

MODEL: \\MODEL\NAME
 FILE: \\NAME: 20240828-1037-4101-01-03.dwg

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 Mascoutah, Illinois 60143
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 Fax: 630.773.3975
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODERNIZATION PLAN (SHEET 2 OF 2)
US RTE 14 (NORTHWEST HWY) AND IL RTE 59 (HOUGH ST)

SCALE: 1" = 20' SHEET 2 OF 2 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	11-00087-00-GS	LAKE	816	301
CONTRACT NO. 61J87				
ILLINOIS FED. AID PROJECT				

TS 6525
EAGLE 7B

MATCH LINE STA 75+00
(SEE SHEET 303)

NOTES:

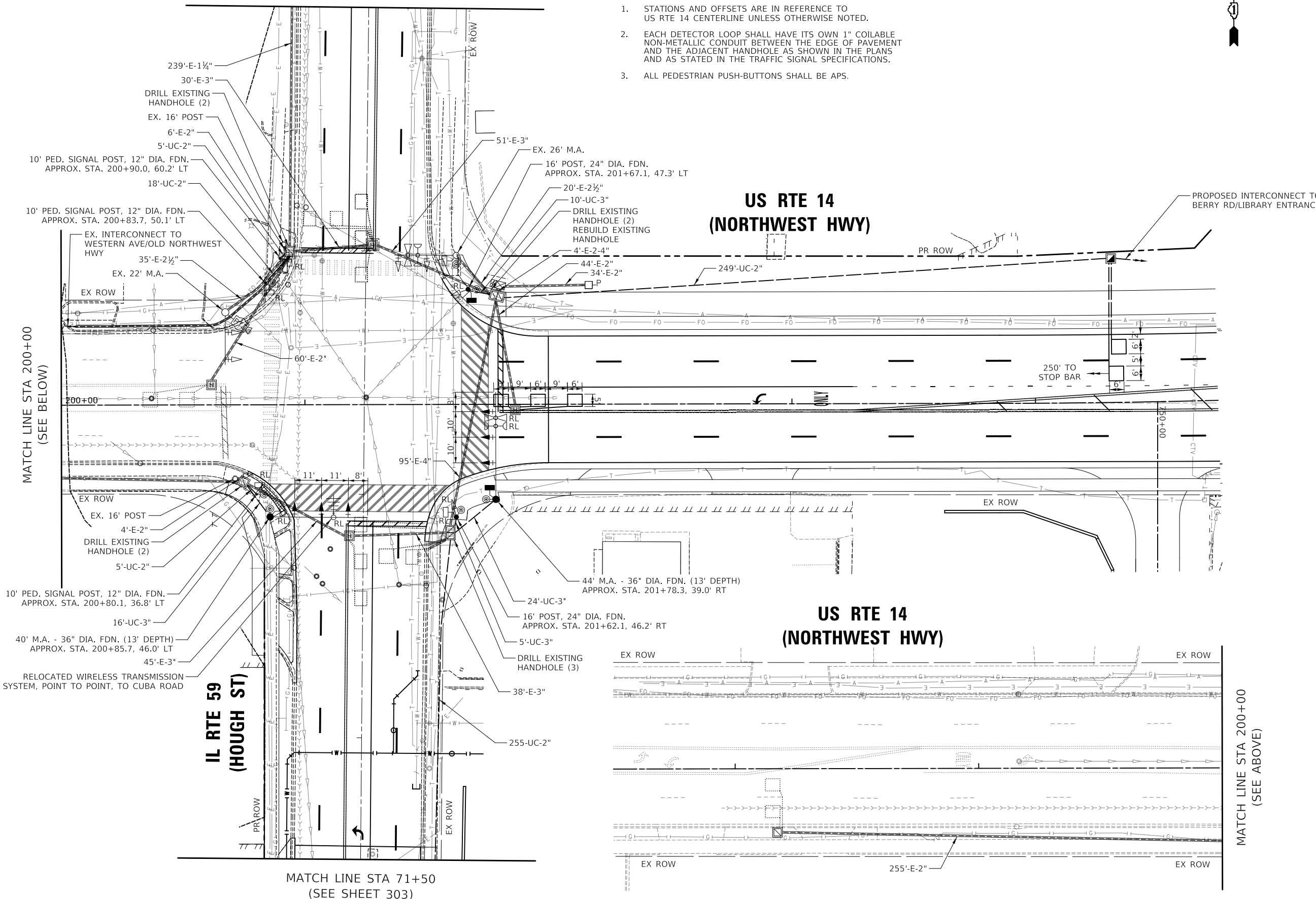
1. STATIONS AND OFFSETS ARE IN REFERENCE TO US RTE 14 CENTERLINE UNLESS OTHERWISE NOTED.
2. EACH DETECTOR LOOP SHALL HAVE ITS OWN 1" COILABLE NON-METALLIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND THE ADJACENT HANDHOLE AS SHOWN IN THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.
3. ALL PEDESTRIAN PUSH-BUTTONS SHALL BE APS.



**US RTE 14
(NORTHWEST HWY)**

**US RTE 14
(NORTHWEST HWY)**

**IL RTE 59
(HOUGH ST)**



MATCH LINE STA 200+00
(SEE BELOW)

MATCH LINE STA 200+00
(SEE ABOVE)

MATCH LINE STA 71+50
(SEE SHEET 303)

MODEL: \\MODEL\NAME: FILE: \\NAME: 0310187-01-02_Utility_Plan.dgn

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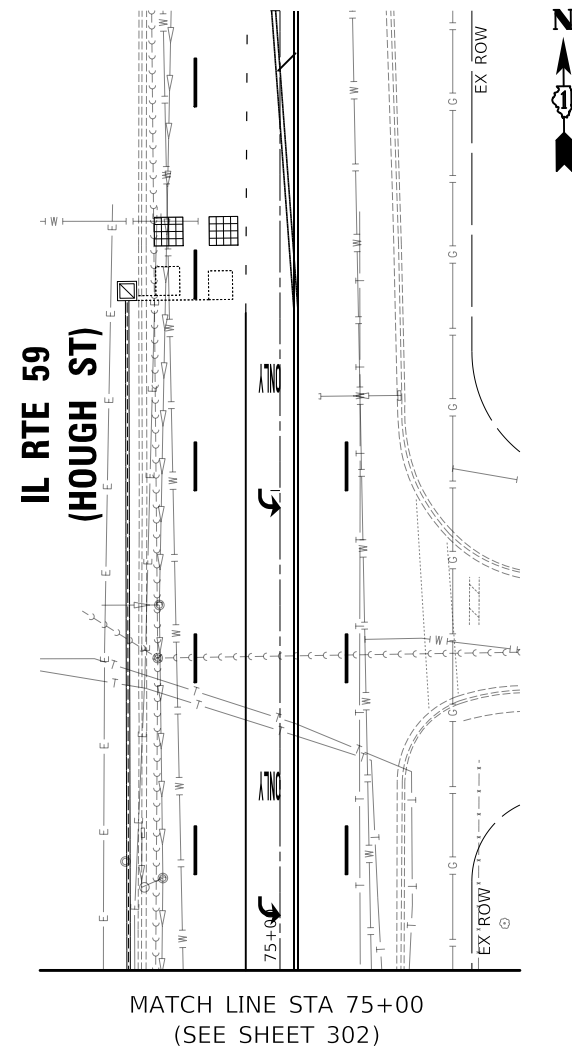
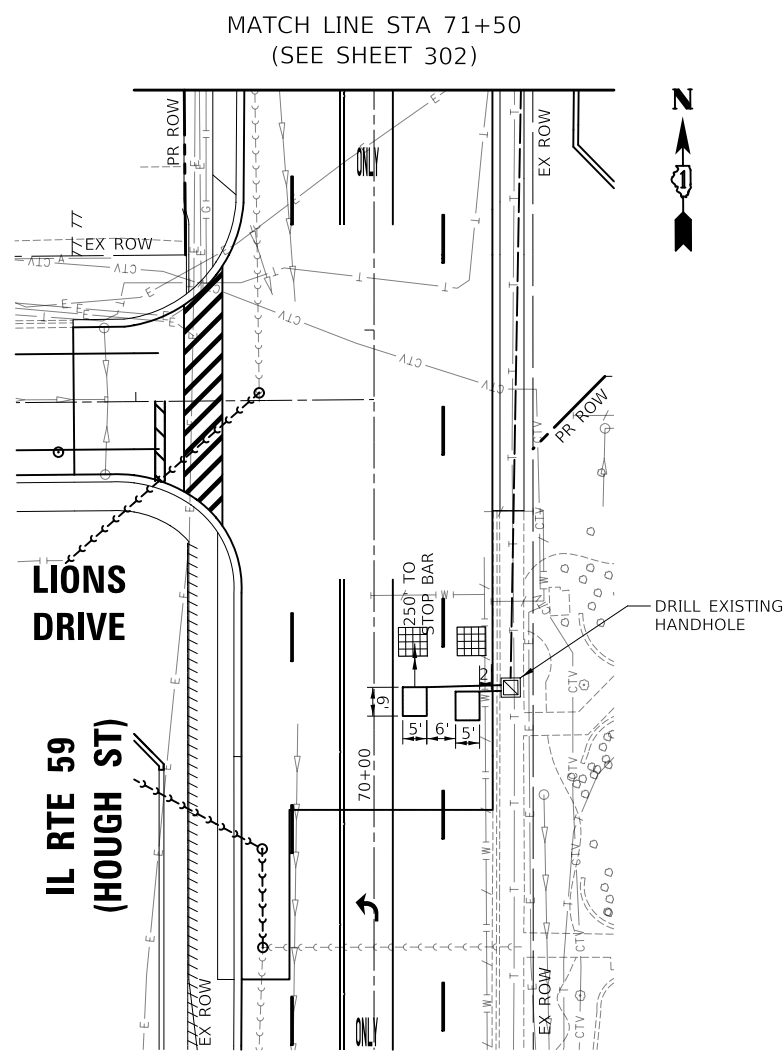
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL UTILITY PLAN (SHEET 1 OF 2)
US RTE 14 (NORTHWEST HWY) AND IL RTE 59 (HOUGH ST)**

SCALE: 1" = 20' SHEET 1 OF 2 SHEETS STA. TO STA.

F.A.P. RTE. 305	SECTION 11-00087-00-GS	COUNTY LAKE	TOTAL SHEETS 816	SHEET NO. 302
CONTRACT NO. 61J87				
ILLINOIS FED. AID PROJECT				

**TS 6525
EAGLE 7B**



MODEL: \\MODELNAME
FILE: \\NAME - 0310187-410-03 Utility Plan.dgn

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REVISED -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

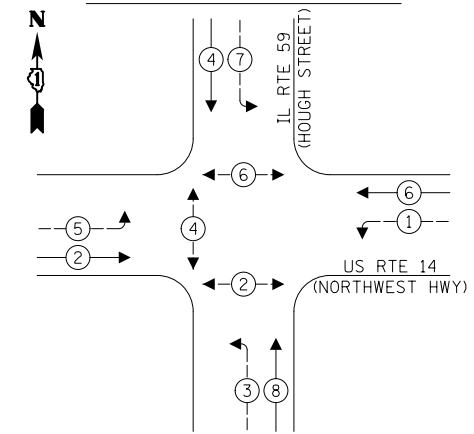
**TRAFFIC SIGNAL UTILITY PLAN (SHEET 2 OF 2)
US RTE 14 (NORTHWEST HWY) AND IL RTE 59 (HOUGH ST)**

SCALE: 1" = 20' SHEET 2 OF 2 SHEETS STA. TO STA.

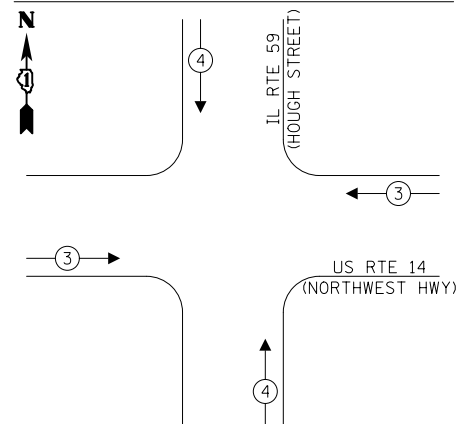
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	11-00087-00-GS	LAKE	816	303
CONTRACT NO. 61J87				
ILLINOIS FED. AID PROJECT				

**TS 6525
EAGLE 7B**

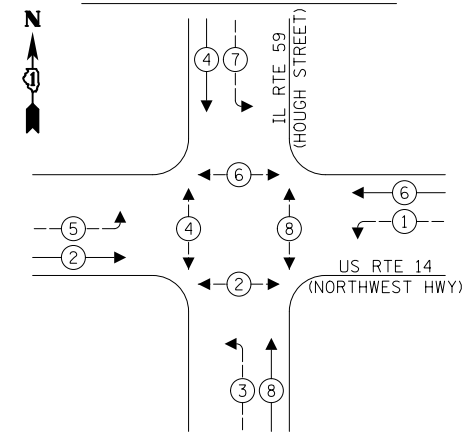
EXISTING CONTROLLER SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED CONTROLLER SEQUENCE

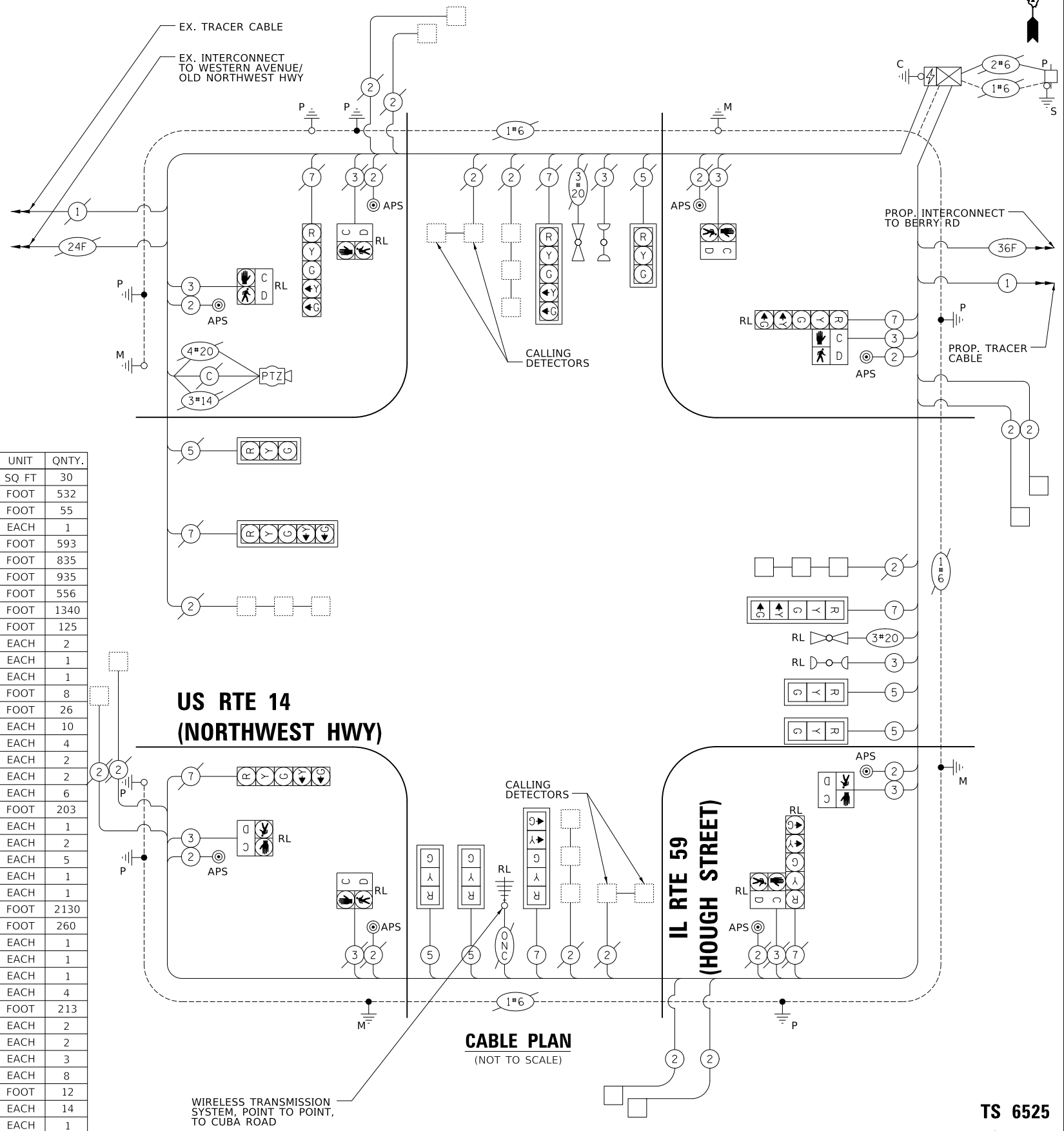


- LEGEND:**
- ← (circle with star) PROTECTED PHASE
 - ← (circle with star and slash) PROTECTED/PERMITTED PHASE
 - ← (circle with star and arrow) PEDESTRIAN PHASE
 - ← (circle with star and OL) OVERLAP

SCHEDULE OF QUANTITIES

PAY ITEM	UNIT	QNTY.
RELOCATE SIGN PANEL - TYPE 2	SQ FT	30
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	532
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	55
HANDHOLE	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	593
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	835
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	935
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	556
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1340
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	125
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 44 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	8
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	26
DRILL EXISTING HANDHOLE	EACH	10
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	6
DETECTOR LOOP, TYPE I	FOOT	203
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
RELOCATE EXISTING SIGNAL HEAD	EACH	2
RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD	EACH	5
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	1
MODIFY EXISTING CONTROLLER	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	2130
REMOVE AND REINSTALL ELECTRIC CABLE FROM CONDUIT	FOOT	260
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REBUILD EXISTING HANDHOLE	EACH	1
REMOVE EXISTING HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	4
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	213
RELOCATE EXISTING REMOTE - CONTROLLED VIDEO SYSTEM (SPECIAL)	EACH	2
RELOCATE SWITCH	EACH	2
PEDESTRIAN SIGNAL POST, 10 FT.	EACH	3
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	8
CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	FOOT	12
LED SIGNAL FACE, LENS COVER	EACH	14
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
RELOCATE WIRELESS TRANSMISSION SYSTEM POINT TO POINT	EACH	1

NOTE:
1. ALL RED SIGNAL INDICATIONS SHALL HAVE A LENS COVER.



TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 3 - SECTION	6	11	66.0
4 - SECTION	-	14	-
5 - SECTION	8	13	104.0
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	8	15	120.0
CONTROLLER	1	150	150.0
MASTER CONTROLLER	-	100	-
UPS	1	25	25.0
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35.0
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			500.0
UPS CHARGING	1	225	225.0
BATTERY HEATER MAT	1	180	180.0
CABINET HEATER	1	200	200.0
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING =			1105.0

ENERGY COSTS TO:
ILLINOIS DEPARTMENT OF TRANSPORTATION
201 CENTER ST.
SCHAUMBURG, IL 60196
ENERGY SUPPLY: CONTACT: _____
PHONE: _____
COMPANY: COMED
ACCOUNT NUMBER: _____

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES US RTE 14 (NORTHWEST HWY) AND IL RTE 59 (HOUGH ST)

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	11-00087-00-GS	LAKE	816	304

CONTRACT NO. 61J87
ILLINOIS FED. AID PROJECT

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

**TS 6525
EAGLE 7B**

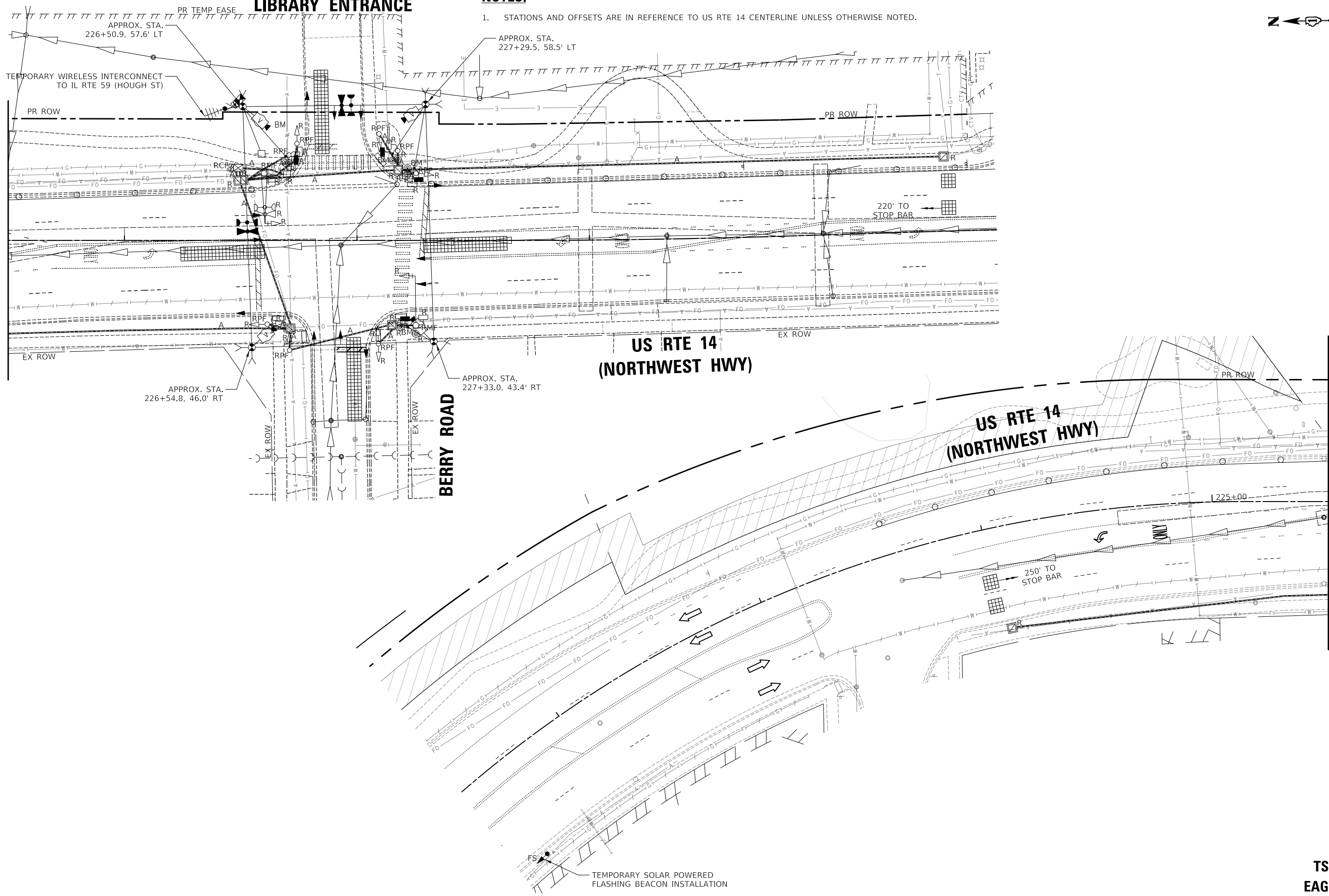
BARRINGTON AREA LIBRARY ENTRANCE

NOTES:

1. STATIONS AND OFFSETS ARE IN REFERENCE TO US RTE 14 CENTERLINE UNLESS OTHERWISE NOTED.



MATCH LINE STA 225+50
(SEE BELOW)



MATCH LINE STA 225+50
(SEE ABOVE)

MODEL: \\MODEL\NAME: FILE: \\NAME: 0310187-01-CIS-03-00 Prestage Temp Signal Utility Plan.dgn

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN,
REMOVAL PLAN, AND UTILITY PLAN - PRESTAGE
US RTE 14 (NORTHWEST HWY) AND BERRY RD**

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

F.A.P. RTE. 305	SECTION 11-00087-00-GS	COUNTY LAKE	TOTAL SHEETS 816	SHEET NO. 306
CONTRACT NO. 61J87				
ILLINOIS FED. AID PROJECT				

**TS 4685
EAGLE 7B**

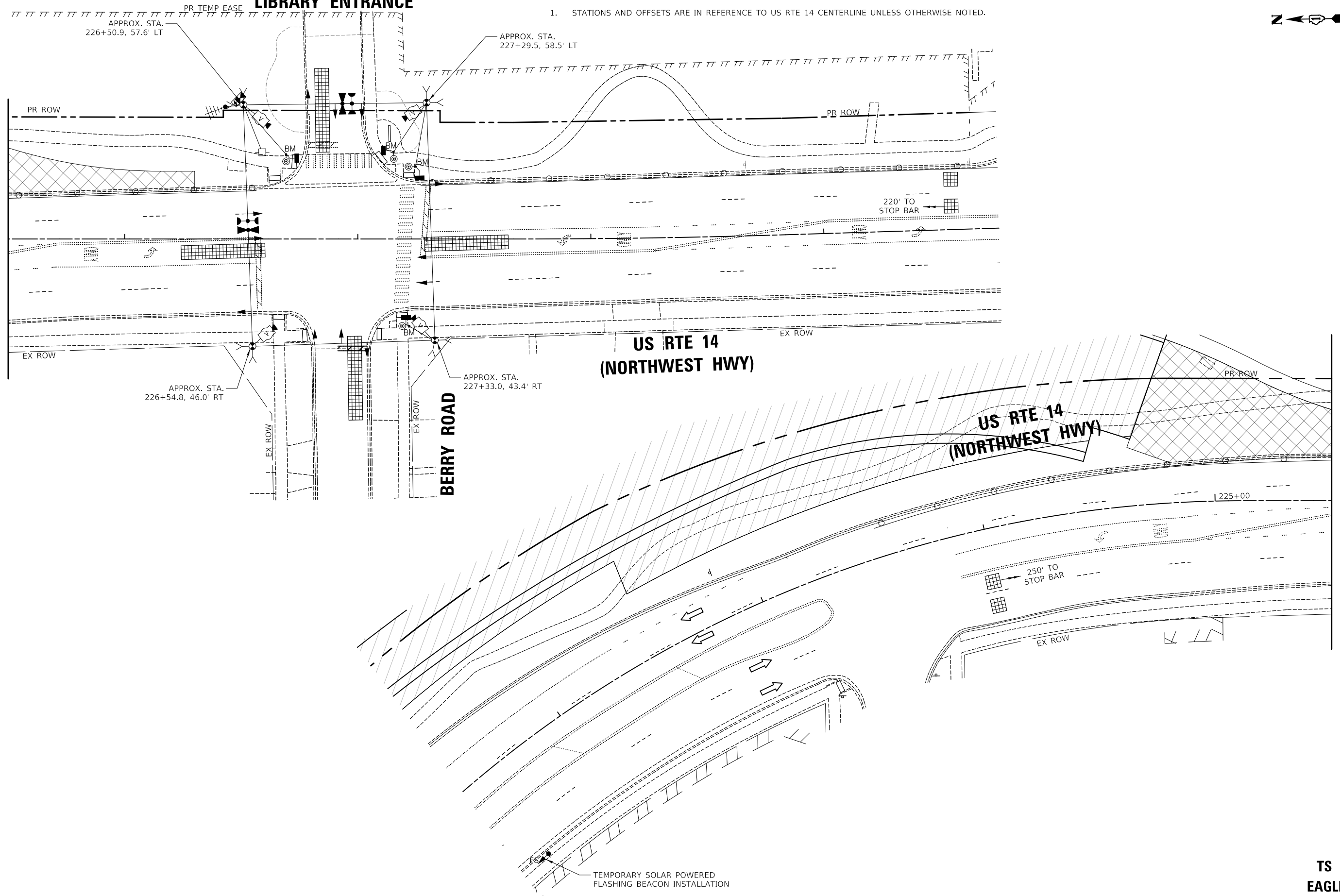
**BARRINGTON AREA
LIBRARY ENTRANCE**

NOTES:

1. STATIONS AND OFFSETS ARE IN REFERENCE TO US RTE 14 CENTERLINE UNLESS OTHERWISE NOTED.



MATCH LINE STA 225+50
(SEE BELOW)



MATCH LINE STA 225+50
(SEE ABOVE)

MODEL: \\MODELNAME
FILE NAME: \\101087-00-GS-03-01 Stage 1.dgn

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY TRAFFIC SIGNAL PLAN
M.O.T. STAGE 1
US RTE 14 (NORTHWEST HWY) AND BERRY RD**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	11-00087-00-GS	LAKE	816	307
CONTRACT NO. 61J87				
ILLINOIS FED. AID PROJECT				

**TS 4685
EAGLE 7B**

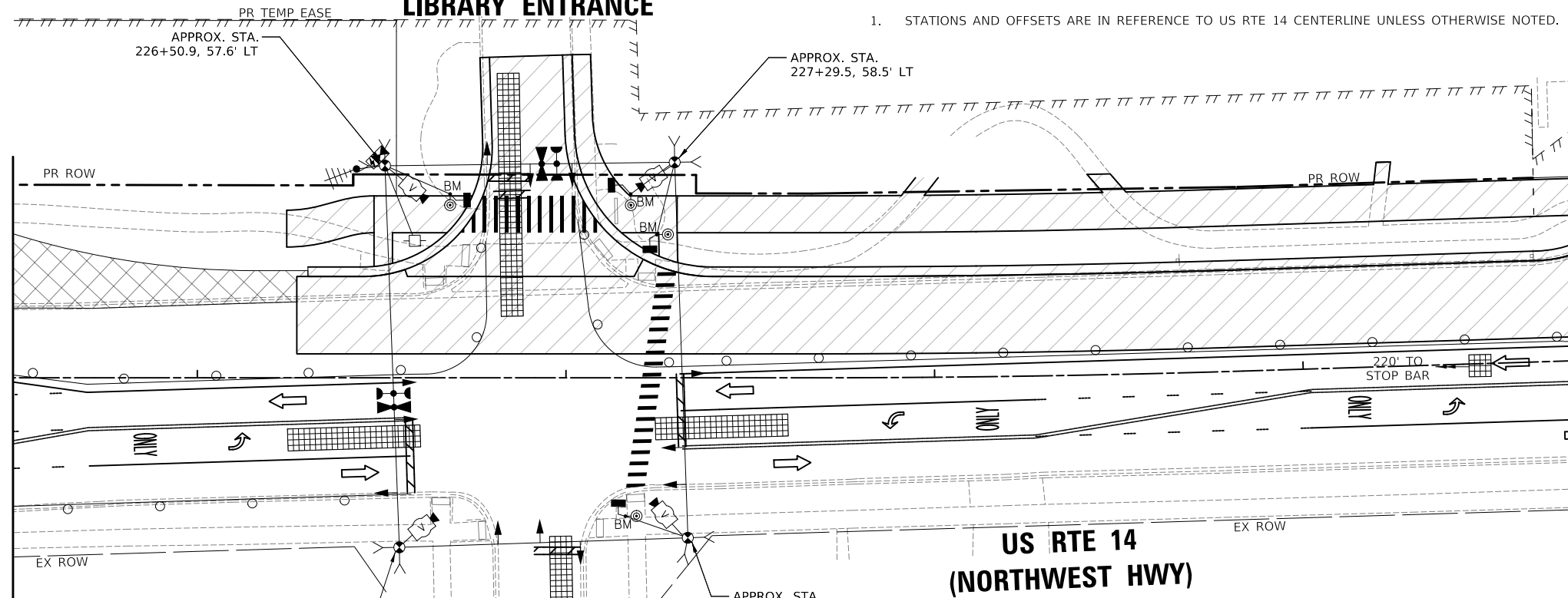
BARRINGTON AREA LIBRARY ENTRANCE

NOTES:

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MATCH LINE STA 225+50
(SEE BELOW)



APPROX. STA. 226+54.8, 46.0' RT
APPROX. STA. 227+33.0, 43.4' RT

BERRY ROAD

**US RTE 14
(NORTHWEST HWY)**

**US RTE 14
(NORTHWEST HWY)**

MATCH LINE STA 225+50
(SEE ABOVE)

TEMPORARY SOLAR POWERED
FLASHING BEACON INSTALLATION

MODEL: \\MODEL\NAME: ...
FILE: \\NAME: ...

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	DATE - 08/28/2024	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY TRAFFIC SIGNAL PLAN
M.O.T. STAGE 1A
US RTE 14 (NORTHWEST HWY) AND BERRY RD**

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

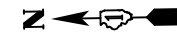
F.A.P. RTE. 305	SECTION 11-00087-00-GS	COUNTY LAKE	TOTAL SHEETS 816	SHEET NO. 308
CONTRACT NO. 61J87				
ILLINOIS FED. AID PROJECT				

**TS 4685
EAGLE 7B**

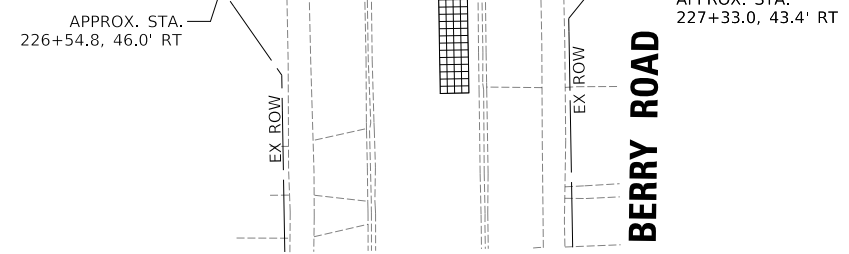
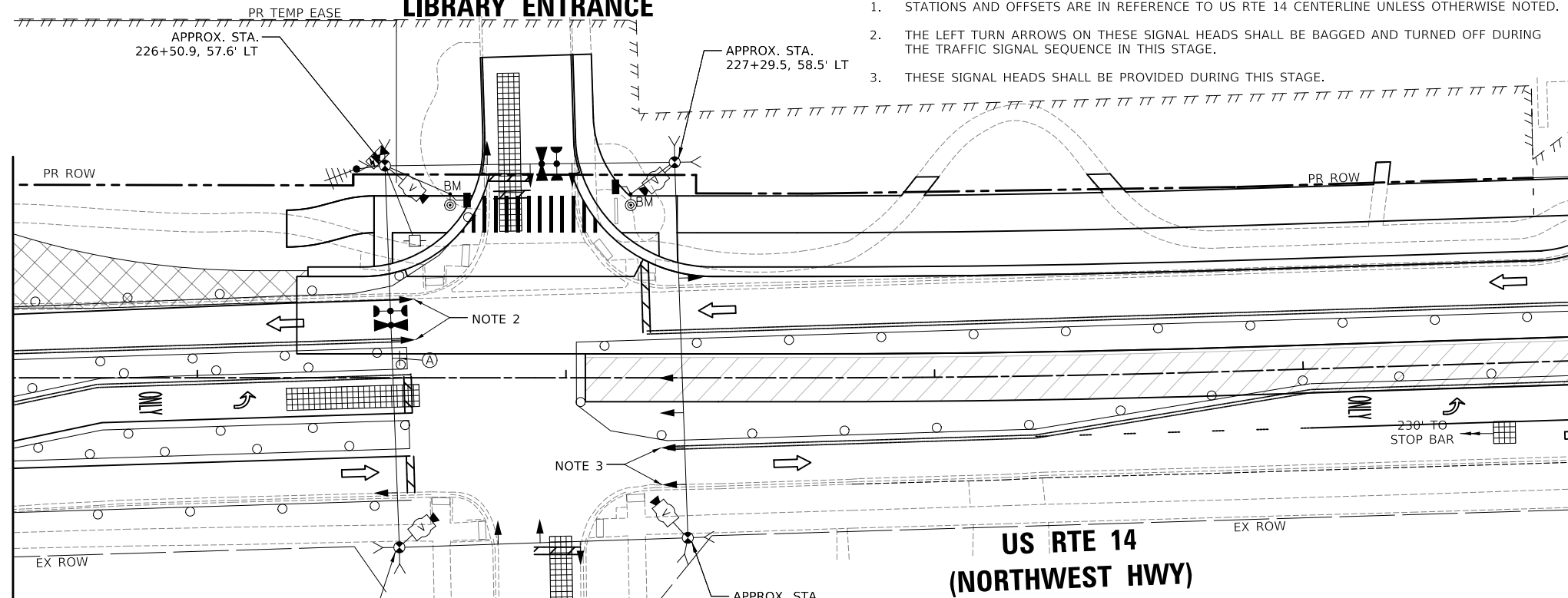
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NOTES:

1. STATIONS AND OFFSETS ARE IN REFERENCE TO US RTE 14 CENTERLINE UNLESS OTHERWISE NOTED.
2. THE LEFT TURN ARROWS ON THESE SIGNAL HEADS SHALL BE BAGGED AND TURNED OFF DURING THE TRAFFIC SIGNAL SEQUENCE IN THIS STAGE.
3. THESE SIGNAL HEADS SHALL BE PROVIDED DURING THIS STAGE.



MATCH LINE STA 225+50
(SEE BELOW)



MATCH LINE STA 225+50
(SEE ABOVE)



Ⓐ
R3-2
24" X 24"
SIGN PANEL
TYPE 1
1 REQUIRED

TEMPORARY SOLAR POWERED
FLASHING BEACON INSTALLATION

**TS 4685
EAGLE 7B**

MODEL: \\MODEL\NAME: FILE: \\NAME: 03101872-rlt-cs-03-01 Stage 1B.dwg

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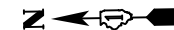
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY TRAFFIC SIGNAL PLAN
M.O.T. STAGE 1B
US RTE 14 (NORTHWEST HWY) AND BERRY RD**
SCALE: 1" = 20' SHEET 1 OF 1 SHEETS STA. TO STA.

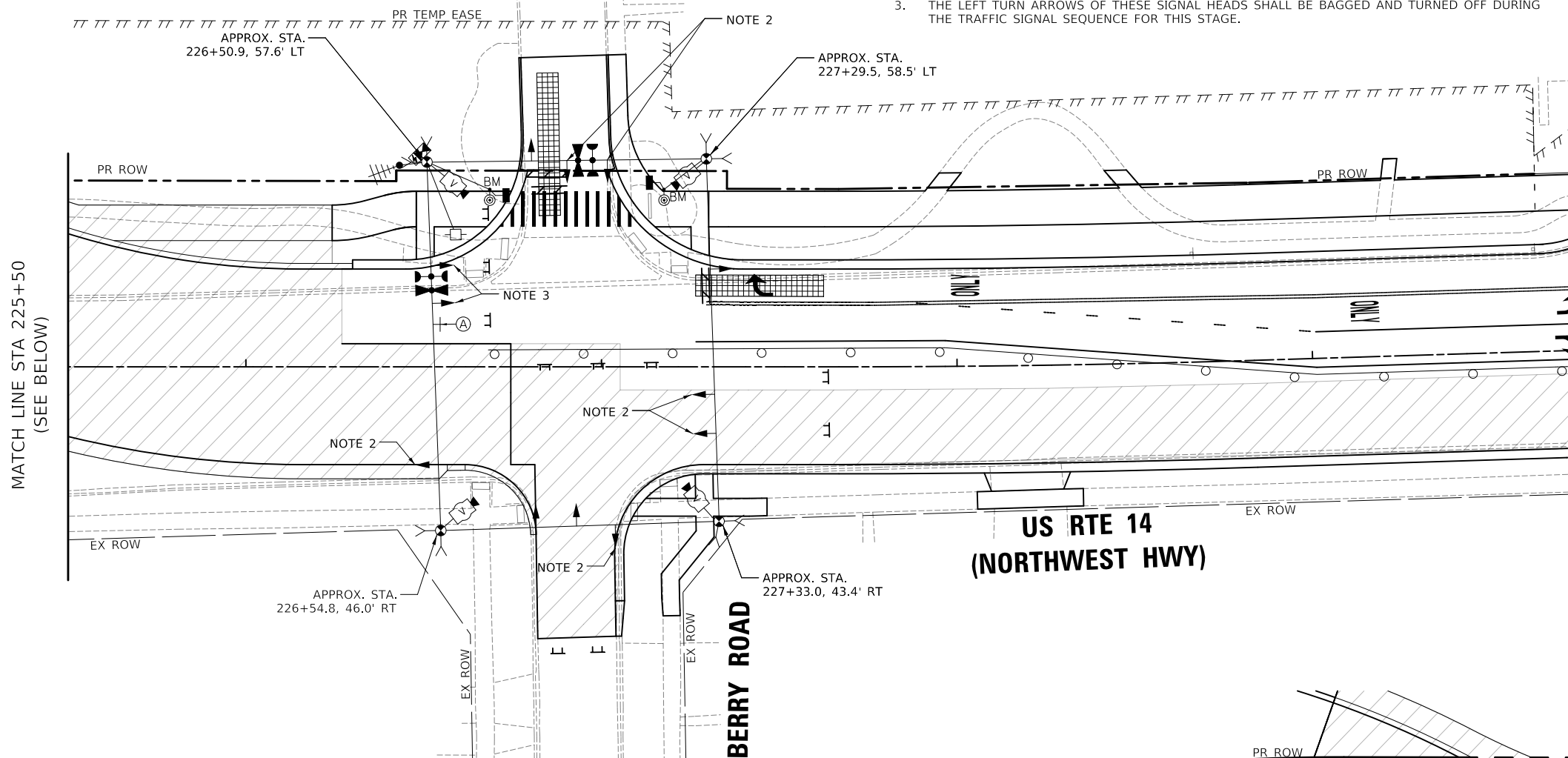
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	11-00087-00-GS	LAKE	816	309
CONTRACT NO. 61J87				
ILLINOIS FED. AID PROJECT				

BARRINGTON AREA LIBRARY ENTRANCE



NOTES:

1. STATIONS AND OFFSETS ARE IN REFERENCE TO US RTE 14 CENTERLINE UNLESS OTHERWISE NOTED.
2. THE SOUTHBOUND AND EASTBOUND SIGNAL HEADS SHALL BE BAGGED AND DEACTIVATED.
3. THE LEFT TURN ARROWS OF THESE SIGNAL HEADS SHALL BE BAGGED AND TURNED OFF DURING THE TRAFFIC SIGNAL SEQUENCE FOR THIS STAGE.



Ⓐ
R3-2
24" X 24"
SIGN PANEL
TYPE 1
1 REQUIRED

MODEL: \\MODEL\NAME: FILE: \\NAME: 0310187-rlt-CS-03-01 Stage 1C.dwg

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DEPARTMENT OF TRANSPORTATION**

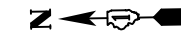
**TEMPORARY TRAFFIC SIGNAL PLAN
M.O.T. STAGE 1C
US RTE 14 (NORTHWEST HWY) AND BERRY RD**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	11-00087-00-GS	LAKE	816	310
CONTRACT NO. 61J87				
ILLINOIS FED. AID PROJECT				

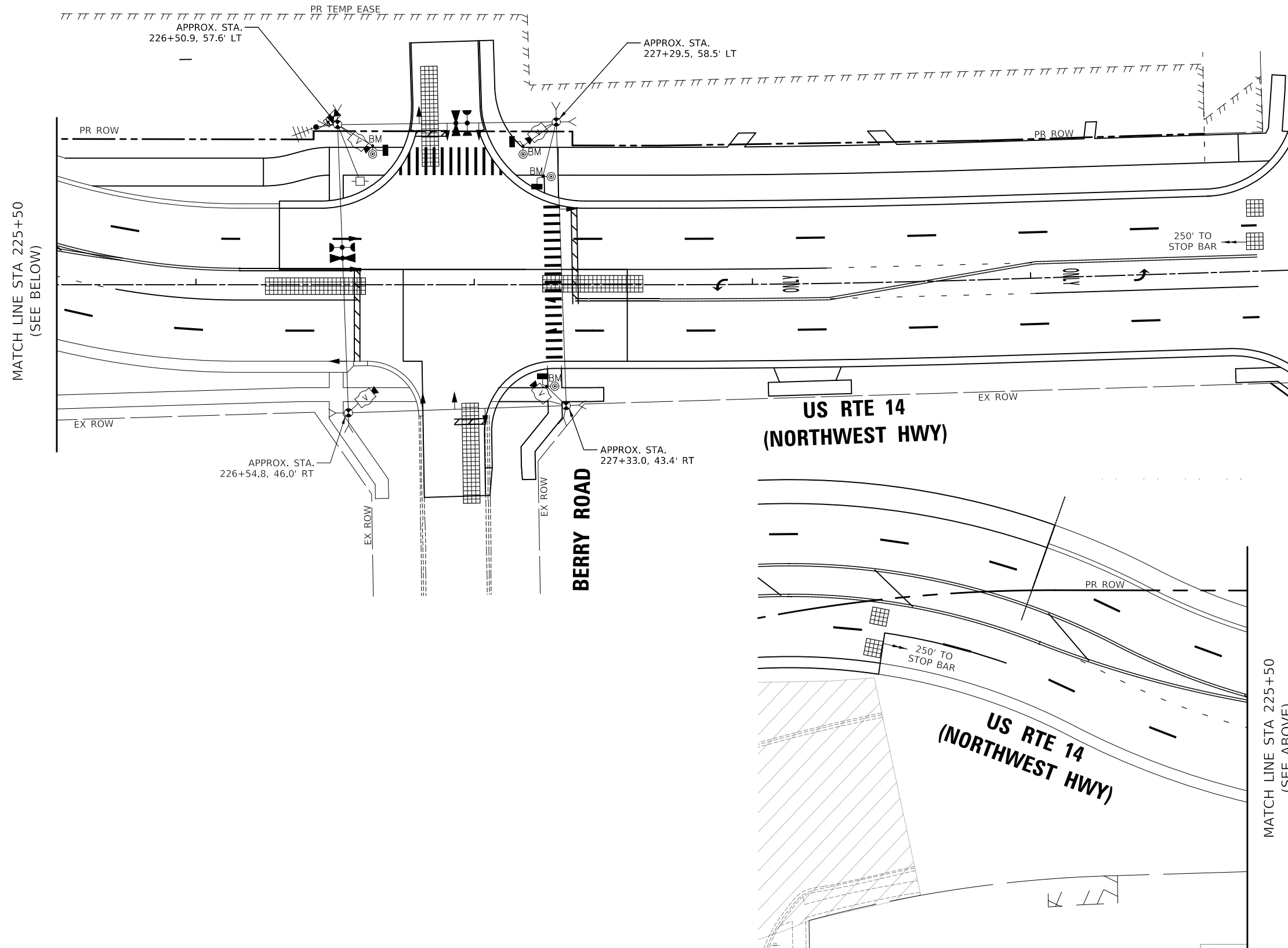
**TS 4685
EAGLE 7B**

BARRINGTON AREA LIBRARY ENTRANCE



NOTES:

1. STATIONS AND OFFSETS ARE IN REFERENCE TO US RTE 14 CENTERLINE UNLESS OTHERWISE NOTED.



MODEL: \\MODEL\NAME
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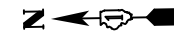
TEMPORARY TRAFFIC SIGNAL PLAN
M.O.T. STAGE 2
US RTE 14 (NORTHWEST HWY) AND BERRY RD

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	11-00087-00-GS	LAKE	816	311
CONTRACT NO. 61J87				
ILLINOIS FED. AID PROJECT				

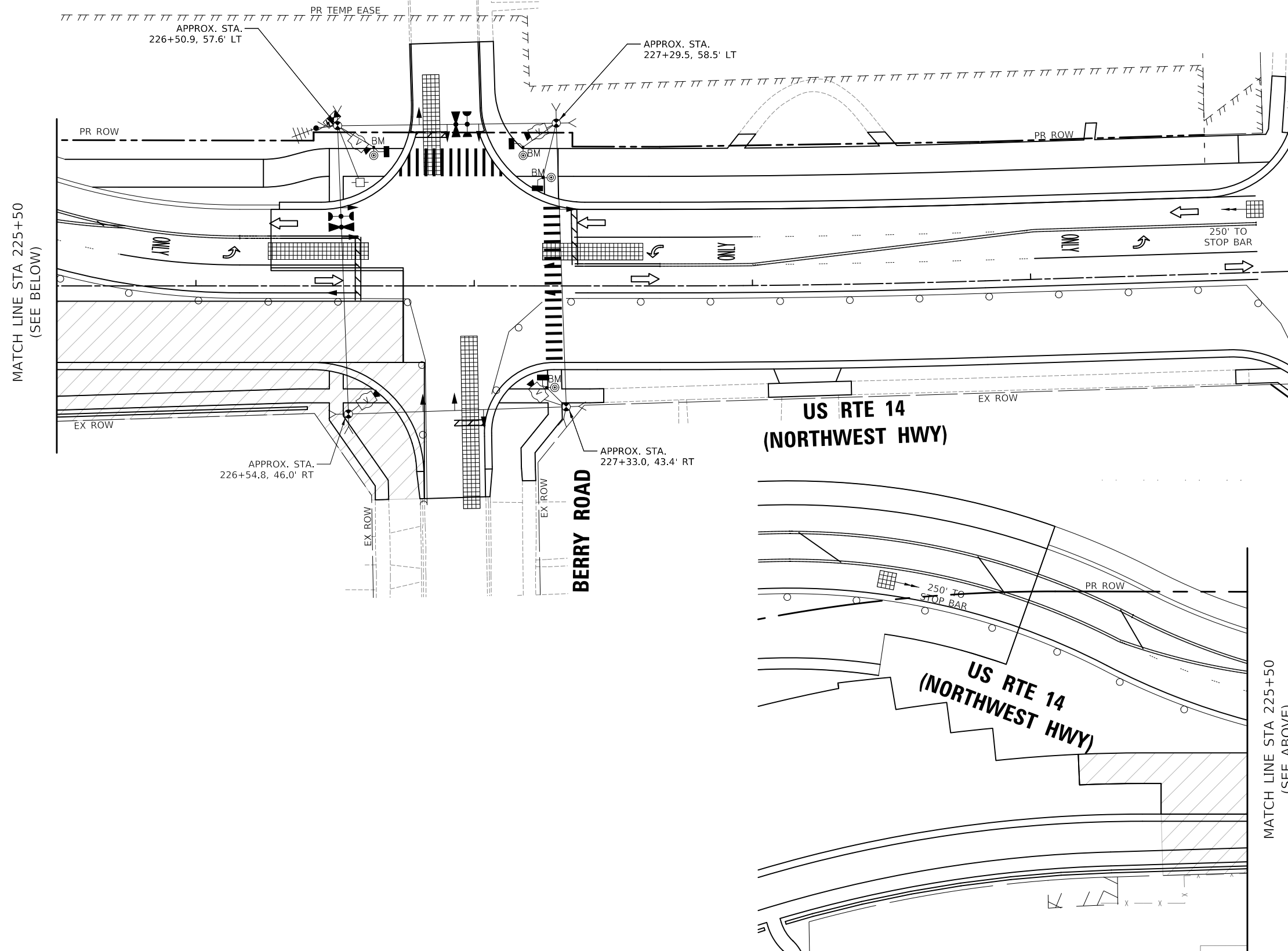
TS 4685
EAGLE 7B

BARRINGTON AREA LIBRARY ENTRANCE



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL PLAN
M.O.T. STAGE 2A
US RTE 14 (NORTHWEST HWY) AND BERRY RD
 SCALE: 1" = 20' SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	11-00087-00-GS	LAKE	816	312
CONTRACT NO. 61J87				
ILLINOIS FED. AID PROJECT				

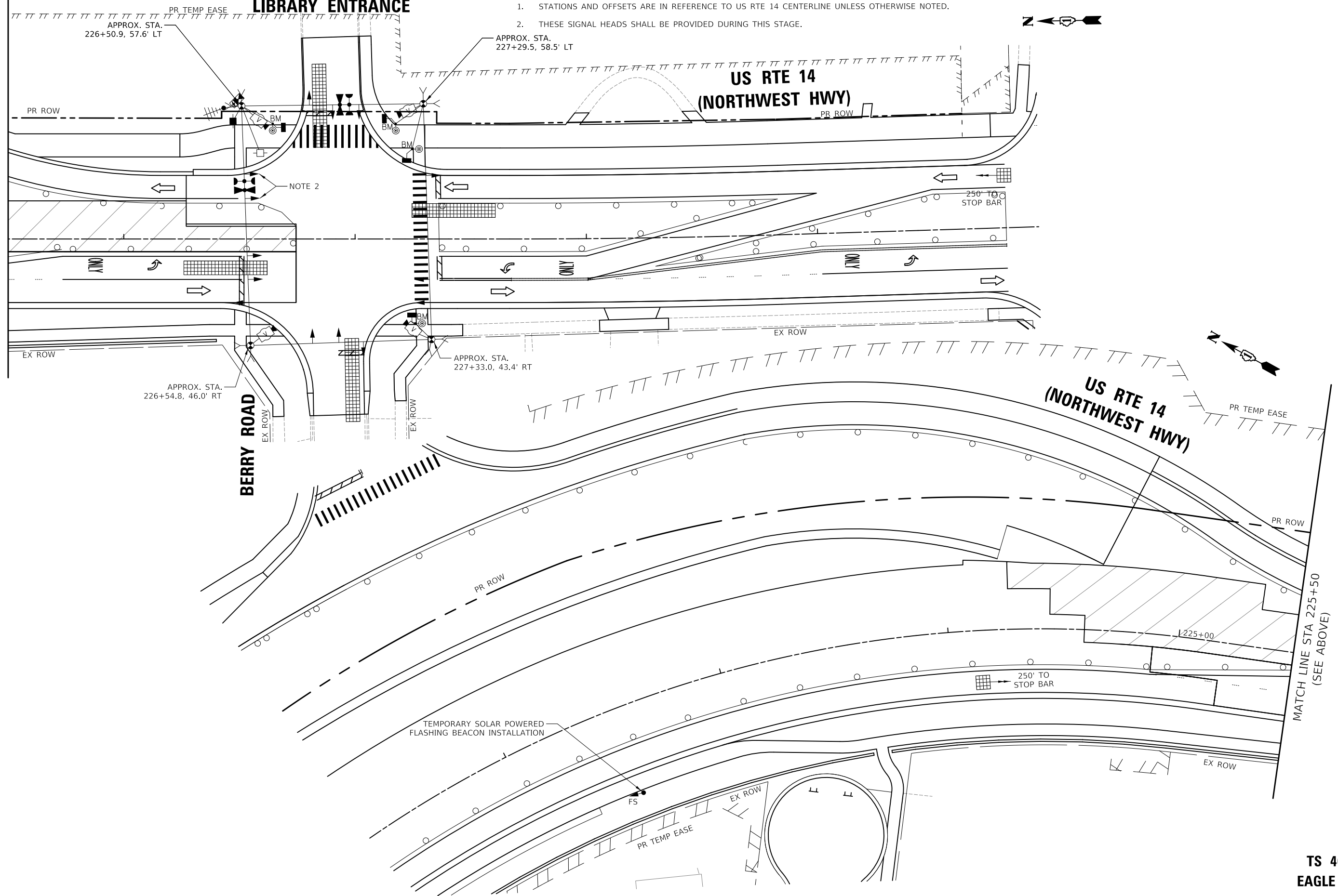
TS 4685
EAGLE 7B

**BARRINGTON AREA
LIBRARY ENTRANCE**

NOTES:

1. STATIONS AND OFFSETS ARE IN REFERENCE TO US RTE 14 CENTERLINE UNLESS OTHERWISE NOTED.
2. THESE SIGNAL HEADS SHALL BE PROVIDED DURING THIS STAGE.

MATCH LINE STA 225+50
(SEE BELOW)



MODEL: \\MODELNAME
 FILE: \\NAME - 030103-087-001-CO-03-02 Stage 2B.dwg
 08/28/2024 11:58:15 AM

CIVILTECH
 Two Pierce Place, Suite 1400
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PLOT DATE = 8/28/2024	CHECKED - JJE	REVISED -
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY TRAFFIC SIGNAL PLAN
M.O.T. STAGE 2B
US RTE 14 (NORTHWEST HWY) AND BERRY RD**

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

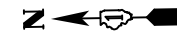
F.A.P. RTE. 305	SECTION 11-00087-00-GS	COUNTY LAKE	TOTAL SHEETS 816	SHEET NO. 313
CONTRACT NO. 61J87			ILLINOIS FED. AID PROJECT	

**TS 4685
EAGLE 7B**

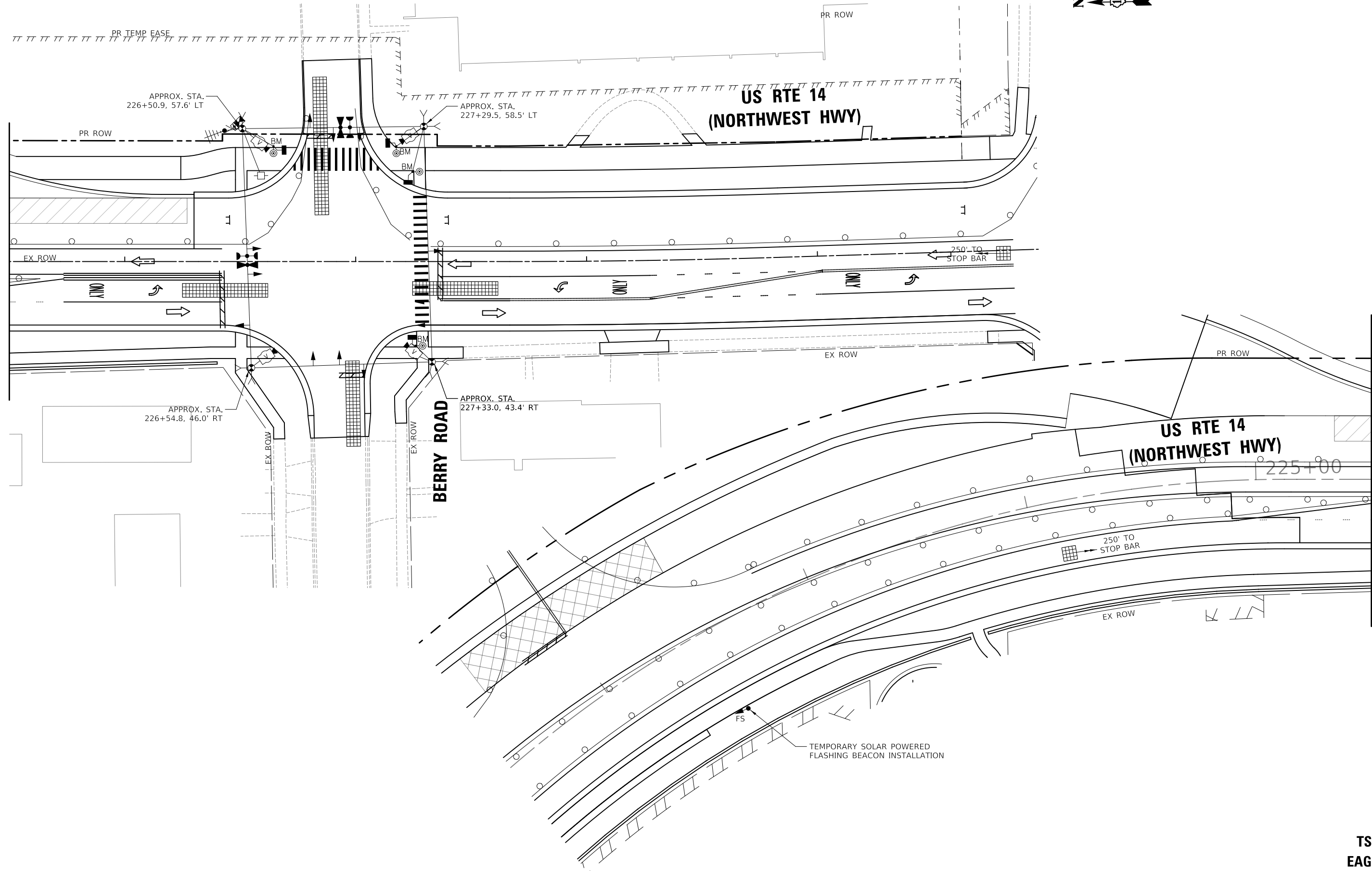
BARRINGTON AREA LIBRARY ENTRANCE

NOTES:

- STATIONS AND OFFSETS ARE IN REFERENCE TO US RTE 14 CENTERLINE UNLESS OTHERWISE NOTED.



MATCH LINE STA 225+50
(SEE BELOW)



MATCH LINE STA 225+50
(SEE ABOVE)

MODEL: \\MODELNAME
FILE NAME: \\101087-00-GS-03-02 Stage 2C.dwg

CIVILTECH
Two Pierce Place, Suite 1400
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Tel: 630.773.3900
Fax: 630.773.3975
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USER NAME = mc	DESIGNED - AS	REVISED -
PLOT SCALE = 40.0000" / in.	DRAWN - AS	REVISED -
PLOT DATE = 8/28/2024	CHECKED - JJE	REVISED -
	DATE - 08/28/2024	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY TRAFFIC SIGNAL PLAN
M.O.T. STAGE 2C
US RTE 14 (NORTHWEST HWY) AND BERRY RD**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	11-00087-00-GS	LAKE	816	314
CONTRACT NO. 61J87				
ILLINOIS FED. AID PROJECT				

**TS 4685
EAGLE 7B**

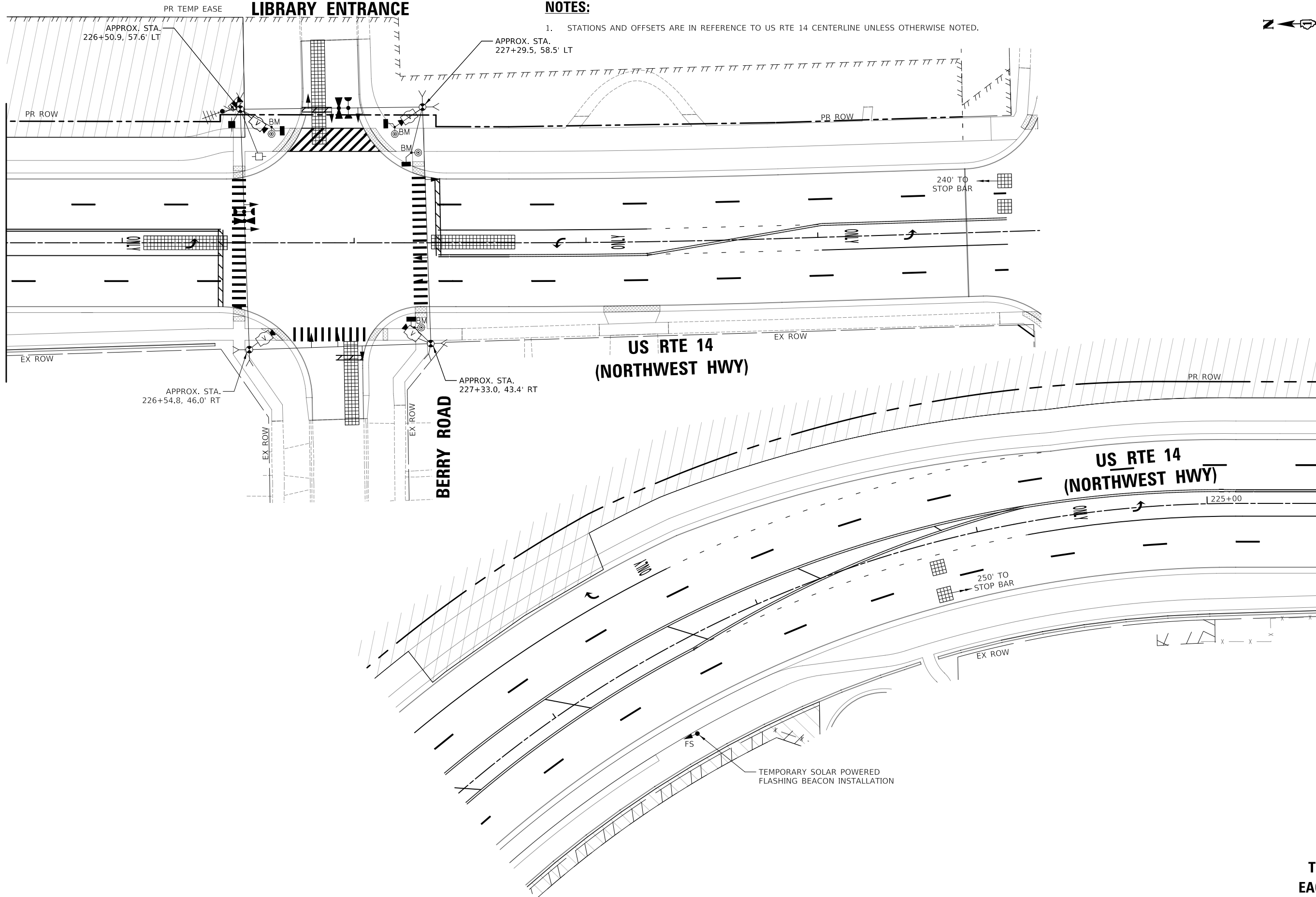
**BARRINGTON AREA
LIBRARY ENTRANCE**

NOTES:

1. STATIONS AND OFFSETS ARE IN REFERENCE TO US RTE 14 CENTERLINE UNLESS OTHERWISE NOTED.



MATCH LINE STA 225+50
(SEE BELOW)



MATCH LINE STA 225+50
(SEE ABOVE)

MODEL: \\MODEL\NAME
FILE NAME: \\3101017-01-03-03 Stage 2.dwg

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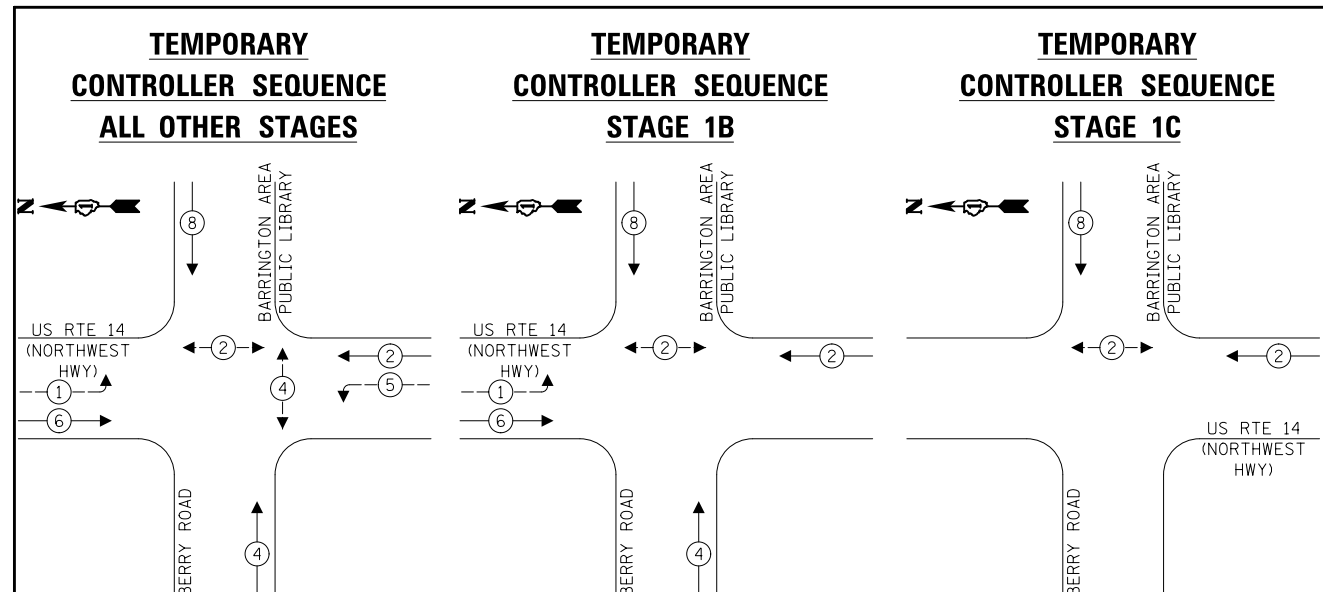
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY TRAFFIC SIGNAL PLAN
M.O.T. STAGE 3
US RTE 14 (NORTHWEST HWY) AND BERRY RD**

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

F.A.P. RTE. 305	SECTION 11-00087-00-GS	COUNTY LAKE	TOTAL SHEETS 816	SHEET NO. 315
CONTRACT NO. 61J87				
ILLINOIS FED. AID PROJECT				

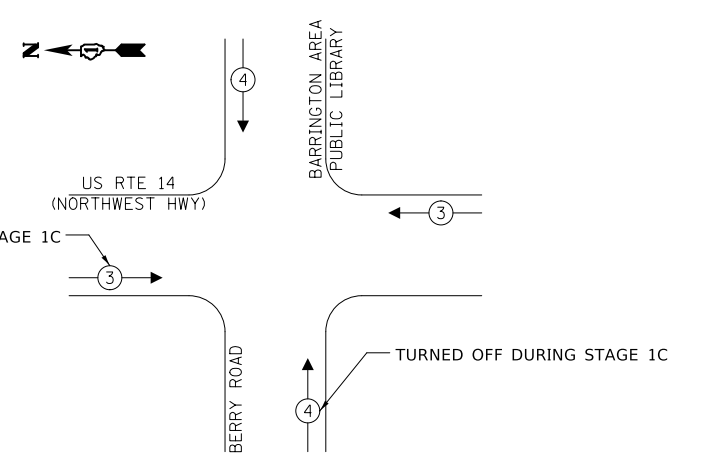
**TS 4685
EAGLE 7B**



LEGEND:

- ← ⊙ → PROTECTED PHASE
- ← ⊙ - - PROTECTED/PERMITTED PHASE
- ← ⊙ → PEDESTRIAN PHASE
- ← ⊙ OL → OVERLAP

TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE



TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD	3 - SECTION	10	110.0
	4 - SECTION	-	-
	5 - SECTION	4	52.0
PROGRAMMABLE SIGNALS			
	3 - SECTION	-	22
	4 - SECTION	-	32
	5 - SECTION	-	28
PED. SIGNAL	4	15	60.0
CONTROLLER	1	150	150.0
MASTER CONTROLLER	-	100	-
UPS	1	25	25.0
DETECTION	RADAR	-	20
	VIDEO	4	20
			80.0
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	-	35	-
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			477.0
UPS CHARGING	1	225	225.0
BATTERY HEATER MAT	1	180	180.0
CABINET HEATER	1	200	200.0
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING =			1082.0

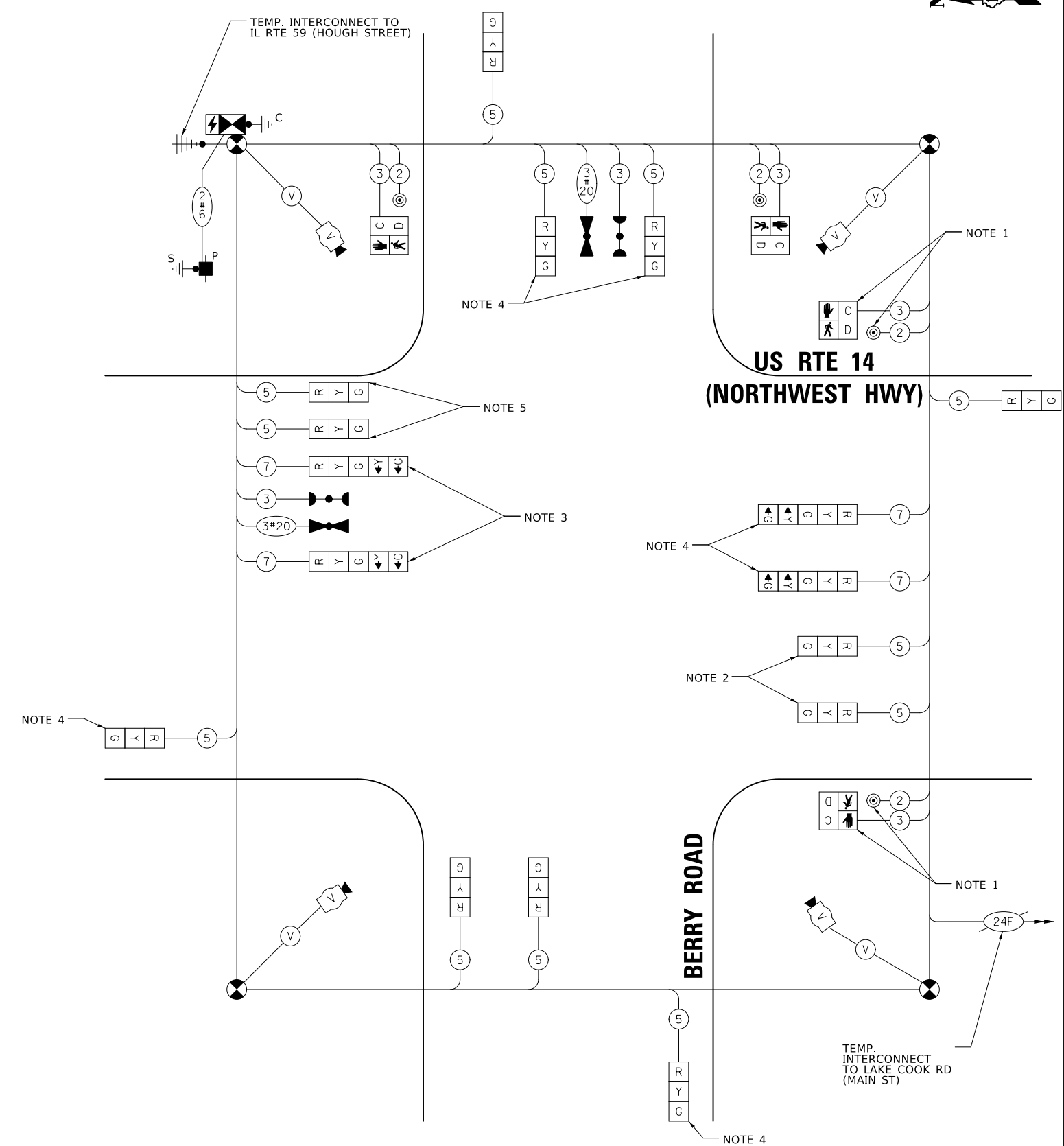
NOTES:

1. DURING STAGES 1B, AND 1C, THESE ITEMS SHALL BE BAGGED AND DEACTIVATED.
2. DURING STAGE 1B, THESE SIGNAL HEADS SHALL BE ADDED TO THE TEMPORARY TRAFFIC SIGNAL INSTALLATION FOR THE SOUTHBOUND THROUGH LANE ONLY DURING THIS STAGE.
3. DURING STAGES 1B AND 1C, THE LEFT TURN SECTIONS OF THESE SIGNAL HEADS SHALL BE BAGGED AND DEACTIVATED.
4. DURING STAGE 1C, THE SOUTHBOUND AND EASTBOUND SIGNAL HEADS SHALL BE BAGGED AND DEACTIVATED.
5. DURING STAGE 2B, THESE SIGNAL HEADS SHALL BE ADDED TO THE TEMPORARY TRAFFIC SIGNAL INSTALLATION FOR THE NORTHBOUND THROUGH LANE ONLY DURING THIS STAGE.

ENERGY COSTS TO:
 VILLAGE OF BARRINGTON
 200 S. HOUGH ST.
 BARRINGTON, IL 60010
 ENERGY SUPPLY: CONTACT: JAMES CAMPBELL
 PHONE: (630) 940-6805
 COMPANY: COMED
 ACCOUNT NUMBER: 0581674000

Two Pierce Place, Suite 1400
 Itasca, Illinois 60143
 Tel: 630.773.3900
 Fax: 630.773.3975
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TEMPORARY CABLE PLAN
(NOT TO SCALE)

TS 4685
EAGLE 7B

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

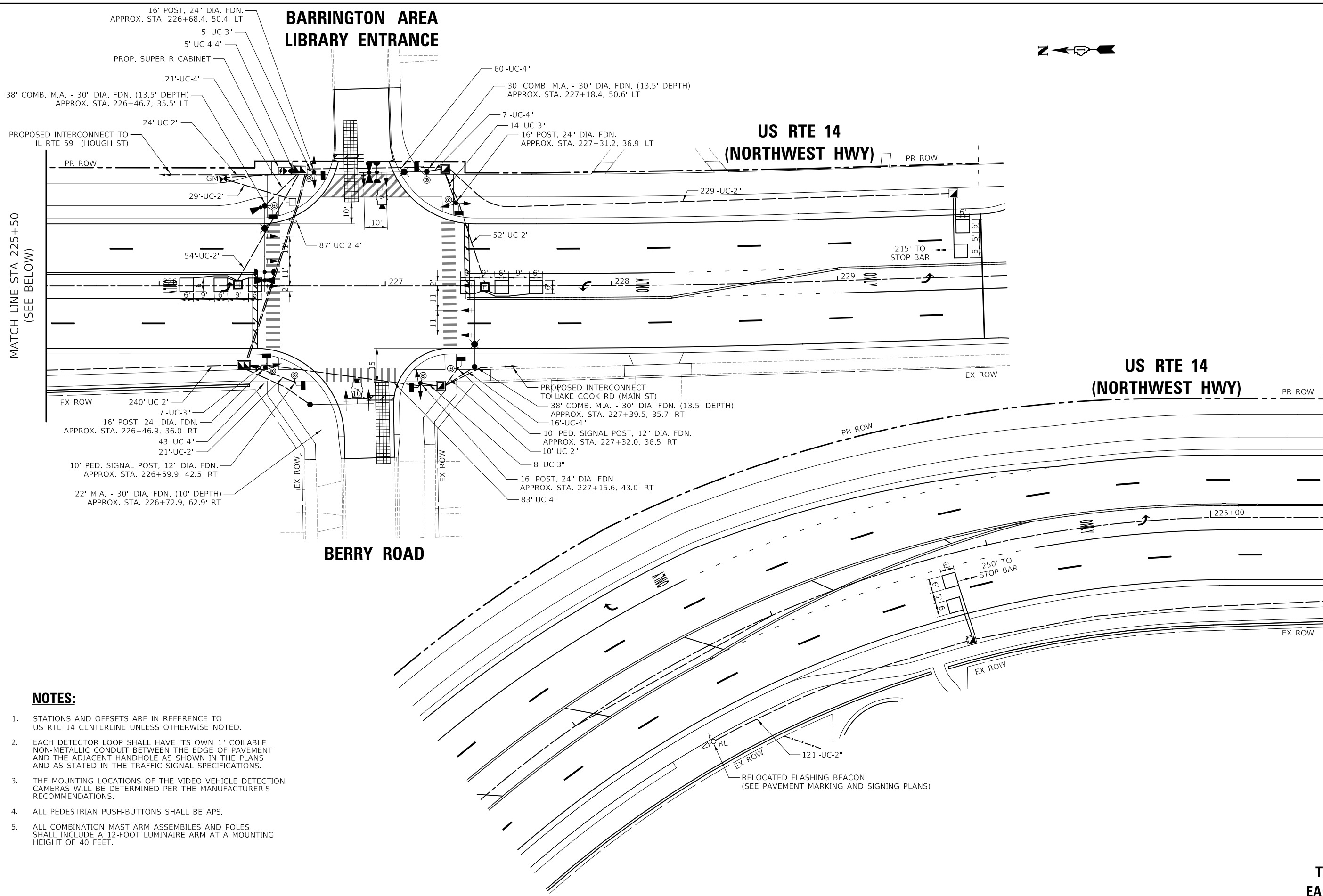
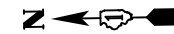
TEMPORARY CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
US RTE 14 (NORTHWEST HWY) AND BERRY RD

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	11-00087-00-GS	LAKE	816	316
CONTRACT NO. 61J87				
ILLINOIS FED. AID PROJECT				

MODEL: 1400DELNAME
 FILE NAME: 20240818T-010-03a.dgn

BARRINGTON AREA LIBRARY ENTRANCE



MATCH LINE STA 225+50
(SEE BELOW)

MATCH LINE STA 225+50
(SEE ABOVE)

NOTES:

1. STATIONS AND OFFSETS ARE IN REFERENCE TO US RTE 14 CENTERLINE UNLESS OTHERWISE NOTED.
2. EACH DETECTOR LOOP SHALL HAVE ITS OWN 1" COILABLE NON-METALLIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND THE ADJACENT HANDHOLE AS SHOWN IN THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.
3. THE MOUNTING LOCATIONS OF THE VIDEO VEHICLE DETECTION CAMERAS WILL BE DETERMINED PER THE MANUFACTURER'S RECOMMENDATIONS.
4. ALL PEDESTRIAN PUSH-BUTTONS SHALL BE APS.
5. ALL COMBINATION MAST ARM ASSEMBLIES AND POLES SHALL INCLUDE A 12-FOOT LUMINAIRE ARM AT A MOUNTING HEIGHT OF 40 FEET.

