STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

DIVISION OF HIGHWAYS

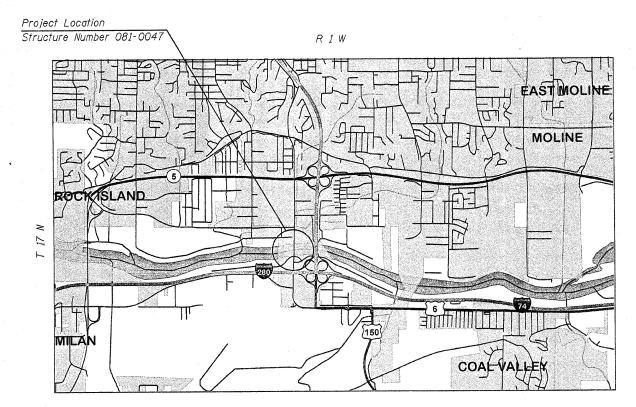
FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROPOSED HIGHWAY PLANS

FAU ROUTE 5834 (27th Street) SECTION (115BR)M

BRIDGE REPAIRS
ROCK ISLAND COUNTY

C-92-041-11



100' 200' 300' — 1" = 100' 0 10' 20' 30' — 1" = 10' 0 50' 100' — 1" = 50' 0 50' 100' — 1" = 40' 0 50' 100' — 1" = 30' 0 50' 100' — 1" = 30'

FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E. JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123 OR 811

CONTRACT NO. 64G70

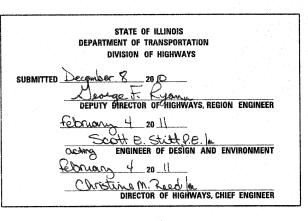
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DISTRICT 2 BRIDGE MAINTENANCE ENGINEER: MAHMOUD ETEMADI 815/284-5393 PLAN TECHNICIAN: DAN LINK 815/284-5416

D-92-019-11





PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

GENERAL NOTES

The final top four inches of soil in any right-of-way area disturbed by the Contractor must be capable of supporting vegetation. The soil must be from the A horizon (zero to 2' deep) of soil profiles of local soils.

All Borrow/Waste/Use sites must be approved by the Department prior to removing any material from the project or initiating any earthmoving activities, including temporary stockpiling outside the limits of construction.

The Contractor shall seed all disturbed areas within the project limits. Seeding Class 4 or 2A shall be used, except in front of properties where the grass will be mowed, then use Seeding, Class 1. Class 2A shall be used on front slopes and ditch bottoms. Class 4 shall be used behind Type A gutter, on all backslopes and areas behind the backslope, and beyond the toe of front slope on fill sections without ditches. This work will be included in the contract unit price per Cubic Yard for Concrete Removal.

Fertilizer shall be applied to all disturbed areas and incorporated into the seedbed prior to seeding or placement of sod at the rate specified in Sections 250 and 252 of the Standard Specifications. This work shall be included in the cost of CONCRETE REMOVAL.

Mulch Method II shall be applied over all seeded areas. This shall be included in the cost of the CONCRETE REMOVAL.

A Nationwide 404 Permit No. 3 has been obtained for this project to account for the use of barges in the river. NO permits have been obtained to allow for the dropping of debris into the river. If any concrete or debris is dropped in the river, the contractor will be required to procure the proper permit(s) from the required Regulatory Agencies on their own. Any time delay or additional compensation due to the procuring of said permit(s) will not be given.

At bridge expansion joints, if temporary expansion joint bulkheads are attached to adjacent deck slabs or abutments for support, the Contractor shall cut the attachments as soon as the concrete has set to prevent joint damage due to horizontal contraction or expansion.

The Contractor shall be responsible for protecting utility property during construction operations as outlined in Article 107.31 of the Standard Specifications. A minimum of 48 hours advance notice is required for non-emergency work. The JULIE number is 800-892-0123.

Prior to installing Stage I Traffic Control the raised concrete median must be removed north of the bridge. See Bridge Approach Sheet for details.

INDEX OF SHEETS

- 1. Cover Sheet
- 2. General Notes, Index of Sheets, Standards
- 3. Summary of Quantities
- 4. Bridge Approach Details
- 5.-7. Traffic Control Plan Stage I
- 8.-10. Traffic Control Plan Stage II
- 11. Informational Warning Sign
- 12. General Plan & Flevation
- 13. Staging Cross Sections
- 14. Abutment Joint Details
- 15. Pier 6 Joint Details
- 16.-17. Deck Repair Plan
- 18, Floor Drain Details
- 19. Pier 3 Repair Plan
- 20. Pier 6 Repair Plan
- 21. Strip Seal Details 22. Bar Splicer Details

STANDARDS

701101-02 Off-Road Operations, Multilane, 4.5 m (15') to 600 mm (24") From Pavement Edge

701426-04 Lane Closure, Multilane, Intermittent or Moving Operation, for Speeds > 45 MPH

701606-07 Urban Lane Closure, Multilane, 2W with Mountable Median

701801-04 Lane Closure, Multilane 1W or 2W Crosswalk or Sidewalk Closure

701901-01 Traffic Control Devices

704001-06 Temporary Concrete Barrier

720001-01 Sign Panel Mounting Details

720006-02 Sign Panel Erection Details

720001-01 Sign Panel Mounting Details

728001-01 Telescoping Steel Sign Support

729001-01 Applications of Types A and B Metal Posts (For Signs & Markers)

720011-01 Metal Posts for Signs, Markers and Delineators

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| 5834 | (115BR)M | Rock Island | 22 | 2 |
| | | CONTRACT | NO. 6 | 4G70 |
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SUMMARY OF QUANTITIES

URBAN 100% State

| Pay Item | Description | Unit | Quantity |
|-----------|---|-------|----------|
| 40600990 | TEMPORARY RAMP | SQ YD | 1 |
| 42001300 | PROTECTIVE COAT | SQ YD | 42 |
| 44000300 | CURB REMOVAL | FOOT | 26 |
| X4402020 | CONCRETE MEDIAN SURFACE REMOVAL | SQ FT | 117 |
| 50157300 | PROTECTIVE SHIELD | SQ YD | 5871 |
| 50102400 | CONCRETE REMOVAL | CU YD | 15. |
| 50300100 | FLOOR DRAINS | EACH | 6 |
| 50300255 | CONCRETE SUPERSTRUCTURE | CU YD | 15, |
| 50800205 | REINFORCEMENT BARS, EPOXY COATED | POUND | 158 |
| 50800515 | BAR SPLICERS | EACH | 2 |
| 52000050 | PREFORMED JOINT SEAL 4" | FOOT | 9 |
| 52000110 | PREFORMED JOINT STRIP SEAL | FOOT | 116. |
| 60600 505 | CONCRETE CURB (SPECIAL) | FOOT | 26 |
| 60618300 | CONCRETE MEDIAN SURFACE, 4 INCH | SQ FT | 1170 |
| 67100100 | MOBILIZATION | L SUM | |
| 70102625 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701606 | LSUM | |
| 70102640 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701801 | L SUM | |
| 70300220 | TEMPORARY PAVEMENT MARKING - LINE 4" | FOOT | 17,250 |
| | | | |
| | | | |
| | | | |

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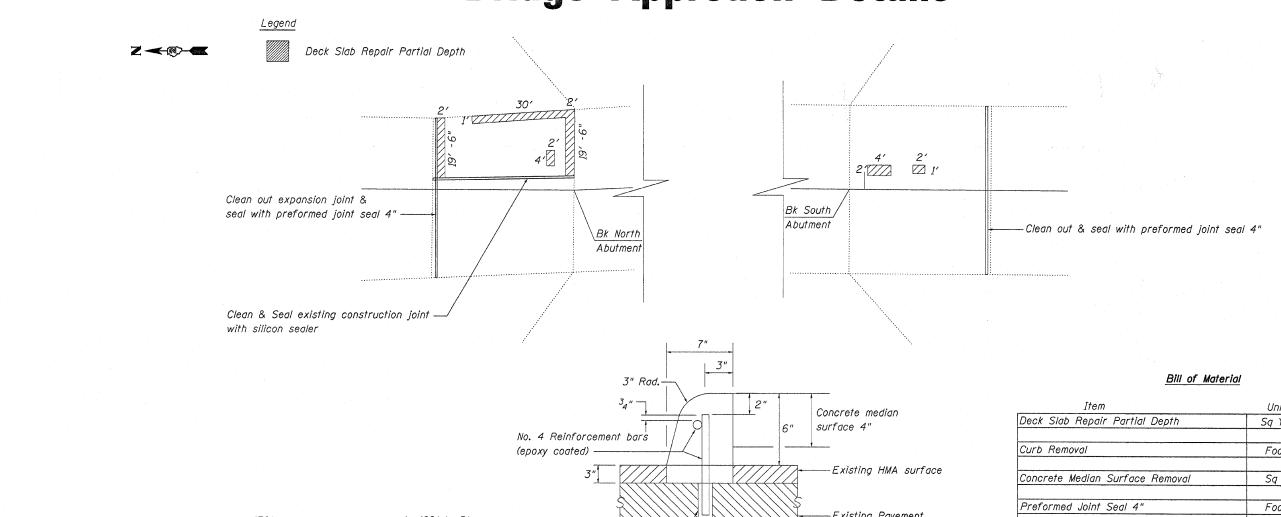
| Pay Item | Description | Unit | Quantity |
|----------|--|-------|----------|
| 70004000 | | | Quantity |
| 70301000 | WORK ZONE PAVEMENT MARKING REMOVAL | SQ FT | 5750 |
| 70400100 | TEMPORARY CONCRETE BARRIER | FOOT | 1187.5 |
| 70400200 | RELOCATE TEMPORARY CONCRETE BARRIER | FOOT | 1187.5 |
| 78001110 | PAINT PAVEMENT MARKING - LINE 4" | FOOT | 7094 |
| 78300100 | PAVEMENT MARKING REMOVAL | SQ FT | 760 |
| 20012754 | STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES) | SQ FT | 1566 |
| Z0016001 | DECK SLAB REPAIR (FULL DEPTH, TYPE I) | SQ YD | 10 |
| Z0016002 | DECK SLAB REPAIR (FULL DEPTH, TYPE II) | SQ YD | 109 |
| Z0016200 | DECK SLAB REPAIR (PARTIAL) | SQ YD | 96, |
| Z0024476 | FLEXIBLE DELINEATOR MAINTENANCE | EACH | 150 |
| Z0030070 | IMPACT ATTENUATORS (SEVERE USE, NARROW), TEST LEVEL 3 | EACH | 1 |
| Z0030250 | IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3 | EACH | 1 |
| Z0030350 | IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3 | EACH | 1 |
| Z0030370 | IMPACT ATTENUATORS, RELOCATE (SEVERE USE, NARROW), TEST LEVEL 3 | EACH | 1 |
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Bridge Approach Details



