

SOIL BORING LOG

**MET Midwest Engineering and Testing, Inc.**

Project Name: Illinois State Police TIM Training Track  
Location: Pawnee, Illinois

Boring: D-1  
Project No.: C53129  
Date of Boring: October 29, 2025  
Field Representative: Jake Hedenberg

VISUAL SOIL CLASSIFICATION	FT.	SAMPLE NO.	N	Q <sub>p</sub> (tsf)	Q <sub>u</sub> (tsf)	MC (%)	Dd (pcf)	REMARKS
10" Topsoil								
Dark Brown Silty Clay Loam (CL)	1	1-SS	15	3.3	4.6	23	94	Dry during and upon completion of drilling
Brown and Gray Silty Clay (CL)	3	2-SS	11	3.8	4.2	21	94	
END OF BORING @ 4 FEET								

Lines of Demarcation represent an approximate boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions.

SOIL BORING LOG

**MET Midwest Engineering and Testing, Inc.**

Project Name: Illinois State Police TIM Training Track  
Location: Pawnee, Illinois

Boring: D-2  
Project No.: C53129  
Date of Boring: October 29, 2025  
Field Representative: Zach Wilcoxon

VISUAL SOIL CLASSIFICATION	FT.	SAMPLE NO.	N	Q <sub>p</sub> (tsf)	Q <sub>u</sub> (tsf)	MC (%)	Dd (pcf)	REMARKS
12" Topsoil								
Dark Brown Silty Clay Loam (CL)	1	1-SS	13	4.3	6.2	23	96	Dry during and upon completion of drilling
Brown and Gray Silty Clay (CL)	3	2-SS	10	3.0	4.7	22	97	
END OF BORING @ 4 FEET								

Lines of Demarcation represent an approximate boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions.

SOIL BORING LOG

**MET Midwest Engineering and Testing, Inc.**

Project Name: Illinois State Police TIM Training Track  
Location: Pawnee, Illinois

Boring: D-3  
Project No.: C53129  
Date of Boring: October 29, 2025  
Field Representative: Zach Wilcoxon

VISUAL SOIL CLASSIFICATION	FT.	SAMPLE NO.	N	Q <sub>p</sub> (tsf)	Q <sub>u</sub> (tsf)	MC (%)	Dd (pcf)	REMARKS
8" Topsoil								
Dark Gray Silty Clay Loam (CL)	1	1-SS	10	3.5	4.6	23	97	Dry during and upon completion of drilling
Brown and Gray Silty Clay (CL)	3	2-SS	12	3.0	--	22	--	
END OF BORING @ 4 FEET								

Lines of Demarcation represent an approximate boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions.

SOIL BORING LOG

**MET Midwest Engineering and Testing, Inc.**

Project Name: Illinois State Police TIM Training Track  
Location: Pawnee, Illinois

Boring: D-4  
Project No.: C53129  
Date of Boring: October 29, 2025  
Field Representative: Zach Wilcoxon

VISUAL SOIL CLASSIFICATION	FT.	SAMPLE NO.	N	Q <sub>p</sub> (tsf)	Q <sub>u</sub> (tsf)	MC (%)	Dd (pcf)	REMARKS
12" Topsoil								
Dark Brown Silty Clay Loam (CL)	1	1-SS	13	4.0	5.6	23	94	Dry during and upon completion of drilling
Brown and Gray Silty Clay (CL)	3	2-SS	10	3.8	4.4	22	96	
END OF BORING @ 4 FEET								

Lines of Demarcation represent an approximate boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions.

SOIL BORING LOG

**MET Midwest Engineering and Testing, Inc.**

Project Name: Illinois State Police TIM Training Track  
Location: Pawnee, Illinois

Boring: B-1  
Project No.: C53129  
Date of Boring: October 28, 2025  
Field Representative: Jake Hedenberg

VISUAL SOIL CLASSIFICATION	FT.	SAMPLE NO.	N	Q <sub>p</sub> (tsf)	Q <sub>u</sub> (tsf)	MC (%)	Dd (pcf)	REMARKS
8" Topsoil								
Brown Silty Clay (CL)	1	1-SS	14	4.5+	8.8	24	91	
Brown and Gray Silty Loam (ML)	2	2-SS	8	4.5+	--	19	--	
Brown and gray Silty Clay (CL)	5	3-SS	7	1.0	1.3	28	91	
	4	4-SS	6	1.0	1.0	23	97	Dry during and upon completion of drilling
Brown Silty Clay (CL)	10	5-SS	5	0.5	1.3	24	99	
	6	6-SS	7	0.5	1.2	20	121	
Brown Clay (CL)	15	7-SS	6	0.3	0.7	23	97	
END OF BORING AT 16.5 FEET								

Lines of Demarcation represent an approximate boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions.

SOIL BORING LOG

**MET Midwest Engineering and Testing, Inc.**

Project Name: Illinois State Police TIM Training Track  
Location: Pawnee, Illinois

Boring: B-2  
Project No.: C53129  
Date of Boring: October 24, 2025  
Field Representative: Jake Hedenberg

VISUAL SOIL CLASSIFICATION	FT.	SAMPLE NO.	N	Q <sub>p</sub> (tsf)	Q <sub>u</sub> (tsf)	MC (%)	Dd (pcf)	REMARKS
8" Topsoil								
Brown and dark brown mixed Silty Clay Loam - Fill (CL)	1	1-AU	11	4.5+	--	13	--	Dry during and upon completion of drilling
Brown and Gray Clay (CL)	6	4-SS	6	0.3	0.6	31	88	
END OF BORING AT 8.0 FEET								

Lines of Demarcation represent an approximate boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions.

SOIL BORING LOG

**MET Midwest Engineering and Testing, Inc.**

Project Name: Illinois State Police TIM Training Track  
Location: Pawnee, Illinois

Boring: B-3  
Project No.: C53129  
Date of Boring: October 24, 2025  
Field Representative: Jake Hedenberg

VISUAL SOIL CLASSIFICATION	FT.	SAMPLE NO.	N	Q <sub>p</sub> (tsf)	Q <sub>u</sub> (tsf)	MC (%)	Dd (pcf)	REMARKS
7" Topsoil								
Dark brown Silty Clay Loam - Fill (CL)	1	1-AU	11	4.5+	5.1	19	95	Dry during and upon completion of drilling
Brown and gray Clay (CL-CH)	5	3-SS	5	0.5	0.7	33	88	
Gray Clay (CL)	7	4-SS	5	1.0	1.2	26	90	
END OF BORING AT 8.0 FEET								

Lines of Demarcation represent an approximate boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions.

SOIL BORING LOG

**MET Midwest Engineering and Testing, Inc.**

Project Name: Illinois State Police TIM Training Track  
Location: Pawnee, Illinois

Boring: B-4  
Project No.: C53129  
Date of Boring: October 24, 2025  
Field Representative: Jake Hedenberg

VISUAL SOIL CLASSIFICATION	FT.	SAMPLE NO.	N	Q <sub>p</sub> (tsf)	Q <sub>u</sub> (tsf)	MC (%)	Dd (pcf)	REMARKS
10" Topsoil								
Brown Silty Clay Loam - Fill (CL)	1	1-AU	9	4.5+	--	11	--	Dry during and upon completion of drilling
Brown and gray Silty Clay (CL)	4	3-SS	8	4.5+	--	12	--	
Brown Clay (CH)	7	4-SS	5	0.5	0.8	37	80	
END OF BORING AT 8.0 FEET								

Lines of Demarcation represent an approximate boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions.

USER NAME = RodrigoZ	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 01/30/26	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SOIL BORINGS

SCALE: SHEET 101 OF 131 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2510	TIM TRAINING TRACK 2026	SANGAMON	131	101
CONTRACT NO. 72N43				
ILLINOIS / FED. AID PROJECT				

SOIL BORING LOG

**MET Midwest Engineering and Testing, Inc.**

Project Name: Illinois State Police TIM Training Track  
Location: Pawnee, Illinois

Boring: B-5  
Project No.: C53129  
Date of Boring: October 28, 2025  
Field Representative: Zach Wilcoxon

VISUAL SOIL CLASSIFICATION	FT.	SAMPLE NO.	N	Q <sub>p</sub> (tsf)	Q <sub>u</sub> (tsf)	MC (%)	Dd (pcf)	REMARKS
10" Topsoil								Dry during and upon completion of drilling
Dark brown Silty Clay Loam (CL)	1	1-AU	10	3.0	1.0	23	89	
	2							
Brown Clay (CH)	3	2-SS	10	4.3	--	28	--	
	4							
Brown and Gray Silty Clay Loam (CL)	5	3-SS	8	1.3	1.2	24	81	
	6							
	7	4-SS	5	0.8	1.0	22	94	
	8							
END OF BORING AT 8.0 FEET								
	9							
	10							
	11							

Lines of Demarcation represent an approximate boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions.

SOIL BORING LOG

**MET Midwest Engineering and Testing, Inc.**

Project Name: Illinois State Police TIM Training Track  
Location: Pawnee, Illinois

Boring: B-6  
Project No.: C53129  
Date of Boring: October 24, 2025  
Field Representative: Jake Hedenberg

VISUAL SOIL CLASSIFICATION	FT.	SAMPLE NO.	N	Q <sub>p</sub> (tsf)	Q <sub>u</sub> (tsf)	MC (%)	Dd (pcf)	REMARKS
12" Topsoil		1-SS	11	4.5+	--	14	--	
Brown Silty Clay Loam - Fill (CL)		2-SS	9	2.0	--	25	--	
Dark Gray Silty Clay (CL)	5	3-SS	6	1.0	1.3	29	87	
		4-SS	6	0.5	0.8	30	84	Dry during and upon completion of drilling
Brown and Gray Silty Clay (CL)	10	5-SS	7	0.8	1.5	27	104	
		6-SS	6	1.0	1.2	25	94	
		7-SS	5	0.8	--	26	--	
Gray Silty Clay Loam - Till (CL)	15	8-SS	7	1.3	1.6	21	104	
END OF BORING AT 16.0 FEET								
	20							

Lines of Demarcation represent an approximate boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions.

SOIL BORING LOG

**MET Midwest Engineering and Testing, Inc.**

Project Name: Illinois State Police TIM Training Track  
Location: Pawnee, Illinois

Boring: B-7  
Project No.: C53129  
Date of Boring: October 29, 2025  
Field Representative: Jake Hedenberg

VISUAL SOIL CLASSIFICATION	FT.	SAMPLE NO.	N	Q <sub>p</sub> (tsf)	Q <sub>u</sub> (tsf)	MC (%)	Dd (pcf)	REMARKS
8" Topsoil								Dry during and upon completion of drilling
Brown and Gray Clay (CH)	1	1-AU	10	3.5	4.1	29	85	
	2							
	3	2-SS	8	3.0	4.3	28	86	
	4							
Brown and Gray Silty Clay (CL)	5	3-SS	11	1.3	1.2	25	83	
	6							
	7	4-SS	7	1.3	1.4	24	92	
	8							
END OF BORING AT 8.0 FEET								
	9							
	10							
	11							

Lines of Demarcation represent an approximate boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions.

SOIL BORING LOG

**MET Midwest Engineering and Testing, Inc.**

Project Name: Illinois State Police TIM Training Track  
Location: Pawnee, Illinois

Boring: B-8  
Project No.: C53129  
Date of Boring: October 24, 2025  
Field Representative: Jake Hedenberg

VISUAL SOIL CLASSIFICATION	FT.	SAMPLE NO.	N	Q <sub>p</sub> (tsf)	Q <sub>u</sub> (tsf)	MC (%)	Dd (pcf)	REMARKS
3" Topsoil								
Dark Brown Silty Clay Loam - Fill (CL)		1-SS	12	4.5+	--	16	--	
Dark Gray Clay - Fill (CL-CH)		2-SS	11	4.5+	8.2	19	101	
		3-SS	8	1.5	1.2	25	89	
Brown and Gray Silty Clay (CL)		4-SS	6	0.5	0.7	24	95	Dry during and upon completion of drilling
		5-SS	6	0.5	0.7	26	98	
		6-SS	7	1.0	1.5	22	103	
Brown Silty Clay Loam - Till (CL)		7-SS	4	--	--	--	--	
7-SS No Recovery								
		8-SS	4	0.3	0.6	17	109	
END OF BORING AT 16.0 FEET								
	20							

Lines of Demarcation represent an approximate boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions.

SOIL BORING LOG

**MET Midwest Engineering and Testing, Inc.**

Project Name: Illinois State Police TIM Training Track  
Location: Pawnee, Illinois

Boring: B-9  
Project No.: C53129  
Date of Boring: October 28, 2025  
Field Representative: Jake Hedenberg

VISUAL SOIL CLASSIFICATION	FT.	SAMPLE NO.	N	Q <sub>p</sub> (tsf)	Q <sub>u</sub> (tsf)	MC (%)	Dd (pcf)	REMARKS
8" Topsoil								
Dark Brown Silty Clay Loam (CL)		1-SS	11	4.5+	--	21	--	
Brown and Gray Silty Clay (CL)		2-SS	9	2.3	--	23	--	
Gray Silty Loam (ML)	5	3-SS	6	1.8	--	24	--	
Brown Silty Clay (CL)		4-SS	5	1.8	--	22	--	Dry during and upon completion of drilling
		5-SS	5	1.0	1.3	25	93	
Gray Clay (CL)		6-SS	5	0.8	1.3	26	108	
		7-SS	6	0.8	1.0	26	104	
Brown and Gray Silty Clay Loam - Till (CL)	15	8-SS	10	3.5	0.8	13	115	
END OF BORING AT 16.0 FEET								
	20							

Lines of Demarcation represent an approximate boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions.

SOIL BORING LOG

**MET Midwest Engineering and Testing, Inc.**

Project Name: Illinois State Police TIM Training Track  
Location: Pawnee, Illinois

Boring: B-10  
Project No.: C53129  
Date of Boring: October 28, 2025  
Field Representative: Jake Hedenberg

VISUAL SOIL CLASSIFICATION	FT.	SAMPLE NO.	N	Q <sub>p</sub> (tsf)	Q <sub>u</sub> (tsf)	MC (%)	Dd (pcf)	REMARKS
12" Topsoil		1-SS	9	4.5+	6.1	20	98	
Dark Brown Silty Clay Loam (CL)		2-SS	10	3.0	4.2	21	95	
Brown Silty Clay (CL)		3-SS	5	2.0	1.4	25	87	
Dark Gray Clay (CL)	5	4-SS	5	0.8	0.6	27	84	Dry during and upon completion of drilling
Gray Silty Clay (CL)		5-SS	6	0.8	1.1	25	93	
		6-SS	7	0.8	1.2	28	102	
Gray CLAY (CL-CH)		7-SS	5	1.0	1.3	24	95	
Gray Silty Clay Loam - Till	15	8-SS	9	1.0	1.0	21	97	
END OF BORING AT 16.0 FEET								
	20							

Lines of Demarcation represent an approximate boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions.

SOIL BORING LOG

**MET Midwest Engineering and Testing, Inc.**

Project Name: Illinois State Police TIM Training Track  
Location: Pawnee, Illinois

Boring: B-11  
Project No.: C53129  
Date of Boring: October 27, 2025  
Field Representative: Jake Hedenberg

VISUAL SOIL CLASSIFICATION	Feet	Sample No.	N	Q <sub>p</sub> (tsf)	Q <sub>u</sub> (tsf)	MC (%)	Dd (pcf)	Remarks
GROUND SURFACE ELEVATION:								
8" Topsoil								
Brown Silty Clay (CL)		1-AU	9	4.5+	--	21	--	
		2-SS	10	4.5+	--	21	--	
Brown and Gray Silty Clay (CL)	5	3-SS	9	1.3	1.8	25	91	
		4-SS	6	0.5	0.9	23	99	
		5-SS	7	1.0	1.4	26	112	
Brown and Gray Clay (CL)	10	6-SS	7	0.8	1.1	31	106	
		7-SS	6	0.3	0.5	21	130	
		8-SS	11	1.3	--	16	--	
Brown Loam - Till (CL)	20	9-SS	75	4.5+	8.5	8	155	▼ Drilling: 20 ft.
		10-SS	73	4.5+	--	8	--	
		11-SS	77	4.5+	--	8	--	
Brown and Gray Silty Clay Loam - Till (CL)	25	12-SS	59	4.5+	--	9	--	
		13-SS	71	4.5+	--	16	--	
Gray Silty Clay Loam - Till (CL)	30							
END OF BORING @ 31.5 FEET								

Lines of Demarcation represent an approximate boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions.

SOIL BORING LOG

**MET Midwest Engineering and Testing, Inc.**

Project Name: Illinois State Police TIM Training Track  
Location: Pawnee, Illinois

Boring: B-12  
Project No.: C53129  
Date of Boring: October 27, 2025  
Field Representative: Jake Hedenberg

VISUAL SOIL CLASSIFICATION	Feet	Sample No.	N	Q <sub>p</sub> (tsf)	Q <sub>u</sub> (tsf)	MC (%)	Dd (pcf)	Remarks
GROUND SURFACE ELEVATION:								
7" Topsoil								
Dark Brown Silty Clay Loam (CL)		1-AU	10	4.5+	6.5	21	96	
Brown Silty Clay (CL)		2-SS	9	4.0	4.5	22	92	
Brown and Gray Silty Clay (CL)	5	3-SS	10	1.5	1.6	26	90	
Brown Silty Clay (CL)		4-SS	7	1.0	1.5	26	88	
Gray Silty Clay (CL)		5-SS	5	0.8	1.1	24	102	
		6-SS	6	1.0	1.4	26	109	
Brown and Gray Silty Clay Loam - Till (CL)	15	7-SS	6	0.5	0.8	21	109	
		8-SS	10	1.0	--	16	--	
Brown Silty Clay Loam - Till (CL)	20	9-SS	54	4.5+	9.0	9	136	
		10-SS	71	4.5+	--	8	--	
Gray Silty Clay Loam - Till (CL)	25	11-SS	93	4.5+	--	7	--	▼ Drilling: 25 ft.
		12-SS	55	4.5+	0.0	10	--	
		13-SS	41	4.5+	6.8	15	117	
END OF BORING @ 31.5 FEET								

Lines of Demarcation represent an approximate boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions.

USER NAME	= RodrigoZ	DESIGNED	-	REVISED	-
		DRAWN	-	REVISED	-
		CHECKED	-	REVISED	-
PLOT DATE	01/30/26	DATE	-	REVISED	-

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SOIL BORINGS

SCALE: SHEET 102 OF 131 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2510	TIM TRAINING TRACK 2026	SANGAMON	131	102
CONTRACT NO. 72N43				
ILLINOIS / FED. AID PROJECT				

SOIL BORING LOG

Project Name: Illinois State Police TIM Training Track  
Location: Pawnee, Illinois

**MET** Midwest Engineering and Testing, Inc.

Boring: B-13  
Project No.: C53129  
Date of Boring: October 27, 2025  
Field Representative: Jake Hedenberg

VISUAL SOIL CLASSIFICATION	Feet	Sample No.	N	Q <sub>p</sub> (tsf)	Q <sub>u</sub> (tsf)	MC (%)	Dd (pcf)	REMARKS
GROUND SURFACE ELEVATION: 7" Topsoil								
Dark Brown Silty Clay Loam (CL)		1-AU	11	3.5	4.4	22	94	
		2-SS	13	4.5+	--	20	--	
	5	3-SS	8	1.0	--	25	--	
Brown and Gray Silty Clay (CL)		4-SS	5	2.0	1.9	24	91	
	10	5-SS	5	0.5	0.8	28	89	
		6-SS	5	0.8	1.2	25	97	
	15	7-SS	7	1.3	1.6	18	109	
Brown Silty Clay Loam - Till		8-SS	9	1.0	--	15	--	
	20	9-SS	50/5"	4.5+	--	7	--	
		10-SS	63	4.5+	--	8	--	
Gray Silty Clay Loam - Till		11-SS	73	4.5+	--	7	--	▼ Drilling: 25 ft.
	25	12-SS	42	4.5+	--	10	--	
	30	13-SS	20	4.5+	--	15	--	
END OF BORING @ 31.5 FEET								

Lines of Demarcation represent an approximate boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions.

SOIL BORING LOG

Project Name: Illinois State Police TIM Training Track  
Location: Pawnee, Illinois

**MET** Midwest Engineering and Testing, Inc.

Boring: B-16  
Project No.: C53129  
Date of Boring: October 25, 2025  
Field Representative: Jake Hedenberg

VISUAL SOIL CLASSIFICATION	FT.	SAMPLE NO.	N	Q <sub>p</sub> (tsf)	Q <sub>u</sub> (tsf)	MC (%)	Dd (pcf)	REMARKS
Ground Surface Elevation: 12" Topsoil								
Dark brown Silty Clay Loam (CL)		1-SS	8	4.5+	--	21	--	
		2-SS	9	3.5	--	21	--	
	5	3-SS	7	2.5	1.6	24	94	
Gray Silty Clay (CL)		4-SS	4	0.5	0.8	24	95	
	10	5-SS	5	1.3	1.4	24	96	Dry during and upon completion of drilling
		6-SS	7	1.8	2.0	18	103	
Brown and Gray Silty Clay Loam - Till (CL)		7-SS	5	1.0	--	20	--	
	15	8-SS	9	1.8	--	21	--	
		9-SS	91	4.5+	--	7	--	
Gray Silty Clay Loam - Till (CL)								
END OF BORING AT 21.5 FEET								

Lines of Demarcation represent an approximate boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions.

SOIL BORING LOG

Project Name: Illinois State Police TIM Training Track  
Location: Pawnee, Illinois

**MET** Midwest Engineering and Testing, Inc.

Boring: B-14  
Project No.: C53129  
Date of Boring: October 28, 2025  
Field Representative: Jake Hedenberg

VISUAL SOIL CLASSIFICATION	FT.	SAMPLE NO.	N	Q <sub>p</sub> (tsf)	Q <sub>u</sub> (tsf)	MC (%)	Dd (pcf)	REMARKS
GROUND SURFACE ELEVATION: 7" Topsoil								
Dark Brown Silty Clay Loam (CL)		1-SS	11	4.5+	9.0	18	101	
		2-SS	13	4.5+	6.6	17	102	
	5	3-SS	10	3.5	2.8	16	95	
Brown and Gray Silty Clay (CL)		4-SS	9	4.5+	3.2	16	95	Dry during and upon completion of drilling
	10	5-SS	6	0.5	1.0	25	94	
Gray Clay (CL)		6-SS	9	1.3	1.6	21	100	
	15	7-SS	5	1.0	1.3	23	93	
Brown and Gray Silty Clay Loam - Till (CL)								
END OF BORING AT 16.5 FEET								

Lines of Demarcation represent an approximate boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions.

SOIL BORING LOG

Project Name: Illinois State Police TIM Training Track  
Location: Pawnee, Illinois

**MET** Midwest Engineering and Testing, Inc.

Boring: B-17  
Project No.: C53129  
Date of Boring: October 25, 2025  
Field Representative: Jake Hedenberg

VISUAL SOIL CLASSIFICATION	FT.	SAMPLE NO.	N	Q <sub>p</sub> (tsf)	Q <sub>u</sub> (tsf)	MC (%)	Dd (pcf)	REMARKS
Ground Surface Elevation: 8" Topsoil								
		1-SS	12	4.5+	--	26	--	
Brown Silty Clay (CL)		2-SS	10	2.5	--	26	--	
	5	3-SS	7	1.5	--	28	--	
Brown and Gray Silty Clay (CL)		4-SS	6	0.8	--	21	--	Dry during and upon completion of drilling
	10	5-SS	4	0.8	--	22	--	
Brown Clay (CL)		6-SS	5	1.0	1.5	24	102	
	15	7-SS	2	0.0	--	15	--	
Brown Clay Loam (CL)		8-SS	8	1.5	--	22	--	
	20	9-SS	94	2.8	--	12	--	
Brown Silty Clay Loam - Till								
END OF BORING AT 21.5 FEET								

Lines of Demarcation represent an approximate boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions.

SOIL BORING LOG

Project Name: Illinois State Police TIM Training Track  
Location: Pawnee, Illinois

**MET** Midwest Engineering and Testing, Inc.

Boring: B-15  
Project No.: C53129  
Date of Boring: October 28, 2025  
Field Representative: Jake Hedenberg

VISUAL SOIL CLASSIFICATION	FT.	SAMPLE NO.	N	Q <sub>p</sub> (tsf)	Q <sub>u</sub> (tsf)	MC (%)	Dd (pcf)	REMARKS
GROUND SURFACE ELEVATION: 10" Topsoil								
Brown Silty Clay (CL)		1-SS	12	4.5+	--	18	--	
		2-SS	13	4.0	--	17	--	
	5	3-SS	9	2.3	--	21	--	
Gray Silty Loam (ML)		4-SS	6	0.5	0.9	26	96	Dry during and upon completion of drilling
	10	5-SS	5	0.8	1.0	24	96	
Gray Clay (CL)		6-SS	7	0.5	0.9	24	99	
	15	7-SS	6	0.5	0.8	24	93	
END OF BORING AT 16.5 FEET								

Lines of Demarcation represent an approximate boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions.

SOIL BORING LOG

Project Name: Illinois State Police TIM Training Track  
Location: Pawnee, Illinois

**MET** Midwest Engineering and Testing, Inc.

Boring: B-18  
Project No.: C53129  
Date of Boring: October 29, 2025  
Field Representative: Jake Hedenberg

VISUAL SOIL CLASSIFICATION	FT.	SAMPLE NO.	N	Q <sub>p</sub> (tsf)	Q <sub>u</sub> (tsf)	MC (%)	Dd (pcf)	REMARKS
GROUND SURFACE ELEVATION: 12" Topsoil								
		1-AU	9	3.3	4.7	22	96	Dry during and upon completion of drilling
Dark Brown Silty Clay Loam (CL)		2-SS	9	2.8	--	22	--	
	5	3-SS	6	1.5	1.4	25	88	
Brown and Gray Silty Clay (CL)		4-SS	5	0.5	0.8	27	91	
	10							
Gray Clay (CL)								
END OF BORING AT 8.0 FEET								

Lines of Demarcation represent an approximate boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions.

USER NAME = RodrigoZ	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 01/30/26	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SOIL BORINGS

SCALE: SHEET 103 OF 131 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2510	TIM TRAINING TRACK 2026	SANGAMON	131	103
CONTRACT NO. 72N43				
ILLINOIS FED. AID PROJECT				

SOIL BORING LOG

Project Name: Illinois State Police TIM Training Track  
 Location: Pawnee, Illinois

**MET** Midwest Engineering and Testing, Inc.

Boring: B-19  
 Project No.: C53129  
 Date of Boring: October 29, 2025  
 Field Representative: Jake Hedenberg

FT.	SAMPLE NO.	N	Q <sub>p</sub> (tsf)	Q <sub>u</sub> (tsf)	MC (%)	Dd (pcf)	REMARKS
0							9" Topsoil
1	1-AU	13	4.0	5.5	23	92	Dark Brown Silty Clay Loam (CL) Dry during and upon completion of drilling
2							
3	2-SS	10	3.3	5.3	20	97	Brown and Gray Silty Clay (CL)
4							
5	3-SS	7	1.3	1.2	25	96	
6							
7	4-SS	6	0.5	0.9	28	88	
8							END OF BORING AT 8.0 FEET
9							
10							
11							

Lines of Demarcation represent an approximate boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions.

SOIL BORING LOG

Project Name: Illinois State Police TIM Training Track  
 Location: Pawnee, Illinois

**MET** Midwest Engineering and Testing, Inc.

Boring: B-20  
 Project No.: C53129  
 Date of Boring: October 29, 2025  
 Field Representative: Jake Hedenberg

FT.	SAMPLE NO.	N	Q <sub>p</sub> (tsf)	Q <sub>u</sub> (tsf)	MC (%)	Dd (pcf)	REMARKS
0							8" Topsoil
1	1-AU	10	4.0	--	21	--	Dark Brown Silty Clay Loam (CL) Dry during and upon completion of drilling
2							
3	2-SS	7	2.3	--	24	--	Brown and Gray Silty Clay (CL)
4							
5	3-SS	7	1.8	2.4	25	93	Gray Silt Loam (ML)
6							
7	4-SS	7	1.3	1.4	23	98	Gray Clay (CL)
8							END OF BORING AT 8.0 FEET
9							
10							
11							

Lines of Demarcation represent an approximate boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions.

SOIL BORING LOG

Project Name: Illinois State Police TIM Training Track  
 Location: Pawnee, Illinois

**MET** Midwest Engineering and Testing, Inc.

Boring: B-21  
 Project No.: C53129  
 Date of Boring: October 29, 2025  
 Field Representative: Jake Hedenberg

FT.	SAMPLE NO.	N	Q <sub>p</sub> (tsf)	Q <sub>u</sub> (tsf)	MC (%)	Dd (pcf)	REMARKS
0							12" Topsoil
1	1-AU	10	3.3	5.0	23	95	Dark Brown Silty Clay Loam (CL) Dry during and upon completion of drilling
2							
3	2-SS	9	2.5	3.5	24	93	Brown and Gray Silty Clay (CL)
4							
5	3-SS	9	1.5	1.8	24	97	Gray Silt Loam (ML)
6							
7	4-SS	6	1.0	--	24	--	
8							END OF BORING AT 8.0 FEET
9							
10							
11							

Lines of Demarcation represent an approximate boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions.

SOIL BORING LOG

Project Name: Illinois State Police TIM Training Track  
 Location: Pawnee, Illinois

**MET** Midwest Engineering and Testing, Inc.

Boring: B-22  
 Project No.: C53129  
 Date of Boring: October 29, 2025  
 Field Representative: Jake Hedenberg

FT.	SAMPLE NO.	N	Q <sub>p</sub> (tsf)	Q <sub>u</sub> (tsf)	MC (%)	Dd (pcf)	REMARKS
0							10" Topsoil
1	1-AU	10	3.8	4.0	21	96	Dark Brown Silty Clay Loam (CL) Dry during and upon completion of drilling
2							
3	2-SS	8	1.3	--	24	--	Brown and Gray Silty Clay (CL)
4							
5	3-SS	6	1.5	--	25	--	Gray Silty Loam (ML)
6							
7	4-SS	3	0.3	0.4	35	94	Gray CLAY (CH)
8							END OF BORING AT 8.0 FEET
9							
10							
11							

Lines of Demarcation represent an approximate boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions.

SOIL BORING LOG

Project Name: Illinois State Police TIM Training Track  
 Location: Pawnee, Illinois

**MET** Midwest Engineering and Testing, Inc.

Boring: B-23  
 Project No.: C53129  
 Date of Boring: October 29, 2025  
 Field Representative: Jake Hedenberg

FT.	SAMPLE NO.	N	Q <sub>p</sub> (tsf)	Q <sub>u</sub> (tsf)	MC (%)	Dd (pcf)	REMARKS
0							9" Topsoil
1	1-AU	10	4.5+	7.4	18	99	Dark Brown Silty Clay Loam (CL) Dry during and upon completion of drilling
2							
3	2-SS	8	3.0	3.0	23	92	Brown and Gray Silty Clay (CL)
4							
5	3-SS	5	2.0	1.6	23	93	
6							
7	4-SS	6	1.0	--	24	--	
8							END OF BORING AT 8.0 FEET
9							
10							
11							

Lines of Demarcation represent an approximate boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions.

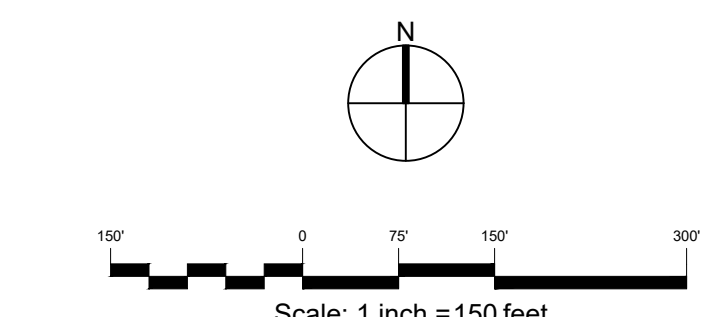
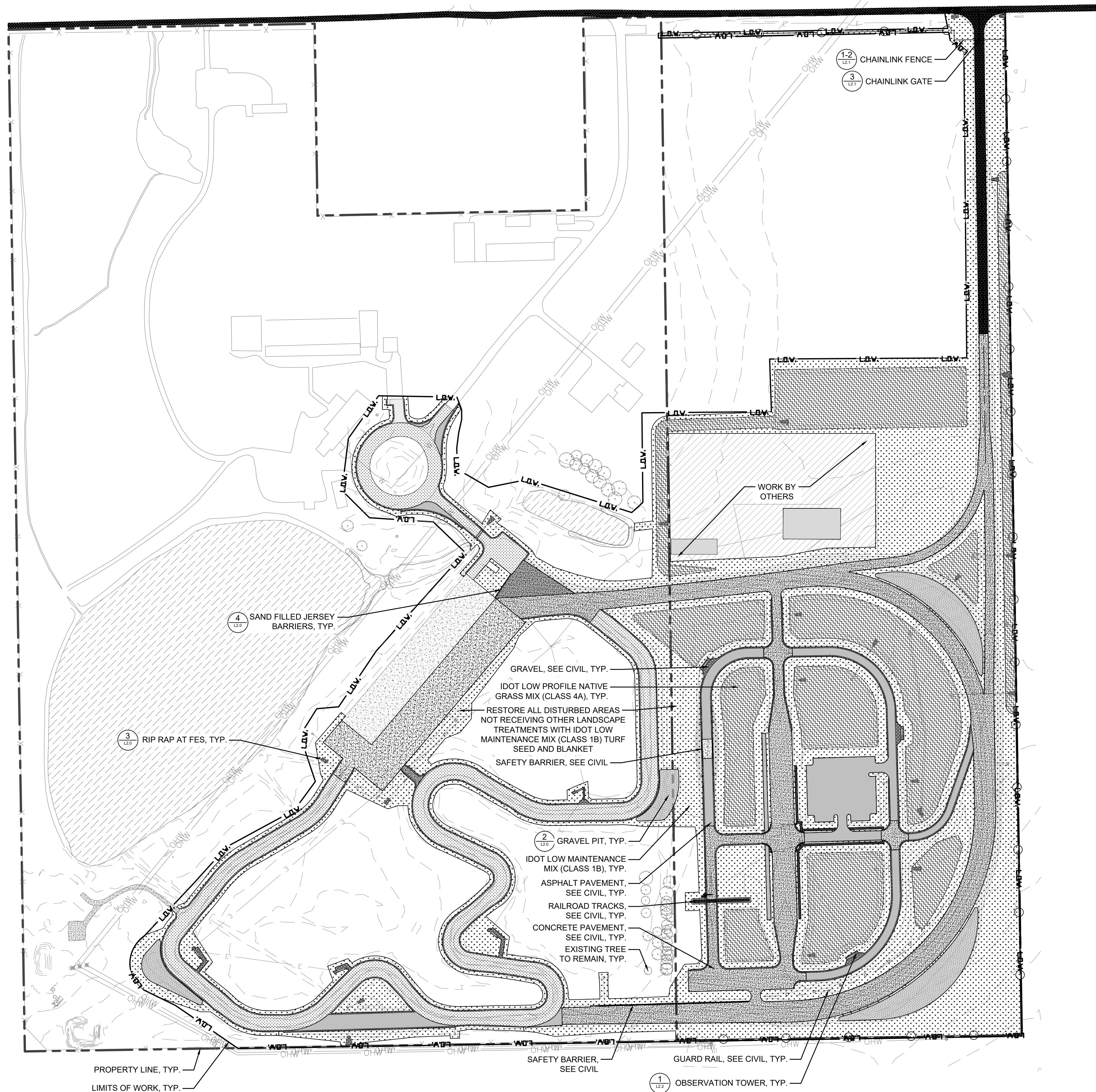
USER NAME = RodrigoZ	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 01/30/26	DATE -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

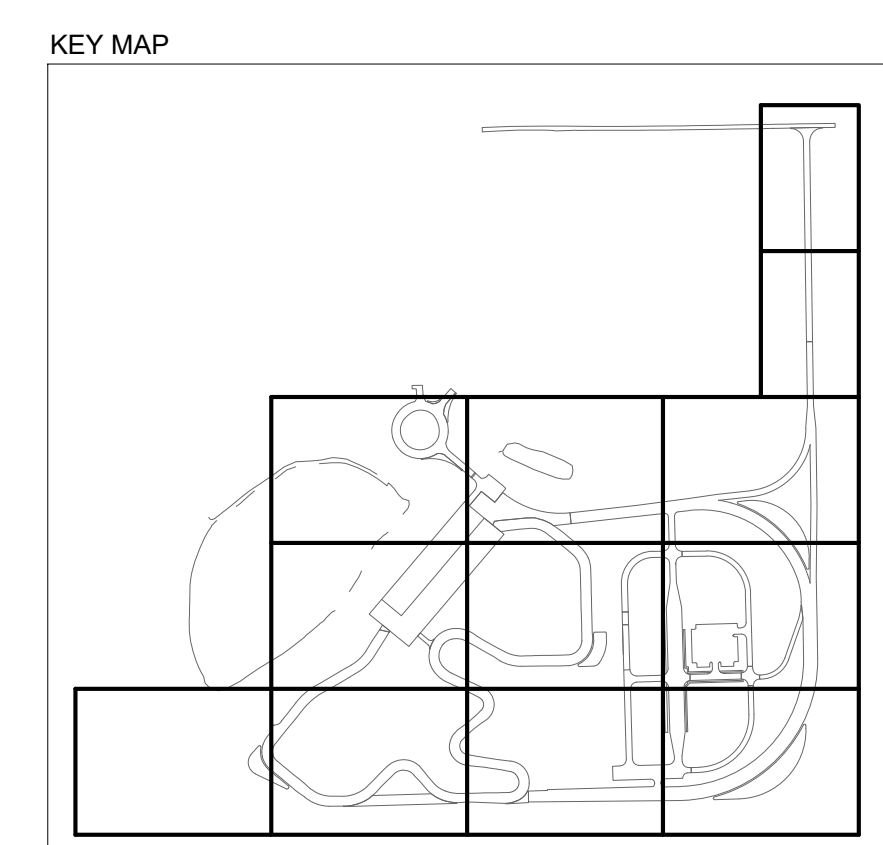
SOIL BORINGS

SCALE: SHEET 104 OF 131 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2510	TIM TRAINING TRACK 2026	SANGAMON	131	104
CONTRACT NO. 72N43				
ILLINOIS FED. AID PROJECT				



- LEGEND:**
- PROPERTY LINE
  - L.O.V. --- LIMITS OF WORK
  - [Pattern] CONCRETE PAVEMENT AND BASE
  - [Pattern] CONCRETE WALK AND BASE
  - [Pattern] ASPHALT PAVEMENT AND BASE
  - [Pattern] GRAVEL SHOULDER
  - [Pattern] GRAVEL PIT AREA
  - [Pattern] 1.5" ASPHALT SURFACE COURSE
  - CHAIN LINK FENCE
  - GUARD RAIL
  - RAILROAD TRACKS
  - CHIP AND OIL AND BASE
  - [Pattern] FUTURE GRAVEL PARKING AREA
  - [Pattern] RIP RAP AT FES
  - [Pattern] IDOT LOW MAINTENANCE MIX (CLASS 1B)
  - [Pattern] IDOT LOW MAINTENANCE NATIVE GRASS MIX (CLASS 4A)
  - WATER FILLED BARRIERS
  - OBSERVATION TOWER



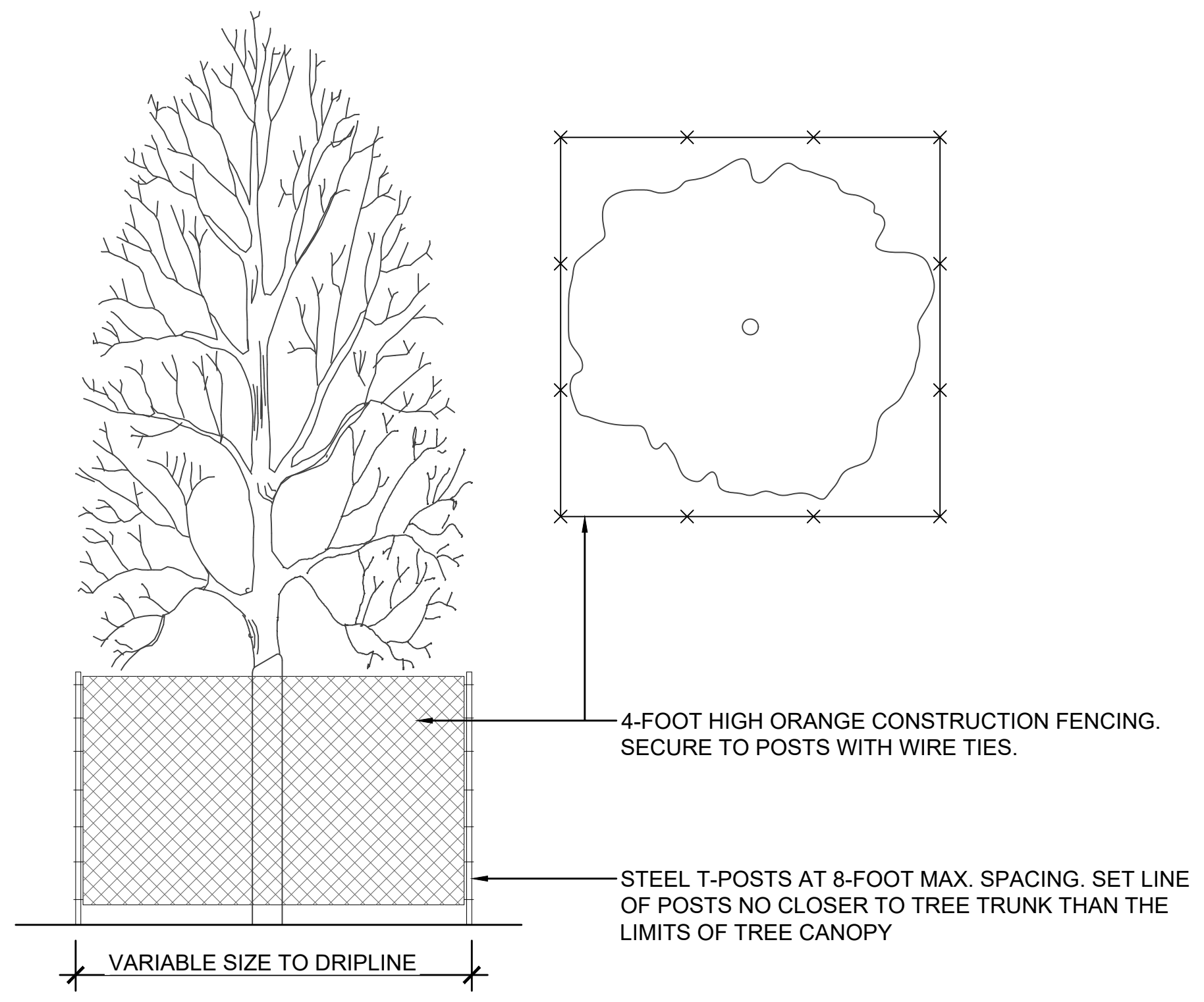
USER NAME = KatharineS	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 01/30/26	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**LANDSCAPE PLAN**

SCALE: 1" = 150'-0" SHEET 105 OF 131 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2510	TIM TRAINING TRACK 2026	SANGAMON	131	105
CONTRACT NO. 72N43				
ILLINOIS FED. AID PROJECT				

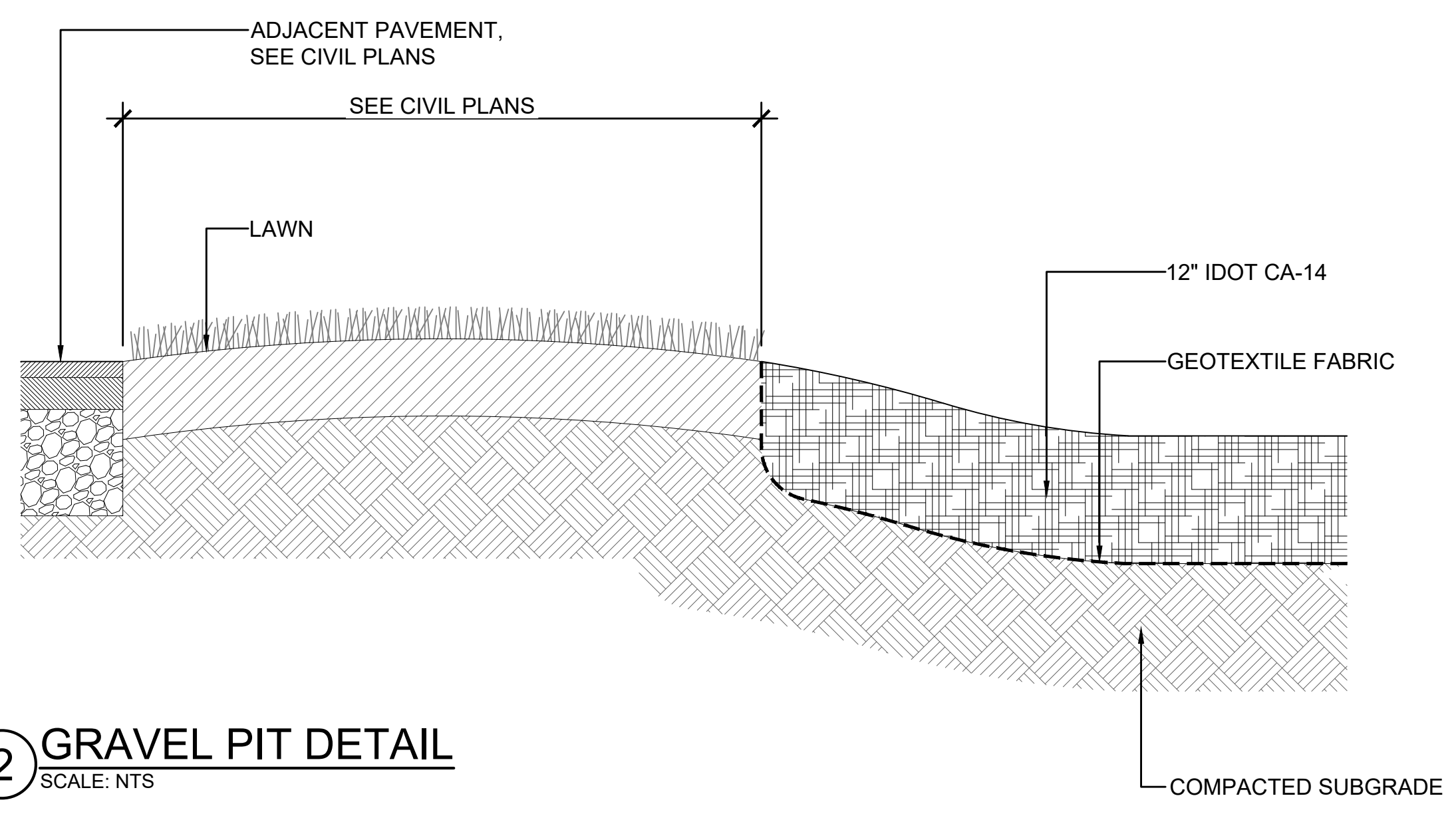


TREE PROTECTION FENCE SHALL REMAIN IN PLACE THROUGHOUT THE DURATION OF CONSTRUCTION AND SHALL BE REMOVED ONLY BY PERMISSION OF THE OWNER. CONTRACTOR SHALL NOT STORE ANY MATERIALS OR EQUIPMENT WITHIN TREE PROTECTION ZONE.

