08-02-2024 LETTING ITEM 010

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STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION **DIVISION OF HIGHWAYS**

PROPOSED

FAP ROUTE 326: IL-47 OVER SLOUGH CREEK SECTION: FAP 0326 22 BJ2 PROJECT: NHPP-B4N8(422) BRIDGE JOINT REPAIR, BRIDGE DECK OVERLAY **MCHENRY COUNTY**

C-91-279-22



TRAFFIC DATA

FOR INDEX OF SHEETS AND HIGHWAY

IN THE UNINCORPORATED MCHENRY

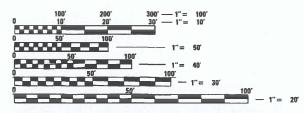
STANDARDS, SEE SHEET NO. 2

THIS PROJECT IS LOCATED

COUNTY

2019 ADT = 5,550 VPDPOSTED SPEED LIMIT = 55 MPH OTHER PRINCIPAL ARTERIAL

> PROJECT LOCATION IL-47 OVER SLOUGH CREEK **STRUCTURE NO. 056-0054**



ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

MEADE ELECTRIC CO. DISTRICT ONE ELECTRICAL MAINTENANCE CONTRACTOR LOCATES IDOT ELECTRICAL EQUIPMENT AND UNDERGROUND CABLES 773-287-7672

PROJECT ENGINEER: DAN WILGREEN (847) 705-7240 PROJECT MANAGER: J. ALAIN MIDY (847) 221-3056

R 7 E **GREENWOOD** WONDER TOWNSHIP LAKE HARTLAND

GROSS LENGTH

= 957 FT. = 0.18 MILES

NET LENGTH

= 168 FT. = 0.03 MILES

INFRASTRUCTURE ENGINEERING | INCORPORATED

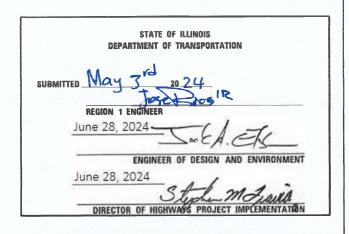
1 South Wacker | Suite 2650 | Chicago, IL 60606 CONTACT: ALEXANDER LANE (312) 477-0620

SECTION MCHENRY 33 1 FAP 0326 22 BJ2 326 CONTRACT NO. 62T02

* 33 + 1 = 34 TOTAL SHEETS

D-91-226-22





PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

CONTRACT NO. 62T02

INDEX OF SHEETS

SHEET NO.	TITLE
1	COVER SHEET
2	INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES
3	SUMMARY OF QUANTITIES
4-6	TRAFFIC CONTROL PLANS
7	ROADWAY AND PAVEMENT MARKING PLAN
8-23	STRUCTURAL DRAWINGS - S.N. 056-0054
24	BUTT JOINT AND HMA TAPER DETAILS (BD-32)
25	TEMPORARY LIGHT POLE DETAILS (BE-800)
26	TEMPORARY AERIAL CABLE INSTALLATION (BE-801)
27-29	TEMPORARY LIGHTING AND TRAFFIC SIGNALS FOR SINGLE LANE STAGING (BE-805)
30	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS (TC-10)
31	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) (TC-11)
32	TYPICAL PAVEMENT MARKINGS (TC-13)
33	ARTERIAL ROAD INFORMATION SIGN (TC-22) / DRIVEWAY ENTRANCE SIGNING (TC-26)

STATE STANDARDS

STANDARD NO.	DRAWING NAME
000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701321-18	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
701901-09	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
780001-05	TYPICAL PAVEMENT MARKINGS
782006-01	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

HMA TABLE

HOT-MIX ASPHALT MIXTURE REQUIRMENTS				
MIXTURE TYPE	PE AIR VOIDS @ Ndes			
APPROACH SLABS				
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", IL-9.5, N70, 1-1/2" TO 2"	4% @ 70 Gyr	QC/QA		
SHOULDERS				
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", IL-9.5, N70, 1-1/2" TO 2"	4% @ 70 Gyr	QC/QA		
MP DESIGNATION: QUALITY CONTROL/ QUALITY ASSURANCE (QC/QA): QUALITY CONTROL	FOR PERFORMANCE (QCP)	PAY FOR PERFORMANCE (PFF		

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

GENERAL NOTES

- THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE ORDERING ANY MATERIALS AND STARTING ANY WORK. FOR LOCATIONS OF UTILITIES, LOCALLY OWNED EQUIPMENT, LEASED ENFORCEMENT CAMERA SYSTEM FACILITIES AND IDOT UNDERGROUND FACILITIES, CONTACT THE LOCAL COUNTIES, MUNICIPALITIES AND IDOT FOR LOCATES.
- MEADE ELECTRIC COMPANY, THE IDOT DISTRICT ONE ELECTRICAL MAINTENANCE CONTRACTOR, LOCATES IDOT ELECTRICAL EQUIPMENT AND UNDERGROUND CABLES. CALL 773-287-7672 FOR THE INITIAL LOCATE. REQUEST FOR LOCATES OF PREVIOUSLY MARKED FACILITIES MAY BE AT THE CONTRACTOR'S EXPENSE.
- IN ADDITION TO FIELD REVIEW AND AERIAL DATA, PLAN DIMENSIONS AND DETAILS RELATIVE TO THE EXISTING FACILITIES HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO CONSTRUCTION VARIATIONS. PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING PLANS ARE SUBJECT TO ROUTINE VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY EXISTING DIMENSIONS AND DETAILS AFFECTING NEW CONSTRUCTION AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF WORK. HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE BID PRICE FOR THE WORK.
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO BEGINNING CONSTRUCTION AND ORDERING MATERIALS.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE PROTECTION OF EXISTING PLANT MATERIAL FOR WHICH THE CONTRACT DOES NOT PROVIDE REMOVAL. THE PROTECTION OF EXISTING PLANT MATERIAL AND THE REPAIR OR REPLACEMENT OF EXISTING PLANT MATERIAL DAMAGED BY THE CONTRACTOR SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 201 OF THE STANDARD SPECIFICATIONS.
- THE DEPARTMENT HAS NOT OBTAINED ANY PERMITS FOR OFFSITE BORROW, WASTE, USE (BWU) AREAS. PRIOR TO WORKING IN BWU AREAS, IF THE CONTRACTOR CHOOSES TO USE ACTIVITIES REQUIRING PERMITS IT IS THE CONTRACTOR'S RESPONSIBILITY TO SECURE THE PROPER PERMITS. IN ADDITION TO THE BORROW REVIEW (BDE 2289) AND USE/WASTE REVIEW (BDE 2290) SUBMITTALS, THE CONTRACTOR SHALL SUBMIT AN EROSION AND SEDIMENT CONTROL (ESC) PLAN FOR EVERY BWU SITE TO THE DEPARTMENT FOR ACCEPTANCE. GUIDELINES FOR ACCEPTABLE BWU PRACTICES CAN BE FOUND IN SECTION 11.G.1. THE COST OF ALL MATERIALS AND LABOR NECESSARY TO COMPLY WITH THE ABOVE PROVISIONS TO PREPARE AND IMPLEMENT ESC PLANS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE CONTRACT UNIT PRICES AND NO ADDITIONAL COMPENSATION WILL BE ALL OWED. CONSIDERED AS INCLUDED IN THE CONTRACT UNIT PRICES AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- 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
- THE RESIDENT ENGINEER SHALL CONTACT WALTER CZARNY, AREA TRAFFIC FIELD ENGINEER, AT WALTER.CZARNY@ILLINOIS.GOV A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT
- 10. THE DEPARTMENT HAS DETERMINED THAT IN STREAM WORK IS NOT REQUIRED FOR THE WORK SPECIFIED IN THIS CONTRACT. THE DEPARTMENT HAS NOT OBTAINED A 404 PERMIT. IF THE CONTRACTOR CHOSES TO USE ACTIVITIES REQUIRING AN USACE 404 PERMIT IT IS THE CONTRACTOR'S RESPONSIBILITY TO SECURE THE PROPER USACE PERMITS.
- 11. THESE PLANS HAVE BEEN PREPARED FROM NOTES RECEIVED FROM I.D.O.T. FIELD MAINTENANCE ENGINEERS.
- 12. THE CONTRACTOR SHALL USE CARE IN REMOVING OR EXCAVATING NEAR ALL EXISTING ITEMS WHICH WILL REMAIN. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- 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. FOR WORK OUTSIDE THE LIMITS OF BRIDGE APPROACH PAVEMENT. ALL REFERENCES IN THE HIGHWAY STANDARDS AND STANDARD SPECIFICATIONS FOR REINFORCEMENT, DOWEL BARS AND TIE BARS IN PAVEMENT SHALL BE EPOXY COATED UNLESS NOTED ON THE PLANS.
- 15. DOUBLE LANE MARKERS ARE TO BE USED AS SHOWN ON THE DISTRICT ONE DETAIL "TYPICAL APPLICATIONS-RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTENT)" SHOWN IN PLANS.
- 16. THE CENTERLINE IS FOR INFORMATION ONLY.

SCALE:

'PG 64 -22" UNLESS MODIFIED BY RECLAIMED MATERIALS SPECIFICATIONS.

INDEX OF	INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES					F.A.P. RTE.	SECTION	COUNTY	TOTAL	
IL-47 OVER SLOUGH CREEK BRIDGE					326	FAP 0326 22 BJ2	MCHENRY	33	2	
	16-47	OVEN 3	LUUGII U	ILLK D	MIDGE			CONTRACT	NO. 6	52T02
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				CONSTRUC CODE	
			URBAN	0059	
PAY ITEM NUMBER	DESIGNATION	UNIT	TOTAL QUANTITY	80% FEDERAL 20% STATE	
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	326	326	
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	291	291	
10000342	BOT MAN NOT THE SOUTH OF THE POST OF SOUTH	34 15	291	291	
40604062	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70	TON	68	6¥	
50102400	CONCRETE REMOVAL	CU YD	6.4	6.4	
50300255	CONCRETE SUPERSTRUCTURE	CU YD	7.6	7.6	
50300300	PROTECTIVE COAT	SQ YD	364	364	
505004 0 5	FURRNISHING AND ERECTING STRUCTURAL STEEL	POUND	200	200	
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	770	770	
50800515	BAR SPLICERS	EACH	10	10	
52000110	PREFORMED JOINT STRIP SEAL	FOOT	96	96	
52100520	ANCHOR BOLTS, 1"	EACH	12	12	
67100100	MOBILIZATION	L SUM	1	1	
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1	
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	8 4	8 4	
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	435	435	
70207120	TEMPODADY DAVENTHE MADISING LINE ALL TYPE IV TARE	5007	2.760	2.760	
70307120	TEMPORARY PAVEMENT MARKING - LINE 4" - TYPE IV TAPE	FOOT	2,760	2,760	
70307210	TEMPORARY PAVEMENT MARKING - LINE 24"- TYPE IV TAPE	FOOT	48	48	
70400100	TEMPORARY CONCRETE BARRIER	FOOT	350.0	350.0	
70400100	TEMPONANT CONCRETE BANNER	1001	330.0	330.0	
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	350	350	
70600250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2	2	
70600350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2	2	
78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	2,904	2,904	
78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	123	123	
78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	676	676	

*	=	SPECIALTY IT	EM

		USER NAME = ALane	DESIGNED MLD	REVISED -
INFRASTRUCTURE ENGINEERING INCORPORATED 1 South Wacker Suite 2650 Chicago, IL 60606 P 312.425.9580 F 312.435.9584 www.infrastructure-eng.com		DRAWN - MLD	REVISED -	
	1 South Wacker Suite 2650 Chicago, IL 60606		CHECKED ACL	REVISED -
		PLOT DATE = 5/10/2024	DATE 05/10/2024	REVISED +

STATI	E OF	- ILLINOIS
DEPARTMENT	0F	TRANSPORTATION

PAY ITEM

78100100 RAISED REFLECTIVE PAVEMENT MARKER

78300200 RAISED REFLECTIVE PAVEMENT MARKER REMOVAL

X0326276 TEMPORARY LIGHTING FOR SINGLE LANE STAGING

TEMPORARY RUMBLE STRIPS (SPECIAL)

CLEANING AND PAINTING BEARINGS

X7010216 TRAFFIC CONTROL AND PROTECTION, (SPECIAL)

Z0001700 APPROACH SLAB REPAIR (FULL DEPTH)

Z0012130 BRIDGE DECK SCARIFICATION 3/4"

Z0016002 DECK SLAB REPAIR (FULL DEPTH, TYPE II)

Z0029090 DIAMOND GRINDING (BRIDGE SECTION)

Z0030850 TEMPORARY INFORMATION SIGNING

Z0073510 TEMPORARY TRAFFIC SIGNAL TIMING

Z0015550 DEBRIS REMOVAL

Z0001800 APPROACH SLAB REPAIR (PARTIAL DEPTH)

ENGINEER'S FIELD OFFICE, TYPE A (D1)

X7830050 RAISED REFLECTIVE PAVEMENT MARKER, REFLECTOR REMOVAL

Z0006016 BRIDGE DECK LATEX CONCRETE OVERLAY, 2 3/4 INCHES

Z0012754 STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)

X7830052 RAISED REFLECTTIVE PAVEMENT MARKER, REFLECTOR REPLACEMENT

X5030250 BRIDGE DECK GROOVING (LONGITUDINAL)

PAVEMENT MARKING REMOVAL - WATER BLASTING

78200011 BARRIER WALL REFLECTORS, TYPE C

NUMBER

78300202

X2700001

X5060700

DESIGNATION

SUMMARY OF QUANTITIES						F.A.P. RTE.	SECTION	
	II _47 (NVFR SI	UIIGH C	REEK BR	INGE	326	FAP 0326 22 BJ2	- 1
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	SHEET	OF	SHEETS	STA.	TO STA.		ILLINOIS FE	D. AII

COUNTY TOTAL SHEET NO.

MCHENRY 33 3

CONSTRUCTION CODE

0059 80%

FEDERAL

20% STATE

12

39

12

431

6

192

14

12

32

39

300

300

27

1

287

67

32

URBAN

TOTAL

QUANTITY

12

39

12

431

6

192

14

12

32

1

39

300

300

27

287

67

32

UNIT

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MAINTENANCE OF TRAFFIC GENERAL NOTES

- 1. ALL MAINTENANCE OF TRAFFIC (MOT) LANE CLOSURES CAN BE COMPLETED WITH IDOT HIGHWAY STANDARDS. THE MOT PLANS SHALL SERVE AS A GUIDE FOR SAFE DIVERSION OF TRAFFIC DURING EXECUTION OF THIS CONTRACT. HOWEVER, THE CONTRACTOR, AT NO ADDITIONAL EXPENSE TO THE DEPARTMENT, MAY IMPROVE OR MODIFY THE MOT PLANS TO MEET CONSTRUCTION NEEDS BUT NOT AT THE EXPENSE OF PUBLIC SAFETY OR CONVENIENCE. ANY CHANGES TO THE MOT PLANS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
- 2. THE CONTRACTOR SHALL CONTACT THE IDOT DISTRICT 1 ARTERIAL TRAFFIC CONTROL SUPERVISOR AT KALPANA.KANNAN-HOSADURGA@ILLINOIS.GOV A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
- 3. THE IL-47 WORK ZONE SPEED LIMIT SHALL BE 40 MPH.
- 4. CHANGEABLE MESSAGE SIGN LOCATIONS, MESSAGES, AND DURATIONS SHALL BE DETERMINED BY THE ENGINEER.
- 5. EXISTING REFLECTOR ELEMENTS IN RAISED REFLECTIVE PAVEMENT MARKERS THAT CONFLICT WITH STAGED TRAFFIC PATTERNS SHALL BE REMOVED UNDER THIS CONTRACT. THESE SHALL BE REPLACED WITHIN THE LIMITS OF THIS CONTRACT'S MAINTENANCE OF TRAFFIC, ALONG WITH ANY OTHER MARKERS THAT WERE MISSING REFLECTOR ELEMENTS PRIOR TO REOPENING THE LANES TO TRAFFIC. THE REMOVAL AND REPLACEMENT OF REFLECTOR ELEMENTS SHALL BE CONSIDERED INCLUDED IN THE COST OF REPLACEMENT REFLECTOR.
- 6. CONTRACTOR SHALL REMOVE OR COVER ALL W21-1 (WORKERS PRESENT) AND W20-7 (FLAGGER) SIGNS, WITHIN AN HOUR, WHEN WORKERS ARE NOT PRESENT OR IF THE SIGN IS NOT APPLICABLE.
- 7. PAVEMENT MARKING TAPE, TYPE IV SHALL BE USED FOR SHORT TERM PAVEMENT MARKINGS ON ALL FINAL SURFACES.

