06-13-2025 LETTING ITEM 035

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	(195-1HB-1) BDR	WHITESIDE	22	1
	ILLINOIS	CONTRACT NO. 64S28		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

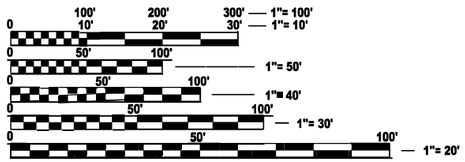
PROPOSED
HIGHWAY PLANS

FAI ROUTE 88 (I-88) UNDER CORDOVA ROAD
SECTION (195-1HB-1) BDR
BRIDGE OVERLAY AND JOINT REPLACEMENT
WHITESIDE COUNTY

C-92-061-23

D-92-060-23

LOCATION OF SECTION INDICATED THUS: -

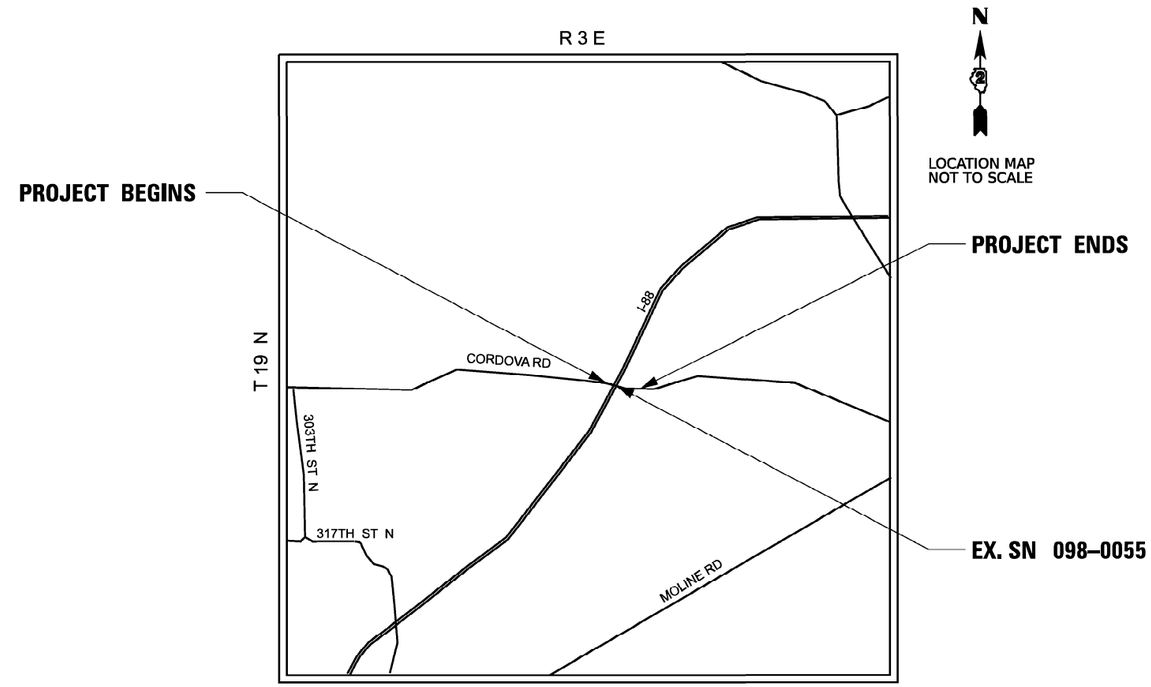


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

PROJECT MANAGER: DERRICK LOPEZ

CONTRACT NO. 64S28



GROSS LENGTH = 465.27 FT. = 0.088 MILE
NET LENGTH = 465.27 FT. = 0.088 MILE

FOR INDEX OF SHEETS, SEE SHEET NO. 2

TOWNSHIP: ERIE
SECTION: 3

CLASSIFICATION: MAJOR COLLECTOR
ADT (2016): 325

POSTED SPEED: 55 MPH

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED March 25 20 25

Trisha Thompson
REGIONAL ENGINEER

May 9 20 25
ENGINEER OF DESIGN AND ENVIRONMENT

May 9 20 25
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

REV. 4/9/25

GENERAL NOTES

1. THE CONTRACTOR SHALL NOTIFY TRAFFIC OPERATIONS A MINIMUM OF 5 WORKING DAYS PRIOR TO PLACING PERMANENT PAVEMENT MARKING OR SIGNING.

2. QUALITY MANAGEMENT PROGRAM TO BE USED ROW WILL HAVE QC/QA (QUALITY CONTROL/QUALITY ASSURANCE), QCP (HMA QUALITY CONTROL FOR PERFORMANCE), OR PFP (HMA PAY FOR PERFORMANCE USING PERCENT WITHIN LIMITS JOBSITE SAMPLING). WHICH ONE TO USE WILL BE DETERMINED BY MATERIALS. THEY WILL NEED QUANTITIES FOR EACH TYPE OF MIX USED (I.E. SURFACE, BINDER, ETC.). SEE BDE MANUAL CH. 53-4.07 OR CONTACT THE DISTRICT MIXTURES CONTROL ENGINEER FOR MORE INFORMATION.

3. PAVEMENT MARKING SHALL BE DONE ACCORDING TO STANDARD 780001, EXCEPT AS FOLLOWS:

    1. ALL WORDS, SUCH AS ONLY, SHALL BE 8 FEET HIGH.
    2. ALL NON-FREEWAY ARROWS SHALL BE THE LARGE SIZE.
    3. THE DISTANCE BETWEEN YELLOW NO-PASSING LINES SHALL BE 8 INCHES, NOT 7 INCHES, AS SHOWN IN THE DETAIL OF TYPICAL LANE AND EDGE LINES.
    4. CENTERLINE SKIP DASH PAVEMENT MARKING ON MULTI-LANE DIVIDED, MULTI-LANE UNDIVIDED, AND ONE-WAY ROADWAY SHALL BE ACCORDING TO DISTRICT STANDARD 41.1.

4. IDOT IS NOT A MEMBER OF JULIE. IF YOU ARE NEAR ANY OVERHEAD LIGHTING, INTERSECTION LIGHTING OR TRAFFIC SIGNALS, CONTACT THE IDOT TRAFFIC OFFICE AT 815/284-5469 AT LEAST 48 HOURS PRIOR TO WORK

5. THE SUPPORTING DATA SHOWN IN THE PLANS WERE DEVELOPED THROUGH AERIAL PHOTOGRAPHY AND IS NOT THE RESULT OF A GROUND SURVEY. THEREFORE, THE ALIGNMENTS AND SUPPORTING DATA SHOWN IN THE PLANS ARE FOR REFERENCE PURPOSES ONLY. THE RELATIVE ACCURACY OF THE INFORMATION IS UNKNOWN AND CANNOT BE GUARANTEED. THE CONTRACTOR MAY BE REQUIRED TO ADJUST LAYOUT TO MATCH ACTUAL FIELD CONDITIONS AND THE INTENT OF THE PLANS.

INDEX OF SHEETS

IDOT STANDARD DRAWINGS

STANDARD NUMBERS	DESCRIPTION
000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
701006-05	OFF-RD OPERATIONS, 2L, 2W, 15' (4.5m) TO 24" (600mm) FROM PAVEMENT EDGE
701101-05	OFF-RD OPERATIONS, MULTILANE, 15' (4.5m) TO 24" (600mm) FROM PAVEMENT EDGE
701106-02	OFF-RD OPERATIONS, MULTILANE, MORE THAN 15' (4.5m) AWAY
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701400-12	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
701406-13	LANE CLOSURE, FREEWAY/EXPRESSWAY, DAY OPERATIONS ONLY
701901-10	TRAFFIC CONTROL DEVICES
780001-05	TYPICAL PAVEMENT MARKINGS

DISTRICT 2 STANDARD DRAWINGS

STANDARD NUMBERS	DESCRIPTION
40.1	TRAFFIC CONTROL FOR ROAD CLOSURE
41.1	TYPICAL PAVEMENT MARKINGS

HOT MIX ASPHALT MIXTURE REQUIREMENTS	
LOCATION AND MIXTURE USES(S):	SURFACE
PG:	SBS PG 70-28
DESIGN AIR VOIDS	4.0 @ N50
MIXTURE COMPOSITION	SMA 9.5
FRICTION AGGREGATE	C
MIX WEIGHT	112 LB/SY/IN
QUALITY MANAGEMENT PROGRAM	QC/QA
SUBLOT SIZE	N/A
MATERIAL TRANSFER DEVICE	N/A

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	DRAWN - AMB	REVISED -	
	CHECKED - PK	REVISED -	
PLOT DATE = 3/24/2025	DATE - 3/19/2025	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-88 UNDER CORDOVA RD
GENERAL NOTES, INDEX OF SHEETS AND STANDARD DRAWINGS

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	(195-1HB-1)BDR	WHITESIDE	22	2
		CONTRACT NO. 64S28		
	ILLINOIS	FED. AID PROJECT		

CONSTRUCTION CODE
100% STATE
BRIDGE REHABILITATION
0059
RURAL
SN. 098-0055

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	
40605022	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, MIX "D", N50	TON	217	217
50102400	CONCRETE REMOVAL	CU YD	8.2	8.2
50157300	PROTECTIVE SHIELD	SQ YD	464	464
50300255	CONCRETE SUPERSTRUCTURE	CU YD	8.5	8.5
50300300	PROTECTIVE COAT	SQ YD	28	28
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	1,500	1,500
52000110	PREFORMED JOINT STRIP SEAL	FOOT	74	74
58100210	FULL LANE SEALANT WATERPROOFING SYSTEM	SQ YD	1764	1764
58700300	CONCRETE SEALER	SQ FT	146	146
59000200	EPOXY CRACK INJECTION	FOOT	127	127
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	1	1
67100100	MOBILIZATION	L SUM	1	1
70100700	TRAFFIC CONTROL AND PROTECTION, STANDARD 701406	L SUM	1	1
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	90	90

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PLOT DATE = 3/24/2025	DATE - 3/19/2025	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-88 UNDER CORDOVA RD
SUMMARY OF QUANTITIES

SCALE: | SHEET 1 OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	(195-1HB-1)BDR	WHITESIDE	22	3
		CONTRACT NO. 64S28		
ILLINOIS	FED. AID PROJECT			

REV. 5/13/25REV. 4/9/25

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE 100% STATE BRIDGE REHABILITATION 0059 RURAL SN. 098-0055
*	78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	1908	1908
	X5110308	SLOPE WALL CRACK SEALING	FOOT	17	17
	X5110310	SLOPE WALL REPAIR	SQ YD	1	1
	X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1
	Z0004556	HOT-MIX ASPHALT SURFACE REMOVAL (DECK)	SQ YD	1761	1761
	Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	284	284
	Z0012755	STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)	SQ FT	6	6
	Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	32	32
	Z0016200	DECK SLAB REPAIR (PARTIAL)	SQ YD	397	397

*= SPECIALTY ITEM

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PLOT DATE = 3/24/2025	DATE - 3/19/2025	REVISED -	

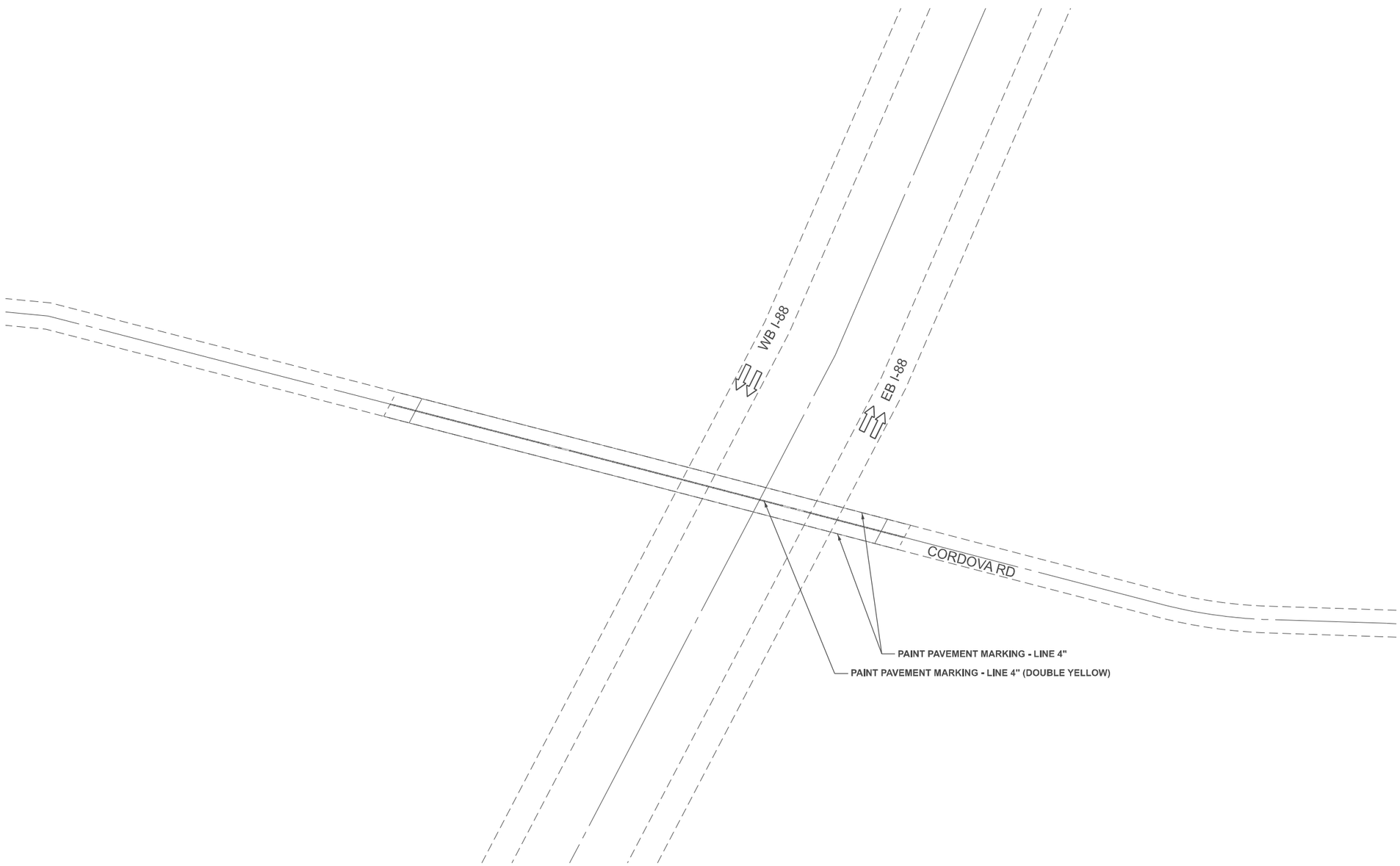
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-88 UNDER CORDOVA RD
SUMMARY OF QUANTITIES

SCALE: | SHEET 1 OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	(195-1HB-1)BDR	WHITESIDE	22	4
		CONTRACT NO. 64S28		
	ILLINOIS	FED. AID PROJECT		

REV. 5/16/25REV. 5/13/25REV. 4/9/25



NOTE:
LIMITS OF PAVEMENT MARKINGS SHALL BE DETERMINED IN THE FIELD TO MATCH THE EXISTING CONDITIONS.

