03-11-2022 LETTING ITEM 008

PROJECT LOCATED IN **VILLAGE OF SHOREWOOD** AND CITY OF JOLIET

DESIGN DESIGNATION:

BLACK ROAD

BLACK ROAD

POSTED SPEED:

BLACK ROAD

ADT:

FOR INDEX OF SHEETS, SEE SHEET NO. 2

MINOR ARTERIAL

2019

24,300

40 MPH

SN 099-0209

BLACK ROAD STA. 19+42.20

STA. 20+99.80

BEGIN IMPROVEMENTS

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

FINAL

SECTION 2020-163-BR WILL 55 ILLINOIS CONTRACT NO. 62M50

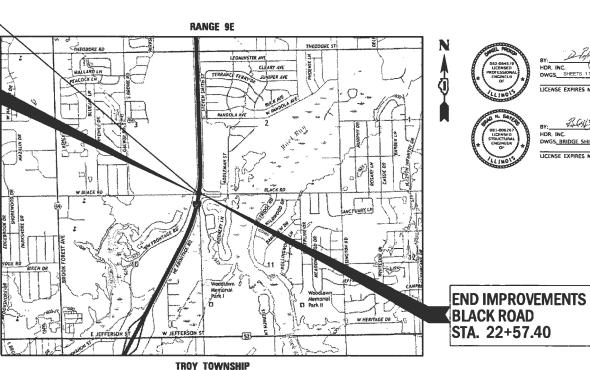
* 65 + 5 = 70 TOTAL SHEETS

D-91-579-20

PROPOSED HIGHWAY PLANS

F.A.I. ROUTE 55: I-55 BARACK OBAMA PRESIDENTIAL EXPRESSWAY AT BLACK ROAD (BRIDGE CARRYING BLACK ROAD OVER I-55) **SECTION 2020–163–BR** PROJECT NHPP-UUD8(263) **BRIDGE REHABILITATION** WILL COUNTY

C-91-378-20



STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

LOCATION OF SECTION INDICATED THUS: -

EGIONAL ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

GROSS LENGTH = 315.20 FT. = 0.06 MILE NET LENGTH = 315.20 FT. = 0.06 MILE

LOCATION MAP

DESIGN FIRM REGISTRATION NUMBER 184,001070

Chicago, IL 60018

9450 W. Bryn Mawr Ave., Suite 400

CONTRACT NO. 62M50

J.U.L.I.E.

1-800-892-0123

FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES, REDUCED SIZED PLANS WILL NOT

ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS

CONFORM TO STANDARD SCALES, IN MAKING MEASUREMENTS

PROJECT ENGINEER: VESELIN VELICHKOV (847) 705-4432

PROJECT MANAGER: FAWAD AQUEEL (847) 705-4211

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REV-SEP

INDEX OF	SHEETS .	HIGHWAY	STANDARDS CONT.
DRAWING NO.	DESCRIPTION	STANDARD NO.	TITLE
1	COVER SHEET	280001-07	TEMPORARY EROSION CONTROL SYSTEMS
2	INDEX OF SHEETS, HIGHWAY STANDARDS AND GENERAL NOTES	420406	PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB
3 TO 6	SUMMARY OF QUANTITIES	424001-11	PERPENDICULAR CURB RAMPS FOR SIDEWALKS
7	SCHEDULE OF QUANTITIES	424016-05	MID-BLOCK CURB RAMPS FOR SIDEWALKS
8 TO 9	TYPICAL SECTIONS	424021-06	DEPRESSED CORNER FOR SIDEWALKS
10 TO 17	MAINTENANCE OF TRAFFIC & DETOUR PLAN	442201-03	CLASS C AND D PATCHES
18	ROADWAY REMOVAL PLAN	606001-08	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
19	ROADWAY PROPOSED PLAN	630001-12	STEEL PLATE BEAM GUARDRAIL
20	PAVEMENT OVERLAY DETAIL	631031-17	TRAFFIC BARRIER TERMINAL, TYPE 6
21 TO 23	PAVEMENT MARKING PLAN	701006-05	OFF-ROAD OPERATIONS, 2L, 2W, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
23A TO 23C	TEMPORARY TRAFFIC SIGNAL PLANS	701011-04	OFF-ROAD MOVING OPERATIONS, 2L, 2W, DAY ONLY
24 TO 44	STRUCTURAL PLANS - BLACK ROAD BRIDGE (SN 099-0209)	701101-05	OFF-ROAD OPERATIONS, MULTILANE, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
45	BUTT JOINT AND HMA TAPER DETAILS (BD400-05 BD-32)	701301-04	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
46	BENCHING DETAIL FOR EMBANKMENT WIDENING (BD-51)	701311-03	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
47	TEMPORARY LIGHTING AND TRAFFIC SIGNALS FOR SINGLE LANE STAGING (BE-805)	701400-11	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
48	PRUNING FOR SAFETY AND EQUIPMENT CLEARANCE (BM-20)	701401-13	LANE CLOSURE, FREEWAY/EXPRESSWAY
49 TO 52	REMOVE AND REERECT STEEL PLATE BEAM GUARDRAIL (BM-21)	701427-05	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATION, FOR SPEEDS \leq 40 MPH
53 TO 55	TYPE 6 TERMINAL FOR USE WITH 21" HIGH SPBGR (BM-22)	701428-01	TRAFFIC CONTROL, SETUP AND REMOVAL, FREEWAY/EXPRESSWAY
56	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS (TC-10)	701606-10	URBAN SINGLE LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
57	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS	701611-01	URBAN HALF ROAD CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
E 0	(SNOW-PLOW RESISTANT) (TC-11) DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13)	701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
58 59	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN	701901-08	TRAFFIC CONTROL DEVICES
59	OPEN TO TRAFFIC) (TC-14)	704001-08	TEMPORARY CONCRETE BARRIER
60	SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS (TC-16)	720001-01	SIGN PANEL MOUNTING DETAILS
61	TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES (TC-17)	720006-04	SIGN PANEL ERECTION DETAILS
62	DETOUR SIGNING FOR CLOSING STATE HIGHWAYS (TC-21)	720011-01	METAL POSTS FOR SIGNS, MARKERS AND DELINEATORS
63	ARTERIAL ROAD INFORMATION SIGN (TC-22)	725001-01	OBJECT AND TERMINAL MARKERS
64 TO 65	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS (TS-05)	728001-01	TELESCOPING STEEL SIGN SUPPORT
65A TO 65B	CROSS SECTIONS - NW FRONTAGE ROAD	729001-01	APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS & MARKERS)
		731001-01	BASE FOR TELESCOPING STEEL SIGN SUPPORT
<u>HIGHWAY</u>	STANDARDS	780001-05	TYPICAL PAVEMENT MARKINGS
STANDARD NO.	TITLE	781001-04	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS	782006-01	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS
001001-02	AREAS OF REINFORCEMENT BARS		
001006	DECIMAL OF AN INCH AND A FOOT		

GENERAL NOTES

- 1. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, THE CITY OF JOLIET, AND THE VILLAGE OF SHOREWOOD.
- 2. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- 3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- 4. THE CONTRACTOR SHALL CONTACT KALPANA KANNAN-HOSADURGA, THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR, AT KALPANA.KANNAN-HOSADURGA@ILLINOIS.GOV AND THE EXPRESSWAY FIELD ENGINEER AT (847) 705-4155, A MINIMUM OF 72 HOURS PRIOR TO THE PLACEMENT OF ANY TEMPORARY TRAFFIC CONTROL DEVICES.
- 5. THE CONTRACTOR SHALL CONTACT EMAD ALHUSSEINI, AREA TRAFFIC FIELD ENGINEER, AT EMAD.ALHUSSEINI@ILLINOIS.GOV AT LEAST TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
- 5. THE CONTRACTOR SHALL USE CARE IN GRADING OR EXCAVATING NEAR ANY AND ALL EXISTING ITEMS THAT WILL NOT BE REMOVED. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S OWN EXPENSE.
- ANY SIGNAGE, PAVEMENT MARKINGS, AND REFLECTORS DAMAGED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- 8. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE THROUGHOUT THE DURATION OF THE CONTRACT AND MAINTAIN ALL PUBLIC AND PRIVATE DRAINS. TEMPORARY DRAINAGE STRUCTURES MAY BE REQUIRED AND SHALL BE CONSTRUCTED AT THE DIRECTION OF THE ENGINEER. THIS WORK SHALL NOT BE PAID FOR SEPARATELY, BUT WILL BE CONSIDERED INCLUDED IN THE CONTRACT.
- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL J.U.L.I.E. AT 1-800-892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES. (48 HOUR NOTIFICATION IS REQUIRED)
- 10. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
- 11. WHEN ARTIFICIAL LIGHTING IS USED IN NIGHT OPERATIONS, THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC.
- 12. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS, AS REQUIRED, PRIOR TO COMMENCING WITH CONSTRUCTION.
- 13. SAW CUTTING PRIOR TO ANY REMOVAL ITEMS NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER SHALL BE CONSIDERED INCLUDED IN THE COST OF THE ITEMS BEING REMOVED.
- 14. BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE ALL EXISTING PAVEMENT MARKING LINES (AND RAISED REFLECTIVE PAVEMENT MARKERS) IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.
- 15. THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN ACCESS ACROSS THE SOUTH LEF OF NW FRONTAGE ROAD AT ALL TIMES.

COMMITMENTS

NONE

SCALE:

FDS	HDR 9450 W. BRYN MAWR AVE. ROSEMONT, IL 60018

	USER NAME = MMICZEK	DESIGNED	-	MSM	REVISED -
		DRAWN	-	YP	REVISED -
VE.	PLOT SCALE = 100.0000 ' / in.	CHECKED	-	DP	REVISED -
	PLOT DATE = 01/21/22022	DATE	-	12/17/2021	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF S	SHEETS,	НΙΘ	HW#	۱Y	STANDA	RDS AN	D GENERAL NOTES	F.A.I. RTE.	SECTI	ON	COUNTY	TOTAL SHEETS	SHEET NO.
	•	1	L_55	ΔΤ	BLACK	ROAD		55	2020-16	3-BR	WILL	65	2
	,			<u> </u>	DLAGK	IIOAD		ļ			CONTRACT	NO. 62	2M50
A1 E.	CHEET	1	OE	1	CHEETC	CTA	TO CTA		1.	LUMBER SED A	D BROJECT		

CODE NO.	DESCRIPTION	UNIT	TOTAL QUANTITY URBAN	0059 BRIDGE RESURFACING 90% FED/ 10% STATE
2010011	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	96	96
2010021	0 TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	24	24
2010140	0 NITROGEN FERTILIZER NUTRIENT	POUND	21	21
2010150	D PHOSPHORUS FERTILIZER NUTRIENT	POUND	21	21
2010160	D POTASSIUM FERTILIZER NUTRIENT	POUND	21	21
2020010	0 EARTH EXCAVATION	CU YD	85	85
2020120	0 REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	20	20
2040080	0 FURNISHED EXCAVATION	CU YD	135	135
2110150	5 TOPSOIL EXCAVATION AND PLACEMENT	CU YD	86	86
2500030	0 SEEDING, CLASS 3	ACRE	0.3	0.3
2500035	0 SEEDING, CLASS 7	ACRE	0.3	0.3
2520020	0 SUPPLEMENTAL WATERING	UNIT	36.4	36.4
2800030	5 TEMPORARY DITCH CHECKS	FOOT	10	10
2800040	D PERIMETER EROSION BARRIER	FOOT	224	224
2800051	0 INLET FILTERS	EACH	4	4
2800120	0 TEMPORARY HEAVY DUTY EROSION CONTROL BLANKET	SQ YD	1,211	1,211
3030011	2 AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	120	120

* - DENOTES SPECIALTY ITEM

USER NAME = MMICZEK DESIGNED - MSM REVISED DRAWN -MSM REVISED PLOT SCALE = 100.0000 ' / in. CHECKED -DJP REVISED -PLOT DATE = 10/1/2021 DATE - 12/21/2021 REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE:

F.A.I. RTE. SECTION SUMMARY OF QUANTITIES 2020-163-BR I-55 AT BLACK ROAD SHEET 1 OF 4 SHEETS STA. TO STA.

CODE NO.	DESCRIPTION	UNIT	TOTAL QUANTITY URBAN	0059 BRIDGE RESURFACING 90% FED/ 10% STATE
31101200	SUBBASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	53	53
35600712	HOT-MIX ASPHALT BASE COURSE WIDENING, 9"	SQ YD	90	90
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	203	203
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	407	407
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	378	378
40600990	TEMPORARY RAMP	SQ YD	14	14
40604062	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70	TON	64	64
42001300	PROTECTIVE COAT	SQ YD	81	81
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	289	289
44004250	PAVED SHOULDER REMOVAL	SQ YD	77	77
50102400	CONCRETE REMOVAL	CU YD	15.8	15.8
50300255	CONCRETE SUPERSTRUCTURE	CU YD	18.2	18.2
50300260	BRIDGE DECK GROOVING	SQ YD	1,137	1,137
50300300	PROTECTIVE COAT	SQ YD	1,936	1,936
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	220	220
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	2,430	2,430
50800515	BAR SPLICERS	EACH	24	24
52000110	PREFORMED JOINT STRIP SEAL	FOOT	110.0	110.0

*- DENOTES SPECIALTY ITEM

HDR 9450 W. BRYN MAWR AVE. ROSEMONT, IL 60018

USER NAME = MMICZEK	DESIGNED	-	MSM	REVISED -
	DRAWN	-	MSM	REVISED -
PLOT SCALE = 100.0000 / in.	CHECKED	-	DJP	REVISED -
PLOT DATE = 10/1/2021	DATE	-	12/21/2021	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES 2020-163-BR I-55 AT BLACK ROAD SHEET 2 OF 4 SHEETS STA. TO STA.

SECTION

CODE NO.	DESCRIPTION	UNIT	TOTAL QUANTITY URBAN	0059 BRIDGE RESURFACING 90% FED/ 10% STATE
52100520	ANCHOR BOLTS, 1"	EACH	1	1
60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	281	281
63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	163	163
63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	2	2
63200310	GUARDRAIL REMOVAL	FOOT	250	250
63300575	REMOVE AND REERECT RAIL ELEMENT OF EXISTING GUARDRAIL	FOOT	30	30
63302700	REMOVE AND REERECT TRAFFIC BARRIER TERMINALS, TYPE 6	EACH	1	1
66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	85	85
66900530	SOIL DISPOSAL ANALYSIS	EACH	1	1
66901001	REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN	L SUM	1	1
66901003	REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	L SUM	1	1
66901006	REGULATED SUBSTANCES MONITORING	CAL DA	20	20
67100100	MOBILIZATION	L SUM	1	1
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	12	12
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	5,323	5,323
70307100	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS - TYPE IV TAPE	SQ FT	73	73
70307120	TEMPORARY PAVEMENT MARKING - LINE 4" - TYPE IV TAPE	FOOT	13,313	13,313
70307130	TEMPORARY PAVEMENT MARKING - LINE 6" - TYPE IV TAPE	FOOT	1,237	1,237

CODE NO.	DESCRIPTION	UNIT	TOTAL QUANTITY URBAN	0059 BRIDGE RESURFACING 90% FED/ 10% STATE
70307210	TEMPORARY PAVEMENT MARKING - LINE 24"- TYPE IV TAPE	FOOT	97	97
70400100	TEMPORARY CONCRETE BARRIER	FOOT	537.5	537.5
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	462.5	462.5
70600241	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	1	1
70600341	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	1	1
78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	247	247
78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	12,574	12,574
78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	1,085	1,085
78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	910	910
78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	107	107
78004235	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - INLAID - LINE 7"	FOOT	2,372	2,372
78011040	GROOVING FOR RECESSED PAVEMENT MARKING 8"	FOOT	2,372	2,372
78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	40	40
78100300	REPLACEMENT REFLECTOR	EACH	236	236
78200006	GUARDRAIL REFLECTORS, TYPE B	EACH	31	31
78200011	BARRIER WALL REFLECTORS, TYPE C	EACH	24	24
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	40	40
78300202	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	5,886	5,886

LEGEND

*- DENOTES
SPECIALTY ITEM

HDR 9450 W. BRYN MAWR AV ROSEMONT, IL 60018

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE:

SHEET 3 OF 4 SHEETS STA. TO STA.

 F.A.I. RTE.
 SECTION
 COUNTY SHEETS WO.
 SHEET SHEETS WO.
 SHEET SHEETS WO.
 SO.

 55
 2020-163-BR
 WILL
 65
 5

 CONTRACT NO. 62M50

 ILLINOIS FED. AID PROJECT

CODE NO.	DESCRIPTION	UNIT	TOTAL QUANTITY URBAN	0059 BRIDGE RESURFACING 90% FED/ 10% STATE
89000050	TEMPORARY BRIDGE TRAFFIC SIGNAL INSTALLATION	EACH	1	1
X2100002	PRUNING FOR SAFETY AND EQUIPMENT CLEARANCE	UNIT	100	100
X6700407	ENGINEER'S FIELD OFFICE, TYPE A (D1)	CAL MO	12	12
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1
X7011015	TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS)	L SUM	1	1
X7830050	RAISED REFLECTIVE PAVEMENT MARKER, REFLECTOR REMOVAL	EACH	236	236
X8620200	UNINTERRUPTABLE POWER SUPPLY, SPEC IAL	EACH	1	1
Z0001700	APPROACH SLAB REPAIR (FULL DEPTH)	SQ YD	59	59
Z0001800	APPROACH SLAB REPAIR (PARTIAL DEPTH)	SQ YD	6	6
Z0001903	STRUCTURAL STEEL REMOVAL	POUND	90	90
Z0001905	STRUCTURAL STEEL REPAIR	POUND	370	370
Z0005216	HOT-MIX ASPHALT STABILIZATION 6" AT STEEL PLATE BEAM GUARD RAIL	SQ YD	74	74
70006012	BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/4 INCHES	SQ YD	1,159	1,159
20000012	BRIDGE BECK LATEX CONCRETE OVERLAT, 2 1/4 INCHES	JQ 10	1,139	1,159
Z0012130	BRIDGE DECK SCARIFICATION 3/4"	SQ YD	1,159	1,159
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	170	170
Z0012755	STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)	SQ FT	38	38
Z0016001	DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SQ YD	2	2
Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	3	3
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	52	52

	CODE NO.	DESCRIPTION	UNIT	total quantity URBAN	0059 BRIDGE RESURFACING 90% FED/ 10% STATE
	Z0073510	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	5	5
Ø	Z0076600	TRAINEES	HOURS	500	500
Ø	Z0076604	TRAINEES - TRAINING PROGRAM GRADUATE	HOURS	500	500

USER NAME = MMICZEK DESIGNED - MSM REVISED DRAWN REVISED MSM PLOT SCALE = 100.0000 ' / in. CHECKED -DJP REVISED PLOT DATE = 10/1/2021 DATE - 12/21/2021 REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE:

*- DENOTES
SPECIALTY ITEM

0042

ECTION

COUNTY

SHEETS
NO.

0-163-BR

WILL

65

CONTRACT

O-163-BR

CONTRACT

CONTRACT

ILLINOIS

FED. AID PROJECT

DEV. SED. F.A.I. RTE. SECTION SUMMARY OF QUANTITIES 2020-163-BR I-55 AT BLACK ROAD SHEET 4 OF 4 SHEETS STA. TO STA.

EARTHWORK TABLE												
EARTH EXCAVATION	**SUITABLE EXCAVATION	EMBANKMENT	EARTHWORK BALANCE	FURNISHED EXCAVATION	TOPSOIL REMOVAL	TOPSOIL EXCAVATION AND PLACEMENT	NON-SPECIAL WASTE DISPOSAL	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL				
(CU YD)	(CU YD)	(CU YD)	(CU YD)	(CU YD)	(CU YD)	(CU YD)	(CU YD)	(CU YD)				
20200100				20400800		21101505	66900200	20201200				
85	0	135	-135	135	86	86	85	20				
•				•								
85	0	135	-135	135	86	86	85	20				
	(CU YD) 20200100	XCAVATION EXCAVATION (CU YD) (CU YD) 20200100 85 0	XCAVATION	XCAVATION	XCAVATION EXCAVATION EMBANKMENT BALANCE EXCAVATION (CU YD) (CU YD) (CU YD) (CU YD) 20200100 20400800 85 0 135 -135 135	XCAVATION	CCU YD CCU	EARTH				

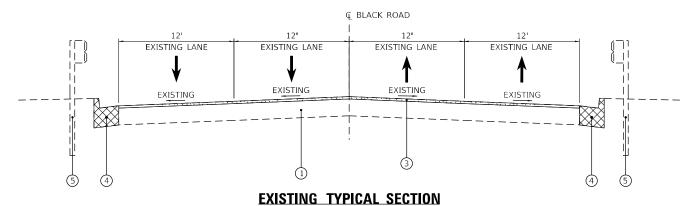
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HDR 9450 W. BRYN MAWR AVE. ROSEMONT, IL 60018

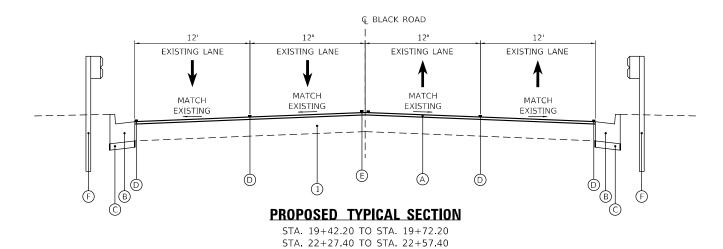
USER NAME = MMICZEK	DESIGNED -	MSM	REVISED -
	DRAWN -	YP	REVISED -
PLOT SCALE = 200.0000 / in.	CHECKED -	DP	REVISED -
PLOT DATE = 01/21/22022	DATE -	12/17/2021	REVISED -

SCALE:

		SC	HEDU	LE	OF QUA	NTITIES	F.A.I. RTE	SECT	COUNTY				
I-55 AT BLACK ROAD							55	2020-1	63-BR		WILL	I	
											CONTRACT	-	
	SHEET	1	OF	1	SHEETS	STA.	TO STA.			ILLINOIS	FED. A	D PROJECT	



STA. 19+42.20 TO STA. 19+72.20 STA. 22+27.40 TO STA. 22+57.40

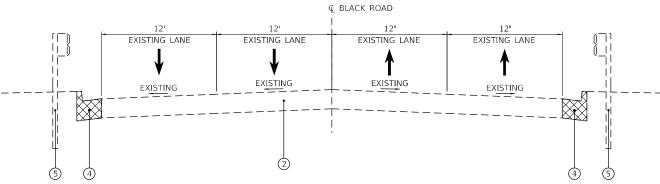


EXISTING LEGEND

- 1 EXISTING HOT-MIX ASPHALT PAVEMENT
- 2 EXISTING CONCRETE APPROACH SLAB
- 3 HMA SURFACE REMOVAL - BUTT JOINT
- 4 COMBINATION CONCRETE CURB & GUTTER REMOVAL
- EXISTING GUARDRAIL

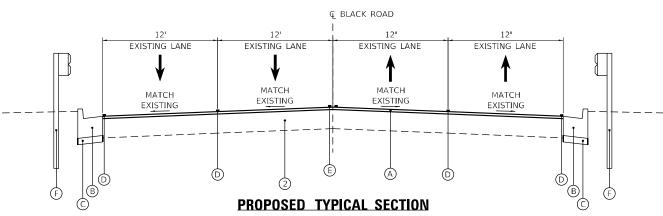
PROPOSED LEGEND

- HOT-MIX ASPHALT SURFACE COURSE, MIX "D", IL-9.5, N70 (1.5")
- PROPOSED CONCRETE CURB AND GUTTER, TYPE B-6.24
- 0 SUBBASE GRANULAR MATERIAL, TYPE B 4"
- D THERMOPLASTIC PAVEMENT MARKING - LINE 4", WHITE
- (E) THERMOPLASTIC PAVEMENT MARKING - LINE 4", YELLOW
- STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS



EXISTING TYPICAL SECTION

STA. 19+72.20 TO STA. 19+96.27 STA. 19+96.27 TO STA. 22+03.33 - BRIDGE OMISSION STA. 22+03.33 TO STA. 22+27.40



STA, 19+72.20 TO STA, 19+96.27 STA. 19+96.27 TO STA. 22+03.33 - BRIDGE OMISSION STA. 22+03.33 TO STA. 22+27.40

HOT-MIX ASPHALT MIXTURE REQUIREMENTS									
MIXTURE TYPE	AIR VOIDS @ NDES	QMP	MTD (REQUIRED?)						
PAVEMENT RESURFACING									
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", IL-9.5, N70; 1.5"	4% @ 70 GYR.	QC/QA							
PAVEMENT WIDENING									
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", IL-9.5, N70; 2"	4% @ 70 GYR.	QC/QA							
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70; 9"	4% @ 70 GYR.	QC/QA							
QMP DESIGNATIONS: QUALITY CONTROL/QUALITY ASSURANCE (QC/QA); QUALITY CONTROL PERFORMANCE (PFP)	FOR PERFORMANCE	(QCP); F	PAY FOR						

SCALE: N.T.S.

- NOTES FOR HMA MIXTURE REQUIREMENTS:

 1. THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.

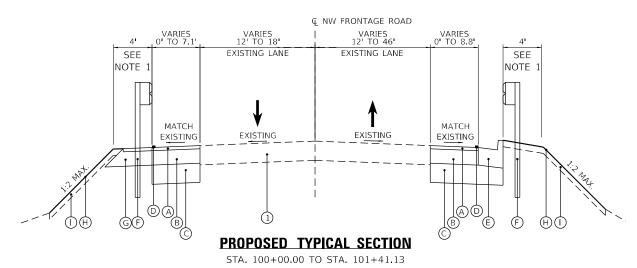
 2. THE AC TYPE FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22", UNLESS MODIFIED BY RECLAIMED MATERIALS SPECIFICATIONS.

USER NAME = MMICZEK	DESIGNED -	MSM	REVISED -
	DRAWN -	YJP	REVISED -
PLOT SCALE = 10.0000 / in.	CHECKED -	DP	REVISED -
PLOT DATE = 10/1/2021	DATE -	12/10/2021	REVISED -

TYPICAL SECTIONS							F.A.I. SECTION COUNTY				SHEET NO.
I-55 AT BLACK ROAD						55	2020-163-BF	l	WILL	65	8
	. 55 /	· ·	DLAUK	IIOAD					CONTRACT	NO. 62	2M50
1	OF	2	SHEETS	STA.	TO STA.		ILLING	IS FED. A	ID PROJECT		

EXISTING TYPICAL SECTION

STA. 100+00.00 TO STA. 101+41.13



EXISTING LEGEND

- 1 EXISTING HOT-MIX ASPHALT PAVEMENT
- 2 COMBINATION CONCRETE CURB & GUTTER REMOVAL
- 3 EXISTING GUARDRAIL

PROPOSED LEGEND

- (A) HOT-MIX ASPHALT SURFACE COURSE, MIX "D", IL-9.5, N70 (2")
- B HOT-MIX ASPHALT BASE COURSE WIDENING, 9"
- C AGGREGATE SUBGRADE IMPROVEMENT, 12"
- ① THERMOPLASTIC PAVEMENT MARKING LINE 4", WHITE
- E PROPOSED CONCRETE CURB AND GUTTER, TYPE B-6.24
- F STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS
- G HMA STABILIZATION (MATERIAL SAME AS SHOULDER)
- H SEEDING, CLASS 3
- 1 TOPSOIL FURNISH AND PLACE, 4"

NOTES

1. HINGE POINT TO BE LOCATED A MINIMUM OF 2 FEET FROM BACK OF GUARD RAIL POSTS, MEASURED PERPENDICULAR TO THE EDGE OF PAVEMENT.

HDR 9450 W. BRYN MAWR AVE. ROSEMONT, IL 60018

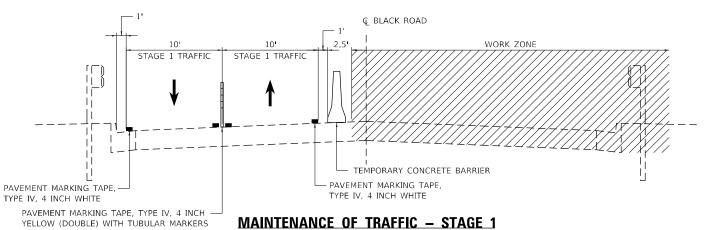
USER NAME = MMICZEK	DESIGNED	-	MSM	REVISED -
	DRAWN	-	YJP	REVISED -
PLOT SCALE = 10.0000 / in.	CHECKED	-	DP	REVISED -
PLOT DATE = 01/21/22022	DATE	-	12/10/2021	REVISED -

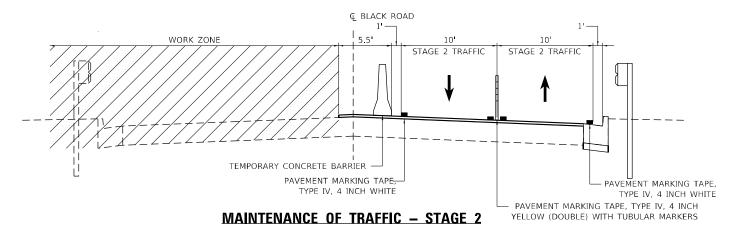
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS							F.A.I. RTE	SEC	TION		COUNTY	TOTAL SHEETS	SHEET NO.	
		1	NW	FRO	NTAGE	ROAD		55	2020-	163-BR		WILL	65	9
					MINGE	HOAD						CONTRACT	NO. 62	2M50
SCALE: N.T.S.	SHEET	2	OF	2	SHEETS	STA.	TO STA.			ILLINOIS	FED. A	ID PROJECT		

MOT GENERAL NOTES

- 1. TRAFFIC CONDITIONS, CRASHES, AND OTHER UNFORESEEN EMERGENCY CONDITIONS MAY REQUIRE THE ENGINEER TO RESTRICT, MODIEY OR REMOVE LANE CLOSURES OR CHANNELIZATION SHOWN ON THE PLANS. THE CONTRACTOR SHALL MAKE THE NECESSARY ADJUSTMENTS AS DIRECTED BY THE ENGINEER WITHOUT DELAY. COMPLIANCE WITH THIS REQUIREMENT SHALL BE CONSIDERED INCLUDED IN THE CONTRACT UNIT PRICE OF TRAFFIC CONTROL AND PROTECTION (ARTERIALS).
- 2. THE MAINTENANCE OF TRAFFIC PLANS SHALL SERVE AS A GUIDE FOR THE SAFE DIVERSION OF TRAFFIC DURING EXECUTION OF THE 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 SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL.
- 3. THE CONTRACTOR SHALL REMOVE ALL TEMPORARY OR EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH THE STAGING. REMOVAL OF TEMPORARY PAVEMENT MARKING LINE WILL BE PAID FOR AS TEMPORARY PAVEMENT MARKING REMOVAL. REMOVAL OF EXISTING PAVEMENT MARKING ON PAVEMENT TO REMAIN WILL BE PAID FOR AS PAVEMENT MARKING REMOVAL - WATER BLASTING
- 4. ALL TEMPORARY PAVEMENT MARKINGS SHALL BE PAVEMENT MARKING TAPE, TYPE IV
- 5. ALL TRAFFIC CONTROL DEVICES INCLUDING, BUT NOT LIMITED TO DRUMS, VERTICAL PANELS, AND BARRICADES IMMEDIATELY ADJACENT TO THE EDGE OF TRAVELLED WAY SHALL BE EQUIPPED WITH MONO-DIRECTIONAL STEADY BURNING LIGHTS.
- 6. THE CONTRACTOR SHALL REMOVE OR COVER ALL EXISTING SIGNS THAT CONFLICT WITH OR DO NOT APPLY TO THE REVISED TRAFFIC PATTERNS AND SHALL RESTORE THE SIGNS AT THE END OF CONSTRUCTION AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE CONSIDERED INCLUDED IN THE TRAFFIC CONTROL AND PROTECTION (SPECIAL)
- 7. ANY RAISED REFLECTIVE MARKERS THAT CONFLICT WITH THE TEMPORARY TRAFFIC LANES MUST HAVE THE REFLECTIVE LENSES REMOVED AS DIRECTED BY THE ENGINEER. REFLECTOR REPLACEMENT NOT TO OCCUR UNTIL NO LONGER IN CONFLICT WITH TEMPORARY TRAFFIC CONFIGURATION.
- 8. DURING CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO AVOID ANY CONSTRUCTION DEBRIS FROM ENCROACHING INTO TRAVEL LANES.
- 9 PEDESTRIAN ACCESS SHALL BE MAINTAINED AT ALL TIMES ANY TEMPORARY SIGNAGE TEMPORARY ACCESS PATHS OR OTHER ITEMS NEEDED TO REPOUTE PEDESTRIAN TRAFFIC AROUND WORK ZONES SHALL BE APPROVED BY THE ENGINEER. THE COST OF THIS WORK SHALL BE CONSIDERED INCLUDED IN THE CONTRACT UNIT PRICE OF TRAFFIC CONTROL AND PROTECTION (ARTERIALS).
- 10. THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN ACCESS ACROSS THE SOUTH LEG OF NW FRONTAGE ROAD AT ALL TIMES.
- 11. THE CONTRACTOR SHALL CONTACT KALPANA KANNAN-HOSADURGA, THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR, AT KALPANA.KANNAN-HOSADURGA@ILLINOIS.GOV A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
- CONTRACTOR SHALL MAINTAIN SATISFACTORY INGRESS AND EGRESS TO ADJACENT PROPERTIES THOUGHOUT THE CONSTRUCTION.
- 13. BEFORE INSTALLING POST MOUNTED SIGNS, THE CONTRACTOR SHALL CALL J.U.L.I.E. AT 1-800-892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES.