MODEL: \\MODEL\NAME
FILE: \\NAME - 0310107-2101-04.dwg

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PLOT DATE = 8/28/2024	CHECKED - JJE	REVISED -
	DATE - 08/28/2024	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

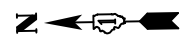
**TRAFFIC SIGNAL MODERNIZATION PLAN
US RTE 14 (NORTHWEST HWY) AND BERRY RD**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	11-00087-00-GS	LAKE	816	317
CONTRACT NO. 61J87				
ILLINOIS FED. AID PROJECT				

**TS 4685
EAGLE 7B**

BARRINGTON AREA LIBRARY ENTRANCE



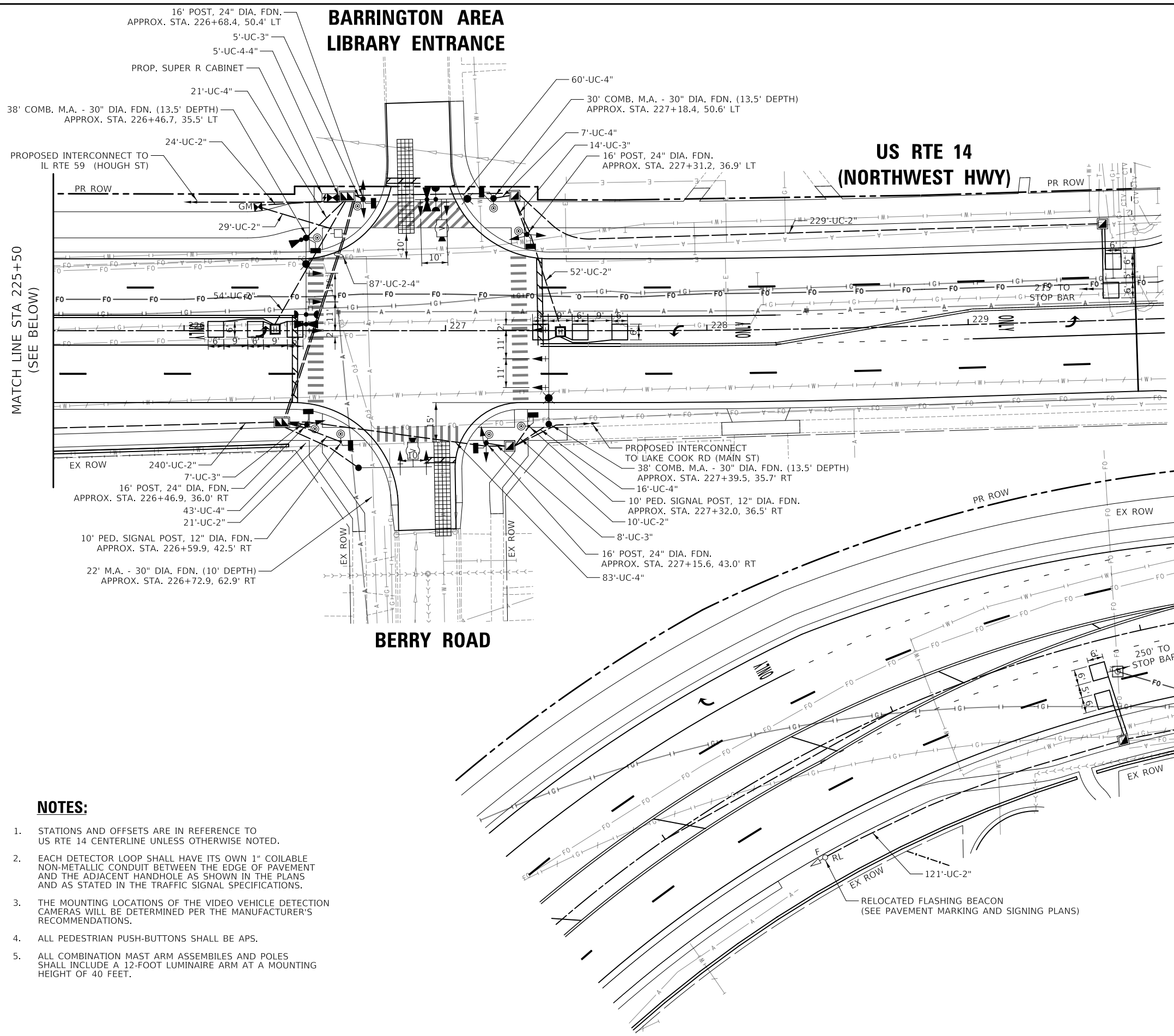
US RTE 14 (NORTHWEST HWY)

US RTE 14 (NORTHWEST HWY)

BERRY ROAD

MATCH LINE STA 225+50
(SEE BELOW)

MATCH LINE STA 225+50
(SEE ABOVE)



NOTES:

1. STATIONS AND OFFSETS ARE IN REFERENCE TO US RTE 14 CENTERLINE UNLESS OTHERWISE NOTED.
2. EACH DETECTOR LOOP SHALL HAVE ITS OWN 1" COILABLE NON-METALLIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND THE ADJACENT HANDHOLE AS SHOWN IN THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.
3. THE MOUNTING LOCATIONS OF THE VIDEO VEHICLE DETECTION CAMERAS WILL BE DETERMINED PER THE MANUFACTURER'S RECOMMENDATIONS.
4. ALL PEDESTRIAN PUSH-BUTTONS SHALL BE APS.
5. ALL COMBINATION MAST ARM ASSEMBLES AND POLES SHALL INCLUDE A 12-FOOT LUMINAIRE ARM AT A MOUNTING HEIGHT OF 40 FEET.

**TS 4685
EAGLE 7B**

MODEL: \\MODEL\NAMES
FILE NAME: \\3103\107\2024\2504_Utility Plan.dgn

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PLOT DATE = 8/28/2024	DATE - 08/28/2024	REVISED -

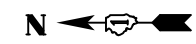
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CHECKED - JJE	REVISED -
DATE - 08/28/2024	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

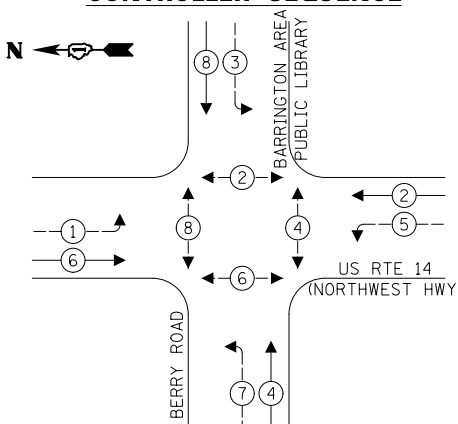
**TRAFFIC SIGNAL UTILITY PLAN
US RTE 14 (NORTHWEST HWY) AND BERRY RD**

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

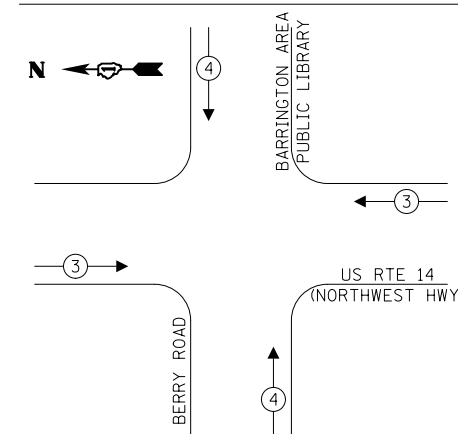
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	11-00087-00-GS	LAKE	816	318
CONTRACT NO. 61J87				
ILLINOIS FED. AID PROJECT				



PROPOSED CONTROLLER SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE

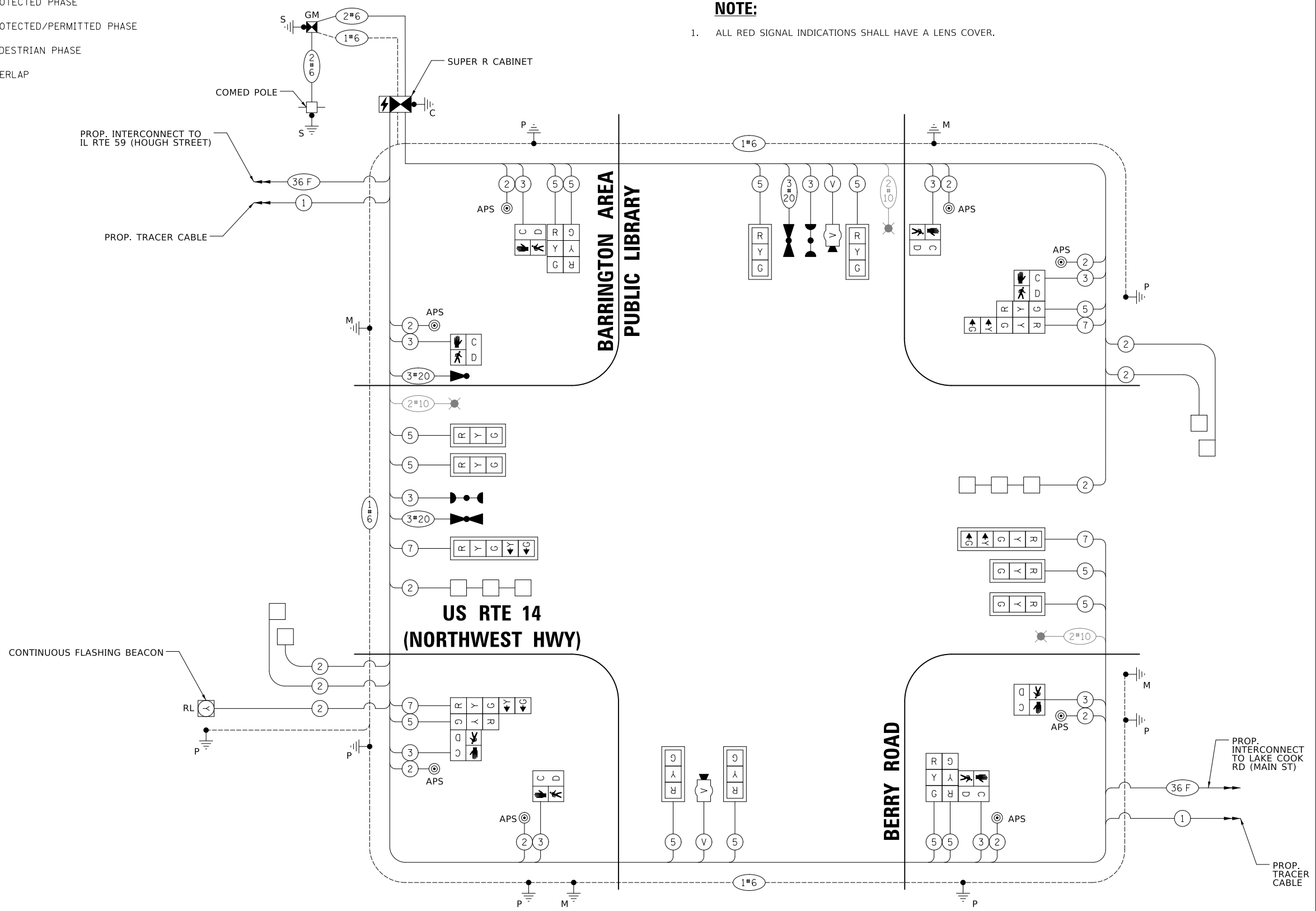


LEGEND:

- ⊙ — PROTECTED PHASE
- ⊙ — PROTECTED/PERMITTED PHASE
- ⊙ — PEDESTRIAN PHASE
- OL — OVERLAP

NOTE:

1. ALL RED SIGNAL INDICATIONS SHALL HAVE A LENS COVER.

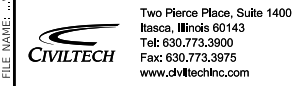


CABLE PLAN
(NOT TO SCALE)

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE	
SIGNAL HEAD	3 - SECTION	14	11	154.0
	4 - SECTION	-	14	-
	5 - SECTION	4	13	52.0
PROGRAMMABLE SIGNALS				
	3 - SECTION	-	22	-
	4 - SECTION	-	32	-
	5 - SECTION	-	28	-
PED. SIGNAL	8	15	120.0	
CONTROLLER	1	150	150.0	
MASTER CONTROLLER	-	100	-	
UPS	1	25	25.0	
DETECTION	RADAR	-	20	-
	VIDEO	2	20	40.0
BLANK-OUT SIGN	-	25	-	
NETWORK SWITCH II OR III	-	35	-	
CELLULAR MODEM	-	15	-	
TOTAL UPS SIZING =			541.0	
UPS CHARGING	1	225	225.0	
BATTERY HEATER MAT	1	180	180.0	
CABINET HEATER	1	200	200.0	
FLASHER	1	15	15.0	
LED STREET NAME SIGN	-	120	-	
LUMINAIRE	3	240	720.0	
TOTAL SERVICE WIRE SIZING =			1881.0	

ENERGY COSTS TO:
 VILLAGE OF BARRINGTON
 200 S. HOUGH ST.
 BARRINGTON, IL 60010
 ENERGY SUPPLY: CONTACT: JAMES CAMPBELL
 PHONE: (630) 940-6805
 COMPANY: COMED
 ACCOUNT NUMBER: 0581674000



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DRAWN - AS	REVISION -
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

**PROPOSED CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
 US RTE 14 (NORTHWEST HWY) AND BERRY RD**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	11-00087-00-GS	LAKE	816	319
CONTRACT NO. 61J87				
ILLINOIS FED. AID PROJECT				

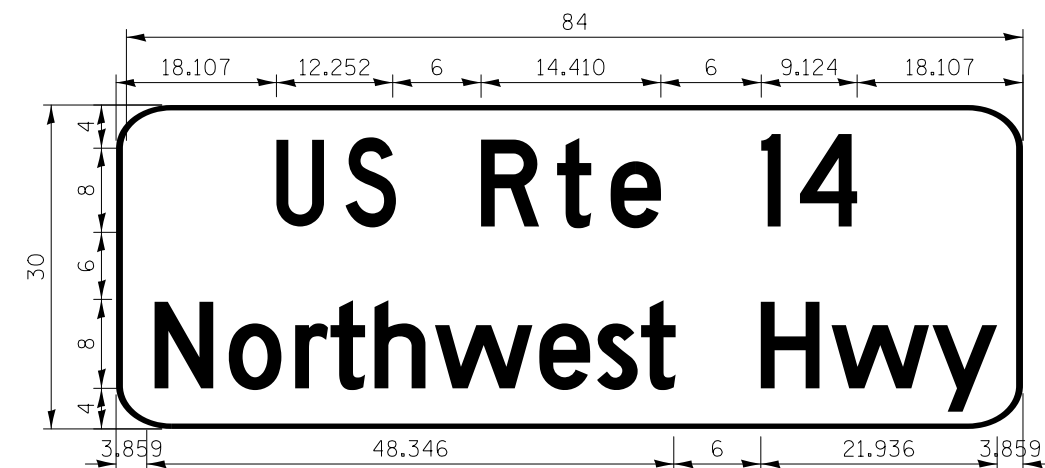
**TS 4685
 EAGLE 7B**

SCHEDULE OF QUANTITIES

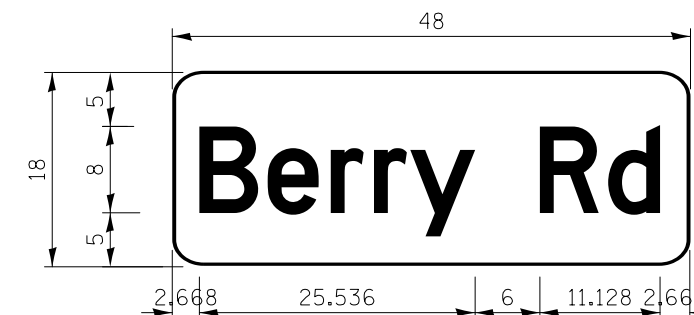
PAY ITEM	UNIT	QNTY.
SIGN PANEL - TYPE 1	SQ FT	12
SIGN PANEL - TYPE 2	SQ FT	35
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	780
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	34
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	424
HANDHOLE	EACH	4
HEAVY-DUTY HANDHOLE	EACH	2
DOUBLE HANDHOLE	EACH	2
MAINTENANCE OF EXISTING FLASHING BEACON INSTALLATION	EACH	1
TRANSCIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1581
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1379
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2298
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	662
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1618
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	94
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1110
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	4
STEEL MAST ARM ASSEMBLY AND POLE, 22 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	2
CONCRETE FOUNDATION, TYPE A	FOOT	20
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	51
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	8
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	10
INDUCTIVE LOOP DETECTOR	EACH	6
DETECTOR LOOP, TYPE I	FOOT	349
LIGHT DETECTOR	EACH	3
LIGHT DETECTOR AMPLIFIER	EACH	1
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
RELOCATE EXISTING FLASHING BEACON	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	6
REMOVE EXISTING CONCRETE FOUNDATION	EACH	11
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	318
FULL-ACTUATED CONTROLLER AND TYPE SUPER R CABINET (SPECIAL)	EACH	1
SERVICE INSTALLATION, GROUND MOUNTED, METERED	EACH	1
PEDESTRIAN SIGNAL POST, 10 FT.	EACH	2
VIDEO VEHICLE DETECTION SYSTEM, SINGLE APPROACH	EACH	2
TEMPORARY FLASHING BEACON INSTALLATION	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	8
CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	FOOT	8
LED SIGNAL FACE, LENS COVER	EACH	18
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1

SIGN PANEL – TYPE 1 OR TYPE 2

ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	17.5	TYPE 2	ZZ	2



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	6	TYPE 1	ZZ	2

MODEL: \\MODEL\NAME: FILE: \\NAME: 2024.08.28 10:05:05 AM

CIVILTECH
 Two Pierce Place, Suite 1400
 Itasca, Illinois 60143
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 Fax: 630.773.3975
 www.civiltechinc.com

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PLOT SCALE = 2.0000' / in.	DRAWN - AS	REVISED -
PLOT DATE = 8/28/2024	CHECKED - JJE	REVISED -
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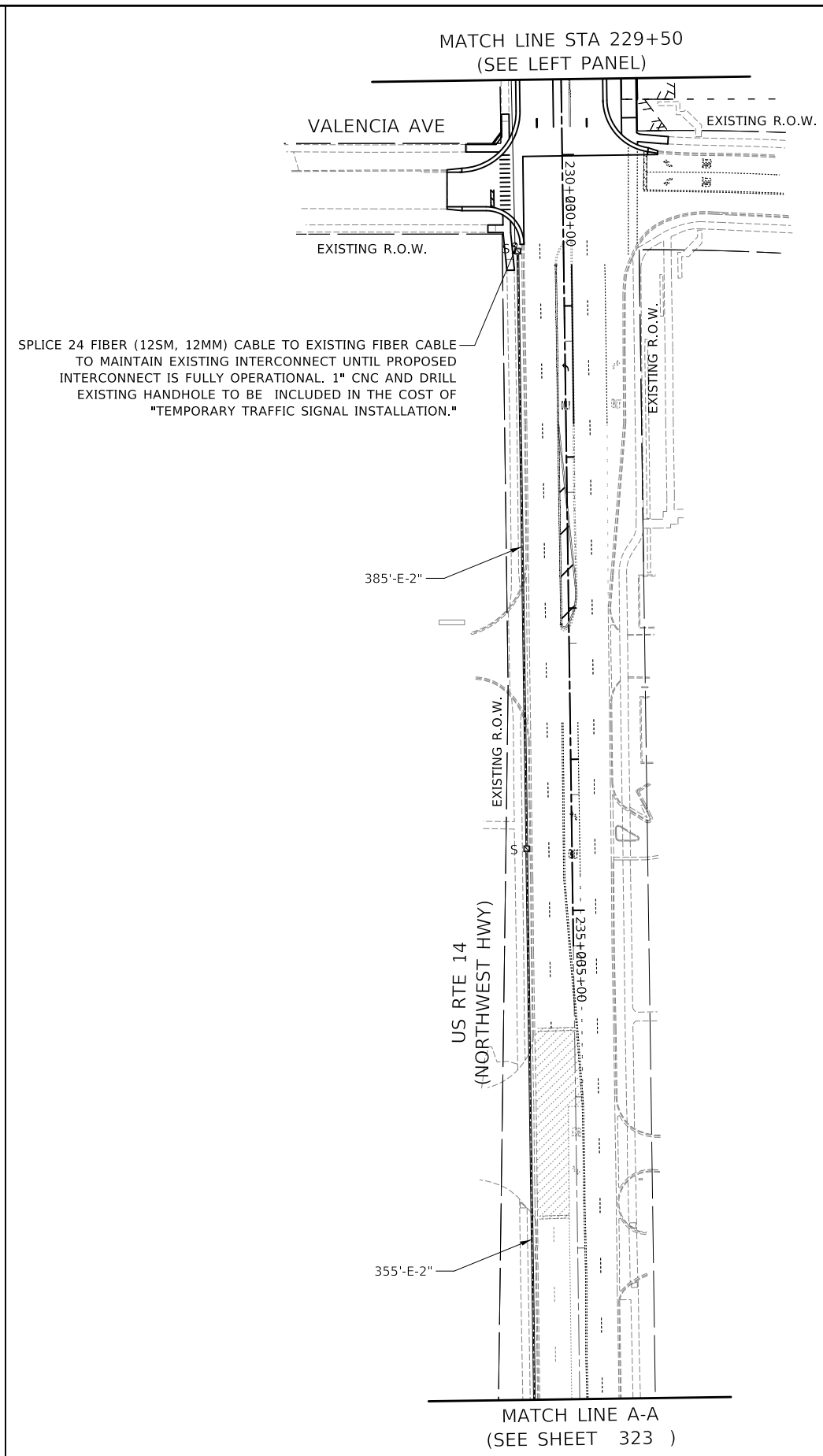
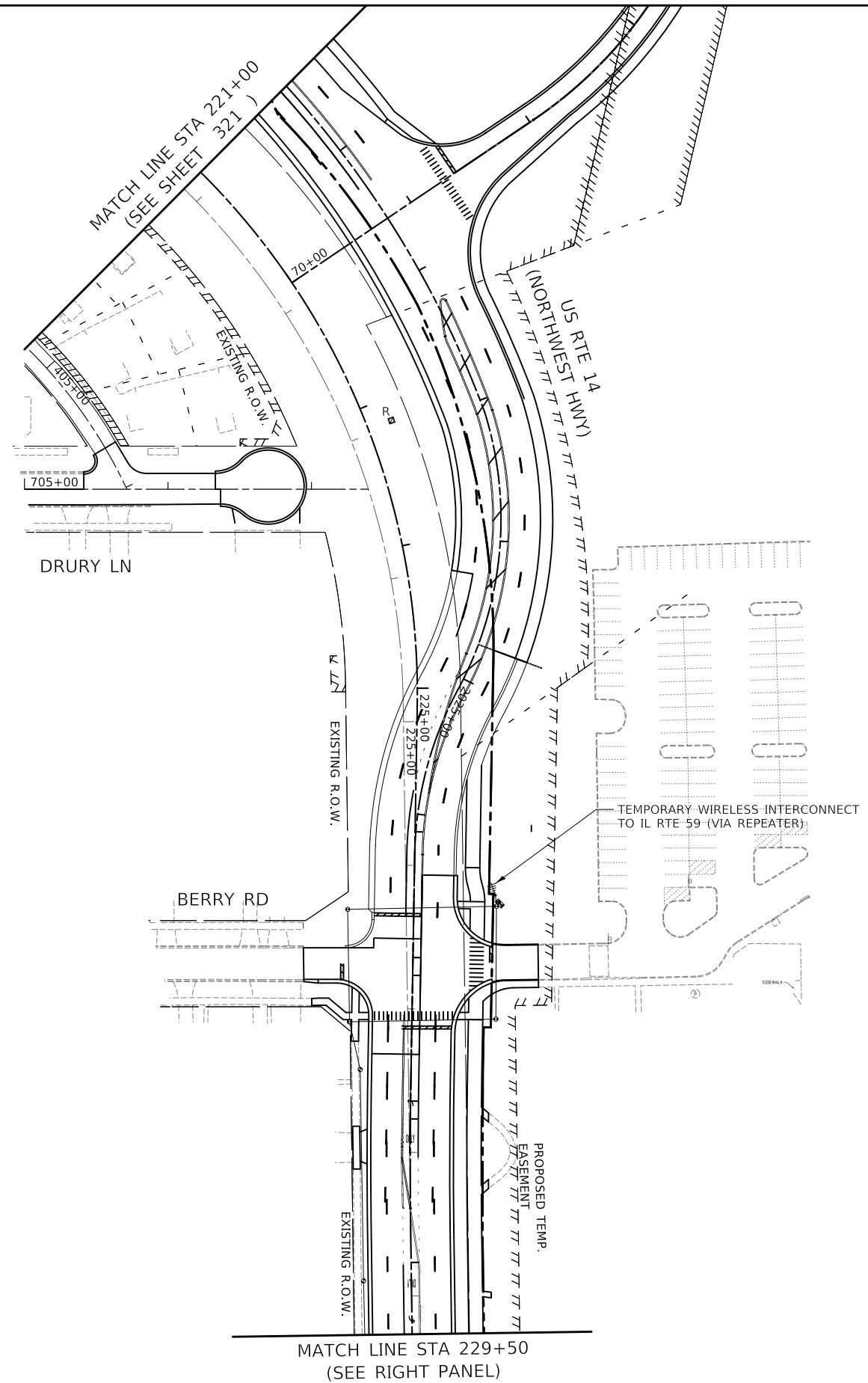
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**MAST ARM MOUNTED STREET NAME SIGNS
 AND SCHEDULE OF QUANTITIES
 US RTE 14 (NORTHWEST HWY) AND BERRY RD**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	11-00087-00-GS	LAKE	816	320
CONTRACT NO. 61J87				
ILLINOIS FED. AID PROJECT				

**TS 4685
 EAGLE 7B**



SPLICE 24 FIBER (12SM, 12MM) CABLE TO EXISTING FIBER CABLE TO MAINTAIN EXISTING INTERCONNECT UNTIL PROPOSED INTERCONNECT IS FULLY OPERATIONAL. 1" CNC AND DRILL EXISTING HANDHOLE TO BE INCLUDED IN THE COST OF "TEMPORARY TRAFFIC SIGNAL INSTALLATION."



MODEL: \\MODEL\NAME
FILE NAME: \\31010187-010-05.dwg

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Two Pierce Place, Suite 1400
Itasca, Illinois 60143
Tel: 630.773.3900
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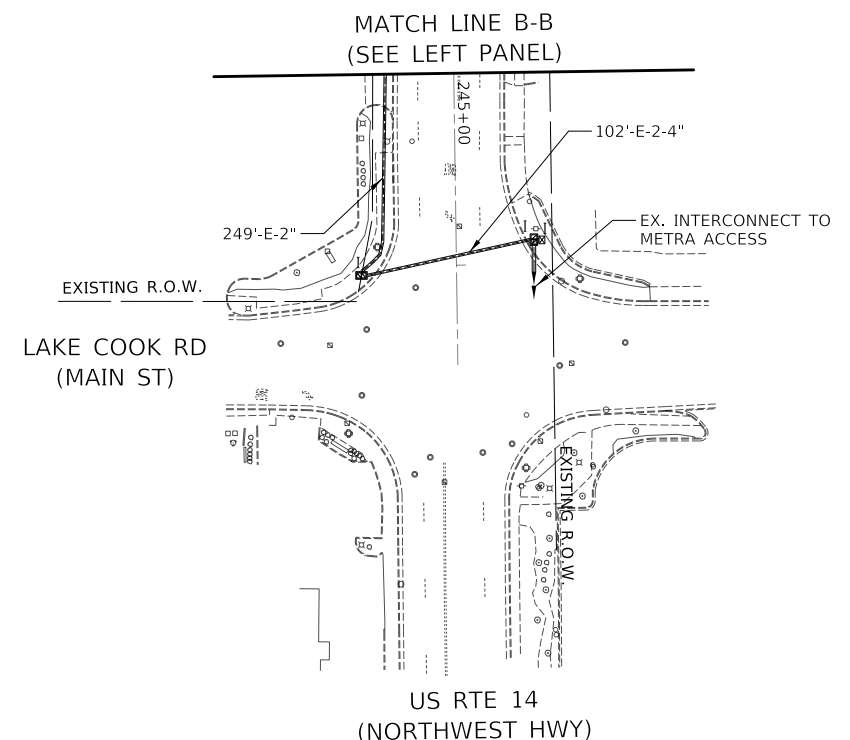
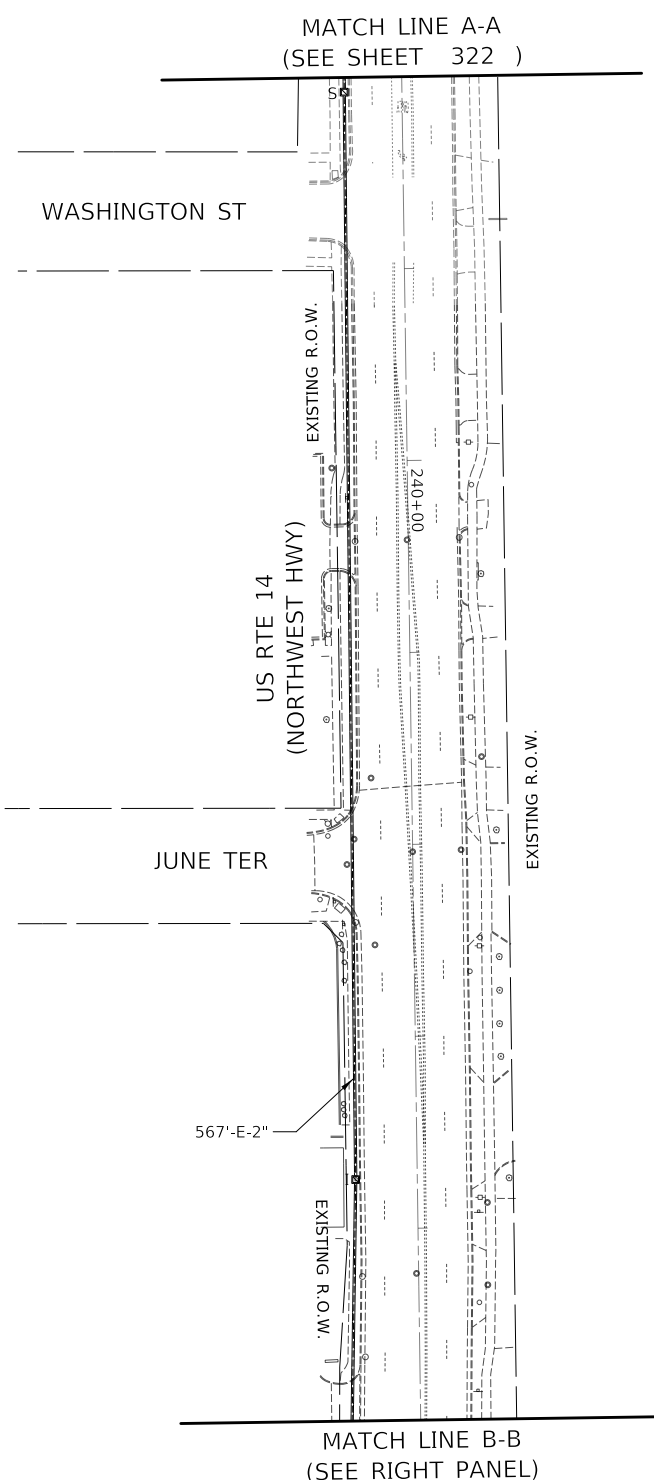
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PLOT SCALE = 100,0000' / in.	DRAWN - AS	REVISED -
PLOT DATE = 8/28/2024	CHECKED - JJE	REVISED -
	DATE - 08/28/2024	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY INTERCONNECT PLAN AND REMOVAL PLAN (SHEET 2 OF 3)
US RTE 14 (NORTHWEST HWY)
IL RTE 59 (HOUGH ST) TO LAKE COOK RD (MAIN ST)**

SCALE: 1" = 50' SHEET OF SHEETS STA. 221+00 TO STA. 238+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	11-00087-00-GS	LAKE	816	322
CONTRACT NO. 61J87				
ILLINOIS FED. AID PROJECT				



MODEL: \\MODEL\NAME
FILE: \\NAME: 0310187-rlt-CS-1-06.dwg

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Two Pierce Place, Suite 1400
Itasca, Illinois 60143
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Fax: 630.773.3975
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	DRAWN - AS	REVISED -
PLOT SCALE = 100,0000' / in.	CHECKED - JJE	REVISED -
PLOT DATE = 8/28/2024	DATE - 08/28/2024	REVISED -

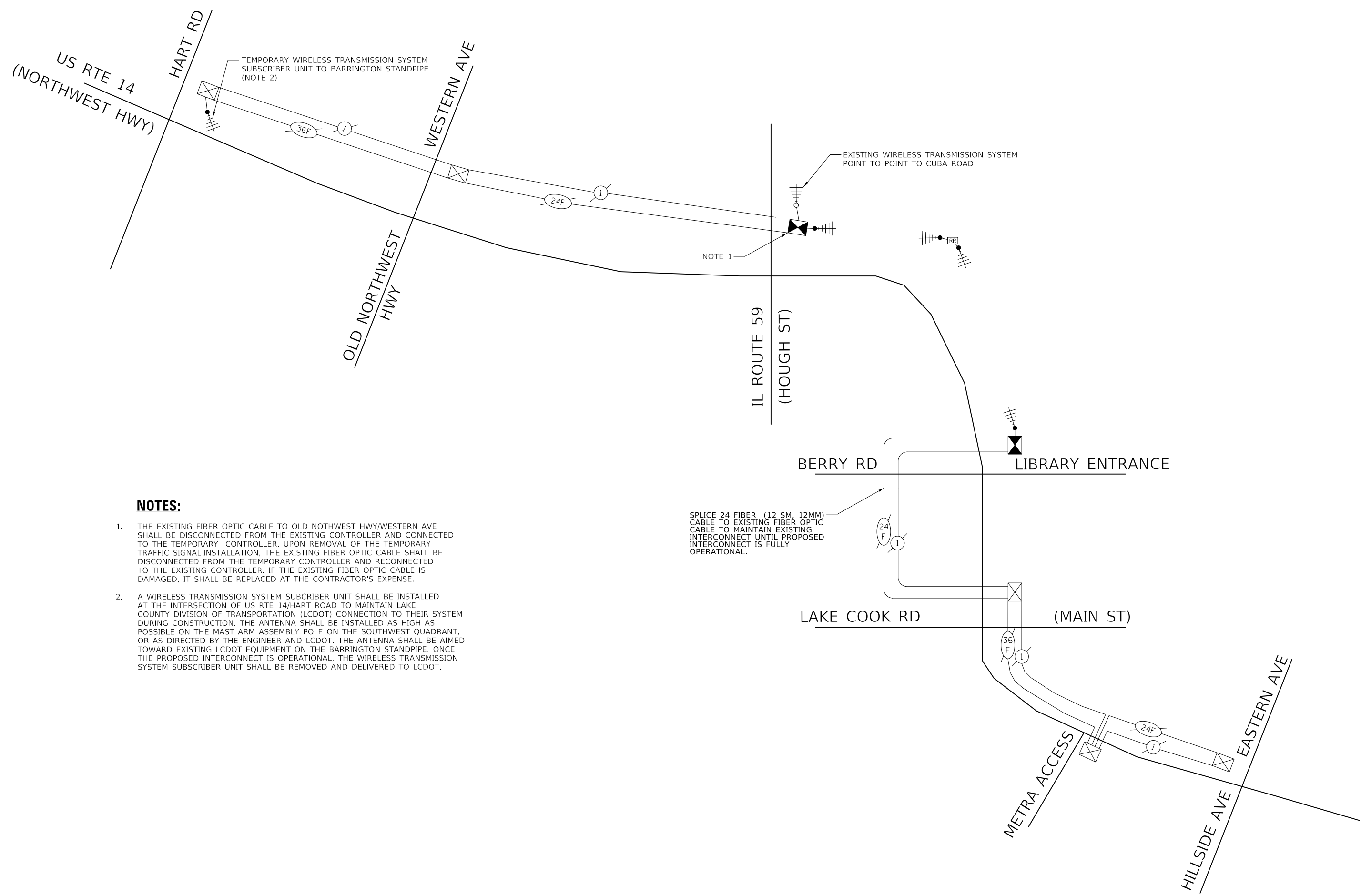
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY INTERCONNECT PLAN AND REMOVAL PLAN (SHEET 3 OF 3)
US RTE 14 (NORTHWEST HWY)
IL RTE 59 (HOUGH ST) TO LAKE COOK RD (MAIN ST)**

SCALE: 1" = 50' SHEET OF SHEETS STA. 238+00 TO STA. 247+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	11-00087-00-GS	LAKE	816	323
CONTRACT NO. 61J87				
ILLINOIS FED. AID PROJECT				

EAGLE 7B



NOTES:

1. THE EXISTING FIBER OPTIC CABLE TO OLD NOTHWEST HWY/WESTERN AVE SHALL BE DISCONNECTED FROM THE EXISTING CONTROLLER AND CONNECTED TO THE TEMPORARY CONTROLLER. UPON REMOVAL OF THE TEMPORARY TRAFFIC SIGNAL INSTALLATION, THE EXISTING FIBER OPTIC CABLE SHALL BE DISCONNECTED FROM THE TEMPORARY CONTROLLER AND RECONNECTED TO THE EXISTING CONTROLLER. IF THE EXISTING FIBER OPTIC CABLE IS DAMAGED, IT SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
2. A WIRELESS TRANSMISSION SYSTEM SUBSCRIBER UNIT SHALL BE INSTALLED AT THE INTERSECTION OF US RTE 14/HART ROAD TO MAINTAIN LAKE COUNTY DIVISION OF TRANSPORTATION (LCDOT) CONNECTION TO THEIR SYSTEM DURING CONSTRUCTION. THE ANTENNA SHALL BE INSTALLED AS HIGH AS POSSIBLE ON THE MAST ARM ASSEMBLY POLE ON THE SOUTHWEST QUADRANT, OR AS DIRECTED BY THE ENGINEER AND LCDOT. THE ANTENNA SHALL BE AIMED TOWARD EXISTING LCDOT EQUIPMENT ON THE BARRINGTON STANDPIPE. ONCE THE PROPOSED INTERCONNECT IS OPERATIONAL, THE WIRELESS TRANSMISSION SYSTEM SUBSCRIBER UNIT SHALL BE REMOVED AND DELIVERED TO LCDOT.

SPlice 24 FIBER (12 SM, 12MM) CABLE TO EXISTING FIBER OPTIC CABLE TO MAINTAIN EXISTING INTERCONNECT UNTIL PROPOSED INTERCONNECT IS FULLY OPERATIONAL.

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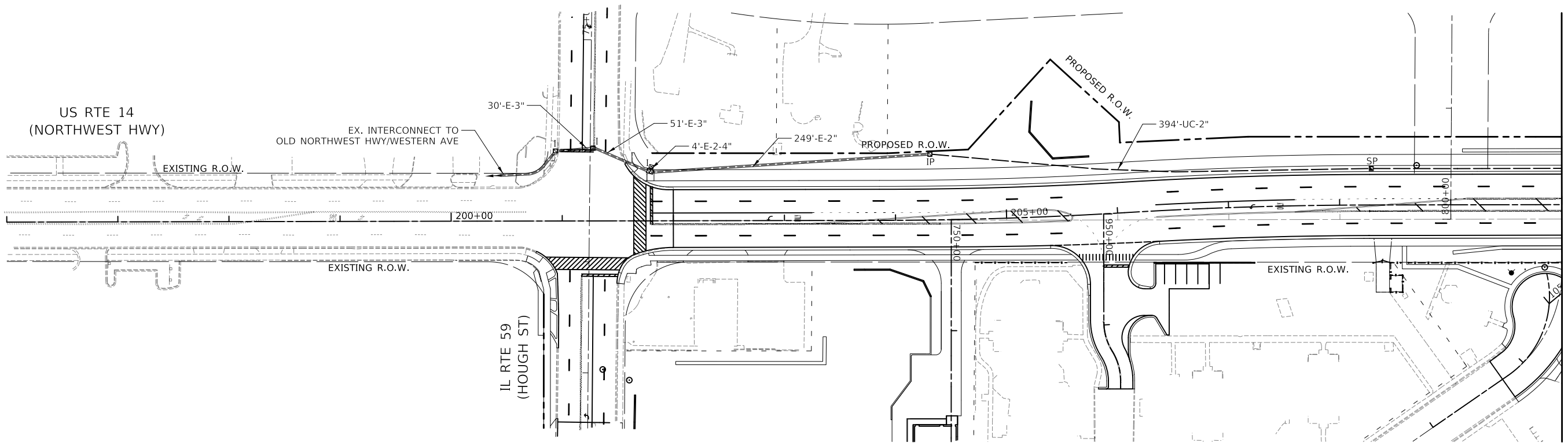
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY INTERCONNECT SCHEMATIC
US RTE 14 (NORTHWEST HWY)
HART RD TO HILLSIDE AVE / EASTERN AVE**

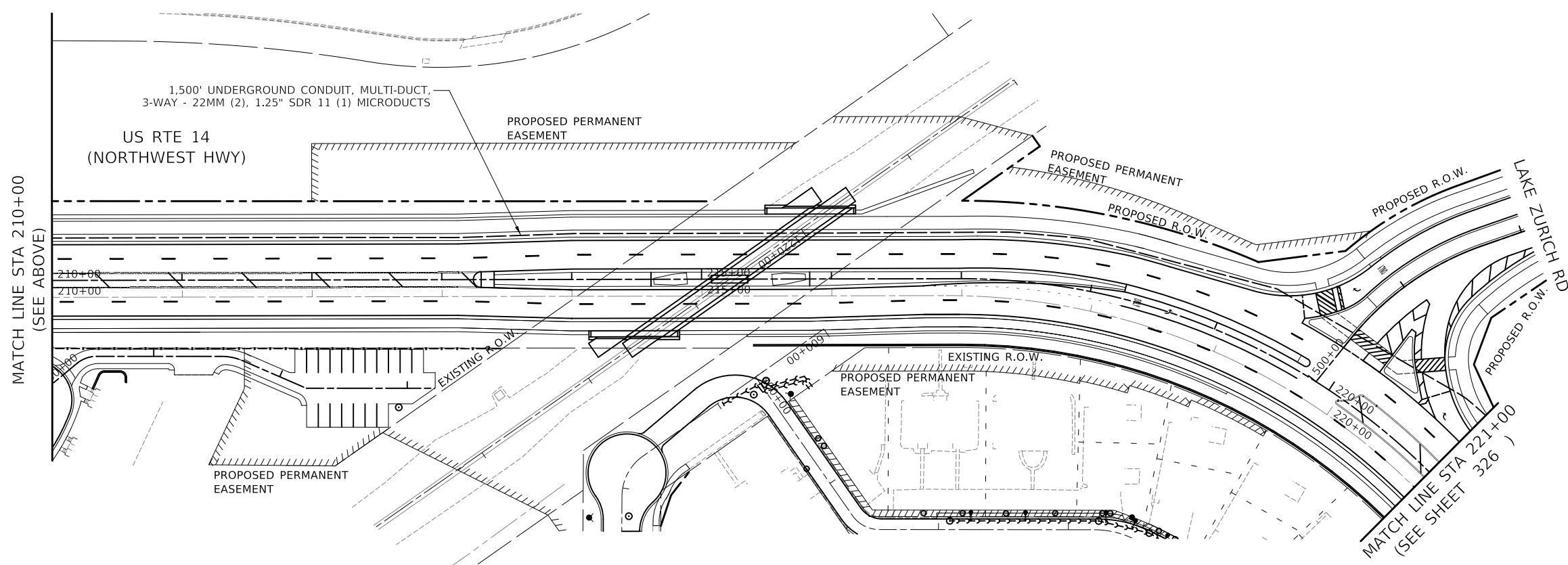
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	11-00087-00-GS	LAKE	816	324
CONTRACT NO. 61J87				
ILLINOIS FED. AID PROJECT				

EAGLE 7B



MATCH LINE STA 210+00
(SEE BELOW)



MATCH LINE STA 210+00
(SEE ABOVE)

MATCH LINE STA 221+00
(SEE SHEET 326)

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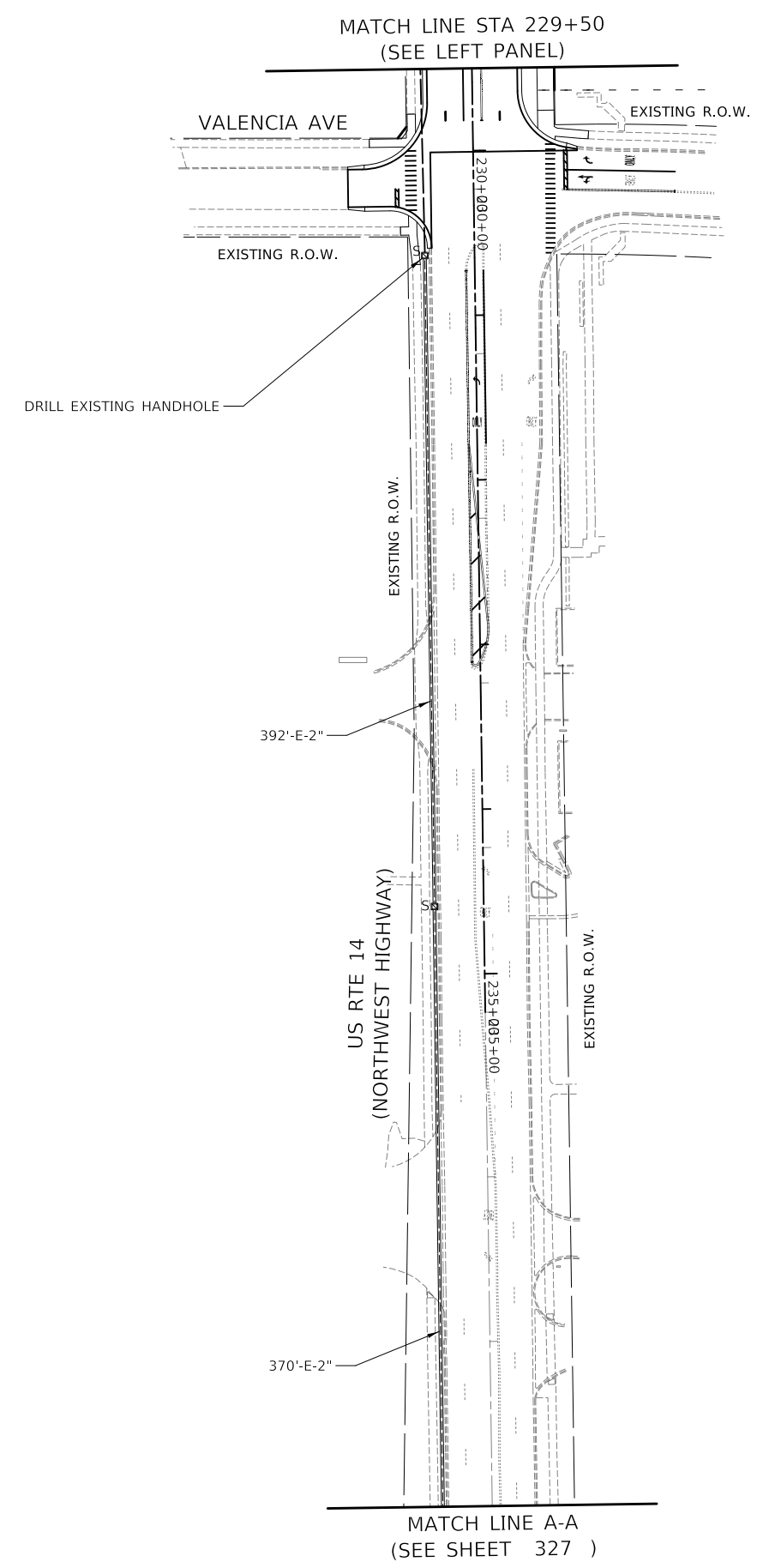
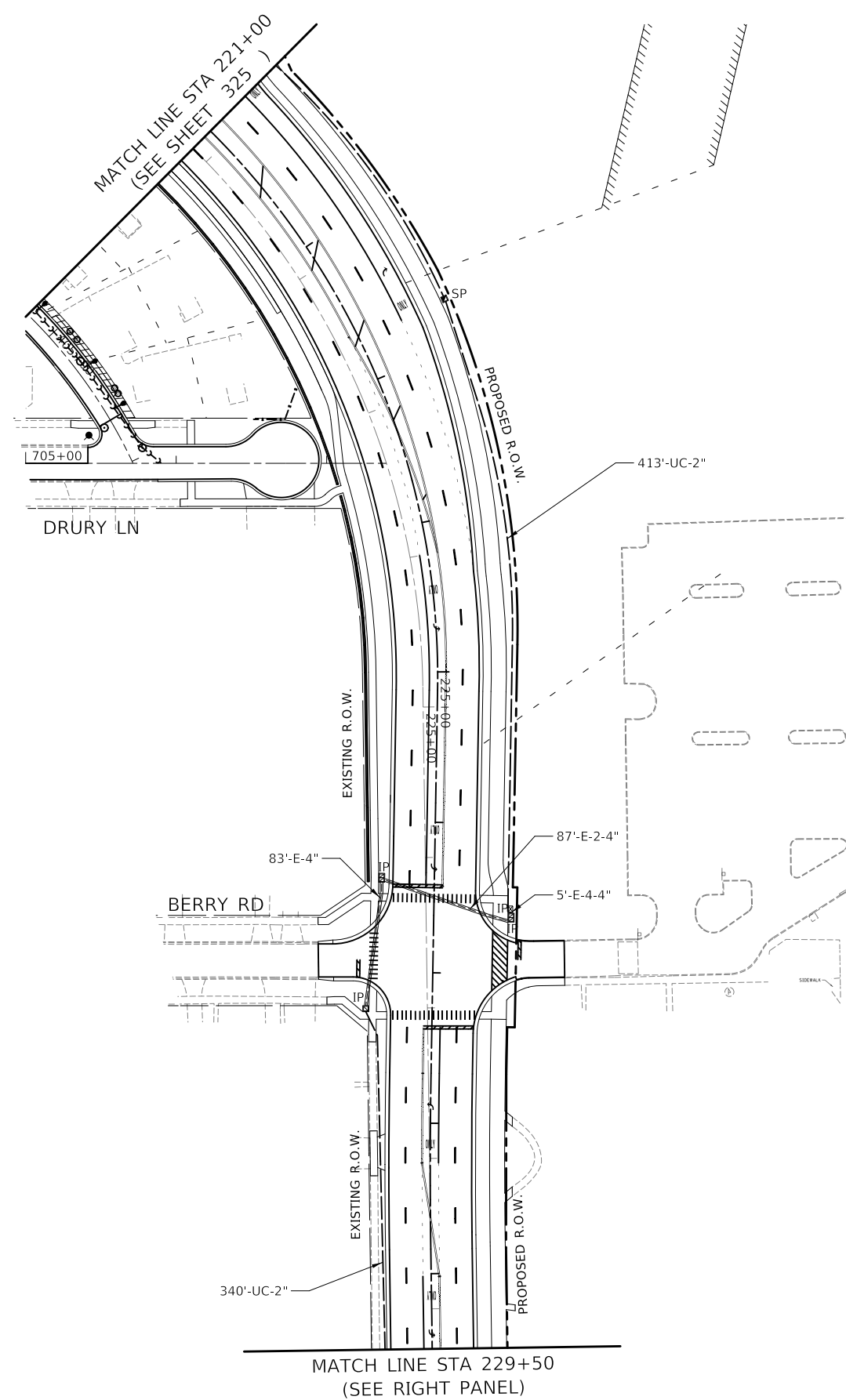
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PROPOSED INTERCONNECT PLAN (SHEET 1 OF 3)
US RTE 14 (NORTHWEST HWY)
IL RTE 59 (HOUGH ST) TO LAKE COOK RD (MAIN ST)**
SCALE: 1" = 50' SHEET OF SHEETS STA. 196+00 TO STA. 221+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	11-00087-00-GS	LAKE	816	325
CONTRACT NO. 61J87				
ILLINOIS FED. AID PROJECT				

EAGLE 7B



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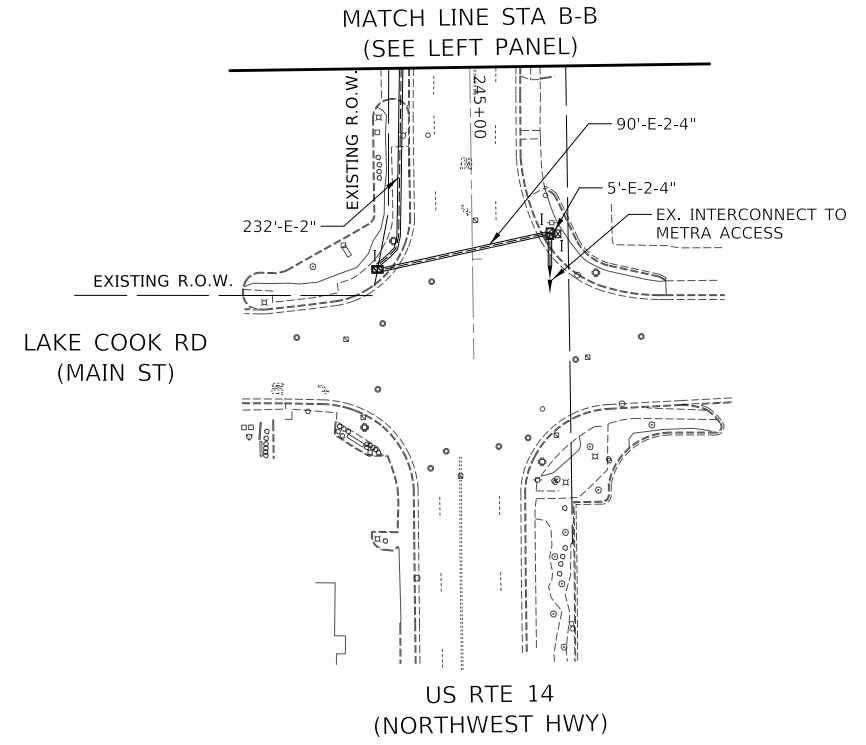
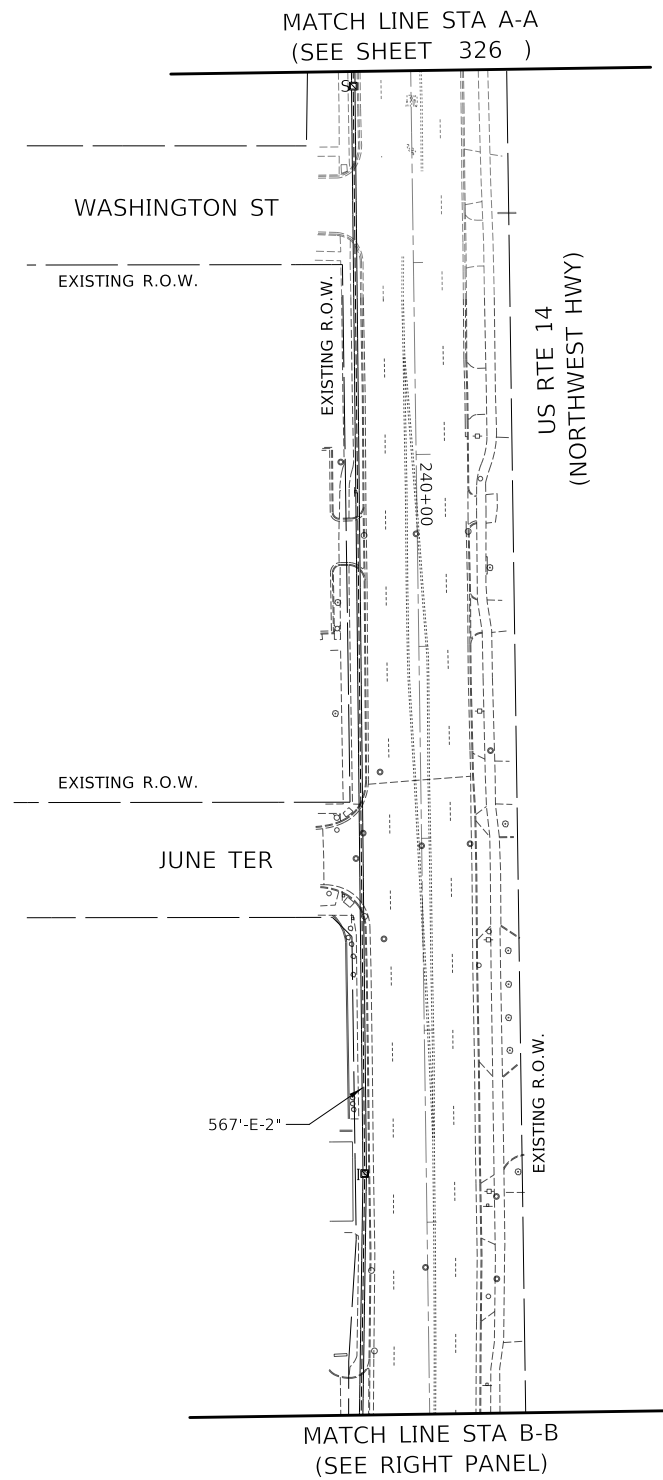
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**PROPOSED INTERCONNECT PLAN (SHEET 2 OF 3)
 US RTE 14 (NORTHWEST HWY)
 IL RTE 59 (HOUGH ST) TO LAKE COOK RD (MAIN ST)**

SCALE: 1" = 50' SHEET OF SHEETS STA. 221+00 TO STA. 238+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	11-00087-00-GS	LAKE	816	326
CONTRACT NO. 61J87				
ILLINOIS FED. AID PROJECT				

EAGLE 7B



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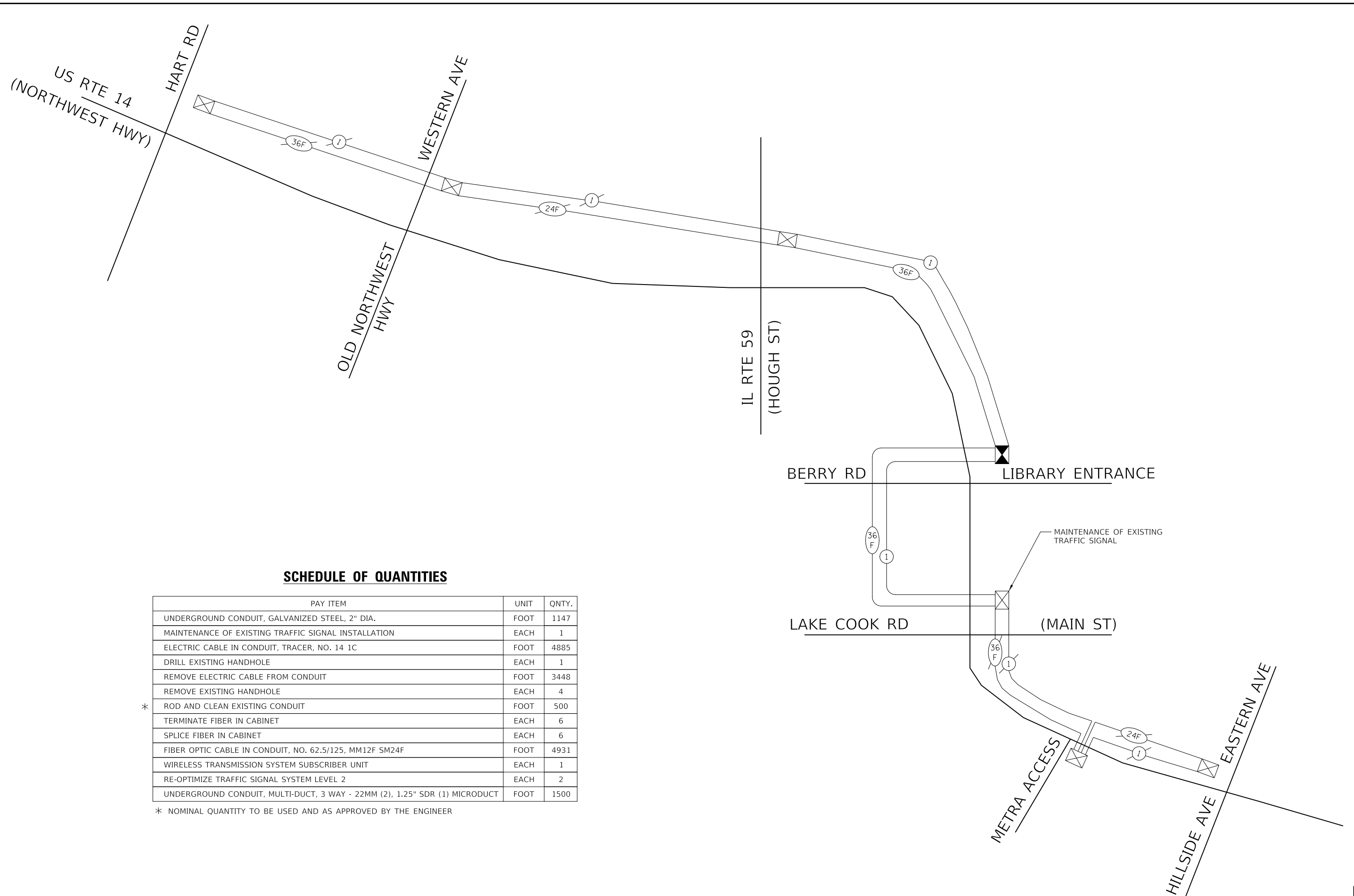
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**PROPOSED INTERCONNECT PLAN (SHEET 3 OF 3)
 US RTE 14 (NORTHWEST HWY)
 IL RTE 59 (HOUGH ST) TO LAKE COOK RD (MAIN ST)**

SCALE: 1" = 50' SHEET OF SHEETS STA. 238+00 TO STA. 247+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	11-00087-00-GS	LAKE	816	327
CONTRACT NO. 61J87				
ILLINOIS FED. AID PROJECT				

EAGLE 7B



SCHEDULE OF QUANTITIES

PAY ITEM	UNIT	QNTY.
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	1147
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	4885
DRILL EXISTING HANDHOLE	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	3448
REMOVE EXISTING HANDHOLE	EACH	4
* ROD AND CLEAN EXISTING CONDUIT	FOOT	500
TERMINATE FIBER IN CABINET	EACH	6
SPLICE FIBER IN CABINET	EACH	6
FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F	FOOT	4931
WIRELESS TRANSMISSION SYSTEM SUBSCRIBER UNIT	EACH	1
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 2	EACH	2
UNDERGROUND CONDUIT, MULTI-DUCT, 3 WAY - 22MM (2), 1.25" SDR (1) MICRODUCT	FOOT	1500

* NOMINAL QUANTITY TO BE USED AND AS APPROVED BY THE ENGINEER

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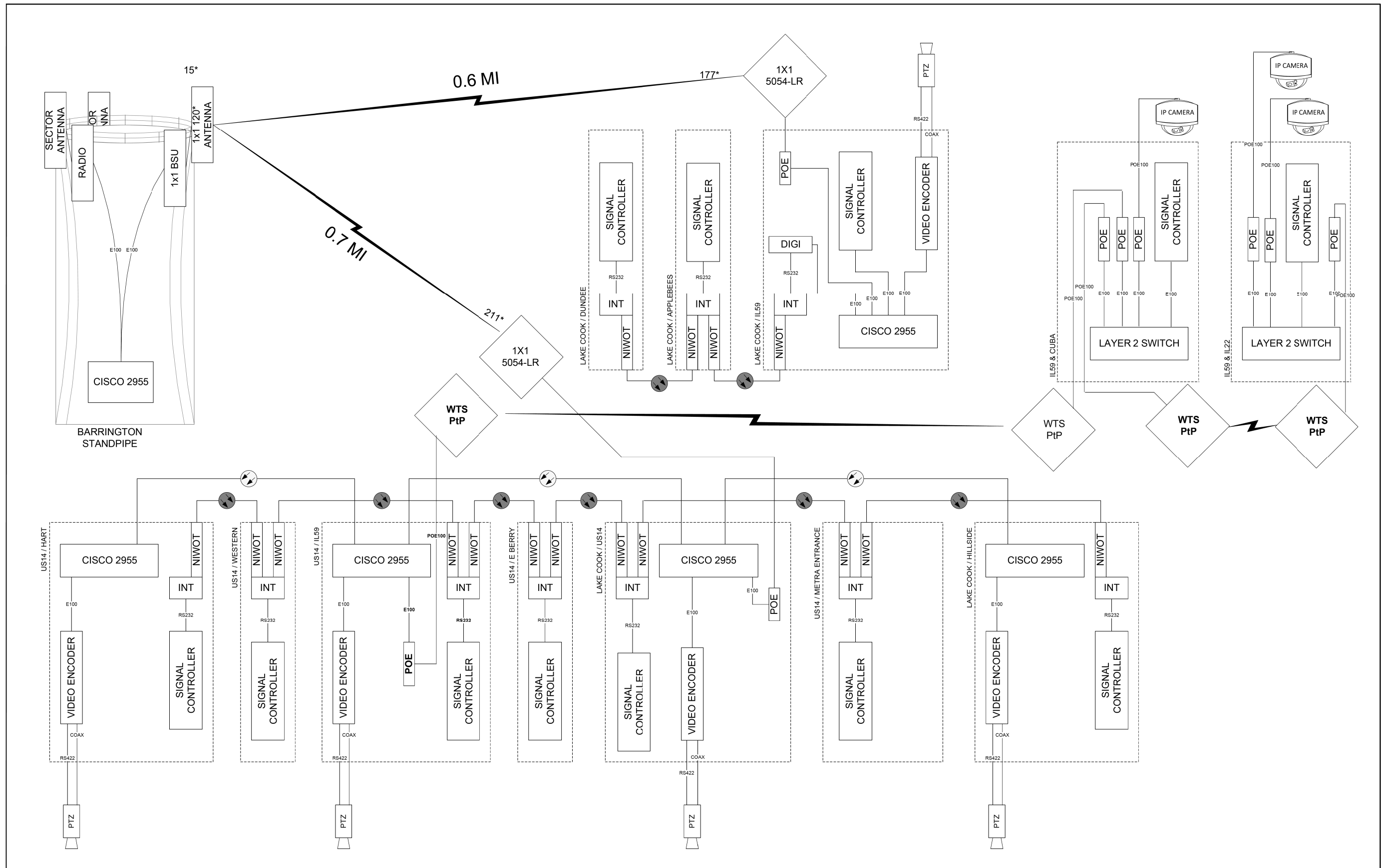
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PROPOSED INTERCONNECT SCHEMATIC AND SCHEDULE OF QUANTITIES
US RTE 14 (NORTHWEST HWY)
HART RD TO HILLSIDE AVE / EASTERN AVE**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	11-00087-00-GS	LAKE	816	328
ILLINOIS FED. AID PROJECT			CONTRACT NO. 61J87	

EAGLE 7B



DESIGNED - RH	REVISED -	LAKE COUNTY DIVISION OF TRANSPORTATION	220C BARRINGTON STANDPIPE (EXISTING)		ROUTE	SECTION	ROUTE	SECTION	SHEET	SHEETS
DRAWN - RH	REVISED -		SCALE N/A							
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DATE 2024.04.08	REVISED -									

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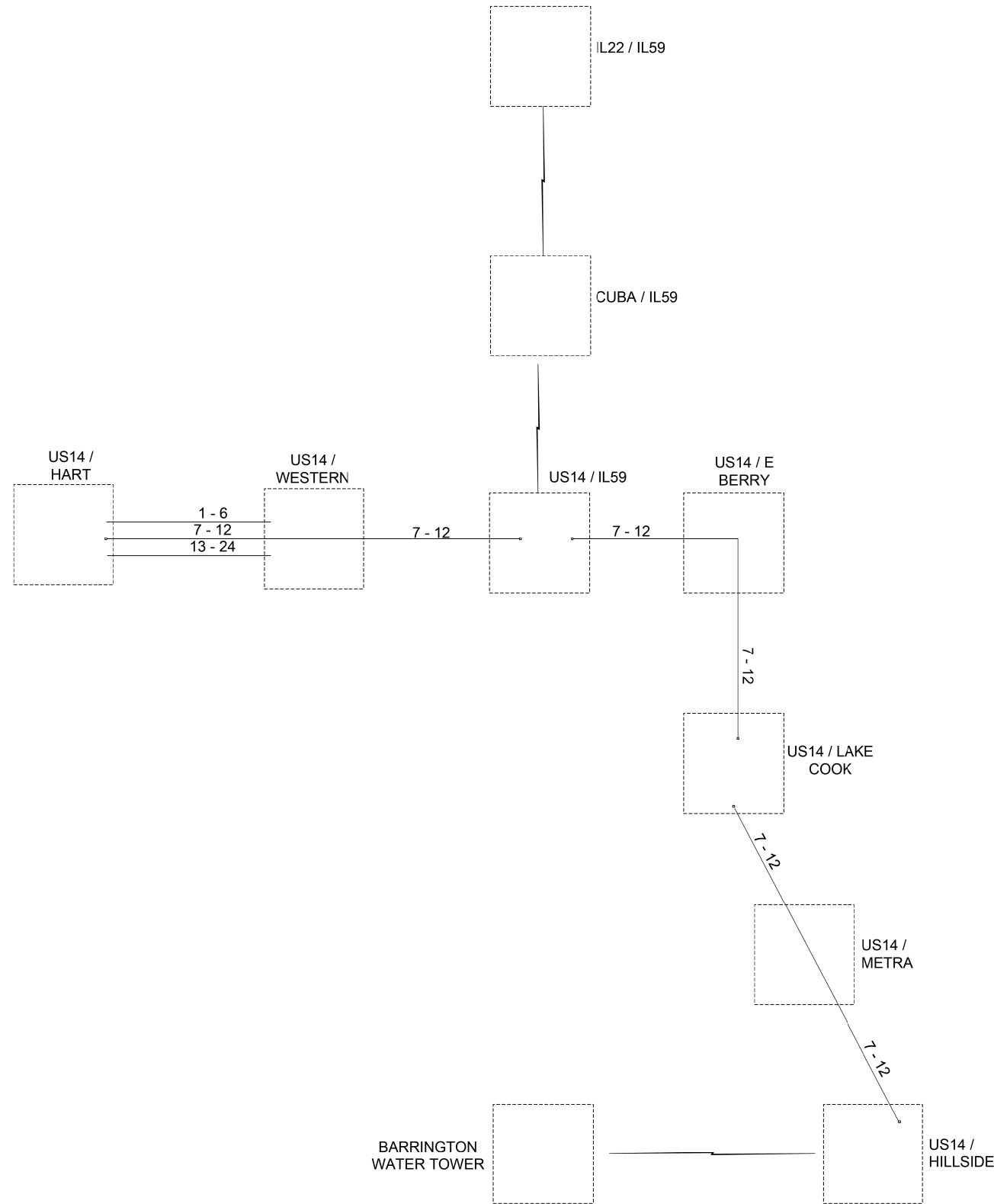
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US RTE 14 (NORTHWEST HWY)
EXISTING CABINET DIAGRAM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	11-00087-00-GS	LAKE	816	329
CONTRACT NO. 61J87				
ILLINOIS FED. AID PROJECT				

SCALE: SHEET OF SHEETS STA. TO STA.