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	CHECKED - PK	REVISED -	
PLOT DATE = 3/24/2025	DATE - 3/19/2025	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-88 UNDER CORDOVA RD
PROPOSED PAVEMENT MARKINGS

SCALE: 1" = 50' | SHEET OF SHEETS | STA. | TO STA.

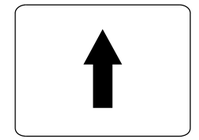
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	(195-1HB-1)BDR	WHITESIDE	22	5
		CONTRACT NO. 64S28		
	ILLINOIS FED. AID PROJECT			

GENERAL NOTES

1. DETOUR SIGNAGE SHALL BE CONSIDERED INCLUDED IN THE COST FOR TEMPORARY TRAFFIC CONTROL AND PROTECTION (SPECIAL) EXCEPT AS OTHERWISE NOTED.
2. SEE DETAILS FOR TYPICAL SIGN SPACING.
3. THE CONTRACTOR SHALL NOT OBSTRUCT EXISTING SIGNAGE WITH THE PLACEMENT OF THE DETOUR SIGNAGE.
4. DETOUR ROUTES SHALL BE IN EFFECT DURING THE DURATION OF PROJECT.

LEGEND

①	M4-8P 24"X12"	DETOUR	⑦	M6-3 21"X15"
②	SPECIAL 30"X18" VARIABLE 6" BLACK LETTERS ON ORANGE REFLECTIVE BACKGROUND	CORDOVA ROAD	⑧	M4-8A 30"X24"
③	M3-2P 24"x12"	EAST	⑨	W20-2 48"X48"
④	M3-4P 24"X12"	WEST	⑩	W20-3 48"X48"
⑤	M6-1 21"X15"		⑪	W20-3(O)-48 48"X48"
⑥	M6-1 21"X15"		⑫	W21-I100(0)-48



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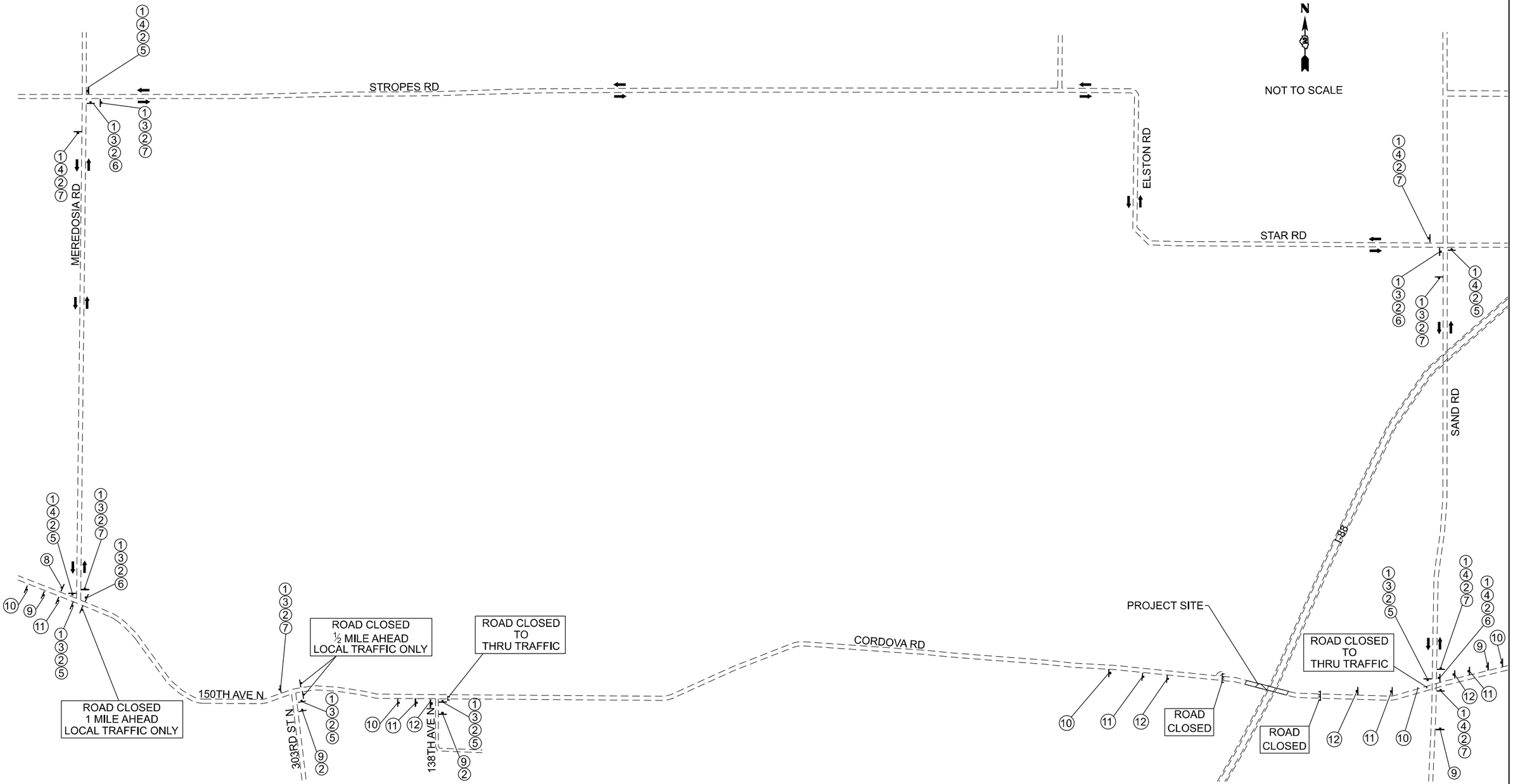
	CHECKED - PK	REVISED -	
PLOT DATE = 3/24/2025	DATE - 3/19/2025	REVISED -	

I-88 UNDER CORDOVA RD
DETOUR ROUTE NOTES

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	(195-1HB-1)BDR	WHITESIDE	22	6
		CONTRACT NO. 64S28		
	ILLINOIS	FED. AID PROJECT		



NOTE
SEE SHEET 6 FOR LEGEND

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	DRAWN - AMB	REVISED -	
	CHECKED - PK	REVISED -	
PLOT DATE = 3/24/2025	DATE - 3/19/2025	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-88 UNDER CORDOVA RD
PROPOSED DETOUR ROUTE

SCALE: | SHEET OF SHEETS | STA. | TO STA.

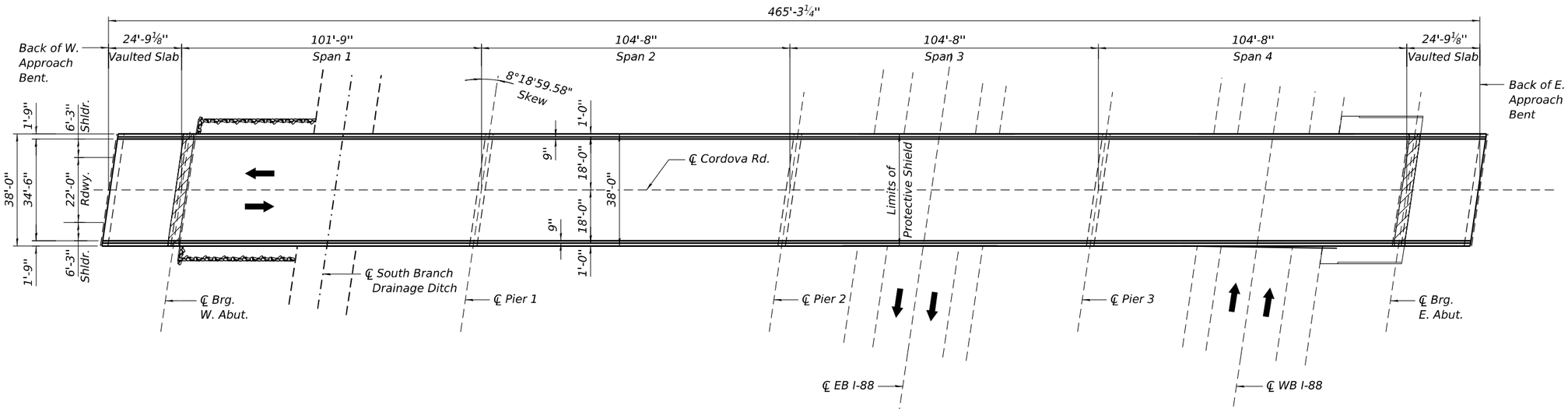
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	(195-1HB-1)BDR	WHITESIDE	22	7
		CONTRACT NO. 64S28		
	ILLINOIS FED. AID PROJECT			

Benchmark: Chiseled square on Top of Railing Curb SW Corner of Bridge at Sta. 47+18. Elev. 585.17

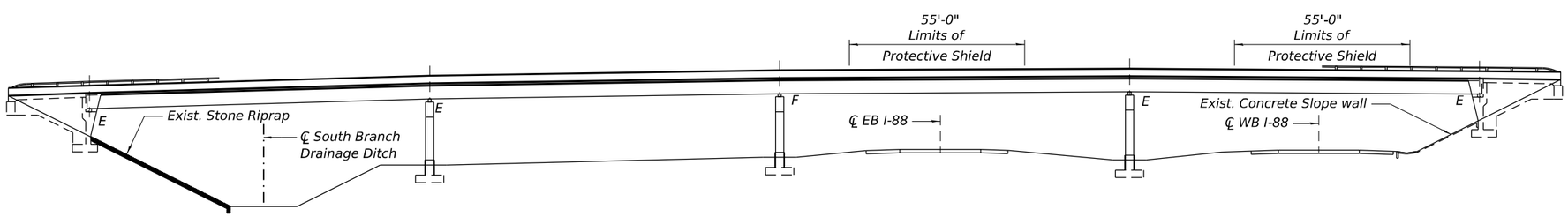
Existing Structure:
The structure is a four-span continous, composite plate girder bridge with a 7½-inch reinforced concrete deck with a 1½-inch bituminous overlay. At the vaulted abutments are 24'-9⅛" approach spans. Expansion joints are neoprene expansion joints. The original structure was built in 1975. Abutments and approach bents are supported by concrete piles. Piers are supported by creosoted timber piles.

Traffic will be detoured during construction.

No salvage.



PLAN



ELEVATION

DESIGN SPECIFICATIONS

2024 AASHTO LRFD Bridge Design Specifications, 10th Edition

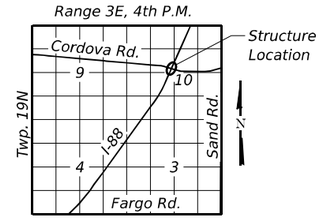
DESIGN STRESSES

FIELD UNITS

f'c = 4,000 psi (Superstructure)
f'c = 3,500 psi (Substructure)
fy = 60,000 psi (Reinforcement)

SCOPE OF WORK

1. *Remove and replace existing expansion joints at East and West Abutments*
2. *Remove existing bituminous overlay.*
3. *Repair areas of the bridge deck and parapet.*
4. *Repair Vaulted slab.*
5. *Install new bituminous overlay.*
6. *Repair abutments.*
7. *Repair piers.*
8. *Repair East slope wall.*



LOCATION SKETCH

GENERAL PLAN AND ELEVATION
CORDOVA ROAD OVER FAI-88 (I-88)
SECTION (195-1HB-1)BDR
WHITESIDE COUNTY
STATION 1037+72
STRUCTURE NO. 098-0055

MODEL: Default
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GARZA KARHOFF ENGINEERING, LLC

USER NAME =	DESIGNED - RO	REVISED -	
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PLOT SCALE =	DRAWN - RO	REVISED -	
PLOT DATE =	CHECKED - EG	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
STRUCTURE NO. 098-0055
SHEET 1 OF 10 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	SEC (195-1HB-1)BDR	WHITESIDE	22	8
		CONTRACT NO. 64S28		
	ILLINOIS FED. AID PROJECT			

GENERAL NOTES

1. Reinforcement bars designated (E) shall be epoxy coated.

2. Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose detrimental foreign material shall be removed from the surfaces in contact with concrete (SSPC - SP3 standards). 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 paid for according to Article 109.04 of the Standard Specifications.

   As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer. Any cracks that cannot be removed by grinding ¼ in. deep shall be identified and reported to the Bureau of Bridges & Structures for further disposition. 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.

3. Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

4. Concrete Sealer shall be applied to the areas of Abutment Cap concrete repair. All surfaces to be sealed shall be cleaned thoroughly prior to sealer application. Cost included with Concrete Sealer.

5. Protective Coat shall be applied to new concrete on the top and inside vertical surfaces of the parapet repairs per Section 503.19 of the Standard Specifications.

