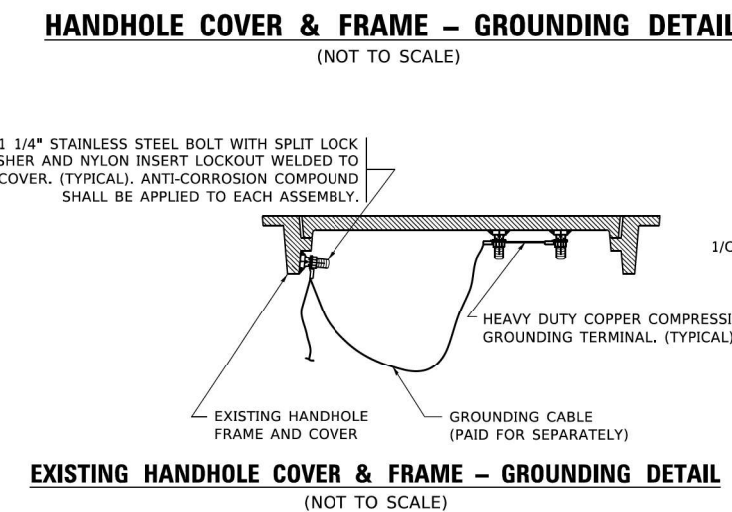
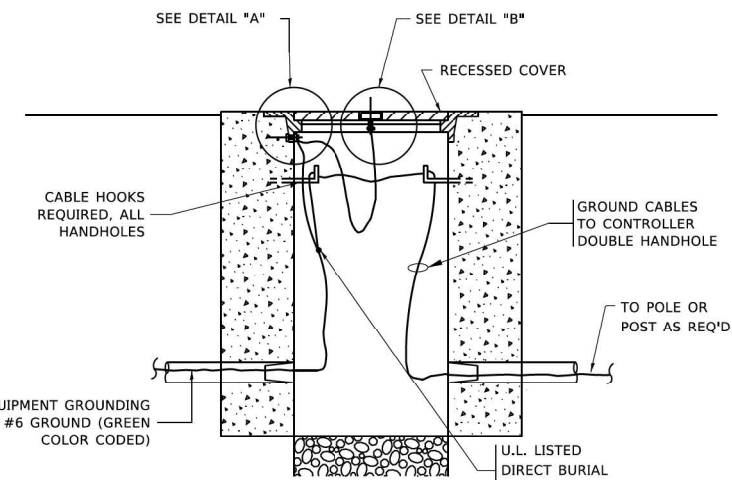
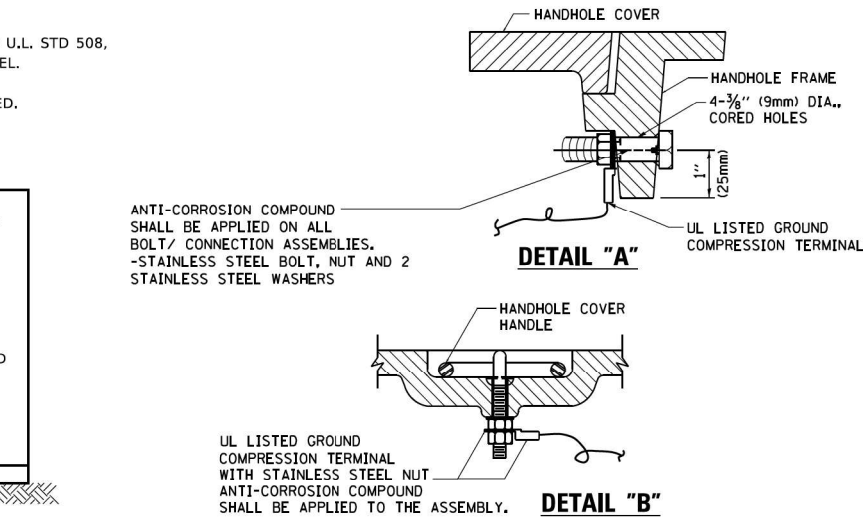
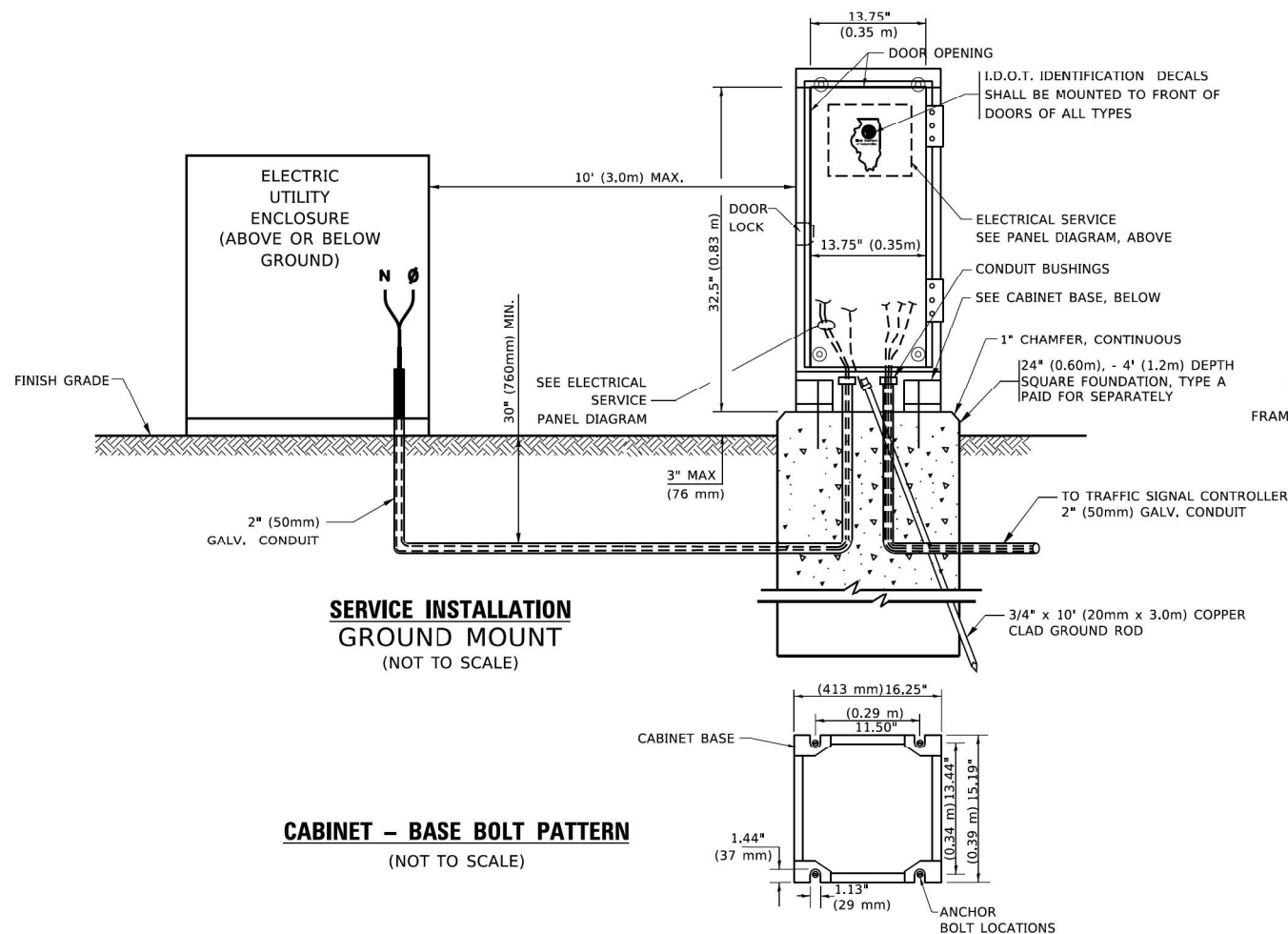
**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

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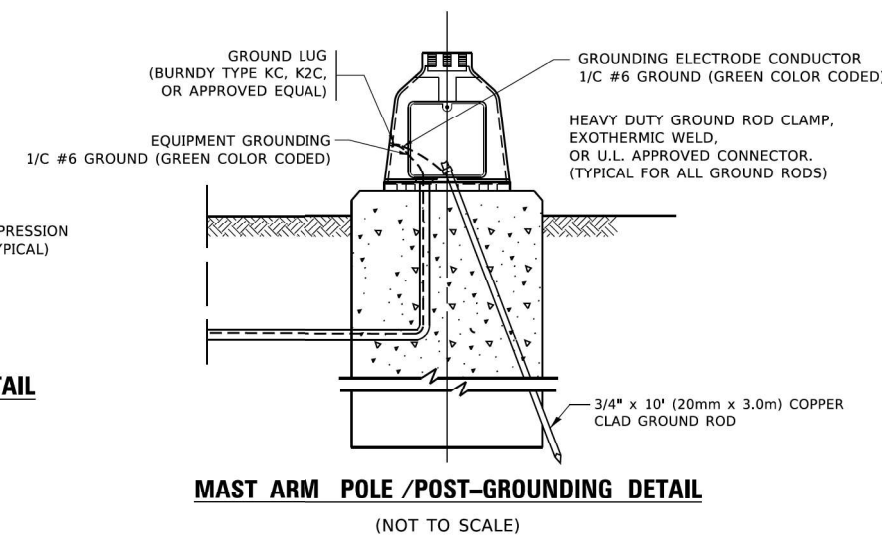
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TS-05		CONTRACT NO. 62M56		
ILLINOIS FED. AID PROJECT				



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



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



TS SHT NO. 4

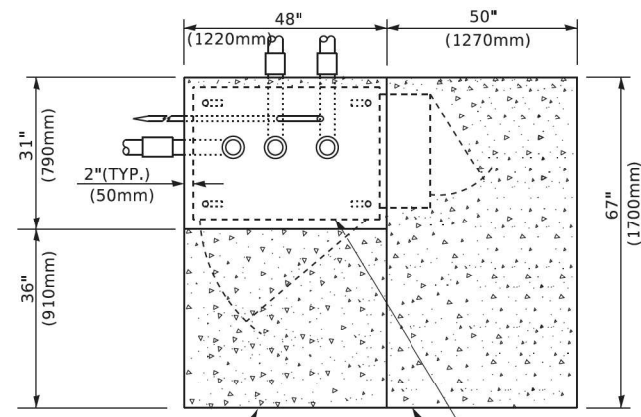
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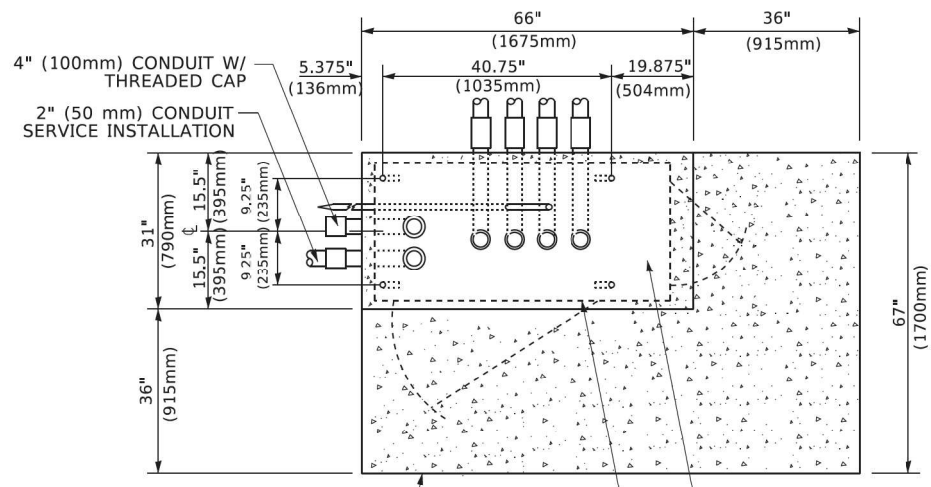
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE			
STANDARD TRAFFIC SIGNAL DESIGN DETAILS			
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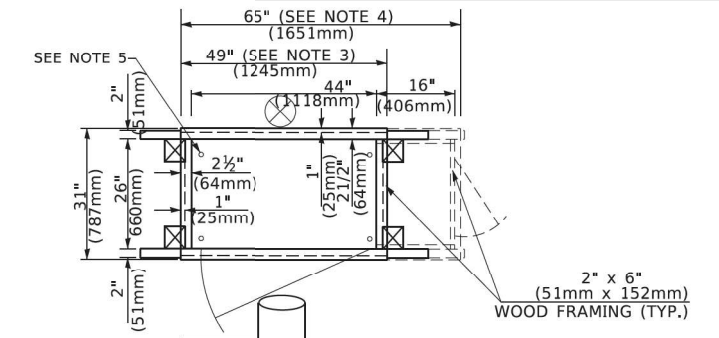
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TS-05		CONTRACT NO. 62M56		
ILLINOIS FED. AID PROJECT				



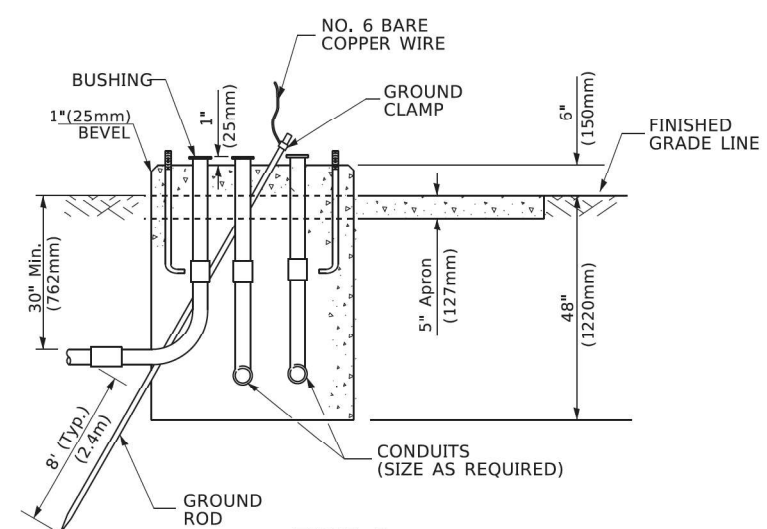
TOP VIEW



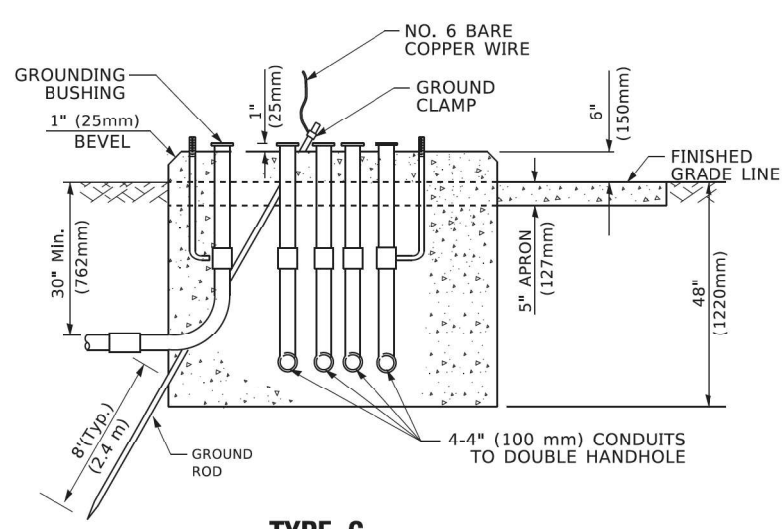
TOP VIEW



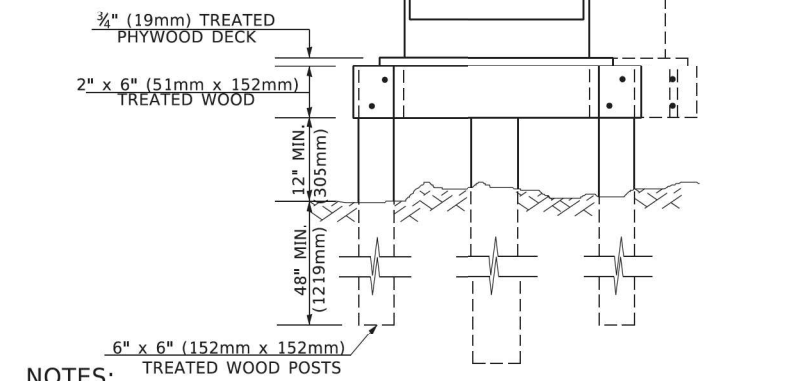
TEMPORARY SIGNAL CONTROLLER WOOD SUPPORT PLATFORM



TYPE D FOR GROUND MOUNTED CONTROLLER CABINET AND UPS BATTERY CABINET



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



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

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

CABLE SLACK

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

VERTICAL CABLE LENGTH

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

DEPTH OF FOUNDATION

Mast Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 65' (19.8 m) and less than 75' (22.9 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 75' (22.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

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

DEPTH OF MAST ARM FOUNDATIONS, TYPE E

TS SHT NO. 5

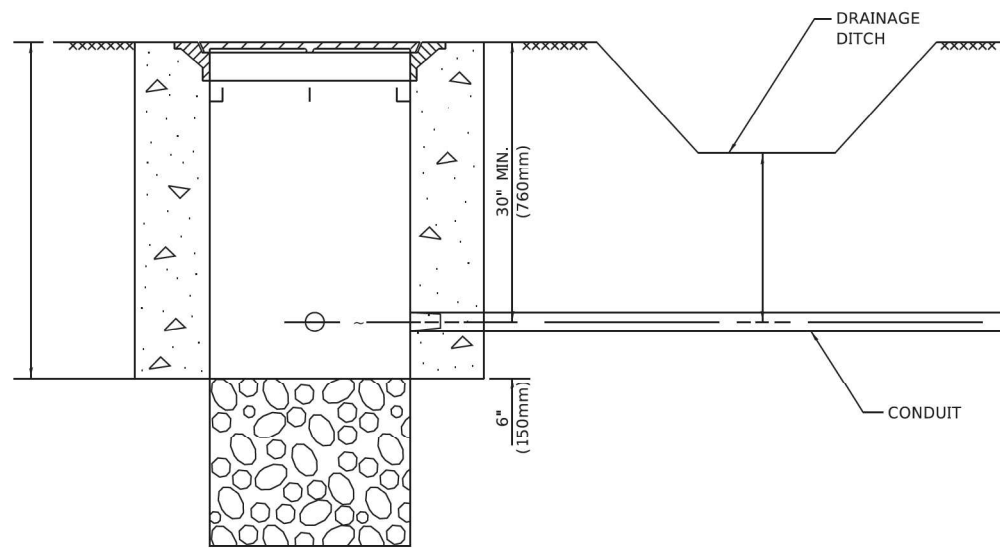
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DISTRICT ONE			
STANDARD TRAFFIC SIGNAL DESIGN DETAILS			
SCALE: NONE	SHEET 5	OF 7 SHEETS	STA. TO STA.

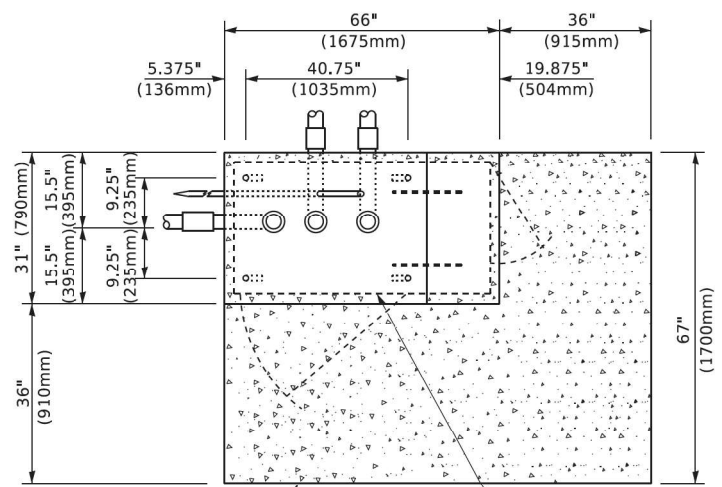
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3512	2020-174-BR	COOK	63	31
TS-05			CONTRACT NO. 62M56	
ILLINOIS FED. AID PROJECT				



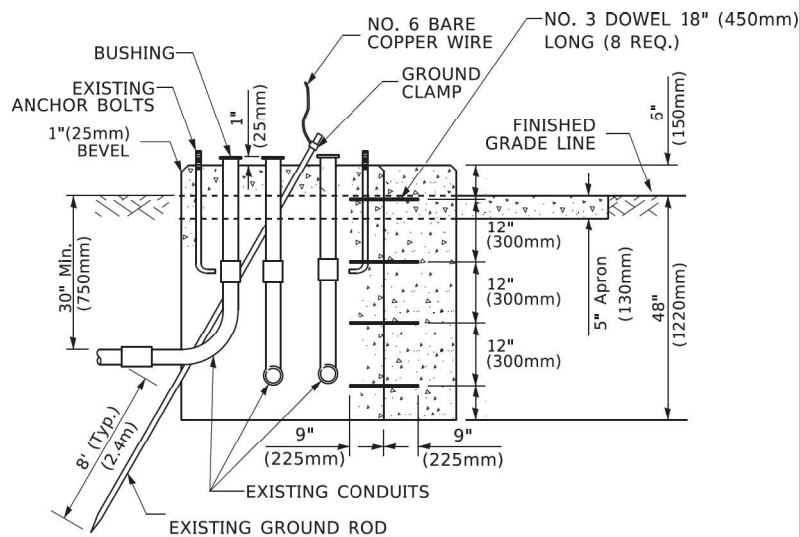
NOTES:

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.

