11-07-2025 LETTING ITEM 066

# **STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

FOR INDEX OF SHEETS, SEE SHEET NO. 3.

# **PROPOSED HIGHWAY PLANS**

**F.A.P. ROUTE 304 (IL ROUTE 16/100) SECTION 266BRR, (4, 5) I** 

# REHABILITATION OF THE JOE PAGE BRIDGE OVER ILLINOIS RIVER **GREENE COUNTY**

C-98-102-24



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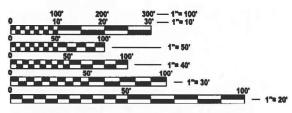


1254 UNIVERSITY DRIVE, SUITE 302 **EDWARDSVILLE, IL 62025** PHONE (618) 659-9102 MODJESKI-MASTERS PROJECT MANAGER: JERILYN M. HASSARD, P.E. WWW.MODJESKI.COM

EFK+Moen PHONE (618) 208-4251 Civil Engineering Design

16 EXECUTIVE DRIVE, SUITE 230 **FAIRVIEW HEIGHTS, IL 62208** PROJECT MANAGER: SHELLEY DINTELMAN, P.E. **EFKMOEN.COM** 

FUNCTIONAL CLASSIFICATION MINOR ARTERIAL AADT (2023) = 2,250 SU = 6.70%, MU = 5.30%

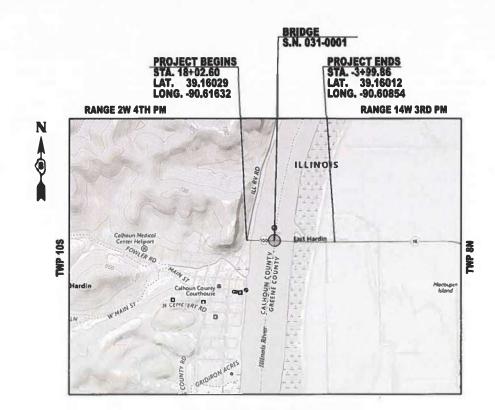


**ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS** ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123 OR 811

**PROJECT ENGINEER: CHERYL KEPLAR PROJECT MANAGER: BRANDON HUMPHREYS** 

**CONTRACT NO. 76T66** 



GROSS LENGTH = 2,202.46 FT. = 0.42 MILE NET LENGTH = 2,202.46 FT. = 0.42 MILE

GREENE | 117 | 1 266BRR, (4, 5) I CONTRACT NO. 76T66

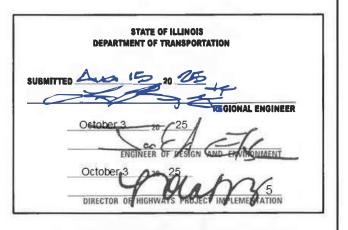
\* 117 + 2 = 119 TOTAL SHEETS

### D-98-040-24



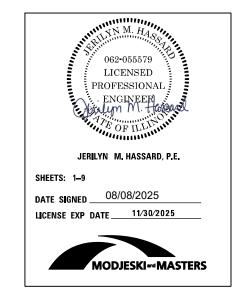
# **PROJECT DESCRIPTION:**

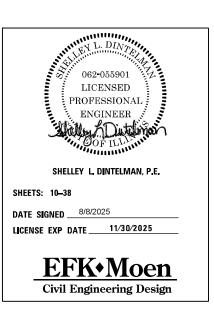
THE REHABILITATION OF S.N. 031-0001 INCLUDES DECK REPAIRS, SUPERSTRUCTURE REPAIRS, MECHANICAL REPAIRS, AND ELECTRICAL COMPONENT REPLACEMENT.

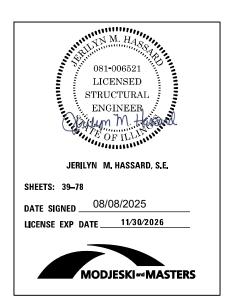


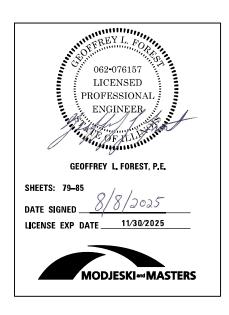
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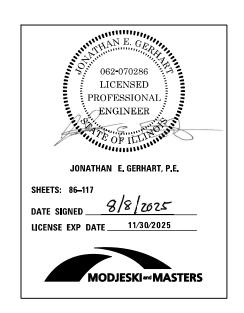
**REV - MS** 











\mm.lcNIL\_Data\Projects\5018-Joe Page Bridge Phase II Rehab\CADD\Structural\_Front Sheets - Cover, SOQ,

MODJESKI∞ MASTERS

| USER NAME = AECook         | DESIGNED - JAD  | REVISED - |
|----------------------------|-----------------|-----------|
|                            | DRAWN - AEC     | REVISED - |
| PLOT SCALE = 0:2 ':" / in. | CHECKED - JAD   | REVISED - |
| PLOT DATE = 7/31/2025      | DATE - 8/8/2025 | REVISED - |

COVER SHEET

PROJECT SEALS

INDEX OF SHEETS, HIGHWAY STANDARDS AND GENERAL NOTES

SUMMARY OF QUANTITIES 10-11

SCHEDULE OF QUANTITIES 12-13 ALIGNMENT, TIES & BENCHMARKS

PLAN & PROFILE 14-18

TRAFFIC CONTROL AND PROTECTION 19-38

STRUCTURAL PLANS (SN 031-0001) 39-78

MECHANICAL PLANS 79-85 ELECTRICAL PLANS 86-117

# **HIGHWAY STANDARDS**

606301-04 PC CONCRETE ISLANDS AND MEDIANS

701001-02 OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5 M) AWAY

701006-05 OFF-ROAD OPERATIONS, 2L, 2W, 15' (4.5 M) TO 24" (600 MM) FROM PAVEMENT EDGE

701311-03 LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY 701321-19 LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER

701501-06 URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED 701901-10 TRAFFIC CONTROL DEVICES

704001-08 TEMPORARY CONCRETE BARRIER

720001-01 SIGN PANEL MOUNTING DETAILS 720006-04 SIGN PANEL ERECTION DETAILS

728001-01 TELESCOPING STEEL SIGN SUPPORT

731001-01 BASE FOR TELESCOPING STEEL SIGN SUPPORT

780001-05 TYPICAL PAVEMENT MARKINGS

782001-01 CURB REFLECTORS

782006-01 GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

BLR 17-4 TRAFFIC CONTROL DEVICES - DAY LABOR CONSTRUCTION

TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

# PROJECT SPECIFIC GENERAL NOTES

THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FROM THE STATE OF ILLINOIS PRIOR TO COMMENCING CONSTRUCTION. THE COSTS SHALL BE INCLUDED IN THE COST OF THE CONTRACT

THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO ENSURE THAT NO DEBRIS FALLS INTO THE ILLINOIS RIVER OR ENDANGERS OR INTERFERES WITH RIVER TRAFFIC BENEATH THE BRIDGE. IF ANY DEBRIS FALLS INTO THE WATERWAY, THE CONTRACTOR SHALL REMOVE IT FROM THE RIVER TO THE ENGINEERS SATISFACTION AND AT NO ADDITIONAL COST. THE COST OF THIS WORK SHALL BE CONSIDERED INCLUDED IN THE CONTRACT.

THE CONTRACTOR SHALL SUBMIT TEMPORARY ACCESS PLANS TO THE ENGINEER FOR ANY WORK TO BE PERFORMED IN/FROM THE RIVER, THE CONTRACTOR IS RESPONSIBLE FOR ALL ACCESS COSTS AND OBTAINING ANY NECESSARY PERMITS.

THE PROPOSED PAVEMENT MARKINGS SHALL GENERALLY MATCH THE LOCATION OF THE EXISTING PAVEMENT MARKINGS, EXCEPT AROUND THE ISLAND WEST OF THE JOE PAGE

EXISTING ROW SHOWN IS APPROXIMATE.

EXISTING STRUCTURE PLANS ARE AVAILABLE FOR REVIEW IN THE DISTRICT OFFICE. CONTACT CHERYL KEPLAR AT 618-346-3123.

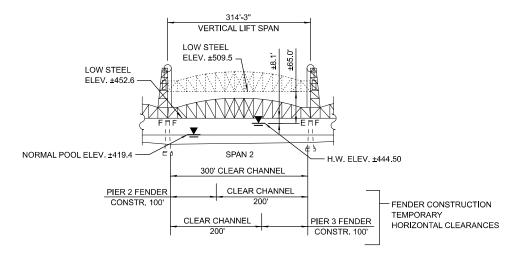
PROJECT SHALL BE CONSTRUCTED WITHOUT DISTURBING THE EXISTING GUARDRAIL OR THE EXISTING BRIDGE RAIL

THE CONTRACTOR SHALL REMOVE THE EXISTING YIELD SIGN AND SUPPORT AT STA. 17+66 LT AT NO ADDITIONAL COST.

# COMMITMENTS

NO TREE REMOVAL IS ANTICIPATED. HOWEVER, IF TREES NEED TO BE REMOVED, TREES THREE (3) INCHES IN DIAMETER AT BREAST HEIGHT SHALL NOT BE CLEARED FROM APRIL 1ST TO SEPTEMBER 30TH OF ANY GIVEN YEAR.

TEMPORARY ILLINOIS RIVER CONSTRUCTION CLEARANCES SHALL BE AS APPROVED PER UNITED STATE COAST GUARD.



# COORDINATION

SEE SPECIAL PROVISIONS FOR UNITED STATES COAST GUARD (U.S.C.G.) REQUIREMENTS.

U.S.C.G. CONTACT: MR. PETER J. SAMBOR, M.P.A. U.S.C.G. BRIDGE MANAGEMENT SPECIALIST COAST GUARD 8TH DISTRICT 1222 SPRUCE STREET, SUITE 2. 102D ST. LOUIS, MO 63103 (314) 269-2380 U.S.C.G. 24-HOUR WATCH CENTER: (314) 269-2332

# LIST OF UTILITY OWNERS AND CONTACTS

UTILITIES KNOWN TO HAVE FACILITIES WITHIN THE PROJECT AREA ARE AS FOLLOWS:

AMEREN ILLINOIS 700 OAKWOOD AVENUE MC AL 832 ALTON, IL 62002

FRONTIER COMMUNICATIONS SOUTHERN DIVISION 111 F STATE STREET MASCOUTAH, IL 62258

ILLINOIS AMERICAN WATER - JERSEYVILLE

ILLINOIS NET.COM

# HMA MIXTURE REQUIREMENT TABLE

THE FOLLOWING HMA MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT:

| MIXTURE USE:                         | POLY SURFACE     | TEMP PAVEMENT (8" THICKNESS) |
|--------------------------------------|------------------|------------------------------|
| PG:                                  | SBS PG 70-28     | PG 64-22                     |
| DESIGN AIR VOIDS:                    | 4.0% @ Ndes=70   | 4.0% @ Ndes=70               |
| MIXTURE COMPOSITION:                 | IL-9.5FG         | IL 19.0                      |
| FRICTION AGGREGATE:                  | MIXTURE "D"      | MIXTURE "B"                  |
| MIXTURE WEIGHT:                      | 112 #/SQ YD/INCH | 112 #/SQ YD/INCH             |
| QUALITY MANAGEMENT PROGRAM:          | QC/QA            | QC/QA                        |
| SUBLOT SIZE:                         | N/A              | N/A                          |
| MATERIAL TRANSFER DEVICE (REQUIRED?) | NO               | NO                           |



USER NAME = AECook DESIGNED - JAD REVISED DRAWN AEC REVISED LOT SCALE = 0:2 ':" / in. CHECKED -JAD REVISED PLOT DATE = 10/3/2025 REVISED DATE 8/8/2025

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**  INDEX OF SHEETS, HIGHWAY STANDARDS AND GENERAL NOTES SECTION COUNTY 304 266BRR, (4, 5) I GREENE 117 3 **ILLINOIS ROUTE 16/100 JOE PAGE BRIDGE REHABILITATION** CONTRACT NO. 76T66 SHEET 1 OF 1 SHEETS STA.

|          |  |         | TOTAL    | BRIDGE        | ELECTRICAL | BRIDGE          |
|----------|--|---------|----------|---------------|------------|-----------------|
| CODE     | ITEM   | UNIT    |          | 0013          | 0021       | 0013            |
| NO.      |  |         | QUANTITY | S.N. 031-0001 |            | S.N. 031-0001   |
|          |  |         |          |               |            | - CHIL 001 0001 |
|          |  |         |          |               |            |                 |
| 40600295 | POLYMERIZED BITUMINOUS MATERIALS (TACK COAT)                       | POUND   | 1652     | 1652          |            |                 |
|          |  |         |          |               |            |                 |
|          |  |         |          |               |            |                 |
| 40604112 | POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, IL-9.5FG, MIX "D", N70 | TON     | 257      | 257           |            |                 |
|          |  |         |          |               |            |                 |
|          |  |         |          |               |            |                 |
| 44000154 | HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/4"                            | SQ YD   | 3670     | 3670          |            |                 |
|          |  |         |          |               |            |                 |
|          |  |         |          |               |            |                 |
| 50102400 | CONCRETE REMOVAL   | CU YD   | 7.4      | 7.4           |            |                 |
|          |  |         |          |               |            |                 |
|          |  |         |          |               |            |                 |
| 50300255 | CONCRETE SUPERSTRUCTURE  | CU YD   | 6.1      | 6.1           |            |                 |
|          |  |         |          |               |            |                 |
| 50300300 | PROTECTIVE COAT  | SQ YD   | 29       | 29            |            |                 |
| 30300300 | THOTEOTIVE GOAL  | 1 00 15 | 23       | 23            |            |                 |
|          |  |         |          |               |            |                 |
| 50301350 | CONCRETE SUPERSTRUCTURE (APPROACH SLAB)                            | CU YD   | 1.4      | 1.4           |            |                 |
|          |  |         |          |               |            |                 |
|          |  |         |          |               |            |                 |
| 50800205 | REINFORCEMENT BARS, EPOXY COATED                                   | POUND   | 1240     | 1240          |            |                 |
|          |  |         |          |               |            |                 |
|          |  |         |          |               |            |                 |
| 52000005 | PREFORMED JOINT SEAL 1"  | FOOT    | 97.5     | 97.5          |            |                 |
|          |  |         |          |               |            |                 |
|          |  |         |          |               |            |                 |
| 52000025 | PREFORMED JOINT SEAL 2"  | FOOT    | 23.5     | 23.5          |            |                 |
|          |  |         |          |               |            |                 |
| E2000205 | NEODDENIE EVDANGIONI IOINT 6 1/2"                                  | FOOT    | 00 E     | 22 5          |            |                 |
| 52000365 | NEOPRENE EXPANSION JOINT 6 1/2"                                    | FOOT    | 23.5     | 23.5          |            |                 |
|          |  |         |          |               |            |                 |
| 52100520 | ANCHOR BOLTS, 1"   | EACH    | 4        | 4             |            |                 |
|          |  |         |          | •             |            |                 |
|          |  |         |          |               |            |                 |
| 60622800 | CONCRETE MEDIAN, TYPE SM-6.12                                      | SQ FT   | 128      | 128           |            |                 |
|          |  |         |          |               |            |                 |
|          |  |         |          |               |            |                 |
| 67000400 | ENGINEER'S FIELD OFFICE, TYPE A                                    | CAL MO  | 8        | 8             |            |                 |
|          |  |         |          |               |            |                 |
|          |  |         |          |               |            |                 |

REV - MS

|                      | USER NAME = AECook         | DESIGNED | - | JAD      |
|----------------------|----------------------------|----------|---|----------|
|                      |                            | DRAWN    | - | AEC      |
| MODJESKI and MASTERS | PLOT SCALE = 0:2 ':" / in. | CHECKED  | - | JAD      |
|                      | PLOT DATE = 8/15/2025      | DATE     | - | 8/8/2025 |

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CONSTRUCTION CODE

MCHD FUNDING

100% STATE

\* SPECIALTY ITEM



|    | USER NAME = AECook         | DESIGNED | - | JAD      | REVISED | - |
|----|----------------------------|----------|---|----------|---------|---|
|    |                            | DRAWN    | - | AEC      | REVISED | - |
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|    | PLOT DATE = 8/15/2025      | DATE     | - | 8/8/2025 | REVISED | - |

| SUMMARY OF QUANTITIES                               |         |    |   |        |     |       |  |  |
|---|---------|----|---|--------|-----|-------|--|--|
| LLINOIS ROUTE 16/100 JOE PAGE BRIDGE REHABILITATION |         |    |   |        |     |       |  |  |
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SCALE:

CONSTRUCTION CODE

MCHD FUNDING

100% STATE

| F.A.P.<br>RTE | SEC    | TION       |          | COUNTY             | TOTAL<br>SHEETS | SHEE. |
|---------------|--------|------------|----------|--------------------|-----------------|-------|
| 304           | 266BRR | , (4, 5) I |          | GREENE             | 117             | 5     |
|               |        |            |          | CONTRACT           | NO. 76          | Г66   |
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|          |   |       |          | CONSTRUCTION CODE |              |               |  |
|----------|---|-------|----------|-------------------|--------------|---------------|--|
|          |   |       |          | 100%              | MCHD FUNDING |               |  |
|          |   |       | TOTAL    | BRIDGE            | ELECTRICAL   | BRIDGE        |  |
| CODE     | ITEM  | UNIT  | QUANTITY | 0013              | 0021         | 0013          |  |
| NO.      |   |       | QUANTITY | S.N. 031-0001     |              | S.N. 031-0001 |  |
|          |   |       |          |                   |              |               |  |
| 78300202 | PAVEMENT MARKING REMOVAL - WATER BLASTING   | SQ FT | 86       | 86                |              |               |  |
|          |   |       |          |                   |              |               |  |
| 81100220 | CONDUIT ATTACHED TO STRUCTURE, 3/4" DIA., PVC COATED GALVANIZED STEEL   | FOOT  | 4200     |                   | 4200         |               |  |
| 81100320 | CONDUIT ATTACHED TO STRUCTURE, 1" DIA., PVC COATED GALVANIZED STEEL   | FOOT  | 1750     |                   | 1750         |               |  |
|          | SONDENTALINGUES TO STREET THE STREET OF THE | 1001  | 1700     |                   |              |               |  |
| 81100420 | CONDUIT ATTACHED TO STRUCTURE, 1 1/4" DIA., PVC COATED GALVANIZED STEEL   | FOOT  | 1750     |                   | 1750         |               |  |
|          |   |       |          |                   |              |               |  |
| 81100510 | CONDUIT ATTACHED TO STRUCTURE, 1 1/2" DIA., PVC COATED GALVANIZED STEEL   | FOOT  | 1500     |                   | 1500         |               |  |
| 81100605 | CONDUIT ATTACHED TO STOLICTURE 2" DIA DVC COATED CALVANIZED STEEL   | FOOT  | 700      |                   | 700          |               |  |
|          | CONDUIT ATTACHED TO STRUCTURE, 2" DIA., PVC COATED GALVANIZED STEEL   | 1001  | 700      |                   | 700          |               |  |
| 81100705 | CONDUIT ATTACHED TO STRUCTURE, 2 1/2" DIA., PVC COATED GALVANIZED STEEL   | FOOT  | 1000     |                   | 1000         |               |  |
|          |   |       |          |                   |              |               |  |
| 81100805 | CONDUIT ATTACHED TO STRUCTURE, 3" DIA., PVC COATED GALVANIZED STEEL   | FOOT  | 500      |                   | 500          |               |  |
|          |   |       |          |                   |              |               |  |
| 81101005 | CONDUIT ATTACHED TO STRUCTURE, 4" DIA., PVC COATED GALVANIZED STEEL   | FOOT  | 900      |                   | 900          |               |  |
| 89502300 | REMOVE ELECTRIC CABLE FROM CONDUIT  | FOOT  | 240000   |                   | 240000       |               |  |
|          |   |       |          |                   |              |               |  |
| X0322559 | BOLT REPLACEMENT  | EACH  | 26       | 26                |              |               |  |
|          |   |       |          |                   |              |               |  |
| X0325493 | MAINTENANCE OF BRIDGE ELECTRICAL SYSTEM   | L SUM | 1        |                   | 1            |               |  |
| X0325499 | REMOVAL OF THIN EPOXY POLYMER BRIDGE DECK OVERLAY   | SQ YD | 800      | 800               |              |               |  |
|          | REMOVAE OF THIRD EFOAT FOR WILLIAM DISEASE DEGROVEREAL  | 30 10 | 550      | 300               |              |               |  |
| X0325941 | ACCESS LADDER   | EACH  | 1        | 1                 |              |               |  |
| A0325941 | ACCESS EADDER   |       | <u>'</u> | '                 |              |               |  |

★ SPECIALTY ITEM

REV - MS

|                      | USER NAME = AECook         | DESIGNED - JAD  | REVISED - |
|----------------------|----------------------------|-----------------|-----------|
|                      |                            | DRAWN - AEC     | REVISED - |
| MODJESKI and MASTERS | PLOT SCALE = 0:2 ':" / in. | CHECKED - JAD   | REVISED - |
|                      | PLOT DATE = 8/15/2025      | DATE - 8/8/2025 | REVISED - |

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|----------|--|-------|----------|---------------|------------------------|---------------|
|          |  |       |          | 100%          | MCHD FUNDING<br>BRIDGE |               |
| CODE     | ITEM                                       | UNIT  | TOTAL    | BRIDGE        | ELECTRICAL             |               |
| NO.      | I I CIVI                                   | UNIT  | QUANTITY | 0013          | 0021                   | 0013          |
|          |  |       |          | S.N. 031-0001 |                        | S.N. 031-0001 |
| X0326232 | FENDER SYSTEM                              | L SUM | 1        | 1             |                        |               |
|          |  |       |          |               |                        |               |
| X0326557 | REFURBISHING OF OPERATING MACHINERY        | L SUM | 1        | 1             |                        |               |
|          |  |       |          |               |                        |               |
| X0326945 | CLOSED CIRCUIT TELEVISION CAMERA EQUIPMENT | EACH  | 1        | 1             |                        |               |
|          |  |       |          |               |                        |               |
| X0327739 | MISCELLANEOUS ELECTRICAL WORK              | LSUM  | 1        | 1             |                        |               |
|          |  |       |          |               |                        |               |
| X2010505 | CLEARING (SPECIAL)                         | L SUM | 1        | 1             |                        |               |
| V4400440 | TEMPORARY RAVENT REMOVAL                   | 20.45 | 45       | 45            |                        |               |
| X4400110 | TEMPORARY PAVEMENT REMOVAL                 | SQ YD | 15       | 15            |                        |               |
| X4402805 | ISLAND REMOVAL                             | SQ FT | 128      | 128           |                        |               |
| *******  |  |       |          |               |                        |               |
| X5051204 | STRUCTURAL STEEL REMOVAL                   | POUND | 2140     | 2140          |                        |               |
|          |  |       |          |               |                        |               |
| X5051206 | STRUCTURAL STEEL REPAIR                    | POUND | 24100    | 23710         |                        | 390           |
|          |  |       |          |               |                        |               |
| X5091772 | HANDRAIL REPAIRS                           | LSUM  | 1        | 1             |                        |               |
|          |  |       |          |               |                        |               |
| X5870015 | BRIDGE DECK CONCRETE SEALER                | SQ FT | 869      | 869           |                        |               |
| X7010216 | TRAFFIC CONTROL AND PROTECTION, (SPECIAL)  | L SUM | 1        | 1             |                        |               |
| 7/010210 | THAT TO GOTTHOLAND I NOTEOTION, (GITCOIAL) | LSOW  | '        | 1             |                        |               |
| X7016500 | TEMPORARY BRIDGE TRAFFIC SIGNALS (SPECIAL) | EACH  | 2        | 2             |                        |               |
|          |  |       |          |               |                        |               |
| X7200201 | WIDTH RESTRICTION SIGNING                  | LSUM  | 1        | 1             |                        |               |
|          |  |       |          |               |                        |               |

REV - MS

|                   | USER NAME = AECook         | DESIGNED - JAD  | REVISED - |
|-------------------|----------------------------|-----------------|-----------|
|                   |                            | DRAWN - AEC     | REVISED - |
| MODJESKI-™MASTERS | PLOT SCALE = 0:2 ':" / in. | CHECKED - JAD   | REVISED - |
| MODILING          | PLOT DATE = 8/15/2025      | DATE - 8/8/2025 | REVISED - |

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| 9876T66-bor |  |
| SOQ, etc/L  |  |
| Ŝ           |  |
| - Cover     |  |
| Sheets .    |  |
| Front       |  |
| Structural  |  |
| ADD/S       |  |
| II Rehab\0  |  |
| Phase       |  |
| Bridge      |  |
| Page        |  |
| 18-Joe      |  |
| jects\50    |  |
| Data\Pro    |  |
| m.Ic/IIL    |  |

|     |          |  | CONSTRUCTION CODE  100% STATE MCHD FUNDING |              |               |        |               |
|-----|----------|--|--|--------------|---------------|--------|---------------|
|     |          |  |  | MCHD FUNDING |               |        |               |
| ا ( | CODE     | ITEM   | TOTAL                                      | BRIDGE       | ELECTRICAL    | BRIDGE |               |
|     | NO.      | ITEM   | UNIT                                       | QUANTITY     | 0013          | 0021   | 0013          |
|     |          |  |  |              | S.N. 031-0001 |        | S.N. 031-0001 |
| X8  | 3430100  | REMOVE EXISTING CONDUIT ATTACHED TO STRUCTURE                          | FOOT                                       | 11000        |               | 11000  |               |
|     |          |  |  |              |               |        |               |
| X8  | 3710036  | FIBER OPTIC CABLE 12 FIBERS, SINGLE MODE                               | FOOT                                       | 3025         |               | 3025   |               |
|     |          |  |  |              |               |        |               |
|     |          |  |  |              |               |        |               |
|     |          |  |  |              |               |        |               |
| X8  | 3950510  | REMOVE FIBER OPTIC CABLE FROM CONDUIT                                  | FOOT                                       | 1400         |               | 1400   |               |
| ZO  | 0007101  | CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 1         | L SUM                                      | 1            | 1             |        |               |
|     |          |  |  |              |               |        |               |
| Z0  | 0012102  | CONCRETE BRIDGE DECK SCARIFICATION 3/8 INCH                            | SQ YD                                      | 1137         | 1137          |        |               |
|     |          |  |  |              |               |        |               |
| Z0  | 0012193  | BRIDGE DECK THIN POLYMER OVERLAY 3/8"                                  | SQ YD                                      | 1936         | 1936          |        |               |
| 70  | 204.0754 | OTPLICTUDAL PERAIR OF CONORETE (PERTIL FOLIAL TO OR LEGG THAN FINGUES) | 00.57                                      | 50           | 50            |        |               |
| 20  | 0012754  | STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)   | SQ FT                                      | 50           | 50            |        |               |
| Z0  | 0015500  | DEBRIS REMOVAL   | L SUM                                      | 1            | 1             |        |               |
|     |          |  |  |              |               |        |               |
| ZO  | 0016001  | DECK SLAB REPAIR (FULL DEPTH, TYPE I)                                  | SQ YD                                      | 15           | 15            |        |               |
|     |          |  |  |              |               |        |               |
| Z0  | 0016002  | DECK SLAB REPAIR (FULL DEPTH, TYPE II)                                 | SQ YD                                      | 5            | 5             |        |               |
| 70  | 0016200  | DECK SLAB REPAIR (PARTIAL)   | SQYD                                       | 5            | 5             |        |               |
|     |          | •  |  |              | -             |        |               |
| Z0  | 0036200  | PAINT CURB   | FOOT                                       | 35           | 35            |        |               |
|     |          |  |  |              |               |        |               |
| Z0  | 0041895  | POLYMER CONCRETE   | CU FT                                      | 1.1          | 1.1           |        |               |
|     |          |  |  |              |               |        |               |

\* SPECIALTY ITEM

REV - MS

| υį   |                        | USER NAME  | = AECOOK        |
|------|------------------------|------------|-----------------|
| ANIC |                        |            |                 |
| Ľ    | MODJESKI-™MASTERS      | PLOT SCALE | = 0:2 ':" / in. |
|      | 11100010111 1107012110 | PLOT DATE  | = 8/15/2025     |

|   | Z0050400 | REMOVE AND REPLACE ANCHOR BOLTS    | EACH  | 27   | 27   |  |
|---|----------|------------------------------------|-------|------|------|--|
|   |          |                                    |       |      |      |  |
|   | Z0062456 | TEMPORARY PAVEMENT                 | SQ YD | 15   | 15   |  |
|   |          |                                    |       |      |      |  |
|   | X8180066 | AERIAL CABLE REPLACEMENT           | FOOT  | 3750 | 3750 |  |
|   |          |                                    |       |      |      |  |
| Ø | Z0076604 | TRAINEES TRAINING PROGRAM GRADUATE | HOUR  | 1500 | 1500 |  |
|   |          |                                    |       |      |      |  |
|   |          |                                    |       |      |      |  |
|   |          |                                    |       |      |      |  |
|   |          |                                    |       |      |      |  |
|   |          |                                    |       |      |      |  |
|   |          |                                    |       |      |      |  |
|   |          |                                    |       |      |      |  |
|   |          |                                    |       |      |      |  |
|   |          |                                    |       |      |      |  |
|   |          |                                    |       |      |      |  |
|   |          |                                    |       |      |      |  |
|   |          |                                    |       |      |      |  |
|   |          |                                    |       |      |      |  |
|   |          |                                    |       |      |      |  |
|   |          |                                    |       |      |      |  |
|   |          |                                    |       |      |      |  |
|   |          |                                    |       |      |      |  |
|   |          |                                    |       |      |      |  |
|   |          |                                    |       |      |      |  |
|   |          |                                    |       |      |      |  |
|   |          |                                    |       |      |      |  |

ITEM

L. D. Sinest Consultant AME: \mm.lc\ll\_ Data\Projects\5018-Joe Page Bridge Phase II Reh.

REV - MS

MODJESKI ™ MASTERS

|    | USER NAME = AECook         | DESIGNED - | JAD      | REVISED - |
|----|----------------------------|------------|----------|-----------|
|    |                            | DRAWN -    | AEC      | REVISED - |
| RS | PLOT SCALE = 0:2 ':" / in. | CHECKED -  | JAD      | REVISED - |
|    | PLOT DATE = 8/15/2025      | DATE -     | 8/8/2025 | REVISED - |

Ø 0042

\* SPECIALTY ITEM

CODE

NO.

SCALE:

CONSTRUCTION CODE

ELECTRICAL

0021

MCHD FUNDING

BRIDGE

0013

S.N. 031-0001

100% STATE

BRIDGE

0013

S.N. 031-0001

TOTAL

QUANTITY

UNIT

|           | TEMPORARY CONCRETE BARRIER |          |          |           |         |         |          |          |         |         |  |  |  |
|-----------|----------------------------|----------|----------|-----------|---------|---------|----------|----------|---------|---------|--|--|--|
|           |                            |          |          |           | -       | REL     | IMP ATTN | IMP ATTN | BARRIER |         |  |  |  |
|           | 1.4                        | OCATION  |          |           | TEMP    | TEMP    | TEMP NRD | REL NRD  | WALL    |         |  |  |  |
| LOCATION  |                            |          |          |           | CONC    | CONC    | NAR      | NAR      | REFLEC⊺ | NOTES   |  |  |  |
|           |                            |          |          |           | BARRIER | BARRIER | TL2      | TL2      | TYC     |         |  |  |  |
| ROADWAY   | STATION                    | OFFSET   | STATION  | OFFSET    | (FOOT)  | (FOOT)  | (EACH)   | (EACH)   | (EACH)  |         |  |  |  |
| IL 16/100 | 2+49.36                    | 7.9' RT  | 11+73.78 | 1.4' LT   | 925     |         | 2        |          | 37      | STAGE 1 |  |  |  |
| IL 16/100 | 15+34.69                   | 1.4' LT  | 17+53.41 | 27.1' RT  | 225     |         | 2        |          | 9       | STAGE 1 |  |  |  |
| IL 16/100 | 17+42.89                   | 20.4' RT | 17+53.41 | 27.1' RT  |         |         |          |          |         | STAGE 1 |  |  |  |
| IL 16/100 | 2+49.36                    | 8.5' LT  | 11+73.78 | 0.8' RT   |         | 925     |          | 2        | 37      | STAGE 2 |  |  |  |
| IL 16/100 | 15+34.69                   | 0.8' RT  | 17+45.34 | 14.3' LT  |         | 212.5   |          | 2        | 9       | STAGE 2 |  |  |  |
| IL 16/100 | -3+99.66                   | 1.7' LT  | 6+49.63  | 7.9' LT   |         | 1050    |          | 2        | 42      | STAGE 3 |  |  |  |
| IL 16/100 | -3+99.67                   | 2.3' RT  | 6+37.12  | 7.8' RT   |         | 1037.5  |          | 2        | 42      | STAGE 4 |  |  |  |
|           |                            |          |          |           |         |         |          |          |         |         |  |  |  |
|           | SUBTOTALS                  |          |          |           |         | 3225.0  | 4        | 8        | 176     |         |  |  |  |
|           |                            |          |          |           |         |         |          |          |         |         |  |  |  |
|           |                            |          | PAY ITI  | EM TOTALS | 1150    | 3225    | 4        | 8        | 176     |         |  |  |  |

|           | ISLAND SCHEDULE |          |          |             |         |         |        |            |          |          |              |  |
|-----------|-----------------|----------|----------|-------------|---------|---------|--------|------------|----------|----------|--------------|--|
|           |                 |          |          |             | CONC    |         |        |            |          | TEMP     |              |  |
|           |                 | LOCATION |          |             | MED     | ISLAND  | PAINT  | CURB       | TEMP     | PAVEMENT | NOTES        |  |
|           |                 |          |          |             | TSM6.12 | REMOVAL | CURB   | REFLECTORS | PAVEMENT | REMOVAL  | NOTES        |  |
| ROADWAY   | STATION         | OFFSET   | STATION  | OFFSET      | (SQ FT) | (SQ FT) | (FOOT) | (EACH)     | (SQ YD)  | (SQ YD)  |              |  |
| IL 16/100 | 17+74.49        | 17.4' RT | 17+88.68 | 20.4' RT    | 127.2   | 127.2   | 35.0   | 8          | 14.1     | 14.1     |              |  |
|           |                 |          |          |             |         |         |        |            |          |          |              |  |
|           | SUBTOTALS       |          |          |             |         | 127.2   | 35.0   | 8          | 14.1     | 14.1     | <del>-</del> |  |
|           |                 |          |          |             |         |         |        |            |          |          |              |  |
|           |                 |          | PAY      | ITEM TOTALS | 128     | 128     | 35     | 8          | 15       | 15       |              |  |

| BRIDGE DECK OVERLAY SCHEDULE |            |        |            |           |         |             |          |          |          |         |       |  |  |
|------------------------------|------------|--------|------------|-----------|---------|-------------|----------|----------|----------|---------|-------|--|--|
|                              |            |        | _          |           | P BIT   | P HMA       | HMA      | REM TH   | CONC BR  | BR DK   |       |  |  |
| LOCATION                     |            |        |            |           | MATLS   | SC IL-9.5FG | SURF REM | EPXYB DK | DECK     | TH POLY | NOTES |  |  |
|                              |            |        |            |           |         | D N70       | 1 1/4    | OLAY     | SCAR 3/8 | OVL 3/8 | NOTES |  |  |
| ROADWAY                      | LOCATION   | OFFSET | LOCATION   | OFFSET    | (POUND) | (TON)       | (SQ YD)  | (SQ YD)  | (SQ YD)  | (SQ YD) |       |  |  |
| IL 16/100                    | W ABUTMENT | CL     | PIER 1     | CL        |         |             |          |          | 308.5    | 308.5   |       |  |  |
| IL 16/100                    | PIER 1     | CL     | PIER 2     | CL        | 187.5   | 29.2        | 416.8    |          | _        |         |       |  |  |
| IL 16/100                    | PIER 2     | CL     | PIER 3     | CL        |         |             |          | 799.0    | _        | 799.0   |       |  |  |
| IL 16/100                    | PIER 3     | CL     | PIER 9     | CL        | 1463.7  | 227.7       | 3252.8   |          |          |         |       |  |  |
| IL 16/100                    | PIER 9     | CL     | E ABUTMENT | CL        |         |             |          |          | 828.1    | 828.1   |       |  |  |
|                              |            |        |            |           |         |             |          |          |          |         |       |  |  |
| SUBTOTALS                    |            |        |            |           | 1651.3  | 256.9       | 3669.5   | 799.0    | 1136.6   | 1935.6  |       |  |  |
|                              |            |        |            |           |         |             |          |          |          |         |       |  |  |
|                              |            |        | PAY ITE    | EM TOTALS | 1652    | 257         | 3670     | 800      | 1137     | 1936    |       |  |  |

| NAME. C. | EFK•Moen                 |    |
|----------|--------------------------|----|
| 빔        | Civil Engineering Design |    |
| 디        | Civil Engineering Design | ٦. |

| USER NAME = ZWaters   | DESIGNED - JRD | REVISED - |
|-----------------------|----------------|-----------|
|                       | DRAWN - ZJW    | REVISED - |
|                       | CHECKED - SLD  | REVISED - |
| PLOT DATE = 8/15/2025 | DATE - 7/18/25 | REVISED - |

| ILLINOIS ROUTE 16 / 100 JOE PAGE BRIDGE REHABILITATION SCHEDULE OF QUANTITIES |         |        |         |   |                    |                           | SECTION          | COUNTY | TOTAL<br>SHEETS | SHEET<br>NO. |
|---|---------|--------|---------|---|--------------------|---------------------------|------------------|--------|-----------------|--------------|
|   |         |        |         |   |                    |                           | 266BRR, (4, 5) I | GREENE | 117             | 10           |
|   |         | IILDOL | - 01 40 | 414111111111111111111111111111111111111 | CONTRACT NO. 76T66 |                           |                  |        |                 |              |
| ≣:  | SHEET 1 | OF 2   | SHEETS  | STA.                                    | TO STA.            | ILLINOIS FED. AID PROJECT |                  |        |                 |              |

| TEMPORARY SIGNAL SCHEDULE |           |             |                            |                          |             |  |  |  |
|---------------------------|-----------|-------------|----------------------------|--------------------------|-------------|--|--|--|
| LOCATION                  |           |             | TEMP<br>BR TRAF<br>SIG SPL | TEMP<br>RUMBLE<br>STRIPS | NOTES       |  |  |  |
| ROADWAY                   | STATION   | OFFSET      | (EACH)                     | (EACH)                   |             |  |  |  |
| IL 16/100                 |           |             | 1                          |                          | STAGE 1 & 2 |  |  |  |
| IL 16/100                 |           |             | 1                          |                          | STAGE 3 & 4 |  |  |  |
| IL 16/100                 | -3+45.75  |             |                            | 1                        | STAGE 1 & 2 |  |  |  |
| IL 16/100                 | -5+45.75  |             |                            | 1                        | STAGE 1 & 2 |  |  |  |
| IL 16/100                 | 936+86.06 |             |                            | 1                        | STAGE 1 & 2 |  |  |  |
| IL 100                    | 18+48.00  |             |                            | 1                        | STAGE 1 & 2 |  |  |  |
| IL 100                    | 20+48.00  |             |                            | 1                        | STAGE 1 & 2 |  |  |  |
| IL 100                    | 22+48.00  |             |                            | 1                        | STAGE 1 & 2 |  |  |  |
| IL 100                    | 800' FROM | STOPBAR     |                            | 1                        | STAGE 1 & 2 |  |  |  |
| IL 100                    | 600' FROM | STOPBAR     |                            | 1                        | STAGE 1 & 2 |  |  |  |
| IL 100                    | 9+24.00   |             |                            | 1                        | STAGE 1 & 2 |  |  |  |
| IL 16/100                 | 12+52.15  |             |                            | 1                        | STAGE 3 & 4 |  |  |  |
| IL 16/100                 | 14+52.15  |             |                            | 1                        | STAGE 3 & 4 |  |  |  |
| IL 16/100                 | 16+52.15  |             |                            | 1                        | STAGE 3 & 4 |  |  |  |
| IL 16/100                 | 930+07.21 |             |                            | 1                        | STAGE 3 & 4 |  |  |  |
| IL 16/100                 | 932+07.21 |             |                            | 1                        | STAGE 3 & 4 |  |  |  |
| IL 16/100                 | 934+07.21 |             |                            | 1                        | STAGE 3 & 4 |  |  |  |
|                           |           |             |                            |                          |             |  |  |  |
|                           |           | SUBTOTALS   | 2                          | 15                       |             |  |  |  |
|                           |           |             |                            |                          |             |  |  |  |
|                           | PAY       | ITEM TOTALS | 2                          | 15                       |             |  |  |  |

|                    | PAVEMENT MARKING SCHEDULE |          |          |           |           |           |            |            |          |                          |
|--------------------|---------------------------|----------|----------|-----------|-----------|-----------|------------|------------|----------|--------------------------|
|                    |                           |          |          |           | PAINT     | PAINT     | PAINT      | THPL       | PMK REM  |                          |
|                    | LO                        | CATION   |          |           | PMK       | PMK       | PMK        | PMK        | WATER    | NOTEO                    |
|                    |                           |          |          |           | LINE - 6" | LINE - 8" | LINE - 12" | LINE - 24" | BLASTING | NOTES                    |
| ROADWAY            | STATION                   | OFFSET   | STATION  | OFFSET    | (FOOT)    | (FOOT)    | (FOOT)     | (FOOT)     | (SQ FT)  |                          |
| IL 16/100          | 17+73.08                  | 4.1' RT  | -3+99.86 | CL        | 4346.0    |           |            |            |          | DOUBLE YELLOW            |
| IL 16/100          | 17+72.00                  | 72.7' RT | -3+99.86 | 11' RT    | 2199.0    |           |            |            |          | EDGELINE                 |
| IL 16/100          | 18+02.60                  | 66.0' LT | -3+99.86 | 11' LT    | 2219.8    |           |            |            |          | EDGELINE                 |
| IL 16/100 - IL 100 | 17+55.16                  | 15.3' RT | 14+06.28 | 12.5' RT  |           | 34.8      | 69.9       |            |          | ISLAND EDGELINE/CHEVRONS |
| IL 16/100 - IL 100 | 17+55.16                  | 15.3' RT | 14+33.71 | 12.7' RT  |           | 40.9      |            |            |          | ISLAND EDGELINE          |
| IL 100             | 14+06.28                  | 12.5' RT | 14+33.71 | 12.7' RT  | _         | 27.7      |            |            |          | ISLAND EDGELINE          |
| IL 16/100          | 17+73.08                  | 4.1' RT  | 17+72.51 | 16.1' RT  |           |           |            | 12         |          | STOP BAR                 |
| IL 100             | 14+30.08                  | 18.3' RT | 14+47.29 | 29.9' RT  |           |           |            | 21         |          | STOP BAR                 |
| IL 16/100          | 17+72.50                  | 16.2' RT | 17+73.53 | 4.1' RT   |           |           |            |            | 24.2     | EXISTING STOP BAR        |
| IL 16/100          | 17+55.15                  | 15.2' RT | 17+84.15 | 44.1' RT  |           |           |            |            | 61.0     | EXISTING STOP BAR        |
|                    |                           |          |          |           |           |           |            |            |          |                          |
|                    |                           |          |          | SUBTOTALS | 8764.8    | 103.4     | 69.9       | 33         | 85.2     |                          |
|                    |                           |          |          |           |           | ·         |            |            |          |                          |
|                    | PAY ITEM TOTALS           |          |          | EM TOTALS | 8765      | 104       | 70         | 33         | 86       |                          |

| 1 | EFK•Moen                 |
|---|--------------------------|
| 1 | Civil Engineering Design |

| USER NAME = ZWaters   | DESIGNED - JRD | REVISED - |
|-----------------------|----------------|-----------|
|                       | DRAWN - ZJW    | REVISED - |
|                       | CHECKED - SLD  | REVISED - |
| PLOT DATE = 8/15/2025 | DATE - 7/18/25 | REVISED - |

| ILLINOIS ROUTE 16 / 100 JOE PAGE BRIDGE REHABILITATION<br>SCHEDULE OF QUANTITIES |         |      |        |      |         | F.A.P<br>RTE.             | SECTION          | COUNTY  | TOTAL<br>SHEETS | SHEET<br>NO. |
|--|---------|------|--------|------|---------|---------------------------|------------------|---------|-----------------|--------------|
|  |         |      |        |      |         | 304                       | 266BRR, (4, 5) I | GREENE  | 117             | 11           |
|  |         |      |        |      |         |                           |                  | CONTRAC | T NO. 76        | Г66          |
| ≣:   | SHEET 2 | OF 2 | SHEETS | STA. | TO STA. | ILLINOIS FED. AID PROJECT |                  |         |                 |              |

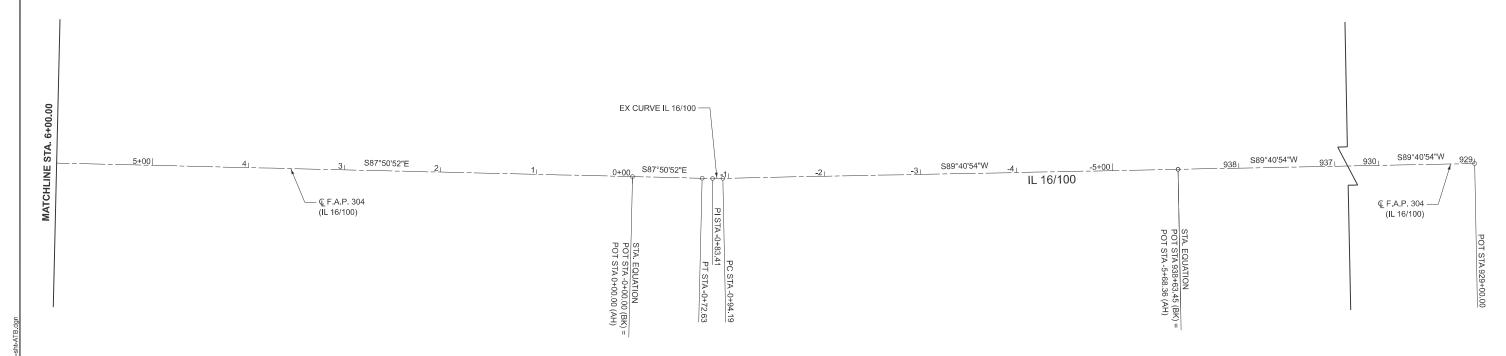
EX CURVE IL 16/100 PI STA = -0+83.41  $\Delta = 02^{\circ}28'14'' (RT)$ D = 11°27'33" R = 500.00' T = 10.78'

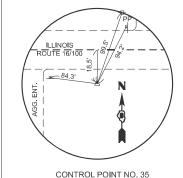
e = \_\_\_ PC STA = -0+94.19 PT STA = -0+72.63

L = 21.56' E = 0.12'

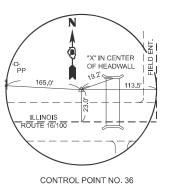
| CONTROL POINTS         |            |            |           |             |          |                      |  |  |  |
|------------------------|------------|------------|-----------|-------------|----------|----------------------|--|--|--|
| POINT NUMBER           | NORTHING   | EASTING    | OFFSET    | DESCRIPTION |          |                      |  |  |  |
| S PARK ST/IL ROUTE 100 |            |            |           |             |          |                      |  |  |  |
| 51                     | 94765.4290 | 7735.2350  | 439.630   | 12+34.80    | 24.6' RT | ROD WITH BRONZE DISK |  |  |  |
| 68                     | 94271.0480 | 7469.8950  | 438.853   | 06+72.80    | 23.8' LT | IRON PIN WITH CAP    |  |  |  |
| 69                     | 95424.3970 | 7840.7930  | 438.844   | 18+98.97    | 18.4' LT | IRON PIN WITH CAP    |  |  |  |
|                        |            | -          | IL 16/100 |             |          |                      |  |  |  |
| 35                     | 94840.5400 | 11868.6950 | 421.298   | 921+29.04   | 18.7' LT | IRON PIN WITH CAP    |  |  |  |
| 36                     | 94878.3430 | 11165.4190 | 421.486   | 928+32.10   | 23.0' RT | IRON PIN WITH CAP    |  |  |  |
| MA 50                  | 94822.6180 | 10201.0080 | 424.180   | 937+96.80   | 27.4' LT | ROD WITH BRONZE DISK |  |  |  |



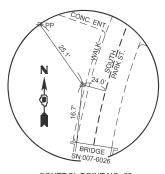




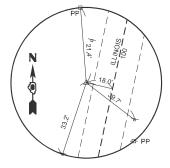
CONTROL POINT NO. 35 IRON PIN W/CAP N: 94840.540 E: 11868.695 EL: 421.298 STATION 921+29.04 OFFSET 18.70LT



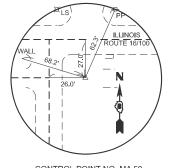
IRON PIN W/CAP N: 94878.343 E: 11165.419 EL: 421.486 STATION 928+32.10 OFFSET 23.01RT



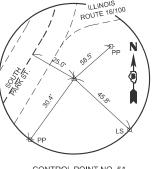
CONTROL POINT NO. 68 IRON PIN W/CAP N: 94271.048 E:7469.895 EL: 438.853 STATION 6+72.80 OFFSET 23.79LT



CONTROL POINT NO. 69 IRON PIN W/CAP N: 95424.397 E: 7840.793 EL: 438.844 STATION 18+98.97 OFFSET 18.40LT



CONTROL POINT NO. MA 50 ROD W/BRONZE DISK N: 94822.618 E:10201.008 EL: 424.180 STATION 937+96.80 OFFSET 27.36LT



CONTROL POINT NO. 51 ROD W/BRONZE DISK N: 94765.429 E: 7735.235 EL: 439.630 STATION 12+34.80 OFFSET 24.60RT

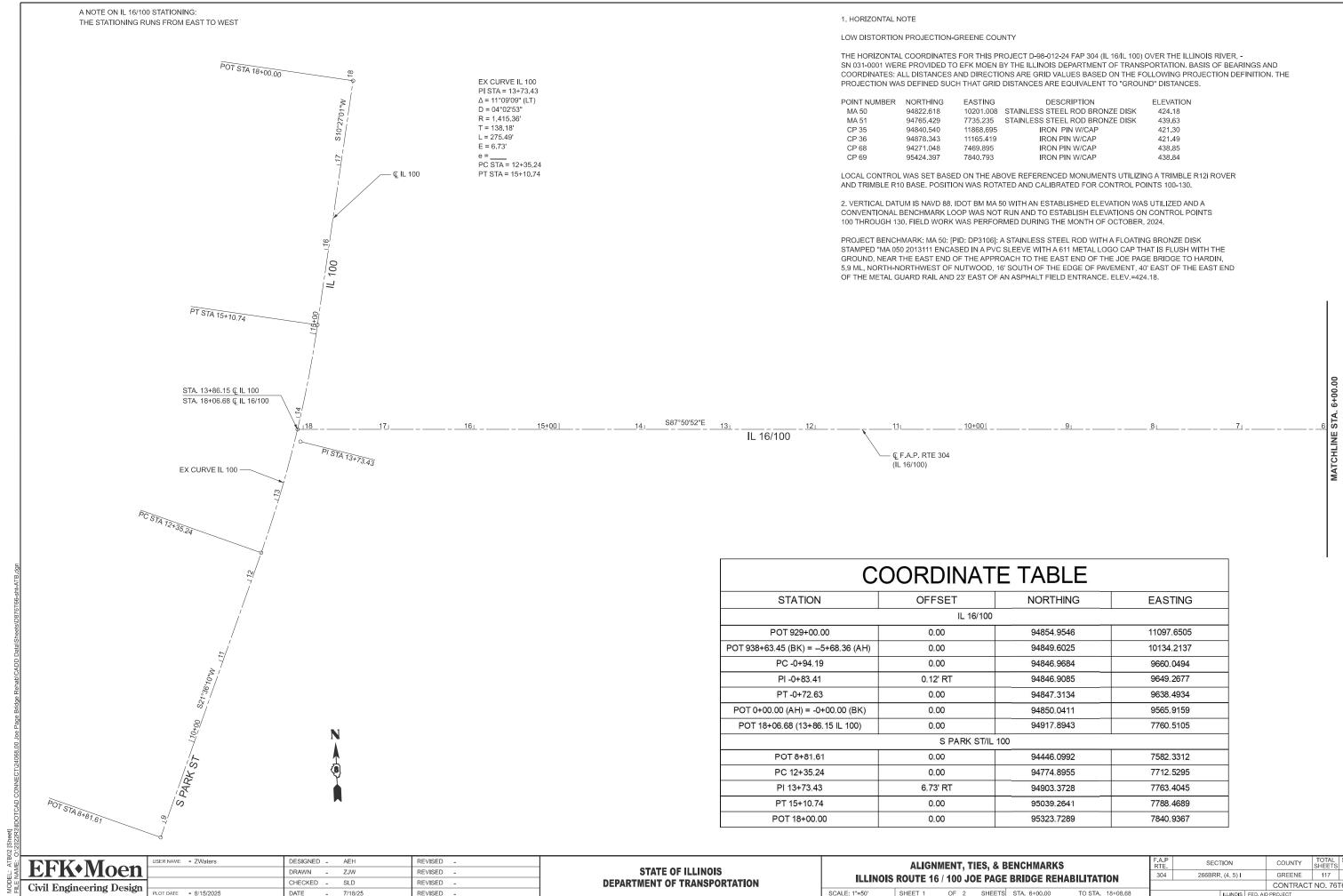
| NAME: | EFK•Moen                 |
|-------|--------------------------|
|       | Civil Engineering Design |

| USER NAME = ZWaters   | DESIGNED - | AEH     | REVISED - |
|-----------------------|------------|---------|-----------|
|                       | DRAWN -    | ZJW     | REVISED - |
|                       | CHECKED -  | SLD     | REVISED - |
| PLOT DATE = 8/15/2025 | DATE -     | 7/18/25 | REVISED - |

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

| ALIGNMENT, TIES, & BENCHMARKS ILLINOIS ROUTE 16 / 100 JOE PAGE BRIDGE REHABILITATION |         |    |   |        |           |        |         | ION     |
|--|---------|----|---|--------|-----------|--------|---------|---------|
| SCALE: 1"=50'  | SHEET 2 | OF | 2 | SHEETS | STA. 929+ | +00.00 | TO STA. | 6+00.00 |

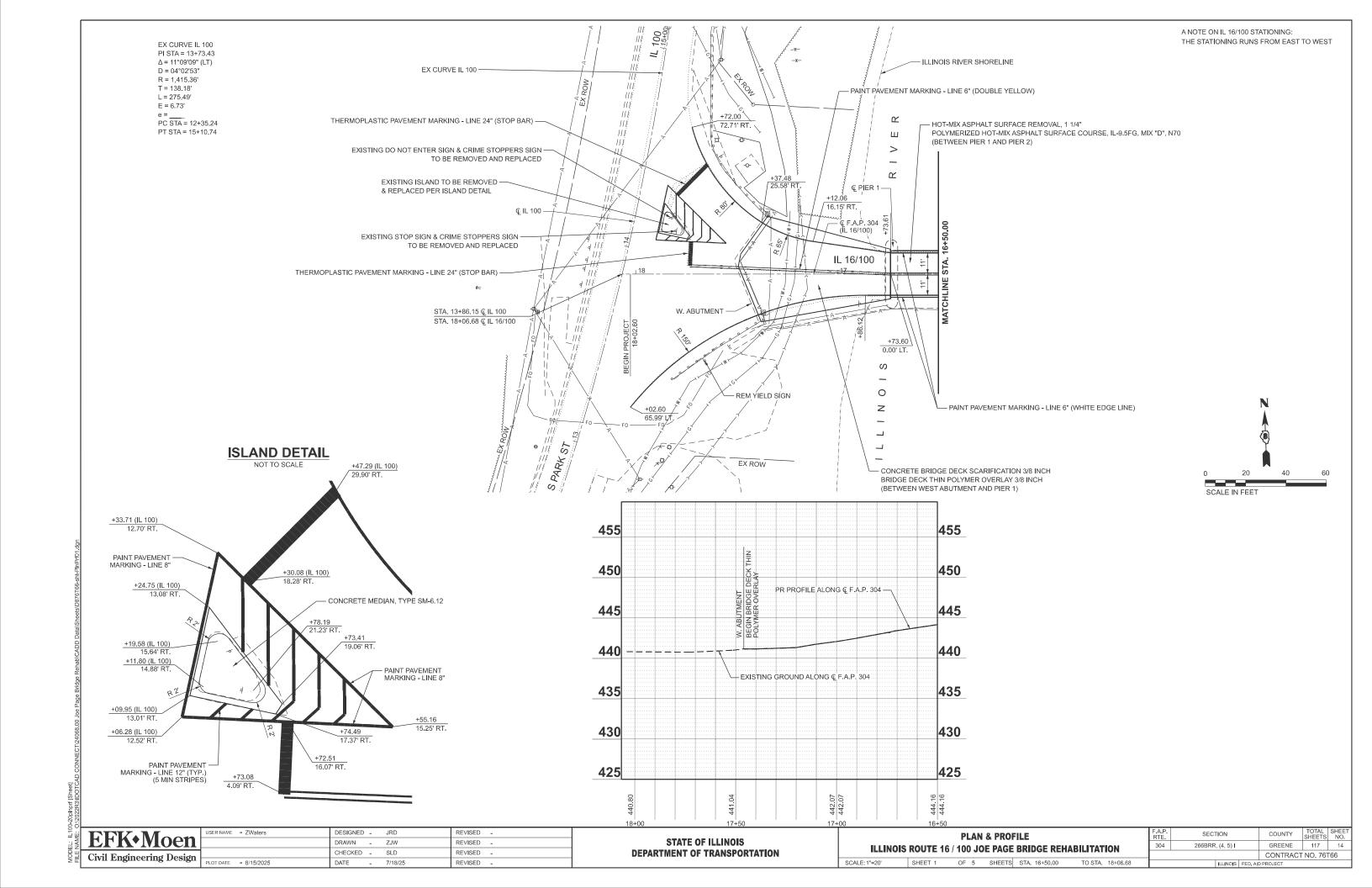
| F.A.P<br>RTE. | SEC.             | TION     |          | COUNTY    | TOTAL<br>SHEETS | SHEE NO. |
|---------------|------------------|----------|----------|-----------|-----------------|----------|
| 304           | 266BRR, (4, 5) I |          | GREENE   | 117       | 12              |          |
|               |                  |          |          | CONTRACT  | NO. 76          | Г66      |
|               |                  | ILLINOIS | FED, AII | D PROJECT |                 |          |