SUGGESTED STAGING AND MAINTENANCE OF TRAFFIC

PRE-STAGE

CONSTRUCTION STAGING:

1. CONSTRUCT PAVEMENT WIDENING, CONCRETE CURB AND GUTTER, AND GUARDRAIL AT NORTH LEG OF NW FRONTAGE ROAD. COMBINATION CURB AND GUTTER SHALL BE CONSTRUCTED TO FINAL ELEVATION ACCORDING TO PROPOSED OVERLAY TRANSITION.

MAINTENANCE OF TRAFFIC:

- 1. UTILIZE DAY TIME LANE CLOSURES TO CONSTRUCT WIDENING AT NORTHWEST FRONTAGE ROAD.
- 2. MAINTAIN FOUR-LANE TWO-WAY TRAFFIC ON ON BLACK ROAD.
- 3. REMOVE CONFLICTING EXISTING PAVEMENT MARKINGS

STAGE 1

CONSTRUCTION STAGING:

- 1. REPLACE BRIDGE JOINTS AND REPAIR APPROACH SLAB ON EASTBOUND HALF OF BRIDGE.
- 2. SCARIFY BRIDGE DECK ¾" ON EASTBOUND HALF OF BRIDGE AND PLACE LATEX CONCRETE OVERLAY.
- 3. REMOVE AND REPLACE COMBINATION CONCRETE CURB AND GUTTER ON RIGHT TO FINAL ELEVATION ACCORDING TO PROPOSED OVERLAY TRANSITION
- 4. REMOVE AND REPLACE GUARDRAIL ON RIGHT TO FINAL ELEVATION ACCORDING TO PROPOSED OVERLAY TRANSITION
- 5. SCARIFY AND OVERLAY EASTBOUND APPROACH SLABS AND EXISTING PAVEMENT

MAINTENANCE OF TRAFFIC:

- 1. MAINTAIN TWO-LANE TWO-WAY TRAFFIC ON WESTBOUND PAVEMENT ACROSS BRIDGE AS SHOWN IN PLANS.
- 2. REMOVE CONFLICTING EXISTING PAVEMENT MARKINGS.
- 3. ACCESS TO AND FROM NW FRONTAGE ROAD IS TO BE PROVIDED FOR RIGHT-IN RIGHT-OUT MOVEMENTS ONLY USING A TEMPORARY TRAFFIC SIGNAL AS SHOWN IN THE PLANS. THE SOUTH LEG OF NW FRONTAGE ROAD IS TO BE CLOSED AND TRAFFIC DETOURED PER DETOUR PLANS.

STAGE 2

CONSTRUCTION STAGING:

- 1. REPLACE BRIDGE JOINTS AND REPAIR APPROACH SLAB ON WESTBOUND HALF OF BRIDGE
- 2. SCARIFY BRIDGE DECK 3/4" ON WESTBOUND HALF OF BRIDGE AND PLACE LATEX CONCRETE OVERLAY.
- 3. REMOVE AND REPLACE COMBINATION CONCRETE CURB AND GUTTER ON LEFT TO FINAL ELEVATION ACCORDING TO PROPOSED OVERLAY TRANSITION.
- 4. REMOVE AND REPLACE GUARDRAIL ON LEFT TO FINAL ELEVATION ACCORDING TO PROPOSED OVERLAY TRANSITION.
- 5. SCARIFY AND OVERLAY WESTBOUND APPROACH SLAB AND EXISTING PAVEMENT ON EAST SIDE OF BRIDGE. CONSTRUCT TEMPORARY HMA RAMP AT

MAINTENANCE OF TRAFFIC:

- 1. MAINTAIN TWO-LANE TWO-WAY TRAFFIC ON EASTBOUND PAVEMENT ACROSS BRIDGE AS SHOWN IN PLANS.
- 2. REMOVE CONFLICTING EXISTING PAVEMENT MARKINGS
- 3. ACCESS TO AND FROM NW FRONTAGE ROAD IS TO BE PROVIDED FOR RIGHT-IN RIGHT-OUT MOVEMENTS ONLY USING A TEMPORARY TRAFFIC SIGNAL AS SHOWN IN THE PLANS. THE SOUTH LEG OF NW FRONTAGE ROAD IS TO BE CLOSED AND TRAFFIC DETOURED PER DETOUR PLANS.

POST STAGE

CONSTRUCTION STAGING:

1. CONSTRUCT APPROACH SLAB SCARIFICATION, BUTT JOINT AND OVERLAY OF WESTBOUND APPROACH SLAB AND EXISTING PAVEMENT ON WEST SIDE OF

MAINTENANCE OF TRAFFIC:

- 1. UTILIZE DAY TIME LANE CLOSURES TO CONSTRUCT BUTT JOINT AND OVERLAY.
- 2. MAINTAIN A MINIMUM OF TWO-LANES OF EASTBOUND TRAFFIC AND ONE LANE OF WESTBOUND TRAFFIC ON BLACK ROAD AT ALL TIMES.

SUBSTRUCTURE REPAIRS

CONSTRUCTION STAGING:

PERFORM THE FOLLOWING WORK CONCURRENTLY WITH SUPERSTRUCTURE REPAIRS:

- 1. REPAIR SHOULDER BRIDGE PIER AT BLACK ROAD OVER SOUTHBOUND I-55.
- 2. REPAIR MEDIAN BRIDGE PIER AT BLACK ROAD OVER SOUTHBOUND I-55
- 3. REPAIR MEDIAN BRIDGE PIER AT BLACK ROAD OVER NORTHBOUND I-55
- 4. REPAIR SHOULDER BRIDGE PIER AT BLACK ROAD OVER NORTHBOUND I-55.

MAINTENANCE OF TRAFFIC:

- 1. UTILIZE IDOT HIGHWAY STANDARD 701400, 701401, AND 701428.
- 2. WORK IS TO BE PERFORMED USING OVERNIGHT LANE CLOSURES.
- 3. MAINTAIN A MINIMUM OF TWO-LANE TRAFFIC ON I-55 IN THE DIRECTION IN WHICH WORK IS BEING PERFORMED AND THREE-LANE TRAFFIC IN THE OPPOSITE DIRECTION AT ALL TIMES.

SUGGESTED TRAFFIC CONTROL PLAN GENERAL NOTES

1. ALL SIGNING SHALL BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED JANUARY 1, 2022", THE DETAILS IN THESE PLANS, THE LATEST EDITION OF THE STATE OF ILLINOIS "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES", AND THE SPECIAL PROVISIONS.

2. THE ENGINEER SHALL BE NOTIFIED IN WRITING AT LEAST THREE WEEKS PRIOR TO THE DAY THE DETOUR IS TO BE IN EFFECT. THE ENGINEER SHALL DETERMINE THE HOUR OF CLOSURE. THE ENGINEER WILL CONTACT THE APPROPRIATE LOCAL AGENCIES AND INTERESTED PARTIES.

3. THE CONTRACTOR SHALL SUPPLY TO THE ENGINEER THE NAMES AND TELEPHONE NUMBERS OF HIS REPRESENTATIVES ON THE CONSTRUCTION SITE AND HIS REPRESENTATIVE RESPONSIBLE FOR THE DETOUR SIGNING PRIOR TO THE START OF THE WORK,

4. IF REQUESTED BY THE CONTRACTOR IN WRITING AT LEAST THREE WEEKS PRIOR TO THE DAY THE DETOUR IS TO BE IN EFFECT, THE ENGINEER WILL FIELD LOCATE THE POSITIONS OF ANY SIGNS.

5. THE ROAD SHALL NOT BE CLOSED UNTIL ALL SIGNING IS ERECTED IN ACCORDANCE WITH THE DETOUR PLAN AND INSPECTED AND APPROVED BY THE ENGINEER.

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL BARRICADES, SIGNS, LIGHTS, AND OTHER DEVICES INSTALLED BY HIM ARE IN PLACE AND OPERATING 24 HOURS EACH DAY INCLUDING SUNDAYS AND HOLIDAYS DURING THE TIME THE DETOUR IS IN FFFECT.

7. THE TRAFFIC CONTROL SHOWN ON THE DETOUR PLAN IS THE MINIMUM NECESSARY TO ENSURE THIS ROAD CLOSURE. THE CONTRACTOR SHALL MAKE ALL CHANGES IN TRAFFIC CONTROL THAT IS DEEMED NECESSARY BY THE ENGINEER. ADDITIONS AND DELETIONS OF TRAFFIC CONTROL FOR THIS DETOUR SHALL BE CONSIDERED INCLUDED IN THE COST OF THE PAY ITEM "TRAFFIC CONTROL AND PROTECTION (SPECIAL)".

8. ALL EXISTING SIGNING THAT IS NOT APPLICABLE WHILE THE DETOUR IS IN EFFECT SHALL BE COMPLETELY COVERED BY THE CONTRACTOR, IN A MANNER APPROVED BY THE ENGINEER.

9. ALL DETOUR SIGNING SHALL BE POST MOUNTED IF THE ROAD CLOSURE IS TO EXCEED FOUR (4) CALENDAR DAYS.

10. ALL DETOUR SIGNING EXCEPT REGULATORY SIGNS SHALL HAVE BLACK LEGENDS ON FLUORESCENT ORANGE SHEETING AND STANDARD BLACK BORDERS. THE FLUORESCENT ORANGE REFLECTIVE SHEETING SHALL MEET THE REQUIREMENTS OF ARTICLE 1084.02 OF THE STANDARD SPECIFICATIONS. ALL DETOUR SIGNING SHALL BE NEW OR LIKE NEW CONDITION OF THE SIGNS. THE ENGINEER SHALL BE THE SOLE JUDGE OF THE CONDITION OF THE SIGNS.

11. THE SIZES OF ALL SIGNS NOT SPECIFIED IN THESE PLANS SHALL BE AS REQUIRED BY THE ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

12. AS A MINIMUM, ALL AMBER FLASHING LIGHTS THAT ARE REQUIRED FOR THIS DETOUR SHALL MEET THE REQUIREMENTS FOR TYPE A-LOW INTENSITY FLASHING LIGHTS IN ARTICLE 1084.01 OF THE STANDARD SPECIFICATIONS. ALL LIGHTS SHALL OPERATE DURING THE HOURS OF DARKNESS. ONLY LIGHTS THAT HAVE BEEN APPROVED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION SHALL BE USED.

13. WHEN REQUIRED THE MINIMUM DIMENSIONS OF THE ORANGE WARNING FLAGS SHOWN IN THESE PLANS ARE 18" \times 18".

14. ALL BARRICADES SHALL HAVE REFLECTORIZED STRIPING ON BOTH SIDES OF THE BARRICADES. THE TYPE III BARRICADES USED AT THE POINT OF CLOSURE TO THRU TRAFFIC SHALL NOT EXCEED 8 FEET IN WIDTH EACH, FOR A SINGLE APPROACH LANE.

15. THE "ROAD CLOSED" (R11-2) SIGNS SHALL BE MOUNTED ABOVE THE TOP OF THE BARRICADE. ALL TYPE III BARRICADES SHALL HAVE TWO (2) AMBER TYPE A-LOW INTENSITY FLASHING LIGHTS SPACED NEAR THE CENTERLINE OF THE SUPPORTS.

16. THE ROAD NAME SIGN SHALL HAVE A BLACK LEGEND ON FLUORESCENT ORANGE REFLECTIVE SHEETING. THE SIGN SHALL BE A 9" X VARIABLE OR A 12" X VARIABLE WITH DESIGN SERIES C LETTERS. THE CAPITAL LETTERS SHALL BE 6" WITH 5" LOWER CASE.

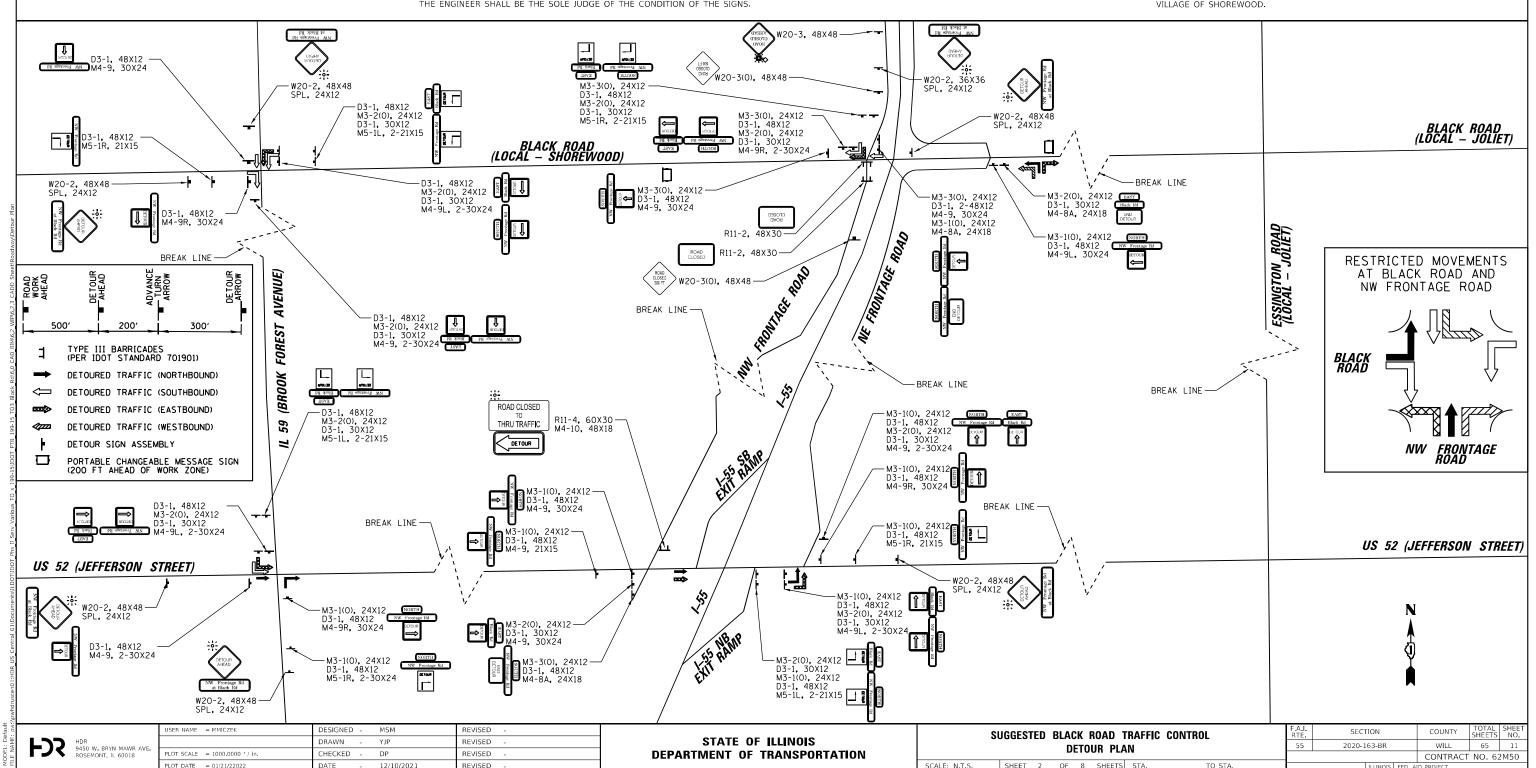
17. DURING NON-WORKING HOURS AT THE POINT OF ROAD CLOSURE TO ALL TRAFFIC THE CONTRACTOR SHALL PROVIDE A MEANS TO RESTRAIN THE BARRICADES FROM EASY MOVEMENT BY VANDALS. THE CHOSEN METHOD SHALL BE APPROVED BY THE ENGINEER.

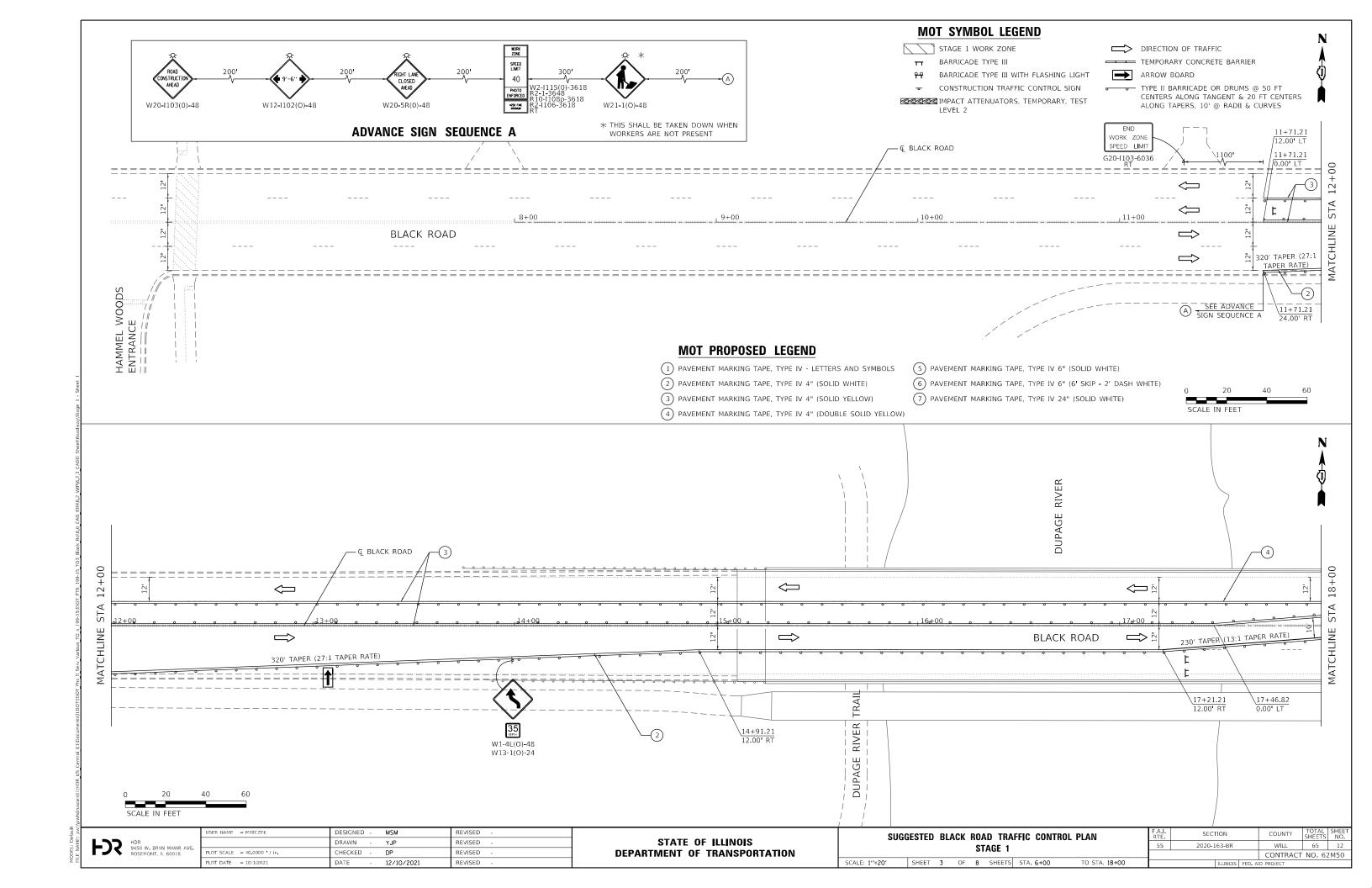
18. CONSTRUCTION EQUIPMENT SHALL NOT BE PARKED WITHIN 25 FT BEHIND THE TYPE III BARRICADES. IN ANY EVENT ARTICLE 701.04 OF THE STANDARD SPECIFICATIONS SHALL APPLY.

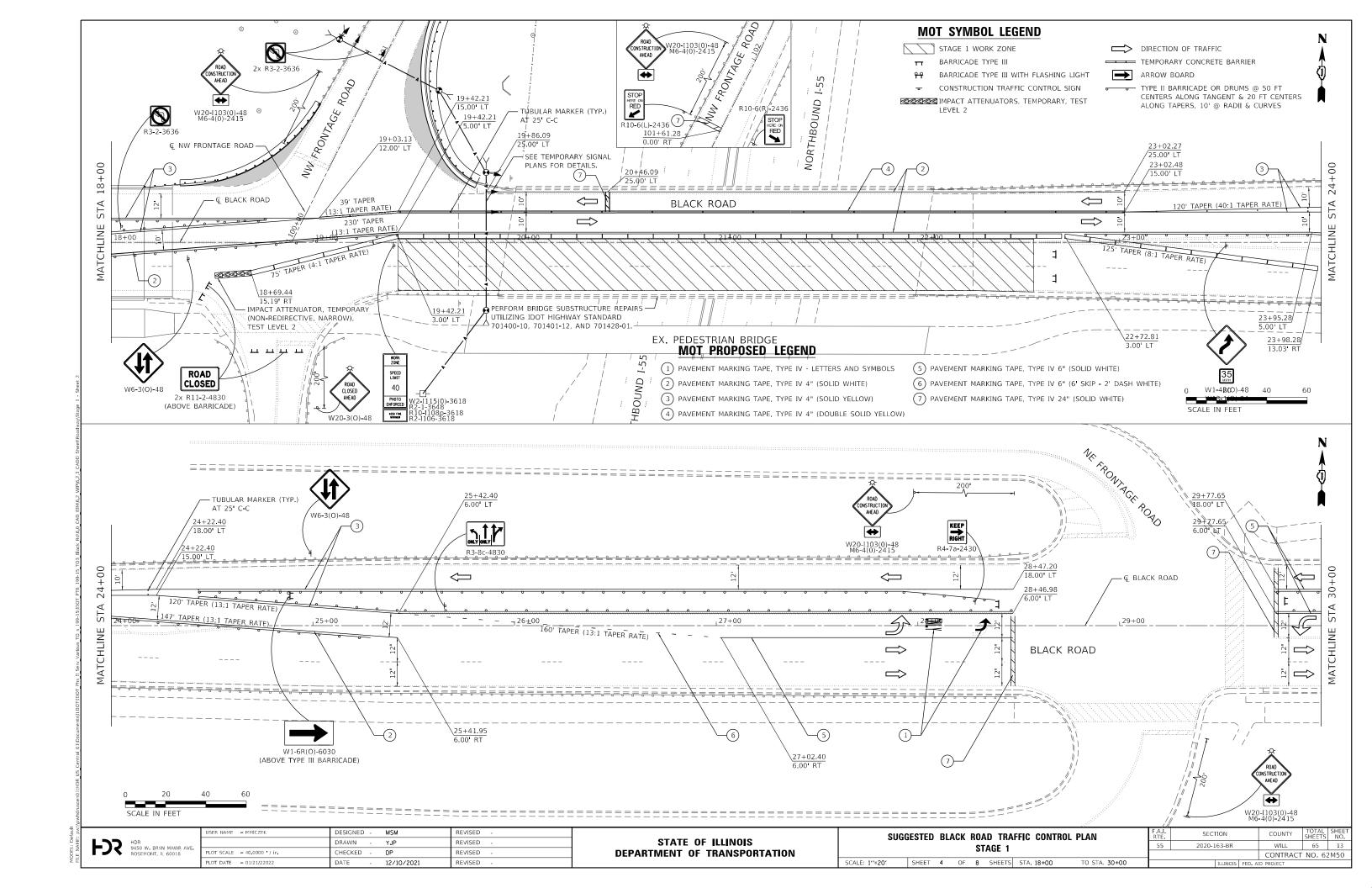
19. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE VISIBILITY OF ALL DETOUR AND CONSTRUCTION SIGNING, INCLUDING BRUSHING BACK VEGETATION IF DEEMED NECESSARY BY THE ENGINEER.

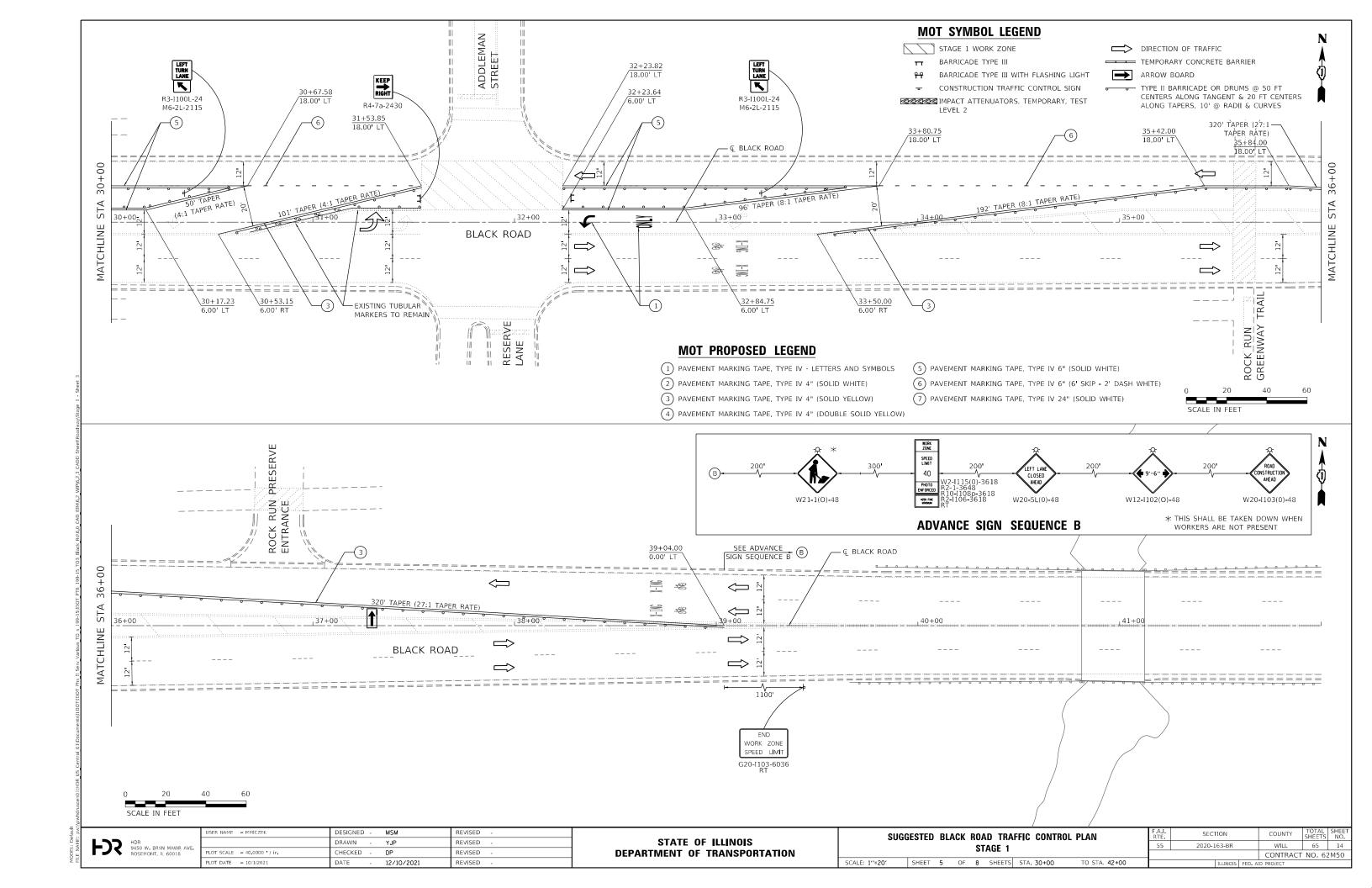
20. THE ENGINEER SHALL BE NOTIFIED AT LEAST TWO (2) HOURS BEFORE THE ROAD IS TO BE OPENED TO TRAFFIC. THE ENGINEER WILL CONTACT THE APPROPRIATE LOCAL AGENCIES AND INTERESTED PARTIES.

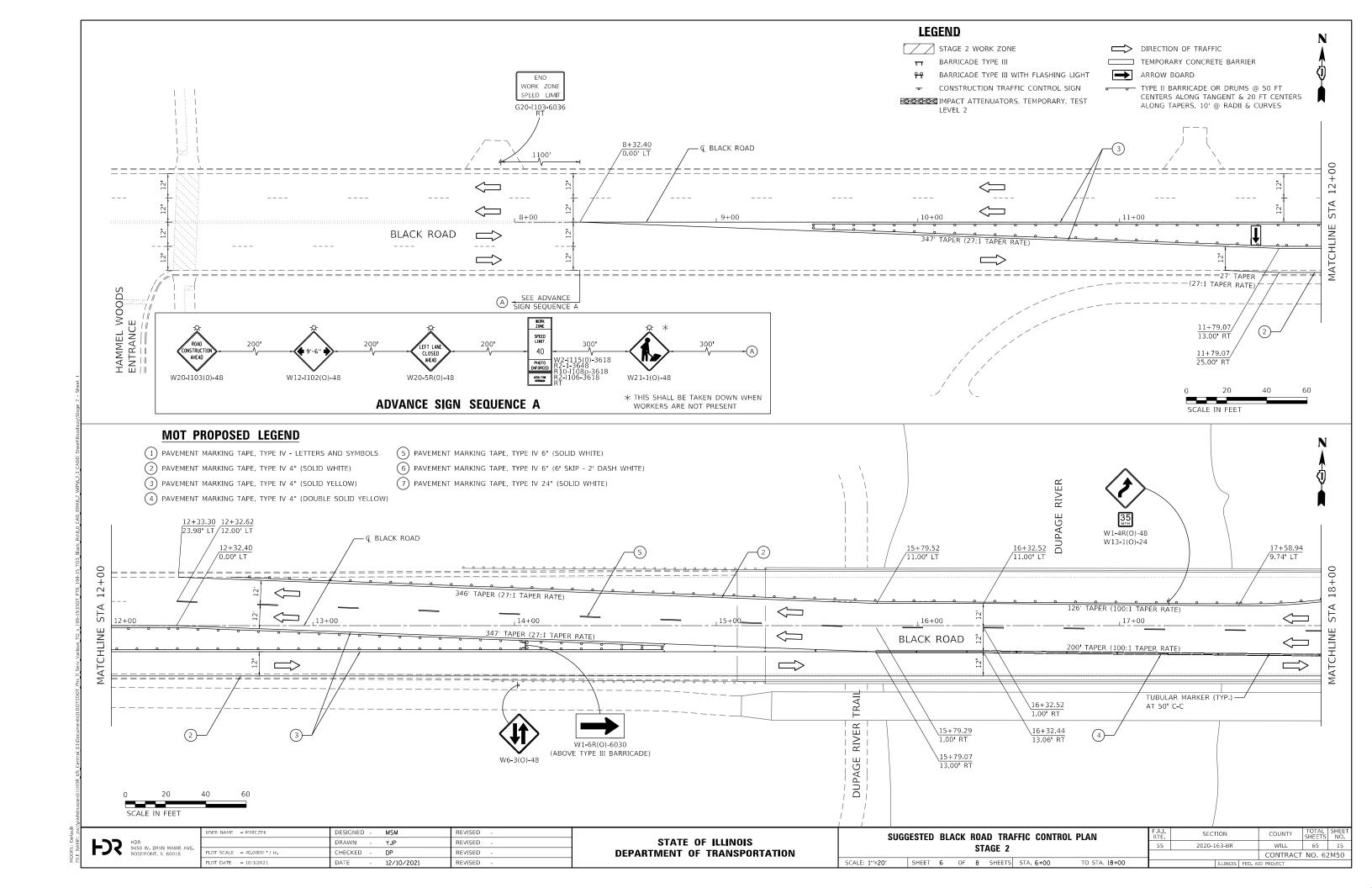
21. BLACK ROAD LANE CLOSURE AND DETOUR SHALL NOT BEGIN PRIOR TO MAY 1, 2022 WITHOUT WRITTEN PERMISSION FROM THE VILLAGE OF SHOREWOOD.