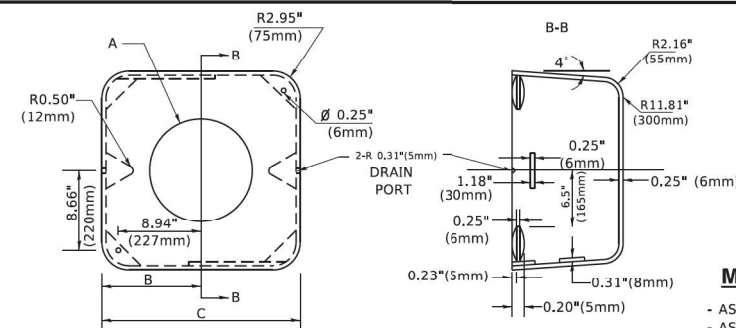
HANDHOLE WITH MINIMUM CONDUIT DEPTH
(NOT TO SCALE)



TOP VIEW
(NOT TO SCALE)



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



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

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

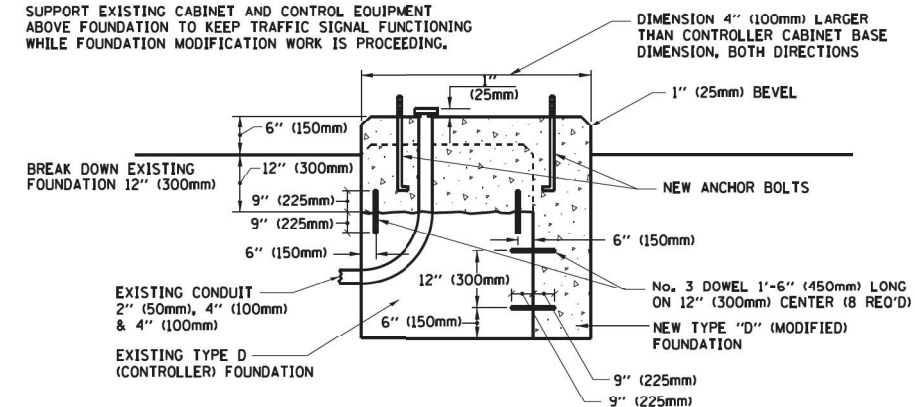
SHROUD

NOTES:

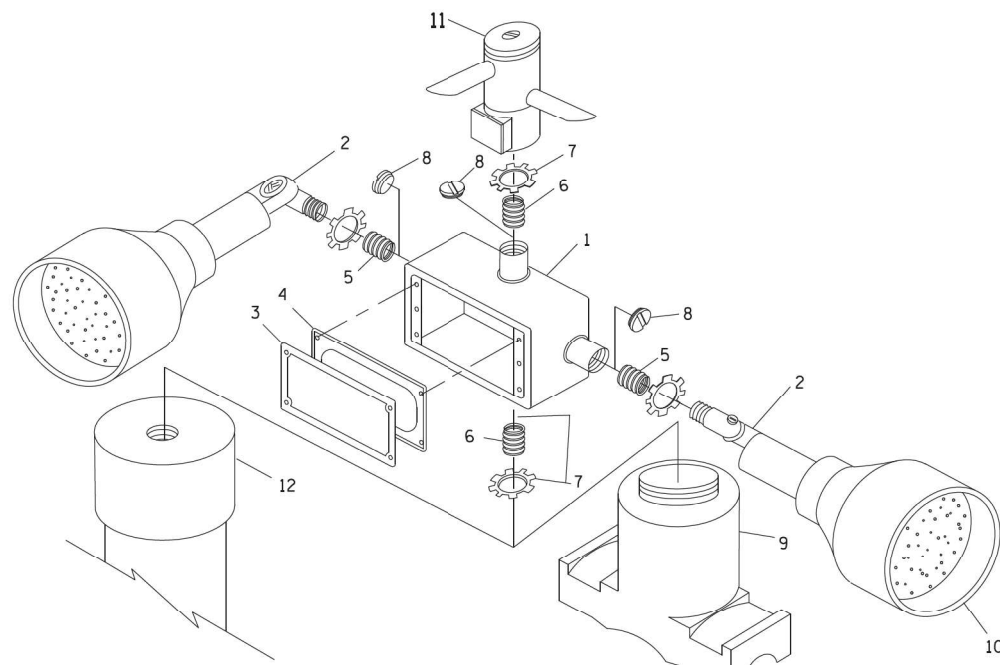
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFY THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

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



POST CAP MOUNT

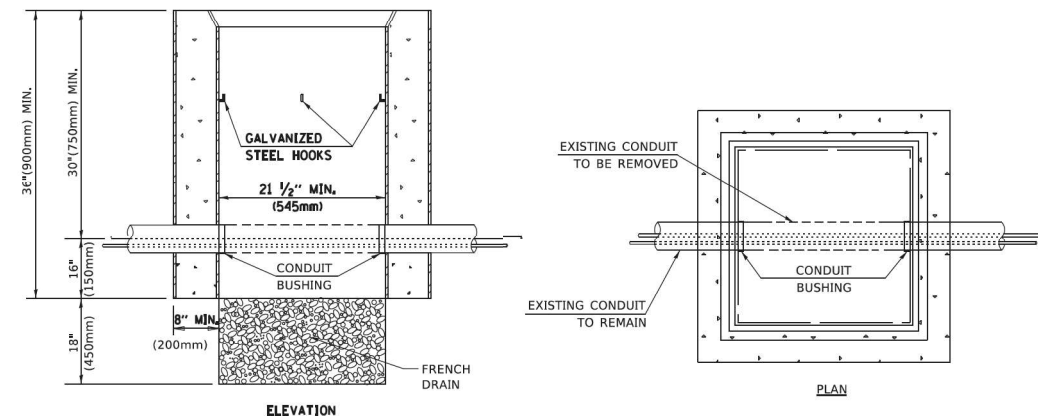
MAST ARM MOUNT

EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

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

NOTES:

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



NOTES:

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

HANDHOLE TO INTERCEPT EXISTING CONDUIT

TS SHT NO. 6

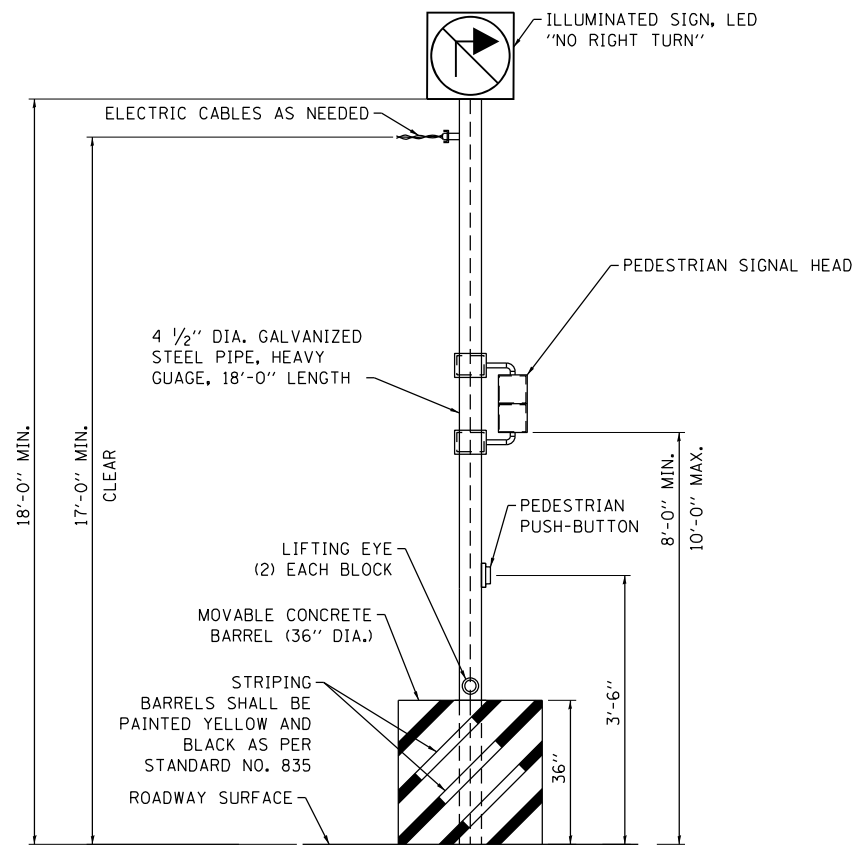
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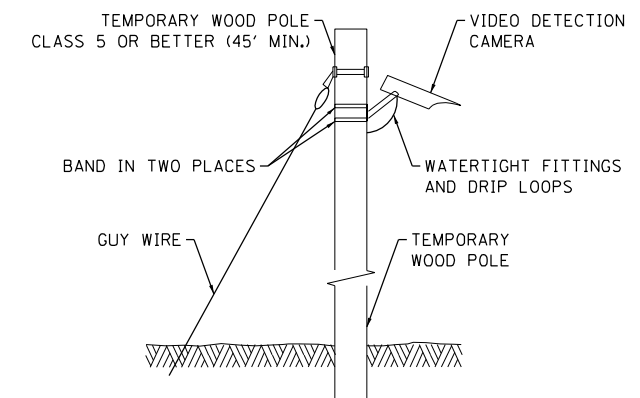
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DISTRICT ONE			
STANDARD TRAFFIC SIGNAL DESIGN DETAILS			
SCALE: NONE	SHEET 6	OF 7 SHEETS	STA. TO STA.

F.A.U. RTE. 3512	SECTION 2020-174-BR	COUNTY COOK	TOTAL SHEETS 63	SHEET NO. 32
TS-05		CONTRACT NO. 62M56		
ILLINOIS FED. AID PROJECT				



TEMPORARY CONCRETE BARREL WITH POST
(NOT TO SCALE)



TEMPORARY VIDEO DETECTION MOUNTING DETAIL
(NOT TO SCALE)

TS SHT NO. 8

SCHEDULE OF QUANTITIES					
ITEM DESCRIPTION	UNITS	TOTAL QTY	DES PLAINES RIVER RD	BUSSE HWY	INTERCONNECT
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1	-	-	1*
DETECTOR LOOP REPLACEMENT	FOOT	264	98	166	-
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	2	1	1	-
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	17	1	1	15**

* REQUIRED AT PEARSON STREET.

** FOR LOCATIONS, SEE NOTES ON THE DETOUR PLAN.

TS SHT NO. 9

TS-13075
ECON 87



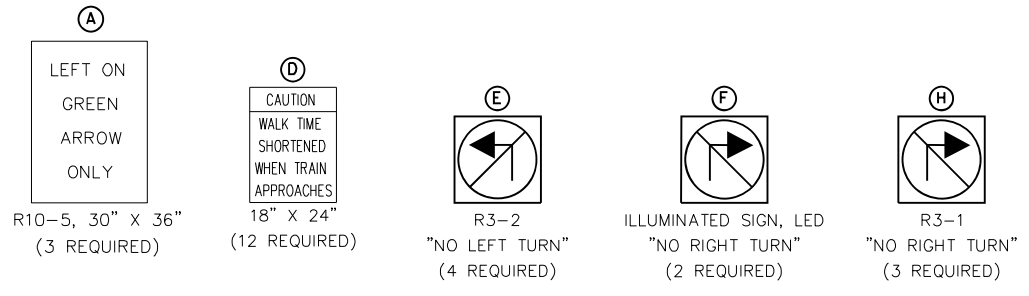
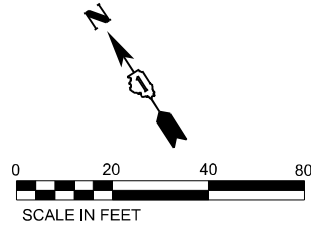
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

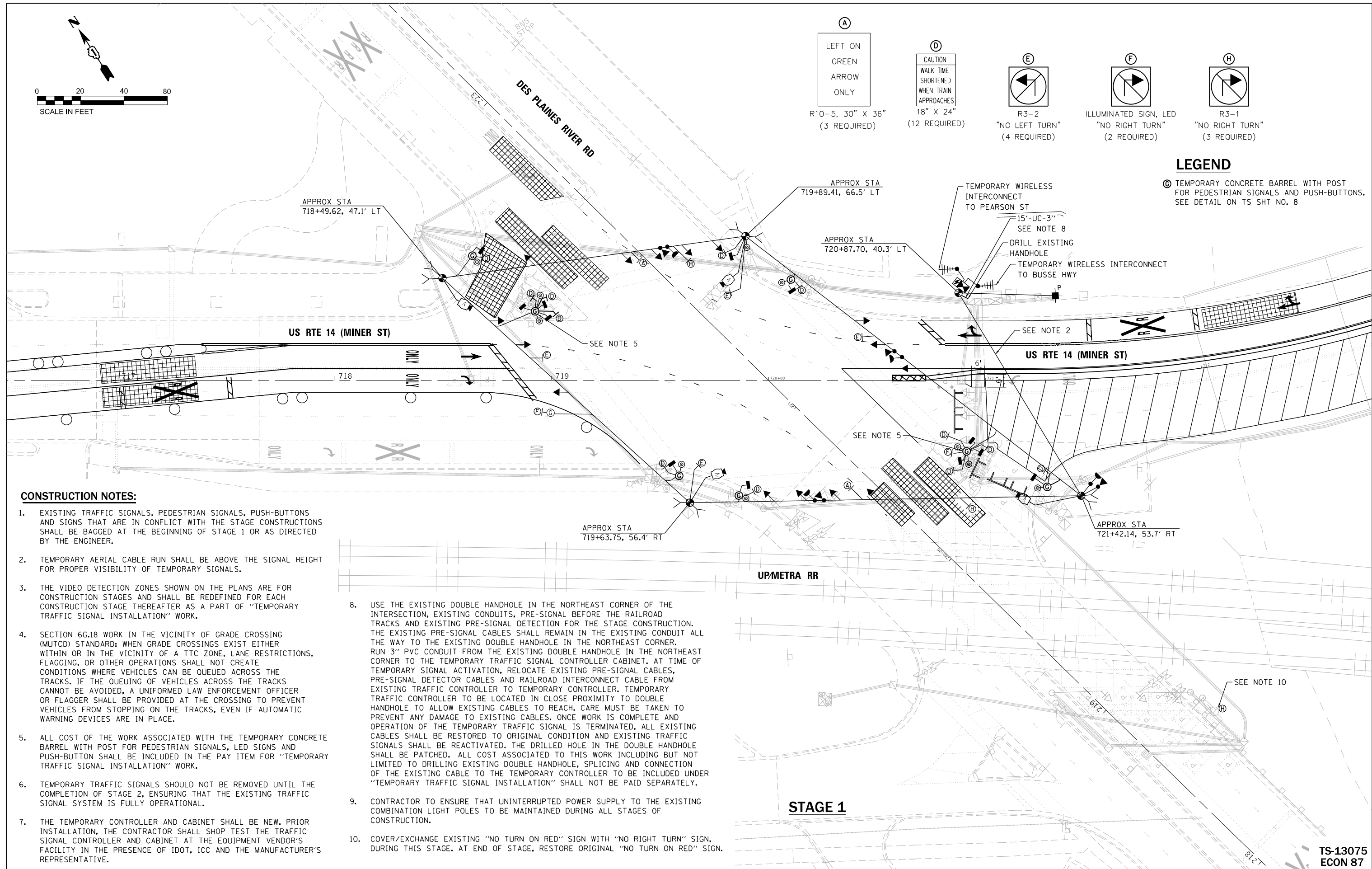
US RTE 14 (MINER ST) AT DES PLAINES RIVER RD
SCHEDULE OF QUANTITIES

SCALE: N.T.S. SHEET 2 OF 12 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3512	2020-174-BR	COOK	63	35
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62M56	



LEGEND
 (C) TEMPORARY CONCRETE BARREL WITH POST FOR PEDESTRIAN SIGNALS AND PUSH-BUTTONS. SEE DETAIL ON TS SHT NO. 8



CONSTRUCTION NOTES:

1. EXISTING TRAFFIC SIGNALS, PEDESTRIAN SIGNALS, PUSH-BUTTONS AND SIGNS THAT ARE IN CONFLICT WITH THE STAGE CONSTRUCTIONS SHALL BE BAGGED AT THE BEGINNING OF STAGE 1 OR AS DIRECTED BY THE ENGINEER.
2. TEMPORARY AERIAL CABLE RUN SHALL BE ABOVE THE SIGNAL HEIGHT FOR PROPER VISIBILITY OF TEMPORARY SIGNALS.
3. THE VIDEO DETECTION ZONES SHOWN ON THE PLANS ARE FOR CONSTRUCTION STAGES AND SHALL BE REDEFINED FOR EACH CONSTRUCTION STAGE THEREAFTER AS A PART OF "TEMPORARY TRAFFIC SIGNAL INSTALLATION" WORK.
4. SECTION 6G.18 WORK IN THE VICINITY OF GRADE CROSSING (MUTCD) STANDARD: WHEN GRADE CROSSINGS EXIST EITHER WITHIN OR IN THE VICINITY OF A TTC ZONE, LANE RESTRICTIONS, FLAGGING, OR OTHER OPERATIONS SHALL NOT CREATE CONDITIONS WHERE VEHICLES CAN BE QUEUED ACROSS THE TRACKS. IF THE QUEUING OF VEHICLES ACROSS THE TRACKS CANNOT BE AVOIDED, A UNIFORMED LAW ENFORCEMENT OFFICER OR FLAGGER SHALL BE PROVIDED AT THE CROSSING TO PREVENT VEHICLES FROM STOPPING ON THE TRACKS, EVEN IF AUTOMATIC WARNING DEVICES ARE IN PLACE.
5. ALL COST OF THE WORK ASSOCIATED WITH THE TEMPORARY CONCRETE BARREL WITH POST FOR PEDESTRIAN SIGNALS, LED SIGNS AND PUSH-BUTTON SHALL BE INCLUDED IN THE PAY ITEM FOR "TEMPORARY TRAFFIC SIGNAL INSTALLATION" WORK.
6. TEMPORARY TRAFFIC SIGNALS SHOULD NOT BE REMOVED UNTIL THE COMPLETION OF STAGE 2, ENSURING THAT THE EXISTING TRAFFIC SIGNAL SYSTEM IS FULLY OPERATIONAL.
7. THE TEMPORARY CONTROLLER AND CABINET SHALL BE NEW. PRIOR INSTALLATION, THE CONTRACTOR SHALL SHOP TEST THE TRAFFIC SIGNAL CONTROLLER AND CABINET AT THE EQUIPMENT VENDOR'S FACILITY IN THE PRESENCE OF IDOT, ICC AND THE MANUFACTURER'S REPRESENTATIVE.
8. USE THE EXISTING DOUBLE HANDHOLE IN THE NORTHEAST CORNER OF THE INTERSECTION, EXISTING CONDUITS, PRE-SIGNAL BEFORE THE RAILROAD TRACKS AND EXISTING PRE-SIGNAL DETECTION FOR THE STAGE CONSTRUCTION. THE EXISTING PRE-SIGNAL CABLES SHALL REMAIN IN THE EXISTING CONDUIT ALL THE WAY TO THE EXISTING DOUBLE HANDHOLE IN THE NORTHEAST CORNER. RUN 3" PVC CONDUIT FROM THE EXISTING DOUBLE HANDHOLE IN THE NORTHEAST CORNER TO THE TEMPORARY TRAFFIC SIGNAL CONTROLLER CABINET. AT TIME OF TEMPORARY SIGNAL ACTIVATION, RELOCATE EXISTING PRE-SIGNAL CABLES, PRE-SIGNAL DETECTOR CABLES AND RAILROAD INTERCONNECT CABLE FROM EXISTING TRAFFIC CONTROLLER TO TEMPORARY CONTROLLER. TEMPORARY TRAFFIC CONTROLLER TO BE LOCATED IN CLOSE PROXIMITY TO DOUBLE HANDHOLE TO ALLOW EXISTING CABLES TO REACH. CARE MUST BE TAKEN TO PREVENT ANY DAMAGE TO EXISTING CABLES. ONCE WORK IS COMPLETE AND OPERATION OF THE TEMPORARY TRAFFIC SIGNAL IS TERMINATED, ALL EXISTING CABLES SHALL BE RESTORED TO ORIGINAL CONDITION AND EXISTING TRAFFIC SIGNALS SHALL BE REACTIVATED. THE DRILLED HOLE IN THE DOUBLE HANDHOLE SHALL BE PATCHED. ALL COST ASSOCIATED TO THIS WORK INCLUDING BUT NOT LIMITED TO DRILLING EXISTING DOUBLE HANDHOLE, SPLICING AND CONNECTION OF THE EXISTING CABLE TO THE TEMPORARY CONTROLLER TO BE INCLUDED UNDER "TEMPORARY TRAFFIC SIGNAL INSTALLATION" SHALL NOT BE PAID SEPARATELY.
9. CONTRACTOR TO ENSURE THAT UNINTERRUPTED POWER SUPPLY TO THE EXISTING COMBINATION LIGHT POLES TO BE MAINTAINED DURING ALL STAGES OF CONSTRUCTION.
10. COVER/EXCHANGE EXISTING "NO TURN ON RED" SIGN WITH "NO RIGHT TURN" SIGN, DURING THIS STAGE. AT END OF STAGE, RESTORE ORIGINAL "NO TURN ON RED" SIGN.

TS SHT NO. 10



USER NAME = l1nho	DESIGNED - IS	REVISED -
PLOT SCALE = 40,0000' / in.	DRAWN - IS	REVISED -
PLOT DATE = 8/23/2022	CHECKED - ST	REVISED -
	DATE - 8/2022	REVISED -

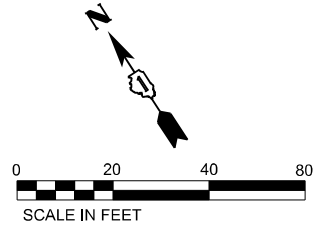
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**US RTE 14 (MINER ST) AT DES PLAINES RIVER RD
TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 1**

SCALE: 1"=20' SHEET 3 OF 12 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3512	2020-174-BR	COOK	63	36
CONTRACT NO. 62M56			ILLINOIS FED. AID PROJECT	

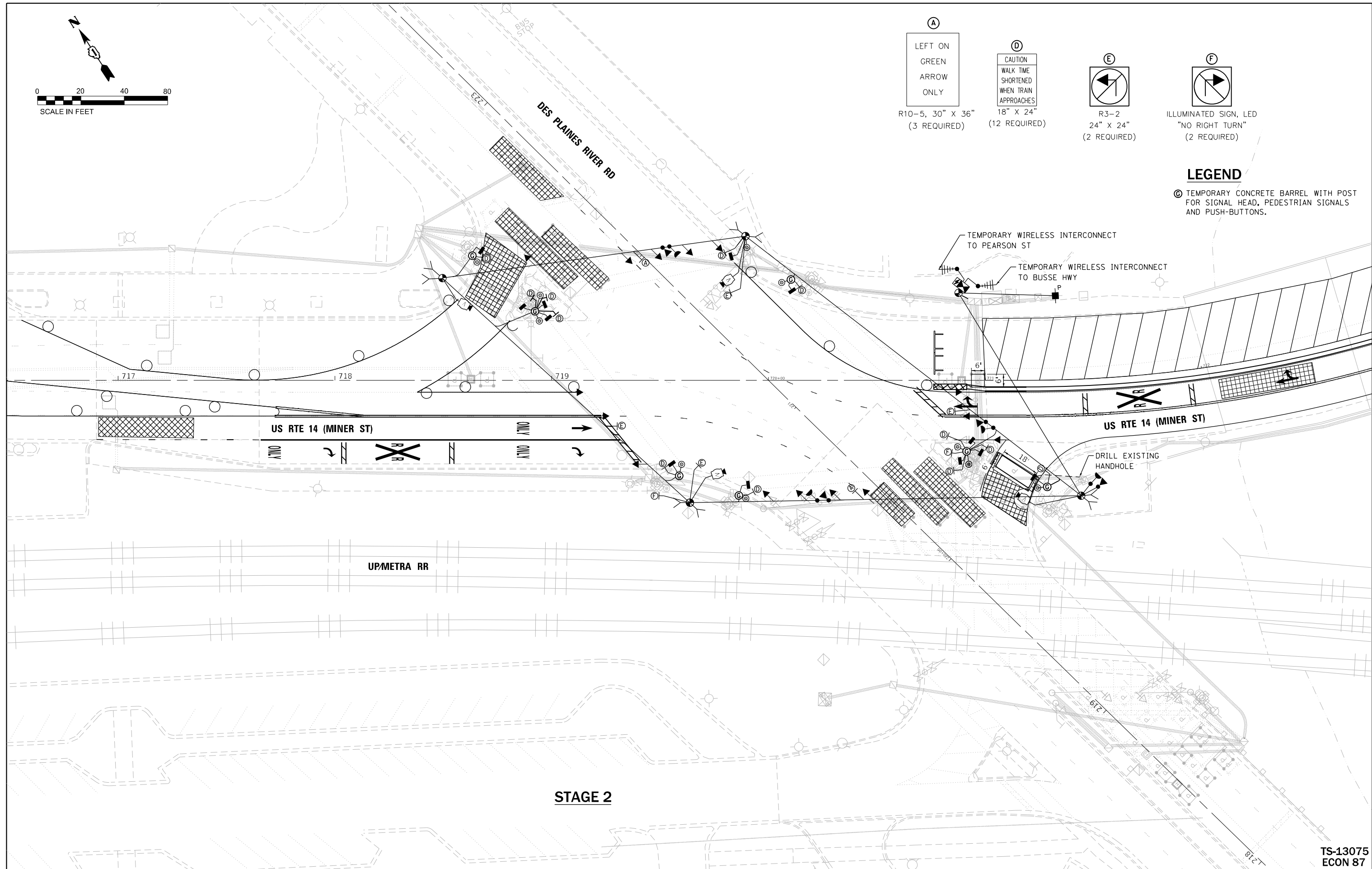
**TS-13075
ECON 87**



(A) LEFT ON GREEN ARROW ONLY R10-5, 30" X 36" (3 REQUIRED)	(D) CAUTION WALK TIME SHORTENED WHEN TRAIN APPROACHES 18" X 24" (12 REQUIRED)	(E) R3-2 24" X 24" (2 REQUIRED)	(F) ILLUMINATED SIGN, LED "NO RIGHT TURN" (2 REQUIRED)
--	---	---	---

LEGEND

⊙ TEMPORARY CONCRETE BARREL WITH POST FOR SIGNAL HEAD, PEDESTRIAN SIGNALS AND PUSH-BUTTONS.

