







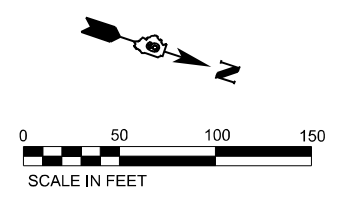


LEGEND

- | | | | |
|---|------------------------------------|---|----------------------------|
|  | SEEDING, CLASS 2 |  | EASTERN REDBUD (RED) |
|  | WOVEN WIRE FENCE, 4' FENCE SPECIAL |  | STAR MAGNOLIA (MAG) |
|  | AUTUMN BLAZE FREEMAN MAPLE (MPL) |  | PRAIRIFIRE CRABAPPLE (CRB) |
|  | RIVER BIRCH (BIR) |  | CRAPE MYRTLE (MYR) |



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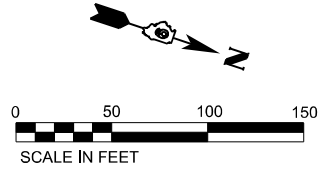
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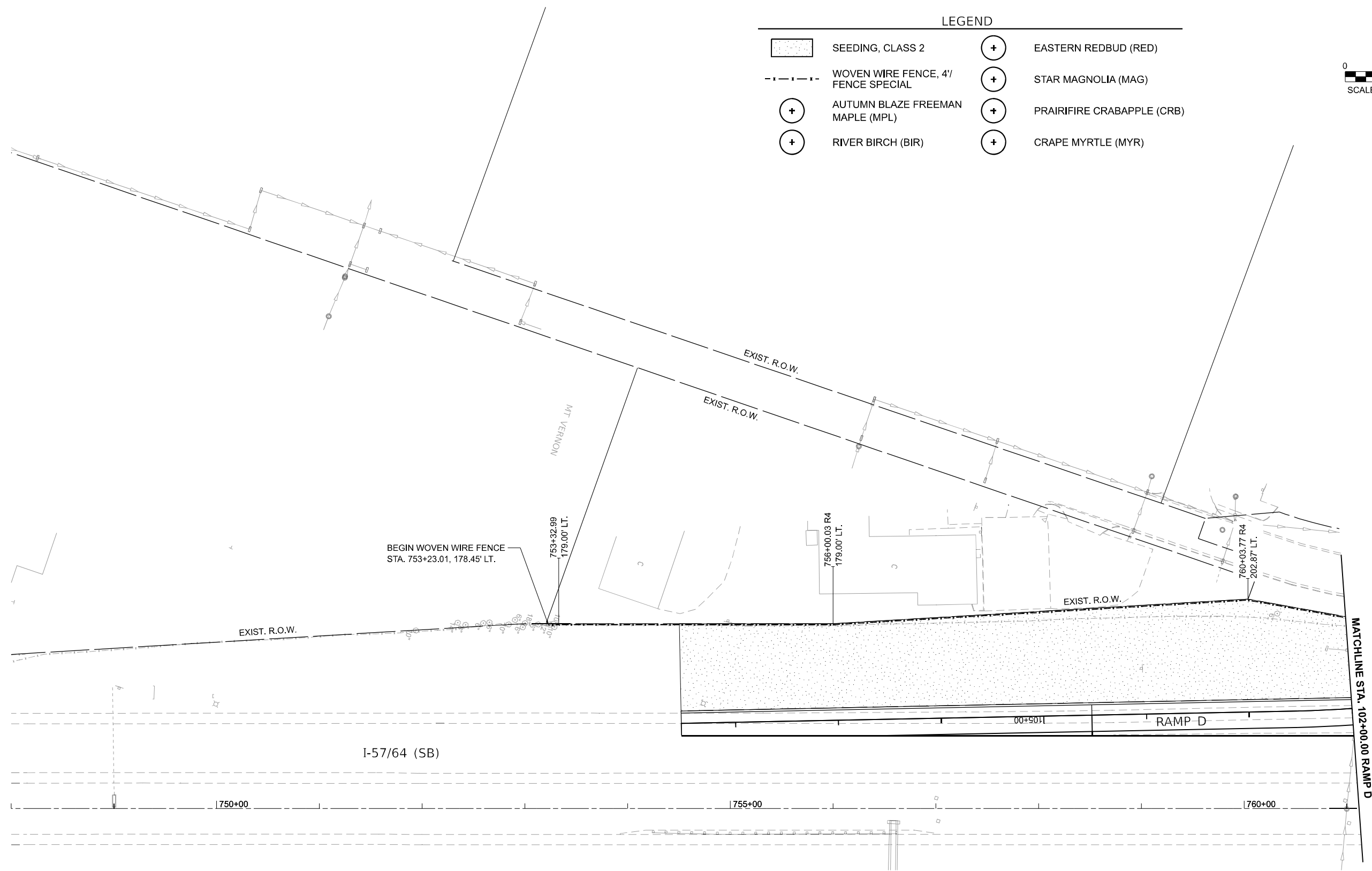
LANDSCAPING PLAN
RAMP C

SCALE: 1" = 50' SHEET 9 OF 11 SHEETS STA. 75+00 TO STA. 84+36.33

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	13.13-2(N-1,TS-1): (41-3)HB2	JEFFERSON	787	501
CONTRACT NO. 78483				
ILLINOIS FED. AID PROJECT				



LEGEND			
	SEEDING, CLASS 2		EASTERN REDBUD (RED)
	WOVEN WIRE FENCE, 4' FENCE SPECIAL		STAR MAGNOLIA (MAG)
	AUTUMN BLAZE FREEMAN MAPLE (MPL)		PRAIRIFIRE CRABAPPLE (CRB)
	RIVER BIRCH (BIR)		CRAPE MYRTLE (MYR)



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION









LANDSCAPING PLAN
RAMP D

SCALE: 1" = 50' SHEET 10 OF 11 SHEETS STA. 102+00 TO STA. 108+53.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	13.13-2(N-1,TS-1); (41-3)HB2	JEFFERSON	787	502
CONTRACT NO. 78483				
ILLINOIS FED. AID PROJECT				

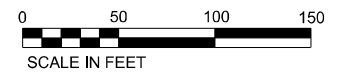
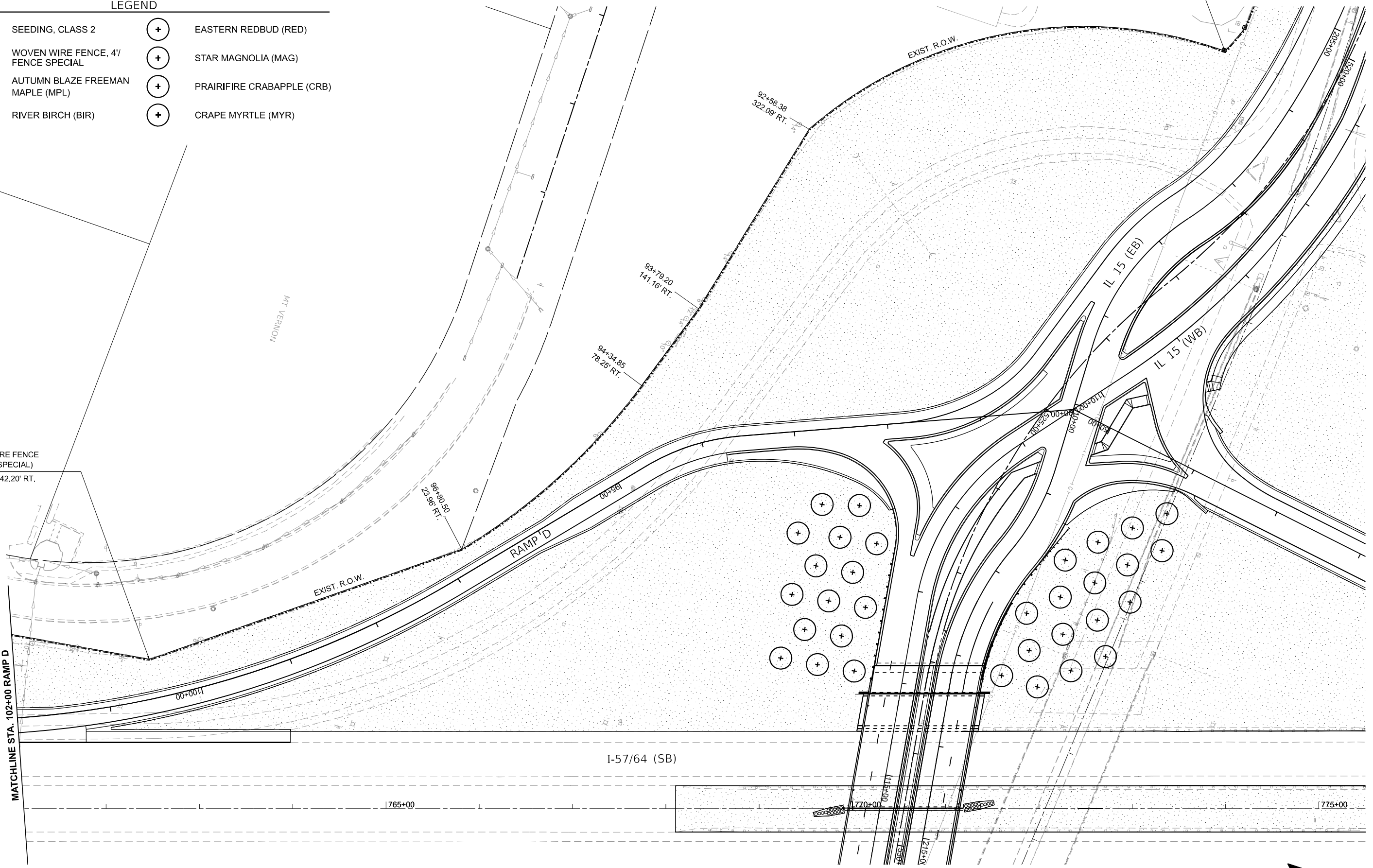
STA. 520+63.35, 118.89' RT.

LEGEND

-  SEEDING, CLASS 2
-  WOVEN WIRE FENCE, 4' / FENCE SPECIAL
-  AUTUMN BLAZE FREEMAN MAPLE (MPL)
-  RIVER BIRCH (BIR)
-  EASTERN REDBUD (RED)
-  STAR MAGNOLIA (MAG)
-  PRAIRIFIRE CRABAPPLE (CRB)
-  CRAPE MYRTLE (MYR)

END WOVEN WIRE FENCE
BEGIN FENCE (SPECIAL)
STA. 100+47.82, 42.20' RT.

MATCHLINE STA. 102+00 RAMP D



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LANDSCAPING PLAN
RAMP D

SCALE: 1" = 50' SHEET 11 OF 11 SHEETS STA. 90+00 TO STA. 102+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	13.13-2(N-1,TS-1): (41-3)HB2	JEFFERSON	787	503
CONTRACT NO. 78483				
ILLINOIS FED. AID PROJECT				

ELECTRICAL GENERAL NOTES:

1. ALL VEHICLE AND PEDESTRIAN SIGNAL HEADS SHALL HAVE 12" L.E.D. SECTIONS. ALL MOUNTING HARDWARE, SIGNAL POSTS, AND BASES SHALL BE UNPAINTED ALUMINUM. ALL BOLTS, SCREWS, NUTS AND WASHERS SHALL BE STAINLESS STEEL. ANTI-SEIZE PASTE COMPOUND SHALL BE USED ON ALL MOUNTING HARDWARE FIELD CONNECTIONS.
2. BACKPLATES SHALL BE ABS PLASTIC.
3. THE LOCATION OF MAST ARM SUPPORTS SHALL BE APPROVED BY THE ENGINEER BEFORE FOUNDATIONS ARE CONSTRUCTED. MAST ARM POLES SHALL BE LOCATED A MINIMUM OF 10 FEET FROM THE EDGE OF PAVEMENT OR 2 FEET FROM THE EDGE OF SHOULDER, WHICHEVER DISTANCE IS GREATER. IN CURBED SECTIONS, THE MAST ARM POLES SHALL BE LOCATED A MINIMUM OF 5 FEET FROM THE FACE OF CURB UNLESS OTHERWISE SHOWN ON THE PLANS. THESE DISTANCES ARE TO THE NEAR FACE OF THE MAST ARM POLE. ALL MAST ARMS AND POLES SHALL BE GALVANIZED.
4. ALL TRAFFIC CABLES SHALL BE #14 AWG STRANDED COPPER UNLESS OTHERWISE SPECIFIED.
5. ALL UTILITIES SHALL BE LOCATED IN THE FIELD PRIOR TO ANY ATTEMPT TO CONSTRUCT ANY COMPONENT OF THE VARIOUS TRAFFIC SIGNAL INSTALLATIONS.

INDEX OF SHEETS

- | | |
|---------|---|
| 1 | INDEX & GENERAL NOTES |
| 2 | TRAFFIC SIGNAL LEGENDS |
| 3 - 4 | SUMMARY OF QUANTITIES |
| 5 - 6 | TRAFFIC SIGNAL PLANS
VETERANS MEMORIAL DR AT RAMPS C & D |
| 7 - 8 | TRAFFIC SIGNAL PLANS
VETERANS MEMORIAL DR AT RAMPS A & B |
| 9 - 13 | TRAFFIC SIGNAL PLANS
IL 15 AT POTOMAC BLVD / WELLS BY-PASS |
| 14 - 18 | TRAFFIC SIGNAL PLANS
IL 15 AT RAMPS A & D |
| 19 - 23 | TRAFFIC SIGNAL PLANS
IL 15 AT RAMPS B & C |
| 24 - 28 | TRAFFIC SIGNAL PLANS
IL 15 AT 44TH STREET |

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 <small>License No. 184-000613 © Copyright CMT, Inc.</small>	USER NAME = Brian Bond PLOT SCALE = 0.16666667 / in. PLOT DATE = 11/15/2024	DESIGNED - BMB DRAWN - RAH CHECKED - SPH DATE - NOV 2024	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNALS INDEX & GENERAL NOTES	F.A.I. RTE. 57 SECTION 13.13-2(N-1,TS-1); (41-3)HB2	COUNTY JEFFERSON	TOTAL SHEETS 787	SHEET NO. 504
	SCALE: SHEET 1 OF 28 SHEETS STA. TO STA.						CONTRACT NO. 78483 ILLINOIS FED. AID PROJECT		

TRAFFIC SIGNAL PLAN LEGEND

EXISTING	PROPOSED	DESCRIPTION
		SIGNAL HEAD
		SIGNAL HEAD WITH BACKPLATE
		TEMPORARY SIGNAL HEAD
		PEDESTRIAN SIGNAL HEAD
		PEDESTRIAN PUSHBUTTON DETECTOR
		DETECTOR LOOP
		QUADRAPOLE DETECTOR LOOP
		SIGNAL POST
		ALUMINUM MAST ARM ASSEMBLY AND POLE
		STEEL MAST ARM ASSEMBLY AND POLE
		WOOD POLE
		WOOD POLE WITH GUY
		SERVICE INSTALLATION
		CONTROLLER
		HANDHOLE
		HEAVY DUTY HANDHOLE
		DOUBLE HANDHOLE
		JUNCTION BOX
		GULFBOX JUNCTION
		VIDEO DETECTION CAMERA
		HYBRID RADAR / VIDEO DETECTION CAMERA
		LUMINAIRE
		AERIAL CABLE
		CONDUIT
		LENGTH - CONSTRUCTION (T=TRENCH P=PUSHED A=AUGERED E=EXISTING) SIZE - TYPE (S=STEEL P=PVC F=FIBER DUCT U=UNI-DUCT)
		SPAN WIRE / TETHER WIRE
		56 ————— SIDEWALK REMOVAL IN SQ. FT.
		40 ————— PCC SIDEWALK, 4 INCH IN SQ. FT.
		32 ————— PCC SIDEWALK, 4 INCH (SPECIAL) IN SQ. FT.

TRAFFIC SIGNAL WIRING DIAGRAM LEGEND

EXISTING	PROPOSED	DESCRIPTION
		8" SIGNAL SECTION
		12" SIGNAL SECTION
		DIRECTIONAL SIGNAL SECTION
		9" PEDESTRIAN SIGNAL FACE
		12" PEDESTRIAN SIGNAL FACE
		SIGNAL FACE WITH BACKPLATE
		PROGRAMMED SIGNAL SECTION
		SIGNAL SECTION WITH LOUVRE
		DUAL-INDICATION SIGNAL SECTION
		INDUCTION DETECTOR LOOP
		INDUCTION DETECTOR LOOP
		DIRECT-CONNECTED LOOP LEAD-IN (TWISTED)
		ELECTRIC CABLE DENOTING NUMBER OF CONDUCTORS
		ELECTRIC CABLE TO BE REMOVED
		ELECTRIC CABLE IDENTIFIER TAPE CODES (R = RED W = WHITE Y = YELLOW G = GREEN B = BLUE O = ORANGE)
		PEDESTRIAN PUSHBUTTON DETECTOR

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 DATE - NOV 2024

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNALS
LEGENDS

SCALE: SHEET 2 OF 28 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	13.13-2(N-1,TS-1); (41-3)HB2	JEFFERSON	787	505
CONTRACT NO. 78483				
		ILLINOIS	FED. AID PROJECT	

SUMMARY OF TRAFFIC SIGNAL QUANTITIES

ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	IL RTE. 15 AT 45TH ST. / POTOMAC BLVD.	IL RTE. 15 AT RAMPS A & D	IL RTE. 15 AT RAMPS B & C	IL RTE. 15 AT 44TH ST.	VETERANS MEMORIAL DR. AT RAMPS C & D	VETERANS MEMORIAL DR. AT RAMPS A & B
SERVICE INSTALLATION - GROUND MOUNTED	EACH	5	1	1	1		1	1
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	2,411	136	1,061	706	108	214	186
UNDERGROUND CONDUIT, PVC, 4" DIA.	FOOT	2,636	553	610	670	68	315	420
HANDHOLE	EACH	20	4	4	5		3	4
DOUBLE HANDHOLE	EACH	5	1	1	1		1	1
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 10	FOOT	5,035	1,897	288	898		1,124	828
LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H	EACH	18	7	1	2		4	4
LIGHTING CONTROLLER, PEDESTAL MOUNTED, 240VOLT, 60AMP	EACH	2					1	1
REMOVAL OF ELECTRIC SERVICE INSTALLATION	EACH	3	1	1	1			
FULL-ACTUATED CONTROLLER AND TYPE V CABINET	EACH	5	1	1	1		1	1
UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	5	1	1	1		1	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	4,775	856	911	1,323	561	534	590
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	15,891	3,644	2,894	3,715	1,487	2,284	1,867
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	3,036	1,512	327	204	393	377	223
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	1,734	87	888	529		156	74
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	5,590	740	1,697	1,432	402	622	697
TRAFFIC SIGNAL POST, ALUMINUM 12 FT.	EACH	7		2	2		1	2
TRAFFIC SIGNAL POST, ALUMINUM 16 FT.	EACH	16	3	3	4		2	4
PEDESTRIAN PUSH-BUTTON POST, TYPE I	EACH	6	3	1		1	1	
STEEL MAST ARM ASSEMBLY AND POLE, 20 FT.	EACH	3		1	2			
STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	1		1				
STEEL MAST ARM ASSEMBLY AND POLE, 62 FT.	EACH	1		1				
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 34 FT.	EACH	2		1	1			
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 48 FT.	EACH	1			1			
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 68 FT.	EACH	1	1					
CONCRETE FOUNDATION, TYPE A	FOOT	71	10	16	16		10	19
CONCRETE FOUNDATION, TYPE C	FOOT	20	4	4	4		4	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	32		11	21			
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	123	27	23	25		25	23
CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	69	47	22				
DRILL EXISTING HANDHOLE	EACH	1				1		
SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	14	2	3	3		2	4
SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	37	10	9	9		5	4
SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	3		1	1			1
SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2	2					
SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	2	2					
SIGNAL HEAD, POLYCARBONATE, LED, 2-FACE, 1 - 3-SECTION, 1 - 4-SECTION, BRACKET MOUNTED	EACH	3					2	1
SIGNAL HEAD, POLYCARBONATE, LED, 2-FACE, 1 - 3-SECTION, 1 - 5-SECTION, BRACKET MOUNTED	EACH	2	1					1
SIGNAL HEAD, POLYCARBONATE, LED, 3-FACE, 1 - 3-SECTION, 2 - 5-SECTION, BRACKET MOUNTED	EACH	1	1					
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	14	2	4	4		2	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2	2					
TRAFFIC SIGNAL BACKPLATE	EACH	69	21	13	13		11	11
PEDESTRIAN PUSH-BUTTON	EACH	2				2		
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	4	1	1	1	1		

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNALS
SUMMARY OF QUANTITIES**

SCALE: SHEET 3 OF 28 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	13,13-2(N-1,TS-1): (41-3)HB2	JEFFERSON	787	506
CONTRACT NO. 78483				
ILLINOIS FED. AID PROJECT				

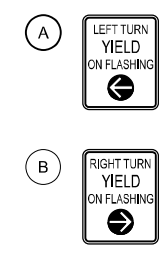
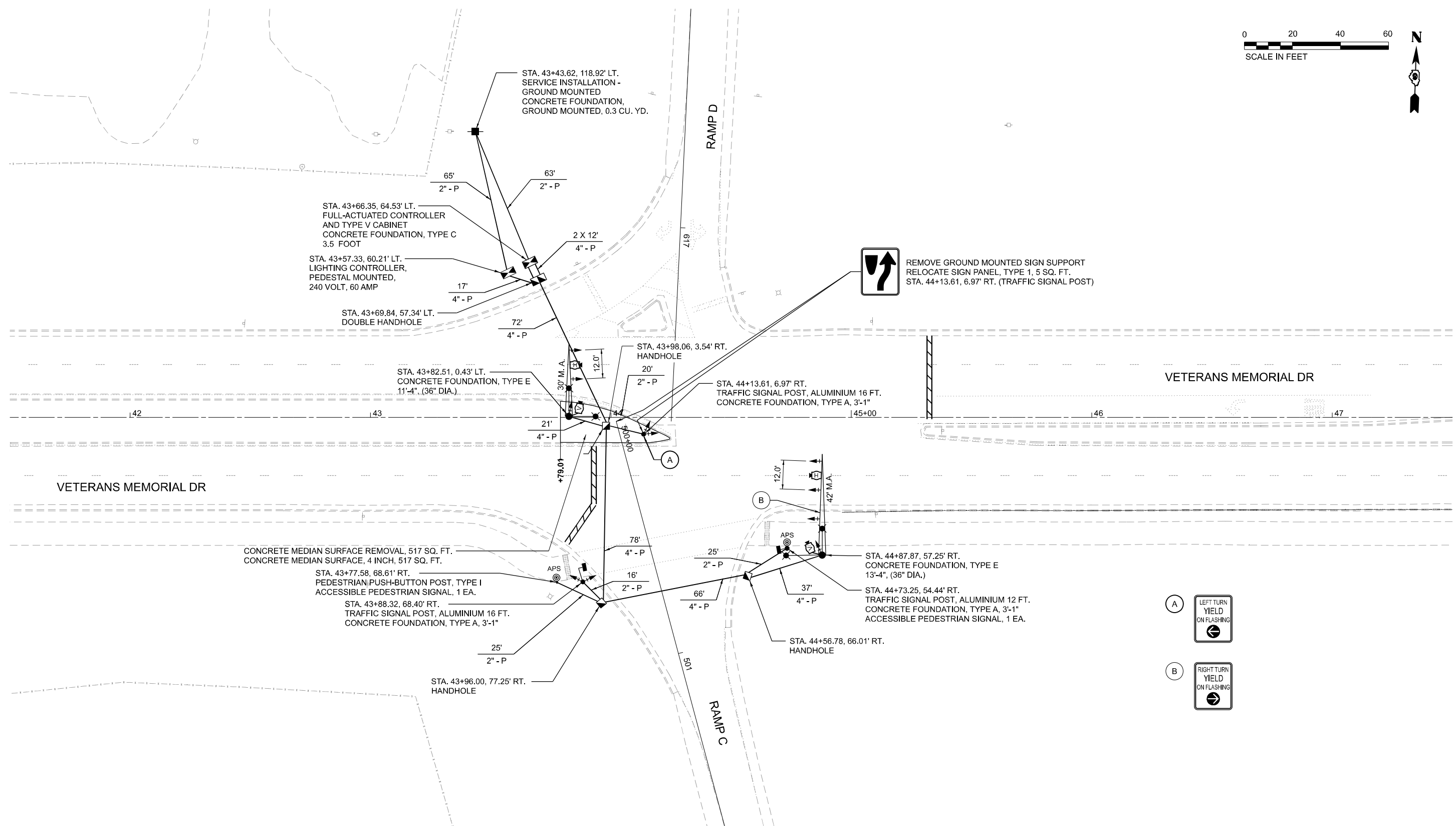
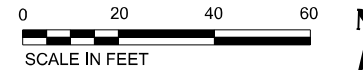
SUMMARY OF TRAFFIC SIGNAL QUANTITIES

ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	IL RTE. 15 AT 45TH ST. / POTOMAC BLVD.	IL RTE. 15 AT RAMPS A & D	IL RTE. 15 AT RAMPS B & C	IL RTE. 15 AT 44TH ST.	VETERANS MEMORIAL DR. AT RAMPS C & D	VETERANS MEMORIAL DR. AT RAMPS A & B
REMOVE EXISTING SERVICE INSTALLATION	EACH	3	1	1	1			
RELOCATE EXISTING TRAFFIC SIGNAL POST	EACH	2				2		
RELOCATE EXISTING MAST ARM ASSEMBLY AND POLE	EACH	2				2		
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	4	1	1	1	1		
WIRELESS ETHERNET RADIO	EACH	5	1	1	1		1	1
CAT 5 ETHERNET CABLE	FOOT	6,101	1,065	1,232	1,442	424	1,130	808
CONCRETE FOUNDATIONS, GROUND MOUNTED	CU YD	1.5	0.3	0.3	0.3		0.3	0.3
LIGHTING CONTROLLER, PEDESTAL MOUNTED, 240VOLT, 60AMP WITH BLACK POWDER COAT FINISH	EACH	3	1	1	1			
TEMPORARY LIGHTING SYSTEM	L SUM	1	0.33	0.33	0.33			
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	18	6	4	4		2	2
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 30 FT. (SPECIAL)	EACH	3					1	2
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 42 FT. (SPECIAL)	EACH	1					1	
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 38 FT. (SPECIAL)	EACH	1	1					
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 55 FT. (SPECIAL)	EACH	1	1					
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 62 FT. (SPECIAL)	EACH	1	1					
VIDEO VEHICLE DETECTION SYSTEM COMPLETE	EACH	5	1	1	1		1	1
GROUND ROD, 8', COPPER CLAD	EACH	25	5	5	6		4	5

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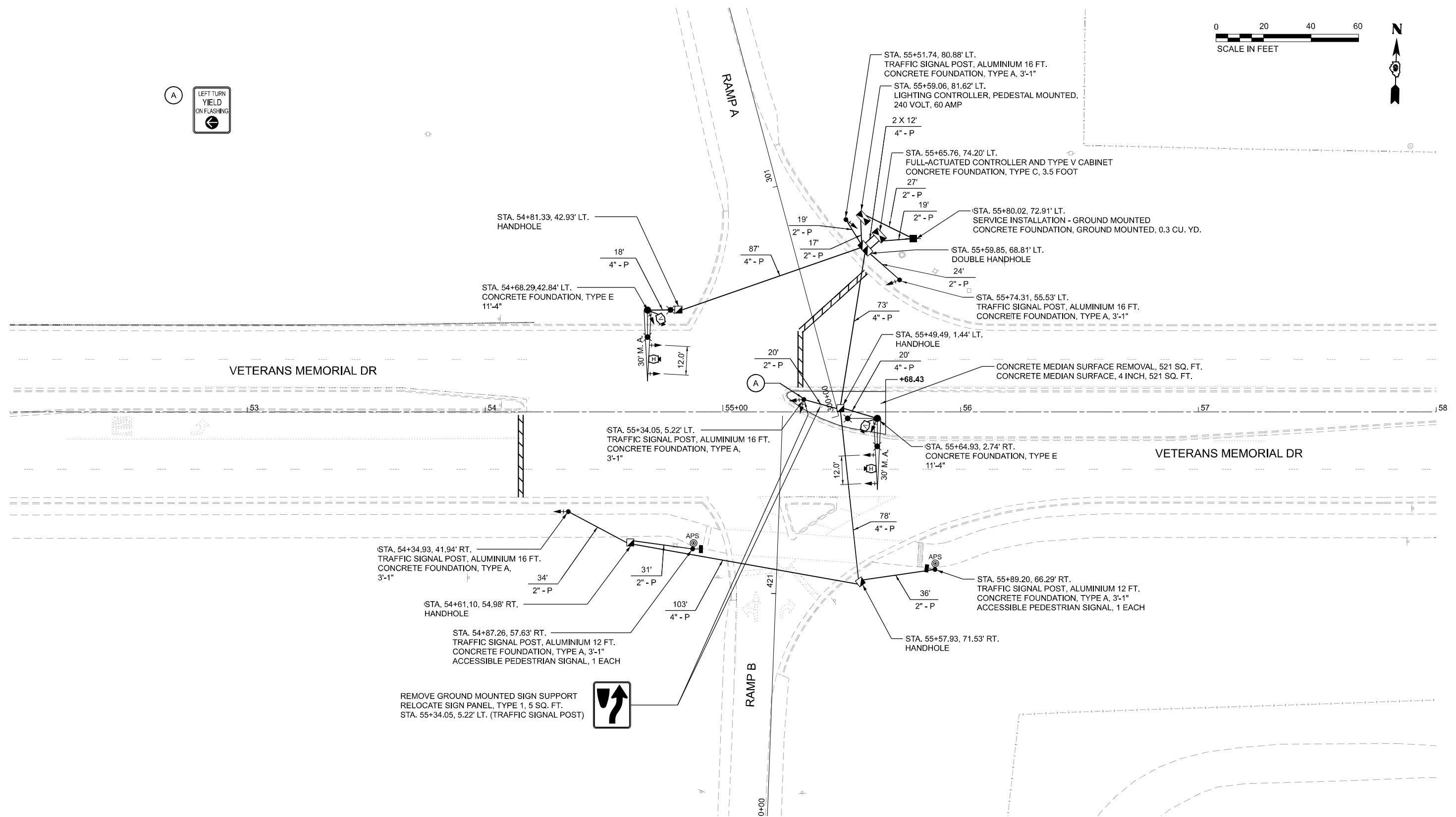
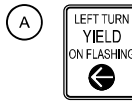
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNALS
VETERANS MEMORIAL & RAMP C/RAMP D - PROPOSED PLAN

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	13.13-2(N-1,TS-1); (41-3)HB2	JEFFERSON	787	508
CONTRACT NO. 78483				
		ILLINOIS	FED. AID PROJECT	

SCALE: 1" = 20' SHEET 5 OF 28 SHEETS STA. TO STA.



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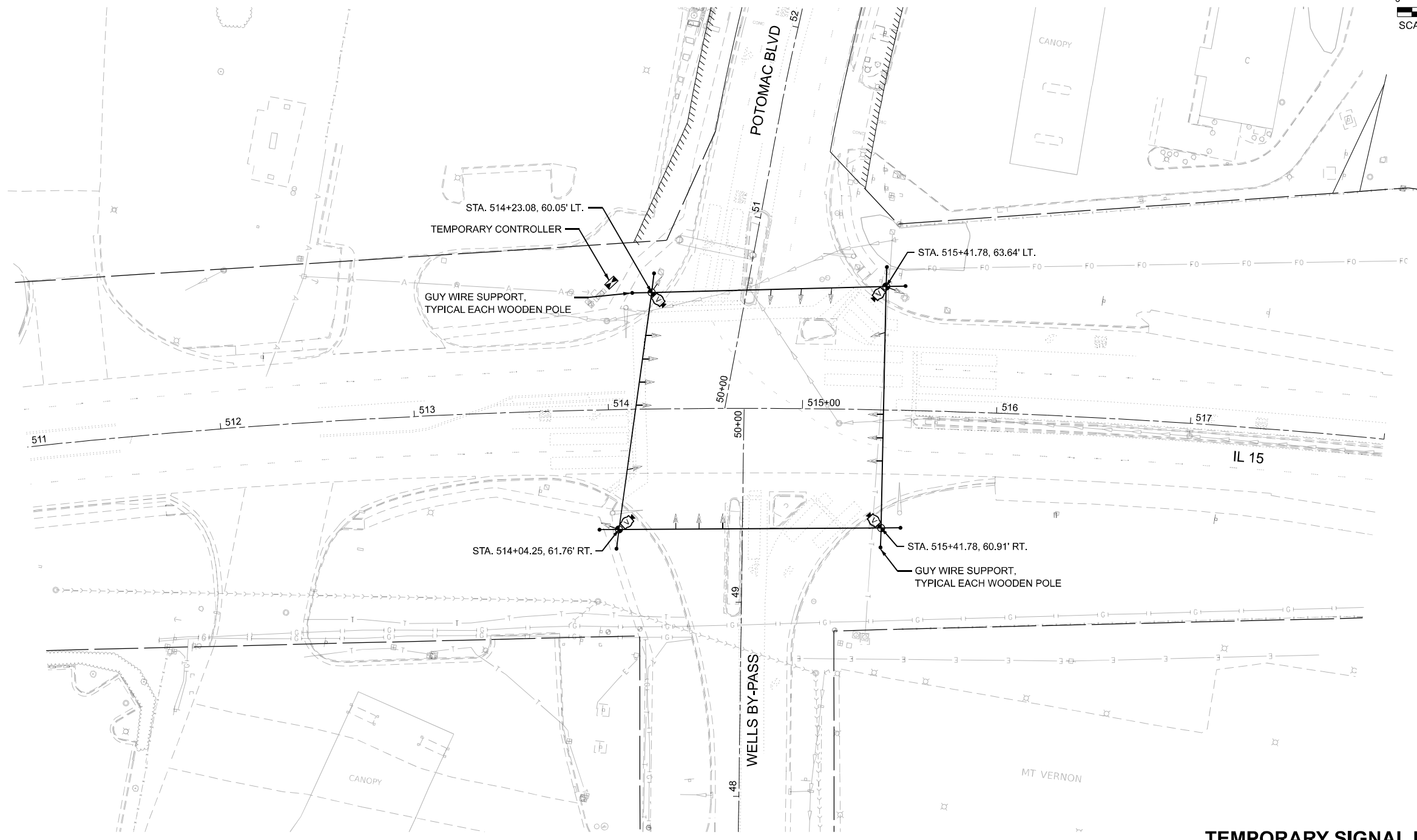
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PLOT DATE =	11/15/2024	DATE -	NOV 2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNALS
VETERANS MEMORIAL & RAMP A/RAMP B - PROPOSED PLAN

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	13,13-2(N-1,TS-1): (41-3)HB2	JEFFERSON	787	510
CONTRACT NO. 78483				
		ILLINOIS	FED. AID PROJECT	

SCALE: 1" = 20' SHEET 7 OF 28 SHEETS STA. TO STA.



TEMPORARY SIGNAL NOTES

1. TEMPORARY SIGNALS SHALL BE OPERATIONAL PRIOR TO THE REMOVAL OF EXISTING SIGNALS.
2. POLES SHALL BE USED TO THE SATISFACTION OF THE ENGINEER. ANY ADJUSTMENTS SHALL BE CONSIDERED PART OF THE PAY ITEM FOR TEMPORARY TRAFFIC SIGNAL INSTALLATION.
3. VIDEO VEHICLE DETECTION SYSTEM SHALL BE UTILIZED TO PROVIDE DETECTION FOR THE CONTROLLER.
4. POLES USED FOR TEMPORARY SIGNAL INSTALLATION SHALL PROVIDE A MINIMUM 35' MOUNTING HEIGHT FOR THE VIDEO CAMERAS.
5. CONTRACTOR SHALL PROVIDE TEMPORARY CABLE DIAGRAM LAYOUT FOR EACH SEPARATE CONSTRUCTION STAGE.
6. CONTRACTOR SHALL ADJUST PLACEMENT OF SIGNAL HEADS FOR EACH CONSTRUCTION STAGE AS DIRECTED BY THE ENGINEER.
7. TEMPORARY SIGNAL HEAD SPACING AND SIGNAL TIMING SHALL BE COORDINATED WITH THE MAINTENANCE OF TRAFFIC.

TEMPORARY TRAFFIC SIGNAL LEGEND

- TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED W/BACKPLATE
- TEMPORARY WOOD POLE (CLASS 3 OR BETTER)
- TEMPORARY SPAN WIRE, TETHER WIRE OR CABLE
- TEMPORARY VIDEO DETECTION CAMERA

MODEL: IL_15 - TempTrafficSignals (Sheet)
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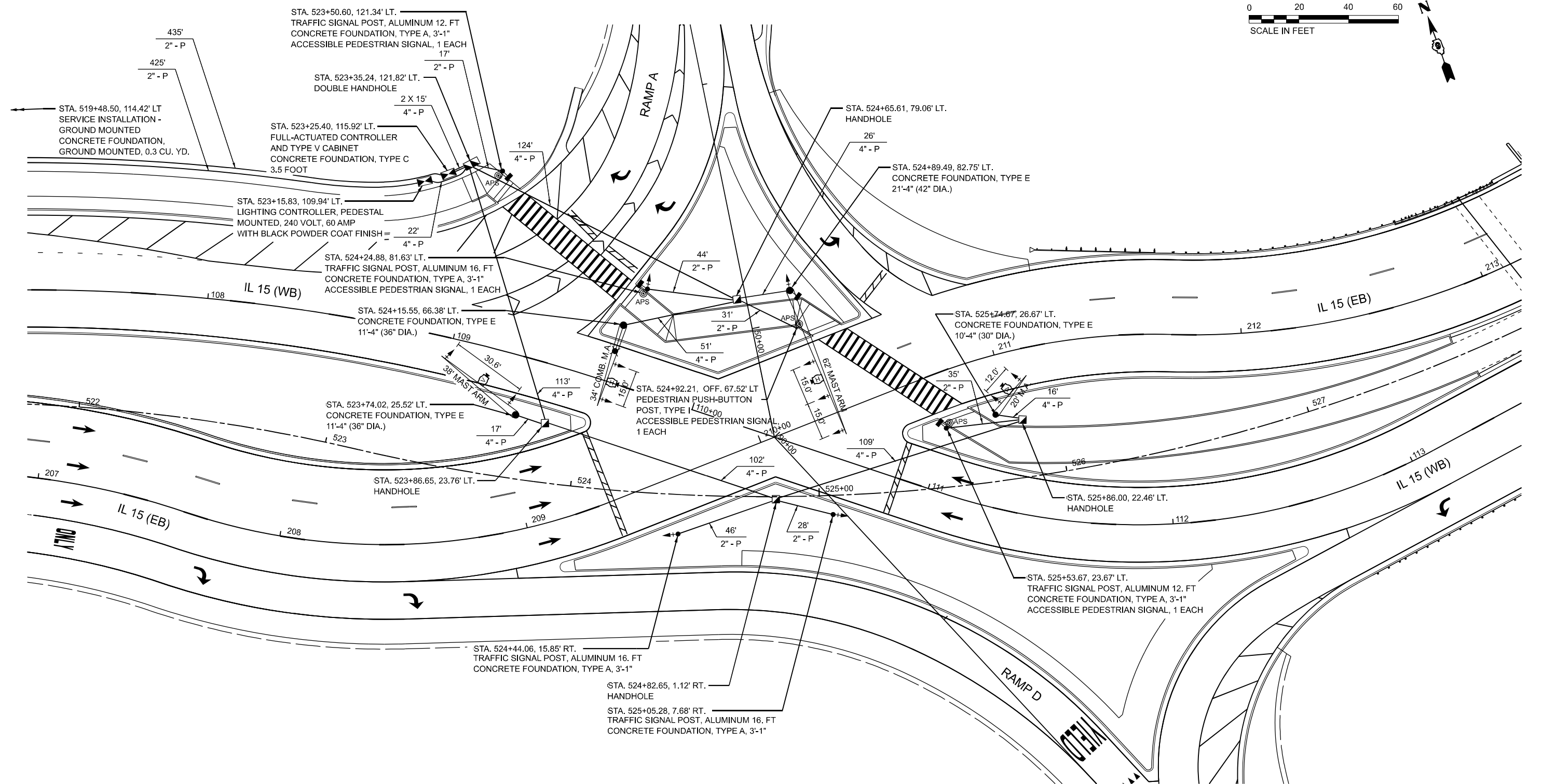
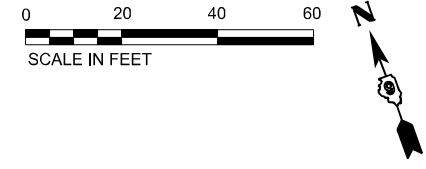


USER NAME = Brian Bond	DESIGNED - BMB	REVISED -
	DRAWN - RAH	REVISED -
PLOT SCALE = 0.1666667 / in.	CHECKED - SPH	REVISED -
PLOT DATE = 11/15/2024	DATE - NOV 2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNALS
IL 15 & WELLS BY-PASS / POTOMAC - TEMPORARY PLAN
 SCALE: 1" = 30' SHEET 10 OF 28 SHEETS STA. 511+00.00 TO STA. 518+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	13.13-2(N-1,TS-1); (41-3)HB2	JEFFERSON	787	513
CONTRACT NO. 78483				
ILLINOIS FED. AID PROJECT				



MODEL: PRL-15-PR_Plan-4-2024 (Sheet)
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 License No. 184-000613 © Copyright CMT, Inc.

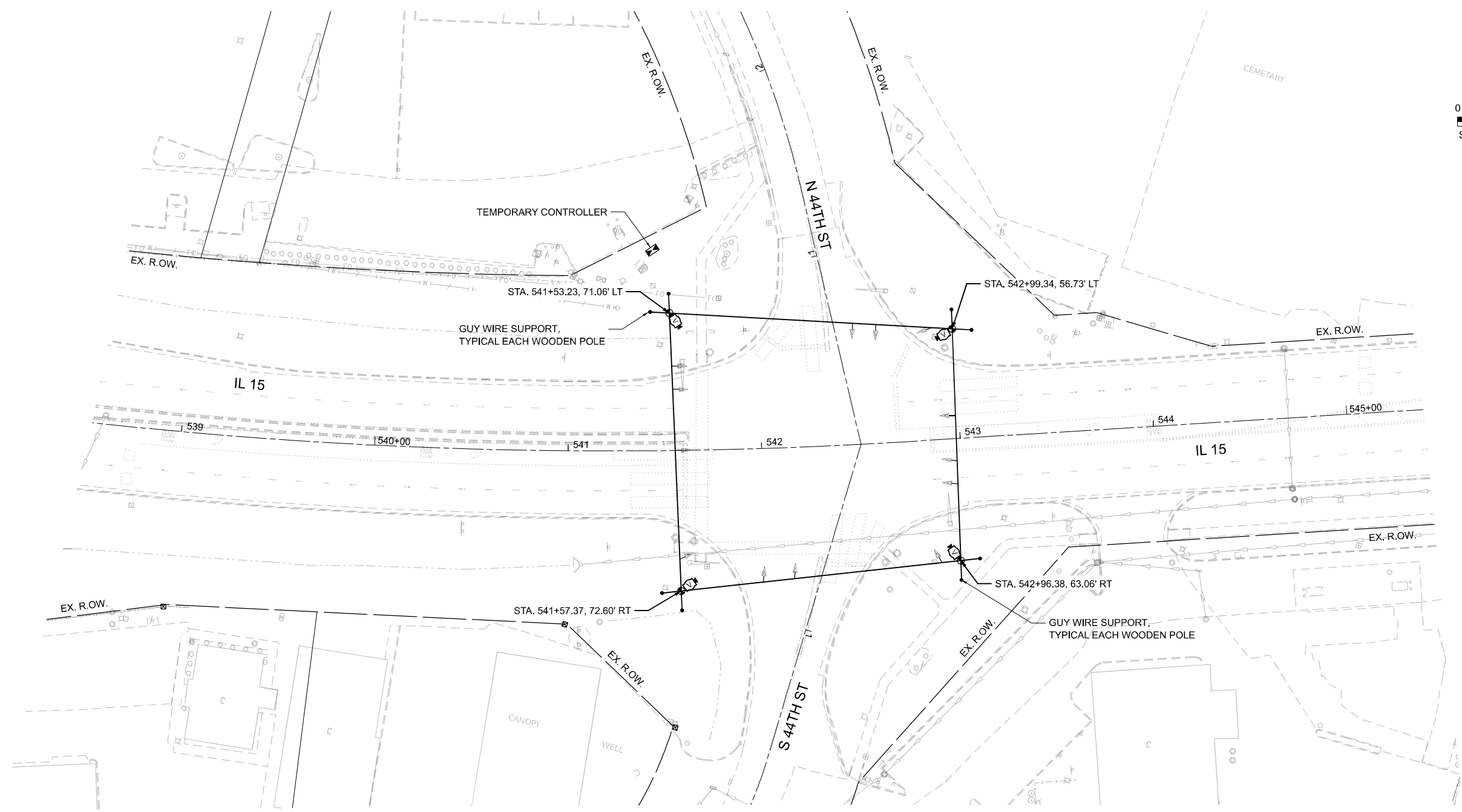
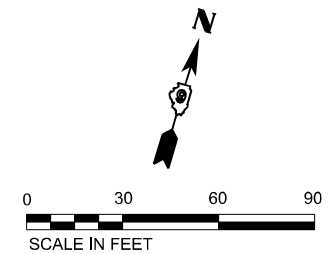


USER NAME = Bitlan Bond	DESIGNED - BMB	REVISED -
DRAWN - RAH	REVISED -	
PLOT SCALE = 0.16666667 / in.	CHECKED - SPH	REVISED -
PLOT DATE = 11/15/2024	DATE - NOV 2024	REVISED -





STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNALS
IL 15 & RAMP A / RAMP D - PROPOSED PLAN
 SCALE: 1"=100' SHEET 17 OF 28 SHEETS STA. 522+00.00 TO STA. 527+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	13.13-2(N-1,TS-1); (41-3)HB2	JEFFERSON	787	520
CONTRACT NO. 78483				
ILLINOIS FED. AID PROJECT				



TEMPORARY TRAFFIC SIGNAL LEGEND

-  TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED W/BACKPLATE
-  TEMPORARY WOOD POLE (CLASS 3 OR BETTER)
-  TEMPORARY SPAN WIRE, TETHER WIRE OR CABLE
-  TEMPORARY VIDEO DETECTION CAMERA

TEMPORARY SIGNAL NOTES

1. TEMPORARY SIGNALS SHALL BE OPERATIONAL PRIOR TO THE REMOVAL OF EXISTING SIGNALS.
2. POLES SHALL BE USED TO THE SATISFACTION OF THE ENGINEER. ANY ADJUSTMENTS SHALL BE CONSIDERED PART OF THE PAY ITEM FOR TEMPORARY TRAFFIC SIGNAL INSTALLATION.
3. VIDEO VEHICLE DETECTION SYSTEM SHALL BE UTILIZED TO PROVIDE DETECTION FOR THE CONTROLLER.
4. POLES USED FOR TEMPORARY SIGNAL INSTALLATION SHALL PROVIDE A MINIMUM 35' MOUNTING HEIGHT FOR THE VIDEO CAMERAS.
5. CONTRACTOR SHALL PROVIDE TEMPORARY CABLE DIAGRAM LAYOUT FOR EACH SEPARATE CONSTRUCTION STAGE.
6. CONTRACTOR SHALL ADJUST PLACEMENT OF SIGNAL HEADS FOR EACH CONSTRUCTION STAGE AS DIRECTED BY THE ENGINEER.
7. TEMPORARY SIGNAL HEAD SPACING AND SIGNAL TIMING SHALL BE COORDINATED WITH THE MAINTENANCE OF TRAFFIC.

MODEL: IL_IL15 - TempTraffic (Sheet)
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USER NAME = Brian Bond	DESIGNED - BMB	REVISED -
	DRAWN - RAH	REVISED -
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PLOT DATE = 11/15/2024	DATE - NOV 2024	REVISED -



























**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNALS
IL 15 & 44TH ST - TEMPORARY PLAN**

SCALE: 1"=100' SHEET 25 OF 28 SHEETS STA. 539+00.00 TO STA. 545+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	13.13-2(N-1,TS-1): (41-3)HB2	JEFFERSON	787	528
CONTRACT NO. 78483				
ILLINOIS FED. AID PROJECT				

LIGHTING LEGEND

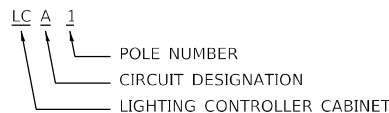
-  P PROPOSED GROUND MOUNTED LIGHTING UNIT ALUMINUM, 45' M.H., 15' M.A., LED LUMINAIRE WITH 15" B.C. ON CONCRETE FOUNDATION AND BREAKAWAY COUPLINGS WITH STAINLESS STEEL SCREEN (PRESTAGE SHOWN)
-  P PROPOSED GROUND MOUNTED LIGHTING UNIT BLACK ANODIZED ALUMINUM, 45' M.H., 15' M.A., BLACK LED LUMINAIRE WITH 15" B.C. ON CONCRETE FOUNDATION AND BREAKAWAY COUPLINGS WITH STAINLESS STEEL SCREEN (PRESTAGE SHOWN)
-  P PROPOSED BRIDGE MOUNTED LIGHTING UNIT BLACK ANODIZED ALUMINUM, 45' M.H., 4' M.A., BLACK LED LUMINAIRE WITH HOUSE SIDE SHIELD (PRESTAGE SHOWN)
-  PROPOSED LED LUMINAIRE ON EXISTING LIGHTING UNIT
-  COMBINATION MAST ARM AND POLE (SEE NOTE 3)
-  PROPOSED JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 12" X 12" X 6", UNLESS NOTED OTHERWISE
-  PROPOSED LIGHTING CONTROLLER, BASE MOUNTED 240/480V, 100 AMP, 1-PHASE, 3-WIRE WITH BLACK POWDER COAT FINISH
-  PROPOSED ELECTRIC SERVICE INSTALLATION, 240/480V, 100 AMP, 1-PHASE, 3-WIRE
-  PROPOSED UNIT DUCT, 600V, 2-1C NO.6, 1/C NO.8 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE, UNLESS OTHERWISE NOTED
-  PROPOSED ELECTRIC CABLE IN CONDUIT ATTACHED TO STRUCTURE, SIZE AS NOTED ON PLAN
-  PROPOSED ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 2-1C NO.6, 1/C NO.8 GROUND, IN CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., PVC, UNLESS OTHERWISE NOTED
-  PROPOSED UNDERGROUND CONDUIT CASING, CNC, 2" DIA.
-  PROPOSED UNDERPASS LUMINAIRE
-  R,P EXISTING LIGHTING UNIT TO BE REMOVED, FOUNDATION TO BE REMOVED (PRESTAGE SHOWN)
-  R EXISTING LUMINAIRE AND LUMINAIRE MAST ARM TO BE REMOVED FROM COMBINATION LIGHT POLE (SEE TRAFFIC SIGNAL PLANS FOR REMOVAL)
-  R EXISTING LUMINAIRE TO BE REMOVED FROM EXISTING LIGHTING UNIT
-  R EXISTING LIGHTING CONTROLLER TO BE REMOVED
-  R EXISTING ELECTRIC SERVICE TO BE REMOVED
-  EXISTING ELECTRIC CABLE TO BE REMOVED
-  EXISTING LIGHTING CONTROLLER TO REMAIN
-  EXISTING LIGHTING UNIT TO REMAIN
-  EXISTING ELECTRIC CABLE TO REMAIN
-  T,P TEMPORARY WOOD POLE, 60' CLASS 3, 50' M.H., 15' M.A., LED LUMINAIRE (PRESTAGE SHOWN)
-  T,P TEMPORARY WOOD POLE, 60' CLASS 3, 50' M.H. (PRESTAGE SHOWN)
-  TEMPORARY AERIAL CABLE, 2-1/C NO. 6 WITH MESSENGER WIRE, UNLESS OTHERWISE NOTED OTHERWISE
-  TEMPORARY UNIT DUCT, 600V, 2-1C NO.6, 1/C NO.8 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE, UNLESS OTHERWISE NOTED

HIGHWAY STANDARDS

812001-01	RACEWAYS EMBEDDED IN STRUCTURE
821001	UNDERPASS LIGHTING WALL MOUNT
821006	UNDERPASS LIGHTING SUSPENDED
821101-02	LUMINAIRE WIRING IN POLE
825026-04	LIGHTING CONTROLLER, BASE MOUNTED, 480V
830001-03	LIGHT POLE ALUMINUM MAST ARM
836001-04	LIGHT POLE FOUNDATION
838001-01	BREAKAWAY DEVICES

CALLOUT KEY

LIGHT POLE DESIGNATION:



GENERAL NOTES:

1. IN NO INSTANCE SHALL THE CONTRACTOR INSTALL A LIGHT POLE WITHIN 5 FT OF BACK OF GUARDRAIL POST.
2. ALL SETBACKS ARE MEASURED FROM EDGE OF PAVEMENT.
3. SEE TRAFFIC SIGNAL PLANS FOR INSTALLATION.
4. TEMPORARY LIGHT POLES SHALL BE INSTALLED OUTSIDE THE CLEARZONE.
5. THE CONTRACTOR SHALL ENSURE CONTINUITY OF THE CIRCUITS VIA UNDERGROUND OR AERIAL CABLE INSTALLATION, AS NECESSARY, DURING CONSTRUCTION STAGES. THIS WORK SHALL BE PAID FOR AS "MAINTAIN EXISTING LIGHTING SYSTEM".

LIGHTING SUMMARY OF QUANTITIES

S.P.	DESCRIPTION	UNIT	QUANTITY
	ELECTRIC SERVICE INSTALLATION	EACH	1
	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 2" DIA.	FOOT	820
	CONDUIT ATTACHED TO STRUCTURE, 1" DIA., STAINLESS STEEL	FOOT	860
	CONDUIT ATTACHED TO STRUCTURE, 2" DIA., STAINLESS STEEL	FOOT	40
	CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., PVC	FOOT	620
	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 6" X 6" X 4"	EACH	12
	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 12" X 10" X 6"	EACH	4
	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 12" X 12" X 6"	EACH	4
	UNIT DUCT, 600V, 2-1C NO.6, 1/C NO.8 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE	FOOT	22,000
	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10	FOOT	2,580
	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 8	FOOT	620
	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 6	FOOT	1,240
	AERIAL CABLE, 2-1/C NO. 6 WITH MESSENGER WIRE	FOOT	3,815
**	LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H	EACH	105
**	LUMINAIRE, LED, UNDERPASS, WALLMOUNT, OUTPUT DESIGNATION E	EACH	4
**	LUMINAIRE, LED, UNDERPASS, SUSPENDED, OUTPUT DESIGNATION E	EACH	4
	LIGHT POLE, ALUMINUM, 45 FT. M.H., 15 FT. MAST ARM	EACH	60
	LIGHT POLE FOUNDATION, 30" DIAMETER	FOOT	630.5
	BREAKAWAY DEVICE, COUPLING WITH STAINLESS STEEL SCREEN	EACH	388
	REMOVAL OF TEMPORARY LIGHTING UNIT	EACH	22
	REMOVAL OF LIGHTING UNIT, NO SALVAGE	EACH	51
	REMOVAL OF POLE FOUNDATION	EACH	51
	REMOVAL OF LIGHTING CONTROLLER	EACH	1
	REMOVAL OF ELECTRIC SERVICE INSTALLATION	EACH	1
	REMOVAL OF LIGHTING CONTROLLER FOUNDATION	EACH	1
*	TEMPORARY WOOD POLE, 60 FT., CLASS 4, 15 FT. MAST ARM	EACH	21
*	TEMPORARY WOOD POLE, 60 FT., CLASS 4	EACH	1
*	REMOVAL OF LIGHTING LUMINAIRE, NO SALVAGE	EACH	4
*	TEMPORARY LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION I	EACH	21
*	MAINTAIN EXISTING LIGHTING SYSTEM	L SUM	1
*	LIGHT POLE, SPECIAL, 15 FT. MAST ARM	EACH	37
*	LIGHT POLE, SPECIAL, 4 FT. MAST ARM	EACH	4
*	LIGHTING CONTROLLER, BASE MOUNTED, 480VOLT, 200AMP WITH BLACK POWDER COAT FINISH	EACH	1

LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H (82110008)	
LUMINAIRE FINISH	QUANTITY
GRAY	64
BLACK	41
TOTAL QUANTITY	105

* THE CONTRACTOR SHALL FURNISH AND INSTALL FOUR (4) BLACK LUMINAIRE HOUSE SIDE SHIELDS FOR FOUR (4) BRIDGE MOUNTED LIGHTING UNITS TO LIMIT BACKLIGHT. THE COST OF THIS WORK IS INCLUDED IN THE LUMINAIRE.

S.P. COLUMN

- * INDICATES SPECIAL PROVISION
- ** INDICATES SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS

INDEX OF SHEETS

LT-01	LIGHTING LEGEND, GENERAL NOTES, & LIGHTING INDEX OF SHEETS
LT-02	LIGHTING STAGING NOTES
LT-03 TO LT-10	LIGHTING REMOVAL PLANS
LT-11 TO LT-17	PROPOSED LIGHTING PLANS
LT-18	UNDERPASS LIGHTING PLAN
LT-19	UNDERPASS LIGHTING CONDUIT ROUTING DETAILS
LT-20	LUMINAIRES PERFORMANCE TABLES
LT-21	WIRING DIAGRAMS

LT-01

FILE NAME = D978483-sht-lightlegend-01.dgn	USER NAME = bbarr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	LIGHTING LEGEND, GENERAL NOTES, & LIGHTING INDEX OF SHEETS	F.A.I. RTE. = 57	SECTION = 13,13-2(N-1,TS-1)(41-3)HB2	COUNTY = JEFFERSON	TOTAL SHEETS = 787	SHEET NO. = 532		
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -			SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.		CONTRACT NO. 78483				
	PLOT DATE = 9/30/2024	DATE -	REVISED -			ILLINOIS FED. AID PROJECT						

LIGHTING STAGING NOTES:

PRESTAGE

INTERCHANGE RAMPS AND MAINLINE

- PN1. INSTALL TEMPORARY LIGHTING, AS INDICATED BY STAGE. EXISTING LIGHTING TO BE REMOVED SHALL REMAIN IN PLACE AND USED IN CONJUNCTION WITH THE TEMPORARY LIGHTING, UNLESS NOTED OTHERWISE.
- PN2. EXISTING LIGHTING TO BE REMOVED UPON ACTIVATION OF TEMPORARY LIGHTING, AS INDICATED BY STAGE.

STAGE 1

IL 15

- 1N1. INSTALL TEMPORARY LIGHTING, AS INDICATED BY STAGE. EXISTING LIGHTING TO BE REMOVED SHALL REMAIN IN PLACE AND USED IN CONJUNCTION WITH THE TEMPORARY LIGHTING, UNLESS NOTED OTHERWISE.
- 1N2. EXISTING LIGHTING TO BE REMOVED UPON ACTIVATION OF TEMPORARY LIGHTING, AS INDICATED BY STAGE.
- 1N3. INSTALL PROPOSED LIGHTING CONTROLLER.
- 1N4. EXISTING LIGHTING CONTROLLER CONTROLLER TO BE REMOVED UPON ACTIVATION OF PROPOSED LIGHTING CONTROLLER.

IL 15 AT INTERCHANGE RAMP TERMINALS

- 1N5. INSTALL PROPOSED LIGHTING, AS INDICATED BY STAGE AT PROPOSED IL 15 RAMP TERMINALS FOR RAMPS A, C, AND D.

STAGE 4

INTERCHANGE RAMPS AND MAINLINE

- 4N1. INSTALL TEMPORARY LIGHTING ALONG EXISTING RAMP C, AS INDICATED BY STAGE. EXISTING LIGHTING SHOWN TO BE REMOVED AT A LATER STAGE SHALL REMAIN IN PLACE AND USED IN CONJUNCTION WITH THE TEMPORARY LIGHTING.
- 4N2. INSTALL PROPOSED LIGHTING ALONG PROPOSED RAMP C ADJACENT TO PROPOSED PAVEMENT, UNLESS OTHERWISE INDICATED BY A LATER STAGE.
- 4N3. EXISTING RAMP C LIGHTING TO BE REMOVED UPON ACTIVATION OF PROPOSED LIGHTING.
- 4N4. INSTALL PROPOSED LIGHTING ALONG THE NORTHBOUND SIDE OF THE MAINLINE SOUTH OF THE EXISTING BRIDGE.
- 4N5. EXISTING AND TEMPORARY LIGHTING ALONG THE NORTHBOUND SIDE OF THE MAINLINE SOUTH OF THE EXISTING BRIDGE TO BE REMOVED UPON ACTIVATION OF PROPOSED LIGHTING.