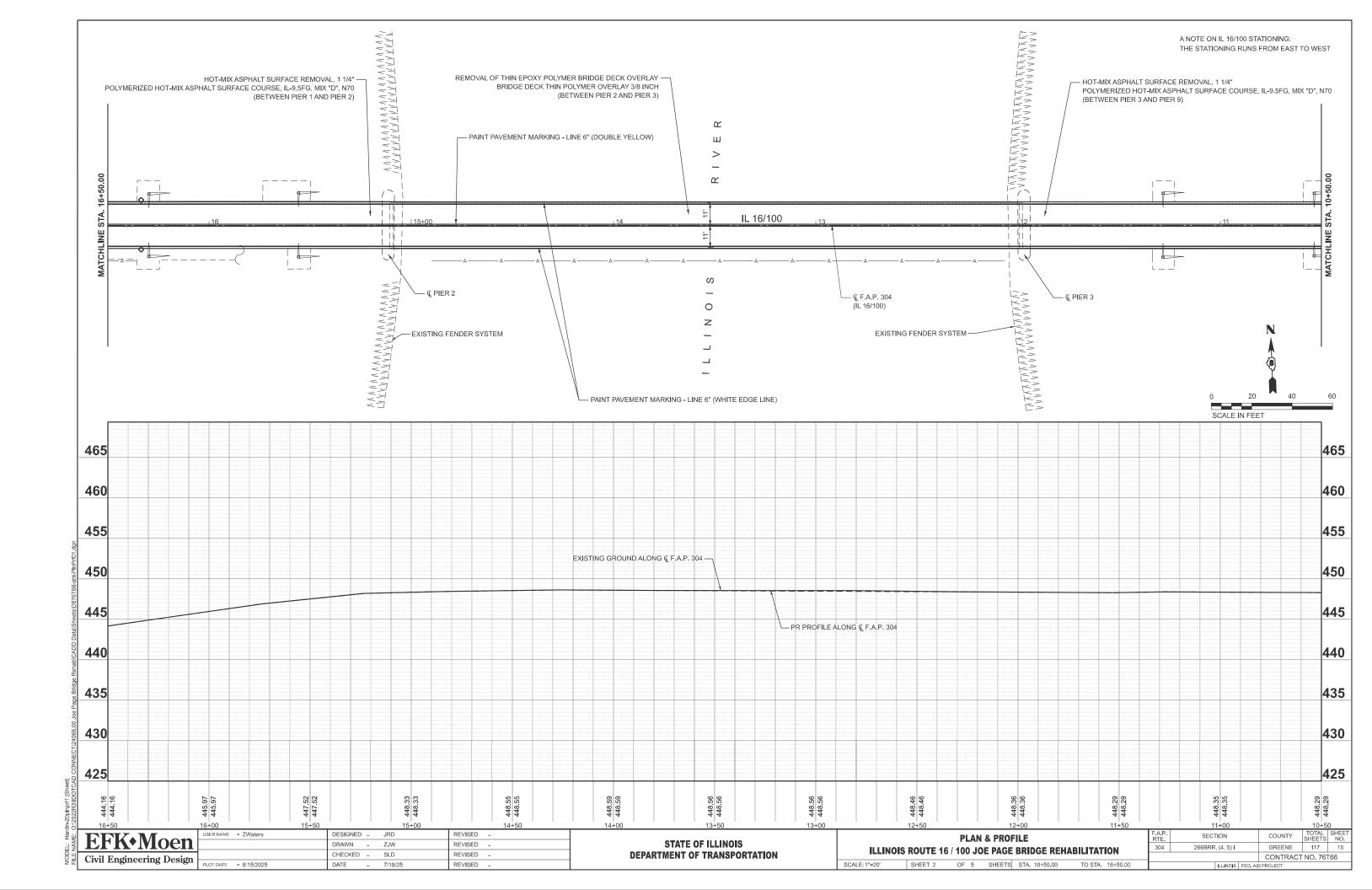


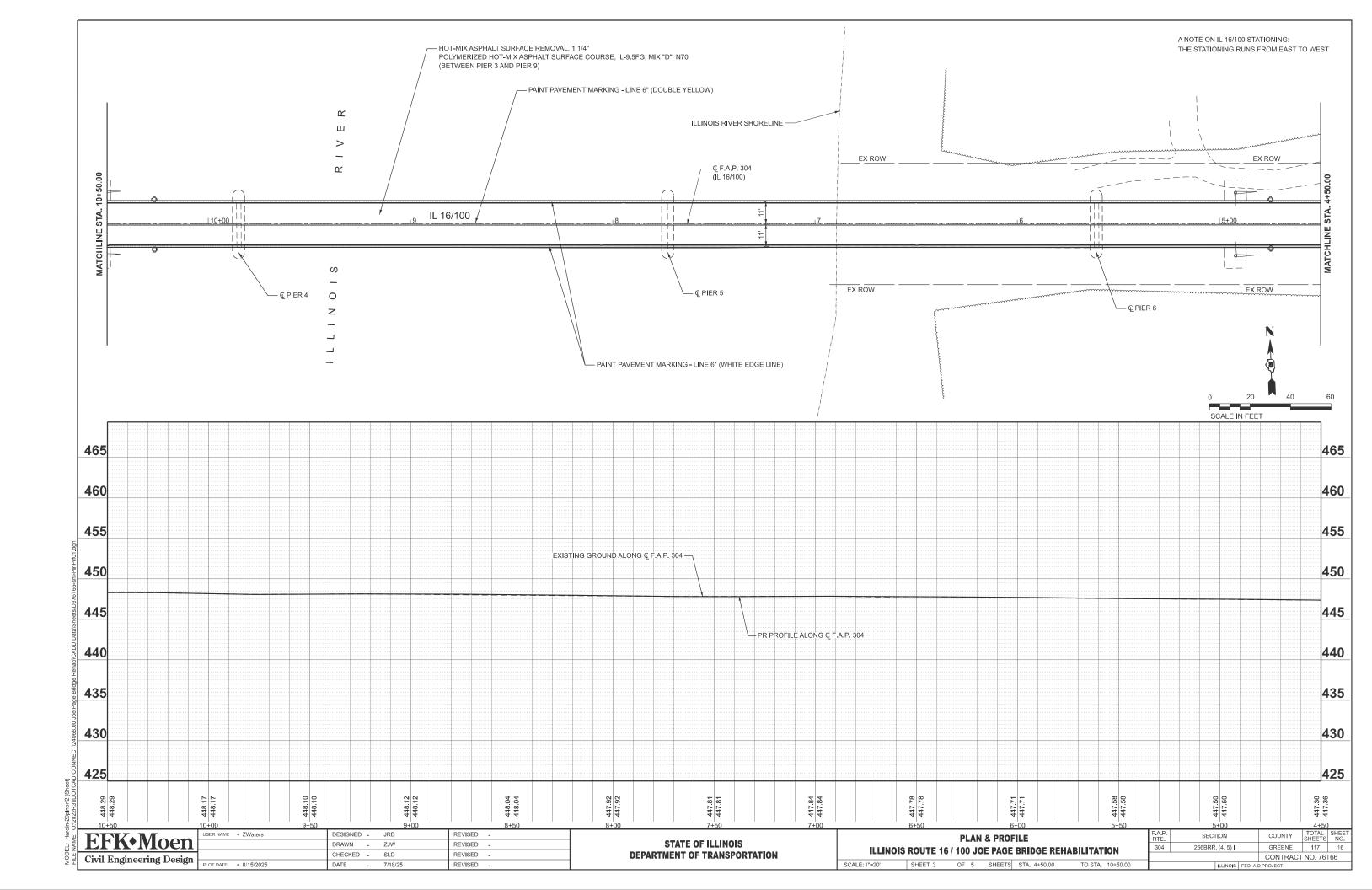
REVISED

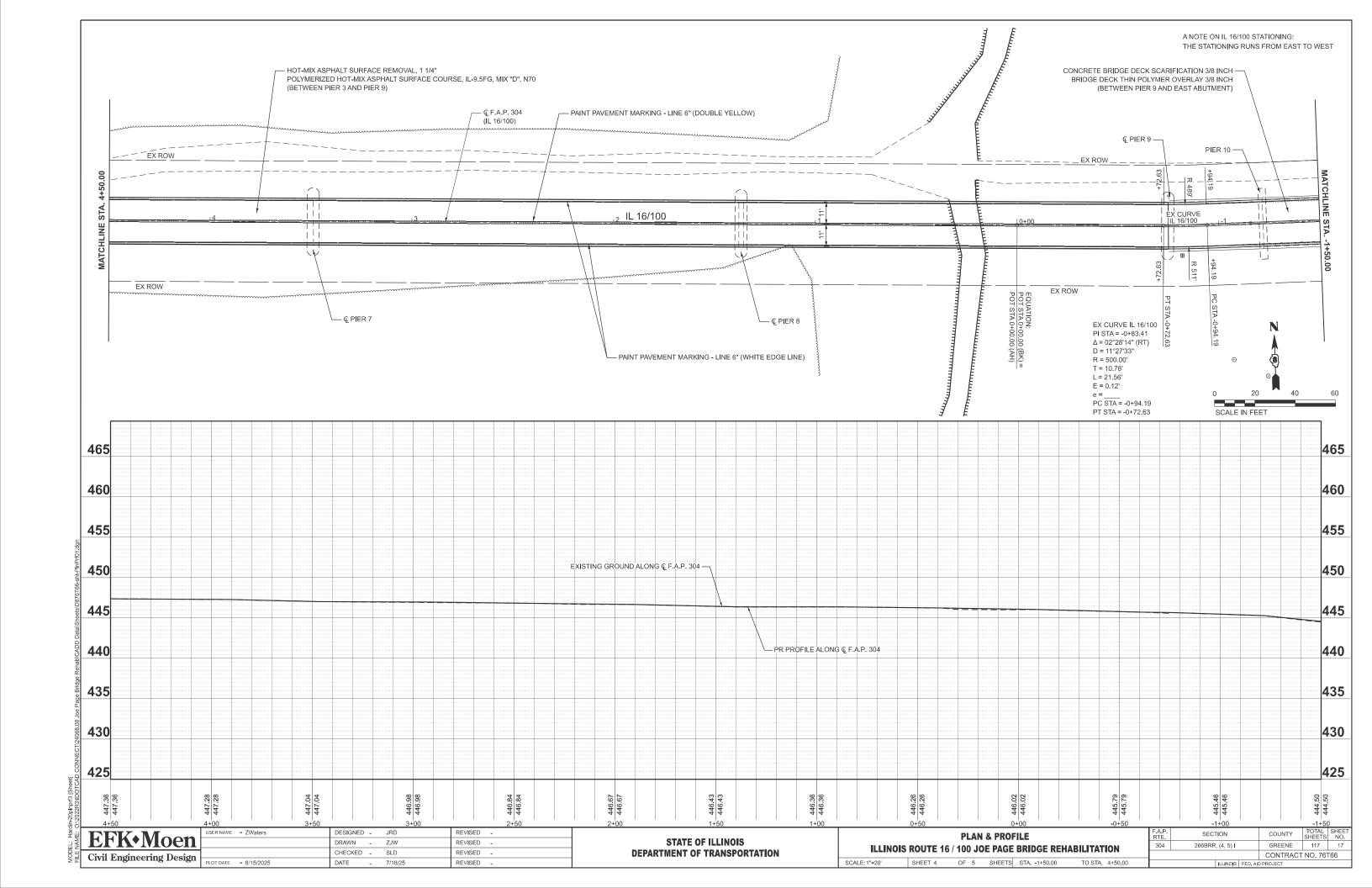
SHEET 1 OF 2 SHEETS STA. 6+00.00

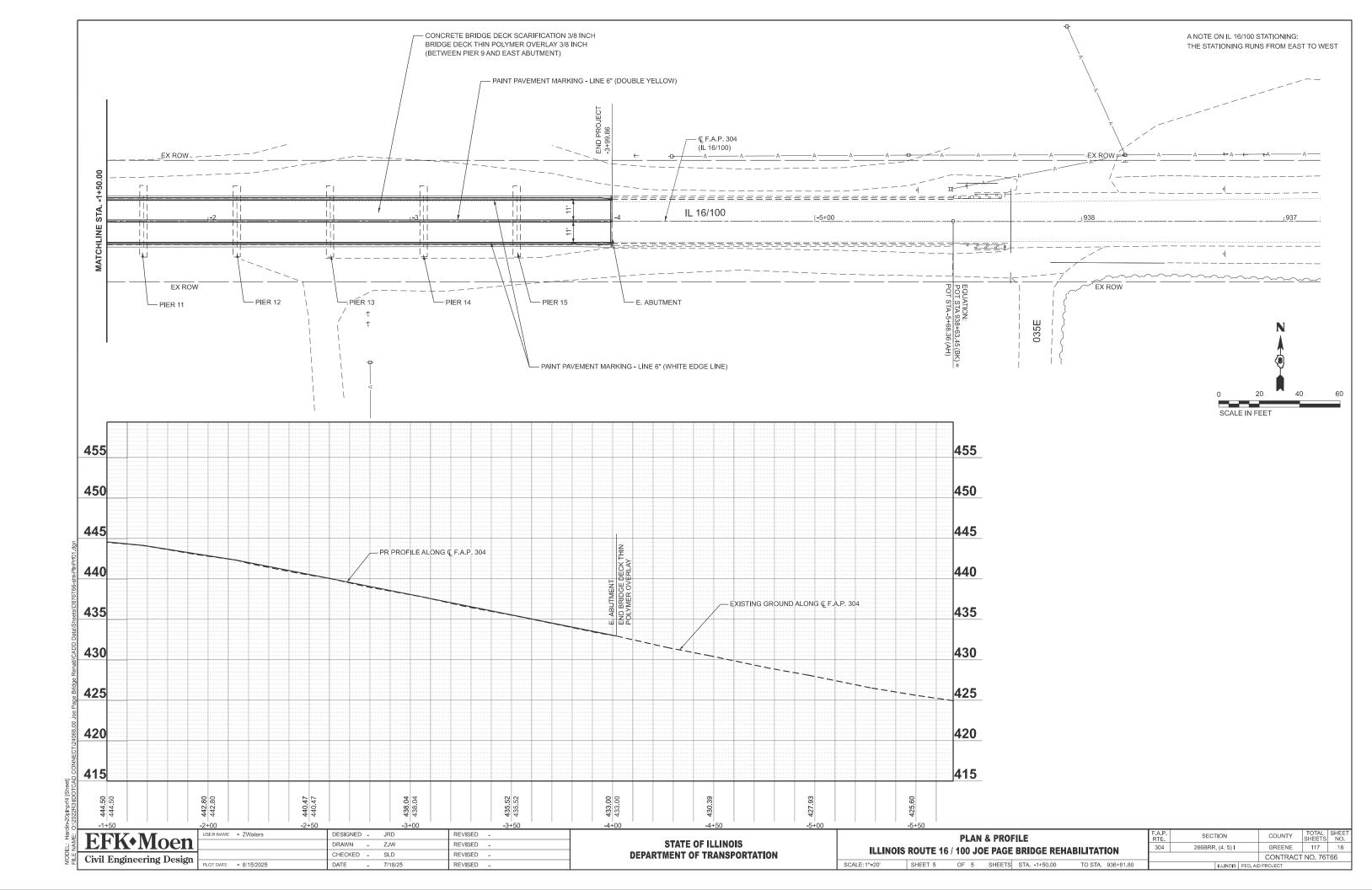
GREENE 117 13 CONTRACT NO. 76T66











# TRAFFIC CONTROL AND PROTECTION GENERAL NOTES

- ALL REQUIRED TRAFFIC CONTROL SHALL BE CONDUCTED IN ACCORDANCE WITH ALL CURRENT APPLICABLE IDOT POLICIES AND STANDARDS AND THE LATEST EDITION THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) IN EFFECT ON THE DAY OF THE INVITATION FOR BIDS
- ALL CONSTRUCTION SIGNS SHALL BE FLORESCENT ORANGE.
- ALL TRAFFIC CONTROL SHALL BE IN PLACE PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR IS REQUIRED TO NOTIFY THE RESIDENT ENGINEER 21 DAYS IN ADVANCE OF THE PLACEMENT OF ANY TEMPORARY TRAFFIC CONTROL DEVICES.
- 21 DAYS PRIOR TO ANY LANE CLOSURES THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER.
- THREE CHANGEABLE MESSAGE SIGNS (CMS) SHALL BE REQUIRED FOR THIS PROJECT. THEY SHALL BE PLACED TWO WEEKS PRIOR TO ANY LANE CLOSURE, SHALL REMAIN UP FOR THE DURATION OF THE REPAIRS TO THE BRIDGE DECK AND ABOVE: AND SHALL BE PLACED AS SHOWN ON THE PLANS, HIGHWAY STANDARDS, OR AT THE DIRECTION OF THE ENGINEER. ALL MESSAGES SHOWN ON THE CMS SHALL BE APPROVED BY THE RESIDENT ENGINEER.
- FLAGGERS SHALL BE REQUIRED AT ALL TIMES WHEN WORKERS OR EQUIPMENT ARE ENCROACHING INTO A LANE OF TRAFFIC.
- ALL CONSTRUCTION SIGNING, TEMPORARY PAVEMENT MARKINGS, TEMPORARY BRIDGE TRAFFIC SIGNALS, DETECTOR LOOPS, AND TEMPORARY RUMBLE STRIPS SHALL BE ACCORDING WITH 701321 AND THE STAGING PLANS, WITH THE EXCEPTION OF THE TEMPORARY TRAFFIC SIGNALS MOUNTED TO THE STRUCTURE. WHEN NECESSARY, TEMPORARY TRAFFIC SIGNALS AND VIDEO DETECTOR CAMERAS CAN BE MOUNTED ON THE BRIDGE AS APPROVED BY THE ENGINEER
- A WHITE 6" PAVEMENT MARKING LINE SHALL BE APPLIED TO THE TEMPORARY CONCRETE BARRIER SECTIONS THAT ARE IMMEDIATELY ADJACENT TO TRAFFIC. THE COST OF THE PAVEMENT MARKING LINES ON THE TEMPORARY CONCRETE BARRIER SECTIONS SHALL BE INCLUDED IN THE COST FOR TRAFFIC CONTROL AND PROTECTION (SPECIAL)
- THE TRAFFIC CONTROL AND PROTECTION PLANS SHALL BE USED FOR THE LANE CLOSURES ALONG THE BRIDGE FOR REPAIRS ON AND ABOVE THE BRIDGE DECK.
- THE EXISTING LIFT SPAN WARNING FLASHERS AND SIGNALS SHALL REMAIN IN OPERATION DURING ALL STAGES OF CONSTRUCTION. THE COORDINATOR SHALL BE INSTALLED TO COORDINATE WITH THE EXISTING LIFT SPAN WARNING SIGNALS. THE COORDINATOR SHALL BE PROGRAMMED TO CLEAR ALL VEHICLES QUEUED ON THE LIFT SPAN PRIOR TO BRIDGE LIFTING OPERATION
- THE METHOD OF MOUNTING AND ROUTING SIGNAL FEEDER CABLES ON THE STRUCTURE SHALL BE APPROVED BY THE ENGINEER.
- ANY PERMANENT PAVEMENT MARKING THAT CONFLICTS WITH THE PROPOSED TRAFFIC CONTROL STAGINGS SHALL BE COVERED USING BLACKOUT TAPE.
- TEMPORARY CONCRETE BARRIER LOCATED ON THE EXISTING BRIDGE DECK SHALL NOT BE ANCHORED OR PINNED TO THE EXISTING BRIDGE DECK.
- THE TEMPORARY IMPACT ATTENUATORS SHALL BE A WATER FILLED SYSTEM THAT CONNECTS TO THE TEMPORARY CONCRETE BARRIER AND NOT THE BRIDGE DECK.
- TEMPORARY CONCRETE BARRIER SECTIONS SHALL BE CONNECTED TO EACH OTHER IN ACCORDANCE WITH HIGHWAY STANDARD 704001
- DETECTOR LOOPS WILL NOT BE ALLOWED ON THE BRIDGE DECK OR BRIDGE APPROACH PAVEMENT.
- PRIOR TO STAGE 1, TEMPORARY STOP SIGNS SHALL BE PLACED TO MAINTAIN THE OPERATION OF THE S PARK ST/IL ROUTE 100 INTERSECTION WHEN TRAFFIC SIGNALS ARE NOT IN PLACE. THE COST OF THE TEMPORARY STOP SIGNS ARE INCLUDED IN THE COST FOR TRAFFIC CONTROL AND PROTECTION (SPECIAL).

# SEQUENCE OF CONSTRUCTION

TRAFFIC CONTROL AND PROTECTION PRESTAGE

- INSTALL CONSTRUCTION SIGNING AS SHOWN ON THE APPROPRIATE HIGHWAY STANDARDS.
- REMOVE THE ISLAND ALONG IL 16/100 WEST OF THE BRIDGE AND INSTALL TEMPORARY PAVEMENT. INSTALL THE WIDE LOAD DETOUR SIGNAGE AS SHOWN ON THE WIDE LOAD DETOUR SIGNAGE DETAIL.
- INSTALL THE TEMPORARY SIGNALS FOR STAGE 1 AND STAGE 2 CONSTRUCTION.

#### TRAFFIC CONTROL AND PROTECTION STAGE 1

- INSTALL CONSTRUCTION SIGNING AND TRAFFIC CONTROL DEVICES AS SHOWN ON THE STAGE 1 PLANS, DETAILS, AND APPROPRIATE HIGHWAY STANDARDS.
- CONSTRUCT REPAIRS ALONG THE NORTH SIDE OF THE JOE PAGE BRIDGE BETWEEN THE WEST ABUTMENT AND THE MIDPOINT OF SPAN 6

## TRAFFIC CONTROL AND PROTECTION STAGE 2

- INSTALL AND/OR RELOCATE CONSTRUCTION SIGNING AND TRAFFIC CONTROL DEVICES AS SHOWN ON THE STAGE 2 PLANS, DETAILS, AND APPROPRIATE HIGHWAY STANDARDS. CONSTRUCT REPAIRS ALONG THE SOUTH SIDE OF THE JOE PAGE BRIDGE BETWEEN THE WEST ABUTMENT AND THE MIDPOINT OF SPAN 6.

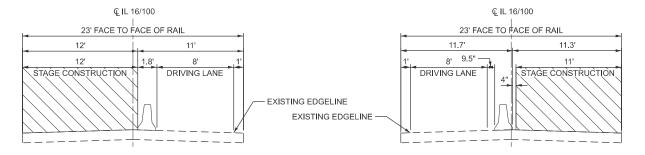
#### TRAFFIC CONTROL AND PROTECTION STAGE 3

- INSTALL AND/OR RELOCATE CONSTRUCTION SIGNING AND TRAFFIC CONTROL DEVICES, INCLUDING THE TEMPORARY SIGNAL AS SHOWN ON THE STAGE 3 PLANS, DETAILS, AND APPROPRIATE HIGHWAY STANDARDS.
- INSTALL THE ISLAND ALONG IL 16/100 WEST OF THE BRIDGE AND REINSTALL ALL PERMANENT TRAFFIC CONTROL ITEMS AT THE INTERSECTION OF IL 16/100
- CONSTRUCT REPAIRS ALONG THE SOUTH SIDE OF THE JOE PAGE BRIDGE BETWEEN THE MIDPOINT OF SPAN 6 AND PIER 15.

#### TRAFFIC CONTROL AND PROTECTION STAGE 4

- INSTALL AND/OR RELOCATE CONSTRUCTION SIGNING AND TRAFFIC CONTROL DEVICES AS SHOWN ON THE STAGE 4 PLANS, DETAILS, AND APPROPRIATE HIGHWAY STANDARDS. CONSTRUCT REPAIRS ALONG THE NORTH SIDE OF THE JOE PAGE BRIDGE BETWEEN THE MIDPOINT OF SPAN 6 AND PIER 15.

- INSTALL CONSTRUCTION SIGNING AS SHOWN ON APPROPRIATE HIGHWAY STANDARDS AND DETAILS TO CLOSE THE JOE PAGE BRIDGE TO ALL TRAFFIC. CONSTRUCT REPAIRS OF THE JOE PAGE BRIDGE BETWEEN PIER 15 AND THE EAST ABUTMENT.
- SCARIFY THE EXISTING EXPOSED CONCRETE BRIDGE DECK, REMOVE THE EXISTING THIN POLYMER OVERLAY, AND INSTALL THE PROPOSED THE BRIDGE DECK THIN POLYMER OVERLAY BETWEEN THE WEST AND EAST ABUTMENTS.
- INSTALL FINAL PAVEMENT MARKINGS.



# **STAGE 1 CONSTRUCTION**

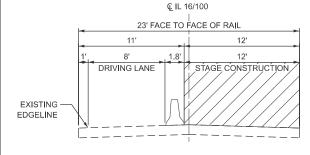
ACROSS SN 031-0001 LOOKING EAST W. ABUTMENT - MIDPOINT OF SPAN 6

\* INSTALL FLEXIBLE DELINEATORS AT 4' CENTERS THRU SPAN 2 INSTEAD OF TEMPORARY CONCRETE BARRIER

# **STAGE 2 CONSTRUCTION**

ACROSS SN 031-0001 LOOKING EAST W. ABUTMENT - MIDPOINT OF SPAN 6

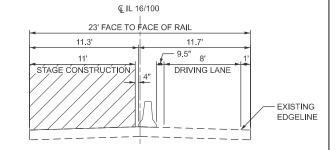
\* INSTALL FLEXIBLE DELINEATORS AT 4' CENTERS THRU SPAN 2 INSTEAD OF TEMPORARY CONCRETE BARRIER



# **STAGE 3 CONSTRUCTION**

ACROSS SN 031-0001 LOOKING EAST MIDPOINT OF SPAN 6 - PIER 15

SCALE: N/A



# **STAGE 4 CONSTRUCTION**

ACROSS SN 031-0001 LOOKING EAST MIDPOINT OF SPAN 6 - PIER 15

|                          | US |
|--------------------------|----|
| EFK•Moen                 |    |
| Civil Engineering Design |    |
| Civil Engineering Design | DI |

| ER NAME = ZWaters   | DESIGNED - JRD | REVISED - |  |
|---------------------|----------------|-----------|--|
|                     | DRAWN - ZJW    | REVISED - |  |
|                     | CHECKED - SLD  | REVISED - |  |
| DT DATE = 8/15/2025 | DATE - 7/18/25 | REVISED - |  |

| <br>    |    |    |        |      | GENERAL NOTES YPICAL SECTIONS |
|---------|----|----|--------|------|-------------------------------|
| SHEET 1 | OF | 20 | SHEETS | STA. | TO STA.                       |

| F.A.P<br>RTE. | SECTION          | COUNTY  | TOTAL<br>SHEETS | SHE    |     |
|---------------|------------------|---------|-----------------|--------|-----|
| 304           | 266BRR, (4, 5) I | GREENE  | 117             | 19     |     |
|               |                  |         | CONTRACT        | NO. 76 | Г66 |
|               | ILLINOIS         | PROJECT |                 |        |     |

# TEMPORARY TRAFFIC SIGNAL NOTES

- 1. THE EXISTING DUAL LIFT SPAN WARNING WIG-WAG FLASHERS TO REMAIN IN OPERATION DURING ALL STAGES OF CONSTRUCTION. A COORDINATOR SHALL BE USED TO COORDINATE WITH THE EXISTING LIFT SPAN WARNING SIGNAL.
- 2. PRIORITY WILL BE GIVEN TO EASTBOUND TRAFFIC AFTER THE LIFT SPAN OPERATION.
- 3. THE TEMPORARY SIGNALS AT THE IL ROUTE 100/S PARK ST INTERSECTION SHALL BE SPAN WIRE MOUNTED AND APPROVED BY THE ENGINEER. THE SPAN WIRE MOUNTED TEMPORARY SIGNAL HEADS SHALL MAINTAIN A UNIFORM 18' CLEARANCE OVER THE PAVEMENT.
- 4. THE METHOD OF MOUNTING AND ROUTING SIGNAL FEEDER CABLE ON THE JOE PAGE BRIDGE SHALL BE APPROVED BY THE ENGINEER.
- 5. THE CONTROLLER FOR THE TEMPORARY BRIDGE TRAFFIC SIGNAL INSTALLATION SHALL BE A FULL ACTUATED NEMA MICROPROCESSOR BASED, CAPABLE OF SUPPLYING 225 SECONDS OF CYCLE LENGTH AND INDIVIDUAL PHASE LENGTH SETTINGS UP TO 99 SECONDS. THE CONTROLLER SHALL BE A NEMA TS-2 TYPE 2 CONTROLLER EQUIPPED WITH A SOLE PORT FOR COMMUNICATION WITH THE VIDEO DETECTION SYSTEM.
- 6. THE VIDEO DETECTION SYSTEM CAMERA, PROCESSOR, BOARDS, AND ALL OTHER COMPONENTS USED IN THE TEMPORARY INSTALLATION SHALL BE FURNISHED BY THE CONTRACTOR AND AFTER REMOVAL OF THE TEMPORARY SIGNALS SHALL BECOME THE PROPERTY OF THE DEPARTMENT.
- 7. THE CONTRACTOR SHALL FURNISH ENOUGH SLACK CABLE TO RELOCATE THE SIGNAL HEADS TO ANY POSITION REQUIRED FOR CONSTRUCTION STAGING. THE TEMPORARY BRIDGE SIGNALS SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS.
- 8. ALL SIGNAL HEADS SHALL HAVE 12" LENSES, AND SHALL BE PLACED AS INDICATED OR AS DIRECTED BY THE ENGINEER.
- 9. SIGNAL PHASES B & C SHALL BE ON RECALL.
- 10. THE CONTRACTOR SHALL PROVIDE THE INSTALLATION EQUIPMENT WITH RESPECT TO THE SPAN WIRE MOUNTED TRAFFIC SIGNAL INSTALLATION. THIS SHALL INCLUDE ALL CABLES, SIGNAL HEADS, CONTROLLER, CABINET, AND ALL OTHER PERIPHERAL EQUIPMENT.
- 11. ALL CONTROL EQUIPMENT FOR THE TEMPORARY BRIDGE TRAFFIC SIGNAL SHALL BE FURNISHED BY THE CONTRACTOR, UNLESS OTHERWISE SPECIFIED IN THE PLANS.
- 12. THE COST OF RELOCATING SIGNAL HEADS, WIRING, AND OTHER NECESSARY ITEMS ASSOCIATED WITH THE TEMPORARY SIGNALS SHALL BE INCLUDED WITH "TEMPORARY BRIDGE TRAFFIC SIGNALS (SPECIAL), EACH".

# PHASING DIAGRAMS (STAGES 1 & 2)

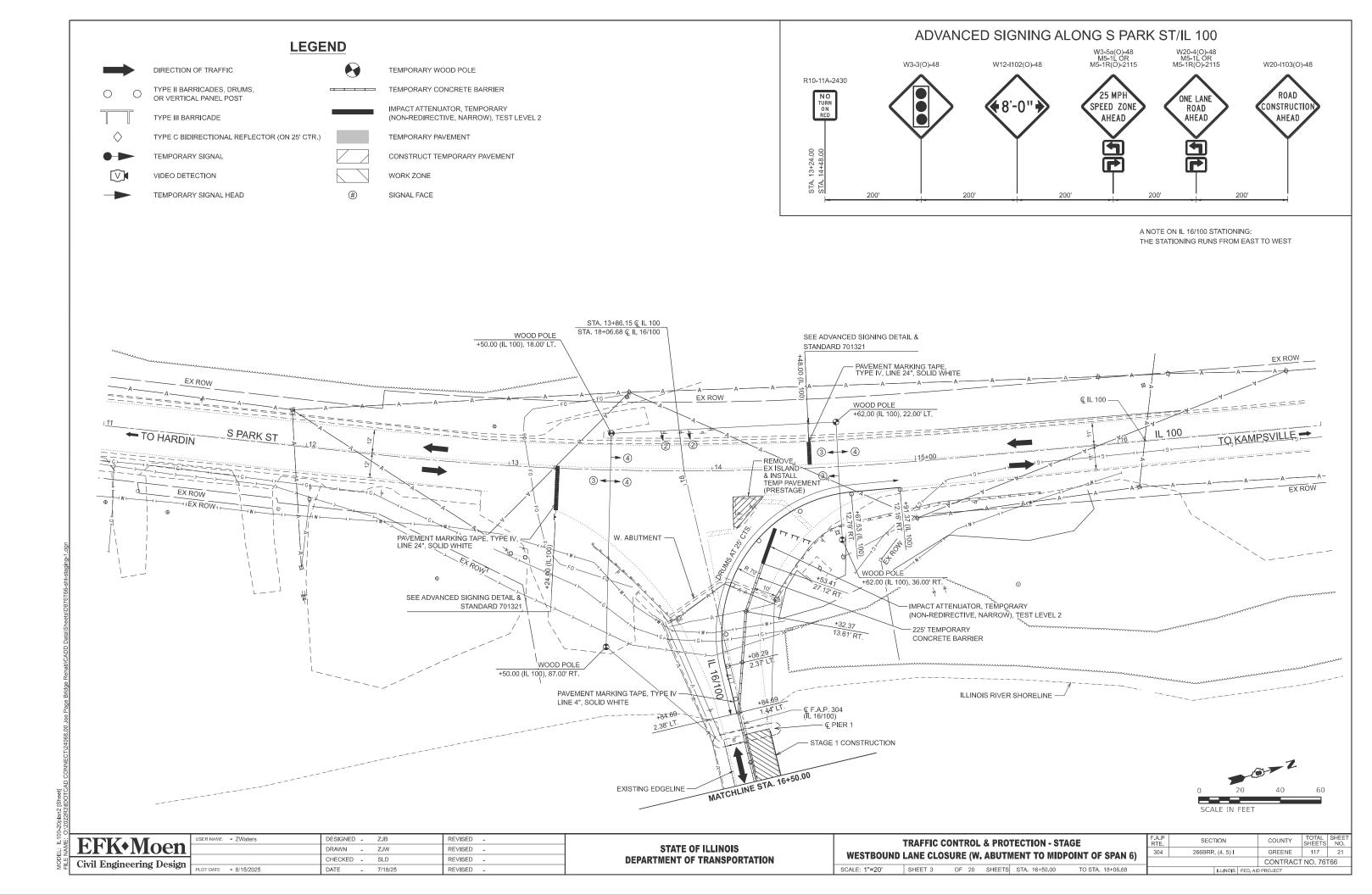
| SEQUENCE OF OPERATIONS |          |                |   |   |   |   |   |   |         |   |    |
|------------------------|----------|----------------|---|---|---|---|---|---|---------|---|----|
| PHASE                  |          | A B C S.B N.B. |   |   |   |   |   |   | 3.      |   |    |
| INTERVAL               | INTERVAL |                |   |   |   | 5 | 6 | 7 | 8       | 9 | 10 |
| SIGNAL<br>FACES        | 1        | G              | Υ | R | R | R | R | R | R       | R | R  |
|                        | 2        | G              | G | G | Υ | R | R | R | R       | R | R  |
|                        | 3        | R              | R | R | R | R | G | Υ | R       | R | R  |
|                        | 4        | R              | R | R | R | R | R | R | G<br>-G | Υ | R  |

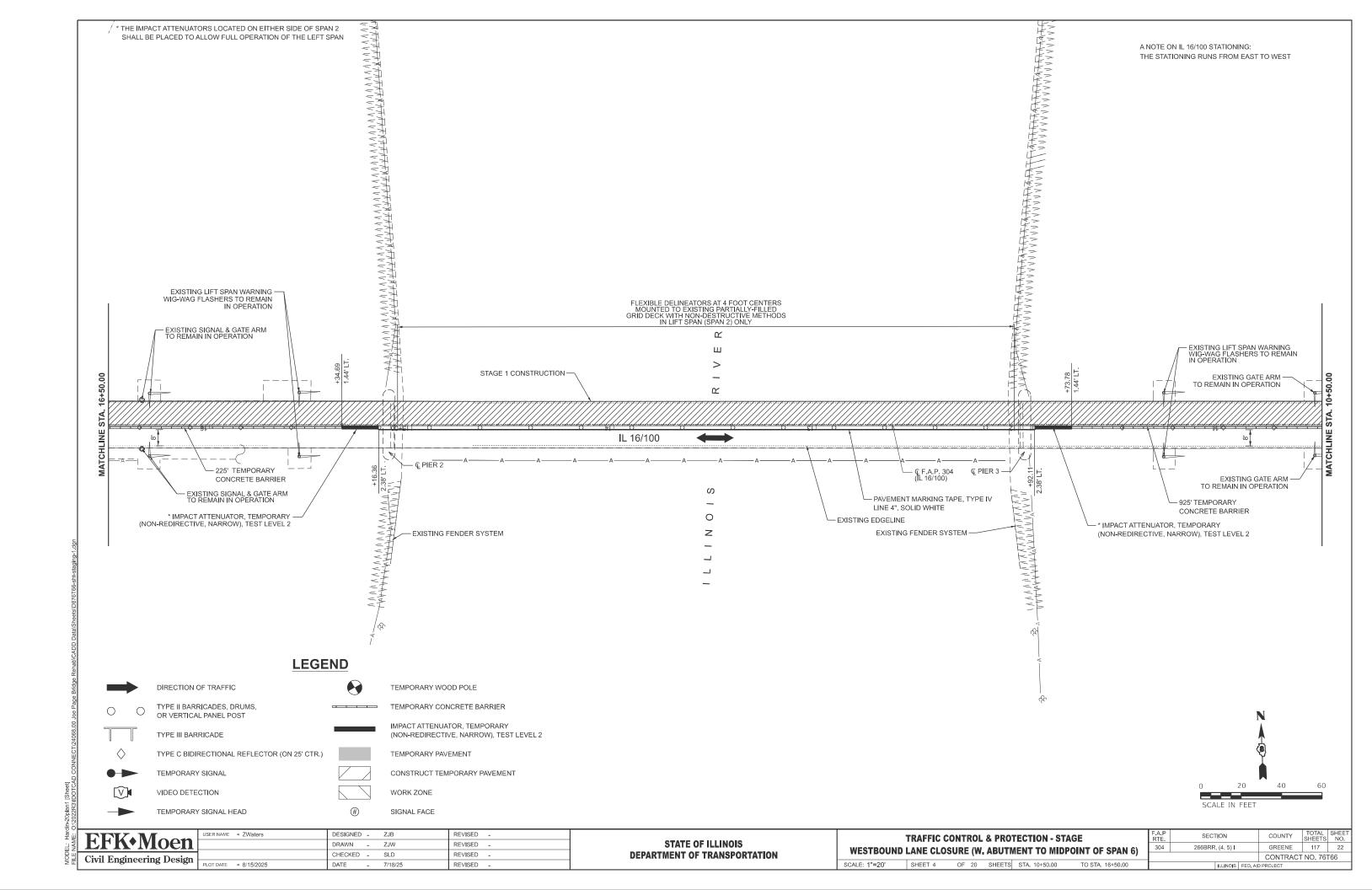
| PREEMPTION SEQUENCE |   |            |    |    |            |    |    |            |    |    |                      | 5115                    |  |  |
|---------------------|---|------------|----|----|------------|----|----|------------|----|----|----------------------|-------------------------|--|--|
| PHASE               |   | FROM<br>ØA |    |    | FROM<br>ØA |    |    | FROM<br>ØA |    |    | DURING<br>PREEMPTION | END<br>PREEMPTION<br>ØB |  |  |
| INTERVAL            |   | 1a         | 2a | За | 1b         | 2b | 3b | 1c         | 2с | Зс |                      |                         |  |  |
| SIGNAL<br>FACES     | 1 | Υ          | R  | R  | R          | R  | R  | R          | R  | R  | R                    | R                       |  |  |
|                     | 2 | G          | G  | Υ  | R          | R  | R  | R          | R  | R  | R                    | R                       |  |  |
|                     | 3 | R          | R  | R  | Υ          | R  | R  | R          | R  | R  | FLASH R              | G                       |  |  |
|                     | 4 | R          | R  | R  | R          | R  | R  | Υ          | R  | R  | FLASH R              | R                       |  |  |

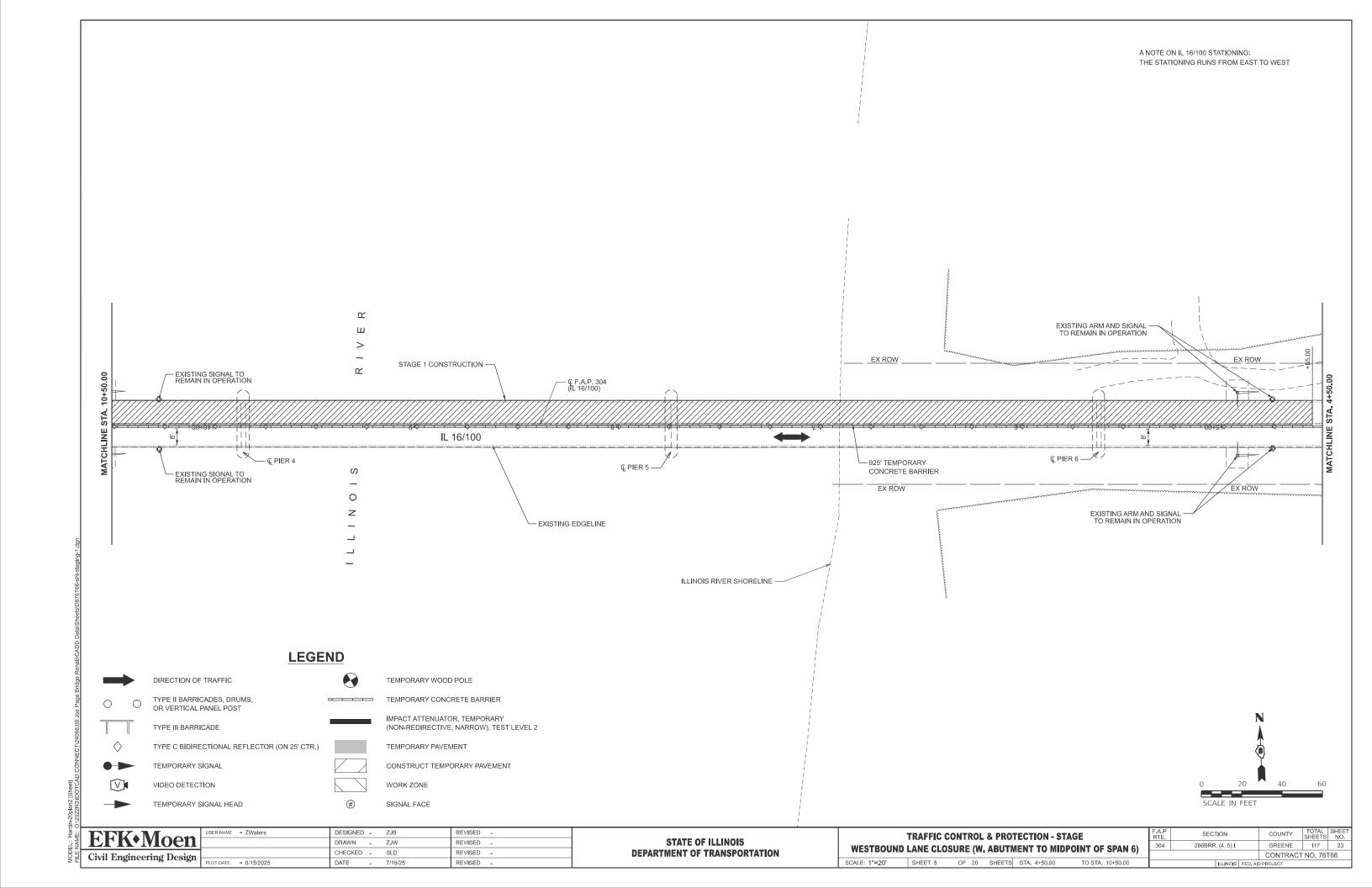
EFK Moen
Civil Engineering Design

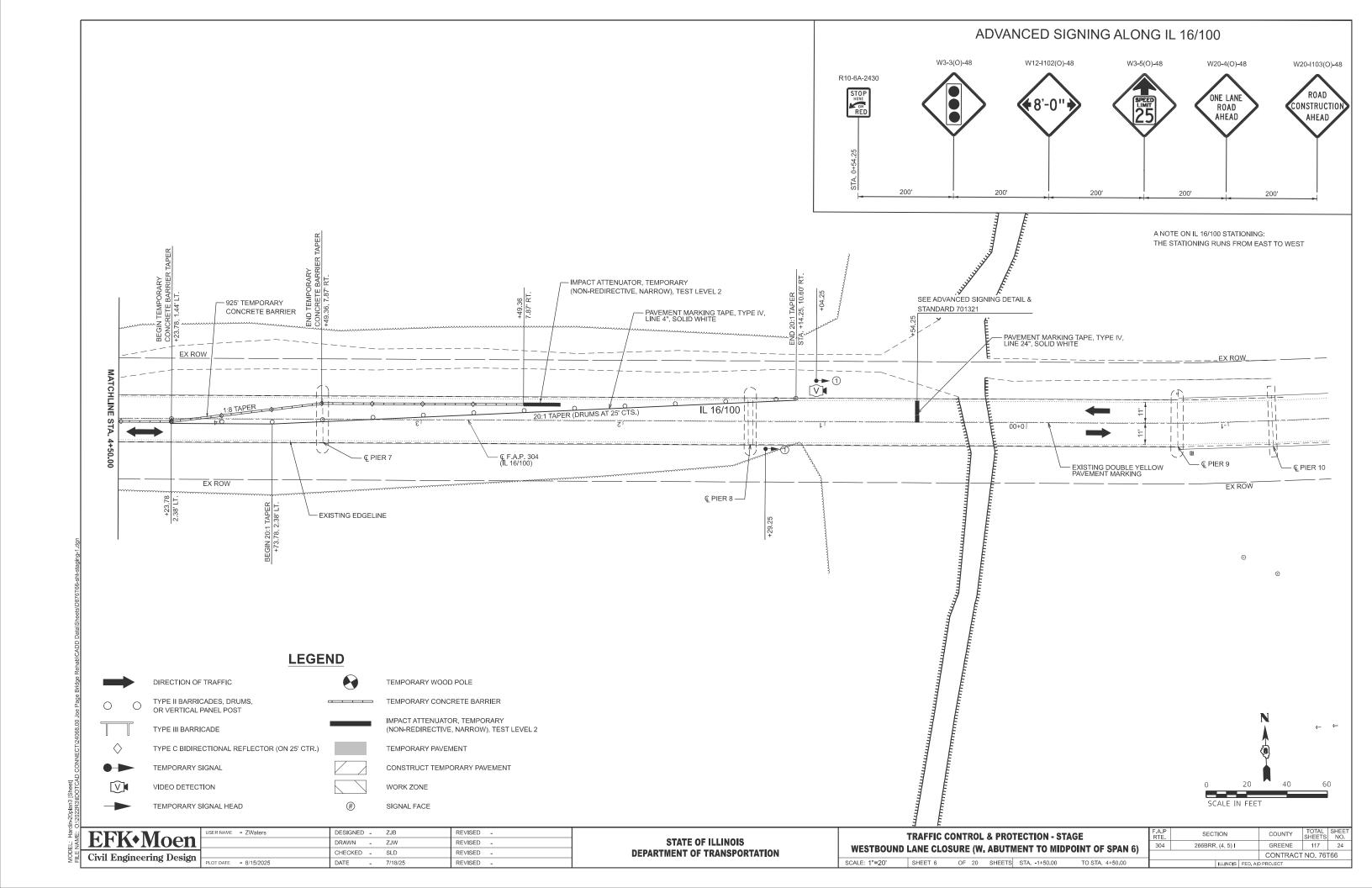
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

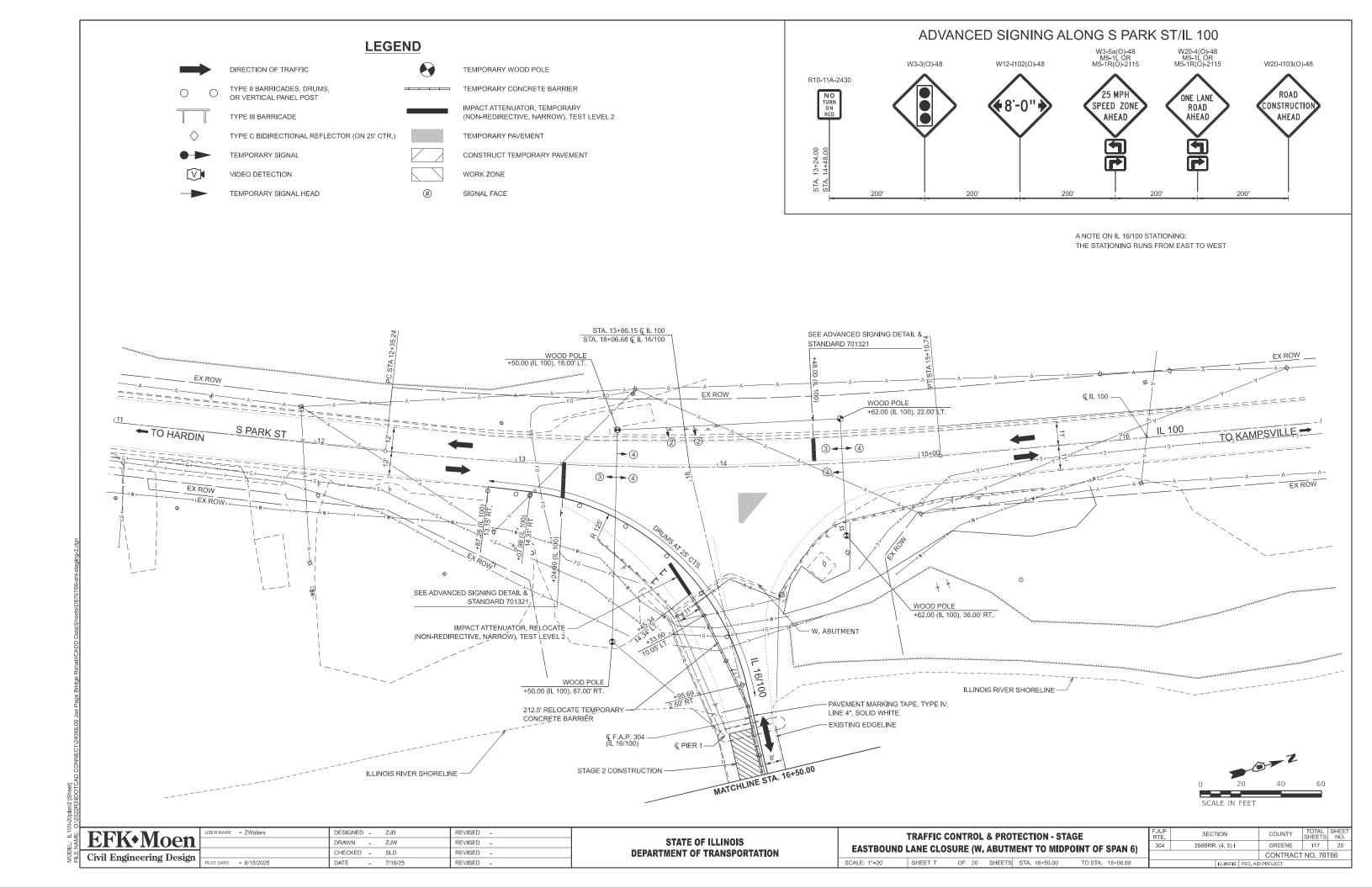
TRAFFIC CONTROL AND PROTECTION GENERAL NOTES
TEMPORARY TRAFFIC SIGNAL NOTES, AND PHASING DIAGRAMS
E: N/A SHEET 2 OF 20 SHEETS STA. TO STA.