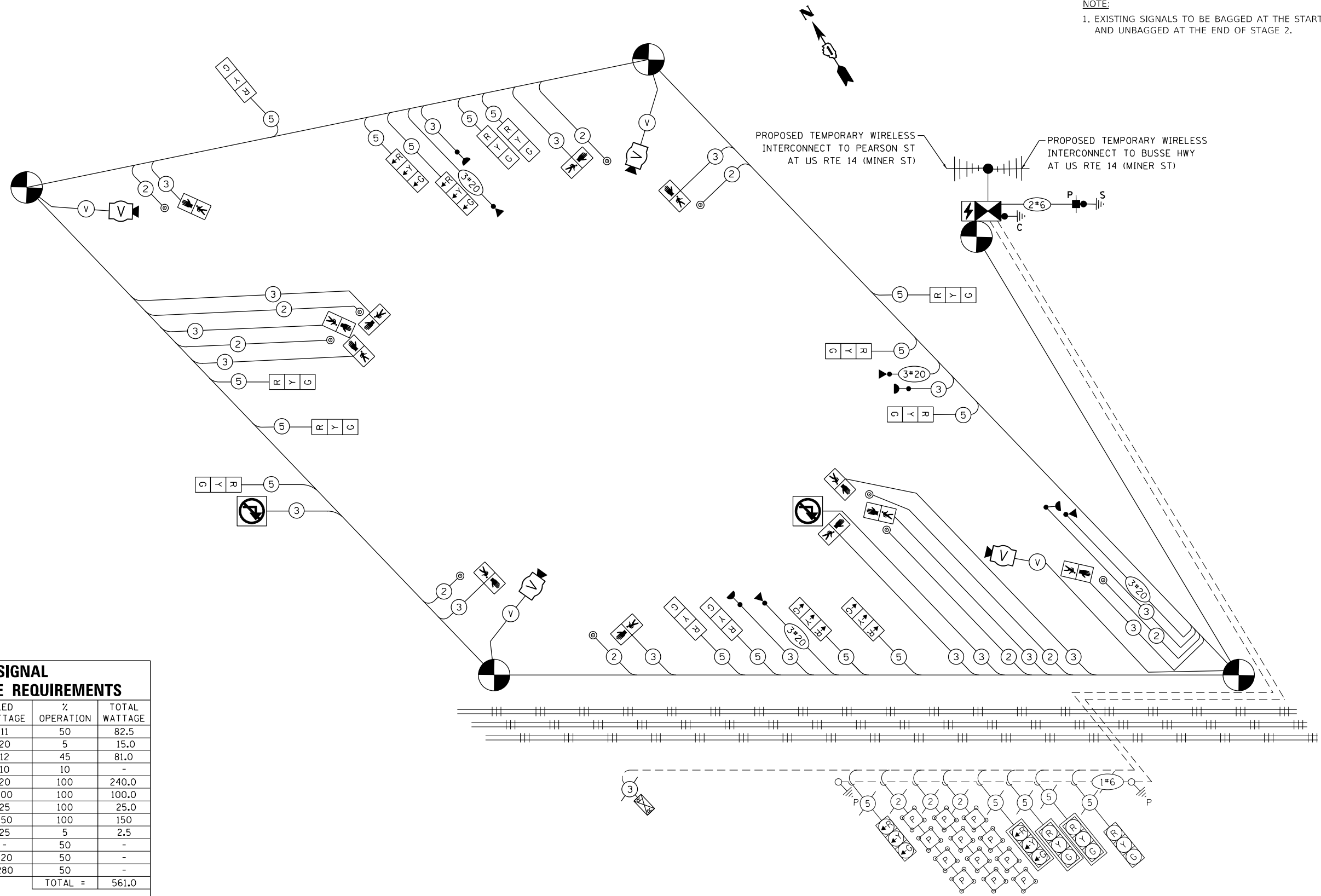


TS SHT NO. 11

TS-13075
ECON 87

	USER NAME = l4nho	DESIGNED - IS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	US RTE 14 (MINER ST) AT DES PLAINES RIVER RD TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 2	F.A.U. RTE. = 3512	SECTION = 2020-174-BR	COUNTY = COOK	TOTAL SHEETS = 63	SHEET NO. = 37
	PLOT SCALE = 40,0000' / in.	CHECKED - ST	REVISED -			CONTRACT NO. = 62M56	ILLINOIS FED. AID PROJECT			
	PLOT DATE = 8/23/2022	DATE = 8/2022	REVISED -	SCALE: 1"=20'		SHEET 4 OF 12 SHEETS		STA. TO STA.		

NOTE:
1. EXISTING SIGNALS TO BE BAGGED AT THE START OF STAGE 1 AND UNBAGGED AT THE END OF STAGE 2.



TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	15	11	50	82.5
(YELLOW)	15	20	5	15.0
(GREEN)	15	12	45	81.0
PERMISSIVE ARROW	-	10	10	-
PED. SIGNAL	12	20	100	240.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	1	150	100	150
BLANK-OUT SIGN	2	25	5	2.5
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	280	50	-
TOTAL =				561.0

ENERGY COSTS TO:

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

ENERGY SUPPLY: CONTACT: ELLIE SARALLO
PHONE: (630) 424-5124
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

TEMPORARY CABLE PLAN

STAGE 1 & STAGE 2
(NOT TO SCALE)

TS SHT NO. 12



USER NAME = l1nho
DESIGNED - IS
DRAWN - IS
PLOT SCALE = 40,0000 * / in.
PLOT DATE = 8/23/2022

REVISIED -
REVISIED -
CHECKED - ST
DATE - 8/2022

REVISIED -
REVISIED -
REVISIED -
REVISIED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US RTE 14 (MINER ST) AT DES PLAINES RIVER RD
TEMPORARY CABLE PLAN - STAGE 1 & STAGE 2

SCALE: 1"=20' SHEET 5 OF 12 SHEETS STA. TO STA.

TS-13075
ECON 87

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3512	2020-174-BR	COOK	63	38
CONTRACT NO. 62M56				
ILLINOIS FED. AID PROJECT				

TEMPORARY SEQUENCE OF OPERATION (FOR ALL STAGES)

MOVEMENT	2+6				3+7								3+8								4+7				4+8				F L A S H									
PHASE	1	2	3A	3B	4	5A	5B	6A	6B	6C	6D	7A	7B	7C	7D	8	9	10A	10B	10C	10D	11A	11B	11C	11D	12	13	14A		14B	15A	15B	16	17	18A	18B	18C	18D
INTERVAL																																						
CHANGE TO			3+7 3+8 4+7 4+8				3+8								2+6 4+8																							
DES PLAINES RIVER ROAD (SOUTH OF TRACKS) RIGHT LOW MOUNT AND TWO RIGHT CANTILEVER SIGNALS	N/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Y	R	R	R	
DES PLAINES RIVER ROAD (SOUTH OF TRACKS) MEDIAN LOW MOUNT AND MEDIAN CANTILEVER SIGNALS	N/B	←R	←R	←R	←R	←G	←G	←G	←Y	←R	←R	←R	←R	←R	←R	←G	←G	←Y	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	
DES PLAINES RIVER ROAD (NORTH OF TRACKS) TWO FAR RIGHT SPAN WIRE SIGNALS	N/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	G	G	Y	R	G	G	G	G	R	R	R	R	R	R	G	G	G	G	Y	R	
DES PLAINES RIVER ROAD (NORTH OF TRACKS) TWO FAR LEFT SPAN WIRE SIGNALS WITH LEFT TURN ARROWS	N/B	←R	←R	←R	←R	←G	←G	←G	←G	←Y	←R	←R	←R	←R	←R	←G	←G	←Y	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	
DES PLAINES RIVER ROAD NEAR RIGHT AND TWO FAR RIGHT SPAN WIRE SIGNALS	S/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	
DES PLAINES RIVER ROAD TWO FAR LEFT SPAN WIRE SIGNALS WITH LEFT TURN ARROWS	S/B	←R	←R	←R	←R	←G	←Y	←R	←G	←G	←G	←G	←G	←G	←G	←Y	←R	←R	←R	←R	←R	←R	←R	←R	←R	←G	←G	←Y	←R	←Y	←R	←R	←R	←R	←R	←R	←R	
U.S. ROUTE 14 (MINER STREET) NEAR RIGHT AND TWO FAR RIGHT SPAN WIRE SIGNALS	E/B	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	
U.S. ROUTE 14 (MINER STREET) NEAR RIGHT AND TWO FAR RIGHT SPAN WIRE SIGNALS	W/B	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	
PEDESTRIAN SIGNALS CROSSING DES PLAINES RIVER ROAD ON NORTH SIDE OF U.S. ROUTE 14		* P	** FH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
PEDESTRIAN SIGNALS CROSSING BETWEEN NORTHWEST CORNER ISLAND AND NORTHWEST CORNER		* P	** FH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
PEDESTRIAN SIGNALS CROSSING DES PLAINES RIVER ROAD ON SOUTH SIDE OF U.S. ROUTE 14		* P	** FH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
PEDESTRIAN SIGNALS CROSSING BETWEEN SOUTHEAST CORNER ISLAND AND SOUTHEAST CORNER		* P	** FH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
PEDESTRIAN SIGNALS CROSSING U.S. ROUTE 14 ON EAST SIDE OF DES PLAINES RIVER ROAD		H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	* P	** FH	H	H	H	H	
PEDESTRIAN SIGNALS CROSSING U.S. ROUTE 14 ON WEST SIDE OF DES PLAINES RIVER ROAD		H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	* P	** FH	H	H	H	H	

PHASE 2+6 SHALL BE PLACED ON RECALL.

* TO APPEAR ONLY UPON PUSH-BUTTON ACTUATION.

** FLASHING [FH] IS TO TERMINATE AT THE COMPLETION OF THE PEDESTRIAN INTERVAL CLEARANCE.

∅ THIS [P] OR FLASHING [FH] INTERVAL MAY FINISH TIMING IN THE BI-DIRECTIONAL STRAIGHT THROUGH MOVEMENT IF THE LEFT ARROW TIME IS NOT SUFFICIENT TO COMPLETE [P] OR FLASHING [FH] INTERVALS. [P] AND [FH] TIMINGS TO BE SET ONLY ON THE PHASES WHERE [P] AND FLASHING [FH] ARE INDICATED IN THE SEQUENCE OF OPERATION.

P = ILLUMINATED PERSON = WALK

FH = ILLUMINATED FLASHING HAND = FLASHING DON'T WALK

H = ILLUMINATED SOLID HAND = DON'T WALK

TS SHT NO. 13

TS-13075
ECON 87



USER NAME = l1nho	DESIGNED - IS	REVISED -
DRAWN - IS	REVISED -	
PLOT SCALE = 100,0000' / in.	CHECKED - ST	REVISED -
PLOT DATE = 8/25/2022	DATE - 8/2022	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**US RTE 14 (MINER ST) AT DES PLAINES RIVER RD
TEMPORARY SEQUENCE OF OPERATION**

SCALE: N.T.S. SHEET 6 OF 12 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3512	2020-174-BR	COOK	63	39
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62M56	

**TEMPORARY RAILROAD PREEMPTION SEQUENCE OF OPERATION
(FOR ALL STAGES)**


	PREEMPTION SEQUENCE																PREEMPTOR NUMBER 3	PREEMPTOR NUMBER 4	PREEMPTOR NUMBER 5	PREEMPTOR NUMBER 6	PREEMPTOR NUMBER 2						
CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER	1	4	8	12	16																						
CHANGE FROM EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER																	2	3	4	5							
RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1A	1B	1C	1D	1E	1F	1G	1H	1J	1K	1L	1M	1P	1Q	1R	1S	1T	1U	2	3	4	5	CLEAR TO NORMAL SEQUENCE				
CHANGE TO RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1B	2	1D	2	1F	2	1H	2	1K	2	1M	2	1Q	2	1S	2	1U	2	3	4	5						
DES PLAINES RIVER ROAD (SOUTH OF TRACKS) RIGHT LOW MOUNT AND TWO RIGHT CANTILEVER SIGNALS	N/B	R	R	R	R	Y	R	R	R	Y	R	R	R	R	R	R	Y	R	R	R	R	R	◇				
DES PLAINES RIVER ROAD (SOUTH OF TRACKS) MEDIAN LOW MOUNT AND MEDIAN CANTILEVER SIGNALS	N/B	←R	←R	←Y	←R	←Y	←R	←R	←R	←R	←R	←R	←R	←R	←R	←Y	←R	←R	←R	←R	←R	←R	◇				
DES PLAINES RIVER ROAD (NORTH OF TRACKS) TWO FAR RIGHT SPAN WIRE SIGNALS	N/B	R	R	R	R	G	G	R	R	G	G	R	R	R	R	R	G	G	G	Y	R	R	◇				
DES PLAINES RIVER ROAD (NORTH OF TRACKS) TWO FAR LEFT SPAN WIRE SIGNALS WITH LEFT TURN ARROWS	N/B	←R	←R	←G	←G	←G	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←G	←G	←G	←Y	←R	←R	◇				
DES PLAINES RIVER ROAD NEAR RIGHT AND TWO FAR RIGHT SPAN WIRE SIGNALS	S/B	R	R	R	R	R	Y	R	Y	R	R	R	Y	R	R	R	R	R	R	R	R	R	◇				
DES PLAINES RIVER ROAD TWO FAR LEFT SPAN WIRE SIGNALS WITH LEFT TURN ARROWS	S/B	←R	←R	←Y	←R	←R	←Y	←R	←R	←R	←R	←R	←Y	←R	←R	←R	←R	←R	←R	←R	←R	←R	◇				
U.S. ROUTE 14 (MINER STREET) NEAR RIGHT AND TWO FAR RIGHT SPAN WIRE SIGNALS	E/B	Y	R	R	R	R	R	R	R	R	Y	R	R	R	R	R	R	R	R	R	R	G	◇				
U.S. ROUTE 14 (MINER STREET) NEAR RIGHT AND TWO FAR RIGHT SPAN WIRE SIGNALS	W/B	Y	R	R	R	R	R	R	R	R	R	R	R	R	Y	R	R	R	R	R	R	G	◇				
PEDESTRIAN SIGNALS CROSSING DES PLAINES RIVER ROAD ON NORTH SIDE OF U.S. ROUTE 14	**FH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	◇				
PEDESTRIAN SIGNALS CROSSING BETWEEN NORTHWEST CORNER ISLAND AND NORTHWEST CORNER	**FH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	◇				
PEDESTRIAN SIGNALS CROSSING DES PLAINES RIVER ROAD ON SOUTH SIDE OF U.S. ROUTE 14	**FH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	◇				
PEDESTRIAN SIGNALS CROSSING BETWEEN SOUTHEAST CORNER ISLAND AND SOUTHEAST CORNER	**FH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	◇				
PEDESTRIAN SIGNALS CROSSING U.S. ROUTE 14 ON EAST SIDE OF DES PLAINES RIVER ROAD	H	H	H	H	**FH	H	H	H	**FH	H	H	H	H	H	H	H	H	H	H	H	H	H	◇				
PEDESTRIAN SIGNALS CROSSING U.S. ROUTE 14 ON WEST SIDE OF DES PLAINES RIVER ROAD	H	H	H	H	H	**FH	H	**FH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	◇				
INTERNALLY ILLUMINATED NO RIGHT TURN SIGNS	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT					

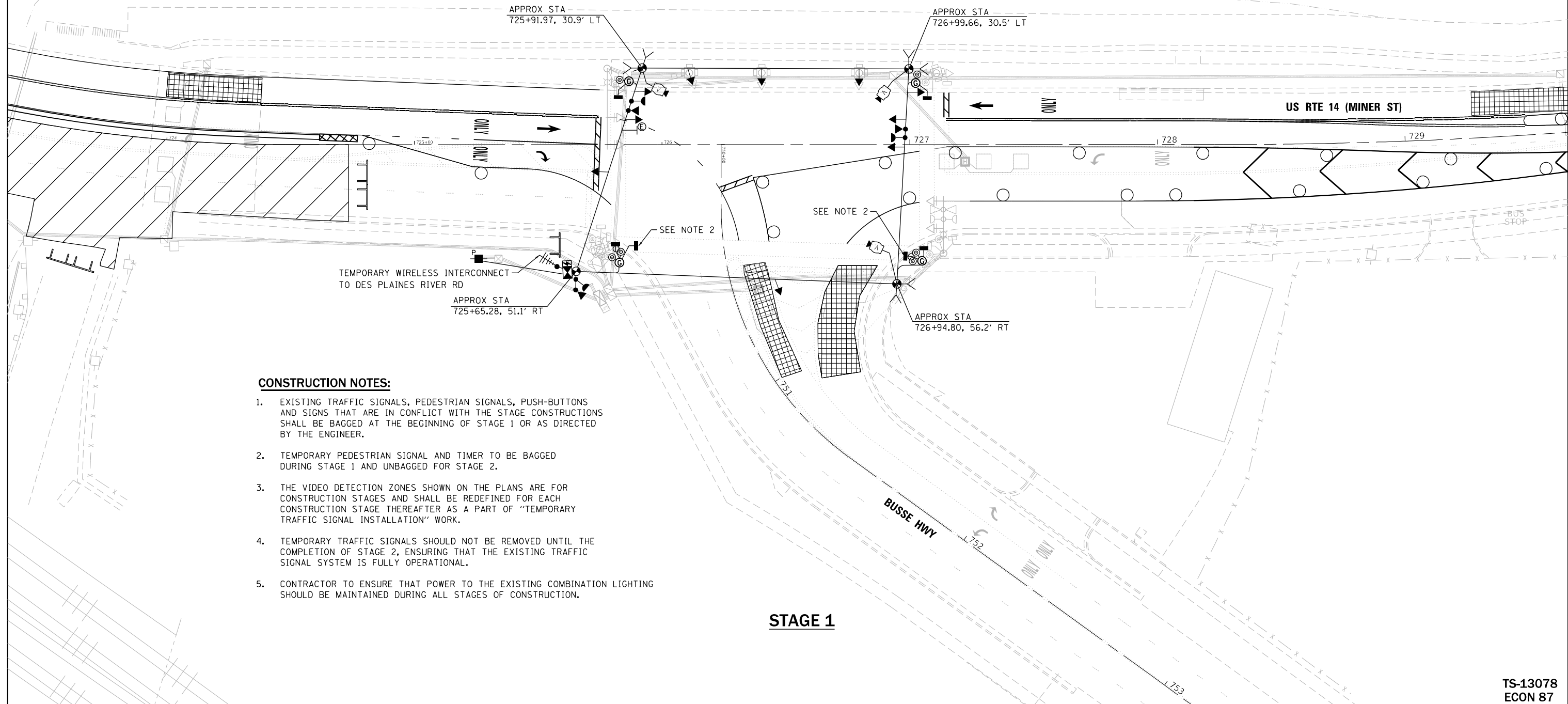
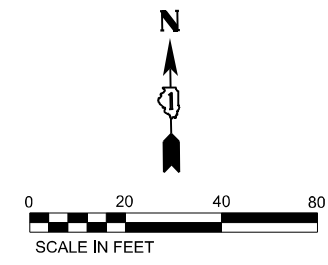
HOLD

◇ RAILROAD PREEMPTION SEQUENCE SHALL PROVIDE THE PROPER CLEARANCE INTERVAL TO RESUME THE NORMAL SEQUENCE OF OPERATION OR PROPER CLEARANCE INTERVAL (IF APPLICABLE) AFTER RAILROAD PREEMPTION INTERVAL 5 IS TERMINATED

TS SHT NO. 15

TS-13075
ECON 87

(E)

 R3-2
 24" X 24"
 (1 REQUIRED)



CONSTRUCTION NOTES:

1. EXISTING TRAFFIC SIGNALS, PEDESTRIAN SIGNALS, PUSH-BUTTONS AND SIGNS THAT ARE IN CONFLICT WITH THE STAGE CONSTRUCTIONS SHALL BE BAGGED AT THE BEGINNING OF STAGE 1 OR AS DIRECTED BY THE ENGINEER.
2. TEMPORARY PEDESTRIAN SIGNAL AND TIMER TO BE BAGGED DURING STAGE 1 AND UNBAGGED FOR STAGE 2.
3. THE VIDEO DETECTION ZONES SHOWN ON THE PLANS ARE FOR CONSTRUCTION STAGES AND SHALL BE REDEFINED FOR EACH CONSTRUCTION STAGE THEREAFTER AS A PART OF "TEMPORARY TRAFFIC SIGNAL INSTALLATION" WORK.
4. TEMPORARY TRAFFIC SIGNALS SHOULD NOT BE REMOVED UNTIL THE COMPLETION OF STAGE 2, ENSURING THAT THE EXISTING TRAFFIC SIGNAL SYSTEM IS FULLY OPERATIONAL.
5. CONTRACTOR TO ENSURE THAT POWER TO THE EXISTING COMBINATION LIGHTING SHOULD BE MAINTAINED DURING ALL STAGES OF CONSTRUCTION.

STAGE 1

TS SHT NO. 16



USER NAME = 14nho	DESIGNED - IS	REVISED -
PLOT SCALE = 40,0085' / in.	DRAWN - IS	REVISED -
PLOT DATE = 8/25/2022	CHECKED - ST	REVISED -
	DATE - 8/2022	REVISED -

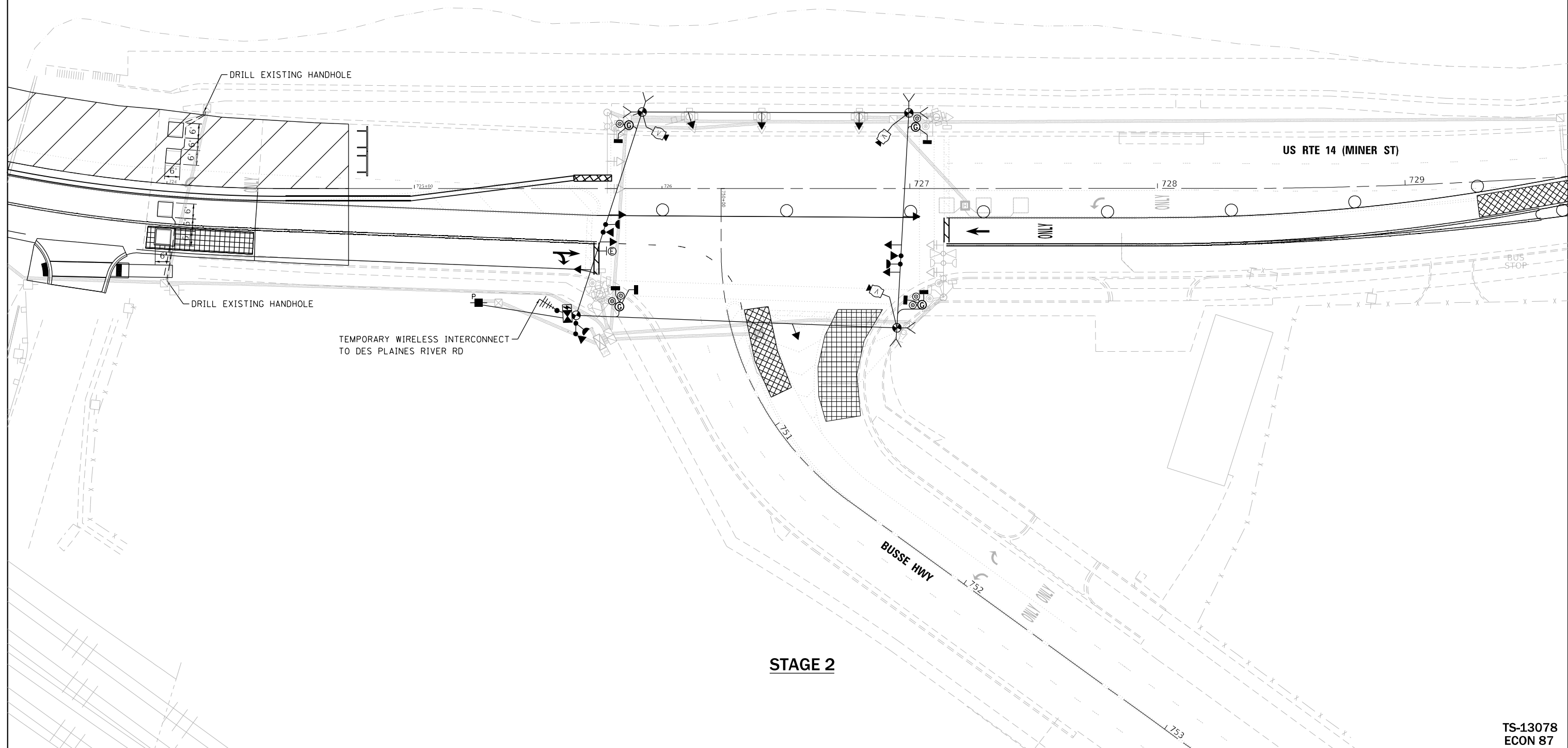
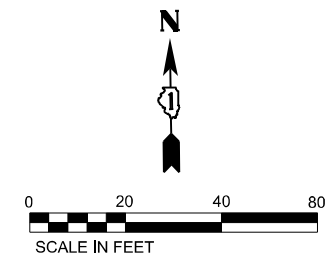
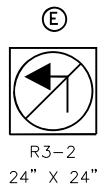
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US RTE 14 (MINER ST) AT BUSSE HWY
TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 1

SCALE: 1"=20' SHEET 9 OF 12 SHEETS STA. TO STA.