STAGE 5

IL 15

- 5N1. INSTALL PROPOSED LIGHTING, AS INDICATED BY STAGE.

INTERCHANGE RAMPS AND MAINLINE

- 5N2. INSTALL TEMPORARY LIGHTING ALONG EXISTING RAMP D, AS INDICATED BY STAGE. EXISTING LIGHTING SHOWN TO BE REMOVED AT A LATER STAGE SHALL REMAIN IN PLACE AND USED IN CONJUNCTION WITH THE TEMPORARY LIGHTING.
- 5N3. INSTALL PROPOSED LIGHTING ALONG PROPOSED RAMP D ADJACENT TO PROPOSED PAVEMENT.
- 5N4. EXISTING RAMP D LIGHTING TO BE REMOVED UPON ACTIVATION OF PROPOSED LIGHTING.
- 5N5. INSTALL PROPOSED LIGHTING ALONG THE SOUTHBOUND SIDE OF THE MAINLINE SOUTH OF THE EXISTING BRIDGE.
- 5N6. EXISTING AND TEMPORARY LIGHTING ALONG THE SOUTHBOUND SIDE OF THE MAINLINE SOUTH OF THE EXISTING BRIDGE TO BE REMOVED UPON ACTIVATION OF PROPOSED LIGHTING.

STAGE 6

IL 15

- 6N1. INSTALL PROPOSED LIGHTING, AS INDICATED BY STAGE.

STAGE 8

IL 15

- 8N1. INSTALL PROPOSED LIGHTING, AS INDICATED BY STAGE.

INTERCHANGE RAMPS AND MAINLINE

- 8N2. INSTALL PROPOSED LIGHTING ALONG PROPOSED RAMP A ADJACENT TO PROPOSED PAVEMENT, UNLESS OTHERWISE INDICATED BY A LATER STAGE.
- 8N3. EXISTING RAMP A LIGHTING TO BE REMOVED UPON ACTIVATION OF PROPOSED LIGHTING, UNLESS OTHERWISE INDICATED BY A LATER STAGE.
- 8N4. INSTALL PROPOSED LIGHTING ALONG THE SOUTHBOUND SIDE OF THE MAINLINE NORTH OF THE EXISTING BRIDGE.
- 8N5. EXISTING AND TEMPORARY LIGHTING ALONG THE SOUTHBOUND SIDE OF THE MAINLINE NORTH OF THE EXISTING BRIDGE TO BE REMOVED UPON ACTIVATION OF PROPOSED LIGHTING.

STAGE 9

IL 15

- 9N1. INSTALL PROPOSED LIGHTING, AS INDICATED BY STAGE.

INTERCHANGE RAMPS AND MAINLINE

- 9N2. INSTALL PROPOSED LIGHTING ALONG PROPOSED RAMP B ADJACENT TO PROPOSED PAVEMENT.
- 9N3. EXISTING RAMP B LIGHTING TO BE REMOVED UPON ACTIVATION OF PROPOSED LIGHTING.
- 9N4. INSTALL PROPOSED LIGHTING ALONG THE NORTHBOUND SIDE OF THE MAINLINE NORTH OF THE EXISTING BRIDGE.
- 9N5. EXISTING AND TEMPORARY LIGHTING ALONG THE NORTHBOUND SIDE OF THE MAINLINE NORTH OF THE EXISTING BRIDGE TO BE REMOVED UPON ACTIVATION OF PROPOSED LIGHTING.

STAGE 10

IL 15

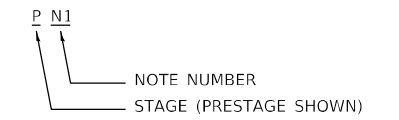
- 10N1. INSTALL PROPOSED LIGHTING, AS INDICATED BY STAGE.

INTERCHANGE RAMPS AND MAINLINE

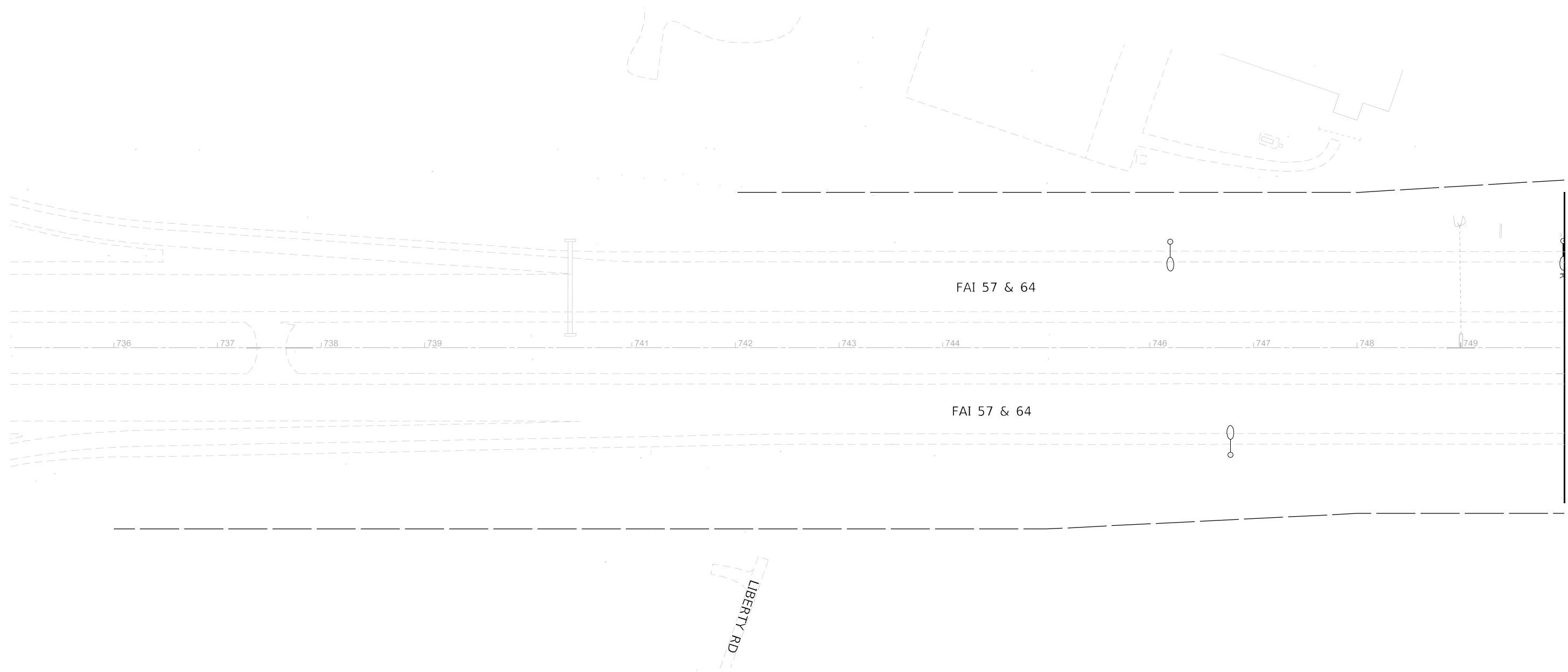
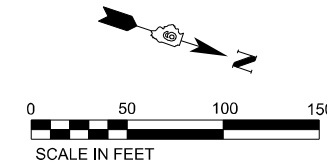
- 10N2. INSTALL PROPOSED LIGHTING, AS INDICATED BY STAGE.
- 10N3. EXISTING LIGHTING TO BE REMOVED UPON ACTIVATION OF PROPOSED LIGHTING.

CALLOUT KEY

STAGING NOTE DESIGNATION:

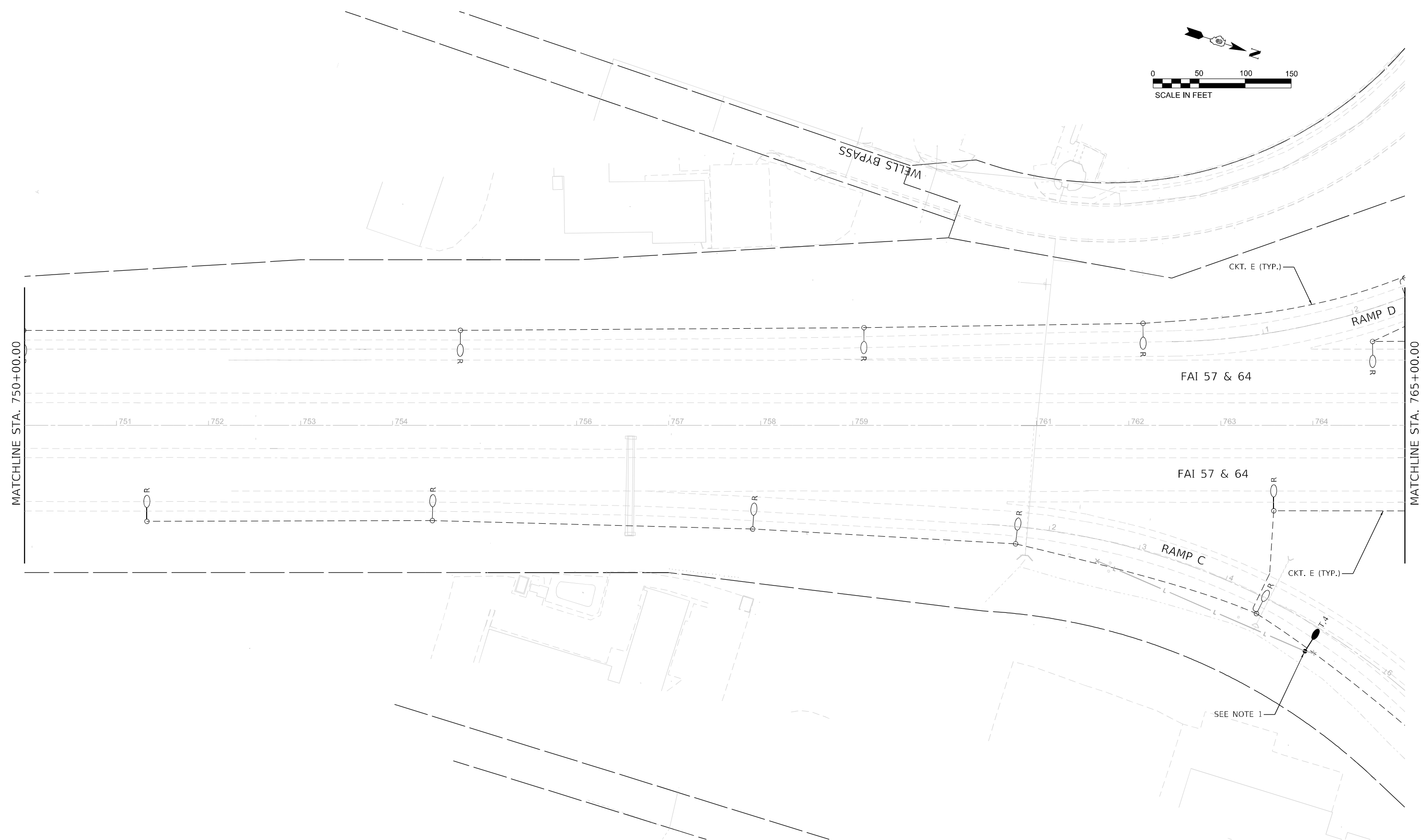
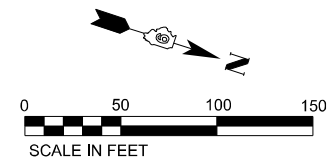


FILE NAME = D978483-sh1-lightLegend-02.dgn	USER NAME = bbarr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	LIGHTING STAGING NOTES		F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 100.0000' / in.	DRAWN -	REVISED -				57	13,13-2(N-1,TS-1)(41-3)HB2	JEFFERSON	787	533
	PLOT DATE = 9/30/2024	CHECKED -	REVISED -		SCALE: NONE	SHEET 1 OF 1 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT CONTRACT NO. 78483		



LT-03

FILE NAME = D978483-sht-remlight.dgn	USER NAME = bbarr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY LIGHTING AND REMOVAL PLAN I-57/64			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 0.166666' / in.	DRAWN -	REVISED -		57	13,13-2IN-1,TS-1)(41-3)HB2	JEFFERSON	787	534			
PLOT DATE = 9/30/2024	CHECKED -	REVISED -	SCALE: 1"=50'		SHEET 1 OF 8 SHEETS	STA. 735+00	TO STA. 750+00	CONTRACT NO. 78483		ILLINOIS FED. AID PROJECT		
	DATE -	REVISED -										

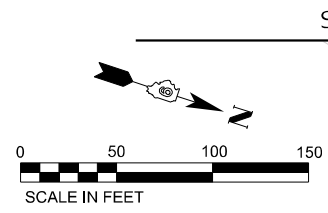
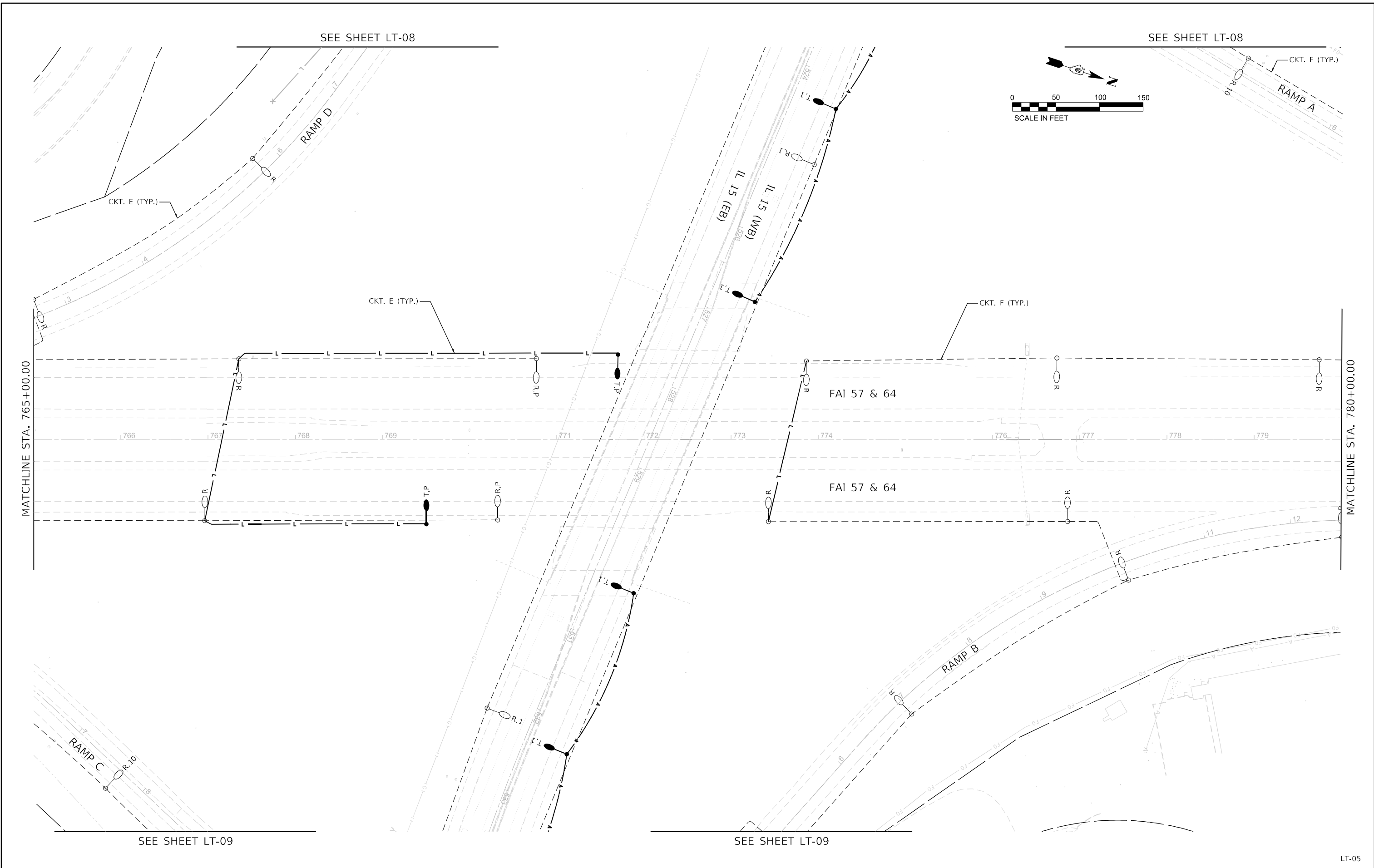


NOTES:

1. UNDERGROUND CONNECTION TO PROPOSED LIGHT POLE AT STA. 75+62 TO BE MADE DURING STAGE 4. INTERCEPT EXISTING UNDERGROUND CABLE AND CONDUIT FROM ADJACENT EXISTING LIGHT POLE AND ROUTE TO TEMPORARY LIGHT POLE.

LT-04

FILE NAME = D978483-sht-remlight.dgn	USER NAME = bbarr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY LIGHTING AND REMOVAL PLAN I-57/64			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 0.166666' / 1in.	CHECKED -	REVISED -		57	13,13-2IN-1,TS-1)(41-3)HB2	JEFFERSON	787	535			
PLOT DATE = 9/30/2024	DATE -	REVISED -	SCALE: 1"=50'		SHEET 2 OF 8 SHEETS	STA. 750+00	TO STA. 765+00	CONTRACT NO. 78483				
ILLINOIS FED. AID PROJECT												



SEE SHEET LT-08

SEE SHEET LT-08

MATCHLINE STA. 765+00.00

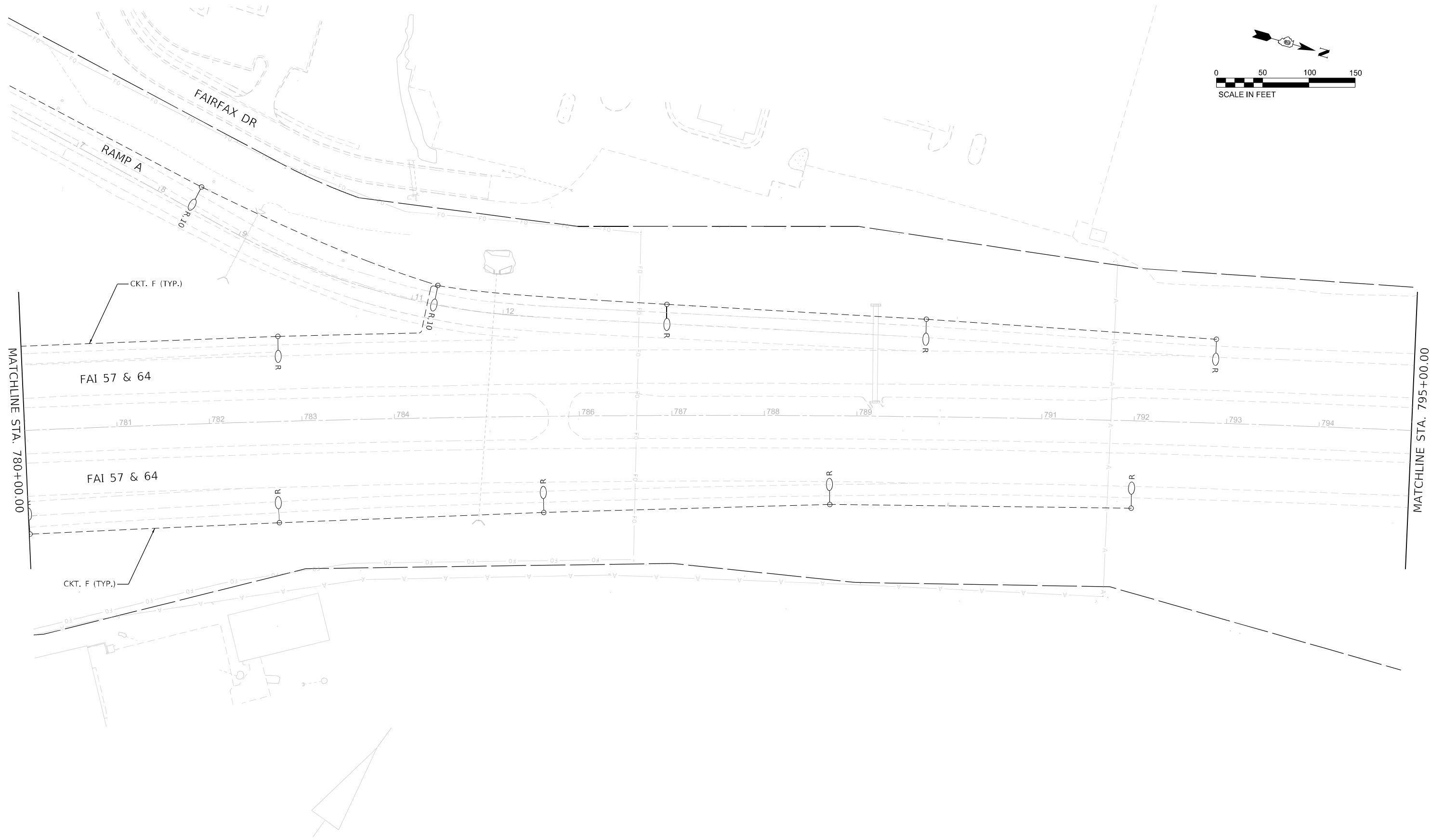
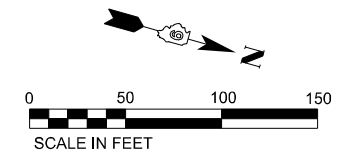
MATCHLINE STA. 780+00.00

SEE SHEET LT-09

SEE SHEET LT-09

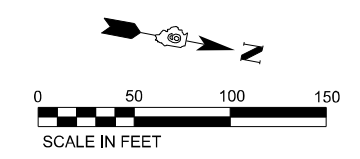
LT-05

FILE NAME = D978483-sht-remlight.dgn	USER NAME = bbarr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY LIGHTING AND REMOVAL PLAN			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 0.166666' / 1" = 1/6"	DRAWN -	REVISED -		I-57/64			57	13,13-2IN-1,TS-1;41-3;HB2	JEFFERSON	787	536
	PLOT DATE = 9/30/2024	CHECKED -	REVISED -		SCALE: 1"=50'			SHEET 3 OF 8 SHEETS	STA. 765+00	TO STA. 780+00	CONTRACT NO. 78483	
	DATE -	REVISED -						ILLINOIS FED. AID PROJECT				

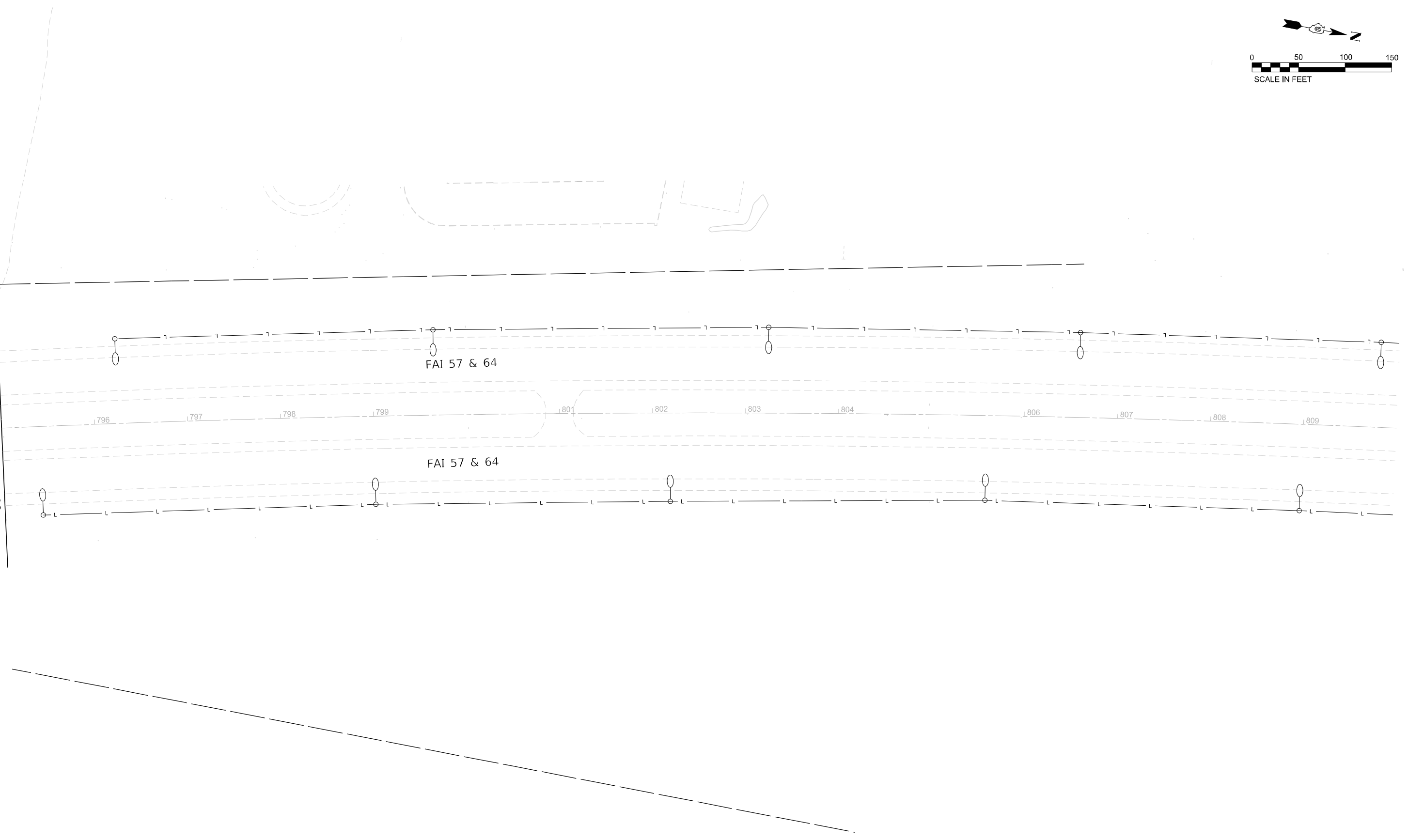


LT-06

FILE NAME = D978483-sht-remlight.dgn	USER NAME = bbarr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY LIGHTING AND REMOVAL PLAN			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 0.166666' / 1in.	DRAWN -	REVISED -		57	13.13-2IN-1,TS-1)(41-3)HB2	JEFFERSON	787	537			
PLOT DATE = 9/30/2024	CHECKED -	REVISED -	SCALE: 1"=50'		SHEET 4 OF 8 SHEETS	STA. 780+00	TO STA. 795+00	CONTRACT NO. 78483				
	DATE -	REVISED -	ILLINOIS FED. AID PROJECT									

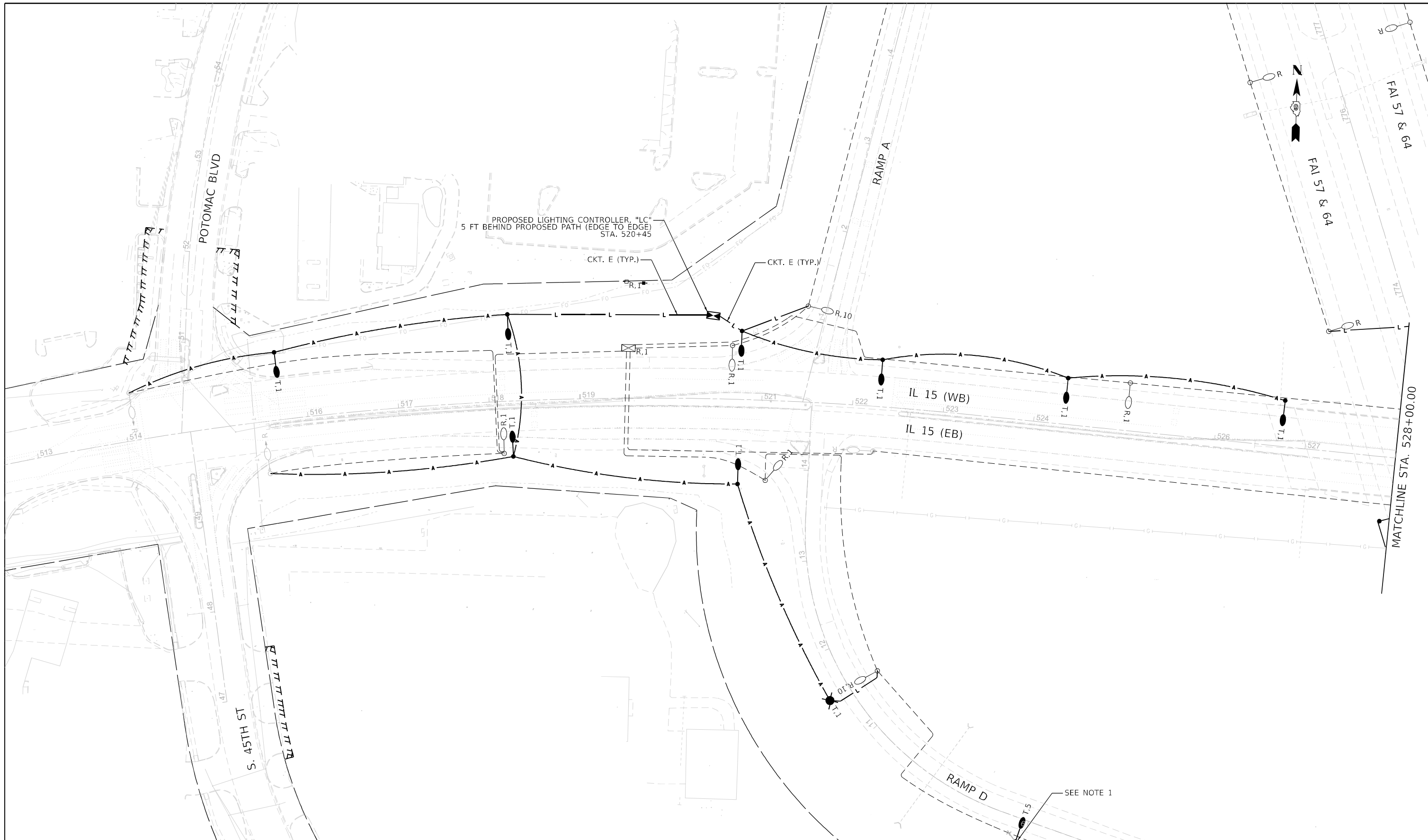


MATCHLINE STA. 795+00.00



LT-07

FILE NAME = D978483-sht-remlight.dgn	USER NAME = bbarr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY LIGHTING AND REMOVAL PLAN			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 0.166666' / 1in.	DRAWN -	REVISED -		57	13,13-2IN-1,TS-1)(41-3)HB2	JEFFERSON	787	538			
PLOT DATE = 9/30/2024	CHECKED -	REVISED -	SCALE: 1"=50' SHEET 5 OF 8 SHEETS STA. 795+00 TO STA. 810+00			CONTRACT NO. 78483						
	DATE -	REVISED -	ILLINOIS FED. AID PROJECT									



NOTES:

1. UNDERGROUND CONNECTION TO PROPOSED LIGHT POLE AT STA. 94+59 TO BE MADE DURING STAGE 5. INTERCEPT EXISTING UNDERGROUND CABLE AND CONDUIT FROM ADJACENT EXISTING LIGHT POLE AND ROUTE TO TEMPORARY LIGHT POLE.

SEE SHEET LT-05

LT-08

FILE NAME =
D978483-sht-remlight.dgn

USER NAME = bbarr
DESIGNED -
DRAWN -
PLOT SCALE = 0.166666' / 1"
PLOT DATE = 9/30/2024

DESIGNED -
DRAWN -
CHECKED -
DATE -

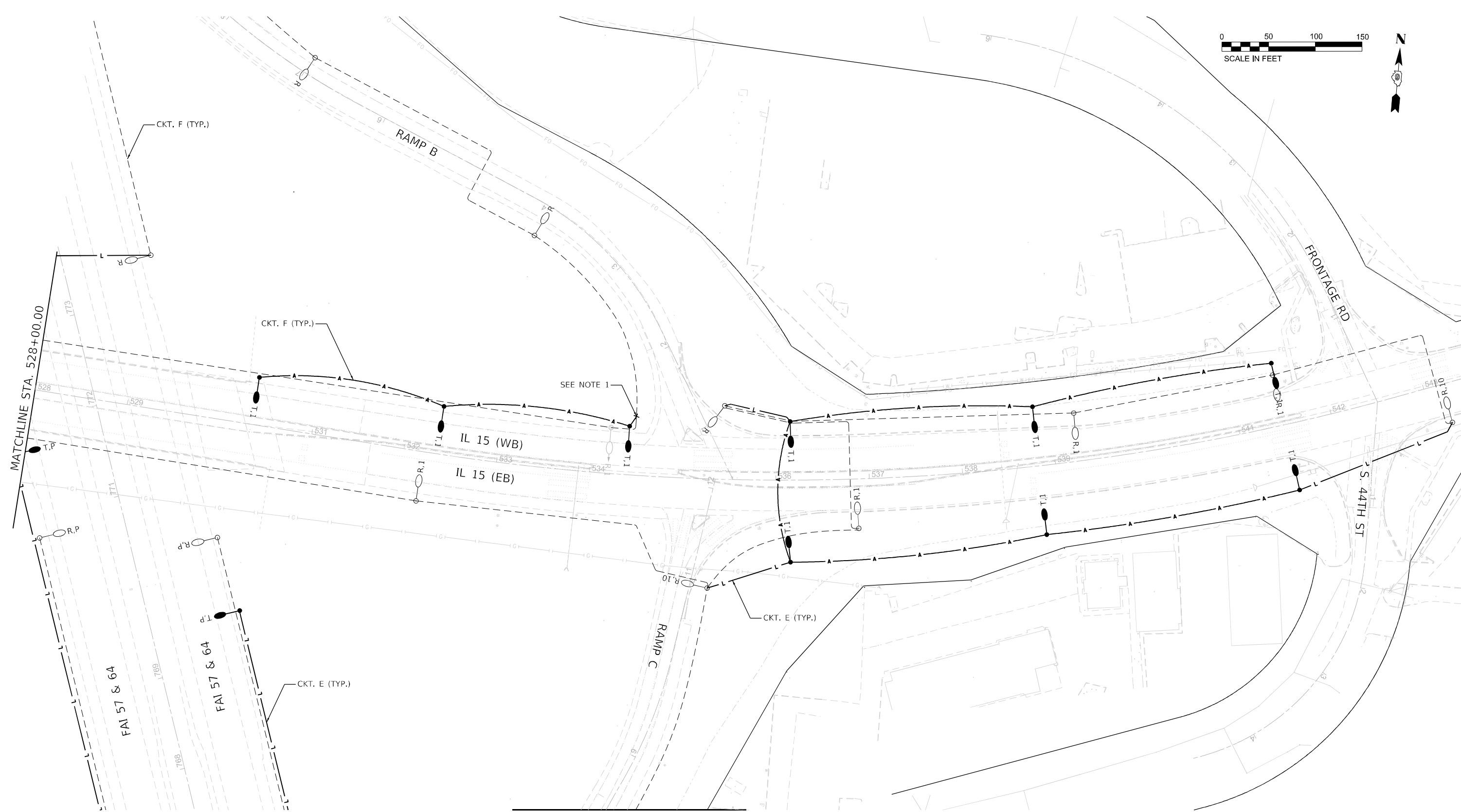
REVISED -
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**LIGHTING REMOVAL PLAN
IL 15**

SCALE: 1"=50' SHEET 6 OF 8 SHEETS STA. 513+00 TO STA. 528+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	13,13-2IN-1,TS-1x(41-3)HB2	JEFFERSON	787	539
				CONTRACT NO. 78483
ILLINOIS FED. AID PROJECT				



SEE NOTE 1

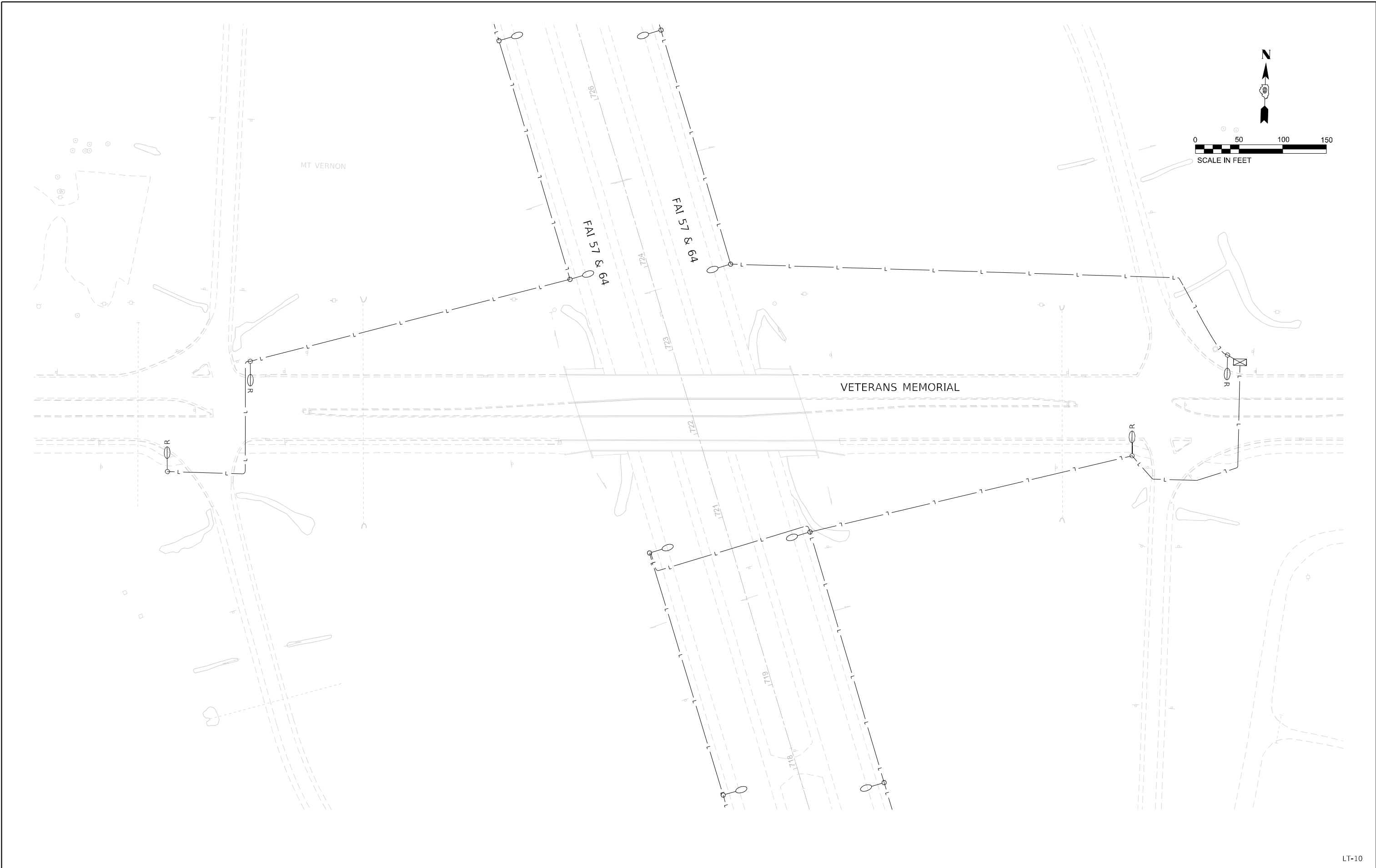
SEE SHEET LT-05

NOTES:

1. INTERCEPT EXISTING UNDERGROUND CABLE AND CONDUIT FROM ADJACENT EXISTING LIGHT POLE AND ROUTE TO TEMPORARY LIGHT POLE.

LT-09

FILE NAME = D978483-sht-remlight.dgn	USER NAME = bbarr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	LIGHTING REMOVAL PLAN IL 15			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 0.166666' / in.	DRAWN -	REVISED -		57	13,13-2IN-1,TS-1)(41-3)HB2	JEFFERSON	787	540			
	PLOT DATE = 9/30/2024	CHECKED -	REVISED -		SCALE: 1"=50' SHEET 7 OF 8 SHEETS STA. 528+00 TO STA. 543+00			CONTRACT NO. 78483				
	DATE -	REVISED -			ILLINOIS FED. AID PROJECT							



LT-10

FILE NAME =
D978483-sht-remlight.dgn

USER NAME = bbarr
PLOT SCALE = 0.166667' / in.
PLOT DATE = 9/30/2024

DESIGNED -
DRAWN -
CHECKED -
DATE -

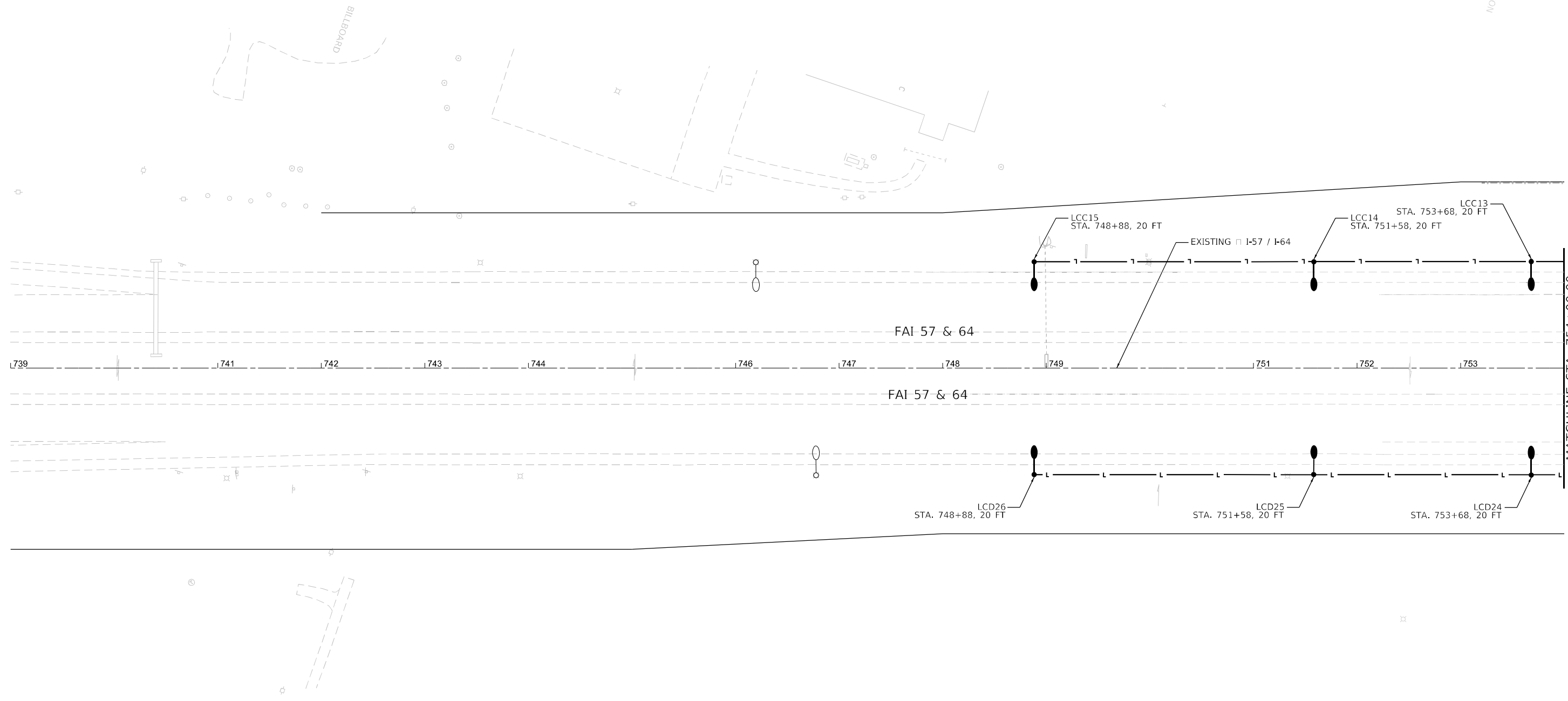
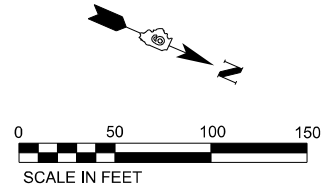
REVISED -
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY LIGHTING AND REMOVAL PLAN
VETERANS MEMORIAL**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	13,13-2(N-1,TS-1)(41-3)HB2	JEFFERSON	787	541
			CONTRACT NO. 78483	
ILLINOIS FED. AID PROJECT				

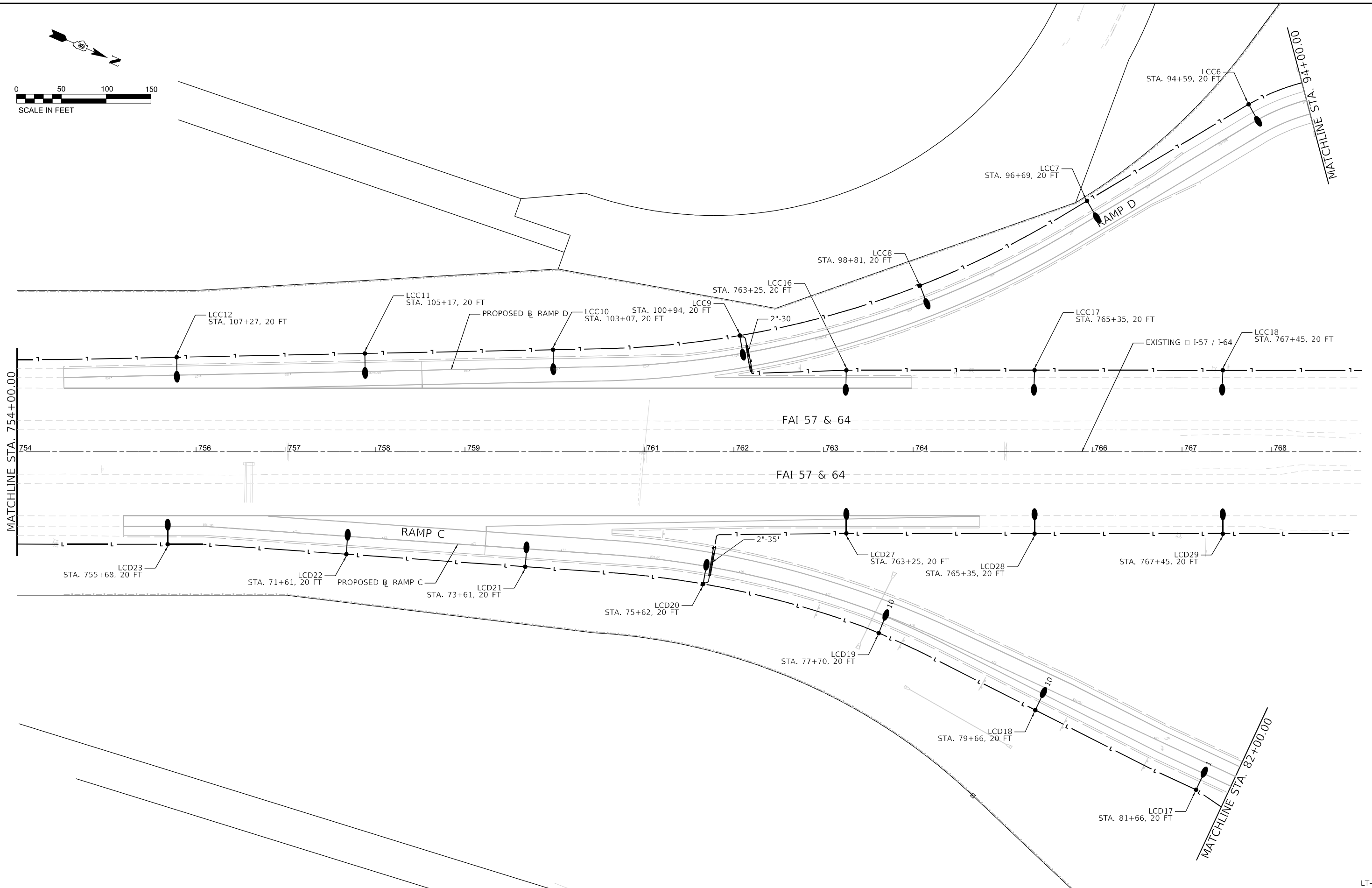
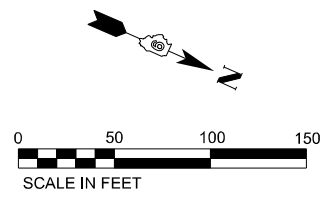
SCALE: 1"=50' SHEET 8 OF 8 SHEETS STA. TO STA.



MATCHLINE STA. 754+00.00

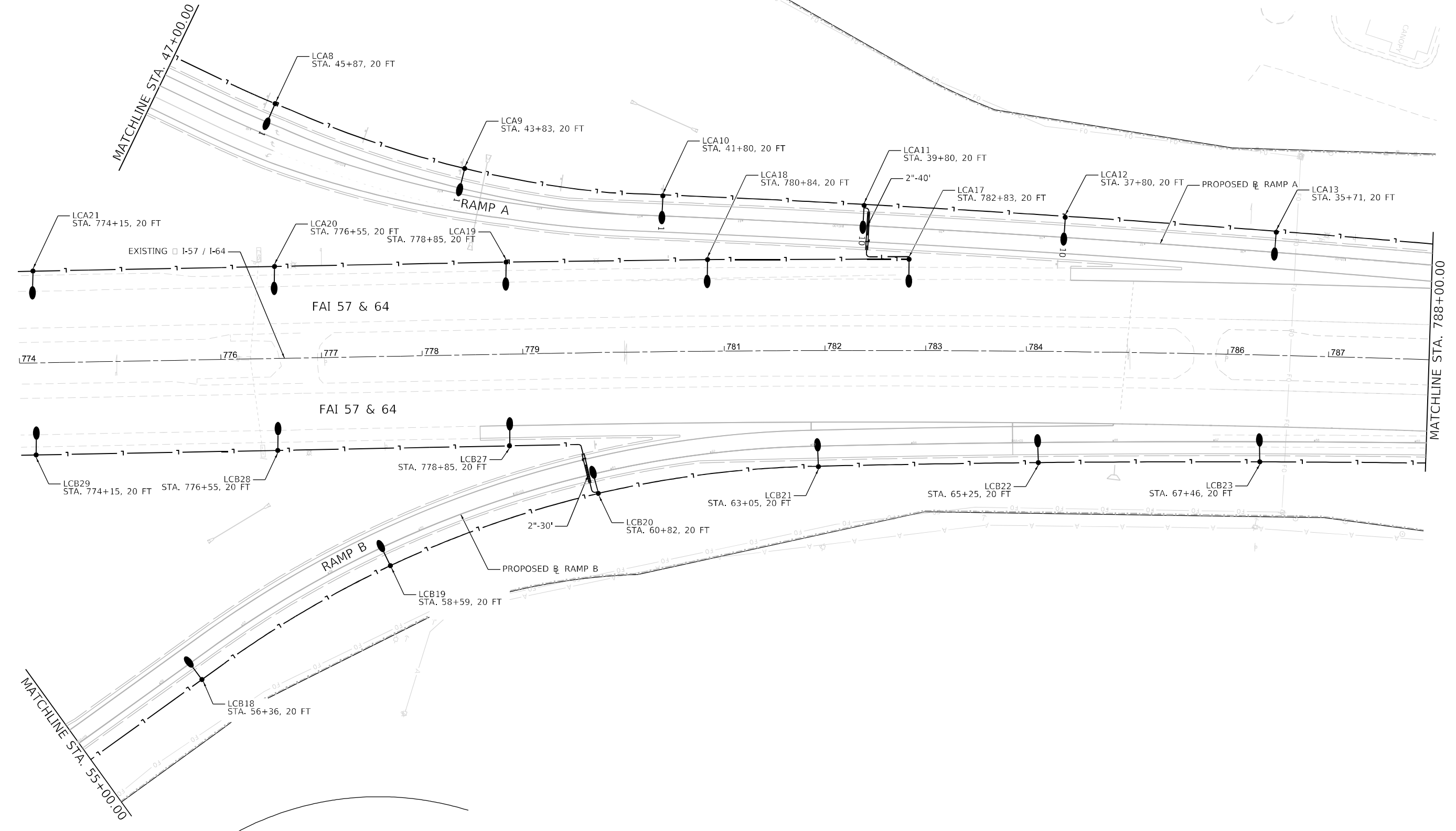
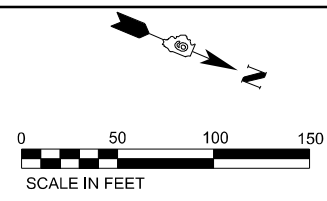
LT-11

FILE NAME = D978483-sh1-light.dgn	USER NAME = bbarr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	LIGHTING PLAN I-57/64		F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 0.167' / in.	DRAWN -	REVISED -		57	13,13-2(N-1,TS-1)(41-3)HB2	JEFFERSON	787	542		
PLOT DATE = 9/30/2024	CHECKED -	REVISED -	SCALE: 1"=50'		SHEET 1 OF 7 SHEETS	STA. 739+00.00 TO STA. 754+00.00	CONTRACT NO. 78483				
	DATE -	REVISED -	ILLINOIS FED. AID PROJECT								



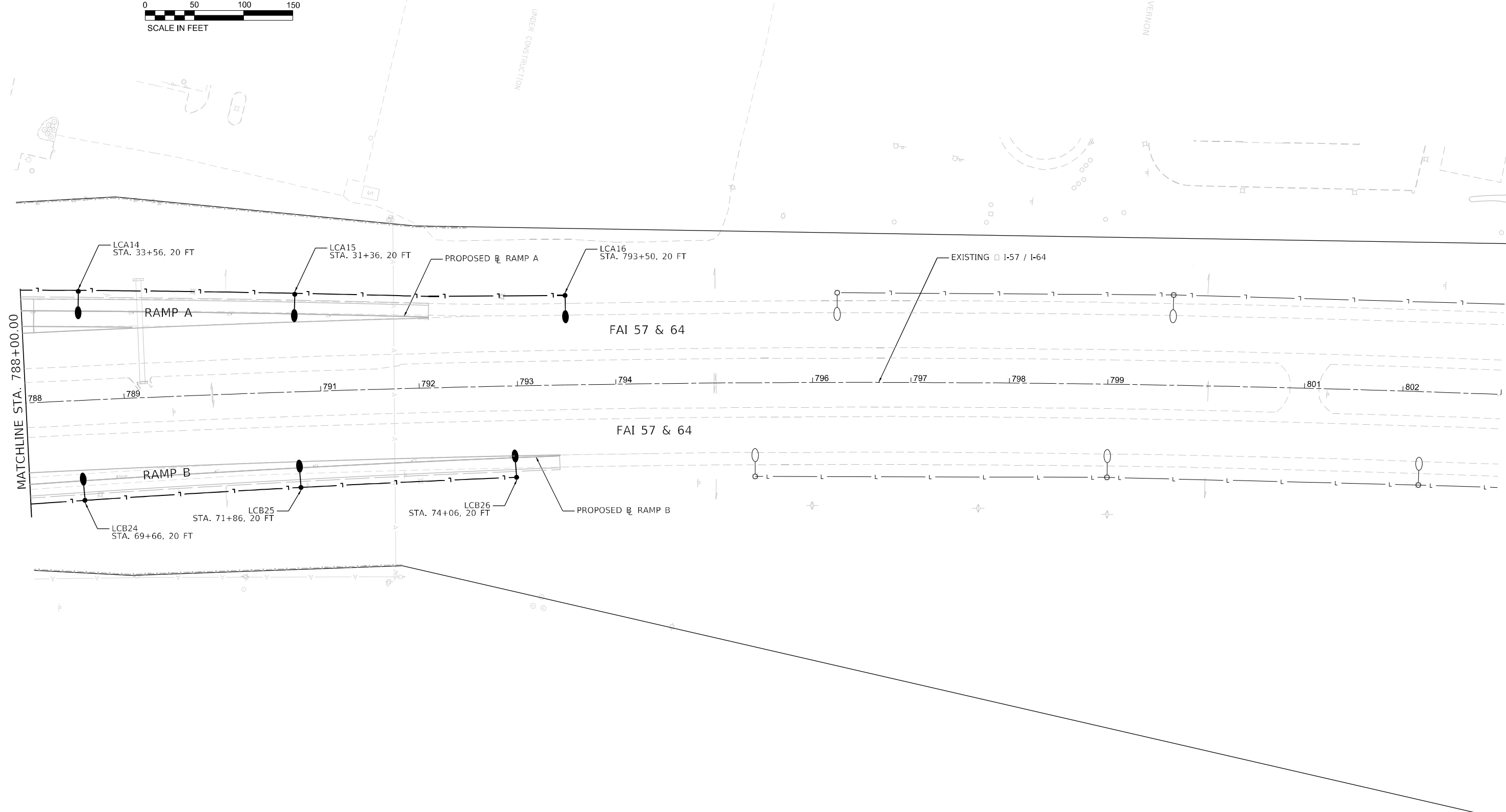
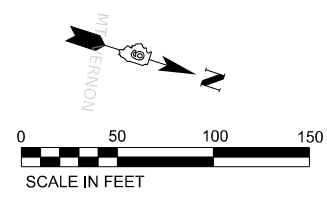
LT-12

FILE NAME = D978483-sht-light.dgn	USER NAME = bbarr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	LIGHTING PLAN I-57/64		F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 0.167' / in.	CHECKED -	REVISED -		57	13,13-2IN-1,TS-14(41-3)HB2	JEFFERSON	787	543		
PLOT DATE = 9/30/2024	DATE -	REVISED -	REVISED -		SCALE: 1"=50' SHEET 2 OF 7 SHEETS STA. 754+00.00 TO STA. 769+00.00		CONTRACT NO. 78483		ILLINOIS FED. AID PROJECT		



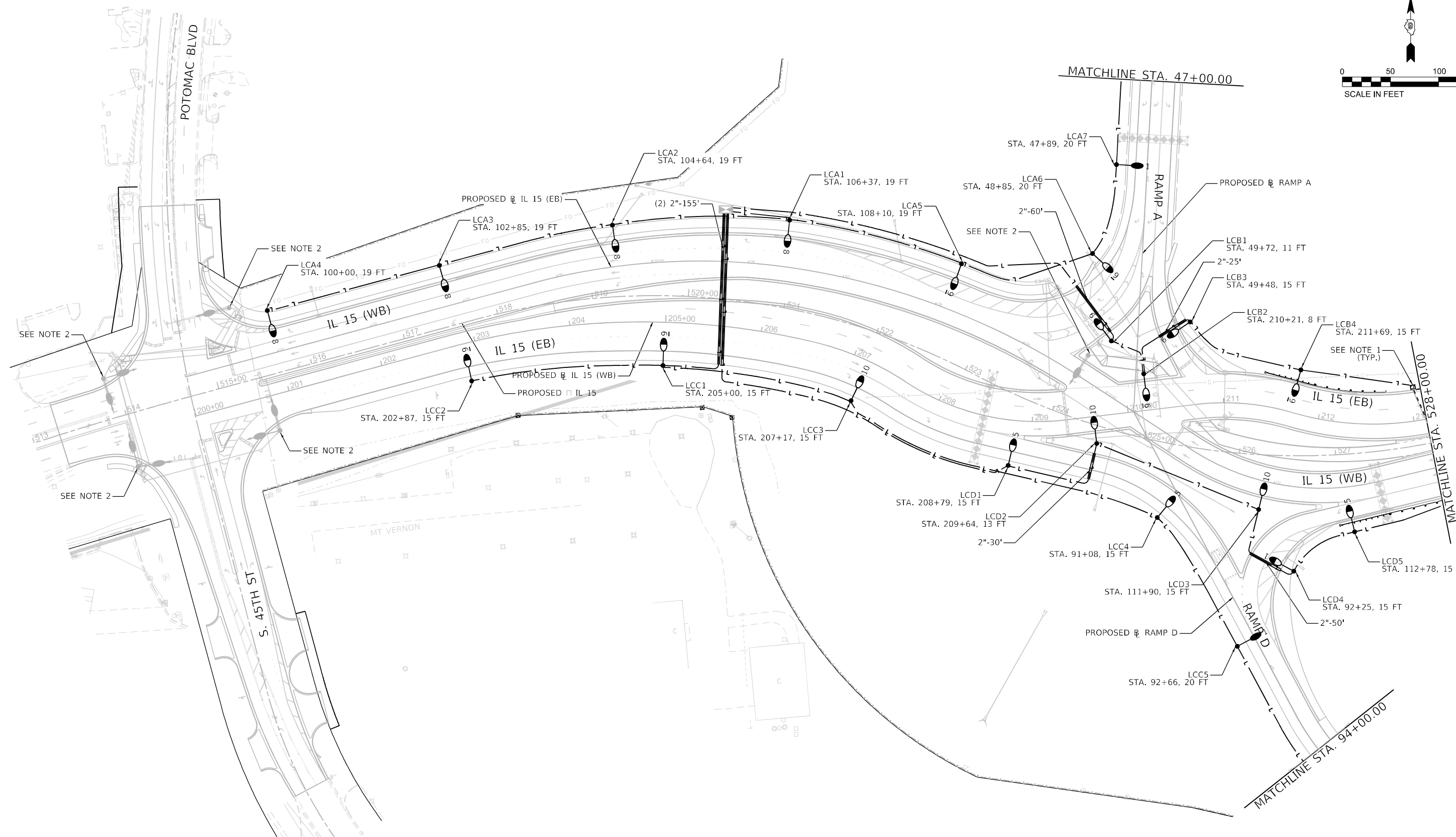
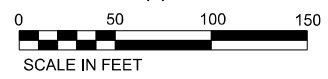
LT-13

FILE NAME = D978483-sh1-light.dgn	USER NAME = bbarr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	LIGHTING PLAN I-57/64		F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 0.167" / 1'	DRAWN -	REVISED -		SCALE: 1"=50'	SHEET 3 OF 7 SHEETS	STA. 774+00.00 TO STA. 788+00.00	57	13,13-2IN-1,TS-1;(41-3)HB2	JEFFERSON	787
PLOT DATE = 9/30/2024	CHECKED -	DATE -	REVISED -				CONTRACT NO. 78483			ILLINOIS FED. AID PROJECT	



LT-14

FILE NAME = D978483-sht-light.dgn	USER NAME = bbarr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	LIGHTING PLAN I-57/64		F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 0.167' / in.	DRAWN -	REVISED -		SCALE: 1"=50'	SHEET 4 OF 7 SHEETS	STA. 788+00.00 TO STA. 803+00.00	57	13.13-2IN-1,TS-1)(41-3)HB2	JEFFERSON	787
PLOT DATE = 9/30/2024	CHECKED -	DATE -	REVISED -					CONTRACT NO. 78483		ILLINOIS FED. AID PROJECT	



NOTES:

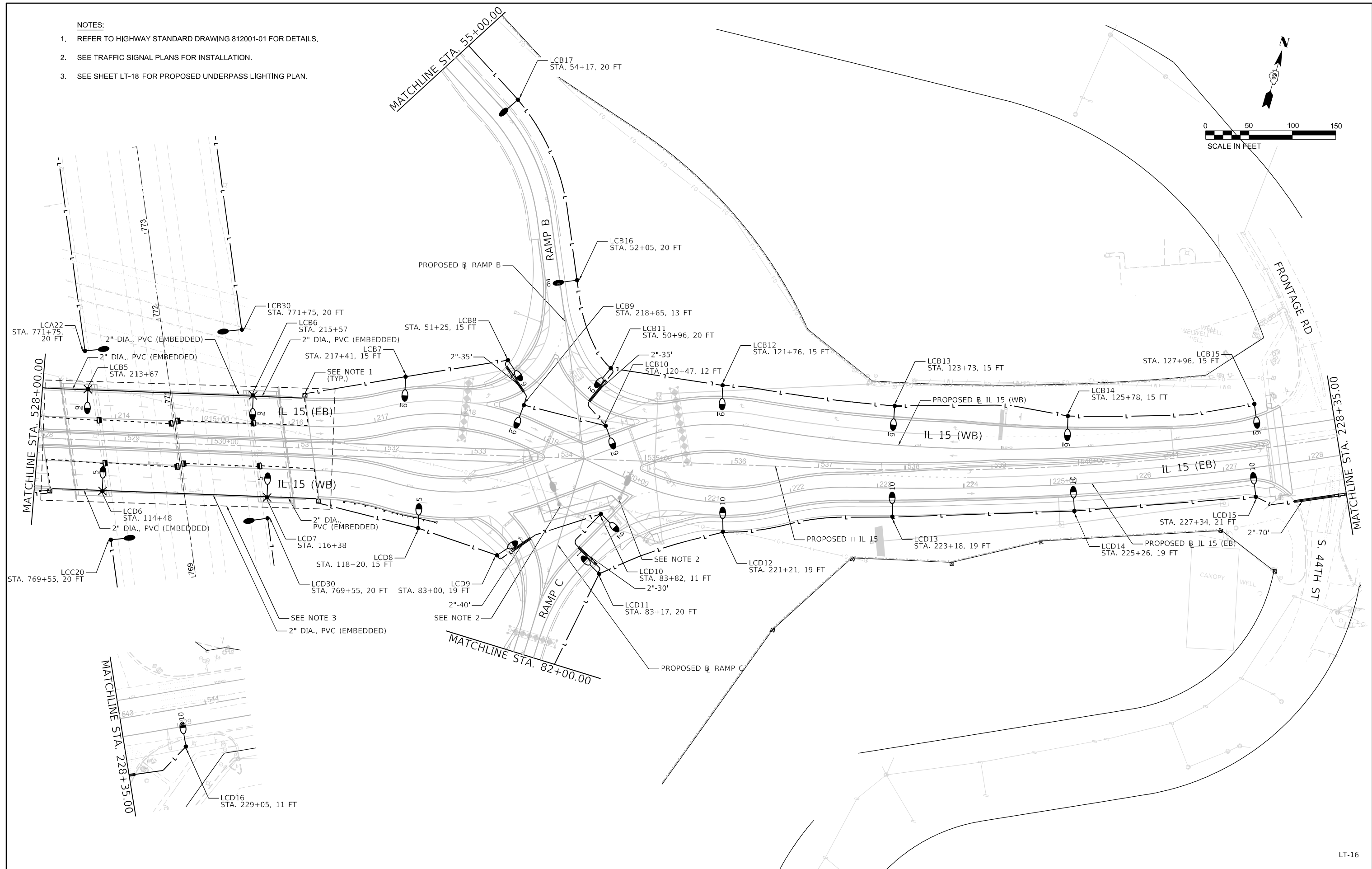
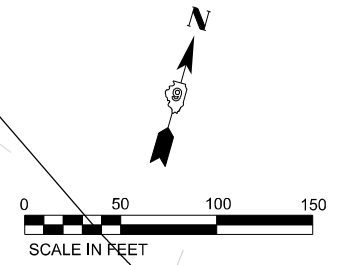
- 1. REFER TO HIGHWAY STANDARD DRAWING 812001-01 FOR DETAILS.
- 2. SEE TRAFFIC SIGNAL PLANS FOR INSTALLATION.