Epoxy grout

+/- 160' to Bk North Abutment Remove, store & re-install Temporary HMA Rampexisting sign-(+/- 12' x 13') Existing Curb nose-

> Remove concrete curb and median to provide driving surface for cross-over stage traffic. Upon completion of bridge repairs replace concrete curb and median surface.

> > Median Removal and Replacement

-Existing Pavement

Concrete Curb Detail

Holes $l_2^{l_2}$ " Dia shall be drilled 5" into the existing pavement at 5' -0" cts. spaced to miss existing anchors. No. 4 bars 12" long shall be epoxy grouted into the holes, and a no.4 bar shall be installed horizontally in the curb, except at contraction joints.

Existing No. 4 bar anchors to be cut flush with pavement surface.

Joints of a type similar to that in the underlying pavement (expansion or contraction) shall be installed in the concrete curb in alignment with the joints in the pavement.

The cost of all materials and labor required to install the joints and reinforcement bars in the curb shall be included in the contract unit price per lineal foot for "Concrete Curb".

| Item | Unit | Quantity |
|---------------------------------|-------|----------|
| Deck Slab Repair Partial Depth | Sq Yd | 14 |
| | | |
| Curb Removal | Foot | 260 |
| | | |
| Concrete Median Surface Removal | Sq Ft | 1170 |
| | | |
| Preformed Joint Seal 4" | Foot | 96 |
| | | |
| Concrete Median Surface, 4" | Sq Ft | 1170 |
| | | |
| Concrete Curb | Foot | 260 |
| | | |

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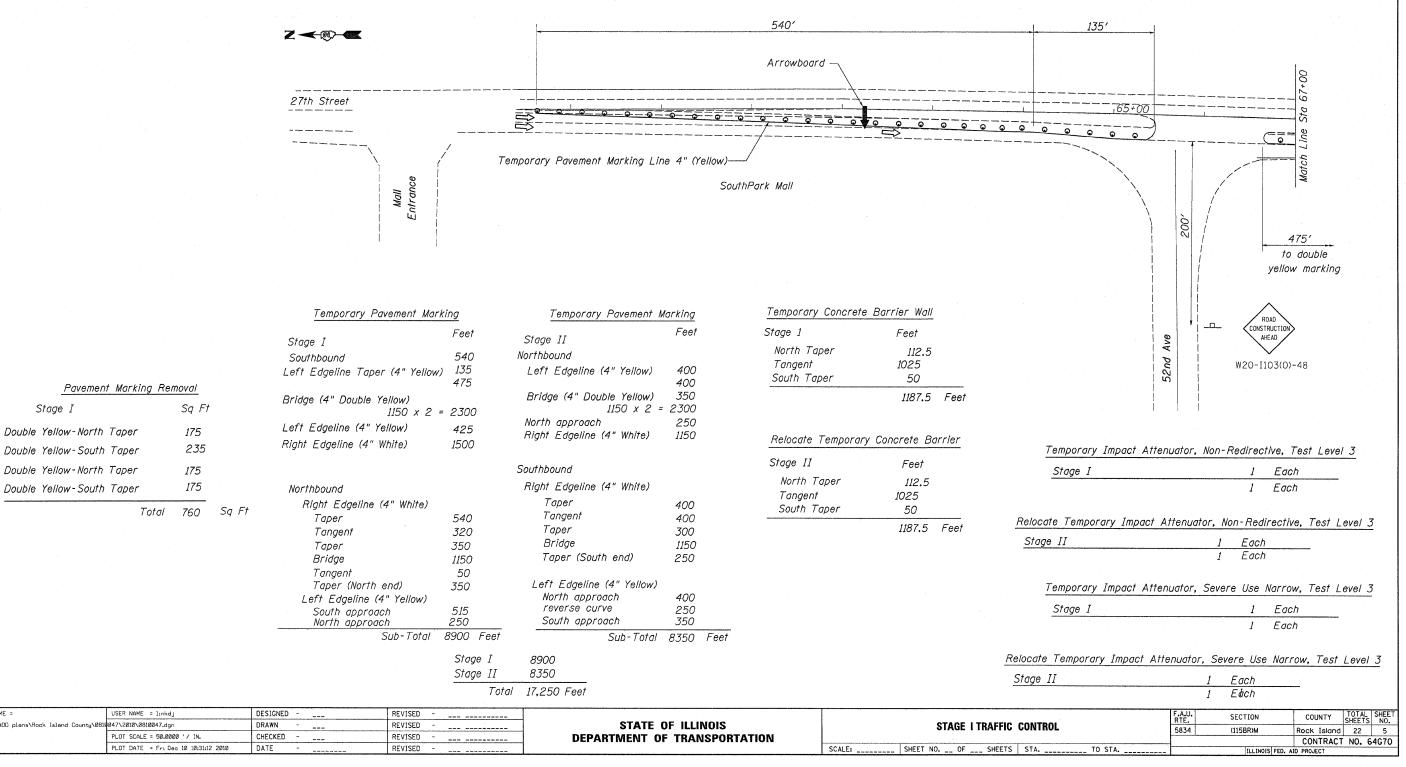
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Traffic Control Plan Stage I

Refer to Standard 701606-06 for additional details, signing & devices.

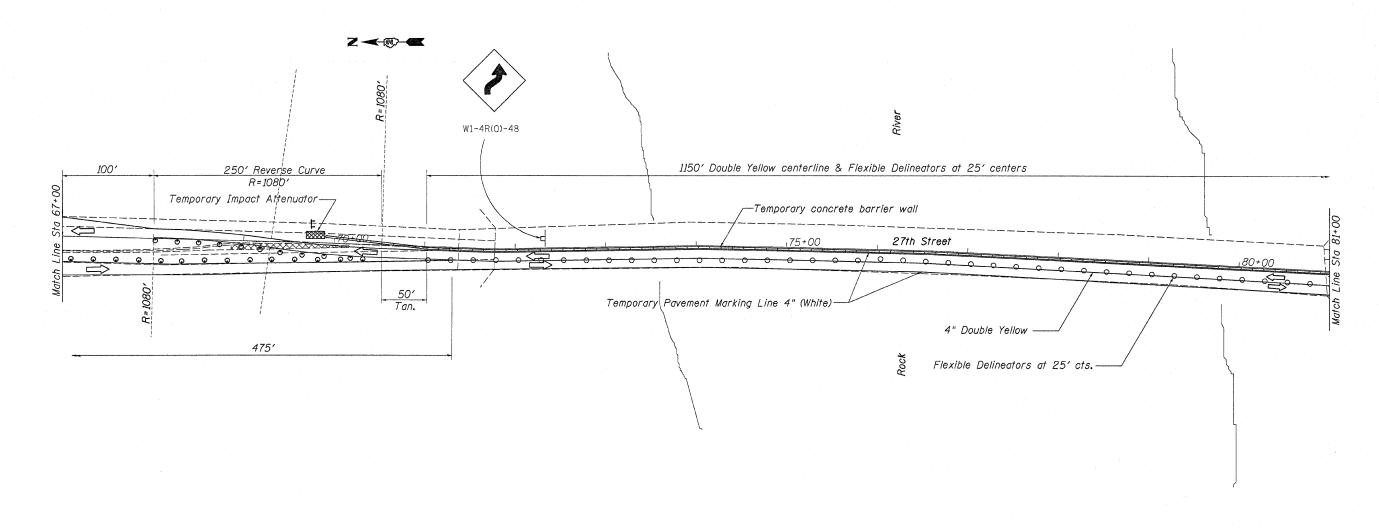
Prior to installing Stage I Traffic Control the raised concrete median must be removed north of the bridge. See Bridge Approach Sheet for details.