F.A.U. RTE. 3512	SECTION 2020-174-BR	COUNTY COOK	TOTAL SHEETS 63	SHEET NO. 42
			CONTRACT NO. 62M56	
ILLINOIS FED. AID PROJECT				

TS-13078
ECON 87



TS SHT NO. 17

STAGE 2

**TS-13078
ECON 87**



USER NAME = 14nho	DESIGNED - IS	REVISED -
	DRAWN - IS	REVISED -
PLOT SCALE = 40,0085' / in.	CHECKED - ST	REVISED -
PLOT DATE = 8/25/2022	DATE - 8/2022	REVISED -

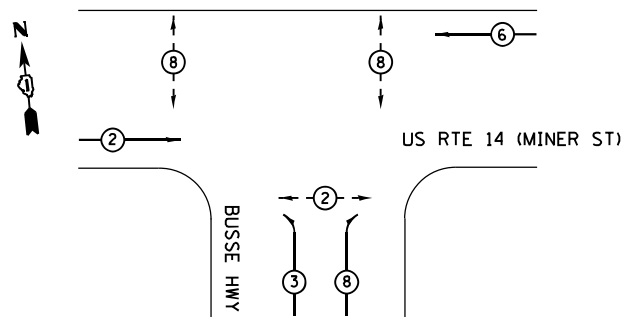
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**US RTE 14 (MINER ST) AT BUSSE HWY
TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 2**

SCALE: 1"=20' SHEET 10 OF 12 SHEETS STA. TO STA.

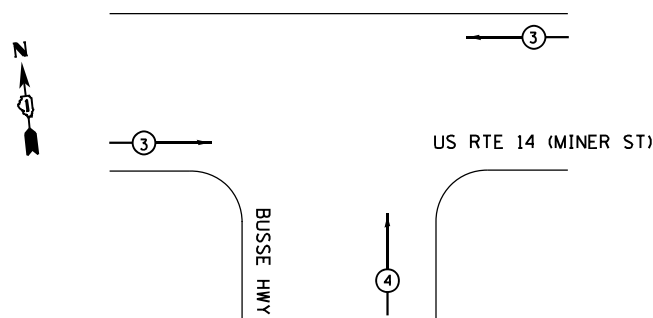
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3512	2020-174-BR	COOK	63	43
				CONTRACT NO. 62M56
ILLINOIS FED. AID PROJECT				

CONTROLLER SEQUENCE



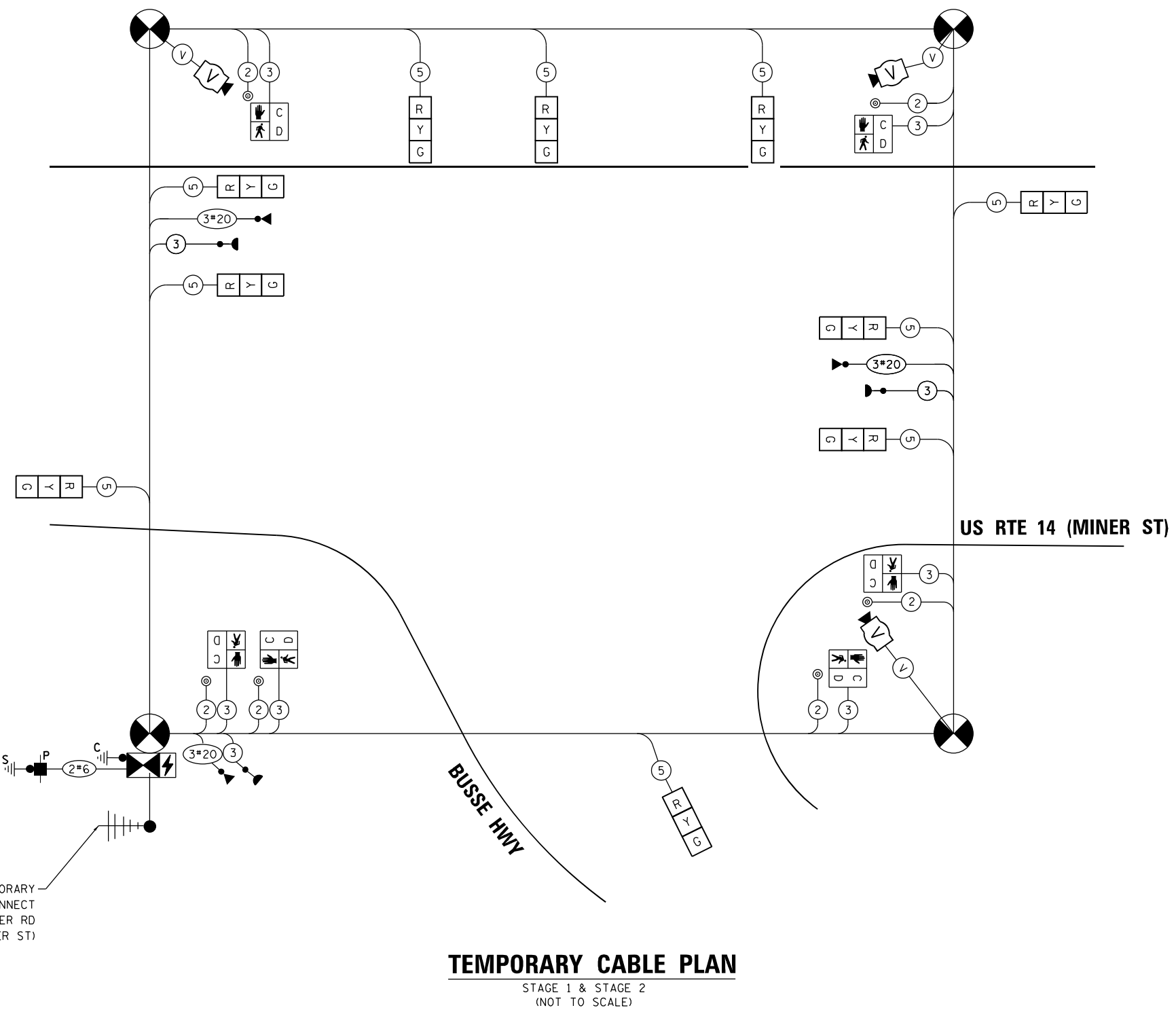
TEMPORARY PHASE DESIGNATION DIAGRAM

TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE



LEGEND

- ← ⊙ ← PROTECTED PHASE
- ← ⊙ - PROTECTED/PERMITTED PHASE
- ← ⊙ → PEDESTRIAN PHASE
- ← ⊙ OL OVERLAP
- * NUMBER REFERS TO ASSOCIATED PHASE



TEMPORARY CABLE PLAN

STAGE 1 & STAGE 2
(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	-	10	10	-
PED. SIGNAL	4	20	100	80.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	1	150	100	150.0
BLANK-OUT SIGN	1	25	5	1.3
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	280	50	-
TOTAL =				475.3

ENERGY COSTS TO:

ILLINOIS DEPARTMENT OF TRANSPORTATION
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196-1096
ENERGY SUPPLY: CONTACT: ELLIE SARALLO
PHONE: (630) 424-5124
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

NOTE:

- EXISTING SIGNALS TO BE BAGGED AT THE START OF STAGE 1 AND UNBAGGED AT THE END OF STAGE 2.

TS SHT NO. 18



USER NAME = 14nho
DESIGNED - IS
DRAWN - IS
PLOT SCALE = 40,0000 * / in.
CHECKED - ST
PLOT DATE = 8/23/2022
DATE - 8/2022

REVISD -
REVISD -
REVISD -
REVISD -

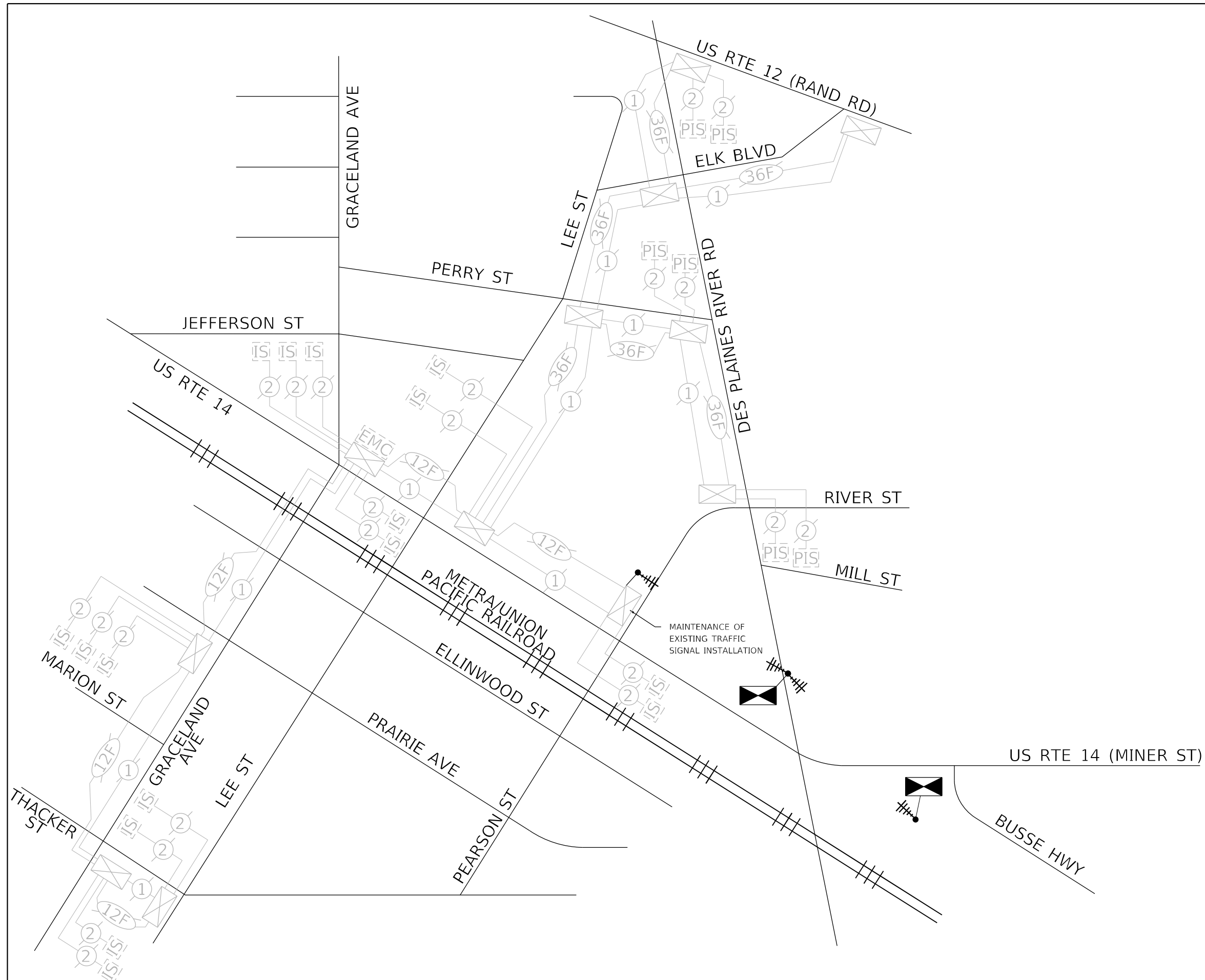
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US RTE 14 (MINER ST) AT BUSSE HWY
TEMPORARY CABLE PLAN - STAGE 1 & STAGE 2

SCALE: 1"=20' SHEET 11 OF 12 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3512	2020-174-BR	COOK	63	44
			CONTRACT NO. 62M56	
ILLINOIS FED. AID PROJECT				

TS-13078
ECON 87



TS SHT NO. 19

ECON 87



USER NAME = l4nho	DESIGNED - IS	REVISED -
	DRAWN - IS	REVISED -
PLOT SCALE = 100,000' / in.	CHECKED - ST	REVISED -
PLOT DATE = 8/23/2022	DATE - 8/2022	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**US RTE 14 (MINER ST) AT DES PLAINES RIVER RD
TEMPORARY INTERCONNECT SCHEMATIC**

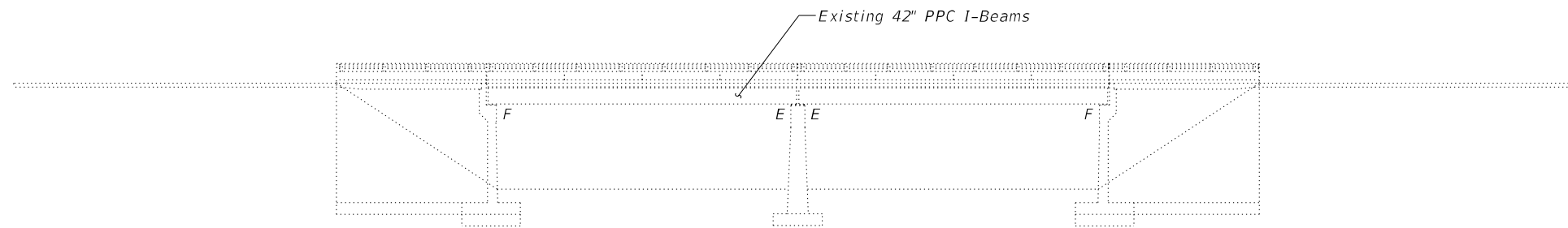
SCALE: N.T.S. SHEET 12 OF 12 SHEETS STA. TO STA.

F.A.U. RTE. 3512	SECTION 2020-174-BR	COUNTY COOK	TOTAL SHEETS 63	SHEET NO. 45
			CONTRACT NO. 62M56	
ILLINOIS FED. AID PROJECT				

Existing Structure: SN 016-0238 built in 1925 as SBI Rte. 19, Section 86D at Sta. 214+25. In 1930, the bridge was widened in kind. In 1986, the superstructure was replaced and the substructure widened. The structure is a 2-span bridge with a 7½" deck on PPC I-beams, measuring 132'-7¼" back to back abutments with no skew. The out to out width varies 69'-8" to 74'-9". The concrete substructure units are comprised of closed wall abutments and solid wall piers. Stage construction will be utilized to maintain one lane of traffic in each direction.

INDEX OF SHEETS

1. General Plan & Elevation
2. General Data
3. Stage Construction Details
4. Deck Slab Repair Plan
- 5-7. Joint Replacement Details
8. Preformed Joint Strip Seal
9. Bar Splicer Assembly Details
10. Substructure Repairs

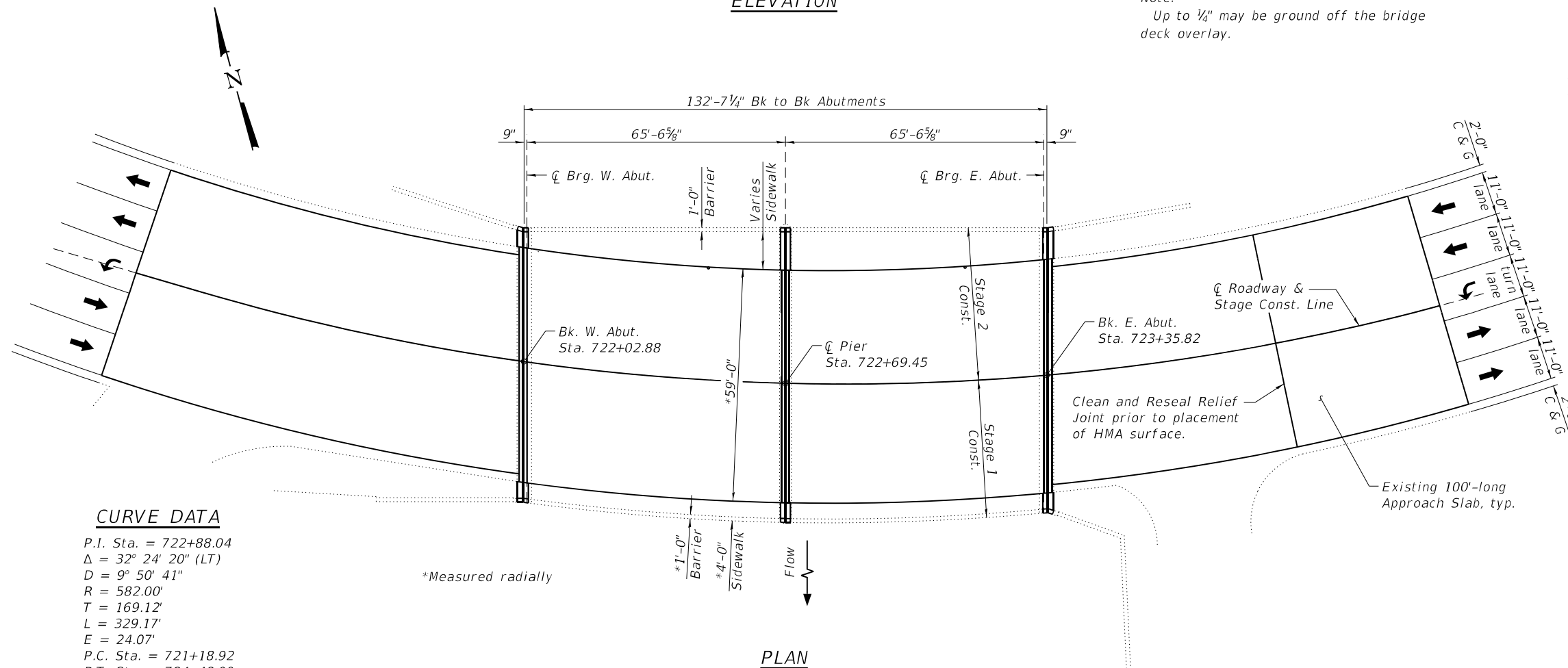


ELEVATION

Note:
Up to ¼" may be ground off the bridge deck overlay.

SCOPE OF WORK

1. Remove portions of existing concrete deck and parapets as required to replace expansion joints over abutments and pier.
2. Perform ¾" scarification to top of existing bridge deck.
3. Complete concrete repairs to the bridge deck and approach slabs.
4. Provide new strip seal expansion joints and adjacent superstructure concrete over abutments and pier.
5. Place 2¾" latex concrete overlay on bridge deck and HMA surface on approach slabs.
6. Perform ¼" diamond grinding on new overlay.
7. Perform bridge deck grooving on new overlay.
8. Apply protective coat to new overlay, and to the top/inside faces of parapet and sidewalk surfaces.
9. Plug northwesternmost deck floor drain.
10. Clean and paint the steel portions of all existing bearings.
11. Perform concrete repairs at east abutment.

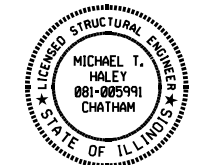


PLAN

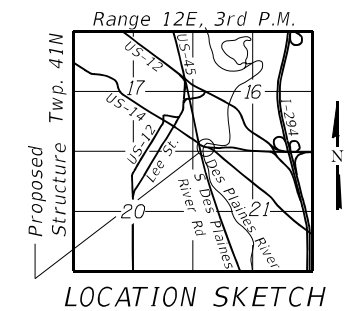
CURVE DATA

P.I. Sta. = 722+88.04
 $\Delta = 32^\circ 24' 20"$ (LT)
 $D = 9^\circ 50' 41"$
 $R = 582.00'$
 $T = 169.12'$
 $L = 329.17'$
 $E = 24.07'$
P.C. Sta. = 721+18.92
P.T. Sta. = 724+48.09

*Measured radially



Michael J. Haley 8/25/2022
Michael T. Haley Date
Licensed Structural Engineer
State of Illinois No. 081-005991
Expires 11/30/2022



GENERAL PLAN & ELEVATION
US RTE. 14 (MINER ST) OVER DES PLAINES RIVER
F.A.U. RTE. 3512 - SEC. 2020-174-BR
COOK COUNTY
STATION 722+69.45
STRUCTURE NO. 016-0238

DESIGN SPECIFICATIONS

(New Construction)
2002 AASHTO Standard Specifications
for Highway Bridges

DESIGN STRESSES

FIELD UNITS - NEW CONSTRUCTION
 $f'_c = 4,000$ psi (Superstructure)
 $f_y = 60,000$ psi (Reinforcement)

LOADING HS-20

(Original Construction)
No allowance for future wearing surface.

STATE OF ILLINOIS
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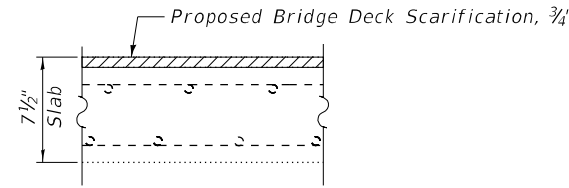
SHEET 1 OF 10 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3512	2020-174-BR	COOK	63	46
CONTRACT NO. 62M56				

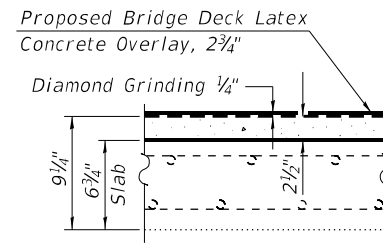
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GENERAL NOTES

1. Reinforcement bars designated (E) shall be epoxy coated.
2. 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.
3. Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.
4. Cost of removal and disposal of existing expansion joints shall be included in the cost of Concrete Removal.
5. Protective Coat shall be applied to the top surface of new overlay, and to the inside and top faces of the parapet and sidewalk surfaces.
6. Joint openings shall be adjusted according to Article 520.04 of the Std. Specs. when the concrete adjacent to joints is poured at an ambient temperature other than 50°F.
7. Expansion joints shall be fabricated to conform to the existing cross slope of the bridge.
8. The Contractor shall exercise care during removal of existing joints to ensure that the slab, beams, and diaphragms' integrity will not be detrimentally impacted. The Contractor shall repair any damage(s) to the slab, beams and diaphragms caused by their operation as directed by the Engineer at no additional cost to the Department.
9. Cleaning and painting of the existing structural steel shall be as specified in the special provision for "Cleaning and Painting Existing Steel Structures". All bearings shall be cleaned per Near White Blast Cleaning (SSPC-SP10) and shall be painted according to the requirements of Organic Zinc-Rich / Epoxy / Urethane paint system. The color of the final finish coat for all steel surfaces shall be Gray, Munsell No 5B 7/1.
10. Containment of cleaning residue is required to control nuisance dust. See special provisions.
11. Contractor must maintain safe access to the Des Plaines River Trail during parapet and abutment repairs. Cost included with Concrete Removal.