LT-15

FILE NAME = D978483-sht-light.dgn	USER NAME = bbarr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	LIGHTING PLAN IL 15		F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 0.167" / in.	CHECKED -	REVISED -		SCALE: 1"=50'	SHEET 5 OF 7 SHEETS	STA. 513+00.00 TO STA. 528+00.00	57	13.13-2IN-1,TS-1X(41-3)HB2	JEFFERSON	787
PLOT DATE = 9/30/2024	DATE -	REVISED -	REVISED -							CONTRACT NO. 78483	
ILLINOIS FED. AID PROJECT											

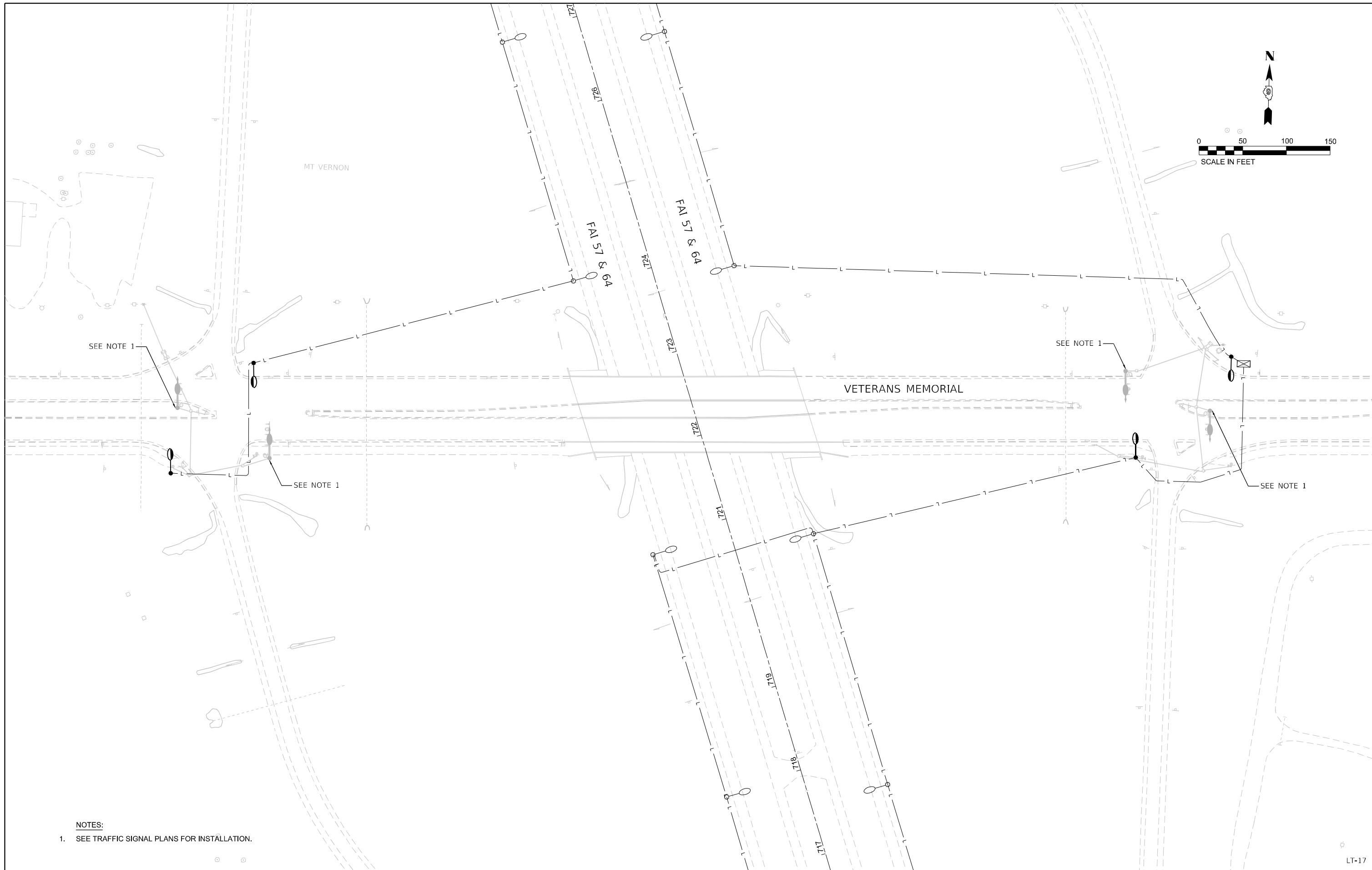
NOTES:

1. REFER TO HIGHWAY STANDARD DRAWING 812001-01 FOR DETAILS.
2. SEE TRAFFIC SIGNAL PLANS FOR INSTALLATION.
3. SEE SHEET LT-18 FOR PROPOSED UNDERPASS LIGHTING PLAN.



LT-16

FILE NAME = D978483-sh1-light.dgn	USER NAME = bbarr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	LIGHTING PLAN IL 15			F.A.I. RTE. 57	SECTION 13,13-2IN-1,TS-1x(41-3)HB2	COUNTY JEFFERSON	TOTAL SHEETS 787	SHEET NO. 547	
	PLOT SCALE = 0.167" / 1"	CHECKED -	REVISED -		SCALE: 1"=50'	SHEET 6	OF 7 SHEETS	STA. 528+00.00	TO STA. 543+00.00	CONTRACT NO. 78483			
	PLOT DATE = 9/30/2024	DATE -	REVISED -		ILLINOIS FED. AID PROJECT								



NOTES:

- 1. SEE TRAFFIC SIGNAL PLANS FOR INSTALLATION.

FILE NAME =
D978483-sht-light.dgn

USER NAME = bbarr
DESIGNED -
DRAWN -
PLOT SCALE = 0.167' / in.
CHECKED -
PLOT DATE = 9/30/2024
DATE -

DESIGNED -
DRAWN -
CHECKED -
DATE -

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REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**LIGHTING PLAN
VETERANS MEMORIAL**

SCALE: 1"=50' SHEET 7 OF 7 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	13,13-2(N-1,TS-1)(41-3)MB2	JEFFERSON	787	548
CONTRACT NO. 78483			ILLINOIS FED. AID PROJECT	

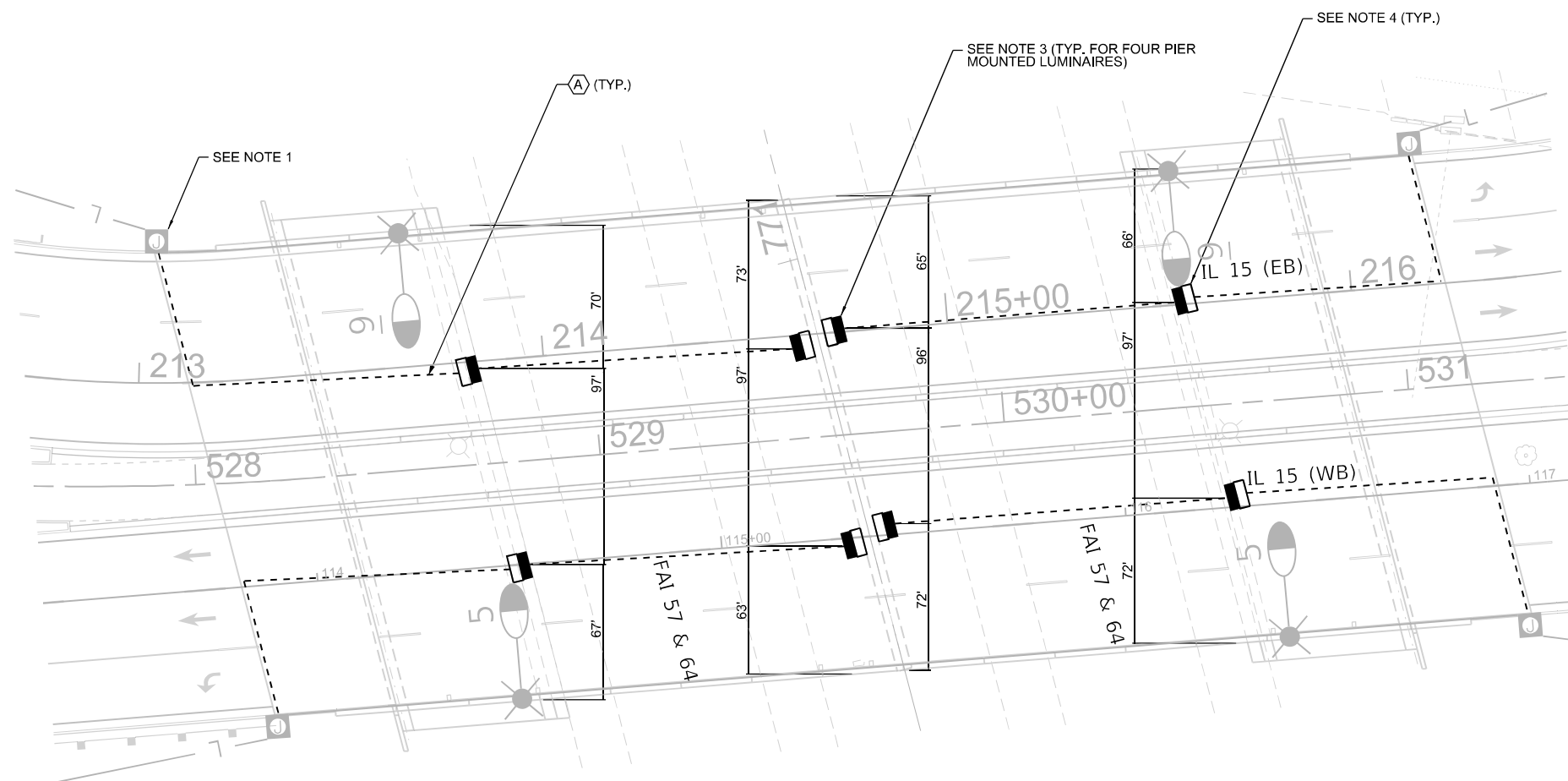
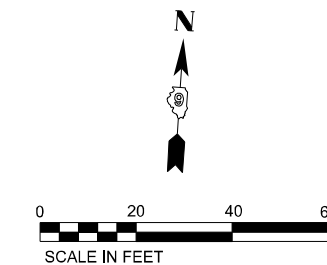
LIGHTING LEGEND

1 PROPOSED JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE

JB1 12" X 10" X 6" (SEE NOTE 2)
 JB2 6" X 6" X 4" (SEE NOTE 2)

CABLE TAGS

A ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 2-1C NO.10, 1/C NO.10
 GROUND, IN CONDUIT ATTACHED TO STRUCTURE, 1" DIA., SS



NOTES:

1. PROVIDE IN-LINE FUSE IN ACCORDANCE WITH ARTICLE 1065.01 OF THE STANDARD SPECIFICATIONS.
2. NOT SHOWN FOR CLARITY. REFER TO HIGHWAY STANDARD DRAWINGS 821001 AND 821006 FOR DETAILS.
3. REFER TO HIGHWAY STANDARD DRAWING 821001 FOR DETAILS. PROPOSED WALL MOUNTED UNDERPASS LUMINAIRE MOUNTING HEIGHT OF 15'-0" MINIMUM TO GRADE.
4. REFER TO HIGHWAY STANDARD DRAWING 821006 FOR DETAILS. PROPOSED SUSPENDED MOUNTED UNDERPASS LUMINAIRES SHALL BE OFFSET SIX (6) FEET FROM EDGE OF PAVEMENT.
5. SEE SHEET LT-19 FOR ELEVATION DETAILS.

SCHEDULE OF QUANTITIES FOR UNDERPASS JUNCTION BOXES

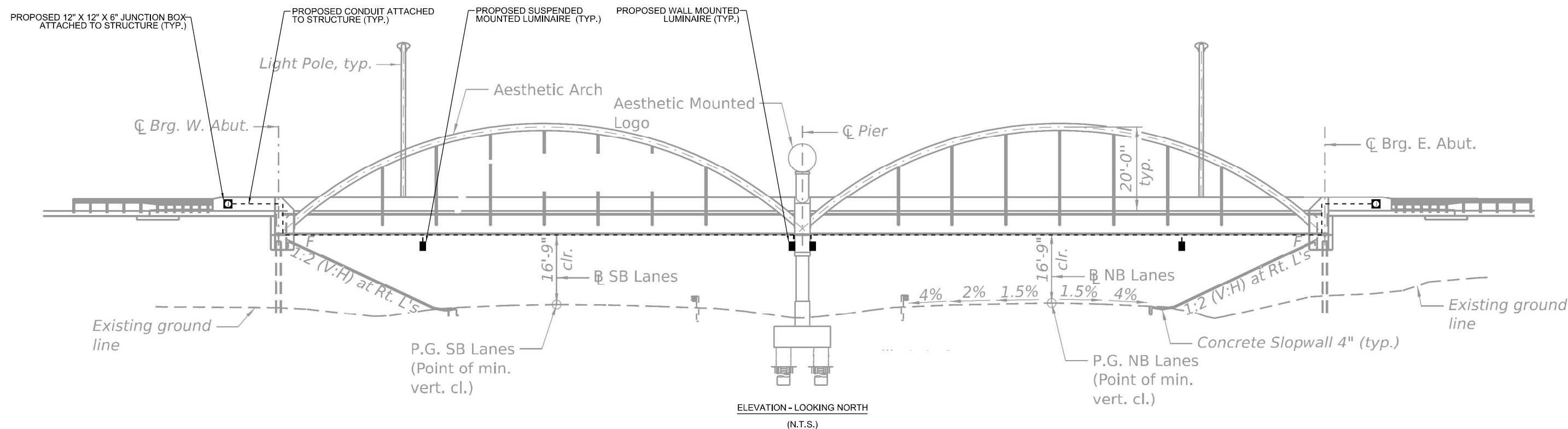
PAY ITEM	DESCRIPTION	UNIT	QUANTITY
81300220	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 6" X 6" X 4"	EACH	12
81300530	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 12" X 10" X 6"	EACH	4

LT-18

FILE NAME = D978483-sht-undlight-01.dgn	USER NAME = bbarr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	UNDERPASS LIGHTING PLAN I-57/64			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -		SCALE: 1"=20'	SHEET 1 OF 1 SHEETS	STA.	TO STA.	13,13-2(N-1,TS-1)(41-3)HB2	JEFFERSON	787	549
		PLOT SCALE = 40.0000' / in.	REVISED -		CONTRACT NO. 78483							
		PLOT DATE = 9/30/2024	REVISED -		ILLINOIS FED. AID PROJECT							

NOTES:

- SEE UNDERPASS LIGHTING PLAN FOR DETAILS AND LOCATION OF UNDERPASS LUMINAIRES.



FILE NAME = D978483-sh1-lightdetail-01.dgn	USER NAME = bbarr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	UNDERPASS LIGHTING CONDUIT ROUTING DETAILS		F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -		I-57/64		57	13,13-2(N-1,TS-1)(41-3)HB2	JEFFERSON	787	550
PLOT DATE = 9/30/2024	DATE -	REVISED -	REVISED -	SCALE: NONE		SHEET 1 OF 1 SHEETS	STA.	TO STA.	CONTRACT NO. 78483		
ILLINOIS FED. AID PROJECT											

LUMINAIRE PERFORMANCE TABLE
TEMPORARY LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION I

Project
 Date: 10-31-2023 Contract Number: 78483 Section Number: 13,13-2(N-1,TS-1)(41-3)HB2 County: JEFFERSON
 Marked Route Number: Municipality:

Roadway
 Lane Width (See Note 4): 24 ft *of Lanes: 2 Median Width: 0 ft I.E.S. Surface Classification: R3 0-Zero Value: 0.07

Structure
 Mounting Height: 50 ft Arm Length: 15 ft Set Back (See Note 1): 45 ft Number of Luminaires (Highmast & Sign Lighting Only): N/A

Luminaire
 Description: TEMPORARY LUMINAIRE, LED, ROADWAY, DESIGNATION I I.E.S. Transverse Distribution: TYPE II I.E.S. Lateral Distribution: MEDIUM
 Total Light Loss Factor (LLF): 0.7 BUG Rating: U = 0 Shields: NO Dimming Protocol: 0-10V

Layout
 Spacing (to Nearest 5 Ft) Configuration (Opposite, Staggered, 1 Sided, or Median): 275 ft TWO ROWS, OPPOSITE, WITH MEDIAN

Performance (See Note 5)
 Average Illuminance, E_{AVE} (fc): ≥ 1.3 Uniformity Ratio, E_{AVE}/E_{MIN} : $\leq 3.0:1$
 Average Luminance, L_{AVE} (cd/m²): ≥ 0.9 Uniformity Ratio, L_{AVE}/L_{MIN} : $\leq 3.0:1$ Uniformity Ratio, L_{MAX}/L_{MIN} : $\leq 5.0:1$ Veiling Luminance Ratio, L_V/L_{MIN} : ≤ 0.3

Light Trespass
 Distance to ROW (behind pole): N/A Max. Horizontal Illuminance at ROW, E_H : N/A Max. Vertical Illuminance at ROW, E_V : N/A

- Notes**
- Set Back is from Edge of Pavement (white line).
 - Lighting calculations shall be performed with all luminaires oriented toward and perpendicular to roadway.
 - Performance requirements shall be the minimum acceptable standards of photometric performance for the luminaire, based on the given conditions above.
 - Lane width is the width of each individual lane, not to be confused with total roadway width.
 - Compliance with performance criteria shall be held to one significant digit.
 - Luminaire performance table is intended to define the luminaire and does not necessarily match any specific roadway geometry, mounting height, setback, or arm length.
 - Nominal lumen output of 40,000.

LUMINAIRE PERFORMANCE TABLE
LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H

Project
 Date: 10-31-2023 Contract Number: 78483 Section Number: 13,13-2(N-1,TS-1)(41-3)HB2 County: JEFFERSON
 Marked Route Number: Municipality:

Roadway
 Lane Width (See Note 4): 15 ft *of Lanes: 3 Median Width: 22 ft I.E.S. Surface Classification: R3 0-Zero Value: 0.07

Structure
 Mounting Height: 45 ft Arm Length: 15 ft Set Back (See Note 1): 15 ft Number of Luminaires (Highmast & Sign Lighting Only): N/A

Luminaire
 Description: LUMINAIRE, LED, ROADWAY, DESIGNATION H I.E.S. Transverse Distribution: TYPE II I.E.S. Lateral Distribution: MEDIUM
 Total Light Loss Factor (LLF): 0.7 BUG Rating: U = 0 Shields: NO Dimming Protocol: 0-10V

Layout
 Spacing (to Nearest 5 Ft) Configuration (Opposite, Staggered, 1 Sided, or Median): 200 ft TWO ROWS, OPPOSITE, WITH MEDIAN

Performance (See Note 5)
 Average Illuminance, E_{AVE} (fc): ≥ 1.3 Uniformity Ratio, E_{AVE}/E_{MIN} : $\leq 3.0:1$
 Average Luminance, L_{AVE} (cd/m²): ≥ 0.9 Uniformity Ratio, L_{AVE}/L_{MIN} : $\leq 3.0:1$ Uniformity Ratio, L_{MAX}/L_{MIN} : $\leq 5.0:1$ Veiling Luminance Ratio, L_V/L_{MIN} : ≤ 0.3

Light Trespass
 Distance to ROW (behind pole): N/A Max. Horizontal Illuminance at ROW, E_H : N/A Max. Vertical Illuminance at ROW, E_V : N/A

- Notes**
- Set Back is from Edge of Pavement (white line).
 - Lighting calculations shall be performed with all luminaires oriented toward and perpendicular to roadway.
 - Performance requirements shall be the minimum acceptable standards of photometric performance for the luminaire, based on the given conditions above.
 - Lane width is the width of each individual lane, not to be confused with total roadway width.
 - Compliance with performance criteria shall be held to one significant digit.
 - Luminaire performance table is intended to define the luminaire and does not necessarily match any specific roadway geometry, mounting height, setback, or arm length.
- Unshielded and shielded photometry to be used to perform lighting calculations.

LUMINAIRE PERFORMANCE TABLE
LUMINAIRE, LED, UNDERPASS, OUTPUT DESIGNATION E

Project
 Date: 10-31-2023 Contract Number: 78483 Section Number: 13,13-2(N-1,TS-1)(41-3)HB2 County: JEFFERSON
 Marked Route Number: Municipality:

Roadway
 Lane Width (See Note 4): 12 ft *of Lanes: 1 Median Width: N/A I.E.S. Surface Classification: R3 0-Zero Value: 0.07

Structure
 Mounting Height: 15 ft Arm Length: N/A Set Back (See Note 1): 15 ft Number of Luminaires (Highmast & Sign Lighting Only): N/A

Luminaire
 Description: LUMINAIRE, LED, UNDERPASS, DESIGNATION E I.E.S. Transverse Distribution: TYPE II I.E.S. Lateral Distribution: SHORT
 Total Light Loss Factor (LLF): 0.7 BUG Rating: U = 0 Shields: NO Dimming Protocol: 0-10V

Layout
 Spacing (to Nearest 5 Ft) Configuration (Opposite, Staggered, 1 Sided, or Median): 50 ft ONE ROW, NEAR SIDE

Performance (See Note 5)
 Average Illuminance, E_{AVE} (fc): $\geq 1.0-2.0$ Uniformity Ratio, E_{AVE}/E_{MIN} : $\leq 3.0:1$
 Average Luminance, L_{AVE} (cd/m²): $\geq 0.9 - 1.0$ Uniformity Ratio, L_{AVE}/L_{MIN} : $\leq 3.0:1$ Uniformity Ratio, L_{MAX}/L_{MIN} : $\leq 5.0:1$ Veiling Luminance Ratio, L_V/L_{MIN} : ≤ 0.3

Light Trespass
 Distance to ROW (behind pole): N/A Max. Horizontal Illuminance at ROW, E_H : N/A Max. Vertical Illuminance at ROW, E_V : N/A

- Notes**
- Set Back is from Edge of Pavement (white line).
 - Lighting calculations shall be performed with all luminaires oriented toward and perpendicular to roadway.
 - Performance requirements shall be the minimum acceptable standards of photometric performance for the luminaire, based on the given conditions above.
 - Lane width is the width of each individual lane, not to be confused with total roadway width.
 - Compliance with performance criteria shall be held to one significant digit.
 - Luminaire performance table is intended to define the luminaire and does not necessarily match any specific roadway geometry, mounting height, setback, or arm length.
- The underpass luminaire shall be tilted, as necessary, to meet the performance requirements. The Contractor shall install the underpass luminaire at the designed tilt.

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		DRAWN -	REVISED -
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	PLOT DATE = 9/30/2024	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LUMINAIRE PERFORMANCE TABLES

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

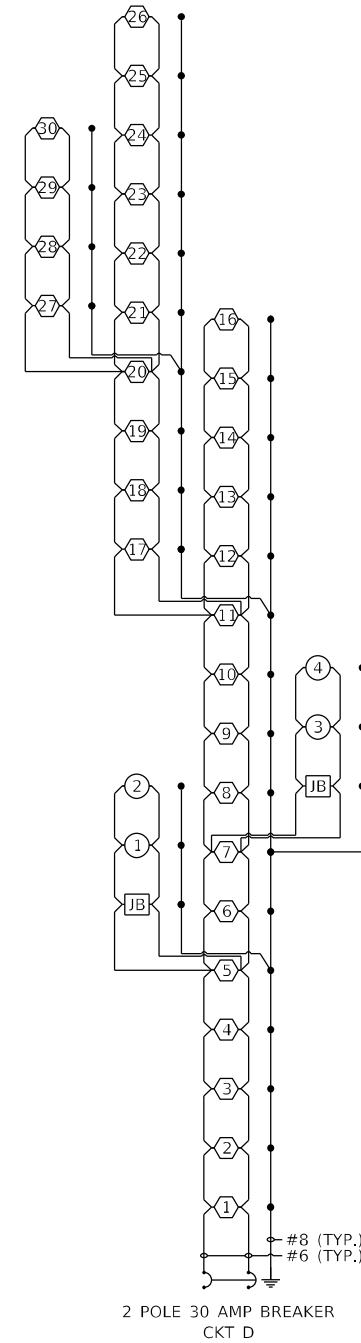
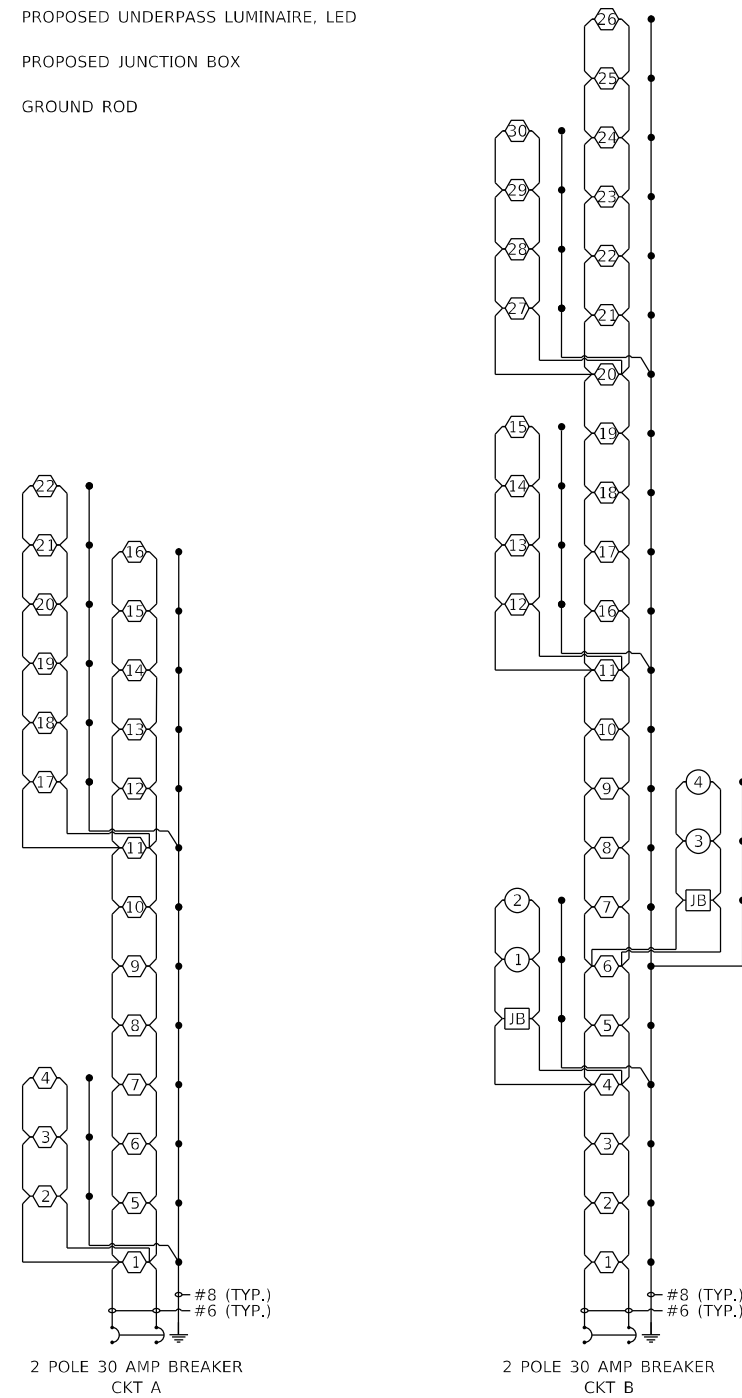
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	13,13-2(N-1,TS-1)(41-3)HB2	JEFFERSON	787	551
			CONTRACT NO. 78483	
ILLINOIS FED. AID PROJECT				

PROPOSED LIGHTING CIRCUITS

NOTES:

1. ALL NECESSARY REVISIONS TO THE WIRING SHOWN ON THIS SHEET SHALL BE MADE AT NO ADDITIONAL COST TO THE DEPARTMENT AND TO THE SATISFACTION OF THE ENGINEER.

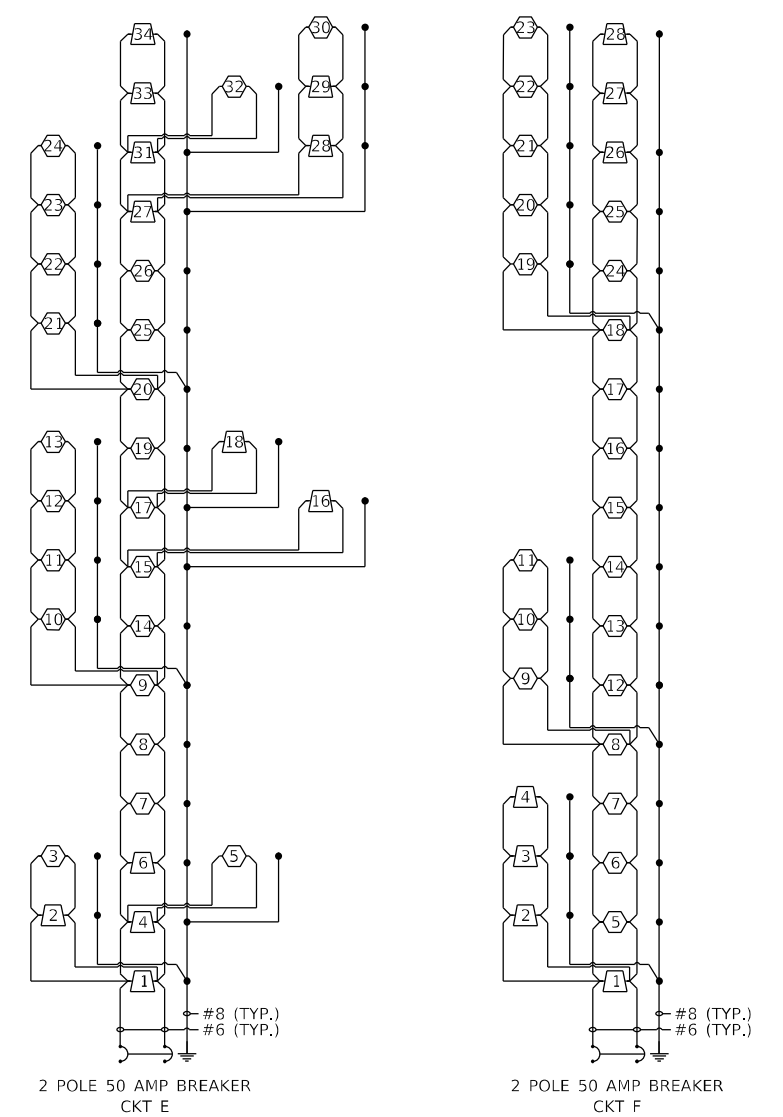
- PROPOSED ROADWAY LUMINAIRE, LED
- PROPOSED UNDERPASS LUMINAIRE, LED
- PROPOSED JUNCTION BOX
- ⏏ GROUND ROD



IL 15
PROPOSED LIGHTING CONTROLLER, "LC"
BASE MOUNTED, 480 VOLT, 200 AMP









TEMPORARY LIGHTING CIRCUITS

- TEMPORARY ROADWAY LUMINAIRE, LED
- EXISTING ROADWAY LUMINAIRE, LED
- ⏏ GROUND ROD



FILE NAME = D978483-sh1-lightdetail-03.dgn	USER NAME = bbarr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WIRING DIAGRAMS IL 15		F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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PLOT DATE = 9/30/2024	DATE -	REVISED -	SCALE: NONE	SHEET 1 OF 1 SHEETS	STA.	TO STA.	CONTRACT NO. 78483				
ILLINOIS FED. AID PROJECT											

DECORATIVE LIGHTING LEGEND

-  JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 18" X 12" X 10" UNLESS OTHERWISE NOTED
-  LIGHTING CONTROLLER (SPECIAL) UNLESS OTHERWISE NOTED
-  SERVICE INSTALLATION, GROUND MOUNTED
(SEE TRAFFIC SIGNAL PLANS - UTILIZED FOR SERVICE TO LIGHTING CONTROLLERS)
-  UNIT DUCT, 600V, 2-1/C NO.4, 1/C NO.6 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE UNLESS OTHERWISE NOTED
-  UNIT DUCT, 600V, 3-1/C NO.6, 1/C NO.6 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE
-  LUMINAIRE, LED, DECORATIVE LIGHT (D1), VERTICAL BEAM FLOOD
-  LUMINAIRE, LED, DECORATIVE LIGHT (D2), MIDDLE COLUMN FLOOD
-  LUMINAIRE, LED, DECORATIVE LIGHT (D3), LOGO FLOOD

GENERAL NOTES

1. THE FINAL LOCATION OF THE PROPOSED LIGHTING CONTROLLER SHALL BE DETERMINED IN THE FIELD UNDER THE DIRECTION OF THE FIELD ENGINEER. IN NO INSTANCE SHALL THE LIGHTING CONTROLLER BE PLACED WITHIN 5 FT. OF THE BACK OF GUARDRAIL.
2. ELECTRIC SERVICE SHALL BE PROVIDED FROM THE SERVICE INSTALLATION, GROUND MOUNTED AS DESCRIBED IN THE TRAFFIC SIGNAL PLANS.

DECORATIVE LIGHTING SUMMARY OF QUANTITIES

S.P.	CODE NO.	ITEM DESCRIPTION	UNIT	QUANTITY
		UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 2" DIA.	FOOT	312
		CONDUIT EMBEDDED IN STRUCTURE, 2 1/2" DIA., PVC	FOOT	580
		JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 12" X 12" X 6"	EACH	28
		JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 18" x 12" x 10"	EACH	6
		UNIT DUCT, 600V, 2-1C NO.4, 1/C NO.6 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE	FOOT	1,122
		UNIT DUCT, 600V, 3-1C NO.6, 1/C NO.6 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE	FOOT	258
		ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10	FOOT	1,764
*		PARAPET MOUNTED BRIDGE LIGHTING SYSTEM	L SUM	1
*		LIGHTING CONTROLLER (SPECIAL)	EACH	1

S.P. COLUMN

* INDICATES SPECIAL PROVISION

ITEMS INCLUDED UNDER PARAPET MOUNTED LIGHTING SYSTEM, L SUM

LUMINAIRE, LED, DECORATIVE LIGHT (D1), VERTICAL BEAM FLOOD	EACH	28
LUMINAIRE, LED, DECORATIVE LIGHT (D2), MIDDLE COLUMN FLOOD	EACH	2
LUMINAIRE, LED, DECORATIVE LIGHT (D3), LOGO FLOOD	EACH	2
DECORATIVE LIGHTING CONTROL EQUIPMENT AND CABLING (DMX)	L SUM	1
DECORATIVE LIGHTING INTEGRATION	L SUM	1
PRE-DEMONSTRATION DECORATIVE LIGHTING	EACH	1

HIGHWAY STANDARDS

- 812001-01 RACEWAYS EMBEDDED IN STRUCTURE
- 821006 UNDERPASS LIGHTING SUSPENDED
- 825021-04 LIGHTING CONTROLLER, BASE MOUNTED, 240V

INDEX OF SHEETS

1. DECORATIVE LIGHTING LEGEND, GENERAL NOTES & INDEX OF SHEETS
2. DECORATIVE LIGHTING - OVERALL PLAN
3. DECORATIVE LIGHTING - DETAILED PLAN
4. DECORATIVE LIGHTING - DETAILS
5. DECORATIVE LIGHTING - WIRING DIAGRAM

REV - MS

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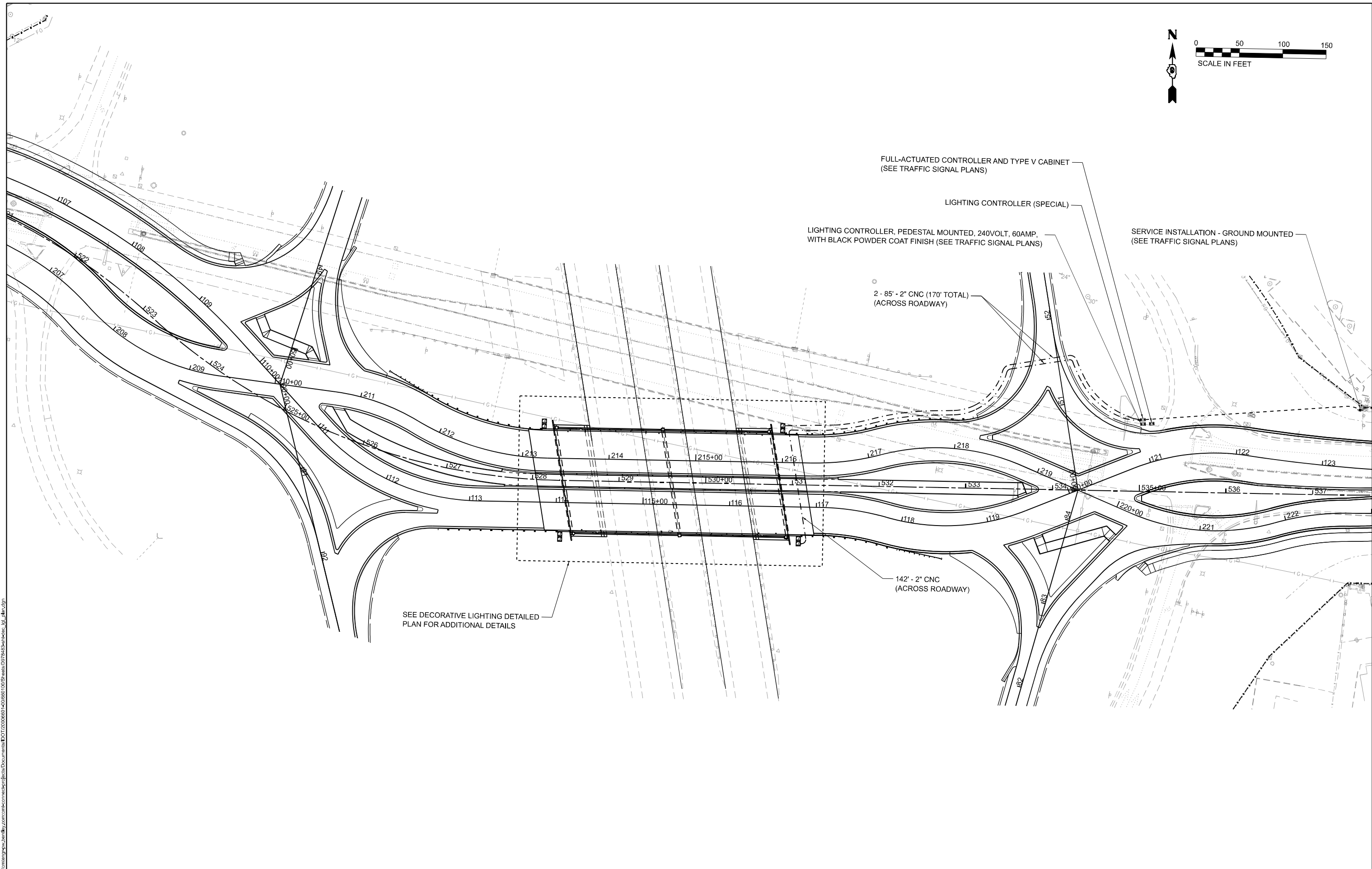
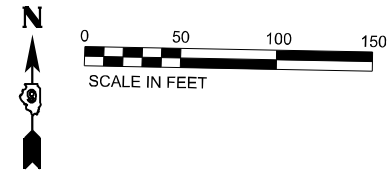
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DECORATIVE LIGHTING
LEGEND, GENERAL NOTES & INDEX OF SHEETS**

SCALE: SHEET 1 OF 5 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	13,13-2(N-1,TS-1); (41-3)HB2	JEFFERSON	787	553
CONTRACT NO. 78483				
ILLINOIS FED. AID PROJECT				



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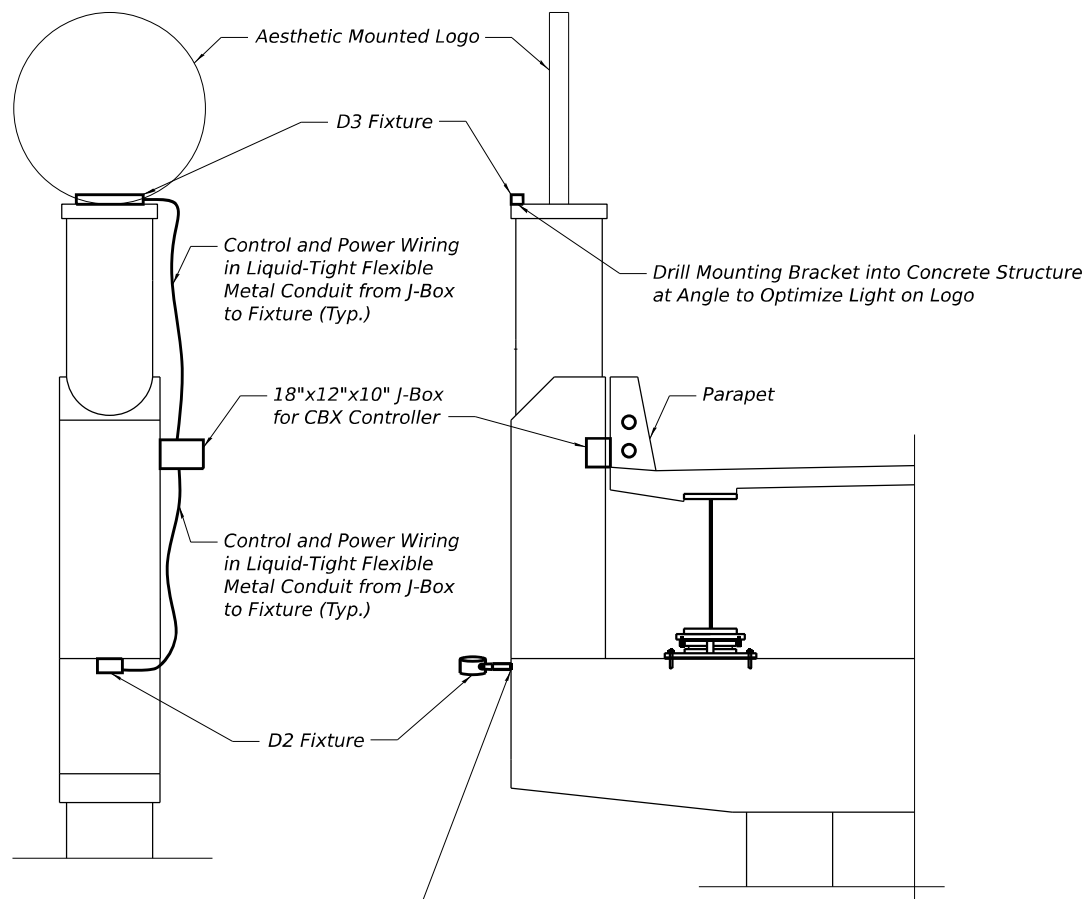
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DECORATIVE LIGHTING
OVERALL PLAN

SCALE: 1" = 50' SHEET 2 OF 5 SHEETS STA. TO STA.

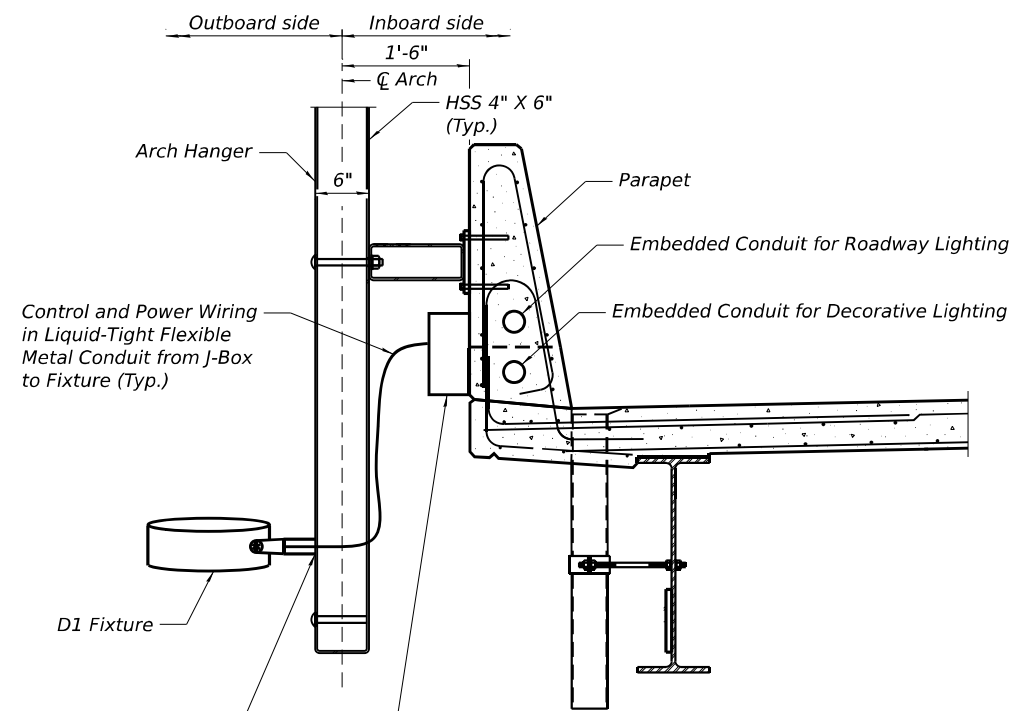
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57	13.13-2(N-1,TS-1); (41-3)HB2	JEFFERSON	787	554
CONTRACT NO. 78483				
ILLINOIS FED. AID PROJECT				



Mounting Bracket to be Attached to Structure with Two Stainless Steel Bolts and Hardware. See Structural Plans for Additional Details.

**AESTHETIC MOUNTED LOGO
DECORATIVE LIGHTING DETAIL**

NTS



Mounting Bracket to be Installed with Two Bolts Through Arch Hanger. All Hardware shall be Stainless Steel. See Structural Plans for Additional Details.

ARCH TYPICAL SECTION

12"x12"x6" Junction Box for Decorative Lighting

MODEL: Decorative Lighting Detail (Sheet)
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PLOT DATE = 11/15/2024	DATE - NOV 2024	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DECORATIVE LIGHTING
DETAILS**

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	13.13-2(N-1,TS-1); (41-3)HB2	JEFFERSON	787	556
CONTRACT NO. 78483				
ILLINOIS FED. AID PROJECT				

Benchmark: BM #365 - "□" cut on northwest parapet wall of existing SN 041-0025, NAVD 88, Elevation = 514.687'.

Existing Structure: SN 041-0025 was originally built in 1968 as F.A.P. 821 (IL Rt. 15) Section (41-3HB-1)J. The existing structure is a 4 span rigid frame steel bridge with stub abutments on steel H-piles. The intermediate supports are founded on concrete spread footings with pedestals. 330'-0" Bk. to Bk. abutments, 88'-0" out to out deck, 22° 40' 00" right ahead skew.

No traffic control to be utilized.

No salvage.

SEISMIC DATA

Seismic Performance Zone (SPZ) = 2
 Design Spectral Acceleration at 1.0 sec. (SD1) = 0.216g
 Design Spectral Acceleration at 0.2 sec. (SDS) = 0.598g
 Soil Site Class = C

LOADING HL-93

Allow 50 #/sq. ft. for future wearing surface
 Maximum LL Deflection = L/1000

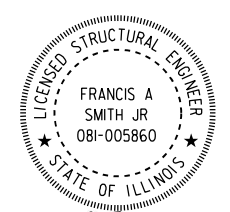
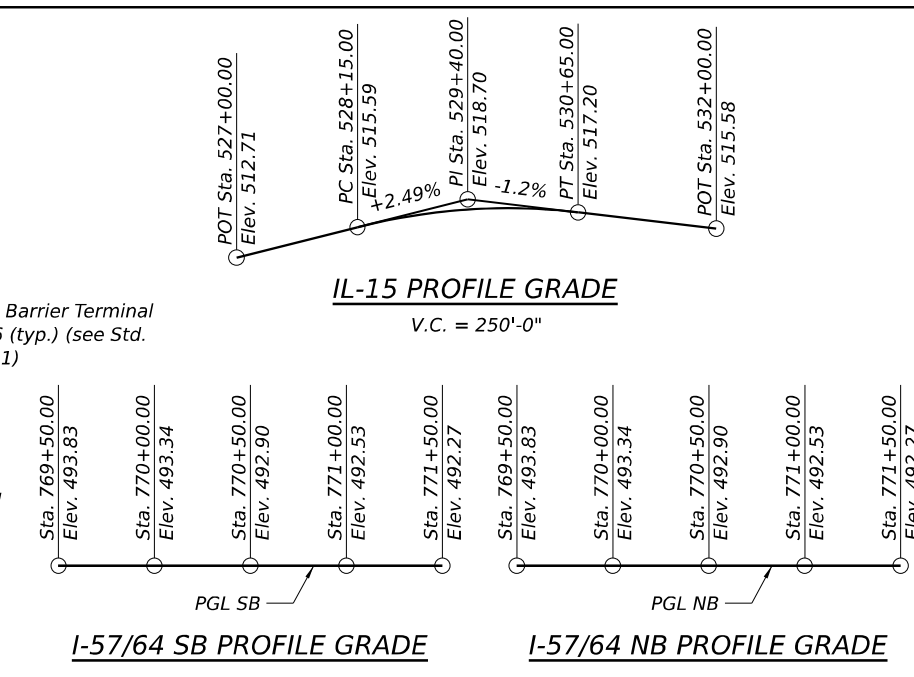
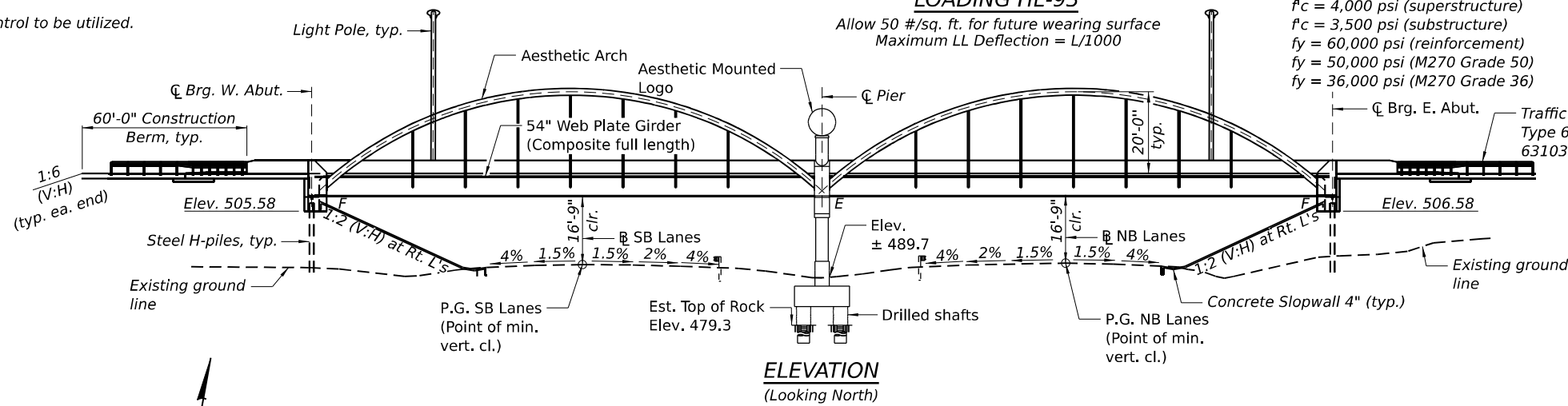
DESIGN SPECIFICATIONS

2020 AASHTO LRFD Bridge Design Specifications 9th Edition

DESIGN STRESSES

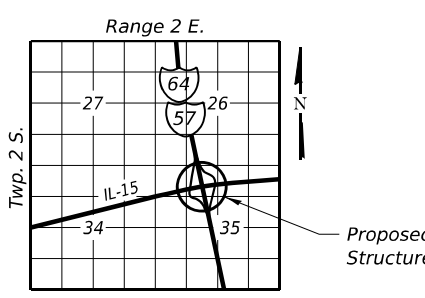
FIELD UNITS

f_c = 4,000 psi (superstructure)
 f_c = 3,500 psi (substructure)
 f_y = 60,000 psi (reinforcement)
 f_y = 50,000 psi (M270 Grade 50)
 f_y = 36,000 psi (M270 Grade 36)

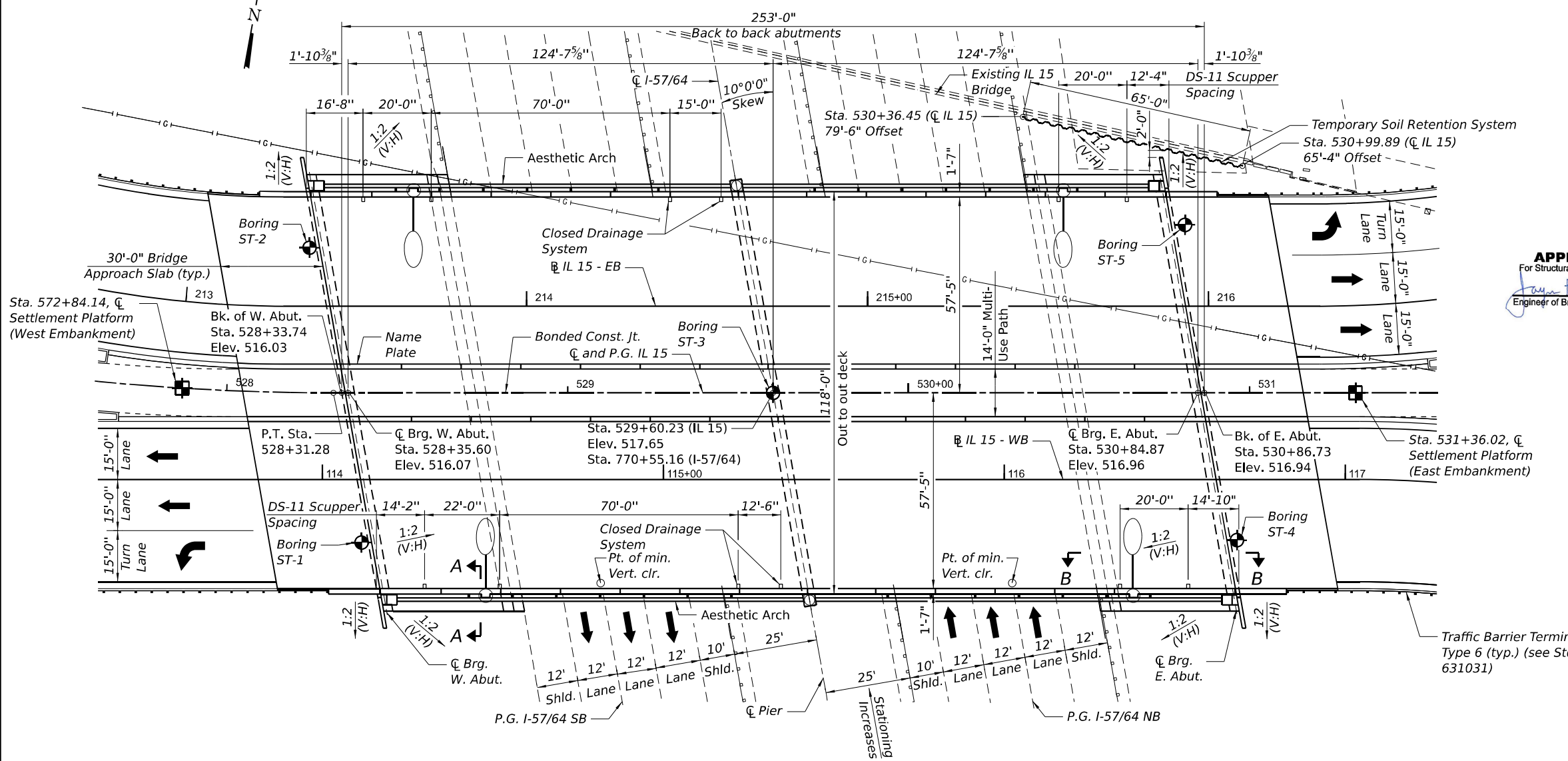


Francis A. Smith, Jr. 11/15/2024
 Exp. Date 11/30/2024

APPROVED
 For Structural Adequacy Only
 [Signature]
 Engineer of Bridges & Structures



LOCATION SKETCH



PLAN

GENERAL PLAN AND ELEVATION
IL 15 BRIDGE OVER F.A.I. 57/64
 F.A.P. RTE 821 - SEC. 13,
 13-2(N-1, TS-1); (41-3)HB2
JEFFERSON COUNTY
STATION 529+60.23
STRUCTURE NO. 041-0121

MODEL: S:\041-0121-001_General Plan and Elevation-1 (Sheet)
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PLOT DATE = 12/10/2024	CHECKED - FAS	REVISED -
	DATE - DEC 2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 041-0121

SCALE: SHEET 1 OF 48 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	13-2(N-1, TS-1); (41-3)HB2	JEFFERSON	787	558
CONTRACT NO. 78483				
ILLINOIS FED. AID PROJECT				

GENERAL NOTES

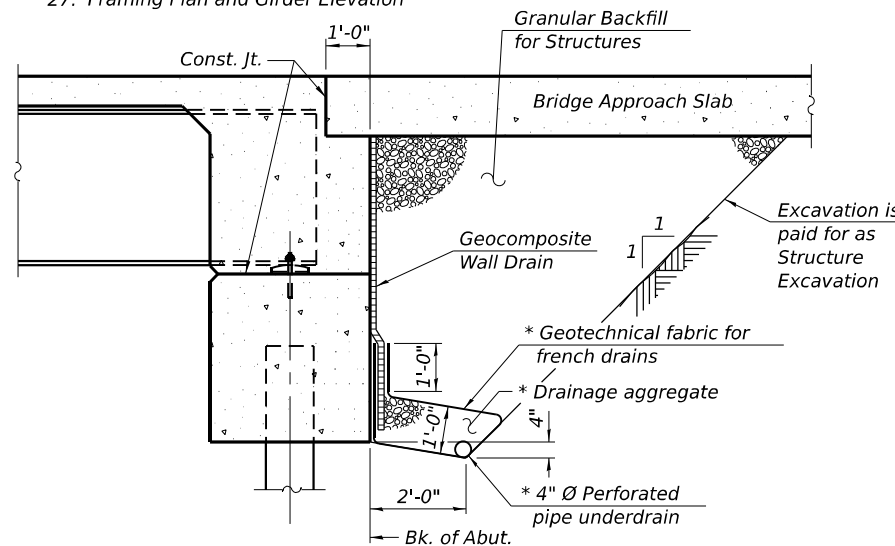
- Fasteners shall be ASTM F3125 Grade A325 Type 1, mechanically galvanized bolts in painted areas. Bolts 7/8" diameter, holes 1 1/16" diameter, unless otherwise noted.
- Calculated weight of Structural Steel:
M270 Grade 50 = 1,415,163 lbs.
M270 Grade 36 = 86,852 lbs.
- No field welding is permitted except as specified in the contract documents.
- Reinforcement bars designated (E) shall be epoxy coated.
- If the Contractor elects to use cantilever forming brackets on the exterior beams or girders, the brackets shall be placed at the same locations as required for the hard wood blocks in Article 503.06(b) of the Standard Specifications. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior beam at each of these additional bracket locations.
- Slipforming of the parapets is not allowed.
- Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8" (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.
- A film forming Concrete Sealer shall be applied to the designated areas of the pier.
- The Contractor shall submit a temporary soil retention system design including plan details and calculations for review acceptance by the Engineer.
- The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.
- Bridge seat reinforcement shall be carefully placed as detailed in the plans to avoid interference with drilling holes for anchor bolts. The beams shall be erected in final position prior to drilling holes for and placing anchor bolts.
- All bearing anchor bolts shall be set before permanently bolting diaphragms or cross frames over supports.
- No construction joints except those shown on the plans will be allowed unless approved by the Engineer.
- Prior to pouring deck the vertical clearance shall be confirmed. Upon completion of the structure, the Contractor shall measure the resulting horizontal and vertical clearances and submit them to the Engineer for review and inclusion in the As-Built plans (Record Drawings).
- The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to address the presence of lead on this project.
- All Structural Steel shall be metallized. See Special Provision for "Metallizing of Structural Steel".
- All (embedded and separate) bearing plates, side retainers, anchor bolts, nuts, washers, and pintles shall be galvanized according to AASHTO M111 or M232 as applicable.
- The exterior fascia and bottom of bottom flange areas shall be metallized and painted with System 2. The color of the final finish coats of painting of fascia areas shall be field applied and shall be Blue AMS-STD-595 15050. See Special Provision for "Metallizing of Structural Steel". The interior metallized areas shall be painted with System 1.
- Removal of existing slope walls shall be included in the cost of Removal of Existing Structures.
- There is existing Protective Shield in place on the existing bridge which may, at the Contractor's option, be re-used and/or strengthened or supplemented as needed for re-use. The Contractor shall evaluate the adequacy and condition of the existing Protective Shield to satisfy the requirements of Article 501.03 of the Standard Specifications. Such evaluation shall be performed by a licensed Structural Engineer in Illinois and submitted for acceptance along with the design submittal for new Protective Shield. The cost of this evaluation shall be included in the cost for Protective Shield. The Contractor shall be responsible for the full limits of Protective Shield required. The Contractor shall be paid for this work based on the total quantity of existing and new Protective Shield required at the Contract unit price per square yard for Protective Shield. See Sheet 606 for existing Protective Shield layout.