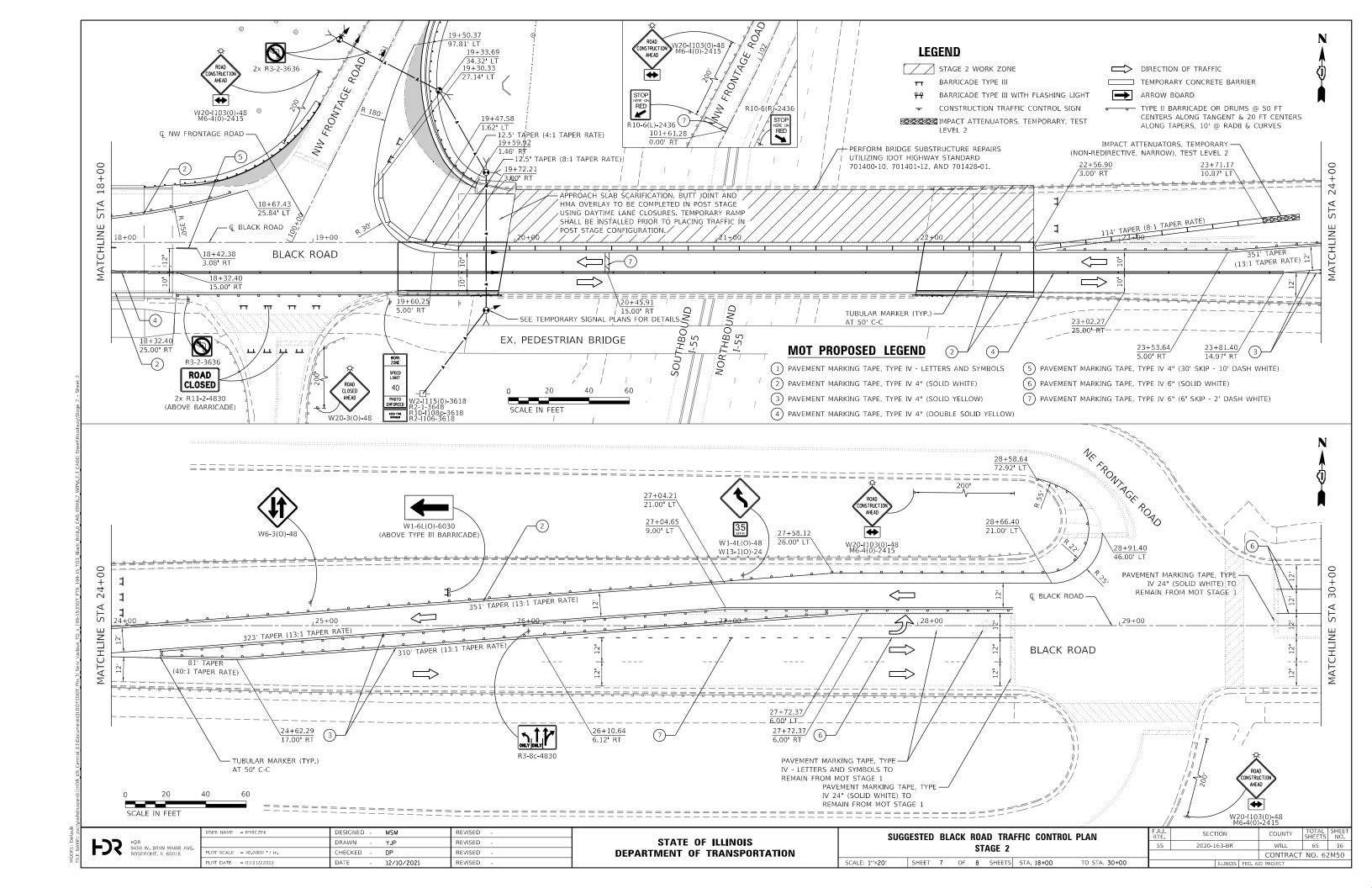


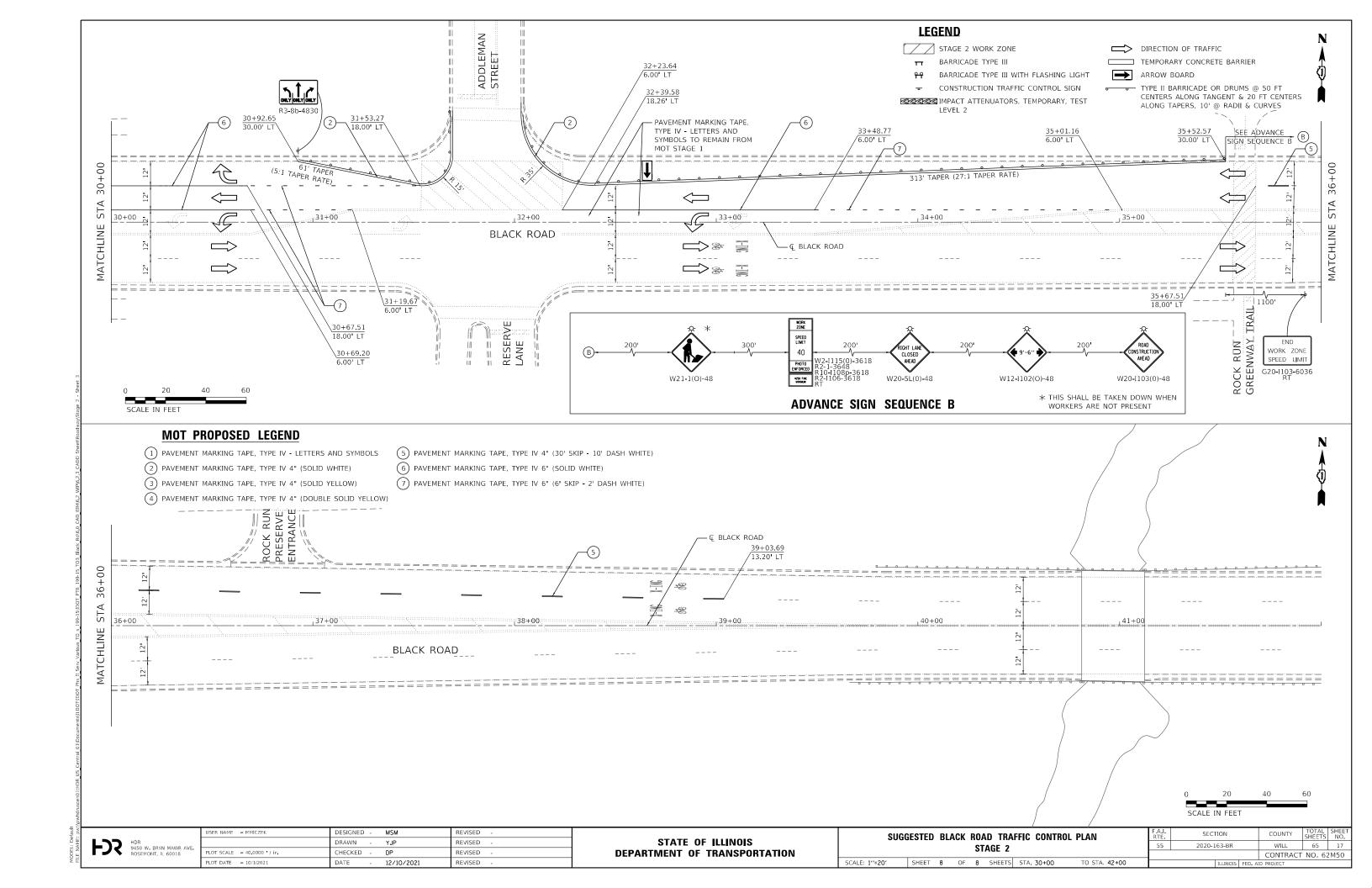




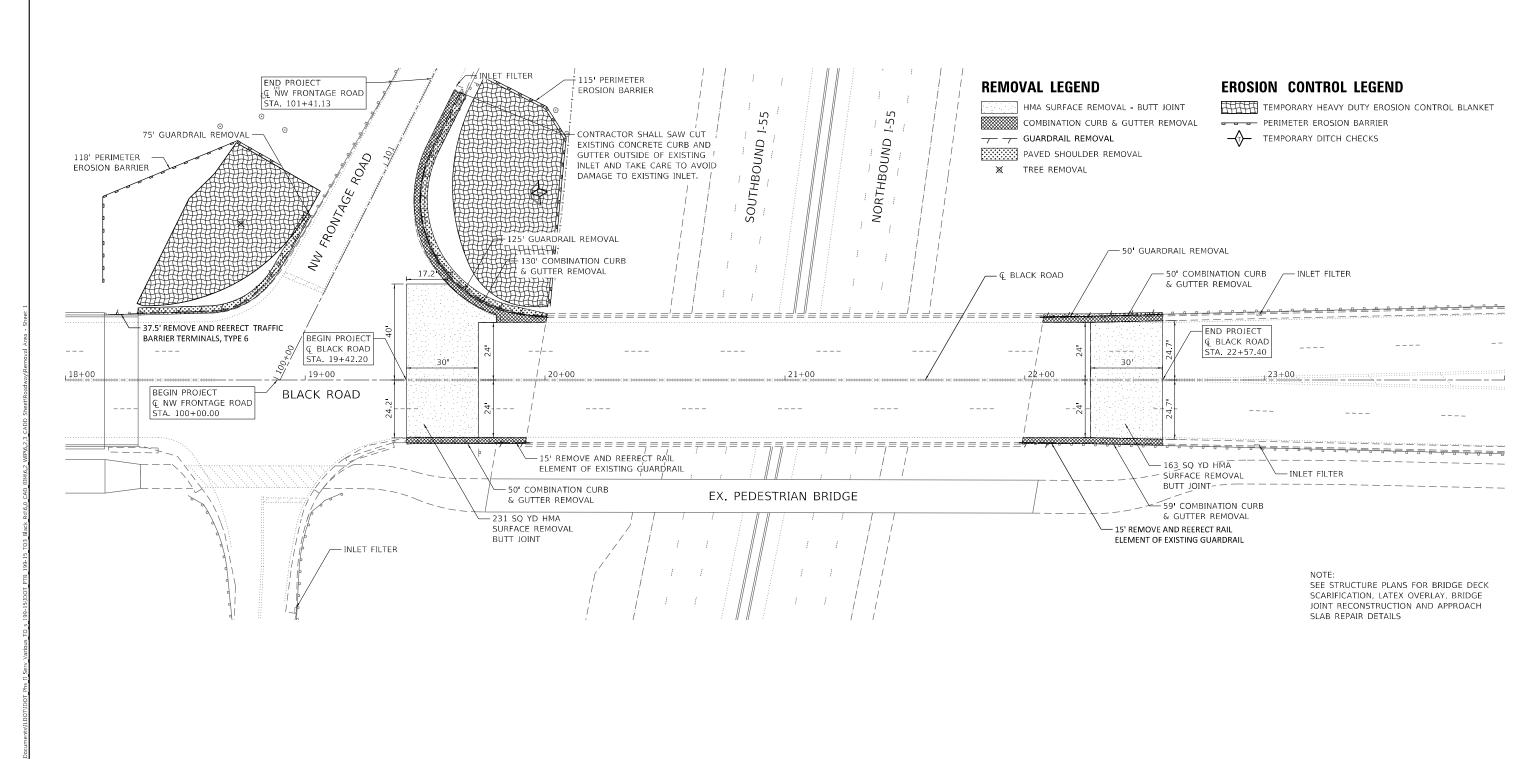












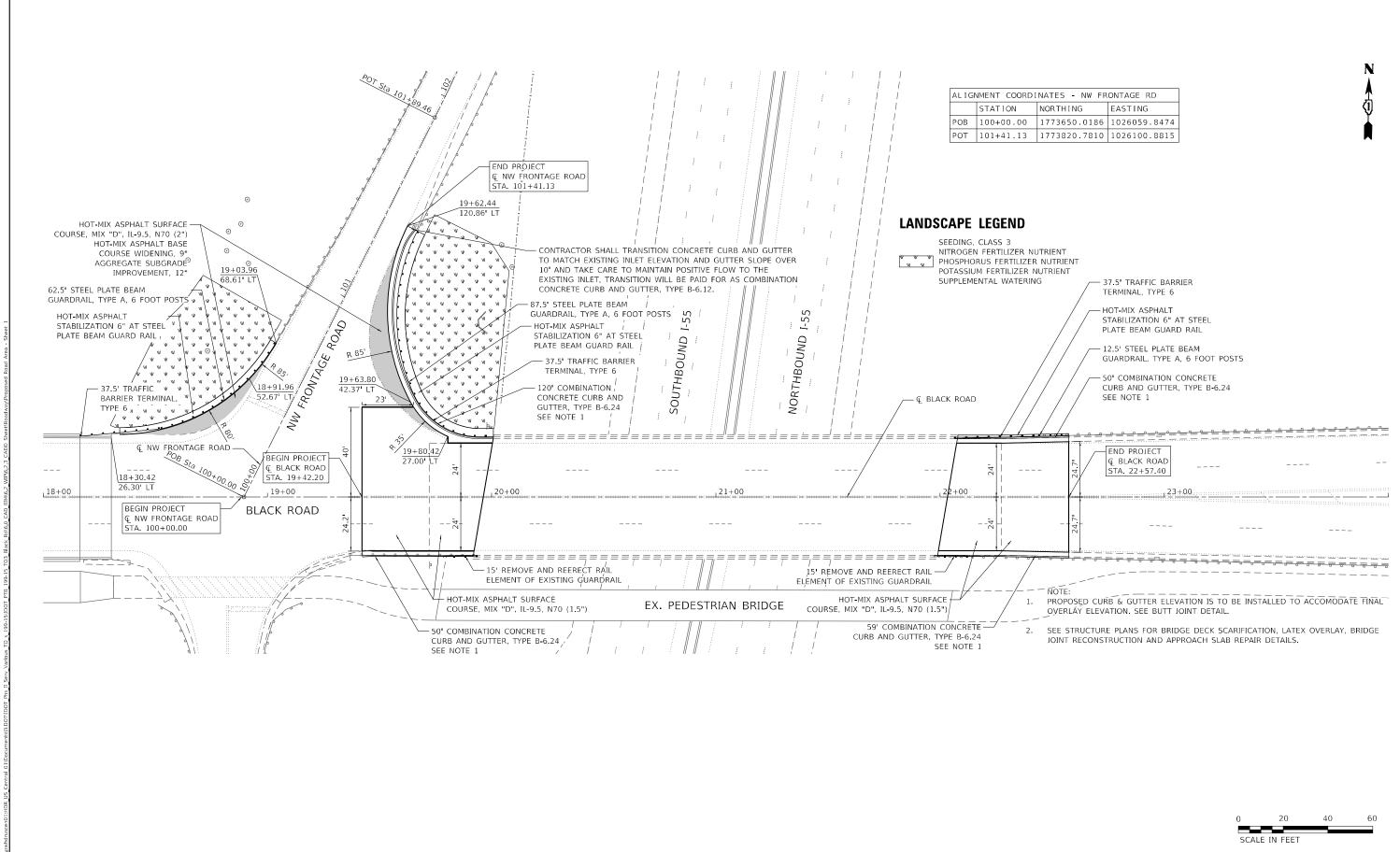
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SCAL	E IN FEET		

HDR
9450 W. BRYN MAWR AVE.
ROSEMONT, IL 60018

USER NAME = MMICZEK	DESIGNED - MSM	REVISED -
	DRAWN - YJP	REVISED -
PLOT SCALE = 40.0000 / in	CHECKED - DP	REVISED -
PLOT DATE = 01/21/22022	DATE - 12/10/2021	REVISED -

STAT	OF ILLINOIS	
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SCALE: 1"=20"	SHEET	1	OF	1	SHEETS	STA. 18+00	TO STA. 24+00



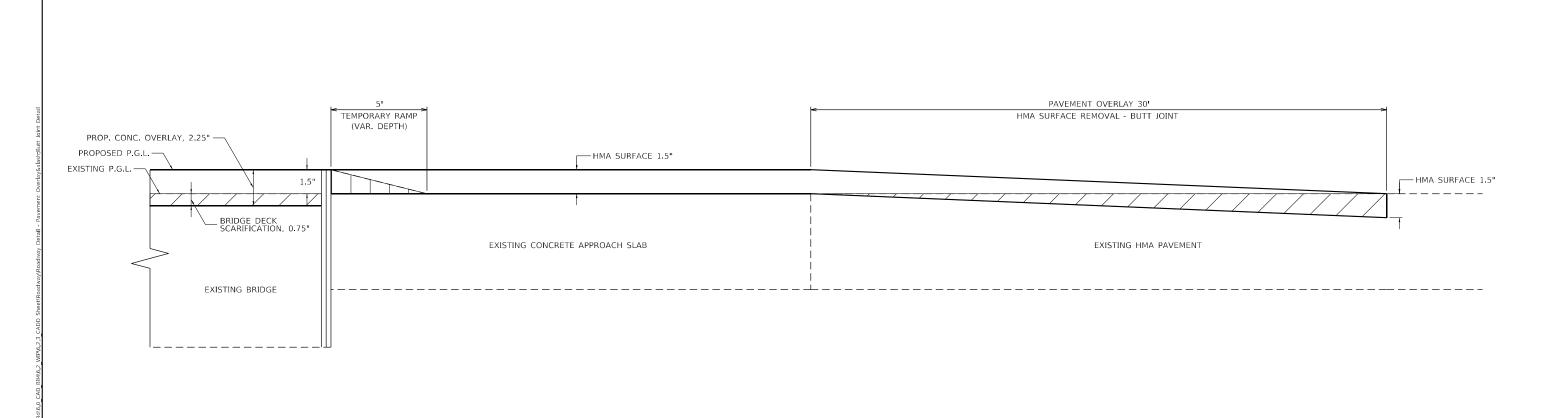
HDR 9450 W. BRYN MAWR AVE.

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PLOT DATE = 01/21/22022	DATE - 12/10/2021	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: 1"=20"

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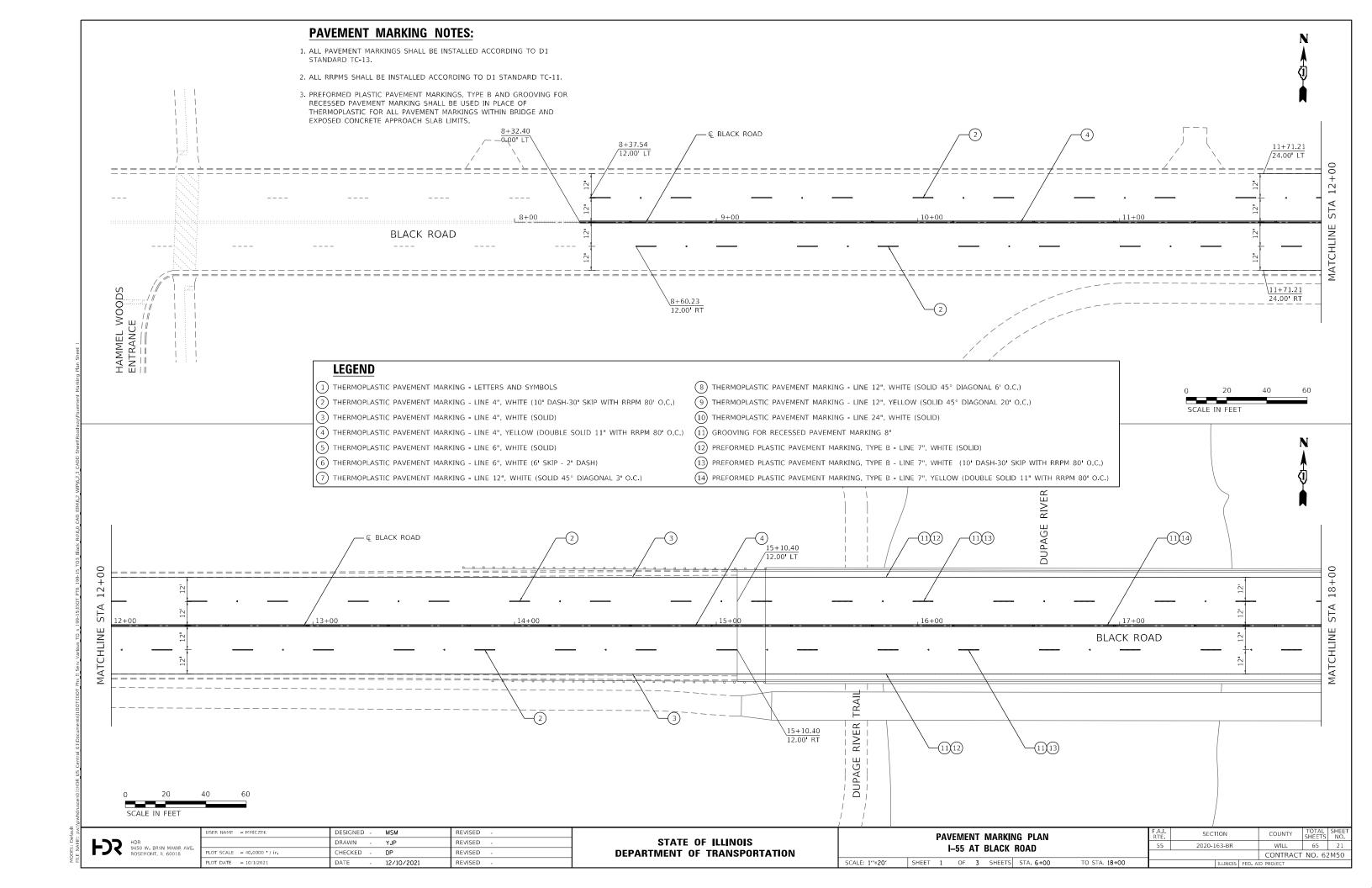
PAVEMENT OVERLAY DETAIL

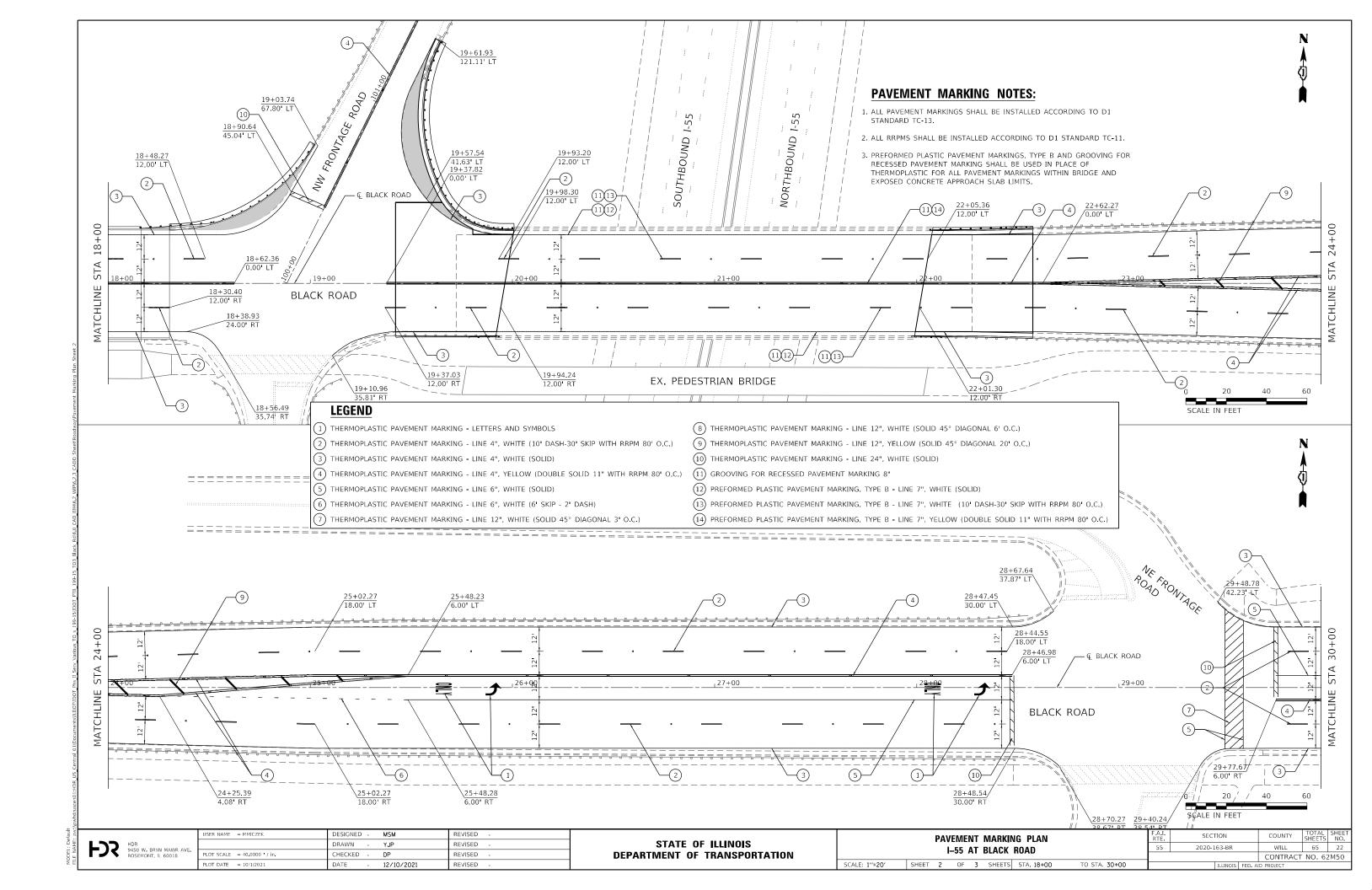
STA. 19+42.20 TO STA. 19+96.27 STA. 22+03.33 TO STA. 22+57.40

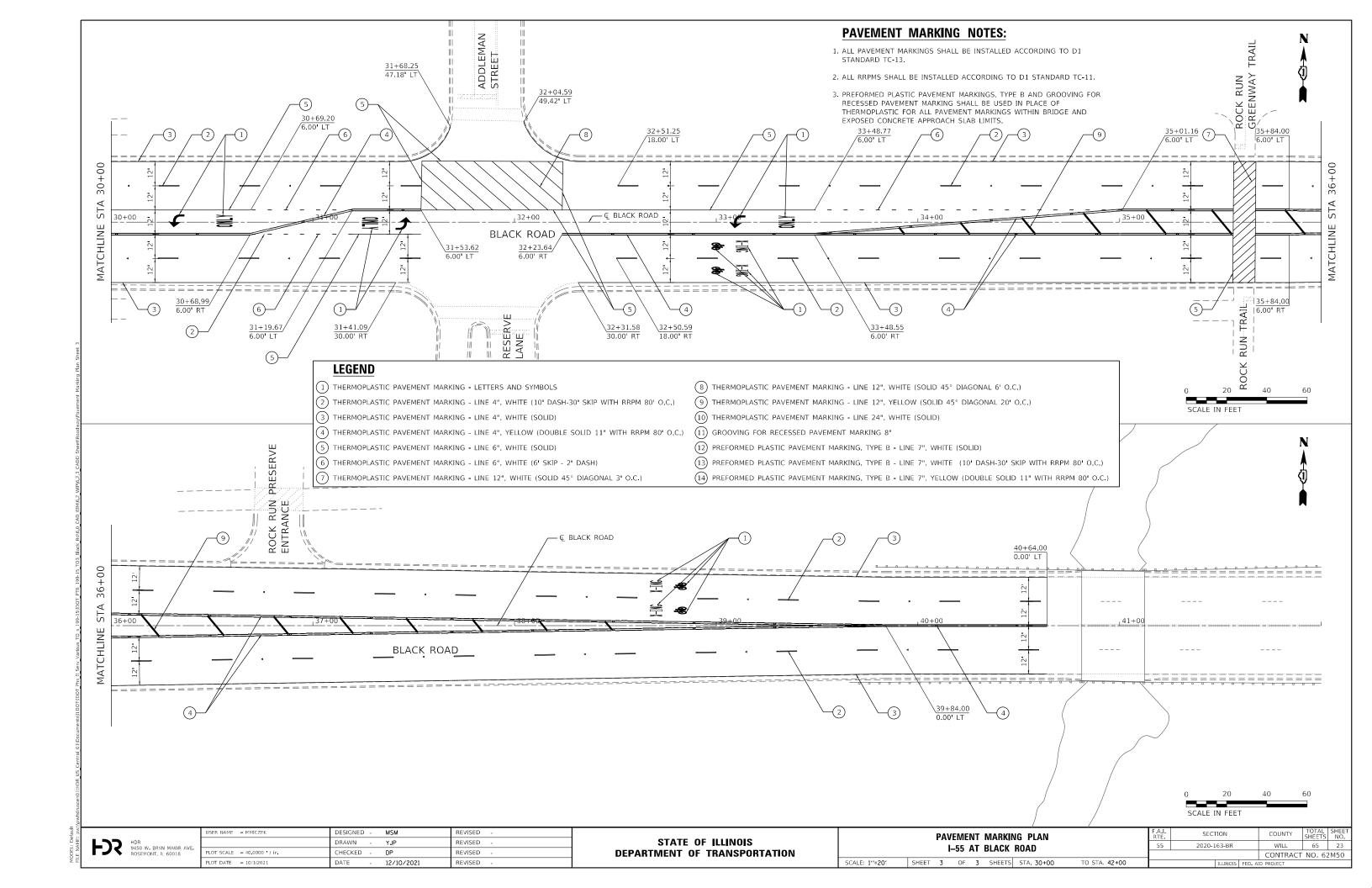
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	DRAWN	-	YJP	REVISED -
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PLOT DATE = 10/1/2021	DATE	-	12/10/2021	REVISED -

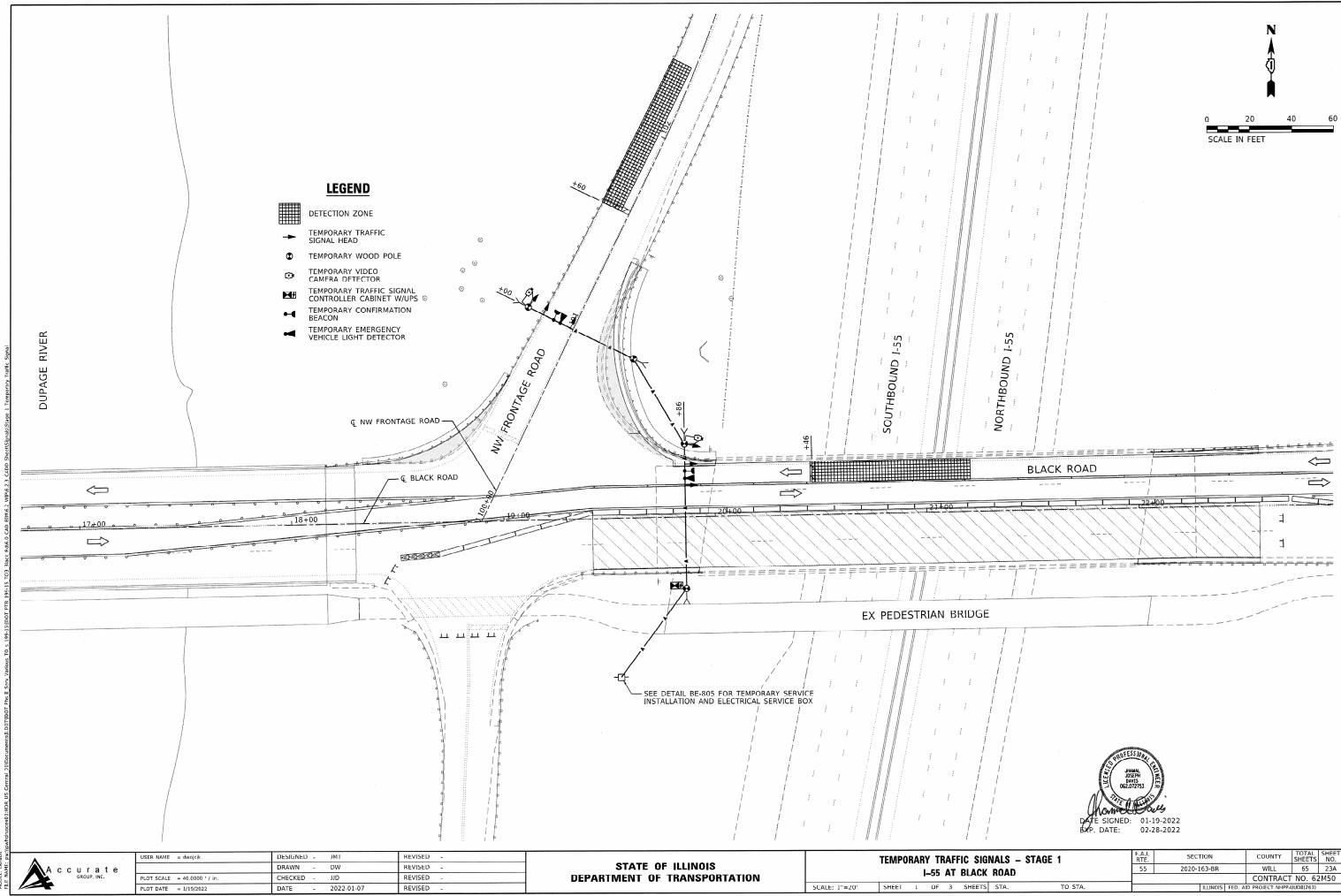
STATE OF ILLINOIS						
DEPARTMENT O	TRANSPORTATION					

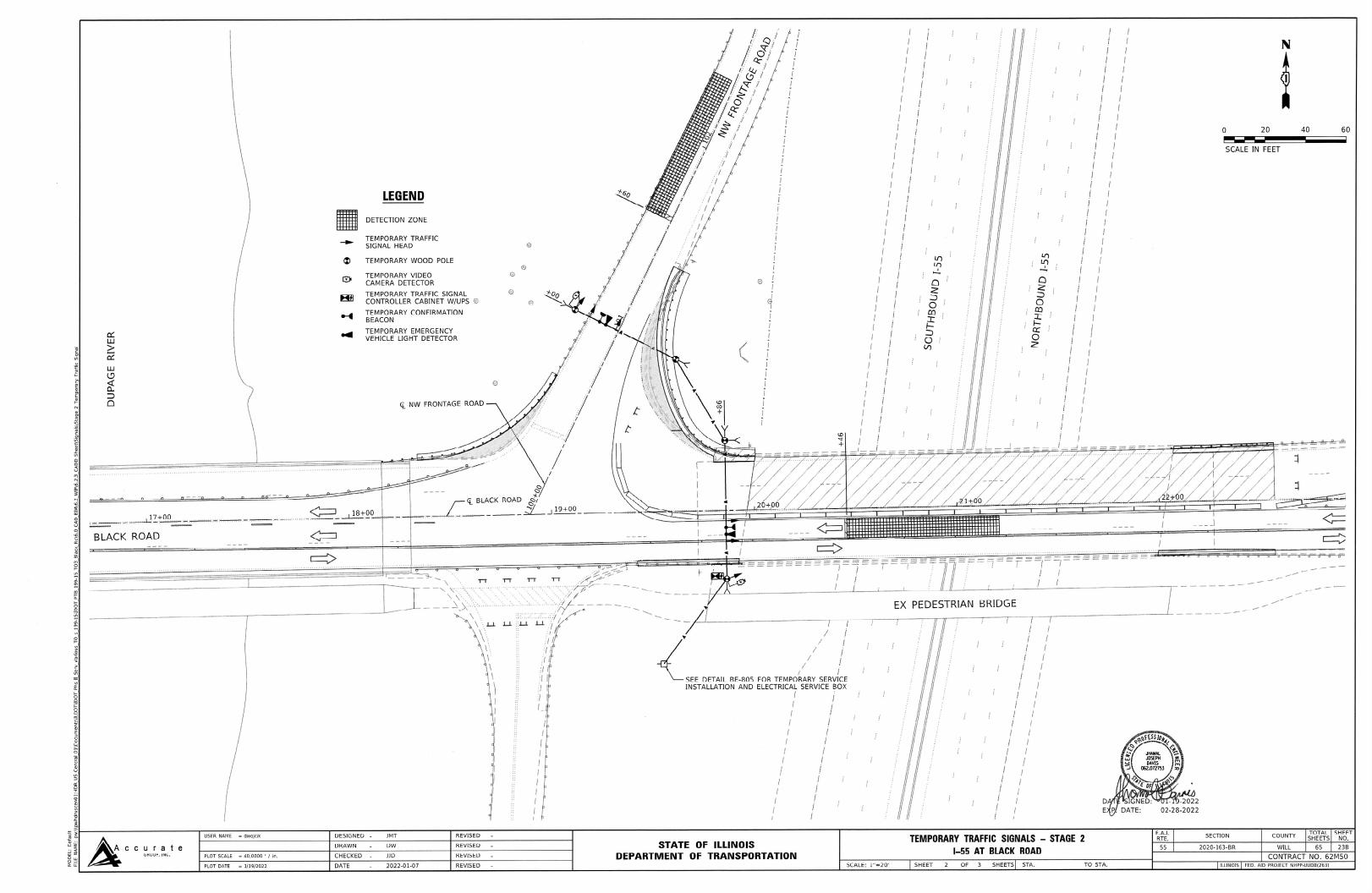
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I-55 AT BLACK ROAD				CONTRACT NO. 62				2M50				
SCALE: N.T.S.	SHEET 1 OI	1	SHEETS	STA.	TO STA.			ILLINOIS	FED. AI	D PROJECT		