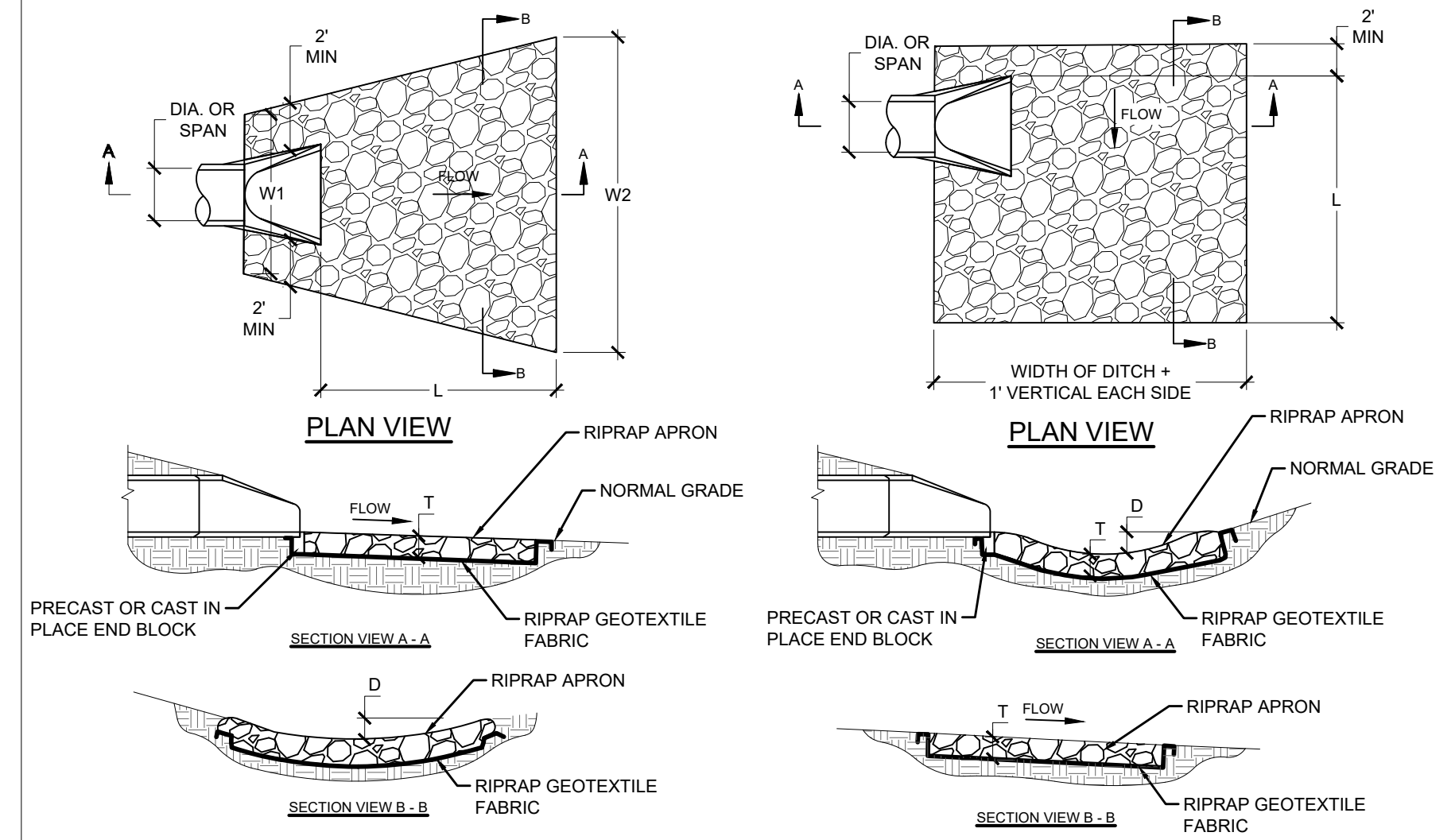
MULTIPLE TREES MAY BE ENCLOSED BY A SINGLE FENCE LINE PROVIDED FENCE INCLUDES LIMITS OF TREE CANOPY.

SEE REMOVAL PLANS FOR LOCATIONS.

**1 TREE PROTECTION DETAIL**  
SCALE: 1/2" = 1'-0"

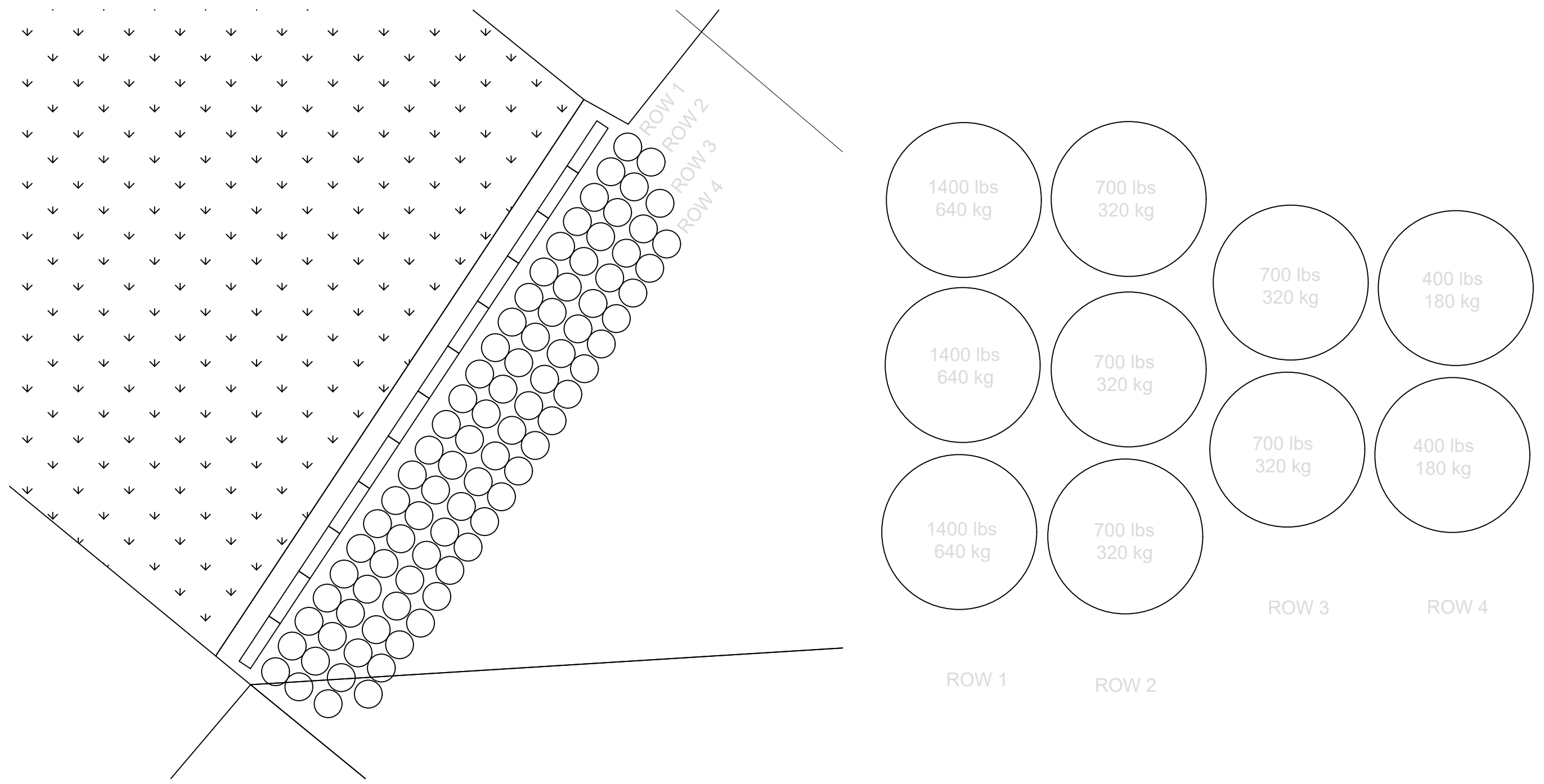


**2 GRAVEL PIT DETAIL**  
SCALE: NTS



DIA. OF ROUND INLET PIPE (in)	IDOT RIPRAP GRADATION (RR)	RIPRAP BED THICKNESS (in)	APRON LENGTH (ft)	APRON WIDTH UPSTREAM (ft)	APRON WIDTH DOWNSTREAM (ft)	DEPTH BELOW NORMAL GRADE
12	RR-3	15.0	12.0	5.0	11.0	6.0
15	RR-3	15.0	14.0	5.0	12.0	6.0
18	RR-3	15.0	16.0	5.5	13.5	7.0
24	RR-4	15.0	20.0	6.0	16.0	10.0
30	RR-4	20.0	22.0	6.0	17.0	11.0
36	RR-4	20.0	24.0	7.0	19.0	11.0

**3 RIP RAP PROTECTION AT OUTFALL DETAIL**  
SCALE: NTS



**4 SAND BARREL GUARDRAIL PROTECTION DETAIL**  
SCALE: NTS

USER NAME = MeganS	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 01/30/26	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

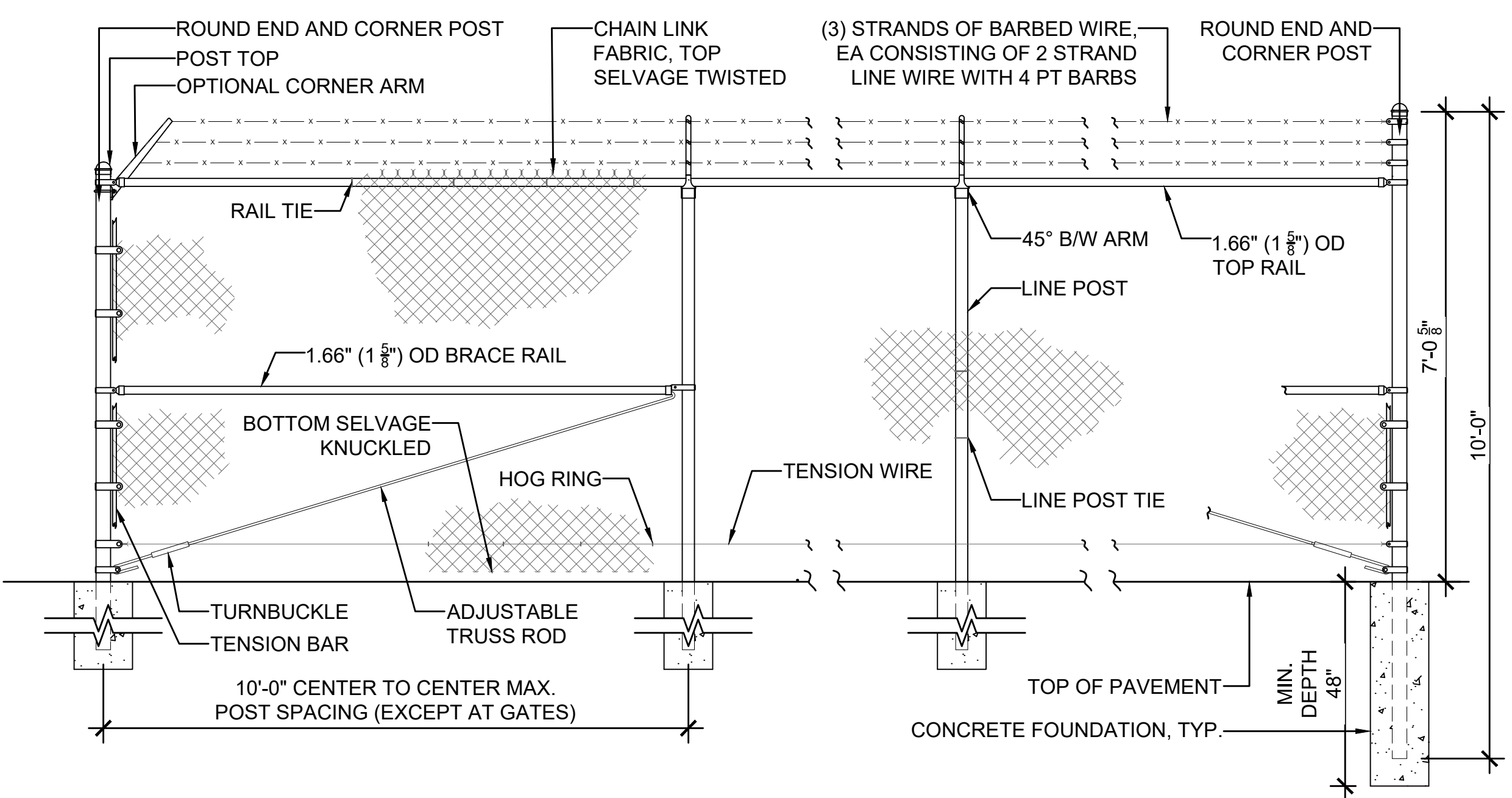
**LANDSCAPE DETAILS**

SCALE: NTS SHEET 106 OF 131 SHEETS STA. TO STA.

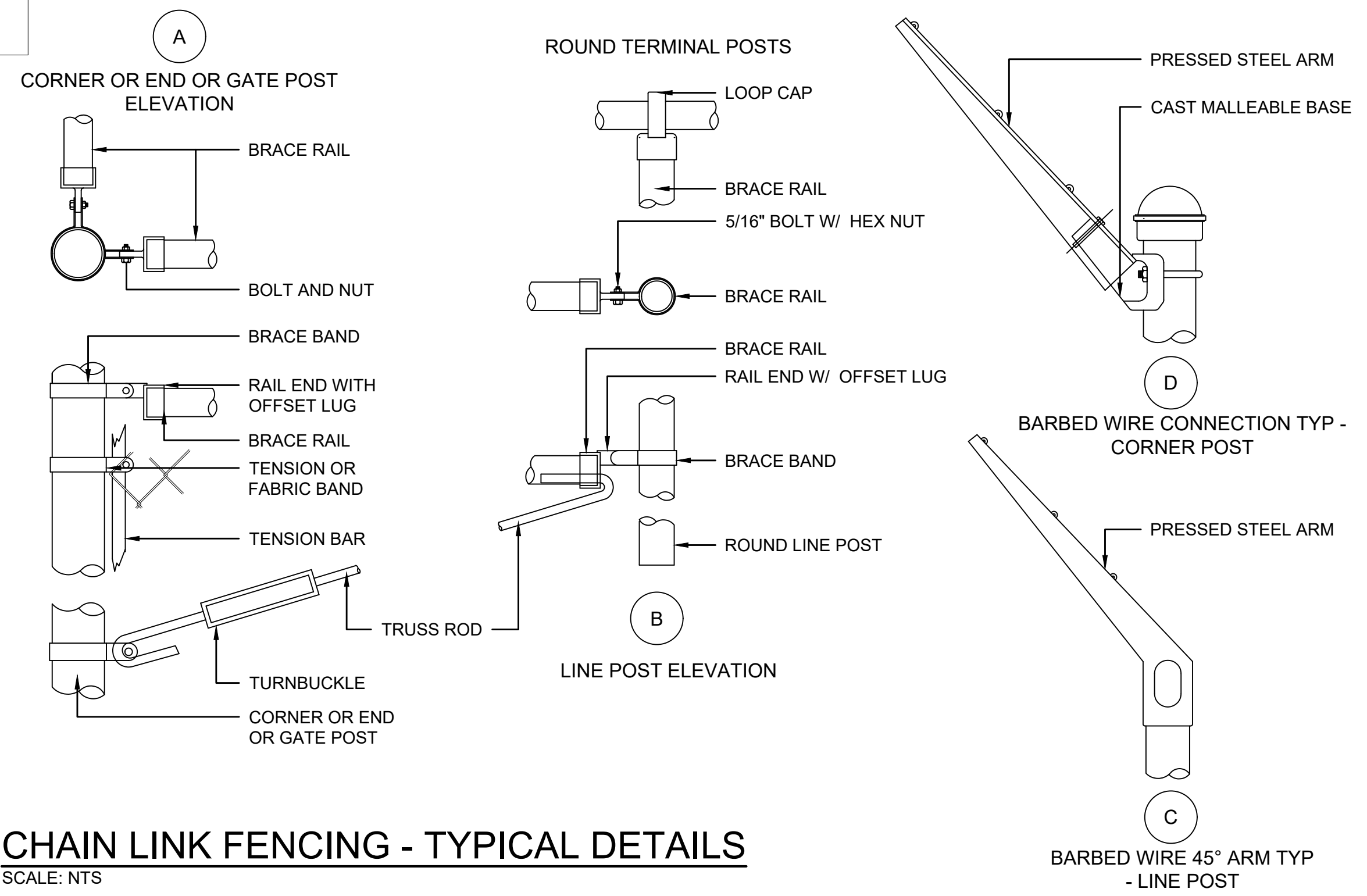
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2510	TIM TRAINING TRACK 2026	SANGAMON	131	106
CONTRACT NO. 72N43				
ILLINOIS FED. AID PROJECT				

FENCE SCHEDULE									
HEIGHT NOM.	FABRIC	TERMINAL/CORNER POSTS & FOOTING DEPTHS	LINE POSTS & FOOTING DEPTHS	GATE POSTS	LINE POST SPACING	TOP / BOTTOM RAIL	CENTER AND BRACE RAIL	TRUSS RODS W/ TURNBUCKLE	BOTTOM TENSION WIRE
6'-0"	9 GA., 2" MESH	3" DIA., 4'-0" DEPTH	2-1/2" DIA., 4'-0" DEPTH	6" DIA., 5'-0" DEPTH	10'-0" O.C.	1-5/8" DIA.	1-5/8" DIA. AT CORNER & TERMINAL PANELS ONLY	CORNERS ONLY	9 GA.

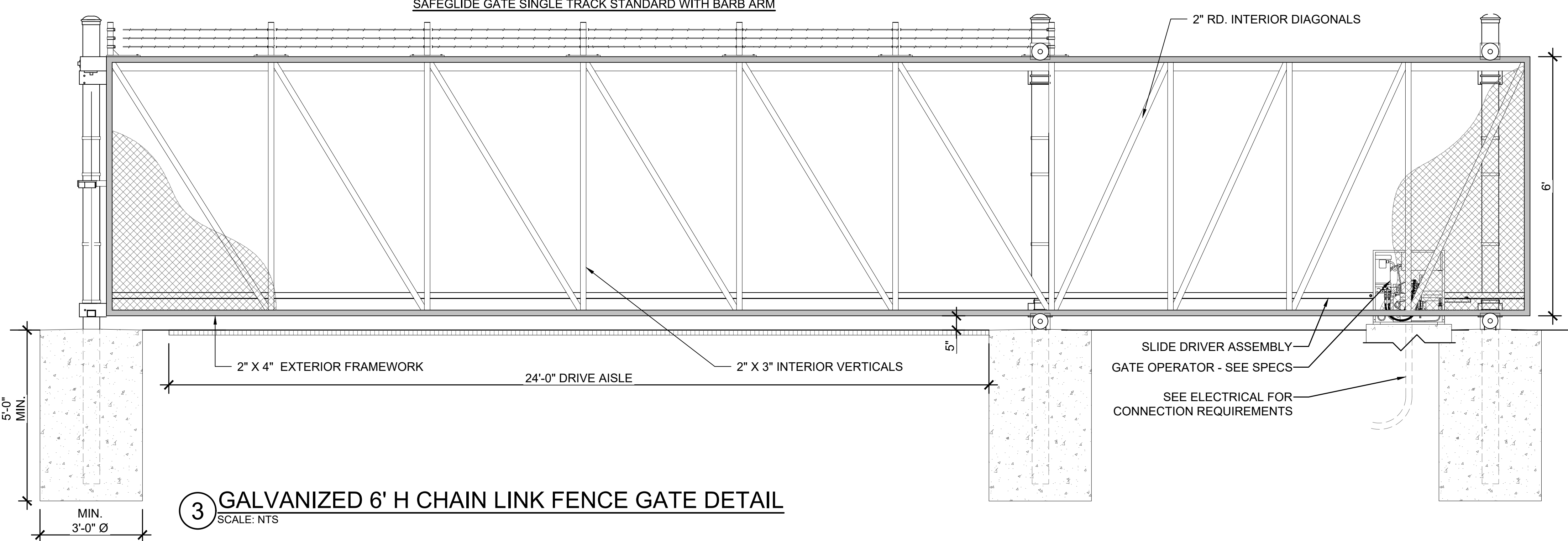
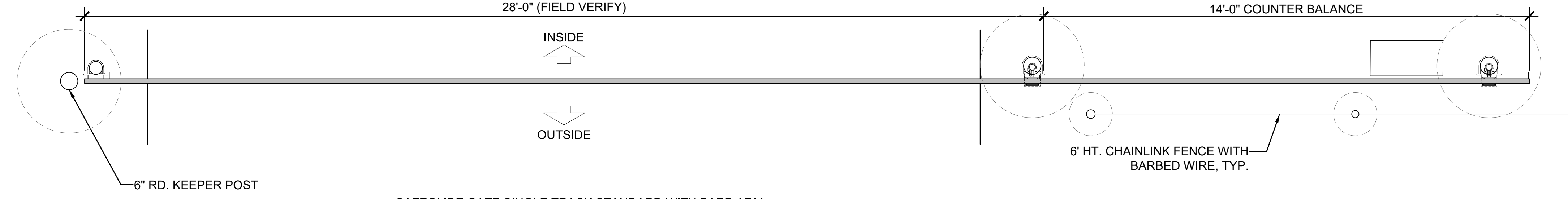
NOTE:  
BARBED WIRE IS TO FACE INTERIOR TO THE SITE



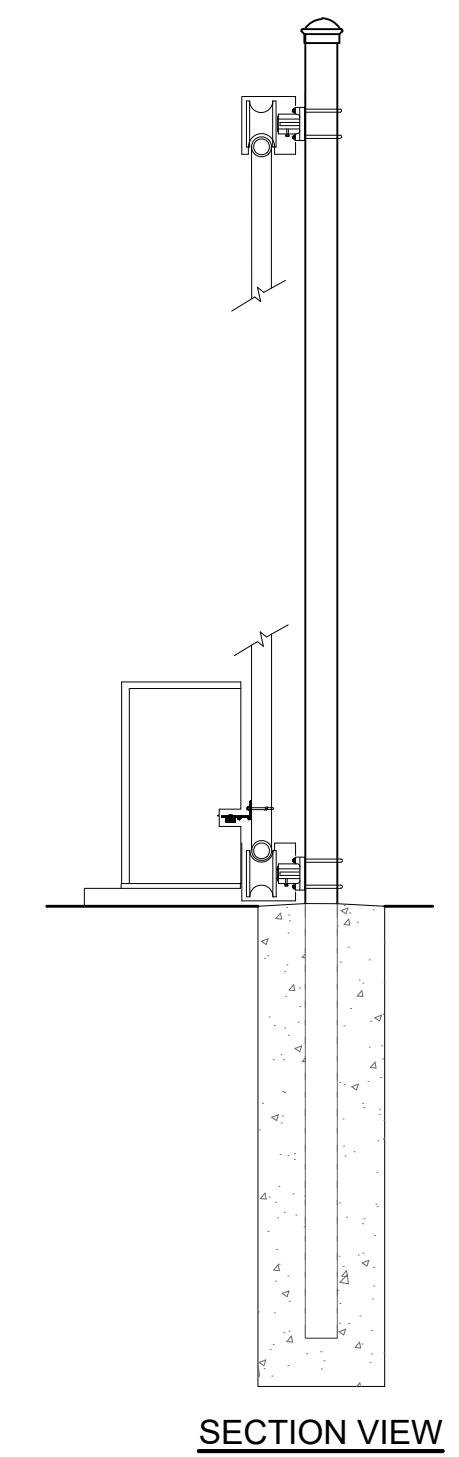
**1 GALVANIZED 6' H CHAIN LINK FENCE WITH BARBED WIRE DETAIL**  
SCALE: NTS



**2 CHAIN LINK FENCING - TYPICAL DETAILS**  
SCALE: NTS



**3 GALVANIZED 6' H CHAIN LINK FENCE GATE DETAIL**  
SCALE: NTS



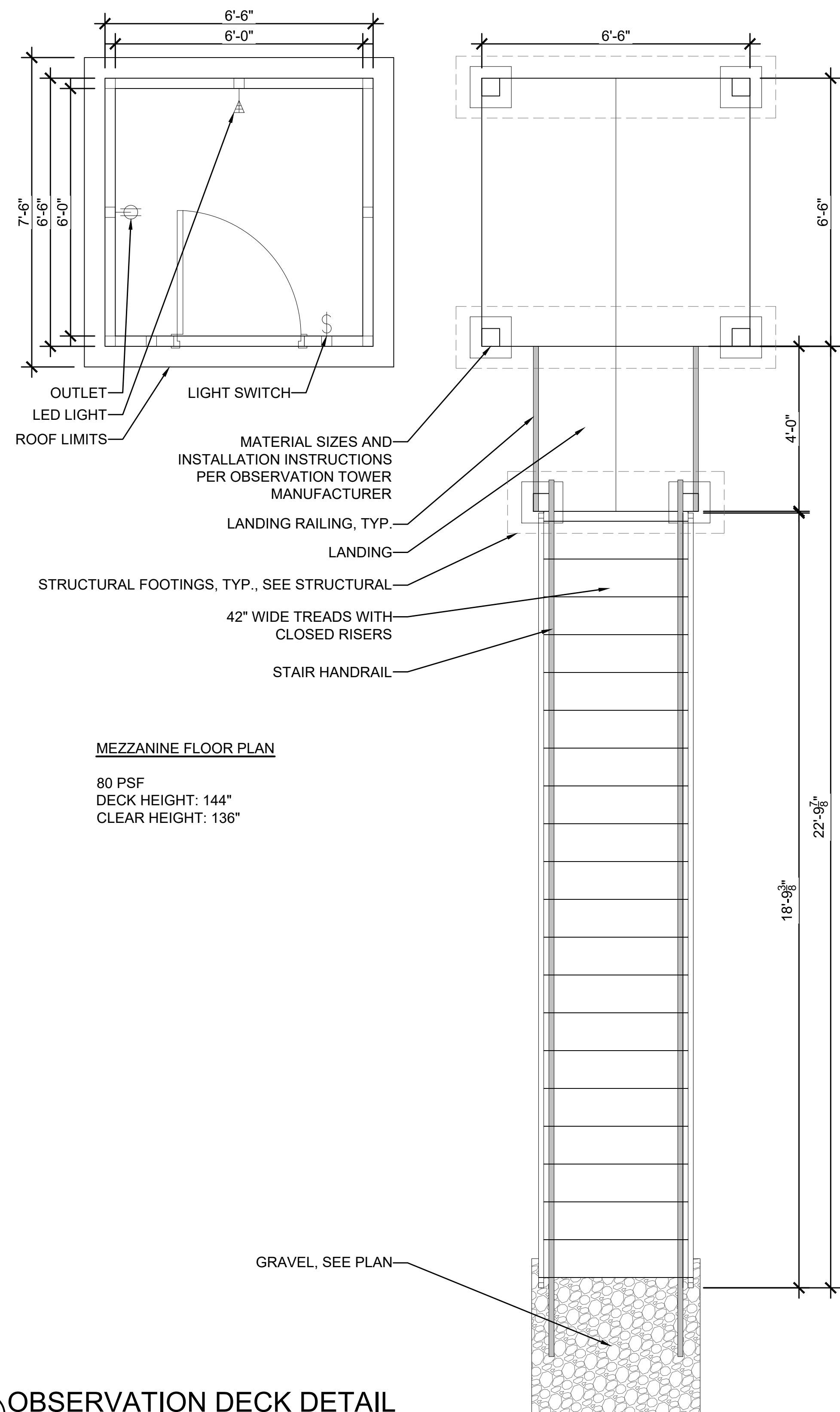
USER NAME = MeganS	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 01/30/26	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**FENCE DETAILS**

SCALE: NTS SHEET 107 OF 131 SHEETS STA. TO STA.

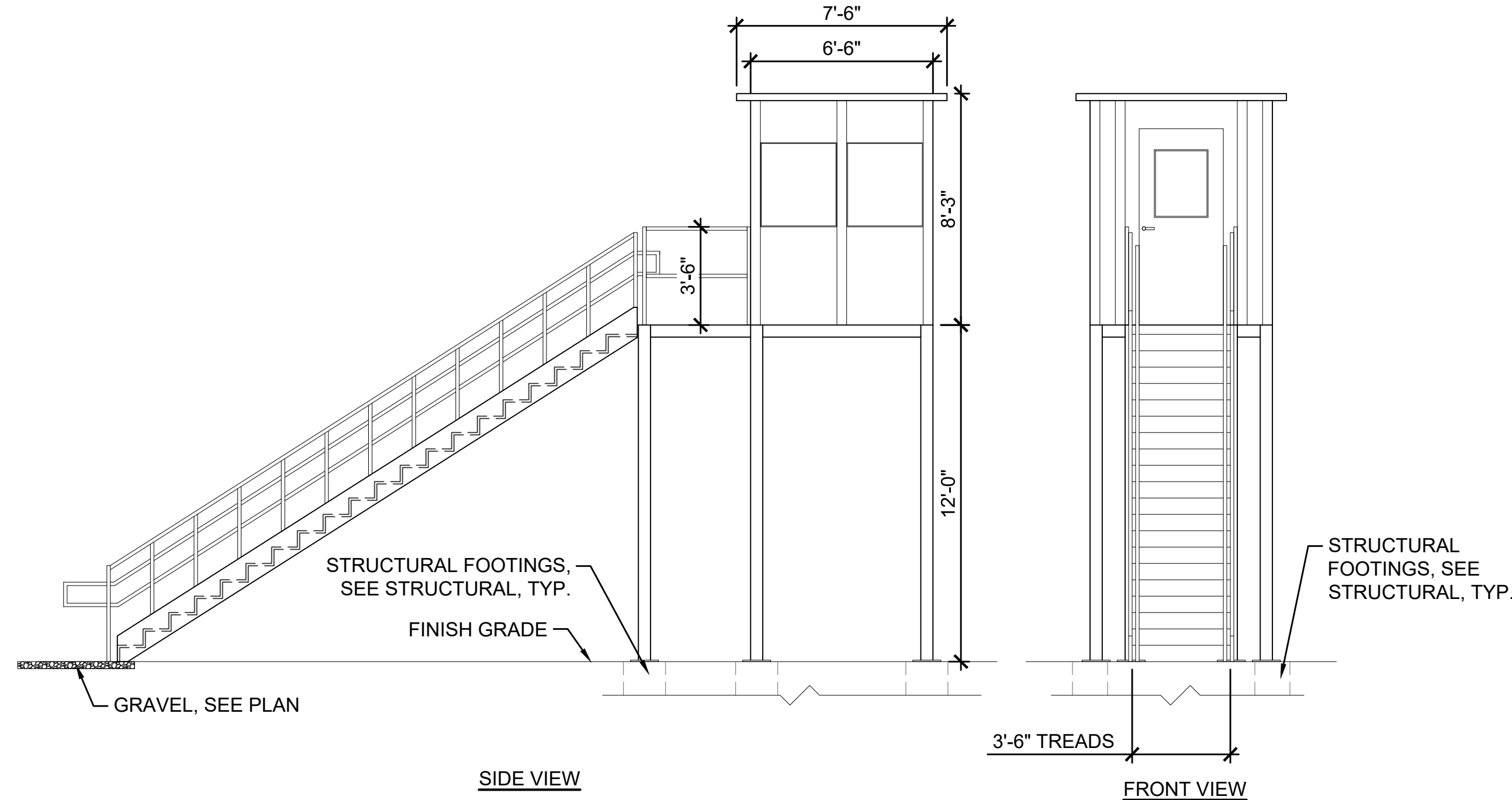
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2510	TIM TRAINING TRACK 2026	SANGAMON	131	107
CONTRACT NO. 72N43				
ILLINOIS FED. AID PROJECT				



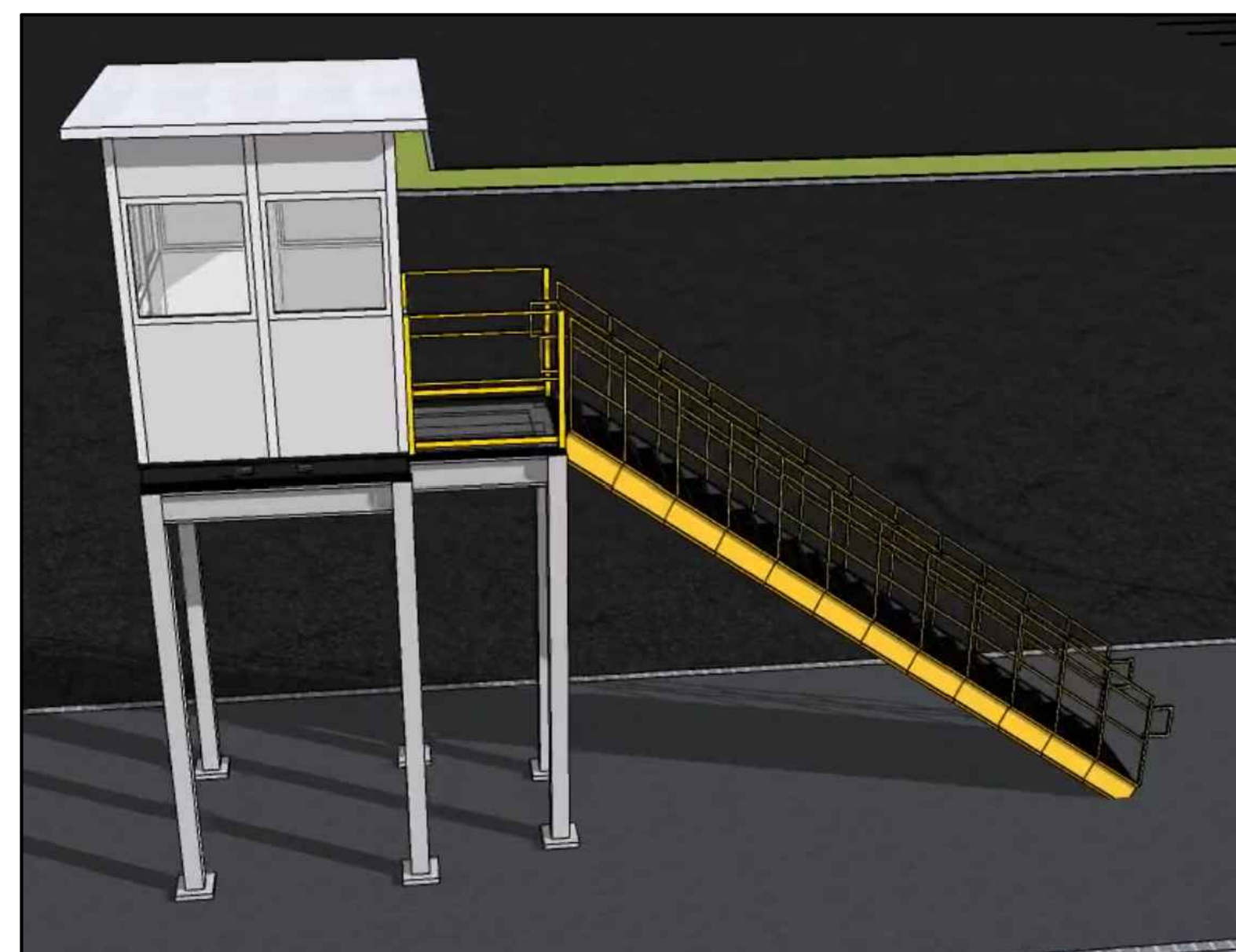
**1 OBSERVATION DECK DETAIL**  
SCALE: 1/2" = 1'-0"

**MEZZANINE FLOOR PLAN**

80 PSF  
DECK HEIGHT: 144"  
CLEAR HEIGHT: 136"



**2 OBSERVATION DECK ELEVATIONS**  
SCALE: 1/4" = 1'-0"



**3 OBSERVATION DECK IMAGES**  
SCALE: NTS

6' X 6' FACTORY ASSEMBLY EXTERIOR BUILDING ON TOP OF MEZZANINE

(SIZES OF MATERIALS MAY VARY PER OBSERVATION TOWER MANUFACTURER. DEVIATION FROM THESE MINIMUM SIZES SHALL BE APPROVED BY ENGINEER PRIOR TO PURCHASE.)

Observation tower product shall meet all required IBC 2021 and any local code requirements. Contractor to submit sign and sealed structural drawings for review during the submittal process.

**CLASS A EXTERIOR WALLS STEEL BOTH SIDES OF WALL (S/S): 24 LF @ 8 FEET TALL**  
The walls shall be 3" thick composite sandwich panels. The outside and inside facings shall be 24-gauge galvanized smooth steel pre-painted white and laminated to the core. Every 4" will have an aluminum extruded binder post with a snap cover to house all the electrical components. All binder posts, window trim, and doors are painted to match the wall covering.

**ONE POUND DENSITY POLYSTYRENE CORE:**  
The polystyrene core shall have the following minimum mechanical properties:  
Shear strength (flatwise) 18-22 PSI, Shear Modulus (flatwise) 280 - 320 PSI. The water absorption rate shall be less than 4%; STC Value: 32, R-Value: 11

**QUICK SHIP ROOF - 1/4:12 PITCH PANELIZED SHED ROOF W/ 3" OVERHANG:**  
The roof shall be 3" thick composite sandwich panels. Both sides shall be stucco-embossed aluminum pre-painted white. The core shall be of 1 lb. density polystyrene foam. The entire panel shall be laminated together using a solvent-free two-part polyurethane adhesive and pressure. The panels shall have formed edge connectors that are capable of being friction locked without mechanical fasteners using a full-length joint without through metal connectors. The joint shall allow lateral expansion and contraction.

**DOORS - 20 GAUGE INSULATED STEEL WITH 1/2 GLASS:**  
The door shall be 36" w X 84" h X 1 3/4" thick and shall be constructed of painted 20-gauge hot dipped galvanized steel, mill treated for proper paint adherence. The door shall have a top and bottom channel of 16-gauge steel projection welded to door skins on no less than 2" centers. The top channel is to be flush while the bottom channel is to be inverted. The hinge preparations are to be 9-gauge steel reinforcements projection welded to the door skins in six places each. Hinge preparation shall be cut through the doors and provided with reversible filler plates to allow building site handling. Standard hinge preparation shall be 4-1/2" regular weight, 134" hinge, conforming to ANSI A1567, three preparations. The door frame shall be 16 gauge single "rabbit" commercial quality steel. The frame shall be pre-mortised for application of matching hinges and striker set of the door. The door shall be supplied with all necessary hardware to meet local and state code requirements. The door shall be fabricated as to include 1/4" tempered safety glass in the upper half. The window shall measure approximately 23" w X 29" h. Each door includes a sweep, threshold, satin chrome lever set, weather-stripping and closer. All lever sets are keyed alike.

**WINDOWS - EXTERIOR PICTURE WINDOW: 6 EACH**  
Viewable area of picture windows shall be nominal +/- 3/8" wide X 3' high. Viewable height of picture window shall be 42" above finished floor. A window will be glazed with 1/4" clear tempered glass and shall be an integral part of the wall panel. The window shall be non-opening, and the entire window frame shall be painted by AAMA Specification 603.8.

**SURFACE MOUNTED ELECTRICAL:**  
The electrical package shall consist of #12 Ga. Min copper wiring in 1/2" EMT, surface mounted and attached to surface-mounted electrical handy boxes at receptacle and switch locations. There shall be (1) wall switch, (1) duplex receptacles, and (1) LED fixture.

**PRE-WIRE THE RECEPTACLE, LIGHT, AND SWITCH WITH LOAD CENTER ATTACHED TO THE BUILDING. FINAL TIE-IN AND DATA/COMMUNICATIONS ARE BY OTHERS.** Load Center / Panelboard shall be surface mounted.

**SURFACE MOUNT LED LIGHT FIXTURE: 1 EACH**  
The 110-volt 1x4 LED style light troffers with a wraparound lens are coupled with high-efficiency drivers to provide extended life with 70% LED lumen maintenance and 50,000 hours of service. They are designed to be surface mounted. No bulbs are needed.

**125 AMP SINGLE PHASE 120/240 Volt 8 SPACE MAIN LUG LOAD CENTER GE TLM812SCUDP:**  
The electrical service shall include an indoor load center of sufficient amperage and circuit capacity to handle all lighting loads, and receptacles. NOTE: The entire electrical system for the modular building shall be by the National Electrical Code and shall meet all N.E.C. requirements.

**FLOORING - 3" TALL STEEL FORK LIFTABLE BASE: 1 EACH**  
The finished floor shall be a 1/8" diamond plate over a structural steel base with 3x3 steel tubes. The base will include a 4" tube bolted at each corner for forklift access. These need to be removed before anchoring the base to the existing concrete surface. The entire base shall be painted black.

**INSULATED BASE:**  
R19 insulation shall be installed between the perimeter frame and floor joists, and a sheet of .040 aluminum shall be mechanically fastened to the underside of the steel base to act as a weather shield and protect it from vermin.

**MEZZANINE STRUCTURE AND LOAD RATING: 80 PSF - L / 360**  
**CLEAR HEIGHT: 135" DECK HEIGHT: 144"**  
The mezzanine floor support and loading shall consist of square columns with plates as bases. The perimeter and intermediate support beams shall be structural beams. Joists shall consist of properly sized bar joists.

**1" BAR GRATING: 69 SQUARE FEET**  
Decking shall be composed of 1" thick 19w4 welded bar grating. The material shall be painted shop coat black. Bar grating shall be attached with saddle clamps and tek screws.

**STAIR SYSTEMS & HANDRAILS - IBC STAIR SYSTEM:**  
Application - The stairs listed below meet the standards for USE GROUPS with occupancies of 50 or less people.

Treads shall be 42" min. wide with closed risers. Tread rise shall be a maximum of 7" and tread run shall be a minimum of 11". Tread material is to be bar grate. Stair railing shall be constructed of 1 1/2" vertical posts and 1 1/2" horizontal tubes designed to meet building code loading requirements. Stair railing members shall be spaced to allow a sphere no larger than 4" diameter to pass through any opening. Landings shall be sized appropriately to meet code requirements. The landing floor is to be constructed of bar grate. Landing railing shall be constructed of 1 1/2" vertical posts and 1 1/2" horizontal tubes. Landing railings shall be spaced to allow a sphere no larger than 4" diameter to pass through any opening. All landing railing shall include a 4" tall toe plate. All stairs, railings, and handrails to meet all code requirements.

**IBC HANDRAILS:**  
Application - The handrail listed below meet the standards for the USE GROUPS with occupancies of 50 or less people.  
The handrail shall consist of 1-1/2" tubular uprights with 1-1/2" tubular cross members. Handrail shall meet all code requirements. Handrail shall include a 4" tall, 14 Ga. Steel, kick plate.

**FASTENERS:**  
All wedge anchors, bolts, nuts, washers, and screws shall be supplied with the system. No additional fasteners will be needed to complete the structure.

**FINISH:**  
All structural beams, columns, landings, rails and gates are powder coated in a standard color. Bar joists are primed gray and are not powder coated. All handrails shall be painted safety yellow.

USER NAME = MeganS	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 01/30/26	DATE -	REVISED -

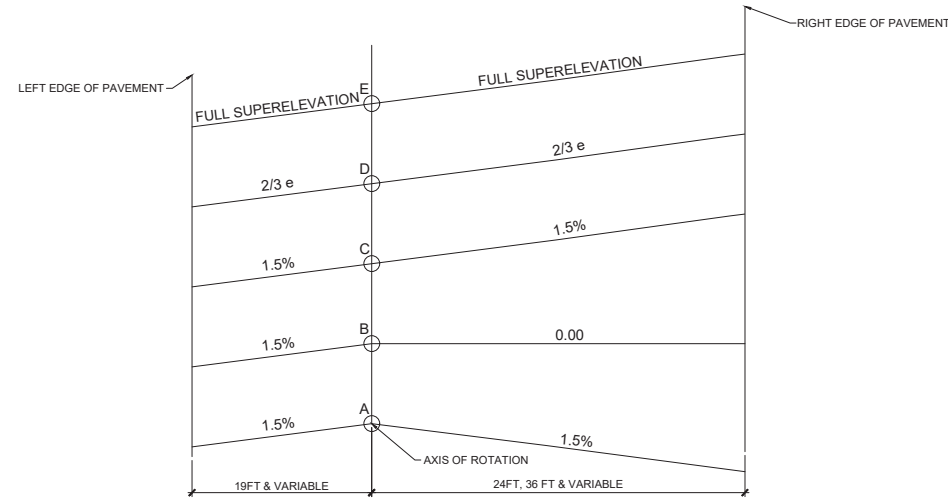
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**OBSERVATION TOWER DETAILS**

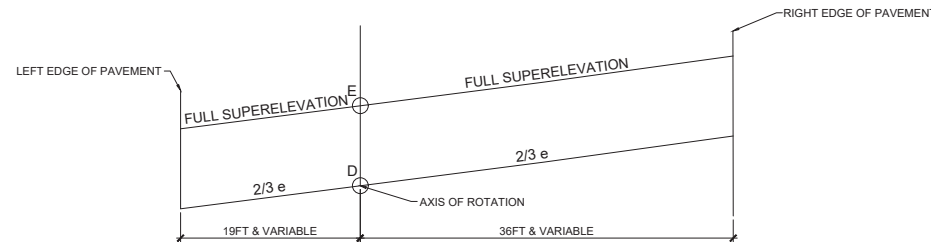
SCALE: NTS SHEET 108 OF 131 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2510	TIM TRAINING TRACK 2026	SANGAMON	131	108
CONTRACT NO. 72N43				
ILLINOIS FED. AID PROJECT				

**TYPICAL CROSS SECTION - S.E. TRANSITION  
HIGH SPEED TRACK, STA 104+00 TO 107+00, 122+00 TO 125+00**

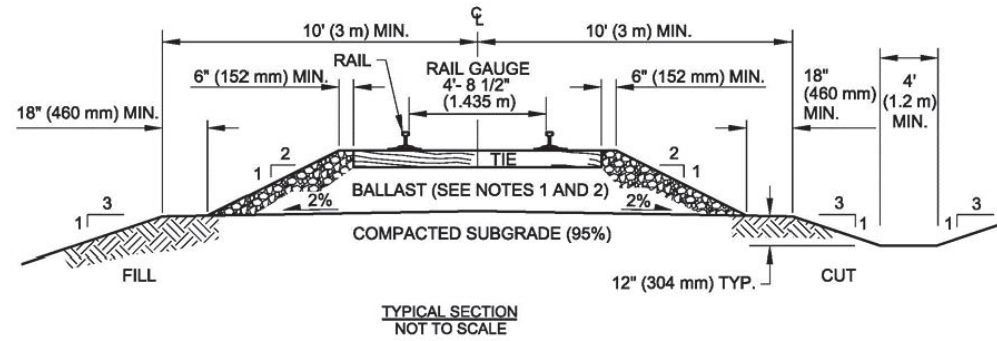


**TYPICAL CROSS SECTION - S.E. TRANSITION  
HIGH SPEED TRACK, STA 113+00 TO 117+00**

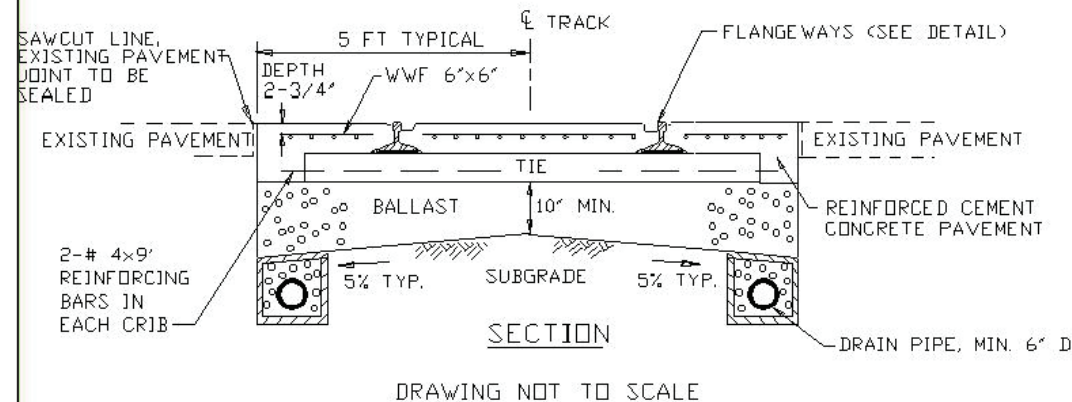
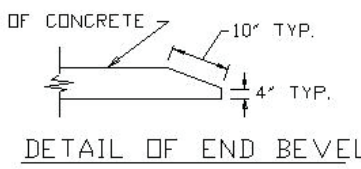
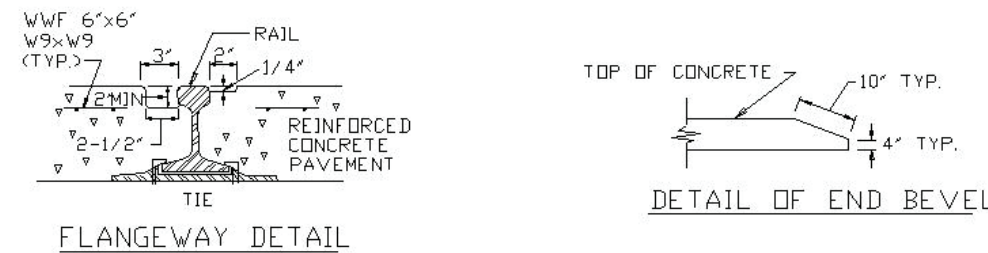
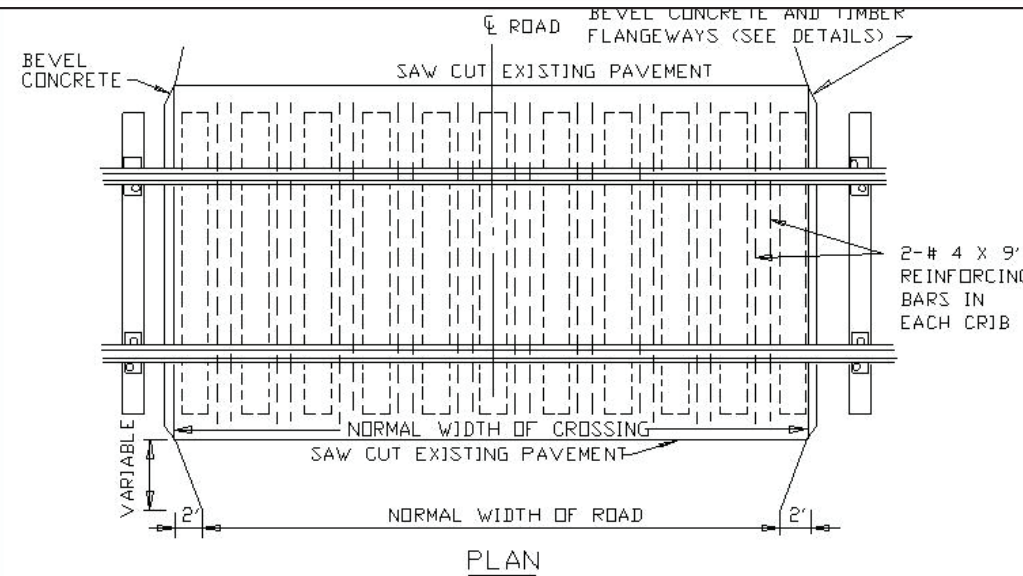


CURVE NO.	TABLE OF SUPERELEVATION BREAK POINT LOCATIONS						STA. 113+00 TO STA. 117+00	
	e	A	B	C	D	E	D	E
C5	8%	STA. 104+33	STA. 104+73	STA. 105+13	STA. 106+15	STA. 106+85	STA. 113+50	STA. 113+00
C6	8%	STA. 124+80	STA. 124+40	STA. 124+00	STA. 122+97	STA. 122+27	STA. 115+50	STA. 117+00

**1 SUPERELEVATION SECTION DETAIL  
SCALE: NTS**



- NOTES:**
1. DEPTH OF BALLAST WILL DEPEND ON SUBGRADE STRENGTH, TRAFFIC DENSITY, AND WHEEL LOADS. USE RECOMMENDED STRUCTURAL ANALYSIS TO DETERMINE APPROPRIATE DEPTH FOR EACH SITE.
  2. MINIMUM BALLAST THICKNESS IS 8 INCHES (203 MM) BELOW BOTTOM OF TIE.
  3. CUT OR FILL ACCORDING TO LOCAL CONDITIONS.