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- | | |
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| 1. General Plan and Elevation | 28. Structural Steel Details - I |
| 2. General Data | 29. Structural Steel Details - II |
| 3. Slope Wall Details | 30. Bearing Details |
| 4. Footing Layout | 31. Aesthetic Enhancement Details - General |
| 5. Top of Deck Elevations - I | 32. West Abutment Details - I |
| 6. Top of Deck Elevations - II | 33. West Abutment Details - II |
| 7. Top of Deck Elevations - III | 34. East Abutment Details - I |
| 8. Top of Deck Elevations - IV | 35. East Abutment Details - II |
| 9. Top of Deck Elevations - V | 36. Aesthetic Enhancement Details - Abutments |
| 10. Top of Deck Elevations - VI | 37. Pier Details - I |
| 11. Top of Deck Elevations - VII | 38. Pier Details - II |
| 12. West Approach Slab Elevations | 39. Pier Details - III |
| 13. East Approach Slab Elevations | 40. Aesthetic Enhancement Details - Pier |
| 14. Superstructure - I | 41. HP Pile Details |
| 15. Superstructure - II | 42. Bar Splicer Assembly and Mechanical Splicer Details |
| 16. Superstructure - III | 43. Soil Boring and Rock Core Log - I |
| 17. Superstructure Details - I | 44. Soil Boring and Rock Core Log - II |
| 18. Superstructure Details - II | 45. Soil Boring and Rock Core Log - III |
| 19. Diaphragm Details | 46. Soil Boring and Rock Core Log - IV |
| 20. Parapet Railing | 47. Soil Boring and Rock Core Log - V |
| 21. West Approach Slab Plan | 48. Soil Boring and Rock Core Log - VI |
| 22. West Approach Slab Details | |
| 23. East Approach Slab Plan | |
| 24. East Approach Slab Details | |
| 25. Drainage Scupper, DS - 11 | |
| 26. Drainage System Details | |
| 27. Framing Plan and Girder Elevation | |

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Structures	Each		1	1
Protective Shield	Sq. Yd.	100		100
Structure Excavation	Cu. Yd.		1,496	1,496
Concrete Structures	Cu. Yd.		754.1	754.1
Concrete Superstructure	Cu. Yd.	1,056.8		1,056.8
Bridge Deck Grooving	Sq. Yd.	3,250		3,250
Protective Coat	Sq. Yd.	4,421		4,421
Concrete Superstructure (Approach Slab)	Cu. Yd.	260.4		260.4
Furnishing and Erecting Structural Steel	L. Sum	1		1
Stud Shear Connectors	Each	16,632		16,632
Reinforcement Bars, Epoxy Coated	Pound	409,200	210,230	619,430
Bar Splicers	Each	1,213	100	1,313
Parapet Railing	Foot	620		620
Slope Wall 4 Inch	Sq. Yd.		1,090	1,090
Furnishing Steel Piles HP 14X117	Foot		923	923
Driving Piles	Foot		923	923
Test Pile Steel HP 14X117	Each		2	2
Pile Shoes	Each		28	28
Name Plates	Each	1		1
Drilled Shaft in Soil	Cu. Yd.		34.5	34.5
Drilled Shaft in Rock	Cu. Yd.		115.2	115.2
Anchor Bolts, 1"	Each	112		112
Temporary Soil Retention System	Sq. Ft.		452	452
Drainage System for Structures	L. Sum	1		1
Granular Backfill for Structures	Cu. Yd.		652	652
Concrete Sealer	Sq. Ft.		4,039	4,039
Geocomposite Wall Drain	Sq. Yd.		298	298
Pipe Underdrains for Structures 4"	Foot		324	324
Crosshole Sonic Logging Access Ducts	Foot		2,147	2,147
Crosshole Sonic Logging Testing	Each		22	22
Bar Terminators	Each	680		2,195
High Load Multi-Rotational Bearings, Disc, Guided Expansion-500K	Each	14		14
Drainage Scuppers, DS-11	Each	12		12
Aesthetic Enhancements	L. Sum		1	1



SECTION THRU INTEGRAL ABUTMENT

(Horiz. dim. at Rt. L's)

*Included in the cost of Pipe Underdrains for Structures. (See Special Provisions)

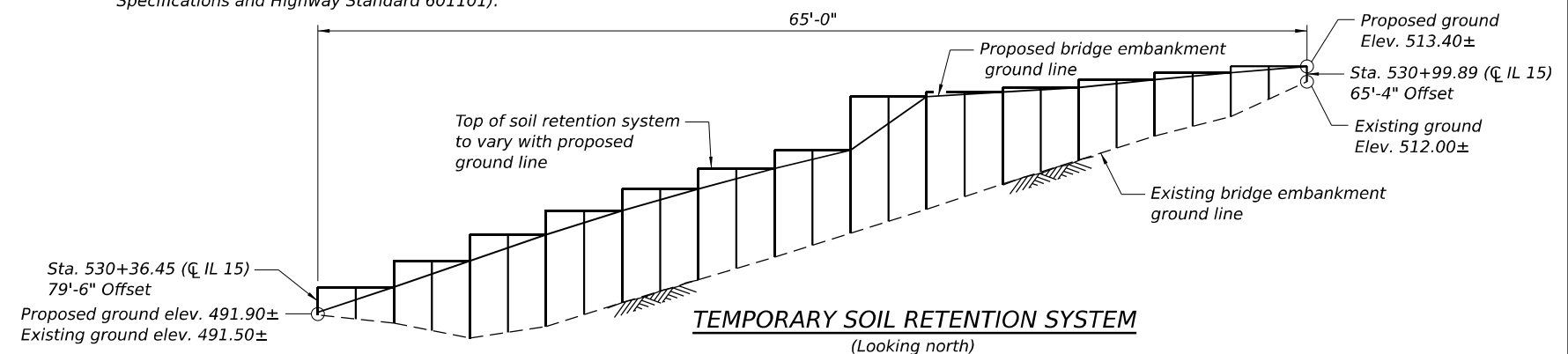
Note:

All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).

STATION 529+60.23
BUILT BY
STATE OF ILLINOIS
F.A.P. 821 - SEC. 13-2(N-1, TS-1); (41-3)HB2
LOADING HL-93
STRUCTURE NO. 041-0121

NAME PLATE

See Std. 515001



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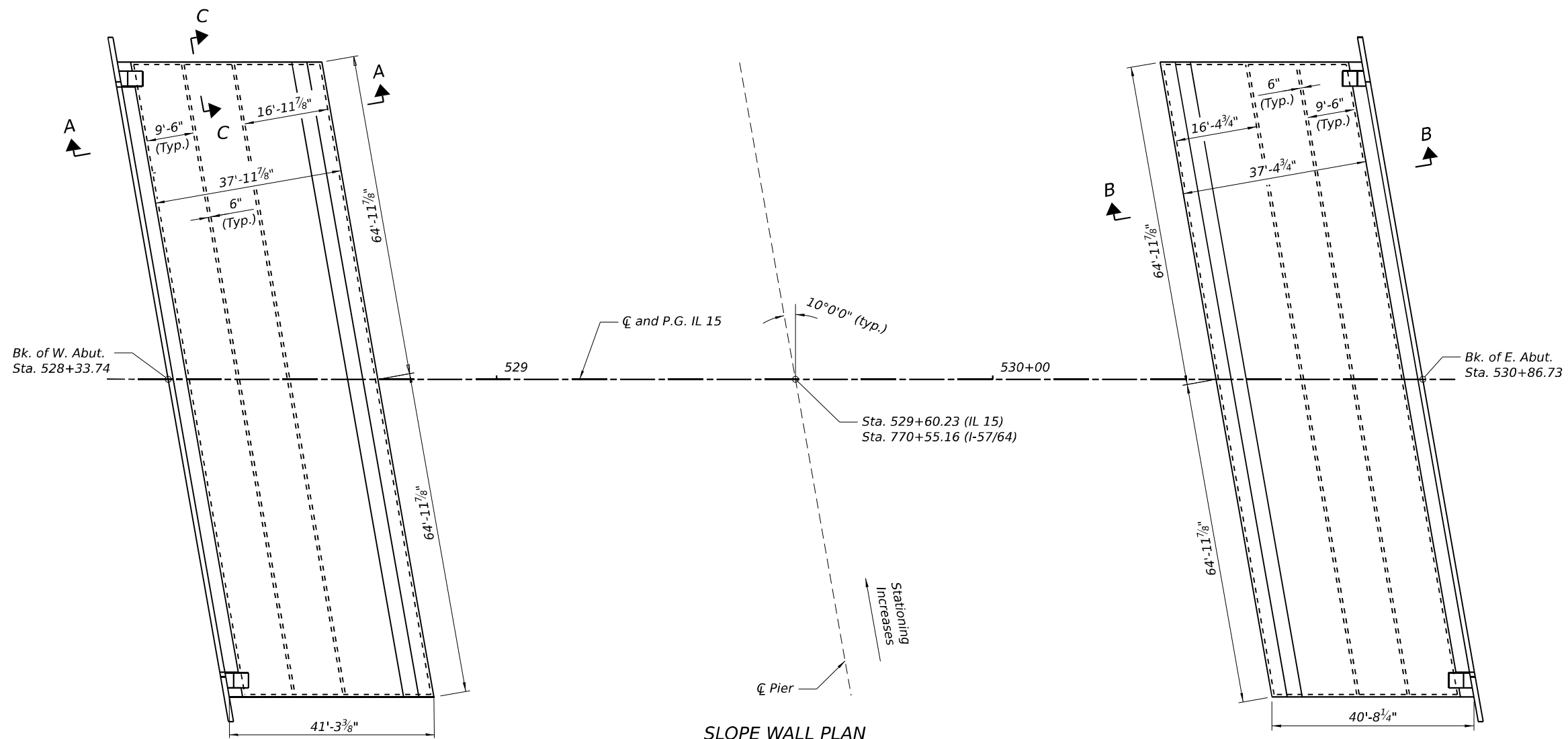


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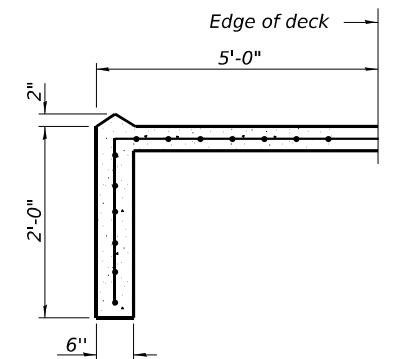
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

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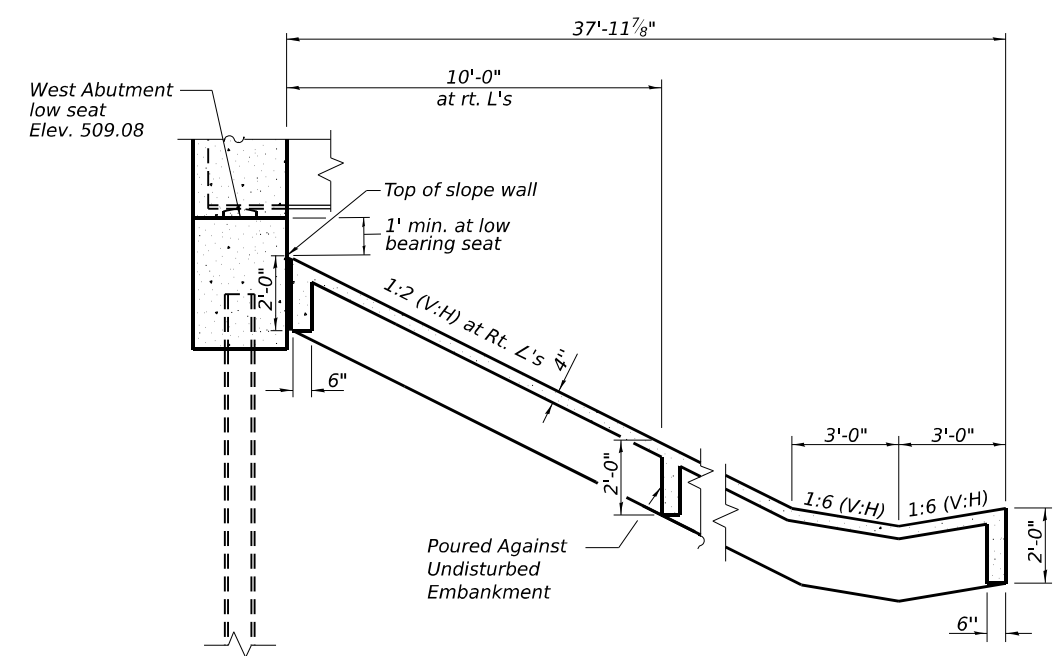
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CONTRACT NO. 78483				
ILLINOIS FED. AID PROJECT				



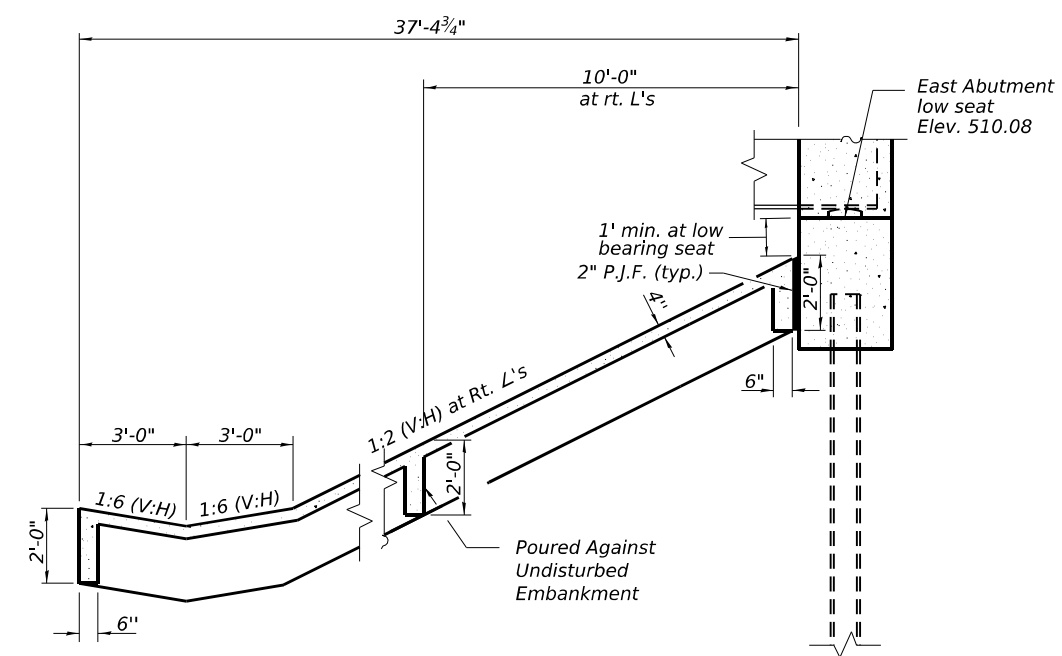
SLOPE WALL PLAN



SECTION C-C



SECTION A-A



SECTION B-B

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Slope Wall, 4 Inch	Sq. Yd.	1,090

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

MODEL: Unintitled1 (Sheet)
 FILE NAME: Proj\cmt\eng\proj\cmt\connect\projects\Documents\DOT\2006601_000\6601000\bridge\CADD_Sheets\SI 041-0121_003 Slope Wall Details



USER NAME = Brian Bond	DESIGNED - DAC	REVISED -
PLOT SCALE = N/A	DRAWN - VT	REVISED -
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	DATE - DEC 2024	REVISED -

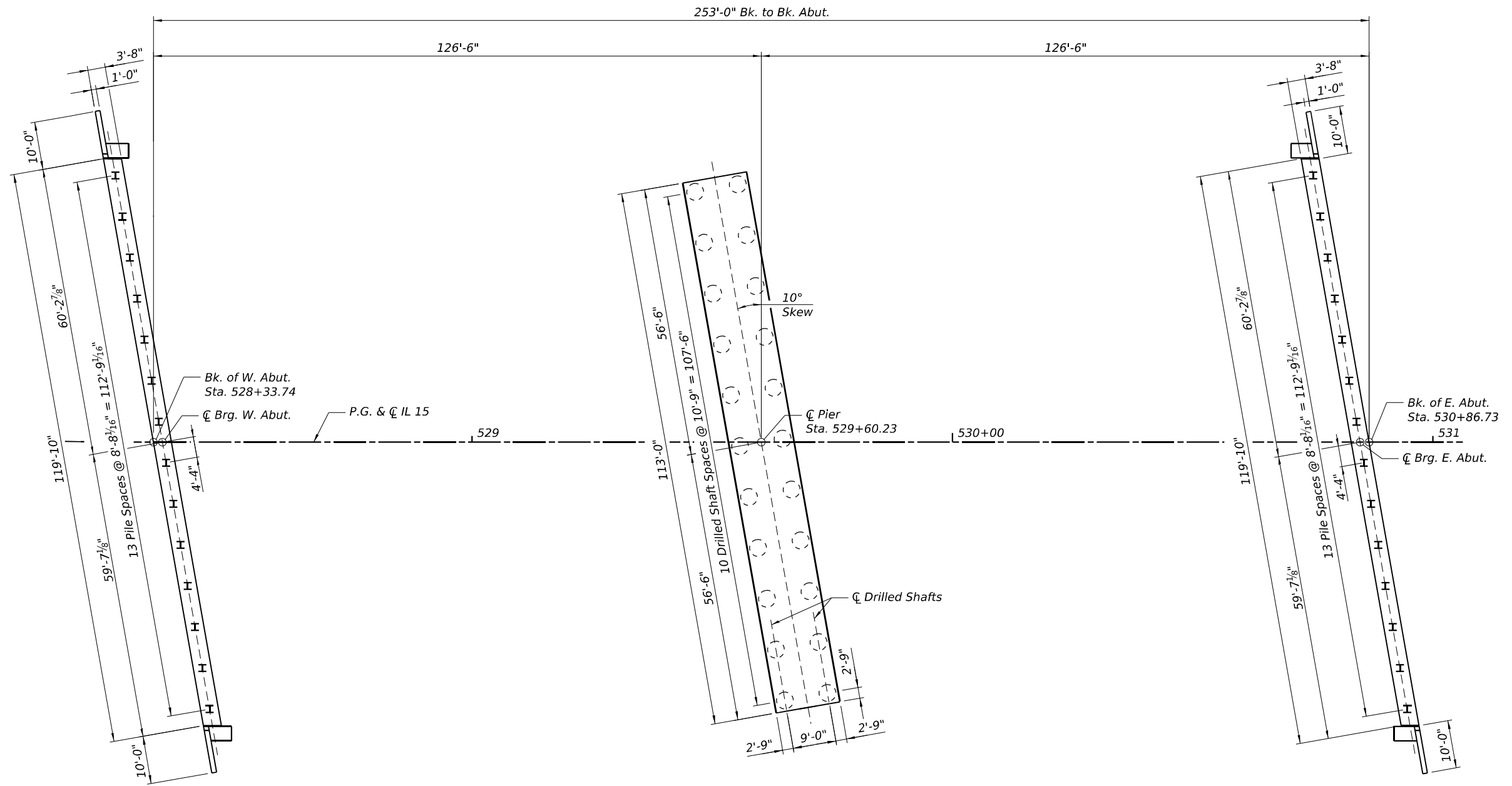
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SLOPE WALL DETAILS
STRUCTURE NO. 041-0121**

SCALE: SHEET 3 OF 48 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	13-2(N-1, TS-1); (41-3)HB2	JEFFERSON	787	560
CONTRACT NO. 78483				

ILLINOIS FED. AID PROJECT



FOOTING LAYOUT PLAN

MODEL: Footing Layout (Sheet)
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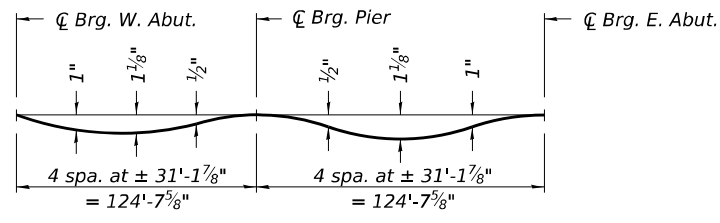
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PLOT SCALE = N/A	DRAWN - VT	REVISED -
PLOT DATE = 12/10/2024	CHECKED - DAC	REVISED -
	DATE - DEC 2024	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**FOOTING LAYOUT
STRUCTURE NO. 041-0121**

SCALE: SHEET 4 OF 48 SHEETS STA. TO STA.

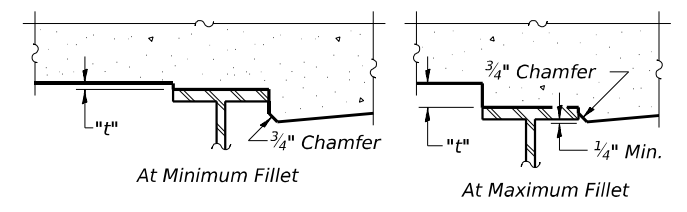
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	13-2(N-1, TS-1); (41-3)HB2	JEFFERSON	787	561
CONTRACT NO.			78483	
ILLINOIS FED. AID PROJECT				



DEAD LOAD DEFLECTION DIAGRAM

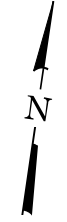
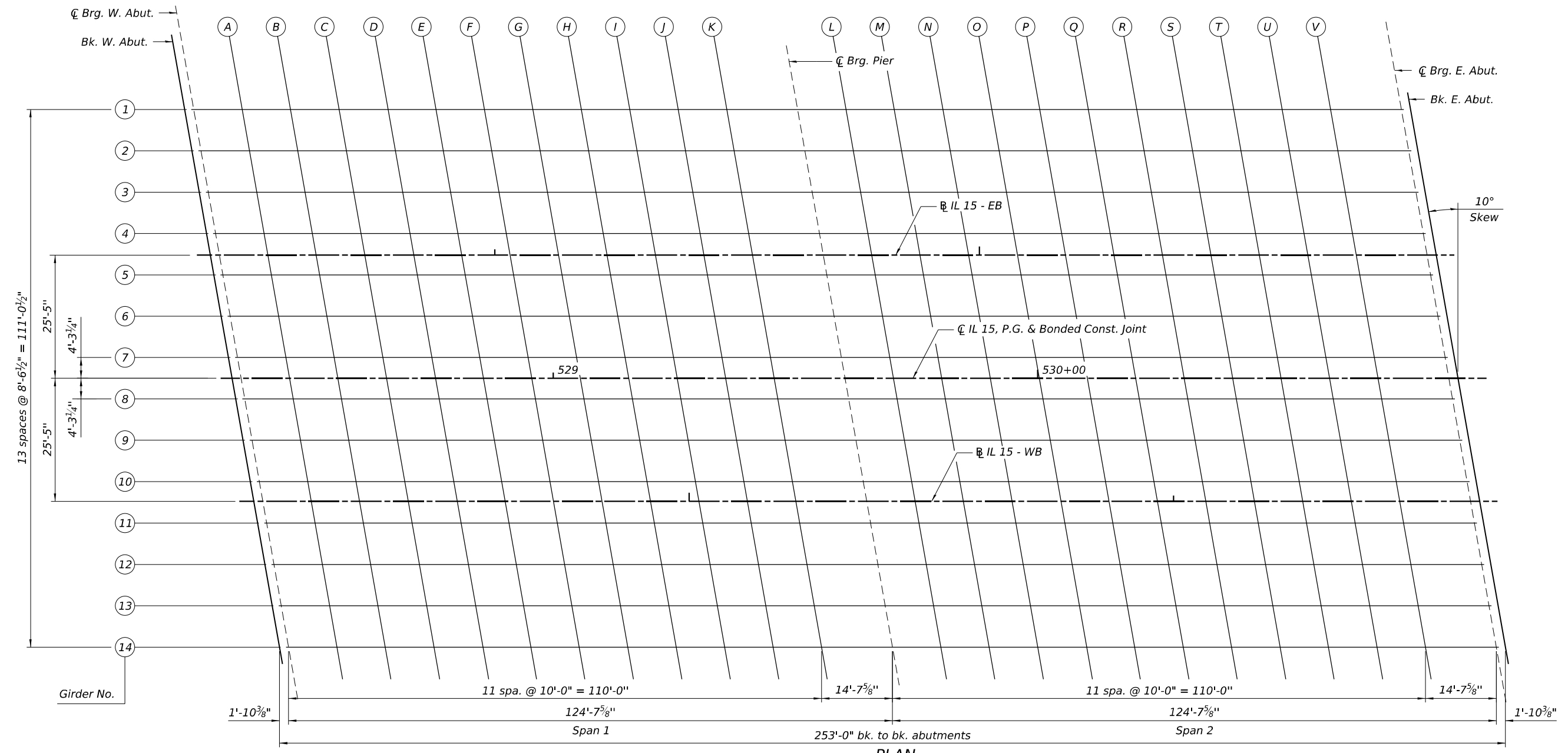
(Includes weight of concrete only.)

Note:
 The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on Sheets 6 thru 11 of 48.
 Stations and offsets are referenced from \bar{C} IL Route 15.



To determine "t": After all structural steel has been erected, elevations of the top flanges of the girders shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on Sheets 6 thru 11 of 48, minus slab thickness, equals the fillet heights "t" above top flange of girders.

FILLET HEIGHTS



MODEL: Deck Elevation 1 (Sheet)
 FILE NAME: ...
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PLOT DATE = 12/10/2024	DATE - DEC 2024	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**TOP OF DECK ELEVATIONS - I
 STRUCTURE NO. 041-0121**

SCALE: SHEET 5 OF 48 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	13-2 (N-1, TS-1); (41-3)HB2	JEFFERSON	787	562
CONTRACT NO. 78483				
ILLINOIS FED. AID PROJECT				

GIRDER 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	528+28.34	-29.89	515.31	515.31
CL Brg. W. Abut.	528+30.29	-29.90	515.35	515.35
A	528+40.33	-29.90	515.57	515.60
B	528+50.33	-29.90	515.78	515.84
C	528+60.33	-29.90	515.97	516.05
D	528+70.33	-29.90	516.14	516.24
E	528+80.33	-29.90	516.30	516.40
F	528+90.33	-29.90	516.45	516.55
G	529+00.33	-29.90	516.58	516.67
H	529+10.33	-29.90	516.69	516.76
I	529+20.33	-29.90	516.79	516.84
J	529+30.33	-29.90	516.88	516.91
K	529+40.33	-29.90	516.95	516.96
CL Pier	529+54.96	-29.90	517.03	517.03
L	529+64.96	-29.90	517.06	517.07
M	529+74.96	-29.90	517.08	517.10
N	529+84.96	-29.90	517.09	517.13
O	529+94.96	-29.90	517.08	517.14
P	530+04.96	-29.90	517.06	517.14
Q	530+14.96	-29.90	517.02	517.11
R	530+24.96	-29.90	516.96	517.06
S	530+34.96	-29.90	516.90	517.00
T	530+44.96	-29.90	516.81	516.90
U	530+54.96	-29.90	516.72	516.79
V	530+64.96	-29.90	516.60	516.65
CL Brg. E. Abut.	530+79.60	-29.90	516.43	516.43
Bk. E. Abut.	530+81.46	-29.90	516.41	516.41

IL 15 - EB

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	528+29.18	-25.41	515.42	515.42
CL Brg. W. Abut.	528+31.11	-25.42	515.46	515.46
A	528+41.12	-25.42	515.68	515.71
B	528+51.12	-25.42	515.88	515.94
C	528+61.12	-25.42	516.07	516.15
D	528+71.12	-25.42	516.24	516.34
E	528+81.12	-25.42	516.40	516.50
F	528+91.12	-25.42	516.55	516.65
G	529+01.12	-25.42	516.68	516.77
H	529+11.12	-25.42	516.79	516.86
I	529+21.12	-25.42	516.89	516.94
J	529+31.12	-25.42	516.98	517.01
K	529+41.12	-25.42	517.05	517.06
CL Pier	529+55.75	-25.42	517.12	517.12
L	529+65.75	-25.42	517.16	517.17
M	529+75.75	-25.42	517.18	517.20
N	529+85.75	-25.42	517.18	517.22
O	529+95.75	-25.42	517.17	517.23
P	530+05.75	-25.42	517.14	517.22
Q	530+15.75	-25.42	517.10	517.19
R	530+25.75	-25.42	517.05	517.15
S	530+35.75	-25.42	516.98	517.08
T	530+45.75	-25.42	516.90	516.99
U	530+55.75	-25.42	516.80	516.87
V	530+65.75	-25.42	516.68	516.73
CL Brg. E. Abut.	530+80.39	-25.42	516.51	516.51
Bk. E. Abut.	530+82.25	-25.42	516.49	516.49

GIRDER 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	528+29.93	-21.35	515.52	515.52
CL Brg. W. Abut.	528+31.83	-21.35	515.56	515.56
A	528+41.83	-21.35	515.78	515.81
B	528+51.83	-21.35	515.98	516.04
C	528+61.83	-21.35	516.17	516.25
D	528+71.83	-21.35	516.34	516.44
E	528+81.83	-21.35	516.50	516.60
F	528+91.83	-21.35	516.64	516.74
G	529+01.83	-21.35	516.77	516.86
H	529+11.83	-21.35	516.88	516.95
I	529+21.83	-21.35	516.98	517.03
J	529+31.83	-21.35	517.06	517.09
K	529+41.83	-21.35	517.13	517.14
CL Pier	529+56.46	-21.35	517.21	517.21
L	529+66.46	-21.35	517.24	517.25
M	529+76.46	-21.35	517.26	517.28
N	529+86.46	-21.35	517.26	517.30
O	529+96.46	-21.35	517.25	517.31
P	530+06.46	-21.35	517.22	517.30
Q	530+16.46	-21.35	517.18	517.27
R	530+26.46	-21.35	517.13	517.23
S	530+36.46	-21.35	517.06	517.16
T	530+46.46	-21.35	516.97	517.06
U	530+56.46	-21.35	516.87	516.94
V	530+66.46	-21.35	516.76	516.81
CL Brg. E. Abut.	530+81.10	-21.35	516.58	516.58
Bk. E. Abut.	530+82.96	-21.35	516.56	516.56

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF DECK ELEVATIONS- III
STRUCTURE NO. 041-0121**

SCALE: SHEET 7 OF 48 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	13-2 (N-1, TS-1); (41-3)HB2	JEFFERSON	787	564
CONTRACT NO. 78483				
ILLINOIS FED. AID PROJECT				

GIRDER 8

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	528+34.49	4.27	515.96	515.96
CL Brg. W. Abut.	528+36.35	4.27	516.00	516.00
A	528+46.35	4.27	516.21	516.24
B	528+56.35	4.27	516.41	516.47
C	528+66.35	4.27	516.59	516.67
D	528+76.35	4.27	516.75	516.85
E	528+86.35	4.27	516.90	517.00
F	528+96.35	4.27	517.04	517.14
G	529+06.35	4.27	517.16	517.25
H	529+16.35	4.27	517.27	517.34
I	529+26.35	4.27	517.36	517.41
J	529+36.35	4.27	517.44	517.47
K	529+46.35	4.27	517.50	517.51
CL Pier	529+60.98	4.27	517.56	517.56
L	529+70.98	4.27	517.59	517.60
M	529+80.98	4.27	517.60	517.62
N	529+90.98	4.27	517.60	517.64
O	530+00.98	4.27	517.58	517.64
P	530+10.98	4.27	517.55	517.63
Q	530+20.98	4.27	517.50	517.59
R	530+30.98	4.27	517.44	517.54
S	530+40.98	4.27	517.36	517.46
T	530+50.98	4.27	517.27	517.36
U	530+60.98	4.27	517.16	517.23
V	530+70.98	4.27	517.04	517.09
CL Brg. E. Abut.	530+85.62	4.27	516.87	516.87
Bk. E. Abut.	530+87.48	4.27	516.85	516.85

GIRDER 9

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	528+36.00	12.81	515.82	515.82
CL Brg. W. Abut.	528+37.86	12.81	515.86	515.86
A	528+47.86	12.81	516.07	516.10
B	528+57.86	12.81	516.26	516.32
C	528+67.86	12.81	516.44	516.52
D	528+77.86	12.81	516.61	516.71
E	528+87.86	12.81	516.75	516.85
F	528+97.86	12.81	516.89	516.99
G	529+07.86	12.81	517.01	517.10
H	529+17.86	12.81	517.11	517.18
I	529+27.86	12.81	517.20	517.25
J	529+37.86	12.81	517.28	517.31
K	529+47.86	12.81	517.34	517.35
CL Pier	529+62.49	12.81	517.40	517.40
L	529+72.49	12.81	517.42	517.43
M	529+82.49	12.81	517.43	517.45
N	529+92.49	12.81	517.43	517.47
O	530+02.49	12.81	517.41	517.47
P	530+12.49	12.81	517.37	517.45
Q	530+22.49	12.81	517.32	517.41
R	530+32.49	12.81	517.26	517.36
S	530+42.49	12.81	517.18	517.28
T	530+52.49	12.81	517.08	517.17
U	530+62.49	12.81	516.97	517.04
V	530+72.49	12.81	516.85	516.90
CL Brg. E. Abut.	530+87.13	12.81	516.68	516.68
Bk. E. Abut.	530+88.99	12.81	516.66	516.66

GIRDER 10

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	528+37.51	21.35	515.68	515.68
CL Brg. W. Abut.	528+39.37	21.35	515.72	515.72
A	528+49.37	21.35	515.93	515.96
B	528+59.37	21.35	516.12	516.18
C	528+69.37	21.35	516.30	516.38
D	528+79.37	21.35	516.46	516.56
E	528+89.37	21.35	516.60	516.70
F	528+99.37	21.35	516.74	516.84
G	529+09.37	21.35	516.85	516.94
H	529+19.37	21.35	516.96	517.03
I	529+29.37	21.35	517.04	517.09
J	529+39.37	21.35	517.12	517.15
K	529+49.37	21.35	517.17	517.18
CL Pier	529+64.00	21.35	517.23	517.23
L	529+74.00	21.35	517.25	517.26
M	529+84.00	21.35	517.26	517.28
N	529+94.00	21.35	517.25	517.29
O	530+04.00	21.35	517.23	517.29
P	530+14.00	21.35	517.19	517.27
Q	530+24.00	21.35	517.14	517.23
R	530+34.00	21.35	517.07	517.17
S	530+44.00	21.35	516.99	517.09
T	530+54.00	21.35	516.90	516.99
U	530+64.00	21.35	516.79	516.86
V	530+74.00	21.35	516.67	516.72
CL Brg. E. Abut.	530+88.64	21.35	516.49	516.49
Bk. E. Abut.	530+90.50	21.35	516.47	516.47

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF DECK ELEVATIONS - V
STRUCTURE NO. 041-0121**

SCALE: SHEET 9 OF 48 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	13-2 (N-1, TS-1); (41-3)HB2	JEFFERSON	787	566
CONTRACT NO. 78483				
ILLINOIS FED. AID PROJECT				

IL 15 - WB

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	528+38.22	25.42	515.62	515.62
CL Brg. W. Abut.	528+40.08	25.42	515.66	515.66
A	528+50.08	25.42	515.86	515.89
B	528+60.08	25.42	516.05	516.11
C	528+70.08	25.42	516.23	516.31
D	528+80.08	25.42	516.39	516.49
E	528+90.08	25.42	516.53	516.63
F	529+00.08	25.42	516.66	516.76
G	529+10.08	25.42	516.78	516.87
H	529+20.08	25.42	516.88	516.95
I	529+30.08	25.42	516.97	517.02
J	529+40.08	25.42	517.04	517.07
K	529+50.08	25.42	517.10	517.11
CL Pier	529+64.71	25.42	517.15	517.15
L	529+74.71	25.42	517.17	517.18
M	529+84.71	25.42	517.18	517.20
N	529+94.71	25.42	517.17	517.21
O	530+04.71	25.42	517.15	517.21
P	530+14.71	25.42	517.11	517.19
Q	530+24.71	25.42	517.06	517.15
R	530+34.71	25.42	516.99	517.09
S	530+44.71	25.42	516.91	517.01
T	530+54.71	25.42	516.81	516.90
U	530+64.71	25.42	516.70	516.77
V	530+74.71	25.42	516.58	516.63
CL Brg. E. Abut.	530+89.35	25.42	516.40	516.40
Bk. E. Abut.	530+91.21	25.42	516.38	516.38

GIRDER 11

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	528+39.01	29.90	515.55	515.55
CL Brg. W. Abut.	528+40.87	29.90	515.58	515.58
A	528+50.87	29.90	515.79	515.82
B	528+60.87	29.90	515.98	516.04
C	528+70.87	29.90	516.15	516.23
D	528+80.87	29.90	516.31	516.41
E	528+90.87	29.90	516.45	516.55
F	529+00.87	29.90	516.58	516.68
G	529+10.87	29.90	516.70	516.79
H	529+20.87	29.90	516.80	516.87
I	529+30.87	29.90	516.88	516.93
J	529+40.87	29.90	516.95	516.98
K	529+50.87	29.90	517.01	517.02
CL Pier	529+65.50	29.90	517.07	517.07
L	529+75.50	29.90	517.09	517.10
M	529+85.50	29.90	517.09	517.11
N	529+95.50	29.90	517.08	517.12
O	530+05.50	29.90	517.06	517.12
P	530+15.50	29.90	517.02	517.10
Q	530+25.50	29.90	516.96	517.05
R	530+35.50	29.90	516.89	516.99
S	530+45.50	29.90	516.81	516.91
T	530+55.50	29.90	516.71	516.80
U	530+65.50	29.90	516.60	516.67
V	530+75.50	29.90	516.48	516.53
CL Brg. E. Abut.	530+90.14	29.90	516.30	516.30
Bk. E. Abut.	530+92.00	29.90	516.28	516.28

GIRDER 12

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	528+40.52	38.44	515.41	515.41
CL Brg. W. Abut.	528+42.38	38.44	515.45	515.45
A	528+52.38	38.44	515.65	515.68
B	528+62.38	38.44	515.83	515.89
C	528+72.38	38.44	516.00	516.08
D	528+82.38	38.44	516.16	516.26
E	528+92.38	38.44	516.30	516.40
F	529+02.38	38.44	516.43	516.53
G	529+12.38	38.44	516.54	516.63
H	529+22.38	38.44	516.64	516.71
I	529+32.38	38.44	516.73	516.78
J	529+42.38	38.44	516.79	516.82
K	529+52.38	38.44	516.85	516.86
CL Pier	529+67.01	38.44	516.90	516.90
L	529+77.01	38.44	516.92	516.93
M	529+87.01	38.44	516.92	516.94
N	529+97.01	38.44	516.91	516.95
O	530+07.01	38.44	516.88	516.94
P	530+17.01	38.44	516.84	516.92
Q	530+27.01	38.44	516.78	516.87
R	530+37.01	38.44	516.71	516.81
S	530+47.01	38.44	516.62	516.72
T	530+57.01	38.44	516.52	516.61
U	530+67.01	38.44	516.41	516.48
V	530+77.01	38.44	516.29	516.34
CL Brg. E. Abut.	530+91.65	38.44	516.11	516.11
Bk. E. Abut.	530+93.51	38.44	516.09	516.09

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PLOT SCALE = N/A	DRAWN - VT	REVISED -
PLOT DATE = 12/10/2024	CHECKED - MAC	REVISED -
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF DECK ELEVATION - VI
STRUCTURE NO. 041-0121**

SCALE: SHEET 10 OF 48 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	13-2 (N-1, TS-1); (41-3)HB2	JEFFERSON	787	567
CONTRACT NO. 78483				
ILLINOIS FED. AID PROJECT				

GIRDER 13

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	528+42.02	46.98	515.27	515.27
CL Brg. W. Abut.	528+43.88	46.98	515.31	515.31
A	528+53.88	46.98	515.50	515.53
B	528+63.88	46.98	515.69	515.75
C	528+73.88	46.98	515.86	515.94
D	528+83.88	46.98	516.01	516.11
E	528+93.88	46.98	516.15	516.25
F	529+03.88	46.98	516.28	516.38
G	529+13.88	46.98	516.39	516.48
H	529+23.88	46.98	516.48	516.55
I	529+33.88	46.98	516.57	516.62
J	529+43.88	46.98	516.63	516.66
K	529+53.88	46.98	516.68	516.69
CL Pier	529+68.51	46.98	516.73	516.73
L	529+78.51	46.98	516.75	516.76
M	529+88.51	46.98	516.75	516.77
N	529+98.51	46.98	516.73	516.77
O	530+08.51	46.98	516.70	516.76
P	530+18.51	46.98	516.66	516.74
Q	530+28.51	46.98	516.60	516.69
R	530+38.51	46.98	516.53	516.63
S	530+48.51	46.98	516.44	516.54
T	530+58.51	46.98	516.34	516.43
U	530+68.51	46.98	516.22	516.29
V	530+78.51	46.98	516.10	516.15
CL Brg. E. Abut.	530+93.15	46.98	515.92	515.92
Bk. E. Abut.	530+95.01	46.98	515.90	515.90

GIRDER 14

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	528+43.53	55.52	515.13	515.13
CL Brg. W. Abut.	528+45.39	55.52	515.17	515.17
A	528+55.39	55.52	515.36	515.39
B	528+65.39	55.52	515.54	515.60
C	528+75.39	55.52	515.71	515.79
D	528+85.39	55.52	515.86	515.96
E	528+95.39	55.52	516.00	516.10
F	529+05.39	55.52	516.13	516.23
G	529+15.39	55.52	516.23	516.32
H	529+25.39	55.52	516.33	516.40
I	529+35.39	55.52	516.41	516.46
J	529+45.39	55.52	516.47	516.50
K	529+55.39	55.52	516.52	516.53
CL Pier	529+70.02	55.52	516.56	516.56
L	529+80.02	55.52	516.58	516.59
M	529+90.02	55.52	516.57	516.59
N	530+00.02	55.52	516.56	516.60
O	530+10.02	55.52	516.53	516.59
P	530+20.02	55.52	516.48	516.56
Q	530+30.02	55.52	516.42	516.51
R	530+40.02	55.52	516.34	516.44
S	530+50.02	55.52	516.25	516.35
T	530+60.02	55.52	516.15	516.24
U	530+70.02	55.52	516.03	516.10
V	530+80.02	55.52	515.91	515.96
CL Brg. E. Abut.	530+94.66	55.52	515.73	515.73
Bk. E. Abut.	530+96.52	55.52	515.71	515.71

MODEL: Deck Elevation - VII (Sheet)
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USER NAME = Brian Bond	DESIGNED - VT	REVISED -
PLOT SCALE = N/A	DRAWN - VT	REVISED -
PLOT DATE = 12/10/2024	CHECKED - MAC	REVISED -
	DATE - DEC 2024	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF DECK ELEVATIONS - VII
STRUCTURE NO. 041-0121**

SCALE: SHEET 11 OF 48 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	13-2 (N-1, TS-1); (41-3)HB2	JEFFERSON	787	568
CONTRACT NO. 78483				
ILLINOIS FED. AID PROJECT				

NORTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr. Slab	527+91.24	-57.30	513.85
W	528+02.26	-57.15	514.13
X	528+13.18	-57.21	514.40
E. End W. Appr. Slab	528+24.05	-57.38	514.66

NORTH EDGE OF EB ROADWAY

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr. Slab	527+91.75	-55.29	513.90
W	528+02.73	-55.14	514.18
X	528+13.62	-55.22	514.45
E. End W. Appr. Slab	528+24.45	-55.39	514.71

SOUTH EDGE OF EB ROADWAY

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr. Slab	528+02.45	-10.15	515.07
W	528+12.65	-10.20	515.33
X	528+22.79	-10.37	515.57
E. End W. Appr. Slab	528+32.92	-10.42	515.80

SOUTH EDGE OF MULTI-USE PATH

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr. Slab	528+06.24	7.44	515.22
W	528+16.14	7.16	515.47
X	528+26.04	7.02	515.71
E. End W. Appr. Slab	528+35.99	7.00	515.94

NORTH EDGE OF NORTH INTERIOR PARAPET

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr. Slab	528+02.89	-8.14	515.12
W	528+13.06	-8.21	515.38
X	528+23.17	-8.37	515.62
E. End W. Appr. Slab	528+33.27	-8.42	515.85

SOUTH EDGE OF SOUTH INTERIOR PARAPET

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr. Slab	528+06.54	8.85	515.20
W	528+16.41	8.57	515.45
X	528+26.30	8.43	515.69
E. End W. Appr. Slab	528+36.24	8.42	515.92

NORTH EDGE OF MULTI-USE PATH

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr. Slab	528+03.20	-6.73	515.16
W	528+13.34	-6.79	515.41
X	528+23.44	-6.96	515.65
E. End W. Appr. Slab	528+33.52	-7.00	515.88

NORTH EDGE OF WB ROADWAY

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr. Slab	528+06.95	10.84	515.17
W	528+16.80	10.57	515.42
X	528+26.66	10.43	515.66
E. End W. Appr. Slab	528+36.59	10.42	515.88

CL IL 15 & P.G.

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr. Slab	528+04.66	0.00	515.33
W	528+14.72	0.00	515.58
X	528+24.75	0.00	515.82
E. End W. Appr. Slab	528+34.75	0.00	516.05

SOUTH EDGE OF WB ROADWAY

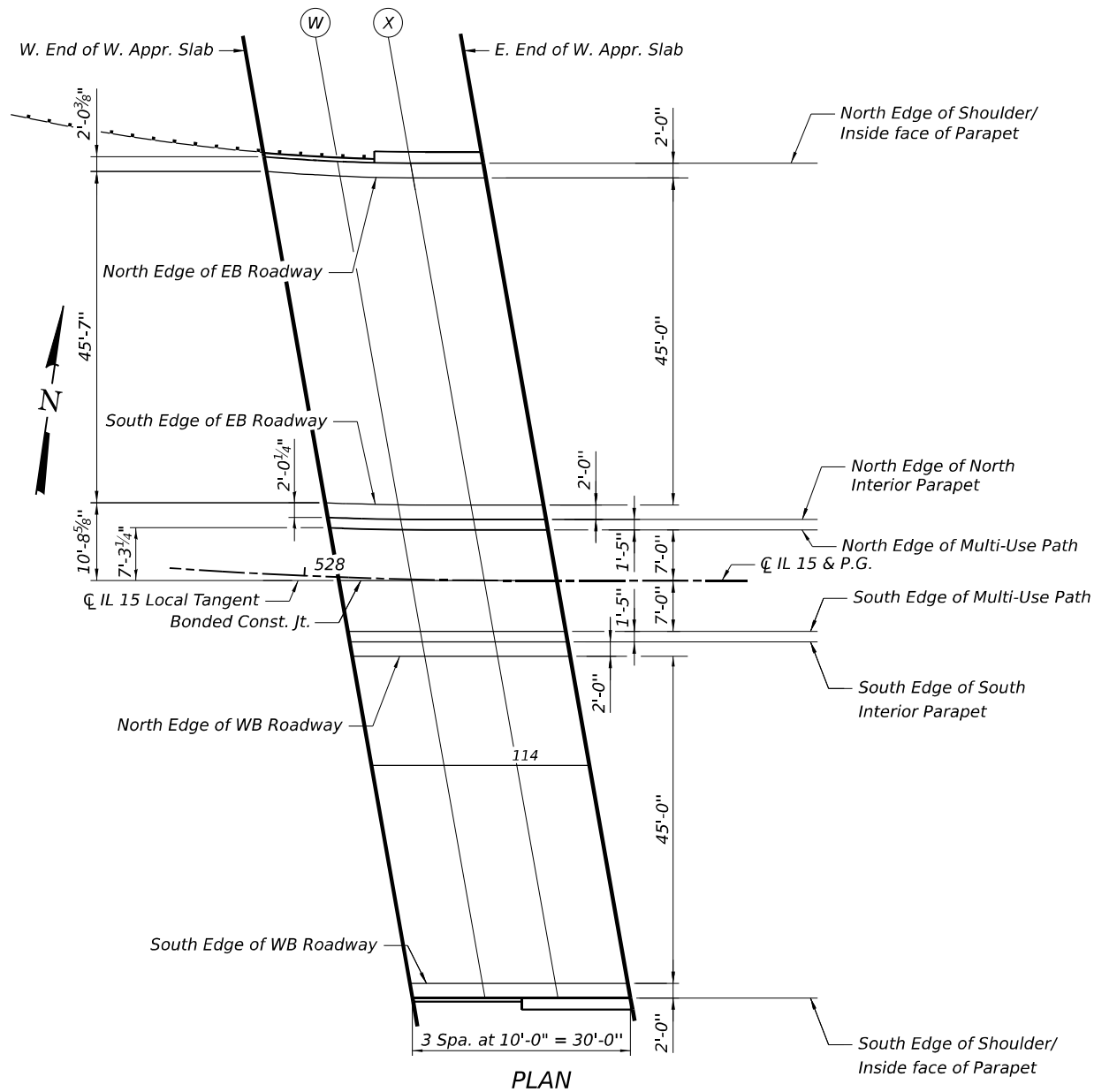
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W. End W. Appr. Slab	528+15.73	55.60	514.49
W	528+25.01	55.45	514.72
X	528+34.52	55.42	514.94
E. End W. Appr. Slab	528+44.53	55.42	515.15

BONDED CONST. JT.

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr. Slab	528+04.77	0.49	515.32
W	528+14.76	0.19	515.58
X	528+24.75	0.03	515.82
E. End W. Appr. Slab	528+34.75	0.00	516.05

SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr. Slab	528+16.10	57.59	514.46
W	528+25.35	57.44	514.69
X	528+34.87	57.42	514.91
E. End W. Appr. Slab	528+44.88	57.42	515.12



PLAN

MODEL: West Approach Slab Elev. (Sheet)
 FILE NAME: P:\Common\Projects\2024\12\10\10410121-012_Twp of West Approach Slab Elev.dgn
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USER NAME = Bitlan Bond	DESIGNED - VT	REVISED -
	DRAWN - VT	REVISED -
PLOT SCALE = N/A	CHECKED - MAC	REVISED -
PLOT DATE = 12/10/2024	DATE - DEC 2024	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**WEST APPROACH SLAB ELEVATIONS
STRUCTURE NO. 041-0121**

SCALE: SHEET 12 OF 48 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	13-2 (N-1, TS-1); (41-3)HB2	JEFFERSON	787	569
CONTRACT NO. 78483				
ILLINOIS FED. AID PROJECT				

NORTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr. Slab	530+75.59	-57.42	515.93
Y	530+85.59	-57.42	515.81
Z	530+95.59	-57.42	515.69
E. End E. Appr. Slab	531+05.59	-57.42	515.57

NORTH EDGE OF EB ROADWAY

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr. Slab	530+75.94	-55.42	515.96
Y	530+85.94	-55.42	515.84
Z	530+95.94	-55.42	515.72
E. End E. Appr. Slab	531+05.94	-55.42	515.60

SOUTH EDGE OF MULTI-USE PATH

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr. Slab	530+86.95	7.00	516.80
Y	530+96.95	7.00	516.68
Z	531+06.95	7.00	516.56
E. End E. Appr. Slab	531+16.95	7.00	516.44

SOUTH EDGE OF EB ROADWAY

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr. Slab	530+83.88	-10.42	516.77
Y	530+93.88	-10.42	516.65
Z	531+03.88	-10.42	516.53
E. End E. Appr. Slab	531+13.88	-10.42	516.41

SOUTH EDGE OF SOUTH INTERIOR PARAPET

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr. Slab	530+87.20	8.42	516.77
Y	530+97.20	8.42	516.65
Z	531+07.20	8.42	516.53
E. End E. Appr. Slab	531+17.20	8.42	516.41

NORTH EDGE OF NORTH INTERIOR PARAPET

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr. Slab	530+84.23	-8.42	516.80
Y	530+94.23	-8.42	516.68
Z	531+04.23	-8.42	516.56
E. End E. Appr. Slab	531+14.23	-8.42	516.44

NORTH EDGE OF WB ROADWAY

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr. Slab	530+87.55	10.42	516.72
Y	530+97.55	10.42	516.60
Z	531+07.55	10.42	516.48
E. End E. Appr. Slab	531+17.55	10.42	516.36

NORTH EDGE OF MULTI-USE PATH

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr. Slab	530+84.48	-7.00	516.83
Y	530+94.48	-7.00	516.71
Z	531+04.48	-7.00	516.59
E. End E. Appr. Slab	531+14.48	-7.00	516.47

SOUTH EDGE OF WB ROADWAY

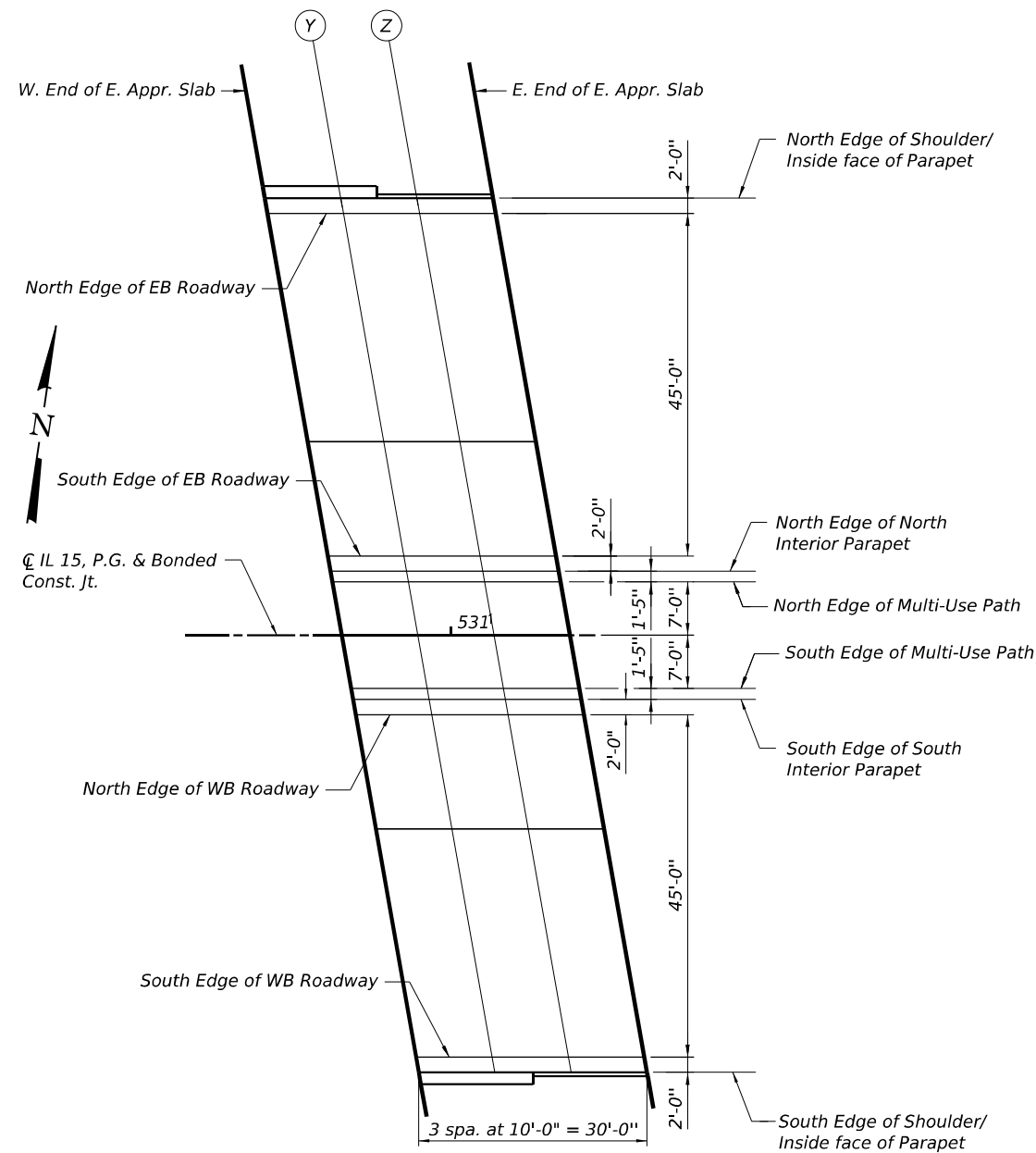
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W. End E. Appr. Slab	530+95.49	55.42	515.73
Y	531+05.49	55.42	515.61
Z	531+15.49	55.42	515.49
E. End E. Appr. Slab	531+25.49	55.42	515.37

CL IL 15, P.G. & BONDED CONST. JT.