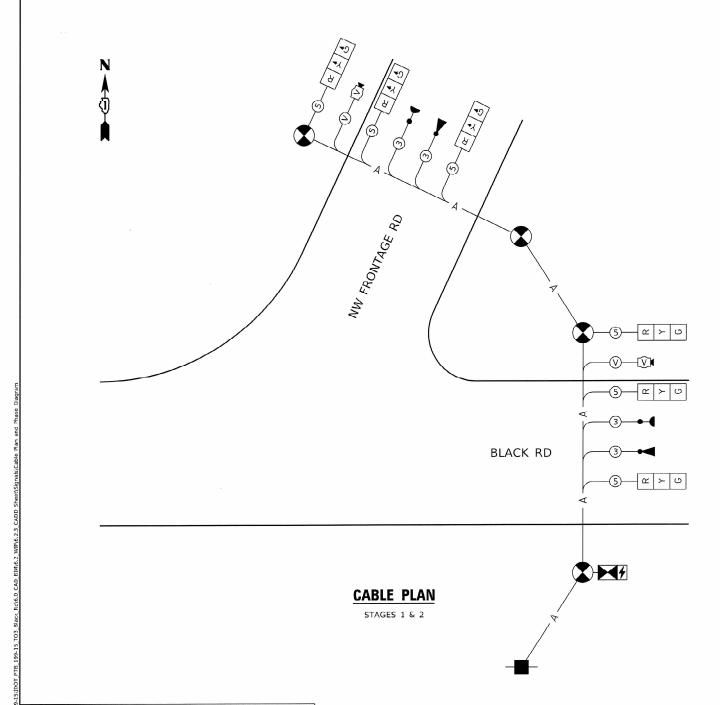












G

TRAFFIC SIGNAL HEAD



VIDEO DETECTOR



EMERGENCY VEHICLE LIGHT DETECTOR

CONFIRMATION BEACON



OR VIDEO DETECTOR CABLE CONTROLLER AND CABINET WITH UNINTERRUPTABLE POWER SUPPLY

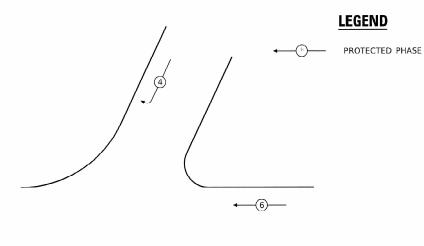


SERVICE INSTALLATION

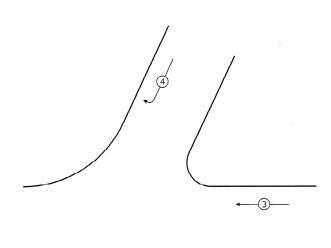
NUMBER OF CONDUCTORS



TEMPORARY WOOD POLE



CONTROLLER SEQUENCE



EMERGENCY VEHICLE PREEMPTION SEQUENCE

TRAFFIC SIGNAL **ELECTRICAL SERVICE REQUIREMENTS**

Sev var	TYPE	Nº LAMPS	WATTAGE LED	% OPERATION	TOTAL WATTAGE
Phs II	SIGNAL (RED)	6	11	0.50	33
	(YELLOW)	6	20	0.05	6
2	(GREEN)	6	12	0.45	32.4
2	CONTROLLER	1	100	1.00	100
2	VIDEO SYSTEM	1	150	1.00	150
men	UPS	1	25	1.00	25
Scri	ILLUM. SIGN			0.50	
Ĭ	FLASHER			0.50	
<u>e</u>				TOTAL =	346.4
=					

ENERGY COSTS TO:

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

ONTACT: <u>JOE HURLEY</u> PHONE: <u>(847) 816-5503</u>

- 1. CONTACT WITH THE ELECTRIC UTILITY SHALL BE INITIATED BEFORE THE PRECONSTRUCTION MEETING, AND DOCUMENTATION OF THAT CONTACT SHALL BE PRESENTED AT THAT MEETING. NO PLACEMENT OF POLES WILL BE ALLOWED WITHOUT EVIDENCE OF A SIGNED AGREEMENT WITH THE ELECTRIC UTILITY FURNISHED 10 THE ENGINEER.
- 2. THE LAYOUT OF THE TEMPORARY EQUIPMENT MAY VARY BASED ON FIELD CONDITIONS, STAGING, UTILITY IMPACTS, AND THE ELECTRIC SERVICE LOCATION AS COORDINATED WITH THE ELECTRIC UTILITY, BEFORE ANY POLES ARE PLACED, THE CONTRACTOR SHALL SUBMIT A PLAN INDICATING THE SETTING OF POLES, TRAFFIC SIGNALS, AND COMBINED SERVICE TO THE ENGINEER FOR APPROVAL.
- 3. THE ELECTRIC SERVICE SHALL BE 240/120V. WHERE 240V SERVICE IS NOT AVAILABLE, THE CONTRACTOR MAY SUBMIT A PROPOSAL FOR 120V SERVICE. DROP CABLE, MAIN BREAKER, AND ALL OTHER SERVICE APPURIENANCES SHALL BE APPROPRIATELY RATED AND INCLUDED REGARDLESS OF THE SERVICE VOLTAGE APPLIED.
- 4. THE CONTRACTOR SHALL SPLICE AERIAL CABLE AT THE LIGHT POLE USING HEAT SHRINKABLE CAPS WITH THE FACTORY-APPLIED WATERPROOF SEALANT OR AN APPROVED UL-LISTED AERIAL TAP DEVICE.
- 5. ALL AREAS DISTURBED UNDER THIS CONTRACT SHALL BE RESTORED TO THE ORIGINAL CONDITION OR BETTER, TO THE SATISFACTION OF THE ENGINEER.
- 6. ANY TREE TRIMMING NECESSARY TO SET UP THE TEMPORARY TRAFFIC SIGNALS WILL BE COVERED UNDER THE SPECIAL PROVISION "PRUNING FOR SAFETY AND EQUIPMENT CLEARANCE".



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PLOT DATE = 1/19/2022	DATE	-	2022-01-07	REVISED	-

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

· · · · · · · · · · · · · · · · · · ·	TEMPORA				SIGNA Black		ABLE PLAN
SCALE: NONE	SHEET	3	OF	3	SHEETS	STA.	TO STA.

F.A.I. RTE.	SECT	COUNTY	TOTAL SHEETS	SHEE NO.		
55 2020-163-BR				WILL	65	230
				CONTRACT	NO. 62	2M50
		ILLINOIS	FED, A	D PROJECT NHPP-U	JUD8(263)	

Existing Structure: S.N. 099-0209 Built in 1959 and widened in 1986 as a 4 lane, 4 span continuous non-composite bridge with an out to out of 55'-6'' and length of $207'-0\frac{3}{4}''$ Bk. to Bk. of abutments.

≮ Proposed Traffic Barrier Terminal

Type 6

typ.

Bk. W. Abut.

Sta. 19+96.27

2'-03/8"

24'-0⁷/8"

Appr. Slab

Exist. 6" Ø

Floor Drain,

W. Abut.

© Pier 1

Sta. 20+43.30

20'-0" | 11'-6" |

45'-0"

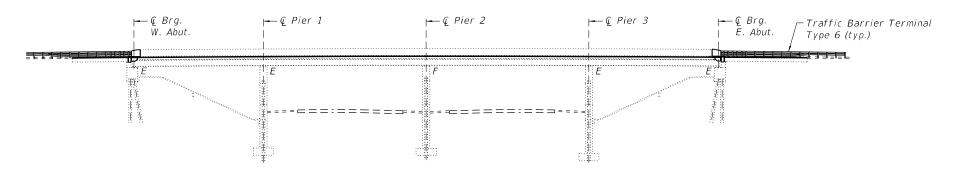
Span 1

20'-0"

.11'-6"

Traffic to be maintained utilizing stage construction.

No salvage.



♀ Pier 3

Sta. 21+56.30

– Stage

Line

56'-6"

Span 3

Constr.

ELEVATION

9°37'0" Skew, typ.

© Pier 2

56'-6"

Span 2

Sta. 20+99.80

DATE: 12/22/2022 BY: DATE: 12/22/2022 HDR, INC. DWGS. BRIDGE SHEETS 1 TO 21 (OF 21) LICENSE EXPIRES NOV. 30, 2022

* Proposed Traffic

Barrier Terminal

Type 6

A A A A A

Bk. E. Abut.

2'-03/8"

24'-07/8"

Appr. Slab

Sta. 22+03.33

Existing Traffic

Barrier Terminal

Type 6 (to remain)

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications for Highway Bridges

LOADING HS20-44

No allowance for future wearing surface

EXISTING DESIGN STRESSES

1959 CONSTRUCTION

fc = 1,400 psi (Superstructure)

fc = 800 psi (Substructure)

fs = 20,000 psi (Reinforcement) fs = 18,000 psi (Structural Steel)

1986 CONSTRUCTION

fc = 1,400 psi

fs = 24,000 psi (Reinforcement)

fs = 20,000 psi (Structural Steel)

PROPOSED DESIGN STRESSES

FIELD UNITS:

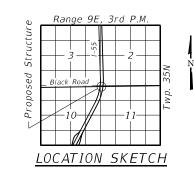
f'c = 4,000 psi (Superstructure)

fy = 60,000 psi (Reinforcement)

fy = 36,000 psi (Structural Steel)

SCOPE OF WORK

- 1. Remove and replace existing expansion joints at both abutments.
- Perform partial and full depth repairs to bridge deck and approach slabs.
- 3. Scarify bridge deck $\frac{3}{4}$ " and install 2 $\frac{1}{4}$ " Latex Concrete Overlay.
- . Install 1 $\frac{1}{2}$ " Hot-Mix Asphalt (HMA) on the approaches. Refer to Roadway Plans for quantities and details.
- . Install steel plates on the north and south fascia beam webs at the West Abutment.
- Install a new side retainer angle at the north fascia beam at the West Abutment.
- 7. Perform Structural Repair of Concrete at all substructure units.
- 8. Apply Protective Coat on the top surface of the deck overlay, the top and inside faces of the existing parapets and curbs, and the piers.



GENERAL PLAN AND ELEVATION

BLACK ROAD OVER I-55

F.A.I. RTE. 55

SEC. 2020-163-BR

WILL COUNTY

STATION 20+99.80

STRUCTURE NO. 099-0209

<u>PLAN</u>

207'-03/4"

Bk. to Bk. Abutments

* Attach Proposed Traffic Barrier Terminal to bridge parapet using anchor bolts secured with chemical adhesive per Highway Standard 631031 (Sheet 2 of 4).

.11'-6".

20'-0"

45'-0"

Span 4

11'-6"

20'-0"

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION STRUCTURE NO. 099-0209 F.A.I. SECTION COUNTY TOTAL SHEETS NO.
55 2020-163-BR WILL 65 24
CONTRACT NO. 62M50

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♀ Black Rd

Existing Traffic

Barrier Terminal

Type 6 (to remain)

GENERAL NOTES

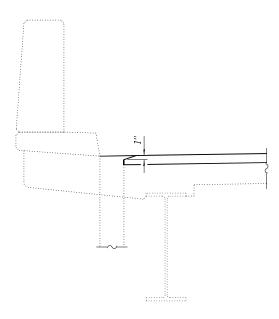
- 1. Fasteners shall be high strength bolts. Bolts $\frac{3}{4}$, open holes $\frac{13}{16}$, $\frac{1}{6}$, unless otherwise noted
- 2. No field welding is permitted except as specified in the contract
- 3. Reinforcement bars designated (E) shall be epoxy coated.
- 4. Prior to pouring the new concrete deck for expansion joint reconstruction and deck slab repairs, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete. As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dve penetrant testing (PT) by qualified personnel approved by the Engineer. Any cracks that cannot be removed by grinding $\frac{1}{4}$ " deep shall be identified and reported to the Bureau of Bridges and Structures for further dispositions. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.
- 5. Plan dimensions and details relative to existing plans are subject to nominal construction variation. 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 variation 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.
- 6. Existing reinforcement extending into the removal area shall be cleaned, straightened, and incorporated into the new construction. Any existing reinforcement bars intended for reuse and damaged during the concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system to the satisfaction of the Engineer. Cost included with Concrete Removal.
- 7. The Contractor shall take appropriate measures to assure the Protective Coat is not applied to the floor drains.
- Joint openings shall be adjusted according to Article 520.04 of the Standard Specifications when the deck is poured at an ambient temperature other than 50°F.
- 9. The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
- 10. Existing structural steel that will be in contact with new structural steel shall be cleaned and painted as required by the Special Provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures."
- 11. All new structural steel shall be hot-dip galvanized. See Special Provisions for "Hot Dip Galvanizing for Structural Steel".

INDEX OF SHEETS

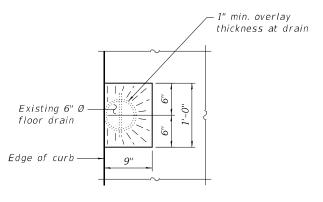
- 1 General Plan & Elevation
- General Notes, Index of Sheets & Total Bill of Materials
- 3 Stage Construction
- 4 Temporary Concrete Barrier for Stage Construction 5 Bridge Deck Repairs
- 6 Bridge Deck Repairs
- Joint Reconstruction Details
- 8 Joint Reconstruction Details
- 9 Approach Slab Repairs 10 Preformed Joint Strip Seal
- 11 Bar Splicer Assembly Details
- 12 Structural Steel Repairs
- 13 Abutment Repairs
- 14 Pier 1 Repairs 15 Pier 2 Repairs
- 16 Pier 3 Repairs
- 17 Existing Bridge Plans (For Reference Only) 18 Existing Bridge Plans (For Reference Only)
- 19 Existing Bridge Plans (For Reference Only)
- 20 Existing Bridge Plans (For Reference Only)
- 21 Existing Bridge Plans (For Reference Only)

TOTAL BILL OF MATERIAL

TOTAL DILL OF MATERIAL		
ITEM	UNIT	TOTAL
Concrete Removal	Cu Yd	15.8
Concrete Superstructure	Cu Yd	18.2
Bridge Deck Grooving	Sq Yd	1,137
Protective Coat	Sq Yd	1,936
Furnishing and Erecting Structural Steel	Pound	220
Reinforcement Bars, Epoxy Coated	Pound	2,430
Bar Splicers	Each	24
Preformed Joint Strip Seal	Foot	110.0
Anchor Bolts, 1"	Each	1
Approach Slab Repair (Full Depth)	Sq Yd	59
Approach Slab Repair (Partial Depth)	Sq Yd	6
Structural Steel Removal	Pound	90
Structural Steel Repair	Pound	370
Bridge Deck Latex Concrete Overlay, 2 1/4 Inches	Sq Yd	1,159
Bridge Deck Scarification 3/4"	Sq Yd	1,159
Structural Repair of Concrete (Depth Equal to Or Less Than 5 Inches)	Sq Ft	170
Structural Repair of Concrete (Depth Greater Than 5 Inches)	Sq Ft	38
Deck Slab Repair (Full Depth, Type I)	Sq Yd	2
Deck Slab Repair (Full Depth, Type II)	Sq Yd	3



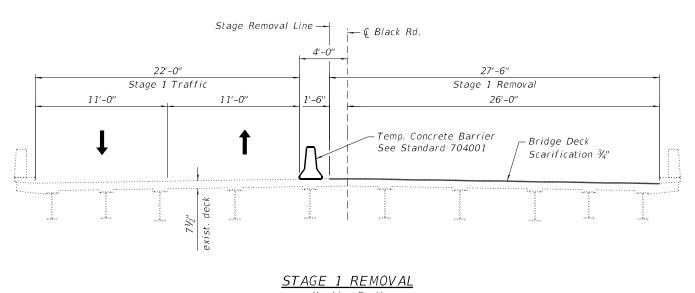
SECTION AT DRAINS



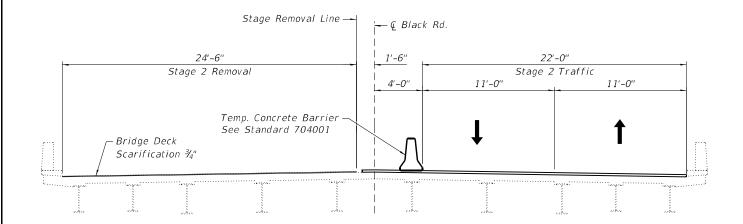
OVERLAY TREATMENT AT DRAINS

(8 drains total)

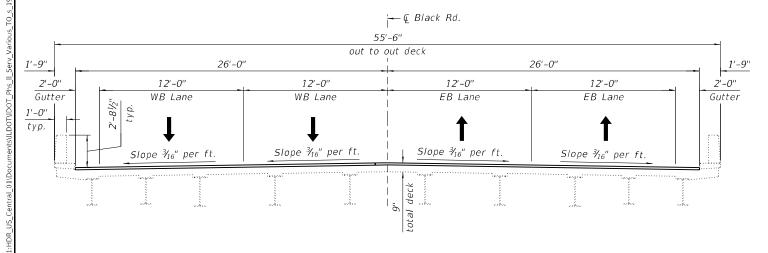
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(Looking East)



STAGE 2 REMOVAL (Looking East)



FINAL CROSS-SECTION (Looking East)

DESIGNED - BHS CHECKED - SA REVISED DRAWN – AMN REVISED -LOT DATE = 12/22/2021 CHECKED - BHS

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

STAGE CONSTRUCTION SECTION 2020-163-BR WILL 65 26 **STRUCTURE NO. 099-0209** CONTRACT NO. 62M50 SHEET 3 OF 21 SHEETS

STAGE 1 CONSTRUCTION (Looking East)

🗕 🧯 Black Rd.

27'-0"

Stage 1 Construction

Temp. Concrete Barrier

See Standard 704001

26'-0"

- Bridge Deck Latex

Concrete Overlay, 21/4"

Stage Construction Line —

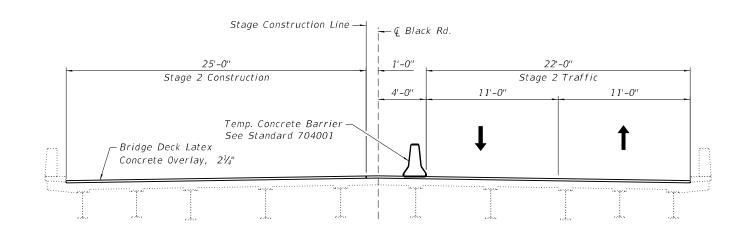
11'-0"

1'-0"

22'-0"

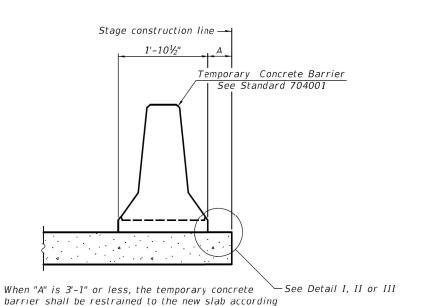
Stage 1 Traffic

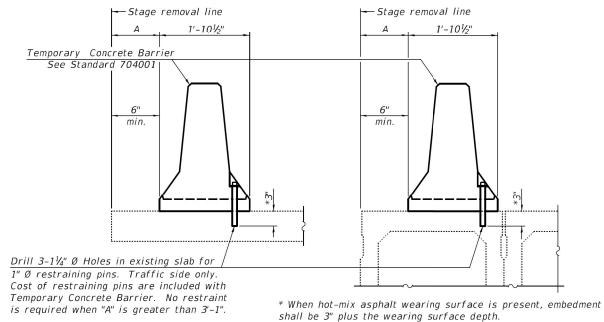
11'-0"



STAGE 2 CONSTRUCTION (Looking East)

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1x8 UNC US Std. 11/16" I.D. x 21/2" O.D. x approx. 8 gauge thick washer RESTRAINING PIN

BAR SPLICER FOR #4 BAR - DETAIL III

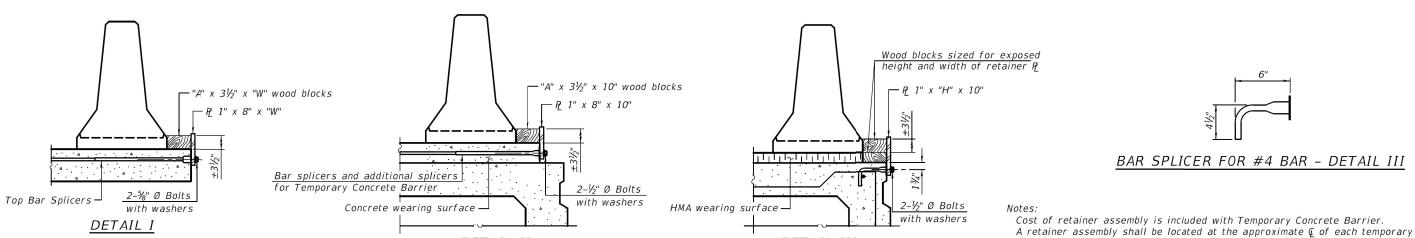
NEW SLAB OR NEW DECK BEAM

to Detail I, II or III. No restraint is required

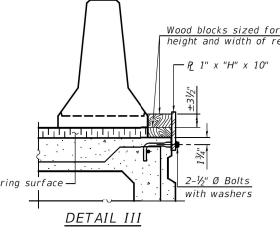
when "A" is greater than 3'-1".

SECTIONS THRU SLAB OR DECK BEAM

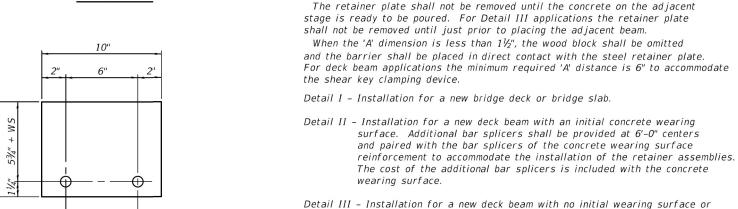
EXISTING SLAB



DETAIL II



EXISTING DECK BEAM



- ⊊ ¾" Ø Holes

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

Detail I Detail II Detail I 2" Top bars Spa. 2" Detail II ⊷ Ç 1/8" Ø Holes

RAILING CRITERIA

NCHRP 350 Test Level Railing Weight (plf) 440

R-27 10-12-2021

LOT DATE = 12/22/2021

STEEL RETAINER P 1" x 8" x "W"

DESIGNED - BHS REVISED

REVISED

REVISED

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION **STRUCTURE NO. 099-0209**

concrete barrier.

SECTION COUNTY 2020-163-BR WILL 65 27 CONTRACT NO. 62M50 SHEET 4 OF 21 SHEETS

of the bar splicers is included with the deck beam.

with an initial hot-mix asphalt (HMA) wearing surface present. The deck

beam directly beneath the temporary concrete barrier shall be fabricated with bar splicer inserts in the side of the beam, as detailed, to accommodate

the installation of the retainer assemblies. A pair of bar splicers, 6" apart, shall be placed at 6'-0" centers along the length of the beam. The cost

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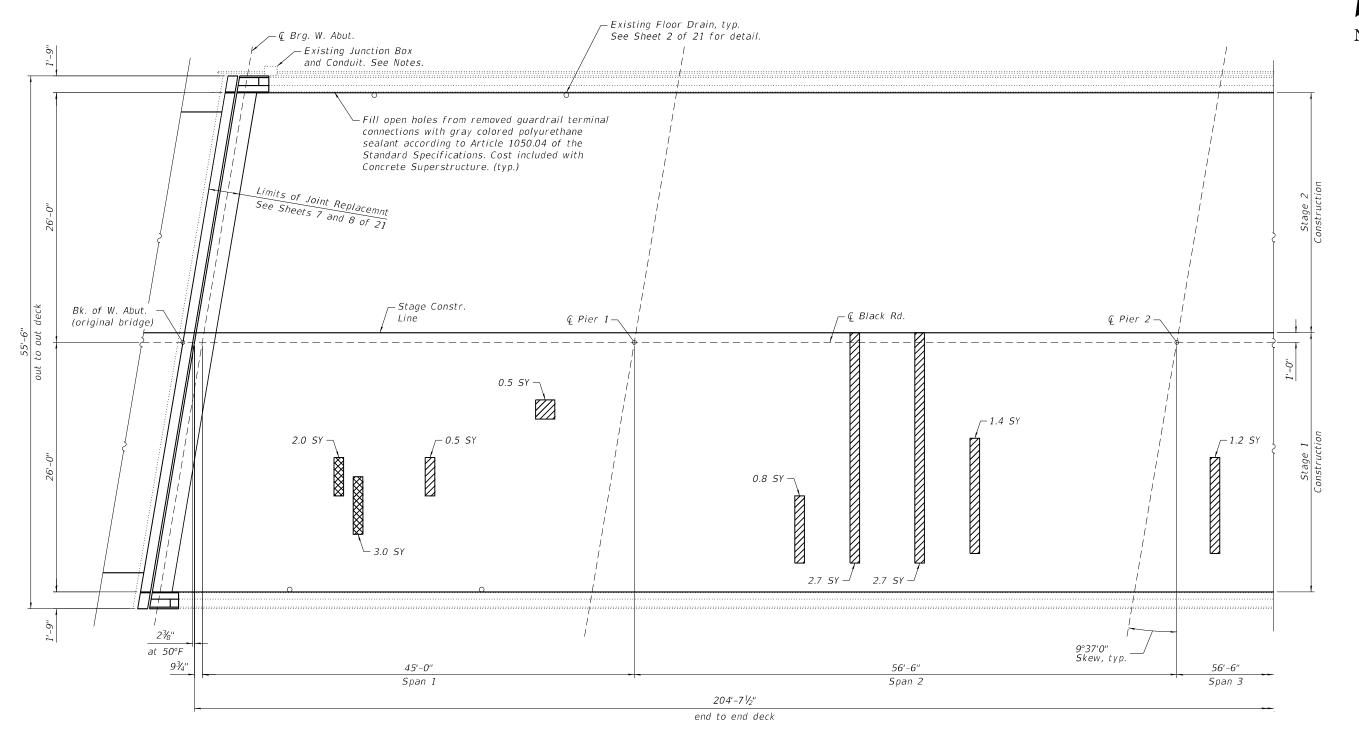
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(Detail I and II)

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STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION



Notes

Deck Slab Repair (Partial) locations and quantities are shown for information only and will not be measured for payment but shall be included in the cost of Bridge Deck Latex Concrete Overlay. See special provision for Bridge Deck Latex Concrete Overlay.

The Contractor is advised that a junction box and conduit are attached to the outside face of the north parapet. The Contractor shall take proper precautions to protect the utility from damage during concrete removal and replacement, and remount the junction box and conduit according to the as-built condition. Cost included with Concrete Superstructure. Any damage to the utility caused by the Contractor shall be repaired at the Contractor's expense to the satisfactory of the utility owner.