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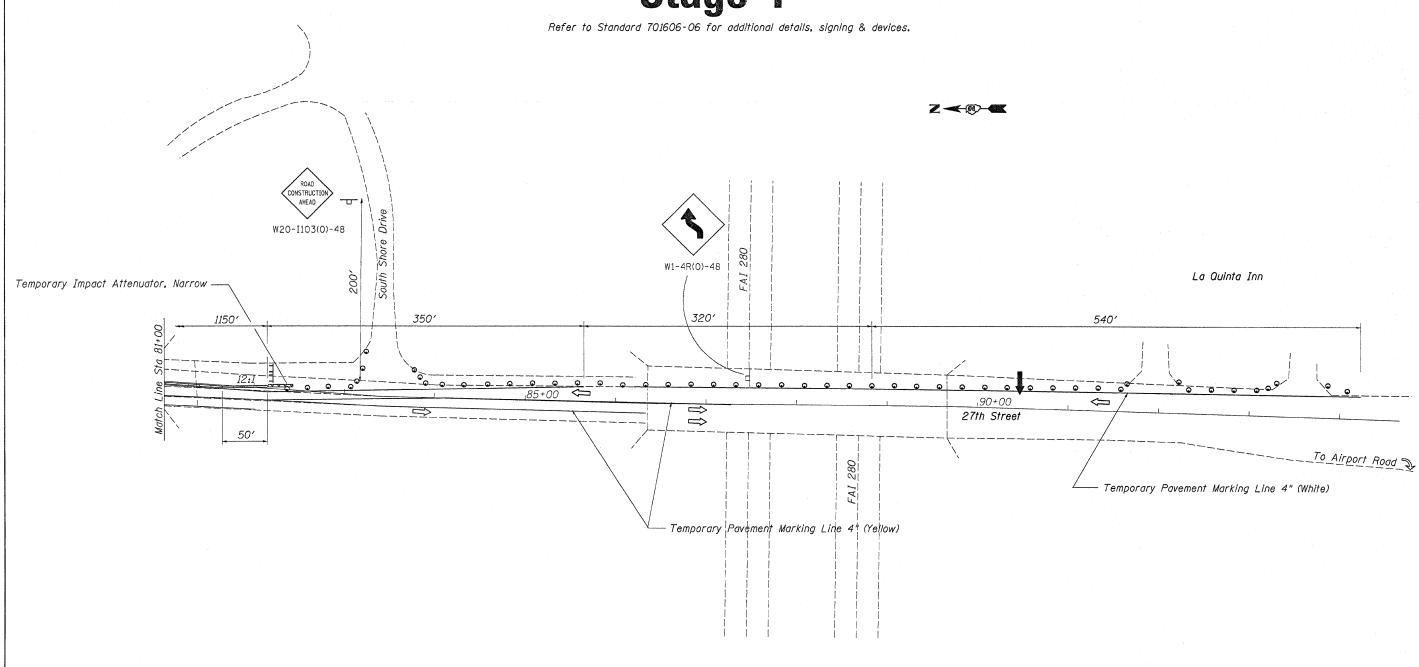
Traffic Control Plan Stage I

Refer to Standard 701606-06 for additional details, signing & devices.



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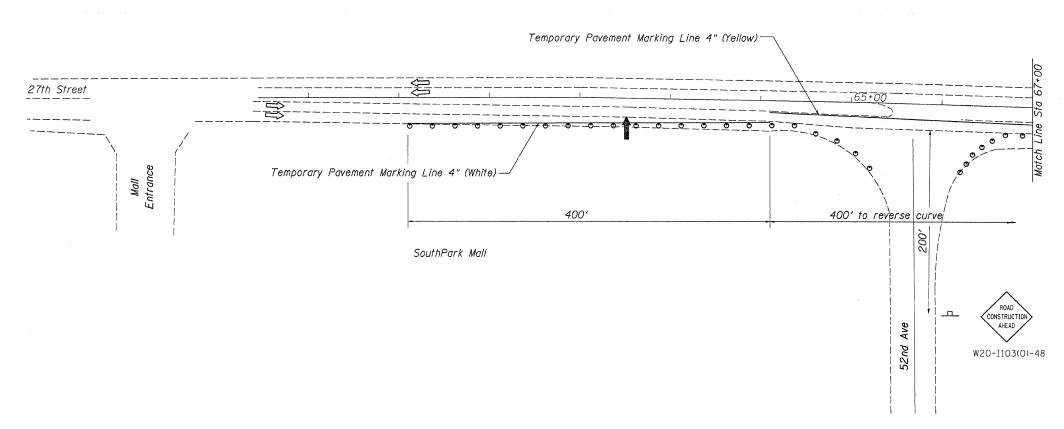


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Traffic Control Plan Stage II

Z -®--

Refer to Standard 701606-06 for additional details, signing & devices.



Work Zone Pavement Marking Removal

Square Feet

 Stage I
 2967

 Stage II
 2783

5750 Square Feet

Upon project completion re-stripe pavement 300' either side of and including the bridge deck

Paint Pavement Marking 4"

Double Yellow
(300' + 920' (bridge) + 300') x 2 3040

White edgelines
(300' + 920' (bridge) + 300') x 2 3040

White skip dash
((300' + 920' (bridge) + 300') x 2)/3 1014

Total 7094 Fe

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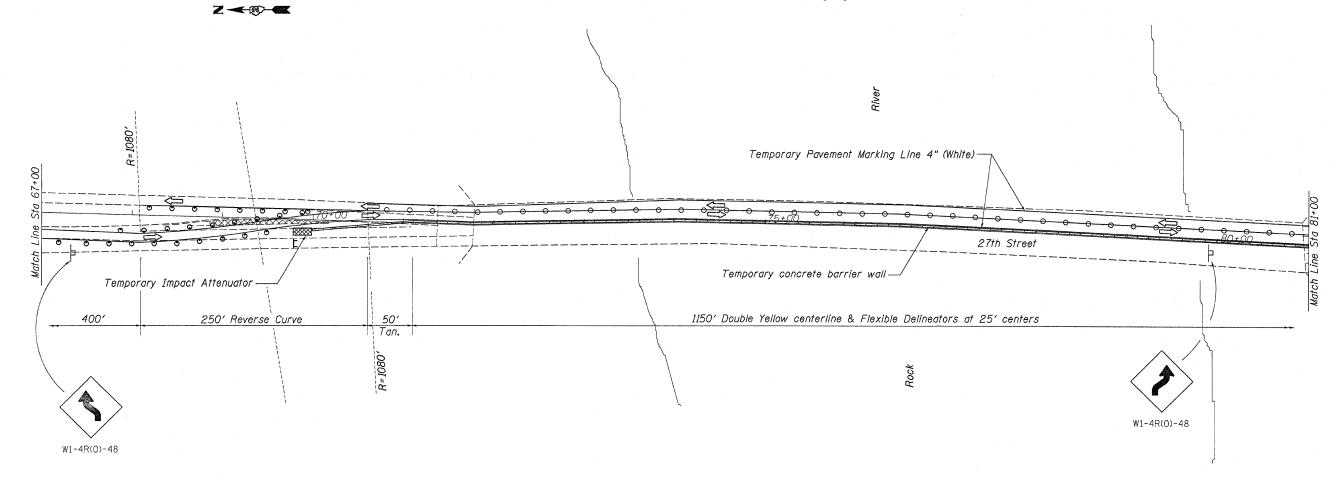
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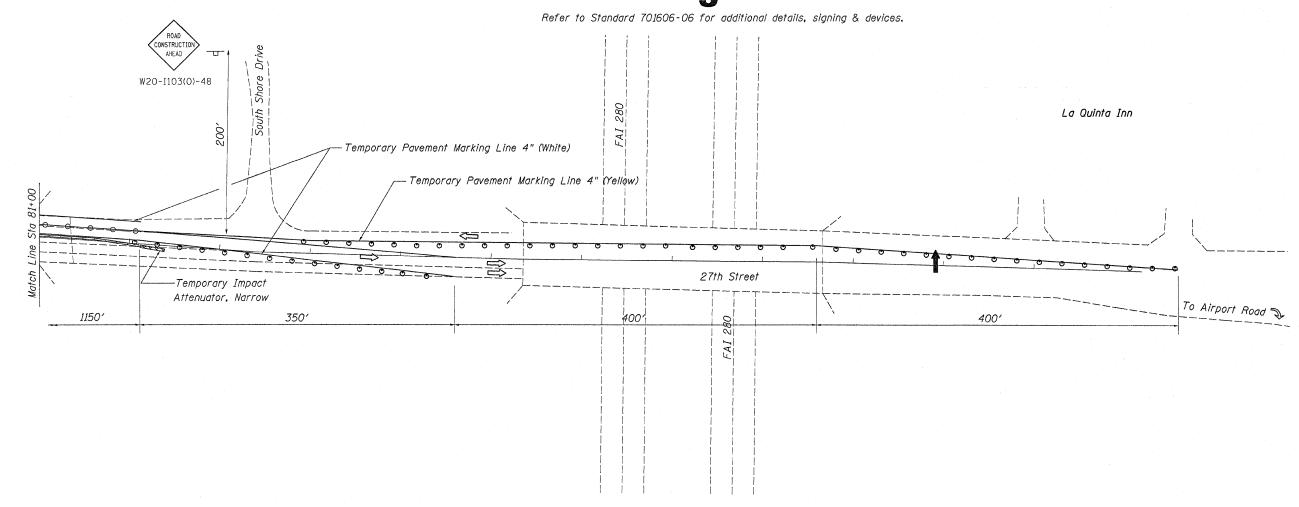
Traffic Control Plan Stage II

Refer to Standard 701606-06 for additional details, signing & devices.