IL-47 CONSTRUCTION STAGING

MAINTENANCE OF TRAFFIC - STAGE 1

- 1. COMPLETE BRIDGE DECK SCARIFICATION, LATEX CONCRETE OVERLAY, DIAMOND GRINDING, GROOVING, SEALING, AND JOINT AND OTHER REPAIRS OF THE EAST SIDE (NORTHBOUND DIRECTION) OF THE BRIDGE.
- 2. COMPLETE BUTT JOINT ON APPROACH PAVEMENT EAST SIDE (NORTHBOUND DIRECTION).

MAINTENANCE OF TRAFFIC:

- 1. CLOSE THE NORTHBOUND LANE OF TRAFFIC AND SHIFT TRAFFIC TO THE SOUTHBOUND LANES. 1 LANE SHALL BE MAINTAINED.
- 2. TRAFFIC SIGNAL SHALL BE USE TO MAINTAIN TRAFFIC DIRECTION.
- 3. CLOSE RAYCRAFT ROAD TO TRAFFIC FROM JANKOWSKI ROAD TO IL-47.

MAINTENANCE OF TRAFFIC - STAGE 2

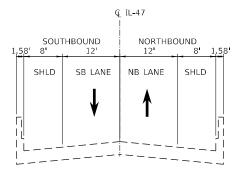
- 1. CCOMPLETE BRIDGE DECK SCARIFICATION, LATEX CONCRETE OVERLAY, DIAMOND GRINDING, GROOVING, SEALING, AND JOINT AND OTHER REPAIRS OF THE WEST SIDE (SOUTHBOUND DIRECTION) OF THE BRIDGE.
- 2. COMPLETE BUTT JOINT ON APPROACH PAVEMENT ON WEST SIDE (SOUTHBOUND DIRECTION) OF THE BRIDGE.

MAINTENANCE OF TRAFFIC:

- 1. CLOSE THE SOUTHBOUND LANES OF TRAFFIC AND SHIFT TRAFFIC TO THE NORTHBOUND LANES. 1 LANE SHALL BE
- 2. TRAFFIC SIGNAL SHALL BE USE TO MAINTAIN TRAFFIC DIRECTION.
- 3. CLOSE RAYCRAFT ROAD TO TRAFFIC FROM JANKOWSKI ROAD TO IL-47.

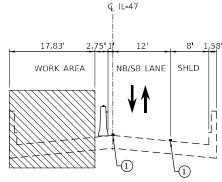
WORK ZONE SPEED LIMIT:

	EXISTING POSTED SPEED	PROPOSED POSTED SPEED
STAGE 1	55 MPH	40 MPH
STAGE 2	55 MPH	40 MPH



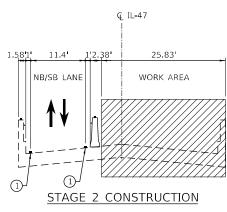
EXISTING TYPICAL CROSS SECTION

ON SN 056-0054



STAGE 1 CONSTRUCTION

ON SN 056-0054



ON SN 056-0054

MOT TYPICAL LEGEND:

1) TEMPORARY PAVEMENT MARKING TAPE, TYPE IV (WHITE)



WORK AREA

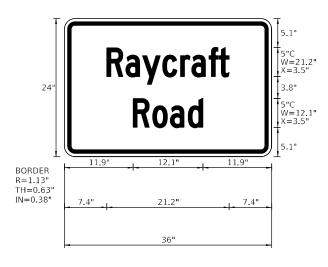


DIRECTION OF TRAVEL



TEMPORARY CONCRETE BARRIER WITH TYPE C, BI-DIRECTIONAL CRYSTAL REFLECTORS PER STD 704001

TEMPORARY PAVEMENT MARKING



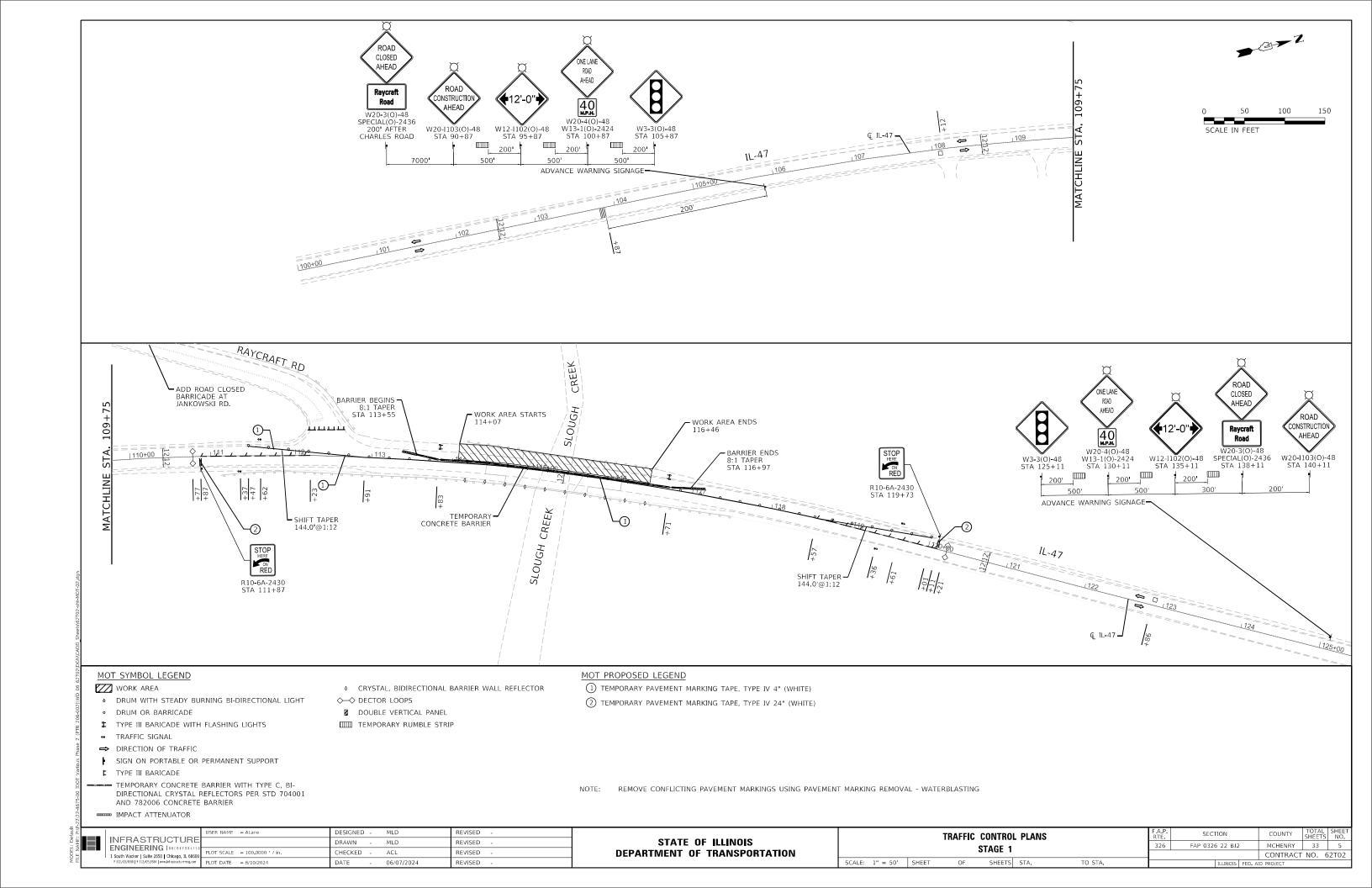
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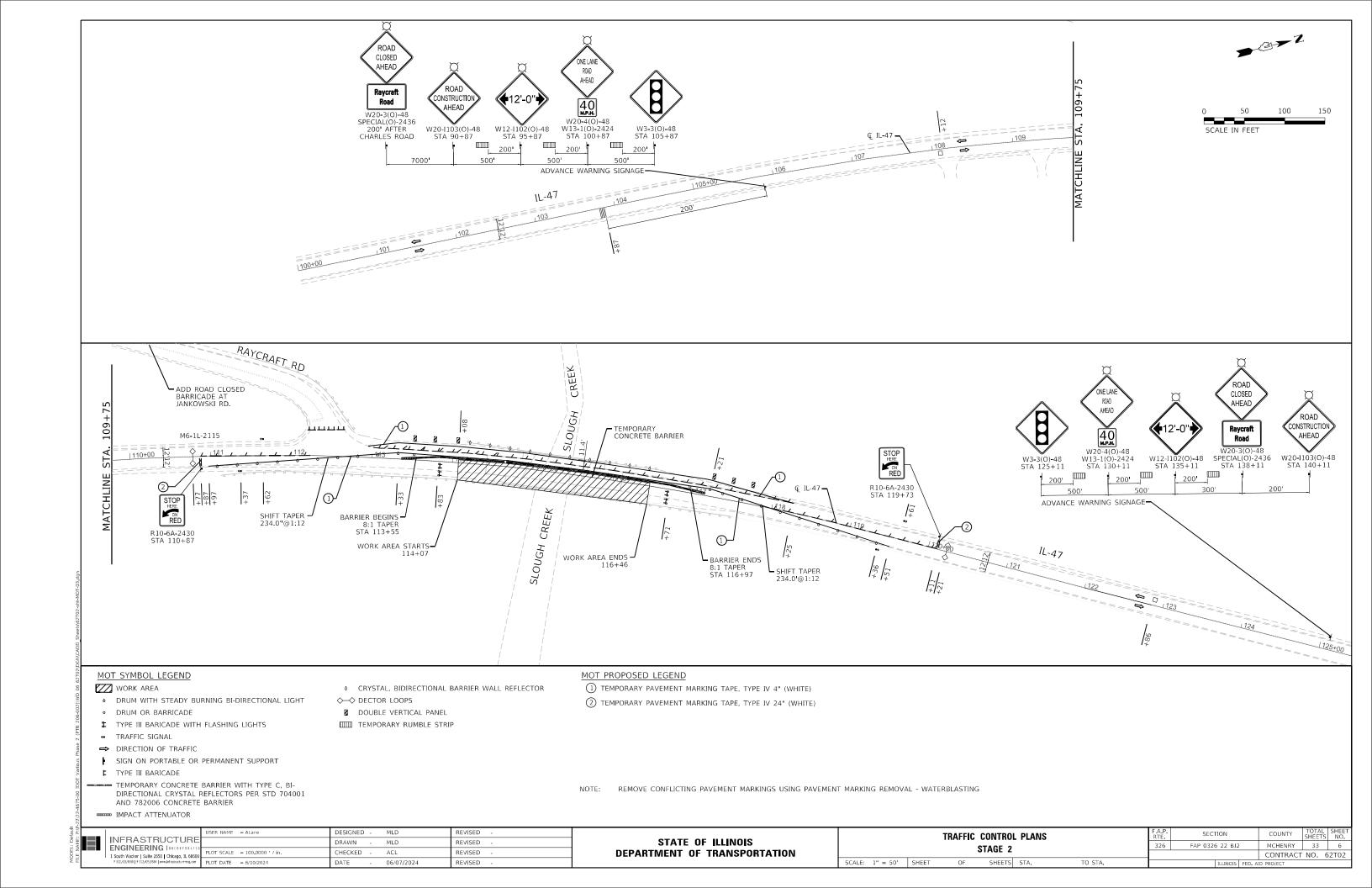
SPECIAL SIGN DETAIL

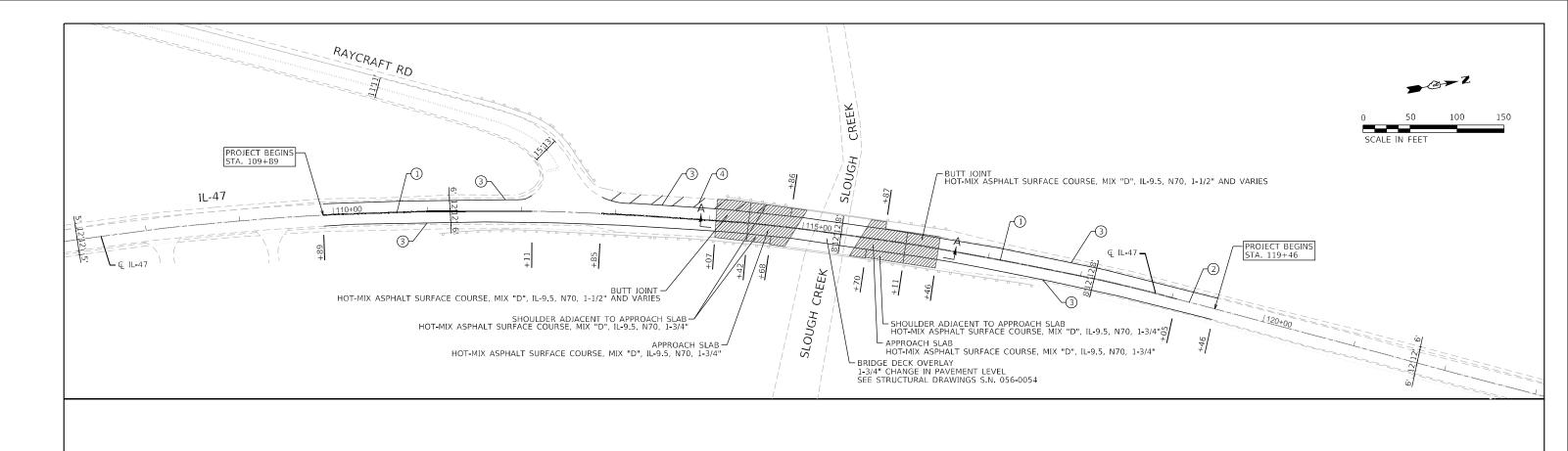
MLD DESIGNED -REVISED INFRASTRUCTURE DRAWN MLD REVISED ENGINEERING LINCORPO HECKED ACL REVISED 1 South Wacker | Suite 2650 | Chicago, IL 60606 PLOT DATE = 5/31/2024 REVISED 05/30/2024

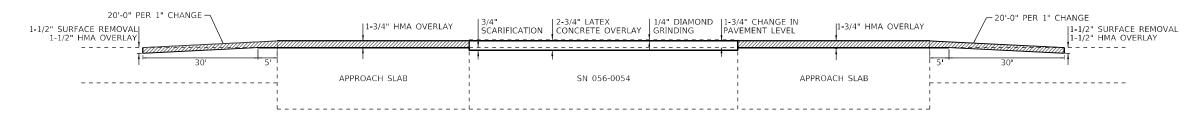
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

SECTION COUNTY TRAFFIC CONTROL PLANS FAP 0326 22 BJ2 MCHENRY 34 **GENERAL NOTES AND TYPICAL SECTIONS** CONTRACT NO. 62T02









DETAIL A-A

NOTES:

- 1. ALL FINAL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC PAVEMENT MARKINGS (OF THE EXTRUDED TYPE) ON HMA PAVEMENT.
- 2. MODIFIED URETHANE PAVEMENT MARKINGS SHALL BE USED FOR ALL PAVEMENT MARKINGS ON CONCRETE PAVEMENT.
- 3. ALL FINAL PAVEMENT MARKINGS SHALL BE PLACED IN ACCORDANCE WITH TC-13 "DISTRICT ONE TYPICAL PAVEMENT MARKINGS" STANDARD DETAIL.
- ALL RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED IN ACCORDANCE WITH TC-11 "TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)" STANDARD DETAIL .
- 5. ALL RAISED REFLECTIVE PAVEMENT MARKERS WITHIN BRIDGE LIMITS SHALL BE REMOVED AND NOT REPLACED.