DECK REPAIR PARTIAL PLAN

BILL OF MATERIAL

Item	Unit	Quantity	
(Full Depth, Type I)	Sq. Yd.	2	
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	3	

<u>LEGEND</u>

Deck Slab Repair (Partial)



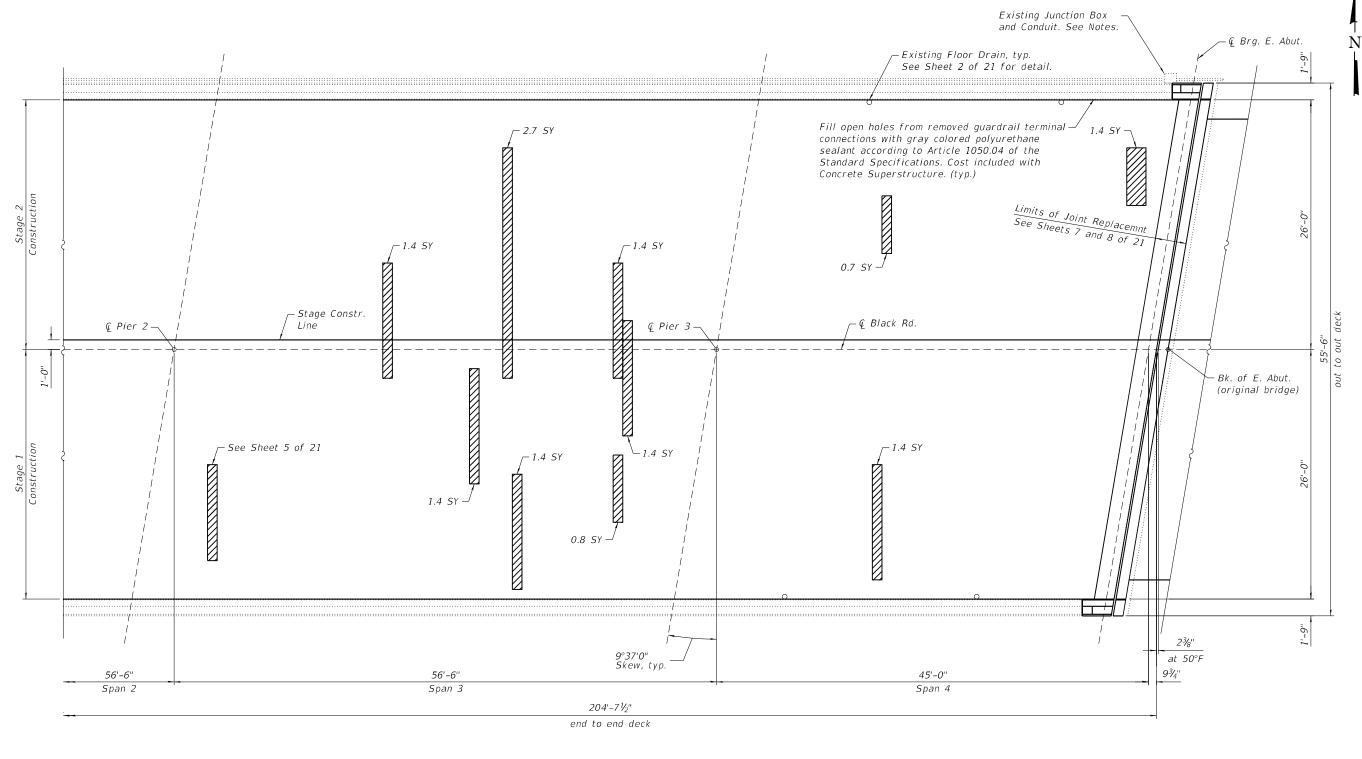
Deck Slab Repair (Full Depth)

HDR 9450 W. BRYN MAWR AVE. ROSEMONT, IL 60018

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE DECK REPAIRS
STRUCTURE NO. 099-0209

SHEET 5 OF 21 SHEETS



DECK REPAIR PARTIAL PLAN

<u>LEGEND</u>

Deck Slab Repair (Partial)

 \bowtie

Deck Slab Repair (Full Depth)

HDR 9450 W. BRYN MAWR AVE. ROSEMONT, II. 60018

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

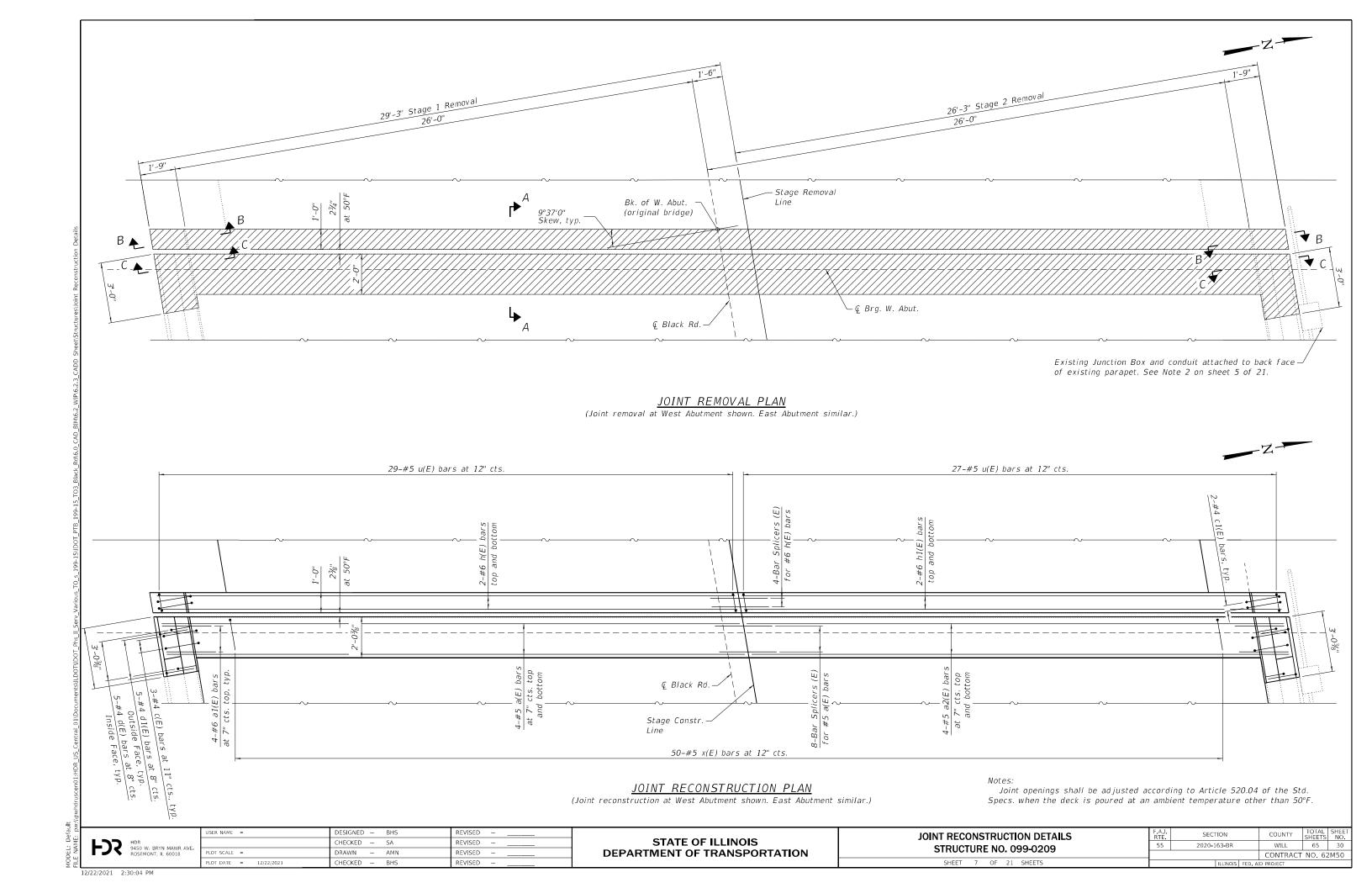
BRIDGE DECK REPAIRS
STRUCTURE NO. 099-0209

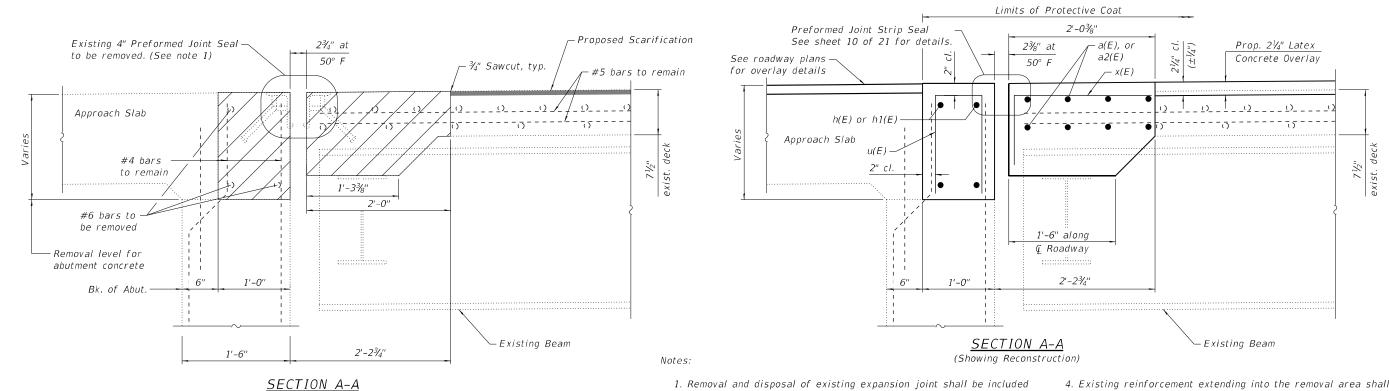
SHEET 6 OF 21 SHEETS

 F.A.I. RTE.
 SECTION
 COUNTY SHEETS NO.
 SHEETS NO.

 55
 2020-163-BR
 WILL
 65
 29

 CONTRACT NO. 62M50

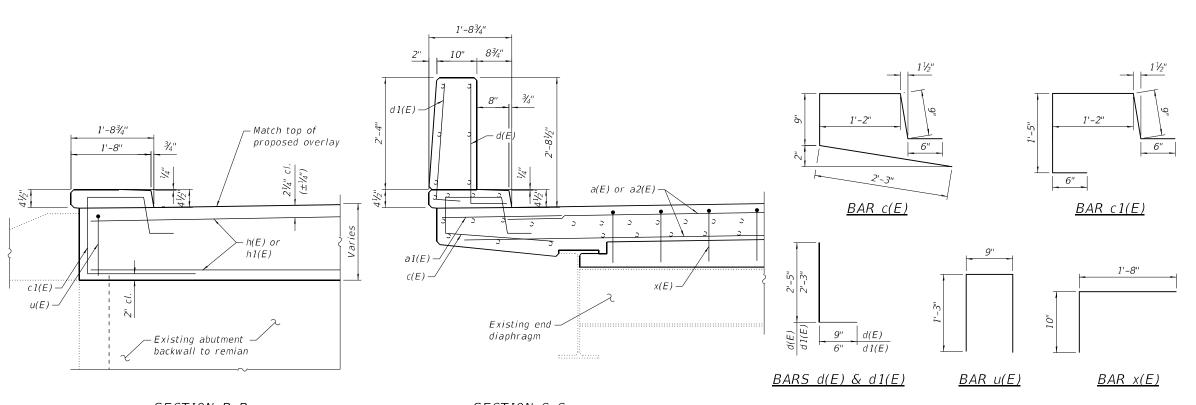




Concrete Removal Limits (See note 2)

Proposed Scarification

- 1. Removal and disposal of existing expansion joint shall be included with the cost of Concrete Removal.
- 2. The Contractor shall use extreme care during concrete removal so as not to damage the steel beams.
- 3. See existing plans for reinforcement bars not shown. Existing reinforcement bars extending into the removal areas that are not shown shall remain.
- 4. Existing reinforcement extending into the removal area shall be cleaned, straightened, and incorporated into the new construction. Any existing reinforcement bars intended for reuse and damaged during the concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system to the satisfaction of the Engineer. Cost included with Concrete Removal.



TWO JOINT RECONSTRUCTIONS BILL OF MATERIAL

Bar	No.	Size	Length	Shape	
a(E)	16	#5	28'-10"		
a1(E)	8	#6	4'-0"		
a2(E)	16	#5	26'-10"		
c(E)	12	#4	5'-5"		
c1(E)	8	#4	3'-8"		
d(E)	20	#4	3'-2"	L	
d1(E)	20	#4	2'-9"	L	
h(E)	8	#6	28'-10"		
h1(E)	8	#6	26'-10"		
u(E)	112	#5	3'-3"	П	
x(E)	100	#5	2'-6"		
Concrete Removal			Cu. Yd.	15.8	
Concrete Superstructure			Cu. Yd.	18.2	
Reinforcement Bars, Epoxy Coated			Pound	2,430	
Bar Splicers			Each	24	

SECTION B-B (Showing Reconstruction)

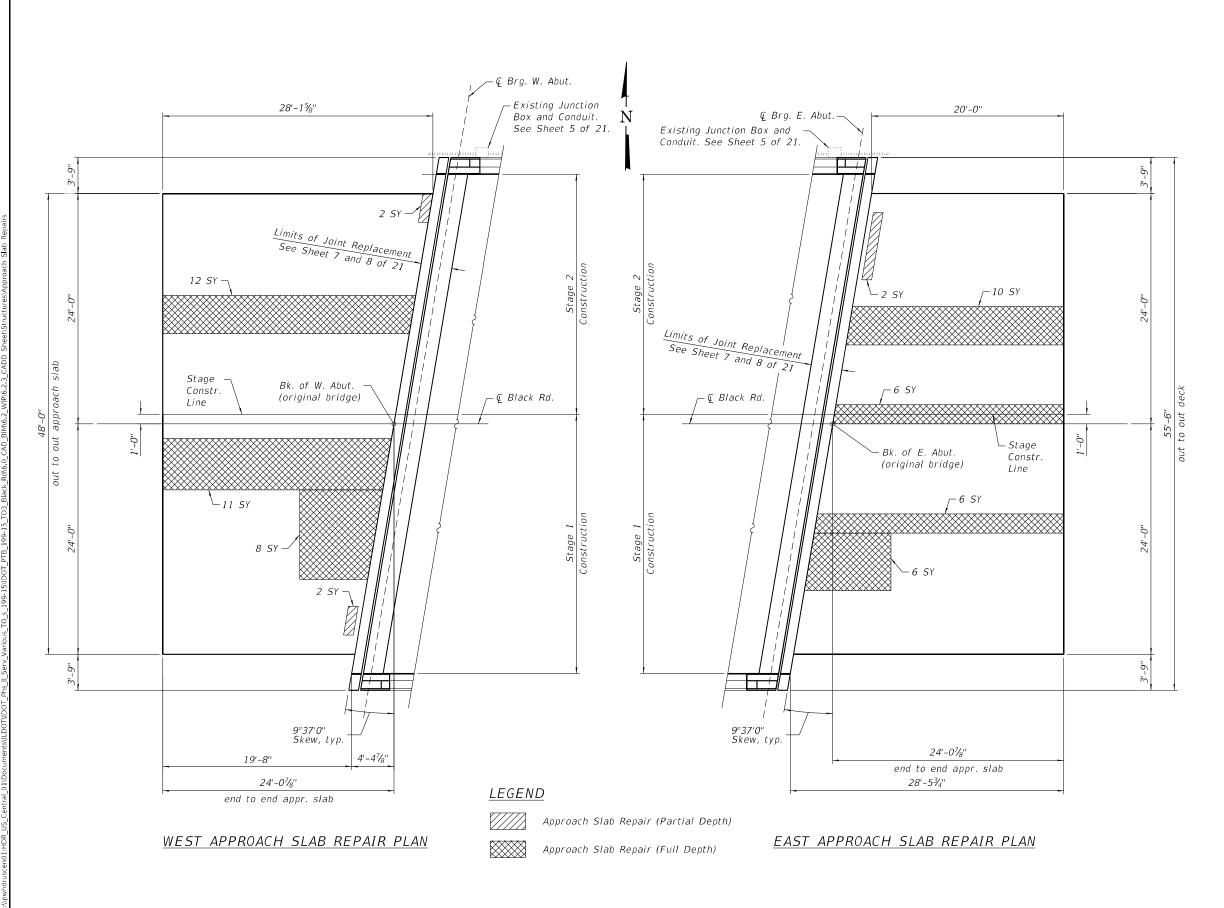
SECTION C-C (Showing Reconstruction)

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ľ		PLOT DATE = 12/22/2021	CHECKED - BHS	REVISED -

(Showing Removal)

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION JOINT RECONSTRUCTION DETAILS SECTION 2020-163-BR WILL 65 31 **STRUCTURE NO. 099-0209** CONTRACT NO. 62M50 SHEET 8 OF 21 SHEETS

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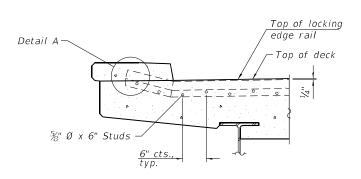
BILL OF MATERIAL

Item	Unit	Quantity
Approach Slab Repair (Full Depth)	Sq. Yd.	59
Approach Slab Repair (Partial Depth)	Sq. Yd.	6

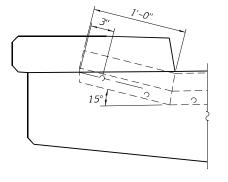
HDR 9450 W. BRYN MAWR AVE. ROSEMONT, IL 60018

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	PLOT DATE = 12/22/2021	CHECKED - BHS	REVISED

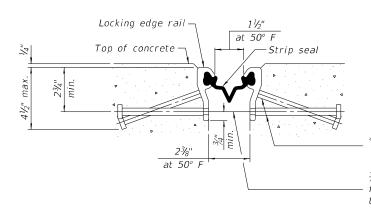
PLAN AT PARAPET



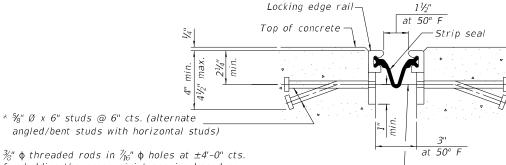
SECTION AT PARAPET/CURB



DETAIL A



SHOWING ROLLED RAIL JOINT



%'' ϕ threaded rods in $\%''_6$ ϕ holes at $\pm 4'$ -0" cts. for holding the proper joint opening based on — the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

after concrete is set. SHOWING WELDED RAIL JOINT

SECTION A-A

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

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of V_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.

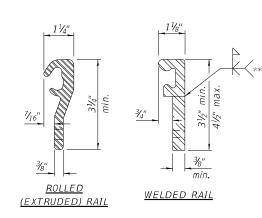
The locking edge rails depicted are configured for typical applications and are conceptual only. The actual configuration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they fit the application and meet the minimum anchorage shown. Flanged edge rails, however, will not be allowed. Locking edge rails may exceed the 4½" maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.

The manufacturer's recommended installation methods shall be followed.

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

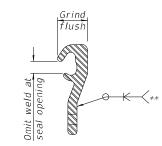
The Maximum space between locking edge rail segments shall be $\frac{3}{6}$ " and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.

The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Deck and parapet lengths shown elsewhere in the plans are dimensioned to the concrete opening, not the joint opening, and are based on the rolled locking edge rail. If the Contractor elects to use a different locking edge rail, dimensional adjustments may be required. One exception to this would be the strip seal joint at the end of the precast bridge approach slab. For these cases the pavement connector length shall be adjusted, not the length of the bridge approach slab.



LOCKING EDGE RAILS

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



LOCKING EDGE RAIL SPLICE

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

BILL OF MATERIAL

·		
Item	Unit	Total
Preformed Joint Strip Seal	Foot	110.0

HDR 9450 W. BRYN MAWR AVE. ROSEMONT, IL 60018

 USER NAME
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 PLOT DATE
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 12/22/2021
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL STRUCTURE NO. 099-0209

SHEET 10 OF 21 SHEETS

F.A.I. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEE
55	2020-163-BR		WILL	65	33
CONTRACT NO. 62M50					M50
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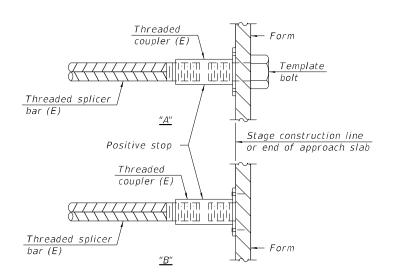
STANDARD BAR SPLICER ASSEMBLY PLAN

(All components shall be provided from one supplier)

Threaded splicer bar length = min. lap length + $1\frac{1}{2}$ " + thread length

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

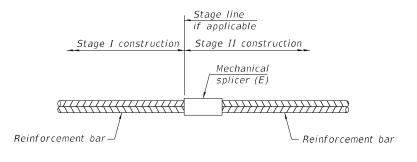
Location	Bar size	No. assemblies required	Minimum lap length
Deck	#5	16	3'-6"
Backwall	#6	8	4'-0"



INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt. "B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.

(E): Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required

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.

1-1-2020

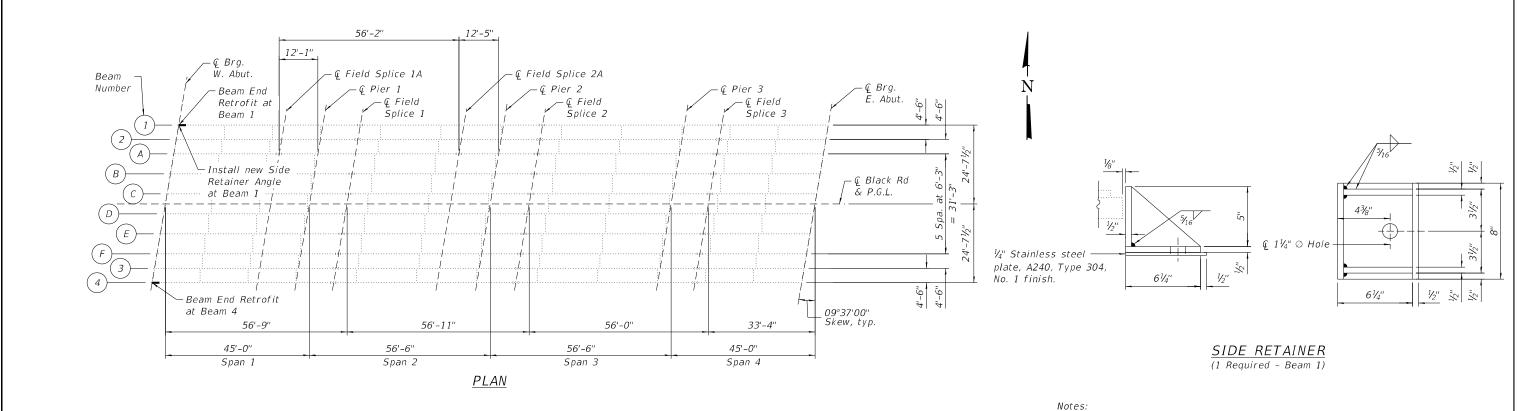
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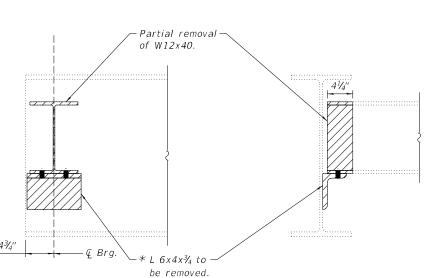
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION **BAR SPLICER ASSEMBLY DETAILS STRUCTURE NO. 099-0209** SHEET 11 OF 21 SHEETS

SECTION COUNTY 2020-163-BR WILL 65 34 CONTRACT NO. 62M50

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BSD-1





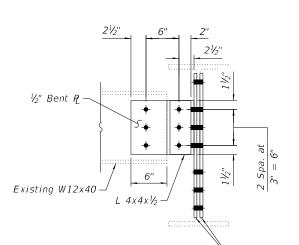
PARTIAL DIAPHRAGM REMOVAL (2 Required - Beam 1 and Beam 4)

* Weld connecting L 6x4x¾ to W27x94 are to be ground smooth. Cost included with Structural Steel Removal.

** Q 3/2" O H.S. bolts for angle connection 15/16" O holes ** Q 3/2" O holes

BEAM END RETROFIT AT WEST ABUTMENT (2 Required - Beam 1 and Beam 4)

** Drill holes in proposed plates in shop and use plate as template to drill remaining holes in field. Cost of field drilling included in Structural Steel Repair.



SECTION A-A

*** Includes all new diaphragm connection plates, diaphragm connection angles, side retainer, stainless steel plate, and HS bolts.

washer under nut.

Erecting Structural Steel.

**** Includes removal of side retainer, diaphragm support angles, and partial removal of end diaphragms as indicated.

***** Includes all steel work need to repair beam ends.



Provide 1" \odot x 12" All-thread anchor bolt (Grade 36) with a $2\frac{1}{4}$ " x $2\frac{1}{4}$ " x $\frac{5}{16}$ " F

New side retainer and stainless steel plate are paid for as Furnishing and

Removal of existing side retainer is paid for as Structural Steel Removal.

1/2" Bent P

L 4x4x½ Existing W12x40 9°37'0" Skew, typ.

— Ç Brg.

<u>SECTION B-B</u>

BILL OF MATERIAL

	Item	Unit	Quantity
***	Furnishing and Erecting Structural Steel	Pound	220
	Anchor Bolts, 1"	Each	1
****	Structural Steel Removal	Pound	90
****	Structural Steel Repair	Pound	370

HDR 9450 W. BRYN MAWR AVE. ROSEMONT, IL 60018

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 PLOT SCALE
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 AMN
 REVISED

 PLOT DATE
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 12/22/2021
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURAL STEEL REPAIRS
STRUCTURE NO. 099-0209

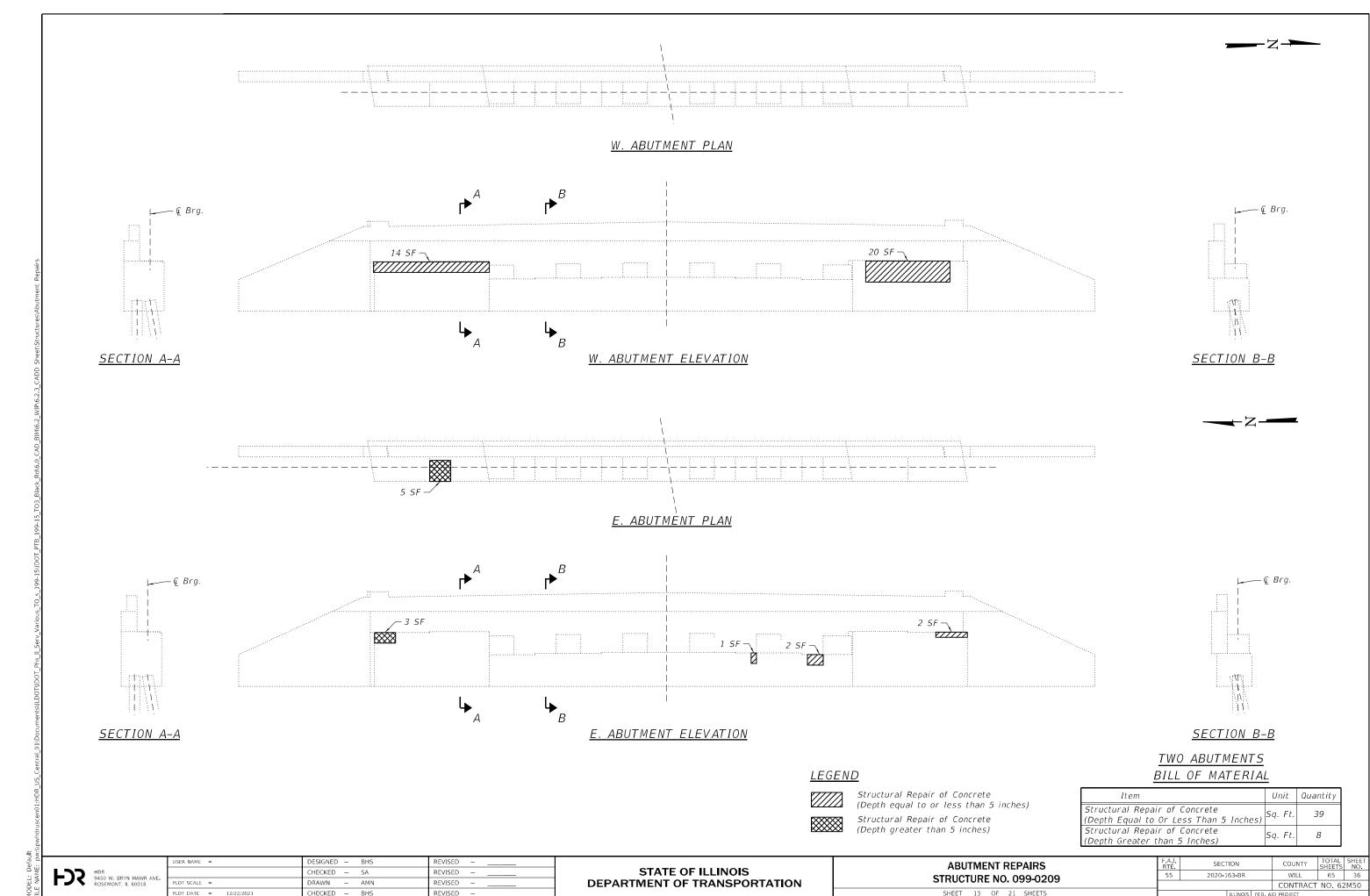
SHEET 12 OF 21 SHEETS

F.A.I. RTE.	SECT	ION		COUNTY	TOTAL SHEETS	SHEE NO.
55	2020-1	63-BR		WILL	65	35
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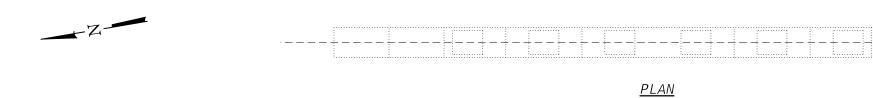
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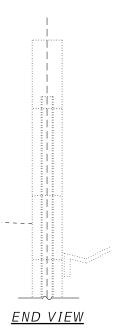
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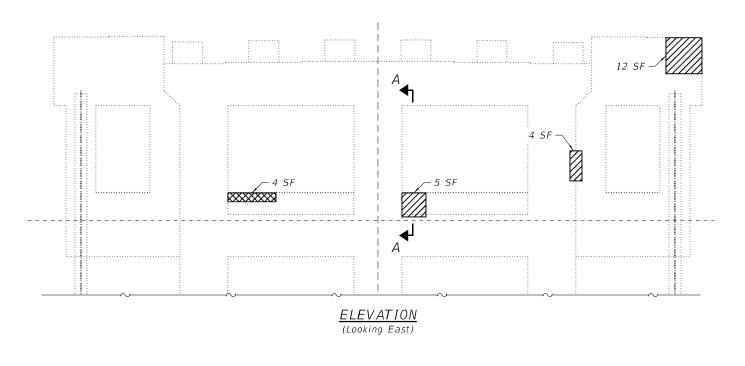
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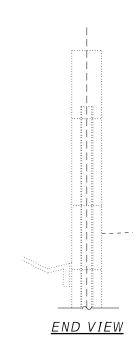


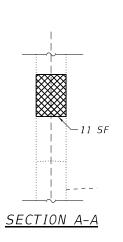
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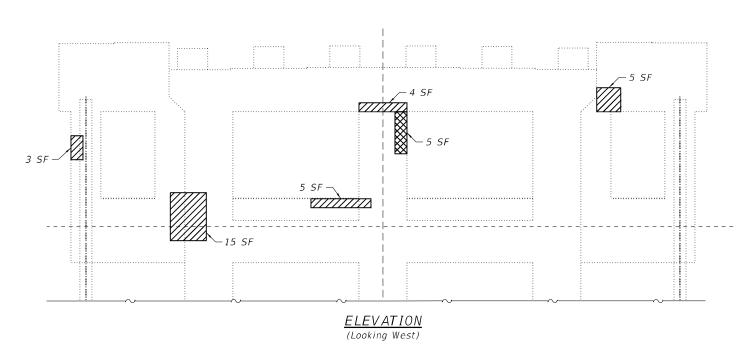












BILL OF MATERIAL

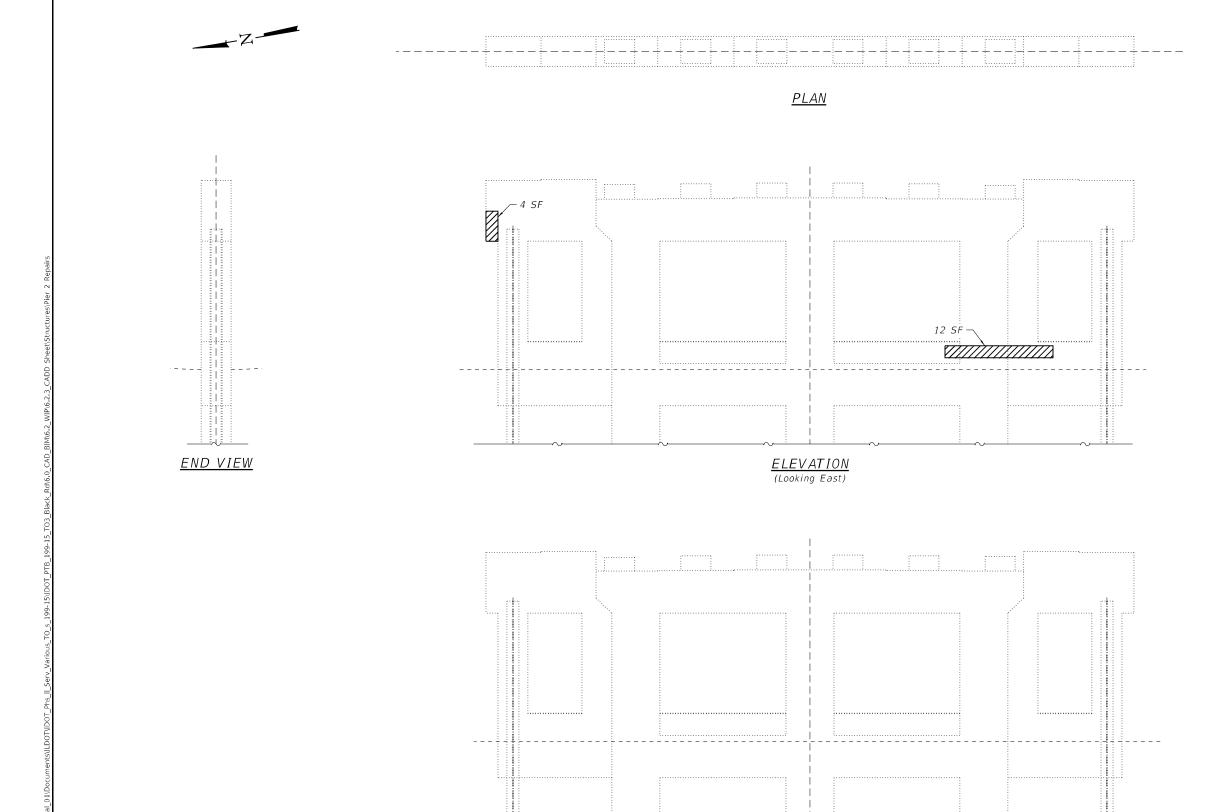
Item	Unit	Quantity
Structural Repair of Concrete (Depth Equal to Or Less Than 5 Inches)	Sq. Ft.	53
Structural Repair of Concrete (Depth Greater than 5 Inches)	Sq. Ft.	20

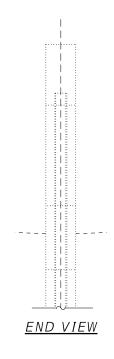
<u>LEGEND</u>

Structural Repair of Concrete (Depth equal to or less than 5 inches)



Structural Repair of Concrete (Depth greater than 5 inches)





BILL OF MATERIAL

Item	Unit	Quantity
Structural Repair of Concrete (Depth Equal to Or Less Than 5 Inches)	Sq. Ft.	16

<u>LEGEND</u>



Structural Repair of Concrete (Depth equal to or less than 5 inches)

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CHECKED - BHS REVISED -LOT DATE = 12/22/2021

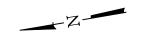
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

ELEVATION (Looking West)

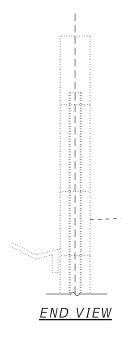
PIER 2 REPAIRS **STRUCTURE NO. 099-0209** SHEET 15 OF 21 SHEETS

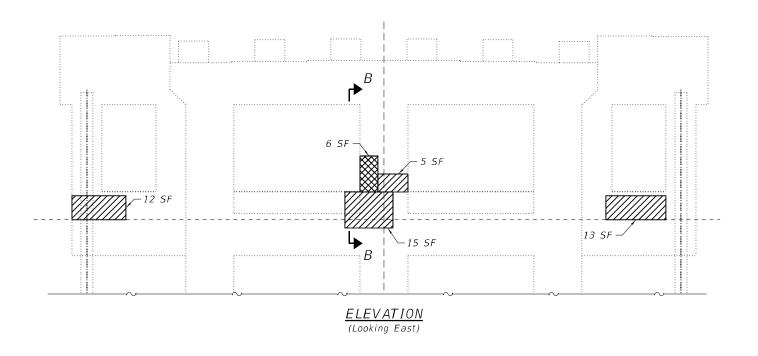
SECTION COUNTY TOTAL SHEETS NO.
WILL 65 38
CONTRACT NO. 62M50 2020-163-BR

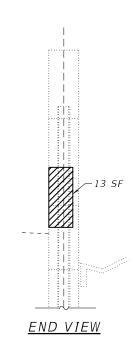
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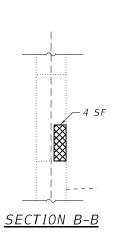


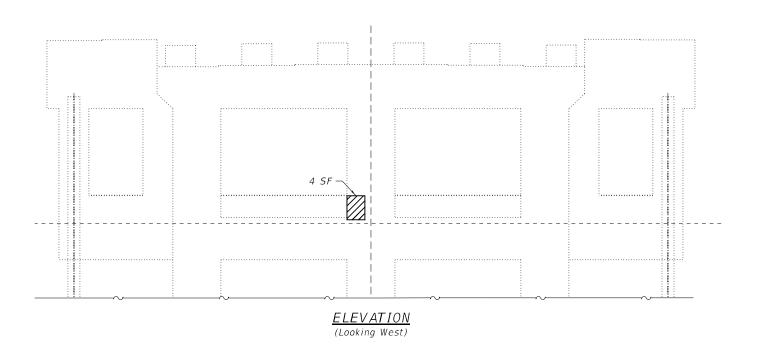
<u>PLAN</u>











BILL OF MATERIAL

Item	Unit	Quantity
Structural Repair of Concrete (Depth Equal to Or Less Than 5 Inches)	Sq. Ft.	62
Structural Repair of Concrete (Depth Greater than 5 Inches)	Sq. Ft.	10

<u>LEGEND</u>



Structural Repair of Concrete (Depth equal to or less than 5 inches)



Structural Repair of Concrete (Depth greater than 5 inches)

HDR 9450 W. BRYN MAWR AVE. ROSEMONT, IL 60018

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 3 REPAIRS	F.A.I. RTE	SEC
STRUCTURE NO. 099-0209	55	2020-
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Traffic to be deroured.

