Illinois Department of Transportation

## Luminaire Performance Table

Reset Form

**Project**

| Date | Contract Number | Section Number | County |
|---|---|---|---|
| 01/25/24 | D264C24 | (201-3)K | Winnebago |

| Marked Route Number | Municipality |
|---|---|
| I-39 / US-20 | VILLAGE OF CHERRY VALLEY |

**Roadway**

| Lane Width | # of Lanes | Median Width | I.E.S. Surface Classification | Q-Zero Value |
|---|---|---|---|---|
| 48' | 4 | 27' | R3 | 0.07 |

**Structure**

| Mounting Height | Arm Length | Set-Back | Number of Luminaires (Highmast & Sign Lighting Only) |
|---|---|---|---|
| 22.5' | N/A | 1' | N/A |

**Luminaire**

| Description | I.E.S. Lateral Distribution | I.E.S. Distribution (Transverse) |
|---|---|---|
| UNDERPASS LUM., LED, DESIGNATION E | MEDIUM | TYPE III |

| Total Light Loss Factor (LLF) | B-U-G Rating | Shields | Dimming Protocol |
|---|---|---|---|
| 0.7 | U=0 | 0 | 0 |

**Layout**

| Spacing (to Nearest 5 ft) | Configuration (Opposite, Staggered, 1 Sided, or Median) |
|---|---|
| 60' | OPPOSITE |

**Performance**

| Average Illuminance, $E_{AVE}$ (fc) | Uniformity Ratio, $E_{AVE}/E_{MIN}$ |
|---|---|
| 1.0 | 3.0 |

| Average Luminance, $L_{AVE}$ (cd/m$^2$) | Uniformity Ratio, $L_{AVE}/L_{MIN}$ | Uniformity Ratio, $L_{MAX}/L_{MIN}$ | Veiling Luminance Ratio, $L_V/L_{AVE}$ |
|---|---|---|---|
| N/A | N/A | N/A | N/A |

**Light Tresspass**

| Distance to ROW (behind pole) | Max. Horizontal Illuminance at ROW, $E_H$ | Max. Vertical Illuminance at ROW, $E_V$ |
|---|---|---|
| N/A | N/A | N/A |

**Notes**

LED, UNDERPASS LUMINAIRE,OPPOSITE, WALL MOUNTED ON I-39 OVER UPRR UNDERPASS

Printed 01/25/24

BDE 5630 (04/10/19)

MODEL: UPRR Underpass Performance Table [Sheet]
FILE NAME: c:\pwworkfr\benesch projects\projects\d0173716\D264C24_ML-sht-PerformanceTable2.dgn

benesch
Alfred Benesch & Company
35 W Wacker Drive, Suite 3300
Chicago, Illinois 60601
312-565-0450 Job No. 10800.00

| | | | |
|---|---|---|---|
| USER NAME = lfranceschina | DESIGNED - R. SCARIA | REVISED - | |
| | DRAWN - R. SCARIA | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - G. THIESSE | REVISED - | |
| PLOT DATE = 8/12/2024 | DATE - 02/14/2025 | REVISED - | |

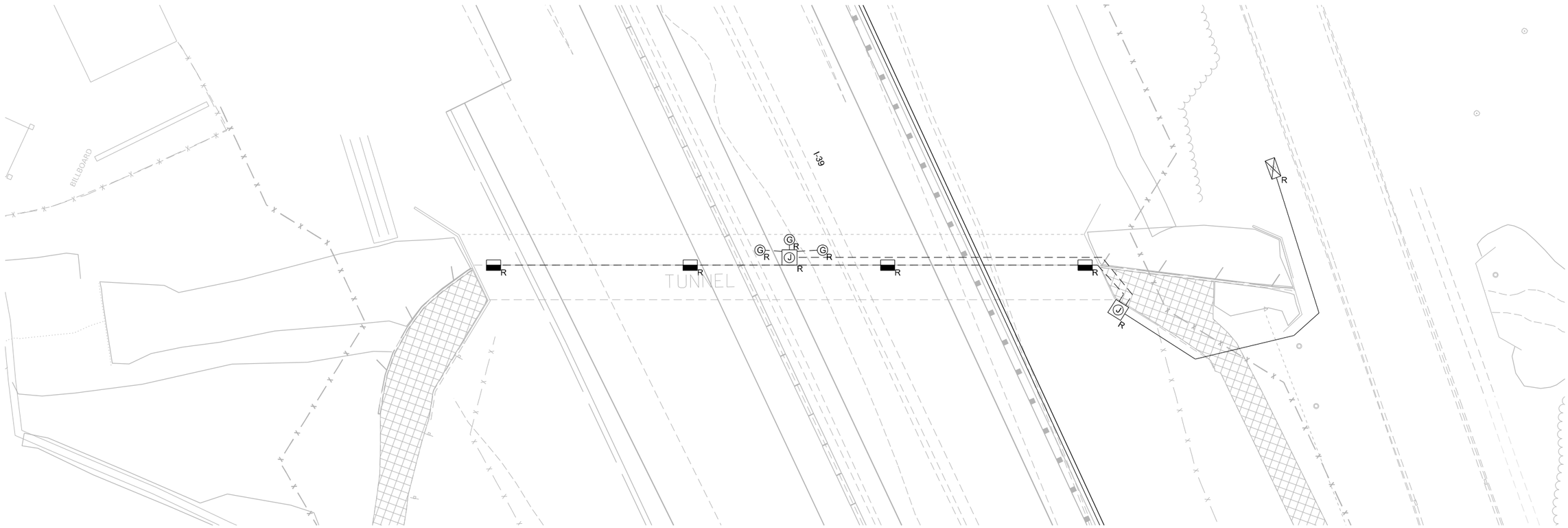
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**PROPOSED LIGHTING DETAILS**
**PERFORMANCE TABLE**

SCALE: | SHEET 16 OF 21 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 501 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)




LEGEND THIS SHEET ONLY

R — PEDESTRIAN LUMINAIRE TO BE REMOVED

G R — GAS SENSOR TO BE REMOVED

— — — CONDUIT ATTACHED TO STRUCTURE WITH CABLE, TO BE REMOVED

——— UNDERGROUND CONDUIT WITH CABLE, TO BE REMOVED

R — EXISTING CONTROLLER AND FOUNDATION TO BE REMOVED

0 20 40 60
SCALE IN FEET

MODEL: CVP Lighting Removal - Plan 1 [Sheet]
FILE NAME: c:\wwordir\benesch projects\projects\d0173716\D264C24_ML-sht-LGT-CVP-REM.dgn

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Alfred Benesch & Company
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| | | | | | |
|---|---|---|---|---|---|
| USER NAME | = lfranceschina | DESIGNED | - | REVISED | - |
| | | DRAWN | - | REVISED | - |
| PLOT SCALE | = $SCALE$ | CHECKED | - G. THIESSE | REVISED | - |
| PLOT DATE | = 8/12/2024 | DATE | - 02/14/2025 | REVISED | - |

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

**CHERRY VALLEY PATH - LIGHTING REMOVAL PLAN**

SCALE: 1"=20' | SHEET 17 OF 21 SHEETS | STA. 0+00.00 | TO STA. 6+00.00

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1,5)R | WINNEBAGO | 1685 | 502 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

INSTALL CONTROLLER, 240V, 100A
ON PROPOSED FOUNDATION

DIRECTIONAL BORE

LEGEND THIS SHEET ONLY

- LIGHTING CONTROLLER (SIZE AS NOTED)
- WALL MOUNTED TUNNEL LUMINAIRE
- 3/4" DIA CONDUIT ATTACHED TO STRUCTURE WITH 4-1/C#10 AND 1-1/C#10 GROUNF
- UNDERGROUND CONDUIT, PVC, 3" DIA.(CASING FOR UNIT DUCT)
- UNIT DUCT, 600V, 4-1/C NO. 8, 1/C NO. 8 GND, (XLP-TYPE USE) 1 1/4" DIA POLYETHYLENE
- UNGROUND CONDUIT WITH CABLE, SIZE AND TYPE AS INDICATED
- PROPOSED JUNCTION BOX, STAINLESS STEEL, TYPE AND SIZE AS NOTED
- LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT, 1/2" DIA. WITH 2-C NO. 10 AND 1-1/C NO. 10

STA. 3+84.43, 6.0' LT
WALL MOUNT

3/4" DIA. STAINLESS STEEL CONDUIT ATTACHED TO STRUCTURE, 2-1/C #10 & 1/C #10 GROUND

8.50'
(TYP.)

STA. 3+84.45, 6.0' RT
WALL MOUNT

3/4" DIA. STAINLESS STEEL CONDUIT ATTACHED TO STRUCTURE, 2-1/C #10 & 1/C #10 GROUND

JUNCTION BOX, STAINLESS STEEL 12"X10"X6"

JUNCTION BOX, STAINLESS STEEL 6"X6"X4" (TYP.)

I-39

VALLEY WOODS DRIVE

0 20 40 60
SCALE IN FEET

MODEL: PrCL CVP - Plan 1 [Sheet]
FILE NAME: c:\pwworkl\benesch projects\projects\d0173716\D2642\24_ML-sht-LGT-CVP.dgn

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Chicago, Illinois 60601
312-565-0450 Job No. 10800.00

| | | | |
|---|---|---|---|
| USER NAME = jtardy | DESIGNED - | REVISED - | |
| | DRAWN - | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - G. THIESSE | REVISED - | |
| PLOT DATE = 8/12/2024 | DATE - 02/14/2025 | REVISED - | |

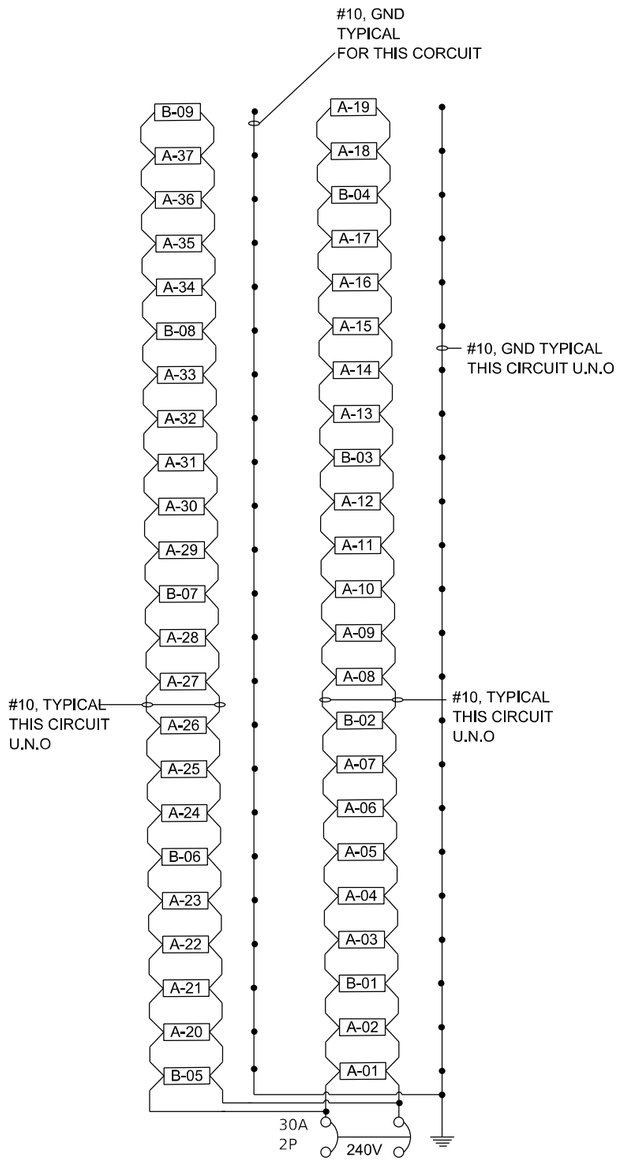
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**CHERRY VALLEY PATH - LIGHTING**
**PROPOSED LIGHTING PLAN**

SCALE: 1"=20' | SHEET 18 OF 21 SHEETS | STA. 2+00.00 | TO STA. 8+00.00

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1,5)R | WINNEBAGO | 1685 | 503 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)



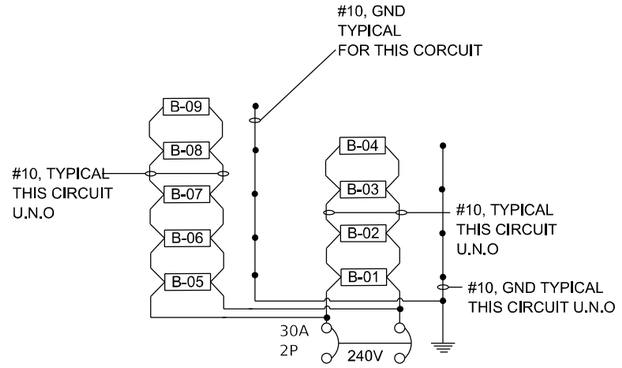

DAY TIME LIGHTING CIRCUITS
(CONTROLLER-1)

LED WALL MOUNT TUNNEL LUMINAIRE

GROUND CONNECTION AT EACH LUMINAIRE

GROUND ROD

1. BOND EACH JUNCTION BOX TO EQUIPMENT GROUNDING CONDUCTOR.




NIGHT TIME LIGHTING CIRCUITS
(CONTROLLER-1)

MODEL: CVP Wiring Diagram [Sheet]
FILE NAME: c:\pwworkfr\benesch projects\projects\d0173716\D264C24_ML-sht-CVP-Wiring-Diagram.dgn

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312-565-0450 Job No. 10800.00

| | | | |
|---|---|---|---|
| USER NAME = lfranceschina | DESIGNED - | REVISED - | |
| | DRAWN - | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - G. THIESSE | REVISED - | |
| PLOT DATE = 8/12/2024 | DATE - 02/14/2025 | REVISED - | |

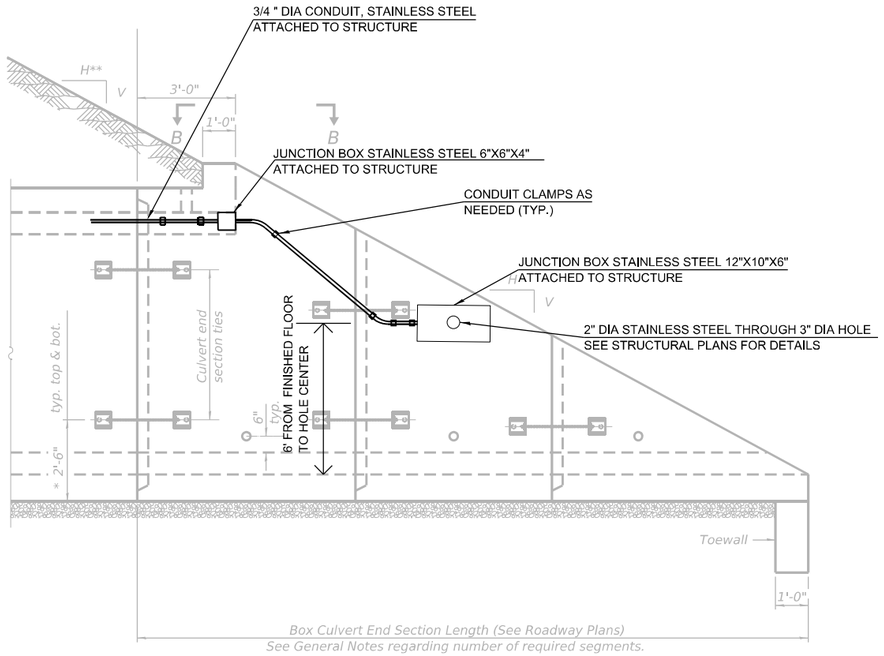
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**CHERRY VALLEY PATH - LIGHTING**
**PROPOSED LIGHTING DETAILS**

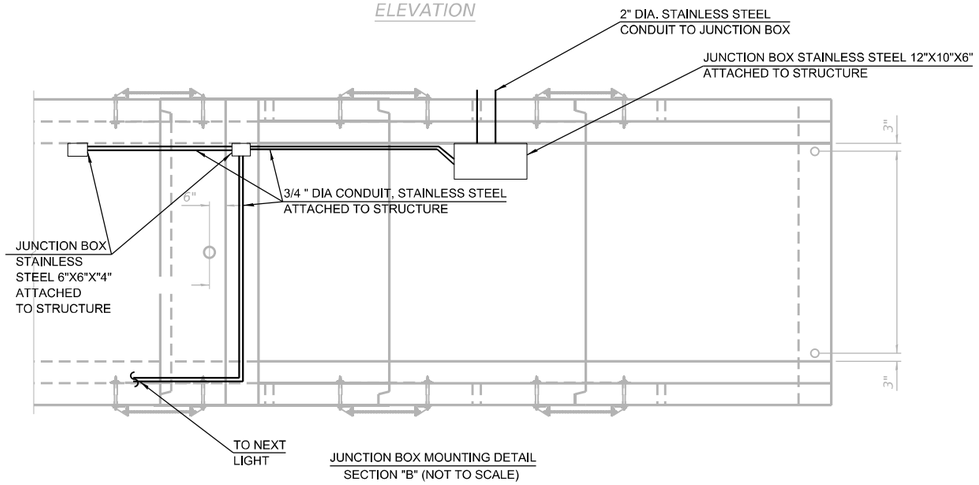
SCALE: | SHEET 19 OF 21 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 504 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

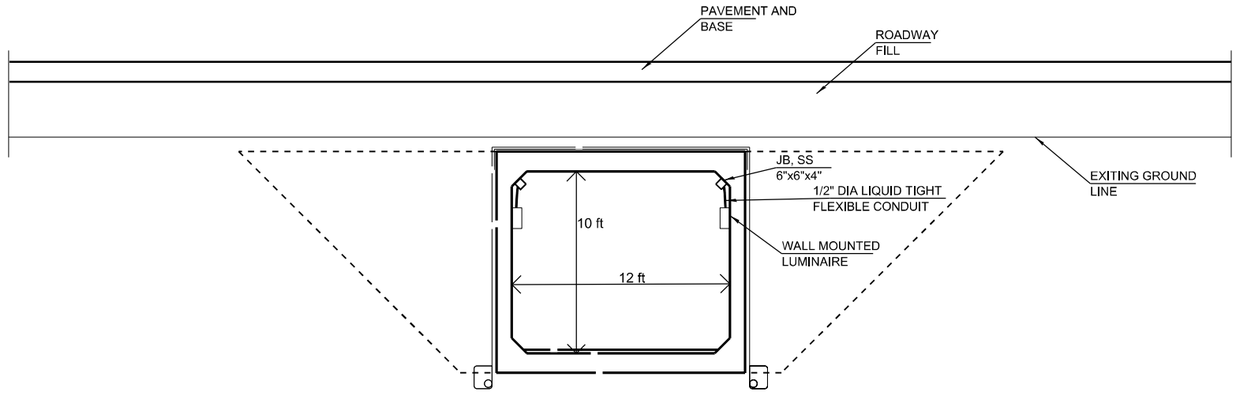
* FAI ROUTE 39 (I-39) & FAP 301 (US 20)



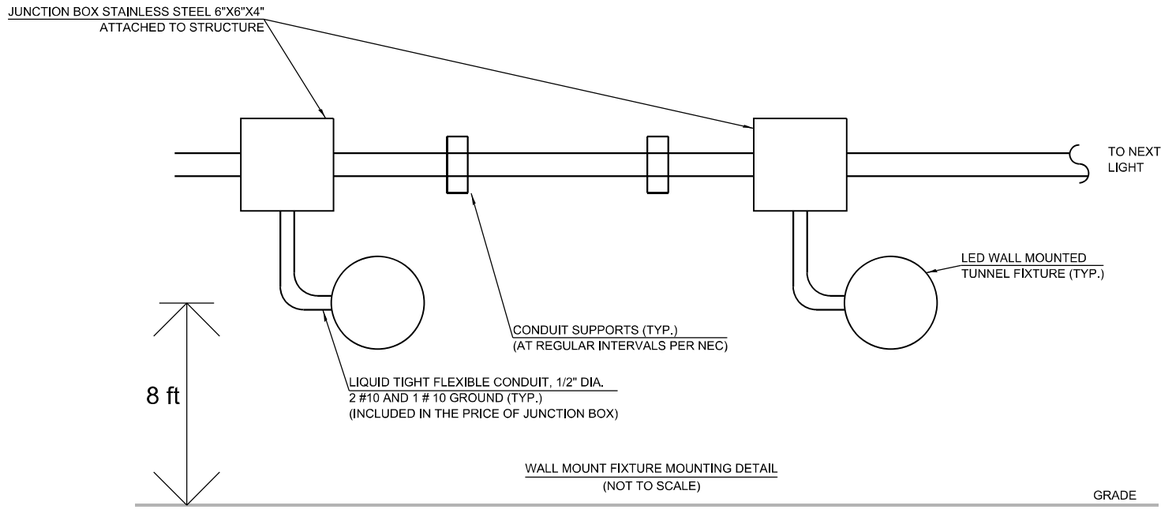

ELEVATION



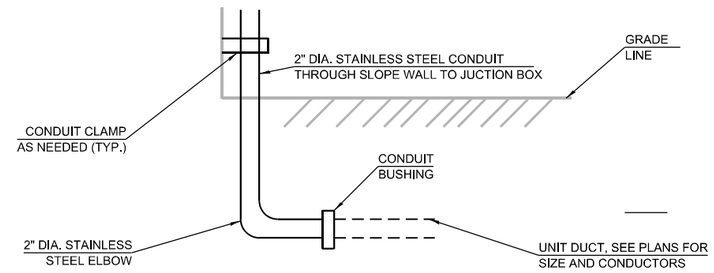

JUNCTION BOX MOUNTING DETAIL
SECTION "B" (NOT TO SCALE)




SECTION DETAIL-WALL MOUNT FIXTURE MOUNTING
(NOT TO SCALE)




WALL MOUNT FIXTURE MOUNTING DETAIL
(NOT TO SCALE)




CONDUIT TRANSITION DETAIL
(NOT TO SCALE)

MODEL: CVP Details-1 [Sheet]
FILE NAME: c:\pwworkdir\benesch.projects\projects\d0173716\D2864C24_MI-sht-CVP-Details-1.dgn

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Alfred Benesch & Company
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Chicago, Illinois 60601
312-565-0450 Job No. 10806.00

| | | | |
|---|---|---|---|
| USER NAME = lfranceschina | DESIGNED - | REVISED - | |
| | DRAWN - | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - G. THIESSE | REVISED - | |
| PLOT DATE = 8/12/2024 | DATE - 02/14/2025 | REVISED - | |

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

**CHERRY VALLEY PATH - LIGHTING**
**PROPOSED LIGHTING DETAILS**

SCALE: | SHEET 20 OF 21 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 505 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

(1) Photocell with integral surge arrester

(2) HAND-OFF-AUTO selector switch

(3) 100 amp, electrically held contactor

(4) 15 amp, 1-pole circuit breaker

(5) 20 amp, 2P circuit breaker(two spares required but not shown)

(6) Surge Arrester

(7) GFCI Duplex receptacle

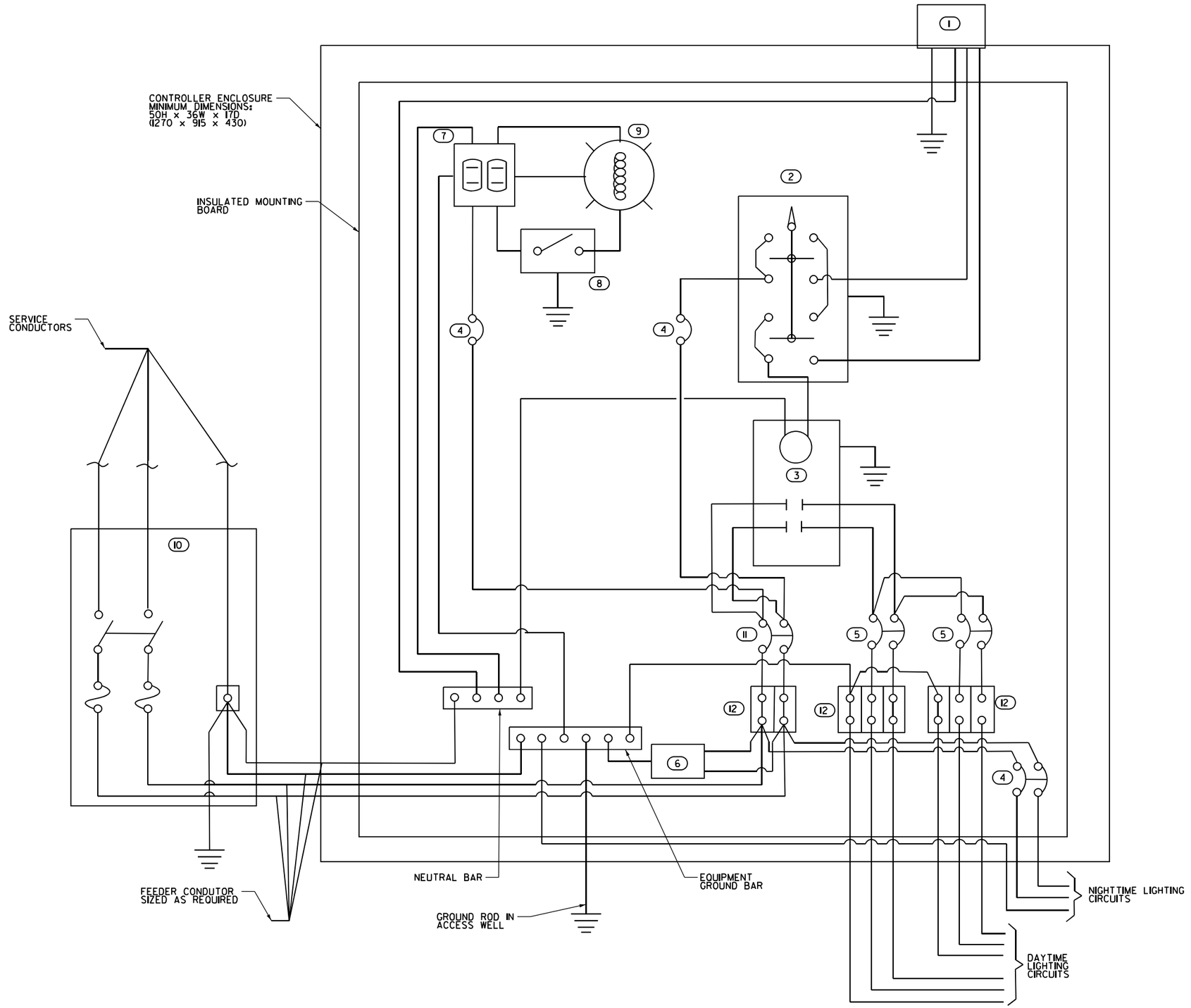
(8) Single-pole, single throw switch

(9) Incandescent luminaire, enclosed and gasketted with 100W lamp

(10) Service disconnect swicth-2 pole 3 wire, 100A, fused at 100 amp, solid neutral in Nema 4X enclosure having lockable external handle

(11) 100 amp, 2 pole circuit breaker

(12) Terminal block sized for conductors as shown on plans




NOTE:
1. PHOTOCELL AND CONTACTOR SHALL BE WIRED SO THAT CONTACTOR IS CLOSED DURING DAYTIME HOURS.

MODEL: CVP Details-2 [Sheet]
FILE NAME: c:\pwworkdir\benesch.projects\projects\d0173716\D2864C24_IML-sht-CVP-Details-2.dgn

benesch
Alfred Benesch & Company
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Chicago, Illinois 60601
312-565-4450 Job No. 10806.00

| | | | |
|---|---|---|---|
| USER NAME = lfranceschina | DESIGNED - | | REVISED - |
| | DRAWN - | | REVISED - |
| PLOT SCALE = $SCALE$ | CHECKED - | G. THIESSE | REVISED - |
| PLOT DATE = 8/12/2024 | DATE - | 02/14/2025 | REVISED - |

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

**CHERRY VALLEY PATH - LIGHTING**
**PROPOSED LIGHTING DETAILS**

SCALE: | SHEET 21 OF 21 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 506 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

## SCHEDULE OF INTELLIGENT TRANSPORTATION SYSTEM (ITS) QUANTITIES IDOT

| PAY ITEM NO. | DESCRIPTION | UNIT | TOTAL |
|---|---|---|---|
| 81028260 | UNDERGROUND CONDUIT, GALVANIZED STEEL, 6" DIA | FOOT | 1349 |
| 81028750 | UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 2" DIA | FOOT | 1470 |
| 81101205 | CONDUIT ATTACHED TO STRUCTURE, 6"DIA., PVC COATED GALVANIZED STEEL | FOOT | 400 |
| 81300948 | JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 24" X 24" X 10" | EACH | 4 |
| 81400100 | HANDHOLE | EACH | 2 |
| 81702130 | ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO.6 | FOOT | 1470 |
| 81702140 | ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO.4 | FOOT | 2940 |
| 89502300 | REMOVE ELECTRIC CABLE FROM CONDUIT | FOOT | 120 |
| 89502380 | REMOVE EXISTING HANDHOLE | EACH | 1 |
| X0323917 | CABINET, MODEL 334 | EACH | 1 |
| X0325485 | TRUSS MOUNTED LED DYNAMIC MESSAGE SIGN | EACH | 1 |
| X0327616 | MAINTAINING ITS DURING CONSTRUCTION | CAL MO | 36 |
| X1400282 | POLYETHYLENE DUCT, 1 1/4" DIA | FOOT | 53808 |
| X1400459 | DYNAMIC MESSAGE SIGN REMOVAL - IDOT | EACH | 1 |
| X6026627 | VAULTS TO BE REMOVED | EACH | 6 |
| X8301804 | REMOVAL OF TEMPORARY WOOD POLES AND FIBER OPTIC CABLE | LSUM | 1 |
| X8500102 | MAINTENANCE OF EXISTING FIBER OPTIC CABLE (FOC) NETWORK | MONTH | 32 |
| X8710013 | FIBER OPTIC CABLE IN CONDUIT, 12 FIBERS, SINGLE MODE | FOOT | 170 |
| X8710023 | FIBER OPTIC CABLE IN CONDUIT, 96 FIBERS, SINGLE MODE | FOOT | 45,195 |
| X8710306 | FIBER OPTIC CABLE SPLICE - MAINLINE | EACH | 9 |
| X8710314 | FIBER OPTIC SPLICE-LATERAL | EACH | 2 |
| X8710318 | FIBER OPTIC UTILITY MARKER | EACH | 14 |
| X8950510 | REMOVE FIBER OPTIC CABLE FROM CONDUIT | FOOT | 7,310 |
| Z0010614 | CLEANING EXISTING MANHOLE OR HANDHOLE | EACH | 3 |
| Z0033052 | COMMUNICATIONS VAULT | EACH | 14 |

## SCHEDULE OF INTELLIGENT TRAFFIC SYSTEM (ITS) QUANTITIES TOLLWAY

| PAY ITEM NO. | DESCRIPTION | UNIT | TOTAL |
|---|---|---|---|
| JS810826 | UNDERGROUND CONDUIT, GALVANIZED STEEL, 6" DIA. | FOOT | 180 |
| JS817213 | ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 6 | FOOT | 839 |
| JS817214 | ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 4 | FOOT | 1,678 |
| JT132040 | DYNAMIC MESSAGE SIGN - TYPE 1 | EACH | 1 |
| JT132050 | DYNAMIC MESSAGE SIGN -TYPE 1 (TRAINING) | L SUM | 1 |
| JT132060 | DYNAMIC MESSAGE SIGN - TYPE 1 (SPARE PARTS) | EACH | 1 |
| JT132112 | REMOVE DYNAMIC MESSAGE SIGN CONTROLLER FOUNDATION | EACH | 1 |
| JT132114 | REMOVE DYNAMIC MESSAGE SIGN - TYPE 1 | EACH | 1 |
| JT132621 | DMS ELECTRICAL WORK - TYPE 1 | EACH | 1 |
| JT132800 | REMOVE ITS POLE MOUNTED ENCLOSURE | EACH | 1 |
| JT132810 | ITS POLE MOUNTED ENCLOSURE (CCTV OR MVDS) | EACH | 1 |
| JT132814 | ITS DISCONNECT SWITCH ASSEMBLY | EACH | 2 |
| JT132820 | CCTV CAMERA, ITS ASSEMBLY | EACH | 1 |
| JT132830 | FIBER OPTIC COMMUNICATIONS, ITS ASSEMBLY | EACH | 2 |
| JT134002 | MAINTAIN INTELLIGENT TRANSPORTATION SYSTEMS | CAL MO | 36 |
| JT134037 | ITS ELEMENT SITE GROUNDING - POLE MOUNTED ASSEMBLY | EACH | 1 |
| JT135097 | REMOVE CCTV CAMERA, POLE MOUNTED | EACH | 1 |
| JT160099 | HANDHOLE FOR SINGLE MODE FIBER OPTIC CABLE, TORSION ASSIST, 48"X72"X36" | EACH | 1 |
| JT160217 | LOCATE POST FOR FIBER OPTIC CABLE | EACH | 2 |
| JT160226 | SINGLE MODE FIBER OPTIC CABLE REMOVAL, NO SALVAGE | FOOT | 267 |
| JT810873 | UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, SDR 11, 1 1/4" DIA. | FOOT | 515 |
| JT810876 | UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, SDR 11, 2" DIA. | FOOT | 839 |
| JT830051 | GROUND MOUNTED LIGHT POLE, GALVANIZED STEEL, 50 FT., WITHOUT MAST ARM | EACH | 1 |
| JT836018 | ITS ELEMENT POLE FOUNDATION STEEL HELIX (10 FT) | EACH | 1 |
| JT836028 | ITS CONCRETE SERVICE PAD, TYPE B | EACH | 1 |
| JT901056 | LOCATE TRACER WIRE | FOOT | 329 |

## LEGEND

- (E) EXISTING
- (P) PROPOSED
- (R) REMOVED
- (A) ABANDON IN PLACE
- FO PROPOSED UNDERGROUND FIBER OPTIC CABLE IN DUCT, TYPE AND SIZE AS NOTED
- FO EXISTING UNDERGROUND FIBER OPTIC DUCT
- FO EXISTING FIBER OPTIC CABLE, AERIAL, 3-96 FIBERS
- E PROPOSED UNDERGROUND ELECTRICAL CABLE IN CONDUIT, TYPE AND SIZE AS NOTED
- TEMPORARY WOOD POLE, 50 FT., CLASS 4
- PROPOSED COMMUNICATION VAULT
- EXISTING COMMUNICATION VAULT
- GALVANIZED RIGID STEEL CONDUIT PUSHED (P), TYPE AND SIZE AS NOTED
- PROPOSED JUNCTION BOX, STAINLESS STEEL, TYPE AND SIZE AS NOTED
- H PROPOSED ELECTRICAL HANDHOLE
- C PROPOSED CCTV CAMERA
- DMSC PROPOSED DMS CABINET
- DMSC DMS CABINET TO BE REMOVED
- DMS PROPOSED DMS SIGN
- DMS EXISTING DMS SIGN TO BE REMOVED
- CCTV CAMERA TO BE REMOVED
- PROPOSED DISCONNECT SWITCH
- EXISTING ELECTRICAL SERVICE

## GENERAL NOTES

1. THE CONTRACTOR SHALL TAKE RESPONSIBIILITY FOR THE MAINTENANCE OF THE FIBER OPTIC CABLE FOR THE DURATION OF THE PROJECT.
2. THE CONTRACTOR SHALL PROVIDE A 10 DAY NOTICE PRIOR TO ANY SERVICE INTERRUPTION FOR THE SPLICING OF NEW CABLE INTO THE SYSTEM.
3. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF HANDHOLES AND FIBER OPTIC CABLE PRIOR TO CONSTRUCTION OF THE JOB.
4. ALL SERVICE OUTAGES FOR SPLICING IN OF NEW CABLE SHALL BE LESS THAN 2 HOURS.
5. THERE EXISTS ENVIRONMENTALLY SENSITIVE AREAS ALONG THIS JOB. CARE MUST BE TAKEN NOT TO REMOVE PLANT LIFE FROM THESE AREAS.
6. THERE SHALL BE 200 FEET OF 96 SM FIBER OPTIC CABLE SLACK, PER CABLE, IN EACH COMMUNICATION VAULT. THERE SHALL BE 50 FEET OF FIBER OPTIC CABLE SLACK, PER CABLE, IN ALL JUNCTION BOXES.
7. THE CONTRACTOR SHALL EXERCISE CARE WITH THE INSTALLATION OF UNDERGROUND EQUIPMENT AS THERE ARE EXISTING PRIVATELY OWNED UTILITIES WITHIN THE PROJECT LIMITS. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO CONTACT ANY UTILITIES IN THE WORK ZONE AND REQUEST UTILITY LOCATES.
8. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL EXISTING STATE OWNED LIGHTING, TRAFFIC SIGNALS AND/OR FIBER OPTIC CABLE.
9. THE CONTRACTOR SHALL BE AWARE OF THE DOCUMENTATION REQUIREMENTS WHICH REQUIRE GPS DATA ACQUISITION.
10. ALL EXISTING FIBER OPTIC CABLE CALLED TO BE EITHER REMOVED OR ABANDONED SHALL REMAIN IN PLACE AND OPERATIONAL UNTIL PROPOSED UNDERGROUND FIBER OPTIC CABLE IS INSTALLED AND CUT OVER. TEMPORARY FIBER INSTALLATIONS SHALL ALSO REMAIN IN PLACE UNTIL UNDERGROUND FIBER OPTIC CABLES ARE INSTALLED AND FULLY OPERATIONAL.
11. ALL PROPOSED FIBER SHALL HAVE A MINIMUM BENDING RADIUS OF 24".
12. INCASE OF ANY ACCIDENTAL DISRUPTION IN SERVICE TO THE FIBER OPTIC CABLE DURING CONSTRUCTION, THE CONTRACTOR SHALL CONTACT THE 24 HOUR EMERGENCY CONTACT NUMBER AT 312-814-3648.

MODEL: FO GEN NOTES [Sheet]
FILE NAME: c:\pwworld\benesch projects\projects\d0173716\D2804C24_ML-sht-FiberGeneralNotes.dgn

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312-565-0450 Job No. 10800.00

| | | | |
|---|---|---|---|
| USER NAME = rscaria | DESIGNED - R.SCARIA | REVISED - | |
| | DRAWN - R.SCARIA | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - G.THIESSE | REVISED - | |
| PLOT DATE = 2/14/2025 | DATE - 02/14/2025 | REVISED - | |

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

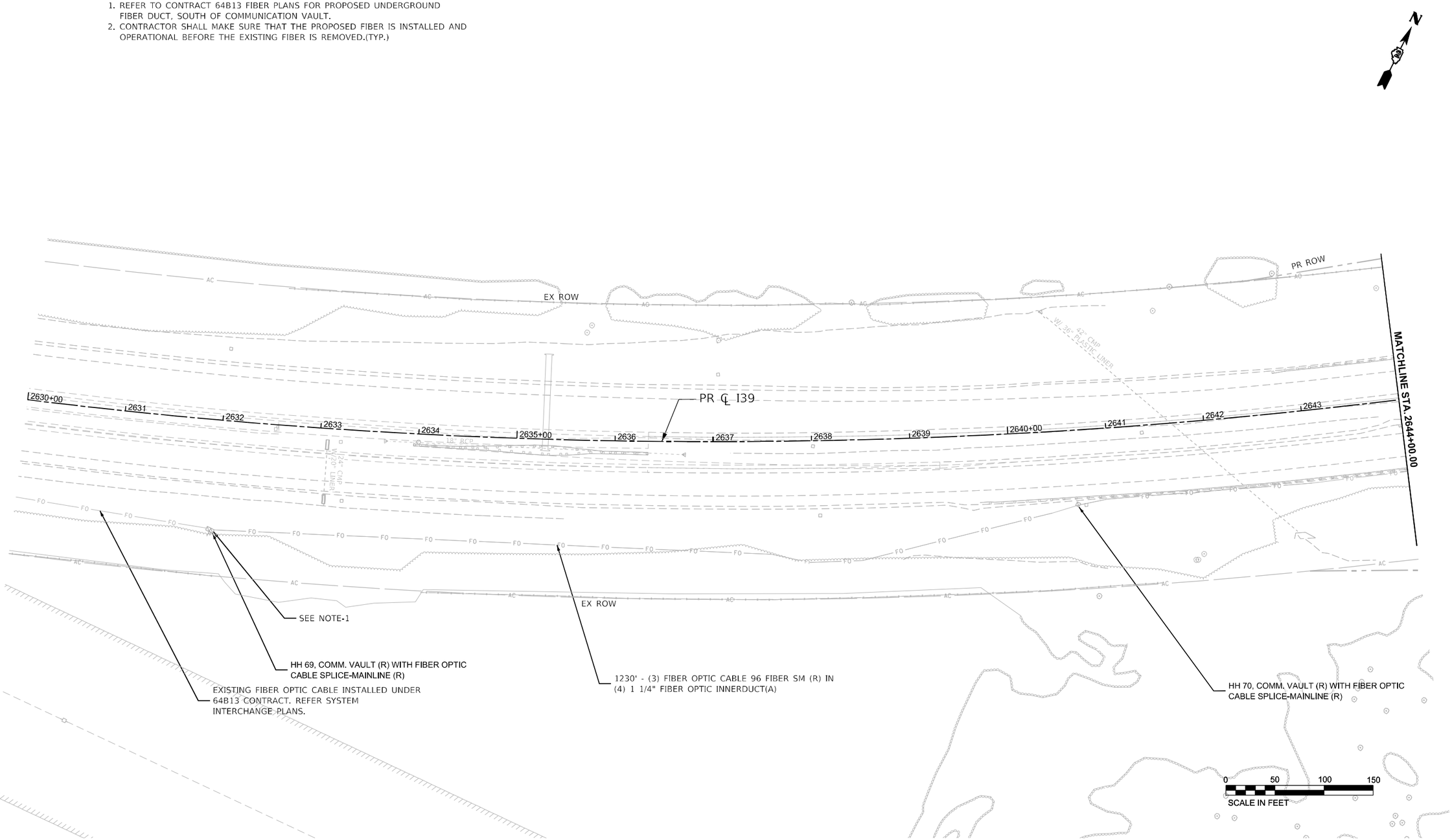
**FIBER OPTIC GENERAL NOTES**
**I-39**

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

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 507 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS FED. AID PROJECT | | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

NOTES:
1. REFER TO CONTRACT 64B13 FIBER PLANS FOR PROPOSED UNDERGROUND FIBER DUCT, SOUTH OF COMMUNICATION VAULT.
2. CONTRACTOR SHALL MAKE SURE THAT THE PROPOSED FIBER IS INSTALLED AND OPERATIONAL BEFORE THE EXISTING FIBER IS REMOVED.(TYP.)




MODEL: I39 Wide - LGT REM Plan 6 [Sheet]
FILE NAME: c:\pw\wordtn\benesch projects\projects\d0173716\D2664C24_ML-sht-Fiber-Rem-I39.dgn

benesch
Alfred Benesch & Company
35 W Wacker Drive, Suite 3200
Chicago, Illinois 60601
312.565.0450 Job No. 10800.00

| | | | | |
|---|---|---|---|---|
| USER NAME = lfranceschina | DESIGNED - R.SCARIA | REVISED - | | |
| | DRAWN - R.SCARIA | REVISED - | | |
| PLOT SCALE = $SCALE$ | CHECKED - G.THIESSE | REVISED - | | |
| PLOT DATE = 8/12/2024 | DATE - 02/14/2025 | REVISED - | | |

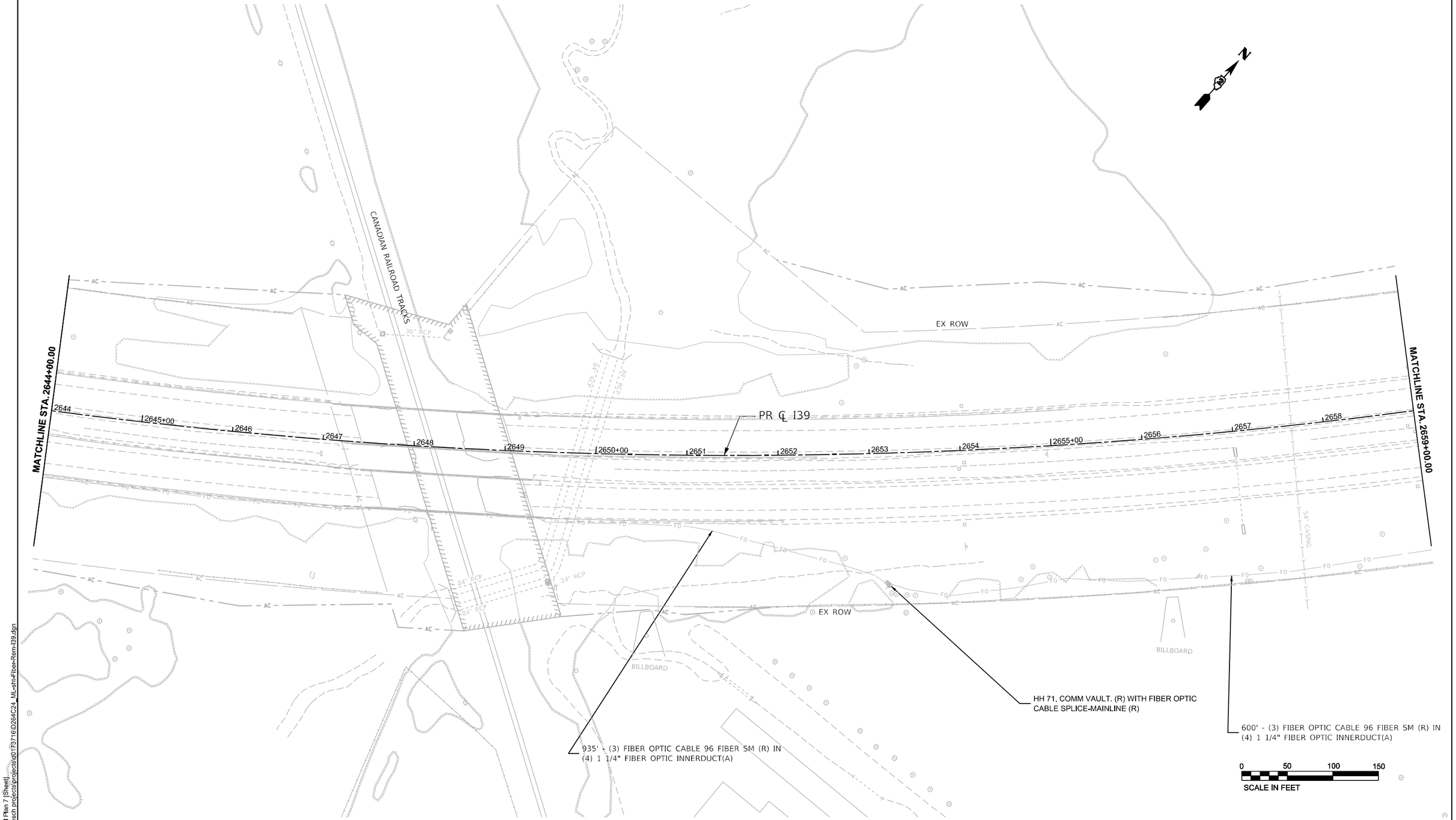
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**FIBER OPTIC REMOVALS**
**I-39**

SCALE: 1"=50' | SHEET 2 OF 11 SHEETS | STA. 2630+00.00 | TO STA. 2644+00.00

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1,5)R | WINNEBAGO | 1685 | 508 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

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benesch
Alfred Benesch & Company
35 W Wacker Drive, Suite 3200
Chicago, Illinois 60601
312-565-0450 Job No. 10800.00

| | | | | | |
|---|---|---|---|---|---|
| USER NAME | = agibson | DESIGNED | - R.SCARIA | REVISED | - |
| | | DRAWN | - R.SCARIA | REVISED | - |
| PLOT SCALE | = $SCALE$ | CHECKED | - G.THIESSE | REVISED | - |
| PLOT DATE | = 2/6/2025 | DATE | - 02/14/2025 | REVISED | - |

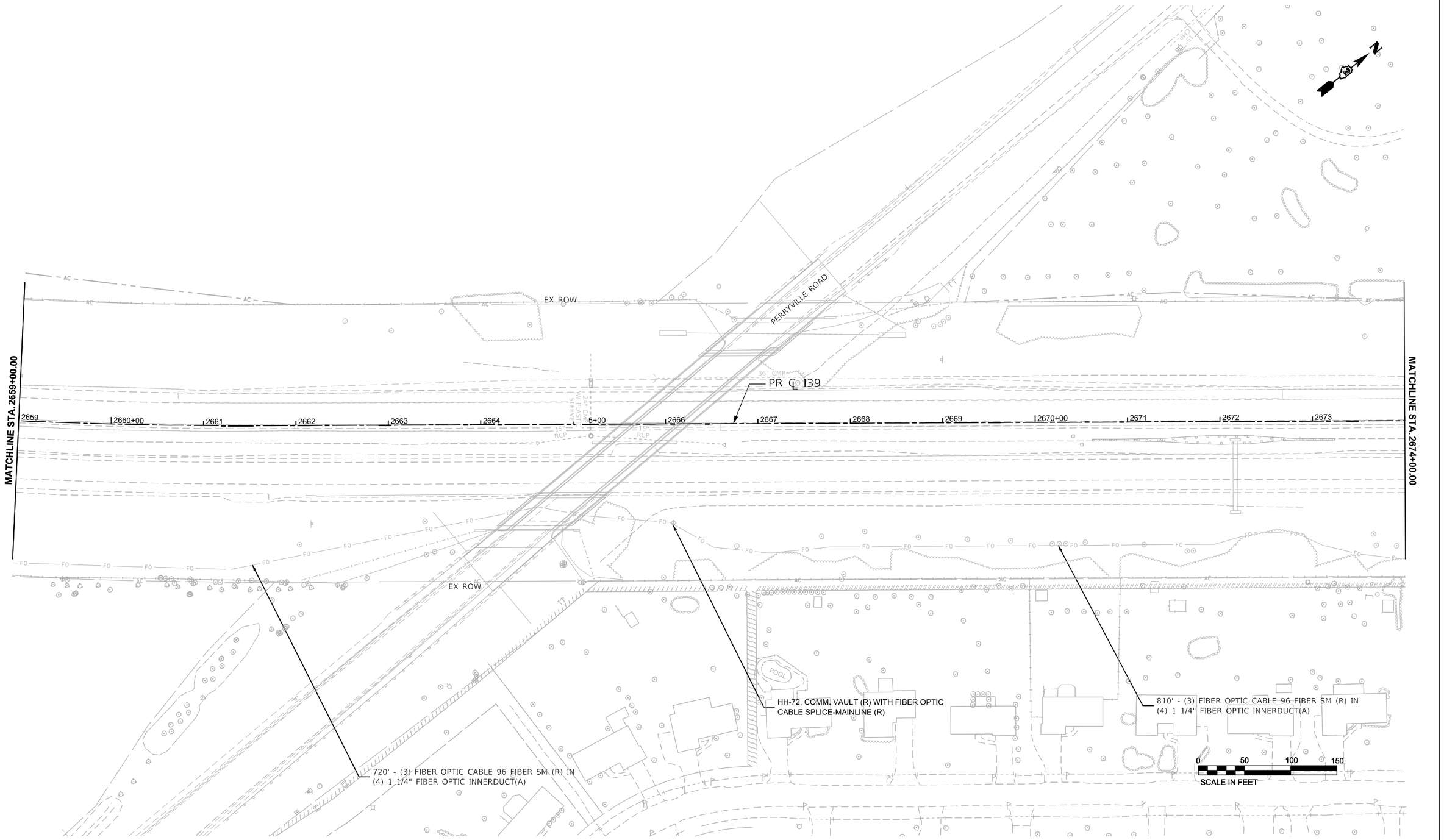
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**FIBER OPTIC REMOVALS**
**I-39**

SCALE: 1"=50' | SHEET 3 OF 11 SHEETS | STA. 2644+00.00 TO STA. 2659+00.00

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1,5)R | WINNEBAGO | 1685 | 509 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)




MODEL: I39 Wide - LGT REM Plan 8 [Sheet]
FILE NAME: c:\pwworkdir\benesch projects\projects\d0173716\D2664C2a_ML-sht-Fiber-Rem-I39.dgn

benesch
Alfred Benesch & Company
35 W Wacker Drive, Suite 3200
Chicago, Illinois 60601
312-565-0450 Job No. 10800.00

| | | | | | |
|---|---|---|---|---|---|
| USER NAME = agibson | DESIGNED - R.SCARIA | REVISED - |
| | DRAWN - R.SCARIA | REVISED - |
| PLOT SCALE = $SCALE$ | CHECKED - G.THIESSE | REVISED - |
| PLOT DATE = 2/6/2025 | DATE - 02/14/2025 | REVISED - |

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

**FIBER OPTIC REMOVALS**
**I-39**

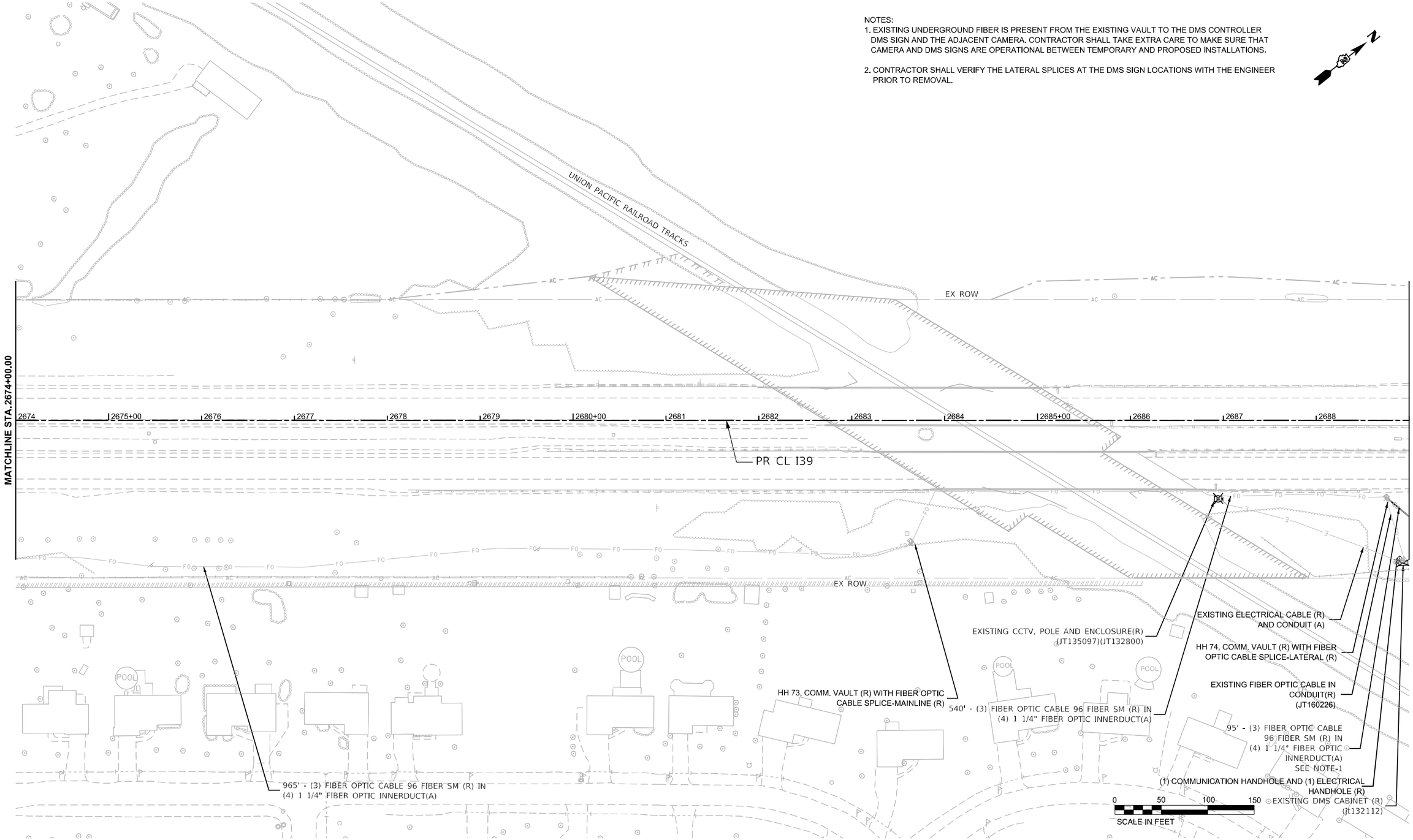
SCALE: 1"=50' | SHEET 4 OF 11 SHEETS | STA. 2659+00.00 | TO STA. 2674+00.00

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1,5)R | WINNEBAGO | 1685 | 510 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

NOTES:
1. EXISTING UNDERGROUND FIBER IS PRESENT FROM THE EXISTING VAULT TO THE DMS CONTROLLER DMS SIGN AND THE ADJACENT CAMERA. CONTRACTOR SHALL TAKE EXTRA CARE TO MAKE SURE THAT CAMERA AND DMS SIGNS ARE OPERATIONAL BETWEEN TEMPORARY AND PROPOSED INSTALLATIONS.

2. CONTRACTOR SHALL VERIFY THE LATERAL SPLICES AT THE DMS SIGN LOCATIONS WITH THE ENGINEER PRIOR TO REMOVAL.

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FILE NAME: c:\pwworkf\benesch projects\projects\d0173716\D264C24_ML-sht-Fiber-Rem-I39.dgn

benesch
Alfred Benesch & Company
35 W Wacker Drive, Suite 3300
Chicago, Illinois 60601
312-565-0450
Job No. 10800.00

| | | | | | |
|---|---|---|---|---|---|
| USER NAME | = agibson | DESIGNED | - R.SCARIA | REVISED | - |
| | | DRAWN | - R.SCARIA | REVISED | - |
| PLOT SCALE | = $SCALE$ | CHECKED | - G.THIESSE | REVISED | - |
| PLOT DATE | = 2/6/2025 | DATE | - 02/14/2025 | REVISED | - |

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

**FIBER OPTIC REMOVALS**
**I-39**

SCALE: 1"=50' | SHEET 5 OF 11 SHEETS | STA. 2674+00.00 | TO STA. 2689+00.00

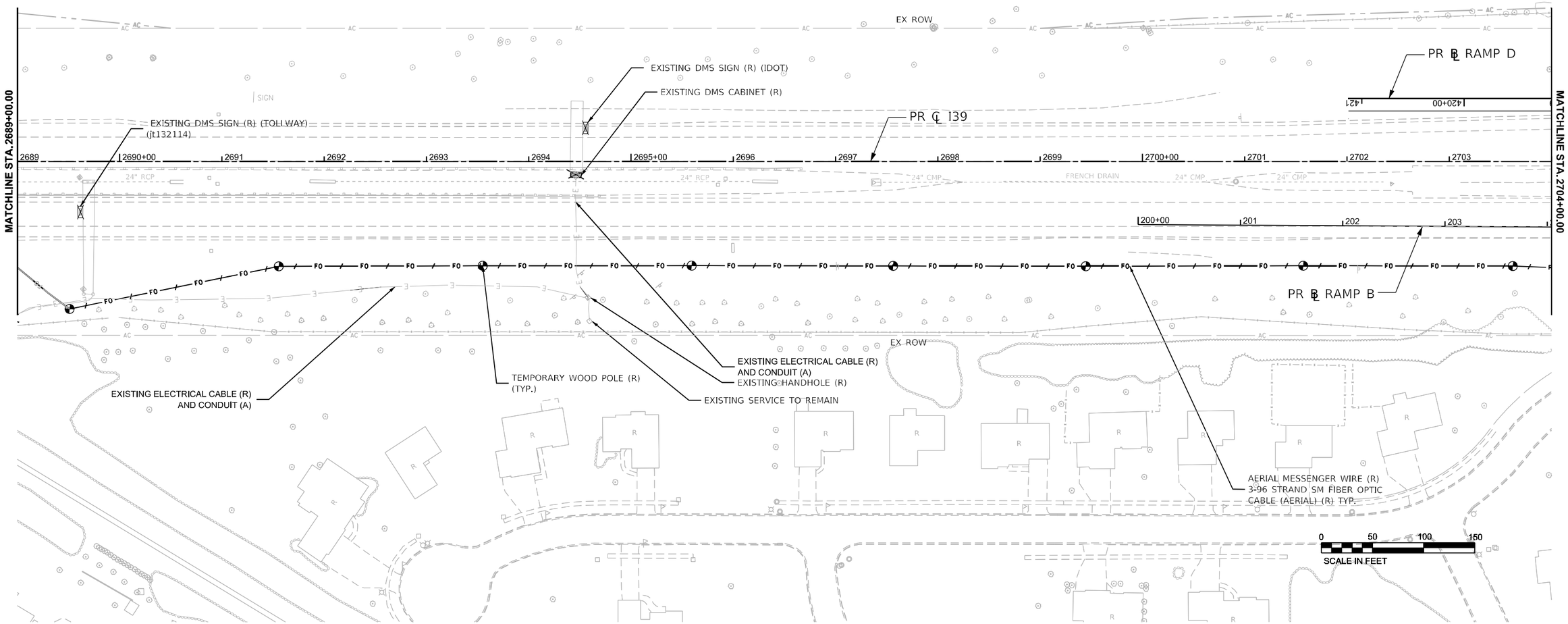
| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 511 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

NOTES:
1. EXISTING UNDERGROUND FIBER IS PRESENT FROM THE EXISTING VAULT TO THE DMS CONTROLLER DMS SIGN AND THE ADJACENT CAMERA. CONTRACTOR SHALL TAKE EXTRA CARE TO MAKE SURE THAT CAMERA AND DMS SIGNS ARE OPERATIONAL BETWEEN TEMPORARY AND PROPOSED INSTALLATIONS.

2. WHILE THE DMS SIGN IS REMOVED, THE DISCONNECT SWITCH ASSOCIATED WITH THE DMS SIGN SHALL ALSO BE REMOVED.

3. CONTRACTOR SHALL VERIFY THE LATERAL SPLICES AT THE DMS SIGN LOCATIONS WITH THE ENGINEER PRIOR TO REMOVAL.




MODEL: I39 Wide - LGT REM Plan 10 [Sheet]
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benesch
Alfred Benesch & Company
35 W Wacker Drive, Suite 3200
Chicago, Illinois 60601
312-565-0450 Job No. 15800.00

| | | | |
|---|---|---|---|
| USER NAME = agibson | DESIGNED - R.SCARIA | REVISED - | |
| | DRAWN - R.SCARIA | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - G.THIESSE | REVISED - | |
| PLOT DATE = 2/6/2025 | DATE - 02/14/2025 | REVISED - | |

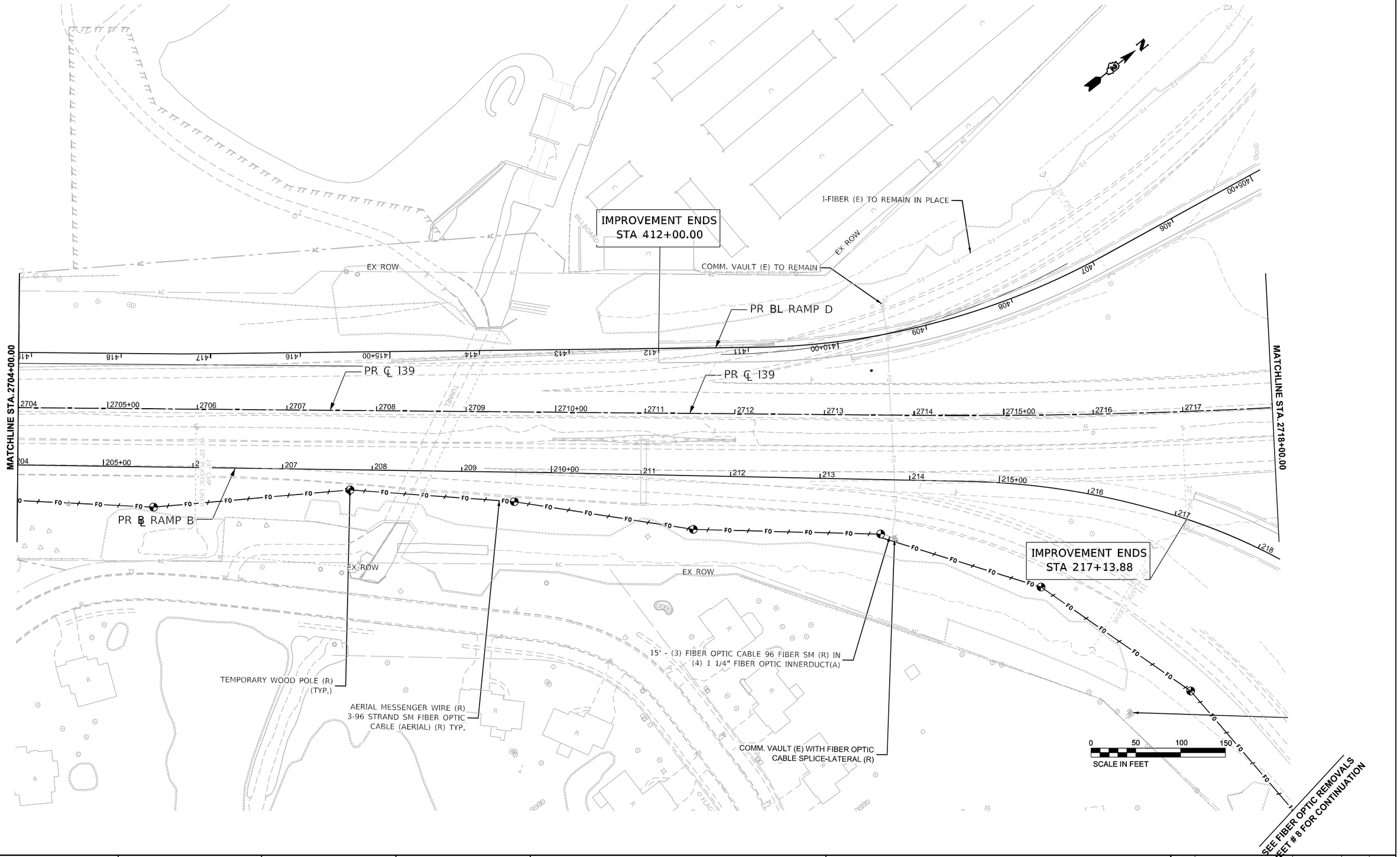
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**FIBER OPTIC REMOVALS**
**I-39**

SCALE: 1"=50' | SHEET 6 OF 11 SHEETS | STA. 2689+00.00 TO STA. 2704+00.00

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1,5)R | WINNEBAGO | 1685 | 512 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

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benesch
Alfred Benesch & Company
35 W Wacker Drive, Suite 3300
Chicago, Illinois 60601
312-565-0450 Job No. 10800.00

| | | | | | |
|---|---|---|---|---|---|
| USER NAME = agibson | | DESIGNED - R.SCARIA | | REVISED - | |
| | | DRAWN - R.SCARIA | | REVISED - | |
| PLOT SCALE = $SCALE$ | | CHECKED - G.THIESSE | | REVISED - | |
| PLOT DATE = 2/6/2025 | | DATE - 02/14/2025 | | REVISED - | |

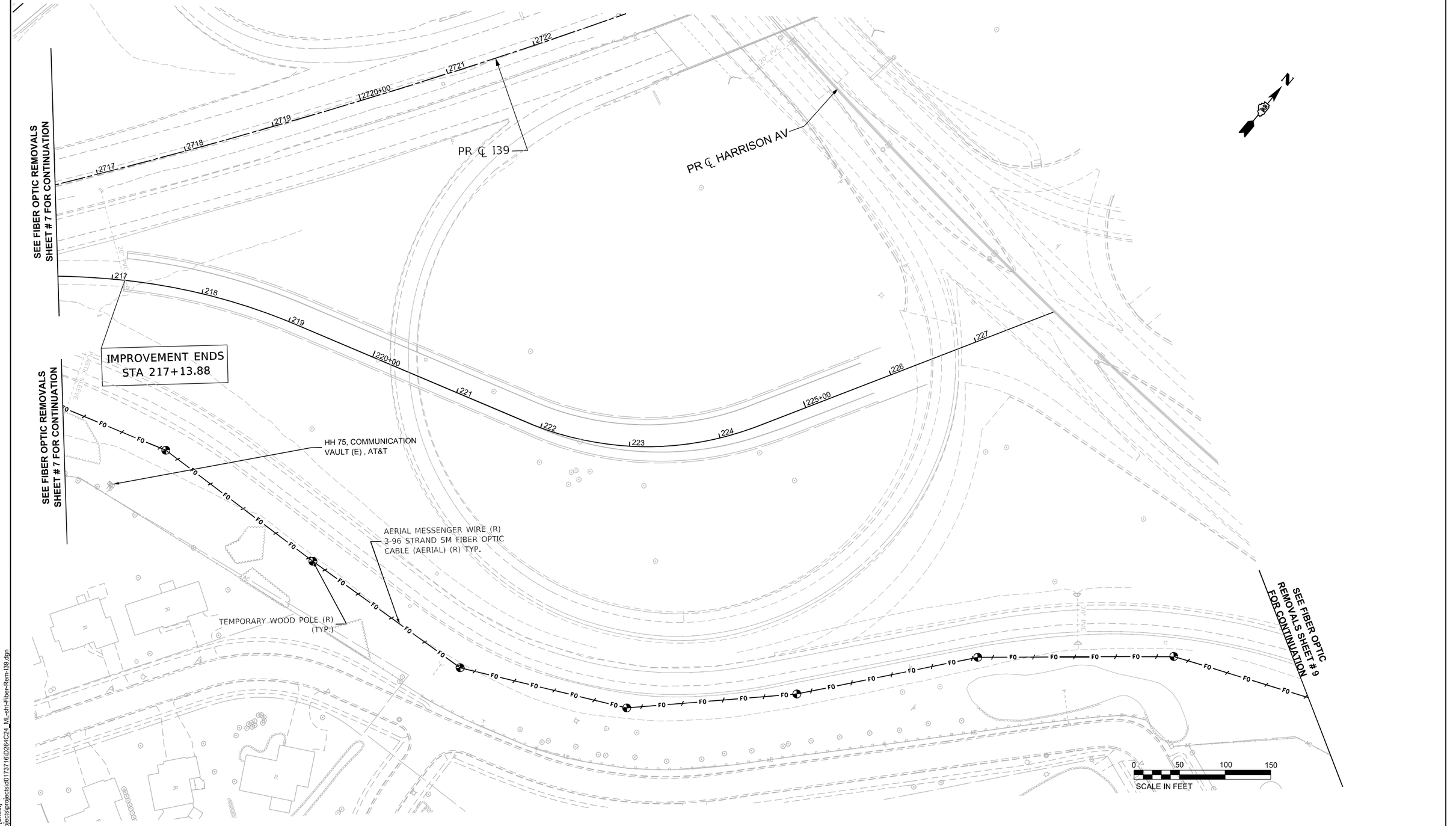
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**FIBER OPTIC REMOVALS**
**I-39**

SCALE: 1"=50' | SHEET 7 OF 11 SHEETS | STA. 2704+00.00 | TO STA. 2718+00.00

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1,5)R | WINNEBAGO | 1685 | 513 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS FED. AID PROJECT | | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

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benesch
Alfred Benesch & Company
35 W Wacker Drive, Suite 3300
Chicago, Illinois 60601
312-565-0450 Job No. 10800.00

| | | | |
|---|---|---|---|
| USER NAME = agibson | DESIGNED - R.SCARIA | REVISED - | |
| | DRAWN - R.SCARIA | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - G.THIESSE | REVISED - | |
| PLOT DATE = 2/6/2025 | DATE - 02/14/2025 | REVISED - | |

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

**FIBER OPTIC REMOVALS**
**I-39**

SCALE: 1"=50' | SHEET 8 OF 11 SHEETS | STA. 0+00.00 | TO STA. 0+00.00

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1,5)R | WINNEBAGO | 1685 | 514 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

SEE FIBER OPTIC REMOVALS
SHEET # 10 FOR CONTINUATION

HARRISON AVE. WB

HARRISON AVE. EB

HH 77, COMMUNICATION VAULT

TEMPORARY WOOD POLE (R)
(TYP.)

HH 76, COMMUNICATION VAULT

AERIAL MESSENGER WIRE (R)
3-96 STRAND SM FIBER OPTIC
CABLE (AERIAL) (R) TYP.

SEE FIBER OPTIC REMOVALS
SHEET # 8 FOR CONTINUATION

WATER TOWER

BB COURT

SIGN

FLAGPOLE

POOL

N

0 50 100 150
SCALE IN FEET

MODEL: Harrison Wide - HAR FO Plan 4 [Sheet]
FILE NAME: c:\pwworkdir\benesch projects\projects\d0172716\D2642C24_ML-sht-LGT PL-HAR.dgn

benesch
Alfred Benesch & Company
35 W Wacker Drive, Suite 3200
Chicago, Illinois 60601
312.565.0450 Job No. 10800.00

| | | | |
|---|---|---|---|
| USER NAME = agibson | DESIGNED - R.SCARIA | REVISED - | |
| | DRAWN - R.SCARIA | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - G.THIESSE | REVISED - | |
| PLOT DATE = 2/6/2025 | DATE - 02/14/2025 | REVISED - | |

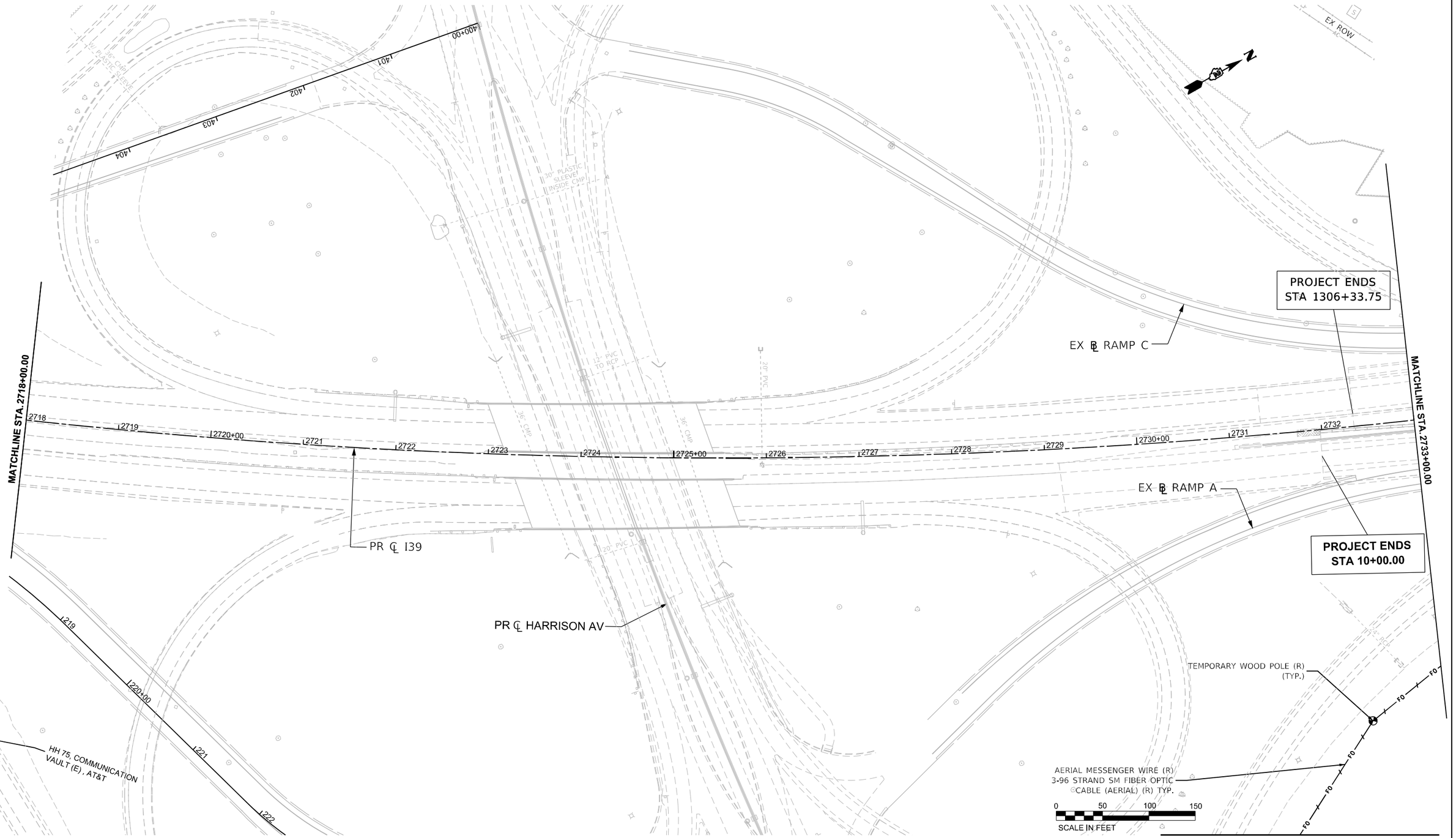
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**FIBER OPTIC REMOVALS**
**HARRISON AVE**

SCALE: 1"=50' | SHEET 9 OF 11 SHEETS | STA. 0+00.00 | TO STA. 0+00.00

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1,5)R | WINNEBAGO | 1685 | 515 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

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benesch
Alfred Benesch & Company
35 W Wacker Drive, Suite 3200
Chicago, Illinois 60601
312-565-0450 Job No. 10800.00

| | | | |
|---|---|---|---|
| USER NAME = agibson | DESIGNED - R.SCARIA | REVISED - | |
| | DRAWN - R.SCARIA | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - G.THIESSE | REVISED - | |
| PLOT DATE = 2/6/2025 | DATE - 02/14/2025 | REVISED - | |

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

**FIBER OPTIC REMOVALS**
**I-39**

SCALE: 1"=50' | SHEET 10 OF 11 SHEETS | STA. 2718+00.00 | TO STA. 2733+00.00

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 516 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

MATCHLINE STA. 2733+00.00

SEE FIBER OPTIC REMOVALS SHEET # 10
FOR CONTINUATION

EX ℄ RAMP C

EX ROW

2733 | 2734 | 2735+00 | 2736 | 2737 | 2738 | 2739 | 2740+00 | 2741 | 2742 | 2743 | 2744 | 2745+00 | 2746 | 2747

PR ℄ I39

PR ℄ I39

EX ℄ RAMP A

15" RCP

24" RCP

FO

200' - (3) FIBER OPTIC CABLE 96 FIBER SM (R) IN
(4) 1 1/4" FIBER OPTIC INNERDUCT(A)

HH 78, COMM. VAULT (E) WITH FIBER OPTIC
CABLE SPLICE-LATERAL (R)

TEMPORARY WOOD POLE (R)
(TYP.)

AERIAL MESSENGER WIRE (R)
3-96 STRAND SM FIBER OPTIC
CABLE (AERIAL) (R) TYP.

AC

0 50 100 150
SCALE IN FEET

MODEL: I39 Wide - LGT REM Plan 13 [Sheet]
FILE NAME: c:\pwworlr\benesch projects\projects\d0173716\D26\4C24_ML-sht-Fiber-Rem-I39.dgn

benesch
Alfred Benesch & Company
35 W Wacker Drive, Suite 3300
Chicago, Illinois 60601
312-565-0450 Job No. 10800.00

| | | | | | |
|---|---|---|---|---|---|
| USER NAME = agibson | | DESIGNED - R.SCARIA | | REVISED - | |
| | | DRAWN - R.SCARIA | | REVISED - | |
| PLOT SCALE = $SCALE$ | | CHECKED - G.THIESSE | | REVISED - | |
| PLOT DATE = 2/6/2025 | | DATE - 02/14/2025 | | REVISED - | |

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

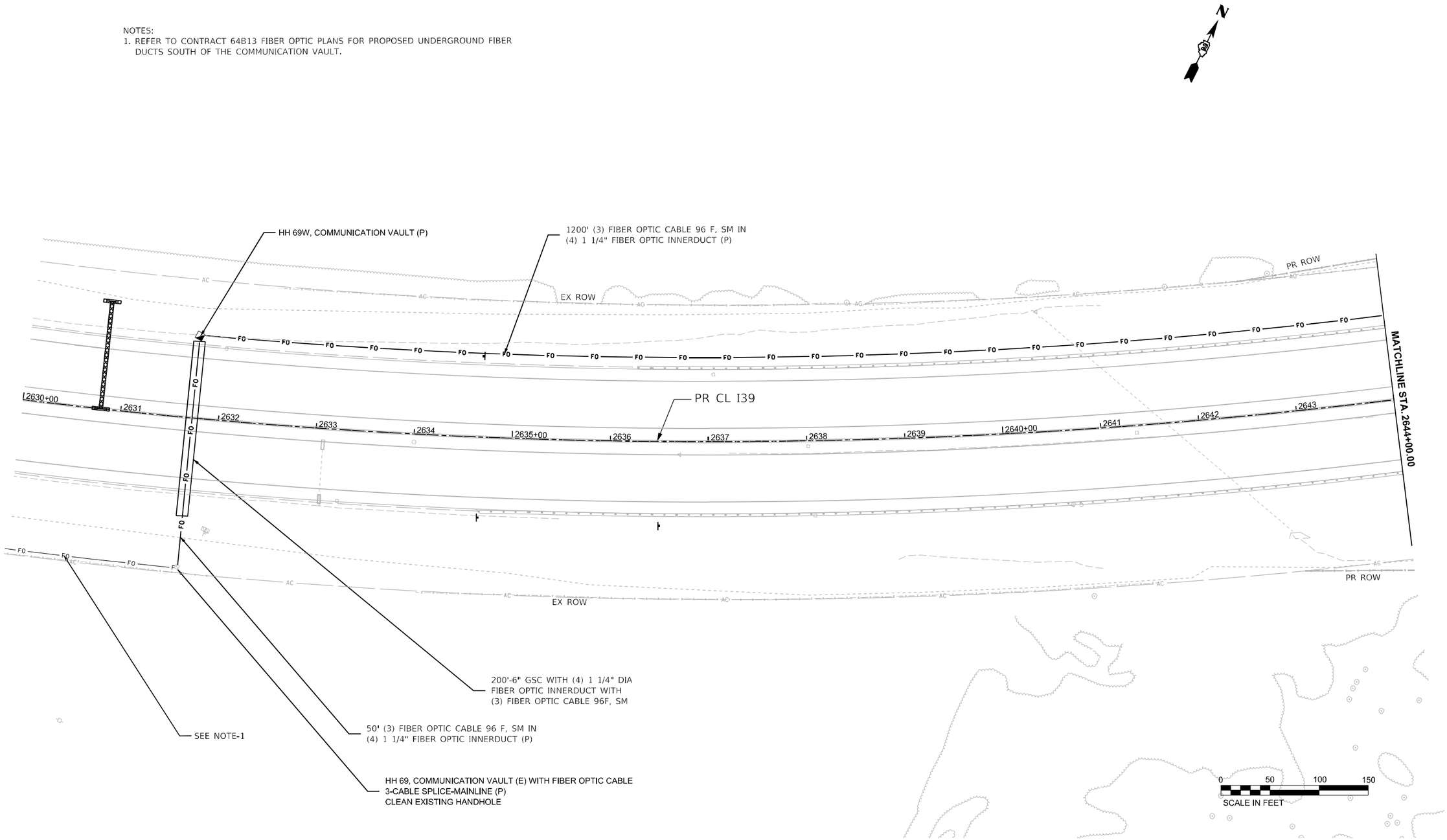
**FIBER OPTIC REMOVALS**
**I-39**

SCALE: 1"=50' | SHEET 11 OF 11 SHEETS | STA. 2733+00.00 | TO STA. 2748+00.00

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 517 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

NOTES:
1. REFER TO CONTRACT 64B13 FIBER OPTIC PLANS FOR PROPOSED UNDERGROUND FIBER DUCTS SOUTH OF THE COMMUNICATION VAULT.