SECTION FAP 0326 22 BJ2

MCHENRY 33 7 CONTRACT NO. 62T02

PAVEMENT MARKING LEGEND

- 1 LINE 2 @ 4" SOLID YELLOW, 11" C-C CENTERLINE (TYP)
- 2 LINE 4", SOLID, YELLOW 2 WAY LEFT TURN LANE (TYP)
- 3 LINE 4", SOLID, WHITE EDGE LINE (TYP)
- (4) LINE 12", SOLID, WHITE PAINTED MEDIANS DIAGONALS (TYP) (SEE DISTRICT DETAIL TC-13 FOR SPACING)

<u>LEGEND</u>

HMA PAVEMENT

WE:	INFRASTRUCTURE	USER NAME = ALane	DRAWN - MLD	REVISED -	STATE OF ILLINOIS		ROADWAY	AND PAV	EMEN	r Marking	G PLAN
Ž	ENGINEERING INCORPORATED 1 South Wacker Suite 2650 Chicago, IL 60606	PLOT SCALE = 100.0000 / in	CHECKED - ACL	REVISED -	DEPARTMENT OF TRANSPORTATION						
Ī	P 312-425-9560 F 312-425-9564 www.infrastructure-eng.com	PLOT DATE = 6/10/2024	DATE - 06/07/2024	REVISED -		SCALE: 1" = 50'	SHEET	OF	SHEETS	STA.	TO STA.

Existing Structure: SN 056-0054 was built as FAP 100, Section 104B(2)R(83) at Sta. 424+50 in 1985. Superstructures consist of a one span concrete deck on composite precast prestressed concrete I beams and reinforced concrete pavements. Substructures consist of stub abutments on concrete piles. Length is 73'-3" back-to-back abutments. Out-to-out deck width is 43'-2".

Traffic will be maintained using Stage Construction.

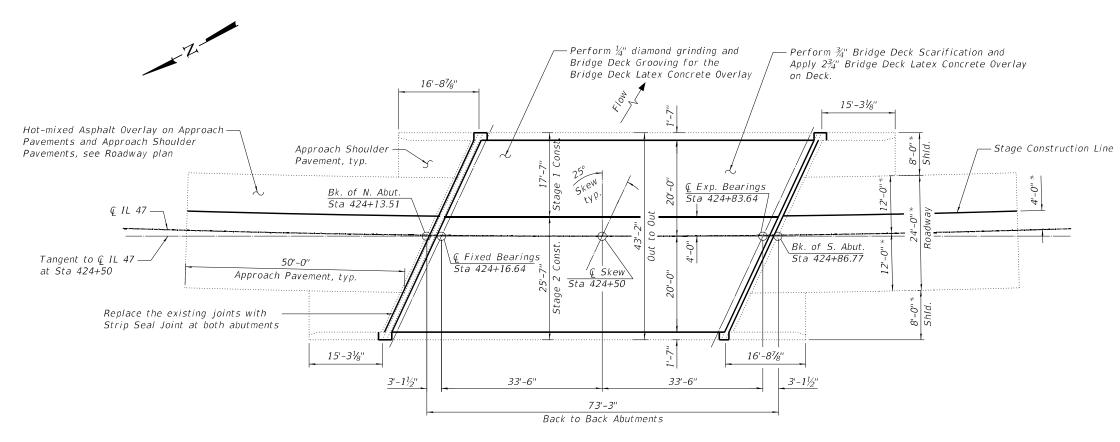
No Salvage.



PANKAJ KUMAR, S.E. NO. 081-007577 EXP. DATE: 11/30/2024

F E

ELEVATION (Looking East)



PLAN * Radial Dimension

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- 1. General Plan and Elevation
- 2. General Notes, Scope of Work, & Bill of Material
- 3. Stage Construction Details
- 4. Temporary Concrete Barrier For Stage Construction
- 5. Deck Repair Plan
- 6. Abutment and Deck Concrete Removal
- 7. Abutment and Deck Concrete Removal Sections
- 8. Abutment and Deck Concrete Removal Sections & Details
- 9. Abutment and Deck Alterations
- 10. Abutment and Deck Alteration Sections
- 11. Abutment and Deck Alteration Details
- 12. Deck Details At Drainage Structures
- 13. Approach Pavement & Approach Shoulder Repair Plan
- 14. Preformed Joint Strip Seal
- 15. Framing Plan and Bearing Details
- 16. North Abutment Repair
- 17. Bar Splicer Assembly and Mechanical Splicer Details

DESIGN STRESSES

New Construction

f'c = 4,000 psi (Superstructure Concrete) fy = 60,000 psi (Reinforcement)

Existing Construction

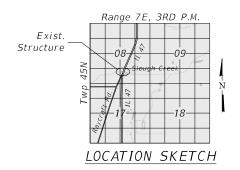
f'c = 3,500 psi (Concrete) fy = 60,000 psi (Reinforcement) f'c = 5,000 psi f'ci = 4,000 psi $f's = 270,000 \text{ psi } (\frac{1}{2}" \otimes \text{Strands})$ Precast prestressed units

$f'si = 189,000 \ psi \ (\frac{1}{2}" \ \odot \ Strands) \ _$ $DESIGN \ SPECIFICATIONS$

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

LOADING HS20-44

SHEET 1 OF 16 SHEETS



GENERAL PLAN AND ELEVATION

IL 47 OVER SLOUGH CREEK

FAP 326 SECTION FAP 0326 22 BJ2

COOK COUNTY

STATION 424+50

STRUCTURE NO. 056-0054

USER NAME = Tyu	DESIGNED - TY	REVISED -
FRASTRUCTURE	CHECKED - PK	REVISED -
uth Wacker Suite 2650 Chicago, IL 60606 PLOT SCALE =	DRAWN - TY	REVISED -
2.425.9560 F 312.425.9564 www.linfrastructure.org.com PLOT DATE = 6/7/2024	CHECKED - PK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Ρ.	SECT	ПОИ		COUNTY	TOTAL SHEETS	SHEET NO.	
6	FAP 0326	5 22 BJ2	!	СООК	33	8	
	CONTRACT NO. 62T02						
		ILLINOIS	FED. A	ID PROJECT			

SCOPE OF WORK

- 1. Perform $\frac{3}{4}$ " bridge deck scarification on the bridge deck.
- 2. Perform deck slab and approach pavement repairs as required.
- Remove bridge deck expansion joints at both abutments and install new preformed strip seal joints.
- Apply 23/4" bridge deck latex concrete overlay on the bridge deck.
- 5. Perform $\frac{1}{4}$ diamond grinding on the bridge deck.
- Perform bridge deck grooving on the bridge deck.
- Clean and adjust bridge floor drains.
- Apply protective coat to the reconstructed top and inside surfaces of parapets and concrete overlay areas.
- Clean and paint bearings at abutments.
- 10. Perform structural repair of concrete on the abutment.

GENERAL NOTES

- 1. Reinforcement bars designated (E) shall be epoxy coated.
- 2. Plan dimensions and details relative to the existing structure have been taken from existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work; however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
- 3. All structural steel for expansion joints shall be AASHTO M270 Grade 36.
- The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to address the presence of lead on this project.
- 5. In addition to the requirements of Article 107.16 the contractor shall protect the surface of all bridge decks and bridge approach pavements in a manner satisfactory to the engineer before any equipment is allowed to cross the structure. Protection shall be provided for all equipment as defined in Article 107.16 regardless if track mounted or wheeled.
- 6. 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.
- Cleaning and painting of the existing bearings shall be as specified in the special provision for "Cleaning and Painting Bearings". All bearings of either side of deck joints shall be cleaned per Near White Blast Cleaning - SSPC - SP10.

The designated areas cleaned per Near White Blast Cleaning and per commercial Grade Power Tool Cleaning shall be painted according to the requirements of Organic Zinc-Rich Primer/Epoxy Intermediate coat/Urethane Topcoat (OZ/E/U) system. The color of the final finish coat for all steel surfaces shall be Gray, Munsell No 5B 7/1.

Extreme care shall be taken to collect and contain runoff from hydrodemolition and make sure no runoff enters the creek.

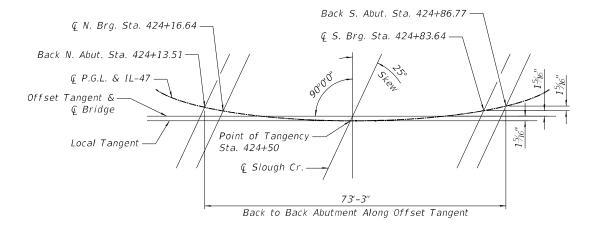
TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu Yd	6.4		6.4
Concrete Superstructure	Cu Yd	7.6		7.6
Protective Coat	Sq Yd	364		364
Furnishing and Erecting Structural Steel	Pound	200		200
Reinforcement Bars, Epoxy Coated	Pound	770		770
Bar Splicers	Each	10		10
Preformed Joint Strip Seal	Foot	96		96
Anchor Bolts, 1"	Each	11		11
Bridge Deck Grooving (Longitudinal)	Sq Yd	192		192
Cleaning and Painting Bearings	Each	14		14
Approach Slab Repair (Full Depth)	Sq Yd	1		1
Approach Slab Repair (Partial Depth)	Sq Yd	39		39
Bridge Deck Latex Concrete overlay, $2\frac{3}{4}$ Inches	Sq Yd	300		300
Bridge Deck Scarification, ¾"	Sq Yd	300		300
Structural Repair of Concrete (Depth Equal to or Less than 5 Inches)	Sq Ft		27	27
Debris Removal	Cu Yd		1	1
Deck Slab Repair (Full Depth, Type II)	Sq Yd	1		1
Diamond Grinding (Bridge Section)	Sq Yd	287		287

* Quantity is for the top of deck and top and interior faces of new concrete for the parapets

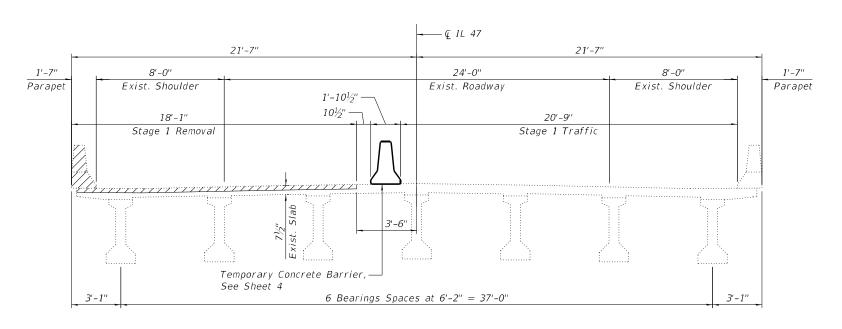
© IL 43 CURVE DATA

 $\Delta = 26^{\circ} - 36' - 32''$ $D = 1^{\circ}-53'-28.66''$ T = 724.05' $L = 1402.50^{\circ}$ E = 83.02'R = 3029.446'S = 0.043%PC = 420+39.59PI = 427 + 53.64PT = 434+42.99

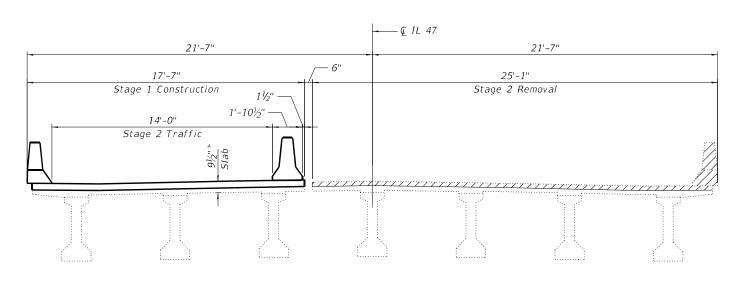


OFFSET SKETCH

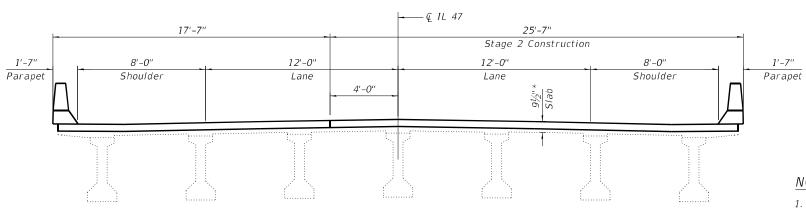
_		USER NAME = Tyu	DESIGNED -	TY	REVISED -
	INFRASTRUCTURE ENGINEERING INCORPORATED 1 South Wacker Suite 2650 Chicago, IL 60606		CHECKED -	PK	REVISED -
1 South Wacker Suite 2650 Chicago, IL 6			DRAWN -	TY	REVISED -
	P 312 425 9560 F 312 425 9564 www.infrastructure-eng.com		CHECKED -	PK	REVISED -



STAGE 1 REMOVAL



STAGE 1 CONSTRUCTION AND STAGE 2 REMOVAL



STAGE 2 CONSTRUCTION

* Prior to grinding

LEGEND

Concrete Removal at Joint Reconstruction

NOTES

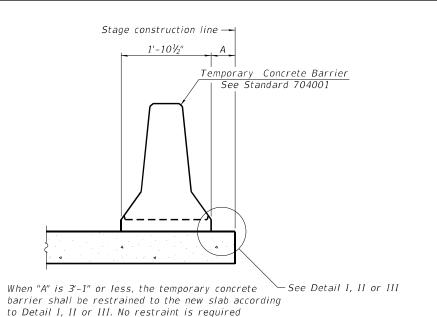
- 1. Looking south for all sections
- 2. Sections are shown near the joints showing joint construction
- 3. For quantity of Temporary Concrete Barriers, see roadway plans

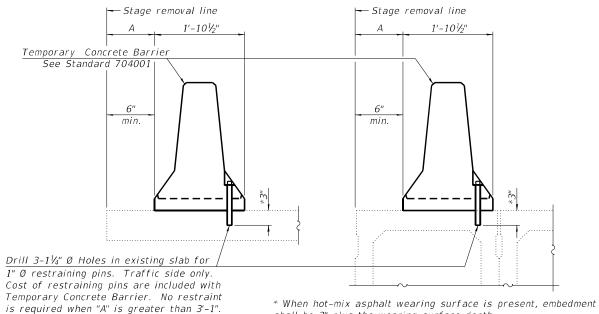
	USER NAME = Tyu	DESIGNED - TY	REVISED -
INFRASTRUCTURE		CHECKED - PK	REVISED -
ENGINEERING INCORPORATED 1 South Wacker Suite 2650 Chicago, IL 60606 P 312.425.9560 F 312.425.9564 www.infrastructure-eng.com	PLOT SCALE =	DRAWN - TY	REVISED -
		CHECKED - PK	REVISED -

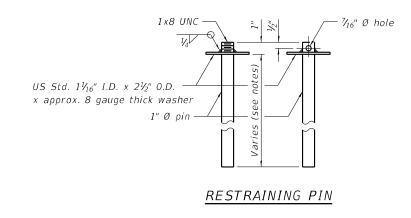
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION DETAILS STRUCTURE NO. 056-0054		SECTION
		FAP 0326 22 BJ
3111001011L 140: 030-0034		
SHEET 3 OF 16 SHEETS		ILLINOIS

TE. 3CCTION COUNT SHEETS NO. 326 FAP 0326 22 BJ2 COOK 33 10 CONTRACT NO. 62T02







NEW SLAB OR NEW DECK BEAM

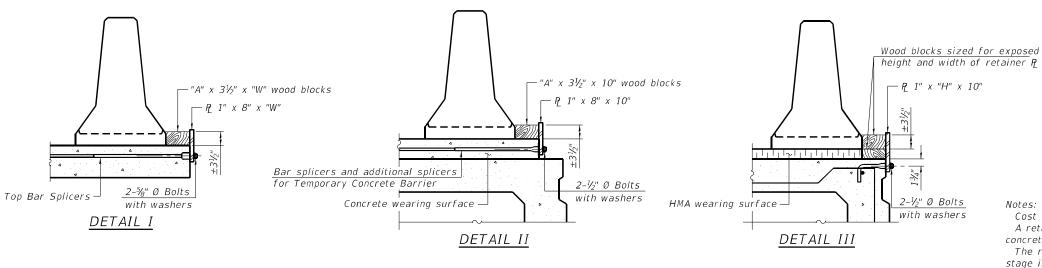
when "A" is greater than 3'-1".