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr. Slab	530+85.72	0.00	516.95
Y	530+95.72	0.00	516.83
Z	531+05.72	0.00	516.71
E. End E. Appr. Slab	531+15.72	0.00	516.59

SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr. Slab	530+95.84	57.42	515.68
Y	531+05.84	57.42	515.56
Z	531+15.84	57.42	515.44
E. End E. Appr. Slab	531+25.84	57.42	515.32



PLAN

MODEL: East Approach Slab Elev.dwg (Sheet)
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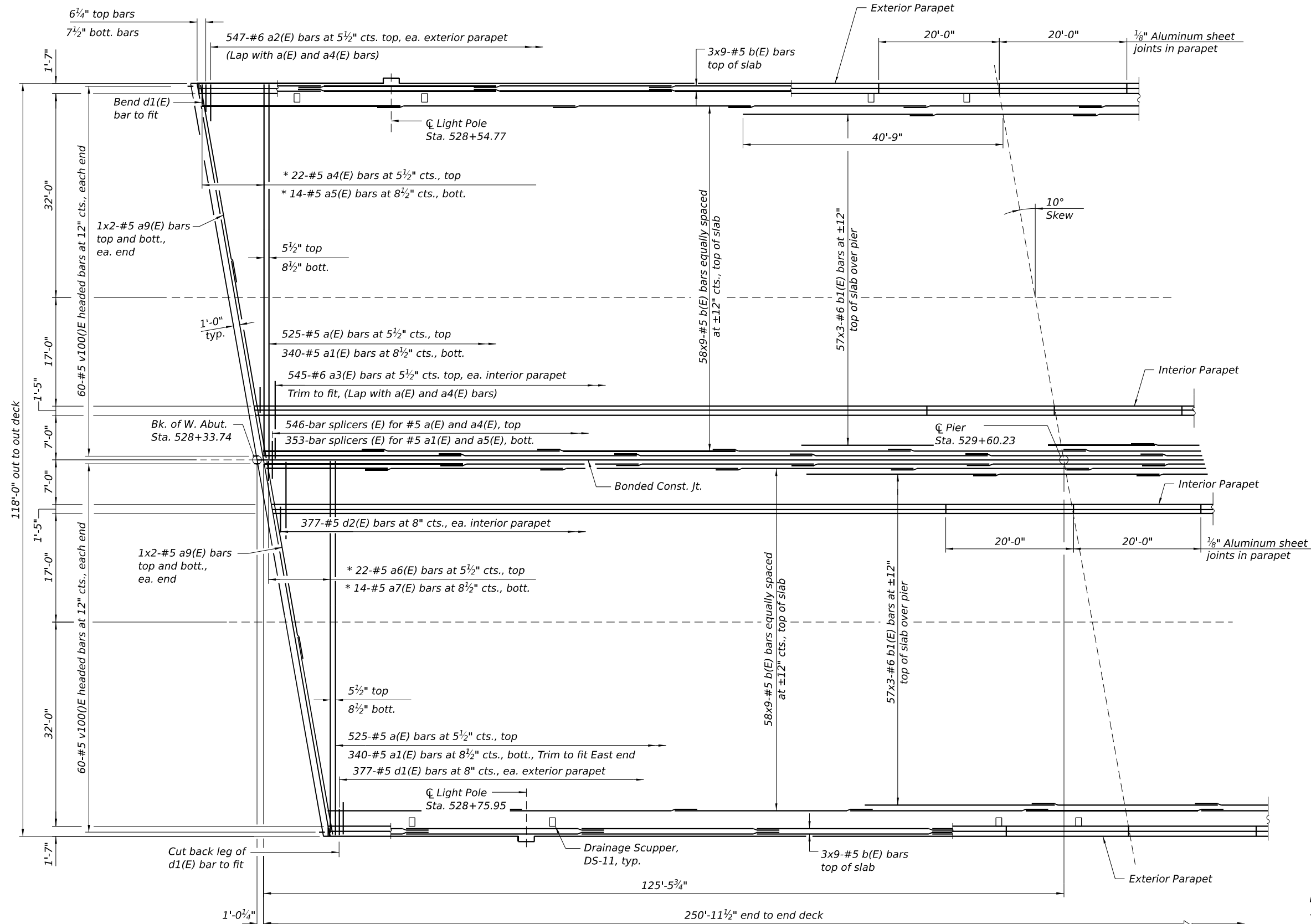
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	DATE - DEC 2024	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EAST APPROACH SLAB ELEVATIONS
STRUCTURE NO. 041-0121**

SCALE: SHEET 13 OF 48 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	13-2 (N-1, TS-1); (41-3)HB2	JEFFERSON	787	570
CONTRACT NO. 78483				
ILLINOIS FED. AID PROJECT				



MINIMUM BAR LAP

#5 bar = 3'-6"
 #6 bar = 3'-7"

* See Field Cutting Diagram on sheet 16 of 48.

- Notes:**
1. See sheets 15 and 16 of 48 for superstructure details and Bill of Material.
 2. Bars noted thus 20 x 3-#5 indicates 20 lines of bars with 3 lengths per line.
 3. See sheet 25 of 48 for Drainage Scupper Details.

PLAN

MODEL: 041-0121 - 014_Superstructure - 1 (Sheet)
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DESIGNED	- DAC
DRAWN	- DAC
PLOT SCALE	= N/A
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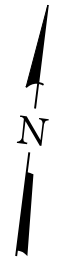
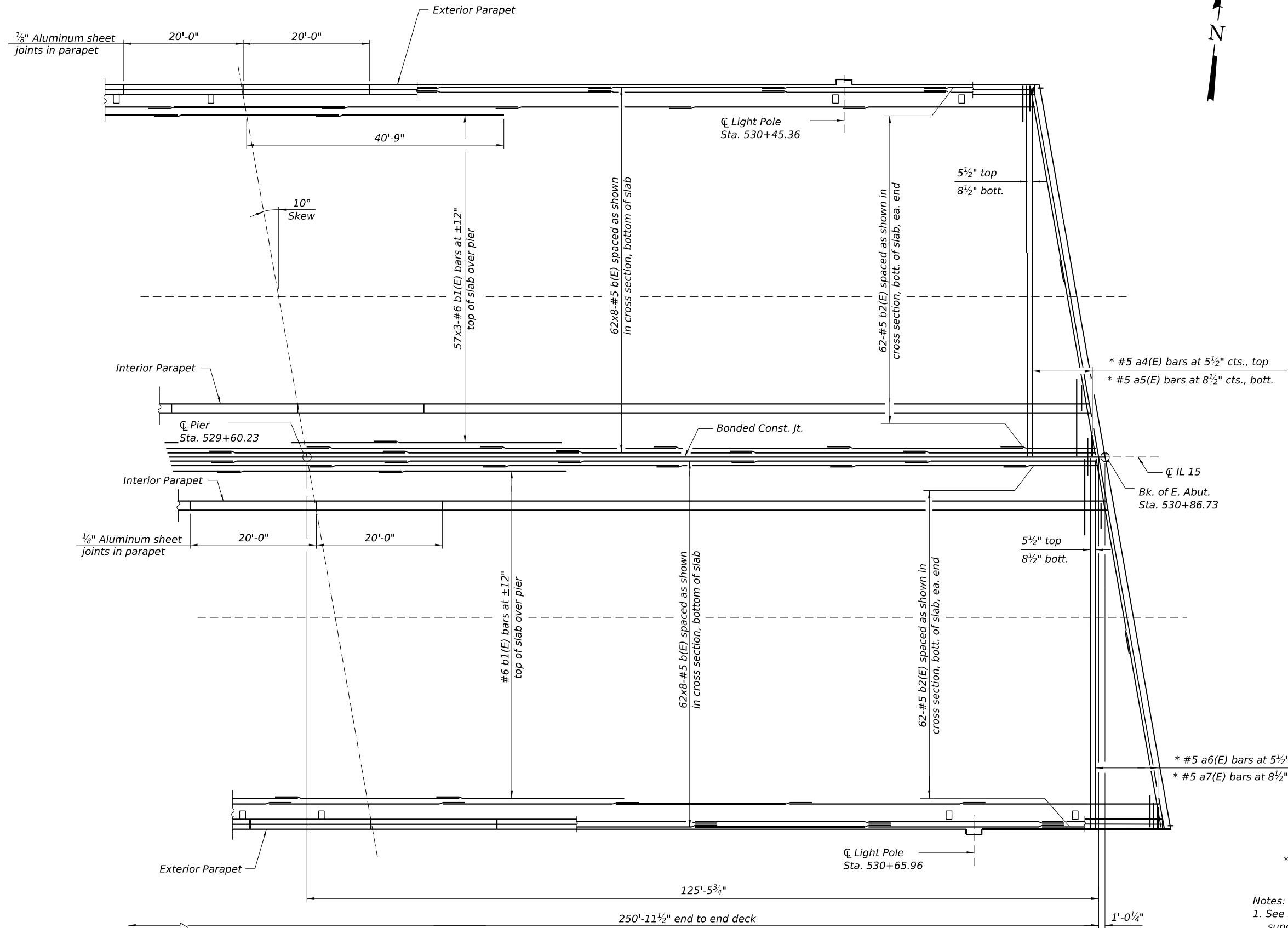
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CHECKED	- FAS	REVISED	-
DATE	- DEC 2024	REVISED	-

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SUPERSTRUCTURE - I
 STRUCTURE NO. 041-0121**

SCALE: SHEET 14 OF 48 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	13-2(N-1, TS-1); (41-3)HB2	JEFFERSON	787	571
CONTRACT NO. 78483				
ILLINOIS FED. AID PROJECT				



PLAN

MINIMUM BAR LAP

#5 bar = 3'-6"
#6 bar = 3'-7"

* See Field Cutting Diagram on sheet 16 of 48.

- Notes:
1. See sheets 15 and 16 of 48 for superstructure details and Bill of Material.
 2. Bars noted thus 20 x 3-#5 indicates 20 lines of bars with 3 lengths per line.
 3. See sheet 25 of 48 for Drainage Scupper Details.

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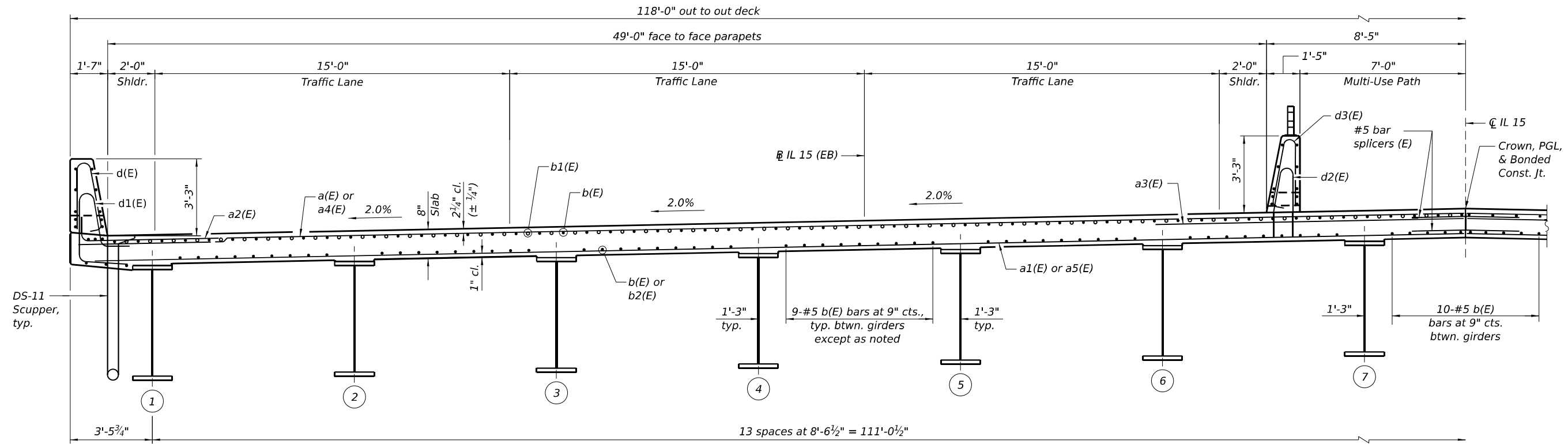
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PLOT DATE = 12/10/2024	CHECKED - FAS	REVISED -
	DATE - DEC 2024	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUPERSTRUCTURE - II
STRUCTURE NO. 041-0121**

SCALE: SHEET 15 OF 48 SHEETS STA. TO STA.

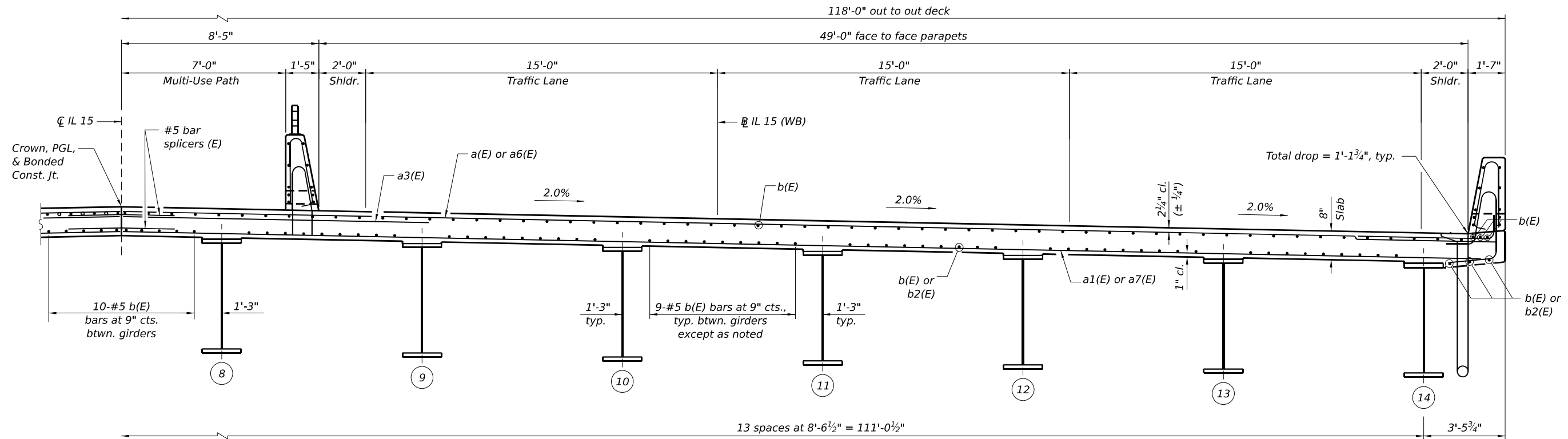
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821	13-2(N-1, TS-1); (41-3)HB2	JEFFERSON	787	572
CONTRACT NO. 78483				
ILLINOIS FED. AID PROJECT				



NEAR PIER

CROSS SECTION

(Looking East)



CROSS SECTION

(Looking East)

NEAR MIDSPAN

MODEL: 04-01-0121 - 011_Superstructure (Sheet)
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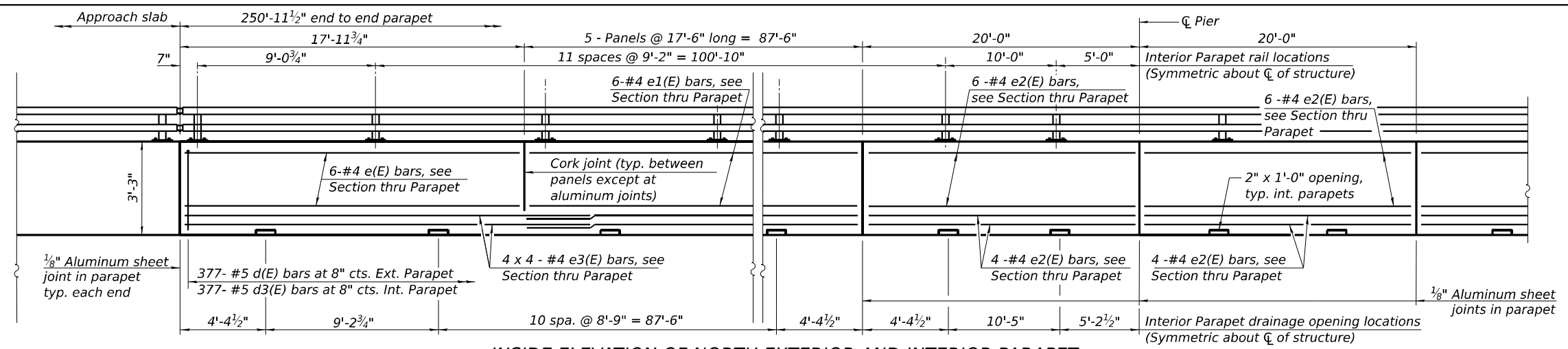
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

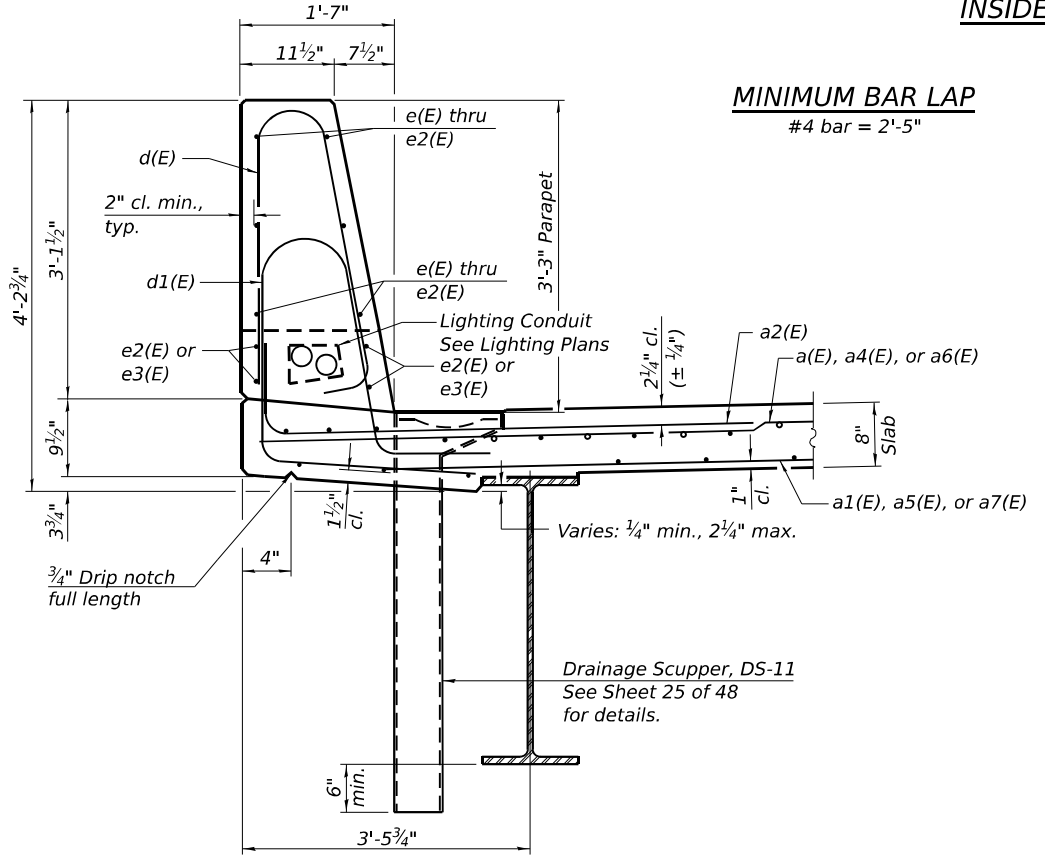
SUPERSTRUCTURE - III
STRUCTURE NO. 041-0121

SCALE: SHEET 16 OF 48 SHEETS STA. TO STA.

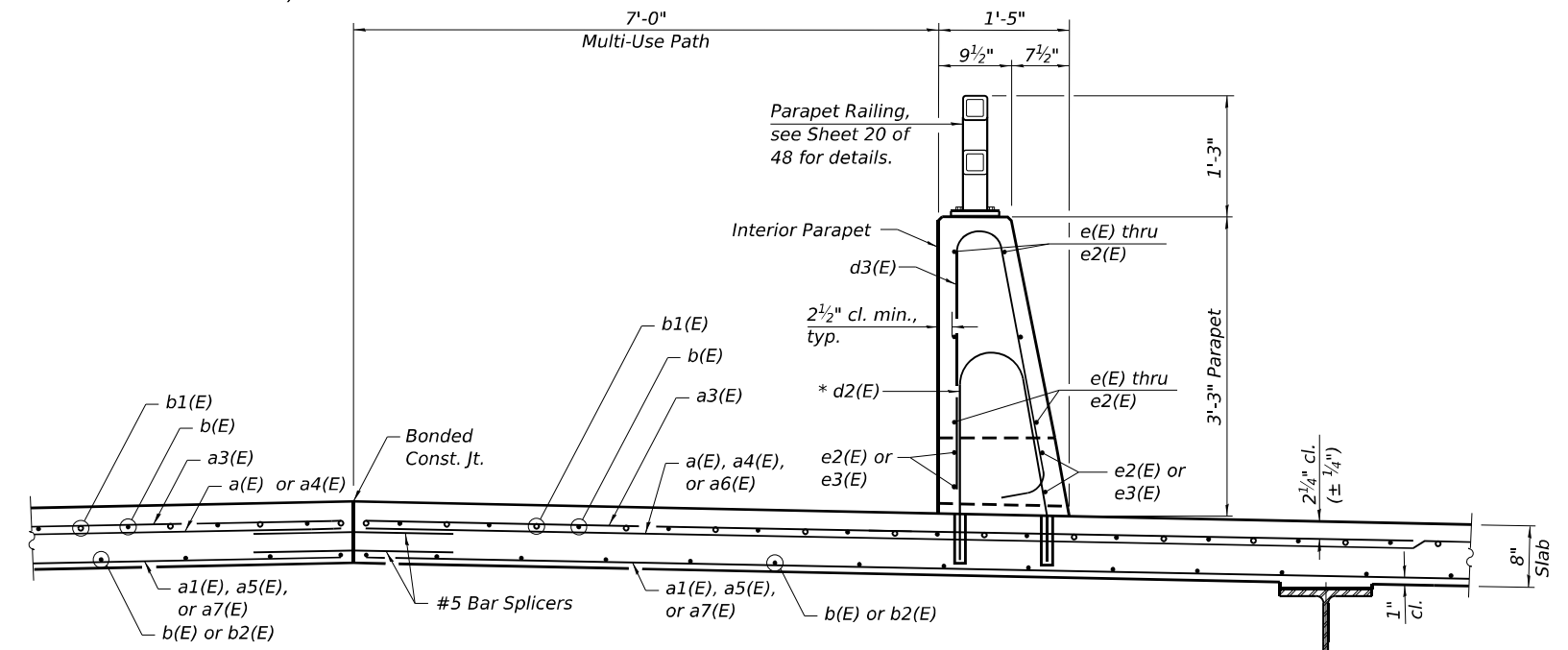
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CONTRACT NO. 78483				
ILLINOIS FED. AID PROJECT				



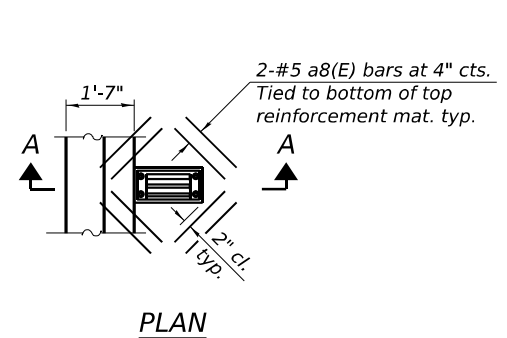
INSIDE ELEVATION OF NORTH EXTERIOR AND INTERIOR PARAPET
(SOUTH PARAPETS SIMILAR)



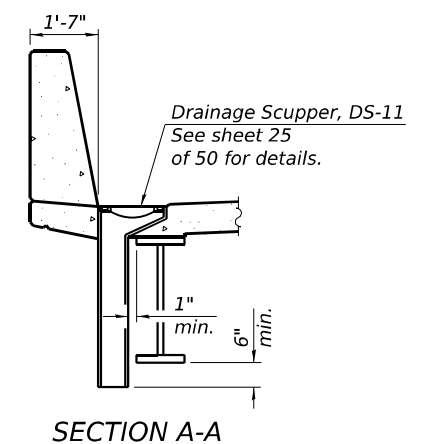
SECTION THRU EXTERIOR PARAPET



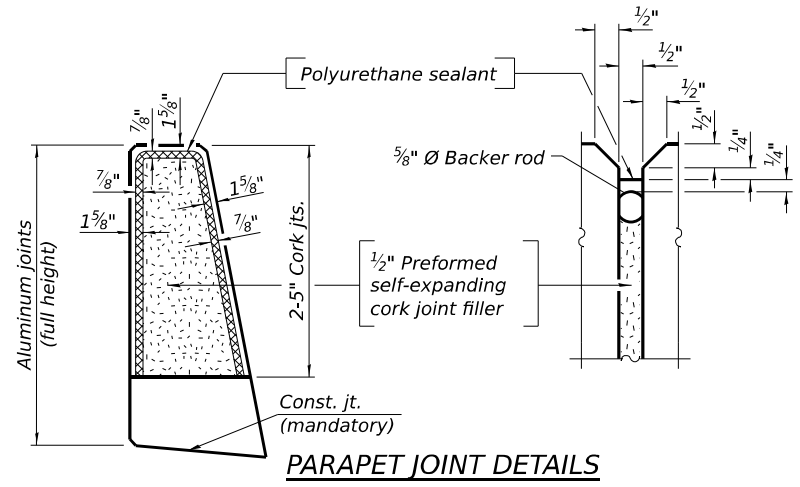
SECTION THRU INTERIOR PARAPET



Note:
Cut longitudinal reinforcement to clear drainage scuppers.



SECTION A-A



PARAPET JOINT DETAILS

- Notes:
- The 1/8" aluminum sheet shall be ASTM B 209 alloy 3003-H14 and coated to minimize reaction with wet concrete. Cost included with Concrete Superstructure.
 - The polyurethane sealant shall be according to Article 1050.04 of the Std. Spec. and the color shall be gray.
 - Reinforcement bars shall not pass thru aluminum sheets and cork joint filler.

MODEL: 04-01-0121 - 017_Superstructure Details - I (Sheet)
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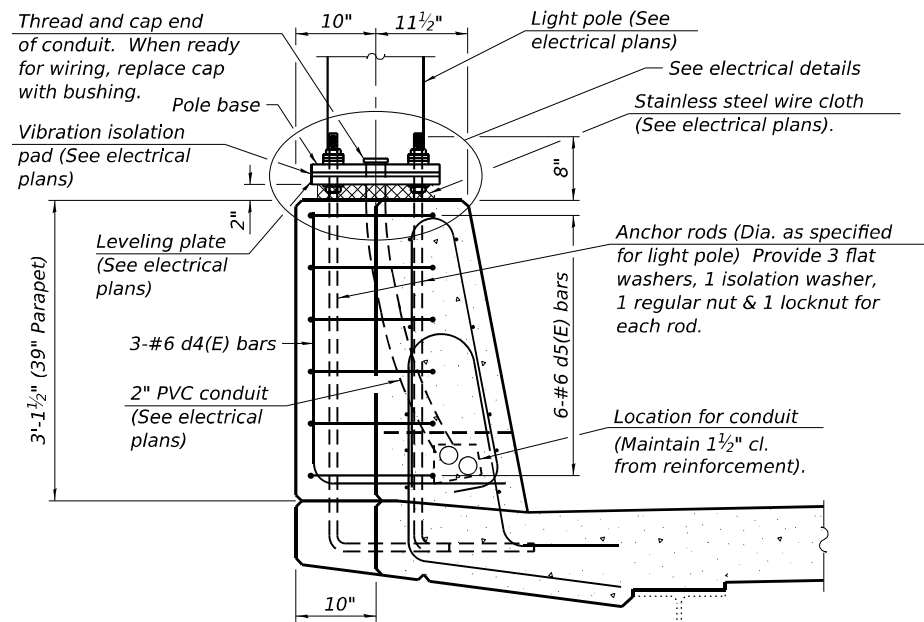
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PLOT SCALE = N/A	DRAWN - DAC	REVISED -
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	DATE - DEC 2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

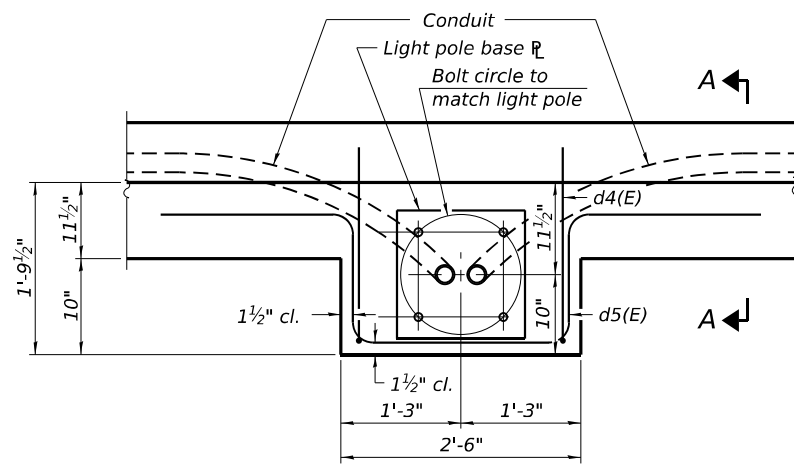
SUPERSTRUCTURE DETAILS - I
STRUCTURE NO. 041-0121

SCALE: SHEET 17 OF 48 SHEETS STA. TO STA.

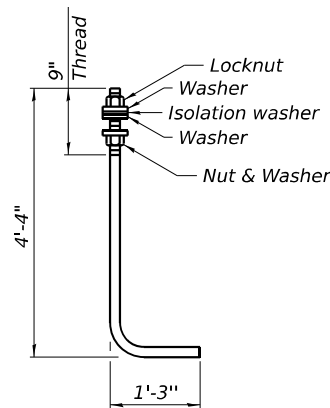
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	13-2(N-1, TS-1); (41-3)HB2	JEFFERSON	787	574
CONTRACT NO. 78483			ILLINOIS FED.AID PROJECT	



SECTION A-A

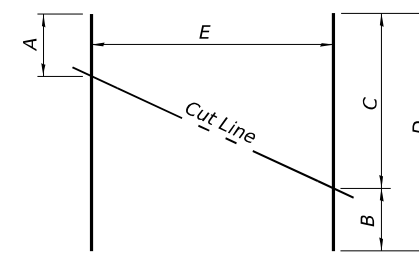


PLAN



ANCHOR ROD

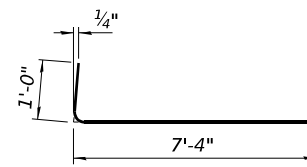
Diameter as specified for light poles.
(ASTM F 1554 Grade 105) Full length
hot dipped galvanized.



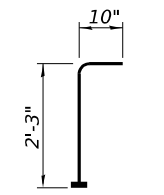
FIELD CUTTING DIAGRAM

Order a4(E) thru a7(E) bars full length.
Cut as shown and use remainder of
bars in opposite side of deck.

Bar	A	B	C	D	E
a4(E)	1'-9 ¹ / ₂ "	1'-9 ³ / ₂ "	56'-4 ¹ / ₂ "	58'-2"	22-#5 a4(E) bars
a5(E)	1'-11"	3'-3 ¹ / ₂ "	54'-1 ¹ / ₂ "	57'-5"	14-#5 a5(E) bars
a6(E)	2'-9"	1'-0"	57'-2"	58'-2"	22-#5 a6(E) bars
a7(E)	3'-8"	1'-6 ¹ / ₂ "	55'-10 ¹ / ₂ "	57'-5"	14-#5 a7(E) bars

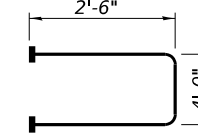


BAR a2(E)



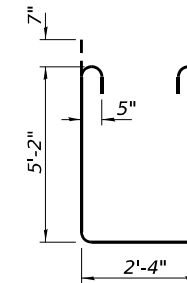
BAR v100(E)

(Headed, 240-#5 Bar terminators)

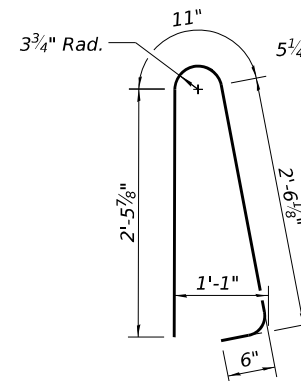


BAR s10(E)

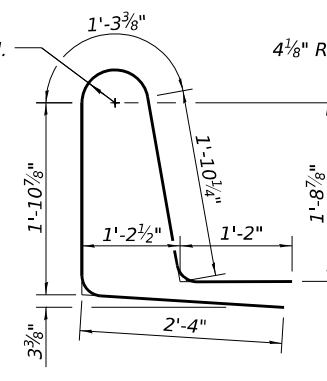
(Headed, 440-#5 Bar terminators)



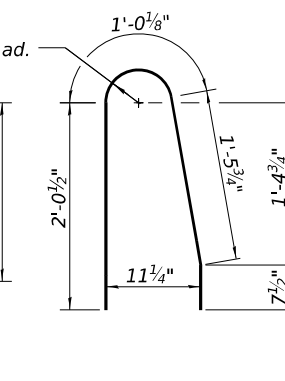
BAR s11(E)



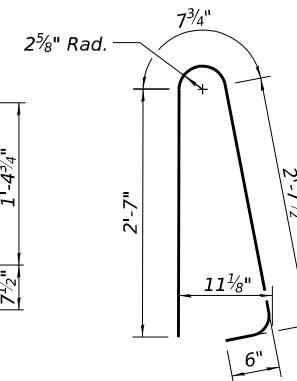
BAR d(E)



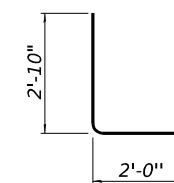
BAR d1(E)



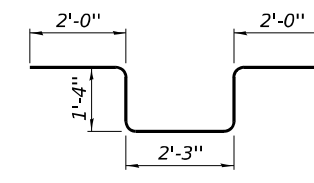
BAR d2(E)



BAR d3(E)



BAR d4(E)



BAR d5(E)

**SUPERSTRUCTURE
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a(E)	1050	#5	58'-8"	—
a1(E)	680	#5	58'-2"	—
a2(E)	1094	#6	8'-4"	—
a3(E)	1090	#6	14'-4"	—
a4(E)	22	#5	58'-2"	—
a5(E)	14	#5	57'-9"	—
a6(E)	22	#5	58'-2"	—
a7(E)	14	#5	57'-5"	—
a8(E)	96	#5	1'-6"	—
a9(E)	16	#5	31'-7"	—
b(E)	2144	#5	31'-0"	—
b1(E)	342	#6	29'-7"	—
b2(E)	248	#5	17'-1"	—
d(E)	754	#5	6'-5"	—
d1(E)	754	#5	8'-7"	—
d2(E)	754	#5	5'-2"	—
d3(E)	754	#5	6'-4"	—
d4(E)	12	#6	4'-6"	—
d5(E)	24	#6	9'-3"	—
e(E)	48	#4	17'-8"	—
e1(E)	240	#4	17'-2"	—
e2(E)	80	#4	19'-8"	—
e3(E)	128	#4	28'-2"	—
m10(E)	48	#6	31'-10"	—
m11(E)	120	#6	8'-3"	—
m12(E)	20	#6	3'-2"	—
m13(E)	20	#6	4'-0"	—
s10(E)	220	#5	9'-0"	—
s11(E)	196	#5	13'-10"	—
v100(E)	240	#5	3'-1"	—
Concrete Superstructure		Cu. Yd.	1,032.0	
Bridge Deck Grooving		Sq. Yd.	2,622	
Reinforcement Bars, Epoxy Coated		Pound	274,330	

Notes:

1. Cost of anchor rods is included with Concrete Superstructure.
2. Bar terminators, paid for separately. See Total Bill of Material.

MODEL: S1 041-0121 018_Superstructure Details - II (Sheet)
 FILE NAME: P:\Engineering\2024\11\2024-11-15\11-15-2024\CADD_Sheets\11-15-2024-018_Superstructure Details - II.dwg
 License No. 184-00613 © Copyright CMT, Inc.



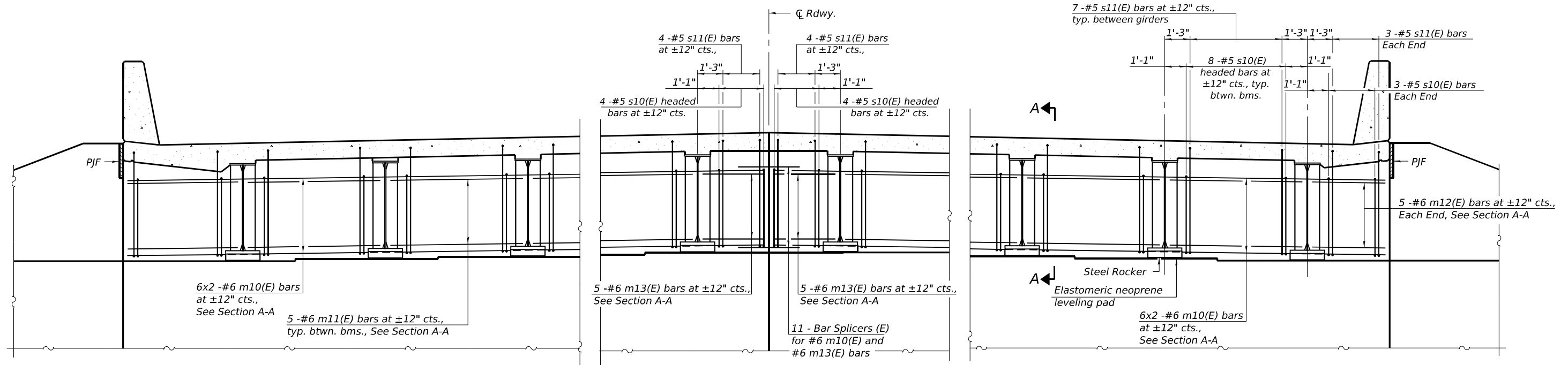
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PLOT SCALE = N/A	DRAWN - DAC	REVISED -
PLOT DATE = 12/10/2024	CHECKED - FAS	REVISED -
	DATE - DEC 2024	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUPERSTRUCTURE DETAILS - II
STRUCTURE NO. 041-0121**

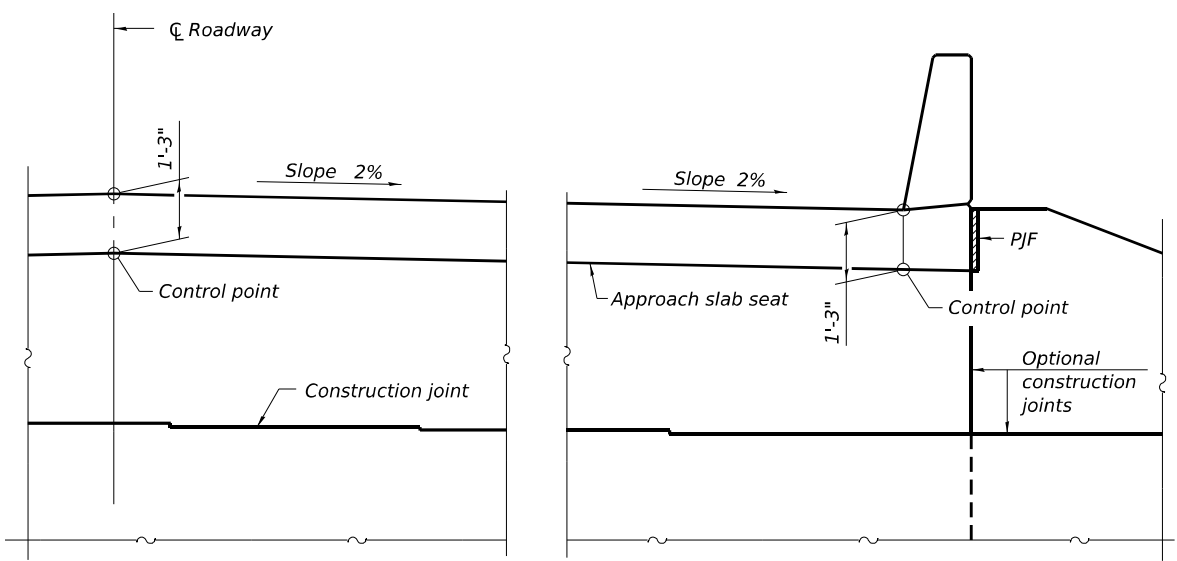
SCALE: SHEET 18 OF 48 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	13-2(N-1, TS-1); (41-3)HB2	JEFFERSON	787	575
CONTRACT NO. 78483				
ILLINOIS FED. AID PROJECT				

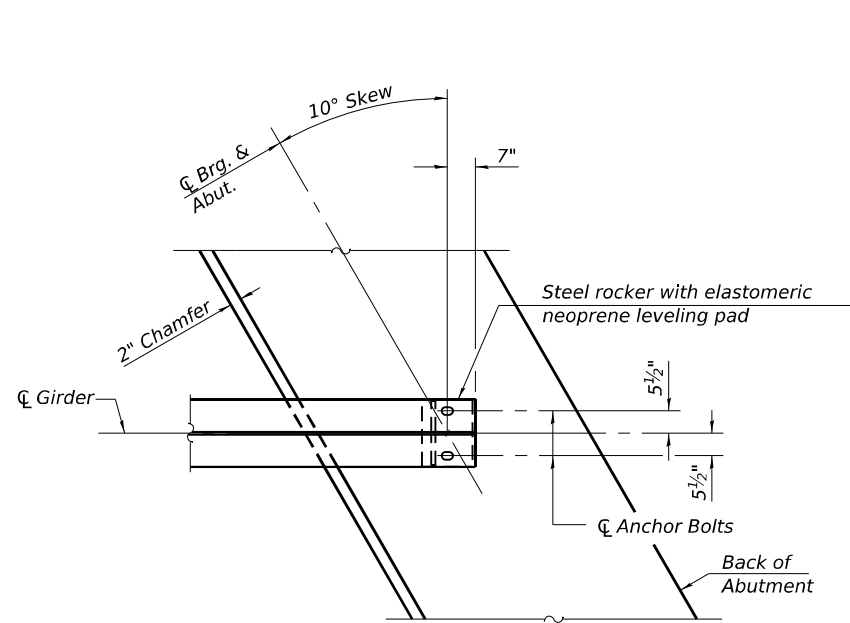


DIAPHRAGM AT ABUTMENT

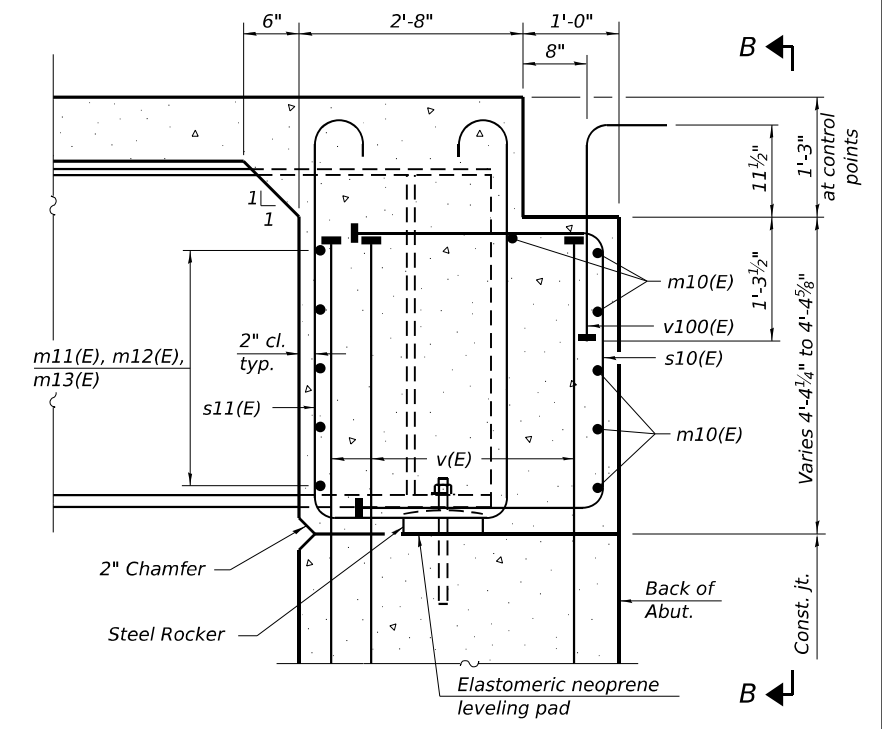
MIN. BAR LAP
 #6 Bar = 4'-0"



VIEW B-B



PLAN AT ABUTMENT
 (Showing bottom flange of beam)



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

- Notes:
 1. See sheets 17 and 18 of 48 for superstructure details and Bill of Material.
 2. See sheets 21 and 23 of 48 for P/JF details.
 3. The s10(E) and s11(E) bars shall be placed parallel to the girders. Spacing for these bars shall be at right angles to the girders.
 4. The approach slab seat shall have a constant slope determined from the control points shown.

MODEL: 04-01-0121 - 019_Diaphragm_Details (Sheet)
 FILE NAME: p:\cmt\eng\proj\04-01-0121-019_Diaphragm_Details.dgn
 PROJECT: 04-01-0121 - 019_Diaphragm_Details



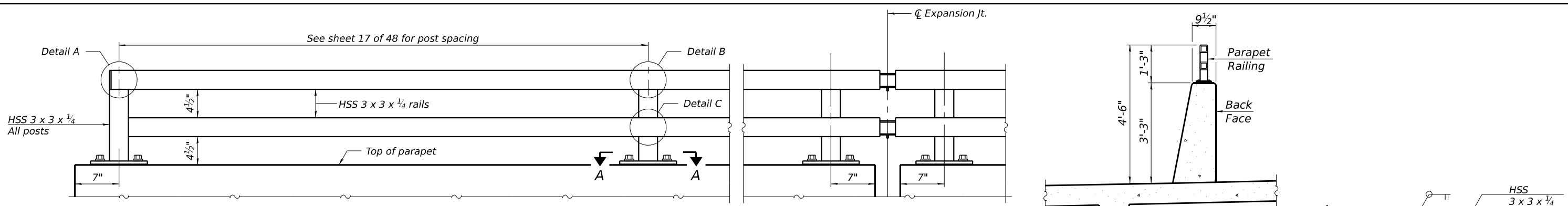
USER NAME = Brian Bond	DESIGNED - DAC	REVISED -
PLOT SCALE = N/A	DRAWN - DAC	REVISED -
PLOT DATE = 12/10/2024	CHECKED - FAS	REVISED -
	DATE - DEC 2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

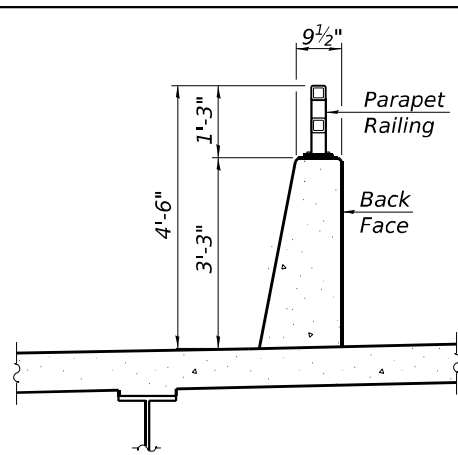
DIAPHRAGM DETAILS
STRUCTURE NO. 041-0121

SCALE: SHEET 19 OF 48 SHEETS STA. TO STA.

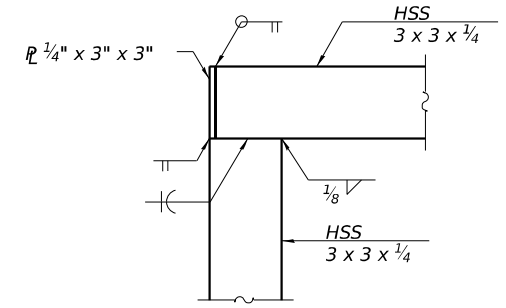
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	13-2(N-1, TS-1); (41-3)HB2	JEFFERSON	787	576
CONTRACT NO. 78483				
ILLINOIS FED. AID PROJECT				



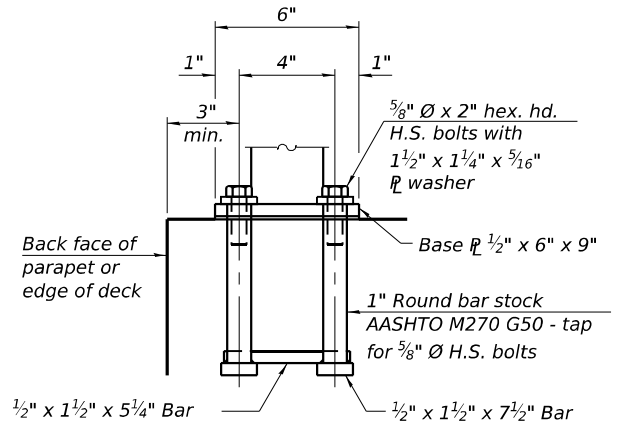
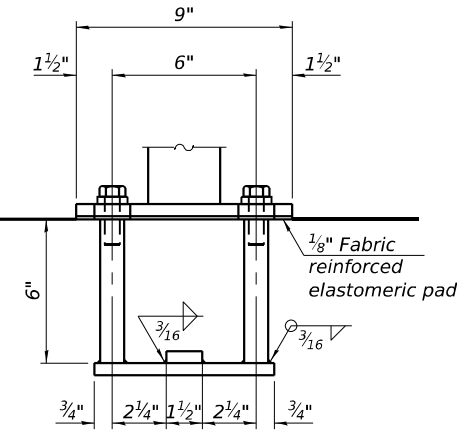
ELEVATION PARAPET RAILING
(Inside face)



SECTION THRU DECK

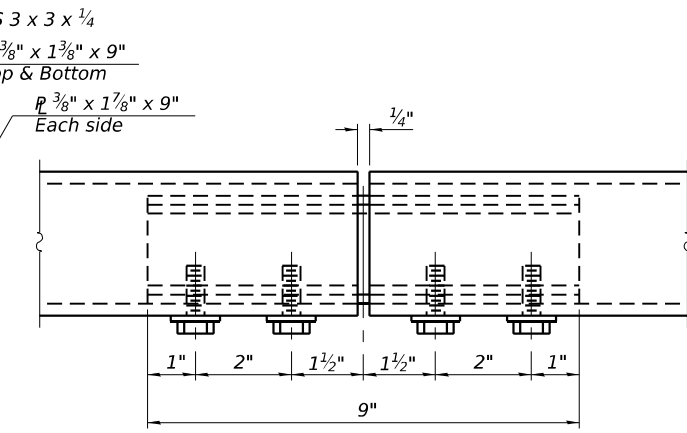
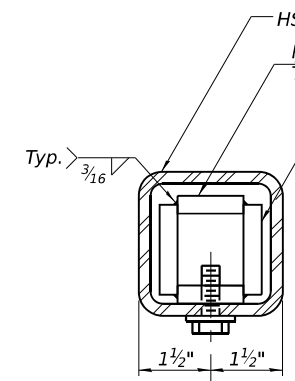


DETAIL A

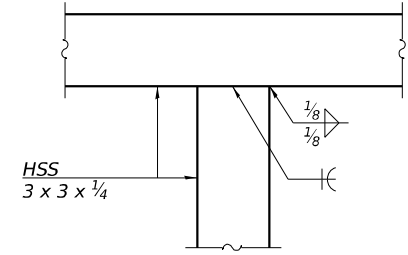


ANCHORAGE ASSEMBLY

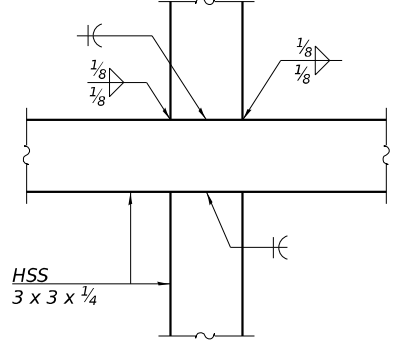
In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 5/8" Ø fully threaded anchor rods with the same plate washers as specified above and heavy hex lock nuts according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.



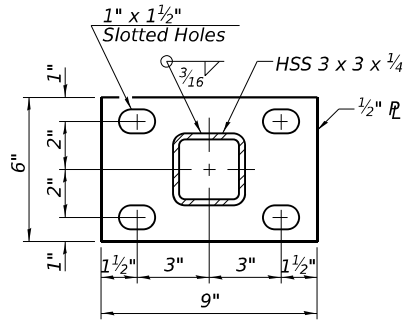
MATERIAL SPLICE



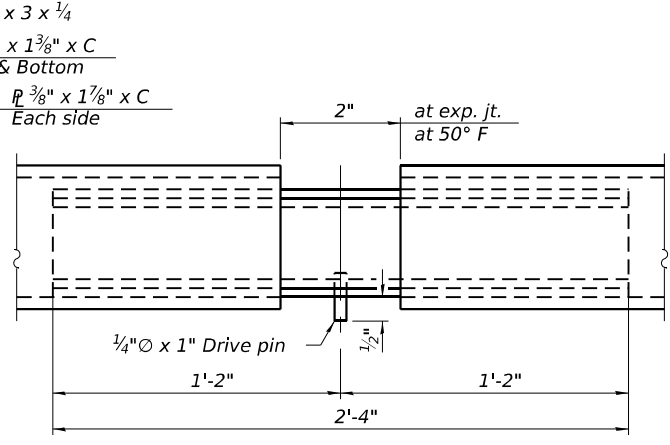
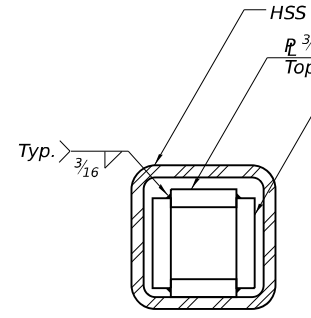
DETAIL B



DETAIL C



SECTION A-A



EXPANSION SPLICE

- Notes:
1. Place reinforcement bars to miss anchor rod locations.
 2. All HSS tubing used for the Parapet Railing shall be CVN tested according to Article 1006.34(b) of the Standard Specifications.
 3. All HSS tubing used for the Parapet Railing shall be ASTM A500 grade C.
 4. All base plates used for the Parapet Railing shall be AASHTO M270 grade 50.
 5. All heavy hex nuts shall be according to ASTM A563 grade DH.
 6. All fully threaded anchor rods shall be ASTM F1554 grade 105.
 7. The post base plate shall be fastened to the curb snug tight and given an additional 1/8" turn.
 8. Rail splice inserts may be built out of bent plates of the same thicknesses and outside geometry limits as the 4 plate rail splice inserts shown.
 9. When the contract specifies a galvanized railing, all steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.

BILL OF MATERIAL

Item	Unit	Quantity
Parapet Railing	Foot	620

RAILING CRITERIA

MASH 2016 Test Level	4
Parapet Railing Weight (plf)	25
Max Post Spacing	10'-0"

MODEL: 04-01-0121 - 020 Parapet Railing [Sheet]
 FILE NAME: Proj\cmengr\p2\2024\04-01-0121-020 Parapet Railing.dgn
 PROJECT: 04-01-0121 - 020 Parapet Railing
 SHEET: 04-01-0121 - 020 Parapet Railing (Sheet)



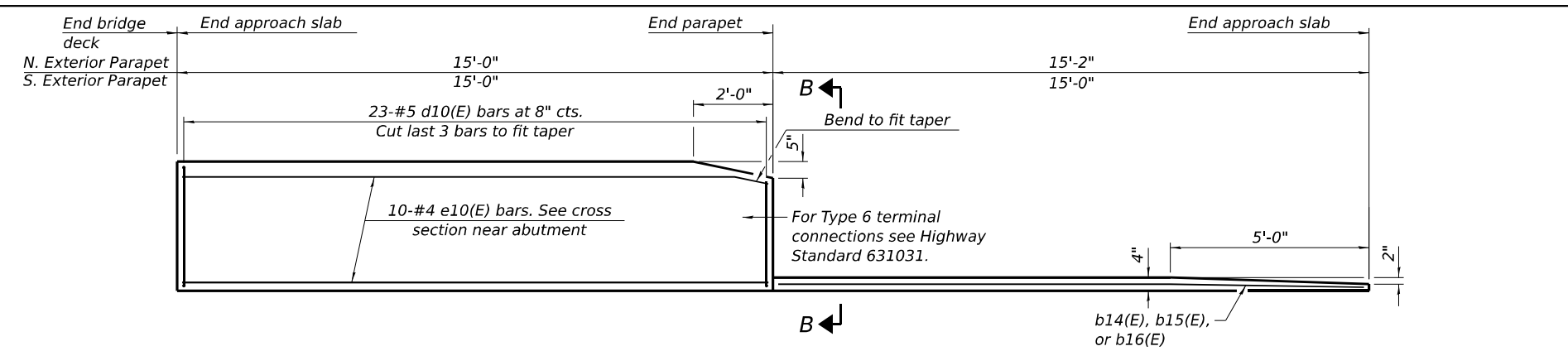
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PLOT SCALE = N/A	DRAWN - DAC	REVISED -
PLOT DATE = 12/10/2024	CHECKED - FAS	REVISED -
	DATE - DEC 2024	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

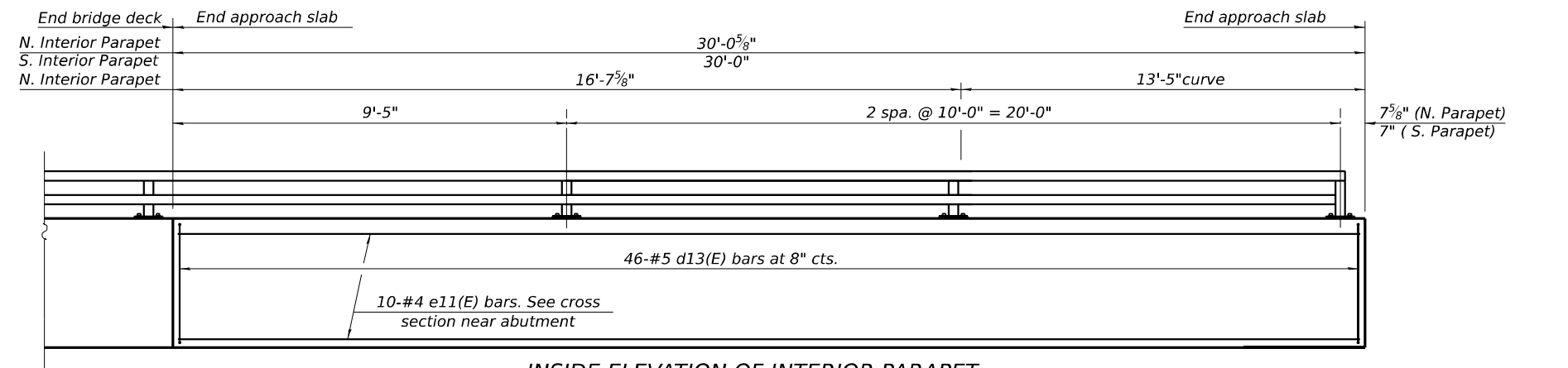
**PARAPET RAILING
STRUCTURE NO. 041-0121**

SCALE: SHEET 20 OF 48 SHEETS STA. TO STA.