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benesch
Alfred Benesch & Company
35 W Wacker Drive, Suite 3200
Chicago, Illinois 60601
312-565-0450 Job No. 10800.00

| | | | |
|---|---|---|---|
| USER NAME = gthiesse | DESIGNED - R.SCARIA | REVISED - | |
| | DRAWN - R.SCARIA | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - G.THIESSE | REVISED - | |
| PLOT DATE = 9/3/2024 | DATE - 02/14/2025 | REVISED - | |

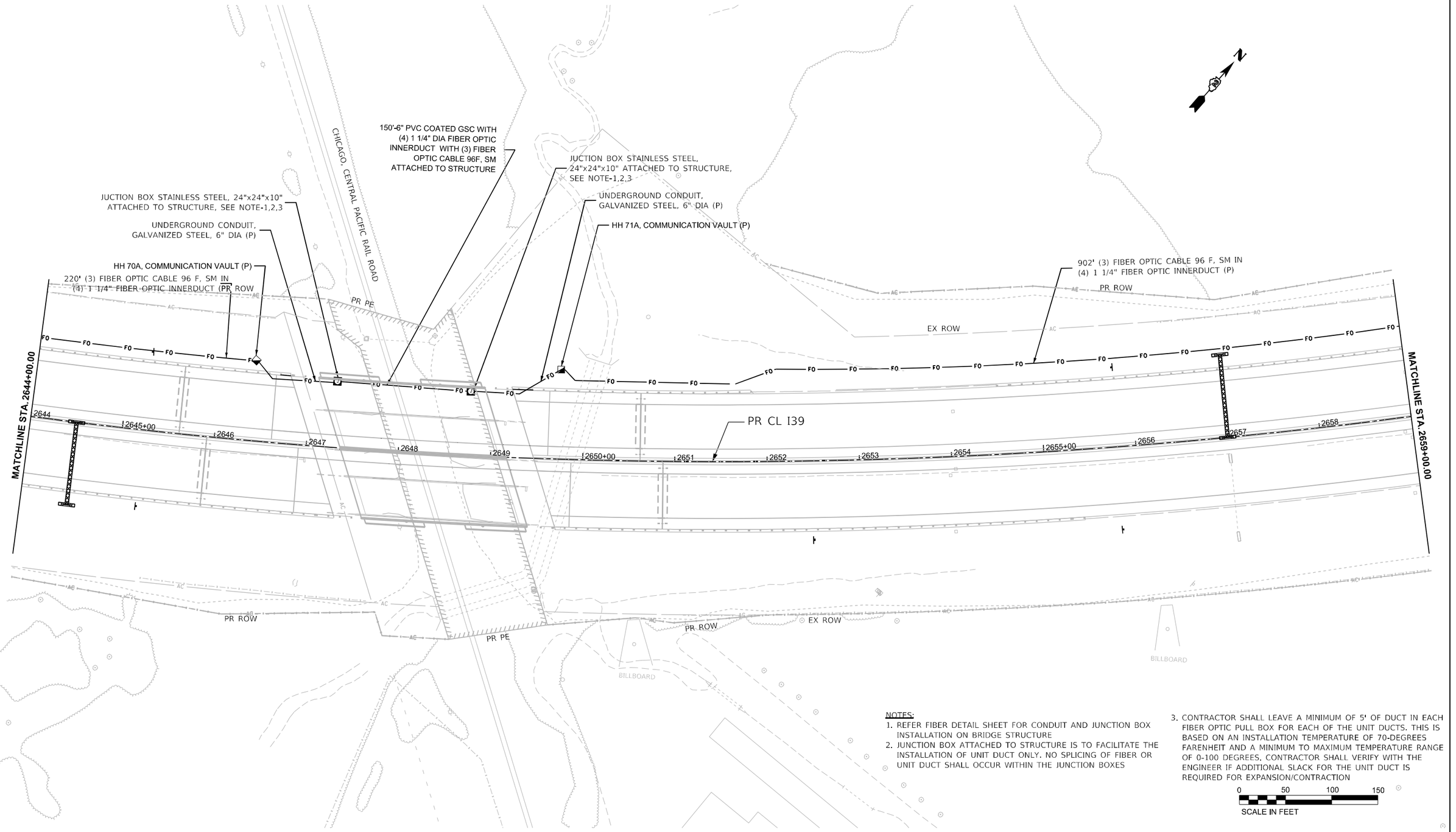
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**PROPOSED FIBER OPTIC PLANS**
**I-39**

SCALE: 1"=50' | SHEET 1 OF 26 SHEETS | STA. 2630+00.00 | TO STA. 2644+00.00

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1,5)R | WINNEBAGO | 1685 | 518 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)




NOTES:

1. REFER FIBER DETAIL SHEET FOR CONDUIT AND JUNCTION BOX INSTALLATION ON BRIDGE STRUCTURE
2. JUNCTION BOX ATTACHED TO STRUCTURE IS TO FACILITATE THE INSTALLATION OF UNIT DUCT ONLY. NO SPLICING OF FIBER OR UNIT DUCT SHALL OCCUR WITHIN THE JUNCTION BOXES
3. CONTRACTOR SHALL LEAVE A MINIMUM OF 5' OF DUCT IN EACH FIBER OPTIC PULL BOX FOR EACH OF THE UNIT DUCTS. THIS IS BASED ON AN INSTALLATION TEMPERATURE OF 70-DEGREES FARENHEIT AND A MINIMUM TO MAXIMUM TEMPERATURE RANGE OF 0-100 DEGREES. CONTRACTOR SHALL VERIFY WITH THE ENGINEER IF ADDITIONAL SLACK FOR THE UNIT DUCT IS REQUIRED FOR EXPANSION/CONTRACTION

0 50 100 150
SCALE IN FEET

MODEL: I39 Wide - FO Plan 7 [Sheet]
FILE NAME: c:\pwworkl\benesch projects\projects\d0173716\D2642C24_ML-sht-Fiber-Proposed-I39.dgn

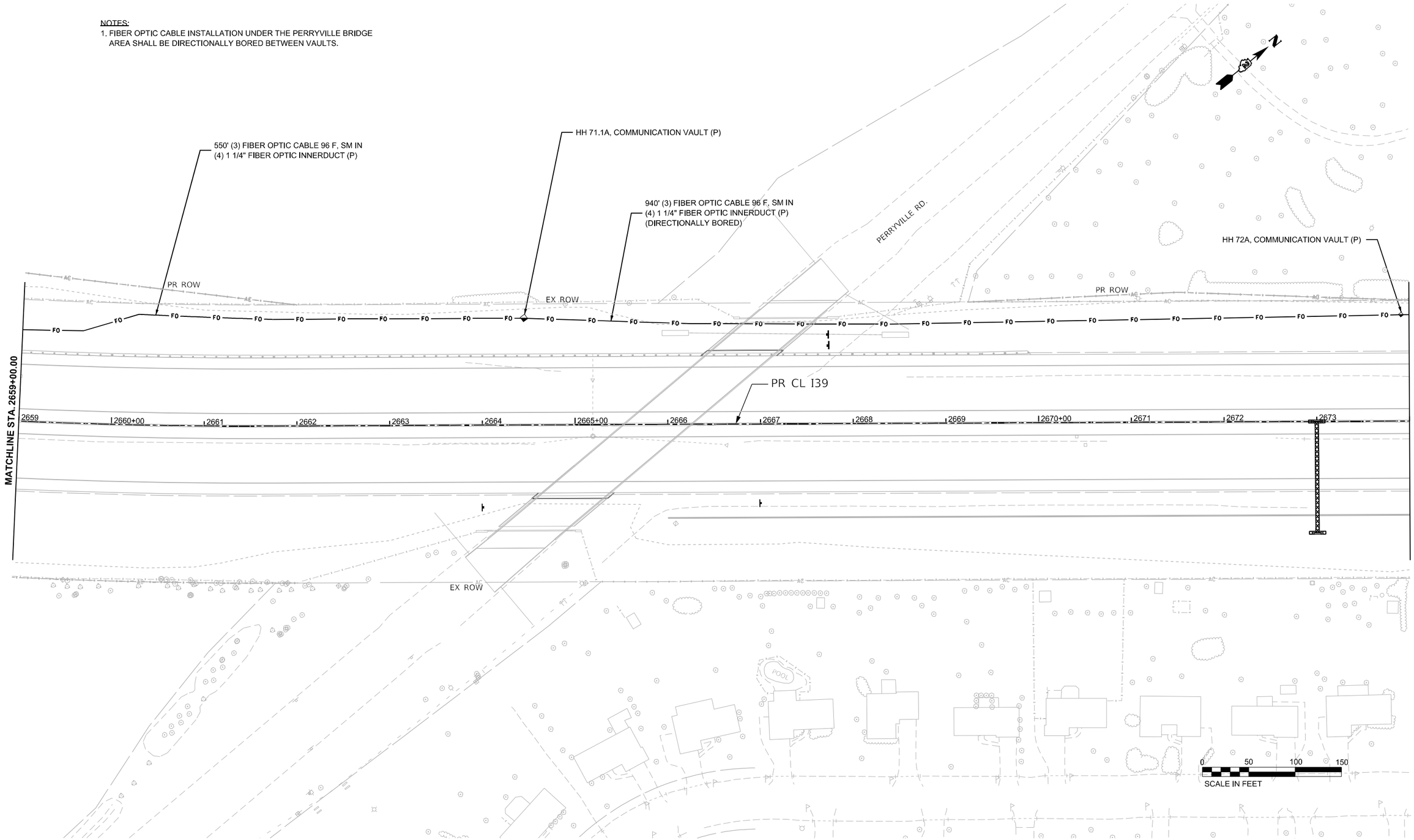
benesch
Alfred Benesch & Company
35 W Wacker Drive, Suite 3200
Chicago, Illinois 60601
312-565-0450 Job No. 10800.00

| | | | | | |
|---|---|---|---|---|---|
| USER NAME = agibson | DESIGNED - R.SCARIA | REVISED - | **STATE OF ILLINOIS** | **PROPOSED FIBER OPTIC PLANS** | |
| | DRAWN - R.SCARIA | REVISED - | **DEPARTMENT OF TRANSPORTATION** | **I-39** | |
| PLOT SCALE = $SCALE$ | CHECKED - G.THIESSE | REVISED - | | | |
| PLOT DATE = 2/6/2025 | DATE - 02/27/24 | REVISED - | | SCALE: 1"=50' SHEET 2 OF 26 SHEETS STA. 2644+00.00 TO STA. 2659+00.00 | |

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1,5)R | WINNEBAGO | 1685 | 519 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

NOTES:
1. FIBER OPTIC CABLE INSTALLATION UNDER THE PERRYVILLE BRIDGE AREA SHALL BE DIRECTIONALLY BORED BETWEEN VAULTS.

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FILE NAME: c:\pw\wordir\benesch projects\projects\d0173716\D2642C24_ML-sht-Fiber-Proposed-I39.dgn

benesch
Alfred Benesch & Company
35 W Wacker Drive, Suite 3200
Chicago, Illinois 60601
312-565-0450 Job No. 10800.00

| | | | |
|---|---|---|---|
| USER NAME = agibson | DESIGNED - R.SCARIA | REVISED - | |
| | DRAWN - R.SCARIA | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - G.THIESSE | REVISED - | |
| PLOT DATE = 2/6/2025 | DATE - 02/14/2025 | REVISED - | |

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

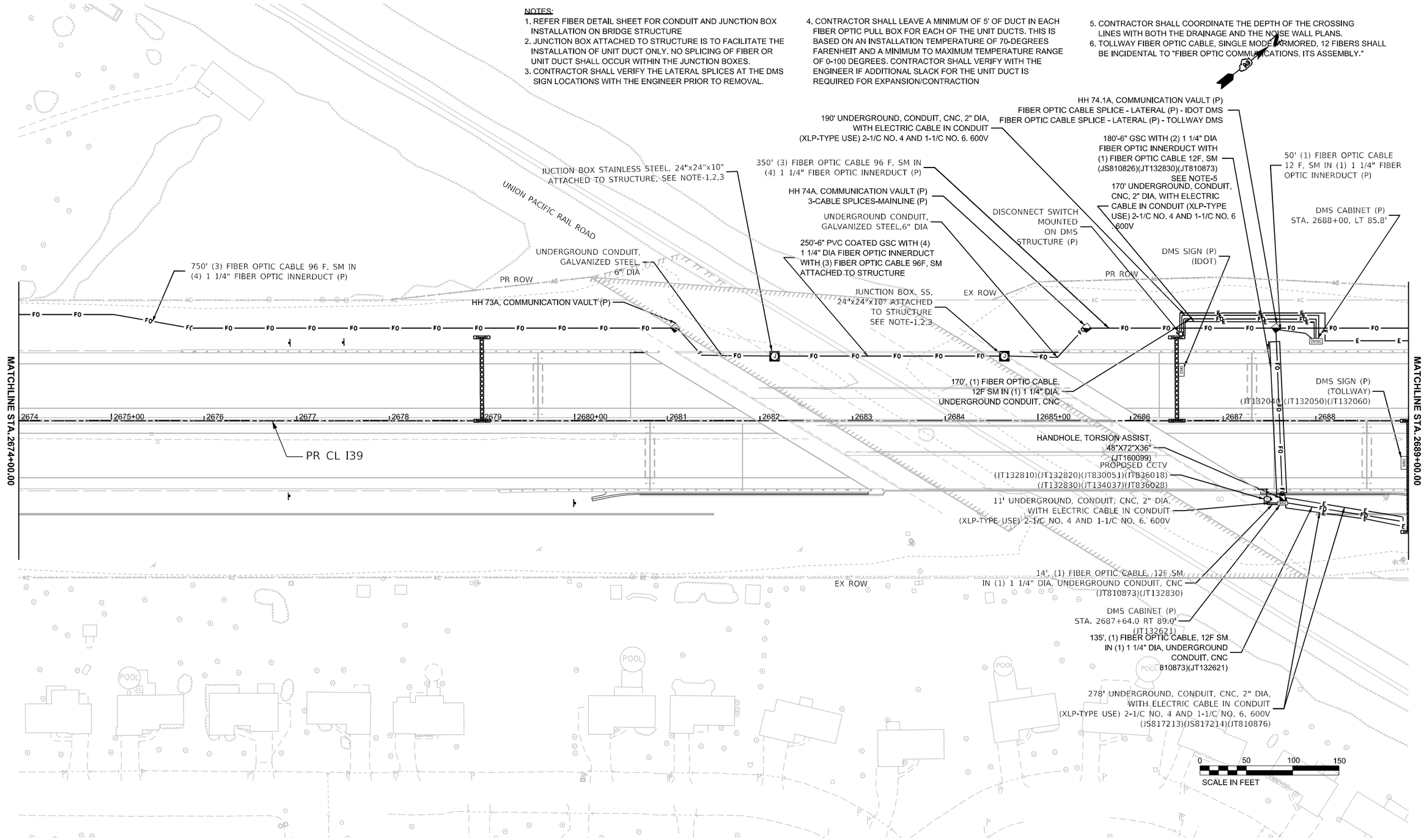
**PROPOSED FIBER OPTIC PLANS**
**I-39**

SCALE: 1"=50' | SHEET 3 OF 26 SHEETS | STA. 2659+00.00 | TO STA. 2674+00.00

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1,5)R | WINNEBAGO | 1685 | 520 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

NOTES:
1. REFER FIBER DETAIL SHEET FOR CONDUIT AND JUNCTION BOX INSTALLATION ON BRIDGE STRUCTURE
2. JUNCTION BOX ATTACHED TO STRUCTURE IS TO FACILITATE THE INSTALLATION OF UNIT DUCT ONLY. NO SPLICING OF FIBER OR UNIT DUCT SHALL OCCUR WITHIN THE JUNCTION BOXES.
3. CONTRACTOR SHALL VERIFY THE LATERAL SPLICES AT THE DMS SIGN LOCATIONS WITH THE ENGINEER PRIOR TO REMOVAL.
4. CONTRACTOR SHALL LEAVE A MINIMUM OF 5' OF DUCT IN EACH FIBER OPTIC PULL BOX FOR EACH OF THE UNIT DUCTS. THIS IS BASED ON AN INSTALLATION TEMPERATURE OF 70-DEGREES FARENHEIT AND A MINIMUM TO MAXIMUM TEMPERATURE RANGE OF 0-100 DEGREES. CONTRACTOR SHALL VERIFY WITH THE ENGINEER IF ADDITIONAL SLACK FOR THE UNIT DUCT IS REQUIRED FOR EXPANSION/CONTRACTION
5. CONTRACTOR SHALL COORDINATE THE DEPTH OF THE CROSSING LINES WITH BOTH THE DRAINAGE AND THE NOISE WALL PLANS.
6. TOLLWAY FIBER OPTIC CABLE, SINGLE MODE ARMORED, 12 FIBERS SHALL BE INCIDENTAL TO "FIBER OPTIC COMMUNICATIONS, ITS ASSEMBLY."




MODEL: I39 Wide - FO Plan 9 [Sheet]
FILE NAME: c:\pwworkl\benesch projects\projects\d0173716\D264C24_ML-shl-Fiber-Proposed-I39.dgn

benesch
Alfred Benesch & Company
35 W Wacker Drive, Suite 3300
Chicago, Illinois 60601
312-565-0450 Job No. 10800.00

| | | | | | |
|---|---|---|---|---|---|
| USER NAME = agibson | | DESIGNED - R.SCARIA | | REVISED - | |
| | | DRAWN - R.SCARIA | | REVISED - | |
| PLOT SCALE = $SCALE$ | | CHECKED - G.THIESSE | | REVISED - | |
| PLOT DATE = 2/6/2025 | | DATE - 02/27/24 | | REVISED - | |

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

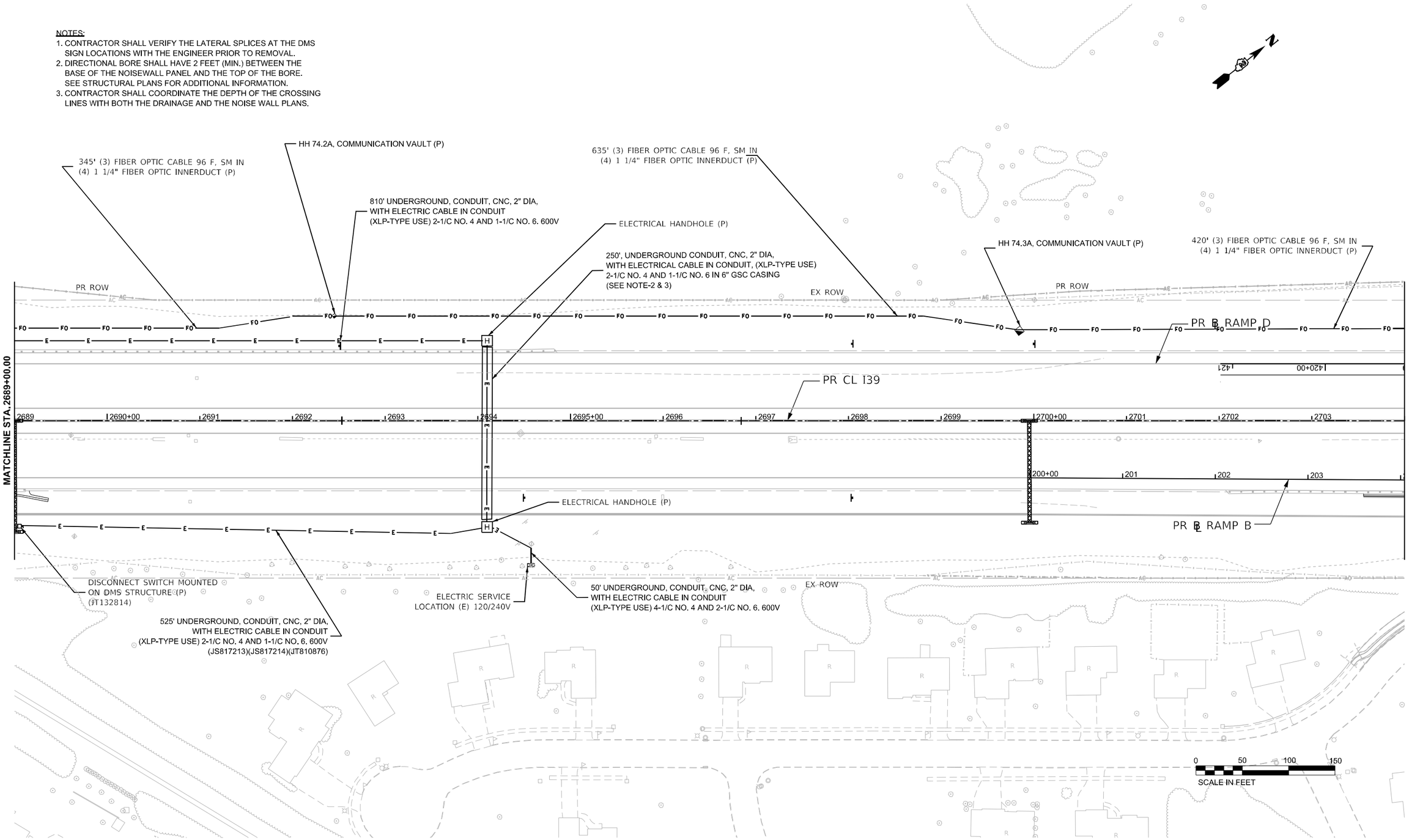
**PROPOSED FIBER OPTIC PLANS**
**I-39**

SCALE: 1"=50' | SHEET 4 OF 26 SHEETS | STA. 2674+00.00 TO STA. 2689+00.00

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 521 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

NOTES:
1. CONTRACTOR SHALL VERIFY THE LATERAL SPLICES AT THE DMS SIGN LOCATIONS WITH THE ENGINEER PRIOR TO REMOVAL.
2. DIRECTIONAL BORE SHALL HAVE 2 FEET (MIN.) BETWEEN THE BASE OF THE NOISEWALL PANEL AND THE TOP OF THE BORE. SEE STRUCTURAL PLANS FOR ADDITIONAL INFORMATION.
3. CONTRACTOR SHALL COORDINATE THE DEPTH OF THE CROSSING LINES WITH BOTH THE DRAINAGE AND THE NOISE WALL PLANS.

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benesch
Alfred Benesch & Company
35 W Wacker Drive, Suite 3300
Chicago, Illinois 60601
312-565-0450
Job No. 10800.00

| | | | | |
|---|---|---|---|---|
| USER NAME = agibson | | DESIGNED - R.SCARIA | REVISED - | |
| | | DRAWN - R.SCARIA | REVISED - | |
| PLOT SCALE = $SCALE$ | | CHECKED - G.THIESSE | REVISED - | |
| PLOT DATE = 2/6/2025 | | DATE - 02/14/2025 | REVISED - | |

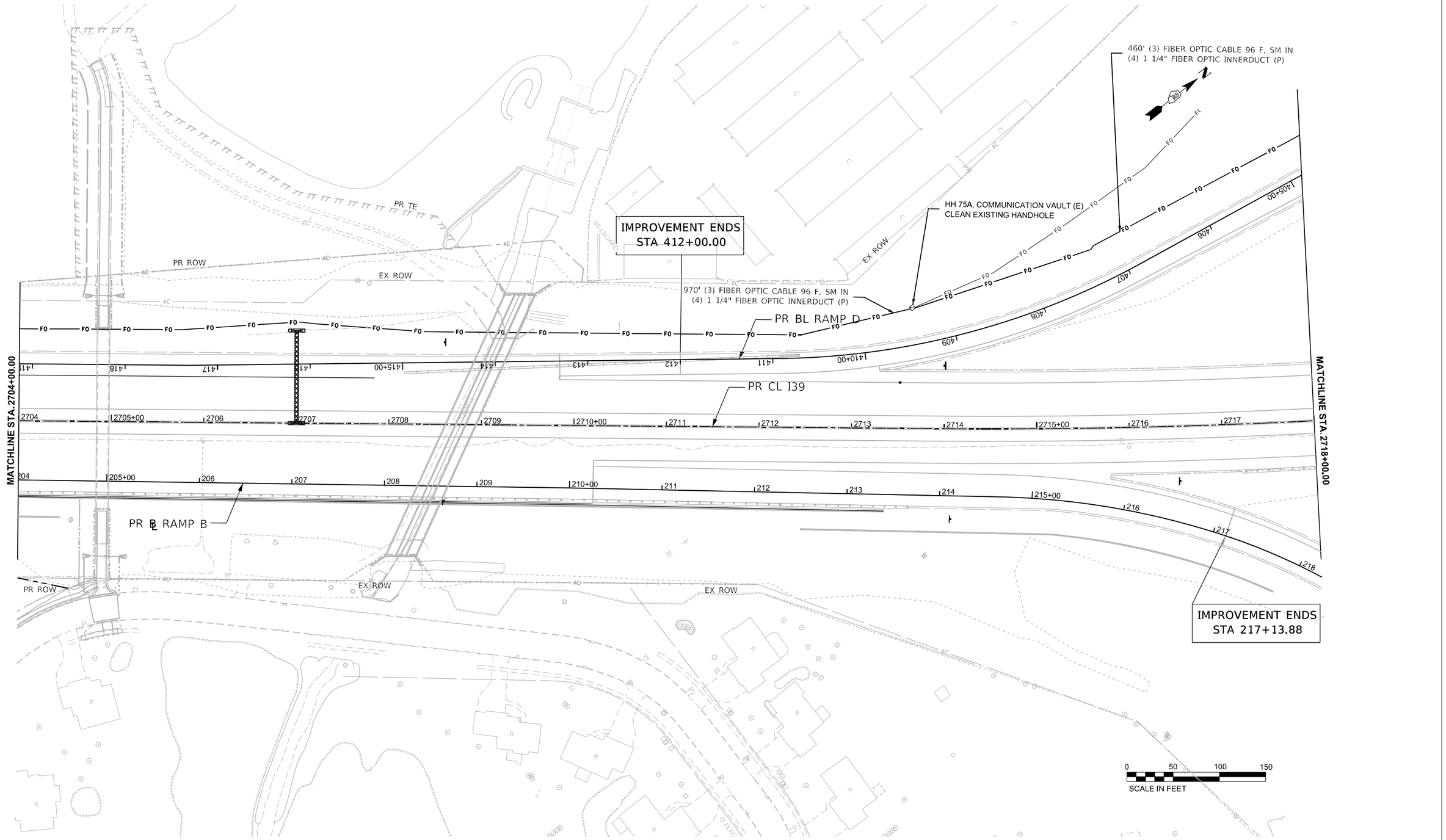
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**PROPOSED FIBER OPTIC PLANS**
**I-39**

SCALE: 1"=50' | SHEET 5 OF 26 SHEETS | STA. 2689+00.00 | TO STA. 2704+00.00

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 522 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

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Alfred Benesch & Company
35 W Wacker Drive, Suite 3300
Chicago, Illinois 60601
312-565-0450 Job No. 10800.00

| | | | | | |
|---|---|---|---|---|---|
| USER NAME | = jMajcher | DESIGNED | - R.SCARIA | REVISED | - |
| | | DRAWN | - R.SCARIA | REVISED | - |
| PLOT SCALE | = 0.16666633 ' / In. | CHECKED | - G.THIESSE | REVISED | - |
| PLOT DATE | = 3/14/2025 | DATE | - 02/14/2025 | REVISED | - |

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

**PROPOSED FIBER OPTIC PLANS**
**I-39**

SCALE: 1"=50' | SHEET 6 OF 26 SHEETS | STA. 2704+00.00 TO STA. 2718+00.00

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 523 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

SEE PROPOSED FIBER SHEET# 8 FOR CONTINUATION

340' (3) FIBER OPTIC CABLE 96 F, SM IN (4) 1 1/4" FIBER OPTIC INNERDUCT (P)

980' (3) FIBER OPTIC CABLE 96 F, SM IN (4) 1 1/4" FIBER OPTIC INNERDUCT (P)

HH 77.1A, COMMUNICATION VAULT (P)

PROJECT ENDS
STA 1306+33.75

EX ℄ RAMP C

EX ROW

HARRISON AVE.

MATCHLINE STA. 2718+00.00

MATCHLINE STA. 2733+00.00

PR CL I39

EX ℄ RAMP A

PROJECT ENDS
STA 10+00.00

SCALE IN FEET
0 50 100 150

MODEL: I39 Wide - FO Plan 12 [Sheet]
FILE NAME: c:\pwworkd\benesch projects\projects\d0173716\D2664C24_ML-sht-Fiber-Proposed-I39.dgn

benesch
Alfred Benesch & Company
35 W Wacker Drive, Suite 3200
Chicago, Illinois 60601
312-565-0450 Job No. 10800.00

| | | | |
|---|---|---|---|
| USER NAME = agibson | DESIGNED - R.SCARIA | REVISED - | |
| | DRAWN - R.SCARIA | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - G.THIESSE | REVISED - | |
| PLOT DATE = 2/6/2025 | DATE - 02/27/24 | REVISED - | |

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

**PROPOSED FIBER OPTIC PLANS**
**I-39**

SCALE: 1"=50' | SHEET 7 OF 26 SHEETS | STA. 2718+00.00 | TO STA. 2733+00.00

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 524 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

SEE PROPOSED FIBER SHEET# 9 FOR CONTINUATION

980' (3) FIBER OPTIC CABLE 96 F, SM IN (4) 1 1/4" FIBER OPTIC INNERDUCT (P)

200'-6" GSC WITH (4) 1 1/4" DIA FIBER OPTIC INNERDUCT WITH (3) FIBER OPTIC CABLE 96F, SM

HH 77A, COMM. VAULT (P)

102' (3) FIBER OPTIC CABLE 96 F, SM IN (4) 1 1/4" FIBER OPTIC INNERDUCT (P)

HH 76A, COMM. VAULT (P)

85' (3) FIBER OPTIC CABLE 96 F, SM IN (4) 1 1/4" FIBER OPTIC INNERDUCT (P)

340' (3) FIBER OPTIC CABLE 96 F, SM IN (4) 1 1/4" FIBER OPTIC INNERDUCT (P)

HARRISON AVE.

PR CL I39

SEE PROPOSED FIBER SHEET# 7 FOR CONTINUATION

SCALE IN FEET 0 50 100 150

MODEL: Harrison Wide - Plan 3-1 [Sheet]
FILE NAME: c:\pw\wordinbenesch projects\projects\d0173716\D2664C24_ML-sht-Fiber-Proposed-I39.dgn

benesch
Alfred Benesch & Company
35 W Wacker Drive, Suite 3200
Chicago, Illinois 60601
312-565-4450 Job No. 10800.00

| | | | |
|---|---|---|---|
| USER NAME = agibson | DESIGNED - R. SCARIA | REVISED - | |
| | DRAWN - R. SCARIA | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - G. THIESSE | REVISED - | |
| PLOT DATE = 2/6/2025 | DATE - 02/27/2024 | REVISED - | |

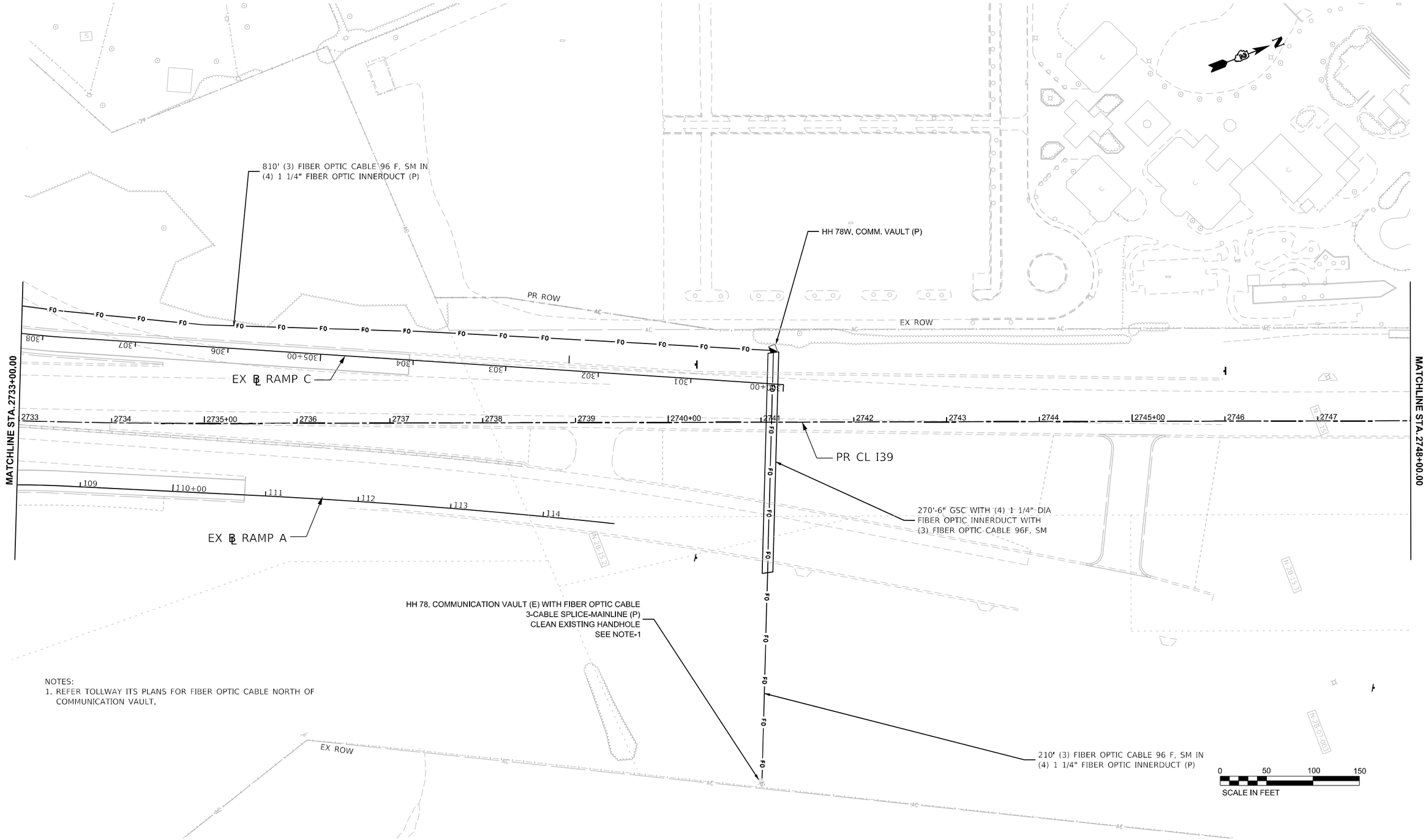
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**PROPOSED FIBER OPTIC PLANS**
**HARRISON AVE**

SCALE: 1"=50' | SHEET 8 OF 26 SHEETS | STA. 146+00.00 | TO STA. A 1319+00.05

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 525 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)




NOTES:
1. REFER TOLLWAY ITS PLANS FOR FIBER OPTIC CABLE NORTH OF COMMUNICATION VAULT.

MODEL: I39 Wide - FO Plan 13 [Sheet]
FILE NAME: c:\pwworkdir\benesch projects\projects\d0173716\D2642C24_ML-sht-Fiber-Proposed-I39.dgn

benesch
Alfred Benesch & Company
35 W Wacker Drive, Suite 3200
Chicago, Illinois 60601
312-565-0450 Job No. 10800.00

| | | | |
|---|---|---|---|
| USER NAME = agibson | DESIGNED - R.SCARIA | REVISED - | |
| | DRAWN - R.SCARIA | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - G.THIESSE | REVISED - | |
| PLOT DATE = 2/6/2025 | DATE - 02/14/2025 | REVISED - | |

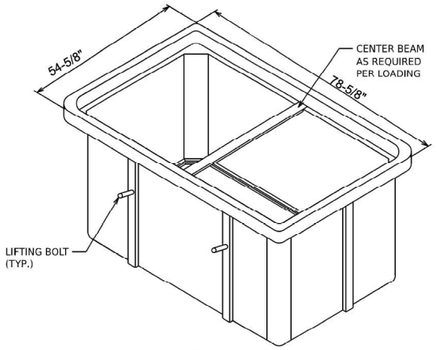
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**PROPOSED FIBER OPTIC PLANS**
**I-39**

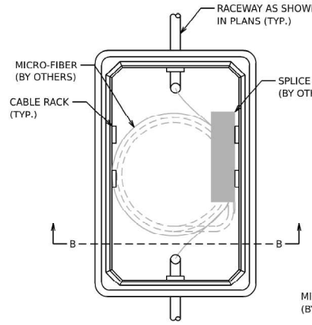
SCALE: 1"=50' | SHEET 9 OF 26 SHEETS | STA. 2733+00.00 TO STA. 2748+00.00

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1,5)R | WINNEBAGO | 1685 | 526 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS FED. AID PROJECT | | | |

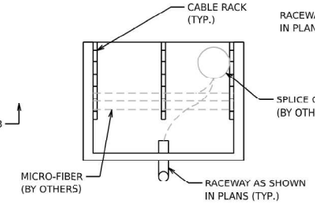
* FAI ROUTE 39 (I-39) & FAP 301 (US 20)



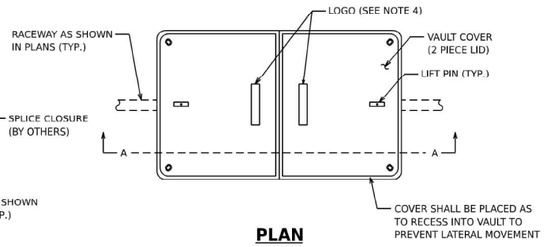

**VAULT BOX ISOMETRIC VIEW**




**TOP VIEW**



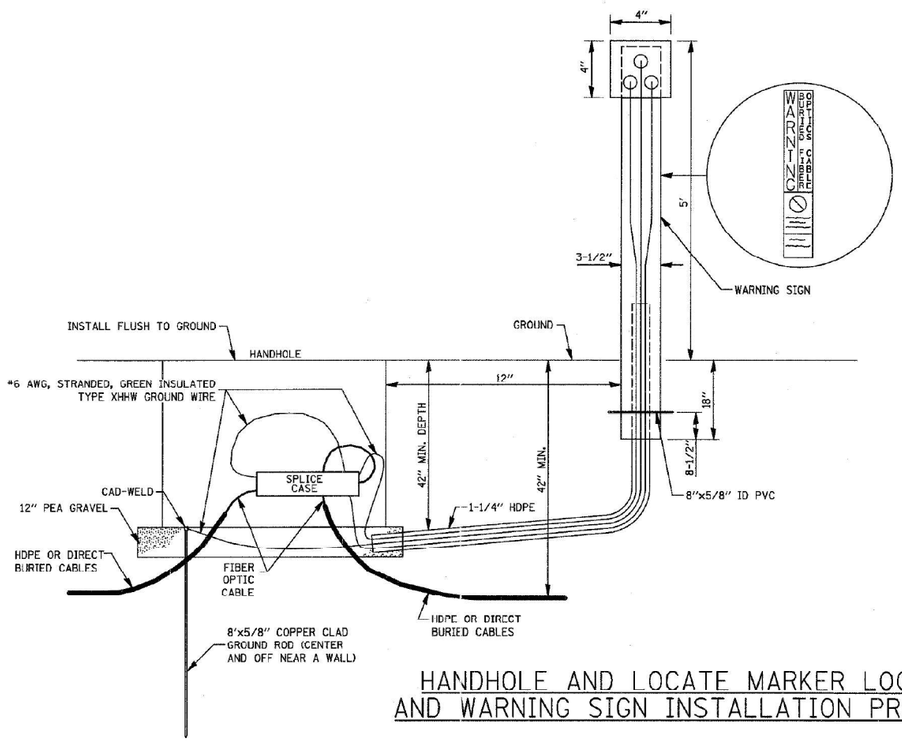

**SECTION B-B**



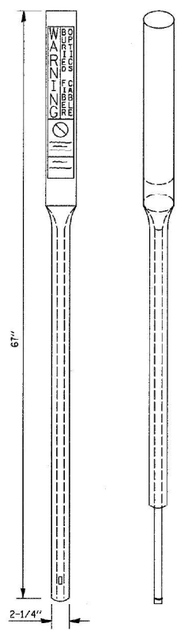

**PLAN**

NOTES:

1. GROUND ROD, 1-1/2" CONDUIT, #6 AWG GROUND WIRE, AND ASSOCIATED WORK ARE INCLUDED AS PART OF COMMUNICATIONS VAULT AND WILL NOT BE PAID FOR SEPARATELY. ALL MATERIALS FOR MECHANICAL CONNECTION SHALL BE UL LISTED AND INSTALLED PER NEC ARTICLE 250.
2. IDOT COMMUNICATIONS VAULTS SHALL HAVE A PERMANENTLY RECESSED LOGO THAT READS "IDOT" AND THIRD PARTY COMMUNICATIONS VAULTS SHALL HAVE A PERMANENTLY RECESSED LOGO THAT READS "IDOT - BB".
3. COMMUNICATIONS VAULT SHALL HAVE AN OPEN BASE. ALL CONDUITS AS SHOWN ON THE PLANS SHALL ENTER THE VAULT VIA THE OPEN BASE.
4. ALL DIMENSIONS ARE MINIMUM AND A LARGER SIZE VAULT MAY BE USED, WITH THE APPROVAL OF THE ENGINEER, TO FACILITATE USING A MANUFACTURER'S STANDARD PRODUCT.



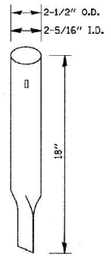

## HANDHOLE AND LOCATE MARKER LOCATION AND WARNING SIGN INSTALLATION PROCEDURE

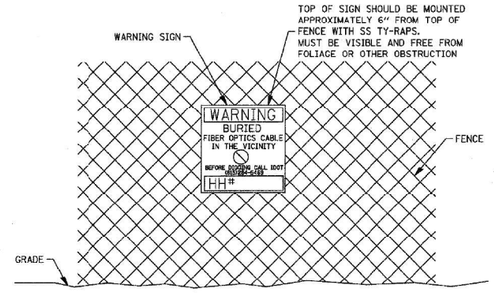



NOTE: DAMAGE TO SOIL ANCHORS NOT INSTALLED W/ APPROVED DRIVER WILL BE THE RESPONSIBILITY OF CONTRACTOR FOR REPLACEMENT

INSTALLATION OF WARNING POST

1. USE THE SENTRY POST® DRIVER TO RAPIDLY INSTALL THE SENTRY POST® IN MOST SOIL CONDITIONS.
2. THE SOIL ANCHOR IS DRIVEN UNTIL FLUSH WITH GROUND LEVEL OR SLIGHTLY BELOW THE SURFACE.
3. PUSH THE SENTRY POST® DOWN INTO THE ANCHOR APPROXIMATELY 9", THEN PULL UP UNTIL IT LOCKS INTO PLACE.




FENCE MOUNTED WARNING SIGN

NTS

NOTES

1. ROUTE MARKER TO BE PLACED 1 FOOT FROM HANDHOLE OR AT FENCE LINE IF POSSIBLE.
2. HANDHOLES SHALL BE BACKFILLED ONLY TO THE TOP OF THE BOX. FLUSH TO GROUND.
3. COIL FIBER CABLE IN HANDHOLE ENSURING THAT THE BEND RADIUS DOES NOT EXCEED VALUES IN TABLE "A".
4. INSTALL GROUND ROD & CAD-WELD AS PER MANUFACTURE'S INSTRUCTIONS. PLACE THE #6 GROUND WIRE (TYPE XHHW, STRANDED, GREEN INSULATED) THAT HAS BEEN ATTACHED TO THE GROUND ROD ON THE CENTER LUG OF THE WARNING SIGN. GROUND RODS AND GROUND WIRES INCLUDED IN THE COST OF HANDHOLE INSTALLATION.
5. BACKFILL MATERIAL SHALL BE COMPACTED TO THE SATISFACTION OF THE ENGINEER.
6. GROUND WIRE SHALL BE BONDED TO BOTH SHEATHS OF ARMORED FIBER OPTIC CABLE IN THE SPLICE ENCLOSURE USING #6 GROUND WIRE. EACH GROUND SHALL BE ISOLATED WITHIN THE ENCLOSURE.
7. INSTALL 1-1/4" HDPE CONDUIT FROM HANDHOLE TO WARNING SIGN TO ALLOW GROUNDING CABLE TO BE INSTALLED.
8. REFERENCE TYPICAL DRAWING FOR HANDHOLE INSTALLATION
9. PLACE 1-1/4" HDPE OVER FIBER OPTIC CABLE TO PROVIDE CRUSH PROTECTION, EXTEND HDPE 1' INSIDE HANDHOLE.
10. NO HANDHOLES WILL BE ALLOWED IN PAVED ROADWAYS OR SHOULDERS.
11. THE TOPS OF ALL HANDHOLES SHALL BE FLUSH WITH THE ADJACENT SLOPES.
12. A WARNING SIGN/LOCATE SIGN IS REQUIRED AT ALL HANDHOLES, AND IS INCLUDED IN COST OF HANDHOLE INSTALLATION.
13. FOR ALL SPLICE AND HANDHOLES, NUMBER DECALS WILL BE APPLIED AFTER INSTALLATION IS COMPLETED AND AT THE DIRECTION OF THE ENGINEER.

TABLE "A"

| FIBER COUNT | MINIMUM BEND RADIUS (AT REST) |
|---|---|
| 24F | 6" |
| 48F | 6" |
| 72F | 8" |
| 96F | 8" |
| 144F | 10" |
| 188F | 10" |
| 288F | 10" |
| 432F | 10" |
| 864F | 11" |


MODEL: FO DETAILS [Sheet]
FILE NAME: c:\pwworkdir\benesch projects\projects\d0173716\D264C24_ML-sht-FiberDetails-1.dgn

benesch
Alfred Benesch & Company
35 W Wacker Drive, Suite 3300
Chicago, Illinois 60601
312-565-0450 Job No. 10800.00

| | | | | |
|---|---|---|---|---|
| USER NAME = lfranceschina | DESIGNED - R.SCARIA | REVISED - |
| | DRAWN - R.SCARIA | REVISED - |
| PLOT SCALE = $SCALE$ | CHECKED - G.THIESSE | REVISED - |
| PLOT DATE = 8/12/2024 | DATE - 02/14/2025 | REVISED - |

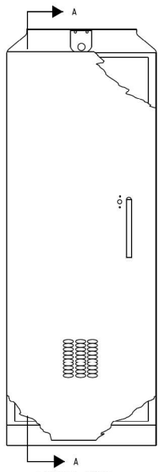
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**FIBER OPTIC DETAILS**
**COMMUNICATION VAULT AND LOCATE POST**

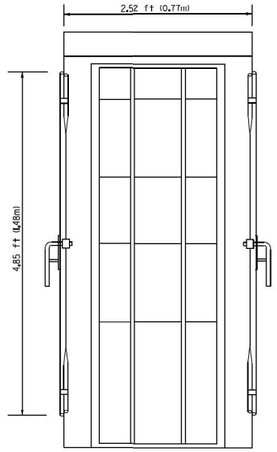
SCALE: | SHEET 10 OF 26 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 527 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

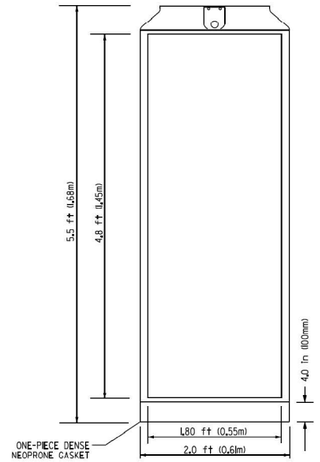
* FAI ROUTE 39 (I-39) & FAP 301 (US 20) *



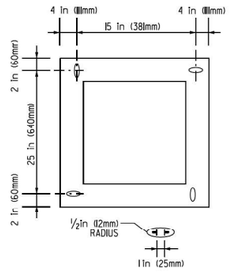

FRONT VIEW
(DOOR CLOSED)
(MODEL 334)




SECTION A-A
FOUNDATION MOUNTED CABINET
(MODEL 334)



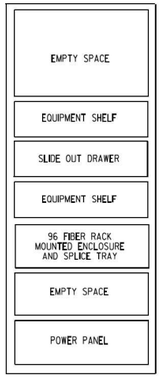

FRONT VIEW
(DOOR REMOVED)
(MODEL 334)



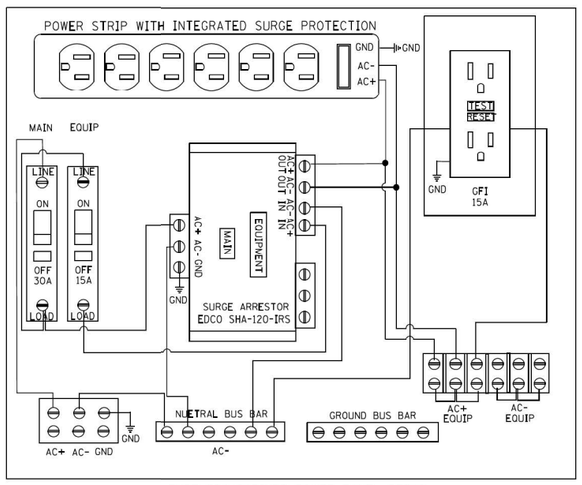

BOTTOM VIEW
(MODEL 334)

NOTES (MODEL 334 CABINET):

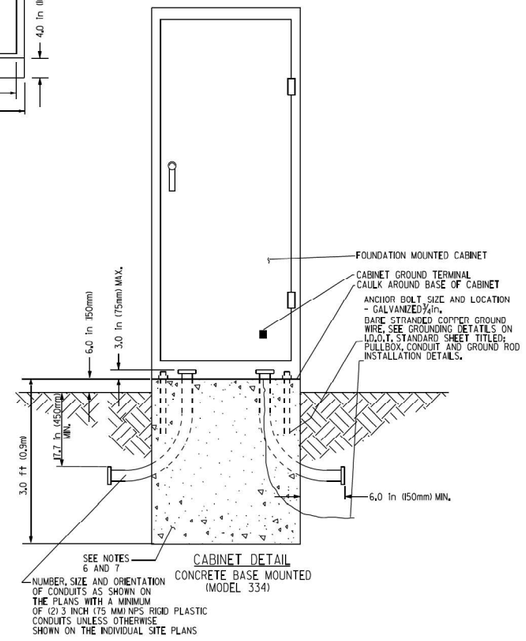
1. REFER TO SPECIAL PROVISIONS FOR CABINET DETAILS AND ADDITIONAL REQUIREMENTS.
2. CABINET ENTRIES INCLUDE VERTICAL ARRANGEMENT FOR MAJOR EQUIPMENT ITEMS ONLY.
3. THERE WILL BE ADDITIONAL ITEMS INSTALLED IN THE CABINET ON SIDE AND BACK PANELS AS PER THE SPECIAL PROVISIONS.
4. PROVIDE ALL UNUSED SPACE AT BOTTOM OF CABINET.
5. THE CONTRACTOR SHALL INSTALL INSULATED BUSHINGS AND DUCT SEALANT AT ALL CONDUIT BEND TERMINATIONS IN FOUNDATIONS.
6. CONCRETE BASE TO BE FORMED AT LEAST 6.0 In (150mm) BELOW THE GROUND SURFACE.
7. CONCRETE BASE MUST BE CAST IN PLACE.
8. THE CABINET SHALL BE EQUIPPED WITH A THERMOSTATICALLY CONTROLLER VENTILATION FAN, DELUXE PLEATED FILTER, POWER PANEL, 96 FIBER RACK MOUNTED ENCLOSURE WITH SPLICE TRAYS, IP MOUNTING RAILS, EQUIPMENT SHELF, AND SLIDE OUT DRAWER WITH STORAGE.
9. ALL WORK INDICATED SHALL BE PAID FOR UNDER ITEM CABINET, MODEL 334 EXCLUSIVE OF THE CONCRETE FOUNDATION.




CONTROL CABINET
LAYOUT (TYPICAL)
(MODEL 334)




TYPE 334 CABINET POWER PANEL DETAIL
(POWER PANEL TO BE EQUIPPED WITH PLEXI-GLASS SAFETY SHIELD)




CABINET DETAIL
CONCRETE BASE MOUNTED
(MODEL 334)

MODEL: HANDHOLE AND LOCATE MARKER [Sheet]
FILE NAME: c:\pwworkdir\benesch projects\projects\d0173716\D2824C24_ML-sht-FiberDetails-17.dgn

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Chicago, Illinois 60601
312-565-4450 Job No. 10800.00

| | | | |
|---|---|---|---|
| USER NAME = lfranceschina | DESIGNED - | REVISED - | |
| | DRAWN - | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - G. THIESSE | REVISED - | |
| PLOT DATE = 8/12/2024 | DATE - 02/14/2025 | REVISED - | |

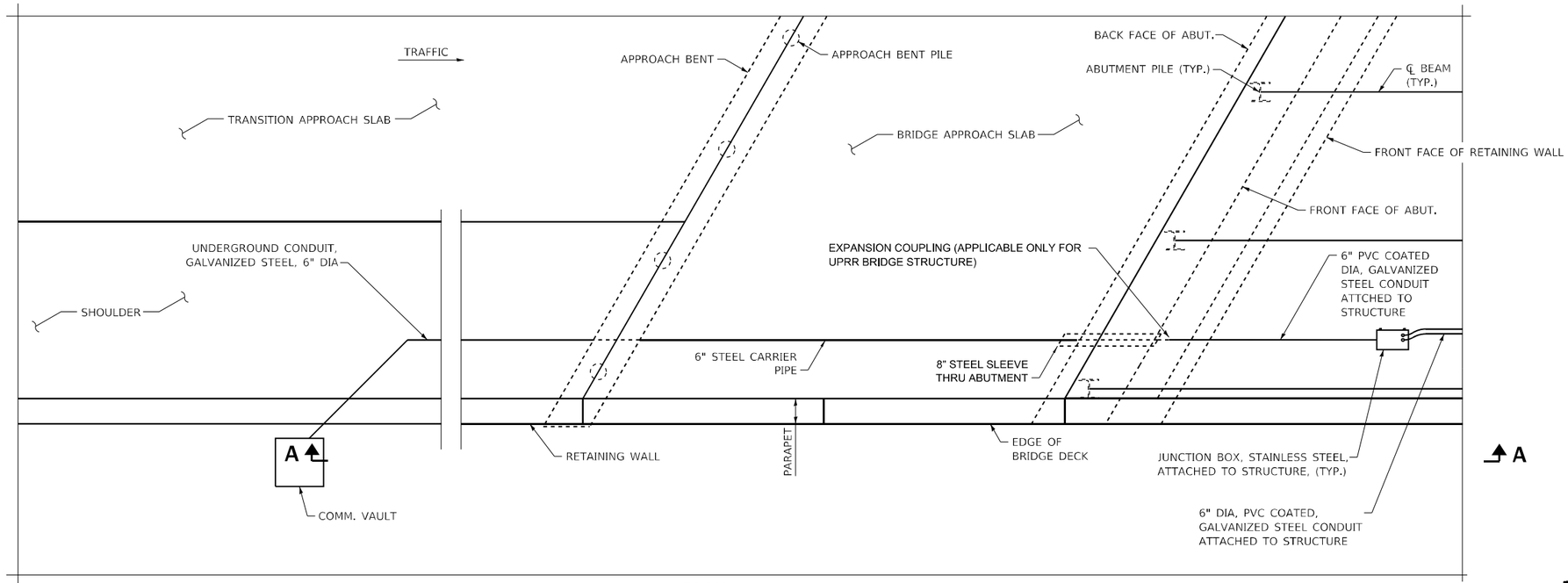
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**FIBER OPTIC DETAILS**
**CABINET MODEL 334 DETAIL**

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

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 528 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS FED. AID PROJECT | | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)



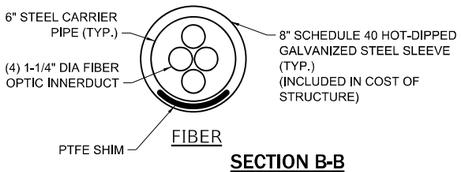

**PLAN**
N.T.S.

**NOTES:**

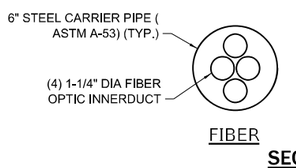
1. THE CONTRACTOR SHALL FURNISH & INSTALL A PULL TAPE THROUGH ALL CONDUITS INSTALLED AS PART OF THIS WORK.
2. THE JUNCTION BOX SHALL MEET THE REQUIREMENTS OF ARTICLE 1088.04 OF THE STANDARD SPECIFICATIONS. A HINGED DOOR AND PROVISIONS FOR 3-POINT LOCK OR A PAD-LOCK ARE REQUIRED
3. JUNCTION BOX SHALL BE LOCATED AT LEAST 2'-6" FROM CROSS FRAMES OR DIAPHRAMS.
4. JUNCTION BOX DOORS SHALL BE POSITIONED FOR WORKERS TO FACE ONCOMING TRAFFIC WHEN ACCESSING THE BOX.
5. MINIMUM BEND RADIUS FOR ALL CONDUIT SHALL BE PER MANUFACTURER'S REQUIREMENTS.
6. THE FIBER INNERDUCT SHALL BE CONTINUOUS BETWEEN VAULTS.



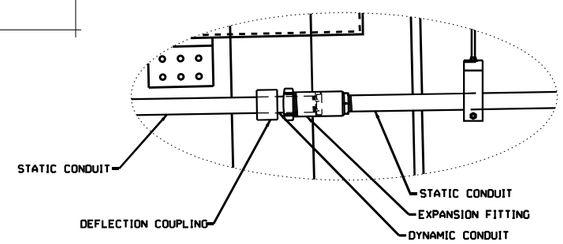

**SECTION A-A**
N.T.S.
(FOR CLARITY, ONLY ONE CARRIER PIPE SYSTEM SHOWN)




**SECTION B-B**
N.T.S.




**SECTION C-C**
N.T.S.




**DETAIL - EXPANSION/DEFLECTION COUPLING**

MODEL: JB ATTACHED TO STRUCTURE DETAIL [Sheet]
FILE NAME: c:\pwworkdir\benesch projects\projects\d0173716\D2864C24_ML-sht-FiberDetails-2.dgn

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Alfred Benesch & Company
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| | | | |
|---|---|---|---|
| USER NAME = lfranceschina | DESIGNED - R.SCARIA | REVISED - | |
| | DRAWN - R.SCARIA | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - G.THIESSE | REVISED - | |
| PLOT DATE = 8/12/2024 | DATE - 02/14/2025 | REVISED - | |

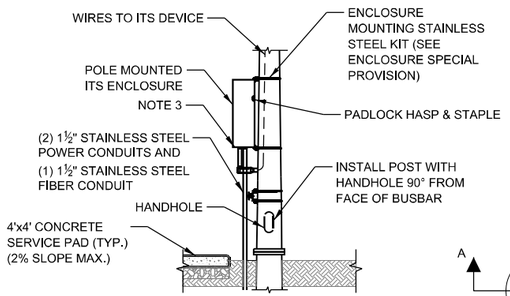
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**FIBER OPTIC DETAILS**
**CONDUIT DETAILS AT ABUTMENT WITH WALLS**

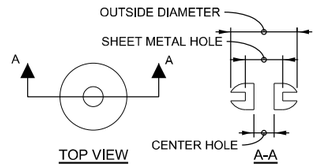
SCALE: | SHEET 11 OF 26 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1,5)R | WINNEBAGO | 1685 | 529 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS FED. AID PROJECT | | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

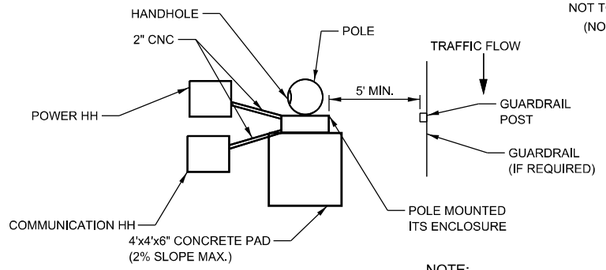



ENCLOSURE SIDE VIEW
NOT TO SCALE



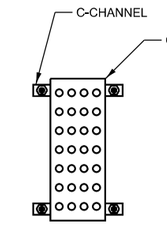

TOP VIEW A-A

DEFAULT
NOT TO SCALE
(NOTE 22)

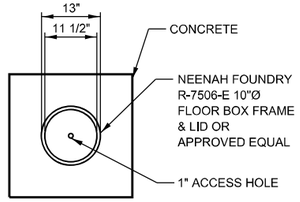



POLE MOUNTED ITS ELEMENT ASSEMBLY - TOP VIEW
NOT TO SCALE

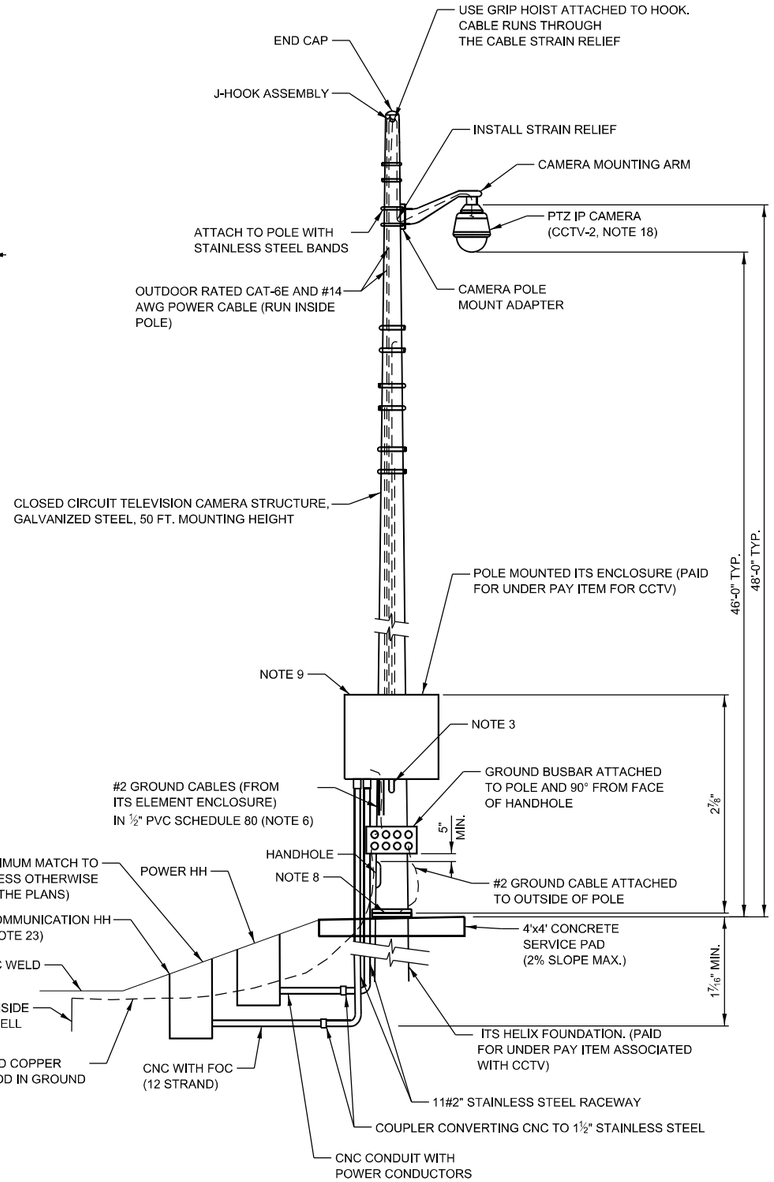
NOTE:
WHEN ITS ENCLOSURE IS CONNECTED TO POWER, THEN NO SOLAR ARRANGEMENT AND NO BATTERY ENCLOSURE REQUIRED.




GROUND BUSBAR
ELEVATION
NOT TO SCALE

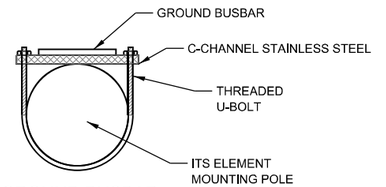



GROUND WELL PLAN DETAIL
NOT TO SCALE




50' GALVANIZED STEEL POLE MOUNTED ITS ELEMENT ASSEMBLY
NOT TO SCALE

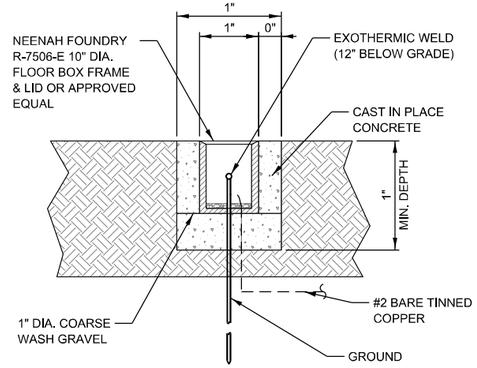
| SCHEDULE OF DEVICES | | | | | | | |
|---|---|---|---|---|---|---|---|
| | SITE | | | | SUPPORT TYPE | | |
| | MILEPOST | STATION | OFFSET | ORIENTATION | POLE | FOUNDATION | MOUNTING HEIGHT |
| CCTV-1 | 46.5 | 2687 | 84.5 | NORTH WEST | STEEL | 17 1/2"DIA. HELIX | 50 FT. |
| CCTV-2 | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| WIRELESS MODEM | | | | | | | |
| | | | | | | | |
| | | | | | | | |




GROUND BUSBAR
PLAN VIEW
NOT TO SCALE

NOTE:

1. SEE FIBER OPTIC DETAILS SHEET-13 FOR NOTES.




GROUND WELL ELEVATION DETAIL
NOT TO SCALE

MODEL: M-ITS-1000 [Sheet]
FILE NAME: c:\pwworkdir\benesch.projects\projects\d0173716\D264C24_MI-shi-FiberDetails-3.dgn

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35 W Wacker Drive, Suite 3200
Chicago, Illinois 60601
312-565-4450 Job No. 10806.00

| | | | | | |
|---|---|---|---|---|---|
| USER NAME = lfranceschina | | DESIGNED - R.SCARIA | | REVISED - | |
| | | DRAWN - R.SCARIA | | REVISED - | |
| PLOT SCALE = $SCALE$ | | CHECKED - G.THIESSE | | REVISED - | |
| PLOT DATE = 8/12/2024 | | DATE - 02/14/2025 | | REVISED - | |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

# FIBER OPTIC DETAILS
## ELEVATION VIEWS POLE MOUNTED ITS ELEMENT ASSEMBLY

SCALE: | SHEET 12 OF 26 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 530 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS FED. AID PROJECT | | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

**GENERAL NOTES:**

1. ITS ELEMENT POLES SHIELDED BY GUARDRAIL SHALL BE LOCATED A MINIMUM OF 5' TO A MAXIMUM OF 20' BEHIND THE GUARDRAIL POST. SEE ILLINOIS TOLLWAY GUARDRAIL STANDARD (SECTION C OF STANDARDS) FOR MORE INFORMATION. ALL OTHER POLES SHALL BE LOCATED OUTSIDE THE CLEAR ZONE. FINAL LOCATION TO BE APPROVED BY THE ENGINEER.

2. ANY GROUND CABLES ROUTED INSIDE THE ENCLOSURE SHALL BE GREEN INSULATED TYPE RHW CONDUCTORS. ANY GROUND CONDUCTORS THAT ARE BURIED SHALL BE BARE COPPER TINNED. ANY GROUND CONNECTED TO THE EXTERNAL GROUND BUSBAR SHALL BE CADWELDED TO THE BUSBAR. PVC SCH 80 CONDUIT SHOULD BE GROMMETTED ON END GOING TO BUSBAR TO PREVENT RODENTS AND INSECTS FROM ENTERING.

3. PROVIDE A 1½" ALUMINUM CONDUIT NIPPLE WITH LB FITTING FOR ROUTING ITS ELEMENT CABLES INSIDE THE POLE TO THE EQUIPMENT ENCLOSURE. DRILL AND TAP POLE FOR THE CONDUIT NIPPLE. CABLE SLACK SHALL BE PULLED AND FASTENED WITHIN THE TOP OF THE POLE. PROPER CABLE STRAIN RELIEF SHALL BE INSTALLED AND APPROVED BY THE ENGINEER. ALL CABLE RUN INSIDE THE POLE SHALL NOT HANG BELOW THE TOP OF THE HANDHOLE COVER ON THE POLE.

4. ALL CONDUITS ENTERING THE ENCLOSURE SHALL BE SEALED. SEE "ITS POLE MOUNTED ENCLOSURE, ITS ASSEMBLY (CCTV OR MVDS)" SPECIAL PROVISION FOR MORE DETAIL FOR RODENT PROTECTION.

5. CONTRACTOR TO PROVIDE ALL POWER, COMMUNICATIONS AND GROUND WIRING REQUIRED FOR SYSTEM OPERATION.

6. ATTACH PVC SCH 80 CONDUIT TO POLE FOR SUPPORT. USE METAL BUSHING WHEN CONNECTING PVC TO CABINET. USE GROMMETS AT BOTH ENDS OF CONDUIT TO SEAL CONDUIT BUT ALLOW GROUND CABLE TO RUN THROUGH BOTH ENDS.

7. GROUND ROD SHALL BE PLACED A MINIMUM OF 10' FROM THE FOUNDATION. A GROUND WELL SHALL BE INCLUDED TO PERMIT ACCESS TO THE GROUND ROD CONNECTION. CONNECTION TO THE GROUND BUSBAR AND THE GROUND ROD SHALL BE CADWELD.

8. A FLAT STEEL MESH PANEL ALONG WITH A COMMERCIALLY AVAILABLE HYDROPHOBIC LOW DENSITY COMPOSITE BACKFILL MATERIAL (KNOWN AS Q-SET 250) SHALL BE INSTALLED BETWEEN THE ANCHOR BASE AND THE POLE TO PREVENT THE ENTRY OF RODENTS INTO THE POLE. SEE SPECIAL PROVISIONS FOR MORE DETAILS.

9. THIS ITS ELEMENT ENCLOSURE DETAIL WILL BE UTILIZED FOR POLE MOUNTED APPLICATIONS ONLY, IT CANNOT BE UTILIZED FOR TOWER MOUNTED APPLICATION.

10. BACKFILL PER ILLINOIS TOLLWAY STANDARD H1. BACKFILL SHALL BE TO THE TOP OF THE POLE BASE ON ALL SIDES.

11. ALL CABLING (INCLUDING CABLING INSIDE THE ENCLOSURE) IS OUTDOOR RATED. CAMERA CABLE PART NUMBERS ARE: CAT-6E CABLE (BELDEN CATALOG NO. 7953A) AND #14 AWG 3/C CCTV POWER CABLE (BELDEN CATALOG NO. 9367). THE GROUND WIRE (WHITE) IN THE 3/C #14 AWG POWER CABLE SHALL BE TAPED GREEN. ANY OTHER ITS ELEMENT WILL USE SPECIFIC CABLE ASSOCIATED TO THAT ELEMENT.

12. THE J-HOOK SHALL BE WELDED IN PLACE TO THE SIDE OF THE POLE, NEAR THE TOP OF THE POLE. THE CONTRACTOR SHALL PROVIDE A CUSTOM FLAT TOP POLE CAP THAT WILL FIT THE POLE TOP WITH THE J-HOOK WELDED TO THE SIDE. THE POLE CAP SHALL BE SECURED TO THE POLE BY DRILLING AND INSERTING SET SCREWS.

13. THIS DRAWING IS A MULTI-PURPOSE DRAWING THAT INCLUDES TWO TYPES OF CONNECTIONS TO A SOLAR POWERED BATTERY ENCLOSURE. IF SOLAR POWER IS UTILIZED, THEN THE SPECIAL PROVISIONS WILL CALL OUT THE MATERIAL AND NECESSARY CONNECTIONS TO THE ITS ELEMENT ENCLOSURE.

14. CONSTRUCT A 4 FT. X 4 FT. CONCRETE SERVICE PAD 6-INCHES FROM THE POLE BASE ON THE SAME SIDE AS THE ITS ENCLOSURE, CENTERED WITH THE ITS ENCLOSURE.

15. THIRTY DAYS PRIOR TO INSTALLING ANY NEW CCTV CAMERA, MVDS, SWITCH, WIRELESS OR FIBER OPTIC MODEM, THE CONTRACTOR SHALL COORDINATE DEVICE CONFIGURATION WITH THE ENGINEER.

16. THE DISCONNECT SWITCH, SUPPORT, AND ASSOCIATED CONDUIT SHALL BE INSTALLED FOR ITS SITES WHERE THE UTILITY SERVICE INSTALLATION IS GREATER THAN 500 FEET FROM THE ITS SITE OR LOCATED ON THE OPPOSITE SIDE OF THE ROADWAY FROM THE ITS SITE.

17. ALL SLOPE RATIOS ARE EXPRESSED AS UNITS OF VERTICAL DISPLACEMENT TO UNITS OF HORIZONTAL DISPLACEMENT (V:H).

18. CABLES SHALL ENTER POLES THROUGH A GROMMET. GROMMET SIZE SHALL BE CHOSEN SO THAT THE CENTER HOLE FORMS A WATER TIGHT SEAL AROUND THE CABLES.

19. IF HANDHOLE IS INSTALLED NEAR THE BOTTOM OF A DITCH, THEN IT SHALL NOT BE INSTALLED BELOW THE FIFTY YEAR FLOOD ELEVATION.

CCTV NOTES:

18. FINAL PLACEMENT HEIGHTS OF THE CCTV CAMERAS SHALL BE BASED ON SITE CONDITIONS, ILLINOIS TOLLWAY OPERATIONAL NEEDS, AND AS PER MANUFACTURER'S MOUNTING RECOMMENDATIONS. THE HEIGHT SHALL BE APPROVED BY THE ENGINEER ONLY AFTER REVIEW BY ILLINOIS TOLLWAY ITS OPERATIONS. FOR SITE WHERE 2 CCTV TO BE INSTALLED ON SAME ITS POLE: KEEP A MINIMUM 24 INCHES HEIGHT DIFFERENCE BETWEEN THE 2 CCTV.

MODEL: M-ITS-1001 [Sheet]
FILE NAME: c:\pw\wordir\benesch projects\projects\d0173716\D264C24_ML-sht-FiberDetails-4.dgn

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| USER NAME = lfranceschina | DESIGNED - R.SCARIA | REVISED - | |
| | DRAWN - R.SCARIA | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - G.THIESSE | REVISED - | |
| PLOT DATE = 8/12/2024 | DATE - 02/14/2025 | REVISED - | |

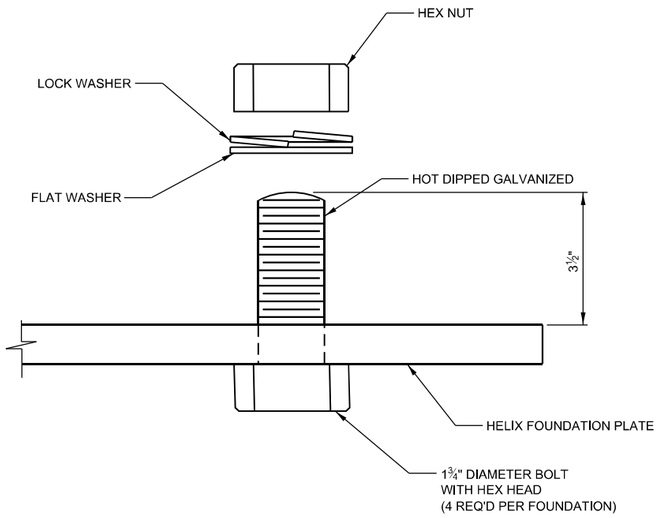
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**FIBER OPTIC DETAILS**
**GENERAL NOTES POLE MOUNTED ITS ELEMENT ASSEMBLY**

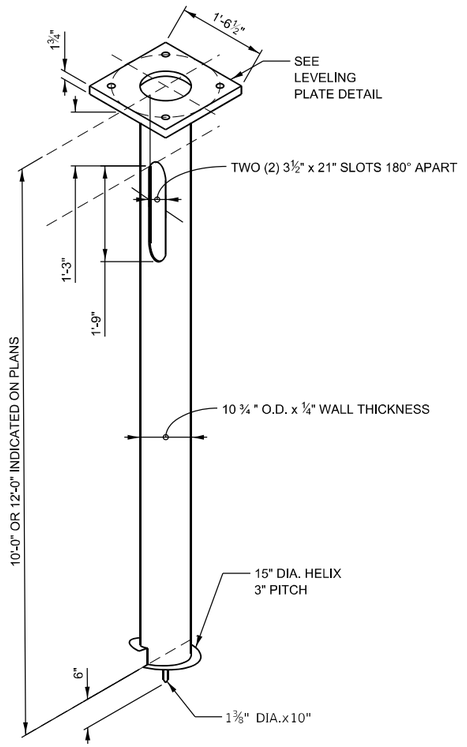
SCALE: | SHEET 13 OF 26 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1,5)R | WINNEBAGO | 1685 | 531 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS FED. AID PROJECT | | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)




BASE ATTACHMENT DETAIL
17 1/2" BASE DIA.

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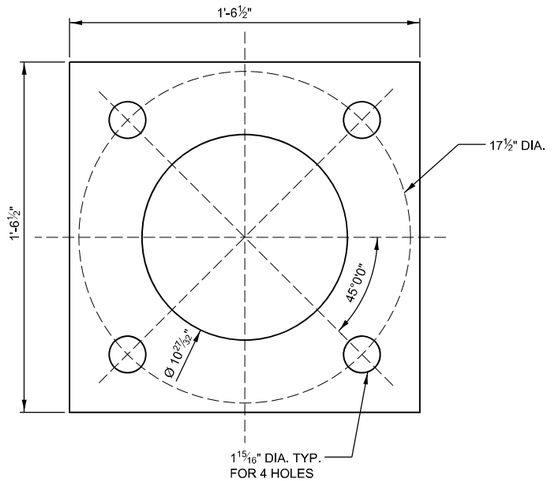


LEVELING PLATE

HELIX - GROUND MOUNTED ASSEMBLY

MODEL: M-ITS-1002 [Sheet]
FILE NAME: c:\pwworkfi\benesch projects\projects\d0173716\D26\4C24_ML-sht-FiberDetails-5.dgn

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| | DRAWN - R.SCARIA | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - G.THIESSE | REVISED - | |
| PLOT DATE = 8/12/2024 | DATE - 02/14/2025 | REVISED - | |

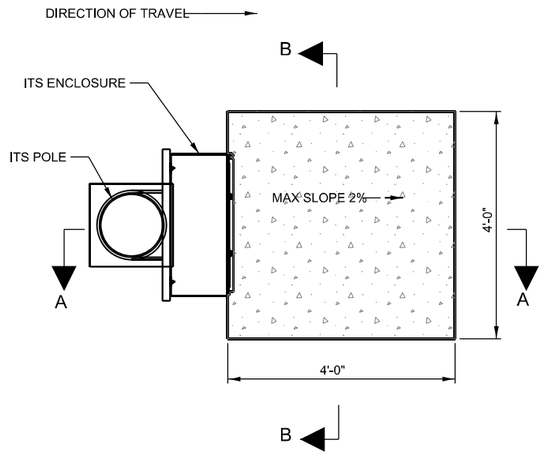
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**FIBER OPTIC DETAILS**
**ITS STANDAR FOUNDATION**

SCALE: | SHEET 14 OF 26 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 532 |
| | | CONTRACT NO. 64C24 | | |
| | | ILLINOIS | FED. AID PROJECT | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)




CONCRETE SERVICE PAD FOR ITS POLE
PLAN VIEW

## DESIGN STRESSES

CONCRETE

| | |
|---|---|
| CAST-IN-PLACE: | f'c = 3,500 PSI AT 14 DAYS (CLASS SI) |
| PRE-CAST: | f'c = 3,500 PSI AT 5 DAYS, f'c = 5,000 PSI AT 28 DAYS (CLASS PC) |

STEEL

| | |
|---|---|
| ASTM A615, GRADE 60 DEFORMED, | Fy = 60,000 PSI (EPOXY COATED) |
| OR | |
| WELDED WIRE MESH, | Fy = 60,000 PSI - 6x6 D10 |

NOTES:

1. TYPE A SERVICE PADS SHALL BE INSTALLED ON SLOPES UP TO AND INCLUDING 1:6 (V:H).
2. TYPE B SERVICE PADS SHALL BE INSTALLED ON SLOPES GREATER THAN 1:6 AND LESS THAN OR EQUAL TO 1:3.
3. TYPE C SERVICE PADS SHALL BE INSTALLED ON SLOPES GREATER THAN 1:3 AS SHOWN ON SHEET M-ITS-1003 SHEET 2 OF 2.
4. ALL EXPOSED CONCRETE EDGES SHALL HAVE A 1" MINIMUM CHAMFER.
5. CONTRACTOR SHALL TAKE PRECAUTIONS TO STABILIZE EXISTING ITS POLES AND HELIX FOUNDATIONS WHILE EXCAVATING SOIL FOR INSTALLATION OF CONCRETE SERVICE PADS.
6. COMPACTED SOIL SHALL BE PLACED TO BE LEVEL WITH THE SERVICE PAD. CONTRACTOR MAY USE EXCAVATED SOIL FROM PLACING THE PAD'S AGGREGATE BASE FOR GRADING PURPOSES WITH APPROVAL OF THE ENGINEER. SEEDING AND EROSION CONTROL SHALL BE PER THE GENERAL NOTES ON SHEET GN-08.
7. SOIL EXCAVATED FOR THE PURPOSE OF MAINTAINING A STABLE WORKING SLOPE WHILE INSTALLING THE SERVICE PAD SHALL BE REPLACED. BACKFILL SHALL BE EARTH WHICH IS FREE FROM DEBRIS, CINDERS, AND ROCKS MEASURING 2" OR GREATER IN DIAMETER. IN THE EVENT THAT EXCAVATED MATERIAL IS UNSUITABLE FOR USE AS BACKFILL, THE CONTRACTOR SHALL USE A CLEAN, NATURAL SAND. THIS SUBSTITUTE BACKFILL SHALL BE INCIDENTAL TO THE SERVICE PAD INSTALLATION AND WILL NOT BE PAID FOR SEPARATELY. ALL BACKFILL MATERIALS SHALL BE COMPACTED TO THE SATISFACTION OF THE ENGINEER.
8. THE TOP SURFACE OF SOIL DISTURBED BY EXCAVATION FOR PLACING THE SERVICE PADS SHALL BE SEEDED AND PROTECTED WITH EROSION CONTROL MEASURES PER THE GENERAL NOTES ON SHEET GN-08.
9. SURFACE OF SERVICE PADS SHALL BE BROOM FINISHED.
10. SERVICE PAD MAY BE PRECAST TO MATCH TYPE A (JT8360027) OR TYPE B (JT8360028) PAD ACCORDINGLY.
11. ALL EMBEDDED LIFTING HARDWARE USED SHALL BE GALVANIZED.
12. FOR LIFTING INSERT, INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION INCLUDING MINIMUM EDGE DISTANCE AND SPACING REQUIREMENTS AND HAVE A 4:1 SAFETY FACTOR.
13. FOR LIFTING PLATES, INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND HAVE A STANDARD 5:1 SAFETY FACTOR FOR THE LIFTING HARDWARE.
14. PRECAST SERVICE PADS SHALL BE TRANSPORTED IN SUCH A MANNER THAT THE PAD WILL NOT BE DAMAGED DURING TRANSPORTATION. PLASTIC CORNER PIECES OR SHOCK-ABSORBING CUSHIONING MATERIAL SHALL BE USED AT ALL BEARING POINTS AND ALL EXPOSED CORNERS DURING TRANSPORTATION OF THE PRECAST ELEMENTS. PADS SHALL BE PROPERLY SUPPORTED DURING TRANSPORTATION SUCH THAT CRACKING OR DEFORMATION DOES NOT OCCUR. IF MORE THAN ONE PAD IS TRANSPORTED PER VEHICLE, PROPER SUPPORT AND SEPARATION MUST BE PROVIDED BETWEEN INDIVIDUAL PADS. PADS MUST BE LYING HORIZONTALLY DURING TRANSPORTATION, UNLESS OTHERWISE APPROVED.
15. PRECAST ELEMENT DAMAGED DURING HANDLING AND STORAGE SHALL BE REPAIRED OR REPLACED AT NO COST TO THE ILLINOIS TOLLWAY.
16. A PRECAST PAD SHALL NOT BE TRANSPORTED FROM THE CASTING YARD UNTIL A MINIMUM 5 DAY COMPRESSIVE STRENGTH SPECIFIED HAS BEEN ATTAINED.
17. MATERIAL QUALITY AND CONDITION AFTER SHIPMENT WILL BE INSPECTED AFTER DELIVERY TO THE CONSTRUCTION SITE, WITH THIS AND ANY PREVIOUS INSPECTIONS CONSTITUTING ON PARTIAL ACCEPTANCE.
18. REPAIR OF DAMAGE CAUSE TO THE PADS DURING FABRICATION, LIFTING AND HANDLING, OR TRANSPORTATION SHALL BE ADDRESSED ON A CASE-BY-CASE BASIS. DAMAGE WITHIN ACCEPTABLE LIMITS CAUSED TO THE TOP OF THE SURFACES OR TO KEYED EDGES OF THE PADS SHALL BE REPAIRED USING AN APPROVED REPAIR METHOD AT THE FABRICATION PLANT AT THE EXPENSE OF THE CONTRACTOR. REPETITIVE DAMAGE TO THE PADS SHALL BE CAUSE FOR STOPPAGE OF FABRICATION OPERATION UNTIL CAUSE OF DAMAGE CAN BE REMEDIED.
19. THE CONTRACTOR SHALL RETAIN THE SOLE RESPONSIBILITY FOR THE MEANS, METHODS, AND TECHNIQUES OF CONSTRUCTION OF THE PADS AND FOR COMPLIANCE WITH LAWS, REGULATIONS, AND CODES, AND FOR THE SAFETY OF CONSTRUCTION APPLICABLE TO THIS WORK.




SECTION A-A (TYPE A)




SECTION B-B (TYPE A)




SECTION A-A (TYPE B)




SECTION B-B (TYPE B)

CONCRETE SERVICE PAD DETAILS



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35 W Wacker Drive, Suite 3200
Chicago, Illinois 60601
312-565-0450 Job No. 10800.00

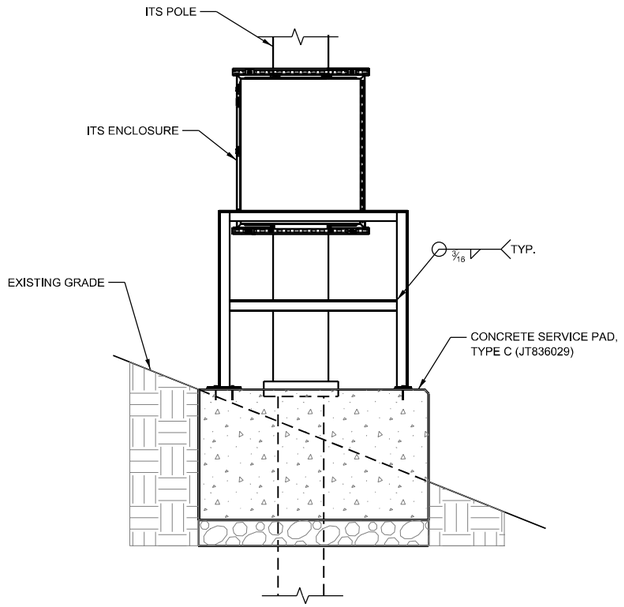
| | | | | | |
|---|---|---|---|---|---|
| USER NAME = lfranceschina | DESIGNED - R.SCARIA | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | FIBER OPTIC DETAILS ITS CONCRETE SERVICE PAD | |
| | DRAWN - R.SCARIA | REVISED - | | | |
| PLOT SCALE = $SCALE$ | CHECKED - G.THIESSE | REVISED - | | SCALE: | SHEET 15 OF 26 SHEETS STA. TO STA. |
| PLOT DATE = 8/12/2024 | DATE - 02/14/2025 | REVISED - | | | |

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 533 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

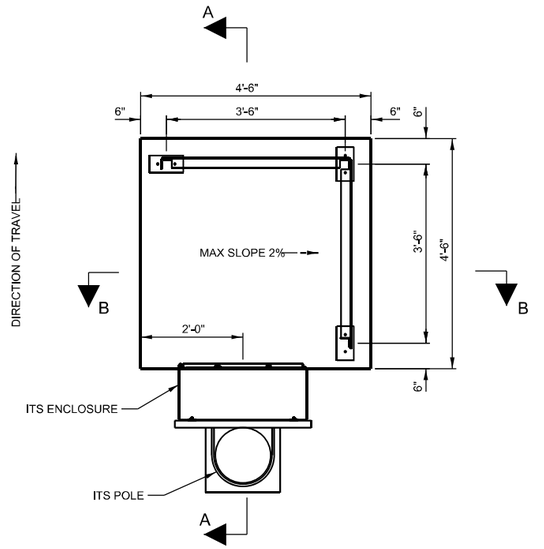
* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

NOTES:

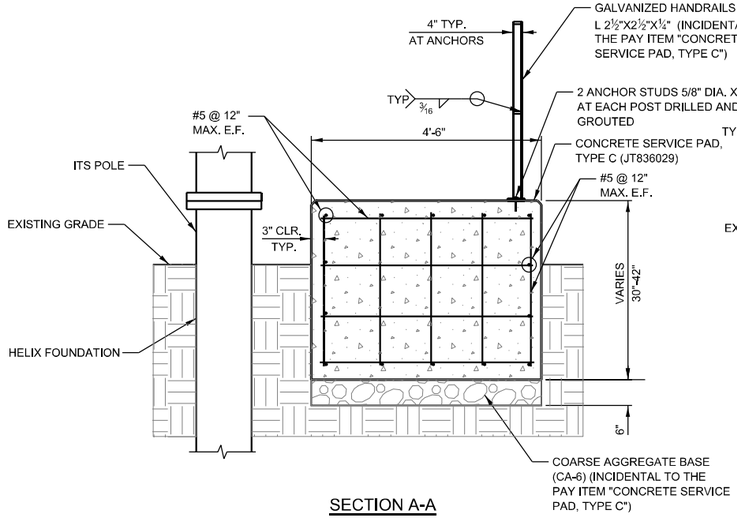
1. TYPE A SERVICE PADS SHALL BE INSTALLED ON SLOPES UP TO AND INCLUDING 1:6 (V:H).
2. TYPE B SERVICE PADS SHALL BE INSTALLED ON SLOPES GREATER THAN 1:6 AND LESS THAN OR EQUAL TO 1:3 WHEN WELL BEYOND THE CLEAR ZONE.
3. TYPE C SERVICE PADS SHALL BE INSTALLED ON SLOPES GREATER THAN 1:3 AS SHOWN ON SHEET M-ITS-1003 SHEET 2 OF 2.
4. ALL EXPOSED CONCRETE EDGES SHALL HAVE A 1" MINIMUM CHAMFER.
5. CONTRACTOR SHALL TAKE PRECAUTIONS TO STABILIZE EXISTING ITS POLES AND HELIX FOUNDATIONS WHILE EXCAVATING SOIL FOR INSTALLATION OF CONCRETE SERVICE PADS.
6. COMPACTED SOIL SHALL BE PLACED TO BE LEVEL WITH THE SERVICE PAD. CONTRACTOR MAY USE EXCAVATED SOIL FROM PLACING THE PAD'S AGGREGATE BASE FOR GRADING PURPOSES WITH APPROVAL OF THE ENGINEER. SEEDING AND EROSION CONTROL SHALL BE PER THE GENERAL NOTES ON SHEET GN-08.
7. SOIL EXCAVATED FOR THE PURPOSE OF MAINTAINING A STABLE WORKING SLOPE WHILE INSTALLING THE SERVICE PAD SHALL BE REPLACED. BACKFILL SHALL BE EARTH WHICH IS FREE FROM DEBRIS, CINDERS, AND ROCKS MEASURING 2" OR GREATER IN DIAMETER. IN THE EVENT THAT EXCAVATED MATERIAL IS UNSUITABLE FOR USE AS BACKFILL, THE CONTRACTOR SHALL USE A CLEAN, NATURAL SAND. THIS SUBSTITUTE BACKFILL SHALL BE INCIDENTAL TO THE SERVICE PAD INSTALLATION AND WILL NOT BE PAID FOR SEPARATELY. ALL BACKFILL MATERIALS SHALL BE COMPACTED TO THE SATISFACTION OF THE ENGINEER.
8. THE TOP SURFACE OF SOIL DISTURBED BY EXCAVATION FOR PLACING THE SERVICE PADS SHALL BE SEEDED AND PROTECTED WITH EROSION CONTROL MEASURES PER THE GENERAL NOTES ON SHEET GN-08.
9. SURFACE OF SERVICE PADS SHALL BE BROOM FINISHED.
10. ALL EMBEDDED LIFTING HARDWARE USED SHALL BE GALVANIZED.
11. FOR LIFTING INSERT, INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION INCLUDING MINIMUM EDGE DISTANCE AND SPACING REQUIREMENTS AND HAVE A 4:1 SAFETY FACTOR.
12. FOR LIFTING PLATES, INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND HAVE A STANDARD 5:1 SAFETY FACTOR FOR THE LIFTING HARDWARE.
13. PRECAST SERVICE PADS SHALL BE TRANSPORTED IN SUCH A MANNER THAT THE PAD WILL NOT BE DAMAGED DURING TRANSPORTATION. PLASTIC CORNER PIECES OR SHOCK-ABSORBING CUSHIONING MATERIAL SHALL BE USED AT ALL BEARING POINTS AND ALL EXPOSED CORNERS DURING TRANSPORTATION OF THE PRECAST ELEMENTS. PADS SHALL BE PROPERLY SUPPORTED DURING TRANSPORTATION SUCH THAT CRACKING OR DEFORMATION DOES NOT OCCUR. IF MORE THAN ONE PAD IS TRANSPORTED PER VEHICLE, PROPER SUPPORT AND SEPARATION MUST BE PROVIDED BETWEEN INDIVIDUAL PADS. PADS MUST BE LYING HORIZONTALLY DURING TRANSPORTATION, UNLESS OTHERWISE APPROVED.
14. PRECAST ELEMENT DAMAGED DURING HANDLING AND STORAGE SHALL BE REPAIRED OR REPLACED AT NO COST TO THE ILLINOIS TOLLWAY.
15. A PRECAST PAD SHALL NOT BE TRANSPORTED FROM THE CASTING YARD UNTIL A MINIMUM 5 DAY COMPRESSIVE STRENGTH SPECIFIED HAS BEEN ATTAINED.
16. MATERIAL QUALITY AND CONDITION AFTER SHIPMENT WILL BE INSPECTED AFTER DELIVERY TO THE CONSTRUCTION SITE, WITH THIS AND ANY PREVIOUS INSPECTIONS CONSTITUTING ON PARTIAL ACCEPTANCE.
17. REPAIR OF DAMAGE CAUSE TO THE PADS DURING FABRICATION, LIFTING AND HANDLING, OR TRANSPORTATION SHALL BE ADDRESSED ON A CASE-BY-CASE BASIS. DAMAGE WITHIN ACCEPTABLE LIMITS CAUSED TO THE TOP OF THE SURFACES OR TO KEYED EDGES OF THE PADS SHALL BE REPAIRED USING AN APPROVED REPAIR METHOD AT THE FABRICATION PLANT AT THE EXPENSE OF THE CONTRACTOR. REPETITIVE DAMAGE TO THE PADS SHALL BE CAUSE FOR STOPPAGE OF FABRICATION OPERATION UNTIL CAUSE OF DAMAGE CAN BE REMEDIED.
18. THE CONTRACTOR SHALL RETAIN THE SOLE RESPONSIBILITY FOR THE MEANS, METHODS, AND TECHNIQUES OF CONSTRUCTION OF THE PADS AND FOR COMPLIANCE WITH LAWS, REGULATIONS, AND CODES, AND FOR THE SAFETY OF CONSTRUCTION APPLICABLE TO THIS WORK.