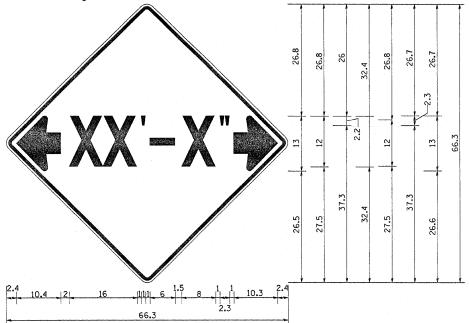
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Traffic Control Plan Stage II

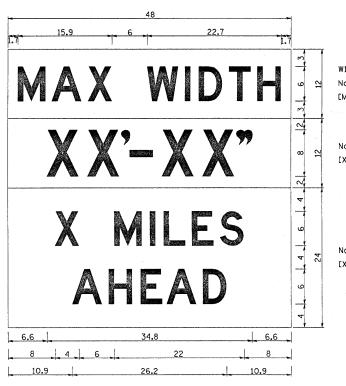


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INFORMATIONAL WARNING SIGN (FOR NARROW TRAVEL LANES)



NOTES
W12-2 - Horizontal Clearance Sign
48.0" across sides, 1.9" Radius,
0.8" Border, 0.5" Indent, Black on
Orange; Standard Arrow Custom
10.4" X 8.1" 180° Black 11 Inch
D Series Lettering; Standard Arrow
Custom 10.4" X 8.1" 0°



W12-I103 (Width is 8D); No border, Black on White; [MAX WIDTH] D:

No border, Black on Orange; [XX'-XX''] D;

No border, Black on White; [X MILES] D; [AHEAD] D;

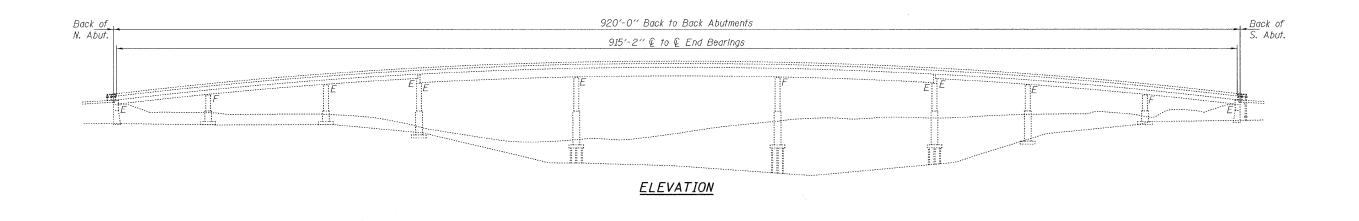
All work to furnish and install these signs shall be included in the cost of the Traffic Control Standards and shall not be paid for separately.

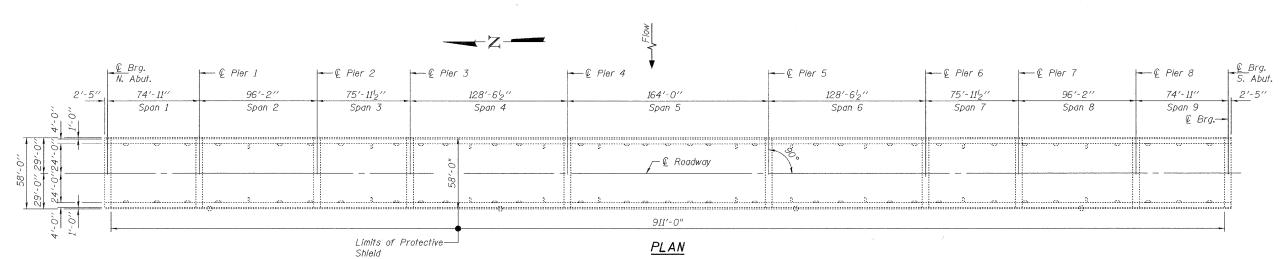
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REVISED - 5-15-09

| REVISED - ___ | REGION 2 / DISTRICT 2 STANDARD | F.A.U. | RTE. | SECTION | COUNTY | SHEET |

PLOT DATE = Fr1 Dec 10 10:30:35 2010





GENERAL NOTES

All structural steel shall conform to AASHTO Classification M-270 Gr. 36,

Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. 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 included in the pay item covering removal of the existing concrete.

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

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

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

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.

Reinforcement bars designated (E) shall be epoxy coated.

SCOPE OF WORK

- 1. Replace all existing 4" x 12" rectangular deck drains with 6"\$\phi\$ deck drains.
- 2. Substructure repair at Piers 3 and 6. 3. Replace expansion joints at North and South Abutments.

TOTAL BILL OF MATERIAL

| ITEM | UNIT | QUANTITY |
|--|---------|----------|
| Concrete Removal | Cu. Yd. | 15.3 |
| Concrete Superstructure | Cu. Yd. | 15.3 |
| Reinforcement Bars, Epoxy Coated | Pound | 1580 |
| Preformed Joint Strip Seal | Foot | 117 |
| Bar Splicers | Each | 22 |
| Protective Coat | Sq. Yd. | 42.8 |
| Deck Slab Repair, Partial Depth | Sq. Yd. | .96 |
| Deck Slab Repair, Full Depth, Type I | Sq. Yd. | 10 |
| Deck Slab Repair, Full Depth, Type II | Sq. Yd. | 109 |
| Structural Repair of Concrete (Depth equal to or less than 5") | Sq. Ft. | 1,566 |
| Floor Drains | Each | 64 |
| Protective Shield | Sq. Yd. | 5,871 |