EXISTING SLAB

EXISTING DECK BEAM

shall be 3" plus the wearing surface depth.

SECTIONS THRU SLAB OR DECK BEAM



Detail I

Detail II

Detail I

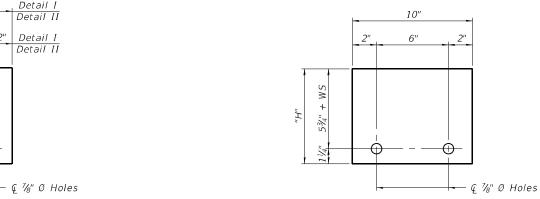
Detail II

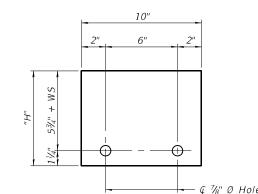
10"

2" Top bars Spa. 2"

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

(Detail I and II)





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

Notes:

Cost of retainer assembly is included with Temporary Concrete Barrier. A retainer assembly shall be located at the approximate G of each temporary

BAR SPLICER FOR #4 BAR - DETAIL III

The retainer plate shall not be removed until the concrete on the adjacent stage is ready to be poured. For Detail III applications the retainer plate shall not be removed until just prior to placing the adjacent beam.

When the 'A' dimension is less than $1\frac{1}{2}$ ", the wood block shall be omitted and the barrier shall be placed in direct contact with the steel retainer plate. For deck beam applications the minimum required 'A' distance is 6" to accommodate the shear key clamping device.

Detail I - Installation for a new bridge deck or bridge slab.

Detail II - Installation for a new deck beam with an initial concrete wearing surface. Additional bar splicers shall be provided at 6'-0" centers and paired with the bar splicers of the concrete wearing surface reinforcement to accommodate the installation of the retainer assemblies. The cost of the additional bar splicers is included with the concrete wearing surface.

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

RAILING CRITERIA

NCHRP 350 Test Level 440 Railing Weight (plf)

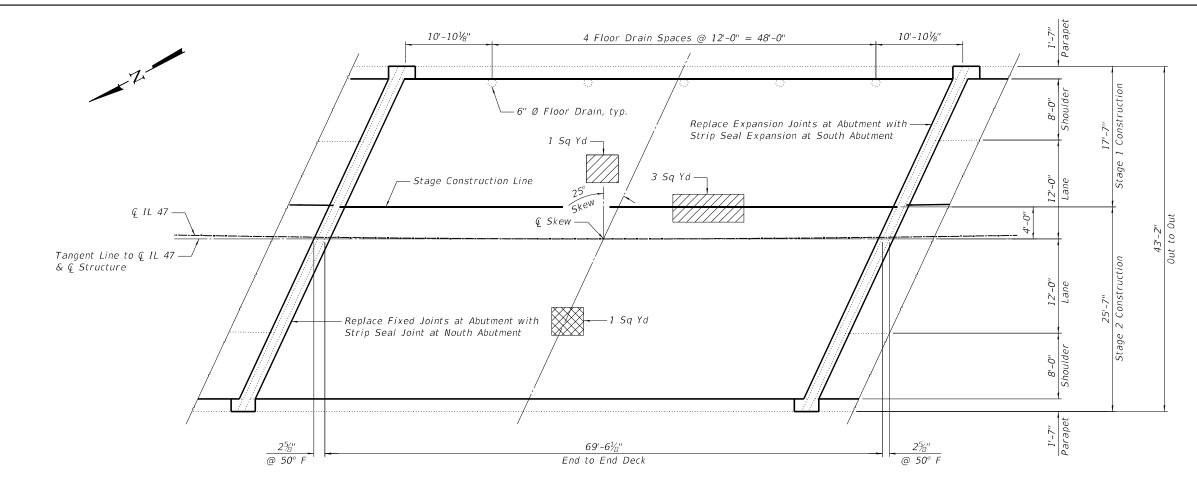
R-27

10-12-2021

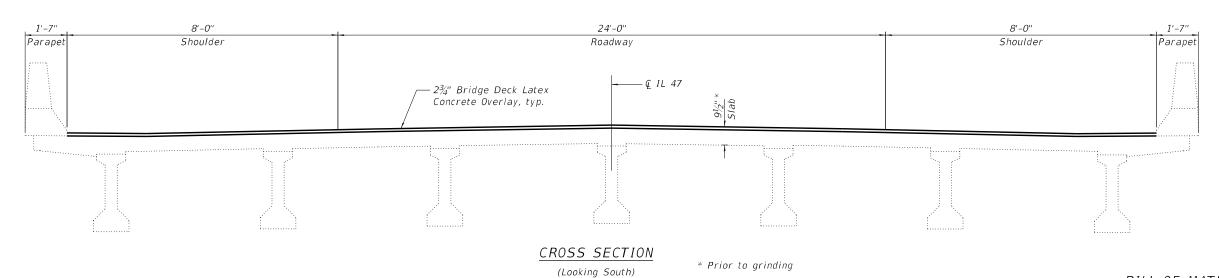
	USER NAME = ALane	DESIGNED - TY	REVISED -
INFRASTRUCTURE		CHECKED - PK	REVISED -
1 South Wacker Suite 2650 Chicago, IL 606		DRAWN - TY	REVISED -
P 312 425 9560 F 312 425 9564 www.infrastructure-eng.com	PLOT DATE = 5/10/2024	CHECKED - PK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION	F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STRUCTURE NO. 056-0054		FAP 0326 22 BJ2	COOK	33	11
			CONTRACT	NO. 6	2T02
SHEET 4 OF 16 SHEETS		ILLINOIS FED. A	D PROJECT		



PLAN



NOTES

REVISED

REVISED

REVISED REVISED

<u>LEGEND</u>



Deck Slab Repair (Partial Depth)



Deck Slab Repair (Full Depth)

- 1. Areas of Deck Slab Repair (Partial Depth) are Provide for information only and shall be included in the cost of Bridge Deck Latex Concrete Overlay, $2\frac{3}{4}$ ".
- 2. Protective Coat shall be applied to the new concrete overlay areas
- 3. For Floor Drain Adjustment Details, see Sheets 12 of 17.

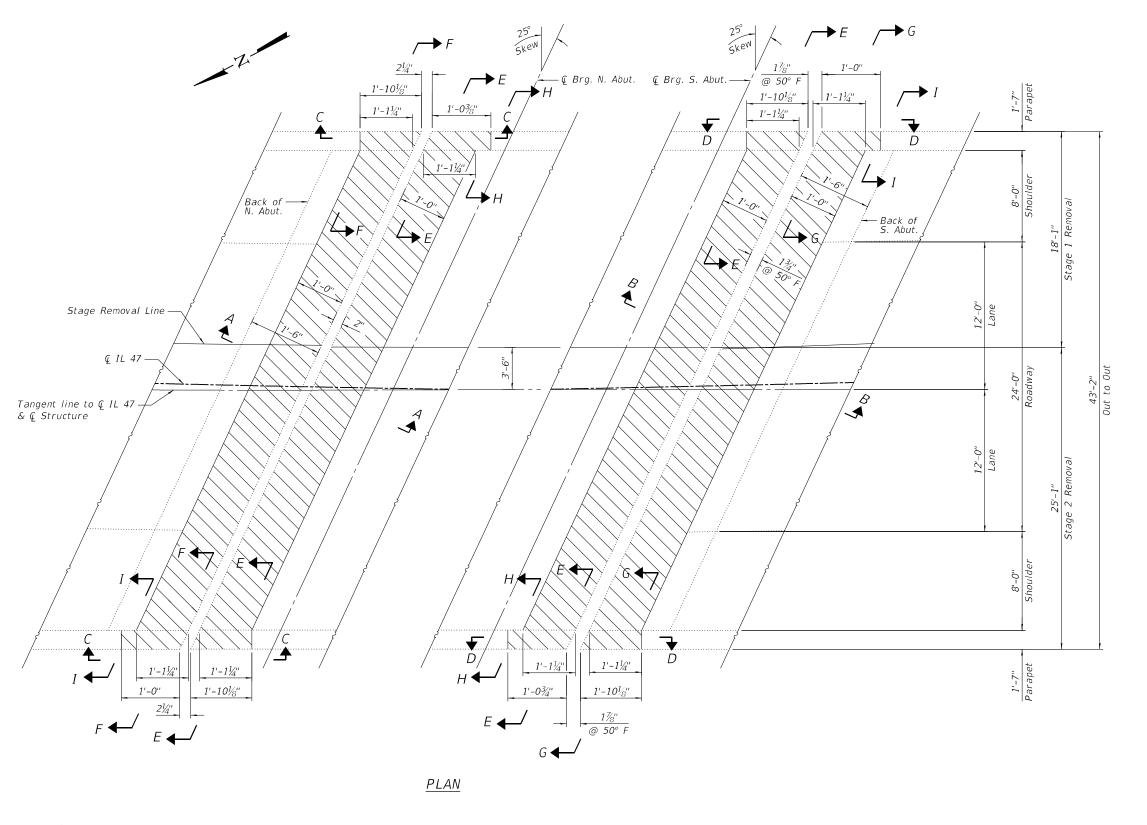
BILL OF MATERIAL

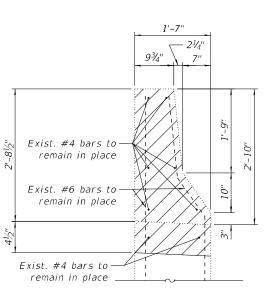
ITEM	UNIT	TOTAL
Protective Coat	Sq Yd	364
Bridge Deck Grooving (Longitudinal)	Sq Yd	192
Bridge Deck Latex Concrete Overlay, 2¾"	Sq Yd	300
Bridge Deck Scarification, ¾"	Sq Yd	300
Deck Slab Repair (Full Depth, Type II)	Sq Yd	1
Diamond Grinding (Bridge Section)	Sq Yd	287

		USER NAME = Tyu	DESIGNED -	TY
	INFRASTRUCTURE		CHECKED -	PK
•	ENGINEERING INCORPORATED 1 South Wacker Suite 2650 Chicago, IL 60606		DRAWN -	TY
	P 312 425 9560 F 312 425 9564 www.infrastructure-eng.com		CHECKED -	PK

STATE OF	: ILLINOIS
DEPARTMENT OF	TRANSPORTATION

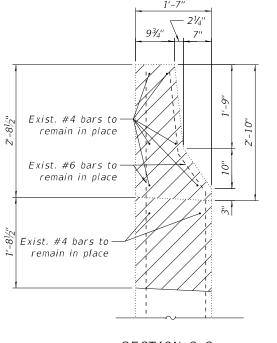
DECK REPAIR PLAN		SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
STRUCTURE NO. 056-0054	326	FAP 0326 22 BJ2	!	COOK	33	12
3111001011L 140: 030-0034				CONTRACT	NO. 6	52T02
SHEET 5 OF 16 SHEETS		ILLINOIS	FED. A	D PROJECT	-	





SECTION F-F

(Dimensions are at right angle to & Structure)



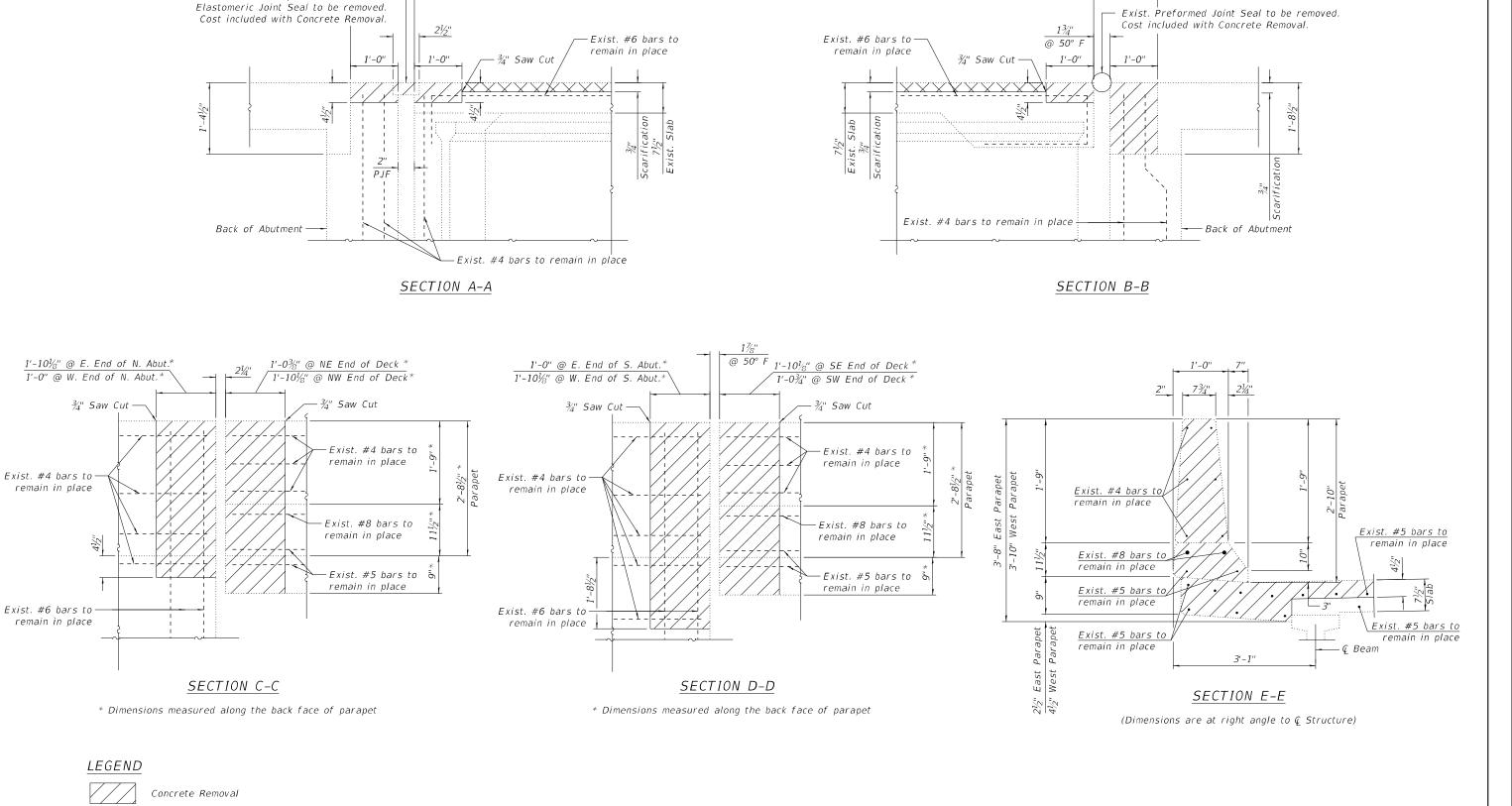
SECTION G-G

(Dimensions are at right angle to & Structure)

NOTE

- 1. Hatch area denote Concrete Removal
- 2. For Sections A-A thru E-E, see Sheet 7 of 17 For Sections H-H and I-I, see Sheet 8 of 17

 IN IED A OTEN IOTUBE	USER NAME = Tyu	DESIGNED -	TY	REVISED -		ABUTMENT AND DECK CONCRETE REMOVAL	F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET	1
INFRASTRUCTURE		CHECKED -	PK	REVISED -	STATE OF ILLINOIS		326	FAP 0326 22 BJ2	соок	33	13	1
 1 South Wacker Suite 2650 Chicago, II 60606	PLOT SCALE =	DRAWN -	TY	REVISED -	DEPARTMENT OF TRANSPORTATION	STRUCTURE NO. 056-0054			CONTRACT	NO. 6	2T02	1
P 312 425 9560 F 312 425 9564 www.infrastructure.eng.com	PLOT DATE = 6/7/2024	CHECKED -	PK	REVISED -		SHEET 6 OF 16 SHEETS		ILLINOIS FED. A	D PROJECT			1



INFRASTRUCTURE ENGINEERING LINCORPOR 1 South Wacker | Suite 2650 | Chicago, IL 60606