- RAILROAD CONSTRUCTION NOTES:**
1. TOP BALLAST SHALL BE CA-6 WITH A MINIMUM THICKNESS OF 8-INCHES BELOW THE BOTTOM OF TIE. BALLAST SHALL BE FILLED BETWEEN TIES FLUSH WITH THE TOP OF TIE.
  2. THE SUBGRADE SHALL BE EXCAVATED AND SCARIFIED FOR UNIFORMITY TO A DEPTH OF 12-INCHES OR AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER. THE EXCAVATION SHALL THEN BE WIND-ROWED AND BLADED TO ACHIEVE ADEQUATE BLENDING. ANY UNSUITABLE AREAS OR AREAS FAILING THE PROOF ROLLING SHALL BE REMOVED AND REPLACED AS UNSUITABLE MATERIAL.
  3. RAILROAD TIES SHALL BE HARDWOOD WITH A 60/40 CREOSOTE-COAL TAR PRESERVATIVE TREATMENT AS SPECIFIED IN AWPA STANDARD P2. TIES MAY BE 6-INCH BY 8-INCH OR 7-INCH BY 9-INCH. TIES SHALL BE EITHER 8.5 FEET OR 9 FEET LONG. SPACING SHALL BE 22-INCHES MINIMUM MEASURED CENTER TO CENTER. TIES SHALL BE SELECTED FOR LONGEVITY AND SHALL INCLUDE NAIL PLATE ANTI-SPLIT DEVICES ON EACH END.
  4. EVERY TIE SHALL BE TAMPED AND SHALL HAVE TWO FULL INSERTIONS OF THE TAMPING HEADS DURING THE SURFACING OPERATION.
  5. NEW RAIL SECTIONS SHALL BE USED. RELAY (USED) RAIL SHALL NOT BE ALLOWED. NEW RAIL SHALL MEET ONE OF THE FOLLOWING STANDARD SECTIONS: 115RE, 132RE OR 136RE. ALL RAIL SHALL BE OF THE SAME STANDARD.
  6. RAILROAD TRACK SECTIONS SHALL EXTEND A MINIMUM OF 90 FEET EAST OF THE EDGE OF PAVEMENT. THIS LENGTH SHALL ACCOMMODATE A 70-FOOT RAIL CAR AND ASSOCIATED SAFETY EQUIPMENT AND CAPSTAN SYSTEM WHILE MAINTAINING A MINIMUM RAILCAR SETBACK OF 10 FEET FROM THE EDGE OF PAVEMENT.
  7. RAILS MAY BE THERMITE WELDED OR MECHANICALLY FASTENED FOLLOWING STANDARD RAIL PROCEDURES. NO MECHANICALLY FASTENED JOINTS SHALL BE ALLOWED IN THE ROADWAY CROSSING AND SHALL BE LOCATED A MINIMUM OF 5 FEET FROM THE EDGE OF PAVEMENT. THERMITE WELDING SHALL BE PERFORMED BY PERSONNEL TRAINED AND CERTIFIED IN THE SAFE USE OF THE APPROPRIATE EQUIPMENT AND PROCEDURES FOR WELDING RAIL.
  8. IF JOINT BARS ARE USED RAILS SHALL BE GAPPED BASED ON THE OUTSIDE TEMPERATURE DURING INSTALLATION. STANDARD THERMOMETERS FOR MEASURING RAIL TEMPERATURE SHALL BE USED AND LAID CLOSE TO THE WEB ON THE RAIL BASE SHADED FROM THE SUN AND LEFT LONG ENOUGH TO ACCURATELY RECORD TEMPERATURE.
    - A. OVER 85 DEGREES - NO GAP
    - B. BETWEEN 66 AND 85 DEGREES FAHRENHEIT - 0.625 INCHES
    - C. BETWEEN 46 AND 65 DEGREES FAHRENHEIT - 0.125 INCHES
    - D. BETWEEN 26 AND 45 DEGREES FAHRENHEIT - 0.1875 INCHES
  9. JOINT BARS SHALL BE NEW AND CONFORM WITH AREMA CHAPTER 4, PART 2. JOINT BAR ASSEMBLIES SHALL CONFORM WITH AREMA CHAPTER 4, PART 1. FOUR-HOLE OR SIX-HOLE JOINT BARS MAY BE USED. TRACK BOLTS, NUTS, AND SPRING WASHERS SHALL CONFORM WITH AREMA CHAPTER 4, PARTS 1 AND 2. BOLT DIAMETERS SHALL BE SELECTED TO MEET THE APPROPRIATE RAIL WEIGHT AND SHALL BE NO SMALLER THAN 3/8-INCH AND NEED NOT BE LARGER THAN 1-1/8-INCH.
  10. RAIL PLATES MAY BE SINGLE OR DOUBLE SHOULDER AND MUST BE IN GOOD CONDITION (NOT BENT, CORRODED, OR OTHERWISE UNSUITABLE). ALL PLATES MUST BE OF THE SAME CANT (SLOPE) AND SHALL BE OF AN APPROPRIATE SIZE FOR THE RAIL. ALL PLATES SHALL HAVE THE CANTED SURFACE NO LARGER THAN 1/8-INCH OF THE RAIL BASE.
  11. FOUR (4) RAIL SPIKES SHALL BE USED ON EACH TIE. ONE SPIKE ON THE GAUGE AND ONE ON THE FIELD SIDE OF EACH RAIL SHALL BE USED.
  12. RAIL ANCHORS SHALL BE USED FOR THE ENTIRE LENGTH OF THE RAIL WITHIN THE ROADWAY CROSSING. EVERY THIRD TIE SHALL BE BOX ANCHORED STARTING FROM THE EDGE OF PAVEMENT FOR THE REMAINDER OF THE RAIL.
  13. PRIOR TO TAMPING INSPECT TAMPING MACHINE FOR WORN OR DAMAGED TAMPING HEADS.
  14. TRACK CONSTRUCTION SEQUENCING SHALL BE AS FOLLOWS:
    - A. PREPARE SUBGRADE
    - B. PLACE TIES ON THE SUBGRADE AT THE CORRECT SPACING
    - C. PLACE TIE PLATES ON TIES
    - D. PLACE RAIL ON PLATES AND SPIKE IN PLACE AT CORRECT GAUGE WIDTH
    - E. INSTALL JOINT BARS AND TIGHTEN BOLTS
    - F. INSTALL THE OPPOSITE RAIL BY FIRST CHECKING THE GAUGE AND SPIKING EVERY FOURTH TIE AND THEN SPIKE REMAINING TIES.
    - G. INSTALL RAIL ANCHORS
    - H. UNLOAD AND DISTRIBUTE BALLAST. CARE SHALL BE TAKEN DURING UNLOADING TO AVOID RUTTING SUBGRADE. ALL RUTS SHALL BE LEVELED AND GRADED TO DRAIN PRIOR TO PLACING BALLAST.
    - I. LIFT AND TAMP TRACK TO ABOUT 1 INCH BELOW FINAL ELEVATION IN 3 TO 4 INCH LIFTS, ADDING BALLAST AS NEEDED AFTER EACH LIFT. THE TAMPING MACHINE SHALL ALSO ALIGN THE TRACK IN PLACE. TIES SHALL BE TAMPED AS PART OF THIS OPERATION.
    - J. ANY TIES THAT PULL LOOSE DURING PLACEMENT SHALL BE LIFTED, PLUGGED OR REPLACED, SPIKED AND RETAMPED.
    - K. IF DURING TRACK LIFTING VOIDS DEVELOP UNDER TIE CENTERS, CHECK GRADE AND LINE AND DRESS (SHAPE) BALLAST SECTION.
    - L. TRACK SHALL NOT BE TAMPED IN FROZEN BALLAST CONDITIONS OR IF SNOW COVER IS PRESENT.

USER NAME = GustavoYanez	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 01/30/26	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUPERELEVATION SECTION DETAIL  
RAIL CROSSING DETAIL AND NOTES**

SCALE: NTS SHEET 109 OF 131 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2510	TIM TRAINING TRACK 2026	SANGAMON	131	109
CONTRACT NO. 72N43				
ILLINOIS FED. AID PROJECT				

Benchmark: ISP4 ELEV = 606.387. RAILROAD SPIKE IN WEST SIDE OF WESTERLY WOODEN POWER POLE BEING THE 3RD SET OF WOODEN POWER POLES SOUTH OF ACADEMY ROAD RUNNING ALONG EAST SIDE OF 55 ACRE FIELD  
Existing Structure: N/A

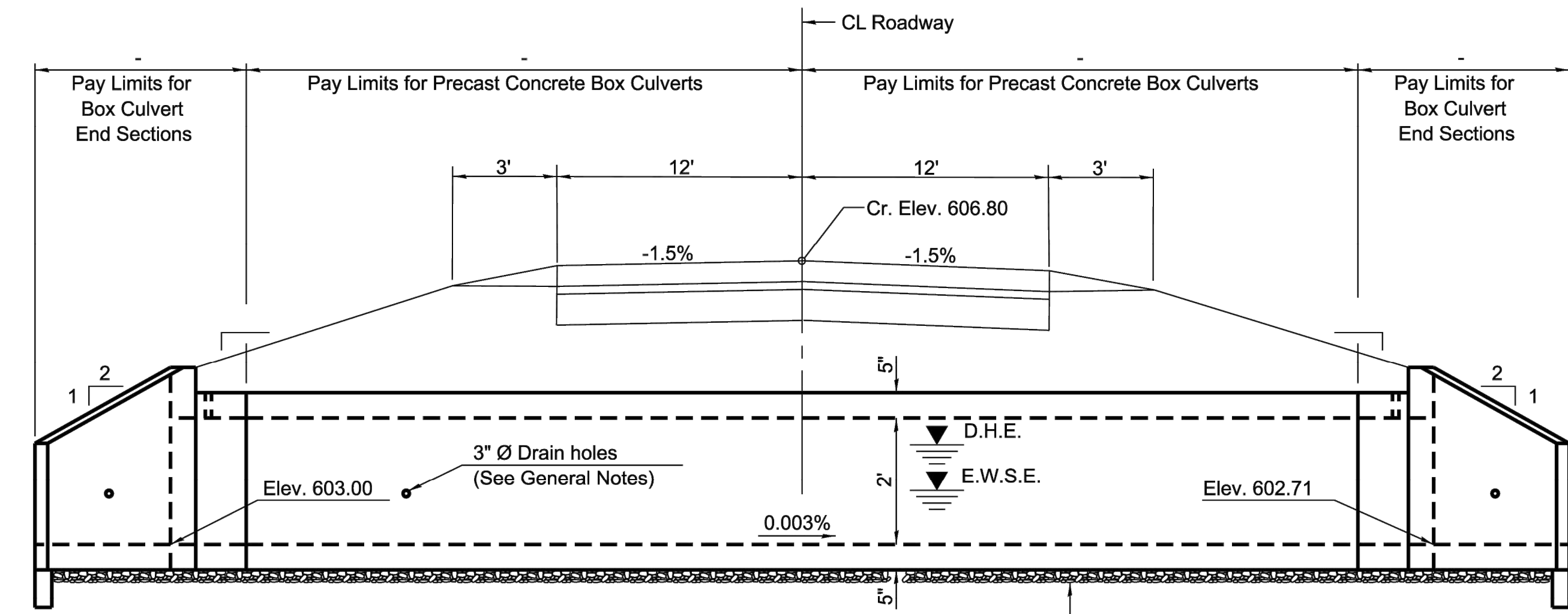
**BOX CULVERT DETAIL**

**INDEX OF SHEETS**

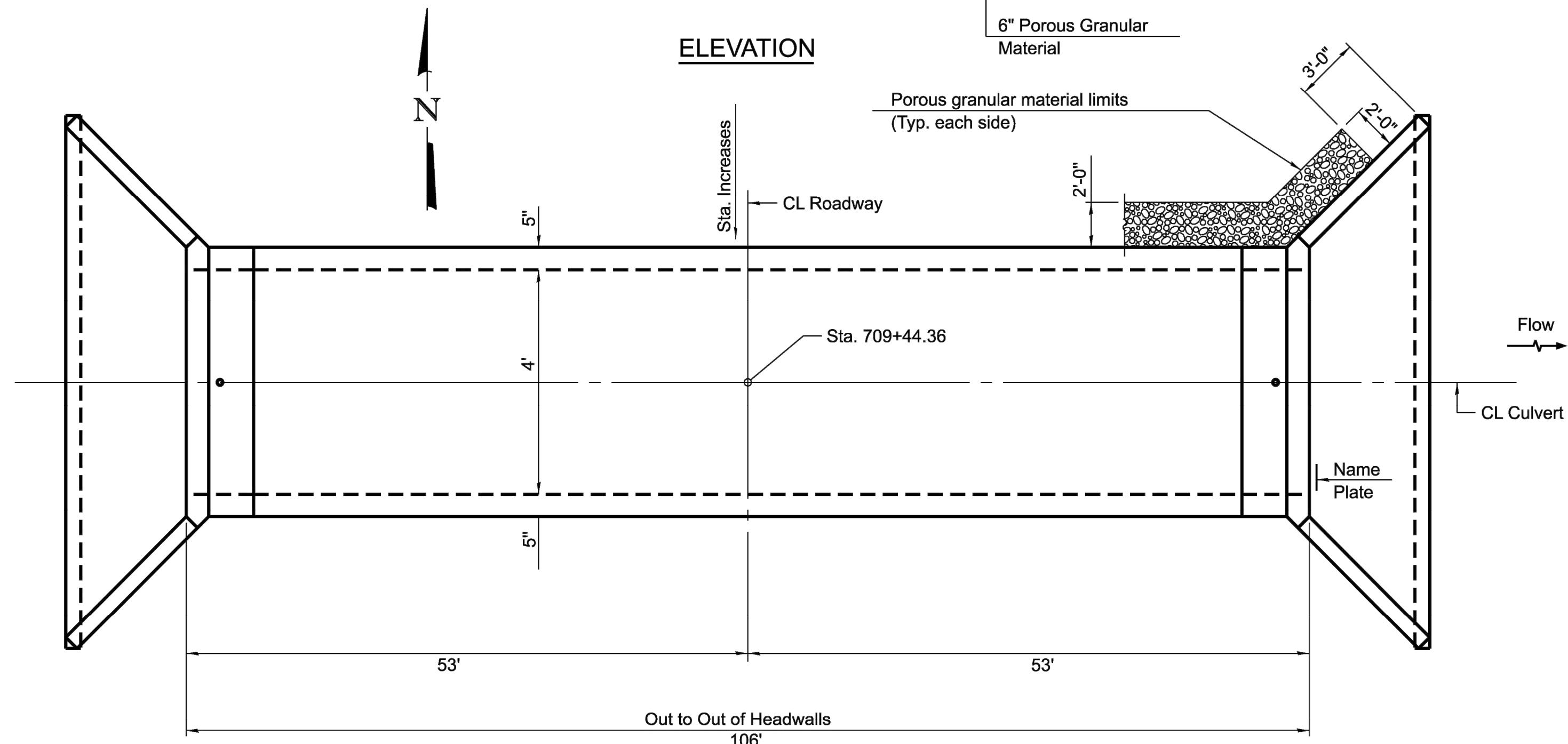
- 1. General Plan and Elevation
- 2.-3. Precast Concrete Box Culvert Apron End Section Details

**GENERAL NOTES**

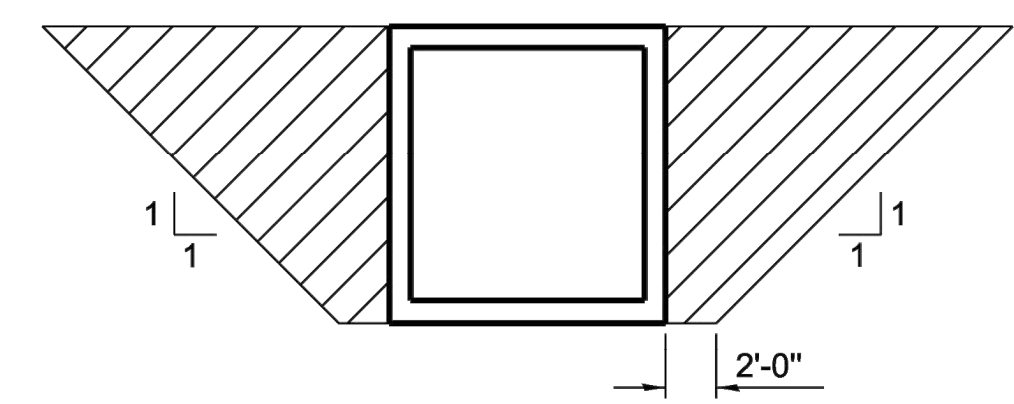
The design fill height for this box is 3.125 ft. The precast box culvert sections shall conform to the requirements of ASTM C 1577.  
Drain holes shall be provided on exterior culvert walls for each precast box segment with a clear rise greater than 3 ft. The drain hole shall be located within 1/3 of the clear rise of the box culvert, shall not intercept the haunch, and shall conform to the requirements of Article 503.11 of the Standard Specification.  
Nonwoven geotextile fabric shall conform to the requirements of Art. 1080.01 of the Standard Specifications. The minimum weight of the fabric shall be 6 ounces per square yard.  
Precast concrete box culverts and box culvert end sections shall be backfilled with Porous Granular Embankment in the required excavation areas on the sides of the box culvert from the top of the box culvert to the bottom of the box culvert. This area of PGE is included in the Porous Granular Embankment pay item. The 6-inch thick layer of porous granular material required under the precast concrete box culvert, according to Section 540.06 of the standard specifications, shall also apply to the end sections. Cost of this porous granular material will not be paid for separately but shall be included in the unit price of the work for which it is required.



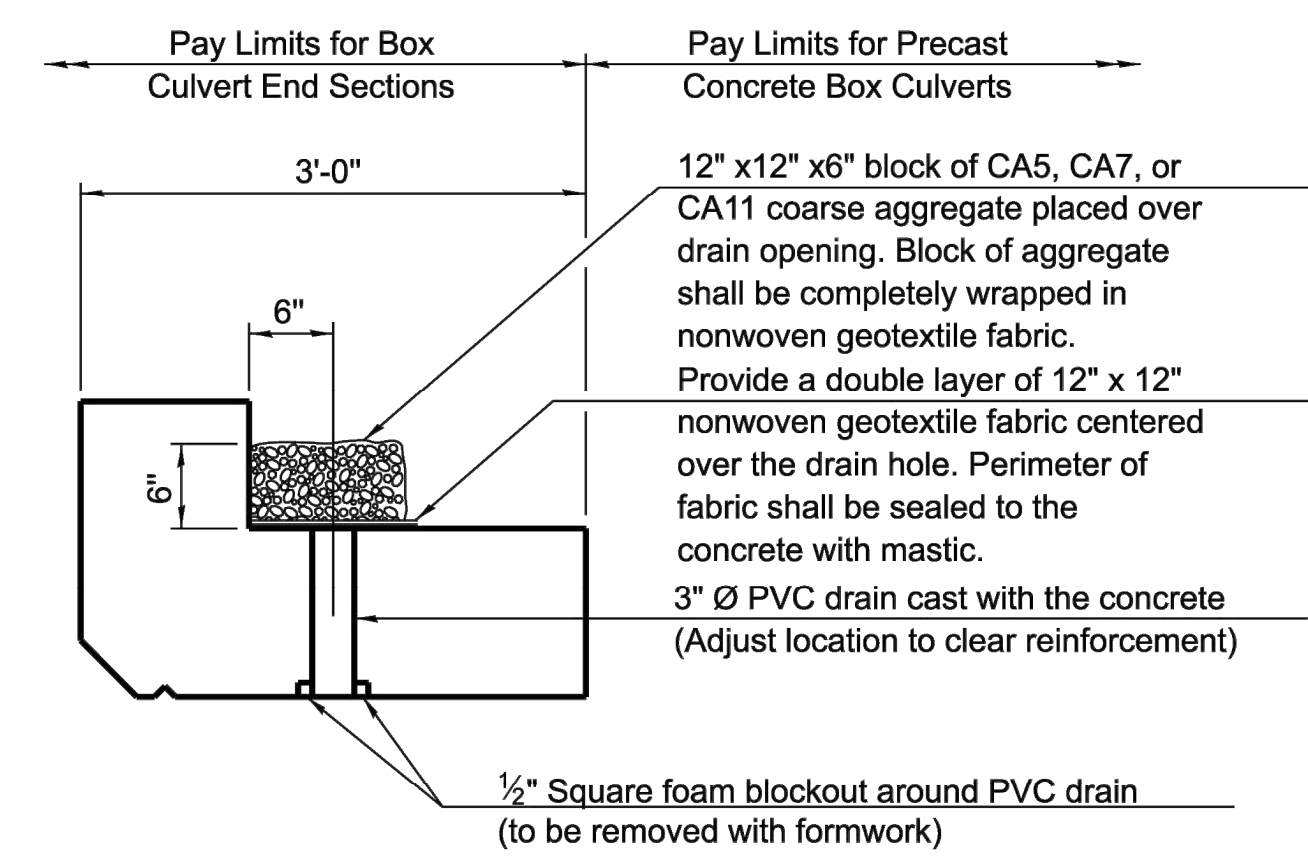
**ELEVATION**



**PLAN**



**PAY LIMITS FOR POROUS GRANULAR EMBANKMENT**  
(Hatched area)



**DRAIN DETAIL**

(All costs associated with furnishing and constructing the above drain detail will not be measured for payment but shall be included in the contract unit price for the associated work.)

**PROFILE GRADE**

**DESIGN SPECIFICATIONS**

2020 AASHTO LRFD Bridge Design Specifications  
Customary U.S. Units, 9th Edition

**LOADING HL-93**

**DESIGN STRESSES**

**PRECAST UNITS**

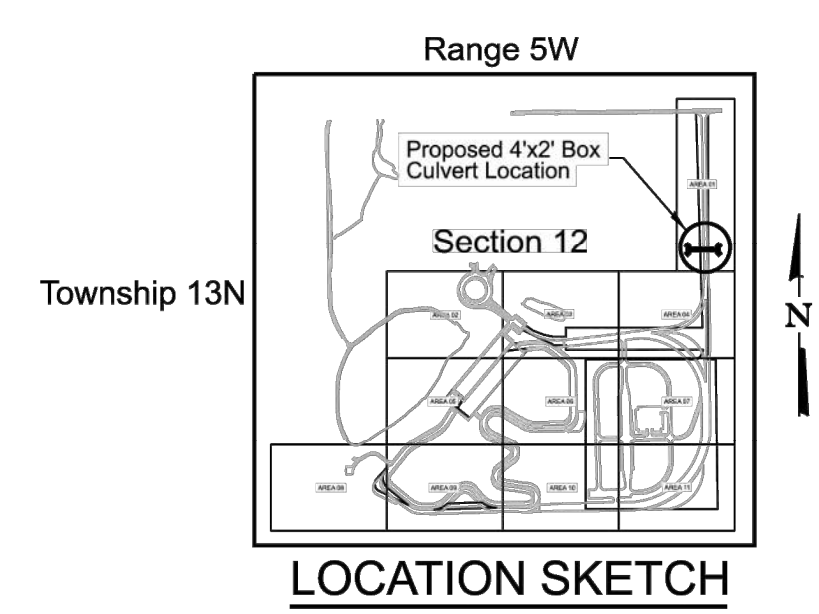
f<sub>c</sub> = 5,000 psi  
f<sub>y</sub> = 65,000 psi (Welded Wire Reinforcement)

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	TOTAL
Box Culvert End Sections, Culvert No.1	Each	2
Precast Concrete Box Culverts, 4' x 2'	Foot	106
Porous Granular Embankment	Cu. Yd.	70

**GENERAL PLAN AND ELEVATION**

**ILLINOIS STATE POLICE TRAINING FACILITY - PAWNEE**  
**EAST ACCESS ROAD**  
**SANGAMON COUNTY**  
**STATION 709+44.36**



**LOCATION SKETCH**

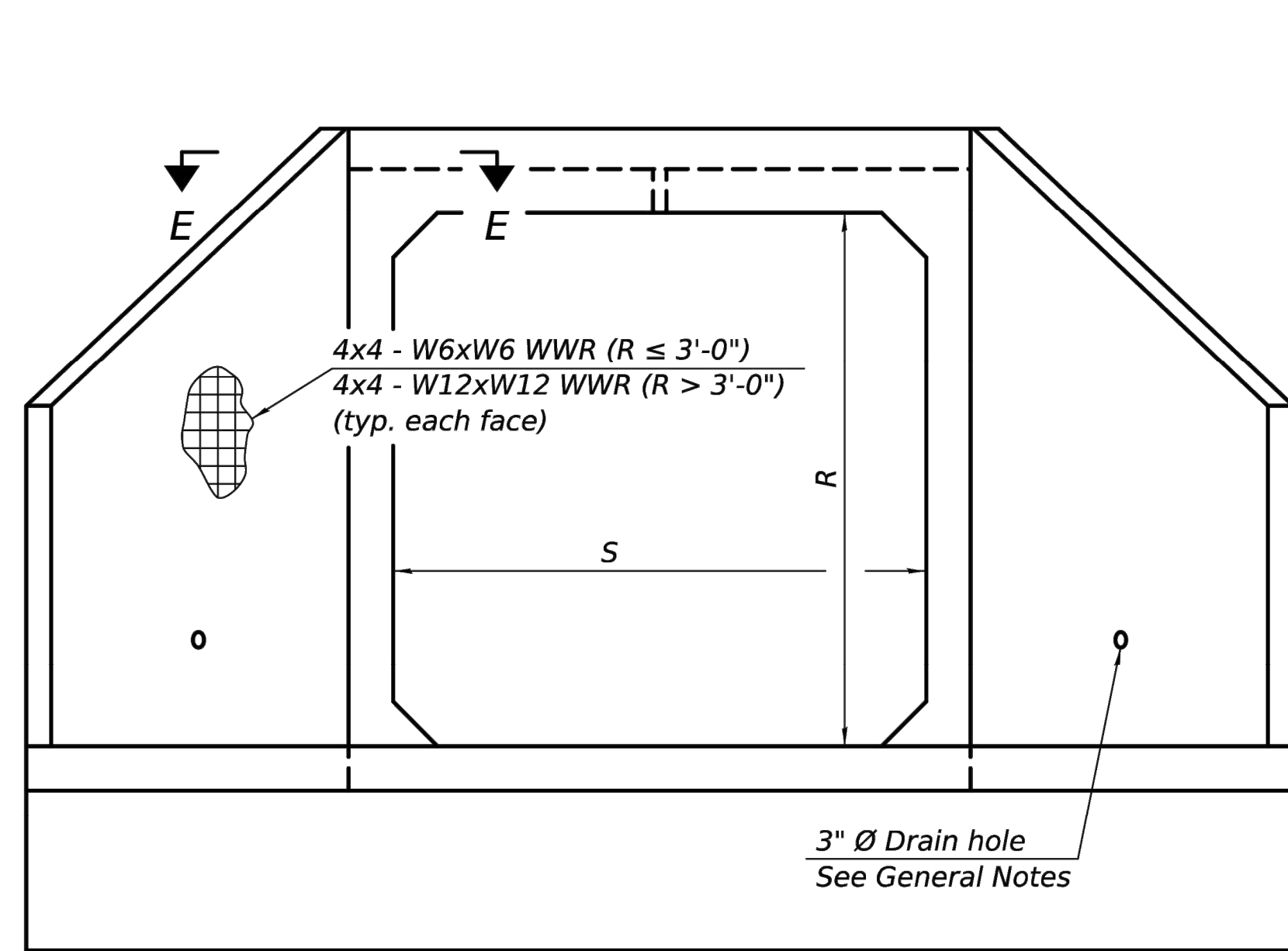
USER NAME = MeganS	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 01/30/26	DATE -	REVISED -

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

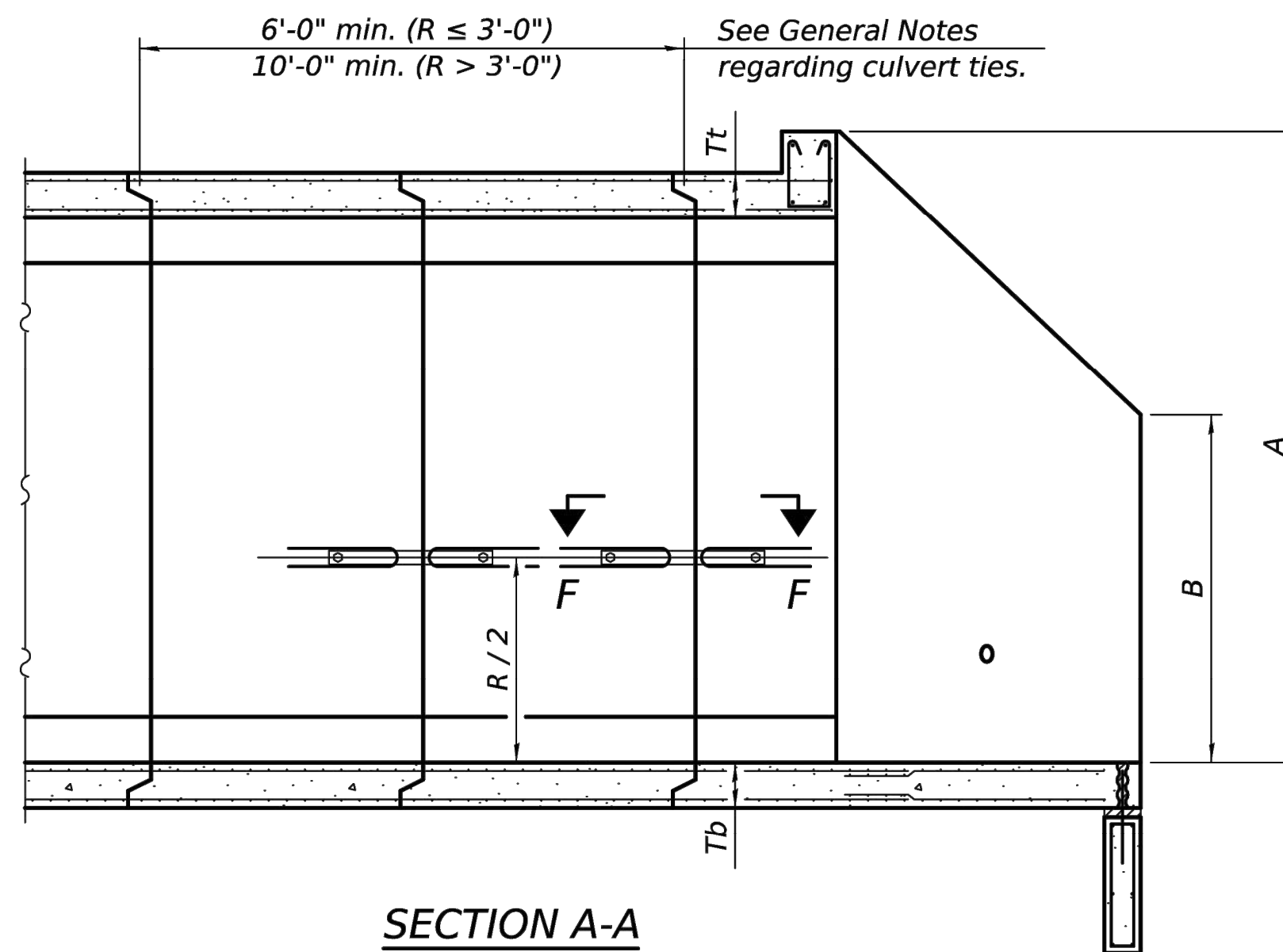
**PRECAST CONCRETE BOX CULVERT**  
**GENERAL PLAN & ELEVATION**

SCALE: NTS SHEET 110 OF 131 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2510	TIM TRAINING TRACK 2026	SANGAMON	131	110
			CONTRACT NO. 72N43	
ILLINOIS FED. AID PROJECT				



END VIEW



SECTION A-A

GENERAL NOTES

Box Culvert End Sections shall be constructed according to the requirements of Section 540 of the Standard Specifications except as modified herein. End sections will be paid for at the contract unit price per each for Box Culvert End Sections.

The Contractor may furnish the end section as a single precast concrete piece or construct the end section in the field using cast-in-place (CIP) construction. For CIP construction, the bottom slab thickness shall be increased by 2" and the clear cover to the bottom mat of reinforcement shall be increased to 3".

Box section dimensions, materials, and reinforcement details for Box Culvert End Sections shall be according to the requirements for ASTM C 1577 as required for the design of the portion of the culvert within the limits of Precast Concrete Box Culverts except as modified herein.

The number of culvert ties shall be sufficient to engage the minimum length of culvert barrel shown within the pay limits for Precast Concrete Box Culverts and will be dependent upon the length of box culvert segments furnished by the Contractor. Culvert ties are not required for box culverts having a rise (R) less than or equal to 3 ft and a span (S) greater than or equal to 10 ft.

All costs associated with furnishing and installing or constructing the toewall and culvert ties will not be measured for payment but shall be included in the unit price for Box Culvert End Sections of the culvert number specified.

Shop drawings that detail slab thickness and reinforcement layout for the Box Culvert End Sections shall be provided to the Engineer for review and approval. Reinforcement bars not detailed herein shall be detailed with a clear distance at the end of the reinforcement not less than 1/2" nor more than 2". For the precast option, it shall be the Contractor's responsibility for determining a method of handling and a construction procedure shall be included on the shop drawings. The Contractor shall determine and detail in the shop drawings any necessary strengthening or stiffening provisions necessary to handle the precast segment. Any required modifications shall be at no extra charge.

The Contractor may use reinforcement bars in lieu of welded wire reinforcement (WWR). Reinforcement bars shall be limited to the sizes of #3 through #5 bars, a maximum spacing of the lesser of 8" or the member thickness, and shall result in an area of reinforcement equal to or greater than that provided by the WWR. Minimum lap lengths detailed herein are applicable to WWR and reinforcement bars.

Reinforcement (circumferential and longitudinal) in the culvert barrel portion of the end section being lapped with reinforcement from the wingwalls or bottom slab of the end section shall not be less than that required by ASTM C 1577 for the design fill height or the reinforcement detailed for the end section, whichever is greater.

One drain hole shall be provided in each wingwall for end sections of box culverts having an opening with a clear rise greater than 3 ft. The drain hole shall be located within the lower 1/3 of the clear rise of the box culvert and shall conform to the requirements of Article 503.11 of the Standard Specifications.

APRON END SECTION DIMENSIONS

Span (S)	Rise (R)	Tt	Tb	Ts	A	B	C	D	E	Concrete Cu. Yd.	Culvert Ties Required
3'-0"	2'-0"	7"	6"	4"	3'-4"	2'-2"	2'-10 <sup>5</sup> / <sub>8</sub> "	4'-1"	10'-4 <sup>5</sup> / <sub>8</sub> "	2.8	Yes
3'-0"	2'-0"	4"	4"	4"	3'-1"	2'-1"	2'-7 <sup>5</sup> / <sub>8</sub> "	3'-9"	9'-11"	2.3	Yes
3'-0"	3'-0"	7"	6"	4"	4'-4"	2'-8"	3'-10 <sup>5</sup> / <sub>8</sub> "	5'-6"	12'-4 <sup>5</sup> / <sub>8</sub> "	3.7	Yes
3'-0"	3'-0"	4"	4"	4"	4'-1"	2'-7"	3'-7 <sup>5</sup> / <sub>8</sub> "	5'-2"	11'-11"	3.1	Yes
4'-0"	2'-0"	7.5"	6"	5"	3'-4 <sup>1</sup> / <sub>2</sub> "	2'-2 <sup>1</sup> / <sub>2</sub> "	2'-11 <sup>3</sup> / <sub>8</sub> "	4'-2"	11'-8"	3.3	Yes
4'-0"	2'-0"	5"	5"	5"	3'-2"	2'-1"	2'-8 <sup>1</sup> / <sub>2</sub> "	3'-10"	11'-2 <sup>3</sup> / <sub>8</sub> "	2.8	Yes
4'-0"	3'-0"	7.5"	6"	5"	4'-4 <sup>1</sup> / <sub>2</sub> "	2'-8 <sup>1</sup> / <sub>2</sub> "	3'-11 <sup>3</sup> / <sub>8</sub> "	5'-7"	13'-8 <sup>1</sup> / <sub>8</sub> "	4.2	Yes
4'-0"	3'-0"	5"	5"	5"	4'-2"	2'-7"	3'-8 <sup>1</sup> / <sub>2</sub> "	5'-3"	13'-2 <sup>3</sup> / <sub>8</sub> "	3.7	Yes
4'-0"	4'-0"	7.5"	6"	5"	5'-4 <sup>1</sup> / <sub>2</sub> "	3'-2 <sup>1</sup> / <sub>2</sub> "	4'-11 <sup>3</sup> / <sub>8</sub> "	7'-0"	15'-8 <sup>1</sup> / <sub>8</sub> "	5.3	Yes
4'-0"	4'-0"	5"	5"	5"	5'-2"	3'-1"	4'-8 <sup>5</sup> / <sub>8</sub> "	6'-8"	15'-2 <sup>1</sup> / <sub>8</sub> "	4.7	Yes
5'-0"	2'-0"	8"	7"	6"	3'-5"	2'-3"	2'-11 <sup>3</sup> / <sub>8</sub> "	4'-2"	12'-10"	3.9	Yes
5'-0"	2'-0"	6"	6"	6"	3'-3"	2'-2"	2'-10"	4'-0"	12'-7 <sup>1</sup> / <sub>4</sub> "	3.5	Yes
5'-0"	3'-0"	8"	7"	6"	4'-5"	2'-9"	3'-11 <sup>3</sup> / <sub>8</sub> "	5'-7"	14'-10 <sup>1</sup> / <sub>8</sub> "	4.9	Yes
5'-0"	3'-0"	6"	6"	6"	4'-3"	2'-8"	3'-10"	5'-5"	14'-7 <sup>1</sup> / <sub>4</sub> "	4.5	Yes
5'-0"	4'-0"	8"	7"	6"	5'-5"	3'-3"	4'-11 <sup>3</sup> / <sub>8</sub> "	7'-0"	16'-10 <sup>1</sup> / <sub>8</sub> "	6.1	Yes
5'-0"	4'-0"	6"	6"	6"	5'-3"	3'-2"	4'-9 <sup>1</sup> / <sub>4</sub> "	6'-9"	16'-5 <sup>5</sup> / <sub>8</sub> "	5.5	Yes
5'-0"	5'-0"	8"	7"	6"	6'-5"	3'-9"	5'-11 <sup>3</sup> / <sub>8</sub> "	8'-5"	18'-10 <sup>1</sup> / <sub>8</sub> "	7.4	Yes
5'-0"	5'-0"	6"	6"	6"	6'-3"	3'-8"	5'-9 <sup>1</sup> / <sub>4</sub> "	8'-2"	18'-5 <sup>5</sup> / <sub>8</sub> "	6.8	Yes
6'-0"	2'-0"	8"	7"	7"	3'-5"	2'-3"	2'-11 <sup>3</sup> / <sub>8</sub> "	4'-2"	14'-0"	4.3	Yes
6'-0"	2'-0"	7"	7"	7"	3'-4"	2'-2"	2'-10 <sup>5</sup> / <sub>8</sub> "	4'-1"	13'-10 <sup>5</sup> / <sub>8</sub> "	4.2	Yes
6'-0"	3'-0"	8"	7"	7"	4'-5"	2'-9"	3'-11 <sup>3</sup> / <sub>8</sub> "	5'-7"	16'-0 <sup>5</sup> / <sub>8</sub> "	5.4	Yes
6'-0"	3'-0"	7"	7"	7"	4'-4"	2'-8"	3'-10 <sup>5</sup> / <sub>8</sub> "	5'-6"	15'-10 <sup>5</sup> / <sub>8</sub> "	5.2	Yes
6'-0"	4'-0"	8"	7"	7"	5'-5"	3'-3"	4'-11 <sup>3</sup> / <sub>8</sub> "	7'-0"	18'-0 <sup>5</sup> / <sub>8</sub> "	6.5	Yes
6'-0"	4'-0"	7"	7"	7"	5'-4"	3'-2"	4'-10 <sup>3</sup> / <sub>4</sub> "	6'-11"	17'-10 <sup>3</sup> / <sub>4</sub> "	6.5	Yes
6'-0"	5'-0"	8"	7"	7"	6'-5"	3'-9"	5'-11 <sup>3</sup> / <sub>8</sub> "	8'-5"	20'-0 <sup>5</sup> / <sub>8</sub> "	8.0	Yes
6'-0"	5'-0"	7"	7"	7"	6'-4"	3'-8"	5'-10 <sup>3</sup> / <sub>4</sub> "	8'-4"	19'-10 <sup>3</sup> / <sub>4</sub> "	7.8	Yes
6'-0"	6'-0"	8"	7"	7"	7'-5"	4'-3"	6'-11 <sup>1</sup> / <sub>2</sub> "	9'-10"	22'-0 <sup>1</sup> / <sub>4</sub> "	9.5	Yes
6'-0"	6'-0"	7"	7"	7"	7'-4"	4'-2"	6'-10 <sup>3</sup> / <sub>4</sub> "	9'-9"	21'-10 <sup>3</sup> / <sub>4</sub> "	9.3	Yes
7'-0"	2'-0"	8"	8"	8"	3'-5"	2'-3"	2'-11 <sup>3</sup> / <sub>8</sub> "	4'-2"	15'-2"	4.9	Yes
7'-0"	3'-0"	8"	8"	8"	4'-5"	2'-9"	3'-11 <sup>3</sup> / <sub>8</sub> "	5'-7"	17'-2 <sup>1</sup> / <sub>8</sub> "	6.1	Yes
7'-0"	4'-0"	8"	8"	8"	5'-5"	3'-3"	4'-11 <sup>3</sup> / <sub>8</sub> "	7'-0"	19'-2 <sup>1</sup> / <sub>8</sub> "	7.4	Yes
7'-0"	5'-0"	8"	8"	8"	6'-5"	3'-9"	5'-11 <sup>3</sup> / <sub>8</sub> "	8'-5"	21'-2 <sup>1</sup> / <sub>8</sub> "	8.9	Yes
7'-0"	6'-0"	8"	8"	8"	7'-5"	4'-3"	6'-11 <sup>1</sup> / <sub>2</sub> "	9'-10"	23'-2 <sup>1</sup> / <sub>4</sub> "	10.6	Yes
8'-0"	2'-0"	8"	8"	8"	3'-5"	2'-3"	2'-11 <sup>3</sup> / <sub>8</sub> "	4'-2"	16'-2"	5.3	Yes
8'-0"	3'-0"	8"	8"	8"	4'-5"	2'-9"	3'-11 <sup>3</sup> / <sub>8</sub> "	5'-7"	18'-2 <sup>1</sup> / <sub>8</sub> "	6.5	Yes
8'-0"	4'-0"	8"	8"	8"	5'-5"	3'-3"	4'-11 <sup>3</sup> / <sub>8</sub> "	7'-0"	20'-2 <sup>1</sup> / <sub>8</sub> "	7.8	Yes
8'-0"	5'-0"	8"	8"	8"	6'-5"	3'-9"	5'-11 <sup>3</sup> / <sub>8</sub> "	8'-5"	22'-2 <sup>1</sup> / <sub>8</sub> "	9.3	Yes
8'-0"	6'-0"	8"	8"	8"	7'-5"	4'-3"	6'-11 <sup>1</sup> / <sub>2</sub> "	9'-10"	24'-2 <sup>1</sup> / <sub>4</sub> "	11.0	Yes
9'-0"	2'-0"	9"	9"	9"	3'-6"	2'-3"	3'-0 <sup>3</sup> / <sub>4</sub> "	4'-4"	17'-6 <sup>3</sup> / <sub>8</sub> "	6.2	Yes
9'-0"	3'-0"	9"	9"	9"	4'-6"	2'-9"	4'-0 <sup>3</sup> / <sub>4</sub> "	5'-9"	19'-6 <sup>3</sup> / <sub>8</sub> "	7.5	Yes
9'-0"	4'-0"	9"	9"	9"	5'-6"	3'-3"	5'-0 <sup>3</sup> / <sub>4</sub> "	7'-2"	21'-6 <sup>3</sup> / <sub>8</sub> "	9.0	Yes
9'-0"	5'-0"	9"	9"	9"	6'-6"	3'-9"	6'-0 <sup>3</sup> / <sub>8</sub> "	8'-7"	23'-7"	10.6	Yes
9'-0"	6'-0"	9"	9"	9"	7'-6"	4'-3"	7'-0 <sup>3</sup> / <sub>8</sub> "	9'-11"	25'-5 <sup>5</sup> / <sub>8</sub> "	12.4	Yes
10'-0"	2'-0"	10"	10"	10"	3'-7"	2'-4"	3'-1 <sup>1</sup> / <sub>2</sub> "	4'-5"	18'-10 <sup>1</sup> / <sub>4</sub> "	7.1	No
10'-0"	3'-0"	10"	10"	10"	4'-7"	2'-10"	4'-1 <sup>1</sup> / <sub>2</sub> "	5'-10"	20'-10 <sup>1</sup> / <sub>4</sub> "	8.6	No
10'-0"	4'-0"	10"	10"	10"	5'-7"	3'-4"	5'-1 <sup>1</sup> / <sub>2</sub> "	7'-3"	22'-10 <sup>3</sup> / <sub>8</sub> "	10.2	Yes
10'-0"	5'-0"	10"	10"	10"	6'-7"	3'-10"	6'-1 <sup>1</sup> / <sub>2</sub> "	8'-8"	24'-10 <sup>3</sup> / <sub>8</sub> "	12.0	Yes
10'-0"	6'-0"	10"	10"	10"	7'-7"	4'-4"	7'-1 <sup>1</sup> / <sub>2</sub> "	10'-1"	26'-10 <sup>3</sup> / <sub>8</sub> "	13.9	Yes
11'-0"	2'-0"	11"	11"	11"	3'-8"	2'-4"	3'-2 <sup>7</sup> / <sub>8</sub> "	4'-7"	20'-3 <sup>3</sup> / <sub>8</sub> "	8.2	No
11'-0"	3'-0"	11"	11"	11"	4'-8"	2'-10"	4'-2 <sup>7</sup> / <sub>8</sub> "	6'-0"	22'-3 <sup>3</sup> / <sub>8</sub> "	9.8	No
11'-0"	4'-0"	11"	11"	11"	5'-8"	3'-4"	5'-2 <sup>1</sup> / <sub>4</sub> "	7'-4"	24'-1 <sup>1</sup> / <sub>4</sub> "	11.5	Yes
11'-0"	5'-0"	11"	11"	11"	6'-8"	3'-10"	6'-2 <sup>1</sup> / <sub>4</sub> "	8'-9"	26'-1 <sup>1</sup> / <sub>4</sub> "	13.3	Yes
11'-0"	6'-0"	11"	11"	11"	7'-8"	4'-4"	7'-2 <sup>1</sup> / <sub>4</sub> "	10'-2"	28'-1 <sup>1</sup> / <sub>8</sub> "	15.5	Yes
12'-0"	2'-0"	12"	12"	12"	3'-9"	2'-5"	3'-3 <sup>5</sup> / <sub>8</sub> "	4'-8"	21'-6 <sup>1</sup> / <sub>2</sub> "	9.3	No
12'-0"	3'-0"	12"	12"	12"	4'-9"	2'-11"	4'-3 <sup>5</sup> / <sub>8</sub> "	6'-1"	23'-6 <sup>1</sup> / <sub>2</sub> "	11.1	No
12'-0"	4'-0"	12"	12"	12"	5'-9"	3'-5"	5'-3 <sup>5</sup> / <sub>8</sub> "	7'-6"	25'-6 <sup>5</sup> / <sub>8</sub> "	13.0	Yes
12'-0"	5'-0"	12"	12"	12"	6'-9"	3'-11"	6'-3 <sup>5</sup> / <sub>8</sub> "	8'-11"	27'-6 <sup>5</sup> / <sub>8</sub> "	14.1	Yes
12'-0"	6'-0"	12"	12"	12"	7'-9"	4'-5"	7'-3 <sup>5</sup> / <sub>8</sub> "	10'-4"	29'-6 <sup>5</sup> / <sub>8</sub> "	17.4	Yes

Note:

Two sets of apron end section dimensions are shown above for some box culvert sizes due to the top and bottom slabs having different thicknesses per ASTM C 1577 for design fill heights less than 2 ft.