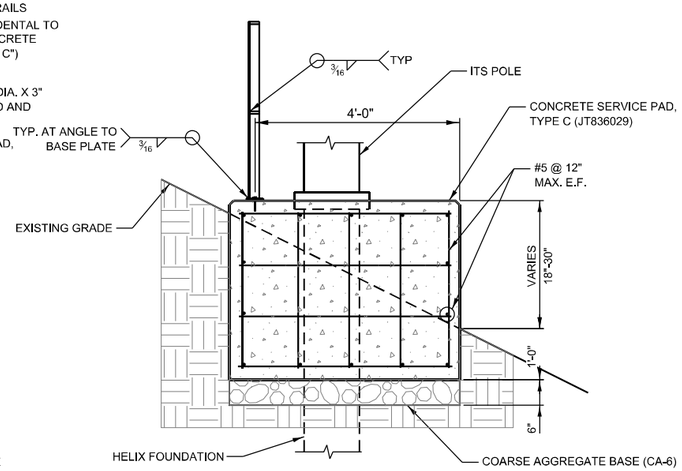

CONCRETE SERVICE PAD, TYPE C
ELEVATION VIEW




CONCRETE SERVICE PAD, TYPE C
PLAN VIEW




SECTION A-A




SECTION B-B

## DESIGN STRESSES

CONCRETE

CAST-IN-PLACE: f'c = 3,500 PSI AT 14 DAYS (CLASS SI)
PRE-CAST: f'c = 3,500 PSI AT 5 DAYS, f'c = 5,000 PSI AT 28 DAYS (CLASS PC)

STEEL

ASTM A615, GRADE 60 DEFORMED, Fy = 60,000 PSI (EPOXY COATED) OR
WELDED WIRE MESH, Fy = 60,000 PSI 6x6 D14

MODEL: M-ITS-1003 [Sheet]
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312-565-0450 Job No. 10806.00

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| USER NAME = lfranceschina | DESIGNED - R.SCARIA | REVISED - | |
| | DRAWN - R.SCARIA | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - G.THIESSE | REVISED - | |
| PLOT DATE = 8/12/2024 | DATE - 02/14/2025 | REVISED - | |

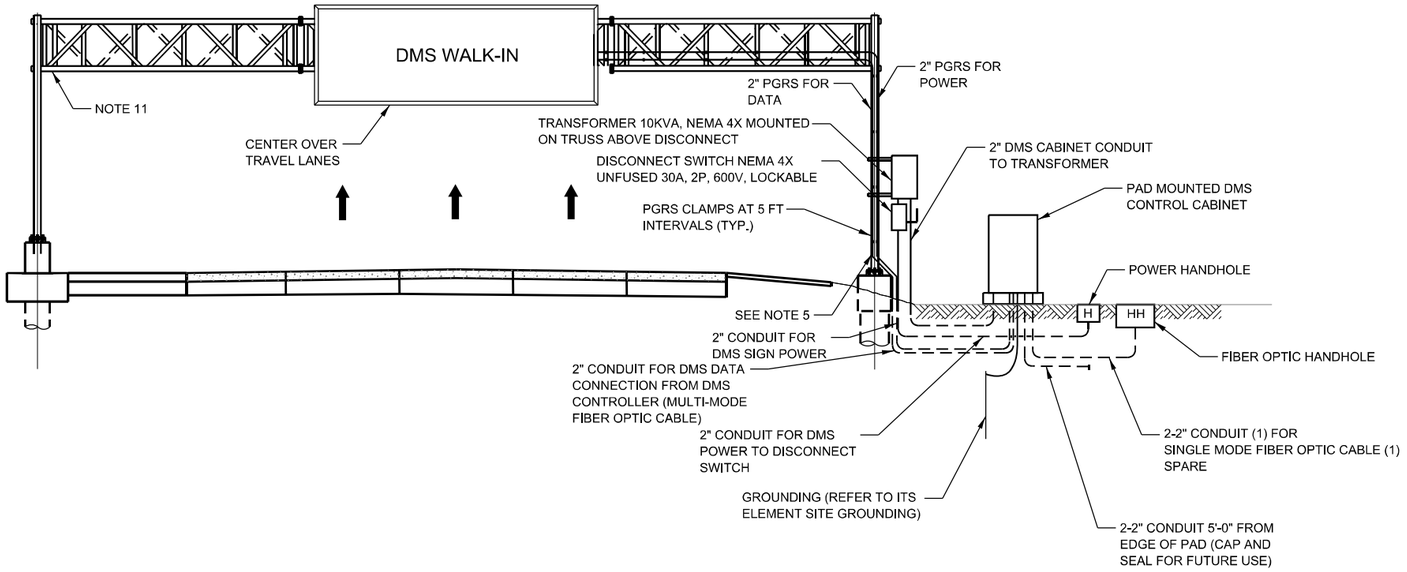
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**FIBER OPTIC DETAILS**
**ITS CONCRETE SERVICE PAD**

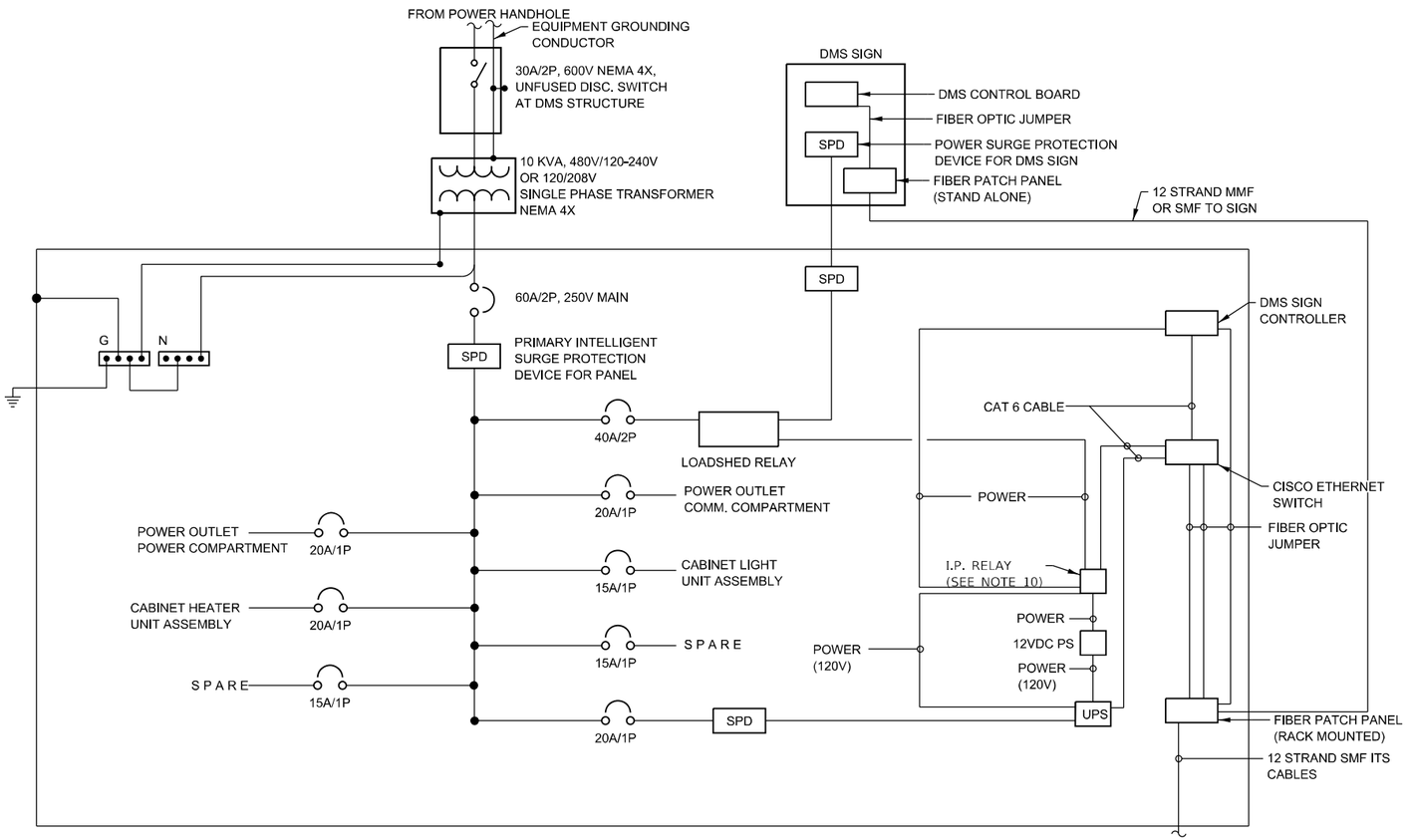
SCALE: | SHEET 16 OF 26 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 534 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS FED. AID PROJECT | | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)




| DMS CABINET - IP RELAY WIRING TABLE | | | | | |
|---|---|---|---|---|---|
| DESCRIPTION | | CONNECTION FROM | | CONNECTION TO | |
| IP TERMINAL | IP TERMINAL ASSIGNMENT | DEVICE | CONNECTION | DEVICE | CONNECTION |
| 1 | RESERVED FOR CCTV 1 | | | | |
| | | IP_RELAY | 12VDC (+) | CB | CB1A |
| 2 | RESERVED FOR CCTV 1 | CB | CB1B | IP_RELAY | 3 COMM |
| | | IP_RELAY | 3 NC | LOAD SHED RELAY | COIL (+) |
| | | SPLICE BLOCK | 120V | IP_RELAY | NC |
| 3 | DMS LOAD SHEDDING RELAY | | | | |
| | | IP_RELAY | 4NC | POWER OUTLET#1 | HOT |
| | | | | (COMMUNICATION) | |
| 4 | DMS CONTROLLER | | | | |
| 5 | RESERVED FOR FLASHING BEACONS | | | | |
| 6 | OPEN | | | | |
| 7 | OPEN | | | | |
| 8 | OPEN | | | | |




POWER WIRING SCHEMATIC FOR 100A PANEL, 120 / 240V LOAD CENTER OF DMS CABINET
(NOT TO SCALE)

COMMUNICATION RISER
(NOT TO SCALE)

GENERAL NOTES:

1. FURNISH AND INSTALL LOCKABLE SERVICE DISCONNECT AT PROPOSED STRUCTURE.
2. 10KVA, 480V/120/240V SINGLE PHASE TRANSFORMER SHALL BE MOUNTED ABOVE DISCONNECT.
3. THIS IS A DIAGRAMMATIC SCHEMATIC, ALL BREAKERS, TRANSFORMER LOAD CENTER SHALL BE SIZED AND WIRED AS PER MANUFACTURER RECOMMENDATIONS.
4. NEUTRAL AND GROUNDING SHALL BE BONDED AT SERVICE ENTRANCE DISCONNECT.
5. ALL UNDERGROUND CONDUITS SHALL BE NON-METALLIC CNC AND ABOVE GRADE CONDUITS SHALL BE RGS PVC COATED. COUPLERS SHALL BE UTILIZED WHEN TRANSITIONING FROM CNC TO PRGS.
6. MOUNT CLAMPS ON 5'-0" ON CENTER MOUNTING. HARDWARE SHALL BE USED AS PER CONDUIT MANUFACTURER RECOMMENDATION.
7. CONTRACTOR SHALL SUPPLY AND INSTALL CABLE REDUCER LUGS WHERE SIZE OF CABLE ENTERING THE DISCONNECT IS MORE THAN RECOMMENDED SIZE DUE TO VOLTAGE DROP.
8. ALL ELECTRICAL WORK FOR DMS WALK-IN SHALL BE PAID UNDER PAY ITEM "TRUSS MOUNTED LED DYNAMIC MESSAGE SIGN - TOLLWAY"
9. THIS SCHEMATIC IS FOR GUIDANCE ONLY. CONTRACTOR SHALL WIRE THE DMS CABINET AS PER MANUFACTURER RECOMMENDATIONS AND INDUSTRY STANDARDS.
10. THE COM (COMMON) CONTACT AND NC (NORMALLY CLOSED) CONTACT ON RELAY CONTACTS OF DIN RELAY SHALL FOLLOW THE TABLE ABOVE.
11. REFER TO ILLINOIS TOLLWAY STANDARD DRAWING F17 FOR OVERHEAD SIGN STRUCTURE SPAN TYPE (STEEL) STRUCTURE DETAILS.
12. FIBER PATCH PANEL IN DMS SIGN HOUSING SHALL BE A FACTORY TERMINATED UNIT WITH A 12-STRAND PIGTAIL CONNECTING TO RACK MOUNTED FIBER PATCH PANEL IN DMS CONTROLLER CABINET.

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|---|---|---|---|---|---|
| USER NAME | = lfranceschina | DESIGNED - | R.SCARIA | REVISED - | |
| | | DRAWN - | R.SCARIA | REVISED - | |
| PLOT SCALE | = $SCALE$ | CHECKED - | G.THIESSE | REVISED - | |
| PLOT DATE | = 8/12/2024 | DATE - | 02/14/2025 | REVISED - | |

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

**FIBER OPTIC DETAILS**
**DMS WALK-IN ELECTRICAL SCHEMATIC**

SCALE: | SHEET 17 OF 26 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1,5)R | WINNEBAGO | 1685 | 535 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

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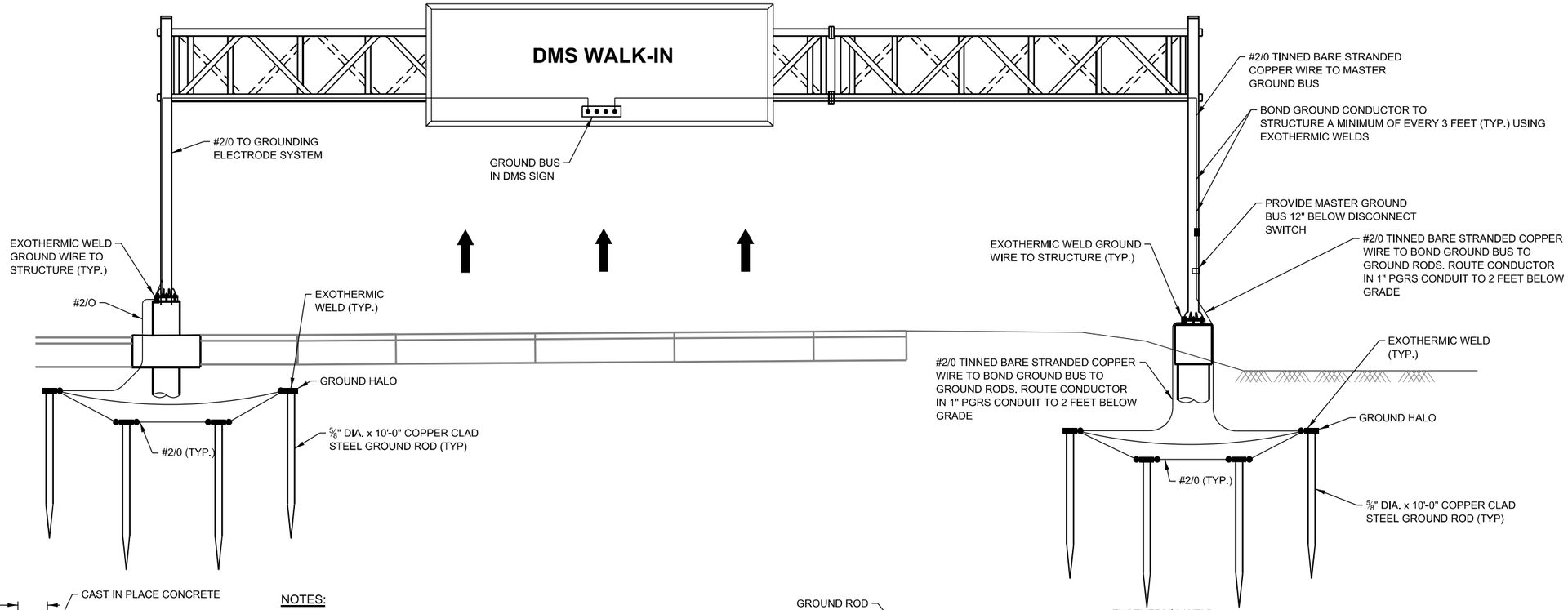
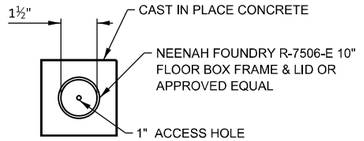
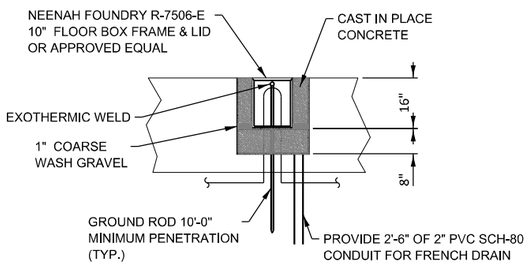
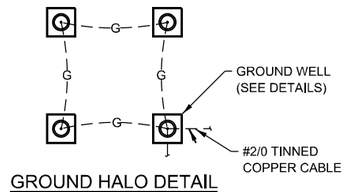



GROUND WELL PLAN DETAIL
(NOT TO SCALE, NOTE 3)



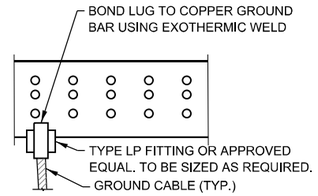

GROUND WELL ELEVATION DETAIL
(NOT TO SCALE, NOTE 3)



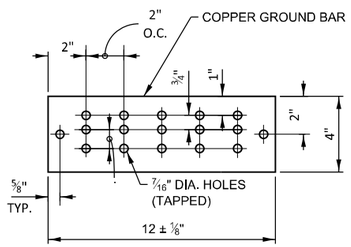

GROUND HALO DETAIL
N.T.S.

NOTES:

1. GROUND MOUNTED CONTROL CABINET SHALL BE PLACED UPSTREAM OF THE STRUCTURE AT THE LOCATION SHOWN ON THE PLAN VIEWS.
2. INSTALL MARKER TAPE DIRECTLY ABOVE GROUNDING ELECTRODE CONDUCTORS.
3. THE COST OF ALL MATERIALS, ALL GROUND BUSBARS, EXOTHERMIC WELDING GROUND WELL, GROUND RODS AND ALL OTHER ITEMS TO COMPLETE THE GROUNDING ELECTRODE SYSTEM SHALL BE INCLUDED IN THE PAY ITEM ASSOCIATED WITH DYNAMIC MESSAGE SIGN.
4. REFER FIBER OPTIC DETAIL SHEET-17 FOR DMS TYPICAL SITE WIRING.
5. GROUND RODS SHALL BE INSTALLED IN GROUND WELLS IN FINISHED GRADE UNLESS INSTALLED UNDER SHOULDERS OR PAVEMENT.




MASTER GROUND BUSBAR CONNECTION DETAIL
(NOT TO SCALE)




MASTER GROUND BUSBAR SUPPORT SPACING DETAIL
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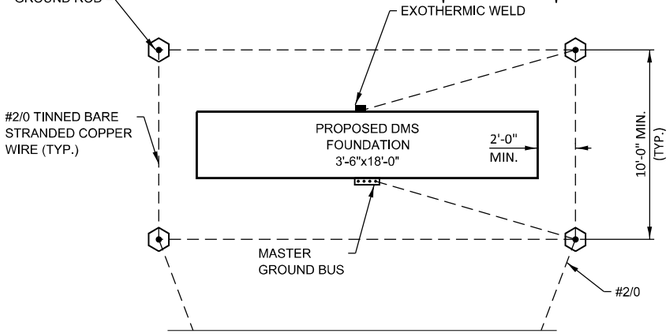


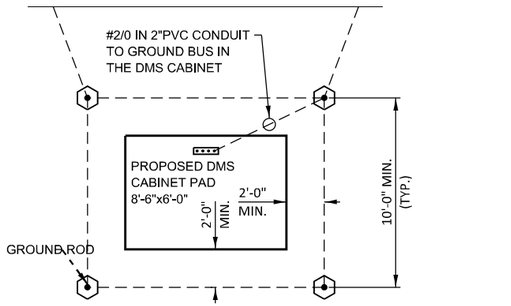


GROUNDING SCHEMATIC
(NOT TO SCALE)

MODEL: M-ITS-1101 [Sheet]
FILE NAME: c:\pw\wordir\benesch projects\projects\d0173716\D264C24_ML-sht-FiberDetails-9.dgn

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| | | | | | |
|---|---|---|---|---|---|
| USER NAME = lfranceschina | | DESIGNED - R.SCARIA | | REVISED - | |
| | | DRAWN - R.SCARIA | | REVISED - | |
| PLOT SCALE = $SCALE$ | | CHECKED - G.THIESSE | | REVISED - | |
| PLOT DATE = 8/12/2024 | | DATE - 02/14/2025 | | REVISED - | |

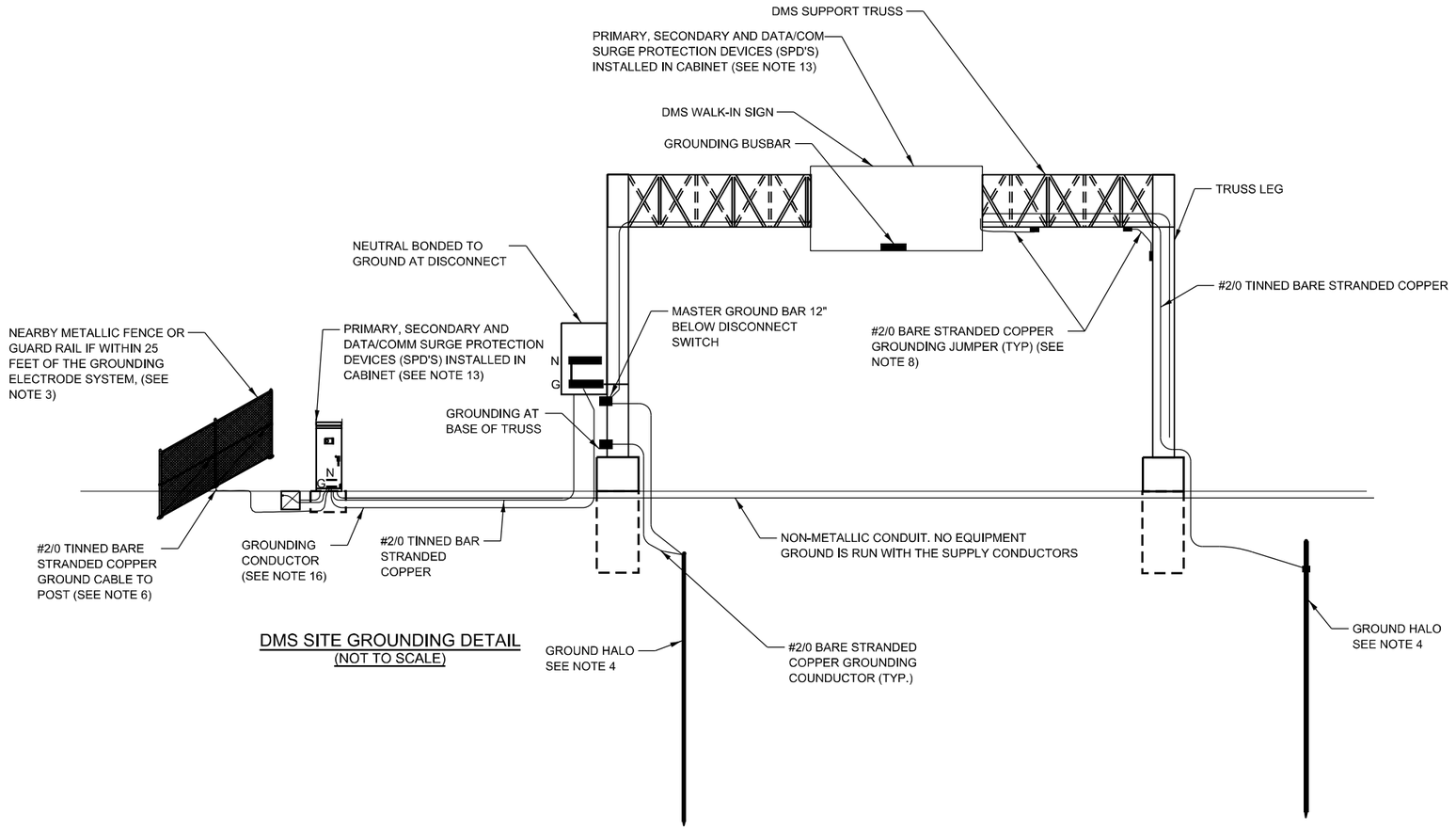
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**FIBER OPTIC DETAILS**
**DMS WALK-IN SITE GROUNDING PLAN**

SCALE: | SHEET 18 OF 26 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1,5)R | WINNEBAGO | 1685 | 536 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS FED. AID PROJECT | | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)




## DMS SITE GROUNDING DETAIL
(NOT TO SCALE)

1. ADDITIONAL GROUND RODS SHALL BE ADDED TO GROUNDING ELECTRODE CONDUCTOR AS REQUIRED UNTIL RESISTANCE TO GROUND IS 5 OHMS OR LESS. FOR DEVICE AND POWER SERVICE LOCATIONS, IF ADDITIONAL GROUND ROD ELECTRODES ARE REQUIRED INORDER TO ACHEIVE REQUIRED RESISTANCE THEY SHALL RADIATE OUT FROM EXISTING GROUND ROD ELECTRODES. THESE SHALL BE CONNECTED WITH #2/0 TINNED BARE STRANDED CONDUCTORS AND SHALL BE 20' FROM CONNECTED GROUND ROD. ALL COMMUNICATION EQUIPMENT GROUNDING SITES SHALL BE TESTED FOR RESISTANCE TO GROUND USING THE THREE-POINT FALL OF POTENTIAL TEST PER ANSI/EEE STD 81. ALL REQUIRED GROUNDING SHALL BE INCLUDED IN THE PAY ITEM ASSOCIATED WITH DMS SIGN.
2. GROUND RODS SHALL NOT BE ROUTED THROUGH FOUNDATIONS.
3. FENCES AND OTHER METALLIC STRUCTURES WITH PATHS TO GROUND SHALL BE CONNECTED TO EQUIPMENT GROUND IF THEY ARE LOCATED WITHIN 25' OF THE GROUNDING ELECTRODE SYSTEM OR ANY OBJECT GROUNDED TO THE GROUNDING ELECTRODE SYSTEM.
4. GROUND RODS SHALL BE INSTALLED IN GROUND WELLS IN FINISHED GRADE UNLESS INSTALLED UNDER SHOULDERS OR PAVEMENTS.
5. ALL EQUIPMENT GROUNDS SHALL BE PROPERLY CONNECTED TO A CHASSIS: ALL PAINT AND OTHER COATINGS, INCLUDING GALVANIZATION, SHALL BE REMOVED PRIOR TO TERMINATION OF A GROUND, AFTER THE GROUND IS TERMINATED A NON-OXIDIZING COATING SHALL BE PAINTED OVER THE EXPOSED METAL SURFACES.
6. GROUNDING ELECTRODE SYSTEM CONNECTIONS TO FENCING SHALL BE MADE USING HEAVY DUTY TINNED LISTED PIPE CLAMPS DESIGNED FOR GROUNDING AND STAINLESS STEEL HARDWARE.
7. ALL GROUNDING DIAGRAMS ARE SCHEMATIC ONLY.
8. ALL METALLIC MEMBERS OF THE DMS TRUSS AND THE DMS SIGN WITHIN 6 FEET OF EACH OTHER SHALL BE BONDED TOGETHER. WELDS SHALL BE CONSIDERED AN ACCEPTABLE BONDING METHOD. U-BOLT CONNECTIONS SHALL NOT BE CONSIDERED AN ACCEPTABLE BONDING METHOD.
9. AT LEAST AN 8 INCH MINIMUM BENDING RADIUS SHALL BE MAINTAINED ON ALL GROUNDING ELECTRODE CONDUCTORS. THE ANGLE OF ANY BENDING SHALL NOT BE LESS THAN 90 DEGREE.
10. GROUNDING CONDUCTORS SHALL ALWAYS ROUTE AS STRAIGHT AS POSSIBLE. "U" FORM JUMPERS SHALL BE ACCEPTABLE ONLY FOR GATES AND DOORS.
11. THE QUANTITY OF GROUNDING ELECTRODE CONDUCTORS CONNECTED TO A GROUND ROD ELECTRODE SHALL BE LIMITED TO THREE.
12. WHENEVER POSSIBLE, GROUND ROD ELECTRODES SHALL BE INSTALLED NO CLOSER THAN 11' FROM A FOUNDATION.
13. EVERY COPPER CONDUCTOR OR CABLE ENTERING OR LEAVING A DMS ENCLOSURE, THE DMS CONTROLLER, OR THE CCTV ELECTRONICS ENCLOSURE SHALL BE PROTECTED, WITH A SURGE PROTECTION DEVICE.
14. DIAGRAM OMITS EQUIPMENT GROUNDING INSIDE ENCLOSURES.
15. GROUNDING CONDUCTOR SHALL BE #2/0 TINNED BARE STRANDED COPPER. CONTRACTOR SHALL INSTALL GROUND RODS AS NECESSARY TO ENSURE GROUND RESISTANCE AT DMS CABINET IS 5 OHMS OR LESS.
16. IF THERE IS A METAL HANDRAIL WITHIN 20 FEET OF CONTROL CABINET CONNECT HANDRAIL TO GROUNDING SYSTEM WITH #2/0 TINNED BARE STRANDED COPPER CONDUCTOR.

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312-565-0450 Job No. 10800.00

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| | DRAWN - R.SCARIA | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - G.THIESSE | REVISED - | |
| PLOT DATE = 8/12/2024 | DATE - 02/14/2025 | REVISED - | |

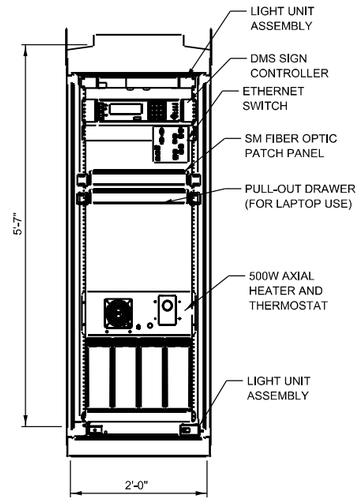
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER OPTIC DETAILS
DMS WALK-IN TYPICAL SITE WIRING DETAIL

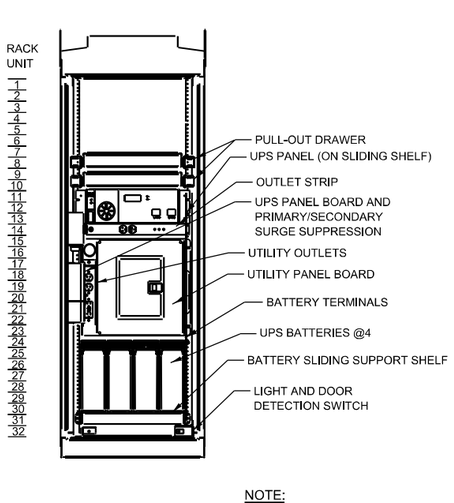
SCALE: | SHEET 19 OF 26 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 537 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS FED. AID PROJECT | | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)



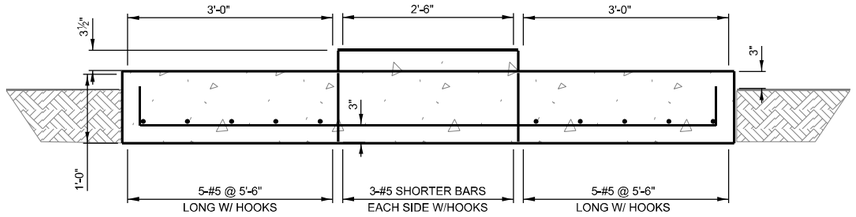

SECTION B-B FRONT VIEW
(NO DOOR SHOWN)



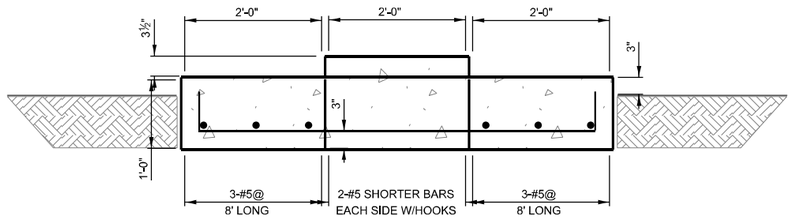

SECTION A-A REAR VIEW
(NO DOOR SHOWN)

NOTE:
SPLICE BLOCK, LOAD SHED RELAY, CONTROL POWER TRANSFORMER & DIN IP RELAY MOUNTED ON SIDE WALL ADJACENT UTILITY PANEL BOARD.

## TYPE 334 DMS CABINET LAYOUT DETAILS

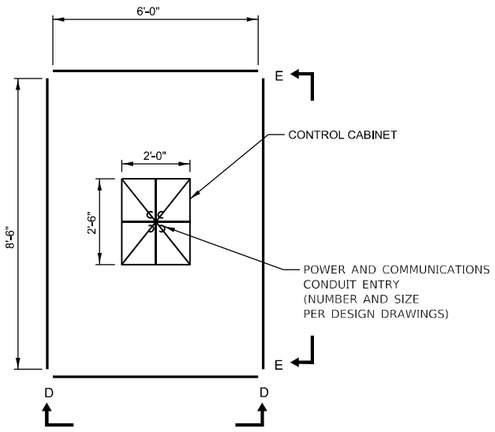



SECTION E-E

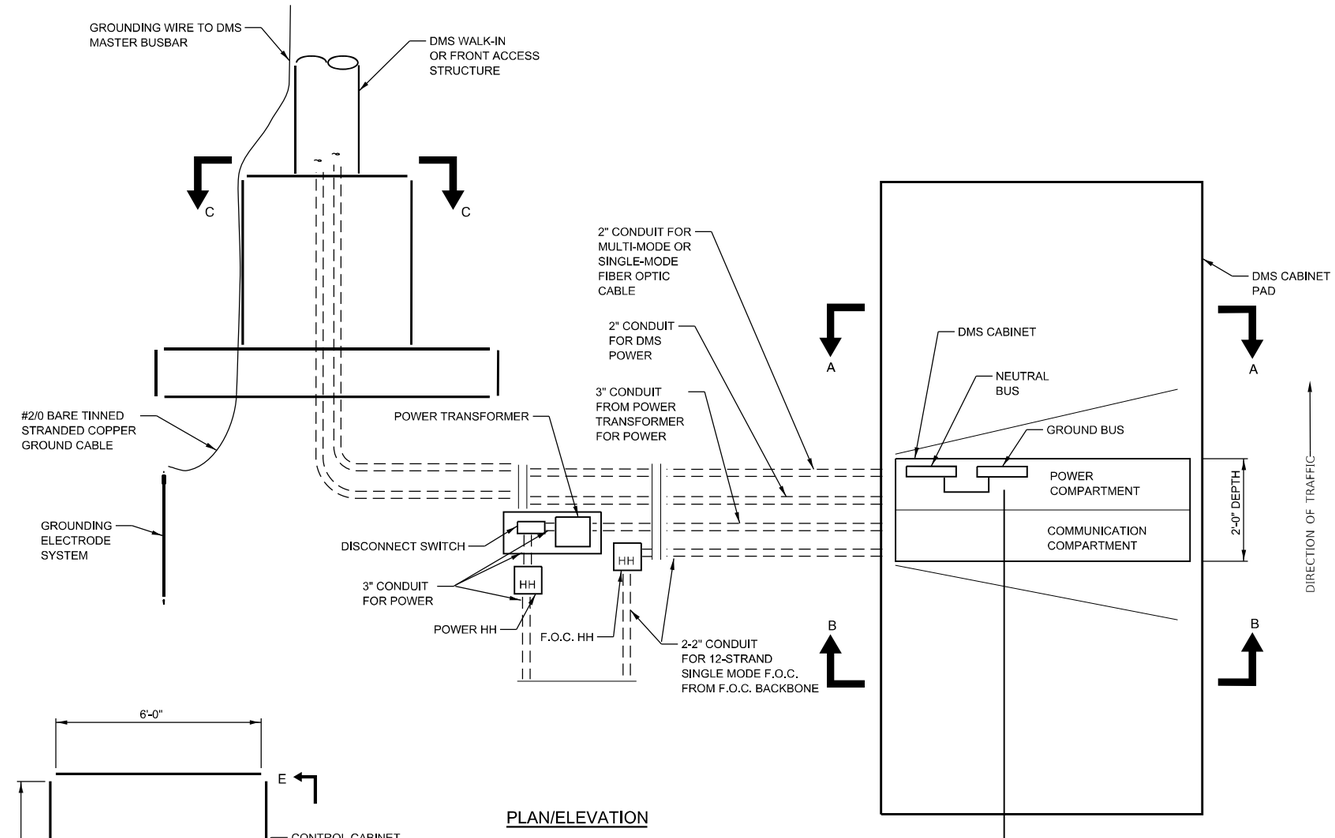



SECTION D-D
NOT TO SCALE

## DMS CONTROLLER FOUNDATION DETAILS



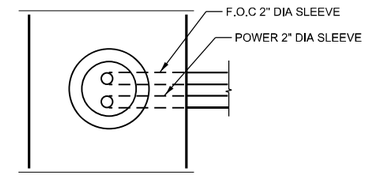

PLAN




PLAN/ELEVATION

DMS CABINET NOTES:

1. PAD MOUNT CONFIGURATION
2. 0.125" ALUMINUM 5052-H34 CONSTRUCTION WITH CONTINUOUSLY WELDED EXTERNAL SEAMS
3. THREE POINT LATCH WITH SST HANDLE
4. DOUBLE FLANGED DOOR SEAL WITH ½" X 2" CLOSED CELL NEOPRENE GASKET WITH CORBIN #2 LOCK ON EACH DOOR.
5. FULL LENGTH EIA GAGE FOR 19" EQUIPMENT
6. ADJUSTABLE PULL OUT DRAWER
7. DOOR OPENING: 21.50" X 54.75"
8. FULL LENGTH STAINLESS STEEL HINGE
9. ALL STAINLESS STEEL HARDWARE
10. CORBIN #2 LOCK
11. NEMA 4X ENCLOSURE
12. SHIPPED ON WOOD PALLET
13. MOUNT LAYER 2 ETHERNET SWITCH (DIN-RAIL MOUNT) USING DIN-RAIL MOUNT
14. BATTERIES AND UPS SHALL BE PLACED ON A SLIDING SHELF
15. CABINET DIMENSION 24"X30"X67"




SECTION C-C
POWER AND F.O.C WITHIN DMS FOUNDATION

DMS CABINET FOUNDATION NOTES:

1. COORDINATE SIZE OF OPENING WITH DMS CONTROLLER CABINET BOTTOM CONDUIT CUT-OUTS
2. CONCRETE = 4,000 PSI (MIN.)
3. REBAR EPOXY COATED FY=60,000 PSI (MIN.)
4. PROVIDE SHOP DRAWINGS PRIOR TO CONSTRUCTION
5. INCLUDE CONDUITS


MODEL: M-ITS-1107 [Sheet]
FILE NAME: c:\pw\wordir\benesch projects\projects\d0173716\D2664C24_ML-sht-FiberDetails-11.dgn

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| USER NAME = lfranceschina | DESIGNED - R.SCARIA | REVISED - |
|---|---|---|
| | DRAWN - R.SCARIA | REVISED - |
| PLOT SCALE = $SCALE$ | CHECKED - G.THIESSE | REVISED - |
| PLOT DATE = 8/12/2024 | DATE - 02/14/2025 | REVISED - |

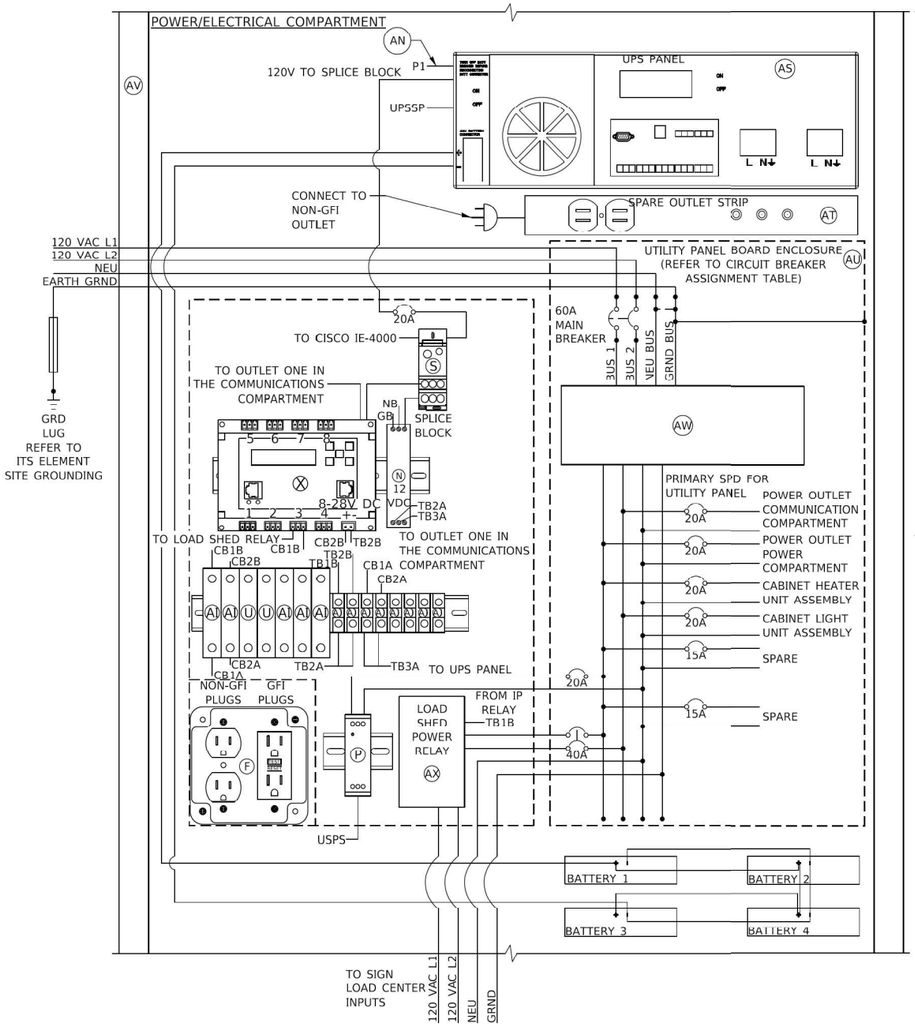
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

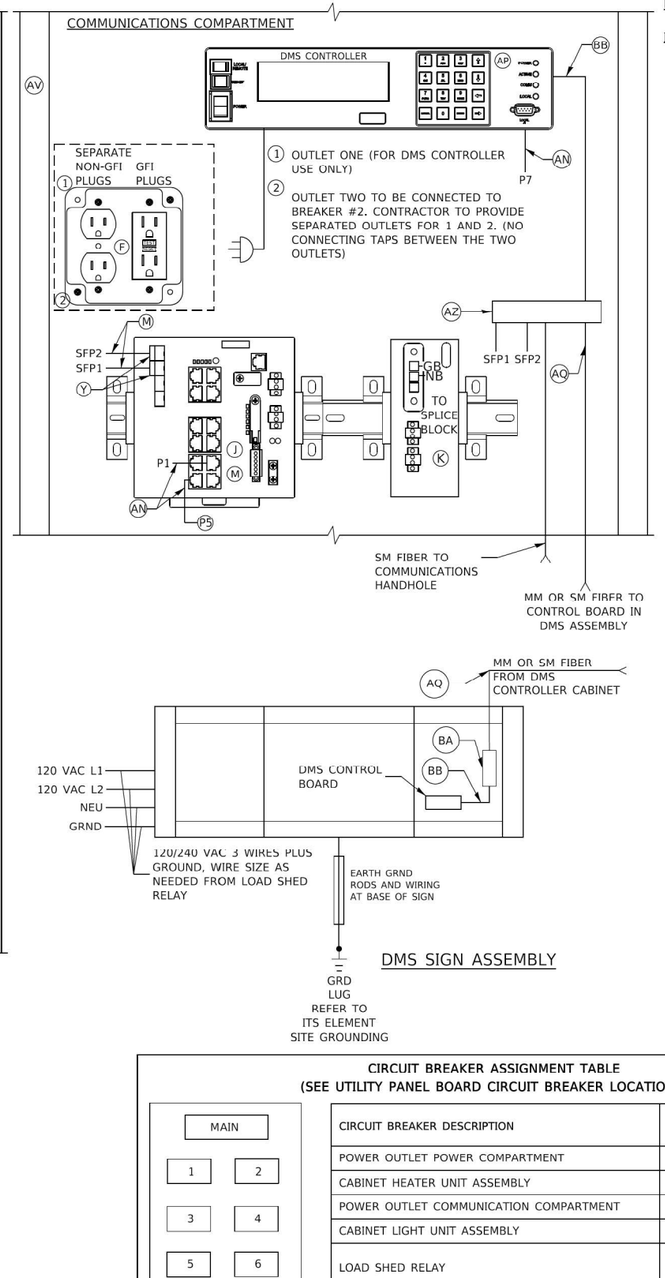
FIBER OPTIC DETAILS
DMS CABINET LAYOUT DETAIL

SCALE: | SHEET 20 OF 26 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 538 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)




LEGEND:

| ITEM | DESCRIPTION |
|---|---|
| A-E | NOT USED |
| F | TWO DUPLEX 120V RECEPTACLES, ONE GFCI (HUBBELL GFR5362TR) AND ONE STANDARD (HUBBELL BR20WR) |
| G-I | NOT USED |
| J | NETWORK SWITCH CISCO IE-4000-8T4G-E |
| K | CISCO POWER SUPPLY, PWR-IE170W-PC-AC= |
| L | IP SERVICES LICENSE: L-IE4000-RTU= |
| M | 2 METER - SMFO LC-SC DUPLEX JUMPERS, CORNING/047202R5120002M |
| N | AC/DC POWER SUPPLY, 12VDC, 10 WATTS, MEAN WELL/MDR-10-12 |
| O | SMF PATCH PANEL WITH SC CONNECTORS FIBER CONNECTIONS G620U012 LAN-100-0 |
| P | 120VAC SURGE SUPPRESSOR, MOUNTED ON DIN RAIL COOPER CROUSE HINDS/MA15/D/1/SI OR APPROVED EQUAL |
| Q-R | NOT USED |
| S | SPLICE BLOCK, ALTECH/38041 |
| T | NOT USED |
| U | 5A CIRCUIT BREAKER, ALLEN BRADLEY/1492-SPM1B050 |
| V-W | NOT USED |
| X | POWER CONTROLLER, 8-CHANNEL DIN ETHERNET RELAY DIGITAL LOGGERS/DIN 4 |
| Y | (2) GLC-LX-SM-RGD = 1 GBPS SM SFP MODULES |
| Z | NOT USED |
| AA-AH | NOT USED |
| AI | 2A CIRCUIT BREAKER, ALLEN BRADLEY/1492-SPM1D020 |
| AJ | TERMINAL BLOCK, ALLEN BRADLEY/1492-CD8 |
| AK-AM | NOT USED |
| AN | INDOOR/OUTDOOR RATED CAT6 (1000MBS, TEMPERATURE HARDENED) THESE ARE THE CAT6 CABLES ROUTED INSIDE CABINET |
| AO | NOT USED |
| AP | DMS CONTROLLER |
| AQ | 12-STRAND MULTI-MODE OR SINGLE-MODE FIBER OPTIC CABLE |
| AR | NOT USED |
| AS | UPS PANEL ALPHA TECHNOLOGIES FXM1100 WITH BATTERIES |
| AT | OUTLET STRIP |
| AU | DMS MANUFACTURER UTILITY PANEL ENCLOSURE |
| AV | DMS CONTROL CABINET TYPE 334 NEMA 4X |
| AW | 120/240VAC MTL ZONE DEFENDER MODEL ZD16100 |
| AX | LOAD SHED POWER RELAY MAGNECRAFT MODEL 199X-12 WITH COVER |
| AZ | RACK MOUNTED FIBER PATCH PANEL |
| BA | STAND ALONE FIBER PATCH PANEL |
| BB | 2 METER FIBER JUMPER, CORNING (TYPE AND CONNECTION PER DMS MANUFACTURER) |

NOTES:

1. FABRICATOR TO PROVIDE CABINET DRAWINGS SUBMITTAL FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
2. ENTIRE COMPLETED SYSTEM SHALL BE GROUNDED AND BONDED IN ACCORDANCE WITH MOTOROLA R56 MANUAL AND THE APPLICABLE ARTICLES OF SECTION 250 OF THE NATIONAL ELECTRICAL CODE.
3. DMS CONTROLLER SHOWN REPRESENTS A GENERIC DMS CONTROLLER. DMS CONTROLLERS ARE SUPPLIED BY THE DMS MANUFACTURER AND THEREFORE THE FRONT PANEL MAY DIFFER.

**CIRCUIT BREAKER ASSIGNMENT TABLE**
**(SEE UTILITY PANEL BOARD CIRCUIT BREAKER LOCATIONS)**




| CIRCUIT BREAKER DESCRIPTION | AMPS | CIRCUIT BREAKER LOCATION |
|---|---|---|
| POWER OUTLET POWER COMPARTMENT | 20 | 1 |
| CABINET HEATER UNIT ASSEMBLY | 20 | 2 |
| POWER OUTLET COMMUNICATION COMPARTMENT | 20 | 3 |
| CABINET LIGHT UNIT ASSEMBLY | 15 | 4 |
| LOAD SHED RELAY | 40 | 5 |
| | | 7 |
| UPS PANEL | 20 | 6 |
| NOT USED | - | 8 |

MODEL: M-ITS-1108 [Sheet]
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| | | | | | |
|---|---|---|---|---|---|
| USER NAME = lfranceschina | DESIGNED - R.SCARIA | REVISED - |
| | DRAWN - R.SCARIA | REVISED - |
| PLOT SCALE = $SCALE$ | CHECKED - G.THIESSE | REVISED - |
| PLOT DATE = 8/12/2024 | DATE - 02/14/2025 | REVISED - |

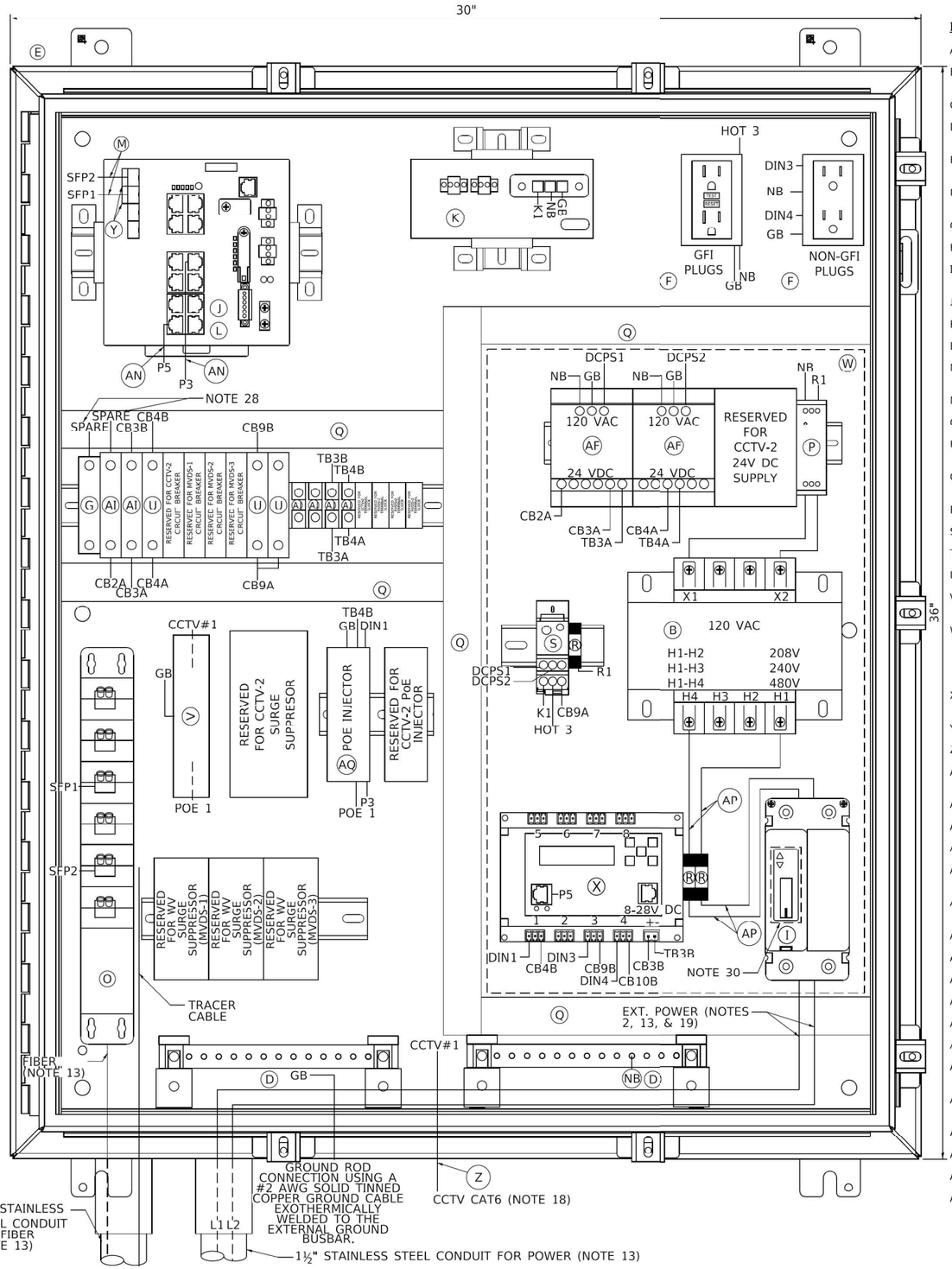
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**FIBER OPTIC DETAILS**
**DMS CABINET WIRING DIAGRAM**

SCALE: | SHEET 21 OF 26 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1,5)R | WINNEBAGO | 1685 | 539 |
| | | CONTRACT NO. 64C24 | | |
| | | ILLINOIS | FED. AID PROJECT | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)




| ITEM | DESCRIPTION |
|---|---|
| A | NOT USED FOR THIS SHEET APPLICATION |
| B | CONTROL POWER TRANSFORMER, 1000VA, 208/240/480-120VAC, 1PH SQUARE D/CLASS 9070 - T1000 D95 |
| C | NOT USED FOR THIS SHEET APPLICATION |
| D | TWO (2) GROUNDING BAR SYSTEM HOFFMAN/PGS2K, BONDED OR SEPARATED AS REQUIRED. |
| E | NEMA 4X STAINLESS STEEL, 36"H X 30"W X 12"D ENCLOSURE WITH 33"X27" PANEL, HOFFMAN/A36H3012SS6LP & A36P30 |
| F | TWO DUPLEX 120V RECEPTACLES, ONE GFCI AND NON-GFI (SEE NOTE 9) HUBBELL/GFR5362 & BR20WR |
| G | 24VDC, 1P, 15A CIRCUIT BREAKER SCHNEIDER ELECTRIC/MGN61510 |
| H | NOT USED FOR THIS SHEET APPLICATION |
| I | 480V, 2P, 30A CIRCUIT BREAKER WITH TERMINAL SHIELD EATON/HFD2030L & 625B220G07 |
| J | NETWORK SWITCH CISCO IE-4000-8T4G-E |
| K | CISCO POWER SUPPLY, PWR-IE170W-PC-AC= |
| L | IP SERVICES LICENSE: L-IE4000-RTU= |
| M | 2 METER - SMFO LC-LC DUPLEX JUMPERS, CORNING/040402R5Z20002M |
| N | NOT USED FOR THIS SHEET APPLICATION |
| O | SMF PATCH PANEL WITH LC CONNECTORS, SEE SPECIAL PROVISIONS |
| P | 120VAC SURGE SUPPRESSOR, MOUNTED ON DIN RAIL COOPER CROUSE HINDS/MA15/D/1/SI OR APPROVED EQUAL |
| Q | PANDUIT WIRING DUCT (OR EQUIVALENT) PANDUIT/F1X2LG6 WITH COVER-C1LG6 |
| R | 10 AMP FUSE, GOULD (MERSEN)/ATM-10 |
| S | SPLICE BLOCK, ALTECH/38041 |
| T | NOT USED FOR THIS SHEET APPLICATION |
| U | 5A CIRCUIT BREAKER, ALLEN BRADLEY/1492-SPM1B050 |
| V | CAT6 PoE+ SURGE SUPPRESSOR: USE AXIS T8061 FOR AXIS PoE CAMERA |
| W | CLEAR POLY METHYL METHACRYLATE (PMMA, PLEXIGLAS) SAFETY COVER ENCOMPASSING ITEMS AF, P, S, R, B, X, & I. (THE INSTALLER SHALL PERMANENTLY AFFIX A LABEL STATING "DANGER 480 VAC" OR "DANGER 240 VAC" OR "DANGER 120 VAC" FOR 120 VAC AS FIELD CONDITIONS WARRANT.) |
| X | POWER CONTROLLER, 8-CHANNEL DIN ETHERNET RELAY DIGITAL LOGGERS/DIN 4 |
| Y | (2) CISCO GLC LX SM RGD = 1 GBPS SM SFP MODULES |
| Z | CATEGORY 6 CABLE, 23 AWG, OUTDOOR RATED CABLE BELDEN/7953A |
| AA | SENSOR SURGE SUPPRESSION, WAVETRONIX - CLICK-200 OR ISS ZONE BARRIER ZB24510 |
| AB | NOT USED FOR THIS SHEET APPLICATION |
| AC | NOT USED FOR THIS SHEET APPLICATION |
| AD | NOT USED FOR THIS SHEET APPLICATION |
| AE | RS-232 / RS-485 TO ETHERNET CONVERTOR WAVETRONIX - CLICK-301 OR ISS-MOXA P5150A-T, DK-035T |
| AF | AC/DC POWER SUPPLY, 24VDC WAVETRONIX - CLICK-204 OR ISS LAMBDA DSP100-24 |
| AG | NOT USED FOR THIS SHEET APPLICATION |
| AH | NOT USED FOR THIS SHEET APPLICATION |
| AI | 2A CIRCUIT BREAKER, ALLEN BRADLEY/1492-SPM1B020 |
| AJ | TERMINAL BLOCK, ALLEN BRADLEY/1492-CD8 |
| AK | MVDS ASSEMBLY (NOT SHOWN), SEE SPECIAL PROVISIONS |
| AL | TRANSFORMER COVERS, SQUARE D/9070FSC2 |
| AM | 5-CONDUCTOR JUMPER (Tx, Rx, GND, RTS, CTS), RS-232 SERIAL COMMUNICATIONS (APPLICABLE TO ISS/MOXA) |
| AN | INDOOR/OUTDOOR RATED CAT6 (1000MBS, TEMPERATURE HARDENED) THESE ARE THE CAT6 CABLES ROUTED INSIDE CABINET |
| AO | MVDS CABLE, SEE SPECIAL PROVISIONS |
| AP | #10 AWG |
| AQ | PoE INJECTOR AXIS T8144 24VDC |
| AR | T-BUS CONNECTOR (WAVETRONIX) |

NOTES:

1. ALL POWER WIRING SHALL BE RHH/RHW WITH WIRE TERMINALS OR TINNED.
2. CONTRACTOR TO VERIFY CORRECT TRANSFORMER TAPS ARE USED BASED ON INCOMING POWER SOURCE.
3. ALL CABLES AND EQUIPMENT SHALL BE PROPERLY DRESSED AND LABELED. ALL CONDUITS SHALL BE PROPERLY PLUGGED WITH DUCT SEAL PUTTY (RAINBOW TECHNOLOGIES OR EQUIVALENT).
4. NOT USED.
5. EACH 120VAC OUTLET, PS CR TRANSFORMER (ITEM F, K, L, & AF) SHALL BE FED FROM A SEPARATE INPUT LINE.
6. THE DIN RAIL(S) FOR ITEMS J & K SHALL BE INSTALLED WITH THE CENTER LINE NO LESS THAN 5 INCHES FROM ANY OBSTACLE ABOVE AND NO LESS THAN 4 INCHES FROM ANY OBSTACLE BELOW. ALL DIN RAIL SHALL BE GROUNDED.
7. ALL CABLES INSTALLED WITHIN THE CABINET AND POLE SHALL BE OUTDOOR RATED.
8. WIFI COMMUNICATION SHALL BE DISABLED ON DIN ETHERNET RELAY.
9. THE GFI OUTLETS LOAD SHALL NOT BE CONNECTED TO ANY OTHER LOAD IN THE ENCLOSURE. THE GFI'S ARE INTENDED TO BE UTILIZED FOR EXTERNAL EQUIPMENT ONLY. EACH OUTLETS TAB SHALL BE BROKEN SO THEY ARE INDEPENDENT.
10. ALL BREAKERS SHALL BE LABELED (E.G. CAMERA-AC, CAMERA-DC, DIN RELAY-AC, DIN RELAY-DC, CELL MODEM-AC ETC.).
11. NOT USED FOR THIS SHEET APPLICATION.
12. USE THE MOUNTING TABS ON THE IP RELAY UNIT TO MOUNT THE UNIT DIRECTLY TO THE BACK PLATE. REFER TO THE IP RELAY WIRING TABLE FOR WIRING DETAILS.
13. THE FIBER CABLE SHALL RUN STRAIGHT DOWN FROM THE GATOR PATCH THROUGH THE LEFT MOST CONDUIT. THE POWER CABLE SHALL BE PULLED THROUGH THE CONDUIT TO THE RIGHT OF THE FIBER CONDUIT. NO SLACK SHALL BE PLACED IN THE CABINET. ALL POWER AND COMMUNICATION CABLE SLACK SHALL BE PLACED IN THEIR RESPECTIVE HANDHOLES.
14. POWER FEED TO THE CISCO IE4000 SWITCH SHALL BE FROM THE 120VAC INPUT WHEN THE ENCLOSURE IS AC POWERED.
15. NOT USED FOR THIS SHEET APPLICATION.
16. IF A SOLAR GENERATOR IS CONNECTED, THEN ITEM P AND THE SECONDARY SIDE OF ITEM B SHALL BE CONNECTED UNTIL A FINAL AC CONNECTION IS MADE.
17. ITEM X IS USED TO CONTRCL POWER TO THE CAMERAS AND DETECTORS. ALL 120VAC CONNECTIONS ON ITEM X SHALL BE PROTECTED.
18. CABLES TO BE ROUTED THROUGH POLE.
19. WHEN A 24VDC TO 120VAC POWER GENERATOR IS CONNECTED, THEN THE 480VAC TO 120VAC STEP DOWN TRANSFORMER IS BYPASSED.
20. NOT USED FOR THIS SHEET APPLICATION.
21. NOT USED FOR THIS SHEET APPLICATION.
22. DIN RAIL SHALL BE INSTALLED AS ILLUSTRATED ON DRAWING. DIN RAIL SHALL BE GROUNDED TO THE GROUND BUS.
23. BOND NEUTRAL AND GROUND BUSES TOGETHER, TIE THE ENCLOSURE INTO THE GROUND BUS.
24. ITEM W SHALL BE FORMED AND MOLDED TO FIT AROUND THE AREA DENOTED BY THE DASHED LINE. THE PLEXIGLASS SHALL BE MOUNTED TO THE BACKPLATE WITH SUFFICIENT AIR HOLES TO ALLOW HEAT TO ESCAPE THE AREA. THERE SHALL ALSO BE OPENINGS ON THE BOTTOM TO ALLOW CABLES TO BE PASSED FROM THE AC SECTION TO THE OTHER SECTIONS OF THE ENCLOSURE.
25. ITEM AL SHALL BE PLACED ON ITEM B.
26. ALL INTERNAL ENCLOSURE ROUTED AND TERMINATED CAT6 CABLE SHALL BE TEMPERATURE RATED.
27. ALL INTERNAL 24VAC, 120VAC (STARTING ON SECONDARY SIDE OF ITEM B) AND ANY DC VOLTAGE POWER FEEDS USE #16 AWG CABLE.
28. SPARE BREAKER RESERVED.
29. ALL CONDUIT EXITING THE BOTTOM OF THE CABINET SHALL BE INSTALL IN-LINE WITH THE EQUIPMENT IT IS CONNECTED TO. THE CABLES SHALL BE INSTALLED IN A NEAT AND PROFESSIONAL MANNER.
30. PROVIDE WINDOW IN PMMA SHIELD FOR ACCESS TO BREAKER. MOUNT BREAKER FLUSH WITH PMMA SHIELD USING MOUNTING BRACKET.

MODEL: M-ITS-1203 [Sheet]
FILE NAME: c:\pwwordir\benesch projects\projects\d0173716\D284C24_ML-sht-FiberDetails-13.dgn

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Alfred Benesch & Company
35 W Wacker Drive, Suite 3200
Chicago, Illinois 60601
312-565-0450 Job No. 10800.00

| | | | |
|---|---|---|---|
| USER NAME = lfranceschina | DESIGNED - R.SCARIA | REVISED - | |
| | DRAWN - R.SCARIA | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - G.THIESSE | REVISED - | |
| PLOT DATE = 8/12/2024 | DATE - 02/14/2025 | REVISED - | |

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

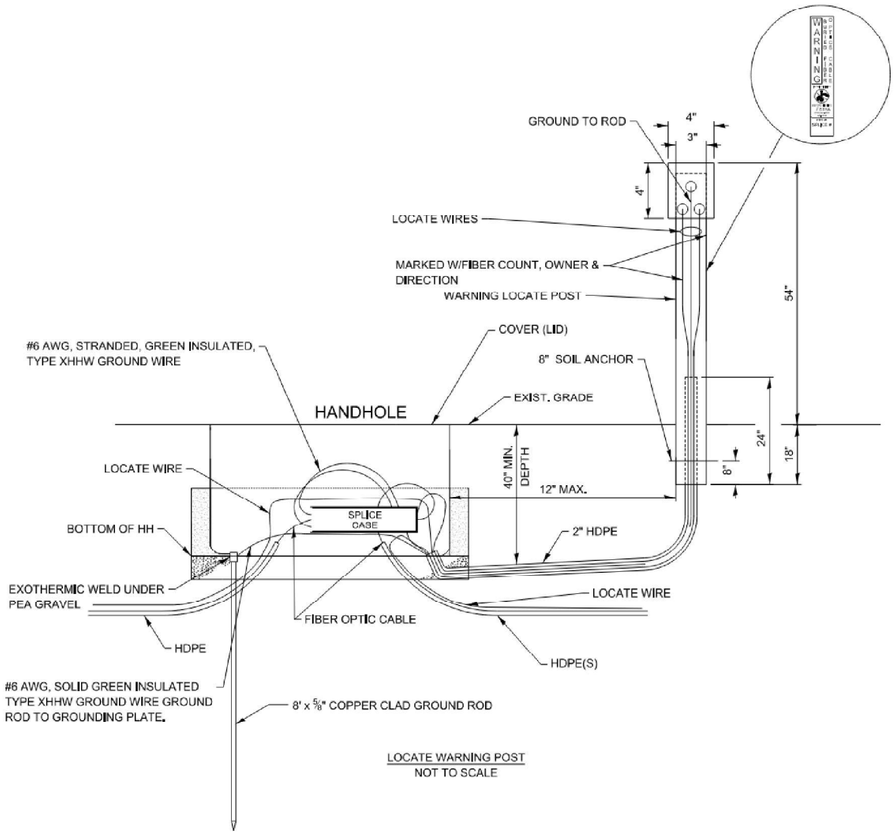
**FIBER OPTIC DETAILS**
**CABINET LAYOUT AND WIRING ITS POLE MOUNTED ENCLOSURE**

SCALE: | SHEET 22 OF 26 SHEETS | STA. | TO STA.

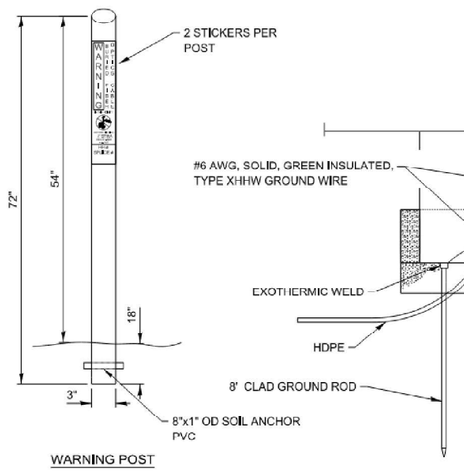
| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 540 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS FED. AID PROJECT | | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

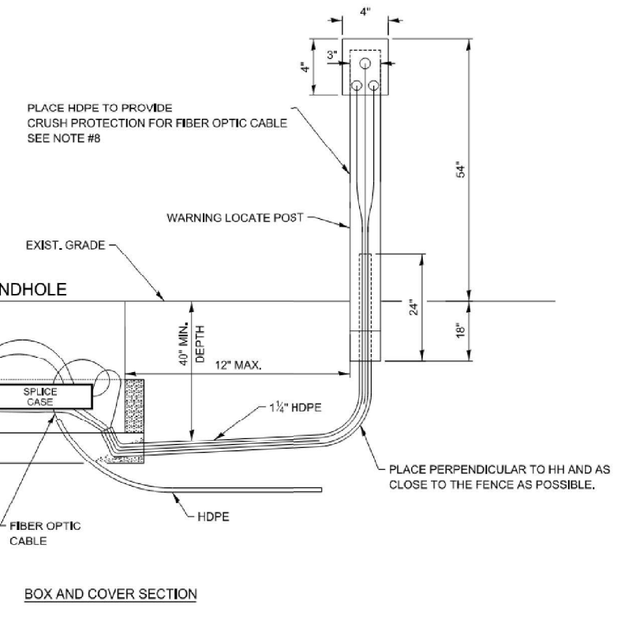
# FIBER HANDHOLE SITE DETAIL AND GROUNDING




LOCATE WARNING POST
NOT TO SCALE




WARNING POST




BOX AND COVER SECTION

## GENERAL NOTES

1. LOCATE WARNING POST SHALL BE PLACED 1 FOOT FROM HANDHOLE OR AT FENCE LINE OR RIGHT-OF-WAY LINE IF POSSIBLE.
2. AREA AROUND THE HANDHOLE SHALL BE BACKFILLED ONLY TO THE TOP OF THE BOX, FLUSH TO EXISTING GRADE.
3. COIL FIBER CABLE IN HANDHOLE ENSURING THAT THE BEND RADIUS SHALL NOT EXCEED VALUES LISTED IN TABLE A ON SHEET 8.
4. INSTALL GROUND ROD & EXOTHERMIC WELD AS PER MANUFACTURER'S INSTRUCTIONS. PLACE THE #6 GROUND WIRE (TYPE XHHW, SOLID, GREEN INSULATED) THAT HAS BEEN ATTACHED TO THE GROUND ROD AND TO THE CENTER LUG OF THE LOCATE POST.
5. BACKFILL MATERIAL SHALL BE COMPACTED TO THE SATISFACTION OF THE ENGINEER.
6. GROUND WIRE SHALL BE BONDED TO BOTH SHEATHS OF ARMORED FIBER OPTIC CABLE IN THE SPLICE ENCLOSURE USING #6 GROUND STRANDED, GREEN INSULATED WIRE. EACH GROUND SHALL BE ISOLATED WITHIN THE ENCLOSURE.
7. INSTALL 2" HDPE CONDUIT FROM HANDHOLE TO WARNING POST TO ALLOW GROUNDING CABLE AND LOCATE TRACE WIRES TO BE INSTALLED.
8. NO HANDHOLES WILL BE ALLOWED IN PAVED ROADWAYS OR SHOULDERS.
9. THE TOPS OF ALL HANDHOLES SHALL BE FLUSH WITH THE EXISTING GRADE.
10. A WATER PROOF SEALING SIMPLEX DUCT PLUG SHALL BE INSTALLED AROUND THE FIBER OPTIC TO SEAL AROUND THE CONDUIT. A WATER PROOF SEALING PLUG SHALL BE INSTALLED IN ALL VACANT CONDUIT.
11. ANY WORK IN AN EXISTING SINGLE MODE HANDHOLE OR INVOLVING AN EXISTING SINGLE MODE DUCT AND FIBER SHALL BE COORDINATED WITH THE TOLLWAY FIBER OPTIC CONTRACTOR. USING A-36 PROCESS.
12. FOR ALL SPLICE AND HANDHOLE, NUMBER DECALS SHALL BE APPLIED AFTER INSTALLATION IS COMPLETED.
13. PLACEMENT OF SIGNS IS PREFERRED OVER POSTS. SIGNS SHALL BE USED ON LOCATIONS WHERE FENCE IS VISIBLE FROM ROAD. POSTS SHALL ONLY BE USED WHERE SIGN WOULD NOT BE VISIBLE FROM ROAD.

APPROVED BY: Marwan Nashif, CHIEF ENGINEERING OFFICER — DATE: 03/01/2024

Illinois Tollway

FIBER OPTIC SYSTEM TYPICALS AND DRAWINGS

| VERSION: | STANDARD: | SHEET: |
|---|---|---|
| 2024-03 | L1-06 | 9 OF 15 |

MODEL: L1-06A [Sheet]
FILE NAME: c:\pwworkdir\benesch projects\projects\d0173716\D264C24_ML-sht-FiberDetails-14.dgn

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| | | | | | |
|---|---|---|---|---|---|
| USER NAME | = lfranceschina | DESIGNED - | R. SCARIA | REVISED - | |
| | | DRAWN - | R. SCARIA | REVISED - | |
| PLOT SCALE | = $SCALE$ | CHECKED - | G. THIESSE | REVISED - | |
| PLOT DATE | = 8/12/2024 | DATE - | 02/14/2025 | REVISED - | |

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

**FIBER OPTIC DETAILS**
**FIBER OPTIC SYSTEM TYPICALS AND DRAWINGS**

SCALE: | SHEET 23 OF 26 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 541 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS FED. AID PROJECT | | | |

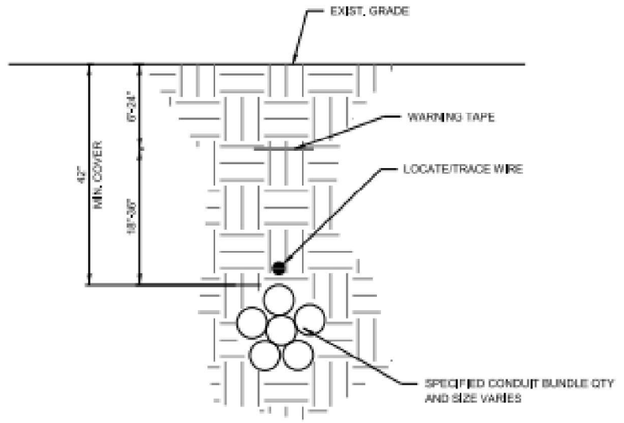
* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

# TYPES OF BURY

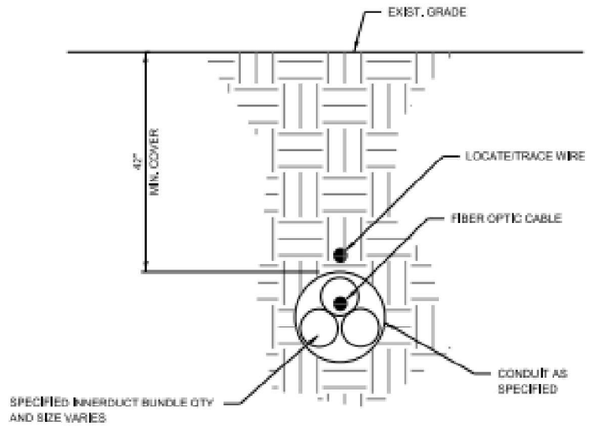
## CABLE AND CONDUIT
## BORED, TRENCHED, AND PLOWED

GENERAL NOTES:

1. UNDERGROUND CONDUIT SHALL BE PLACED AT 42" MINIMUM COVER UNLESS OTHERWISE SPECIFIED ON THE PLANS.
2. UNDERGROUND CONDUIT SHALL BE PLACED AT 48" MINIMUM COVER UNDER STREAM, CREEK AND DRAINAGE DITCHES UNLESS OTHERWISE SPECIFIED ON THE PLANS.
3. IF WHILE LOWERING THE CONDUIT THERE IS NOT ENOUGH SLACK, ADDITIONAL CONDUIT SHALL BE ADDED. EMPTY CONDUITS CAN BE CUT AND HAVE NEW CONDUIT FUSED OR COMPRESSION COUPLED ON. CONDUITS WITH FIBER INSTALLED SHALL BE RING CUT WITH A TUBE CUTTER SO AS NOT TO DAMAGE THE FIBER.
4. CONDUIT USED ABOVE GROUND SHALL BE STAINLESS STEEL OR FIBERGLASS REINFORCED EPOXY (FRE) CONDUIT. UNDERGROUND CASINGS SHALL BE FRE PER THE SPECIAL PROVISIONS OR HDPE.
5. LOCATE/TRACE WIRE SHALL BE DIRECT BURIED WITH EVERY CONDUIT BUNDLE PATH AS CLOSE TO THE CENTER OF THE CONDUITS AS POSSIBLE. LOCATE/TRACE WIRE SHALL NOT BE INSTALLED IN A CONDUIT WITHOUT APPROVAL OF THE ENGINEER.
6. WHEN AN OPTIC FIBER CONDUIT SEPARATES FROM A CONDUIT BUNDLE OR DUCT BANK, AN ADDITIONAL LOCATE WIRE SHALL BE INSTALLED WITH THAT SEPARATE CONDUIT PATH GOING BACK TO THE PREVIOUS HANDHOLE.
7. ALL LOCATE/TRACE WIRE WILL BE TESTED PER SPECIFICATIONS PRIOR TO ANY FIBER BEING INSTALLED.
8. ALL UNUSED CONDUIT SHALL HAVE 1200 LB MULE TAPE INSTALLED FOR FUTURE USE.



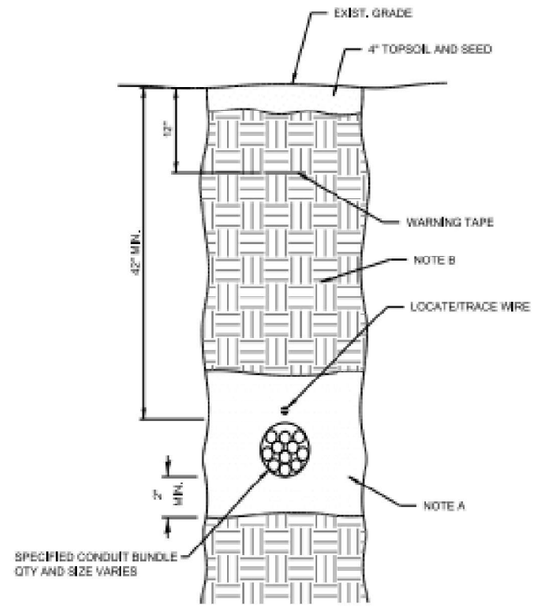

PLOWED CONDUIT BUNDLES
QTY VARIES




BORED CONDUIT WITH FIBER OPTIC CABLE AND/OR MULTIPLE INNERDUCTS AS REQUIRED

NOTE:

THE PICTURE ABOVE IS A CONCEPT LAYOUT.




CONSTRUCTION NOTES TRENCHED CONDUIT BUNDLES

A. A MINIMUM OF 2" OF SAND SHALL BE PLACED UNDER THE CONDUIT. SAND SHALL TRANSITION TO BACKFILL ACCORDING TO NOTE B 4" ABOVE CONDUIT.

B. BACKFILL SHALL BE ACCORDING TO ARTICLE 810.04 OF THE STANDARD SPECIFICATIONS.

TRENCHED CONDUIT BUNDLES

APPROVED BY: Manar Nashif, CHIEF ENGINEERING OFFICER — DATE: 03/01/2024

| REVISIONS | |
|---|---|
| DATE | DESCRIPTION |
| 02-01-2024 | MODIFIED PROFILE VIEW TO INCLUDE TRACER WIRE, MODIFIED SIDE VIEW TO INCLUDE A REFERENCE TO NOTE 2. REMOVED AND MODIFIED NOTES. |
| | UPDATED THE GENERAL NOTES SECTION. |
| | MODIFIED DETAILS. |

Illinois Tollway

FIBER OPTIC SYSTEM TYPICALS AND DRAWINGS

VERSION: 2024-03 | STANDARD: L1-06 | SHEET: 1 of 15

MODEL: L1-06B [Sheet]
FILE NAME: c:\pwworkfn\benesch projects\projects\d0173716\D264C24_ML-sht-FiberDetails-15.dgn

benesch
Alfred Benesch & Company
35 W Wacker Drive, Suite 3300
Chicago, Illinois 60601
312-565-0450 Job No. 10800.00

| | | | | | |
|---|---|---|---|---|---|
| USER NAME = lfranceschina | | DESIGNED - R. SCARIA | | REVISED - | |
| | | DRAWN - R. SCARIA | | REVISED - | |
| PLOT SCALE = $SCALE$ | | CHECKED - G. THIESSE | | REVISED - | |
| PLOT DATE = 8/12/2024 | | DATE - 02/14/2025 | | REVISED - | |

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

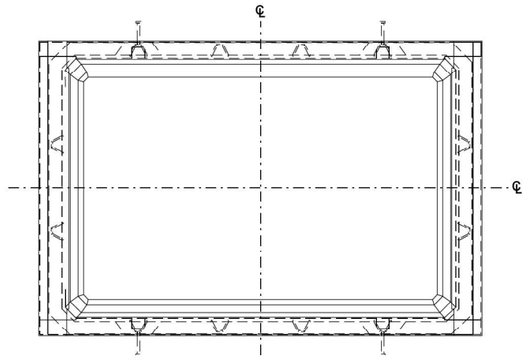
**FIBER OPTIC DETAILS**
**FIBER OPTIC SYSTEM TYPICALS AND DRAWINGS**

SCALE: | SHEET 24 OF 26 SHEETS | STA. | TO STA.