DESIGNED -REVISED CHECKED -PK REVISED DRAWN REVISED PLOT DATE = 6/7/2024 REVISED CHECKED -

Scarification

Exist. Appr. Pavement

Exist. 2" Low Compression Preformed

Exist. Deck

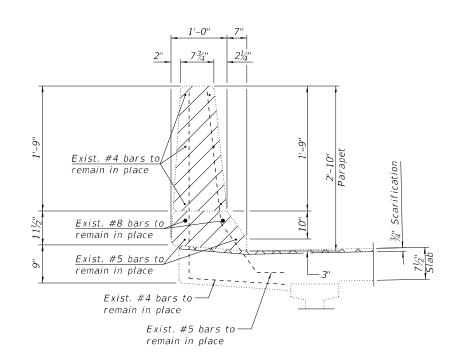
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

SECTION ABUTMENT AND DECK CONCRETE REMOVAL SECTIONS 326 FAP 0326 22 BJ2 STRUCTURE NO. 056-0054 CONTRACT NO. 62T02 SHEET 7 OF 16 SHEETS

COOK 33 14

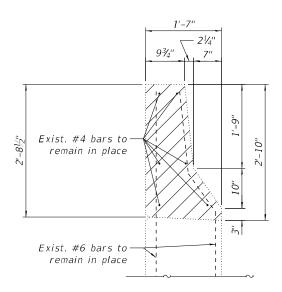
Exist. Deck

Exist. Appr. Pavement



SECTION H-H

(Dimensions are at right angle to @ Structure)



SECTION I-I

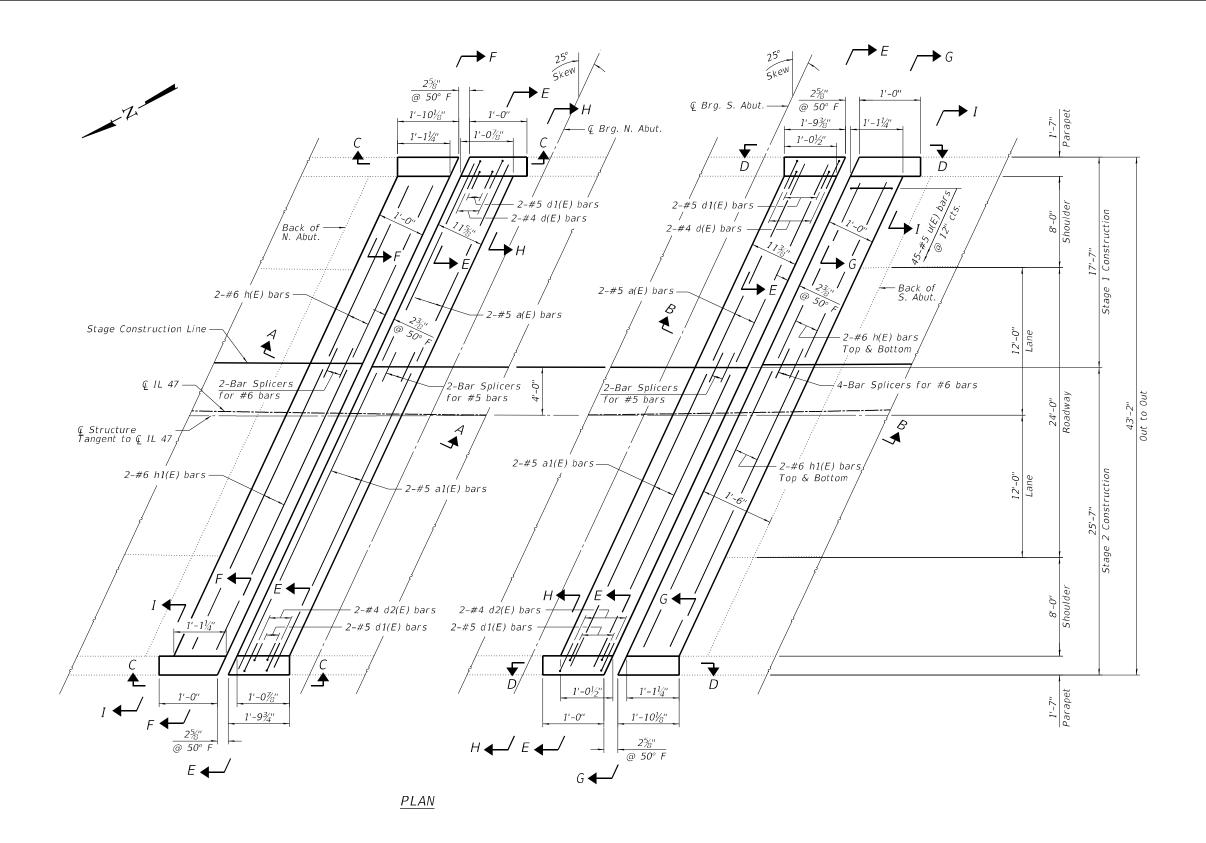
(Dimensions are at right angle to <code>Q</code> Structure)

LEGEND

Concrete Removal

BILL OF MATERIAL

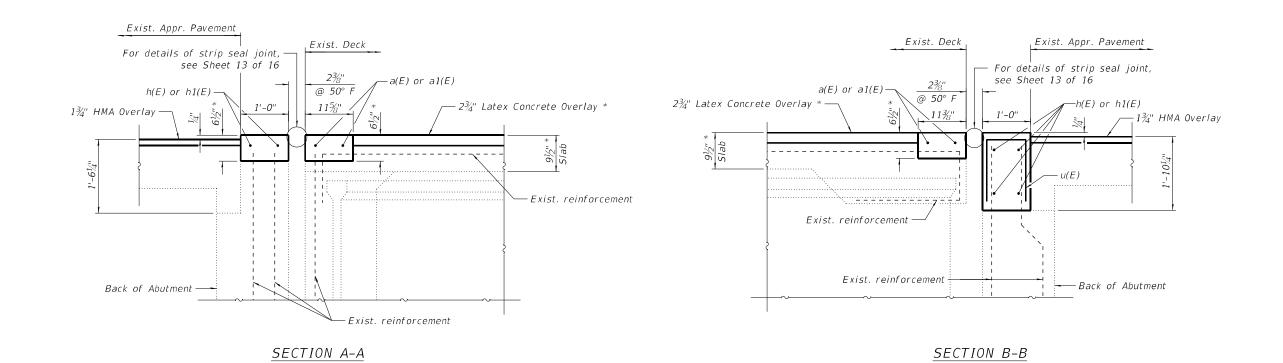
ITEM	UNIT	TOTAL
Concrete Removal	Cu Yd	6.4

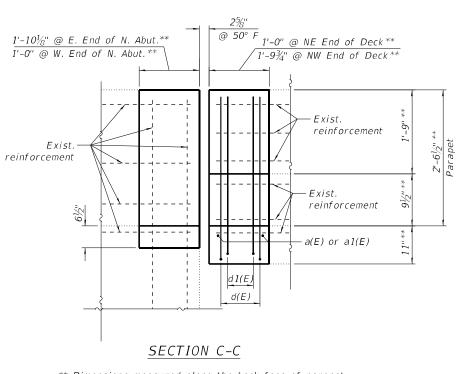


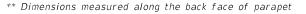
NOTE

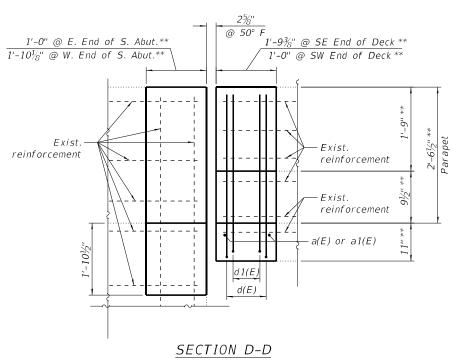
- 1. For Sections A-A thru E-E, see Sheet 10 of 17
- 2. For Sections F-F thru I-I and Bill of Material, see Sheet 11 of 17
- Space u(E) bars to miss expansion joint supports.
- 4. The u(E) bars shall be placed parallel to centerline of structure.
- 5. Concrete for abutment to be poured separately after superstructure falsework has been removed.

		USER NAME = Tyu	DESIGNED -	TY	REVISED -		ABUTMENT AND DECK ALTERATIONS	F.A.P.	SECTION	COUNTY	TOTAL SHEET
	ENGINEERING LINGERSTEIN		CHECKED -	PK	REVISED -	STATE OF ILLINOIS		326	FAP 0326 22 BJ2	СООК	33 15
	1 South Wacker Suite 2650 Chicago, IL 60606	PLOT SCALE =	DRAWN -	TY	REVISED -	DEPARTMENT OF TRANSPORTATION	STRUCTURE NO. 056-0054			CONTRAC	T NO. 62T02
·	P 312 425 9560 F 312 425 9564 www.infrastructure.eng.com	PLOT DATE = 6/7/2024	CHECKED -	PK	REVISED -		SHEET 8 OF 16 SHEETS		ILLINOIS FED. A	ID PROJECT	

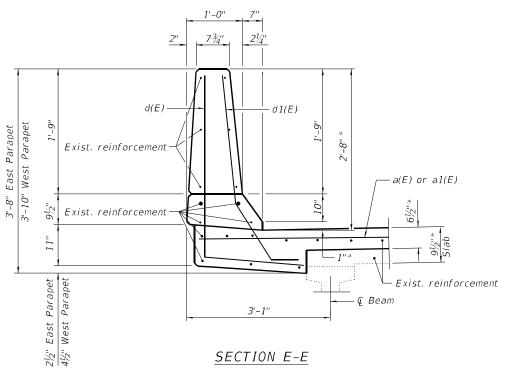








** Dimensions measured along the back face of parapet



* Prior to grinding

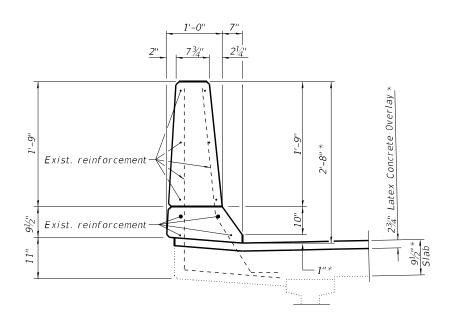
(Dimensions are at right angle to © Structure) * Prior to grinding

INFRASTRUCTURE	USER NAME = Tyu	CHECKED - PK	REVISED -	STATE OF ILLINOIS	ABUTMENT AND DECK ALTERATION
1 South Wacker Suite 2650 Chicago, IL 60606	PLOT SCALE =	DRAWN - TY	REVISED -	DEPARTMENT OF TRANSPORTATION	STRUCTURE NO. 056-0054
P 312-425.9560 F 312-425.9564 www.infrastructure.eng.com	PLOT DATE = 6/7/2024	CHECKED - PK	REVISED -		SHEET 9 OF 16 SHEETS

* Prior to grinding

SECTION F-F

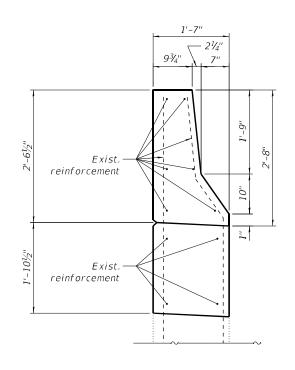
* Dimensions measured along the back face of parapet



SECTION H-H

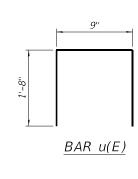
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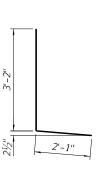
* Prior to grinding



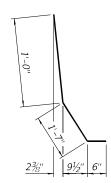
SECTION G-G

(Dimensions are at right angle to & Structure)

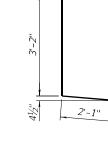




BAR d(E)



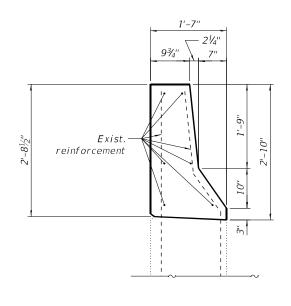
BAR d1(E)



BAR d2(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	4	#5	19'-0"	
a1(E)	4	#5	27'-10"	
d(E)	4	#4	5'-3''	L
d1(E)	8	#5	3'-11"	L
d2(E)	4	#4	5'-3''	L
h(E)	6	#6	17'-3"	
h1(E)	6	#6	26'-1"	
u(E)	45	#4	4'-1''	
Concret	te Super.	Cu Yd	7.6	
Reinfor Epoxy	cement i Coated	Pound	770	



SECTION I-I

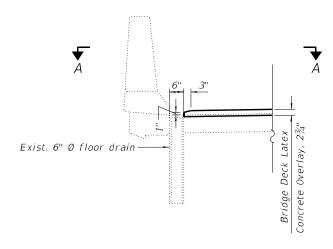
(Dimensions are at right angle to @ Structure)

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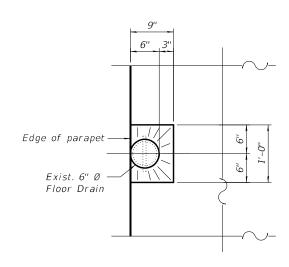
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INFRASTRUCTURE ENGINEERING INCORPORATED 1 South Wacker Suite 2650 Chicago, IL 60606		CHECKED - PK	REVISED -
	PLOT SCALE =	DRAWN - TY	REVISED -
P 312 425,9560 F 312 425,9564 www.infrastructure-eng.com		CHECKED - PK	REVISED -

ABUTMENT					RATION 6–0054	DETAILS	
	SHEET	10	OF	16	SHEETS		

A.P. TE	SECT	ION		COUNTY	TOTAL SHEETS	SHEET NO.
26	FAP 0326	5 22 BJ2	!	СООК	33	17
				CONTRACT	NO. 6	52T02







SECTION A-A

DRAINAGE SCUPPER DETAILS

(5 Locations)

INFRASTRUCTURE
ENGINEERING | INCOPORATION
1 South Wacker | Sulte 2550 | Chikago, IL 60506
7323-235591 | 731245:5591 | (www.dirastructure-appear)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DECK DETAILS AT DRAINAGE STRUCTURES
STRUCTURE NO. 056-0054

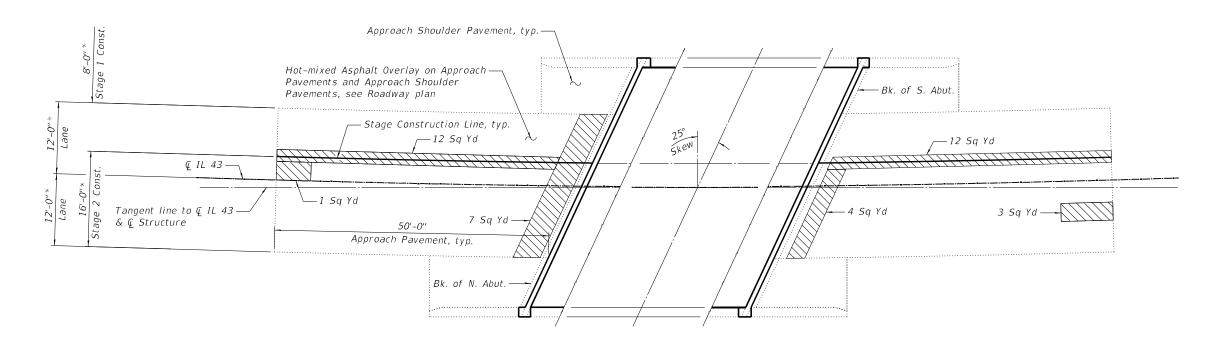
SHEET 11 OF 16 SHEETS

 F.A.P. RTE.
 SECTION
 COUNTY
 TOTAL SHEETS
 SHEETS NO.