- EXISTING WIRELESS POINT TO POINT LINK
- EXISTING CONNECTOR / EXISTING FIBER
- NEW CONNECTOR / EXISTING FIBER
- EXISTING FUSION SPLICE / EXISTING FIBER
- NEW FUSION SPLICE / EXISTING FIBER
- NEW CONNECTOR / NEW FIBER
- NEW FUSION SPLICE / NEW FIBER

	DESIGNED - RH	REVISED -	LAKE COUNTY DIVISION OF TRANSPORTATION	FIBER SPLICING DIAGRAM 1 (EXISTING)		ROUTE	SECTION	ROUTE SECTION	SHEET	SHEETS
	DRAWN - RH	REVISED -		SCALE N/A				F1		
	CHECKED - DG	REVISED -								
	DATE 2024.04.08	REVISED -								

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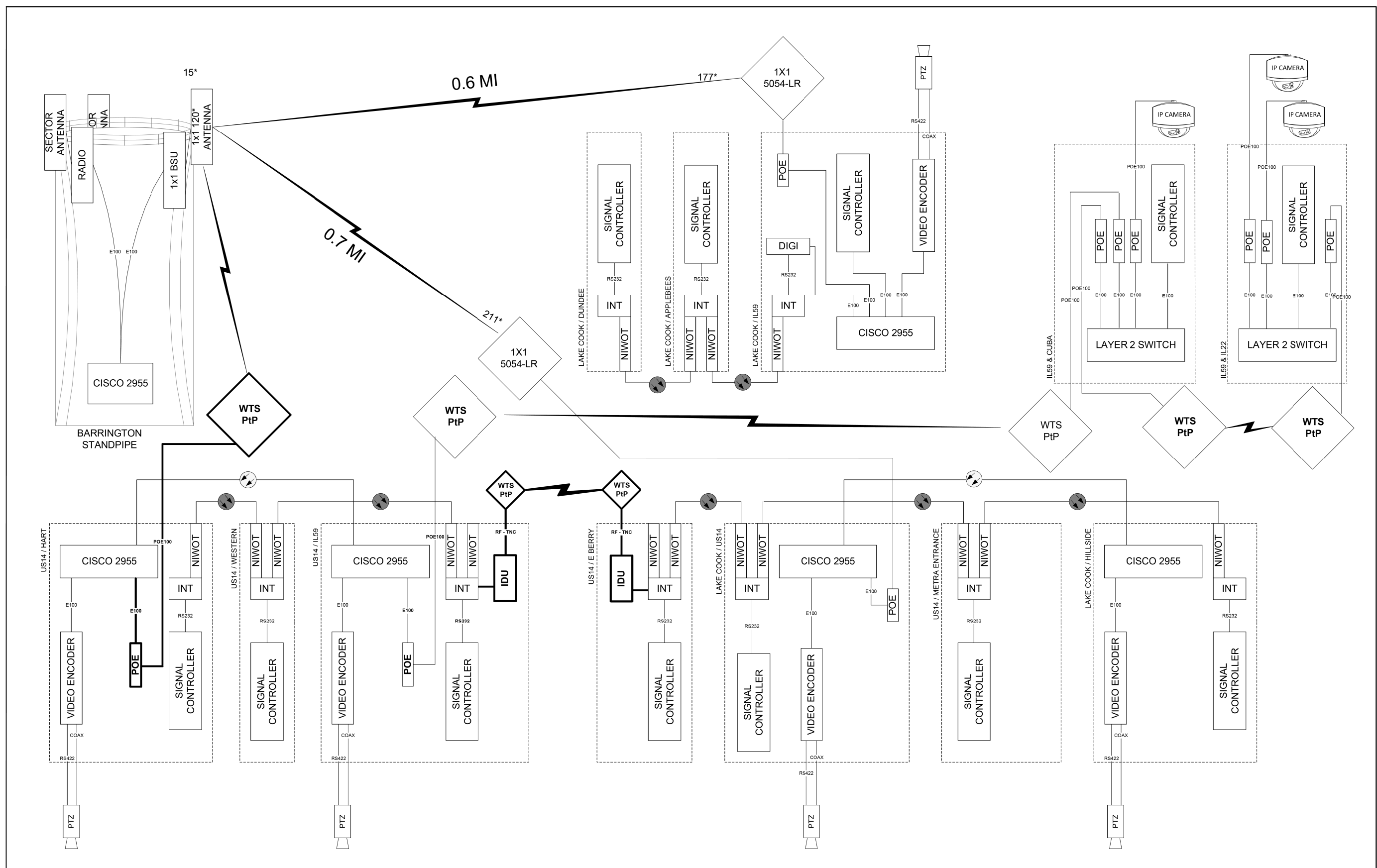
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**US RTE 14 (NORTHWEST HWY)
EXISTING FIBER SPLICING DIAGRAM**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	11-00087-00-GS	LAKE	816	330
CONTRACT NO. 61J87				
		ILLINOIS	FED. AID PROJECT	



DESIGNED - RH	REVISED -	LAKE COUNTY DIVISION OF TRANSPORTATION	220C BARRINGTON STANDPIPE (TEMPORARY)		ROUTE	SECTION	ROUTE	SECTION	SHEET	SHEETS
DRAWN - RH	REVISED -		SCALE N/A							
CHECKED - DG	REVISED -									
DATE 2024.04.08	REVISED -									

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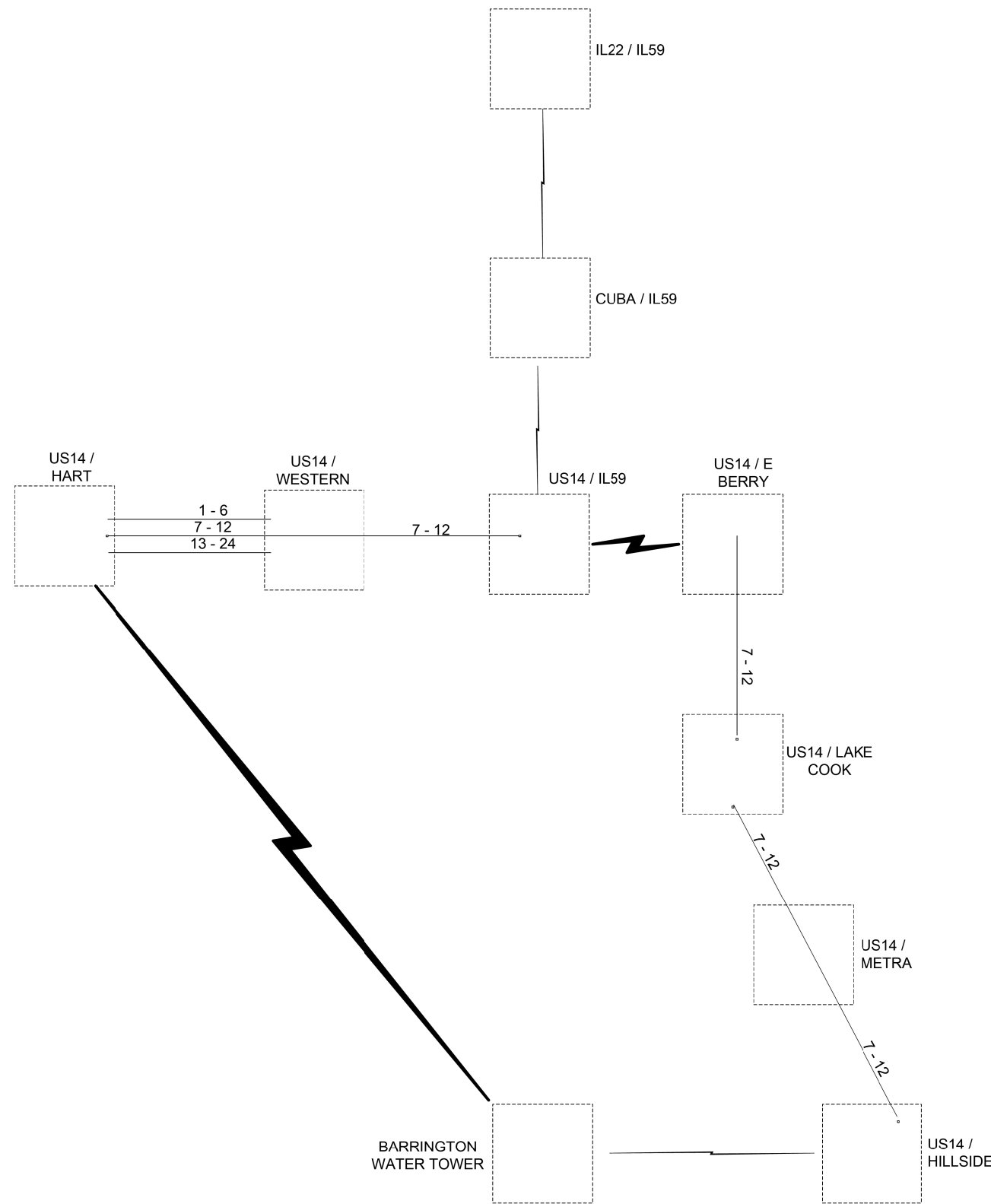
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US RTE 14 (NORTHWEST HWY)
TEMPORARY CABINET DIAGRAM

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	11-00087-00-GS	LAKE	816	331
CONTRACT NO. 61J87				
ILLINOIS FED. AID PROJECT				



- EXISTING WIRELESS POINT TO POINT LINK
- EXISTING CONNECTOR / EXISTING FIBER
- NEW CONNECTOR / EXISTING FIBER
- EXISTING FUSION SPLICE / EXISTING FIBER
- NEW FUSION SPLICE / EXISTING FIBER
- NEW CONNECTOR / NEW FIBER
- NEW FUSION SPLICE / NEW FIBER

	DESIGNED - RH	REVISED -	LAKE COUNTY DIVISION OF TRANSPORTATION	FIBER SPLICING DIAGRAM 1 (TEMPORARY)		ROUTE	SECTION	ROUTE SECTION	SHEET	SHEETS
	DRAWN - RH	REVISED -		SCALE N/A				F1		
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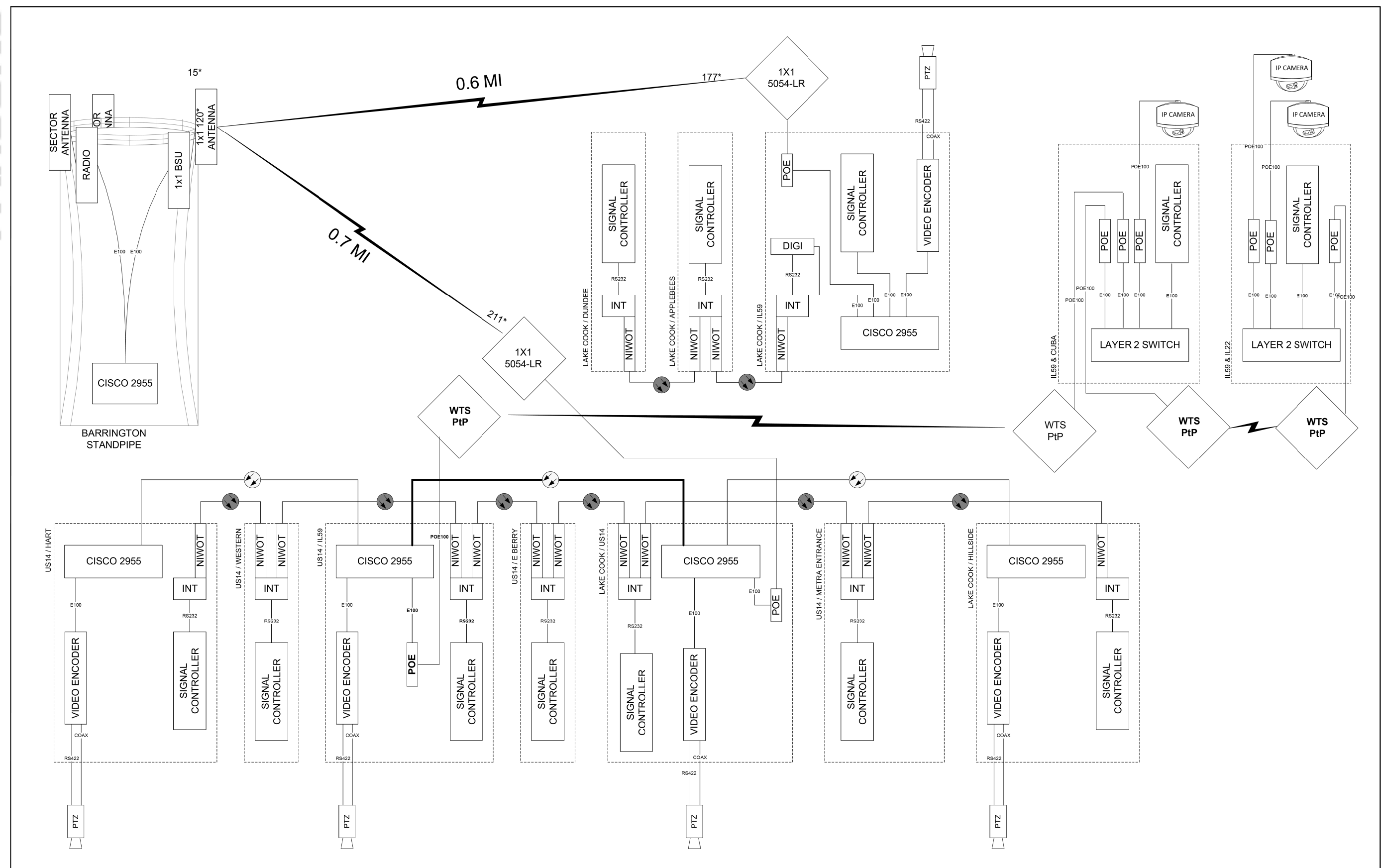
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

US RTE 14 (NORTHWEST HWY) TEMPORARY FIBER SPLICING DIAGRAM			
SCALE:	SHEET	OF	SHEETS
	STA.		TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	11-00087-00-GS	LAKE	816	332
CONTRACT NO. 61J87				
ILLINOIS FED. AID PROJECT				



DESIGNED - RH	REVISED -	LAKE COUNTY DIVISION OF TRANSPORTATION	220C BARRINGTON STANDPIPE (FINAL)		ROUTE	SECTION	ROUTE SECTION	SHEET	SHEETS
DRAWN - RH	REVISED -		SCALE N/A						
CHECKED - DG	REVISED -								
DATE 2024.04.08	REVISED -								

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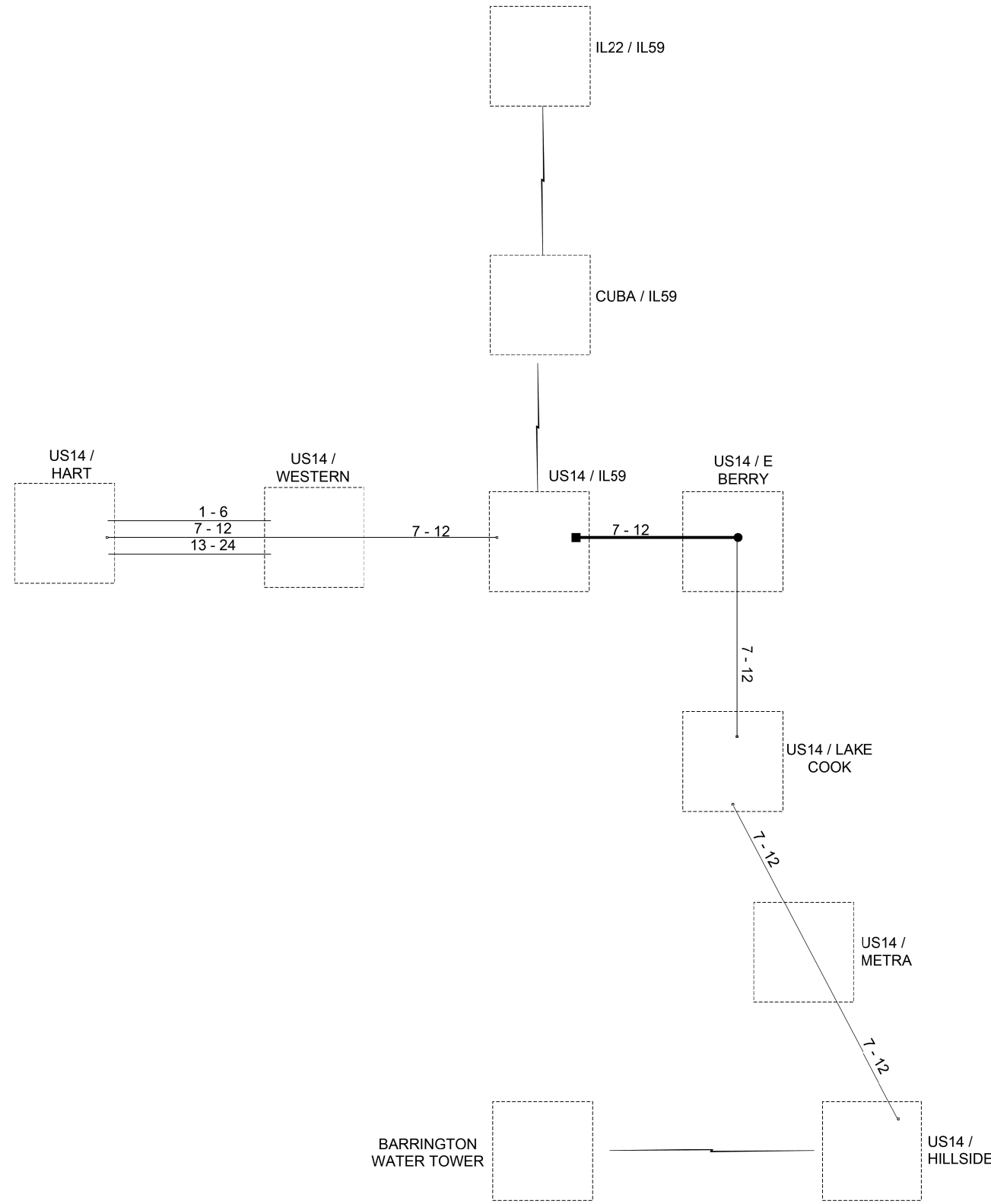
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US RTE 14 (NORTHWEST HWY)
PROPOSED CABINET DIAGRAM

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	11-00087-00-GS	LAKE	816	333
CONTRACT NO. 61J87				
ILLINOIS FED. AID PROJECT				



- EXISTING WIRELESS POINT TO POINT LINK
- EXISTING CONNECTOR / EXISTING FIBER
- NEW CONNECTOR / EXISTING FIBER
- EXISTING FUSION SPLICE / EXISTING FIBER
- NEW FUSION SPLICE / EXISTING FIBER
- NEW CONNECTOR / NEW FIBER
- NEW FUSION SPLICE / NEW FIBER

	DESIGNED - RH	REVISED -	LAKE COUNTY DIVISION OF TRANSPORTATION	FIBER SPLICING DIAGRAM 1 (FINAL)		ROUTE	SECTION	ROUTE SECTION	SHEET	SHEETS
	DRAWN - RH	REVISED -		SCALE N/A				F1		
	CHECKED - DG	REVISED -								
	DATE 2024.04.08	REVISED -								

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	DATE - 08/28/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US RTE 14 (NORTHWEST HWY) PROPOSED FIBER SPLICING DIAGRAM			
SCALE:	SHEET	OF	SHEETS
	STA.	TO	STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	11-00087-00-GS	LAKE	816	334
CONTRACT NO. 61J87				
ILLINOIS FED. AID PROJECT				

LIGHTING GENERAL NOTES

1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION.
2. PAY ITEMS IN THE SUMMARY OF QUANTITIES HAVE BEEN ESTIMATED. IF, IN THE ENGINEER'S OPINION, ANY WORK IS NOT REQUIRED, THAT ITEM WILL BE DEDUCTED FROM THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MARK THE PROPOSED LOCATIONS OF ALL LIGHT POLES AND LIGHTING CONTROLLERS FOR EXAMINATION AND CONFIRMATION WITH THE RESIDENT ENGINEER.
4. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO AUGURING FOR LIGHT POLE FOUNDATIONS. THE EXACT LOCATIONS FOR ALL ITEMS SHALL BE CONFIRMED WITH THE RESIDENT ENGINEER.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ESTABLISHMENT OF FINISHED GRADE. THE RESIDENT ENGINEER MAY ASSIST THE CONTRACTOR, AS APPLICABLE, BUT THE RESPONSIBILITY FOR COORDINATING THE FINISHED GRADE ELEVATION WITH THE TOP OF FOUNDATIONS HEIGHTS AND THE LIGHT SHALL REMAIN WITH THE CONTRACTOR.
6. FOUNDATION TYPE IS BASED ON KNOWN UTILITY INFORMATION. OFFSET FOUNDATION LOCATIONS WERE BASED ON ATLAS AND ABOVE GROUND STRUCTURES FOR LOCATION OF UTILITIES. WHERE POSSIBLE, OFFSET FOUNDATIONS SHOULD BE REPLACED WITH 24" DIAMETER FOUNDATIONS. FOUNDATION TYPE SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION. CONTRACTOR WILL BE PAID FOR THE FOUNDATION TYPE INSTALLED WITH NO ADDITIONAL COMPENSATION FOR CHANGE FROM CONTRACT PLAN.
7. NO POLES SHALL BE ERECTED UNTIL THE RESPECTIVE FOUNDATIONS HAVE CURED, AS APPROVED BY THE ENGINEER.
8. FOR ALL CONCRETE FOUNDATIONS, A MINIMUM OF 2 SLEEVES SHALL BE PROVIDED REGARDLESS OF WHAT IS BEING INSTALLED. THE SLEEVES SHALL BE SEALED AND CAPPED TO PREVENT MOISTURE OR CONTAMINANTS. MATERIAL AND LABOR WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE PAY ITEM FOR LIGHT POLE FOUNDATION.
9. TO MAINTAIN THE STRUCTURAL INTEGRITY OF ALUMINUM POLES WITH MAST ARMS, THEY SHALL NOT BE ERECTED AND LEFT TO STAND WITHOUT LUMINAIRES. NOTE THAT THE CONTRACTOR SHALL NOT BE PAID FOR POLES UNTIL LUMINAIRES ARE INSTALLED.
10. CONDUIT AND UNIT DUCT MUST BE POSITIONED IN THE FIELD TO AVOID CONFLICT WITH TREES, BUSHES, DRAINS, OTHER UTILITIES, AND LANDSCAPING.
11. THE CABLE TRENCH SHALL BE BACKFILLED AND FIRMLY COMPACTED BEFORE ANY LIGHT STANDARD IS ERECTED.
12. THE INSTALLATION OF BURIED WARNING TAPE SHALL BE INSPECTED AND APPROVED BY THE RESIDENT ENGINEER.
13. ANY DAMAGE TO PAVEMENT, SIDEWALK, CURB, OR ANY OTHER PORTION OF THE ROADWAY NOT SPECIFICALLY TO BE REMOVED AND REPLACED SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST AND REPLACEMENT SHALL MEET THE APPROVAL OF THE ENGINEER.
14. OFFSETS CALL-OFFS FOR PROPOSED LIGHT POLES ARE FROM THE CENTER OF POLES TO PROPOSED FACE OF CURB (F.O.C.)
15. COMED SERVICE REQUEST IS TOWER ACCOUNT # 0581674000. COMED ENGINEER IS AVARO SALDIVAR CELL PHONE NUMBER 630-488-7096. EMAIL ADDRESS Alvaro.Saldivar@ComEd.com

BILL OF MATERIALS

ITEM	UNIT	TOTAL QUANTITY
ELECTRIC SERVICE INSTALLATION	EACH	2
ELECTRIC UTILITY SERVICE CONNECTION	LSUM	1
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	350
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	25
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	355
UNDERGROUND CONDUIT, PVC, 3/4" DIA.	FOOT	315
UNDERGROUND CONDUIT, PVC, 1 1/4" DIA.	FOOT	112
CONDUIT ATTACHED TO STRUCTURE, 3/4" DIA., PVC COATED GALVANIZED STEEL	FOOT	104
CONDUIT ATTACHED TO STRUCTURE, 1 1/4" DIA., GALVANIZED STEEL	FOOT	14
JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 8" X 8" X 6"	EACH	4
JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 14" X 12" X 6"	EACH	1
UNIT DUCT, 600V, 2-1C NO.6, 1/C NO.6 GROUND, (XLP-TYPE USE), 1 1/4" DIA. POLYETHYLENE	FOOT	5195
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10	FOOT	1077
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2	FOOT	35
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 6	FOOT	135
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 8	FOOT	448
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 10	FOOT	528
AERIAL CABLE, 2-1/C NO. 8 WITH MESSENGER WIRE	FOOT	420
LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION G	EACH	3
LIGHTING CONTROLLER, BASE MOUNTED, 240VOLT, 100AMP	EACH	1
LIGHT POLE, ALUMINUM, 35 FT. M.H., 6 FT. DAVIT ARM	EACH	24
LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	240
LIGHT POLE FOUNDATION, 30" DIAMETER	FOOT	10
BREAKAWAY DEVICE, TRANSFORMER BASE, 11.5 INCH BOLT CIRCLE	EACH	24
REMOVAL OF TEMPORARY LIGHTING UNIT	EACH	6
REMOVAL OF LIGHTING UNIT, SALVAGE	EACH	2
REMOVAL OF POLE FOUNDATION	EACH	3
RELOCATE EXISTING LIGHTING UNIT	EACH	1
REMOVAL OF LIGHTING CONTROLLER	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	740
REMOVE EXISTING HANDHOLE	EACH	2
TEMPORARY WOOD POLE, 45 FEET, CLASS 5	EACH	4
ELECTRICAL SERVICE DISCONNECT	EACH	1
EXPOSE AND RELOCATE EXISTING UNIT DUCT	FOOT	100
LUMINAIRE SHIELD	EACH	7
UNDERPASS LUMINAIRE (SPECIAL)	EACH	4
TEMPORARY LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION G	EACH	2
LUMINAIRE, TYPE A (SPECIAL)	EACH	24
COMBINATION LIGHTING CONTROLLER	EACH	1
TEMPORARY WOOD POLE, 50 FT., CLASS 4, 15 FT. MAST ARM	EACH	2
LIGHT POLE FOUNDATION, 24" DIAMETER, OFFSET	FOOT	36
MAINTENANCE OF LIGHTING SYSTEM	CAL MO	30

MODEL: \\MODELNAME
FILE: \\name - 03101817-48-lighting.dwg



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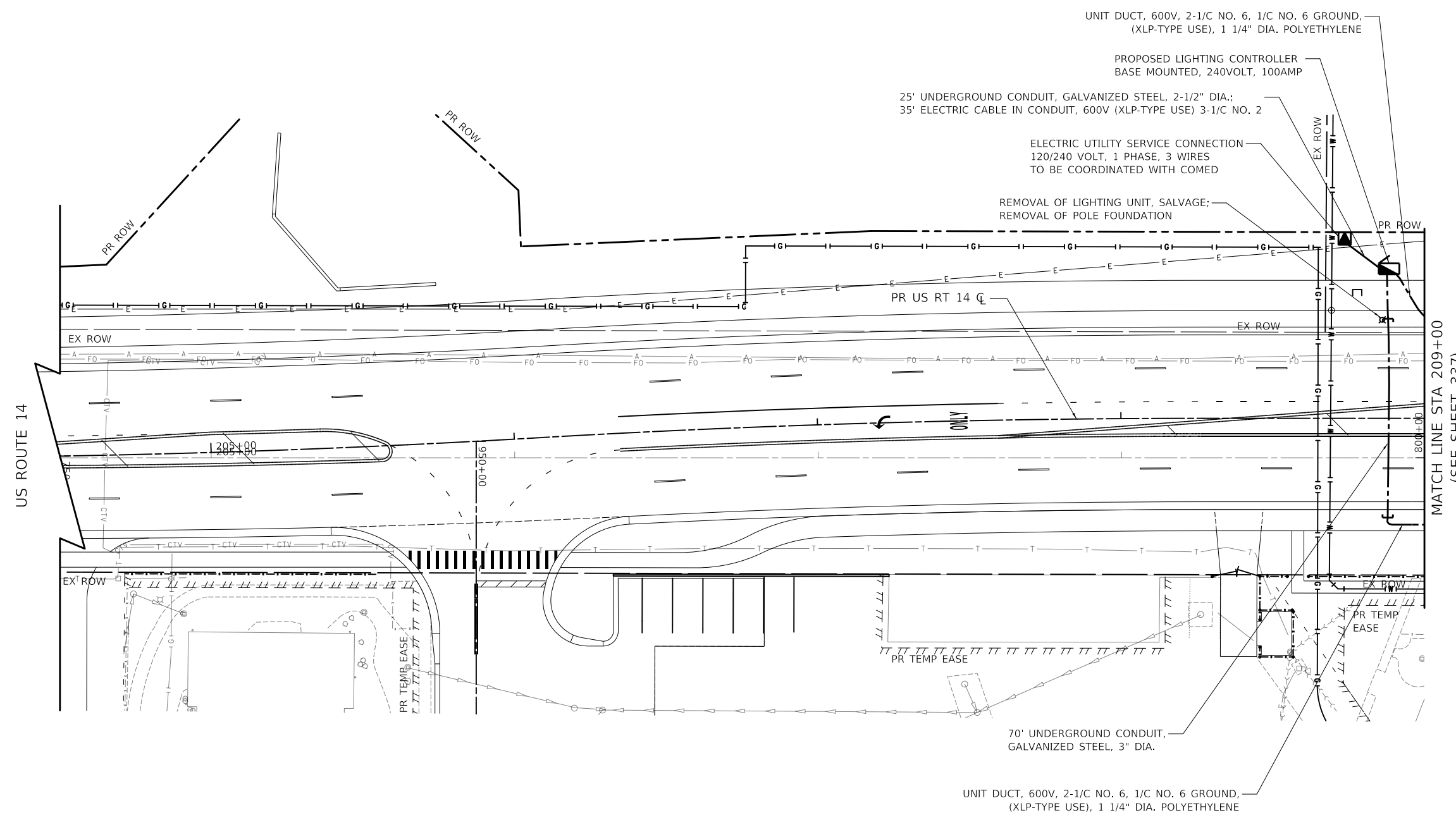
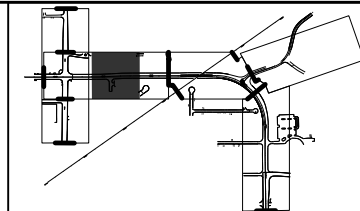
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PLOT DATE = 8/28/2024	CHECKED - DNM	REVISED -
	DATE - 08/28/2024	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

LIGHTING LEGEND, GENERAL NOTES, AND BILL OF MATERIAL

SCALE: N.T.S SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	11-00087-00-GS	LAKE	816	335
CONTRACT NO. 61J87				
		ILLINOIS	FED. AID PROJECT	



LIGHTING LEGEND

- PROPOSED LIGHTING UNIT
LUMINIAIRE, TYPE A (SPECIAL)
136.5 WATT LED (240V)
LIGHT POLE, ALUMINUM,
35 FT. M.H., 6 FT. DAVIT ARM
- UNDERPASS LUMINAIRE (SPECIAL)
47 WATT LED (240V)
- PROPOSED COMBINATION TRAFFIC
SIGNAL STREET LIGHT
- PROPOSED LIGHTING CONTROLLER
BASE MOUNTED, 120/240 VOLT,
100 AMP
- PROPOSED JUNCTION BOX
STAINLESS STEEL, ATTACHED
TO STRUCTURE 14" X 12" X 6"
- PROPOSED JUNCTION BOX
STAINLESS STEEL, ATTACHED
TO STRUCTURE 8" X 8" X 6"
- PROPOSED UNIT DUCT
AS SPECIFIED IN THE PLANS
- UNDERGROUND CONDUIT,
GALVANIZED STEEL
SIZE AS SPECIFIED IN THE PLANS
- TEMPORARY LIGHTING UNIT
TEMPORARY LUMINIAIRE, LED,
ROADWAY OUTPUT
DESIGNATION G (240V)
TEMPORARY WOOD POLE, 50 FT.,
CLASS 4, 15 FT. MAST ARM
(40 FT. MOUNTING HEIGHT)
- TEMPORARY WOOD POLE, 45 FEET,
CLASS 5
- AERIAL CABLE
AS SPECIFIED IN THE PLANS

MODEL: \\MODELNAME
 FILE: \\NAME - 0310187-4-lighting-01.dgn

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 Moline, Illinois 61413
 Tel: 630.773.3900
 Fax: 630.773.3975
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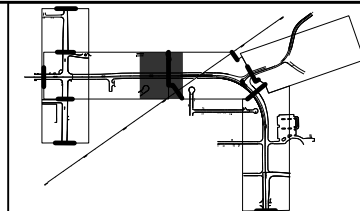
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PLOT SCALE = 40,0000' / in.	DRAWN - SJC	REVISED -
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	DATE - 08/28/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION












US ROUTE 14
LIGHTING PLAN

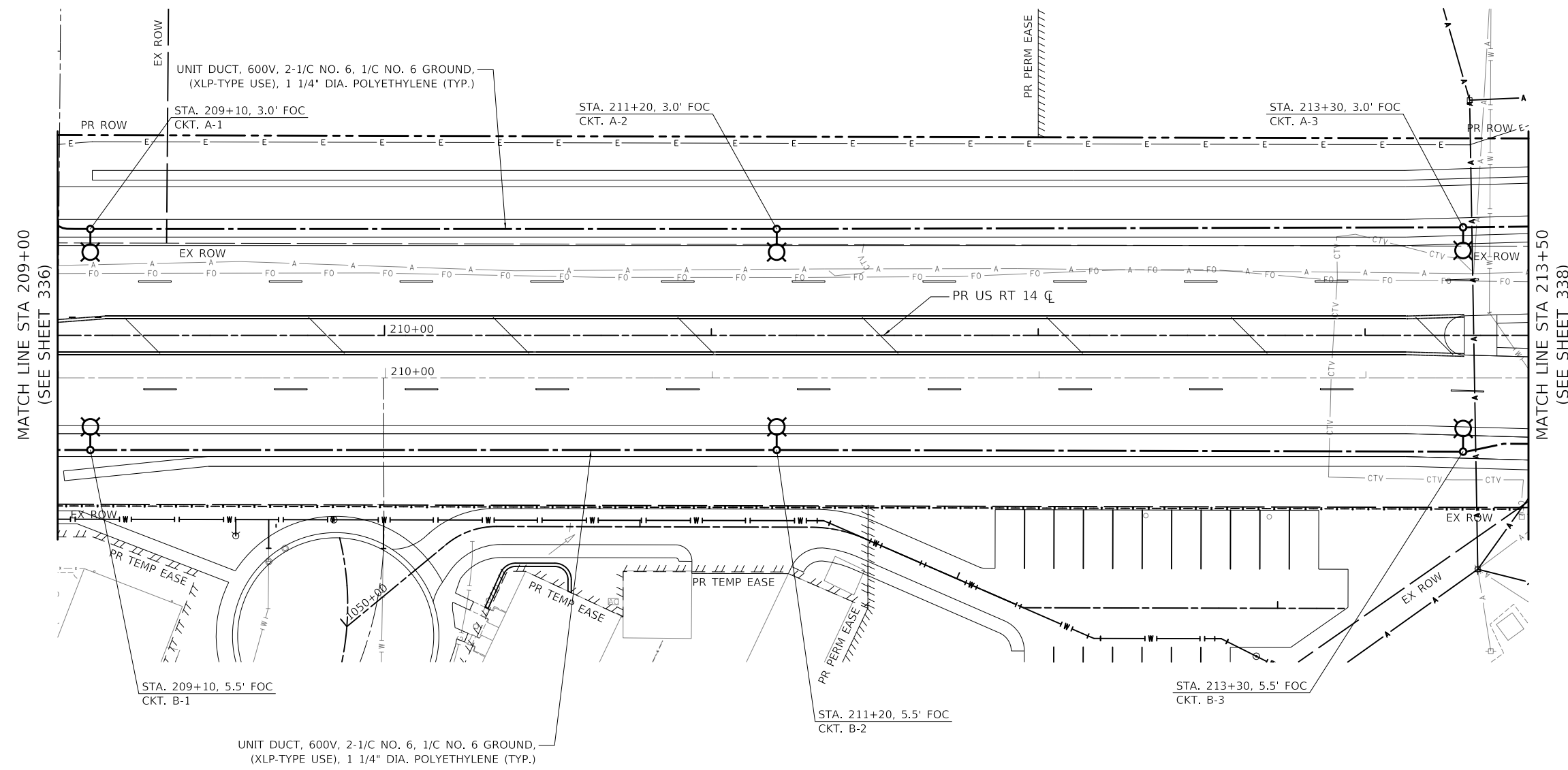
SCALE: 1" = 20' SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	11-00087-00-GS	LAKE	816	336
CONTRACT NO. 61J87				
ILLINOIS FED. AID PROJECT				



LIGHTING LEGEND

-  PROPOSED LIGHTING UNIT
LUMINIAIRE, TYPE A (SPECIAL)
136.5 WATT LED (240V)
LIGHT POLE, ALUMINUM,
35 FT. M.H., 6 FT. DAVIT ARM
-  UNDERPASS LUMINAIRE (SPECIAL)
47 WATT LED (240V)
-  PROPOSED COMBINATION TRAFFIC
SIGNAL STREET LIGHT
-  PROPOSED LIGHTING CONTROLLER
BASE MOUNTED, 120/240 VOLT,
100 AMP
-  PROPOSED JUNCTION BOX
STAINLESS STEEL, ATTACHED
TO STRUCTURE 14" X 12" X 6"
-  PROPOSED JUNCTION BOX
STAINLESS STEEL, ATTACHED
TO STRUCTURE 8" X 8" X 6"
-  PROPOSED UNIT DUCT
AS SPECIFIED IN THE PLANS
-  UNDERGROUND CONDUIT,
GALVANIZED STEEL
SIZE AS SPECIFIED IN THE PLANS
-  TEMPORARY LIGHTING UNIT
TEMPORARY LUMINIAIRE, LED,
ROADWAY OUTPUT
DESIGNATION G (240V)
TEMPORARY WOOD POLE, 50 FT.,
CLASS 4, 15 FT. MAST ARM
(40 FT. MOUNTING HEIGHT)
-  TEMPORARY WOOD POLE, 45 FEET,
CLASS 5
-  AERIAL CABLE
AS SPECIFIED IN THE PLANS



MATCH LINE STA 209+00
(SEE SHEET 336)

MATCH LINE STA 213+50
(SEE SHEET 338)

MODEL: \\MODELNAME
FILE: \\NAME_031013-1017-11-lighting-02.dgn

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Mascoutah, Illinois 60143
Tel: 630.773.3900
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USER NAME = mc	DESIGNED - SJC	REVISED -
PLOT SCALE = 40.0000' / in.	DRAWN - SJC	REVISED -
PLOT DATE = 8/28/2024	CHECKED - DNM	REVISED -
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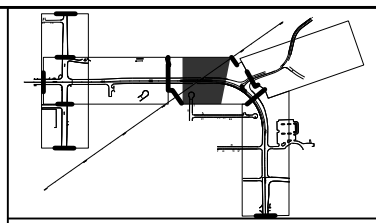
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**US ROUTE 14
LIGHTING PLAN**












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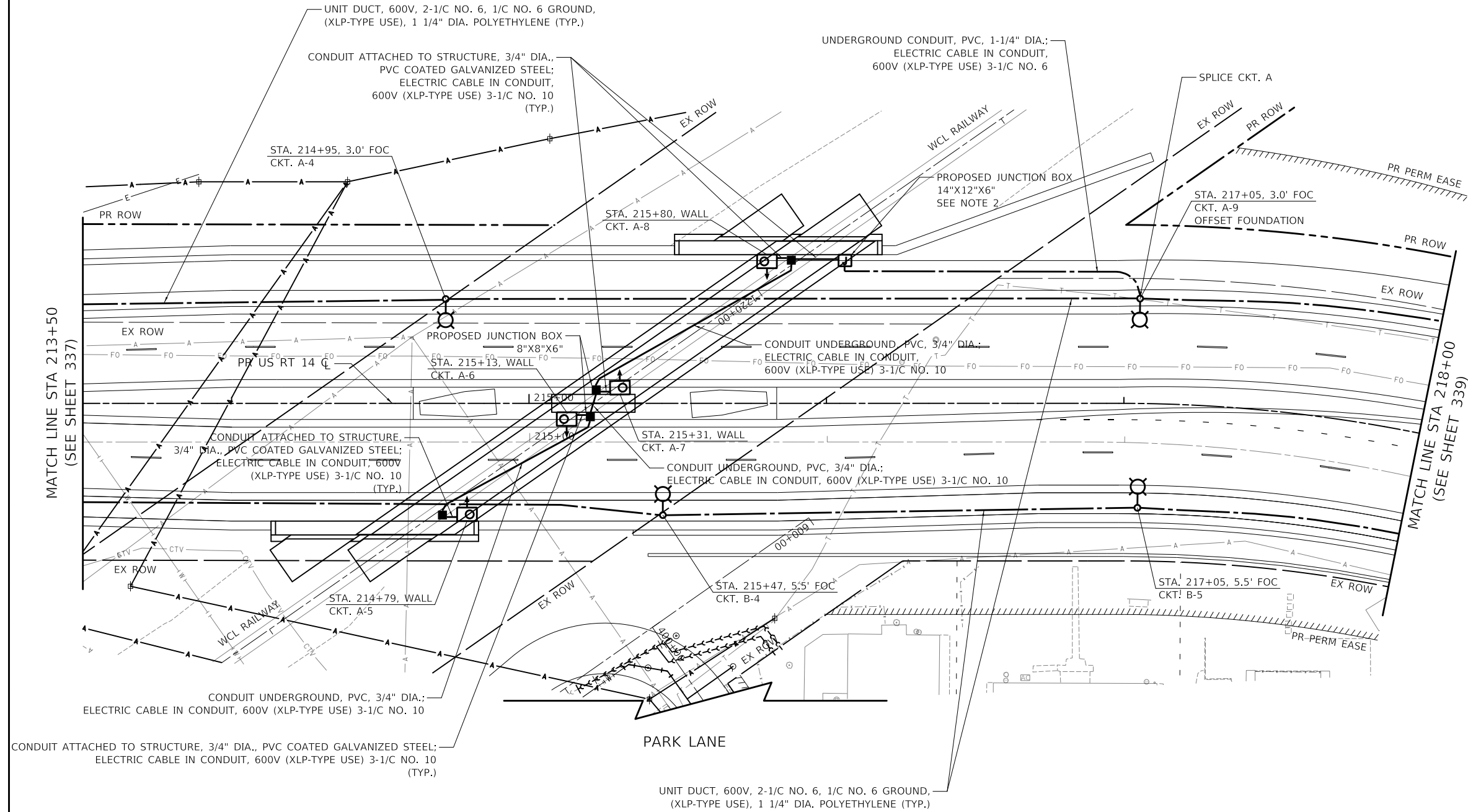
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	11-00087-00-GS	LAKE	816	337
CONTRACT NO. 61J87				
		ILLINOIS	FED. AID PROJECT	

- NOTES:
- FOR UNDERPASS LUMINAIRE DETAILS SEE SHEET 345
 - PROVIDE 30A, 600 VOLT FUSE KIT BETWEEN THE NO. 6 AND NO. 10 CONDUCTOR SPLICE. THIS WORK SHALL BE INCIDENTAL TO THE COST OF THE JUNCTION BOX. NO SEPARATE PAYMENT WILL BE MADE.



LIGHTING LEGEND

-  PROPOSED LIGHTING UNIT
LUMINAIRE, TYPE A (SPECIAL)
136.5 WATT LED (240V)
LIGHT POLE, ALUMINUM,
35 FT. M.H., 6 FT. DAVIT ARM
-  UNDERPASS LUMINAIRE (SPECIAL)
47 WATT LED (240V)
-  PROPOSED COMBINATION TRAFFIC
SIGNAL STREET LIGHT
-  PROPOSED LIGHTING CONTROLLER
BASE MOUNTED, 120/240 VOLT,
100 AMP
-  PROPOSED JUNCTION BOX
STAINLESS STEEL, ATTACHED
TO STRUCTURE 14" X 12" X 6"
-  PROPOSED JUNCTION BOX
STAINLESS STEEL, ATTACHED
TO STRUCTURE 8" X 8" X 6"
-  PROPOSED UNIT DUCT
AS SPECIFIED IN THE PLANS
-  UNDERGROUND CONDUIT,
GALVANIZED STEEL
SIZE AS SPECIFIED IN THE PLANS
-  TEMPORARY LIGHTING UNIT
TEMPORARY LUMINAIRE, LED,
ROADWAY OUTPUT
DESIGNATION G (240V)
TEMPORARY WOOD POLE, 50 FT.,
CLASS 4, 15 FT. MAST ARM
(40 FT. MOUNTING HEIGHT)
-  TEMPORARY WOOD POLE, 45 FEET,
CLASS 5
-  AERIAL CABLE
AS SPECIFIED IN THE PLANS



NOTE: FOR UNDERPASS LUMINAIRE DETAILS SEE SHEET 345

MODEL: \\MODELNAME
FILE: \\NAME...0310187-411.dgn:03.dgn

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Itasca, Illinois 60143
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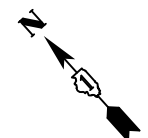
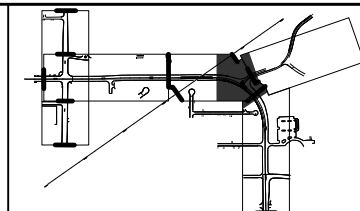
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**












**US ROUTE 14
LIGHTING PLAN**

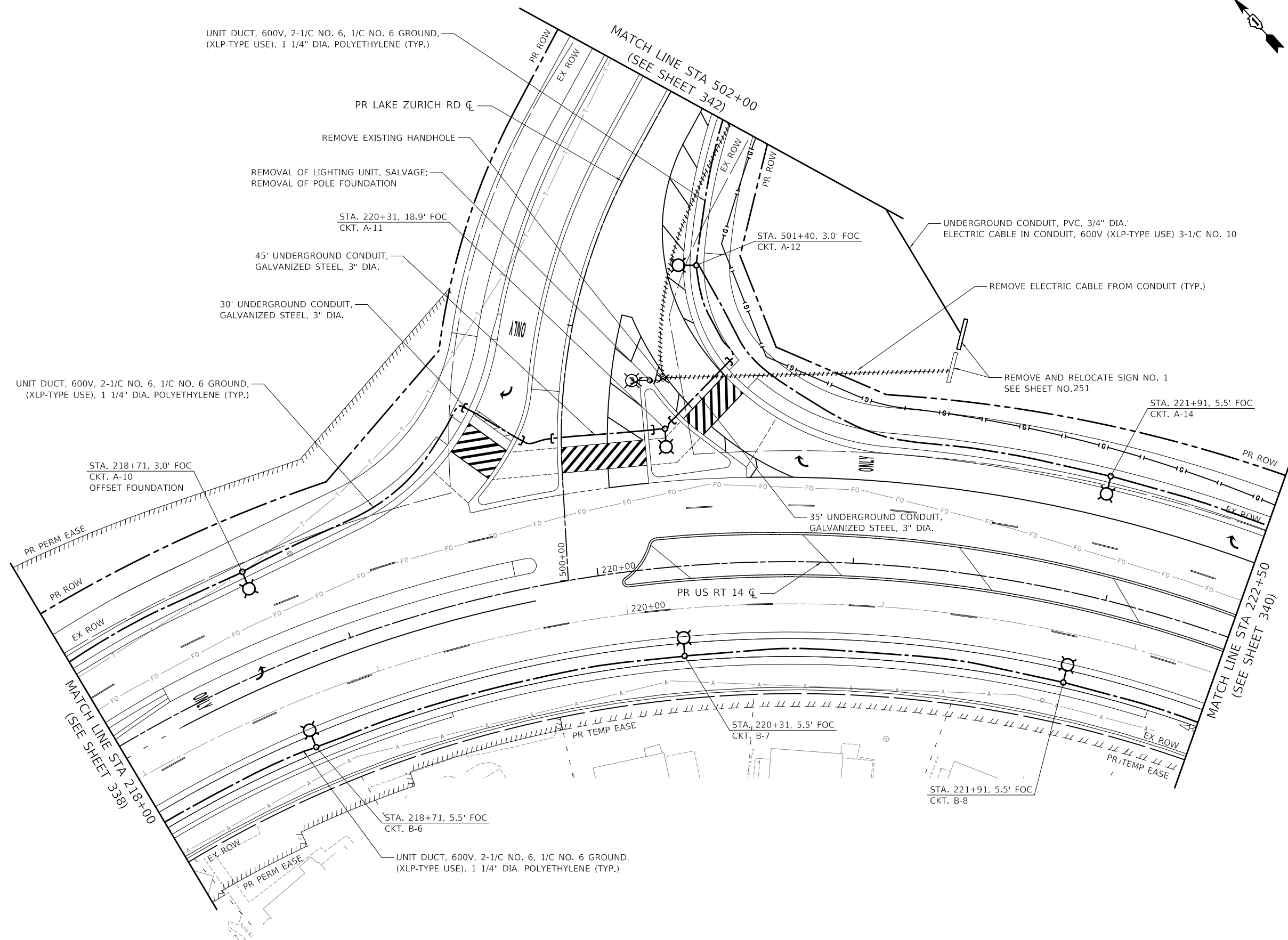
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	11-00087-00-G5	LAKE	816	338
CONTRACT NO. 61J87				
ILLINOIS FED. AID PROJECT				



LIGHTING LEGEND

-  PROPOSED LIGHTING UNIT
LUMINIARE, TYPE A (SPECIAL)
136.5 WATT LED (240V)
LIGHT POLE, ALUMINUM,
35 FT. M.H., 6 FT. DAVIT ARM
-  UNDERPASS LUMINAIRE (SPECIAL)
47 WATT LED (240V)
-  PROPOSED COMBINATION TRAFFIC
SIGNAL STREET LIGHT
-  PROPOSED LIGHTING CONTROLLER
BASE MOUNTED, 120/240 VOLT,
100 AMP
-  PROPOSED JUNCTION BOX
STAINLESS STEEL, ATTACHED
TO STRUCTURE 14" X 12" X 6"
-  PROPOSED JUNCTION BOX
STAINLESS STEEL, ATTACHED
TO STRUCTURE 8" X 8" X 6"
-  PROPOSED UNIT DUCT
AS SPECIFIED IN THE PLANS
-  UNDERGROUND CONDUIT,
GALVANIZED STEEL
SIZE AS SPECIFIED IN THE PLANS
-  TEMPORARY LIGHTING UNIT
TEMPORARY LUMINAIRE, LED,
ROADWAY OUTPUT
DESIGNATION G (240V)
TEMPORARY WOOD POLE, 50 FT.,
CLASS 4, 15 FT. MAST ARM
(40 FT. MOUNTING HEIGHT)
-  TEMPORARY WOOD POLE, 45 FEET,
CLASS 5
-  AERIAL CABLE
AS SPECIFIED IN THE PLANS



MODEL: \\MODEL\NAME
 FILE: \\NAME: 20240828-1087-1087-1087-1087.dwg

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 Fax: 630.773.3975
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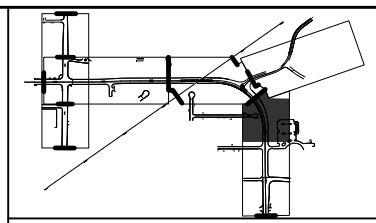
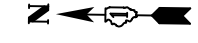
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION












US ROUTE 14
LIGHTING PLAN

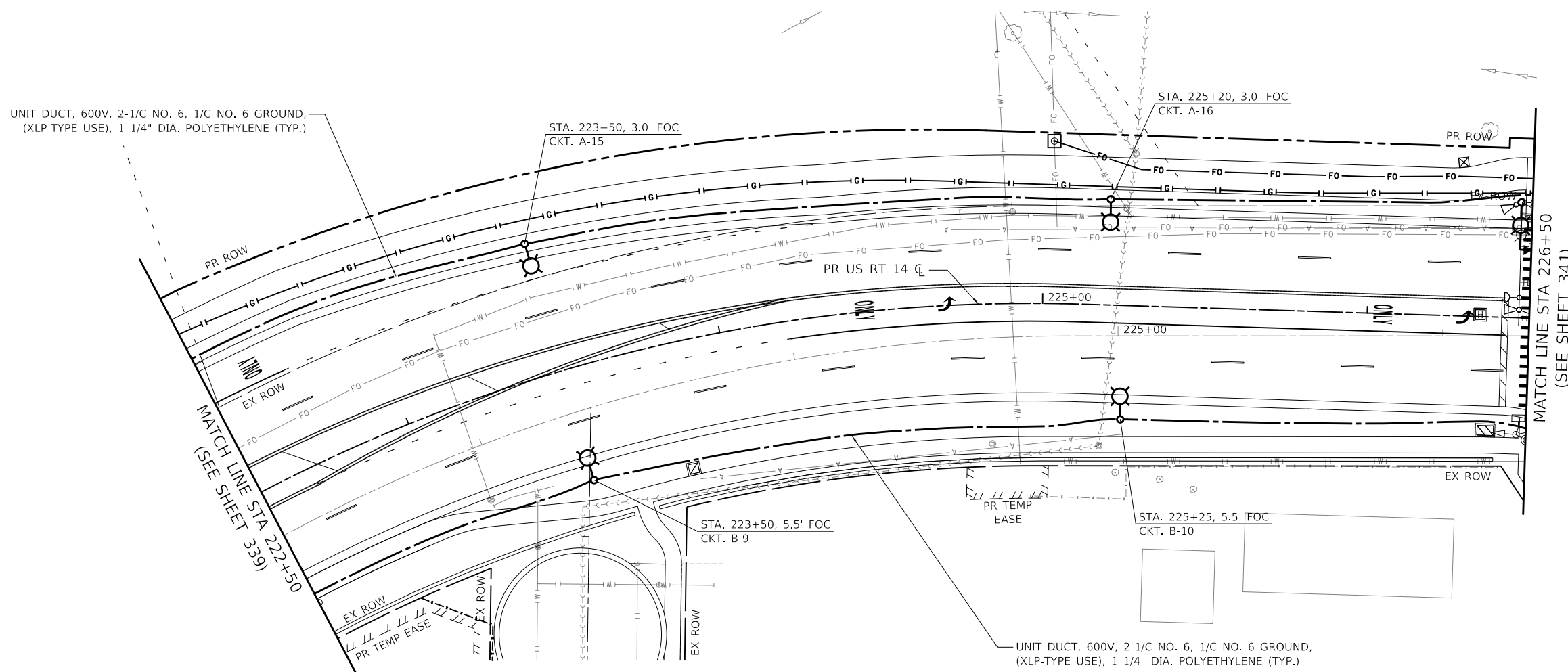
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	11-00087-00-GS	LAKE	816	339
CONTRACT NO. 61J87				
ILLINOIS FED. AID PROJECT				



LIGHTING LEGEND

- 
 PROPOSED LIGHTING UNIT
 LUMINAIRE, TYPE A (SPECIAL)
 136.5 WATT LED (240V)
 LIGHT POLE, ALUMINUM,
 35 FT. M.H., 6 FT. DAVIT ARM
- 
 UNDERPASS LUMINAIRE (SPECIAL)
 47 WATT LED (240V)
- 
 PROPOSED COMBINATION TRAFFIC
 SIGNAL STREET LIGHT
- 
 PROPOSED LIGHTING CONTROLLER
 BASE MOUNTED, 120/240 VOLT,
 100 AMP
- 
 PROPOSED JUNCTION BOX
 STAINLESS STEEL, ATTACHED
 TO STRUCTURE 14" X 12" X 6"
- 
 PROPOSED JUNCTION BOX
 STAINLESS STEEL, ATTACHED
 TO STRUCTURE 8" X 8" X 6"
- 
 PROPOSED UNIT DUCT
 AS SPECIFIED IN THE PLANS
- 
 UNDERGROUND CONDUIT,
 GALVANIZED STEEL
 SIZE AS SPECIFIED IN THE PLANS
- 
 TEMPORARY LIGHTING UNIT
 TEMPORARY LUMINAIRE, LED,
 ROADWAY OUTPUT
 DESIGNATION G (240V)
 TEMPORARY WOOD POLE, 50 FT.,
 CLASS 4, 15 FT. MAST ARM
 (40 FT. MOUNTING HEIGHT)
- 
 TEMPORARY WOOD POLE, 45 FEET,
 CLASS 5
- 
 AERIAL CABLE
 AS SPECIFIED IN THE PLANS



MODEL: \\MODELNAME
 FILE: \\NAME - 0310187-lighting05.dgn


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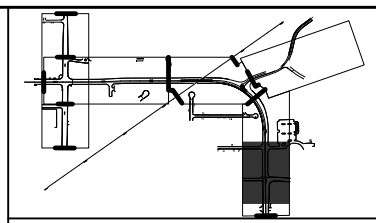
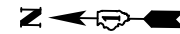
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PLOT DATE = 8/28/2024	CHECKED - DNM	REVISED -
	DATE - 08/28/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION












US ROUTE 14
LIGHTING PLAN

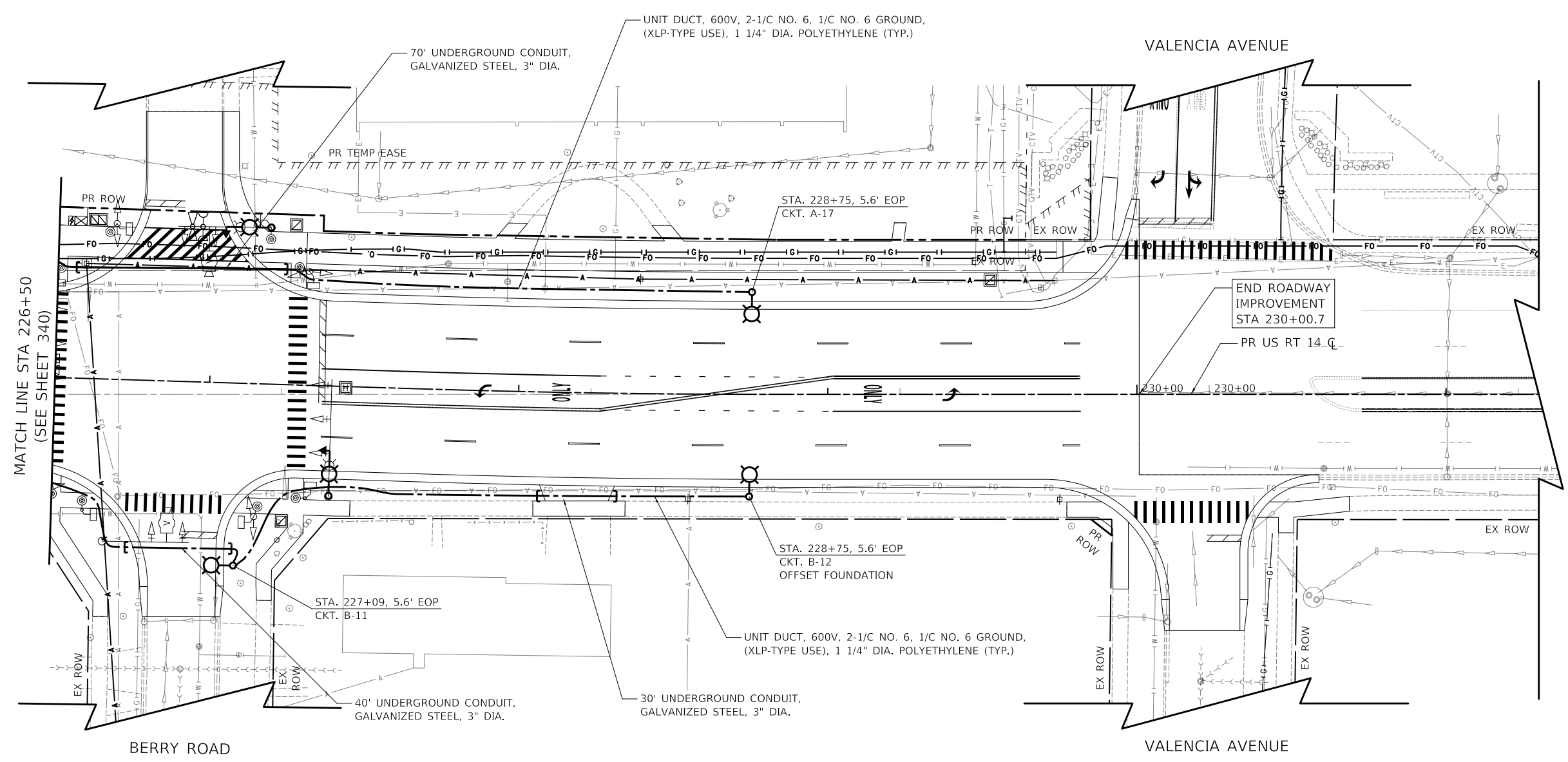
SCALE: 1" = 20' SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	11-00087-00-GS	LAKE	816	340
CONTRACT NO. 61J87				
ILLINOIS FED. AID PROJECT				



LIGHTING LEGEND

-  PROPOSED LIGHTING UNIT
LUMINIAIRE, TYPE A (SPECIAL)
136.5 WATT LED (240V)
LIGHT POLE, ALUMINUM,
35 FT. M.H., 6 FT. DAVIT ARM
-  UNDERPASS LUMINAIRE (SPECIAL)
47 WATT LED (240V)
-  PROPOSED COMBINATION TRAFFIC
SIGNAL STREET LIGHT
-  PROPOSED LIGHTING CONTROLLER
BASE MOUNTED, 120/240 VOLT,
100 AMP
-  PROPOSED JUNCTION BOX
STAINLESS STEEL, ATTACHED
TO STRUCTURE 14" X 12" X 6"
-  PROPOSED JUNCTION BOX
STAINLESS STEEL, ATTACHED
TO STRUCTURE 8" X 8" X 6"
-  PROPOSED UNIT DUCT
AS SPECIFIED IN THE PLANS
-  UNDERGROUND CONDUIT,
GALVANIZED STEEL
SIZE AS SPECIFIED IN THE PLANS
-  TEMPORARY LIGHTING UNIT
TEMPORARY LUMINIAIRE, LED,
ROADWAY OUTPUT
DESIGNATION G (240V)
TEMPORARY WOOD POLE, 50 FT.,
CLASS 4, 15 FT. MAST ARM
(40 FT. MOUNTING HEIGHT)
-  TEMPORARY WOOD POLE, 45 FEET,
CLASS 5
-  AERIAL CABLE
AS SPECIFIED IN THE PLANS



MATCH LINE STA 226+50
(SEE SHEET 340)

MODEL: \\MODEL\NAME
FILE: \\NAME: 031013107-lighting-06.dgn

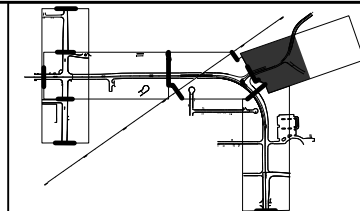
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	DATE - 08/28/2024	REVISED -












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DEPARTMENT OF TRANSPORTATION**

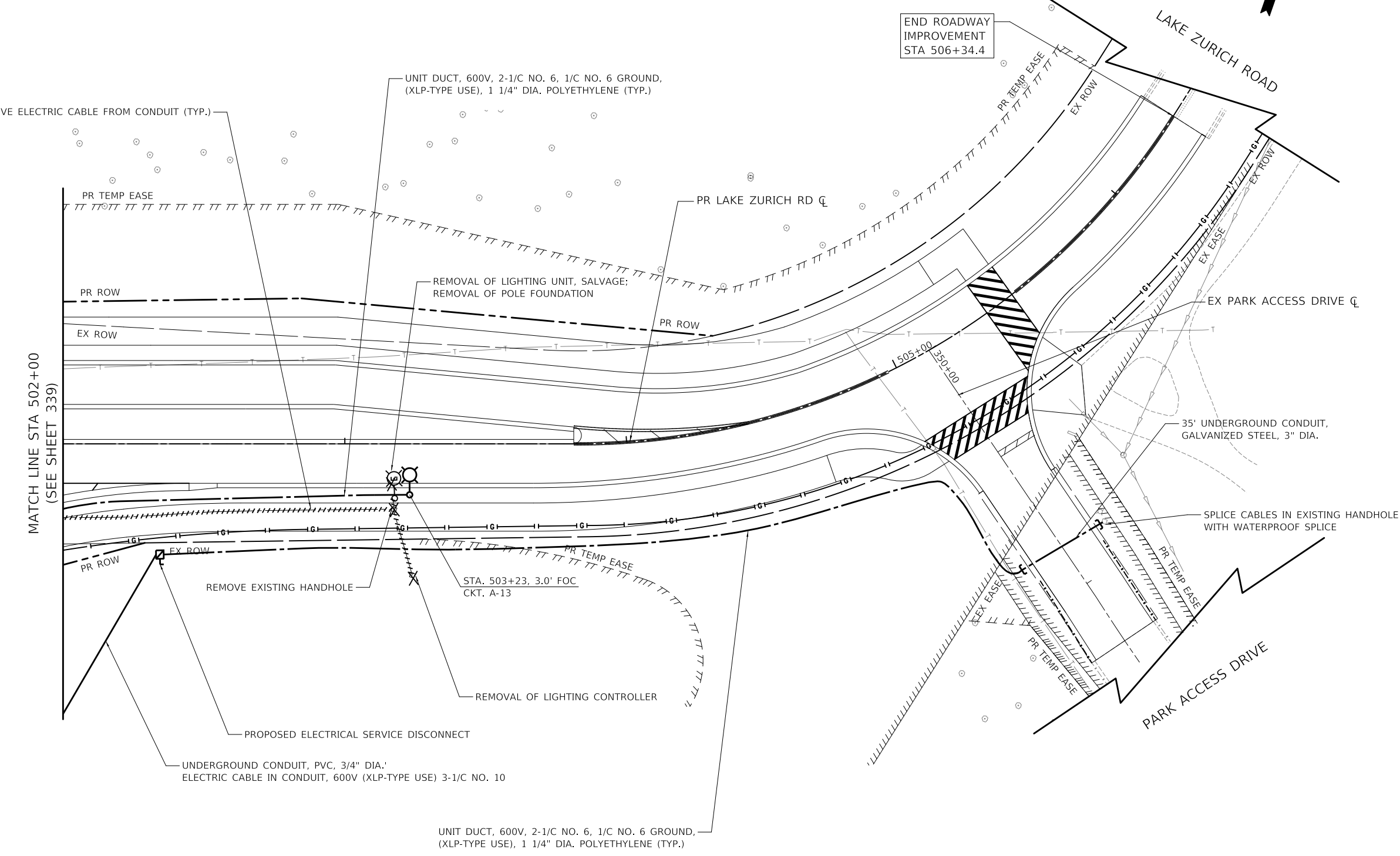
US ROUTE 14 LIGHTING PLAN	
SCALE: 1" = 20'	SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	11-00087-00-G5	LAKE	816	341
CONTRACT NO. 61J87				
ILLINOIS FED. AID PROJECT				



LIGHTING LEGEND

-  PROPOSED LIGHTING UNIT
LUMINIAIRE, TYPE A (SPECIAL)
136.5 WATT LED (240V)
LIGHT POLE, ALUMINUM,
35 FT. M.H., 6 FT. DAVIT ARM
-  UNDERPASS LUMINAIRE (SPECIAL)
47 WATT LED (240V)
-  PROPOSED COMBINATION TRAFFIC
SIGNAL STREET LIGHT
-  PROPOSED LIGHTING CONTROLLER
BASE MOUNTED, 120/240 VOLT,
100 AMP
-  PROPOSED JUNCTION BOX
STAINLESS STEEL, ATTACHED
TO STRUCTURE 14" X 12" X 6"
-  PROPOSED JUNCTION BOX
STAINLESS STEEL, ATTACHED
TO STRUCTURE 8" X 8" X 6"
-  PROPOSED UNIT DUCT
AS SPECIFIED IN THE PLANS
-  UNDERGROUND CONDUIT,
GALVANIZED STEEL
SIZE AS SPECIFIED IN THE PLANS
-  TEMPORARY LIGHTING UNIT
TEMPORARY LUMINIAIRE, LED,
ROADWAY OUTPUT
DESIGNATION G (240V)
TEMPORARY WOOD POLE, 50 FT.,
CLASS 4, 15 FT. MAST ARM
(40 FT. MOUNTING HEIGHT)
-  TEMPORARY WOOD POLE, 45 FEET,
CLASS 5
-  AERIAL CABLE
AS SPECIFIED IN THE PLANS



MODEL: \\MODELNAME
 FILE: \\NAME - 0310107-4-11-lighting-02.dgn

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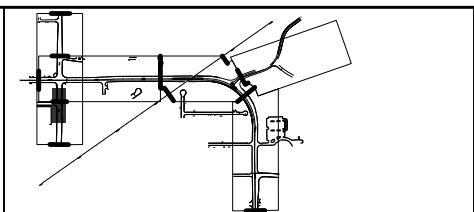
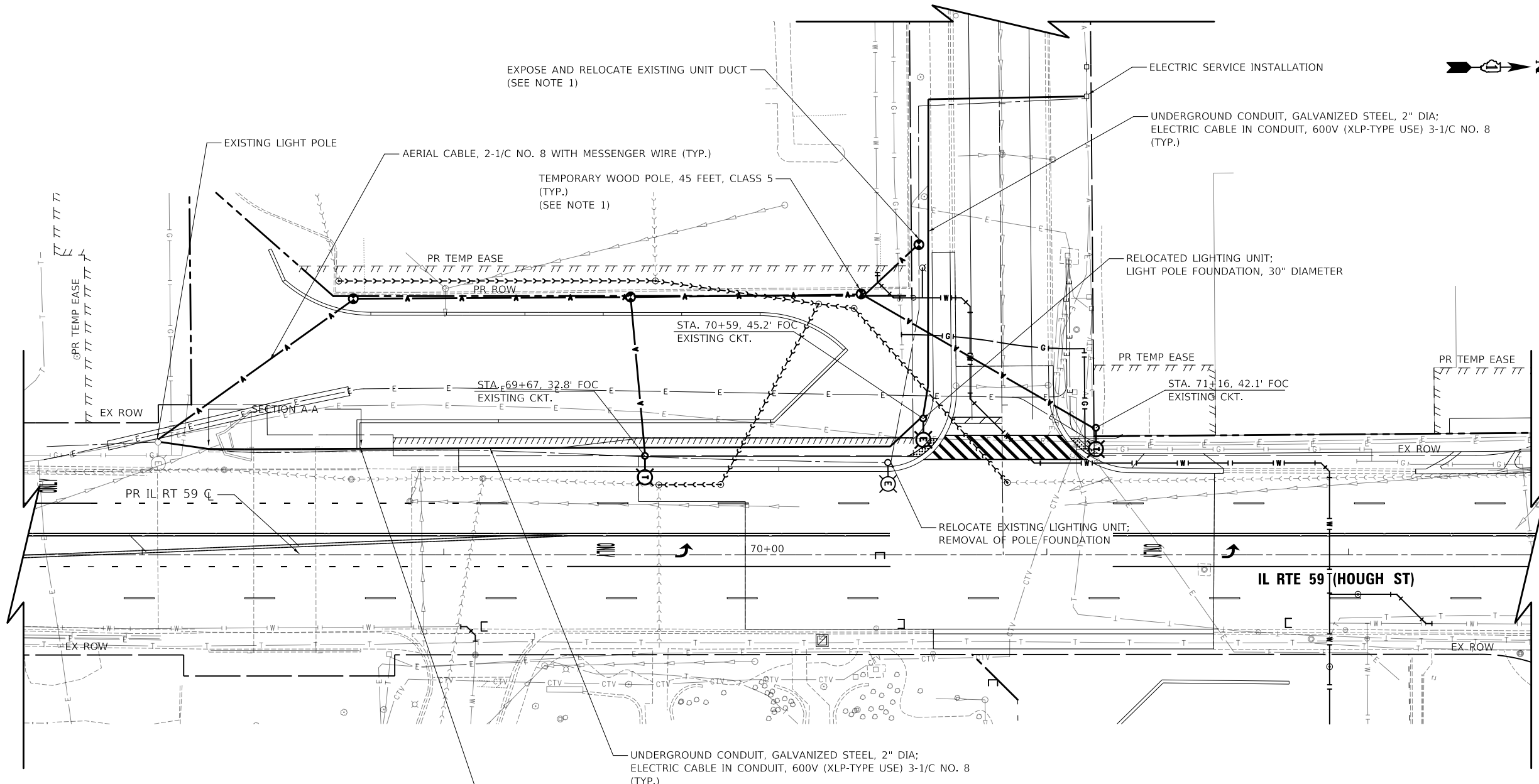
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LAKE ZURICH ROAD
LIGHTING PLAN

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	11-00087-00-GS	LAKE	816	342
CONTRACT NO. 61J87				
ILLINOIS FED. AID PROJECT				

LIONS DRIVE

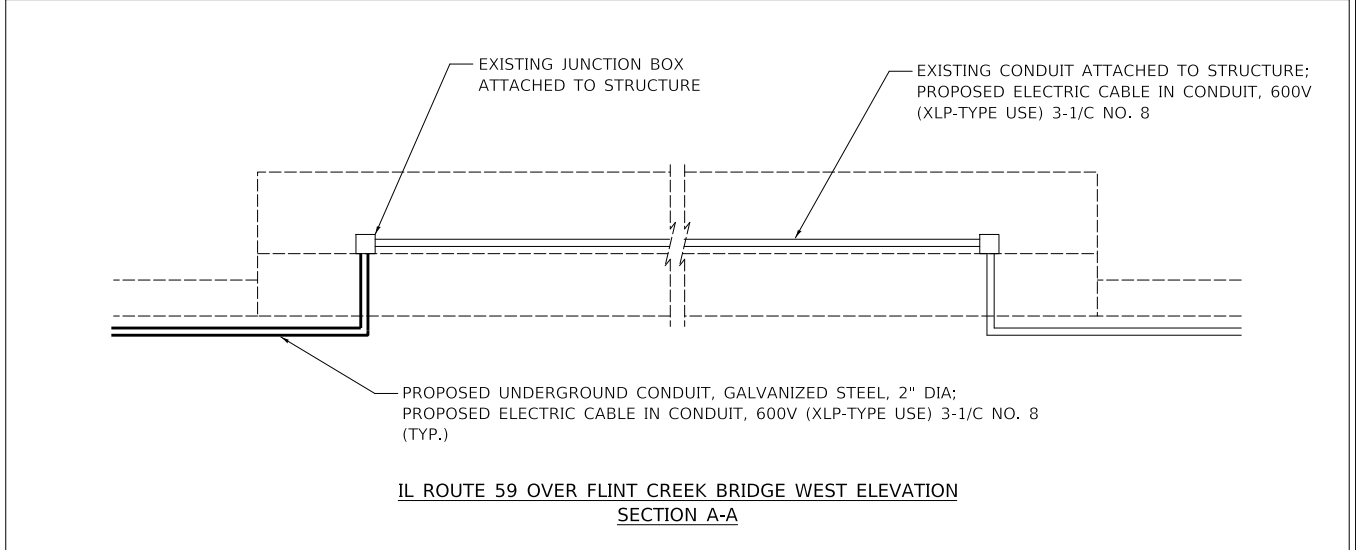


LIGHTING LEGEND

- PROPOSED LIGHTING UNIT
LUMINAIRE, TYPE A (SPECIAL)
136.5 WATT LED (240V)
LIGHT POLE, ALUMINUM,
35 FT. M.H., 6 FT. DAVIT ARM
- UNDERPASS LUMINAIRE (SPECIAL)
47 WATT LED (240V)
- PROPOSED COMBINATION TRAFFIC
SIGNAL STREET LIGHT
- PROPOSED LIGHTING CONTROLLER
BASE MOUNTED, 120/240 VOLT,
100 AMP
- PROPOSED JUNCTION BOX
STAINLESS STEEL, ATTACHED
TO STRUCTURE 14" X 12" X 6"
- PROPOSED JUNCTION BOX
STAINLESS STEEL, ATTACHED
TO STRUCTURE 8" X 8" X 6"
- PROPOSED UNIT DUCT
AS SPECIFIED IN THE PLANS
- UNDERGROUND CONDUIT,
GALVANIZED STEEL
SIZE AS SPECIFIED IN THE PLANS
- TEMPORARY LIGHTING UNIT
TEMPORARY LUMINAIRE, LED,
ROADWAY OUTPUT
DESIGNATION G (240V)
TEMPORARY WOOD POLE, 50 FT.,
CLASS 4, 15 FT. MAST ARM
(40 FT. MOUNTING HEIGHT)
- TEMPORARY WOOD POLE, 45 FEET,
CLASS 5
- AERIAL CABLE
AS SPECIFIED IN THE PLANS

NOTES:

1. INTERCEPT AND RUN EXISTING UNIT DUCT UP TEMPORARY WOOD POLE AND SPLICE TO AERIAL CABLES. THIS WORK WILL BE PAID FOR AS EXPOSE AND RELOCATE EXISTING UNIT DUCT.
2. TEMPORARY LIGHTING TO BE INSTALLED FOR IL ROUTE 59 STAGE 2A.
3. AERIAL WIRING MAY BE REQUIRED TO BE TEMPORARILY LOWER TO INSTALL CREEK WALL PILES.
4. LIGHTING SHALL BE OPERATIONAL DURING EACH NIGHT.



IL ROUTE 59 OVER FLINT CREEK BRIDGE WEST ELEVATION
SECTION A-A

MODEL: \\MODEL\NAME: FILE: \\NAME: 03101013-1013-lighting-08.dgn

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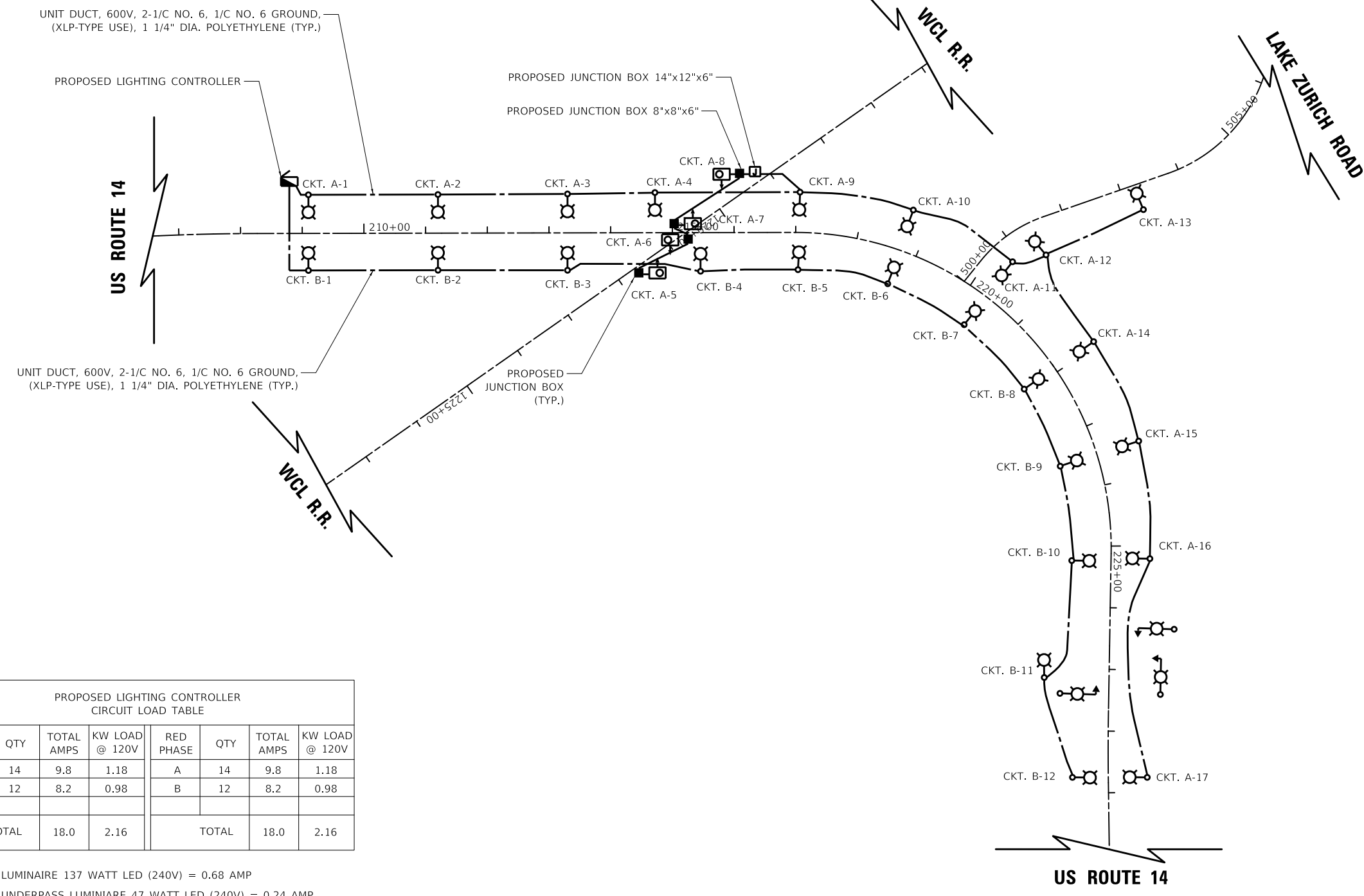
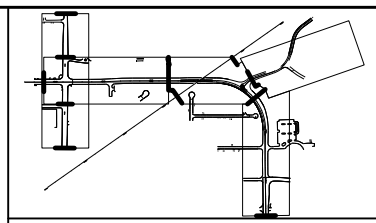
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	DATE - 08/28/2024	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL ROUTE 59
LIGHTING PLAN**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	11-00087-00-GS	LAKE	816	343
CONTRACT NO. 61J87				
ILLINOIS FED. AID PROJECT				



LIGHTING LEGEND

- PROPOSED LIGHTING UNIT
LUMINIAIRE, TYPE A (SPECIAL)
136.5 WATT LED (240V)
LIGHT POLE, ALUMINUM,
35 FT. M.H., 6 FT. DAVIT ARM
- UNDERPASS LUMINIAIRE (SPECIAL)
47 WATT LED (240V)
- PROPOSED COMBINATION TRAFFIC
SIGNAL STREET LIGHT
- PROPOSED LIGHTING CONTROLLER
BASE MOUNTED, 120/240 VOLT,
100 AMP
- PROPOSED JUNCTION BOX
STAINLESS STEEL, ATTACHED
TO STRUCTURE 14" X 12" X 6"
- PROPOSED JUNCTION BOX
STAINLESS STEEL, ATTACHED
TO STRUCTURE 8" X 8" X 6"
- PROPOSED UNIT DUCT
AS SPECIFIED IN THE PLANS
- UNDERGROUND CONDUIT,
- TEMPORARY LUMINIAIRE, LED,
ROADWAY OUTPUT
DESIGNATION G (240V)
TEMPORARY WOOD POLE, 50 FT.,
CLASS 4, 15 FT. MAST ARM
(40 FT. MOUNTING HEIGHT)
- TEMPORARY WOOD POLE, 45 FEET,
CLASS 5
- AERIAL CABLE
AS SPECIFIED IN THE PLANS

**PROPOSED LIGHTING CONTROLLER
CIRCUIT LOAD TABLE**

BLACK PHASE	QTY	TOTAL AMPS	KW LOAD @ 120V	RED PHASE	QTY	TOTAL AMPS	KW LOAD @ 120V
A	14	9.8	1.18	A	14	9.8	1.18
B	12	8.2	0.98	B	12	8.2	0.98
TOTAL		18.0	2.16	TOTAL		18.0	2.16

PROPOSED LUMINIAIRE 137 WATT LED (240V) = 0.68 AMP
 PROPOSED UNDERPASS LUMINIAIRE 47 WATT LED (240V) = 0.24 AMP

MODEL: 11/08/2024
FILE: 11/08/2024-11/08/2024.dgn

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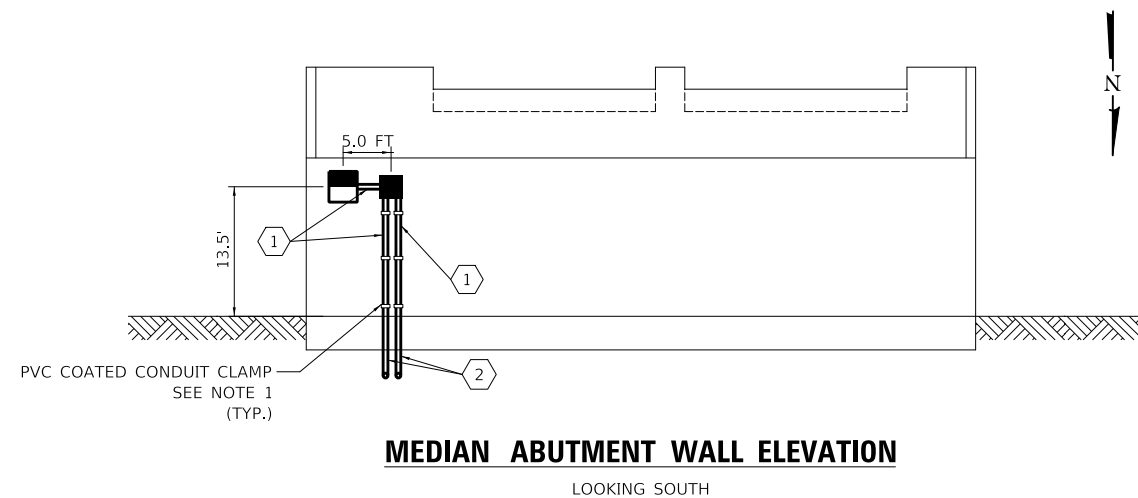
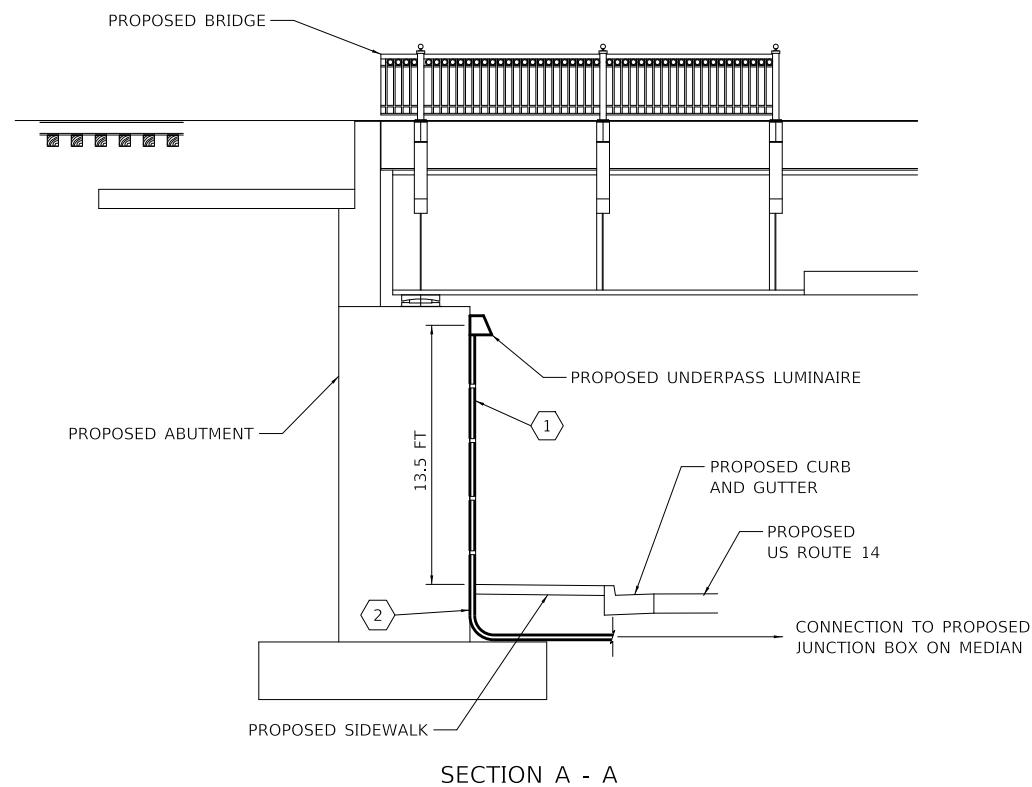
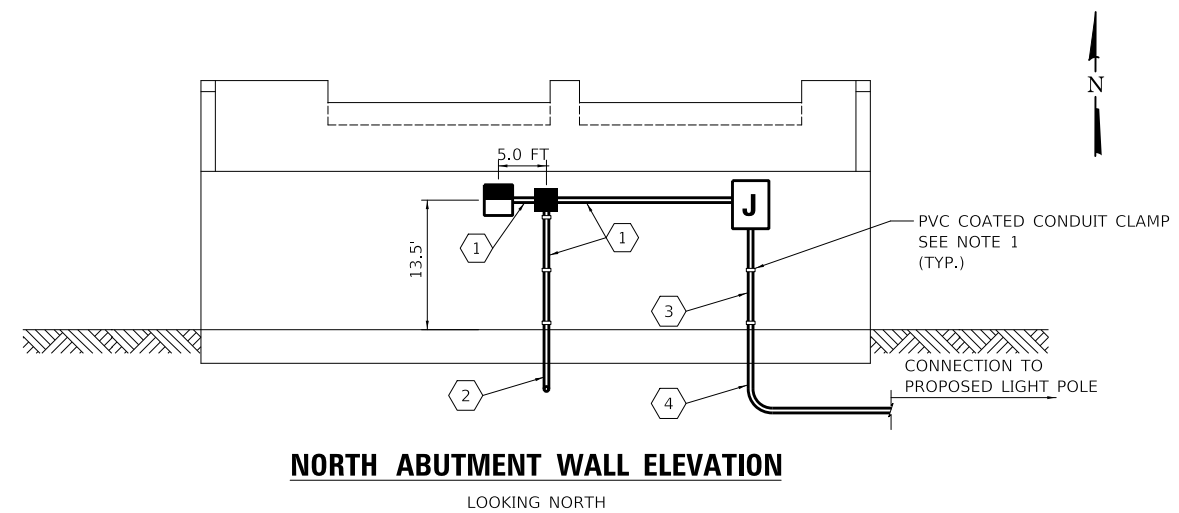
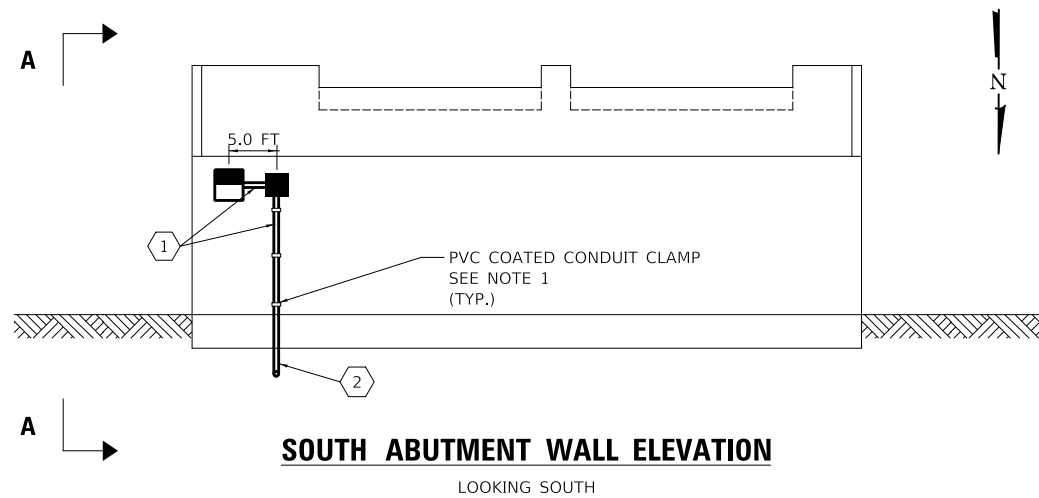
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	DATE - 08/28/2024	REVISED -

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**US ROUTE 14
PROPOSED WIRING DIAGRAM**

SCALE: N.T.S. SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	11-00087-00-GS	LAKE	816	344
CONTRACT NO. 61J87				
ILLINOIS FED. AID PROJECT				



WIRE AND CONDUIT TABLE

TAG	WIRE	CONDUIT
①	2-1/C NO. 10 AND 1/C NO. 10 GROUND	CONDUIT ATTACHED TO STRUCTURE, 3/4" DIA., PVC COATED GALVANIZED STEEL
②	2-1/C NO. 10 AND 1/C NO. 10 GROUND	UNDERGROUND CONDUIT, PVC, 3/4" DIA.
③	2-1/C NO. 6 AND 1/C NO. 6 GROUND	CONDUIT ATTACHED TO STRUCTURE, 1-1/4" DIA., PVC COATED GALVANIZED STEEL
④	2-1/C NO. 6 AND 1/C NO. 6 GROUND	UNDERGROUND CONDUIT, PVC, 1-1/4" DIA.