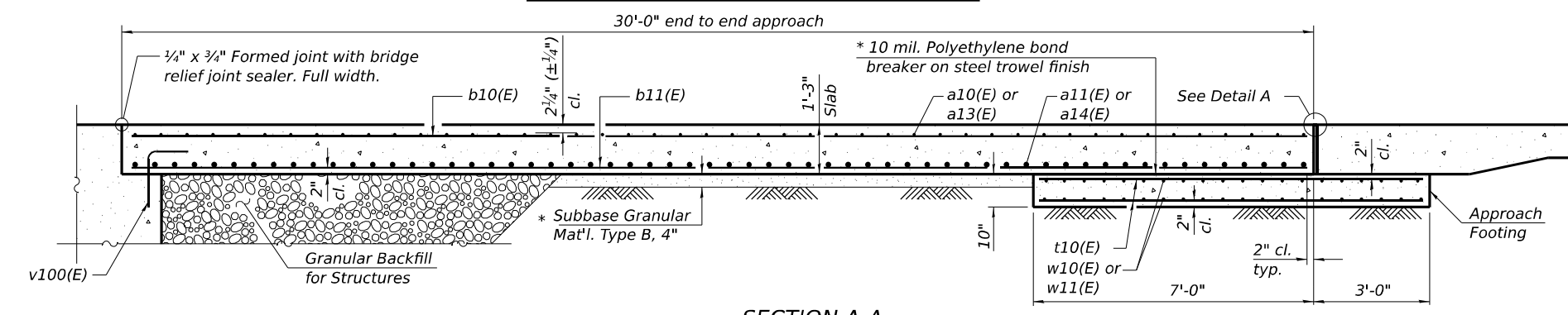
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	13-2(N-1, TS-1); (41-3)HB2	JEFFERSON	787	577
CONTRACT NO. 78483				
ILLINOIS FED. AID PROJECT				



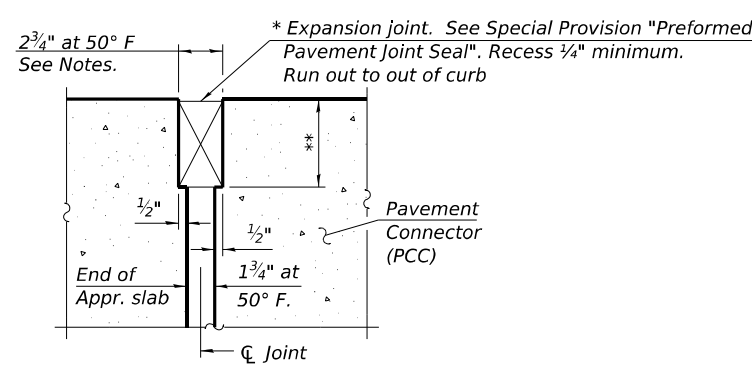
INSIDE ELEVATION OF EXTERIOR PARAPET AND CURB



INSIDE ELEVATION OF INTERIOR PARAPET

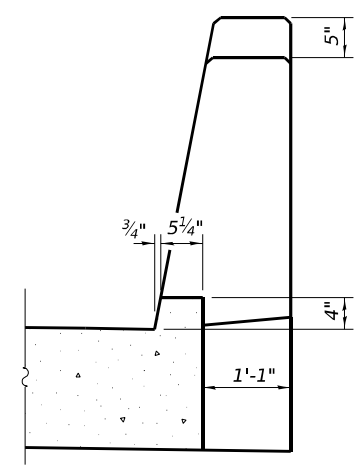


SECTION A-A

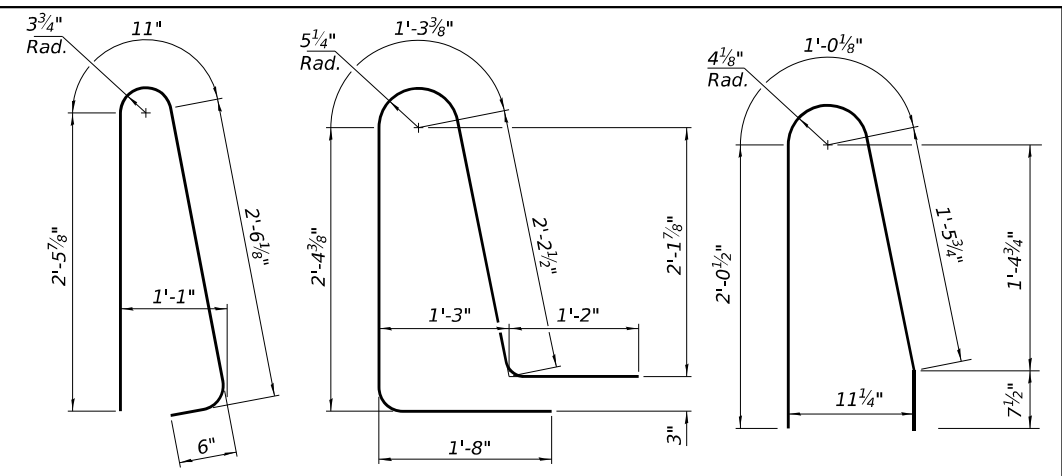


DETAIL A
(at Rt. L's)

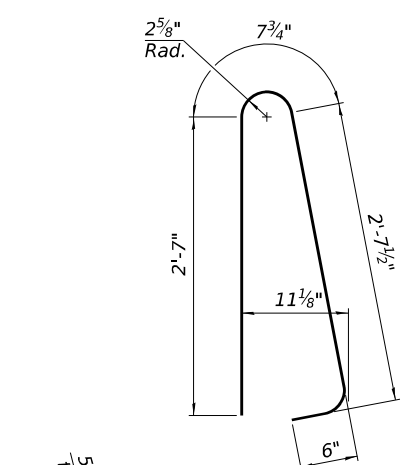
* Cost included with Concrete Superstructure (Approach Slab).
** Per manufacturer recommendations



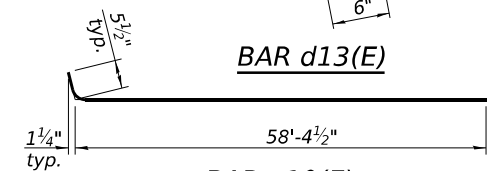
VIEW B-B



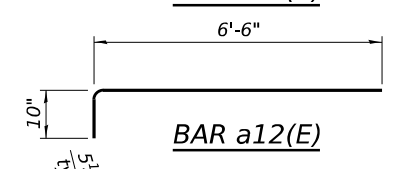
BAR d10(E) BAR d11(E) BAR d12(E)



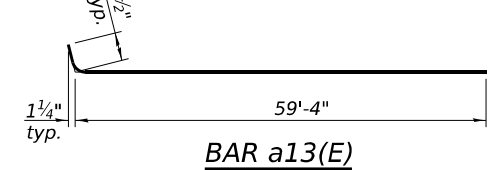
BAR d13(E)



BAR a10(E)



BAR a12(E)



BAR a13(E)

**WEST APPROACH
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a10(E)	63	#5	58'-11"	
a11(E)	75	#8	58'-6"	
a12(E)	46	#5	7'-4"	
a13(E)	29	#5	59'-10"	
a14(E)	45	#8	59'-5"	
b10(E)	174	#5	29'-8"	
b11(E)	279	#9	29'-8"	
b12(E)	4	#5	14'-8"	
b13(E)	4	#5	14'-8"	
b14(E)	1	#4	14'-7"	
b15(E)	1	#4	14'-11"	
b16(E)	4	#4	14'-10"	
d10(E)	46	#5	6'-5"	
d11(E)	46	#5	8'-8"	
d12(E)	92	#5	5'-2"	
d13(E)	92	#5	6'-4"	
e10(E)	20	#4	14'-8"	
e11(E)	20	#4	29'-8"	
t10(E)	238	#4	9'-10"	
w10(E)	40	#5	58'-6"	
w11(E)	40	#5	59'-5"	
Concrete Structures		Cu. Yd.	36.2	
Concrete Superstructure		Cu. Yd.	12.4	
Bridge Deck Grooving		Sq. Yd.	314	
Concrete Superstructure (Approach Slab)		Cu. Yd.	130.5	
Reinforcement Bars, Epoxy Coated		Pound	67,500	

Notes:

- The joint opening shall be adjusted for temperature per Article 520.04 of the Standard Specifications. However, since this detail is for jointless structures, the length of bridge used to calculate the adjustment shall be equal to half the total bridge length plus the length of the bridge approach slab.
- Parapet concrete shall be paid for as Concrete Superstructure.
- Approach slab shall be paid for as Concrete Superstructure (Approach Slab).
- Approach footing concrete shall be paid for as Concrete Structures.
- The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
- Cost of excavation for approach footing included with Concrete Structures.
- Granular Backfill for Structures and drainage treatment details, see sheet 2 of 48.

(Sheet 2 of 2)

MOC: E:\04-01-0121-022 West Approach Slab Details (Sheet 2) - 022 West Approach Slab Details.dgn
 FILE NAME: p:\cmt\engineering\2024\04-01-0121-022 West Approach Slab Details.dgn
 License No. 184-00613 © Copyright CMT, Inc.



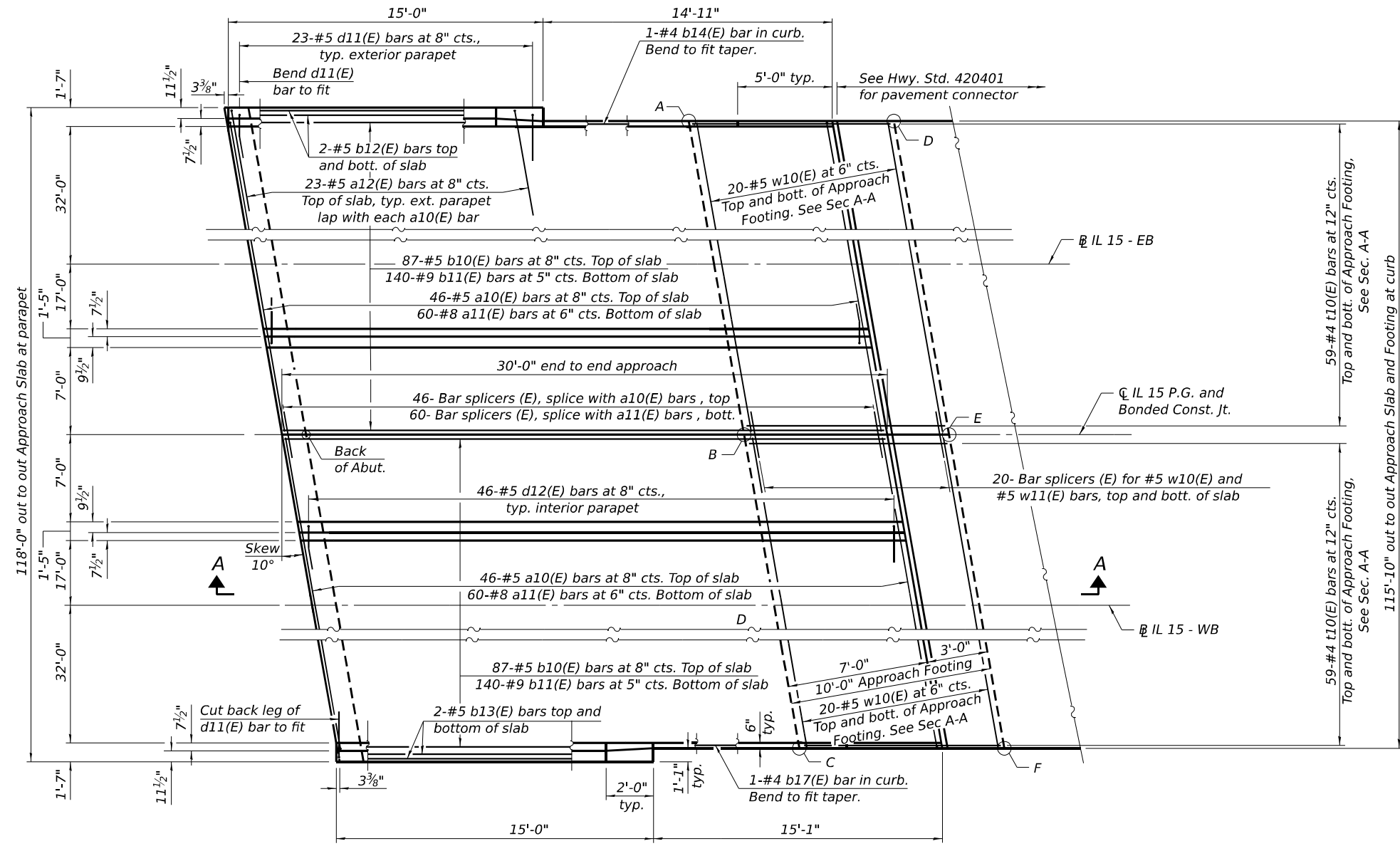
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PLOT SCALE = N/A	DRAWN - DAC	REVISED -
PLOT DATE = 12/10/2024	CHECKED - VT	REVISED -
	DATE - DEC 2024	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

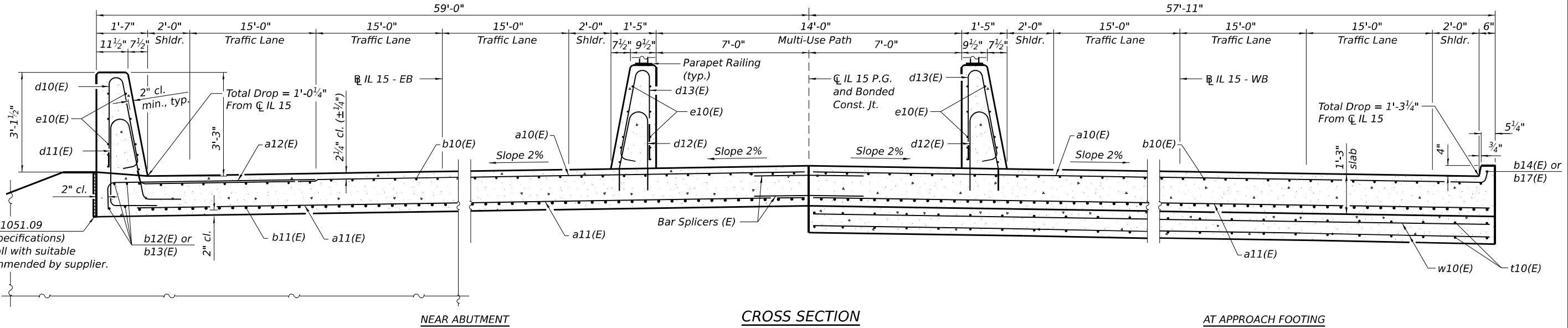
**WEST APPROACH SLAB DETAILS
STRUCTURE NO. 041-0121**

SCALE: SHEET 22 OF 48 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	13-2(N-1, TS-1); (41-3)HB2	JEFFERSON	787	579
CONTRACT NO. 78483				
ILLINOIS FED. AID PROJECT				



PLAN



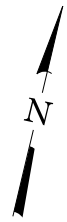
NEAR ABUTMENT

CROSS SECTION
(Looking East)

AT APPROACH FOOTING

TOP AND BOTTOM ELEVATIONS
FOR APPROACH FOOTING

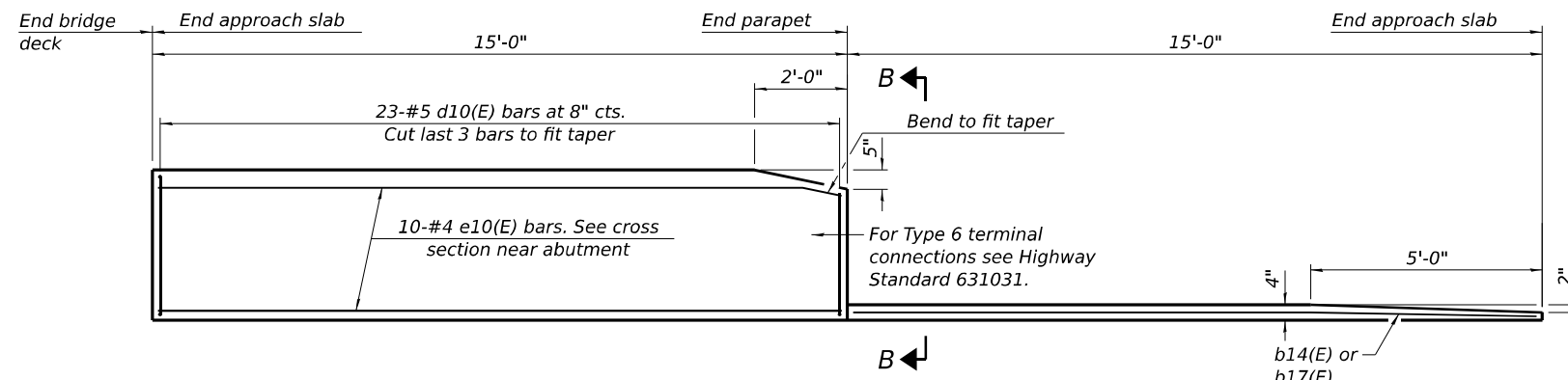
East Approach			
Point	Location	Top	Bottom
A	NW	514.39	513.56
B	W. CL 15	515.43	514.60
C	SW	514.15	513.32
D	NE	514.27	513.44
E	E. CL 15	515.31	514.48
F	SE	514.03	513.20



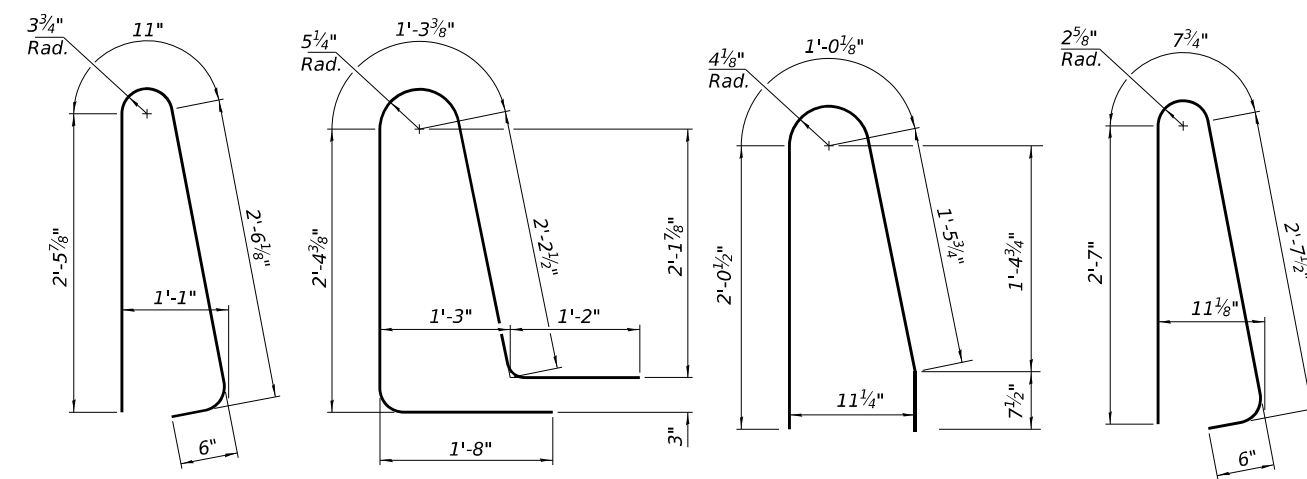
MODEL: S:\041-0121-023_East Approach Slab Plan (Sheet) 12/10/2024
 FILE NAME: P:\cmt\engineering\projects\041-0121-023_East Approach Slab Plan.dgn
 License No. 184-00613 © copyright CMT, Inc.

	USER NAME = Brian Bond	DESIGNED - DAC	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EAST APPROACH SLAB PLAN STRUCTURE NO. 041-0121		F.A.P. RTE. 821	SECTION 13-2(N-1), TS-1; (41-3)HB2	COUNTY JEFFERSON	TOTAL SHEETS 787	SHEET NO. 580
	PLOT SCALE = N/A	CHECKED - VT	REVISED -				SCALE: SHEET 23 OF 48 SHEETS STA. TO STA.	CONTRACT NO. 78483		ILLINOIS FED. AID PROJECT	
	PLOT DATE = 12/10/2024	DATE - DEC 2024	REVISED -								

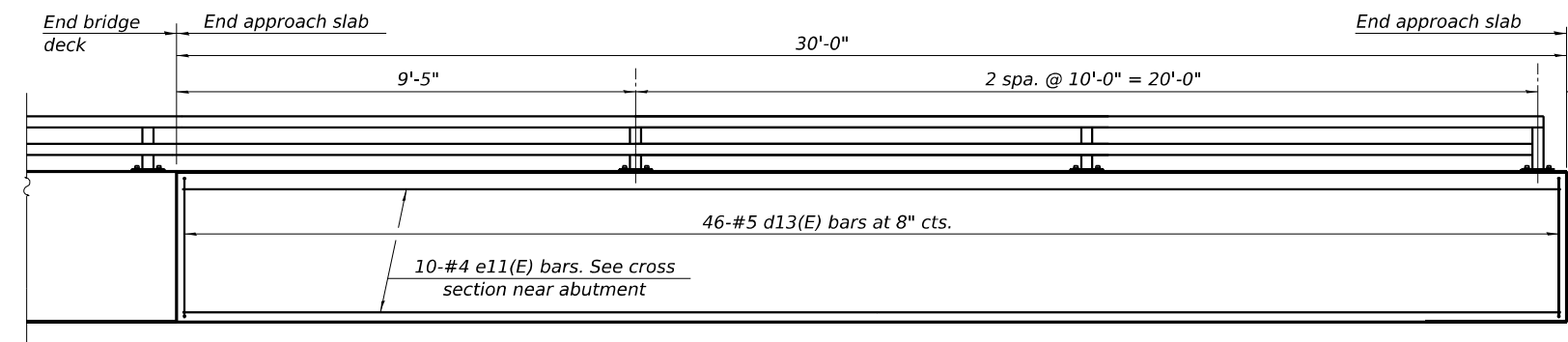
(Sheet 1 of 2)



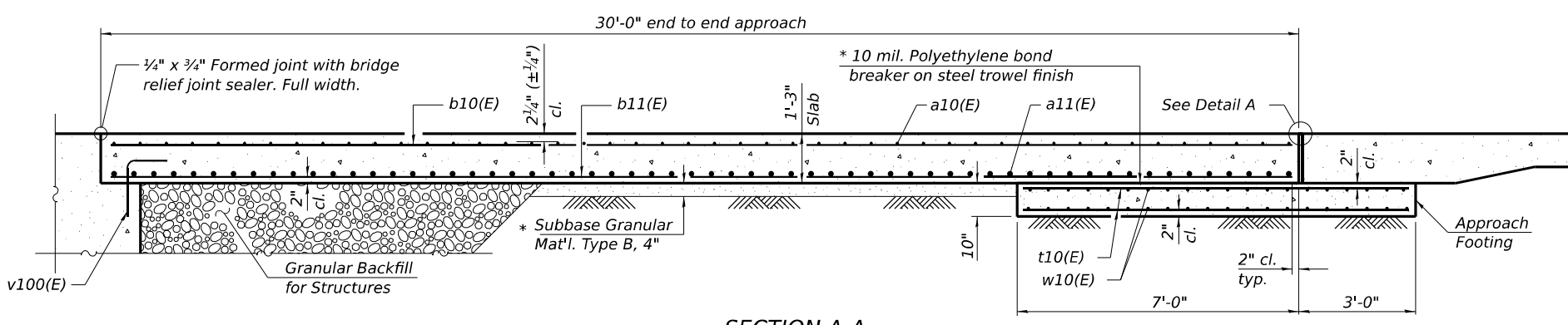
INSIDE ELEVATION OF EXTERIOR PARAPET AND CURB



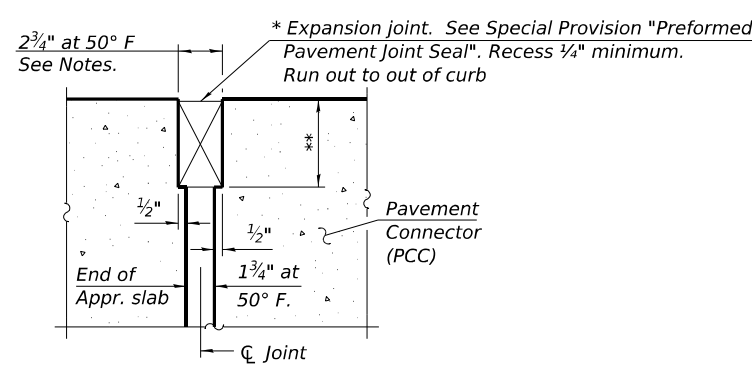
BAR d10(E) BAR d11(E) BAR d12(E) BAR d13(E)



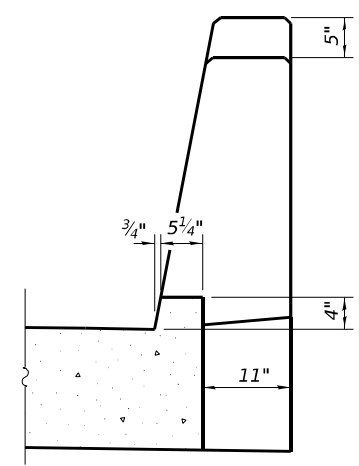
INSIDE ELEVATION OF INTERIOR PARAPET



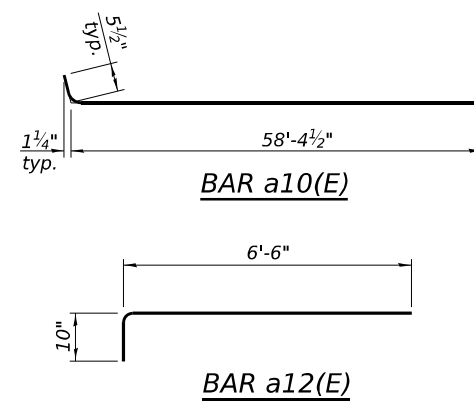
SECTION A-A



DETAIL A
(at Rt. L's)



VIEW B-B



BAR a10(E)

BAR a12(E)

**EAST APPROACH
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a10(E)	92	#5	58'-11"	
a11(E)	120	#8	58'-6"	
a12(E)	46	#5	7'-4"	
b10(E)	174	#5	29'-8"	
b11(E)	280	#9	29'-8"	
b12(E)	4	#5	14'-8"	
b13(E)	4	#5	14'-8"	
b14(E)	1	#4	14'-7"	
b17(E)	1	#4	14'-9"	
d10(E)	46	#5	6'-5"	
d11(E)	46	#5	8'-8"	
d12(E)	92	#5	5'-2"	
d13(E)	92	#5	6'-4"	
e10(E)	20	#4	14'-8"	
e11(E)	20	#4	29'-8"	
t10(E)	236	#4	9'-10"	
w10(E)	80	#5	58'-6"	
Concrete Structures		Cu. Yd.	35.8	
Concrete Superstructure		Cu. Yd.	12.4	
Bridge Deck Grooving		Sq. Yd.	314	
Concrete Superstructure (Approach Slab)		Cu. Yd.	129.9	
Reinforcement Bars, Epoxy Coated		Pound	67,370	

Notes:

1. The joint opening shall be adjusted for temperature per Article 520.04 of the Standard Specifications. However, since this detail is for jointless structures, the length of bridge used to calculate the adjustment shall be equal to half the total bridge length plus the length of the bridge approach slab.
2. Parapet concrete shall be paid for as Concrete Superstructure.
3. Approach slab shall be paid for as Concrete Superstructure (Approach Slab).
4. Approach footing concrete shall be paid for as Concrete Structures.
5. The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
6. Cost of excavation for approach footing included with Concrete Structures.
7. Granular Backfill for Structures and drainage treatment details, see sheet 2 of 48.

* Cost included with Concrete Superstructure (Approach Slab).
** Per manufacturer recommendations

(Sheet 2 of 2)

MOC:EL-04-01-0121-021_East Approach Slab Details (Sheet) 12/10/2024
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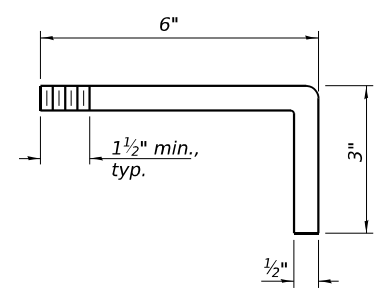
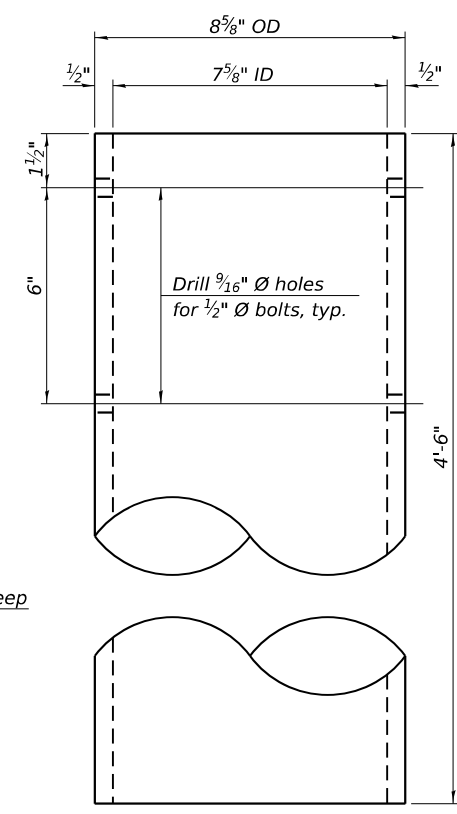
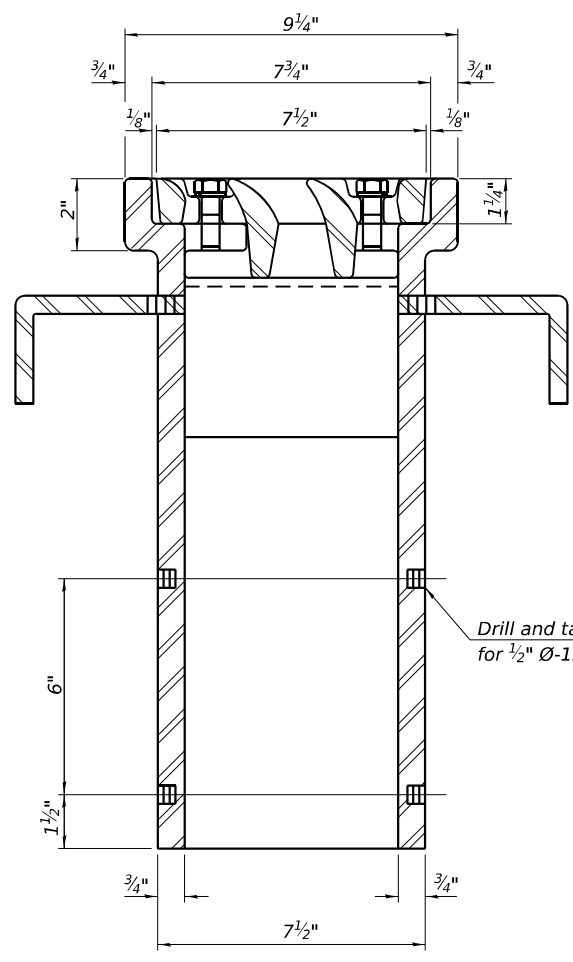
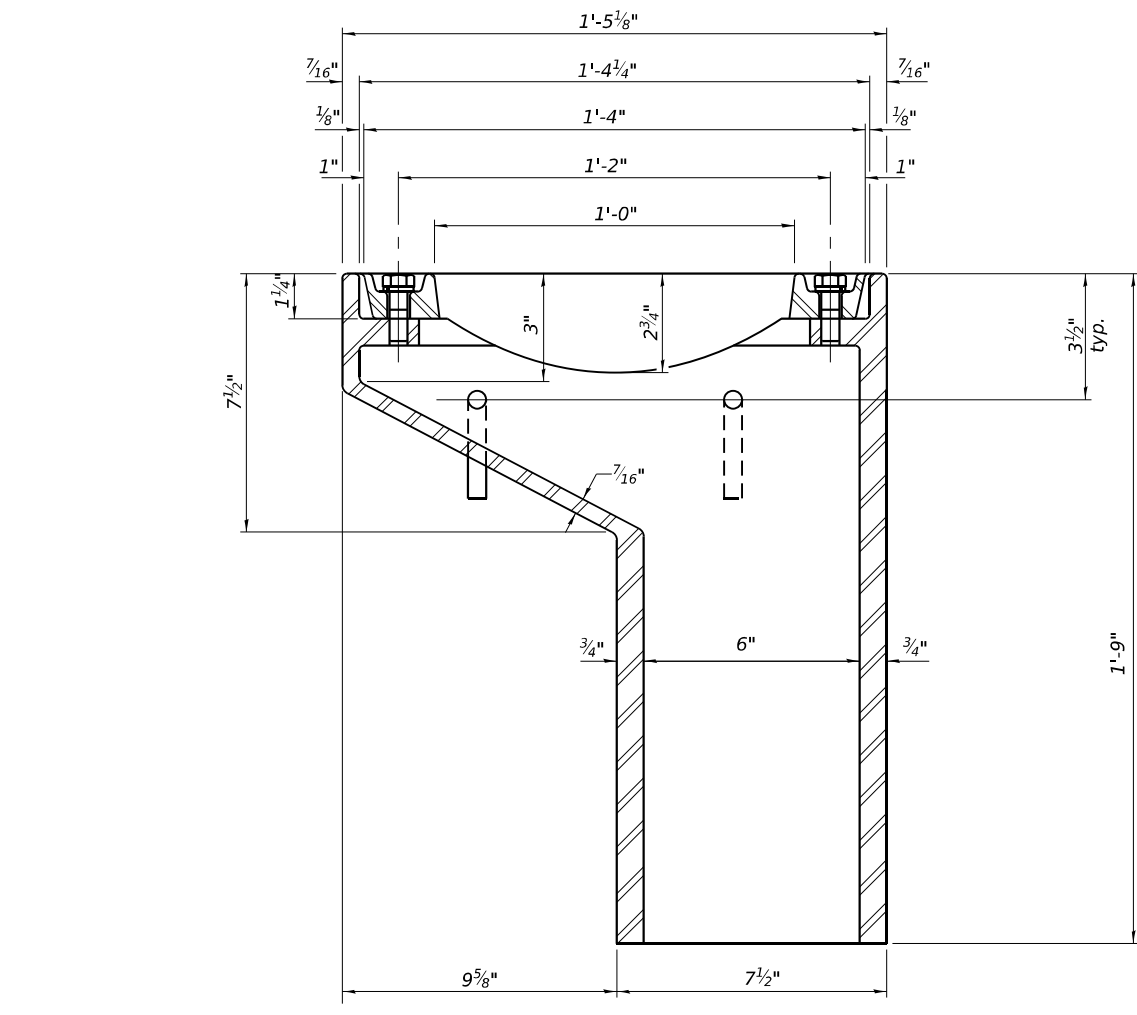
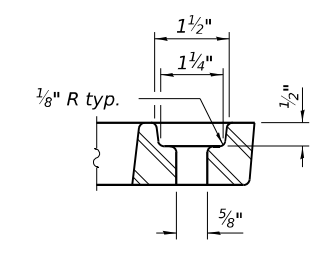
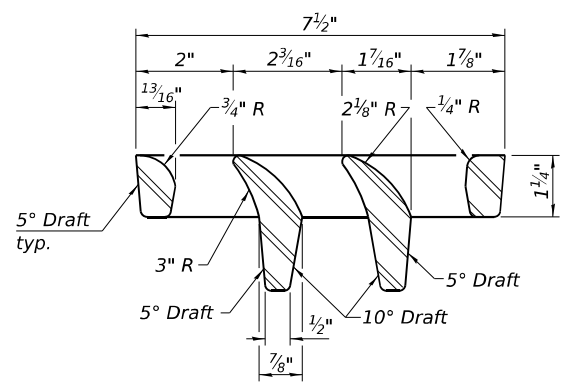
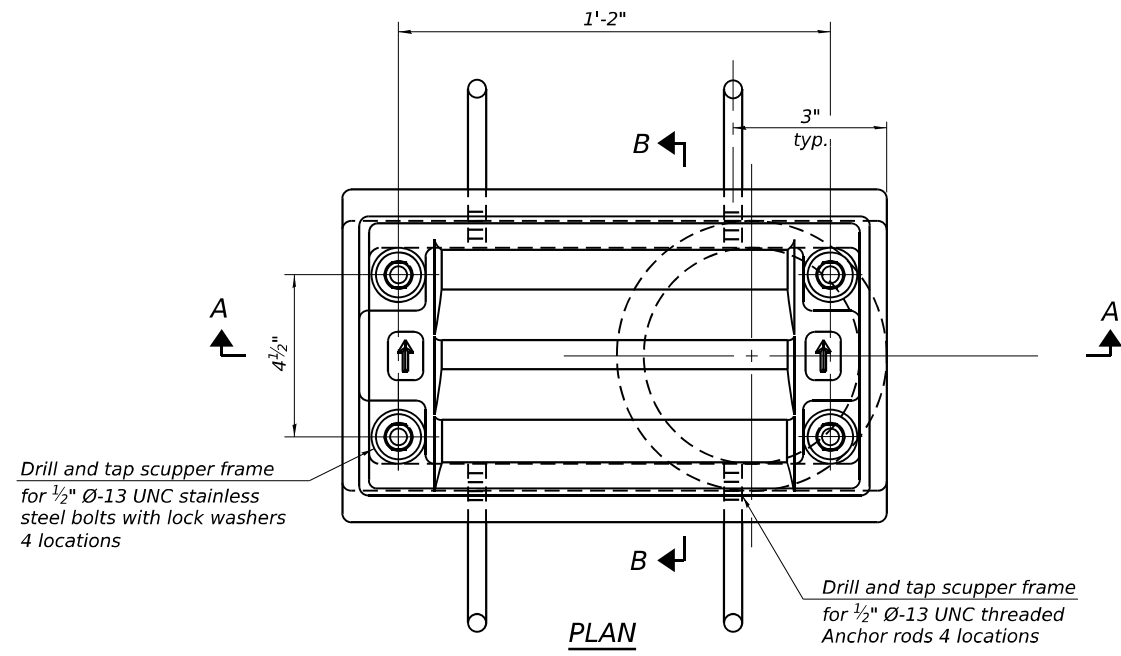
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PLOT DATE = 12/10/2024	CHECKED - VT	REVISED -
	DATE - DEC 2024	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EAST APPROACH SLAB DETAILS
STRUCTURE NO. 041-0121**

SCALE: SHEET 24 OF 48 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	13-2(N-1, TS-1); (41-3)HB2	JEFFERSON	787	581
CONTRACT NO. 78483				
ILLINOIS FED. AID PROJECT				



See sheet 17 of 48 for scupper location relative to parapet.

Notes:

All cast iron parts shall be gray iron conforming to the requirements of AASHTO M105, Class 35B and AASHTO M306.

Bolts, anchor rods, nuts and washers shall be according to ASTM A307 and shall be galvanized according to AASHTO M232. As an alternate stainless steel may be used.

Stainless steel hardware shall be according to Article 1006.29(d) of the Standard Specifications.

Structural steel weldments of equal sections and of the same configuration may be substituted for the cast iron scupper frames and downspouts; however, the scupper grates shall remain cast iron. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval.

Structural steel scupper frames and downspouts, when utilized, shall be galvanized according to AASHTO M111.

As an alternate, fiberglass may be used for downspouts according to ASTM D2996 with a short-time rupture strength hoop tensile stress of 30,000 psi min. in lieu of the cast iron or structural steel.

Exterior surfaces of downspouts and exterior exposed surfaces of the scupper frame below deck shall be treated as specified on sheet 2 of 48.

The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the scupper.

Cost of the grate, frame, downspout, anchor rods, nuts and washers including complete installation of the scupper shall be paid for at the contract unit price for Drainage Scuppers, DS-11.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scuppers, DS-11	Each	12

MODEL: Unfiled [Sheet]
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 License No. 184-000613 © Copyright CMT, Inc.

DS-11 5-15-2023

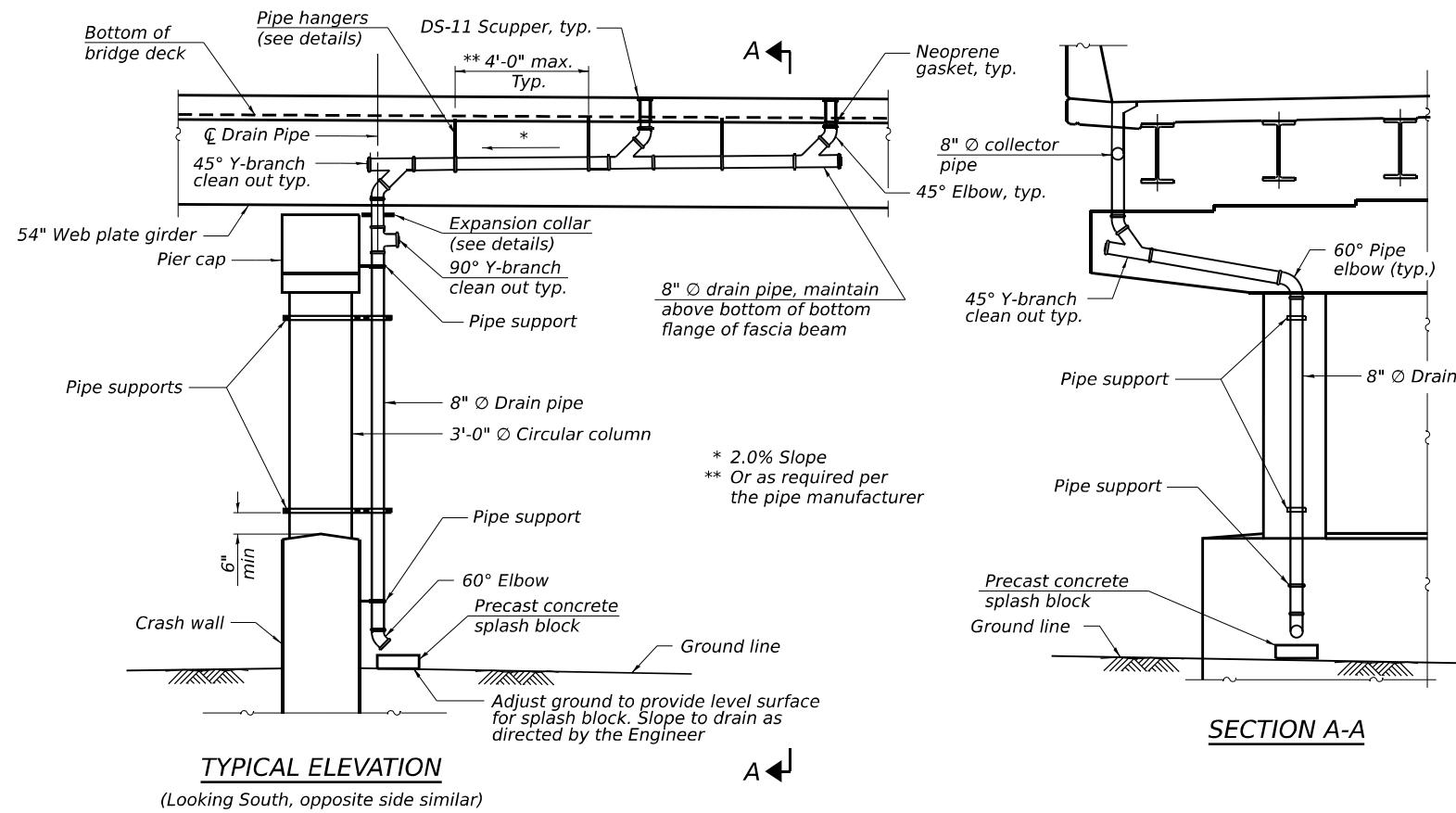
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	DATE - DEC 2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

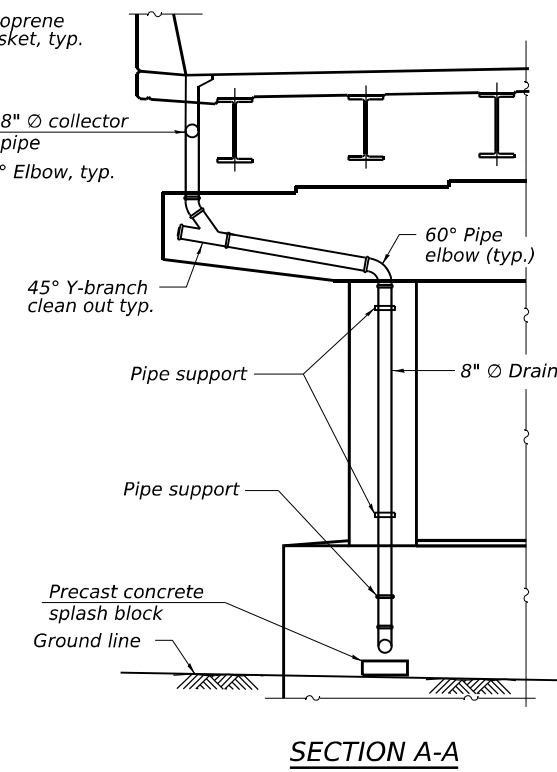
DRAINAGE SCUPPER, DS-11
STRUCTURE NO. 041-0121

SCALE: SHEET 25 OF 48 SHEETS STA. TO STA.

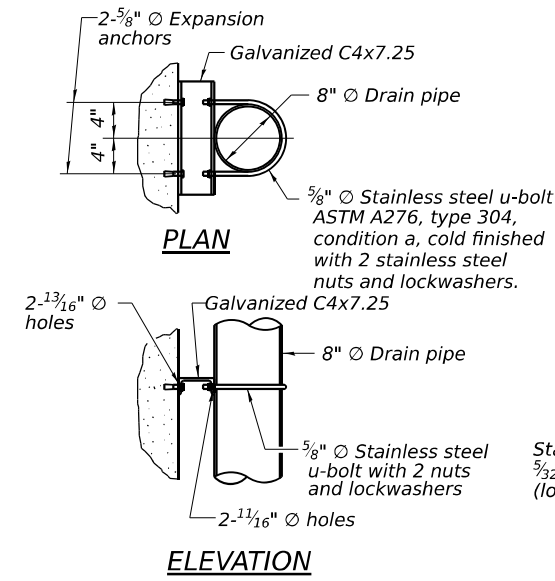
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CONTRACT NO. 78483				
ILLINOIS FED. AID PROJECT				



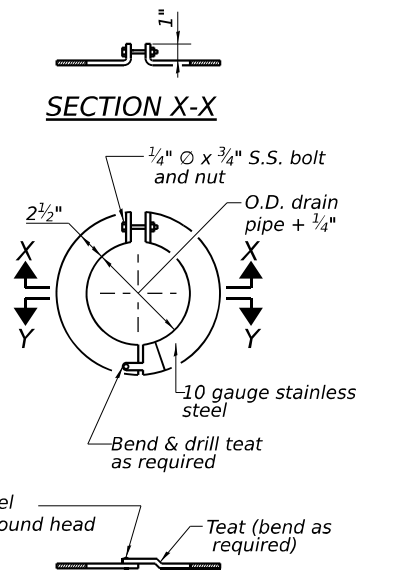
TYPICAL ELEVATION
(Looking South, opposite side similar)



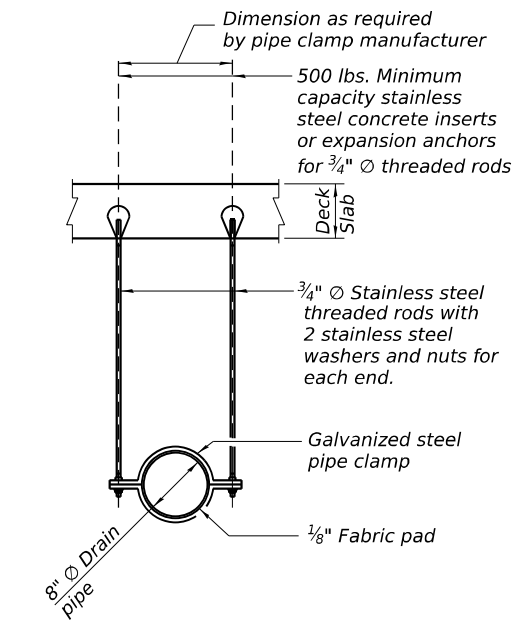
SECTION A-A



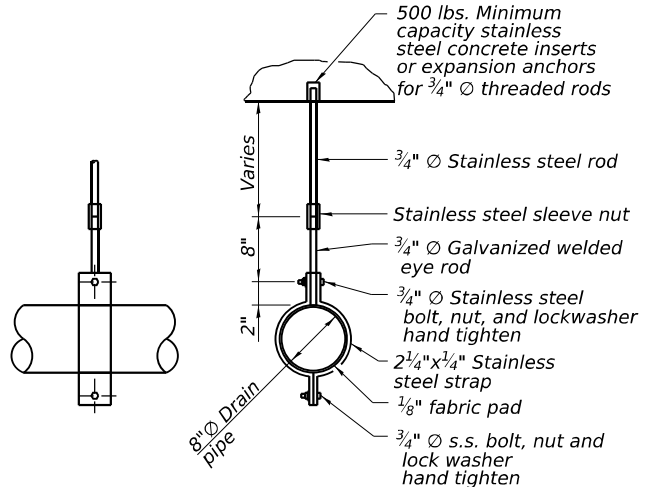
PIPE SUPPORT DETAIL



DETAIL OF EXPANSION COLLAR



PIPE HANGER DETAILS



ALTERNATE PIPE HANGER DETAIL

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage System for Structures	L. Sum	1

- Notes:
- Maintain 8" \varnothing drain pipe above bottom flanges.
 - Bolt pattern and size in drain pipe flange to match scupper flange.
 - Approximate lengths from scupper to abutment or between downspouts shown on plans. Contractor to determine actual quantities of pipe and fitting required. Paid for as Drainage System for Structures.
 - For Drainage scupper locations, see Sheet 1, 14, and 15 of 48.
 - For Drainage scupper details, see Sheet 25 of 50.
 - Pipe supports shall be provided, as required by design, on all horizontal pipes at each tee elbow or change in direction and at intermediate points not more than 4'-0" centers.
 - Pipe supports shall be provided, as required by design, on all vertical drain pipes at not more than 10'-0" centers or as approved by the Engineer.
 - Ductile iron pipe shall be used for the drain pipe, elbow, and Y-branch clean outs. The ductile iron pipe shall conform to ANSI/AWWA C150/A21.50, C151/A21.51.
 - The ductile iron pipe shall have a standard coating of black or dark grey on the exterior and shall also have a cement-mortar lining on the interior in accordance with ANSI/AWWA C104/A21.

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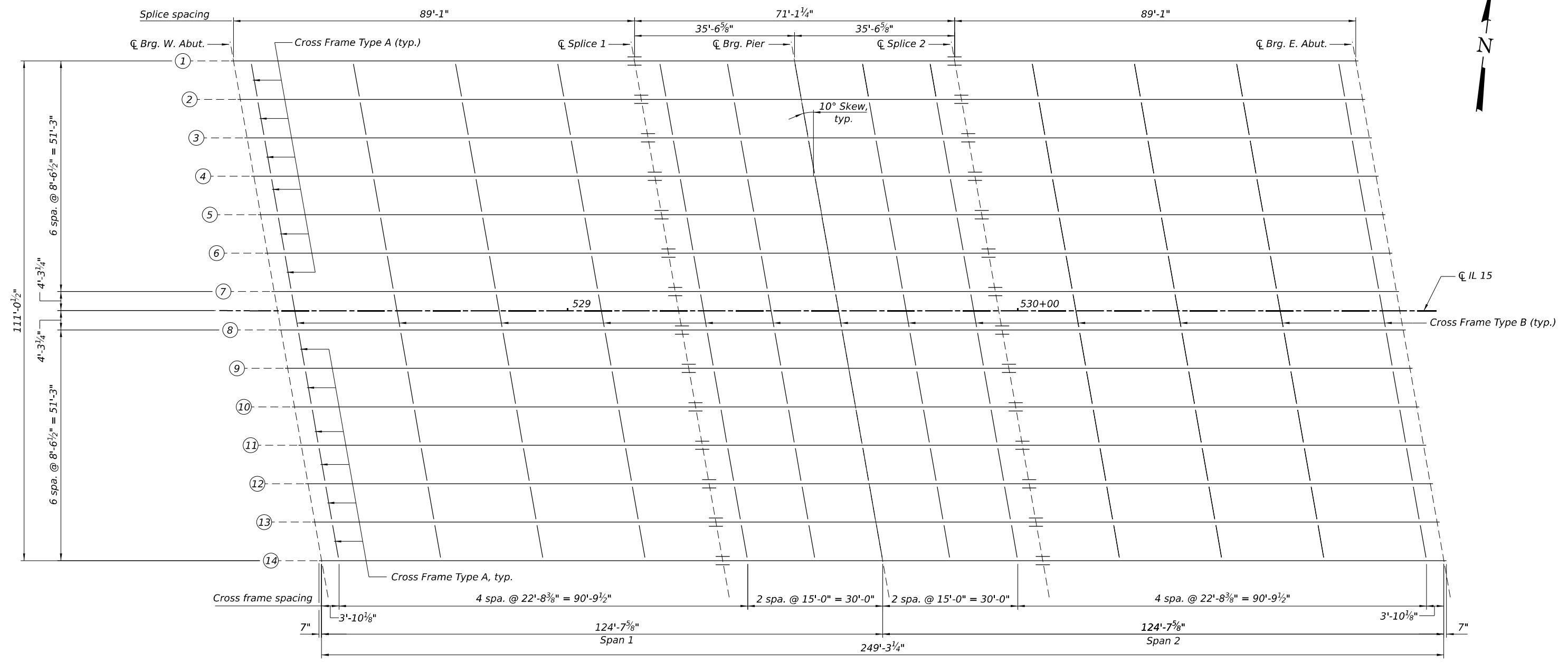
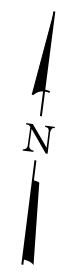
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

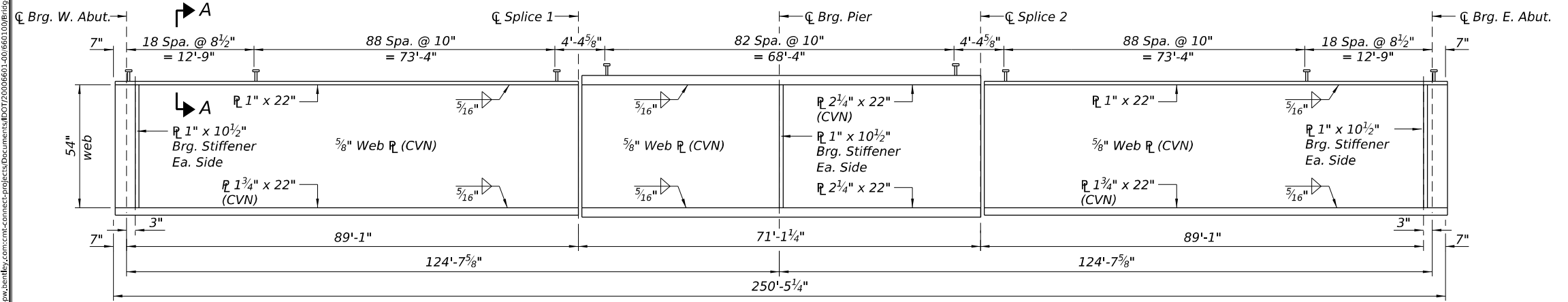
**DRAINAGE SYSTEM DETAILS
STRUCTURE NO. 041-0121**

SCALE: SHEET 26 OF 48 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	13-2(N-1, TS-1); (41-3)HB2	JEFFERSON	787	583
CONTRACT NO. 78483				
ILLINOIS FED. AID PROJECT				



FRAMING PLAN



GIRDER ELEVATION

- Notes:
1. All steel flanges, webs, bearing stiffeners, and splice plates shall be AASHTO M270 Grade 50.
 2. Load carrying components designated "CVN" shall conform to the Charpy-V-Notch Impact Energy Requirement, Zone 2.
 3. See sheets 28 of 48 for steel details.

MODEL: S:\041-0121-027-Framing Plan and Girder Elevation (Sheet)
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PLOT SCALE	= N/A
PLOT DATE	= 12/10/2024

DESIGNED	- DAC
DRAWN	- DAC
CHECKED	- FAS
DATE	-

REVISED	-
REVISED	-
REVISED	-
REVISED	-

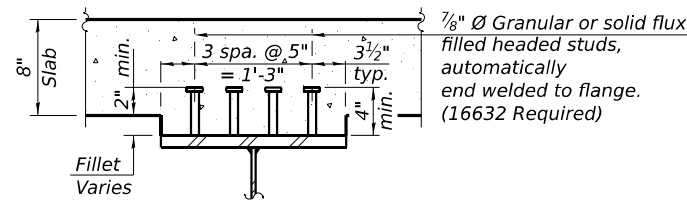
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**FRAMING PLAN AND GIRDER ELEVATION
STRUCTURE NO. 041-0121**

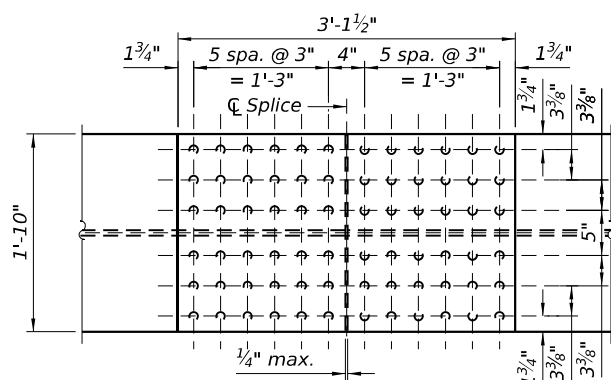
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 78483				

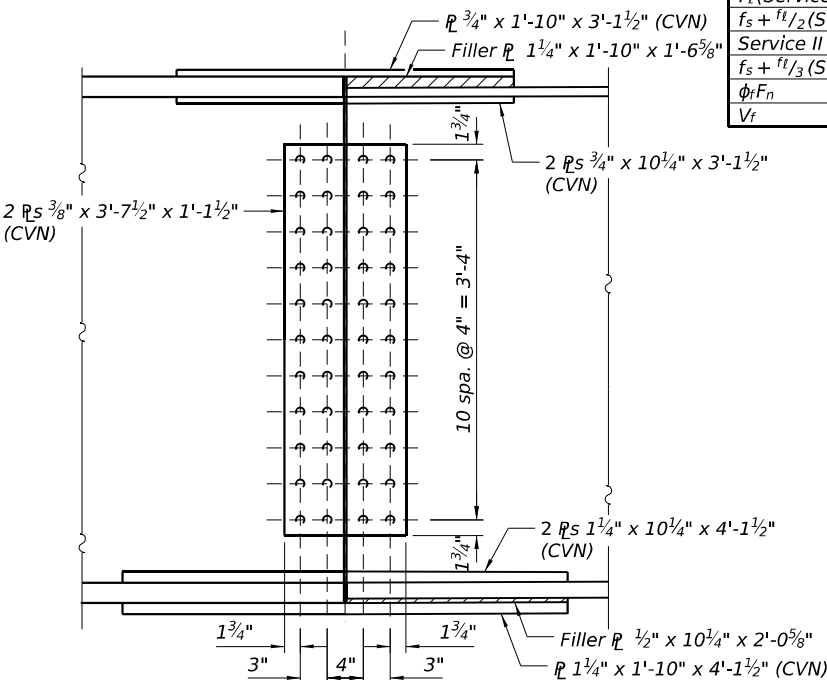
ILLINOIS FED. AID PROJECT



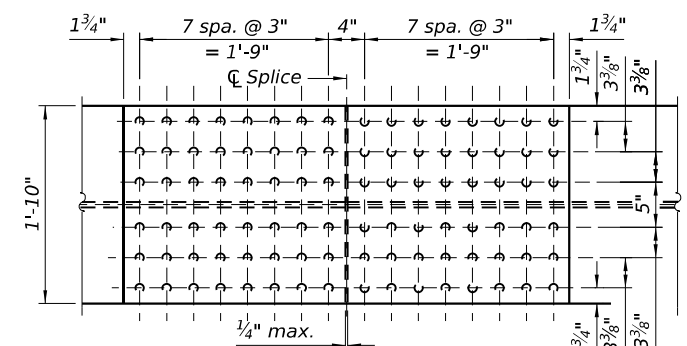
SECTION A-A



TOP FLANGE SPLICE



WEB SPLICE



BOTTOM FLANGE SPLICE

INTERIOR GIRDER MOMENT TABLE		
	0.4 Sp. 1 or 0.6 Sp. 2	Pier
I_s	(in ⁴) 52440	86554
$I_c(n)$	(in ⁴) 133601	157624
$I_c(3n)$	(in ⁴) 93847	120608
$I_c(cr)$	(in ⁴) --	95941
S_s	(in ³) 2205	2959
$S_c(n)$	(in ³) 2974	--
$S_c(3n)$	(in ³) 2713	--
$S_c(cr)$	(in ³) --	3532
S_x	(in ³) 2864	3480
DC1	(k') 1.34	1.34
M _{DC1}	(k) 1268	2925
DC2	(k') 0.16	0.16
M _{DC2}	(k) 169	347
DW	(k') 0.43	0.43
M _{DW}	(k) 409	842
LLDF	0.63	0.63
M _{l + IM}	(k) 2017	2271
f _t (Strength I)	(ksi) 0	0
M _u + 1/3 f _t S _x	(k) 5940	9327
φ _t M _n	(k) 13787	14095
f _s DC1	(ksi) 6.90	11.86
f _s DC2	(ksi) 0.75	1.18
f _s DW	(ksi) 1.81	2.86
f _s (l + IM)	(ksi) 8.14	7.72
f _t (Service II)	(ksi) 20.04	25.93
f _s + f _t /2 (Service II)	(ksi) 20.04	25.93
Service II Resistance	(ksi) 47.50	47.50
f _s + f _t /3 (Strength I)	(ksi) 26.51	34.09
φ _t F _n	(ksi) --	--
V _t	(k) 47.8	65.0

I_s, S_s : Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total-Strength I, and Service II) due to non-composite dead loads (in.⁴ and in.³).