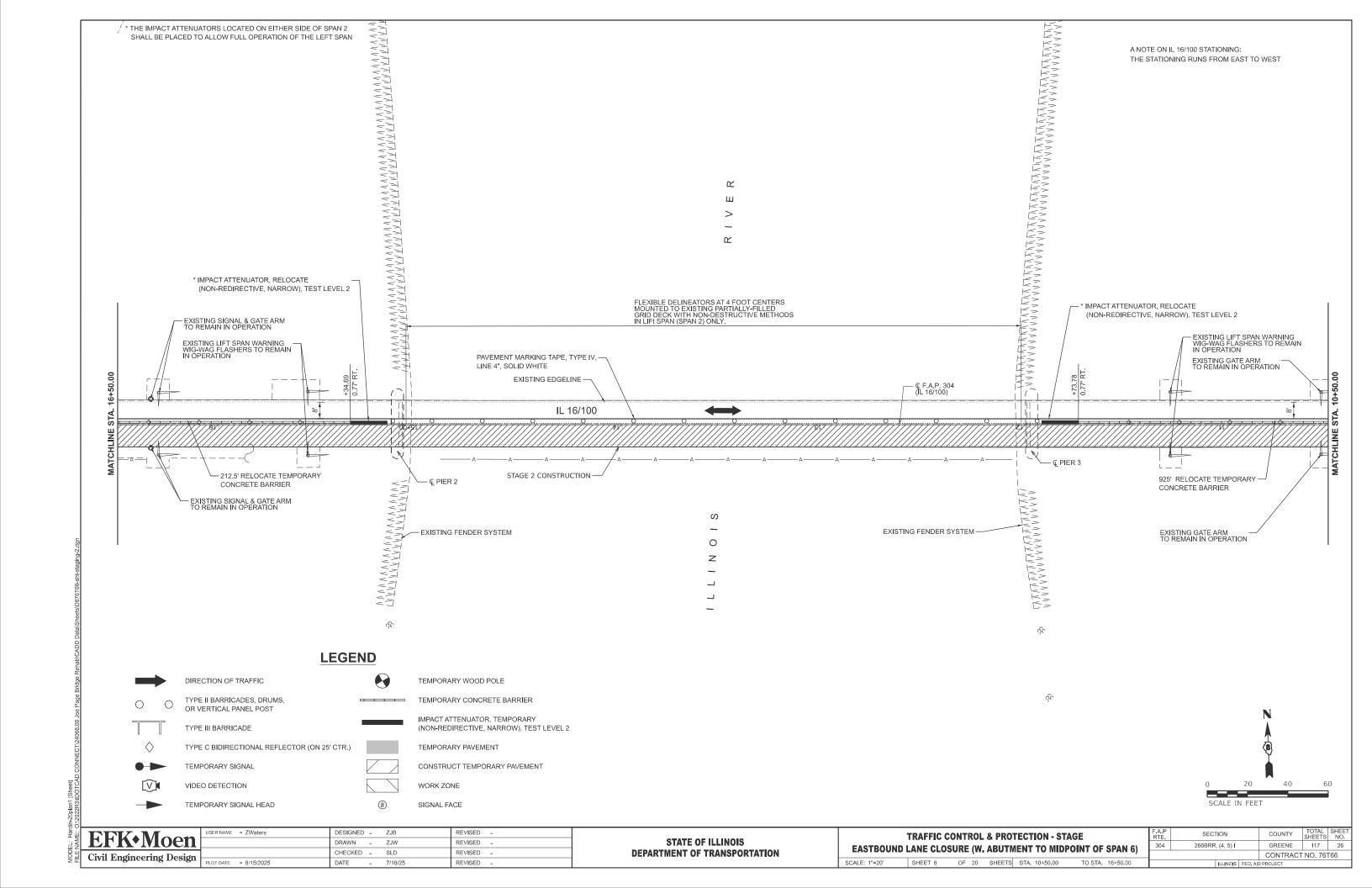


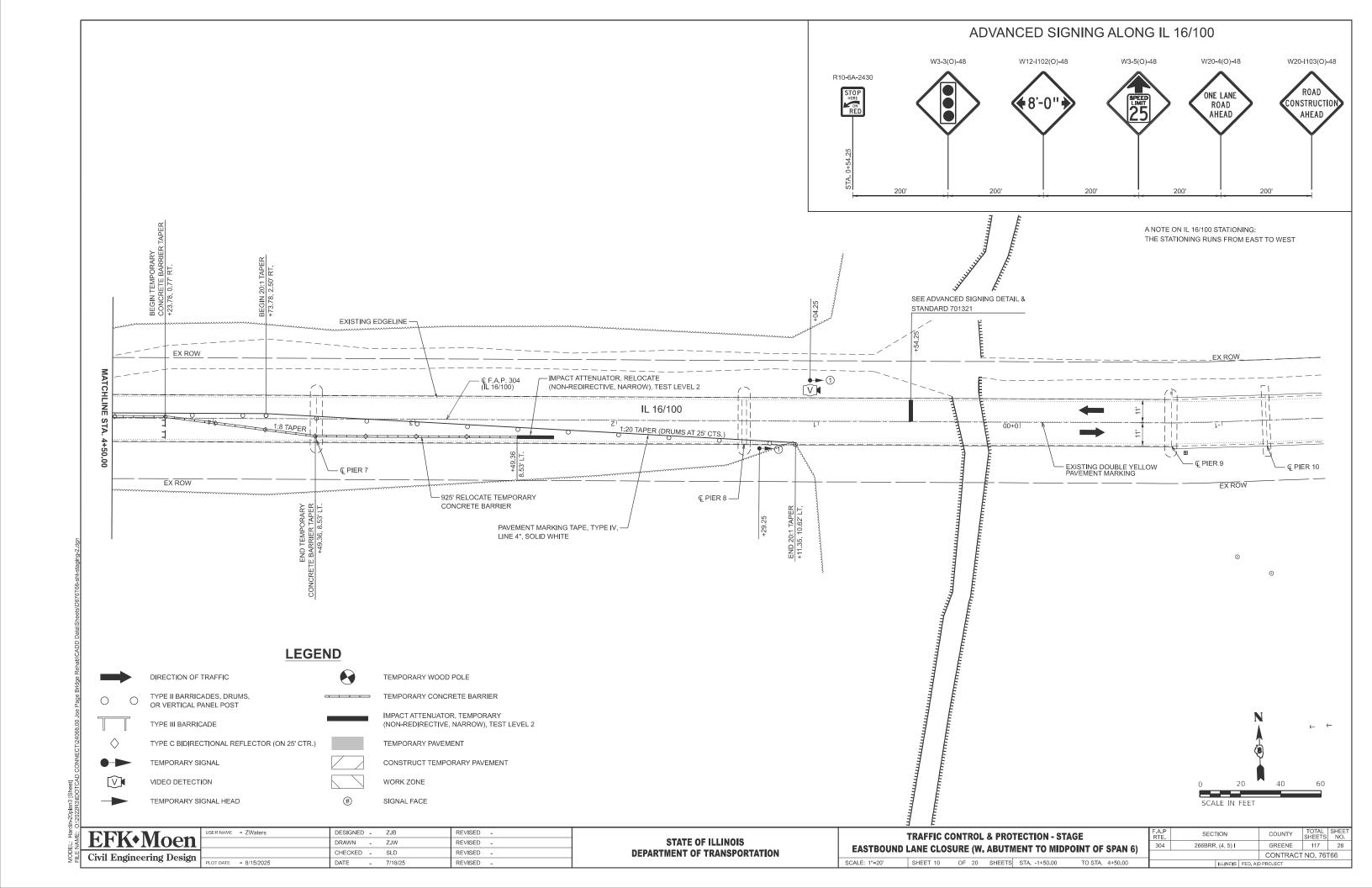


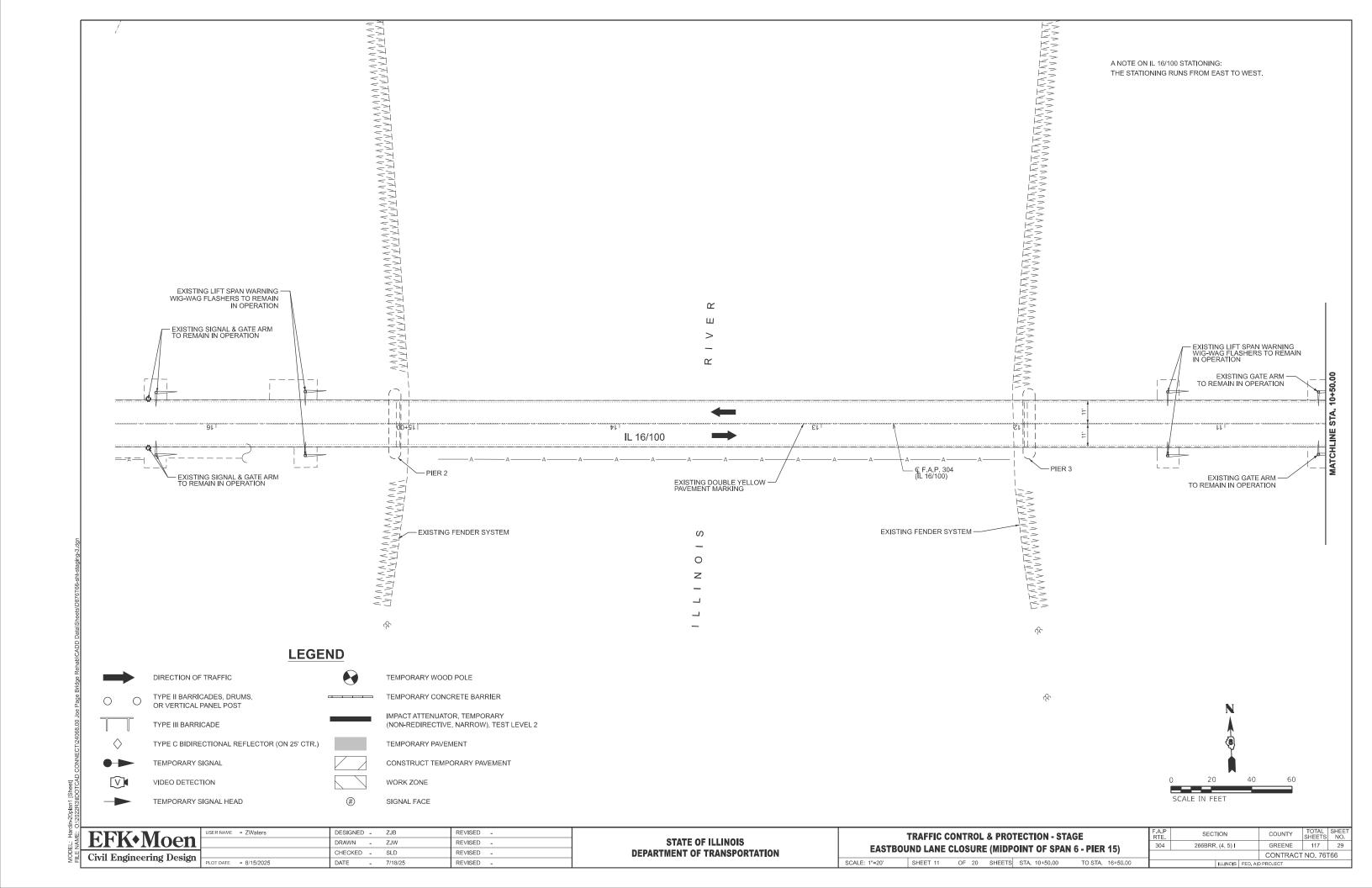


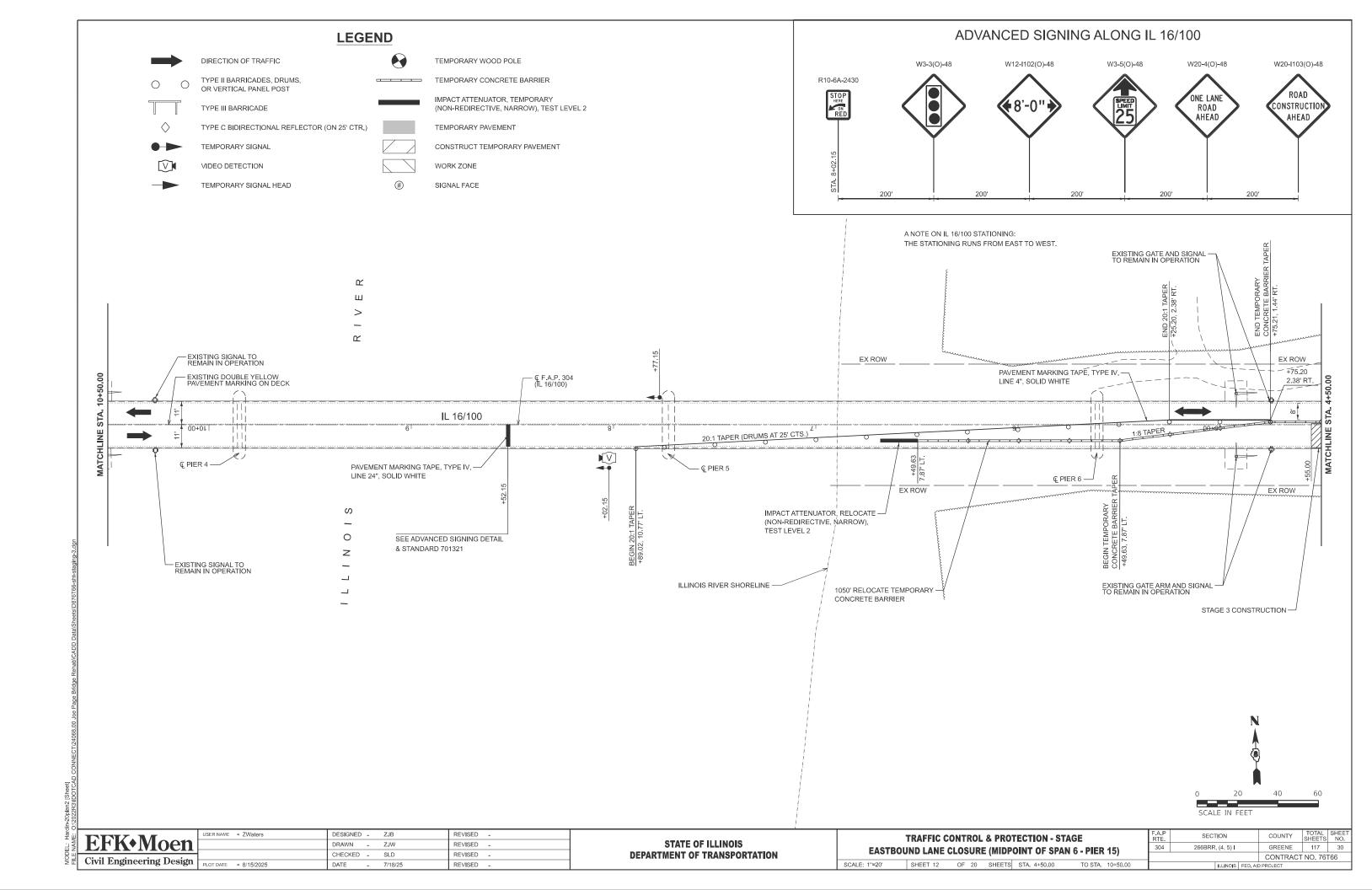


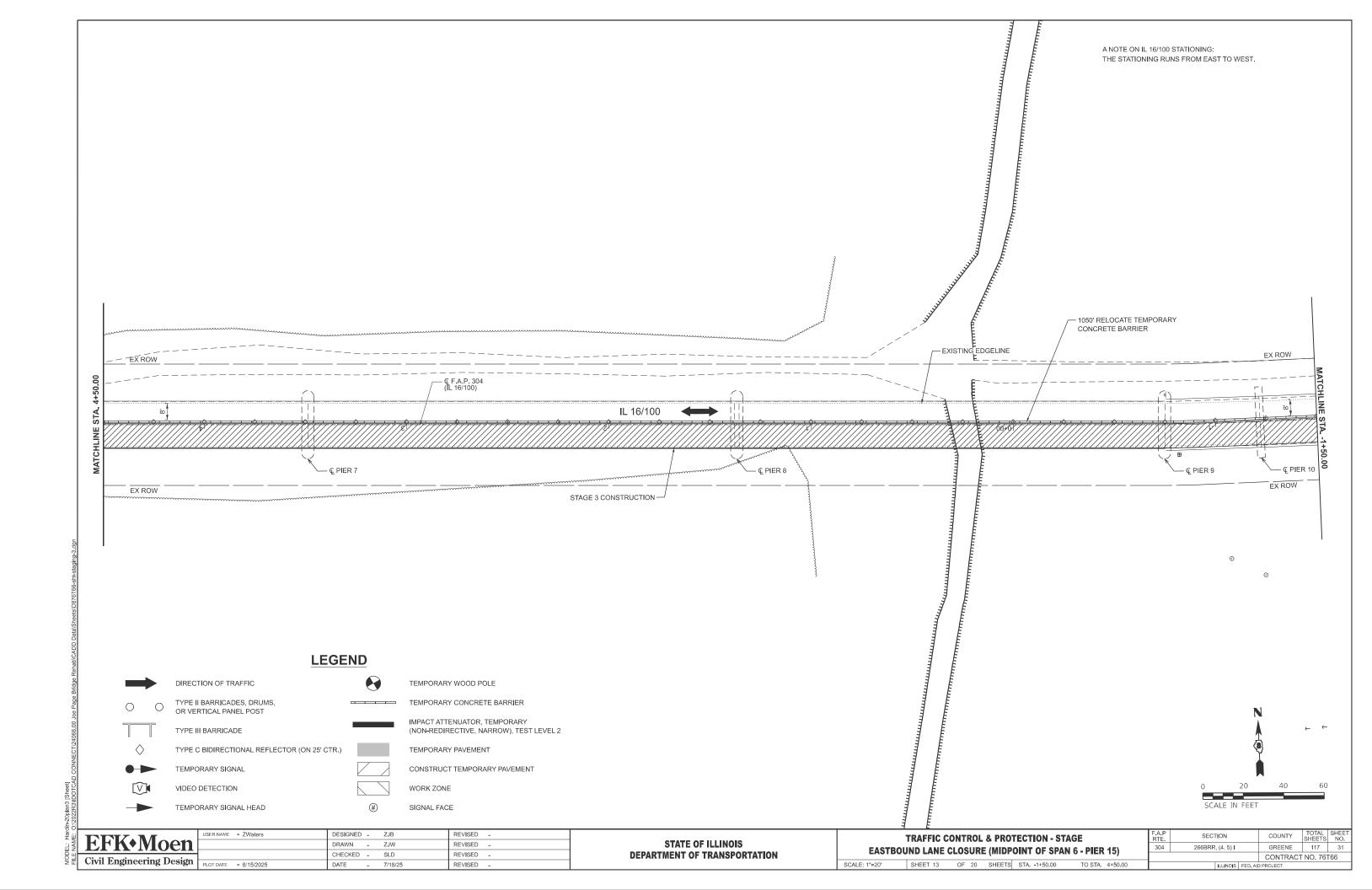


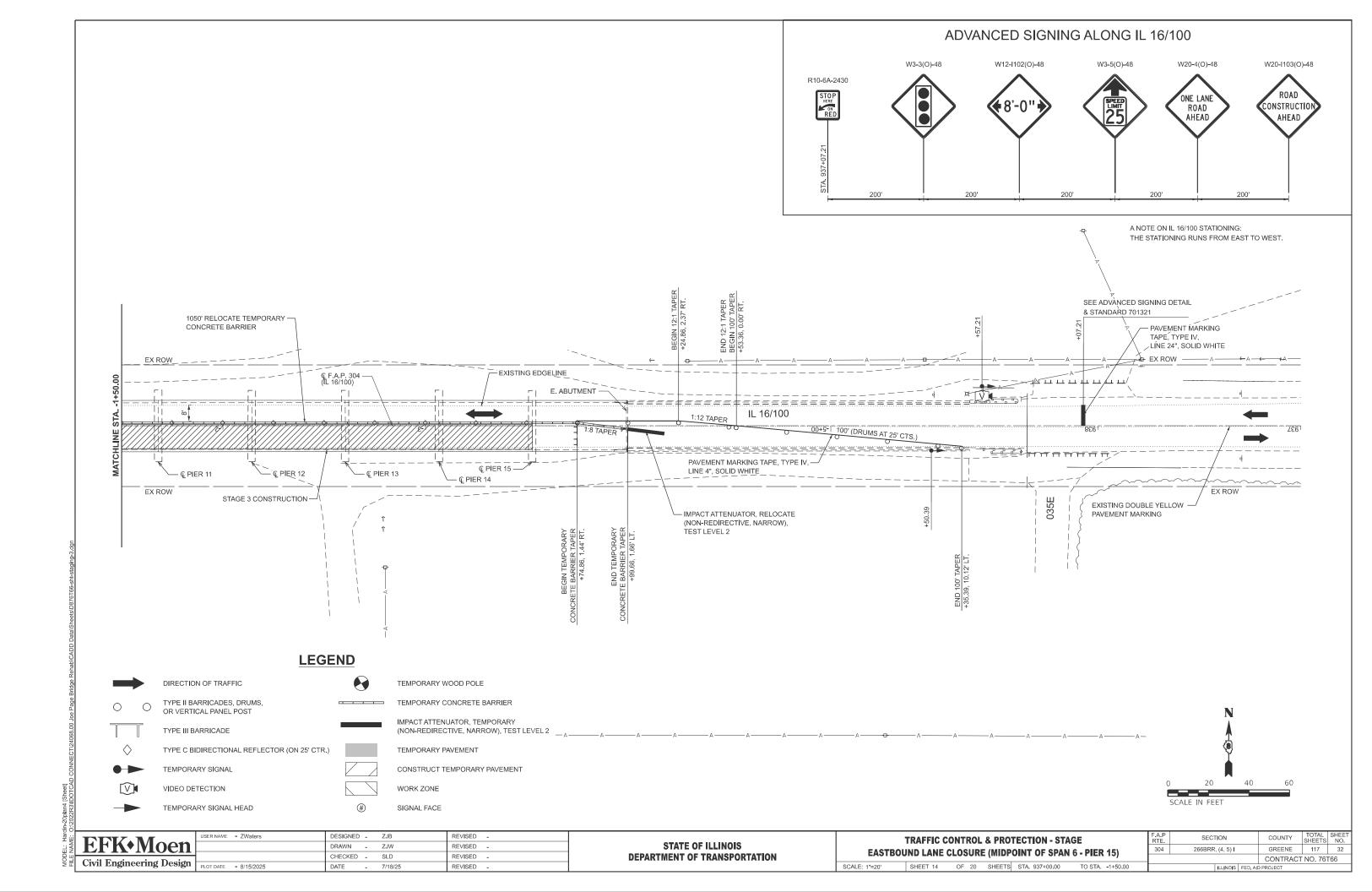


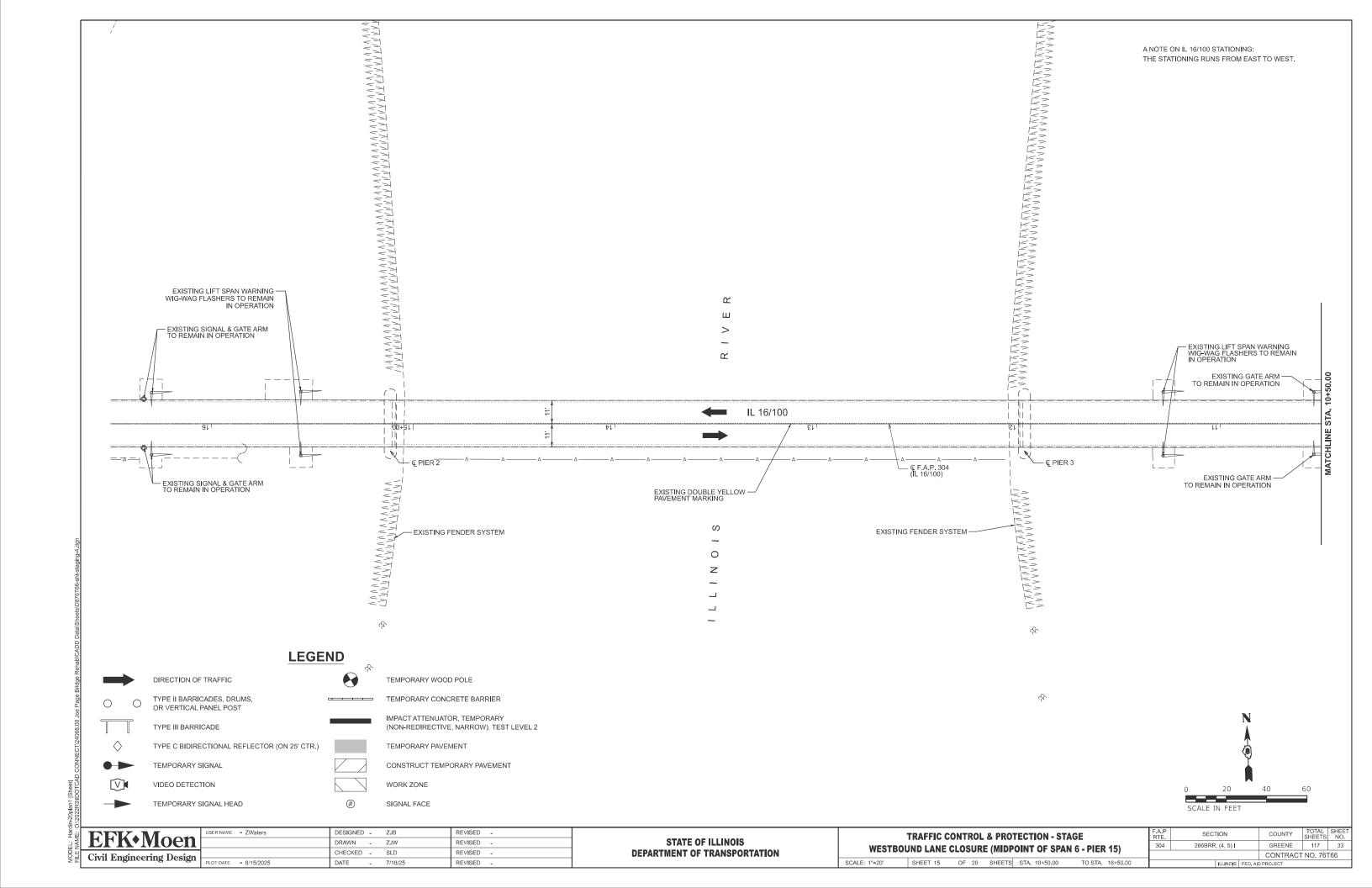


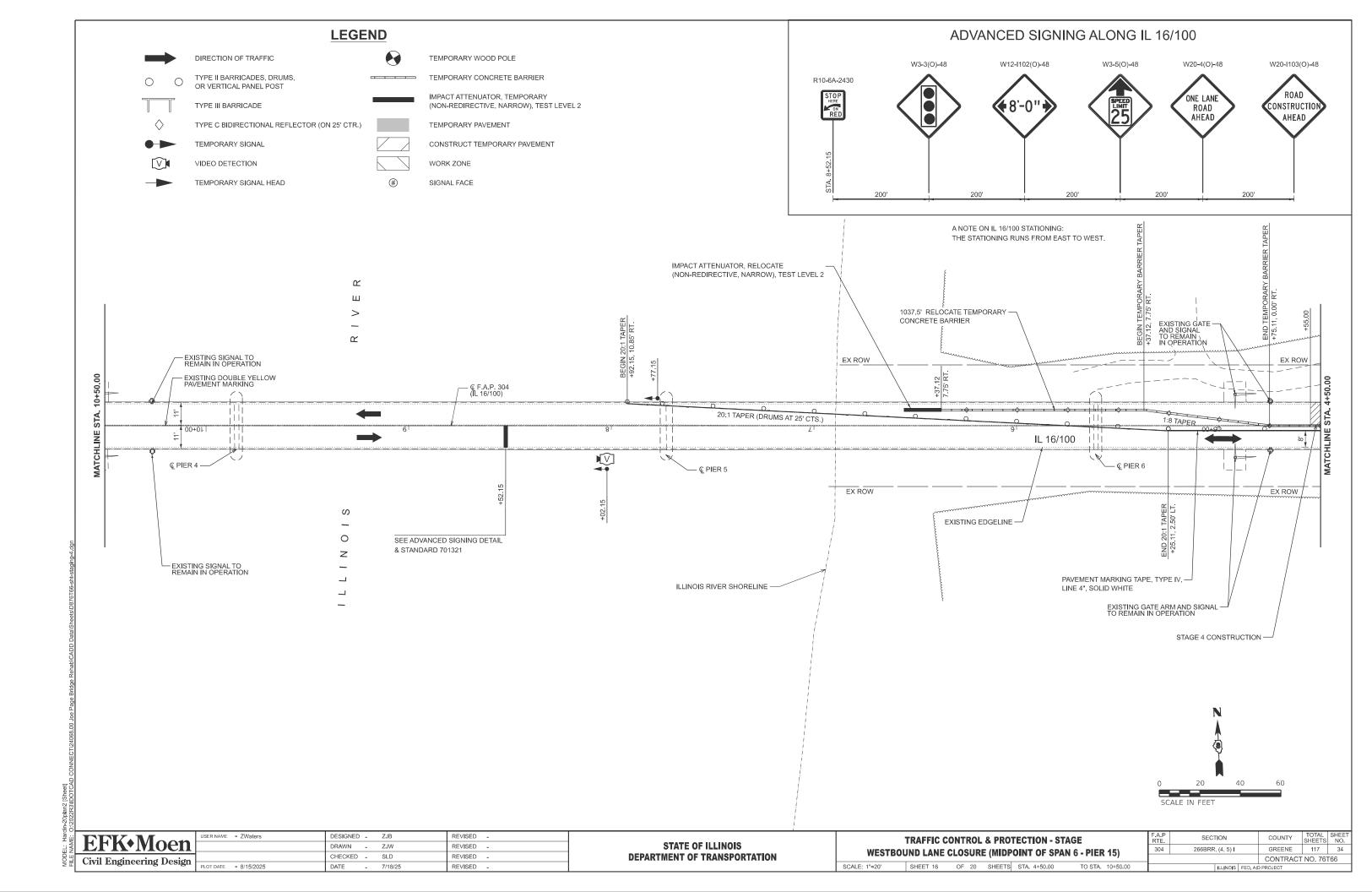


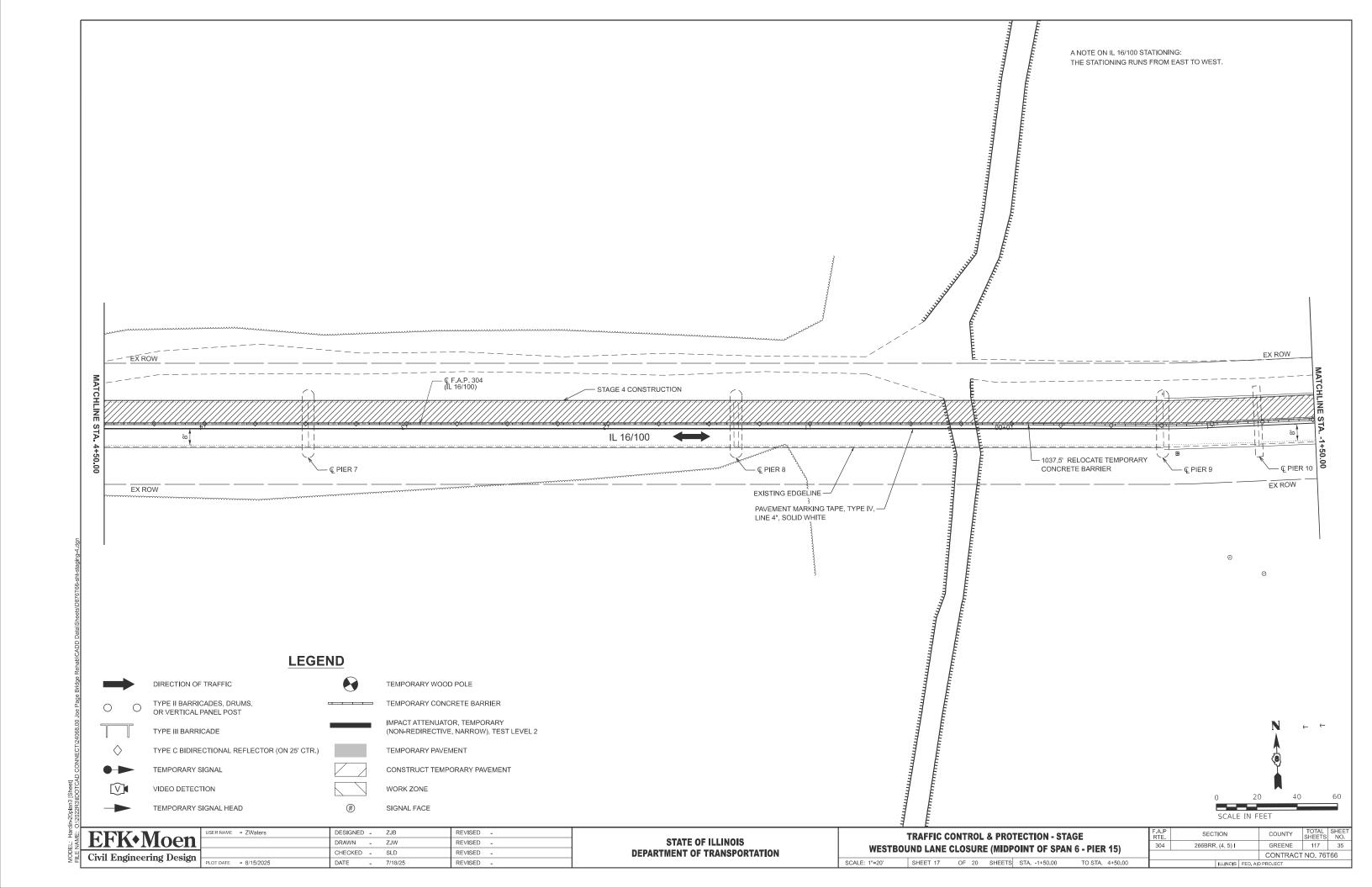


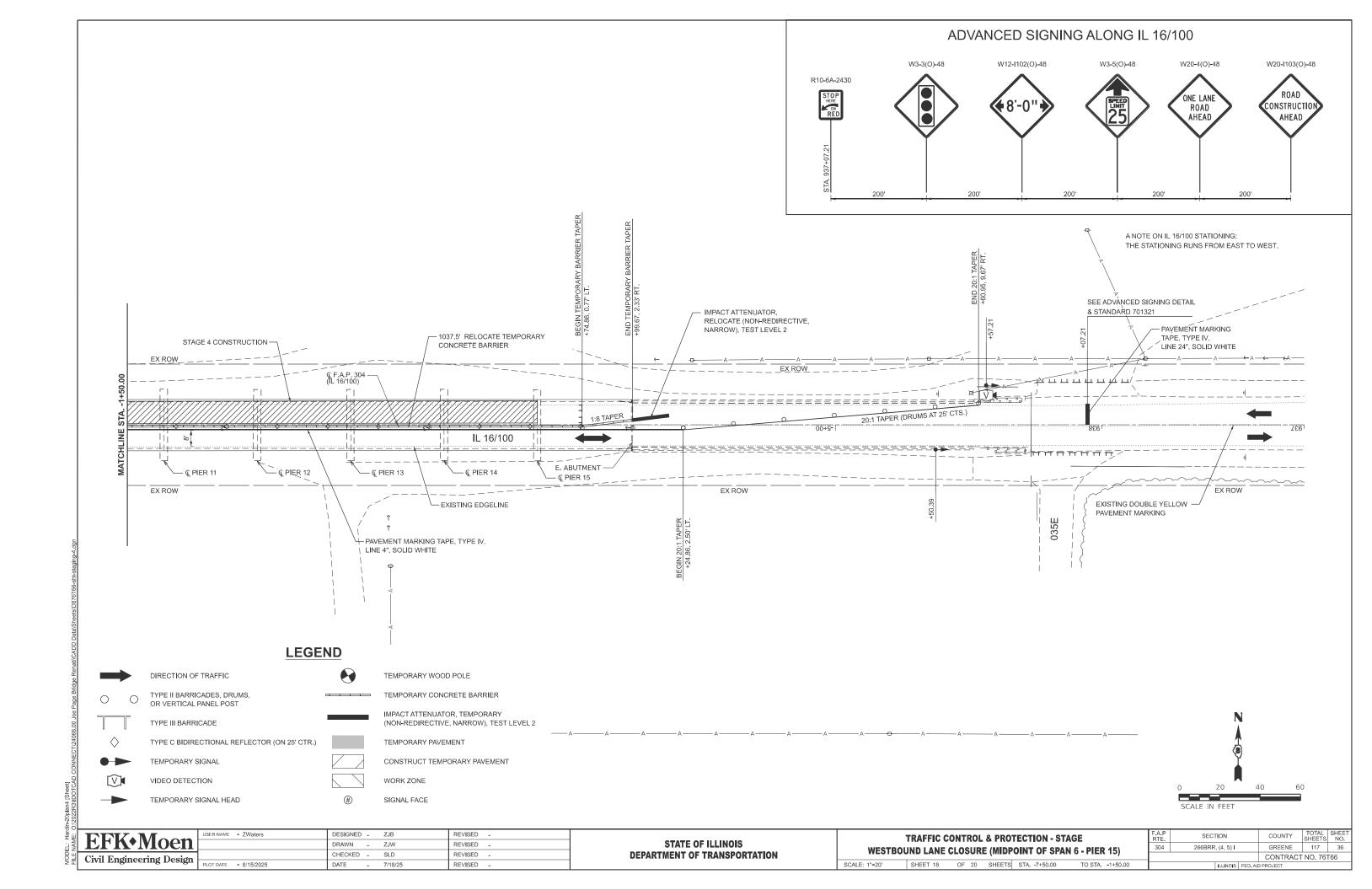


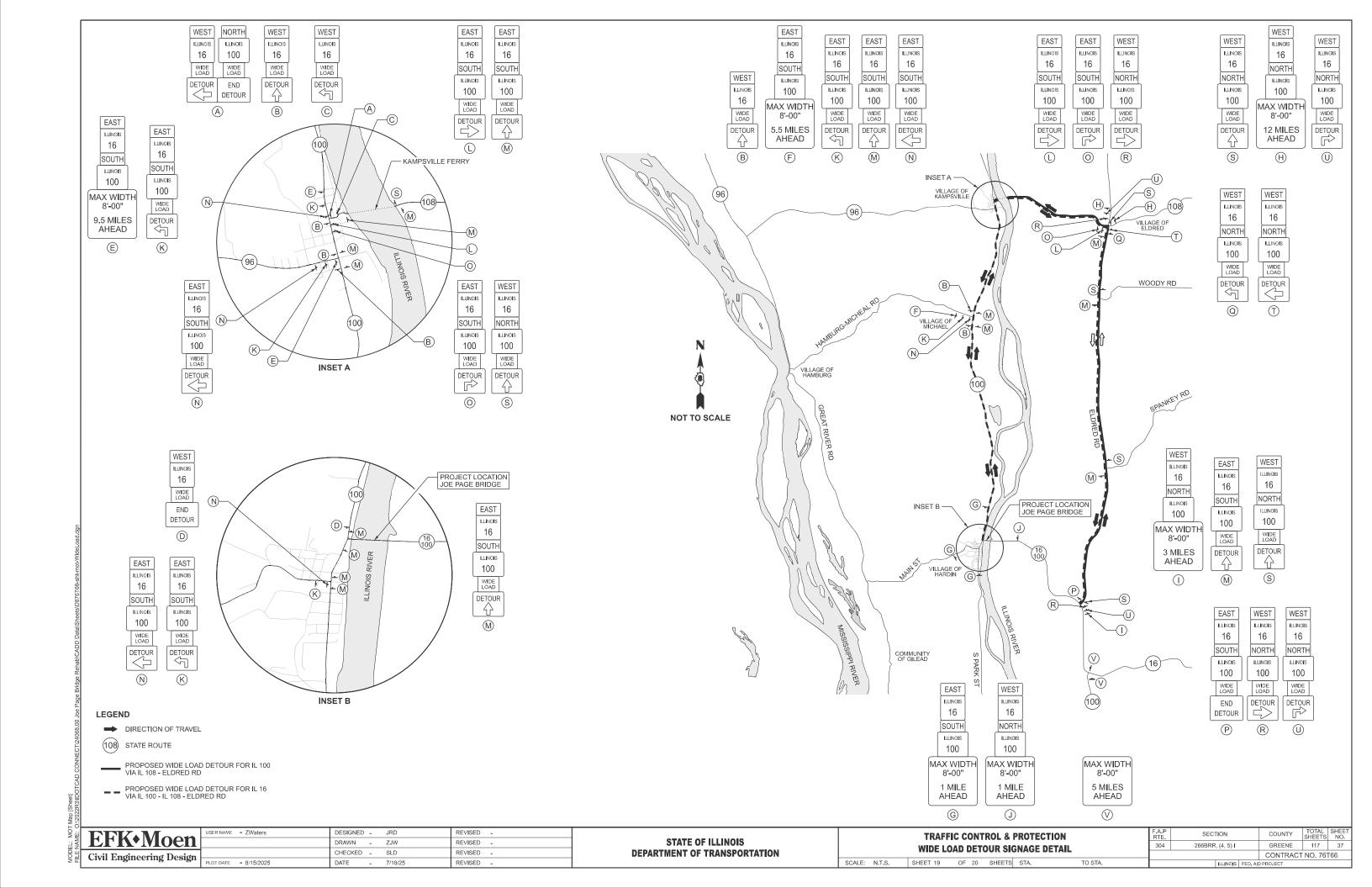


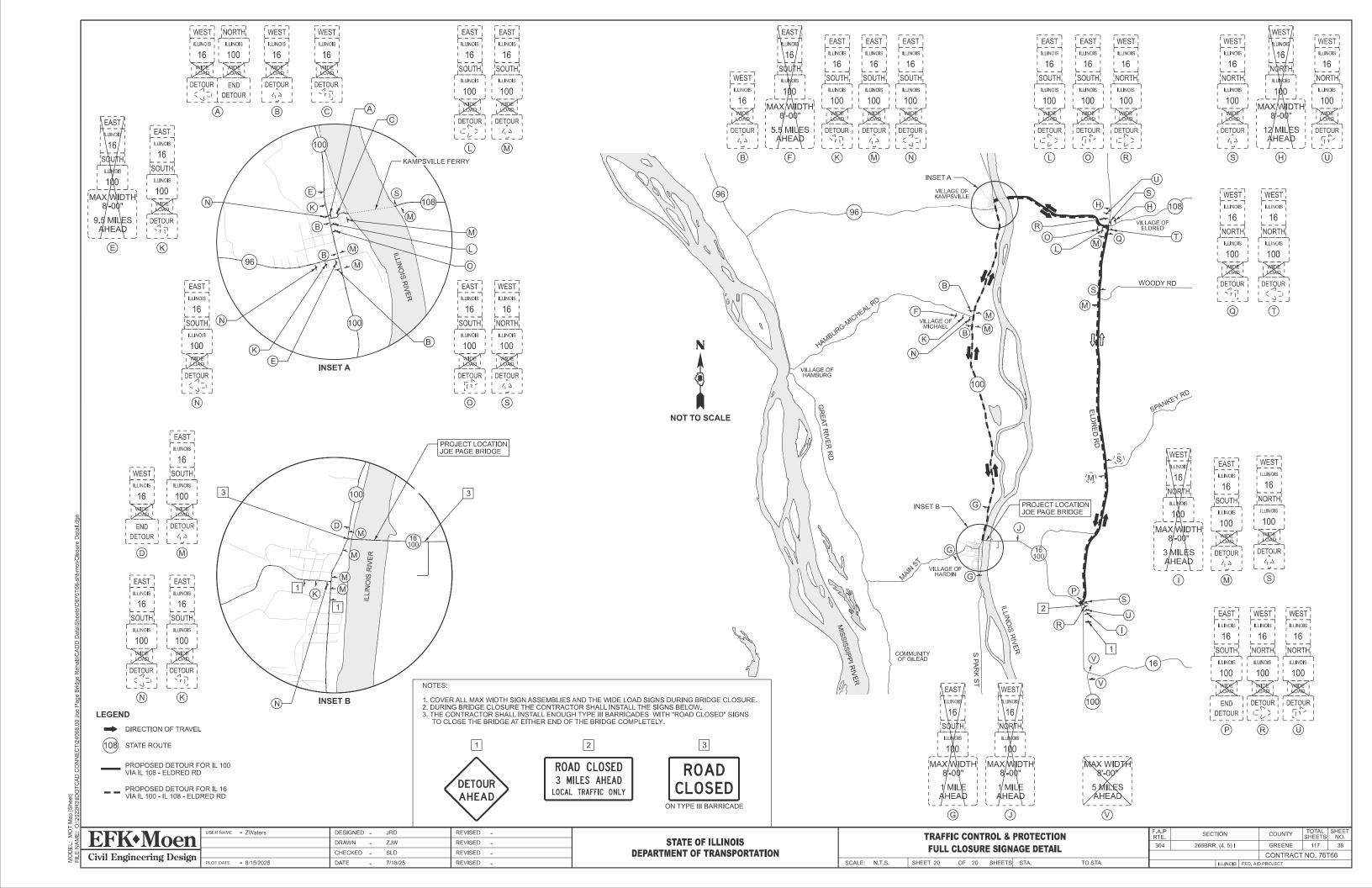












Bench Mark: In Hardin at Southwest corner of courthouse lot Northeast corner of concrete public well curbing; bronze tablet stamped, "Prim. Trav. Sta. 183-F-1925" Elev. 446.285

Bench Mark: 200 ft. East of depot at East Hardin, 10 ft. South of R.R. tracks, 30 ft. North of road, on top of center concrete pillar on North side of water tank; chiseled square marked "427.4" Elev. 427.36

Existing Structure: No. 031-0001 Built as Senate Bill No. 266, Sec. B & C in 1931. The structure consisted of one lift span with timber deck supported by a thru-truss, and seven fixed spans with reinf. conc. deck supported by a thru-truss on concrete piers, seven approach spans with reinf. conc. deck supported by WF beams on pile bents, and five approach spans with reinf. conc. deck supported by WF beams in a wye on modified spill thru abutments acting as piers. In 1964 work consisted of deck reconstruction of lift span with conc. filled steel grid and various minor repairs to other spans. In 1981 work consisted of four west approach spans being removed and backfilled with modifications to the pier converting it to the west abutment, and conc. deck reconstruction with various steel repairs of all remaining spans (except lift span), and repairs to conc. cap spalling at pile bents. In 1994 all thru-truss spans including the lift span work consisted of roadway wearing surface removal and replacement. Numerous additional rehabilitation contracts have been previously performed, including a major mechanical/electrical rehabilitation in 1983, a major structural/mechanical/electrical rehabilitation in 2003, and a structural rehabilitation in 2018.

Traffic: Traffic to be maintained during structure rehabilitation by partial lane closures in Stages 1 through 4, full structure closure with detour in Stage 5, and short-term navigational closures.

Salvage: Salvage and reuse steel splices from the pier fender system as directed by the Engineer.

### SCOPE OF WORK

- 1. Deck repair.
- 2. Repair steel superstructure members.
- . Remove and replace expansion joints.
- 4. Remove debris from piers.
- 5. Repair roadway railings.
- 6. Repair walkway handrails.
- 7. Repair beam steel bearings.
- 8. Remove vegetation near structure.
- 9. Repair or replace fender system members.
- 10. See Mechanical and Electrical plans for additional scope of work.

SHEET 39 OF 117 SHEETS

### Allow 0#/sq. ft. for future wearing surface.

LOADING HS20-44 (NEW CONSTRUCTION)

### DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications for Highway Bridges, 17th Edition

2023 AASHTO LRFD Movable Highway Bridge Design Specification, 3rd Edition

### DESIGN STRESSES (NEW CONSTRUCTION)

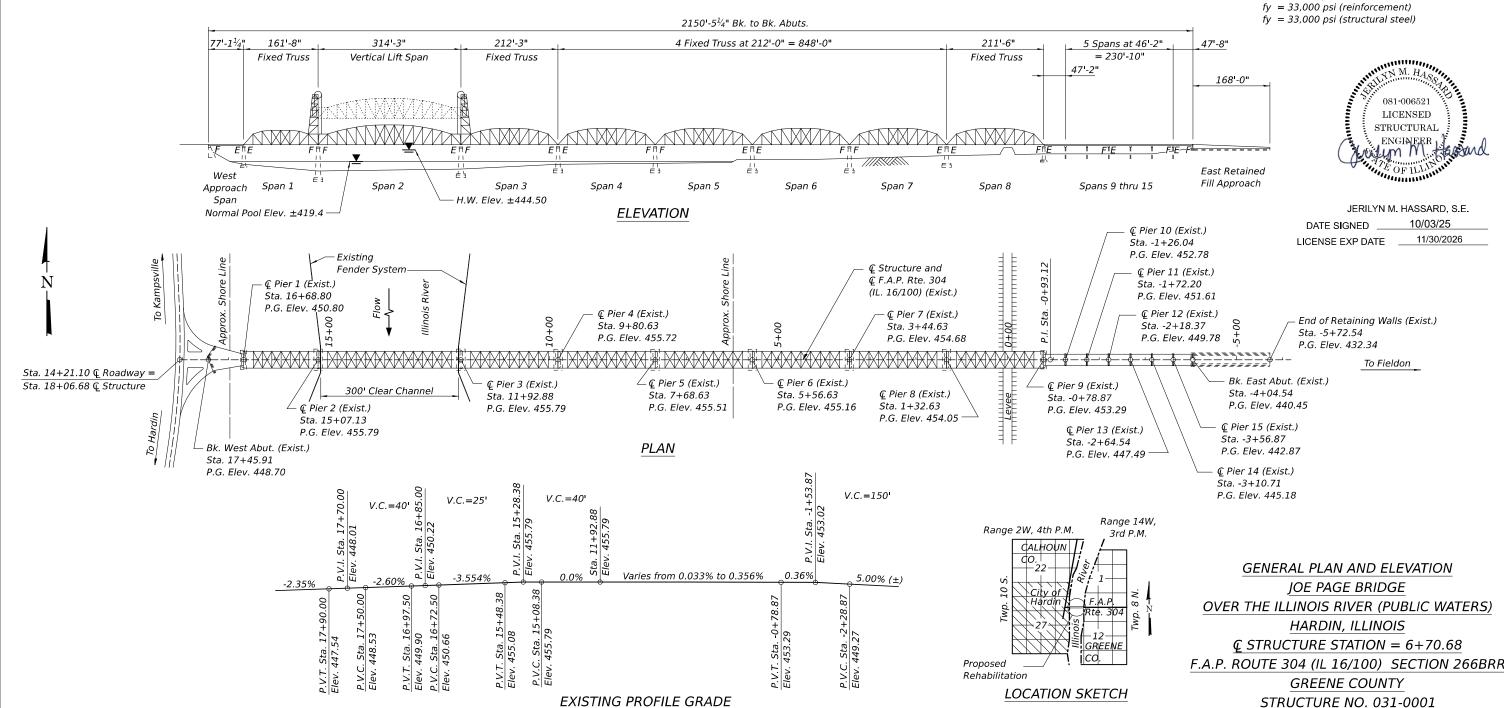
f'c = 4,000 psi

fy = 60,000 psi (reinforcement)

fy = 36,000 psi (structural steel)

### DESIGN STRESSES (ORIGINAL CONSTRUCTION)

 $f^{1}c = 3,500 \ psi$ 



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

(At € Roadway)

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| 45  | General Plan and Elevation Repair Schedule - 3 |
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## TOTAL BILL OF MATERIAL

| ITEM   | UNIT  | SUPER  | SUB | TOTAL  |
|--|-------|--------|-----|--------|
| Concrete Removal   | Cu Yd | 7.4    | -   | 7.4    |
| Concrete Superstructure  | Cu Yd | 6.1    | -   | 6.1    |
| Protective Coat  | Sq Yd | 29     | -   | 29     |
| Concrete Superstructure (Approach Slab)                              | Cu Yd | 1.4    | -   | 1.4    |
| Reinforcement Bars, Epoxy Coated                                     | Pound | 1,240  | -   | 1,240  |
| Preformed Joint Seal 1"  | Foot  | 97.5   | -   | 97.5   |
| Preformed Joint Seal 2"  | Foot  | 23.5   | -   | 23.5   |
| Neoprene Expansion Joint 6 1/2"                                      | Foot  | 23.5   | -   | 23.5   |
| Anchor Bolts, 1"   | Each  | 4      | -   | 4      |
| Containment And Disposal Of Lead Paint Cleaning Residues No. 1       | L Sum | 1      | -   | 1      |
| Structural Repair Of Concrete (Depth Equal To Or Less Than 5 Inches) | Sq Ft | 50     | -   | 50     |
| Debris Removal   | L Sum | -      | 1   | 1      |
| Deck Slab Repair (Full Depth, Type I)                                | Sq Yd | 15     | -   | 15     |
| Deck Slab Repair (Full Depth, Type II)                               | Sq Yd | 5      | -   | 5      |
| Deck Slab Repair (Partial)   | Sq Yd | 5      | -   | 5      |
| Polymer Concrete   | Cu Ft | 1.1    | -   | 1.1    |
| Remove and Replace Anchor Bolts                                      | Each  | 27     | -   | 27     |
| Bolt Replacement   | Each  | 26     | -   | 26     |
| Access Ladder  | Each  | 1      | -   | 1      |
| Fender System  | L Sum | -      | 1   | 1      |
| Clearing (Special)   | L Sum | 1      | -   | 1      |
| Structural Steel Removal   | Pound | 2,140  | -   | 2,140  |
| Structural Steel Repair  | Pound | 24,100 | -   | 24,100 |
| Handrail Repairs   | L Sum | 1      | -   | 1      |
| Bridge Deck Concrete Sealer  | Sq Ft | 869    | -   | 869    |

MODEL: Br\_Sneet\_Consultant FILE NAME: \\mm.id\IL\_Data\Projects\5018-Joe Page Bridge

MODJESKI and MASTERS

|   | USER NAME =  | DESIGNED | - | JAD | REVISED | - |
|---|--------------|----------|---|-----|---------|---|
|   |              | CHECKED  | - | RKA | REVISED | - |
| S | PLOT SCALE = | DRAWN    | - | AEC | REVISED | - |
| • | PLOT DATE =  | CHECKED  | - | JAD | REVISED | - |

Fasteners shall be ASTM F3125 Grade A325 Type 1, mechanically galvanized bolts in painted areas, except as noted. Bolts  $\frac{7}{8}$  in. diameter, holes  $\frac{15}{16}$  in. diameter, unless otherwise noted. Fasteners connecting galvanized members or connecting a painted member to an unpainted galvanized member shall be ASTM F3125 Grade A325 Type 1, hot dip galvanized. See Special Provision for "Hot Dip Galvanizing for Structural Steel." Bolts  $\frac{7}{8}$  in. diameter holes  $\frac{15}{16}$  in. diameter unless otherwise noted

Calculated weight of Structural Steel Repair = 23,710 lbs (Grade 36)

All new structural steel shall be AASHTO M270 Grade 36.

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

Reinforcement bars designated (E) shall be epoxy coated.

Prior to pouring the new concrete deck, all heavy or loose detrimental foreign material shall be removed from the surfaces in contact with concrete (SSPC-SP3 standards). Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be paid for according to Article 109.04 of the Standard Specifications.

As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer. Any cracks that cannot be removed by grinding 1/4 inch deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.

The Contractor shall obtain a construction permit from the Illinois Department of Natural Resources (IDNR), Office of Water Resources for any temporary construction activity placed in the water except cofferdams. This shall include the placement of material for run-arounds, causeways, etc. Any permit application by the Contractor shall refer to the IDNR 3704 Floodway Construction permit number allowing permanent construction as shown in the contract plans.

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

The Contractor shall field verify all proposed plate and angle dimensions and spacing of holes prior to ordering steel.

Gaps between the existing steel and the new steel angles and / or plates, as well as abandoned holes to be covered by new steel plates and / or angles, shall be sealed with an approved polyurethane sealant. The sealant shall be compatible with the proposed paint system and shall be submitted to the Engineer for approval prior to use. All costs associated with the installation of the sealant shall be included with the cost for Structural Steel Repair.

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

The Organic Zinc Rich Primer / Epoxy / Urethane paint system shall be used for shop and field painting of new structural steel except where otherwise noted. The entire system shall be shop applied, with the exception that the exterior surfaces and bottom of the bottom flange of fascia beams, masked off connection surfaces, and field installed fasteners, shall all be touched up and finish coated in the field. The color of the final finish coat for all interior steel surfaces shall be Gray, Munsell No. 5B 7/1. The color of the finish coat for the exterior surfaces and bottom flange of the fascia beams shall be Interstate Green, Munsell No. 7.5G 4/8.

Cleaning and painting of existing structural steel in the areas of structural repairs or new structural installations shall be as specified in the special provision for Cleaning and Painting Contact Surface Areas of Existing Steel Structures.

The Contractor shall submit calculations and details demonstrating the structural integrity of the bridge is maintained under the additional imposed loads of the containment system. See special provisions

A minimum of 2 air monitors will be required to monitor abrasive blasting operations at this site. See special provision for "Containment and Disposal of Lead Paint Cleaning Residues."

The Contractor shall sequence construction in order to complete work in accordance with the required completion date. See the Special Provision for working restrictions.

The Contractor is required to provide Structural Assessment Reports for the proposed work. See Special Provision

The Contractor shall retain the services of an engineering firm, prequalified in the IDOT consultant selection category of Structures-Highway: Complex and Structures-Movable, for preparation of the Structural Assessment Reports. Contractor's pre-approval shall not be applicable for this project. See Special Provision.

Current Ratings on File for Existing Structure Inventory: HS 12.4

Operating: HS 26.8

Live Load Restrictions: Single Unit Vehicle: 26 Tons

Inventory and Operating Ratings and Live Load Restrictions are provided for information only. Inventory and Operating Ratings are based on HS loading and configuration. Live Load Restrictions are based on Illinois legal loads and configurations. The Ratings and Live Load Restrictions are not necessarily representative of capacities to support the Contractor's equipment.

The Contractor is advised that the existing structure contains members that are in a deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the condition of the existing structure when developing construction procedures for the complete or partial removal, or replacement of the structure. An Existing Structure Information Package is available upon request as noted in the special provisions.

### STRUCTURAL STEEL REPAIR GENERAL NOTES

Repair plates, fill plates, and repair angles may require field adjustment to fit actual as-built conditions. Cost included in Structural Steel Repair.

Repair plates, fill plates, and repair angles have been sized per available existing plan information. Bolt layout for replacement of existing fasteners with new bolts in existing holes are also based on existing plan information. Dimensions shall be field verified to confirm.

Unless noted otherwise, the as-designed repair details do not require temporary support for structural members. If additional fasteners need to be removed beyond those shown, the Contractor shall submit a procedure for review and approval by the Engineer. If necessary, the Contractor shall provide temporary support for members due to the additional fastener removal.

Trimming of repair plates, fill plates, and angles to accommodate existing fasteners not used in the repair shall occur by saw cutting or grinding. Minimum radius of 1" shall be maintained. Flame-cutting is not permitted. All cut edges shall be ground smooth to an ANSI 500 finish.

Sealant shall be compatible with the proposed paint system and shall be submitted to the Engineer for approval prior to use. All costs associated with the installation of the sealant shall be included in Structural Steel Repair.

### STRUCTURAL STEEL REPAIR PROCEDURES

Provided the Contractor complies with the load restrictions assumed during design (see Structural Steel Repair Load Restrictions section this sheet), there is no limit to the number of steel repair locations that can be simultaneously repaired.

The Contractor will be allowed to remove rivets and replace with temporary high-strength bolts in advance of repair plate and/or angle installation. Flame cutting for rivet removal is not permitted.

Contractor shall install repair plates, fill plates, and angles one at a time at each steel repair

For each individual repair plate or angle, the Contractor may remove all rivets to be replaced at the same time to facilitate fit-up and match-marking of holes.

Bolt holes will not be left open overnight. The Contractor shall complete the installation of individual plates or angles at the end of each day. The completion of the installation of all plates and angles at a repair location at the end of each day is not required.

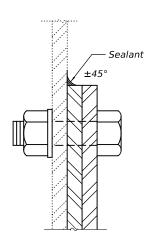
Upon completion of repairs and coating touch-up, joint sealant shall be installed all around perimeter of plys between existing steel and the new steel angles and/or plates per Detail 1 and as directed by the Engineer. After the sealant has cured in accordance with the manufacturer's written product data sheet, a stripe finish shall be applied over the sealant.

### STRUCTURAL STEEL REPAIR LOAD RESTRICTIONS

Construction loading assumptions for design consisted of a 20 psf construction load over the lane closed to traffic, an HS-20 live load in the open lane, and dead load of the structure which including the weight of the temporary concrete barrier. The 20 psf construction load was positioned or applied in order to maximize the load for each individual member.

The Contractor shall confirm that the combined weight of construction vehicles, equipment, work platforms and stockpiled materials comply with the noted design assumptions at all times during structural steel repairs. The Contractor shall submit construction weights and sequencing to the Engineer for approval.

See the individual structural repair detail sheets for additional restrictions.



DETAIL 1 - SEALANT

MODJESKI and MASTERS

 USER NAME =
 DESIGNED - JAD
 REVISED 

 CHECKED - RKA
 REVISED 

 PLOT SCALE =
 DRAWN - ELK
 REVISED 

 PLOT DATE =
 CHECKED - JAD
 REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| FA.P. | SECTION | COUNTY | TOTAL | SHEETS | STRUCTURE | NO. 031-0001 | SHEET | 41 | OF | 117 | SHEETS | SHEETS | SHEET | SHEET | SHEETS | SHEET | SH

| Repair   | 10/29/2024 NBIS |   | Sheet  |
|----------|-----------------|---|--------|
| I.D.     | Inspection      | Location  |        |
|          | Deficiency      | Location  | No. of |
| No.      | Item No.        |   | 117    |
| 1        | 599             | West Approach, South Rail at 1st Bracket West of West Abutment                          | 51     |
|          |                 |   |        |
| 1        | 368             | Span 1, North Rail at 1st Rail Post East of Panel Point 0                               | 51     |
| 1        | 548             | Span 1, North Rail at 1st and 2nd Rail Supports East of Panel Point 6                   | 51     |
| 1        | 765             | Span 2, South Rail at 1st Rail Support East of Panel Point 2                            | 51     |
| 1        | 785             | Span 3, North Rail at 1st Rail Support East of Panel Point 8                            | 51     |
| 1        | 788             | Span 3, North Rail at 2nd Rail Support East of Panel Point 9                            | 51     |
| 1        | 806             |   | 51     |
|          |                 | Span 7, South Rail at 1st and 2nd Rail Supports East of Panel Point 0                   | +      |
| 1        | 807             | Span 7, North Rail at 1st Rail Support East of Panel Point 0                            | 51     |
| 1        | 614             | Span 7, South Rail at 1st Rail Support West of Panel Point 2                            | 51     |
| 1        | 814             | Span 7, South Rail at 1st Rail Support East of Panel Point 8                            | 51     |
| 2        | 603             | Span 1, Walkway at L4S and South Railing at 1st and 3rd Rail Post West of Panel Point 4 | 67     |
| 2        | 605             | Span 1, Walkway at U7S  | 67     |
| 2        | 772             | Span 2, South Navigation Light Walkway at Midspan L7S-L8S                               | 68     |
|          |                 |   | +      |
| 3        | 14              | Span 1, Floorbeam 2 at North End  | 58     |
| 3        | 766             | Span 2, Floorbeam 3 at North End  | 56     |
| 3        | 773             | Span 2, Floorbeam 8 at North End  | 56     |
| 3        | 145             | Span 2, Floorbeam 11 at North End   | 56     |
| 3        | 675             | Span 3, Floorbeam 1 at North End  | 57     |
|          |                 | Span 3, Floorbeam 3 at North End  |        |
| 3        | 736             | '   | 57     |
| 3        | 181             | Span 3, Floorbeam 6 at North End  | 57     |
| 3        | 186             | Span 3, Floorbeam 7 at North and South Ends   | 57     |
| 3        | 189             | Span 3, Floorbeam 8 at South End  | 57     |
| 3        | 414             | Span 3, Floorbeam 9 at South End  | 57     |
| 3        | 644             | Span 3, Floorbeam 10 at North End   | 55     |
| 3        | 418             | Span 4, Floorbeam 1 at North End  | 60     |
|          |                 | 1 '   |        |
| 3        | 425             | Span 4, Floorbeam 9 at South End  | 58     |
| 3        | 49              | Span 5, Floorbeam 6 at South End  | 60     |
| 3        | 681             | Span 5, Floorbeam 8 at South End  | 58     |
| 3        | 247             | Span 7, Floorbeam 1 at North End  | 58     |
| 3        | 253             | Span 7, Floorbeam 2 at South End  | 58     |
| 3        | 256             | Span 7, Floorbeam 3 at South End  | 58     |
| <u> </u> |                 |   |        |
| 3        | 342             | Span 7, Floorbeam 4 at South End  | 58     |
| 3        | 264             | Span 7, Floorbeam 5 at North End  | 58     |
| 3        | 272             | Span 7, Floorbeam 6 at North End  | 58     |
| 3        | 615             | Span 7, Floorbeam 7 at South End  | 58     |
| 3        | 284             | Span 7, Floorbeam 8 at South End  | 58     |
| 3        | 287             | Span 7, Floorbeam 9 at South End  | 58     |
| 4        |                 | Span 2, Floorbeam 0   |        |
|          | 635             |   | 59     |
| 4        | 644             | Span 3, Floorbeam 10  | 55     |
| 5        | 393             | Span 2, L9N-U10N at L9N   | 63     |
| 5        | 138             | Span 2, L9S-U10S at L9S   | 63     |
| 5        | 570             | Span 4, U3N-L4N at L4N  | 64     |
| 5        | 697             | Span 4, L6S-U7S at L6S  | 64     |
| 5        | 223             | Span 5, L6S-U7S at L6S  | 64     |
|          |                 |   |        |
| 5        | 232             | Span 6, U3N-L4N at L4N  | 64     |
| 5        | 726             | Span 6, U3S-L4S at L4S  | 64     |
| 5        | 341             | Span 7, U3S-L4S at L4S  | 64     |
| 5        | 72              | Span 7, L6N-U7N at L6N  | 64     |
| 5        | 729             | Span 7, L6S-U7S at L6S  | 64     |
| 5        | 77              | Span 8, U3S-L4S at L4S  | 64     |
|          |                 |   |        |
| 5        | 358             | Span 8, L6N-U7N at L6N  | 64     |
| 6        | 157             | Span 3, L1N-U1N at L1N  | 65     |
| 6        | 572             | Span 6, L1S-U1S at L1S  | 65     |
| 7        | 644             | Span 3, Floorbeam 10 at South End   | 55     |
| 7        | 49              | Span 5, Floorbeam 6 at South End  | 60     |
| 7        | 702             | Span 6, Floorbeam 10 at North End   | 61     |
|          |                 |   | +      |
| 7        | 658             | Span 7, Floorbeam 0 at North and South Ends   | 61     |
| 7        | 659             | Span 7, Floorbeam 10 at North and South Ends  | 61     |
| 7        | 660             | Span 8, Floorbeam 1 at North End  | 61     |
| 7        | 92              | Span 8, Floorbeam 2 at Stringer 1   | 61     |
| 7        | 661             | Span 8, Floorbeam 3 at North and South Ends   | 61     |
|          |                 |   |        |
| 7        | 93              | Span 8, Floorbeam 4 at Stringer 1   | 61     |

| 5 '                    | 10/29/2024 NBIS |  |               |
|------------------------|-----------------|--|---------------|
| Repair                 | Inspection      | 1 4:   | Sheet         |
| I.D.<br>No.            | Deficiency      | Location   | No. of<br>117 |
| NO.                    | Item No.        |  | 117           |
| 8                      | 49              | Span 5, Floorbeam 6 at South End                                 | 60            |
| 8                      | 439             | Span 5, Floorbeam 9 at North End                                 | 59            |
| 9                      | 294             | Span 8, LON-L1N at LON   | 66            |
| 10                     | 838             | Beam 2 Bearing at Pier 9, Span 9                                 | 71            |
| 10                     | 731             | Beam 4 Bearing at Pier 9, Span 9                                 | 70            |
| 10                     | 708             | Beam 2 Bearing at Pier 15, Span 14                               | 70            |
| 10                     | 732             | Beam 3 Bearing at Pier 15, Span 15                               | 70            |
| 10                     | 824             | Beam 4 Bearing at Pier 15, Span 15                               | 70            |
| 10                     | 733             | Beam 5 Bearing at Pier 15, Span 15                               | 70            |
| 11                     | 110             | Span 2, Stringers 2 and 5 at Floorbeam 1, Panel 1                | 62            |
| 11                     | 110             | Span 2, Stringers 2, 3 and 5 at Floorbeam 1, Panel 2             | 62            |
| 11                     | 110             | Span 2, Stringers 2, 3, 4, 5 and 9 at Floorbeam 2, Panel 3       | 62            |
| 11                     | 110             | Span 2, Stringer 5 at Floorbeam 3, Panel 3                       | 62            |
| 11                     | 110             | Span 2, Stringer 9 at Floorbeam 3, Panel 4                       | 62            |
| 11                     | 110             | Span 2, Stringers 7 and 9 at Floorbeam 4, Panel 4                | 62            |
| 11                     | 110             | Span 2, Stringers 3 and 5 at Floorbeam 4, Panel 5                | 62            |
| 11                     | 110             | Span 2, Stringers 2, 5 and 10 at Floorbeam 5, Panel 5            | 62            |
| 11                     | 110             | Span 2, Stringers 2, 3 and 5 at Floorbeam 6, Panel 7             | 62            |
| 11                     | 110             | Span 2, Stringers 2, 3 and 7 at Floorbeam 7, Panel 7             | 62            |
| 11                     | 110             | Span 2, Stringers 3, 5 and 7 at Floorbeam 7, Panel 8             | 62            |
| 11                     | 110             | Span 2, Stringers 3 and 7 at Floorbeam 8, Panel 8                | 62            |
| 11                     | 110             | Span 2, Stringer 3 at Floorbeam 8, Panel 9                       | 62            |
| 11                     | 110             | Span 2, Stringer 4 at Floorbeam 9, Panel 9                       | 62            |
| 11                     | 110             | Span 2, Stringer 5 at Floorbeam 10, Panel 10                     | 62            |
| 11                     | 110             | Span 2, Stringer 2 at Floorbeam 10, Panel 11                     | 62            |
| 11                     | 110             | Span 2, Stringers 5, 9 and 10 at Floorbeam 11, Panel 12          | 62            |
| 11                     | 110             | Span 2, Stringers 2 and 8 at Floorbeam 12, Panel 12              | 62            |
| 11                     | 110             | Span 2, Stringer 7 at Floorbeam 12, Panel 13                     | 62            |
| 11                     | 110             | Span 2, Stringers 2 and 3 at Floorbeam 13, Panel 13              | 62            |
| 11                     | 110             | Span 2, Stringers 7, 9 and 10 at Floorbeam 14, Panel 14          | 62            |
| 11                     | 110             | Span 2, Stringers 2, 5, 7 and 9 at Floorbeam 14, Panel 15        | 62            |
| 11                     | 110             | Span 5, Stringer 1 at Floorbeam 7, Panel 8                       | 62            |
| 11                     | 110             | Span 5, Stringer 9 at Floorbeam 10, Panel 10                     | 62            |
| 11                     | 110             | Span 7, Stringer 8 at Floorbeam 4, Panel 4                       | 62            |
| Bridge Deck            | 2               | West Approach Span and Spans 9 thru 15 , Bridge Deck, Throughout | 50            |
| Expansion Joints       | 721             | Pier 4   | 52            |
| Expansion Joints       | 797             | Pier 5   | 53            |
| Expansion Joints       | 728             | Pier 7   | 53            |
| Expansion Joints       | 457             | Pier 9   | 53            |
| Expansion Joints       | 718             | Pier 15  | 53            |
| Expansion Joints       | 840             | East Abutment  | 54            |
| Misc. Fastener Repairs | 11              | West Approach, North Side Handrail at Pier 1                     | 69            |
| Misc. Fastener Repairs | 825             | Span 1, Stringers 2, 4 and 5 at Floorbeam 0                      | 69            |
| Misc. Fastener Repairs | 741             | Span 1, North Rail at 1st Rail Post East of Pier 1               | 69            |
| Aisc. Fastener Repairs | 634             | Span 1, Walkway Stairwell at U7S                                 | 69            |
| Misc. Fastener Repairs | 606             | Span 1, L8S-U8S at L8S   | 69            |
| Aisc. Fastener Repairs | 476             | Span 1, L8N-U8N at L8N   | 69            |
| Aisc. Fastener Repairs | 559             | Span 3, South Gate Platform between Floorbeam 3 and Floorbeam 4  | 69            |
| Misc. Fastener Repairs | 415             | Span 4, North and South Rails at Panel Point 0                   | 69            |
| lisc. Fastener Repairs | 648             | Span 4, L6S-L7S at L6S   | 69            |
| Misc. Fastener Repairs | 796             | Span 4, L7N-L8S at L8S   | 69            |
| 1isc. Fastener Repairs | 794             | Span 4, L8N-L9N at L8N   | 69            |
| Misc. Fastener Repairs | 804             | Span 6, Platform at L3S  | 69            |
| Misc. Fastener Repairs | 808             | Span 7, L1S-L2N at L1S   | 69            |
| Misc. Fastener Repairs | 616             | Span 7, L7S-U8S at L7S   | 69            |
| Remove Debris          | 600             | Top of Pier 1  | +             |
| Remove Debris          | 717             | Top of Pier 12   | +             |
| Remove Vegetation      | 83              | Span 5 Thru Span 8 at North and South Sides                      | _1            |

Note:

See sheets 43 thru 48 of 117 for repair identification numbers.

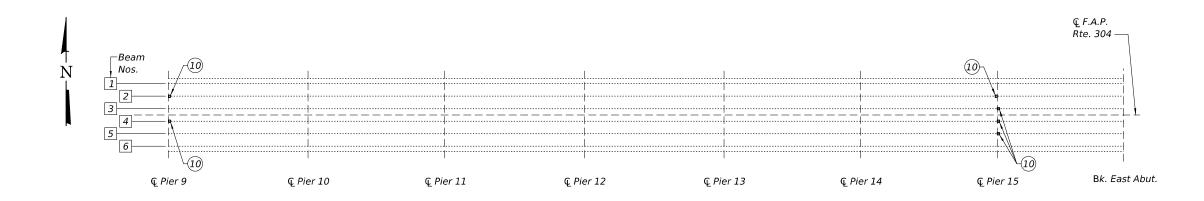


| USER NAME =  | DESIGNED - JAD | REVISED - |
|--------------|----------------|-----------|
|              | CHECKED - RKA  | REVISED - |
| PLOT SCALE = | DRAWN - AEC    | REVISED - |
| PLOT DATE =  | CHECKED - JAD  | REVISED - |
|              |                |           |

| STATE OF ILLINOIS            |
|------------------------------|
| DEPARTMENT OF TRANSPORTATION |

| 2024 NBIS REFERENCE TABLES |  | SECTION          | COUNTY         | TOTAL<br>SHEETS | SHEE' |
|----------------------------|--|------------------|----------------|-----------------|-------|
| STRUCTURE NO. 031-0001     |  | 266BRR, (4, 5) I | GREENE         | 117             | 42    |
|                            |  |                  | CONTRAC        | T NO. 76        | 3T66  |
| SHEET 42 OF 117 SHEETS     |  | ILLINOIS FED.    | AID PROJECT #5 | STP-PE84        | (558) |

PLAN WEST APPROACH SPAN

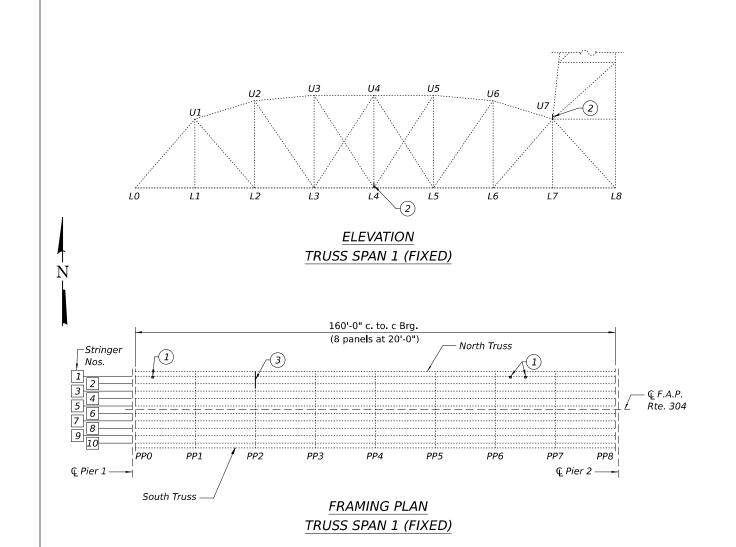


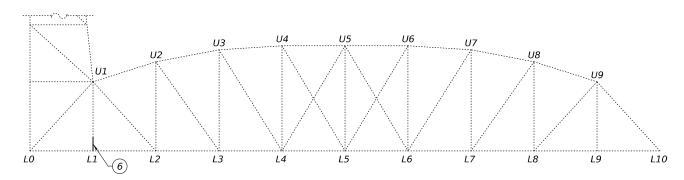
FRAMING PLAN SPANS 9 THRU 15

|        | REPAIR SCHEDULE - 1    |  |   |  |  |  |  |  |
|--------|------------------------|--|---|--|--|--|--|--|
| ID No. | Item                   | Location (NBIS Item Number)  | Action  |  |  |  |  |  |
| -      | Bridge Deck            | West Approach Span and Spans 9 thru 15, Bridge Deck, Throughout (2)  | Install full or partial depth concrete repair       |  |  |  |  |  |
| -      | Expansion Joints       | Pier 15 (718); East Abutment (840)   | Replace expansion joints                            |  |  |  |  |  |
| -      | Misc. Fastener Repairs | West Approach, North Side Handrail at Pier 1 (11)  | Replace defective or missing fasteners              |  |  |  |  |  |
| -      | Remove Debris          | Top of Pier 1 (600); Top of Pier 12 (717)  | Clean pier caps of debris                           |  |  |  |  |  |
| 1      | Rail or Walkway        | West Approach, South Rail at 1st Bracket West of West Abutment (599)   | Replace anchor rods                                 |  |  |  |  |  |
| 10     | Bearings               | Beam 2 Bearing at Pier 9, Span 9 (838); Beam 4 Bearing at Pier 9, Span 9 (731); Beam 2 Bearing at Pier 15, Span 14 (708); Beam 3 Bearing at Pier 15, Span 15 (732); Beam 4 Bearing at Pier 15, Span 15 (824); Beam 5 Bearing at Pier 15, Span 15 (733) | Replace anchor bolt and / or bearing retainer plate |  |  |  |  |  |

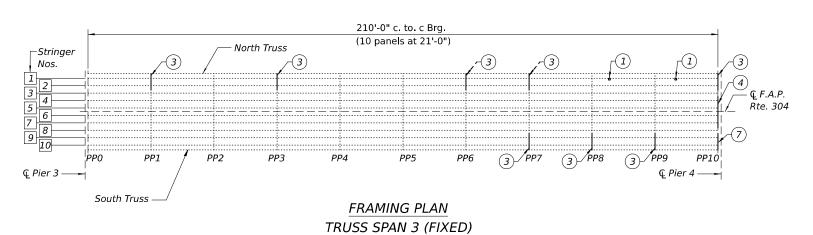
| MODEL: Br_Sh<br>FILE NAME: \\m |           | MODJESKI and MASTERS |
|--------------------------------|-----------|----------------------|
|                                | 10/2/2025 | 6:45:07 AM           |
|                                |           |                      |

|   | USER NAME =  | DESIGNED - | JAD | REVISED | - |
|---|--------------|------------|-----|---------|---|
|   |              | CHECKED -  | RKA | REVISED | - |
|   | PLOT SCALE = | DRAWN -    | AEC | REVISED | - |
| • | PLOT DATE =  | CHECKED -  | JAD | REVISED | - |





<u>ELEVATION</u> TRUSS SPAN 3 (FIXED)



|        | REPAIR SCHEDULE - 2                 |   |  |  |  |  |  |
|--------|-------------------------------------|---|--|--|--|--|--|
| ID No. | Item                                | Location (NBIS Item Number)   | Action                                 |  |  |  |  |
| -      | Expansion Joint                     | Pier 4 (721)  | Replace expansion joint                |  |  |  |  |
| -      | Misc. Fastener Repairs              | Span 1, Stringers 2, 4 and 5 at Floorbeam 0 (825); Span 1, North Rail at 1st Rail Post East of Pier 1 (741); Span 1, Walkway Stairwell at U7S (634); Span 1, L8S-U8S at L8S (606); Span 1, L8N-U8N at L8N (476); Span 3, South Gate Platform between Floorbeam 3 and Floorbeam 4 (559)  | Replace defective or missing fasteners |  |  |  |  |
| 1      | Railing Anchor                      | Span 1, North Rail at 1st Rail Post East of Panel Point 0 (368); Span 1, North Rail at 1st and 2nd Rail Supports East of Panel Point 6 (548); Span 3, North Rail at 1st Rail Support East of Panel Point 8 (785); Span 3, North Rail at 2nd Rail Support East of Panel Point 9 (788)  | Replace anchor bolts                   |  |  |  |  |
| 2      | Handrail                            | Span 1, Walkway at L4S and South Railing at 1st and 3rd Rail Post West of Panel Point 4 (603); Span 1, Walkway at U7S (605)   | Replace handrail                       |  |  |  |  |
| 3      | Floorbeam Flange                    | Span 1, Floorbeam 2 at North End (14); Span 3, Floorbeam 1 at North End (675); Span 3, Floorbeam 3 at North End (736); Span 3, Floorbeam 6 at North End (181); Span 3, Floorbeam 7 at North and South Ends (186); Span 3, Floorbeam 8 at South End (189); Span 3, Floorbeam 9 at South End (414); Span 3, Floorbeam 10 at North End (644) | Install repair plates and / or angles  |  |  |  |  |
| 4      | Floorbeam Bottom Flange Cover Plate | Span 3, Floorbeam 10 (644)  | Replace cover plates                   |  |  |  |  |
| 6      | Truss Vertical                      | Span 3, L1N-U1N at L1N (157)  | Install repair plates                  |  |  |  |  |
| 7      | Floorbeam Flange to Web             | Span 3, Floorbeam 10 at South End (644)   | Install repair plates and / or angles  |  |  |  |  |

Note:

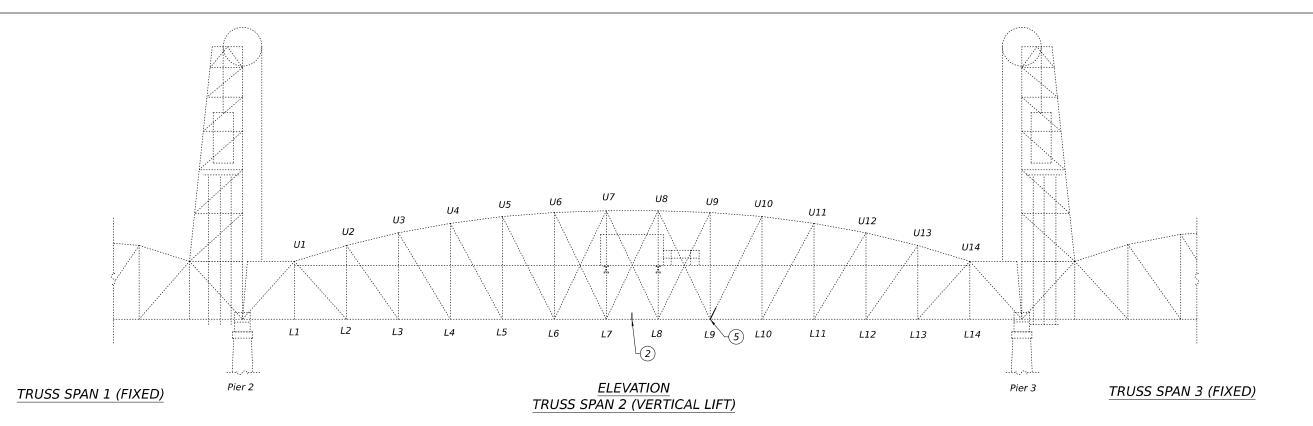
PP = Panel Point

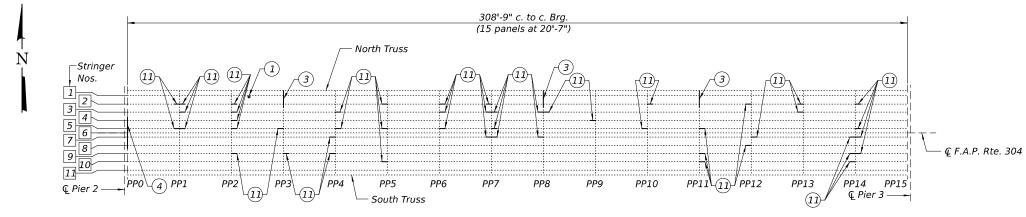
MODJESKI ••• MASTERS

|   | USER NAME =  | DESIGNED | - | JAD | REVISED | - |
|---|--------------|----------|---|-----|---------|---|
|   |              | CHECKED  | - | RKA | REVISED | - |
|   | PLOT SCALE = | DRAWN    | - | AEC | REVISED | - |
| • | PLOT DATE =  | CHECKED  | - | JAD | REVISED | - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| GENERAL PLAN AND ELEVATION REPAIR SCHEDULE - 2 | F.A.P.<br>RTE. |    |
|--|----------------|----|
| STRUCTURE NO. 031-0001                         | 304            | 26 |
| OTROGRANE NOT COT-0001                         |                |    |
| SHEET 44 OF 117 SHEETS                         |                |    |





### FRAMING PLAN TRUSS SPAN 2 (VERTICAL LIFT)

|        | REPAIR SCHEDULE - 3                 |  |                                       |  |  |  |  |  |  |
|--------|-------------------------------------|--|---------------------------------------|--|--|--|--|--|--|
| ID No. | Item                                | Location (NBIS Item Number)  | Action                                |  |  |  |  |  |  |
| 1      | Railing Anchor                      | Span 2, South Rail at 1st Rail Support East of Panel Point 2 (765)   | Replace anchor bolts                  |  |  |  |  |  |  |
| 2      | Handrail                            | Span 2, South Navigation Light Walkway at Midspan L7S-L8S (772)  | Replace handrail                      |  |  |  |  |  |  |
| 3      | Floorbeam Flange                    | Span 2, Floorbeam 3 at North End (766); Span 2, Floorbeam 8 at North End (773); Span 2, Floorbeam 11 at North End (145)  | Install repair plates and / or angles |  |  |  |  |  |  |
| 4      | Floorbeam Bottom Flange Cover Plate | Span 2, Floorbeam 0 (635)  | Replace cover plates                  |  |  |  |  |  |  |
| 5      | Truss Diagonal                      | Span 2, L9N-U10N at L9N (393); Span 2, L9S-U10S at L9S (138)   | Install repair plates                 |  |  |  |  |  |  |
| 11     | Stringer Web                        | Span 2, Stringers 2 and 5 at Floorbeam 1, Panel 1, Stringers 2, 3 and 5 at Floorbeam 1, Panel 2, Stringers 2, 3, 4, 5 and 9 at Floorbeam 2, Panel 3, Stringer 5 at Floorbeam 3, Panel 3, Stringer 9 at Floorbeam 3, Panel 4, Stringers 7 and 9 at Floorbeam 4, Panel 4, Stringers 3 and 5, Floorbeam 4, Panel 5, Stringers 2, 5 and 10 at Floorbeam 5, Panel 5, Stringers 2, 3 and 5 at Floorbeam 6, Panel 7, Stringers 2, 3 and 7 at Floorbeam 7, Panel 7, Stringers 3, 5 and 7 at Floorbeam 7, Panel 8, Stringers 3 and 7 at Floorbeam 8, Panel 8, Stringer 3 at Floorbeam 8, Panel 9, Stringer 4 at Floorbeam 10, Panel 11, Stringers 5, 9 and 10 at Floorbeam 11, Panel 12, Stringers 2 and 8 at Floorbeam 12, Panel 12, Stringer 7 at Floorbeam 12, Panel 13, Stringers 2 and 3 at Floorbeam 13, Panel 13, Stringers 7, 9 and 10 at Floorbeam 14, Panel 14, Stringers 2, 5, 7 and 9 at Floorbeam 14, Panel 15 (110) | Install repair plates                 |  |  |  |  |  |  |

Note:

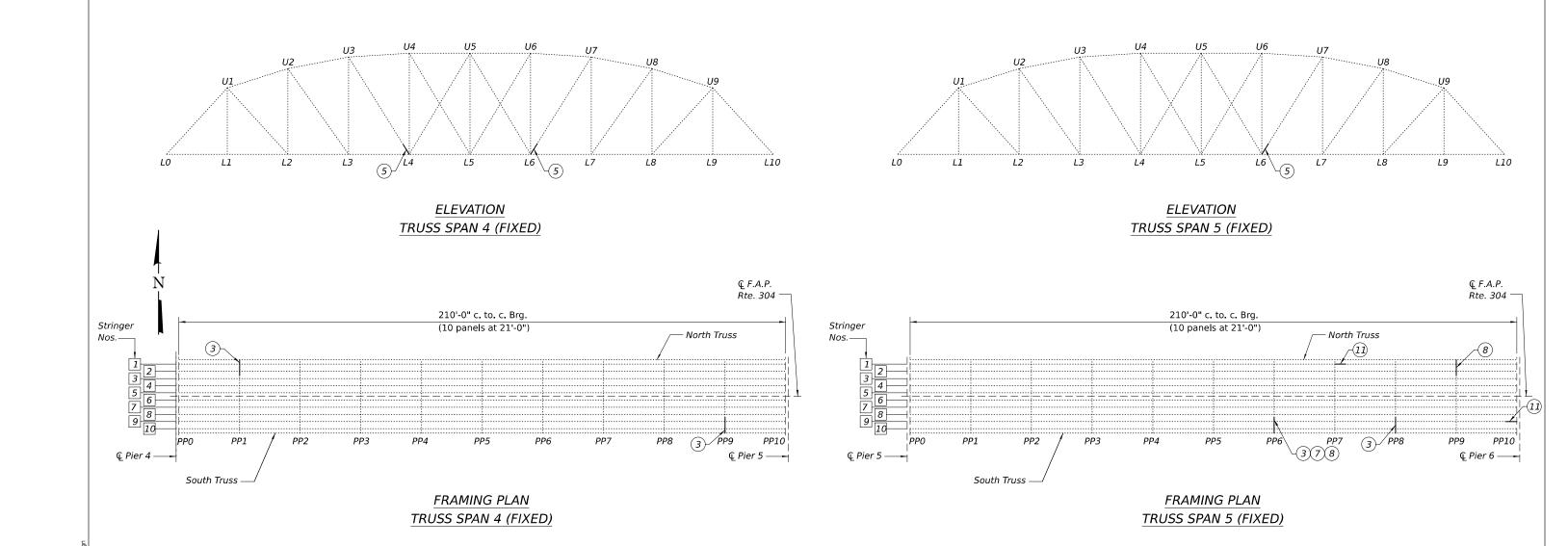
PP = Panel Point

|                      | ŀ |
|----------------------|---|
| MODJESKI and MASTERS | ŀ |

|    | USER NAME =  | DESIGNED | - | JAD | REVISED | - |
|----|--------------|----------|---|-----|---------|---|
|    |              | CHECKED  | - | RKA | REVISED | - |
| RS | PLOT SCALE = | DRAWN    | - | AEC | REVISED | - |
| 13 | PLOT DATE =  | CHECKED  | - | JAD | REVISED | - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FILE NAME: \text{\tinch{\text{\texi}\tint{\text{\text{\texi}\text{\text{\text{\text{\texi}\tint{\text{\texi}}\tint{\text{\texi}\text{\text{\texi}\tint{\tex{



|        | REPAIR SCHEDULE - 4  |   |  |  |  |  |  |  |  |
|--------|--|---|--|--|--|--|--|--|--|
| ID No. | Item   | Action  |  |  |  |  |  |  |  |
| -      | Expansion Joint  | Replace expansion joint   |  |  |  |  |  |  |  |
| -      | Misc. Fastener Repairs  Span 4, North and South Rails at Panel Point 0 (415); Span 4, L6S-L7S at L6S (648); Span 4, L7N-L8S at L8S (796); Span 4, L8N-L9N at L8N (794)  Re |   | Replace defective or missing fasteners |  |  |  |  |  |  |
| -      | Remove Vegetation  | Span 5, North and South Sides (83)  | Remove vegetation from right-of-way    |  |  |  |  |  |  |
| 3      | Floorbeam Flange   | Span 4, Floorbeam 1 at North End (418); Span 4, Floorbeam 9 at South End (425); Span 5, Floorbeam 6 at South End (49); Span 5, Floorbeam 8 at South End (681) | Install repair plates and / or angles  |  |  |  |  |  |  |
| 5      | Truss Diagonal   | Span 4, U3N-L4N at L4N (570); Span 4, L6S-U7S at L6S (697); Span 5, L6S-U7S at L6S (223)  | Install repair plates                  |  |  |  |  |  |  |
| 7      | Floorbeam Flange to Web  | Span 5, Floorbeam 6 at South End (49)   | Install repair plates and / or angles  |  |  |  |  |  |  |
| 8      | 8 Floorbeam Web Span 5, Floorbeam 6 at South End (49); Span 5, Floorbeam 9 at North End (439)  |   | Install repair plates and / or angles  |  |  |  |  |  |  |
| 11     | Stringer Web   | Span 5, Stringer 1 at Floorbeam 7, Panel 8, Stringer 9 at Floorbeam 10, Panel 10 (110)  | Install repair plates                  |  |  |  |  |  |  |

PP = Panel Point

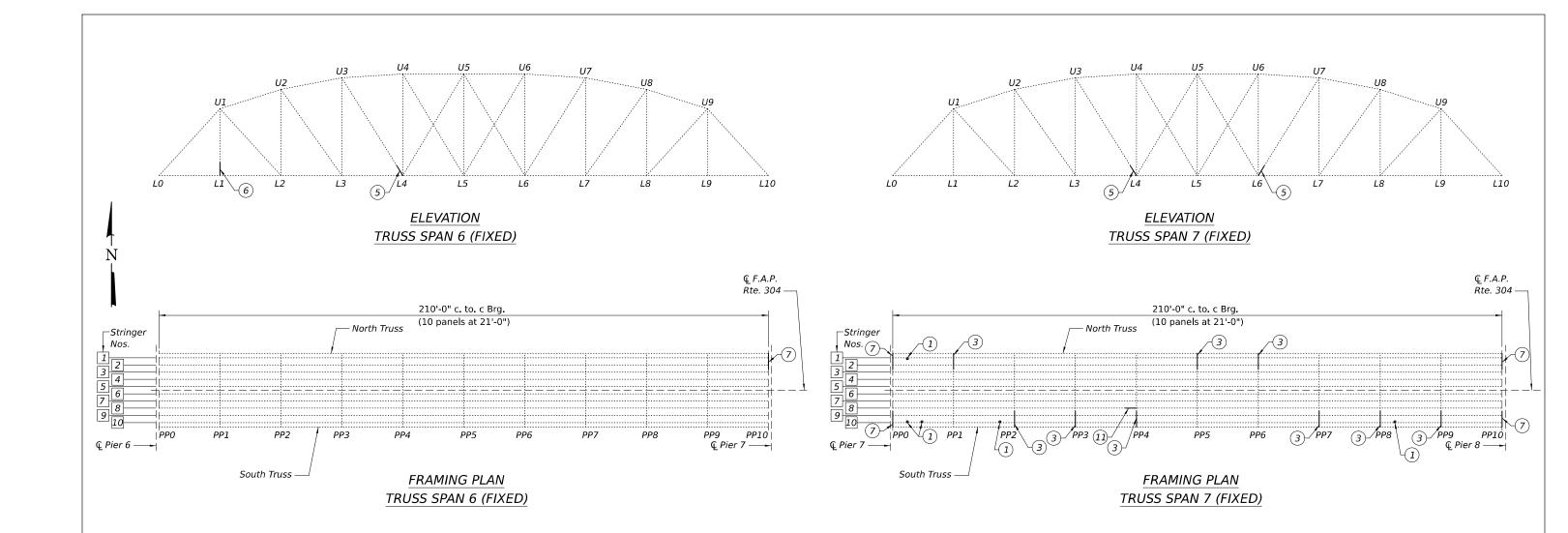
| MODJESKI and MASTERS | ŀ |
|----------------------|---|

|    | USER NAME =  | DESIGNED | - | JAD | REVISED | - |
|----|--------------|----------|---|-----|---------|---|
|    |              | CHECKED  | - | RKA | REVISED | - |
| RS | PLOT SCALE = | DRAWN    | - | AEC | REVISED | - |
|    | PLOT DATE =  | CHECKED  | - | JAD | REVISED | - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION REPAIR SCHEDULE - 4
STRUCTURE NO. 031-0001

SHEET 46 OF 117 SHEETS



|   | REPAIR SCHEDULE - 5  |  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|--|
| ID No.  | Item   | Location (NBIS Item Number)  | Action                                 |  |  |  |  |  |
| -   | - Expansion Joint Pier 7 (728)   |  | Replace expansion joint                |  |  |  |  |  |
| - Misc. Fastener Repairs Span 6, Platform at L3S (804); Span 7, L1S-L2N at L1S (808); Span 7, L7S-U8S at L7S (61) |  | Span 6, Platform at L3S (804); Span 7, L1S-L2N at L1S (808); Span 7, L7S-U8S at L7S (616)  | Replace defective or missing fasteners |  |  |  |  |  |
| -   | - Remove Vegetation Span 6 thru Span 7, North and South Sides (83)   |  | Remove vegetation from right-of-way    |  |  |  |  |  |
| 1   | Railing Anchor   | Span 7, South Rail at 1st and 2nd Rail Supports East of Panel Point 0 (806); Span 7, North Rail at 1st Rail Support East of Panel Point 0 (807); Span 7, South Rail at 1st Rail Support East of Panel Point 8 (814)  | Replace anchor bolts                   |  |  |  |  |  |
| 3   | Floorbeam Flange   | Span 7, Floorbeam 1 at North End (247); Span 7, Floorbeam 2 at South End (253); Span 7, Floorbeam 3 at South End (256);<br>Span 7, Floorbeam 4 at South End (342); Span 7, Floorbeam 5 at North End (264); Span 7, Floorbeam 6 at North End (272);<br>Span 7, Floorbeam 7 at South End (615); Span 7, Floorbeam 8 at South End (284); Span 7, Floorbeam 9 at South End (287) | Install repair plates and / or angles  |  |  |  |  |  |
| 5   | Truss Diagonal   | Span 6, U3N-L4N at L4N (232); Span 6, U3S-L4S at L4S (726); Span 7, U3S-L4S at L4S (341); Span 7, L6N-U7N at L6N (72);<br>Span 7, L6S-U7S at L6S (729)   | Install repair plates                  |  |  |  |  |  |
| 6   | Truss Vertical   | Span 6, L1S-U1S at L1S (572)   | Install repair plates                  |  |  |  |  |  |
| 7   | 7 Floorbeam Flange to Web Span 6, Floorbeam 10 at North End (702); Span 7, Floorbeam 0 at North and South Ends (658); Span 7, Floorbeam 10 at North and South Ends (659) |  | Install repair plates and / or angles  |  |  |  |  |  |
| 11  | Stringer Web   | Span 7, Stringer 8 at Floorbeam 4, Panel 4 (110)   | Install repair plates                  |  |  |  |  |  |

PP = Panel Point

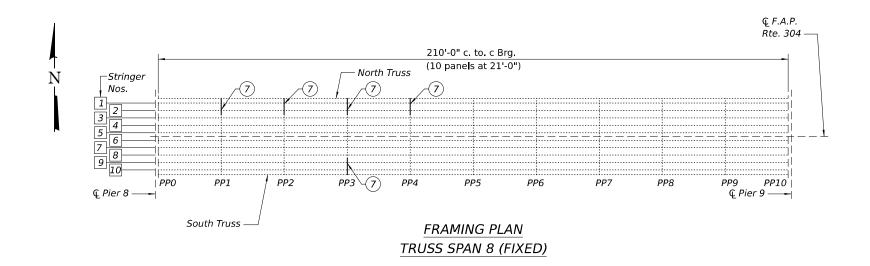
| EL: Br_Sh<br>NAME: \\n |           |                  |  |
|------------------------|-----------|------------------|--|
| MODEL<br>FILE N        |           | MODJESKI MASTERS |  |
|                        | 8/13/2025 | 9:50:59 AM       |  |

|   | USER NAME =  | DESIGNED - | JAD | REVISED | - |
|---|--------------|------------|-----|---------|---|
|   |              | CHECKED -  | RKA | REVISED | - |
| s | PLOT SCALE = | DRAWN -    | AEC | REVISED | - |
| • | PLOT DATE =  | CHECKED -  | JAD | REVISED | - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| GENERAL PLAN AND ELEVATION REPAIR SCHEDULE - 5 | F.A.P.<br>RTE | SECTION          | COUNTY             | TOTAL<br>SHEETS | SHEET<br>NO. |
|--|---------------|------------------|--------------------|-----------------|--------------|
| STRUCTURE NO. 031-0001                         |               | 266BRR, (4, 5) I | GREENE             | 117             | 47           |
|  |               | •                | CONTRAC            | T NO. 76        | 3T66         |
| SHEET 47 OF 117 SHEETS                         |               | ILLINOIS F       | ED. AID PROJECT #8 | STP-PE84        | (558)        |
|  |               |                  |                    |                 |              |

## ELEVATION TRUSS SPAN 8 (FIXED)



|        | REPAIR SCHEDULE - 6       |   |                                       |  |  |  |  |
|--------|---------------------------|---|---------------------------------------|--|--|--|--|
| ID No. | Item                      | Location (NBIS Item Number)   | Action                                |  |  |  |  |
| -      | Expansion Joint           | Pier 9 (457)  | Replace expansion joint               |  |  |  |  |
| -      | Remove Vegetation         | Span 8, North and South Sides   | Remove vegetation from right-of-way   |  |  |  |  |
| 5      | Truss Diagonal            | Span 8, U3S-L4S at L4S (77); Span 8, L6N-U7N at L6N (358)   | Install repair plates                 |  |  |  |  |
| 7      | I FIGORDEAM FIANCE TO WED | Span 8, Floorbeam 1 at North End (660); Span 8, Floorbeam 2 at Stringer 1 (92); Span 8, Floorbeam 3 at North and South Ends (661); Span 8, Floorbeam 4 at Stringer 1 (93) | Install repair plates and / or angles |  |  |  |  |
| 9      | Truss Lower Chord         | Span 8, LON-L1N at LON (294)  | Install repair plates                 |  |  |  |  |
| 12     | East Portal Strut         | Span 8, Portal Strut between L10S-U9S and L10N-U9N  | Install repair plates and angles      |  |  |  |  |

PP = Panel Point

| H. Br_Sh<br>AME: № |           |                  | ĺ |
|--------------------|-----------|------------------|---|
| MODEL<br>FILE N    |           | MODJESKI MASTERS | ĺ |
|                    | 9/25/2025 | 7:21:43 AM       |   |

| USER NAME =  | DESIGNED - JAD | REVISED - |
|--------------|----------------|-----------|
|              | CHECKED - RKA  | REVISED - |
| PLOT SCALE = | DRAWN - AEC    | REVISED - |
| PLOT DATE =  | CHECKED - JAD  | REVISED - |

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

**GENERAL PLAN AND ELEVATION REPAIR SCHEDULE - 6 STRUCTURE NO. 031-0001** SHEET 48 OF 117 SHEETS

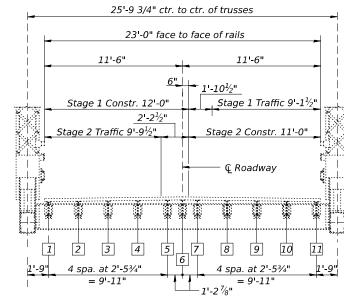
F.A.P. RTE. COUNTY TOTAL SHEET NO.

GREENE 117 48 SECTION 266BRR, (4, 5) I CONTRACT NO. 76T66

### <u>CROSS SECTION</u> (WEST APPROACH SPAN)

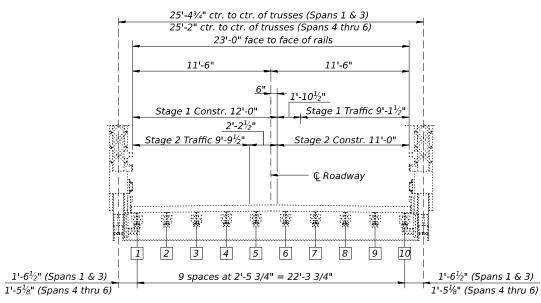
(Looking East)

Temporary concrete barriers not shown for clarity.



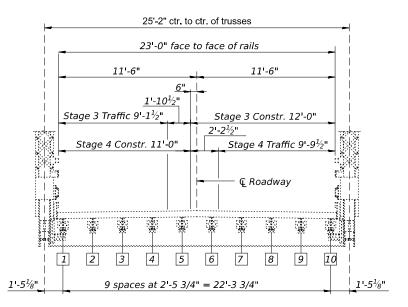
# CROSS SECTION (SPAN 2)

(Looking East) Flexible delineators not shown for clarity.



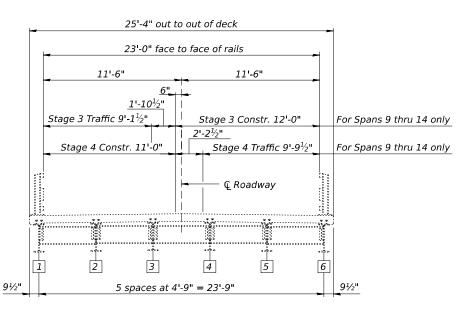
### <u>CROSS SECTION</u> (SPAN 1 AND SPAN 3 THRU MIDPOINT OF SPAN 6)

(Looking East) Temporary concrete barriers not shown for clarity.



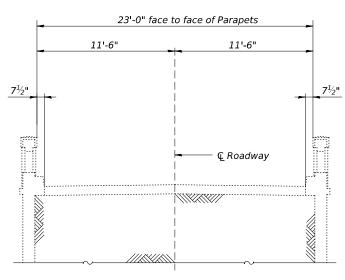
### <u>CROSS SECTION</u> (MIDPOINT OF SPAN 6 THRU SPAN 8)

(Looking East) Temporary concrete barriers not shown for clarity.



### CROSS SECTION (SPANS 9 THRU 15)

(Looking East)
Temporary concrete barriers not shown for clarity.



# <u>CROSS SECTION</u> (EAST RETAINED FILL APPROACH)

(Looking East)

Note

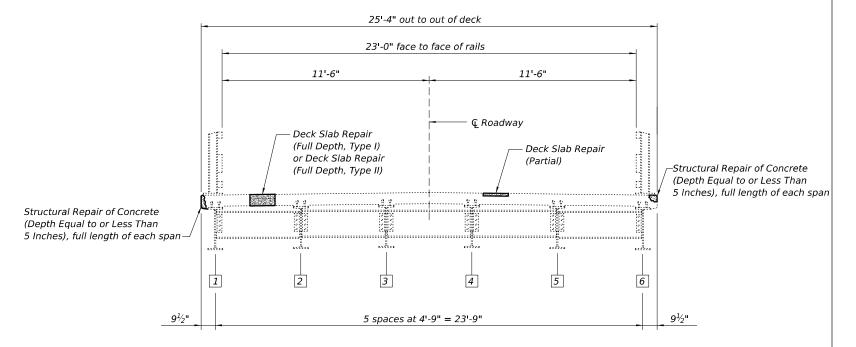
Full structure closure in Stage 5 is not shown. See Highway Plans for additional stage construction information.



| USER NAME =  | DESIGNED - | - | JAD | REVISED | - |
|--------------|------------|---|-----|---------|---|
|              | CHECKED .  | - | RKA | REVISED | - |
| PLOT SCALE = | DRAWN      | - | AEC | REVISED | - |
| PLOT DATE =  | CHECKED .  | - | JAD | REVISED | - |

8-Joe Page Bridge Phase II Rehab\CADD\Structural\0310001-76T66-049-TypStgCnstXSec.dc

MODE



CROSS SECTION - WEST APPROACH SPAN Looking East

CROSS SECTION - SPANS 9 THRU 15 Looking East

### **BILL OF MATERIAL**

| ITEM                                   | UNIT  | QUANTITY |
|--|-------|----------|
| Bridge Deck Concrete Sealer            | Sq Ft | 1,000    |
| Structural Repair of Concrete (Depth   | c 5.  |          |
| Equal to or Less Than 5 Inches)        | Sq Ft | 50       |
| Deck Slab Repair (Full Depth, Type I)  | Sq Yd | 15       |
| Deck Slab Repair (Full Depth, Type II) | Sq Yd | 5        |
| Deck Slab Repair (Partial)             | Sq Yd | 5        |
|  |       |          |

### Notes:

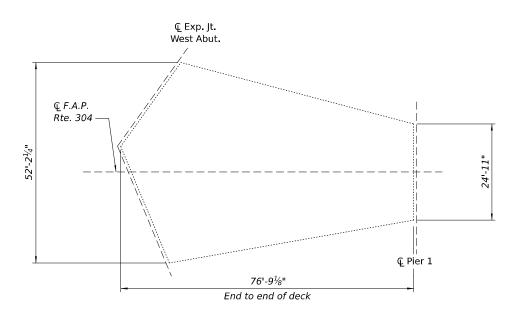
Bridge Deck Concrete Sealer shall be placed on the top face of the deck slab for the West Approach Span and Spans 9 thru 15 from edge of deck to front face of rail on both sides.

Quantities for Deck Slab Repair (Full Depth, Type I), Deck Slab Repair (Full Depth, Type II), and Deck Slab Repair (Partial) are estimated. The locations and size of deck slab repairs shall be submitted to the Engineer for approval.

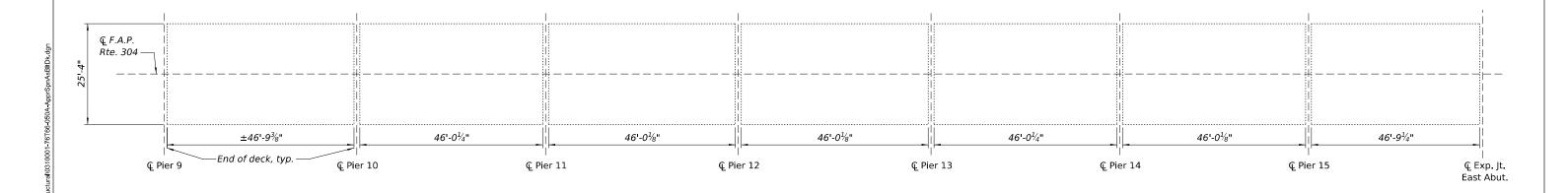


|   | USER NAME =  | DESIGNED | - | JAD | REVISED | - |
|---|--------------|----------|---|-----|---------|---|
|   |              | CHECKED  | - | RKA | REVISED | - |
| s | PLOT SCALE = | DRAWN    | - | AEC | REVISED | - |
| • | PLOT DATE =  | CHECKED  | - | JAD | REVISED | - |





## AS-BUILT DECK SLAB REPAIR PLAN WEST APPROACH SPAN



AS-BUILT DECK SLAB REPAIR PLAN EAST APPROACH - SPANS 9 THRU 15

Note:

Contractor shall complete this sheet during construction to record as-built Deck Slab Repair locations.

| MODEL: Br_S<br>FILE NAME: \ |           | MODJESKI and MASTERS |
|-----------------------------|-----------|----------------------|
|                             | 10/2/2025 | 3:41:58 PM           |

| USER NAME =  | DESIGNED | - | JAD | REVISED | - |
|--------------|----------|---|-----|---------|---|
|              | CHECKED  | - | RKA | REVISED | - |
| PLOT SCALE = | DRAWN    | - | AEC | REVISED | - |
| PLOT DATE =  | CHECKED  | - | JAD | REVISED | - |

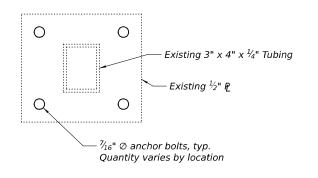
| AS-BUILT DECK SLAB REPAIR - APPROACH SPANS | F.A.P.<br>RTE | SECTION          | COUNTY  | TOTAL<br>SHEETS | SHEET<br>NO. |
|--|---------------|------------------|---------|-----------------|--------------|
| STRUCTURE NO. 031-0001                     |               | 266BRR, (4, 5) I | GREENE  | 117             | 50A          |
|  |               | •                | CONTRAC | T NO. 76        | 6T66         |
| CHEET FOA OF 117 CHEETC                    |               |                  |         |                 | (===)        |

## TYPICAL RAILING SYSTEM REPAIR

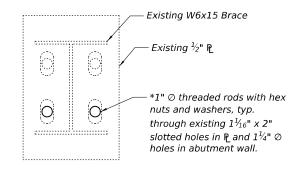
See Railing Anchor Replacement table for location

# Outside face of abutment wall - Existing W6x15 Brace Replace loose or missing anchor bolts. Drill and epoxy 1" ∅ threaded rods with hex nuts and washers, typ. 1'-0" min. embedment

### WEST APPROACH RAILING SYSTEM REPAIR SOUTH RAIL AT 1ST BRACKET WEST OF WEST ABUTMENT (ITEM 599)



## DETAIL A



- FRP walkway

### SECTION A-A

\* Replace missing rods. Two required, verify the locations in the field.

### **BILL OF MATERIAL**

| ITEM                            | UNIT | QUANTITY |
|---------------------------------|------|----------|
| Remove and Replace Anchor Bolts | Each | 27       |

COUNTY

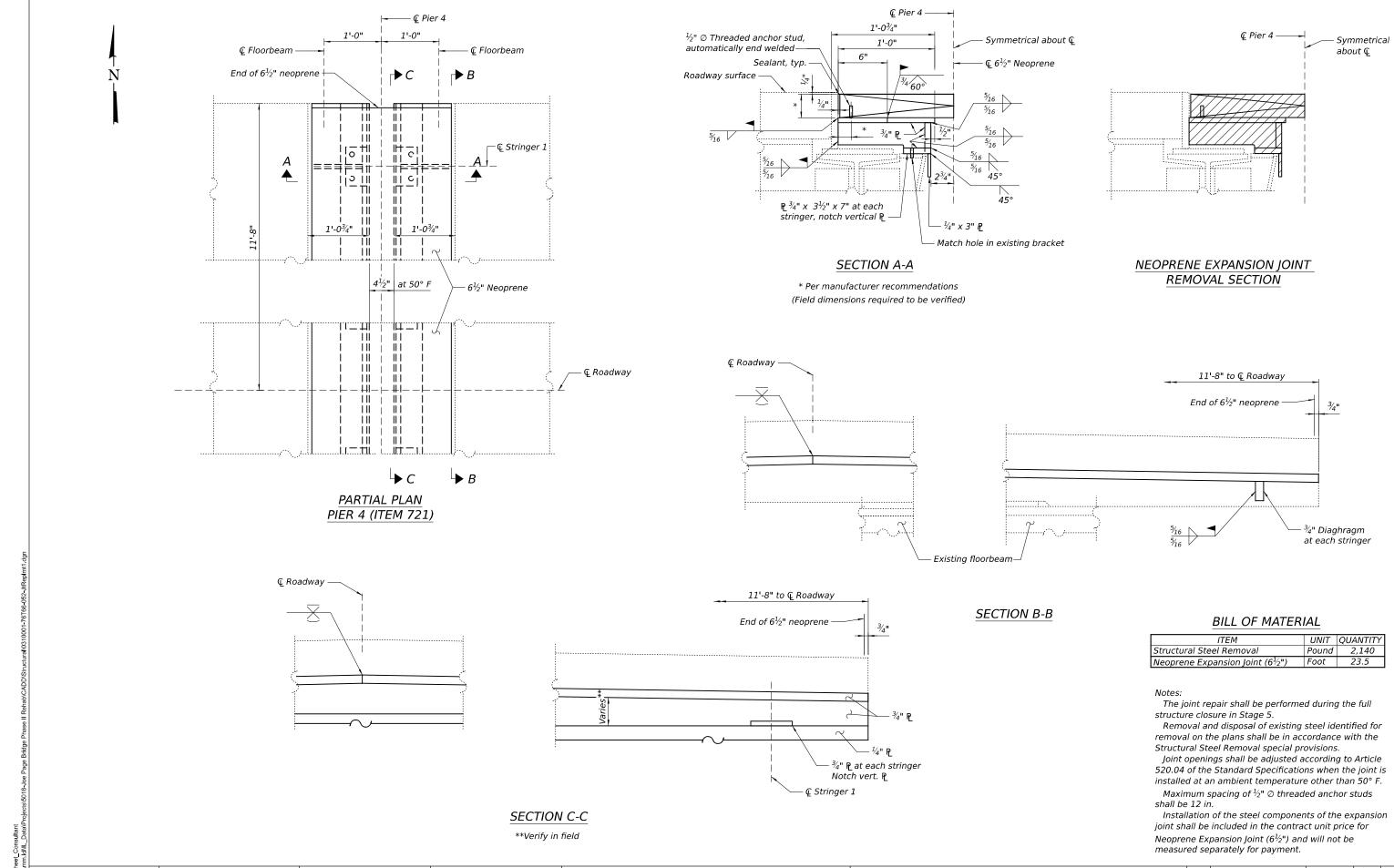
GREENE 117 51

CONTRACT NO. 76T66

| RAILING ANCHOR REPLACEMENT                   |      |   |          |  |  |  |
|--|------|---|----------|--|--|--|
| 2024 NBIS Inspection<br>Deficiency Item. No. | Span | Location  | Quantity |  |  |  |
| 368  | 1    | North Rail at 1st Rail Post East of Panel Point 0             | 3        |  |  |  |
| 548  | 1    | North Rail at 1st and 2nd Rail Supports East of Panel Point 6 | 2        |  |  |  |
| 765  | 2    | South Rail at 1st Rail Support East of Panel Point 2          | 1        |  |  |  |
| <i>785</i>                                   | 3    | North Rail at 1st Rail Support East of Panel Point 8          | 1        |  |  |  |
| 788  | 3    | North Rail at 2nd Rail Support East of Panel Point 9          | 4        |  |  |  |
| 806  | 7    | South Rail at 1st and 2nd Rail Supports East of Panel Point 0 | 5        |  |  |  |
| 807  | 7    | North Rail at 1st Rail Support East of Panel Point 0          | 3        |  |  |  |
| 614  | 7    | South Rail at 1st Rail Support West of Panel Point 2          | 2        |  |  |  |
| 814  | 7    | South Rail at 1st Rail Support East of Panel Point 8          | 4        |  |  |  |

|                      | ŀ |
|----------------------|---|
| MODJESKI and MASTERS | ŀ |

| NAME =  | DESIGNED | -                      | RKA   | REVISED   | -   |
|---------|----------|------------------------|---|---|---|
|         | CHECKED  | -                      | JAD   | REVISED   | -   |
| SCALE = | DRAWN    | -                      | AEC   | REVISED   | -   |
| DATE =  | CHECKED  | -                      | RKA   | REVISED   | -   |
|         | SCALE =  | CHECKED  SCALE = DRAWN | CHECKED         -           SCALE =         DRAWN         - | CHECKED         -         JAD           SCALE =         DRAWN         -         AEC | CHECKED         -         JAD         REVISED           SCALE =         DRAWN         -         AEC         REVISED |



MODJESKI∞MASTERS

 USER NAME =
 DESIGNED - RKA
 REVISED - REVISED 

 CHECKED - JAD REVISED 

 PLOT SCALE = DRAWN - AEC REVISED REVISED 

 PLOT DATE = CHECKED - RKA REVISED

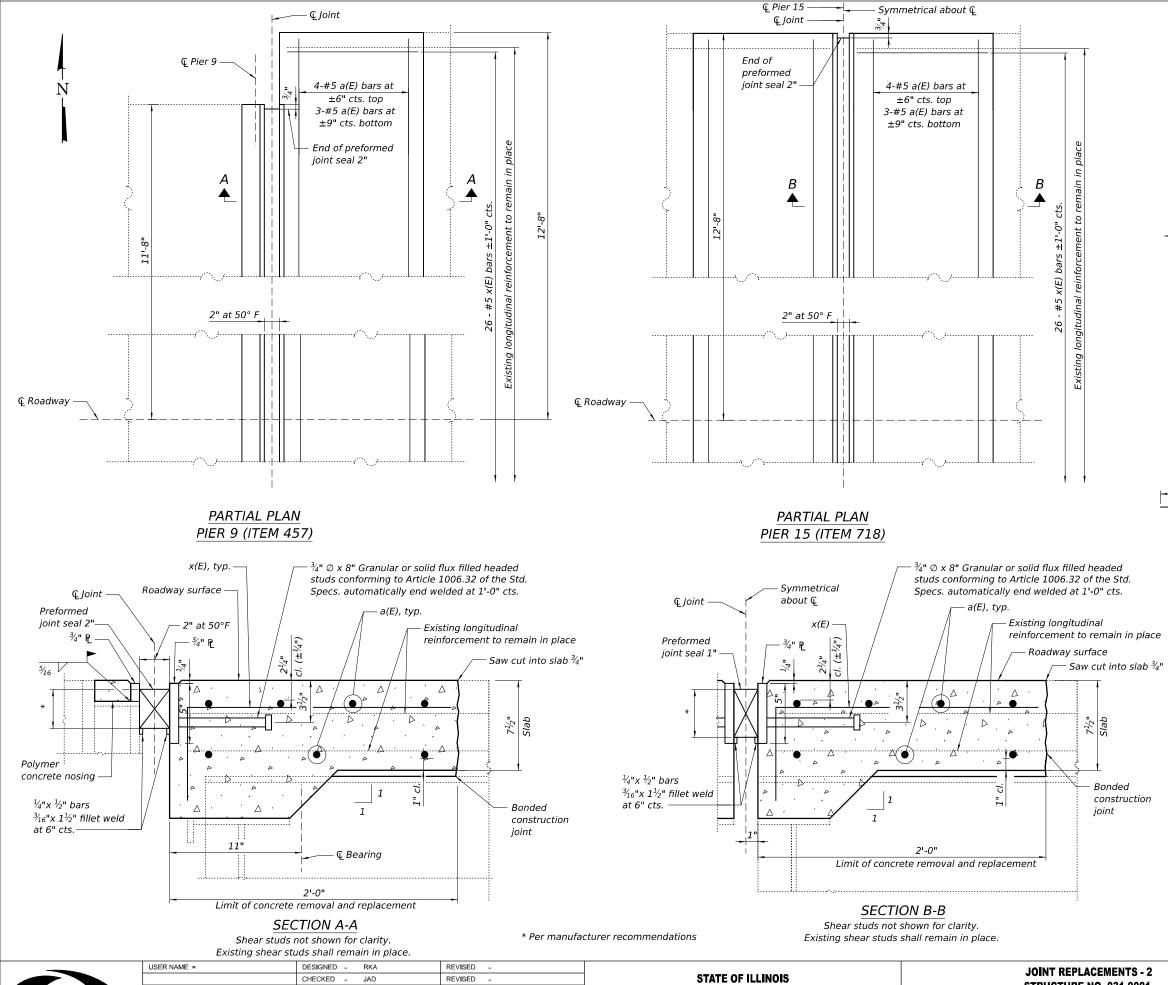
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

JOINT REPLACEMENTS - 1 STRUCTURE NO. 031-0001  
 F.A.P. RTE.
 SECTION
 COUNTY SHEETS
 TOTAL NO.
 SHEETS NO.

 304
 266BRR, (4, 5) I
 GREENE
 117
 52

 CONTRACT NO. 76T66

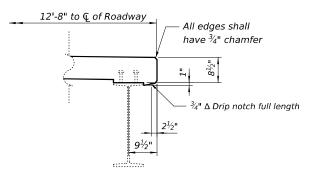
 ILLINOIS
 FED. AID PROJECT #STP-PE84(558)



**DEPARTMENT OF TRANSPORTATION** 

Remove existing joint material 1¾" at 50° F Preformed joint seal 1" Existing 3/4" P to remain in place SECTION THRU JOINT

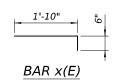
PIER 5 (ITEM 797) PIER 7 (ITEM 728)



### DETAIL AT FASCIA EAST APPROACH SPAN

Reinforcement not shown for clarity.

### BILL OF MATERIAL



| BILL OF MATERIAL   |          |       |        |       |  |  |
|--------------------|----------|-------|--------|-------|--|--|
| Bar                | No.      | Size  | Length | Shape |  |  |
| (E)                | 21       | #5    | 25'-0" |       |  |  |
|                    |          |       |        |       |  |  |
| E)                 | 78       | #5    | 2'-4"  |       |  |  |
|                    |          |       |        |       |  |  |
| `oncre             | te Rem   | oval  | Cu Yd  | 4.4   |  |  |
| oncrete            |          | Cu Yd | 4.4    |       |  |  |
| uperstructure      |          |       | Cu /u  | 7.7   |  |  |
| rotective Coat     |          |       | Sq Yd  | 17    |  |  |
| einforcement Bars, |          |       | Pound  | 740   |  |  |
| poxy Coated        |          | roana | , ,,   |       |  |  |
|                    | ned Join | t     | Foot   | 72    |  |  |
| eal 1"             |          |       | 7 000  | /2    |  |  |
| reformed Joint     |          | t     | Foot   | 23.5  |  |  |
| eal 2'             | 1        |       | 7 000  | 25.5  |  |  |
| olyme              | er Concr | ete   | Cu Ft  | 1.1   |  |  |
|                    |          |       |        |       |  |  |

The joint repairs shall be performed during the full structure closure

Joint openings shall be adjusted according to Article 520.04 of the Standard Specifications when the deck is poured at an ambient temperature other than 50° F.

Existing reinforcement shall be cleaned, straightened, and incorporated into the new construction. Cost included with Concrete Removal. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system at the Contractor's expense.

Existing shear studs in the removal area shall be cleaned and incorporated into the new construction. Any shear studs that are damaged during concrete removal shall be replaced as directed by the Engineer at the Contractor's expense.

All steel components of the expansion joint shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications. The deck surface shall have its final finish tined according to Article

420.09(e)(1) of the Standard Specifications. Cost included with Concrete Superstructure.

Installation of the steel components of the expansion joint shall be included in the contract unit price for Preformed Joint Seal 1" and Preformed Joint Seal 2" and will not be measured separately for

SECTION COUNTY GREENE 117 53 304 266BRR, (4, 5) I **STRUCTURE NO. 031-0001** CONTRACT NO. 76T66 SHEET 53 OF 117 SHEETS ILLINOIS FED. AID PROJECT #STP-PE84(558)

10/1/2025 11:44:14 AM

MODJESKI∞MASTERS

PLOT SCALE =

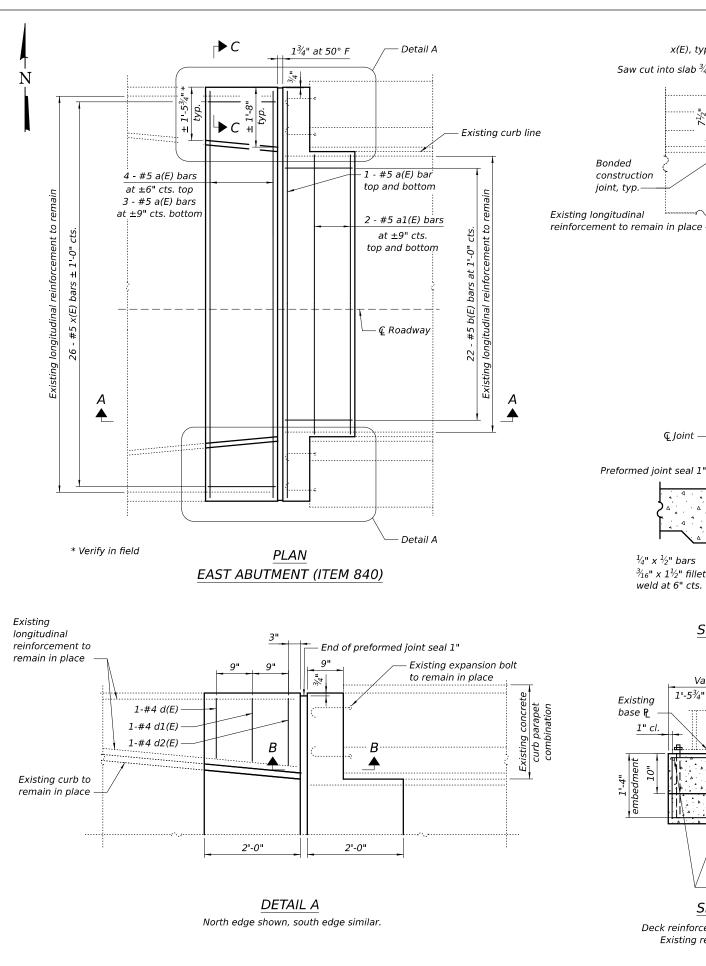
PLOT DATE =

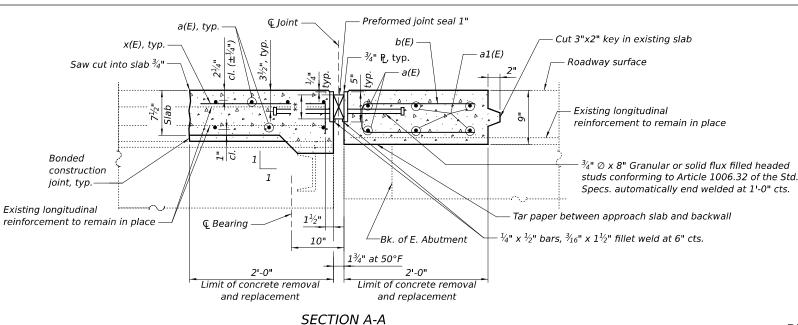
DRAWN

CHECKED - RKA

REVISED

REVISED





Shear studs not shown for clarity. Existing shear studs shall remain in place.

Top of existing curb

(on approach slab)

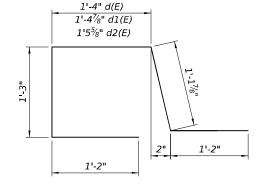
Existing expansion bolt to remain in place

BAR x(E)

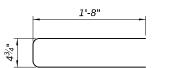
\*\*Per manufacturer recommendations

# 12'-8" to Q of Roadway All edges shall have 3/4" chamfer $\frac{3}{4}$ " $\Delta$ Drip notch full length

### DETAIL AT FASCIA EAST APPROACH SPAN Reinforcement not shown for clarity.



### BAR d(E), d1(E) and d2(E)



### BAR b(E)

### BILL OF MATERIAL

|   |          | 61    |        | 01    |
|---|----------|-------|--------|-------|
| Bar   | No.      | Size  | Length | Shape |
| a(E)  | 9        | #5    | 25'-0" |       |
| a1(E)   | 4        | #5    | 21'-9" |       |
|   |          |       |        |       |
| b(E)  | 22       | #5    | 3'-9"  |       |
|   |          |       |        |       |
| d(E)  | 2        | #4    | 6'-1"  |       |
| d1(E)   | 2        | #4    | 6'-2"  |       |
| d2(E)   | 2        | #4    | 6'-3"  |       |
|   |          |       |        |       |
| x(E)  | 26       | #5    | 2'-4"  |       |
|   |          |       |        |       |
| Concrete Removal                              |          | Cu Yd | 3.0    |       |
| Concrete<br>Superstructure                    |          |       | Cu Yd  | 1.7   |
| Concrete<br>Superstructure<br>(Approach slab) |          | Cu Yd | 1.4    |       |
| Protect                                       | tive Coa | t     | Sq Yd  | 12    |
| Reinforcement Bars,<br>Epoxy Coated           |          | Pound | 500    |       |
| Preformed Joint<br>Seal 1"                    |          | Foot  | 25.5   |       |

### Notes:

The joint repair shall be performed during the full structure closure in Stage 5.

Joint openings shall be adjusted according to Article 520.04 of the Standard Specifications when the deck is poured at an ambient temperature other than 50° F.

Existing reinforcement shall be cleaned, straightened, and incorporated into the new construction. Cost included with Concrete Removal. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system at the Contractor's expense.

All steel components of the expansion joint shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

The deck surface shall have its final finish tined according to Article 420.09(e)(1) of the Standard Specifications. Cost included with Concrete Superstructure.

Installation of the steel components of the expansion joint shall be included in the contract unit price for Preformed Joint Seal 1" and will not be measured separately for payment.

| SECTION C-C                        |
|------------------------------------|
| Deck reinforcement not shown for a |

C Joint

 $\frac{1}{4}$ " x  $\frac{1}{2}$ " bars

 $\frac{3}{16}$ " x  $1\frac{1}{2}$ " fillet

weld at 6" cts.

9"

Limit of concrete

removal and

replacement

- Existing rail post

d(E), d1(E) or d2(E)

4 - 1" ∅ anchor bolts, cast in concrete

using existing holes in railing base PL

included with Concrete Superstructure.

as template at end of curb. Cost

- Existing longitudinal reinforcement

SECTION B-B

Varies

1'-5¾" to 1'-8"

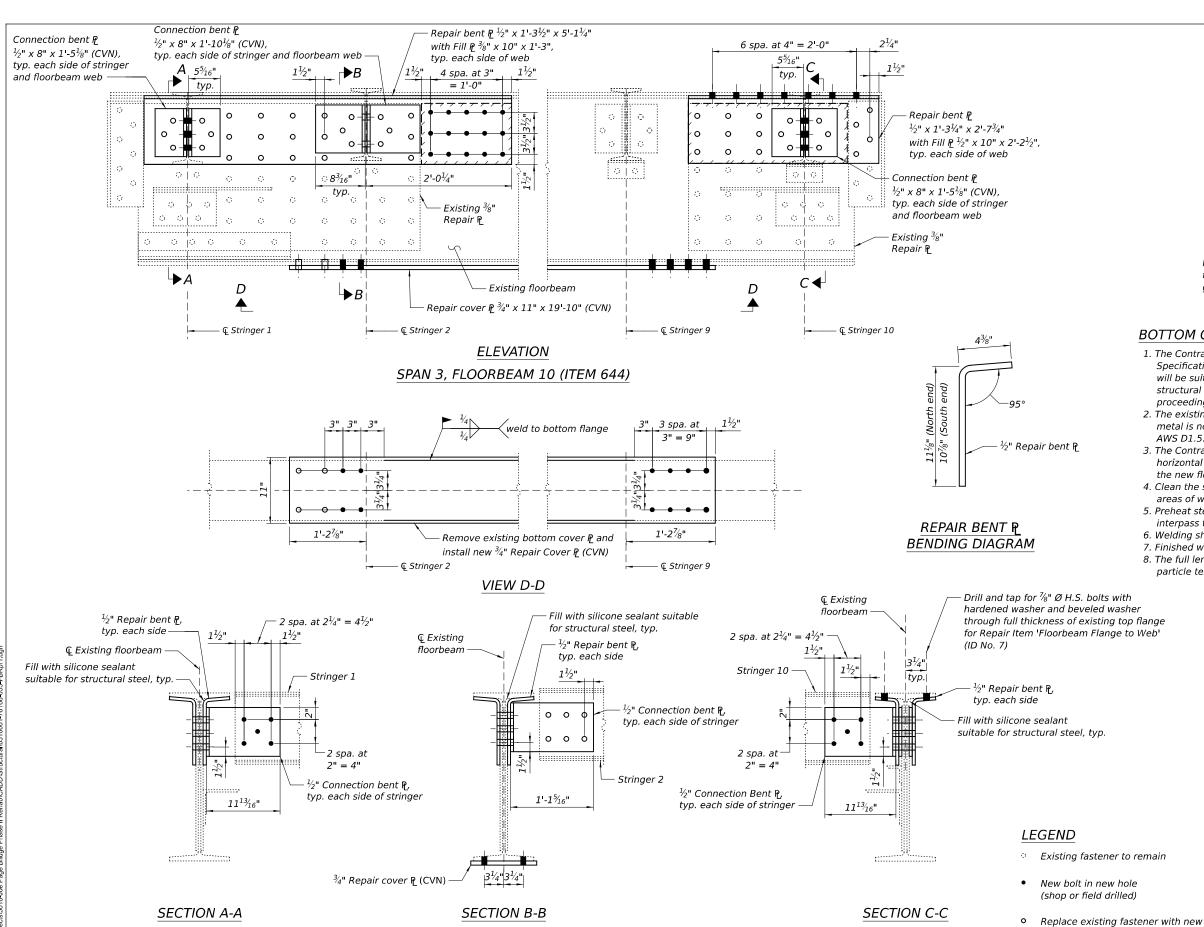
clarity. Existing reinforcement to remain.

USER NAME = DESIGNED -RKA REVISED CHECKED -JAD REVISED PLOT SCALE = REVISED MODJESKI MASTERS PLOT DATE = CHECKED -REVISED RKA

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION** 

**JOINT REPLACEMENTS - 3 STRUCTURE NO. 031-0001** SHEET 54 OF 117 SHEETS

SECTION COUNTY GREENE 304 266BRR, (4, 5) I 117 54 CONTRACT NO. 76T66 ILLINOIS FED. AID PROJECT #STP-PE84(558)



typ.

Cut at edge of cope

Stringer seat, typ.
Remove at Stringer 1 and 2 only

### STRINGER REMOVAL SECTION

Hatched areas indicate removal. All cut edges are to be ground smooth and be free from any nicks, gouges or irregularities.

### BOTTOM COVER PLATE REPLACEMENT PROCEDURE

- 1. The Contractor shall submit a proposed Welding Procedure Specification (WPS) for the Engineer's review and approval. The WPS will be suitable for welding to base materials identified in existing structural plans. The WPS shall be approved by the Engineer prior to proceeding with this work.
- The existing weld shall be removed in such a manner that the base metal is not damaged. Surface shall be finished in accordance with AWS D1.5.
- 3. The Contractor shall provide a welder that is certified in the horizontal position according to AWS D1.5 Clause 7, Part B, to weld the new floorbeam cover plate.
- Clean the steel surface as necessary to facilitate visual inspection of areas of weld removal.
- 5. Preheat steel to a minimum temperature of 250 °F. The minimum interpass temperature shall be limited to 250 °F.
- 6. Welding shall be performed in accordance with the approved WPS.
- 7. Finished weld profile shall meet AWS D1.5.
- 8. The full length of the weld repair shall be inspected by magnetic particle testing.

### BILL OF MATERIAL

| ITEM                    | UNIT  | QUANTITY |
|-------------------------|-------|----------|
| Structural Steel Repair | Pound | 1,330    |

### Note

The bottom flange cover plate repair shall be performed during the full structure closure in Stage 5.

Existing floorbeam shall be temporarily supported during repair when removal of fasteners at the truss connection is required. The estimated total unfactored load to be supported is 97 kips.

Existing stringers shall be temporarily supported. The estimated total unfactored load is 12 kips at each exterior stringer and 31 kips at each interior stringer.

Existing steel that will be in contact with new steel shall be cleaned and painted in accordance with the special provision for Cleaning and Painting Contact Surface Areas of Existing Steel Structures for primary connections. Primer shall be fully cured in accordance with the manufacturer's instructions prior to connecting new steel to existing steel.

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

Steel removal and temporary stringer support shall be included in the unit cost per pound for Structural Steel Repair.

MODJESKI --- MASTERS

|   | USER NAME =  | DESIGNED | - | RKA | REVISED | - |
|---|--------------|----------|---|-----|---------|---|
|   |              | CHECKED  | - | JAD | REVISED | - |
|   | PLOT SCALE = | DRAWN    | - | AEC | REVISED | - |
| • | PLOT DATE =  | CHECKED  | - | RKA | REVISED | - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

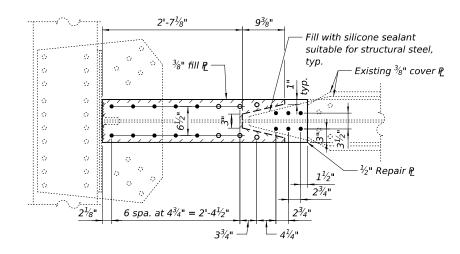
FLOORBEAM REPAIRS - 1 STRUCTURE NO. 031-0001 SHEET 55 OF 117 SHEETS

bolt in existing hole (holes in new

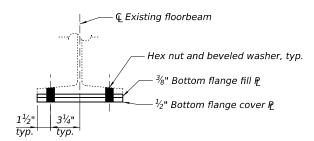
material may be field drilled using

existing member as a template)

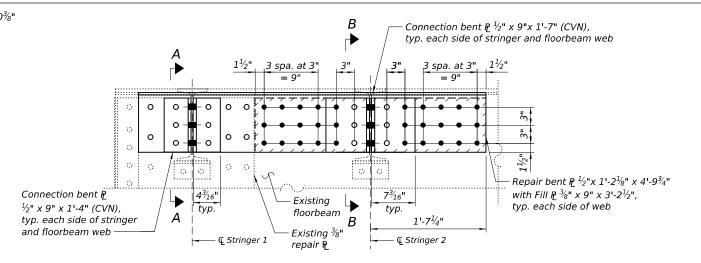
**ELEVATION** SPAN 2, FLOORBEAM 8, NORTH END (ITEM 773)



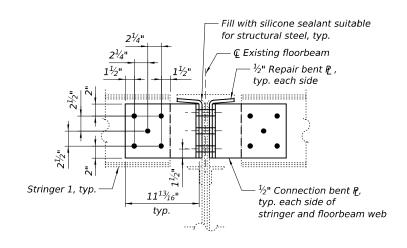
### VIEW C-C



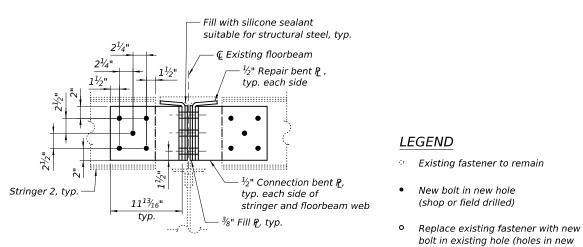
SECTION D-D

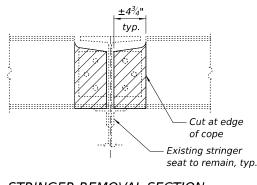


### **ELEVATION** SPAN 2, FLOORBEAM 3, NORTH END (ITEM 766) SPAN 2, FLOORBEAM 11, NORTH END (ITEM 145)



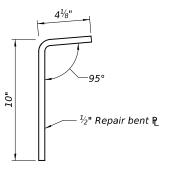
### SECTION A-A





### STRINGER REMOVAL SECTION

Hatched areas indicate removal. All cut edges are to be ground smooth and be free from any nicks, gouges or irregularities.



REPAIR BENT P BENDING DIAGRAM

### **BILL OF MATERIAL**

| ITEM                    | UNIT  | QUANTITY |
|-------------------------|-------|----------|
| Structural Steel Repair | Pound | 1,240    |

### Notes:

Existing stringers shall be temporarily supported. The estimated total unfactored load is 12 kips at each exterior stringer and 31 kips at each interior stringer.

Existing steel that will be in contact with new steel shall be cleaned and painted in accordance with the special provision for Cleaning and Painting Contact Surface Areas of Existing Steel Structures for primary connections. Primer shall be fully cured in accordance with the manufacturer's instructions prior to connecting new steel to existing steel.

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

Steel removal and temporary stringer support shall be included in the unit cost per pound for Structural Steel Repair.

### SECTION B-B

| STATE OF ILLINOIS<br>DEPARTMENT OF TRANSPORTATION | FLOORBEAM REPAIRS - 2<br>STRUCTURE NO. 031-0001 |
|---|---|
|   |   |

(shop or field drilled)

bolt in existing hole (holes in new

material may be field drilled using

existing member as a template)

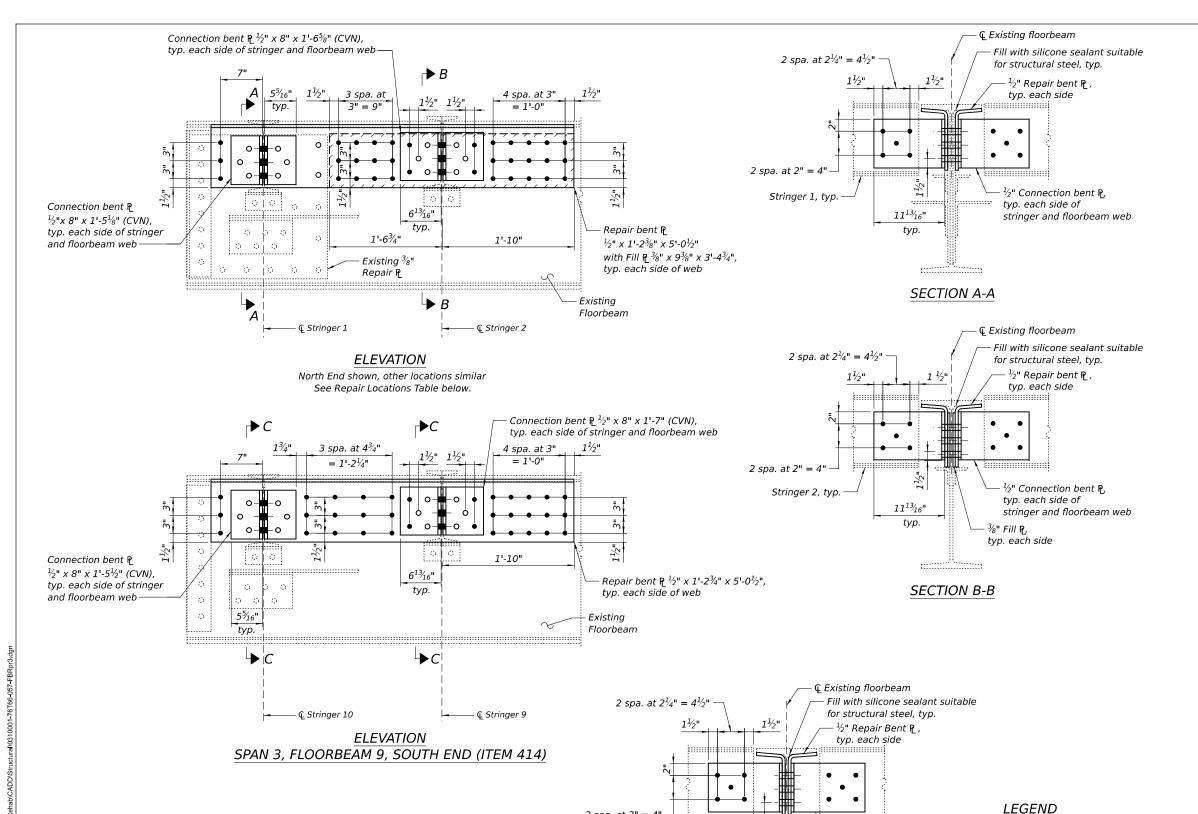
SHEET 56 OF 117 SHEETS

| F.A.P.<br>RTE | SECTION          |  | COUNTY         | TOTAL<br>SHEETS | SHEET<br>NO. |    |
|---------------|------------------|--|----------------|-----------------|--------------|----|
| 304           | 266BRR, (4, 5) I |  |                | GREENE          | 117          | 56 |
|               |                  |  | CONTRAC        | T NO. 76        | ST66         |    |
| ILLINOIS FED. |                  |  | AID PROJECT #9 | STP-PE84        | (558)        |    |

MODJESKI∞MASTERS

USER NAME = DESIGNED - RKA REVISED CHECKED -JAD REVISED PLOT SCALE = REVISED PLOT DATE = CHECKED - RKA REVISED -

8/13/2025 9:51:53 AM



2 spa. at 2" = 4"

Stringer 10, typ.

| REPAIR LOCATIONS                             |      |             |                      |  |  |  |
|--|------|-------------|----------------------|--|--|--|
| 2024 NBIS Inspection<br>Deficiency Item. No. | Span | Member      | Location             |  |  |  |
| 675  | 3    | Floorbeam 1 | North End            |  |  |  |
| 736  | 3    | Floorbeam 3 | North End            |  |  |  |
| 181  | 3    | Floorbeam 6 | North End            |  |  |  |
| 186  | 3    | Floorbeam 7 | North and South Ends |  |  |  |
| 189  | 3    | Floorbeam 8 | South End            |  |  |  |

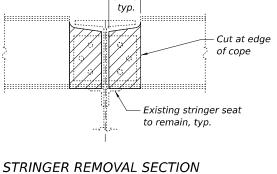
# SECTION C-C

½" Connection bent P.,

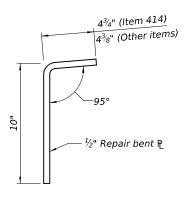
stringer and floorbeam web

typ. each side of

Section at Stringer 10 shown, Stringer 9 simliar



Hatched areas indicate removal. All cut edges are to be ground smooth and be free from any nicks, gouges or irregularities.



### REPAIR BENT P **BENDING DIAGRAM**

### **BILL OF MATERIAL**

| ITEM                    | UNIT  | QUANTITY |
|-------------------------|-------|----------|
| Structural Steel Repair | Pound | 3.860    |

Existing stringers shall be temporarily supported. The estimated total unfactored load is 12 kips at each exterior stringer and 31 kips at each interior stringer.

Existing steel that will be in contact with new steel shall be cleaned and painted in accordance with the special provision for Cleaning and Painting Contact Surface Areas of Existing Steel Structures for primary connections. Primer shall be fully cured in accordance with the manufacturer's instructions prior to connecting new steel to existing steel.

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

Steel removal and temporary stringer support shall be included in the unit cost per pound for Structural Steel Repair.

| MODJESKI ∞ MASTERS | 5 |
|--------------------|---|
|                    |   |

|    | USER NAME =  | DESIGNED | - | RKA | REVISED | - |
|----|--------------|----------|---|-----|---------|---|
|    |              | CHECKED  | - | JAD | REVISED | - |
| ts | PLOT SCALE = | DRAWN    | - | AEC | REVISED | - |
|    | PLOT DATE =  | CHECKED  | - | RKA | REVISED | - |

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

1'-03/16"

typ.

|       |    |    |     | AIRS - 3<br>31-0001 |  |
|-------|----|----|-----|---------------------|--|
| SHEET | 57 | OF | 117 | SHEETS              |  |

Existing fastener to remain

• New bolt in new hole

(shop or field drilled)

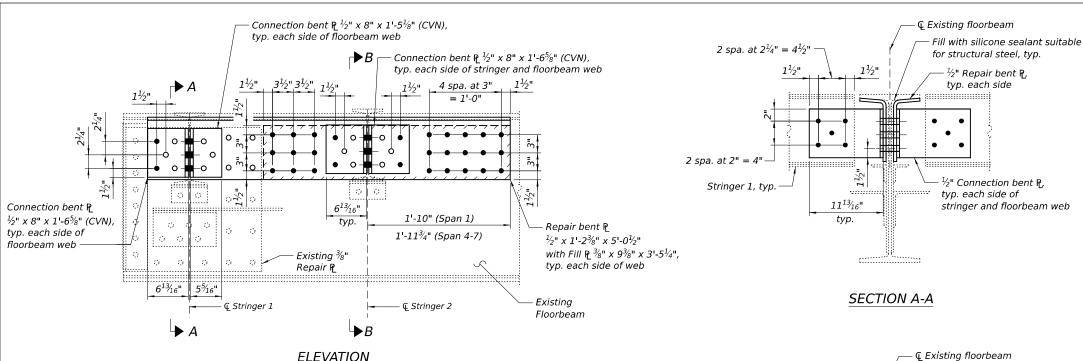
Replace existing fastener with new

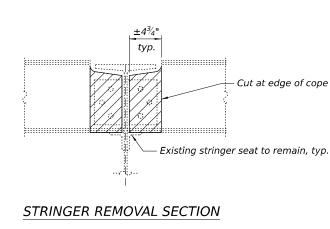
bolt in existing hole (holes in new

material may be field drilled using

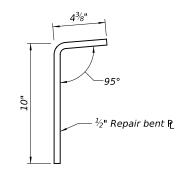
existing member as a template)

| F.A.P.<br>RTE. | SEC    | ION            |      | COUNTY        | TOTAL<br>SHEETS | SHEE<br>NO. |
|----------------|--------|----------------|------|---------------|-----------------|-------------|
| 304            | 266BRR | 6BRR, (4, 5) I |      | GREENE        | 117             | 57          |
|                |        |                |      | CONTRAC       | T NO. 76        | ST66        |
|                |        | ILLINOIS       | FED. | AID PROJECT#9 | STP-PE84        | (558)       |





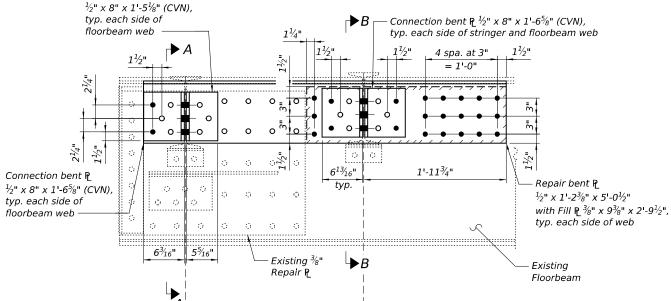
Hatched areas indicate removal. All cut edges are to be ground smooth and be free from any nicks, gouges or irregularities.

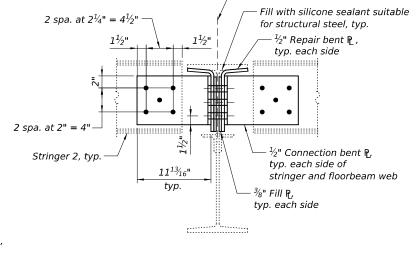


REPAIR BENT P BENDING DIAGRAM

### **ELEVATION**

North End shown, other locations similar See Repair Locations Table below.





### SECTION B-B

### **ELEVATION**

- © Stringer 2

• **Q** Stringer 1

North End shown, other location similar

SPAN 7, FLOORBEAM 1, NORTH END (ITEM 247) SPAN 7, FLOORBEAM 4, SOUTH END (ITEM 342)

| REPAIR LOCATIONS                             |      |             |           |  |  |
|--|------|-------------|-----------|--|--|
| 2024 NBIS Inspection<br>Deficiency Item. No. | Span | Member      | Location  |  |  |
| 14   | 1    | Floorbeam 2 | North End |  |  |
| 425  | 4    | Floorbeam 9 | South End |  |  |
| 681  | 5    | Floorbeam 8 | South End |  |  |
| 253  | 7    | Floorbeam 2 | South End |  |  |
| 256  | 7    | Floorbeam 3 | South End |  |  |
| 264  | 7    | Floorbeam 5 | North End |  |  |
| 272  | 7    | Floorbeam 6 | North End |  |  |
| 615  | 7    | Floorbeam 7 | South End |  |  |
| 284  | 7    | Floorbeam 8 | South End |  |  |
| 287  | 7    | Floorbeam 9 | South End |  |  |

### **LEGEND**

½" Repair bent P.,

 $\frac{1}{2}$ " Connection bent **P**,

stringer and floorbeam web

typ. each side of

typ. each side

- Existing fastener to remain
- New bolt in new hole (shop or field drilled)
- Replace existing fastener with new bolt in existing hole (holes in new material may be field drilled using existing member as a template)

### **BILL OF MATERIAL**

| ITEM                    | UNIT  | QUANTITY |
|-------------------------|-------|----------|
| Structural Steel Repair | Pound | 6,740    |

### Notes:

Existing stringers shall be temporarily supported. The estimated total unfactored load is 12 kips at each exterior stringer and 31 kips at each interior stringer.