LEGEND

- UNDERPASS LUMINAIRE (SPECIAL)
- RIGID CONDUIT, TYPE AND SIZE AS NOTED
- JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 8" X 8" X 6"
- JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 14" X 12" X 6"

NOTES:

- SECURE THE CONDUIT WITH PVC COATED CONDUIT CLAMPS AS SHOW AT 5' INTERVALS FOR LATERALS AND WITHIN 2' MAXIMUM FROM ANY JUNCTION BOX, FLEXIBLE CONDUIT, OR CHANGE IN DIRECTION. ALL PVC COATED CONDUIT CLAMPS SHALL BE INCLUDED WITH THE COST OF "CONDUIT ATTACHED TO STRUCTURE, 3/4" DIA. PVC COATED GALVANIZED STEEL" PAY ITEM.
- ATTACH LUMINAIRE TO BRIDGE PIER WITH EXPANSION ANCHORS. THE NUMBER AND SIZE OF ANCHORS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS. SEE THE SPECIAL PROVISIONS FOR ADDITIONAL REQUIREMENTS. POWER ACTUATED FASTENERS WILL NOT BE ALLOWED.



PVC COATED CONDUIT CLAMP

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**US ROUTE 14
LIGHTING DETAILS**

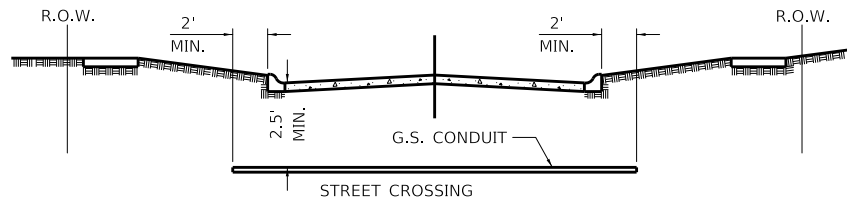
SCALE: N.T.S. SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 61J87				
ILLINOIS FED. AID PROJECT				

MODEL: 140001.DWG
FILE: 140001.dwg
DATE: 8/28/2024

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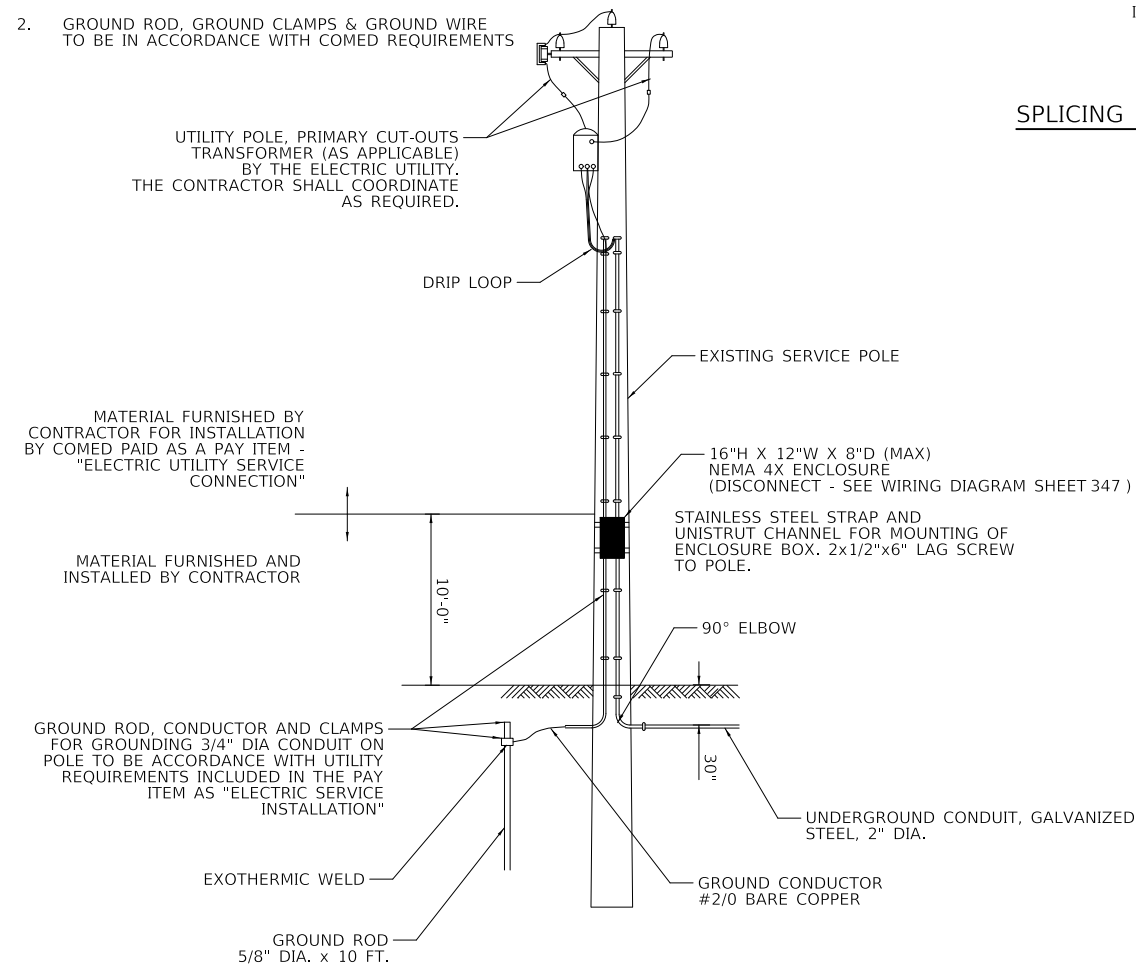
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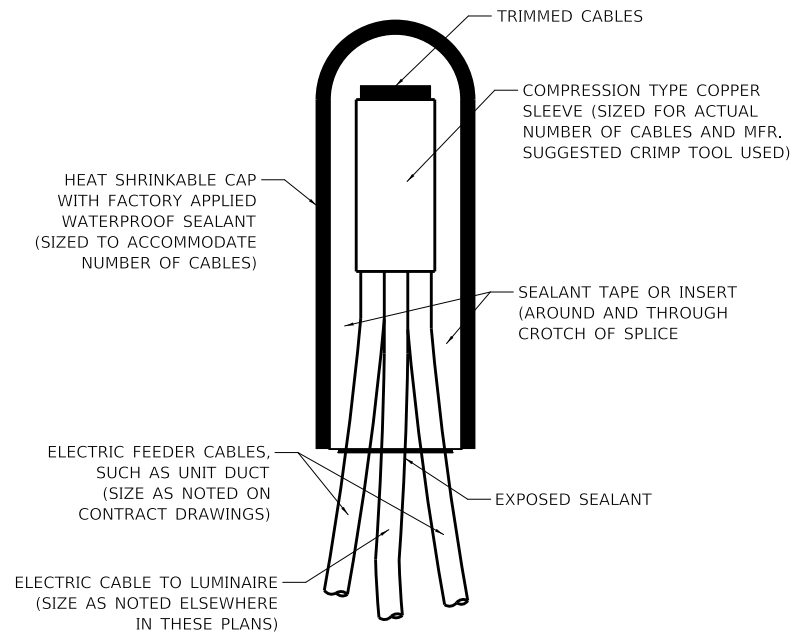
- ① CONDUIT SHALL BE HEAVY WALL RIGID G.S. CONDUIT
- ② CONDUIT SHALL EXTEND A MINIMUM OF 2 FT. BEYOND BACK OF CURB
- ③ CONDUIT SHALL BE A MINIMUM OF 2.5 FT. BELOW FINISHED GRADE

ELECTRICAL CONDUIT UNDER PAVEMENT

- NOTE:
- 1. THE COST TO FURNISH AND INSTALL CONDUIT ON SERVICE POLE TO A HEIGHT NOT TO EXCEED 10' ABOVE GROUND INCLUDING 90° ELBOW SHALL BE INCLUDED IN THE BID UNIT COST FOR ELECTRIC SERVICE INSTALLATION.
 - 2. GROUND ROD, GROUND CLAMPS & GROUND WIRE TO BE IN ACCORDANCE WITH COMED REQUIREMENTS

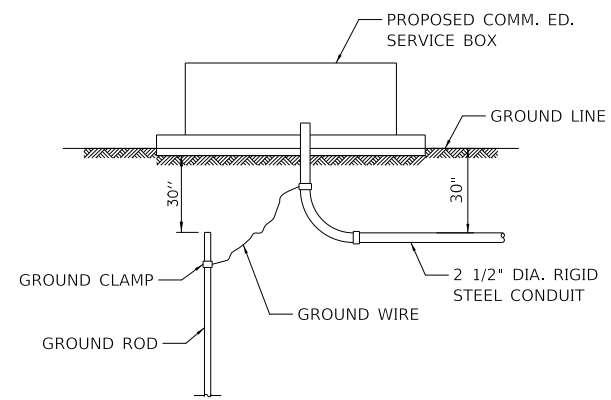


**ELECTRIC SERVICE INSTALLATION
(ON LIONS DRIVE)**



NOTE: NUMBER OF CABLES IN SPLICE MAY VARY

SPLICING ELECTRIC CABLES BASIC MATERIALS AND METHODS

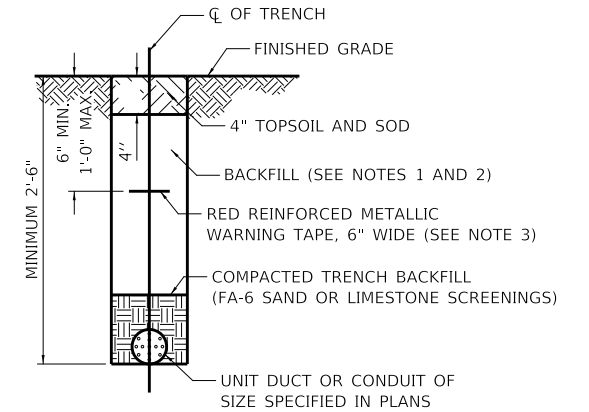


NOTE: GROUND ROD, GROUND CLAMPS & GROUND WIRE TO BE IN ACCORDANCE WITH COMM. ED. REQUIREMENTS.

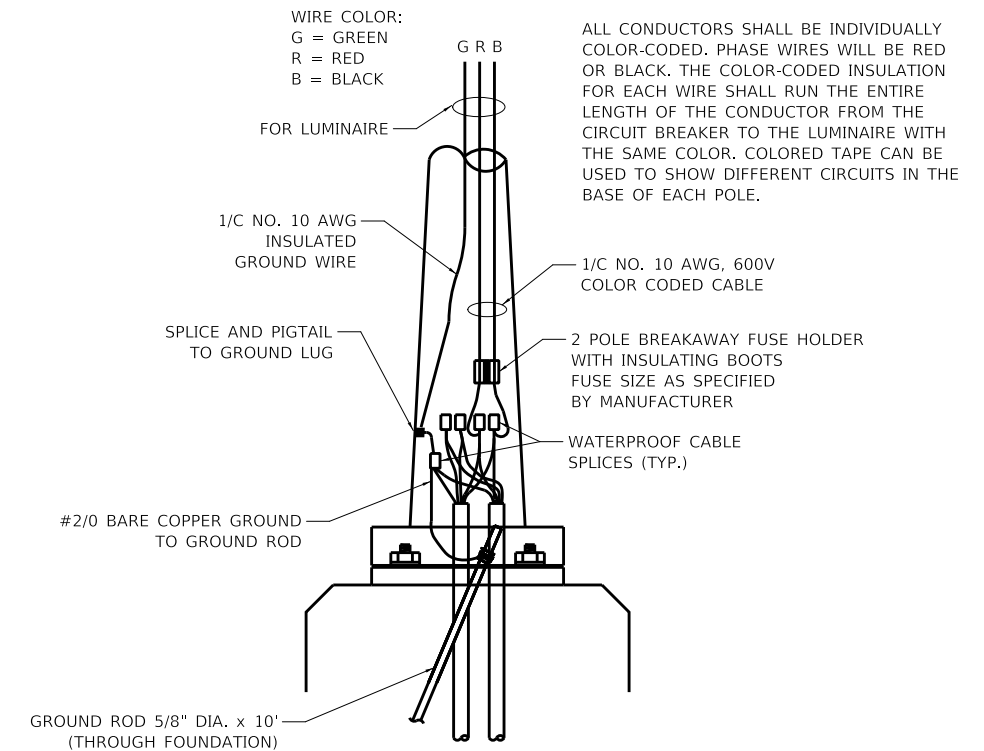
**ELECTRIC SERVICE INSTALLATION
(ON US ROUTE 14)**

NOTES:

- 1. IN GRASS COVERED AREAS, THE BACKFILL MAY BE COMPACTED EARTH.
- 2. TRENCHES WITHIN 2' OF PROPOSED OR EXISTING STREETS, DRIVEWAYS, OR SIDEWALKS WILL BE BACKFILLED WITH COMPACTED FA-6 SAND OR LIMESTONE SCREENINGS.
- 3. WARNING TAPE WILL BE RED WITH BLACK LETTERING TO READ "CAUTION - ELECTRIC LINE BURIED BELOW".
- 4. ALL GRASS COVERED AREAS DISTURBED DURING CONSTRUCTION WILL BE RESTORED WITH 4" OF TOPSOIL AND SOD.



TYPICAL TRENCH CROSS SECTION



LIGHT POLE HANDHOLE WIRING DIAGRAM

MODEL: 140001.DWG
FILE: 140001.dwg
DATE: 08/28/2024

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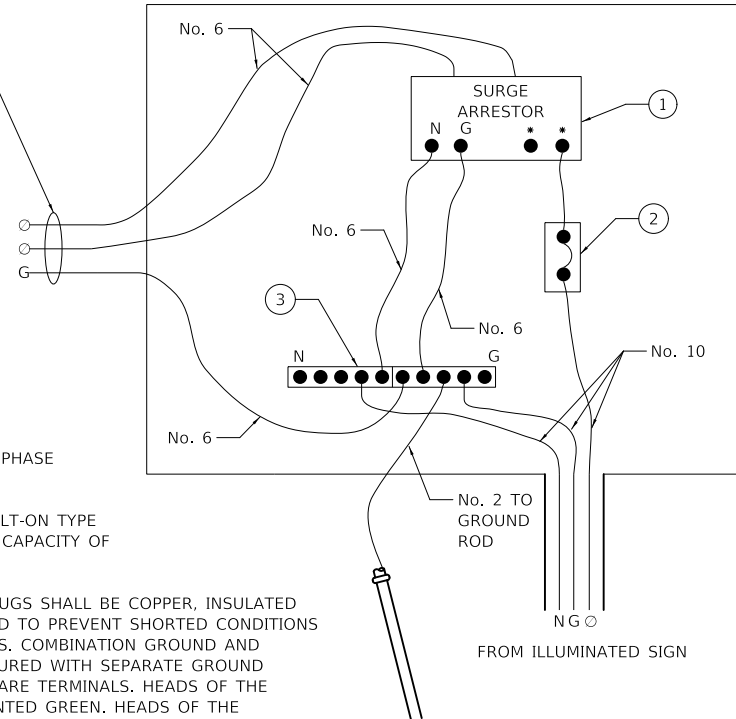
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**US ROUTE 14
LIGHTING DETAILS**

SCALE: N.T.S. SHEET 1 OF 2 SHEETS STA. TO STA.

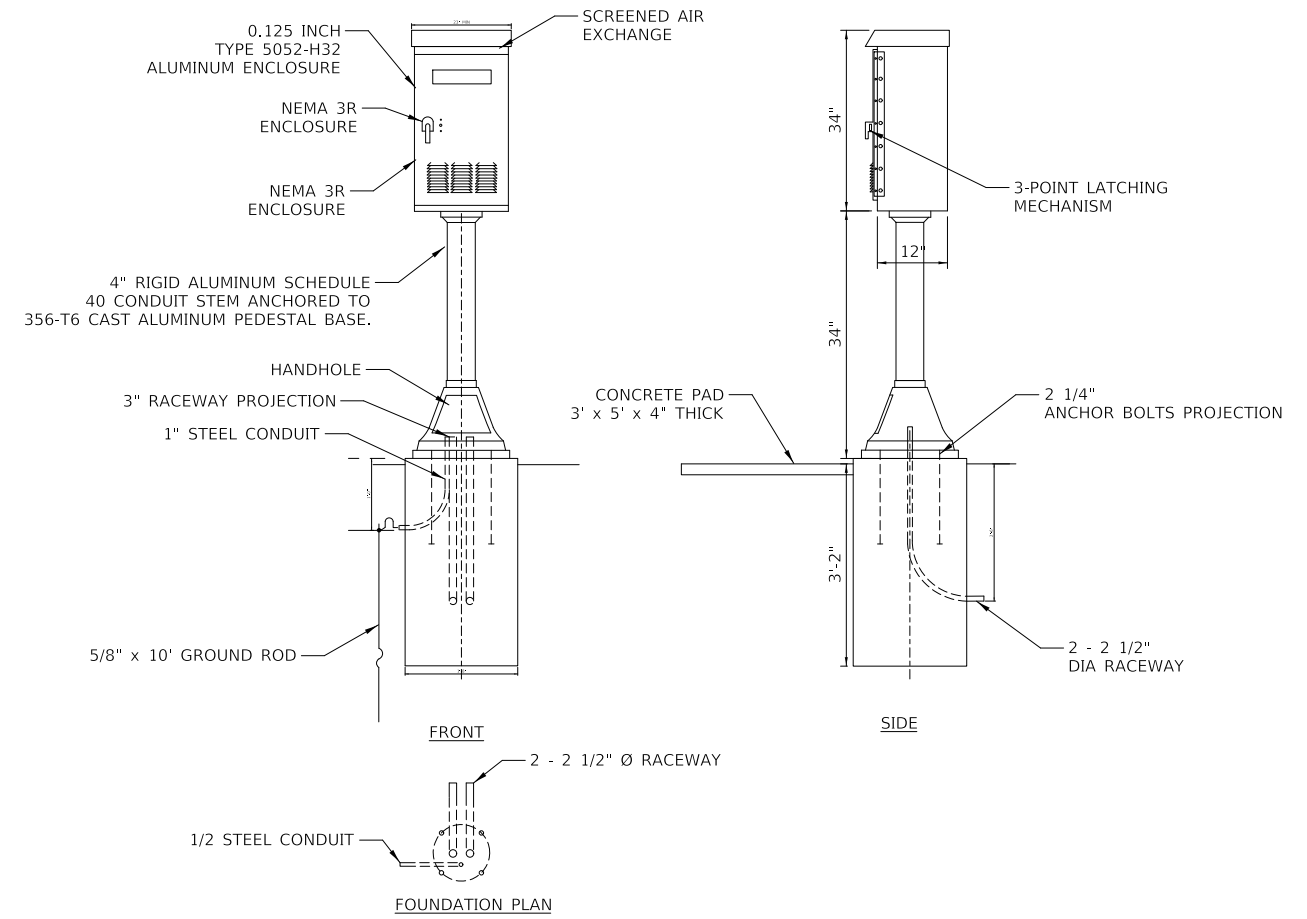
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	11-00087-00-GS	LAKE	816	346
CONTRACT NO. 61J87				
ILLINOIS FED. AID PROJECT				

UNIT DUCT, 600V, 2-1/2" NO. 6, 1/2" NO. 6 GROUND, (XLP-TYPE USE), 1 1/4" DIA. POLYETHYLENE; TO EXISTING HANDHOLE AT NE CORNER OF PARK ACCESS DRIVE AND LAKE ZURICH ROAD



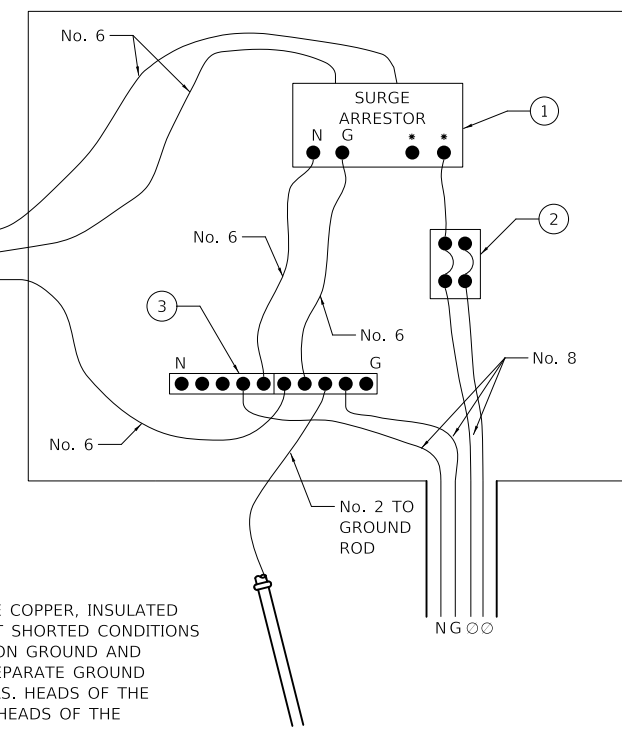
- ① SURGE ARRESTOR - SUITABLE FOR 120/240V SINGLE PHASE 60HZ ELECTRICAL SERVICE
- ② CIRCUIT BREAKER - 60 AMP. THERMAL MAGNETIC BOLT-ON TYPE WITH A MINIMUM INTERRUPTING CAPACITY OF 10,000 AMPS AT 120 VOLTS.
- ③ NEUTRAL/GROUND COPPER BAR - BUS BARS, CONNECTORS, AND LUGS SHALL BE COPPER, INSULATED AND ISOLATED, AND CONFIGURED TO PREVENT SHORTED CONDITIONS FROM TIGHTENING TERMINATIONS. COMBINATION GROUND AND NEUTRAL BAR SHALL BE CONFIGURED WITH SEPARATE GROUND AND NEUTRAL SECTION WITH SPARE TERMINALS. HEADS OF THE GROUND SCREWS SHALL BE PAINTED GREEN. HEADS OF THE NEUTRAL SCREWS SHALL BE PAINTED WHITE.

ELECTRICAL SERVICE DISCONNECT CABINET WIRING SCHEMATIC (ON LAKE ZURICH ROAD)



ELECTRIC SERVICE DISCONNECT CABINET (ON LAKE ZURICH ROAD)

120/240V, 1Ø, 3 WIRE, 60 HZ SERVICE WIRES



- ① SURGE ARRESTOR - SUITABLE FOR 120/240V SINGLE PHASE 60HZ ELECTRICAL SERVICE
- ② CIRCUIT BREAKER - 60 AMP. THERMAL MAGNETIC BOLT-ON TYPE WITH A MINIMUM INTERRUPTING CAPACITY OF 10,000 AMPS AT 240 VOLTS.
- ③ NEUTRAL/GROUND COPPER BAR - BUS BARS, CONNECTORS, AND LUGS SHALL BE COPPER, INSULATED AND ISOLATED, AND CONFIGURED TO PREVENT SHORTED CONDITIONS FROM TIGHTENING TERMINATIONS. COMBINATION GROUND AND NEUTRAL BAR SHALL BE CONFIGURED WITH SEPARATE GROUND AND NEUTRAL SECTION WITH SPARE TERMINALS. HEADS OF THE GROUND SCREWS SHALL BE PAINTED GREEN. HEADS OF THE NEUTRAL SCREWS SHALL BE PAINTED WHITE.

ELECTRICAL SERVICE INSTALLATION - DISCONNECT WIRING SCHEMATIC (ON LIONS DRIVE - NEMA ENCLOSURE ON COMED UTILITY POLE)

MODEL: 14000001.dwg
FILE: 14000001.dwg
DATE: 8/28/2024

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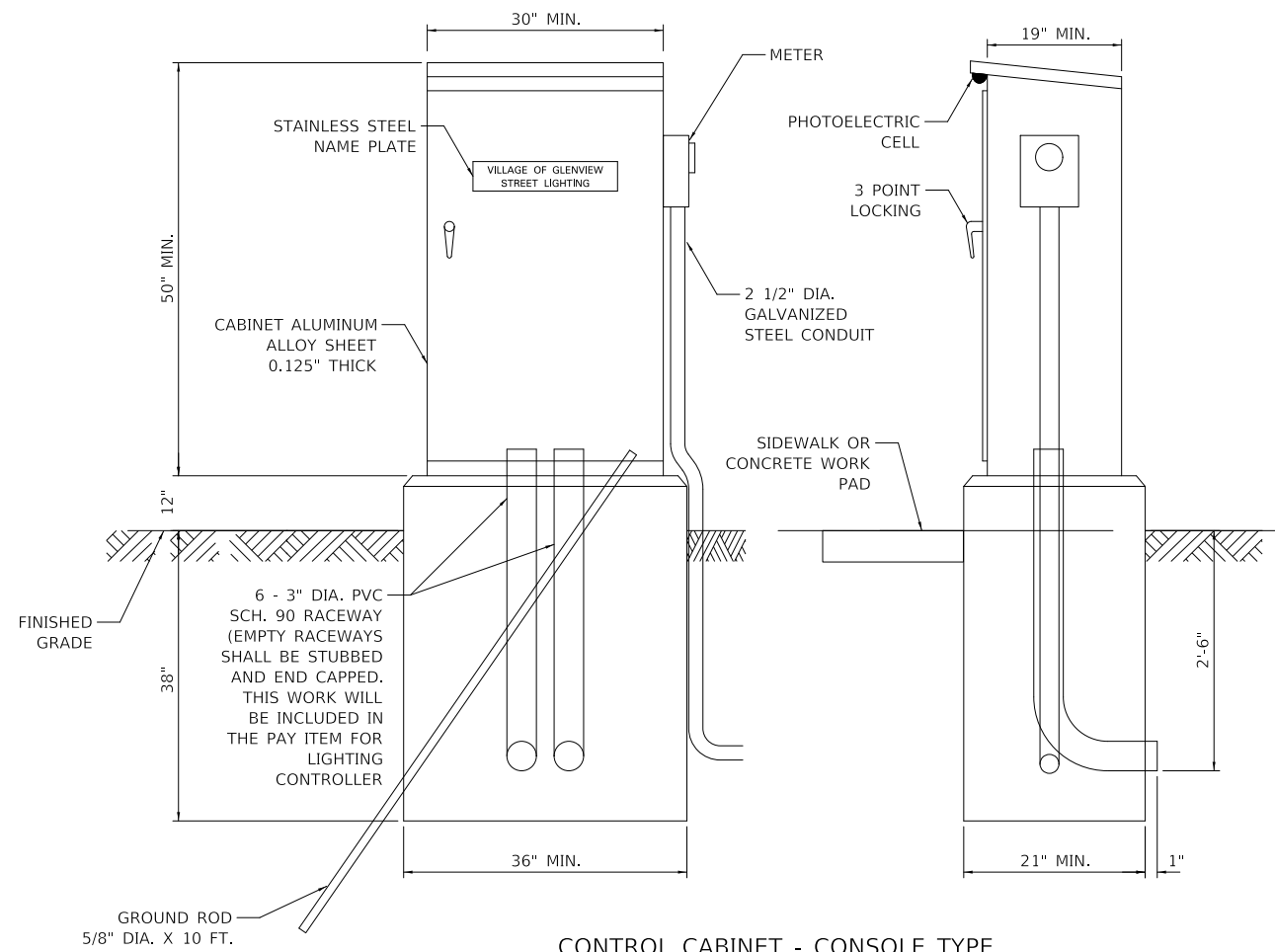
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	DATE - 08/28/2024	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**US ROUTE 14
LIGHTING DETAILS**

SCALE: N.T.S. SHEET 1 OF 2 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	11-00087-00-GS	LAKE	816	347
CONTRACT NO. 61J87				
ILLINOIS FED. AID PROJECT				



CONTROL CABINET - CONSOLE TYPE

PROPOSED LIGHTING CONTROLLER COMPONENT SCHEDULE	
ITEM	SPECIFICATION OR EQUAL
① MAIN CIRCUIT BREAKER	100 AMPERE, 2 POLE, 240 VOLT RATING INTERRUPTING CAPACITY NOT LESS THAN 25,000 RMS SYMMETRICAL AMPS AT 600V
② OUTLET CIRCUIT BREAKER	20 AMPERE, 1 POLE, 120 VOLT RATING INTERRUPTING CAPACITY NOT LESS THAN 14,000 RMS SYMMETRICAL AMPS AT 277V
③ PHOTOELECTRIC CELL CONTROL CIRCUIT BREAKER	15 AMPERE, 1 POLE, 120 VOLT RATING INTERRUPTING CAPACITY NOT LESS THAN 14,000 RMS SYMMETRICAL AMPS AT 277V
④ AUXILIARY RELAY	120 VOLT SPST 60 HZ COIL
⑤ FOUR POINT TERMINAL BLOCK	600 VOLT
⑥ LAMPHOLDER	120 VOLT SWITCHED LAMPHOLDER
⑦ REMOTE CONTROL SWITCH - CONTACTOR	100 AMPERE, 2 POLE, 240 VOLT RATING, 120V COIL SQUARE D ELECTRICALLY OPERATED, MECHANICALLY HELD LIGHTING CONTACTOR
⑧ BRANCH LINE CIRCUIT BREAKERS	30 AMP, 2 POLE, 240 VOLT RATING ALL CIRCUITS SHALL BE INTERRUPTING CAPACITY NOT LESS THAN 10,000 RMS SYMMETRICAL AMPS
⑨ PHOTOELECTRIC CELL CONTROL WIRE	3-600V XLP NO. 10
⑩ SERVICE CABLES	3-600V (XLP-TYPE USE) NO. 2
⑪ CONTROL WIRE	2-600V XLP NO. 10
⑫ HAND-AUTO-OFF CONTROL SWITCH	10 AMPERE, 3 POLE, 120 VOLT.
⑬ LIGHTING ARRESTOR	BRACKET MOUNTED SURGE ARRESTOR FOR 120/240V 3W SERVICE
⑭ PHOTOELECTRIC CELL	120 SECONDS OFF TIME DELAY, 120V
⑮ MICRO SWITCH	MOUNT WITH ACTUATOR TO SWITCH WHEN DOOR IS OPEN
⑯ OUTLET	120 VOLT SWITCHED LAMPHOLDER AND 20 AMP GFI DUPLEX RECEPTACLE. WEATHERPROOF SINGLE GANG CAST ALUMINUM BOX AND WEATHERPROOF COVER.

NOTES FOR CONTROL CABINET:

THE CABINET SHALL BE FABRICATED FROM 0.125" THICK ALUMINUM ALLOY SHEET AND SHALL BE REINFORCED WITH ALUMINUM ANGLES. THE CABINET DOOR SHALL BE NEMA TYPE 3 CONSTRUCTION WITH NEOPRENE GASKET. THE DOOR SHALL HAVE STAINLESS STEEL HINGES AND THREE POINT LOCKING SYSTEM.

CONTROL WIRING SHALL BE NO. 12 AWG., 600V, TYPE 'SIS' GRAY SWITCHBOARD WIRE, STRANDED COPPER.

THE HEADS OF CONNECTOR SCREWS SHALL BE PAINTED WHITE FOR NEUTRAL BUS CONNECTION AND GREEN FOR GROUND BUS CONNECTORS.

PROVIDE SEALING GROMMETS FOR ALL WIRING EXTENDING FROM DEVICE ENCLOSURES.

ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.

THE CONTROLLER SHALL BE CONSTRUCTED TO U.L. STD. 508 AND BEAR THE U.L. LABEL 'ENCLOSED INDUSTRIAL CONTROL PANEL'.

PROVIDE A HOLDER AND WATERPROOF POUCH ON THE INNER SIDE OF THE CONTROLLER DOOR. FURNISH THE APPROVED COPY OF 'CONTROL CABINET WIRING DIAGRAM'.

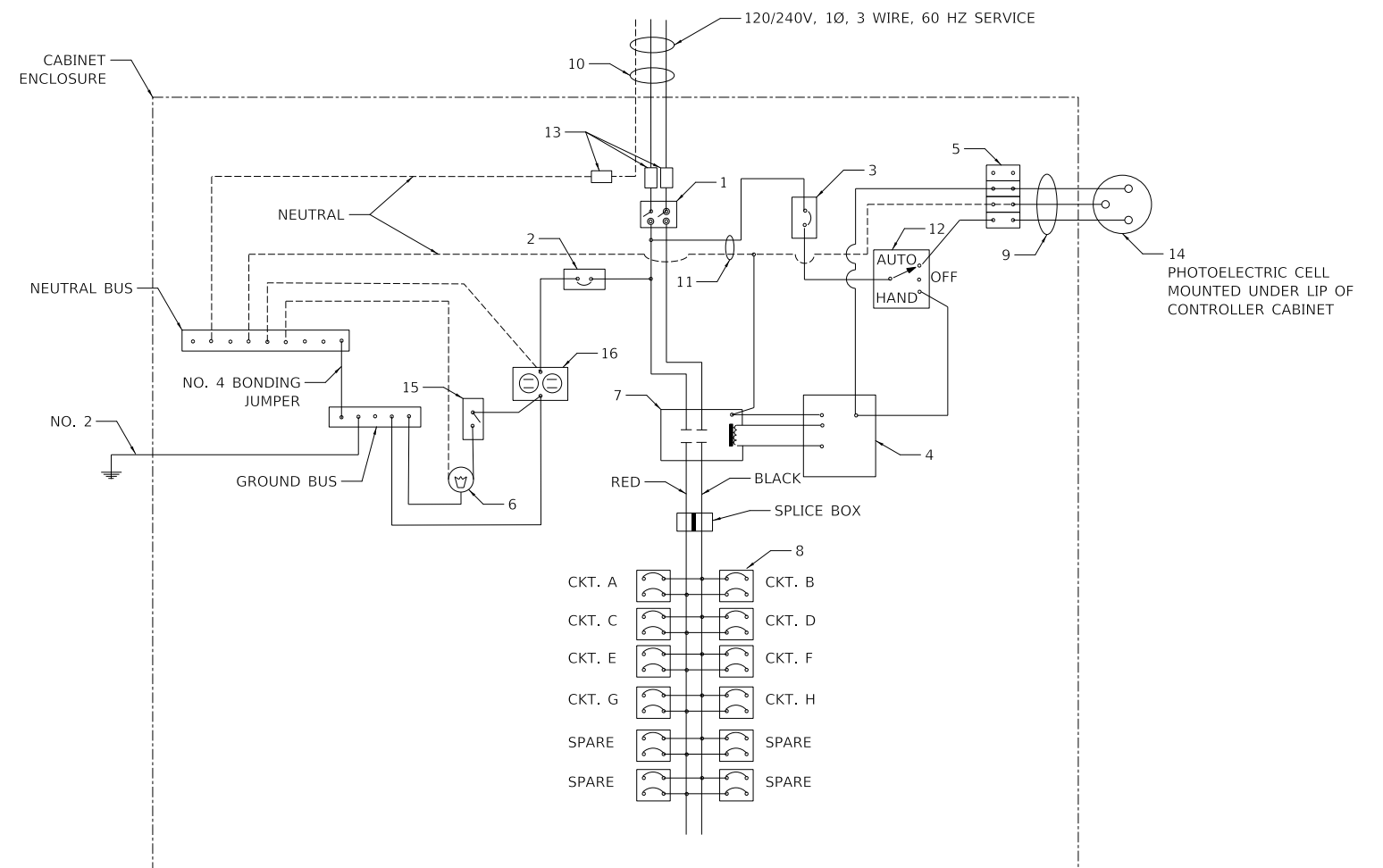
A CONCRETE PAD 36" X 60" X 4" MINIMUM SIZE SHALL BE PLACED IN FRONT OF CONTROLLER CABINET DOOR WHEN THERE IS NO SIDEWALK. THE COST OF LABOR AND MATERIALS ARE INCLUDED IN THE COST OF THE CONTROLLER.

CONTROLLER CABINET PAINTING NOTE:
THE CABINET SHALL BE PRIMED AND PAINTED AS SPECIFIED. A SAMPLE SHALL BE SUBMITTED WITH THE SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION. THE COST OF PAINTING THE CABINET SHALL BE INCLUDED IN THE COSTS OF MATERIAL AND INSTALLATION OF STREET LIGHTING CONTROLLER.

PROVIDE A RED WARNING NAMEPLATE IN THE CONTROLLER NEAR THE MAIN BREAKER INDICATING "LIVE CIRCUITS EVEN WHEN MAIN CIRCUIT BREAKER IS IN OFF POSITION".

THE PANEL MANUFACTURER SHALL LABEL THE CABINET WITH THE APPROPRIATE ARC FLASH WARNING AND PERSONNEL PROTECTION EQUIPMENT REQUIRED FOR SERVICING.

CONTROLLER CABINET DOOR SHALL BE ON THE PARKWAY SIDE OF THE CABINET, OPPOSITE THE ROADWAY.



PANEL WIRING DIAGRAM

MODEL: 110 MODEL NAME: FILE NAME: 20241013 1032-410-1013-13.dgn

CIVILTECH
Two Pierce Place, Suite 1400
Itasca, Illinois 60143
Tel: 630.773.3900
Fax: 630.773.3975
www.civiltechinc.com

USER NAME = mc	DESIGNED - SJC	REVISED -
PLOT SCALE = 40,0000 ' / in.	DRAWN - SJC	REVISED -
PLOT DATE = 8/28/2024	CHECKED - DNM	REVISED -
	DATE - 08/28/2024	REVISED -

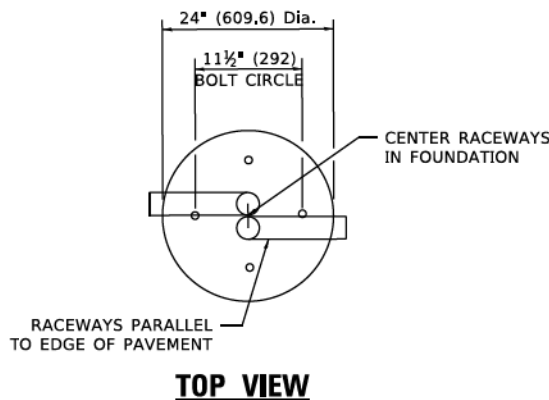
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

US ROUTE 14 LIGHTING DETAILS			
SCALE: N.T.S.	SHEET 2	OF 2 SHEETS	STA. TO STA.

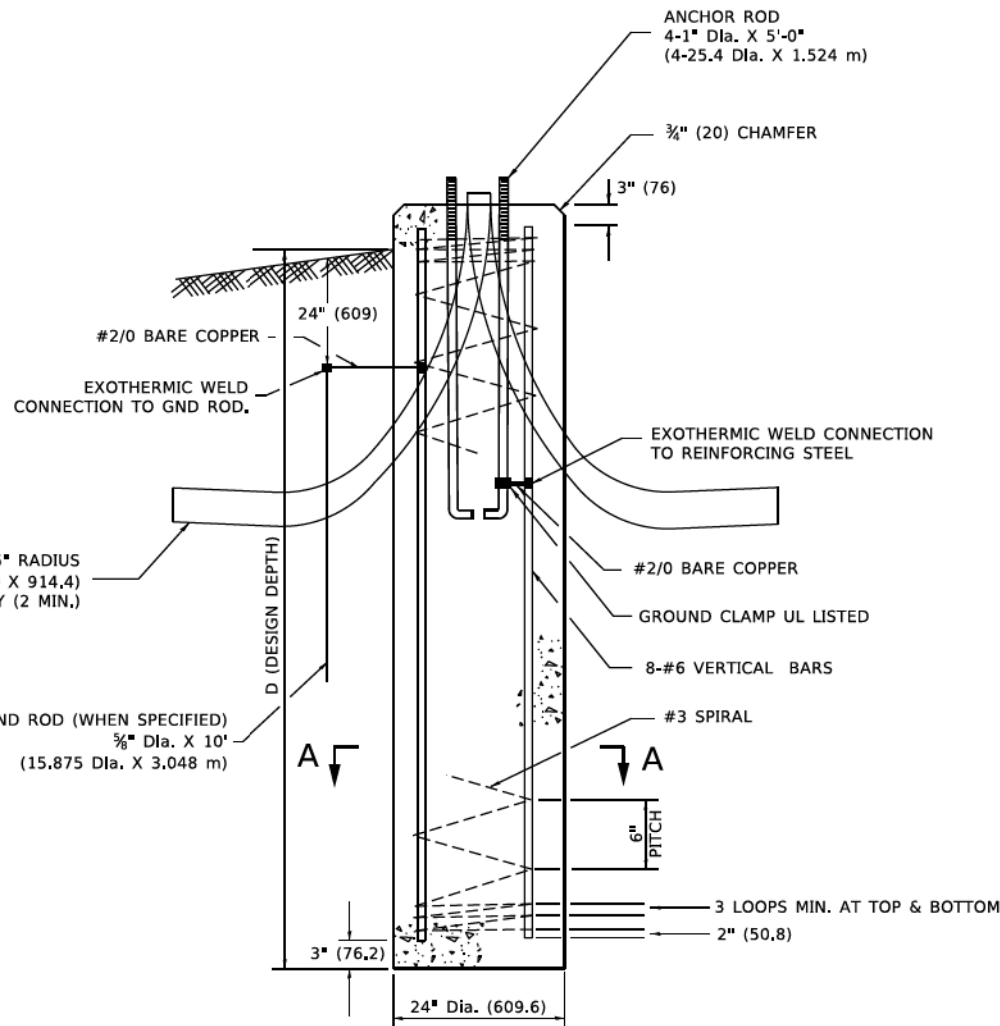
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	11-00087-00-GS	LAKE	816	348
CONTRACT NO. 61J87				
ILLINOIS FED. AID PROJECT				

LIGHT POLE FOUNDATION DEPTH TABLE
30 FT. (9.144 m) TO 35 FT. (10.668 m) MOUNTING HEIGHT

SOIL CONDITIONS	DESIGN DEPTH "D" OF FOUNDATION	
	SINGLE ARM POLE	TWIN ARM POLE
SOFT CLAY Qu = 0.375 TON/SQ. FT.	11'-0" (3.35 m)	12'-8" (3.85 m)
MEDIUM CLAY Qu = 0.75 TON/SQ.FT.	9'-0" (2.74 m)	14'-10" (4.52 m)
STIFF CLAY Qu = 1.50 TON/SQ. FT.	7'-6" (2.29 m)	8'-7" (2.61 m)
LOOSE SAND φ = 34°	9'-6" (2.90 m)	10'-7" (3.22 m)
MEDIUM SAND φ = 37.5°	9'-0" (2.74 m)	9'-10" (2.99 m)
DENSE SAND φ = 40°	8'-3" (2.51 m)	9'-7" (2.91 m)



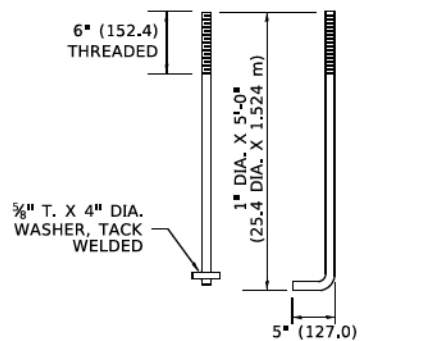
TOP VIEW



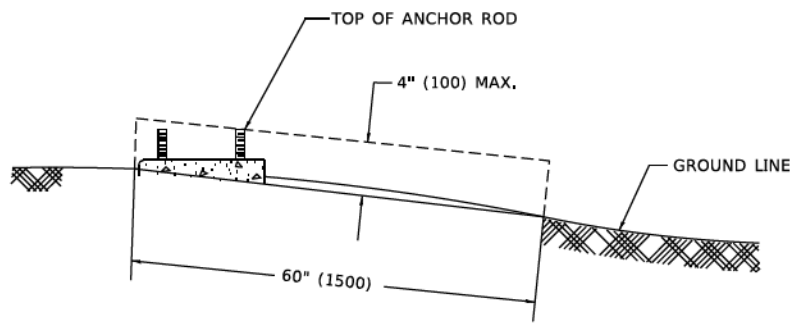
FOUNDATION DETAIL

NOTES

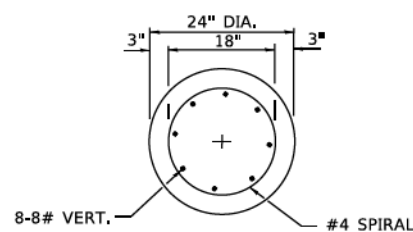
- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- THE ANCHOR RODS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED.
- THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 4 IN. (100 mm) ABOVE THE FINISHED GRADE WITHIN A 60 IN. (1.5 m) CHORD ACROSS THE FOUNDATION, WITH ANCHOR RODS INCLUDED, IN ACCORDANCE WITH AASHTO GUIDELINES. IF THE FOUNDATION HEIGHT, INCLUDING ANCHOR RODS, EXTENDS BEYOND THESE SPECIFIED LIMITS, THE FOUNDATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. SEE FOUNDATION EXTENSION DETAIL.
- THE HOLE FOR THE FOUNDATION SHALL BE MADE BY DRILLING WITH AN AUGER, OF THE SAME DIAMETER AS THE FOUNDATION. IF SOIL CONDITIONS REQUIRE THE USE OF A LINER TO FORM THE HOLE, THE LINER SHALL BE WITHDRAWN AS THE CONCRETE IS DEPOSITED.
- THE TOP OF THE FOUNDATION SHALL BE CONSTRUCTED LEVEL. A LINER OR FORM SHALL BE USED TO PRODUCE A UNIFORM SMOOTH SIDE TO THE TOP OF THE FOUNDATION. FOUNDATION TOP SHALL BE CHAMFERED 3/4-IN. (20 mm).
- THE CONCRETE SHALL BE CLASS SI. CONCRETE SHALL CURE ACCORDING TO ARTICLE 1020.13 BEFORE LIGHT POLES ARE INSTALLED.
- THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
- ANCHOR RODS, NUTS AND WASHERS SHALL BE COMPLETELY GALVANIZED BY EITHER THE HOT-DIPPED PROCESS CONFORMING WITH AASHTO M 232, THE MECHANICAL PLATING METHOD CONFORMING TO AASHTO M 298, CLASS 50 WITH A MAXIMUM COATING THICKNESS OF 150 UM(6 MILS) OR THE ELECTROLYTIC PROCESS ACCORDING TO ASTM F 1136.
- THE ANCHOR RODS SHALL BE THREADED A MINIMUM OF 6 INCHES (150 mm) WITH A MINIMUM OF 3 INCHES (75 mm) OF THREADED ANCHOR ROD EMBEDDED IN THE FOUNDATION.
- ANCHOR RODS SHALL PROJECT 23#4" (69.9 mm) ABOVE THE TOP OF THE FOUNDATION. IF BREAKAWAY COUPLINGS ARE SPECIFIED, THE CONTRACTOR SHALL CAREFULLY COORDINATE THE ANCHOR ROD PROJECTION WITH THE INSTALLATION REQUIREMENTS OF THE BREAKAWAY COUPLINGS.
- THE CONTRACTOR SHALL USE A #3 SPIRAL AT 6" (152.4 mm) PITCH OR MAY SUBSTITUTE #3 TIES AT 12" (304.8 mm) O.C. WITH THE APPROVAL OF THE ENGINEER.
- THE CABLE TRENCHES AND FOUNDATION SHALL BE BACK FILLED AND COMPACTED AS SPECIFIED BEFORE THE LIGHT POLE IS ERECTED.
- THE RACEWAYS SHALL PROJECT 1" (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.



ANCHOR BOLT DETAIL



FOUNDATION EXTENSION DETAIL



SECTION A-A

MODEL: D:\info\... FILE NAME: ...

USER NAME = footem	DESIGNED -	REVISED -
PLOT SCALE = 50,0000 ' / IN.	DRAWN -	REVISED -
PLOT DATE = 4/19/2019	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHT POLE FOUNDATION
30' (9.144 m) TO 35' (10.668 m) M.H. 11 1/2" (292 mm) BOLT CIRCLE
SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

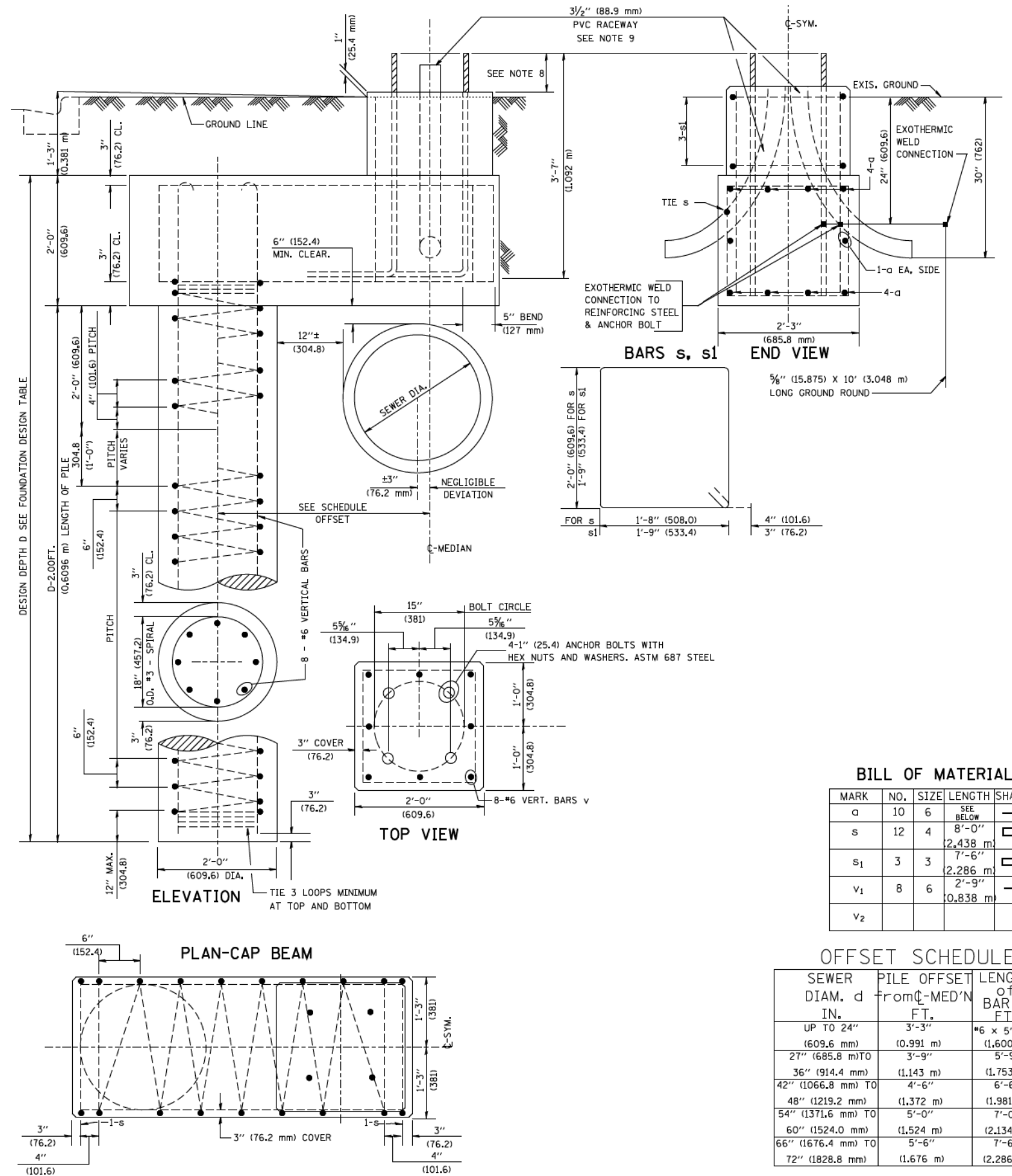
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	11-00087-00-GS	LAKE	816	349
BE-300			CONTRACT NO. 61J87	
ILLINOIS FED. AID PROJECT				

FOUNDATION DESIGN TABLE

TYPE OF SOIL	DESIGN DEPTH OF FOUNDATION		REINFORCEMENT IN FOUNDATION			
	SINGLE ARM D	TWIN ARM D	SINGLE ARM		TWIN ARM	
			VERT BARS	SPIRAL	VERT BARS	SPIRAL
SOFT CLAY	13'-0" (3.962 m)	15'-0" (4.572 m)	8-#6X12'-6" (3.810 m)	#3X122' (37.186 m)	8-#6X14'-3" (4.343 m)	#3X141' (42.977 m)
MEDIUM CLAY	9'-6" (2.896 m)	10'-9" (3.277 m)	8-#6X9'-0" (2.743 m)	#3X90' (27.432 m)	8-#6X10'-0" (3.048 m)	#3X100' (30.480 m)
STIFF CLAY	7'-0" (2.134 m)	8'-0" (2.438 m)	8-#6X6'-6" (1.981 m)	#3X66' (20.112 m)	8-#6X7'-6" (2.286 m)	#3X76' (23.165 m)
LOOSE SAND	9'-0" (2.743 m)	10'-0" (3.048 m)	8-#6X8'-6" (2.591 m)	#3X85' (25.908 m)	8-#6X9'-6" (2.896 m)	#3X94' (28.651 m)
MEDIUM SAND	8'-3" (2.515 m)	9'-0" (2.743 m)	8-#6X8'-0" (2.438 m)	#3X78' (23.774 m)	8-#6X8'-6" (2.591 m)	#3X85' (25.908 m)
DENSE SAND	7'-9" (2.362 m)	9'-0" (2.743 m)	8-#6X7'-6" (2.286 m)	#3X73' (22.250 m)	8-#6X8'-6" (2.591 m)	#3X85' (25.908 m)
ROCK OR SOLIDIFIED SLAG	5'-0" (1.524 m)	5'-0" (1.524 m)	NONE	NONE	NONE	NONE

NOTES

- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- THE ENGINEER SHALL DETERMINE THE CLASS OF SOIL DURING EXCAVATION AND SELECT THE DESIGN DEPTH OF FOUNDATION FROM THE DESIGN TABLE.
- EXCAVATION OF THE POLE FOUNDATION SHALL BE MADE WITH AN AUGER, 24" (609.6 mm) OR 30" (762.0 mm) IN DIAMETER.
- THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
- THE ANCHOR BOLTS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED IN THE FORM.
- THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105). NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
- THE CONTRACTOR SHALL COORDINATE EXTENSION OF ANCHOR BOLTS ABOVE TOP OF FOUNDATION WITH THE BREAKAWAY DEVICE MANUFACTURER'S REQUIREMENTS. IF LIGHT POLE IS MOUNTED WITHOUT BREAKAWAY DEVICE, ANCHOR BOLTS SHALL PROJECT 2 3/4" (69.9 mm) ABOVE TOP OF THE FOUNDATION. THE CONTRACTOR SHALL CONFIRM ANCHOR BOLT EXTENTION WITH ENGINEER.
- RACEWAYS SHALL PROJECT 1" (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.
- THE CABLE TRENCH SHALL BE BACKFILLED AND FIRMLY COMPACTED BEFORE THE LIGHT IS ERRECTED.



BILL OF MATERIAL

MARK	NO.	SIZE	LENGTH	SHAPE
a	10	6	SEE BELOW	—
s	12	4	8'-0" (2.438 m)	□
s ₁	3	3	7'-6" (2.286 m)	□
v ₁	8	6	2'-9" (0.838 m)	—
v ₂				

OFFSET SCHEDULE

SEWER DIAM. d IN.	PILE OFFSET FROM C-MED'N FT.	LENGTH of BAR a FT.
UP TO 24" (609.6 mm)	3'-3" (0.991 m)	#6 x 5'-3" (1.600 m)
27" (685.8 mm) TO	3'-9" (1.143 m)	5'-9" (1.753 m)
36" (914.4 mm)	(1.143 m)	(1.753 m)
42" (1066.8 mm) TO	4'-6" (1.372 m)	6'-6" (1.981 m)
48" (1219.2 mm)	(1.372 m)	(1.981 m)
54" (1371.6 mm) TO	5'-0" (1.524 m)	7'-0" (2.134 m)
60" (1524.0 mm) TO	(1.524 m)	(2.134 m)
66" (1676.4 mm) TO	5'-6" (1.676 m)	7'-6" (2.286 m)
72" (1828.8 mm)	(1.676 m)	(2.286 m)

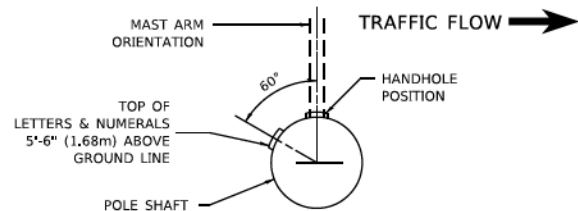
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		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

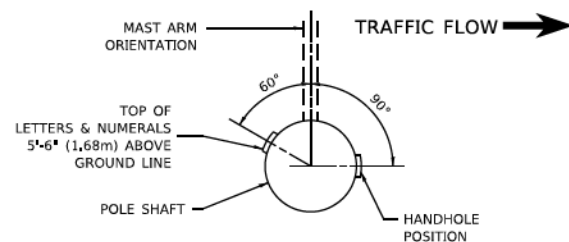
LIGHT POLE FOUNDATION OFFSET
40" (12.192 m) TO 47 1/2" (14.478 m) M.H.
15" (381 mm) BOLT CIRCLE

SCALE: SHEET NO. 1 OF 1 SHEETS STA. TO STA.

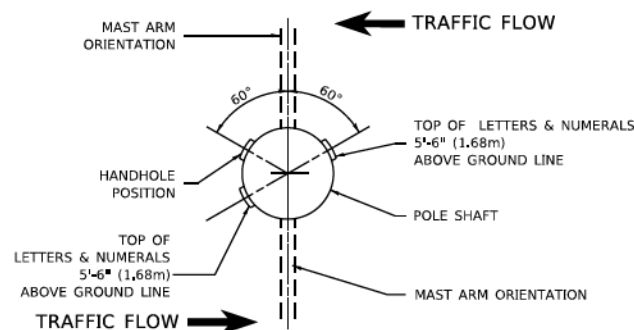
F.A.P. RTE. 305	SECTION 11-00087-00-GS	COUNTY LAKE	TOTAL SHEETS 816	SHEET NO. 350
BE-310		CONTRACT NO. 61J87		
ILLINOIS FED. AID PROJECT				



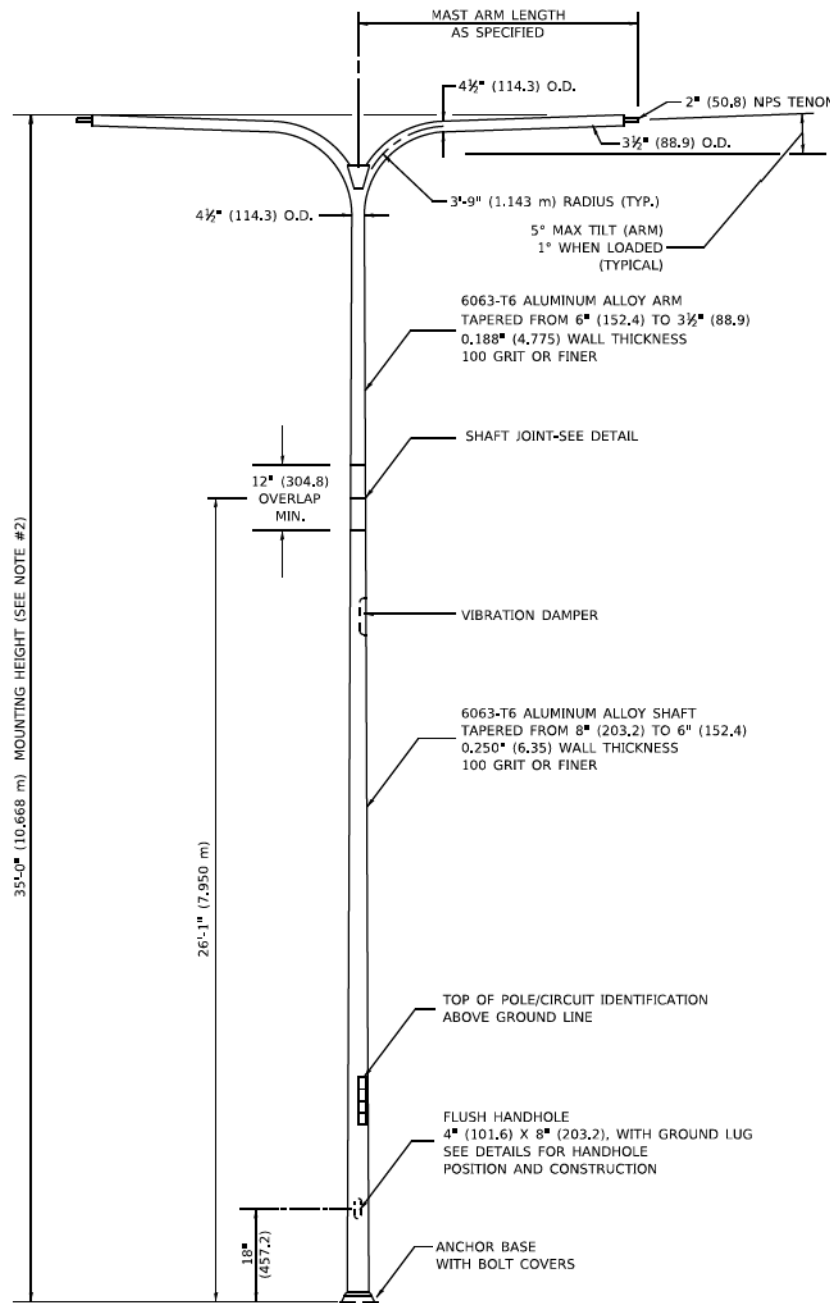
POSITION OF HANDHOLE AND POLE NUMBER FOR SINGLE MAST ARM POLES MOUNTED ON BRIDGE PARAPET OR BARRIER WALL



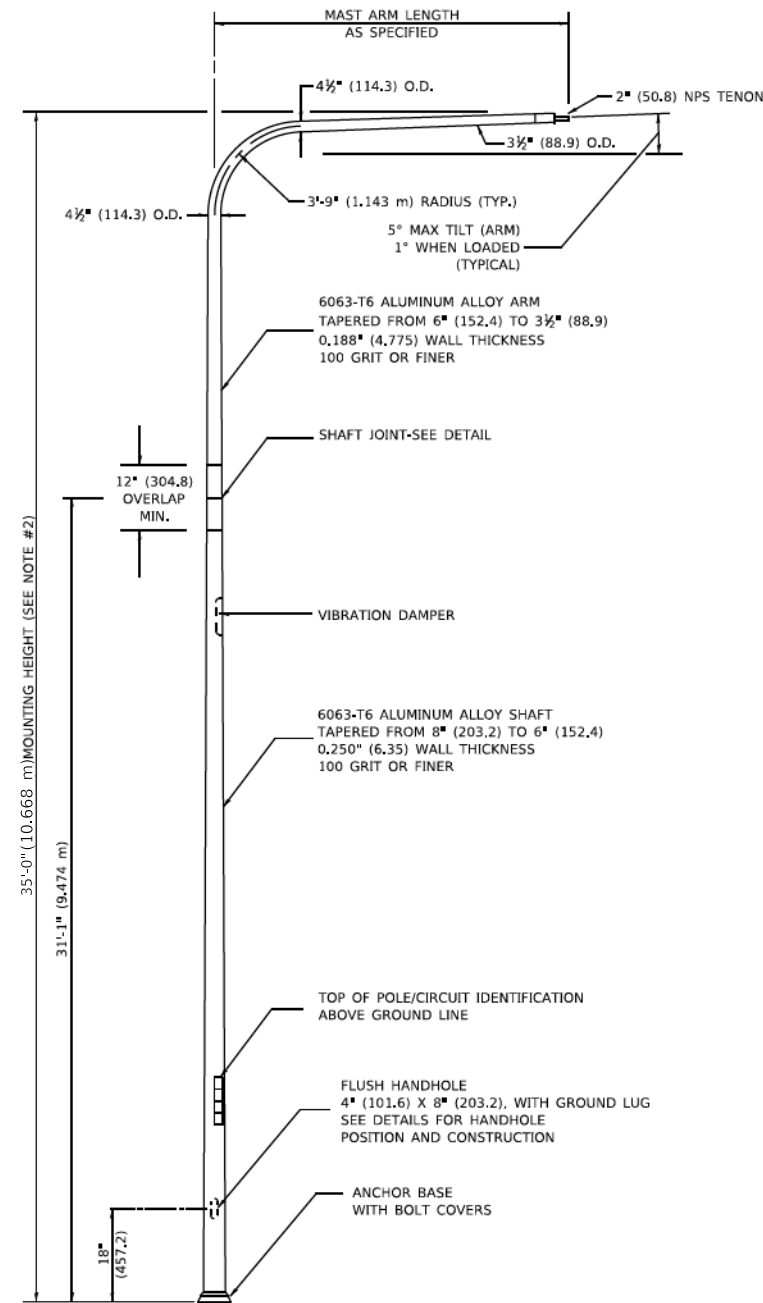
POSITION OF HANDHOLE AND POLE NUMBER FOR SINGLE MAST ARM POLES



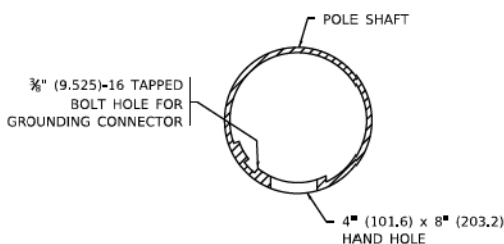
POSITION OF HANDHOLE AND POLE NUMBER FOR TWIN MAST ARM POLES



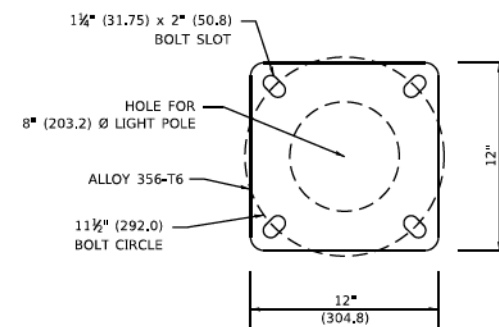
TWIN ARM POLE



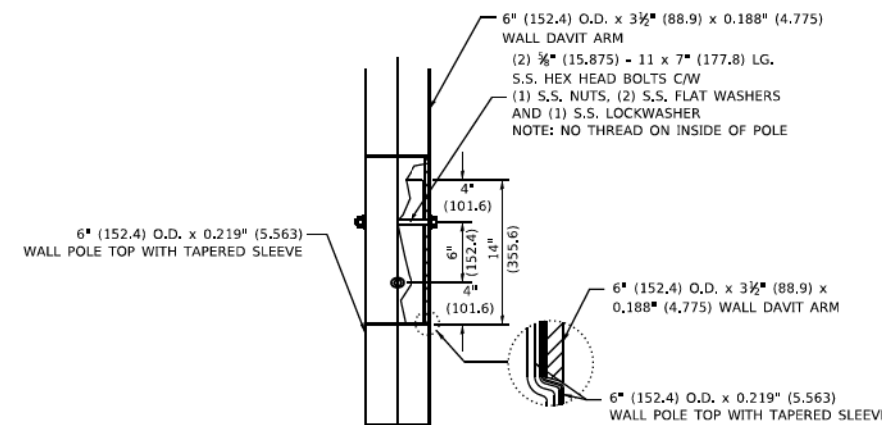
SINGLE ARM POLE



HANDHOLE DETAIL (N.T.S.)



LIGHT POLE BASE PLATE DETAIL



DAVIT ARM CONNECTION (14" (355.6) OVERLAP SHOWN)

NOTES

- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- MOUNTING HEIGHT IS DEFINED AS THE DISTANCE FROM THE CENTERLINE OF THE TENON TO THE BOTTOM OF THE ANCHOR BASE.
- TWO PIECE SHAFT WILL BE MATCHED MARKED AND INTERCHANGEABLE BETWEEN DIFFERENT UNITS. FIELD DRILLING OF THE HOLES WILL NOT BE ALLOWED.
- THE LIGHT POLE WILL MEET AASHTO DESIGN CRITERIA AS SPECIFIED.
- THE INSTALLING CONTRACTOR WILL PROVIDE A UL LISTED GROUNDING CONNECTOR, BURNDY K2C23, T&B SP4DL OR APPROVED EQUAL.
- LIGHT POLES WILL NOT BE INSTALLED WITHOUT MAST ARMS AND LUMINAIRES.
- LIGHT POLES WILL BE SET PLUMB ON THE FOUNDATION WITHOUT THE USE OF LEVELING NUTS, WASHERS OR SHIMS.
- LIGHTING UNIT IDENTIFICATION NUMBERS SHALL BE INSTALLED BEFORE THE LIGHTING UNIT IS ENERGIZED.

MODEL: D:\d4\it...
FILE: I:\MANUALS...
DATE: 6/27/2022

USER NAME - Lawrence,DeManche	DESIGNED -	REVISED - R. TOMSONS 09-06-00
PLOT SCALE = 100,0000 * / IN.	DRAWN - RL	REVISED - R. TOMSONS 09-02-03
PLOT DATE = 6/27/2022	CHECKED -	REVISED - R. TOMSONS 01-18-13
	DATE -	REVISED - 06/13/2022 TG

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DAVIT LIGHT POLE			
35'-0" (10.668 m) MOUNTING HEIGHT			
SCALE: NONE	SHEET 1	OF 1 SHEETS	STA. TO STA.

F.A.P. RTE. 305	SECTION 11-00087-00-GS	COUNTY LAKE	TOTAL SHEETS 816	SHEET NO. 351
BE-412			CONTRACT NO. 61187	
ILLINOIS FED. AID PROJECT				

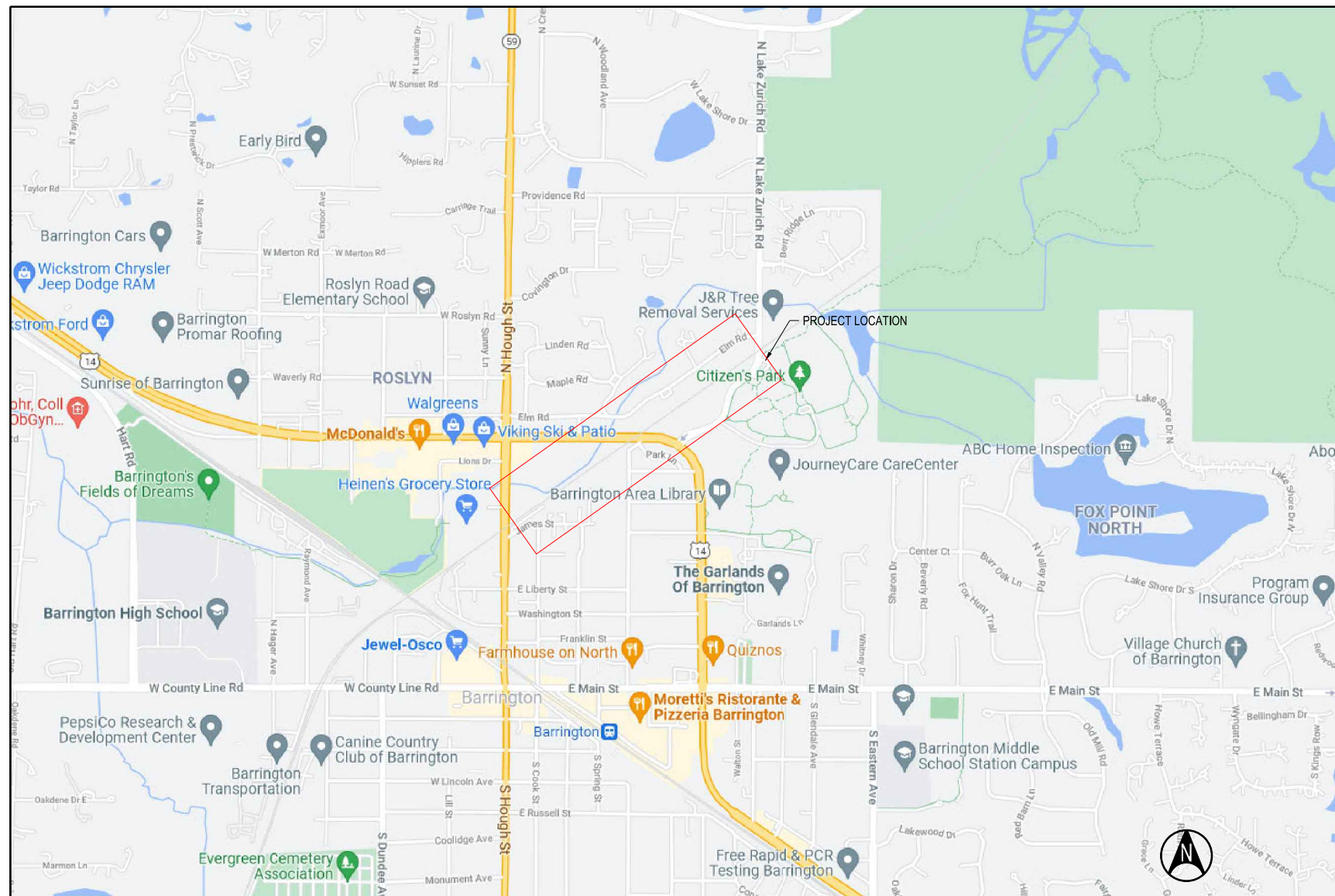


Eastern Region

BARRINGTON, ILLINOIS

US ROUTE 14 GRADE SEPARATION

LOCATION MAP



SITE DATA

PROPERTY OWNERS: WISCONSIN CENTRAL, LTD. (WCL)
 FACILITY OWNER / OPERATOR: WCL
 PROJECT OWNER: VILLAGE OF BARRINGTON
 PLANS DEVELOPED BY: TRANSYSTEMS CORPORATION
 CONTACT: TYLER GASKELL
 1475 EAST WOODFIELD ROAD, SUITE 600
 SCHAUMBURG, IL 60173
 PHONE: (847) 605-9600
 REFERENCE DATUM: HORIZONTAL: NAD 83 (GIS GRADE)
 ILLINOIS STATE PLANE COORDINATES
 VERTICAL: NAVD 1988

CALL BEFORE YOU DIG!

JULIE
 1-800-892-0123
 IN ILLINOIS, CALL 811

US ROUTE 14 GRADE SEPARATION

LAKE ZURICH ROAD TO IL-59

BARRINGTON, ILLINOIS
 OPERATING COMPANY: WCL

CENTRAL DIVISION
 LEITHTON SUB



1475 E. WOODFIELD RD., SUITE 600
 SCHAUMBURG, IL 60173
 (847) 605-9600

US ROUTE 14
 STA. 1205+00
 TO STA. 1235+00

F.A.U. RTE: 0305

SECTION: 11-00087-00-GS

COUNTY: LAKE

CONTRACT: 61J87



Eastern Region

DESIGN	DRAWN	CHECKED	APPRVD.
TEG	TEG	TEG	TEG

CADD FILE NAME:

0001-g-001.dgn

SHEET TITLE:

COVER SHEET

DRAWING No.

G-001

DATE: 08/28/2024

SHEET: 353 OF 816

No.	ISSUE FOR:	DATE
7.		
6.		
5.		
4.		
3.		
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1.		