No solvege

construct new R.C. deck and install new expansion bearings under the existing beams.

Steel H-piles

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

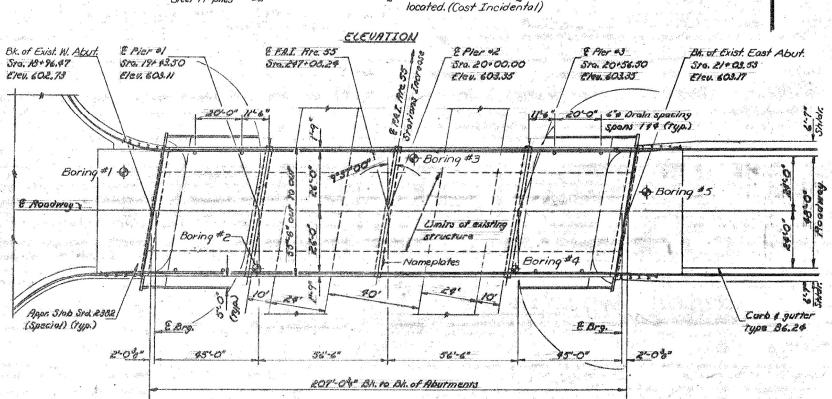
Better v Bitts. 40 16

20 SHEETS

Existing Structure; S.M. 099-0209; The existing structure built in 1959 is a 2 lone, A spon continuous non-composite bridge with an our to our witth of 34-0" and a length of 201-04" Bk. to Bk. of abutments. The contractor shall remove the existing R.C. deck, widen the substructure and superstructure,

> Metal guard rall posts (typ.) New W30 Steel H-piles Exist. Namplate to Steel H-piles Steel H-piles

be cleaned and re-



PLAN +0.1% uc. =750

PROFILE GRADE (Black Road) DESIGNED Mary H Blordon CHECKED Paul S. M toa DRAWN P.S.M.S CHECKED MAB 10-9-85

PROFILE GRADE (F.A.I. Rre. 55)

OT DATE =

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

Allow 25=/sq. fr. for furure **EXISTING BRIDGE PLANS (FOR REFERENCE ONLY)**

STRUCTURE NO. 099-0209

STATION 20+00.00 REBUILT 198 BY

STATE OF ILLINOIS FA.U.RT.0298 SEC.99-2HBK-BY(82) F.A. PROJ. IX-5/38(67)

LOADING HS 20

STR. NO. 099-0209 NAME PLATE (See 5td.2113)

DESIGN STRESSES

DESIGN SPECIFICATIONS

1983 AASHTO \$ 1984 Interims

LOADING HSZO-44

(new construction)

wearing surface.

fs = 20,000 psi (str. stl.) (M183)

ft= 1,400 psi fs =24,000 psi (reinf.)

SEQUENCE OF CONSTRUCTION

The reconstruction and raising of this structure will occur in the following sequence:

- I. That portion of the deck over the ends of the cover plates, at the locations shown on Sheet 9 of 20 shall be removed and the weld between beam and cover plate shall be peened as detailed.
- 2. The existing concrete deck is to be entirely removed. This shall be accomplished without damage to the existing
- 3. The existing structural steel is to be mised, new concrete pedestals constructed and new bearings installed.
- 4. The existing structural steel is to be repaired.
- 5. That new portion of the substructure elements which will support the new exterior steel beams (Beams 1, 2, 3, \$ 4) shall be constructed.
- 6. The new structural steel shall be erected.
- 7. The new concrete deck is to be poured.

Note: For General Notes and Slope Wall Detail, see Sheet 2 of 20.

TOTAL BILL OF MATERIAL

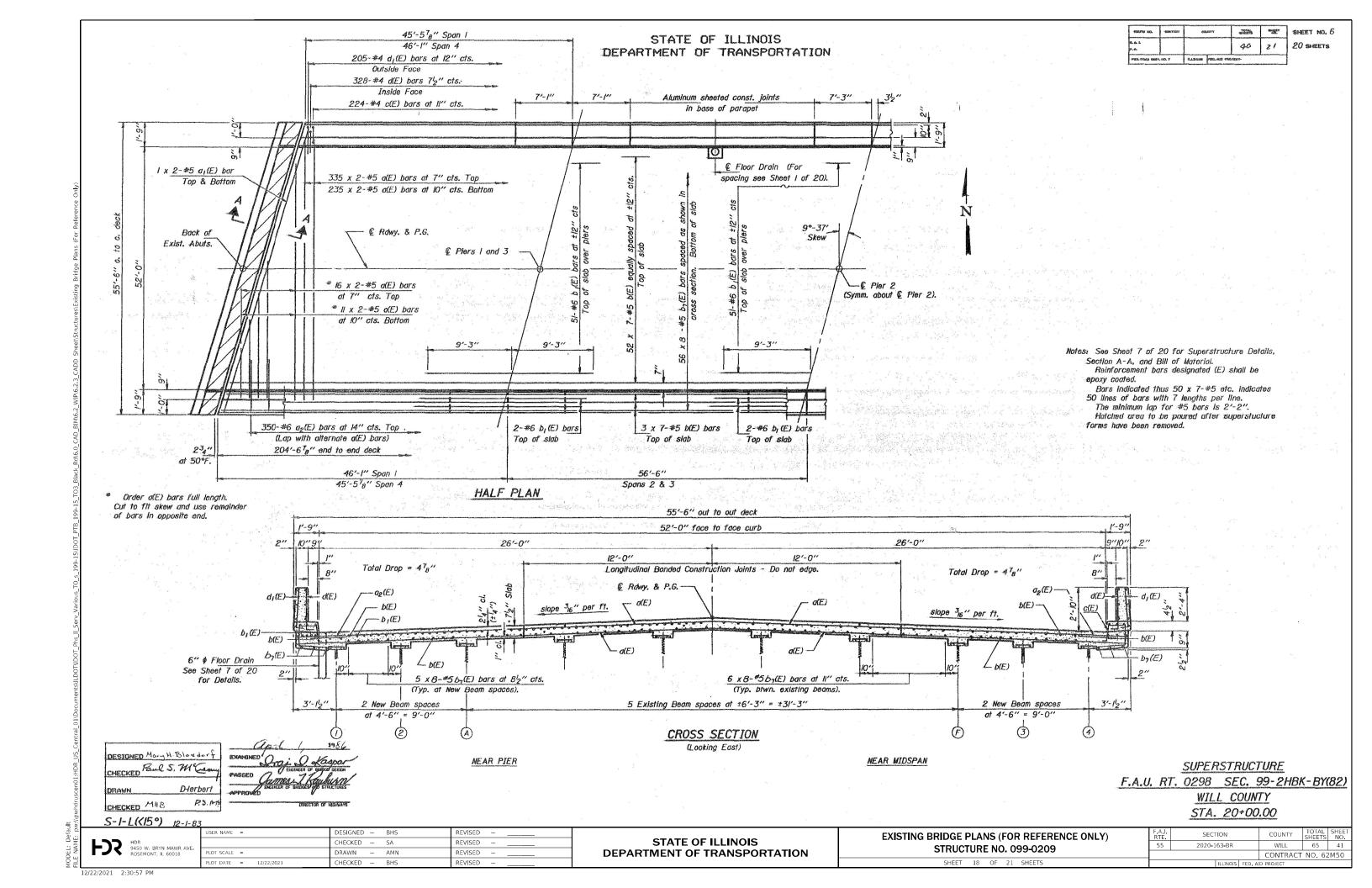
Item	Unit	Super	Sub.	Total
Removal of Existing Concrete Deck	L. Sum		1	/
Concrete Removal	Cu. Yd.		21	21
	10 34		155	155
Structure Excavation	Cu. Yd.	-	155	Contractor and the second
Floor Drains	Each	8	-	8
Protective Coat	Sq. Yd.	1391	and the second s	1391
Preformed Joint Seal (4")	Lin Ft.	112		112
Elastomeric Bearing Assembly, Type I	Each		19:	20
Elastomeric Bearing Assembly, Type II	Each			20
Class X Concrete	Cu. Yd.	343.6	151.1	494.7
Structural Steel	L.Sum			1
Cleaning and Painting Steel Bridge	L. Sum			/
Reinforcement Bars	Pound	1	15,040	15,040
Reinforcement Bars (Epoxy Coated)	Pound	76,910		76,910
Steel Piles HP8×36	Lin. Ft.		308	308
Steel Piles HPIOx42	Lin.Ft.		131	131
Test Pile Steel HP8×36	Each		1	/
Test Pile Steel HP10x42	Each			/
Name Plates	Each	1		1
Jacking Existing Structure	L. Sum			1
Slope Wall 4"	59. Yd.			672
Temporary Support System	Each			2
Slope Wall Removal	59. Yd.			372
Expansion Bolis 34 Inch	Each			202

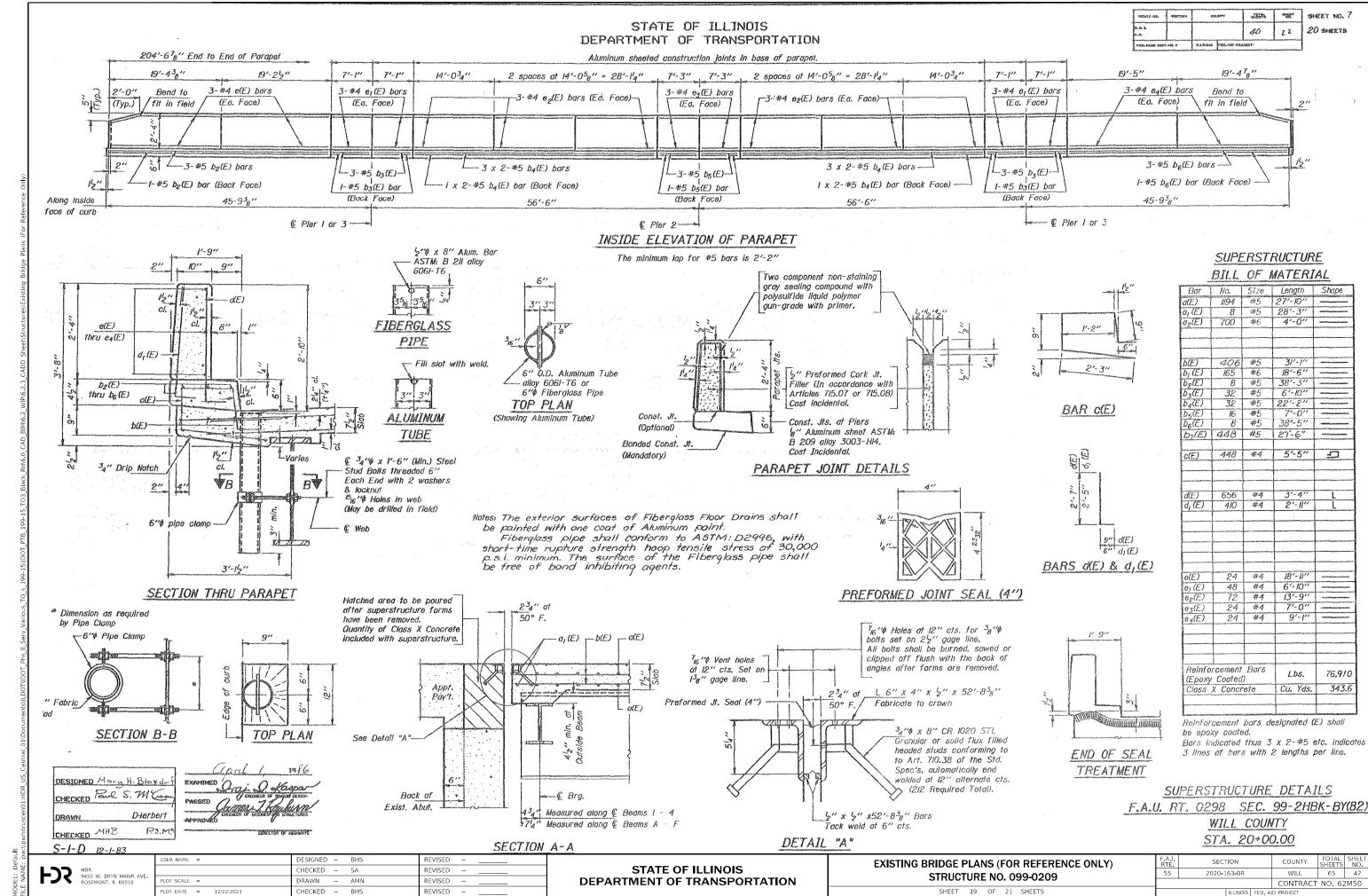
* Cost of removing existing handrail is incidental to Removal of Existing Concrete Deck.

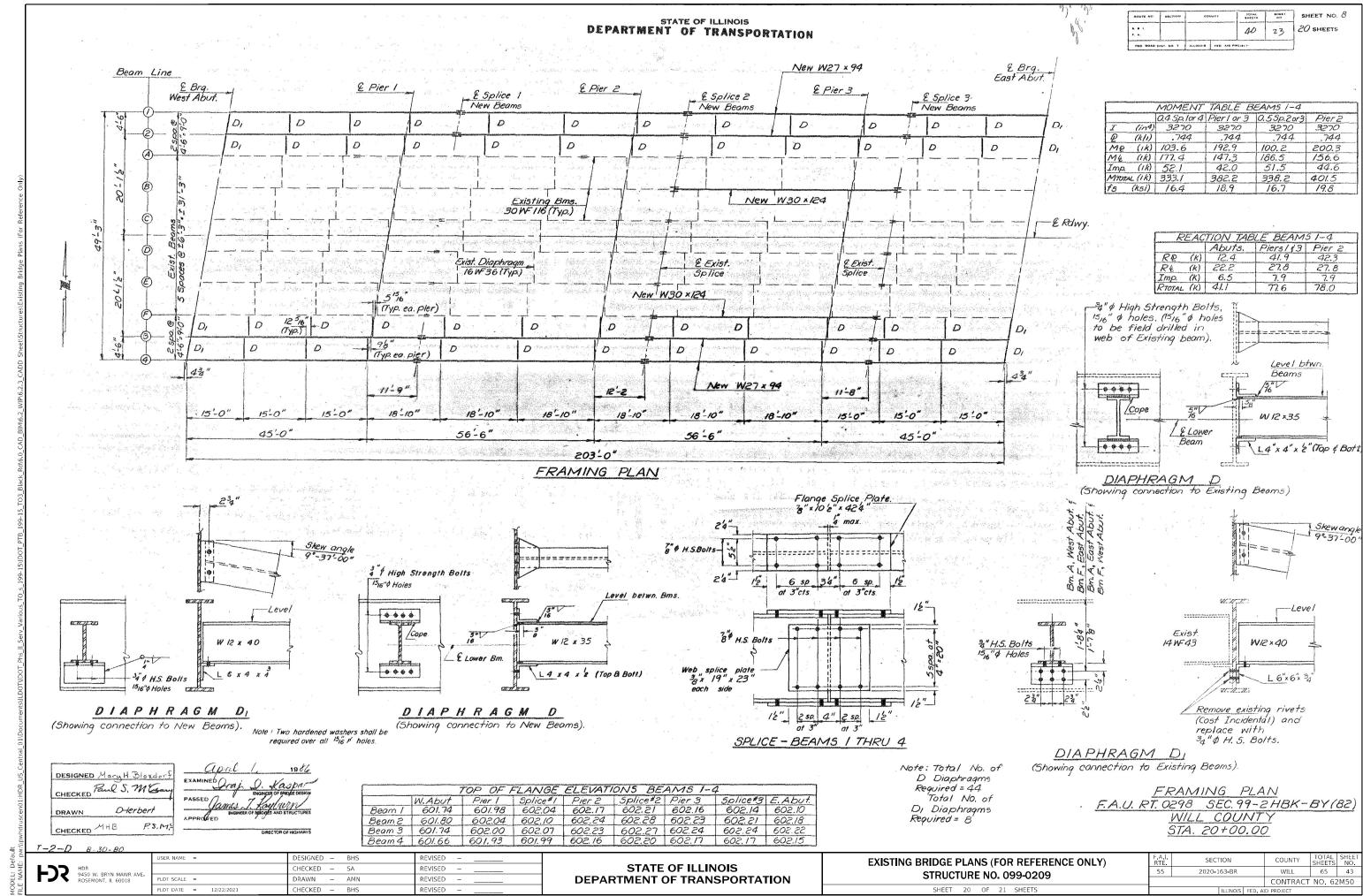
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GENERAL PLAN BLACK ROAD OVER FAI. ROUTE 55 F.A.U. ROUTE 0298 ~ SEC. 99-2HBK-BY (82) NILL COUNTY STA. 20.00.00 STRUCTURE NO. 099-0209

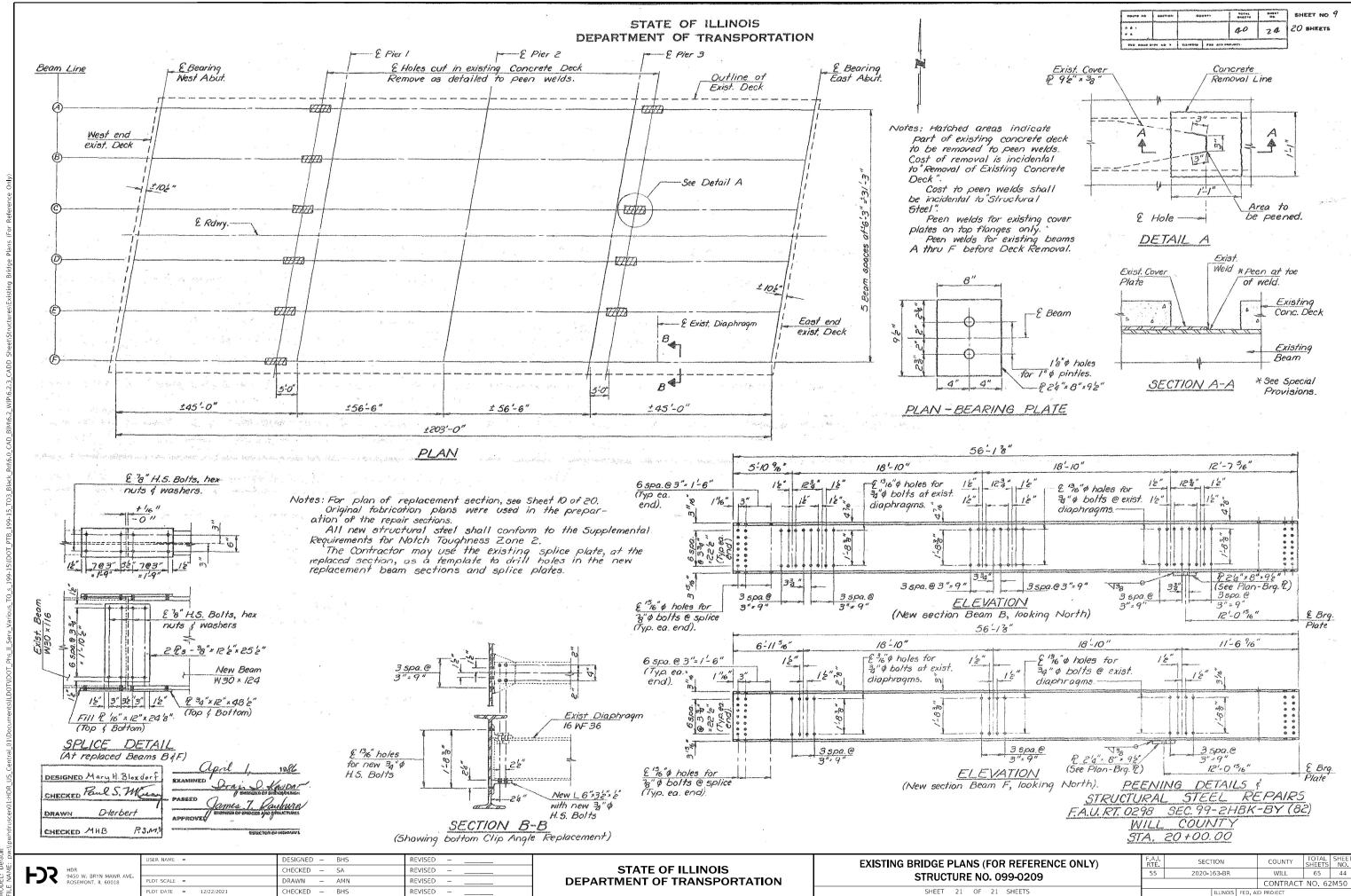
2020-163-BR WILL 65 40 CONTRACT NO. 62M50

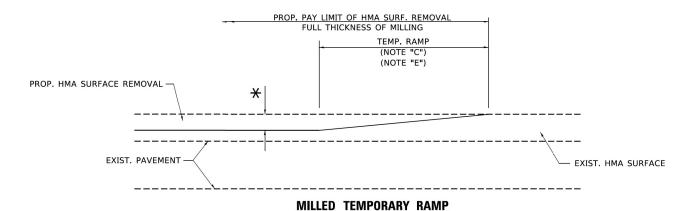






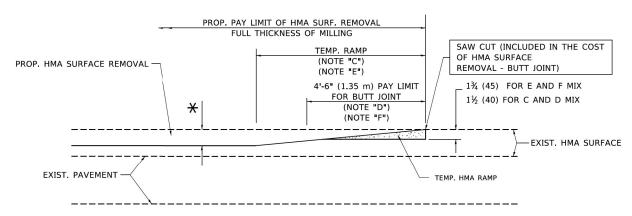
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(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 1

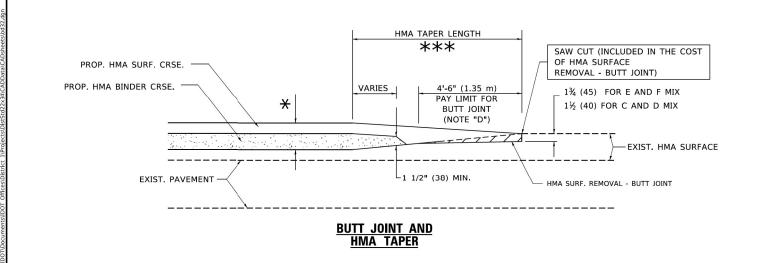


HMA CONSTRUCTED TEMPORARY RAMP

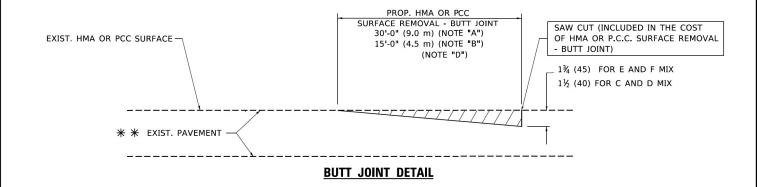
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

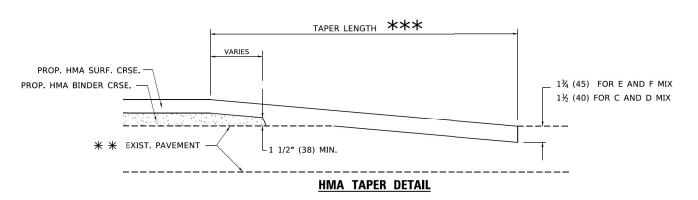
OPTION 2

TYPICAL TEMPORARY RAMP



TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING





TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

** PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

- A. MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- B. MINOR SIDE ROADS.
- C. THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- D. THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- E. TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.

SHEET 1

- F. INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT. * SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- G. SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- *** 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A") 10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

BASIS OF PAYMENT

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

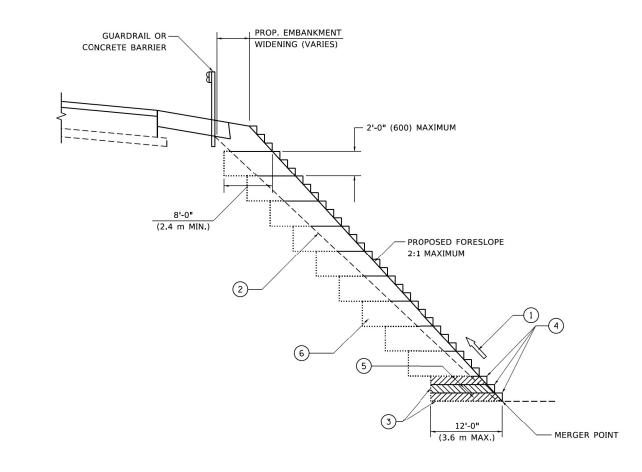
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ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

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ᆵ	PLOT DATE = 3/27/2019	DATE - 06-13-90	REVISED -	R.BORO 01-01-07

STATE OF ILLINOIS					
DEPARTMENT	OF	TRANSPORTATION			

BUTT JOINT AND HMA TAPER DETAILS		F.A.I. RTE.			COUNTY TOTAL SHEETS		SHE			
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TYPICAL BENCHING DETAIL FOR EMBANKMENT

NOTES:

- ONSTRUCT SUCCEEDING BENCH CUTS AND EMBANKMENT PLACEMENT AND COMPACTION FROM BOTTOM TO TOP IN STAIRSTEP FASHION.
- 2 EXISTING FORESLOPE PREPARED IN ACCORDANCE WITH ARTICLE 205.03 OF THE STANDARD SPECIFICATIONS.
- $\begin{picture}(40,0)\put(0,0){\line(0,0){10}}\put(0,0){\line(0,0){10}$
- 4 TRIM TO FINAL SLOPE.
- EQUAL 8-INCH (200) LIFTS OF EMBANKMENT COMPACTED IN ACCORDANCE WITH ARTICLE 205.05 OF THE STANDARD SPECIFICATIONS.
- 6 EXCAVATION OF BENCH CUTS WITHIN EXISTING EMBANKMENT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC METER OR CUBIC YARD FOR "EARTH EXCAVATION". THIS PRICE WILL INCLUDE ALL LABOR AND MATERIAL, NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- SLOPES SHALL BE BENCHED ACCORDING TO THIS DETAIL WHEN THE SLOPE IS STEEPER THAN 4:1 AND THE HEIGHT IS GREATER THAN 5' (1.5 m).

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

HDR 9450 W. BRYN MAWR AVE. ROSEMONT, IL 60018

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

BENCHING DETAIL
FOR EMBANKMENT WIDENING

SHEET 1 OF 1 SHEETS STA. TO STA.

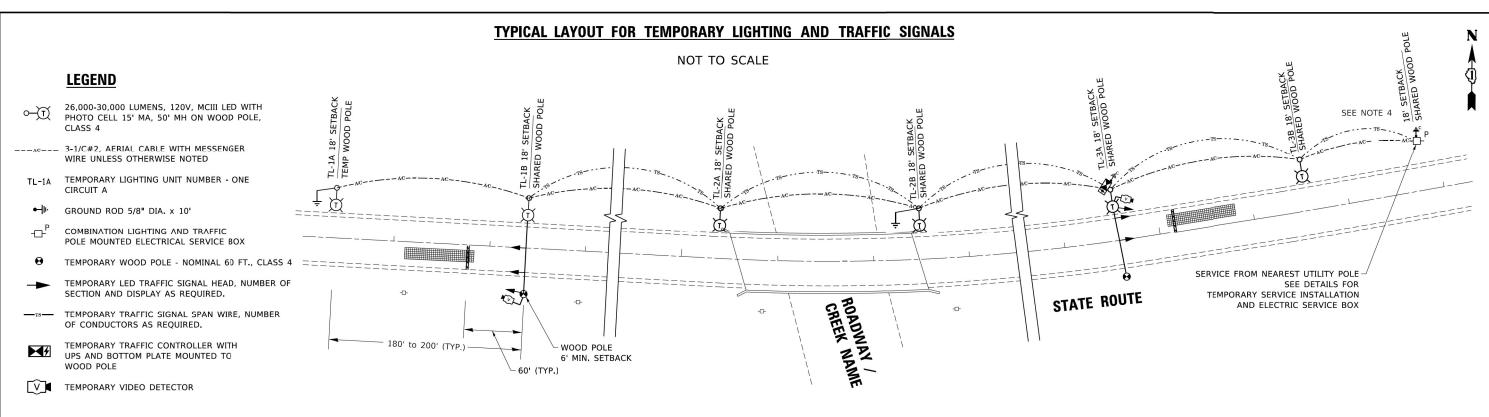
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TE. SECTION WILL 65 NO.

555 2020-163-BR WILL 65 46

BD-51 CONTRACT NO. 62M50

| ILLINOIS | FED. AID PROJECT



GENERAL NOTES:

1. CONTACT TO THE ELECTRIC UTILITY SHALL BE INITIATED BEFORE THE PRECONSTRUCTION MEETING, AND DOCUMENTATION OF CONTACT SHALL BE PRESENTED AT THAT MEETING. NO PLACEMENT OF POLES WILL BE ALLOWED WITHOUT EVIDENCE OF A SIGNED AGREEMENT WITH THE ELECTRIC UTILITY, FURNISHED TO THE ENGINEER.

2. UNLESS OTHERWISE INDICATED, AND EXCEPT AS OTHERWISE NOTED, THIS STANDARDIZED LAYOUT SHALL APPLY FOR BRIDGES NOT EXCEEDING A 250-FOOT SPAN. FOR BRIDGE SPANS IN EXCESS OF 250 FEET, THE POLES IMMEDIATELY ADJACENT TO THE BRIDGE SHALL BE 100-FOOT POLES (90-FOOT MOUNTING HEIGHT), WITH 56,000-60,000 LUMENS TYPE III LED HIGH-MAST LUMINAIRES AS APPROVED BY THE ENGINEER.

3. THE LAYOUT OF THE TEMPORARY EQUIPMENT WILL VARY BASED ON FIELD CONDITIONS, STAGING, UTILITY IMPACTS, AND THE ELECTRIC SERVICE LOCATION AS COORDINATED WITH THE ELECTRIC UTILITY. THE CONTRACTOR SHALL SUBMIT A PLAN INDICATING THE SETTING OF POLES, TRAFFIC SIGNALS, AND COMBINED SERVICE. THIS PLAN MUST BE APPROVED BY THE ENGINEER BEFORE ANY POLES ARE PLACED

4. THE ELECTRIC SERVICE SHALL BE 240/120V. WHERE 240V SERVICE IS NOT AVAILABLE, THE CONTRACTOR MAY SUBMIT A PROPOSAL FOR 120V SERVICE. DROP CABLE, MAIN BREAKER, AND ALL OTHER SERVICE APPURTENANCES SHALL BE APPROPRIATELY RATED AND INCLUDED REGARDLESS OF THE SERVICE VOLTAGE APPLIED.

5. THE TEMPORARY LIGHTING AND TRAFFIC SIGNAL INSTALLATION SHALL SHARE ANY COMMON ELEMENTS SUCH AS WOOD POLES, ELECTRICAL SERVICE, ELECTRIC SERVICE BOX, CABLE, ETC. THE CONTRACTOR SHALL COORDINATE TEMPORARY LIGHTING AND TRAFFIC SIGNAL INSTALLATIONS.

6. THE LIGHT POLE SETBACK FROM THE EDGE OF TRAVEL PAVEMENT SHALL BE 18 FT. UNLESS THE LIGHT POLE IS BEHIND GUARDRAIL. THE LIGHT POLES INSTALLED BEHIND THE GUARDRAIL OR BARRIER WALL SHOULD HAVE AT LEAST 8 FT. SETBACK FROM THE BACK OF THE SHOULDER AND OR AS DIRECTED BY THE ENGINEER.

7. EACH LIGHTING UNIT SHALL BE CONTROLLED BY A PHOTO CELL MOUNTED ON EACH LUMINAIRE WITH THE LIGHTING CIRCUIT FED FROM THE TEMPORARY SERVICE DISCONNECT BOX. OTHER MEANS OF LUMINAIRE CONTROL CAN BE CONSIDERED IF APPROVED BY THE ENGINEER.