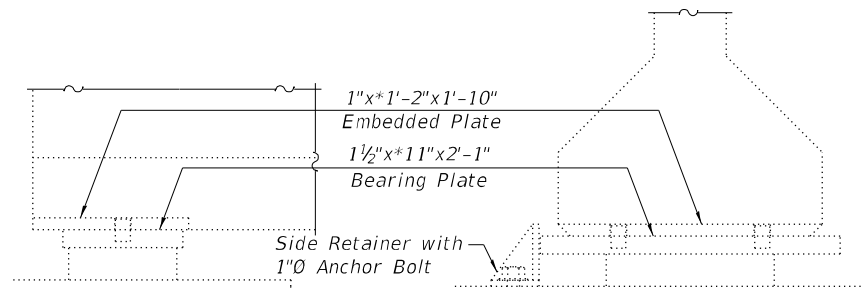
EXISTING BRIDGE DECK CROSS SECTION



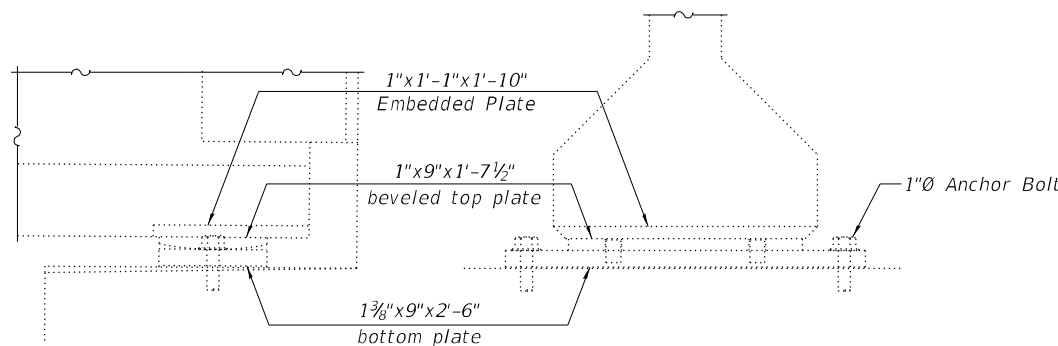
PROPOSED BRIDGE DECK CROSS SECTION

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu. Yd.	10.2	-	10.2
Concrete Superstructure	Cu. Yd.	11.8	-	11.8
Protective Coat	Sq. Yd.	1,098	-	1,098
Reinforcement Bars, Epoxy Coated	Pound	1,320	-	1,320
Bar Splicers	Each	12	-	12
Preformed Joint Strip Seal	Foot	211	-	211
Epoxy Crack Injection	Foot	-	17	17
Bridge Deck Grooving (Longitudinal)	Sq. Yd.	851	-	851
Approach Slab Repair (Full Depth)	Sq. Yd.	9	-	9
Approach Slab Repair (Partial Depth)	Sq. Yd.	4	-	4
Bridge Deck Latex Concrete Overlay, 2 3/4 Inches	Sq. Yd.	872	-	872
Bridge Deck Scarification, 3/4 Inch	Sq. Yd.	872	-	872
Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	Sq. Ft.	26	4	30
Structural Repair of Concrete (Depth Greater Than 5 Inches)	Sq. Ft.	-	12	12
Diamond Grinding (Bridge Section)	Sq. Yd.	813	-	813
Cleaning and Painting Steel Bridge No. 1	L. Sum	1	-	1
Containment and Disposal of Non-Lead Painting Residues No. 1	L. Sum	1	-	1
Polymer Concrete	Cu. Ft.	5.8	-	5.8
Plug Existing Deck Drains	Each	1	-	1
Clean and Reseal Relief Joint	Foot	55	-	55



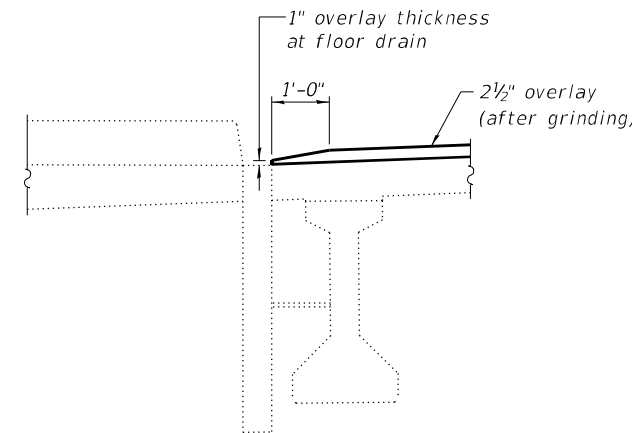
PIER BEARINGS



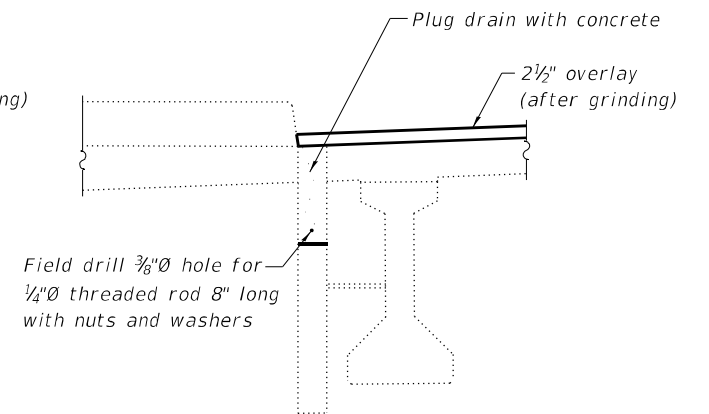
ABUTMENT BEARINGS

STEEL PAINTING DETAILS

*Dimensions shown are for interior beams. Exterior beams have a 1'-2 1/2" embedded plate and a 12" bearing plate.



OVERLAY AT DRAIN DETAIL

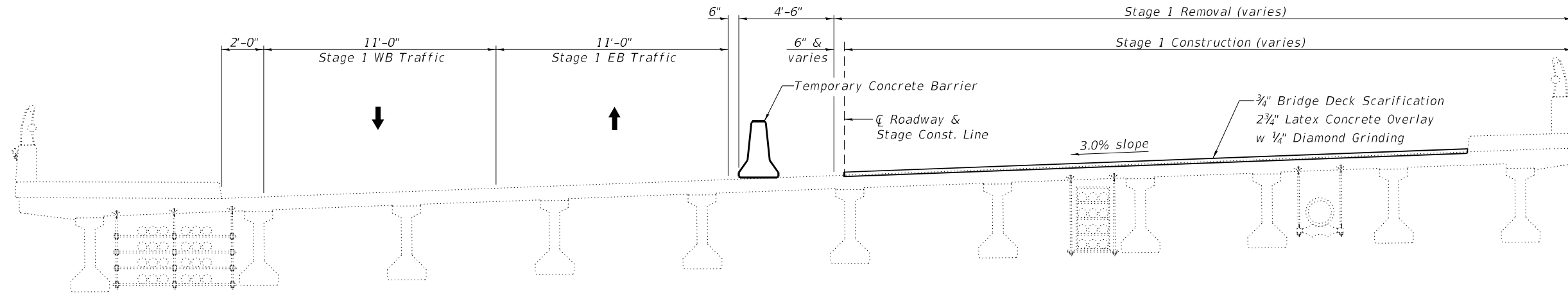


PLUGGING DECK DRAIN DETAIL

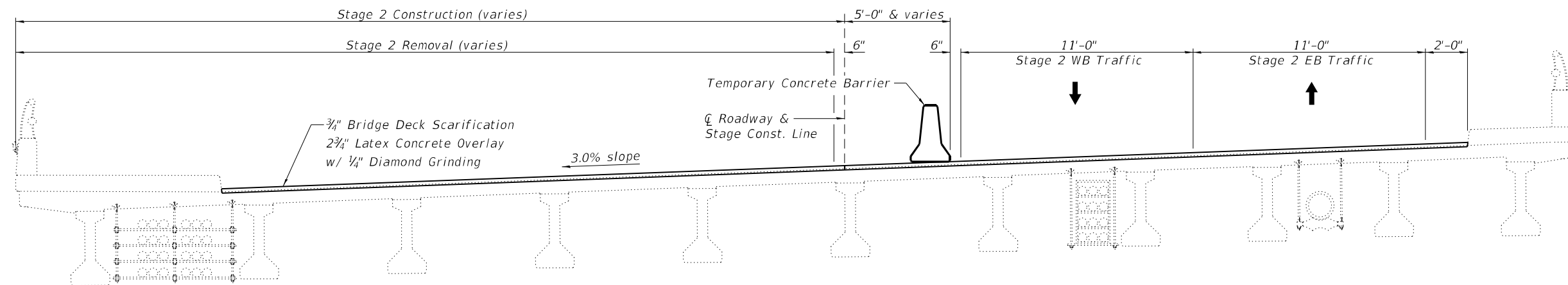
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PLOT SCALE =	CHECKED - RJM	REVISED -
PLOT DATE = 8/25/2022	DRAWN - AJF	REVISED -
	CHECKED - MTH	REVISED -

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3512	2020-174-BR	COOK	63	47
CONTRACT NO. 62M56				
ILLINOIS FED. AID PROJECT				



STAGE 1 REMOVAL & CONSTRUCTION



STAGE 2 REMOVAL & CONSTRUCTION

Notes:
 All sections are looking east.
 See Roadway Plans for Temporary Concrete Barrier quantities.
 All transverse dimensions are measured radial to CL Roadway.

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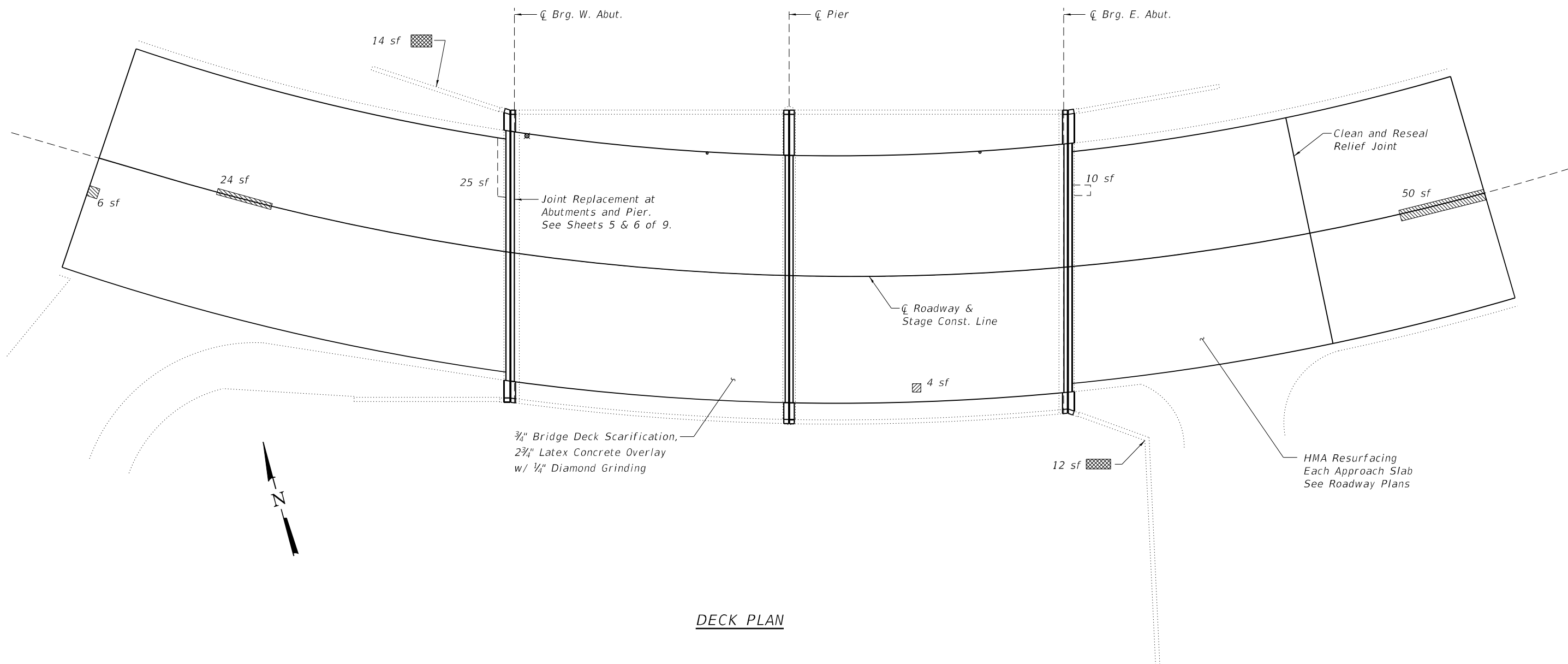
LIN ENGINEERING, LTD.
 Consulting Engineers
 Springfield, Illinois

USER NAME =	DESIGNED - MTH	REVISED -
	CHECKED - RJM	REVISED -
PLOT SCALE =	DRAWN - AJF	REVISED -
PLOT DATE = 8/25/2022	CHECKED - MTH	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION DETAILS
STRUCTURE NO. 016-0238

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3512	2020-174-BR	COOK	63	48
CONTRACT NO. 62M56				
ILLINOIS		FED. AID PROJECT		



DECK PLAN

LEGEND

- Indicates Approach Slab Repair (Partial Depth)
- Indicates Approach Slab Repair (Full Depth)
- Indicates Deck Slab Repair (Partial) (For information only)
- Indicates Structural Repair of Concrete (Depth Less than or Equal to 5 inches)
- ✕ Plug Existing Deck Drains
- sf - Square Feet

Notes:
 Repair areas shown are estimated. The Engineer shall document actual locations of repairs on As-Built Plans.
 Quantity listed for Deck Slab Repair (Partial) is for information only. See Bridge Deck Latex Concrete Overlay Special Provisions.

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Approach Slab Repair (Full Depth)	Sq. Yd.	9
Approach Slab Repair (Partial Depth)	Sq. Yd.	4
Plug Existing Deck Drains	Each	1
Structural Repair of Concrete (Depth Less than or equal to 5 inches)	Sq. Ft.	26
Clean and Reseal Relief Joint	Foot	55

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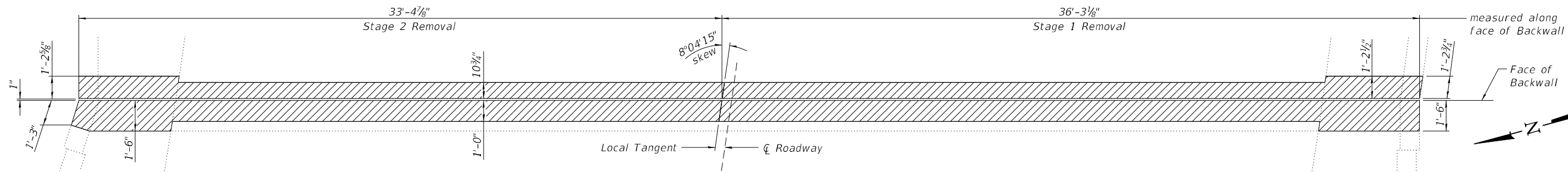
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

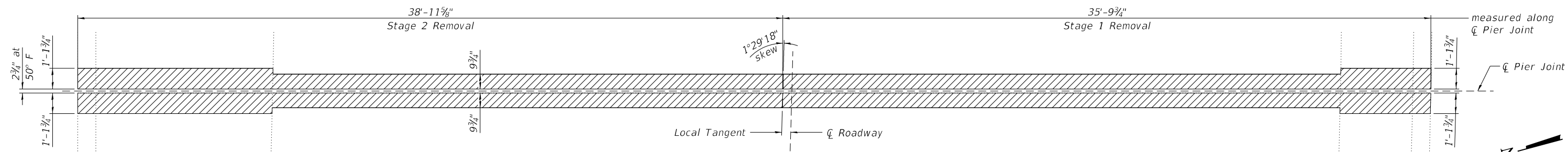
**DECK SLAB REPAIR PLAN
 STRUCTURE NO. 016-0238**

SHEET 4 OF 10 SHEETS

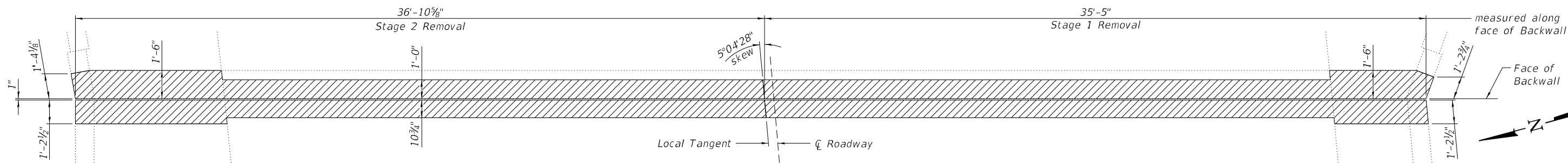
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3512	2020-174-BR	COOK	63	49
CONTRACT NO. 62M56				
ILLINOIS FED. AID PROJECT				



JOINT REMOVAL AT WEST ABUTMENT



JOINT REMOVAL AT PIER



JOINT REMOVAL AT EAST ABUTMENT

Notes:
 Hatched areas indicate limits of
 Concrete Removal.
 See Sheet 7 of 10 for Sections.

(Sheet 1 of 3)

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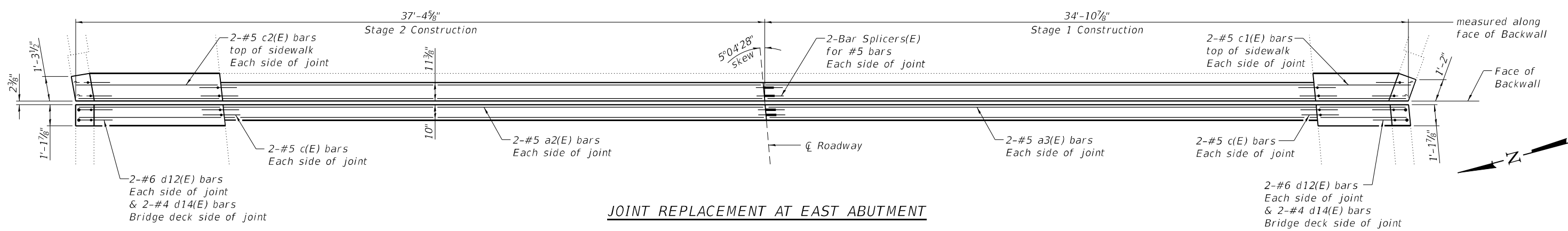
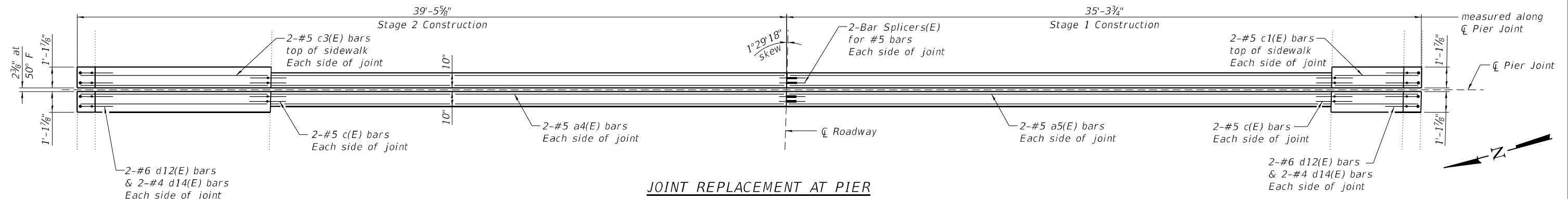
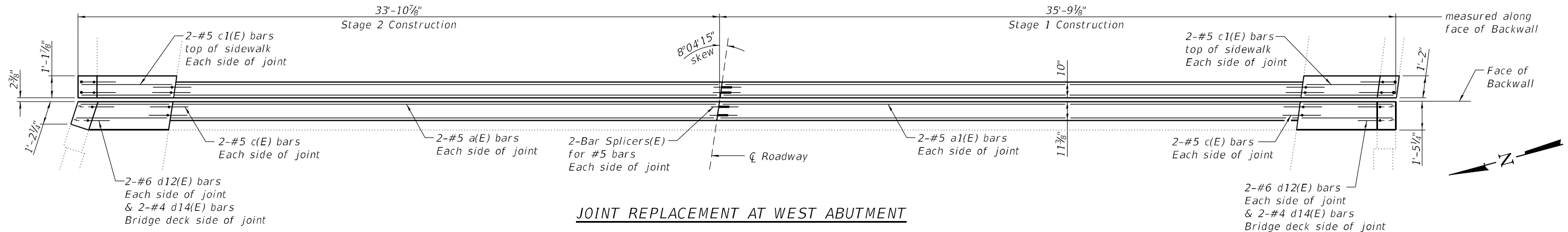
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**JOINT REPLACEMENT DETAILS
 STRUCTURE NO. 016-0238**

SHEET 5 OF 10 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3512	2020-174-BR	COOK	63	50
CONTRACT NO. 62M56				
ILLINOIS FED. AID PROJECT				



(Sheet 2 of 3)

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Consulting Engineers
Springfield, Illinois

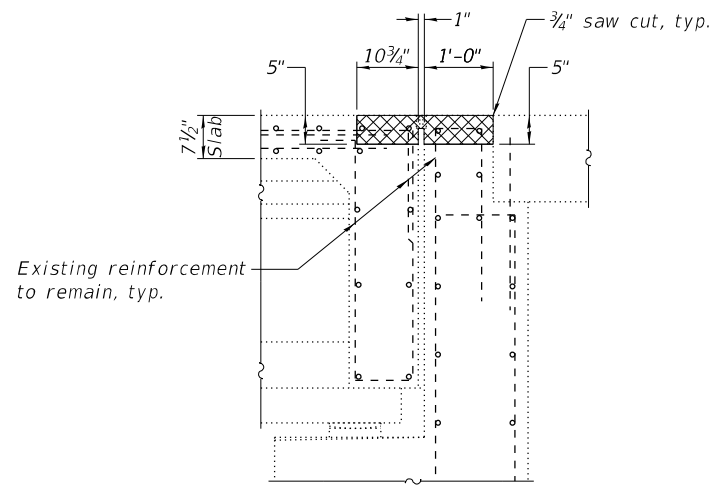
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

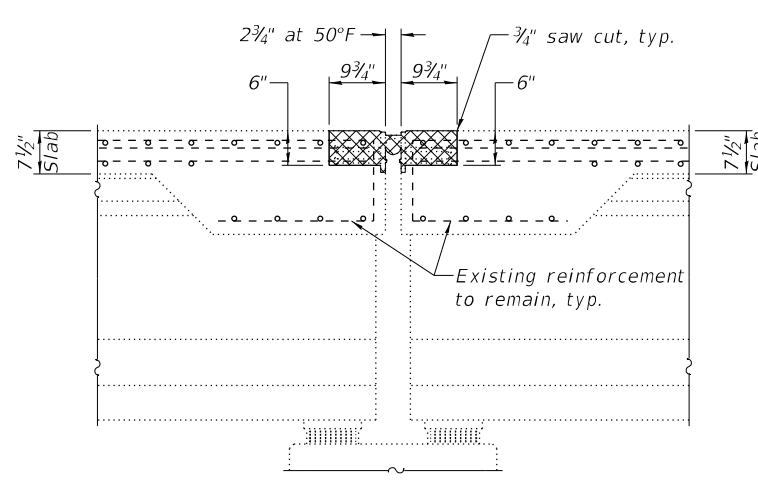
**JOINT REPLACEMENT DETAILS
STRUCTURE NO. 016-0238**

SHEET 6 OF 10 SHEETS

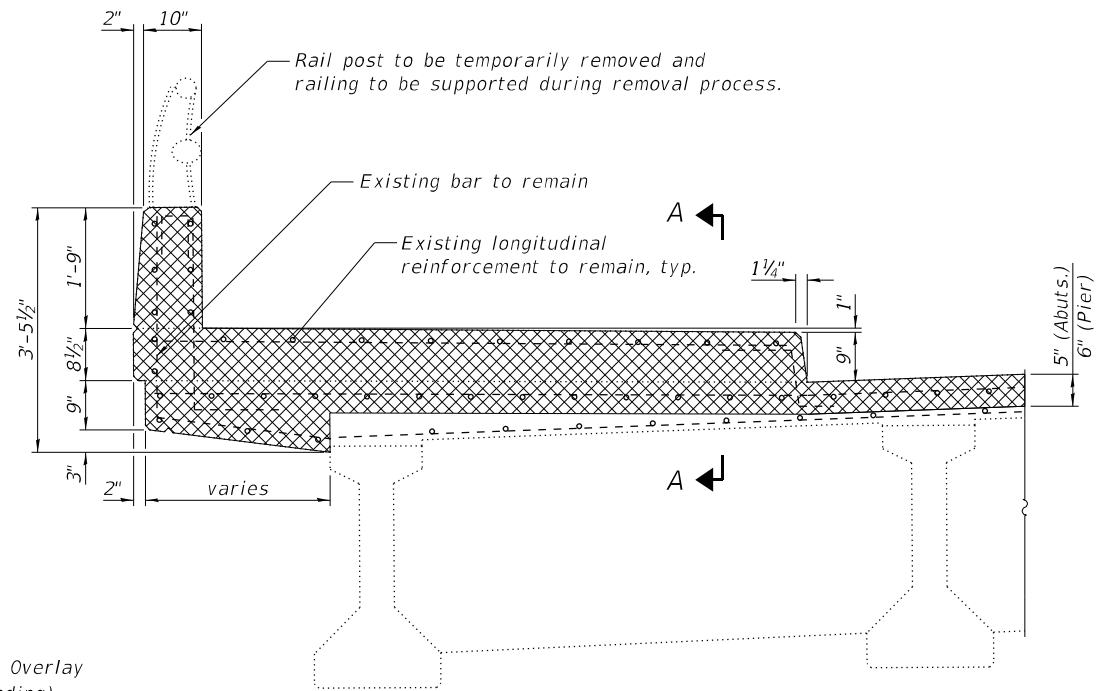
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3512	2020-174-BR	COOK	63	51
CONTRACT NO. 62M56				
ILLINOIS FED. AID PROJECT				



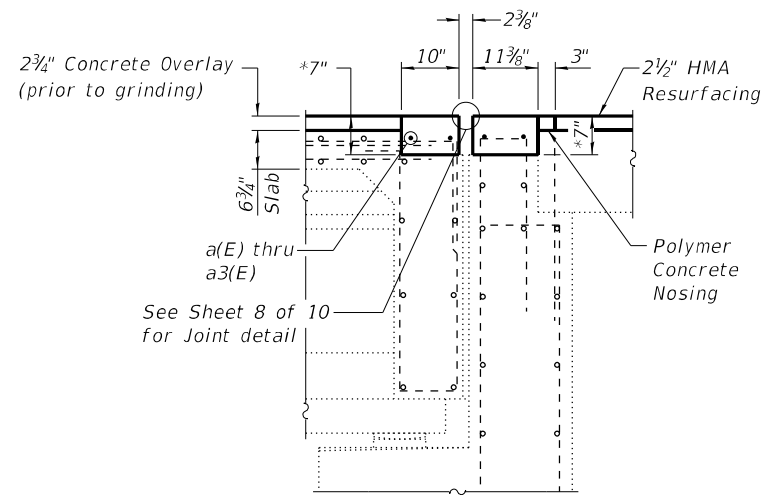
SECTION THRU JOINT AT ABUTMENTS
(Showing Removal; Dimensions at right angles)