$I_c(n), S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total-Strength I, and Service II) in uncracked sections due to short-term composite live loads (in.⁴ and in.³).

$I_c(3n), S_c(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s (Total-Strength I, and Service II) in uncracked sections, due to long-term composite (superimposed) dead loads (in.⁴ and in.³).

$I_c(cr), S_c(cr)$: Composite moment of inertia and section modulus of the steel and longitudinal deck reinforcement, used for computing f_s (Total-Strength I and Service II) in cracked sections, due to both short-term composite live loads and long-term composite (superimposed) dead loads (in.⁴ and in.³).

S_x : Section modulus about the major axis of a section to the controlling flange, tension or compression, taken as yield moment with respect to the controlling flange over the yield strength of the controlling flange (in.³).

DC1: Un-factored non-composite dead load (kips/ft.).

M_{DC1}: Un-factored moment due to non-composite dead load (kip-ft.).

DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).

M_{DC2}: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).

DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).

M_{DW}: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).

LLDF: Live Load Distribution Factor for moment and shear computed according to Article 4.6.2.2 and further IDOT provisions.

M_{l + IM}: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).

M_u: Strength I load combination of factored design moments (kip-ft.).
1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_{l + IM}

f_t: Factored calculated flange lateral bending stress as calculated using Article 6.10.1.6 and as further simplified by IDOT provisions (ksi).

φ_tM_n: Factored nominal flexural resistance of the section determined as specified in Article 6.10.7.1 or A6 as applicable (kip-ft.).

f_s DC1: Un-factored stress at edge of flange for controlling steel flange due to vertical non-composite dead loads as calculated below (ksi).
M_{DC1} / S_s

f_s DC2: Un-factored stress at edge of flange for controlling steel flange due to vertical composite dead loads as calculated below (ksi).
M_{DC2} / S_{c(3n)} or M_{DC2} / S_{c(cr)} as applicable.

f_s DW: Un-factored stress at edge of flange for controlling steel flange due to vertical composite future wearing surface loads as calculated below (ksi).
M_{DW} / S_{c(3n)} or M_{DW} / S_{c(cr)} as applicable.

f_s (l + IM): Un-factored stress at edge of flange for controlling steel flange due to vertical composite live load plus impact loads as calculated below (ksi).
M_{l + IM} / S_{c(n)} or M_{l + IM} / S_{c(cr)} as applicable.

f_s + f_t/2 (Service II): Sum of stresses as computed below (ksi).
f_s DC1 + f_s DC2 + f_s DW + 1.3 f_s (l + IM) + f_t/2

Service II Resistance: Composite (0.95R_nF_{yR}) or noncomposite (0.80R_nF_{yR}) stress capacity according to Article 6.10.4.2 (ksi).

f_s + f_t/3 (Strength I): Sum of stresses as computed below on non-compact sections (ksi).
1.25 (f_s DC1 + f_s DC2) + 1.5 f_s DW + 1.75 f_s (l + IM) + f_t/3

φ_tF_n: Factored nominal flexural resistance of the section as specified in Article 6.10.7.2 or 6.10.8 as applicable (ksi).

V_t: Maximum factored shear range in span computed according to Article 6.10.10.

OCF: Obtuse Correction Factor according to Article 4.6.2.2.3c or as further simplified by IDOT provisions.

R_{DC1}: Un-factored reaction due to non-composite dead load (kip).

R_{DC2}: Un-factored reaction due to long-term composite (superimposed excluding future wearing surface) dead load (kip).

R_{DW}: Un-factored reaction due to long-term composite (superimposed future wearing surface only) dead load (kip).

R_l: Un-factored live load reaction (kip).

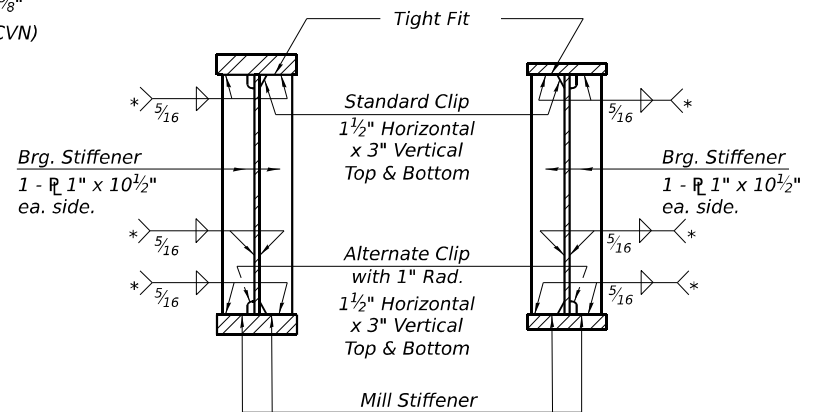
R_{IM}: Un-factored dynamic load allowance (impact) (kip).

R_{Total} (Strength I) (Impact): Strength I load combination of factored design reactions (kip).
1.25 (R_{DC1} + R_{DC2}) + 1.5 R_{DW} + 1.75 (R_l + R_{IM})

R_{Total} (Strength I) (No Impact): Strength I load combination of factored design reactions, not including dynamic load allowance (Impact) (kip).
1.25 (R_{DC1} + R_{DC2}) + 1.5 R_{DW} + 1.75 (R_l)

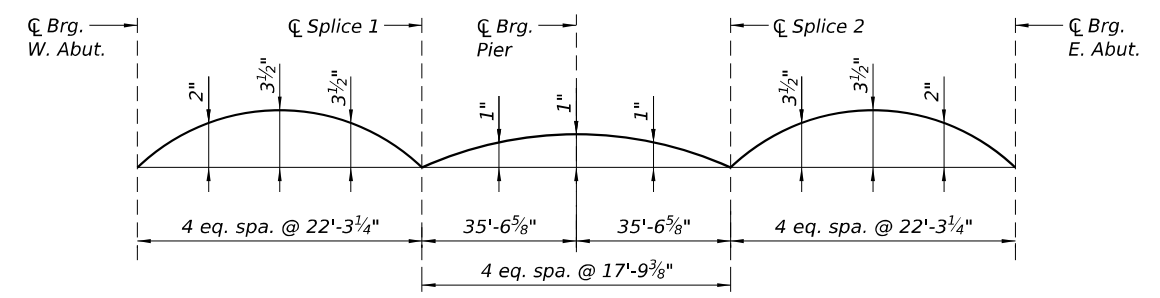
Note:
M_l and R_l include the effects of centrifugal force and superelevation.

	Abutment		Pier	
	Interior	Exterior	Interior	Exterior
LLDF	0.852	0.785	0.852	0.785
OCF	--	1.03	--	--
R _{DC1}	(k) 58.8	56.7	215.3	205.8
R _{DC2}	(k) 7.5	7.5	26.1	26.1
R _{DW}	(k) 18.2	18.2	63.4	63.3
R _l	(k) 87.5	78.4	172.4	154.3
R _{IM}	(k) 18.9	16.9	31.4	28.08
R _{Total} (Strength I) (Impact)	(k) 190.8	177.7	508.6	477.6
R _{Total} (Strength I) (No Impact)	(k) 171.9	160.8	477.3	449.5



SECTION AT PIER SECTION AT ABUTMENT

* Terminate 1/4" (± 1/8") from the end of plate intersects.



CAMBER DIAGRAM

Note:
1. Load carrying components designated "CVN" shall conform to the Charpy-V-Notch Impact Energy Requirement, Zone 2.

MODEL: 04-01-0121_028_Structural Steel Details - 1 (Sheet)
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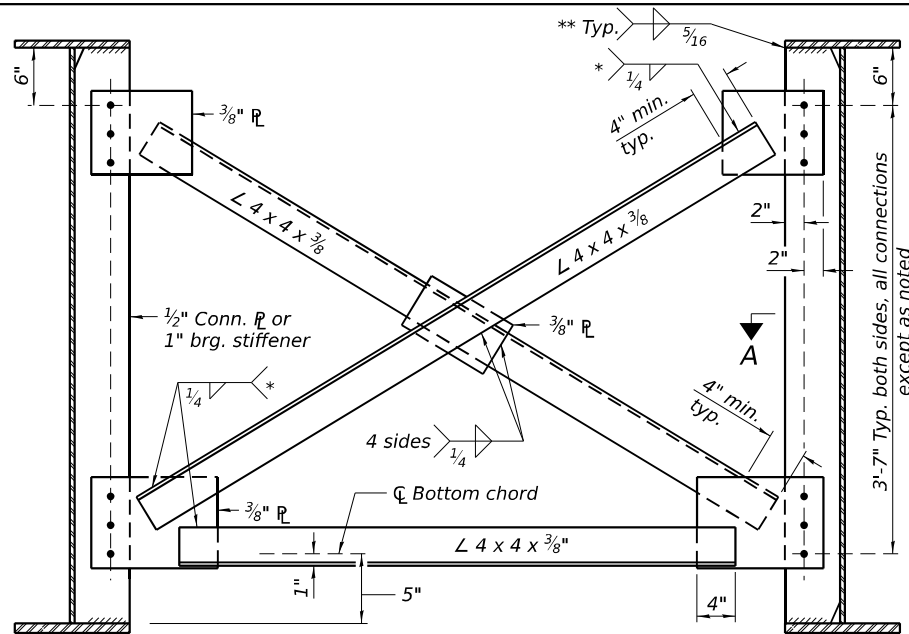
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PLOT DATE = 12/10/2024	CHECKED - FAS	REVISED -
	DATE - DEC 2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURAL STEEL DETAILS - I
STRUCTURE NO. 041-0121

SCALE: SHEET 28 OF 48 SHEETS STA. TO STA.

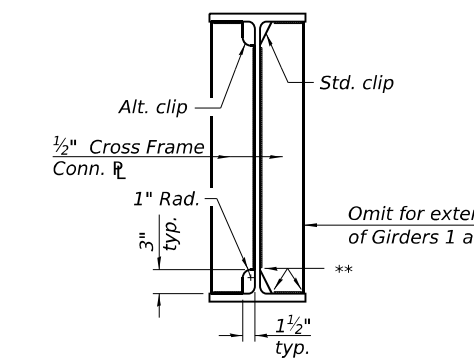
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821	13-2(N-1, TS-1); (41-3)HB2	JEFFERSON	787	585
CONTRACT NO. 78483				
ILLINOIS		FED. AID PROJECT		



* Fillet weld angles along 3 sides on one face of gusset plate
 ** Stop welds 1/4" (±1/8") from edges as shown. Typical.

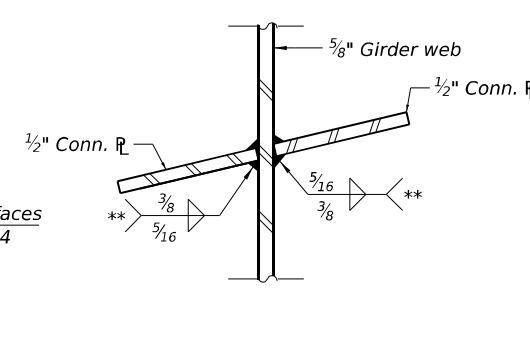
CROSS-FRAME TYPE A

(156 Required)
 (Adjacent connection plate or bearing stiffener not shown)

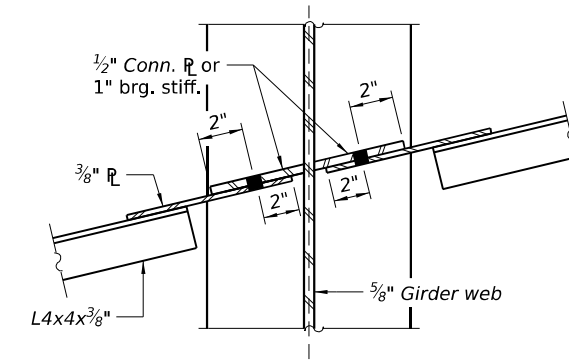


WELD LIMITS AND CLIP DETAILS AT CONNECTION PLATE LOCATIONS

** Stop welds 1/4" (±1/8") from edges as shown. Typical.



WEB WELD DETAILS FOR CONNECTION PLATES



SECTION A-A

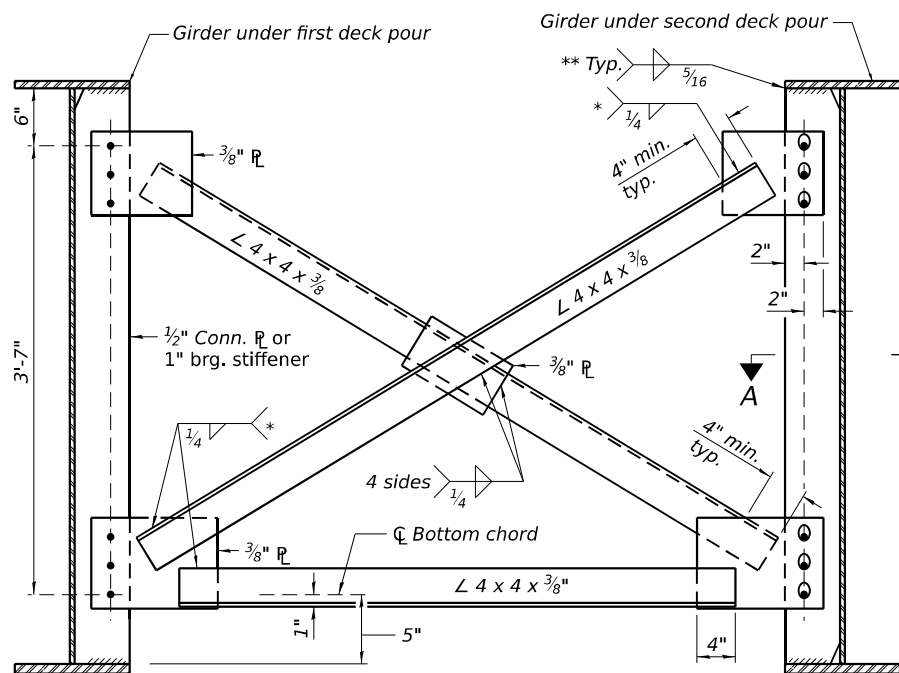
TOP OF WEB ELEVATIONS

(for fabrication only)

	Girder 1	Girder 2	Girder 3	Girder 4	Girder 5	Girder 6	Girder 7	Girder 8	Girder 9	Girder 10	Girder 11	Girder 12	Girder 13	Girder 14
⊕ Brg. W. Abut.	513.90	514.11	514.32	514.52	514.73	514.93	515.14	515.17	515.03	514.89	514.75	514.62	514.48	514.34
⊕ Splice 1	515.30	515.48	515.67	515.86	516.04	516.22	516.41	516.42	516.26	516.11	515.95	515.79	515.63	515.47
⊕ Pier	515.47	515.65	515.83	516.01	516.18	516.35	516.53	516.54	516.37	516.21	516.04	515.87	515.71	515.54
⊕ Splice 2	515.65	515.82	515.99	516.16	516.33	516.49	516.66	516.66	516.49	516.31	516.14	515.96	515.79	515.61
⊕ Brg. E. Abut.	515.14	515.29	515.45	515.60	515.75	515.90	516.06	516.04	515.85	515.66	515.47	515.28	515.09	514.90

MAXIMUM SERVICE Δ_{LL+IM}

	Max. Δ (in.)	Max. Allowable Δ (in.)
Span 1	0.428	1.500
Span 2	0.428	1.500

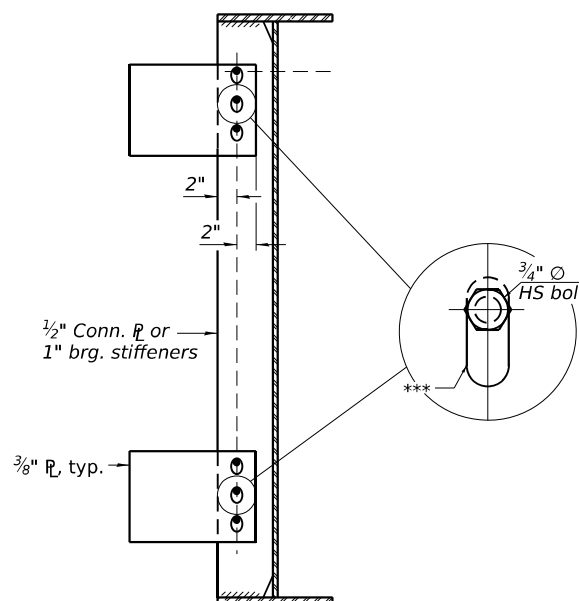


* Fillet weld angles along 3 sides on one face of gusset plate
 ** Stop welds 1/4" (±1/8") from edges as shown. Typical.

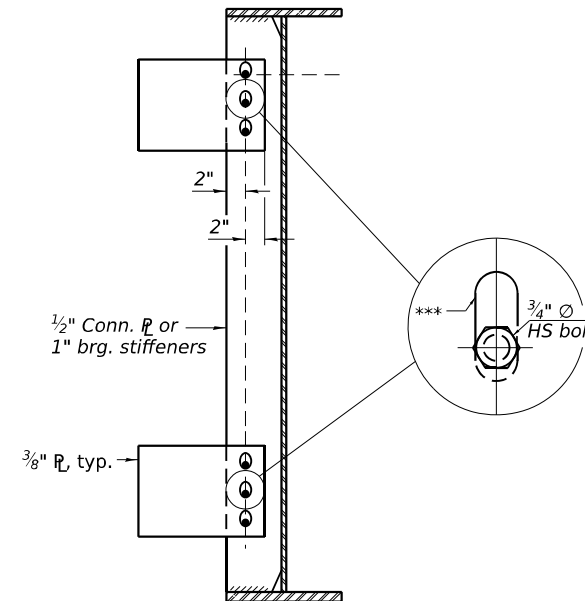
CROSS-FRAME TYPE B

(Showing Final Erection Position)
 (13 Required)

(Adjacent connection plate or bearing stiffener not shown)



INITIAL BOLT ERECTION POSITION AFTER FIRST SIDE DECK POUR



FINAL BOLT ERECTION POSITION AFTER FINAL SIDE DECK POUR

*** Slotted hole in cross frame connection plate

Notes:

- All cross frames shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames at supports may be temporarily disconnected to install bearing anchor bolts.
- 3/4" ⌀ HS bolts with 15/16" ⌀ hole shall be provided for all cross frame connections except as noted.
- Two hardened washers required for each set of oversized and slotted holes.
- 1 3/16" x 1 7/8" vertical slotted holes shall be provided for each connection plate on bonded construction joint side of girder 7 or 8 (side of bonded construction joint poured second) to accommodate the differential displacement between girder 7 and 8 due to separate deck pours. The bolts in slotted holes shall be finger tightened until the second deck pour is completed. Position slots so bolts move from one end with no concrete load to the opposite end under the deck load. The slotted holes in the connection plates shall be positioned under deck load. The holes shall be positioned to allow maximum bolt displacement without laterally stressing the girders. See Framing Plan on sheet 23 of 48 for cross frame orientation.

MODEL: 04-01-0121 - 029_Structural Steel Details - II (Sheet)
 FILE NAME: P:\Engineering\Projects\04-01-0121 - 029_Structural Steel Details - II.dgn
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USER NAME = Brian Bond	DESIGNED - DAC	REVISED -
PLOT SCALE = N/A	DRAWN - DAC	REVISED -
PLOT DATE = 12/10/2024	CHECKED - FAS	REVISED -
	DATE - DEC 2024	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**STRUCTURAL STEEL DETAILS - II
 STRUCTURE NO. 041-0121**

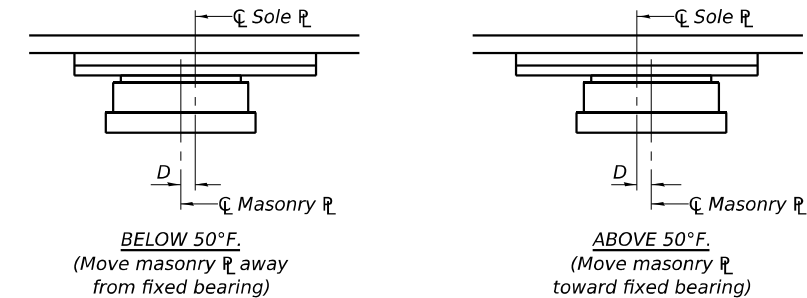
SCALE: SHEET 29 OF 48 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	13-2(N-1, TS-1); (41-3)HB2	JEFFERSON	787	586
CONTRACT NO. 78483				
ILLINOIS FED. AID PROJECT				

DESIGN DATA

Unfactored Vertical Dead Load Reaction (R_{DC})	232.62 kips
Unfactored Vertical Wearing Surface Reaction (R_{WS})	63.42 kips
Unfactored Vertical Live Load without Impact Reaction (R_{LL})	172.52 kips
Maximum Strength or Extreme Event Lateral Reaction (H_u)	83.00 kips
Maximum Strength Limit State Rotation (θ_u according to Article 14.4.2.2)	0.0022 rad
Unfactored Design Thermal Movement from 50° F (ΔT)	0.68 in.
Service I Factored Lateral Reaction	93.71 kips
Service I Rotation	0.0012 rad
Strength I Factored Longitudinal Movement	0.82 in.
Service I Factored Vertical Reaction	468.56 kips
Strength I Factored Vertical Reaction	687.82 kips

Service I Load Factors = 1.0DC + 1.0DW + 1.00LL
 Strength I Load Factors = 1.25DC + 1.5DW + 1.75LL + 1.2TU
 Extreme Event Load Factors = 1.0EQ

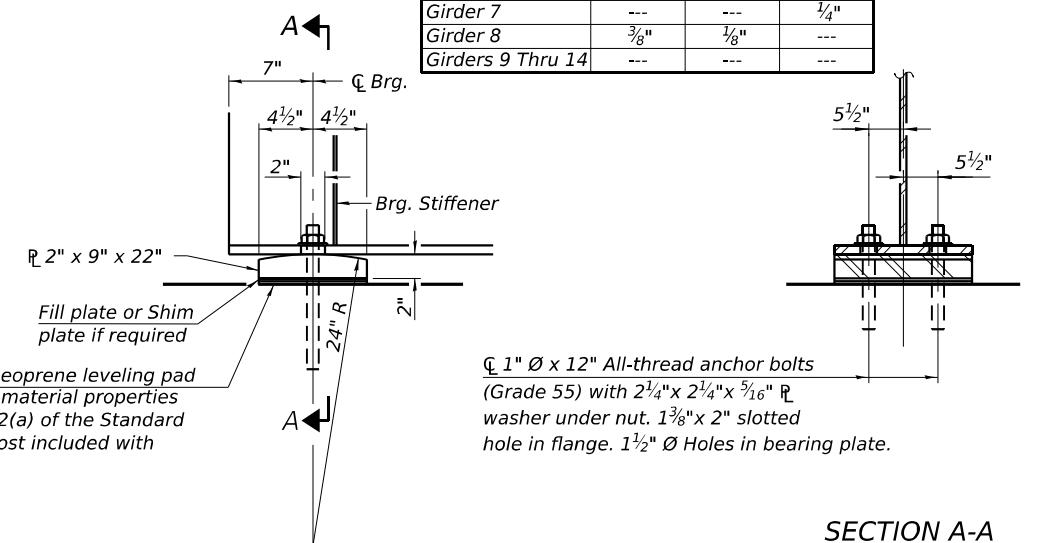


SETTING ANCHOR BOLTS AT EXPANSION BEARING

$D = \frac{3}{8}$ " per each 100' of expansion for every 15° temp. change from the normal temp. of 50° F.

FILL PLATE THICKNESS

Girder	W. Abut.	Pier	E. Abut.
Girders 1 Thru 6	---	---	---
Girder 7	---	---	1/4"
Girder 8	3/8"	1/8"	---
Girders 9 Thru 14	---	---	---

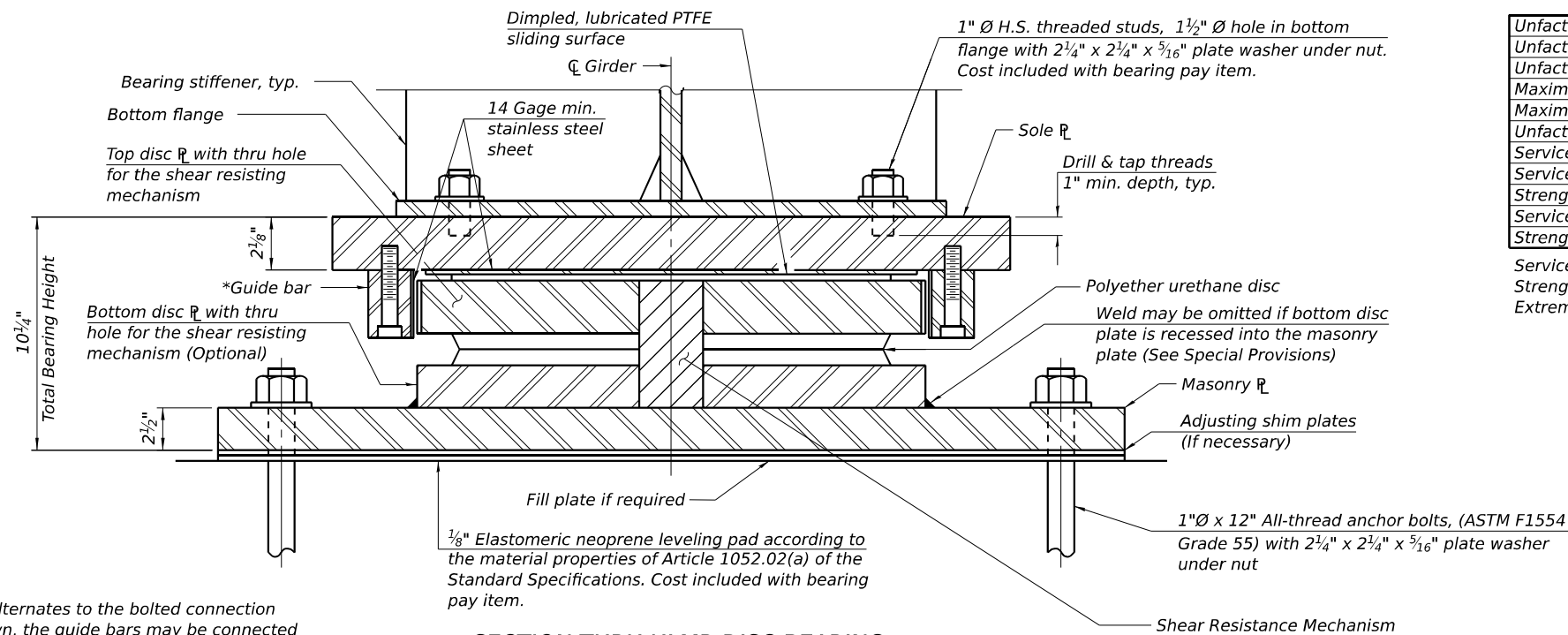


ELEVATION AT ABUTMENT

FIXED BEARING

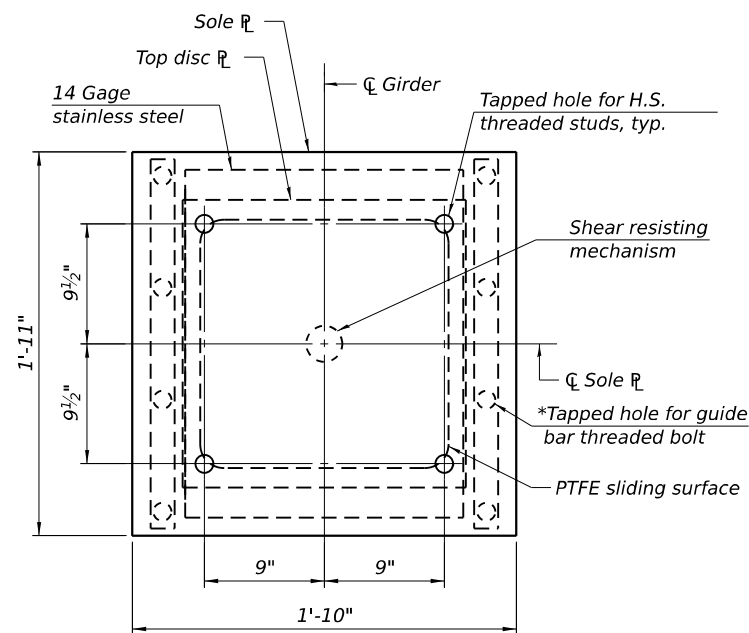
Notes:

- Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details. Shim plates not included in total bearing height. Cost included with bearing pay item.
- Total bearing height is estimated based on manufacturer data. Actual bearing height may differ from contract plans. The Contractor shall be responsible for verifying bearing heights and adjusting seat elevations, if required, prior to placing pier or abutment concrete.
- The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M270 Grade 50.
- Anchor bolts at all supports shall be installed as each member is erected unless an equivalent temporary means of lateral restraint is used.
- The anchor bolt sizes and grades shown constitute a calculated seismic structural fuse. Substitution of higher diameter and/or grade anchor bolts will not be allowed.

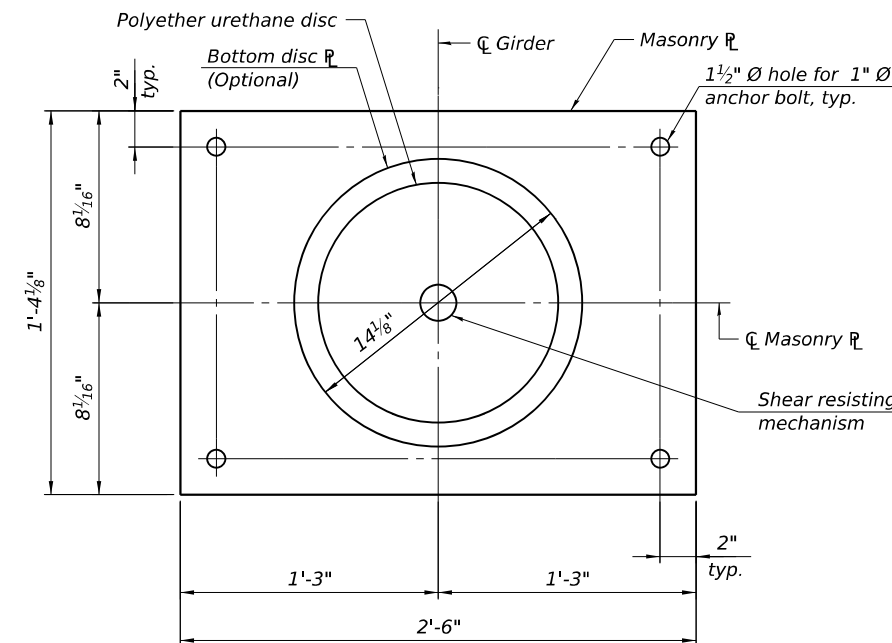


SECTION THRU HLMR DISC BEARING

*As alternates to the bolted connection shown, the guide bars may be connected to the sole plate by groove welds or the guide bars and sole plate may be fabricated as a single piece.



SOLE PLATE AND TOP DISC PLATE PLAN



MASONRY PLATE AND BOTTOM DISC PLATE PLAN

BILL OF MATERIAL

Item	Unit	Total
** High Load Multi-Rotational Bearings, Disc, Guided Expansion-500K	Each	14
Anchor Bolts, 1"	Each	112

** The value specified in the pay item name is an approximate vertical load capacity that is used for letting and bidding purposes only. Exact bearing capacity will vary subject to final design.

MODEL: 04-01-0121 - 03D_Bearing_Details (Sheet)
 FILE NAME: p:\cmt\engineering\2024\04-01-0121\03D\Bearing_Details.dgn
 PROJECT: 04-01-0121 - 03D_Bearing_Details (Sheet)



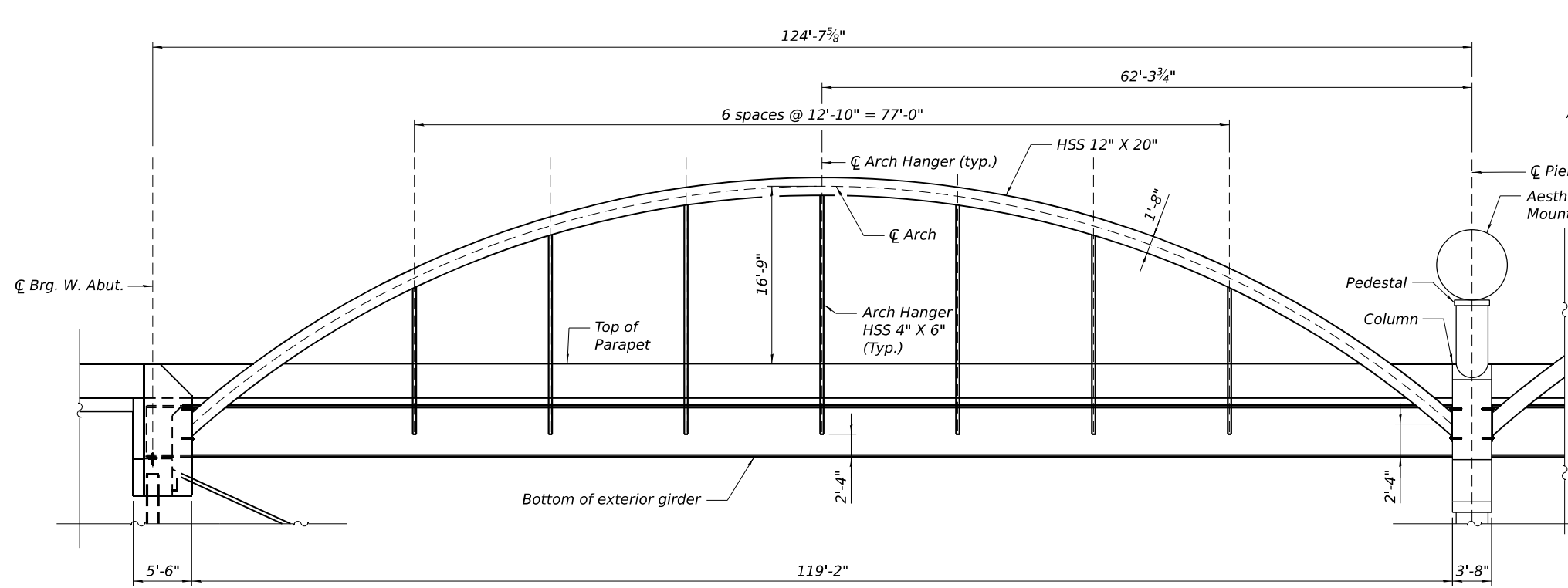
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PLOT SCALE = N/A	DRAWN - MAC	REVISED -
PLOT DATE = 12/10/2024	CHECKED - FAS	REVISED -
	DATE - DEC 2024	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

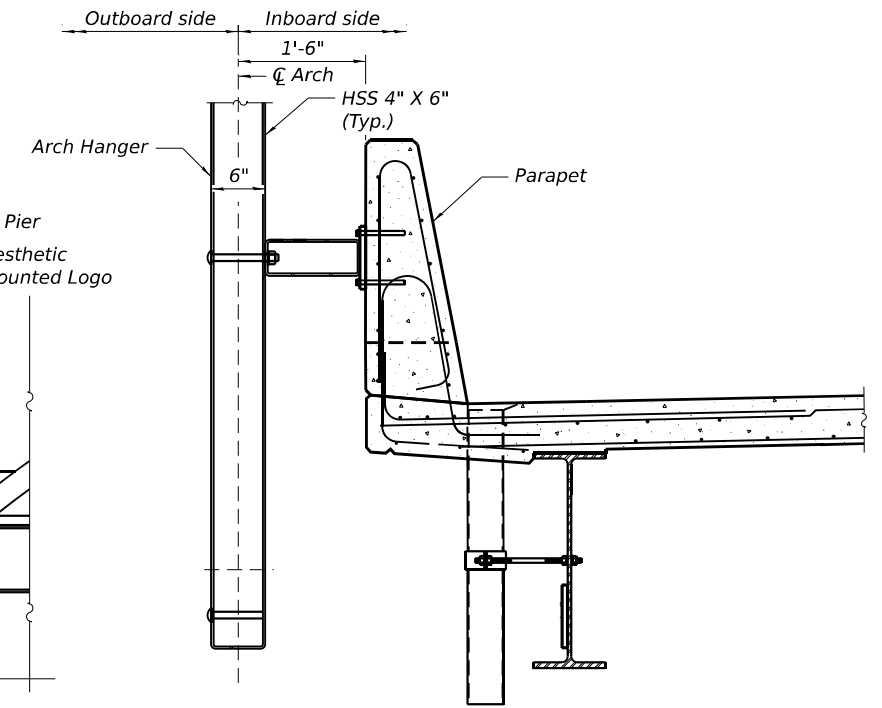
**BEARING DETAILS
STRUCTURE NO. 041-0121**

SCALE: SHEET 30 OF 48 SHEETS STA. TO STA.

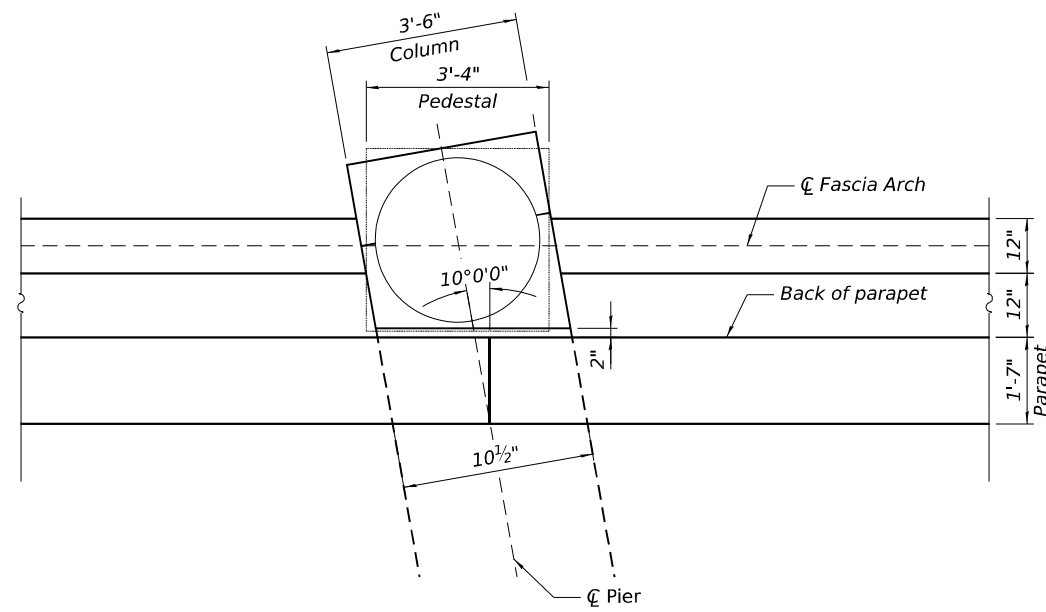
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	13-2(N-1, TS-1); (41-3)HB2	JEFFERSON	787	587
CONTRACT NO. 78483				
ILLINOIS FED. AID PROJECT				



AESTHETIC ARCH ELEVATION - SPAN 1
 (Span 2 symmetric about ζ pier)
 (North face shown, south face similar)



ARCH TYPICAL SECTION



PLAN
 (North end of pier shown; South end similar by 180° rotation)

Approval from the Engineer is required for any connections to the bridge girders

- Notes:
1. The requirements of Section 505 Steel Structures shall apply to AESTHETIC ENHANCEMENTS (Lump Sum) installation operations.
 2. For AESTHETIC ENHANCEMENTS (Lump Sum) requirements, see Special Provisions.
 3. The fascia arch, hangers, and connections shall be metallized or galvanized and then coated with System 2. See Special Provision for "Metallizing of Structural Steel". The color of the final finish coats of paint shall be field applied and shall be Blue AMS-STD-595 15050.
 4. The contractor is responsible for retaining an Illinois Structural Engineer to design and fully detail the arch and connections to the bridge.
 5. Design stresses, Seismic Data and Design Specifications shall apply.
 6. The design, fabrication, and installation of the arch and arch connections shall be paid for as AESTHETIC ENHANCEMENTS (Lump Sum).
 7. All field drilled holes in the steel for the lighting shall be touched up in the field using the specified paint system on Sheet 2.

Additional Loading:
 The fascia arches shall be designed to accommodate an additional 75 psf per square foot maintenance live load applied to the top surface of the arch rib along the entire length of the arch.

MODEL: S1 041-0121-031_Aesthetic Enhancement Details - General (Sheet)
 FILE NAME: p:\cmt\engr\p2\2024\041-0121-031_Aesthetic Enhancement Details - General.dgn



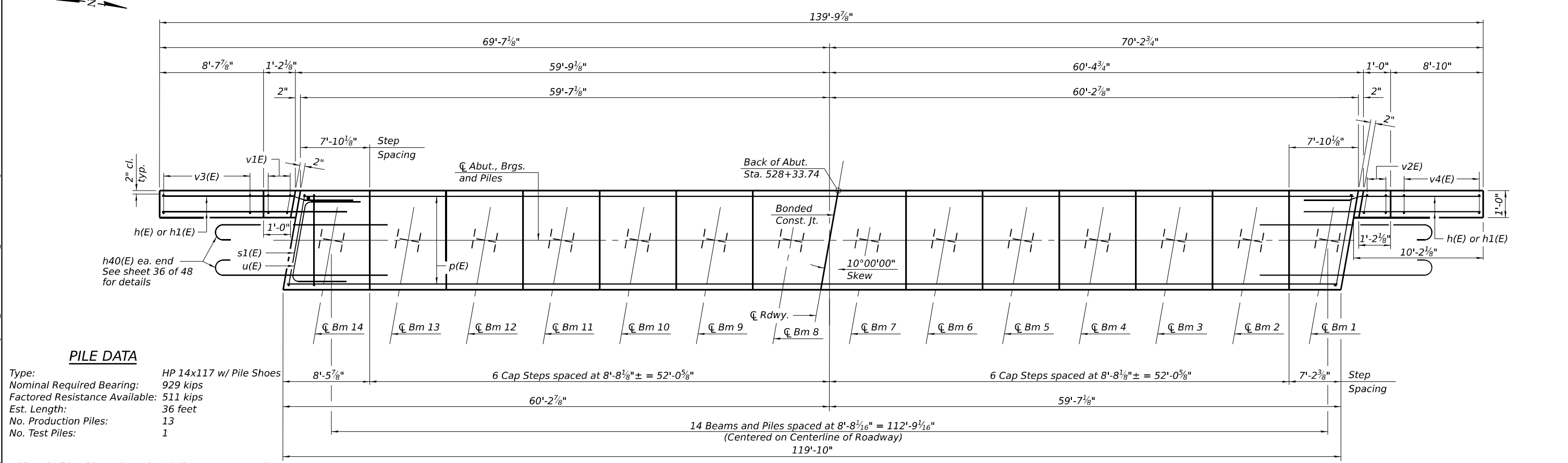
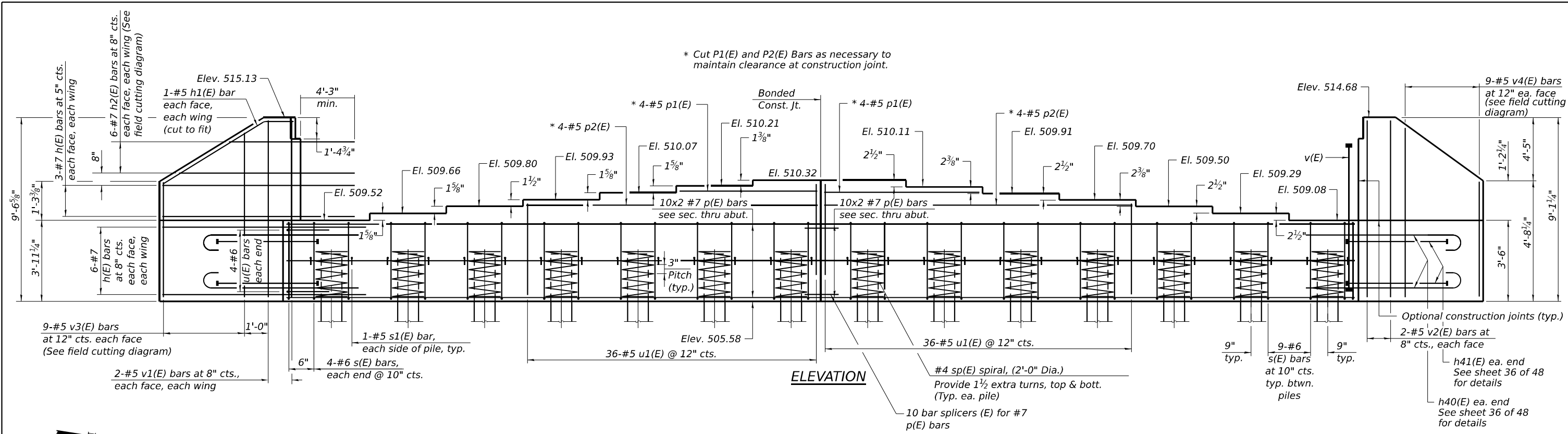
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PLOT SCALE = N/A	DRAWN - VT	REVISED -
PLOT DATE = 12/10/2024	CHECKED - FAS	REVISED -
	DATE - DEC 2024	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**AESTHETIC ENHANCEMENT DETAILS - GENERAL
 STRUCTURE NO. 041-0121**

SCALE: SHEET 31 OF 48 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	13-2(N-1, TS-1); (41-3)HB2	JEFFERSON	787	588
CONTRACT NO. 78483				
ILLINOIS FED. AID PROJECT				



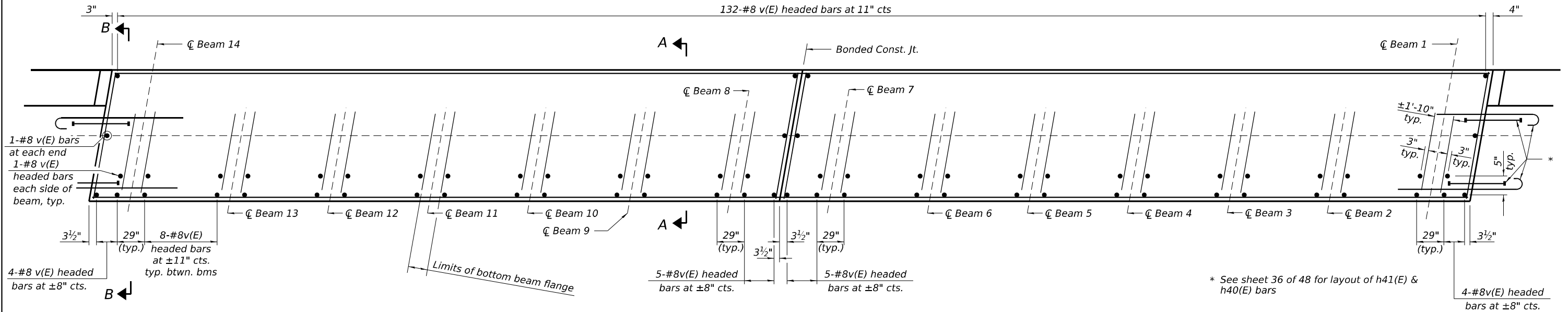
PILE DATA

Type: HP 14x117 w/ Pile Shoes
 Nominal Required Bearing: 929 kips
 Factored Resistance Available: 511 kips
 Est. Length: 36 feet
 No. Production Piles: 13
 No. Test Piles: 1

Piles shall be driven through 30" diameter precored holes extending to elevation 492.0 according to Article 512.09(c) of the Standard Specifications except that the void space outside the pile shall be filled with bentonite according to the manufacturer's recommendations to achieve a Qu of 1.5 tsf. Cost included in driving piles.

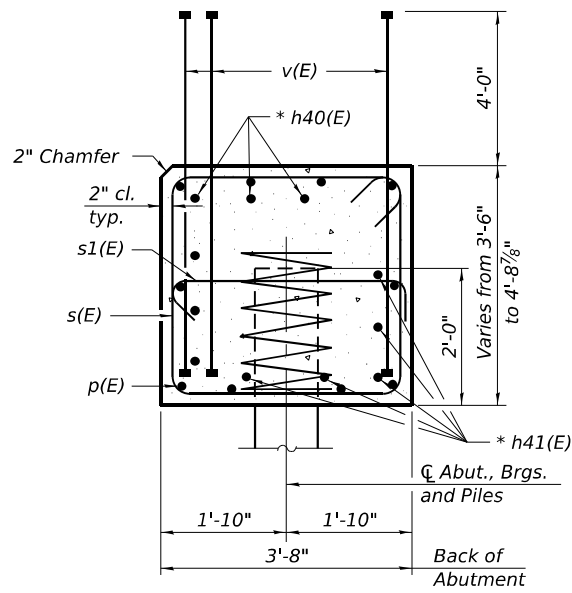
- Notes:
 1. Pour steps monolithically with cap.
 2. For details of piles see sheet 41 of 48.

	USER NAME = Bitan Bond	DESIGNED - FAS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WEST ABUTMENT DETAILS - I STRUCTURE NO. 041-0121	F.A.P. RTE. = 821	SECTION = 13-2(N-1,TS-1); (41-3)HB2	COUNTY = JEFFERSON	TOTAL SHEETS = 787	SHEET NO. = 589
	PLOT SCALE = 2,000' / 1" = 12/10/2024	CHECKED - FAS	REVISED -			SCALE: SHEET 32 OF 48 SHEETS STA. TO STA.	CONTRACT NO. 78483			ILLINOIS FED. AID PROJECT



* See sheet 36 of 48 for layout of h41(E) & h40(E) bars

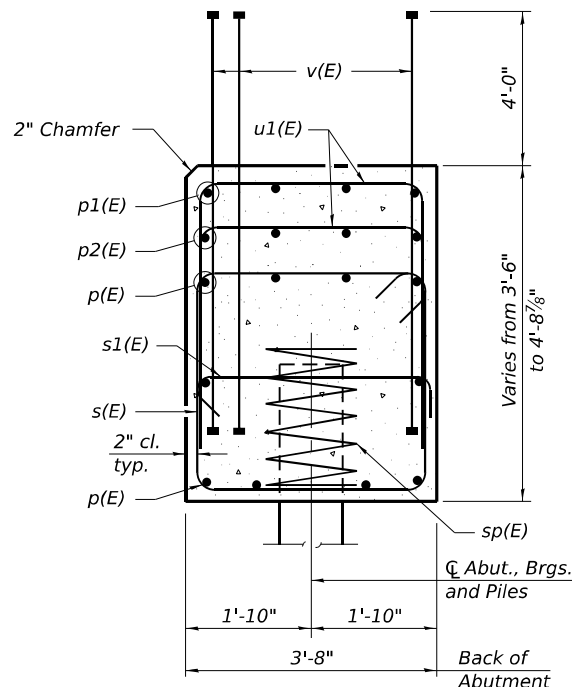
LAYOUT OF v(E) BARS



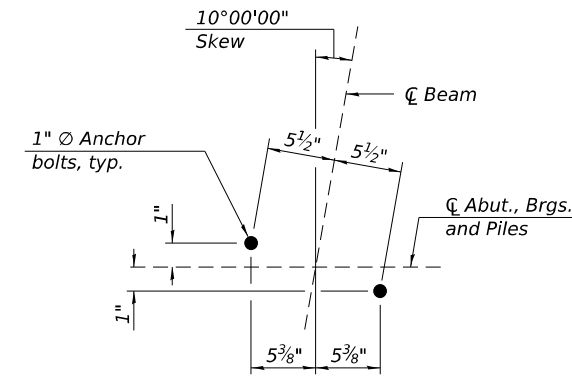
SECTION B-B

Dimensions at right angles to abutment.

* See sheet 36 of 48 for layout of h41(E) & h40(E) bars



SECTION A-A



ANCHOR BOLT DETAIL FOR BEAM 1-14

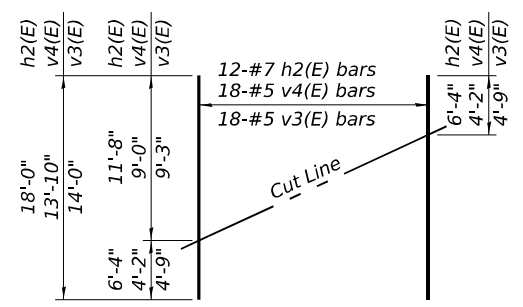
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	36	#7	13'-2"	—
h1(E)	4	#5	10'-5"	—
h2(E)	12	#7	18'-0"	—
p(E)	40	#7	32'-4"	—
p1(E)	4	#5	17'-4"	—
p2(E)	8	#5	34'-8"	—
s(E)	125	#6	14'-4"	□
s1(E)	28	#5	4'-4"	┘
sp(E)	14	#4	2'-0"	WWW
u(E)	8	#6	12'-0"	┘
u1(E)	72	#5	11'-4"	┘
v(E)	278	#8	7'-1"	—
v1(E)	4	#5	9'-2"	—
v2(E)	4	#5	8'-9"	—
v3(E)	18	#5	14'-0"	—
v4(E)	18	#5	13'-10"	—
Structure Excavation	Cu. Yd.	511		
Concrete Structures	Cu. Yd.	83.4		
Reinforcement Bars, Epoxy Coated	Pound	14,310		
Furnishing Steel Piles HP14X117	Foot	468		
Driving Piles	Foot	468		
Test Pile Steel HP14X117	Each	1		
Pile Shoes	Each	14		

**

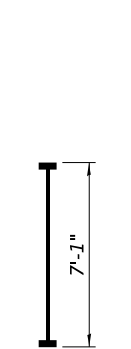
** Length is height of spiral.
Minimum Bar Lap
#7 Bar - 5'-0"

Note:
Bar terminators, paid for separately. See Total Bill of Material.



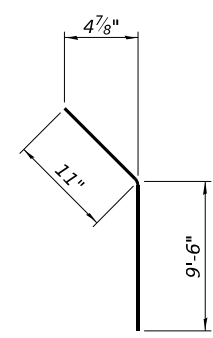
FIELD CUTTING DIAGRAM

Order h2(E), v3(E), and v4(E) full length. Cut as shown and use remainder of bars in opposite face of wing.

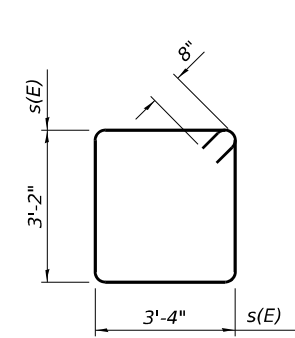


BAR v(E)

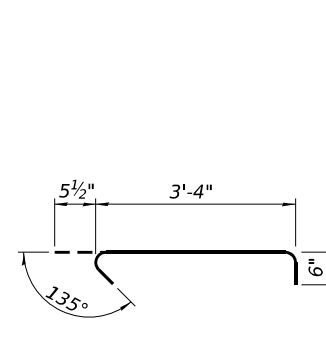
(Headed. 556-#8 Bar terminators)



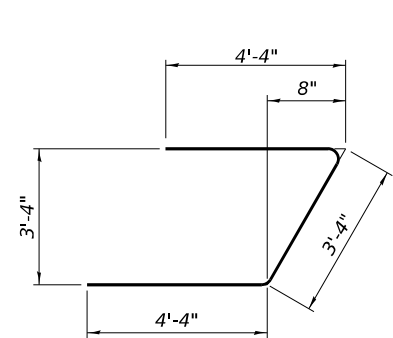
BAR h1(E)



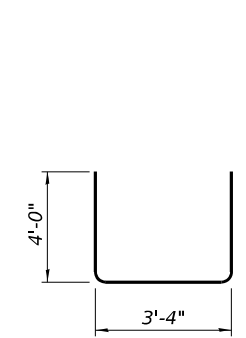
BAR s(E)



BAR s1(E)



BAR u(E)



BAR u1(E)

MODEL: D:\info... FILE NAME: ... CADD... 033... West Abutment Details - II.dwg
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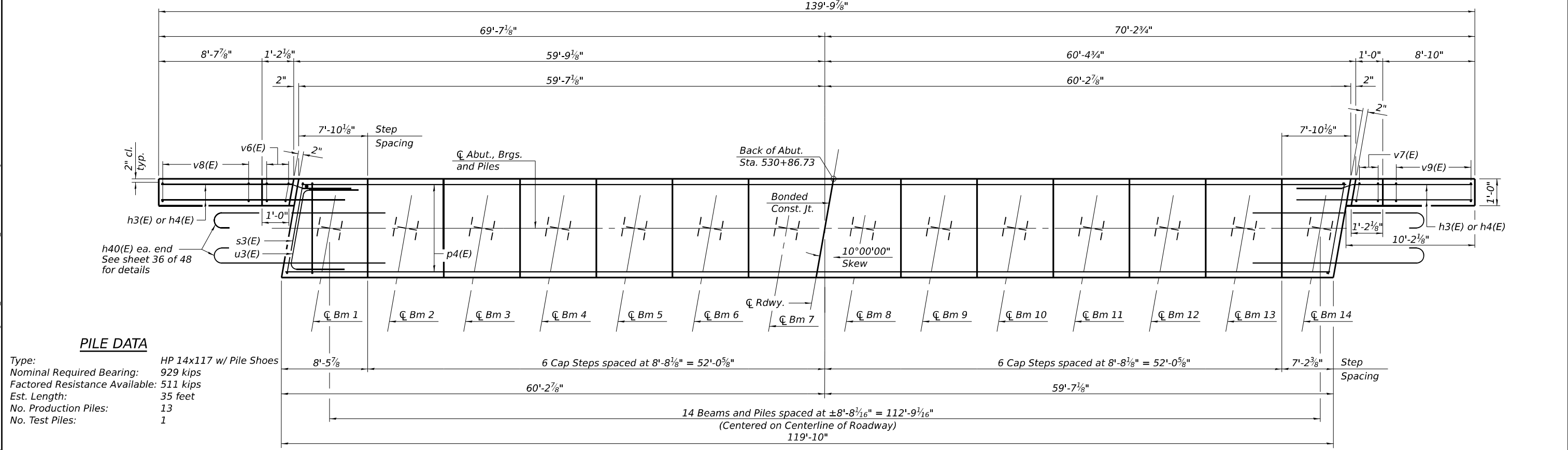
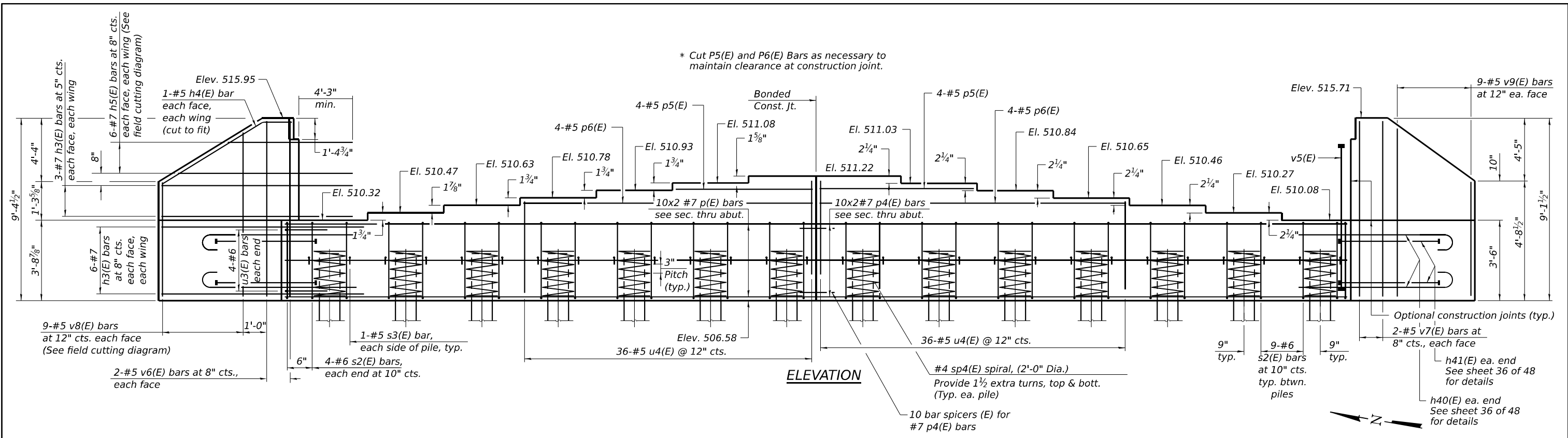
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PLOT SCALE = 2,000' / in.	DRAWN - RAH	REVISED -
PLOT DATE = 12/10/2024	CHECKED - FAS	REVISED -
	DATE - DEC 2024	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**WEST ABUTMENT DETAILS - II
STRUCTURE NO. 041-0121**

SCALE: SHEET 33 OF 48 SHEETS STA. TO STA.