 326
 FAP 0326 22 BJ2
 COOK
 33
 18

 CONTRACT NO. 62T02

 ILLINOIS FED. ALD PROJECT



PLAN

* Radial

<u>LEGEND</u>



Approach Slab Repair (Partial Depth)

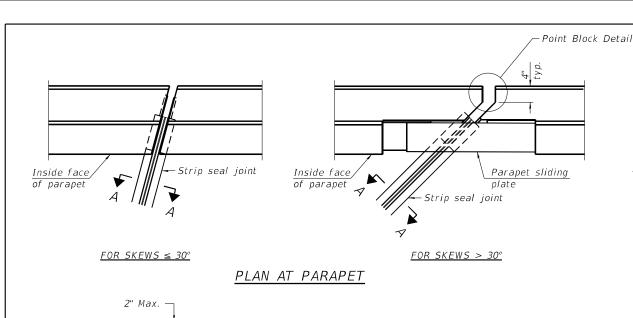
BILL OF MATERIAL ***

	ITEM	UNIT	TOTAL
k	Approach Slab Repair (Full Depth)	Sq Yd	1
	Approach Slab Repair (Partial Depth)	Sq Yd	39

- ** A nominal amount of additional full depth repair quantities have been provided to account for repairs not shown. Actual repair areas shall be determined in the field by the Engineer at the time of construction.

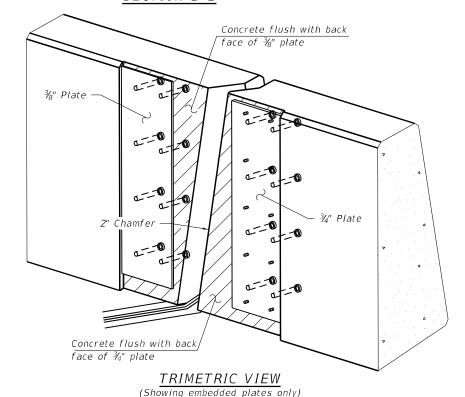
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A.P. RTE	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
326	FAP 0326 22 BJ	2	СООК	33	19
		CONTRACT	NO. 6	52T02	
	ILLINOIS	FED. A	ID PROJECT		



* ¾" Ø x 6" Studs 1'-0" (8 per side 39" parapet) (10 per side 44" parapet) ኘ 🗖 ¾" Embedded plate full depth ¾" Embedded plate, Min. lap full depth 1/2" Parapet sliding plate ¾" Ø Countersunk bolts 1'-0" (10 per side 39" parapet) (12 per side 44" parapet) Direction of traffic

SECTION B-B



Notes:

The strip seal shall be made continuous and shall have a minimum thickness of $\frac{1}{4}$ ". The configuration of the strip seal shall match the configuration of the locking edge rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The locking edge rails depicted are configured for typical applications and are conceptual only. The actual configuration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they fit the application and meet the minimum anchorage shown. Flanged edge rails, however, will not be allowed. Locking edge rails may exceed the 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 $\frac{3}{16}$ " and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.

The top surface of sidewalk sliding plates shall have a raised pattern according to ASTM A786.

Cost of parapet sliding plates, sidewalk sliding plates, embedded plates, anchorage studs, and expansion anchors included with Preformed Joint Strip Seal.

39" constant slope barrier shown, 44" constant slope barrier similar as noted.

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

Inside Face Top of locking of Parapet edge rail Top of deck

6" cts.,

SECTION AT PARAPET

Parapet sliding

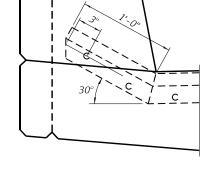
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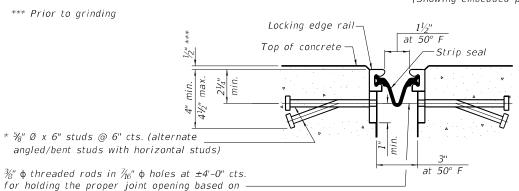
%" Ø x 6" Studs

Detail A -

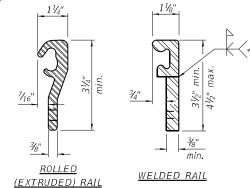
(Skews > 30° shown. Skews ≤ 30° similar except as shown in plan view.)



DETAIL A

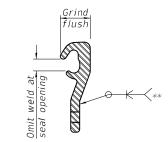


SHOWING WELDED RAIL JOINT



LOCKING EDGE RAILS

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

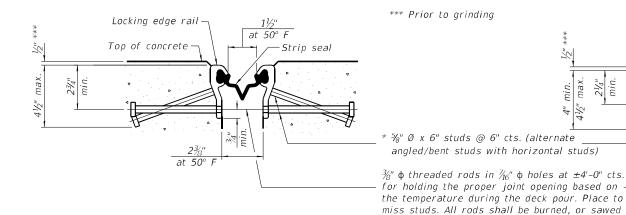


LOCKING EDGE RAIL SPLICE

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	96



SHOWING ROLLED RAIL JOINT

SECTION A-A

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

off flush with the plates after concrete is set.

EJ-SS-S

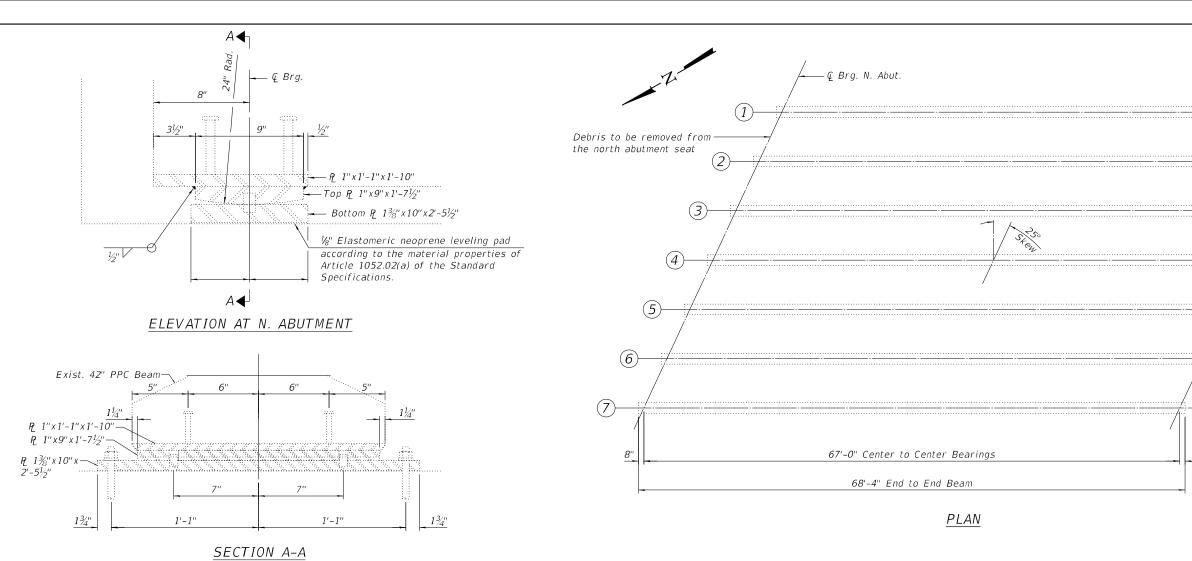
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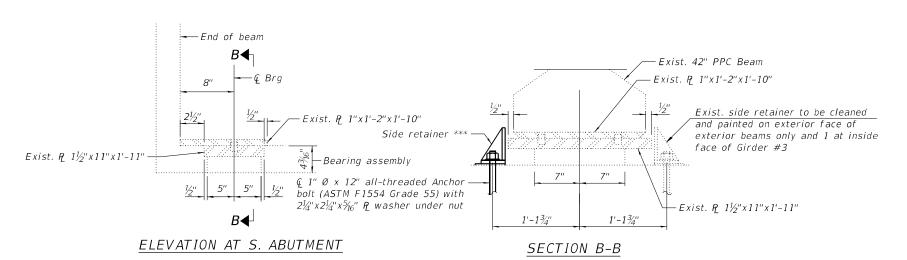
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** PREFORMED JOINT STRIP SEAL STRUCTURE NO. 056-0054

P. E	SECT	ION		COUNTY	TOTAL SHEETS	SHEET NO.
6	FAP 0326	5 22 BJ2	!	СООК	33	20
				CONTRACT	NO. 6	2T02
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SHEET 13 OF 16 SHEETS



FIXED BEARING AT N. ABUT.



TYPE I ELASTOMERIC EXP. BEARING AT S. ABUT.

*** At both faces of interior girders except Girder #3, one face of Girder #3, and on the inside face of exterior girders. (11 Thus)

1½" Ø Hole 1/4" Stainless steel plate, A240, Type 304, No. 1 finish.

8"

SIDE RETAINER

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

BILL OF MATERIAL ****

& Brg. S. Abut. -

Debris to be removed from the south abutment seat

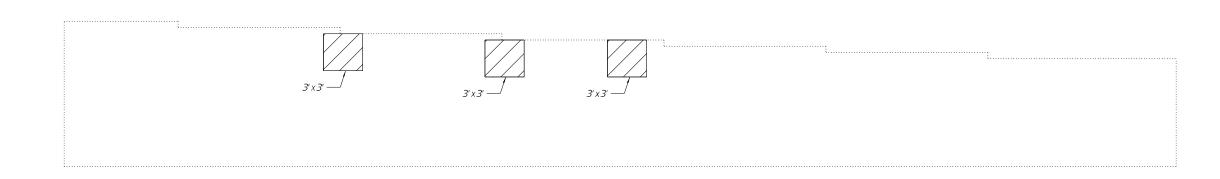
ITEM	UNIT	TOTAL
Furnishing and Erecting Structural Steel	Pound	200
Anchor Bolts, 1"	Each	11
Cleaning and Painting Bearings	Each	14
Debris Removal	Cu Yd	1

**** Includes both expansion and fixed bearings

NOTE

- Clean and paint the visible steel pieces of the expansion and fixed bearings and existing side retainers at the abutments. Side retainers and stainless steel plates shall be included in the cost of Furnishing and Erecting Structural Steel.
- The side retainers shall be galvanized after shop fabrication according to AASHTO M111 and ASTM 385.
- Anchor bolts shall be drilled to avoid reinforcement bars.
- Debris accumulated on the entire length of abutment seats shall be removed.

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	1 South Wacker I Suite 2650 I Chicago, II 60606	PLOT SCALE =	DRAWN - TY	REVISED -	DEPARTMENT OF TRANSPORTATION	STRUCTURE NO. 056-0054			CONTRACT	NO. 62T0;	<u>,</u> †
	P 312 425 9560 F 312 425 9564 www.infrastructure.eng.com	PLOT DATE = 6/27/2024	CHECKED - PK	REVISED -		SHEET 14 OF 16 SHEETS		ILLINOIS FEE	D. AID PROJECT		_



ELEVATION - NORTH ABUTMENT

(Looking North)

<u>LEGEND</u>



Structural Repair Of Concrete (Depth Equal To Or Less Than 5 Inches)

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structural Repair Of Concrete (Depth Equal To Or Less Than 5 Inches)	Sq Ft	27

 	USER NAME = Tyu	DESIGNED -	TY	REVISED -		NORTH ABUTMENT REPAIR	F.A.P.	SECTION	COUNTY	TOTAL	SHEET
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	PLOT SCALE =	DRAWN -	TY	REVISED -		DEPARTMENT OF TRANSPORTATION	STRUCTURE NO. 056-0054			CONTRACT I	NO. 6
P 312 425 9560 F 312 425 9564 www.infrastructure.eng.com	PLOT DATE = 6/7/2024	CHECKED -	PK	REVISED -		SHEET 15 OF 16 SHEETS		ILLINOIS FED. AII	O PROJECT		

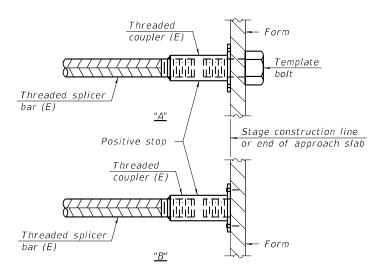
STANDARD BAR SPLICER ASSEMBLY PLAN

Only bar splicer assemblies as presented on the approved QPL list may be used.

Threaded splicer bar length = min. lap length + 1½" + thread length

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

Location	Bar size	No. assemblies required	Minimum Iap length
N. End Deck	#5	2	3'-6"
N. Abutment	#6	2	4'-0''
S. End Deck	#5	2	3'-6"
S. Abutment	#6	4	4'-0''



INSTALLATION AND SETTING METHODS

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

_Stage line if applicable Stage I construction | Stage II construction Mechanical splicer (E) Reinforcement bar Reinforcement bar

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.

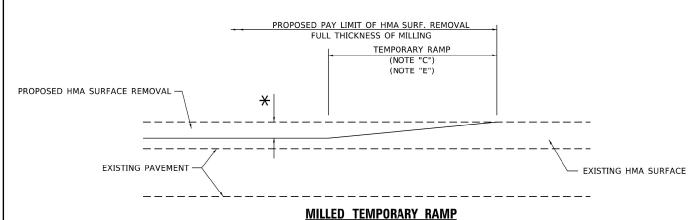
See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BSD-1

5-15-2023

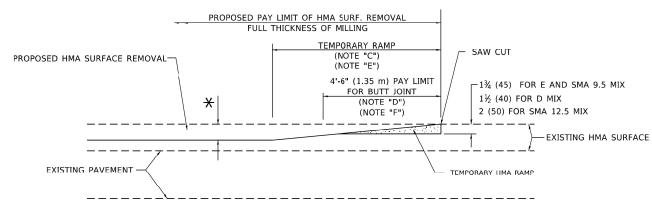
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DEPARTMENT OF TRANSPORTATION



(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 1

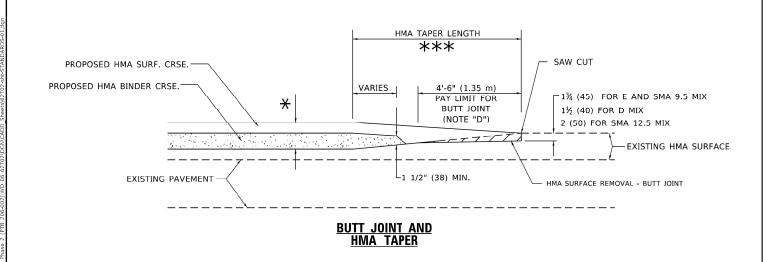


HMA CONSTRUCTED TEMPORARY RAMP

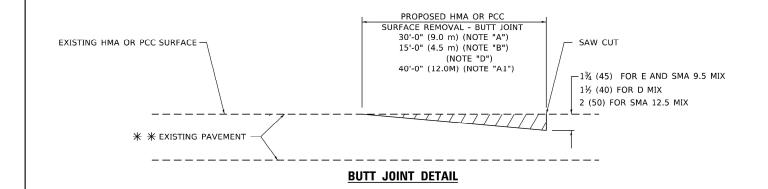
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

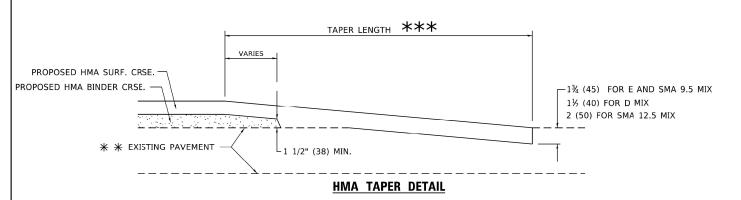
OPTION 2

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.

GENERAL NOTES

- A. MAINLINE ARTERIAL ROADWAYS AND MAJOR SIDE ROADS.
- A1. INTERSTATES
- 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' 4" (1.02m) PER 1 INCH (25 mm) OF MILLING THICKNESS.
 - * SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- F. 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"
- 2. THE TEMPORARY RAMP AND SAW CUT SHALL BE INCLUDED IN THE UNIT COST FOR HMA OR PCC SURFACE REMOVAL-BUTT JOINT

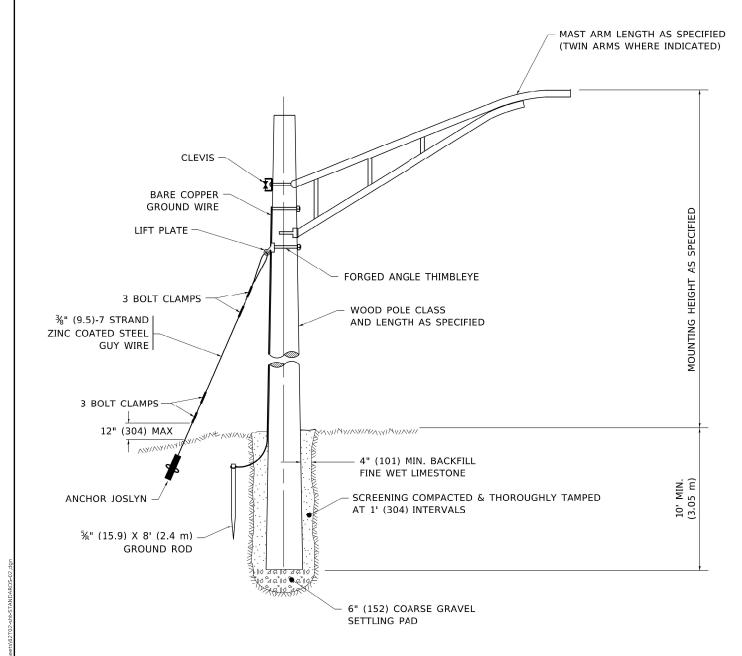
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE - BUTT JOINT AND HMA TAPER DETAILS (BD-32)

FA.P. RTE. 326 FAP 0326 22 BJ2

E: SHEET OF SHEETS STA. TO STA.