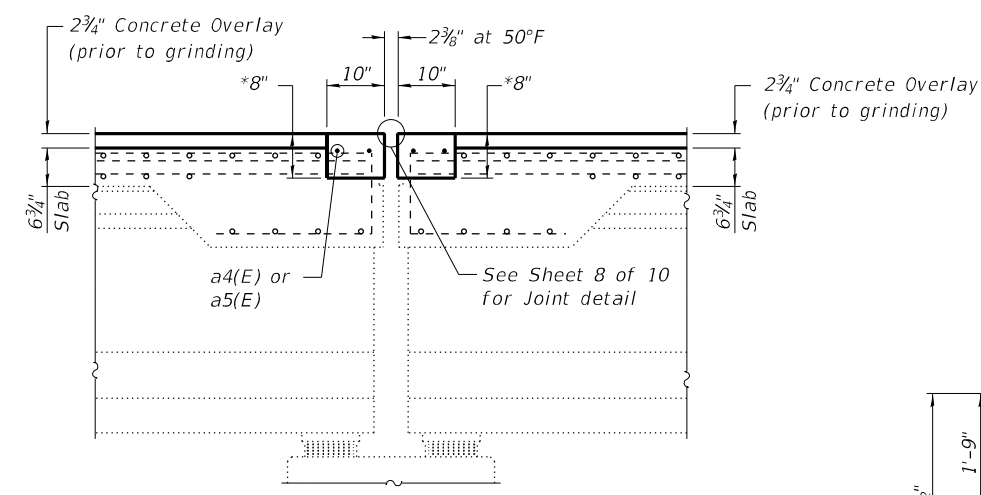
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(Showing Removal; Dimensions at right angles)



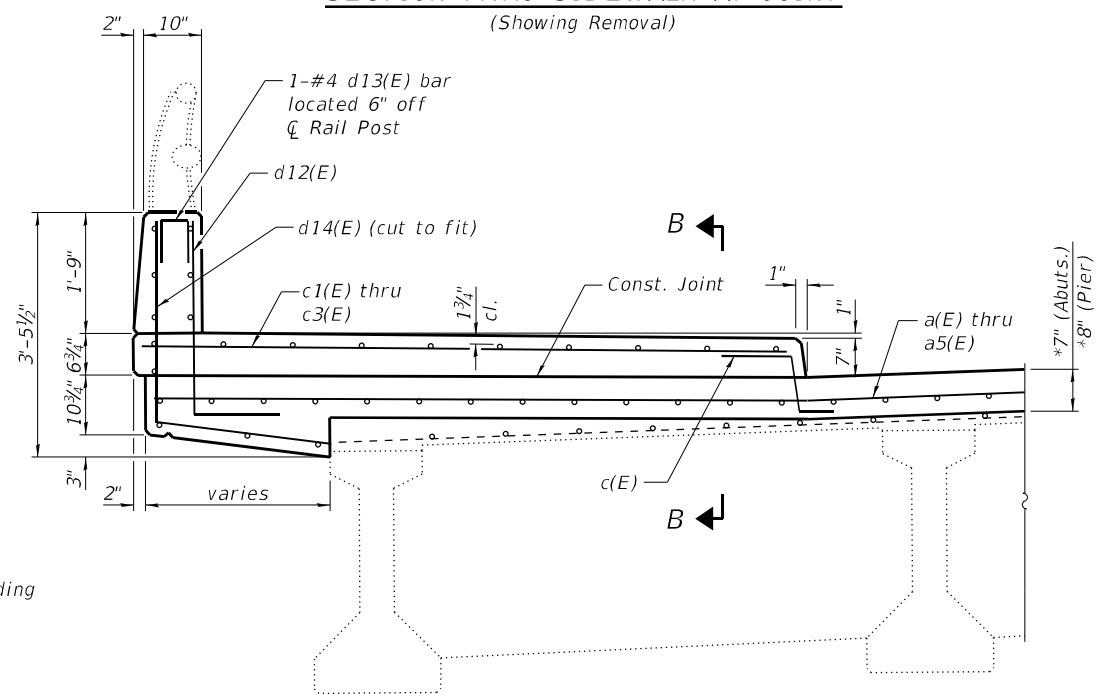
SECTION THRU SIDEWALK AT JOINT
(Showing Removal)



SECTION THRU JOINT AT ABUTMENTS
(Showing Proposed; Dimensions at right angles)



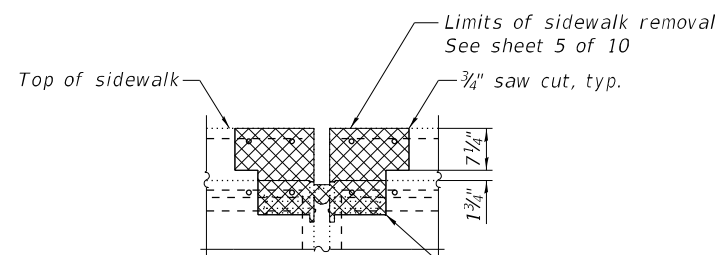
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(Showing Proposed; Dimensions at right angles)



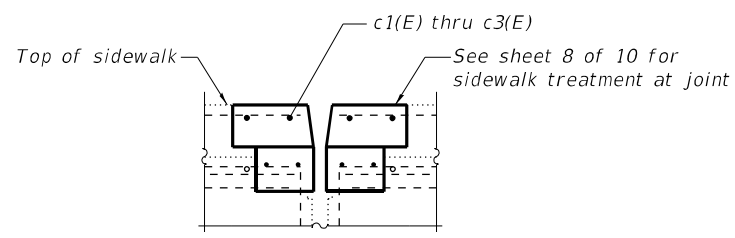
SECTION THRU SIDEWALK AT JOINT
(Showing Proposed)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	4	#5	33'-6"	—
a1(E)	4	#5	35'-3"	—
a2(E)	4	#5	36'-11"	—
a3(E)	4	#5	34'-5"	—
a4(E)	4	#5	39'-0"	—
a5(E)	4	#5	34'-10"	—
c(E)	24	#5	2'-5"	⌋
c1(E)	16	#5	4'-8"	—
c2(E)	4	#5	7'-7"	—
c3(E)	4	#5	10'-5"	—
d12(E)	24	#6	3'-9"	L
d13(E)	8	#4	2'-1"	□
d14(E)	16	#4	5'-7"	L
Concrete Removal		Cu. Yd.	10.2	
Concrete Superstructure		Cu. Yd.	11.8	
Reinforcement Bars, Epoxy Coated		Pound	1,320	



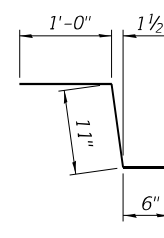
SECTION A-A



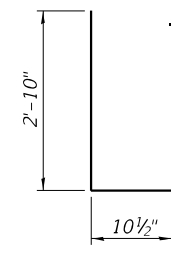
SECTION B-B

*prior to grinding

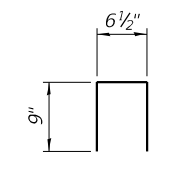
Note: Cross-hatched areas indicate limits of Concrete Removal.



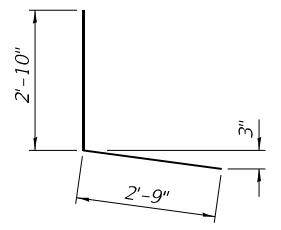
BAR c(E)



BAR d12(E)



BAR d13(E)



BAR d14(E)

(Sheet 3 of 3)

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Consulting Engineers
Springfield, Illinois

USER NAME =	DESIGNED - MTH	REVISED -
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PLOT DATE = 8/25/2022	DRAWN - AJF	REVISED -
	CHECKED - MTH	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

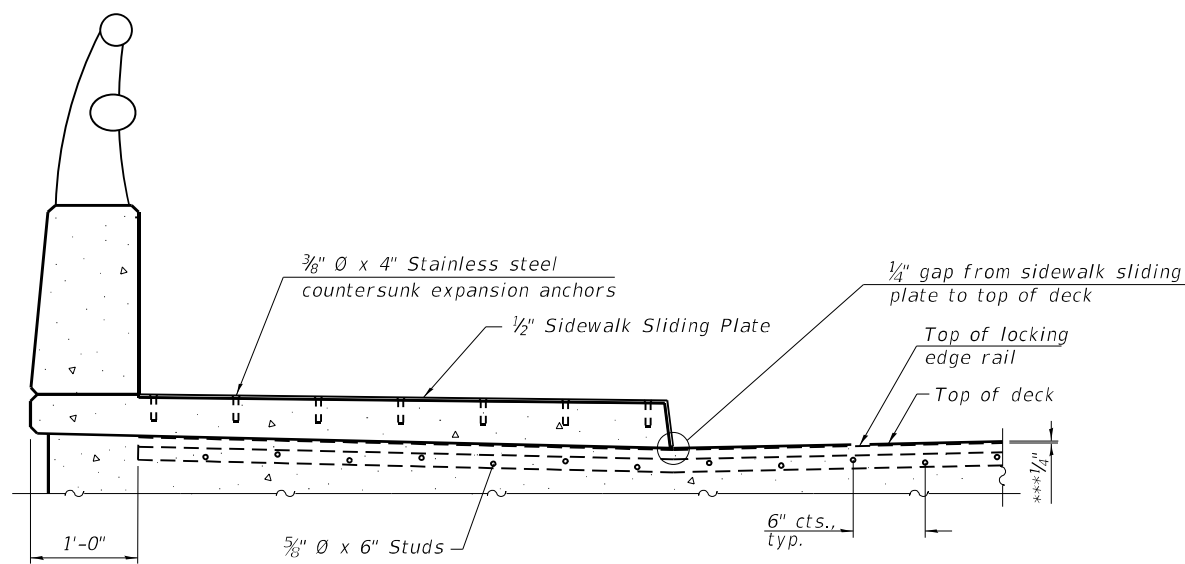
JOINT REPLACEMENT DETAILS
STRUCTURE NO. 016-0238

SHEET 7 OF 10 SHEETS

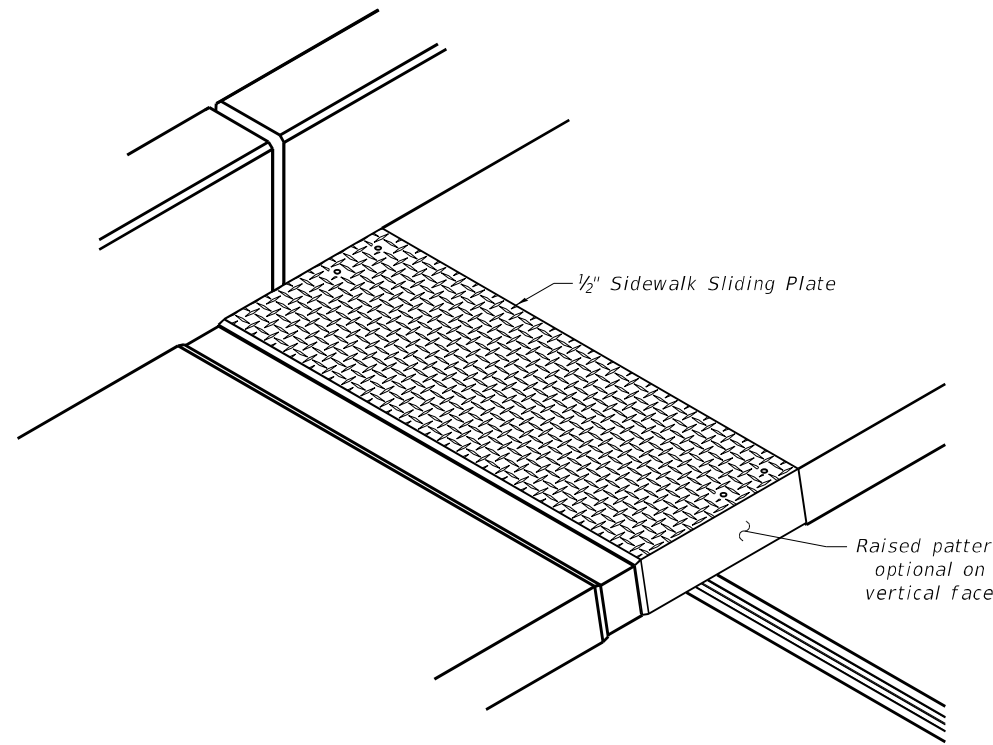
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2020-174-BR	COOK	63	52
CONTRACT NO. 62M56				

ILLINOIS FED. AID PROJECT

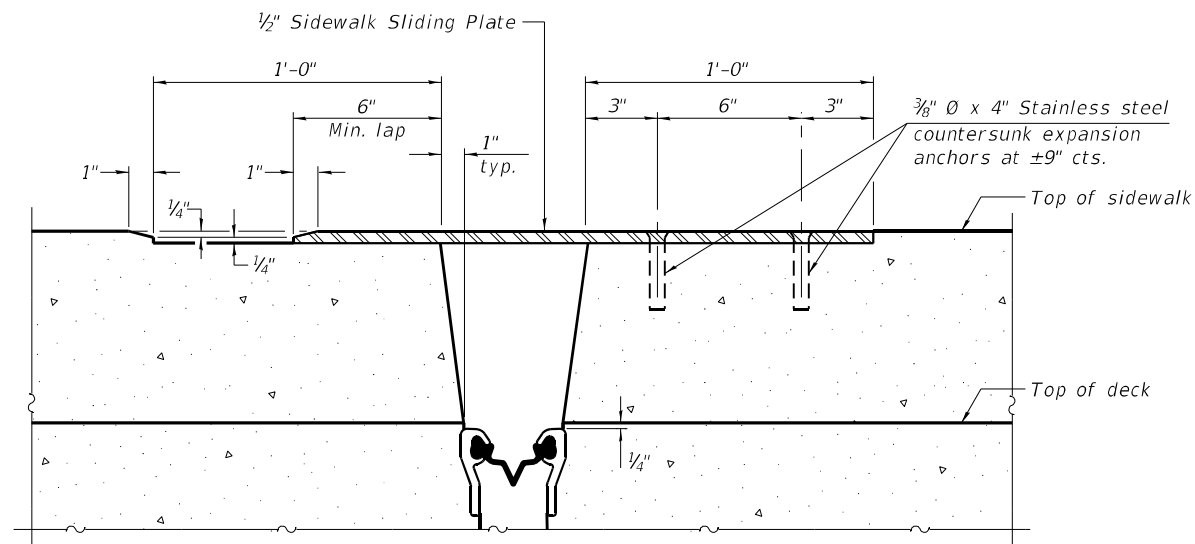
Notes:
 The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the locking edge rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement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



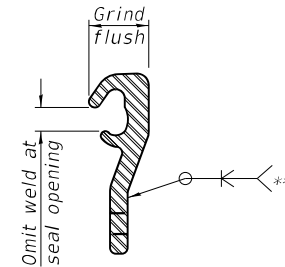
SECTION AT RAISED SIDEWALK



TRIMETRIC VIEW

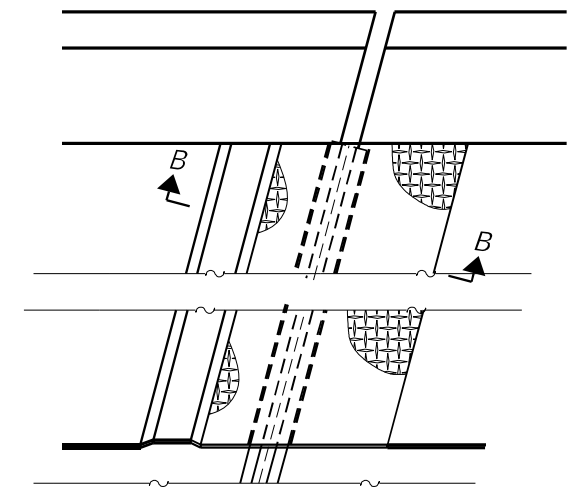


SECTION B-B

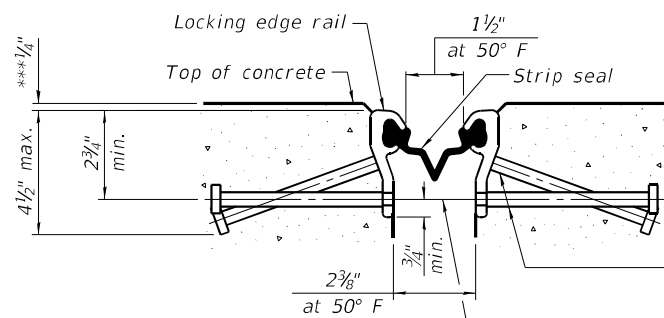


LOCKING EDGE RAIL SPLICE

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



PLAN AT RAISED SIDEWALK

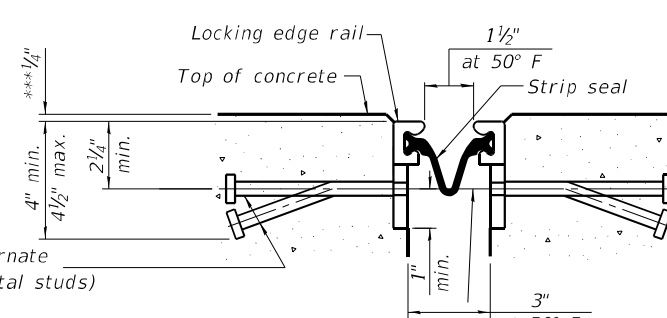


SHOWING ROLLED RAIL JOINT

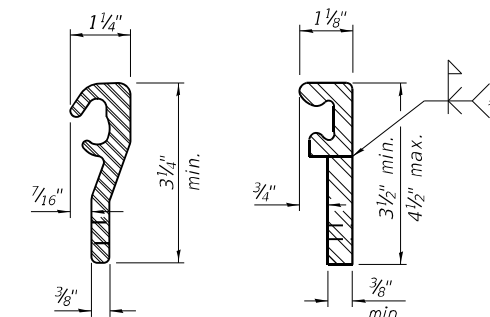
* 5/8" Ø x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)
 3/8" Ø threaded rods in 7/16" Ø holes at ±4'-0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates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

SECTION A-A

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



SHOWING WELDED RAIL JOINT



LOCKING EDGE RAILS

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

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	211

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LE LIN ENGINEERING, LTD.
 Consulting Engineers
 Springfield, Illinois

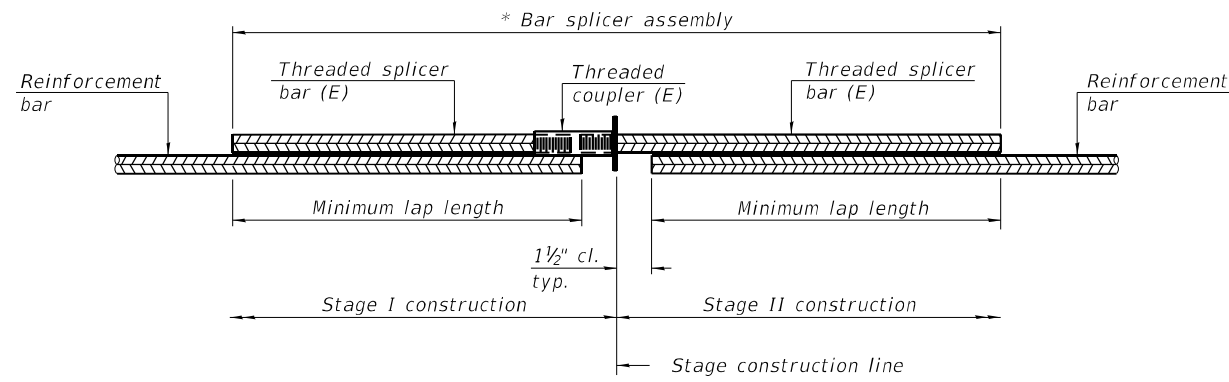
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PLOT DATE = 8/25/2022	DRAWN - AJF	REVISED -
	CHECKED - MTH	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL
 STRUCTURE NO. 016-0238

SHEET 8 OF 10 SHEETS

F.A.U. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3512	2020-174-BR	COOK	63	53
CONTRACT NO. 62M56				
ILLINOIS FED. AID PROJECT				

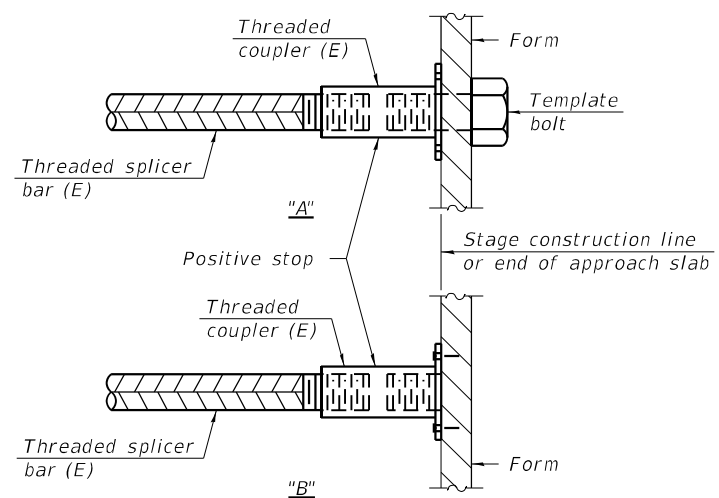


STANDARD BAR SPLICER ASSEMBLY PLAN
 (All components shall be provided from one supplier)

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

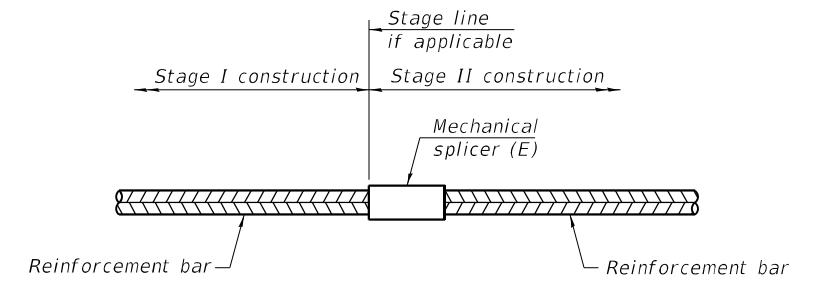
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Joints	#5	12	3'-0"



INSTALLATION AND SETTING METHODS

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



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required

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.