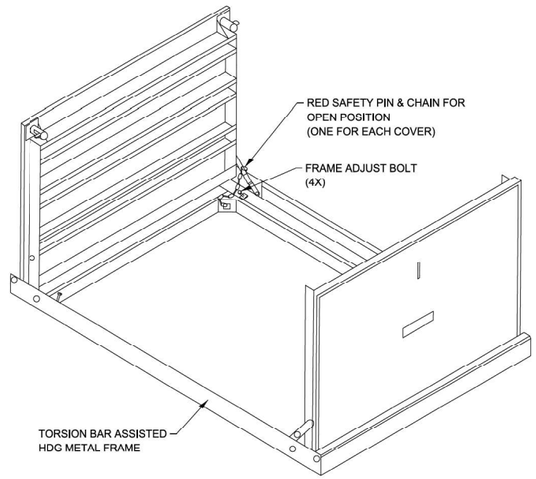
| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 542 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS FED. AID PROJECT | | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

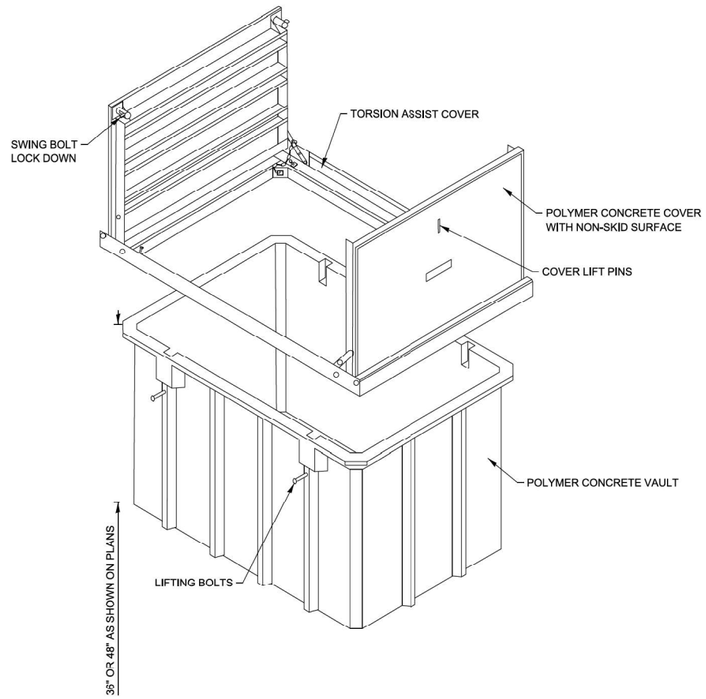
# HANDHOLE




TOP VIEW

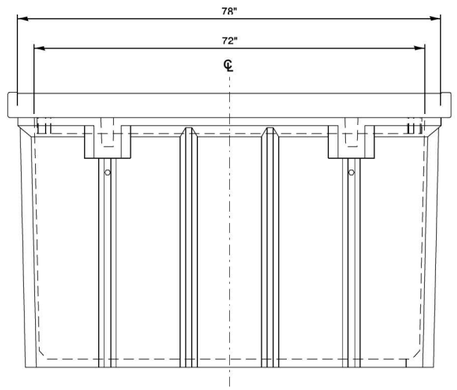



TORSION ASSIST COVER

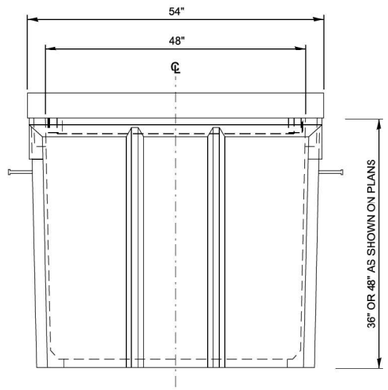



48"X 72" TORSION ASSIST

FOR FIBER OPTIC CABLE SPLICE LOCATIONS
AND SLOPES GREATER THAN OR EQUAL TO 1:4




SIDE VIEW




END VIEW

NOTE:

1. NO CORING/DRILLING OR ALTERATION OF HANDHOLE SHALL BE ALLOWED

APPROVED BY: Manar Nashif
CHIEF ENGINEERING OFFICER
DATE: 03/01/2024

Illinois Tollway

FIBER OPTIC SYSTEM
TYPICALS AND DRAWINGS

| VERSION: | STANDARD: | SHEET: |
|---|---|---|
| 2024-03 | L1-06 | 7 OF 15 |

MODEL: COMMICATIONS VAULT COMPOSITE CONCRETE [Sheet]
FILE NAME: c:\pwworkdir\benesch projects\projects\d0173716\D264C24_MI-ehl-FiberDetails-16.dgn

benesch
Alfred Benesch & Company
35 W Wacker Drive, Suite 3200
Chicago, Illinois 60601
312-565-0450 Job No. 10800.00

| | | | | | |
|---|---|---|---|---|---|
| USER NAME | = lfranceschina | DESIGNED | - R. SCARIA | REVISED | - |
| | | DRAWN | - R. SCARIA | REVISED | - |
| PLOT SCALE | = $SCALE$ | CHECKED | - G. THIESSE | REVISED | - |
| PLOT DATE | = 8/12/2024 | DATE | - 02/14/2025 | REVISED | - |

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

**FIBER OPTIC DETAILS**
**COMMUNICATIONS VAULT, COMPOSITE CONCRETE**

SCALE: | SHEET 25 OF 26 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 543 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

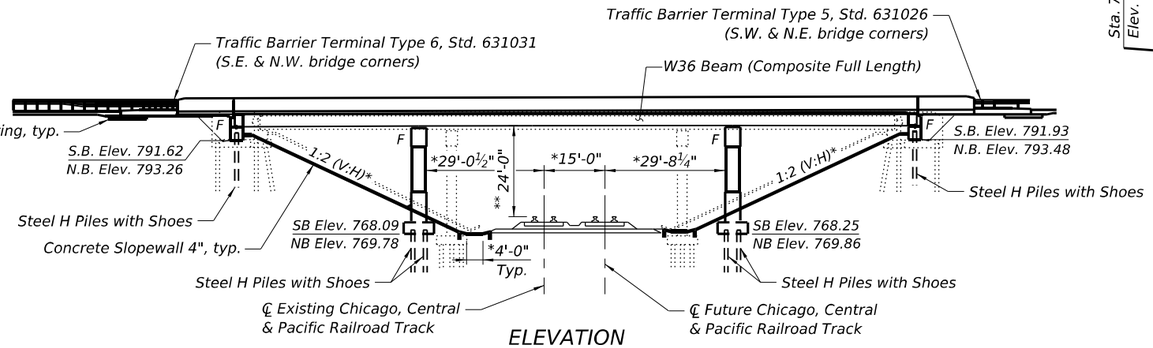
* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

Bench Mark: B.M. 400-Cut "□" on southeast corner of S.N. 101-0067. Elevation = 800.52

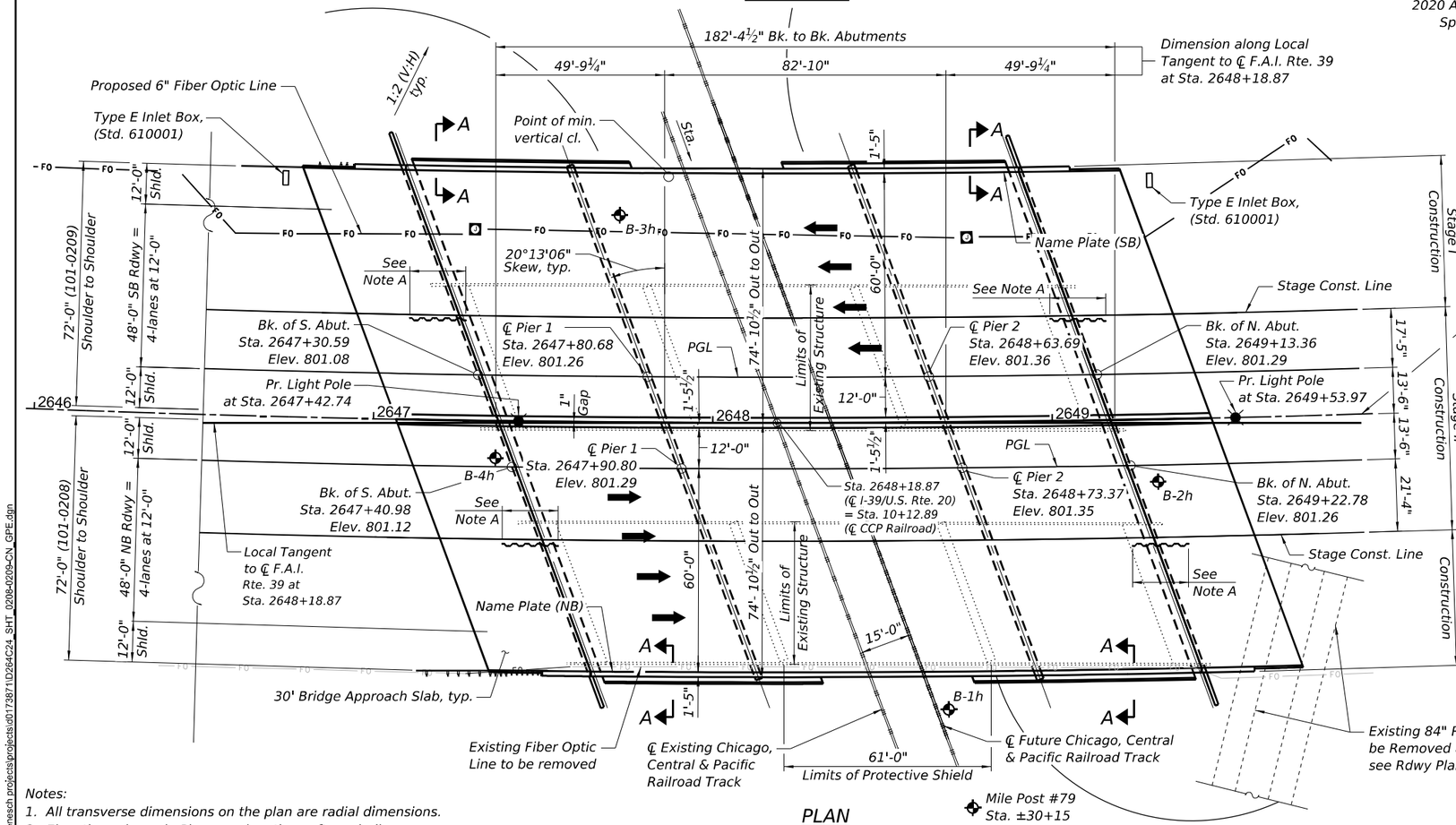
Existing Structure: S.N. 101-0067 (N.B.) and S.N. 101-0068 (S.B.) built as F.A. Route 194, Section 4 VB at Station 796+28.52 in 1963. Bridges widened and deck replaced in 1991 as F.A.I. Route 39, Section 4 VBY. Each superstructure consists of 3 spans of continuous composite rolled steel beams. Each substructure consists of concrete stub abutments and concrete hammerhead piers supported on piles. Length = 169'-8" (back-to-back of abutments). Width of Eastbound Bridge = 42'-3" (out-to-out deck). Width of Westbound Bridge = 43'-2" (out-to-out deck).

Traffic is to be maintained utilizing stage construction.

No Salvage.



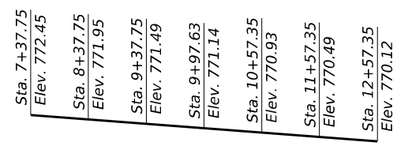

## ELEVATION




## PLAN

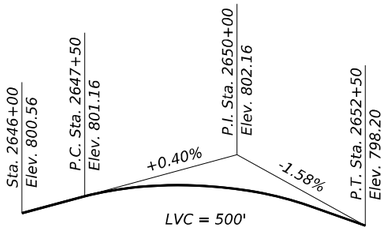
Note A: Limits of temporary sheet piling

Notes:
1. All transverse dimensions on the plan are radial dimensions.
2. Elevations shown in Plan are elevations after grinding.
3. Existing culverts to be removed and relocated, see Rdwy Plans.
4. See Sheet 3 of 60 for Section A-A.




## TOP OF RAIL ELEVATIONS

(Chicago, Central & Pacific Railroad)




## PROFILE GRADE I-39/US 20

(Along the outer edge of the interior shoulders)
(Up to ¼" to be ground off the bridge deck and the bridge approach slabs. The Profile Grade shows the final grade after grinding.)

## LOADING HL-93

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

## DESIGN SPECIFICATIONS

2020 AASHTO LRFD Bridge Design Specifications, 9th Edition

## DESIGN STRESSES

FIELD UNITS

f 'c = 4,000 psi (Superstructure)
f 'c = 3,500 psi (Substructure)
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50)***

*** Structural steel to be galvanized.

## SEISMIC DATA

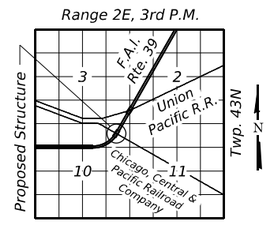
Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (SD1) = 0.056g
Design Spectral Acceleration at 0.2 sec. (SDS) = 0.101g
Soil Site Class = C

APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures

## LEGEND

- Exist. Fiber Optic Line
- Prop. Fiber Optic Line
- Exist. Railroad
- Prop. Railroad
- Soil Boring
- Prop. Light Pole

STATE OF ILLINOIS
ARTHUR J. NOWAK
081-5894
CHICAGO, ILLINOIS
LICENSED STRUCTURAL ENGINEER
05/16/2025




## LOCATION SKETCH

# GENERAL PLAN & ELEVATION
# I-39/U.S. ROUTE 20 OVER CHICAGO, CENTRAL & PACIFIC RAILROAD COMPANY
# F.A.I. RTE. 39 - SECTION (4-1,5)R
# WINNEBAGO COUNTY
# STA. 2648+18.87
# STRUCTURE NUMBER 101-0208 (NB)
# STRUCTURE NUMBER 101-0209 (SB)

MODEL: SHEET
FILE NAME: c:\pwworkdir\benesch projects\projects\d0173871\D264C24_SHT_0208-0209-CN_GPE.dgn

Bowman
10 S. LaSalle Street, Suite 2710
Chicago, Illinois 60603
312-419-0180
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| | | | | | |
|---|---|---|---|---|---|
| USER NAME | = lfranceschina | DESIGNED | - JW | REVISED | - |
| | | DRAWN | - AT | REVISED | - |
| PLOT SCALE | = $SCALE$ | CHECKED | - AJN | REVISED | - |
| PLOT DATE | = 8/12/2024 | DATE | - 02/27/24 | REVISED | - |

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

SCALE: | SHEET 1 OF 60 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1,5)R | WINNEBAGO | 1685 | 544 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS FED. AID PROJECT | | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

## GENERAL NOTES

1. These plans are for erection of the bridges. All work related to the Beam and Bearing Fabrication Contract (64U51) is for information only.

2. Fasteners shall be ASTM F 3125 Grade A325 Type 1. Fasteners shall be hot dip galvanized. See Special Provision for "Hot Dip Galvanizing for Structural Steel." Bolts 7/8 in. diameter, holes 15/16 in. diameter, unless otherwise noted.

3. Calculated weight of Structural Steel (Grade 50)= 751,120 lb and Structural Steel (Grade 36)= 89,100 lb.

4. FOR INFORMATION ONLY - All structural steel shall be galvanized. See Special Provision for "Hot Dip Galvanizing for Structural Steel".

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

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

7. If the Contractor elects to use cantilever forming brackets on the exterior beams or girders, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06(b) of the Standard Specifications. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior beam at each of these additional bracket locations.

8. Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 in. (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.

9. The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.

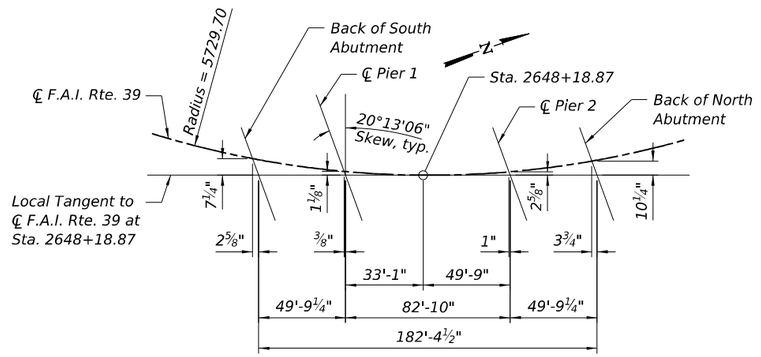
10. The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to address the presence of lead on this project.

11. It shall be the Contractor's responsibility to verify the location of all utilities prior to starting construction.

12. It is anticipated that the structural steel and bearings will be fabricated by June 1, 2026 for Stage 1, June 1, 2027 for Stage 2, and June 1, 2028 for Stage 3. The delivery dates shall be coordinated with IDOT and the Contractor responsible for Contract No. 64U51.

## TOTAL BILL OF MATERIAL

| ITEM | UNIT | 101-0208/0209 | | |
|---|---|---|---|---|
| | | SUPER | SUB | TOTAL |
| REMOVAL OF EXISTING STRUCTURES NO. 1 | EACH | 0.5 | 0.5 | 1 |
| REMOVAL OF EXISTING STRUCTURES NO. 2 | EACH | 0.5 | 0.5 | 1 |
| SLOPE WALL REMOVAL | SQ YD | - | 1,676 | 1,676 |
| PROTECTIVE SHIELD | SQ YD | 580 | - | 580 |
| STRUCTURE EXCAVATION | CU YD | 0 | 971 | 971 |
| CONCRETE STRUCTURES | CU YD | - | 1,208.9 | 1,208.9 |
| CONCRETE SUPERSTRUCTURE | CU YD | 967.0 | - | 967.0 |
| PROTECTIVE COAT | SQ YD | 4,476 | - | 4,476 |
| CONCRETE SUPERSTRUCTURE (APPROACH SLAB) | CU YD | 410.9 | - | 410.9 |
| ERECTING STRUCTURAL STEEL | L SUM | 0.22 | - | 0.22 |
| STUD SHEAR CONNECTORS | EACH | 21,240 | - | 21,240 |
| REINFORCEMENT BARS, EPOXY COATED | POUND | 433,040 | 135,780 | 568,820 |
| BAR SPLICERS | EACH | 1,762 | 276 | 2,038 |
| SLOPE WALL 4 INCH | SQ YD | - | 2,780 | 2,780 |
| FURNISHING STEEL PILES HP12X63 | FOOT | - | 5,208 | 5,208 |
| DRIVING PILES | FOOT | - | 5,208 | 5,208 |
| TEST PILE STEEL HP12X63 | EACH | - | 2 | 2 |
| PILE SHOES | EACH | - | 166 | 166 |
| NAME PLATES | EACH | 2 | - | 2 |
| PREFORMED JOINT SEAL 2 1/2" | FOOT | 241 | - | 241 |
| ANCHOR BOLTS, 1" | EACH | 80 | - | 80 |
| ANCHOR BOLTS, 1¼" | EACH | 80 | - | 80 |
| TEMPORARY SHEET PILING | SQ FT | - | 1,284 | 1,284 |
| GRANULAR BACKFILL FOR STRUCTURES | CU YD | - | 512 | 512 |
| GEOCOMPOSITE WALL DRAIN | SQ YD | - | 207.6 | 207.6 |
| PIPE UNDERDRAINS FOR STRUCTURES 4" | FOOT | - | 354.8 | 354.8 |
| BRIDGE DECK GROOVING (LONGITUDINAL) | SQ YD | 2,564 | - | 2,564 |
| BAR TERMINATORS | EACH | 956 | 1,748 | 2,704 |
| DIAMOND GRINDING (BRIDGE SECTION) | SQ YD | 3,848 | - | 3,848 |




## OFFSET SKETCH

## CURVE DATA

(℄ I-39/US Rte 20)

P.I. Sta. = 2638+19.71
Δ = 50°41'00" (LT)
D = 1°00'00"
R = 5,729.70'
T = 2713.52'
L = 5,068.44'
E = 610.07'
S.E. Run = 3.4%
P.C. Sta. = 2611+06.19
P.T. Sta. = 2661+74.63

## INDEX OF SHEETS


1. General Plan & Elevation
2. General Notes & Total Bill of Material
3. General Details
4. Foundation Layout
5. Temporary Concrete Barrier
6. Stage 1 Construction & Removal
7. Stage 2 Construction & Removal
8. Stage 3 Construction & Removal
9. Removal Plan and Elevation
10. Existing Southbound Abutments Removal
11. Existing Northbound Abutments Removal
12. Existing Southbound Piers Removal
13. Existing Northbound Piers Removal
14. Slab Elevations 1
15. Slab Elevations 2
16. Slab Elevations 3
17. Slab Elevations 4
18. Slab Elevations 5
19. Slab Elevations 6
20. Slab Elevations 7
21. Approach Slab Elevations - Southbound
22. Approach Slab Elevations - Northbound
23. Deck Slab - Southbound Structure
24. Deck Slab - Northbound Structure
25. Deck Slab Details - Miscellaneous & Bill of Material
26. Deck Slab Details - Southbound Parapets
27. Deck Slab Details - Northbound Parapets
28. Deck Slab Details - Parapet Light Pole
29. Concrete End Diaphragm - Southbound
30. Concrete End Diaphragm - Northbound
31. Concrete End Diaphragm Details
32. Approach Slabs - Southbound
33. Approach Slabs Details - Southbound
34. Approach Slabs - Northbound
35. Approach Slabs Details - Northbound
36. Framing Plan
37. Structural Steel
38. Structural Steel Details
39. Structural Steel Diaphragms
40. Bearing Details
41. South Abutment - Southbound Stage 1
42. South Abutment - Southbound Stage 2A
43. South Abutment - Northbound Stage 2B
44. South Abutment - Northbound Stage 3
45. North Abutment - Southbound Stage 1
46. North Abutment - Southbound Stage 2A
47. North Abutment - Northbound Stage 2B
48. North Abutment - Northbound Stage 3
49. Pier 1 - Southbound
50. Pier 1 - Northbound
51. Pier 2 - Southbound
52. Pier 2 - Northbound
53. Pier Details & Bill of Material - Southbound
54. Pier Details & Bill of Material - Northbound
55. Pile Details
56. Concrete Parapet Slipforming
57. Bar Splicer Details
58. Boring Logs 1
59. Boring Logs 2
60. Boring Logs 3


## ABBREVIATIONS

| | | | |
|---|---|---|---|
| abut. | abutment | NE | north east |
| B.F. | back face | NW | north west |
| ℄ | baseline | No. | number |
| brg. | bearing | N.S. | near side |
| ℄ | centerline | O.F. | outside face |
| cl. | clearance | PJF | preformed joint filler |
| conc. | concrete | PJS | preformed joint sealer |
| cts. | centers | PG | profile grade |
| const. | construction | prop. | proposed |
| E.B. | expansion bearings | req'd | required |
| EA | east abutment | rte. | route |
| EB | east bound | SB | south bound |
| E.F. | each face | SE | south east |
| elev. | elevation | SW | south west |
| exist. | existing | sect. | section |
| F.B. | fixed bearings | spa. | spaces |
| F.F. | front face | spec. | specification |
| F.S. | far side | sta. | station |
| H.S. | high strength | std. | standard |
| I.F. | inside face | struct. | structure |
| jt. | joint | typ. | typical |
| long. | longitudinal | UNO | unless noted otherwise |
| max. | maximum | WA | west abutment |
| min. | minimum | WB | west bound |
| NB | north bound | WW | wingwall |

MODEL: SHEET
FILE NAME: c:\pwworkfr\benesch projects\projects\d0173871\D264C24_SHT_0208-0209-CN_GENERAL-NOTES_TBOM.dgn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| | | | | | |
|---|---|---|---|---|---|
| USER NAME = lfranceschina | | DESIGNED - JW | | REVISED - | |
| | | DRAWN - AT | | REVISED - | |
| PLOT SCALE = $SCALE$ | | CHECKED - AJN | | REVISED - | |
| PLOT DATE = 8/12/2024 | | DATE - 02/27/24 | | REVISED - | |

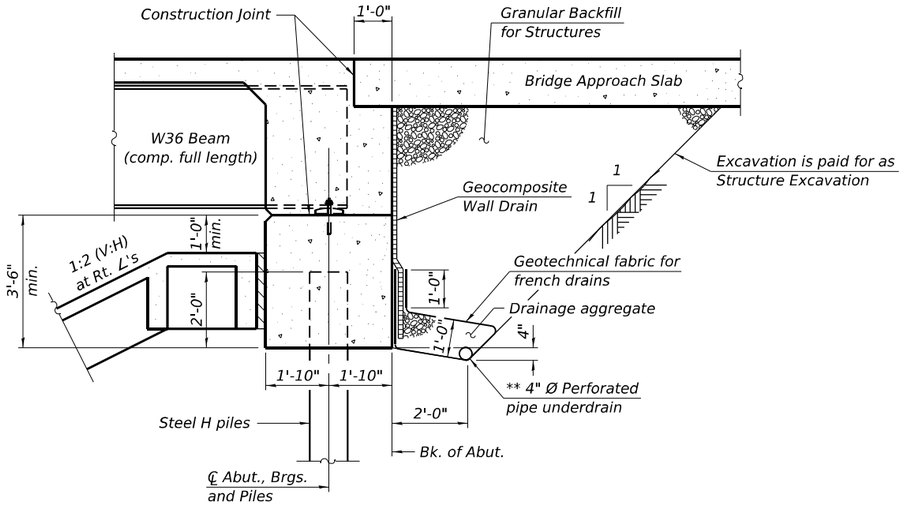
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**GENERAL NOTES & TOTAL BILL OF MATERIAL**
**STRUCTURE NO. 101-0208/0209**

SCALE: | SHEET 2 OF 60 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1,5)R | WINNEBAGO | 1685 | 545 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

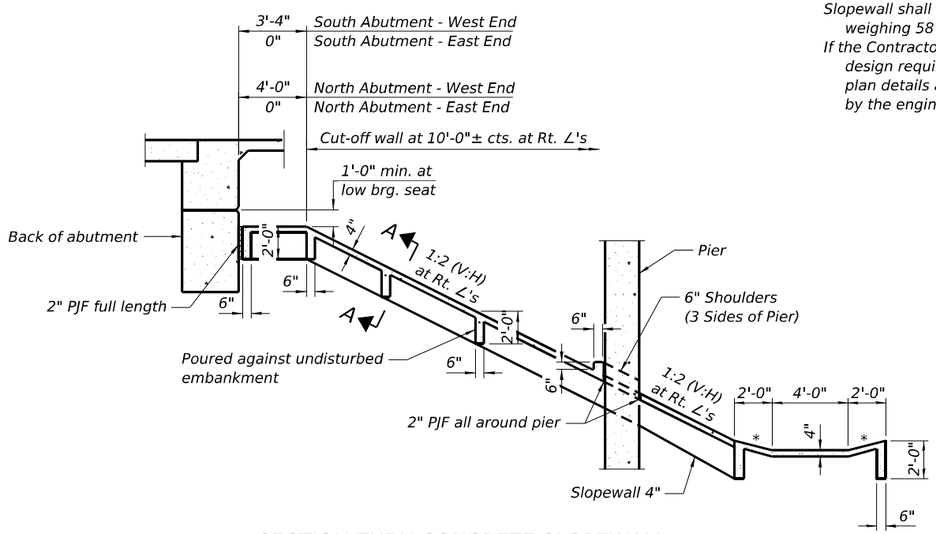



## SECTION THRU INTEGRAL ABUTMENT

(Horiz. dim. at Rt. ∠'s)

**Included in the cost of Pipe Underdrains for Structures.

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




## SECTION THRU CONCRETE SLOPEWALL

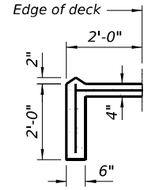
(Horiz. dim. @ Rt. ∠'s)

*1:4 (V:H) at Rt. ∠'s

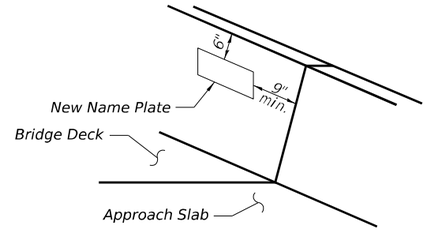
## NOTES:

Slopewall shall be reinforced with welded wire fabric, 6" x 6" - W4.0 x W4.0, weighing 58 lbs. per 100 sq. ft.

If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and accpetance by the engineer.




## SECTION A-A




## PARAPET

(Typical)

STA. 2648+18.87
BUILT 20__ BY
STATE OF ILLINOIS
F.A.I. Rt. I-39
Sec. (4-1,5)R
LOADING HL-93
STR. NO. 101-0209

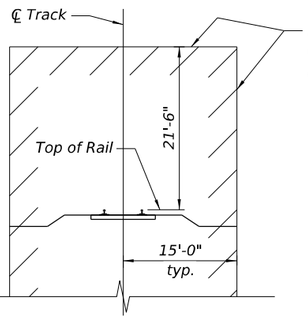
## NAME PLATE

(SB I-39 over CCP Railroad)
See Std. 515001

STA. 2648+18.87
BUILT 20__ BY
STATE OF ILLINOIS
F.A.I. Rt. I-39
Sec. (4-1,5)R
LOADING HL-93
STR. NO. 101-0208

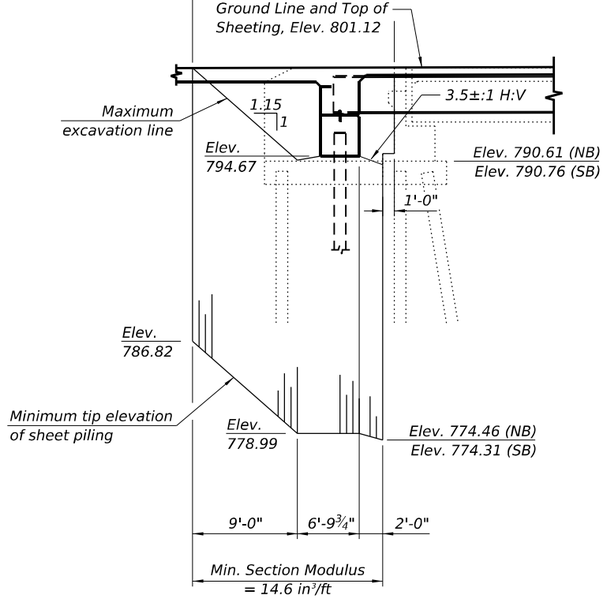
## NAME PLATE

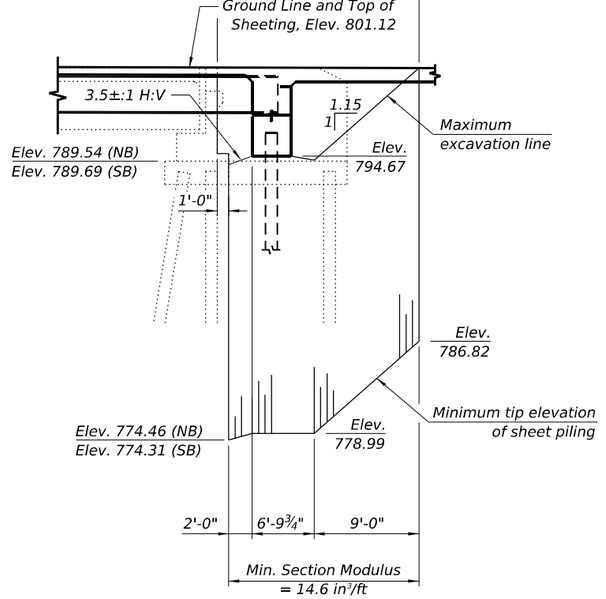
(NB I-39 over CCP Railroad)
See Std. 515001




## MIN. CONSTRUCTION CLEARANCE ENVELOPE

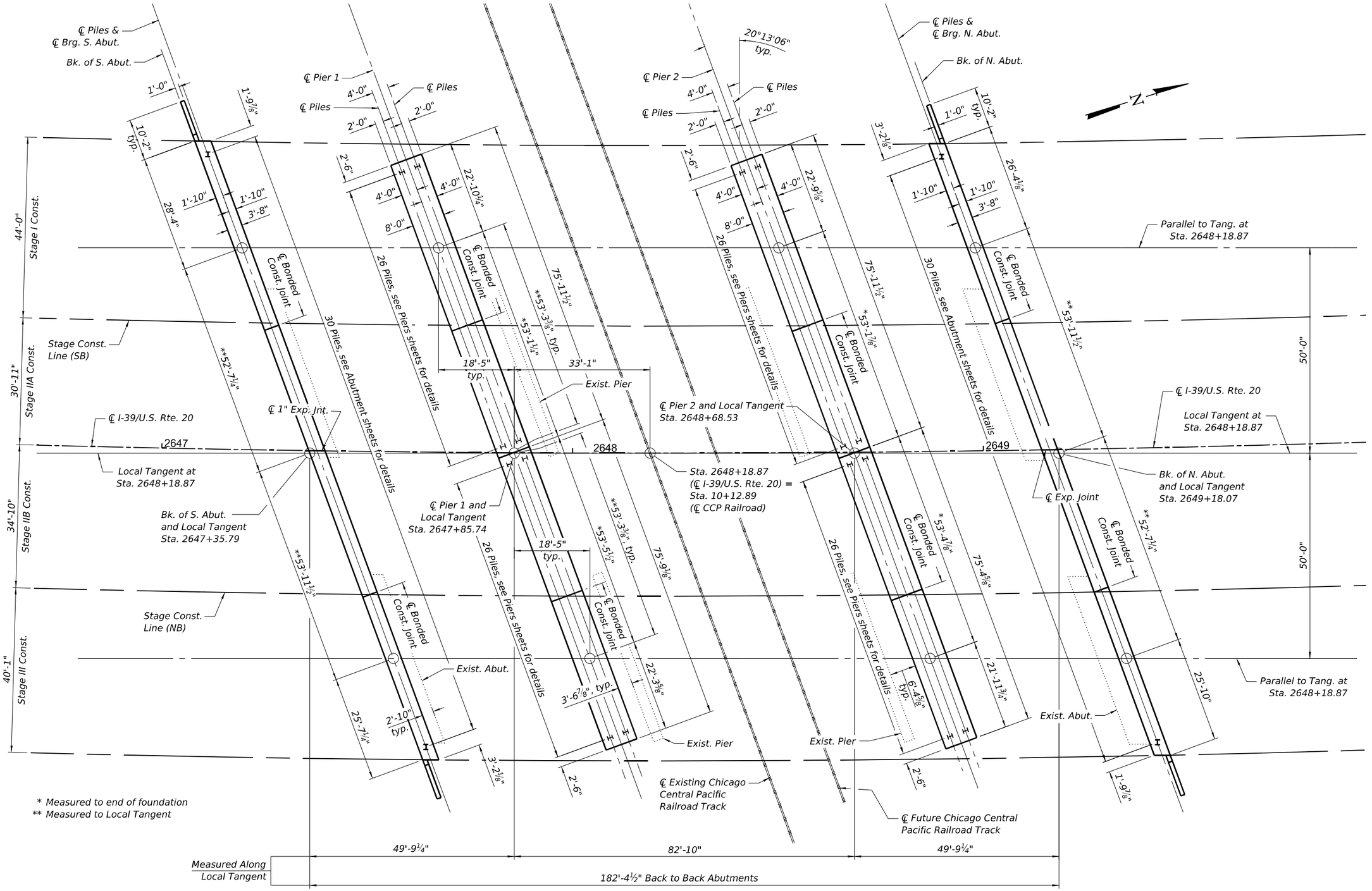
(Normal to Railroad)




## TEMPORARY SHEET PILING

(Looking West)




* Measured to end of foundation
** Measured to Local Tangent

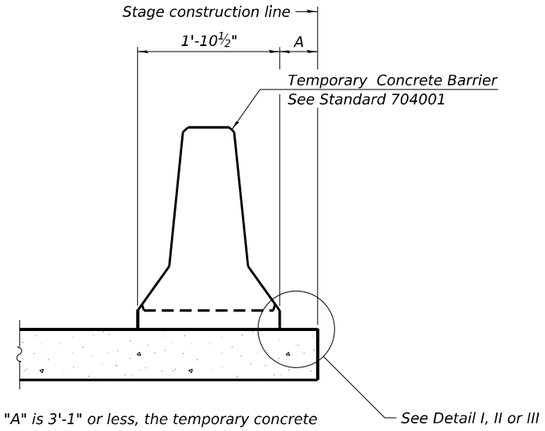
## FOUNDATION LAYOUT PLAN

MODEL: SHEET
FILE NAME: c:\pwwordir\benesch projects\projects\d0173871\D284C24_SHT_0208-0209-CN_FND-LAYOUT.dgn

| | | | | | |
|---|---|---|---|---|---|
| Bowman 10 S. LaSalle Street, Suite 2110 Chicago, Illinois 60603 312-914-2000 www.bowmanus.com | USER NAME = lfranceschina | DESIGNED - JW | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | FOUNDATION LAYOUT STRUCTURE NO. 101-0208/0209 |
| | | DRAWN - AT | REVISED - | | |
| | PLOT SCALE = $SCALE$ | CHECKED - AJN | REVISED - | | SCALE: SHEET 4 OF 60 SHEETS STA. TO STA. |
| | PLOT DATE = 8/12/2024 | DATE - 02/27/24 | REVISED - | | |

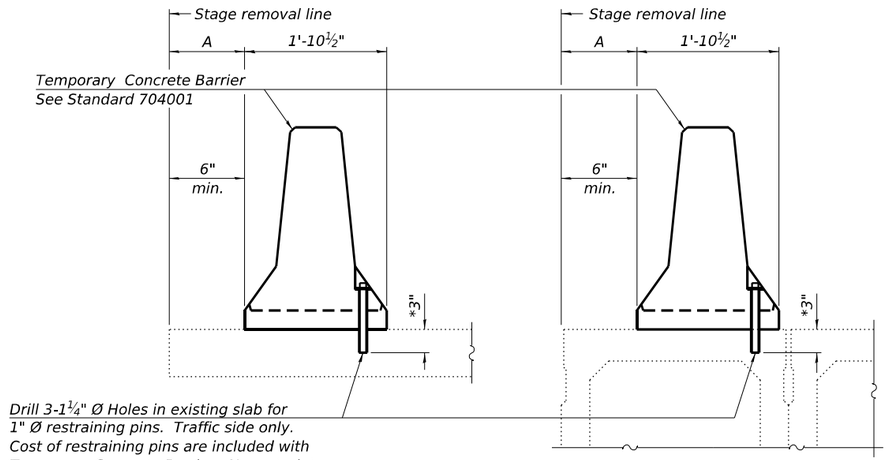
| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 547 |
| | | CONTRACT NO. 64C24 | | |
| | | ILLINOIS FED. AID PROJECT | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)




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".

NEW SLAB OR NEW DECK BEAM



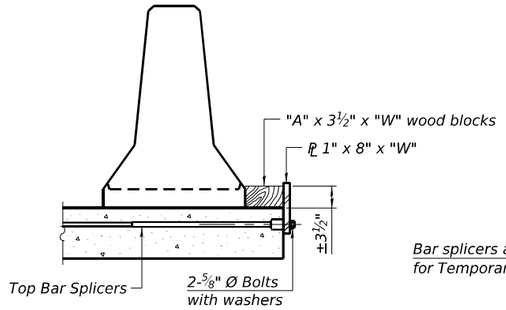

Drill 3-1¼" Ø Holes in existing slab for 1" Ø restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

EXISTING SLAB

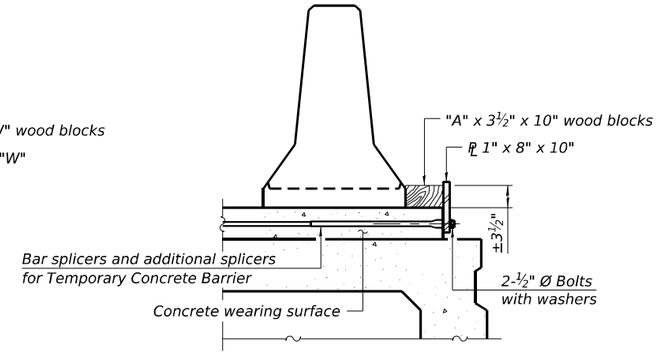
* When hot-mix asphalt wearing surface is present, embedment shall be 3" plus the wearing surface depth.

EXISTING DECK BEAM

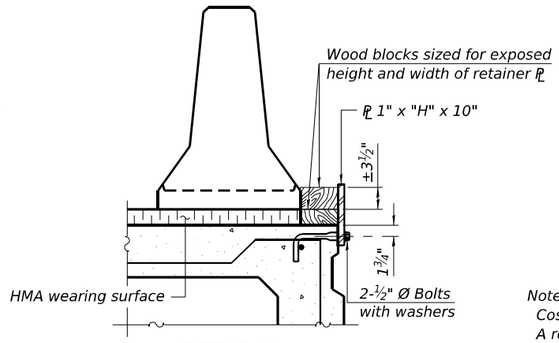
## SECTIONS THRU SLAB OR DECK BEAM



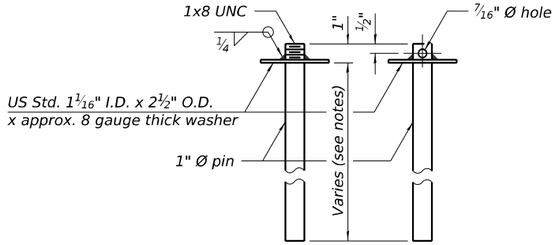

DETAIL I



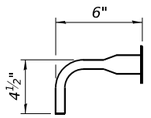

DETAIL II



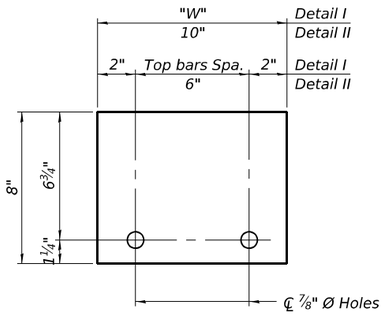

DETAIL III



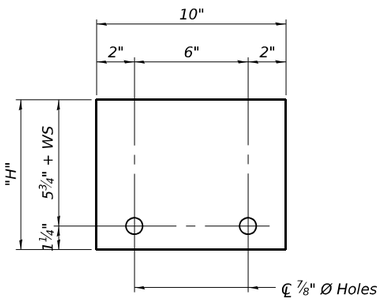

RESTRAINING PIN




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)

## RAILING CRITERIA

| | |
|---|---|
| NCHRP 350 Test Level | 3 |
| Railing Weight (plf) | 440 |

R-27

5-15-2023

Notes:

Cost of retainer assembly is included with Temporary Concrete Barrier.

A retainer assembly shall be located at the approximate ℄ 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 1½", 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.

MODEL: SHEET
FILE NAME: c:\pw\wordir\benesch projects\projects\d0173871\D264C24_SHT_0208-0209-GN_TCB.dgn

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312-454-0160
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| | | | |
|---|---|---|---|
| USER NAME = lfranceschina | DESIGNED - JW | REVISED - | |
| | DRAWN - AT | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - AJN | REVISED - | |
| PLOT DATE = 8/12/2024 | DATE - 02/27/24 | REVISED - | |

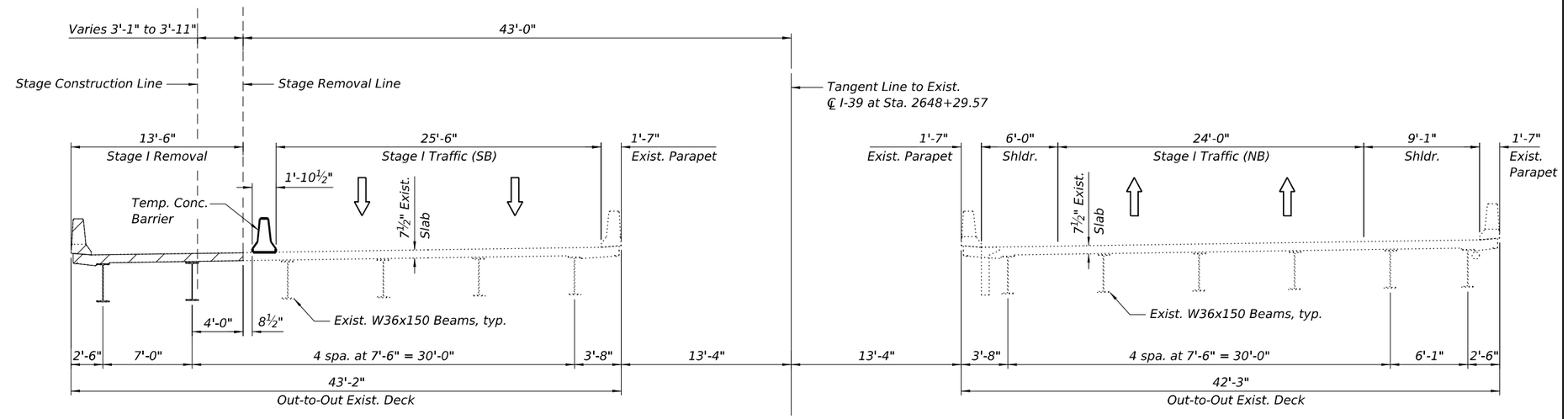
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**TEMPORARY CONCRETE BARRIER**
**STRUCTURE NO. 101-0208/0209**

SCALE: | SHEET 5 OF 60 SHEETS | STA. | TO STA.

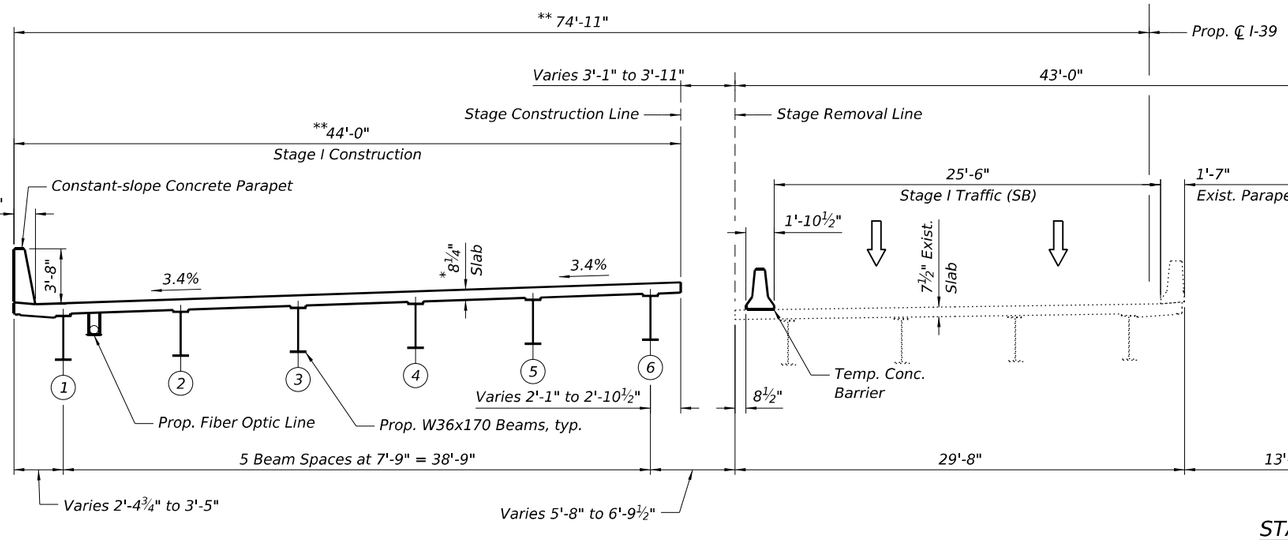
| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 548 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS FED. AID PROJECT | | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)




## STAGE I REMOVAL

(Looking North)




## STAGE I CONSTRUCTION

(Looking North)

* Prior to Grinding

** Radial Dimension

## STAGE I REMOVAL

1. Install temporary concrete barrier as shown to locate traffic on the east side of existing SB structure.
2. Install Temporary Sheet Piling at the approaches.
3. Remove existing concrete bridge decks, approaches, parapets, appurtenances, steel beams, bearings and substructure elements within the limits of Stage I Removal.

## STAGE I CONSTRUCTION

1. Drive HP piles for abutments, and piers, as shown in the Substructure Layout Plan.
2. Construct Integral abutment caps, slopewalls, pier crash walls, pier columns and pier caps.
3. Install bearings at abutments and piers and erect Beams 1 thru 6 and associated permanent bracing.
4. Install deck forms and reinforcement.
5. Construct reinforced concrete decks, steel diaphragms, and parapets.

## STAGE I CONSTRUCTION - CONTINUED

6. Construct the cast-in-place bridge approach slabs.
7. Perform diamond grinding and longitudinal bridge deck grooving for bridge deck and approaches.
8. Apply Protective Coat for bridge decks, approaches and tops and inside faces of parapets.
9. Place temporary pavement markings on the top of deck for Stage II traffic (See Roadway Plans).

## NOTE:

1. For Quantity of Temporary Concrete Barrier, See Roadway Plans.
2. For temporary concrete barrier details, see sheet 5 of 60.

## LEGEND

Removal of Existing Structures No. 2

MODEL: SHEET
FILE NAME: c:\pwwordir\benesch projects\projects\d0173871\D264C24_SHT_0208-0209-CN_S1-CONSTR.dgn

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10 S. LaSalle Street, Suite 2116
Chicago, Illinois 60603
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| | | | |
|---|---|---|---|
| USER NAME = lfranceschina | DESIGNED - JW | REVISED - | |
| | DRAWN - AT | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - AJN | REVISED - | |
| PLOT DATE = 8/12/2024 | DATE - 02/27/24 | REVISED - | |

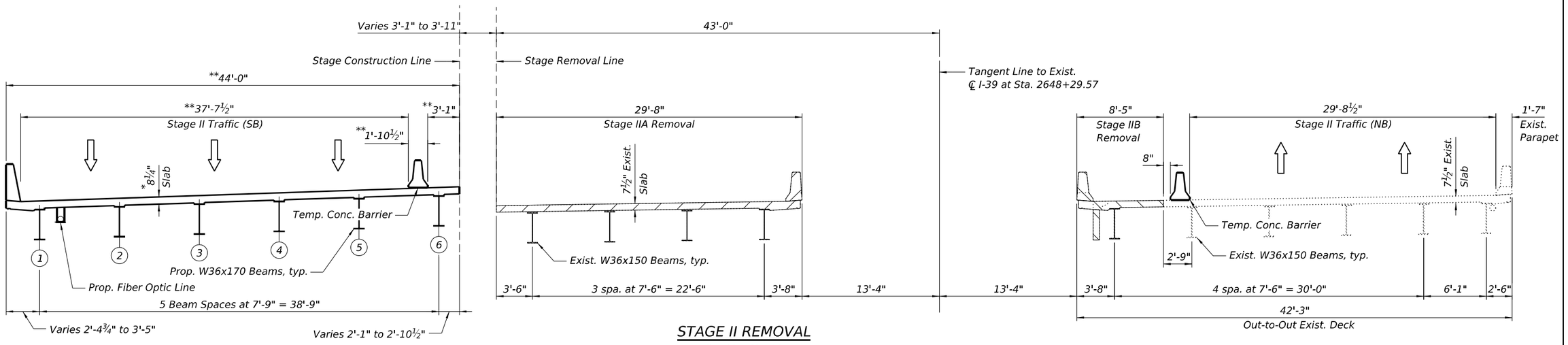
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**STAGE 1 CONSTRUCTION & REMOVAL**
**STRUCTURE NO. 101-0208/0209**

SCALE: | SHEET 6 OF 60 SHEETS | STA. | TO STA.

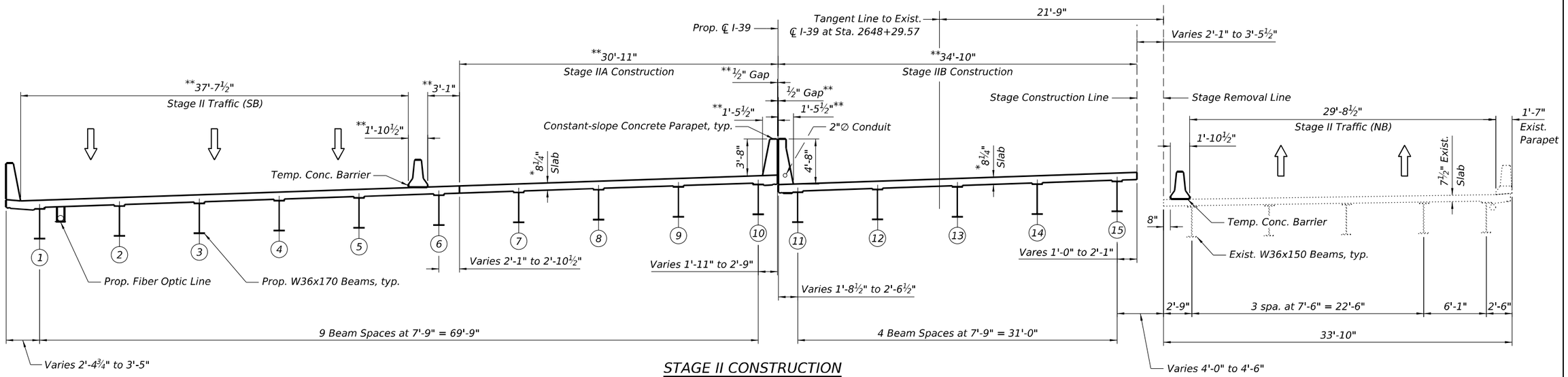
| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 549 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS FED. AID PROJECT | | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)




## STAGE II REMOVAL

(Looking North)




## STAGE II CONSTRUCTION

(Looking North)

* Prior to Grinding

** Radial Dimension

## STAGE II REMOVAL

1. Install temporary concrete barrier as shown to locate traffic on the west side of proposed SB structure.
2. Install Temporary Sheet Piling at the approaches.
3. Remove existing concrete bridge decks, approaches, parapets, appurtenances, steel beams, bearings and substructure elements within the limits of Stage II Removal.

## STAGE II CONSTRUCTION

1. Drive HP piles for abutments, and piers, as shown in the Substructure Layout Plan.
2. Construct Integral abutment caps, slopewalls, pier crash walls, pier columns and pier caps.
3. Install bearings at abutments and piers and erect Beams 7 thru 15 and associated permanent bracing.
4. Install deck forms and reinforcement.
5. Construct reinforced concrete decks, steel diaphragms, and parapets.

## STAGE II CONSTRUCTION - CONTINUED

6. Construct the cast-in-place bridge approach slabs.
7. Perform diamond grinding and longitudinal bridge deck grooving for bridge deck and approaches.
8. Apply Protective Coat for bridge decks, approaches and tops and inside faces of parapets.
9. Place temporary pavement markings on the top of deck for Stage III traffic (See Roadway Plans).

## NOTE:

1. For Quantity of Temporary Concrete Barrier, See Roadway Plans.
2. For temporary concrete barrier details, see sheet 5 of 60.

## LEGEND

Removal of Existing Structures No. 1

Removal of Existing Structures No. 2

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| | | | | | |
|---|---|---|---|---|---|
| USER NAME | = lfranceschina | DESIGNED - | JW | REVISED - | |
| | | DRAWN - | AT | REVISED - | |
| PLOT SCALE | = $SCALE$ | CHECKED - | AJN | REVISED - | |
| PLOT DATE | = 8/12/2024 | DATE - | 02/27/24 | REVISED - | |

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

**STAGE 2 CONSTRUCTION & REMOVAL**
**STRUCTURE NO. 101-0208/0209**

SCALE: | SHEET 7 OF 60 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1,5)R | WINNEBAGO | 1685 | 550 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS FED. AID PROJECT | | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

MODEL: SHEET
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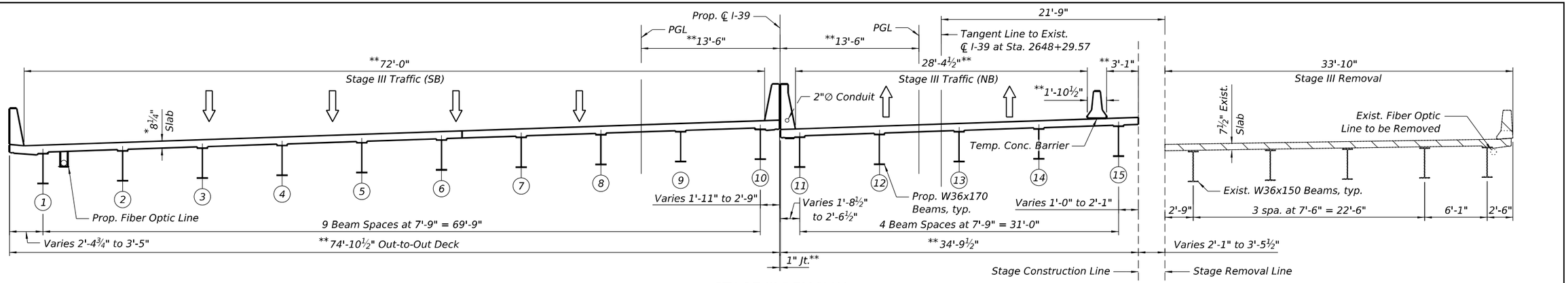
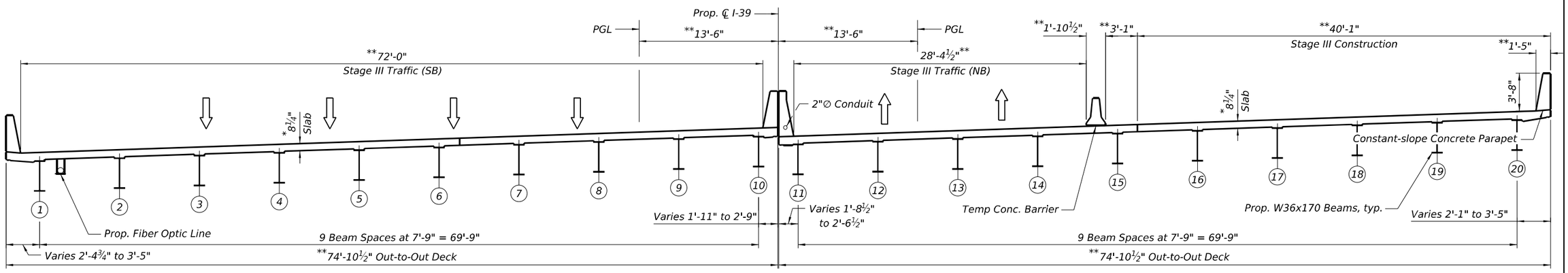


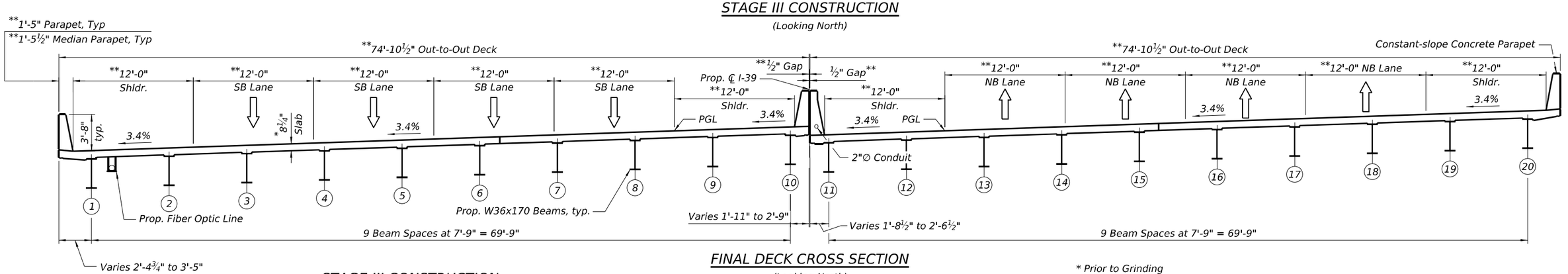

## STAGE III REMOVAL

(Looking North)




## STAGE III CONSTRUCTION

(Looking North)




## FINAL DECK CROSS SECTION

(Looking North)

## STAGE III REMOVAL

1. Install temporary concrete barrier as shown to locate traffic on the west side of proposed NB structure.
2. Remove existing concrete bridge decks, approaches, parapets, appurtenances, steel beams, bearings and substructure elements within the limits of Stage III Removal.

## STAGE III CONSTRUCTION

1. Drive HP piles for abutments, and piers, as shown in the Substructure Layout Plan.
2. Construct Integral abutment caps, slopewalls, pier crash walls, pier columns and pier caps.
3. Install bearings at abutments and piers and erect Beams 16 thru 20 and associated permanent bracing.
4. Install deck forms and reinforcement.
5. Construct reinforced concrete decks, steel diaphragms, and parapets.

## STAGE III CONSTRUCTION - CONTINUED

6. Construct the cast-in-place bridge approach slabs.
7. Perform diamond grinding and longitudinal bridge deck grooving for bridge deck and approaches.
8. Apply Protective Coat for bridge decks, approaches and tops and inside faces of parapets.
9. Place temporary pavement markings on the top of deck for final condition (See Roadway Plans).

* Prior to Grinding

** Radial Dimension

## LEGEND

Removal of Existing Structures No. 1

## NOTE:

1. For Quantity of Temporary Concrete Barrier, See Roadway Plans.
2. For temporary concrete barrier details, see sheet 5 of 60.

MODEL: SHEET
FILE NAME: c:\pwworkdir\benesch projects\projects\d0173871\D284C24_SHT_0208-0209-CN_S3-CONSTR.dgn

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| | | | | | |
|---|---|---|---|---|---|
| USER NAME = dofrikhter | | DESIGNED - JW | | REVISED - | |
| | | DRAWN - AT | | REVISED - | |
| PLOT SCALE = $SCALE$ | | CHECKED - AJN | | REVISED - | |
| PLOT DATE = 2/13/2025 | | DATE - 02/27/24 | | REVISED - | |

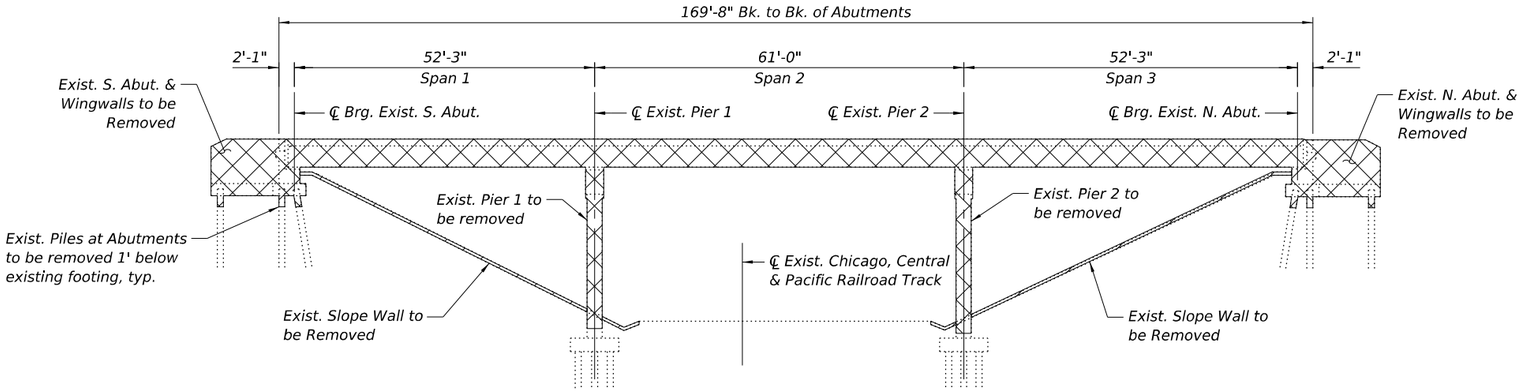
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**STAGE 3 CONSTRUCTION & REMOVAL**
**STRUCTURE NO. 101-0208/0209**

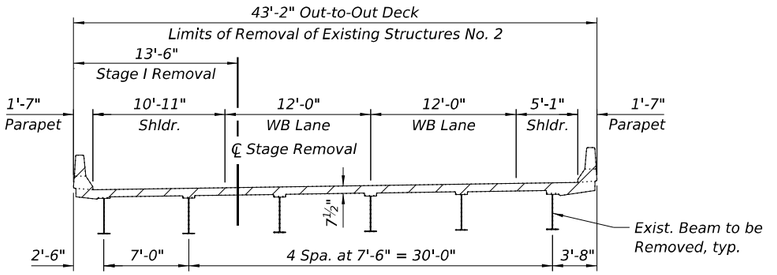
SCALE: ____ | SHEET 8 OF 60 SHEETS | STA. ____ | TO STA. ____

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| - | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 551 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

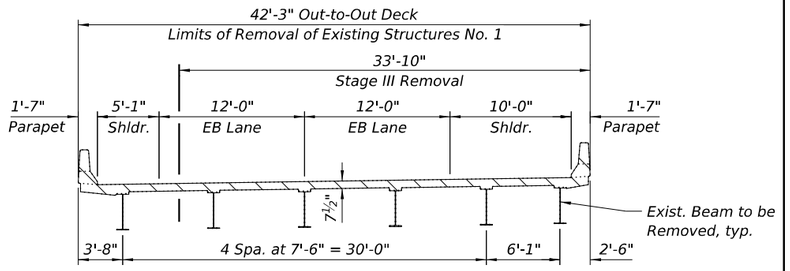



## REMOVAL ELEVATION



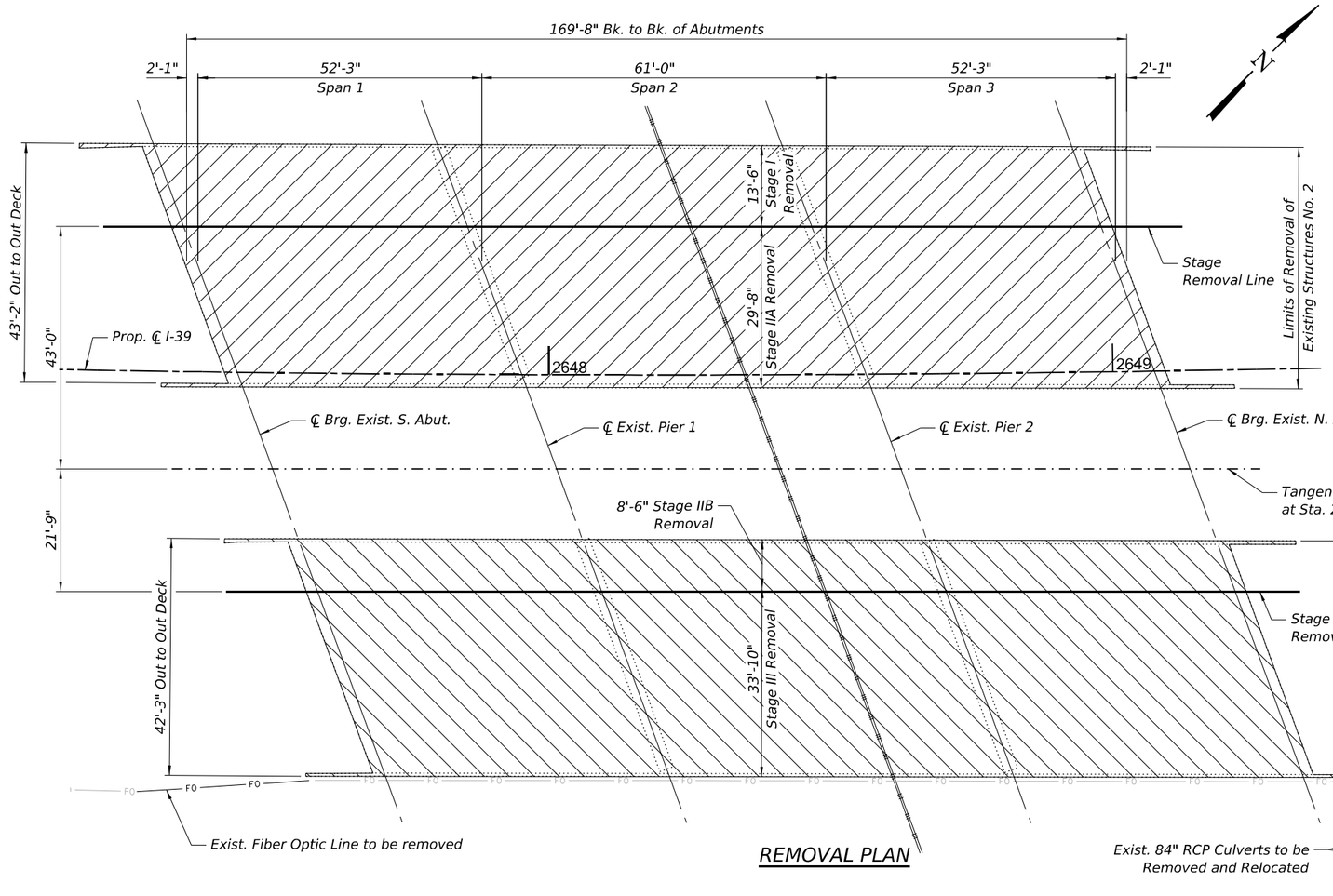

## EXISTING SOUTHBOUND DECK CROSS SECTION

(Looking North)




## EXISTING NORTHBOUND DECK CROSS SECTION

(Looking North)




## REMOVAL PLAN

## LEGEND

- Removal of Existing Structures
- Removal of Existing Structures No. 1
- Removal of Existing Structures No. 2

## NOTES

1. For suggested stages of construction and sequencing requirements, see Roadway Plans and Special Provisions
2. For substructure removal details, see Sheets 10 thru 13 of 60.
3. For Temporary Sheet Piling limits and details, see Sheet 3 of 60.
4. The Contractor shall take all necessary precautions to protect existing utilites and adjacent structures during removal/construction of the bridge.
5. Existing Piers shall be removed according to Art. 501.05 of the Standard Specifications and as shown in the Plans.
6. For Approach Slab Removal, See Roadway Plans.

MODEL: SHEET
FILE NAME: c:\pwworkdir\benesch projects\projects\d0173871\D2834C24_SHT_0208-0209-CN_REM-PLAN-ELEV.dgn

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Chicago, Illinois 60603
312-554-0300
www.bowmansan.com

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|---|---|---|---|
| USER NAME = lfranceschina | DESIGNED - JW | REVISED - | |
| | DRAWN - AT | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - AJN | REVISED - | |
| PLOT DATE = 8/12/2024 | DATE - 02/27/24 | REVISED - | |

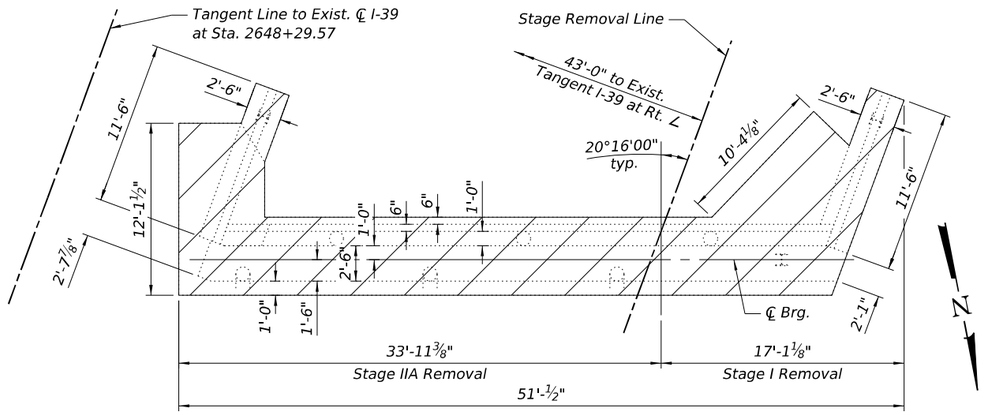
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**REMOVAL PLAN & ELEVATION**
**STRUCTURE NO. 101-0208/0209**

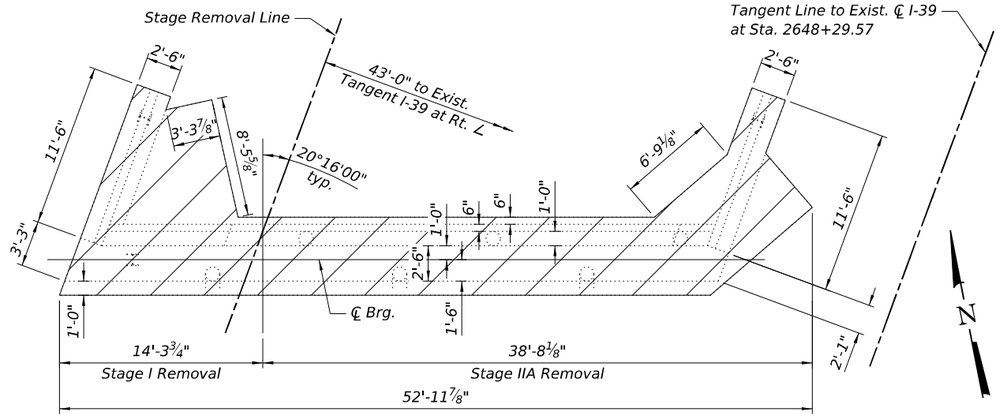
SCALE: | SHEET 9 OF 60 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1,5)R | WINNEBAGO | 1685 | 552 |
| | | CONTRACT NO. 64C24 | | |
| | | ILLINOIS | FED. AID PROJECT | |

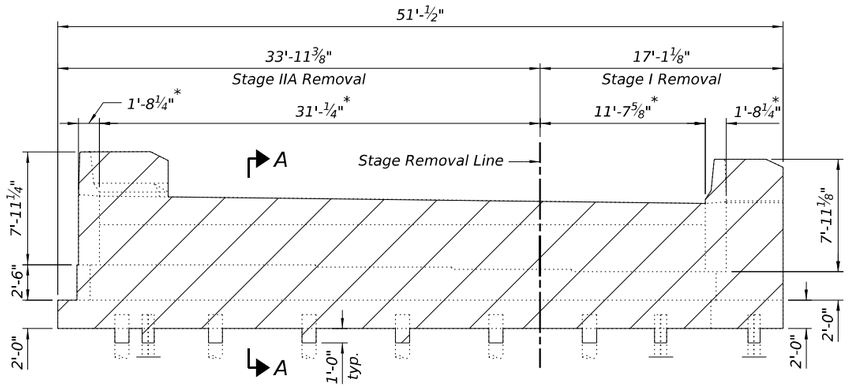
* FAI ROUTE 39 (I-39) & FAP 301 (US 20)




## SOUTH ABUTMENT - REMOVAL PLAN

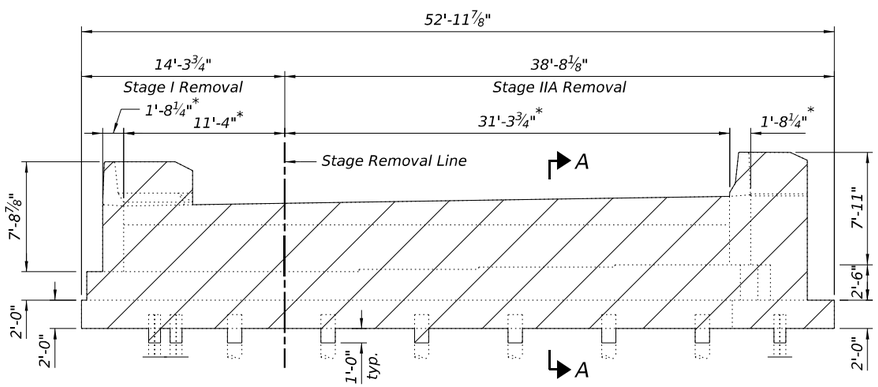



## NORTH ABUTMENT - REMOVAL PLAN



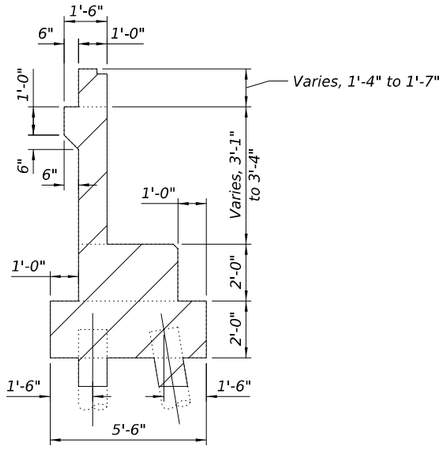

## SOUTH ABUTMENT - REMOVAL ELEVATION

*(Looking South)*

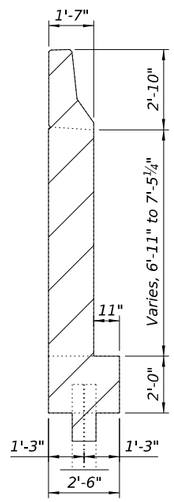



## NORTH ABUTMENT - REMOVAL ELEVATION

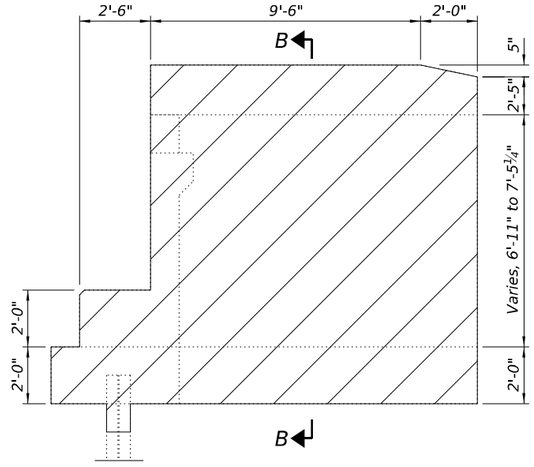
*(Looking North)*




## SECTION A-A




## SECTION B-B




## TYPICAL WINGWALL - REMOVAL ELEVATION

* *Dimensions measured along Front Face of Abutment*

**LEGEND**

*Removal of Existing Structures No. 2*

MODEL: SHEET
FILE NAME: c:\pwworkdir\benesch projects\projects\d0173871\D264C24_SHT_0208-0209-CN_EXIST-ABUTS-SB.dgn

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| | | | | | |
|---|---|---|---|---|---|
| USER NAME | = lfranceschina | DESIGNED - | JW | REVISED - | |
| | | DRAWN - | AT | REVISED - | |
| PLOT SCALE | = $SCALE$ | CHECKED - | AJN | REVISED - | |
| PLOT DATE | = 8/12/2024 | DATE - | 02/27/24 | REVISED - | |

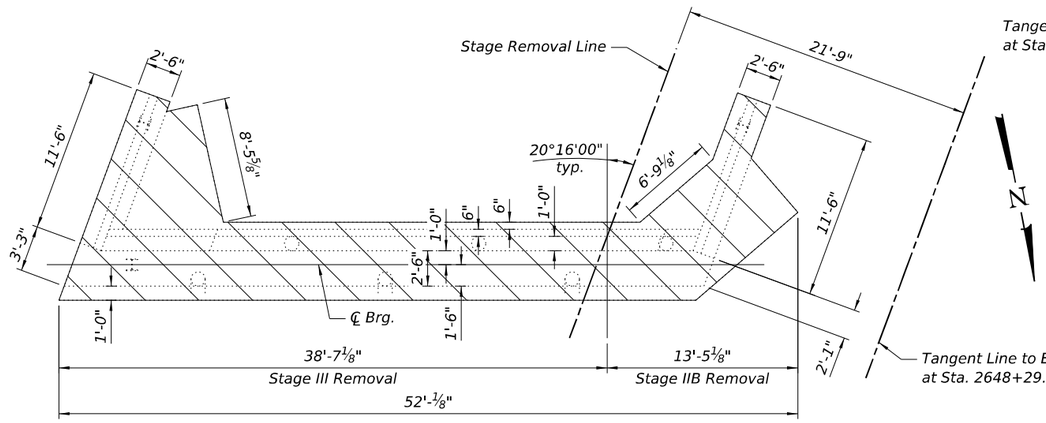
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**EXISTING SOUTHBOUND ABUTMENTS REMOVAL**
**STRUCTURE NO. 101-0208/0209**

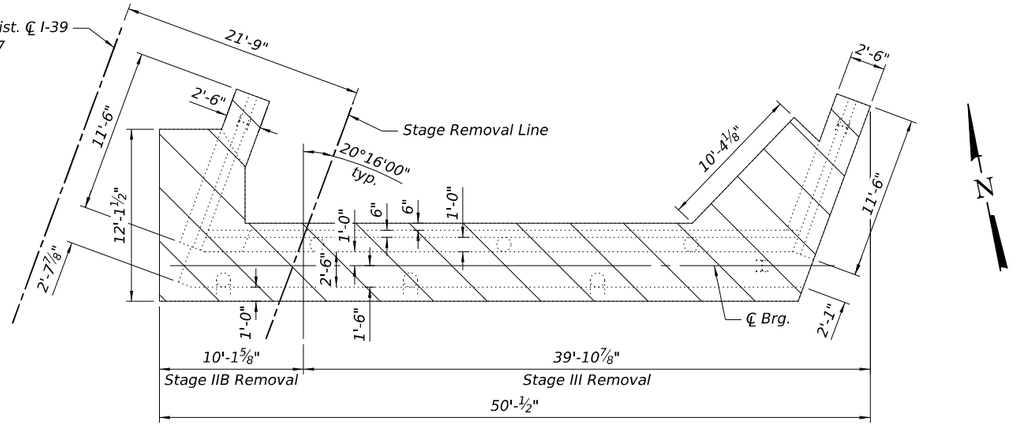
SCALE: | SHEET 10 OF 60 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 553 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

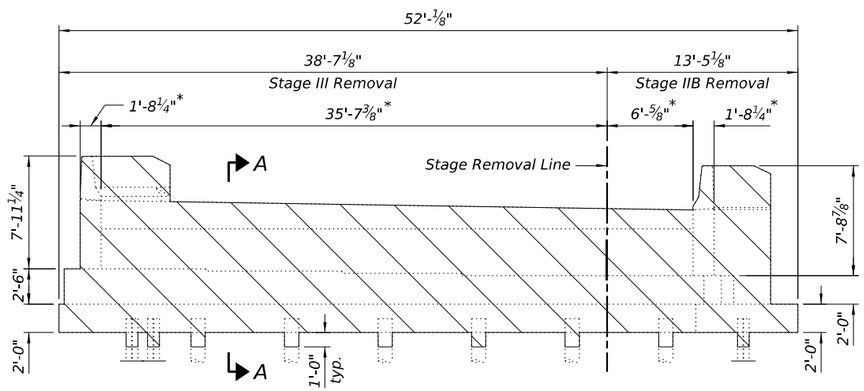
* FAI ROUTE 39 (I-39) & FAP 301 (US 20)




## SOUTH ABUTMENT - REMOVAL PLAN

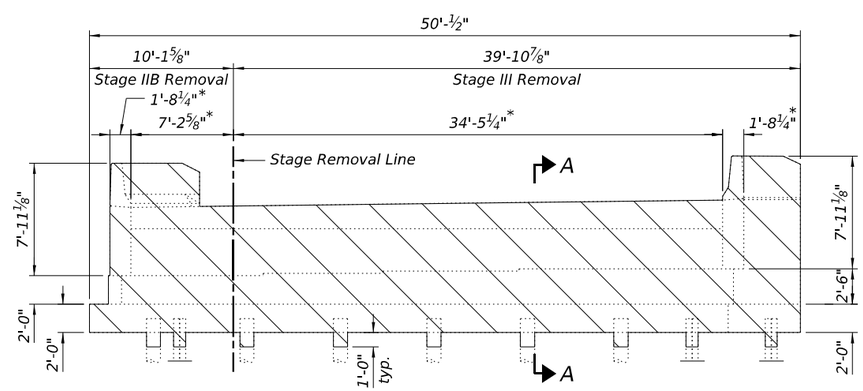



## NORTH ABUTMENT - REMOVAL PLAN



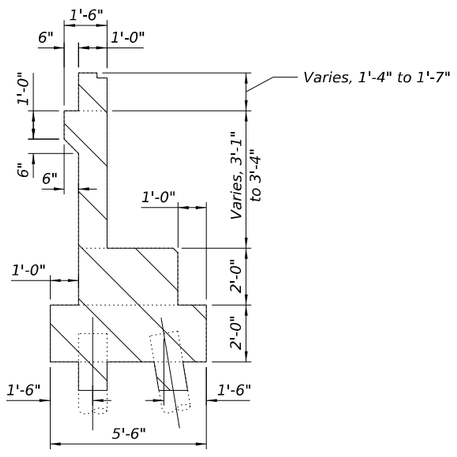

## SOUTH ABUTMENT - REMOVAL ELEVATION

*(Looking South)*

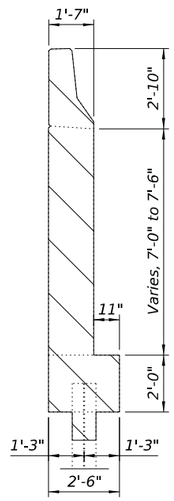



## NORTH ABUTMENT - REMOVAL ELEVATION

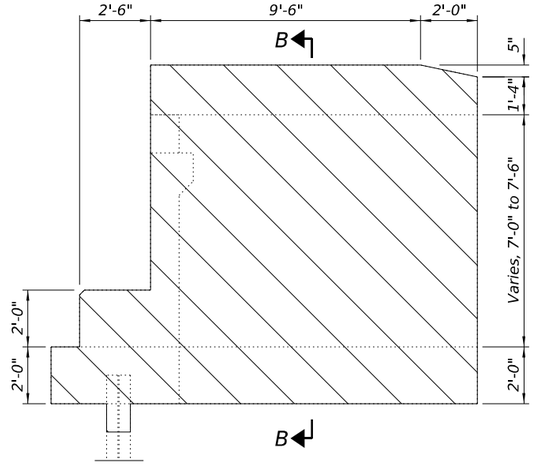
*(Looking North)*




## SECTION A-A




## SECTION B-B




## TYPICAL WINGWALL - REMOVAL ELEVATION

* *Dimensions measured along Front Face of Abutment*

**LEGEND**

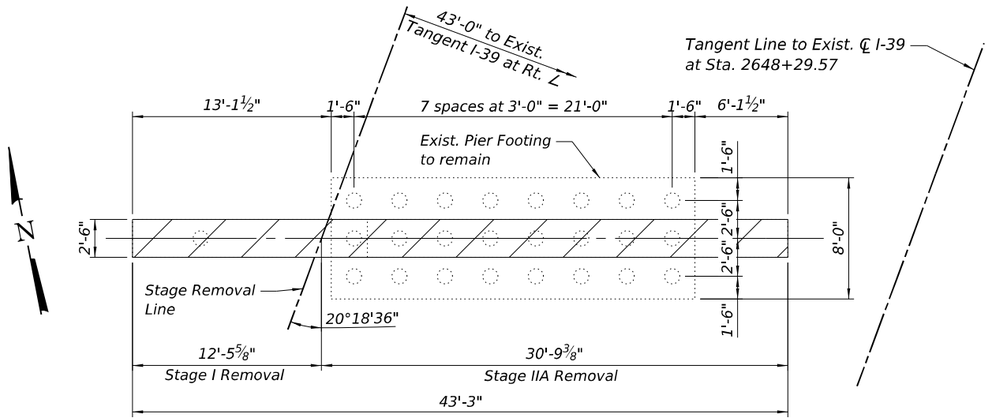
*Removal of Existing Structures No. 1*

MODEL: SHEET
FILE NAME: c:\pwworkdir\benesch projects\projects\d0173871\D264C24_SHT_0208-0209-CN_EXIST-ABUTS-NB.dgn

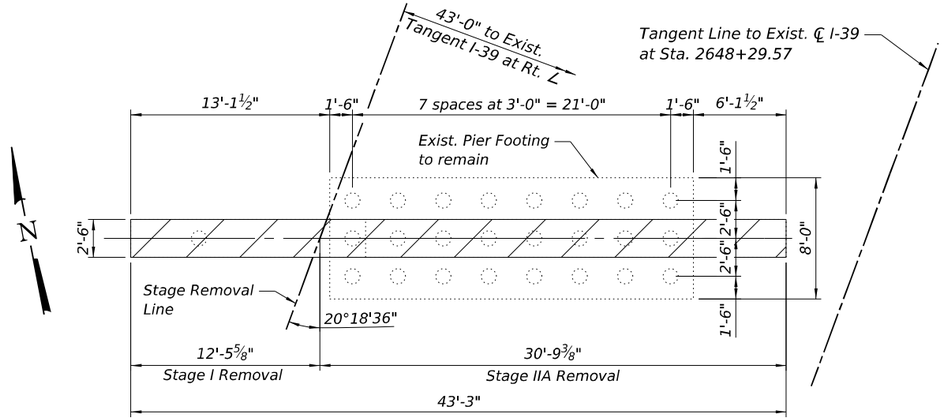
| | | | | | |
|---|---|---|---|---|---|
| Bowman 10 S. LaSalle Street, Suite 2710 Chicago, Illinois 60603 312-914-0160 www.bowman.com | USER NAME = lfranceschina | DESIGNED - JW | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | EXISTING NORTHBOUND ABUTMENTS REMOVAL STRUCTURE NO. 101-0208/0209 |
| | | DRAWN - AT | REVISED - | | |
| | PLOT SCALE = $SCALE$ | CHECKED - AJN | REVISED - | | SCALE: SHEET 11 OF 60 SHEETS STA. TO STA. |
| | PLOT DATE = 8/12/2024 | DATE - 02/27/24 | REVISED - | | |

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 554 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

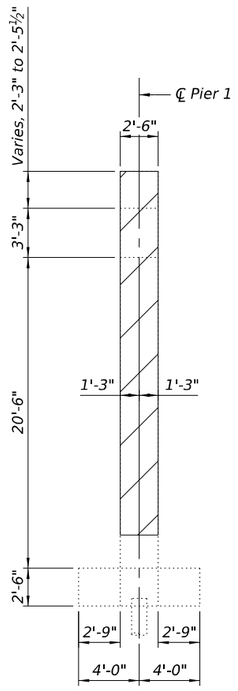
* FAI ROUTE 39 (I-39) & FAP 301 (US 20)