HEAVY DUTY INSULATED PULLEY CLEVIS WOOD POLE -- BARE COPPER GROUND WIRE EVERY THIRD POLE MESSENGER TIED TO INSULATOR WITH FACTORY FORMED CABLE TIE TO LUMINAIRE GROUND CLAMP -─ NEUTRAL CONDUCTOR AWG BARE COPPER PHASE CONDUCTOR GROUND WIRE WATERPROOF INSULATION WATERPROOF FUSEHOLDER & FUSE PIERCING TAP CONNECTOR WATERPROOF FUSEHOLDER AND SOLID NEUTRAL SLUG

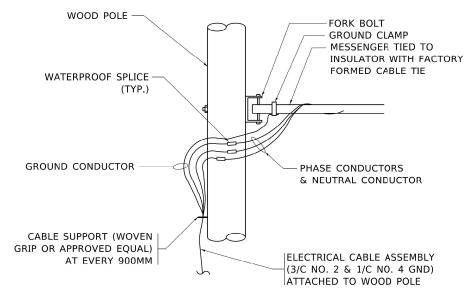
TEMPORARY LIGHT POLE DETAIL

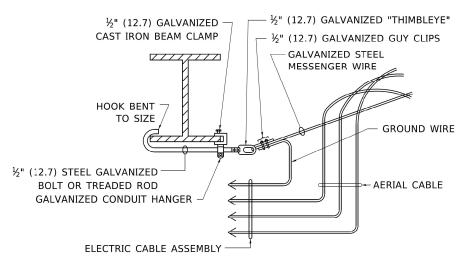
TEMPORARY LIGHT POLE ATTACHMENT DETAIL

NOTE:

- 1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED.
- 2. MAST ARM SHALL BE RATED FOR THE SPECIFIED MOUNTING HEIGHT.

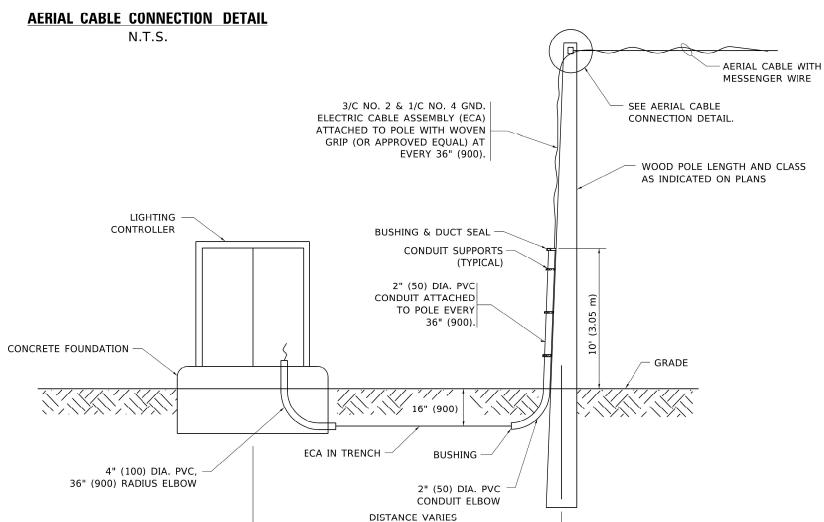
| DISTRICT | ONE - TEMPORARY LIGHT | POLE | DETAILS | (BE-800) | | F.A.P. | SECTION | COUNTY | SHEETS | NO. | 326 | FAP 0326 22 BJ2 | MCHENRY | 33 | 25 | CONTRACT NO. | 62T02 | SHEETS | STA. | TO STA. | | ILLINOIS | FED. ALID PROJECT | TO STA. |





AERIAL CABLE ATTACHED TO STRUCTURE

NOT TO SCALE



NOTES:

- 1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED.
- 2. SEE PROPOSED LIGHTING PLAN FOR CONDUIT, CABLE AND ROUTING.
- 3. THE CONTRACTOR SHALL PROVIDE INTERMEDIATE SUPPORTS TO MAINTAIN MINIMUM CLEARANCES. REFER TO AERIAL AERIAL CABLE ATTACHED TO STRUCTURE DETAIL.
- 4. COST OF SPLICES AND MOUNTING HARDWARE SHALL BE INCLUDED IN THE UNIT PRICE FOR AERIAL CABLE.

WOOD POLE TO LIGHTING CONTROLLER WIRING CONNECTION DETAIL

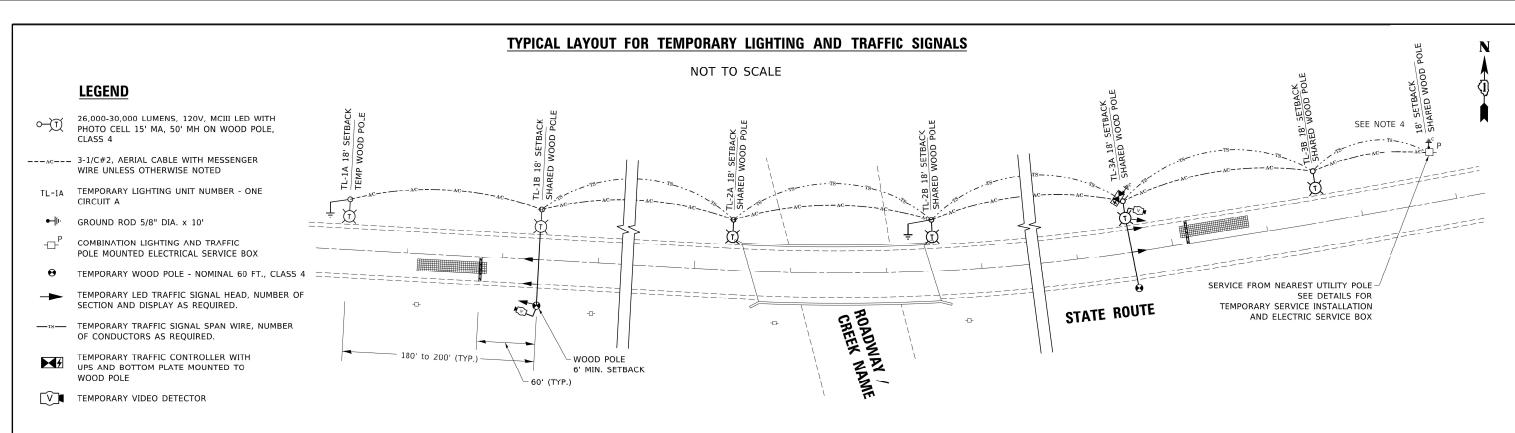
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	P 312 425 9560 F 312 425 9564 www.infrastructure-eng.com		DATE	-	05/10/2024	REVISED	-

STATE OF ILLINOIS	
DEPARTMENT OF TRANSPORTA	ATION

SCALE:

DISTRICT ON	– TEMPO	RARY	AERIAL C	ABLE	INSTALLATION	(BE-801)	F.A.P. RTE	SECT	ION		COUNTY	TOTAL SHEETS	
						, ,	326	FAP 0326	22 BJ2		MCHENRY	33	26
											CONTRACT	NO. 6	2T02
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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 POLLES IMMEDIATELY ADJACENT TO THE BRIDGE SHALL BE 100-FOOT POLES (90-FOOT MOUNTING HEIGHT), WITH 56,000-60,000 LUMENS TYPE II 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 FIFCTRIC 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.

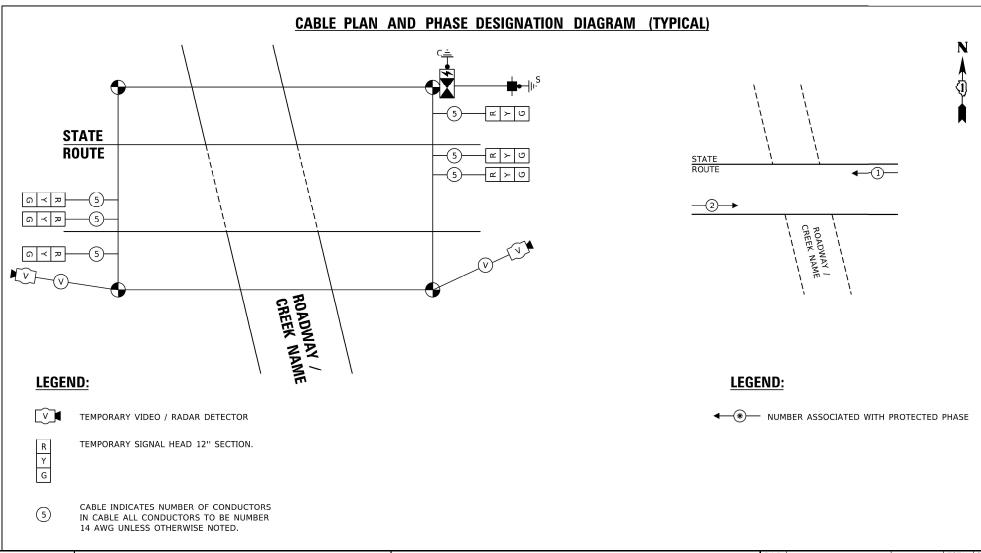
6. THE LIGHT POLE SETBACK FROM THE EDGE OF TRAVEL PAVEMENT SHALL BE 18 FT. UNLESS THE LIGHT POLE IS BEHIND GUARDRAIL. THE LIGHT POLES INSTALLED BEHIND THE GUARDRAIL OR BARRIER WALL SHOULD HAVE AT LEAST 8 FT. SETBACK FROM THE BACK OF THE SHOULDER AND OR AS DIRECTED BY THE ENGINEER.

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.

 $10.\ \mbox{THIS}$ LAYOUT IS ONLY FOR SINGLE LANE STAGING WITHOUT PRIVATE DRIVEWAYS WITHIN SINGLE LANE WORK ZONE.



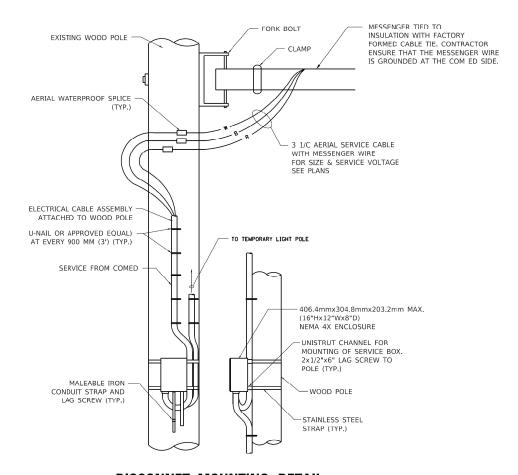
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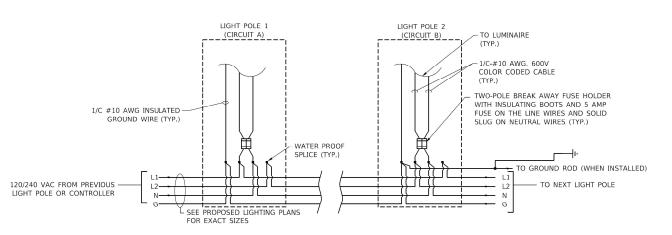
TEMPORARY SERVICE INSTALLATION DETAIL

NOT TO SCALE



DISCONNET MOUNTING DETAIL

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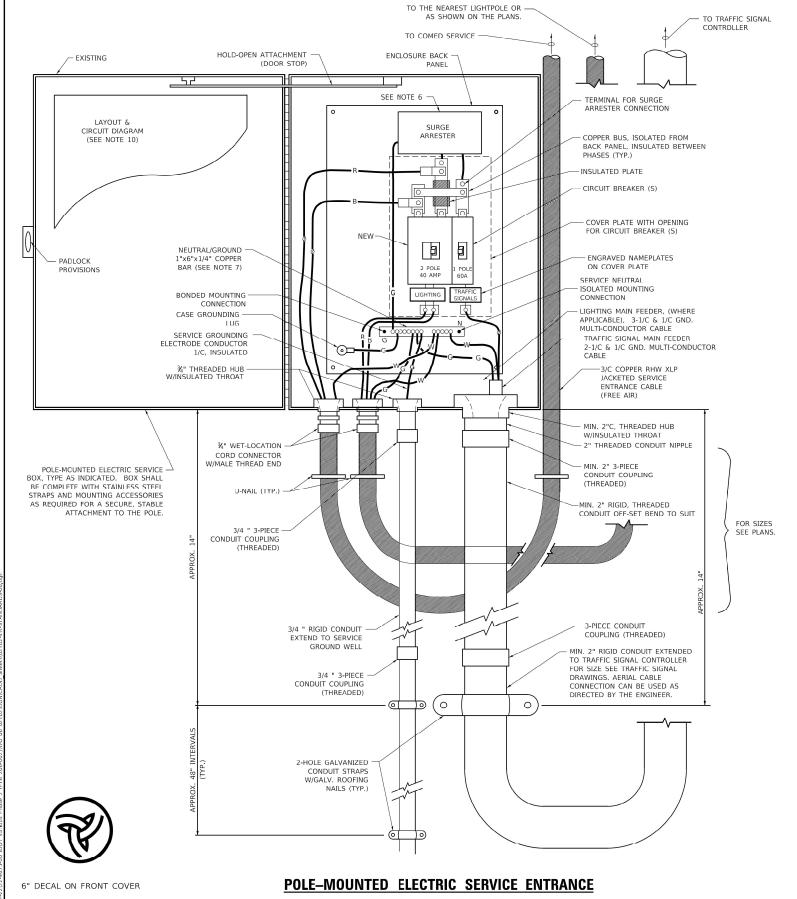
LIGHT POLE WIRING DETAIL

NOT TO SCALE

SCALE:

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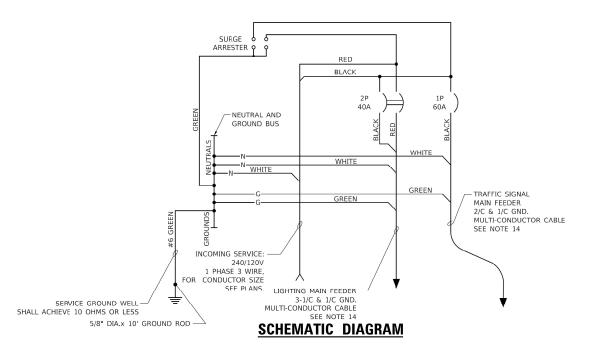
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NOTES:

- ELECTRIC SERVICE SHALL BE OF THE VOLTAGE INDICATED OR DESIGNATED BY THE ENGINEER, AND SERVICE DROP CABLE SHALL BE COMPATIBLE WITH THE SERVICE ACCORDINGLY. SOME INSTALLATIONS MAY CALL FOR SERVICE ENTRANCE EQUIPMENT SUITABLE FOR 3-WIRE SERVICE EVEN THOUGH NITIALLY WIRED FOR 2-WIRE SERVICE.
- THE POLE-MOUNTED ELECTRIC SERVICE BOX SHALL BE CONFIGURED AND FULLY EQUIPPED FOR 240/120V 3W SERVICE, COMPLETE WITH LIGHTING MAIN BREAKER AND TRAFFIC SIGMALS MAIN BREAKER AS REQUIRED.
- 3. THE ELECTRIC SERVICE EQUIPMENT ASSEMBLY SHALL BE UL LISTED AS SUITABLE FOR USE AS SERVICE ENTRANCE
- 4. THE ELECTRIC SERVICE EQUIPMENT ENCLOSURE SHALL BE NEMA 4X STAINLESS STEEL, NOMINALLY 12"W X 16"H X 8"D, WITH A PIANO-HINGED DOOR, STEEL BACK PANEL, FAST-ACTING STAINLESS STEEL ENCLOSURE CLAMPS, PADLOCK PROVISIONS AND DOOR STOP, HOFFMAN CATALOG NO. A-16H1208SS6LP/A-16 P12/A-DSTOPK/C-PMK12, OR APPROVED EQUAL.
- 5. CIRCJIT BREAKERS SHALL BE THERMAL MAGNETIC BOLT-ON TYPE WITH A MINIMUM INTERRUPTING CAPACITY OF 25,000 SYMMETRICAL AMPERES AT 240 VOLTS. THEY SHALL BE LOCKABLE IN THE "OFF" POSITION FOR COMPLIANCE WITH OSHA LOCK-OUT/ FAG-DUT REQUIREMENTS. HANDLES SHALL BE TRIP FREE.
- 6. THE SURGE PROTECTOR SHALL BE SUITABLE FOR THE SERVICE VOLTAGE SINGLE PHASE 60HZ AC, WITH A SURGE ENERGY CAPABILITY OF 2160 JOULES OR BETTER AT 8/20 MICRO-SECONDS, RATED -40 TO 60 DEGREES C., WITH LED OPERATING INDICATORS, AND SHALL BE UL LISTED PER UL 1449, CUTLER-HAMMER CM0V230L065XST OR APPROVED EQUAL.