27th Street over The Rock River

COUNTY TOTAL SHEE SHEETS NO. SECTION Rock Island 22 12 CONTRACT NO. 64G70

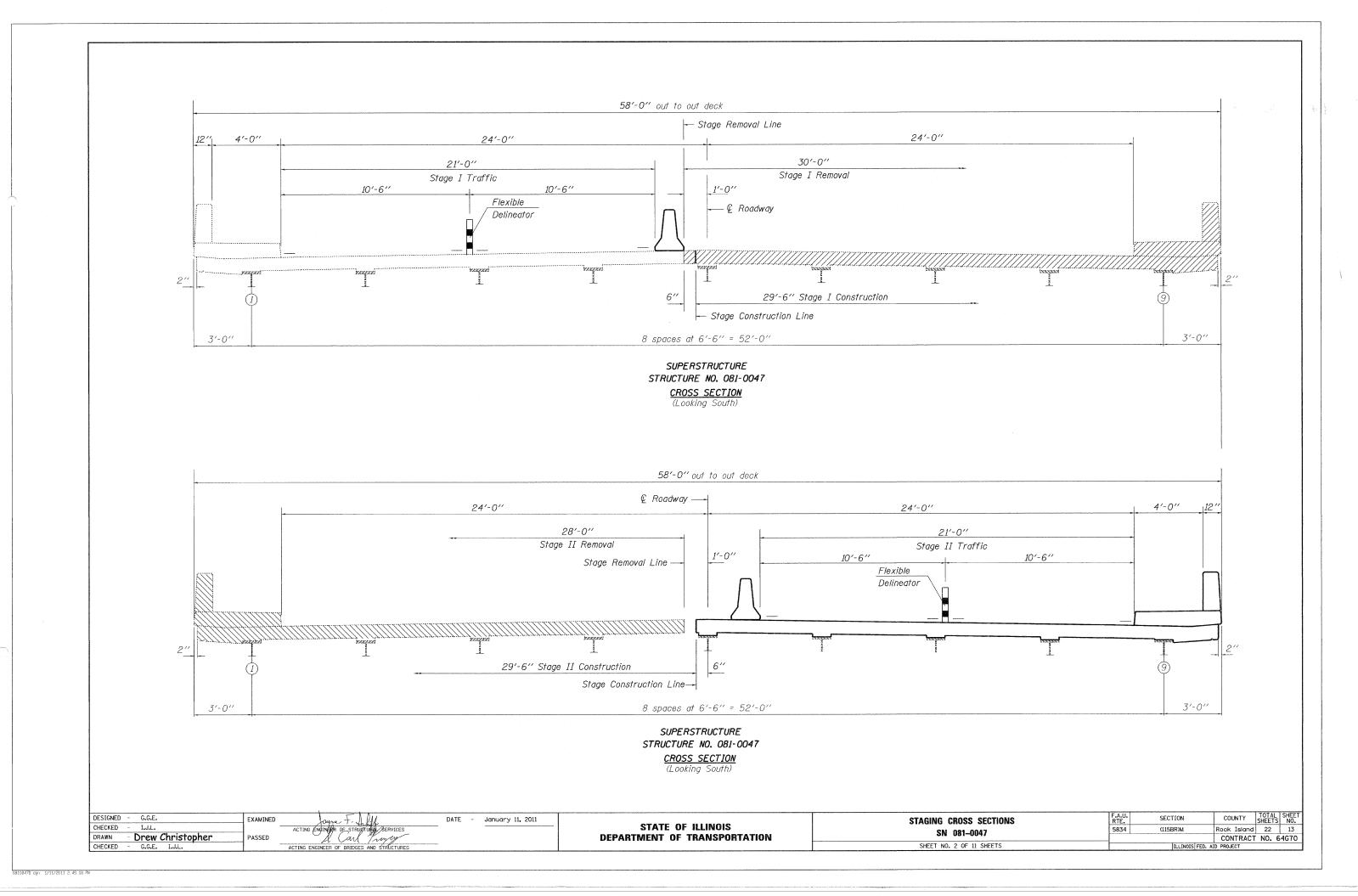
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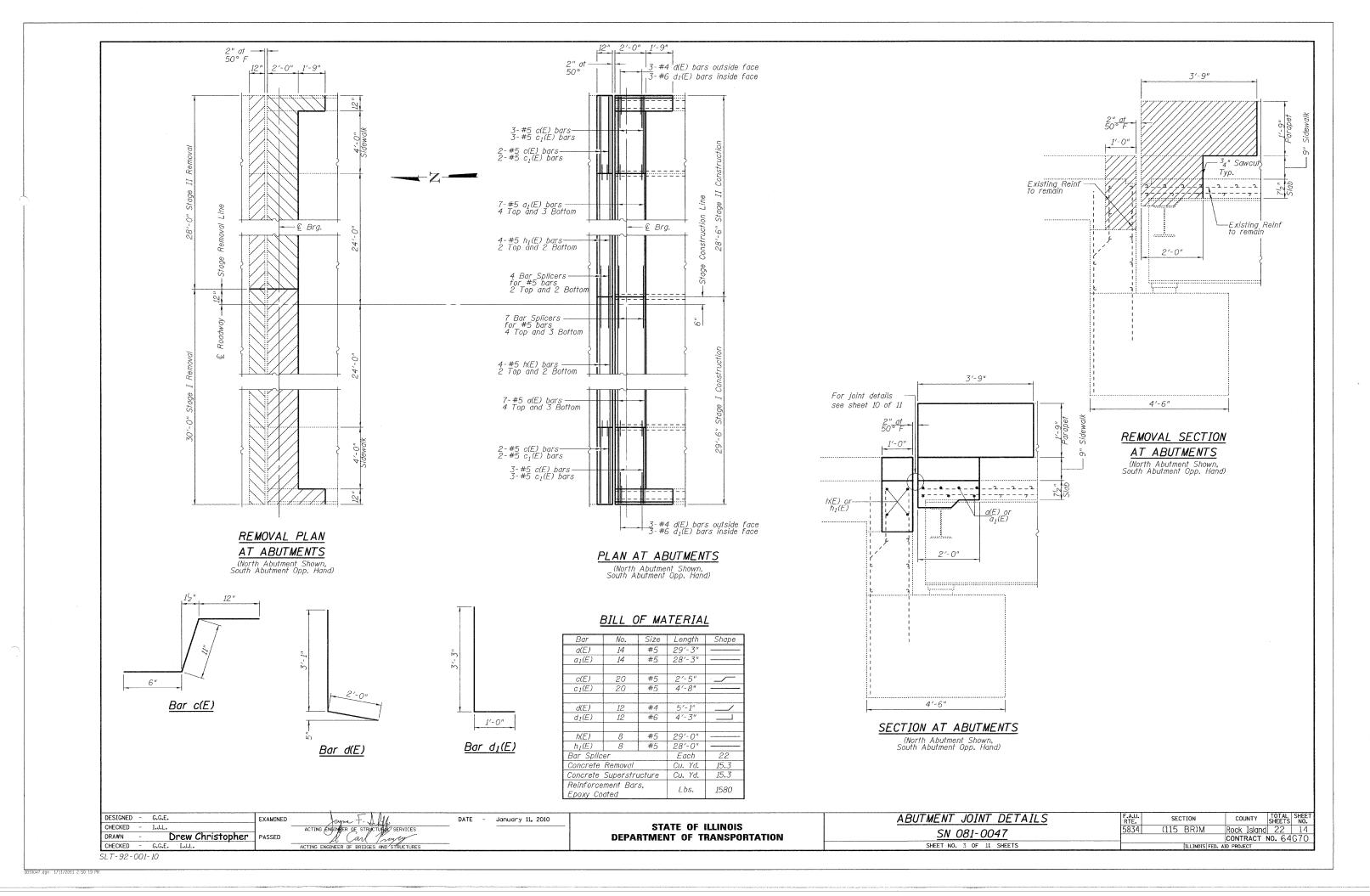
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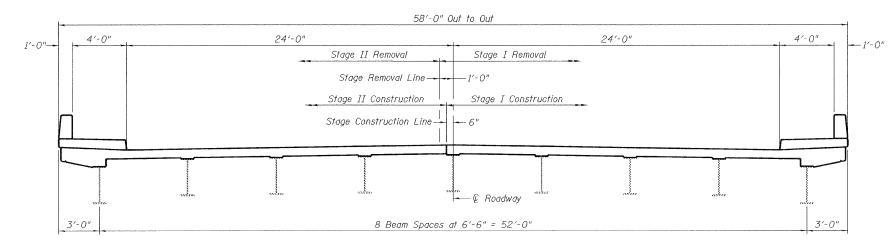
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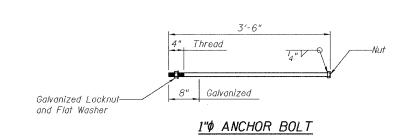
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(115 BR)M

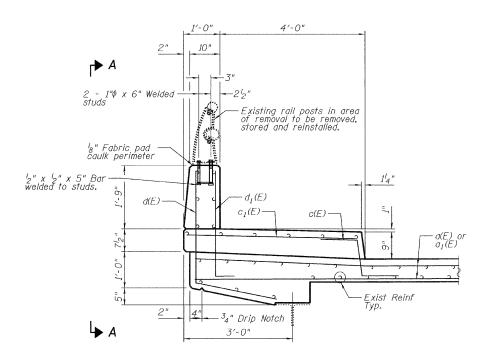




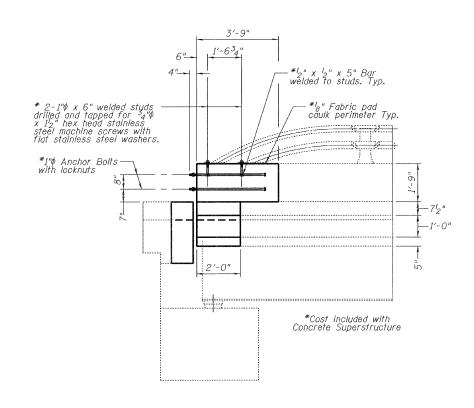




DECK CROSS SECTION NEAR ABUTMENT
(Looking South)