LEGEND

RAILROAD SYMBOLGY	
	EX TRACK
	EX TRACK TO BE SHIFTED
	EX TRACK TO BE REMOVED
	PR TRACK
	SHIFTED TRACK
	SURFACED TRACK

ABBREVIATIONS

CB	CATCH BASIN
COMM	COMMUNICATIONS
Dc	DEGREE OF CURVE
DEMO	DEMOLITION
EL; ELEV	ELEVATION
EX; EXIST	EXISTING
FO	FIBER OPTIC
HH	HANDHOLE
HAB	HOT AIR BLOWER
HL	HUMP LEAD
HML	HIGH MAST LIGHT
HT	HAND THROWN
HY	HUMP YARD
IL	ILLINOIS
L	LENGTH
LH	LEFT HAND
LLT	LAST LONG TIE
MH	MANHOLE
N	NORTH
No.	NUMBER
PC	POINT OF CURVE
PI	POINT OF INTERSECTION
PL	POCKET LEAD
PO	POWER OPERATED
PR; PROP	PROPOSED
PS	POINT OF SWITCH
PT	POINT OF TANGENT
PVI	VERTICAL POINT OF INTERSECTION
r	RATE OF CHANGE
R	RADIUS
RH	RIGHT HAND
RIP	REPAIR IN PLACE
ROW	RIGHT OF WAY
SPR	SHIFT PREVIOUSLY REMOVED
SSP	SMOOTH STEEL PIPE
STA	STATION
TEMP	TEMPORARY
T/	TOP OF
T/R	TOP OF RAIL
T/RAIL	TOP OF RAIL
TO	TURNOUT
TYP	TYPICAL
VPC	VERTICAL POINT OF CURVE
VPT	VERTICAL POINT OF TANGENT
WCL	WISCONSIN CENTRAL, LTD.
XO	CROSSOVER

SHEET NUMBER	DRAWING TITLE	DRAWING NUMBER
	GENERAL	
1	COVER SHEET	G-001
2	LEGEND AND INDEX	G-002
3	GENERAL NOTES	G-003
4	KEY PLAN - PROPOSED TRACK	G-004
5	TRACK SCHEDULE	G-005
6	SCHEDULE OF QUANTITIES	G-006
7	TYPICAL SECTIONS - TEMP ALIGNMENT	G-301
8	TYPICAL SECTIONS - FINAL ALIGNMENT	G-302
	STAGING	
9	SUGGESTED STAGING SCHEMATIC - OVERVIEW	ST-001
	TEMP ALIGNMENT TRACKWORK	
10	TEMP WCL MAINLINE TRACK PLAN & PROFILE - AREA 1	CT-101
11	TEMP WCL MAINLINE TRACK PLAN & PROFILE - AREA 2	CT-102
12	TEMP WCL MAINLINE TRACK PLAN & PROFILE - AREA 3	CT-103
	FINAL ALIGNMENT TRACKWORK	
13	FINAL WCL MAINLINE TRACK PLAN & PROFILE - AREA 1	CT-111
14	FINAL WCL MAINLINE TRACK PLAN & PROFILE - AREA 2	CT-112
15	FINAL WCL MAINLINE TRACK PLAN & PROFILE - AREA 3	CT-113
	TRACK DETAILS	
16	TRACK CURVE DATA	CT-401
17	TEMPORARY GRADE CROSSING DETAILS	CT-402
18	BALLAST SPECIFICATION	CT-403
19	BALLAST SPECIFICATION	CT-404
	CULVERT DETAILS	
20	CULVERT DETAILS (1 OF 2)	S-101
21	CULVERT DETAILS (2 OF 2)	S-102
	TEMP ALIGNMENT CROSS SECTIONS	
22	CROSS SECTIONS - SECTION CUT LINES	CT-700
23	EARTHWORK SUMMARY	CT-800
24	TEMP ALIGNMENT CROSS SECTIONS - 1 OF 5	CT-801
25	TEMP ALIGNMENT CROSS SECTIONS - 2 OF 5	CT-802
26	TEMP ALIGNMENT CROSS SECTIONS - 3 OF 5	CT-803
27	TEMP ALIGNMENT CROSS SECTIONS - 4 OF 5	CT-804
28	TEMP ALIGNMENT CROSS SECTIONS - 5 OF 5	CT-805
	FINAL ALIGNMENT CROSS SECTIONS	
29	EARTHWORK SUMMARY	CT-900
30	FINAL ALIGNMENT CROSS SECTIONS - 1 OF 5	CT-901
31	FINAL ALIGNMENT CROSS SECTIONS - 2 OF 5	CT-902
32	FINAL ALIGNMENT CROSS SECTIONS - 3 OF 5	CT-903
33	FINAL ALIGNMENT CROSS SECTIONS - 4 OF 5	CT-904
34	FINAL ALIGNMENT CROSS SECTIONS - 5 OF 5	CT-905

US ROUTE 14 GRADE SEPARATION

LAKE ZURICH ROAD TO IL-59

BARRINGTON, ILLINOIS
OPERATING COMPANY: WCL

CENTRAL DIVISION
LEIGHTON SUB

TRANSYSTEMS

1475 E. WOODFIELD RD., SUITE 600
SCHAUMBURG, IL 60173
(847) 605-9600

US ROUTE 14
STA. 1205+00
TO STA. 1235+00

F.A.U. RTE: 0305

SECTION: 11-00087-00-GS

COUNTY: LAKE

CONTRACT: 61J87



Eastern Region

DESIGN	DRAWN	CHECKED	APPRVD.
TEG	TEG	TEG	TEG

CADD FILE NAME:

0001-g-002.dgn

SHEET TITLE:

LEGEND & INDEX

DRAWING No.

G-002

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GENERAL NOTES

1. "RAILROAD" MAY BE USED IN PLACE OF "WCL". FOR EXAMPLE, "RAILROAD SIGNALS" SHALL APPLY TO WCL SIGNALS.
2. CONTRACTOR SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL SAFETY CODES AND REGULATIONS AND THE SPECIFICATIONS FOR THIS CONTRACT.
3. ALL CONSTRUCTION ACTIVITIES SHALL BE SCHEDULED AND COORDINATED THROUGH THE ENGINEER, INCLUDING THE VARIOUS COMPANIES, AGENCIES, AND OTHER CONTRACTORS WHO MAY BE AFFECTED BY THIS WORK. ALL REQUIRED PERMITS INCLUDING RAILROAD RIGHT-OF-ENTRY PERMITS NEEDED FOR THE WORK SHALL BE OBTAINED BY THE CONTRACTOR UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL COMPLY WITH ALL RAILROAD OCCUPANCY REQUIREMENTS INCLUDING INSURANCE REQUIREMENTS.
4. HORIZONTAL AND VERTICAL CONTROL POINTS ARE IDENTIFIED IN THE CONTRACT DOCUMENTS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO UTILIZE THESE CONTROL POINTS TO ENSURE THAT ALL FACILITIES INCLUDED IN THIS PROJECT ARE CONSTRUCTED AT THE CORRECT VERTICAL AND HORIZONTAL LOCATIONS.
5. WCL WILL CONSTRUCT ALL WCL TRACKWORK AND SIGNAL WORK. ALL WCL TRACK CONSTRUCTION WILL BE PERFORMED BY WCL, AND WILL INCLUDE ALL WORK ABOVE THE TOP OF THE SUBBALLAST. THE CONTRACTOR IS RESPONSIBLE FOR ALL GRADING WORK BELOW THE TOP OF SUBBALLAST. GRADING WORK CONSISTS OF SUBGRADE PREPARATION AND PLACEMENT OF SUBBALLAST TO GRADES INDICATED ON THE PLANS.
6. POSITIVE DRAINAGE MUST BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION TO PREVENT PONDING OF WATER.
7. CONTRACTOR SHALL SUBMIT A CONSTRUCTION PHASING PLAN TO THE ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION. ANY MODIFICATIONS TO THIS PHASING PLAN SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
8. LIMITS OF GRADING AS SHOWN ON THE PLANS ARE APPROXIMATE.
9. THE CONTRACTOR SHALL BECOME FAMILIAR WITH LEGISLATION OUTLINING PROCEDURES FOR LOCATING UTILITIES BY HAND EXCAVATION AND COMPLY WITH ITS DIRECTIVE.
10. THE CONTRACTOR SHALL PROTECT ALL RAILROAD SIGNAL FACILITIES IN PLACE.
11. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS FOR CONFLICTS WITH EXISTING UTILITIES, SIGNAL CABLES / EQUIPMENT, AND/OR OTHER ITEMS THAT MIGHT IMPAIR CONSTRUCTION ACTIVITIES. INCONSISTENCIES FOUND SHALL BE REPORTED TO THE ENGINEER.
12. REPAIRS TO FACILITIES INTENDED TO REMAIN IN PLACE SHALL BE MADE BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE UNLESS OTHERWISE STATED BY THE ENGINEER.
13. FINAL PLACEMENT OF EXCAVATED EXCESS MATERIAL TO BE DETERMINED BY THE ENGINEER.
14. ON-SITE CONSTRUCTION BY OTHERS, INCLUDING ROUTINE MAINTENANCE WORK, (RAILROAD FORCES, FIBER OPTIC, UTILITIES, ETC.) MAY OCCUR DURING THE CONSTRUCTION PERIOD OF THIS CONTRACT. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES THROUGH THE ENGINEER SO AS TO MINIMIZE INTERFERENCE WITH OTHERS.
15. PRIOR TO COMMENCING WORK, ALL EXISTING SITE CONDITIONS SHALL BE FIELD VERIFIED WITH THE ENGINEER TO ASCERTAIN THE LIMITS OF WORK ACTIVITIES. THE CONTRACTOR SHALL SUBMIT AND RECEIVE THE ENGINEER'S APPROVAL OF THE CONTRACTOR'S PROJECT SCHEDULE AND OPERATIONS PLAN. THE CONTRACTOR SHALL REFER TO THE SPECIFICATIONS FOR FURTHER INFORMATION REGARDING SUBMITTAL REQUIREMENTS.
16. RAIL TRAFFIC DISRUPTIONS SHALL BE KEPT TO A MINIMUM. DISRUPTIONS IN RAIL TRAFFIC THAT MAY BE REQUIRED SHALL BE COORDINATED WITH THE ENGINEER BEFOREHAND. NO SUCH WORK SHALL BE COMMENCED WITHOUT THE ENGINEER'S APPROVAL. WORK AFFECTING THE MOVEMENT OF TRAINS WILL BE UNDER THE AUTHORITY AND OVERALL CONTROL OF THE ENGINEER OR HIS REPRESENTATIVE.
17. THE CONTRACTOR SHALL NOT PLACE MATERIAL AND/OR EQUIPMENT WITHIN 25 FEET OF AN ACTIVE TRACK AT ANY TIME WITHOUT PRIOR APPROVAL OF THE ENGINEER.
18. ALL WORK SHALL BE COORDINATED WITH RAILROAD'S SIGNAL ENGINEER & SIGNAL FORCES THRU THE ENGINEER. WORK WILL BE PHASED TO MAINTAIN THE CONTINUED OPERATION OF EXISTING SIGNAL SYSTEM DURING CONSTRUCTION. IN NO INSTANCE MAY WORK PROCEED IN ANY AREA WITHOUT ADVANCE APPROVAL OF RAILROAD'S SIGNAL ENGINEER. RAILROAD SHALL LOCATE ALL SIGNAL AND COMMUNICATION CONDUITS, CABLES, WIRES, OR OTHER TRACK, TRACK BED, AND RIGHT-OF-WAY.
19. DEFINITIONS:
 A. TRACK OUTAGE: TRACK WHICH IS OUT OF SERVICE FOR A GIVEN PERIOD OF TIME.
 B. ACTIVE TRACK: TRACK ON WHICH TRAINS ARE OPERATING AND INTERRUPTION OF SERVICE MAY OCCUR ONLY WITHIN AN APPROVED "WINDOW", AS DEFINED BELOW.
 C. FOULED TRACK: TRACK IS FOULED WHEN AN OBSTRUCTION INCLUDING A WORKING CREW, IS WITHIN 4 FEET FROM THE NEAREST RAIL OR WHEN AN OVERHEAD OBSTRUCTION IS PLACED WITHIN 23'-0" ABOVE THE TOP OF RAIL. WORK MAY BE PERFORMED UNDER THE PROTECTION OF A RAILROAD FLAGMAN.
 D. WINDOW: A GIVEN PERIOD OF TIME BETWEEN OPERATING TRAINS WHERE A TRACK MAY BE TAKEN OUT OF SERVICE, WITH THE STIPULATION THAT THE TRACK SHALL BE BACK IN SERVICE AT THE END OF THE GIVEN PERIOD OF TIME.
20. SIGNAL LOCATIONS ARE SHOWN ON THIS PLAN FOR REFERENCE. SIGNAL LOCATIONS SHOULD BE CROSS REFERENCED AND CONFIRMED WITH THE PROJECT SIGNAL PLANS AND RAILROAD SIGNAL PERSONNEL PRIOR TO THE START OF CONSTRUCTION.
21. IN THE EVENT THE CONTRACTOR, AS THE WORK PROGRESSES, FINDS ANY DISCREPANCIES BETWEEN THE PLANS AND THE PHYSICAL CONDITION OR ANY ERRORS IN THE PLANS OR LAYOUTS AS GIVEN BY STAKING OR INSTRUCTIONS IT SHALL BE THE CONTRACTOR'S DUTY TO INFORM THE ENGINEER IN WRITING, AND THE ENGINEER SHALL PROMPTLY ARRANGE CORRECTION THEREOF.
22. THE CONTRACTOR SHALL PROVIDE ALL LAYOUT AND CONSTRUCTION STAKING FOR THE ENTIRE PROJECT. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN AND PRESERVE ALL STAKES AND OTHER MARKS ESTABLISHED, UNTIL AUTHORIZED TO REMOVE THEM.
23. THE CONTRACTOR SHALL VERIFY THE INVERTS, ELEVATIONS, AND LOCATIONS OF ALL EXISTING DRAINAGE FACILITIES, WITHIN THE PROJECT AREA AS DEFINED ON THE CONTRACT DRAWINGS, THAT ARE TO REMAIN AND BE MAINTAINED. EXISTING PIPES AND CULVERTS THAT ARE TO BE MAINTAINED SHALL BE CLEANED AND FLUSHED, AS NECESSARY, TO RESTORE FULL CAPACITY.
24. PIPES AND CULVERTS TO BE ABANDONED SHALL BE CAPPED OR BULK HEADED AT EACH RESPECTIVE LOCATION AND FILLED. ALL ABANDONED DRAINAGE FACILITIES WILL BE RECORDED ON AS-BUILT DRAWINGS.
25. UTILITY INFORMATION WAS OBTAINED FROM AVAILABLE RECORDS. LOCATIONS SHOWN ON PLANS ARE APPROXIMATE AND SUBJECT TO FIELD VERIFICATION.
26. AS INDICATED ON THE DRAWINGS, THE PROJECT SITE IS TRAVERSED BY VARIOUS UNDERGROUND AND OVERHEAD UTILITY LINES, INCLUDING BUT NOT LIMITED TO UNDERGROUND FIBER OPTIC LINES, UNDERGROUND STORM WATER LINES, UNDERGROUND SIGNAL LINES, OVERHEAD ELECTRIC LINES, OVERHEAD TELEPHONE LINES, OVERHEAD FIBER OPTIC LINES, OVERHEAD TRANSMISSION LINES. THESE FACILITIES SHALL EITHER REMAIN IN PLACE AND SHALL BE PROTECTED BY THE CONTRACTOR WHILE THE WORK OF THE CONTRACT IS IN PROGRESS, OR BE RELOCATED, MODIFIED, OR REMOVED IN ACCORDANCE WITH THE CONSTRUCTION DRAWINGS AND AGREEMENTS BETWEEN THE RAILROAD AND INDIVIDUAL UTILITY AGENCIES.
27. STANDARD METHODS AND RECORDS AVAILABLE AS OF THE DATE OF THESE DRAWINGS HAVE BEEN UTILIZED TO CONFIRM THE EXISTENCE OF UTILITIES SHOWN ON THESE DRAWINGS. THE INDICATED LOCATIONS OF THESE UTILITIES ARE APPROXIMATE AND MAY NOT BE ACCURATE. THE LOCATION AND DEPTH OF ALL UTILITIES IN THE VICINITY OF NEW CONSTRUCTION IS TO BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY IF CONFLICTS ARE FOUND.
28. THE CONTRACTOR SHALL ENSURE THAT REQUIRED NOTIFICATION IS PROVIDED TO APPROPRIATE UTILITY COMPANIES PRIOR TO EXCAVATION OR OTHER WORK WHICH MAY AFFECT UTILITY COMPANY FACILITIES.
29. THE PROJECT CONTRACTOR SHALL NOTIFY THE "CALL BEFORE YOU DIG" ONE-CALL CENTER AT THE 811 NATIONAL PHONE NUMBER, OR MAKE AN ON-LINE REQUEST AT WWW.CALL811.COM, AT LEAST THREE (3) FULL BUSINESS DAYS BUT NO MORE THAN FOURTEEN (14) FULL BUSINESS DAYS, EXCLUDING WEEKENDS AND LEGAL HOLIDAYS, BEFORE CONSTRUCTION WORK BEGINS. THE CONTRACTOR IS TO GIVE THE 811 OPERATOR THE PROPER INFORMATION ON WHERE THE DIGGING WILL TAKE PLACE AND WHAT TYPE OF WORK WILL BE DONE.
30. FIBER OPTIC CABLES AND MARKERS SHALL BE PROTECTED IN PLACE BY CONTRACTOR UNLESS OTHERWISE NOTED. ALL RELOCATION/REMOVAL OF FIBER OPTIC CABLES OR MARKERS TO BE PER THE OWNER'S FORCES.
31. ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM WITH THE CURRENT SPECIFICATIONS AND STANDARDS OF WCL, THE STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION, AND THE VILLAGE OF BARRINGTON, ILLINOIS, EXCEPT WHERE OTHERWISE NOTED. WHENEVER REFERENCE IS MADE TO THE STANDARD SPECIFICATIONS, IT SHALL BE CONSIDERED TO MEAN THE ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, LATEST EDITION.
32. LINEAL FOOT MEASUREMENTS SHOWN ON THE PLANS ARE HORIZONTAL MEASUREMENTS, NOT SLOPE MEASUREMENTS. ALL PAYMENTS SHALL BE MADE ON HORIZONTAL MEASUREMENTS.
33. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING AT HIS EXPENSE ANY EXISTING UTILITIES DAMAGED DURING CONSTRUCTION.
34. CLEARING AND GRUBBING OPERATIONS AND DISPOSAL OF ALL DEBRIS THEREFROM SHALL BE PERFORMED BY THE CONTRACTOR IN STRICT ACCORDANCE WITH ALL STATE AND LOCAL CODES AND ORDINANCES.
35. ALL EXCAVATION SHALL BE UNCLASSIFIED. NO SEPARATE PAYMENT WILL BE MADE FOR ROCK EXCAVATION.
36. THE CONTRACTOR SHALL CONTROL THE EROSION AND SILTATION DURING ALL PHASES OF CONSTRUCTION AND KEEP THE STREETS CLEAN OF MUD AND DEBRIS.

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US ROUTE 14 GRADE SEPARATION

LAKE ZURICH ROAD TO IL-59

BARRINGTON, ILLINOIS

OPERATING COMPANY: WCL

CENTRAL DIVISION
LEIGHTON SUB

TRANSYSTEMS

1475 E. WOODFIELD RD., SUITE 600
SCHAUMBURG, IL 60173
(847) 605-9600

US ROUTE 14
STA. 1205+00
TO STA. 1235+00

F.A.U. RTE: 0305

SECTION: 11-00087-00-GS

COUNTY: LAKE

CONTRACT: 61J87



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SHEET TITLE: GENERAL NOTES			

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← TO LAKE ZURICH

AREA 1

AREA 2

AREA 3

TO SUTTON →



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TEMPORARY TRACKWORK										
SHEET	FROM STATION	TO STATION	WORK REQUIRED	LENGTH	CONSTRUCT TRACK	SHIFT EXISTING TRACK	BALLAST & SURFACE TRACK, 0" - 12"	REMOVE TRACK	FIELD WELD	ADJUST RAIL
CT-101	1205+00	1207+08.34	SURFACE TRACK	208	-	-	209	-	-	-
CT-101	1207+08.34	1210+89.53	SHIFT TRACK	381	-	381	-	-	2	381
CT-101-103	1210+89.53	1227+69.65	CONSTRUCT TRACK	1,680	1,680	-	-	1,680	40	1,680
CT-103	1227+69.65	1231+49.16	SHIFT TRACK	380	-	380	-	-	2	380
CT-103	1231+49.16	1235+00.00	SURFACE TRACK	351	-	-	351	-	-	-

PERMANENT TRACKWORK										
SHEET	FROM STATION	TO STATION	WORK REQUIRED	LENGTH	CONSTRUCT TRACK	SHIFT EXISTING TRACK	BALLAST & SURFACE TRACK, 0" - 12"	REMOVE TRACK	FIELD WELD	ADJUST RAIL
CT-111	1207+08.34	1210+90.11	SHIFT TRACK	382	-	382	-	-	2	382
CT-111-113	1210+90.11	1227+67.03	CONSTRUCT TRACK	1,677	1,677	-	-	1,680	40	1,677
CT-113	1227+67.03	1231+49.16	SHIFT TRACK	382	-	382	-	-	2	382

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SCHEDULE OF QUANTITIES - WORK RELATED TO WCL TRACKS						
ITEM #	PAY ITEM	ITEM DESCRIPTION	UNIT	QUANTITIES		
				TEMPORARY	FINAL	TOTAL
EARTHWORK						
1	20200100	EARTH EXCAVATION	CY	5,329	3,353	8,682
2	20400800	FURNISHED EXCAVATION	CY	1,741	444	2,185
3	20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CY	-	-	-
4	30300001	AGGREGATE SUBGRADE IMPROVEMENT	CY	-	-	-
5	Z0069700	SUBBALLAST	CY	2,110	1,173	3,283
6		REMOVE SUBBALLAST	CY	-	904	904
7		PRE-BALLAST TRACK, 8"	CY	820	836	1,656
UTILITIES						
8	20700220	PCROUS GRANULAR EMBANKMENT	CY	17		17
9	28100107	STONE RIPRAP, CLASS A4	SY	42		42
10	50105220	PIPE CULVERT REMOVAL	LF	36	29	65
11	54206065	PIPE CULVERTS, SPECIAL 30"	LF	74	-	74
12	54205095	PIPE CULVERTS, SPECIAL 60"	LF	70		70
13	59300100	CONTROLLED LOW-STRENGTH MATERIAL	CY	22		22
14	X5012610	CONCRETE HEADWALL REMOVAL PARTIAL	LS	2	-	2
FORCE ACCOUNT WORK						
15	RAIL01	REMOVAL OF EXISTING TRACK	TF	1,677	1,680	3,357
16	RAIL03	TRACK CONSTRUCTION	TF	1,680	1,677	3,357
17	RAIL04	FIELD WELDS	EA	44	44	88
18	RAIL05	ADJUST RAIL TO 105 DEGREES	TF	2,441	2,441	4,882
19	RAIL06	UNLOAD BALLAST & SURFACE TRACK, 0 - 12"	TF	560	-	560
20	RAIL07	SHIFT EXISTING TRACK, 0' TO 15'	TF	761	764	1,525
21	RAIL09	SIGNAL WORK	EA	1	1	2

NOTES	
1.	TRACK CONSTRUCTION INCLUDES: UNLOADING AND INSTALLING BALLAST, SURFACING, ANCHORING, AND SPIKING
2.	SIGNAL WORK INCLUDES: DESIGN AND CONSTRUCTION OF SIGNALS, CABINETS, SWITCH EQUIPMENT, AND INFRASTRUCTURE

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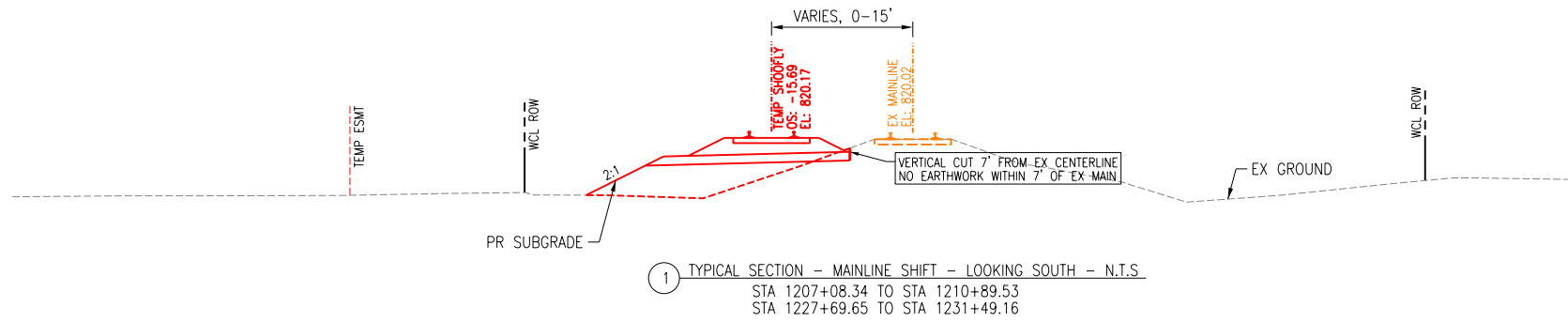


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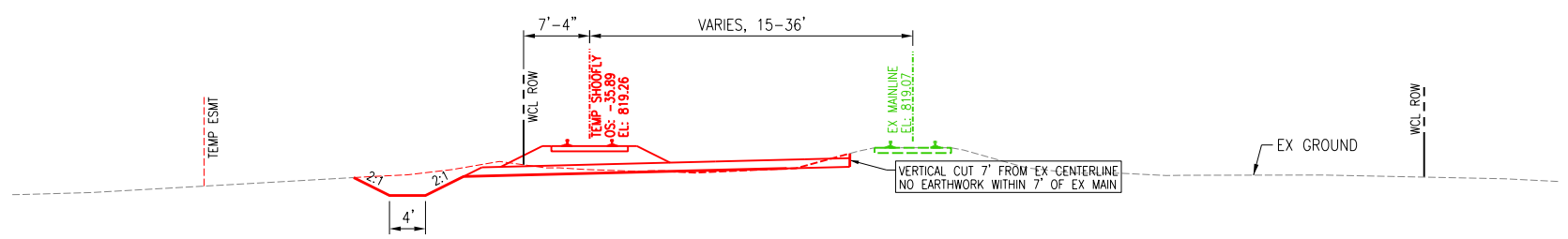
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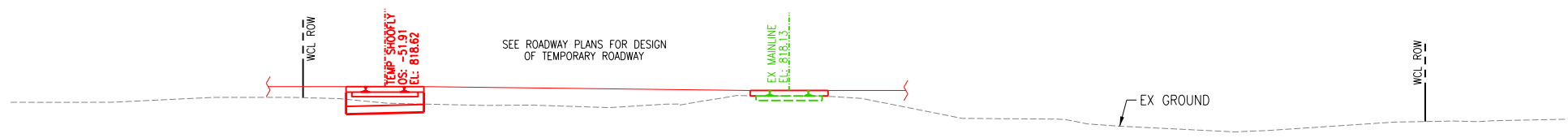
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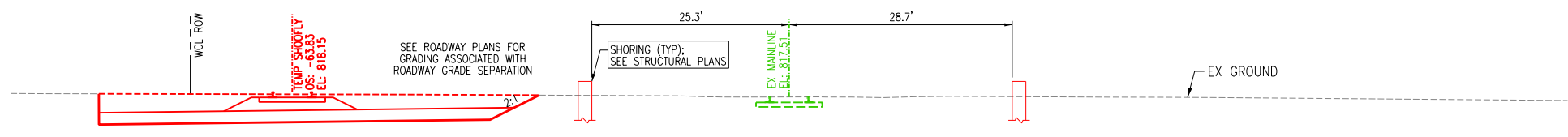
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 STA 1207+08.34 TO STA 1210+89.53
 STA 1227+69.65 TO STA 1231+49.16



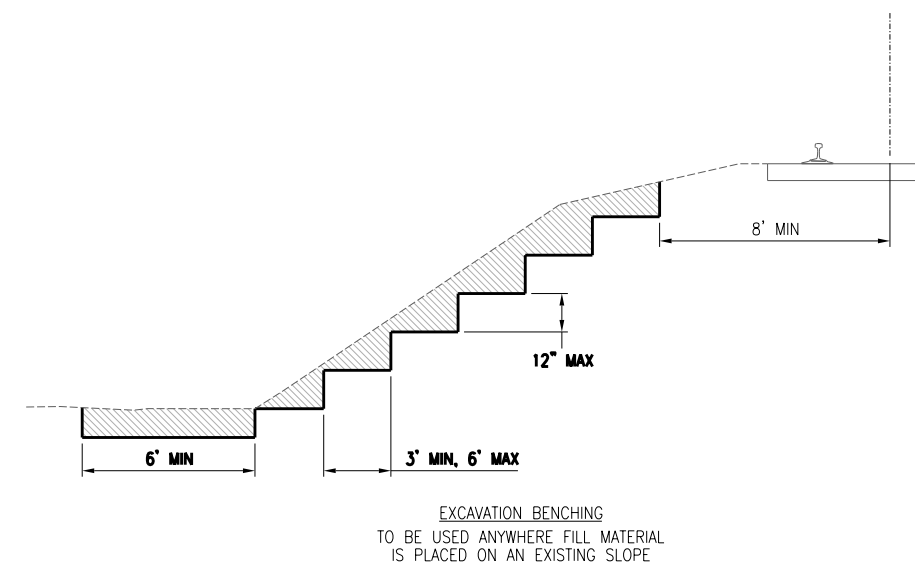
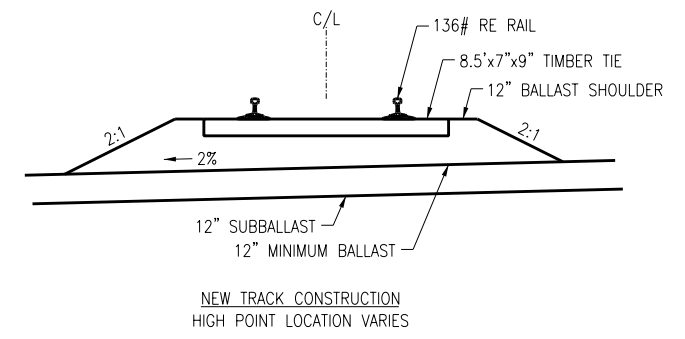
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 STA 1210+89.53 TO STA 1217+79.53
 STA 1218+75.32 TO STA 1220+05.02
 STA 1221+24.13 TO STA 1227+69.65



③ TYPICAL SECTION - AT TEMP US14 - LOOKING SOUTH - N.T.S.
 STA 1217+79.53 TO STA 1218+75.32



④ TYPICAL SECTION - AT US14 - LOOKING SOUTH - N.T.S.
 STA 1220+05.02 TO STA 1221+24.13



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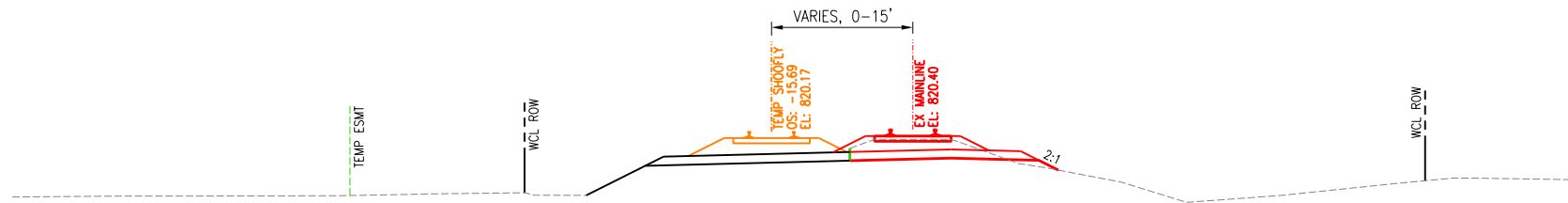
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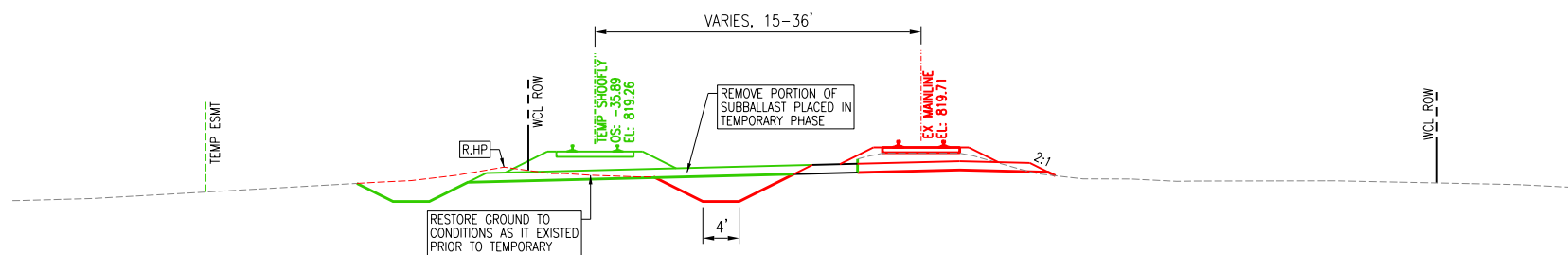
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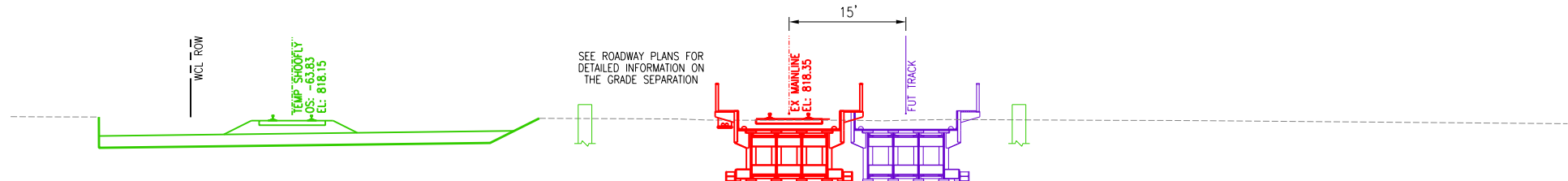
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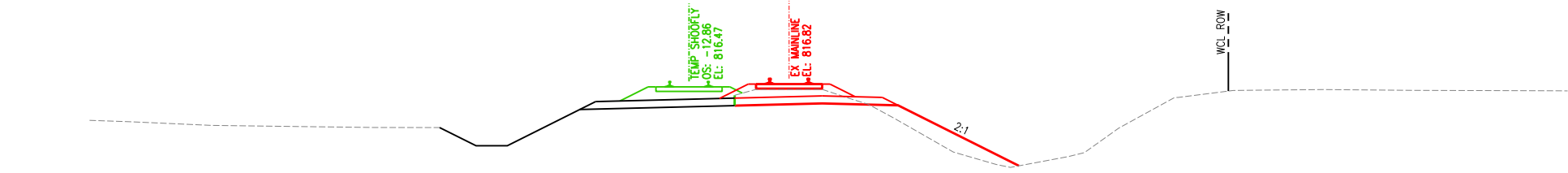
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 STA 1227+67.03 TO STA 1231+49.16



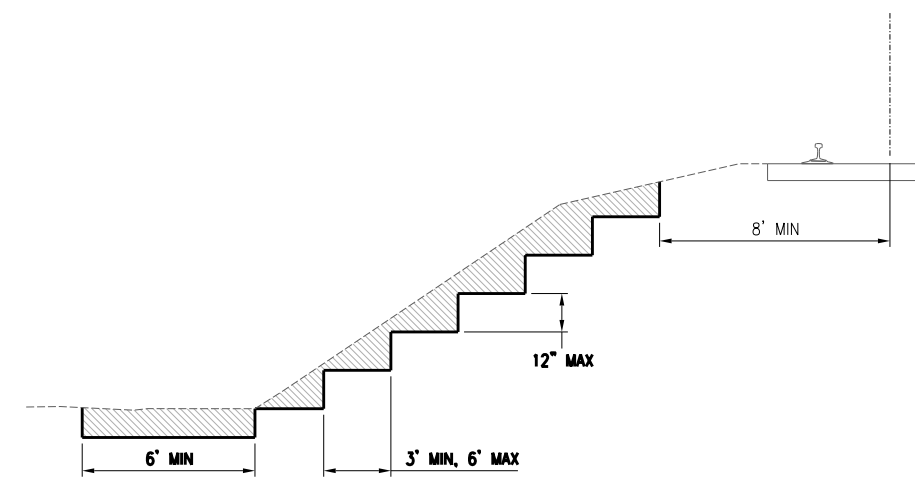
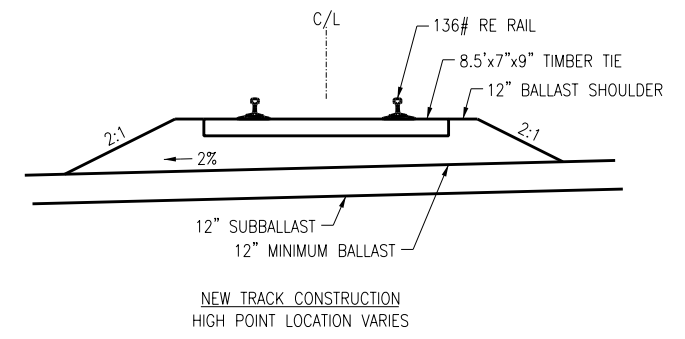
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 STA 1221+63.04 TO STA 1227+67.03



③ TYPICAL SECTION - BRIDGE - LOOKING SOUTH - N.T.S.
 STA 1219+53.54 TO STA 1221+63.04



④ TYPICAL SECTION - SHIFT & WEST SIDE GRADING - LOOKING SOUTH - N.T.S.
 STA 1229+34.34 TO STA 1231+49.16



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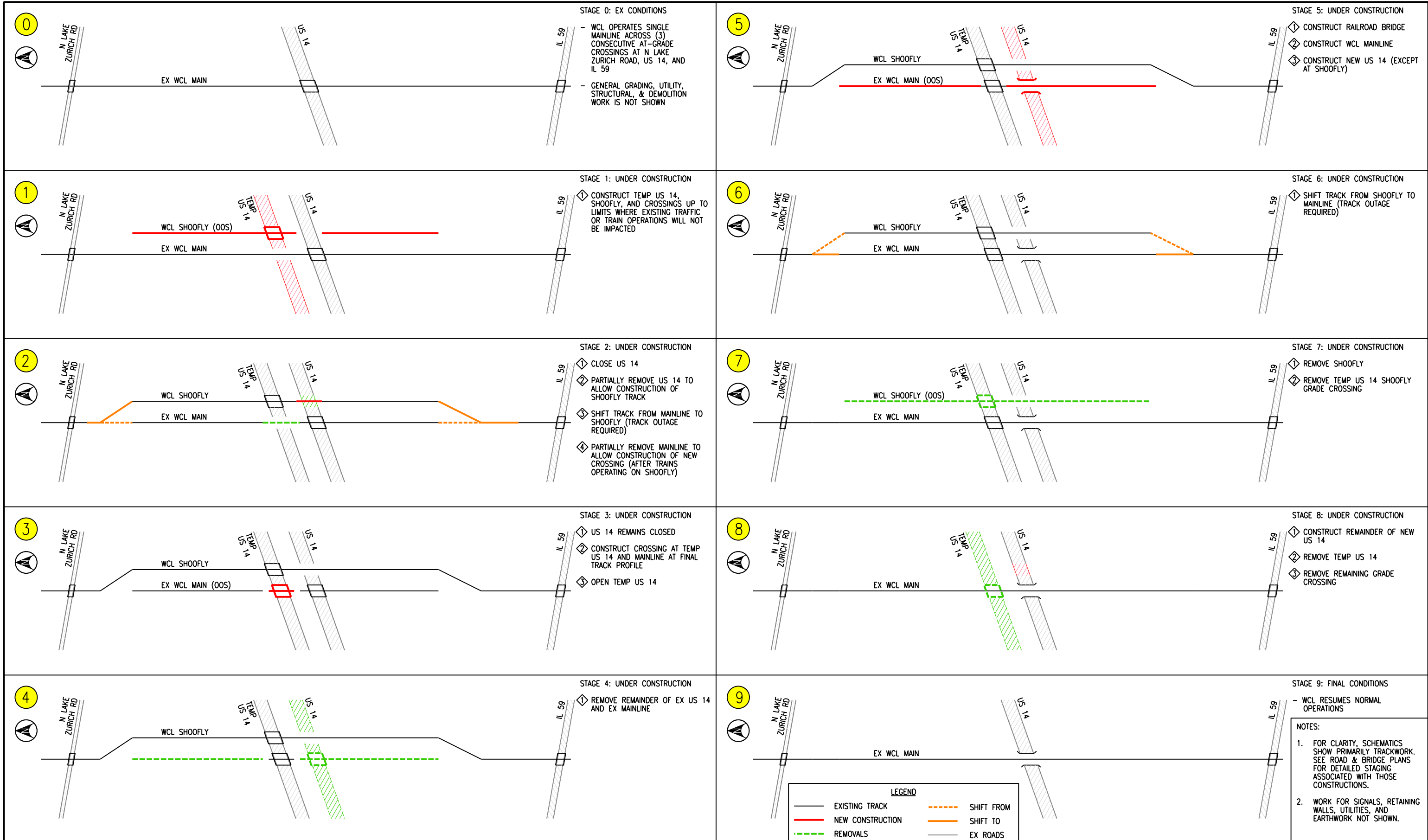
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SHEET:	360 OF 816

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2.	MODIFIED STAGING	2022-11-28
1.	MODIFIED STAGING	2022-11-02
No.	ISSUE FOR:	DATE

US ROUTE 14 GRADE SEPARATION
 LAKE ZURICH ROAD TO IL-59
 BARRINGTON, ILLINOIS
 OPERATING COMPANY: WCL

CENTRAL DIVISION
 LEIGHTON SUB

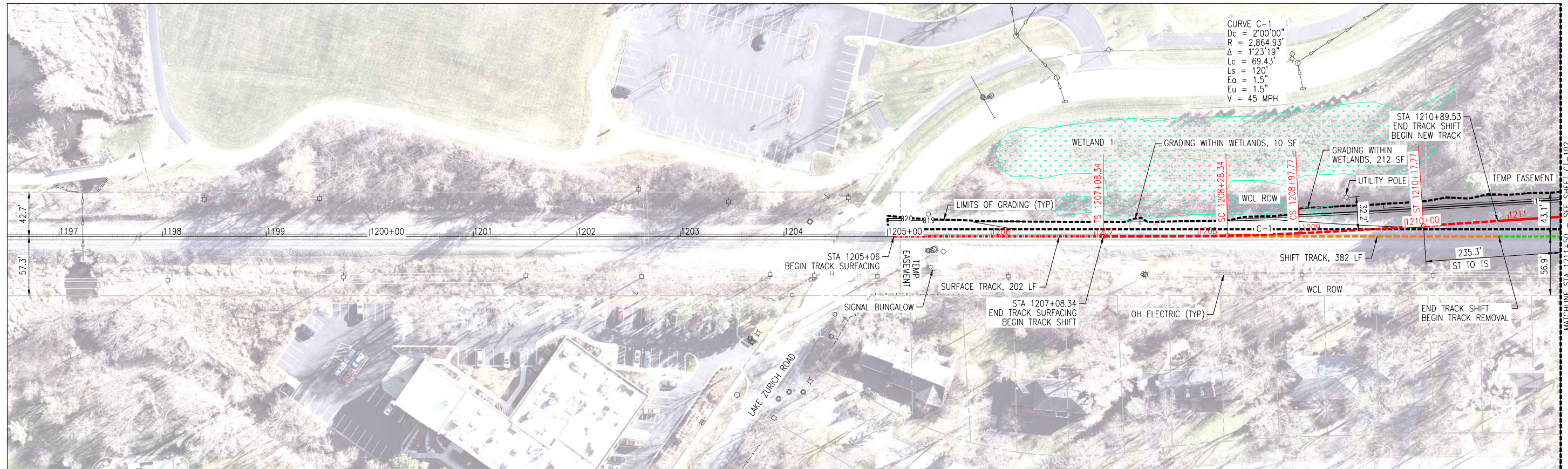
TRANSYSTEMS
 1475 E. WOODFIELD RD., SUITE 600
 SCHAUMBURG, IL 60173
 (847) 605-9600

US ROUTE 14
 STA. 1205+00
 TO STA. 1235+00
 F.A.U. RTE: 0305
 SECTION: 11-00087-00-GS
 COUNTY: LAKE
 CONTRACT: 61J87

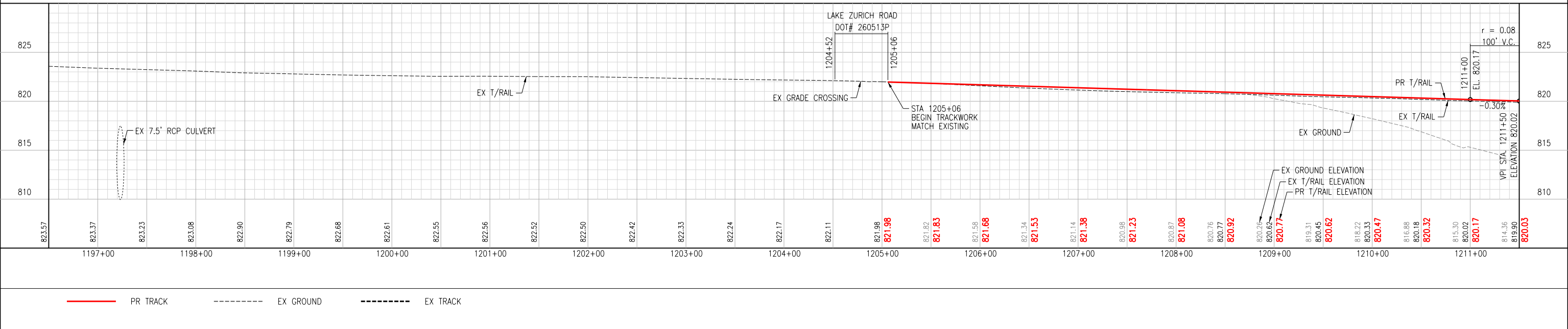
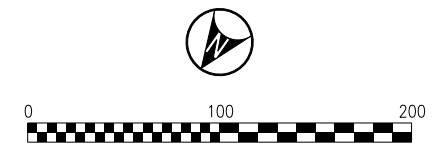
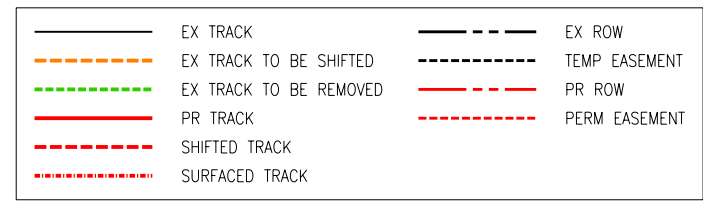


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DRAWING No.	
ST-001	
DATE:	08/28/2024
SHEET:	361 OF 816



- NOTES:
- SEE STRUCTURAL PLANS FOR BRIDGE, WALL, AND RETENTION SYSTEM DETAILS.
 - SEE ROADWAY PLANS FOR US 14 DESIGN.
 - DEMOLITION & UTILITY WORK PERFORMED BY OTHERS ACCORDING TO ROADWAY PLANS.
 - SURFACING TRACK INDICATES VERTICAL TRACKWORK ONLY.
 - SHIFT TRACK INDICATES VERTICAL AND HORIZONTAL TRACKWORK.
 - ALL WCL TRACKWORK SHALL BE PERFORMED BY WCL FORCES.



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US ROUTE 14 GRADE SEPARATION
 LAKE ZURICH ROAD TO IL-59
 BARRINGTON, ILLINOIS
 OPERATING COMPANY: WCL

CENTRAL DIVISION
 LEIGHTON SUB



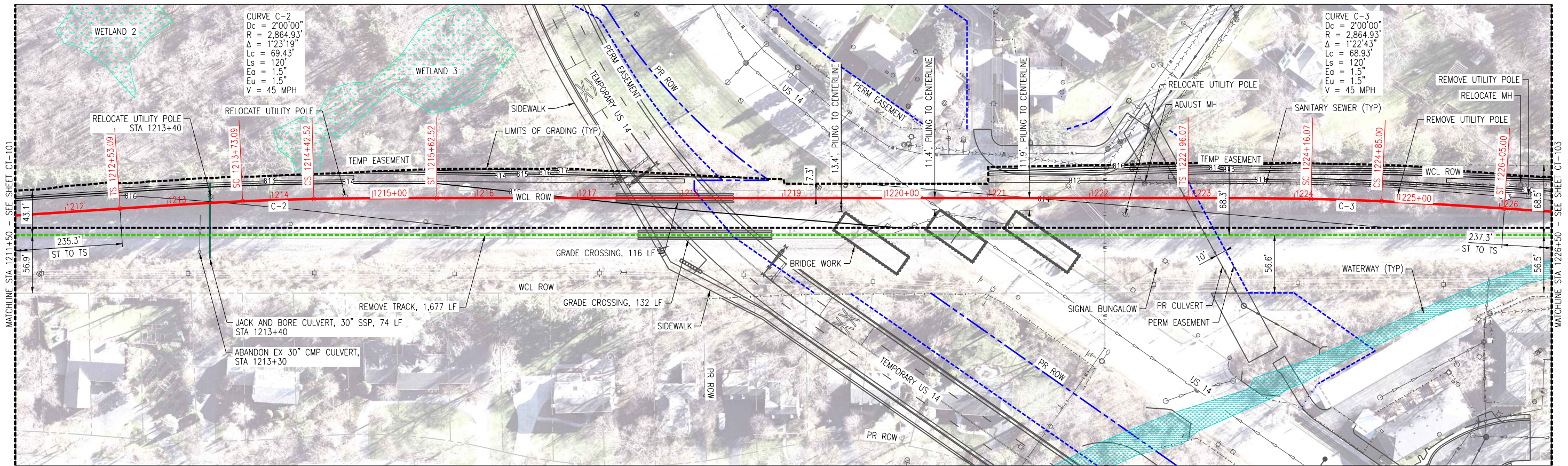
US ROUTE 14
 STA. 1205+00
 TO STA. 1235+00
 F.A.U. RTE: 0305
 SECTION: 11-00087-00-GS
 COUNTY: LAKE
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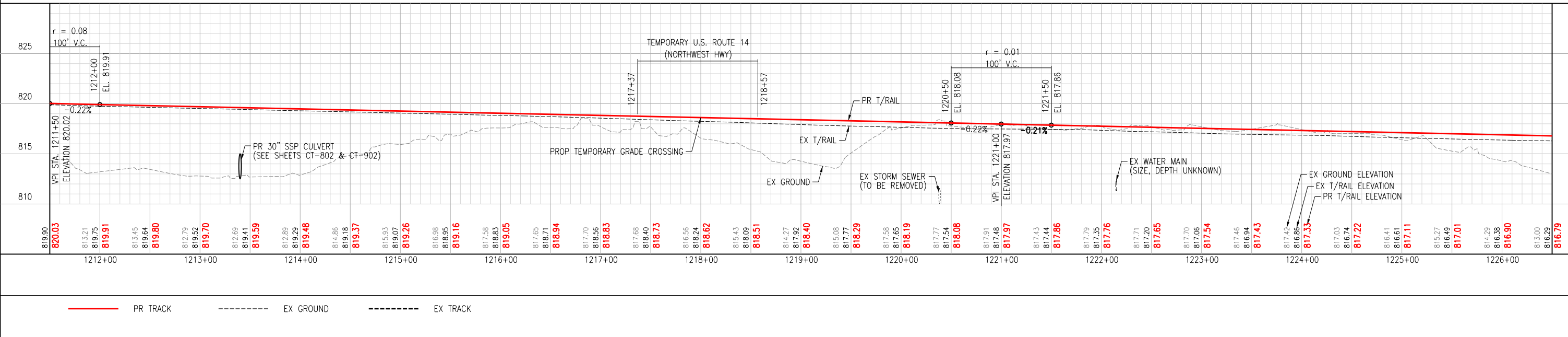
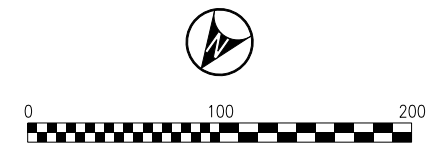
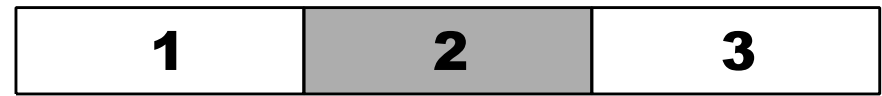
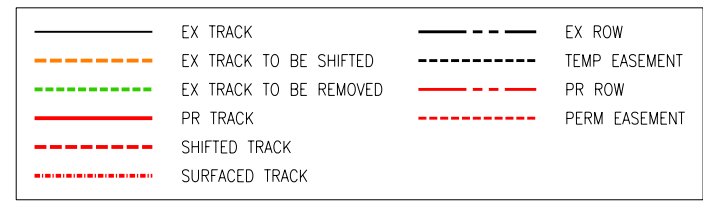
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SHEET TITLE: TEMPORARY TRACK PLAN & PROFILE AREA 1			

DRAWING No.	CT-101
DATE:	
SHEET:	362 OF 816

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- NOTES:
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US ROUTE 14 GRADE SEPARATION
 LAKE ZURICH ROAD TO IL-59
 BARRINGTON, ILLINOIS
 OPERATING COMPANY: WCL

CENTRAL DIVISION
 LEIGHTON SUB

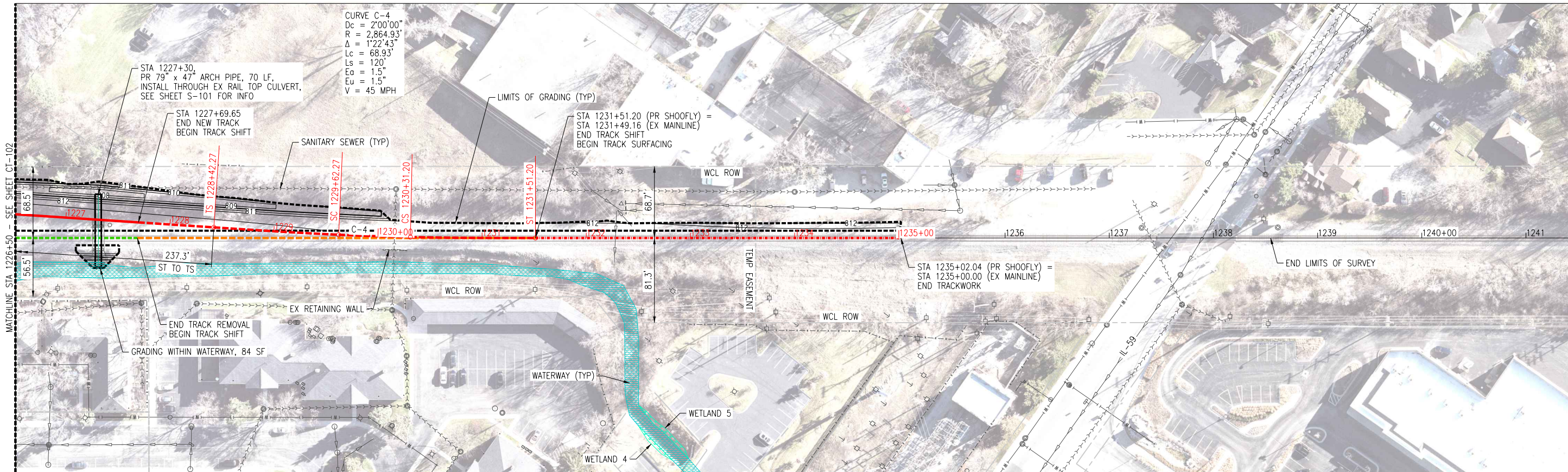
TRANSYSTEMS
 1475 E. WOODFIELD RD., SUITE 600
 SCHAUMBURG, IL 60173
 (847) 605-9600

US ROUTE 14
 STA. 1205+00
 TO STA. 1235+00
 F.A.U. RTE: 0305
 SECTION: 11-00087-00-GS
 COUNTY: LAKE
 CONTRACT: 61J87



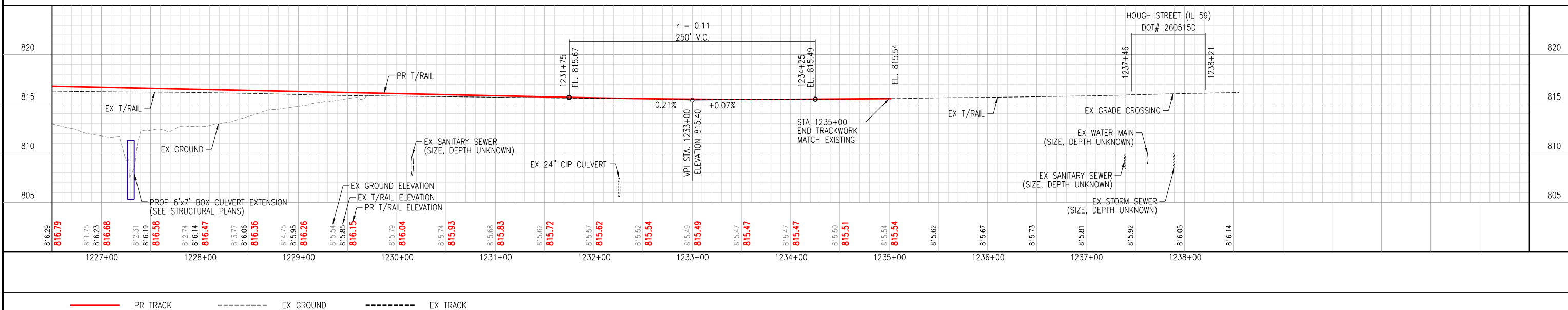
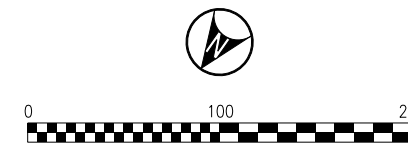
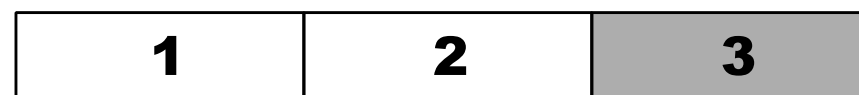
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DRAWING No.
CT-102
 DATE: 08/28/2024
 SHEET: 363 OF 816



- NOTES:
- SEE STRUCTURAL PLANS FOR BRIDGE, WALL, AND RETENTION SYSTEM DETAILS.
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	EX TRACK		EX ROW
	EX TRACK TO BE SHIFTED		TEMP EASEMENT
	EX TRACK TO BE REMOVED		PR ROW
	PR TRACK		PERM EASEMENT
	SHIFTED TRACK		
	SURFACED TRACK		

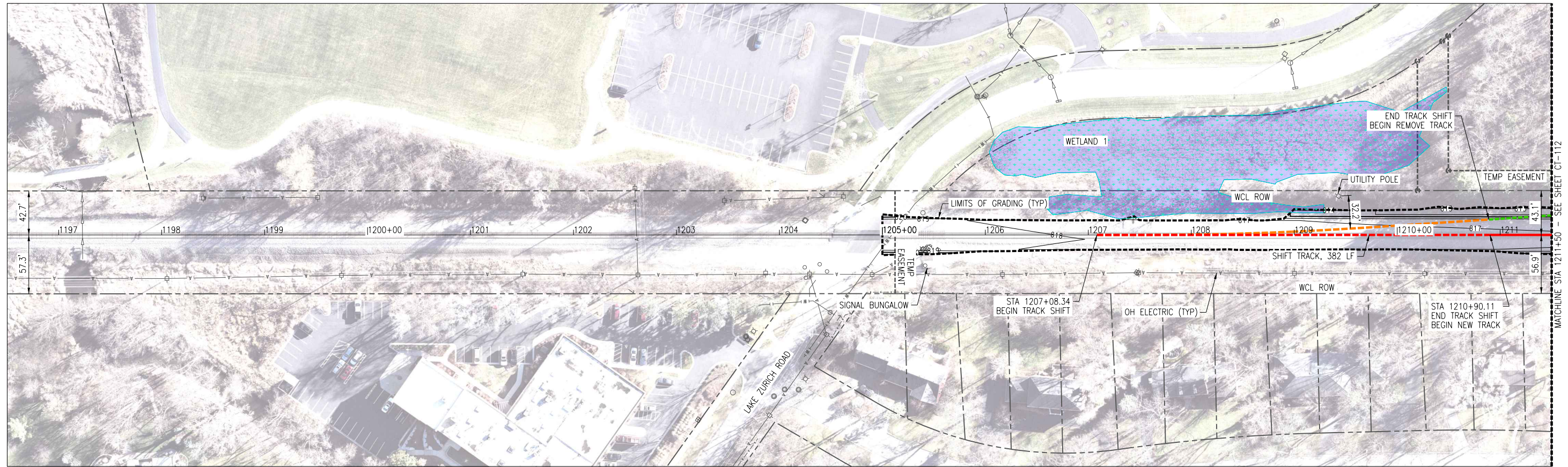


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No.	ISSUE FOR:	DATE

<h2>US ROUTE 14 GRADE SEPARATION</h2> <p>LAKE ZURICH ROAD TO IL-59</p> <p>BARRINGTON, ILLINOIS OPERATING COMPANY: WCL</p>		<p>CENTRAL DIVISION</p> <p>LEIGHTON SUB</p>	<p>1475 E. WOODFIELD RD., SUITE 600 SCHAUMBURG, IL 60173 (847) 605-9600</p>	<p>US ROUTE 14 STA. 1205+00 TO STA. 1235+00</p> <p>F.A.U. RTE: 0305</p> <p>SECTION: 11-00087-00-GS</p> <p>COUNTY: LAKE</p> <p>CONTRACT: 61J87</p>	<p>Eastern Region</p>	<table border="1"> <tr> <td>DESIGN</td> <td>DRAWN</td> <td>CHECKED</td> <td>APPRVD.</td> </tr> <tr> <td>TEG</td> <td>TEG</td> <td>TEG</td> <td>TEG</td> </tr> </table> <p>CADD FILE NAME: 0001-ct-103</p> <p>SHEET TITLE: TEMPORARY TRACK PLAN & PROFILE AREA 3</p>	DESIGN	DRAWN	CHECKED	APPRVD.	TEG	TEG	TEG	TEG	<p>DRAWING No.</p> <h1 style="text-align: center;">CT-103</h1> <p>DATE: 08/28/2024</p> <p>SHEET: 364 OF 816</p>
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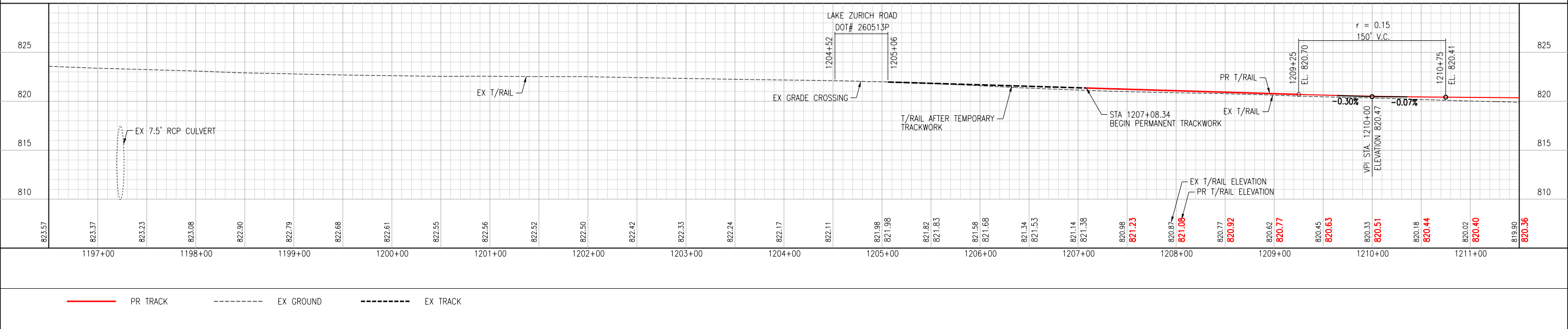
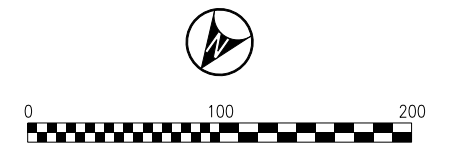
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- NOTES:
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	EX TRACK		EX ROW
	EX TRACK TO BE SHIFTED		TEMP EASEMENT
	EX TRACK TO BE REMOVED		PR ROW
	PR TRACK		PERM EASEMENT
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US ROUTE 14 GRADE SEPARATION
 LAKE ZURICH ROAD TO IL-59
 BARRINGTON, ILLINOIS
 OPERATING COMPANY: WCL

CENTRAL DIVISION
 LEIGHTON SUB

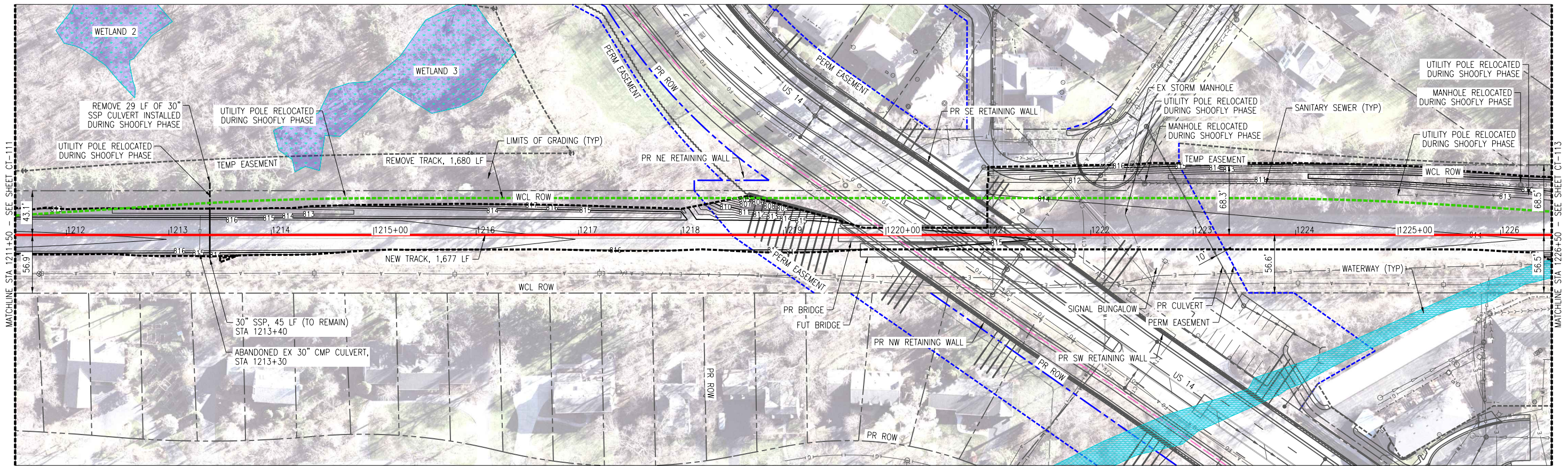
1475 E. WOODFIELD RD., SUITE 600
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 (847) 605-9600

US ROUTE 14
 STA. 1205+00
 TO STA. 1235+00
 F.A.U. RTE: 0305
 SECTION: 11-00087-00-GS
 COUNTY: LAKE
 CONTRACT: 61J87

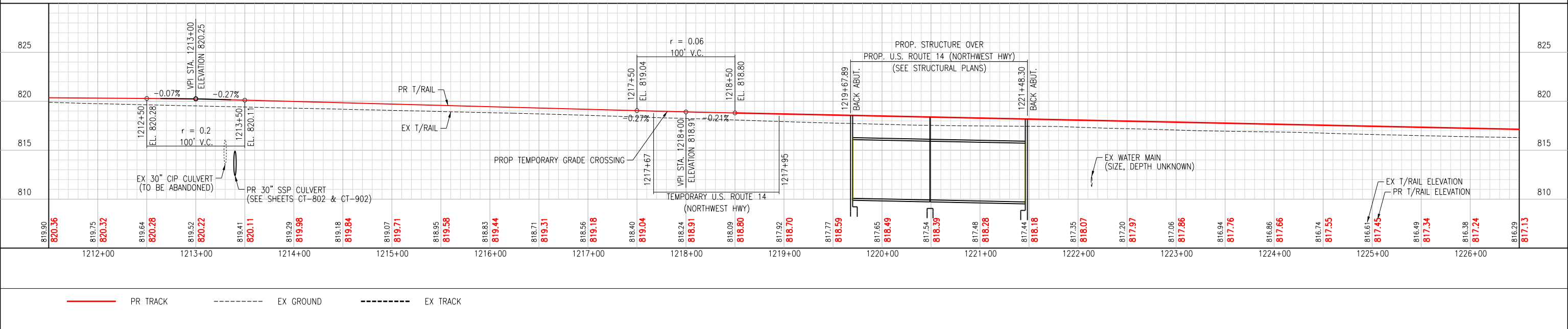
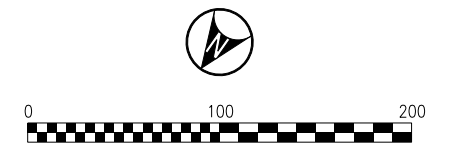
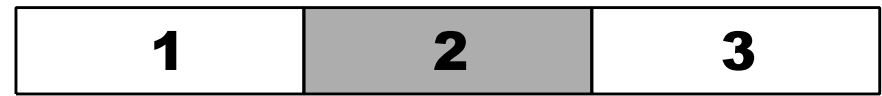
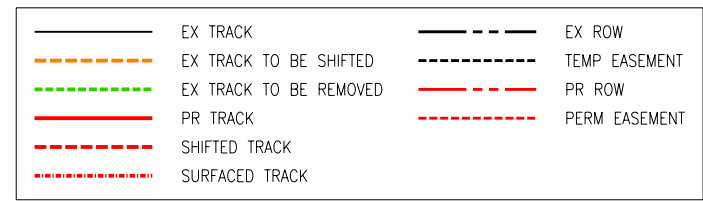
Eastern Region

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PERMANENT TRACK PLAN & PROFILE AREA 1			

DRAWING No.
CT-111
 DATE: 08/28/2024
 SHEET: 365 OF 816



- NOTES:
1. SEE STRUCTURAL PLANS FOR BRIDGE, WALL, AND RETENTION SYSTEM DETAILS.
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US ROUTE 14 GRADE SEPARATION
 LAKE ZURICH ROAD TO IL-59
 BARRINGTON, ILLINOIS
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US ROUTE 14
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 SECTION: 11-00087-00-GS
 COUNTY: LAKE
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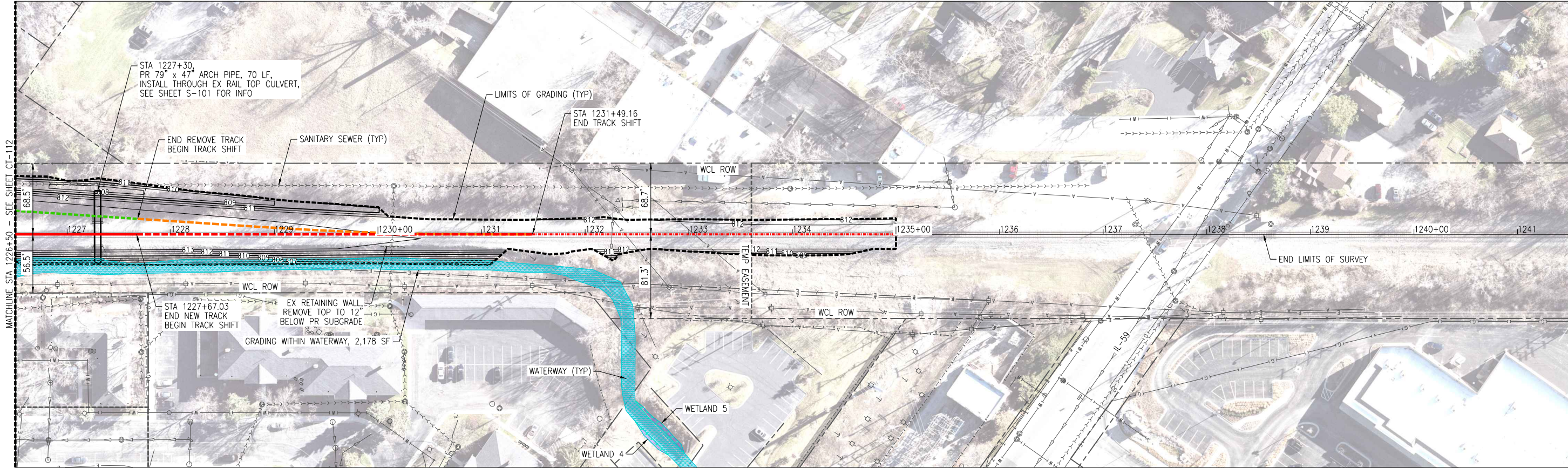
EN
 Eastern Region

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DRAWING No.
CT-112
 DATE: 08/28/2024
 SHEET: 366 OF 816

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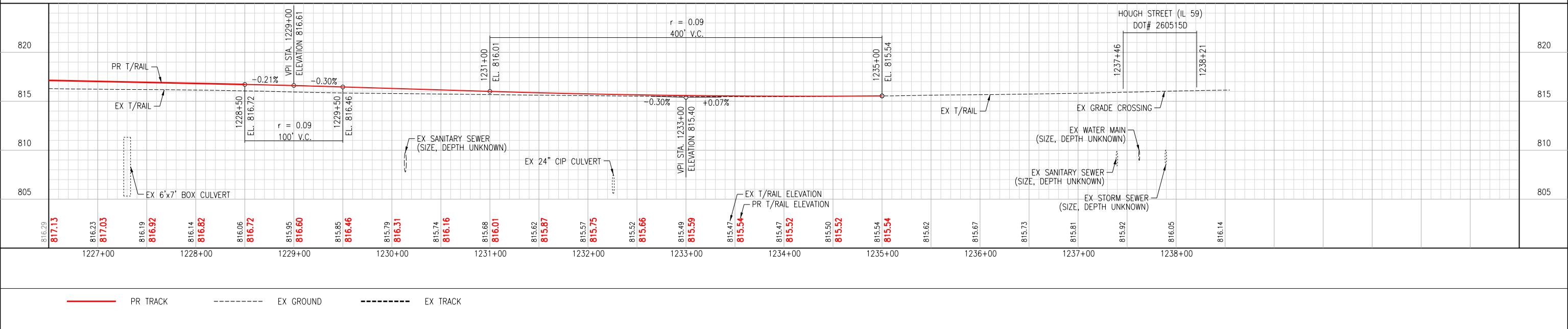
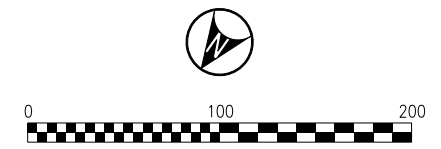
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- NOTES:
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	EX TRACK TO BE REMOVED		PR ROW
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	SURFACED TRACK		

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US ROUTE 14 GRADE SEPARATION
 LAKE ZURICH ROAD TO IL-59
 BARRINGTON, ILLINOIS
 OPERATING COMPANY: WCL

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 SCHAUMBURG, IL 60173
 (847) 605-9600

US ROUTE 14
 STA. 1205+00
 TO STA. 1235+00
 F.A.U. RTE: 0305
 SECTION: 11-00087-00-GS
 COUNTY: LAKE
 CONTRACT: 61J87

Eastern Region

DESIGN	DRAWN	CHECKED	APPRVD.
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SHEET TITLE: PERMANENT TRACK PLAN & PROFILE AREA 3			

CT-113

DATE: 08/28/2024
 SHEET: 367 OF 816

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TEMPORARY SHOOLY												
CURVE ID	POINT	STA	DEG	R	Δ	Lc	Ls	Ea	Eu	V	NORTHING	EASTING
C-1	TS	1207+08.34	2'00'00"	2,864.93	1'23'19"	69.43'	120'	1.5"	1.5"	45 MPH	2002307.91	1040248.02
	SC	1208+28.34									2002238.35	1040150.23
	CS	1208+97.77									2002196.64	1040094.72
	ST	1210+17.77									2002122.08	1040000.69
C-2	TS	1212+53.09	2'00'00"	2,864.93	1'23'19"	69.43'	120'	1.5"	1.5"	45 MPH	2001974.59	1039817.34
	SC	1213+73.09									2001900.03	1039723.31
	CS	1214+42.52									2001858.32	1039667.80
	ST	1215+62.52									2001788.77	1039570.02
C-3	TS	1222+96.07	2'00'00"	2,864.93	1'22'43"	68.93'	120'	1.5"	1.5"	45 MPH	2001367.77	1038969.31
	SC	1224+16.07									2001299.59	1038870.57
	CS	1224+85.00									2001261.90	1038812.84
	ST	1226+05.00									2001198.95	1038710.69
C-4	TS	1228+42.27	2'00'00"	2,864.93	1'22'43"	68.93'	120'	1.5"	1.5"	45 MPH	2001075.87	1038507.84
	SC	1229+62.27									2001012.91	1038405.68
	CS	1230+31.20									2000975.23	1038347.96
	ST	1231+51.20									2000907.05	1038249.21

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US ROUTE 14 GRADE SEPARATION
 LAKE ZURICH ROAD TO IL-59
 BARRINGTON, ILLINOIS
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CENTRAL DIVISION
 LEIGHTON SUB

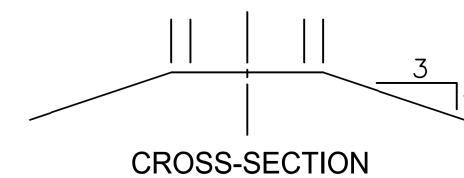
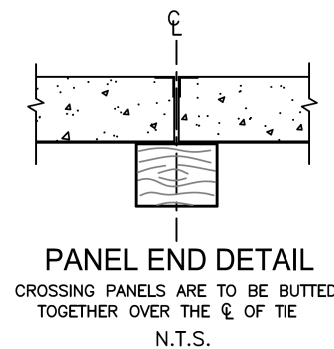
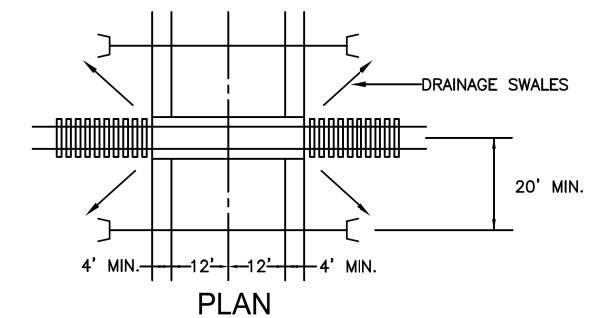
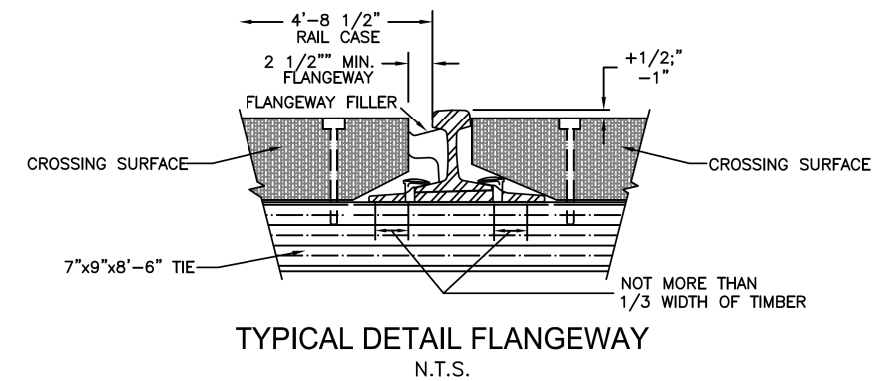
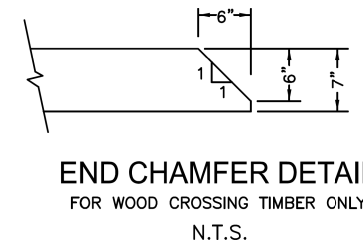
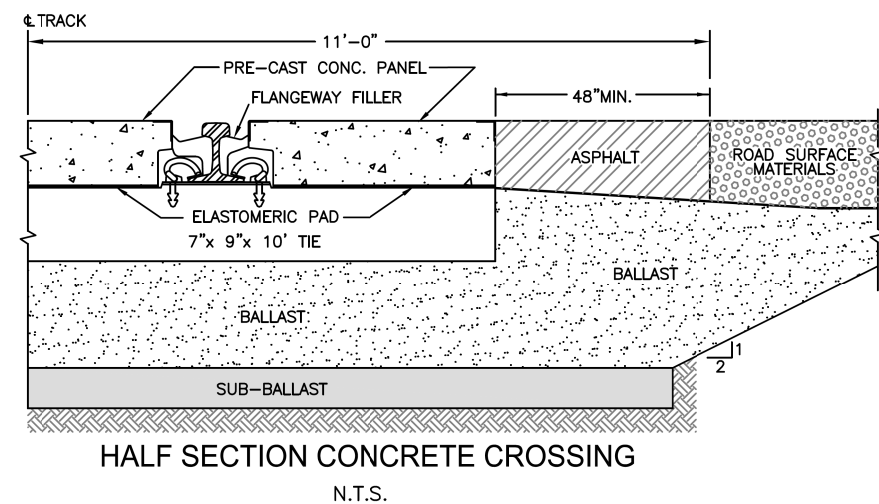
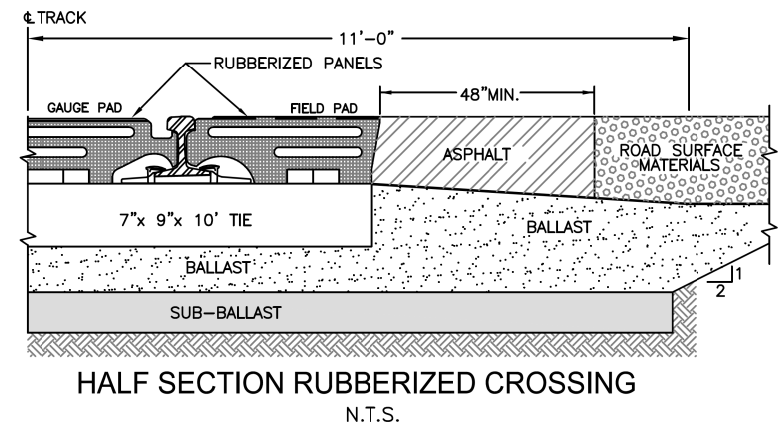
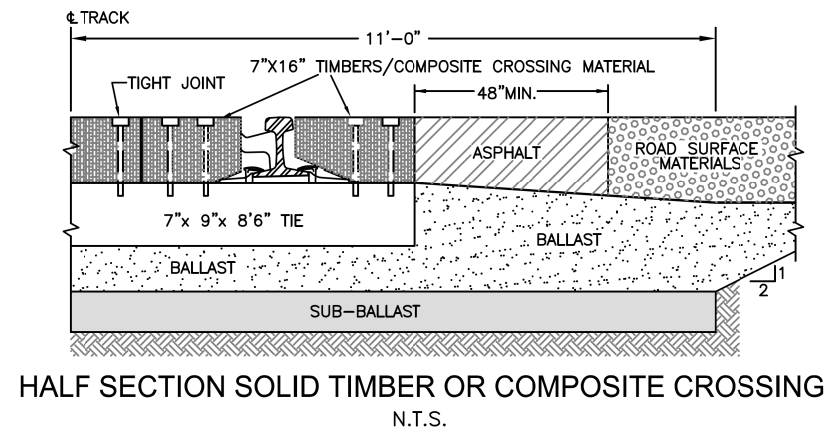
TRANSYSTEMS
1475 E. WOODFIELD RD., SUITE 600
 SCHAUMBURG, IL 60173
 (847) 605-9600

US ROUTE 14
 STA. 1205+00
 TO STA. 1235+00
 F.A.U. RTE: 0305
 SECTION: 11-00087-00-GS
 COUNTY: LAKE
 CONTRACT: 61J87



DESIGN	DRAWN	CHECKED	APPRVD.
TEG	TEG	TEG	TEG
CADD FILE NAME:			
0001-ct-401.dgn			
SHEET TITLE:			
TRACK CURVE DATA			

DRAWING No.
CT-401
 DATE: 08/28/2024
 SHEET: 368 OF 816



- NOTES:
- CROSSING LENGTH SHOULD EXTEND ENTIRE WIDTH OF USABLE SHOULDERS.
 - CROWN IN ROADWAY SHOULD BE ELIMINATED AT CROSSING SO AS TO MATCH GRADE AND PROFILE OF RAILROAD.
 - DRAINAGE CULVERTS IN TRACKSIDE DITCHES SHOULD BE APPROPRIATELY SIZED (24" MINIMUM DIAMETER) AND INSTALLED AT AN ELEVATION WHICH PERMITS UNRESTRICTED FLOW. CULVERTS SHOULD ALSO BE OF SUFFICIENT LENGTH AND/OR EQUIPPED WITH FLARED ENDS OR HEADWALLS TO PRECLUDE COLLAPSE OF ROADWAY SHOULDER AT OR AROUND CULVERT ENDS.