Existing steel that will be in contact with new steel shall be cleaned and painted in accordance with the special provision for Cleaning and Painting Contact Surface Areas of Existing Steel Structures for primary connections. Primer shall be fully cured in accordance with the manufacturer's instructions prior to connecting new steel to existing steel.

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

Steel removal and temporary stringer support shall be included in the unit cost per pound for Structural Steel Repair.

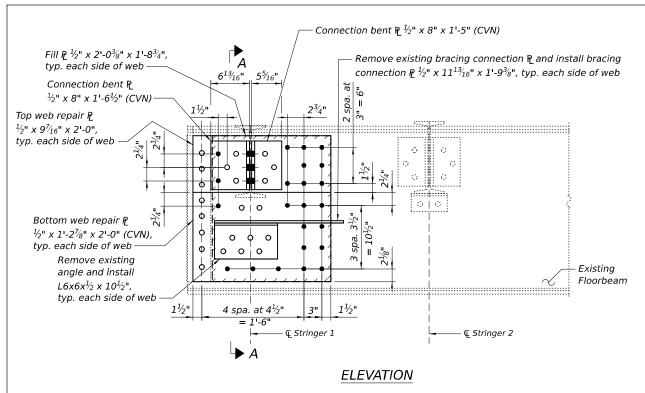


Connection bent P

|   | USER NAME =  | DESIGNED | - | RKA | REVISED | - |
|---|--------------|----------|---|-----|---------|---|
|   |              | CHECKED  | - | JAD | REVISED | - |
| s | PLOT SCALE = | DRAWN    | - | AEC | REVISED | - |
| - | PLOT DATE =  | CHECKED  | - | RKA | REVISED | - |

| FLOORBEAM REPAIRS - 4                    | F.A.P.<br>RTE |    |
|--|---------------|----|
| STRUCTURE NO. 031-0001                   | 304           | 26 |
| O I NO O I O I O I O I O I O I O I O I O |               |    |
| SHEET 58 OF 117 SHEETS                   |               |    |

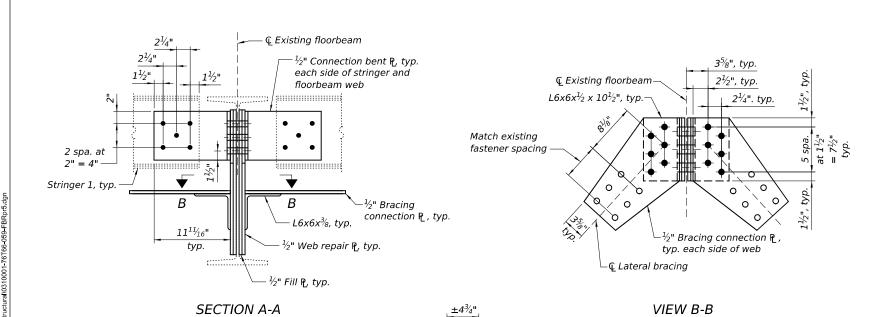
| F.A.P.<br>RTE | SECTION        |         | COUNTY         | TOTAL<br>SHEETS | SHEE<br>NO. |
|---------------|----------------|---------|----------------|-----------------|-------------|
| 304           | 266BRR, (4, 5) | I       | GREENE         | 117             | 58          |
|               |                |         | CONTRAC        | T NO. 76        | 3T66        |
|               | ILLING         | IS FED. | AID PROJECT #9 | STP-PE84        | (558)       |



### — Symm. Abt. @ Structure 8'-5" 8'-5" -Remove existing bottom cover 7½" P and install bottom cover P $\vdash$ Ctyp. -See Detail A 3/4" x 1'-1" x 17'-6" (CVN) — Ç Existing floorbeam Existing floorbeam weld to bottom flange

### **BOTTOM VIEW** SPAN 2, FLOORBEAM 0 (ITEM 635)

## SPAN 5, FLOORBEAM 9, NORTH END (ITEM 439)



typ.

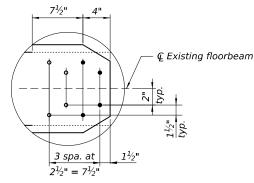
STRINGER REMOVAL SECTION

Hatched areas indicate removal. All cut edges are

to be ground smooth and be free from any nicks,

Cut at edge of cope

Remove existing stringer seat, typ.



DETAIL A

# $^{-3}\!\!4$ " bottom cover $m I\!\!\!P_{ m c}$

**©** Existing floorbeam

-Existing top cover ₽

### SECTION C-C

### BILL OF MATERIAL

| ITEM                    | UNIT  | QUANTITY |
|-------------------------|-------|----------|
| Structural Steel Repair | Pound | 1,180    |

### Notes:

The bottom flange cover plate repair shall be performed during the full structure closure in Stage 5.

Existing floorbeam shall be temporarily supported during repair when removal of fasteners at the truss connection is required. The estimated total unfactored load to be supported is 97 kips.

Existing stringers shall be temporarily supported. The estimated total unfactored load is 12 kips at each exterior stringer.

Existing steel that will be in contact with new steel shall be cleaned and painted in accordance with the special provision for Cleaning and Painting Contact Surface Areas of Existing Steel Structures for primary connections. Primer shall be fully cured in accordance with the manufacturer's instructions prior to connecting new steel to existing steel.

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

See Sheet 55 for Bottom Cover Plate Replacement Procedure. Steel removal and temporary lateral bracing and stringer support shall be included in the unit cost per pound for Structural Steel Repair.

## LEGEND

- Existing fastener to remain
- New bolt in new hole (shop or field drilled)
- Replace existing fastener with new bolt in existing hole (holes in new material may be field drilled using existing member as a template)



|    | USER NAME =  | DESIGNED - RKA | REVISED - |
|----|--------------|----------------|-----------|
|    |              | CHECKED - JAD  | REVISED - |
| ts | PLOT SCALE = | DRAWN - AEC    | REVISED - |
|    | PLOT DATE =  | CHECKED - RKA  | REVISED - |

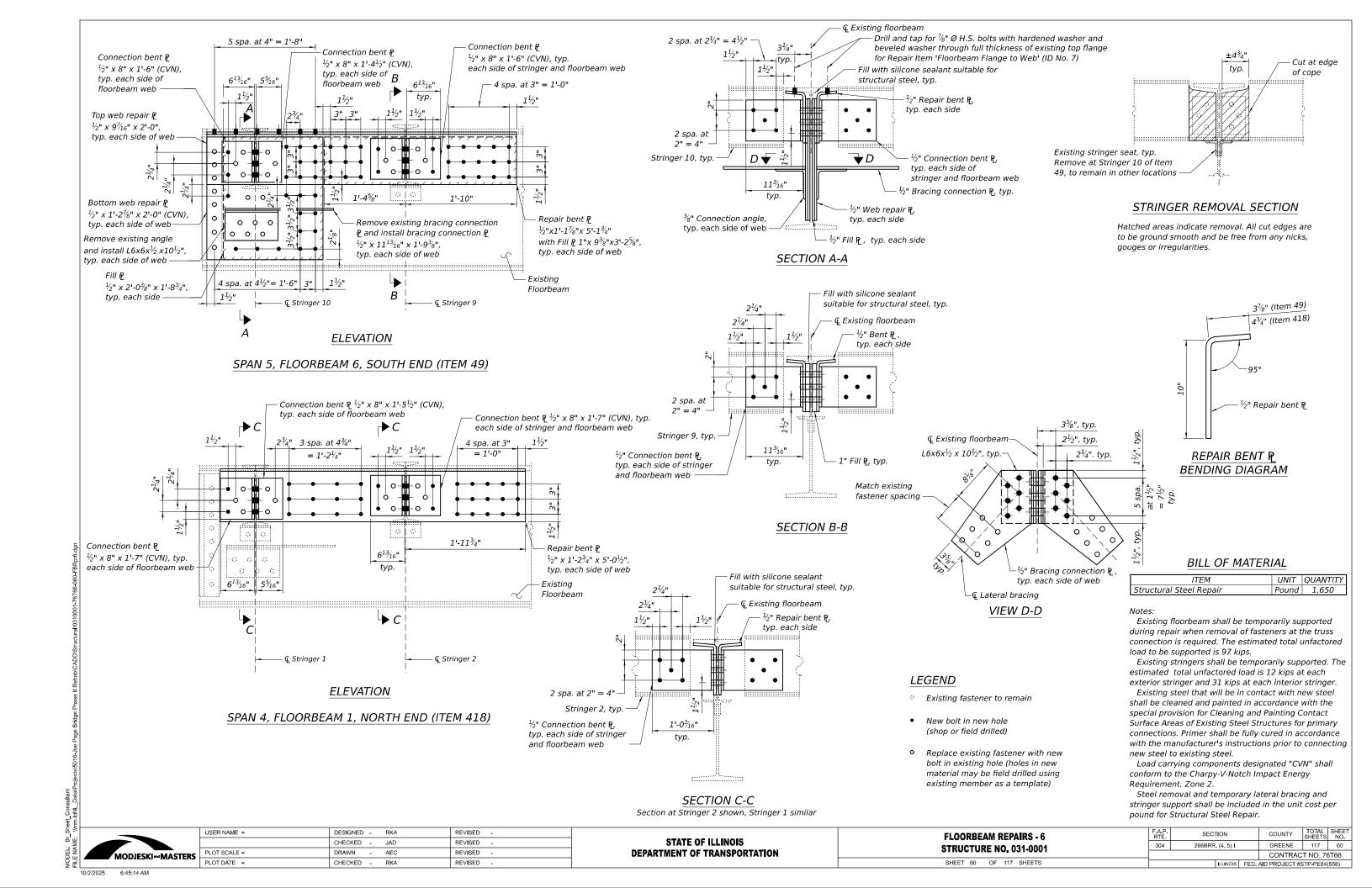
gouges or irregularities.

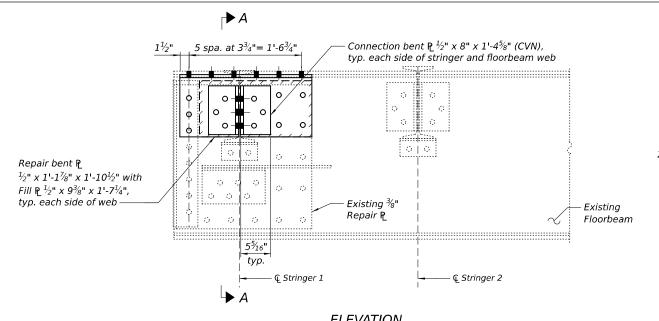
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

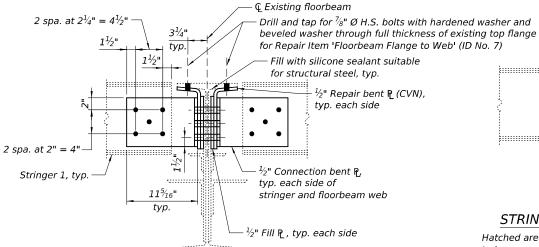
**FLOORBEAM REPAIRS - 5** 304 **STRUCTURE NO. 031-0001** SHEET 59 OF 117 SHEETS

SECTION COUNTY GREENE 117 59 266BRR, (4, 5) I CONTRACT NO. 76T66

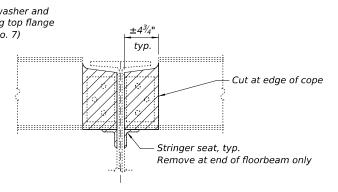
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SECTION A-A

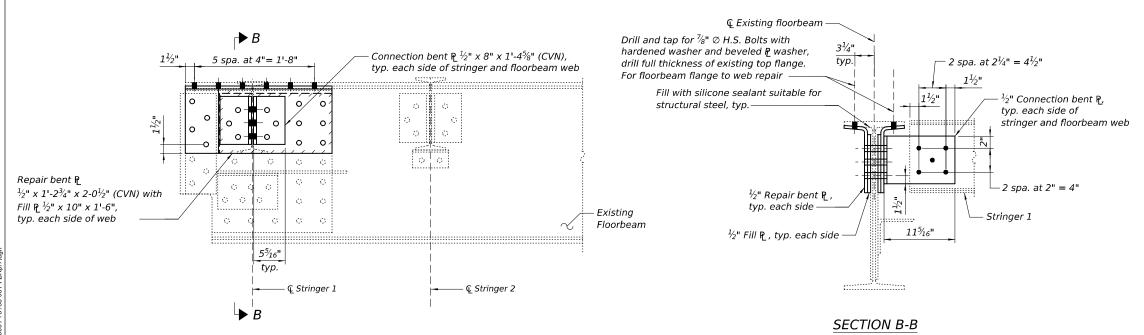


### STRINGER REMOVAL SECTION

Hatched areas indicate removal. All cut edges are to be ground smooth and be free from any nicks, gouges or irregularities.

### **ELEVATION**

North End shown, other locations similar See Repair Locations Table below.

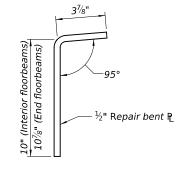


### **ELEVATION**

North End shown, other locations similar

SPAN 6, FLOORBEAM 10, NORTH END (ITEM 702) SPAN 7, FLOORBEAM 0, NORTH AND SOUTH ENDS (ITEM 658) SPAN 7, FLOORBEAM 10, NORTH AND SOUTH ENDS (ITEM 659)

| REPAIR LOCATIONS                             |      |             |                      |  |  |
|--|------|-------------|----------------------|--|--|
| 2024 NBIS Inspection<br>Deficiency Item. No. | Span | Member      | Location             |  |  |
| 660  | 8    | Floorbeam 1 | North End            |  |  |
| 92   | 8    | Floorbeam 2 | North End            |  |  |
| 661  | 8    | Floorbeam 3 | North and South Ends |  |  |
| 93   | 8    | Floorbeam 4 | North End            |  |  |



### REPAIR BENT P BENDING DIAGRAM

### BILL OF MATERIAL

| ITEM                    | UNIT  | QUANTITY |
|-------------------------|-------|----------|
| Structural Steel Repair | Pound | 2,390    |

Existing floorbeams shall be temporarily supported during repair when removal of fasteners at the truss connection is required. The estimated total unfactored load to be supported is 97 kips. Existing stringers shall be temporarily supported.

The estimated total unfactored load is 12 kips at each exterior stringer.

Existing steel that will be in contact with new steel shall be cleaned and painted in accordance with the special provision for Cleaning and Painting Contact Surface Areas of Existing Steel Structures for primary connections. Primer shall be fully cured in accordance with the manufacturer's instructions prior to connecting new steel to existing steel.

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

Steel removal and temporary stringer support shall be included in the unit cost per pound for Structural Steel Repair.

- Existing fastener to remain
- New bolt in new hole (shop or field drilled)

**LEGEND** 

 Replace existing fastener with new bolt in existing hole (holes in new material may be field drilled using existing member as a template)

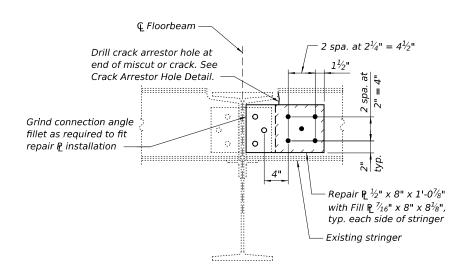


| USER NAME =  | DESIGNED - RKA | REVISED - |
|--------------|----------------|-----------|
|              | CHECKED - JAD  | REVISED - |
| PLOT SCALE = | DRAWN - AEC    | REVISED - |
| PLOT DATE =  | CHECKED - RKA  | REVISED - |

| FLOORBEAM REPAIRS - 7<br>STRUCTURE NO. 031-0001 |  | SEC                  | TION     |        | COUNTY       | TOTAL<br>SHEETS | SHEET<br>NO. |
|---|--|----------------------|----------|--------|--------------|-----------------|--------------|
|   |  | 304 266BRR, (4, 5) I |          | GREENE | 117          | 61              |              |
|   |  |                      |          |        | CONTRAC      | T NO. 76        | ST66         |
| SHEET 61 OF 117 SHEETS                          |  |                      | ILLINOIS | FED.   | AID PROJECT# | STP-PE84        | (558)        |

### STRINGER REPAIR DETAIL - SPAN 2 (ITEM 110)

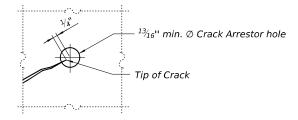
See Repair locations table.



### STRINGER REPAIR DETAIL

SPAN 5, FLOORBEAM 7, PANEL 8, STRINGER 1 (ITEM 110) SPAN 5, FLOORBEAM 10, PANEL 10, STRINGER 9 (ITEM 110) SPAN 7, FLOORBEAM 4, PANEL 4, STRINGER 8 (ITEM 110)

| RE        | REPAIR LOCATIONS |                |  |  |
|-----------|------------------|----------------|--|--|
| Floorbeam | Panel            | Stringer       |  |  |
| 1         | 1                | 2 & 5          |  |  |
| 1         | 2                | 2,3 & 5        |  |  |
| 2         | 3                | 2, 3, 4, 5 & 9 |  |  |
| 3         | 3                | 5              |  |  |
| 3         | 4                | 9              |  |  |
| 4         | 4                | 7 & 9          |  |  |
| 4         | 5                | 3 & 5          |  |  |
| 5         | 5                | 2, 5 & 10      |  |  |
| 6         | 7                | 2, 3 & 5       |  |  |
| 7         | 7                | 2,3 & 7        |  |  |
| ,         | 8                | 3, 5 & 7       |  |  |
| 8         | 8                | 3 & 7          |  |  |
| O .       | 9                | 3              |  |  |
| 9         | 9                | 4              |  |  |
| 10        | 10               | 5              |  |  |
| 10        | 11               | 2              |  |  |
| 11        | 12               | 5, 9 & 10      |  |  |
| 12        | 12               | 2 & 8          |  |  |
| 12        | 13               | 7              |  |  |
| 13        | 13               | 2 & 3          |  |  |
| 1.4       | 14               | 7, 9 & 10      |  |  |
| 14        | 15               | 2, 5, 7 & 9    |  |  |



### CRACK ARRESTOR HOLE DETAIL

Locate crack tip using liquid dye penetrant or magnetic particle testing. Drill  $^{13}\!\!/_{16}$ " min. Ø Crack Arrestor hole at the crack tip. After crack arrestor hole has been drilled, dye penetrant or magnetic particle testing shall be used to verify that the drilled hole has captured the crack tip. Cost shall be included with Structural Steel Repair.

### **BILL OF MATERIAL**

| ITEM                    | UNIT  | QUANTITY |  |
|-------------------------|-------|----------|--|
| Structural Steel Repair | Pound | 2,920    |  |
|                         |       |          |  |

F.A.P. RTE.

Existing stringers shall be temporarily supported. The estimated total unfactored load is 12 kips at each exterior stringer and 31 kips at each interior stringer.

Existing steel that will be in contact with new steel shall be cleaned and painted in accordance with the special provision for Cleaning and Painting Contact Surface Areas of Existing Steel Structures for primary connections. Primer shall be fully cured in accordance with the manufacturer's instructions prior to connecting new steel to existing steel.

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

All material, equipment, labor, temporary stringer support, and other items necessary for stringer repair shall be included in the unit cost per pound for Structural Steel Repair.

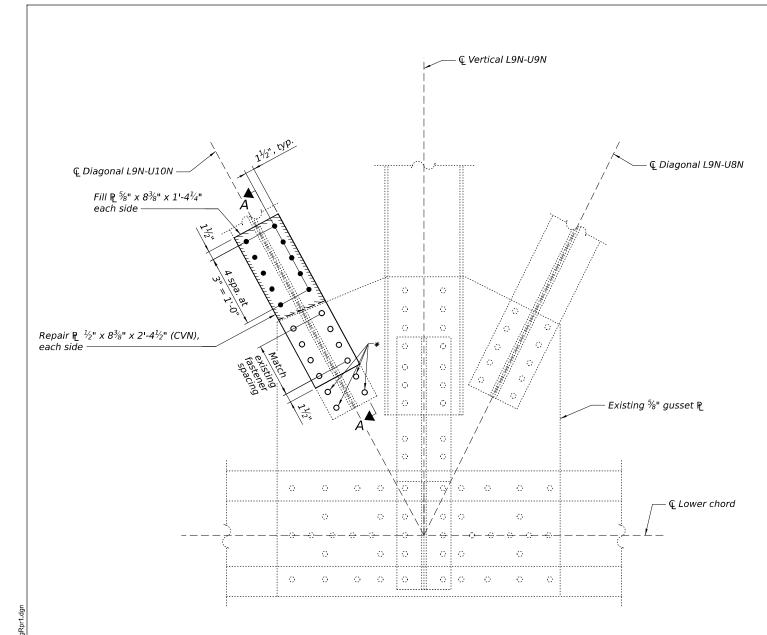
### **LEGEND**

- Existing fastener to remain
- New bolt in new hole (shop or field drilled)
- Replace existing fastener with new bolt in existing hole (holes in new material may be field drilled using existing member as a template)

MODJESKI **™MASTERS** 

| USER NAME =  | DESIGNED - RKA | REVISED - |
|--------------|----------------|-----------|
|              | CHECKED - JAD  | REVISED - |
| PLOT SCALE = | DRAWN - AEC    | REVISED - |
| PLOT DATE =  | CHECKED - RKA  | REVISED - |

| SECTION COUNTY TOT, SHEE          |                     |   |
|-----------------------------------|---------------------|---|
|                                   | AL SHEET<br>ETS NO. | Т |
| 266BRR, (4, 5) I GREENE 117       | 7 62                |   |
| CONTRACT NO                       | D. 76T66            |   |
| ILLINOIS FED. AID PROJECT #STP-PE | E84(558)            |   |

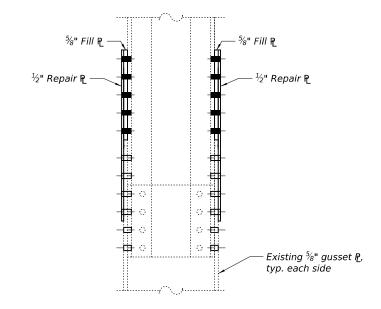


### **ELEVATION**

Looking south L9N shown, other location similar.

SPAN 2, L9S-U10S AT L9S (ITEM 138) SPAN 2, L9N-U10N AT L9N (ITEM 393)

\* Replace existing fasteners with new bolts one at a time before removing other existing fasteners for repair installation.



### SECTION A-A

### LEGEND

- Existing fastener to remain
- New bolt in new hole (shop or field drilled)
- Replace existing fastener with new bolt in existing hole (holes in new material may be field drilled using existing member as a template)

### BILL OF MATERIAL

| ITEM                    | UNIT  | QUANTITY |
|-------------------------|-------|----------|
| Structural Steel Repair | Pound | 320      |

### Notes:

Truss member repairs shall be performed only when the adjacent lane is closed to traffic.

Existing steel that will be in contact with new steel shall be cleaned and painted in accordance with the special provision for Cleaning and Painting Contact Surface Areas of Existing Steel Structures for primary connections. Primer shall be fully cured in accordance with the manufacturer's instructions prior to connecting new steel to existing steel.

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

MODJESKI ••• MASTERS

 USER NAME =
 DESIGNED - RKA
 REVISED 

 CHECKED - JAD
 REVISED 

 PLOT SCALE =
 DRAWN - AEC
 REVISED 

 PLOT DATE =
 CHECKED - RKA
 REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRUSS DIAGONAL REPAIRS - 1 STRUCTURE NO. 031-0001  
 FA.P. RTE.
 SECTION
 COUNTY SHEETS
 TOTAL NO.
 SHEETS NO.

 304
 266BRR, (4, 5) I
 GREENE
 117
 63

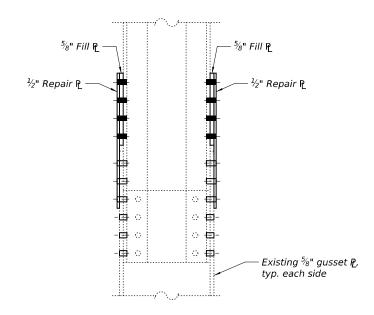
 CONTRACT NO. 76766
 CONTRACT NO. 76766



Looking North L4S shown, other locations similar.

| REPAIR LOCATIONS                            |      |                  |  |  |  |
|---|------|------------------|--|--|--|
| 2024 NBIS Inspection<br>Deficiency Item No. | Span | Member Location  |  |  |  |
| 570   | 4    | U3N - L4N at L4N |  |  |  |
| 697   | 4    | L6S - U7S at L6S |  |  |  |
| 223   | 5    | L6S - U7S at L6S |  |  |  |
| 232   | 6    | U3N - L4N at L4N |  |  |  |
| 726   | 6    | U3S - L4S at L4S |  |  |  |
| 341   | 7    | U3S - L4S at L4S |  |  |  |
| 72  | 7    | L6N - U7N at L6N |  |  |  |
| 729   | 7    | L6S - U7S at L6S |  |  |  |
| 77  | 8    | U3S - L4S at L4S |  |  |  |
| 358   | 8    | L6N – U7N at L6N |  |  |  |

\* Replace existing fasteners with new bolts one at a time before removing other existing fasteners for repair installation.



### SECTION A-A

### LEGEND

- Existing fastener to remain
- New bolt in new hole (shop or field drilled)
- Replace existing fastener with new bolt in existing hole (holes in new material may be field drilled using existing member as a template)

### **BILL OF MATERIAL**

| ITEM                    | UNIT  | QUANTITY |
|-------------------------|-------|----------|
| Structural Steel Repair | Pound | 1,220    |

### Notes:

Truss member repairs shall be performed only when the adjacent lane is closed to traffic.

Existing steel that will be in contact with new steel shall be cleaned and painted in accordance with the special provision for Cleaning and Painting Contact Surface Areas of Existing Steel Structures for primary connections. Primer shall be fully cured in accordance with the manufacturer's instructions prior to connecting new steel to existing steel.

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

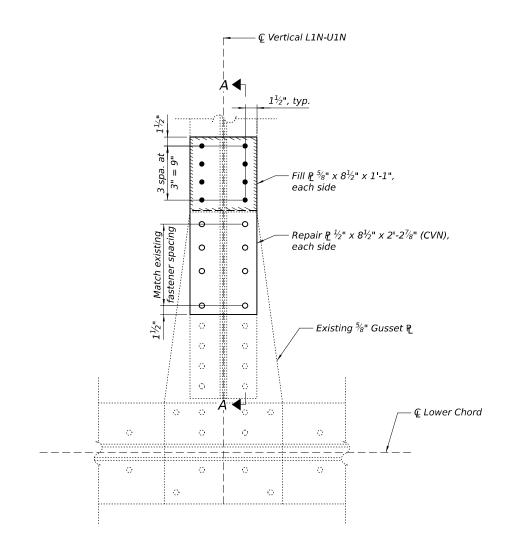


|              | USER NAME =  | DESIGNED - RKA | REVISED - |
|--------------|--------------|----------------|-----------|
|              |              | CHECKED - JAD  | REVISED - |
| KI™MASTERS   | PLOT SCALE = | DRAWN - AEC    | REVISED - |
| IN THE STERM | PLOT DATE =  | CHECKED - RKA  | REVISED - |

| F.A.P.<br>RTE | SECT   | ION        |      | COUNTY        | TOTAL<br>SHEETS | SHEET<br>NO. |
|---------------|--------|------------|------|---------------|-----------------|--------------|
| 304           | 266BRR | , (4, 5) I |      | GREENE        | 117             | 64           |
|               |        |            |      | CONTRAC       | T NO. 76        | ST66         |
|               |        | ILLINOIS   | FED. | AID PROJECT#9 | STP-PE84        | (558)        |

e Page Bridge Phase II Rehab\CADD\Structura\0310001-76T66-064-TrussDiagRpr2

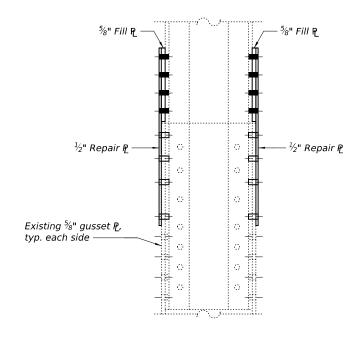
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**ELEVATION** 

Looking South L1N shown, other location similar.

SPAN 3, L1N-U1N AT L1N (ITEM 157) SPAN 6, L1S-U1S AT L1S (ITEM 572)



SECTION A-A

### **LEGEND**

- Existing fastener to remain
- New bolt in new hole (shop or field drilled)
- Replace existing fastener with new bolt in existing hole (holes in new material may be field drilled using existing member as a template)

### BILL OF MATERIAL

| ITEM                                  | UNIT  | QUANTITY |
|---------------------------------------|-------|----------|
| Structural Steel Repair               | Pound | 280      |
| · · · · · · · · · · · · · · · · · · · |       |          |

Notes:

Truss member repairs shall be performed only when the adjacent lane is closed to traffic.

Existing steel that will be in contact with new steel shall be cleaned and painted in accordance with the special provision for Cleaning and Painting Contact Surface Areas of Existing Steel Structures for primary connections. Primer shall be fully cured in accordance with the manufacturer's instructions prior to connecting new steel to existing steel.

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

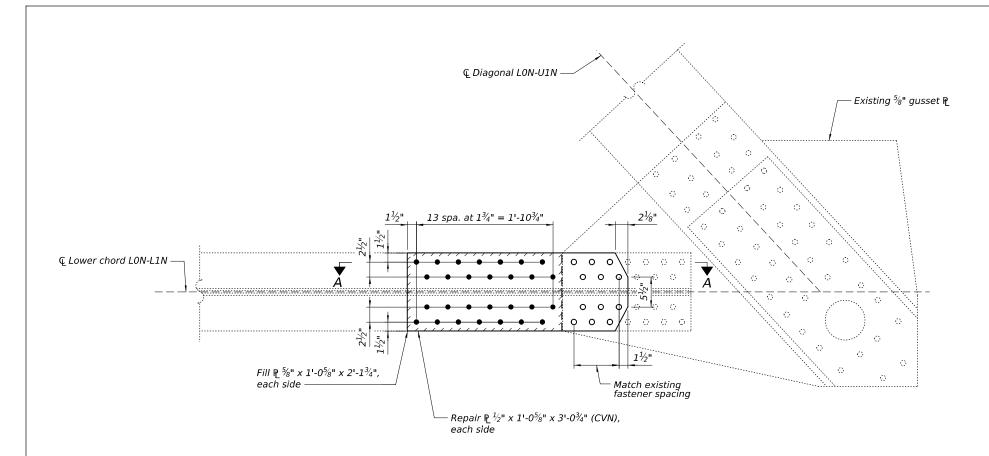
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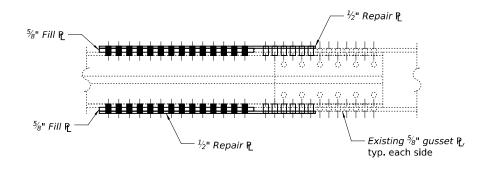
USER NAME = DESIGNED - RKA REVISED CHECKED - JAD REVISED PLOT SCALE = REVISED PLOT DATE = CHECKED - RKA REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**  TRUSS VERTICAL REPAIRS **STRUCTURE NO. 031-0001** SHEET 65 OF 117 SHEETS

COUNTY 304 266BRR, (4, 5) I GREENE 117 65 CONTRACT NO. 76T66

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SECTION A-A

**ELEVATION** Looking South

SPAN 8, LON-L1N AT LON (ITEM 294)

### **LEGEND**

- Existing fastener to remain
- New bolt in new hole (shop or field drilled)
- Replace existing fastener with new bolt in existing hole (holes in new material may be field drilled using existing member as a template)

### **BILL OF MATERIAL**

| ITEM                    | UNIT  | QUANTITY |
|-------------------------|-------|----------|
| Structural Steel Repair | Pound | 330      |

Truss member repairs shall be performed only when the adjacent lane is closed to traffic.

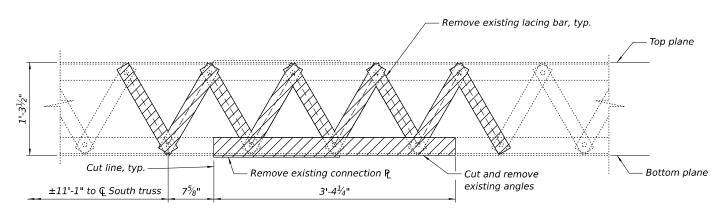
Existing steel that will be in contact with new steel shall be cleaned and painted in accordance with the special provision for Cleaning and Painting Contact Surface Areas of Existing Steel Structures for primary connections. Primer shall be fully cured in accordance with the manufacturer's instructions prior to connecting new steel to existing steel.

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

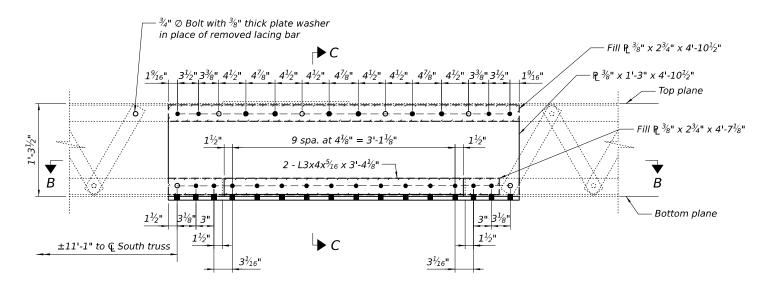


|   | USER NAME =  | DESIGNED - | RKA | REVISED - |
|---|--------------|------------|-----|-----------|
|   |              | CHECKED -  | JAD | REVISED - |
| s | PLOT SCALE = | DRAWN -    | AEC | REVISED - |
|   | PLOT DATE =  | CHECKED -  | RKA | REVISED - |

| F.A.P.<br>RTE | SECTION                                  |     | COUNTY  | TOTAL<br>SHEETS | SHEET<br>NO. |
|---------------|--|-----|---------|-----------------|--------------|
| 304           | 266BRR, (4, 5                            | ) I | GREENE  | 117             | 66           |
|               |  |     | CONTRAC | T NO. 76        | ST66         |
|               | ILLINOIS FED. AID PROJECT #STP-PE84(558) |     |         |                 | (558)        |



### REMOVAL DETAIL

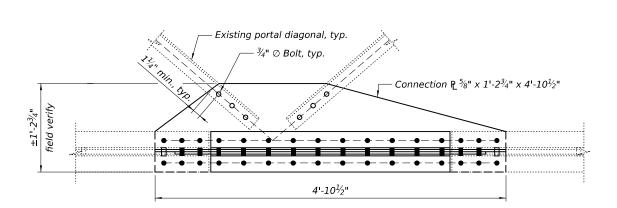


REPAIR DETAIL

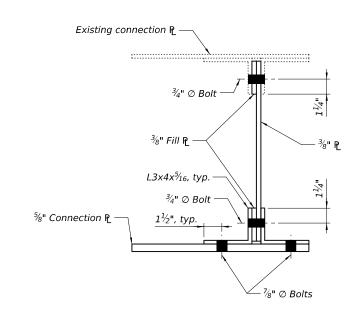
### SECTION A-A

USER NAME = DESIGNED - RKA REVISED 
CHECKED - YSS REVISED 
PLOT SCALE = DRAWN - AEC REVISED 
PLOT DATE = CHECKED - RKA REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



### SECTION B-B



### SECTION C-C

Portal diagonal not shown for clarity.

### BILL OF MATERIAL

| ITEM                    | UNIT  | QUANTITY |
|-------------------------|-------|----------|
| Structural Steel Repair | Pound | 390      |

### **LEGEND**

- Existing fastener to remain
- New bolt in new hole (shop or field drilled)
- Replace existing fastener with new bolt in existing hole (holes in new material may be field drilled using existing member as a template)

### Notes:

Existing steel that will be in contact with new steel shall be cleaned and painted in accordance with the special provision for Cleaning and Painting Contact Surface Areas of Existing Steel Structures for secondary connections. Primer shall be fully cured in accordance with the manufacturer's instructions prior to connecting new steel to existing steel.

Fasteners shall be ASTM F3125 Grade A325 Type 1, mechanically galvanized bolts in painted areas. Holes diameter shall be  $^{15}\!\!/_{16}$  in. for  $^{7}\!\!/_{8}$  in. diameter bolts and  $^{13}\!\!/_{16}$  in. for  $^{3}\!\!/_{4}$  in. diameter bolts.

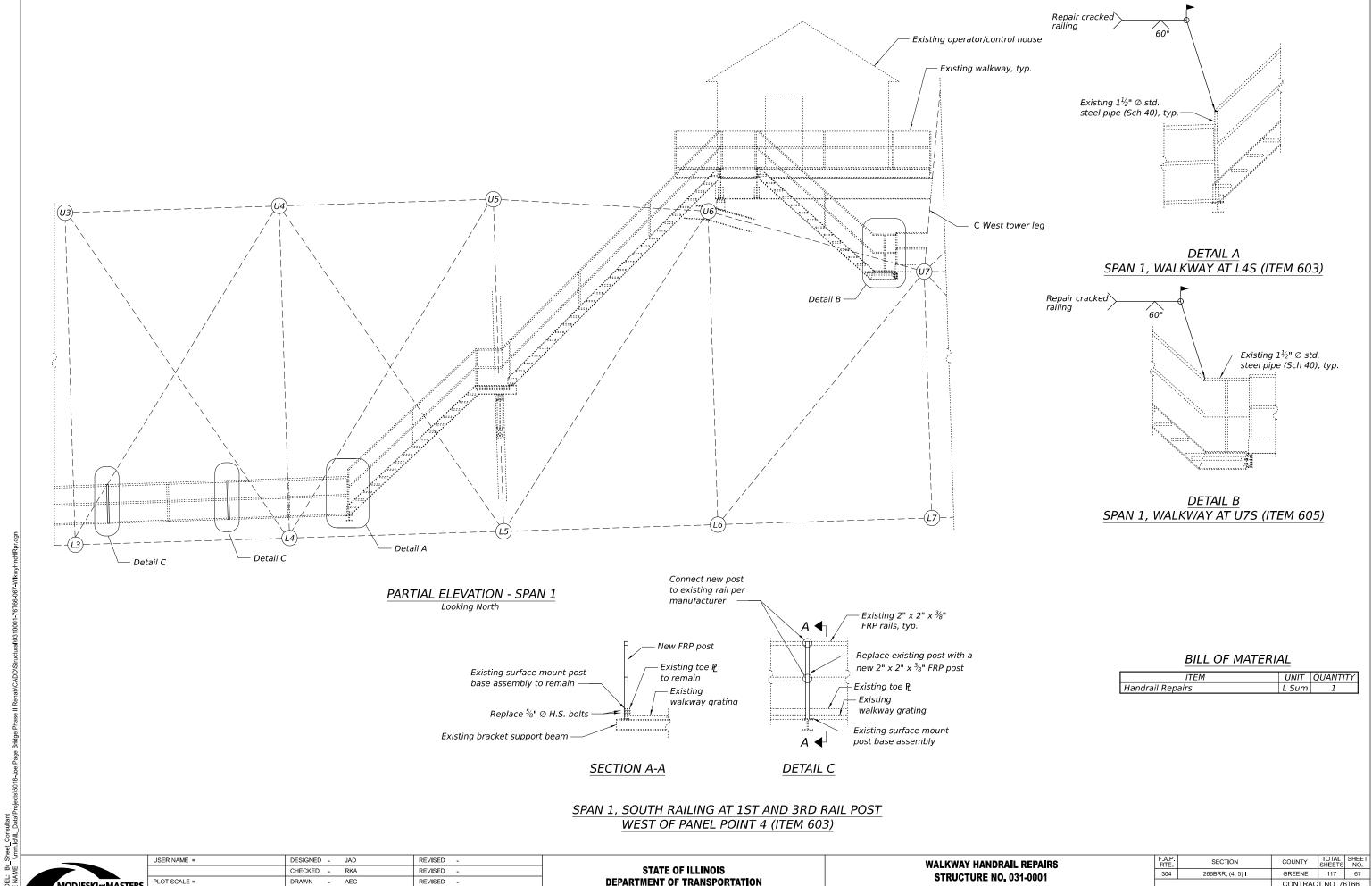
EAST PORTAL STRUT REPAIRS STRUCTURE NO. 031-0001 SHEET 66A OF 117 SHEETS 
 F.A.P. RTE.
 SECTION
 COUNTY SHEETS NO.
 TOTAL SHEETS NO.

 304
 266BRR, (4, 5) I
 GREENE
 117
 66A

 CONTRACT NO. 76T66

FILE NAME: \wm.id\ll\_Data\Projects\5018-Joe Page Bridge Phase II Rehab\CADD\Structural\(C)

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MODJESKI MASTERS

PLOT DATE =

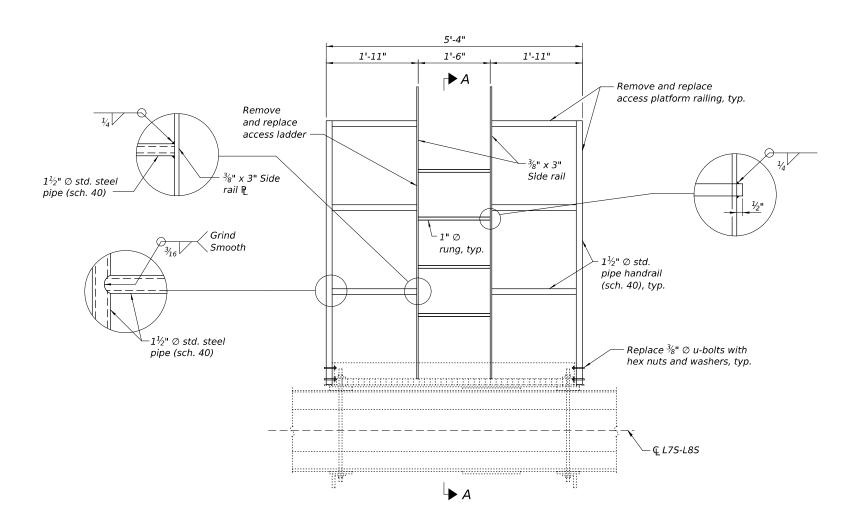
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REVISED

**DEPARTMENT OF TRANSPORTATION** 

STRUCTURE NO. 031-0001 SHEET 67 OF 117 SHEETS

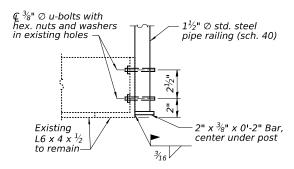
304 266BRR, (4, 5) I CONTRACT NO. 76T66



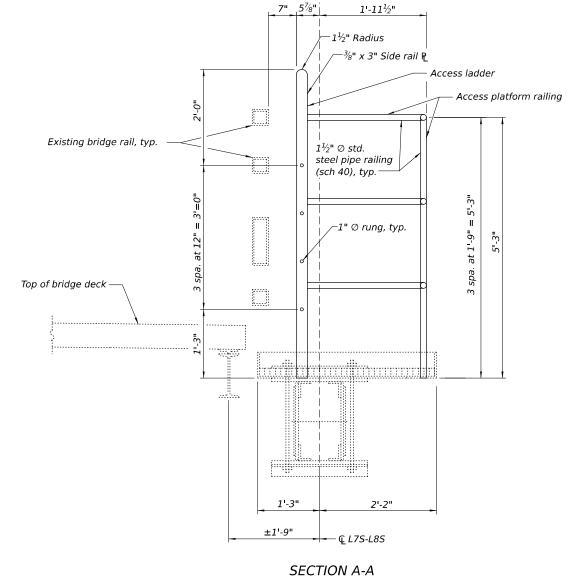
### PARTIAL ELEVATION AT SOUTH NAVIGATION LIGHT WALKWAY SPAN 2, MIDSPAN L7S-L8S (ITEM 772)

Looking North

Bridge rail and deck not shown for clarity.



### RAILING ATTACHMENT DETAIL



ECTION A-A

Looking East

### BILL OF MATERIAL

| ITEM          | UNIT | QUANTITY |
|---------------|------|----------|
| Access Ladder | Each | 1        |
| •             |      |          |

### Notes:

Remove and replace south navigation light walkway railings and ladder at the location indicated. Areas of weld removal shall be ground flush and

inspected for cracks.

The ladder, railing, and associated attachments and hardware shall be galvanized after fabrication according to AASHTO M111 or M232 as applicable. Railings shall meet OSHA requirements.

U-bolts for angle to post connections shall be ASTM A354 Grade BC, mechanically galvanized.



| USER NAME =  | DESIGNED - JAD | REVISED - |
|--------------|----------------|-----------|
|              | CHECKED - RKA  | REVISED - |
| PLOT SCALE = | DRAWN - AEC    | REVISED - |
| PLOT DATE =  | CHECKED - JAD  | REVISED - |

# REPLACE DEFECTIVE OR MISSING FASTENERS WITH HIGH STRENGTH BOLTS

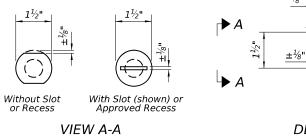
| 2024 NBIS  |   |          |
|------------|---|----------|
| Inspection | Location  | Quantity |
| Deficiency |   | 3        |
| Item No.   |   |          |
| 11         | West Approach, North Side Handrail at Pier 1                    | 2        |
| 825        | Span 1, Stringers 2, 4, and 5 at Floorbeam 0                    | 3        |
| 634        | Span 1, Walkway Stairwell at U7S                                | 2        |
| 606        | Span 1, L8S-U8S at L8S  | 1        |
| 476        | Span 1, L8N-U8N at L8N  | 1        |
| 559        | Span 3, South Gate Platform between Floorbeam 3 and Floorbeam 4 | 3        |
| 648        | Span 4, L6S-L7S at L6S  | 4        |
| 796        | Span 4, L7N-L8S at L8S  | 1        |
| 794        | Span 4, L8N-L9N at L8N  | 1        |
| 804        | Span 6, Platform at L3S   | 2        |
| 808        | Span 7, L1S-L2N at L1S  | 1        |
| 616        | Span 7, L7S-U8S at L7S  | 1        |

### Bolt Replacement Procedure:

- 1. Remove existing defective fasteners as required. Flame cutting for rivet removal is not permitted.
- Install new bolts in open holes. New high strength bolts shall be ASTM F3125
  Grade A325 Type 1, mechanically galvanized, with a diameter ½16" less than the
  diameter of the hole. New round-head bolts shall be ASTM A307, hot dip
  galvanized, with locknuts according to ASTM A563 Grade A, with a diameter ½"
  less than the diameter of the hole.
- 3. The work to replace defective or missing fasteners will be paid for at the contract unit price per each for Bolt Replacement.

# REPLACE DEFECTIVE OR MISSING FASTENERS WITH ROUND HEAD BOLTS

| 2024 NBIS<br>Inspection<br>Deficiency<br>Item No. | Location   | Quantity |
|---|--|----------|
| 741   | Span 1, North Rail at 1st Rail Post East of Pier 1 | 2        |
| 415   | Span 4, North and South Rails at Panel Point 0     | 2        |



 $\frac{\textit{DETAIL OF }^3\!\!4\text{''} \ \varnothing}{\textit{ROUND HEAD BOLTS}}$ 

As Required

### **BILL OF MATERIAL**

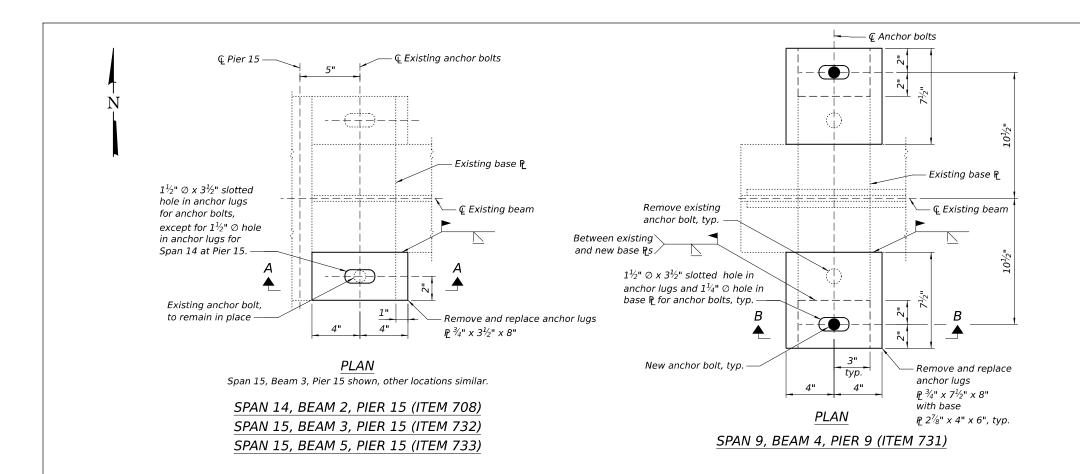
| ITEM             | UNIT | QUANTITY |
|------------------|------|----------|
| Bolt Replacement | Each | 26       |
|                  |      |          |

### Note

The Contractor shall replace all loose, broken, severely corroded or missing fasteners with H.S. and round-head bolts as applicable. The Engineer shall approve all additional locations not shown in the plans prior to replacement. The number of additional bolts not detailed for in the plans shall be in addition to the quanitity shown for Bolt Replacement and in accordance with Article 104.02 of the Spandard Specifications.

| USER NAME =  | DESIGNED - RKA | REVISED - |
|--------------|----------------|-----------|
|              | CHECKED - JAD  | REVISED - |
| PLOT SCALE = | DRAWN - AEC    | REVISED - |
| PLOT DATE =  | CHECKED - RKA  | REVISED - |

| F.A.P.<br>RTE | SECT                                    | ION        |          | COUNTY | TOTAL<br>SHEETS | SHEE<br>NO. |
|---------------|---|------------|----------|--------|-----------------|-------------|
| 304           | 266BRR                                  | , (4, 5) I |          | GREENE | 117             | 69          |
| ·             |   | CONTRAC    | T NO. 76 | ST66   |                 |             |
|               | ILLINOIS FED. AID PROJECT #STP-PE84(55) |            |          | (558)  |                 |             |



**Q** Anchor bolts Q Pier 15 -Existing base P Remove existing - **ℚ** Existing beam anchor bolt Between existing ∖and new base **P**s 101/2  $1\frac{1}{2}$ "  $\emptyset \times 3\frac{1}{2}$ " slotted hole in anchor lugs and  $1\frac{1}{4}$ "  $\varnothing$  hole in base P for anchor bolts, typ.-Remove and replace typ. anchor lugs New anchor bolt  $P^{3}_{4}$ " x  $7^{1}/_{2}$ " x 8" with beveled base PLAN P23" x 4" x 6"

SPAN 15, BEAM 4, PIER 15 (ITEM 824)

### ANCHOR LUG PLATE REPLACEMENT PROCEDURE

- The Contractor shall submit a proposed Welding Procedure Specification (WPS) for the Engineer's review and approval. The WPS will be suitable for welding to base materials identified in existing structural plans. The WPS shall be approved by the Engineer prior to proceeding with this work.
- The existing weld shall be removed in such a manner that the base metal is not damaged. Surface shall be finished in accordance with AWS D1.5.
- 3. The Contractor shall provide a welder that is certified in the horizontal position according to AWS D1.5 Clause 7, Part B, to weld the new anchor slug plate.
- Clean the steel surface as necessary to facilitate visual inspection of areas of weld removal.
- 5. Preheat steel to a minimum temperature of 250 °F. The minimum interpass temperature shall be limited to 250 °F.
- 6. Welding shall be performed in accordance with the approved WPS.
- 7. Finished weld profile shall meet AWS D1.5.
- 8. The full length of the weld repair shall be inspected by magnetic particle testing.

### BILL OF MATERIAL

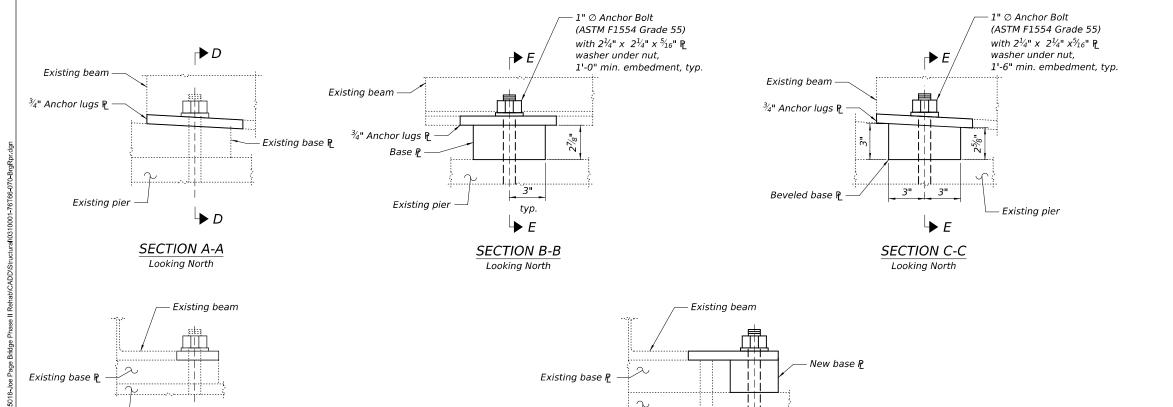
| ITEM                    | UNIT  | QUANTITY |
|-------------------------|-------|----------|
| Structural Steel Repair | Pound | 120      |
| Anchor Bolts, 1"        | Each  | 3        |

### Note.

All base plates, anchor lugs plates, anchor bolts, nuts and washers shall be galvanized according to AASHTO M111 or M232 as applicable. Existing steel that will be in contact with new steel shall be cleaned and painted in accordance with the special provision for Cleaning and Painting Contact Surface Areas of Existing Steel Structures for secondary connections. Primer shall be fully cured in accordance with the manufacturer's instructions prior to connecting new steel to existing

The cost of all work required to repair the bearings, including steel removal, shall be included in the cost for Structural Steel Repair.

The cost of all work for anchor bolt removal shall be included in the cost for Anchor Bolts, 1" and will not be measured separately for payment.



Existing pier

MODJESKI and MASTERS

Existing pier

SECTION D-D

|    | USER NAME =  | DESIGNED | - | RKA | REVISED | - |
|----|--------------|----------|---|-----|---------|---|
|    |              | CHECKED  | - | JAD | REVISED | - |
| RS | PLOT SCALE = | DRAWN    | - | AEC | REVISED | - |
|    | PLOT DATE =  | CHECKED  | - | RKA | REVISED | - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SECTION E-E

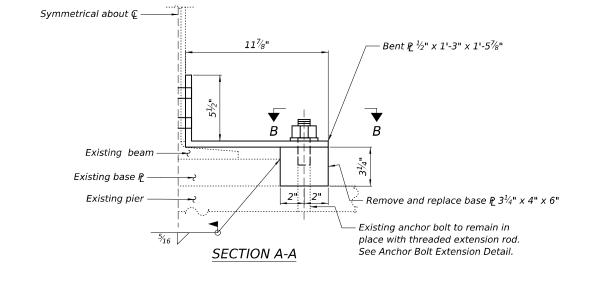
 BEARING REPAIRS - 1
 FA.P. RTE.
 SECTION
 COUNTY SHEETS NO.

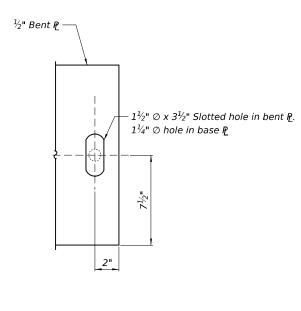
 STRUCTURE NO. 031-0001
 304
 266BRR, (4, 5) I
 GREENE
 117
 70

 SHEET 70
 OF 17
 SHEETS
 LILLINOIS FED AID PROJECT #STP-PFR4/55BN

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VIEW B-B

### RETAINER PLATE REMOVAL PROCEDURE

- Remove the retainer plate welded to the beam flange without damaging the base metal.
- Clean the steel surface as necessary to facilitate visual inspection and magnetic particle testing (MPT) for crack.
- Remove the crack by grinding or other approved method to 1/4" deep. The finished excavation shall be smooth and provide a bright shiny surface.
- Perform MPT of the excavation to verify that the entire crack has been removed.

### BILL OF MATERIAL

| ITEM                    | UNIT  | QUANTITY |
|-------------------------|-------|----------|
| Structural Steel Repair | Pound | 130      |
| Anchor Bolts, 1"        | Each  | 1        |

#### Notes.

Existing fasteners in existing  $\frac{3}{6}$ " web repair plate connection are  $\frac{3}{4}$ "  $\oslash$  bolts in  $\frac{13}{16}$ "  $\oslash$  holes. All fasteners in bearing repair shall be  $\frac{3}{4}$ "  $\oslash$  ASTM F3125 Grade A325 Type 1, mechanically galvanized bolts. Holes in new material and new holes in existing material shall be  $\frac{13}{16}$ "  $\oslash$ .

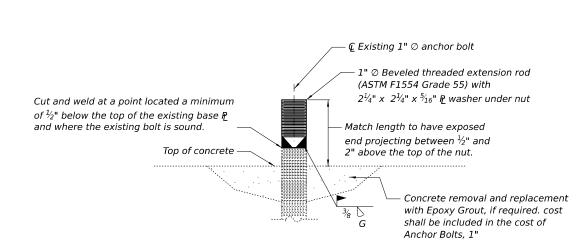
All base plate, bent plate, anchor bolt, nut and washer shall be galvanized according to AASHTO M111 or M232 as applicable.

Existing steel that will be in contact with new steel shall be cleaned and painted in accordance with the special provision for Cleaning and Painting Contact Surface Areas of Existing Steel Structures for secondary connections. Primer shall be fully cured in accordance with the manufacturer's instructions prior to connecting new steel to existing steel.

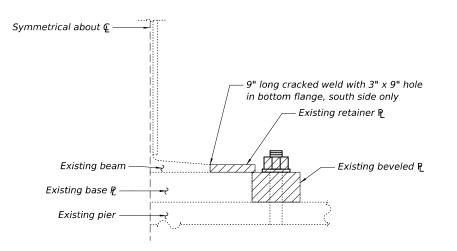
The cost of all work required to repair the bearing, including steel removal, shall be included in the cost for Structural Steel Repair.

The cost of all work for anchor bolt extension shall be included in the

The cost of all work for anchor bolt extension shall be included in th cost for Anchor Bolts, 1" and will not be measured separately for payment.



ANCHOR BOLT EXENSION DETAIL

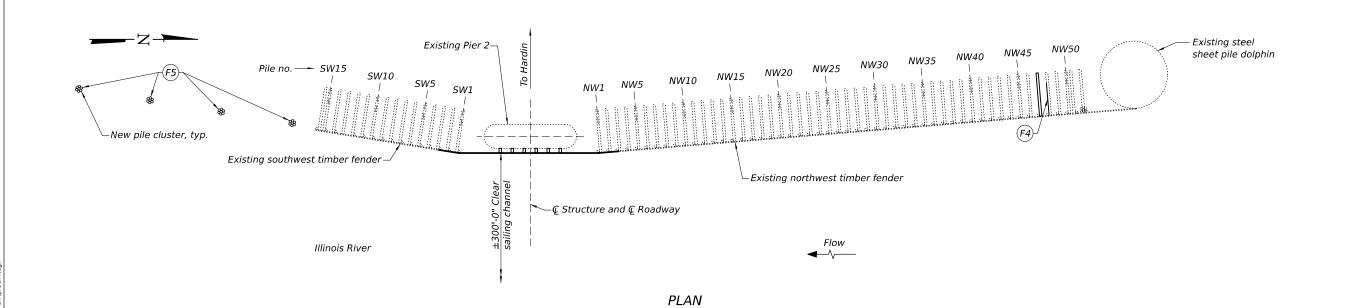


BEARING REMOVAL SECTION

#### LEGEND

- Existing fastener to remain
- New bolt in new hole (shop or field drilled)
- Replace existing fastener with new bolt in existing hole (holes in new material may be field drilled using existing member as a template)

|   | USER NAME =  | DESIGNED - RKA | REVISED - |  |
|---|--------------|----------------|-----------|--|
|   |              | CHECKED - JAD  | REVISED - |  |
| s | PLOT SCALE = | DRAWN - AEC    | REVISED - |  |
| • | PLOT DATE =  | CHECKED - RKA  | REVISED - |  |



WEST FENDER SYSTEM

|        | FENDER REPAIR SCHEDULE - 1 |  |                                    |           |  |  |  |  |
|--------|----------------------------|--|------------------------------------|-----------|--|--|--|--|
| ID No. | Item                       | Action   | Sheet No. of 117                   |           |  |  |  |  |
| F1     | Wale                       | Wale 10 from Pile NW18 to NW25; Wale 11 from Pile NW18 to NW21; Wale 10 from Pile NW28 to NW30; Wale 10 from Pile NW44 to NW49 | Replace damaged portion of wale    | 76        |  |  |  |  |
| F2     | Batter Pile                | Pile NW47  | Replace batter pile                | 76        |  |  |  |  |
| F3     | Pier Fender System         | Pier 2   | Replace wales, verticals and jambs | 74 and 75 |  |  |  |  |
| F4     | Cross Brace                | Upper South Cross Brace at Pile NW48   | Replace cross brace                | 77        |  |  |  |  |
| F5     | Pile Cluster               | Southwest end of fender system   | Replace pile clusters              | 78        |  |  |  |  |

| MODJESKI ••• MASTERS       |
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| <br>MODJESKI 800 MAS I EKS |

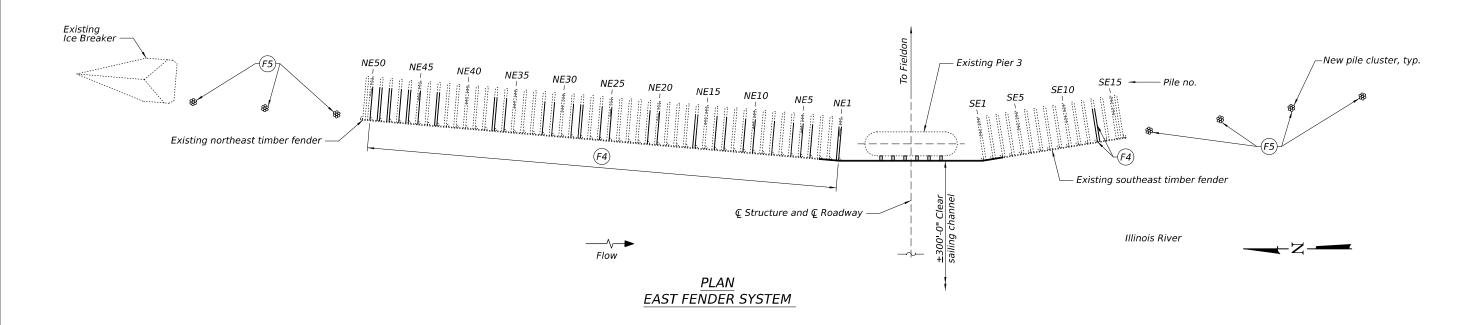
|   | USER NAME =  | DESIGNED - RKA | REVISED - |
|---|--------------|----------------|-----------|
|   |              | CHECKED - JAD  | REVISED - |
|   | PLOT SCALE = | DRAWN - AEC    | REVISED - |
| • | PLOT DATE =  | CHECKED - RKA  | REVISED - |

| STATE OF ILLINOIS            |
|------------------------------|
| DEPARTMENT OF TRANSPORTATION |

| FENDER REPAIR SCHEDULE - 1<br>STRUCTURE NO. 031-0001 |  | SECTION          | COUNTY        | TOTAL<br>SHEETS | SHEET<br>NO. |
|--|--|------------------|---------------|-----------------|--------------|
|  |  | 266BRR, (4, 5) I | GREENE        | 117             | 72           |
|  |  |                  | CONTRAC       | T NO. 7         | 3T66         |
| SHEET 72 OF 117 SHEETS                               |  | HUNOIS EED       | AID DDO IECT# | CTD DE04        | (EEQ)        |

38\5018-Joe Page Bridge Phase II Rehab\CADD\Structural\0310001-76T66-072-FdrBp

### <u>ELEVATION</u> EAST FENDER SYSTEM



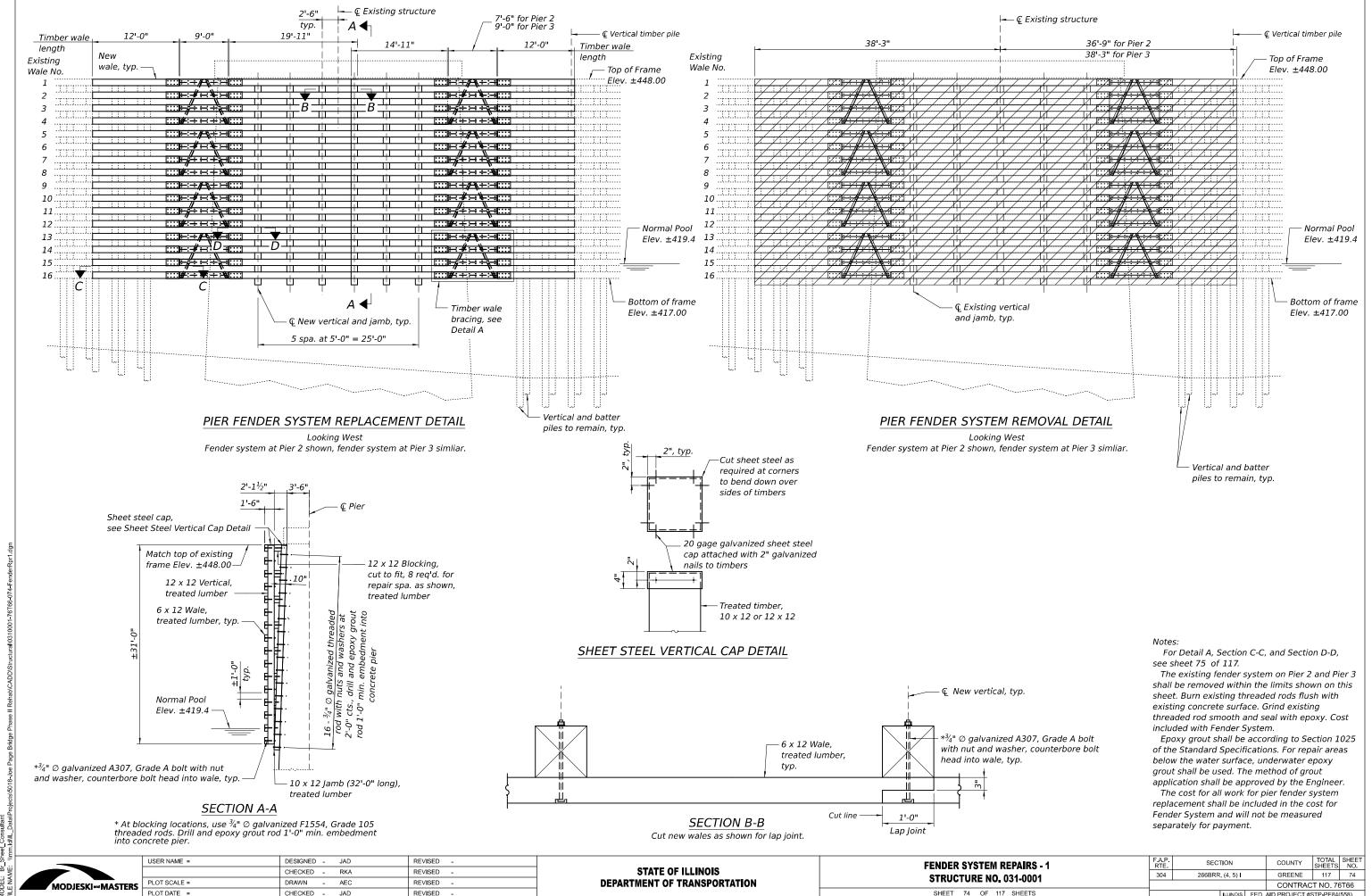
|        | FENDER REPAIR SCHEDULE - 2 |   |                                    |           |  |  |  |  |
|--------|----------------------------|---|------------------------------------|-----------|--|--|--|--|
| ID No. | Item                       | Action  | Sheet No. of 117                   |           |  |  |  |  |
| F1     | Wale                       | Wale 10 from Pile NE5 to NE8; Wale 11 from Pile NE48 to NE50  | Replace damaged portion of wale    | 77        |  |  |  |  |
| F3     | Pier Fender System         | Pier 3  | Replace wales, verticals and jambs | 74 and 75 |  |  |  |  |
| F4     | Cross Brace                | Lower South Cross Brace at Pile SE13, NE1, NE4, NE5, NE6, NE8, NE10, NE11, NE13, NE14, NE16, NE20, NE21, NE25, NE26, NE28, NE29, NE31, NE32, NE36, NE37, NE43, NE45, NE46, NE47, NE48, NE49 and NE50; Lower North Cross Brace at Pile SE13, NE1, NE16, NE28, NE37, NE43, NE46, NE48 and NE49. | Replace cross brace                | 77        |  |  |  |  |
| F5     | Pile Cluster               | Northeast and Southeast ends of fender system   | Replace pile clusters              | 78        |  |  |  |  |

| 4 |                  |
|---|------------------|
|   | MODJESKI∞MASTERS |

|   | USER NAME =  | DESIGNED | - | RKA | REVISED | - |
|---|--------------|----------|---|-----|---------|---|
|   |              | CHECKED  | - | JAD | REVISED | - |
|   | PLOT SCALE = | DRAWN    | - | AEC | REVISED | - |
| • | PLOT DATE =  | CHECKED  | - | RKA | REVISED | - |

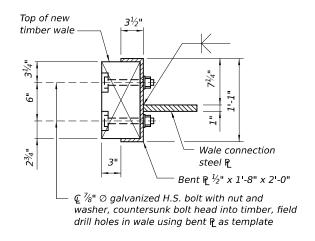
| STATE OF ILLINOIS            |
|------------------------------|
| DEPARTMENT OF TRANSPORTATION |

| FENDER REPAIR SCHEDULE - 2<br>STRUCTURE NO. 031-0001 |  | SECTION          | COUNTY        | TOTAL<br>SHEETS | SHEET<br>NO. |
|--|--|------------------|---------------|-----------------|--------------|
|  |  | 266BRR, (4, 5) I | GREENE        | 117             | 73           |
|  |  |                  | CONTRAC       | T NO. 76        | 3T66         |
| SHEET 73 OF 117 SHEETS                               |  | ILLINOIS FED     | AID PROJECT#9 | STP-PE84        | (558)        |

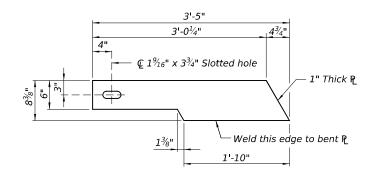


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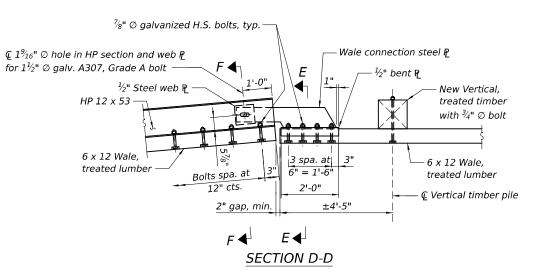
<u>SECTION C-C</u>
Cut existing, as required, and new wales as shown for lap joint.