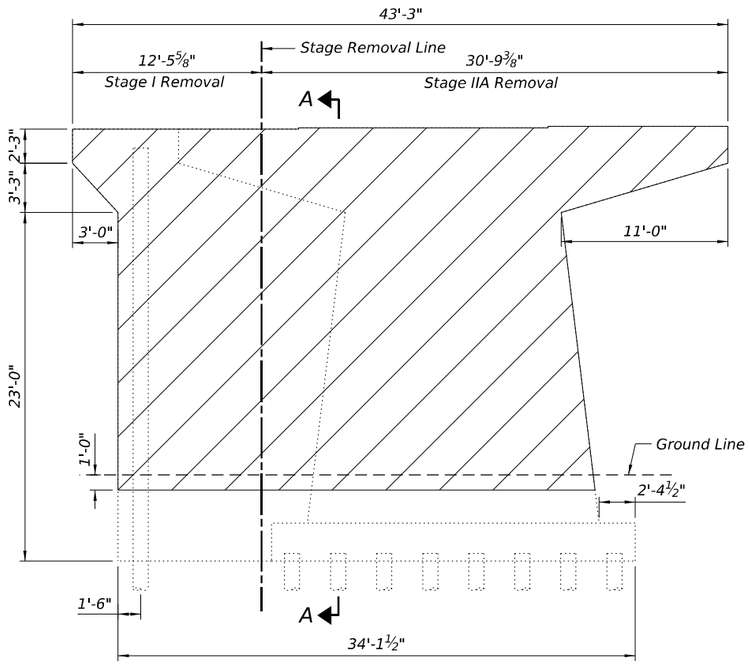

PIER 1 REMOVAL PLAN



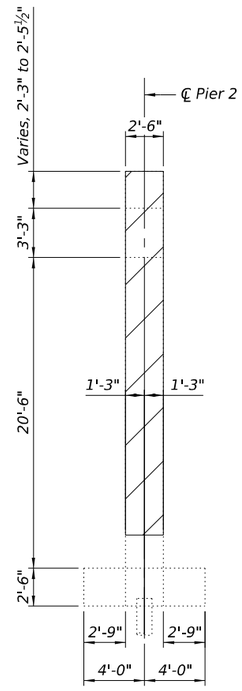

PIER 2 REMOVAL PLAN



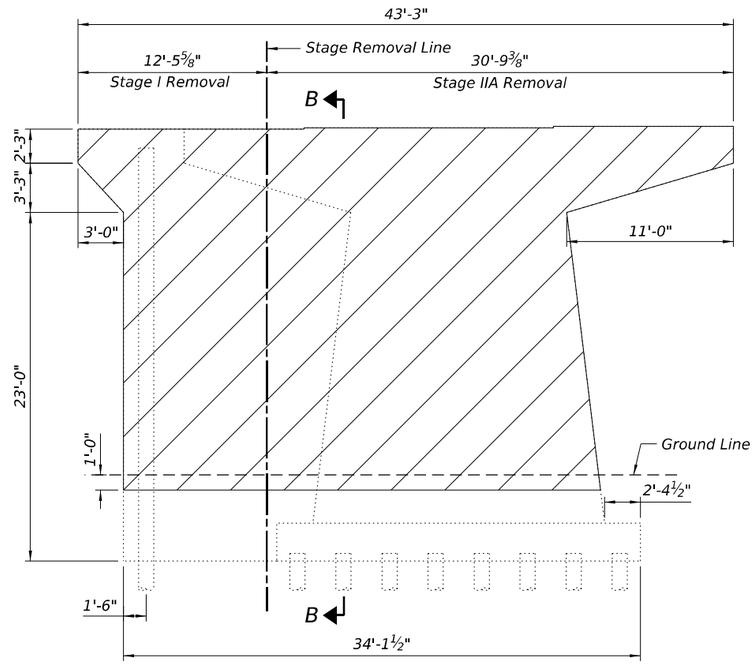

SECTION A-A




PIER 1 REMOVAL ELEVATION
*(Looking North)*




SECTION B-B




PIER 2 REMOVAL ELEVATION
*(Looking North)*

## LEGEND

Removal of Existing Structures No. 2

MODEL: SHEET
FILE NAME: c:\pwworkdir\benesch projects\projects\d0173871\D284024_SHT_0208-0209-CN_EXIST-PIERS-SB.dgn

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Chicago, Illinois 60603
312-454-0390
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| | | | | | |
|---|---|---|---|---|---|
| USER NAME | = lfranceschina | DESIGNED | - JW | REVISED | - |
| | | DRAWN | - AT | REVISED | - |
| PLOT SCALE | = $SCALE$ | CHECKED | - AJN | REVISED | - |
| PLOT DATE | = 8/12/2024 | DATE | - 02/27/24 | REVISED | - |

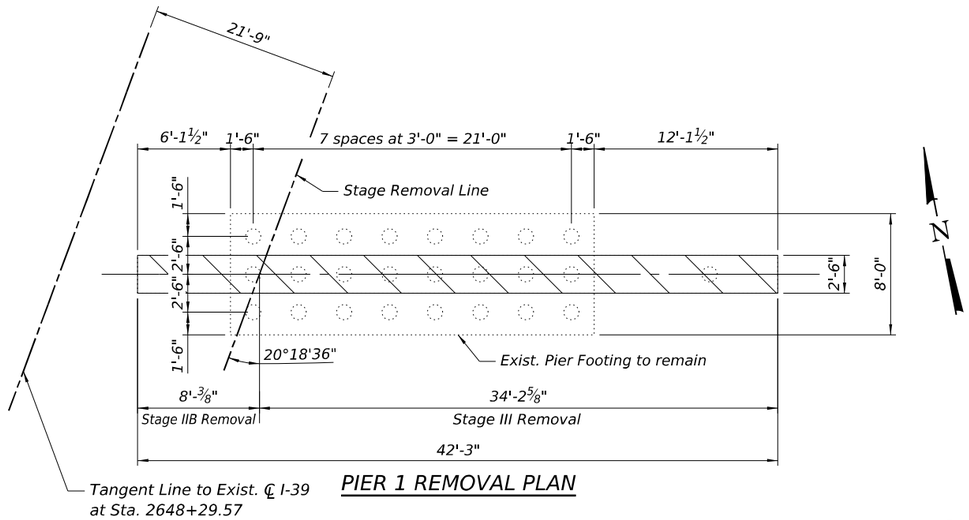
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**EXISTING SOUTHBOUND PIERS REMOVAL**
**STRUCTURE NO. 101-0208/0209**

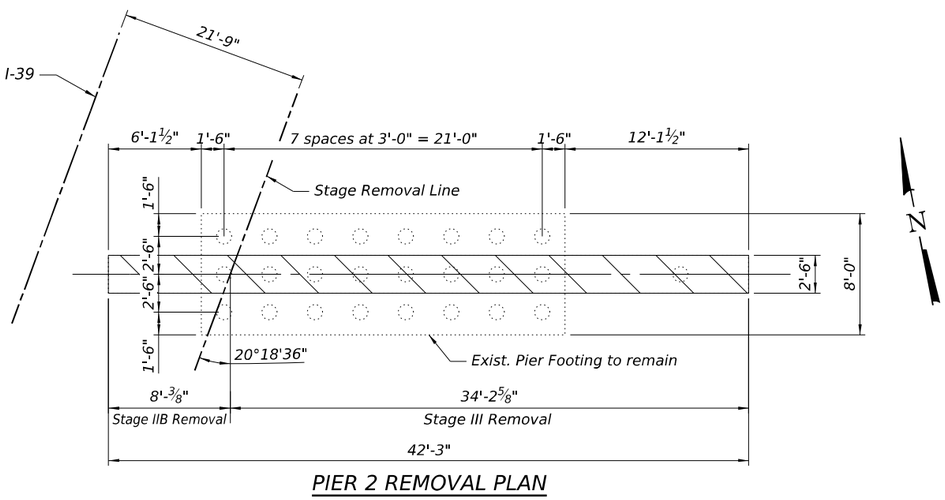
SCALE: | SHEET 12 OF 60 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1,5)R | WINNEBAGO | 1685 | 555 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

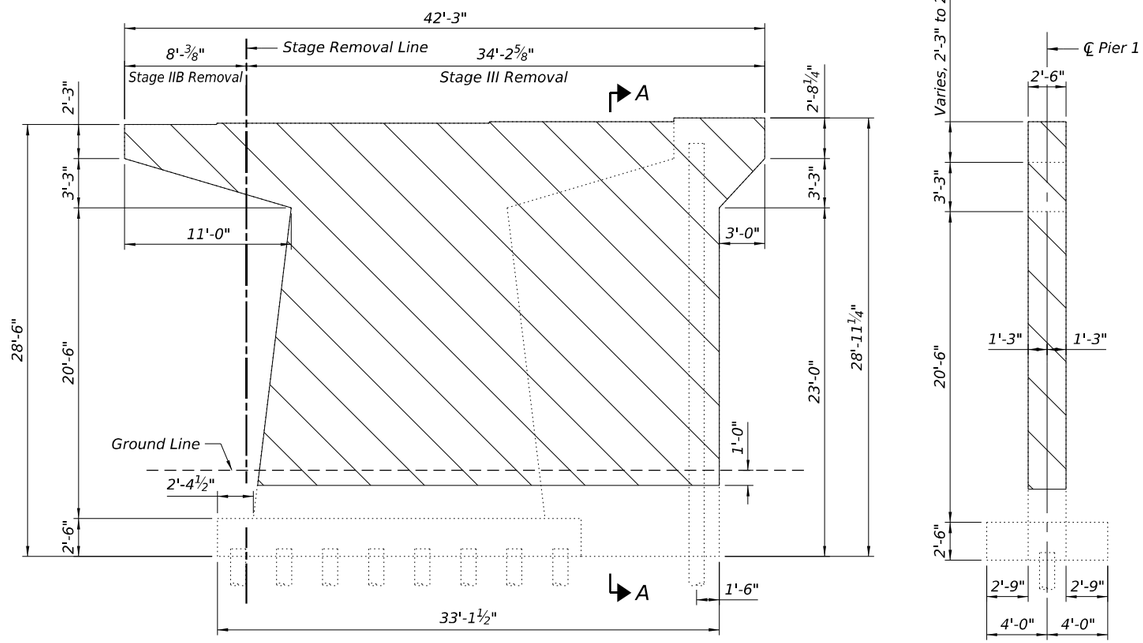
* FAI ROUTE 39 (I-39) & FAP 301 (US 20)




## PIER 1 REMOVAL PLAN




## PIER 2 REMOVAL PLAN

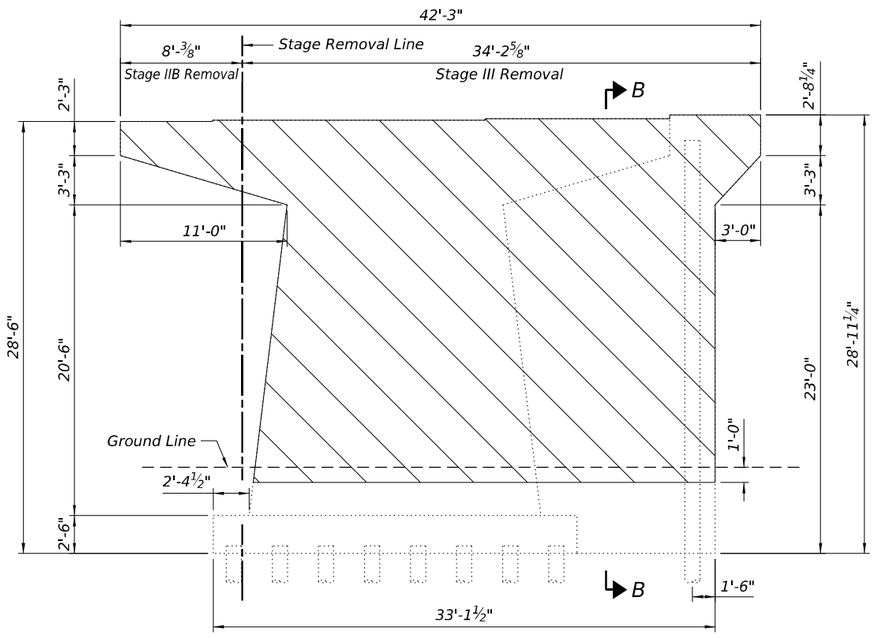



## PIER 1 REMOVAL ELEVATION

*(Looking North)*

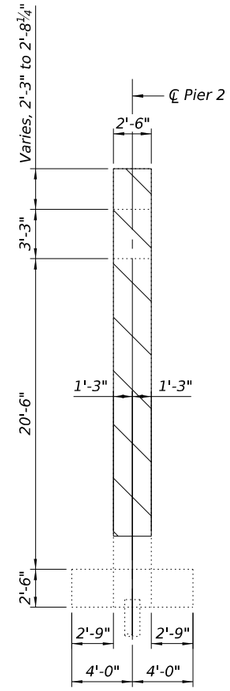



## SECTION A-A




## PIER 2 REMOVAL ELEVATION

*(Looking North)*




## SECTION B-B

## LEGEND

Removal of Existing Structures No. 1

MODEL: SHEET
FILE NAME: c:\pw\wordir\benesch projects\projects\d0173871\D264C24_SHT_0208-0209-CN_EXIST-PIERS-NB.dgn

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10 S. LaSalle Street, Suite 2710
Chicago, Illinois 60603
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|---|---|---|---|---|---|
| USER NAME = lfranceschina | | DESIGNED - JW | | REVISED - | |
| | | DRAWN - AT | | REVISED - | |
| PLOT SCALE = $SCALE$ | | CHECKED - AJN | | REVISED - | |
| PLOT DATE = 8/12/2024 | | DATE - 02/27/24 | | REVISED - | |

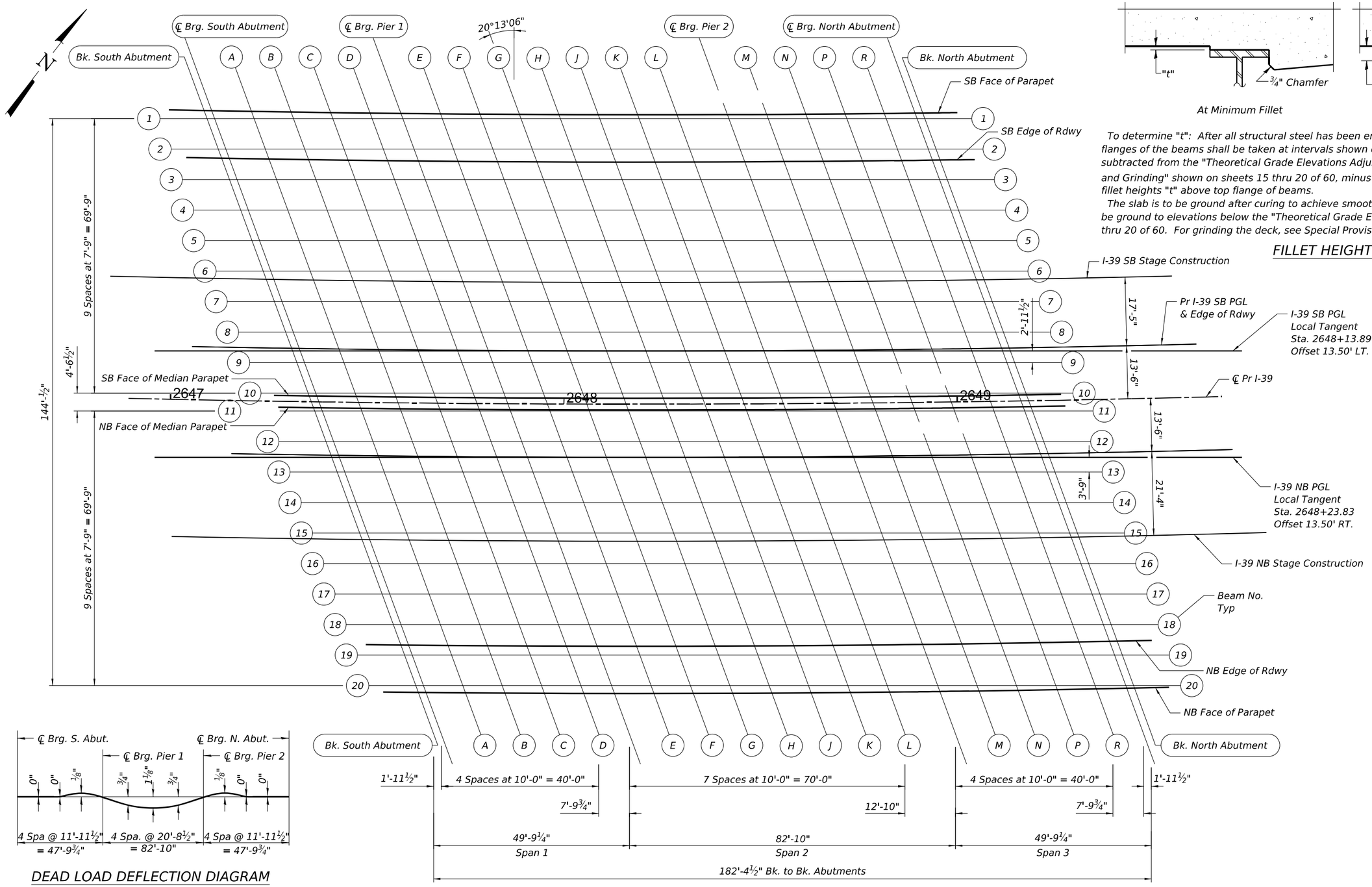
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**EXISTING NORTHBOUND PIERS REMOVAL**
**STRUCTURE NO. 101-0208/0209**

SCALE: | SHEET 13 OF 60 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 556 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS FED. AID PROJECT | | | |

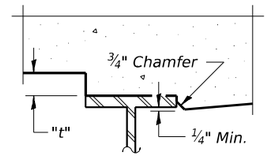
* FAI ROUTE 39 (I-39) & FAP 301 (US 20)




PLAN




At Minimum Fillet




At Maximum Fillet

*To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown on this sheet. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection and Grinding" shown on sheets 15 thru 20 of 60, minus 8¼" deck thickness, equals the fillet heights "t" above top flange of beams.*

*The slab is to be ground after curing to achieve smoothness, but the slab is not to be ground to elevations below the "Theoretical Grade Elevations" shown on sheets 15 thru 20 of 60. For grinding the deck, see Special Provisions.*

## FILLET HEIGHTS




## DEAD LOAD DEFLECTION DIAGRAM

*(Includes weight of concrete only)*

*Note:*

*The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections and grinding as shown on sheets 15 thru 20 of 60.*

MODEL: SHEET
FILE NAME: c:\pwworkdir\benesch projects\projects\d0173871\D264C24_SHT_0208-0209-CN_DECK-SLAB-ELEV-1.dgn

Bowman 10 S. LaSalle Street, Suite 2110 Chicago, Illinois 60603 312-454-0160 www.bowman.com

| | | | |
|---|---|---|---|
| USER NAME = lfranceschina | DESIGNED - JW | REVISED - | |
| | DRAWN - DSO | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - AJN | REVISED - | |
| PLOT DATE = 8/12/2024 | DATE - 02/27/24 | REVISED - | |

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

**SLAB ELEVATIONS 1**
**STRUCTURE NO. 101-0208/0209**

SCALE: | SHEET 14 OF 60 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 557 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

## SOUTHBOUND FACE OF PARAPET

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding |
|---|---|---|---|---|
| Bk. S. Abutment | 2647+07.11 | -73.50 | 798.88 | 798.90 |
| ℄ Brg. S. Abutment | 2647+09.11 | -73.50 | 798.88 | 798.90 |
| A | 2647+19.31 | -73.50 | 798.93 | 798.95 |
| B | 2647+29.50 | -73.50 | 798.97 | 798.99 |
| C | 2647+39.69 | -73.50 | 799.01 | 799.03 |
| D | 2647+49.87 | -73.50 | 799.05 | 799.07 |
| ℄ Brg. Pier 1 | 2647+57.82 | -73.50 | 799.08 | 799.10 |
| E | 2647+67.99 | -73.50 | 799.11 | 799.15 |
| F | 2647+78.15 | -73.50 | 799.14 | 799.20 |
| G | 2647+88.30 | -73.50 | 799.17 | 799.25 |
| H | 2647+98.45 | -73.50 | 799.19 | 799.28 |
| J | 2648+08.59 | -73.50 | 799.21 | 799.30 |
| K | 2648+18.72 | -73.50 | 799.23 | 799.30 |
| L | 2648+28.85 | -73.50 | 799.24 | 799.29 |
| ℄ Brg. Pier 2 | 2648+41.83 | -73.50 | 799.25 | 799.27 |
| M | 2648+51.94 | -73.50 | 799.25 | 799.28 |
| N | 2648+62.05 | -73.50 | 799.25 | 799.27 |
| P | 2648+72.15 | -73.50 | 799.24 | 799.26 |
| R | 2648+82.24 | -73.50 | 799.23 | 799.25 |
| ℄ Brg. N. Abutment | 2648+90.13 | -73.50 | 799.22 | 799.24 |
| Bk. N. Abutment | 2648+92.10 | -73.50 | 799.21 | 799.23 |

## BEAM 1

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding |
|---|---|---|---|---|
| Bk. S. Abutment | 2647+07.91 | -71.49 | 799.02 | 799.04 |
| ℄ Brg. S. Abutment | 2647+09.89 | -71.52 | 799.03 | 799.05 |
| A | 2647+19.96 | -71.70 | 799.06 | 799.08 |
| B | 2647+30.14 | -71.87 | 799.10 | 799.12 |
| C | 2647+40.26 | -72.02 | 799.13 | 799.15 |
| D | 2647+50.39 | -72.14 | 799.17 | 799.19 |
| ℄ Brg. Pier 1 | 2647+58.31 | -72.23 | 799.19 | 799.21 |
| E | 2647+68.43 | -72.33 | 799.23 | 799.27 |
| F | 2647+78.56 | -72.41 | 799.25 | 799.31 |
| G | 2647+88.69 | -72.47 | 799.28 | 799.36 |
| H | 2647+98.82 | -72.51 | 799.30 | 799.39 |
| J | 2648+08.95 | -72.54 | 799.32 | 799.41 |
| K | 2648+19.07 | -72.55 | 799.33 | 799.40 |
| L | 2648+29.20 | -72.54 | 799.34 | 799.39 |
| ℄ Brg. Pier 2 | 2648+42.20 | -72.50 | 799.35 | 799.37 |
| M | 2648+52.33 | -72.45 | 799.36 | 799.39 |
| N | 2648+62.46 | -72.38 | 799.36 | 799.38 |
| P | 2648+72.58 | -72.30 | 799.35 | 799.37 |
| R | 2648+82.71 | -72.20 | 799.35 | 799.37 |
| ℄ Brg. N. Abutment | 2648+90.63 | -72.10 | 799.34 | 799.36 |
| Bk. N. Abutment | 2648+92.61 | -72.08 | 799.33 | 799.35 |

## BEAM 2

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding |
|---|---|---|---|---|
| Bk. S. Abutment | 2647+10.95 | -63.79 | 799.29 | 799.31 |
| ℄ Brg. S. Abutment | 2647+12.92 | -63.83 | 799.30 | 799.32 |
| A | 2647+23.03 | -64.01 | 799.34 | 799.36 |
| B | 2647+33.15 | -64.16 | 799.37 | 799.39 |
| C | 2647+43.26 | -64.30 | 799.41 | 799.43 |
| D | 2647+53.37 | -64.43 | 799.44 | 799.46 |
| ℄ Brg. Pier 1 | 2647+61.28 | -64.51 | 799.47 | 799.49 |
| E | 2647+71.39 | -64.60 | 799.50 | 799.54 |
| F | 2647+81.50 | -64.68 | 799.52 | 799.59 |
| G | 2647+91.62 | -64.73 | 799.55 | 799.64 |
| H | 2648+01.73 | -64.77 | 799.57 | 799.67 |
| J | 2648+11.85 | -64.79 | 799.59 | 799.68 |
| K | 2648+21.96 | -64.80 | 799.60 | 799.68 |
| L | 2648+32.08 | -64.78 | 799.61 | 799.66 |
| ℄ Brg. Pier 2 | 2648+45.06 | -64.74 | 799.62 | 799.64 |
| M | 2648+55.17 | -64.68 | 799.62 | 799.65 |
| N | 2648+65.28 | -64.61 | 799.62 | 799.65 |
| P | 2648+75.40 | -64.52 | 799.61 | 799.63 |
| R | 2648+85.51 | -64.41 | 799.61 | 799.63 |
| ℄ Brg. N. Abutment | 2648+93.42 | -64.32 | 799.60 | 799.62 |
| Bk. N. Abutment | 2648+95.39 | -64.29 | 799.59 | 799.61 |

## SOUTHBOUND EDGE OF ROADWAY

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding |
|---|---|---|---|---|
| Bk. S. Abutment | 2647+11.85 | -61.50 | 799.38 | 799.40 |
| ℄ Brg. S. Abutment | 2647+13.84 | -61.50<br>-61.50 | 799.38 | 799.40 |
| A | 2647+24.02 | -61.50 | 799.42 | 799.44 |
| B | 2647+34.18 | -61.50 | 799.47 | 799.49 |
| C | 2647+44.35 | -61.50 | 799.51 | 799.53 |
| D | 2647+54.50 | -61.50 | 799.54 | 799.56 |
| ℄ Brg. Pier 1 | 2647+62.43 | -61.50 | 799.57 | 799.59 |
| E | 2647+72.58 | -61.50 | 799.61 | 799.65 |
| F | 2647+82.71 | -61.50 | 799.63 | 799.70 |
| G | 2647+92.84 | -61.50 | 799.66 | 799.75 |
| H | 2648+02.96 | -61.50 | 799.68 | 799.78 |
| J | 2648+13.08 | -61.50 | 799.70 | 799.79 |
| K | 2648+23.19 | -61.50 | 799.71 | 799.79 |
| L | 2648+33.29 | -61.50 | 799.72 | 799.77 |
| ℄ Brg. Pier 2 | 2648+46.24 | -61.50 | 799.73 | 799.75 |
| M | 2648+56.33 | -61.50 | 799.73 | 799.76 |
| N | 2648+66.41 | -61.50 | 799.72 | 799.75 |
| P | 2648+76.49 | -61.50 | 799.72 | 799.74 |
| R | 2648+86.56 | -61.50 | 799.70 | 799.72 |
| ℄ Brg. N. Abutment | 2648+94.42 | -61.50 | 799.69 | 799.71 |
| Bk. N. Abutment | 2648+96.39 | -61.50 | 799.69 | 799.71 |

## BEAM 3

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding |
|---|---|---|---|---|
| Bk. S. Abutment | 2647+13.98 | -56.10 | 799.57 | 799.59 |
| ℄ Brg. S. Abutment | 2647+15.95 | -56.13 | 799.57 | 799.59 |
| A | 2647+26.05 | -56.30 | 799.61 | 799.63 |
| B | 2647+36.15 | -56.46 | 799.64 | 799.66 |
| C | 2647+46.24 | -56.59 | 799.68 | 799.70 |
| D | 2647+56.34 | -56.71 | 799.71 | 799.73 |
| ℄ Brg. Pier 1 | 2647+64.24 | -56.79 | 799.74 | 799.76 |
| E | 2647+74.34 | -56.88 | 799.77 | 799.81 |
| F | 2647+84.44 | -56.95 | 799.79 | 799.86 |
| G | 2647+94.54 | -57.00 | 799.82 | 799.91 |
| H | 2648+04.64 | -57.03 | 799.84 | 799.94 |
| J | 2648+14.74 | -57.05 | 799.85 | 799.94 |
| K | 2648+24.84 | -57.04 | 799.87 | 799.95 |
| L | 2648+34.94 | -57.03 | 799.88 | 799.93 |
| ℄ Brg. Pier 2 | 2648+47.90 | -56.97 | 799.88 | 799.90 |
| M | 2648+58.00 | -56.92 | 799.88 | 799.91 |
| N | 2648+68.10 | -56.84 | 799.88 | 799.91 |
| P | 2648+78.20 | -56.74 | 799.88 | 799.90 |
| R | 2648+88.30 | -56.63 | 799.87 | 799.89 |
| ℄ Brg. N. Abutment | 2648+96.20 | -56.53 | 799.86 | 799.88 |
| Bk. N. Abutment | 2648+98.17 | -56.50 | 799.85 | 799.87 |

## BEAM 4

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding |
|---|---|---|---|---|
| Bk. S. Abutment | 2647+17.00 | -48.40 | 799.84 | 799.86 |
| ℄ Brg. S. Abutment | 2647+18.97 | -48.43 | 799.85 | 799.87 |
| A | 2647+29.05 | -48.60 | 799.88 | 799.90 |
| B | 2647+39.14 | -48.75 | 799.92 | 799.94 |
| C | 2647+49.22 | -48.88 | 799.95 | 799.97 |
| D | 2647+59.31 | -48.99 | 799.99 | 800.01 |
| ℄ Brg. Pier 1 | 2647+67.19 | -49.07 | 800.01 | 800.03 |
| E | 2647+77.28 | -49.15 | 800.04 | 800.08 |
| F | 2647+87.36 | -49.21 | 800.06 | 800.13 |
| G | 2647+97.45 | -49.26 | 800.09 | 800.18 |
| H | 2648+07.54 | -49.29 | 800.11 | 800.21 |
| J | 2648+17.62 | -49.30 | 800.12 | 800.21 |
| K | 2648+27.71 | -49.29 | 800.13 | 800.21 |
| L | 2648+37.80 | -49.27 | 800.14 | 800.19 |
| ℄ Brg. Pier 2 | 2648+50.74 | -49.21 | 800.15 | 800.17 |
| M | 2648+60.83 | -49.15 | 800.15 | 800.18 |
| N | 2648+70.91 | -49.06 | 800.14 | 800.17 |
| P | 2648+81.00 | -48.96 | 800.14 | 800.16 |
| R | 2648+91.09 | -48.85 | 800.13 | 800.15 |
| ℄ Brg. N. Abutment | 2648+98.97 | -48.74 | 800.12 | 800.14 |
| Bk. N. Abutment | 2649+00.94 | -48.71 | 800.11 | 800.13 |

MODEL: SHEET
FILE NAME: c:\pwwordir\benesch projects\projects\d0173871\D264C24_SHT_0208-0209-CN_DECK-SLAB-ELEV-2.dgn

Bowman
10 S. LaSalle Street, Suite 2116
Chicago, Illinois 60603
312-641-0580
www.bowman.com

| | | | |
|---|---|---|---|
| USER NAME = lfranceschina | DESIGNED - JW | REVISED - | |
| | DRAWN - DSO | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - AJN | REVISED - | |
| PLOT DATE = 8/12/2024 | DATE - 02/27/24 | REVISED - | |

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

**SLAB ELEVATIONS 2**
**STRUCTURE NO. 101-0208/0209**

SCALE: | SHEET 15 OF 60 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 558 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

## BEAM 5

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding |
|---|---|---|---|---|
| Bk. S. Abutment | 2647+20.01 | -40.70 | 800.12 | 800.14 |
| ℄ Brg. S. Abutment | 2647+21.98 | -40.73 | 800.12 | 800.14 |
| A | 2647+32.05 | -40.89 | 800.16 | 800.18 |
| B | 2647+42.12 | -41.04 | 800.19 | 800.21 |
| C | 2647+52.19 | -41.16 | 800.23 | 800.25 |
| D | 2647+62.26 | -41.27 | 800.26 | 800.28 |
| ℄ Brg. Pier 1 | 2647+70.14 | -41.34 | 800.28 | 800.30 |
| E | 2647+80.21 | -41.42 | 800.31 | 800.35 |
| F | 2647+90.28 | -41.48 | 800.33 | 800.40 |
| G | 2648+00.35 | -41.52 | 800.36 | 800.45 |
| H | 2648+10.43 | -41.54 | 800.37 | 800.47 |
| J | 2648+20.50 | -41.55 | 800.39 | 800.48 |
| K | 2648+30.57 | -41.54 | 800.40 | 800.48 |
| L | 2648+40.65 | -41.51 | 800.41 | 800.46 |
| ℄ Brg. Pier 2 | 2648+53.57 | -41.44 | 800.41 | 800.43 |
| M | 2648+63.65 | -41.37 | 800.41 | 800.44 |
| N | 2648+73.72 | -41.29 | 800.41 | 800.44 |
| P | 2648+83.79 | -41.18 | 800.40 | 800.42 |
| R | 2648+93.86 | -41.06 | 800.39 | 800.41 |
| ℄ Brg. N. Abutment | 2649+01.73 | -40.95 | 800.38 | 800.40 |
| Bk. N. Abutment | 2649+03.70 | -40.92 | 800.37 | 800.39 |

## BEAM 6

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding |
|---|---|---|---|---|
| Bk. S. Abutment | 2647+23.02 | -33.00 | 800.39 | 800.41 |
| ℄ Brg. S. Abutment | 2647+24.98 | -33.03 | 800.40 | 800.42 |
| A | 2647+35.04 | -33.19 | 800.43 | 800.45 |
| B | 2647+45.10 | -33.33 | 800.47 | 800.49 |
| C | 2647+55.15 | -33.45 | 800.50 | 800.52 |
| D | 2647+65.21 | -33.55 | 800.53 | 800.55 |
| ℄ Brg. Pier 1 | 2647+73.07 | -33.62 | 800.55 | 800.57 |
| E | 2647+83.13 | -33.69 | 800.58 | 800.62 |
| F | 2647+93.19 | -33.74 | 800.60 | 800.67 |
| G | 2648+03.25 | -33.78 | 800.63 | 800.72 |
| H | 2648+13.31 | -33.80 | 800.64 | 800.74 |
| J | 2648+23.37 | -33.80 | 800.66 | 800.75 |
| K | 2648+33.43 | -33.78 | 800.67 | 800.75 |
| L | 2648+43.49 | -33.75 | 800.67 | 800.72 |
| ℄ Brg. Pier 2 | 2648+56.40 | -33.68 | 800.67 | 800.69 |
| M | 2648+66.46 | -33.60 | 800.67 | 800.70 |
| N | 2648+76.51 | -33.51 | 800.67 | 800.70 |
| P | 2648+86.57 | -33.40 | 800.66 | 800.68 |
| R | 2648+96.63 | -33.27 | 800.65 | 800.67 |
| ℄ Brg. N. Abutment | 2649+04.49 | -33.16 | 800.64 | 800.66 |
| Bk. N. Abutment | 2649+06.46 | -33.13 | 800.63 | 800.65 |

## SOUTHBOUND STAGE CONSTRUCTION

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding |
|---|---|---|---|---|
| Bk. S. Abutment | 2647+23.83 | -30.92 | 800.46 | 800.48 |
| ℄ Brg. S. Abutment | 2647+25.80 | -30.92 | 800.47 | 800.49 |
| A | 2647+35.92 | -30.92 | 800.51 | 800.53 |
| B | 2647+46.02 | -30.92 | 800.55 | 800.57 |
| C | 2647+56.12 | -30.92 | 800.59 | 800.61 |
| D | 2647+66.21 | -30.92 | 800.63 | 800.65 |
| ℄ Brg. Pier 1 | 2647+74.10 | -30.92 | 800.65 | 800.67 |
| E | 2647+84.18 | -30.92 | 800.68 | 800.72 |
| F | 2647+94.25 | -30.92 | 800.70 | 800.77 |
| G | 2648+04.32 | -30.92 | 800.73 | 800.82 |
| H | 2648+14.38 | -30.92 | 800.74 | 800.84 |
| J | 2648+24.43 | -30.92 | 800.76 | 800.85 |
| K | 2648+34.48 | -30.92 | 800.76 | 800.84 |
| L | 2648+44.52 | -30.92 | 800.77 | 800.82 |
| ℄ Brg. Pier 2 | 2648+57.40 | -30.92 | 800.77 | 800.79 |
| M | 2648+67.43 | -30.92 | 800.76 | 800.79 |
| N | 2648+77.45 | -30.92 | 800.75 | 800.78 |
| P | 2648+87.46 | -30.92 | 800.74 | 800.76 |
| R | 2648+97.47 | -30.92 | 800.73 | 800.75 |
| ℄ Brg. N. Abutment | 2649+05.29 | -30.92 | 800.71 | 800.73 |
| Bk. N. Abutment | 2649+07.24 | -30.92 | 800.71 | 800.73 |

## BEAM 7

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding |
|---|---|---|---|---|
| Bk. S. Abutment | 2647+26.01 | -25.30 | 800.66 | 800.68 |
| ℄ Brg. S. Abutment | 2647+27.97 | -25.33 | 800.67 | 800.69 |
| A | 2647+38.02 | -25.48 | 800.71 | 800.73 |
| B | 2647+48.06 | -25.61 | 800.74 | 800.76 |
| C | 2647+58.11 | -25.73 | 800.77 | 800.79 |
| D | 2647+68.15 | -25.82 | 800.81 | 800.83 |
| ℄ Brg. Pier 1 | 2647+76.00 | -25.89 | 800.83 | 800.85 |
| E | 2647+86.05 | -25.95 | 800.85 | 800.89 |
| F | 2647+96.09 | -26.00 | 800.88 | 800.95 |
| G | 2648+06.14 | -26.03 | 800.89 | 800.98 |
| H | 2648+16.19 | -26.05 | 800.91 | 801.01 |
| J | 2648+26.23 | -26.04 | 800.92 | 801.01 |
| K | 2648+36.28 | -26.02 | 800.93 | 801.01 |
| L | 2648+46.32 | -25.98 | 800.94 | 800.99 |
| ℄ Brg. Pier 2 | 2648+59.21 | -25.91 | 800.94 | 800.96 |
| M | 2648+69.26 | -25.83 | 800.93 | 800.96 |
| N | 2648+79.30 | -25.73 | 800.93 | 800.96 |
| P | 2648+89.35 | -25.62 | 800.92 | 800.94 |
| R | 2648+99.39 | -25.48 | 800.91 | 800.93 |
| ℄ Brg. N. Abutment | 2649+07.24 | -25.37 | 800.89 | 800.91 |
| Bk. N. Abutment | 2649+09.21 | -25.34 | 800.89 | 800.91 |

## BEAM 8

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding |
|---|---|---|---|---|
| Bk. S. Abutment | 2647+29.00 | -17.60 | 800.94 | 800.96 |
| ℄ Brg. S. Abutment | 2647+30.96 | -17.63 | 800.94 | 800.96 |
| A | 2647+40.99 | -17.77 | 800.98 | 801.00 |
| B | 2647+51.02 | -17.90 | 801.01 | 801.03 |
| C | 2647+61.05 | -18.01 | 801.05 | 801.07 |
| D | 2647+71.08 | -18.10 | 801.08 | 801.10 |
| ℄ Brg. Pier 1 | 2647+78.93 | -18.16 | 801.10 | 801.12 |
| E | 2647+88.96 | -18.22 | 801.12 | 801.16 |
| F | 2647+98.99 | -18.26 | 801.15 | 801.22 |
| G | 2648+09.02 | -18.29 | 801.16 | 801.25 |
| H | 2648+19.05 | -18.30 | 801.18 | 801.28 |
| J | 2648+29.08 | -18.29 | 801.19 | 801.28 |
| K | 2648+39.12 | -18.26 | 801.20 | 801.28 |
| L | 2648+49.15 | -18.22 | 801.20 | 801.25 |
| ℄ Brg. Pier 2 | 2648+62.02 | -18.14 | 801.20 | 801.22 |
| M | 2648+72.05 | -18.05 | 801.20 | 801.23 |
| N | 2648+82.08 | -17.95 | 801.19 | 801.22 |
| P | 2648+92.12 | -17.83 | 801.18 | 801.20 |
| R | 2649+02.15 | -17.69 | 801.17 | 801.19 |
| ℄ Brg. N. Abutment | 2649+09.99 | -17.58 | 801.15 | 801.17 |
| Bk. N. Abutment | 2649+11.95 | -17.54 | 801.15 | 801.17 |

## SOUTHBOUND PGL & EDGE OF ROADWAY

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding |
|---|---|---|---|---|
| Bk. S. Abutment | 2647+30.59 | -13.50 | 801.08 | 801.10 |
| ℄ Brg. S. Abutment | 2647+32.56 | -13.50 | 801.09 | 801.11 |
| A | 2647+42.63 | -13.50 | 801.13 | 801.15 |
| B | 2647+52.70 | -13.50 | 801.17 | 801.19 |
| C | 2647+62.77 | -13.50 | 801.21 | 801.23 |
| D | 2647+72.82 | -13.50 | 801.24 | 801.26 |
| ℄ Brg. Pier 1 | 2647+80.68 | -13.50 | 801.26 | 801.28 |
| E | 2647+90.73 | -13.50 | 801.29 | 801.33 |
| F | 2648+00.77 | -13.50 | 801.31 | 801.38 |
| G | 2648+10.80 | -13.50 | 801.33 | 801.42 |
| H | 2648+20.82 | -13.50 | 801.34 | 801.44 |
| J | 2648+30.84 | -13.50 | 801.35 | 801.44 |
| K | 2648+40.86 | -13.50 | 801.36 | 801.44 |
| L | 2648+50.86 | -13.50 | 801.36 | 801.41 |
| ℄ Brg. Pier 2 | 2648+63.69 | -13.50 | 801.36 | 801.38 |
| M | 2648+73.69 | -13.50 | 801.35 | 801.38 |
| N | 2648+83.67 | -13.50 | 801.34 | 801.37 |
| P | 2648+93.65 | -13.50 | 801.32 | 801.34 |
| R | 2649+03.62 | -13.50 | 801.31 | 801.33 |
| ℄ Brg. N. Abutment | 2649+11.42 | -13.50 | 801.29 | 801.31 |
| Bk. N. Abutment | 2649+13.36 | -13.50 | 801.28 | 801.30 |

MODEL: SHEET
FILE NAME: c:\pwworkf\benesch projects\projects\d0173871\D264C24_SHT_0208-0209-CN_DECK-SLAB-ELEV-3.dgn

Bowman
10 S. LaSalle Street, Suite 2116
Chicago, Illinois 60603
312-454-0580
www.bowman.com

| | | | |
|---|---|---|---|
| USER NAME = lfranceschina | DESIGNED - JW | REVISED - | |
| | DRAWN - DSO | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - AJN | REVISED - | |
| PLOT DATE = 8/12/2024 | DATE - 02/27/24 | REVISED - | |

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

**SLAB ELEVATIONS 3**
**STRUCTURE NO. 101-0208/0209**

SCALE: | SHEET 16 OF 60 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1,5)R | WINNEBAGO | 1685 | 559 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

## BEAM 9

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding |
|---|---|---|---|---|
| Bk. S. Abutment | 2647+31.98 | -9.89 | 801.21 | 801.23 |
| ℄ Brg. S. Abutment | 2647+33.94 | -9.92 | 801.22 | 801.24 |
| A | 2647+43.96 | -10.06 | 801.25 | 801.27 |
| B | 2647+53.97 | -10.18 | 801.29 | 801.31 |
| C | 2647+63.99 | -10.29 | 801.32 | 801.34 |
| D | 2647+74.01 | -10.37 | 801.35 | 801.37 |
| ℄ Brg. Pier 1 | 2647+81.84 | -10.43 | 801.37 | 801.39 |
| E | 2647+91.86 | -10.48 | 801.39 | 801.43 |
| F | 2648+01.87 | -10.52 | 801.41 | 801.48 |
| G | 2648+11.89 | -10.54 | 801.43 | 801.52 |
| H | 2648+21.91 | -10.55 | 801.44 | 801.54 |
| J | 2648+31.93 | -10.53 | 801.46 | 801.55 |
| K | 2648+41.95 | -10.50 | 801.46 | 801.54 |
| L | 2648+51.97 | -10.45 | 801.46 | 801.51 |
| ℄ Brg. Pier 2 | 2648+64.82 | -10.36 | 801.46 | 801.48 |
| M | 2648+74.84 | -10.27 | 801.46 | 801.49 |
| N | 2648+84.86 | -10.17 | 801.45 | 801.48 |
| P | 2648+94.88 | -10.04 | 801.44 | 801.46 |
| R | 2649+04.89 | -9.90 | 801.43 | 801.45 |
| ℄ Brg. N. Abutment | 2649+12.72 | -9.78 | 801.41 | 801.43 |
| Bk. N. Abutment | 2649+14.68 | -9.75 | 801.41 | 801.43 |

## BEAM 10

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding |
|---|---|---|---|---|
| Bk. S. Abutment | 2647+34.95 | -2.18 | 801.49 | 801.51 |
| ℄ Brg. S. Abutment | 2647+36.91 | -2.21 | 801.49 | 801.51 |
| A | 2647+46.91 | -2.35 | 801.53 | 801.55 |
| B | 2647+56.92 | -2.46 | 801.56 | 801.58 |
| C | 2647+66.92 | -2.56 | 801.59 | 801.61 |
| D | 2647+76.92 | -2.64 | 801.62 | 801.64 |
| ℄ Brg. Pier 1 | 2647+84.74 | -2.70 | 801.64 | 801.66 |
| E | 2647+94.75 | -2.75 | 801.66 | 801.70 |
| F | 2648+04.75 | -2.78 | 801.68 | 801.74 |
| G | 2648+14.76 | -2.80 | 801.70 | 801.78 |
| H | 2648+24.76 | -2.79 | 801.71 | 801.80 |
| J | 2648+34.77 | -2.78 | 801.72 | 801.81 |
| K | 2648+44.77 | -2.74 | 801.73 | 801.80 |
| L | 2648+54.78 | -2.69 | 801.73 | 801.78 |
| ℄ Brg. Pier 2 | 2648+67.62 | -2.59 | 801.73 | 801.75 |
| M | 2648+77.62 | -2.50 | 801.72 | 801.75 |
| N | 2648+87.62 | -2.39 | 801.71 | 801.73 |
| P | 2648+97.63 | -2.26 | 801.70 | 801.72 |
| R | 2649+07.63 | -2.11 | 801.68 | 801.70 |
| ℄ Brg. N. Abutment | 2649+15.45 | -1.98 | 801.67 | 801.69 |
| Bk. N. Abutment | 2649+17.40 | -1.95 | 801.67 | 801.69 |

## SOUTHBOUND FACE OF MEDIAN PARAPET

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding |
|---|---|---|---|---|
| Bk. S. Abutment | 2647+35.22 | -1.50 | 800.62 | 800.64 |
| ℄ Brg. S. Abutment | 2647+37.18 | -1.50 | 800.63 | 800.65 |
| A | 2647+47.24 | -1.50 | 800.67 | 800.69 |
| B | 2647+57.28 | -1.50 | 800.71 | 800.73 |
| C | 2647+67.32 | -1.50 | 800.74 | 800.76 |
| D | 2647+77.35 | -1.50 | 800.77 | 800.79 |
| ℄ Brg. Pier 1 | 2647+85.19 | -1.50 | 800.79 | 800.81 |
| E | 2647+95.21 | -1.50 | 800.82 | 800.86 |
| F | 2648+05.23 | -1.50 | 800.84 | 800.90 |
| G | 2648+15.24 | -1.50 | 800.85 | 800.93 |
| H | 2648+25.24 | -1.50 | 800.87 | 800.96 |
| J | 2648+35.23 | -1.50 | 800.88 | 800.97 |
| K | 2648+45.22 | -1.50 | 800.88 | 800.95 |
| L | 2648+55.21 | -1.50 | 800.88 | 800.93 |
| ℄ Brg. Pier 2 | 2648+68.01 | -1.50 | 800.87 | 800.89 |
| M | 2648+77.98 | -1.50 | 800.87 | 800.90 |
| N | 2648+87.94 | -1.50 | 800.85 | 800.87 |
| P | 2648+97.89 | -1.50 | 800.84 | 800.86 |
| R | 2649+07.85 | -1.50 | 800.82 | 800.84 |
| ℄ Brg. N. Abutment | 2649+15.62 | -1.50 | 800.80 | 800.82 |
| Bk. N. Abutment | 2649+17.56 | -1.50 | 800.79 | 800.81 |

MODEL: SHEET
FILE NAME: c:\pwwordir\benesch projects\projects\d0173871\D264C24_SHT_0208-0209-CN_DECK-SLAB-ELEV-4.dgn

Bowman
10 S. LaSalle Street, Suite 2110
Chicago, Illinois 60603
312-914-0500
www.bowman.com

| | | | |
|---|---|---|---|
| USER NAME = lfranceschina | DESIGNED - JW | REVISED - | |
| | DRAWN - DSO | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - AJN | REVISED - | |
| PLOT DATE = 8/12/2024 | DATE - 02/27/24 | REVISED - | |

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

**SLAB ELEVATIONS 4**
**STRUCTURE NO. 101-0208/0209**

SCALE: | SHEET 17 OF 60 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 560 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

## NORTHBOUND FACE OF MEDIAN PARAPET

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding |
|---|---|---|---|---|
| Bk. S. Abutment | 2647+36.37 | 1.50 | 800.63 | 800.65 |
| ℄ Brg. S. Abutment | 2647+38.34 | 1.50 | 800.63 | 800.65 |
| A | 2647+48.38 | 1.50 | 800.67 | 800.69 |
| B | 2647+58.42 | 1.50 | 800.71 | 800.73 |
| C | 2647+68.46 | 1.50 | 800.75 | 800.77 |
| D | 2647+78.48 | 1.50 | 800.77 | 800.79 |
| ℄ Brg. Pier 1 | 2647+86.32 | 1.50 | 800.79 | 800.81 |
| E | 2647+96.33 | 1.50 | 800.82 | 800.86 |
| F | 2648+06.34 | 1.50 | 800.84 | 800.90 |
| G | 2648+16.34 | 1.50 | 800.86 | 800.94 |
| H | 2648+26.34 | 1.50 | 800.87 | 800.96 |
| J | 2648+36.33 | 1.50 | 800.88 | 800.97 |
| K | 2648+46.31 | 1.50 | 800.88 | 800.95 |
| L | 2648+56.29 | 1.50 | 800.88 | 800.93 |
| ℄ Brg. Pier 2 | 2648+69.08 | 1.50 | 800.87 | 800.89 |
| M | 2648+79.05 | 1.50 | 800.87 | 800.90 |
| N | 2648+89.00 | 1.50 | 800.85 | 800.87 |
| P | 2648+98.95 | 1.50 | 800.84 | 800.86 |
| R | 2649+08.90 | 1.50 | 800.81 | 800.83 |
| ℄ Brg. N. Abutment | 2649+16.67 | 1.50 | 800.80 | 800.82 |
| Bk. N. Abutment | 2649+18.61 | 1.50 | 800.79 | 800.81 |

## BEAM 11

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding |
|---|---|---|---|---|
| Bk. S. Abutment | 2647+36.69 | 2.33 | 800.73 | 800.75 |
| ℄ Brg. S. Abutment | 2647+38.65 | 2.31 | 800.73 | 800.75 |
| A | 2647+48.64 | 2.17 | 800.77 | 800.79 |
| B | 2647+58.64 | 2.06 | 800.80 | 800.82 |
| C | 2647+68.63 | 1.96 | 800.83 | 800.85 |
| D | 2647+78.63 | 1.89 | 800.86 | 800.88 |
| ℄ Brg. Pier 1 | 2647+86.44 | 1.84 | 800.88 | 800.90 |
| E | 2647+96.44 | 1.79 | 800.90 | 800.94 |
| F | 2648+06.44 | 1.76 | 800.92 | 800.98 |
| G | 2648+16.43 | 1.74 | 800.94 | 801.02 |
| H | 2648+26.43 | 1.75 | 800.95 | 801.04 |
| J | 2648+36.43 | 1.77 | 800.96 | 801.05 |
| K | 2648+46.42 | 1.81 | 800.96 | 801.03 |
| L | 2648+56.42 | 1.87 | 800.96 | 801.01 |
| ℄ Brg. Pier 2 | 2648+69.25 | 1.97 | 800.96 | 800.98 |
| M | 2648+79.25 | 2.06 | 800.96 | 800.99 |
| N | 2648+89.24 | 2.18 | 800.95 | 800.97 |
| P | 2648+99.24 | 2.31 | 800.93 | 800.95 |
| R | 2649+09.23 | 2.46 | 800.92 | 800.94 |
| ℄ Brg. N. Abutment | 2649+17.04 | 2.59 | 800.90 | 800.92 |
| Bk. N. Abutment | 2649+19.00 | 2.62 | 800.90 | 800.92 |

## BEAM 12

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding |
|---|---|---|---|---|
| Bk. S. Abutment | 2647+39.65 | 10.04 | 801.00 | 801.02 |
| ℄ Brg. S. Abutment | 2647+41.60 | 10.02 | 801.01 | 801.03 |
| A | 2647+51.58 | 9.89 | 801.04 | 801.06 |
| B | 2647+61.57 | 9.78 | 801.08 | 801.10 |
| C | 2647+71.55 | 9.69 | 801.10 | 801.12 |
| D | 2647+81.53 | 9.62 | 801.13 | 801.15 |
| ℄ Brg. Pier 1 | 2647+89.34 | 9.57 | 801.15 | 801.17 |
| E | 2647+99.32 | 9.53 | 801.17 | 801.21 |
| F | 2648+09.30 | 9.50 | 801.19 | 801.26 |
| G | 2648+19.29 | 9.49 | 801.20 | 801.29 |
| H | 2648+29.27 | 9.50 | 801.22 | 801.32 |
| J | 2648+39.25 | 9.53 | 801.22 | 801.31 |
| K | 2648+49.24 | 9.57 | 801.23 | 801.31 |
| L | 2648+59.22 | 9.64 | 801.23 | 801.28 |
| ℄ Brg. Pier 2 | 2648+72.03 | 9.74 | 801.22 | 801.24 |
| M | 2648+82.01 | 9.84 | 801.22 | 801.25 |
| N | 2648+92.00 | 9.96 | 801.21 | 801.24 |
| P | 2649+01.98 | 10.10 | 801.19 | 801.21 |
| R | 2649+11.96 | 10.25 | 801.18 | 801.20 |
| ℄ Brg. N. Abutment | 2649+19.76 | 10.38 | 801.16 | 801.18 |
| Bk. N. Abutment | 2649+21.71 | 10.42 | 801.16 | 801.18 |

## NORTHBOUND PGL & EDGE OF ROADWAY

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding |
|---|---|---|---|---|
| Bk. S. Abutment | 2647+40.98 | 13.50 | 801.12 | 801.14 |
| ℄ Brg. S. Abutment | 2647+42.94 | 13.50 | 801.13 | 801.15 |
| A | 2647+52.96 | 13.50 | 801.17 | 801.19 |
| B | 2647+62.98 | 13.50 | 801.21 | 801.23 |
| C | 2647+72.99 | 13.50 | 801.24 | 801.26 |
| D | 2647+82.99 | 13.50 | 801.27 | 801.29 |
| ℄ Brg. Pier 1 | 2647+90.80 | 13.50 | 801.29 | 801.31 |
| E | 2648+00.79 | 13.50 | 801.31 | 801.35 |
| F | 2648+10.78 | 13.50 | 801.33 | 801.40 |
| G | 2648+20.76 | 13.50 | 801.34 | 801.43 |
| H | 2648+30.73 | 13.50 | 801.35 | 801.45 |
| J | 2648+40.70 | 13.50 | 801.36 | 801.45 |
| K | 2648+50.66 | 13.50 | 801.36 | 801.44 |
| L | 2648+60.61 | 13.50 | 801.36 | 801.41 |
| ℄ Brg. Pier 2 | 2648+73.37 | 13.50 | 801.35 | 801.37 |
| M | 2648+83.31 | 13.50 | 801.34 | 801.37 |
| N | 2648+93.24 | 13.50 | 801.32 | 801.35 |
| P | 2649+03.17 | 13.50 | 801.31 | 801.33 |
| R | 2649+13.09 | 13.50 | 801.28 | 801.30 |
| ℄ Brg. N. Abutment | 2649+20.84 | 13.50 | 801.26 | 801.28 |
| Bk. N. Abutment | 2649+22.78 | 13.50 | 801.26 | 801.28 |

## BEAM 13

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding |
|---|---|---|---|---|
| Bk. S. Abutment | 2647+42.60 | 17.75 | 801.28 | 801.30 |
| ℄ Brg. S. Abutment | 2647+44.55 | 17.73 | 801.28 | 801.30 |
| A | 2647+54.52 | 17.61 | 801.32 | 801.34 |
| B | 2647+64.49 | 17.50 | 801.35 | 801.37 |
| C | 2647+74.46 | 17.42 | 801.38 | 801.40 |
| D | 2647+84.43 | 17.35 | 801.40 | 801.42 |
| ℄ Brg. Pier 1 | 2647+92.22 | 17.31 | 801.42 | 801.44 |
| E | 2648+02.19 | 17.27 | 801.44 | 801.48 |
| F | 2648+12.16 | 17.25 | 801.46 | 801.53 |
| G | 2648+22.13 | 17.24 | 801.47 | 801.56 |
| H | 2648+32.10 | 17.26 | 801.48 | 801.58 |
| J | 2648+42.07 | 17.29 | 801.49 | 801.58 |
| K | 2648+52.04 | 17.34 | 801.49 | 801.57 |
| L | 2648+62.01 | 17.41 | 801.49 | 801.54 |
| ℄ Brg. Pier 2 | 2648+74.80 | 17.52 | 801.49 | 801.51 |
| M | 2648+84.77 | 17.62 | 801.48 | 801.51 |
| N | 2648+94.74 | 17.75 | 801.47 | 801.50 |
| P | 2649+04.71 | 17.89 | 801.45 | 801.47 |
| R | 2649+14.68 | 18.05 | 801.43 | 801.45 |
| ℄ Brg. N. Abutment | 2649+22.47 | 18.18 | 801.42 | 801.44 |
| Bk. N. Abutment | 2649+24.42 | 18.22 | 801.41 | 801.43 |

## BEAM 14

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding |
|---|---|---|---|---|
| Bk. S. Abutment | 2647+45.55 | 25.47 | 801.55 | 801.57 |
| ℄ Brg. S. Abutment | 2647+47.49 | 25.44 | 801.56 | 801.58 |
| A | 2647+57.45 | 25.32 | 801.59 | 801.61 |
| B | 2647+67.40 | 25.23 | 801.62 | 801.64 |
| C | 2647+77.36 | 25.14 | 801.65 | 801.67 |
| D | 2647+87.32 | 25.08 | 801.67 | 801.69 |
| ℄ Brg. Pier 1 | 2647+95.10 | 25.04 | 801.69 | 801.71 |
| E | 2648+05.06 | 25.01 | 801.71 | 801.75 |
| F | 2648+15.01 | 25.00 | 801.72 | 801.79 |
| G | 2648+24.97 | 25.00 | 801.74 | 801.83 |
| H | 2648+34.93 | 25.02 | 801.75 | 801.85 |
| J | 2648+44.88 | 25.05 | 801.75 | 801.84 |
| K | 2648+54.84 | 25.11 | 801.75 | 801.83 |
| L | 2648+64.79 | 25.18 | 801.75 | 801.80 |
| ℄ Brg. Pier 2 | 2648+77.57 | 25.30 | 801.75 | 801.77 |
| M | 2648+87.53 | 25.41 | 801.74 | 801.77 |
| N | 2648+97.48 | 25.54 | 801.73 | 801.76 |
| P | 2649+07.44 | 25.68 | 801.71 | 801.73 |
| R | 2649+17.39 | 25.84 | 801.69 | 801.71 |
| ℄ Brg. N. Abutment | 2649+25.17 | 25.98 | 801.68 | 801.70 |
| Bk. N. Abutment | 2649+27.11 | 26.02 | 801.67 | 801.69 |

MODEL: SHEET
FILE NAME: c:\pwworkdir\benesch projects\projects\d0173871\D26#C24_SHT_0208-0209-CN_DECK-SLAB-ELEV-5.dgn

Bowman
10 S. LaSalle Street, Suite 2110
Chicago, Illinois 60603
312-454-0160
www.bowman.com

| | | | | |
|---|---|---|---|---|
| USER NAME = lfranceschina | | DESIGNED - JW | | REVISED - |
| | | DRAWN - DSO | | REVISED - |
| PLOT SCALE = $SCALE$ | | CHECKED - AJN | | REVISED - |
| PLOT DATE = 8/12/2024 | | DATE - 02/27/24 | | REVISED - |

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

**SLAB ELEVATIONS 5**
**STRUCTURE NO. 101-0208/0209**

SCALE: | SHEET 18 OF 60 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 561 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

## BEAM 15

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding |
|---|---|---|---|---|
| Bk. S. Abutment | 2647+48.49 | 33.18 | 801.82 | 801.84 |
| ℄ Brg. S. Abutment | 2647+50.43 | 33.16 | 801.83 | 801.85 |
| A | 2647+60.37 | 33.04 | 801.86 | 801.88 |
| B | 2647+70.31 | 32.95 | 801.89 | 801.91 |
| C | 2647+80.25 | 32.87 | 801.92 | 801.94 |
| D | 2647+90.20 | 32.82 | 801.94 | 801.96 |
| ℄ Brg. Pier 1 | 2647+97.97 | 32.78 | 801.96 | 801.98 |
| E | 2648+07.91 | 32.75 | 801.98 | 802.02 |
| F | 2648+17.86 | 32.74 | 801.99 | 802.06 |
| G | 2648+27.80 | 32.75 | 802.01 | 802.10 |
| H | 2648+37.74 | 32.78 | 802.01 | 802.11 |
| J | 2648+47.69 | 32.82 | 802.02 | 802.11 |
| K | 2648+57.63 | 32.88 | 802.02 | 802.10 |
| L | 2648+67.57 | 32.95 | 802.02 | 802.07 |
| ℄ Brg. Pier 2 | 2648+80.33 | 33.08 | 802.01 | 802.03 |
| M | 2648+90.27 | 33.19 | 802.00 | 802.03 |
| N | 2649+00.21 | 33.32 | 801.99 | 802.02 |
| P | 2649+10.15 | 33.48 | 801.97 | 801.99 |
| R | 2649+20.09 | 33.64 | 801.95 | 801.97 |
| ℄ Brg. N. Abutment | 2649+27.86 | 33.79 | 801.93 | 801.95 |
| Bk. N. Abutment | 2649+29.81 | 33.82 | 801.93 | 801.95 |

## NORTHBOUND STAGE CONSTRUCTION

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding |
|---|---|---|---|---|
| Bk. S. Abutment | 2647+49.11 | 34.83 | 801.88 | 801.90 |
| ℄ Brg. S. Abutment | 2647+51.06 | 34.83 | 801.89 | 801.91 |
| A | 2647+61.04 | 34.83 | 801.93 | 801.95 |
| B | 2647+71.02 | 34.83 | 801.96 | 801.98 |
| C | 2647+80.99 | 34.83 | 801.99 | 802.01 |
| D | 2647+90.95 | 34.83 | 802.01 | 802.03 |
| ℄ Brg. Pier 1 | 2647+98.73 | 34.83 | 802.03 | 802.05 |
| E | 2648+08.68 | 34.83 | 802.05 | 802.09 |
| F | 2648+18.62 | 34.83 | 802.06 | 802.13 |
| G | 2648+28.56 | 34.83 | 802.08 | 802.17 |
| H | 2648+38.49 | 34.83 | 802.08 | 802.18 |
| J | 2648+48.41 | 34.83 | 802.09 | 802.18 |
| K | 2648+58.33 | 34.83 | 802.09 | 802.17 |
| L | 2648+68.24 | 34.83 | 802.08 | 802.13 |
| ℄ Brg. Pier 2 | 2648+80.95 | 34.83 | 802.07 | 802.09 |
| M | 2648+90.85 | 34.83 | 802.05 | 802.08 |
| N | 2649+00.74 | 34.83 | 802.04 | 802.07 |
| P | 2649+10.63 | 34.83 | 802.01 | 802.03 |
| R | 2649+20.51 | 34.83 | 801.99 | 802.01 |
| ℄ Brg. N. Abutment | 2649+28.23 | 34.83 | 801.97 | 801.99 |
| Bk. N. Abutment | 2649+30.15 | 34.83 | 801.96 | 801.98 |

## BEAM 16

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding |
|---|---|---|---|---|
| Bk. S. Abutment | 2647+51.41 | 40.89 | 802.10 | 802.12 |
| ℄ Brg. S. Abutment | 2647+53.35 | 40.87 | 802.10 | 802.12 |
| A | 2647+63.28 | 40.77 | 802.14 | 802.16 |
| B | 2647+73.21 | 40.68 | 802.16 | 802.18 |
| C | 2647+83.14 | 40.61 | 802.19 | 802.21 |
| D | 2647+93.07 | 40.55 | 802.21 | 802.23 |
| ℄ Brg. Pier 1 | 2648+00.83 | 40.52 | 802.23 | 802.25 |
| E | 2648+10.76 | 40.50 | 802.25 | 802.29 |
| F | 2648+20.69 | 40.49 | 802.26 | 802.33 |
| G | 2648+30.62 | 40.51 | 802.27 | 802.36 |
| H | 2648+40.55 | 40.54 | 802.28 | 802.38 |
| J | 2648+50.48 | 40.58 | 802.28 | 802.37 |
| K | 2648+60.41 | 40.65 | 802.28 | 802.36 |
| L | 2648+70.34 | 40.73 | 802.28 | 802.33 |
| ℄ Brg. Pier 2 | 2648+83.08 | 40.86 | 802.27 | 802.29 |
| M | 2648+93.01 | 40.98 | 802.26 | 802.29 |
| N | 2649+02.94 | 41.12 | 802.25 | 802.28 |
| P | 2649+12.86 | 41.27 | 802.23 | 802.25 |
| R | 2649+22.79 | 41.44 | 802.21 | 802.23 |
| ℄ Brg. N. Abutment | 2649+30.55 | 41.59 | 802.19 | 802.21 |
| Bk. N. Abutment | 2649+32.49 | 41.63 | 802.19 | 802.21 |

## BEAM 17

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding |
|---|---|---|---|---|
| Bk. S. Abutment | 2647+54.33 | 48.61 | 802.37 | 802.39 |
| ℄ Brg. S. Abutment | 2647+56.27 | 48.59 | 802.38 | 802.40 |
| A | 2647+66.19 | 48.49 | 802.41 | 802.43 |
| B | 2647+76.10 | 48.40 | 802.43 | 802.45 |
| C | 2647+86.02 | 48.34 | 802.46 | 802.48 |
| D | 2647+95.93 | 48.29 | 802.48 | 802.50 |
| ℄ Brg. Pier 1 | 2648+03.69 | 48.26 | 802.50 | 802.52 |
| E | 2648+13.60 | 48.25 | 802.51 | 802.55 |
| F | 2648+23.52 | 48.25 | 802.53 | 802.60 |
| G | 2648+33.44 | 48.26 | 802.54 | 802.63 |
| H | 2648+43.35 | 48.30 | 802.54 | 802.64 |
| J | 2648+53.27 | 48.35 | 802.54 | 802.63 |
| K | 2648+63.18 | 48.42 | 802.54 | 802.62 |
| L | 2648+73.10 | 48.50 | 802.54 | 802.59 |
| ℄ Brg. Pier 2 | 2648+85.83 | 48.64 | 802.53 | 802.55 |
| M | 2648+95.74 | 48.76 | 802.52 | 802.55 |
| N | 2649+05.65 | 48.91 | 802.50 | 802.53 |
| P | 2649+15.57 | 49.07 | 802.49 | 802.51 |
| R | 2649+25.48 | 49.24 | 802.47 | 802.49 |
| ℄ Brg. N. Abutment | 2649+33.23 | 49.39 | 802.45 | 802.47 |
| Bk. N. Abutment | 2649+35.17 | 49.43 | 802.44 | 802.46 |

## BEAM 18

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding |
|---|---|---|---|---|
| Bk. S. Abutment | 2647+57.25 | 56.33 | 802.64 | 802.66 |
| ℄ Brg. S. Abutment | 2647+59.18 | 56.31 | 802.65 | 802.67 |
| A | 2647+69.08 | 56.21 | 802.68 | 802.70 |
| B | 2647+78.99 | 56.13 | 802.70 | 802.72 |
| C | 2647+88.89 | 56.07 | 802.73 | 802.75 |
| D | 2647+98.79 | 56.03 | 802.75 | 802.77 |
| ℄ Brg. Pier 1 | 2648+06.53 | 56.01 | 802.77 | 802.79 |
| E | 2648+16.44 | 55.99 | 802.78 | 802.82 |
| F | 2648+26.34 | 56.00 | 802.79 | 802.86 |
| G | 2648+36.24 | 56.02 | 802.80 | 802.89 |
| H | 2648+46.15 | 56.06 | 802.81 | 802.91 |
| J | 2648+56.05 | 56.12 | 802.81 | 802.90 |
| K | 2648+65.95 | 56.19 | 802.81 | 802.89 |
| L | 2648+75.85 | 56.28 | 802.80 | 802.85 |
| ℄ Brg. Pier 2 | 2648+88.56 | 56.42 | 802.79 | 802.81 |
| M | 2648+98.46 | 56.55 | 802.78 | 802.81 |
| N | 2649+08.36 | 56.70 | 802.76 | 802.79 |
| P | 2649+18.26 | 56.86 | 802.75 | 802.77 |
| R | 2649+28.16 | 57.05 | 802.72 | 802.74 |
| ℄ Brg. N. Abutment | 2649+35.90 | 57.20 | 802.70 | 802.72 |
| Bk. N. Abutment | 2649+37.84 | 57.24 | 802.70 | 802.72 |

## NORTHBOUND EDGE OF ROADWAY

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding |
|---|---|---|---|---|
| Bk. S. Abutment | 2647+59.19 | 61.50 | 802.83 | 802.85 |
| ℄ Brg. S. Abutment | 2647+61.13 | 61.50 | 802.83 | 802.85 |
| A | 2647+71.06 | 61.50 | 802.87 | 802.89 |
| B | 2647+80.98 | 61.50 | 802.89 | 802.91 |
| C | 2647+90.90 | 61.50 | 802.92 | 802.94 |
| D | 2648+00.81 | 61.50 | 802.94 | 802.96 |
| ℄ Brg. Pier 1 | 2648+08.55 | 61.50 | 802.96 | 802.98 |
| E | 2648+18.44 | 61.50 | 802.97 | 803.01 |
| F | 2648+28.34 | 61.50 | 802.98 | 803.05 |
| G | 2648+38.22 | 61.50 | 802.99 | 803.08 |
| H | 2648+48.10 | 61.50 | 802.99 | 803.09 |
| J | 2648+57.97 | 61.50 | 802.99 | 803.08 |
| K | 2648+67.84 | 61.50 | 802.99 | 803.07 |
| L | 2648+77.70 | 61.50 | 802.98 | 803.03 |
| ℄ Brg. Pier 2 | 2648+90.34 | 61.50 | 802.96 | 802.98 |
| M | 2649+00.19 | 61.50 | 802.95 | 802.98 |
| N | 2649+10.03 | 61.50 | 802.92 | 802.95 |
| P | 2649+19.86 | 61.50 | 802.90 | 802.92 |
| R | 2649+29.69 | 61.50 | 802.87 | 802.89 |
| ℄ Brg. N. Abutment | 2649+37.37 | 61.50 | 802.85 | 802.87 |
| Bk. N. Abutment | 2649+39.29 | 61.50 | 802.84 | 802.86 |

MODEL: SHEET
FILE NAME: c:\pwworkdir\benesch projects\projects\d0173871\D26\4C24_SHT_0208-0209-CN_DECK-SLAB-ELEV-6.dgn

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Chicago, Illinois 60603
312-444-2080
www.bowman.com

| | | | | |
|---|---|---|---|---|
| USER NAME = lfranceschina | | DESIGNED - JW | | REVISED - |
| | | DRAWN - DSO | | REVISED - |
| PLOT SCALE = $SCALE$ | | CHECKED - AJN | | REVISED - |
| PLOT DATE = 8/12/2024 | | DATE - 02/27/24 | | REVISED - |

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

**SLAB ELEVATIONS 6**
**STRUCTURE NO. 101-0208/0209**

SCALE: | SHEET 19 OF 60 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 562 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

## BEAM 19

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding |
|---|---|---|---|---|
| Bk. S. Abutment | 2647+60.15 | 64.05 | 802.92 | 802.94 |
| ℄ Brg. S. Abutment | 2647+62.08 | 64.03 | 802.92 | 802.94 |
| A | 2647+71.97 | 63.94 | 802.95 | 802.97 |
| B | 2647+81.86 | 63.86 | 802.97 | 802.99 |
| C | 2647+91.75 | 63.81 | 803.00 | 803.02 |
| D | 2648+01.64 | 63.77 | 803.02 | 803.04 |
| ℄ Brg. Pier 1 | 2648+09.37 | 63.75 | 803.03 | 803.05 |
| E | 2648+19.26 | 63.74 | 803.05 | 803.09 |
| F | 2648+29.15 | 63.75 | 803.06 | 803.13 |
| G | 2648+39.04 | 63.78 | 803.07 | 803.16 |
| H | 2648+48.93 | 63.82 | 803.07 | 803.17 |
| J | 2648+58.82 | 63.88 | 803.07 | 803.16 |
| K | 2648+68.71 | 63.96 | 803.07 | 803.15 |
| L | 2648+78.60 | 64.06 | 803.07 | 803.12 |
| ℄ Brg. Pier 2 | 2648+91.29 | 64.21 | 803.05 | 803.07 |
| M | 2649+01.18 | 64.34 | 803.04 | 803.07 |
| N | 2649+11.07 | 64.49 | 803.02 | 803.05 |
| P | 2649+20.95 | 64.66 | 803.00 | 803.02 |
| R | 2649+30.84 | 64.85 | 802.98 | 803.00 |
| ℄ Brg. N. Abutment | 2649+38.57 | 65.01 | 802.96 | 802.98 |
| Bk. N. Abutment | 2649+40.50 | 65.05 | 802.96 | 802.98 |

## BEAM 20

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding |
|---|---|---|---|---|
| Bk. S. Abutment | 2647+63.05 | 71.77 | 803.19 | 803.21 |
| ℄ Brg. S. Abutment | 2647+64.98 | 71.75 | 803.20 | 803.22 |
| A | 2647+74.85 | 71.67 | 803.22 | 803.24 |
| B | 2647+84.73 | 71.60 | 803.25 | 803.27 |
| C | 2647+94.61 | 71.55 | 803.27 | 803.29 |
| D | 2648+04.48 | 71.51 | 803.29 | 803.31 |
| ℄ Brg. Pier 1 | 2648+12.20 | 71.50 | 803.30 | 803.32 |
| E | 2648+22.08 | 71.49 | 803.32 | 803.36 |
| F | 2648+31.96 | 71.51 | 803.33 | 803.39 |
| G | 2648+41.83 | 71.54 | 803.33 | 803.41 |
| H | 2648+51.71 | 71.59 | 803.34 | 803.43 |
| J | 2648+61.59 | 71.66 | 803.34 | 803.43 |
| K | 2648+71.46 | 71.74 | 803.33 | 803.40 |
| L | 2648+81.34 | 71.84 | 803.33 | 803.38 |
| ℄ Brg. Pier 2 | 2648+94.01 | 71.99 | 803.31 | 803.33 |
| M | 2649+03.89 | 72.13 | 803.30 | 803.33 |
| N | 2649+13.76 | 72.29 | 803.28 | 803.30 |
| P | 2649+23.64 | 72.46 | 803.26 | 803.28 |
| R | 2649+33.51 | 72.66 | 803.24 | 803.26 |
| ℄ Brg. N. Abutment | 2649+41.23 | 72.82 | 803.22 | 803.24 |
| Bk. N. Abutment | 2649+43.16 | 72.86 | 803.21 | 803.23 |

## NORTHBOUND FACE OF PARAPET

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding |
|---|---|---|---|---|
| Bk. S. Abutment | 2647+63.70 | 73.50 | 802.36 | 802.38 |
| ℄ Brg. S. Abutment | 2647+65.63 | 73.50 | 802.37 | 802.39 |
| A | 2647+75.54 | 73.50 | 802.40 | 802.42 |
| B | 2647+85.44 | 73.50 | 802.42 | 802.44 |
| C | 2647+95.33 | 73.50 | 802.45 | 802.47 |
| D | 2648+05.21 | 73.50 | 802.47 | 802.49 |
| ℄ Brg. Pier 1 | 2648+12.94 | 73.50 | 802.48 | 802.50 |
| E | 2648+22.81 | 73.50 | 802.50 | 802.54 |
| F | 2648+32.68 | 73.50 | 802.51 | 802.57 |
| G | 2648+42.54 | 73.50 | 802.51 | 802.59 |
| H | 2648+52.39 | 73.50 | 802.51 | 802.60 |
| J | 2648+62.24 | 73.50 | 802.51 | 802.60 |
| K | 2648+72.09 | 73.50 | 802.50 | 802.57 |
| L | 2648+81.92 | 73.50 | 802.49 | 802.54 |
| ℄ Brg. Pier 2 | 2648+94.54 | 73.50 | 802.47 | 802.49 |
| M | 2649+04.36 | 73.50 | 802.46 | 802.49 |
| N | 2649+14.18 | 73.50 | 802.43 | 802.45 |
| P | 2649+23.99 | 73.50 | 802.41 | 802.43 |
| R | 2649+33.80 | 73.50 | 802.38 | 802.40 |
| ℄ Brg. N. Abutment | 2649+41.46 | 73.50 | 802.35 | 802.37 |
| Bk. N. Abutment | 2649+43.37 | 73.50 | 802.34 | 802.36 |

MODEL: SHEET
FILE NAME: c:\pwworkfr\benesch projects\projects\d0173871\D26\4C24_SHT_0208-0209-CN_DECK-SLAB-ELEV-7.dgn

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312-914-0160
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| | | | |
|---|---|---|---|
| USER NAME = lfranceschina | DESIGNED - JW | REVISED - | |
| | DRAWN - DSO | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - AJN | REVISED - | |
| PLOT DATE = 8/12/2024 | DATE - 02/27/24 | REVISED - | |

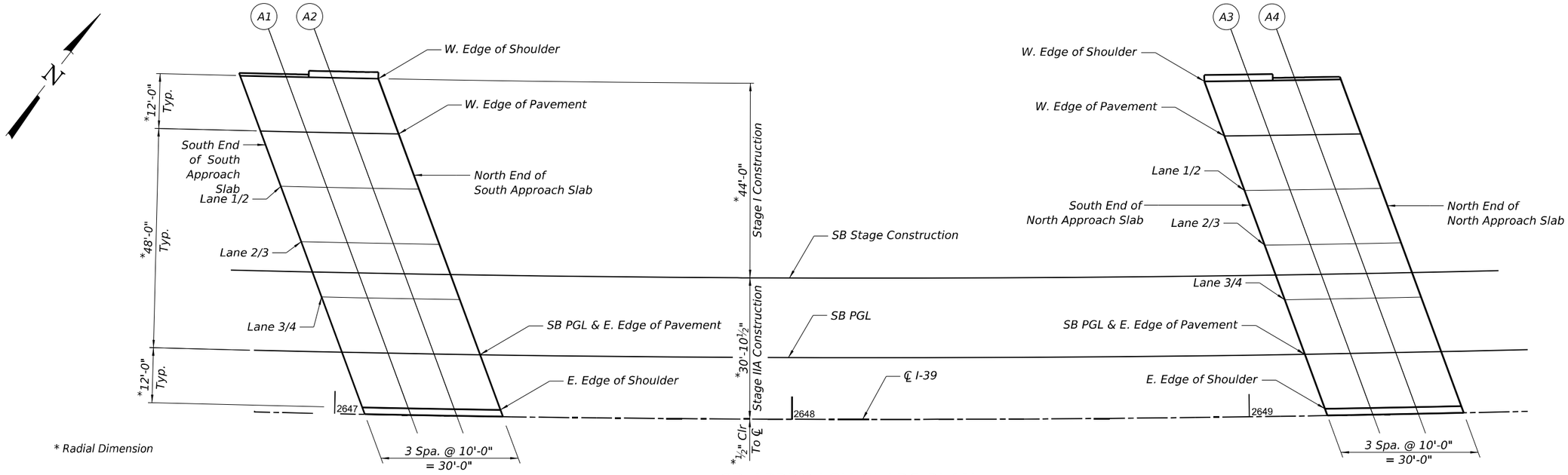
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**SLAB ELEVATIONS 7**
**STRUCTURE NO. 101-0208/0209**

SCALE: | SHEET 20 OF 60 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 563 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)




## SB APPROACH SLABS PLAN

### WEST EDGE OF SHOULDER

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Grinding |
|---|---|---|---|---|
| S. End of S. Appr. Slab | 2646+77.49 | -73.50 | 798.83 | 798.85 |
| A1 | 2646+87.71 | -73.50 | 798.87 | 798.89 |
| A2 | 2646+97.93 | -73.50 | 798.91 | 798.93 |
| N. End of S. Appr. Slab | 2647+08.13 | -73.50 | 798.95 | 798.97 |
| S. End of N. Appr. Slab | 2648+91.09 | -73.50 | 799.29 | 799.31 |
| A3 | 2649+01.17 | -73.50 | 799.27 | 799.29 |
| A4 | 2649+11.24 | -73.50 | 799.25 | 799.27 |
| N. End of N. Appr. Slab | 2649+21.31 | -73.50 | 799.22 | 799.24 |

### LANE 1/2

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Grinding |
|---|---|---|---|---|
| S. End of S. Appr. Slab | 2646+87.09 | -49.50 | 799.69 | 799.71 |
| A1 | 2646+97.26 | -49.50 | 799.73 | 799.75 |
| A2 | 2647+07.42 | -49.50 | 799.77 | 799.79 |
| N. End of S. Appr. Slab | 2647+17.58 | -49.50 | 799.81 | 799.83 |
| S. End of N. Appr. Slab | 2648+99.66 | -49.50 | 800.09 | 800.11 |
| A3 | 2649+09.69 | -49.50 | 800.07 | 800.09 |
| A4 | 2649+19.72 | -49.50 | 800.04 | 800.06 |
| N. End of N. Appr. Slab | 2649+29.74 | -49.50 | 800.01 | 800.03 |

### SB STAGE CONSTRUCTION

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Grinding |
|---|---|---|---|---|
| S. End of S. Appr. Slab | 2646+94.46 | -30.92 | 800.35 | 800.37 |
| A1 | 2647+04.59 | -30.92 | 800.39 | 800.41 |
| A2 | 2647+14.72 | -30.92 | 800.43 | 800.45 |
| N. End of S. Appr. Slab | 2647+24.84 | -30.92 | 800.47 | 800.49 |
| S. End of N. Appr. Slab | 2649+06.24 | -30.92 | 800.71 | 800.73 |
| A3 | 2649+16.24 | -30.92 | 800.68 | 800.70 |
| A4 | 2649+26.23 | -30.92 | 800.66 | 800.68 |
| N. End of N. Appr. Slab | 2649+36.21 | -30.92 | 800.63 | 800.65 |

### SB PGL & EAST EDGE OF PAVEMENT

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Grinding |
|---|---|---|---|---|
| S. End of S. Appr. Slab | 2647+01.32 | -13.50 | 800.96 | 800.98 |
| A1 | 2647+11.42 | -13.50 | 801.01 | 801.03 |
| A2 | 2647+21.51 | -13.50 | 801.04 | 801.06 |
| N. End of S. Appr. Slab | 2647+31.59 | -13.50 | 801.08 | 801.10 |
| S. End of N. Appr. Slab | 2649+12.37 | -13.50 | 801.28 | 801.30 |
| A3 | 2649+22.33 | -13.50 | 801.26 | 801.28 |
| A4 | 2649+32.29 | -13.50 | 801.23 | 801.25 |
| N. End of N. Appr. Slab | 2649+42.24 | -13.50 | 801.20 | 801.22 |

### WEST EDGE OF PAVEMENT

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Grinding |
|---|---|---|---|---|
| S. End of S. Appr. Slab | 2646+82.30 | -61.50 | 799.26 | 799.28 |
| A1 | 2646+92.50 | -61.50 | 799.30 | 799.32 |
| A2 | 2647+02.69 | -61.50 | 799.34 | 799.36 |
| N. End of S. Appr. Slab | 2647+12.87 | -61.50 | 799.38 | 799.40 |
| S. End of N. Appr. Slab | 2648+95.38 | -61.50 | 799.69 | 799.71 |
| A3 | 2649+05.44 | -61.50 | 799.67 | 799.69 |
| A4 | 2649+15.49 | -61.50 | 799.65 | 799.67 |
| N. End of N. Appr. Slab | 2649+25.53 | -61.50 | 799.62 | 799.64 |

### LANE 2/3

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Grinding |
|---|---|---|---|---|
| S. End of S. Appr. Slab | 2646+91.85 | -37.50 | 800.11 | 800.13 |
| A1 | 2647+02.00 | -37.50 | 800.15 | 800.17 |
| A2 | 2647+12.14 | -37.50 | 800.19 | 800.21 |
| N. End of S. Appr. Slab | 2647+22.27 | -37.50 | 800.23 | 800.25 |
| S. End of N. Appr. Slab | 2649+03.91 | -37.50 | 800.49 | 800.51 |
| A3 | 2649+13.92 | -37.50 | 800.47 | 800.49 |
| A4 | 2649+23.93 | -37.50 | 800.44 | 800.46 |
| N. End of N. Appr. Slab | 2649+33.92 | -37.50 | 800.41 | 800.43 |

### LANE 3/4

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Grinding |
|---|---|---|---|---|
| S. End of S. Appr. Slab | 2646+96.60 | -25.50 | 800.54 | 800.56 |
| A1 | 2647+06.72 | -25.50 | 800.58 | 800.60 |
| A2 | 2647+16.84 | -25.50 | 800.62 | 800.64 |
| N. End of S. Appr. Slab | 2647+26.95 | -25.50 | 800.66 | 800.68 |
| S. End of N. Appr. Slab | 2649+08.15 | -25.50 | 800.89 | 800.91 |
| A3 | 2649+18.14 | -25.50 | 800.86 | 800.88 |
| A4 | 2649+28.11 | -25.50 | 800.83 | 800.85 |
| N. End of N. Appr. Slab | 2649+38.09 | -25.50 | 800.80 | 800.82 |

### EAST EDGE OF SHOULDER

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Grinding |
|---|---|---|---|---|
| S. End of S. Appr. Slab | 2647+06.04 | -1.46 | 801.39 | 801.41 |
| A1 | 2647+16.11 | -1.46 | 801.43 | 801.45 |
| A2 | 2647+26.18 | -1.46 | 801.48 | 801.50 |
| N. End of S. Appr. Slab | 2647+36.24 | -1.46 | 801.52 | 801.54 |
| S. End of N. Appr. Slab | 2649+16.58 | -1.46 | 801.68 | 801.70 |
| A3 | 2649+26.52 | -1.46 | 801.66 | 801.68 |
| A4 | 2649+36.45 | -1.46 | 801.63 | 801.65 |
| N. End of N. Appr. Slab | 2649+46.38 | -1.46 | 801.59 | 801.61 |

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312-658-0160
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| | | | |
|---|---|---|---|
| USER NAME = lfranceschina | DESIGNED - JW | REVISED - | |
| | DRAWN - DSO | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - AJN | REVISED - | |
| PLOT DATE = 8/12/2024 | DATE - 02/27/24 | REVISED - | |

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

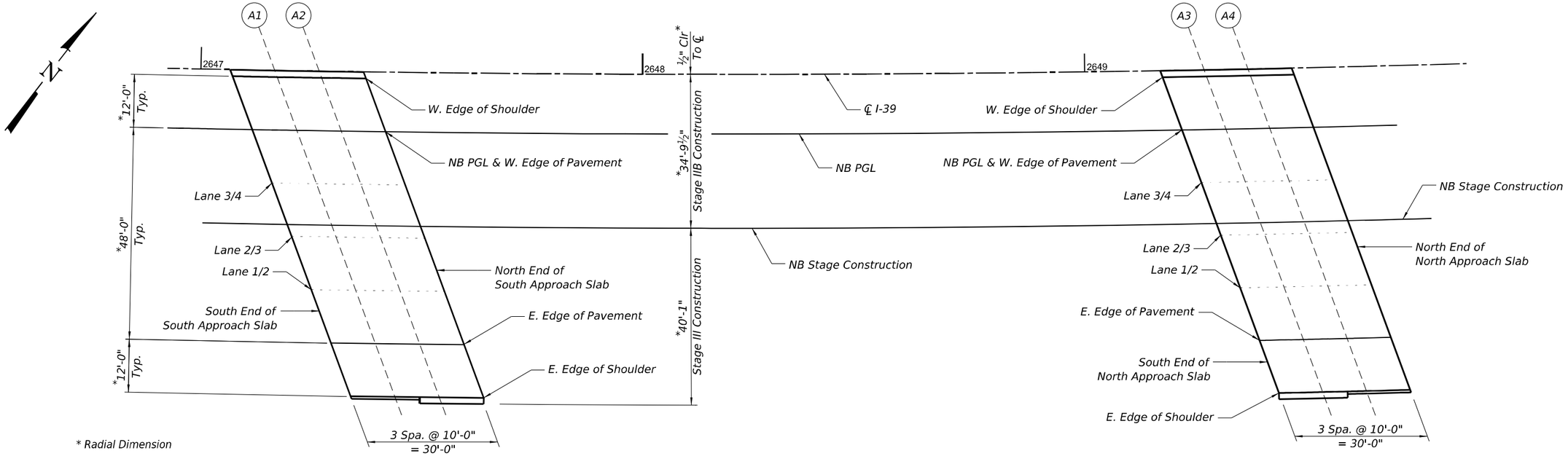
**APPROACH SLAB ELEVATIONS - SOUTHBOUND**
**STRUCTURE NO. 101-0208/0209**

SCALE: | SHEET 21 OF 60 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 564 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS FED. AID PROJECT | | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

MODEL: SHEET
FILE NAME: c:\pwworldir\beneschprojects\projects\d0173871\D2642C24_SHT_0208-0209-GN_APPR-SLAB-ELEV-SB.dgn




* Radial Dimension

## NB APPROACH SLABS PLAN

### WEST EDGE OF SHOULDER

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Grinding |
|---|---|---|---|---|
| S. End of S. Appr. Slab | 2647+07.18 | 1.46 | 800.58 | 800.60 |
| A1 | 2647+17.25 | 1.46 | 800.62 | 800.64 |
| A2 | 2647+27.31 | 1.46 | 800.66 | 800.68 |
| N. End of S. Appr. Slab | 2647+37.36 | 1.46 | 800.70 | 800.72 |
| S. End of N. Appr. Slab | 2649+17.60 | 1.46 | 800.86 | 800.88 |
| A3 | 2649+27.53 | 1.46 | 800.83 | 800.85 |
| A4 | 2649+37.46 | 1.46 | 800.80 | 800.82 |
| N. End of N. Appr. Slab | 2649+47.38 | 1.46 | 800.77 | 800.79 |

### LANE 3/4

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Grinding |
|---|---|---|---|---|
| S. End of S. Appr. Slab | 2647+11.87 | 25.50 | 801.43 | 801.45 |
| A1 | 2647+21.91 | 25.50 | 801.48 | 801.50 |
| A2 | 2647+31.95 | 25.50 | 801.52 | 801.54 |
| N. End of S. Appr. Slab | 2647+41.98 | 25.50 | 801.55 | 801.57 |
| S. End of N. Appr. Slab | 2649+21.79 | 25.50 | 801.66 | 801.68 |
| A3 | 2649+31.70 | 25.50 | 801.63 | 801.65 |
| A4 | 2649+41.60 | 25.50 | 801.59 | 801.61 |
| N. End of N. Appr. Slab | 2649+51.50 | 25.50 | 801.55 | 801.57 |

### LANE 2/3

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Grinding |
|---|---|---|---|---|
| S. End of S. Appr. Slab | 2647+21.16 | 37.50 | 801.86 | 801.88 |
| A1 | 2647+31.15 | 37.50 | 801.90 | 801.92 |
| A2 | 2647+41.14 | 37.50 | 801.94 | 801.96 |
| N. End of S. Appr. Slab | 2647+51.12 | 37.50 | 801.98 | 802.00 |
| S. End of N. Appr. Slab | 2649+30.08 | 37.50 | 802.05 | 802.07 |
| A3 | 2649+39.95 | 37.50 | 802.02 | 802.04 |
| A4 | 2649+49.81 | 37.50 | 801.98 | 802.00 |
| N. End of N. Appr. Slab | 2649+59.66 | 37.50 | 801.94 | 801.96 |

### EAST EDGE OF SHOULDER

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Grinding |
|---|---|---|---|---|
| S. End of S. Appr. Slab | 2647+30.36 | 61.50 | 802.71 | 802.73 |
| A1 | 2647+40.31 | 61.50 | 802.75 | 802.77 |
| A2 | 2647+50.25 | 61.50 | 802.79 | 802.81 |
| N. End of S. Appr. Slab | 2647+60.19 | 61.50 | 802.83 | 802.85 |
| S. End of N. Appr. Slab | 2649+38.31 | 61.50 | 802.84 | 802.86 |
| A3 | 2649+48.13 | 61.50 | 802.80 | 802.82 |
| A4 | 2649+57.94 | 61.50 | 802.77 | 802.79 |
| N. End of N. Appr. Slab | 2649+67.74 | 61.50 | 802.72 | 802.74 |

### NB PGL & WEST EDGE OF PAVEMENT

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Grinding |
|---|---|---|---|---|
| S. End of S. Appr. Slab | 2647+11.87 | 13.50 | 801.01 | 801.03 |
| A1 | 2647+21.91 | 13.50 | 801.05 | 801.07 |
| A2 | 2647+31.95 | 13.50 | 801.09 | 801.11 |
| N. End of S. Appr. Slab | 2647+41.98 | 13.50 | 801.13 | 801.15 |
| S. End of N. Appr. Slab | 2649+21.79 | 13.50 | 801.26 | 801.28 |
| A3 | 2649+31.70 | 13.50 | 801.23 | 801.25 |
| A4 | 2649+41.60 | 13.50 | 801.20 | 801.22 |
| N. End of N. Appr. Slab | 2649+51.50 | 13.50 | 801.16 | 801.18 |

### NB STAGE CONSTRUCTION

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Grinding |
|---|---|---|---|---|
| S. End of S. Appr. Slab | 2647+20.13 | 34.83 | 801.77 | 801.79 |
| A1 | 2647+30.13 | 34.83 | 801.81 | 801.83 |
| A2 | 2647+40.12 | 34.83 | 801.85 | 801.87 |
| N. End of S. Appr. Slab | 2647+50.11 | 34.83 | 801.89 | 801.91 |
| S. End of N. Appr. Slab | 2649+29.17 | 34.83 | 801.96 | 801.98 |
| A3 | 2649+39.04 | 34.83 | 801.93 | 801.95 |
| A4 | 2649+48.90 | 34.83 | 801.90 | 801.92 |
| N. End of N. Appr. Slab | 2649+58.75 | 34.83 | 801.86 | 801.88 |

### LANE 1/2

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Grinding |
|---|---|---|---|---|
| S. End of S. Appr. Slab | 2647+25.77 | 49.50 | 802.29 | 802.31 |
| A1 | 2647+35.74 | 49.50 | 802.33 | 802.35 |
| A2 | 2647+45.71 | 49.50 | 802.37 | 802.39 |
| N. End of S. Appr. Slab | 2647+55.67 | 49.50 | 802.40 | 802.42 |
| S. End of N. Appr. Slab | 2649+34.21 | 49.50 | 802.45 | 802.47 |
| A3 | 2649+44.05 | 49.50 | 802.41 | 802.43 |
| A4 | 2649+53.88 | 49.50 | 802.37 | 802.39 |
| N. End of N. Appr. Slab | 2649+63.71 | 49.50 | 802.33 | 802.35 |

### EAST EDGE OF PAVEMENT

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Grinding |
|---|---|---|---|---|
| S. End of S. Appr. Slab | 2647+34.93 | 73.50 | 803.14 | 803.16 |
| A1 | 2647+44.86 | 73.50 | 803.18 | 803.20 |
| A2 | 2647+54.78 | 73.50 | 803.22 | 803.24 |
| N. End of S. Appr. Slab | 2647+64.69 | 73.50 | 803.25 | 803.27 |
| S. End of N. Appr. Slab | 2649+42.39 | 73.50 | 803.23 | 803.25 |
| A3 | 2649+52.19 | 73.50 | 803.20 | 803.22 |
| A4 | 2649+61.98 | 73.50 | 803.16 | 803.18 |
| N. End of N. Appr. Slab | 2649+71.76 | 73.50 | 803.11 | 803.13 |

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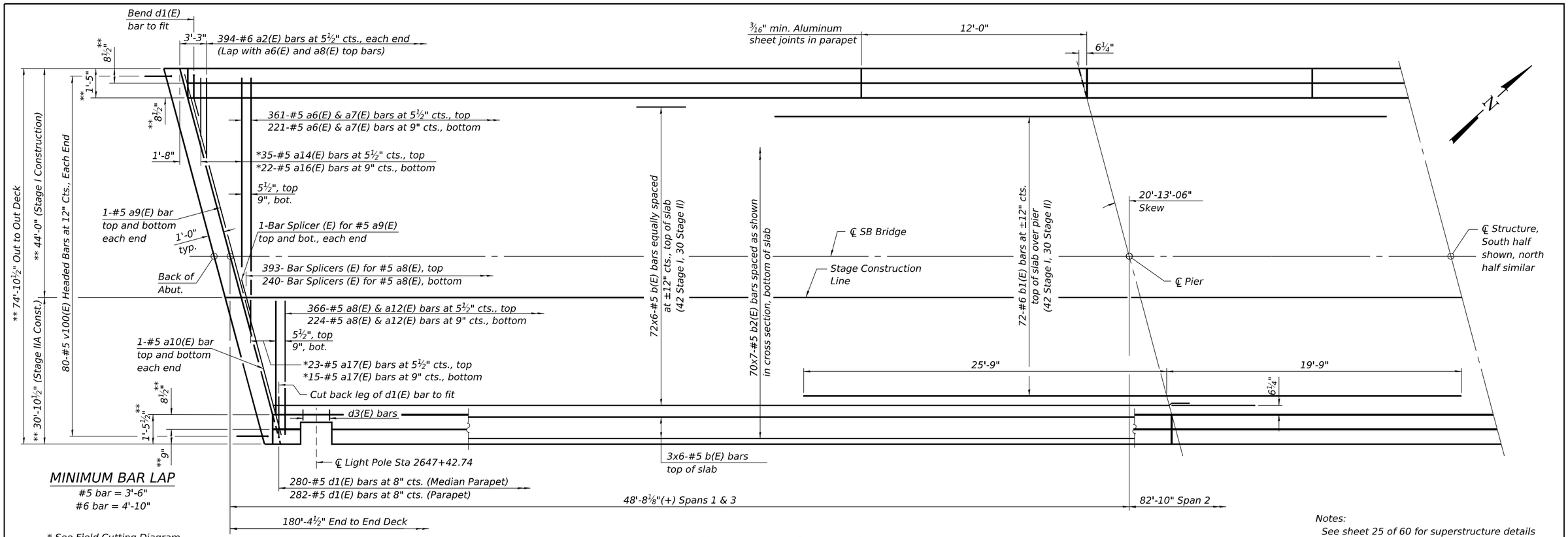
| | | | | |
|---|---|---|---|---|
| USER NAME = lfranceschina | DESIGNED - JW | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | APPROACH SLAB ELEVATIONS - NORTHBOUND STRUCTURE NO. 101-0208/0209 |
| | DRAWN - DSO | REVISED - | | |
| PLOT SCALE = $SCALE$ | CHECKED - AJN | REVISED - | | SCALE: SHEET 22 OF 60 SHEETS STA. TO STA. |
| PLOT DATE = 8/12/2024 | DATE - 02/27/24 | REVISED - | | |

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 565 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS FED. AID PROJECT | | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

MODEL: SHEET
FILE NAME: c:\pwworkdir\beneschprojects\projects\d0173871\D2642C24_SHT_0208-0209-GN_APPR-SLAB-ELEV-NB.dgn




## MINIMUM BAR LAP

#5 bar = 3'-6"
#6 bar = 4'-10"

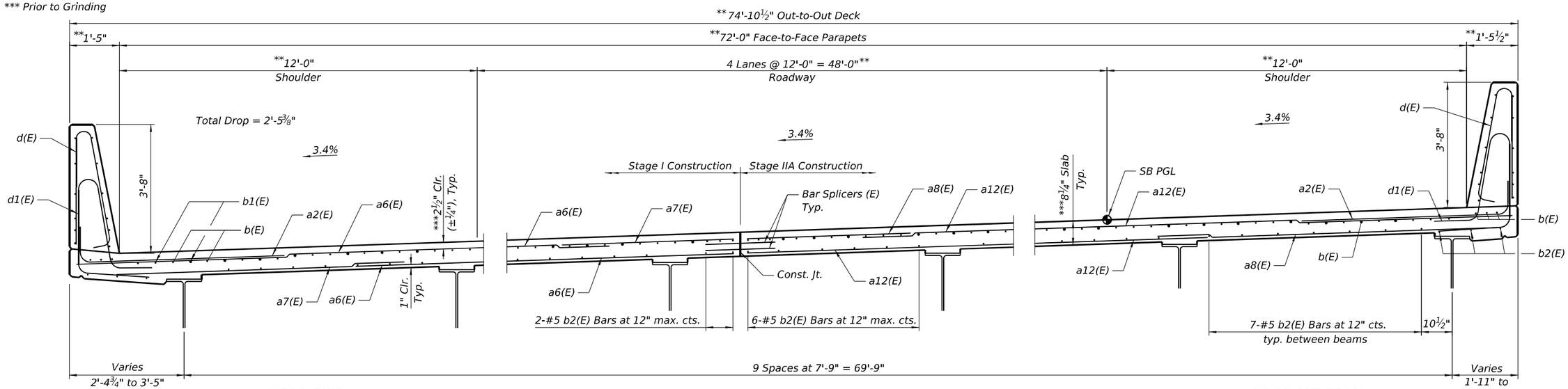
* See Field Cutting Diagram on sheet 26 of 60.