- NOTE:
- FASTENING TO BE WITH 5/8" DRIVE SPIKE OF A LENGTH TO PENETRATE CROSS TIE 3" OR MORE.
 - USE ONE FASTENING PER TIMBER PER CROSS TIE, ALTERNATE POSITION BORE TIMBER 9/16" AND COUNTERSINK PILOT BORE CROSS TIE.
 - FULLY ASPHALTED OR AGGREGATE CROSSINGS ARE NOT ALLOWED
 - CROSSINGS IN CURVES WILL NEED TIES TO BE SPACED IN RADIAL FAN ARRANGEMENT
 - CROSSINGS IN CURVES MAY NEED TO BE SPECIALLY ORDERED.

REVISIONS		DATE	BY
NO.	DESCRIPTION		

ROAD CROSSING DETAILS			
OFFICE OF DESIGN & CONSTRUCTION			
DRAWN BY: DAP	SCALE: NONE	DWG NO:	
CHECKED BY:	DATE: 15 NOV 15	FILE:	

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BARRINGTON, ILLINOIS
OPERATING COMPANY: WCL

CENTRAL DIVISION
LEIGHTON SUB

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SCHAUMBURG, IL 60173
(847) 605-9600

US ROUTE 14
STA. 1205+00
TO STA. 1235+00
F.A.U. RTE: 0305
SECTION: 11-00087-00-GS
COUNTY: LAKE
CONTRACT: 61J87

Eastern Region

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CADD FILE NAME: 0001-ct-402.dgn			
SHEET TITLE: TEMPORARY GRADE CROSSING DETAILS			

DRAWING No.
CT-402
DATE: 08/28/2024
SHEET: 369 OF 816

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CANADIAN NATIONAL RAILWAYS SPECIFICATION 12-20C
 12-20C Superseding
 (July 2003) Specification
 12-20B
CRUSHED ROCK BALLAST

1 **SCOPE:** This specification covers two classes of crushed rock ballast and one class of trowelling stone.

Class 1 - Crushed rock ballast for use primarily on main line track.

Class 2 - Crushed rock ballast for use only on other than main line track.

Trowelling stone shall be supplied in one class only.

GENERAL REQUIREMENTS

2 **Material**

2.1 The ballast and trowelling stone shall be composed of hard, strong and durable particles, clean and free from clay and shale and from an excess of dust or elongated pieces.

2.2 Before crushed rock ballast is accepted from any new pit, or from a new seam, bed or formation in any existing pit that in the judgement of the Inspector is substantially different from material previously inspected and approved, the material shall be inspected by a qualified petrologist and approved by the Senior Geotechnical Engineer of the Railway.

2.3 The word "Inspector" occurring in this specification shall mean the duly authorized representative of the Railways' Chief Engineer.

DETAILED REQUIREMENTS

3 **Methods of Test**

All tests shall be carried out according to the latest revision of the standard test methods referred to in this specification.

4 **Fractured Faces**

The crushed rock ballast or trowelling stone shall have at least 75% of the particles by mass with two or more fractured faces and at least 98% of the particles by mass with one fractured face. The above percentages will be required within each sieve size coarser than 3/4-inch (19 mm).

5 **Flat Pieces**

The crushed rock ballast or trowelling stone shall contain less than 30% by mass of flat pieces. In cases of dispute the test method "Determination of Flakiness Index" contained in British Standard 812 shall be used.

6 **Absorption**

The absorption of the ballast or trowelling stone shall be less than 0.5%. ASTM C 127

Note: Vertical bar on left margin indicates location of latest revision.

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CN SPECIFICATION 12-20C
CRUSHED ROCK BALLAST

7 **Soundness and Resistance to Abrasion**

Property	Requirement		Tested in Accordance with ASTM Method	Testing Remarks
Soundness	Class 1 Ballast & Trowelling Stone	Class 2 Ballast	C 88	Coarse aggregate only, magnesium sulphate solution.
	Less than 7.0% at 5 cycles.	Less than 10.0% at 5 cycles.		
Abrasion Loss	Less than 20%.	Less than 30%.	C 535	ASTM Grading "2".

8 **Grading**

The ballast and trowelling stone shall conform to the grading requirements shown below.

% Passing by Mass			
Sieve Size	Class 1 & 2 Ballast	Trowelling Stone	
2-1/2" (63 mm)	100	-	
2" (50 mm)	70-90	-	
1-1/2" (37.5 mm)	40-70	-	
1" (25 mm)	0-25	100	
3/4" (19 mm)	0-3	90-100	
1/2" (12.5 mm)	-	15-55	
No. 4 (4.75 mm)	-	0-5	
No. 200 (0.75 mm)	0-1	0-1	

ASTM C 136
ASTM C 117 (for material passing the No. 200 sieve).

9 **Ballast Resistivity**

9.1 When tested as described in Appendix A, ballast resistivity shall not be less than 3000 ohm-meters.

10 **Frequency of Testing**

10.1 At the start of production the Producer shall carry out all tests described in Sections 4 to 9 inclusive to establish compliance with this specification.

10.2 During production the Producer shall carry out the grading test twice per day, the abrasion loss test once on each 10,000 metric tonnes of production, and all other tests once on each 30,000 metric tonnes of production thereafter. The ballast or trowelling stone shall be tested more frequently if there is any indication of a change in quality.

11 **Handling and Loading**

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CN SPECIFICATION 12-20C
CRUSHED ROCK BALLAST

11.1 Ballast and trowelling stone shall be handled, stockpiled and/or loaded into cars in such a manner as to minimize the abrasion of particles and the segregation of sizes.

11.2 Under no circumstances shall rubber tired or crawler type vehicles be allowed to operate or traverse repeatedly over the stockpile of crushed material.

11.3 The handling and loading procedures shall have the prior approval of the Senior Geotechnical Engineer of the Railway.

12 **Weighing**

12.1 All ballast and trowelling stone delivered to the Railway shall be weighed by the Producer at his expense and proof of such weight shall be supplied to the Inspector.

12.2 All measurement shall be by actual weight in net tonnes (1000 kg).

12.3 The weighing device or method used must be approved by the Railway in writing. The Producer shall arrange for and obtain certification by the Weights and Measures Division of the Federal Department of Consumer and Corporate Affairs of any weighing device before it goes into service and thereafter as required by the Inspector. In no case shall calibration be done less than once after each 100,000 tonnes of production.

12.4 The accuracy of any weighing device may be checked by the Inspector at any time and should any discrepancies be found in the reading adjustments to the production quantities will be made by the Inspector.

QUALITY ASSURANCE

13 **Application**

Material ordered to this specification is subject to inspection by the Railway with respect to all the requirements of this specification.

14 **Plant Access**

The Inspector shall have, during working hours, free entry to all parts of the producer's plant and laboratory facilities used in the production or testing of material ordered to this specification.

15 **Quality Assurance Provisions**

It is the producer's responsibility to satisfy the Inspector that the ballast and trowelling stone conforms to this specification. This may be accomplished either by performing the tests (preferably on-site) prescribed in this specification or by demonstrating to the Inspector that the production, handling and stockpiling are so controlled that conformity to this specification is assured.

The Railway reserves the right to perform any of the tests set forth in the specification where such tests are deemed necessary to assure conformity to the prescribed requirements.

16 **Test Samples**

The incidence of sampling and the location at which samples are selected for testing by the Railway shall be at the discretion of the Inspector. The samples shall be taken in such a manner as to ensure

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	CN GRANULAR SPECIFICATIONS	<u>OFFICE OF DESIGN & CONSTRUCTION</u>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="font-size: small;">REVISIONS</td> <td style="font-size: small;">DATE</td> <td style="font-size: small;">BY</td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td colspan="3" style="text-align: center;">APPROVALS</td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>	REVISIONS	DATE	BY				APPROVALS														
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CENTRAL DIVISION
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 (847) 605-9600

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Eastern Region

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BALLAST SPECIFICATION			

	DRAWING No.
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DATE:	08/28/2024
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 CRUSHED ROCK BALLAST

that they truly represent the material being produced. The sample size for complete testing shall be not less than 50 kg.

17 Defective Material

Material which has been or is being produced which does not comply with this specification shall be rejected by the Inspector. The Producer shall stop further production until the fault has been corrected and shall dispose of all rejected material without cost to the Railway.

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CN SPECIFICATION 12-20C
 CRUSHED ROCK BALLAST

APPENDIX A
 Ballast Resistivity Testing

1. Load ballast into the covered plexiglass resistivity box (see Diagram A below – minimum dimensions h=0.15m and L=0.2m). Ensure that the box is filled level. If necessary, shake the box to settle material.
2. Measure and record the resistance of the material as produced / received.
3. Record ambient temperature.
4. Using an atomizer, add de-ionized water 50 ml at a time waiting 3 minutes between applications until bottom of sample is wet. Water may not be allowed to accumulate at the base of the box. Record volume of water added and cover sample.
5. The resistivity of the material will decrease as water disperses through the sample. Record resistivity every hour for the first 6 hours and then take a minimum of three additional measurements over the next 36 hours.
6. Minimum resistivity will be calculated by multiplying the lowest recorded resistivity by the ballast box factor (h^2/L where h and L are the ballast box dimensions shown in Diagram A)
7. Replace sample and repeat test a minimum of 4 times. Ballast resistivity shall be the average of the minimum resistivity of all valid tests.

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A16-2

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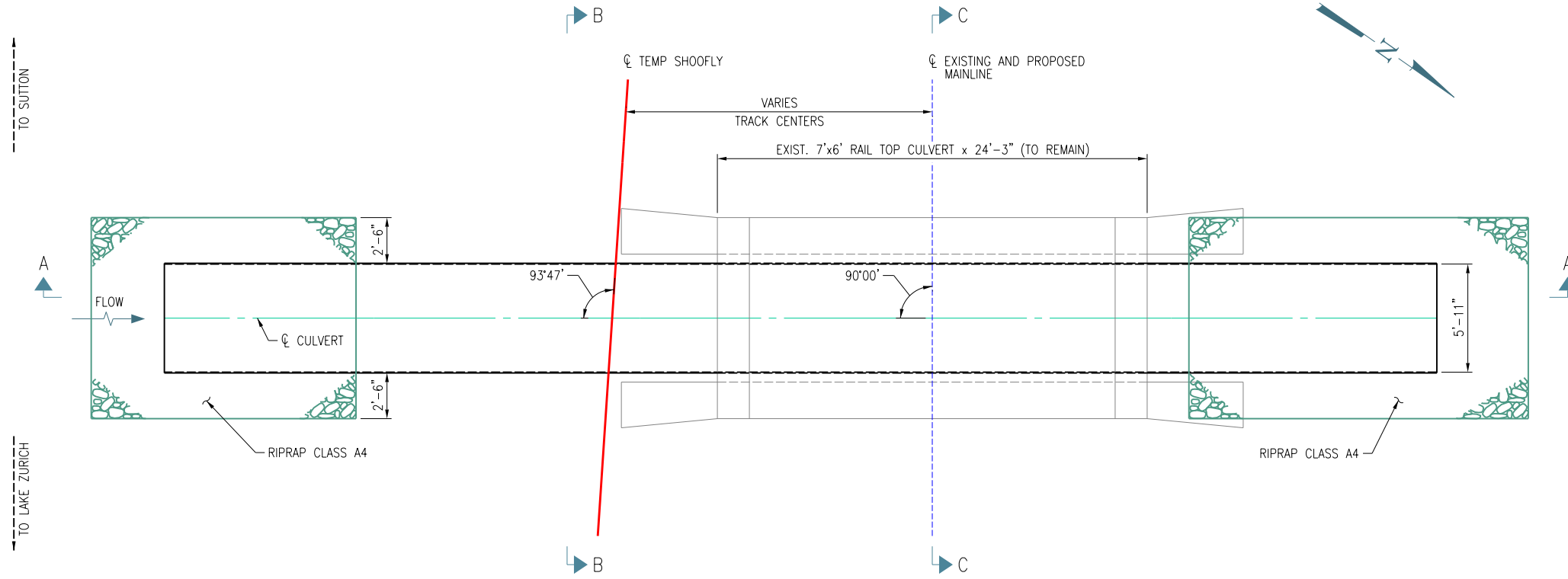
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Eastern Region

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BALLAST SPECIFICATION			

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GENERAL NOTES:

THE EXISTING 7'x6" x 24'-0"± LONG RAIL TOP CULVERT IS TO BE REPLACED WITH A 60" EQUIV. DIA. x 69'-7" LONG CORRUGATED METAL PIPE ARCH. THE PIPE WILL BE PLACED WITHIN THE EXISTING CULVERT OPENING. THE EXISTING CULVERT WILL REMAIN IN PLACE AND ABANDONED.

CN MAINLINE TRACK ALIGNMENT SHALL REMAIN THE SAME.

DESIGN LOADING: LIVE LOAD COOPER E-90, 4.66 FEET MIN. FILL.

DESIGN AND SPECIFICATIONS:

- AREMA (2023) CHAPTERS 8 & 15
- CORRUGATED METAL PIPE (CMP) ARCH SHALL BE PLAIN GALVANIZED CORRUGATED STEEL PIPE IN ACCORDANCE WITH AASHTO M-218 OR ASTM A929.
- CMP SHALL BE 60" EQUIV. DIA. X 0.138" (10 GA) WALL W/ 2 2/3" X 1/2" CORRUGATIONS AND SQUARE ENDS. COST INCLUDED IN PIPE CULVERTS, SPECIAL 60".

BACKFILL AROUND CULVERT SHALL CONSIST OF COMMON FILL MATERIAL COMPACTED TO 95% STANDARD PROCTOR MAXIMUM DRY DENSITY, SHALL BE PLACED AND COMPACTED IN LIFTS NOT EXCEEDING 12".

FLOWABLE FILL SHALL BE PLACED IN THE VOIDS BETWEEN PIPE AND EXISTING CULVERT.

HEADWALL REMOVAL SHALL BE INCLUDED IN THE COST OF CONCRETE HEADWALL REMOVAL PARTIAL.

ALL MATERIAL AND WORKMANSHIP SHALL BE AS PER THE CURRENT A.R.E.M.A. MANUAL FOR RAILWAY ENGINEERING: CHAPTER 8 - CONCRETE STRUCTURES AND FOUNDATIONS. CHAPTER 1, PART 4 - CULVERTS.

REFER TO CN STANDARD DRAWINGS, R7A-80.2_1 FOR CORRUGATED STEEL PIPE (CSP) CULVERT INSTALLATION GUIDELINES.

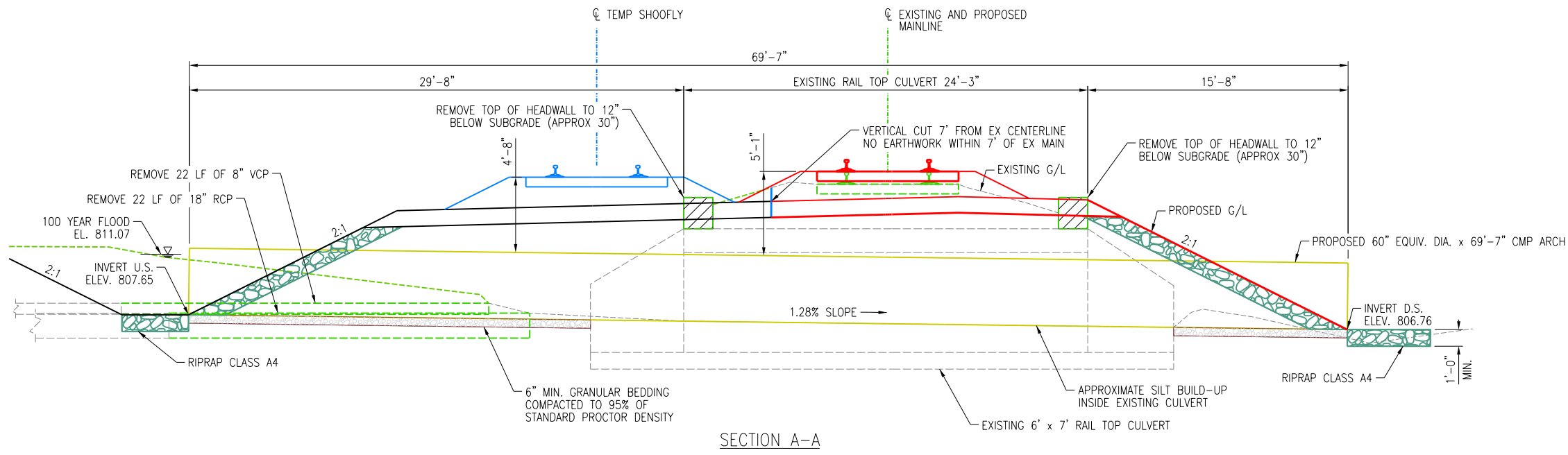
VERIFY ALL DIMENSIONS, STATIONS, AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

STREAM FLOW DIVERSION: IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DIVERT THE STREAM FLOW DURING CONSTRUCTION IN ORDER TO KEEP THE CONSTRUCTION AREA FREE OF WATER.

PROVIDE WELL COMPACTED BEDDING AS REQUIRED TO ESTABLISH GRADE OF THE PIPES. BEDDING SHALL CONSIST OF 6" OF PIPE BEDDING. PIPE BEDDING SHALL BE POROUS GRANULAR EMBANKMENT ACCORDING TO ARTICLE 207 IN THE STANDARD SPECIFICATIONS.

WELL COMPACTED FILL SHALL BE WELL GRADED GRANULAR SOIL FREE OF ANY ORGANIC MATERIAL, STONES LARGER THAN 3 INCHES, FROZEN LUMPS, DEBRIS OR EXCESSIVE MOISTURE. FILL SHALL BE COMPACTED TO 95% OF MAXIMUM DRY DENSITY AS DEFINED IN STM D689-91 (STANDARD PROCTOR). FILL SHALL BE PLACED IN LAYERS NOT TO EXCEED 6 INCHES AND SHALL BE PLACED EQUALLY ON EACH SIDE OF THE PIPE.

READ THIS DRAWING WITH DWG S-102.



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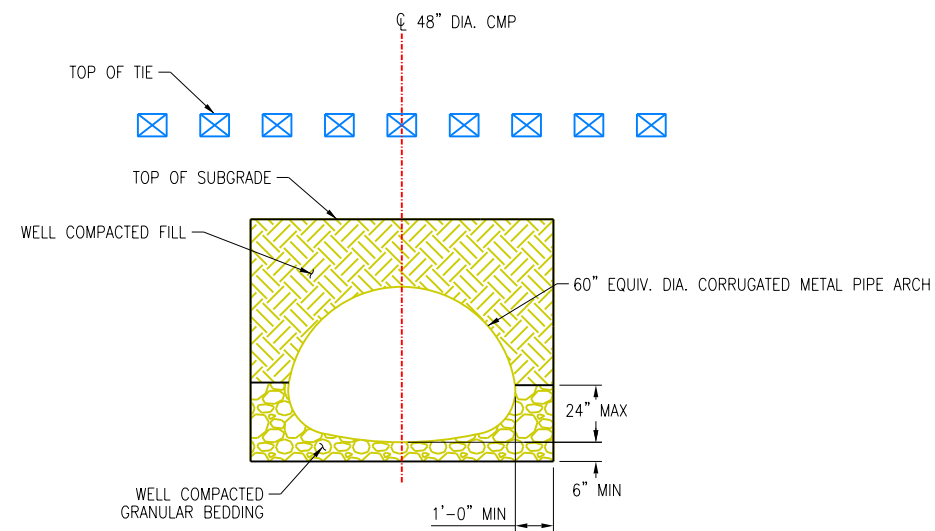
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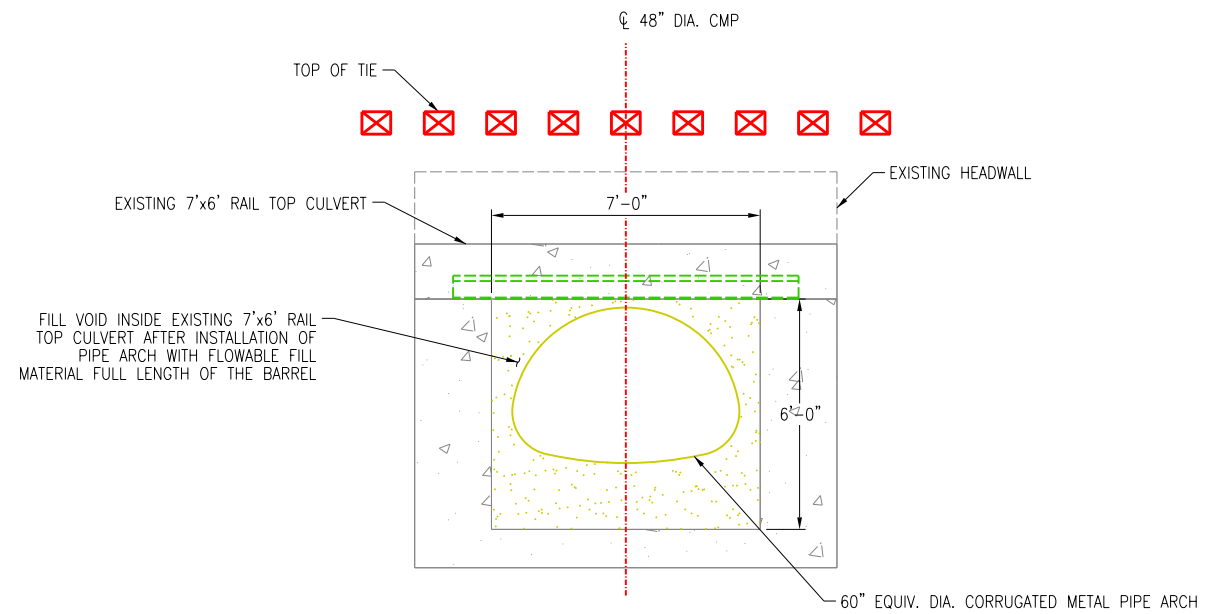
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SECTION B-B



SECTION C-C

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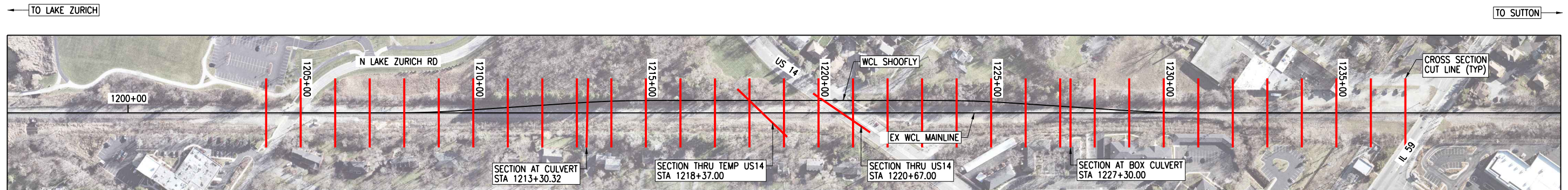
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SHEET TITLE: CROSS SECTION CUT LINES			

DRAWING No.	CT-700
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TEMPORARY TRACK EARTHWORK								
STATION	CUT		FILL		SUBBALLAST		PRE-BALLAST 8"	
	AREA (SF)	VOLUME (CY)	AREA (SF)	VOLUME (CY)	AREA (SF)	VOLUME (CY)	AREA (SF)	VOLUME (CY)
1204+00	-	-	-	-	-	-	-	-
1205+00	-	-	-	-	-	-	-	-
1206+00	-	-	-	-	-	-	-	-
1207+00	-	-	-	-	-	-	-	-
1208+00	-	-	-	-	-	-	-	-
1209+00	5.8	11	4.8	9	8.9	17	3.3	12
1210+00	5.7	21	21.4	49	14.6	44	7.1	19
1211+00	2.8	16	57.6	146	21.0	66	10.8	33
1212+00	6.3	17	73.3	242	27.4	90	10.8	40
1213+00	2.0	15	96.5	315	33.7	113	11.1	41
1213+30	4.3	4	95.3	107	35.5	39	11.2	12
1214+00	2.9	9	94.0	245	38.6	96	11.4	29
1215+00	41.0	81	1.5	177	40.3	146	11.7	43
1216+00	124.8	307	-	3	40.5	150	11.8	44
1217+00	138.7	488	-	-	40.5	150	12.0	44
1218+00	85.0	414	-	-	40.5	150	12.1	45
1218+37		*		*		*	6.7	13
1219+00		*		*		*	12.0	22
1220+00		*		*		*	10.6	42
1220+67	189.7	*	-	*	78.5	*	10.5	26
1221+00	196.7	236	-	-	40.6	73	12.0	14
1222+00	195.5	726	-	-	40.6	150	12.0	45
1223+00	195.2	723	-	-	40.6	150	12.0	45
1224+00	177.7	690	-	-	40.0	149	12.0	45
1225+00	154.8	616	-	-	36.8	142	11.7	44
1226+00	92.0	457	-	-	31.0	126	11.3	43
1227+00	43.1	250	28.4	53	24.6	103	10.8	41
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1231+00	-	-	-	-	-	-	-	-
1232+00	-	-	-	-	-	-	-	-
1233+00	-	-	-	-	-	-	-	-
1234+00	-	-	-	-	-	-	-	-
1235+00	-	-	-	-	-	-	-	-
1236+00	-	-	-	-	-	-	-	-
TOTAL		5,329		1,741		2,110		820

*INCLUDED WITH ROAD QUANTITIES

NOTE: ALL QUANTITIES SHOWN THIS SHEET ARE NEAT LINE QUANTITIES USING AVERAGE END AREA METHOD.

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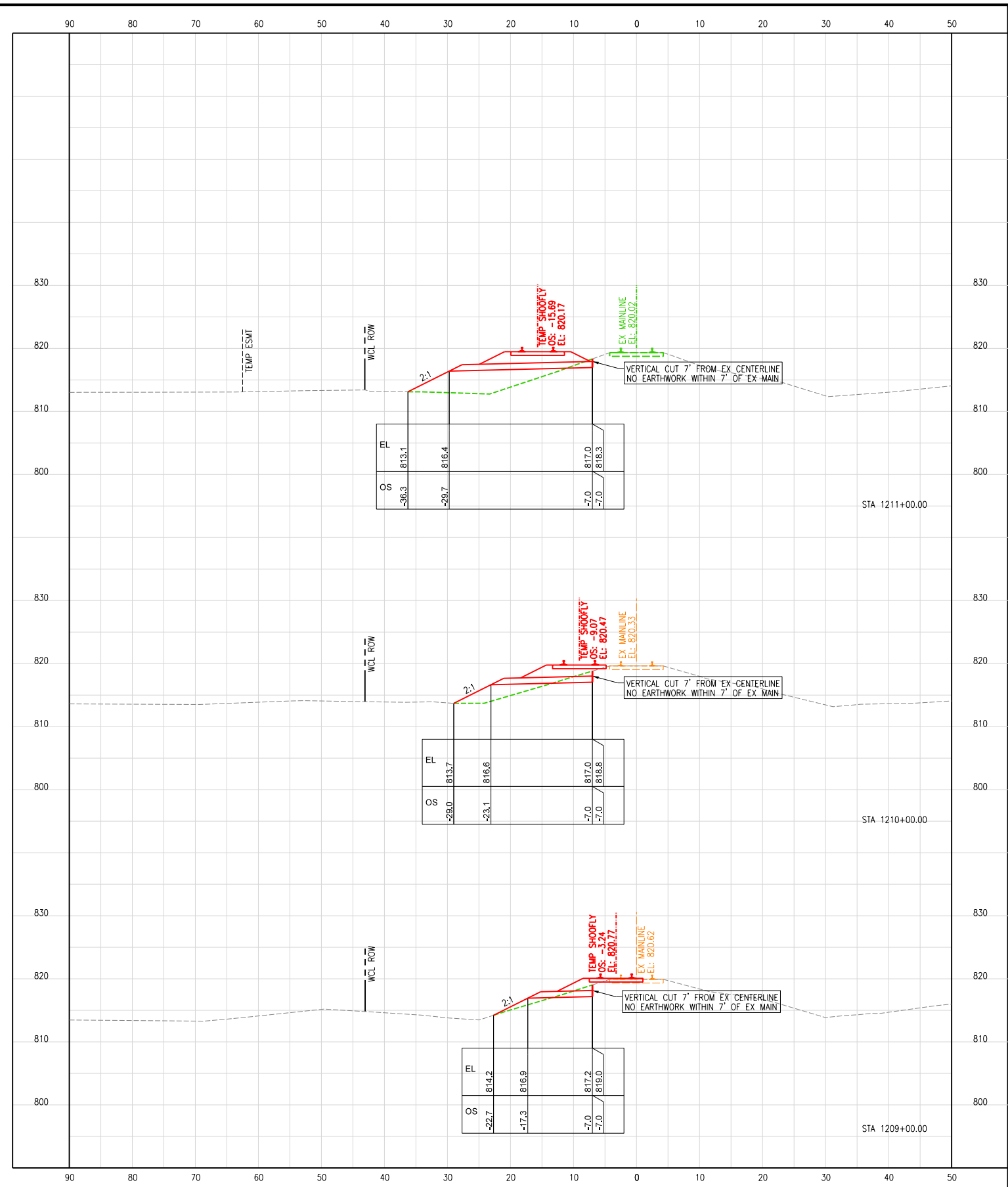
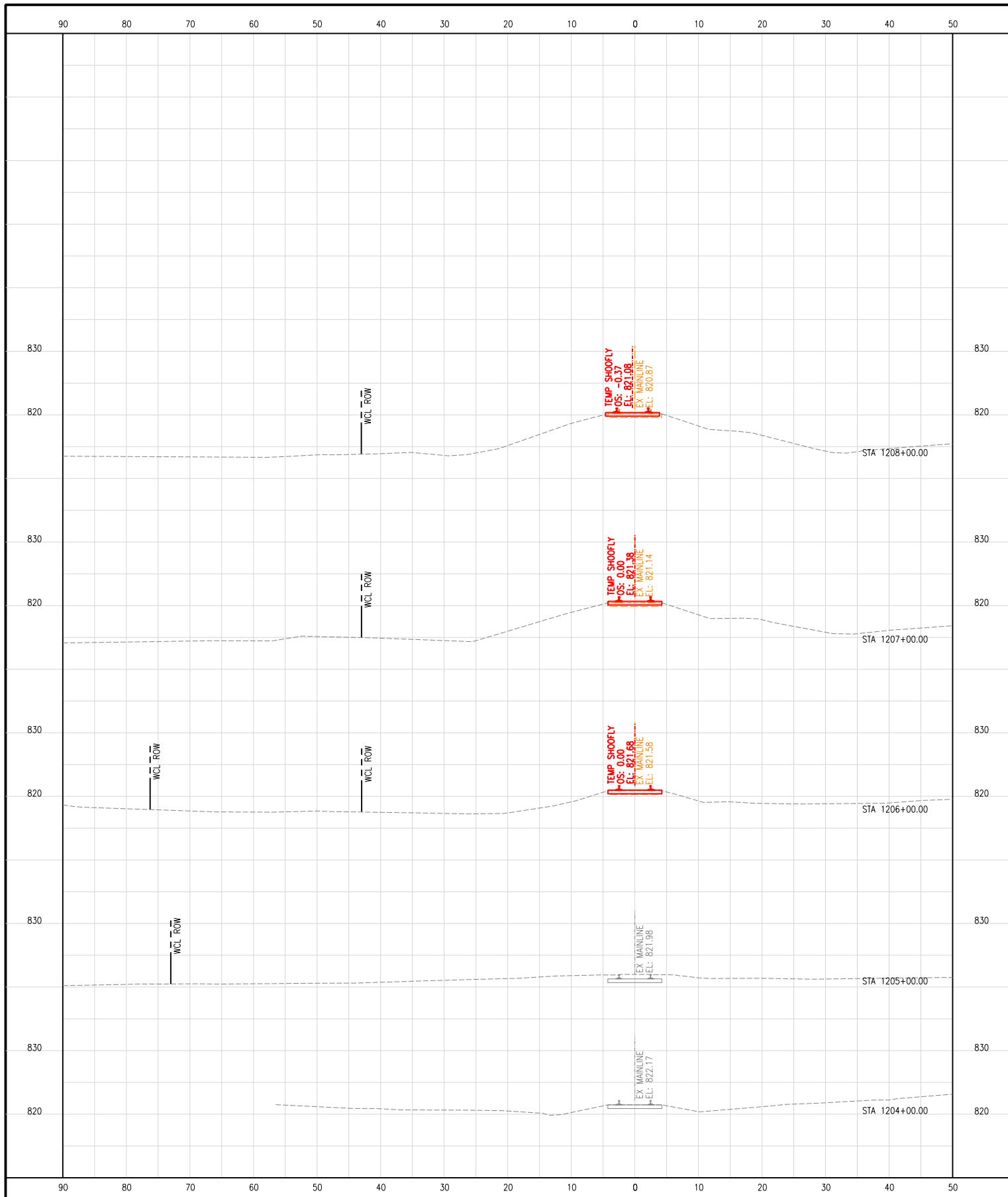
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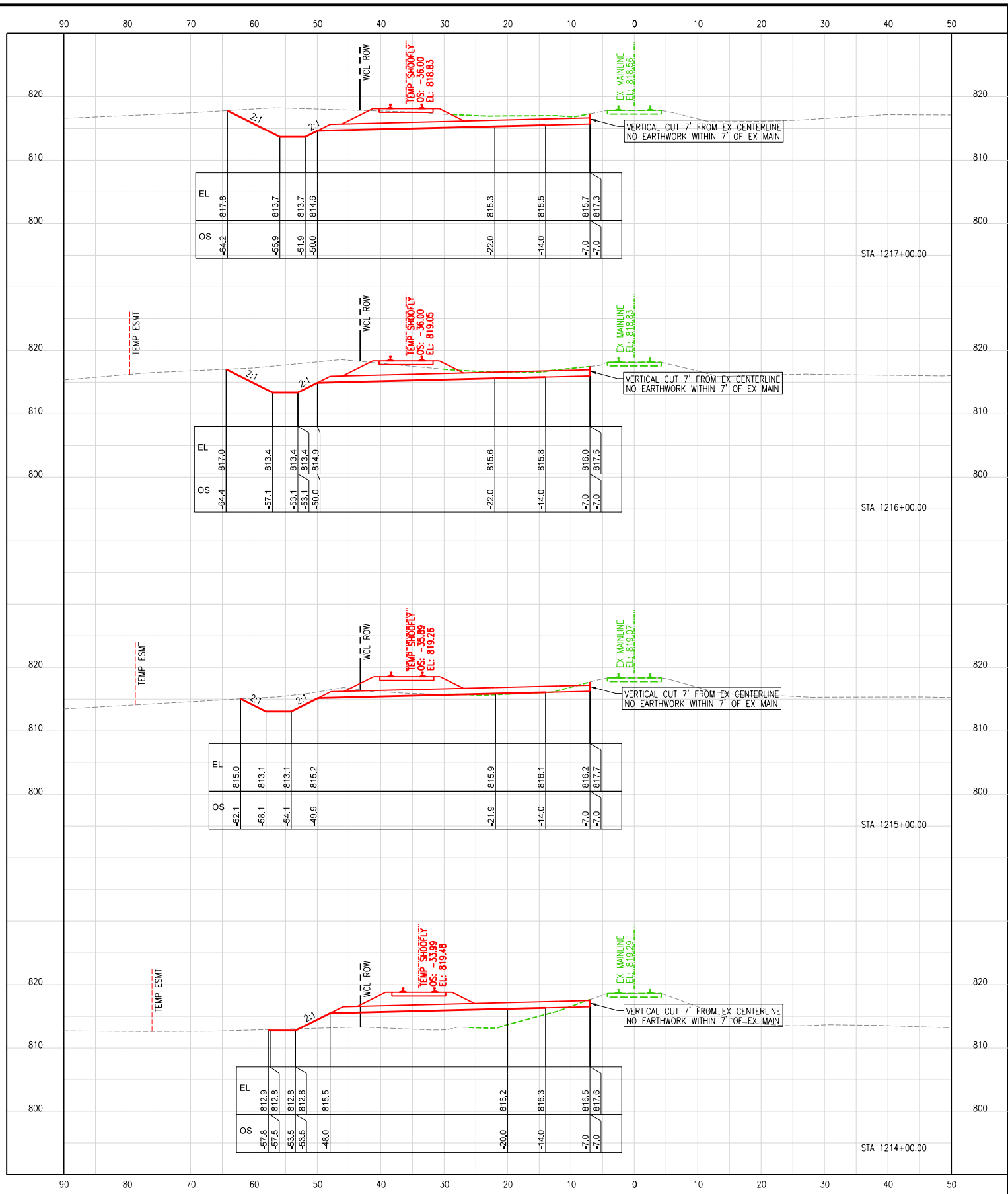
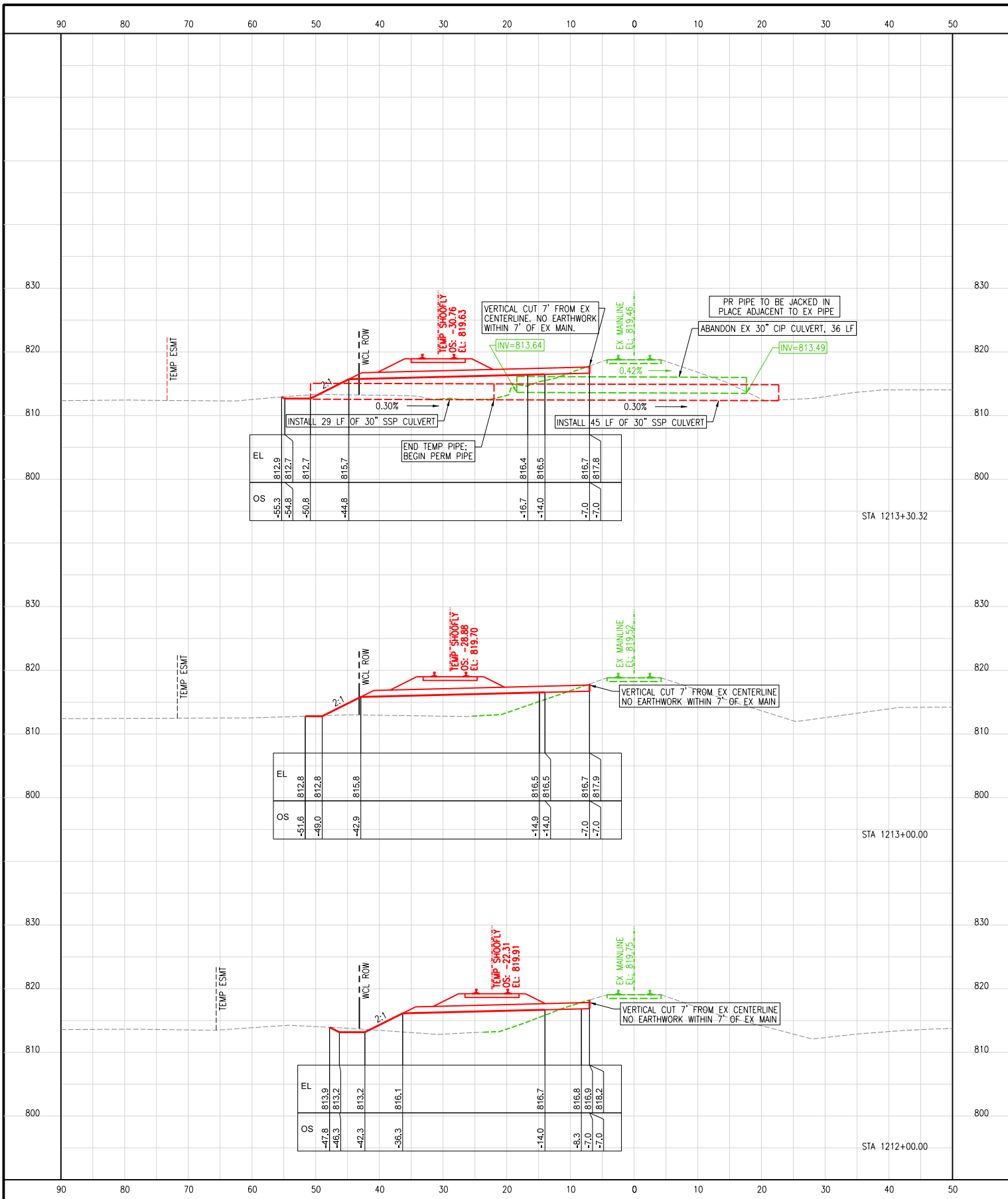
US ROUTE 14
 STA. 1205+00
 TO STA. 1235+00
 F.A.U. RTE: 0305
 SECTION: 11-00087-00-GS
 COUNTY: LAKE
 CONTRACT: 61J87



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SHEET TITLE: CROSS SECTIONS TEMP ALIGNMENT STA 1204+00 TO STA 1211+00			

DRAWING No.
CT-801
 DATE: 08/28/2024
 SHEET: 376 OF 816

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US ROUTE 14 GRADE SEPARATION
 LAKE ZURICH ROAD TO IL-59
 BARRINGTON, ILLINOIS
 OPERATING COMPANY: WCL

CENTRAL DIVISION
 LEIGHTON SUB



1475 E. WOODFIELD RD., SUITE 600
 SCHAUMBURG, IL 60173
 (847) 605-9600

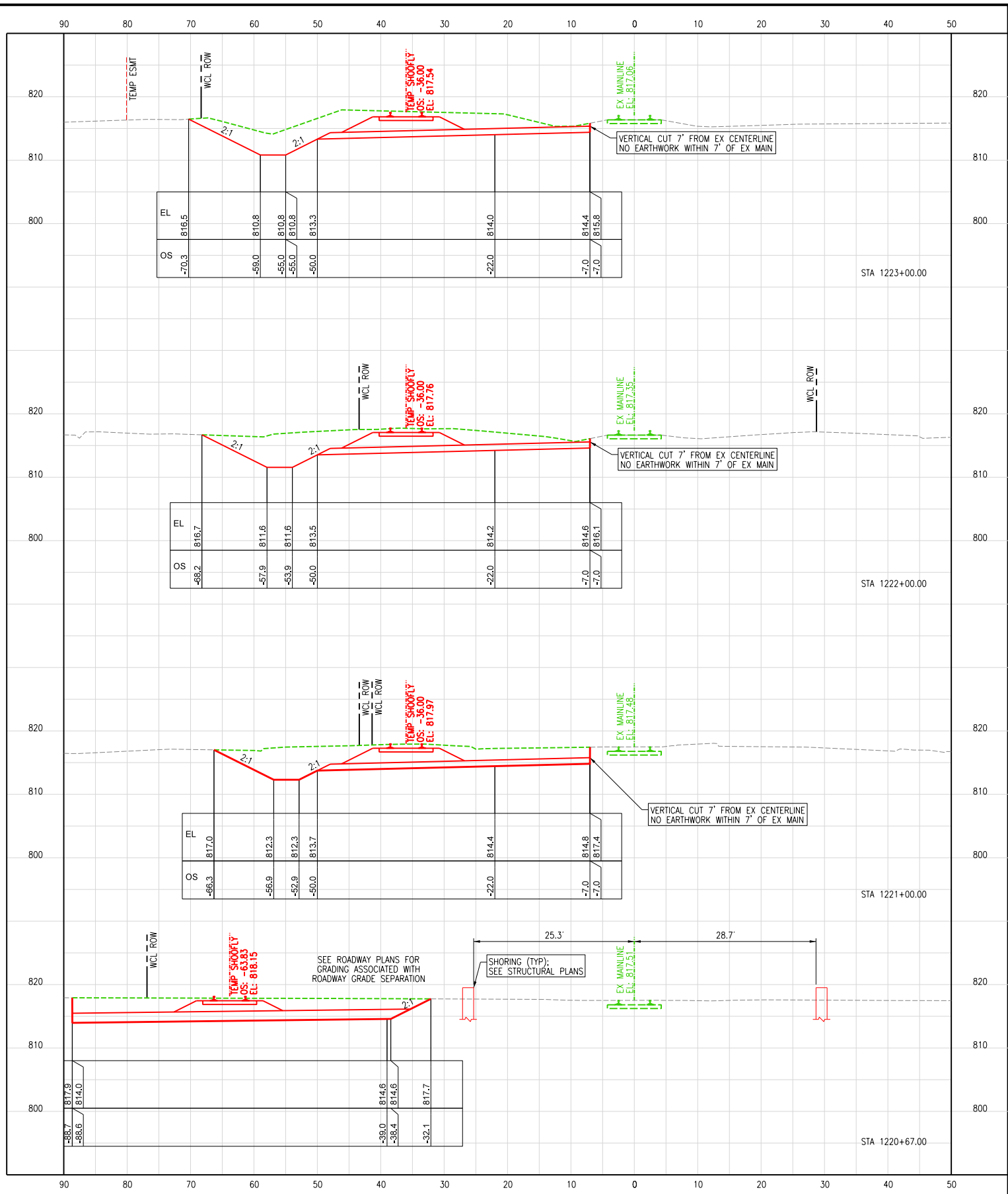
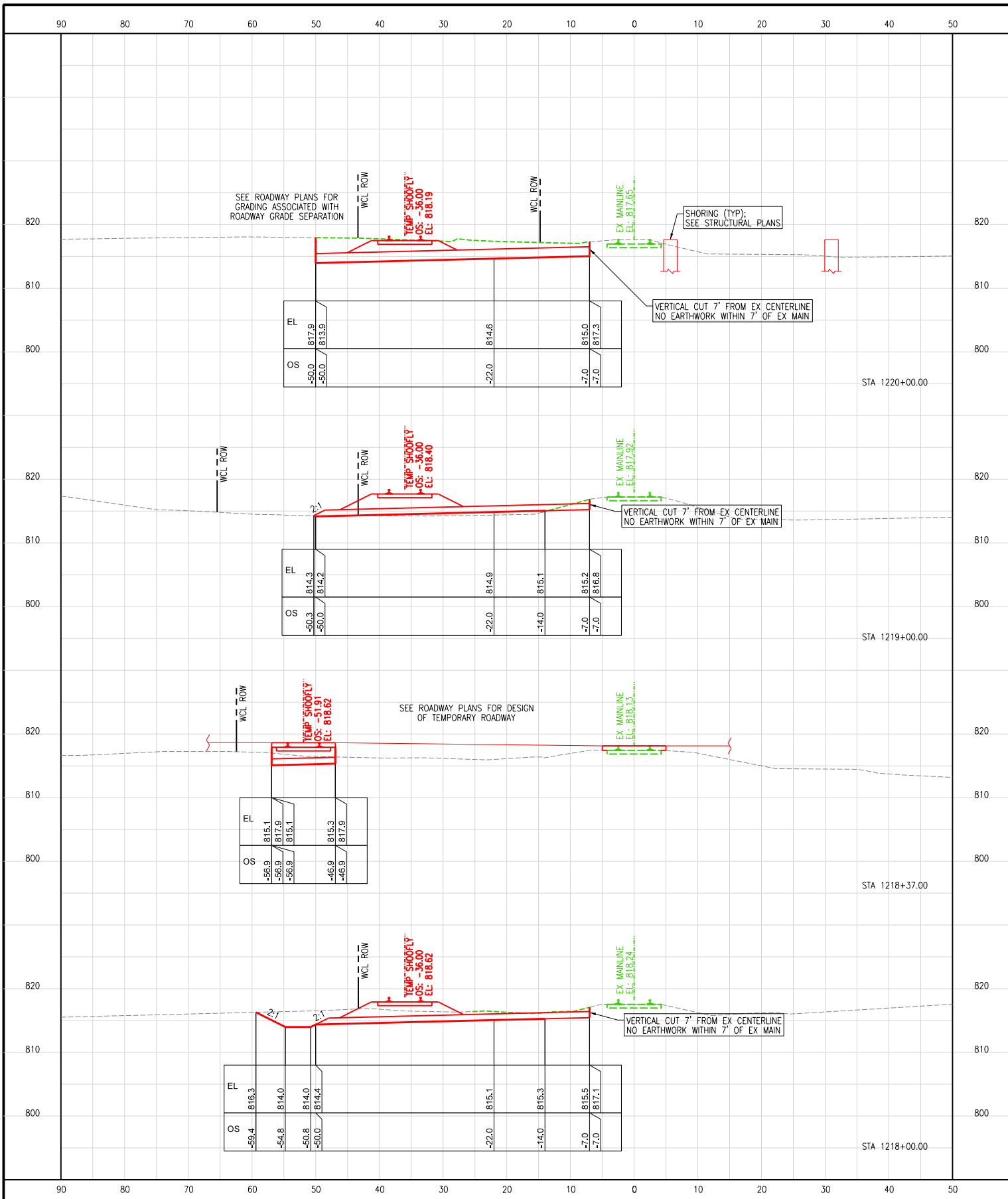
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 STA. 1205+00
 TO STA. 1235+00
 F.A.U. RTE: 0305
 SECTION: 11-00087-00-GS
 COUNTY: LAKE
 CONTRACT: 61J87



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DRAWING No. CT-802	
DATE:	08/28/2024
SHEET:	377 OF 816

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 LAKE ZURICH ROAD TO IL-59
 BARRINGTON, ILLINOIS
 OPERATING COMPANY: WCL

CENTRAL DIVISION
 LEIGHTON SUB

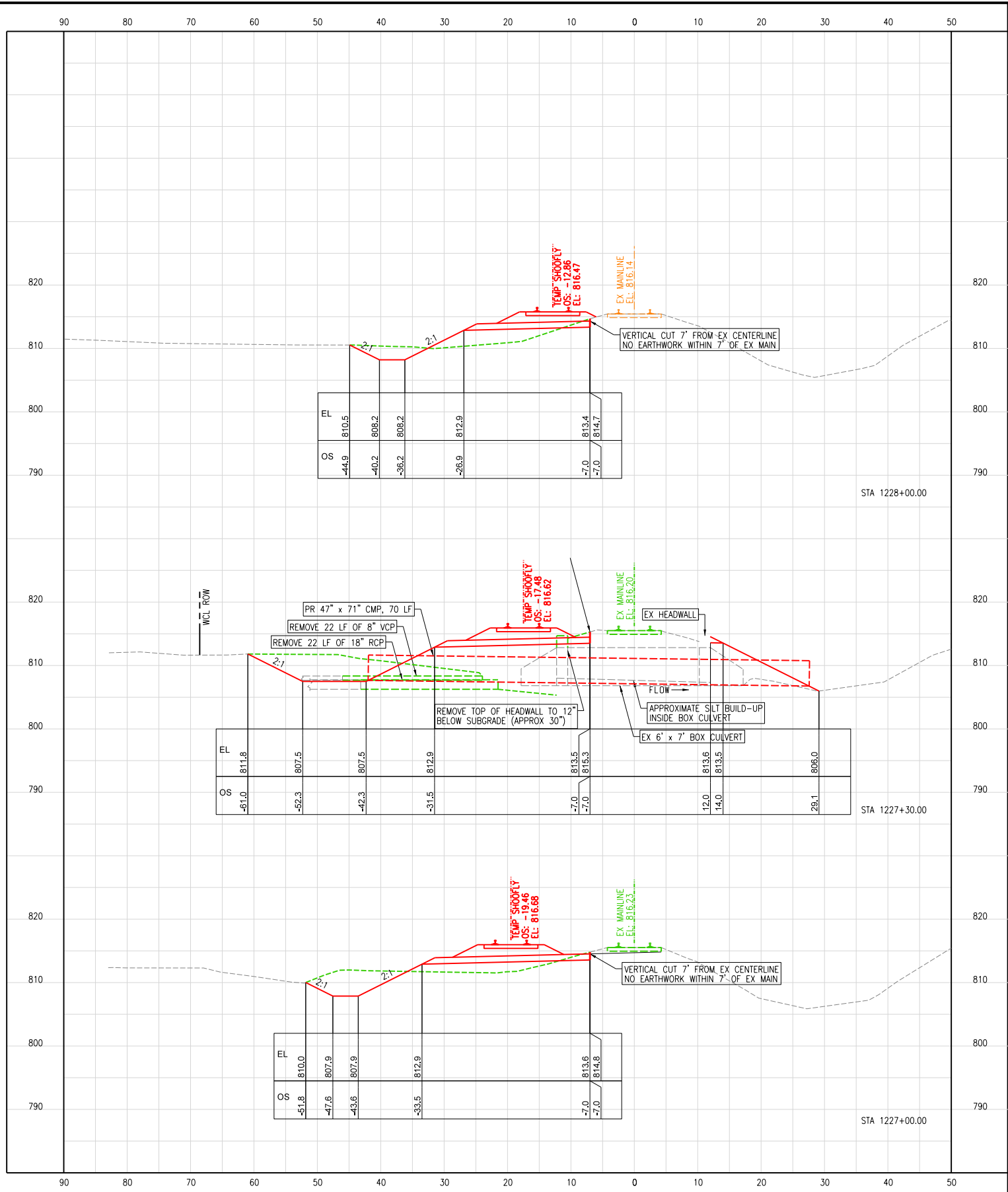
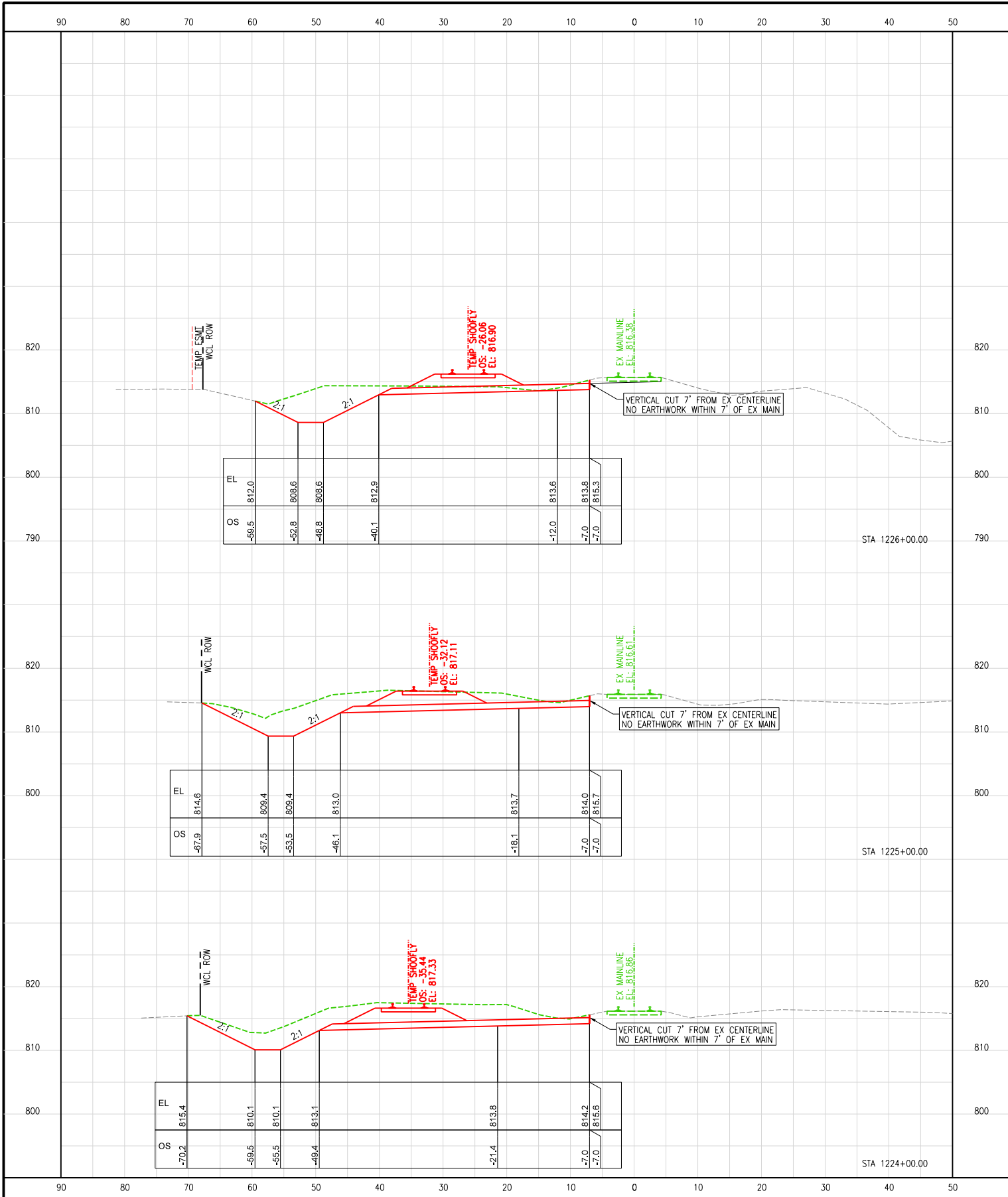


US ROUTE 14
 STA. 1205+00
 TO STA. 1235+00
 F.A.U. RTE: 0305
 SECTION: 11-00087-00-GS
 COUNTY: LAKE
 CONTRACT: 61J87



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0001-ct-801				
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CROSS SECTIONS TEMP ALIGNMENT STA 1218+00 TO STA 1223+00				SHEET: 378 OF 816

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 BARRINGTON, ILLINOIS
 OPERATING COMPANY: WCL

CENTRAL DIVISION
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1475 E. WOODFIELD RD., SUITE 600
 SCHAUMBURG, IL 60173
 (847) 605-9600

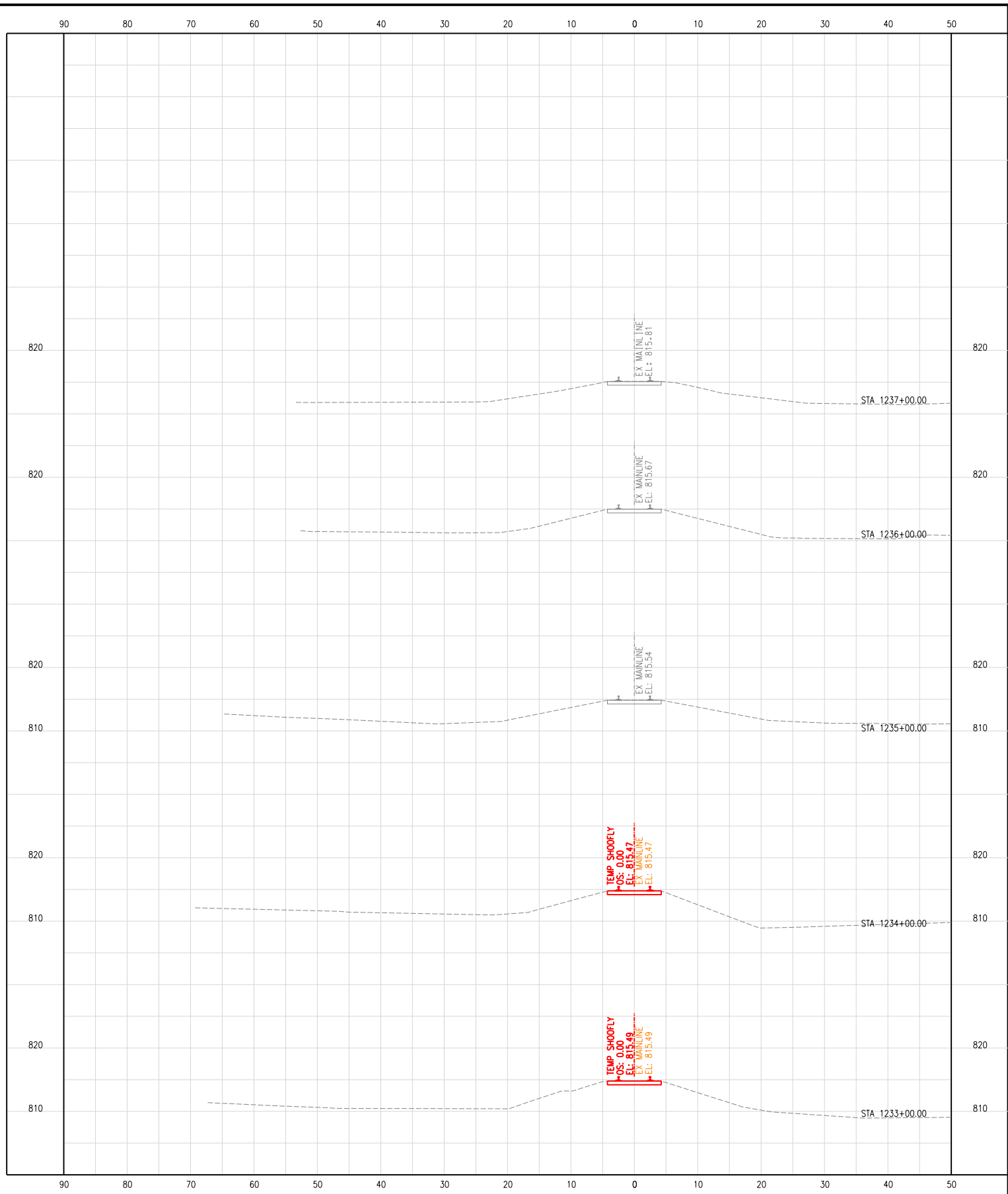
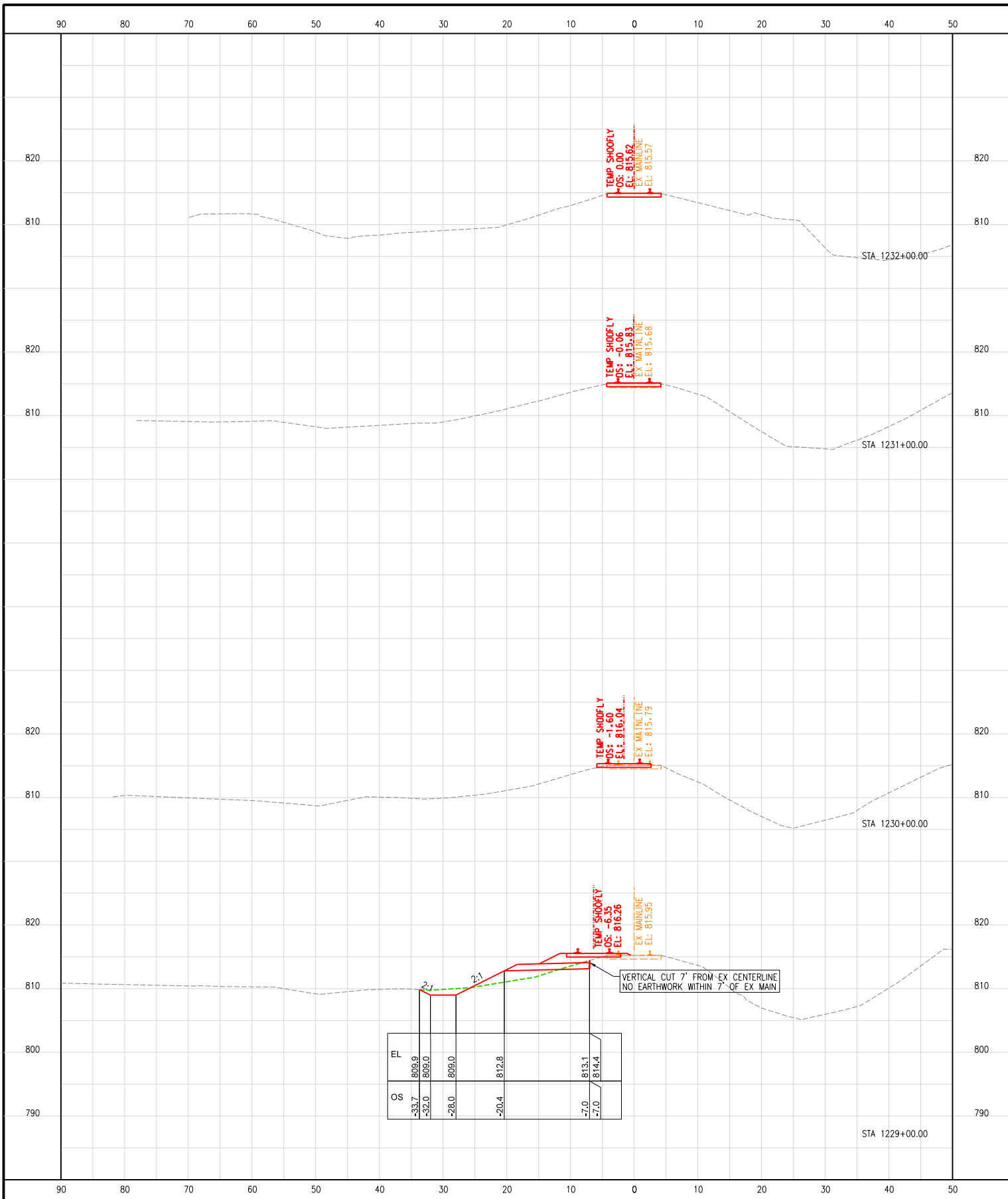
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 STA. 1205+00
 TO STA. 1235+00
 F.A.U. RTE: 0305
 SECTION: 11-00087-00-GS
 COUNTY: LAKE
 CONTRACT: 61J87



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CT-804	
DATE:	08/28/2024
SHEET:	379 OF 816

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US ROUTE 14 GRADE SEPARATION
 LAKE ZURICH ROAD TO IL-59
 BARRINGTON, ILLINOIS
 OPERATING COMPANY: WCL

CENTRAL DIVISION
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US ROUTE 14
 STA. 1205+00
 TO STA. 1235+00
 F.A.U. RTE: 0305
 SECTION: 11-00087-00-GS
 COUNTY: LAKE
 CONTRACT: 61J87



DESIGN	DRAWN	CHECKED	APPRVD.
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DRAWING No.
CT-805
 DATE: 08/28/2024
 SHEET: 380 OF 816

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PERMANENT TRACK EARTHWORK										
STATION	CUT		FILL		SUBBALLAST		REMOVE SUBBALLAST		PRE-BALLAST 8"	
	AREA (SF)	VOLUME (CY)	AREA (SF)	VOLUME (CY)	AREA (SF)	VOLUME (CY)	AREA (SF)	VOLUME (CY)	AREA (SF)	VOLUME (CY)
1204+00	-	-	-	-	-	-	-	-	-	-
1205+00	-	-	-	-	-	-	-	-	-	-
1206+00	-	-	-	-	-	-	-	-	-	-
1207+00	-	-	-	-	-	-	-	-	-	-
1208+00	-	-	-	-	-	-	-	-	-	-
1209+00	41.5	77	-	-	19.3	36	-	-	10.0	37
1210+00	36.5	145	-	-	19.3	71	-	-	9.9	37
1211+00	30.2	124	2.2	4	19.3	71	-	-	10.3	37
1212+00	97.1	236	5.4	14	19.3	72	21.6	40	10.7	39
1213+00	117.1	397	6.4	22	19.3	72	27.9	92	10.8	40
1213+30	129.6	137	11.3	10	19.3	21	29.7	32	10.8	12
1214+00	117.7	321	8.2	25	19.3	50	32.8	81	10.7	28
1215+00	56.0	322	0.5	16	19.3	71	34.6	125	10.7	40
1216+00	48.8	194	0.2	1	19.3	71	34.8	128	10.7	40
1217+00	45.2	174	-	1	19.3	71	34.8	129	10.7	40
1218+00	40.1	158	-	-	19.3	71	34.8	129	10.7	40
1218+37		*		*		*		*	10.5	15
1219+00		*		*		*		*	10.7	25
1220+00		*		*		*		*	8.7	36
1220+67	-	*	-	*	-	*	78.5	*	8.7	22
1221+00	-	-	-	-	-	-	40.6	73	8.7	11
1222+00	24.9	46	-	-	13.3	25	-	75	10.2	35
1223+00	30.1	102	-	-	13.3	49	-	-	10.2	38
1224+00	31.3	114	-	-	15.3	53	-	-	10.7	39
1225+00	26.2	107	-	-	15.8	58	-	-	10.7	40
1226+00	24.4	94	1.9	4	19.2	65	-	-	10.7	40
1227+00	23.1	88	41.1	80	19.3	71	-	-	10.7	40
1227+30	26.5	28	-	23	16.7	20	-	-	10.7	12
1228+00	26.2	68	31.7	41	19.3	47	-	-	9.7	26
1229+00	27.7	100	39.2	131	19.3	72	-	-	9.7	36
1230+00	39.8	125	-	73	-	36	-	-	-	36
1231+00	27.4	125	-	-	-	-	-	-	-	-
1232+00	-	51	-	-	-	-	-	-	-	-
1233+00	1.0	2	-	-	-	-	-	-	-	-
1234+00	5.5	12	-	-	-	-	-	-	-	-
1235+00	-	10	-	-	-	-	-	-	-	-
1236+00	-	-	-	-	-	-	-	-	-	-
TOTAL		3,353		445		1,173		904		841

NOTE: ALL QUANTITIES SHOWN THIS SHEET ARE NEAT LINE QUANTITIES USING AVERAGE END AREA METHOD.