6. Protective coat shall not be applied to surfaces to which Waterproofing Membrane System is applied.

7. The repairs in these plans were identified from a visual inspection and a chain drag deck delamination survey in February 2025. The Contractor shall verify the locations and quantities in the field at the direction of the Engineer.

8. No field welding is permitted except as specified in the contract documents.

9. Existing Reinforcement bars extending into the removal area shall be cleaned, straightened, and incorporated into the new construction. Any Reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system at the contractors expense.

10. Area of deck repairs shown are estimates.

11. The Engineer shall show actual locations and size of deck repairs on As-Built Plans.

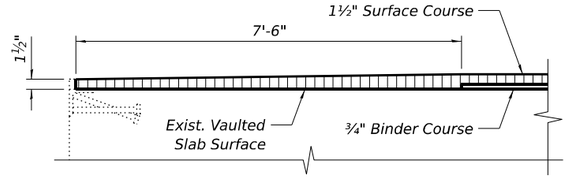
12. The deck surface shall have its final finish tined according to Article 420.09(e)(1) in the standard specifications. Cost to be included with Concrete Superstructure.

13. Joint openings shall be adjusted according to Article 420.09(e)(1) of the Std. Specs. when the deck is poured at an ambient temperature other than 50 deg F.

INDEX OF SHEETS

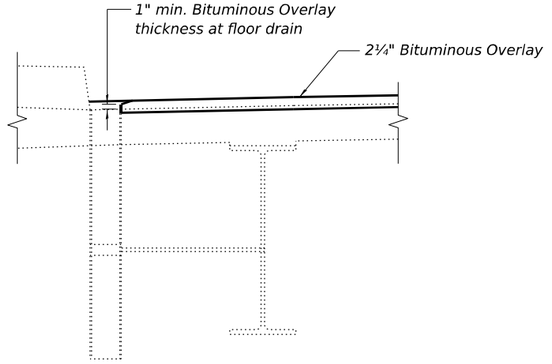
TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Polymerized Hot-Mix Asphalt Surface Course, Stone Matrix Asphalt, 9.5, Mix "C", N50	Ton	217	-	217
Concrete Removal	Cu. Yd.	8.2	-	8.2
Protective Shield	Sq.Yd.	464	-	464
Concrete Superstructure	Cu. Yd.	8.5	-	8.5
Protective Coat	Sq.Yd.	28	-	28
Reinforcement, Bars, Epoxy Coated	Pound	1,500	-	1,500
Preformed Joint Strip Seal	Foot	74	-	74
Full Lane Sealant Waterproofing System	Sq. Yd.	1,764	-	1,764
Concrete Sealer	Sq. Ft.	-	146	146
Epoxy Crack Injection	Foot	-	127	127
Slope Wall Crack Sealing	Foot	-	17	17
Slope Wall Repair	Sq.Yd.	-	1	1
Hot-Mix Asphalt Surface Removal (Deck)	Sq.Yd.	1,761	-	1,761
Structural Repair of Concrete (Depth Equal to or Less than 5 Inches)	Sq. Ft.	-	284	284
Structural Repair of Concrete (Depth Greater than 5 Inches)	Sq. Ft.	-	6	6
Deck Slab Repair (Full Depth, Type II)	Sq.Yd.	32	-	32
Deck Slab Repair (Partial)	Sq.Yd.	397	-	397

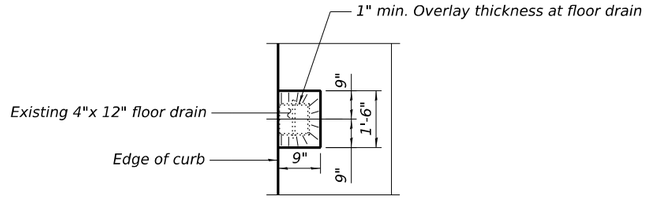


HMA TAPER AT VAULTED SLAB ENDS

1" per 10'-0" HMA Taper per IDOT Std. BD 32
West End shown, East End similar



OVERLAY AT DRAIN DETAIL



OVERLAY TREATMENT AT DRAINS

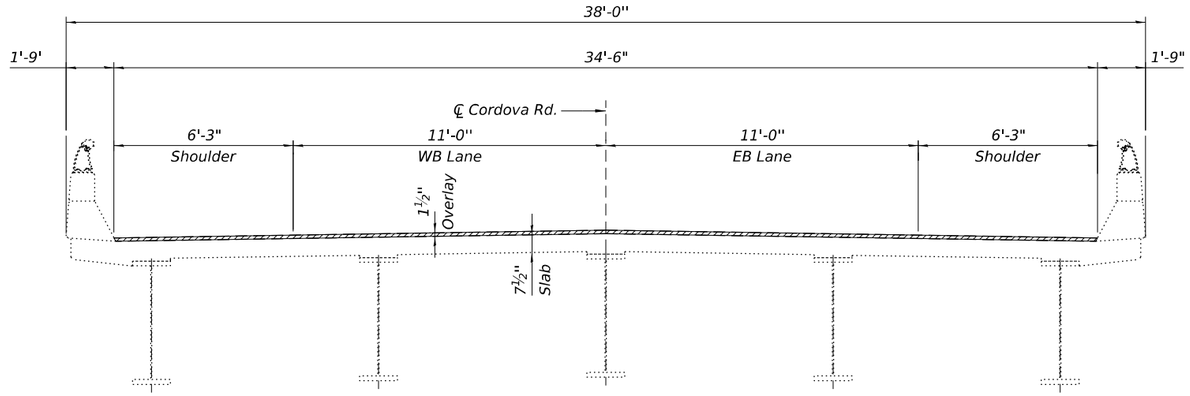
(29 drains N. Shoulder, 34 drains S.Shoulder)
Cost included with Bridge Deck Overlay.

GARZA KARHOFF ENGINEERING, LLC	USER NAME =	DESIGNED - RO	REVISED -
		CHECKED - EG	REVISED -
	PLOT SCALE =	DRAWN - RO	REVISED -
	PLOT DATE =	CHECKED - EG	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

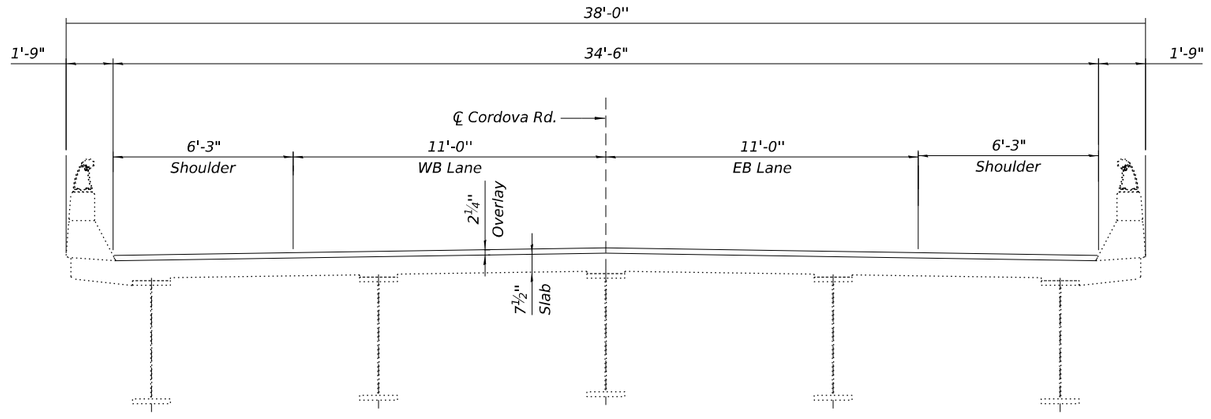
GENERAL DATA
STRUCTURE NO. 098-0055
SHEET 2 OF 10 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	(195-1HB-1)BDR	WHITESIDE	22	9
		CONTRACT NO. 64S28		
	ILLINOIS	FED. AID PROJECT		



EXISTING CROSS SECTION

(Looking East)



PROPOSED CROSS SECTION

(Looking East)

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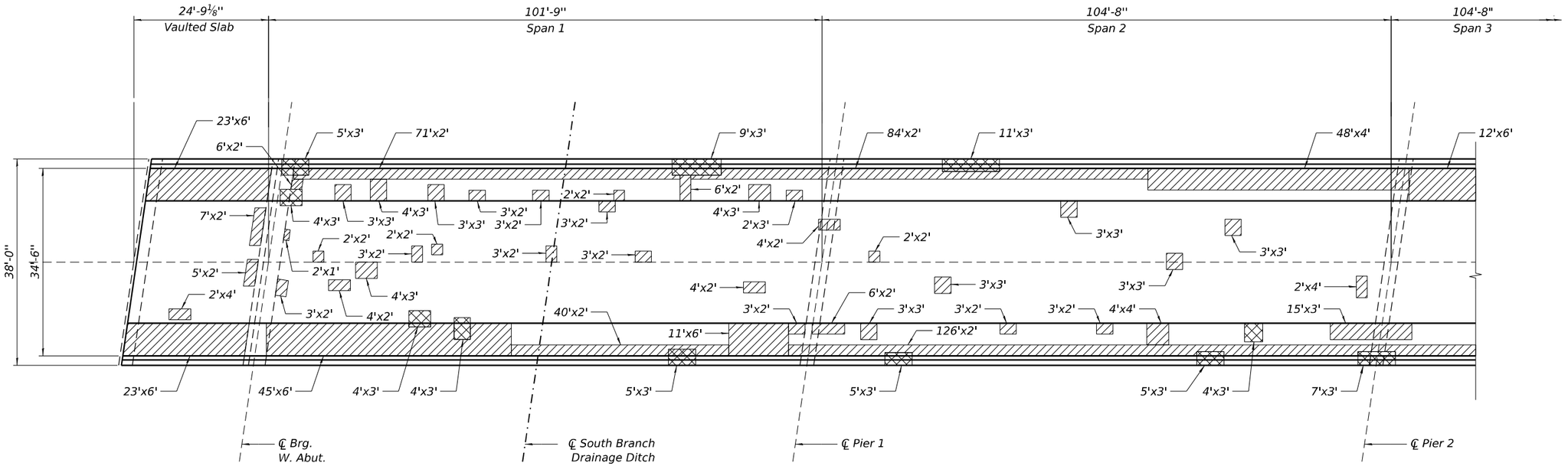
GARZA KARHOFF ENGINEERING, LLC

USER NAME =		DESIGNED -	RO	REVISED -
		CHECKED -	EG	REVISED -
PLOT SCALE =		DRAWN -	RO	REVISED -
PLOT DATE =		CHECKED -	EG	REVISED -

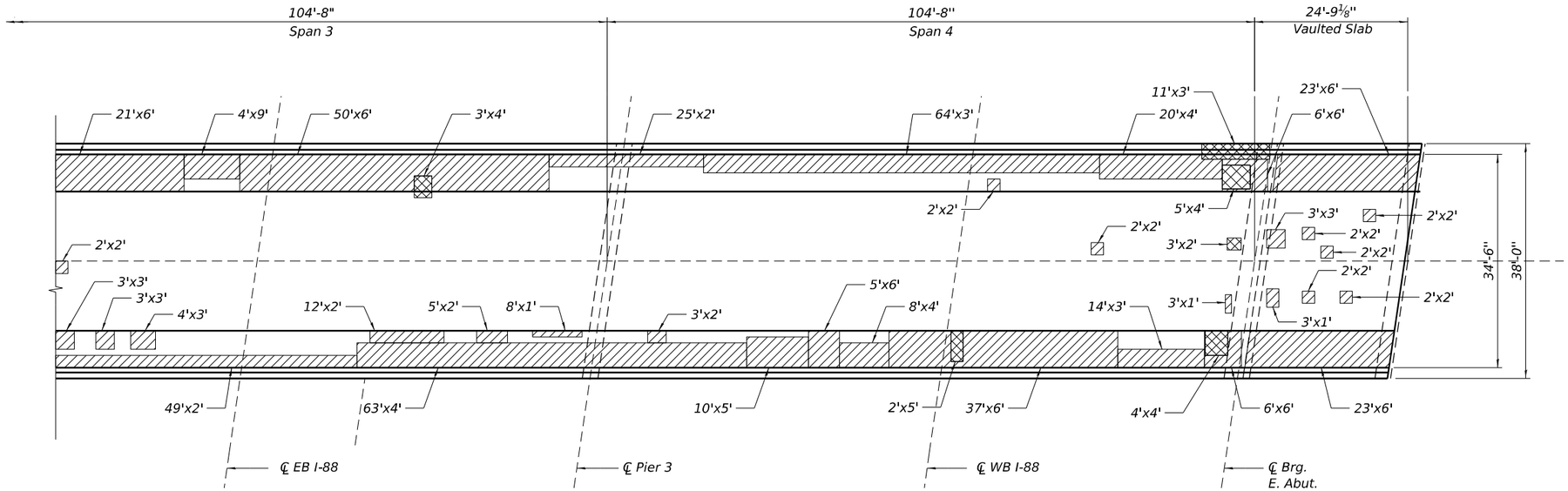
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DECK SECTIONS
STRUCTURE NO. 098-0055
SHEET 3 OF 10 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	SEC (195-1HB-1)BDR	WHITESIDE	22	10
		CONTRACT NO. 64S28		
	ILLINOIS	FED. AID PROJECT		



PLAN



PLAN

LEGEND

Partial Depth Deck Patching

Full Depth Deck Patching

BILL OF MATERIAL

Item	Unit	Total
Polymerized Hot-Mix Asphalt Surface Course, Stone Matrix Asphalt, 9.5, Mix "C", N50	Ton	217
Full Lane Sealant Waterproofing System	Sq. Yd.	1,764
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	32
Deck Slab Repair (Partial Depth)	Sq. Yd.	397

GARZA KARHOFF ENGINEERING, LLC

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DECK REPAIR PLANS AND DETAILS
STRUCTURE NO. 098-0055

SHEET 4 OF 10 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	(195-1HB-1)BDR	WHITESIDE	22	11
		CONTRACT NO. 64S28		
		ILLINOIS	FED. AID PROJECT	