** Radial Dimension

*** Prior to Grinding

## SOUTHBOUND PARTIAL PLAN

Notes:
See sheet 25 of 60 for superstructure details and Bill of Material.
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.




## NEAR PIER

## SOUTHBOUND CROSS SECTION

(Looking North)

## NEAR MIDSPAN

Note:
All transverse bars, a6(E) & a7(E) and a8(E) & a12(E), shall be oriented with top bar laps opposite of bottom bar laps, as shown in cross-section.

MODEL: SHEET
FILE NAME: c:\pwwordir\benesch projects\projects\d0173871\D284C24_SHT_0208-0209-CN_DECK-SLAB-DETAILS-SB.dgn

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| | | | |
|---|---|---|---|
| USER NAME = lfranceschina | DESIGNED - JW | REVISED - | |
| | DRAWN - DSO | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - AJN | REVISED - | |
| PLOT DATE = 8/12/2024 | DATE - 02/27/24 | REVISED - | |

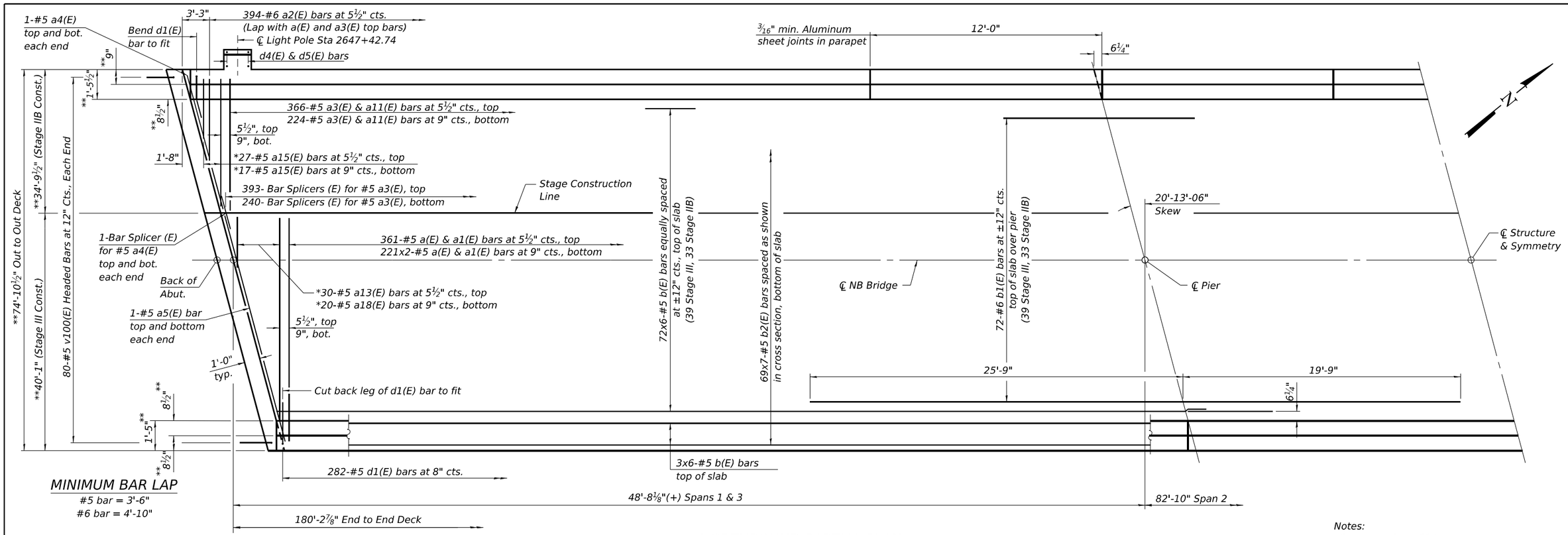
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**DECK SLAB - SOUTHBOUND STRUCTURE**
**STRUCTURE NO. 101-0208/0209**

SCALE: | SHEET 23 OF 60 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 566 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)




## MINIMUM BAR LAP

#5 bar = 3'-6"
#6 bar = 4'-10"

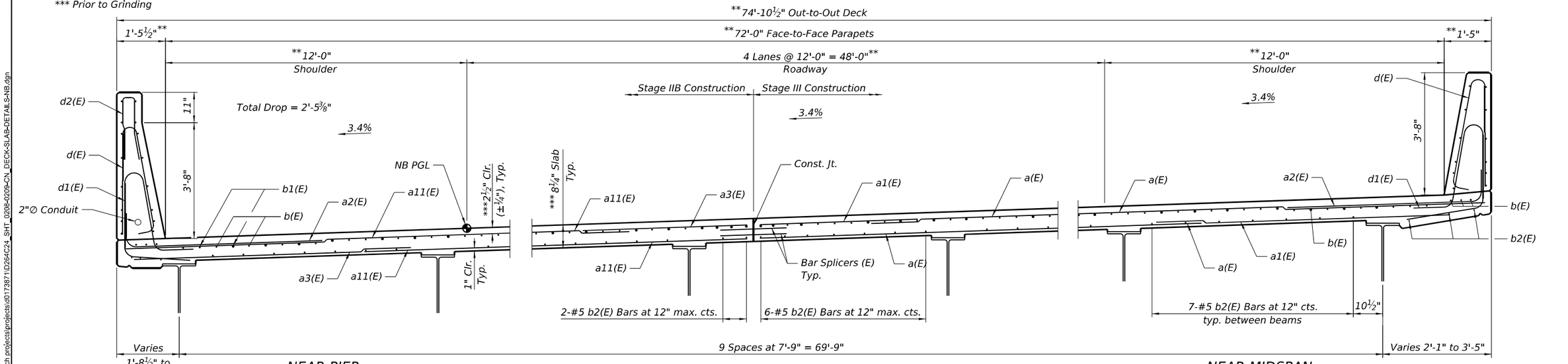
* See Field Cutting Diagram on sheet 26 of 60.

** Radial Dimension

*** Prior to Grinding

## NORTHBOUND PARTIAL PLAN

Notes:
See sheet 25 of 60 for superstructure details and Bill of Material.
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.




## NEAR PIER

## NORTHBOUND CROSS SECTION

(Looking North)

## NEAR MIDSPAN

Note:
All transverse bars, a(E) & a1(E) and a3(E) & a11(E), shall be oriented with top bar laps opposite of bottom bar laps, as shown in cross-section.

MODEL: SHEET
FILE NAME: c:\pwworkdir\benesch.projects\projects\d0173871\D2824C24_SHT_0208-0209-CN_DECK-SLAB-DETAILS-NB.dgn

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| | | | |
|---|---|---|---|
| USER NAME = lfranceschina | DESIGNED - JW | REVISED - | |
| | DRAWN - DSO | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - AJN | REVISED - | |
| PLOT DATE = 8/12/2024 | DATE - 02/27/24 | REVISED - | |

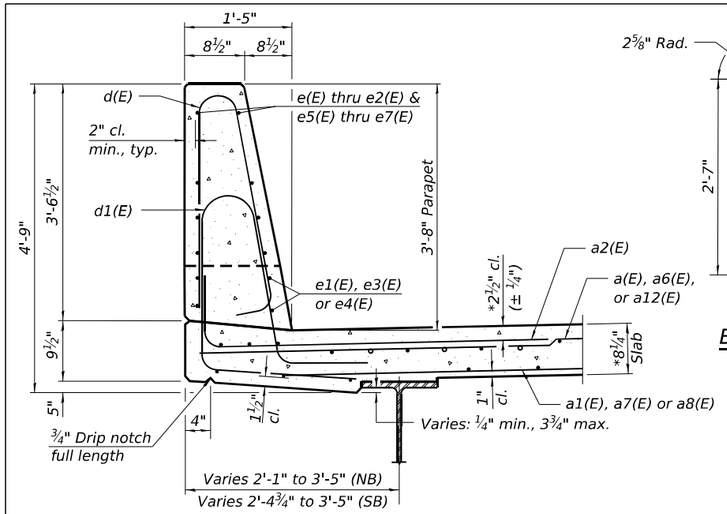
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**DECK SLAB - NORTHBOUND STRUCTURE**
**STRUCTURE NO. 101-0208/0209**

SCALE: | SHEET 24 OF 60 SHEETS | STA. | TO STA.

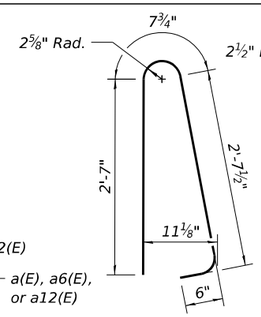
| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 567 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

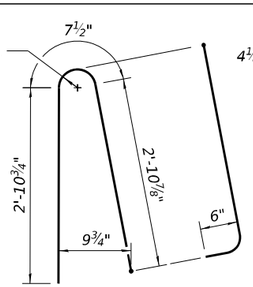



## SECTION THRU NB & SB PARAPETS

* Prior to grinding.

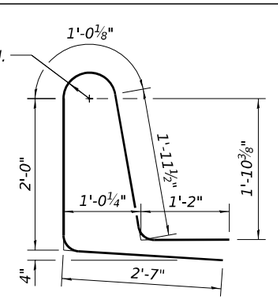



## BAR d(E)

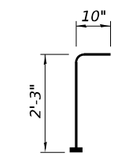



## ALTERNATE BAR d(E)

*(For 44" constant slope parapet when conduit is present)*

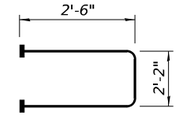



## BAR d1(E)



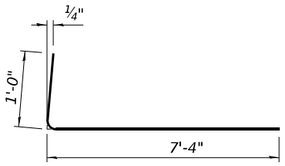

## BAR v100(E)

*(Headed. 320-#5 Bar terminators)*

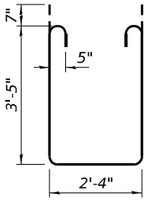



## BAR s10(E)

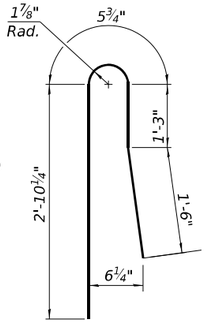
*(Headed. 636-#5 Bar terminators)*



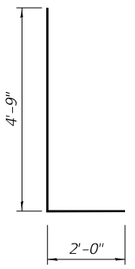

## BAR a2(E)



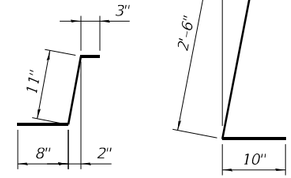

## BAR s11(E)



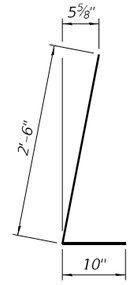

## BAR d2(E)



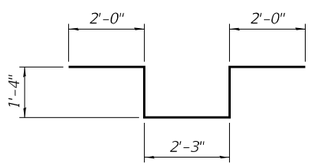

## BAR d4(E)



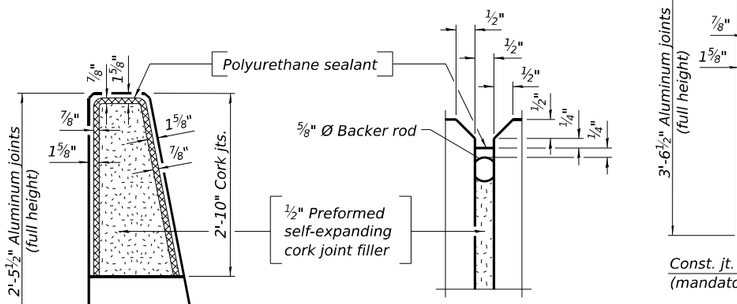

## BAR d3(E)



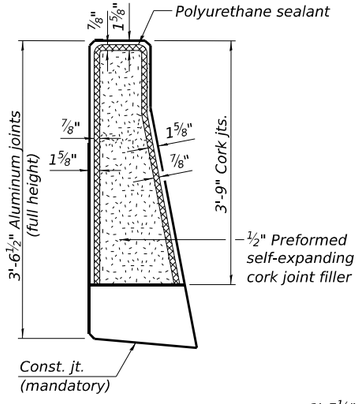

## BAR d5(E)




## BAR e12(E)




## PARAPET JOINT DETAILS

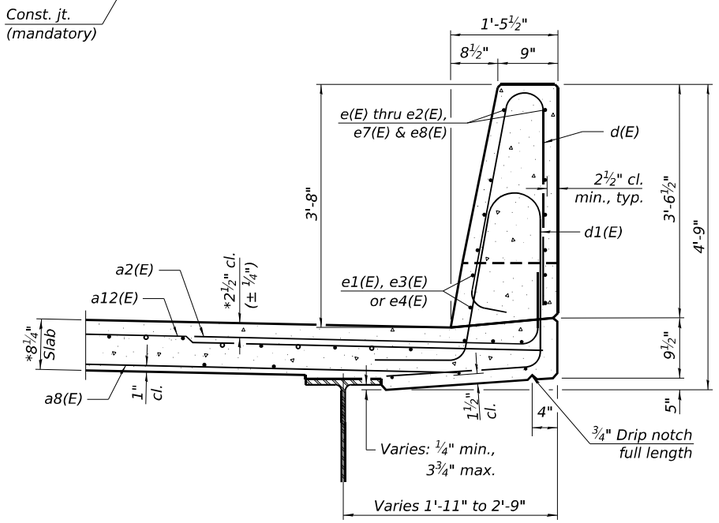



**Notes:**

*The 3/16" minimum aluminum sheet shall be ASTM B 209 alloy 3003-H14 and coated with 5 mils of either bitumen paint or epoxy paint to minimize reaction with wet concrete. Cost included with Concrete Superstructure.*

*The polyurethane sealant shall be according to Article 1050.04 of the Std. Spec. and the color shall be gray.*

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




## SECTION THRU SB MEDIAN PARAPET

* Prior to grinding.




## SECTION THRU NB MEDIAN PARAPET

* Prior to grinding.

## NB SUPERSTRUCTURE BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|---|---|---|---|---|
| a(E) | 686 | #5 | 28'-6" | |
| a1(E) | 686 | #5 | 15'-1" | |
| a2(E) | 788 | #6 | 8'-4" | |
| a3(E) | 636 | #5 | 13'-5" | |
| a4(E) | 4 | #5 | 36'-9" | |
| a5(E) | 4 | #5 | 42'-4" | |
| a11(E) | 636 | #5 | 24'-11" | |
| a13(E) | 30 | #5 | 42'-0" | |
| a15(E) | 44 | #5 | 37'-8" | |
| a18(E) | 20 | #5 | 41'-4" | |
| a19(E) | 10 | #6 | 5'-1" | |
| | | | | |
| b(E) | 468 | #5 | 32'-11" | |
| b1(E) | 144 | #6 | 45'-6" | |
| b2(E) | 525 | #5 | 28'-9" | |
| b3(E) | 2 | #5 | 2'-2" | |
| | | | | |
| d(E) | 564 | #5 | 6'-5" | |
| d1(E) | 564 | #5 | 8'-8½" | |
| d2(E) | 282 | #5 | 4'-5" | |
| d4(E) | 6 | #5 | 6'-9" | |
| d5(E) | 6 | #5 | 3'-4" | |
| | | | | |
| e(E) | 40 | #4 | 17'-8" | |
| e1(E) | 112 | #4 | 11'-8" | |
| e2(E) | 80 | #4 | 14'-3" | |
| e3(E) | 32 | #4 | 19'-10" | |
| e4(E) | 16 | #4 | 28'-11" | |
| e5(E) | 8 | #4 | 18'-9" | |
| e6(E) | 8 | #4 | 17'-10" | |
| e7(E) | 12 | #4 | 18'-5" | |
| e8(E) | 12 | #4 | 18'-2" | |
| e11(E) | 4 | #9 | 2'-2" | |
| e12(E) | 9 | #6 | 8'-11" | |
| | | | | |
| m10(E) | 20 | #6 | 23'-8" | |
| m11(E) | 64 | #6 | 7'-8" | |
| m12(E) | 4 | #6 | 1'-8" | |
| m13(E) | 4 | #6 | 2'-8" | |
| m14(E) | 4 | #6 | 7'-0" | |
| m15(E) | 4 | #6 | 6'-0" | |
| m16(E) | 20 | #6 | 20'-9" | |
| m17(E) | 8 | #6 | 2'-0" | |
| m18(E) | 8 | #6 | 0'-6" | |
| | | | | |
| s10(E) | 158 | #5 | 7'-2" | |
| s11(E) | 158 | #5 | 10'-4" | |
| | | | | |
| v100(E) | 160 | #5 | 3'-1" | |
| Concrete Superstructure | | | Cu. Yd. | 471.7 |
| Protective Coat | | | Sq. Yd. | 1,727 |
| Reinforcement Bars, Epoxy Coated | | | Lb. | 131,780 |

*Bars indicated thus 1 x 2-#4 etc. indicates 1 line of bars with 2 lengths per line.*

## SB SUPERSTRUCTURE BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|---|---|---|---|---|
| a6(E) | 698 | #5 | 31'-1" | |
| a7(E) | 698 | #5 | 16'-5" | |
| a2(E) | 788 | #6 | 8'-4" | |
| a8(E) | 704 | #5 | 12'-1" | |
| a9(E) | 4 | #5 | 46'-10" | |
| a10(E) | 4 | #5 | 32'-9" | |
| a12(E) | 704 | #5 | 22'-3" | |
| a14(E) | 35 | #5 | 46'-10" | |
| a16(E) | 22 | #5 | 46'-2" | |
| a17(E) | 38 | #5 | 32'-9" | |
| | | | | |
| b(E) | 468 | #5 | 32'-11" | |
| b1(E) | 144 | #6 | 45'-6" | |
| b2(E) | 490 | #5 | 28'-9" | |
| b4(E) | 4 | #5 | 2'-0" | |
| | | | | |
| d(E) | 562 | #5 | 6'-5" | |
| d1(E) | 562 | #5 | 8'-8½" | |
| d3(E) | 4 | #5 | 1'-10" | |
| | | | | |
| e(E) | 32 | #4 | 17'-8" | |
| e1(E) | 96 | #4 | 11'-8" | |
| e2(E) | 64 | #4 | 14'-3" | |
| e3(E) | 32 | #4 | 19'-10" | |
| e4(E) | 16 | #4 | 28'-11" | |
| e7(E) | 16 | #4 | 18'-5" | |
| e8(E) | 8 | #4 | 18'-2" | |
| e9(E) | 18 | #4 | 10'-8" | |
| e10(E) | 9 | #4 | 4'-9" | |
| | | | | |
| m11(E) | 64 | #6 | 7'-8" | |
| m19(E) | 8 | #6 | 3'-2" | |
| m20(E) | 8 | #6 | 2'-6" | |
| m21(E) | 24 | #6 | 1'-10" | |
| m22(E) | 8 | #6 | 1'-7" | |
| m23(E) | 8 | #6 | 5'-5" | |
| m24(E) | 20 | #6 | 26'-1" | |
| m25(E) | 20 | #6 | 19'-0" | |
| | | | | |
| s10(E) | 160 | #5 | 7'-2" | |
| s11(E) | 160 | #5 | 10'-4" | |
| | | | | |
| v100(E) | 160 | #5 | 3'-1" | |
| Concrete Superstructure | | | Cu. Yd. | 467.0 |
| Protective Coat | | | Sq. Yd. | 1,751 |
| Reinforcement Bars, Epoxy Coated | | | Lb. | 132,200 |
| Preformed Joint Seal 2 1/2" | | | Foot | 181 |

MODEL: SHEET
FILE NAME: c:\pwworkdir\benesch projects\projects\d0173871\D2\64C24_SHT_0208-0209-CN_DECK-SLAB-DETAILS-MISC.dgn

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| | | | | | |
|---|---|---|---|---|---|
| USER NAME | = lfranceschina | DESIGNED | - JW | REVISED | - |
| | | DRAWN | - DSO | REVISED | - |
| PLOT SCALE | = $SCALE$ | CHECKED | - AJN | REVISED | - |
| PLOT DATE | = 8/12/2024 | DATE | - 02/27/24 | REVISED | - |

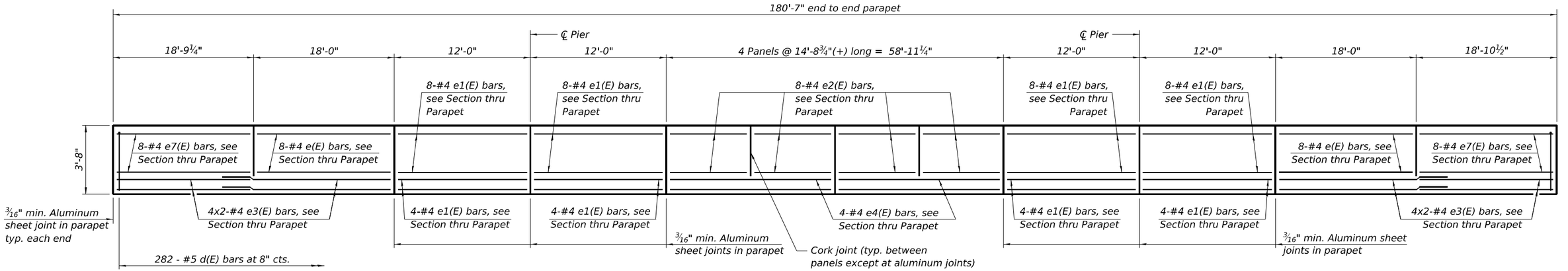
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**DECK SLAB DETAILS - MISCELLANEOUS & BILL OF MATERIAL**
**STRUCTURE NO. 101-0208/0209**

SCALE: | SHEET 25 OF 60 SHEETS | STA. | TO STA.

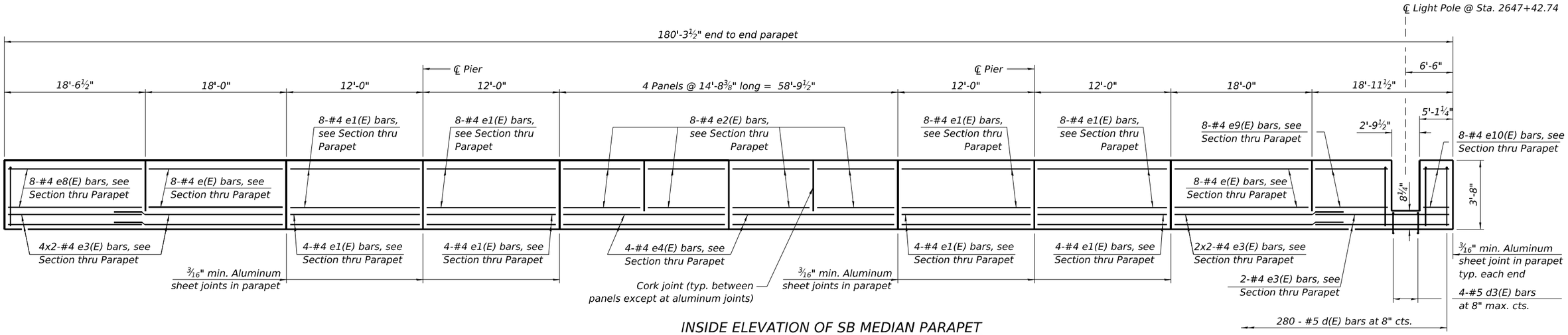
| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1,5)R | WINNEBAGO | 1685 | 568 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)



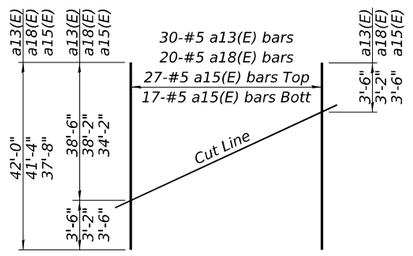

## INSIDE ELEVATION OF SB PARAPET

(Looking West)



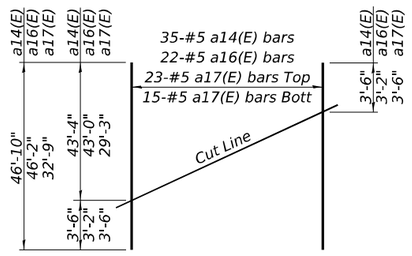

## INSIDE ELEVATION OF SB MEDIAN PARAPET

(Looking East)




## FIELD CUTTING DIAGRAM - NB

*Order a13(E), a15(E) and a18(E) bars full length.*
*Cut as shown and use remainder of bars in opposite end of deck.*




## FIELD CUTTING DIAGRAM - SB

*Order a14(E), a16(E) and a17(E) bars full length.*
*Cut as shown and use remainder of bars in opposite end of deck.*

## MINIMUM BAR LAP

#4 Bar = 2'-5"

*Note:*
*Bars indicated thus 4 x 2-#5 etc. indicates 4 lines of bars with 2 lengths per line.*

MODEL: SHEET
FILE NAME: c:\pwworkdir\benesch projects\projects\d0173871\D284C24_SHT_0208-0209-CN_DECK-SLAB-DETAILS-PARAPETS-SB.dgn

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Chicago, Illinois 60603
312-914-0160
www.bowman.com

| | | | |
|---|---|---|---|
| USER NAME = lfranceschina | DESIGNED - JW | REVISED - | |
| | DRAWN - DSO | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - AJN | REVISED - | |
| PLOT DATE = 8/12/2024 | DATE - 02/27/24 | REVISED - | |

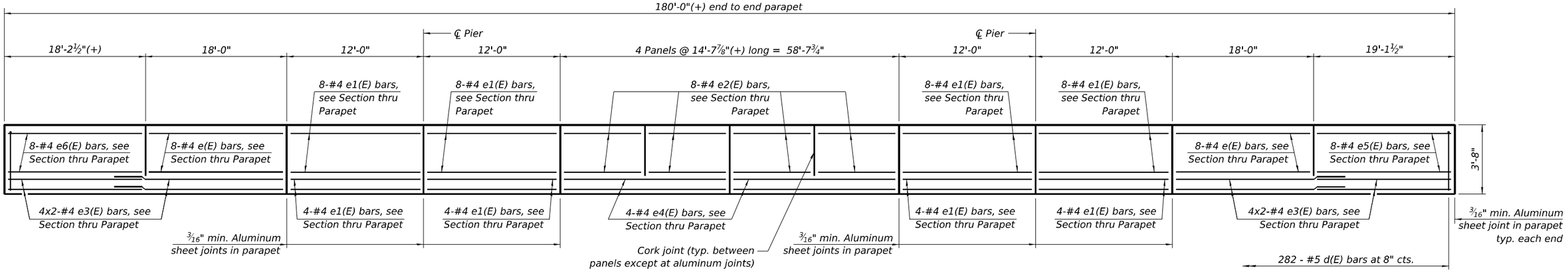
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**DECK SLAB DETAILS - SOUTHBOUND PARAPETS**
**STRUCTURE NO. 101-0208/0209**

SCALE: | SHEET 26 OF 60 SHEETS | STA. | TO STA.

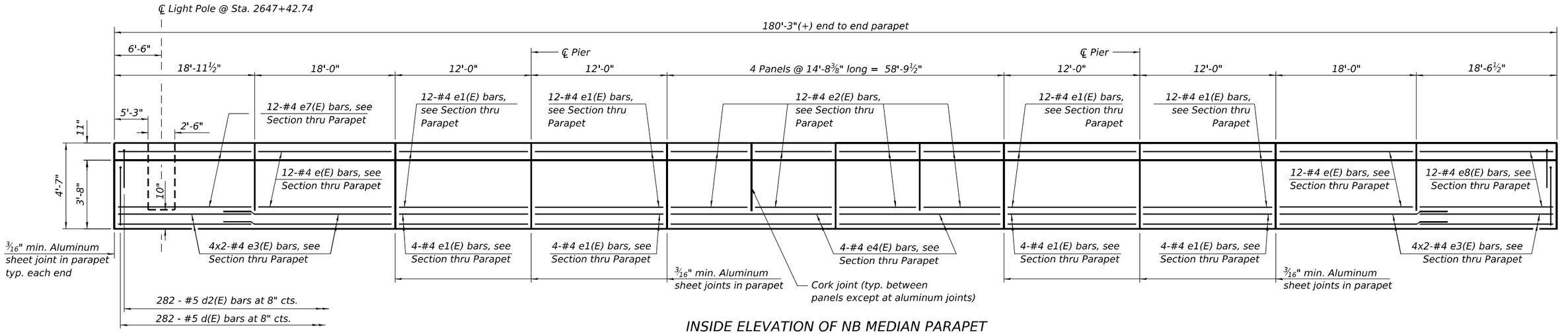
| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 569 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)




## INSIDE ELEVATION OF NB PARAPET

(Looking East)




## INSIDE ELEVATION OF NB MEDIAN PARAPET

(Looking West)

## MINIMUM BAR LAP

#4 Bar = 2'-5"

*Note:*
*Bars indicated thus 4 x 2-#5 etc. indicates 4 lines of bars with 2 lengths per line.*

MODEL: SHEET
FILE NAME: c:\pwworkdir\benesch projects\projects\d0173871\D26#C24_SHT_0208-0209-CN_DECK-SLAB-DETAILS-PARAPETS-NB.dgn

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| | | | | | |
|---|---|---|---|---|---|
| USER NAME | = jworthington | DESIGNED | - JW | REVISED | - |
| | | DRAWN | - DSO | REVISED | - |
| PLOT SCALE | = $SCALE$ | CHECKED | - AJN | REVISED | - |
| PLOT DATE | = 2/9/2025 | DATE | - 02/27/24 | REVISED | - |

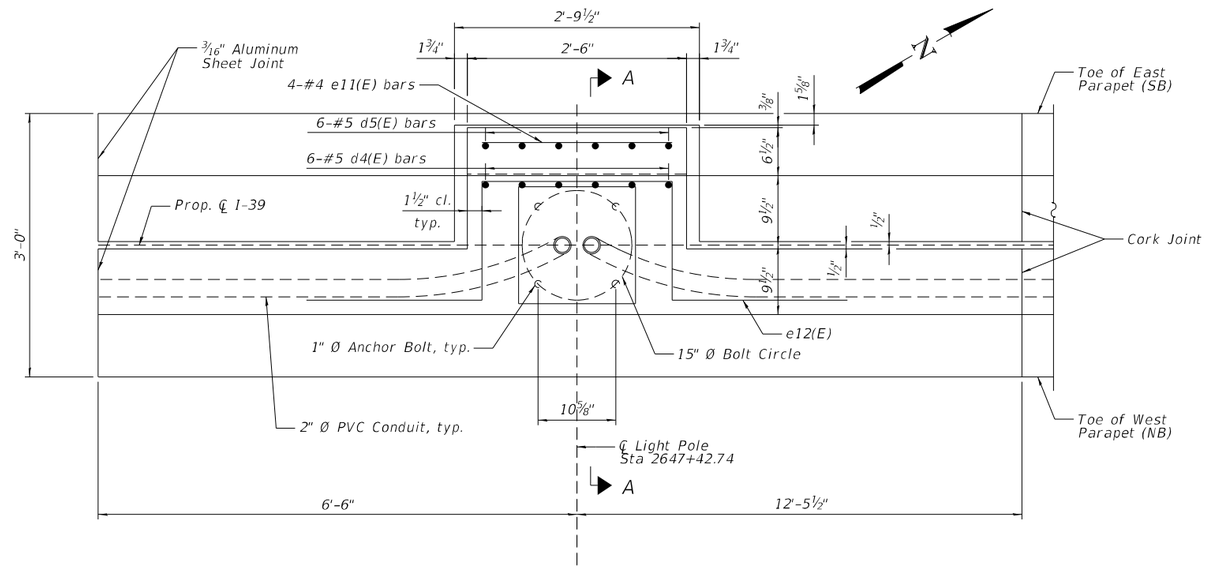
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**DECK SLAB DETAILS - NORTHBOUND PARAPETS**
**STRUCTURE NO. 101-0208/0209**

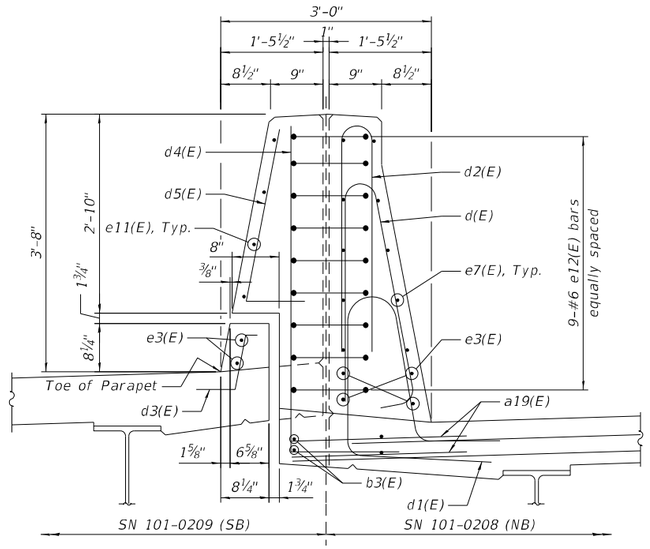
SCALE: | SHEET 27 OF 60 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 570 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

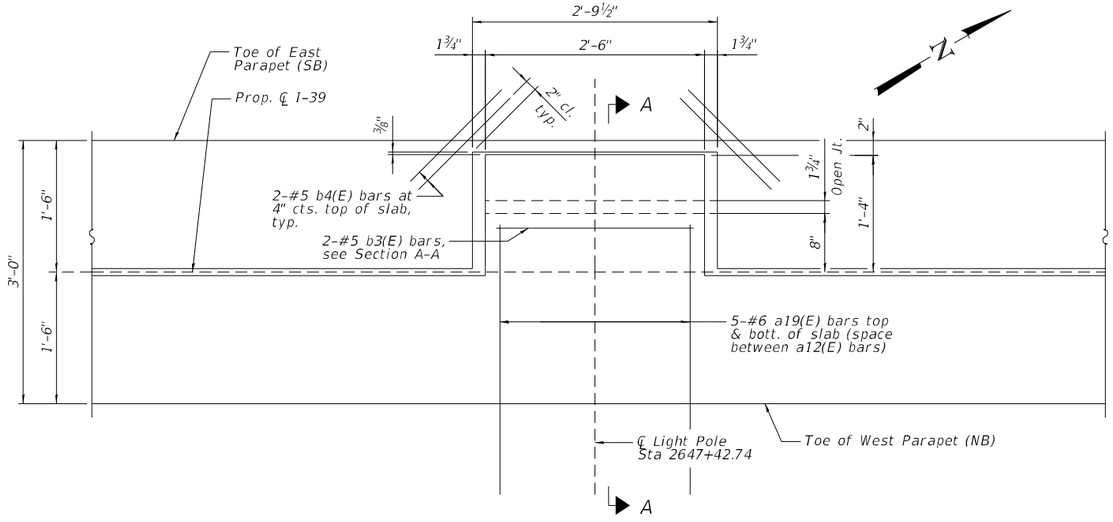



## TOP PLAN



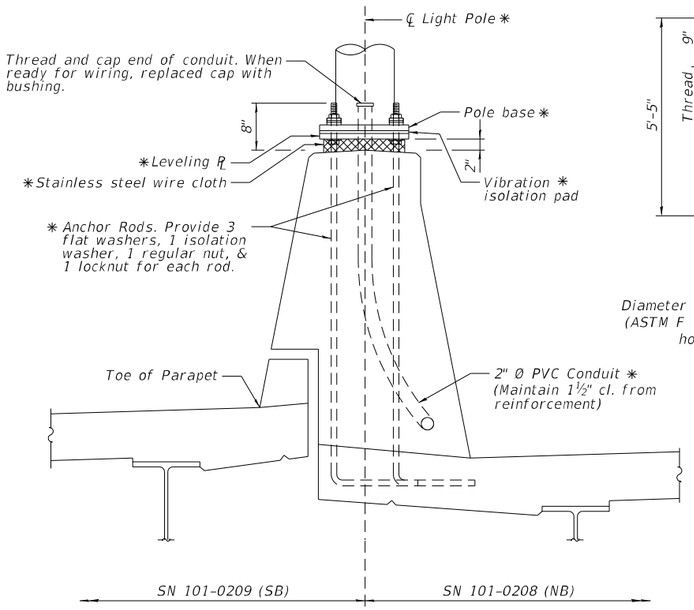

## SECTION A-A

*(Looking upstation)*
*(Light Pole and Conduit not shown for clarity)*



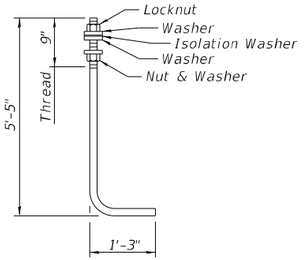

## BOTTOM PLAN

*(Parapet joints not shown for clarity)*




## SECTION A-A

*(Looking upstation)*
*(Showing Light Pole, Anchor Bolts and Conduit)*




## ANCHOR ROD

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

✳ *See Lighting Plans for additional light pole details and pay items.*

## NOTES:

1. See Highway Standard 812001.
2. Cost of anchor rods is included with Concrete Superstructure.

MODEL: SHEET
FILE NAME: c:\pw\wordtribenesch projects\projects\d0172871\D2642C24_SHT_0208-0209-CN_DECK-SLAB-DETAILS-LIGHTPOLE.dgn

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19 S. LaSalle Street, Suite 2710
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|---|---|---|---|
| USER NAME = lfranceschina | DESIGNED - DSO | REVISED - | |
| | DRAWN - DSO | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - AJN | REVISED - | |
| PLOT DATE = 8/12/2024 | DATE - 05/23/2024 | REVISED - | |

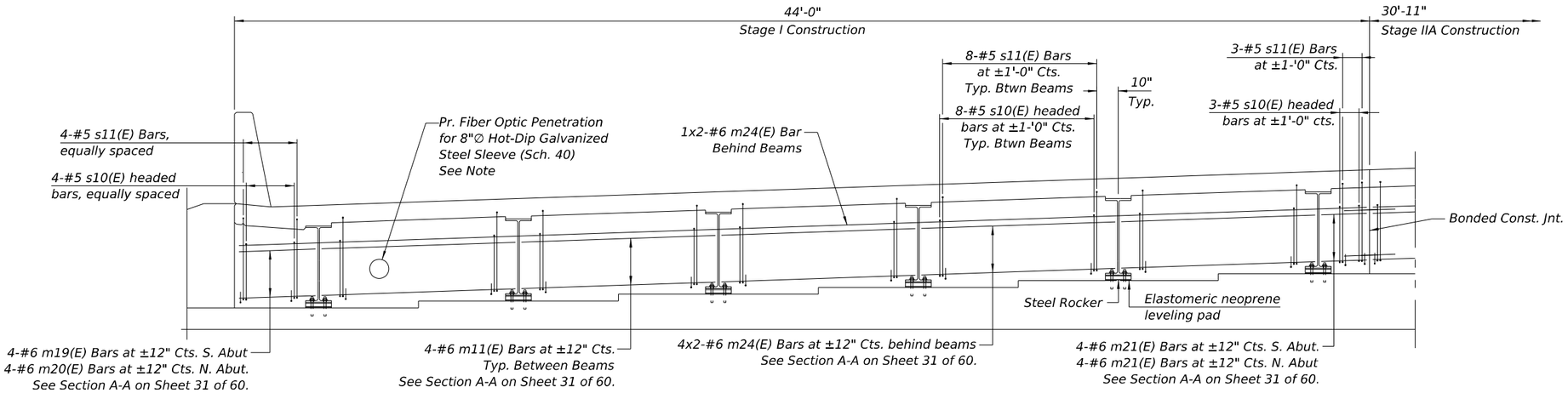
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**DECK SLAB DETAILS - PARAPET LIGHT POLE**
**STRUCTURE NO. 101-0208/0209**

SCALE: | SHEET 28 OF 60 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1,5)R | WINNEBAGO | 1685 | 571 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS FED. AID PROJECT | | | |

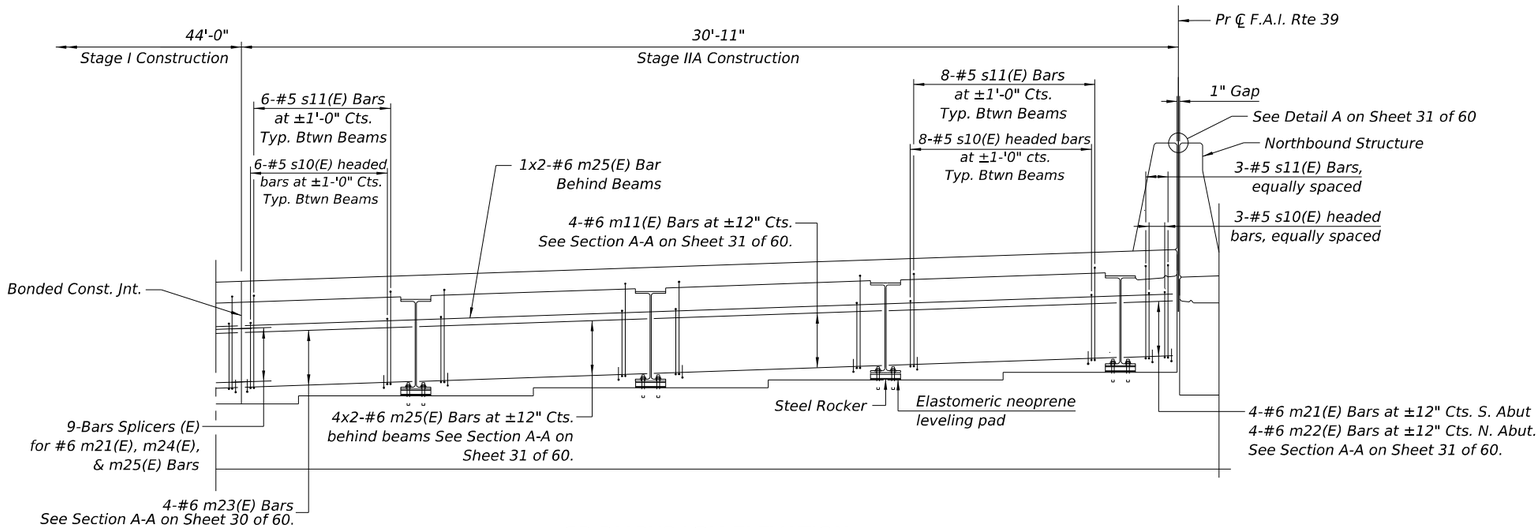
* FAI ROUTE 39 (I-39) & FAP 301 (US 20)




## SB DIAPHRAGM ELEVATION

*(North Abutment diaphragm shown. South Abutment diaphragm similar.)*
*(Looking North)*

*Note:*
*See Electrical Plans for additional conduit details at the backwall. The cost of steel sleeves shall be included in the cost of Concrete Structures.*




## SB DIAPHRAGM ELEVATION

*(North Abutment diaphragm shown. South Abutment diaphragm similar.)*
*(Looking North)*

MODEL: SHEET
FILE NAME: c:\pwworkdir\benesch projects\projects\d0173871\D2804C24_SHT_0208-0209-CN_END-DIAPHRAGM-SB.dgn

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| USER NAME = lfranceschina | DESIGNED - JW | REVISED - | |
| | DRAWN - DSO | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - AJN | REVISED - | |
| PLOT DATE = 8/12/2024 | DATE - 02/27/24 | REVISED - | |

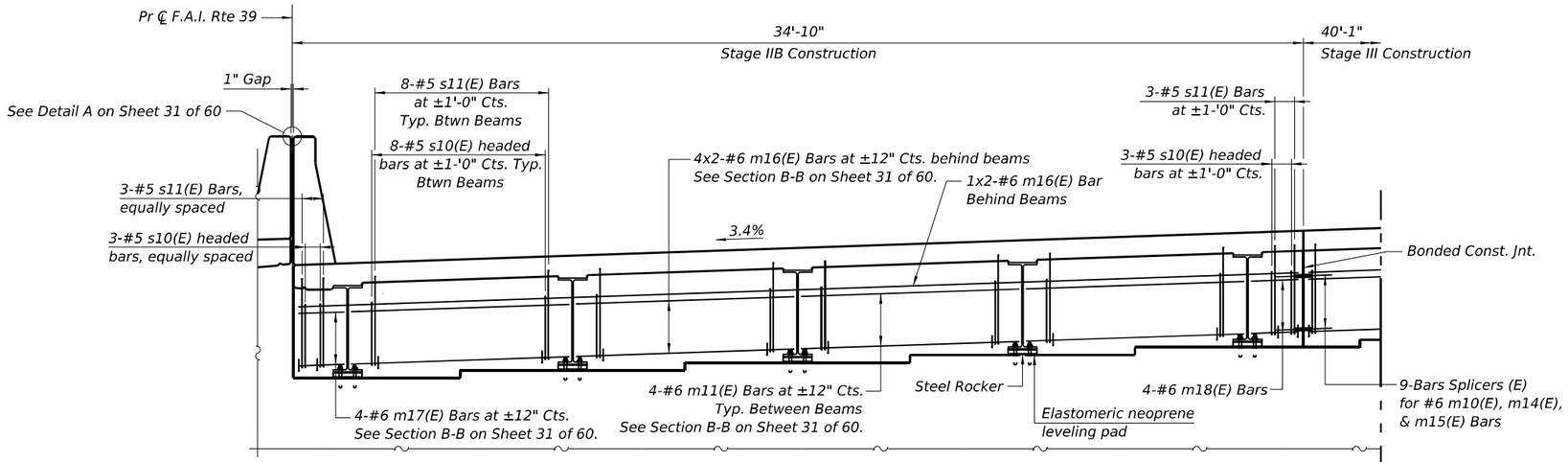
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**CONCRETE END DIAPHRAGM - SOUTHBOUND**
**STRUCTURE NO. 101-0208/0209**

SCALE: | SHEET 29 OF 60 SHEETS | STA. | TO STA.

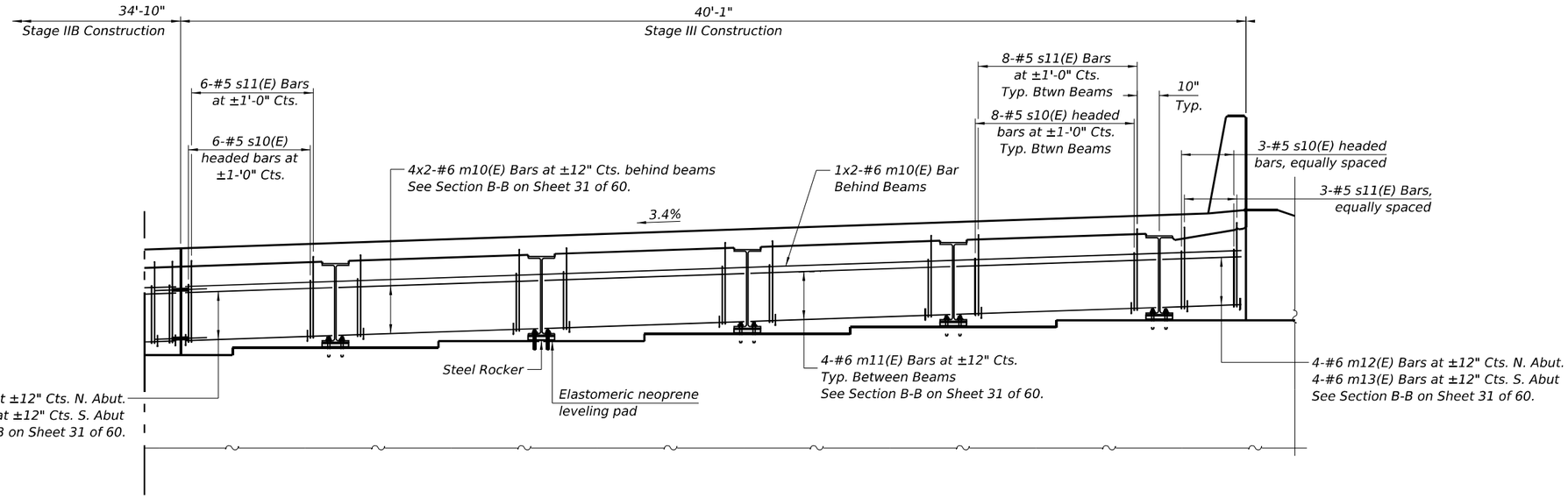
| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1,5)R | WINNEBAGO | 1685 | 572 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)




## NB DIAPHRAGM ELEVATION

*(North Abutment diaphragm shown. South Abutment diaphragm similar.)*
*(Looking North)*




## NB DIAPHRAGM ELEVATION

*(North Abutment diaphragm shown. South Abutment diaphragm similar.)*
*(Looking North)*

MODEL: SHEET
FILE NAME: c:\pwworkdir\boenesch projects\projects\d0173871\D264C24_SHT_0208-0209-CN_END-DIAPHRAGM-NB.dgn

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|---|---|---|---|
| USER NAME = lfranceschina | DESIGNED - JW | REVISED - | |
| | DRAWN - DSO | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - AJN | REVISED - | |
| PLOT DATE = 8/12/2024 | DATE - 02/27/24 | REVISED - | |

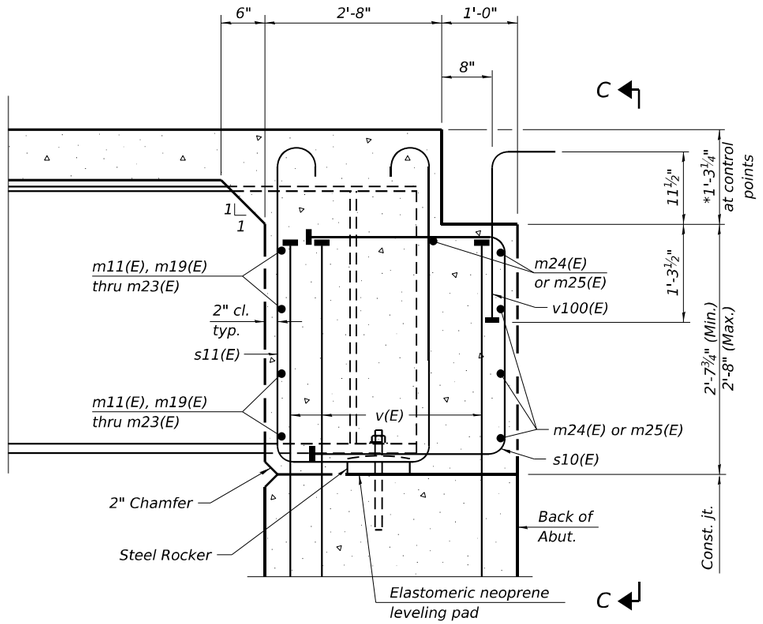
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**CONCRETE END DIAPHRAGM - NORTHBOUND**
**STRUCTURE NO. 101-0208/0209**

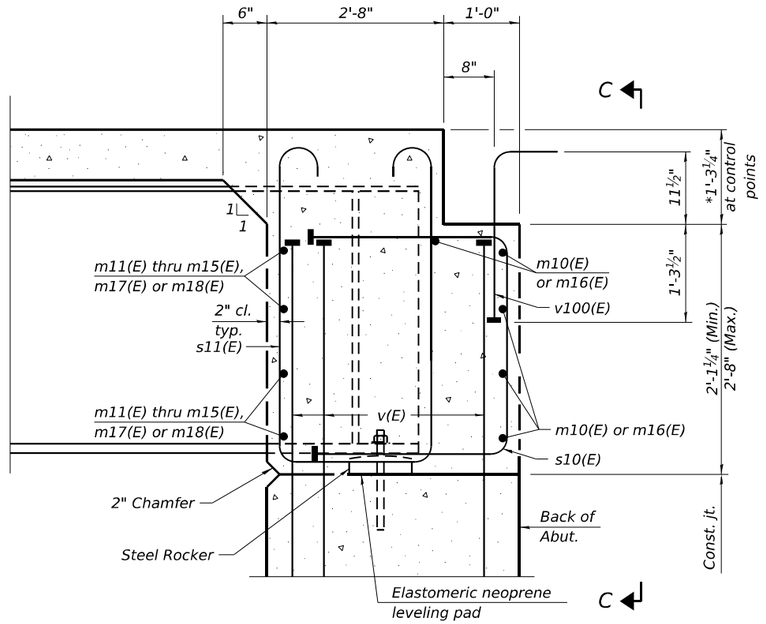
SCALE: | SHEET 30 OF 60 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 573 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

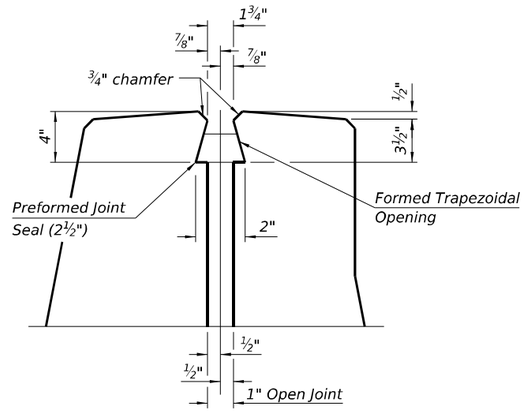



SECTION A-A
(at Rt. ∠'s)



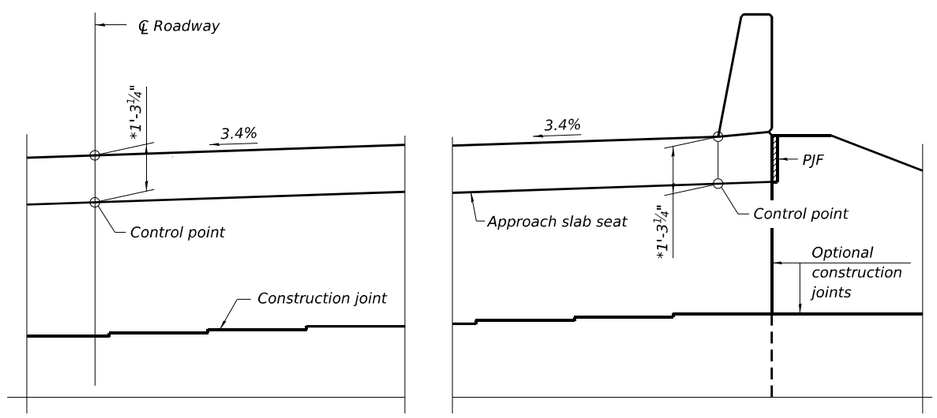

SECTION B-B
(at Rt. ∠'s)

Notes:
See sheet 25 of 60 for superstructure details and Bill of Material.
See sheet 25 of 60 for PJF details.
See sheets 29 & 30 of 60 for Concrete End Diaphragm elevations.
The s10(E) and s11(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.
The approach slab seat shall have a constant slope determined from the control points shown.

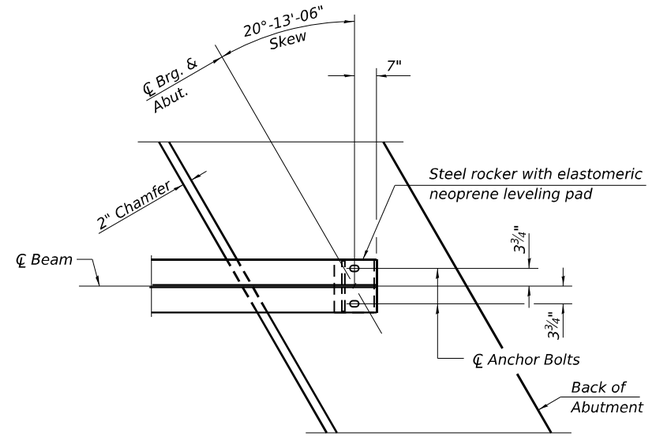



DETAIL A

* Prior to Grinding




VIEW C-C




BOTTOM FLANGE PLAN AT ABUTMENT
(Showing bottom flange of beam)

MODEL: SHEET
FILE NAME: c:\pw\wordir\beneschprojects\projects\d0173871\D264C24_SHT_0208-0209-CN_END-DIAPHRAGM-DETAILS.dgn

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| USER NAME = lfranceschina | | DESIGNED - JW | REVISED - | |
| | | DRAWN - DSO | REVISED - | |
| PLOT SCALE = $SCALE$ | | CHECKED - AJN | REVISED - | |
| PLOT DATE = 8/12/2024 | | DATE - 02/27/24 | REVISED - | |

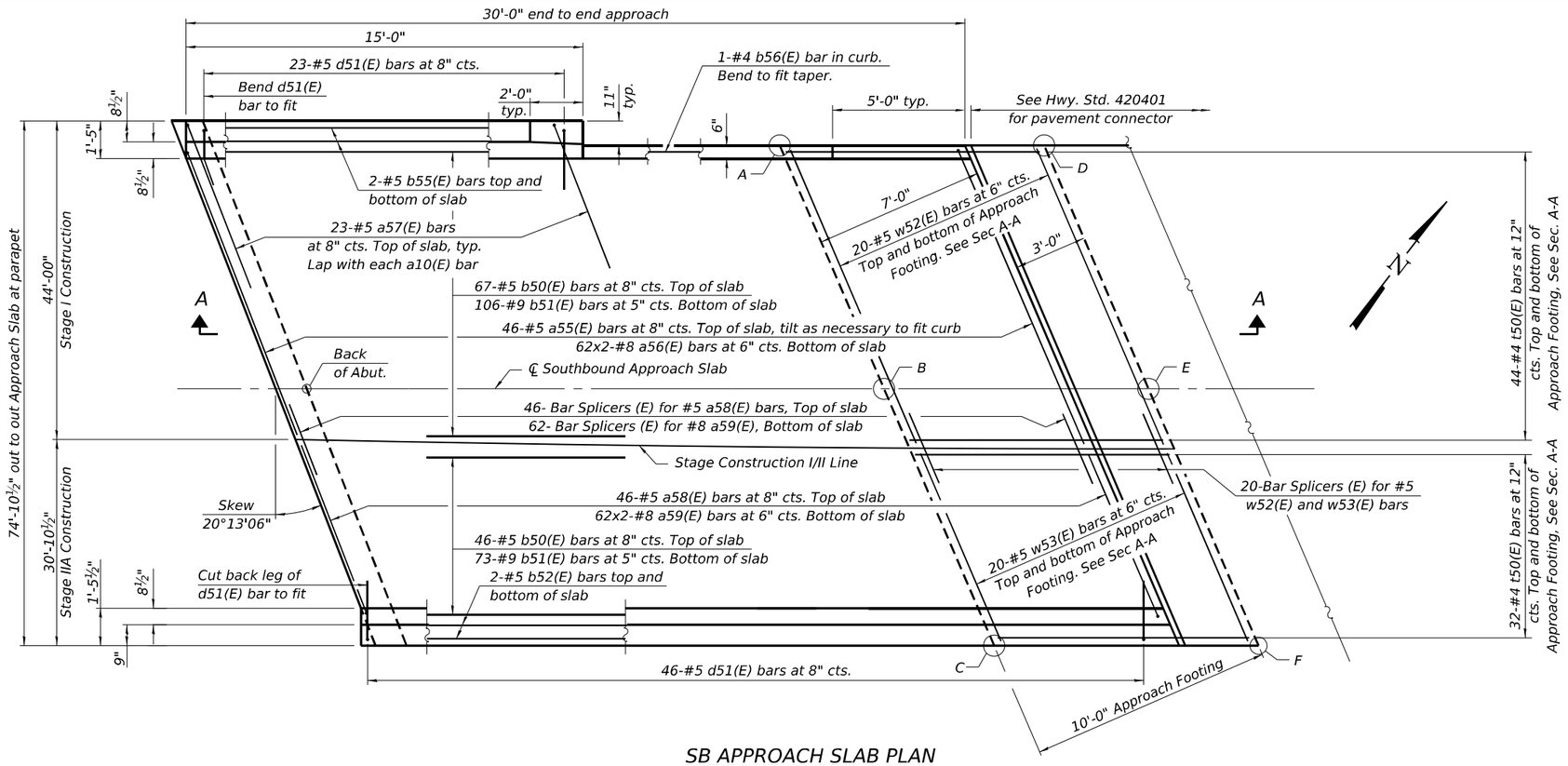
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONCRETE END DIAPHRAGM - DETAILS
STRUCTURE NO. 101-0208/0209

SCALE: | SHEET 31 OF 60 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 574 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS FED. AID PROJECT | | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)




## SB APPROACH SLAB PLAN

*(North approach slab shown; South approach slab similar by 180° rotation)*

## START & END STATIONS OF SB APPROACH SLABS

*(Along SB PGL)*

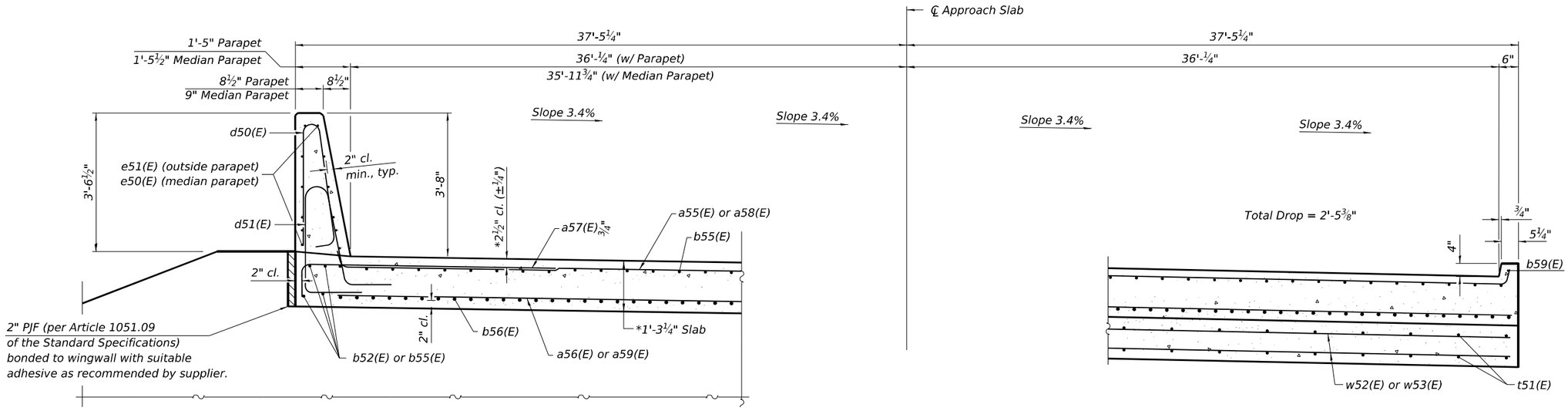
| North Approach | | | South Approach | | |
|---|---|---|---|---|---|
| | Station | Offset | | Station | Offset |
| Start | 2649+12.37 | 13.5' | Start | 2647+31.59 | 13.5' |
| End | 2649+42.24 | 13.5' | End | 2647+01.32 | 13.5' |

## TOP & BOTTOM ELEVATIONS FOR APPROACH FOOTING

| North Approach | | | South Approach | | |
|---|---|---|---|---|---|
| Point/ Location | Top | Bottom | Point/ Location | Top | Bottom |
| A - SW | 797.97 | 797.14 | A - NE | 797.59 | 796.76 |
| B - S ℄ | 799.20 | 798.37 | B - N ℄ | 798.91 | 798.08 |
| C - SE | 800.18 | 799.35 | C - NW | 799.93 | 799.10 |
| D - NW | 797.94 | 797.11 | D - SE | 799.94 | 799.11 |
| E - N ℄ | 799.16 | 798.33 | E - S ℄ | 798.86 | 798.03 |
| F - NE | 800.10 | 799.27 | F - SW | 797.54 | 796.71 |

## MINIMUM BAR LAP

#8 bar = 7'-10"




*NEAR ABUTMENT*
*MIRROR FOR MEDIAN PARAPET*

**Prior to grinding*

*AT APPROACH FOOTING WEST SHOULDER ONLY*

## SB APPROACH SLAB CROSS SECTION

*(Looking South)*

MODEL: SHEET
FILE NAME: c:\pwworkfi\benesch projects\projects\d0173871\D264C24_SHT_0208-0209-CN_APPR-SLABS-SB-1.dgn

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| USER NAME = lfranceschina | DESIGNED - JW | REVISED - | |
| | DRAWN - DSO | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - AJN | REVISED - | |
| PLOT DATE = 8/12/2024 | DATE - 02/27/24 | REVISED - | |

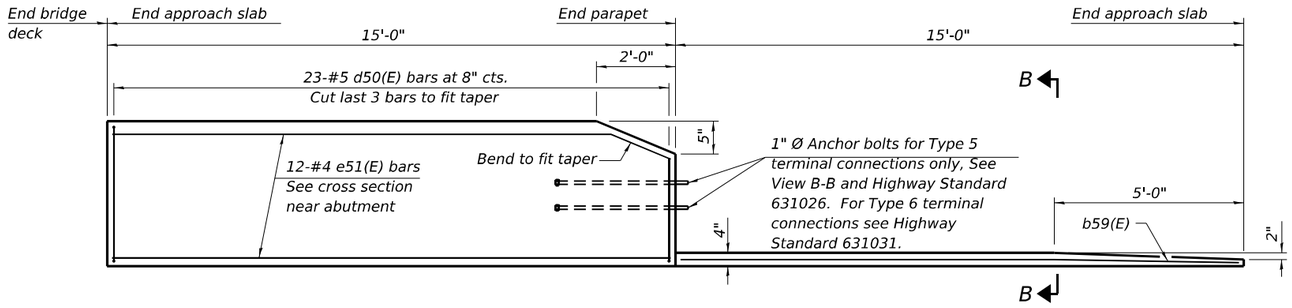
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**APPROACH SLABS - SOUTHBOUND**
**STRUCTURE NO. 101-0208/0209**

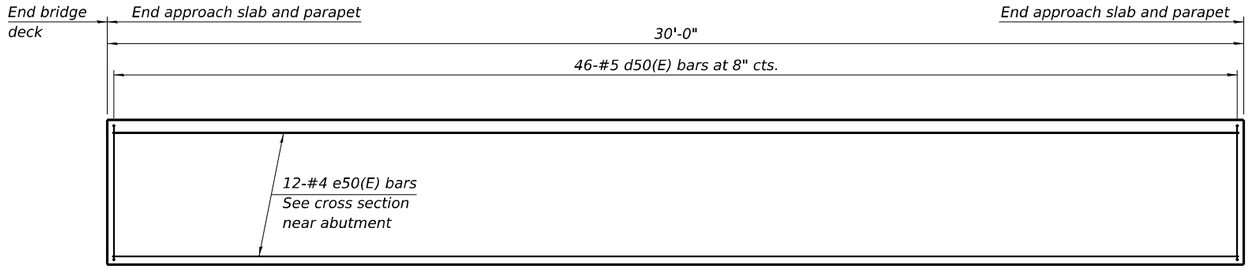
SCALE: | SHEET 32 OF 60 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 575 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

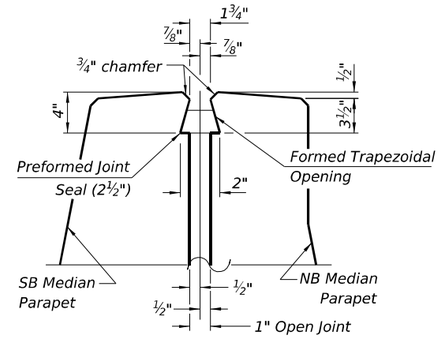
* FAI ROUTE 39 (I-39) & FAP 301 (US 20)



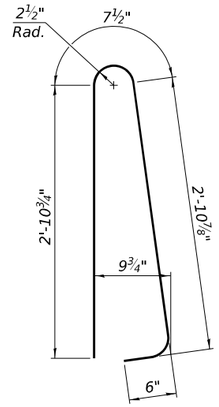

## INSIDE ELEVATION OF OUTSIDE PARAPET AND CURB



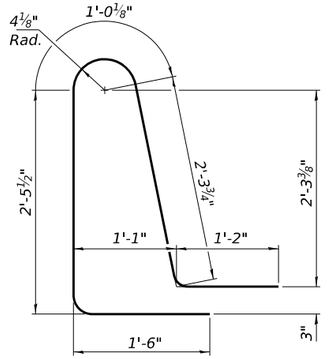

## INSIDE ELEVATION OF MEDIAN PARAPET




## MEDIAN JOINT DETAIL




## BAR d50(E)




## BAR d51(E)

*Notes:*

*The joint opening shall be adjusted for temperature per Article 520.04 of the Standard Specifications. However, since this detail is for jointless structures, the length of bridge used to calculate the adjustment shall be equal to half the total bridge length plus the length of the bridge approach slab.*

*Parapet concrete shall be paid for as Concrete Superstructure.*

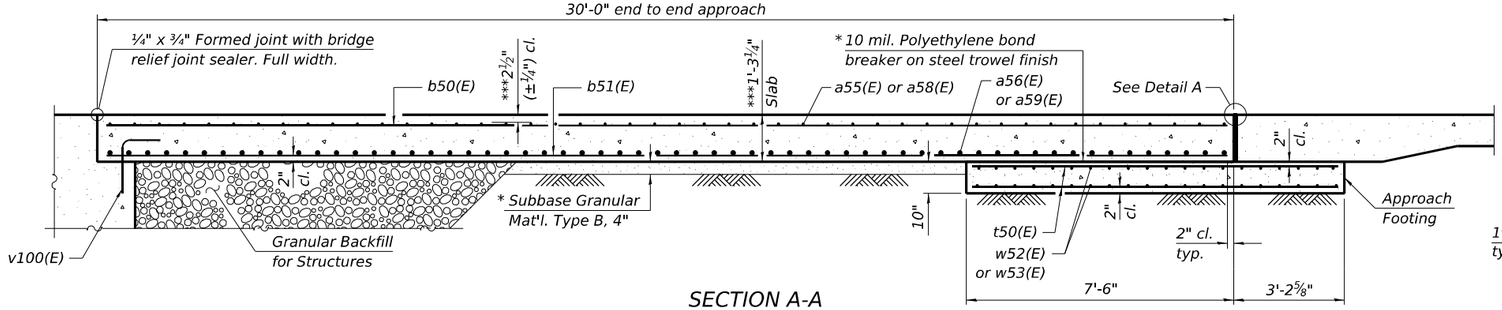
*Approach slab shall be paid for as Concrete Superstructure (Approach Slab).*

*Approach footing concrete shall be paid for as Concrete Structures.*

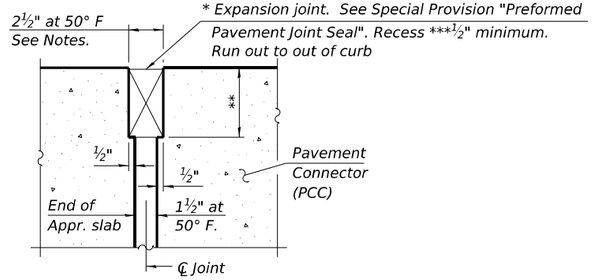
*The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.*

*Cost of excavation for approach footing included with Concrete Structures.*

*For Granular Backfill for Structures and drainage treatment details, see sheet 3 of 60.*

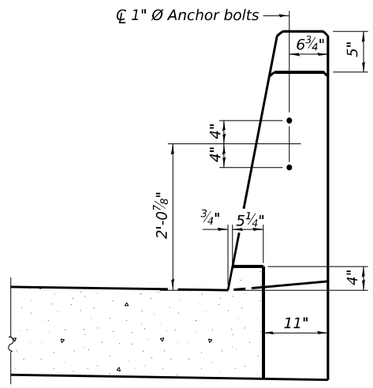



## SECTION A-A



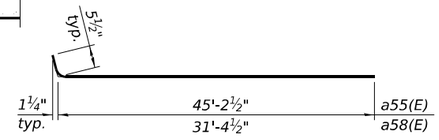

## DETAIL A

(at Rt. ∠'s)

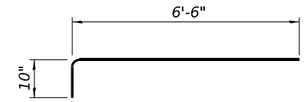



## VIEW B-B

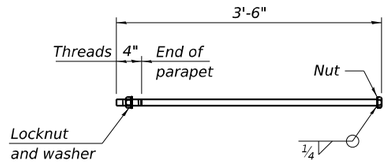
(Terminal 5 shown. For Terminal 6 see Highway Standard 631031.)




## BAR a55(E) or a58(E)




## BAR a57(E)




## *1" Ø ANCHOR BOLT

*(Anchor bolt assemblies shall be galvanized according to Article 1006.09 of the Standard Specifications)*

## SOUTHBOUND TWO APPROACHES BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|---|---|---|---|---|
| a55(E) | 92 | #5 | 45'-8" | |
| a56(E) | 248 | #8 | 26'-7" | |
| a57(E) | 138 | #5 | 7'-4" | |
| a58(E) | 92 | #5 | 31'-10" | |
| a59(E) | 248 | #8 | 19'-7" | |
| | | | | |
| b50(E) | 222 | #5 | 29'-8" | |
| b51(E) | 294 | #9 | 29'-8" | |
| b52(E) | 8 | #5 | 29'-8" | |
| b55(E) | 8 | #5 | 14'-7" | |
| b56(E) | 2 | #4 | 14'-4" | |
| | | | | |
| d50(E) | 138 | #5 | 6'-5" | |
| d51(E) | 138 | #5 | 8'-6" | |
| | | | | |
| e50(E) | 56 | #4 | 29'-8" | |
| e51(E) | 56 | #4 | 14'-7" | |
| | | | | |
| t50(E) | 152 | #4 | 10'-2" | |
| | | | | |
| w52(E) | 40 | #5 | 45'-4" | |
| w53(E) | 40 | #5 | 32'-3" | |
| Concrete Superstructure | | | Cu. Yd. | 13.4 |
| Concrete Superstructure (Approach Slab) | | | Cu. Yd. | 205.6 |
| Concrete Structures | | | Cu. Yd. | 48.4 |
| Reinforcement Bars, Epoxy Coated | | | Pound | 84,050 |
| Protective Coat | | | Sq. Yd. | 499 |
| Preformed Joint Seal 2 1/2" | | | Foot | 30 |

* Cost included with Concrete Superstructure (Approach Slab).