*INCLUDED WITH ROAD QUANTITIES

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No.	ISSUE FOR:	DATE

US ROUTE 14 GRADE SEPARATION
 LAKE ZURICH ROAD TO IL-59
 BARRINGTON, ILLINOIS
 OPERATING COMPANY: WCL

CENTRAL DIVISION
 LEIGHTON SUB

TRANSYSTEMS
 1475 E. WOODFIELD RD., SUITE 600
 SCHAUMBURG, IL 60173
 (847) 605-9600

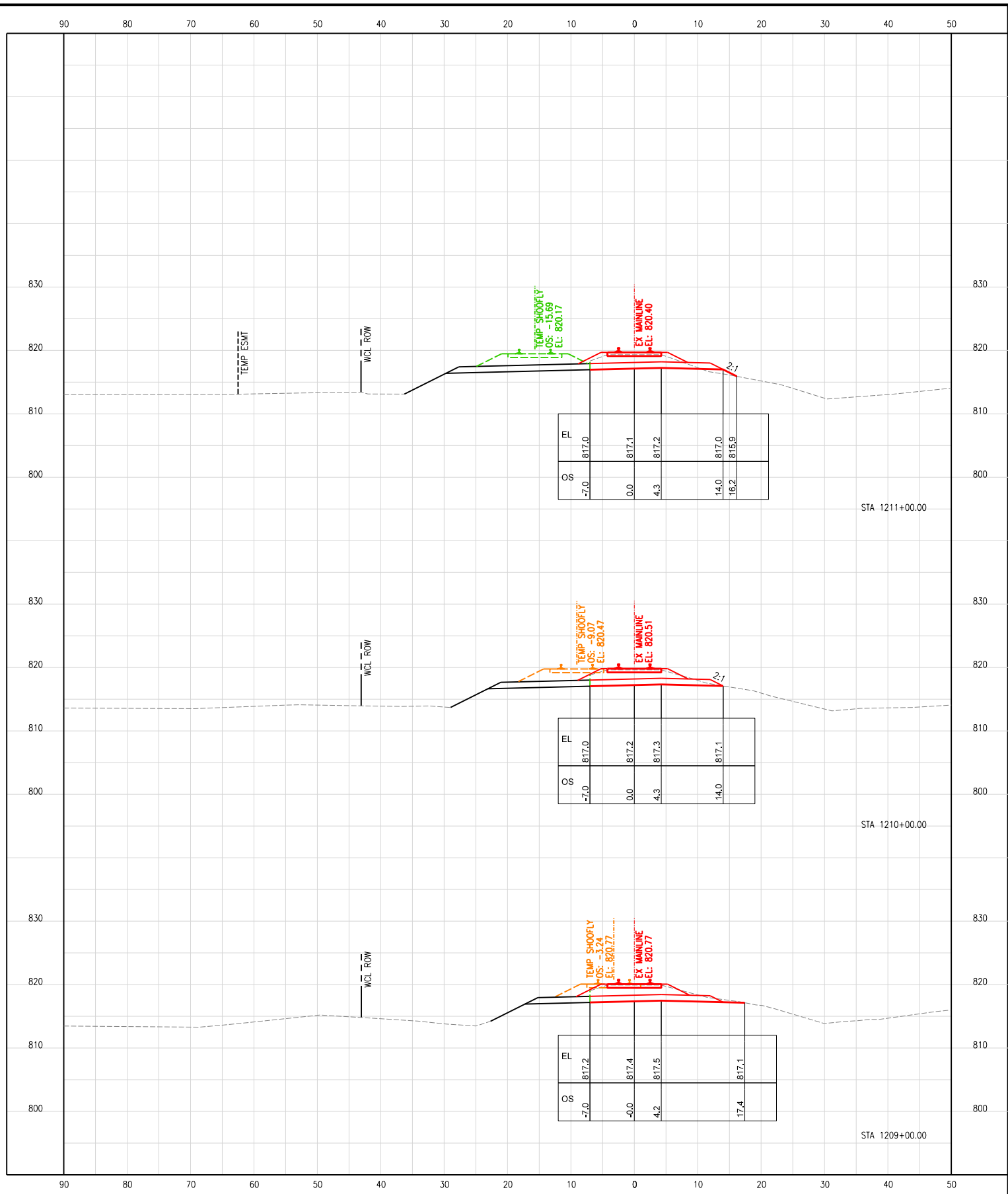
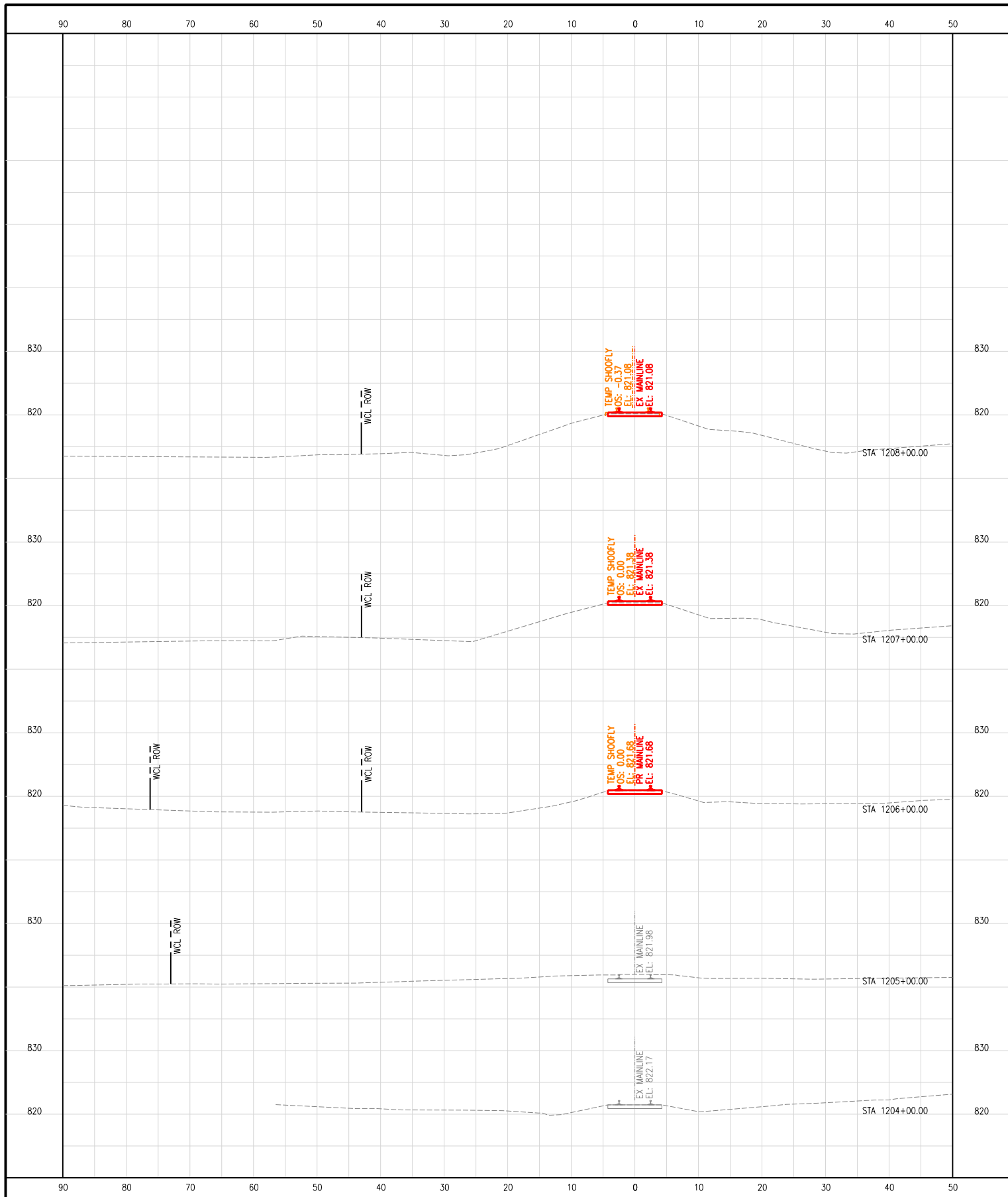
US ROUTE 14
 STA. 1205+00
 TO STA. 1235+00
 F.A.U. RTE: 0305
 SECTION: 11-00087-00-GS
 COUNTY: LAKE
 CONTRACT: 61J87



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DRAWING No.	CT-900
DATE: 08/28/2024	
SHEET: 381 OF 816	

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US ROUTE 14 GRADE SEPARATION
 LAKE ZURICH ROAD TO IL-59
 BARRINGTON, ILLINOIS
 OPERATING COMPANY: WCL

CENTRAL DIVISION
 LEIGHTON SUB



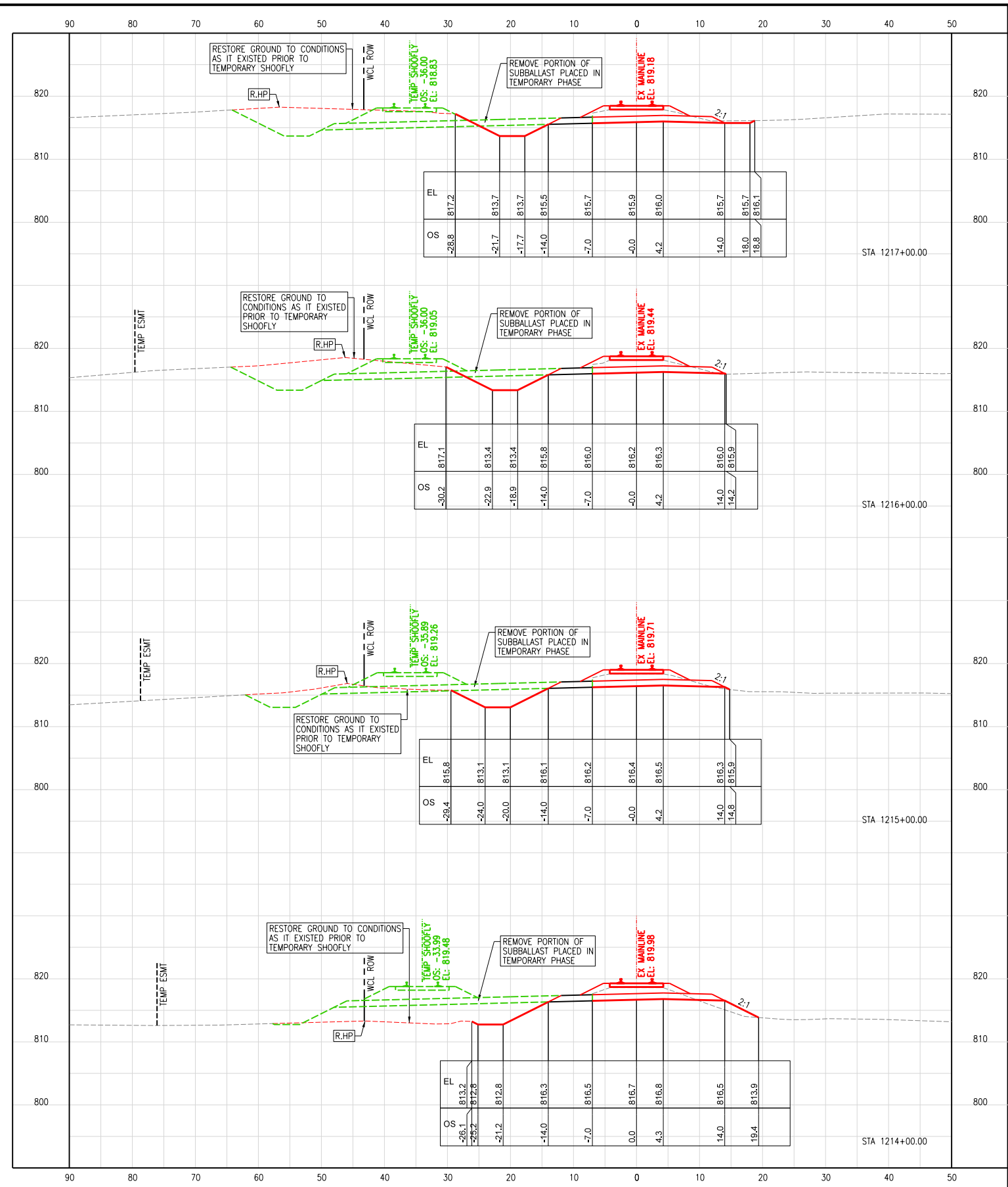
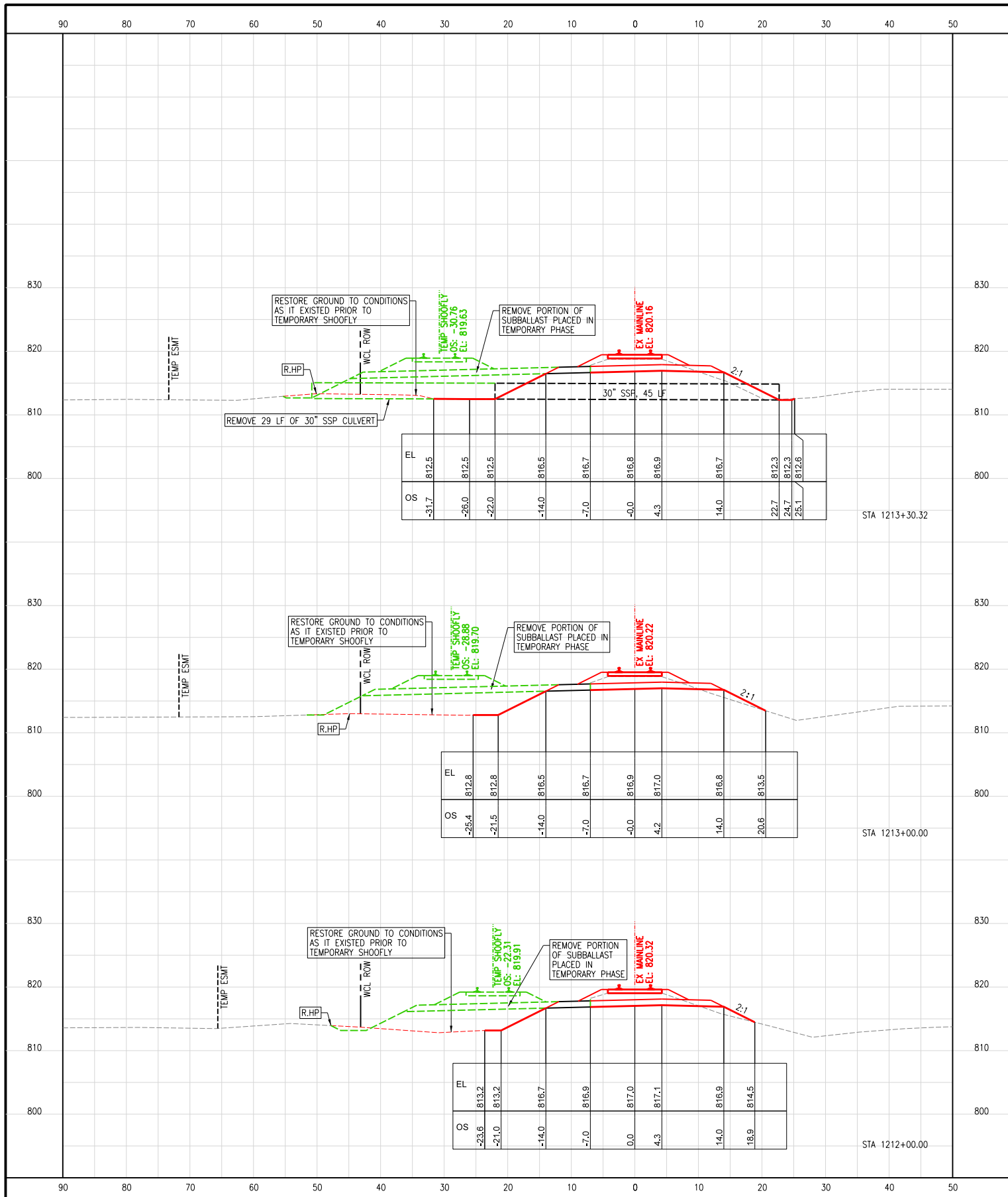
US ROUTE 14
 STA. 1205+00
 TO STA. 1235+00
 F.A.U. RTE: 0305
 SECTION: 11-00087-00-GS
 COUNTY: LAKE
 CONTRACT: 61J87



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DRAWING No.	
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DATE:	08/28/2024
SHEET:	382 OF 816

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US ROUTE 14 GRADE SEPARATION
 LAKE ZURICH ROAD TO IL-59
 BARRINGTON, ILLINOIS
 OPERATING COMPANY: WCL

CENTRAL DIVISION
 LEIGHTON SUB

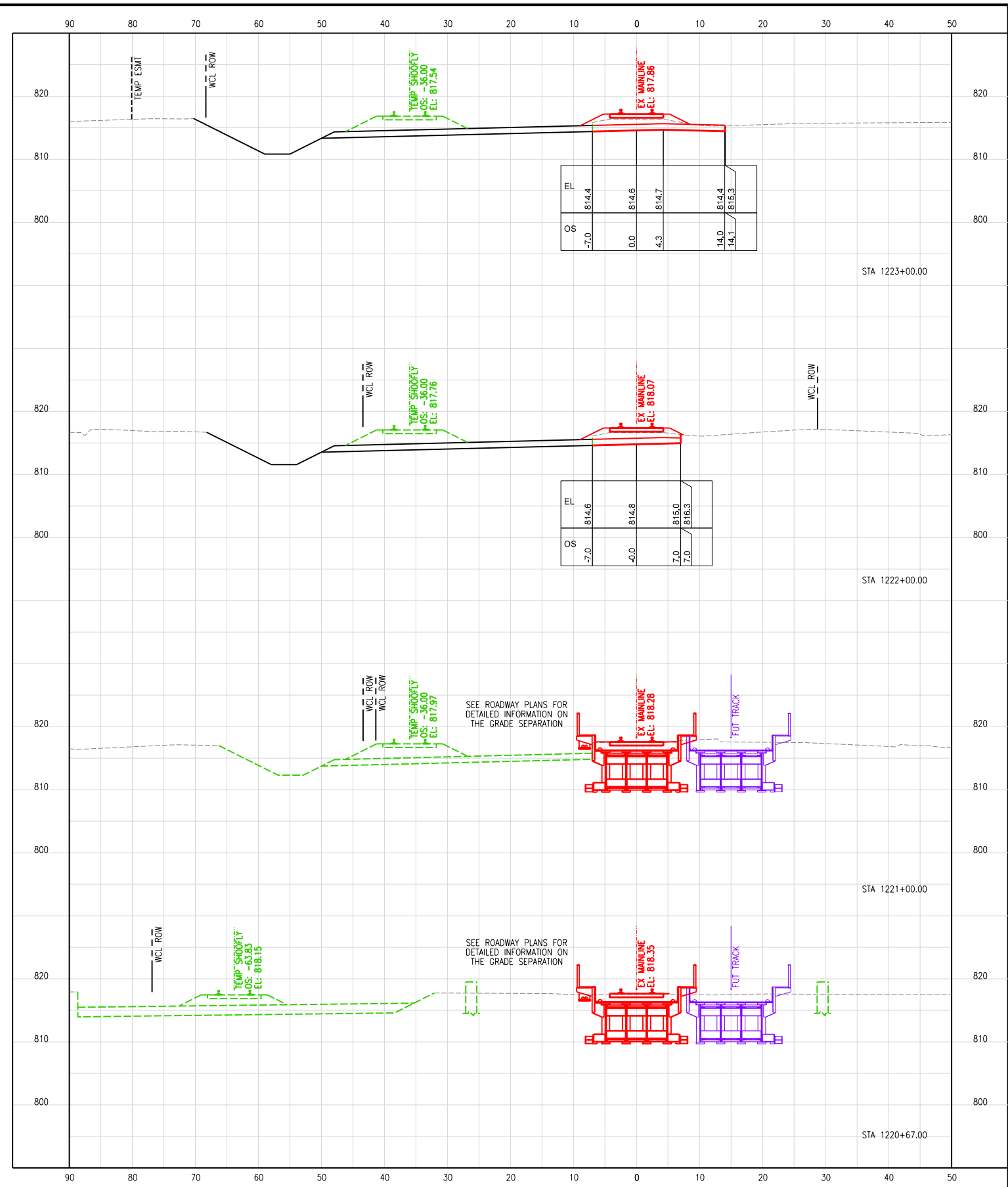
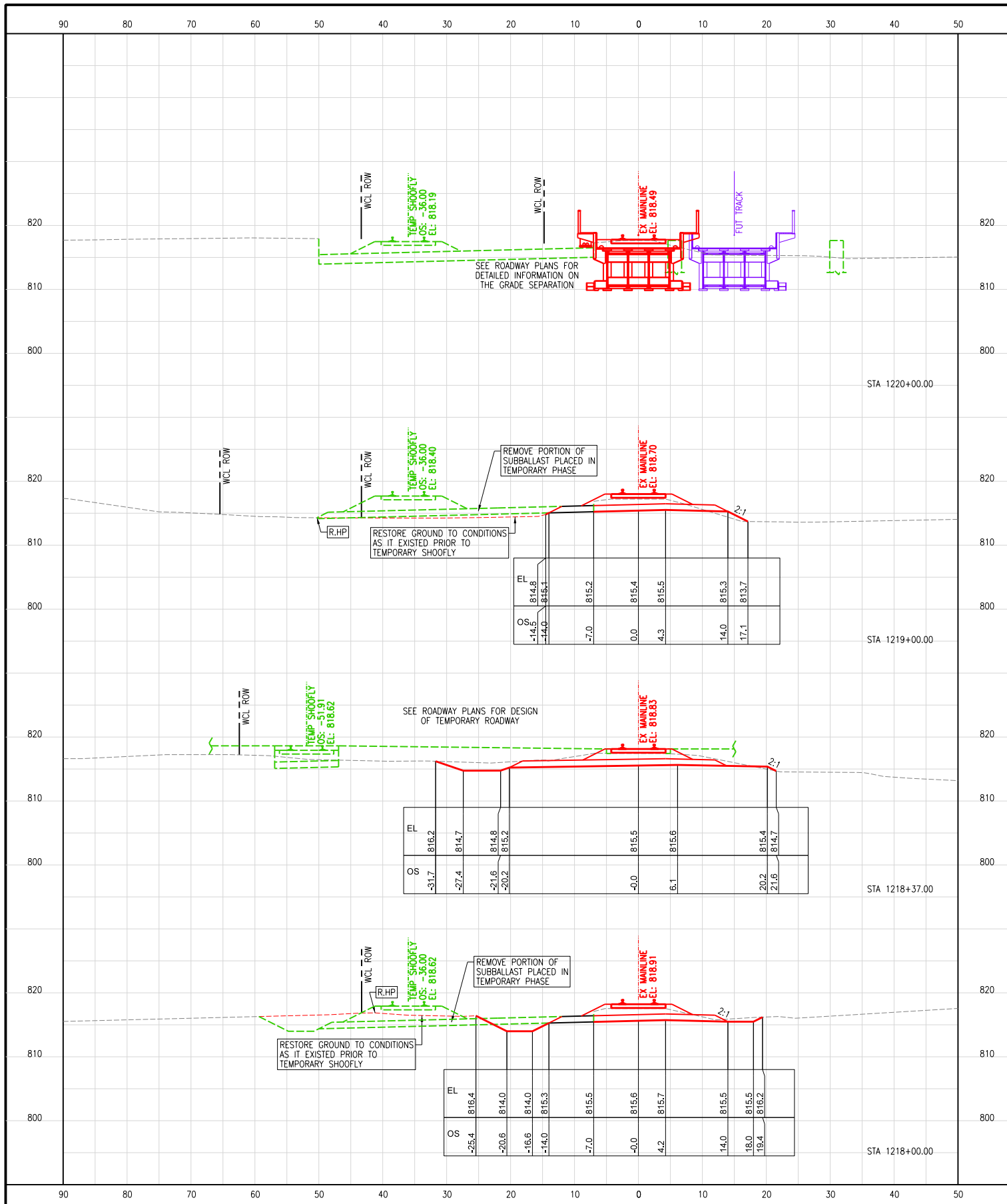


US ROUTE 14
 STA. 1205+00
 TO STA. 1235+00
 F.A.U. RTE: 0305
 SECTION: 11-00087-00-GS
 COUNTY: LAKE
 CONTRACT: 61J87



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US ROUTE 14 GRADE SEPARATION
 LAKE ZURICH ROAD TO IL-59
 BARRINGTON, ILLINOIS
 OPERATING COMPANY: WCL

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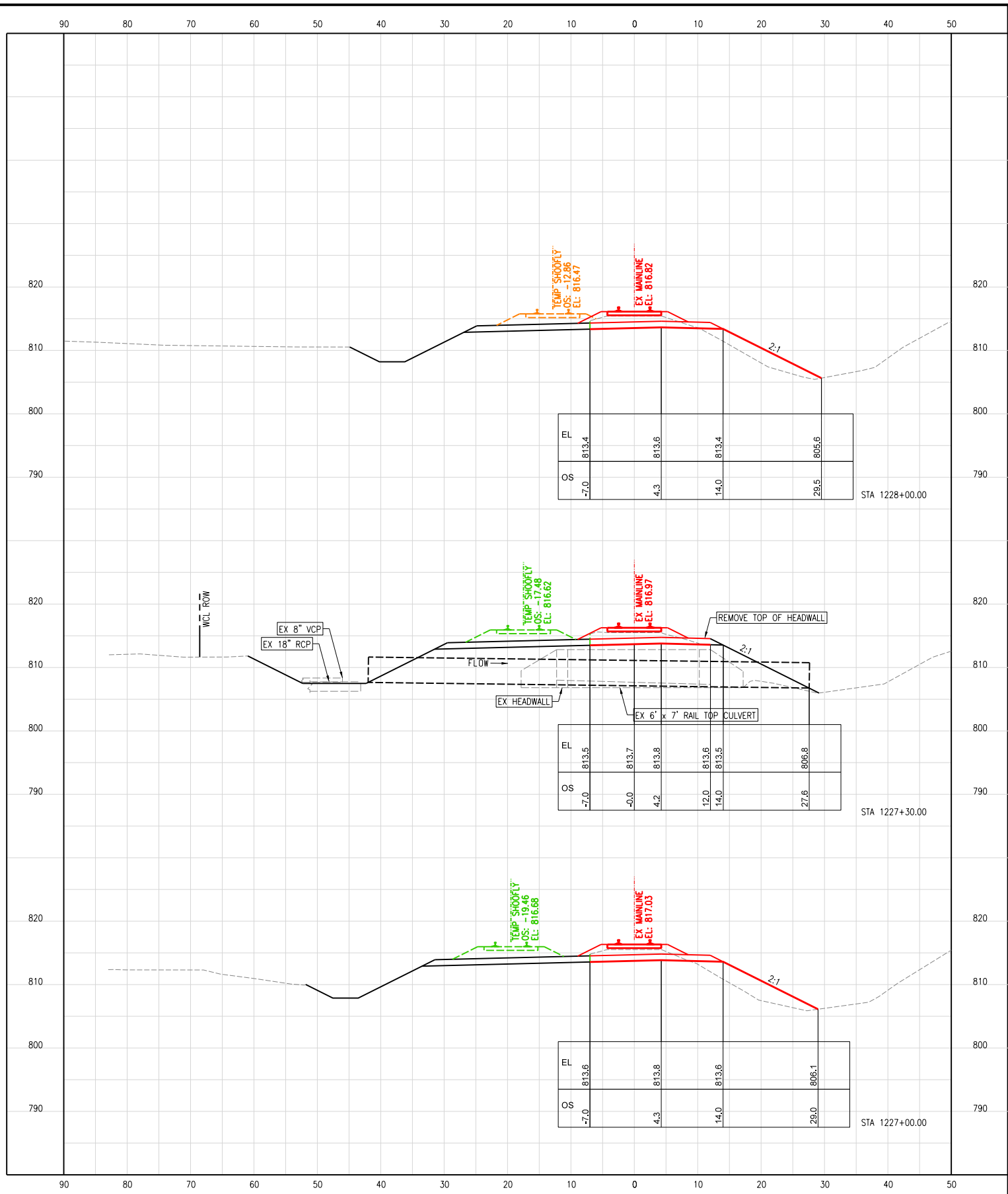
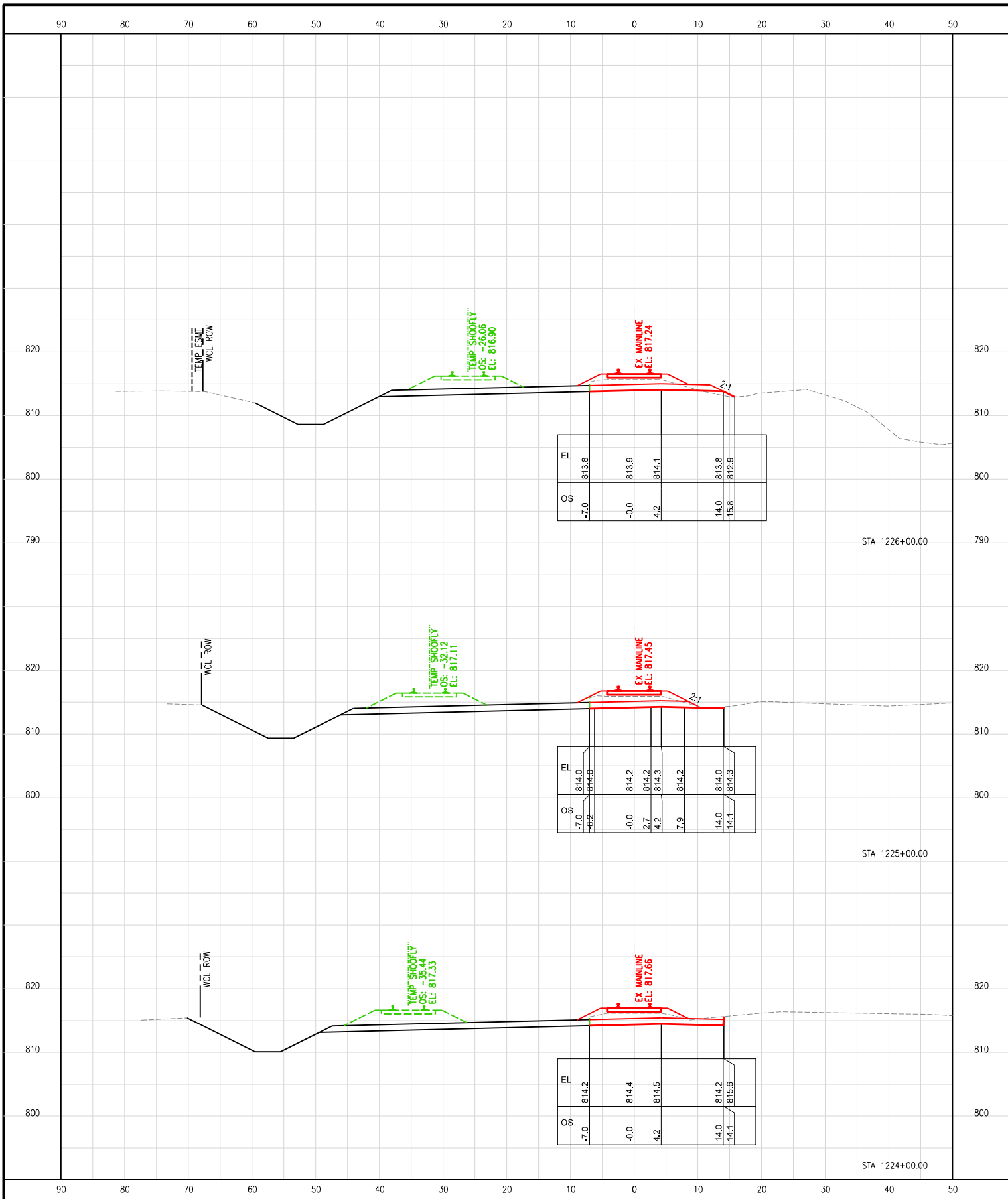


US ROUTE 14
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 SECTION: 11-00087-00-GS
 COUNTY: LAKE
 CONTRACT: 61J87



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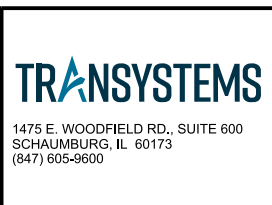
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US ROUTE 14 GRADE SEPARATION
 LAKE ZURICH ROAD TO IL-59
 BARRINGTON, ILLINOIS
 OPERATING COMPANY: WCL

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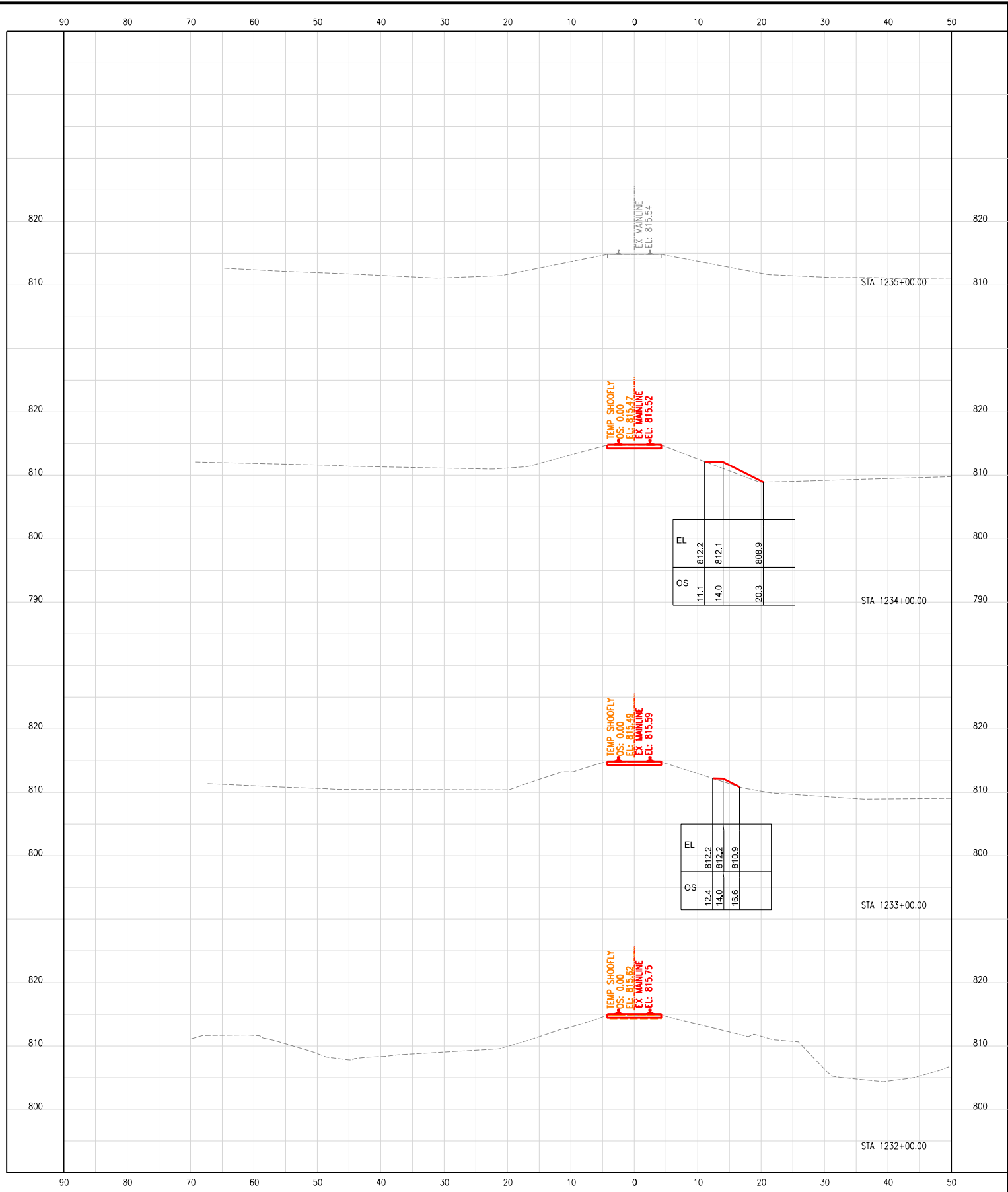
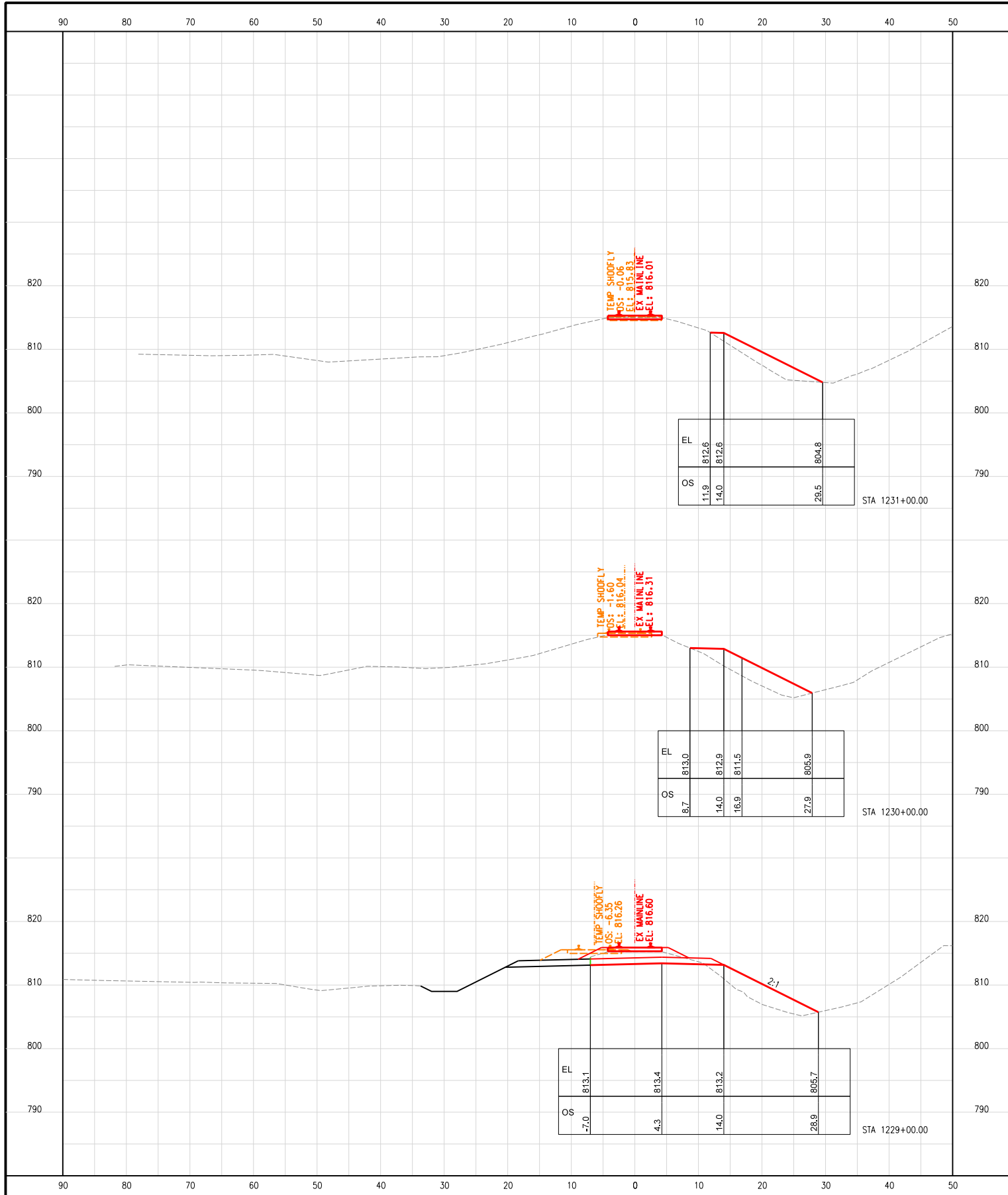
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 TO STA. 1235+00
 F.A.U. RTE: 0305
 SECTION: 11-00087-00-GS
 COUNTY: LAKE
 CONTRACT: 61J87



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DRAWING No.
CT-904
 DATE: 08/28/2024
 SHEET: 385 OF 816

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US ROUTE 14 GRADE SEPARATION
 LAKE ZURICH ROAD TO IL-59
 BARRINGTON, ILLINOIS
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US ROUTE 14
 STA. 1205+00
 TO STA. 1235+00
 F.A.U. RTE: 0305
 SECTION: 11-00087-00-GS
 COUNTY: LAKE
 CONTRACT: 61J87



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DRAWING No.	
CT-905	
DATE:	08/28/2024
SHEET:	386 OF 816

Benchmark: Northeast bolt on fire hydrant at the Northwest corner of IL Route 59 (North Hough Street) and US Route 14 (Northwest Highway), Sta. 73+98.50, Offset 34.6' Lt., Elevation 818.85

Existing Structure: None.

Maintenance of Traffic: IL Route 59 and Lions Drive traffic will be maintained utilizing stage construction.

Note: Precast alternate is not allowed.

DESIGN SPECIFICATIONS

2020 AASHTO LRFD Bridge Design Specifications, 9th Edition

LOADING HL-93

Allow 50#/sq. ft. for future wearing surface.

DESIGN STRESSES

FIELD UNITS

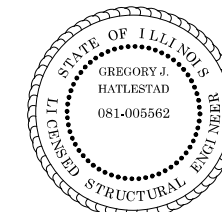
f'c = 3,500 psi
 fy = 60,000 psi (Reinforcement)
 fy = 50,000 psi (M270 Grade 50)

CURVE DATA

(Proposed Flint Creek Curve C4)	(Proposed Flint Creek Curve C5)
Δ = 61° 37' 07" (LT)	Δ = 45° 30' 47" (LT)
D = 67° 24' 24"	D = 260° 26' 07"
T = 50.69'	T = 9.23'
L = 91.41'	L = 17.48'
E = 13.97'	E = 1.86'
R = 85.00'	R = 22.00'
P.C. STA = 21+99.98	P.C. STA = 24+70.33
P.T. STA = 22+91.39	P.T. STA = 24+87.81
PI STA = 22+50.67	PI STA = 24+79.56

(Proposed Flint Creek Curve C6)

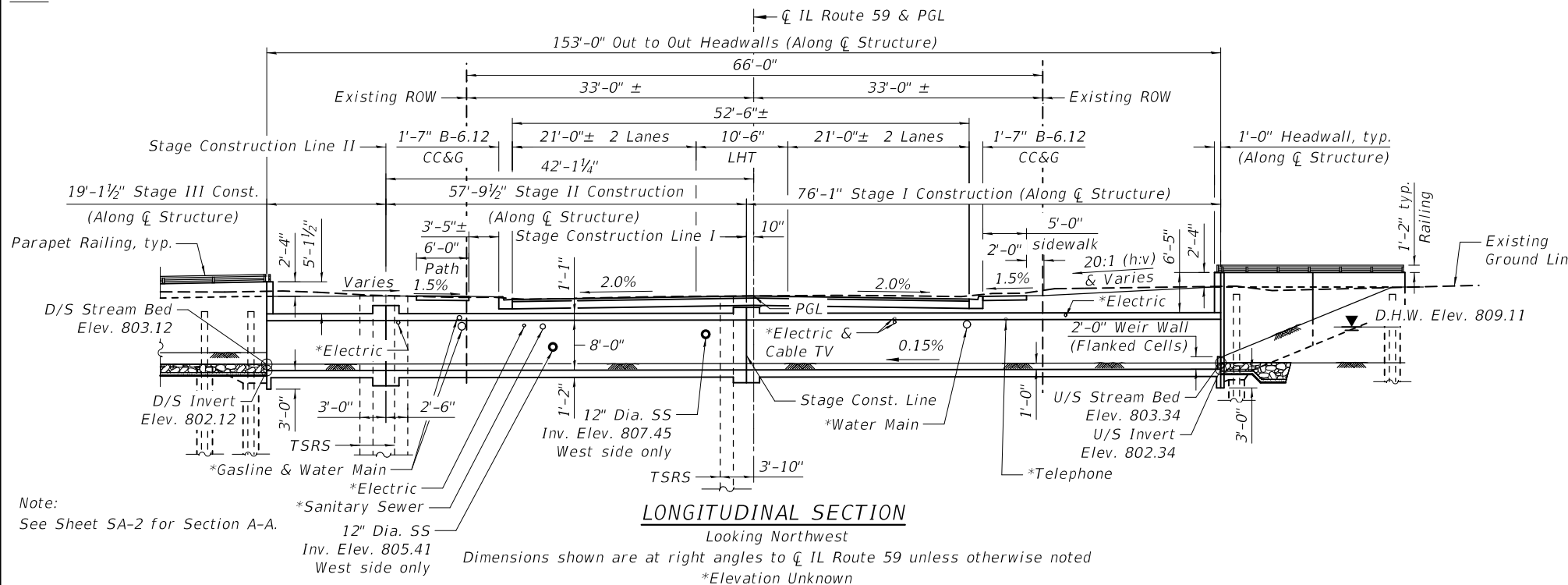
Δ = 58° 04' 37" (RT)
 D = 95° 29' 35"
 T = 33.31'
 L = 60.82'
 E = 8.63'
 R = 60.00'
 P.C. STA = 26+16.91
 P.T. STA = 26+77.72
 PI STA = 26+50.22



Gregory J. Hatlestad, S.E.
 # 081-005562

Exp 11/30/2024

Date 7/25/2024

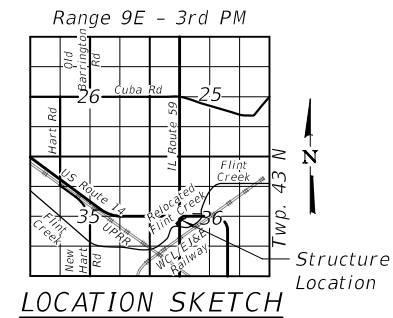
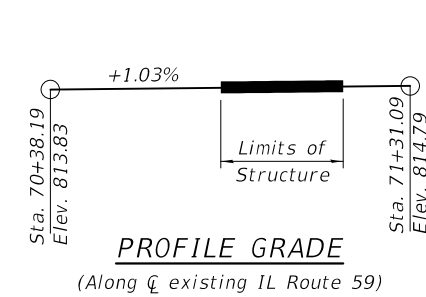
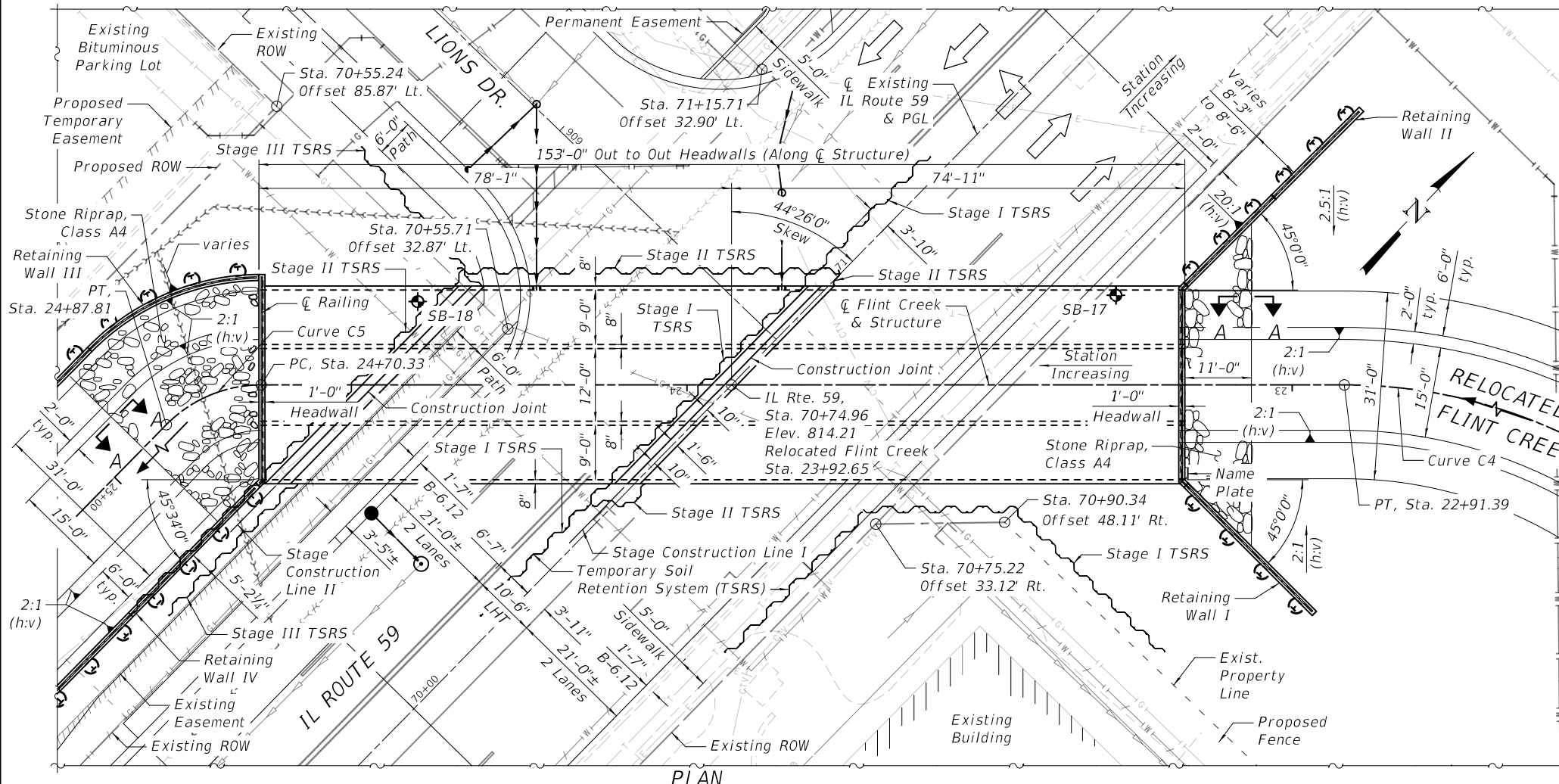


Note:
 See Sheet SA-2 for Section A-A.

Dimensions shown are at right angles to CL IL Route 59 unless otherwise noted
 *Elevation Unknown

LEGEND

- G— Existing Gasline to Remain
- /G/ Existing Gasline to be Removed
- E— Existing Underground Electric to be Relocated or Supported During Construction
- W— Existing Water Main to Remain
- /W/ Existing Water Main to be Removed or Abandon
- T— Existing Underground Telephone to be Relocated or Supported During Construction
- S— Existing Sanitary Sewer to Remain
- /S/ Existing Sanitary Sewer to be Removed
- CTV— Existing Storm Sewer
- /CTV/ Existing Underground Cable TV to be Relocated or Supported During Construction
- G— Proposed Gasline
- W— Proposed Storm Sewer
- W— Proposed Water Main
- S— Proposed Sanitary Sewer
- ⊙ Soil Boring



**GENERAL PLAN & LONGITUDINAL SECTION
 IL ROUTE 59 OVER RELOCATED FLINT CREEK
 FAP 305 - SECTION 11-00087-00-GS
 LAKE COUNTY
 STATION 70+74.96
 STRUCTURE NUMBER 049-0008**

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**GENERAL PLAN AND LONGITUDINAL SECTION
 STRUCTURE NO. 049-0008**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	11-00087-00-GS	LAKE	816	387
CONTRACT NO. 61187				
ILLINOIS FED. AID PROJECT				

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CIVILTECH
 Two Pierce Place, Suite 1400
 Itasca, Illinois 60143
 Tel: 630.773.3900
 Fax: 630.773.3975
 www.civiltechinc.com

USER NAME =	mc	DESIGNED -	KLK	REVISED -	
PLOT SCALE =	24.0000"/in.	DRAWN -	KLK	REVISED -	
PLOT DATE =	10/1/2024	CHECKED -	GJH	REVISED -	
		DATE -	10/01/2024	REVISED -	

SHEET SA-1 OF SA-26 SHEETS

GENERAL NOTES

CULVERT

- Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
- Precast alternate is not allowed.

RETAINING WALLS

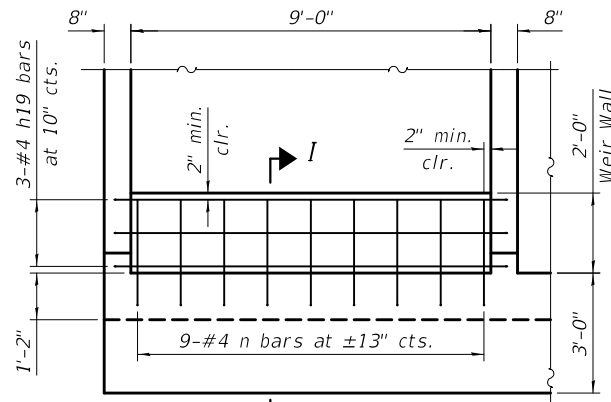
- Reinforcement bars designated (E) shall be epoxy coated.
- All exposed edges shall have 3/4" chamfer.
- All structural steel shall be AASHTO M270 Grade 50.
- The Contractor is responsible for the design and performance of the lagging using no less than a 3" nominal rough-sawn thickness and timber with a minimum allowable bending stress of 1000 psi.

INDEX OF SHEETS

- SA-1 General Plan and Longitudinal Section
- SA-2 General Data
- SA-3 Stage I Construction Details
- SA-4 Stage II Construction Details
- SA-5 Stage III Construction Details
- SA-6 Temporary Concrete Barrier for Stage Construction
- SA-7 Bottom Slab Plan
- SA-8 Culvert Wall Elevations
- SA-9 Top Slab Plan
- SA-10 Culvert Details
- SA-11 General Plan and Elevation - Walls I & II
- SA-12 General Plan and Elevation - Wall III
- SA-13 General Plan and Elevation - Wall IV
- SA-14 Wall Details I
- SA-15 Wall Details II
- SA-16 Wall Pile Data Tables
- SA-17 Walls I & II Elevations
- SA-18 Wall III Elevations A & B
- SA-19 Wall III Elevation C
- SA-20 Wall IV Elevations A & B
- SA-21 Wall Railing Details I
- SA-22 Wall Railing Details II
- SA-23 Bar Splicer Assembly and Mechanical Splicer Details
- SA-24 Soil Boring Logs I
- SA-25 Soil Boring Logs II
- SA-26 Soil Boring Profile

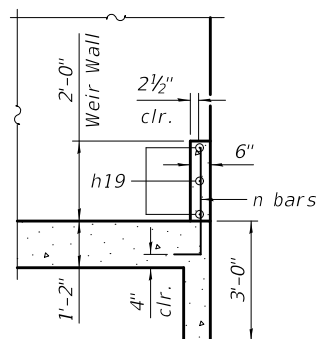
TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Stone Riprap, Class A4	Sq. Yd.	155
Filter Fabric	Sq. Yd.	155
Structure Excavation	Cu. Yd.	3,329
Protective Coat	Sq. Yd.	70
Stud Shear Connectors	Each	536
Reinforcement Bars	Pound	151,340
Reinforcement Bars, Epoxy Coated	Pound	24,040
Bar Splicers	Each	184
Parapet Railing	Foot	487
Name Plates	Each	1
Temporary Soil Retention System	Sq. Ft.	3,901
Furnishing Soldier Piles (W Section)	Foot	1,259
Drilling and Setting Soldier Piles (In Soil)	Cu. Ft.	6,464
Untreated Timber Lagging	Sq. Ft.	3,403
Concrete Structures (Retaining Wall)	Cu. Yd.	194.4
Concrete Box Culverts	Cu. Yd.	576.2
Geocomposite Wall Drain	Sq. Yd.	808
Membrane Waterproofing System for Buried Structures	Sq. Yd.	618



TYPICAL WEIR REINFORCEMENT DETAIL

For Weir Reinforcement Bar Bending Diagrams and Bill of Material, see Sheet SA-10.



SECTION I-I

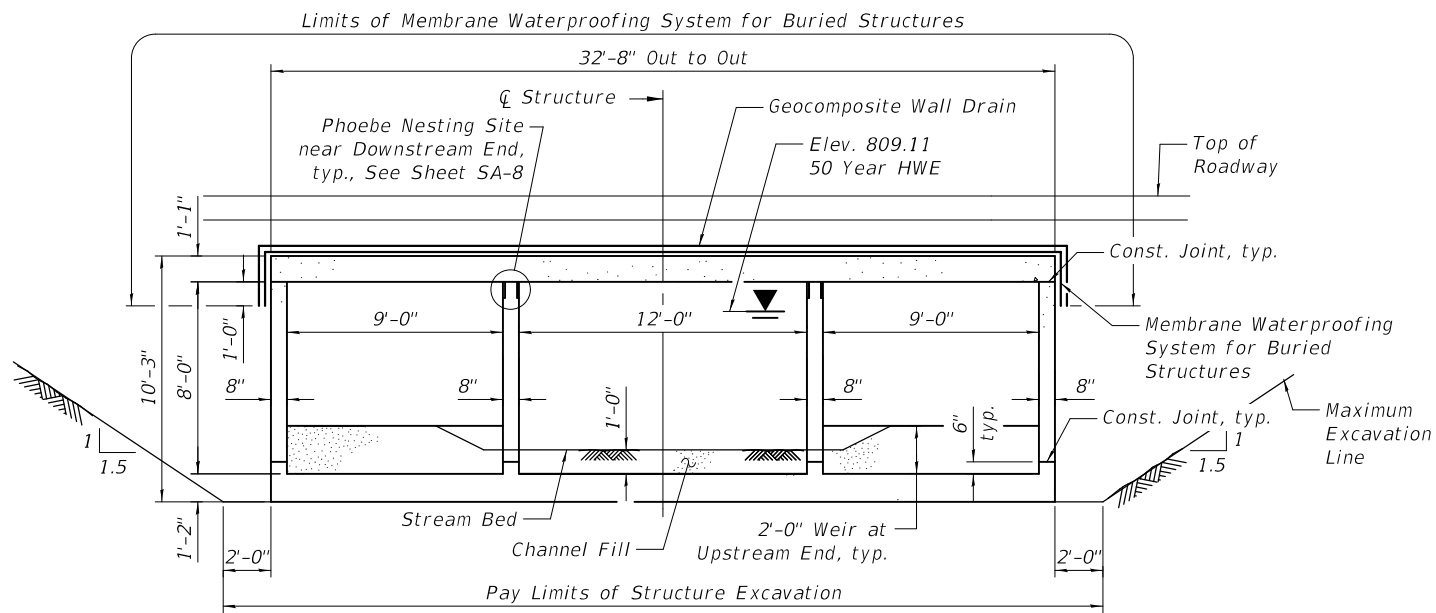
WATERWAY INFORMATION

Flood		Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
				Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design		10	328	N/A	131	808.31	N/A	0.03	N/A	808.34
Base		50	417	N/A	155	809.11	N/A	0.04	N/A	809.15
Overtopping		100	452	N/A	164	809.40	N/A	0.05	N/A	809.45
Max. Calc.		500	585	N/A	185	810.12	N/A	0.04	N/A	810.16

10-Year Velocity through Existing Structure = N/A
 10-Year Velocity through Proposed Structure = 2.58 ft/sec

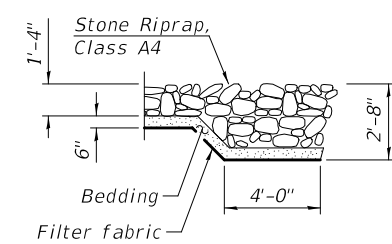
STATION 70+74.96
 BUILT 202_ BY
 STATE OF ILLINOIS
 F.A.P. RT. 305
 SEC. 11-00087-00-GS
 LOADING HL-93
 STR. NO. 049-0008

NAME PLATE
 See Std. 515001

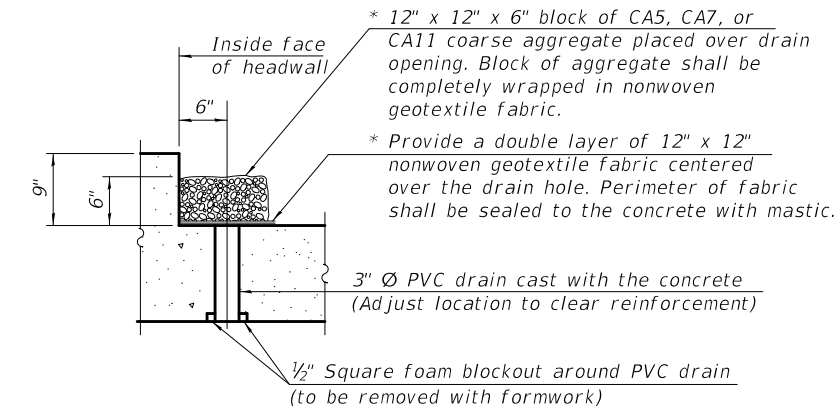


SECTION THROUGH BARREL

(@ Rt. L's to \bar{C} Structure)



SECTION A-A



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.)

* Nonwoven geotextile fabric shall conform to the requirements of Article 1080.01 of the Standard Specifications. The minimum weight of the fabric shall be 6 ounces per square yard.

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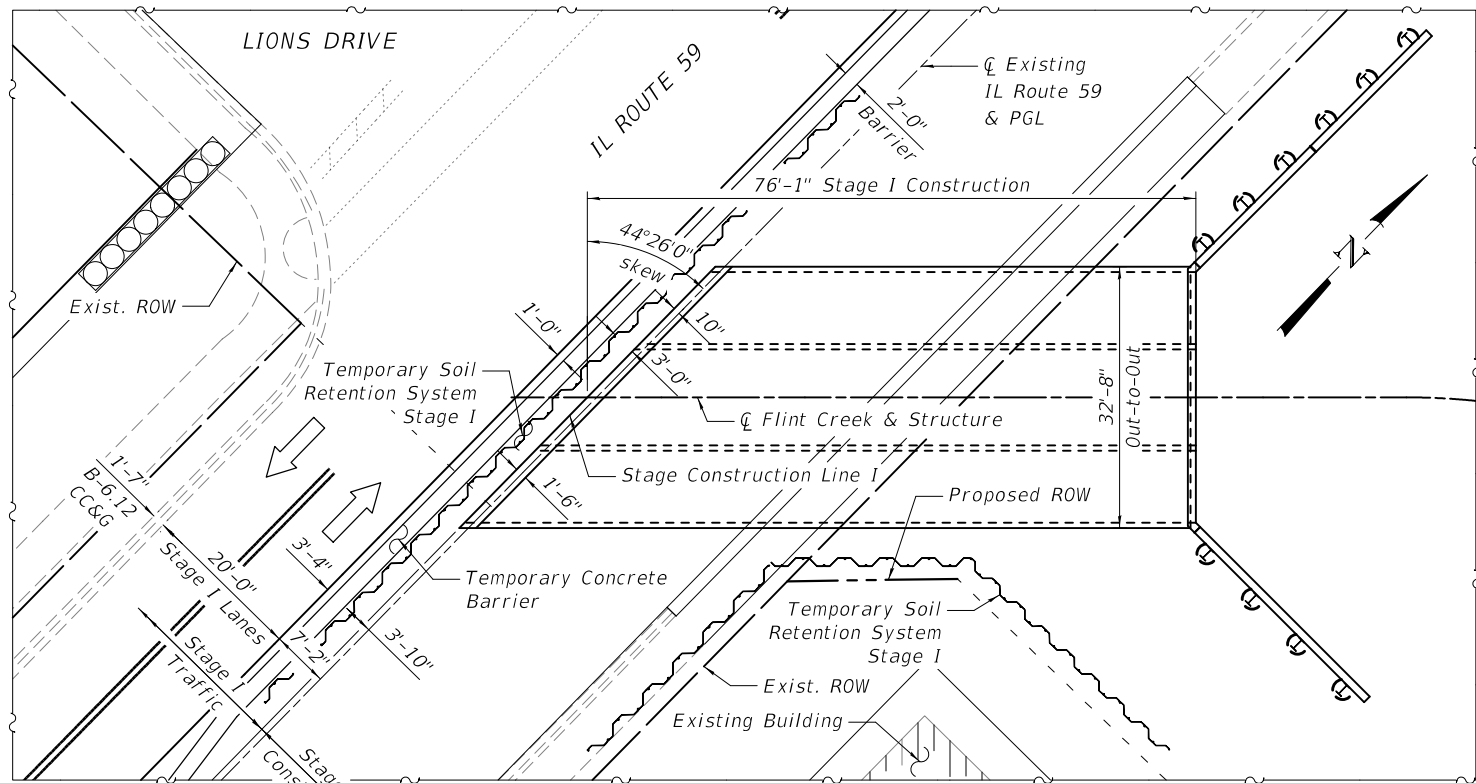
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	DATE - 10/01/2024	REVISED -

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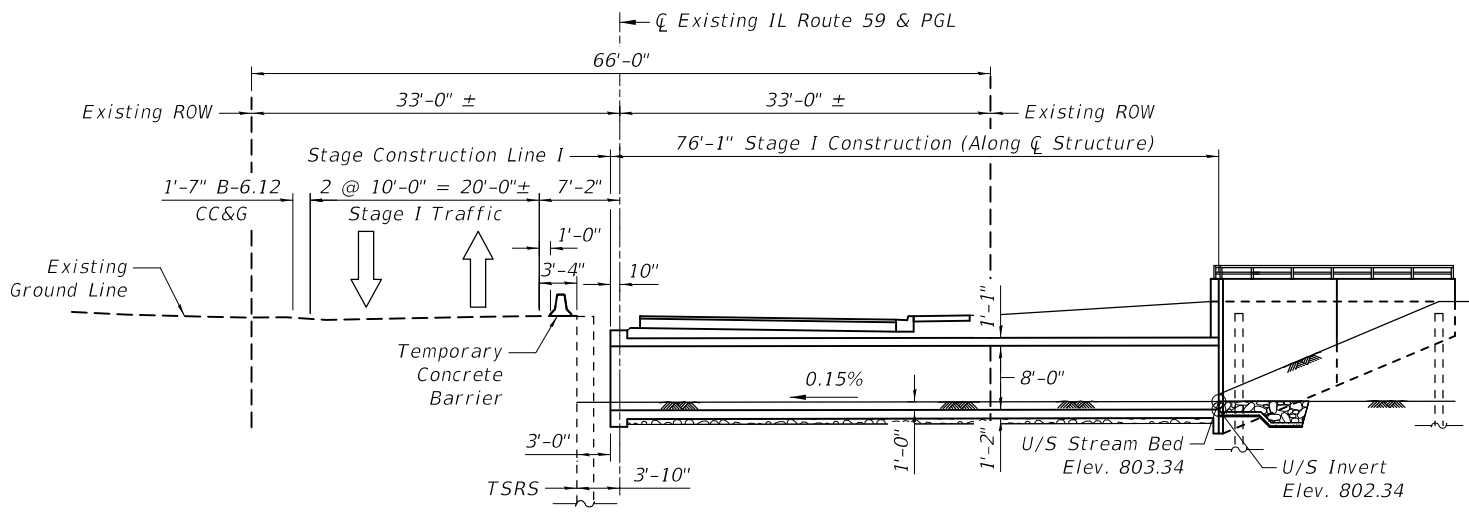
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 STRUCTURE NO. 049-0008**

SHEET SA-2 OF SA-26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 61187				
ILLINOIS FED. AID PROJECT				

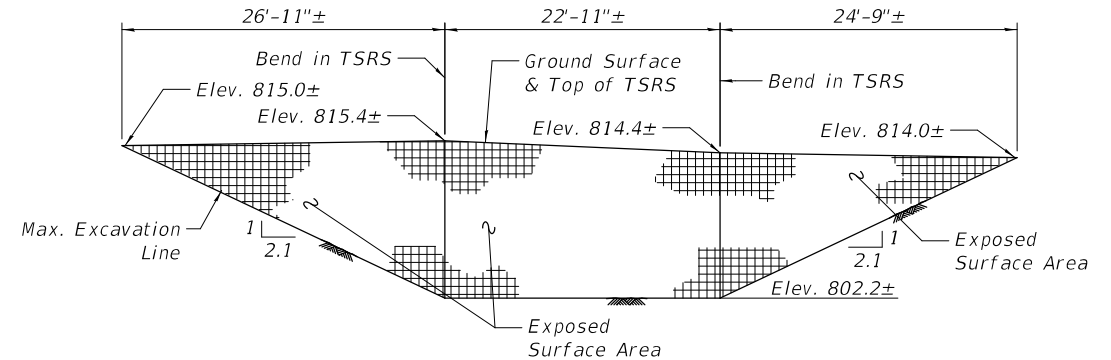


PLAN - STAGE I CONSTRUCTION



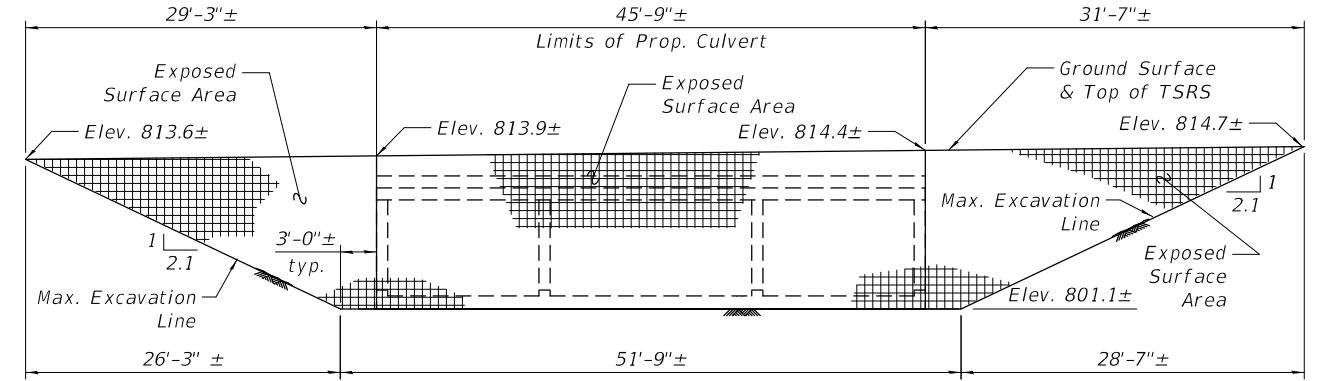
LONGITUDINAL SECTION - STAGE I CONSTRUCTION

(Looking Northwest)
Dimensions shown are at right angles to CL IL Route 59 unless otherwise noted



TEMPORARY SOIL RETENTION SYSTEM UNFOLDED ELEVATION

Located at Southeast ROW Corner
(Looking Southeast)



TEMPORARY SOIL RETENTION SYSTEM ELEVATION

Located Along Stage Construction Line I
(Looking West)

MODEL: Default
FILE NAME: ...0490008-61187-003-Stage I Const. Details

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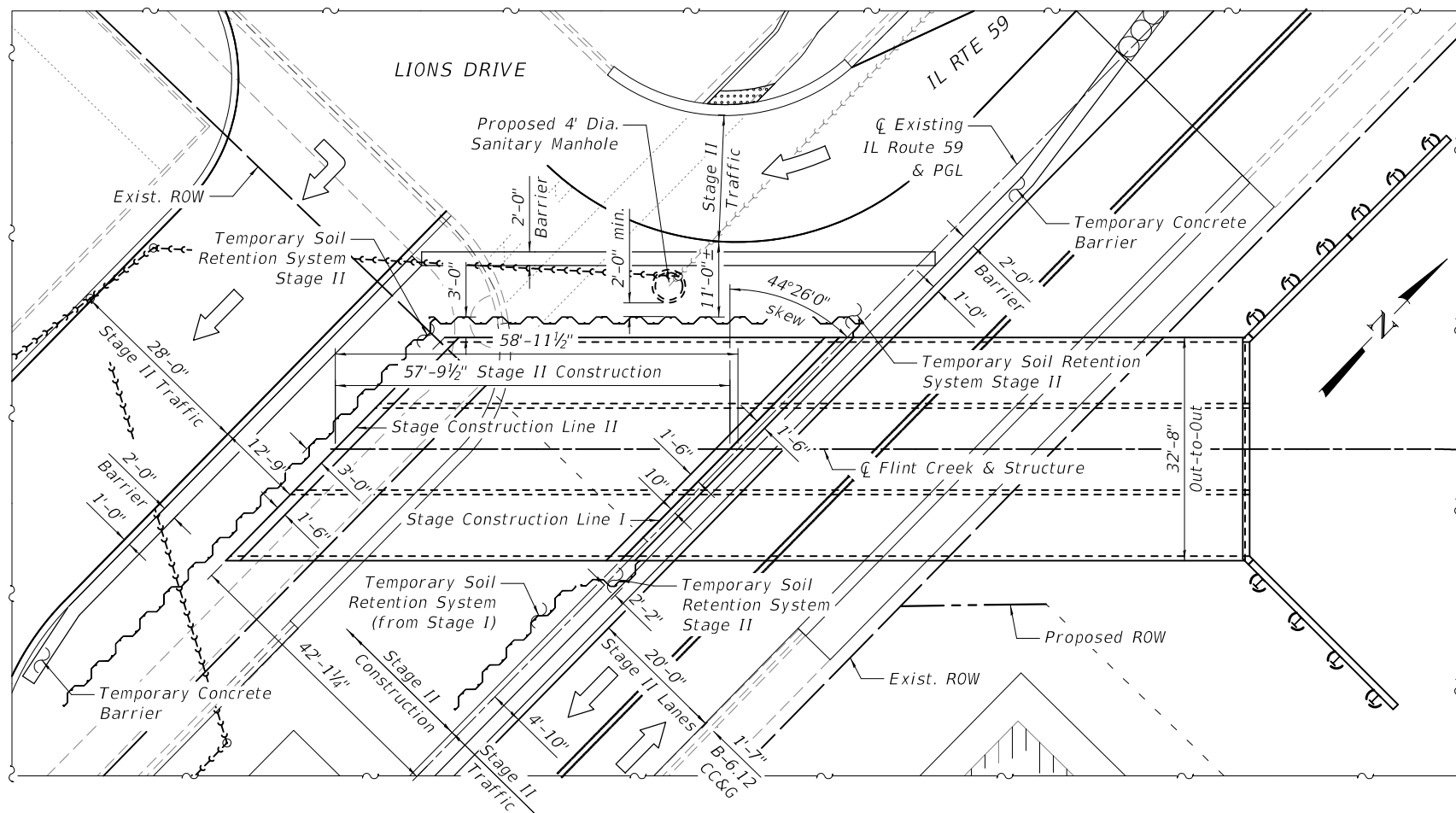
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PLOT DATE =	10/1/2024	CHECKED -	GJH	REVISED -	
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**STATE OF ILLINOIS
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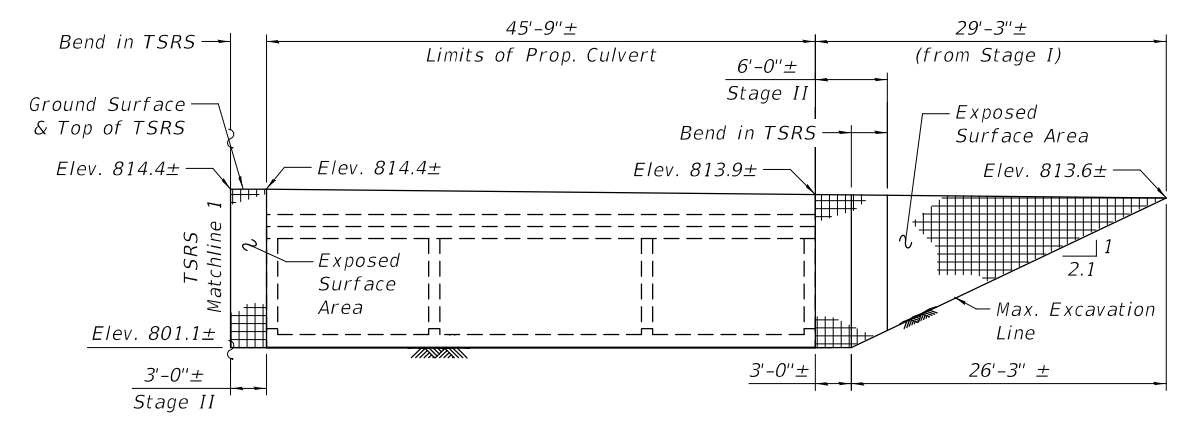
**STAGE I CONSTRUCTION DETAILS
STRUCTURE NO. 049-0008**

SHEET SA-3 OF SA-26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 61187				
ILLINOIS FED. AID PROJECT				

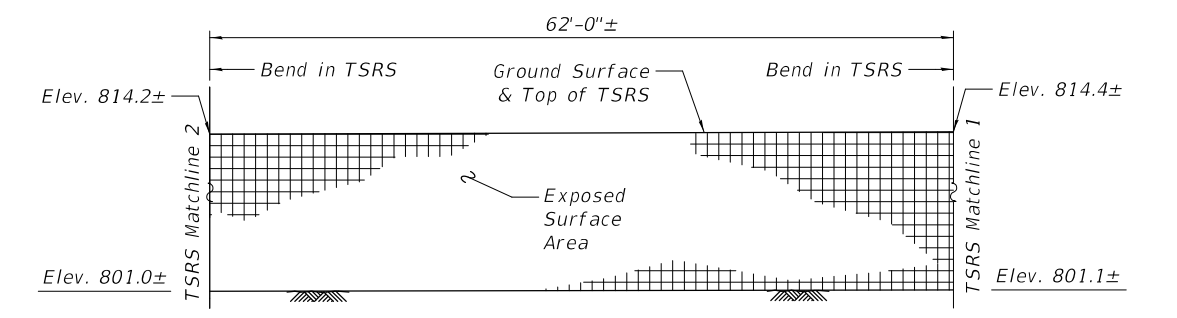


PLAN - STAGE II CONSTRUCTION



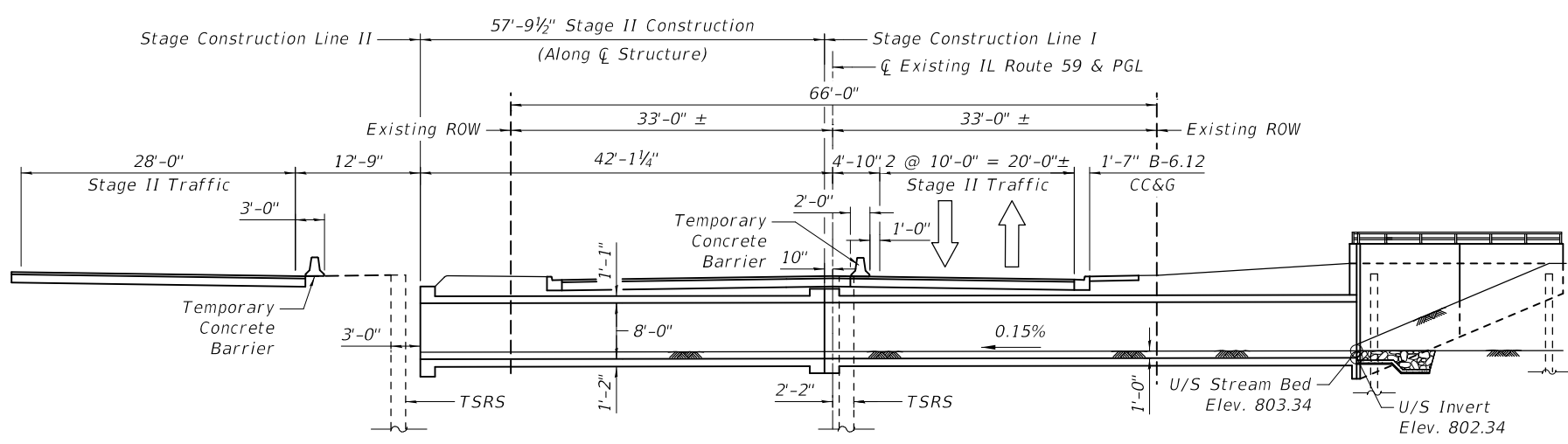
TEMPORARY SOIL RETENTION SYSTEM UNFOLDED ELEVATION

Located Along Stage Construction Line I (Looking East)



TEMPORARY SOIL RETENTION SYSTEM UNFOLDED ELEVATION

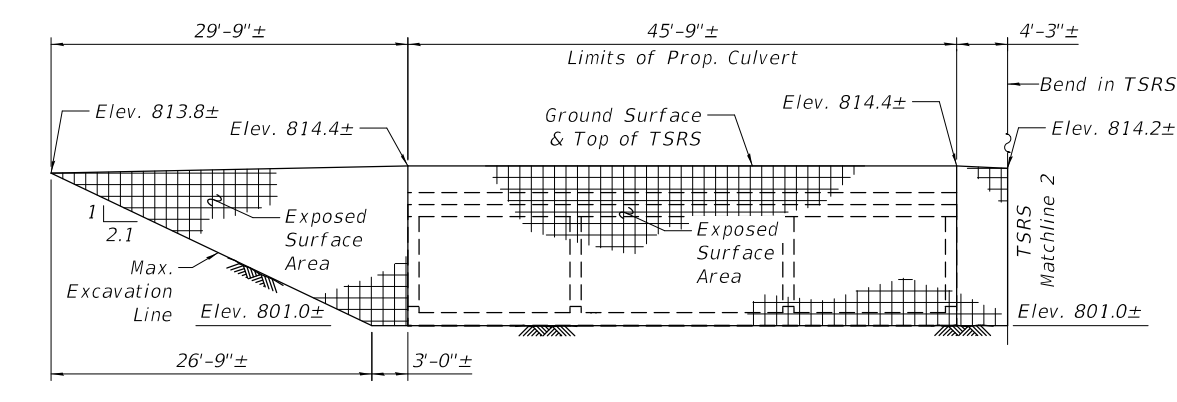
Located at North Side of Culvert (Looking North)



LONGITUDINAL SECTION - STAGE II CONSTRUCTION

(Looking Northwest)

Dimensions shown are at right angles to CL IL Route 59 unless otherwise noted



TEMPORARY SOIL RETENTION SYSTEM UNFOLDED ELEVATION

Located Along Stage Construction Line II (Looking West)

MODEL: Default
FILE NAME: ...0490008-61187-004-Stage II Const. Details

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PLOT DATE = 10/1/2024

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REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
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STAGE II CONSTRUCTION DETAILS
STRUCTURE NO. 049-0008

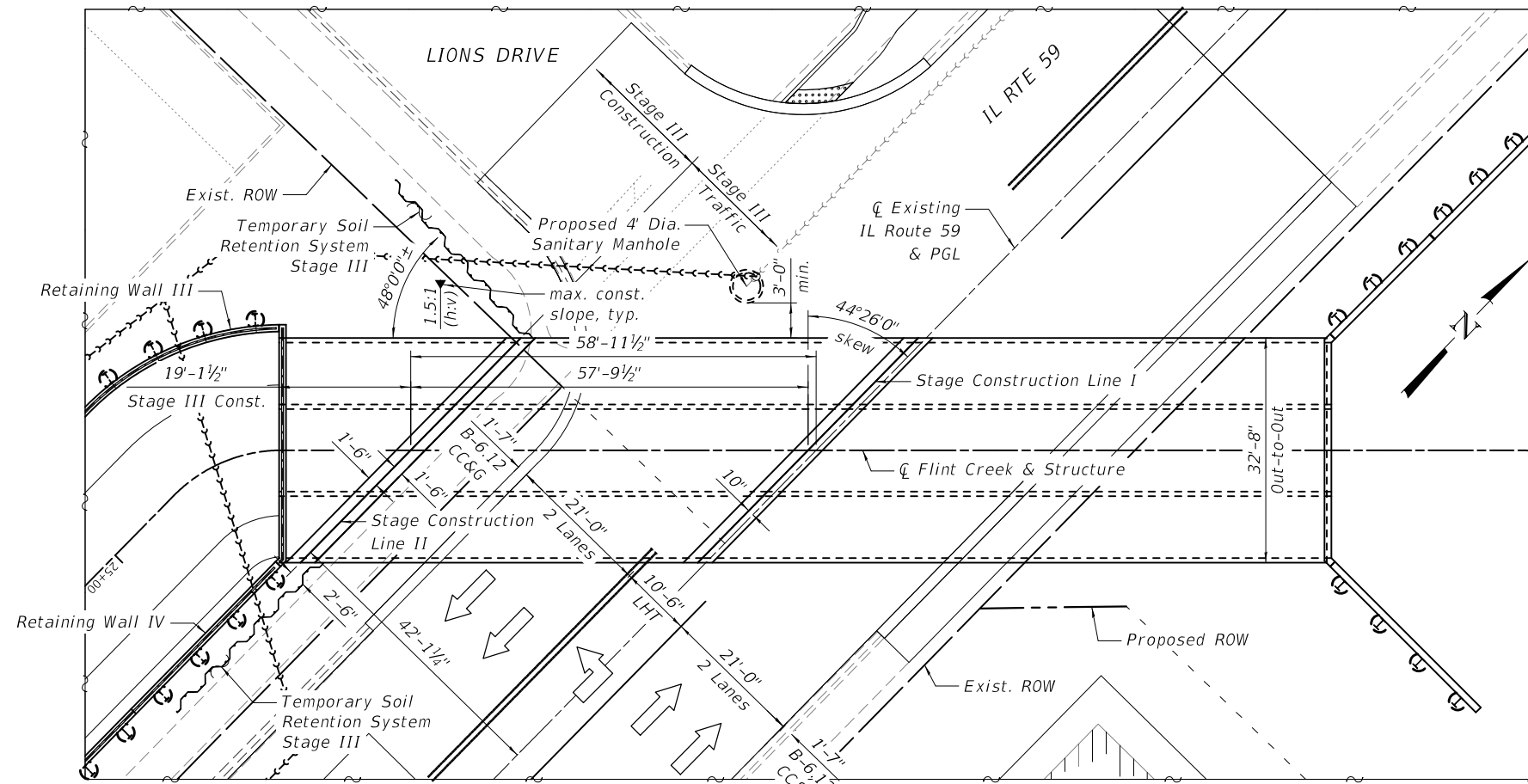
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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ILLINOIS FED. AID PROJECT				

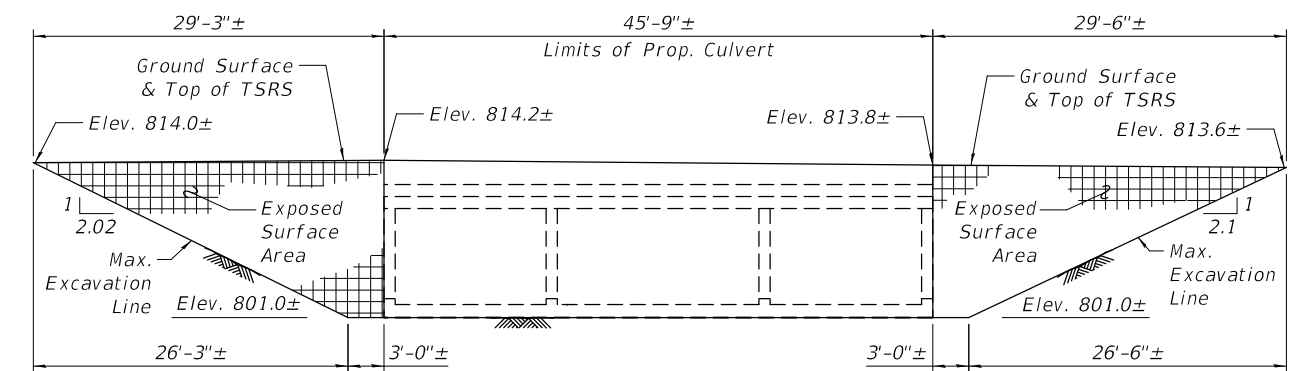
BILL OF MATERIAL

Item	Unit	Quantity
Temporary Soil Retention System	Sq. Ft.	3,901

A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.