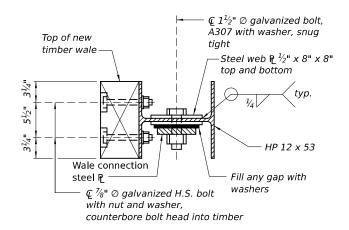


#### SECTION E-E

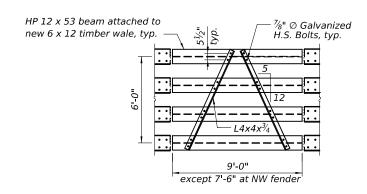


### WALE CONNECTION STEEL P





#### SECTION F-F



<u>DETAIL A</u>
Holes in HP section to be oversized. (1 $\frac{1}{1}$ 6"  $\otimes$ )

#### Notes:

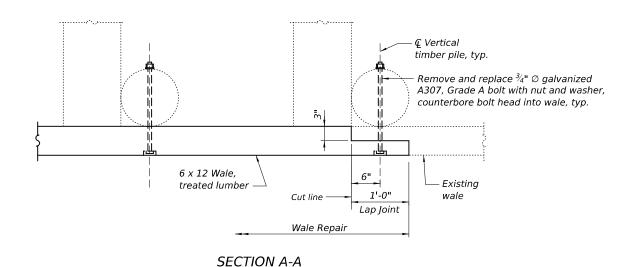
For location of Detail A, Section C-C, and Section D-D, see sheet 74 of 117.

The existing wale connection steel plate and bent plate system and timber wale bracing may be salvaged and reused at the direction of the Engineer.

The cost for all work for pier fender system replacement shall be included in the cost for Fender System and will not be measured separately for payment.

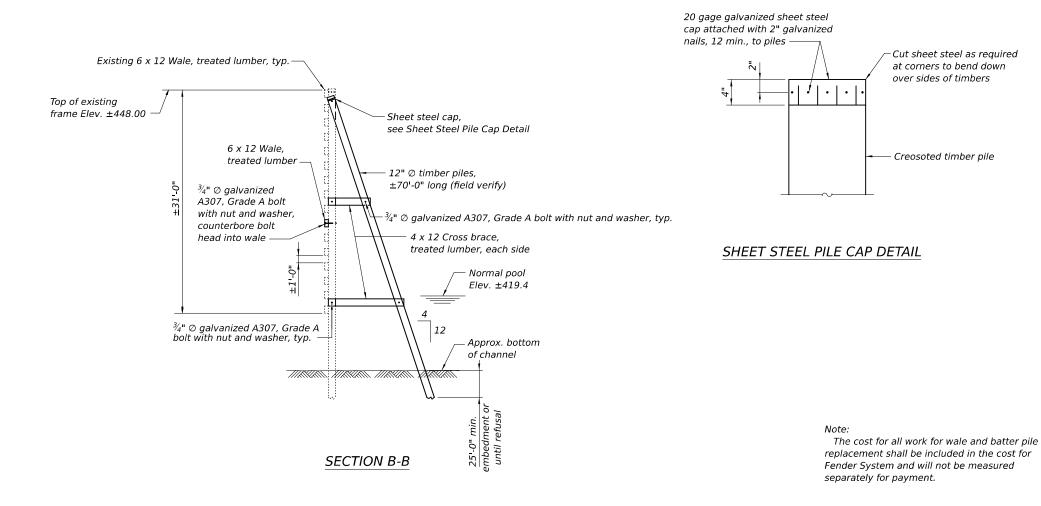
MODJESKI **™** MASTERS

| USER NAME =  | DESIGNED - RKA | REVISED - |
|--------------|----------------|-----------|
|              | CHECKED - JAD  | REVISED - |
| PLOT SCALE = | DRAWN - AEC    | REVISED - |
| PLOT DATE =  | CHECKED - RKA  | REVISED - |



### Cut existing, as required, and new wales as shown for lap joint.

### PARTIAL ELEVATION - NORTHWEST FENDER SYSTEM



MODJESKI \*\*\* MASTERS

 USER NAME =
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 REVISED 

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 REVISED 

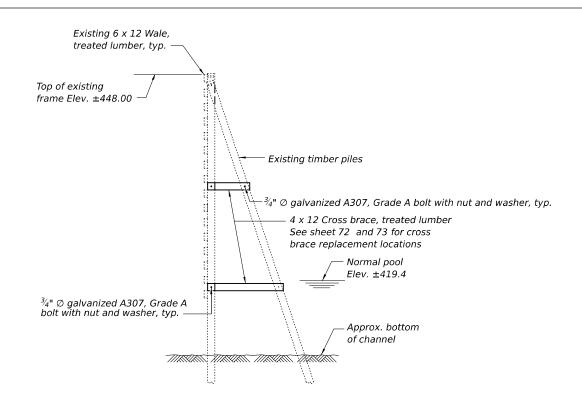
 PLOT SCALE =
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 PLOT DATE =
 CHECKED - RKA
 REVISED

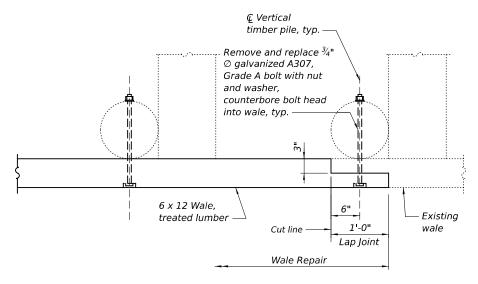
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FENDER SYSTEM REPAIRS - 3 STRUCTURE NO. 031-0001

PARTIAL ELEVATION - NORTHEAST FENDER SYSTEM

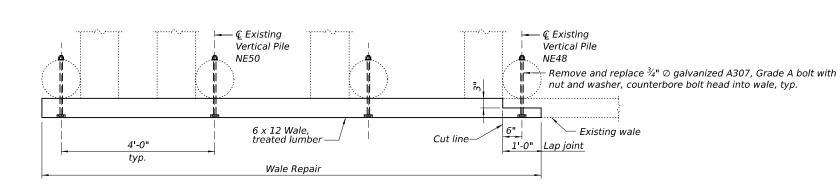


#### CROSS BRACE REPLACEMENT



### SECTION A-A

Cut existing, as required, and new wales as shown for lap joint.



#### SECTION B-B

Cut existing, as required, and new wales as shown for lap joint.

Note:

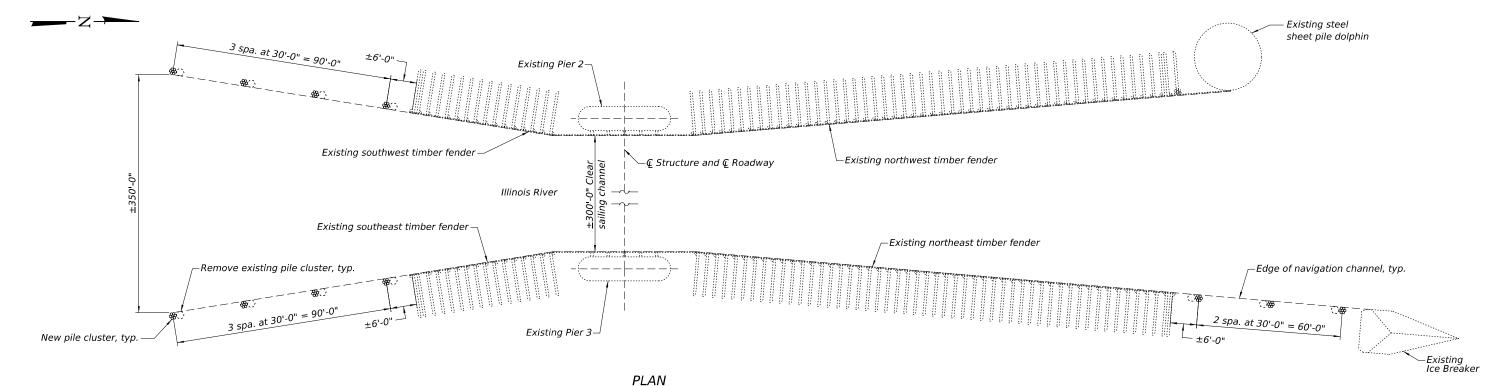
The cost for all work for wale and cross brace replacement shall be included in the cost for Fender System and will not be measured separately for payment.



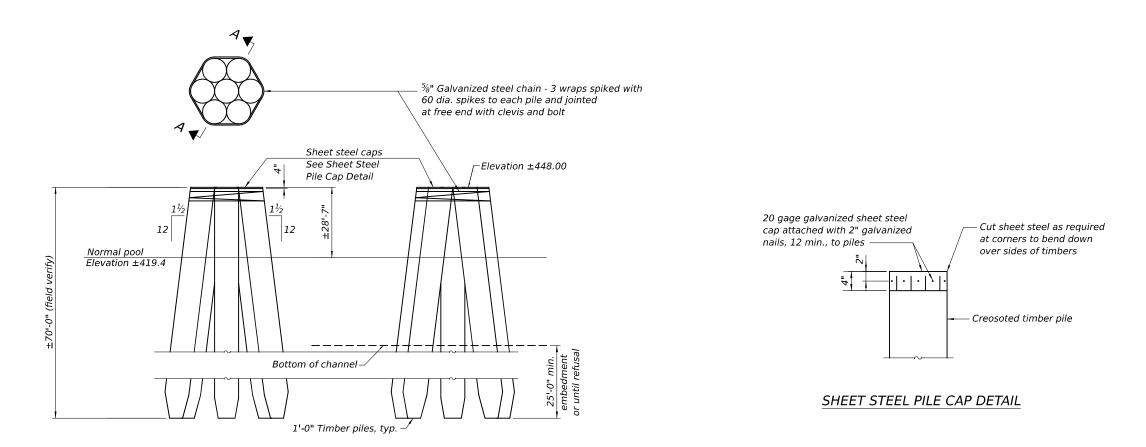
| USER NAME =  | DESIGNED - RKA | REVISED - |
|--------------|----------------|-----------|
|              | CHECKED - JAD  | REVISED - |
| PLOT SCALE = | DRAWN - AEC    | REVISED - |
| PLOT DATE =  | CHECKED - RKA  | REVISED - |

| STATE OF ILLINOIS            |
|------------------------------|
| DEPARTMENT OF TRANSPORTATION |

| FENDER SYSTEM REPAIRS - 4 |  | SECTION |            | COUNTY | TOTAL<br>SHEETS | SHEET<br>NO. |       |
|---------------------------|--|---------|------------|--------|-----------------|--------------|-------|
| STRUCTURE NO. 031-0001    |  | 266BRR  | , (4, 5) I |        | GREENE          | 117          | 77    |
| OTROOTORE NO. 031-0001    |  |         |            |        | CONTRAC         | T NO. 76     | 6T66  |
| SHEET 77 OF 117 SHEETS    |  |         | ILLINOIS   | FED.   | AID PROJECT#    | STP-PE84     | (558) |



PLAN PILE CLUSTER REPLACEMENT



SECTION A-A

FRONT VIEW

### PILE CLUSTER DETAIL

|                      | USER NAME =  | DESIGNED - JAD | REVISED - |
|----------------------|--------------|----------------|-----------|
|                      |              | CHECKED - RKA  | REVISED - |
| MODJESKI and MASTERS | PLOT SCALE = | DRAWN - AEC    | REVISED - |
| WODJEJKIWAJIEKJ      | PLOT DATE =  | CHECKED - JAD  | REVISED - |

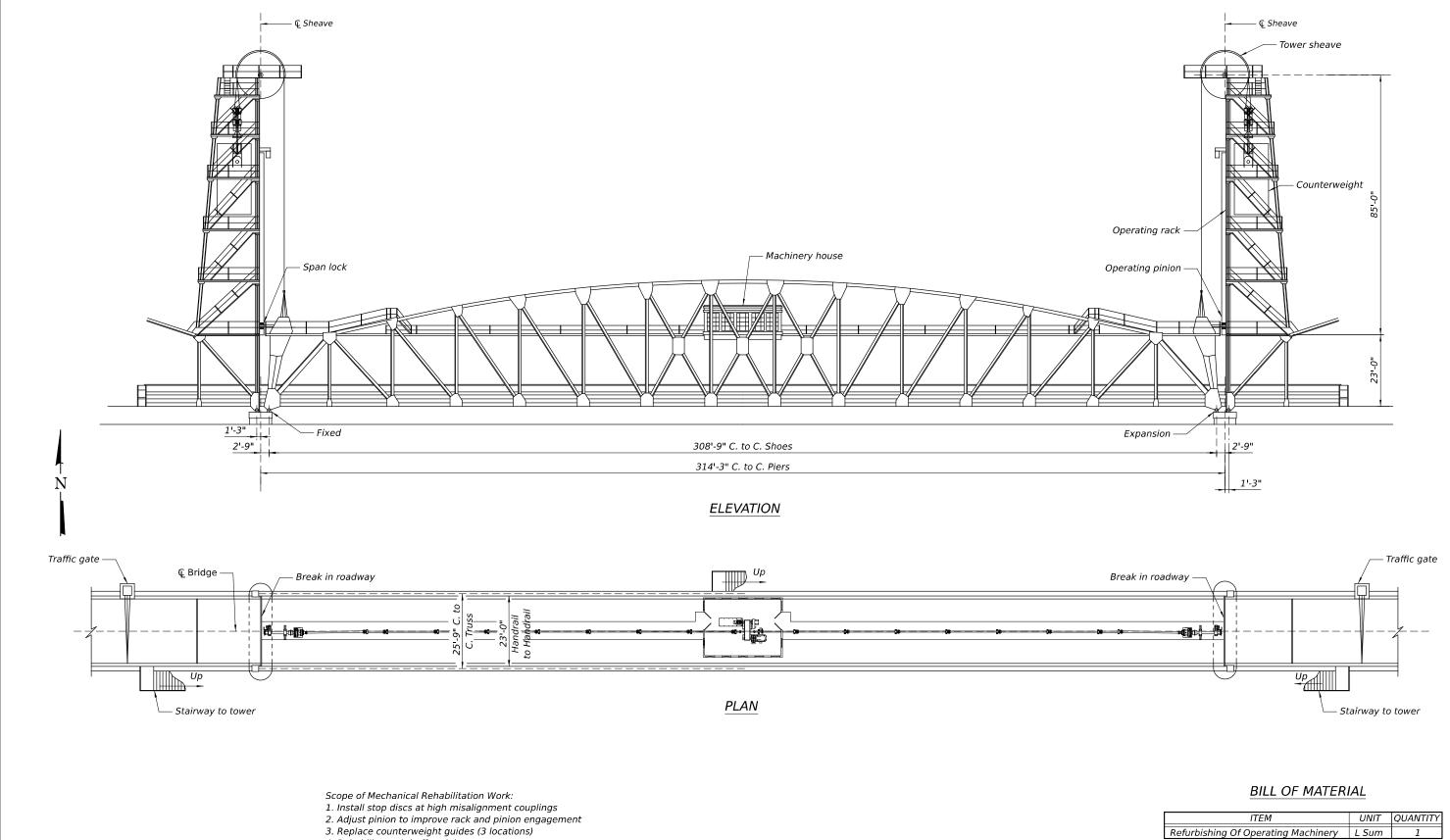
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**  FENDER SYSTEM REPAIRS - 5 **STRUCTURE NO. 031-0001** SHEET 78 OF 117 SHEETS

SECTION COUNTY 304 266BRR, (4, 5) I GREENE 117 78 CONTRACT NO. 76T66

The cost for all work for pile cluster replacement shall be included in the cost for Fender System and will not be measured separately for payment.

Note:

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- 4. Rehabilitate air buffer piping
- 5. Maintain span balance

| ITEM                                | UNIT  | QUANTITY |
|-------------------------------------|-------|----------|
| Refurbishing Of Operating Machinery | L Sum | 1        |

Note: This Bill of Material covers sheets 79 thru 85.

|                      | ŀ |
|----------------------|---|
| MODJESKI and MASTERS | ŀ |

|   | USER NAME =  | DESIGNED - | EAS | REVISED - |
|---|--------------|------------|-----|-----------|
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| s | PLOT SCALE = | DRAWN -    | AEC | REVISED - |
| • | PLOT DATE =  | CHECKED -  | GLF | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| MECHANICAL GENERAL PLAN AND ELEVATION |  | SECTION          | COUNTY       |
|---------------------------------------|--|------------------|--------------|
| STRUCTURE NO. 031-0001                |  | 266BRR, (4, 5) I | GREENE       |
|                                       |  |                  | CONTRA       |
| CUEET 70 OF 117 CUEETC                |  |                  | ALD DOO IDOT |

Span lift to "Extreme Lift" (Overtravel) position - 57.6 feet.

Normal time to lift Span to "Full Open" position - 2.2 Minutes (not including time for Barrier and Warning Gates, and Span Locks to operate).

Time for Emergency Gearmotor to lift Span to "Full Open" position - 10 Minutes.

All quantities shown herein are included for reference only. The Contractor shall generate his own detailed list of quantities and materials as the basis for bidding and purchasing.

Where products of specific Manufacturers are called for in the Contract Documents the Contractor may substitute equal or superior products by other Manufacturers, as approved by the Engineer

Should equipment called for in the Contract Documents be unavailable from the Manufacturer, the Contractor shall produce an equal product from another source, as approved by the Engineer.

The manufacture, workmanship, handling, installation, and lubrication of all Mechanical Components called for in this Contract shall comply with the requirements of the 2023 3rd edition of the American Association of State Highway and Transportation Officials (AASHTO) LRFD "Movable Highway Bridge Design Specification", and all applicable interim revisions, unless otherwise called for by these Plans and Specifications.

Fits and surface finishes, when not included on the Plans, shall be as shown below, or Vendor's recommended Specifications, whichever is more rigorous.

Surface finishes are given as the roughness height in microinches.

| Part                                      | Fit | Finish    |
|---|-----|-----------|
| Machinery Base on Steel<br>Shaft Journals | -   | 250       |
| Journal Bushings                          | RC6 | 8         |
| Split Bushing in Base                     | RC6 | 16        |
| Solid Bushing in Base (to 1/4 inch wall)  | LC1 | 125       |
| Solid Bushing in Base (over ¼ inch wall)  | FN1 | 63        |
| Hubs on Shaft (to 2 inch Bore)            | FN2 | 32        |
| Hubs on Shaft (over 2 inch Bore)          | FN2 | 64        |
| Hubs on Main Trunnions                    | FN2 | 63        |
| Turned Bolts in finished Holes            | LC6 | 63        |
| Sliding Bearings                          | LC6 | 63        |
| Keys and Keyways (Top and Bottom)         | LC4 | 63        |
| Keys and Keyways (Sides)                  | FN2 | 63        |
| Machinery Parts in fixed contact          | FN2 | 63        |
| Teeth of open Spur Gears:                 | -   | 125       |
| under 1 inch circular pitch               |     |           |
| 1 inch to 1¾ inch circualr pitch          | -   | <i>32</i> |
| over $1\%$ inch circular pitch            | -   | 63        |
|   | -   | 125       |

The above fits for cylindrical parts shall also apply to the major dimensions of noncylindrical parts.

All edges and corners of Machinery Parts, Sheet Metal Work, Bedplates and other fabricated Machinery Supports that are exposed in the finished work shall be rounded or chamfered. All burrs or other Surface Defects that could be injurious to Workers erecting or maintaining the Bridge Machinery shall be removed.

Turned Bolts are designated by their nominal Thread Diameter. The turned Body of the Bolt shall be  $^{1}\!\!_{16}$ " larger in diameter than the size called for, and shall have an LC6 Fit to the reamed hole into which it is inserted. All turned Bolts shall be equivalent to ASTM A325, Type 3, or ASTM A449, Type -1. Turned Bolts shall be torqued to 75-85% of proof load, based on Diameter and Thread Lubricant utilized. Torque required shall be determined by calibration on a Skidmore-Wilhelm or equivalent torque testing machine.

Size turned Bolts for mounted manufactured units for minimal reaming of unit's standard Holes, or order units with Solid Bases and drill and ream for recommended Bolt size

All Bolts used to fasten Machinery to Supports or Support Structure shall be  $\frac{7}{6}$ " Dia. ASTM F3125, Grade A325 or equal Grade, unless otherwise noted.

All Fasteners and Pins specified as Stainless Steel shall be Type 316 Stainless Steel, with a minimum tensile strength of 80,000 PSI and shall equal or exceed ASTM F593, Alloy Group 1 or 2, condition CW, unless otherwise noted.

Machinery Units shall have Lifting Eyes or Eye Bolts, properly sized for safe working loads, and located for balanced Lift.

Weldments and miscellaneous Machinery Components shall be fabricated from ASTM A572, Grade 50, or ASTM A709, Grade 50 Steel, unless otherwise noted.

Provide welding consumables conforming to AWS D1.1. Consumables shall include Manual AWS E7018 covered Electrodes, or ER705-3 solid Wire, or E71T-1 fluxcore Wire. Use of Wire must be accompanied by an approved Argon-CO<sup>2</sup> cover Gas. Contractor shall furnish proof of Weld deposit toughness of 25 ft-lbs at 10 Degree F per Manufacturer's Certification or by actual testing.

For fabrication, installation, aligning, testing and all related work required by the Bridge Machinery, the Contractor shall use only skilled, trained and experienced machinists, mechanics and millwrights who are thoroughly familiar with specified Requirements and Methods necessary for the proper execution of the specified Work.

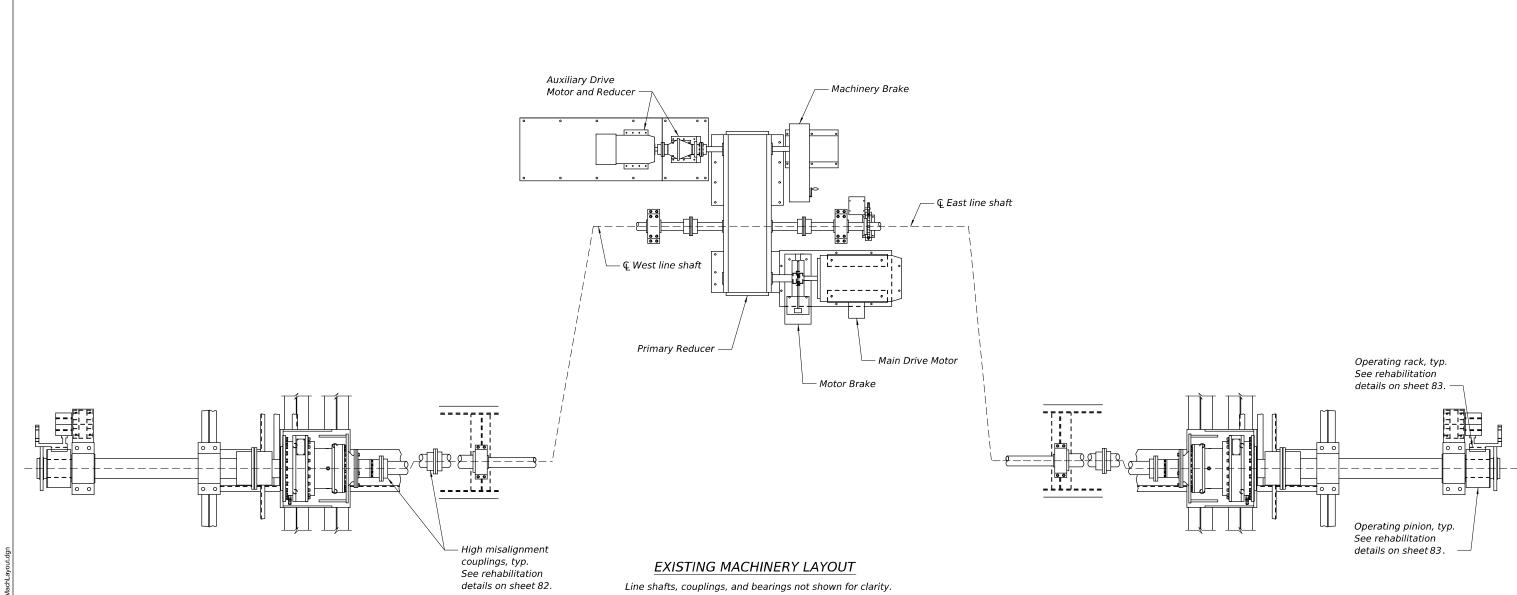
All dimensions shown herein are for the Specified Products of the particular Manufacturer listed. These dimensions shall be verified by the Contractor, using Manufacturer's certified Shop Drawings.

Any change in Design, by the use of a different Manufacturer or otherwise, shall be at the expense of the Contractor, without any additional cost to the Client, and with the approval of the Engineer.

Unless directed otherwise by the Engineer, all material removed from the structure, as specified by this contract, shall become the property of the Contractor and disposed of property.

|   | USER NAME =  | DESIGNED - EAS | REVISED - |
|---|--------------|----------------|-----------|
|   |              | CHECKED - GLF  | REVISED - |
|   | PLOT SCALE = | DRAWN - AEC    | REVISED - |
| ' | PLOT DATE =  | CHECKED - GLF  | REVISED - |

| MECHANICAL GENERAL NOTES | F.A.P.<br>RTE | SEC    | TION        |     | COUNTY       | TOTAL<br>SHEETS | SHEET<br>NO. |
|--------------------------|---------------|--------|-------------|-----|--------------|-----------------|--------------|
| STRUCTURE NO. 031-0001   |               | 266BRF | l, (4, 5) I |     | GREENE       | 117             | 80           |
| OTROGICAL ROLOGI-0001    |               |        |             |     | CONTRAC      | T NO. 76        | 3T66         |
| SHEET 80 OF 117 SHEETS   |               |        | ILLINOIS.   | FED | AID PROJECT# | STP-PE84        | (558)        |



EXISTING MACHINERY LAYOUT

Line shafts, couplings, and bearings not shown for clarity.

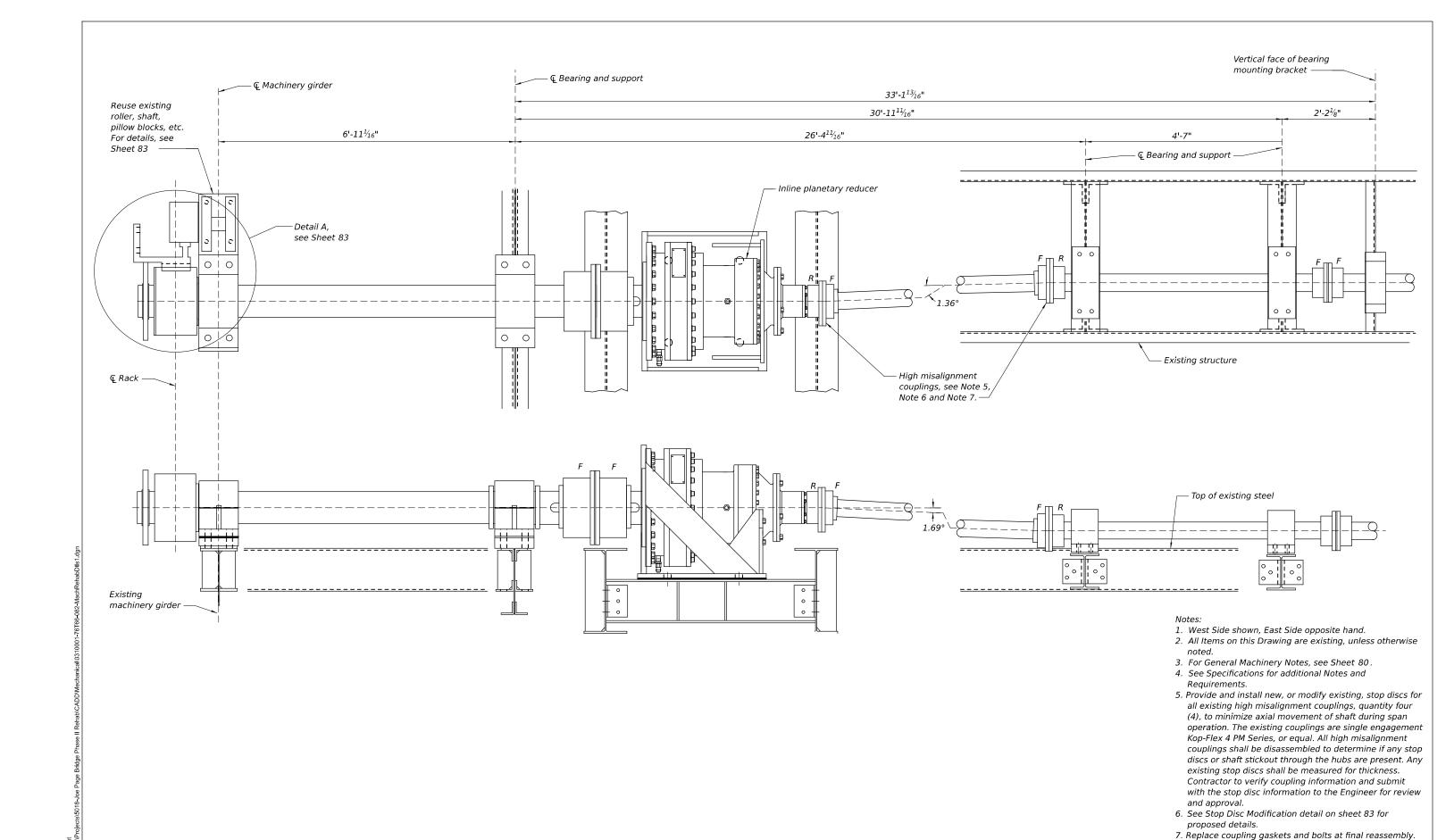
Note:

1. All items on this Drawing are existing.



|   | USER NAME =  | DESIGNED - EAS | REVISED - |
|---|--------------|----------------|-----------|
|   |              | CHECKED - GLF  | REVISED - |
|   | PLOT SCALE = | DRAWN - AEC    | REVISED - |
| ' | PLOT DATE =  | CHECKED - GLF  | REVISED - |
|   |              |                |           |

| EXISTING MACHINERY LAYOUT<br>STRUCTURE NO. 031-0001 |  | SECTION          | COUNTY         | TOTAL<br>SHEETS | SHEET<br>NO. |
|---|--|------------------|----------------|-----------------|--------------|
|   |  | 266BRR, (4, 5) I | GREENE         | 117             | 81           |
|   |  |                  | CONTRAC        | T NO. 7         | 6T66         |
| SHEET 81 OF 117 SHEETS                              |  |                  | ALD DOO LEGT ! | OTD DEGA        | (EEO)        |



| MODJESKI∞MASTERS |
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MACHINERY REHABILITATION DETAILS - 1
STRUCTURE NO. 031-0001

SHEET 82 OF 117 SHEETS

 
 FA.P. RTE.
 SECTION
 COUNTY SHEETS
 TOTAL NO.
 SHEETS NO.

 304
 266BRR, (4, 5) I
 GREENE
 117
 82

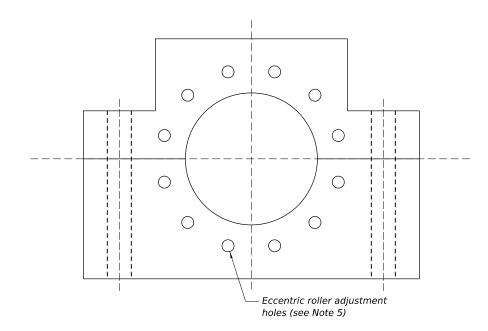
 CONTRACT NO. 76766
 CONTRACT NO. 76766

8. Test operate the lift span through five (5) full raise/lower operations to ensure smooth operation and limited axial

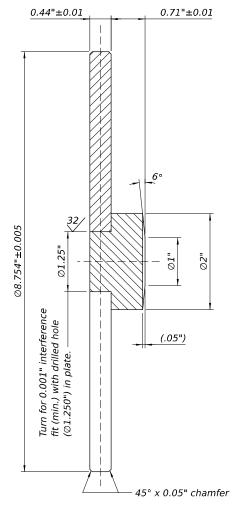
movement of floating shaft.

### DETAIL A RACK AND PINION ADJUSTMENT

All components shown are existing.



#### VIEW A-A



#### Stop Disc Modification

Provide new stop discs as needed per Note 5 on Sheet 82. Dimensions provided above are for reference only. Final details shall be determined based on existing field conditions, and in coordination with the Engineer and the coupling manufacturer. Material shall be ASTM A709 or A36 steel, or as recommended by the manufacturer. 125/ Finish all over U.N.O.

#### Notes:

- 1. West Side shown, East Side opposite hand.
- 2. For General Machinery Notes, see Sheet 80.
- 3. See Specifications for additional Notes and Requirements.
- 4. Clean both eccentric roller and bearing assemblies of all grease and debris prior to adjustments.
- 5. Incrementally, rotate each eccentric roller to improve rack and pinion backlash. The eccentric shaft retainer has 4 holes that will each line up with a hole in the inboard pillow block. Rotate each eccentric shaft one hole position at a time. After an adjustment is made at both pinions, operate the lift span at a reduced speed (approx. 50%), observing rack and pinion contact, eccentric roller contact, and span guides throughout the entire operation. If operation is smooth with no binding or interference, rotate each eccentric shaft an additional rotation. Continue this process until value of 0.070" average backlash, or closest value given available adjustment exists at both pinions throughout operation. Record backlash and clearance at the roller at two locations per rack segment. Lift span may be jacked or otherwise secured in place so that roller contacts rack during measurements. If binding or other operational issues are observed prior to this backlash being obtained, rotate the eccentric shaft back to the last position with smooth operation.
- 6. After adjustment is complete, test operate the lift span through five (5) full raise/lower operations to ensure smooth operation of the open gearing.

MODJESKI **™MASTERS** 

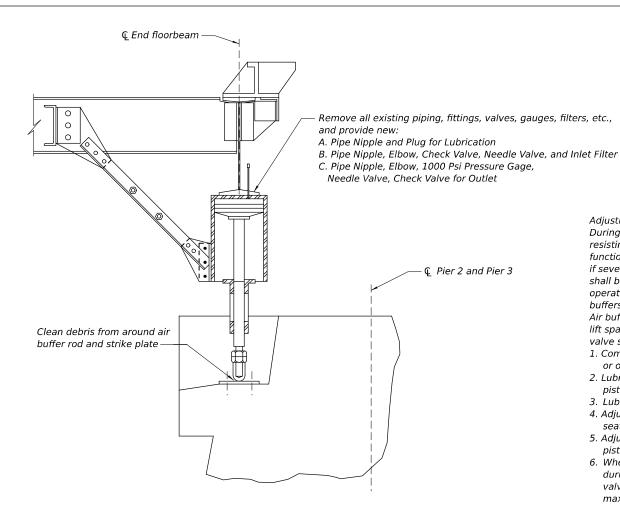
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**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**  **MACHINERY REHABILITATION DETAILS - 2 STRUCTURE NO. 031-0001** SHEET 83 OF 117 SHEETS

SECTION COUNTY GREENE 117 83 304 266BRR, (4, 5) I CONTRACT NO. 76T66 ILLINOIS FED. AID PROJECT #STP-PE84(558)

#### AIR BUFFER - BRIDGE SEATED

Typical at both ends of the lift span.



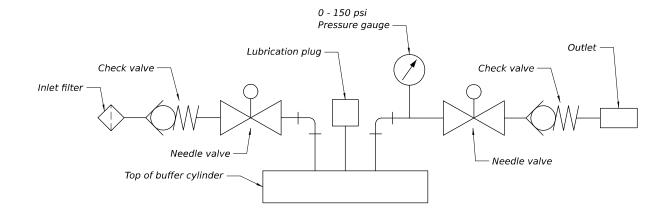
SECTION A-A

#### Adjusting Air Buffer Outlet Valve:

During normal operation, the air buffers shall provide soft seating while resisting against normal span imbalance loads. The air buffers shall also function as energy absorbing devices for emergency or reducing overhauling if severe imbalance conditions arise. The air release rate from the buffers shall be adjusted experimentally to avoid hard seating during normal operation with normal imbalance loads. Care shall be taken to ensure air buffers do not prevent the lift span from fully seating on the live load shoes. Air buffer pressure buildup shall be approximately equal at both ends of the lift span. This procedure shall be followed to determine proper outlet needle valve setting:

- 1. Complete any required balancing adjustments of the lift span with no wind or other extraneous loads.
- 2. Lubricate air buffer components, including internal piston, and ensure piston rod extends fully and smoothly under its own weight.
- 3. Lubricate the sheave trunnions and machinery.
- 4. Adjust the needle valve at the air outlet so that the air buffers provide soft seating against normal span imbalance, yet allow the span to fully seat.
- 5. Adjust the needle valve at the air inlet to provide smooth extension of the piston rod during span raising.
- 6. When an arresting pressure against imbalance loads has been determined during seating, a bronze tag shall be attached to the air gauge needle valve assembly stamped with the following statement: "Set valve for maximum pressure of xxx PSI during seating against imbalance loads."

Proper adjustment of the buffers shall be the responsibility of the Contractor. The Contractor shall supply all equipment necessary for this work including additional pressure gauges if required to accurately measure air buffer pressures.



#### AIR BUFFER SYSTEM SCHEMATIC

|                  |      | L |
|------------------|------|---|
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| • | PLOT DATE =  | CHECKED - GLF  | REVISED - |

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

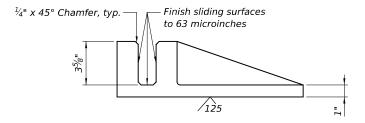
| AIR BUFFER REHABILITATION |  |     |
|---------------------------|--|-----|
| STRUCTURE NO. 031-0001    |  | 266 |
| 01K0010KE NO. 001-0001    |  |     |
| SHEET 84 OF 117 SHEETS    |  |     |

| A.P.<br>TE.     | SEC    | TION       |  | COUNTY         | TOTAL<br>SHEETS | SHEET<br>NO. |
|-----------------|--------|------------|--|----------------|-----------------|--------------|
| 04              | 266BRR | , (4, 5) I |  | GREENE         | 117             | 84           |
|                 |        |            |  | CONTRAC        | T NO. 76        | ST66         |
| ILLINOIS FED. A |        |            |  | AID PROJECT #S | TP-PE84(        | 558)         |

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## Notes:

- 1. All details on this sheet shall be field verified by the Contractor prior to ordering and fabrication of components to ensure proper fit between new and existing components.
- 2. The gauge, valve, and filter shall be located immediately above the existing air buffer, similar to the existing piping. The piping extends through the end floorbeam bottom flange. All new equipment shall be positioned for ease of access and maintenance.
- 3. All new components shall be stainless steel, Type 316, rated for 1500 PSI minimum.



### COUNTERWEIGHT GUIDE SHOE DETAIL

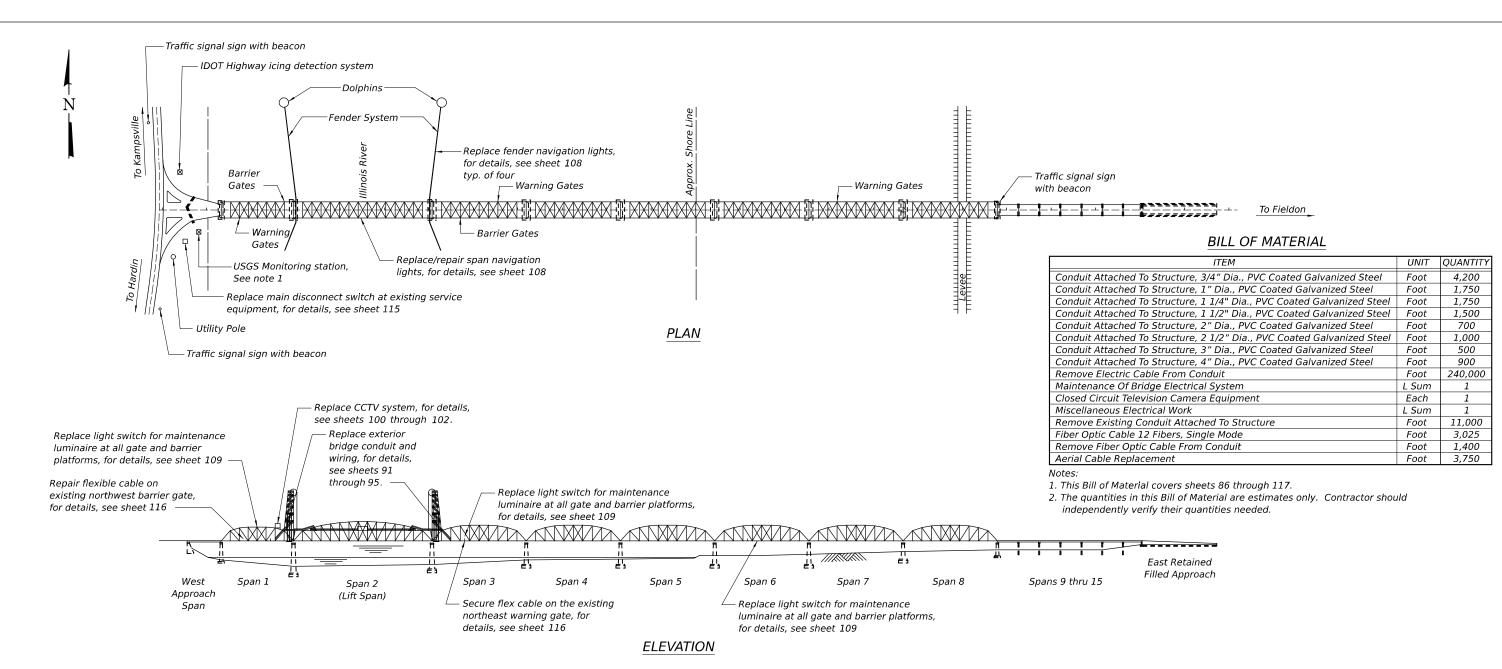
Mat'l: ASTM A148, Grade 80-50 or ASTM A668, Class G. Welded Construction also acceptable upon approval of the Engineer.

#### Notes

- Dimensions shown on this drawing are provided for reference only and shall be field verified by the Contractor prior to ordering and fabrication of components to ensure proper fit between new and existing components.
- Three (3) counterweight guides shall be replaced the lower South guide on the East counterweight, and both the upper and lower North guides on the West counterweight.
   Existing bolts are designated as 15/16" turned bolts with driving fit
- R. Existing bolts are designated as 15/16" turned bolts with driving fit on original drawings. Holes in new Counterweight Guide Shoes shall have an LC6 fit with the new turned bolts. Ream existing steel at assembly. Note that current bolts are inserted with the heads towards the counterweight and may need to be cut out to remove. New bolts likely will need to have the nut end towards the counterweight. Provide double nuts.

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### **ELECTRICAL GENERAL NOTES:**

- 1. Electrical work for this project primarily consists of 1) replacing bridge exterior conduit, cable, wiring, and raceway, 2) replacing some existing equipment with new as specified in the electrical equipment schedule and the electrical sheets, 3) installing new CCTV and Public Address systems, 4) installing new marine navigation lights, conductors, and conduit, and 5) troubleshooting and adjusting motor drive settings.
- 2. All work shall comply with the current edition of the National Electrical Code in effect at the bid opening time, AASHTO, and all applicable state and/or local codes.
- 3. In no way shall these plans be interpreted as requiring a violation of the National Electrical Code, or any other applicable Federal, State, or Local Code or regulation. In any case of dispute between these plans and the National Electrical Code, the more stringent requirement shall govern.
- 4. The installation of all equipment and materials shall comply with their respective manufacturers' recommendations and installation procedures.
- 5. The Contractor is required to deliver a complete, working, and safe electrical system.
- 6. Variations from these plans must be submitted to the Engineer for approval. All changes shall be reflected in the as-built

- 7. The Contractor is required to coordinate with the local Electric Utility Company for all electric service interruptions required for completion of the work.
- 8. The Contractor shall bear full responsibility for verification of all relevant dimensions, quantities, equipment specifications, electrical loads, circuit loads, and similar information prior to purchase and/or fabrication of equipment or materials. Equipment ratings and/or wire sizes shown on the plans shall be increased where required by the loads serviced.
- The Contractor is responsible for supplying any temporary power required.
- 10. Where details are not provided or fully developed, the Contractor shall provide the additional detail development necessary to provide and submit layout drawings and shop drawings for review.
- 11. Unless otherwise noted, all equipment is existing to remain.
- 12. All exterior structure-mounted conduit shall be hot-dipped galvanized conduit with a factory-applied PVC coating, at least 40 mil thick. Provide an exterior coating that is permanently fused to the hot-dip galvanized surface of the conduit. Ensure the adhesion of the PVC coating to the conduit is greater than the strength of the coating itself. Provide NRTL listed overall conduit with the PVC coating as the primary corrosion protection and the underlying galvanized coating as the supplemental protection

13. Contractor shall submit conductor field verification procedure for Engineer approval. The contractor shall utilize the as-built drawings to determine the tagging required for wires and terminals.

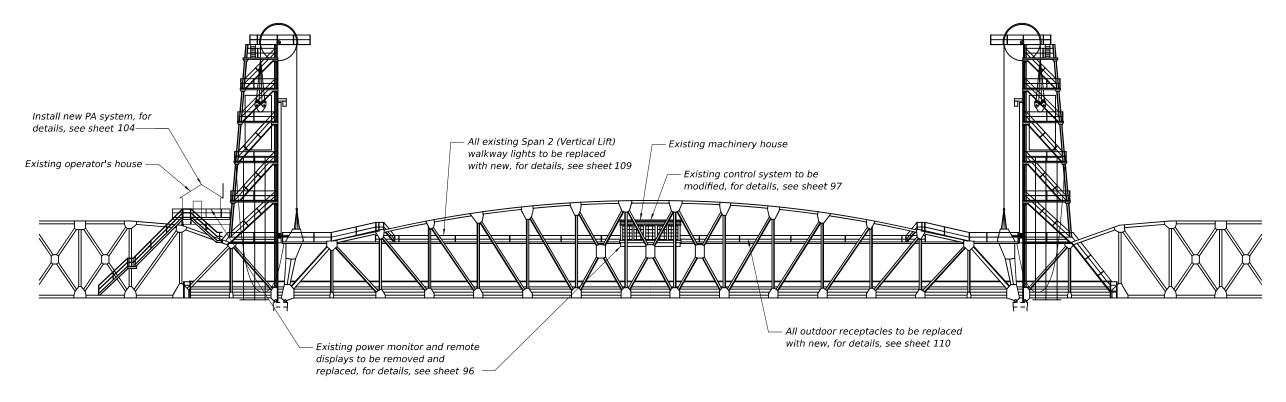
1. USGS Monitoring station and related equipment not to be disturbed during construction. See specifications.

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STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

SECTION COUNTY **ELECTRICAL PLAN AND ELEVATION - 1** 304 266BRR (4.5) I GREENE 117 **STRUCTURE NO. 031-0001** CONTRACT NO. 76T66 SHEET 86 OF 117 SHEETS ILLINOIS FED. AID PROJECT #STP PE84(558)





TRUSS SPAN 1 (FIXED)

TRUSS SPAN 3 (FIXED)

TRUSS SPAN 2 (VERTICAL LIFT)

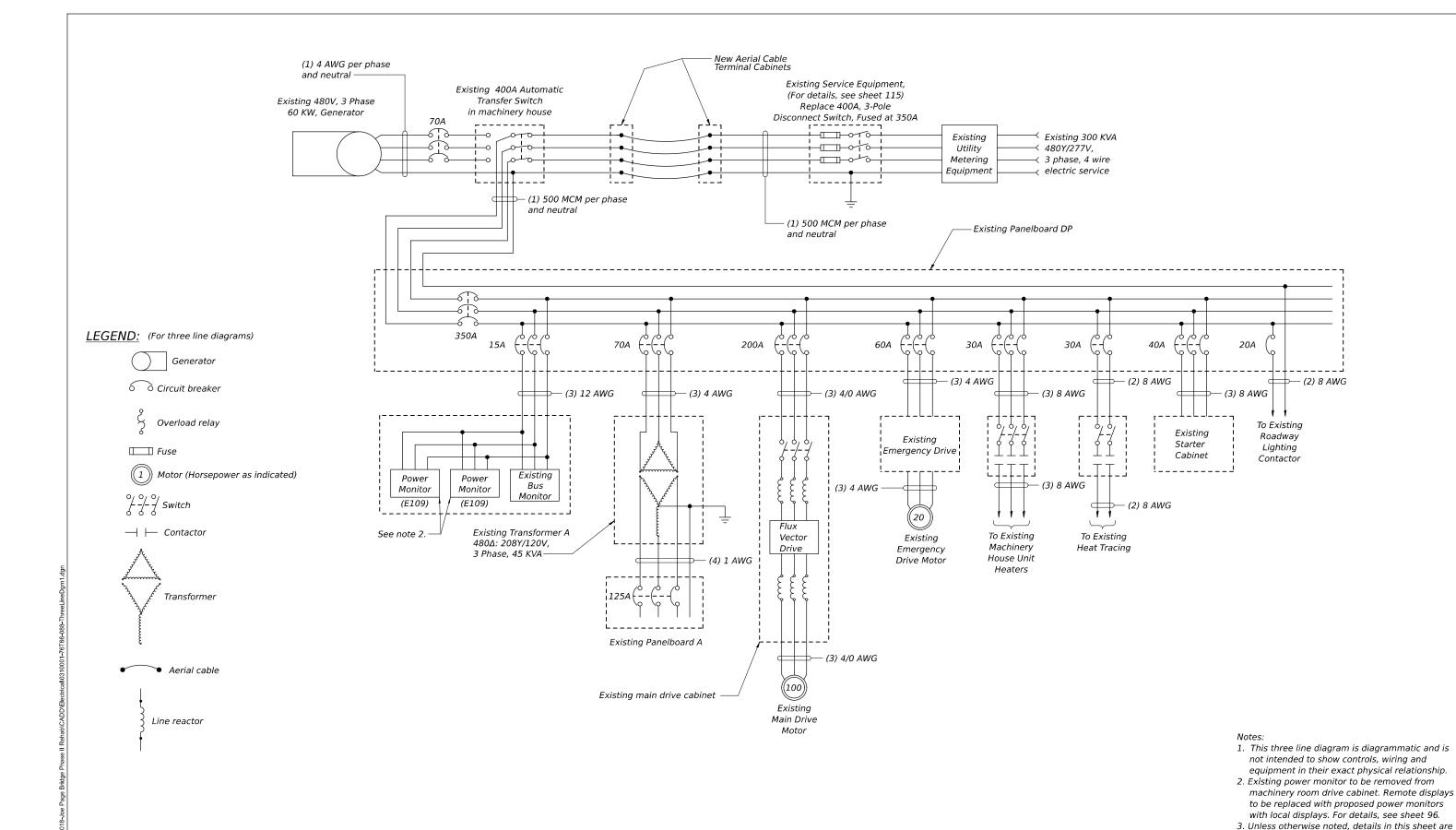
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STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

| ELECTRICAL PLAN AND ELEVATION - 2<br>STRUCTURE NO. 031-0001 |  | SECTION          |       | COUNTY         | TOTAL<br>SHEETS | SHEE<br>NO. |
|---|--|------------------|-------|----------------|-----------------|-------------|
|   |  | 266BRR, (4, 5) I |       | GREENE         | 117             | 87          |
| 01K9010KE H01001-0001                                       |  |                  |       | CONTRAC        | T NO. 76        | 3T66        |
| SHEET 87 OF 117 SHEETS                                      |  | ILLINOIS F       | FED 4 | ID PRO IFCT #9 | STP-PER/        | (558)       |



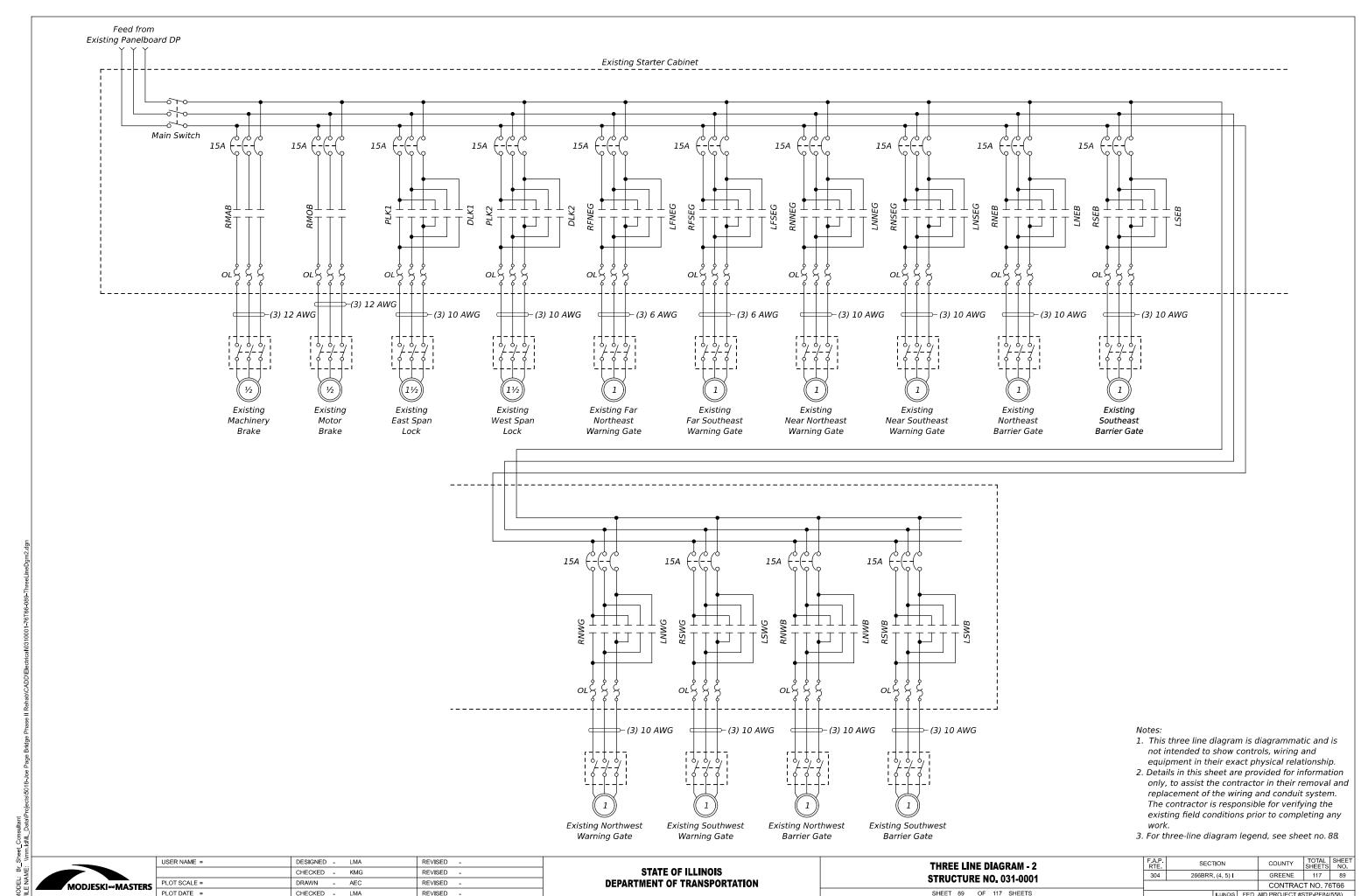
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| STATE OF ILLINOIS            |
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| DEPARTMENT OF TRANSPORTATION |

| THREE LINE DIAGRAM - 1<br>STRUCTURE NO. 031-0001 |  | F.A.P. SECTION   |          | COUNTY | TOTAL<br>SHEETS | SHEET<br>NO. |       |
|--|--|------------------|----------|--------|-----------------|--------------|-------|
|  |  | 266BRR, (4, 5) I |          |        | GREENE          | 117          | 88    |
| 01 NOO1 ONE NO. 031-0001                         |  |                  |          |        | CONTRAC         | T NO. 76     | ST66  |
| SHEET 88 OF 117 SHEETS                           |  |                  | ILLINOIS | FED.   | AID PROJECT#    | STP-PE84     | (558) |

provided for information only, to assist the contractor in their removal and replacement of the wiring and conduit system. The contractor is responsible for verifying the existing field conditions prior to completing any work.