(Sheet 1 of 2)

SCB-AES

PLAN

5-15-2023

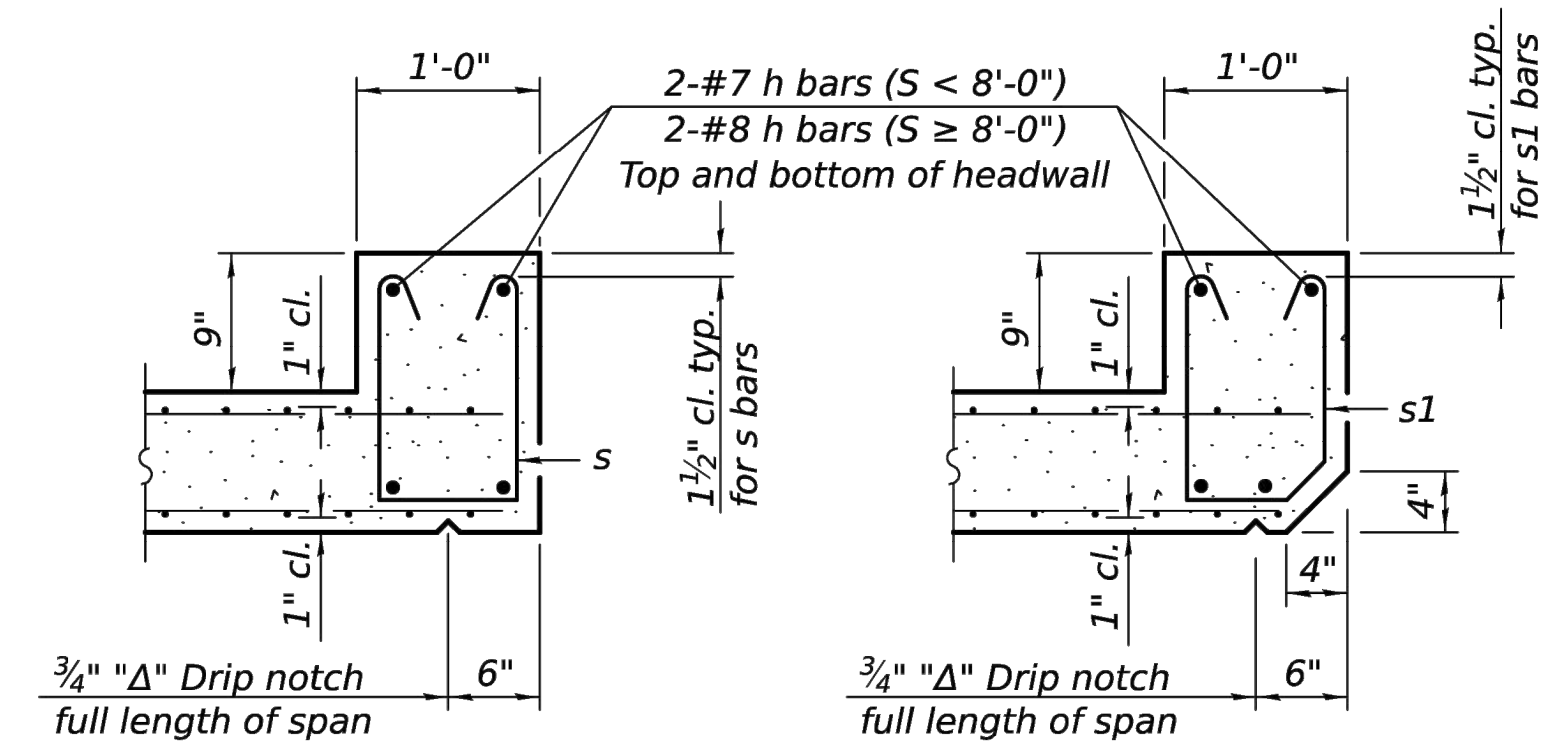
USER NAME = MeganS	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 01/30/26	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PRECAST CONCRETE BOX CULVERT  
APRON END SECTION DETAILS

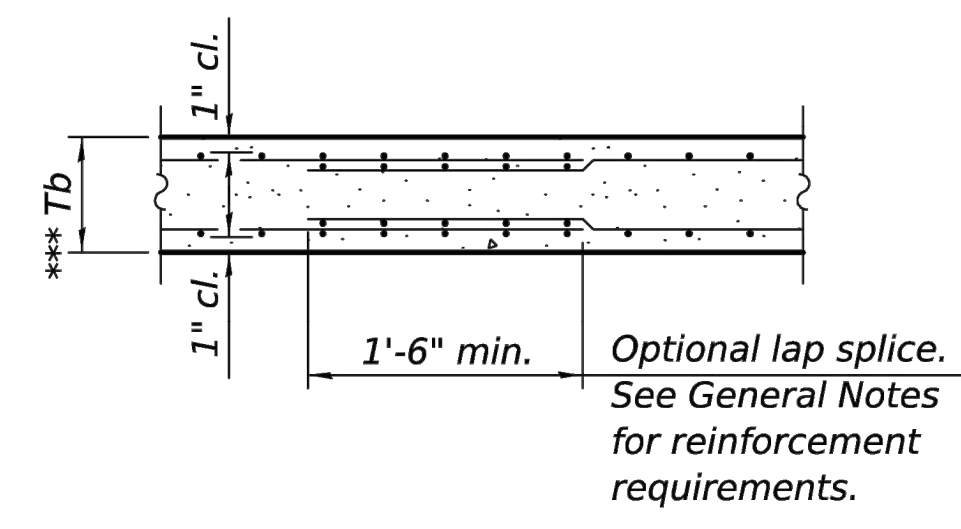
SCALE: NTS SHEET 111 OF 131 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2510	TIM TRAINING TRACK 2026	SANGAMON	131	111
CONTRACT NO. 72N43				
ILLINOIS FED. AID PROJECT				

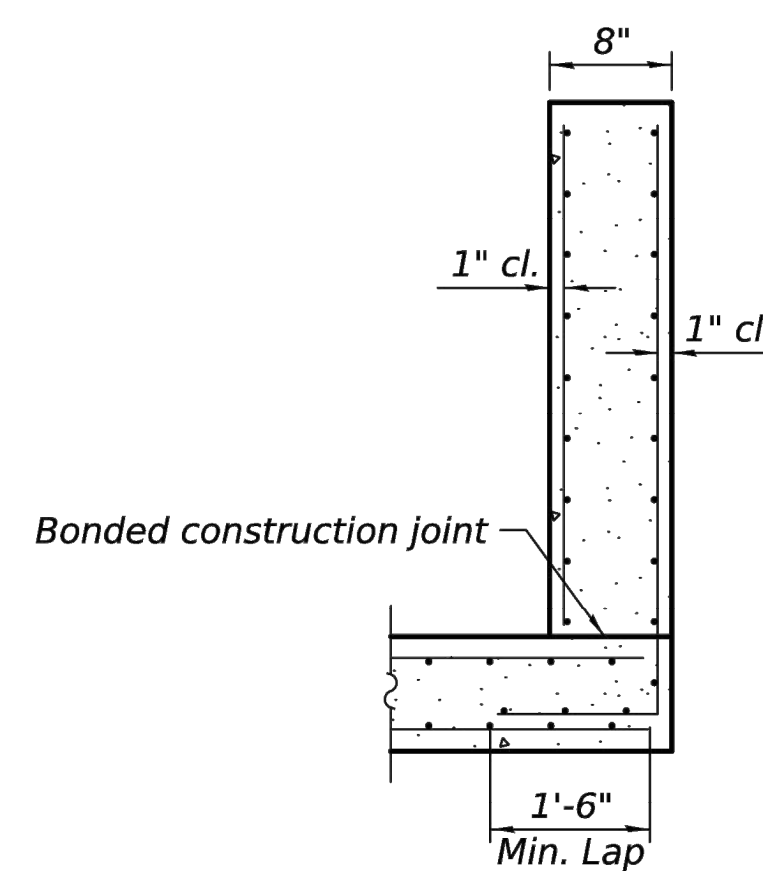


**SECTION B-B**  
(Top slab at downstream end)

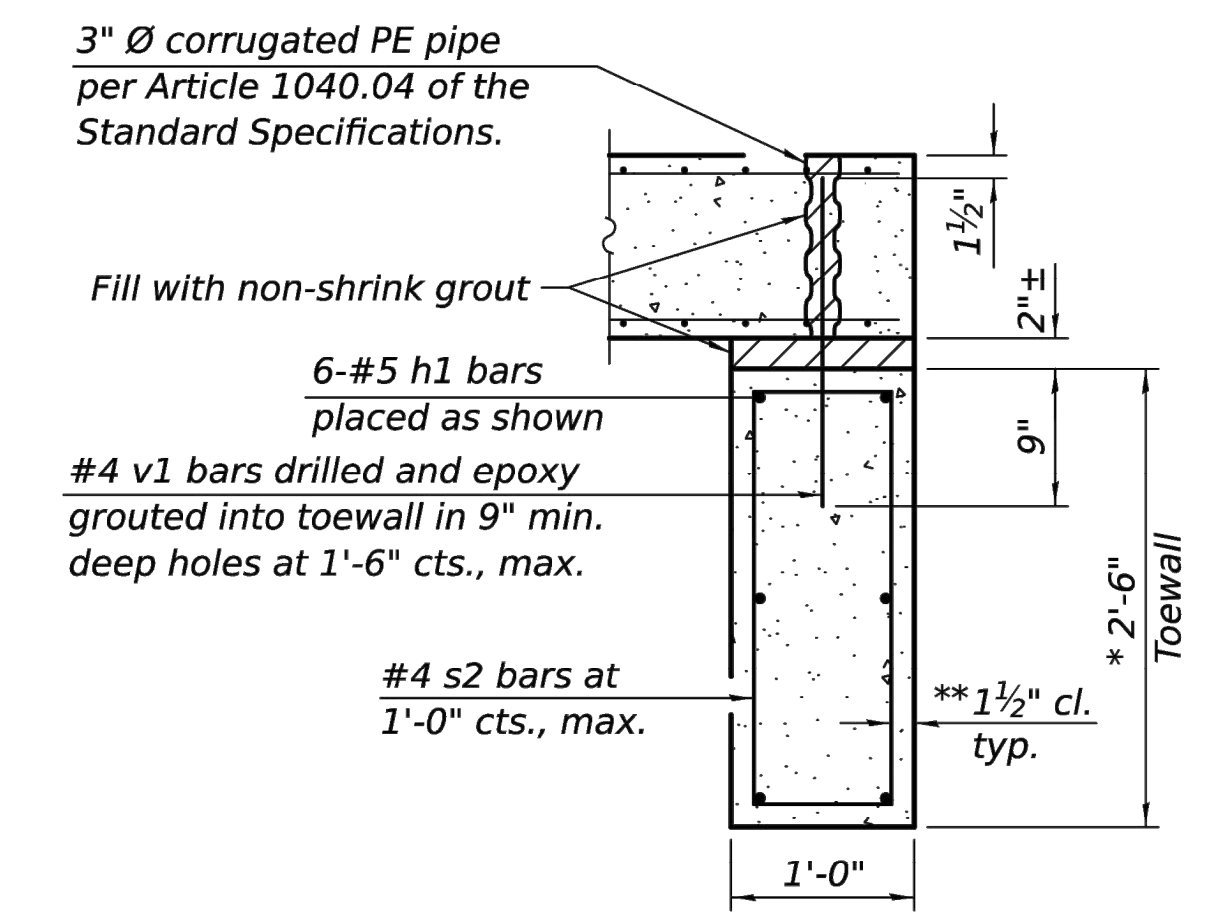
**SECTION B-B**  
(Top slab at upstream end)



**SECTION B-B**  
(Bottom Slab)



**SECTION C-C**



**SECTION D-D**

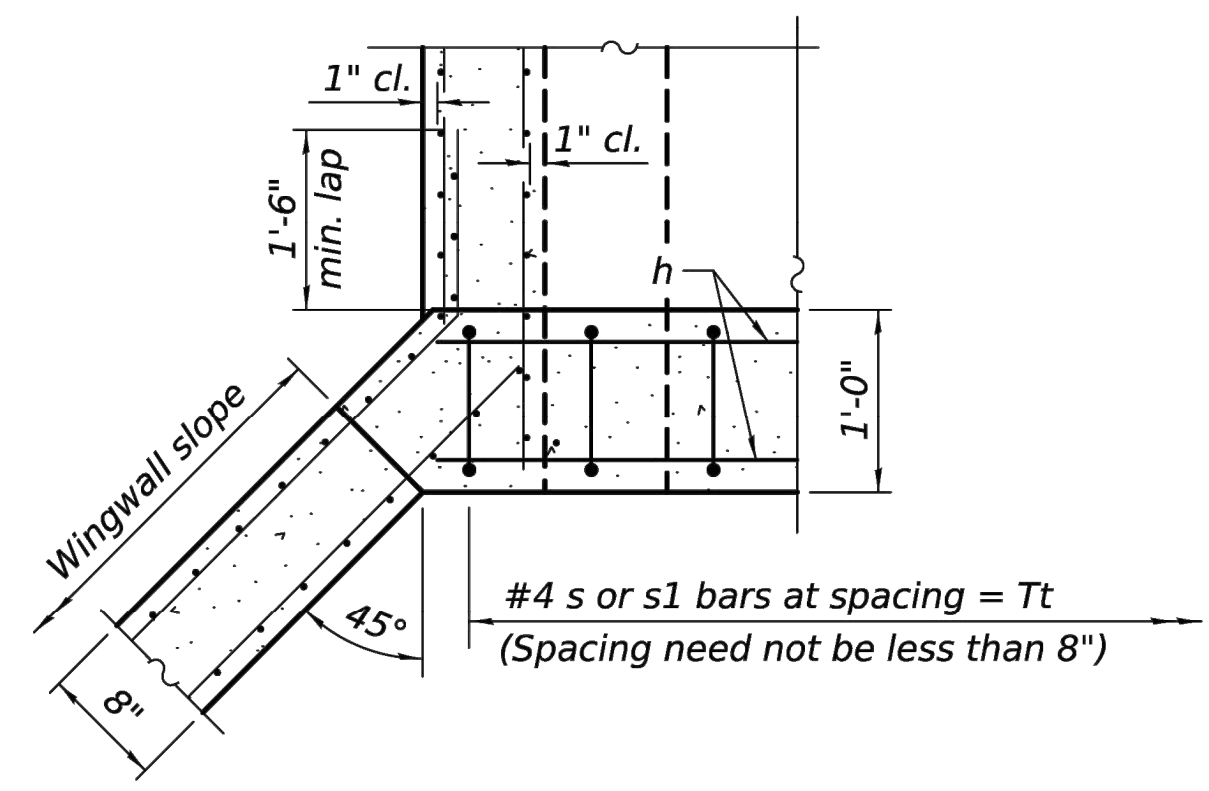
\*\*\* This dimension shall be increased by 2" for CIP construction.

**TOEWALL CONSTRUCTION SEQUENCE**

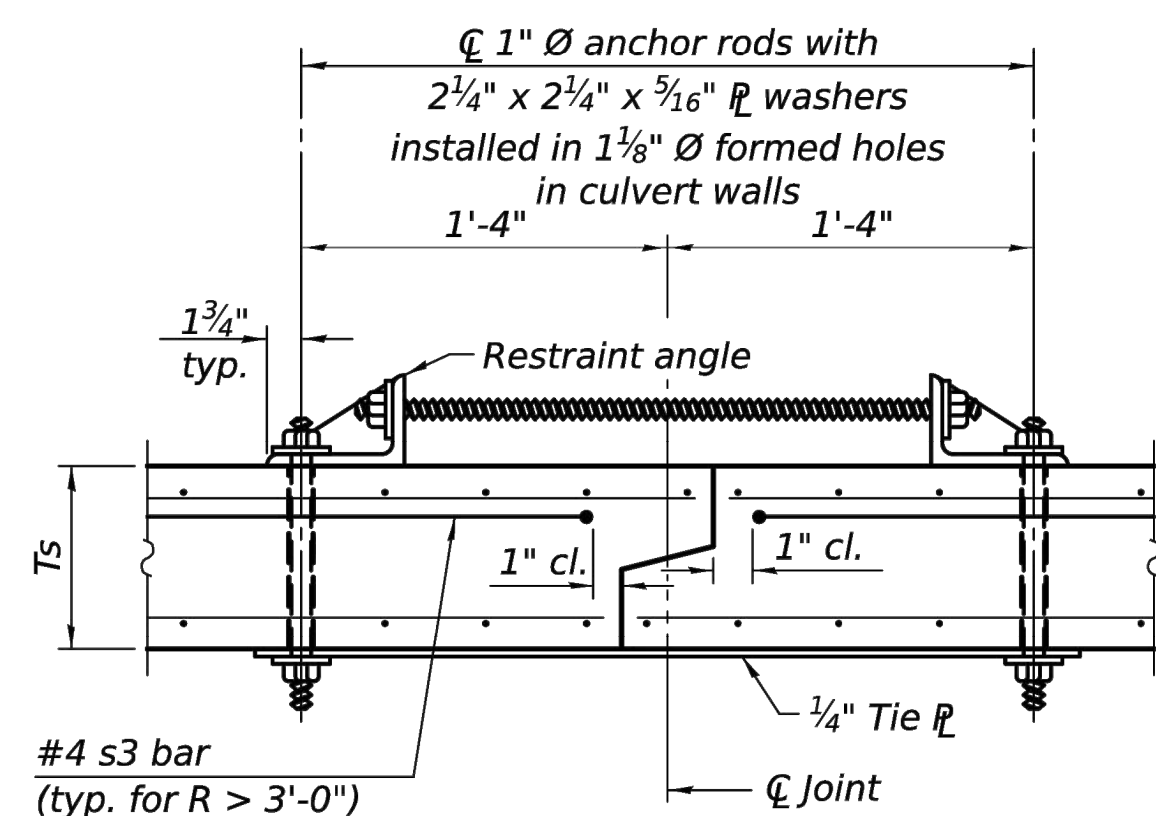
1. Perform excavation and construct toewall.
2. Backfill accordingly and place bedding for precast box culvert end sections.
3. Set precast box culvert end section.
4. Drill and epoxy grout reinforcement in toewall in accordance with Section 584 of the Standard Specifications.
5. Pressure grout voids using non-shrink grout conforming to Section 1024 of the Standard Specifications.

\* The Contractor may furnish a precast or cast-in-place toewall. The Contractor shall be responsible for the strength and stability of the precast toewall during handling. Additional lifting points may be required depending upon the length of the toewall or the Contractor may need to modify the design of the toewall for the proposed handling method.

\*\* If soil conditions permit, the sides of the toewall may be poured directly against the soil. The clear cover on the sides of the toewall shall be increased to 3" by increasing the thickness of the toewall.



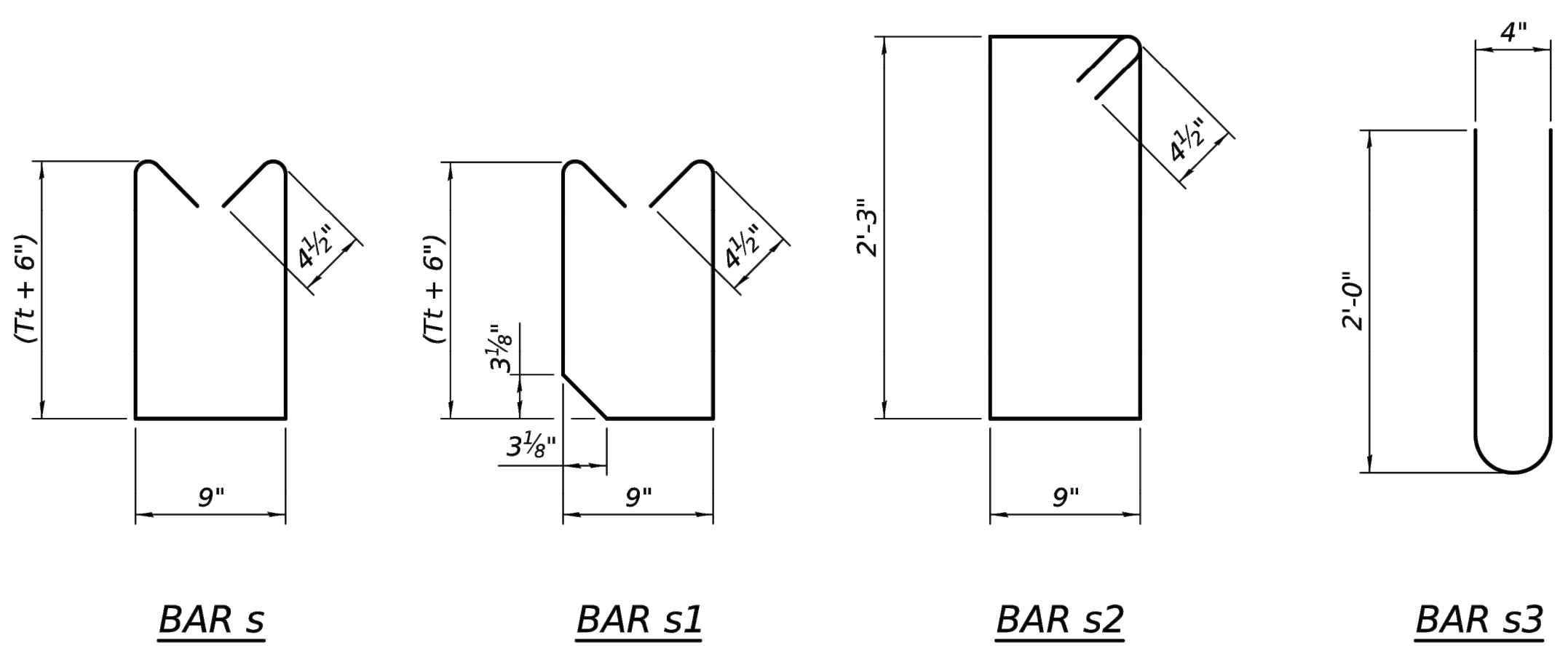
**SECTION E-E**



**SECTION F-F**  
(Showing culvert tie details)

**Notes:**

1"  $\varnothing$  anchor rods for the culvert ties shall conform to the requirements of ASTM F1554, Grade 105. Structural steel for the tie plate and restraint angle shall conform to the requirements of Article 1006.04 of the Standard Specifications. All components of the culvert tie detail shall be galvanized according to the requirements of AASHTO M 111 or M 232 as applicable. 2 1/4" x 2 1/4" x 5/16" plate washers shall be provided under each nut required for the anchor rods. Anchor rods connecting precast sections shall be brought to a snug tight condition followed by an additional 1/2 turn on one of the nuts for anchor rods installed in the walls. Match marks shall be provided on the bolt and nut to verify relative rotation between the bolt and the nut. Holes in the walls for the culvert tie assembly may be drilled using core bits in lieu of using formed holes.

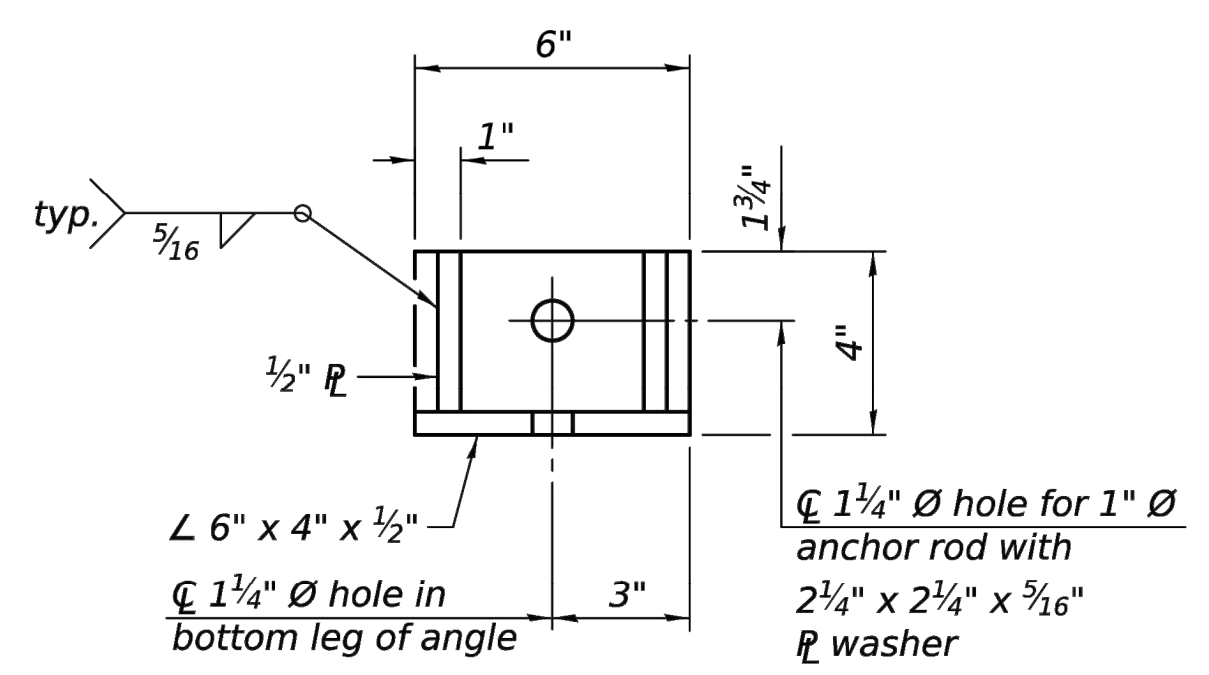


**BAR s**

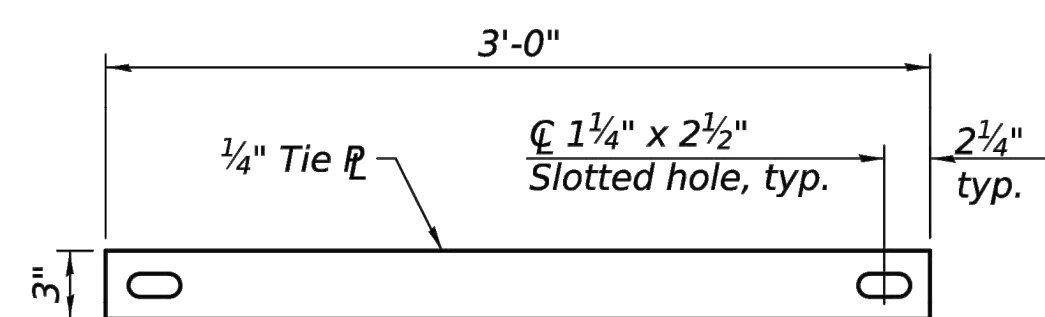
**BAR s1**

**BAR s2**

**BAR s3**



**RESTRAINT ANGLE DETAIL**



**TIE PLATE DETAIL**

SCB-AES

5-15-2023

(Sheet 2 of 2)

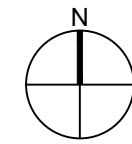
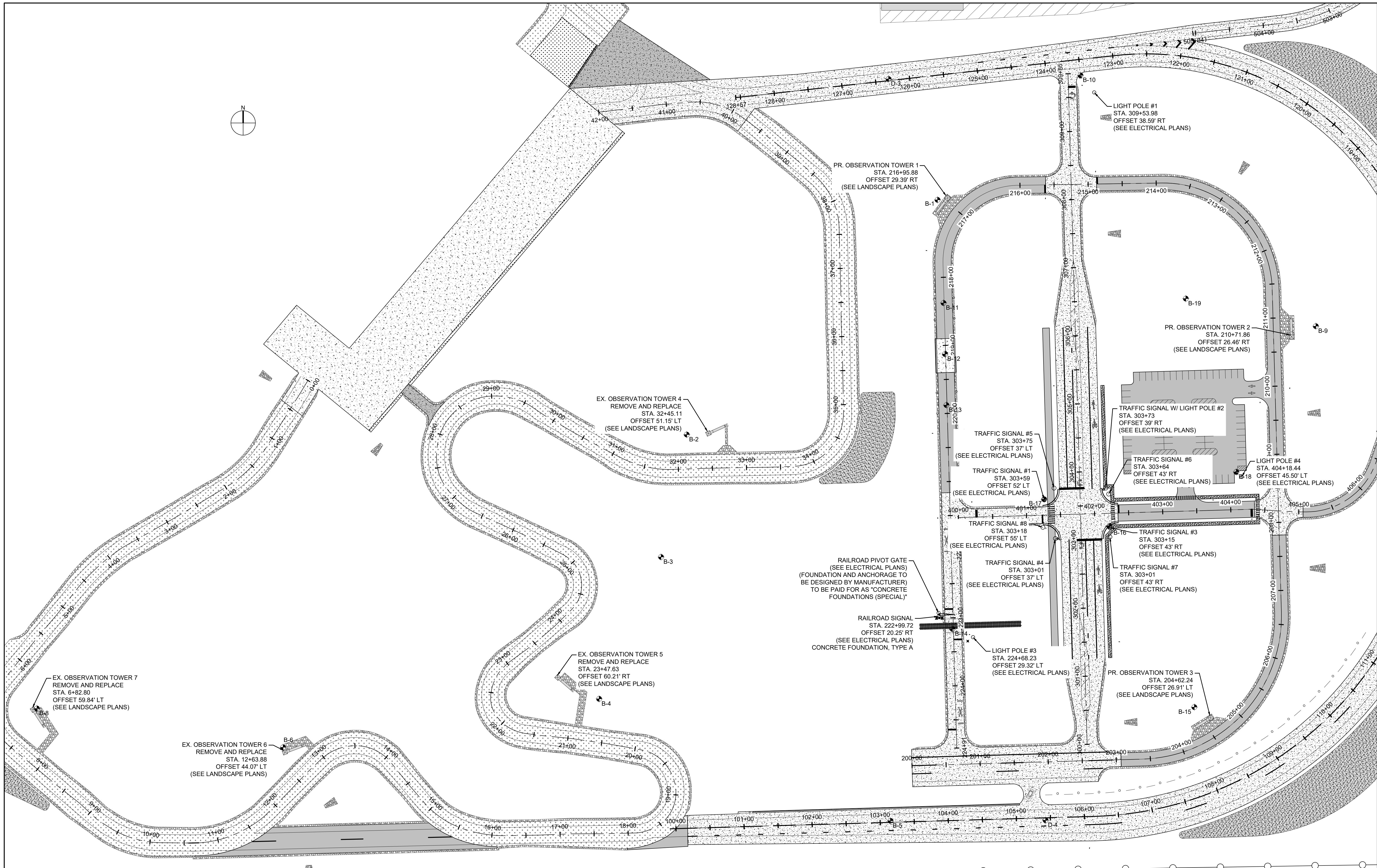
USER NAME = MeganS	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 01/30/26	DATE -	REVISED -

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

**PRECAST CONCRETE BOX CULVERT**  
**APRON END SECTION DETAILS**

SCALE: NTS SHEET 112 OF 131 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2510	TIM TRAINING TRACK 2026	SANGAMON	131	112
CONTRACT NO. 72N43				
ILLINOIS FED. AID PROJECT				



USER NAME = VatsalM	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 01/30/26	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**STRUCTURAL GENERAL PLAN**

SCALE: SHEET 113 OF 131 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2510	TIM TRAINING TRACK 2026	SANGAMON	131	113
CONTRACT NO. 72N43				
ILLINOIS		FED. AID PROJECT		

## BILL OF MATERIALS

### REFERENCES

1. THE FOUNDATIONS FOR THE SITE STRUCTURES HAVE BEEN DESIGNED BASED ON INFORMATION CONTAINED IN THE FOLLOWING:
  - MANUFACTURER INFORMATION FOR LIGHT POLES AND LIGHT FIXTURES TO BE PLACED ON THE LIGHT POLES AND MAST ARM STRUCTURES.
  - MANUFACTURER INFORMATION FOR THE OBSERVATION TOWER.
  - SUBSURFACE EXPLORATION AND GEOTECHNICAL RECOMMENDATIONS, ILLINOIS STATE POLICE TIM TRAINING TRACK 2026, PAWNEE, ILLINOIS PREPARED BY MIDWEST ENGINEERING AND TESTING, INC. DATED NOVEMBER 28, 2025.

### GENERAL NOTES

1. CONTRACTOR SHALL PROTECT THE EXISTING STRUCTURES, UTILITIES, PAVEMENTS, ROADWAYS, AND OTHER FACILITIES TO REMAIN DURING THE EXCAVATION AND CONSTRUCTION OF THE SITE STRUCTURE FOUNDATIONS.
2. THE CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION MEANS AND METHODS, CONSTRUCTION SEQUENCES AND PROCEDURES.
3. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR SITE SAFETY AND FOR MAINTAINING A SECURE CONSTRUCTION SITE.
4. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL EXISTING UNDERGROUND UTILITIES PRIOR TO EXCAVATION AND PROTECTING THESE UTILITIES FROM DAMAGE DURING ALL WORK OPERATIONS.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY SHORING AND BRACING REQUIRED DURING CONSTRUCTION.
6. THE FOUNDATIONS FOR SITE STRUCTURES HAVE BEEN DESIGNED IN ACCORDANCE WITH INFORMATION AND RECOMMENDATIONS PROVIDED IN THE GEOTECHNICAL REPORT. ALL RECOMMENDATIONS FOR EXCAVATIONS AND PREPARATION OF SUBGRADE TO SUPPORT FOUNDATIONS PROVIDED IN THE GEOTECHNICAL REPORT SHALL BE FOLLOWED.
7. ALL CONSTRUCTION WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION 2022, AND IN ACCORDANCE WITH ACCOMPANYING SPECIAL PROVISIONS.

### EXCAVATION AND FOUNDATIONS

1. THE CONTRACTOR SHALL EXERCISE CARE IN EXCAVATION AND DURING CONSTRUCTION, AND SHALL CONTROL OPERATIONS TO PREVENT DAMAGE TO THE EXISTING STRUCTURES, UTILITIES, PAVEMENTS, ROADWAYS, AND OTHER FACILITIES TO REMAIN.
2. THE DEPTH FOR FOUNDATIONS SHOWN IN THESE CONSTRUCTION DRAWINGS IS THE MINIMUM DEPTH REQUIRED. ALL FOUNDATIONS SHALL BE EXTENDED BELOW THE FILL SOILS TO REACH THE NATIVE LOESSIAL SOILS OR TO BEAR ON STRUCTURAL FILL SOILS. ALL FOUNDATIONS SHALL REST ON UNDISTURBED SOIL OR COMPACTED STRUCTURAL FILL WHICH HAS A MINIMUM NET ALLOWABLE BEARING CAPACITY EQUAL TO OR GREATER THAN 2,000 PSF FOR SPREAD FOUNDATIONS AND 1,750 PSF FOR CONTINUOUS FOUNDATIONS IN ACCORDANCE WITH THE RECOMMENDATIONS PROVIDED IN THE GEOTECHNICAL REPORT.
3. ACTUAL SOIL CONDITIONS ENCOUNTERED DURING CONSTRUCTION MAY REQUIRE ELEVATION MODIFICATIONS FOR THE FOUNDATION DEPTHS AS INDICATED ON THESE CONSTRUCTION DRAWINGS OR REMOVAL OF UNSUITABLE MATERIAL AND PLACEMENT OF GRANULAR STRUCTURAL FILL IN ACCORDANCE WITH THE GEOTECHNICAL REPORT.
4. ACCORDING TO THE GEOTECHNICAL REPORT, FILL SOILS ARE PRESENT FOR DEPTHS OF UP TO 6 FEET BELOW THE GROUND SURFACE. FILL SOILS ARE NOT SUITABLE FOR SUPPORT OF STRUCTURE SPREAD FOOTING FOUNDATIONS AND SHALL BE OVER-EXCAVATED AND REPLACED WITH COMPACTED STRUCTURAL FILL IN ACCORDANCE WITH THE RECOMMENDATIONS PROVIDED IN THE GEOTECHNICAL REPORT. THE CONTRACTOR SHALL FOLLOW ALL RECOMMENDATIONS FOR THE REMOVAL OF FILL MATERIALS AND SOFT SOILS BELOW NEW FOUNDATIONS, FOR SUBGRADE PREPARATION, AND FOR REPLACEMENT OF UNSUITABLE SOILS WITH COMPACTED STRUCTURAL FILL.
5. DRILLED PIERS SHALL BE EXCAVATED TO THE MINIMUM REQUIRED DEPTH AS SHOWN IN THESE PLANS. THE EXCAVATION SHALL BE CONDUCTED IN A CONTINUOUS OPERATION UNTIL THE EXCAVATION FOR ONE DRILLED PIER IS COMPLETED, USING APPROVED EQUIPMENT CAPABLE OF EXCAVATING THROUGH THE TYPE OF MATERIAL EXPECTED.
6. MAINTAIN SIDEWALL STABILITY DURING DRILLING. IF EXCESSIVE SIDEWALL INSTABILITY IS ENCOUNTERED, TEMPORARY CASING MAY BE NEEDED.
7. THE CONTRACTOR SHALL USE APPROPRIATE MEANS TO CLEAN THE BOTTOM OF THE EXCAVATION FROM SEDIMENT, LOOSE MATERIAL OR FREE WATER PRIOR TO PLACING CONCRETE.
8. CONCRETE FOR THE DRILLED PIER FOUNDATIONS SHALL BE POURED DIRECTLY AGAINST THE EXPOSED SOIL IN THE AUGERED HOLE AND SHALL COMPLETELY FILL THE ENTIRE AUGERED HOLE.
9. DRILLED PIER EXCAVATIONS SHALL NOT BE LEFT OPEN OVERNIGHT UNLESS CASED OR OTHERWISE PROTECTED AGAINST SIDEWALL INSTABILITY OR ANY OTHER DETRIMENTAL CHANGE IN CONDITION.

### STRUCTURAL CONCRETE

1. CONCRETE REINFORCING BARS SHALL CONFORM TO ASTM A615, GRADE 60. REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED.
2. UNLESS OTHERWISE SHOWN OR NOTED, ALL SPLICING OF REINFORCING BARS SHALL BE CLASS B CONFORMING TO THE REQUIREMENTS OF ACI 318 AND SHALL BE SHOWN ON THE SHOP DRAWINGS.
3. SIZE AND LOCATION OF BASES, SUPPORTS AND EMBEDDED ANCHORAGES FOR EQUIPMENT OR STRUCTURES SHALL BE COORDINATED WITH THE MANUFACTURER AND SHALL BE IN ACCORDANCE WITH APPROVED SHOP DRAWINGS.
4. ALL STRUCTURAL CONCRETE FOR THE DRILLED PIERS SHALL HAVE A SLUMP THAT IS SUITABLE FOR THE PLACEMENT PROCESS USED.
5. ALL EXPOSED STRUCTURAL CONCRETE SHALL HAVE 3/4" CHAMFER AT EXPOSED CORNERS AND EDGES UNLESS NOTED OTHERWISE.

### INDEX OF SHEETS

1. STRUCTURAL GENERAL PLAN
2. GENERAL NOTES
3. OBSERVATION TOWER FOUNDATION DETAILS

ITEM NO.	ITEM	UNIT	QUANTITY
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	40.6
50100300	REMOVAL OF EXISTING STRUCTURES NO. 1	EACH	1
50100400	REMOVAL OF EXISTING STRUCTURES NO. 2	EACH	1
50100500	REMOVAL OF EXISTING STRUCTURES NO. 3	EACH	1
50100600	REMOVAL OF EXISTING STRUCTURES NO. 4	EACH	1
50200100	STRUCTURE EXCAVATION	CU YD	280
50200450	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL FOR STRUCTURES	CU YD	40.6
50300225	CONCRETE STRUCTURES	CU YD	70.1
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	7,630
83600356	LIGHT POLE FOUNDATION, METAL, 15" BOLT CIRCLE, 8 5/8" X 6'	EACH	3
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	15
87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	20
87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	24
X8780105	CONCRETE FOUNDATIONS (SPECIAL)	EACH	1

### Note:

1. FOR LIGHT POLE FOUNDATIONS, SEE STANDARD 836001-05
2. FOR MAST ARM FOUNDATIONS, SEE STANDARD 878001-11
3. FOR RAILROAD SIGNAL FOUNDATION, SEE STANDARD 878001-11

	USER NAME = VatsalM	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>GENERAL NOTES</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		DRAWN -	REVISED -			2510	TIM TRAINING TRACK 2026	SANGAMON	131	114	
		CHECKED -	REVISED -			CONTRACT NO. 72N43					
		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					
	PLOT DATE = 01/30/26			SCALE:	SHEET 114 OF 131 SHEETS	STA.	TO STA.				

# BILL OF MATERIALS

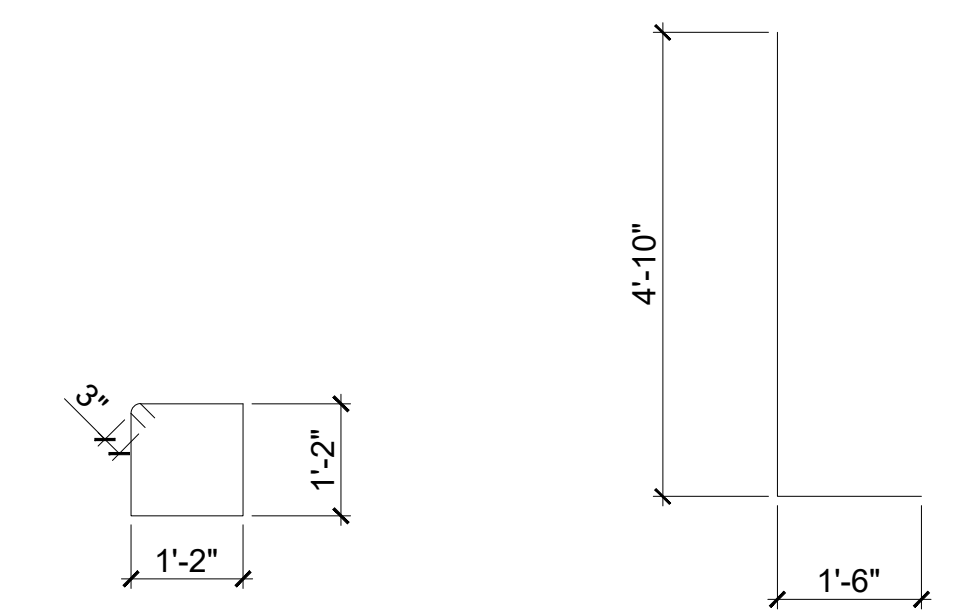
BARS	NO.	SIZE	LENGTH	SHAPE
h1(E)	30	#4	7'-5"	
n1(E)	64	#5	6'-4"	
s1(E)	42	#3	5'-2"	
t1(E)	18	#5	3'-8"	
t2(E)	18	#5	7'-8"	
w1(E)	28	#5	7'-5"	

ITEM	UNIT	QUANTITY
STRUCTURE EXCAVATION	CU YD	40
CONCRETE STRUCTURES	CU YD	10.0
REINFORCEMENT BARS, EPOXY COATED	POUND	1,090
NOTE A REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL FOR STRUCTURES	CU YD	5.8
NOTE A AGGREGATE SUBGRADE IMPROVEMENT	CU YD	5.8

NOTE: BAR LIST AND QUANTITIES ARE FOR ONE OBSERVATION TOWER FOUNDATION.