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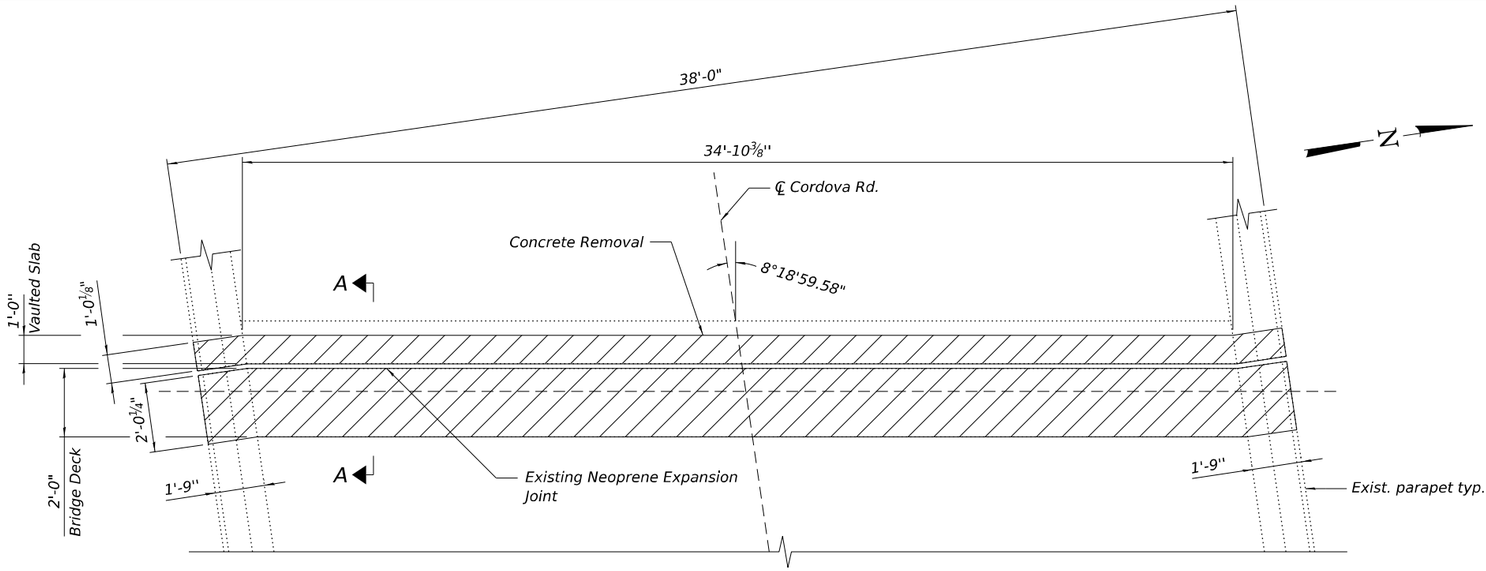
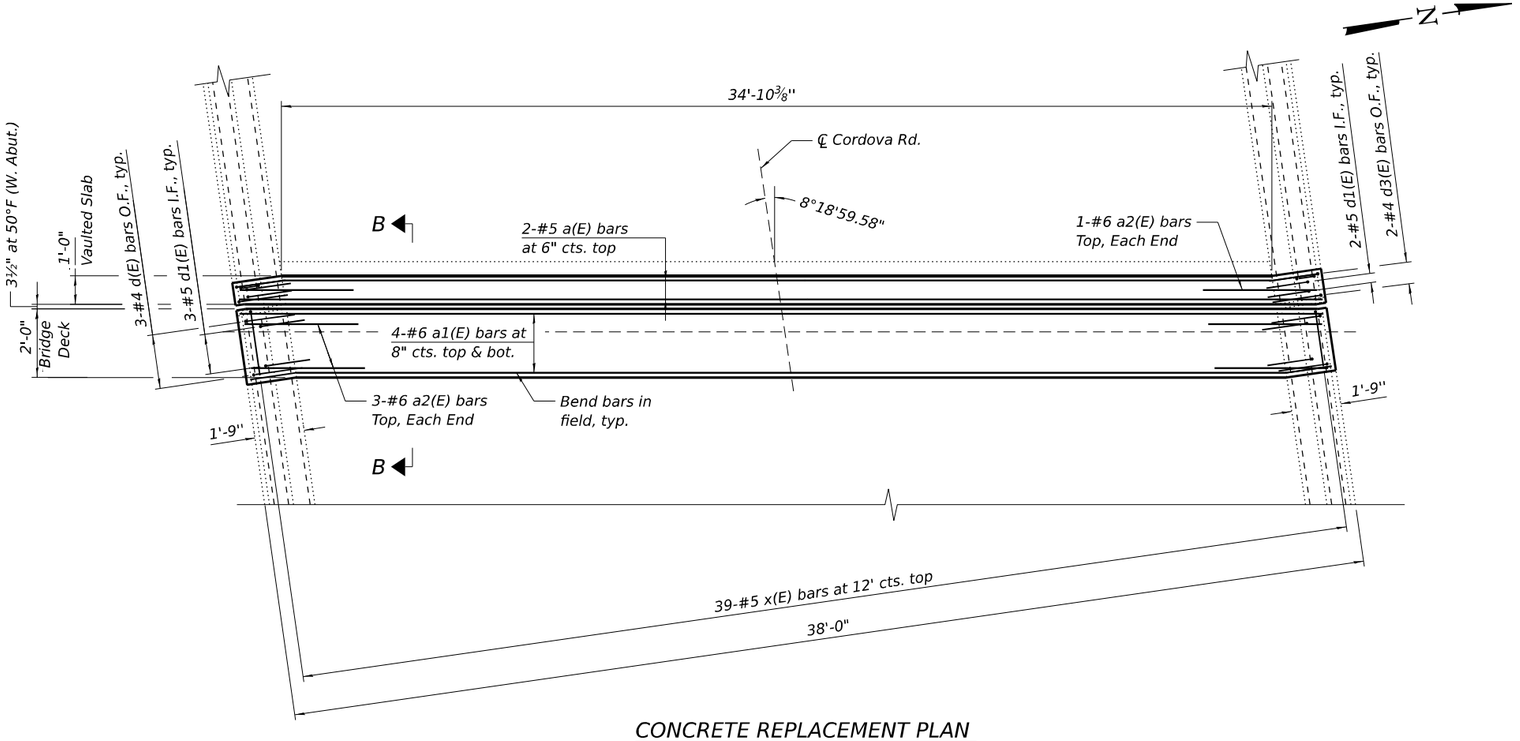


CONCRETE REMOVAL PLAN

(West Abutment shown, East Abutment Similar)



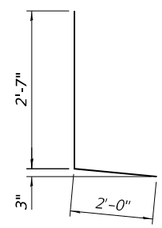
CONCRETE REPLACEMENT PLAN

(West Abutment shown, East Abutment Similar)

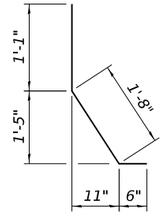
BILL OF MATERIAL FOR TWO JOINTS

Bar	No.	Size	Length	Shape
a(E)	4	#5	38'-2"	
a1(E)	16	#6	38'-2"	
a2(E)	16	#6	4'-0"	
d(E)	12	#4	4'-7"	
d1(E)	20	#5	3'-3"	
d2(E)	4	#4	2'-1"	
d3(E)	8	#4	5'-9"	
x(E)	78	#5	2'-3"	

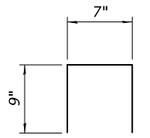
Item	Unit	Total
Concrete Removal	Cu. Yd.	8.2
Concrete Superstructure	Cu. Yd.	8.5
Protective Coat	Sq. Yd	28
Reinforcement Bars, Epoxy Coated	Pound	1,500



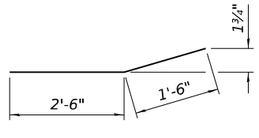
BAR d(E)



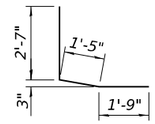
BAR d1(E)



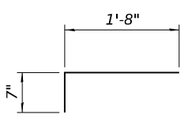
BAR d2(E)



BAR a2(E)



BAR d3(E)



BAR x(E)

NOTES:

1. I.F. denotes Inside Face. O.F. denotes Outside Face.
2. x(E) bar spacing measured along skew.
3. See Sheet 6 of 10 for Section A-A, Section B-B and sections through Parapets.

GARZA KARHOFF ENGINEERING, LLC	USER NAME =	DESIGNED - RO	REVISED -	
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	PLOT DATE =	CHECKED - EG	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXPANSION JOINT REPAIRS
STRUCTURE NO. 098-0055
SHEET 5 OF 10 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	(195-1HB-1)BDR	WHITESIDE	22	12
		CONTRACT NO. 64S28		
		ILLINOIS	FED. AID PROJECT	

MODEL: Default
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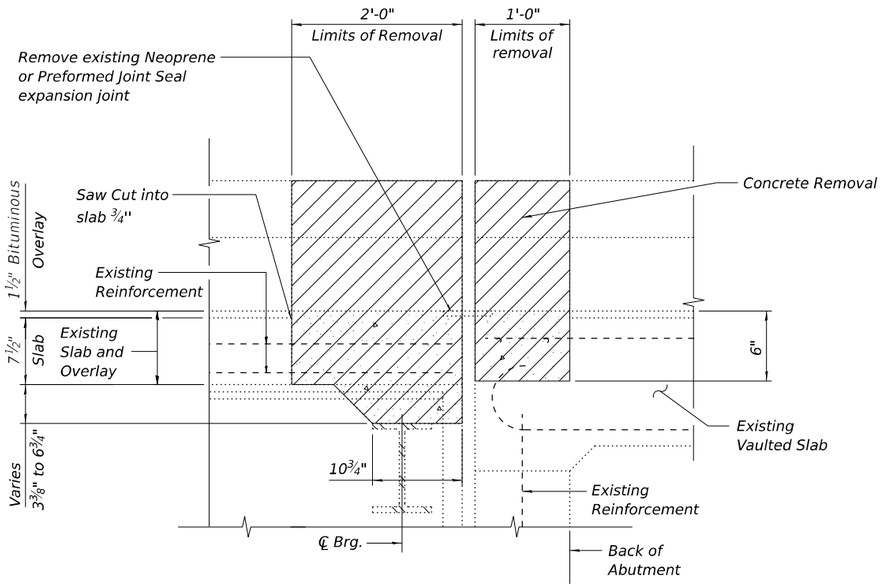
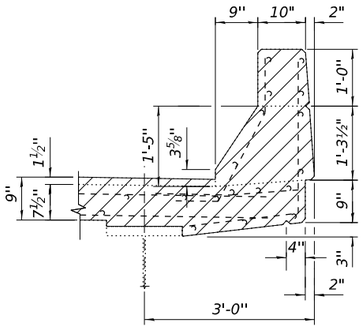
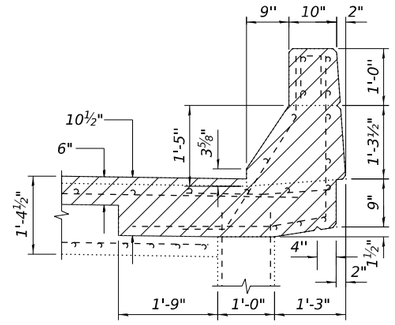


SECTION A-A



EXISTING PARAPET SECTION



EXISTING VAULTED SLAB PARAPET SECTION

Notes:

1. Existing reinforcement bars extending into the concrete removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be repaired or replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.

2. Existing reinforcement bars in the concrete removal area parallel to the expansion joints shall be removed.

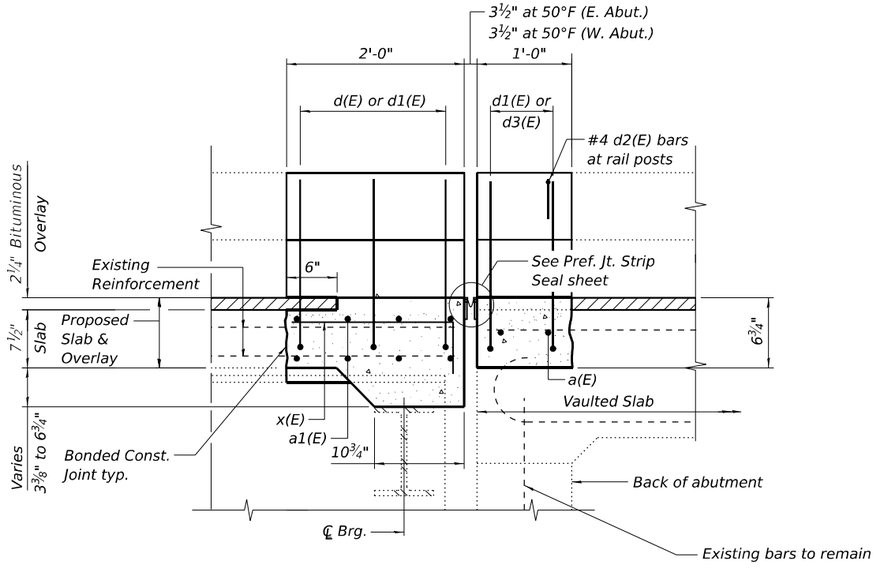
3. Removal and disposal of the existing expansion joints will not be paid for separately, but shall be included with the cost of Concrete Removal.

4. If existing name plate falls within the limits of Concrete Removal, it shall be removed and reinstalled in its original location in accordance with IDOT Std. 515001. Cost included with Concrete Superstructure.

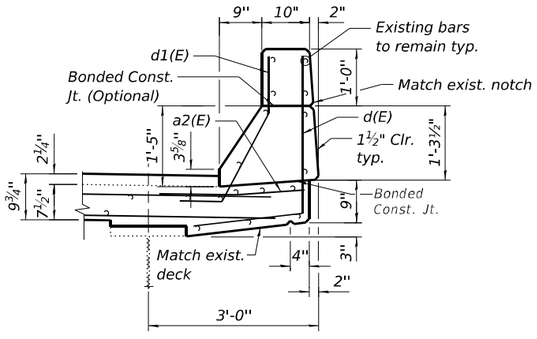
5. If existing guardrail and/or end shoe fall within the limits of Concret Removal, they shall be removed and reinstalled in their original location in accordance with District 1 Std. BM-21. Cost included with Concrete Superstructure.