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|                   |       |                    |                            | PANELBOAR                                | D DP                        |             |          |         |       |             |    |    |
|-------------------|-------|--------------------|----------------------------|--|-----------------------------|-------------|----------|---------|-------|-------------|----|----|
| Voltage: 480Y/277 |       |                    | Phase: 3                   | Wire: 4                                  | Amperes: 400 Main: 350A MCB |             | 50A MCB  | A.I.R.: |       |             |    |    |
| Circuit No.       | Bre   | aker               | Service to:                | Conductors                               | Conductors                  | Cor         | vice to  | Bre     | eaker | Circuit No. |    |    |
| Circuit No.       | Poles | Amps               | Service to:                | Conductors                               | Conductors                  | Service to: |          | Poles   | Amps  | Circuit No. |    |    |
| 1                 |       |                    |                            |  |                             |             |          |         |       |             |    | 2  |
| 3                 | 3     | 30                 | Remote radiator            | (3) 8 AWG                                | (3) 8 AWG                   | Unit I      | heaters  | 3       | 30    | 4           |    |    |
| 5                 |       |                    |                            |  |                             |             |          |         |       | 6           |    |    |
| 7                 |       |                    |                            |  |                             |             |          |         |       | 8           |    |    |
| 9                 | 3     | 30                 | Spare                      |  |                             | Sp          | oare     | 3       | 30    | 10          |    |    |
| 11                |       |                    |                            |  |                             |             |          |         |       | 12          |    |    |
| 13                |       |                    |                            |  |                             |             |          |         |       |             | 14 |    |
| 15                | 15 3  | 3 40 Motor starter | Motor starter              | (3) 8 AWG                                | (3) 4 AWG                   | Transf      | former A | 3       | 70    | 16          |    |    |
| 17                |       |                    | Cabinet                    |  |                             |             |          |         |       | 18          |    |    |
| 19                | 2     | 30                 | //                         | Heat trace (2) 8 AWG (3) 4 AWG Emergency | (2) 0 414/6                 |             |          |         |       |             |    | 20 |
| 21                | 2     | 30                 | пеас стасе                 |  |                             | (3) 4 AWG   |          |         |       | 3           | 60 | 22 |
| 23                | 1     | 20                 | Roadway lights             | (2) 8 AWG                                |                             | di          | rive     |         |       | 24          |    |    |
| 25                |       |                    |                            |  |                             |             |          |         |       | 26          |    |    |
| 27                | 3     | 15                 | Spare                      |  | (3) 12 AWG                  | Power       | monitor  | 3       | 15    | 28          |    |    |
| 29                |       |                    |                            |  |                             |             |          |         |       | 30          |    |    |
|                   |       |                    |                            |  |                             |             |          |         |       |             |    |    |
|                   | 3     | 200                | Main drive<br>(See note 2) | (3) 3/0 AWG                              |                             |             |          |         |       |             |    |    |
|                   |       |                    |                            |  |                             |             |          |         |       |             |    |    |

|             |                   |      |                                     |           | PANELBO    | ARD A                       |  |                            |         |      |             |
|-------------|-------------------|------|-------------------------------------|-----------|------------|-----------------------------|--|----------------------------|---------|------|-------------|
| ,           | Voltage: 208Y/120 |      | Phase: 3                            | Wire      | e: 4       | Amperes: 225 Main: 125A MCB |  |                            | 0       |      |             |
| Cincuit No  | Breaker           |      | Complete to                         |           | Conductors | C                           |  | Complete                   | Breaker |      | Cirruit No  |
| Circuit No. | Poles             | Amps | Service to:                         |           | Conductors | Conauctors                  |  | Service to:                | Poles   | Amps | Circuit No. |
| 1           | 1                 | 20   | Walkway receptacles                 |           | (2) 10 AWG | (2) 10 AWG                  | We                                       | est tower receptacles      | 1       | 20   | 2           |
| 3           | 1                 | 20   | Lift span walkway lights            | 5         | (2) 10 AWG | (2) 10 AWG                  | Ea                                       | st tower receptacles       | 1       | 20   | 4           |
| 5<br>7      | 2                 | 20   | East tower stairway lights          | ts        | (3) 10 AWG | (3) 10 AWG                  | Wes                                      | st tower stairway lights   | 2       | 20   | 6<br>8      |
| 9           | 1                 | 20   | Traffic signals                     |           | (2) 10 AWG | (2) 10 AWG                  | М  | arine navigation lights    | 1       | 20   | 10          |
| 11          | 1                 | 20   | East gates and barrier ligh         | hts       | (2) 10 AWG | (2) 10 AWG                  | West                                     | gates and barrier lights   | 1       | 20   | 12          |
| 13          | 1                 | 20   | Near East CCTV cameras (See r       | note 1)   | (2) 8 AWG  | (2) 12 AWG                  | Control circuits                         |                            | 1       | 20   | 14          |
| 15          | 1                 | 20   | West warning gates heater & recept. |           | (2) 10 AWG | (2) 10 AWG                  | Near East warning gates heater & recept. |                            | 1       | 20   | 16          |
| 17          | 1                 | 20   | West barrier gates heater & recept. |           | (2) 10 AWG | (2) 10 AWG                  | East barrier gates heater & recept.      |                            | 1       | 20   | 18          |
| 19          | 1                 | 20   | Far East warning gates heater &     | x recept. | (2) 10 AWG | (2) 8 AWG                   | Far East CCTV cameras (See note 1)       |                            | 1       | 20   | 20          |
| 21          | 1                 | 20   | Generator heater                    |           | (2) 10 AWG | (2) 12 AWG                  | Machine house receptacles (South)        |                            | 1       | 20   | 22          |
| 23          | 1                 | 20   | Machine house receptacles (N        | North)    | (2) 12 AWG | (2) 12 AWG                  | Relay                                    | and starter cabinet lights | 1       | 20   | 24          |
| 25          | 1                 | 20   | Traffic control circuit             |           | (2) 12 AWG | (2) 12 AWG                  | ٨  | Nachine house lights       | 1       | 20   | 26          |
| 27          | 1                 | 20   | West navigation lights              |           | (2) 10 AWG |                             |  | Spare                      | 1       | 20   | 28          |
| 29          | 1                 | 20   | Exhaust fan                         |           | (2) 10 AWG |                             |  | Spare                      | 1       | 20   | 30          |
| 31          | 1                 | 20   | Heat trace and heater contr         | rols      | (2) 12 AWG |                             |  |                            |         |      | 32          |
| 33          | 1                 | 20   | East navigation lights              |           | (2) 10 AWG | (4) 2/0 AWG                 | ı  | Panelboard B feeder        | 3       | 60   | 34          |
| 35          | 1                 | 20   | Spare                               |           |            |                             |  |                            |         |      | 36          |
| 37          | 1                 | 20   | Spare                               |           |            |                             |  |                            |         |      | 38          |
| 39          | 1                 | 20   | Spare                               |           |            |                             |  |                            |         |      | 40          |
| 41          | 1                 | 20   | Spare                               |           |            |                             |  |                            |         |      | 42          |

|                |               |       |                         | PA         | NELB    | OARD B       |                             |   |               |                |                |
|----------------|---------------|-------|-------------------------|------------|---------|--------------|-----------------------------|---|---------------|----------------|----------------|
| Voltag         | ge: 208Y      | //120 | Phase: 3                | Wire: 4    |         | Amperes: 100 |                             | Main: 60A MCB                           | A.I.          | A.I.R.: 10,000 |                |
| Circuit<br>No. | Brea<br>Poles |       | Service to:             | Condu      | ıctors  | Conductors   | •                           | Service to:                             | Brea<br>Poles |                | Circuit<br>No. |
| 1<br>3         | 2             | 25    | Air conditioner         | (3) 10     | 0 AWG   | (3) 8 AWG    | ,                           | Furnace air handler                     |               | 40             | 2              |
| 5              | 1             | 20    | Outside lights          | (2) 12     | 2 AWG   | (2) 12 AWG   |                             | Water heater                            | 1             | 20             | 6              |
| 7              | 1             | 20    | Inside lights           | (2) 12     | 2 AWG   |              | Spare                       |   | 1             | 20             | 8              |
| 9              | 1             | 20    | Outside receptacles     | (2) 12     | 2 AWG   | (2) 12 AWG   | Attic receptacles           |   | 1             | 20             | 10             |
| 11             | 1             | 20    | West receptacles        | (2) 12     | 2 AWG   | (2) 12 AWG   | Water cooler                |   | 1             | 20             | 12             |
| 13             | 1             | 20    | Exit lights             | (2) 12     | 2 AWG   | (2) 12 AWG   | Control console receptacles |   | 1             | 20             | 14             |
| 15             | 1             | 20    | Exhaust fan and bath li | ght (2) 12 | 2 AWG   | (2) 12 AWG   | East receptacles            |   | 1             | 20             | 16             |
| 17             | 2             | 20    | Base board heater (Ea   | (2) 7.2    | 2 AWG   | (2) 10 AWG   | CCTV equipm                 | CCTV equipment and monitor (See note 1) |               | 20             | 18             |
| 19             |               | 20    | base poaru neater (Ea   | (3) 12     | ZAWG    | (2) 12 4440  |                             |   |               | 20             | 20             |
| 21             | _             | 20    | Dana baand baata (F-    | -4) (2) 12 | 2 414/6 | (3) 12 AWG   | Bas                         | se board heater (West)                  | 2             | 20             | 22             |
| 23             | 2             | 20    | Base board heater (Ea   | st) (3) 12 | ZAWG    | (2) 12 414/6 |                             | Dath was an hoston                      |               | 20             | 24             |
| 25             | 1             | 20    | PA System (See note     | 1) (2) 12  | 2 AWG   | (3) 12 AWG   | Bathroom heater             |   | 2             | 20             | 26             |
| 27             |               | 20    | Sower tank heater       | (2) 12     | 2 AWG   | (2) 12 AWG   | Sew                         | er tank high level alarm                | 1             | 20             | 28             |
| 29             | 9 2           |       | 20 Sewer tank heater (3 |            | ZAWG    |              |                             | Spare                                   | 1             | 20             | 30             |

#### Notes:

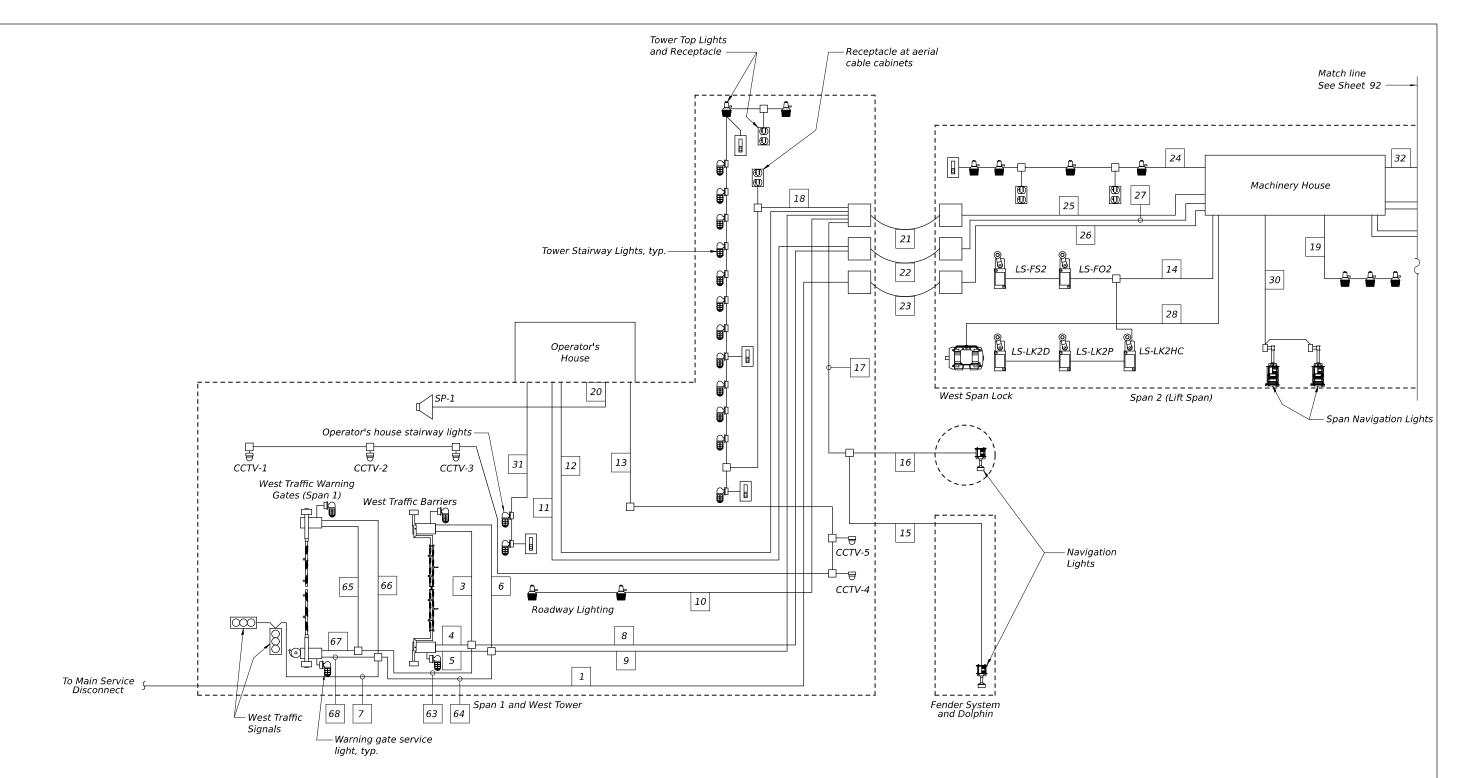
- 1. The Far East CCTV cameras and PA system circuits shall utilize spare breakers in the panelboard, while the Near East CCTV Cameras and West CCTV equipment and monitor circuits shall be modifications to the existing circuits. Details in this sheet, with the exception of the listed changes, are provided for information only to assist the contractor in their removal and replacement of the wiring and conduit system. The contractor is responsible for verifying the existing field conditions prior to completing any
- 2. The Main Drive circuit is fed from Panelboard DP's main bus and thus does not have associated circuit numbers.

| MODEL: Br.:<br>FILE NAME: |           | MODJESKI === MASTERS |
|---------------------------|-----------|----------------------|
|                           | 9/29/2025 | 12:11:30 PM          |

|   | USER NAME =  | DESIGNED | - | LMA | REVISED | - |
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| • | PLOT DATE =  | CHECKED  | - | LMA | REVISED | - |

| STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | PANELBOARD SCHEDULE<br>STRUCTURE NO. 031-0001 |
|--|---|
|  | SHEET 90 OF 117 SHEETS                        |

| F.A.P.<br>RTE | SEC    | SECTION       |      | COUNTY        | TOTAL<br>SHEETS | SHEE. |
|---------------|--------|---------------|------|---------------|-----------------|-------|
| 304           | 266BRR | BRR, (4, 5) I |      | GREENE        | 117             | 90    |
|               |        |               |      | CONTRAC       | T NO. 76        | ST66  |
|               |        | ILLINOIS      | FED. | AID PROJECT#9 | TP-PE84         | (558) |
|               |        |               |      |               |                 |       |



#### Notes:

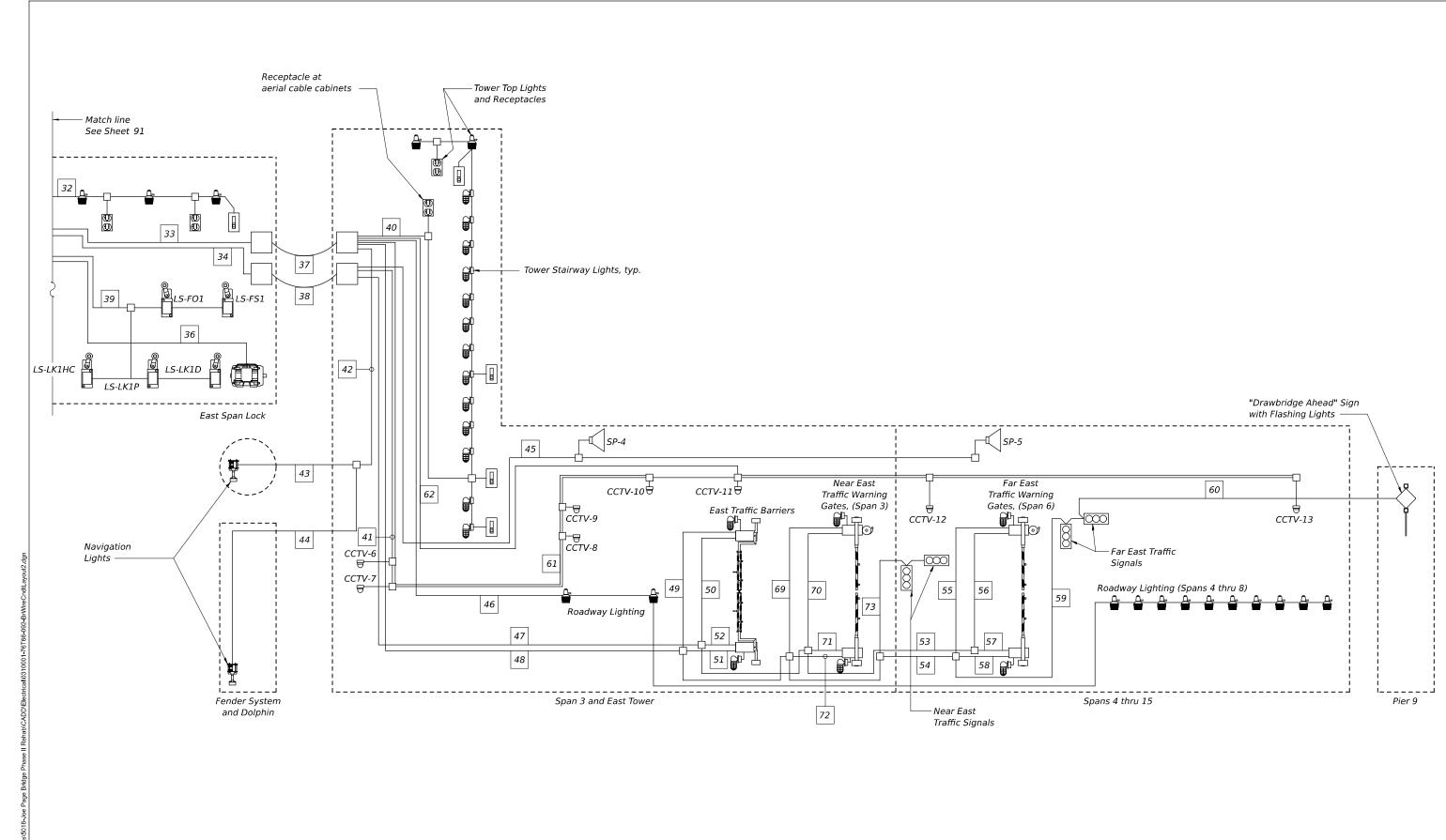
- 1. Unless otherwise noted, all bridge exterior conduit, cable, wiring, and raceway shown are new and required. Any conduit entering the Operator's or Machinery House that require replacement shall be replaced at least up to the first joint inside the houses. Replace conductors up to their point of termination at interior and exterior electrical loads. Conduit run no. 1 is existing, shown for information only, and neither the conductor nor conduit is to be replaced.
- 2. Conduits within houses, and those terminating at devices on the outside of house wall, are not shown.
- 3. Conduit layout shown is not intended to show conduit and equipment in exact physical relationship.
- 4. It shall be the contractors responsibility to provide all miscellaneous fittings, clamps, bushings, flexible conduit and appurtenant hardware as may be required to complete the conduit system even though such devices may not be shown.
- 5. All exposed conduit shall be PVC coated rigid steel. All flexible conduit shall be liquid-tight galvanized steel.
- 6. All conduits shall have a 1/4" drain hole placed in a conduit "tee" at the low point of the conduit run.
- 7. Conduits shall be supported at maximum 6 foot intervals.
- 8. Conductor pulls shall not exceed 300 feet.
- 9. Splices if any, in long conductor runs shall be made utilizing terminal blocks in NEMA 3R enclosures. Splices in multiple runs will require common (grouped) locations for terminal boxes.
- 10. Conduit and cable penetrations through walls and floor shall be sealed after installation with conduit penetration sealing system to seal from moisture, air, dust, smoke, and the spread of fire. Fire barriers and sealants shall be provided for conduit / cable floor penetrations within the machinery house and operator's house. Conduit / cable through wall / floor penetration seals shall be a Roxtec sealing system, or an equivalent sealing system to prevent passage of moisture, dust, air, smoke, and spread
- 11. All conduits shall include a ground conductor.

|   | MODIESKI MASTERS |
|---|------------------|
| _ | MODJESKI MASTERS |

|   | USER NAME =  | DESIGNED | - | GTW | REVISED | - |
|---|--------------|----------|---|-----|---------|---|
|   |              | CHECKED  | - | KMG | REVISED | - |
| s | PLOT SCALE = | DRAWN    | - | AEC | REVISED | - |
| • | PLOT DATE =  | CHECKED  | - | GTW | REVISED | - |

| STATE OF ILLINOIS            |
|------------------------------|
| DEPARTMENT OF TRANSPORTATION |

| BRIDGE WIRING AND CONDUIT LAYOUT - 1 | F.A.P.<br>RTE | SECTION          | COUNTY       | TOTAL<br>SHEETS | SHEET<br>NO. |
|--------------------------------------|---------------|------------------|--------------|-----------------|--------------|
| STRUCTURE NO. 031-0001               | 304           | 266BRR, (4, 5) I | GREENE       | 117             | 91<br>76T66  |
|                                      |               |                  | CONTRAC      | T NO. 76        | 3T66         |
| SHEET 91 OF 117 SHEETS               |               | ILLINOIS FE      | AID PROJECT# | STP_PE84        | (558)        |



Note:

1. For notes, see drawing no. 91.

MODJESKI---MASTERS -

|       | USER NAME =  | DESIGNED | - | GTW | REVISED | - |
|-------|--------------|----------|---|-----|---------|---|
|       |              | CHECKED  | - | KMG | REVISED | - |
| RS    | PLOT SCALE = | DRAWN    | - | AEC | REVISED | - |
| .11.5 | PLOT DATE =  | CHECKED  | - | GTW | REVISED | - |
|       |              |          |   |     |         |   |

| STATE OF ILLINOIS |                |  |  |  |  |  |  |
|-------------------|----------------|--|--|--|--|--|--|
| DEPARTMENT OF     | TRANSPORTATION |  |  |  |  |  |  |

| BRIDGE WIRING AND CONDUIT LAYOUT - 2<br>STRUCTURE NO. 031-0001 |  | SECTION          | COUNTY                                 | TOTAL<br>SHEETS | SHEET<br>NO. |
|--|--|------------------|--|-----------------|--------------|
|  |  | 266BRR, (4, 5) I | GREENE                                 | 117             | 92           |
| 01 K001 OKE NO; 031-0001                                       |  |                  | 5) I GREENE 117 92  CONTRACT NO. 76T66 |                 |              |
| SHEET 92 OF 117 SHEETS   |  | ILLINOIS FE      | D. AID PROJECT #5                      | STP-PE84        | (558)        |

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|            |                              | WIRING AND CONDUIT SCHED   | DULE               |                                  |  |
|------------|------------------------------|--|--------------------|----------------------------------|--|
| Run<br>No. | Conduit (Inches)<br>or Cable | Serving  | Circuit Conductors | Equipment Grounding<br>Conductor |  |
| 1          | 4                            | Bridge feeder (See note 4)   | (4) 500 MCM        | 2 AWG                            |  |
| 2          |                              | Unassigned   |                    |                                  |  |
| 3          | 1                            | Northwest traffic barrier - control (See note 2)                         | (14) 12 AWG        | 12 AWG                           |  |
| 4          | 1                            | Southwest traffic barrier - control (See note 2)                         | (14) 12 AWG        | 12 AWG                           |  |
|            |                              | Southwest traffic barrier - power  | (3) 10 AWG         |                                  |  |
| 5          | 1                            | Southwest traffic barrier - heat, receptacle, service light and flasher  | (6) 10 AWG         | 10 AWG                           |  |
|            |                              | Northwest barrier gate - power   | (3) 10 AWG         |                                  |  |
| 6          | 1                            | Northwest traffic barrier - heat, receptacle, service light and flasher  | (6) 10 AWG         | 10 AWG                           |  |
| 7          | 3/4                          | West traffic signals   | (4) 10 AWG         | 10 AWG                           |  |
|            | -1/                          | West traffic barriers - control (See note 2)                             | (28) 12 AWG        | 10.4446                          |  |
| 8          | 2½                           | West warning gates - control (See note 2)                                | (28) 12 AWG        | — 12 AWG                         |  |
|            |                              | West traffic barriers - power  | (6) 10 AWG         |                                  |  |
|            |                              | West gates and barriers - heat, receptacles, service lights and flashers | (8) 10 AWG         |                                  |  |
| 9          | 1½                           | West warning gates - power   | (6) 10 AWG         | 10 AWG                           |  |
|            |                              | West traffic signals   | (4) 10 AWG         |                                  |  |
|            |                              | Southwest warning gate - gong  | (2) 10 AWG         |                                  |  |
| 10         | 3/4                          | Roadway lighting - Span 1  | (2) 8 AWG          | 8 AWG                            |  |
|            | 4                            | Operator's house - control system interconnections<br>(See note 2)       | (132) 12 AWG       | 12 AWG                           |  |
|            |                              | Operator's house power monitor   | (8) 12 AWG         |                                  |  |
| 11         |                              | Generator remote annunicator   | (12 STP) 16 AWG    |                                  |  |
| 11         | 3                            | PA system handsets and speakers  | (8 STP) 14 AWG     | 12 AWG                           |  |
|            | ]                            | Ammeter  | (1 STP) 16 AWG     | 12 AWG                           |  |
|            |                              | Height indicator   | (1 STP) 16 AWG     |                                  |  |
|            |                              | CCTV East Cameras and Display Video                                      | (2) 12 Count Fiber |                                  |  |
| 12         | 2                            | Operator's house - panelboard B feeder                                   | (4) 2/0 AWG        | 4 AWG                            |  |
| 12         |                              | Heat tracing   | (2) 8 AWG          | 8 AWG                            |  |
|            | 3/4                          | CCTV - 1 through 5 power   | (2) 10 AWG         | 10 AWG                           |  |
| 13         | 3/4                          | CCTV - 1 through 5 video   | 12 count fiber     | 12 AWG                           |  |
| 14         | 1                            | West span control limit switches (LS-FS2, LS-FO2)<br>(See note 2)        | (8) 12 AWG         | 12 AWG                           |  |
|            |                              | West span lock - control (LS-LK2D, LS-LK2P, LS-LK2HC)                    | (10) 12 AWG        |                                  |  |
| 15         | C-L-X                        | Navigation lights - southwest fender                                     | (2) 10 AWG         | 10 AWG                           |  |
| 16         | C-L-X                        | Navigation lights - northwest dolphin                                    | (2) 10 AWG         | 10 AWG                           |  |
| 17         | 3/4                          | Navigation lights - west fender and dolphin                              | (2) 10 AWG         | 10 AWG                           |  |
| 18         | 3/4                          | West tower stairway and tower top lights                                 | (5) 10 AWG         | 10 AWG                           |  |
| 10         | ,                            | West tower service receptacles   | (2) 10 AWG         | 10 AVVG                          |  |
| 19         | 3/4                          | Roadway lighting - Span 2  | (2) 10 AWG         | 10 AWG                           |  |
| 20         | 3/4                          | West outdoor PA system speaker   | (8 STP) 14 AWG     | 12 AWG                           |  |

S-T-P = Shielded twisted pairs  $C-L-X = Okonite\ C-L-X\ type\ MC\ cable,\ or\ approved\ equal$ 

| Run | Conduit (Inches) |   |  | Equipment Grounding |        |
|-----|------------------|---|--|---------------------|--------|
| No. | or Cable         | Serving   | Circuit Conductors   | Conductor           |        |
|     |                  | West traffic barriers - power   | (6) 10 AWG   |                     |        |
|     |                  | West gates and barriers - heat, receptacles, service lights<br>and flashers | (8) 10 AWG   |                     |        |
|     |                  | West warning gates - power  | (6) 10 AWG   |                     |        |
| 21  | A                | West traffic signals  | (4) 10 AWG   |                     |        |
| 21  | Aerial cable(s)  | Roadway lighting - Span 1   | (2) 8 AWG  | 2/0 AWG             |        |
|     |                  | Operator's house - panelboard B feeder                                      | (4) 2/0 AWG  |                     |        |
|     |                  | Navigation lights - west fender and dolphin                                 | (2) 10 AWG   |                     |        |
|     |                  | West tower stairway and tower top lights                                    | (5) 10 AWG   |                     |        |
|     |                  | West tower service receptacles  | (2) 10 AWG   |                     |        |
|     |                  | Southwest warning gate - gong   | (2) 10 AWG   |                     |        |
|     |                  | Heat tracing  | (2) 8 AWG  |                     |        |
|     |                  | West traffic barriers - control (See note 2)                                | (28) 12 AWG  |                     |        |
|     |                  | West warning gates - control (See note 2)                                   | (28) 12 AWG  |                     |        |
| 22  |                  | Operator's house - control system interconnections<br>(See note 2)          | (132) 12 AWG   |                     |        |
| 22  | Aerial cable(s)  | Operator's house power monitor  | (8) 12 AWG   |                     |        |
|     |                  | Generator remote annunciator  | (12 STP) 16 AWG  | 4/0 AWG             |        |
|     |                  | Ammeter   | (1 STP) 16 AWG   |                     |        |
|     |                  | Height indicator  | (1 STP) 16 AWG   |                     |        |
|     |                  | PA system handsets and speakers   | (8 STP) 14 AWG   |                     |        |
|     |                  | CCTV East Cameras and Display Video   | (2) 12 Count Fiber   |                     |        |
| 23  | Aerial cable(s)  | Bridge feeder   | (4) 500 MCM  |                     |        |
| 24  | 3/4              | West lift span walkway lights and receptacles                               | (5) 10 AWG   | 10 AWG              |        |
|     |                  | West gates and barriers - heat, receptacles, service lights<br>and flashers | (8) 10 AWG   |                     |        |
|     |                  | West traffic barriers - power   | (6) 10 AWG   |                     |        |
|     |                  | West warning gates - power  | (6) 10 AWG   |                     |        |
|     | 2½               | West traffic signals  | (4) 10 AWG   |                     |        |
| 25  | 2 /2             | Roadway lighting - Span 1   | (2) 8 AWG  | 10 AWG              |        |
| 23  |                  | Navigation lights - west fender and dolphin                                 | (2) 10 AWG   |                     |        |
|     |                  | West tower stairway and tower top lights                                    | (5) 10 AWG   |                     |        |
|     |                  | West tower service receptacles  | (2) 10 AWG   |                     |        |
|     |                  | Southwest warning gate - gong   | (2) 10 AWG   |                     |        |
|     | 2                | Operator's house - panelboard B feeder                                      | (4) 2/0 AWG  | 4 AWG               |        |
|     | 2                | Heat tracing  | (2) 8 AWG  | 8 AWG               |        |
| 26  | 4                | Bridge feeder   | (4) 500 MCM  | 2/0 AWG             |        |
|     |                  | West traffic barriers - control (See note 2)                                | (28) 12 AWG  |                     |        |
|     |                  | West warning gates - control (See note 2)                                   | (28) 12 AWG  |                     |        |
|     |                  | 4   | Operator's house - control system interconnections<br>(See note 2) | (132) 12 AWG        | 12 AWG |
| 27  |                  | Operator's House Power Monitor  | (8) 12 AWG   |                     |        |
|     |                  | Generator remote annunciator  | (12 STP) 16 AWG  |                     |        |
|     | 3                | PA System Handsets and Speakers   | (8 STP) 14 AWG   |                     |        |
|     | 5                | Ammeter   | (1 STP) 16 AWG   | 12 AVVG             |        |
|     |                  | Height indicator  | (1 STP) 16 AWG   |                     |        |
|     |                  | CCTV East Cameras and Display Video   | (2) 12 Count Fiber   |                     |        |

- Notes:
  1. Unless otherwise noted, all conductors and conduit shown above are new.
- Conductor counts and conduit sizes listed are approximate. It shall be the contractors responsibility to determine exact conductor counts and increase conduit sizes as necessary to comply with NEC requirements. Conduits shall not be smaller than those listed.
- 3. Conductor count shown includes spare conductors. See specifications.
- 4. All conduits shall include an insulated ground conductor sized according to the National Electrical Code, article 250, in addition to the circuit conductors shown.
- 5. No work to be performed on Conduit Run No. 1. Existing bridge feeder to remain in place.



| USER NAME =  | DESIGNED - GTW | REVISED - |
|--------------|----------------|-----------|
|              | CHECKED - KMG  | REVISED - |
| PLOT SCALE = | DRAWN - AEC    | REVISED - |
| PLOT DATE =  | CHECKED - GTW  | REVISED - |
|              |                |           |

|          | Sch2.d                       |
|----------|------------------------------|
|          | CndtWireSch2.d               |
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| <u>.</u> | NAME:                        |

|                                      |                             | WIRING AND CONDUIT SCHEDULE (   | (CONTINUED)                      |                                  |  |
|--------------------------------------|-----------------------------|---|----------------------------------|----------------------------------|--|
| Run Conduit (Inches)<br>No. or Cable |                             | Serving   | Circuit Conductors               | Equipment Grounding<br>Conductor |  |
| 28                                   | 3/4                         | West span lock - motor  | (3) 10 AWG                       | 10 AWG                           |  |
| 29                                   | '                           | Unassigned  |                                  |                                  |  |
| 30                                   | 3/4                         | Lift span navigation lights   | (3) 10 AWG                       | 10 AWG                           |  |
| 31                                   | 3/4                         | Operator's house stairway lights  | (3) 10 AWG                       | 10 AWG                           |  |
| 32                                   | 3/4                         | East lift span walkway lights and receptacles                               | (5) 10 AWG                       | 10 AWG                           |  |
|                                      |                             | East tower stairway and tower top lights                                    | (5) 10 AWG                       |                                  |  |
|                                      |                             | East tower service receptacles  | (2) 10 AWG                       |                                  |  |
|                                      |                             | Navigation lights - east fender and dolphin                                 | (2) 10 AWG                       |                                  |  |
|                                      |                             | Roadway lighting - spans 3 thru 15  | (2) 8 AWG                        |                                  |  |
|                                      |                             | East traffic barriers - power   | (6) 10 AWG                       |                                  |  |
| 33                                   | 2½                          | East gates and barriers - heat, receptacles, service lights and flashers    | (10) 10 AWG                      | 6 AWG                            |  |
|                                      |                             | Far east warning gates - power  | (6) 6 AWG                        |                                  |  |
|                                      |                             | Near east warning gates - power   | (6) 10 AWG                       |                                  |  |
|                                      |                             | East traffic signals  | (8) 10 AWG                       |                                  |  |
|                                      |                             | East "Drawbridge Ahead" sign  | (2) 10 AWG                       |                                  |  |
|                                      |                             | Far northeast warning gate - gong   | (2) 10 AWG                       |                                  |  |
|                                      | 2.                          | CCTV - 6 through 10 power   | (2) 8 AWG                        | 8 AWG                            |  |
|                                      | 3/4                         | CCTV - 11 through 13 power  | (2) 8 AWG                        |                                  |  |
|                                      |                             | CCTV - 6 through 13 video   | (1) 12 Count Fiber               |                                  |  |
|                                      | 1½                          | East Outdoor PA System Speaker  | (8 STP) 14 AWG                   | 12 AWG                           |  |
| 34                                   |                             | East traffic barriers - control (See note 2)                                | (28) 12 AWG                      |                                  |  |
|                                      | 2½                          | Near east warning gates - control (See note 2)                              | (28) 12 AWG                      | 10 AWG                           |  |
|                                      |                             | Far east warning gates - control (See note 2)                               | (28) 12 AWG                      |                                  |  |
| 35                                   |                             | Unassigned  | (==) == : =                      |                                  |  |
| 36                                   | 3/4                         | East span lock - power  | (3) 10 AWG                       | 10 AWG                           |  |
|                                      |                             | East tower stairway and tower top lights                                    | (5) 10 AWG                       |                                  |  |
|                                      |                             | East tower service receptacles  | (2) 10 AWG                       |                                  |  |
|                                      |                             | Navigation lights - east fender and dolphin                                 | (2) 10 AWG                       |                                  |  |
|                                      |                             | Roadway lighting - spans 3 thru 15  | (2) 8 AWG                        |                                  |  |
|                                      |                             | East traffic barriers - power   | (6) 10 AWG                       |                                  |  |
| <i>37</i>                            | Aerial cable                | East gates and barriers - heat, receptacles, service lights and flashers    | (10) 10 AWG                      |                                  |  |
|                                      |                             | Far east warning gates - power  | (6) 6 AWG                        |                                  |  |
|                                      |                             | Near east warning gates - power   | (6) 10 AWG                       | 4/0 AWG                          |  |
|                                      |                             | East traffic signals  | (8) 10 AWG                       |                                  |  |
|                                      |                             | East "Drawbridge Ahead" sign  | (2) 10 AWG                       |                                  |  |
|                                      |                             | Far northeast warning gate - gong   | (2) 10 AWG                       |                                  |  |
|                                      |                             | CCTV - 6 through 10 power   | (2) 8 AWG                        |                                  |  |
|                                      |                             | CCTV - 11 through 13 power  | (2) 8 AWG                        |                                  |  |
|                                      |                             | CCTV - 6 through 13 video   | (1) 12 Count fiber               |                                  |  |
|                                      |                             | East outdoor PA system speaker  | (8 STP) 14 AWG                   | 7                                |  |
| 38                                   | Aerial cable                | East traffic barriers - control (See note 2)                                | (28) 12 AWG                      | 7                                |  |
|                                      |                             | Far east warning gates - control (See note 2)                               | (28) 12 AWG                      |                                  |  |
|                                      |                             | Near east warning gates - control (See note 2)                              | (28) 12 AWG                      |                                  |  |
|                                      | 1.                          | East span control limit switches (LS-FS1, LS-FO1,<br>LS-LK1HC) (See note 2) | (10) 12 AWG                      |                                  |  |
| 39                                   | 11/4                        | East span full open limit switch (LS-FO1)                                   | (4) 12 AWG                       | 12 AWG                           |  |
|                                      |                             | East span lock - control (LS-LK1D, LS-LK1P)                                 | (8) 12 AWG                       | 7                                |  |
|                                      |                             | East tower stairway and tower top lights                                    | (3) 10 AWG + (2) 12 AWG          |                                  |  |
|                                      |                             | , ···   |                                  | 10 AWG                           |  |
| 40                                   | 3/4                         | East tower service receptacles  | (2) 10 AWG                       |                                  |  |
| 40                                   | <sup>3</sup> / <sub>4</sub> | East tower service receptacles  CCTV - 6 through 13 video                   | (2) 10 AWG<br>(1) 12 Count fiber | 12 AWG                           |  |

| S-T-P = Shielded twisted pairs                                  |
|---|
| $C-L-X = Okonite\ C-L-X\ type\ MC\ cable,\ or\ approved\ equal$ |
|   |

| Run<br>No. | Conduit (Inches) Serving |   | Circuit Conductors   | Equipment Grounding<br>Conductor |
|------------|--------------------------|---|--|----------------------------------|
| 43         | C-L-X                    | Navigation lights - east dolphin  | (2) 10 AWG   | 10 AWG                           |
| 44         | C-L-X                    | Navigation lights - southeast fender  | (2) 10 AWG   | 10 AWG                           |
| 45         | 3/4                      | East outdoor PA system speaker  | (8 STP) 14 AWG   | 12 AWG                           |
| 46         | 3/4                      | Roadway lighting - spans 3 thru 8   | (2) 8 AWG  | 8 AWG                            |
|            |                          | East traffic barriers - control (See note 2)                                    | (28) 12 AWG  |                                  |
| 47         | 2½                       | Far east warning gates - control (See note 2)                                   | (28) 12 AWG  | 12 AWG                           |
|            |                          | Near east warning gates - control (See note 2)                                  | (28) 12 AWG  |                                  |
|            |                          | East traffic barriers - power   | (6) 10 AWG   |                                  |
|            |                          | East gates and barriers - heat, receptacles, service lights<br>and flashers     | (10) 10 AWG  |                                  |
| 40         | 21/                      | Far east warning gates - power  | (6) 6 AWG  | 6.414/6                          |
| 48         | 2½                       | Near east warning gates - power   | (6) 10 AWG   | 6 AWG                            |
|            |                          | East traffic signals  | (8) 10 AWG   |                                  |
|            |                          | East "Drawbridge Ahead" sign  | (2) 10 AWG   |                                  |
|            |                          | Far northeast warning gate - gong   | (2) 10 AWG   |                                  |
|            |                          | Northeast traffic barrier - power   | (3) 10 AWG   |                                  |
| 19         | 1                        | Northeast traffic barrier - heat, receptacle, service light<br>and flasher      | (6) 10 AWG   | 10 AWG                           |
| 0          | 1                        | Northeast traffic barrier - control (See note 2)                                | arrier - control (See note 2) (14) 12 AWG                    |                                  |
|            |                          | Southeast traffic barrier - power   | (3) 10 AWG   |                                  |
| 51         | 1                        | Southeast traffic barrier - heat, receptacles, service light and flasher (6) 10 |  | 10 AWG                           |
| 2          | 1                        | Southeast traffic barrier - control (See note 2)                                | Southeast traffic barrier - control (See note 2) (14) 12 AWG |                                  |
| 3          | 11/4                     | Far east warning gates - control  | (28) 12 AWG  | 12 AWG                           |
|            |                          | Far east warning gates - power  | (6) 6 AWG  |                                  |
| 54         |                          | Far east warning gates - heat, receptacles, service lights<br>and flashers      | (6) 10 AWG   | C AIMC                           |
|            | 1½                       | Far east traffic signals  | (4) 10 AWG   | 6 AWG                            |
|            |                          | East "Drawbridge Ahead" sign  | (2) 10 AWG   |                                  |
|            |                          | Far northeast warning gate - gong   | (2) 10 AWG   |                                  |
|            |                          | Far northeast warning gate - power  | (3) 6 AWG  |                                  |
| 55         | 11/4                     | Far Northeast warning gate - heat, receptacle, service<br>light and flasher     | (6) 10 AWG   | 6 AWG                            |
|            |                          | Far northeast warning gate - gong   | (2) 10 AWG   |                                  |
| 6          | 1                        | Far northeast warning gate - control (See note 2)                               | (14) 12 AWG  | 12 AWG                           |
| 7          | 1                        | Far southeast warning gate - control (See note 2)                               | (14) 12 AWG  | 12 AWG                           |
|            |                          | Far southeast warning gate - power  | (3) 6 AWG  |                                  |
| 8          | 11/4                     | Southeast warning gate - heat, receptacle, service light and flasher            | (6) 10 AWG   | 6 AWG                            |
|            | 3/                       | Far east traffic signals  | (4) 10 AWG   | 10                               |
| 59         | 3/4                      | East "Drawbridge Ahead" sign  | (2) 10 AWG   | — 10 AWG                         |
| 50         | 3/4                      | East "Drawbridge Ahead" sign  | (2) 10 AWG   | 10 AWG                           |
| 51         | 3/4                      | CCTV - 6 through 10 power   | (2) 8 AWG  | 8 AWG                            |
| 52         | 3/4                      | CCTV - 11 through 13 power  | (2) 8 AWG  | 8 AWG                            |
|            |                          | Northwest warning gate - control (See note 2)                                   | (14) 12 AWG  |                                  |
| 3          | 1 1/2                    | . ,   |  | ─ 12 AWG                         |

WIRING AND CONDUIT SCHEDULE (CONTINUED)

#### Notes:

- Unless otherwise noted, all conductors and conduit shown above are new.
- Conductor counts and conduit sizes listed are approximate. It shall be the contractors responsibility to determine exact conductor counts and increase conduit sizes as necessary to comply with NEC requirements. Conduits shall not be smaller than those listed.
- 3. Conductor count shown includes spare conductors. See specifications.
- 4. All conduits shall include an insulated ground conductor sized according to the National Electrical Code, article 250, in addition to the circuit conductors shown.

| 7    |        |      |      |
|------|--------|------|------|
| MOD. | JESKI• | ™MAS | TERS |

| USER NAME =  | DESIGNED - | GTW | REVISED | - |
|--------------|------------|-----|---------|---|
|              | CHECKED -  | KMG | REVISED | - |
| PLOT SCALE = | DRAWN -    | AEC | REVISED | - |
| PLOT DATE =  | CHECKED -  | GTW | REVISED | - |
|              |            |     |         |   |

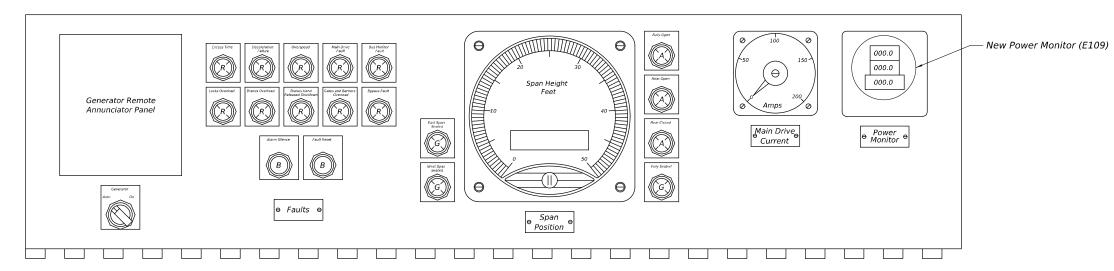
| A.P.<br>RTE.  |                  |  |                | COUNTY  | TOTAL<br>SHEETS | SHE  |
|---------------|------------------|--|----------------|---------|-----------------|------|
| 304           | 266BRR, (4, 5) I |  | GREENE         | 117     | 94              |      |
| ·             |                  |  |                | CONTRAC | T NO. 76        | ST66 |
| ILLINOIS FED. |                  |  | AID PROJECT #S | TP-PE84 | (558)           |      |

#### Notes:

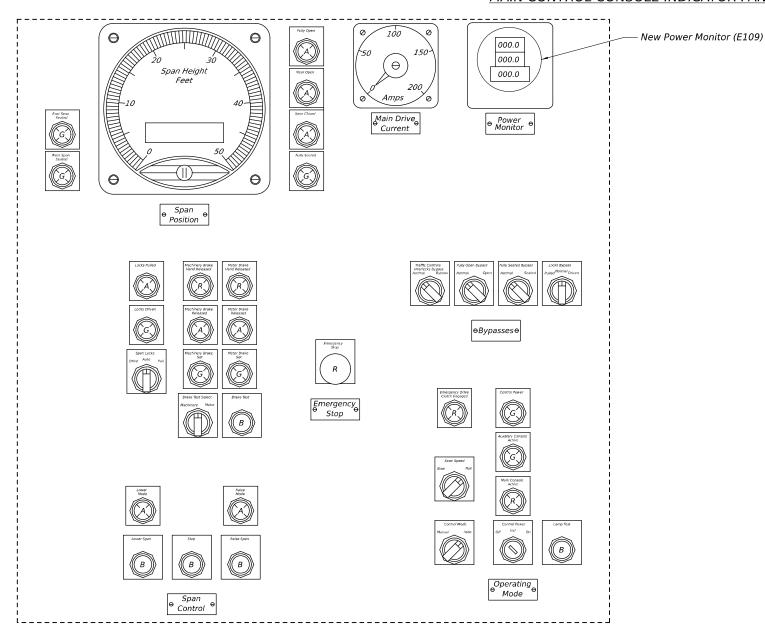
- 1. Unless otherwise noted, all conductors and conduit shown above are new.
- Conductor counts and conduit sizes listed are approximate. It shall be the contractors responsibility to determine exact conductor counts and increase conduit sizes as necessary to comply with NEC requirements. Conduits shall not be smaller than those listed.
- 3. Conductor count shown includes spare conductors. See specifications.
- All conduits shall include an insulated ground conductor sized according to the National Electrical Code, article 250, in addition to the circuit conductors shown.

| 7    | 1      |        |   |
|------|--------|--------|---|
| MOD. | JESKI∞ | MASTER | S |

| USER NAME =  | DESIGNED - GTW | REVISED - |
|--------------|----------------|-----------|
|              | CHECKED - KMG  | REVISED - |
| PLOT SCALE = | DRAWN - AEC    | REVISED - |
| PLOT DATE =  | CHECKED - GTW  | REVISED - |
|              |                |           |



### MAIN CONTROL CONSOLE INDICATOR PANEL



1. Existing power monitor CPU in the relay cabinet and displays on the main and auxiliary control consoles shall be removed. The new power monitors shall be installed in the footprint of the existing displays as shown on this sheet. The contractor shall provide all materials and perform all work necessary for the new power monitors to fit in the footprint of the existing power monitor displays.

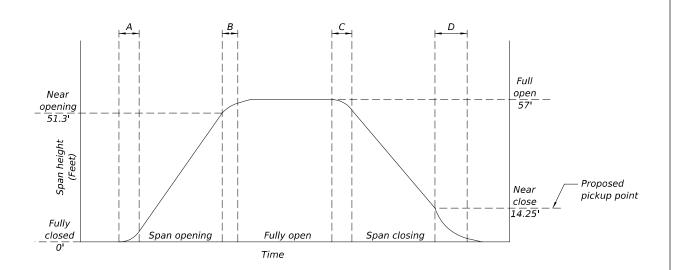
#### **AUXILIARY CONSOLE RIGHT DOOR DEVICES**

|                      | USER NAME =  |
|----------------------|--------------|
| EL: Br               |              |
| MODJESKI MASTERS     | PLOT SCALE = |
| MODJESKI and MASTERS | PLOT DATE =  |
| 9/12/2025 3:54:14 PM |              |
|                      |              |

|   | USER NAME =  | DESIGNED | - | LMA | REVISED | - |
|---|--------------|----------|---|-----|---------|---|
|   |              | CHECKED  | - | KMG | REVISED | - |
| S | PLOT SCALE = | DRAWN    | - | AEC | REVISED | - |
| • | PLOT DATE =  | CHECKED  | - | LMA | REVISED | - |

| STATE OF ILLINOIS            |  |
|------------------------------|--|
| DEPARTMENT OF TRANSPORTATION |  |

| CONTROL CONSOLE LAYOUTS<br>STRUCTURE NO. 031-0001 |  | SECT                 | ION      |     | COUNTY       | TOTAL<br>SHEETS | SHEET<br>NO. |
|---|--|----------------------|----------|-----|--------------|-----------------|--------------|
|   |  | 304 266BRR, (4, 5) I |          |     | GREENE       | 117             | 96           |
|   |  |                      |          |     | CONTRAC      | T NO. 76        | 3T66         |
| SHEET 96 OF 117 SHEETS                            |  |                      | ILLINOIS | FED | AID PROJECT# | STP_PE8/        | (558)        |

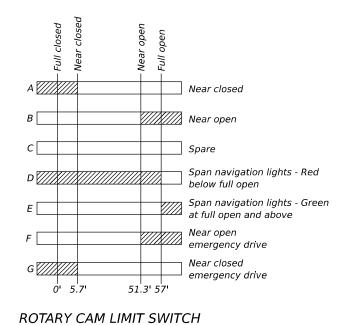


Notes:

#### EXISTING SPAN OPERATING GRAPH

### PROPOSED SPAN OPERATING GRAPH

See Note 1.



| SPAN           | SPAN OPERATING CHARACTERISTICS - RAMP/SPEED TIMES |                        |                                  |  |  |  |  |
|----------------|---|------------------------|----------------------------------|--|--|--|--|
| Ramp<br>Letter | Existing Time<br>(Sec)                            | Proposed Time<br>(Sec) | Description                      |  |  |  |  |
| Α              | 5   | 5                      | Accel Ramp - Zero to full speed  |  |  |  |  |
| В              | 5   | 5                      | Decel Ramp - Full to creep speed |  |  |  |  |
| С              | 5   | 5                      | Accel Ramp - Zero to full speed  |  |  |  |  |
| D              | 5   | 10                     | Decel Ramp - Full to creep speed |  |  |  |  |

### CONTACT LEGEND

MODJESKI MASTERS

Contact closed

Contact open

USER NAME = DESIGNED - LMA REVISED CHECKED - KMG REVISED PLOT SCALE = REVISED PLOT DATE = CHECKED - LMA REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**  **CONTROL SYSTEM MODIFICATION STRUCTURE NO. 031-0001** SHEET 97 OF 117 SHEETS

| switch for the engineer to review. |               |         |                  |         |              |                 |              |  |
|------------------------------------|---------------|---------|------------------|---------|--------------|-----------------|--------------|--|
|                                    | F.A.P.<br>RTE | SECTION |                  |         | COUNTY       | TOTAL<br>SHEETS | SHEET<br>NO. |  |
|                                    | 304           | 266BRR  | 266BRR, (4, 5) I |         |              | 117             | 97           |  |
|                                    |               |         |                  | CONTRAC | T NO. 76     | ST66            |              |  |
|                                    | ILLINOIS FED. |         |                  |         | AID PROJECT# | STP-PE84        | (558)        |  |

as needed to meet the time requirements

2. Existing acceleration and deceleration times are

3. The contractor shall submit existing and adjusted settings for the motor drive and rotary cam limit

1. The vertical lift span has been noted to oscillate

speed to creep speed. The contractor shall investigate the reasoning for the oscillation

from oscillating. At a minimum, it is

described above.

based on field observation.

following adjustments:

while the drive motor is decelerating from run

during the lowering of the span and implement

recommended that the contractor perform the

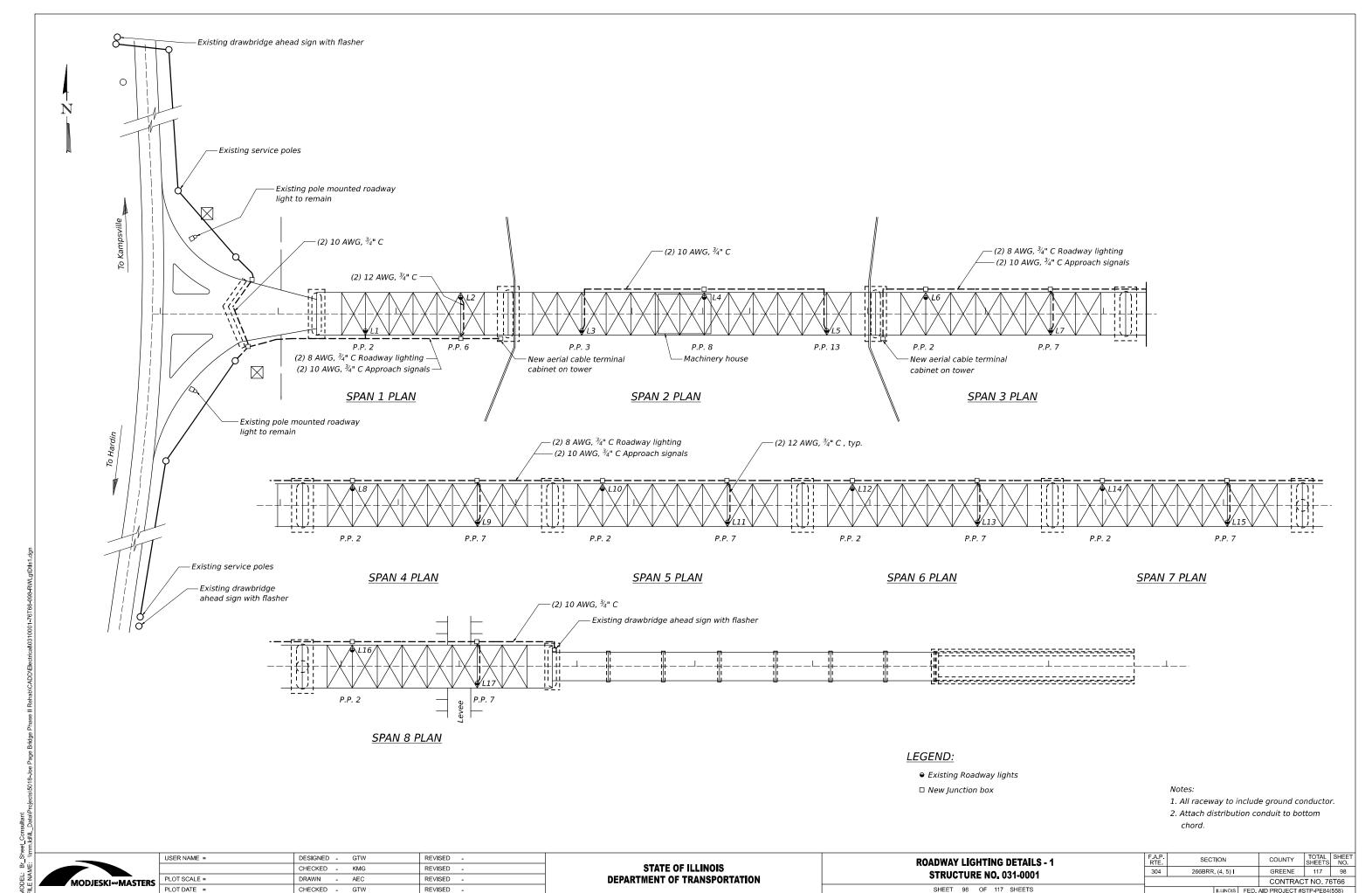
existing motor drive settings. If the deceleration time is 5 seconds or below,

the deceleration time shall be increased to 10 seconds. If the existing deceleration time is above 5 seconds, an additional 5 seconds should be added onto the time. 1b. The "Near Closed" setting on the RCLS shall be field adjusted as needed with the motor drive to accommodate the longer deceleration time. The contractor shall adjust the setting from the existing 5.7' to the recommended 14.25'. The contractor shall adjust the "Near Closed" trip setting

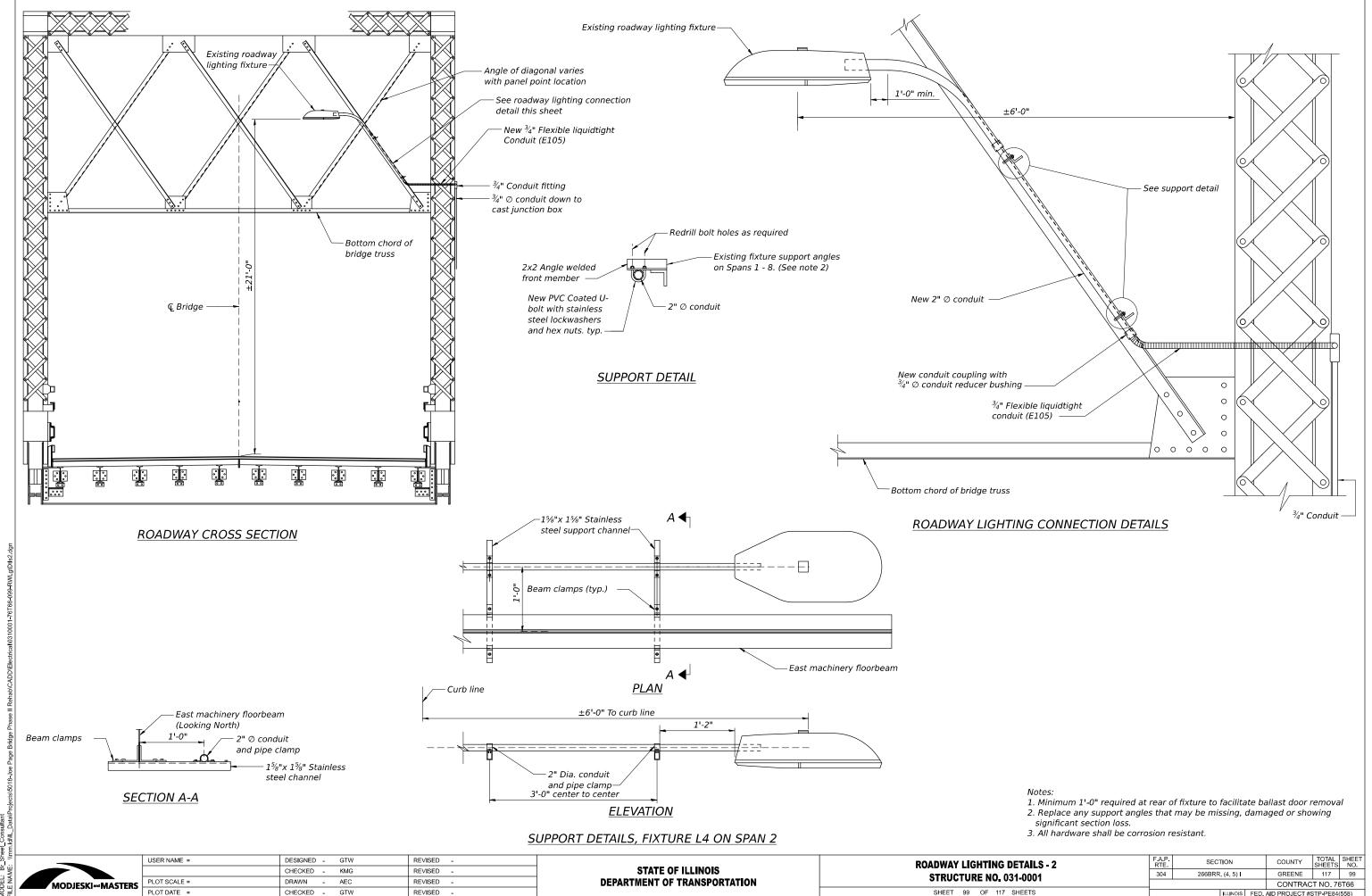
1a. Verify the deceleration time of the

changes to the motor drive and rotary cam limit switch settings as needed to prevent the span

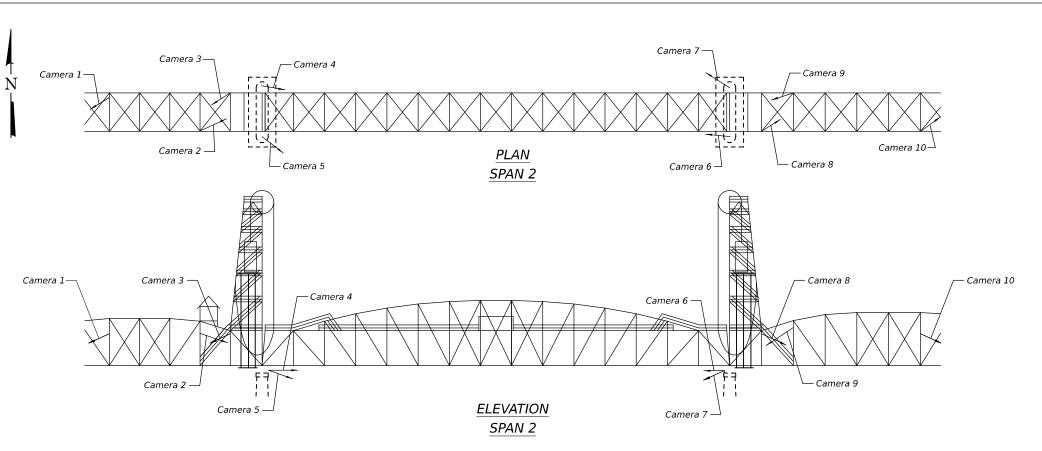
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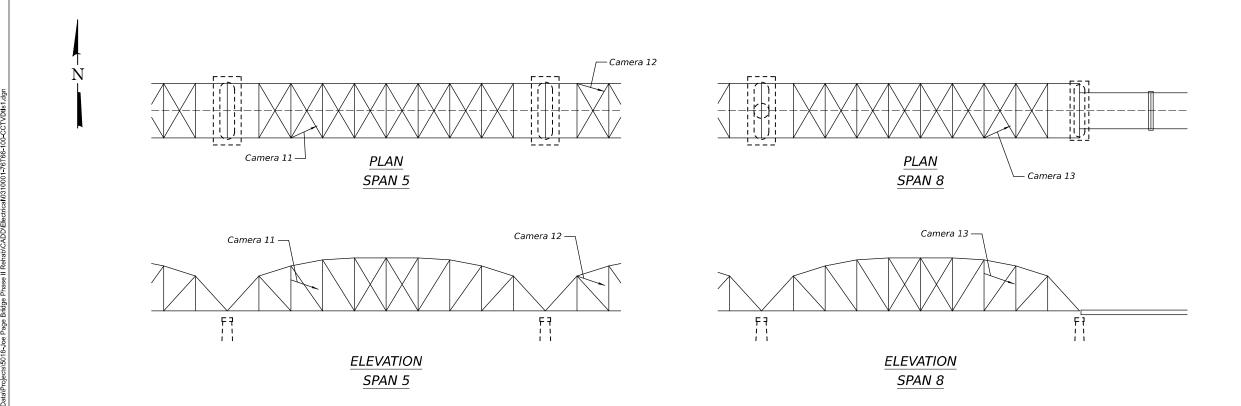
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|               | CAMERA MOUNTING SCHEDULE |   |  |  |  |  |  |  |
|---------------|--------------------------|---|--|--|--|--|--|--|
| Camera<br>No. | (Item No.)               | Area of Coverage  |  |  |  |  |  |  |
| 1             | (E119)                   | West Warning Gate and Approach Roadway                        |  |  |  |  |  |  |
| 2             | (E119)                   | West Counterweight  |  |  |  |  |  |  |
| 3             | (E119)                   | West Barrier Gate and Approach Roadway                        |  |  |  |  |  |  |
| 4             | (E119)                   | East Fender   |  |  |  |  |  |  |
| 5             | (E119)                   | South Channel   |  |  |  |  |  |  |
| 6             | (E119)                   | West Fender   |  |  |  |  |  |  |
| 7             | (E119)                   | North Channel   |  |  |  |  |  |  |
| 8             | (E119)                   | East Barrier Gate and Approach Roadway                        |  |  |  |  |  |  |
| 9             | (E119)                   | East Counterweight  |  |  |  |  |  |  |
| 10            | (E119)                   | Near East Warning Gate and Approach Roadway                   |  |  |  |  |  |  |
| 11            | (E119)                   | East Approach Roadway between Near and Far East Warning Gates |  |  |  |  |  |  |
| 12            | (E119)                   | Far East Warning Gate and Approach Roadway                    |  |  |  |  |  |  |
| 13            | (E119)                   | East Portal and Approach Roadway                              |  |  |  |  |  |  |



### Notes:

- Camera locations shown on this sheet do not represent exact field locations and shall be field verified by the contractor. Proposed mounting locations shall be submitted to the engineer for appeared. approval.
  2. For CCTV system diagram, see sheet 101.
  3. For mounting details, see sheet 102.

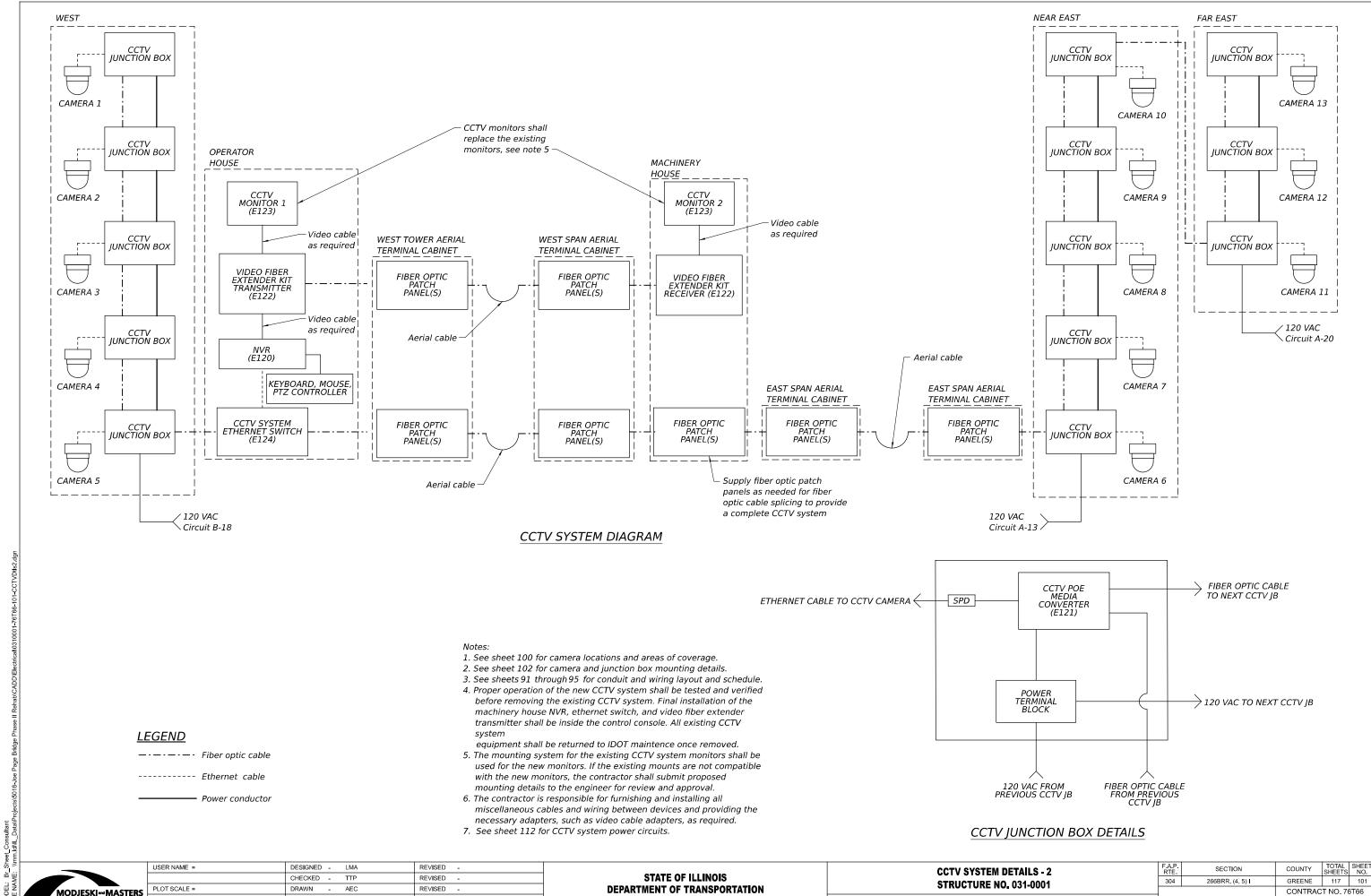
| 7     |                      |   |
|-------|----------------------|---|
| MODJI | ESKI <b>™MASTERS</b> | ; |

|    | USER NAME =  | DESIGNED | - | LMA | REVISED | - |
|----|--------------|----------|---|-----|---------|---|
|    |              | CHECKED  | - | TTP | REVISED | - |
| RS | PLOT SCALE = | DRAWN    | - | AEC | REVISED | - |
|    | PLOT DATE =  | CHECKED  | - | LMA | REVISED | - |

| CCTV SYSTEM DETAILS - 1 | F.A.P.<br>RTE. |    |
|-------------------------|----------------|----|
| STRUCTURE NO. 031-0001  | 304            | 26 |
| OTROOTORE NOT COT-COOT  |                |    |
| SHEET 100 OF 117 SHEETS |                |    |

COUNTY TOTAL SHEET NO.