8. THE CONTRACTOR SHALL SPLICE AERIAL CABLE AT THE LIGHT POLE USING HEAT SHRINKABLE CAPS WITH THE FACTORY APPLIED WATERPROOF SEALENT OR AN APPROVED UL LISTED AERIAL TAP DEVICE.

9. ALL AREAS DISTURBED UNDER THIS CONTRACT SHALL BE RESTORED TO THE ORIGINAL CONDITION OR BETTER, TO THE SATISFACTION OF THE ENGINEER.

10. THIS LAYOUT IS ONLY FOR SINGLE LANE STAGING WITHOUT PRIVATE DRIVEWAYS WITHIN SINGLE LANE WORK ZONE.

CABLE PLAN AND PHASE DESIGNATION DIAGRAM (TYPICAL) STATE ROUTE **←**(1)— **—**2→ ROADWAY I ROADWAY / CREEK NAME **LEGEND: LEGEND:** TEMPORARY VIDEO / RADAR DETECTOR * NUMBER ASSOCIATED WITH PROTECTED PHASE TEMPORARY SIGNAL HEAD 12" SECTION. G CABLE INDICATES NUMBER OF CONDUCTORS IN CABLE ALL CONDUCTORS TO BE NUMBER 14 AWG UNLESS OTHERWISE NOTED.

SCALE: NONE

HDR 9450 W. BRYN MAWR AVE. ROSEMONT, IL 60018

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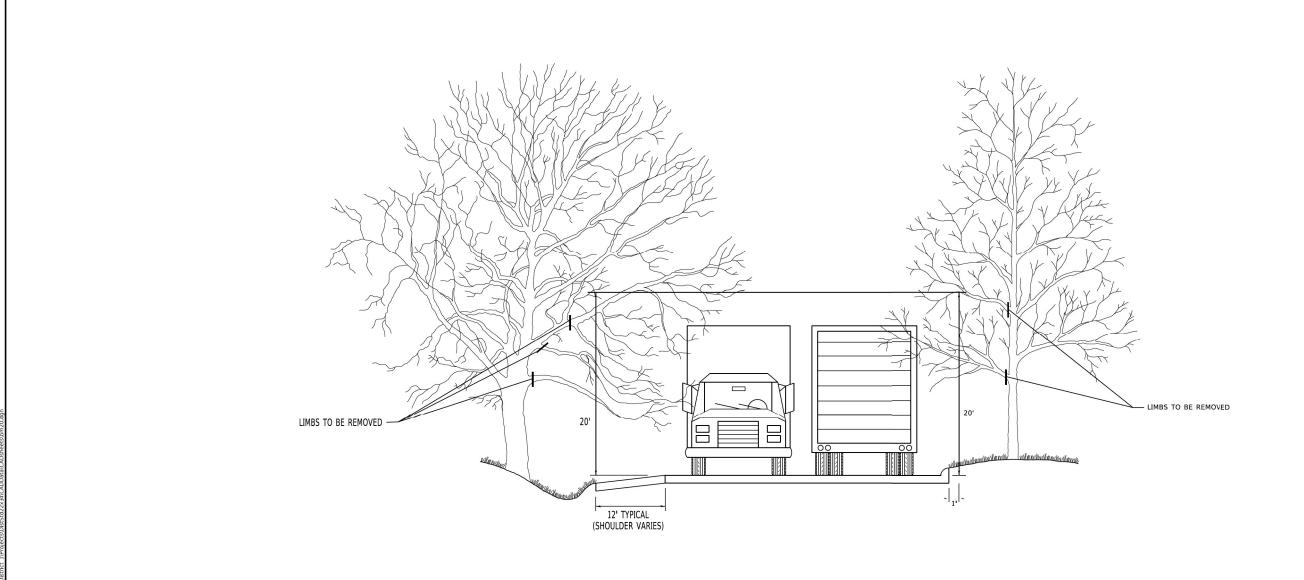
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

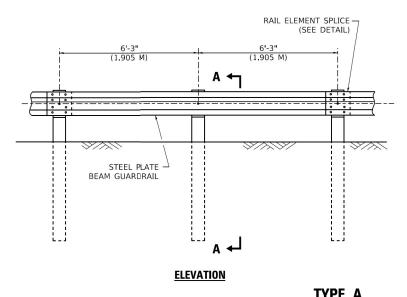
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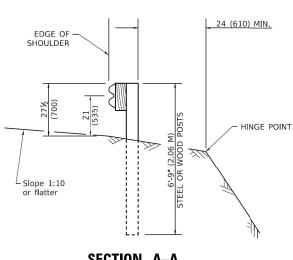
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DEPARTMENT OF TRANSPORTATION

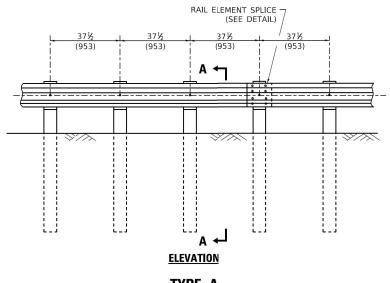
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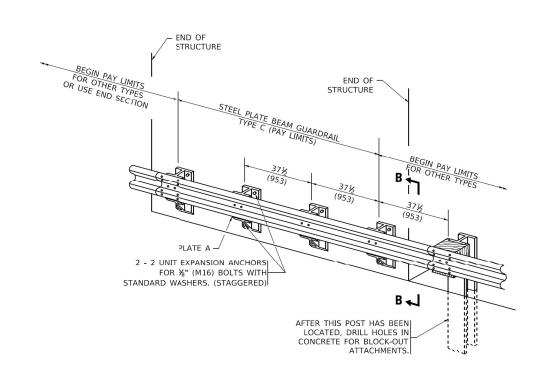
TYPE A
6'-3" (1.905 M) TYPICAL POST SPACING



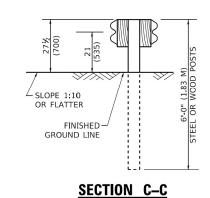
SECTION A-A



TYPE A
37½ (953) CLOSED POST SPACING



TYPE C
37½ (953) BLOCK-OUT SPACING



CONCRETE
STRUCTURE

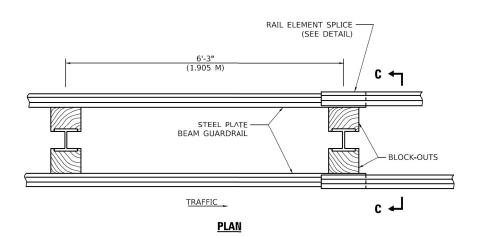
91/6
(232)

STEEL BLOCK OUTS ONLY

SLOPE 1:10
OR FLATTER

FINISHED
GROUND LINE

SECTION B-B



TYPE D

DOUBLE STEEL PLATE BEAM GUARDRAIL 6'-3" (1.905 M) TYPICAL POST SPACING

GENERAL NOTES

ALL SLOPE RATIOS ARE EXPRESSED AS UNITS OF VERTICAL DISPLACEMENT TO UNITS OF HORIZONTAL DISPLACEMENT (V:H).

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

THE EXISTING STEEL POSTS MAY BE DRILLED TO MATCH THE BOLT PATTERN SHOWN HEREIN FOR THE WOOD BLOCK-OUT, OR A NEW STEEL POST SHALL BE PROVIDED.

THIS DETAIL IS APPLICABLE TO THE GUARDRAIL SYSTEM USED PRIOR TO JANUARY 1, 2007. FOR DETAILS ON THE MIDWEST GUARDRAIL SYSTEM, SEE STANDARD 630001.

TO STA.

SECTION

2020-163-BR

BM-21

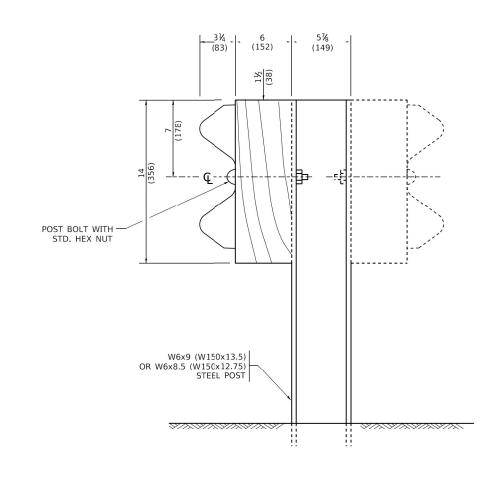
COUNTY

WILL 65 49

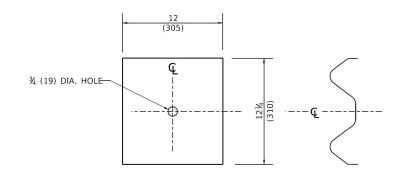
CONTRACT NO. 62M50

		<u>3EU110</u>

	USER NAME = footemj	DESIGNED -	REVISED -		REMOVE AND REERECT				
HDR		DRAWN -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION SI		-			
ROSEMONT, IL 60018	PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED -			21FFF	PLATE BE	AW	GUARDRAIL
	PLOT DATE = 3/11/2019	DATE -	REVISED -		SCALE: NONE	SHEET 1	OF 4 S	HEETS	STA.



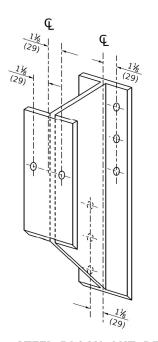
STEEL POST CONSTRUCTION



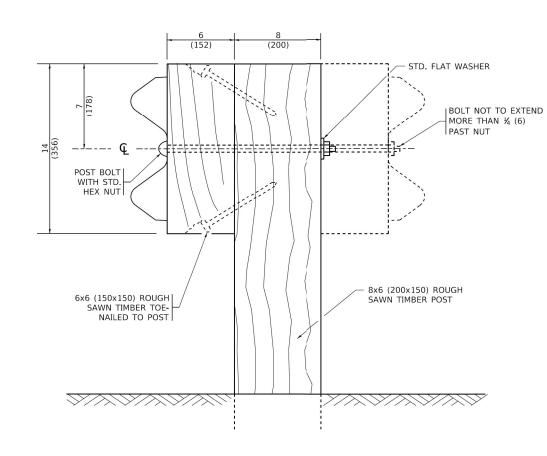
NOTE:

PLATE A SHALL BE PLACED BETWEEN RAIL ELEMENT AND BLOCK-OUT AT NON-SPLICE MOUNTING POINTS ONLY WHEN STEEL BLOCK-OUTS ARE USED.

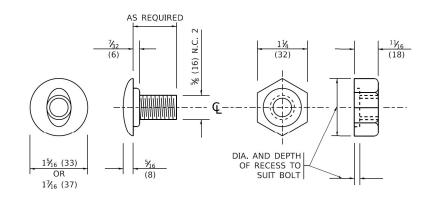
PLATE A



STEEL BLOCK-OUT DETAIL



WOOD POST CONSTRUCTION



POST OR SPLICE BOLT & NUT

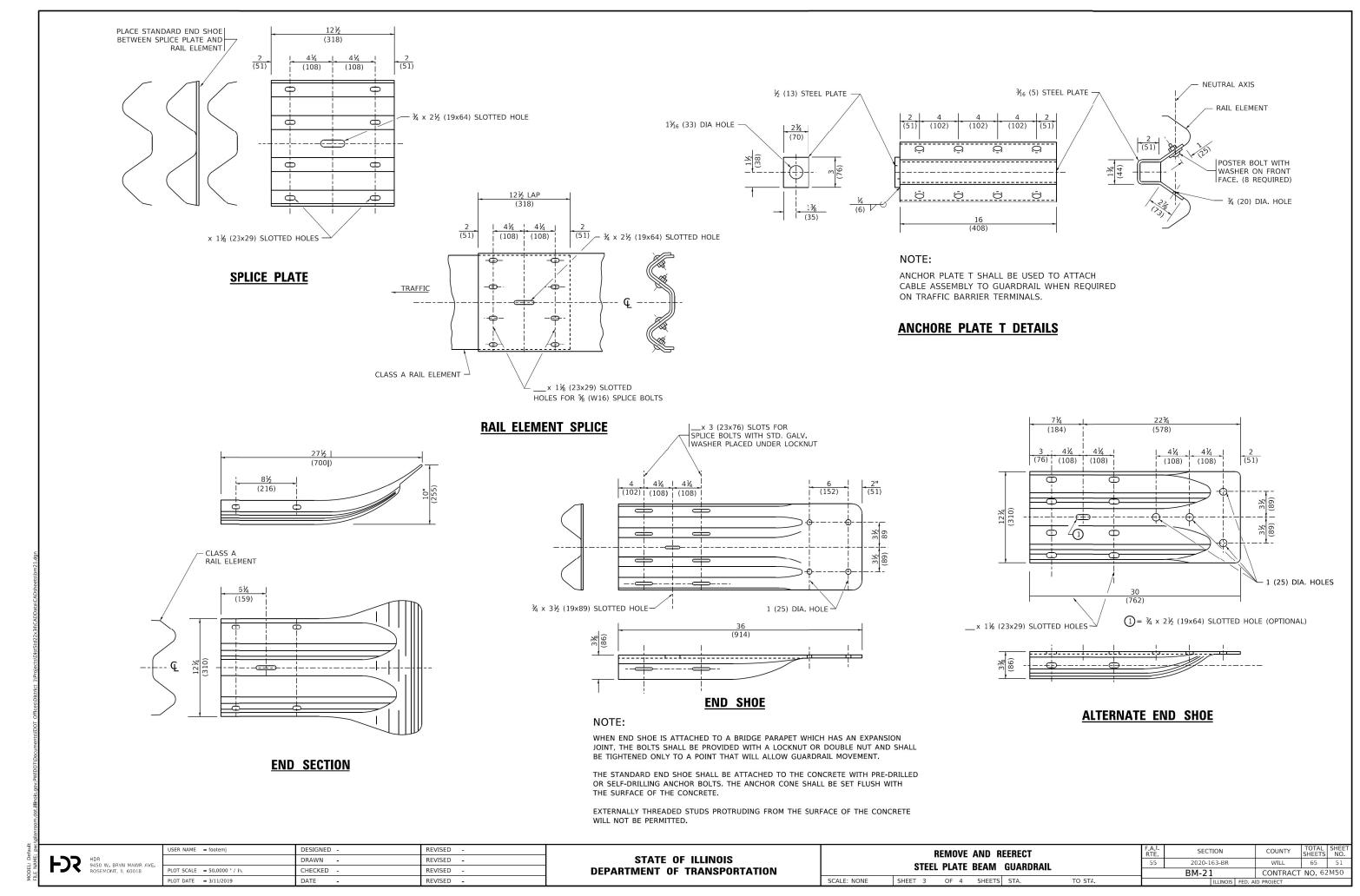
SCALE: NONE

FDS	HDR 9450 W. BRYN MAWR AVE ROSEMONT, IL 60018

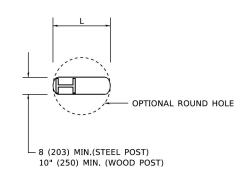
	USER NAME = footemj	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 3/11/2019	DATE -	REVISED -

STATE OF ILLINOIS						
DEPARTMENT O	F TRANSPORTATION					

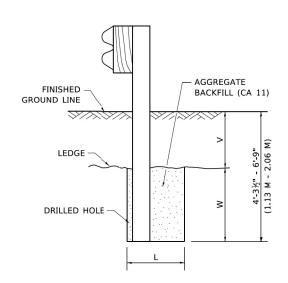
	REMOVE AND REERECT			F.A.I. SECTION		COUNTY TOTAL SHEETS		SHEET NO.		
STEEL PLATE BEAM GUARDRAIL				55	2020-163-BR	WILL	65	50		
SILLE PLATE BLAW GUANDHAIL				BM-21	CONTRACT	NO. 62	2M50			
	SHEET 2	OF 4	SHEETS	STA.	TO STA.		ILLINOIS FED.	AID PROJECT		



nn21 dan 3/11/2019 2:13:59 PM U



<u>PLAN</u>

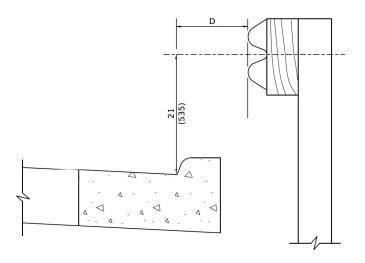


NOTE:

LEDGE LINE IS TOP OF ROCK LEDGE OR HARD SLAG FILL.

ELEVATION

FOOTING FOR POST WHEN IMPERVIOUS MATERIAL IS ENCOUNTERED



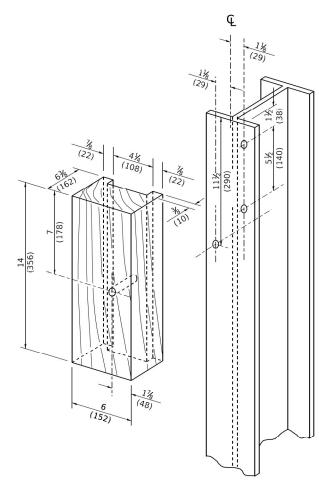
NOTE:

IF IT IS NECESSARY FOR D TO BE MORE THAN 12 (300) AND LESS THAN 10'-0" (3.0 M) TYPE M-2 (M-5) CURB AND GUTTER (STD. 606001) SHALL BE USED IN FRONT OF AND IN ADVANCE OF THE GUARDRAIL.

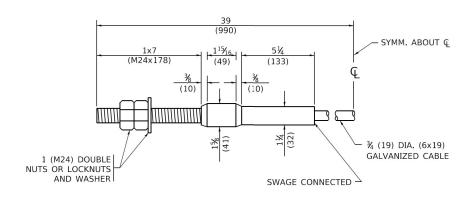
GUARDRAIL PLACED BEHIND CURB

(D = O DESIRABLE TO 12 (300) MAXIMUM)

V	w	L		
V	VV	STEEL POST	WOOD POST	
0 - 18	24	21	23	
(0 - 460)	(610)	(530)	(580)	
>18 - 41.5	12	8	10	
(> 460 - 825)	(305)	(203)	(250)	
>41.5 - 53.5	12 - 0	8	10	
(> 825 - 1.13 M)	(350 - 0)	(203)	(250)	



WOOD BLOCK - OUT AND STEEL POST DETAILS



CABLE ASSEMBLY

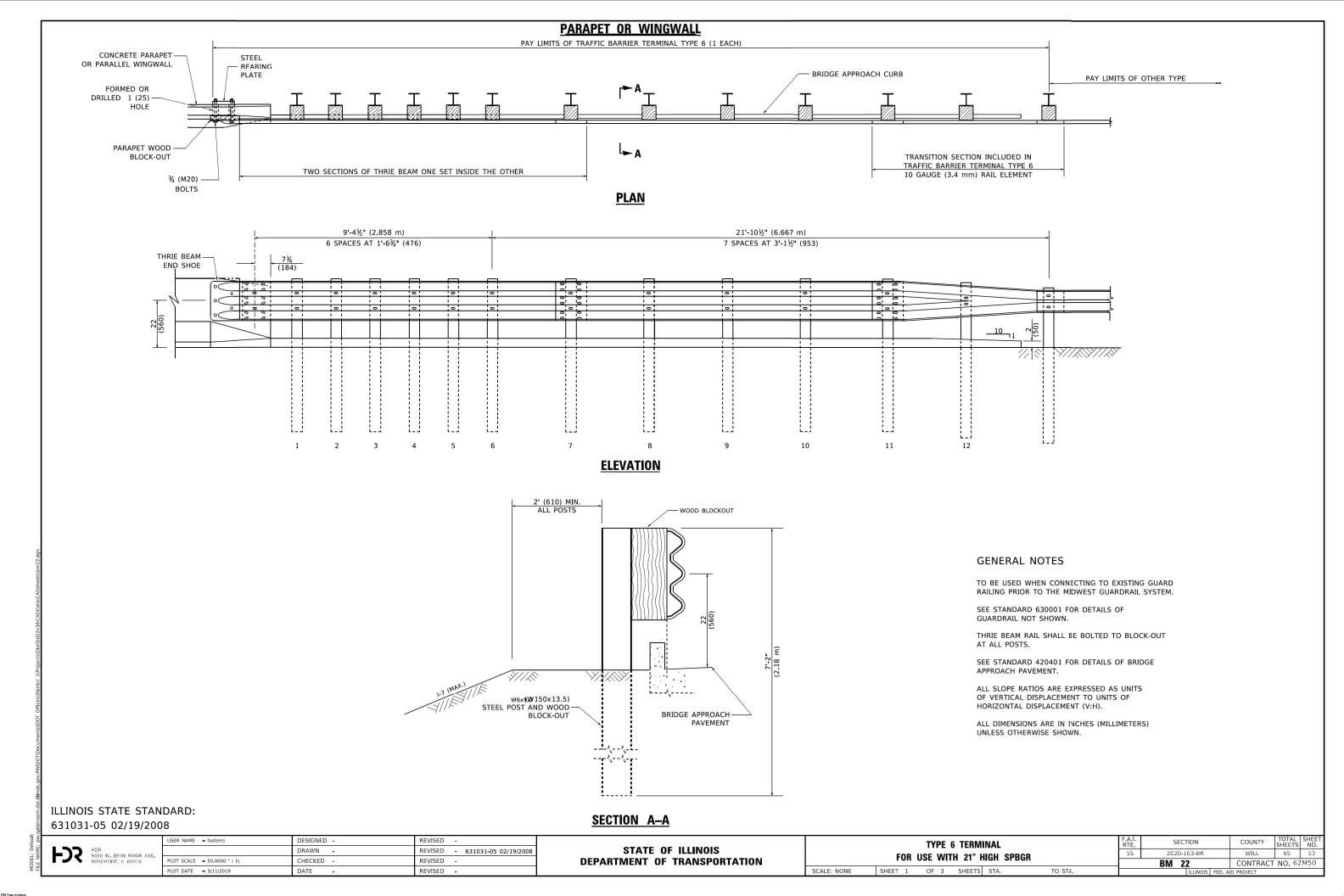
(40,000 LBS (18,100 KG) MIN. BREAKING STRENGTH)
TIGHTEN TO TAUT TENSION

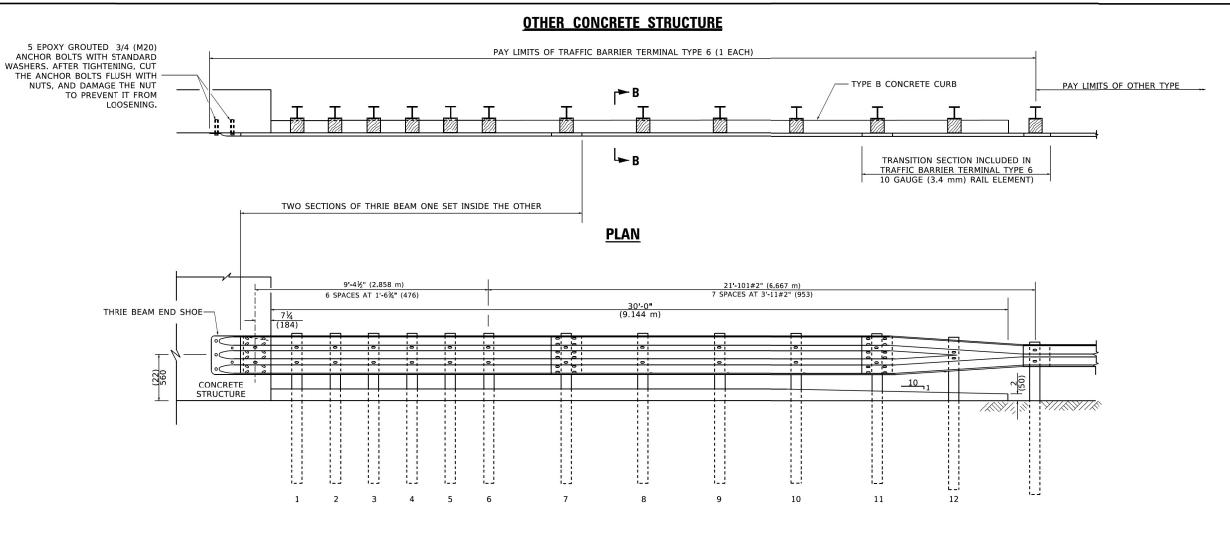
	USER NAME = footemj	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 3/11/2019	DATE -	REVISED -

STATI	E OF	: ILLINOIS
DEPARTMENT	OF	TRANSPORTATION

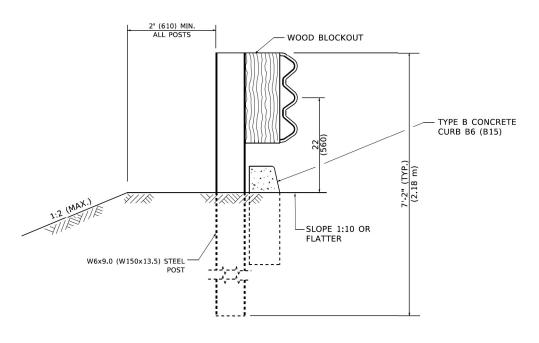
SCALE: NONE

REMOVE AND REERECT	F.A.I. RTE.	SECTION			SHEET NO.
STEEL PLATE BEAM GUARDRAIL	55	2020-163-BR	WILL	65	52
STEEL TEATE BEAM GOARDRAIL		BM-21	CONTRACT	NO. 62	M50
SHEET 4 OF 4 SHEETS STA. TO STA.		ILLINOIS FED. AI	D PROJECT		





ELEVATION



ILLINOIS STATE STANDARD: 631031-05 02/19/2008

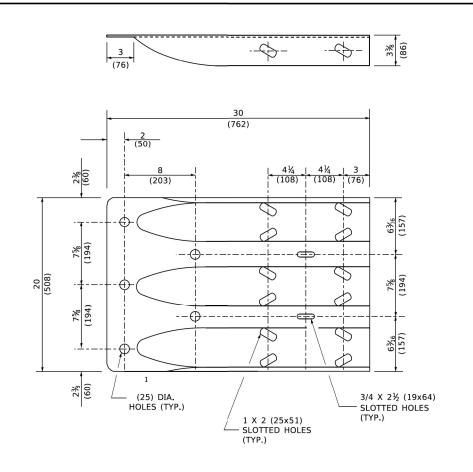
SECTION B-B

	USER NAME = footemj	DESIGNED -	REVISED -
HDR 9450 W. BRYN MAWR	AVE	DRAWN -	REVISED - 631031-05 02/19/2008
ROSEMONT, IL 60018	PLOT SCALE = 50.0000 / in.	CHECKED -	REVISED -
	PLOT DATE = 3/11/2019	DATE -	REVISED -

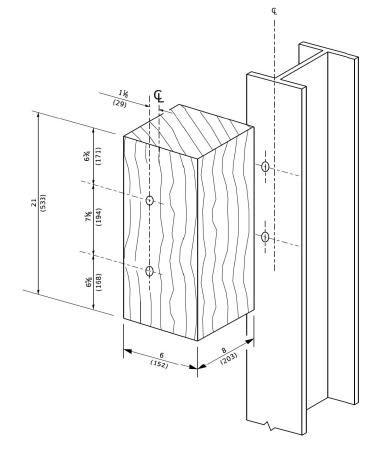
STATI	E 01	FILLINOIS
DEPARTMENT	OF	TRANSPORTATION

SCALE: NONE

	TYPE 6 TERMINAL For USE with 21" High SPBGR					F.A.I. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.			
						55	2020-163-BR		WILL	65	54			
							BM 22			CONTRACT	NO. 62	M50		
	SHEET	2	OF	3	SHEETS	STA.	TO STA.		ILLIN	OIS FE	D. Al	D PROJECT		



THRIE BEAM END SHOE DETAIL

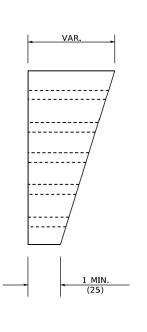


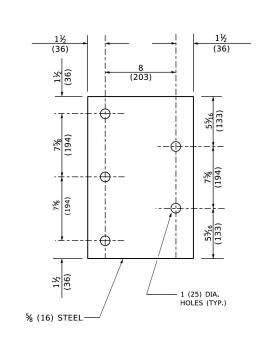
(432) (432) (165) (165) (165) (165) (165) (165) (165)

POSTS 1–11 WOOD BLOCKOUT DETAIL

POST 12 WOOD BLOCKOUT DETAIL

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PARAPET WOOD BLOCK-OUT DETAIL

PARAPET STEEL BEARING PLATE DETAIL

(5 EACH INDIVIDUAL 5X5X % (125x125x16) STEEL PLATES WITH CENTERED 1 (25) HOLES MAY BE SUBSTITUTED FOR THE PLATE SHOWN.)

SCALE: NONE

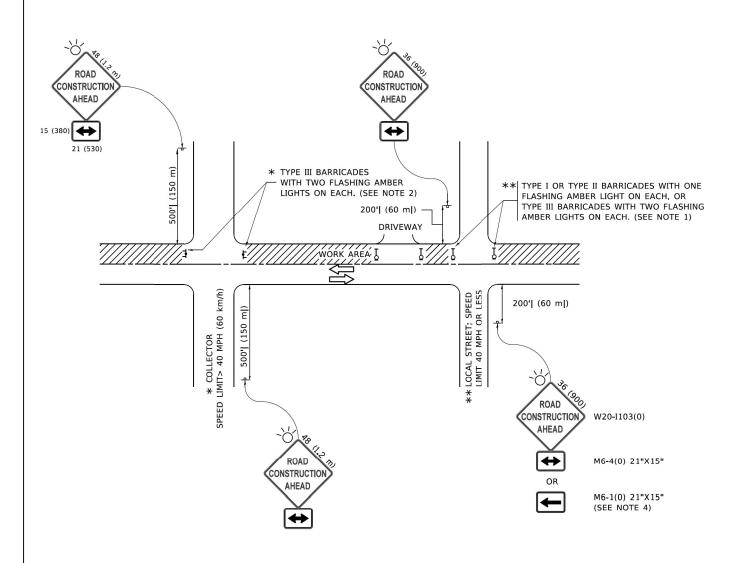
631031-05 02/19/2008						
	USER					
HDR 9450 W. BRYN MAWR AVE.						
ROSEMONT, IL 60018	PLOT					

ILLINOIS STATE STANDARD:

USER NAME = footemj	DESIGNED -	REVISED -
	DRAWN -	REVISED - 631031-05 02/19/2008
PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 3/11/2019	DATE -	REVISED -

STATE	OF	ILLINOIS
DEPARTMENT (OF 1	TRANSPORTATION

TYPE 6 TERMINAL					F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FOR	FOR USE WITH 21" HIGH SPBGR					2020-163-BR	WILL	65	55
						BM 22	CONTRACT	NO. 62	M50
SHEET 3	OF 3	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT				



NOTES:

- 1. SIDE ROAD WITH A SPFFD 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.
- THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY
 b) BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION
 OF THE CLOSED PORTION.
- CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710)
- WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE
 4. SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL
 BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

SCALE: NONE

- WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
- ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
- 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.

HDR 9450 W. BRYN MAWR AVE. ROSEMONIT, IL 60018

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

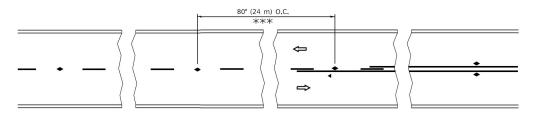
TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

SHEET 1 OF 1 SHEETS STA. TO STA

A.I. SECTION COUNTY TOTAL SHEETS NO.

55 2020-163-BR WILL 65 56

TC-10 CONTRACT NO. 62M50

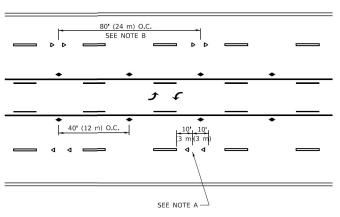


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

3 @ 40' (12 m) O.C. ♥ \Rightarrow

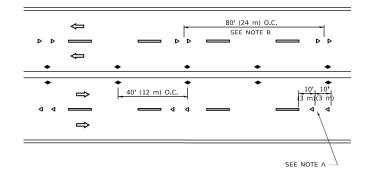
SEE FIGURE 3B-14 MUTCD

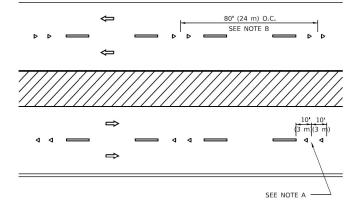
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN

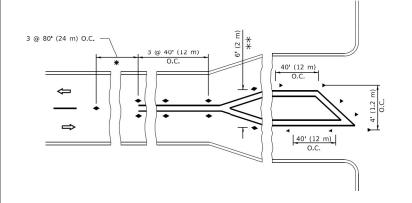
TW0-LANE/TW0-WAY

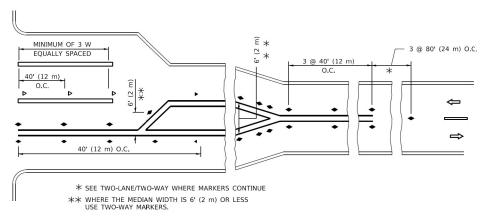




MULTI-LANE/UNDIVIDED







TURN LANES

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

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.

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

REVISED - T. RAMMACHER 03-12-99 USER NAME = footemj DESIGNED -DRAWN REVISED - T. RAMMACHER 01-06-00 PLOT SCALE = 50.0000 ' / in. CHECKED -REVISED - C. JUCIUS 09-09-09 PLOT DATE = 3/4/2019 REVISED - C JUCIUS 07-01-13 DATE

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) SHEET 1 OF 1 SHEETS STA.