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BSD-1

1-1-2020



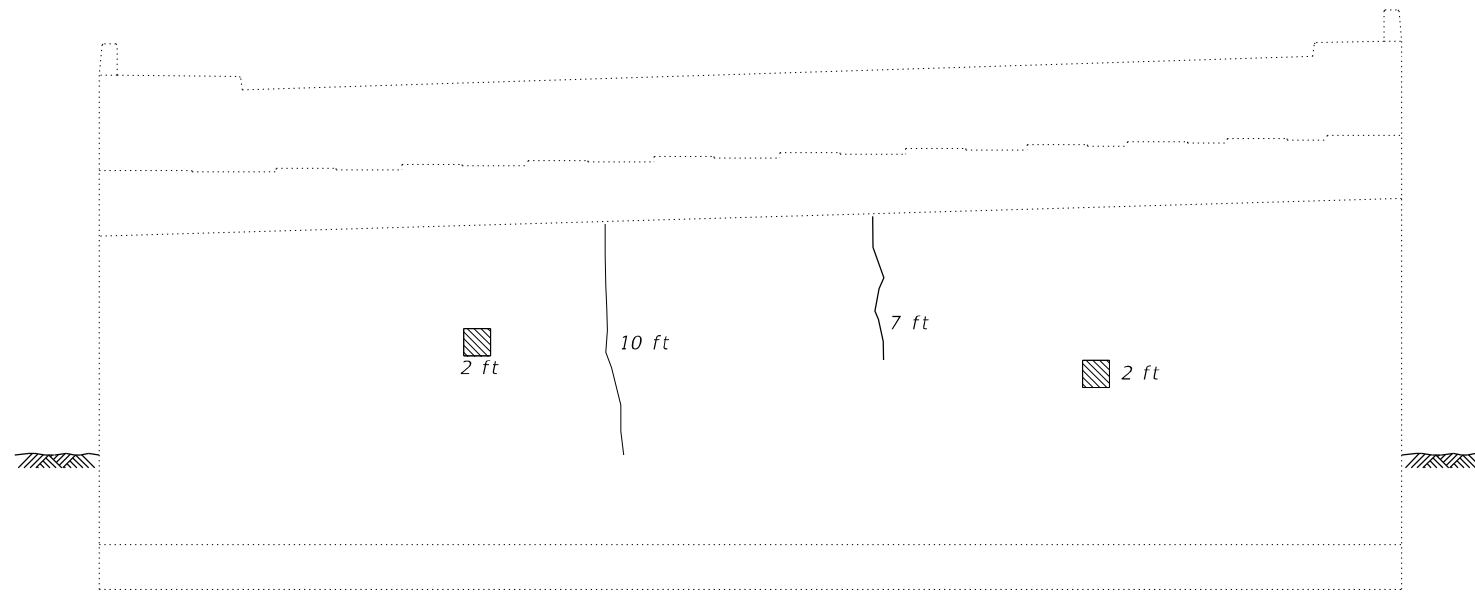
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

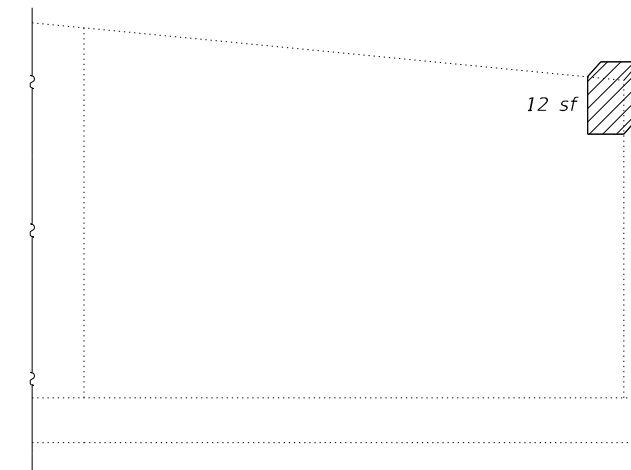
BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
 STRUCTURE NO. 016-0238

SHEET 9 OF 10 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3512	2020-174-BR	COOK	63	54
CONTRACT NO. 62M56				
ILLINOIS FED. AID PROJECT				






EAST ABUTMENT ELEVATION
(Looking East)



SOUTHEAST WINGWALL ELEVATION
(Looking East)

LEGEND

-  Structural Repair of Concrete (Depth > 5")
-  Structural Repair of Concrete (Depth ≤ 5")
-  Epoxy Crack Injection
- sf* Square Feet

Note:
Repair of the existing abutment and wingwall shall include but may not be limited to the areas shown. The actual area to be repaired will be determined by the Engineer at the time of construction.

BILL OF MATERIAL

Item	Unit	Total
Structural Repair of Concrete (Depth > 5")	Sq. Ft.	12
Structural Repair of Concrete (Depth ≤ 5")	Sq. Ft.	4
Epoxy Crack Injection	Foot	17

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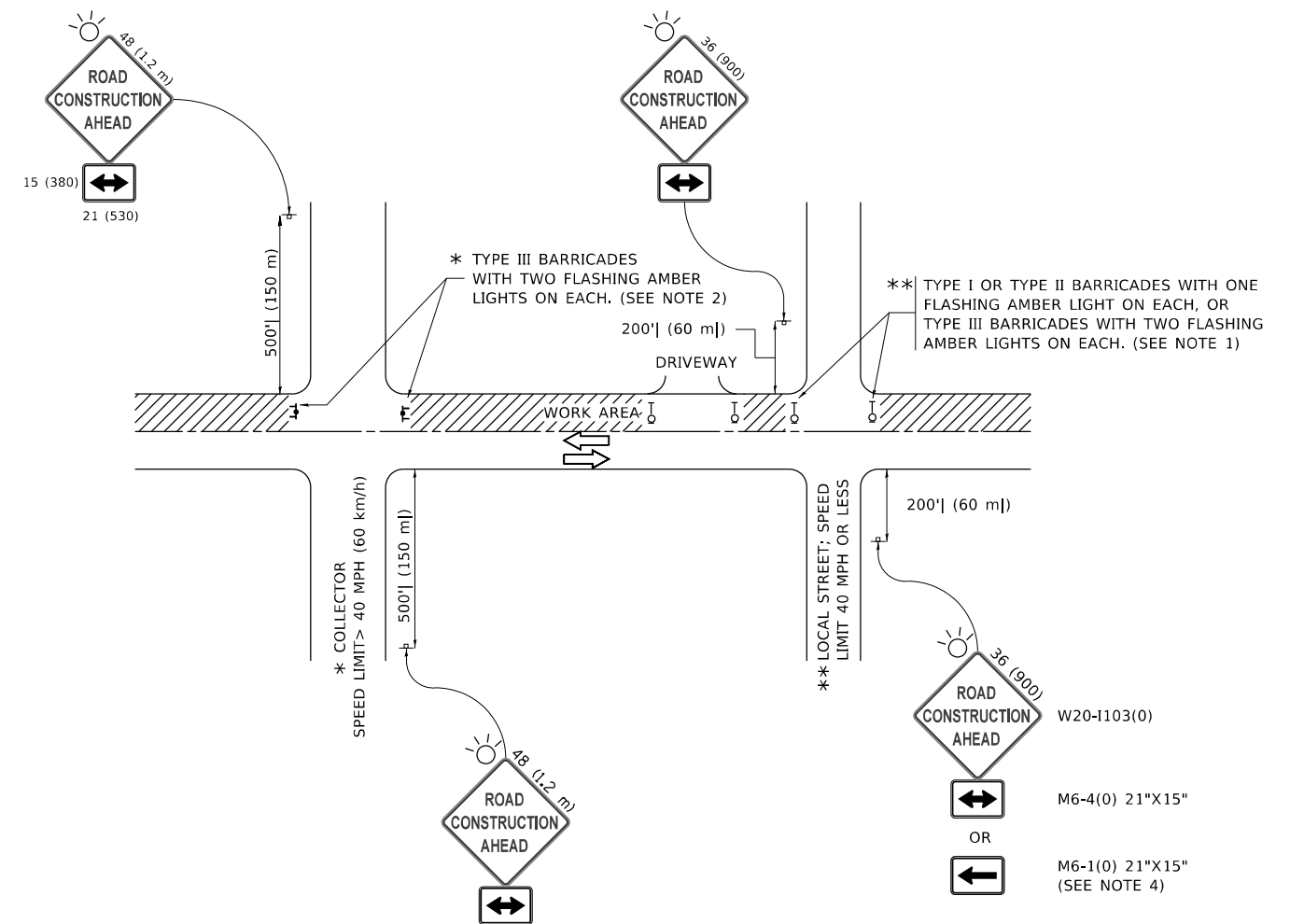
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUBSTRUCTURE REPAIRS
STRUCTURE NO. 016-0238**

SHEET 10 OF 10 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3512	2020-174-BR	COOK	63	55
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62M56	



NOTES:

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

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

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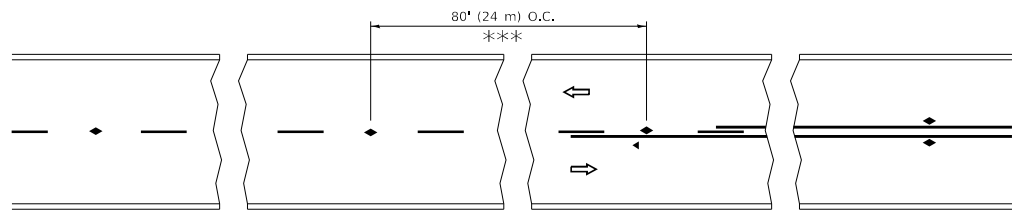
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		REVISED - A. SCHUETZE 09-15-16

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

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

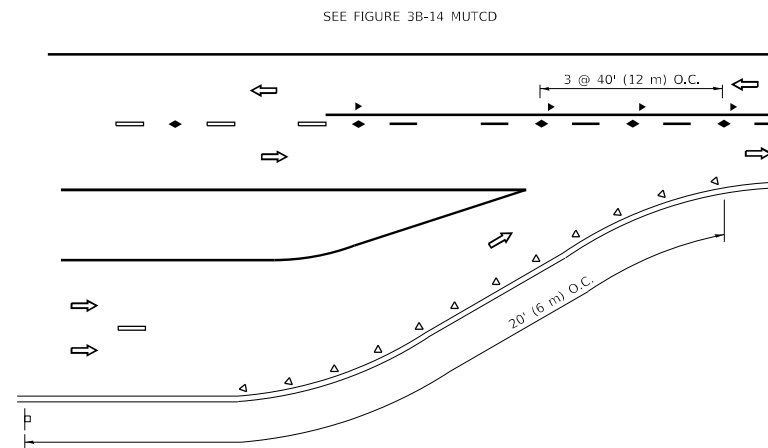
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TC-10			CONTRACT NO. 62M56	
ILLINOIS FED. AID PROJECT				

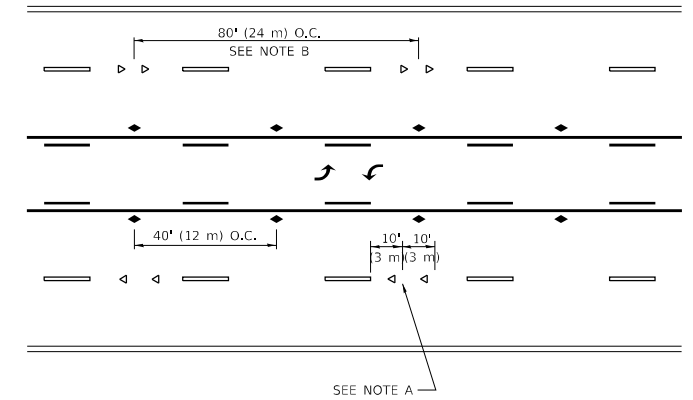


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

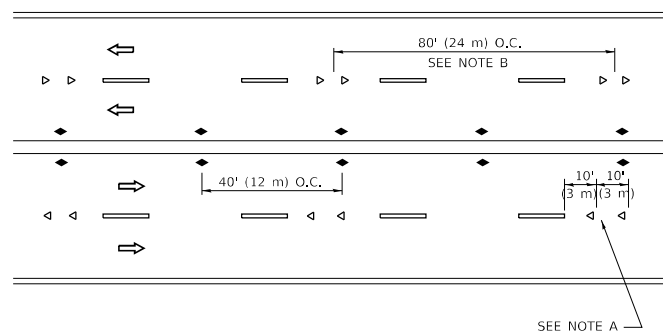
TWO-LANE/TWO-WAY



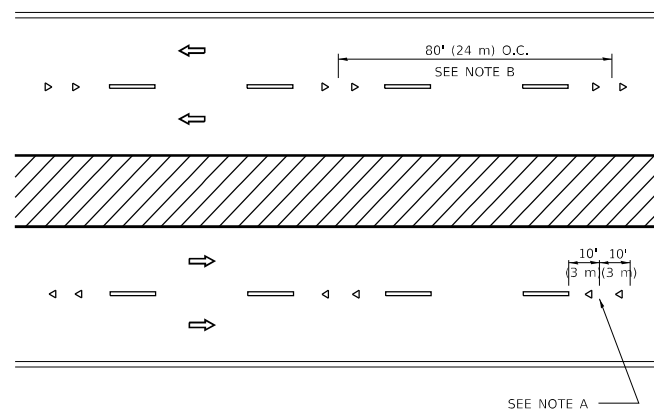
LANE REDUCTION TRANSITION



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

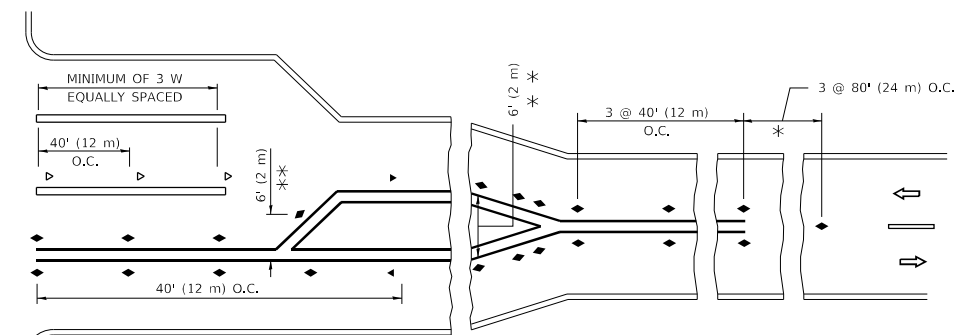
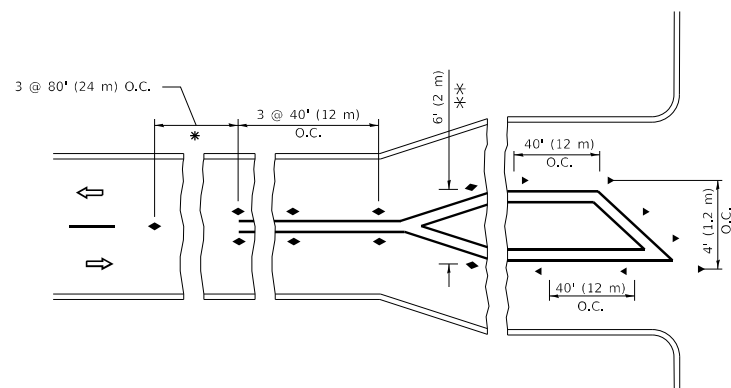
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◀ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

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.

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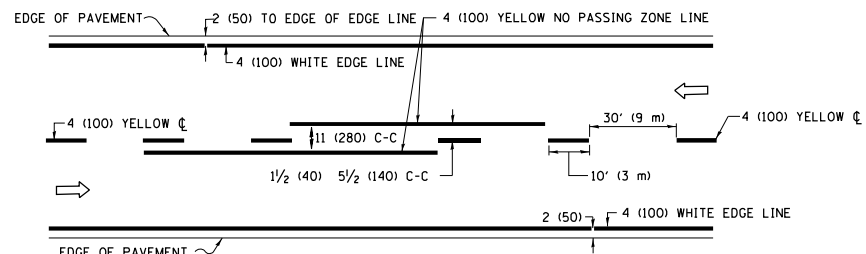
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

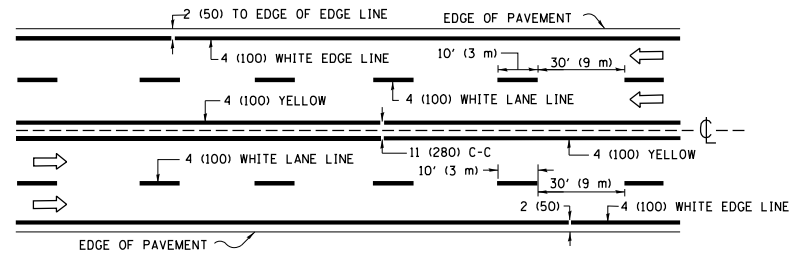
**TYPICAL APPLICATIONS
 RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)**

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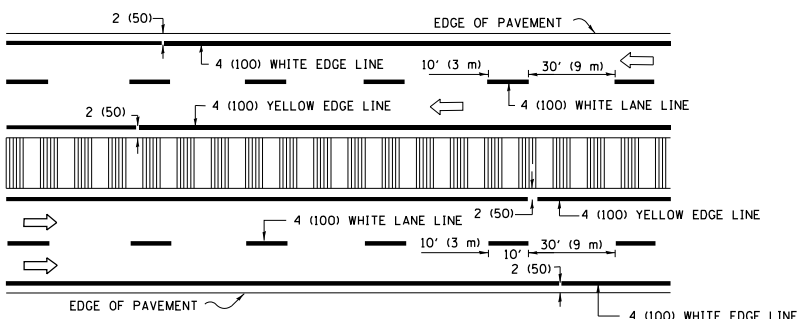
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3512	2020-174-BR	COOK	63	58
TC-11		CONTRACT NO. 62M56		
ILLINOIS		FED. AID PROJECT		



2-LANE ROADWAY

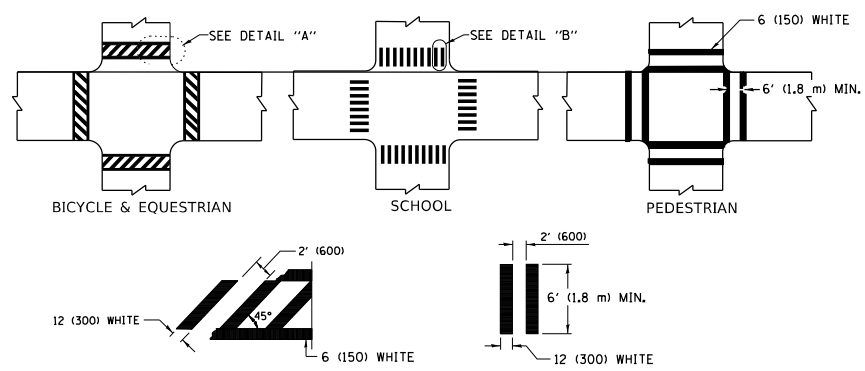


MULTI-LANE UNDIVIDED



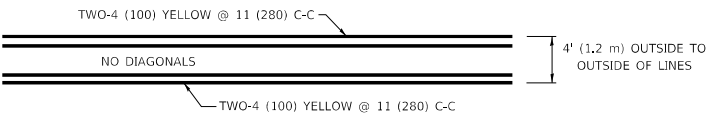
MULTI-LANE DIVIDED WITH MEDIAN

TYPICAL LANE AND EDGE LINE MARKING

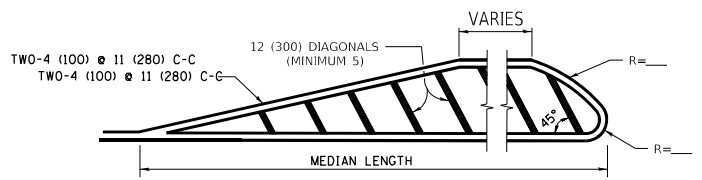


TYPICAL CROSSWALK MARKING

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



4' (1.2 m) WIDE MEDIANS ONLY

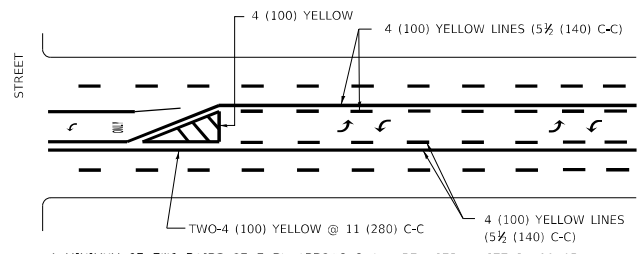


MEDIANS OVER 4' (1.2 m) WIDE

FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

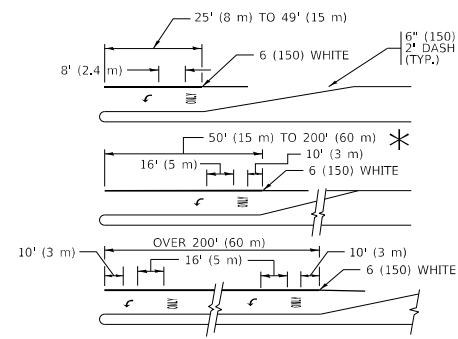
DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

TYPICAL PAINTED MEDIAN MARKING



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

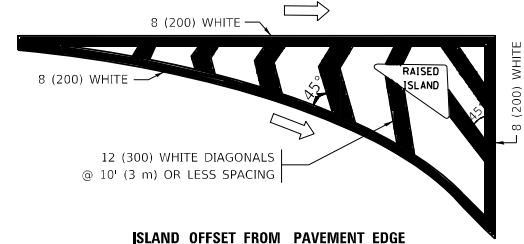


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)

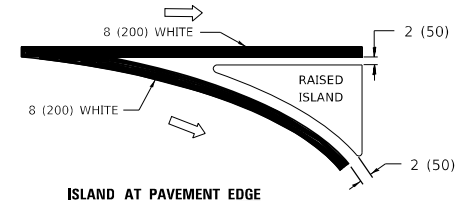
* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

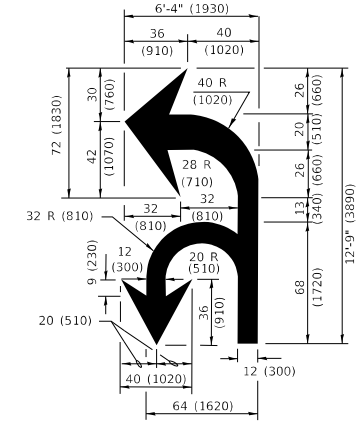
TYPICAL TURN LANE MARKING



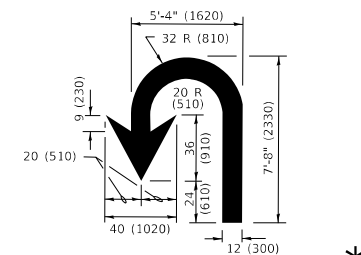
ISLAND OFFSET FROM PAVEMENT EDGE



TYPICAL ISLAND MARKING



COMBINATION LEFT AND U-TURN



U-TURN

LANE REDUCTION TRANSITION

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

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

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

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

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

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USER NAME	DESIGNED	REVISED
= footemj	- EVERS	- C. JUCIUS 09-09-09
	- DRAWN	- C. JUCIUS 07-01-13
	- CHECKED	- C. JUCIUS 12-21-15
	- DATE	- C. JUCIUS 04-12-16

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DISTRICT ONE	
TYPICAL PAVEMENT MARKINGS	
SCALE: NONE	SHEET 1 OF 2 SHEETS STA. TO STA.