- BUS BARS, CONNECTORS, AND LUGS SHALL BE COPPER, INSULATED AND ISOLATED, AND CONFIGURED TO PREVENT SHORTED CONDITIONS FROM TIGHTENING TERMINATIONS, ETC. THE OVERALL BUS SECTION SHALL BE CONFIGURED BEHIND AN INSULATING BARRIER SHIELD WHICH IS REMOVABLE FOR ACCESS TO CONNECTIONS, OR THE ASSEMBLY SHALL BE A MANUFACTURED SPECIALTY PANELBOARD, CUTLER-HAMMER PRL2A OR APPROVED
- 8. THE COMBINATION GROUND AND NEUTRAL BAR SHALL BE CONFIGURED WITH SEPARATE GROUND AND NEUTRAL SECTIONS AND SPARE TERMINALS AS INDICATED. THE HEADS OF GROUND SCREWS SHALL BE PAINTED GREEN. THE HEADS OF NEUTRAL SCREWS SHALL BE PAINTED WHITE. THE SERVICE NEUTRAL AND SERVICE GROUNDING ELECTRODE CONDUCTOR SHALL BE TERMINATED ADJACENT TO EACH OTHER AT THE DIVIDE BETWEEN THE SECTIONS AND WIRING SHALL BE TERMINATED ONLY UPON THE APPROPRIATE SECTION.
- 9. THE WIRING TERMINALS, INCLUDING THE GROUND/NEUTRAL BAR SHALL BE ARRANGED TO PROVIDE ADEQUATE ROOM FOR PERFORMING
- 10. A PLASTIC LAMINATED LAYOUT AND CIRCUIT DIAGRAM SHALL BE MECHANICALLY SECURED TO THE INTERIOR SIDE OF THE ENCLOSURE DOOR.
- 11. A 2-COLOR ENGRAVED PLASTIC NAMEPLATE, ATTACHED WITH SCREWS AND ENGRAVED AS INDICATED, SHALL BE PROVIDED FOR EACH MAIN
- 12. LUGS AND CONNECTORS SHALL BE RATED FOR 75 C CONDUCTOR.
- 13. THE EXACT MOUNTING HEIGHT OF THE BOX SHALL BE FIELD DETERMINED TO AVOID OBSTRUCTIONS AND PUBLIC ACCESS. TYPICAL HEIGHT SHALL BE APPROXIMATELY 10 FEET ABOVE GRADE.



GENERAL LAYOUT DIAGRAM

NOT TO SCALE

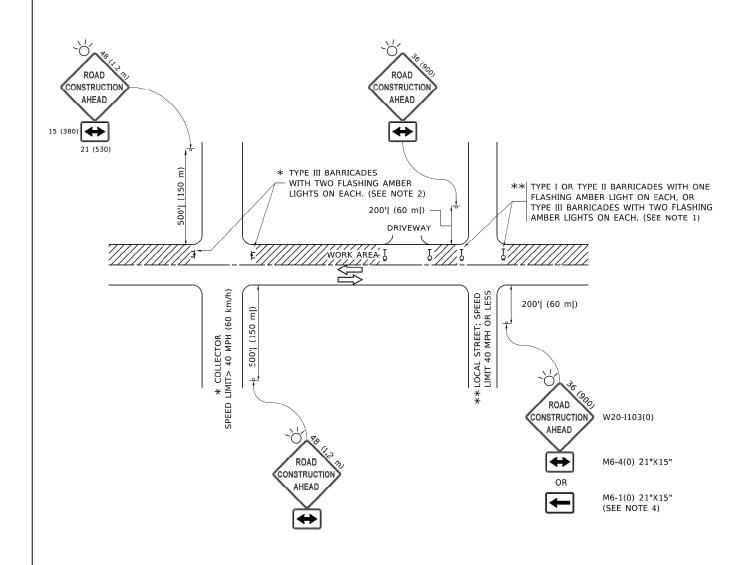
DEPARTMENT OF TRANSPORTATION

STATE OF ILLINOIS

DISTRICT ONE - TEMPORARY LIGHTING AND TRAFFIC SIGNALS FOR SINGLE LANE STAGING (BE-805)

SECTION COUNTY 326 FAP 0326 22 BJ2 MCHENRY 33 29 CONTRACT NO. 62T02

DESIGNED -MLD REVISED INFRASTRUCTURE DRAWN MLD REVISED ENGINEERING LINCOR ACL REVISED 1 South Wacker | Suite 2650 | Chicago, IL 60606 REVISED



NOTES:

- 1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTICN OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- 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 PORTICN OF THE MAIN ROUTE SHALL BE PROTECTED BY
 b) BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION
 OF THE CLOSED PORTION.
- 3. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710)
- 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:

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

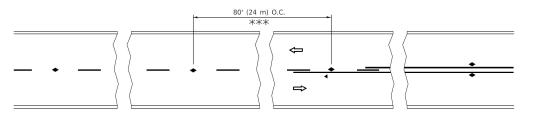
All dimensions are in inches (millimeters) unless otherwise shown.

	USER NAME = ALane	DESIGNED - MLD	REVISED -
NFRASTRUCTURE		DRAWN - MLD	REVISED -
ENGINEERING INCORPORATE South Wacker Suite 2650 Chicago, IL 6060		CHECKED - ACL	REVISED -
P 312,425,9560 F 312,425,9564 www.infrastructure-eng.com	PLOT DATE = 5/10/2024	DATE - 05/10/2024	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

 				PROTECTION FOR IVEWAYS (TC-10)
SHEET	OF	SHEETS	STA	TO STA

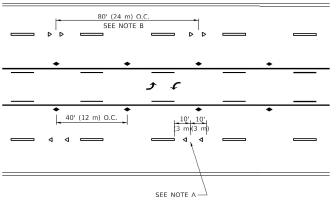
	F.A.P. RTE	SECTION		COUNTY	TOTAL SHEETS	SHE
ı	326	FAP 0326 22 BJ2	MCHENRY	33	30	
4				CONTRACT	NO. 6	52T0
ı		ILLINOIS	FED. A	ID PROJECT		



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

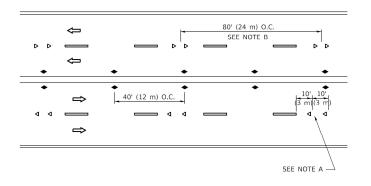
3 @ 40' (12 m) O.C. \Rightarrow LANE REDUCTION TRANSITION

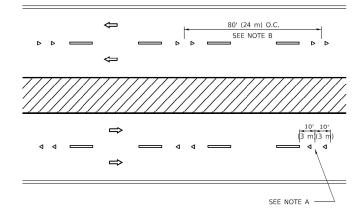
SEE FIGURE 3B-14 MUTCD



TWO-WAY LEFT TURN

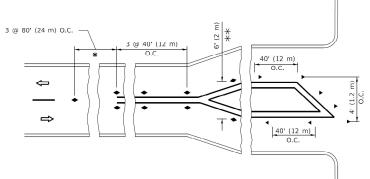
TWO-LANE/TWO-WAY

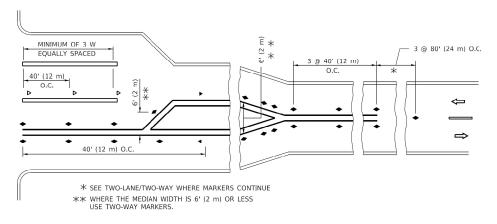




MULTI-LANE/UNDIVIDED







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 INVOLVED.

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

MLD DESIGNED -REVISED INFRASTRUCTURE DRAWN MLD REVISED ENGINEERING INCORPO HECKED ACL REVISED 1 South Wacker | Suite 2650 | Chicago, IL 60606 PLOT DATE = 5/10/2024 DATE 05/10/2024 REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** DISTRICT ONE - TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) (TC-11)

SECTION MCHENRY 326 FAP 0326 22 BJ2 33 31 CONTRACT NO. 62T02

SYMBOLS

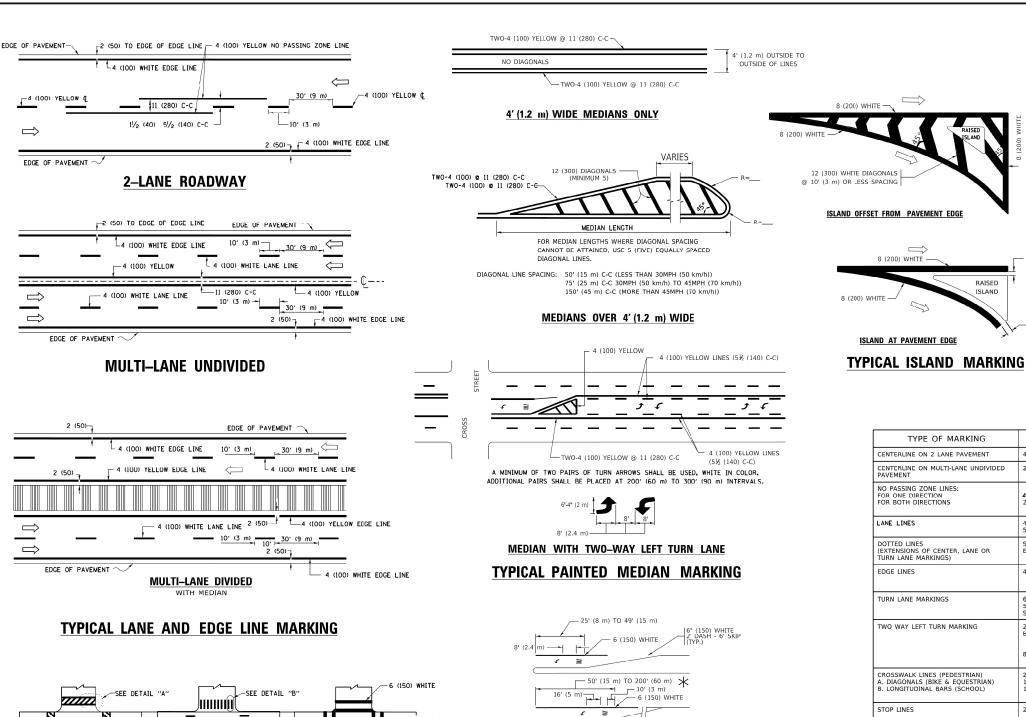
ONE-WAY AMBER MARKER

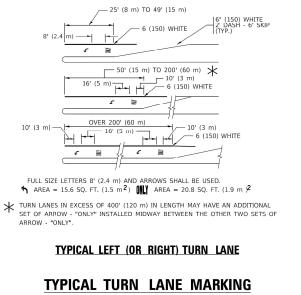
TWO WAY AMBER MARKER

d ONE-WAY CRYSTAL MARKER (W/O)

YELLOW STRIPE

WHITE STRIPE





D(FT) SPEED LIMIT 425 580 45 665 50 55 **COMBINATION** LEFT AND U-TURN 5'-4" (1620) √ 32 R (810) LANE REDUCTION TRANSITION

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5½ (140) C C FROM SKIP DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION	SKIP-DASH AND SOLID IN PAIRS	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN
	8' (2.4m) LEFT ARROW		WHITE	MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4* (1.2 m) IN ADVANCE OF AND DABALLEL TO CROSSWALK, IF PRESENT OTHERWISE, PLACE AT DESIRED STOPPING POINT: PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "X"=3.6 SQ. FT. (0.33 m PEACH "X"=54.0 SQ. FT. (5.0 m P
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS > 8')	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

U-TURN

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

SCALE:

8 (200) WHITE -

ISLAND AT PAVEMENT EDGE

RAISED

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

/////// BICYCLE & EQUESTRIAN

DESIGNED -MLD REVISED **INFRASTRUCTURE** DRAWN MLD REVISED ENGINEERING LINCORPOR HECKED ACL REVISED 1 South Wacker | Suite 2650 | Chicago, IL 60606 DATE 05/10/2024

2' (600)

DETAIL "B"

─12 (300) WHITE

PEDESTRIAN

-6 (150) WHITE

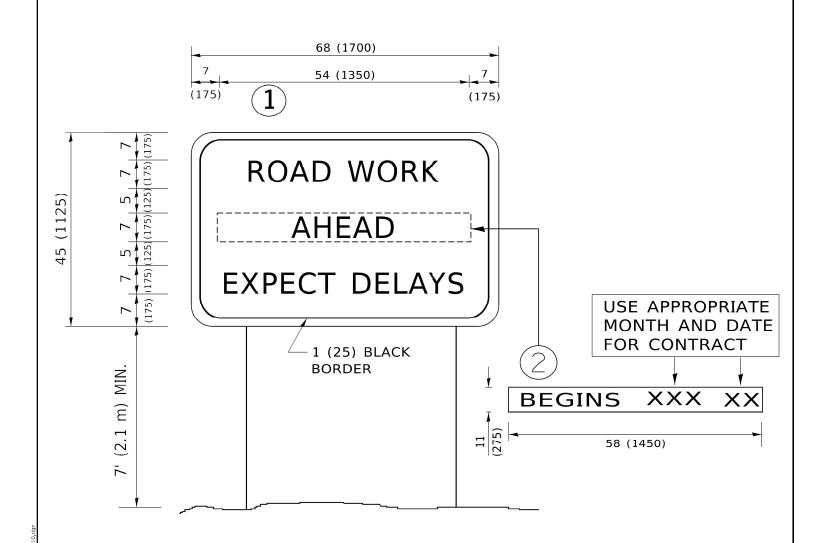
TYPICAL CROSSWALK MARKING

* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF

DETAIL "A"

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

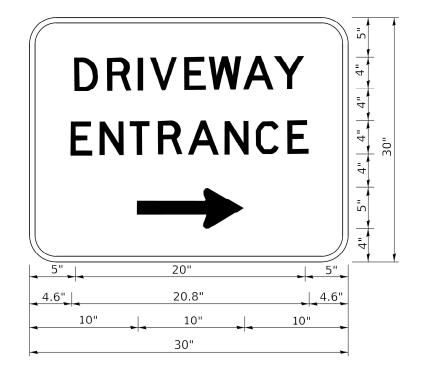
SECTION **DISTRICT ONE - TYPICAL PAVEMENT MARKINGS (TC-13)** 326 FAP 0326 22 BJ2 MCHENRY 33 32 CONTRACT NO. 62T02 SHEET SHEETS STA.



NOTES:

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

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



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

NOTES:

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE – ARTERIAL ROAD INFORMATION SIGN (TC-22)

DRIVEWAY ENTRANCE SIGNING (TC-26)

SHEET OF SHEETS STA. TO STA.