SECTION 2020-163-BR WILL 65 57 CONTRACT NO. 62M50

SYMBOLS

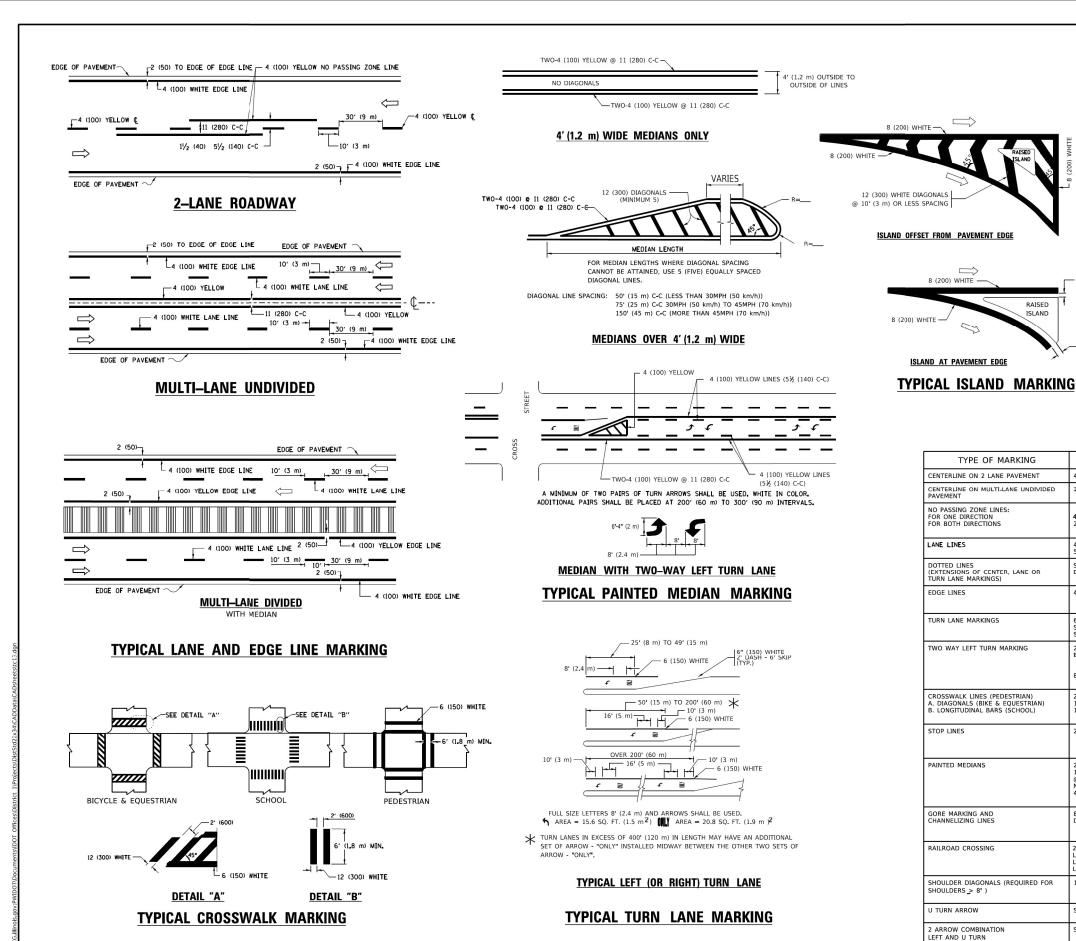
ONE-WAY AMBER MARKER

TWO-WAY AMBER MARKER

d ONE-WAY CRYSTAL MARKER (W/O)

_____ YELLOW STRIPE

■ WHITE STRIPE



COMBINATION LEFT AND U-TURN 5'-4" (1620) LANE REDUCTION TRANSITION * LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS. **U-TURN** WIDTH OF LINE PATTERN COLOR SPACING / REMARKS YELLOW 10' (3 m) LINE WITH 30' (9 m) SPACE 5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C 4 (100) 2 @ 4 (100) MIT SKIP-DASH CENTERLINE BETWEEN SKIP-DASH SKIP-DASH WHITE 10' (3 m) LINE WITH 30' (9 m) SPACE (125) ON FREEWAYS SAME AS LINE BEING EXTENDED SKIP-DASH SAME AS LINE BEING 2' (600) LINE WITH 6' (1,8 m) SPACE SOLID YELLOW-LEFT WHITE-RIGHT OUTLINE MEDIANS IN YELLOW 6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m)) SEE TYPICAL TURN LANE MARKING DETAIL SOLID WHITE YELLOW 10' (3 m) LINE WITH 30' (9 m) SPACE FOR KIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL 8' (2.4m) LEFT ARROW NOT LESS THAN 6' (1.8 m) APART SEE TYPICAL CROSSWALK MARKING DETAILS. 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 SOLID WHITE SOLID 11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING. 2 @ 4 (100) WITH 12 (300) DIAGONALS YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIAN 8 (200) WITH 12 (300) DIAGONALS @ 45° SOLID 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))

32 R (810)

2 (50)

2 (50)

4 (100)

24 (600)

24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"

12 (300) @ 45

SEE DETAIL

SOLID

SOLID

SOLID

SOLID

WHITE

WHITE

WHITE - RIGHT YELLOW - LEFT

RAISED

TYPE OF MARKING

D(FT)

425

750

SPEED LIMIT

30

35

55

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

SCALE: NONE

SECTION COUNTY **DISTRICT ONE** 2020-163-BR WILL 65 58 TYPICAL PAVEMENT MARKINGS TC-13 CONTRACT NO. 62M50 OF 2 SHEETS STA. TO STA SHEET 1

30.4 SF

SEE STATE STANDARD 780001

unless otherwise shown.

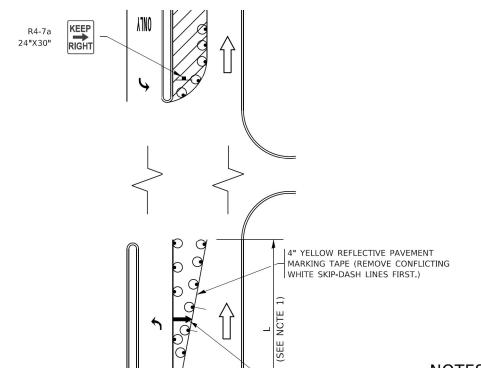
50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

USER NAME = footemj DESIGNED - EVERS REVISED - C. JUCIUS 09-09-09 HDR 9450 W. BRYN MAWR AVE. ROSEMONT, IL 60018 DRAWN REVISED - C. JUCIUS 07-01-13 CHECKED REVISED -PLOT SCALE = 50.0000 ' / in. C. JUCIUS 12-21-15 DATE 03-19-90 REVISED -

 $m{\star}$ MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER



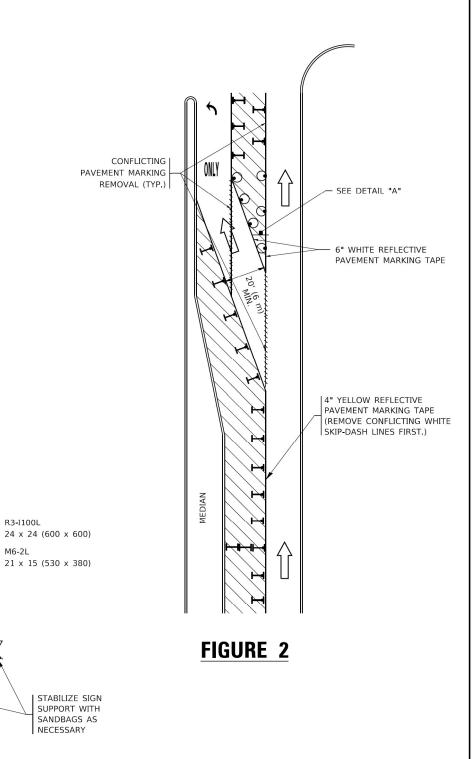
- ARROW BOARD

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 TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

NOTES:

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

TURN BAY ENTRANCE WITHIN A LANE CLOSURE



DETAIL A

TURN

LANE

All dimensions are in inches (millimeters) unless otherwise shown

HDR 9450 W. BRYN MAWR AVE. ROSEMONT, IL 60018

SEE DETAIL "A"

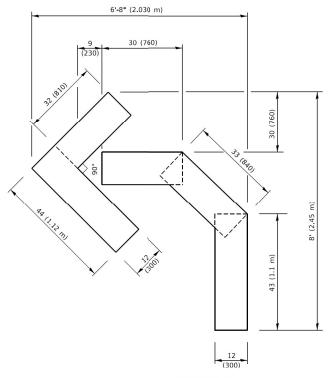
USER NAME = footemj DESIGNED - T. RAMMACHER 09-08-94 REVISED - R. BORO 09-14-09 DRAWN - A. HOUSEH 11-07-95 REVISED - A. SCHUETZE 07-01-13 PLOT SCALE = 50.0000 ' / in. CHECKED - A. HOUSEH 10-12-96 REVISED - A. SCHUETZE 09-15-16 PLOT DATE = 3/4/2019 DATE -T. RAMMACHER 01-06-00 REVISED -

FIGURE 1

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

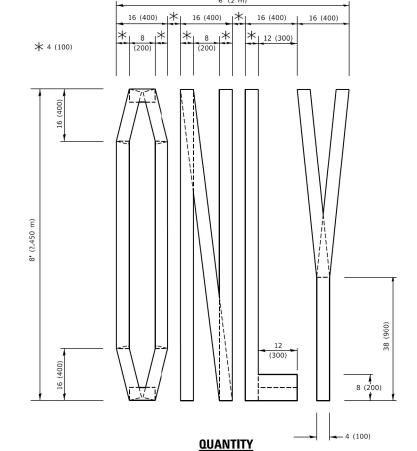
TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHEET 1 OF 1 SHEETS STA. SCALE: NONE

SECTION 2020-163-BR WILL 65 59 TC-14 CONTRACT NO. 62M50

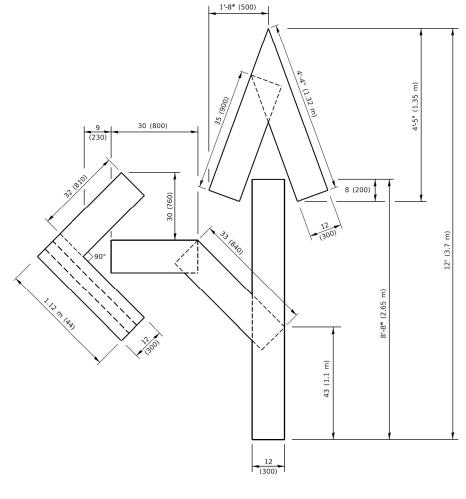


QUANTITY

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



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

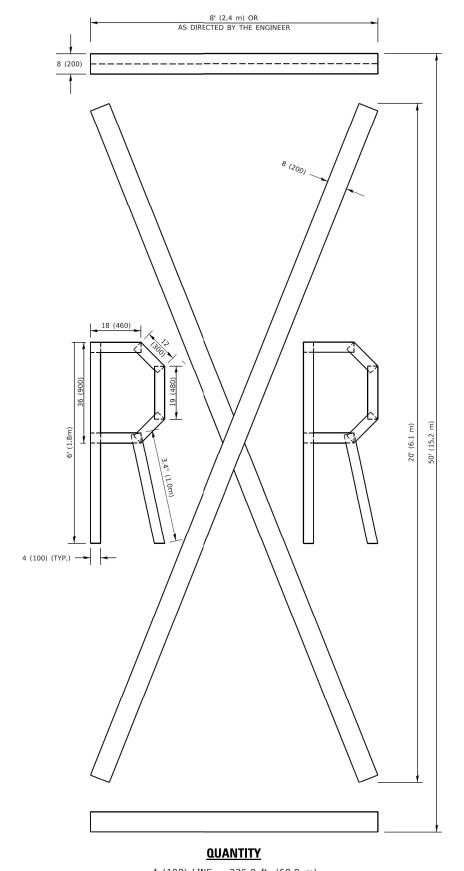


QUANTITY

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.



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.

HDR 9450 W. BRYN MAWR AVE. ROSEMONT, IL 60018 STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

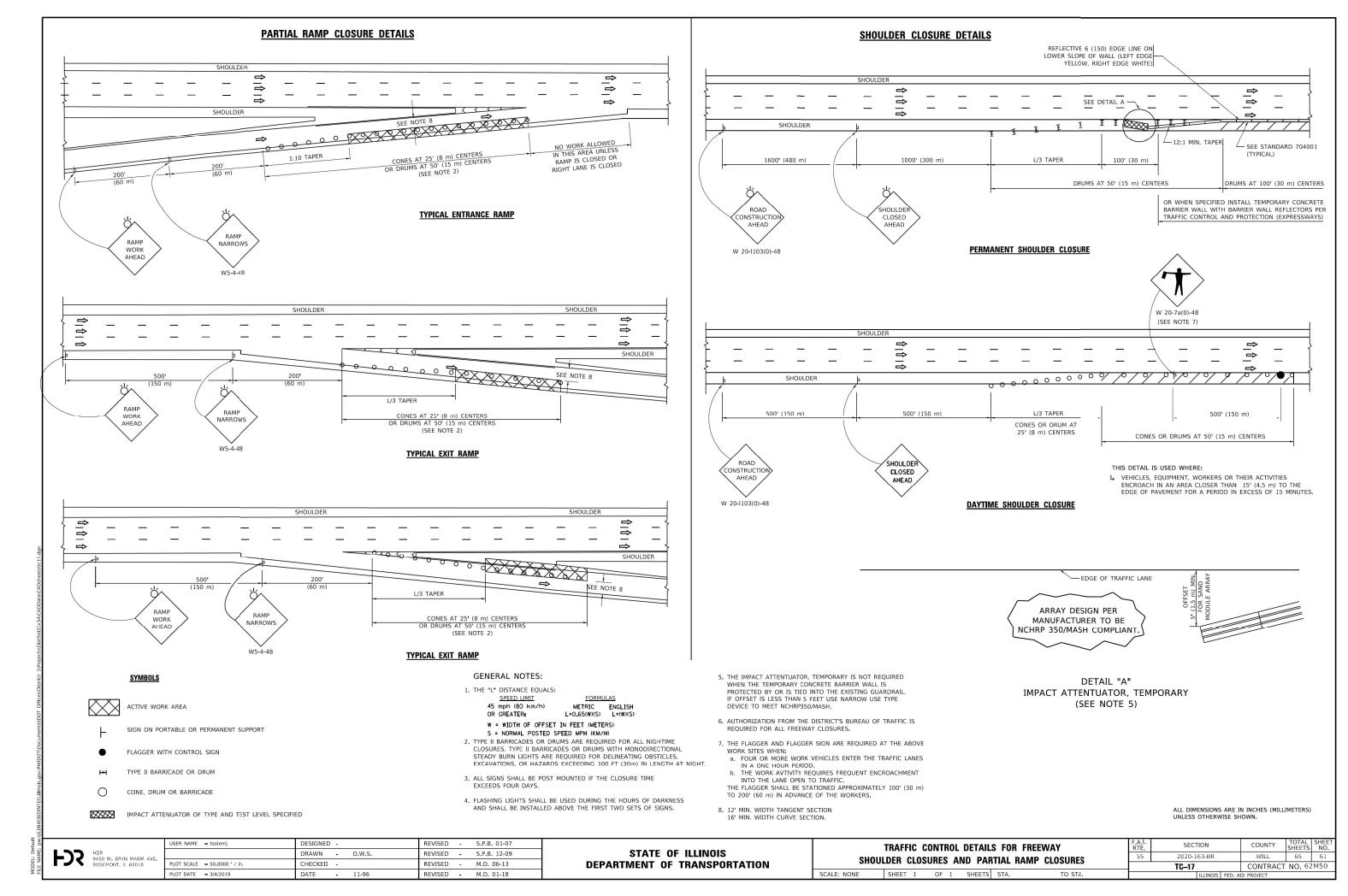
SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

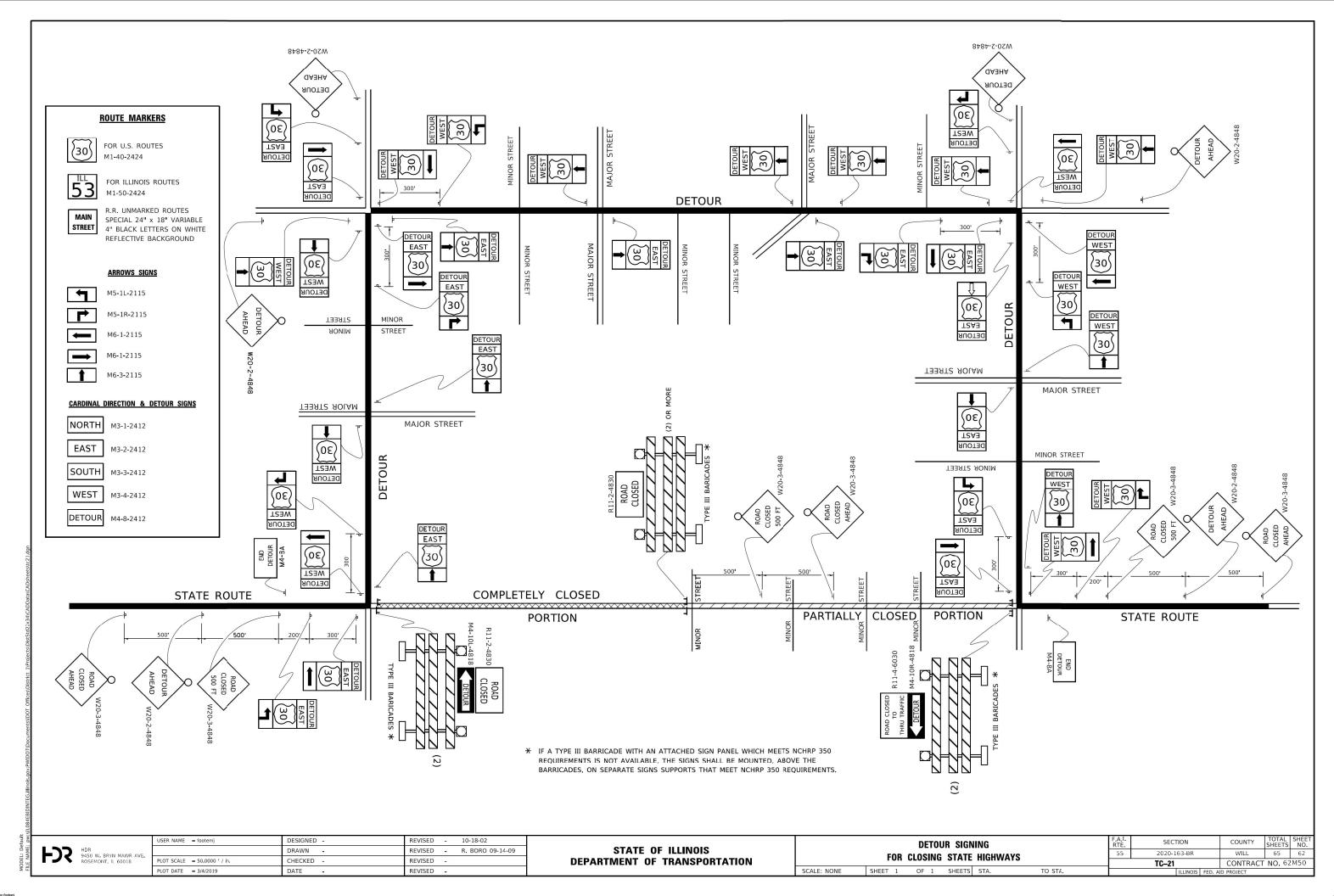
 SECTION
 COUNTY
 TOTAL SHEETS NO.

 2020-163-BR
 WILL
 65
 60

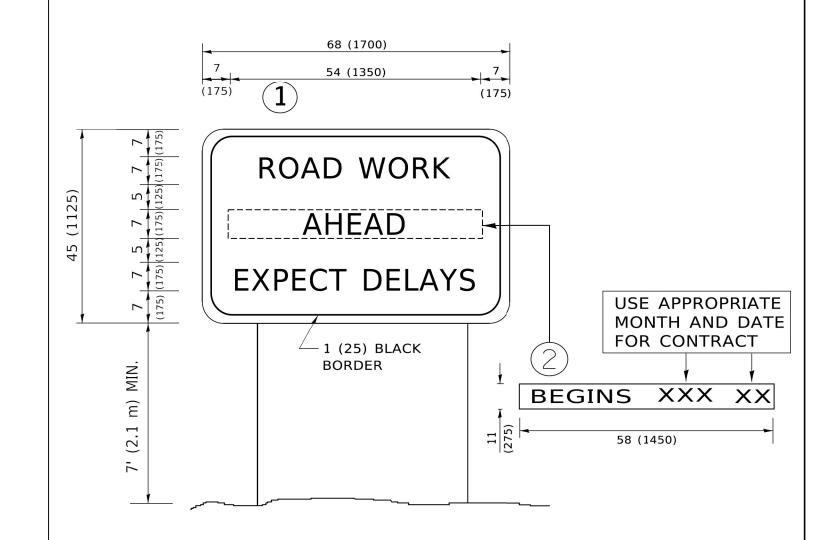
 TC-16
 CONTRACT NO. 62M50

6 dan 3/4/2019 10:37:35 AM U





-21 day 3/4/2019 10:46:33 AM He



NOTES:

- 1. USE BLACK LETTERING ON ORANGE BACKGROUND.
- 2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
- 3. ERECT SIGN 1 WITH INSTALLED PANEL 2 ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
- 4. REMOVE PANEL 2 SOON AFTER THE START OF CONSTRUCTION.
- 5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.

SHEET

6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)

SCALE: NONE

7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

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

HDR 9450 W. BRYN MAWR AVE. ROSEMONT, IL 60018	
	ı

	USER NAME = footemj	DESIGNED -	REVISED	- R. MIRS 09-15-97
		DRAWN -	REVISED	- R. MIRS 12-11-97
•	PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED	-T. RAMMACHER 02-02-99
	PLOT DATE = 3/4/2019	DATE -	REVISED	- C. JUCIUS 01-31-07

	ARTE	RIAL RO	F.A.I. RTE.	SECTION			
	INFORM	MATION	SIGN		55	2020-163-BR	
	INFORMATION SIGN					TC-22	
1	OF 1	SHEETS	STA.	TO STA.		ILLINOIS	FED.

TRAFFIC SIGNAL LEGEND (NOT TO SCALE)

	EXISTING	PROPOSED	<u>ITEM</u>	<u>EXISTING</u>	<u>PROPOSED</u>	<u>ITEM</u>	<u>EXISTING</u>	PROPOSED
CONTROLLER CABINET			HANDHOLE -SQUARE -ROUND			SIGNAL HEAD -(P) PROGRAMMABLE SIGNAL HEAD	R R Y Y	R R Y
COMMUNICATION CABINET	ECC	CC	HEAVY DUTY HANDHOLE					G G ←Y
MASTER CONTROLLER	ЕМС	MC	-SQUARE -ROUND	\mathbb{H}	H B		F	4 6 4 6 P
IASTER MASTER CONTROLLER	EMMC	ммс	DOUBLE HANDHOLE			SIGNAL HEAD WITH BACKPLATE		
NINTERRUPTABLE POWER SUPPLY	₹	9	JUNCTION BOX		0	-(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE		Y Y G G
RVICE INSTALLATION P) POLE MOUNTED	P	- ■ -P	RAILROAD CANTILEVER MAST ARM	$X \longrightarrow X$	X •X X			G G G 4Y 4G 4G
ERVICE INSTALLATION	C CM	C CM	RAILROAD FLASHING SIGNAL	$X \rightarrow X$	X◆X		P RB	P RB
(G) GROUND MOUNTED (GM) GROUND MOUNTED METERED	$\boxtimes^{G} \boxtimes^{GM}$	⊠ ^G ⊠ ^{GM}	RAILROAD CROSSING GATE	202 >	X •X	PEDESTRIAN SIGNAL HEAD	©	*
ELEPHONE CONNECTION	ET	Т	RAILROAD CROSSBUCK	☆	*	AT RAILROAD INTERSECTIONS	(A)	<u>[*</u>]
TEEL MAST ARM ASSEMBLY AND POLE	O	•——	RAILROAD CONTROLLER CABINET		▶∢	PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER	(C) (A) D	♥ C ★ D
LUMINUM MAST ARM ASSEMBLY AND POLE	0		UNDERGROUND CONDUIT (UC), GALVANIZED STEEL			WITH COOKIDOWN TIMEN		
TEEL COMBINATION MAST ARM SSEMBLY AND POLE WITH LUMINAIRE	o-¤—	•*	TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE			ILLUMINATED SIGN "NO LEFT TURN"/"NO RIGHT TURN"		
IGNAL POST (BM) BARREL MOUNTED - TEMPORARY	0	 ● BM 	SYSTEM ITEM	S	SP	NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE.		
BM) BARREL MOUNTED - TEMPORART			INTERSECTION ITEM	I	IP	ALL DETECTOR LOOP CABLE TO BE SHIELDED		
OOD POLE	\otimes	•	REMOVE ITEM		R	GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN)	1#6	<u> </u>
UY WIRE	> -	>-	RELOCATE ITEM		RL	ELECTRIC CABLE IN CONDUIT, TRACER	\sim	
GNAL HEAD	>	-	ABANDON ITEM		Α	NO. 14 1/C		
GNAL HEAD WITH BACKPLATE	+->	+-	CONTROLLER CABINET AND FOUNDATION TO BE REMOVED		RCF	COAXIAL CABLE	<u> </u>	<u> </u>
IGNAL HEAD OPTICALLY PROGRAMMED	-> ⁺ > +>	→ P + → P	MAST ARM POLE AND		RMF	VENDOR CABLE		
LASHER INSTALLATION (FS) SOLAR POWERED	od>F od>FS	•► FS	FOUNDATION TO BE REMOVED		KIH	COPPER INTERCONNECT CABLE,		
	o⇔ ^F o⇔ ^{FS}	₽→ ^F ₽→ ^{FS}	SIGNAL POST AND FOUNDATION TO BE REMOVED		RPF	NO. 18, 3 PAIR TWISTED, SHIELDED	(6#18)	<u>—(6#18)</u>
EDESTRIAN SIGNAL HEAD	-0	-1	DETECTOR LOOP, TYPE I			FIBER OPTIC CABLE -NO. 62.5/125, MM12F		— <u>12F</u> —
EDESTRIAN PUSH BUTTON (APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON	⊚		PREFORMED DETECTOR LOOP	PP	P P	-NO. 62.5/125, MM12F SM12F -NO. 62.5/125, MM12F SM24F		
ADAR DETECTION SENSOR	R	R	SAMPLING (SYSTEM) DETECTOR	s s	S S			—(36F)—
IDEO DETECTION CAMERA	[V]	V	INTERSECTION AND SAMPLING (SYSTEM) DETECTOR	IS (IS)	IS (IS)			
ADAR/VIDEO DETECTION ZONE			QUEUE AND SAMPLING (SYSTEM) DETECTOR	os (s)	QS QS	GROUND ROD -(C) CONTROLLER -(M) MAST ARM	<u>.</u> C <u>.</u> M <u>.</u> P <u>.</u> S	$\stackrel{\underline{\dot{=}}^C}{\overline{\downarrow}} \stackrel{\underline{\dot{=}}^M}{\overline{\downarrow}} \stackrel{\underline{\dot{=}}^P}{\overline{\downarrow}} \stackrel{\underline{\dot{=}}^S}{\overline{\downarrow}}$
AN, TILT, ZOOM (PTZ) CAMERA	PTZ]	PTZ	WIRELESS DETECTOR SENSOR	<u> </u>	©	-(P) POST -(S) SERVICE		
	\boxtimes	~	WIRELESS ACCESS POINT					
MERGENCY VEHICLE LIGHT DETECTOR					_			
	○ —(]	•-(
MERGENCY VEHICLE LIGHT DETECTOR ONFIMATION BEACON VIRELESS INTERCONNECT	⊶1 ⊶ 1 	•- -						

DESIGNED - IP
DRAWN - IP USER NAME = footemj REVISED -REVISED -PLOT SCALE = 50.0000 ' / in.

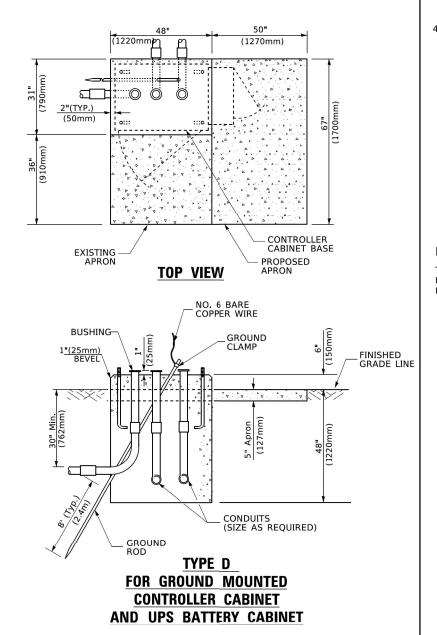
PLOT DATE = 3/4/2019 CHECKED - LP

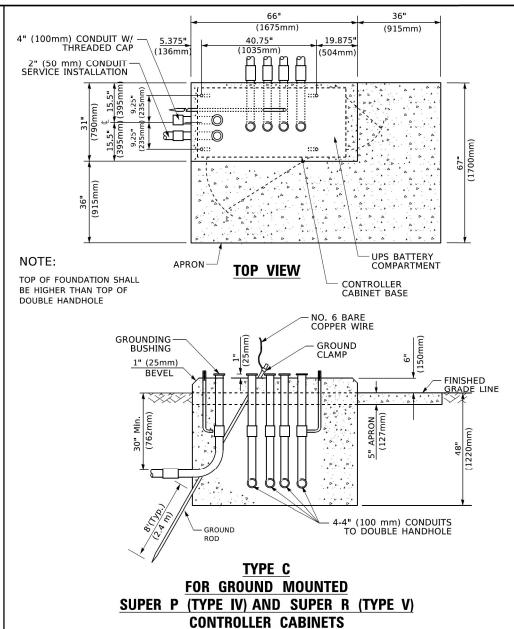
DATE - 9/29/2016 REVISED -REVISED -

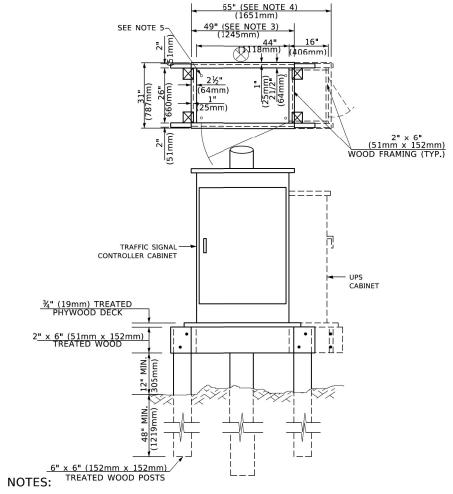
STATE OF ILLINOIS						
DEPARTMENT	OF	TRANSPORTATION				

	DISTRICT ONE								
S	TANDARD	TRAFFIC	SIGNAI	. DESIGN	DETAILS				
SCALE: NONE	SHEET 1	OF 7	SHEETS	STA.	TO STA.				

		ILLINOIS	FED. Al	ED. AID PROJECT		
TS-05				CONTRACT	NO.62	M50
55	2020-163-BR			WILL	65	64
RTE.	SECT	ΓΙΟΝ		COUNTY	SHEETS	NO.







- 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.
- $\mathbf{4}_{ullet}$ 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.
- $\mathbf{6.}$ Fasten all support wood framing to the wood posts with 2 Lag screws for each connection.

TEMPORARY SIGNAL CONTROLLER WOOD SUPPORT PLATFORM

6.5 13.0 2.0	2.0 4.0 0.6
13.0	4.0
2.0	0.6
2.0	0.6
2.0	0.6
1.5	0.5
13.0	4.0
1.5	0.5
1.5	0.5
5.0	1.6
	1.5 13.0 1.5

FEET	METER
20.0+L	6.0+L
13.0	4.0
6.0	2.0
13.5	4.1
13.5	4.1
6.0	2.0
3.0	1.0
	20.0+L 13.0 6.0 13.5 13.5 6.0

VERTICAL CABLE LENGTH

REVISED

REVISED

REVISED

CABLE SLACK

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	13'-6" (4 ₄ 1 m)	30" (750mm)	24" (600mm)	8	6(19)
30' (9.1 m) and less than 40' (12.2 m)	11'-0" (3 ₋ 4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0'' (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50′ (15.2 m) and up to 55′ (16.8 m)	15'-0'' (4 . 6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	21'-0'' (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 65' (19.8 m) and up 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 kpc). 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

	USER NAME = footemj	DESIGNED -
HDR 9450 W. BRYN MAWR AVE.		DRAWN -
ROSEMONT, IL 60018	PLOT SCALE = 50.0000 ' / in.	CHECKED -
	PLOT DATE = 3/4/2019	DATE -

S
DEPARTM

		DISTRICT ONE										
	S	TANDA	RD	TRAI	FFIC	SIGNA	L DESIGN	DETAILS				
NONE		SHEET	5	OF	7	SHEETS	STA.	то				

F.A. ^I RTE.	SECTION			COUNTY	TOTAL SHEETS	SHEET NO.	
55	2020-163-BR				WILL	65	65
TS-05				CONTRACT	NO. 62	M50	
		TLLINIOIC	LLD.	A.1	D DDOIECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