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3512	2020-174-BR	COOK	63	59
TC-13		CONTRACT NO. 62M56		

ILLINOIS FED. AID PROJECT

TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER

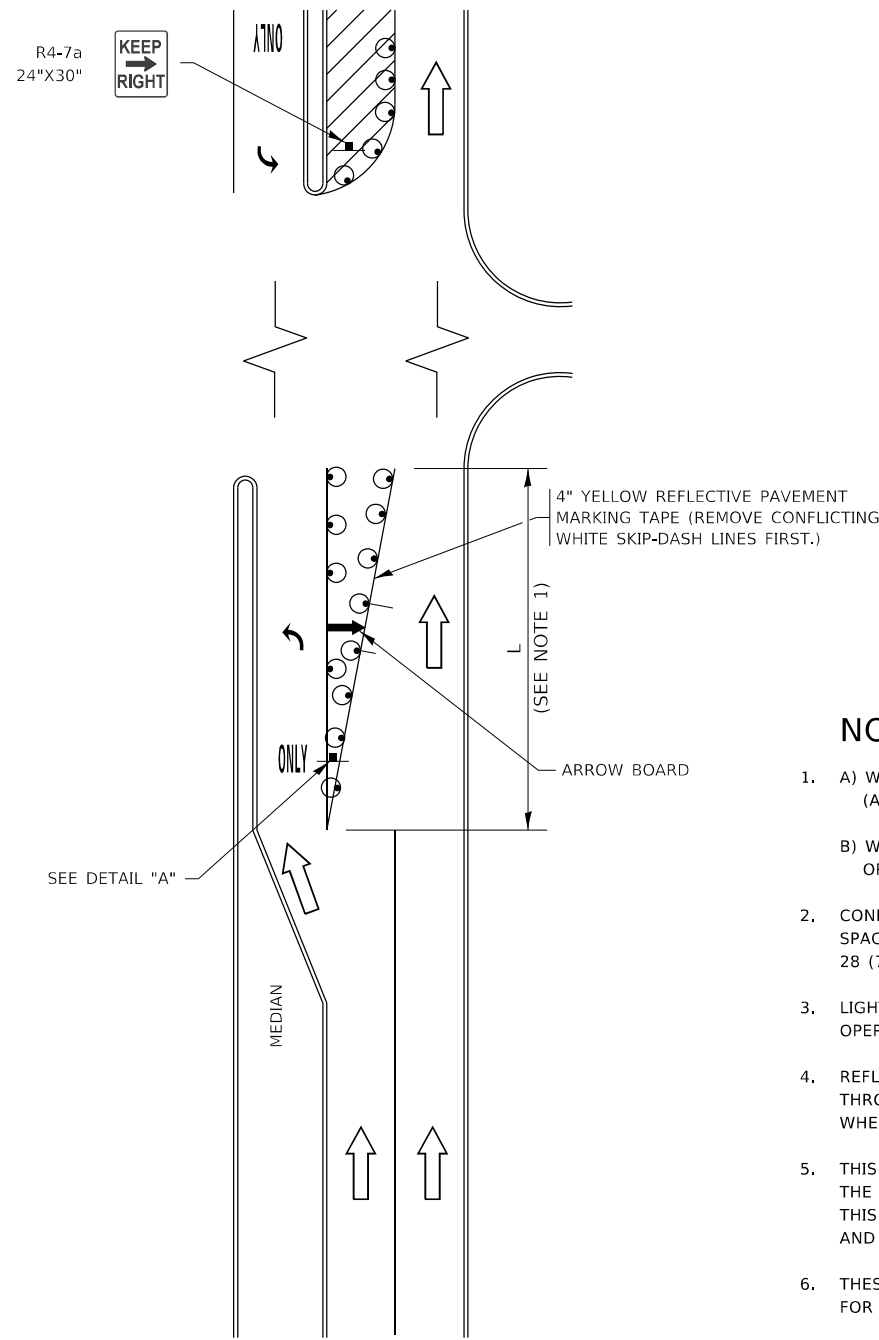


FIGURE 1

TURN BAY ENTRANCE WITHIN A LANE CLOSURE

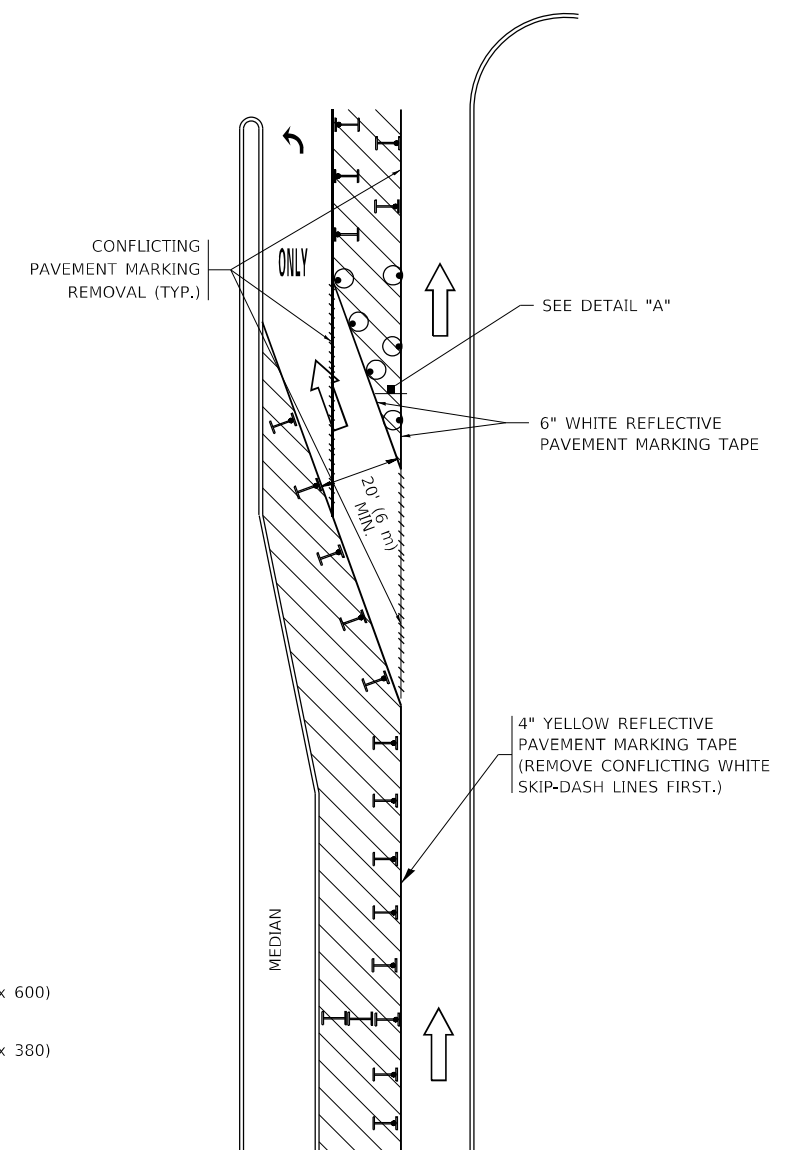


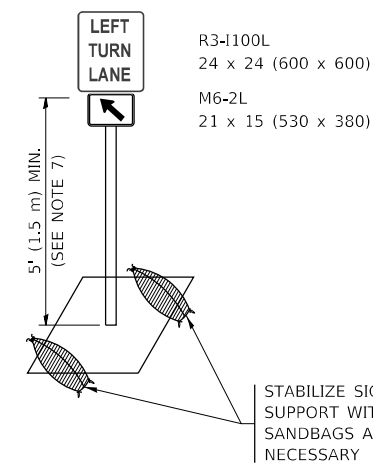
FIGURE 2

LEGEND

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

NOTES:

1. A) WHEN "L" IS \leq THE STORAGE LENGTH OF THE TURN LANE (AS SHOWN IN FIG. 1), USE FIGURE 1.
B) WHEN "L" IS $>$ THE STORAGE LENGTH OF THE TURN LANE OR THE TURN LANE IS WITHIN THE LANE CLOSURE, USE FIGURE 2.
2. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
3. LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
4. REFLECTIVE TEMPORARY PAVEMENT MARKINGS SHALL BE PLACED THROUGHOUT THE BARRICADED AREAS OF EACH TURN BAY AS SHOWN WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN (14) DAYS.
5. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-1100R 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
6. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
7. THE SIGNS SHALL BE MOUNTED ABOVE THE BARRICADES/DRUMS ON SEPARATE SIGN SUPPORTS THAT MEET NCHRP 350 OR MASH REQUIREMENTS.
8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.



DETAIL A

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

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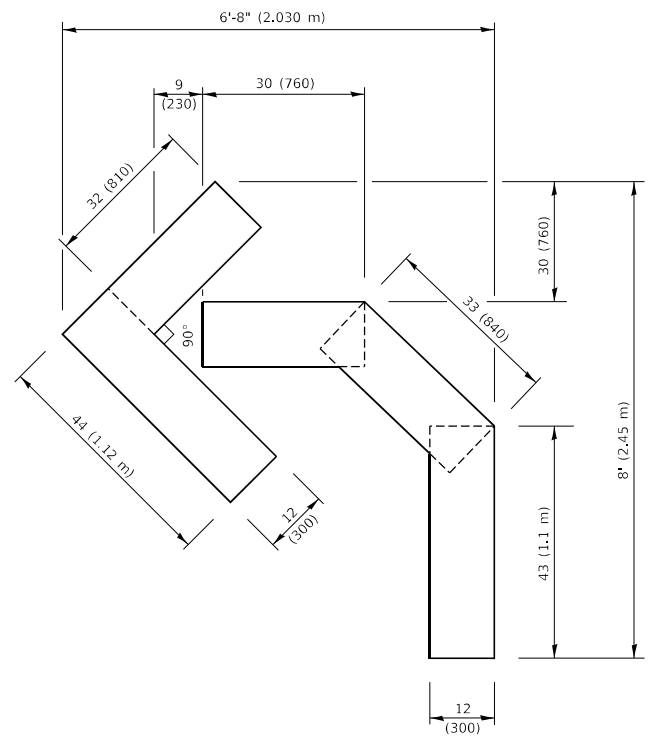
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	DRAWN - A. HOUSEH 11-07-95	REVISED - A. SCHUETZE 07-01-13
PLOT SCALE = 50,0000 ' / in.	CHECKED - A. HOUSEH 10-12-96	REVISED - A. SCHUETZE 09-15-16
PLOT DATE = 3/4/2019	DATE - T. RAMMACHER 01-06-00	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

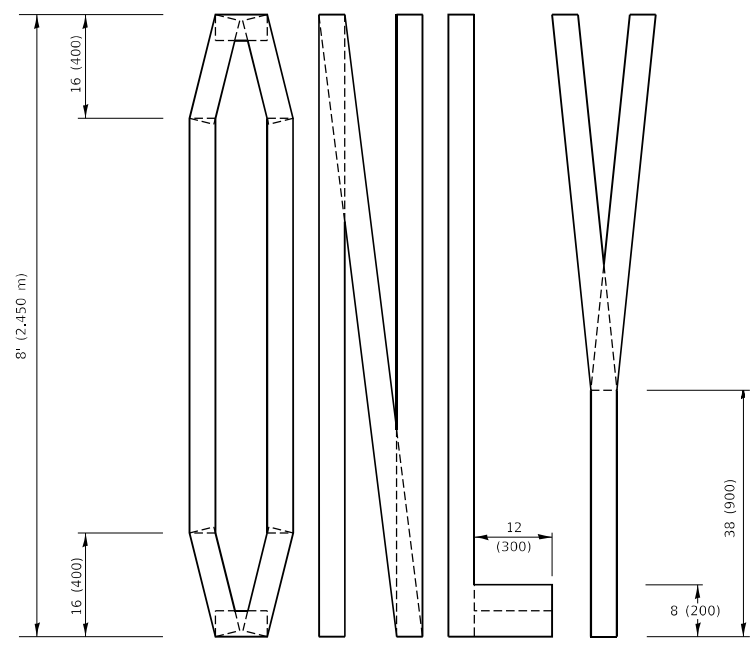
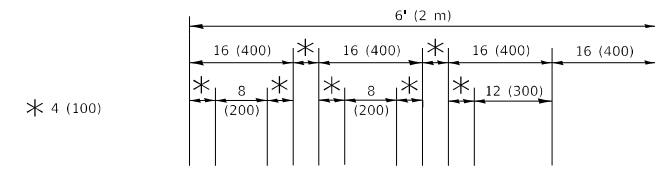
**TRAFFIC CONTROL AND PROTECTION AT TURN BAYS
(TO REMAIN OPEN TO TRAFFIC)**

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

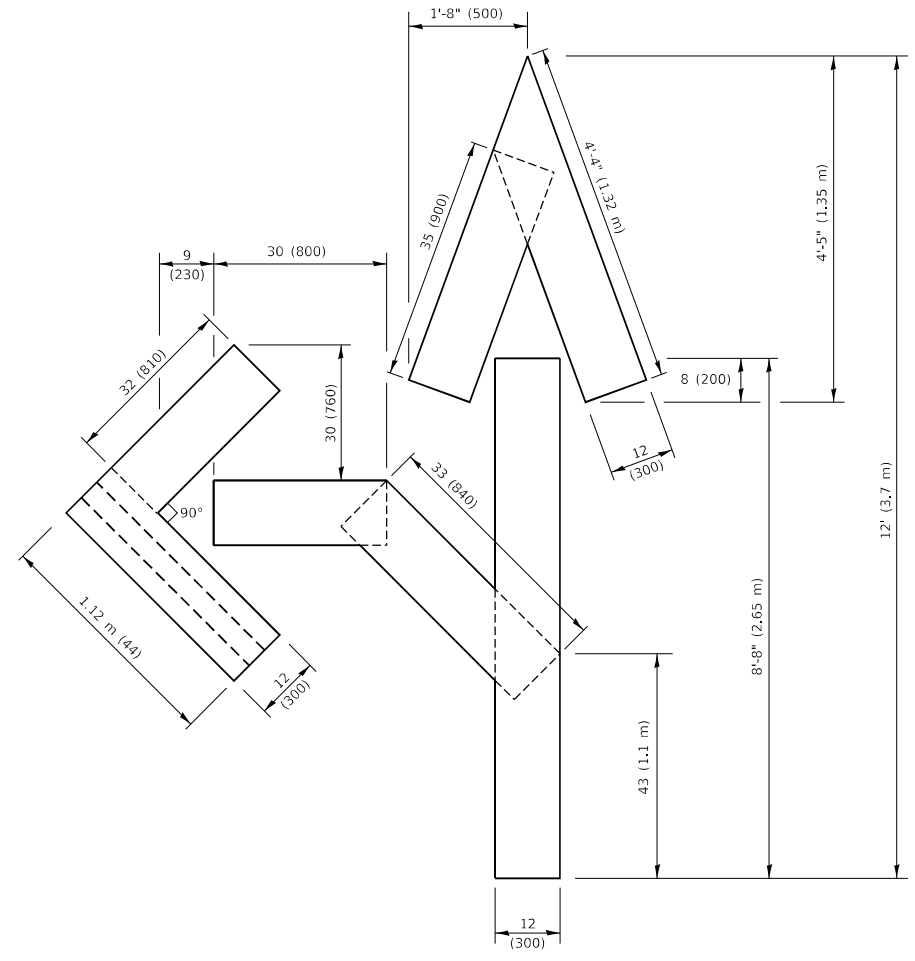
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3512	2020-174-BR	COOK	63	60
TC-14		CONTRACT NO. 62M56		
ILLINOIS FED. AID PROJECT				



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

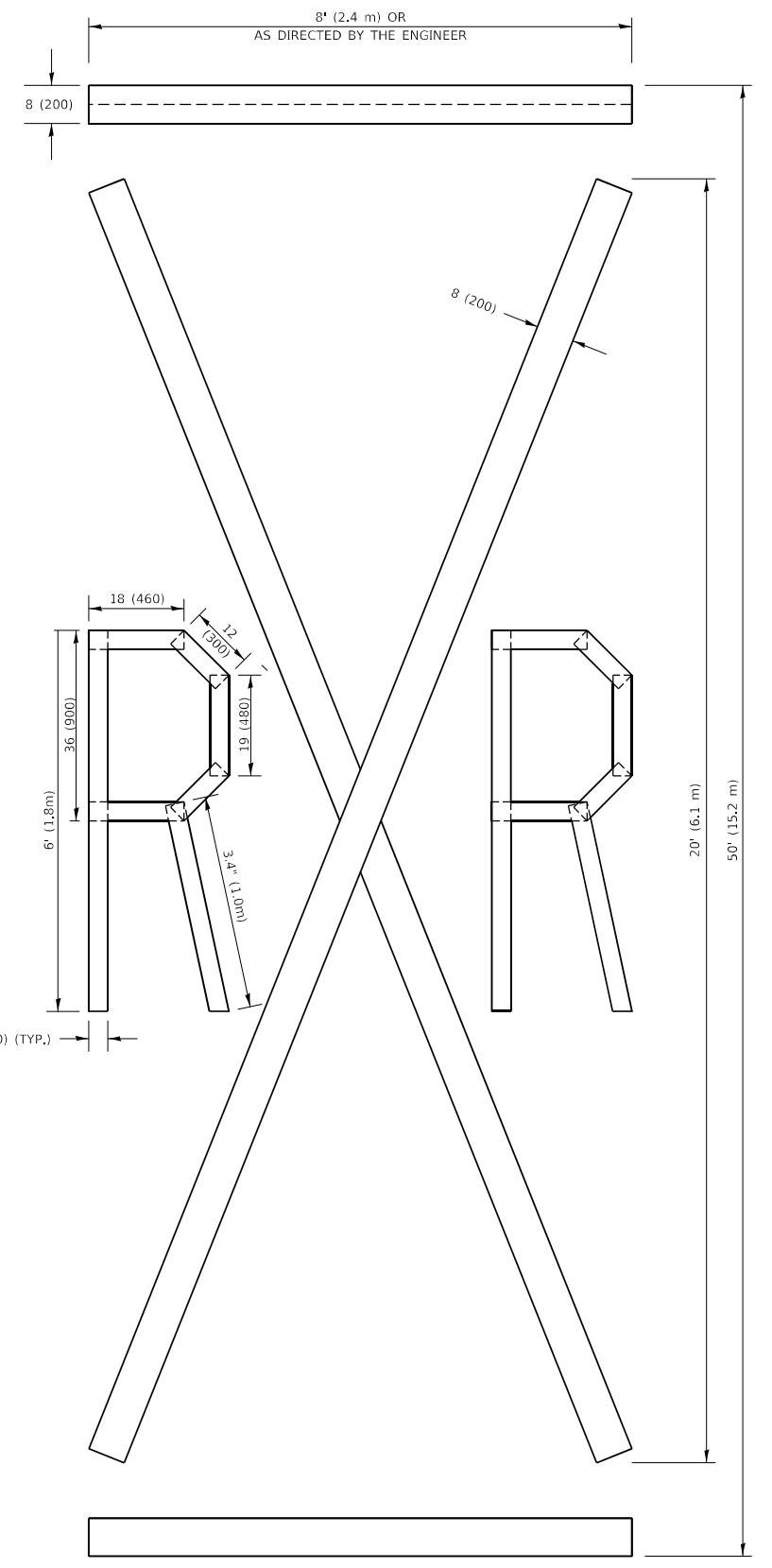


QUANTITY
 4 (100) LINE = 64.1 ft. (19.5 m)
 21.4 sq. ft. (1.99 sq. m)



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

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



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

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

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PLOT SCALE = 50.0068 ' / in.	DRAWN -	REVISED - E. GOMEZ 08-28-00
PLOT DATE = 3/4/2019	CHECKED -	REVISED - E. GOMEZ 08-28-00
	DATE - 09-18-94	REVISED - A. SCHUETZE 09-15-16

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3512	2020-174-BR	COOK	63	61
TC-16		CONTRACT NO. 62M56		
ILLINOIS FED. AID PROJECT				

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ROUTE MARKERS

FOR U.S. ROUTES
M1-40-2424

FOR ILLINOIS ROUTES
M1-50-05-14

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

ARROWS SIGNS

M5-1L-2115

M5-1R-2115

M6-1-2115

M6-1-2115

M6-3-2115

CARDINAL DIRECTION & DETOUR SIGNS

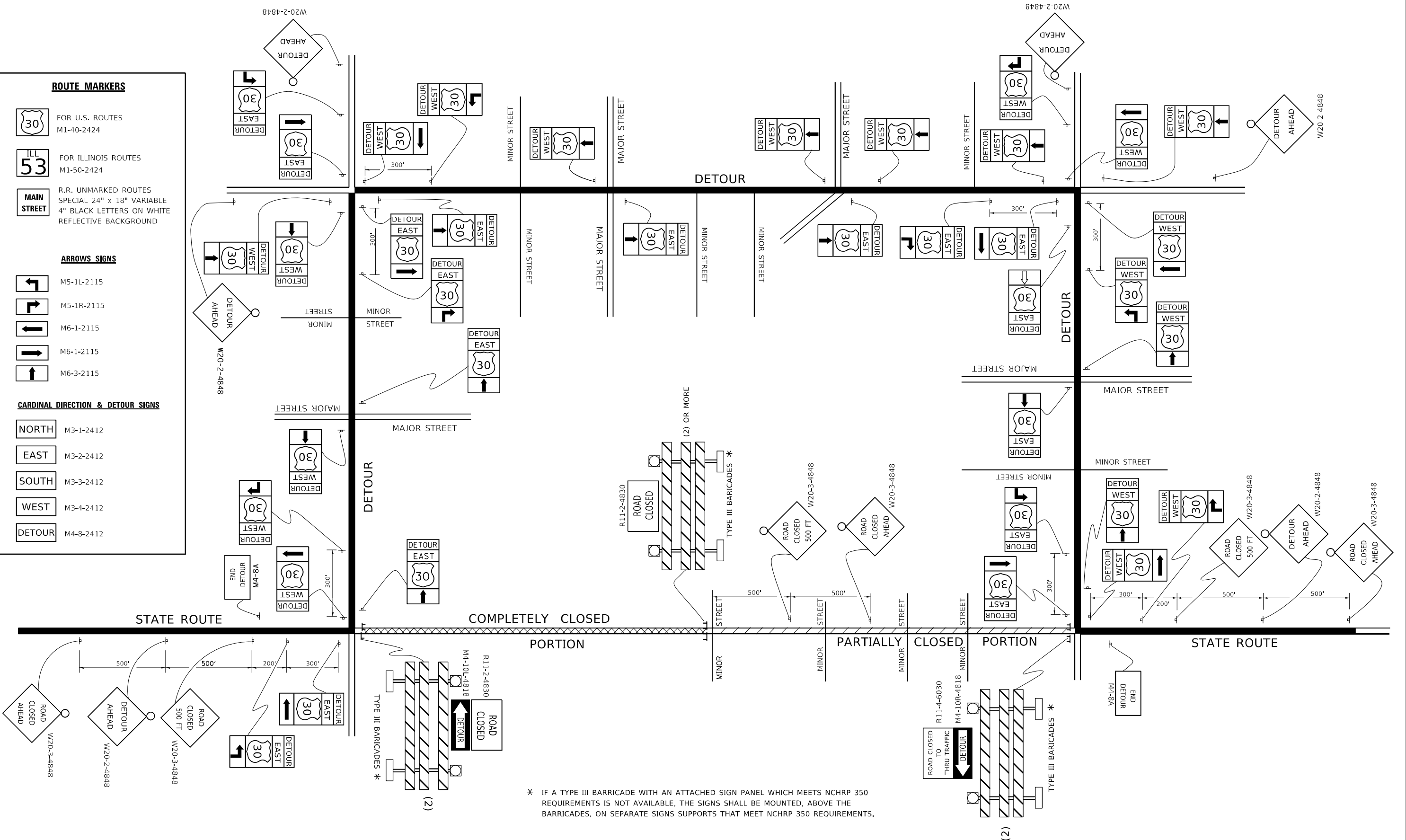
NORTH M3-1-2412

EAST M3-2-2412

SOUTH M3-3-2412

WEST M3-4-2412

DETOUR M4-8-2412



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

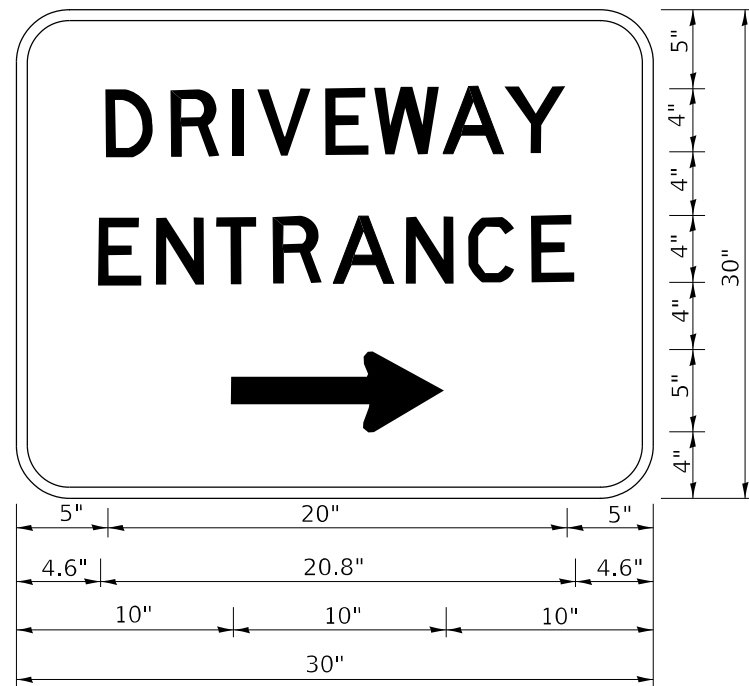
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PLOT SCALE = 50.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 3/4/2019	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**DETOUR SIGNING
 FOR CLOSING STATE HIGHWAYS**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3512	2020-174-BR	COOK	63	62
TC-21		CONTRACT NO. 62M56		
ILLINOIS FED. AID PROJECT				



3.0" RADIUS, 0.5" BORDER, WHITE ON GREEN; REFLECTORIZED
 "DRIVEWAY" D; "ENTRANCE" D; STANDARD ARROW CUSTOM 12.0" x 5.0"

NOTES:

1. HALF OF THE SIGNS WILL REQUIRE A LEFT HAND FACING ARROW.
2. TWO SIGNS SHALL BE USED AT EACH COMMERCIAL ENTRANCE PLACED BACK-TO-BACK: ONE WITH A RIGHT HAND ARROW (SHOWN) SHALL BE PLACED ON THE NEAR RIGHT SIDE THE DRIVEWAY AND ONE WITH A LEFT HAND ARROW SHALL BE PLACED ON THE FAR LEFT SIDE OF THE DRIVEWAY.
3. SIGNS TO BE PAID FOR AS ITEM "TEMPORARY INFORMATION SIGNING".

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USER NAME = Ieysa	DESIGNED -	REVISED - C. JUCIUS 02-15-07
	DRAWN -	REVISED -
PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 8/6/2021	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

DRIVEWAY ENTRANCE SIGNING

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

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3512	2020-174-BR	COOK	63	63
TC-26		CONTRACT NO. 62M56		
		ILLINOIS	FED. AID PROJECT	