NOTE A: SUBJECT TO FIELD CONDITIONS, SEE NOTE 7

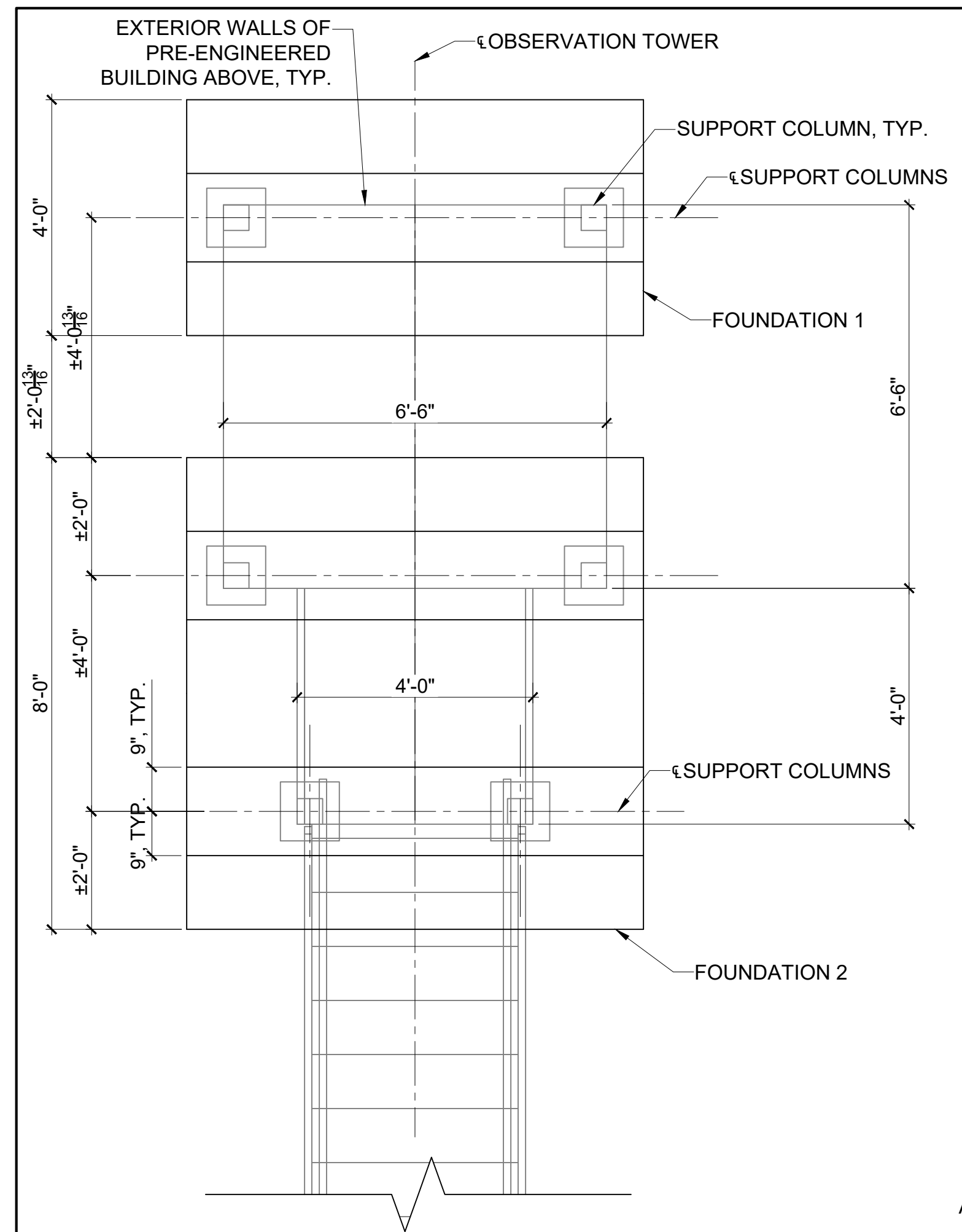


**BAR s1(E)**

**BAR n1(E)**

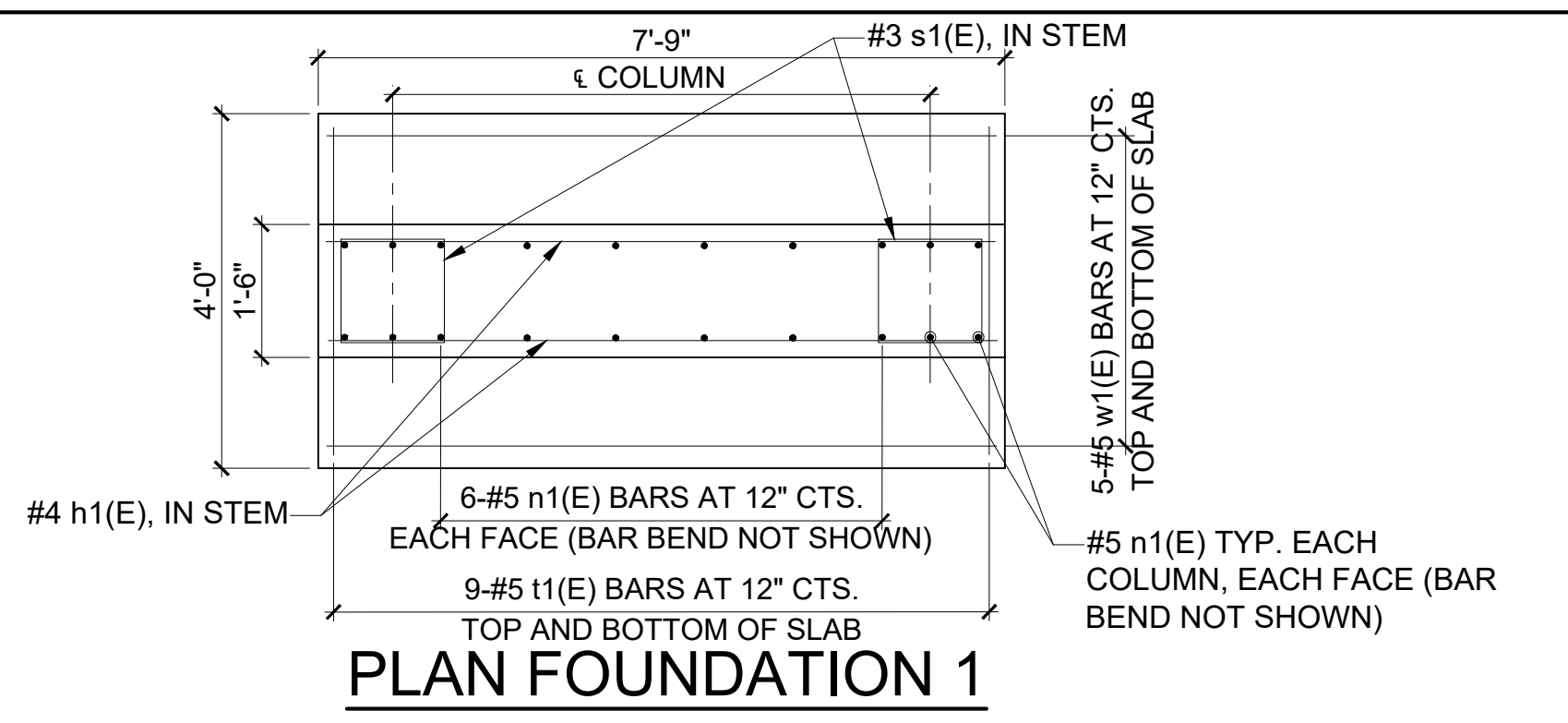
**NOTES:**

- FOR LOCATIONS OF OBSERVATION TOWERS SEE STRUCTURAL GENERAL PLAN SHEET.
- CENTER OF FOUNDATIONS SHALL BE CENTERED ON CENTERLINE OF OBSERVATION TOWER AND CENTERLINE OF SUPPORT COLUMNS UNLESS OTHERWISE SPECIFIED IN OBSERVATION TOWER SHOP DRAWINGS.
- CONTRACTOR SHALL PROVIDE A PRE-ENGINEERED OBSERVATION TOWER TO MEET REQUIREMENTS IN THE SPECIFICATIONS.
- APPROXIMATE DIMENSIONS HAVE BEEN PROVIDED FOR THE LOCATION OF THE OBSERVATION TOWER SUPPORT COLUMNS. CONTRACTOR SHALL VERIFY AND COORDINATE THE FINAL LOCATIONS OF THE FOUNDATIONS WITH THE APPROVED SHOP DRAWINGS.
- CONTRACTOR SHALL COORDINATE WITH APPROVED SHOP DRAWINGS FOR THE OBSERVATION TOWER FOR ALL ANCHORS AND OTHER ITEMS THAT ARE REQUIRED TO BE EMBEDDED INTO THE CONCRETE FOUNDATION PRIOR TO POURING CONCRETE.
- FOUNDATIONS FOR THE OBSERVATION TOWER HAVE BEEN DESIGNED BASED ON INFORMATION TAKEN FROM ONE MANUFACTURER'S PRELIMINARY DRAWINGS. CONTRACTOR SHALL SUBMIT STRUCTURAL CALCULATIONS THAT HAVE BEEN SIGNED AND SEALED BY A STRUCTURAL ENGINEER LICENSED IN THE STATE OF ILLINOIS WITH SHOP DRAWINGS THAT SHOW THE FINAL DESIGN AND DETAILS OF THE OBSERVATION TOWER STRUCTURE, INCLUDING EACH OF THE COLUMN REACTIONS TO THE ENGINEER FOR REVIEW PRIOR TO CONSTRUCTING THE FOUNDATIONS.
- THE GEOTECH REPORT SHOWS THE PRESENCE OF FILL SOILS THAT ARE UNSUITABLE FOR FOUNDATION SUPPORT EXTENDING DOWN TO UP TO 6' BELOW GROUND SURFACE. IF FILL SOILS ARE ENCOUNTERED AT THE BOTTOM OF FOUNDATION DEPTH, OVER-EXCAVATION IN ACCORDANCE WITH THE GEOTECH REPORT WILL BE REQUIRED. THE BOTTOM OF FOOTINGS ARE SHOWN AT A DEPTH THAT IS LIKELY BELOW THE FILL SOIL DEPTH, BUT THIS SHOULD BE VERIFIED IN THE FIELD DURING CONSTRUCTION. EXCAVATION THAT IS REQUIRED DUE TO THE OVER-EXCAVATION OF FILL SOILS OR SOFT SOILS WILL BE PAID FOR AS REMOVAL AND DISPOSAL OF UNSUITABLE MATERIALS FOR STRUCTURES FOR THE ADDITIONAL VOLUME OF SOIL THAT IS REQUIRED TO BE EXCAVATED, AND THE PLACEMENT OF STRUCTURAL FILL WILL BE PAID FOR AS AGGREGATE SUBGRADE IMPROVEMENT FOR THE VOLUME THAT IS REQUIRED TO BE PLACED.

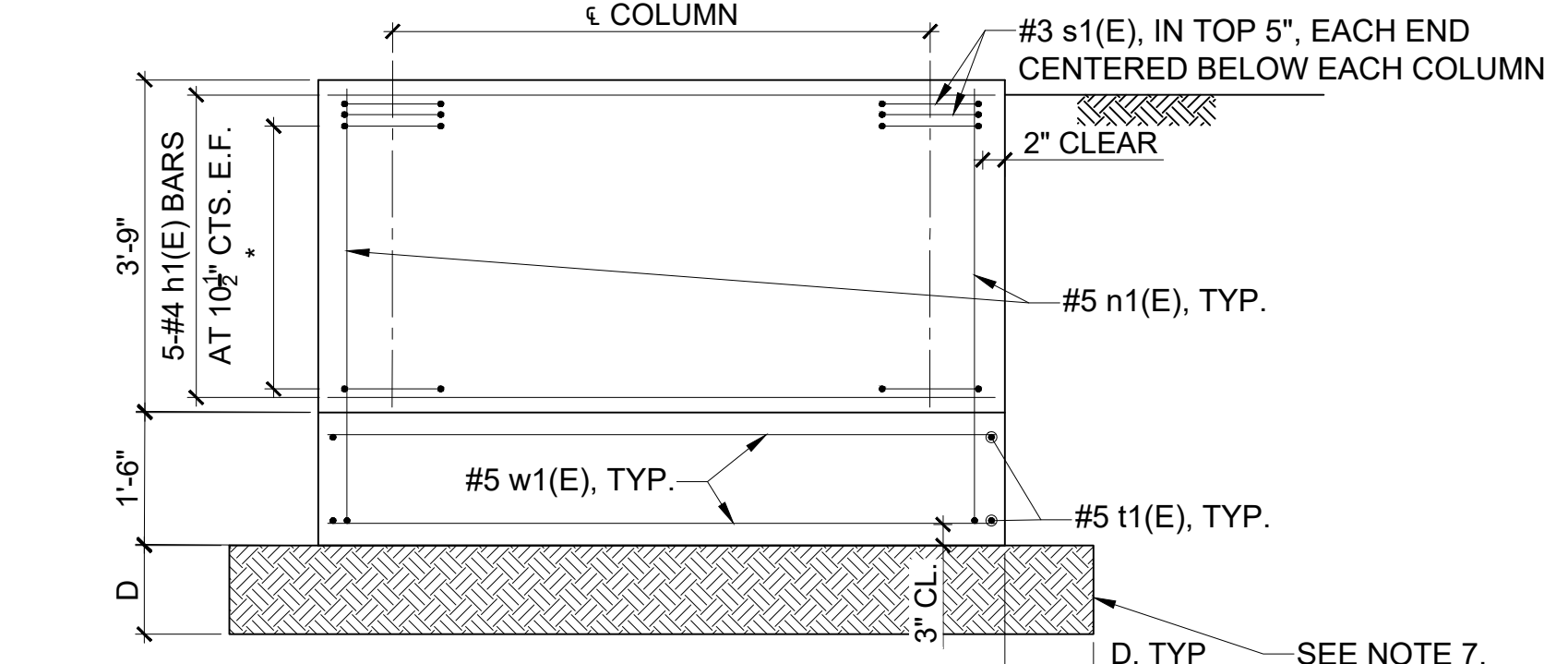


**FOUNDATION PLAN FOR TYPICAL OBSERVATION TOWER**

OBSERVATION TOWER NO.	STATION	OFFSET	ALIGNMENT
1	216+95.88	29.39' RT	€ INNER RING ROAD
2	210+71.86	26.46' RT	€ INNER RING ROAD
3	204+62.24	26.91' LT	€ INNER RING ROAD
4	32+45.11	51.15' LT	€ EXISTING TRACK
5	23+47.63	60.21' RT	€ EXISTING TRACK
6	12+63.88	44.07' LT	€ EXISTING TRACK
7	6+82.80	59.84' LT	€ EXISTING TRACK

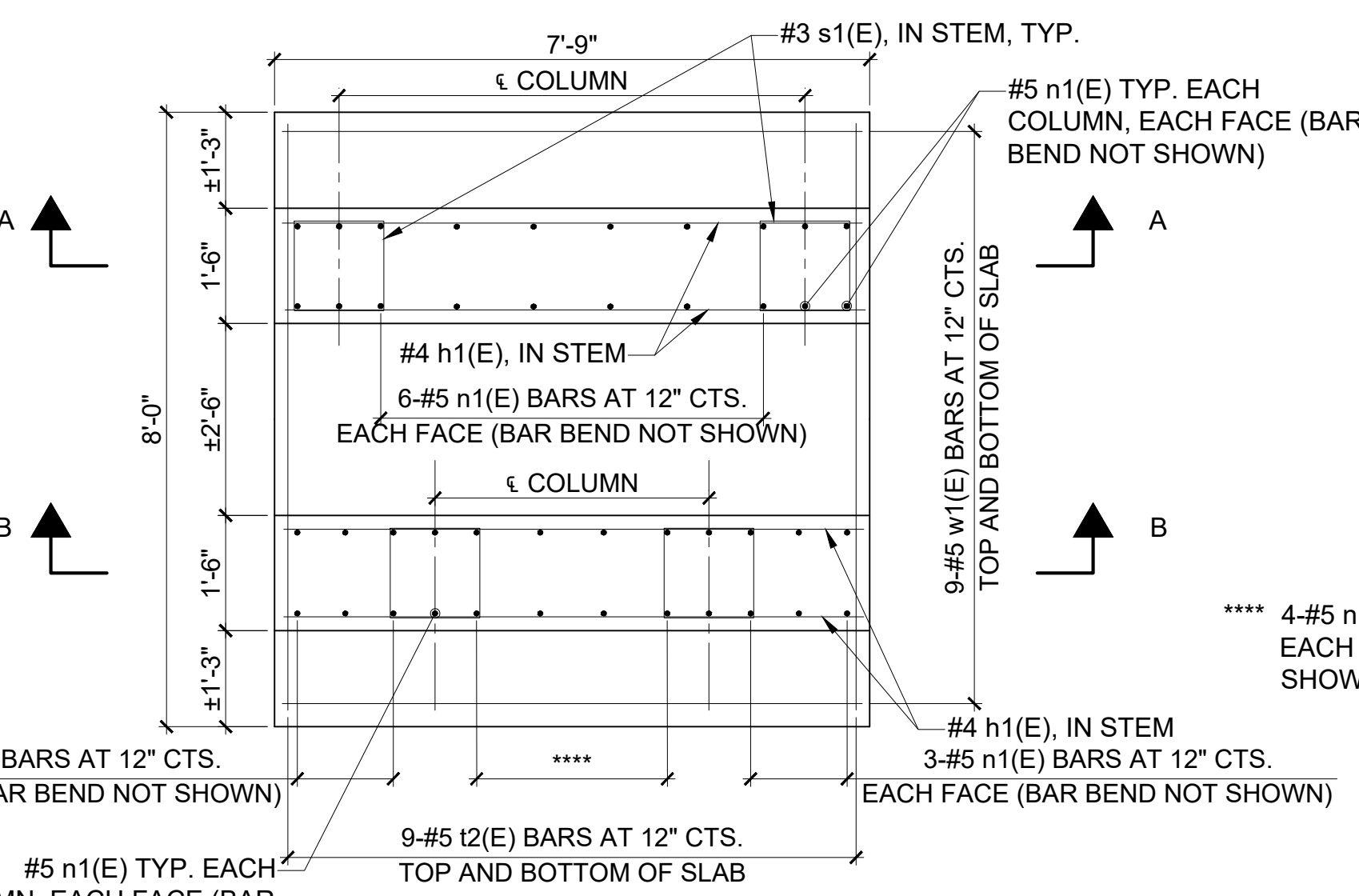


**PLAN FOUNDATION 1**

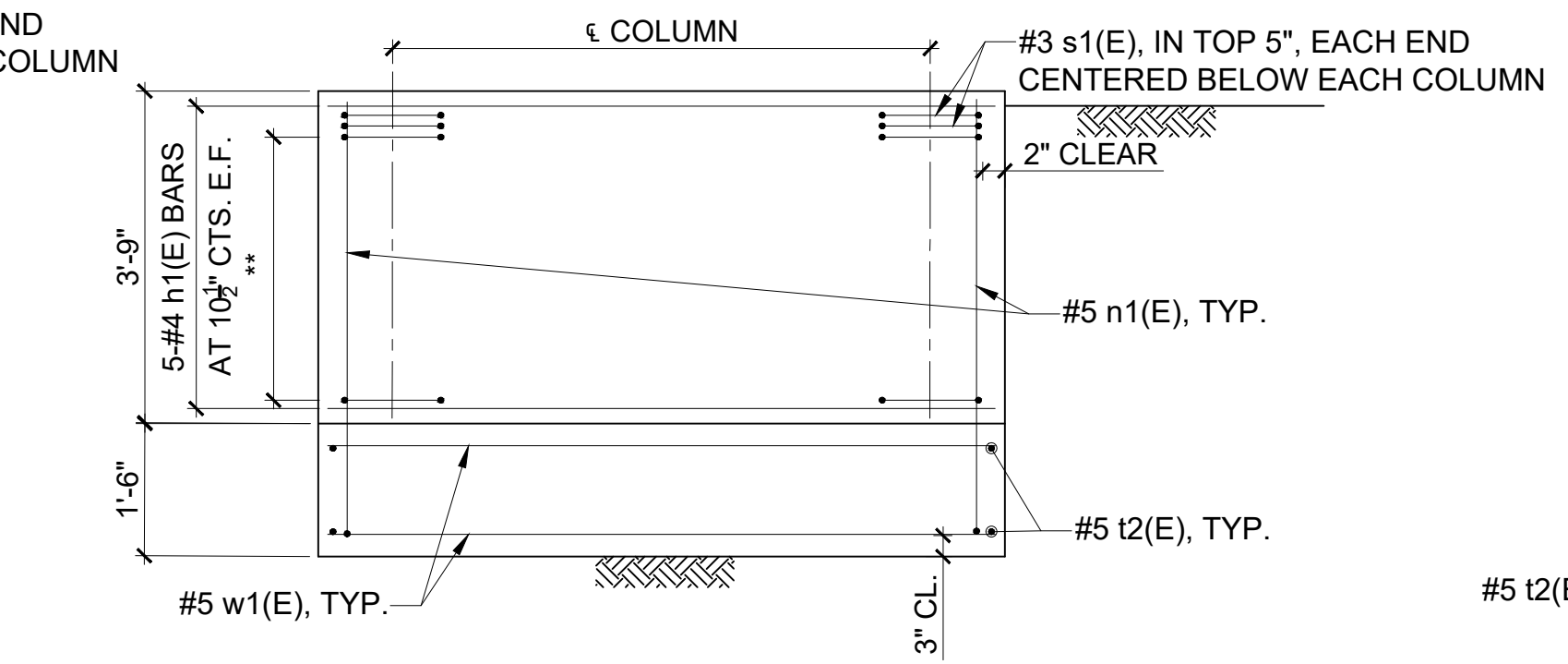


**ELEVATION FOUNDATION 1**

\* 5-#3 s1(E) BARS AT 10" CTS. EACH COLUMN

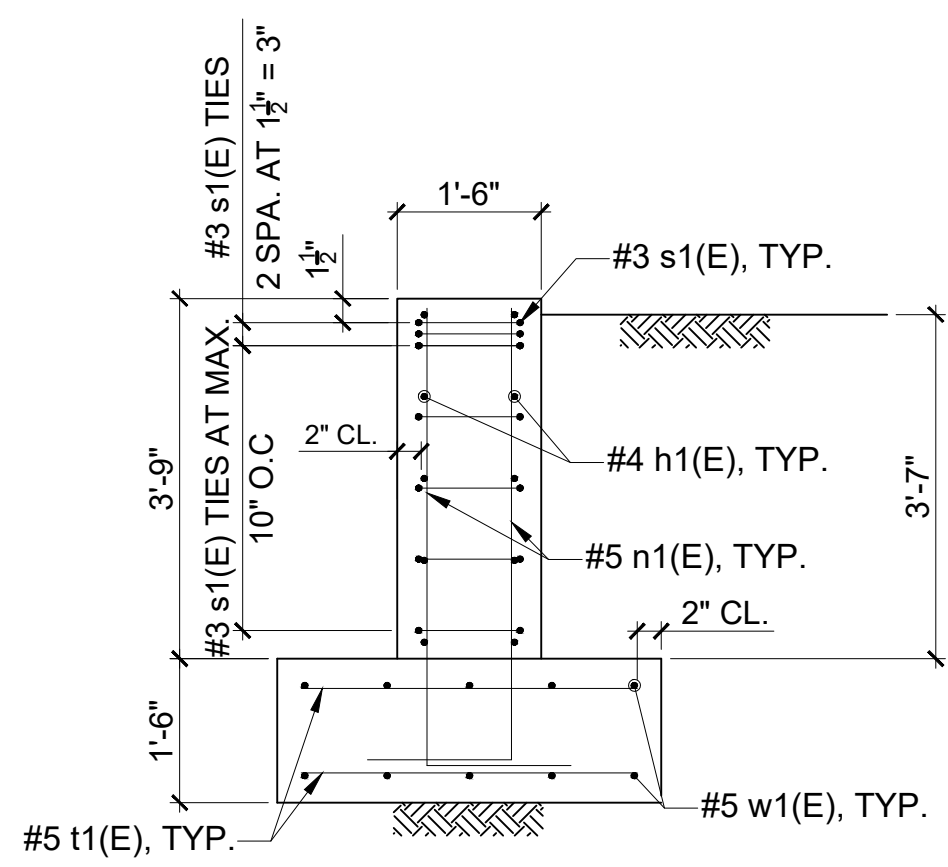


**PLAN FOUNDATION 2**

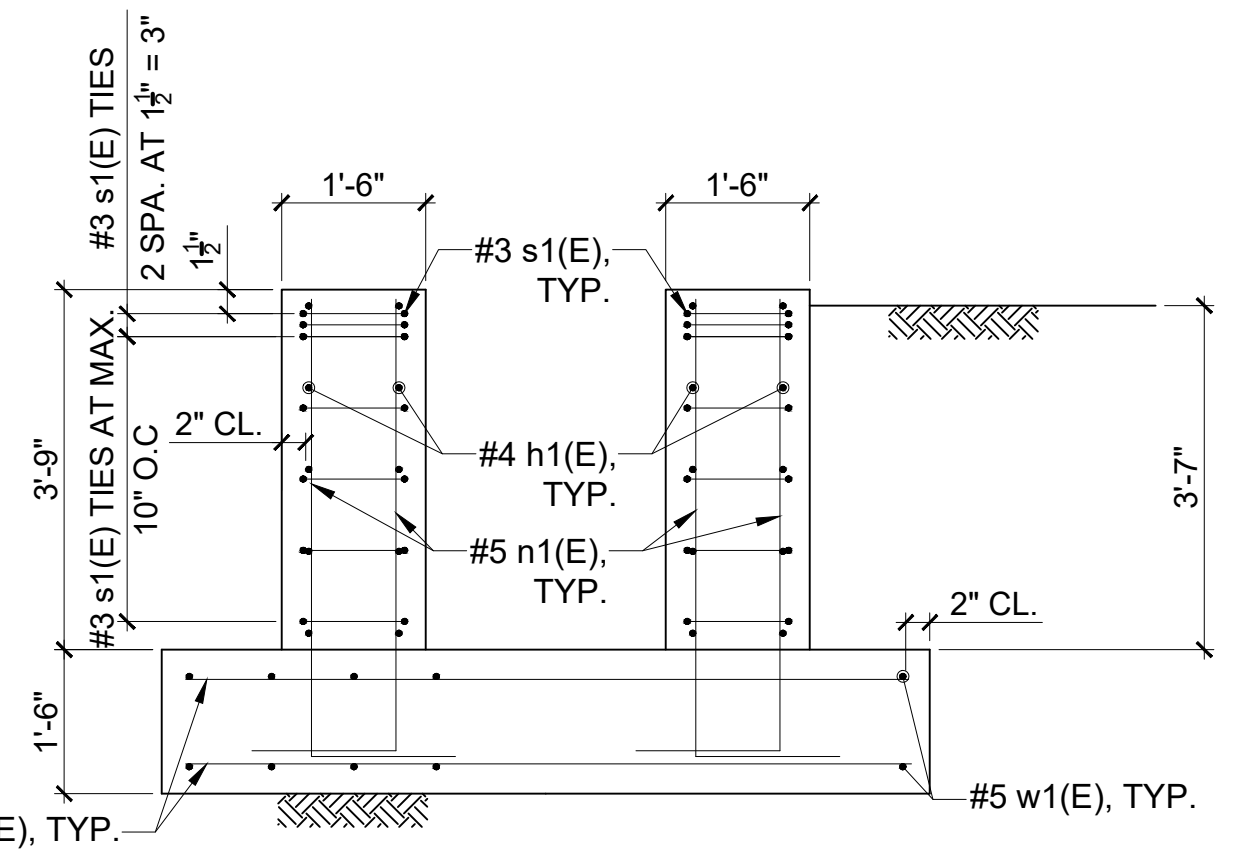


**SECTION A-A**

\*\* 5-#3 s1(E) BARS AT 10" CTS. EACH COLUMN



**SECTION FOUNDATION 1**



**SECTION FOUNDATION 2**

**SECTION B-B**

\*\*\* 5-#3 s1(E) BARS AT 10" CTS. EACH COLUMN

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**OBSERVATION TOWER FOUNDATION DETAILS**

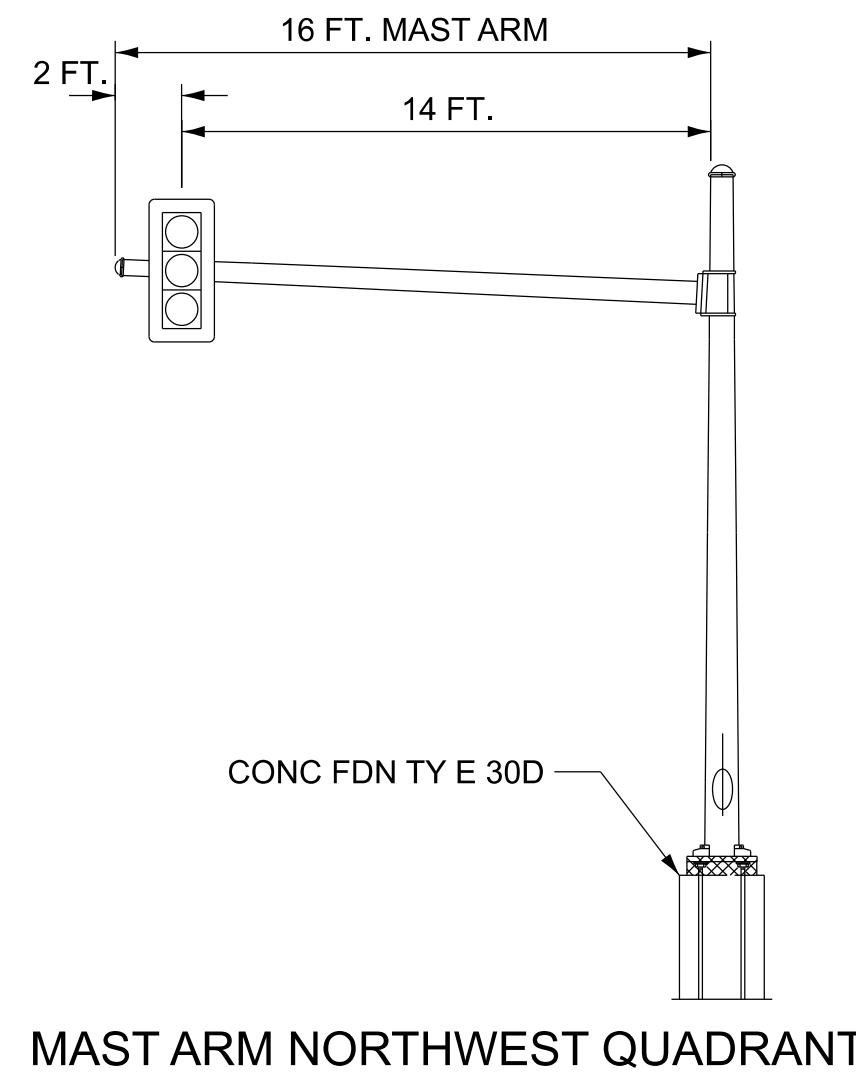
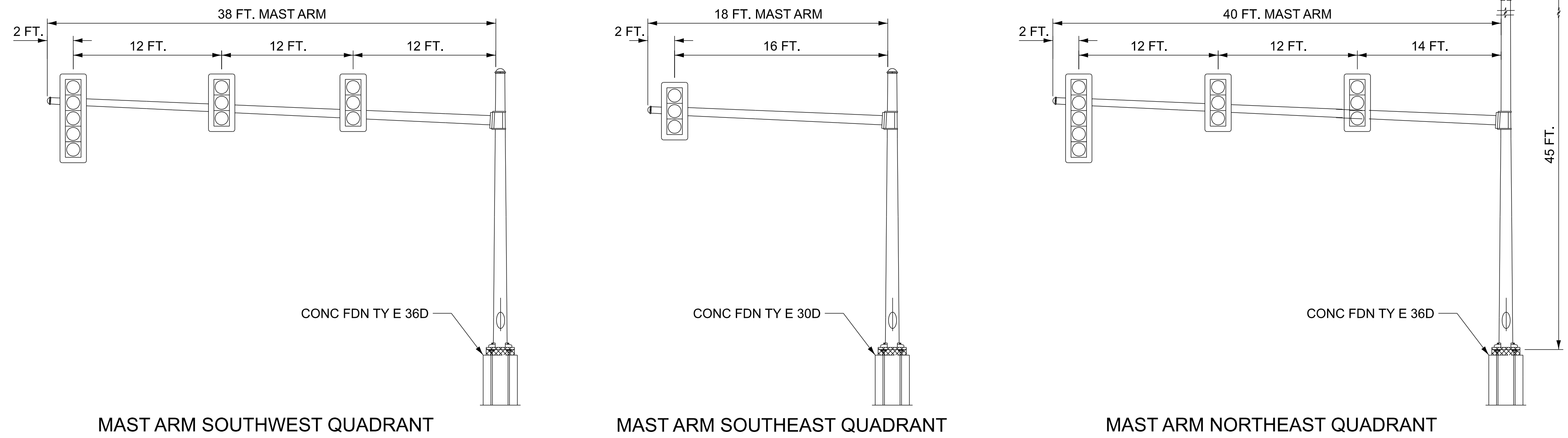
SCALE: SHEET 115 OF 131 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2510	TIM TRAINING TRACK 2026	SANGAMON	131	115

CONTRACT NO. 72N43  
ILLINOIS FED. AID PROJECT

USER NAME = VatsalM	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 01/30/26	DATE -	REVISED -

PAY ITEM	DESCRIPTION	UNITS	QUANTITY
81028350	UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	202
81028370	UNDERGROUND CONDUIT, PVC, 3" DIA.	FOOT	88
81028390	UNDERGROUND CONDUIT, PVC, 4" DIA.	FOOT	307
81400100	HANDHOLE	EACH	3
81400300	DOUBLE HANDHOLE	EACH	1
87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6, 1C	FOOT	12
87501000	TRAFFIC SIGNAL POST, 14 FT.	EACH	4
87700120	STEEL MAST ARM ASSEMBLY AND POLE, 16 FT.	EACH	1
87700130	STEEL MAST ARM ASSEMBLY AND POLE, 18 FT.	EACH	1
87700230	STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	1
87702930	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 40 FT.	EACH	1
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	12
87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	20
87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	24
88040070	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3
88040090	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	6
88040160	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	2
88040230	SIGNAL HEAD, POLYCARBONATE, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
88040260	SIGNAL HEAD, POLYCARBONATE, LED, 2-FACE, 1-3-SECTION, 1-5-SECTION, BRACKET MOUNTED	EACH	2
88040355	SIGNAL HEAD, POLYCARBONATE, LED, 3-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
88200100	TRAFFIC SIGNAL BACKPLATE	EACH	8



TRAFFIC SIGNAL PLAN LEGEND

PROPOSED	DESCRIPTION
	SIGNAL HEAD
	SIGNAL HEAD WITH TRAFFIC SIGNAL BACKPLATE
	STEEL MAST ARM ASSEMBLY AND POLE
	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE
	TRAFFIC SIGNAL POST
	HANDHOLE
	DOUBLE HANDHOLE
	CONDUIT
	LENGTH
	SIZE - TYPE (S=STEEL P=PVC F=FIBER DUCT U=UNI-DUCT)

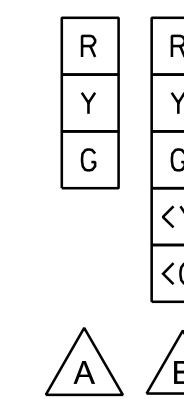
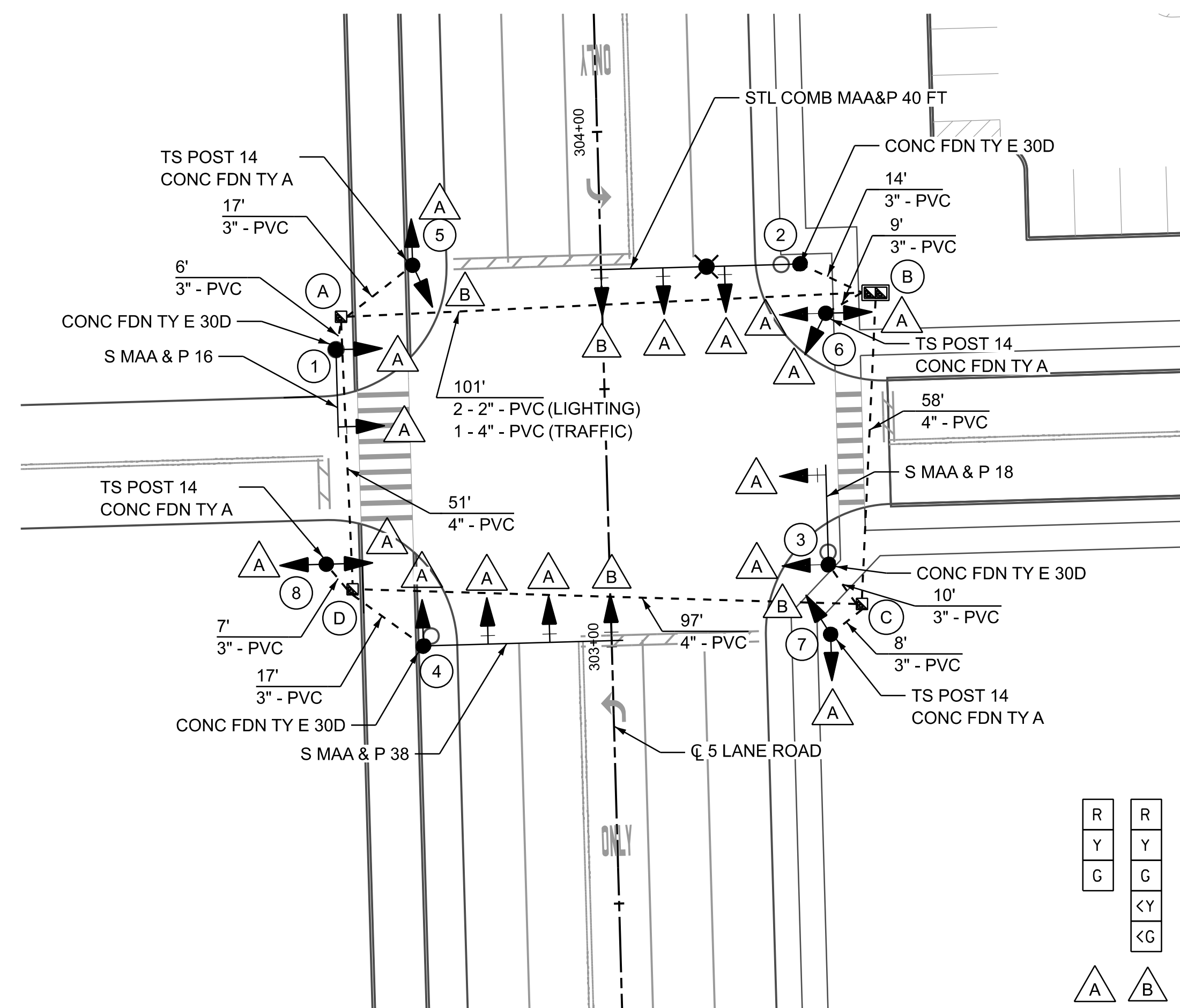
NOTE: SEE LIGHTING PLANS FOR COMBINATION MAST ARM ASSEMBLY LIGHTING INFORMATION

HANDHOLE LOCATIONS

HH I.D.	ALIGN	STATION	OFFSET
(A)	5 LANE RD	303+72	34' LT
(B)	5 LANE RD	303+67	53' RT
(C)	5 LANE RD	303+17	43' RT
(D)	5 LANE RD	303+11	35' LT

POLE LOCATIONS

POLE I.D.	ALIGN	STATION	OFFSET
(1)	5 LANE RD	303+59	52' LT
(2)	5 LANE RD	303+73	39' RT
(3)	5 LANE RD	303+15	43' RT
(4)	5 LANE RD	303+01	37' LT
(5)	5 LANE RD	303+75	37' LT
(6)	5 LANE RD	303+64	43' RT
(7)	5 LANE RD	303+01	43' RT
(8)	5 LANE RD	303+18	55' LT



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

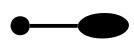


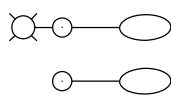


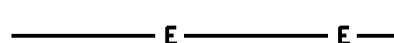



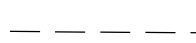




TRAFFIC SIGNAL PLAN

USER NAME = hisummers	DESIGNED - HTS	REVISED -
	DRAWN - HTS	REVISED -
	CHECKED - JIR	REVISED -
PLOT DATE = 1/30/2026	DATE - 1/30/2026	REVISED -

SCALE: 1" = 20'-0" SHEET 116 OF 131 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2510	TIM TRAINING TRACK 2026	SANGAMON	131	116
CONTRACT NO. 72N43				
ILLINOIS FED. AID PROJECT				

## LEGEND

	PROPOSED LUMINAIRE, DESIGNATION E, LIGHTING UNIT COMPLETE, 45' M.H., 15' MAST ARM 240V (LINE TO LINE) BREAKAWAY BASE. SEE STRUCTURAL PLANS FOR FOUNDATION.
	PROPOSED LUMINAIRE, DESIGNATION G, LIGHTING UNIT COMPLETE, 45' M.H., 15' MAST ARM 240V (LINE TO LINE), BREAKAWAY BASE. SEE STRUCTURAL PLANS FOR FOUNDATION.
	PROPOSED COMBINATION SIGNAL / LIGHT POLE, LUMINAIRE, DESIGNATION G, 45' M.H., 240V (LINE TO LINE) LED LUMINAIRE.
	EXISTING LIGHTING UNIT
	DISCONNECT SWITCH
	PROPOSED HANDHOLE
	PROPOSED CONDUIT AND CABLE, SIZE AND TYPE AS SHOWN ON PLANS
	PROPOSED CONCRETE ENCASED CONDUIT(S)
	PANELBOARD
	GROUND ROD
	GROUNDING COUNTERPOISE/CONDUCTOR - BURIED, BARE CABLE (EXTERIOR) - COPPER, #2 AWG MINIMUM, UON
	BOLTED GROUND CONNECTION
	EXOTHERMIC WELD CONNECTION
	CONDUIT ROUTED DOWN (INTO PAGE)
	UTILITY METER

## ABBREVIATIONS

ABBREVIATION	DESCRIPTION
AC	ALTERNATING CURRENT
A/C	AERIAL CABLE
B.O.C.	BACK OF CURB
BOD	BASIS OF DESIGN
CB	CIRCUIT BREAKER
CKT	CIRCUIT
CM	CENTIMETER
COMED	COMMONWEALTH EDISON COMPANY
CP	CONTROL PANEL
CT	CURRENT TRANSFORMER
DA	DAVIT ARM
DC	DIRECT CURRENT
DIA	DIAMETER
DISC	DISCONNECT SWITCH
DP	DISTRIBUTION PANEL
E	EXISTING UNIT TO REMAIN
EX.	EXISTING
ECA	ELECTRIC CABLE ASSEMBLY
EHH	ELECTRICAL HANDHOLE
E.O.P.	EDGE OF PAVEMENT
F.O.C.	FACE OF CURB
FT	FEET OR FOOT
FU	FUSE
GND	GROUND
HID	HIGH INTENSITY DISCHARGE
HPS	HIGH PRESSURE SODIUM
JB	JUNCTION BOX
KVA	KILOVOLT-AMPERE
KW	KILOWATTS
LED	LIGHT EMITTING DIODE
LC	LIGHTING CONTACTOR
LP	LIGHT POLE
LTFM	LIQUID TIGHT FLEXIBLE METALLIC
LPS	LOW PRESSURE SODIUM
M	METER
MA	MAST ARM
MC	MULTI-CONDUCTOR
MM	MILLIMETER
M.H.	MOUNTING HEIGHT
MW	MESSENGER WIRE
NO. #	NUMBER
N.T.S.	NOT TO SCALE
OT	OBSERVATION TOWER
P	PROPOSED
PB	PUSH BUTTON
PNL	PANEL
PVC	POLYVINYL CHLORIDE
PVCC RGC	PVC COATED RIGID GALVANIZED CONDUIT
PT	POTENTIAL TRANSFORMER
R	EXISTING UNIT TO BE REMOVED (OWNER SALVAGED U.N.O.)
RR	EXISTING UNIT TO BE REMOVED AND REINSTALLED
RECP	RECEPTACLE
RGC	RIGID GALVANIZED CONDUIT
SEL SW	SELECTOR SWITCH
SPARE	SPARE
SPACE	SPACE
SPD	SURGE PROTECTION DEVICE
SS	STAINLESS STEEL
STA	STATION
THH	TELECOMMUNICATIONS HANDHOLE
TS	TRAFFIC SIGNAL
XFMR	TRANSFORMER
UD	UNIT DUCT
U.N.O.	UNLESS NOTED OTHERWISE
UGC, GS	UNDERGROUND CONDUCT, GALVANIZED STEEL
V	VOLTS
W	WATTS
WP	WOOD POLE

## GENERAL NOTES

- THE ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST CODES, STANDARDS AND THE IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED JANUARY 1, 2022, AND SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS ADOPTED JANUARY 1, 2024.
- CONDUIT DUCTS SHALL BE INSTALLED AT A MINIMUM 30" DEPTH BELOW GRADE AND POSITIONED IN THE FIELD TO AVOID CONFLICT WITH ROADWAY UNDERDRAINS AND OTHER EXISTING AND PROPOSED UTILITIES. THE CONTRACTOR SHALL INCREASE DEPTH OF UNIT DUCT AND CONDUIT AS REQUIRED AT NO ADDITIONAL COST. THE CONTRACTOR SHALL COORDINATE RACEWAY DEPTH WITH THE ELECTRICAL DETAILS AND THE ENGINEER.
- CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS IN THE FIELD PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
- THE FOLLOWING ITEMS ARE EXCLUDED FROM THIS CONTRACT AND SHALL BE DESIGNED AND PROVIDED BY OTHERS: POWER FOR SECURITY GATES, POWER FEED TO PP-01 PANELBOARD, AND POWER FOR THE COMMUNICATIONS DEVICE (MEDIA CONVERTER) IN THE MAIN BUILDING. NO FEEDERS, BRANCH CIRCUITS, OR ASSOCIATED INFRASTRUCTURE FOR THESE ITEMS ARE INCLUDED IN THIS DESIGN.