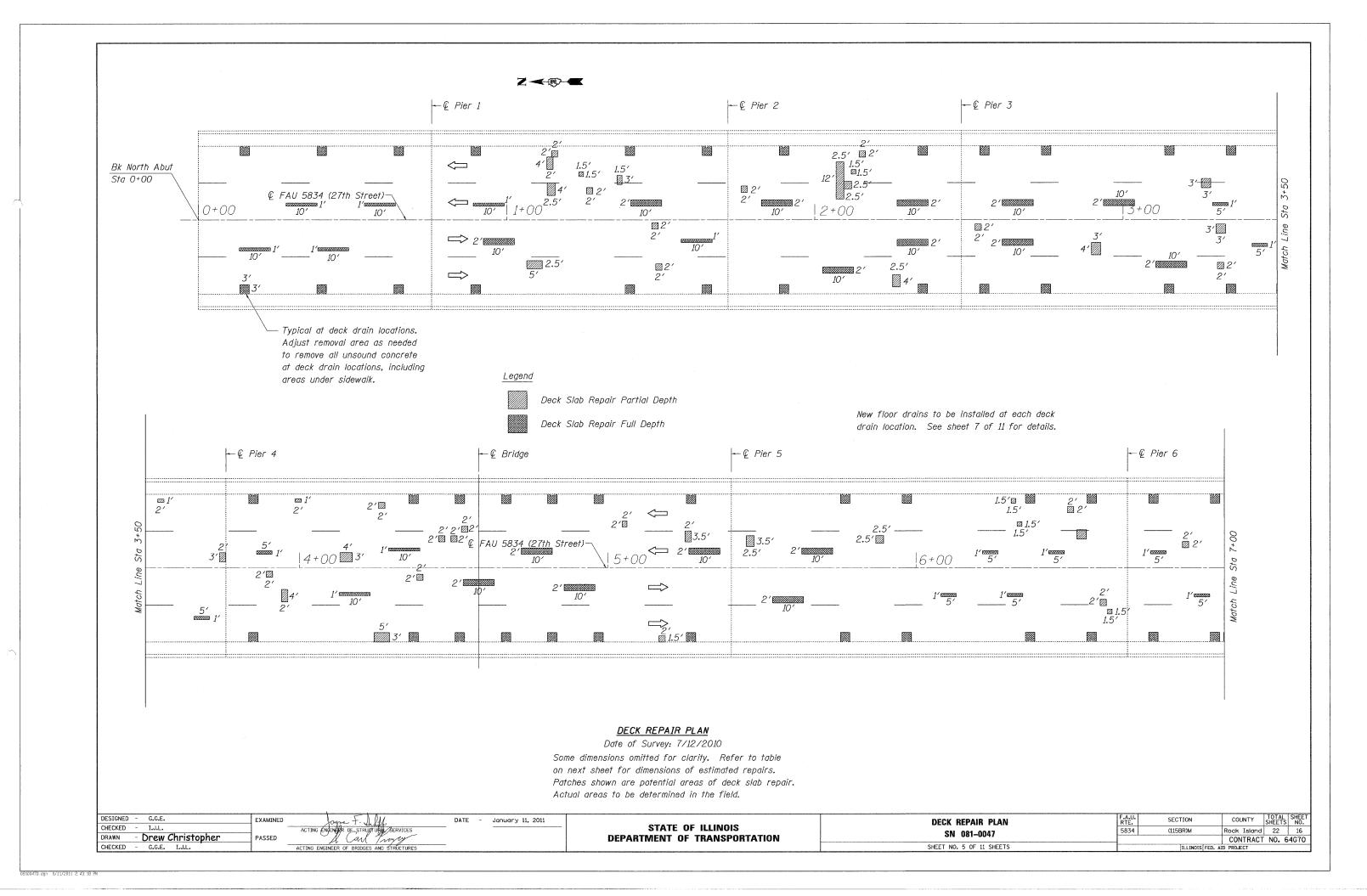


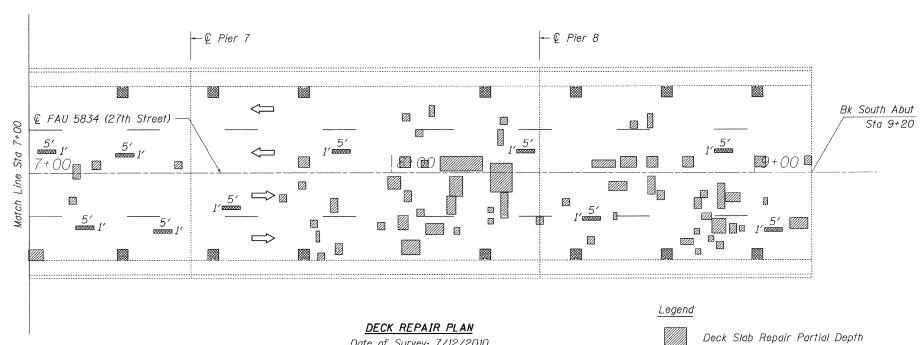
PARAPET AND SIDEWALK SECTION



VIEW A-A

| ESIGNED - G.G.E. | EXAMINED | Jayne F. All | DATE - | January 11, 2010 | | PIER 6 JOINT DETAILS | F.A.U. RTE. | SECTION | COUNTY TOTAL |
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| HECKED - I.J.L. | _ | ACTING ENGINEER OF STRUCTURES SERVICES | ···· | | STATE OF ILLINOIS | SN 081-0047 | 5834 | (115 BR)M | Rock Island 22 |
| RAWN - Drew Christophe | PASSED | A Carl Truyy | | | DEPARTMENT OF TRANSPORTATION | 3N 001 0041 | | | CONTRACT NO. 6 |
| HECKED - G.G.E. I.J.L. | | ACTING ENGINEER OF BRIDGES AND STRUCTURES | | | | SHEET NO. 4 OF 11 SHEETS | | ILLINOIS FE | . AID PROJECT |





Bill of Material

| BIII OT MATERIAL | | |
|--------------------------------------|----------|-------|
| Item | Quantity | Unit |
| Deck Slab Repair Partial Depth | 96 | Sq Yd |
| Deck Slab Repair Full Depth, Type I | 10 | Sq Yd |
| Deck Slab Repair Full Depth, Type II | 109 | Sq Yd |
| | | |
| | | |
| | | |
| | | |

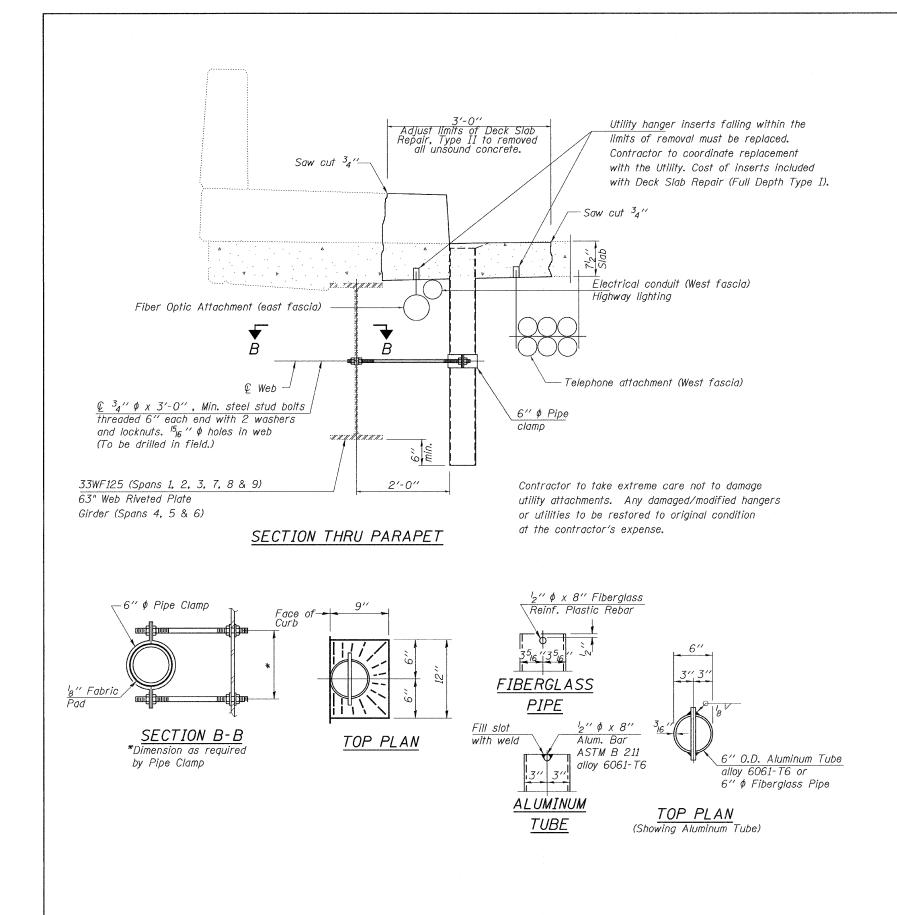
Date of Survey: 7/12/2010 Dimensions omitted for clarity. Refer to schedule below.