6. The Contractor shall exercise extreme care with the existing conduits in sections of the parapet to be removed and to protect and support the conduit. The Contractor will be required to repair any damage done to the conduit to the satisfaction of the Engineer, at no additonal cost to the Department. No splicing will be allowed to any cable damage resulting from this work, instead the Contractor will be required to repair the entire span of any damaged cable at no additional cost to the Department.

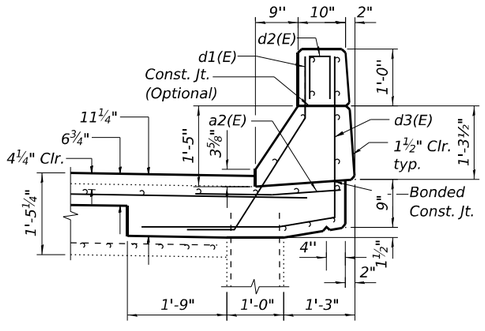
7. See Sheet 5 of 10 for Bar Bending Details and Bill of Material.



SECTION B-B



PROPOSED PARAPET SECTION



PROPOSED VAULTED SLAB PARAPET SECTION

GARZA KARHOFF ENGINEERING, LLC

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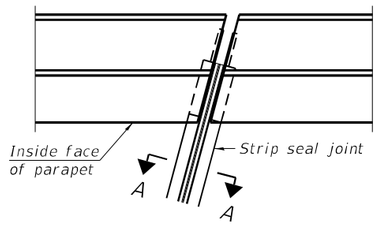
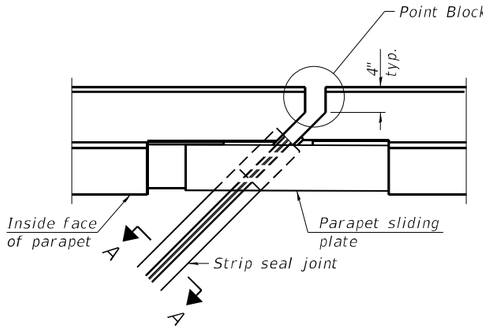
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXPANSION JOINT REPAIR DETAILS
STRUCTURE NO. 098-0055
SHEET 6 OF 10 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	(195-1HB-1)BDR	WHITESIDE	22	13
		CONTRACT NO. 64S28		
	ILLINOIS	FED. AID PROJECT		

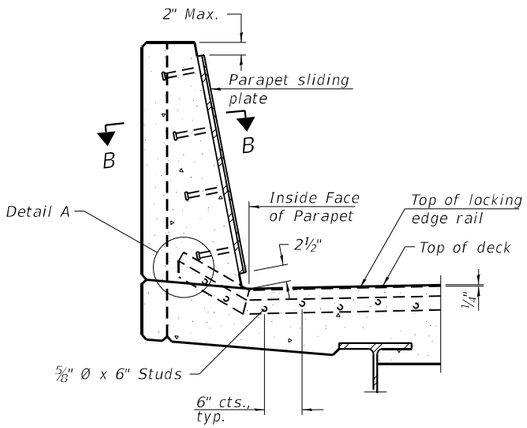


FOR SKEWS ≤ 30°



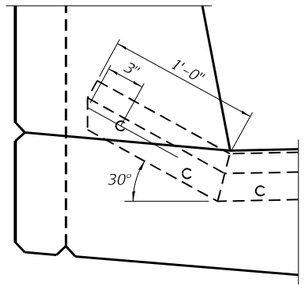
FOR SKEWS > 30°

PLAN AT PARAPET

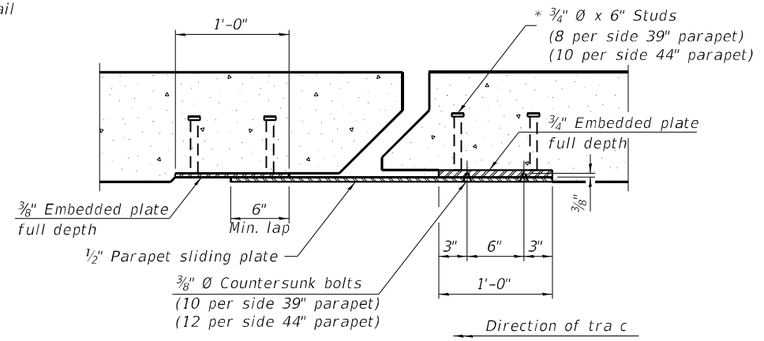


SECTION AT PARAPET

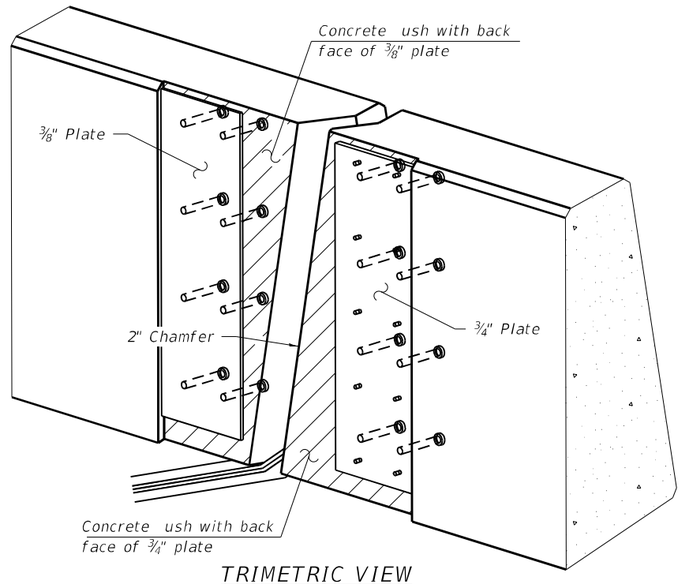
(Skews > 30° shown. Skews ≤ 30° similar except as shown in plan view.)



DETAIL A



SECTION B-B



TRIMETRIC VIEW

(Showing embedded plates only)

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of ¼". The con guration of the strip seal shall match the con guration of the locking edge rails. Open or "webbed" strip seal gland con gurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The locking edge rails depicted are con gured for typical applications and are conceptual only. The actual con guration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they t 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.

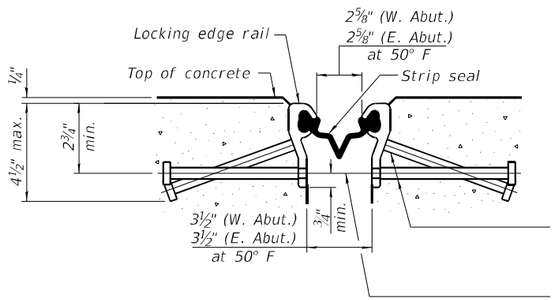
All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Speci cations.

The Maximum space between locking edge rail segments shall be 3/16" and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.

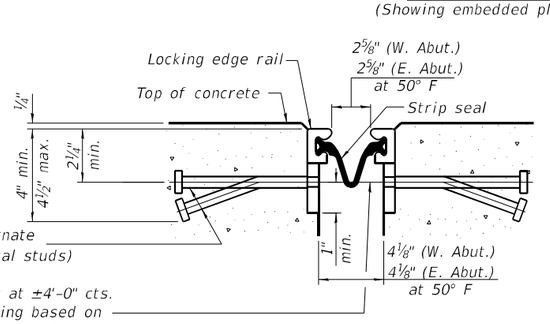
Cost of parapet sliding plates, embedded plates, and anchorage studs included with Preformed Joint Strip Seal.

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 di erent 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.



SHOWING ROLLED RAIL JOINT



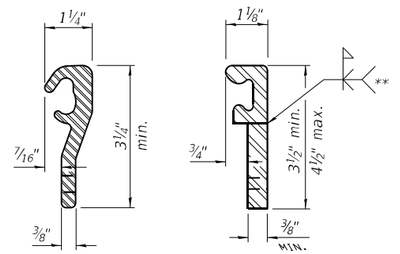
SHOWING WELDED RAIL JOINT

* ⅝" Ø x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

⅜" ϕ threaded rods in 7/16" ϕ holes at ±4'-0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed o ush with the plates after concrete is set.

SECTION A-A

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

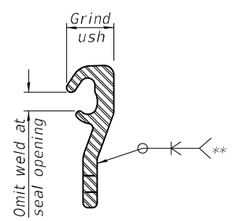


ROLLED (EXTRUDED) RAIL

WELDED RAIL

LOCKING EDGE RAILS

** Back gouge not required if complete joint penetration is veri ed 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	74

EJ-SS

5-15-2023

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PLOT DATE =		CHECKED - LM EG	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL
STRUCTURE NO. 098-0055
SHEET 7 OF 10 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	SEC (195-1HB-1)BDR	WHITESIDE	22	14
		CONTRACT NO. 64S28		
	ILLINOIS FED. AID PROJECT			

MODEL: Default
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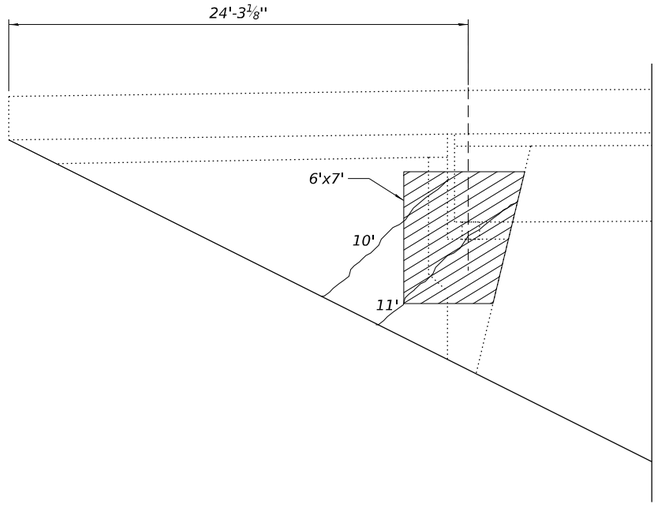
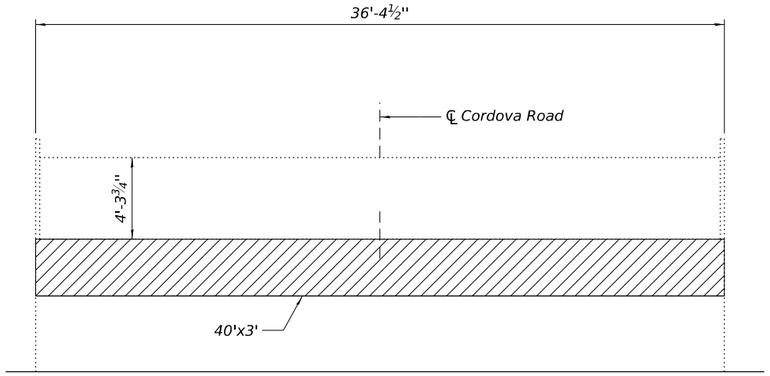
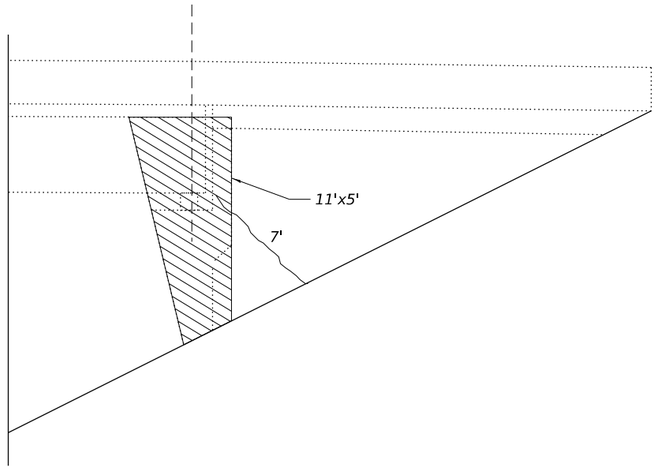
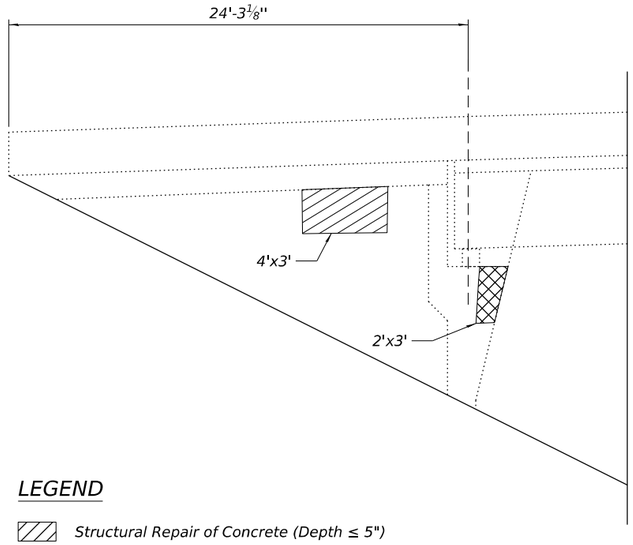
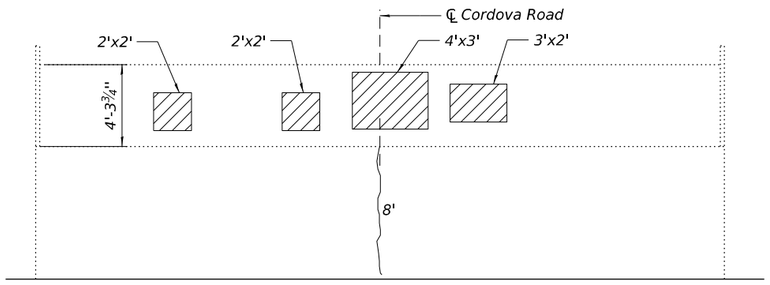