## SCHEDULE OF QUANTITIES

Pay Items #	Pay Item Description	Unit	Quantity
81023100	CONDUIT ENCASED, CONCRETE, 1" DIA., PVC 1 WIDE X 1 HIGH	FOOT	185
81023200	CONDUIT ENCASED, CONCRETE, 2" DIA., PVC 1 WIDE X 1 HIGH	FOOT	185
81023300	CONDUIT ENCASED, CONCRETE, 2" DIA., PVC 2 WIDE X 1 HIGH	FOOT	50
81028320	UNDERGROUND CONDUIT, PVC, 1" DIA.	FOOT	2270
81028350	UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	6530
81028360	UNDERGROUND CONDUIT, PVC, 2 1/2" DIA., SCHD 80	FOOT	25
81028720	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 1" DIA.	FOOT	140
81028750	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 2" DIA.	FOOT	350
81100300	CONDUIT ATTACHED TO STRUCTURE, 1" DIA., GALVANIZED STEEL	FOOT	60
81100600	CONDUIT ATTACHED TO STRUCTURE, 2" DIA., GALVANIZED STEEL	FOOT	60
81300700	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 16" X 12" X 4"	EACH	4
81400100	HANDHOLE	EACH	35
81702110	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10	FOOT	11227
81702120	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 8	FOOT	50
81702130	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 6	FOOT	20910
81702140	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 4	FOOT	1050
81702155	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 1	FOOT	4520
81702160	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 1/0	FOOT	4050
82110005	LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION E	EACH	2
82110007	LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION G	EACH	2
82700100	TRANSFORMER, GENERAL PURPOSE	EACH	2
83009600	LIGHT POLE, ALUMINUM, 45 FT. M.H., 15 FT. MAST ARM	EACH	3
83800650	BREAKAWAY DEVICE, COUPLING WITH STAINLESS STEEL SCREEN	EACH	3
84400105	RELOCATE EXISTING LIGHTING UNIT	EACH	4
TBD	LIGHTING CONTACTOR	EACH	1
TBD	PANELBOARD	EACH	2
TBD	FEEDER INSTALLATION FOR A SEPARATE BUILDING	EACH	7
TBD	ELECTRICAL EQUIPMENT RACK	EACH	9
X8570100	DISCONNECT SWITCH	EACH	9
X1400397	RECEPTACLE OUTLET	EACH	3
X0327739	MISCELLANEOUS ELECTRICAL WORK	L SUM	1
X8040103	ELECTRIC SERVICE INSTALLATION (SPECIAL)	L SUM	1

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

### LIGHTING LEGEND AND GENERAL NOTES

SCALE: SHEET 117 OF 131 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2510	TIM TRAINING TRACK 2026	SANGAMON	131	117
CONTRACT NO. 72N43				
ILLINOIS FED. AID PROJECT				

USER NAME = bnsren	DESIGNED - BNS	REVISED -
	DRAWN - NRD	REVISED -
	CHECKED - BMH	REVISED -
PLOT DATE = 3/16/2026	DATE - 3/16/2026	REVISED -

MODEL: Default  
FILE NAME: 24-245\_sht181-01.dgn

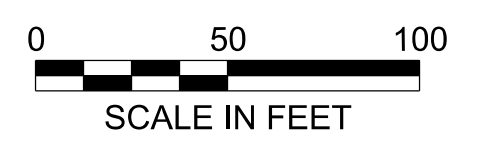
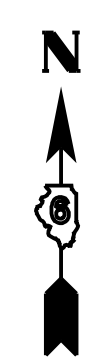


**NOTES:**

1. UNDERGROUND CONDUIT, PVC, 1" DIA.
2. UNDERGROUND CONDUIT, PVC, 2" DIA.
3. CONDUIT ENCASED, CONCRETE, 1" DIA., PVC 1 WIDE X 1 HIGH
4. CONDUIT ENCASED, CONCRETE, 2" DIA., PVC 1 WIDE X 1 HIGH
5. UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 1" DIA.
6. UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 2" DIA.
7. ELECTRICAL CABLE IN CONDUIT, 600V (XLP-TYPE USE) 2-1/C NO. 10, 1/C NO. 10 GROUND
8. ELECTRICAL CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 6, 1/C NO. 6 GROUND
9. RELOCATE EXISTING LIGHTING UNIT TO THE COORDINATE LOCATION SPECIFIED.
10. ELECTRICAL CABLE IN CONDUIT, 600V (XLP-TYPE USE) 2-1/C NO. 4, 1/C NO. 4 GROUND
11. ELECTRICAL CABLE IN CONDUIT, 600V (XLP-TYPE USE) 2-1/C NO. 1/0, 1/C NO. 1/0 GROUND
12. ELECTRICAL CABLE IN CONDUIT, 600V (XLP-TYPE USE) 2-1/C NO. 1, 1/C NO. 1 GROUND
13. ELECTRICAL CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 1, 1/C NO. 6 GROUND
14. CONDUIT ENCASED, CONCRETE, 2" DIA., PVC 2 WIDE X 1 HIGH
15. TWO UNDERGROUND CONDUITS, PVC, 2" DIA.
16. UNDERGROUND CONDUIT, SCHD 80 PVC, 2 1/2" DIA.

MATCH LINE SHEET NUMBER 119

MATCH LINE SHEET NUMBER 120



USER NAME = bnsren	DESIGNED - BNS	REVISED -
	DRAWN - NRD	REVISED -
	CHECKED - BMH	REVISED -
PLOT DATE = 3/16/2026	DATE - 3/16/2026	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

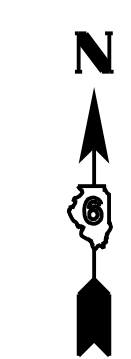
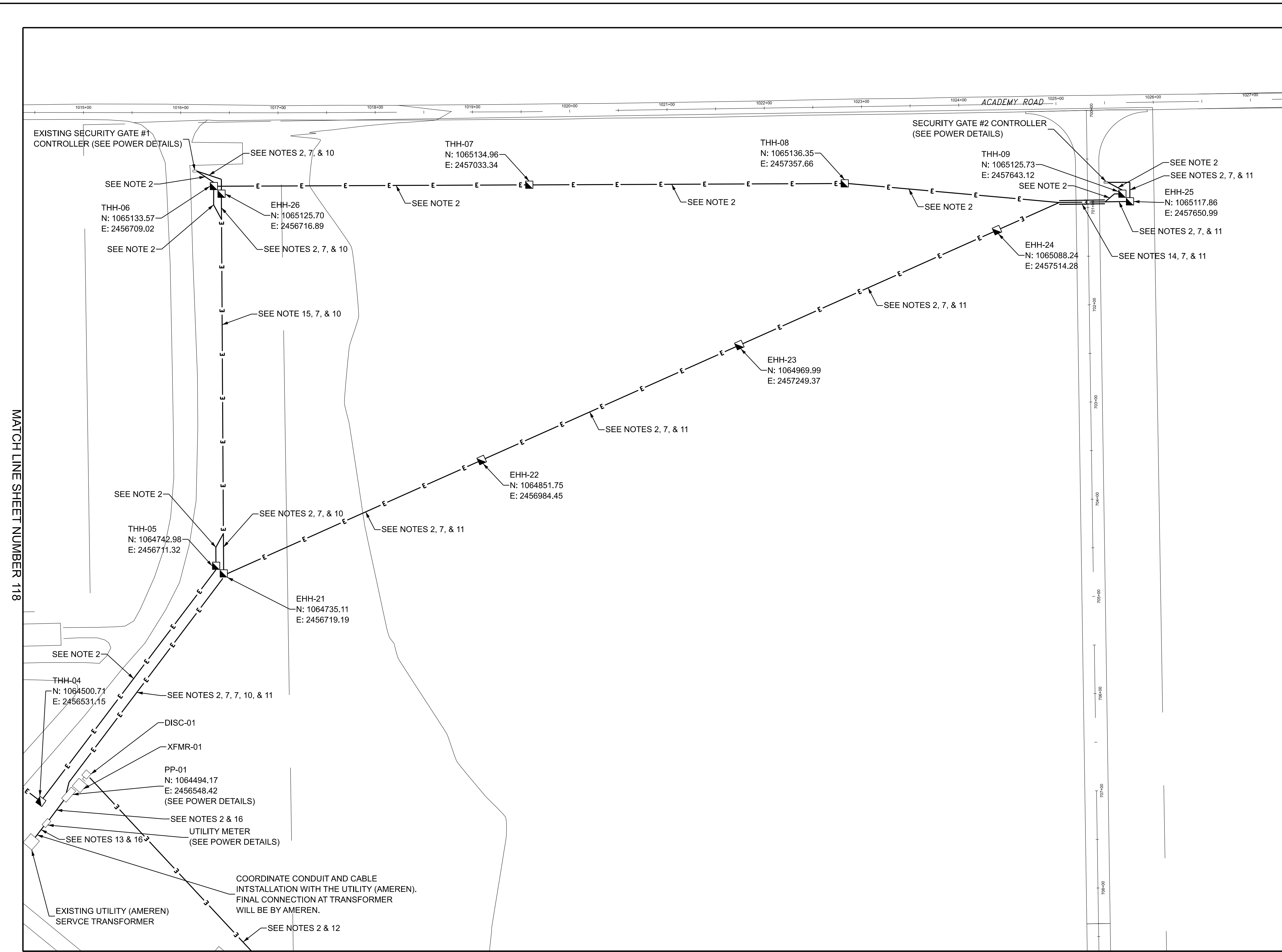
**PROPOSED ELECTRICAL PLAN**

SCALE: 1" = 50'-0" SHEET 118 OF 131 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2510	TIM TRAINING TRACK 2026	SANGAMON	131	118
CONTRACT NO. 72N43				
ILLINOIS FED. AID PROJECT				

**NOTES:**

1. UNDERGROUND CONDUIT, PVC, 1" DIA.
2. UNDERGROUND CONDUIT, PVC, 2" DIA.
3. CONDUIT ENCASED, CONCRETE, 1" DIA., PVC 1 WIDE X 1 HIGH
4. CONDUIT ENCASED, CONCRETE, 2" DIA., PVC 1 WIDE X 1 HIGH
5. UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 1" DIA.
6. UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 2" DIA.
7. ELECTRICAL CABLE IN CONDUIT, 600V (XLP-TYPE USE) 2-1/C NO. 10, 1/C NO. 10 GROUND
8. ELECTRICAL CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 6, 1/C NO. 6 GROUND
9. RELOCATE EXISTING LIGHTING UNIT TO THE COORDINATE LOCATION SPECIFIED.
10. ELECTRICAL CABLE IN CONDUIT, 600V (XLP-TYPE USE) 2-1/C NO. 4, 1/C NO. 4 GROUND
11. ELECTRICAL CABLE IN CONDUIT, 600V (XLP-TYPE USE) 2-1/C NO. 1/0, 1/C NO. 1/0 GROUND
12. ELECTRICAL CABLE IN CONDUIT, 600V (XLP-TYPE USE) 2-1/C NO. 1, 1/C NO. 1 GROUND
13. ELECTRICAL CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 1, 1/C NO. 6 GROUND
14. CONDUIT ENCASED, CONCRETE, 2" DIA., PVC 2 WIDE X 1 HIGH
15. TWO UNDERGROUND CONDUITS, PVC, 2" DIA.
16. UNDERGROUND CONDUIT, SCHD 80 PVC, 2 1/2" DIA.



MATCH LINE SHEET NUMBER 118

MATCH LINE SHEET NUMBER 121

MODEL: Default  
FILE NAME: 24-245\_sht191-02.dgn

USER NAME = bnsoren	DESIGNED - BNS	REVISED -
	DRAWN - NRD	REVISED -
	CHECKED - BMH	REVISED -
PLOT DATE = 3/16/2026	DATE - 3/16/2026	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PROPOSED ELECTRICAL PLAN**

SCALE: 1" = 50'-0" SHEET 119 OF 131 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2510	TIM TRAINING TRACK 2026	SANGAMON	131	119
CONTRACT NO. 72N43				
ILLINOIS FED. AID PROJECT				

COORDINATE CONDUIT PENETRATION LOCATION WITH THE COMMUNICATIONS CONTRACTOR. ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL CONDUIT THROUGH THE EXTERIOR WALL. ALL CONDUIT INSIDE THE BUILDING SHALL BE PROVIDED AND INSTALLED BY THE COMMUNICATIONS CONTRACTOR.

MISCELLANEOUS ELECTRICAL WORK. PROVIDE BRANCH CIRCUIT TO SERVE MEDIA CONVERTER RECEPTACLE.

DUPLEX RECEPTACLE. PROVIDE AND INSTALL RECEPTACLE. COORDINATE INSTALLATION LOCATION WITH COMMUNICATIONS CONTRACTOR. RECEPTACLE SERVES MEDIA CONVERTER.

THH-01  
N: 1064258.58  
E: 2456035.28

SEE NOTE 6

SEE NOTE 2

THH-02  
N: 1064258.68  
E: 2456134.23

SEE NOTE 9  
N: 1064113.26  
E: 2456009.36

SEE NOTE 9  
N: 1064087.46  
E: 2456215.35

SEE NOTE 9  
N: 1063983.48  
E: 2455981.67

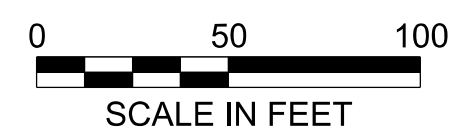
SEE NOTE 9  
N: 1063907.67  
E: 2456150.18

NOTES:

1. UNDERGROUND CONDUIT, PVC, 1" DIA.
2. UNDERGROUND CONDUIT, PVC, 2" DIA.
3. CONDUIT ENCASED, CONCRETE, 1" DIA., PVC 1 WIDE X 1 HIGH
4. CONDUIT ENCASED, CONCRETE, 2" DIA., PVC 1 WIDE X 1 HIGH
5. UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 1" DIA.
6. UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 2" DIA.
7. ELECTRICAL CABLE IN CONDUIT, 600V (XLP-TYPE USE) 2-1/C NO. 10, 1/C NO. 10 GROUND
8. ELECTRICAL CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 6, 1/C NO. 6 GROUND
9. RELOCATE EXISTING LIGHTING UNIT TO THE COORDINATE LOCATION SPECIFIED.
10. ELECTRICAL CABLE IN CONDUIT, 600V (XLP-TYPE USE) 2-1/C NO. 4, 1/C NO. 4 GROUND
11. ELECTRICAL CABLE IN CONDUIT, 600V (XLP-TYPE USE) 2-1/C NO. 1/0, 1/C NO. 1/0 GROUND
12. ELECTRICAL CABLE IN CONDUIT, 600V (XLP-TYPE USE) 2-1/C NO. 1, 1/C NO. 1 GROUND
13. ELECTRICAL CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 1, 1/C NO. 6 GROUND
14. CONDUIT ENCASED, CONCRETE, 2" DIA., PVC 2 WIDE X 1 HIGH
15. TWO UNDERGROUND CONDUITS, PVC, 2" DIA.
16. UNDERGROUND CONDUIT, SCHD 80 PVC, 2 1/2" DIA.

MATCH LINE SHEET NUMBER 121

MODEL: Default  
FILE NAME: 24-245\_sht118-03.dgn



USER NAME = bnsren	DESIGNED - BNS	REVISED -
	DRAWN - NRD	REVISED -
	CHECKED - BMH	REVISED -
PLOT DATE = 3/16/2026	DATE - 3/16/2026	REVISED -

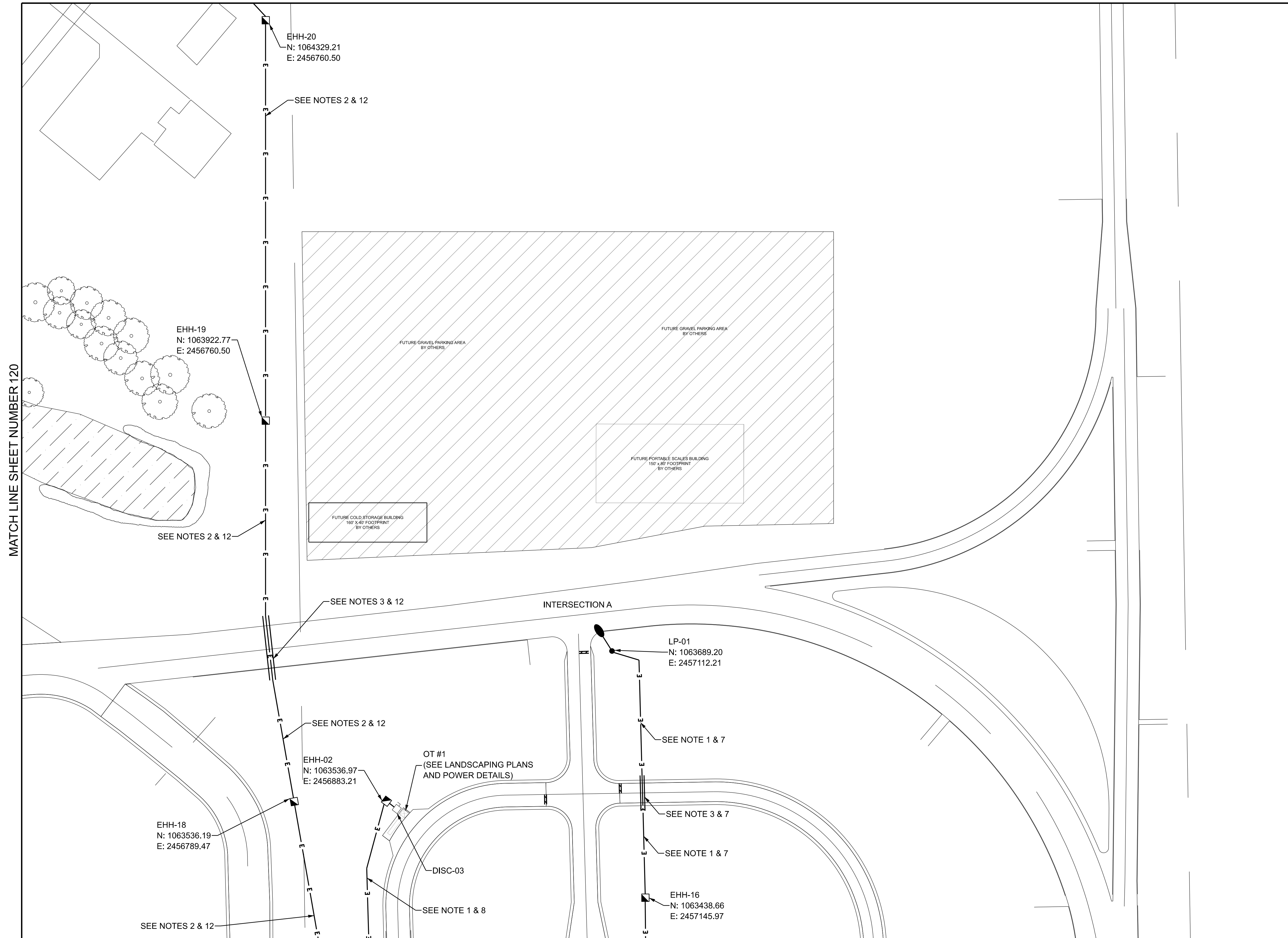
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PROPOSED ELECTRICAL PLAN**

SCALE: 1" = 50'-0" SHEET 120 OF 131 SHEETS STA. TO STA.

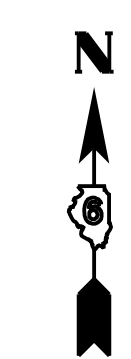
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2510	TIM TRAINING TRACK 2026	SANGAMON	131	120
CONTRACT NO. 72N43				
ILLINOIS FED. AID PROJECT				

MATCH LINE SHEET NUMBER 120



NOTES:

1. UNDERGROUND CONDUIT, PVC, 1" DIA.
2. UNDERGROUND CONDUIT, PVC, 2" DIA.
3. CONDUIT ENCASED, CONCRETE, 1" DIA., PVC 1 WIDE X 1 HIGH
4. CONDUIT ENCASED, CONCRETE, 2" DIA., PVC 1 WIDE X 1 HIGH
5. UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 1" DIA.
6. UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 2" DIA.
7. ELECTRICAL CABLE IN CONDUIT, 600V (XLP-TYPE USE) 2-1/C NO. 10, 1/C NO. 10 GROUND
8. ELECTRICAL CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 6, 1/C NO. 6 GROUND
9. RELOCATE EXISTING LIGHTING UNIT TO THE COORDINATE LOCATION SPECIFIED.
10. ELECTRICAL CABLE IN CONDUIT, 600V (XLP-TYPE USE) 2-1/C NO. 4, 1/C NO. 4 GROUND
11. ELECTRICAL CABLE IN CONDUIT, 600V (XLP-TYPE USE) 2-1/C NO. 1/0, 1/C NO. 1/0 GROUND
12. ELECTRICAL CABLE IN CONDUIT, 600V (XLP-TYPE USE) 2-1/C NO. 1, 1/C NO. 1 GROUND
13. ELECTRICAL CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 1, 1/C NO. 6 GROUND
14. CONDUIT ENCASED, CONCRETE, 2" DIA., PVC 2 WIDE X 1 HIGH
15. TWO UNDERGROUND CONDUITS, PVC, 2" DIA.
16. UNDERGROUND CONDUIT, SCHD 80 PVC, 2 1/2" DIA.



MODEL: Default  
FILE NAME: 24-245\_sht119-04.dgn

USER NAME = bnsen	DESIGNED - BNS	REVISED -
	DRAWN - NRD	REVISED -
	CHECKED - BMH	REVISED -
PLOT DATE = 3/16/2026	DATE - 3/16/2026	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PROPOSED ELECTRICAL PLAN**

SCALE: 1" = 50'-0" SHEET 121 OF 131 SHEETS STA. TO STA.

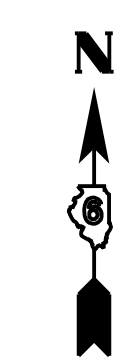
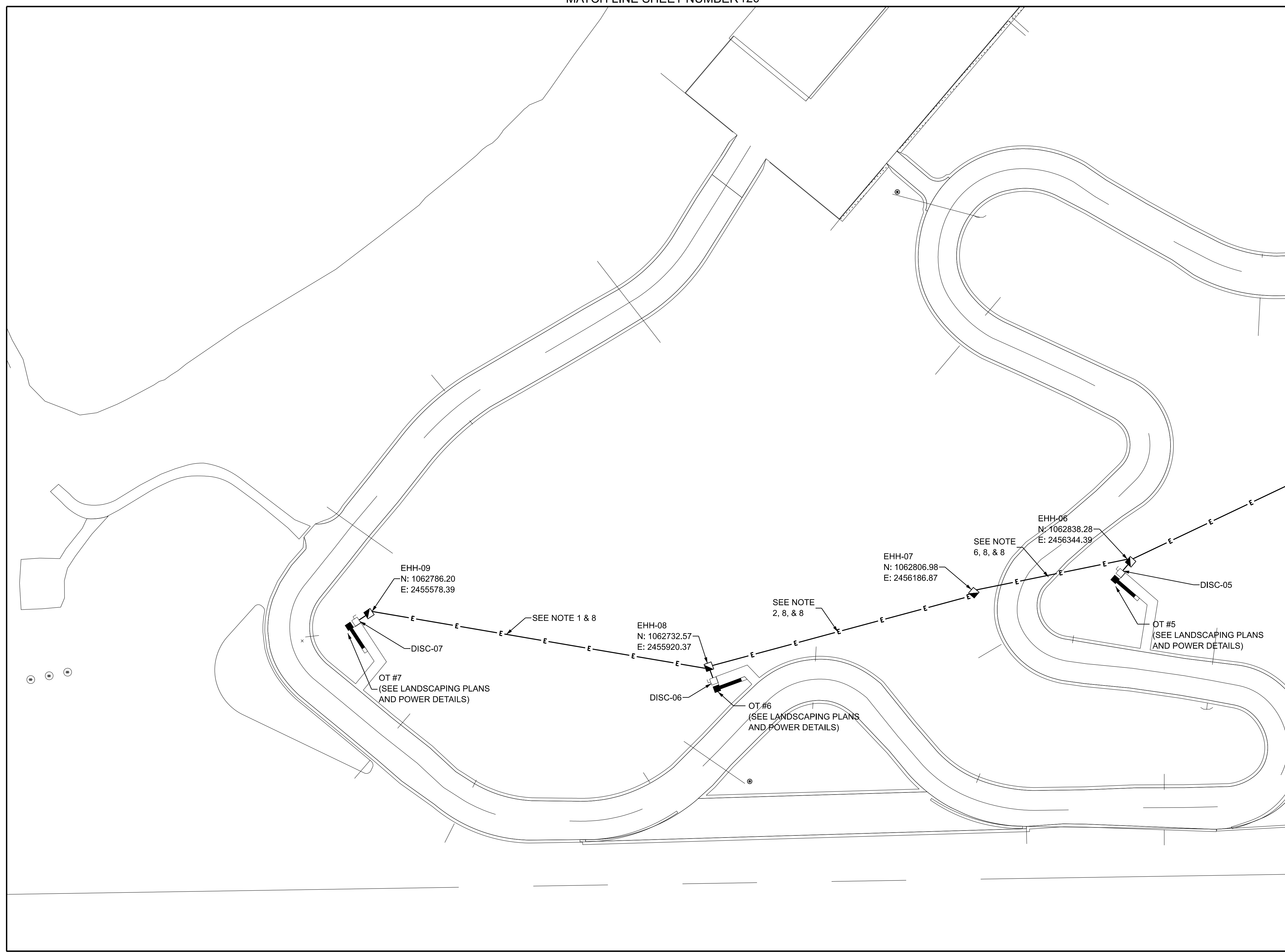
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2510	TIM TRAINING TRACK 2026	SANGAMON	131	121
CONTRACT NO. 72N43				

ILLINOIS FED. AID PROJECT

NOTES:

1. UNDERGROUND CONDUIT, PVC, 1" DIA.
2. UNDERGROUND CONDUIT, PVC, 2" DIA.
3. CONDUIT ENCASED, CONCRETE, 1" DIA., PVC 1 WIDE X 1 HIGH
4. CONDUIT ENCASED, CONCRETE, 2" DIA., PVC 1 WIDE X 1 HIGH
5. UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 1" DIA.
6. UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 2" DIA.
7. ELECTRICAL CABLE IN CONDUIT, 600V (XLP-TYPE USE) 2-1/C NO. 10, 1/C NO. 10 GROUND
8. ELECTRICAL CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 6, 1/C NO. 6 GROUND
9. RELOCATE EXISTING LIGHTING UNIT TO THE COORDINATE LOCATION SPECIFIED.
10. ELECTRICAL CABLE IN CONDUIT, 600V (XLP-TYPE USE) 2-1/C NO. 4, 1/C NO. 4 GROUND
11. ELECTRICAL CABLE IN CONDUIT, 600V (XLP-TYPE USE) 2-1/C NO. 1/0, 1/C NO. 1/0 GROUND
12. ELECTRICAL CABLE IN CONDUIT, 600V (XLP-TYPE USE) 2-1/C NO. 1, 1/C NO. 1 GROUND
13. ELECTRICAL CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 1, 1/C NO. 6 GROUND
14. CONDUIT ENCASED, CONCRETE, 2" DIA., PVC 2 WIDE X 1 HIGH
15. TWO UNDERGROUND CONDUITS, PVC, 2" DIA.
16. UNDERGROUND CONDUIT, SCHD 80 PVC, 2 1/2" DIA.

MATCH LINE SHEET NUMBER 123



MODEL: Default  
FILE NAME: 24-245\_sht122-05.dgn

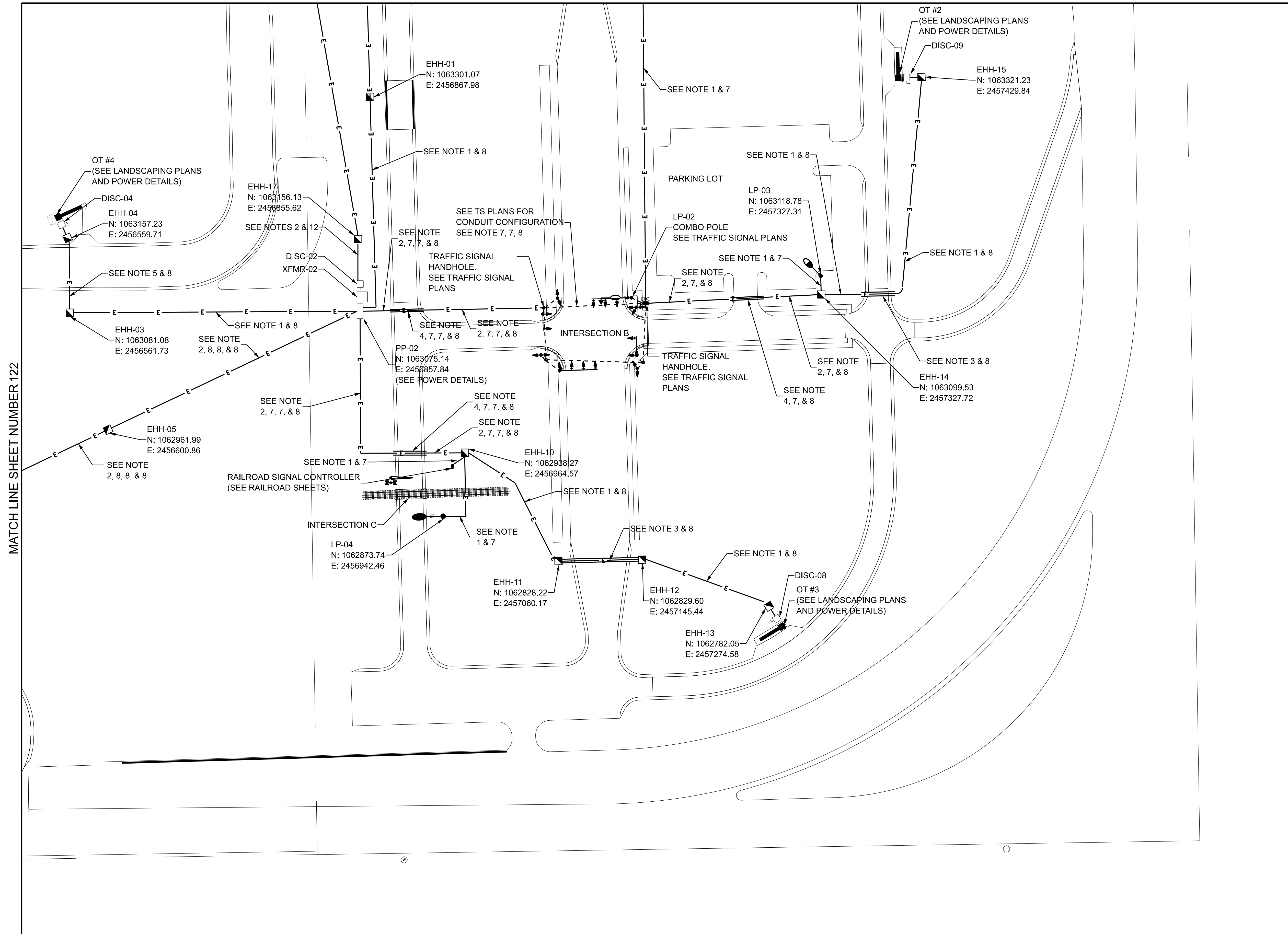
USER NAME = bnsren	DESIGNED - BNS	REVISED -
	DRAWN - NRD	REVISED -
	CHECKED - BMH	REVISED -
PLOT DATE = 3/16/2026	DATE - 3/16/2026	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PROPOSED ELECTRICAL PLAN**

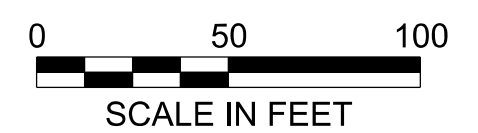
SCALE: 1" = 50'-0" SHEET 122 OF 131 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2510	TIM TRAINING TRACK 2026	SANGAMON	131	122
CONTRACT NO. 72N43				
ILLINOIS FED. AID PROJECT				



NOTES:

1. UNDERGROUND CONDUIT, PVC, 1" DIA.
2. UNDERGROUND CONDUIT, PVC, 2" DIA.
3. CONDUIT ENCASED, CONCRETE, 1" DIA., PVC 1 WIDE X 1 HIGH
4. CONDUIT ENCASED, CONCRETE, 2" DIA., PVC 1 WIDE X 1 HIGH
5. UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 1" DIA.
6. UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 2" DIA.
7. ELECTRICAL CABLE IN CONDUIT, 600V (XLP-TYPE USE) 2-1/C NO. 10, 1/C NO. 10 GROUND
8. ELECTRICAL CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 6, 1/C NO. 6 GROUND
9. RELOCATE EXISTING LIGHTING UNIT TO THE COORDINATE LOCATION SPECIFIED.
10. ELECTRICAL CABLE IN CONDUIT, 600V (XLP-TYPE USE) 2-1/C NO. 4, 1/C NO. 4 GROUND
11. ELECTRICAL CABLE IN CONDUIT, 600V (XLP-TYPE USE) 2-1/C NO. 1/0, 1/C NO. 1/0 GROUND
12. ELECTRICAL CABLE IN CONDUIT, 600V (XLP-TYPE USE) 2-1/C NO. 1, 1/C NO. 1 GROUND
13. ELECTRICAL CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 1, 1/C NO. 6 GROUND
14. CONDUIT ENCASED, CONCRETE, 2" DIA., PVC 2 WIDE X 1 HIGH
15. TWO UNDERGROUND CONDUITS, PVC, 2" DIA.
16. UNDERGROUND CONDUIT, SCHD 80 PVC, 2 1/2" DIA.



MODEL: Default  
FILE NAME: 24-245\_sht121-06.dgn

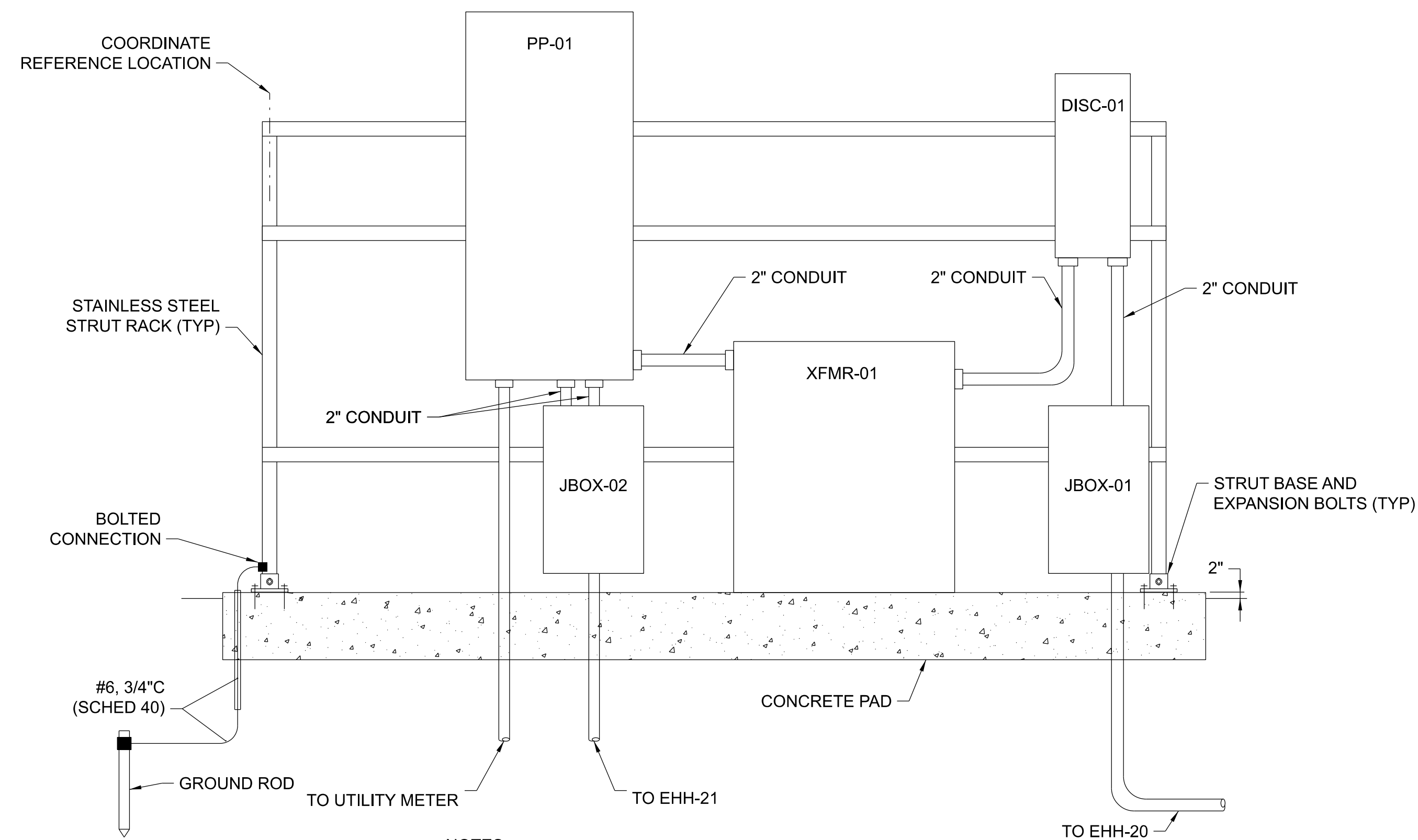
USER NAME = bnsere	DESIGNED - BNS	REVISED -
	DRAWN - NRD	REVISED -
	CHECKED - BMH	REVISED -
PLOT DATE = 3/16/2026	DATE - 3/16/2026	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PROPOSED ELECTRICAL PLAN**

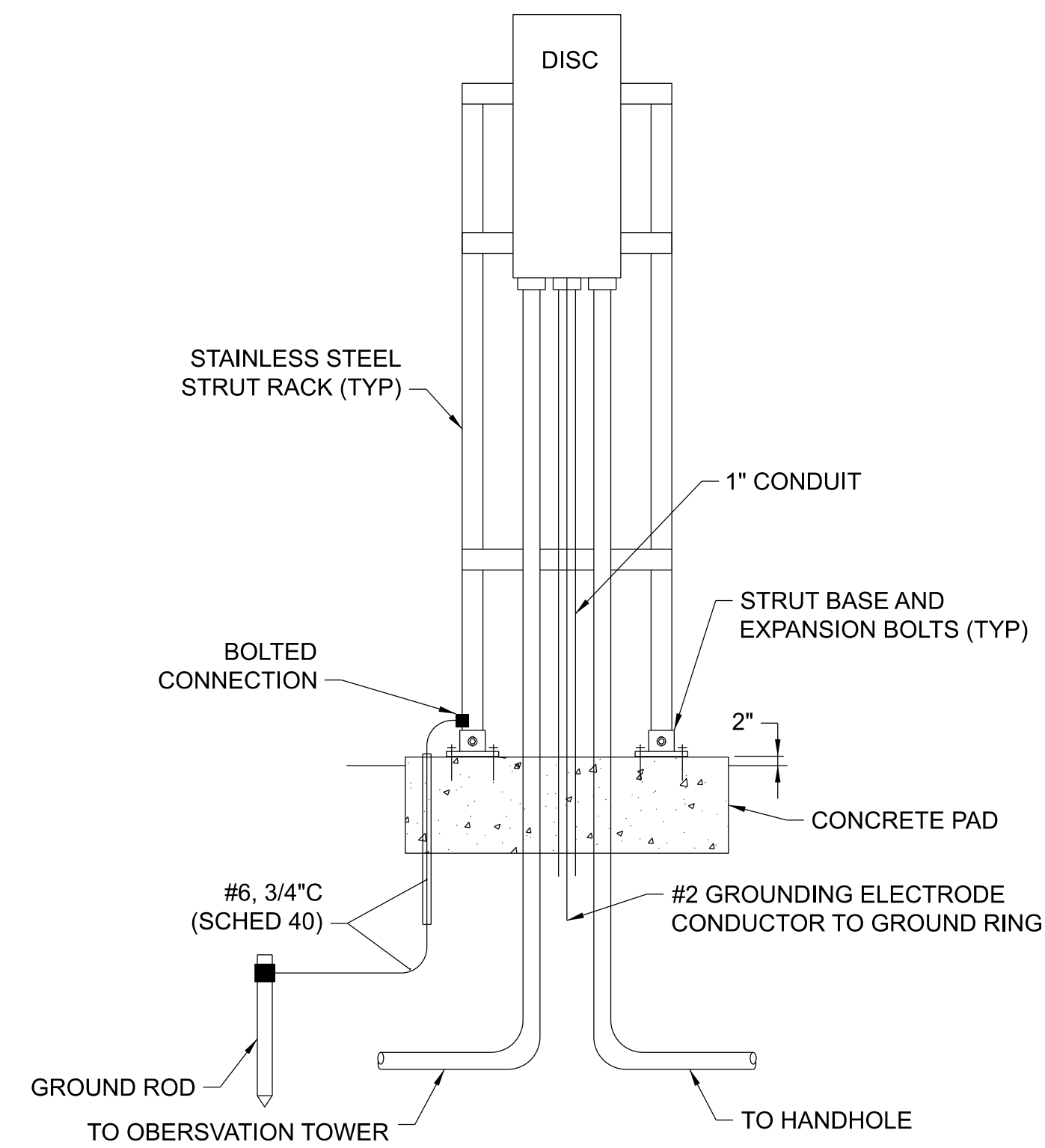
SCALE: 1" = 50'-0" SHEET 123 OF 131 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2510	TIM TRAINING TRACK 2026	SANGAMON	131	123
CONTRACT NO. 72N43				
ILLINOIS FED. AID PROJECT				



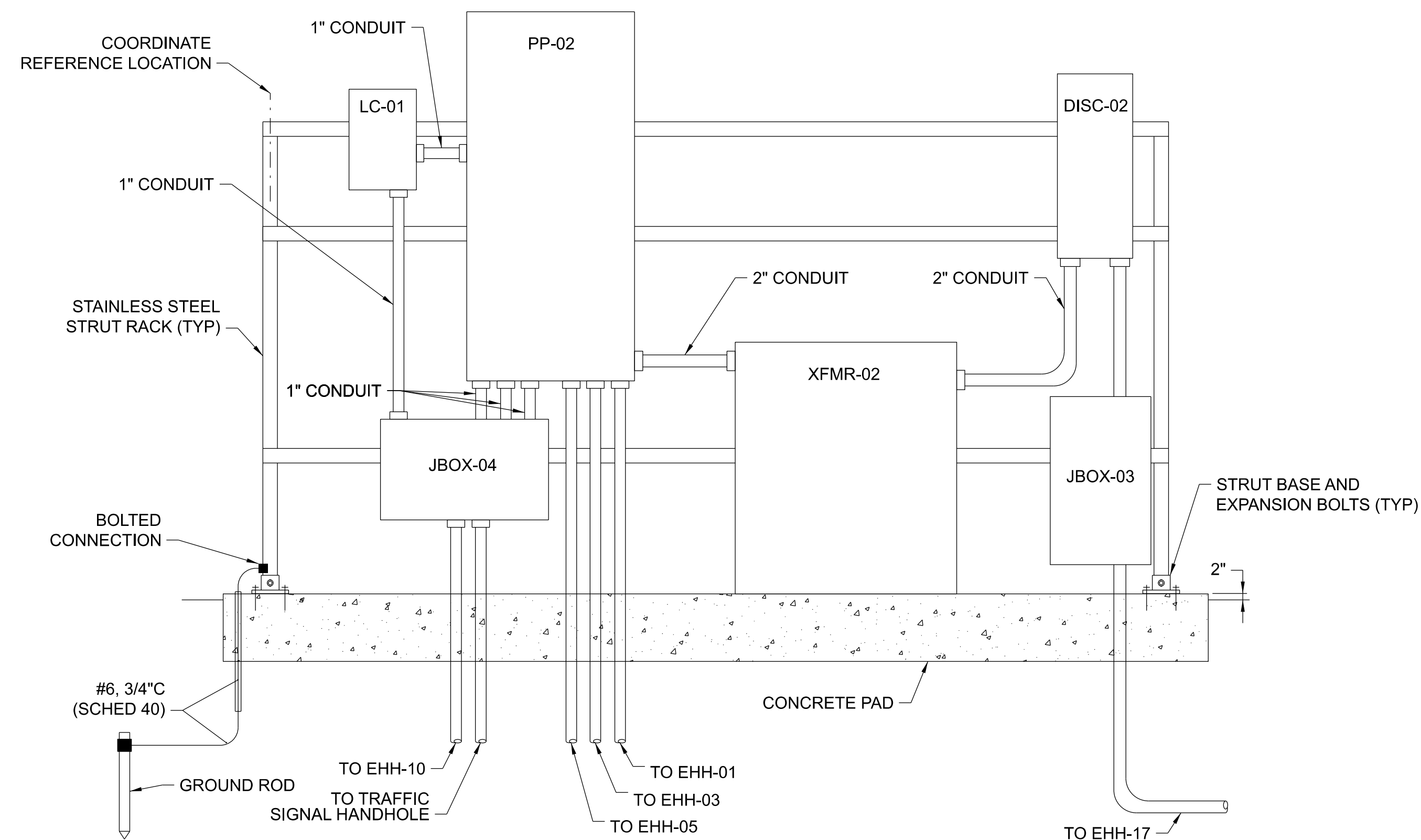
NOTES:  
1. SEE ELECTRICAL PLANS FOR CONDUIT SIZES THAT ARE NOT LISTED.

**ELECTRICAL EQUIPMENT RACK ELEVATION  
(FRONT) FOR PANELBOARD PP-01**



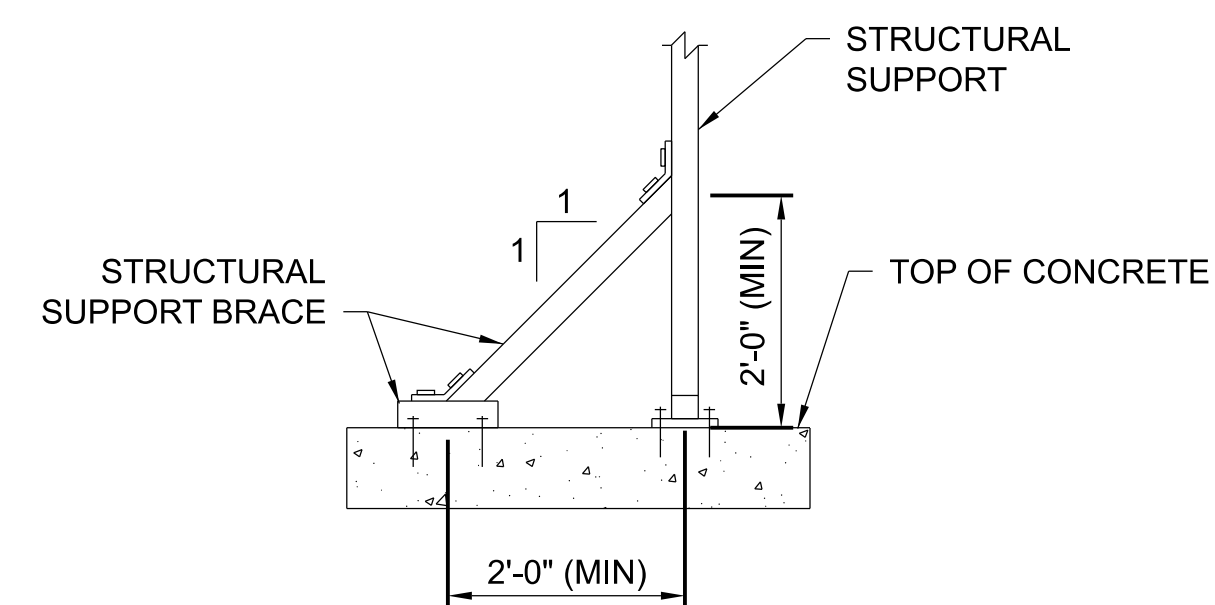
NOTES:  
1. SEE ELECTRICAL PLANS FOR CONDUIT SIZES THAT ARE NOT LISTED.

**TYPICAL ELECTRICAL EQUIPMENT RACK  
ELEVATION (FRONT) FOR DISCONNECT**



NOTES:  
1. SEE ELECTRICAL PLANS FOR CONDUIT SIZES THAT ARE NOT LISTED.