GREENE 117 100 SECTION 266BRR, (4, 5) I CONTRACT NO. 76T66



SHEET 101 OF 117 SHEETS

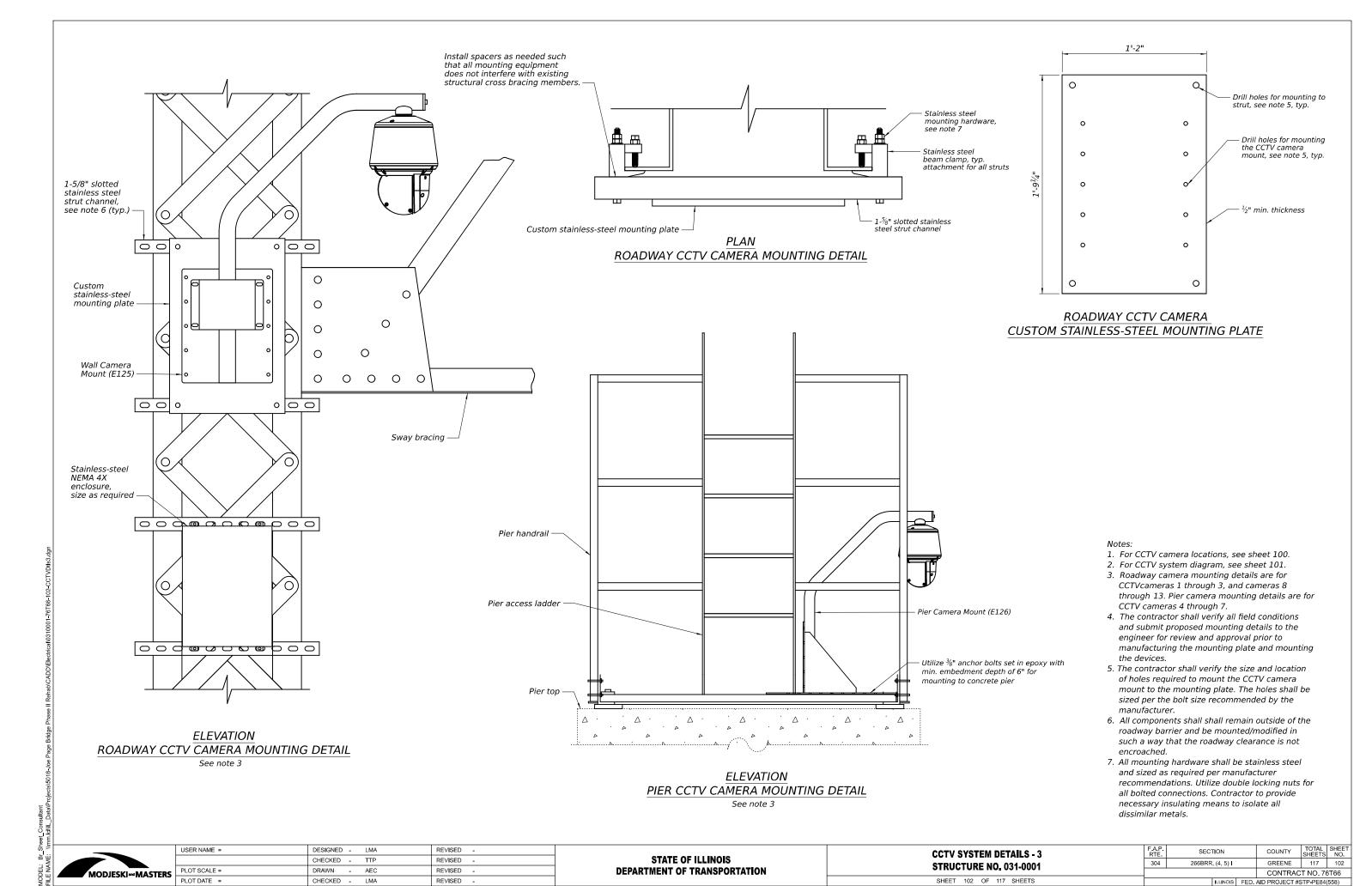
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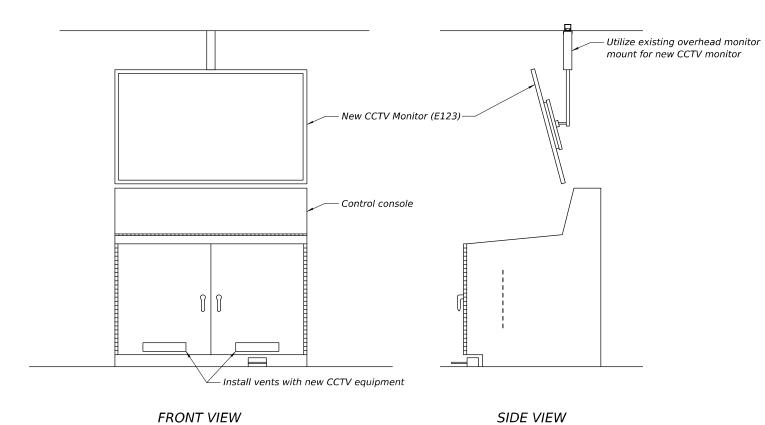
PLOT DATE =

CHECKED -

REVISED



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OPERATOR HOUSE MONITOR

new monitor in the same location utilizing the existing wall monitor mount

Remove the existing monitor and install the

MACHINERY HOUSE MONITOR

#### Notes:

- 1. For CCTV system diagram, see sheet 101.
- Both monitors shall show all camera views in a grid format.
- 3. If the existing monitor mounts are not compatible with the new monitors, the contractor shall furnish and install new VESA mounts.
- The tilt angle of the operator house monitor shall be determined in the field to the satisfaction of the bridge mechanic.

 USER NAME =
 DESIGNED - LMA
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 CHECKED - TTP
 REVISED 

 PLOT SCALE =
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 REVISED 

 PLOT DATE =
 CHECKED - LMA
 REVISED

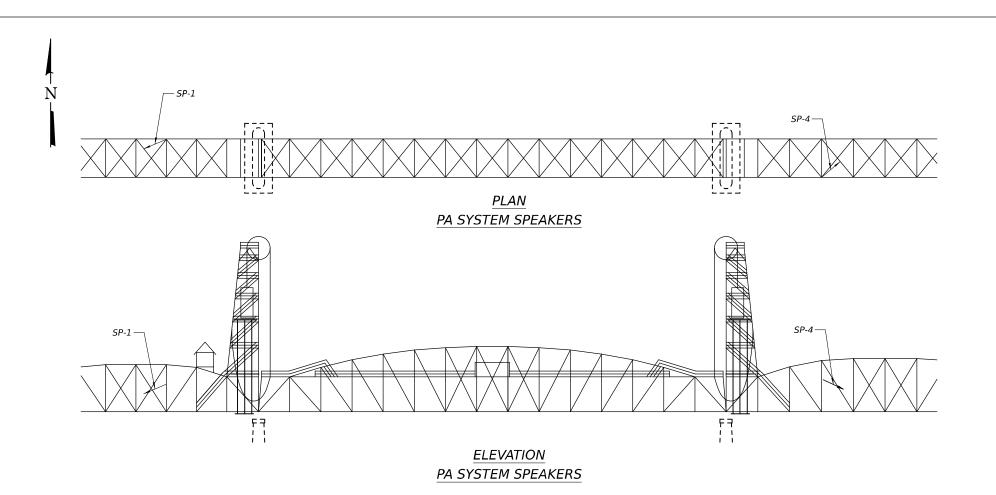
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

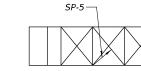
CCTV SYSTEM DETAILS - 4 STRUCTURE NO. 031-0001 SHEET 103 OF 117 SHEETS  
 F.A.P. RTE.
 SECTION
 COUNTY
 TOTAL SHEETS
 SHEETS

 304
 266BRR, (4, 5) I
 GREENE
 117
 103

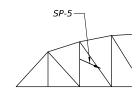
 CONTRACT NO. 76T66

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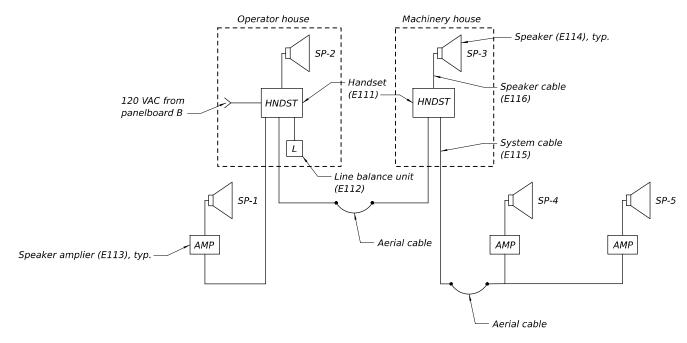




<u>PLAN</u> SPAN 6 PA SYSTEM SPEAKER



<u>ELEVATION</u> SPAN 6 PA SYSTEM SPEAKER



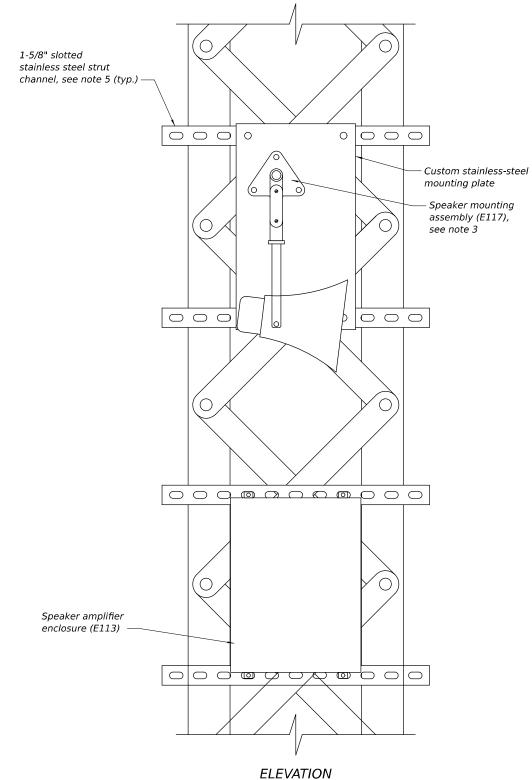
#### PA SYSTEM DIAGRAM

#### Notes

- Mount outdoor speakers and amplifiers to existing structure. Orient all speakers to face the roadway. See sheet 105 for mounting details.
- PA system designed using Gai-Tronics Page/Party system as a reference. Variations in components resulting from use of an approved equal system by a different manufacturer shall be submitted to the engineer for approval.
- Speaker locations shown on this sheet do not represent exact field locations and shall be field verified by the contractor.
- 4. The contractor shall install the PA system equipment in the operator house and machinery house based on existing field conditions. The proposed locations and mounting details shall be submitted to the engineer for approval.

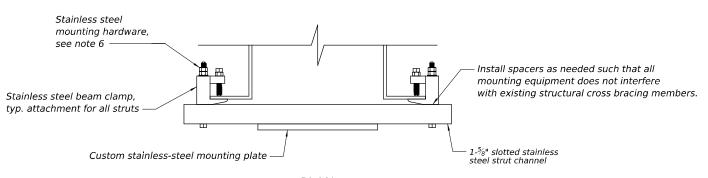


|   | USER NAME =  | DESIGNED | - | LMA | REVISED | - |
|---|--------------|----------|---|-----|---------|---|
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| s | PLOT SCALE = | DRAWN    | - | AEC | REVISED | - |
|   | PLOT DATE =  | CHECKED  | - | LMA | REVISED | - |
|   |              |          |   |     |         |   |

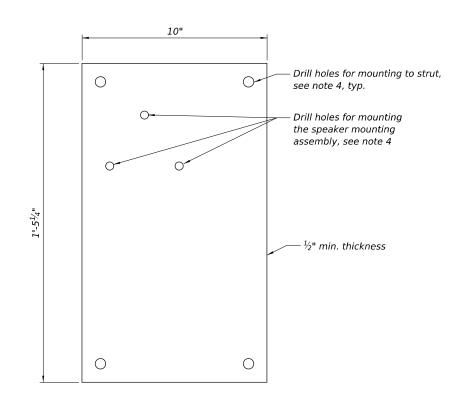


# ELEVATION PA SYSTEM SPEAKER MOUNTING

Typ. for SP-1, SP-4, SP-5



### <u>PLAN</u> PA SYSTEM SPEAKER MOUNTING



PA SYSTEM SPEAKER MOUNTING PLATE

#### Notes:

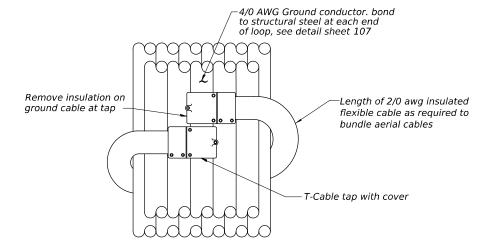
- 1. For outdoor speaker locations and PA system diagram, see sheet 104.
- The contractor shall verify all field conditions and submit proposed mounting details to the engineer for review and approval prior to manufacturing the mounting plate and mounting the devices.
- 3. Speaker mounting assembly from Gai-Tronics Page/Party speaker. Any variations in speaker mounting details resulting from use of an approved equal system by a different manufacturer shall be submitted to the engineer for approval.
- 4. The contractor shall verify the size and location of holes required to mount the speakers to the mounting plate. The holes shall be sized per the bolt size recommended by the manufacturer.
- All components shall remain outside of the roadway barrier and be mounted/modified in such a way that the roadway clearance is not encroached.
- 6. All mounting hardware shall be stainless steel and sized as required per manufacturer recommendations. Utilize double locking nuts for all bolted connections. Contractor to provide necessary insulating means to isolate all dissimilar metals.

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|   | USER NAME =  | DESIGNED | - | LMA | REVISED | - |
|---|--------------|----------|---|-----|---------|---|
|   |              | CHECKED  | - | KMG | REVISED | - |
|   | PLOT SCALE = | DRAWN    | - | AEC | REVISED | - |
| • | PLOT DATE =  | CHECKED  | - | LMA | REVISED | - |
|   |              |          |   |     |         |   |

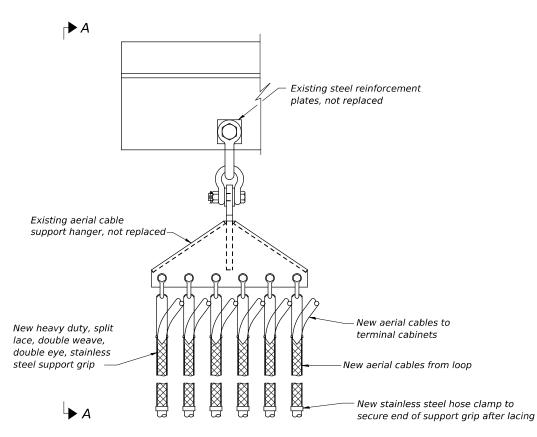
| STATE OF ILLINOIS            |
|------------------------------|
| DEPARTMENT OF TRANSPORTATION |

| PA SYSTEM DETAILS - 2<br>STRUCTURE NO. 031-0001 |  | SECTION     |          | COUNTY        | TOTAL<br>SHEETS | SHEET<br>NO. |
|---|--|-------------|----------|---------------|-----------------|--------------|
|   |  | 266BRR, (4, | 5) I     | GREENE        | 117             | 105          |
|   |  |             |          | CONTRAC       | T NO. 76        | ST66         |
| SHEET 105 OF 117 SHEETS                         |  | ILLIN       | iois FFD | AID PROJECT#5 | STP-PE84        | (558)        |



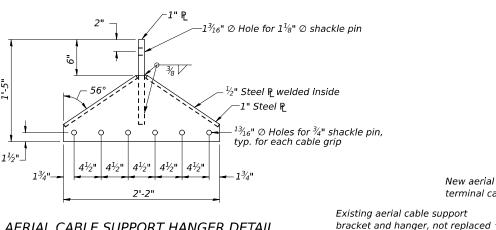
#### CABLE TIE FOR AERIAL LOOP

Install at Maximum 10'-0" Intervals See note 1



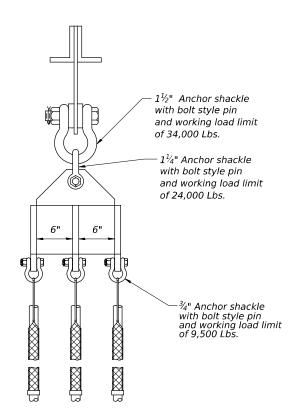
### AERIAL CABLE ATTACHMENT DETAIL

See note 1



## AERIAL CABLE SUPPORT HANGER DETAIL

See note 3



### SECTION A-A

See note 4

| WEST AERIAL CABLE TABULATION |                      |                       |  |  |  |
|------------------------------|----------------------|-----------------------|--|--|--|
| Quantity                     | Cable Make-Up        | Function              |  |  |  |
| 4                            | (1) 500 MCM          | Bridge Service Feeder |  |  |  |
| 1                            | (4) 2/0 AWG          |                       |  |  |  |
| 1                            | (4) 8 AWG            | Power                 |  |  |  |
| 2                            | (25) 10 AWG (Note 5) |                       |  |  |  |
| 4                            | (55) 12 AWG          | Control               |  |  |  |
| 3                            | (6 STP) 16 AWG       | Control               |  |  |  |
| 1                            | 1C AWG 4/0 Ground    |                       |  |  |  |
| 2                            | 12 Count Fiber Optic | East CCTV & Monitor   |  |  |  |
| 1                            | PA system cable      | West PA speaker       |  |  |  |

STP = Shielded Twisted Pairs

|          | EAST AERIAL CABLE TABULATION |                 |  |  |  |
|----------|------------------------------|-----------------|--|--|--|
| Quantity | Cable Make-Up                | Function        |  |  |  |
| 1        | (6) 6 AWG                    |                 |  |  |  |
| 1        | (4) 8 AWG                    | Power           |  |  |  |
| 3        | (25) 10 AWG (Note 5)         |                 |  |  |  |
| 2        | (55) 12 AWG                  | Control         |  |  |  |
| 1        | 1C AWG 4/0                   | Ground          |  |  |  |
| 1        | 12 Count Fiber Optic         | East CCTV       |  |  |  |
| 1        | PA system cable              | East PA speaker |  |  |  |
|          |                              |                 |  |  |  |

New aerial cable

terminal cabinet

New aerial cable

terminal cabinet

#### Note:

Tabulations of Flexible Cables, as shown, are for reference purpose only, Contractor shall determine the exact number flexible Cables required based on all Conductors needed, including required Spares.

#### Notes:

AERIAL CABLE

East shown, west similar

1. Cables shall be supported both individually and in groups. Power and control cables shall not be grouped together. Size of grips to be determined using actual diameters of the cables. The contractor shall consider the actual weights of the cables in order to arrange cable support grips on support hanger for the most balanced load condition.

Existing aerial cable support

±70' Aerial cable, see

Adjust cable for minimum 2'-0" clearance

between cable and lower guide bracket

at span fully seated (guide not shown)

tabulations on this

bracket and hanger, not replaced

- 2. Aerial cable support hanger design shown is based on a maximum cable load of 40 lbs./ft. with wind and ice loads as prescribed by the national electrical safety code. Contractor shall verify loading and strengthen bracket if necessary.
- 3. Detail included for information only. Existing aerial cable support hanger, and associated hardware not to be replaced unless deemed necessary.
- 4. Detail included for information only. Existing hardware not to be replaced unless deemed necessary.
- 5. Each aerial cable to include at least 5 spare conductors.

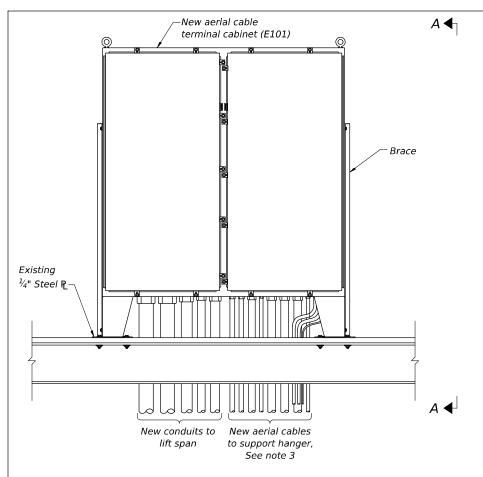
MODJESKI **™MASTERS** 

|   | USER NAME =  | DESIGNED - | GTW | REVISED - |
|---|--------------|------------|-----|-----------|
|   |              | CHECKED -  | KMG | REVISED - |
|   | PLOT SCALE = | DRAWN -    | AEC | REVISED - |
| ' | PLOT DATE =  | CHECKED -  | GTW | REVISED - |
|   |              |            |     |           |

| STATE OF ILLINOIS            |
|------------------------------|
| DEPARTMENT OF TRANSPORTATION |

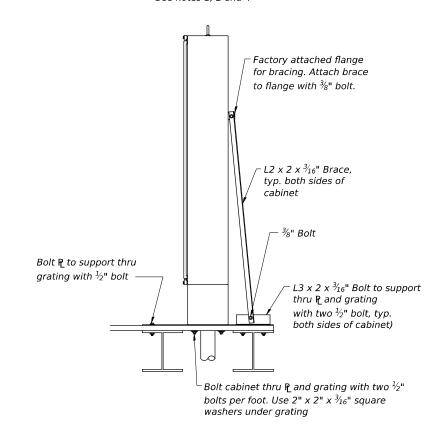
| AERIAL CABLE DETAILS - 1 STRUCTURE NO. 031-0001 SHEET 106 OF 117 SHEETS |  | SECTION          | COUNTY       | TOTAL<br>SHEETS | SHEET<br>NO. |
|---|--|------------------|--------------|-----------------|--------------|
|   |  | 266BRR, (4, 5) I | GREENE       | 117             | 106          |
|   |  |                  | CONTRAC      | T NO. 76        | 3T66         |
|   |  | ILLINOIS FED     | AID PROJECT# | STP-PE84        | (558)        |

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#### LIFT SPAN AERIAL CABLE TERMINAL CABINET

West cabinet shown, east similar See notes 1, 2 and 4



#### VIEW A-A

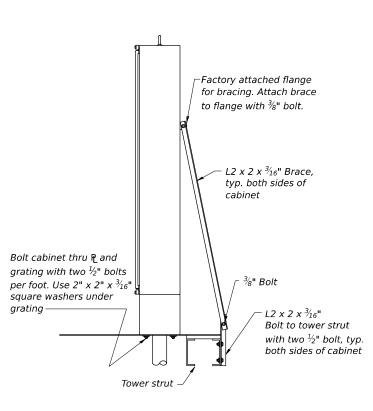
New conduits to tower and fixed spans

New aerial cable terminal cabinet (E101)

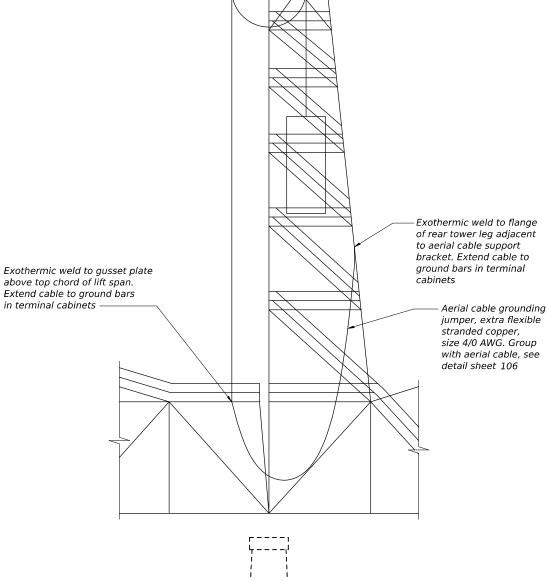
New aerial cables to support hanger, See note 3

#### TOWER AERIAL CABLE TERMINAL CABINET

West cabinet shown, east similar See notes 1, 2 and 4



#### VIEW B-B



#### AERIAL CABLE GROUNDING JUMPER DETAIL

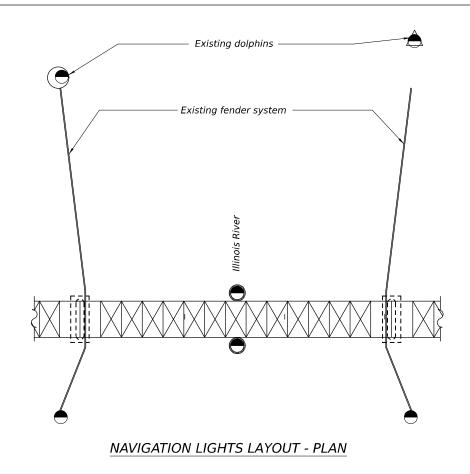
East jumper shown, west similar

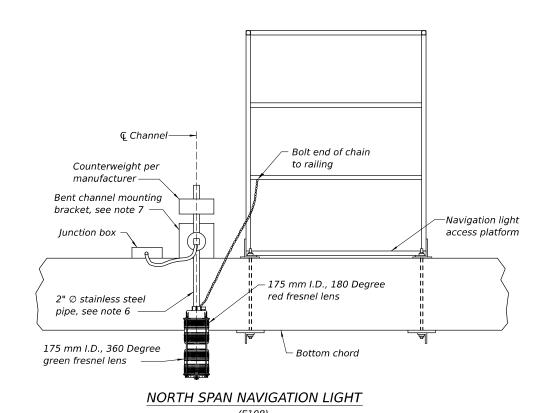
#### Notes:

- 1. All angles and plates shall be stainless steel or hotdipped galvanized steel. Provide new angle and plates as necessary. All nuts, bolts, washers, and related hardware shall be stainless steel and new. Utilize lock washers on all connections.
- 2. All conductors in terminal cabinets shall be terminated on heavy duty, phenolic, screw type terminal blocks. Keep power and control terminal blocks separate inside cabinet.
- Support aerial cables between hanger and terminal cabinet at maximum 3'-0" intervals using stainless steel angle and stainless steel cushion clamps. Provide new stainless steel angle and stainless steel cushion clamps as necessary.
- 4. All nuts, bolts, washers, and related hardware shall be stainless steel and new.
- 5. Install new aerial cable terminal cabinets in same location as existing.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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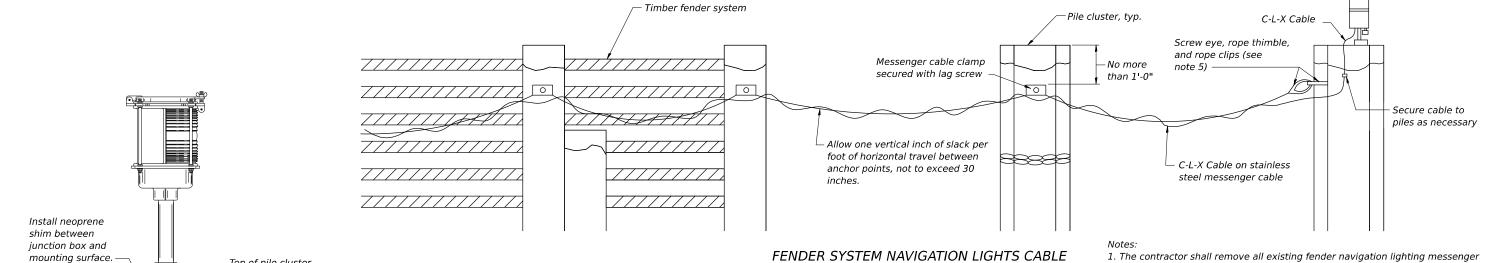
- Remove and replace the broken spring coil and automatic latch with new.

New fender navigation

light (E107)

## SOUTH SPAN NAVIGATION LIGHT

See Note 3.



### FENDER NAVIGATION LIGHT MOUNTING DETAILS

Top of pile cluster

Utilize stainless steel lag bolts

for mounting to wood pile

for mounting to concrete.

clusters, and epoxy anchors

or dolphin

### **LEGEND**

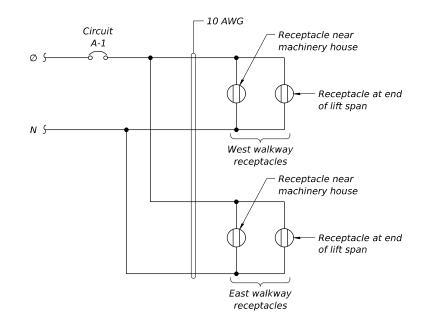
Pier navigation light (180° Red)

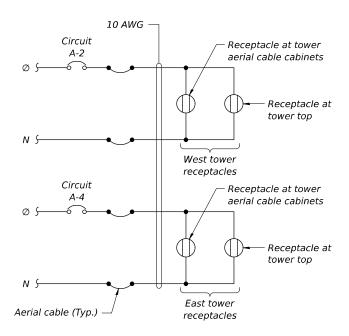
Span navigation light (180° Red over 360° Green)

Typical of four

- 1. The contractor shall remove all existing fender navigation lighting messenger cables, cable support attachments, and hardware prior to structural repairs to the fender. New equipment as shown in the fender navigation lights cable detail shall be installed once structural repairs to the fender are completed.
- 2. The contractor shall submit proposed installation locations and mounting details for each navigation light for review and approval.
- 3. Contractor to provide all materials necessary to make repair to the south span navigation light.
- 4. Secure messenger cables at bridge piers and dolphins in similar manner.
- 5. Secure C-L-X cable to messenger cable by wrapping C-L-X around messenger, approximately once per foot, and securing with stainless steel straps at messenger anchor points, or as recommended by manufacturer.
- 6. Shaft length shall be determined in the field such that the entire 360 Degree Green lens is positioned just below the bottom chord.
- 7. Mounting bracket shall be similar to existing, constructed of galvanized steel. Bolt to bottom chord using existing holes and stainless steel hardware.

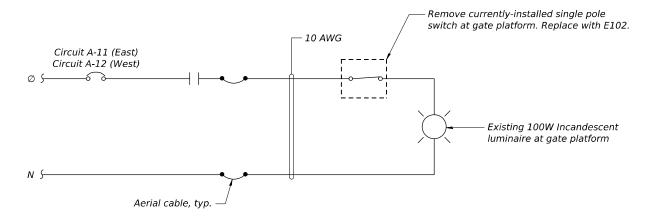
USER NAME = DESIGNED - LMA REVISED COUNTY **NAVIGATION LIGHT DETAILS** CHECKED -**STATE OF ILLINOIS** KMG REVISED GREENE 117 108 304 266BRR, (4, 5) I **STRUCTURE NO. 031-0001** PLOT SCALE = REVISED **DEPARTMENT OF TRANSPORTATION** MODJESKI∞MASTERS CONTRACT NO. 76T66 SHEET 108 OF 117 SHEETS PLOT DATE = CHECKED -REVISED -ILLINOIS FED. AID PROJECT #STP-PE84(558)





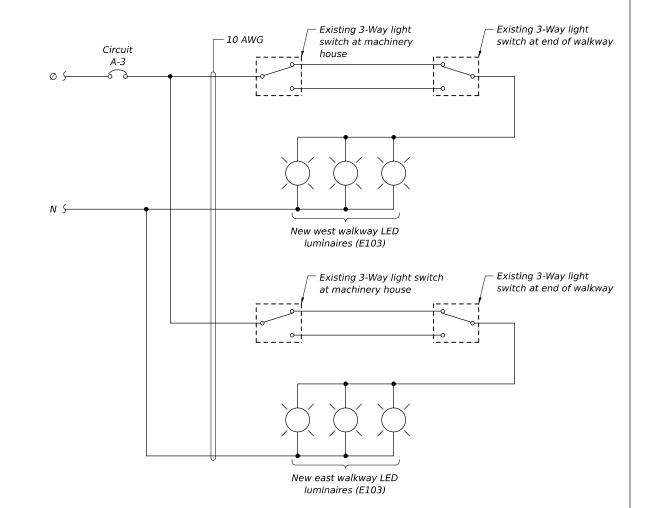
## LIFT SPAN WALKWAY RECEPTACLES See note 1

## TOWER RECEPTACLES See note 1



#### GATE AND BARRIER SERVICE LIGHTS

Typical of all gate and barrier platforms, (10) total



#### LIFT SPAN WALKWAY LIGHTS

See note 2

#### Notes:

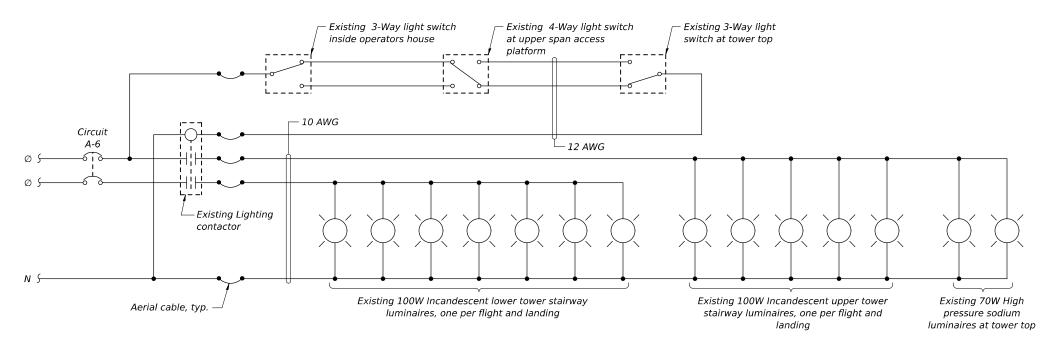
- 1. Remove all existing receptacles and replace with new E104.
- 2. Remove all existing walkway luminaires and replace with new E103.



| USER NAME =  | DESIGNED - GTW | REVISED - |
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|              | CHECKED - KMG  | REVISED - |
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| PLOT DATE =  | CHECKED - GTW  | REVISED - |

### **EAST TOWER STAIRWAY LIGHTS**

See note 1



# $\frac{\textit{WEST TOWER STAIRWAY LIGHTS}}{\textit{See note 1}}$

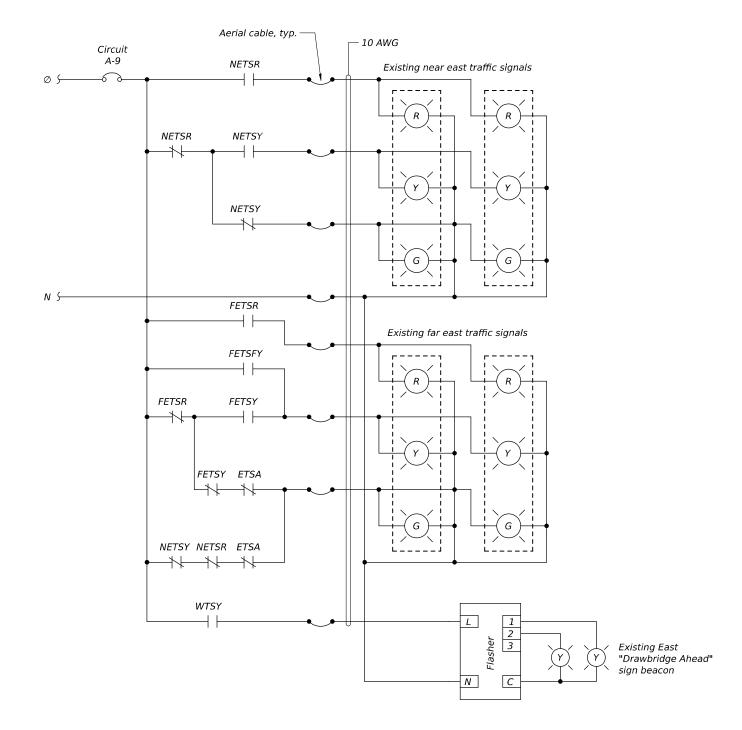
#### Note:

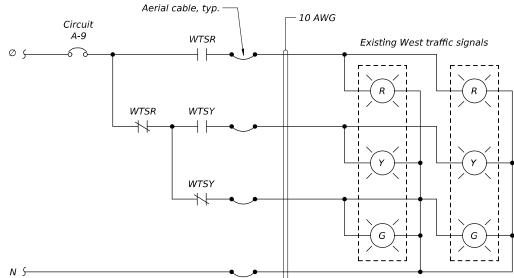
 Details in this sheet are provided for information only, to assist the contractor in their removal and replacement of the wiring and conduit system. The contractor is responsible for verifying the existing field conditions prior to completing any work.

MODJESKI---MASTERS

|   | USER NAME =  | DESIGNED - GTW | REVISED - |
|---|--------------|----------------|-----------|
|   |              | CHECKED - KMG  | REVISED - |
|   | PLOT SCALE = | DRAWN - AEC    | REVISED - |
| • | PLOT DATE =  | CHECKED - GTW  | REVISED - |

| MISCELLANEOUS ELECTRICAL CIRCUITS - 2 STRUCTURE NO. 031-0001  SHEET 110 OF 117 SHEETS |  | SECTION          | COUNTY            | TOTAL<br>SHEETS | SHEET<br>NO. |
|---|--|------------------|-------------------|-----------------|--------------|
|   |  | 266BRR, (4, 5) I | GREENE            | 117             | 110          |
|   |  |                  | CONTRAC           | T NO. 76        | 3T66         |
|   |  | ILLINOIS F       | ED. AID PROJECT#S | STP-PE84        | (558)        |





## WEST TRAFFIC SIGNALS CIRCUIT

See note 1

### EAST TRAFFIC SIGNALS CIRCUIT

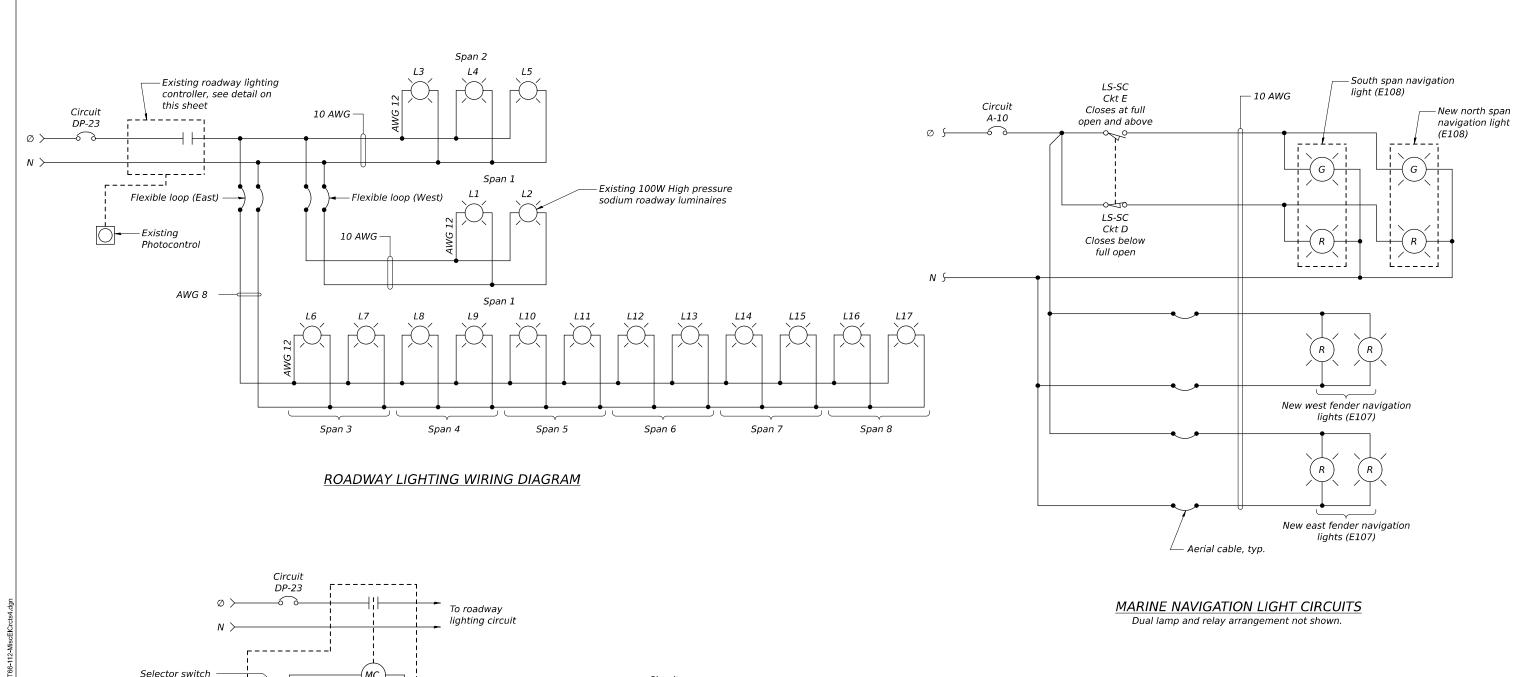
See note 1

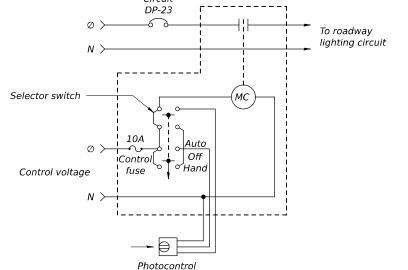
#### Note:

 Details in this sheet are provided for information only, to assist the contractor in their removal and replacement of the wiring and conduit system. The contractor is responsible for verifying the existing field conditions prior to completing any work.

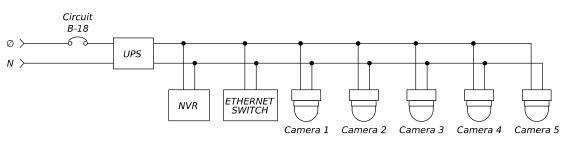
MODJESKI---MASTERS

|   | USER NAME =  | DESIGNED - GTW | REVISED - |
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|   |              | CHECKED - KMG  | REVISED - |
|   | PLOT SCALE = | DRAWN - AEC    | REVISED - |
| • | PLOT DATE =  | CHECKED - GTW  | REVISED - |





ROADWAY LIGHTING CONTROLLER



### NEW CCTV SYSTEM CIRCUIT

West Cameras circuit shown, near and far east camera circuits similar

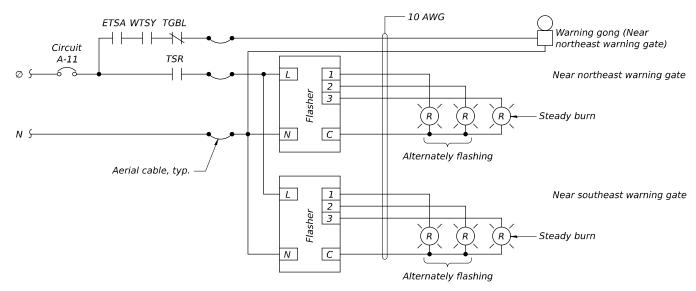
#### A/-+-.

 Details in this sheet, with the exception of the New CCTV Circuit, are provided for information only, to assist the contractor in their removal and replacement of the wiring and conduit system. The contractor is responsible for verifying the existing field conditions prior to completing any work.

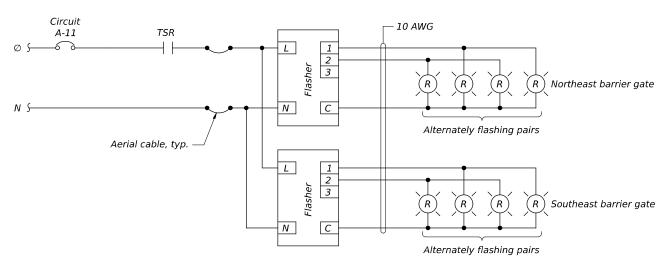
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|    | PLOT DATE =  | CHECKED  | - | GTW | REVISED | - |

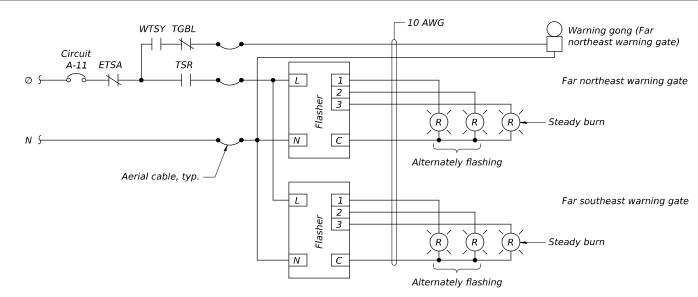
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



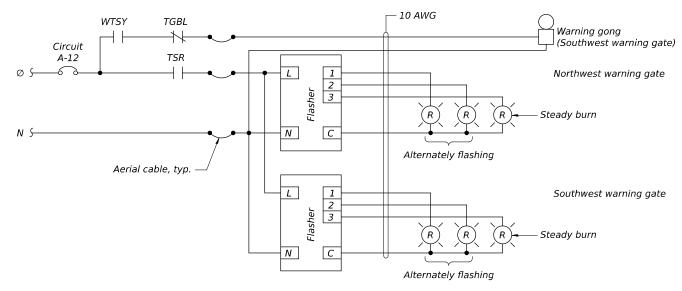
### NEAR EAST WARNING GATES LIGHTS AND GONG CIRCUIT



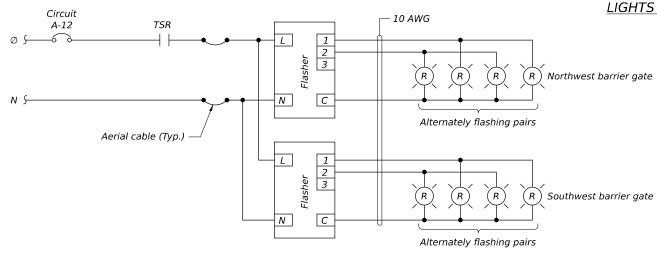
EAST BARRIER GATES LIGHTS CIRCUIT



### FAR EAST WARNING GATES LIGHTS AND GONG CIRCUIT



### **WEST WARNING GATES** LIGHTS AND GONG CIRCUIT



#### WEST BARRIER GATES LIGHTS CIRCUIT

Notes:

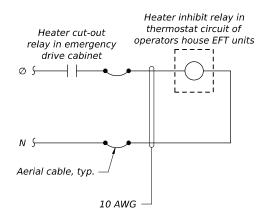
- 1. All flashers integral to their respective gate or barrier housing.
- 2. Details in this sheet are provided for information only, to assist the contractor in their removal and replacement of the wiring and conduit system. The contractor is responsible for verifying the existing field conditions prior to completing any work.

| MODJESKI → MASTERS |   |
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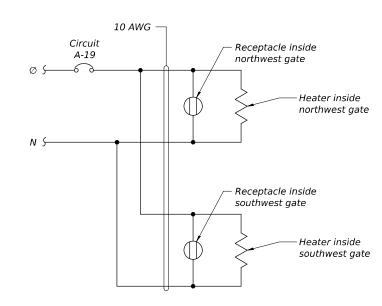
|   | USER NAME =  | DESIGNED | - | GTW | REVISED - |
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|   | PLOT SCALE = | DRAWN    | - | AEC | REVISED - |
| • | PLOT DATE =  | CHECKED  | - | GTW | REVISED - |

### HEATER CUT-OUT CONTACTOR CONTROL CIRCUIT

Typical of both machinery house heat and heat trace cut-out contactors

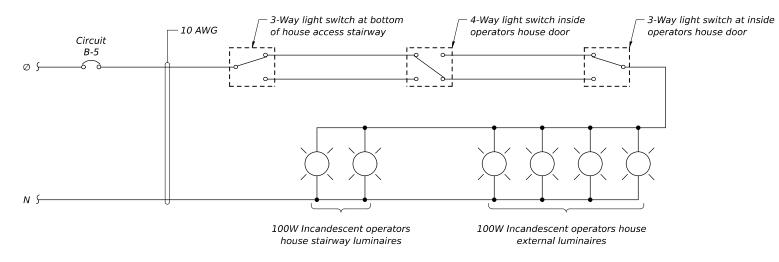


### ELECTRICAL FIN TUBE HEATER UNITS INHIBIT RELAY CIRCUIT



# GATE AND BARRIER HEAT AND RECEPTACLES

West warning gates shown, all other gates and barriers similar



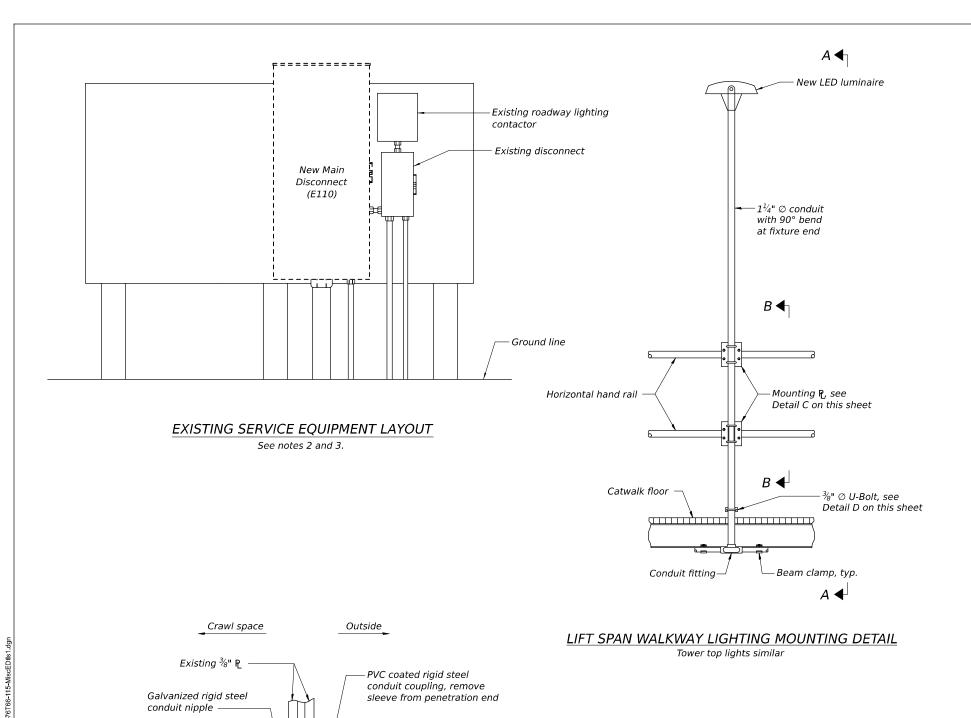
#### OPERATOR'S HOUSE EXTERNAL LIGHTS

#### Note:

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|              | CHECKED - KMG  | REVISED - |
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| PLOT DATE =  | CHECKED - GTW  | REVISED - |



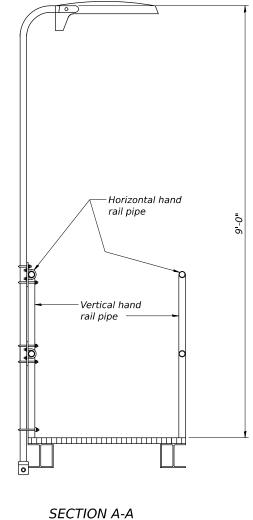
- New PVC coated rigid

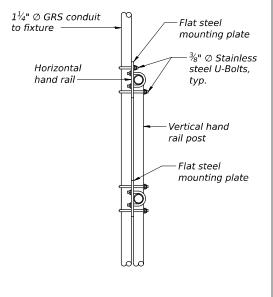
steel conduit

Standard knockout sized hole for penetration, fill any void around

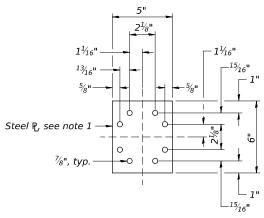
conduit nipple with suitable

silicone caulk

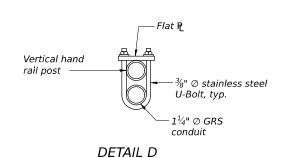




### SECTION B-B



DETAIL C



#### Notes:

- 1. Plate shall be constructed of 3/8" hot-dip galvanized steel. Coat all cut and drilled surfaces with cold galvanized compound prior to installation.
- 2. Dashed lines indicate equipment to be replaced.
- 3. Main disconnect enclosure shall be furnished with a padlock to prevent unwanted switching of power in both the ON and OFF position.



| MODJESKI and MASTERS |  |
|----------------------|--|

Existing PVC coated rigid

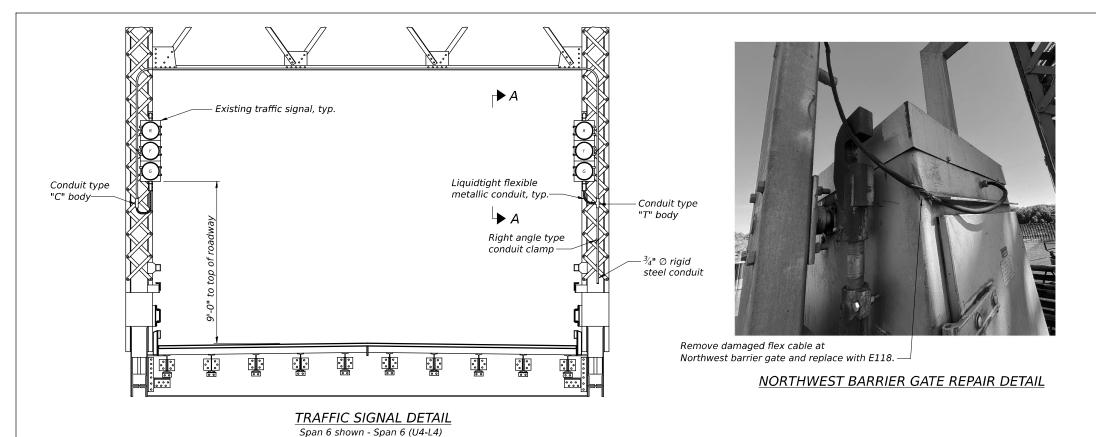
steel conduit and coupling

Sealing locknut-

Existing 5⁄16" web ₧ —

|     | USER NAME =  | DESIGNED - GTW | REVISED - |
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| ERS |              | CHECKED - KMG  | REVISED - |
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|     | PLOT DATE =  | CHECKED - GTW  | REVISED - |

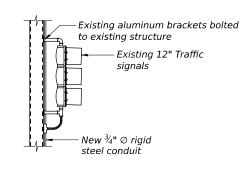
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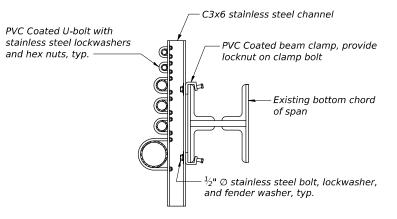
Remove bungee cord at Northeast warning gate and replace with E106. —

#### NORTHEAST WARNING GATE REPAIR DETAIL



Span 1 similar - Span 1 (U1-L1) Span 3 similar - Span 3 (U8-L8)

#### VIEW A-A



FIXED SPANS CONDUITS

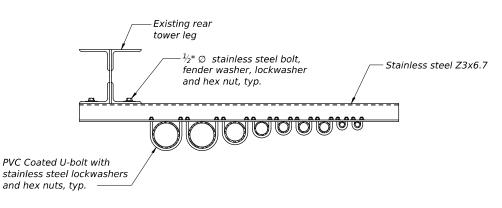
SUPPORT BRACKET DETAIL

Span 1 conduits shown, other spans similar

PVC Coated U-bolt with stainless steel lockwashers and hex nuts, typ.  $-\frac{1}{2}$ " Ø stainless steel bolt, fender washer, lockwasher and hex nut, typ. Stainless steel bracket constructed from C3x6 Existing walkway support channel

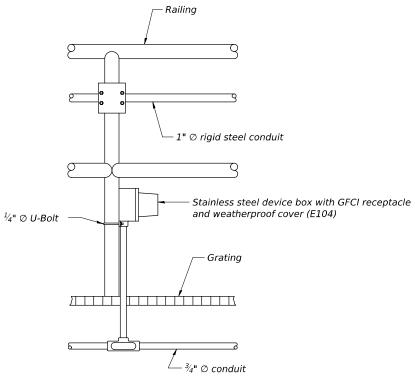
### **LIFT SPAN CONDUITS** SUPPORT BRACKET DETAIL

West conduits shown, east similar



# SUPPORT BRACKET DETAIL

**TOWER CONDUITS** West conduits shown, east similar



WALKWAY RECEPTACLE MOUNTING DETAIL

#### Notes:

1. Conduit attachment to structural steel or concrete shall include clamp backs and nest backs.



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**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**  **MISCELLANEOUS ELECTRICAL DETAILS - 2 STRUCTURE NO. 031-0001** SHEET 116 OF 117 SHEETS

| F.A.P.<br>RTE. |                  |  | COUNTY             | TOTAL<br>SHEETS | SHEE' |  |
|----------------|------------------|--|--------------------|-----------------|-------|--|
| 304            | 266BRR, (4, 5) I |  | GREENE             | 117             | 116   |  |
|                |                  |  | CONTRACT NO. 76T66 |                 |       |  |
| ILLINOIS FED   |                  |  | AID PROJECT#9      | STP-PE84        | 558)  |  |

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| PIECE NO. | QUANTITY | NAME                                  | MANUFACTURER       | TYPE - MODEL                                       | RATING AND DESCRIPTION  |
|-----------|----------|---------------------------------------|--------------------|--|---|
| E101      | 4        | AERIAL CABLE CABINET                  | HOFFMAN            | FLOOR MOUNT<br>STAINLESS STEEL                     | HEAVY DUTY, FLOOR MOUNT, TWO DOOR, NEMA TYPE 4X<br>STAINLESS STEEL ENCLOSURE. ENCLOSURE SIZE 74"H X<br>72"W X 12"D. SHALL INCLUDE INTERNAL MOUNTING PANEL<br>AND FLANGES FOR ATTACHING REAR BRACING AS<br>INDICATED.  |
| E102      | 10       | TOGGLE SWITCH                         | HUBBELL            | HBL1221  | HEAVY DUTY SINGLE POLE TOGGLE SWITCH, 120-277V, 20A.  |
|           |          | WALL PLATE                            | HUBBELL            | HBL5201  | WEATHERPROOF 1-GANG WALL PLATE.   |
| E103      | 7        | SPAN WALKWAY<br>LIGHTING<br>LUMINAIRE | LITHONIA           | RSXF1-P1   | 51 WATT, 120V, LED DUSK-TO-DAWN TYPE LIGHT. ADJUSTABLE ARM<br>ROUND POLE.   |
| E104      | 8        | GFCI RECEPTACLE                       | HUBBELL            | 5362W  | HEAVY DUTY GROUND FAULT CIRCUIT INTERRUPT DUPLEX<br>RECEPTACLE, NEMA 5-20R.   |
|           |          | DUPLEX COVER                          | HUBBELL            | HBLSS84X   | STAINLESS STEEL DUPLEX FLIP COVER, NEMA 4X.   |
| E105      | AS REQ'D | FLEXIBLE METAL CONDUIT                | LIQUATITE          | TYPE LA  | U.L. LISTED, FLEXIBLE METAL CONDUIT, SPIRAL WOUND HOT-DIP<br>GALVANIZED STEEL STRIP. LIQUID-TIGHT PVC JACKET SHALL BE OIL<br>AND SUNLIGHT RESISTANT. ALL FITTINGS AND COUPLINGS SHALL BE<br>LIQUID-TIGHT, DESIGNED FOR USE WITH FLEXIBLE METAL CONDUIT.             |
| E106      | AS REQ'D | CABLE CLAMP                           | GARDNER BENDER     | PPR-1600<br>XTM SERIES                             | RUBBER INSULATED STAINLESS STEEL CABLE CLAMP.   |
| E107      | 4        | PIER NAVIGATION LIGHT                 | B&B ROADWAY        | MODEL PL   | PIER NAVIGATION LIGHT WITH MOUNTING BRACKETS AND STAINLESS<br>STEEL HARDWARE, USCG APPROVED, 180 DEG RED FRESNEL LENS,<br>CAST ALUMINUM HOUSING. CAST JUNCTION BOX WITH GASKET<br>ACCESS COVER. DUAL LED LAMP, 120VAC, AUTOMATIC TRANSFER<br>RELAY SWITCH.          |
| E108      | 1        | SPAN NAVIGATION LIGHT                 | B&B ROADWAY        | MODEL VL   | VERTICAL LIFT SPAN NAVIGATION LIGHT WITH MOUNTING BRACKET<br>AND STAINLESS STEEL HARDWARE, USCG APPROVED, 180 DEGREE<br>RED OVER 360 DEGREE GREEN FRESNEL LENS. 100,000 HOUR LIFE LED<br>LAMPS, 120VAC.   |
| E109      | 2        | POWER<br>MONITOR                      | ELECTRO INDUSTRIES | SHARK 250  | 3 PHASE POWER AND ENERGY METER, TRANSDUCER MODULE WITH<br>LOCAL DISPLAY. INCLUDE ALL HARDWARE NECESSARY TO ALLOW<br>MONITORING OF INCOMING POWER FEEDERS.   |
| E110      | 1        | HEAVY DUTY SAFETY SWITCH              | GENERAL ELECTRIC   | TYPE TH  | NEMA TYPE 4X 316 STAINLESS STEEL, HEAVY DUTY FUSIBLE SAFETY<br>SWITCH. 3 POLE, 600VAC, 400A, 60 HZ.   |
| E111      | 2        | HANDSET                               | GAI-TRONICS        | 700-102  | UL LISTED, 120VAC, 60HZ, WALL MOUNT INDOOR STATION WITH<br>HANDSET, SINGLE PARTY, NEMA 1 RATED 16-GAUGE STEEL<br>ENCLOSURE.   |
| E112      | 1        | LINE-BALANCE UNIT                     | GAI-TRONICS        | 305-001  | LINE-BALANCE ASSEMBLY IN CAST IRON TWO-GANG OUTLET BOX<br>WITH DUST-TIGHT ALUMINUM COVER.   |
| E113      | 3        | SPEAKER AMPLIFIER                     | GAI-TRONICS        | 760-003  | WEATHERPROOF SPEAKER AMPLIFIER FOR OUTDOOR USE, UL LISTED,<br>ANALOG, 120VAC, 12W.  |
| E114      | 5        | SPEAKER                               | GAI-TRONICS        | HP15-8   | OUTDOOR RATED, ABS SPEAKER WITH INTEGRAL DRIVER, STAINLESS<br>STEEL MOUNTING BRACKET. 15W, 8 OHM IMPEDANCE, 110 DEGREE<br>DISPERSION NOMINAL, 116 dB @ 12W.   |
| E115      | AS REQ'D | SYSTEM CABLE                          | GAI-TRONICS        | 60038-101  | EIGHT CONDUCTOR COMMUNICATION AND POWER CABLE WITH (1)  14AWG TWISTED PAIR, (1) 18 AWG TWISTED PAIR, (1) 14AWG  CONDUCTOR AND (1) 18AWG CONDUCTOR. PVC INSULATION AND  JACKET, 600V, 90 DEG. TYPE TC, UL LISTED FOR OUTDOOR  INSTALLATION IN CABLE CHANNEL/WIREWAY. |
| E116      | AS REQ'D | SPEAKER CABLE                         | GAI-TRONICS        | 60021-301  | TWO CONDUCTOR CABLE WITH (1) 18AWG TWISTED PAIR. PVC INSULATION AND JACKET, 600V, 90 DEG. TYPE TC, UL LISTED FOR OUTDOOR INSTALLATION IN CABLE CHANNEL/WIREWAY.   |
| E117      | 3        | SPEAKER MOUNTING<br>ASSEMBLY          | GAI-TRONICS        | 412B   | MOUNTING ASSEMBLY PROVIDED BY SPEAKER MANUFACTURER.   |
| E118      | AS REQ'D | BARRIER GATE<br>ARM CABLE             | B&B ROADWAY        | PWI-145SO  | 14-5 SOOW CABLE   |
| E119      | 13       | CCTV CAMERA                           | PELCO              | SPECTRA<br>ENHANCED 7<br>SERIES IR LOOK-<br>UP PTZ | PTZ DOME CAMERA WITH PELCO SUREVISION, POE, 4K RESOLUTION<br>AT 20+ FRAMES PER SECOND, UL LISTED, RATED IP67,<br>NEMA 4X, IKIO FOR IMPACT, AND NEMA TS 2 PARAGRAPHS 2.2.7-2.2.9<br>FOR ENVIRONMENTAL, VIBRATION, AND SHOCK.   |
| E120      | 1        | NVR                                   | PELCO              | VIDEOXPERT ECO<br>3 SERVER                         | VIDEO MANAGEMENT SYSTEM WITH SUPPORT FOR LIVE AND PLAYBACK<br>OF 4K VIDEO AND ABILITY TO RECORD AND STORE 30 DAYS OF VIDEO<br>FOOTAGE, 100 to 240 VAC, 60 HZ, 10 DEG TO 35 DEG CELSIUS OPERATING TEMI   |
| E121      | 13       | CCTV SYSTEM MEDIA<br>CONVERTER        | OMNITRON           | GPOEBT/S   | 100W POE ETHERNET MEDIA CONVERTER WITH TWO UPLINK PORTS<br>AND ONE RJ-45 POE USER PORT, -40 DEG. TO 60 DEG CELSIUS,<br>100 TO 240 VAC, 60 HZ, AC/DC ADAPTER.  |
| E122      | 1        | HDMI FIBER<br>EXTENDER KIT            | EATON              | TRIPP LITE   | HDMI OVER FIBER TRANSMITTER AND RECEIVER, SUPPORTS ULTRA HIGH<br>DEFINITION 4K RESOLUTION @ 60HZ, TRANSMITS UP TO 985 FT<br>120-240VAC, 60HZ, 0 DEG TO 40 DEG CELSIUS OPERATING TEMP.   |
| E123      | 2        | WALL MOUNT MONITOR                    | PELCO              | PMCL655K   | ULTRA HIGH DEFINITION 4K RESOLUTION LED MONITOR, 55 INCH, 178<br>DEGREE ULTRA WIDE VIEWING ANGLE, STANDARD VESA MOUNTING,<br>HDMI AND DISPLAYPORT INPUTS , 100 TO 240 VAC, 60 HZ  |
| E124      | 1        | CCTV SYSTEM<br>ETHERNET SWITCH        | OMNITRON           | RUGGEDNET G/MI                                     | INDUSTRIAL GIGABIT ETHERNET SWITCH WITH TWO DUAL FIBER<br>UPLINK PORTS AND COPPER PORTS AS REQUIRED.<br>100 to 240VAC, 60 HZ, -40 DEG TO 75 DEG CELSIUS OPERATING TEMP.   |
| E125      | 9        | WALL CCTV CAMERA MOUNT                | PELCO              | PP350  | ALUMINUM CAMERA MOUNT FOR PARAPET OR VERTICAL<br>WALL MOUNTING, OUTDOOR RATED   |
| E126      | 4        | PIER CCTV CAMERA MOUNT                | PELCO              | PP351  | ALUMINUM CAMERA MOUNT FOR ROOF OR HORIZONTAL<br>SURFACE MOUNTING, OUTDOOR RATED   |

- Notes:

  1. These schedules do not reflect all materials, components and equipment which may be required to provide a complete electrical system. Quantities listed shall be verified by contractor prior to purchasing and unless otherwise noted, do not reflect required spare components.

  2. See special provisions for additional information on listed equipment.

  3. All references to specific manufacturer's, model and catalog numbers are for the purpose of describing the minimum features and quality. Products of equivalent or better quality and features may be proposed by the contractor for substitution. All substitutions are subject to acceptance by the engineer. acceptance by the engineer.

MODJESKI **™MASTERS** 

| USER NAME =  | DESIGNED - GTW | REVISED - |
|--------------|----------------|-----------|
|              | CHECKED - KMG  | REVISED - |
| PLOT SCALE = | DRAWN - AEC    | REVISED - |
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| ELECTRICAL EQUIPMENT SCHEDULE<br>STRUCTURE NO. 031-0001 |  | SECTION          |     | COUNTY        | TOTAL<br>SHEETS | SHEET<br>NO. |
|---|--|------------------|-----|---------------|-----------------|--------------|
|   |  | 266BRR, (4, 5) I |     | GREENE        | 117             | 117          |
|   |  |                  |     | CONTRAC       | T NO. 76        | 3T66         |
| SHEET 117 OF 117 SHEETS                                 |  | ILLINOIS         | FED | AID PROJECT#9 | STP-PE84        | (558)        |