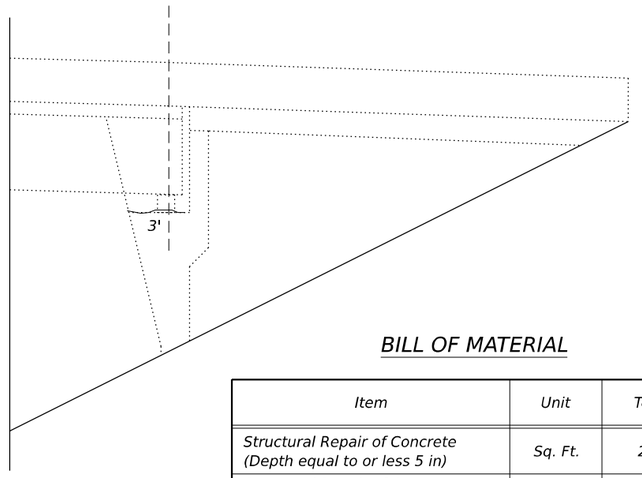




EAST ABUTMENT







WEST ABUTMENT

LEGEND

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

BILL OF MATERIAL

Item	Unit	Total
Structural Repair of Concrete (Depth equal to or less 5 in)	Sq. Ft.	255
Structural Repair of Concrete (Depth greater than 5 in)	Sq. Ft.	6
Concrete Sealer	Sq. Ft.	146
Epoxy Crack Injection	Foot	39

MODEL: Default
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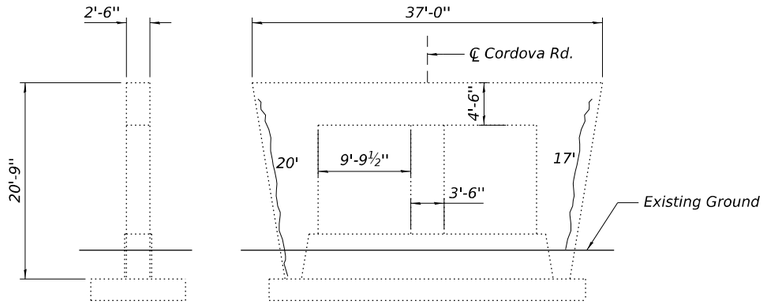
PLOT SCALE =		DRAWN -	RO	REVISED -
PLOT DATE =		CHECKED -	EG	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

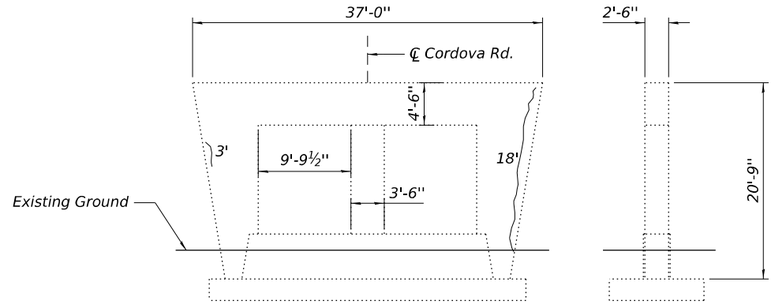
ABUTMENT REPAIR DETAILS
STRUCTURE NO. 098-0055
SHEET 8 OF 10 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	SEC (195-1HB-1)BDR	WHITESIDE	22	15
		CONTRACT NO. 64S28		
	ILLINOIS	FED. AID PROJECT		



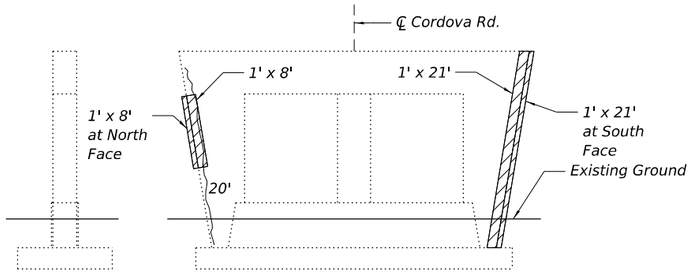
PIER 1

(West Face)



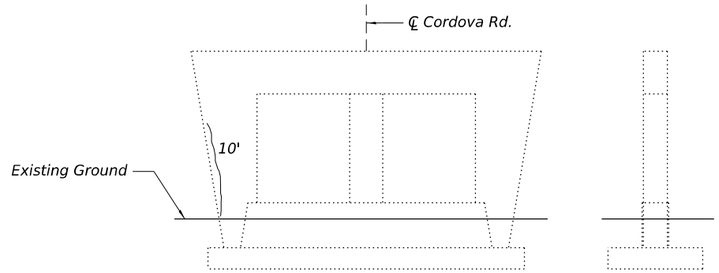
PIER 1

(East Face)



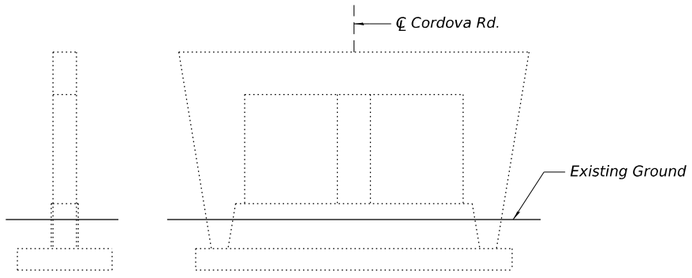
PIER 2

(West Face)



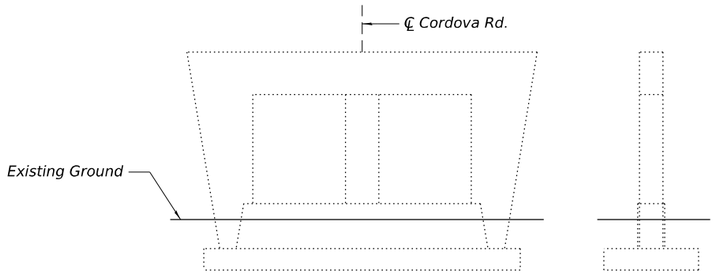
PIER 2

(East Face)



PIER 3

(West Face)



PIER 3

(East Face)

LEGEND

Structural Repair of Concrete (Depth ≤ 5")

Epoxy Crack Injection

BILL OF MATERIAL

Item	Unit	Total
Structural Repair of Concrete (Depth equal to or less 5 in)	Sq. Ft.	29
Epoxy Crack Injection	Foot	88

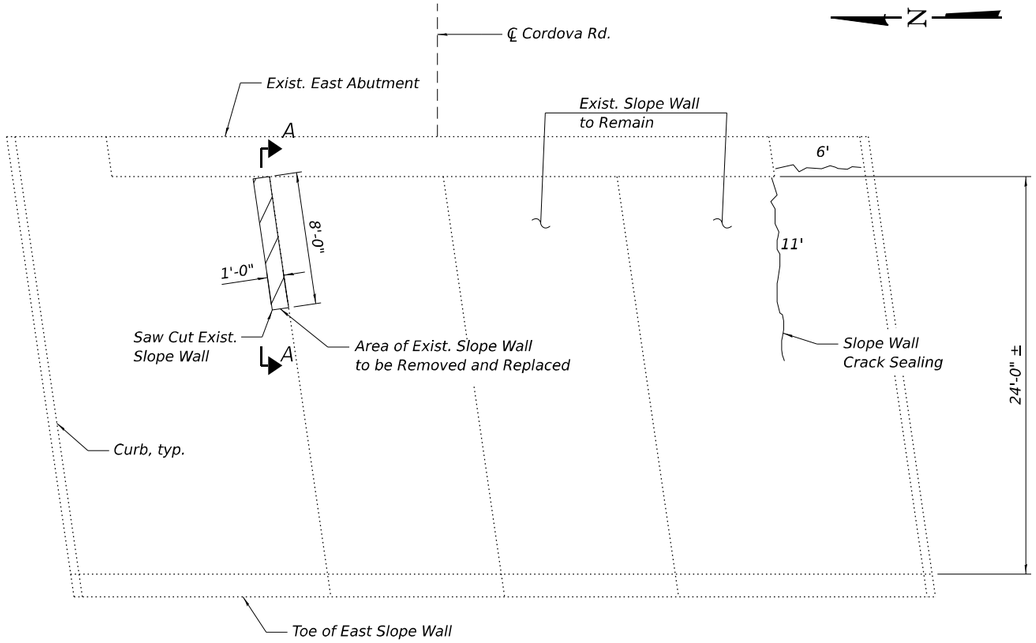
GARZA KARHOFF ENGINEERING, LLC

USER NAME =	DESIGNED - RO	REVISED -	
	CHECKED - EG	REVISED -	
PLOT SCALE =	DRAWN - RO	REVISED -	
PLOT DATE =	CHECKED - EG	REVISED -	

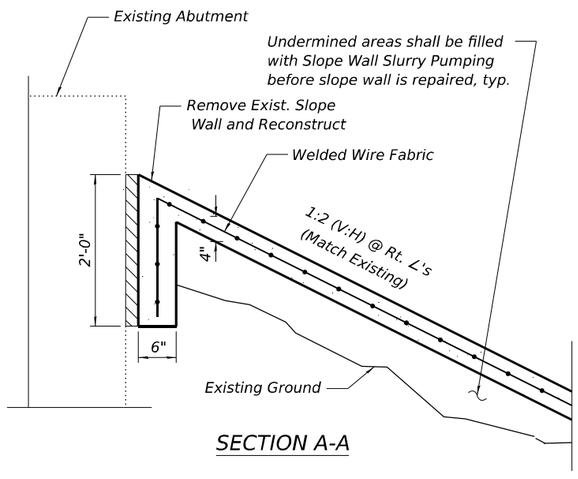
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER REPAIR DETAILS
STRUCTURE NO. 098-0055
SHEET 9 OF 10 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	SEC (195-1HB-1)BDR	WHITESIDE	22	16
		CONTRACT NO. 64S28		
	ILLINOIS	FED. AID PROJECT		



EAST SLOPE WALL REPAIR PLAN



SECTION A-A

NOTES

1. Slope wall shall be reinforced with welded wire fabric, 6in. x 6in. - W4.0 x W4.0, weighing 58 lbs. per 100 sq. ft.

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Slope Wall Repair	Sq. Yd.	1
Slope Wall Crack Sealing	Foot	17

MODEL: Default
FILE NAME: F:\2097-TR01-2024-P1_PTB 213-030 Various Bridge Rehab\WO 01 - 64528 Cordova Rd over I-88\05 CADD\Structure\Sheets\D264528-sht-098-0055-10-SlopeWallRepairDet.dgn

3/24/2025 11:36:07 AM

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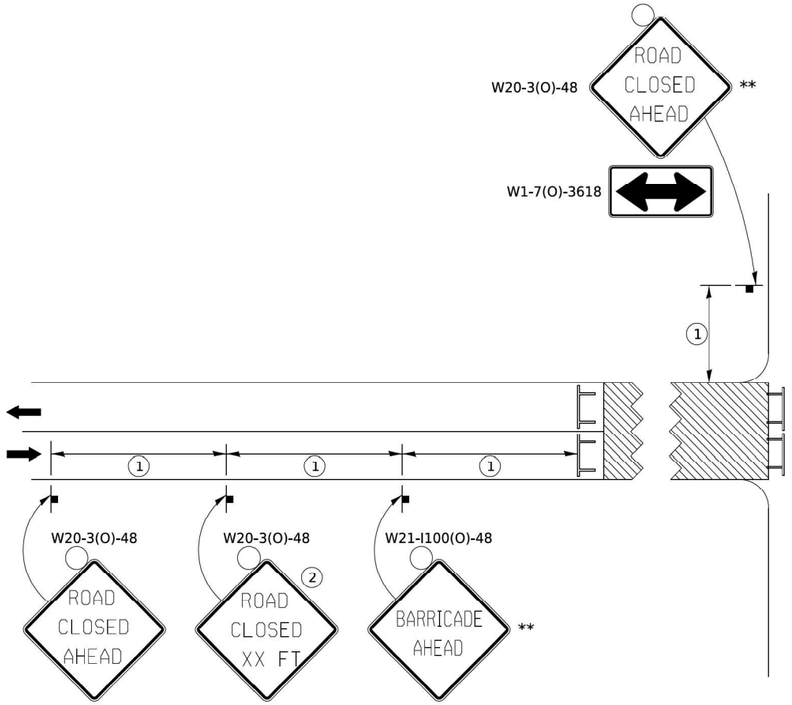
USER NAME =		DESIGNED -	RO	REVISED -
		CHECKED -	EG	REVISED -
PLOT SCALE =		DRAWN -	RO	REVISED -
PLOT DATE =		CHECKED -	EG	REVISED -

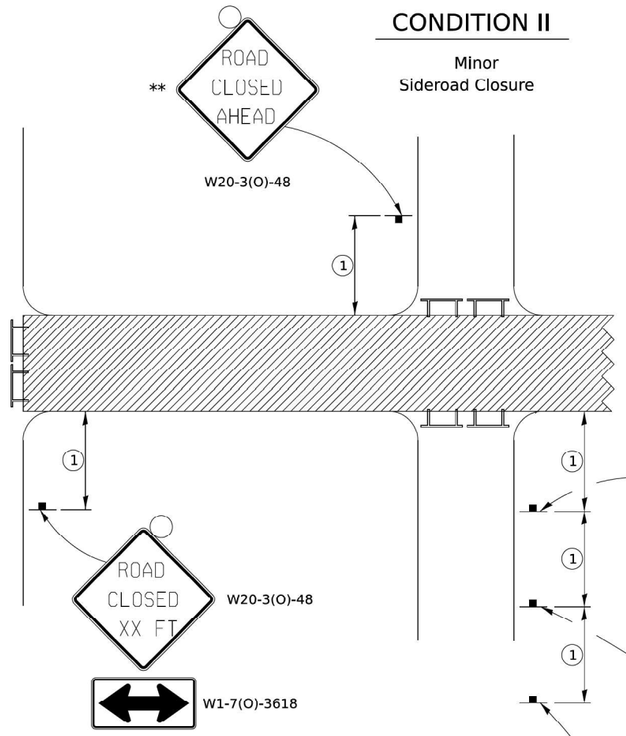
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