Deck Slab Repair Full Depth

Partial Depth Patching Schedule

| Northbour | d | | | | , | | | | T | Southbou | und | | T | т | | | | | 1 |
|------------|-----------------------------|----------|----------|--------------------------------|---------|---------------------------------------|----------|----------|-----------------------------|----------|---------------------------------|----------|----------|--------------------------------|---------|--------------------------------------|----------|----------|-------------------------|
| Station | Offset Left of CL (feet) | X (feet) | Y (feet) | Patch Area (square feet) | Station | Offset Right of Curbline (feet) | X (feet) | Y (feet) | Patch Area (square feet) | Station | Offset Right of CL (feet) | X (feet) | Y (feet) | Patch Area (square feet) | Station | Offset Left of Curbline (feet) | X (feet) | Y (feet) | Patch Are (square fe |
| 1+13 | 12 | 2.5 | 4 | 10 | 1+13 | 3.5 | 2 | 4 | 8 | 1+49 | 1 | 2 | 2 | 4 | 1+06 | 10.7 | 5 | 2.5 | 1: |
| 1+26 | 10.5 | 2 | 2 | 4 | 1+14 | 1.6 | 2.3 | 1.7 | 3.91 | 2+52.5 | 1.5 | 2 | 2 | 4 | 1+48 | 9.7 | 2 | | |
| 1+76 | 11 | 2 | 2 | 4 | 1+24 | 8.4 | 1.5 | 1.5 | 2.25 | 2+90 | 7.5 | 4 | 3 | 12 | 2+25 | 2.2 | 2.5 | 4 | |
| 3+74 | 5 | 2 | 3 | 6 | 1+36 | 9.5 | 1.6 | 3 | 4.8 | 3+30 | 1.6 | 3 | 3 | 9 | 3+30 | 8 | 2 | 2 | |
| 4+13 | 5 | 4 | 3 | 12 | 2+07 | 5.2 | 2.5 | 12 | 30 | 3+89 | 1 | 2 | 2 | 4 | 4+24 | 0 | 5 | | |
| 4+45 | 10 | 2 | 2 | 4 | 2+09.5 | 11.5 | 2.5 | 2.5 | 6.25 | 3+94 | 7 | 4 | 2 | 8 | 5+17 | 0 | 1.5 | 2 | |
| 4+49 | 5 | 2 | 2 | 4 | 2+12 | 7.6 | 1.5 | 1.5 | 2.25 | 4+38 | 2 | 2 | 2 | 4 | 6+60 | 11.7 | 2 | | |
| 5+25 | 10.5 | 2 | 3.5 | 7 | 2+14 | 1.6 | 2 | 2 | 4 | 7+11 | 9 | 2 | 2 | | 6+62 | 9 | 1.5 | 1.5 | |
| 5+45 | 12 | 2.5 | 3.5 | 8.75 | 3+26 | 10.7 | 3 | 3 | 9 | 7+69 | 6 | 2 | 2 | | 7+00 | 0 | 4 | 3 | |
| 5+87 | 10.5 | 2.5 | 2.5 | 6.25 | 3+54 | 1.6 | 2 | 1 | 2 | 7+74 | 2.5 | 2 | 2 | | 7+74 | 0 | 2 | 2 | |
| 6+86 | 10.5 | 2 | 2 | 4 | 3+99 | 1.6 | 2 | 1 | | 7+83 | 7 | 4 | 2 | | 7+77 | 11 | 2 | | |
| 7+12 | 8.5 | 2 | 4 | 8 | 4+26 | 2.7 | 2 | 2 | | 7+99 | 1 | 3.5 | 3.5 | | | 8 | 1 | . 3 | |
| 7+17 | 2.4 | 2.4 | 2 | 4.8 | 4+53 | 10.4 | 2 | 2 | 4 | 8+03 | 5 | 3 | 2 | | 7+84 | 1.6 | | | |
| 7+40 | 3.4 | 2 | 2 | 4 | 5+05 | 8.7 | 1.5 | 2 | 3 | 8+07 | 10 | 2 | 2 | | 7+96 | 8.3 | | | |
| 7+74 | 3.2 | 3 | 3 | 9 | 6+31 | 1.5 | 1.5 | 1.5 | 2.25 | 8+14.5 | 6 | 5 | 2.5 | | 8+01 | 8.3 | | | 11 |
| 8+02 | 4.5 | 3 | 3 | 9 | 6+32 | 9.1 | 1.5 | 1.5 | | 8+16 | 1 | 5.5 | 3.6 | | 8+02 | 1.5 | | | 1 |
| 8+08 | 4.5 | | 2 | 4 | 6+49 | 4.2 | 2 | 2 | | 8+25 | -3 | | 5 | | 8+07 | 12 | | | |
| 8+13 | 3.5 | 9.5 | 4 | 38 | 6+52 | 11.7 | 3 | 3 | | 8+25 | 10 | 2 | 2 | | 8+09 | 7 | | | |
| 8+22 | 4.5 | 3 | 5.7 | 17.1 | 8+03 | 7.6 | 2 | 2 | 4 | 8+29.5 | 7 | 7 | 2 | | 8+17 | 7 | | | 3 |
| 8+27 | 4.5 | 6 | 8 | 48 | 8+10 | 5.4 | 1.5 | 3 | 4.5 | 8+47 | 10 | 2 | 2 | | 8+26 | 9.9 | | | 2.3 |
| 8+55 | 2.7 | 6.5 | 2 | 13 | 8+30 | 8.6 | . 2 | 2 | 4 | 8+60 | 2.5 | 2.5 | 5 | 12.5 | 8+29 | 11.9 | | 4.5 | 6. |
| 8+63 | 3.5 | 4.4 | 3 | 13.2 | 8+66 | 9.7 | 2 | 2 | 4 | 8+70 | -1 | 5 | 2 | | 8+40 | 9.8 | | | |
| 8+70 | 4.5 | 3 | 3 | 9 | 8+71 | 7.6 | 1.5 | 4 | 6 | 8+73 | 5 | 2.5 | 2 | | 8+54 | 4.4 | | | |
| 8+80 | 4.5 | 3 | 3 | 9 | | | | | | 8+81 | 7 | 3 | 2 | | 8+61 | 11 | | | |
| 9+00 | 4.5 | 3 | 3 | 9 | | | | | | 8+85 | 5 | 2 | 2 | | 8+79 | 4.2 | | | |
| 9+19 | 4.5 | 1.7 | 2.6 | 4.42 | | | | | | 8+90 | 3 | 7 | 2 | | 8+83 | 1.7 | | | |
| | | | | | | | | | | 8+92 | 8 | 2.5 | 4 | | 8+83 | 7 | 1.5 | | 2.2 |
| | | | | | | | | | | 9+10 | 7 | 2 | 1 | . 2 | 8+85 | 11 | | | 5.0 |
| | | | | | | - | | | | | | | | | 8+86 | 5 | 1.5 | | 2.3 |
| | | | | | | | | | | | | | | | 8+88 | 7.3 | | | 15 |
| | | | | | | | | | | | | | | | 8+89 | 3 | | | |
| | | | | | | | | | | | | | | | 8+93 | 7.3 | | | |
| | | | | | | | | | | | | | | | 8+95 | 7.8 | | | |
| | | | | | | | | | | | | | | | 9+10 | 8.5 | 5 | 3 | |
| Total Area | (square feet) | | | 269.52 | | | | | 125.46 | | | | | 245.05 | | | | | 219.: |

| DESIGNED - G.G.E. CHECKED - I.J.L. DRAWN - Drew Christopher | EXAMINED PASSED | ACTING ENGINEER OF STRUCTURES ACTING ENGINEER OF STRUCTURES ACTING ENGINEER ACTING ENGIN | DATE - January 11, 2011 | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | DECK REPAIR PLAN SN 081–0047 | F.A.U. RTE. 5834 | SECTION (115BR)M | COUNTY Rock Island CONTRACT | TOTAL SHEETS 22 | SHEET NO. 17 |
|---|-----------------|--|-------------------------|--|---------------------------------|------------------------|---------------------|-----------------------------|-----------------|--------------------|
| CHECKED - G.G.E. I.J.L. | 7 | ACTING ENGINEER OF BRIDGES AND STRUCTURES | - | | SHEET NO. 6 OF 11 SHEETS | | ILLINOIS FED. A | ID PROJECT | | |