** Per manufacturer recommendations

*** Prior to grinding

MODEL: SHEET
FILE NAME: c:\pwworkdir\benesch projects\projects\d0173871\D264C24_SHT_0208-0209-CN_APPR-SLABS-SB-2.dgn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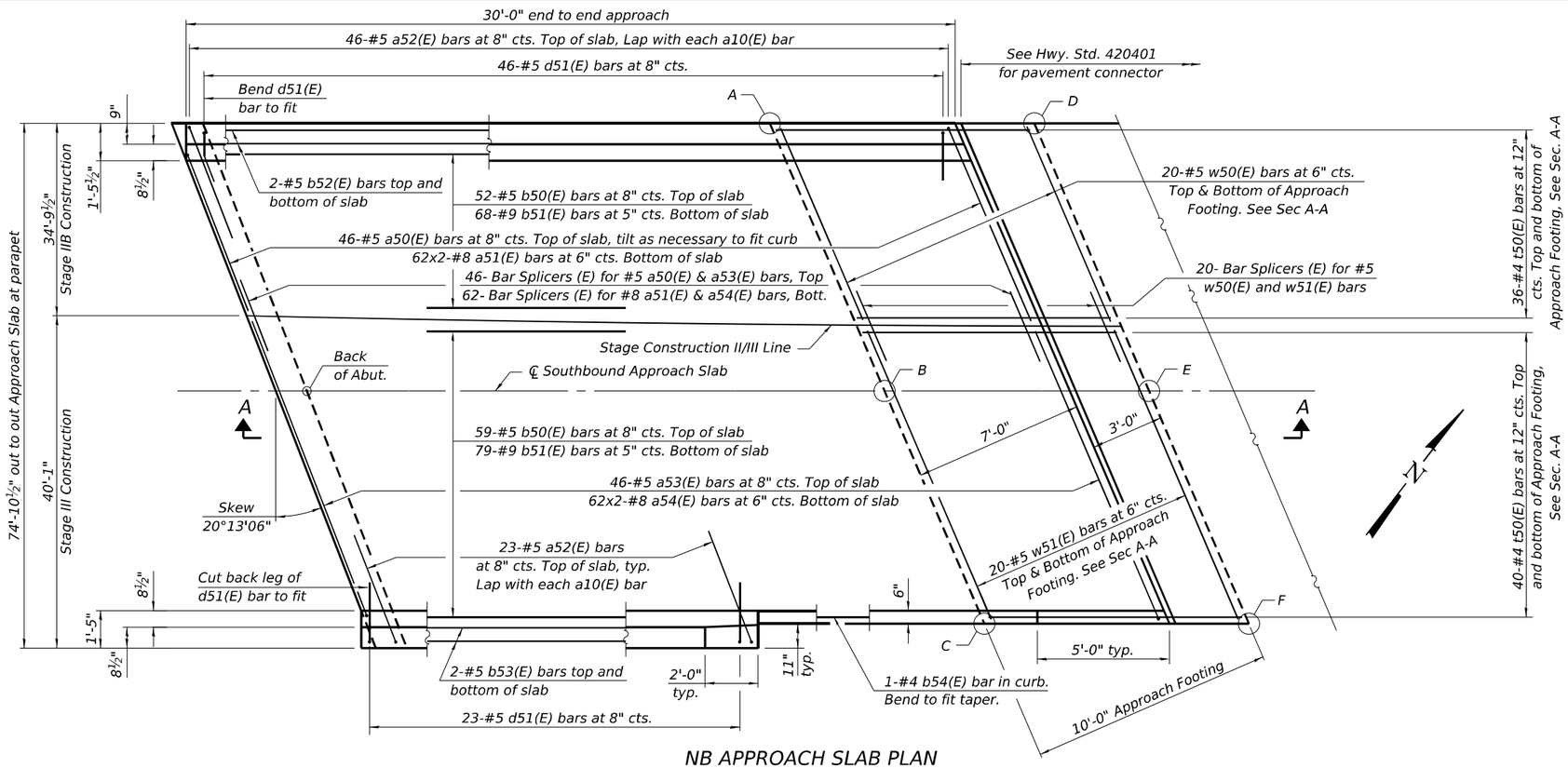
| | | | | |
|---|---|---|---|---|
| USER NAME = lfranceschina | DESIGNED - JW | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | APPROACH SLABS DETAILS - SOUTHBOUND STRUCTURE NO. 101-0208/0209 |
| | DRAWN - DSO | REVISED - | | |
| PLOT SCALE = $SCALE$ | CHECKED - AJN | REVISED - | | SCALE: SHEET 33 OF 60 SHEETS STA. TO STA. |
| PLOT DATE = 8/12/2024 | DATE - 02/27/24 | REVISED - | | |

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 576 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS FED. AID PROJECT | | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)




## NB APPROACH SLAB PLAN

*(North approach slab shown; South approach slab similar by 180° rotation)*

## START & END STATIONS OF NB APPROACH SLABS

*(Along NB PGL)*

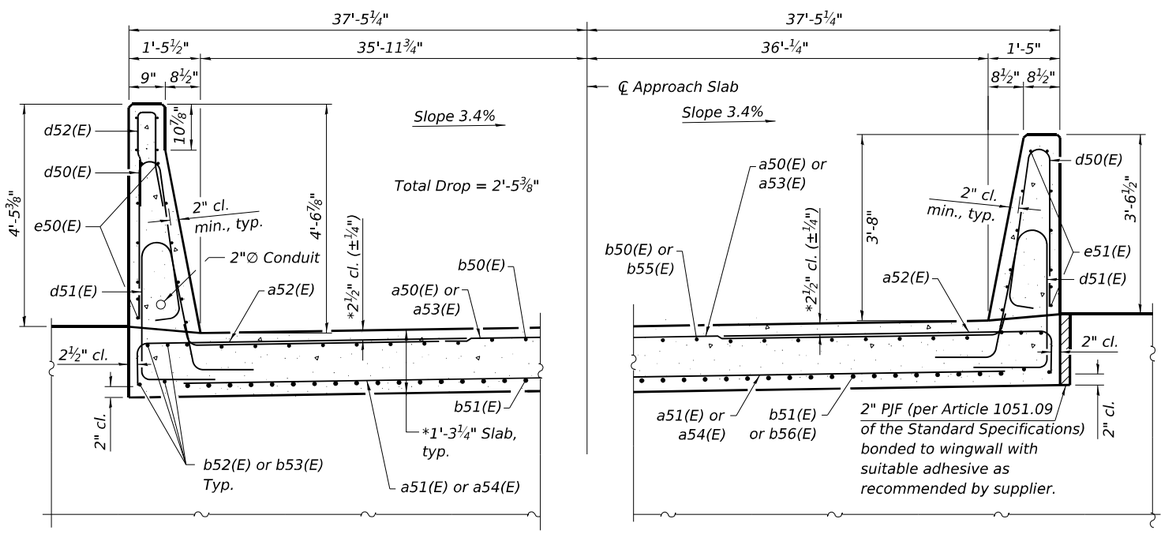
| North Approach | | | South Approach | | |
|---|---|---|---|---|---|
| | Station | Offset | | Station | Offset |
| Start | 2649+21.79 | 13.5' | Start | 2647+41.98 | 13.5' |
| End | 2649+51.50 | 13.5' | End | 2647+11.87 | 13.5' |

## TOP & BOTTOM ELEVATIONS FOR APPROACH FOOTING

| North Approach | | | South Approach | | |
|---|---|---|---|---|---|
| Point/ Location | Top | Bottom | Point/ Location | Top | Bottom |
| A - SW | 799.73 | 798.90 | A - NE | 799.47 | 798.64 |
| B - S ℄ | 800.71 | 799.88 | B - N ℄ | 800.63 | 799.80 |
| C - SE | 801.87 | 801.04 | C - NW | 801.90 | 801.07 |
| D - NW | 799.64 | 798.81 | D - SE | 801.85 | 801.02 |
| E - N ℄ | 800.66 | 799.83 | E - S ℄ | 800.58 | 799.75 |
| F - NE | 801.82 | 800.99 | F - SW | 799.48 | 798.65 |

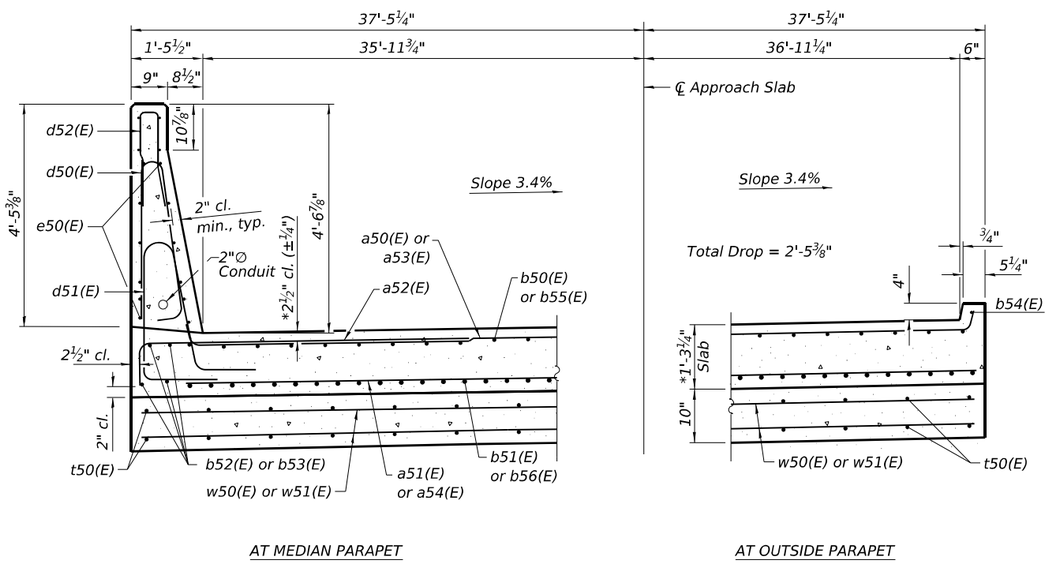
## MINIMUM BAR LAP

*#8 bar = 7'-10"*




## NB APPROACH SLAB CROSS SECTION AT ABUTMENT

*(Looking North)*
**Prior to grinding*




## NB APPROACH SLAB CROSS SECTION AT APPROACH FOOTING

*(Looking North)*
**Prior to grinding*

MODEL: SHEET
FILE NAME: c:\pwworkdir\benesch projects\projects\d0173871\D26#C24_SHT_0208-0209-CN_APPR-SLABS-NB-1.dgn

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|---|---|---|---|
| USER NAME = lfranceschina | DESIGNED - JW | REVISED - | |
| | DRAWN - DSO | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - AJN | REVISED - | |
| PLOT DATE = 8/12/2024 | DATE - 02/27/24 | REVISED - | |

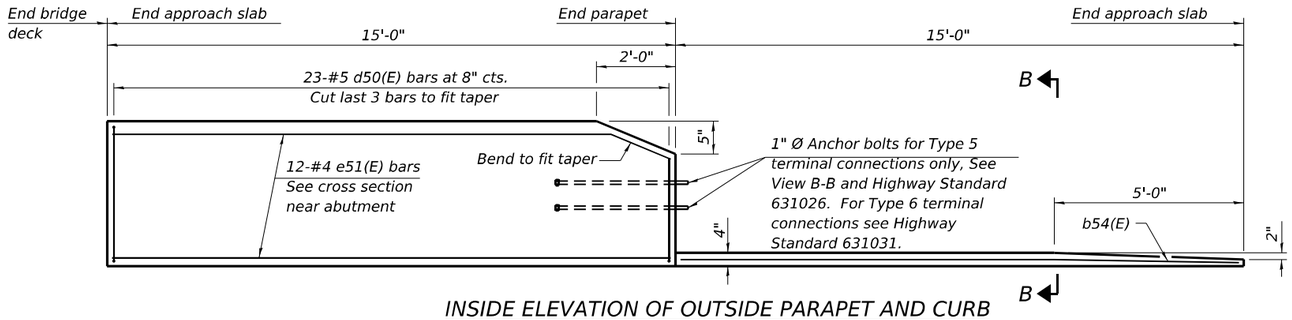
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**APPROACH SLABS - NORTHBOUND**
**STRUCTURE NO. 101-0208/0209**

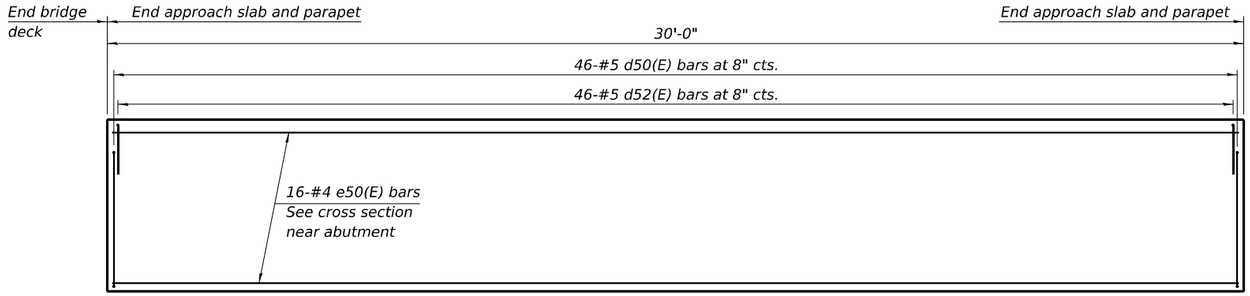
SCALE: | SHEET 34 OF 60 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 577 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

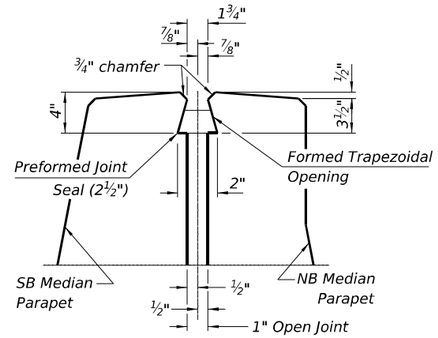
* FAI ROUTE 39 (I-39) & FAP 301 (US 20)



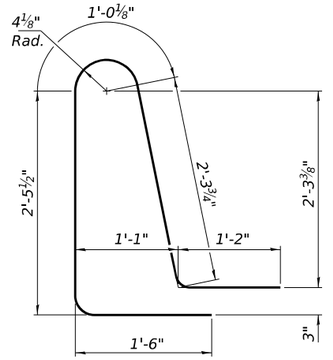

## INSIDE ELEVATION OF OUTSIDE PARAPET AND CURB



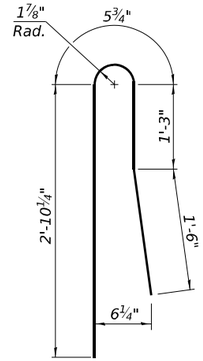

## INSIDE ELEVATION OF MEDIAN PARAPET




## MEDIAN JOINT DETAIL




## BAR d51(E)




## BAR d52(E)

*Notes:*

*The joint opening shall be adjusted for temperature per Article 520.04 of the Standard Specifications. However, since this detail is for jointless structures, the length of bridge used to calculate the adjustment shall be equal to half the total bridge length plus the length of the bridge approach slab.*

*Parapet concrete shall be paid for as Concrete Superstructure.*

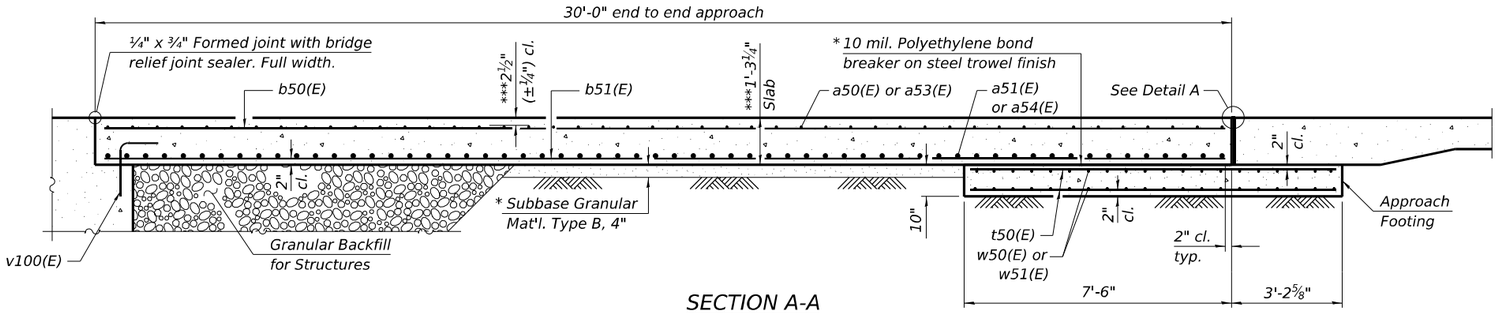
*Approach slab shall be paid for as Concrete Superstructure (Approach Slab).*

*Approach footing concrete shall be paid for as Concrete Structures.*

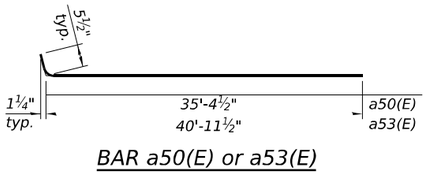
*The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.*

*Cost of excavation for approach footing included with Concrete Structures.*

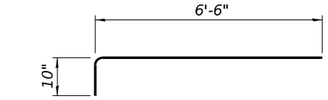
*For Granular Backfill for Structures and drainage treatment details, see sheet 3 of 60.*



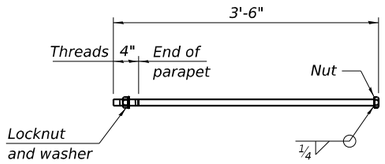

## SECTION A-A




## BAR a50(E) or a53(E)

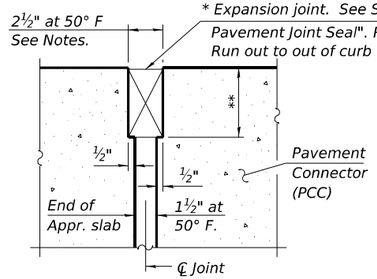



## BAR a52(E)



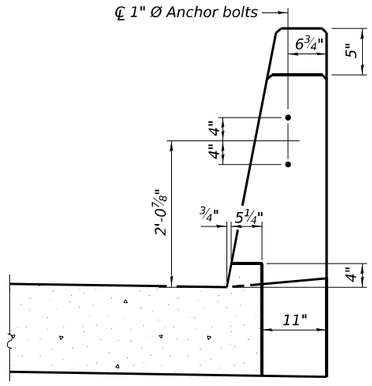

## *1" Ø ANCHOR BOLT

*(Anchor bolt assemblies shall be galvanized according to Article 1006.09 of the Standard Specifications)*



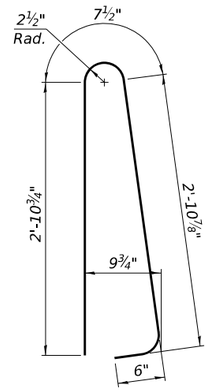

## DETAIL A

*(at Rt. ∠'s)*




## VIEW B-B

*(Terminal 5 shown. For Terminal 6, see Highway Standard 631031.)*




## BAR d50(E)

* Cost included with Concrete Superstructure (Approach Slab).

** Per manufacturer recommendations

*** Prior to grinding

## NORTHBOUND TWO APPROACHES BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|---|---|---|---|---|
| a50(E) | 92 | #5 | 35'-11" | |
| a51(E) | 248 | #8 | 21'-8" | |
| a52(E) | 138 | #5 | 7'-4" | |
| a53(E) | 92 | #5 | 41'-0" | |
| a54(E) | 248 | #8 | 24'-8" | |
| | | | | |
| b50(E) | 222 | #5 | 29'-8" | |
| b51(E) | 294 | #9 | 29'-8" | |
| b52(E) | 8 | #5 | 29'-8" | |
| b53(E) | 8 | #5 | 15'-3" | |
| b54(E) | 2 | #4 | 13'-8" | |
| | | | | |
| d50(E) | 138 | #5 | 6'-5" | |
| d51(E) | 138 | #5 | 8'-6" | |
| d52(E) | 138 | #5 | 6'-2" | |
| | | | | |
| e50(E) | 56 | #4 | 29'-8" | |
| e51(E) | 56 | #4 | 15'-2" | |
| | | | | |
| t50(E) | 152 | #4 | 10'-2" | |
| | | | | |
| w50(E) | 40 | #5 | 36'-5" | |
| w51(E) | 40 | #5 | 41'-1" | |
| Concrete Superstructure | | | Cu. Yd. | 14.9 |
| Concrete Superstructure (Approach Slab) | | | Cu. Yd. | 205.3 |
| Concrete Structures | | | Cu. Yd. | 48.4 |
| Reinforcement Bars, Epoxy Coated | | | Pound | 85,010 |
| Protective Coat | | | Sq. Yd. | 499 |
| Preformed Joint Seal 2 1/2" | | | Foot | 30 |

MODEL: SHEET
FILE NAME: c:\pw\wordir\benesch projects\projects\d0173871\D264C24_SHT_0208-0209-CN_APPR-SLABS-NB-2.dgn

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|---|---|---|---|
| USER NAME = lfranceschina | DESIGNED - JW | REVISED - | |
| | DRAWN - DSO | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - AJN | REVISED - | |
| PLOT DATE = 8/12/2024 | DATE - 02/27/24 | REVISED - | |

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

**APPROACH SLABS DETAILS - NORTHBOUND**
**STRUCTURE NO. 101-0208/0209**

SCALE: | SHEET 35 OF 60 SHEETS | STA. | TO STA.

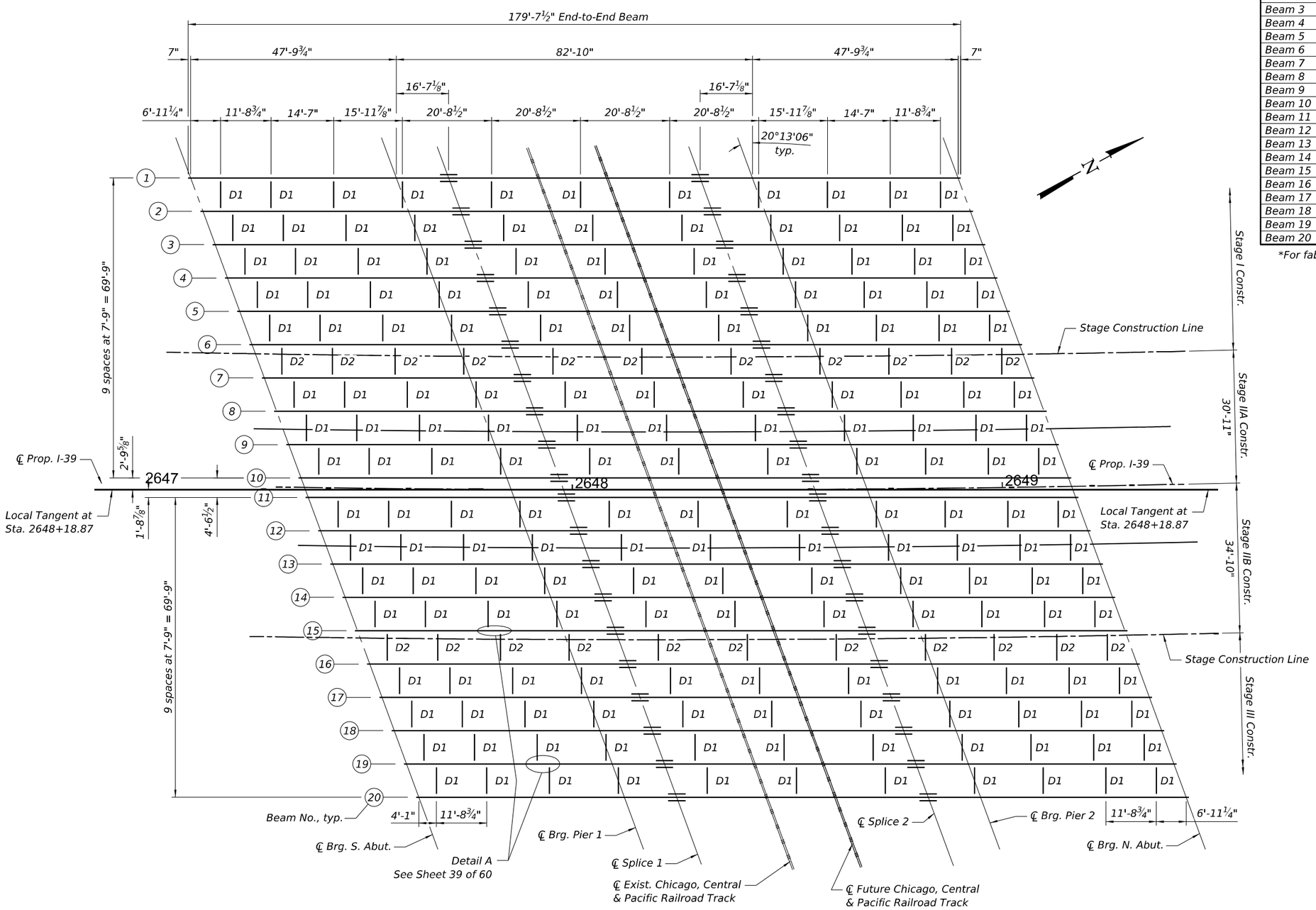
| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 578 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS FED. AID PROJECT | | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

## * TOP OF BEAM ELEVATIONS

| Location | ℄ Brg. S. Abut. | ℄ Brg. Pier 1 | ℄ Splice 1 | ℄ Splice 2 | ℄ Brg. Pier 2 | ℄ Brg. N. Abut. |
|---|---|---|---|---|---|---|
| Beam 1 | 798.28 | 798.44 | 798.42 | 798.52 | 798.60 | 798.59 |
| Beam 2 | 798.55 | 798.72 | 798.69 | 798.79 | 798.87 | 798.85 |
| Beam 3 | 798.82 | 798.99 | 798.96 | 799.05 | 799.13 | 799.11 |
| Beam 4 | 799.10 | 799.26 | 799.23 | 799.32 | 799.40 | 799.37 |
| Beam 5 | 799.37 | 799.53 | 799.50 | 799.59 | 799.66 | 799.63 |
| Beam 6 | 799.65 | 799.80 | 799.77 | 799.85 | 799.92 | 799.89 |
| Beam 7 | 799.92 | 800.08 | 800.04 | 800.11 | 800.19 | 800.14 |
| Beam 8 | 800.19 | 800.35 | 800.31 | 800.38 | 800.45 | 800.40 |
| Beam 9 | 800.47 | 800.62 | 800.58 | 800.64 | 800.71 | 800.66 |
| Beam 10 | 800.74 | 800.89 | 800.85 | 800.91 | 800.98 | 800.92 |
| Beam 11 | 799.98 | 800.13 | 800.09 | 800.14 | 800.21 | 800.15 |
| Beam 12 | 800.26 | 800.40 | 800.36 | 800.41 | 800.47 | 800.41 |
| Beam 13 | 800.53 | 800.67 | 800.63 | 800.67 | 800.74 | 800.67 |
| Beam 14 | 800.81 | 800.94 | 800.90 | 800.93 | 801.00 | 800.93 |
| Beam 15 | 801.08 | 801.21 | 801.17 | 801.20 | 801.26 | 801.18 |
| Beam 16 | 801.35 | 801.48 | 801.43 | 801.46 | 801.52 | 801.44 |
| Beam 17 | 801.63 | 801.75 | 801.70 | 801.72 | 801.78 | 801.70 |
| Beam 18 | 801.90 | 802.02 | 801.97 | 801.98 | 802.04 | 801.95 |
| Beam 19 | 802.17 | 802.28 | 802.24 | 802.25 | 802.30 | 802.21 |
| Beam 20 | 802.45 | 802.55 | 802.50 | 802.51 | 802.56 | 802.47 |

*For fabrication only




Note:
See sheet 39 of 60 for Detail A.

## FRAMING PLAN

MODEL: SHEET
FILE NAME: c:\pwworkdir\benesch projects\projects\d0173871\D264C24_SHT_0208-0209-CN_FRAMING-PLAN.dgn

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| | | | | | |
|---|---|---|---|---|---|
| USER NAME | = lfranceschina | DESIGNED | - JW | REVISED | - |
| | | DRAWN | - AT | REVISED | - |
| PLOT SCALE | = $SCALE$ | CHECKED | - AJN | REVISED | - |
| PLOT DATE | = 8/12/2024 | DATE | - | REVISED | - |

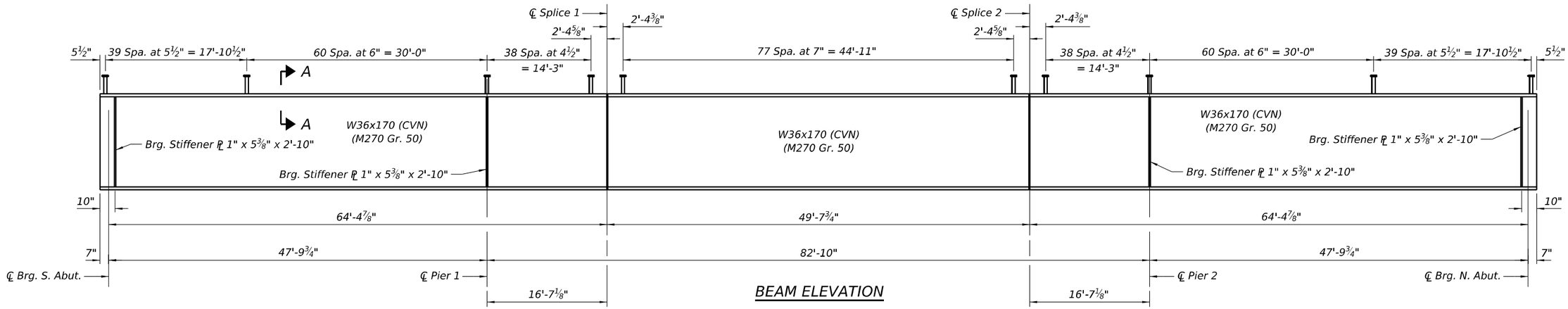
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**FRAMING PLAN**
**STRUCTURE NO. 101-0208/0209**

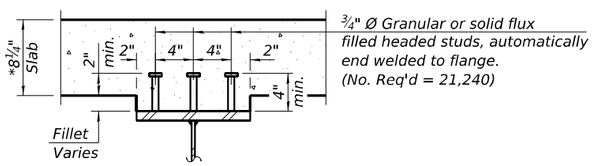
SCALE: | SHEET 36 OF 60 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 579 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS FED. AID PROJECT | | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

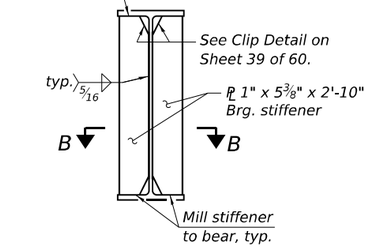



## BEAM ELEVATION

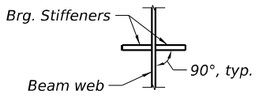



## SECTION A-A

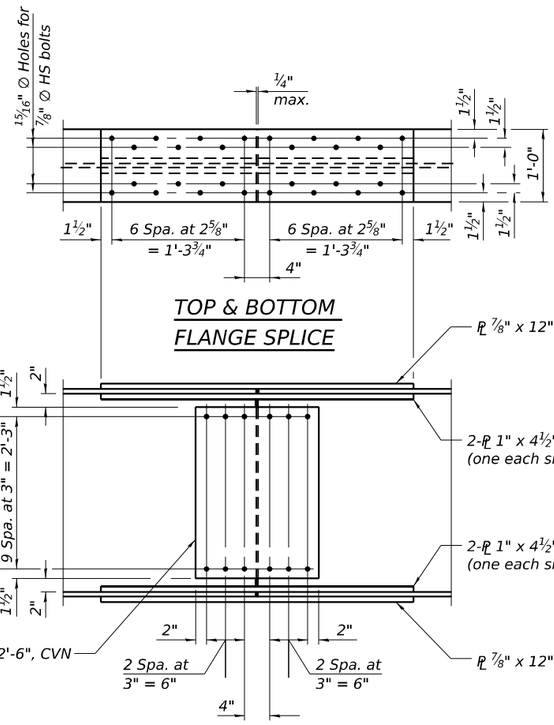
* Prior to grinding




## BEARING STIFFENER DETAIL




## SECTION B-B




## TOP & BOTTOM FLANGE SPLICE




## ELEVATION

## SPLICE DETAIL

*(40 Required)*

## NOTES:

1. Load carrying components designated "CVN" shall conform to the Charpy-V-Notch Impact Energy Requirement, Zone 2.
2. The splice plates for beams shall be AASHTO M270 Grade 50.

MODEL: SHEET
FILE NAME: c:\pwworkf\benesch projects\projects\d0173871\D284C24_SHT_0208-0209-CN_STR-STEEL.dgn

Bowman
10 S. LaSalle Street, Suite 2110
Chicago, Illinois 60603
312-914-2050
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|---|---|---|---|
| USER NAME = lfranceschina | DESIGNED - JW | REVISED - | |
| | DRAWN - AT | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - AJN | REVISED - | |
| PLOT DATE = 8/12/2024 | DATE - 02/27/24 | REVISED - | |

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

**STRUCTURAL STEEL**
**STRUCTURE NO. 101-0208/0209**

SCALE: | SHEET 37 OF 60 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 580 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS FED. AID PROJECT | | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

| INTERIOR BEAM MOMENT TABLE | | | | |
|---|---|---|---|---|
| | | 0.4 Sp. 1 or 0.6 Sp. 3 | Pier 1 or 2 | 0.5 Span 2 |
| $I_s$ | ($in^4$) | 10,500 | 10,500 | 10,500 |
| $I_c$ (n) | ($in^4$) | 30,304 | - | 30,304 |
| $I_c$ (3n) | ($in^4$) | 22,186 | - | 22,186 |
| $I_c$ (cr) | ($in^4$) | - | 14,420 | - |
| $S_s$ | ($in^3$) | 581 | 581 | 581 |
| $S_c$ (n) | ($in^3$) | 889 | - | 889 |
| $S_c$ (3n) | ($in^3$) | 803 | - | 803 |
| $S_c$ (cr) | ($in^3$) | - | 678 | - |
| DC1 | (k/') | 0.996 | 0.996 | 0.996 |
| $M_{DC1}$ | ('k) | 79 | 485 | 369 |
| DC2 | (k/') | 0.123 | 0.123 | 0.123 |
| $M_{DC2}$ | ('k) | 5 | 30 | 22 |
| DW | (k/') | 0.36 | 0.36 | 0.36 |
| $M_{DW}$ | ('k) | 30 | 191 | 142 |
| LLDF | | 0.702 | 0.702 | 0.637 |
| $M_{L+IM}$ | ('k) | 558 | 684 | 735 |
| $f_f$ (Strength I) | (ksi) | 0 | 0 | 0 |
| $M_u + \frac{1}{3} f_f S_x$ | ('k) | 1,126 | 2,128 | 1,988 |
| $\Phi_f M_n$ | ('k) | 4,773 | 2,499 | 4,466 |
| $f_s$ DC1 | (ksi) | 1.60 | 10.00 | 7.60 |
| $f_s$ DC2 | (ksi) | 0.07 | 0.37 | 0.33 |
| $f_s$ DW | (ksi) | 0.45 | 2.37 | 2.12 |
| $f_s$ (L+IM) | (ksi) | 15.2 | 26.4 | 26.8 |
| $f_f$ (Service II) | (ksi) | 0.0 | 0.0 | 0.0 |
| $f_s + f_f/2$ (Service II) | (ksi) | 21.9 | 47.1 | 44.9 |
| Service II Resistance | (ksi) | 47.5 | 47.5 | 47.5 |
| $f_s + f_f/3$ (Strength I) | (ksi) | 29.4 | 62.8 | 60.1 |
| $\Phi_f F_n$ | (ksi) | - | - | - |
| $V_f$ | (k) | 51.52 | 49.52 | 47.59 |

| BEAM REACTION TABLE | | | |
|---|---|---|---|
| | | S. Abut. or N. Abut. | Pier 1 or 2 |
| LLDF | | 0.8550 | 0.8550 |
| OCF | | - | - |
| $R_{DC1}$ | (k) | 14.63 | 75.22 |
| $R_{DC2}$ | (k) | 0.83 | 4.61 |
| $R_{DW}$ | (k) | 5.28 | 29.34 |
| $R_L$ | (k) | 59.73 | 103.19 |
| $R_{IM}$ | (k) | 15.69 | 19.95 |
| $R_{Total}$(Strength I)(Impact) | (k) | 159.23 | 359.29 |
| $R_{Total}$(Strength I)(No Impact) | (k) | 131.77 | 324.38 |

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

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

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

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

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

$R_L$: Un-factored live load reaction (kip).

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

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

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

Note:
$M_L$ and $R_L$ include the effects of centrifugal force and superelevation.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

MODEL: SHEET
FILE NAME: c:\pw\work\nbenesch.projects\projects\d0173871\D2\64C24_SHT_0208-0209-CN_STR-STEEL-DETAILS.dgn

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| | DRAWN - AT | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - AJN | REVISED - | |
| PLOT DATE = 8/12/2024 | DATE - 02/27/24 | REVISED - | |

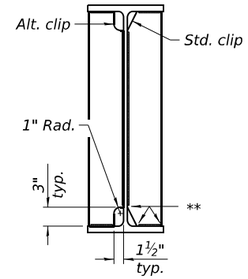
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**STRUCTURAL STEEL DETAILS**
**STRUCTURE NO. 101-0208/0209**

SCALE: | SHEET 38 OF 60 SHEETS | STA. | TO STA.

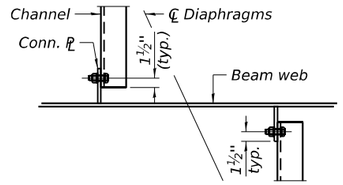
| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1,5)R | WINNEBAGO | 1685 | 581 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

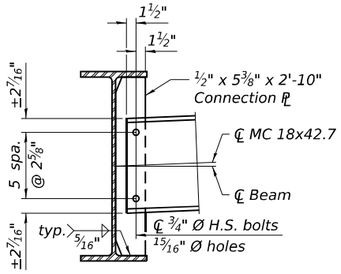



## WELD LIMITS AND CLIP DETAILS

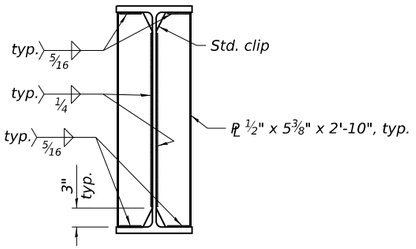
** Stop welds ¼" (±⅛") from edges as shown. Typical.




## DETAIL A

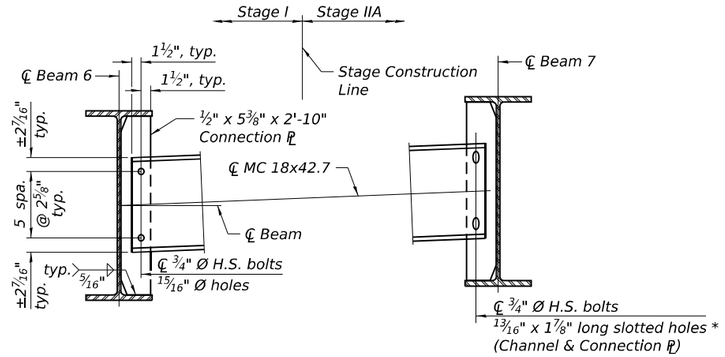



## DIAPHRAGM - D1




## PLATE CONNECTION DETAIL FOR DIAPHRAGMS

** Stop welds ¼" (±⅛") from edges as shown. Typical.




## DIAPHRAGM - D2

(Stage I/IIA Construction Line shown, Stage IIB/III similar)

* Long slotted holes shall be at Beam 7 for Stage I/IIA diaphragms and at Beam 16 for Stage IIB/III diaphragms.

## NOTES:

1. All diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual diaphragms at supports may be temporarily disconnected to install bearing anchor bolts.
2. Two hardened washers required for each set of oversized holes.
3. Alternate channels of equal depth and larger weight are permitted to facilitate material acquisition. Alternate channels, if utilized, shall be provided at no additional cost to the Department.
4. Bolts in long-slots shall be finger tight until the second stage pour is complete, and position slots so bolts start at one end with no concrete load and finish near the opposite end under deck load, allowing maximum displacement without laterally stressing main members. All holes shall have appropriate hardened or plate washers.

MODEL: SHEET
FILE NAME: c:\pw\wordir\benesch projects\projects\d0173871\D2264C24_SHT_0208-0209-CN_STEEL-DIAPHRAGMS.dgn

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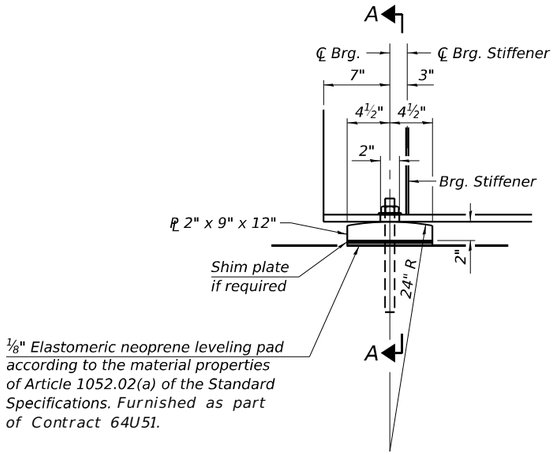
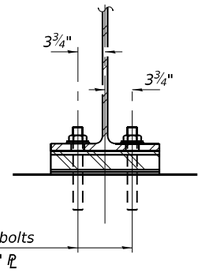
| USER NAME = lfranceschina | DESIGNED - JW | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | STRUCTURAL STEEL DIAPHRAGMS STRUCTURE NO. 101-0208/0209 |
| | DRAWN - AT | REVISED - | | |
| PLOT SCALE = $SCALE$ | CHECKED - AJN | REVISED - | | SCALE: SHEET 39 OF 60 SHEETS STA. TO STA. |
| PLOT DATE = 8/12/2024 | DATE - 02/27/24 | REVISED - | | |

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1,5)R | WINNEBAGO | 1685 | 582 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS FED. AID PROJECT | | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)



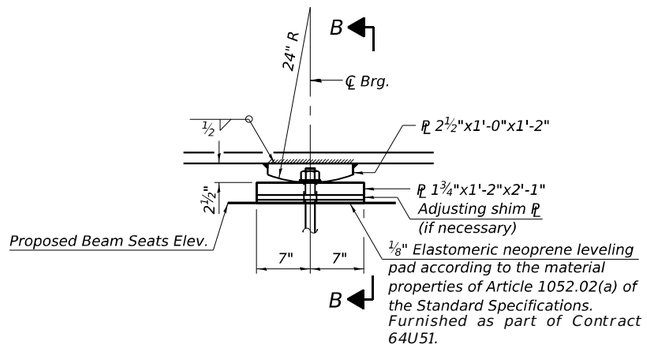

ELEVATION AT ABUTMENT



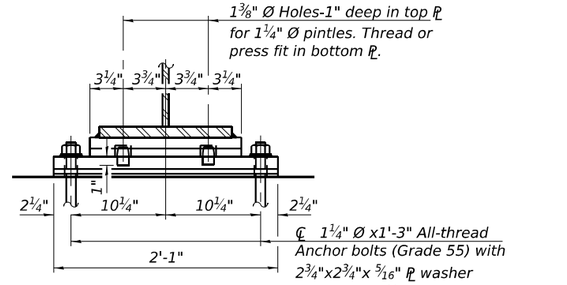

SECTION A-A

FIXED BEARING

Typical at Each Beam End
(40 Req'd)



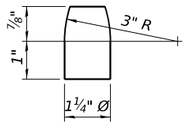

ELEVATION AT PIER




SECTION B-B

FIXED BEARING

Typical at Each Beam at Piers
(40 Req'd)




PINTLE

## NOTES:

1. Anchor bolts at all supports shall be installed as each member is erected unless an equivalent temporary means of lateral restraint is used.
2. Two 1/8 in. adjusting shims shall be furnished as part of Contract 64U51 for each bearing in addition to all other plates or shims and placed as shown on bearing details.
3. All (embedded and separate) bearing plates, side retainers, and anchor bolts, nuts, washers and pintles shall be galvanized according to AASHTO M111 or M232 as applicable.
4. The structural steel plates and pintles of the bearing shall conform to the requirements of AASHTO M270 Grade 50.
5. Installation of all bearing plates, shims, leveling pads, and pintles shall be included in the cost of Erecting Structural Steel.

## BILL OF MATERIAL

| Item | Unit | Total |
|---|---|---|
| Anchor Bolts, 1" | Each | 80 |
| Anchor Bolts, 1¼" | Each | 80 |

MODEL: SHEET
FILE NAME: c:\pwworkfi\benesch projects\projects\d0173871\D264C24_SHT_0208-0209-CN_BEARING DETAILS.dgn

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| PLOT DATE = 8/12/2024 | DATE - 02/27/24 | REVISED - | |

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

**BEARING DETAILS**
**STRUCTURE NO. 101-0208/0209**

SCALE: | SHEET 40 OF 60 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 583 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS FED. AID PROJECT | | | |

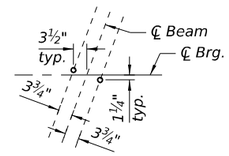
* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

## NOTES:

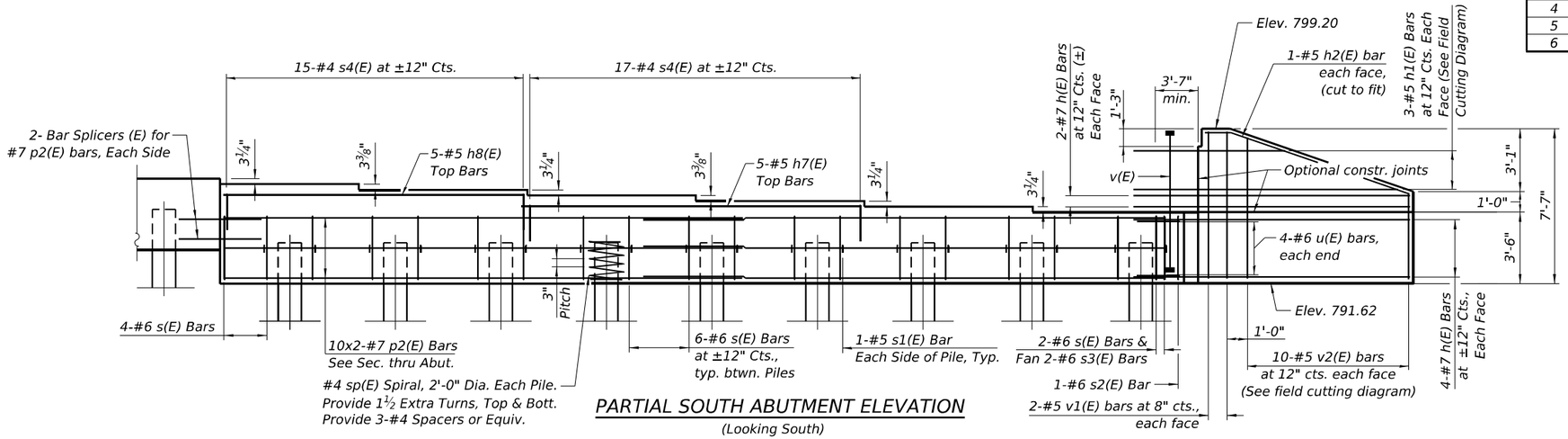
1. Pour steps monolithically with cap.
2. Bar terminators, paid for separately. See Total Bill of Material.
3. For details of piles see sheet 55 of 60.

## BEARING SEAT ELEVATIONS

| Beam | Elev. |
|---|---|
| 1 | 795.12 |
| 2 | 795.39 |
| 3 | 795.66 |
| 4 | 795.94 |
| 5 | 796.21 |
| 6 | 796.49 |

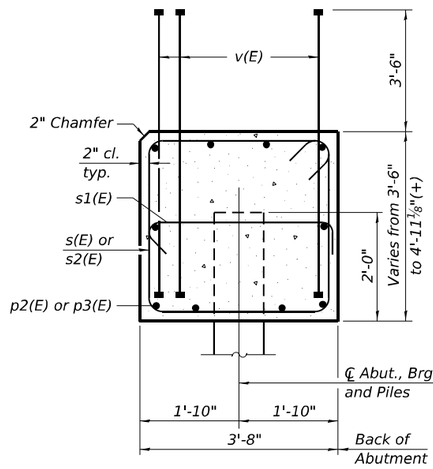



## ANCHOR BOLT LAYOUT



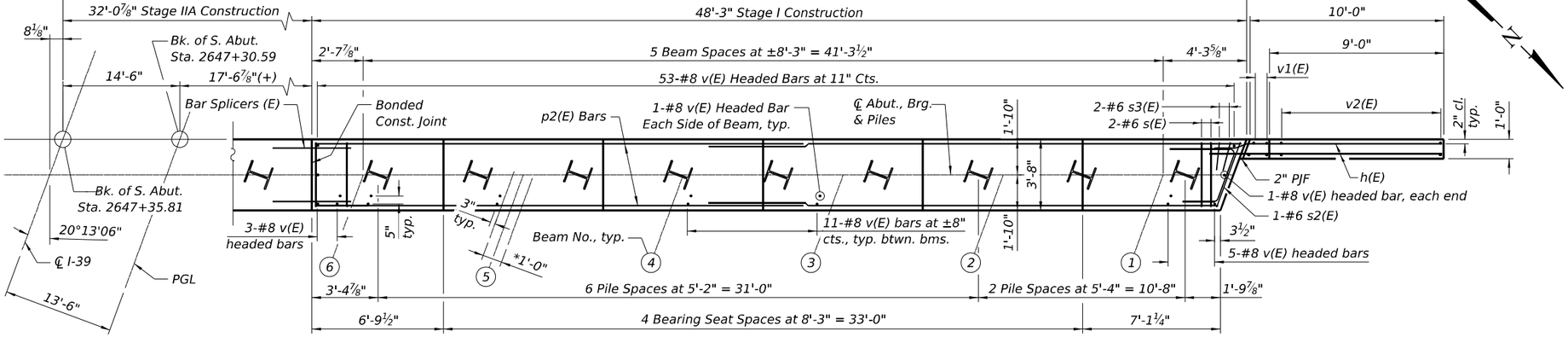

## PARTIAL SOUTH ABUTMENT ELEVATION

(Looking South)




## SEC. THRU ABUT.

Dimensions at right angles to abutment.




## PARTIAL SOUTH ABUTMENT PLAN

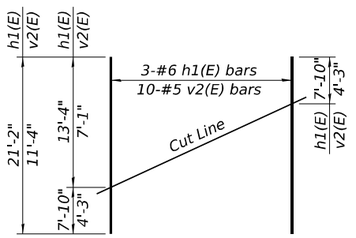
*Limits of beam flange

## MINIMUM BAR LAP

#5 Bar = 3'-7"
#6 Bar = 4'-4"
#7 Bar = 5'-0"

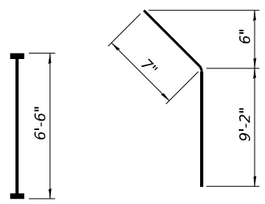
## PILE DATA

Type: HP12x63 with pile shoes
Nominal Required Bearing: 497 kips
Factored Resistance Available: 273 kips
Est. Length: 42 Ft
No. Production Piles: 15
No. Test Piles: 1




## FIELD CUTTING DIAGRAM

Order h1(E) and v2(E) full length. Cut as shown and use remainder of bars in opposite face of wingwall.

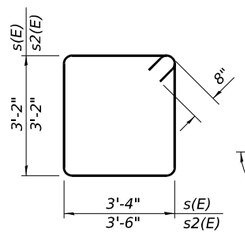



## BAR v(E)

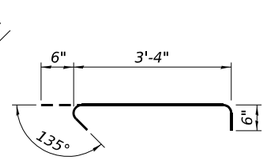
(Headed. 440-#8 Bar terminators)



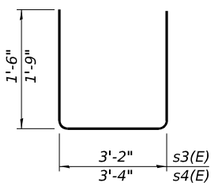

## BAR h2(E)



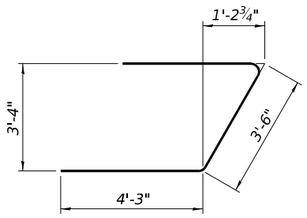

## BAR s(E) & s2(E)




## BAR s1(E)




## BAR s3(E) & s4(E)




## BAR u(E)

MODEL: SHEET
FILE NAME: c:\pwworkf\benesch projects\projects\d0173871\D284C24_SHT_0208-0209-CN_ABUT-SOUTH-S1.dgn

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| PLOT DATE = 8/12/2024 | DATE - 02/27/24 | REVISED - | |

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

**SOUTH ABUTMENT - SOUTHBOUND STAGE 1**
**STRUCTURE NO. 101-0208/0209**

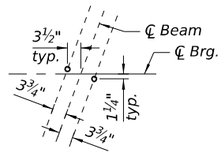
SCALE: | SHEET 41 OF 60 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 584 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

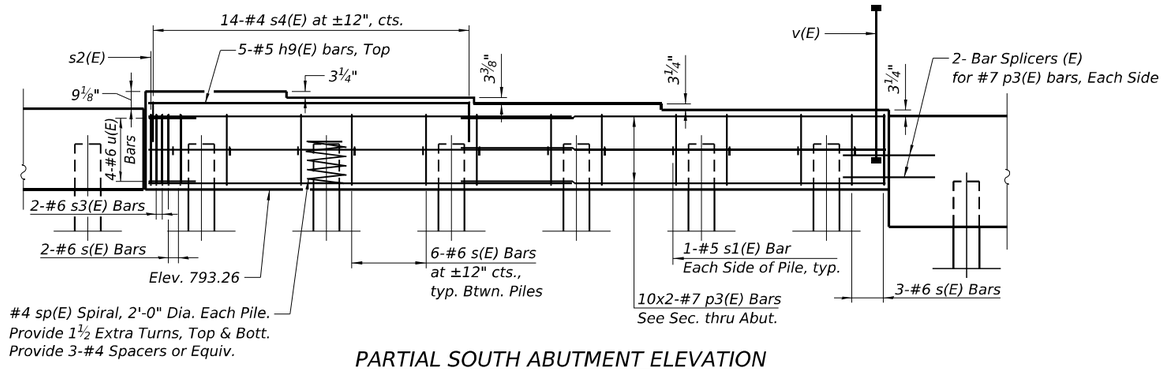
* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

## NOTES:

1. Pour steps monolithically with cap.
2. Bar terminators, paid for separately. See Total Bill of Material.
3. For details of piles see sheet 55 of 60.




## ANCHOR BOLT LAYOUT

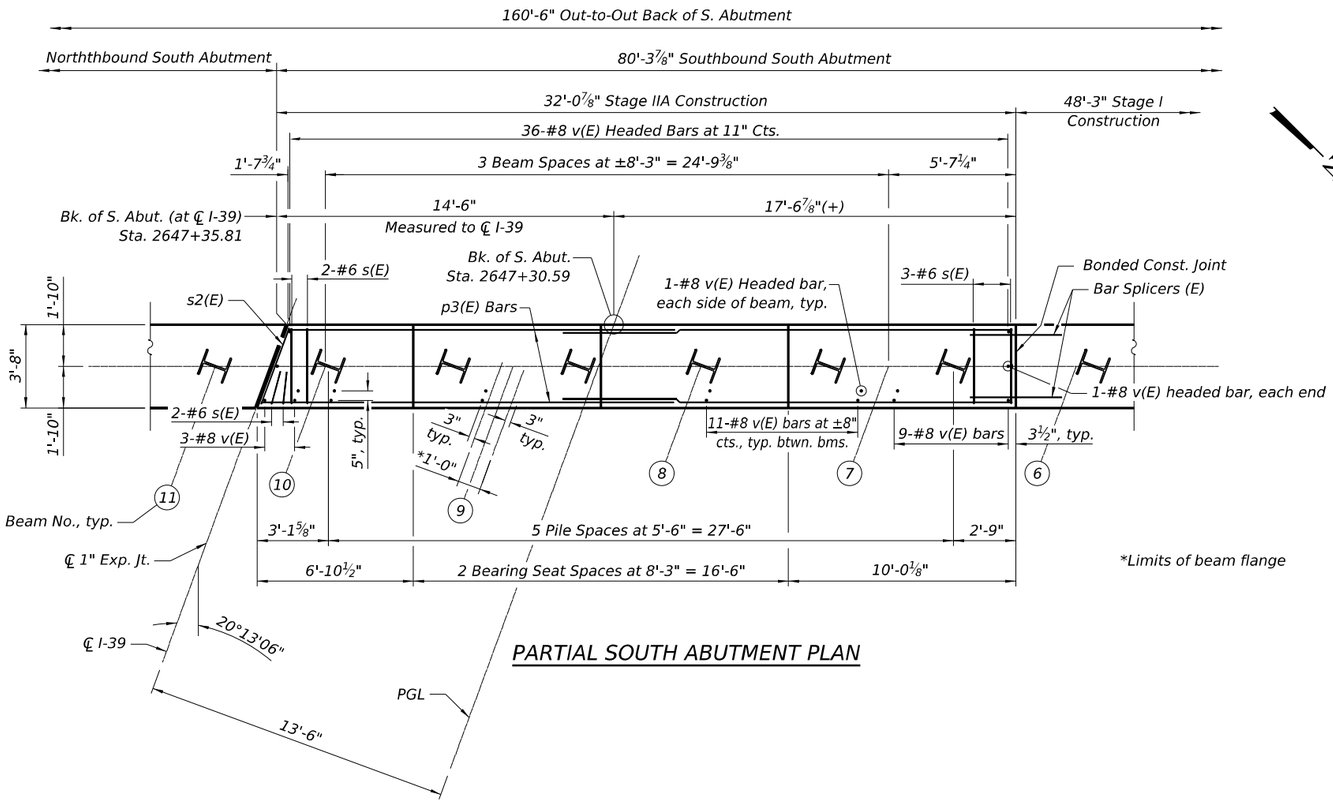



## PARTIAL SOUTH ABUTMENT ELEVATION

(Looking South)

## BEARING SEAT ELEVATIONS

| Beam | Elev. |
|---|---|
| 7 | 796.76 |
| 8 | 797.03 |
| 9 | 797.31 |
| 10 | 797.58 |




## PARTIAL SOUTH ABUTMENT PLAN

## SOUTHBOUND SOUTH ABUTMENT BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|---|---|---|---|---|
| h(E) | 6 | #7 | 14'-10" | |
| h1(E) | 3 | #6 | 21'-2" | |
| h2(E) | 2 | #5 | 9'-9" | |
| h7(E) | 5 | #5 | 16'-8" | |
| h8(E) | 5 | #5 | 14'-9" | |
| h9(E) | 5 | #5 | 14'-2" | |
| | | | | |
| p2(E) | 20 | #7 | 26'-5" | |
| p3(E) | 20 | #7 | 19'-0" | |
| | | | | |
| s(E) | 89 | #6 | 14'-4" | |
| s1(E) | 30 | #5 | 4'-4" | |
| s2(E) | 2 | #6 | 14'-8" | |
| s3(E) | 4 | #6 | 6'-2" | |
| s4(E) | 46 | #4 | 6'-10" | |
| | | | | |
| **sp(E) | 15 | #4 | 2'-0" | |
| | | | | |
| u(E) | 8 | #6 | 12'-0" | |
| | | | | |
| v(E) | 220 | #8 | 6'-6" | |
| v1(E) | 4 | #5 | 7'-3" | |
| v2(E) | 10 | #5 | 11'-4" | |
| | | | | |
| Structure Excavation | | Cu. Yd. | 92 | |
| Concrete Structures | | Cu. Yd. | 49.7 | |
| Reinforcement Bars, Epoxy Coated | | Pound | 9,900 | |
| Furnishing Steel Piles HP12x63 | | Foot | 630 | |
| Driving Piles | | Foot | 630 | |
| Test Pile Steel HP12x63 | | Each | 1 | |
| Pile Shoes | | Each | 15 | |

** Length is height of spiral

MODEL: SHEET
FILE NAME: c:\pwworkdir\benesch projects\projects\d0173871\D2824C24_SHT_0208-0209-CN_ABUT-SOUTH-S2A.dgn

Bowman — 10 S. LaSalle Street, Suite 2710, Chicago, Illinois 60603, 312-956-0360, www.bowmanus.com

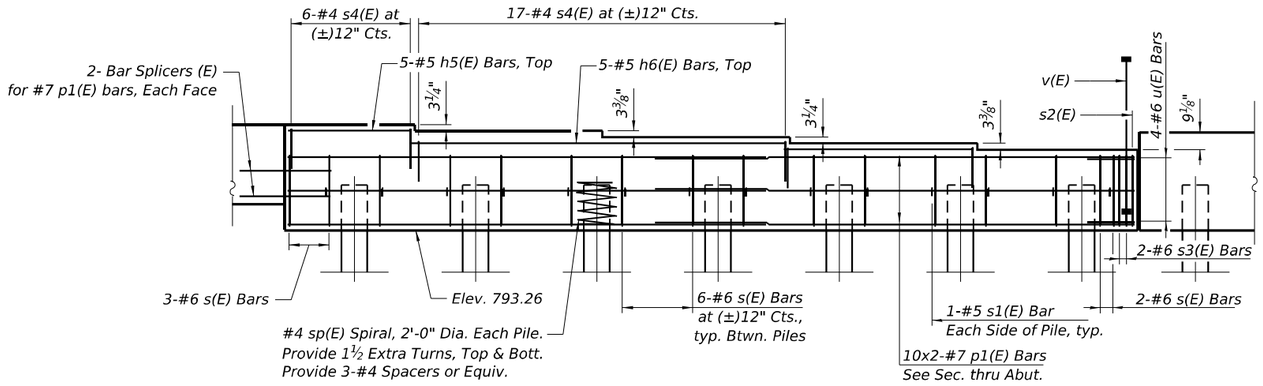
| | | | | |
|---|---|---|---|---|
| USER NAME = lfranceschina | DESIGNED - JW | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | SOUTH ABUTMENT - SOUTHBOUND STAGE 2A STRUCTURE NO. 101-0208/0209 |
| | DRAWN - AT | REVISED - | | |
| PLOT SCALE = $SCALE$ | CHECKED - AJN | REVISED - | | SCALE: SHEET 42 OF 60 SHEETS STA. TO STA. |
| PLOT DATE = 8/12/2024 | DATE - 02/27/24 | REVISED - | | |

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1,5)R | WINNEBAGO | 1685 | 585 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS FED. AID PROJECT | | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

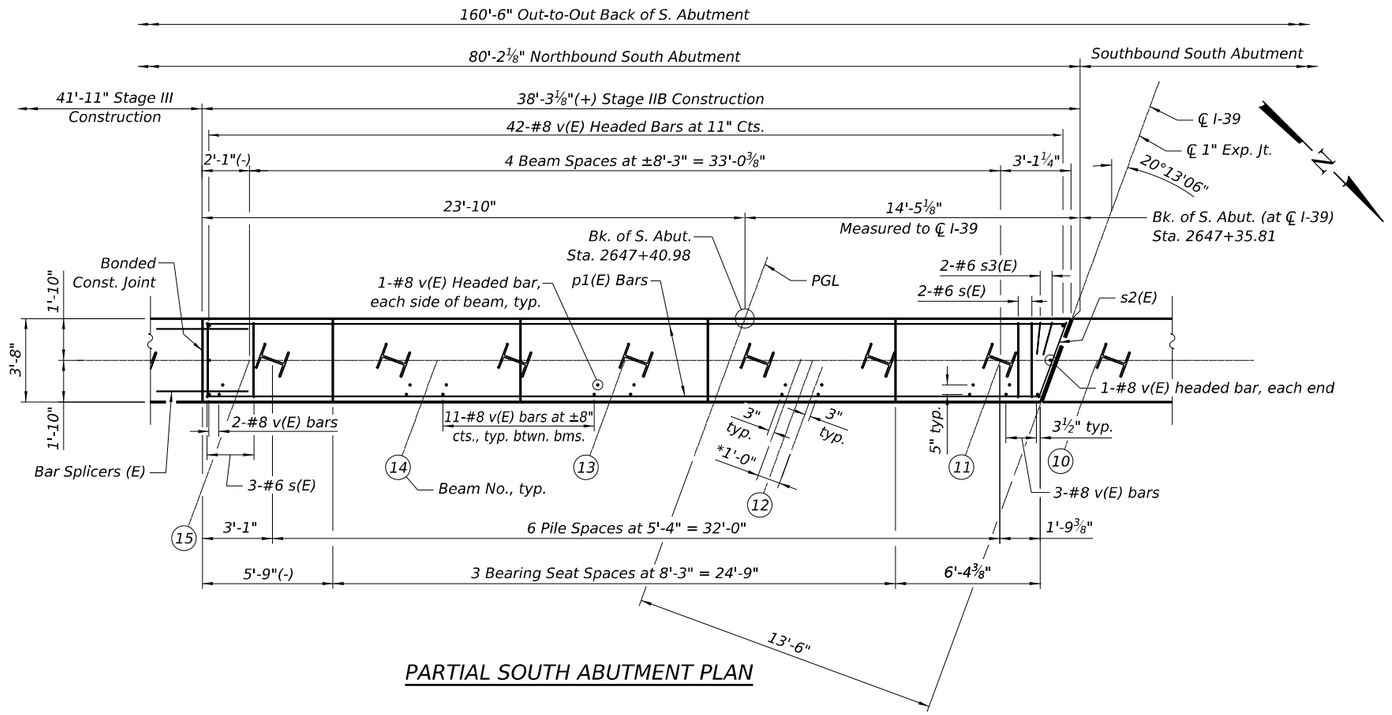
## NOTES:

1. Pour steps monolithically with cap.
2. Bar terminators, paid for separately. See Total Bill of Material.
3. For details of piles see sheet 55 of 60.



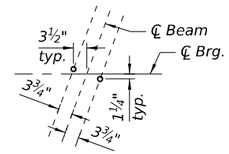

### PARTIAL SOUTH ABUTMENT ELEVATION

(Looking South)




### PARTIAL SOUTH ABUTMENT PLAN

*Limits of beam flange




### ANCHOR BOLT LAYOUT

### BEARING SEAT ELEVATIONS

| Beam | Elev. |
|---|---|
| 11 | 796.82 |
| 12 | 797.10 |
| 13 | 797.37 |
| 14 | 797.65 |
| 15 | 797.92 |

### NORTHBOUND SOUTH ABUTMENT BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|---|---|---|---|---|
| h(E) | 9 | #7 | 14'-10" | |
| h1(E) | 2 | #6 | 21'-2" | |
| h2(E) | 2 | #5 | 9'-9" | |
| h3(E) | 5 | #5 | 15'-4" | |
| h4(E) | 5 | #5 | 17'-0" | |
| h5(E) | 5 | #5 | 5'-5" | |
| h6(E) | 5 | #5 | 16'-6" | |
| | | | | |
| p(E) | 20 | #7 | 23'-11" | |
| p1(E) | 20 | #7 | 21'-5" | |
| | | | | |
| s(E) | 89 | #6 | 14'-4" | |
| s1(E) | 30 | #5 | 4'-4" | |
| s2(E) | 2 | #6 | 14'-8" | |
| s3(E) | 4 | #6 | 6'-2" | |
| s4(E) | 56 | #4 | 6'-10" | |
| | | | | |
| **sp(E) | 15 | #4 | 2'-0" | |
| | | | | |
| u(E) | 8 | #6 | 12'-0" | |
| | | | | |
| v(E) | 217 | #8 | 6'-6" | |
| v3(E) | 4 | #5 | 8'-9" | |
| v4(E) | 10 | #5 | 14'-6" | |
| Structure Excavation | | Cu. Yd. | 92 | |
| Concrete Structures | | Cu. Yd. | 49.2 | |
| Reinforcement Bars, Epoxy Coated | | Pound | 8,990 | |
| Furnishing Steel Piles HP12x63 | | Foot | 672 | |
| Driving Piles | | Foot | 672 | |
| Pile Shoes | | Each | 16 | |

** Length is height of spiral

MODEL: SHEET
FILE NAME: c:\pwworkdir\benesch projects\projects\d0173871\D26#C24_SHT_0208-0209-CN_ABUT-SOUTH-S2B.dgn

Bowman — 10 S. LaSalle Street, Suite 2110, Chicago, Illinois 60603, 312-914-0160, www.bowman.com

| | | | |
|---|---|---|---|
| USER NAME = lfranceschina | DESIGNED - JW | REVISED - | |
| | DRAWN - AT | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - AJN | REVISED - | |
| PLOT DATE = 8/12/2024 | DATE - 02/27/24 | REVISED - | |

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

**SOUTH ABUTMENT - NORTHBOUND STAGE 2B**
**STRUCTURE NO. 101-0208/0209**

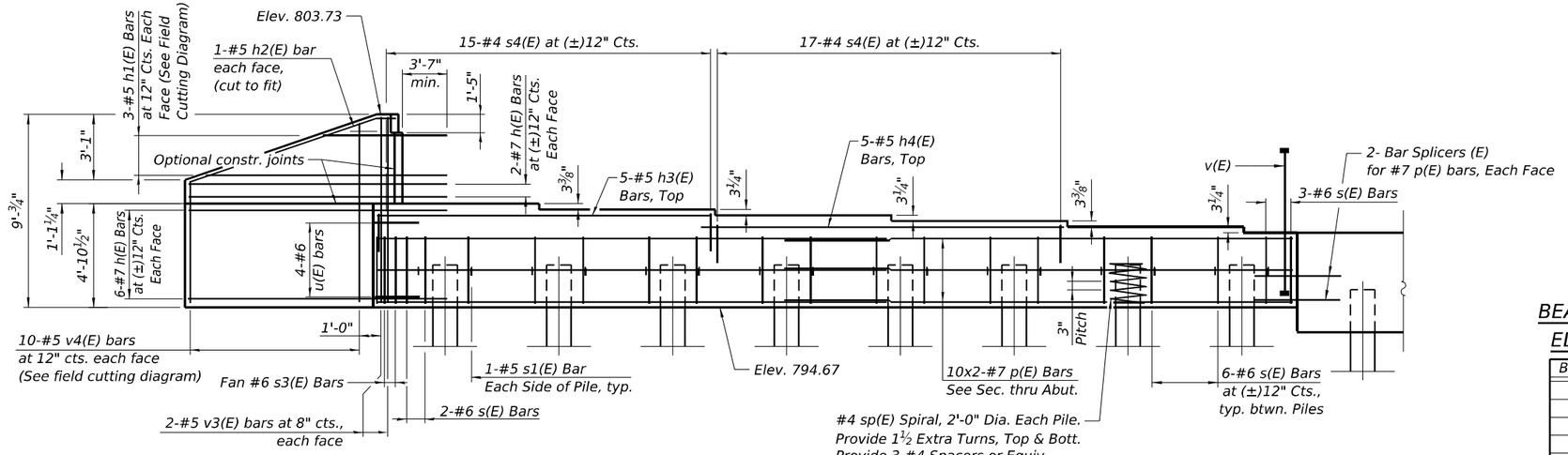
SCALE: | SHEET 43 OF 60 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 586 |
| | | CONTRACT NO. 64C24 | | |
| | | ILLINOIS | FED. AID PROJECT | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

## NOTES:

1. Pour steps monolithically with cap.
2. Bar terminators, paid for separately. See Total Bill of Material.
3. For details of piles see sheet 55 of 60.

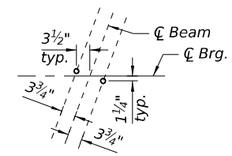



## PARTIAL SOUTH ABUTMENT ELEVATION

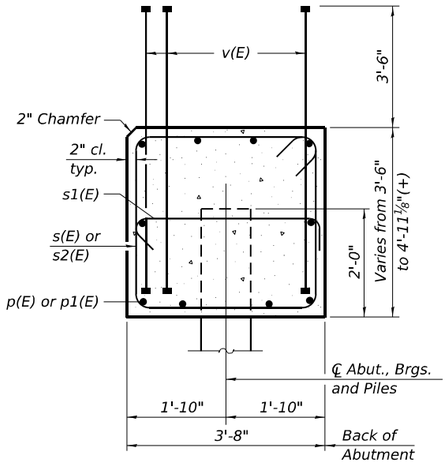
(Looking South)

## BEARING SEAT ELEVATIONS

| Beam | Elev. |
|---|---|
| 15 | 797.92 |
| 16 | 798.19 |
| 17 | 798.47 |
| 18 | 798.74 |
| 19 | 799.01 |
| 20 | 799.29 |




## ANCHOR BOLT LAYOUT

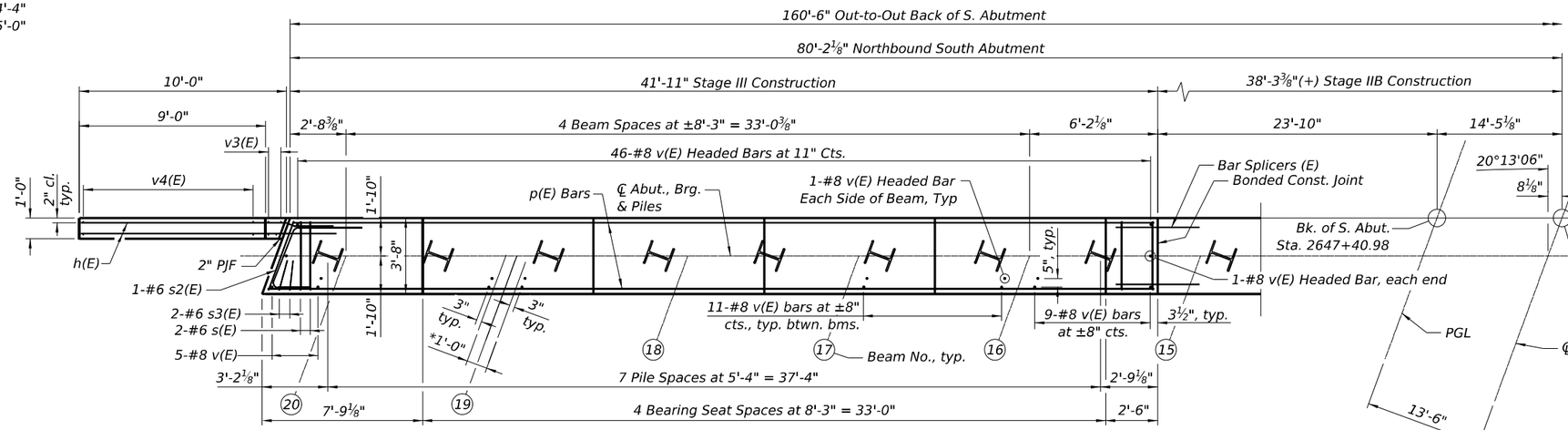



## SEC. THRU ABUT.

Dimensions at right angles to abutment.

## MINIMUM BAR LAP

#5 Bar = 3'-7"
#6 Bar = 4'-4"
#7 Bar = 5'-0"

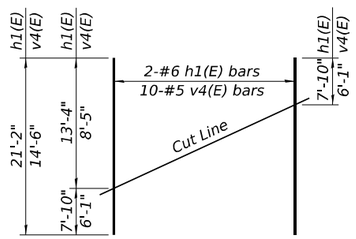



## PARTIAL SOUTH ABUTMENT PLAN

*Limits of beam flange

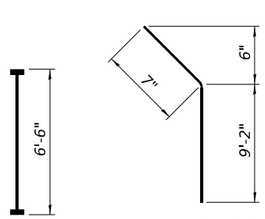
## PILE DATA

Type: HP12x63 with Pile Shoes
Nominal Required Bearing: 497 kips
Factored Resistance Available: 273 kips
Est. Length: 42 Ft
No. Production Piles: 16
No. Test Piles: 0




## FIELD CUTTING DIAGRAM

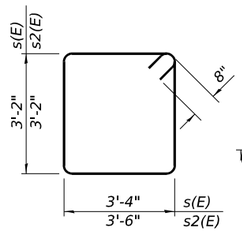
Order h1(E) and v4(E) full length. Cut as shown and use remainder of bars in opposite face of wingwall.



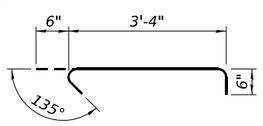

## BAR v(E)

(Headed. 434-#8 Bar terminators)

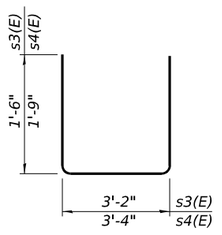
## BAR h2(E)



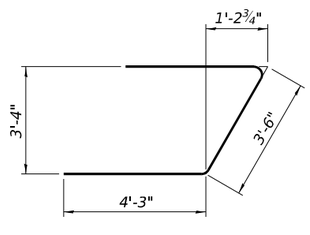

## BAR s(E) & s2(E)




## BAR s1(E)




## BAR s3(E) & s4(E)




## BAR u(E)


MODEL: SHEET
FILE NAME: c:\pwworkdir\benesch projects\projects\d0173871\D284\C24_SHT_0208-0209-CN_ABUT-SOUTH-S3.dgn

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10 S. LaSalle Street, Suite 2110
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312-554-0300
www.bowmanus.com

| | | | | | |
|---|---|---|---|---|---|
| USER NAME | = lfranceschina | DESIGNED | - JW | REVISED | - |
| | | DRAWN | - AT | REVISED | - |
| PLOT SCALE | = $SCALE$ | CHECKED | - AJN | REVISED | - |
| PLOT DATE | = 8/12/2024 | DATE | - 02/27/24 | REVISED | - |

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

**SOUTH ABUTMENT - NORTHBOUND STAGE 3**
**STRUCTURE NO. 101-0208/0209**

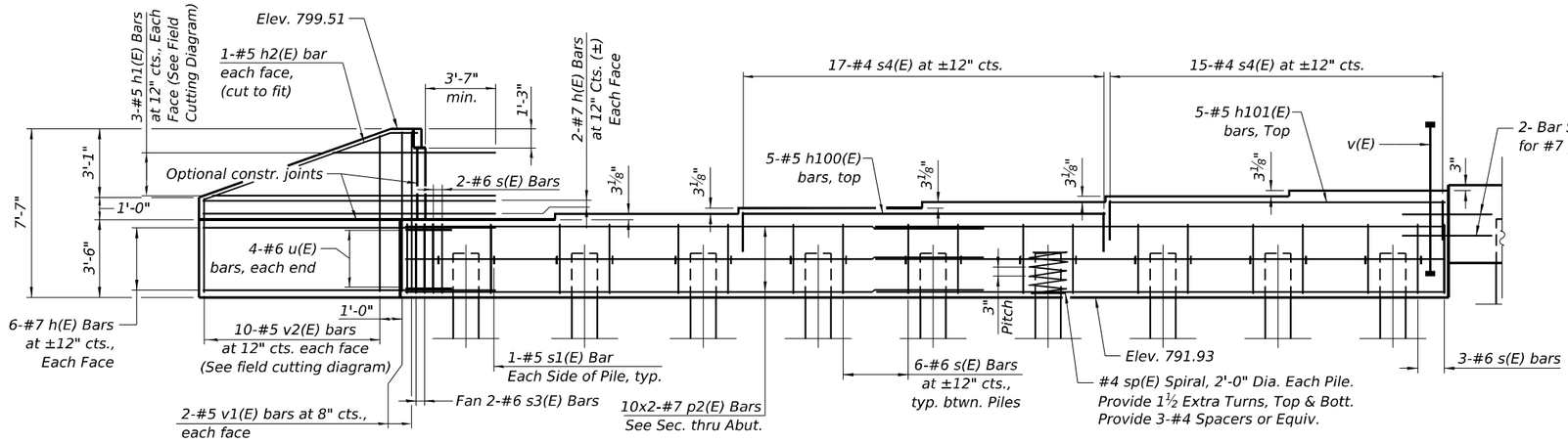
SCALE: | SHEET 44 OF 60 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1,5)R | WINNEBAGO | 1685 | 587 |
| | | CONTRACT NO. 64C24 | | |
| | | ILLINOIS | FED. AID PROJECT | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

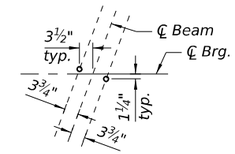
## NOTES:

1. Pour steps monolithically with cap.
2. Bar terminators, paid for separately. See Total Bill of Material.
3. For details of piles see sheet 55 of 60.

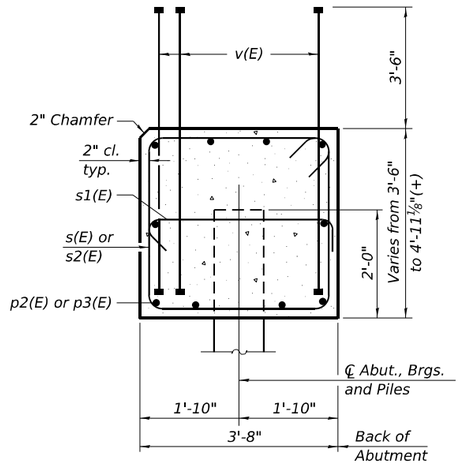



## PARTIAL NORTH ABUTMENT ELEVATION

(Looking North)




## ANCHOR BOLT LAYOUT

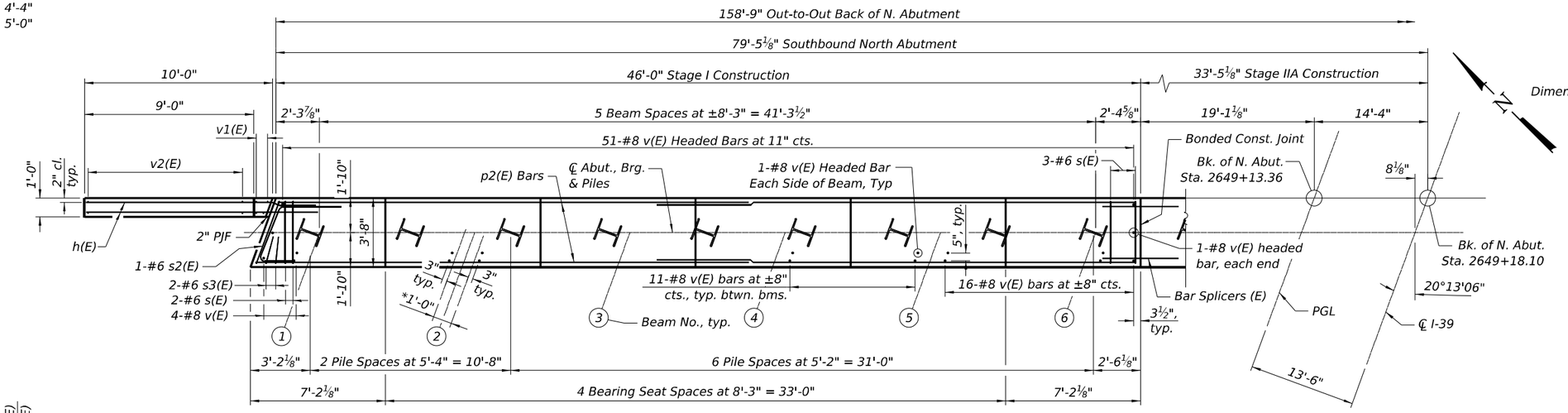



## BEARING SEAT ELEVATIONS

| Beam | Elev. |
|---|---|
| 1 | 795.43 |
| 2 | 795.69 |
| 3 | 795.95 |
| 4 | 796.21 |
| 5 | 796.47 |
| 6 | 796.73 |

## MINIMUM BAR LAP

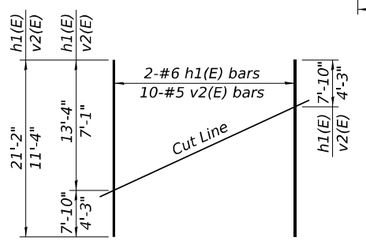
#5 Bar = 3'-7"
#6 Bar = 4'-4"
#7 Bar = 5'-0"




## PARTIAL NORTH ABUTMENT PLAN

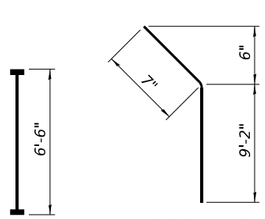
## SEC. THRU ABUT.

Dimensions at right angles to abutment.




## FIELD CUTTING DIAGRAM

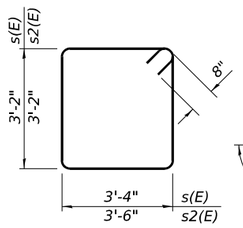
Order h1(E) and v2(E) full length. Cut as shown and use remainder of bars in opposite face of wingwall.



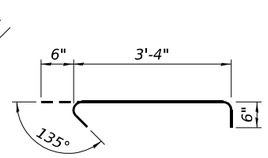

## BAR v(E)

(Headed. 438-#8 Bar terminators)

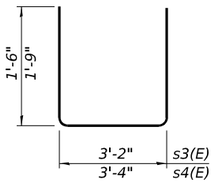
## BAR h2(E)



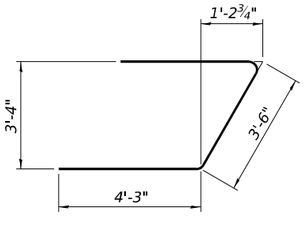

## BAR s(E) & s2(E)




## BAR s1(E)




## BAR s3(E) & s4(E)




## BAR u(E)

*Limits of beam flange

## PILE DATA

Type: HP12x63 with Pile Shoes
Nominal Required Bearing: 497 kips
Factored Resistance Available: 273 kips
Est. Length: 53 Ft
No. Production Piles: 16
No. Test Piles: 0

MODEL: SHEET
FILE NAME: c:\pwworkdir\benesch.projects\projects\d0173871\D264C24_SHT_0208-0209-CN_ABUT-NORTH-S1.dgn

Bowman
10 S. LaSalle Street, Suite 2710
Chicago, Illinois 60603
312-554-5160
www.jbowman.com

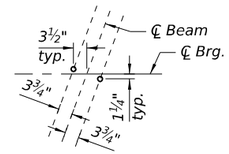
| | | | | | |
|---|---|---|---|---|---|
| USER NAME = lfranceschina | DESIGNED - JW | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | NORTH ABUTMENT - SOUTHBOUND STAGE 1 STRUCTURE NO. 101-0208/0209 | |
| | DRAWN - AT | REVISED - | | | |
| PLOT SCALE = $SCALE$ | CHECKED - AJN | REVISED - | | SCALE: | SHEET 45 OF 60 SHEETS STA. TO STA. |
| PLOT DATE = 8/12/2024 | DATE - 02/27/24 | REVISED - | | | |

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1,5)R | WINNEBAGO | 1685 | 588 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

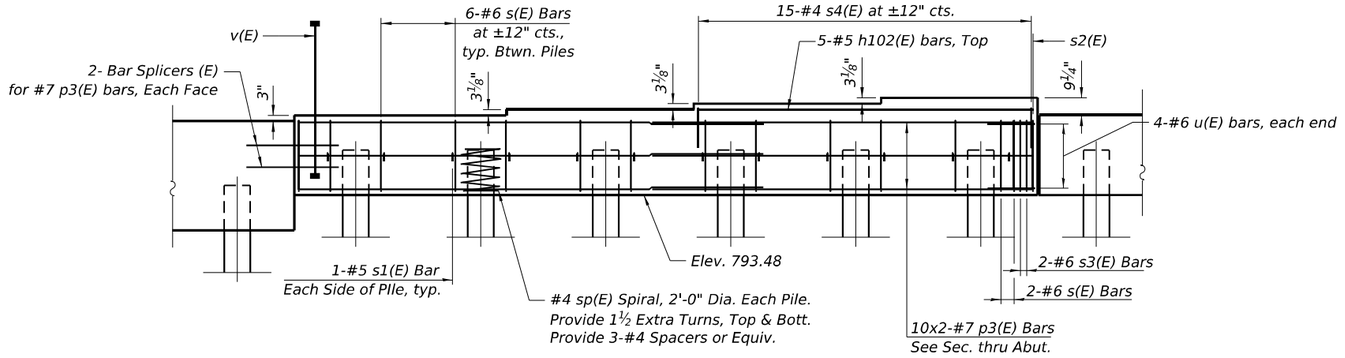
* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

## NOTES:

1. Pour steps monolithically with cap.
2. Bar terminators, paid for separately. See Total Bill of Material.
3. For details of piles see sheet 55 of 60.