**ELECTRICAL EQUIPMENT RACK ELEVATION  
(FRONT) FOR PANELBOARD PP-02**



**TYPICAL ELECTRICAL EQUIPMENT RACK SUPPORT DETAIL**

MODEL: Default  
FILE NAME: 24-245\_sht-power-details-01.dgn

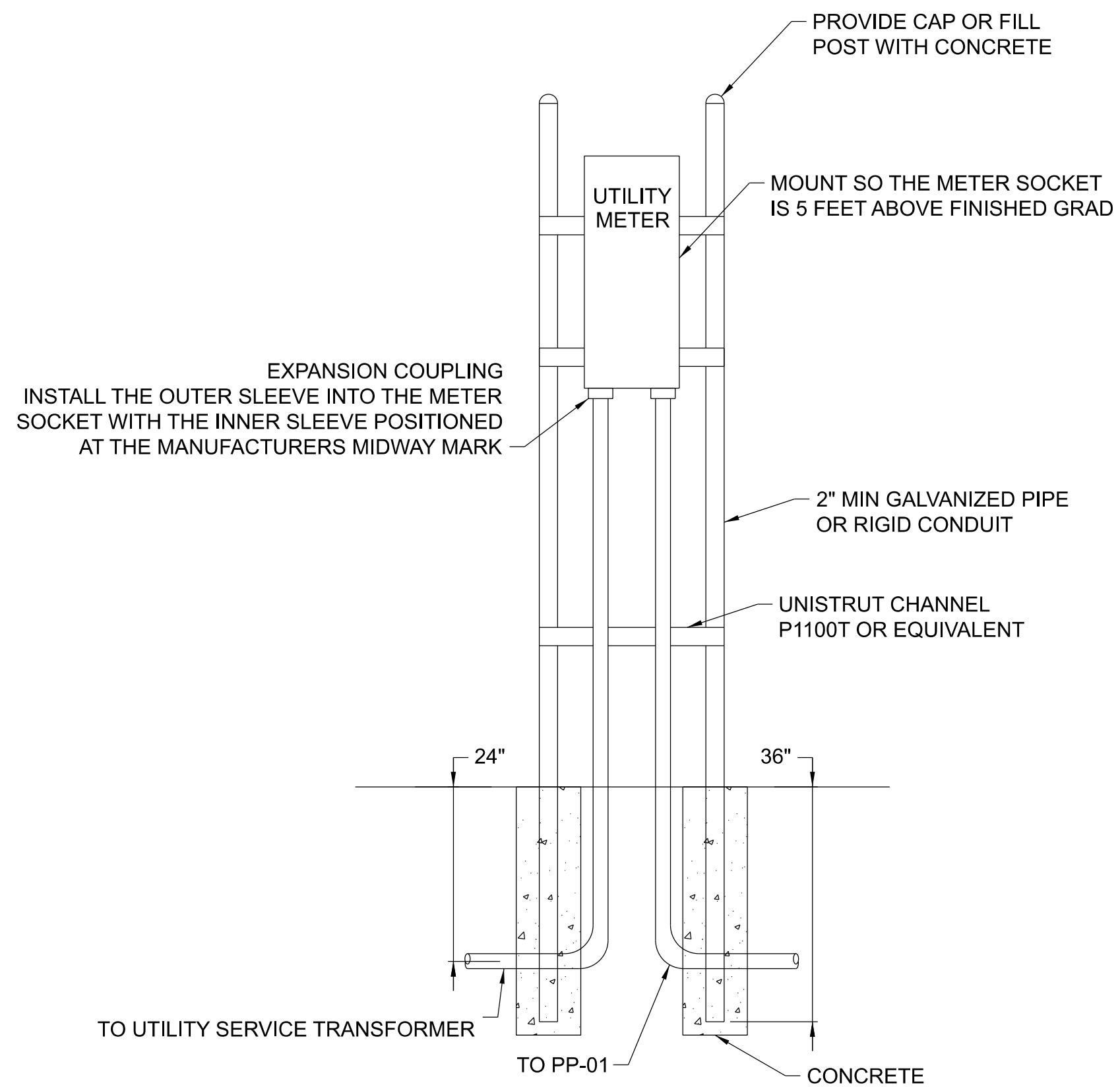
USER NAME = bnsoren	DESIGNED - BNS	REVISED -
	DRAWN - NRD	REVISED -
	CHECKED - BMH	REVISED -
PLOT DATE = 3/16/2026	DATE - 3/16/2026	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**POWER DETAILS 1**

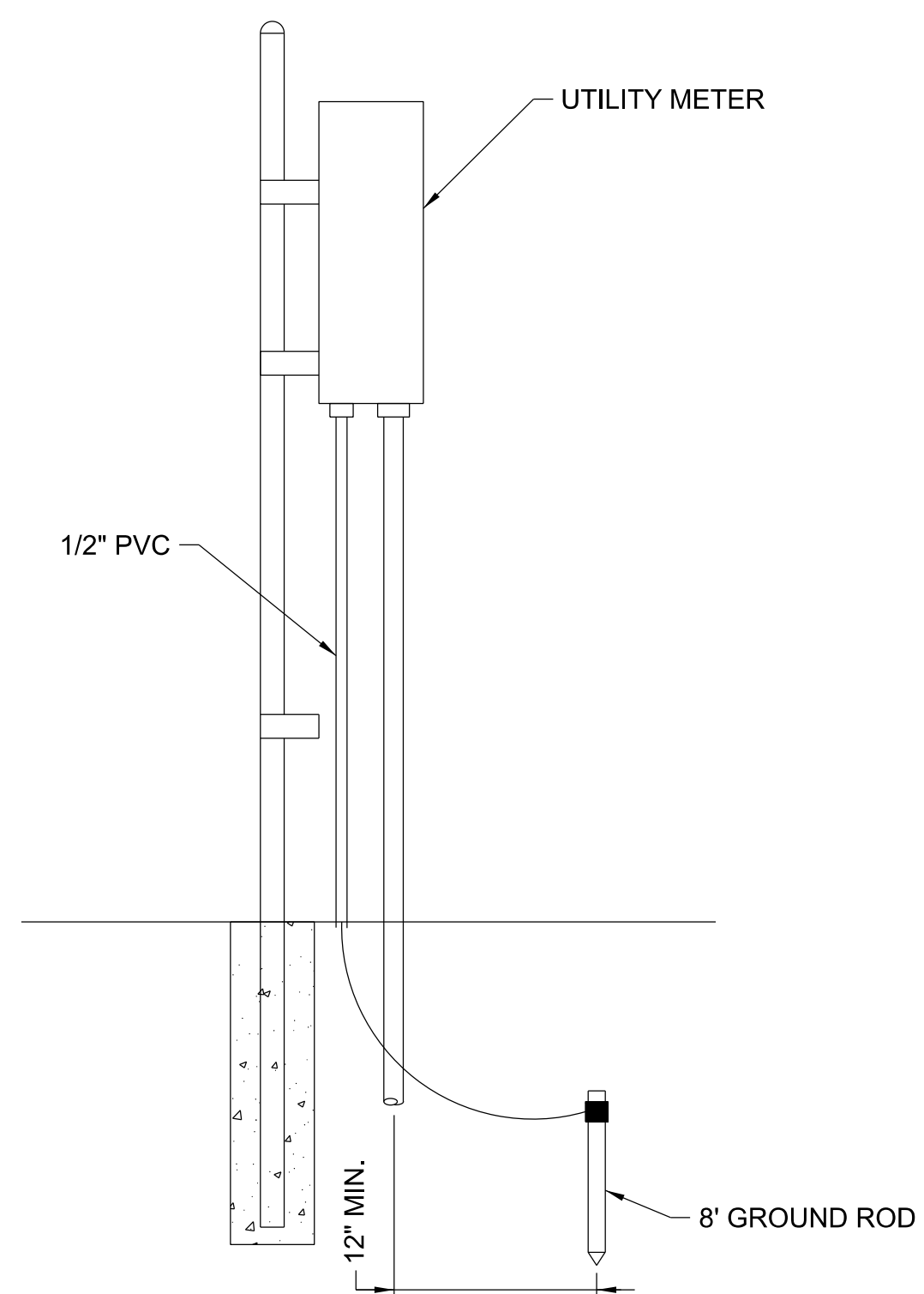
SCALE: SHEET 124 OF 131 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2510	TIM TRAINING TRACK 2026	SANGAMON	131	124
CONTRACT NO. 72N43				
ILLINOIS FED. AID PROJECT				



NOTES:  
1. SEE ELECTRICAL PLANS FOR CONDUIT SIZES THAT ARE NOT LISTED.

**TYPICAL UTILITY METER RACK ELEVATION  
(FRONT)**



NOTES:  
1. SEE ELECTRICAL PLANS FOR CONDUIT SIZES THAT ARE NOT LISTED.

**TYPICAL UTILITY METER RACK ELEVATION  
(SIDE)**

MODEL: Default  
FILE NAME: 24-245\_sht-power-details-01A.dgn

USER NAME = bnsren	DESIGNED - BNS	REVISED -
	DRAWN - NRD	REVISED -
	CHECKED - BMH	REVISED -
PLOT DATE = 3/16/2026	DATE - 3/16/2026	REVISED -

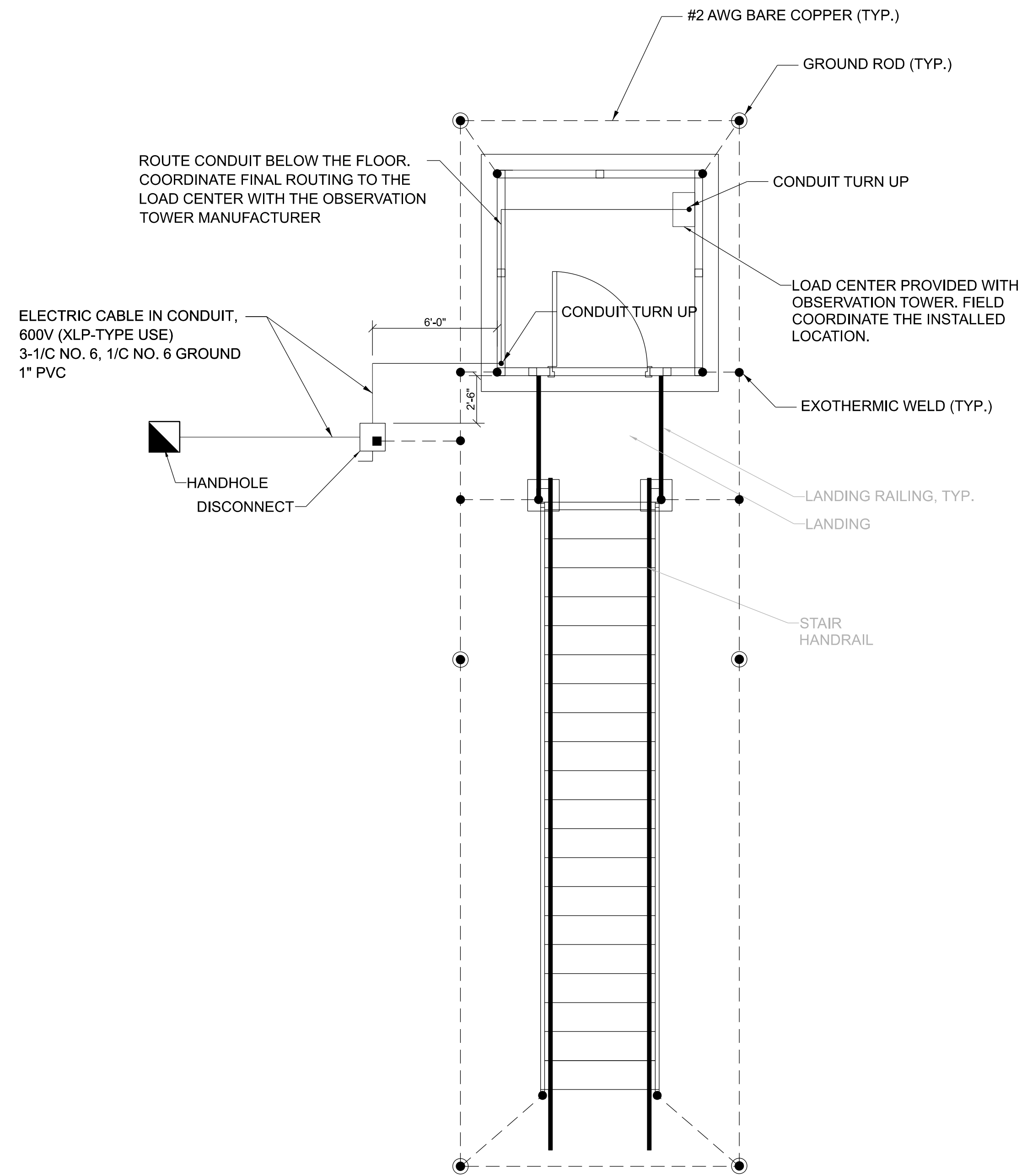
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**POWER DETAILS 1A**

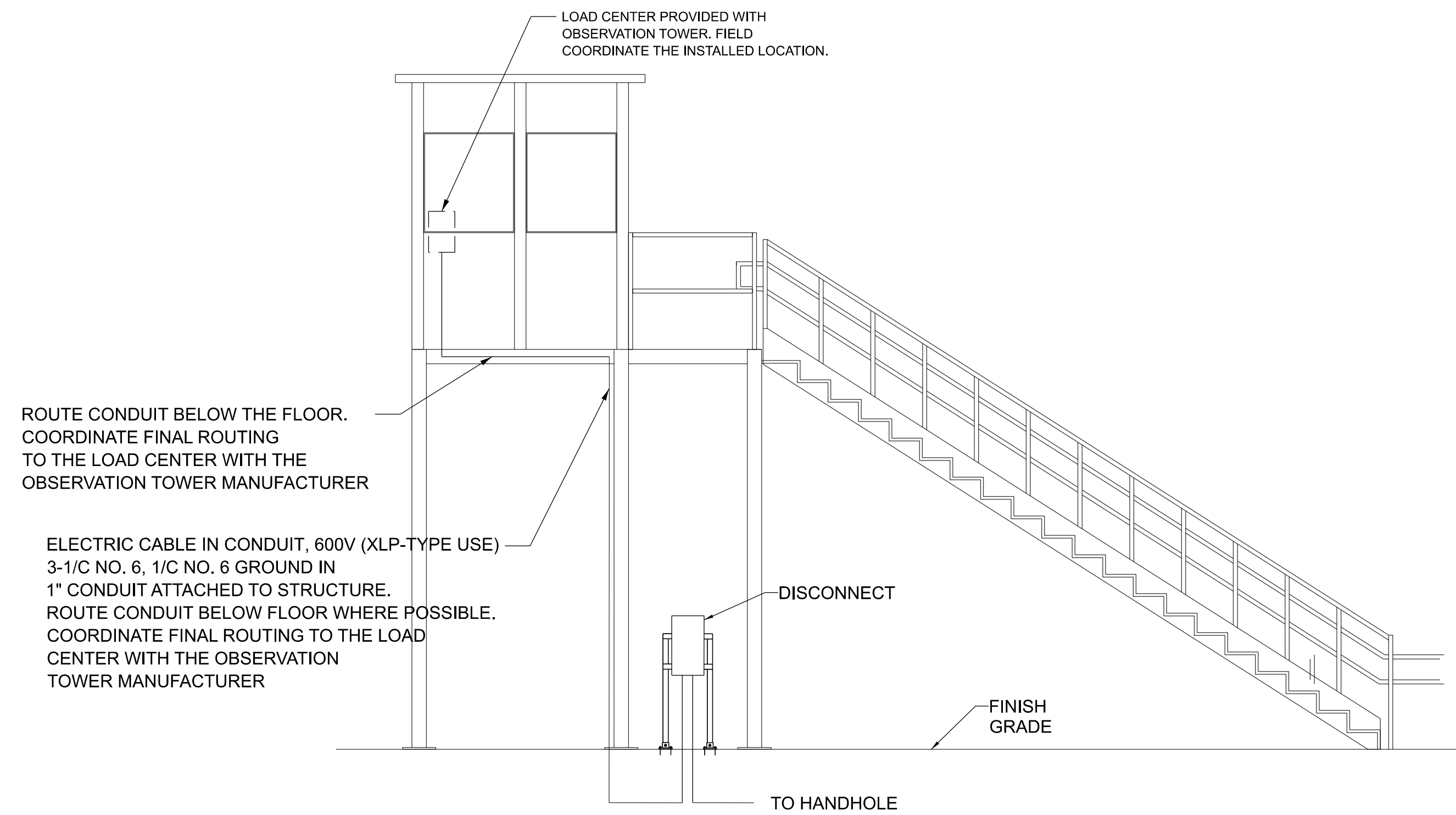
SCALE: SHEET 124A OF 131 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2510	TIM TRAINING TRACK 2026	SANGAMON	131	124A
CONTRACT NO. 72N43				
ILLINOIS FED. AID PROJECT				

- NOTES:  
 1. SEE LANDSCAPE PLANS FOR OBSERVATION TOWER DETAILS, DIMENSIONS, ETC.



1 TYPICAL OBSERVATION TOWER (OT) ELECTRICAL INSTALLATION DETAIL



2 TYPICAL OBSERVATION TOWER (OT) ELEVATION

MODEL: Default  
 FILE NAME: 24-245\_sht-power-details-02.dgn

USER NAME = bnsere	DESIGNED - BNS	REVISED -
	DRAWN - NRD	REVISED -
	CHECKED - BMH	REVISED -
PLOT DATE = 3/16/2026	DATE - 3/16/2026	REVISED -

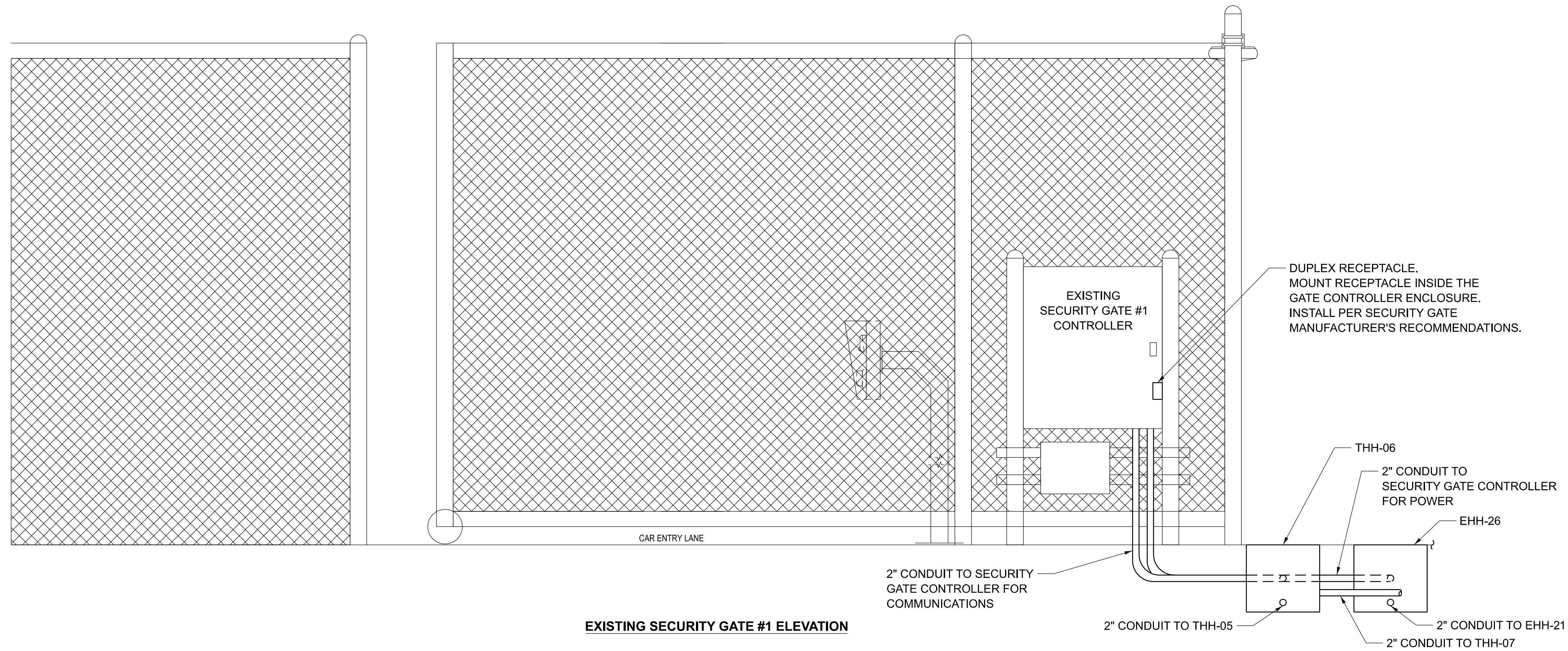
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

POWER DETAILS 2

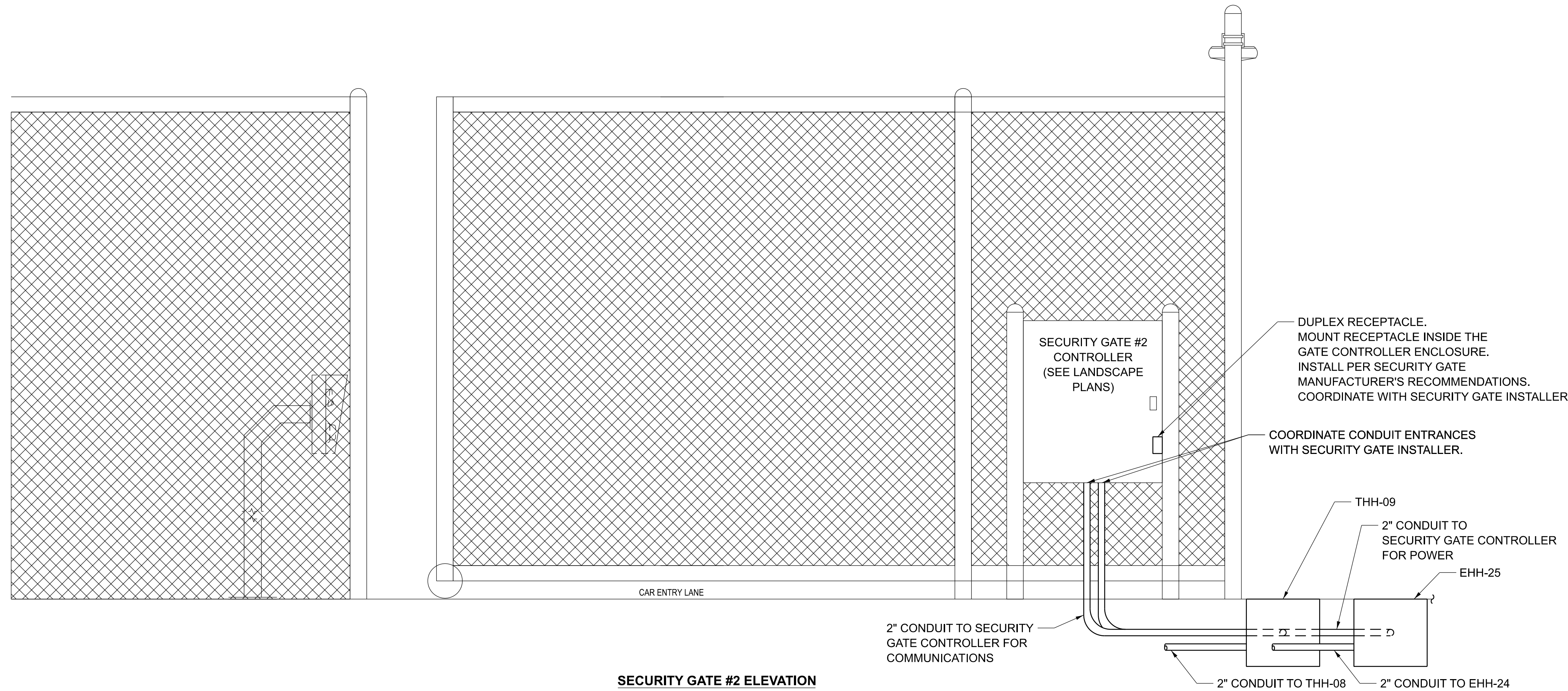
SCALE: SHEET 125 OF 131 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2510	TIM TRAINING TRACK 2026	SANGAMON	131	125
CONTRACT NO. 72N43				
ILLINOIS FED. AID PROJECT				

NOTES:  
 1. SEE LANDSCAPE PLANS FOR SECURITY GATE DETAILS.



**EXISTING SECURITY GATE #1 ELEVATION**



**SECURITY GATE #2 ELEVATION**

MODEL: Default  
FILE NAME: 24-245\_sht-power-details-02A.dgn

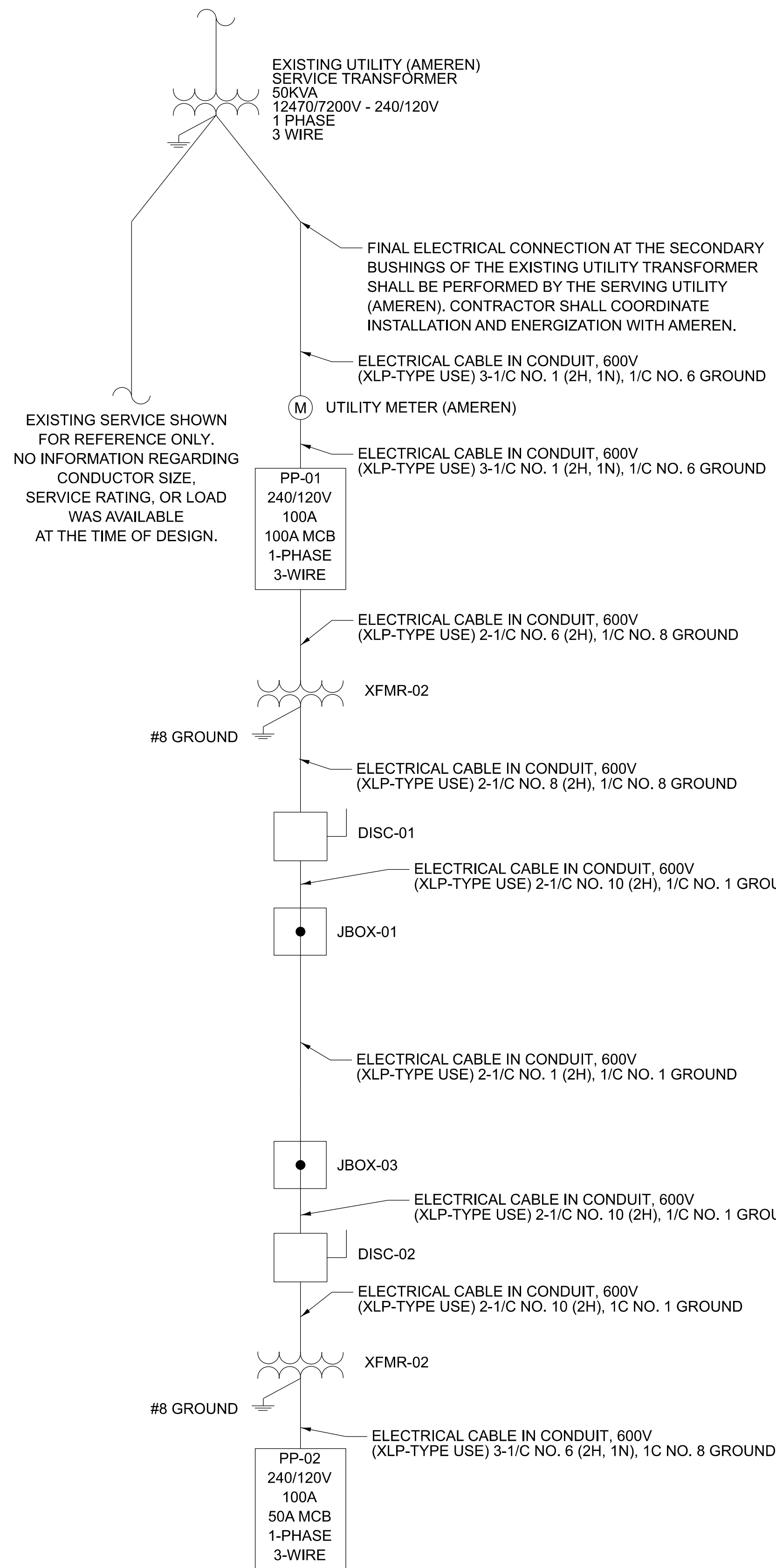
USER NAME = bnsere	DESIGNED - BNS	REVISED -
	DRAWN - NRD	REVISED -
	CHECKED - BMH	REVISED -
PLOT DATE = 3/16/2026	DATE - 3/16/2026	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

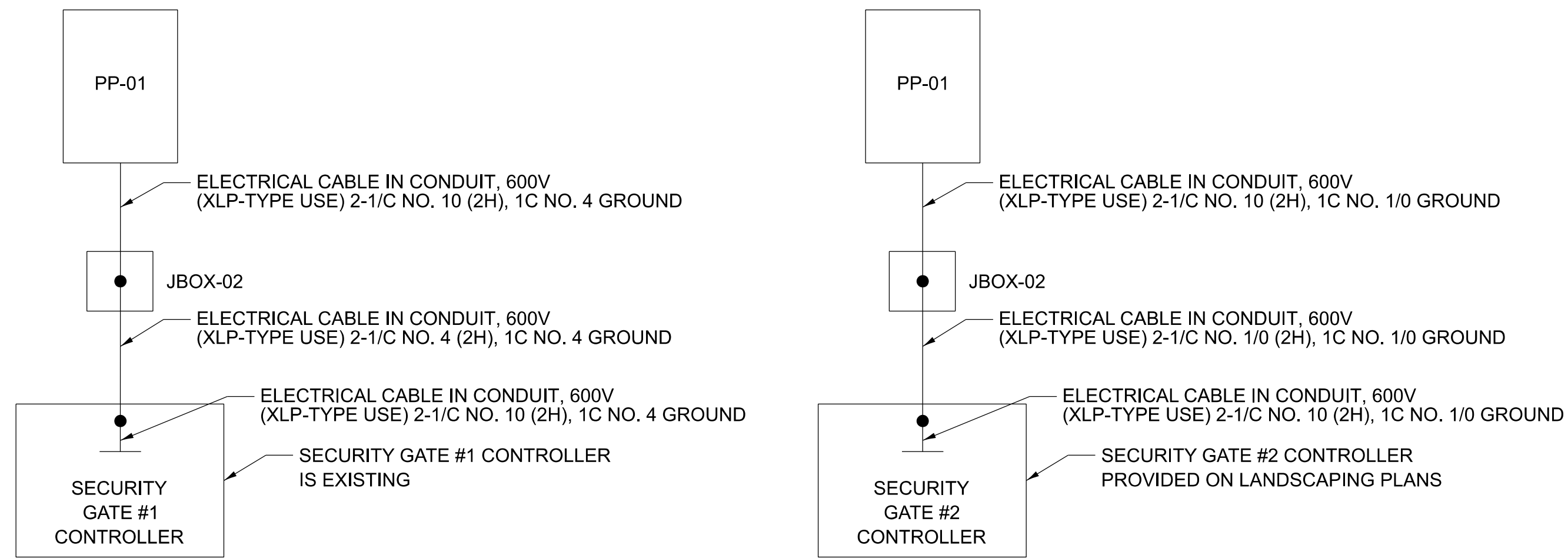
**POWER DETAILS 2A**

SCALE: SHEET 125A OF 131 SHEETS STA. TO STA.

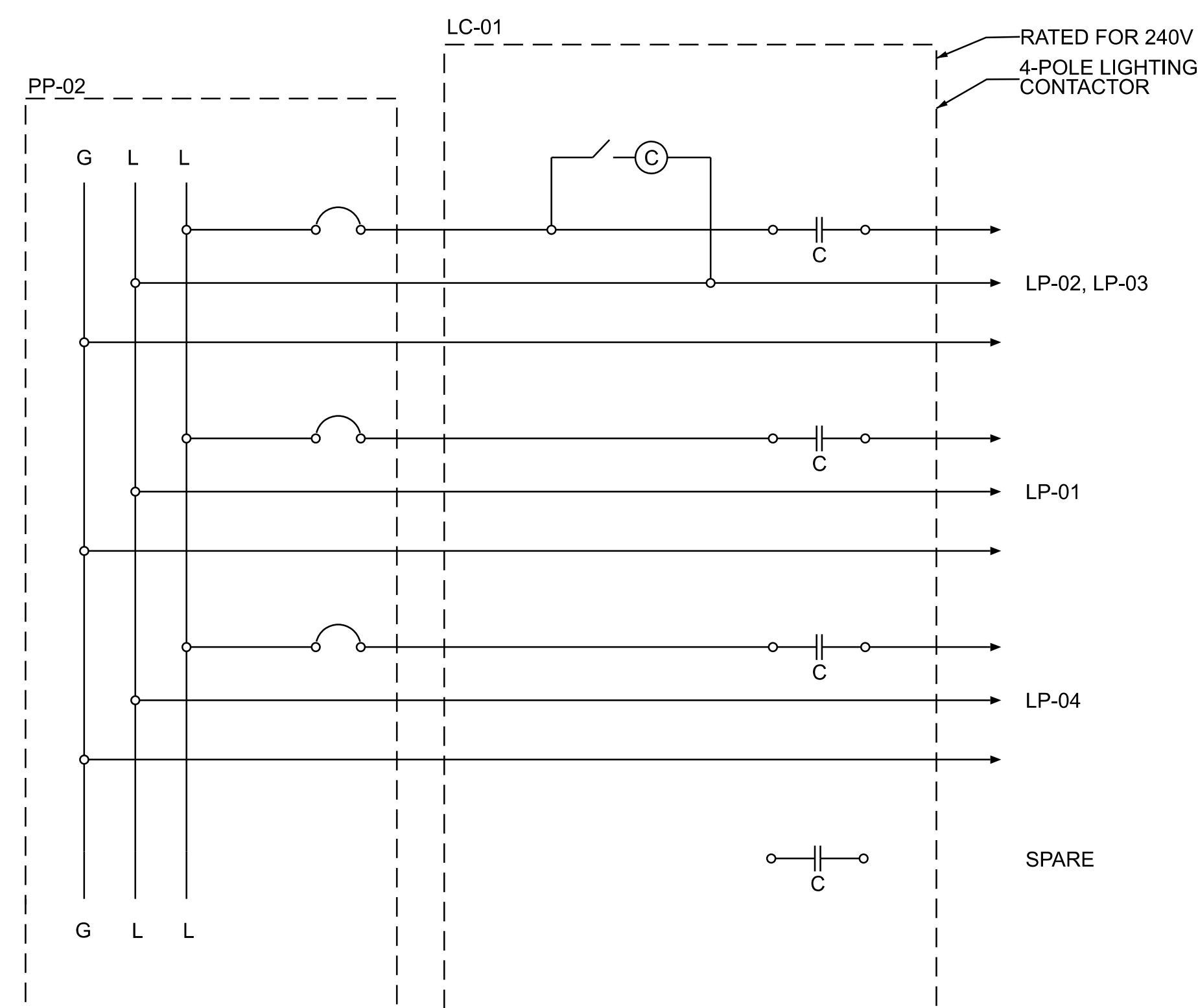
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2510	TIM TRAINING TRACK 2026	SANGAMON	131	125A
CONTRACT NO. 72N43				
ILLINOIS FED. AID PROJECT				



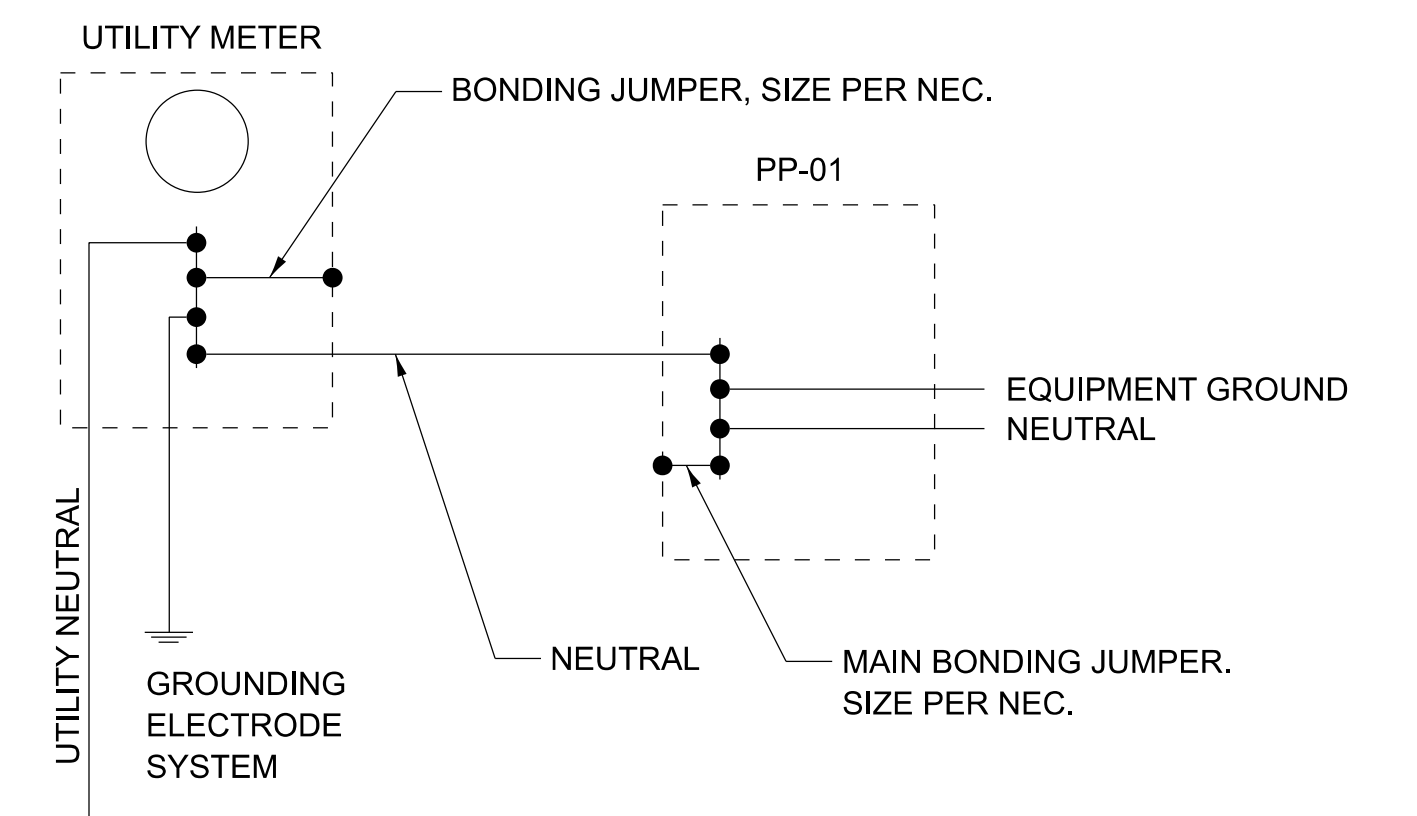
**ONELINE DIAGRAM**



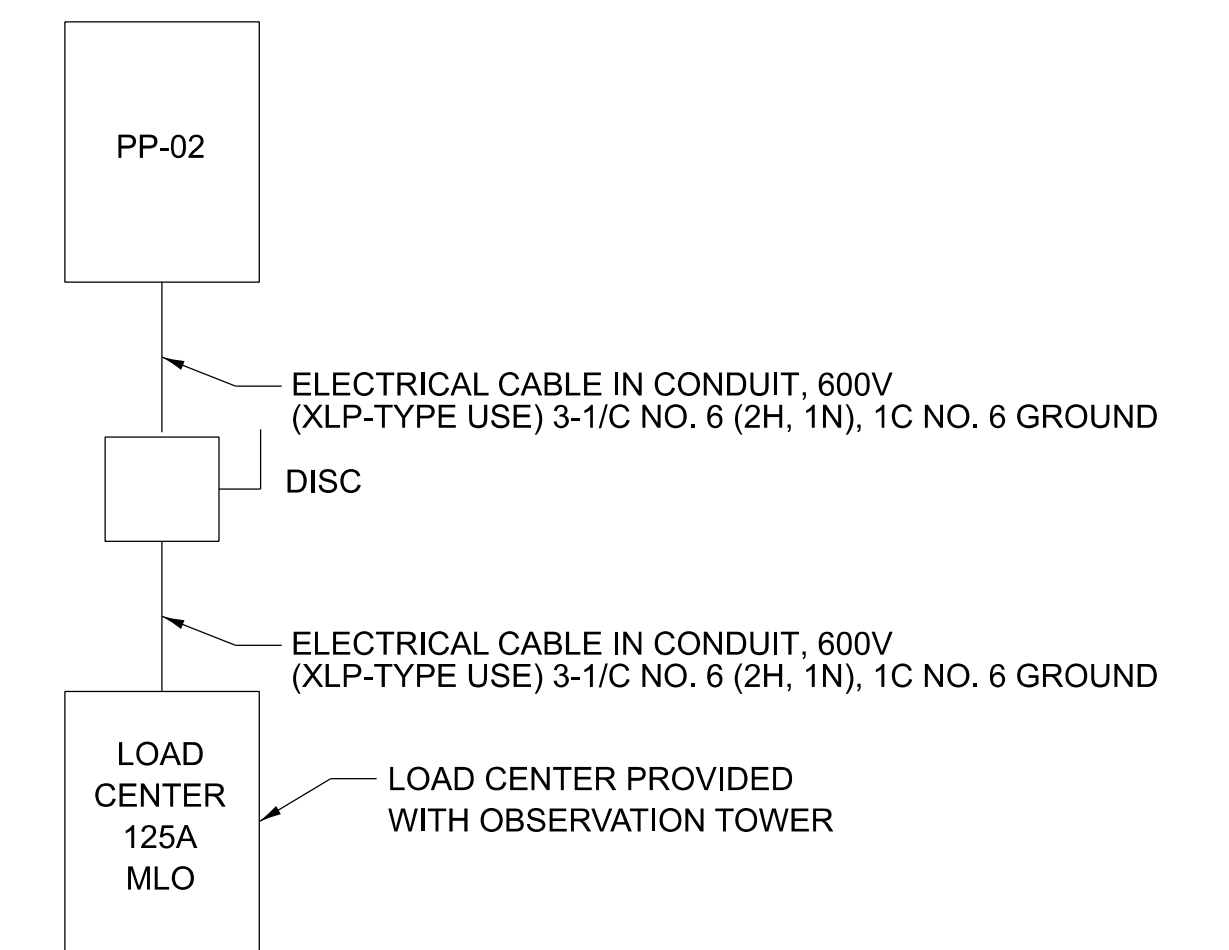
**SECURITY GATE CONTROLLER WIRING DIAGRAMS**



**LIGHTING CONTACTOR SCHEMATIC**



**NEW SERVICE GROUNDING DIAGRAM**



**TYPICAL OBSERVATION TOWER WIRING DIAGRAM**

MODEL: Default  
FILE NAME: 24-245\_sht-light-diagrams.dgn

USER NAME = bnsere	DESIGNED - BNS	REVISED -
	DRAWN - NRD	REVISED -
	CHECKED - BMH	REVISED -
PLOT DATE = 3/16/2026	DATE - 3/16/2026	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**ELECTRICAL DIAGRAMS**

SCALE: SHEET 126 OF 131 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2510	TIM TRAINING TRACK 2026	SANGAMON	131	126
CONTRACT NO. 72N43			ILLINOIS FED. AID PROJECT	

PANELBOARD NAME: PP-01	VOLTAGE: 240 / 120 V	A.I.C RATING: 10000
PANEL LOCATION: NORTH AREA OF SITE	PHASE: 1	PANELBOARD TYPE: MCB
SUPPLIED FROM: UTILITY METER	WIRES: 3	MAINS RATING 100 A
ENCLOSURE TYPE: NEMA 3R	MOUNTING: SURFACE	MCB 100 A

CKT NO.	TRIP AMPS	NO. POLES	WIRE, GND	LOAD CLASS	LOAD SERVED	A	B	LOAD SERVED	LOAD CLASS	WIRE, GND	NO. POLES	TRIP AMPS	CKT NO.	
1	20	2	SEE DIAGRAMS	N	SECURITY GATE #1 (CONTROLLER)	1440 VA	2220 VA	SECURITY GATE #2 (CONTROLLER)	N	SEE DIAGRAMS	1	30	2	
3				N							N		1	
5	50	2	(2)#6, #6G	P	XFMR-01	1853 VA	0 VA	SPARE	S	--	1	20	6	
7				P							S		1	20
9	20	1	(2)#10, #10G	C	RECEPT - GATE #1 (COMM DEVICES)	70 VA	0 VA	SPARE	S	--	1	20	10	
11	20	1	(2)#10, #10G	C	RECEPT - GATE #1 (COMM DEVICES)		70 VA	0 VA	SPARE	S	--	1	20	12
13	20	1	--	S	SPARE	0 VA	0 VA	SPARE	S	--	1	20	14	
15	20	1	--	S	SPARE		0 VA	0 VA	SPARE	S	--	1	20	16
17	20	1	--	S	SPARE	0 VA	0 VA	SPARE	S	--	1	20	18	

TOTAL LOAD:		5583 VA	5763 VA
TOTAL AMPS:		46.5 A	48.0 A
<b>LOAD CLASS</b>	<b>CONNECTED LOAD</b>	<b>DEMAND FACTOR</b>	<b>ESTIMATED DEMAND</b>
C CONTINUOUS	140 VA	100.00%	140 VA
N NON CONTINUOUS	7320 VA	100.00%	7320 VA
L LIGHTING	0 VA	100.00%	0 VA
R RECEPTACLE	0 VA	100.00%	0 VA
S SPARE	0 VA	100.00%	0 VA
P PANELBOARD	3886 VA	100.00%	3886 VA
			<b>PANEL TOTALS</b>
			TOTAL CONNECTED LOAD: 11346 VA
			TOTAL ESTIMATED DEMAND LOAD 11346 VA
			TOTAL CONNECTED CURRENT: 47.3 A
			TOTAL ESTIMATED DEMAND CURRENT: 47.3 A

NOTES:  
1. PROVIDE WITH INTEGRAL SPD

### PP-01 PANELBOARD SCHEDULE

PANELBOARD NAME: PP-02	VOLTAGE: 240 / 120 V	A.I.C RATING: 10000
PANEL LOCATION: SOUTH AREA OF SITE	PHASE: 1	PANELBOARD TYPE: MCB
SUPPLIED FROM: XFMR-02	WIRES: 3	MAINS RATING 100 A
ENCLOSURE TYPE: NEMA 3R	MOUNTING: SURFACE	MCB 50 A

CKT NO.	TRIP AMPS	NO. POLES	WIRE, GND	LOAD CLASS	LOAD SERVED	A	B	LOAD SERVED	LOAD CLASS	WIRE, GND	NO. POLES	TRIP AMPS	CKT NO.
1	20	2	(3)#6, #6G	R	OBSERVATION TOWER #1	230 VA	0 VA	SPARE	S	--	1	20	2
3				R							S		1
5	20	2	(3)#6, #6G	R	OBSERVATION TOWER #2	230 VA	175 VA	LP-02, LP-03	L	(2)#10, #10G	2	20	6
7				R							L		2
9	20	2	(3)#6, #6G	R	OBSERVATION TOWER #3	230 VA	34 VA	LP-01	L	(2)#10, #10G	2	20	10
11				R							L		2
13	20	2	(3)#6, #6G	R	OBSERVATION TOWER #4	230 VA	34 VA	LP-04	L	(2)#10, #10G	2	20	14
15				R							L		2
17	20	2	(3)#6, #6G	R	OBSERVATION TOWER #5	230 VA	0 VA	RAILROAD LGTS/BELLS	L	(2)#10, #10G	1	20	18
19				R							S		1
21	20	2	(3)#6, #6G	R	OBSERVATION TOWER #6	230 VA	0 VA	SPARE	S	--	1	20	22
23				R							S		1
25	20	2	(3)#6, #6G	R	OBSERVATION TOWER #7	230 VA	0 VA	SPACE	S	--	1	--	26
27				R							S		1
29	20	1	--	S	SPARE	0 VA	0 VA	SPACE	S	--	1	--	30

TOTAL LOAD:		1853 VA	2033 VA
TOTAL AMPS:		15.4 A	16.9 A
<b>LOAD CLASS</b>	<b>CONNECTED LOAD</b>	<b>DEMAND FACTOR</b>	<b>ESTIMATED DEMAND</b>
C CONTINUOUS	0 VA	100.00%	0 VA
N NON CONTINUOUS	0 VA	100.00%	0 VA
L LIGHTING	666 VA	100.00%	666 VA
R RECEPTACLE	3220 VA	100.00%	3220 VA
S SPARE	0 VA	100.00%	0 VA
			<b>PANEL TOTALS</b>
			TOTAL CONNECTED LOAD: 3886 VA
			TOTAL ESTIMATED DEMAND LOAD 3886 VA
			TOTAL CONNECTED CURRENT: 16.2 A
			TOTAL ESTIMATED DEMAND CURRENT: 16.2 A

NOTES:  
1. PROVIDE WITH INTEGRAL SPD

### PP-02 PANELBOARD SCHEDULE

TAG	EQUIPMENT DESCRIPTION
DISC-01	DISCONNECT SWITCH, HD TYPE, 480V, NEMA 3R, 2 POLE, 30A, 30A FUSES
DISC-02	DISCONNECT SWITCH, HD TYPE, 480V, NEMA 3R, 2 POLE, 30A
DISC-03	DISCONNECT SWITCH, HD TYPE, 240V, NEMA 3R, 2 POLE, 30A
DISC-04	DISCONNECT SWITCH, HD TYPE, 240V, NEMA 3R, 2 POLE, 30A
DISC-05	DISCONNECT SWITCH, HD TYPE, 240V, NEMA 3R, 2 POLE, 30A
DISC-06	DISCONNECT SWITCH, HD TYPE, 240V, NEMA 3R, 2 POLE, 30A
DISC-07	DISCONNECT SWITCH, HD TYPE, 240V, NEMA 3R, 2 POLE, 30A
DISC-08	DISCONNECT SWITCH, HD TYPE, 240V, NEMA 3R, 2 POLE, 30A
DISC-09	DISCONNECT SWITCH, HD TYPE, 240V, NEMA 3R, 2 POLE, 30A
JBOX-01	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 16" X 12" X 4"
JBOX-02	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 16" X 12" X 4"
JBOX-03	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 16" X 12" X 4"
JBOX-04	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 16" X 12" X 4"
LC-01	240V, NEMA 3R, 20 AMP, 4 POLE
PP-01	SEE PANELBOARD SCHEDULE
PP-01	SEE PANELBOARD SCHEDULE
UTILITY METER	BOD: AMERICAN MIDWEST POWER, SESMH223H
XFMR-01	TRANSFORMER, NEMA 3R, 10KVA, PRI: 240V, SEC: 480V, 1-PHASE, Z=2.5%
XFMR-02	TRANSFORMER, NEMA 3R, 10KVA, PRI: 480V, SEC: 240/120V CENTER TAPPED, 1-PHASE, Z=2.5%

### EQUIPMENT SCHEDULE

MODEL: Default  
FILE NAME: 24-245\_sht-light-schedules.dgn

USER NAME = bnsren	DESIGNED - BNS	REVISED -
	DRAWN - NRD	REVISED -
	CHECKED - BMH	REVISED -
PLOT DATE = 3/16/2026	DATE - 3/16/2026	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

### ELECTRICAL SCHEDULES AND DIAGRAMS

SCALE: SHEET 126A OF 131 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2510	TIM TRAINING TRACK 2026	SANGAMON	131	126A
CONTRACT NO. 72N43				
ILLINOIS FED. AID PROJECT				

NOTES:  
 1. DUE TO THE SPECIALIZED OPERATIONAL REQUIREMENTS OF THIS FACILITY, CERTAIN ASPECTS OF THE LIGHTING DESIGN DO NOT STRICTLY ADHERE TO IES RECOMMENDED PRACTICES.