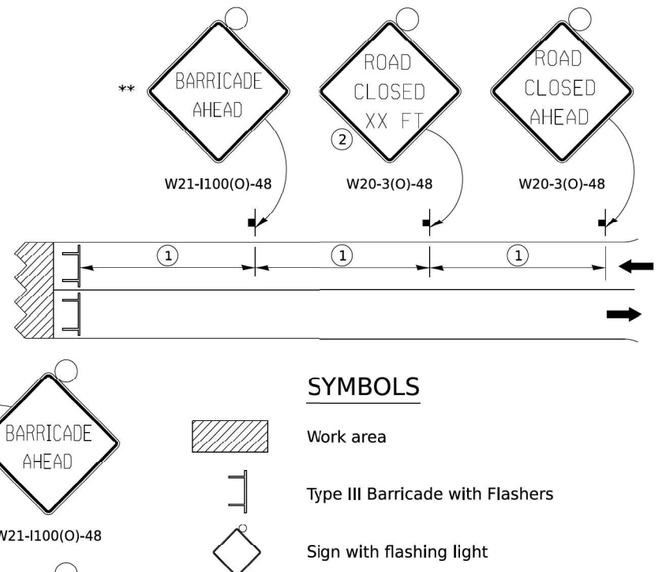
SLOPE WALL REPAIR DETAILS
STRUCTURE NO. 098-0055
SHEET 10 OF 10 SHEETS

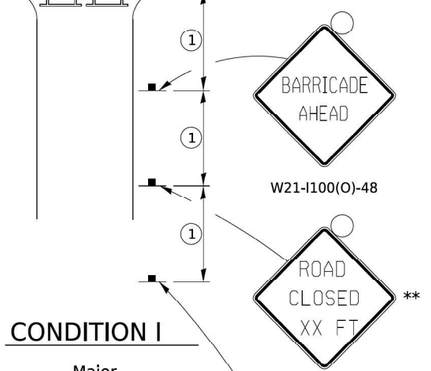
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	SEC (195-1HB-1)BDR	WHITESIDE	22	17
		CONTRACT NO. 64S28		
	ILLINOIS	FED. AID PROJECT		

TRAFFIC CONTROL FOR ROAD CLOSURE









SYMBOLS

- Work area
- Type III Barricade with Flashers
- Sign with flashing light

GENERAL NOTES

Longitudinal dimensions may be adjusted to fit field conditions.

Side roads requiring all three signs as shown in CONDITION I (Major Sideroad Closure), shall be listed in the special provision.

** Where local access is to be maintained, barricades are to be set up as shown in "Road Closed To Thru Traffic". Type III Barricades and R11-2-4830 signs shall be as shown in "Road Closed To All Traffic" detail on Highway Standard 701901.

All dimensions are in inches unless otherwise shown.

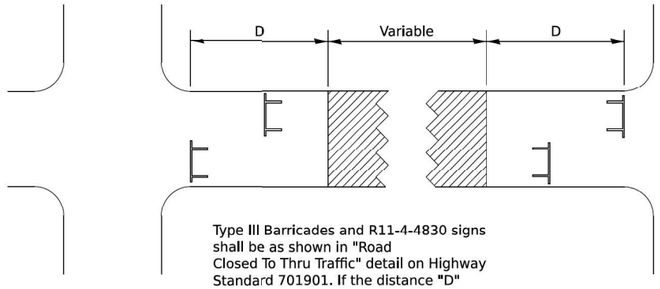
(1)

SIGN SPACING TABLE	
Posted Speed	Sign Spacing
45 MPH and above	500'
Below 45 MPH	250'

(2)

SIGN LEGEND	
Posted Speed Limit	Distance
45 MPH and above	1000'
Below 45 MPH	500'

ROAD CLOSED TO THRU TRAFFIC BARRICADE SET UP



Type III Barricades and R11-4-4830 signs shall be as shown in "Road Closed To Thru Traffic" detail on Highway Standard 701901. If the distance "D" exceeds 2000' an additional set of barricades and R11-4-4830 shall be placed at each end of the work area.

40.1

TYPICAL APPLICATION FOR ROAD CLOSURE

MODEL: Default
FILE NAME: P:\2097-TR01-2024-P1_PTB 213-030 Various Bridge Rehab\WO 01 - 64S28 Cordova Rd over I-88\05 CADD\Civil\Models\D2864S28-border.dgn

USER NAME = Amalia.Baymundo	DESIGNED - AMB	REVISED -
	DRAWN - AMB	REVISED -
	CHECKED - PK	REVISED -
PLOT DATE = 3/7/2025	DATE - 3/19/2025	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

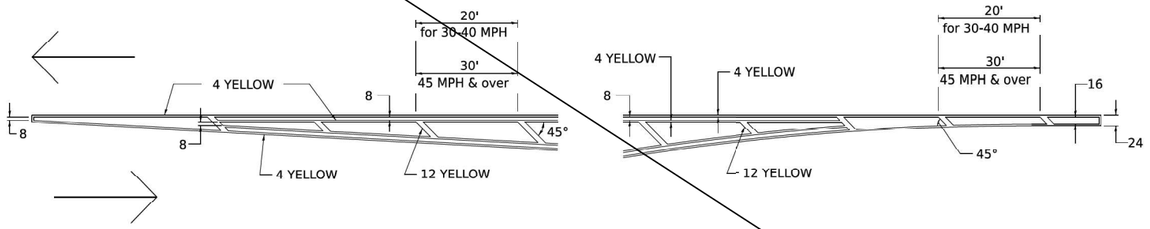
I-88 UNDER CORDOVA RD
REGION 2 / DISTRICT 2 STANDARDS

SCALE: | SHEET #### OF #### SHEETS | STA. | TO STA.

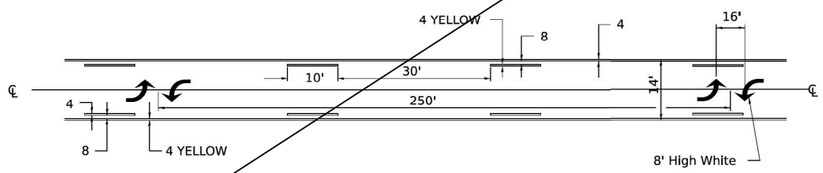
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	(195-1HB-1)BDR	WHITESIDE	22	18
		CONTRACT NO. 64S28		
	ILLINOIS	FED. AID PROJECT		

TYPICAL PAVEMENT MARKINGS

TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN AT LEFT TURN LANE

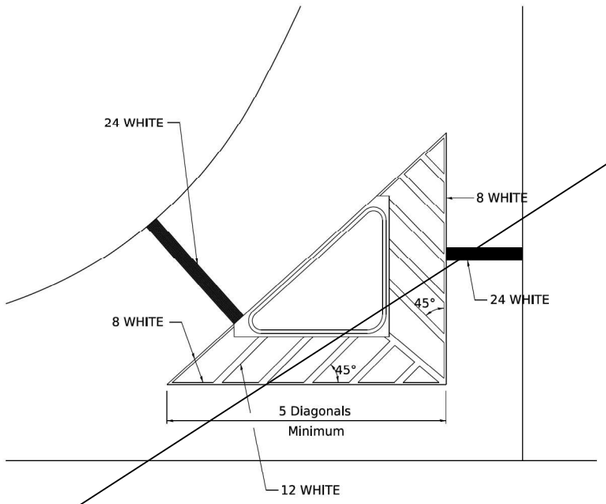


MEDIAN PAVEMENT MARKING



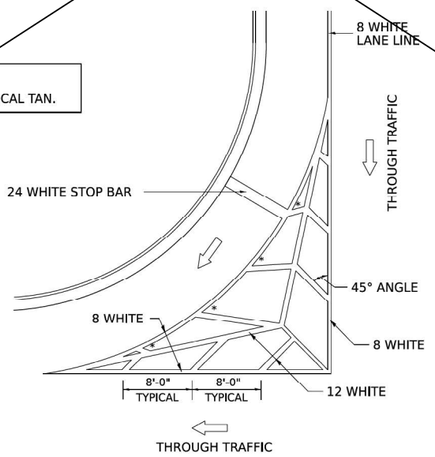
** ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

TYPICAL ISLAND OFFSET SHOULDER WIDTH



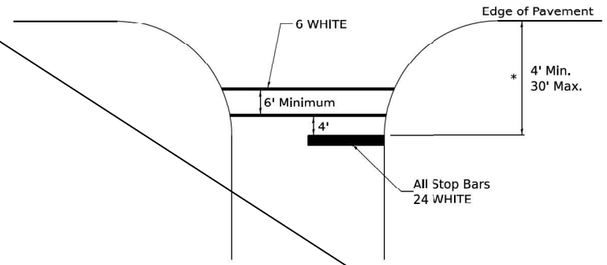
TYPICAL MARKING FOR PAINTED ISLANDS

NOTE:
* 45° TO LOCAL TAN.



STANDARD CROSSWALK MARKING

See Schedules for Locations



* Distance to the nearest edge of the intersecting roadway in the absence of a marked crosswalk.

SHEET 1 OF 4 41.1

MODEL: Default
FILE NAME: F:\2097-TR01-2024-P1_PTB 213-030 Various Bridge Rehab\WO 01 - 64S28 Cordova Rd over I-88\05 CADD\Civil\Models\D2864S28-border.dgn

GARZA KARHOFF ENGINEERING, LLC

USER NAME = Amalia.Baymundo	DESIGNED - AMB	REVISED -	
	DRAWN - AMB	REVISED -	
	CHECKED - PK	REVISED -	
PLOT DATE = 4/29/2025	DATE - 4/29/2025	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-88 UNDER CORDOVA RD
REGION 2 / DISTRICT 2 STANDARDS

SCALE: | SHEET 2 OF 5 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	(195-1HB-1)BDR	WHITESIDE	22	19
		CONTRACT NO. 64S28		
	ILLINOIS FED. AID PROJECT			

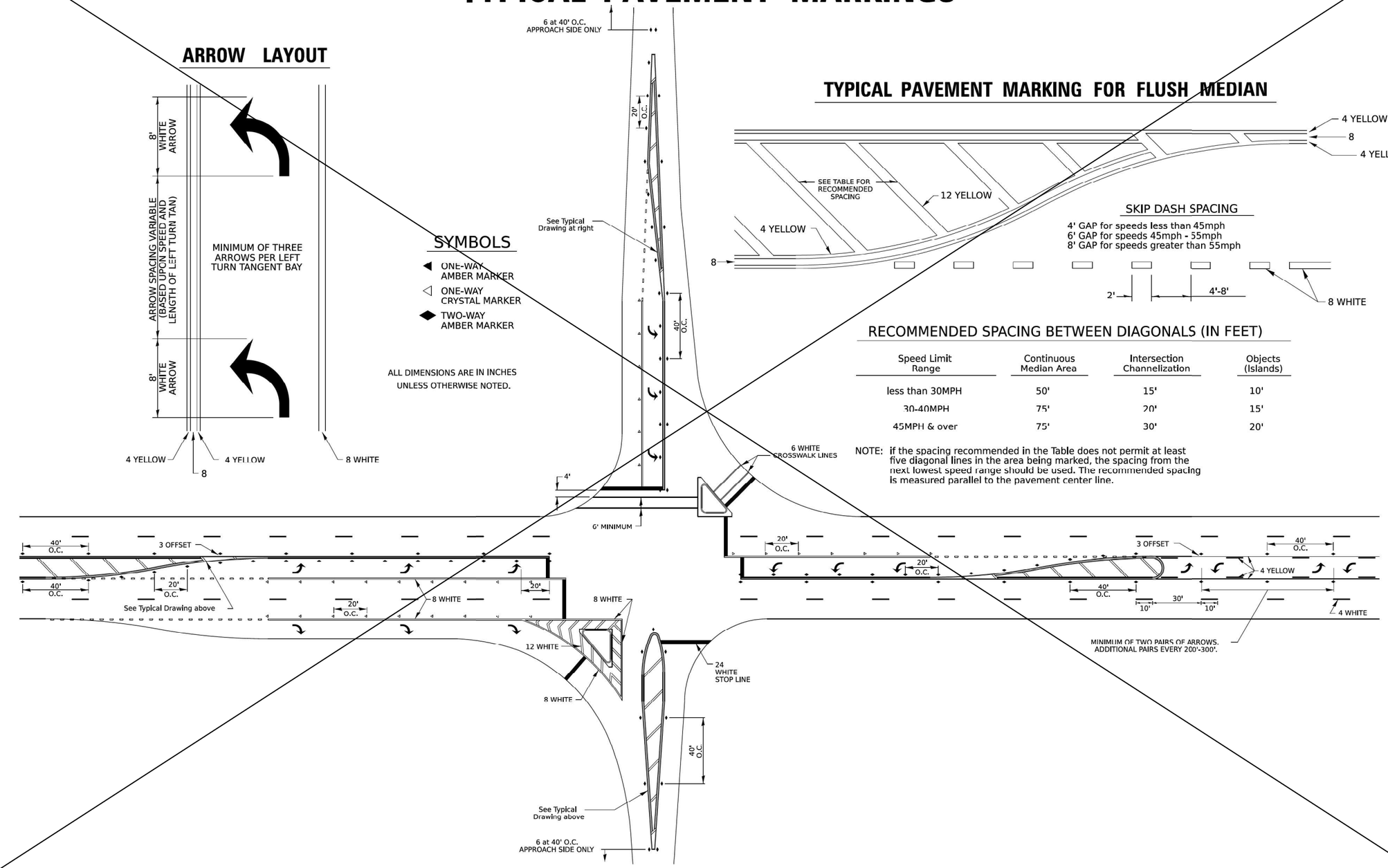
TYPICAL PAVEMENT MARKINGS

ARROW LAYOUT

SYMBOLS

- ONE-WAY AMBER MARKER
- ONE-WAY CRYSTAL MARKER
- TWO-WAY AMBER MARKER

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.



TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN

SKIP DASH SPACING

4' GAP for speeds less than 45mph
6' GAP for speeds 45mph - 55mph
8' GAP for speeds greater than 55mph

RECOMMENDED SPACING BETWEEN DIAGONALS (IN FEET)

Speed Limit Range	Continuous Median Area	Intersection Channelization	Objects (Islands)
less than 30MPH	50'	15'	10'
30-40MPH	75'	20'	15'
45MPH & over	75'	30'	20'

NOTE: if the spacing recommended in the Table does not permit at least five diagonal lines in the area being marked, the spacing from the next lowest speed range should be used. The recommended spacing is measured parallel to the pavement center line.

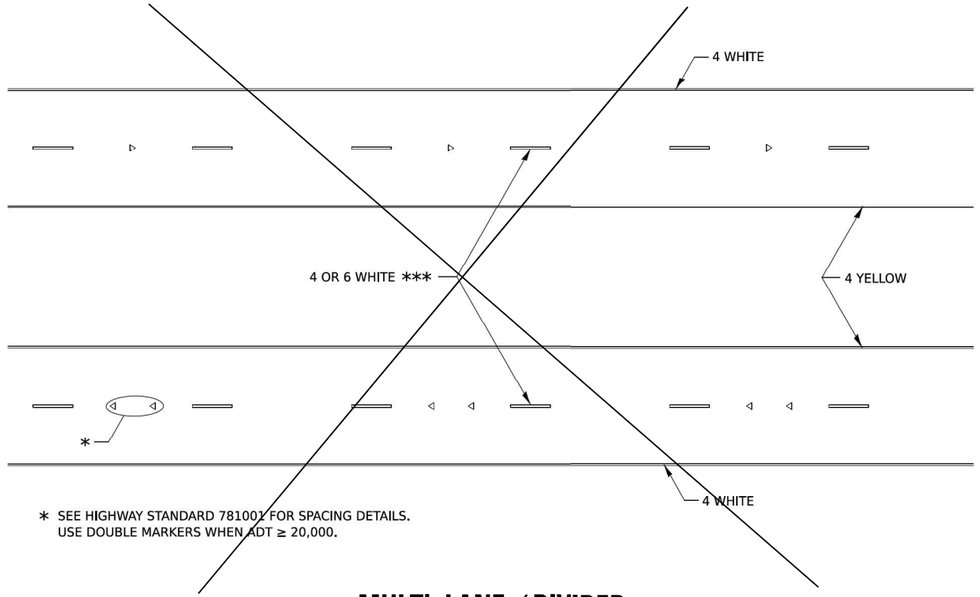
SHEET 2 OF 4 **41.1**

MODEL: Default
FILE NAME: F:\2097-TR01-2024-P1_PTB 213-030 Various Bridge Rehab\WO 01 - 64S28 Cordova Rd over I-88\05 CADD\Civil\Models\D284S28-border.dgn

GARZA KARHOFF ENGINEERING, LLC	USER NAME = Amalia.Baymundo	DESIGNED - AMB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	I-88 UNDER CORDOVA RD REGION 2 / DISTRICT 2 STANDARDS
		DRAWN - AMB	REVISED -		
		CHECKED - PK	REVISED -		SCALE: SHEET 3 OF 5 SHEETS STA. TO STA.
	PLOT DATE = 4/29/2025	DATE - 4/29/2025	REVISED -		

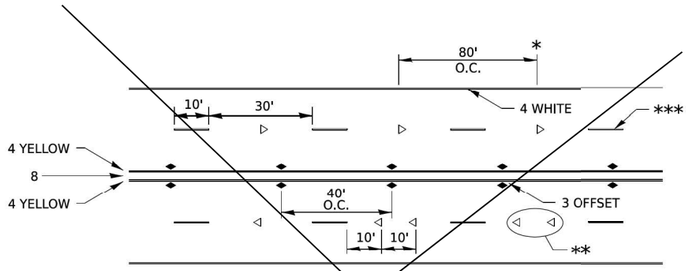
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	(195-1HB-1)BDR	WHITESIDE	22	20
		CONTRACT NO. 64S28		
	ILLINOIS FED. AID PROJECT			

TYPICAL PAVEMENT MARKINGS



* SEE HIGHWAY STANDARD 781001 FOR SPACING DETAILS.
USE DOUBLE MARKERS WHEN ADT ≥ 20,000.

MULTI–LANE / DIVIDED



* REDUCE TO 40' O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 MPH LOWER THAN POSTED SPEEDS.

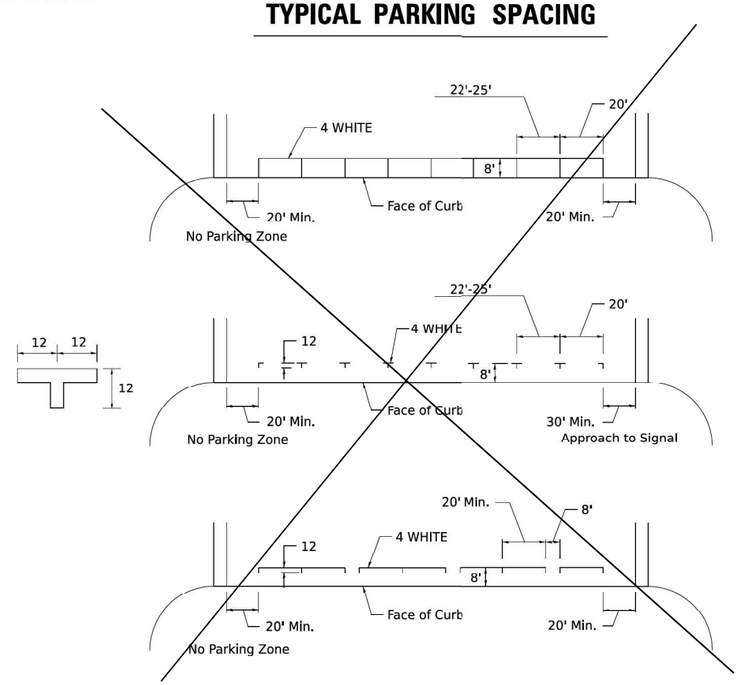
** USE DOUBLE MARKERS WHEN ADT ≥ 20,000

*** CENTERLINE SKIP DASH PAVEMENT MARKING SPEED LIMIT LESS THAN 40 MPH USE 4" LINE. SPEED LIMIT 40 MPH AND OVER USE 6" LINE.

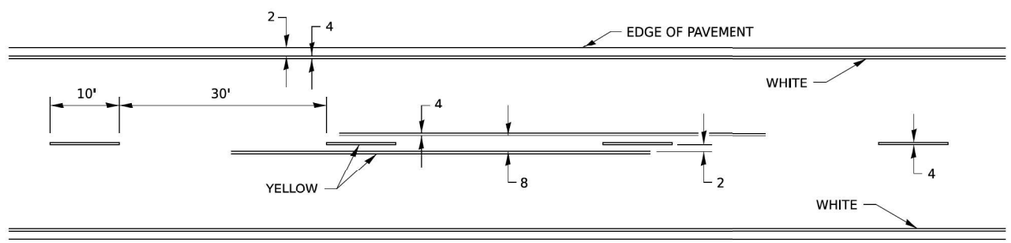
MULTI–LANE / UNDIVIDED & ONE WAY

(FOR MULTI-LANE UNDIVIDED HIGHWAYS USE THIS DETAIL NOT HIGHWAY STANDARD 781001)

TYPICAL PARKING SPACING



TYPICAL PAVEMENT MARKING FOR TWO LANE SECTION – NO PASSING ZONES



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GARZA KARHOFF ENGINEERING, LLC

USER NAME = Amalia.Baymundo	DESIGNED - AMB	REVISED -	
	DRAWN - AMB	REVISED -	
	CHECKED - PK	REVISED -	
PLOT DATE = 4/29/2025	DATE - 4/29/2025	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-88 UNDER CORDOVA RD
REGION 2 / DISTRICT 2 STANDARDS

SCALE: | SHEET 4 OF 5 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	(195-1HB-1)BDR	WHITESIDE	22	21
		CONTRACT NO. 64S28		
	ILLINOIS FED. AID PROJECT			

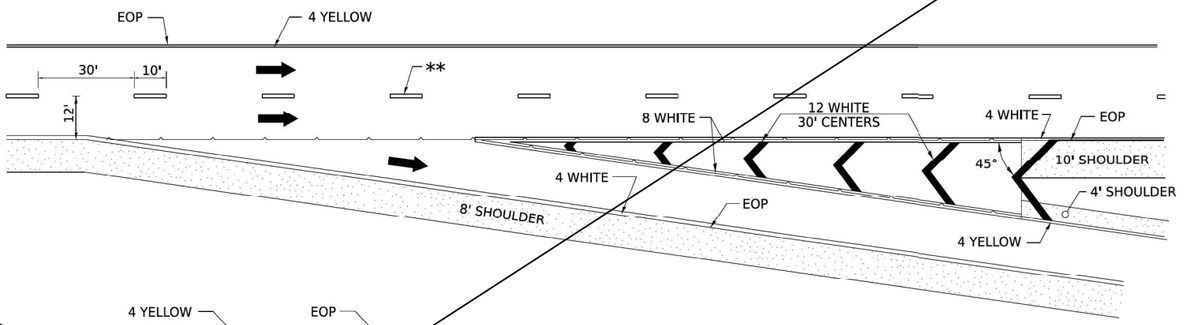
TYPICAL PAVEMENT MARKINGS

** 6" WHITE ON INTERSTATES, WHERE THE SPPED LIMIT IS 65 MPH, OR WHEN DIRECTED BY THE ENGINEER.

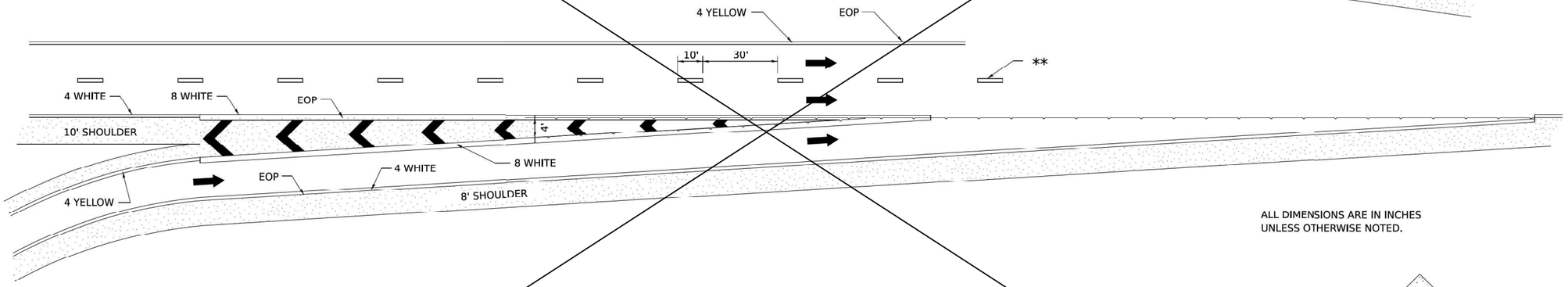
4" WIDE AT ALL OTHER LOCATIONS.

NOTE: GORE HATCHING PLACED ONLY WHEN SCHEDULED IN THE PLANS

EXIT RAMP

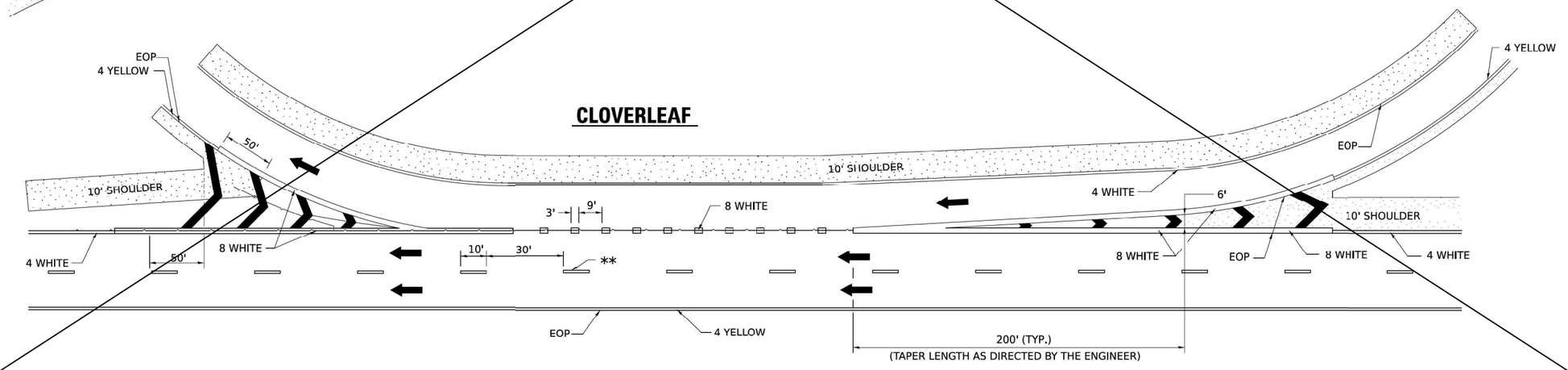


ENTRANCE RAMP



ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

CLOVERLEAF



SHEET 4 OF 4 41.1

MODEL: Default
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GARZA KARHOFF ENGINEERING, LLC	USER NAME = Amalia.Baymundo	DESIGNED - AMB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	I-88 UNDER CORDOVA RD REGION 2 / DISTRICT 2 STANDARDS
		DRAWN - AMB	REVISED -		
		CHECKED - PK	REVISED -		
	PLOT DATE = 4/29/2025	DATE - 4/29/2025	REVISED -		SCALE: SHEET 5 OF 5 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	(195-1HB-1)BDR	WHITESIDE	22	22
		CONTRACT NO. 64S28		
	ILLINOIS FED. AID PROJECT			