ANCHOR BOLT LAYOUT

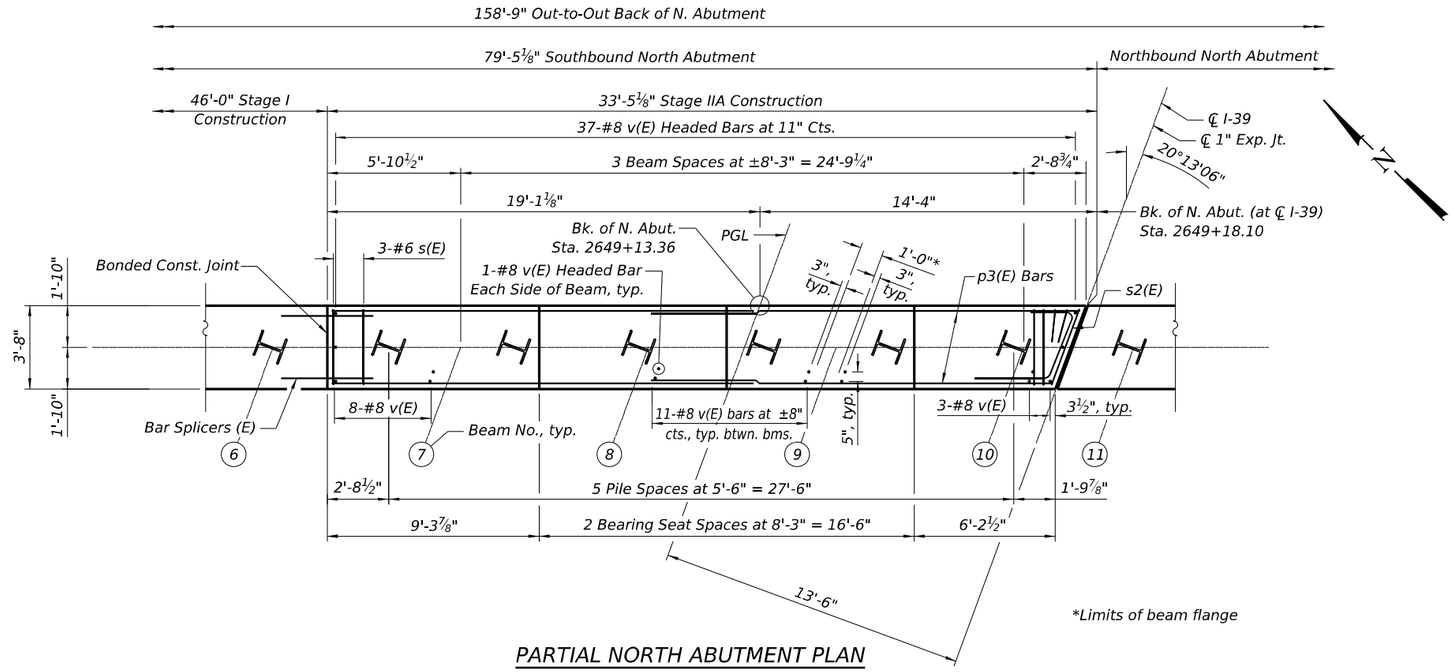



PARTIAL NORTH ABUTMENT ELEVATION

(Looking North)

BEARING SEAT ELEVATIONS

| Beam | Elev. |
|---|---|
| 7 | 796.98 |
| 8 | 797.24 |
| 9 | 797.50 |
| 10 | 797.76 |




*Limits of beam flange

PARTIAL NORTH ABUTMENT PLAN

SOUTHBOUND NORTH ABUTMENT BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|---|---|---|---|---|
| h(E) | 9 | #7 | 14'-10" | |
| h1(E) | 2 | #6 | 21'-2" | |
| h2(E) | 2 | #5 | 9'-9" | |
| h100(E) | 5 | #5 | 16'-8" | |
| h101(E) | 5 | #5 | 14'-9" | |
| h102(E) | 5 | #5 | 14'-2" | |
| | | | | |
| p2(E) | 20 | #7 | 26'-5" | |
| p3(E) | 20 | #7 | 19'-0" | |
| | | | | |
| s(E) | 88 | #6 | 14'-4" | |
| s1(E) | 30 | #5 | 4'-4" | |
| s2(E) | 2 | #6 | 14'-8" | |
| s3(E) | 4 | #6 | 6'-2" | |
| s4(E) | 47 | #4 | 6'-10" | |
| | | | | |
| **sp(E) | 15 | #4 | 2'-0" | |
| | | | | |
| u(E) | 8 | #6 | 12'-0" | |
| | | | | |
| v(E) | 219 | #8 | 6'-6" | |
| v1(E) | 4 | #5 | 7'-3" | |
| v2(E) | 10 | #5 | 11'-4" | |
| Structure Excavation | | Cu. Yd. | 92 | |
| Concrete Structures | | Cu. Yd. | 49.2 | |
| Reinforcement Bars, Epoxy Coated | | Pound | 9,870 | |
| Furnishing Steel Piles HP12x63 | | Foot | 848 | |
| Driving Piles | | Foot | 848 | |
| Pile Shoes | | Each | 16 | |

**Length is height of spiral

MODEL: SHEET
FILE NAME: c:\pw\wordir\boenesch projects\projects\d0173871\D264C24_SHT_0208-0209-CN_ABUT-NORTH-S2A.dgn

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10 S. LaSalle Street, Suite 2710
Chicago, Illinois 60603
312-454-0160
www.bowman.com

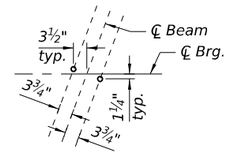
| | | | | |
|---|---|---|---|---|
| USER NAME = lfranceschina | DESIGNED - JW | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | NORTH ABUTMENT - SOUTHBOUND STAGE 2A STRUCTURE NO. 101-0208/0209 |
| | DRAWN - AT | REVISED - | | |
| PLOT SCALE = $SCALE$ | CHECKED - AJN | REVISED - | | SCALE: SHEET 46 OF 60 SHEETS STA. TO STA. |
| PLOT DATE = 8/12/2024 | DATE - 02/27/24 | REVISED - | | |

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 589 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS FED. AID PROJECT | | | |

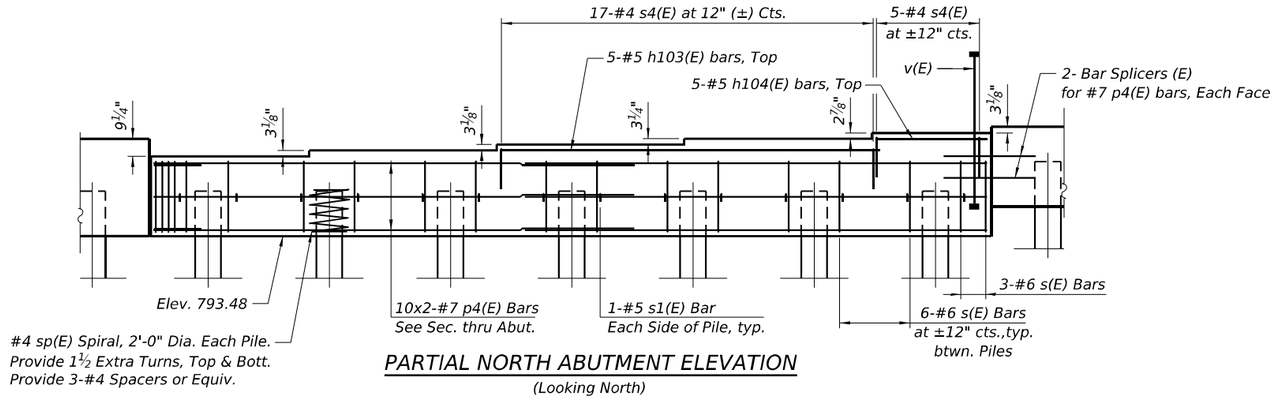
* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

## NOTES:

1. Pour steps monolithically with cap.
2. Bar terminators, paid for separately. See Total Bill of Material.
3. For details of piles see sheet 55 of 60.




## ANCHOR BOLT LAYOUT

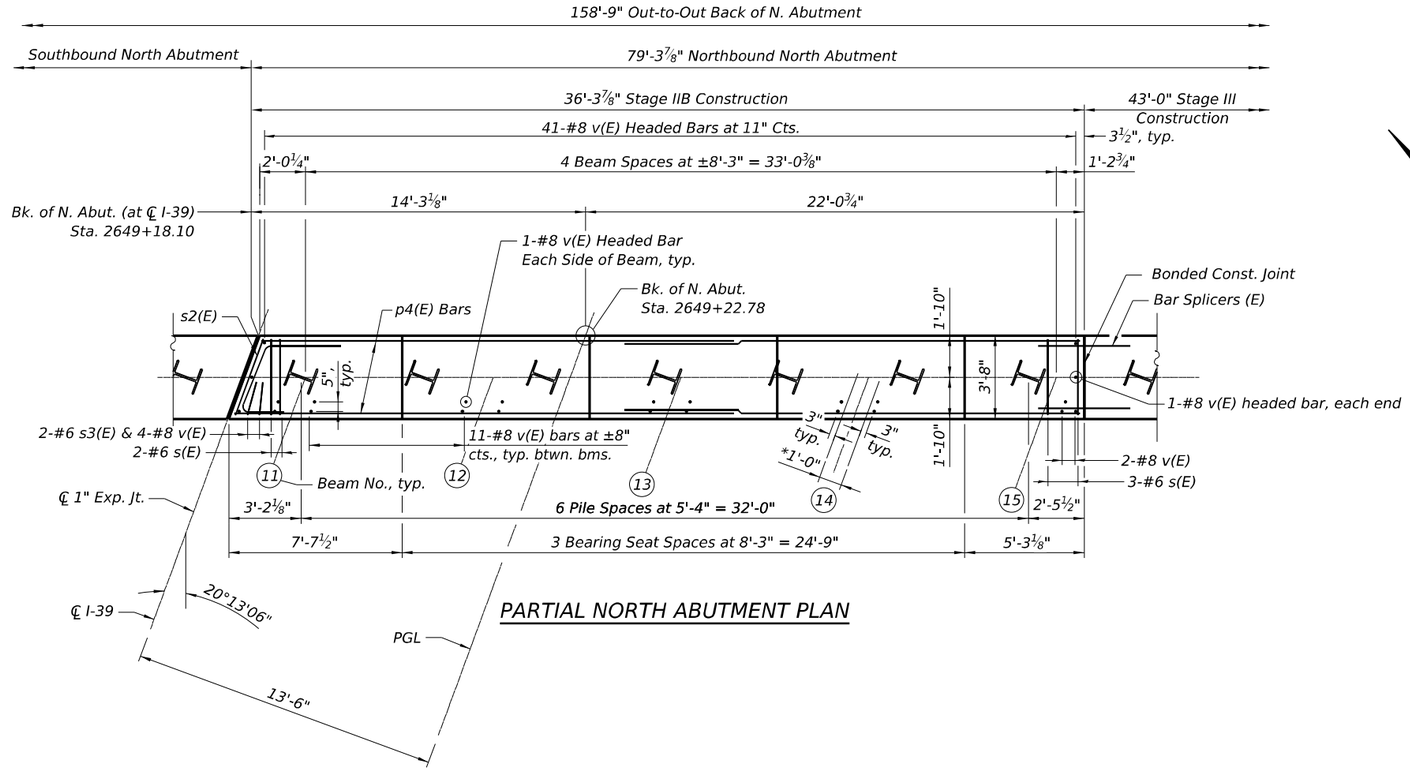



## PARTIAL NORTH ABUTMENT ELEVATION

(Looking North)

## BEARING SEAT ELEVATIONS

| Beam | Elev. |
|---|---|
| 11 | 796.99 |
| 12 | 797.25 |
| 13 | 797.51 |
| 14 | 797.78 |
| 15 | 798.02 |




## PARTIAL NORTH ABUTMENT PLAN

## PILE DATA

Type: HP12x63 with Pile Shoes
Nominal Required Bearing: 497 kips
Factored Resistance Available: 273 kips
Est. Length: 53 Ft
No. Production Piles: 16
No. Test Piles: 0

MODEL: SHEET
FILE NAME: c:\pwworkdir\benesch projects\projects\d0173871\D264C24_SHT_0208-0209-CN_ABUT-NORTH-S2B.dgn

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| | | | | |
|---|---|---|---|---|
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| | DRAWN - AT | REVISED - | | |
| PLOT SCALE = $SCALE$ | CHECKED - AJN | REVISED - | | SCALE: SHEET 47 OF 60 SHEETS STA. TO STA. |
| PLOT DATE = 8/12/2024 | DATE - 02/27/24 | REVISED - | | |

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 590 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

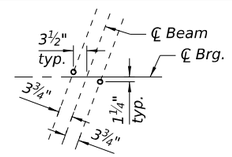
* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

## NOTES:

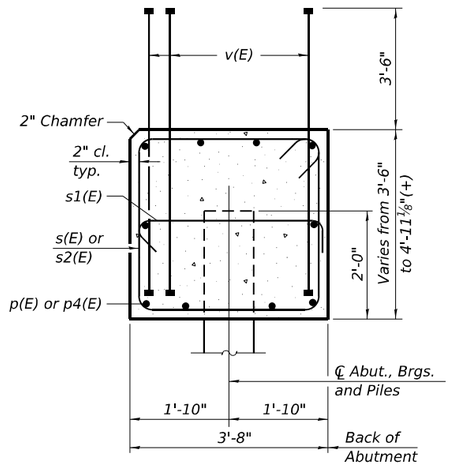
1. Pour steps monolithically with cap.
2. Bar terminators, paid for separately. See Total Bill of Material.
3. For details of piles see sheet 55 of 60.

## BEARING SEAT ELEVATIONS

| Beam | Elev. |
|---|---|
| 16 | 798.28 |
| 17 | 798.54 |
| 18 | 798.79 |
| 19 | 799.05 |
| 20 | 799.31 |




## ANCHOR BOLT LAYOUT

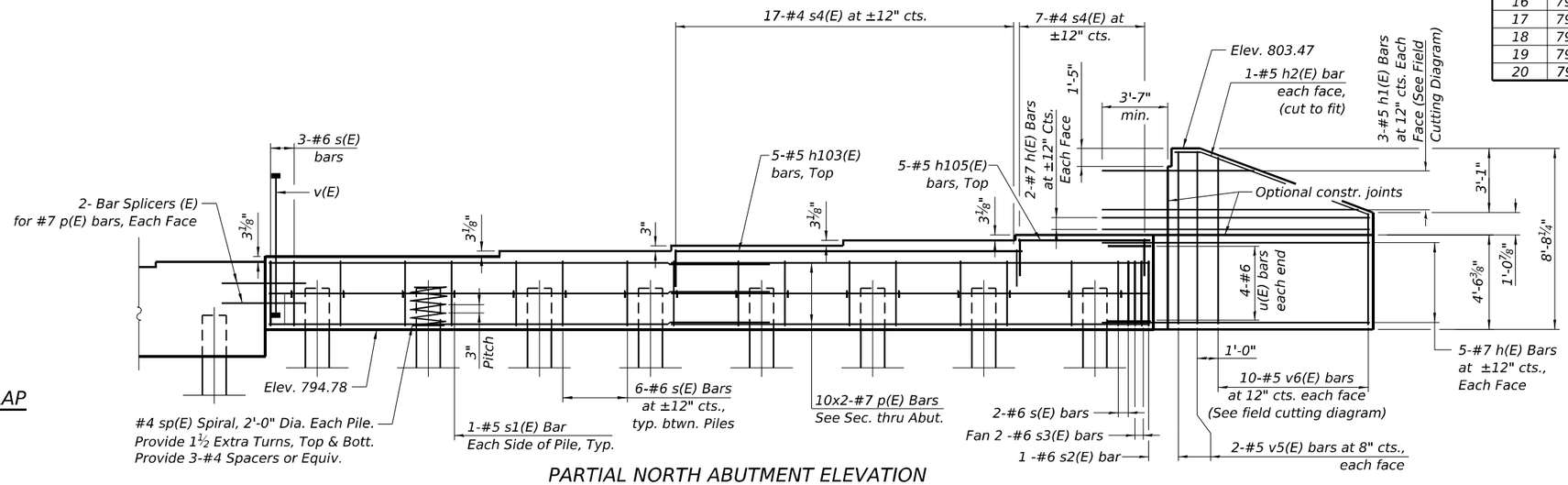



## SEC. THRU ABUT.

*Dimensions at right angles to abutment.*

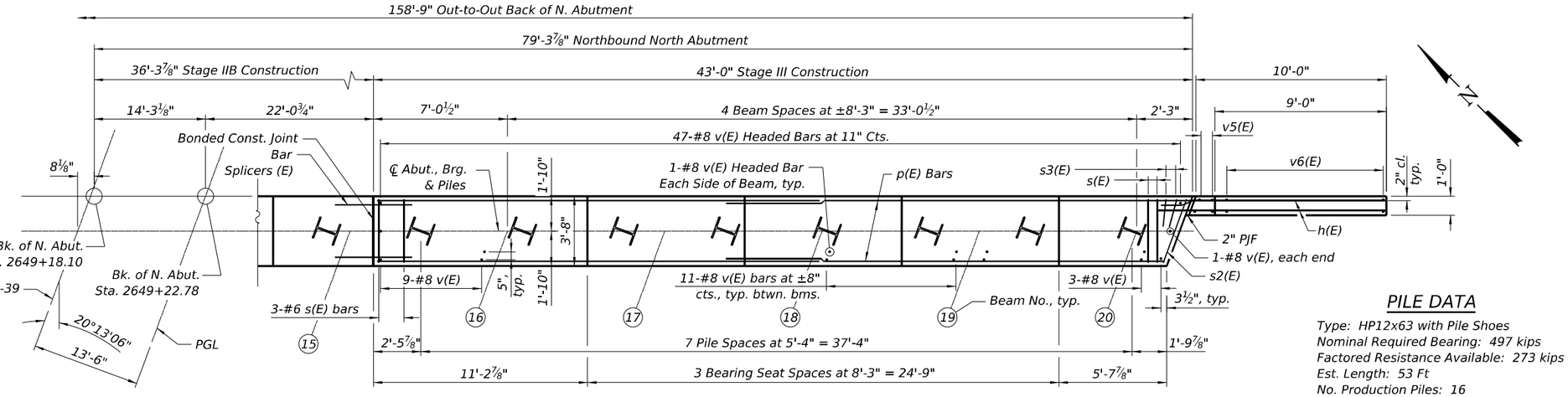
## MINIMUM BAR LAP

#5 Bar = 3'-7"
#6 Bar = 4'-4"
#7 Bar = 5'-0"




## PARTIAL NORTH ABUTMENT ELEVATION

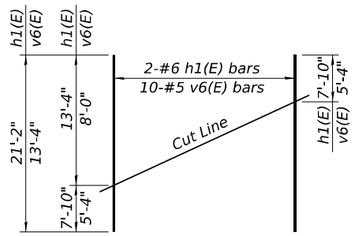
*(Looking North)*




## PARTIAL NORTH ABUTMENT PLAN

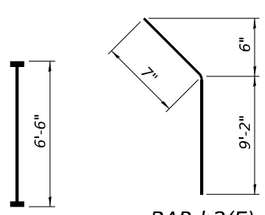
## PILE DATA

*Type: HP12x63 with Pile Shoes*
*Nominal Required Bearing: 497 kips*
*Factored Resistance Available: 273 kips*
*Est. Length: 53 Ft*
*No. Production Piles: 16*
*No. Test Piles: 0*




## FIELD CUTTING DIAGRAM

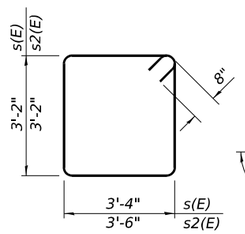
*Order h1(E) and v6(E) full length. Cut as shown and use remainder of bars in opposite face of wingwall.*



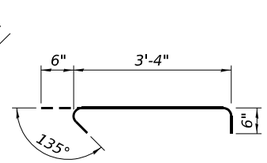

## BAR v(E)

*(Headed. 436-#8 Bar terminators)*

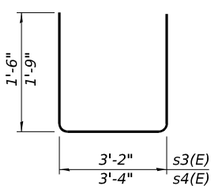
## BAR h2(E)



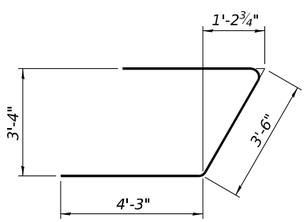

## BAR s(E) & s2(E)




## BAR s1(E)




## BAR s3(E) & s4(E)




## BAR u(E)

## NORTHBOUND NORTH ABUTMENT BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|---|---|---|---|---|
| h(E) | 7 | #7 | 14'-10" | |
| h1(E) | 2 | #6 | 21'-2" | |
| h2(E) | 2 | #5 | 9'-9" | |
| h103(E) | 10 | #5 | 16'-8" | |
| h104(E) | 5 | #5 | 4'-11" | |
| h105(E) | 5 | #5 | 6'-4" | |
| | | | | |
| p(E) | 20 | #7 | 21'-2" | |
| p4(E) | 20 | #7 | 23'-10" | |
| | | | | |
| s(E) | 88 | #6 | 14'-4" | |
| s1(E) | 30 | #5 | 4'-4" | |
| s2(E) | 2 | #6 | 14'-8" | |
| s3(E) | 4 | #6 | 6'-2" | |
| s4(E) | 41 | #4 | 6'-10" | |
| | | | | |
| **sp(E) | 15 | #4 | 2'-0" | |
| | | | | |
| u(E) | 8 | #6 | 12'-0" | |
| | | | | |
| v(E) | 218 | #8 | 6'-6" | |
| v5(E) | 4 | #5 | 7'-5" | |
| v6(E) | 10 | #5 | 13'-4" | |
| Structure Excavation | | | Cu. Yd. | 92 |
| Concrete Structures | | | Cu. Yd. | 49.2 |
| Reinforcement Bars, Epoxy Coated | | | Pound | 8,850 |
| Furnishing Steel Piles HP12x63 | | | Foot | 848 |
| Driving Piles | | | Foot | 848 |
| Pile Shoes | | | Each | 16 |

** Length is height of spiral

MODEL: SHEET
FILE NAME: c:\pw\wordir\beneschl.projects\projects\d0173871\D2642C24_SHT_0208-0209-CN_ABUT-NORTH-S3.dgn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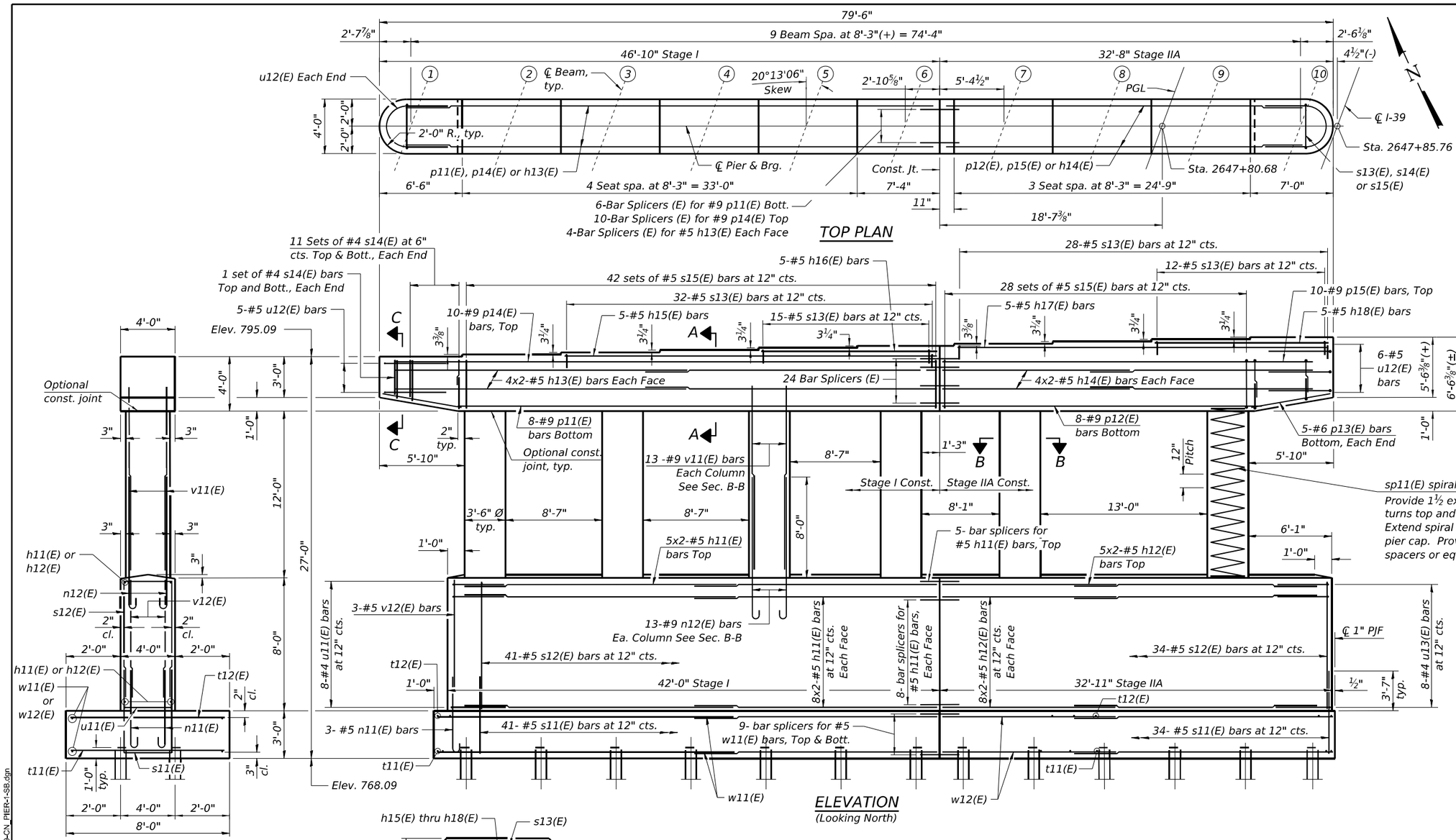
| | DRAWN - AT | REVISED - | | | |
| PLOT SCALE = $SCALE$ | CHECKED - AJN | REVISED - | | | |
| PLOT DATE = 8/12/2024 | DATE - 02/27/24 | REVISED - | | SCALE: | SHEET 48 OF 60 SHEETS STA. TO STA. |

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1,5)R | WINNEBAGO | 1685 | 591 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS FED. AID PROJECT | | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

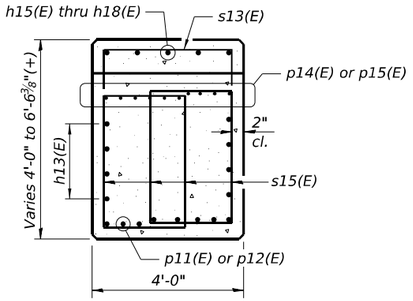



## SEAT ELEVATIONS

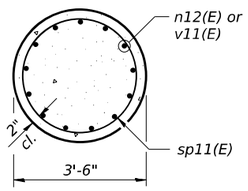
| Beam Line | Seat Elevation |
|---|---|
| 1 | 795.09 |
| 2 | 795.37 |
| 3 | 795.64 |
| 4 | 795.91 |
| 5 | 796.18 |
| 6 | 796.45 |
| 7 | 796.73 |
| 8 | 797.00 |
| 9 | 797.27 |
| 10 | 797.54 |

## MIN. BAR LAP

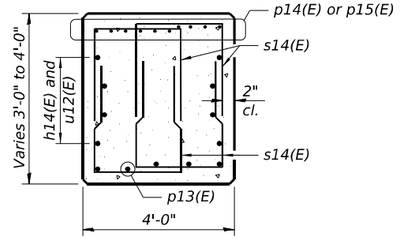
#4 bar = 2'-11"
#5 bar = 3'-7"
#9 bar = 7'-1"




SEC. A-A




SEC. B-B




SEC. C-C

## PILE DATA

Type: HP 12x63 with Pile Shoes
Nominal Required Bearing: 497 kips
Factored Resistance Available: 273 kips
Est. Length: 19 ft.
No. Production Piles: 26
No. Test Piles: 0

Notes:
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.
Cost of PJF included in Concrete Structures
For details of piles, see sheet 55 of 60.



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| USER NAME = lfranceschina | DESIGNED - JW | REVISED - | |
| | DRAWN - AT | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - AJN | REVISED - | |
| PLOT DATE = 8/12/2024 | DATE - 02/27/24 | REVISED - | |

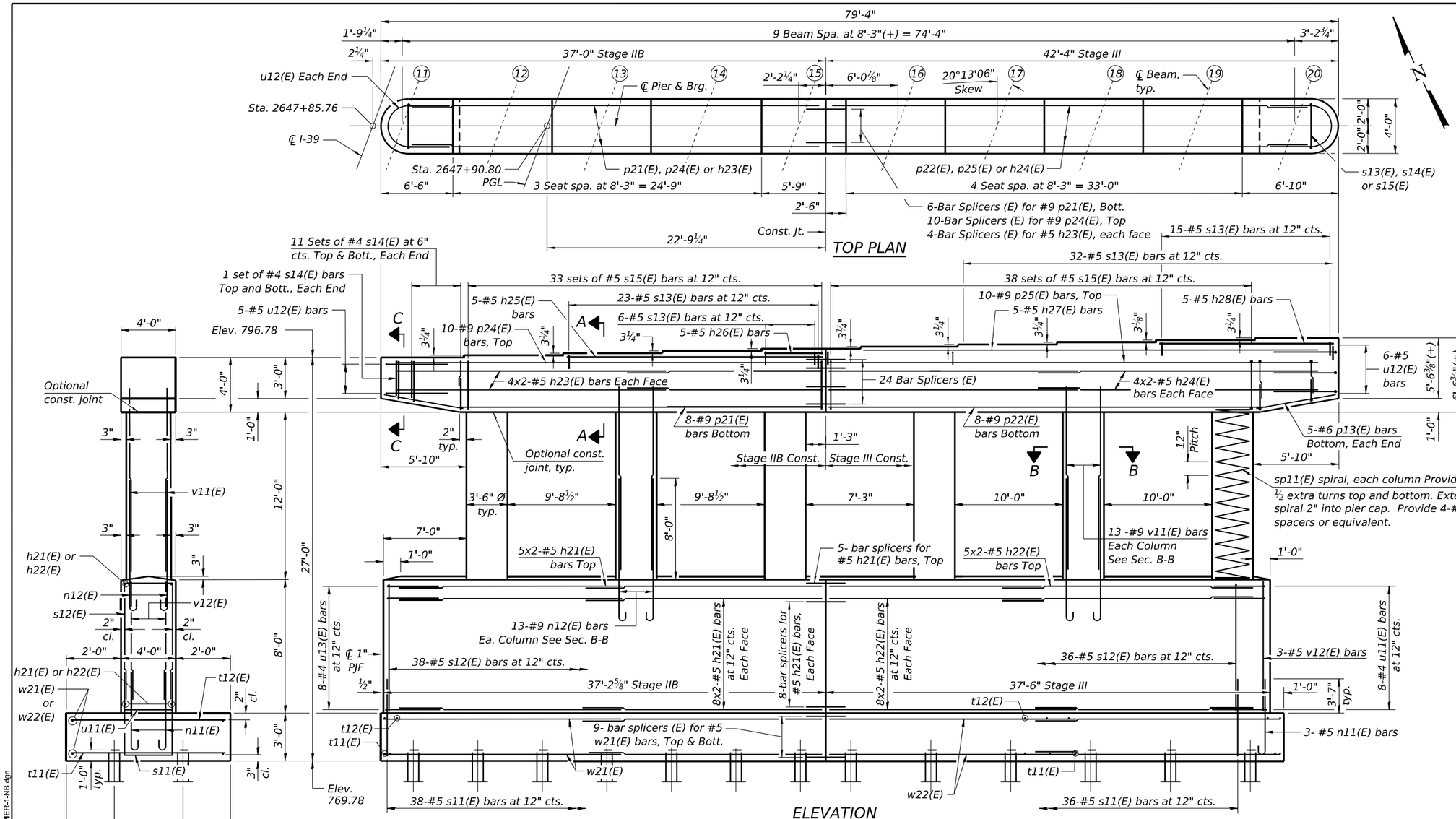
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**PIER 1 - SOUTHBOUND**
**STRUCTURE NO. 101-0208/0209**

SCALE: | SHEET 49 OF 60 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1,5)R | WINNEBAGO | 1685 | 592 |
| | | CONTRACT NO. 64C24 | | |
| | | ILLINOIS | FED. AID PROJECT | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

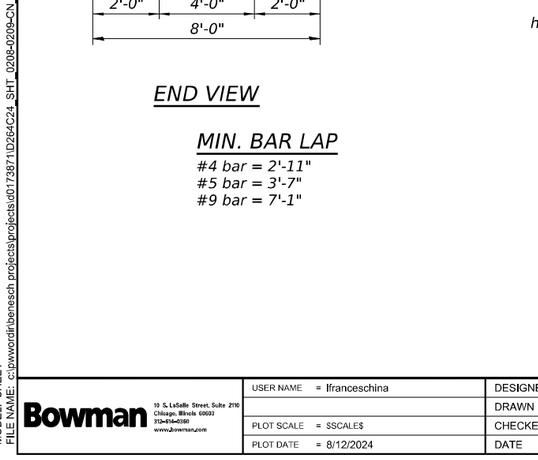



## SEAT ELEVATIONS

| Beam Line | Seat Elevation |
|---|---|
| 11 | 796.78 |
| 12 | 797.05 |
| 13 | 797.32 |
| 14 | 797.59 |
| 15 | 797.86 |
| 16 | 798.13 |
| 17 | 798.40 |
| 18 | 798.67 |
| 19 | 798.93 |
| 20 | 799.20 |

## PILE DATA

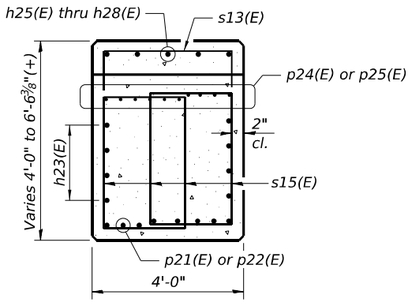
Type: HP 12x63 with Pile Shoes
Nominal Required Bearing: 497 kips
Factored Resistance Available: 273 kips
Est. Length: 19 ft.
No. Production Piles: 26
No. Test Piles: 0



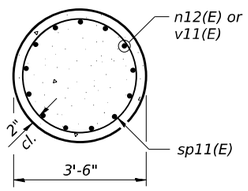

END VIEW

## MIN. BAR LAP

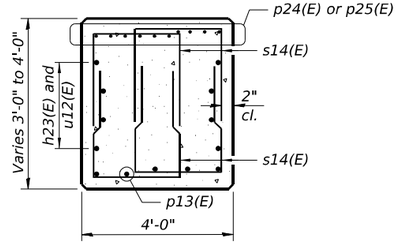
#4 bar = 2'-11"
#5 bar = 3'-7"
#9 bar = 7'-1"




SEC. A-A




SEC. B-B




SEC. C-C

## MIN. BAR LAP

#4 bar = 2'-11"
#5 bar = 3'-7"
#9 bar = 7'-1"

Notes:
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.
Cost of PJF included in Concrete Structures
For details of piles, see sheet 55 of 60.

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| | | | |
|---|---|---|---|
| USER NAME = lfranceschina | DESIGNED - JW | REVISED - | |
| | DRAWN - AT | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - AJN | REVISED - | |
| PLOT DATE = 8/12/2024 | DATE - 02/27/24 | REVISED - | |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

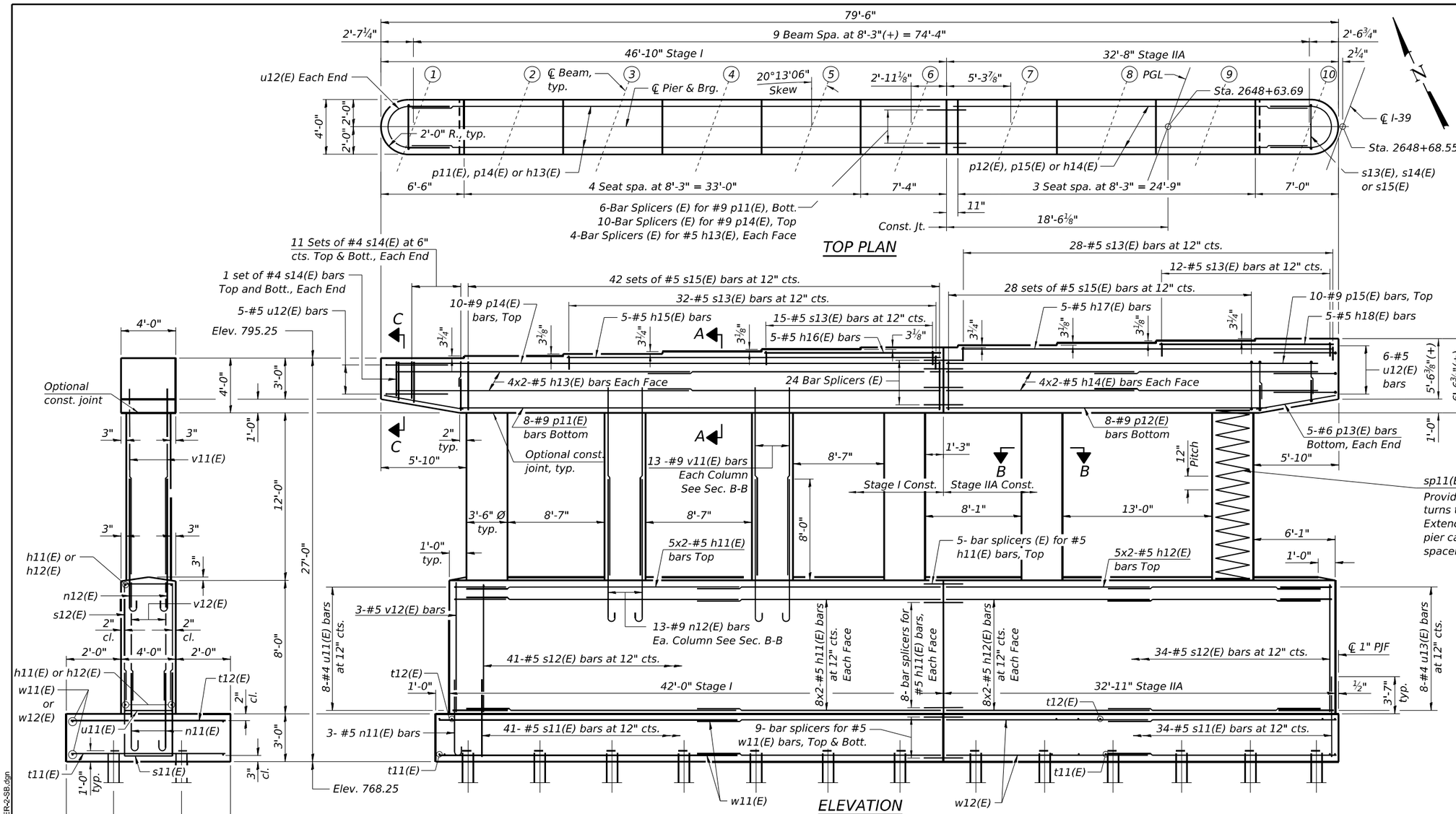
**PIER 1 - NORTHBOUND**
**STRUCTURE NO. 101-0208/0209**

SCALE: | SHEET 50 OF 60 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1,5)R | WINNEBAGO | 1685 | 593 |
| | | CONTRACT NO. 64C24 | | |
| | | ILLINOIS | FED. AID PROJECT | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

MODEL: SHEET
FILE NAME: c:\pwworld\benesch projects\projects\d0173871\D2824C24_SHT_0208-0209-CN_PIER-1-NB.dgn




## SEAT ELEVATIONS

| Beam Line | Seat Elevation |
|---|---|
| 1 | 795.25 |
| 2 | 795.52 |
| 3 | 795.78 |
| 4 | 796.05 |
| 5 | 796.31 |
| 6 | 796.57 |
| 7 | 796.84 |
| 8 | 797.10 |
| 9 | 797.36 |
| 10 | 797.63 |

## MIN. BAR LAP

#4 bar = 2'-11"
#5 bar = 3'-7"
#9 bar = 7'-1"

## PILE DATA

Type: HP 12x63 with Pile Shoes
Nominal Required Bearing: 497 kips
Factored Resistance Available: 273 kips
Est. Length: 24 ft.
No. Production Piles: 25
No. Test Piles: 1

Notes:
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.
Cost of PJF included in Concrete Structures.
For details of piles, see sheet 55 of 60.

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|---|---|---|---|
| USER NAME = lfranceschina | DESIGNED - JW | REVISED - | |
| | DRAWN - AT | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - AJN | REVISED - | |
| PLOT DATE = 8/12/2024 | DATE - 02/27/24 | REVISED - | |

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

**PIER 2 - SOUTHBOUND**
**STRUCTURE NO. 101-0208/0209**

SCALE: | SHEET 51 OF 60 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1,5)R | WINNEBAGO | 1685 | 594 |
| | | CONTRACT NO. 64C24 | | |
| | | ILLINOIS | FED. AID PROJECT | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

MODEL: SHEET
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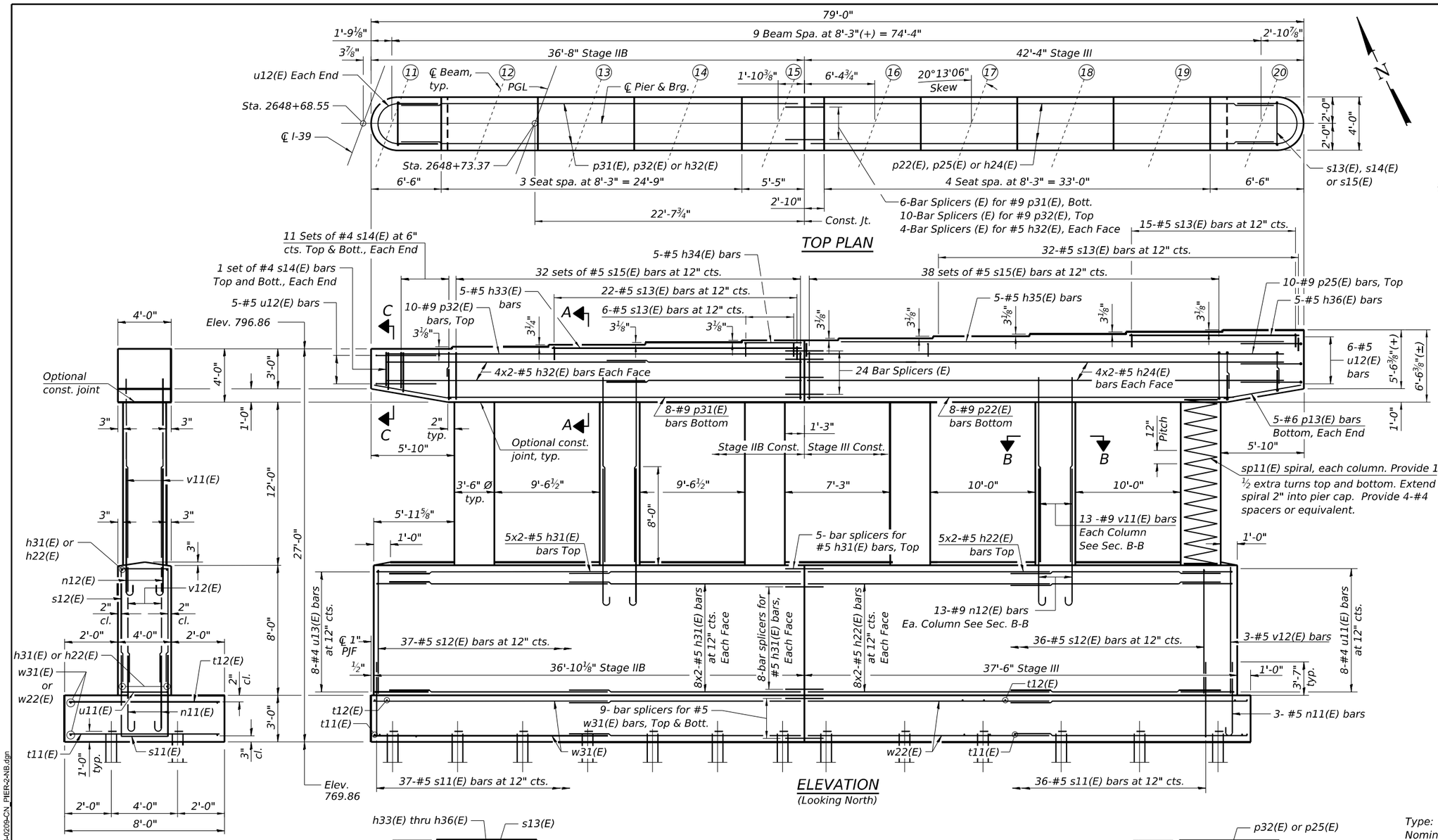
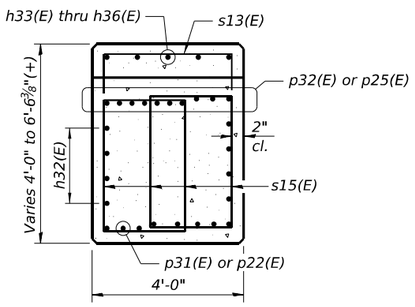



## SEAT ELEVATIONS

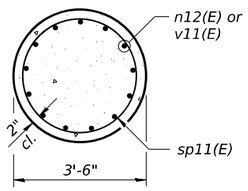
| Beam Line | Seat Elevation |
|---|---|
| 11 | 796.86 |
| 12 | 797.12 |
| 13 | 797.39 |
| 14 | 797.65 |
| 15 | 797.91 |
| 16 | 798.17 |
| 17 | 798.43 |
| 18 | 798.69 |
| 19 | 798.95 |
| 20 | 799.21 |

## MIN. BAR LAP

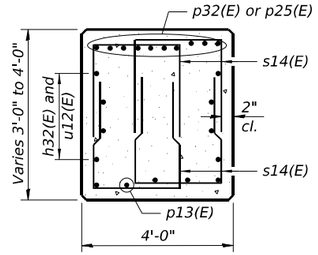
#4 bar = 2'-11"
#5 bar = 3'-7"
#9 bar = 7'-1"




SEC. A-A




SEC. B-B




SEC. C-C

## PILE DATA

Type: HP 12x63 with Pile Shoes
Nominal Required Bearing: 497 kips
Factored Resistance Available: 273 kips
Est. Length: 24 ft.
No. Production Piles: 26
No. Test Piles: 0

Notes:
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.
Cost of PJF included in Concrete Structures.
For details of piles, see sheet 55 of 60.

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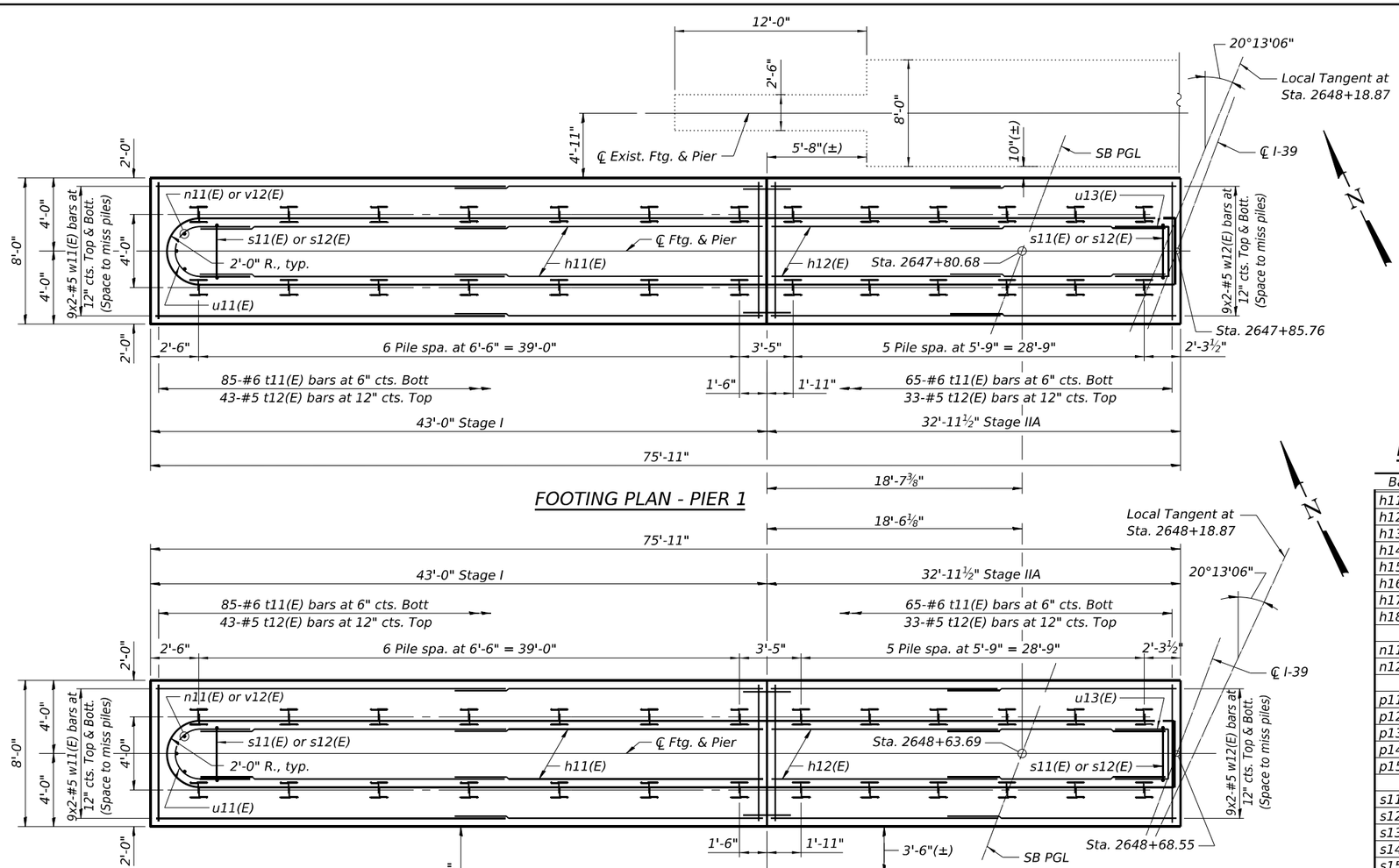
| | DRAWN - AT | REVISED - | | |
| PLOT SCALE = $SCALE$ | CHECKED - AJN | REVISED - | | SCALE: SHEET 52 OF 60 SHEETS STA. TO STA. |
| PLOT DATE = 8/12/2024 | DATE - 02/27/24 | REVISED - | | |

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1,5)R | WINNEBAGO | 1685 | 595 |
| | | CONTRACT NO. 64C24 | | |
| | | ILLINOIS | FED. AID PROJECT | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

MODEL: SHEET
FILE NAME: c:\pwworkdir\benesch projects\projects\d0173871\D0284C24_SHT_0208-0209-CN_PIER-2-NB.dgn



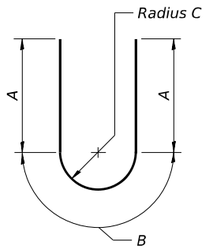

## FOOTING PLAN - PIER 1



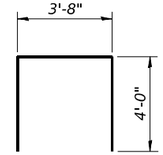

## FOOTING PLAN - PIER 2



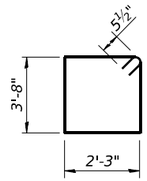

## BARS s11(E), s12(E) THRU s14(E)



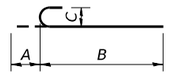

## BAR u11(E) & u12(E)




## BAR u13(E)




## BAR s15(E)




## BARS n11(E) & n12(E)

### s11(E) THRU s14(E) DIMENSIONS

| Bar | A | B |
|---|---|---|
| s11(E) | 3'-8" | 5'-9" |
| s12(E) | 3'-8" | 7'-8" |
| s13(E) | 3'-6" | 1'-0" |
| s14(E) | 2'-3" | 3'-1" |

### u11(E) & u12(E) DIMENSIONS

| Bar | A | B | C |
|---|---|---|---|
| u11(E) | 2'-4" | 5'-9" | 1'-10" |
| u12(E) | 2'-11" | 5'-6" | 1'-9" |

### BARS n11(E) & n12(E) DIMENSIONS

| Bar | A | B | C |
|---|---|---|---|
| n11(E) | 7" | 5'-10" | 5" |
| n12(E) | 1'-3" | 13'-6" | 11¾" |

## BILL OF MATERIAL - PIER 1

| Bar | No. | Size | Length | Shape |
|---|---|---|---|---|
| h11(E) | 42 | #5 | 22'-8" | |
| h12(E) | 42 | #5 | 18'-1" | |
| h13(E) | 16 | #5 | 24'-11" | |
| h14(E) | 16 | #5 | 17'-10" | |
| h15(E) | 5 | #5 | 31'-3" | |
| h16(E) | 5 | #5 | 14'-10" | |
| h17(E) | 5 | #5 | 22'-10" | |
| h18(E) | 5 | #5 | 14'-8" | |
| | | | | |
| n11(E) | 3 | #5 | 6'-4" | |
| n12(E) | 78 | #9 | 14'-9" | |
| | | | | |
| p11(E) | 8 | #9 | 41'-2" | |
| p12(E) | 8 | #9 | 27'-1" | |
| p13(E) | 10 | #6 | 5'-8" | |
| p14(E) | 10 | #9 | 44'-8" | |
| p15(E) | 10 | #9 | 30'-6" | |
| | | | | |
| s11(E) | 75 | #5 | 15'-2" | |
| s12(E) | 75 | #5 | 19'-0" | |
| s13(E) | 87 | #5 | 5'-6" | |
| s14(E) | 96 | #4 | 8'-5" | |
| s15(E) | 140 | #5 | 12'-9" | |
| | | | | |
| ** sp11(E) | 6 | #4 | 12'-2" | |
| | | | | |
| t11(E) | 150 | #6 | 7'-8" | |
| t12(E) | 76 | #5 | 7'-8" | |
| | | | | |
| u11(E) | 8 | #4 | 10'-5" | |
| u12(E) | 11 | #5 | 11'-4" | |
| u13(E) | 8 | #4 | 11'-8" | |
| | | | | |
| v11(E) | 78 | #9 | 13'-0" | |
| v12(E) | 3 | #5 | 7'-8" | |
| | | | | |
| w11(E) | 36 | #5 | 23'-2" | |
| w12(E) | 36 | #5 | 18'-1" | |
| Structure Excavation | | Cu. Yd. | 150 | |
| Concrete Structures | | Cu. Yd. | 229.1 | |
| Reinforcement Bars, Epoxy Coated | | Pound | 24,640 | |
| Furnishing Steel Piles HP12x63 | | Foot | 494 | |
| Driving Piles | | Foot | 494 | |
| Pile Shoes | | Each | 26 | |

** Length is height of spiral.

## BILL OF MATERIAL - PIER 2

| Bar | No. | Size | Length | Shape |
|---|---|---|---|---|
| h11(E) | 42 | #5 | 22'-8" | |
| h12(E) | 42 | #5 | 18'-1" | |
| h13(E) | 16 | #5 | 24'-11" | |
| h14(E) | 16 | #5 | 17'-10" | |
| h15(E) | 5 | #5 | 31'-3" | |
| h16(E) | 5 | #5 | 14'-10" | |
| h17(E) | 5 | #5 | 22'-10" | |
| h18(E) | 5 | #5 | 14'-8" | |
| | | | | |
| n11(E) | 3 | #5 | 6'-4" | |
| n12(E) | 78 | #9 | 14'-9" | |
| | | | | |
| p11(E) | 8 | #9 | 41'-2" | |
| p12(E) | 8 | #9 | 27'-1" | |
| p13(E) | 10 | #6 | 5'-8" | |
| p14(E) | 10 | #9 | 44'-8" | |
| p15(E) | 10 | #9 | 30'-6" | |
| | | | | |
| s11(E) | 75 | #5 | 15'-2" | |
| s12(E) | 75 | #5 | 19'-0" | |
| s13(E) | 87 | #5 | 5'-6" | |
| s14(E) | 96 | #4 | 8'-5" | |
| s15(E) | 140 | #5 | 12'-9" | |
| | | | | |
| ** sp11(E) | 6 | #4 | 12'-2" | |
| | | | | |
| t11(E) | 150 | #6 | 7'-8" | |
| t12(E) | 76 | #5 | 7'-8" | |
| | | | | |
| u11(E) | 8 | #4 | 10'-5" | |
| u12(E) | 11 | #5 | 11'-4" | |
| u13(E) | 8 | #4 | 11'-8" | |
| | | | | |
| v11(E) | 78 | #9 | 13'-0" | |
| v12(E) | 3 | #5 | 7'-8" | |
| | | | | |
| w11(E) | 36 | #5 | 23'-2" | |
| w12(E) | 36 | #5 | 18'-1" | |
| Structure Excavation | | Cu. Yd. | 150 | |
| Concrete Structures | | Cu. Yd. | 229.1 | |
| Reinforcement Bars, Epoxy Coated | | Pound | 24,640 | |
| Furnishing Steel Piles HP12x63 | | Foot | 598 | |
| Driving Piles | | Foot | 598 | |
| Test Pile Steel HP12x63 | | Each | 1 | |
| Pile Shoes | | Each | 25 | |

** Length is height of spiral.

MODEL: SHEET
FILE NAME: c:\pwworkf\benesch projects\projects\d0173871\D264C24_SHT_0208-0209-CN_PIERS-SB-DETAILS.dgn

Bowman
10 S. LaSalle Street, Suite 2110
Chicago, Illinois 60603
312-914-0580
www.bowman.com

| | | | | |
|---|---|---|---|---|
| USER NAME = lfranceschina | | DESIGNED - JW | REVISED - | |
| | | DRAWN - AT | REVISED - | |
| PLOT SCALE = $SCALE$ | | CHECKED - AJN | REVISED - | |
| PLOT DATE = 8/12/2024 | | DATE - 02/27/24 | REVISED - | |

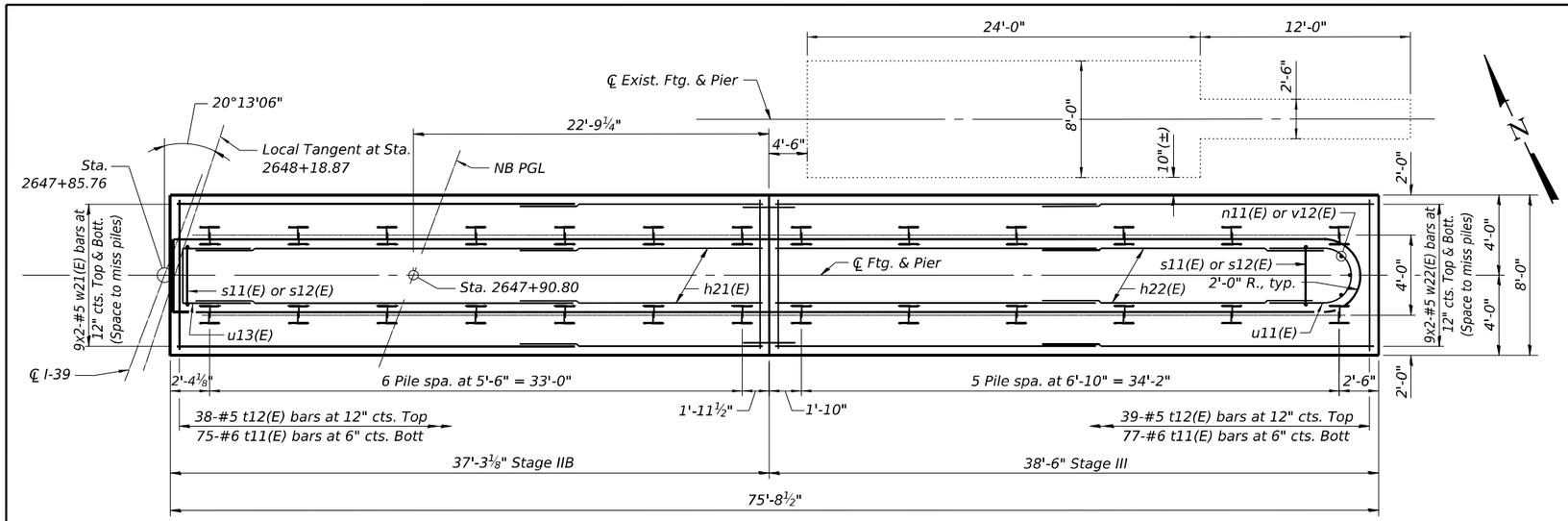
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**PIER DETAILS & BILL OF MATERIAL - SOUTHBOUND**
**STRUCTURE NO. 101-0208/0209**

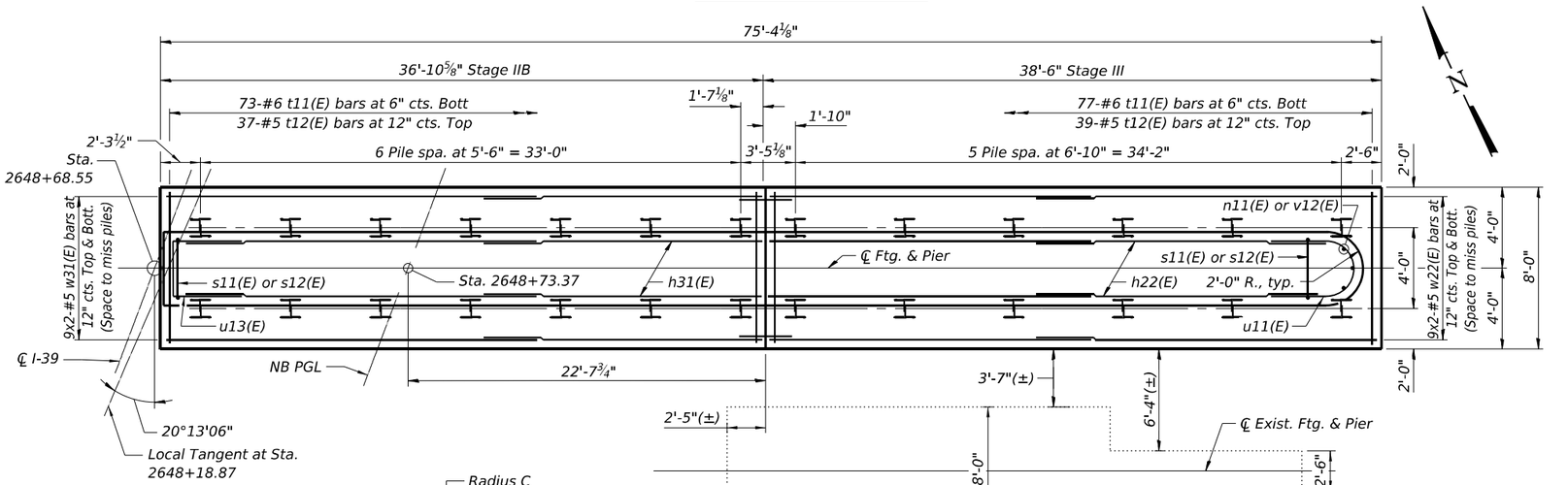
SCALE: | SHEET 53 OF 60 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 596 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

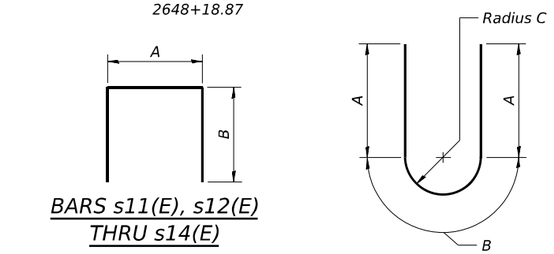
* FAI ROUTE 39 (I-39) & FAP 301 (US 20)




## FOOTING PLAN - PIER 1




## FOOTING PLAN - PIER 2




## BARS s11(E), s12(E) THRU s14(E)

## s11(E) THRU s14(E) DIMENSIONS

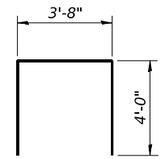
| Bar | A | B |
|---|---|---|
| s11(E) | 3'-8" | 5'-9" |
| s12(E) | 3'-8" | 7'-8" |
| s13(E) | 3'-6" | 1'-0" |
| s14(E) | 2'-3" | 3'-1" |



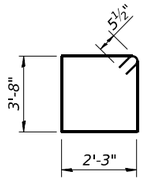

## BAR u11(E) & u12(E)

## u11(E) & u12(E) DIMENSIONS

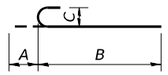
| Bar | A | B | C |
|---|---|---|---|
| u11(E) | 2'-4" | 5'-9" | 1'-10" |
| u12(E) | 2'-11" | 5'-6" | 1'-9" |




## BAR u13(E)




## BAR s15(E)




## BARS n11(E) & n12(E)

## BARS n11(E) & n12(E) DIMENSIONS

| Bar | A | B | C |
|---|---|---|---|
| n11(E) | 7" | 5'-10" | 5" |
| n12(E) | 1'-3" | 13'-6" | 11¾" |

## BILL OF MATERIAL - PIER 1

| | Bar | No. | Size | Length | Shape |
|---|---|---|---|---|---|
| | h21(E) | 42 | #5 | 21'-3" | |
| | h22(E) | 42 | #5 | 20'-5" | |
| | h23(E) | 16 | #5 | 19'-8" | |
| | h24(E) | 16 | #5 | 22'-4" | |
| | h25(E) | 5 | #5 | 22'-3" | |
| | h26(E) | 5 | #5 | 5'-5" | |
| | h27(E) | 5 | #5 | 37'-8" | |
| | h28(E) | 5 | #5 | 12'-11" | |
| | | | | | |
| | n11(E) | 3 | #5 | 6'-4" | |
| | n12(E) | 78 | #9 | 14'-9" | |
| | | | | | |
| | p13(E) | 10 | #6 | 5'-8" | |
| | p21(E) | 8 | #9 | 31'-6" | |
| | p22(E) | 8 | #9 | 36'-10" | |
| | p24(E) | 10 | #9 | 34'-10" | |
| | p25(E) | 10 | #9 | 40'-2" | |
| | | | | | |
| | s11(E) | 74 | #5 | 15'-2" | |
| | s12(E) | 74 | #5 | 19'-0" | |
| | s13(E) | 76 | #5 | 5'-6" | |
| | s14(E) | 96 | #4 | 8'-5" | |
| | s15(E) | 142 | #5 | 12'-9" | |
| | | | | | |
| ** | sp11(E) | 6 | #4 | 12'-2" | |
| | | | | | |
| | t11(E) | 152 | #6 | 7'-8" | |
| | t12(E) | 77 | #5 | 7'-8" | |
| | | | | | |
| | u11(E) | 8 | #4 | 10'-5" | |
| | u12(E) | 11 | #5 | 11'-4" | |
| | u13(E) | 8 | #4 | 11'-8" | |
| | | | | | |
| | v11(E) | 78 | #9 | 13'-0" | |
| | v12(E) | 3 | #5 | 7'-8" | |
| | | | | | |
| | w21(E) | 36 | #5 | 20'-3" | |
| | w22(E) | 36 | #5 | 20'-11" | |
| | Structure Excavation | | Cu. Yd. | 152 | |
| | Concrete Structures | | Cu. Yd. | 228.8 | |
| | Reinforcement Bars, Epoxy Coated | | Pound | 24,520 | |
| | Furnishing Steel Piles HP12x63 | | Foot | 494 | |
| | Driving Piles | | Foot | 494 | |
| | Pile Shoes | | Foot | 26 | |

** Length is height of spiral.

## BILL OF MATERIAL - PIER 2

| | Bar | No. | Size | Length | Shape |
|---|---|---|---|---|---|
| | h22(E) | 42 | #5 | 20'-5" | |
| | h24(E) | 16 | #5 | 22'-4" | |
| | h31(E) | 42 | #5 | 21'-1" | |
| | h32(E) | 16 | #5 | 19'-6" | |
| | h33(E) | 5 | #5 | 21'-7" | |
| | h34(E) | 5 | #5 | 5'-1" | |
| | h35(E) | 5 | #5 | 37'-4" | |
| | h36(E) | 5 | #5 | 12'-7" | |
| | | | | | |
| | n11(E) | 3 | #5 | 6'-4" | |
| | n12(E) | 78 | #9 | 14'-9" | |
| | | | | | |
| | p13(E) | 10 | #6 | 5'-8" | |
| | p22(E) | 8 | #9 | 36'-10" | |
| | p25(E) | 10 | #9 | 40'-2" | |
| | p31(E) | 8 | #9 | 31'-2" | |
| | p32(E) | 10 | #9 | 34'-6" | |
| | | | | | |
| | s11(E) | 73 | #5 | 15'-2" | |
| | s12(E) | 73 | #5 | 19'-0" | |
| | s13(E) | 75 | #5 | 5'-6" | |
| | s14(E) | 96 | #4 | 8'-5" | |
| | s15(E) | 140 | #5 | 12'-9" | |
| | | | | | |
| ** | sp11(E) | 6 | #4 | 12'-2" | |
| | | | | | |
| | t11(E) | 150 | #6 | 7'-8" | |
| | t12(E) | 76 | #5 | 7'-8" | |
| | | | | | |
| | u11(E) | 8 | #4 | 10'-5" | |
| | u12(E) | 11 | #5 | 11'-4" | |
| | u13(E) | 8 | #4 | 11'-8" | |
| | | | | | |
| | v11(E) | 78 | #9 | 13'-0" | |
| | v12(E) | 3 | #5 | 7'-8" | |
| | | | | | |
| | w31(E) | 36 | #5 | 20'-1" | |
| | w22(E) | 36 | #5 | 20'-11" | |
| | Structure Excavation | | Cu. Yd. | 151 | |
| | Concrete Structures | | Cu. Yd. | 227.8 | |
| | Reinforcement Bars, Epoxy Coated | | Pound | 24,370 | |
| | Furnishing Steel Piles HP12x63 | | Foot | 624 | |
| | Driving Piles | | Foot | 624 | |
| | Pile Shoes | | Foot | 26 | |

** Length is height of spiral.

MODEL: SHEET
FILE NAME: c:\pwworkf\benesch projects\projects\d0173871\D264C24_SHT_0208-0209-CN_PIERS-NB-DETAILS.dgn

Bowman
10 S. LaSalle Street, Suite 2110
Chicago, Illinois 60603
312-914-5080
www.bowman.com

| | | | |
|---|---|---|---|
| USER NAME = lfranceschina | DESIGNED - JW | REVISED - | |
| | DRAWN - AT | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - AJN | REVISED - | |
| PLOT DATE = 8/12/2024 | DATE - 02/27/24 | REVISED - | |

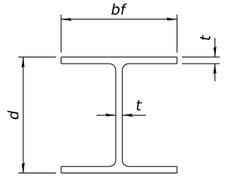
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**PIER DETAILS & BILL OF MATERIAL - NORTHBOUND**
**STRUCTURE NO. 101-0208/0209**

SCALE: | SHEET 54 OF 60 SHEETS | STA. | TO STA.

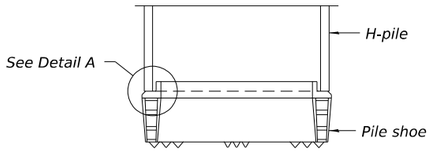
| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 597 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

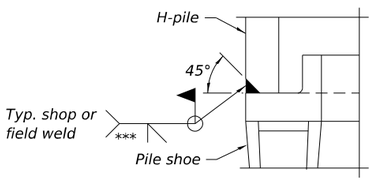



## STEEL PILE TABLE

| Designation | Depth d | Flange width bf | Web and Flange thickness t | Encasement diameter A |
|---|---|---|---|---|
| HP 14x117 | 14¼" | 14⅞" | 13/16" | 30" |
| x102 | 14" | 14¾" | 11/16" | 30" |
| x89 | 13⅞" | 14¾" | ⅝" | 30" |
| x73 | 13⅝" | 14⅝" | ½" | 30" |
| HP 12x84 | 12¼" | 12¼" | 11/16" | 24" |
| x74 | 12⅛" | 12¼" | ⅝" | 24" |
| x63 | 12" | 12⅛" | ½" | 24" |
| x53 | 11¾" | 12" | 7/16" | 24" |
| HP 10x57 | 10" | 10¼" | 9/16" | 24" |
| x42 | 9¾" | 10⅛" | 7/16" | 24" |
| HP 8x36 | 8" | 8⅛" | 7/16" | 18" |



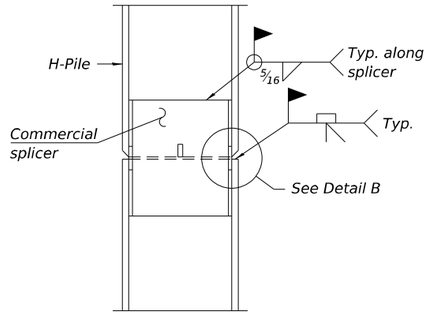

## ELEVATION



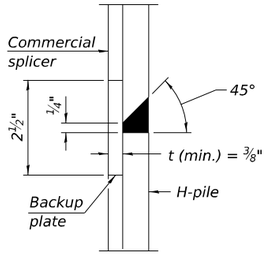

## DETAIL A

## SHOE ATTACHMENT

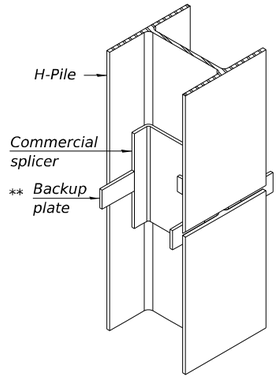
*Note:*
*The steel H-piles shall be according to AASHTO M270 Grade 50.*




## ELEVATION

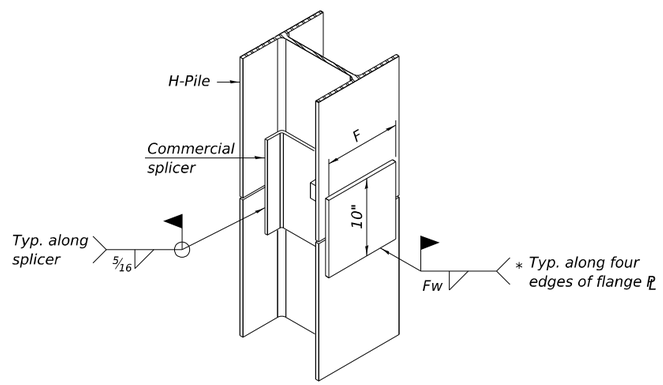



## DETAIL "B"




## ISOMETRIC VIEW

## WELDED COMMERCIAL SPLICE



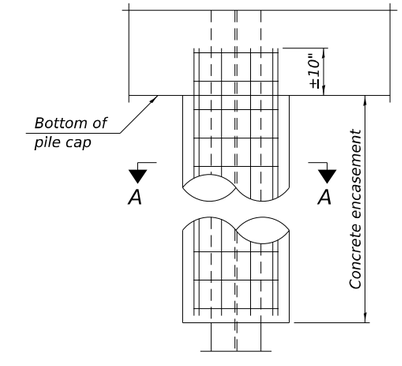

## ISOMETRIC VIEW

## WELDED COMMERCIAL SPLICE ALTERNATE

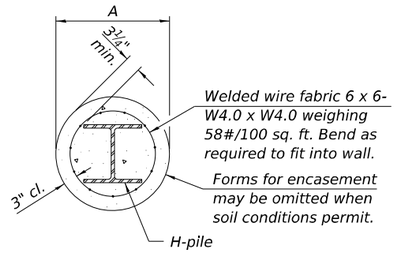
* *Interrupt welds ¼" from end of web and/or each flange.*

** *Remove portions of backup plates that extend outside the flanges.*

*** *Weld size per pile shoe manufacturer (5/16" min.).*



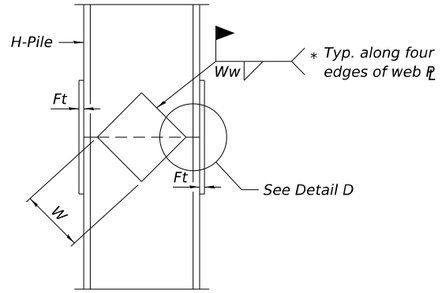

## ELEVATION



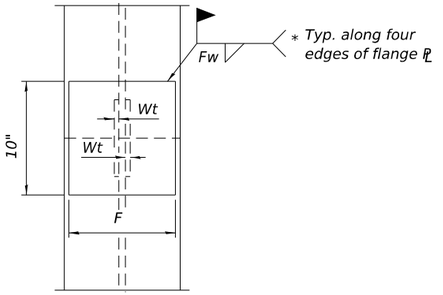

## SECTION A-A

## INDIVIDUAL PILE CONCRETE ENCASEMENT

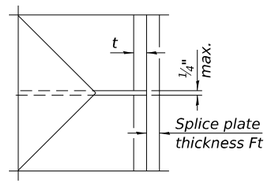
*(when specified)*




## ELEVATION




## END VIEW




## DETAIL D

| Designation | F | Ft | Fw | W | Wt | Ww |
|---|---|---|---|---|---|---|
| HP 14x117 | 12½" | 1" | ⅞" | 7¾" | ⅝" | ½" |
| x102 | 12½" | ⅞" | ¾" | 7¾" | ⅝" | ½" |
| x89 | 12½" | ¾" | 11/16" | 7¾" | ⅝" | ½" |
| x73 | 12½" | ⅝" | 9/16" | 7¾" | ⅝" | ½" |
| HP 12x84 | 10" | ⅞" | 11/16" | 6½" | ⅝" | ½" |
| x74 | 10" | ⅞" | 11/16" | 6½" | ⅝" | ½" |
| x63 | 10" | ⅝" | ½" | 6½" | ½" | ⅜" |
| x53 | 10" | ⅝" | ½" | 6½" | ½" | ⅜" |
| HP 10x57 | 8" | ¾" | 9/16" | 5¼" | ½" | ⅜" |
| x42 | 8" | ⅝" | 9/16" | 5¼" | ½" | ⅜" |
| HP 8x36 | 7" | ⅝" | 7/16" | 4¼" | ½" | ⅜" |

## WELDED PLATE FIELD SPLICE

F-HP

5-15-2023

Bowman
10 S. LaSalle Street, Suite 2710
Chicago, Illinois 60603
312-934-0160
www.bowman.com

| | | | |
|---|---|---|---|
| USER NAME = lfranceschina | DESIGNED - JW | REVISED - | |
| | DRAWN - DSO | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - AJN | REVISED - | |
| PLOT DATE = 8/12/2024 | DATE - 02/27/24 | REVISED - | |

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

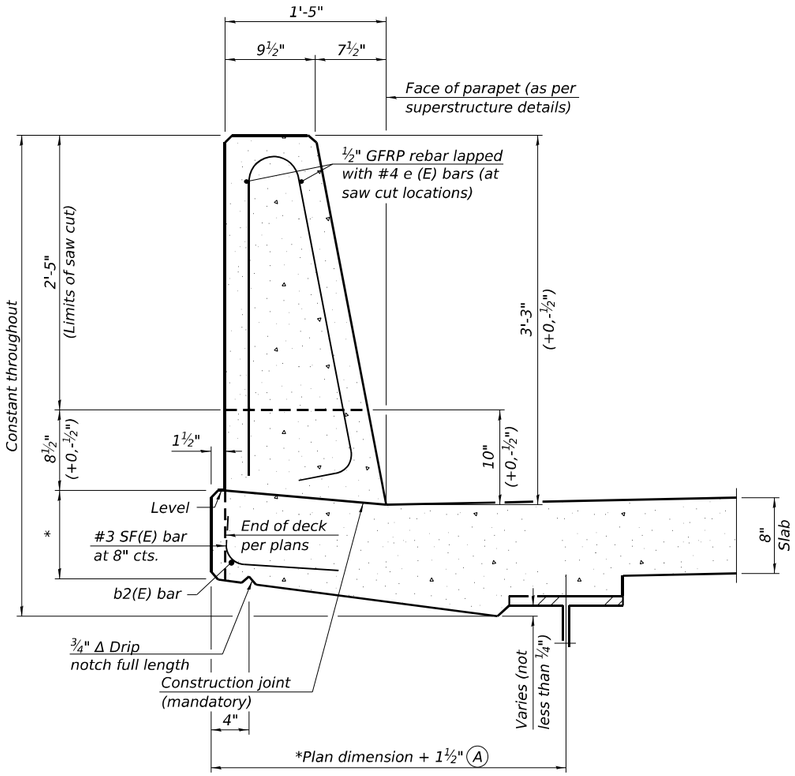
**PILE DETAILS**
**STRUCTURE NO. 101-0208/0209**

SCALE: | SHEET 55 OF 60 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 598 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

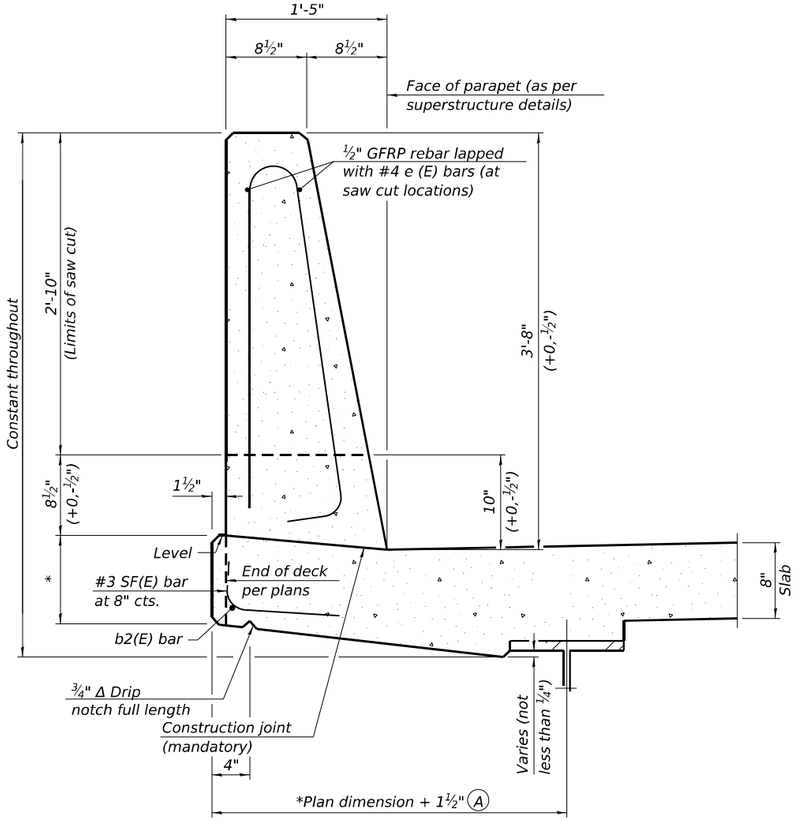
* FAI ROUTE 39 (I-39) & FAP 301 (US 20)

MODEL: SHEET
FILE NAME: c:\pw\wordir\benesch projects\projects\d0172871\D2642C2a_SHT_0208-0209-CN_PILE-DETAILS.dgn




## 39" CONSTANT-SLOPE PARAPET SECTION

(Showing dimensions, d(E), and ½" Ø GFRP rebar)




## 44" CONSTANT-SLOPE PARAPET SECTION

(Showing dimensions, d(E), and ½" Ø GFRP rebar)

*See Superstructure Details.

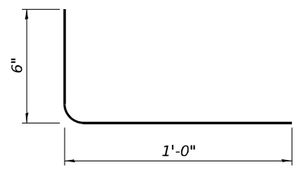
Notes:

All dimensions shall remain the same as shown on superstructure details, except dimension A which is to be revised as shown. Additional concrete needed to revise dimension A = 0.00348 cu. yds./ft. for 39" and 44" parapets.

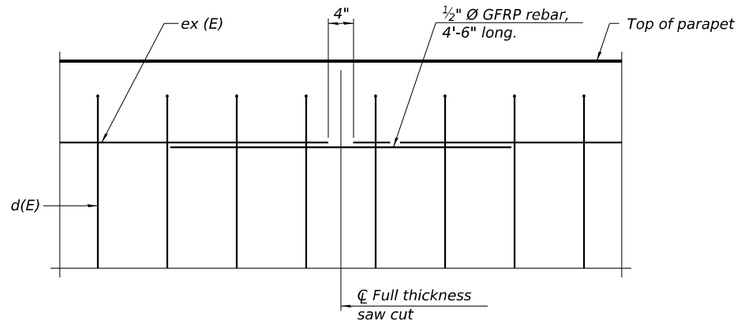
Place full depth aluminum sheets as shown on superstructure details.

Replace all cork joint filler locations with a full thickness saw cut.

Steel superstructure shown. Other superstructure types similar.




## SF(E) BAR




## GFRP REBAR STIFFENING DETAIL

(Place as shown in parapet section at each parapet joint location.)

SFP 39-44

5-15-2023

MODEL: SHEET
FILE NAME: c:\pwworkfr\benesch projects\projects\d0173871\D264C24_SHT_0208-0209-CN_PARAPET-SLIPFORMING.dgn

Bowman 10 S. LaSalle Street, Suite 2110 Chicago, Illinois 60603 312-454-0160 www.bowman.com

| | | | | | |
|---|---|---|---|---|---|
| USER NAME | = lfranceschina | DESIGNED | - JW | REVISED | - |
| | | DRAWN | - DSO | REVISED | - |
| PLOT SCALE | = $SCALE$ | CHECKED | - AJN | REVISED | - |
| PLOT DATE | = 8/12/2024 | DATE | - | REVISED | - |

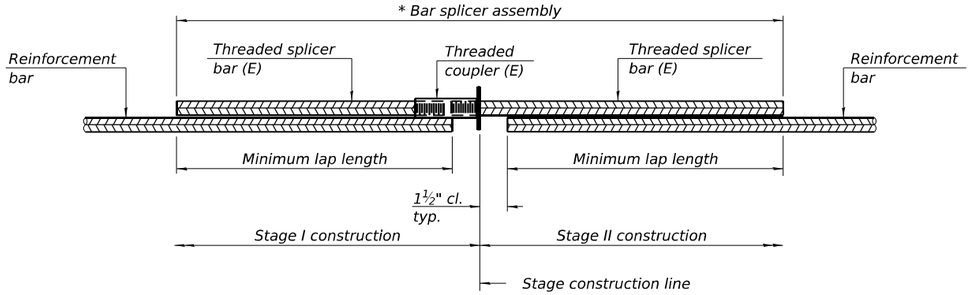
**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**CONCRETE PARAPET SLIPFORMING**
**STRUCTURE NO. 101-0208/0209**

SCALE: | SHEET 56 OF 60 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 599 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS | FED. AID PROJECT | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)




## STANDARD BAR SPLICER ASSEMBLY PLAN

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

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

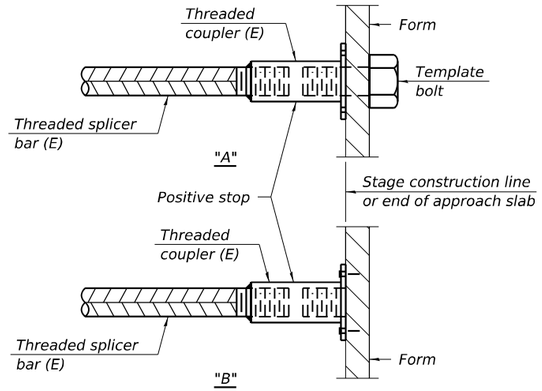
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

## NORTHBOUND STRUCTURE

| Location | Bar size | No. assemblies required | Minimum lap length |
|---|---|---|---|
| Approach Slabs | #5 | 92 | 3'-2" |
| | #8 | 124 | 5'-1" |
| Deck Slab | #5 | 665 | 3'-2" |
| Abutments | #7 | 8 | 4'-5" |
| Piers | #5 | 94 | 3'-2" |
| | #9 | 36 | 5'-8" |

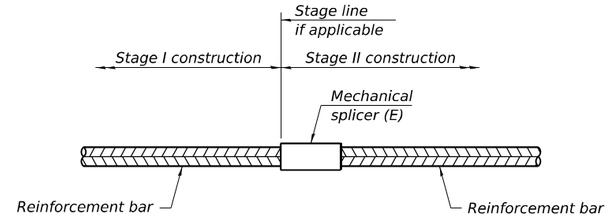
## SOUTHBOUND STRUCTURE

| Location | Bar size | No. assemblies required | Minimum lap length |
|---|---|---|---|
| Approach Slabs | #5 | 92 | 3'-2" |
| | #8 | 124 | 5'-1" |
| Deck Slab | #5 | 665 | 3'-2" |
| Abutments | #7 | 8 | 4'-5" |
| Piers | #5 | 94 | 3'-2" |
| | #9 | 36 | 5'-8" |




## INSTALLATION AND SETTING METHODS

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




## STANDARD MECHANICAL SPLICER

| Location | Bar size | No. assemblies required |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

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

BSD-1

5-15-2023

MODEL: SHEET
FILE NAME: c:\pw\wordir\benesch projects\projects\d0173871\D264C24_SHT_0208-0209-GN_BAR-SPLICERS.dgn

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312-454-0160
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|---|---|---|---|
| USER NAME = lfranceschina | DESIGNED - JW | REVISED - | |
| | DRAWN - DSO | REVISED - | |
| PLOT SCALE = $SCALE$ | CHECKED - AJN | REVISED - | |
| PLOT DATE = 8/12/2024 | DATE - 02/27/24 | REVISED - | |

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

**BAR SPLICER DETAILS**
**STRUCTURE NO. 101-0208/0209**

SCALE: | SHEET 57 OF 60 SHEETS | STA. | TO STA.

| F.A.I RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| * | (201-3)R & (4-1.5)R | WINNEBAGO | 1685 | 600 |
| | | CONTRACT NO. 64C24 | | |
| | ILLINOIS FED. AID PROJECT | | | |

* FAI ROUTE 39 (I-39) & FAP 301 (US 20)