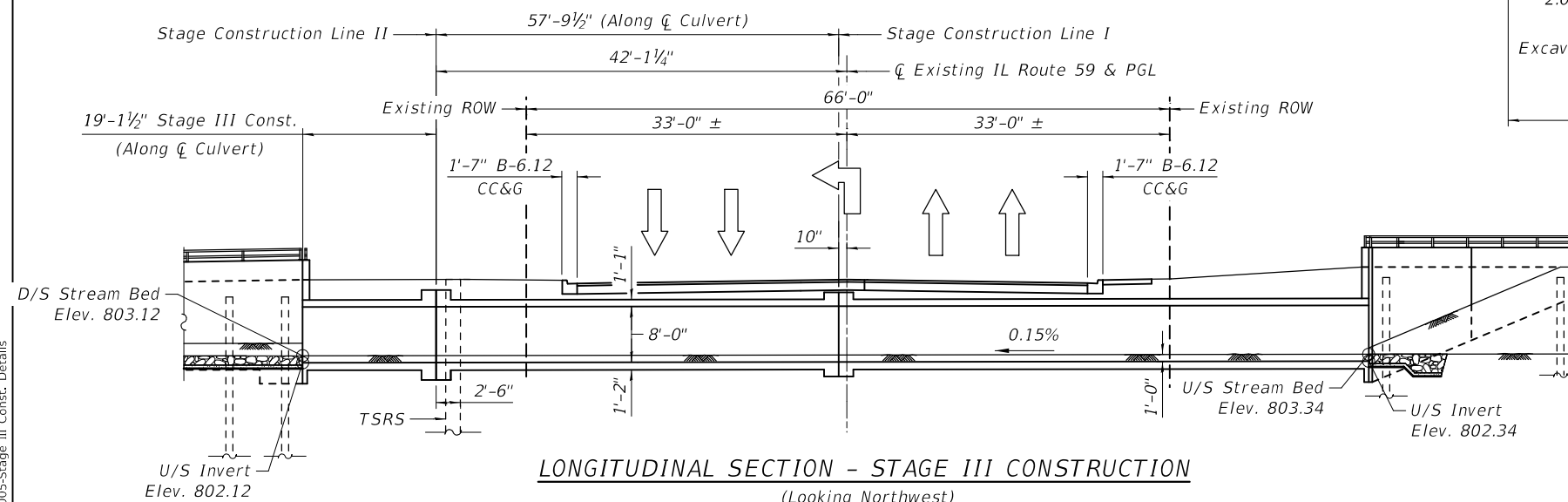


PLAN - STAGE III CONSTRUCTION



TEMPORARY SOIL RETENTION SYSTEM UNFOLDED ELEVATION

Located Along Stage Construction Line III
(Looking East)



LONGITUDINAL SECTION - STAGE III CONSTRUCTION

(Looking Northwest)

Dimensions shown are at right angles to CL IL Route 59 unless otherwise noted

MODEL: Default
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PLOT DATE = 10/1/2024

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DRAWN - KLK
CHECKED - GJH
DATE - 10/01/2024

REVISED -
REVISED -
REVISED -
REVISED -

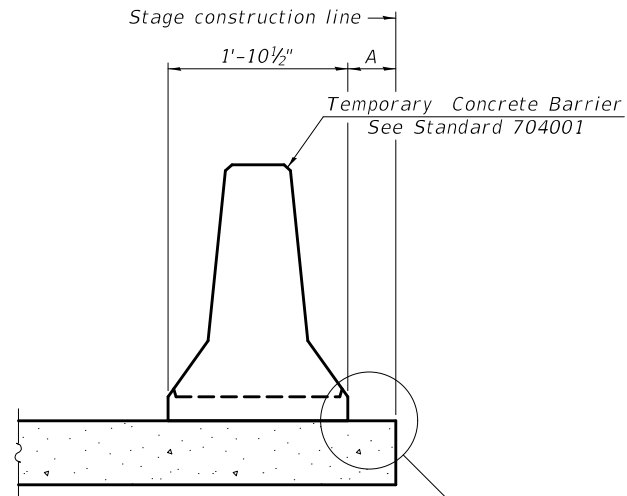
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STAGE III CONSTRUCTION DETAILS
STRUCTURE NO. 049-0008**

SHEET SA-5 OF SA-26 SHEETS

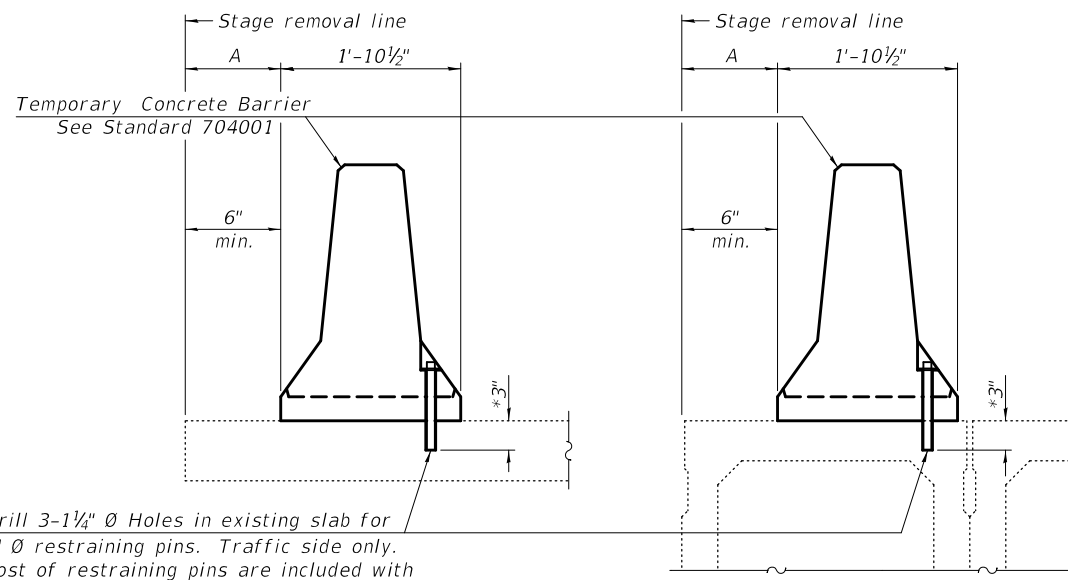
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305	11-00087-00-GS	LAKE	816	391
CONTRACT NO. 61187				

ILLINOIS FED. AID PROJECT



When "A" is 3'-1" or less, the temporary concrete barrier shall be restrained to the new slab according to Detail I, II or III. No restraint is required when "A" is greater than 3'-1". See Detail I, II or III

NEW SLAB OR NEW DECK BEAM



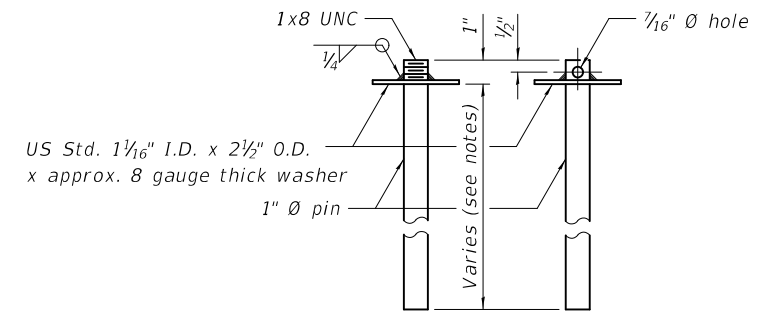
Drill 3-1 1/4" Ø Holes in existing slab for 1" Ø restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

EXISTING SLAB

EXISTING DECK BEAM

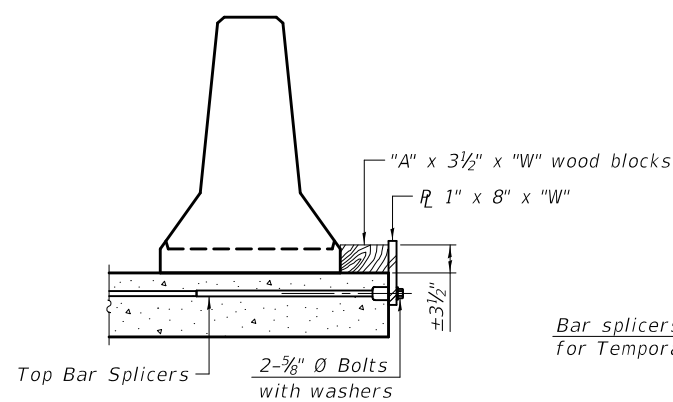
* When hot-mix asphalt wearing surface is present, embedment shall be 3" plus the wearing surface depth.

SECTIONS THRU SLAB OR DECK BEAM

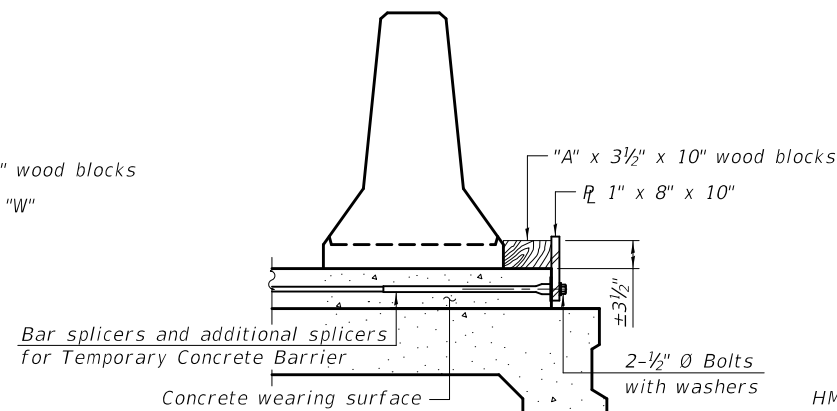


RESTRAINING PIN

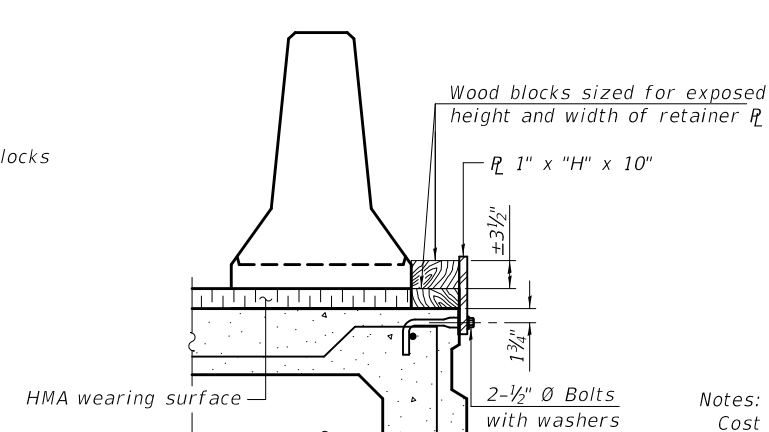
US Std. 1 1/16" I.D. x 2 1/2" O.D. x approx. 8 gauge thick washer



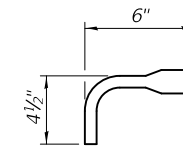
DETAIL I



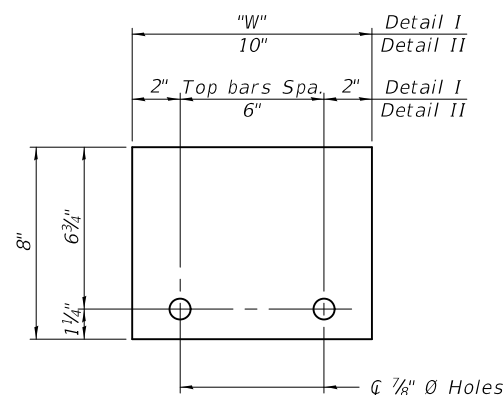
DETAIL II



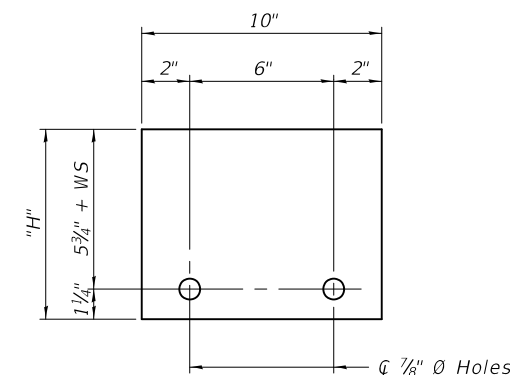
DETAIL III



BAR SPLICER FOR #4 BAR - DETAIL III



STEEL RETAINER 1" x 8" x "W" (Detail I and II)



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

Notes:
 Cost of retainer assembly is included with Temporary Concrete Barrier.
 A retainer assembly shall be located at the approximate \bar{C} of each temporary concrete barrier.
 The retainer plate shall not be removed until the concrete on the adjacent stage is ready to be poured. For Detail III applications the retainer plate shall not be removed until just prior to placing the adjacent beam.
 When the 'A' dimension is less than 1 1/2", the wood block shall be omitted and the barrier shall be placed in direct contact with the steel retainer plate. For deck beam applications the minimum required 'A' distance is 6" to accommodate the shear key clamping device.

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

RAILING CRITERIA

NCHRP 350 Test Level	3
Railing Weight (plf)	440

R-27 5-15-2023

MODEL: Default
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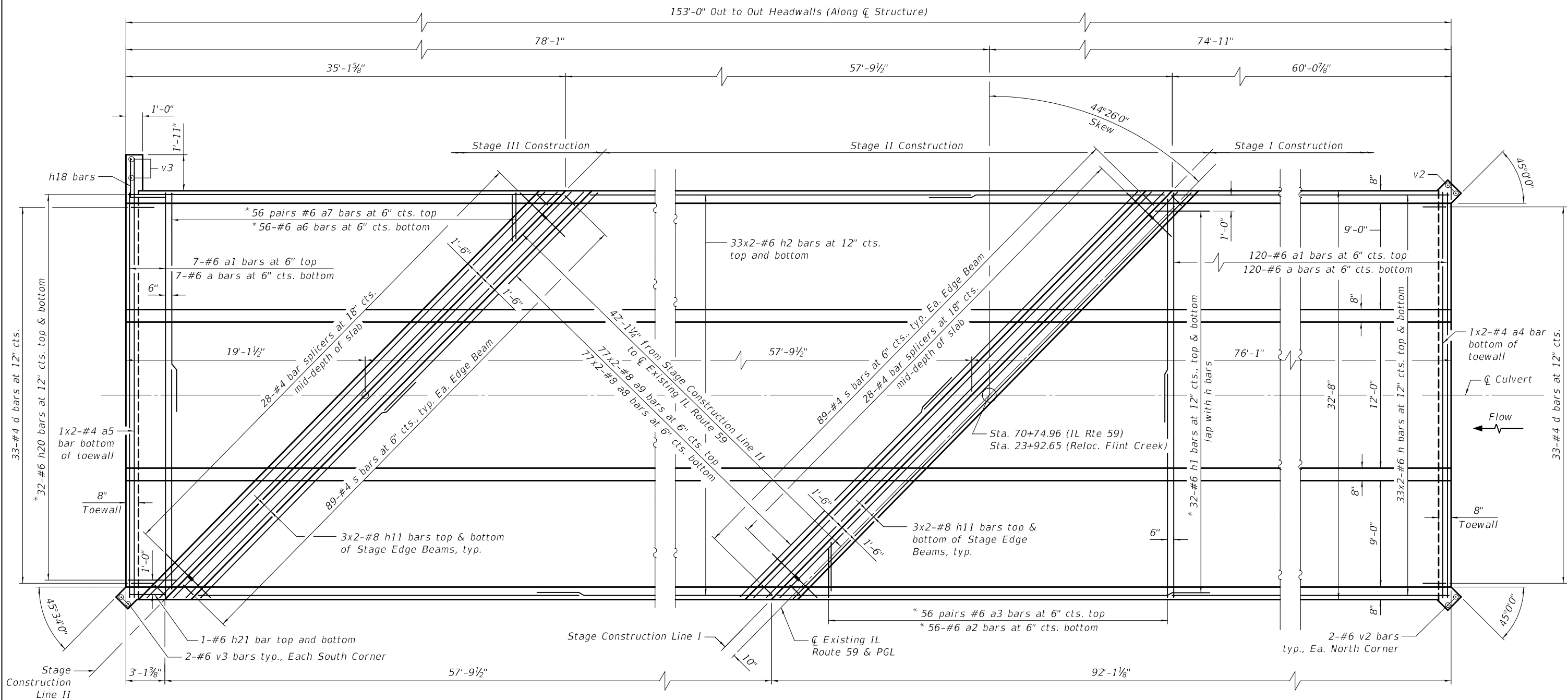
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		DATE -	10/01/2024	REVISED -	

STATE OF ILLINOIS
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TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
 STRUCTURE NO. 049-0008

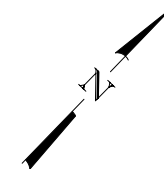
SHEET SA-6 OF SA-26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	11-00087-00-GS	LAKE	816	392
CONTRACT NO. 61187				
ILLINOIS FED. AID PROJECT				



BOTTOM SLAB PLAN

* See Field Cutting Diagram on Sheet SA-10.



Notes:

1. See Sheet SA-10 for reinforcement details, Section through Barrel, and Bill of Material.
2. Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
3. For Bar Splicer Details, see Sheet SA-23.
4. For Weir Reinforcement Details, See Sheet SA-2.

MINIMUM BAR LAP

- #4 bar = 1'-9"
- #6 bar = 3'-4"
- #8 bar = 4'-5"

MODEL: Default
FILE NAME: ...0490008-61187-007-Bottom Slab Plan

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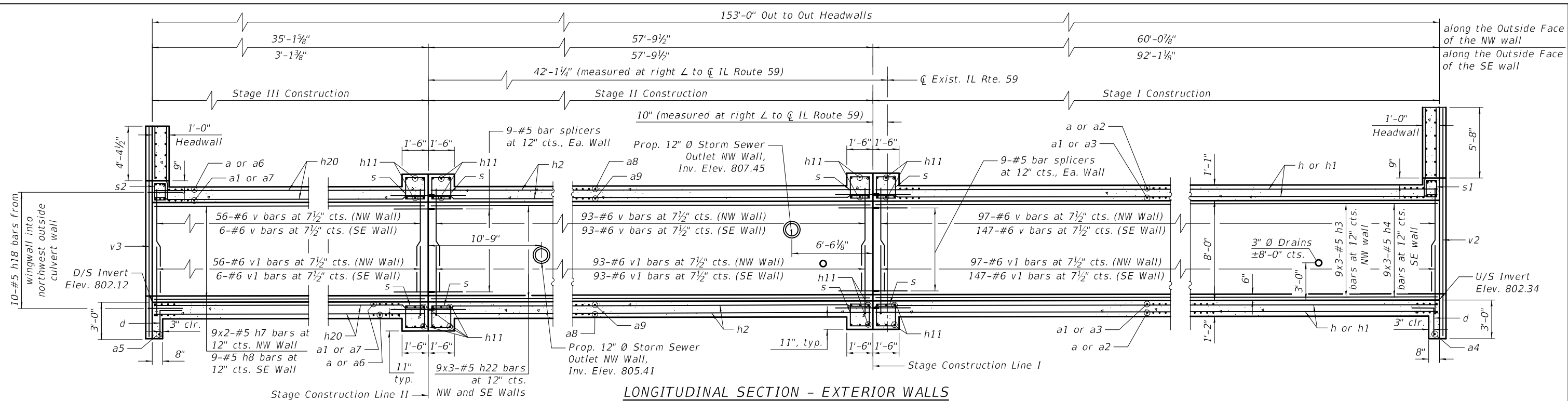
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PLOT DATE =	10/1/2024	DATE	10/01/2024	REVISOR	

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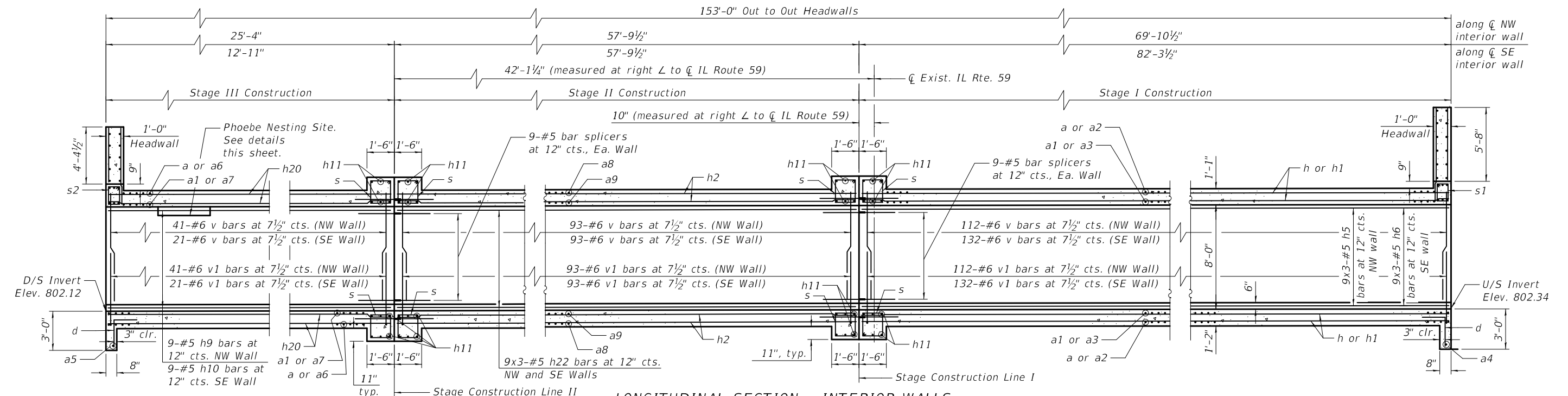
**BOTTOM SLAB PLAN
STRUCTURE NO. 049-0008**

SHEET SA-7 OF SA-26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	11-00087-00-GS	LAKE	816	393
CONTRACT NO. 61187				
ILLINOIS FED. AID PROJECT				



LONGITUDINAL SECTION - EXTERIOR WALLS

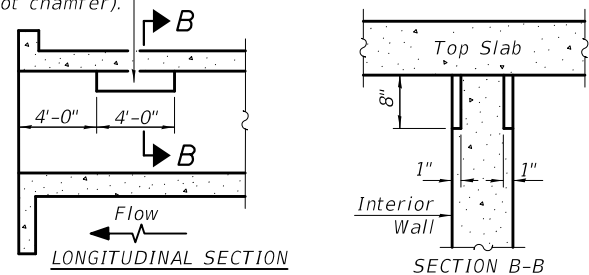


LONGITUDINAL SECTION - INTERIOR WALLS

MINIMUM BAR LAP

#5 Bar = 2'-9"

Notch formed by rough finished board attached to and removed with form work, each interior wall. (Do not chamfer).



PHOEBE NESTING SITE DETAILS
(Downstream End Only)

Notes:

1. See Sheet SA-10 for Bar Bending details, Section through Headwall, and Bill of Material.
2. Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
3. For Bar Splicer Details, see Sheet SA-23.
4. For Weir Reinforcement Details, See Sheet SA-2.

MODEL: Default
FILE NAME: ...0490008-61187-008-Culvert Wall Elevations

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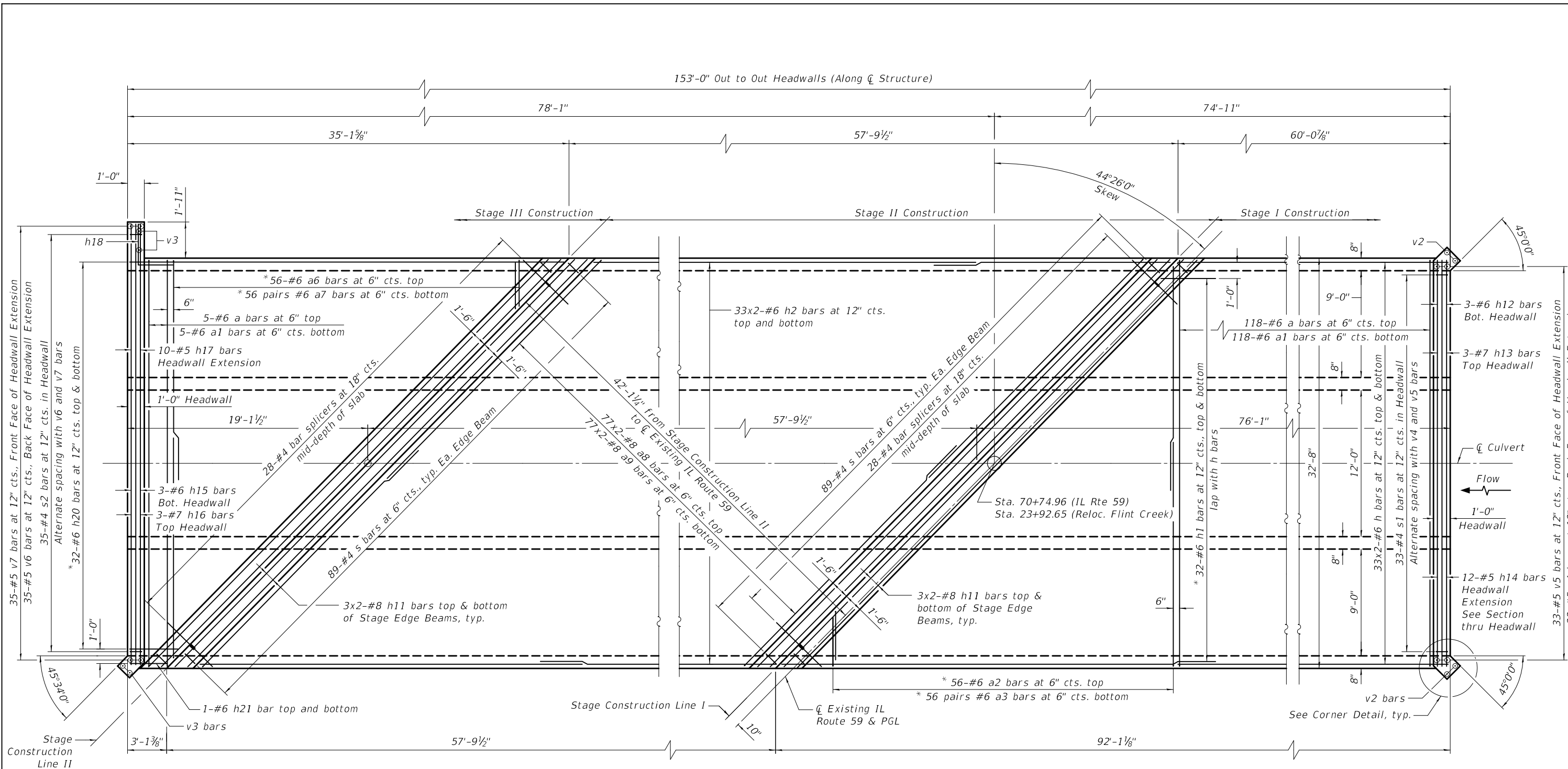
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PLOT DATE =	10/1/2024	CHECKED -	GJH	REVISED -	
		DATE -	10/01/2024	REVISED -	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CULVERT WALL ELEVATIONS
STRUCTURE NO. 049-008**

SHEET SA-8 OF SA-26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	11-00087-00-GS	LAKE	816	394
CONTRACT NO. 61187				
		ILLINOIS	FED. AID PROJECT	



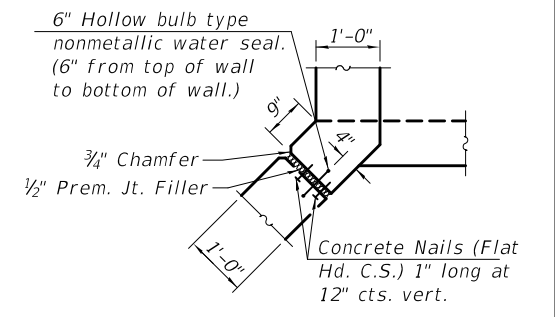
TOP SLAB PLAN

* See Field Cutting Diagram on Sheet SA-10.

- Notes:
1. See Sheet SA-10 for reinforcement details, Section through Barrel, Section through Headwall, and Bill of Material.
 2. Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
 3. For Bar Splicer Details, see Sheet SA-23.

MINIMUM BAR LAP

- #4 bar = 1'-9"
- #6 bar = 3'-4"
- #8 bar = 4'-5"



CORNER DETAIL

MODEL: Default
FILE NAME: ...0490008-61187-009-Top_Slab_Plan

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PLOT DATE =	10/1/2024	CHECKED -	GJH	REVISED -	
		DATE -	10/01/2024	REVISED -	

**STATE OF ILLINOIS
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**TOP SLAB PLAN
STRUCTURE NO. 049-0008**

SHEET SA-9 OF SA-26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 61187				

ILLINOIS FED. AID PROJECT

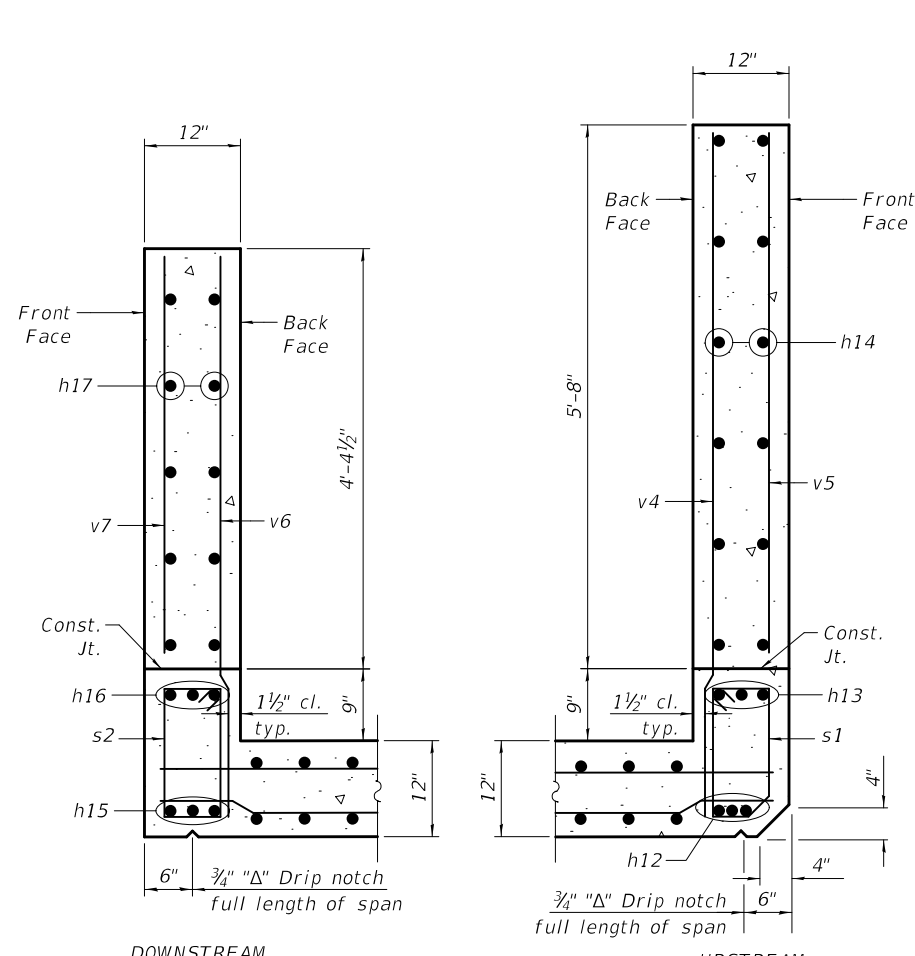
BILL OF MATERIAL
(IL59 Culvert)

Bar	No.	Size	Length	Shape
a	250	#6	32'-4"	—
a1	250	#6	33'-8"	U
a2	56	#6	35'-8"	—
a3	112	#6	22'-9"	U
a4	2	#4	17'-0"	—
a5	2	#4	18'-0"	—
a6	56	#6	35'-4"	—
a7	112	#6	22'-6"	U
a8	308	#8	24'-4"	—
a9	308	#8	25'-03'	U

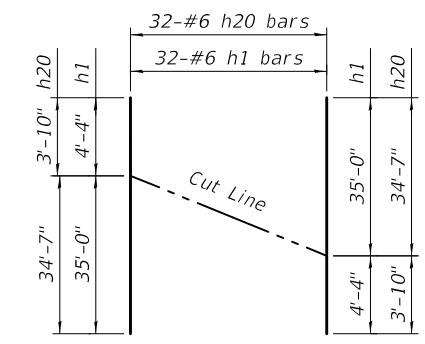
d	66	#4	4'-5"	L
h	264	#6	31'-7"	—
h1	64	#6	39'-4"	—
h2	264	#6	30'-5"	—
h3	27	#5	21'-10"	—
h4	27	#5	32'-5"	—
h5	27	#5	25'-0"	—
h6	27	#5	29'-2"	—
h7	18	#5	18'-7"	—
h8	9	#5	2'-11"	—
h9	9	#5	25'-0"	—
h10	9	#5	12'-7"	—
h11	96	#8	24'-11"	—
h12	3	#6	32'-4"	—
h13	3	#7	32'-4"	—
h14	12	#5	32'-4"	—
h15	3	#6	34'-3"	—
h16	3	#7	34'-3"	—
h17	10	#5	34'-3"	—
h18	10	#5	4'-11"	L
h19	6	#4	11'-2"	U
h20	64	#6	38'-5"	—
h21	4	#6	2'-10"	—
h22	108	#5	21'-0"	—

n	18	#4	3'-4"	L
s	712	#4	6'-5"	☑
s1	33	#4	5'-4"	☑
s2	35	#4	5'-5"	☑
v	984	#6	8'-0"	—
v1	984	#6	6'-6"	—
v2	4	#6	18'-1"	—
v3	4	#6	16'-9"	—
v4	33	#5	7'-2"	—
v5	33	#5	5'-4"	—
v6	35	#5	5'-11"	—
v7	35	#5	4'-1"	—

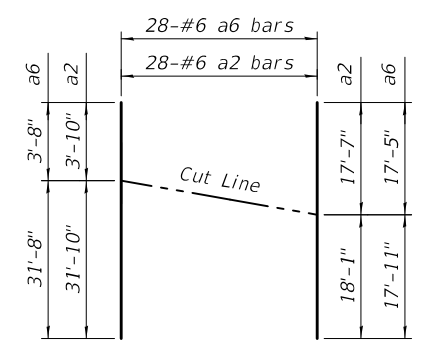
Concrete Box Culverts	Cu. Yd.	576.2
Reinforcement Bars	Pound	151,340



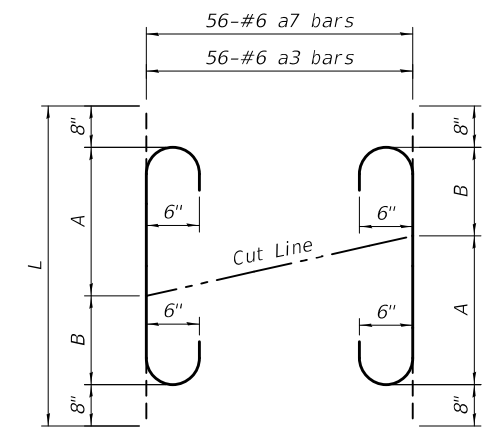
SECTION THROUGH HEADWALL



FIELD CUTTING DIAGRAM
Order bars full length. Cut as shown and use remainder of bars in other face of slab.

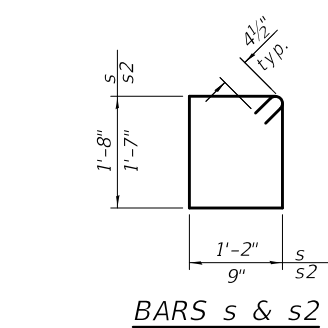


FIELD CUTTING DIAGRAM
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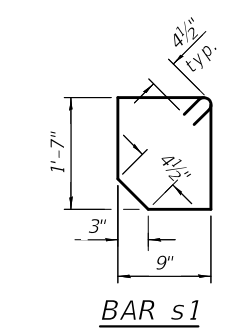


FIELD CUTTING DIAGRAM
Order bars full length. Cut as shown and use remainder of bars in opposite half of slab.

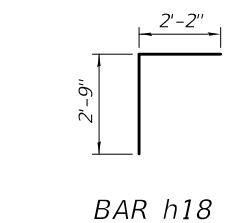
Bar	A	B	L
a3	17'-7"	3'-10"	22'-9"
a7	17'-6"	3'-8"	22'-6"



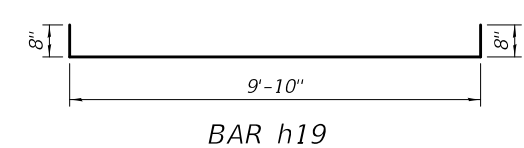
BARS s & s2



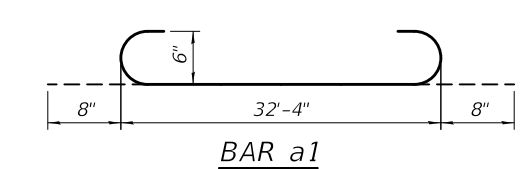
BAR s1



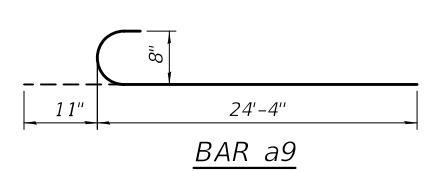
BAR h18



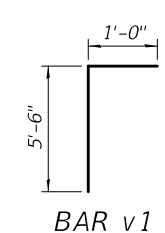
BAR h19



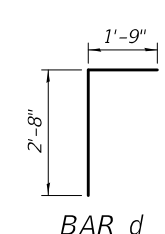
BAR a1



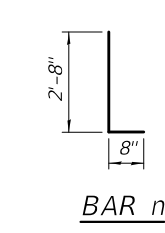
BAR a9



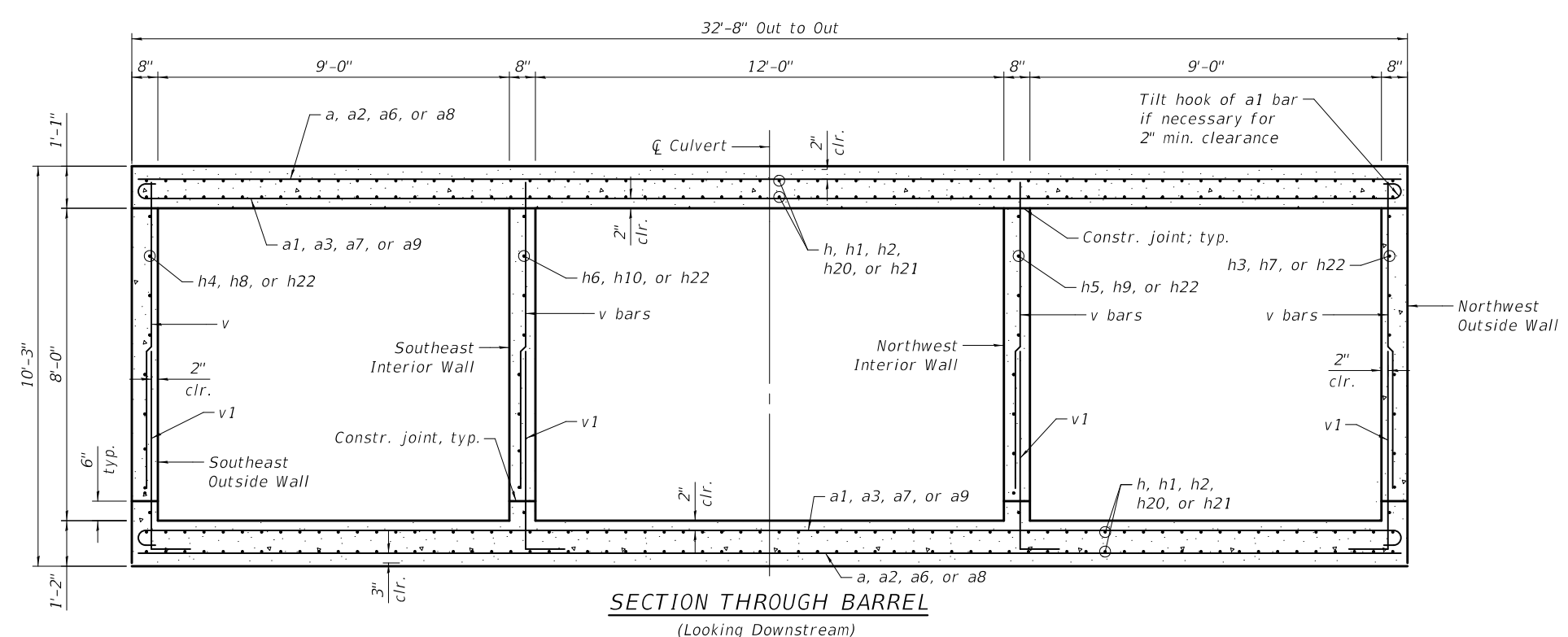
BAR v1



BAR d



BAR n



SECTION THROUGH BARREL
(Looking Downstream)

MODEL: Default
FILE NAME: ...0490008-61187-010-Culvert_Details



Two Pierce Place, Suite 1400 Itasca, Illinois 60143 Tel: 630.773.3900 Fax: 630.773.3975 www.civiltechinc.com	USER NAME = mc	DESIGNED - KLK	REVISED -
	PLOT SCALE = N/A	DRAWN - KLK	REVISED -
	PLOT DATE = 10/1/2024	CHECKED - GJH	REVISED -
		DATE - 10/01/2024	REVISED -

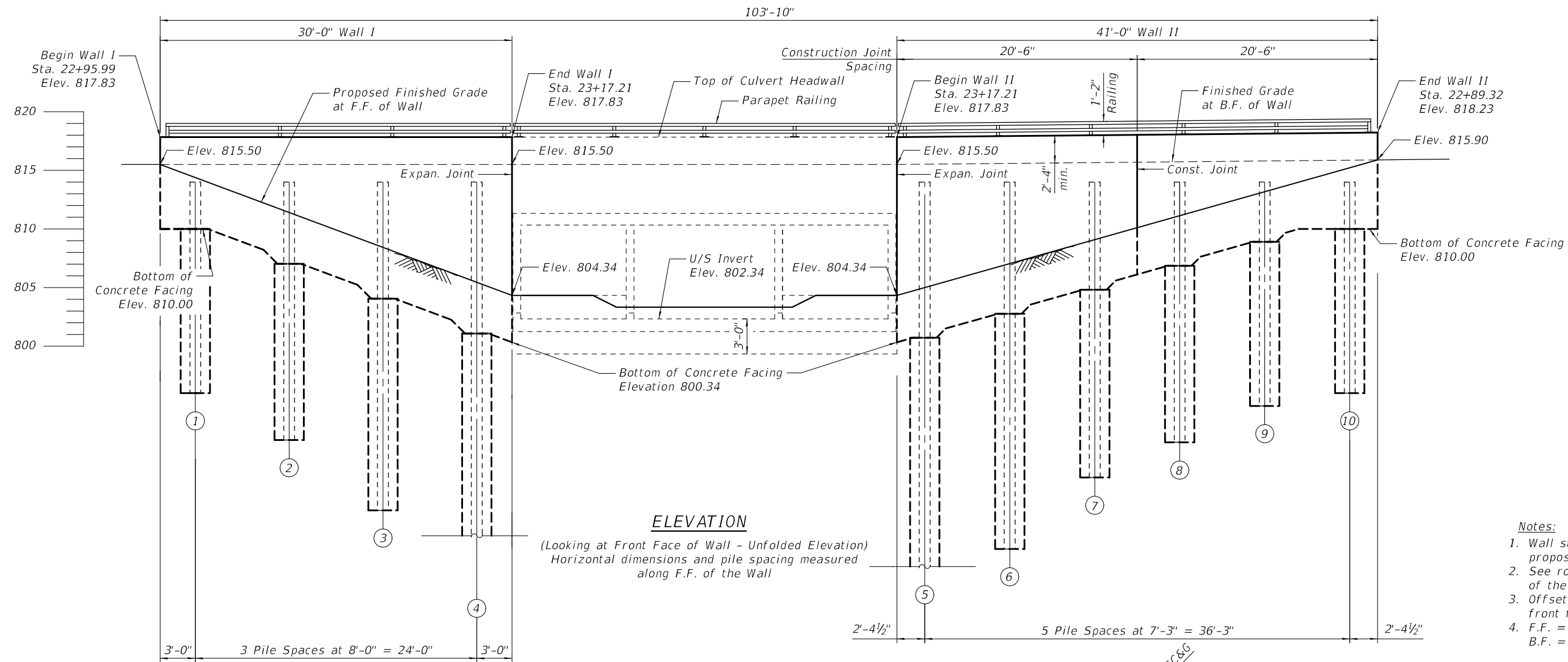
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CULVERT DETAILS
STRUCTURE NO. 049-0008

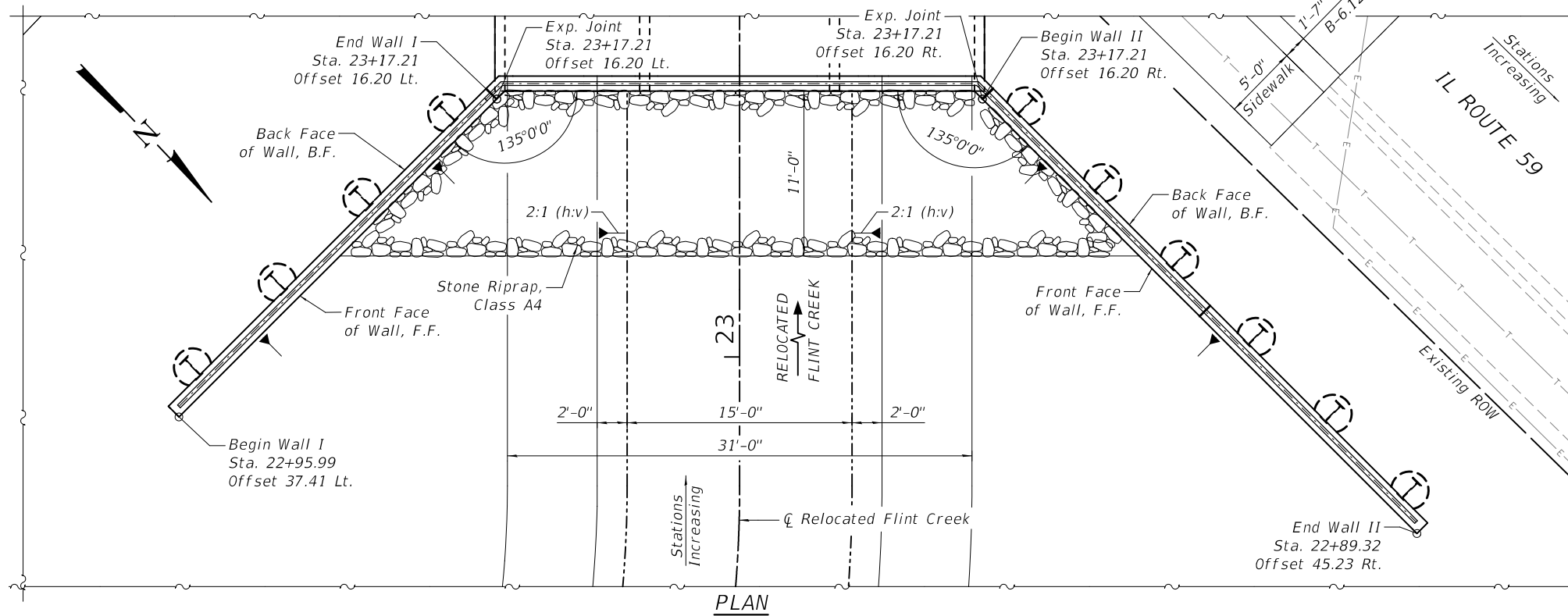
SHEET SA-10 OF SA-26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	11-00087-00-GS	LAKE	816	396
CONTRACT NO. 61187				

ILLINOIS FED. AID PROJECT



- Notes:**
1. Wall stations and offsets are to the proposed \bar{C} Relocated Flint Creek.
 2. See roadway plans for the profile grade of the Relocated Flint Creek.
 3. Offsets and stations are given at the front face of the walls.
 4. F.F. = Front Face
B.F. = Back Face



- LEGEND**
- E — Existing Underground Electric
 - T — Existing Underground Telephone

MODEL: Default
FILE NAME: ...0490008-61187-011-GPE Walls I & II

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Mascota, IL 60143
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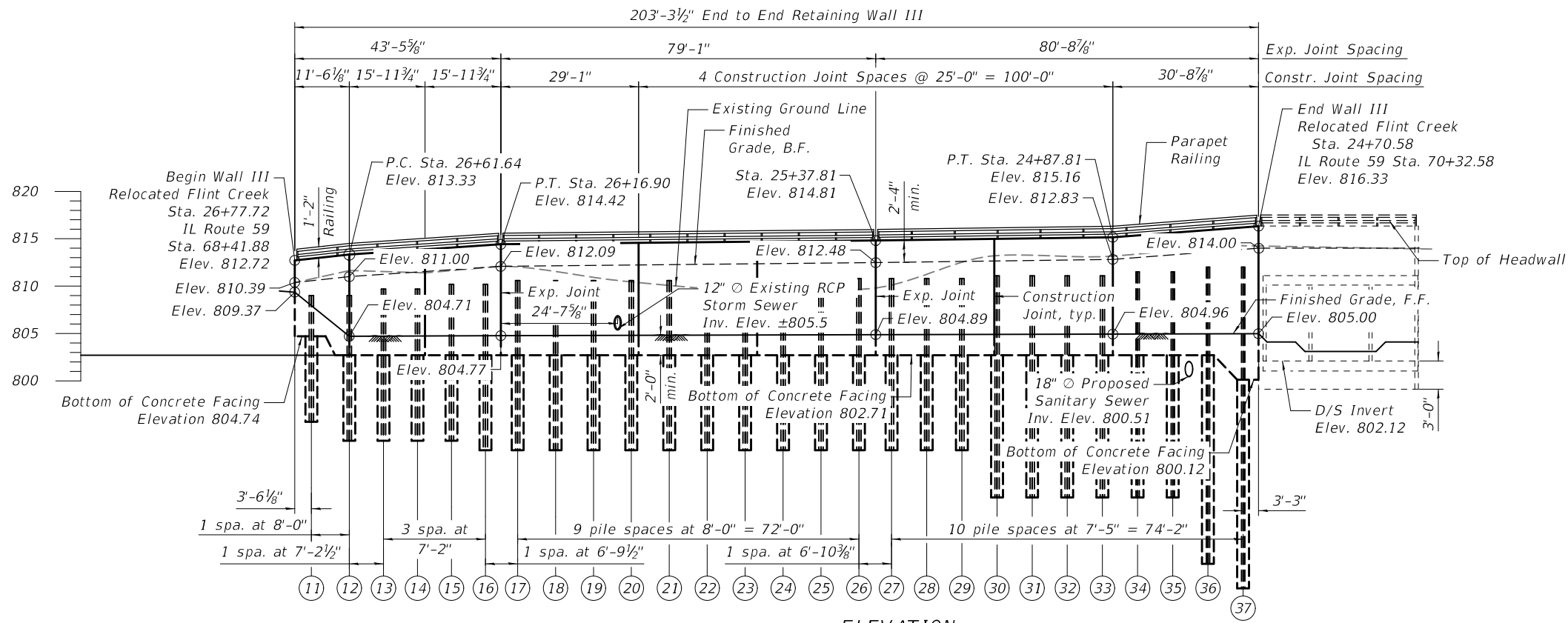
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		DATE -	10/01/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

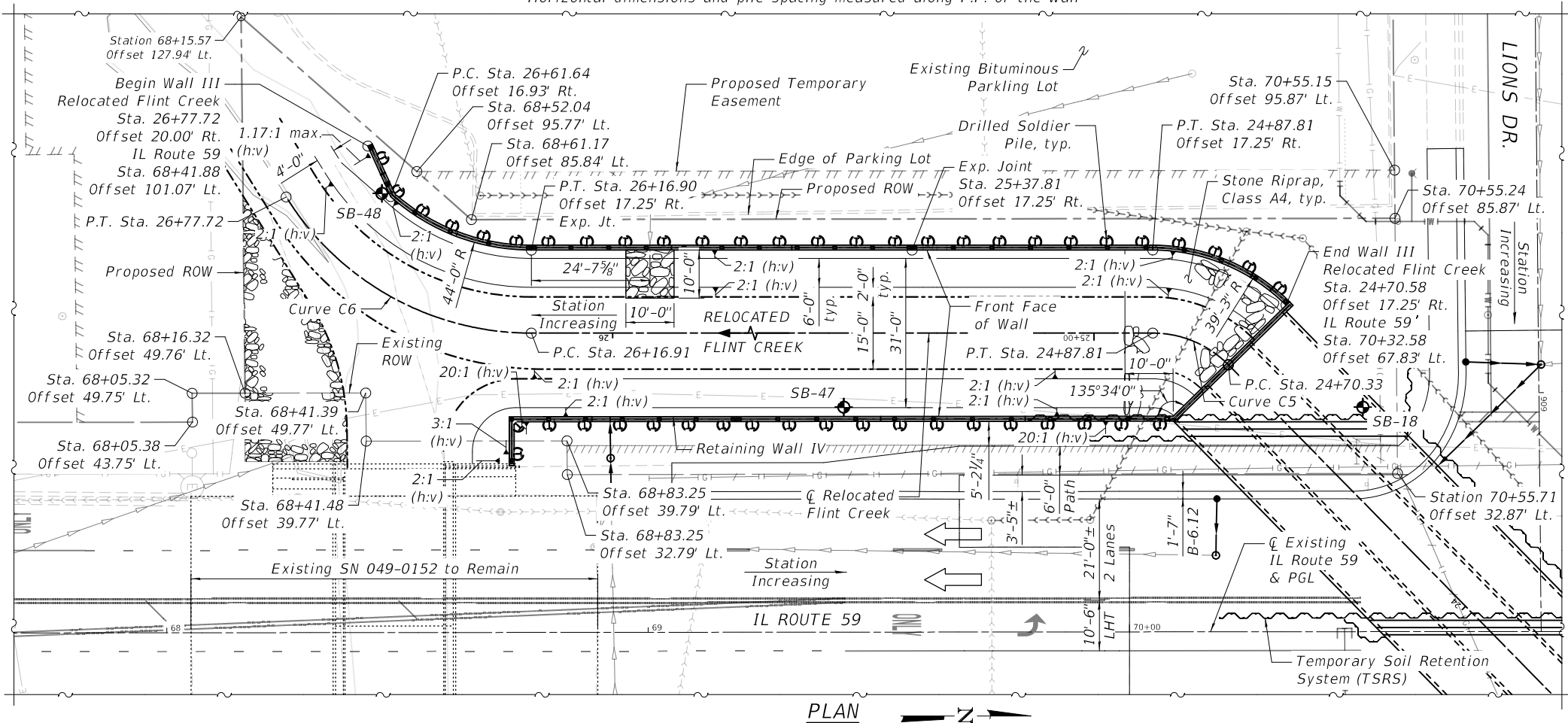
GENERAL PLAN AND ELEVATION - WALLS I & II
STRUCTURE NO. 049-0008

SHEET SA-11 OF SA-26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	11-00087-00-GS	LAKE	816	397
CONTRACT NO. 61187				
ILLINOIS FED. AID PROJECT				



ELEVATION
 (Looking at Front Face of Wall - Unfolded Elevation)
 Horizontal dimensions and pile spacing measured along F.F. of the Wall



PLAN

- Notes:**
1. Wall stations and offsets are to the proposed \bar{C} Relocated Flint Creek.
 2. See roadway plans for the profile grade of the Relocated Flint Creek.
 3. Offsets and stations are given at the front face of the walls.
 4. F.F. = Front Face
B.F. = Back Face

LEGEND

	Existing Gasline
	Existing Underground Electric to be Relocated
	Existing Water Main
	Existing Water Main to be Abandoned
	Existing Sanitary Sewer to be Removed
	Existing Underground Telephone
	Existing Sanitary Sewer
	Existing Storm Sewer
	Existing Underground Cable TV
	Proposed Sanitary Sewer
	Proposed Storm Sewer
	Proposed Water Main
	Soil Boring

MODEL: Default
 FILE NAME: ...0490008-61187-012-GPE Wall III

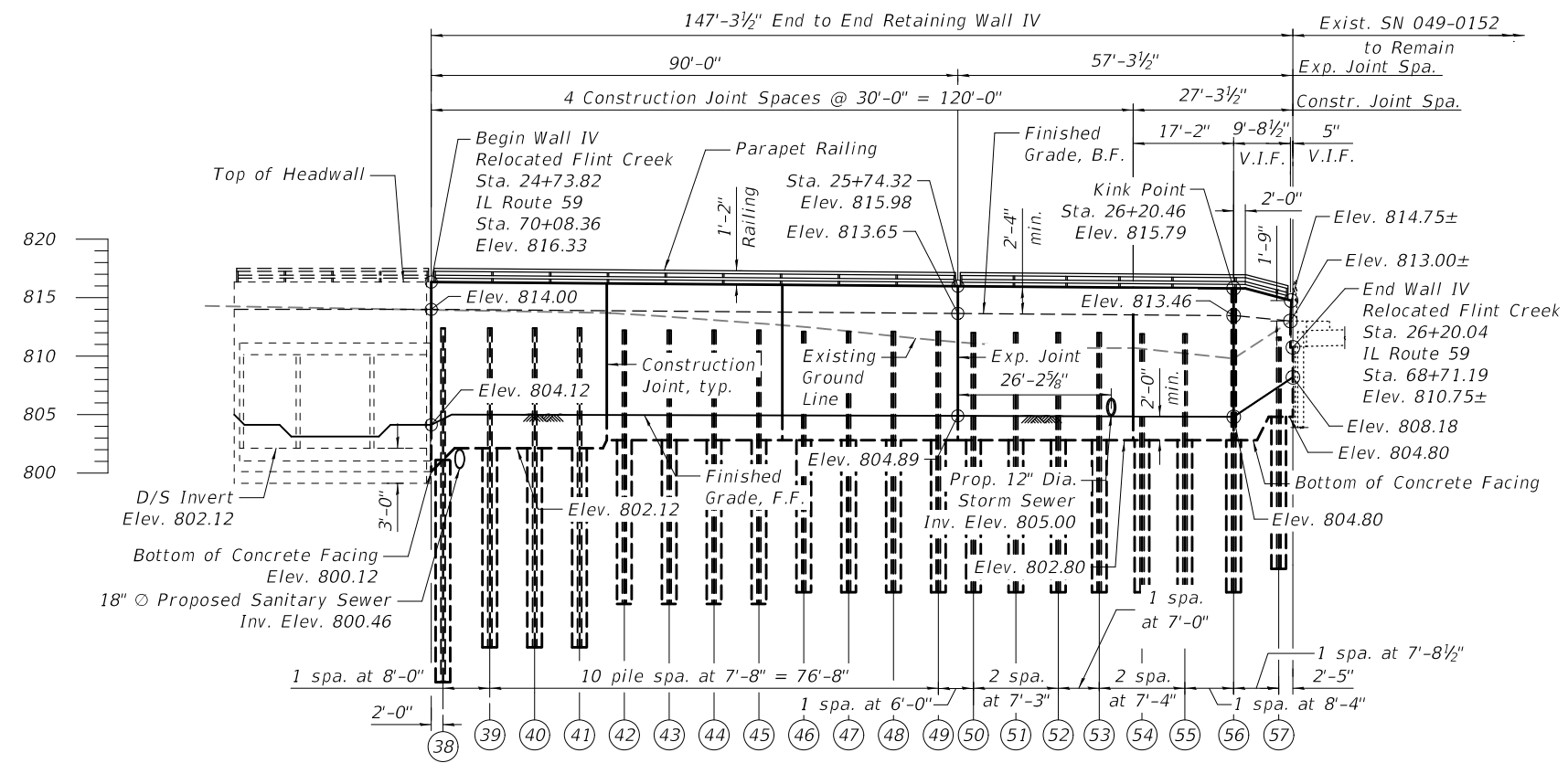
CIVILTECH
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 Fax: 630.773.3975
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USER NAME = mc	DESIGNED - KLK	REVISED -
PLOT SCALE = N/A	DRAWN - KLK	REVISED -
PLOT DATE = 10/1/2024	CHECKED - GJH	REVISED -
	DATE - 10/01/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

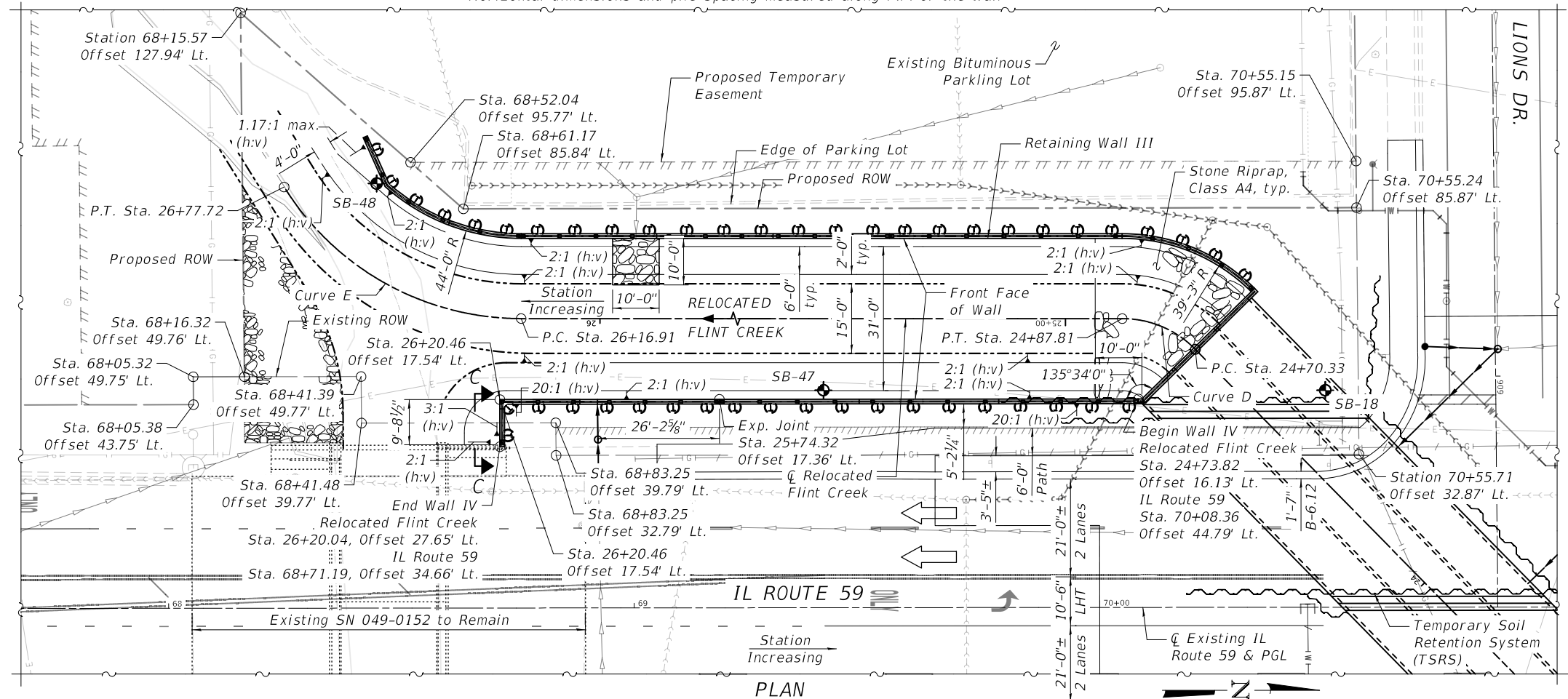
GENERAL PLAN AND ELEVATION - WALL III
STRUCTURE NO. 049-008
 SHEET SA-12 OF SA-26 SHEETS

F.A.P. RTE. 305	SECTION 11-00087-00-GS	COUNTY LAKE	TOTAL SHEETS 816	SHEET NO. 398
CONTRACT NO. 61187				
ILLINOIS FED. AID PROJECT				



- Notes:**
1. Wall stations and offsets are to the proposed \bar{C} Relocated Flint Creek.
 2. See roadway plans for the profile grade of the Relocated Flint Creek.
 3. Offsets and stations are given at the front face of the walls.
 4. F.F. = Front Face
 5. B.F. = Back Face
 6. See Sheet SA-14 for View C-C.

ELEVATION
 (Looking at Front Face of Wall - Unfolded Elevation)
 Horizontal dimensions and pile spacing measured along F.F. of the Wall



LEGEND

	Existing Gasline
	Existing Underground Electric
	Existing Water Main
	Existing Water Main to be Abandoned
	Existing Sanitary Sewer to be Removed
	Existing Underground Telephone
	Existing Sanitary Sewer
	Existing Storm Sewer
	Existing Underground Cable TV
	Proposed Sanitary Sewer
	Proposed Storm Sewer
	Proposed Water Main
	Soil Boring

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION - WALL IV
 STRUCTURE NO. 049-008

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	11-00087-00-GS	LAKE	816	399
CONTRACT NO. 61187				

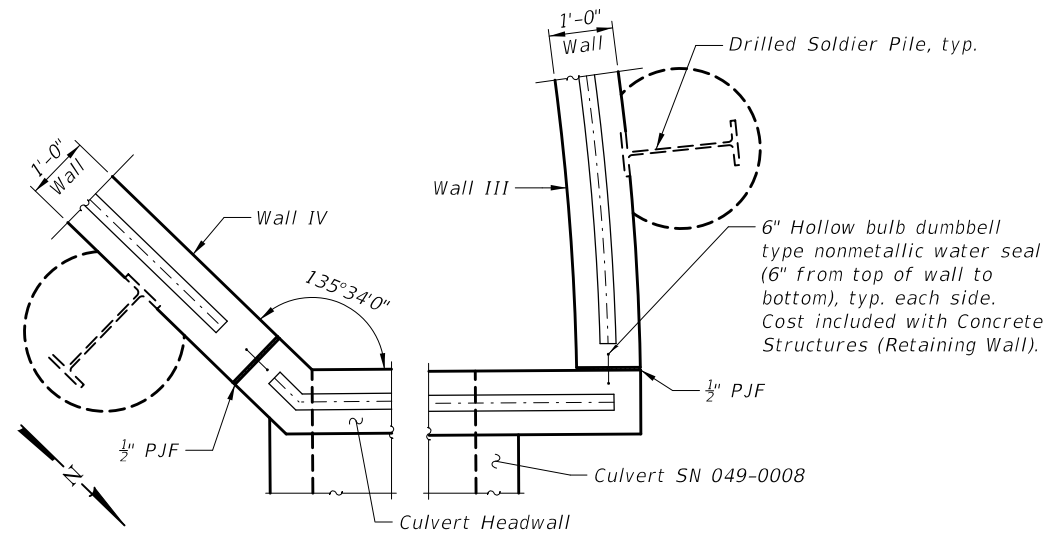
MODEL: Default
 FILE NAME: ...0490008-61187-013-GPE Wall IV

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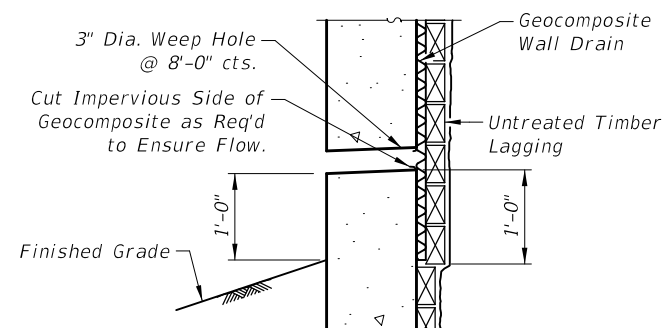
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	DATE - 10/01/2024	REVISED -

SHEET SA-13 OF SA-26 SHEETS

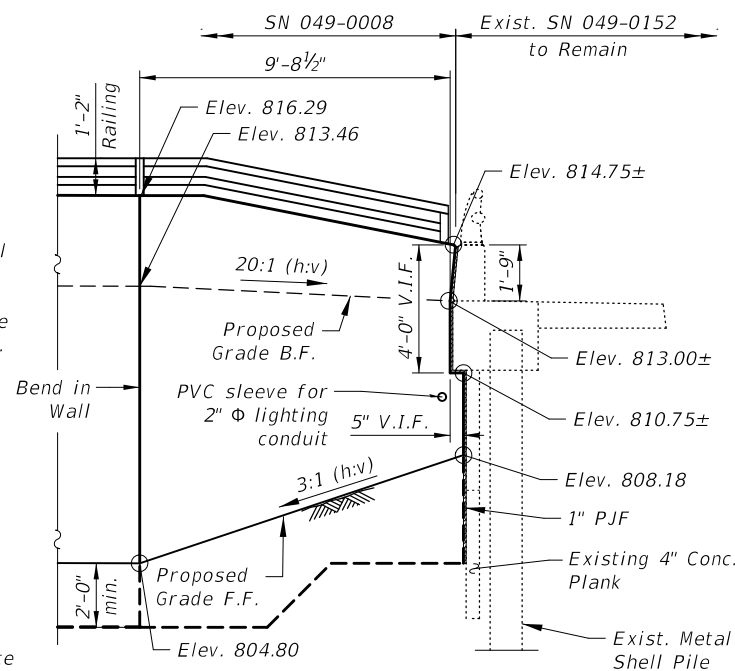
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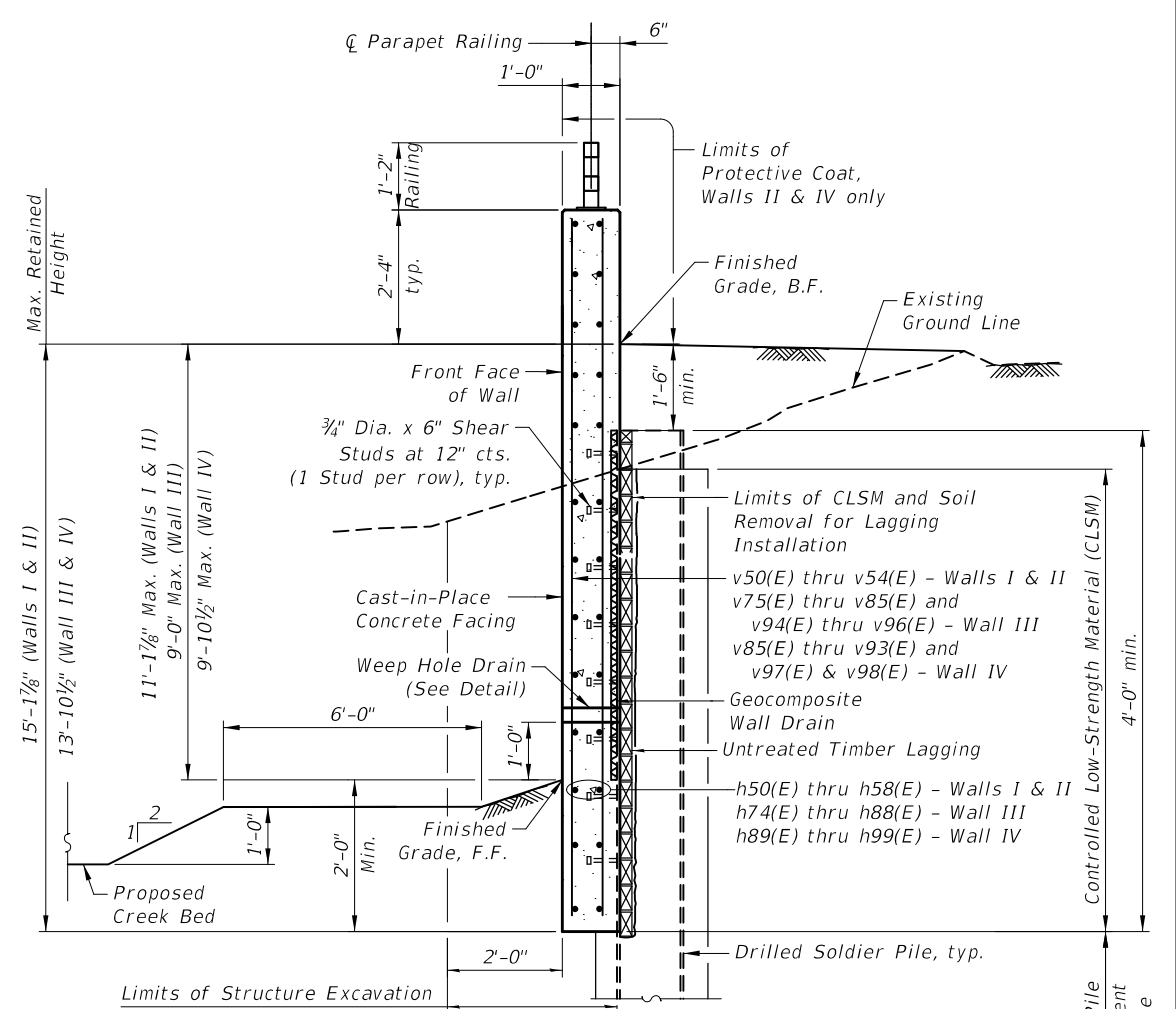
RETAINING WALL TO CULVERT DETAIL



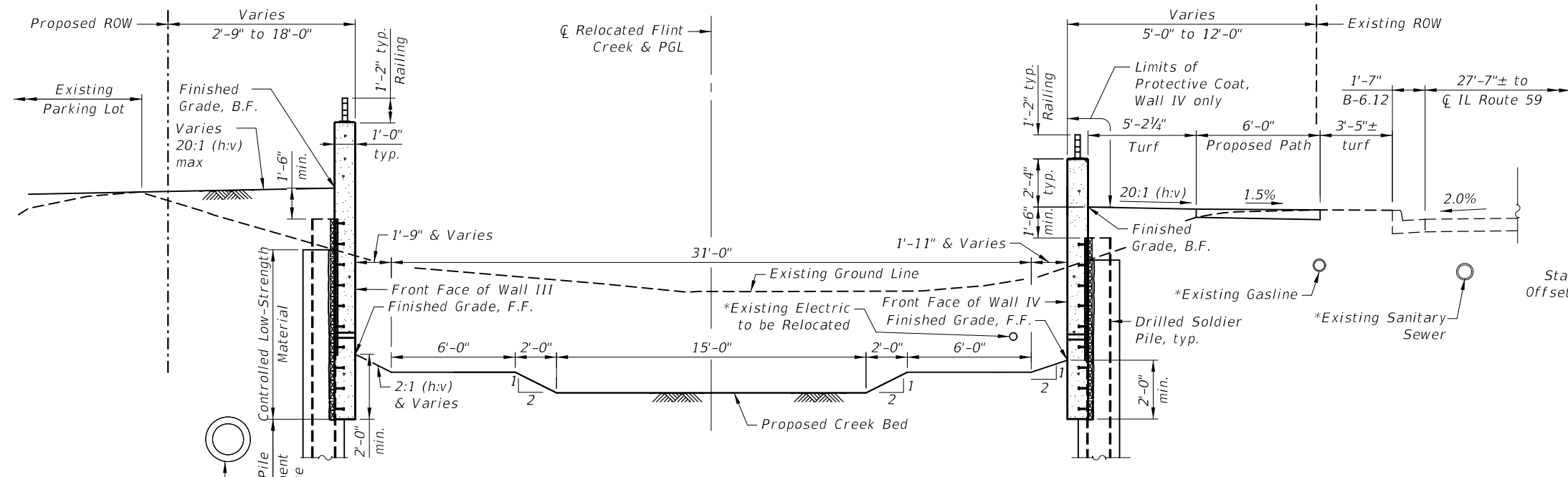
WEEP HOLE DRAIN DETAIL



VIEW C-C
(Looking North)
Retaining Wall IV
(Unfolded View)

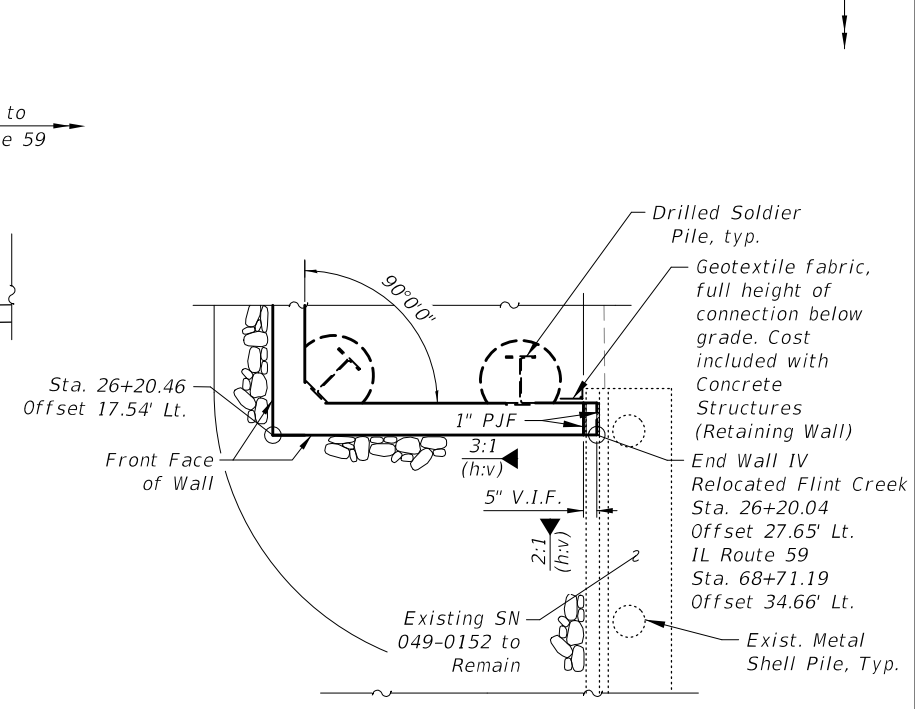


TYPICAL WALL SECTION



TYPICAL SECTION AT RELOCATED FLINT CREEK/IL ROUTE 59

(Looking North - Upstream)
See Typical Wall Section for balance of information
*Elevation Unknown



PLAN

Showing Wall IV Connection to Existing Structure

MODEL: Default
FILE NAME: ...0490008-61187-014-Walls Details I

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	DATE - 10/01/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WALL DETAILS I
STRUCTURE NO. 049-0008

SHEET SA-14 OF SA-26 SHEETS

F.A.P. RTE. 305	SECTION 11-00087-00-GS	COUNTY LAKE	TOTAL SHEETS 816	SHEET NO. 400
ILLINOIS FED. AID PROJECT			CONTRACT NO. 61187	