INTERSECTION A			
IES Roadway Classification:	Local	Illuminance (fc)	
Pavement Classification:	R4	$E_{avg}$	$E_{avg}^{4K}$
IES Recommended Levels:		0.4	6
Manufacturer:	Autobahn	$E_{avg}$	$E_{avg}^{4K}$
Series:	ATB0 P301	0.45	4.5
Distribution:	Type II Medium		

**DESIGN PARAMETERS**  
 Light Loss Factor: 0.7 Mounting Height: 45 ft. IES file name: ATB0 P301 R2 4K.ies  
 Lamp Lumens: 10460 Mast Arm: 15 ft. Fixture Watts: 67

### INTERSECTION A

INTERSECTION C			
IES Roadway Classification:	Local	Illuminance (fc)	
Pavement Classification:	R4	$E_{avg}$	$E_{avg}^{4K}$
IES Recommended Levels:		0.4	6
Manufacturer:	Autobahn	$E_{avg}$	$E_{avg}^{4K}$
Series:	ATB0 P301	0.57	2.9
Distribution:	Type II Medium		

**DESIGN PARAMETERS**  
 Light Loss Factor: 0.7 Mounting Height: 45 ft. IES file name: ATB0 P301 R2 4K.ies  
 Lamp Lumens: 10460 Mast Arm: 15 ft. Fixture Watts: 67

### INTERSECTION C

INTERSECTION B			
IES Roadway Classification:	Collector	Illuminance (fc)	
Pavement Classification:	R4	$E_{avg}$	$E_{avg}^{4K}$
IES Recommended Levels:		0.5	4
Manufacturer:	Autobahn	$E_{avg}$	$E_{avg}^{4K}$
Series:	ATB2 P601 (combination pole)	0.58	2.9
Distribution:	Type IV Medium		

**DESIGN PARAMETERS**  
 Light Loss Factor: 0.7 Mounting Height: 45 ft. IES file name: ATB2 P601 R4 4K.ies  
 Lamp Lumens: 24768 Mast Arm: 15 ft. Fixture Watts: 175

### INTERSECTION B

PARKING LOT			
IES Roadway Classification:	Parking Lot	Illuminance (fc)	
Pavement Classification:	R4	$E_{avg}$	$E_{avg}^{4K}$
IES Recommended Levels:		0.2	4
Manufacturer:	Autobahn	$E_{avg}$	$E_{avg}^{4K}$
Series:	ATB2 P601	0.33	N/A
Distribution:	Type IV Medium		

**DESIGN PARAMETERS**  
 Light Loss Factor: 0.7 Mounting Height: 45 ft. IES file name: ATB2 P601 R4 4K.ies  
 Lamp Lumens: 24768 Mast Arm: 15 ft. Fixture Watts: 175

### PARKING LOT

MODEL: Default  
 FILE NAME: 24-245\_sht-light-luminaire-performance.dgn

USER NAME = bnsren	DESIGNED - BNS	REVISED -
	DRAWN - NRD	REVISED -
	CHECKED - BMH	REVISED -
PLOT DATE = 3/16/2026	DATE - 3/16/2026	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

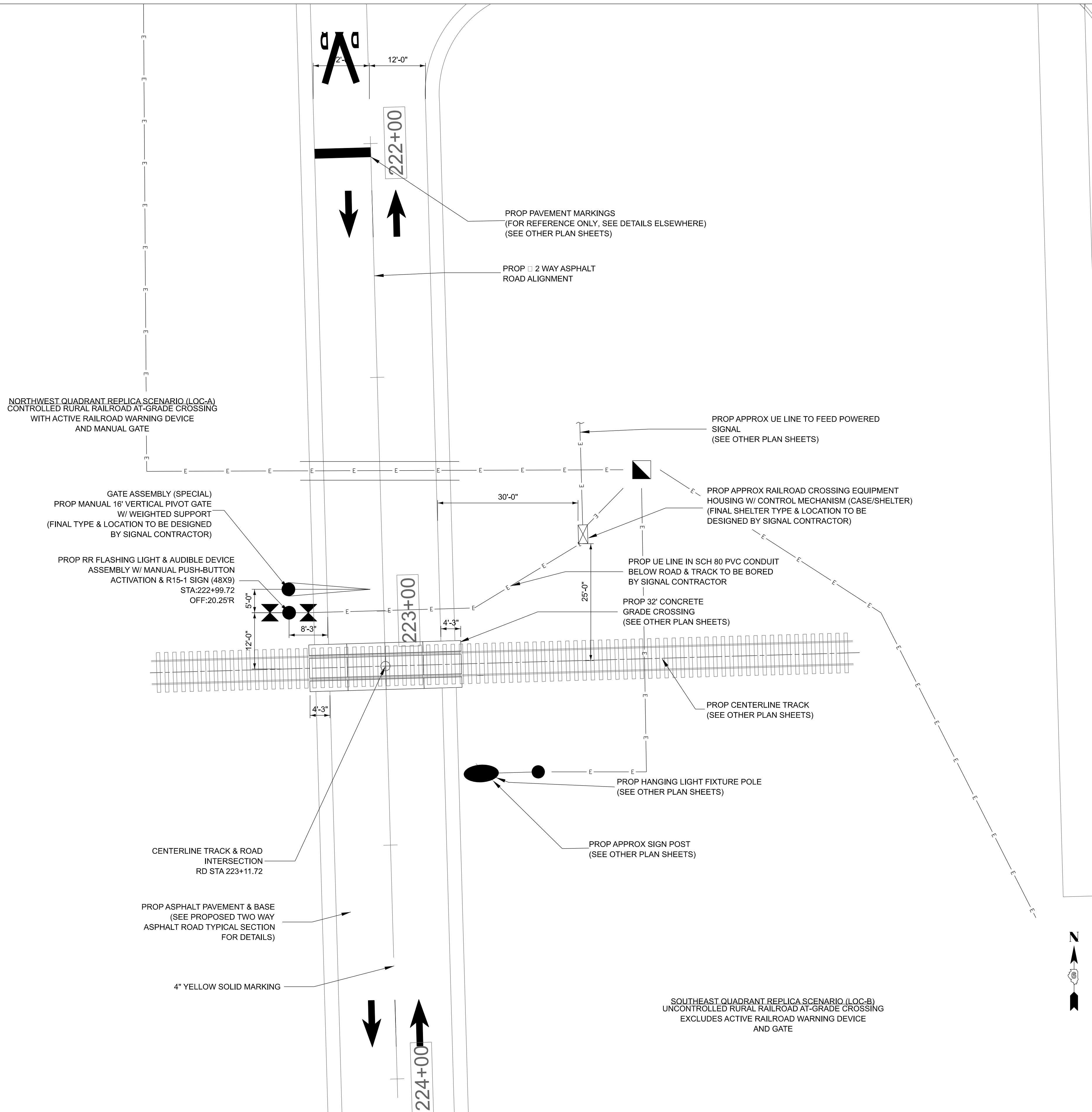
#### LUMINAIRE PERFORMANCE TABLES

SCALE: SHEET 127 OF 131 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2510	TIM TRAINING TRACK 2026	SANGAMON	131	127
CONTRACT NO. 72N43				
ILLINOIS FED. AID PROJECT				

**RAILROAD CROSSING SIGNAL PLAN NOTES**

1. "RAILROAD SIGNAL" AS REFERRED TO ON THIS SHEET IS DEFINED AS AN ACTIVE RAILROAD WARNING DEVICE THAT INCLUDES PUSH-BUTTON ACTIVATED POWERED FLASHING LIGHTS WITH AUDIBLE DEVICE (BELLS/ALARMS) AND SELECT MANUAL CONTROLLED VERTICAL PIVOT GATE INSTALLED TO REPLICATE A SINGLE TRACK AT-GRADE CROSSING SURFACE WITH CONTROLLED AND UNCONTROLLED FEATURES.
2. CONDUIT FOR SIGNAL CABLES TO BE INSTALLED BY SIGNAL CONTRACTOR INCLUDING POWER FEED TO RAILROAD SIGNAL EQUIPMENT.
3. RAIL TRACK AND AT-GRADE CROSSING SURFACE SHOWN FOR REFERENCE ONLY AND IS EXCLUDED FROM THE RAILROAD SIGNAL SCOPE INCLUDING ANY DESIGN, INSTALLATION, BONDING OR CONNECTIONS.
4. RAILROAD SIGNAL CONTRACTOR (SIGNAL CONTRACTOR) SHALL PROVIDE ALL MATERIAL, EQUIPMENT AND LABOR TO INSTALL THE FLASHING-LIGHT WARNING DEVICE WITH OPTIONAL SHELTER TO BE POWERED AND CONTROLLED BY HARD WIRE AC COMMERCIAL POWER.
  - a. THE FLASHING LIGHT SHALL BE ACTIVATED BY A SINGLE PUSH-BUTTON STATIONED AT A SINGLE LOCATION AS DESIGNATED BY THE OWNER DURING SHOP DRAWING REVIEW WITHIN REASONABLE PROXIMITY TO THE TRACK AND SIGNAL EQUIPMENT.
5. SIGNAL CONTRACTOR SHALL PROVIDE ALL PRELIMINARY ENGINEERING, LAYOUT, ENGINEERING SERVICES, CIRCUIT PLANS, AS-IN-SERVICE PLANS, AND ANY OTHER DOCUMENTS OR INCIDENTALS TO COMMISSION THE RAILROAD SIGNAL.
  - a. SIGNAL CONTRACTOR SHALL PROVIDE ALTERNATIVES FOR OWNER CONSIDERATION TO FURNISH AND INSTALL A SINGLE MANUAL VERTICAL PIVOT GATE WITH COUNTERWEIGHTS, IF REQUIRED, THAT MAXIMIZES VISUAL ADHERENCE TO MUTCD AND RAILROAD STANDARD APPLICATIONS.
  - b. SIGNAL CONTRACTOR SHALL PROVIDE ALTERNATIVES FOR OWNER CONSIDERATION AND SELECTION TO FURNISH AND INSTALL A SINGLE PUSH-BUTTON CONTROLLER THAT CAN MANUALLY TURN ON AND OFF THE FLASHING LIGHTS AND BELL WITH OPTION FOR TIMER SETTINGS.
6. AC POWER WILL BE AVAILABLE OR BROUGHT WITHIN 150 FEET OF THE RAILROAD SIGNAL.
7. SIGNAL CONTRACTOR TO RESTORE THE SITE WITHIN THEIR DISTURBED LIMITS TO BETTER THAN PREINSTALLATION CONDITION.
8. RAILROAD SIGNAL SCOPE OF WORK EXCLUDES:
  - a. DEMOLITION
  - b. BATTERY BACKUP
  - c. AC POWERED RAILROAD GATES
  - d. ANY UTILITY RELOCATION BELOW OR ABOVE GRADE
  - e. ANY REMOVAL OR RESTORATION OF ANY PAVEMENT SURFACE
  - f. ANY TRAFFIC SIGNAL INTERCONNECTIONS
  - g. ANY MAINTENANCE OF TRAFFIC OR TRAFFIC CONTROL
  - h. ANY RAILROAD OR ROADWAY FLAGGING, PERMITS, RIGHT OF ENTRIES, APPLICATIONS OR COORDINATION OF ANY KIND
  - i. ANY SPECIALIZED TRAINING, CERTIFICATION OR PERMITS TO WORK WITHIN THE PROJECT LIMITS, UNLESS SPECIFICALLY STATED IN THE CONTRACT DOCUMENTS
  - j. ADHERENCE TO MUTCD AND RAILROAD STANDARDS IS SUBJECT TO OWNER APPROVAL



MODEL: Default  
FILE NAME: 24-245\_sht-rail01.dgn

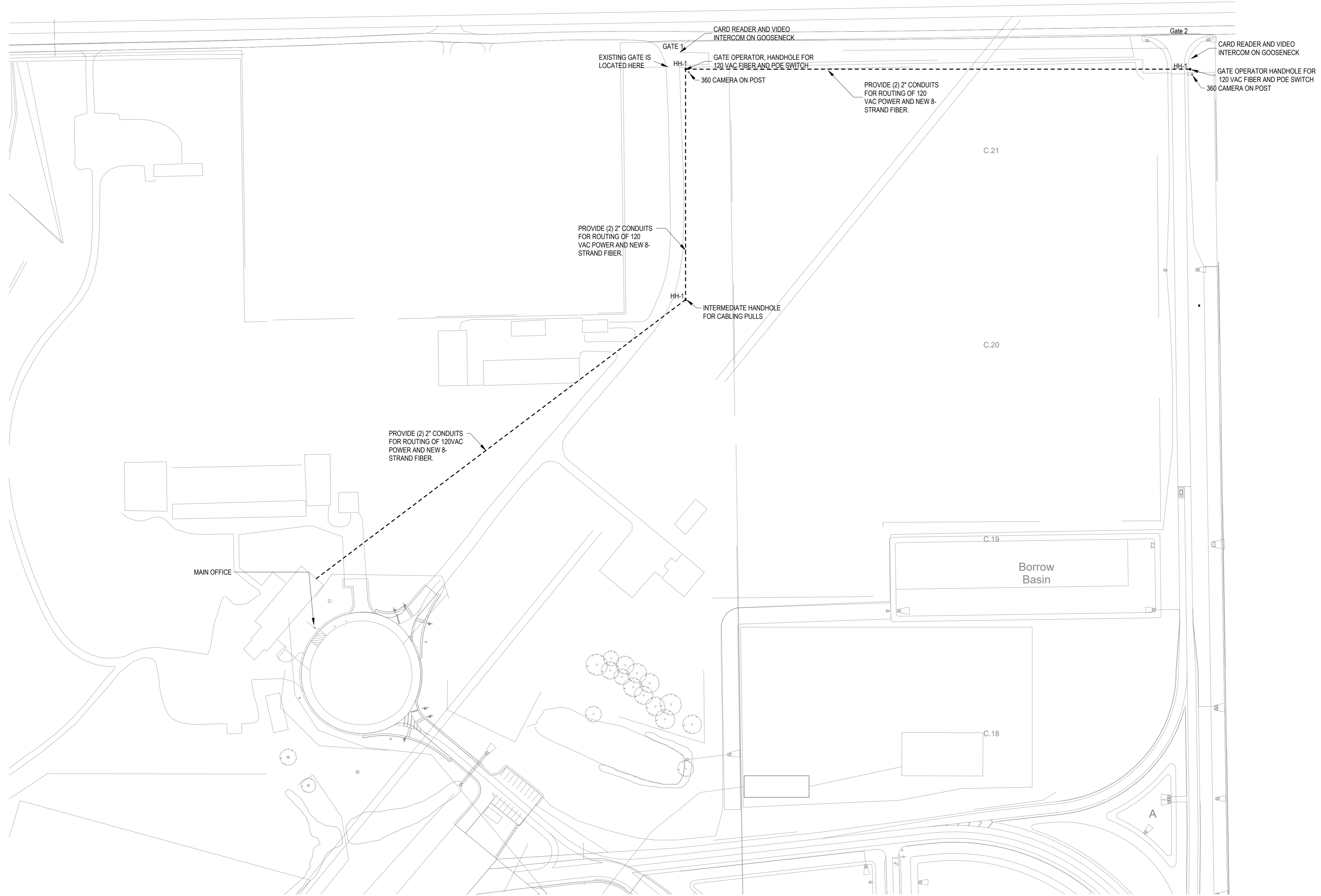
USER NAME = hisummers	DESIGNED - CDS	REVISED -
	DRAWN - CDS	REVISED -
	CHECKED - MPA	REVISED -
PLOT DATE = 1/30/2026	DATE - 1/30/2026	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PROPOSED RAILROAD SIGNAL PLAN**

SCALE: N.T.S. SHEET 128 OF 131 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2510	TIM TRAINING TRACK 2026	SANGAMON	131	128
CONTRACT NO. 72N43				
		ILLINOIS	FED. AID PROJECT	

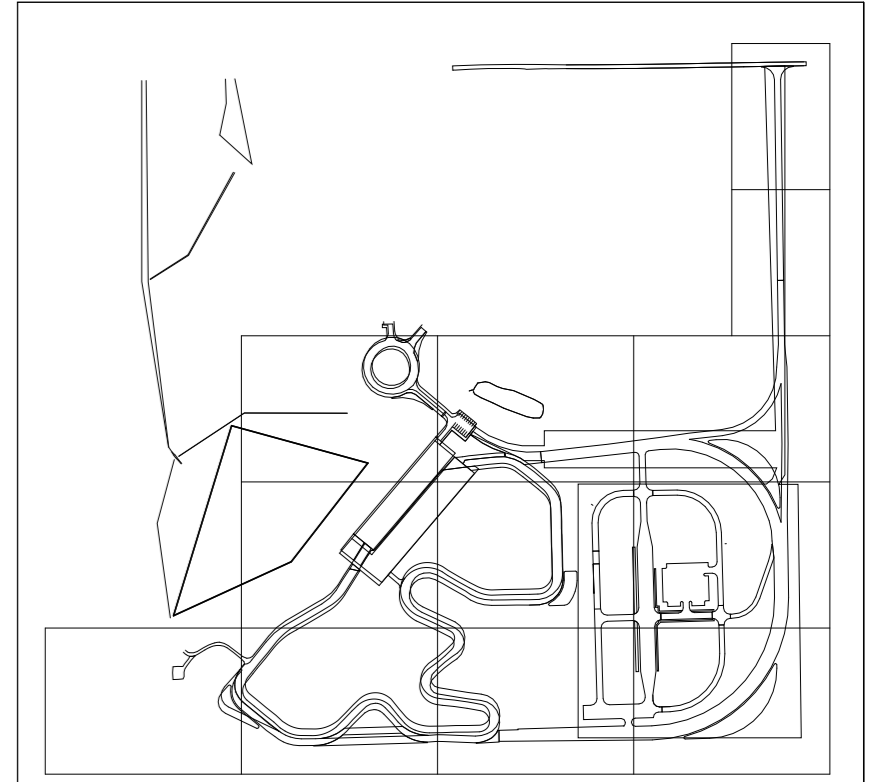


1

**FIRST FLOOR - TECHNOLOGY SITE PLAN**

1" = 100'-0"

KEY MAP



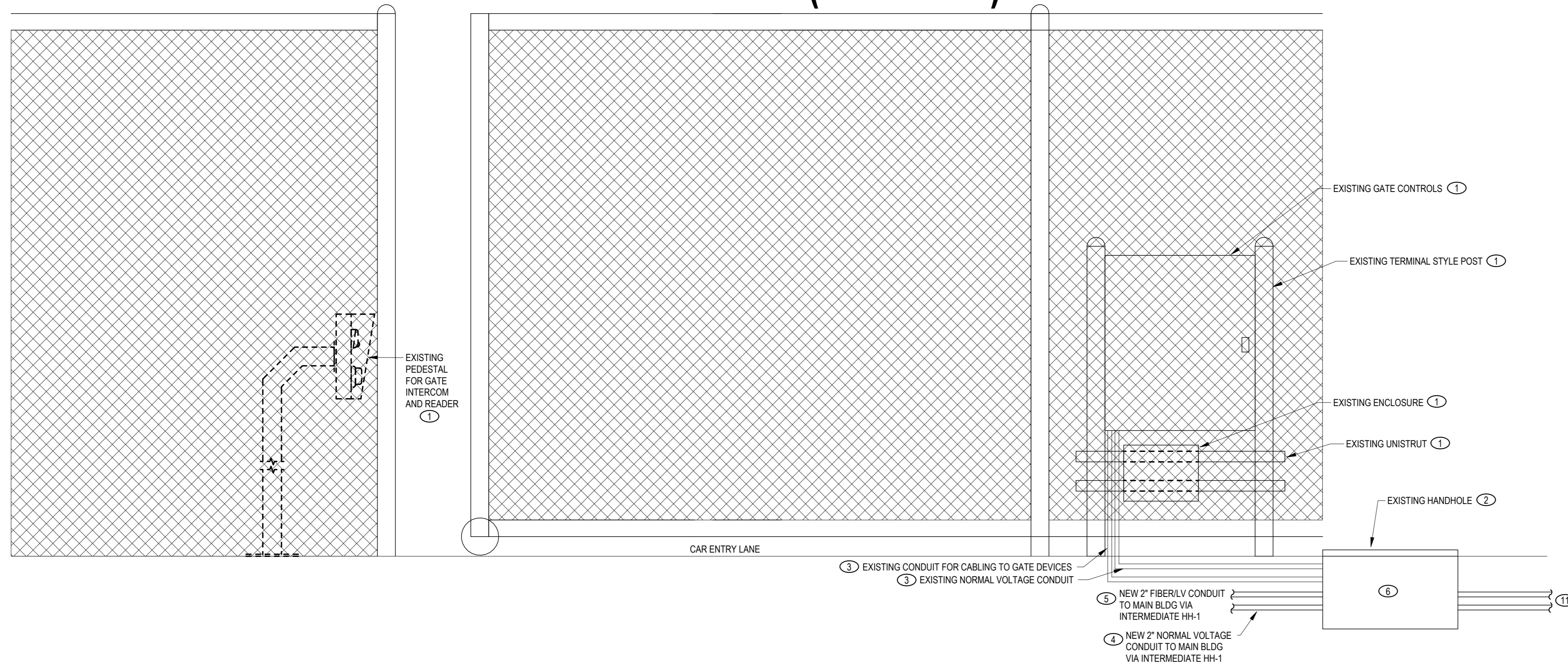
USER NAME = Approver	DESIGNED - Designer	REVISED -
	DRAWN - Author	REVISED -
	CHECKED - Checker	REVISED -
PLOT DATE = 05/07/24	DATE - 05/07/24	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

SCALE: SHEET 129 OF 131 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2510	TIM TRAINING TRACK 2026	SANGAMON	131	129
CONTRACT NO. 72N43				
ILLINOIS FED. AID PROJECT				

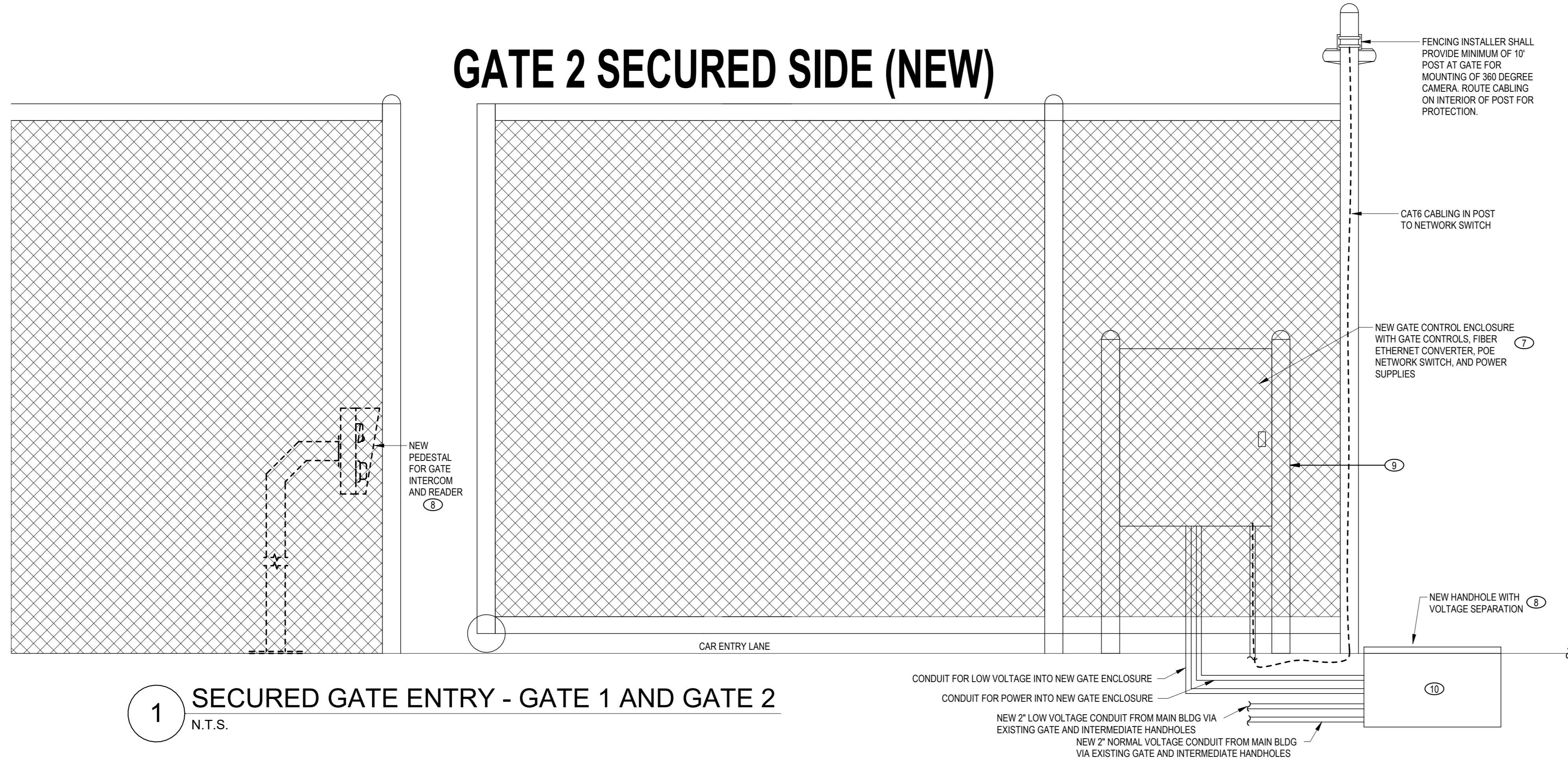
# GATE 1 SECURED SIDE (EXISTING)



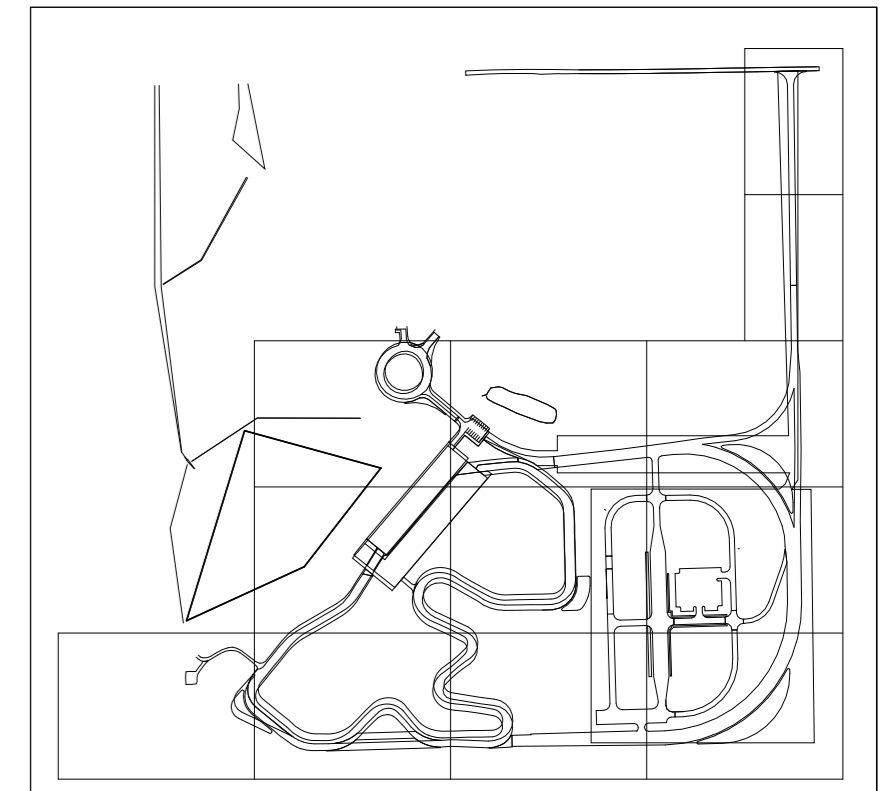
### KEYED NOTES:

- EXISTING TO REMAIN.
- EXISTING HANDHOLE AND CONTENTS SHALL REMAIN FOR REUSE FOR NEW CABLING PULLS. EXISTING COPPER BACKBONE CABLING SHALL BE DISCONNECTED FROM EXISTING GATE AND SECURITY HARDWARE/EQUIPMENT AND DEMOLISHED BACK TO CANINE BUILDING HANDHOLE.
- EXISTING POWER AND LOW VOLTAGE CONDUIT FEEDING THE EXISTING HANDHOLE SHALL BE DISCONNECTED AND ABANDONED IN PLACE.
- E.C. SHALL FURNISH AND INSTALL NEW 2" UNDERGROUND CONDUIT FROM EXISTING GATE HANDHOLE TO THE MAIN BUILDING. AN INTERMEDIATE HANDHOLE WILL BE INSTALLED BETWEEN THE HANDHOLE AND MAIN BUILDING FOR EASE OF PULLS. SEE PLANS FOR ADDITIONAL INFORMATION ON THIS HANDHOLE.
- E.C. SHALL FURNISH AND INSTALL NEW 2" UNDERGROUND LOW VOLTAGE CONDUIT FROM EXISTING GATE HANDHOLE TO MAIN BUILDING. AN INTERMEDIATE HANDHOLE WILL BE INSTALLED BETWEEN THESE TWO HANDHOLES FOR EASE OF PULLS. SEE PLANS FOR ADDITIONAL INFORMATION ON THIS HANDHOLE. INSTALLING SECURITY CONTRACTOR SHALL FURNISH AND INSTALL NEW 8-STRAND FIBER CABLING FROM CANINE HANDHOLE TO EXISTING HANDHOLE TO FEED NEW EQUIPMENT.
- SECURITY CONTRACTOR SHALL FURNISH AND INSTALL NEW MEDIA/ETHERNET CONVERTER, POE NETWORK SWITCH AND POWER SUPPLIES TO FEED THE EXISTING GATE AND SECURITY CAMERA. COORDINATE INSTALLATIONS WITH E.C. FOR CONDUIT REQUIREMENTS FOR SYSTEM CABLING TO CAMERA AND EXISTING GATE CONTROLS.
- NEW GATE SHALL HAVE A PEDESTAL MOUNTED CARD READER AND VIDEO INTERCOM SYSTEM FOR GATE ACCESS. SECURITY CONTRACTOR SHALL FURNISH AND INSTALL THE GATE CONTROL ENCLOSURE AND ALL CONTROL HARDWARE.
- E.C. SHALL FURNISH AND INSTALL NEW HANDHOLE WITH VOLTAGE SEPARATION AT NEW GATE. SECURITY CONTRACTOR SHALL FURNISH AND INSTALL NEW 8-STRAND SINGLEMODE FIBER FROM MAIN BUILDING TO NEW GATE. ROUTE CABLING THROUGH NEW CONDUIT FROM INTERMEDIATE HANDHOLE.
- SECURITY CONTRACTOR SHALL COORDINATE WITH E.C. TO PROVIDE UNISTRUT MOUNTING FOR NEW GATE ENCLOSURE AND CONDUIT FROM TWO UNDERGROUND CONDUIT FROM NEW HANDHOLE. SIZE CONDUIT AS NEEDED FOR CABLING PULLS.
- SECURITY CONTRACTOR SHALL FURNISH AND INSTALL NEW MEDIA/ETHERNET CONVERTER, POE NETWORK SWITCH AND POWER SUPPLIES IN NEW HANDHOLE TO FEED THE NEW GATE AND SECURITY CAMERA.
- FURNISH AND INSTALL TWO (2) 2" CONDUITS FROM EXISTING GATE HANDHOLE TO NEW GATE HANDHOLE FOR 120V POWER AND FIBER CABLING FROM MAIN BUILDING. CONDUCTORS AND FIBER SHALL BE ROUTED THROUGH INTERMEDIATE AND EXISTING GATE HANDHOLES TO NEW GATE.

# GATE 2 SECURED SIDE (NEW)



### KEY MAP



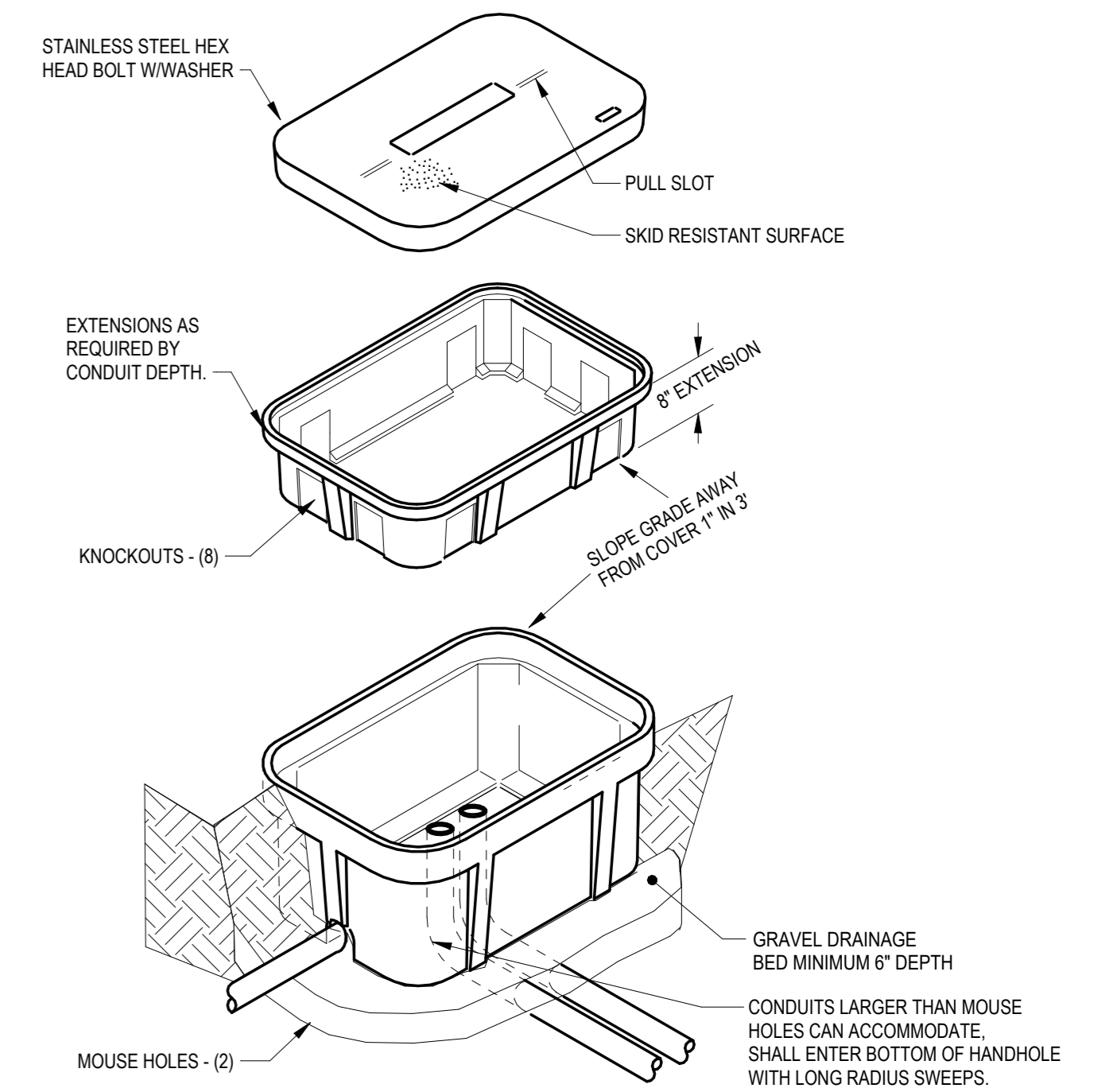
## 1 SECURED GATE ENTRY - GATE 1 AND GATE 2 N.T.S.

USER NAME = Approver	DESIGNED - JPZ	REVISED -
	DRAWN - Author	REVISED -
	CHECKED - VGM	REVISED -
PLOT DATE = 05/07/24	DATE - 05/07/24	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

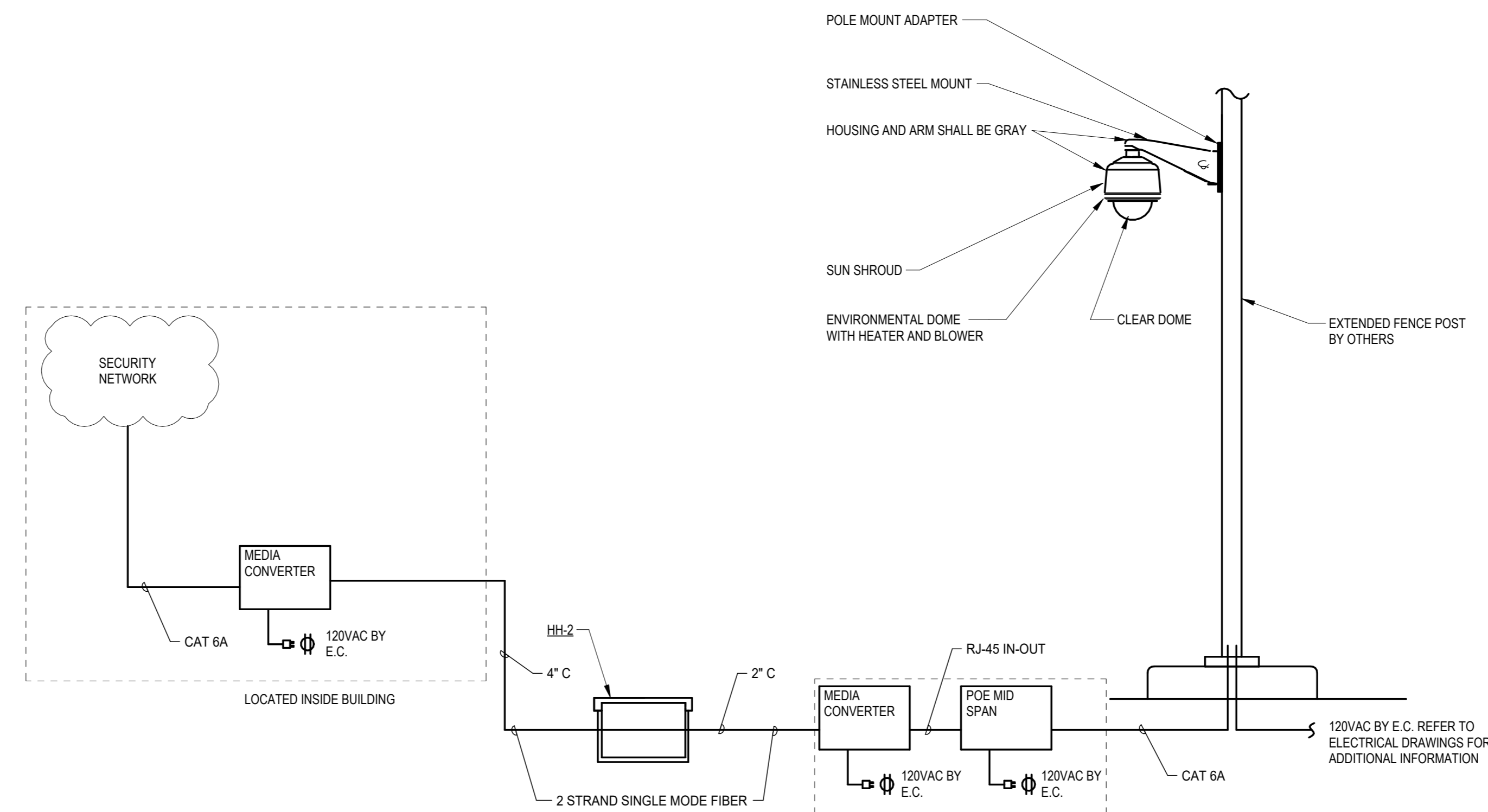
SCALE: SHEET 130 OF 131 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2510	TIM TRAINING TRACK 2026	SANGAMON	131	130
CONTRACT NO. 72N43				
ILLINOIS FED. AID PROJECT				



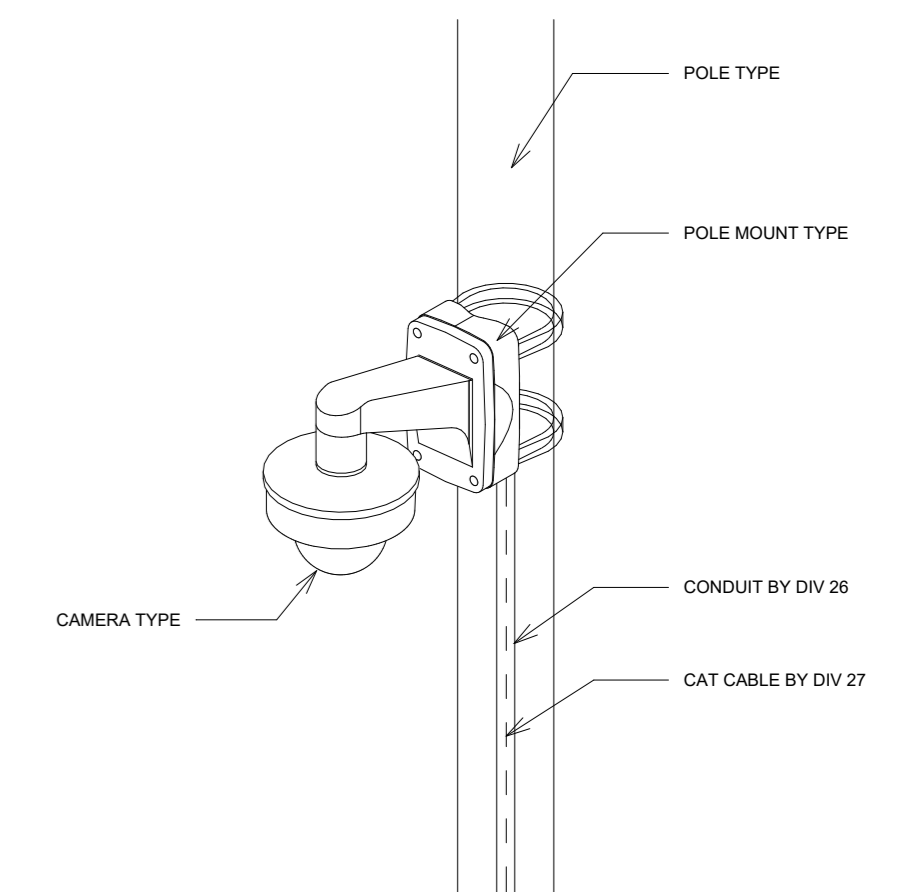
**2 EXTERIOR HANDHOLE DETAIL**  
N.T.S.

- NOTES:**  
1. PROVIDE HANDHOLES AS REQUIRED FOR INSTALLATION OF SITE CONDUITS AND SERVICES.

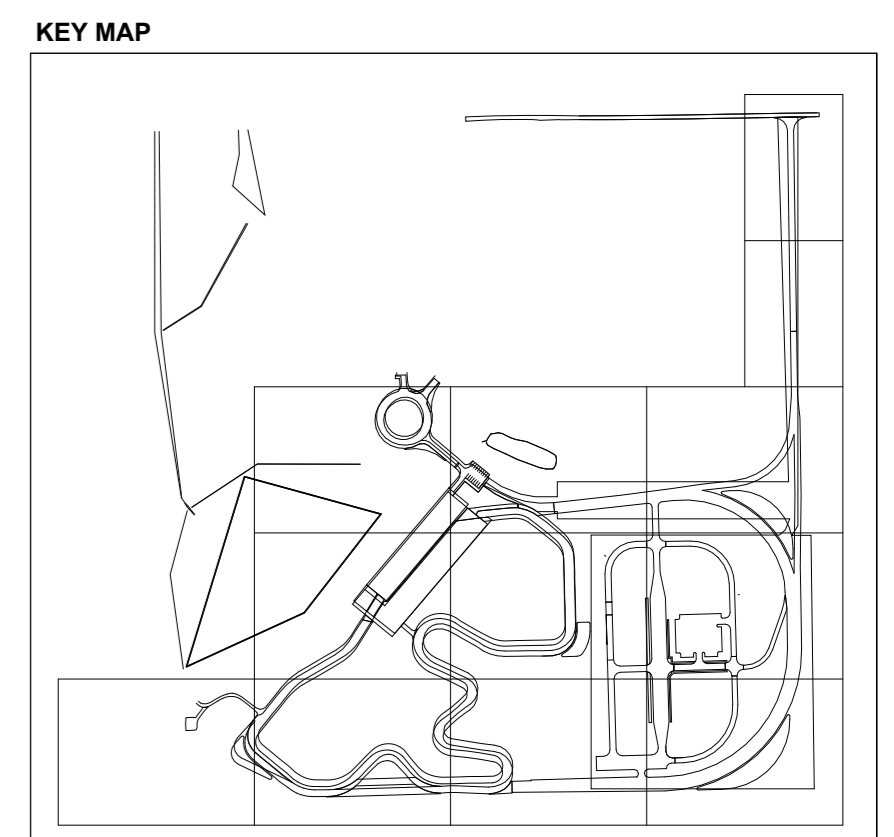


**3 RISER DIAGRAM - EXTERIOR CAMERA POLE MOUNTING AND RISER DIAGRAM**  
N.T.S.

- NOTES:**  
1. SECURE POLE MOUNT ADAPTER FOR THE CAMERA SYSTEM. BASE PLATE SHALL BE SECURED BY (4) 5/16" MOUNTING STUDS, NUTS, AND SPLIT LOCK WASHERS SUITED FOR THE ENVIRONMENT. SECURITY CONTRACTOR SHALL COORDINATE CAMERA MOUNT WITH THE LIGHT POLE MANUFACTURER.  
2. SEAL WALL MOUNT BASE PLATE TO POLE TO PREVENT WATER INFILTRATION.  
3. IF A COMMON BACK BOX IS USED PROVIDE DIVIDER FOR POWER AND VIDEO DATA.



**1 DOME - 3D - POLE MOUNT**  
N.T.S.



USER NAME = Approver	DESIGNED - JPZ	REVISED -
	DRAWN - Author	REVISED -
	CHECKED - VGM	REVISED -
PLOT DATE = 05/07/24	DATE - 05/07/24	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

SCALE: SHEET 131 OF 131 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2510	TIM TRAINING TRACK 2026	SANGAMON	131	131
CONTRACT NO. 72N43				
ILLINOIS FED. AID PROJECT				