F.A.P. RTE. 821	SECTION 13-2(N-1.TS-1); (41-3)HB2	COUNTY JEFFERSON	TOTAL SHEETS 787	SHEET NO. 590
CONTRACT NO. 78483			ILLINOIS FED. AID PROJECT	



PILE DATA

Type: HP 14x117 w/ Pile Shoes
 Nominal Required Bearing: 929 kips
 Factored Resistance Available: 511 kips
 Est. Length: 35 feet
 No. Production Piles: 13
 No. Test Piles: 1

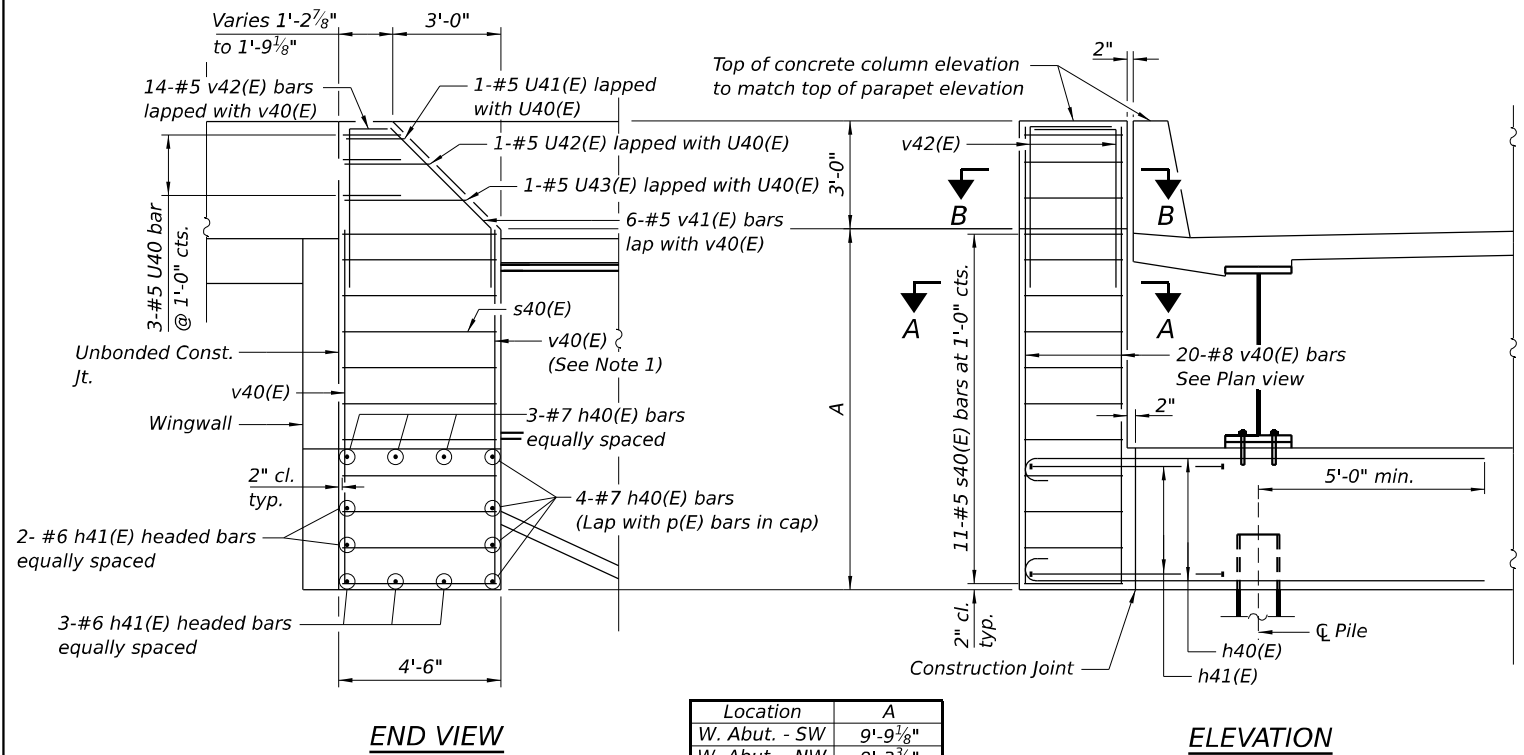
Piles shall be driven through 30" diameter precored holes extending to elevation 494.0 according to Article 512.09(c) of the Standard Specifications except that the void space outside the pile shall be filled with bentonite according to the manufacturer's recommendations to achieve a Qu of 1.5 tsf. Cost included in driving piles.

- Notes:**
1. Pour steps monolithically with cap.
 2. For details of piles see sheet 41 of 48.

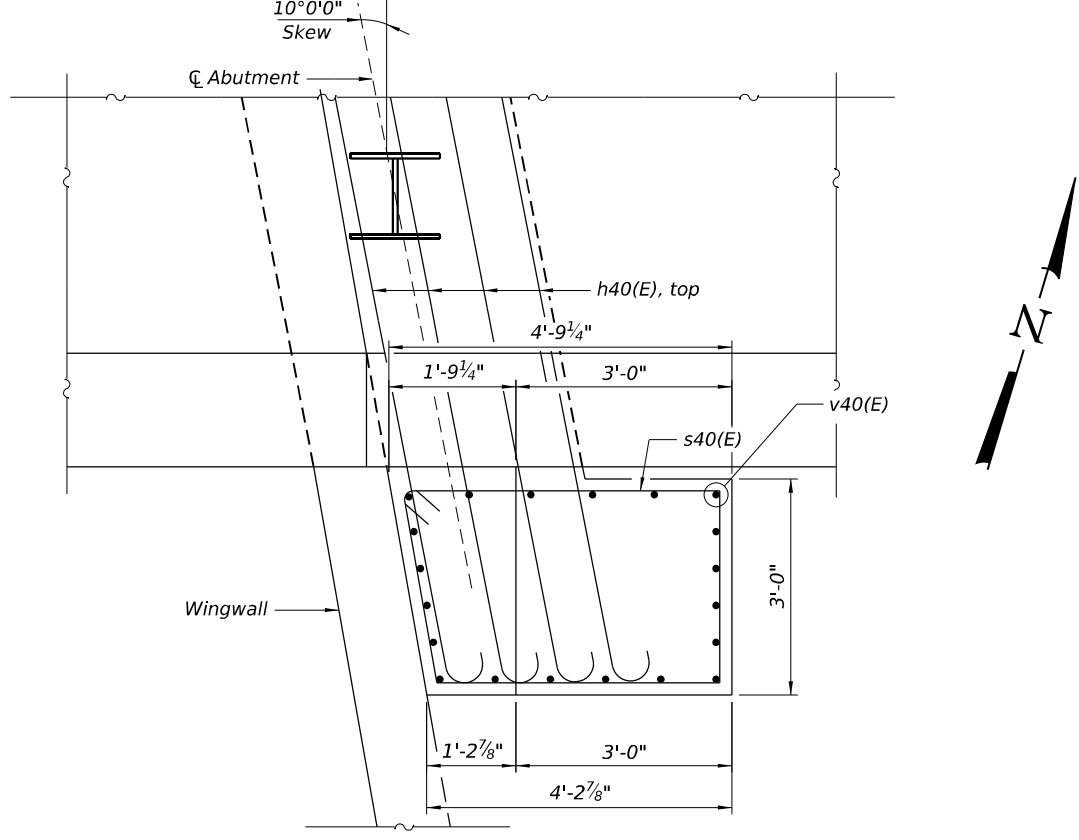
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	USER NAME = Bitan Bond	DESIGNED - FAS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EAST ABUTMENT DETAILS - I STRUCTURE NO. 041-0121		F.A.P. RTE. = 821	SECTION = 13-2(N-1,TS-1); (41-3)HB2	COUNTY = JEFFERSON	TOTAL SHEETS = 787	SHEET NO. = 591
	PLOT SCALE = 2,000' / in.	CHECKED - FAS	REVISED -				SCALE: SHEET 34 OF 48 SHEETS STA. TO STA.	CONTRACT NO. 78483			ILLINOIS FED. AID PROJECT
	PLOT DATE = 12/10/2024	DATE = DEC 2024	REVISED -								

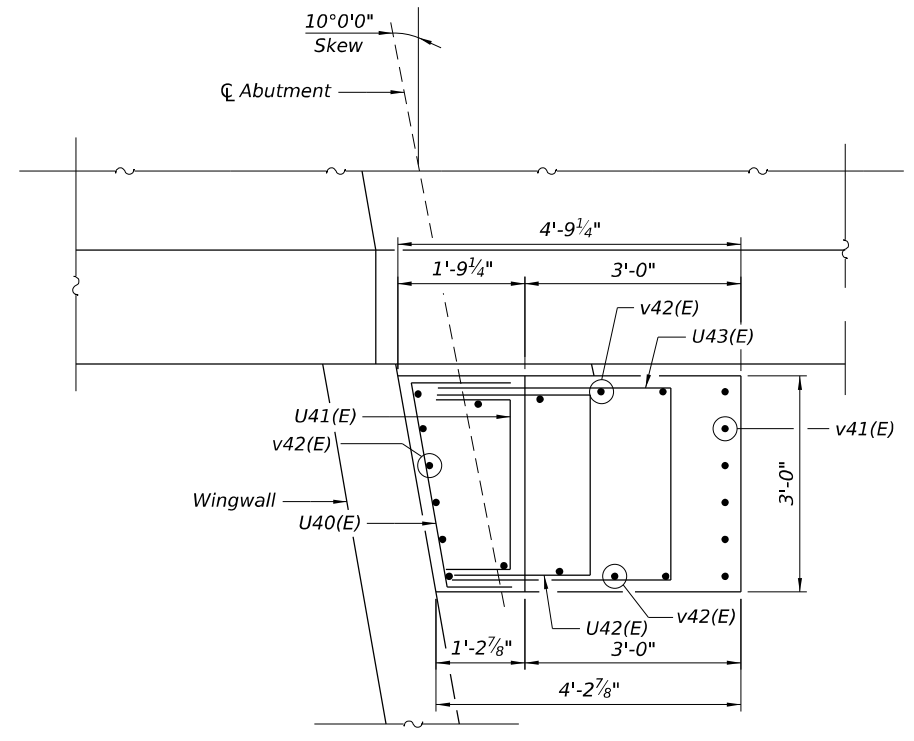
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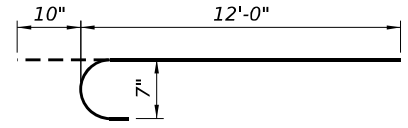
Location	A
W. Abut. - SW	9'-9 ¹ / ₈ "
W. Abut. - NW	9'-3 ³ / ₄ "
E. Abut. - SE	9'-3 ³ / ₄ "
E. Abut. - NE	9'-7"



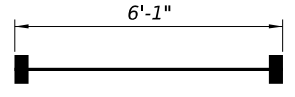
SECTION A-A
(SW column shown, SE, NW, and NE columns similar)



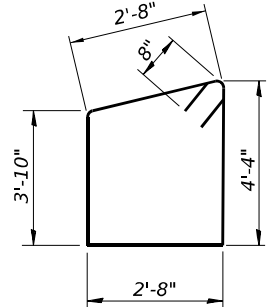
SECTION B-B
(SW column shown, SE, NW, and NE columns similar)



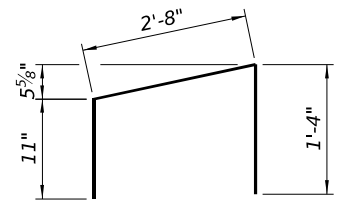
BAR h40(E)



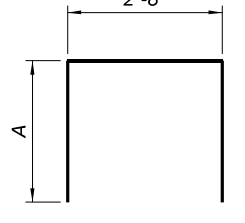
BAR h41(E)
(Headed. 40-#6 Bar terminators)



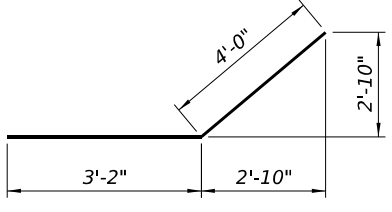
BAR s40(E)



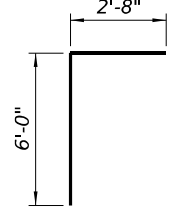
BAR U40(E)



BARS U41(E), U42(E) & U43(E)



BAR v41(E)



BAR v42(E)

BAR	A
U41(E)	11"
U42(E)	1'-11"
U43(E)	2'-11"

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h40(E)	24	#7	12'-10"	C
h41(E)	20	#6	6'-1"	I
s40(E)	44	#5	14'-10"	D
u40(E)	12	#5	4'-11"	J
u41(E)	4	#5	4'-6"	K
u42(E)	4	#5	6'-6"	K
u43(E)	4	#5	8'-6"	K
v40(E)	80	#8	9'-5"	L
v41(E)	24	#5	7'-2"	M
v42(E)	56	#5	8'-8"	N
Concrete Structures			Cu. Yd.	22.9
Reinforcement Bars, Epoxy Coated			Pound	4,340

- Notes:
1. Space column reinforcement to miss anchor bolts.
 2. Trim v40(E) and v42(E) bars to fit the four aesthetic columns as necessary.
 3. Bar terminators, paid for separately. See Total Bill of Material.



USER NAME = Brian Bond	DESIGNED - DAC	REVISED -
PLOT SCALE = NA	DRAWN - DAC	REVISED -
PLOT DATE = 12/10/2024	CHECKED - FAS	REVISED -
	DATE - DEC 2024	REVISED -

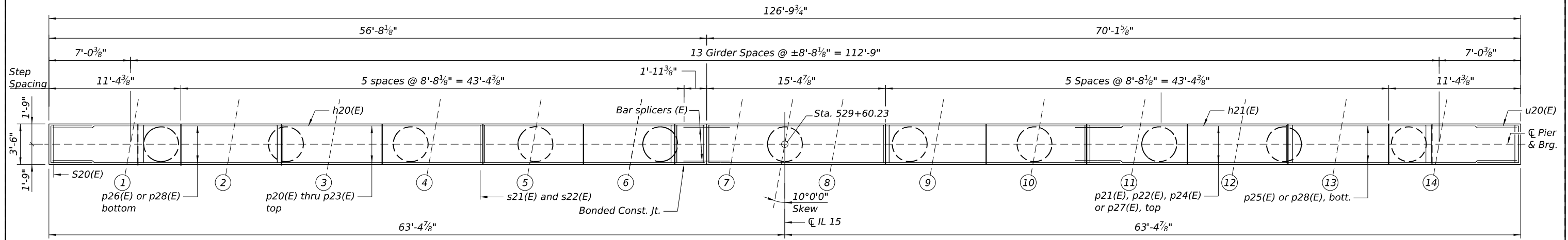
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**AESTHETIC ENHANCEMENT DETAILS - ABUTMENTS
STRUCTURE NO. 041-0121**

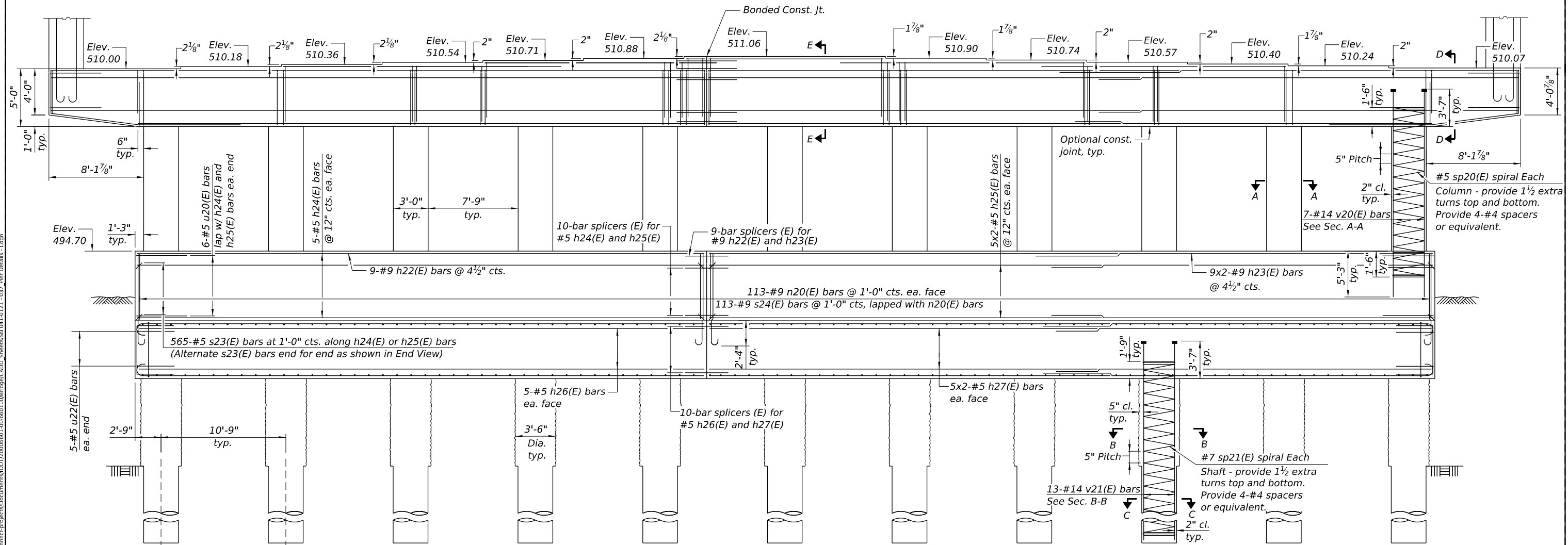
SCALE: SHEET 36 OF 48 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	13-2(N-1, TS-1); (41-3)HB2	JEFFERSON	787	593
CONTRACT NO. 78483				

ILLINOIS FED. AID PROJECT



TOP PLAN



ELEVATION
(Looking East)

- Notes:**
1. Space reinforcement in cap to miss anchor bolts.
 2. Pour steps monolithically with cap.
 3. End View and Footing Plan on sheet 38 of 48.
 4. See sheet 40 of 48 for Aesthetic Enhancement Details
 5. Bars indicated this 5 x 2-#5 etc. indicates 5 lines of bars with 2 lengths per line.
 6. Concrete Sealer shall be applied to all exposed surfaces of the pier.

MINIMUM BAR LAP
#5 Bar = 3'-7"
#9 Bar = 10'-4"

MODEL: 041-0121 - 037_Pier_Details - 1(Sheet)
 FILE NAME: p:\cmt\engineering\2024\041-0121\037_Pier_Details\CADD_Sheets\041-0121 - 037_Pier_Details - 1.dgn
 License No. 184-000613 © Copyright CMT, Inc.



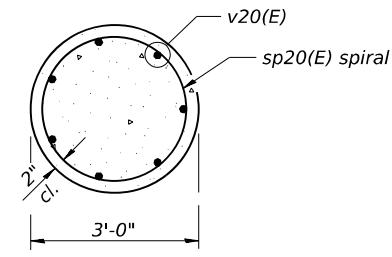
USER NAME = Brian Bond	DESIGNED - JRW	REVISED -
PLOT SCALE = N/A	DRAWN - DAC	REVISED -
PLOT DATE = 12/10/2024	CHECKED - FAS	REVISED -
	DATE = DEC 2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

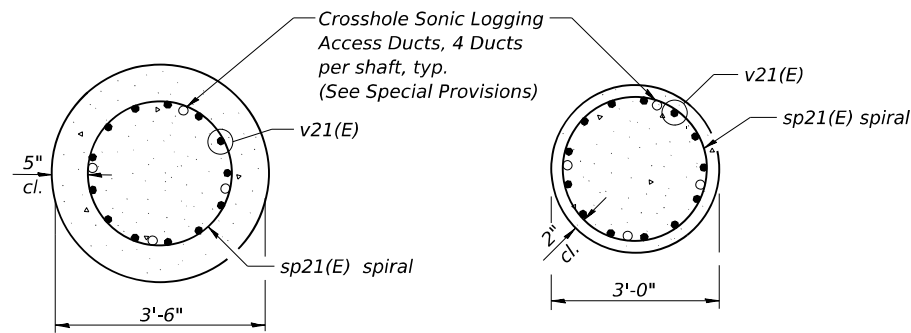
PIER DETAILS - I
STRUCTURE NO. 041-0121

SCALE: SHEET 37 OF 48 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	13-2(N-1, TS-1); (41-3)H2	JEFFERSON	787	594
CONTRACT NO. 78483			ILLINOIS FED. AID PROJECT	

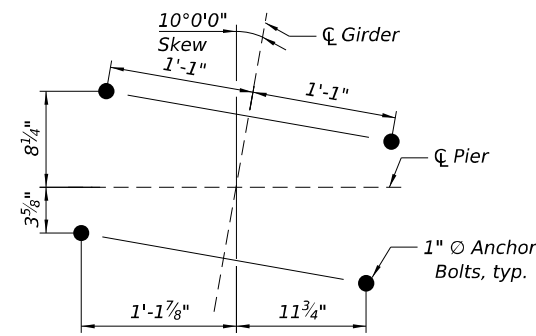


SECTION A-A

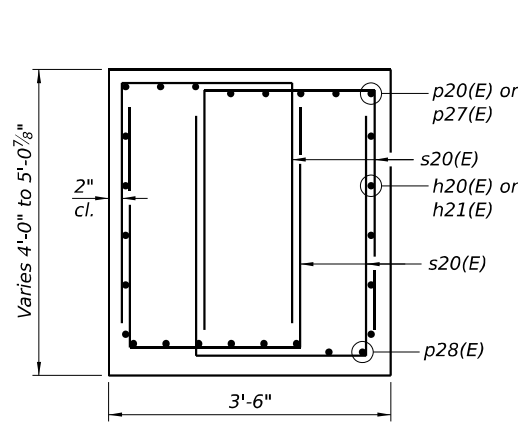


SECTION B-B

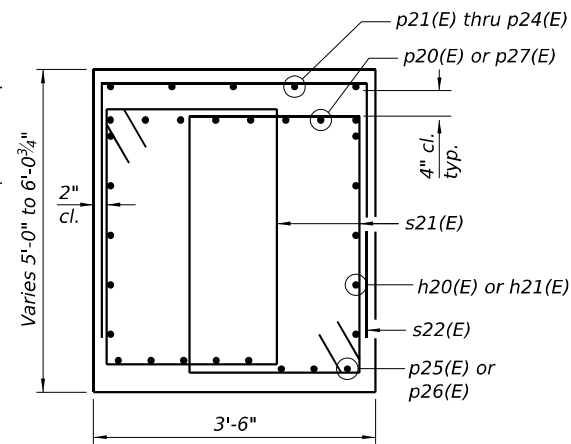
SECTION C-C



ANCHOR BOLT DETAIL



SECTION D-D

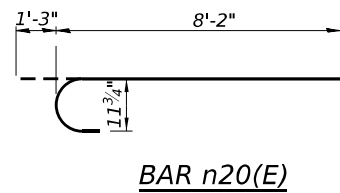


SECTION E-E

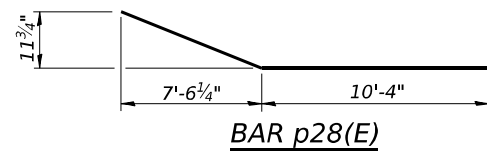
BILL OF MATERIAL FOR PIER

Bar	No.	Size	Length	Shape
h20(E)	10	#5	56'-4"	—
h21(E)	20	#5	36'-10"	—
h22(E)	9	#9	49'-5"	—
h23(E)	18	#9	36'-8"	—
h24(E)	10	#5	49'-5"	—
h25(E)	20	#5	33'-3"	—
h26(E)	10	#5	49'-5"	—
h27(E)	20	#5	33'-3"	—
n20(E)	232	#9	9'-5"	┌
p20(E)	8	#9	56'-4"	—
p21(E)	15	#5	21'-2"	—
p22(E)	5	#5	19'-0"	—
p23(E)	5	#5	1'-7"	—
p24(E)	5	#5	15'-0"	—
p25(E)	16	#9	36'-4"	—
p26(E)	8	#9	48'-2"	—
p27(E)	16	#9	40'-1"	—
p28(E)	16	#9	17'-11"	└
s20(E)	128	#6	9'-6"	┌
s21(E)	502	#6	15'-0"	┌
s22(E)	203	#5	11'-10"	┌
s23(E)	565	#5	4'-1"	┌
s24(E)	113	#9	14'-6"	┌
sp20(E)	11	#5	13'-4"	⋈
sp21(E)	22	#7	26'-2"	⋈
t20(E)	136	#9	16'-8"	┌
t21(E)	114	#7	15'-10"	┌
u20(E)	22	#5	10'-4"	┌
u21(E)	258	#5	11'-9"	┌
u22(E)	10	#5	21'-4"	┌
v20(E)	77	#14	19'-2"	└
v21(E)	286	#14	28'-0"	└
w20(E)	20	#9	50'-8"	┌
w21(E)	20	#9	37'-11"	┌
w22(E)	20	#9	36'-10"	┌
Structure Excavation			Cu. Yd.	481
Concrete Structures			Cu. Yd.	482.1
Reinforcement Bars, Epoxy Coated			Pound	175,000
Drilled Shaft in Soil			Cu. Yd.	34.5
Drilled Shaft in Rock			Cu. Yd.	115.2
Concrete Sealer			Sq. Ft.	4,039
Crosshole Sonic Logging Access Ducts			Foot	2,147
Crosshole Sonic Logging Testing			Each	22

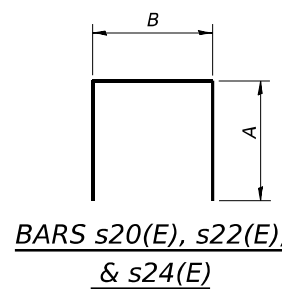
- ** Length is height of spiral.
- Notes:
1. Cast steps monolithically with cap.
 2. Space cap reinforcement to miss anchor bolts.
 3. Bar terminators, paid for separately. See Total Bill of material.



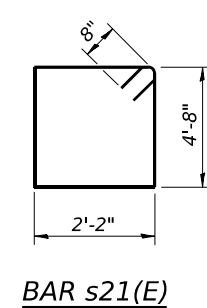
BAR n20(E)



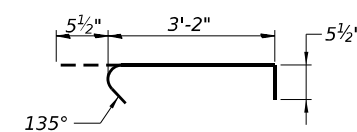
BAR p28(E)



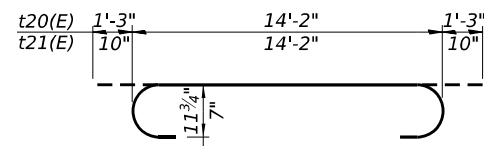
Bar	A	B
s20(E)	3'-8"	2'-2"
s22(E)	4'-4"	3'-2"
s24(E)	5'-8"	3'-2"



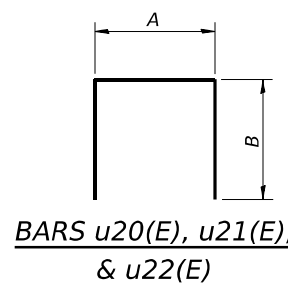
BAR s21(E)



BAR s23(E)

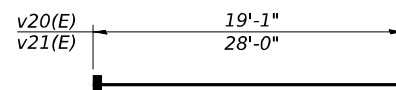


BARS t20(E) & t21(E)

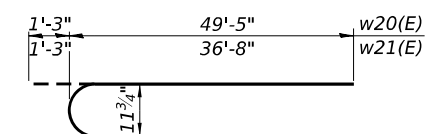


BARS u20(E), u21(E), & u22(E)

Bar	A	B
u20(E)	3'-2"	3'-7"
u21(E)	4'-7"	3'-7"
u22(E)	14'-2"	3'-7"



BARS v20(E) & v21(E)
(Headed. 363-#14 Bar terminators)



BARS w20(E) & w21(E)

MOC: E:\041-0121-039_Pier_Details-III(Sheet1)
 FILE NAME: p:\cmt\eng\proj\041-0121-039_Pier_Details-III.dwg
 PROJECT: 041-0121-039_Pier_Details-III.dwg
 SHEET: 39 OF 48 SHEETS
 DATE: 12/10/2024



USER NAME = Brian Bond	DESIGNED - JRW	REVISED -
PLOT SCALE = N/A	DRAWN - DAC	REVISED -
PLOT DATE = 12/10/2024	CHECKED - FAS	REVISED -
	DATE - DEC 2024	REVISED -

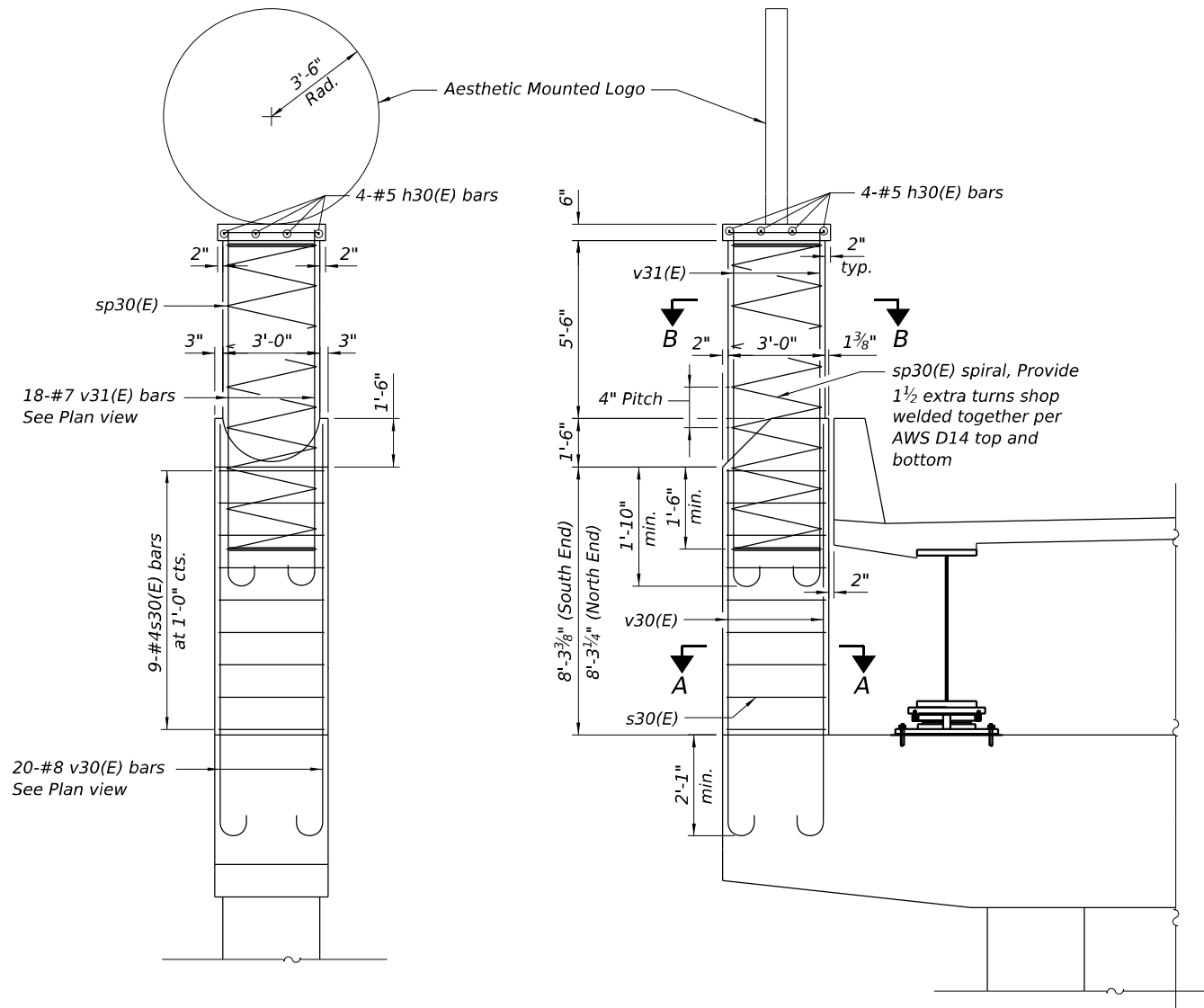
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER DETAILS - III
STRUCTURE NO. 041-0121

SCALE: SHEET 39 OF 48 SHEETS STA. TO STA.

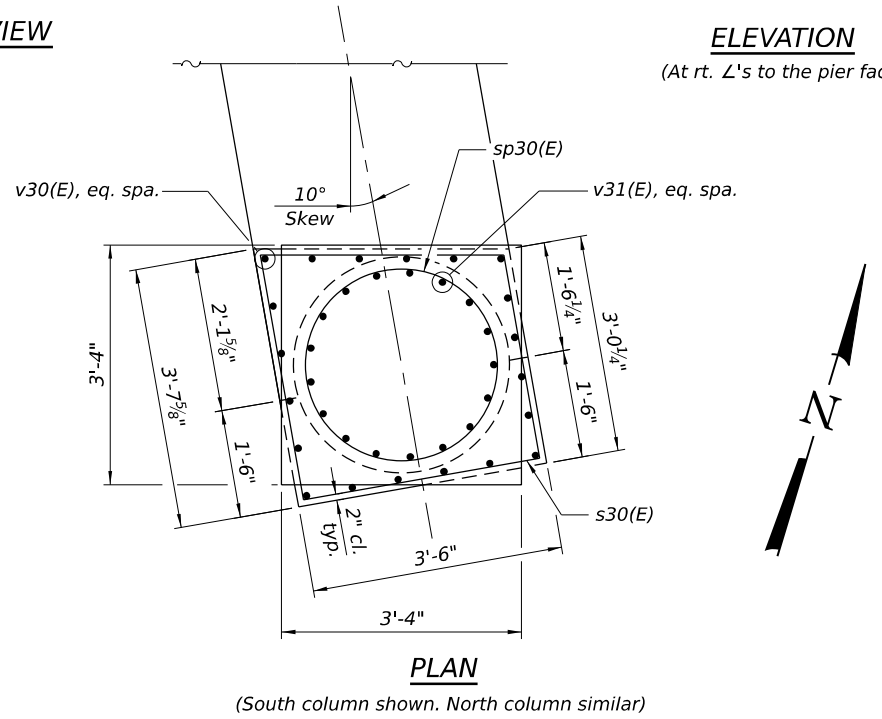
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	13-2(N-1, TS-1); (41-3)HB2	JEFFERSON	787	596
CONTRACT NO. 78483				
ILLINOIS FED. AID PROJECT				

MODEL: S:\041-0121-040_Aesthetic Enhancement Details - Pier (Sheet)
 FILE NAME: P:\cmt\eng\proj\041-0121-040_Aesthetic Enhancement Details - Pier.dgn
 License No. 184-000613 © Copyright CMT, Inc.



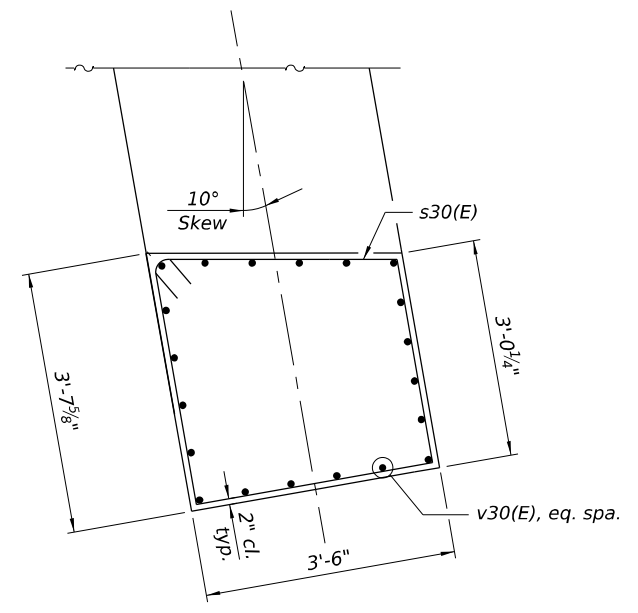
END VIEW

ELEVATION
(At rt. L's to the pier face)

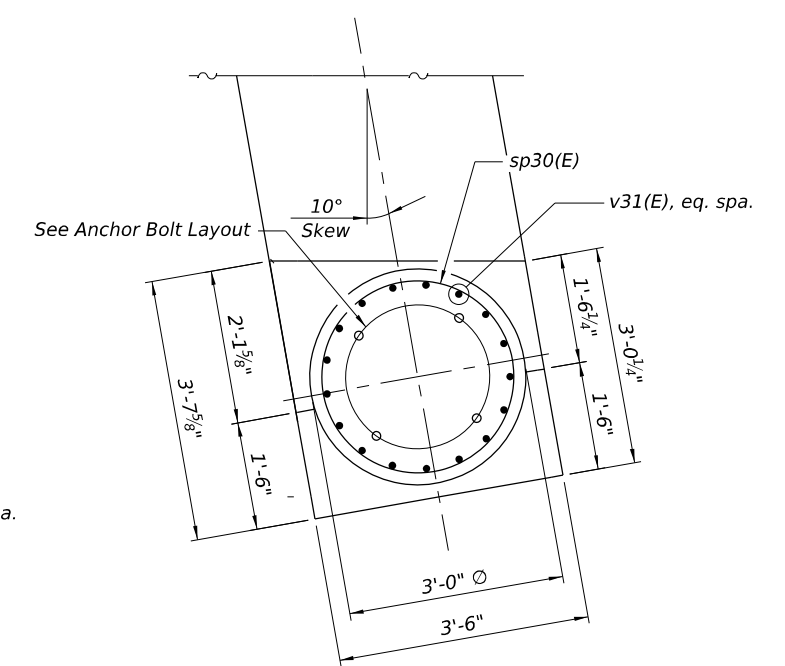


PLAN

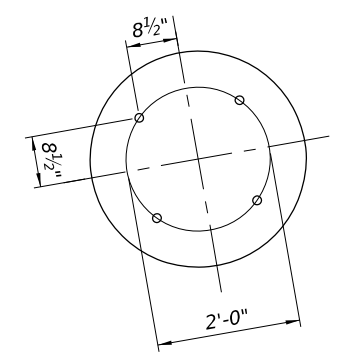
(South column shown. North column similar)



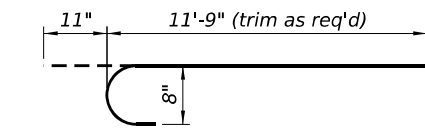
SECTION A-A



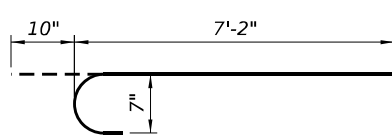
SECTION B-B



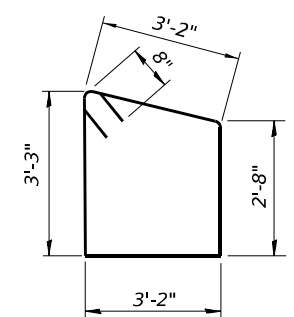
ANCHOR BOLT LAYOUT



BAR v30(E)



BAR v31(E)



BAR s30(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h30(E)	16	#5	3'-0"	—
s30(E)	18	#5	13'-7"	□
** sp30(E)	2	#5	8'-6"	∩∩∩
v30(E)	40	#8	12'-8"	⌋
v31(E)	36	#7	8'-0"	⌋
Concrete Structures			Cu. Yd.	12.0
Reinforcement Bars, Epoxy Coated			Pound	2,270

Space column reinforcement to miss anchor bolts.
 ** Length is height of spiral.

Note:
 1. Anchor bolt size and layout to be designed by others.



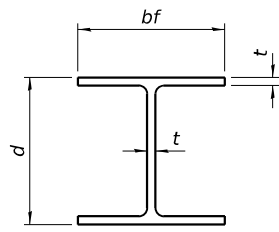
USER NAME = Brian Bond	DESIGNED - DAC	REVISED -
PLOT SCALE = N/A	DRAWN - DAC	REVISED -
PLOT DATE = 12/10/2024	CHECKED - FAS	REVISED -
	DATE - DEC 2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AESTHETIC ENHANCEMENT DETAILS - PIER
STRUCTURE NO. 041-0121

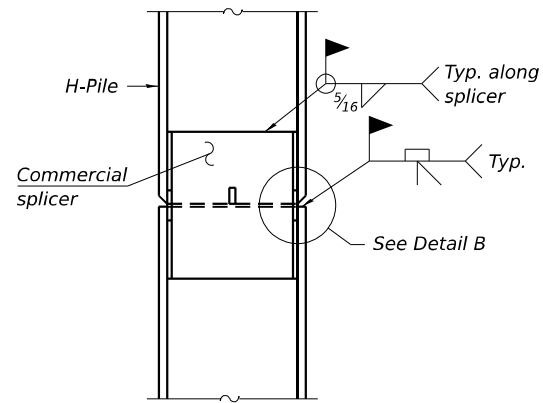
SCALE: SHEET 40 OF 48 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	13-2(N-1, TS-1); (41-3)HB2	JEFFERSON	787	597
CONTRACT NO. 78483				
ILLINOIS		FED. AID PROJECT		

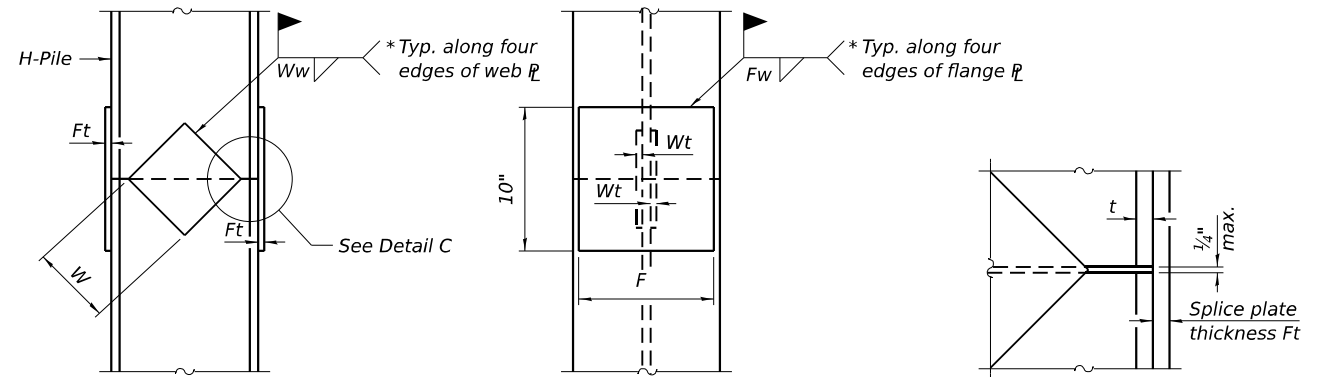


STEEL PILE TABLE

Designation	Depth d	Flange width bf	Web and Flange thickness t	Encasement diameter A
HP 18x181	18	18	1	36"
x157	17 ³ / ₄ "	17 ⁷ / ₈ "	7/8"	36"
x135	17 ¹ / ₂ "	17 ³ / ₄ "	3/4"	36"
HP 16x183	16 ¹ / ₂ "	16 ¹ / ₂ "	1 ¹ / ₈ "	36"
x162	16 ¹ / ₄ "	16 ¹ / ₈ "	1"	36"
x141	16	16	7/8"	36"
x121	15 ³ / ₄ "	15 ⁷ / ₈ "	3/4"	36"
HP 14x117	14 ¹ / ₄ "	14 ⁷ / ₈ "	1 ³ / ₁₆ "	30"
x102	14"	14 ³ / ₄ "	1 ¹ / ₁₆ "	30"
x89	13 ³ / ₈ "	14 ³ / ₄ "	5/8"	30"
x73	13 ³ / ₈ "	14 ⁵ / ₈ "	1/2"	30"
HP 12x84	12 ¹ / ₄ "	12 ¹ / ₄ "	1 ¹ / ₁₆ "	24"
x74	12 ¹ / ₈ "	12 ¹ / ₄ "	5/8"	24"
x63	12"	12 ¹ / ₈ "	1/2"	24"
x53	11 ³ / ₄ "	12"	7/16"	24"
HP 10x57	10"	10 ¹ / ₄ "	9/16"	24"
x42	9 ³ / ₄ "	10 ¹ / ₈ "	7/16"	24"
HP 8x36	8"	8 ¹ / ₈ "	7/16"	18"



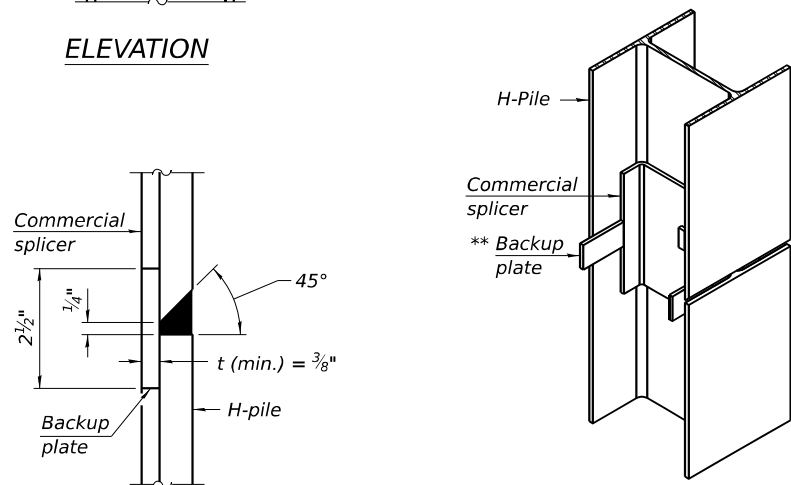
ELEVATION



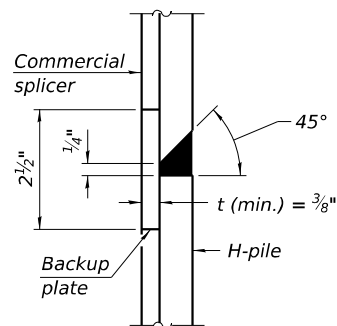
ELEVATION

END VIEW

DETAIL C



ISOMETRIC VIEW

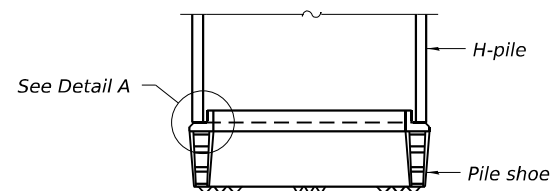


DETAIL B

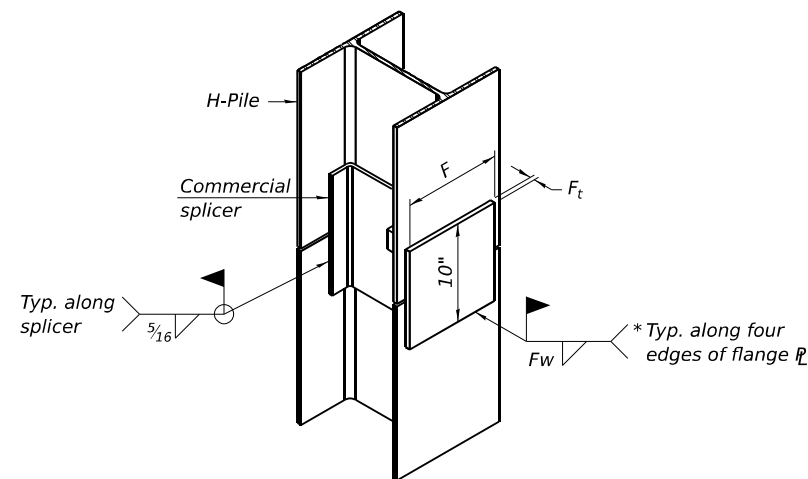
Designation	F	Ft	Fw	W	Wt	Ww
HP 18x181	15 ¹ / ₂ "	1 ¹ / ₂ "	1"	9 ¹ / ₂ "	7/8"	3/4"
x157	15 ¹ / ₄ "	1 ¹ / ₄ "	1"	9 ¹ / ₂ "	7/8"	3/4"
x135	15 ¹ / ₄ "	1 ¹ / ₄ "	1"	9 ¹ / ₂ "	7/8"	3/4"
HP 16x183	13 ³ / ₄ "	1 ¹ / ₂ "	1"	8 ¹ / ₄ "	7/8"	3/4"
x162	13 ¹ / ₂ "	1 ¹ / ₂ "	1"	8 ¹ / ₄ "	3/4"	5/8"
x141	13 ¹ / ₂ "	1 ¹ / ₄ "	7/8"	8 ¹ / ₄ "	3/4"	5/8"
x121	13 ¹ / ₂ "	1 ¹ / ₄ "	7/8"	8 ¹ / ₄ "	3/4"	5/8"
HP 14x117	12 ¹ / ₂ "	1 ¹ / ₄ "	7/8"	7 ³ / ₄ "	5/8"	1/2"
x102	12 ¹ / ₂ "	1"	3/4"	7 ³ / ₄ "	5/8"	1/2"
x89	12 ¹ / ₂ "	7/8"	1 ¹ / ₁₆ "	7 ³ / ₄ "	5/8"	1/2"
x73	12 ¹ / ₂ "	3/4"	9/16"	7 ³ / ₄ "	5/8"	1/2"
HP 12x84	10"	1"	1 ¹ / ₁₆ "	6 ¹ / ₂ "	5/8"	1/2"
x74	10"	7/8"	1 ¹ / ₁₆ "	6 ¹ / ₂ "	5/8"	1/2"
x63	10"	3/4"	1/2"	6 ¹ / ₂ "	1/2"	3/8"
x53	10"	3/4"	1/2"	6 ¹ / ₂ "	1/2"	3/8"
HP 10x57	8"	7/8"	9/16"	5 ¹ / ₄ "	1/2"	3/8"
x42	8"	3/4"	9/16"	5 ¹ / ₄ "	1/2"	3/8"
HP 8x36	6 ³ / ₄ "	5/8"	7/16"	4"	1/2"	3/8"

WELDED COMMERCIAL SPLICE

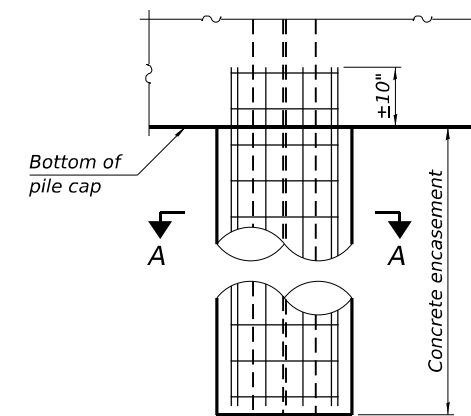
WELDED PLATE FIELD SPLICE



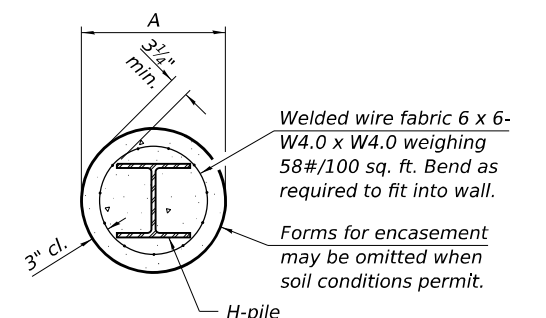
ELEVATION



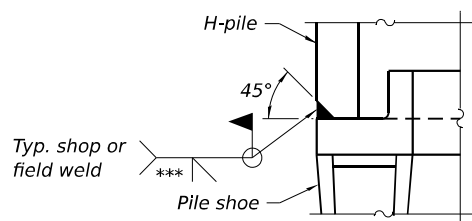
ISOMETRIC VIEW



ELEVATION



SECTION A-A



DETAIL A

SHOE ATTACHMENT

WELDED COMMERCIAL SPLICE ALTERNATE

INDIVIDUAL PILE CONCRETE ENCASEMENT (when specified)

Note:
The steel H-piles shall be according to AASHTO M270 Grade 50.

- * Interrupt welds 1/4" from end of web and/or each flange.
- ** Remove portions of backup plates that extend outside the flanges.
- *** Weld size per pile shoe manufacturer (5/16" min.).

F-HP

10-27-2023



USER NAME	= Brian Bond
PLOT SCALE	= N/A
PLOT DATE	= 12/10/2024

DESIGNED	- DAC
DRAWN	- DAC
CHECKED	- FAS
DATE	- DEC 2024

REVISED	-
REVISED	-
REVISED	-
REVISED	-

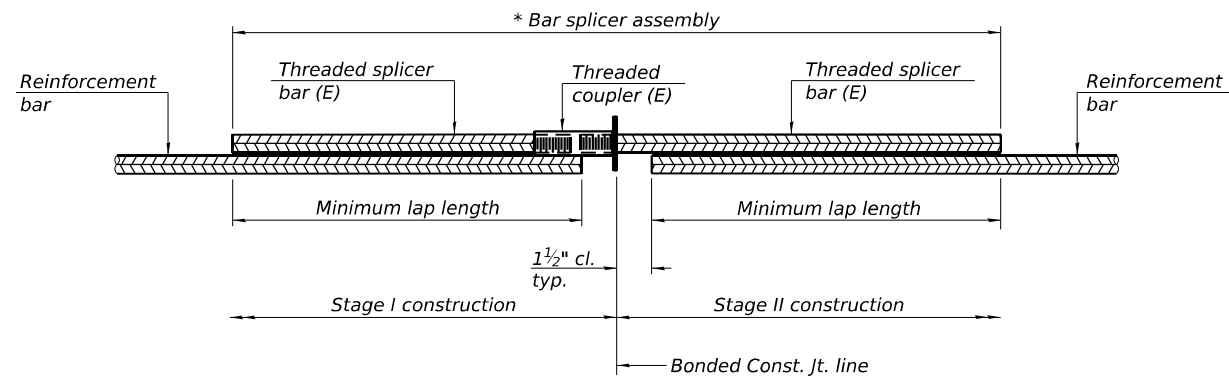
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HP PILE DETAILS
STRUCTURE NO. 041-0121

SCALE: SHEET 41 OF 48 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	13-2(N-1, TS-1); (41-3)HB2	JEFFERSON	787	598
CONTRACT NO. 78483				
ILLINOIS FED. AID PROJECT				

MODEL: S:\041-0121-041_HP_Pile_Details_Sheet1.dwg
FILE NAME: P:\cmt\p\p\041-0121-041_HP_Pile_Details_Sheet1.dwg
PROJECT: ILLINOIS DEPARTMENT OF TRANSPORTATION
DRAWN: DAC
CHECKED: FAS
DATE: DEC 2024
SCALE: N/A
PLOT DATE: 12/10/2024



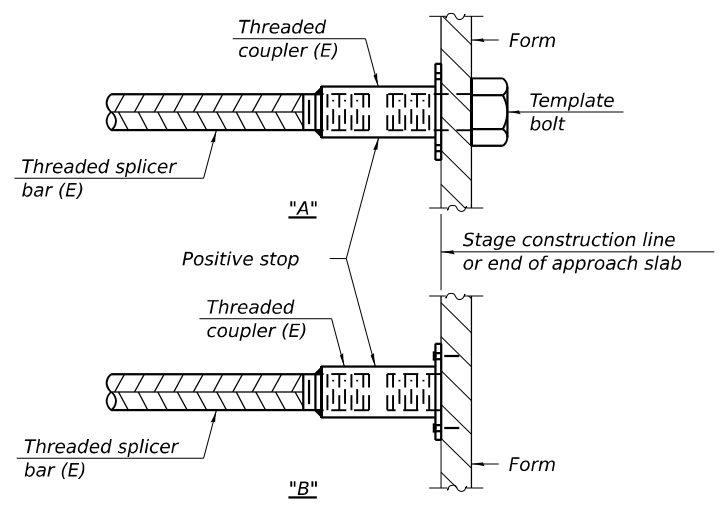
STANDARD BAR SPLICER ASSEMBLY PLAN

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

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

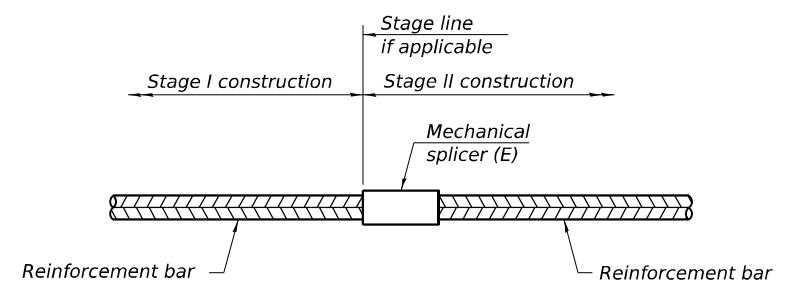
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Top of Deck	#5	546	3'-1"
Bottom of Deck	#5	353	3'-6"
West Abutment Diaphragm	#6	11	4'-0"
East Abutment Diaphragm	#6	11	4'-0"
West Approach Slab Top	#5	46	3'-4"
West Approach Slab Bottom	#8	60	4'-9"
West Approach Slab Footing	#5	40	3'-0"
East Approach Slab Top	#5	46	3'-4"
East Approach Slab Bottom	#8	60	4'-9"
East Approach Slab Footing	#5	40	3'-0"
West Abutment Cap	#7	10	5'-0"
East Abutment Cap	#7	10	5'-0"
Pier Cap	#9	16	10'-4"
Pier Cap	#5	15	3'-7"
Pier Crashwall	#9	9	10'-4"
Pier Crashwall	#5	10	3'-7"
Pier Footing	#5	10	3'-7"
Pier Footing	#9	20	10'-4"



INSTALLATION AND SETTING METHODS

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



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required

- Notes:
- Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.
 - All reinforcement shall be lapped and tied to the splicer bars.
 - Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.
 - See approved list of bar splicer assemblies and mechanical splicers for alternatives.

MODEL: S1 041-0121 - 042 Bar Splicer Assembly and Mechanical Splicer Details (Sheet)
 FILE NAME: p:\cmt\engineering\projects\2020\06\01-00\660100\bridge\CADD_Sheets\S1 041-0121 - 042 Bar Splicer Assembly and Mechanical Splicer Details.dgn

BSD-1

5-15-2023



USER NAME = Brian Bond	DESIGNED - DAC	REVISED -
PLOT SCALE = N/A	DRAWN - DAC	REVISED -
PLOT DATE = 12/10/2024	CHECKED - FAS	REVISED -
	DATE - DEC 2024	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
 STRUCTURE NO. 041-0121

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
821	13-2(N-1, TS-1); (41-3)HB2	JEFFERSON	787	599
CONTRACT NO. 78483				
ILLINOIS FED. AID PROJECT				

SCALE: SHEET 42 OF 48 SHEETS STA. TO STA.