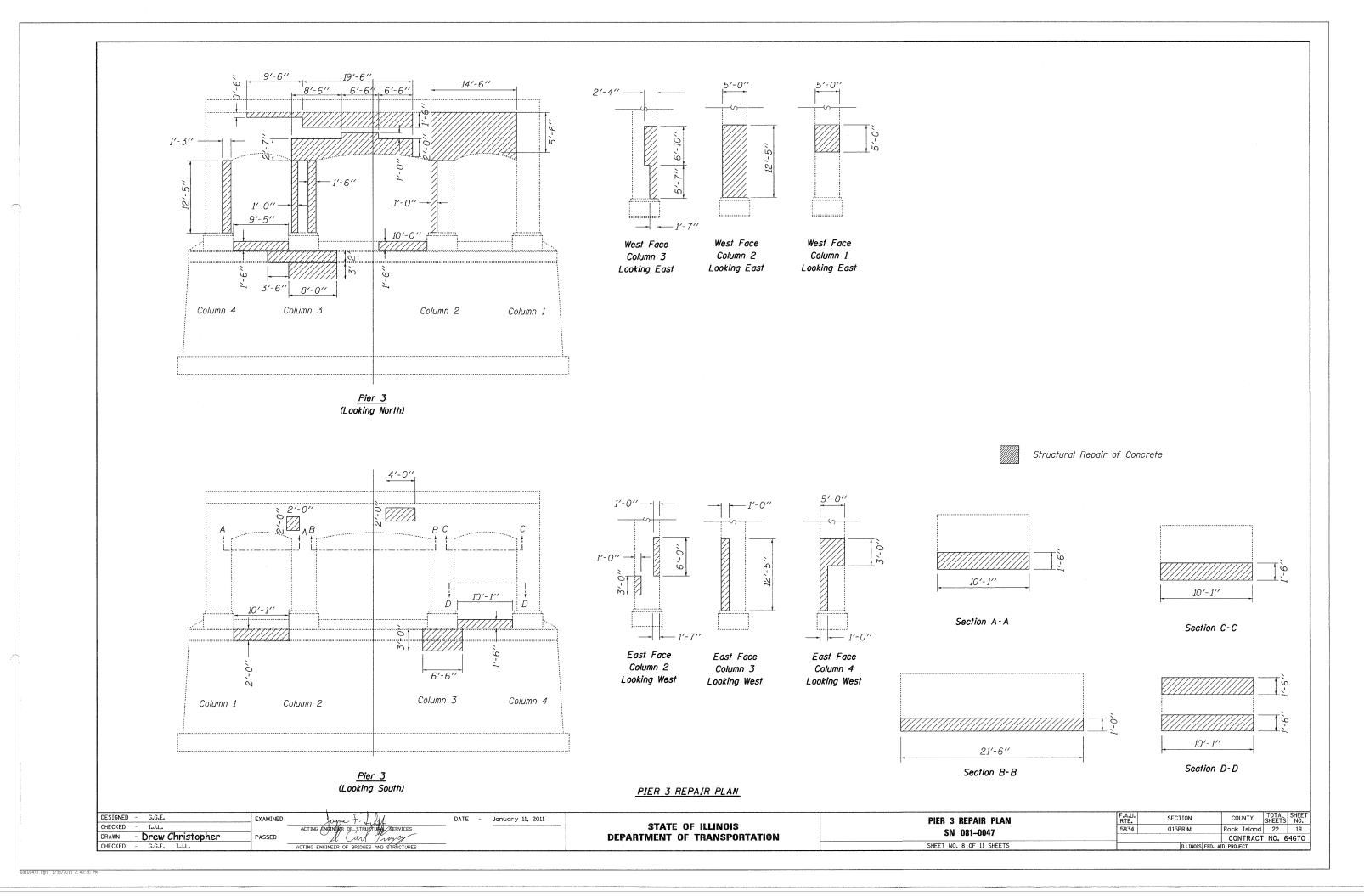


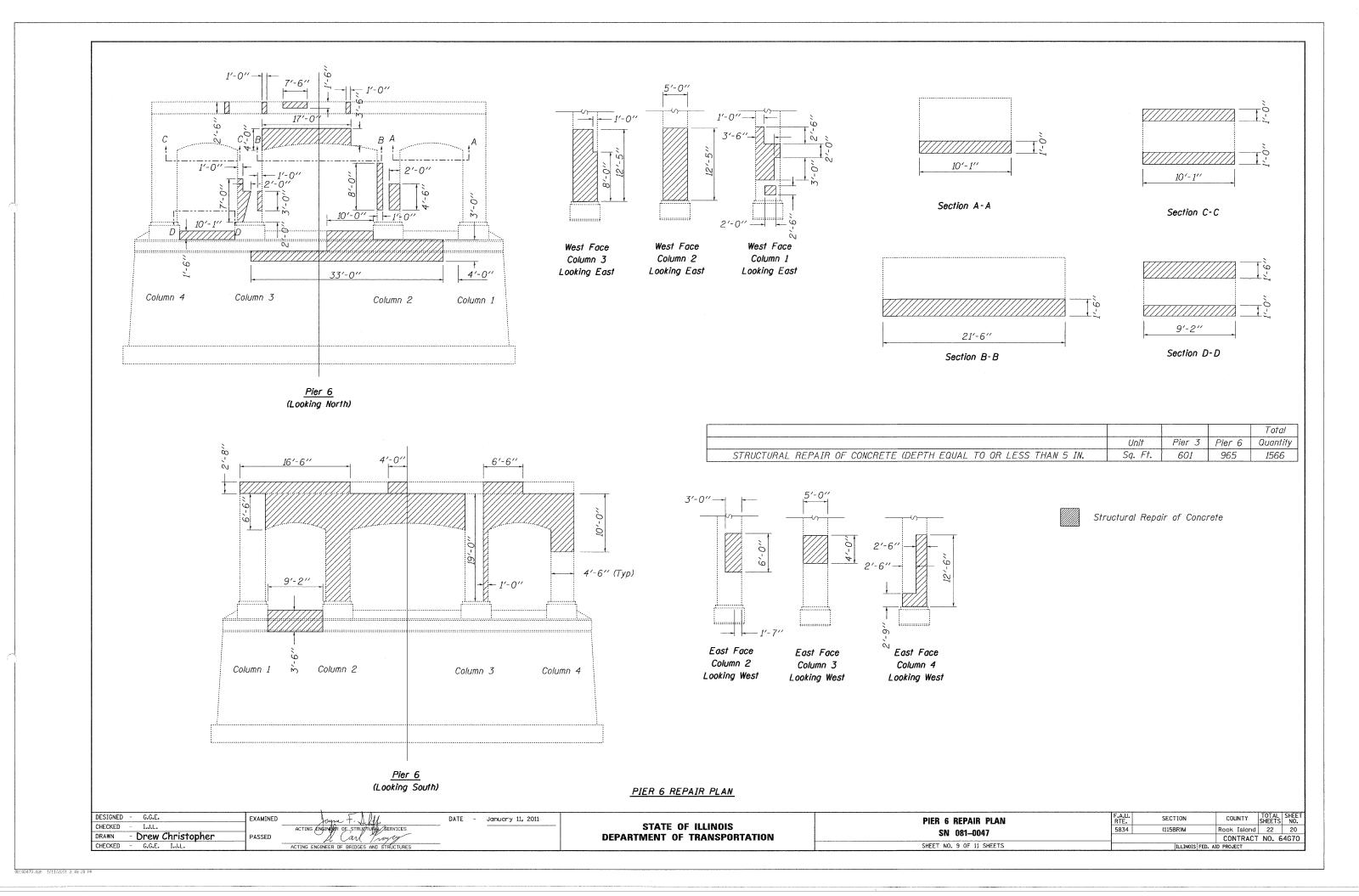
BILL OF MATERIAL

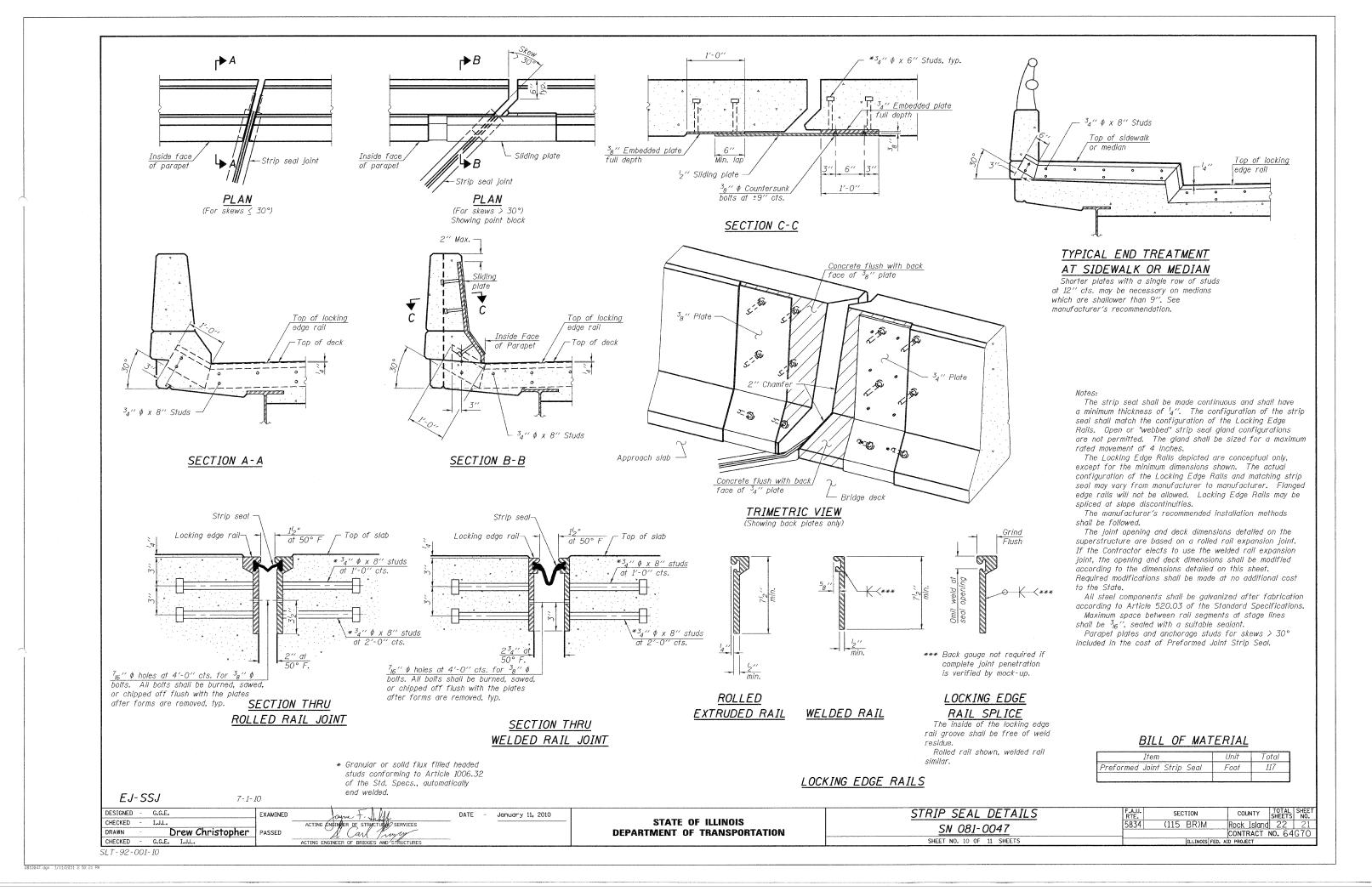
| Item | Unit | Quantity |
|--------------|------|----------|
| Floor Drains | Each | 64 |
| | | |

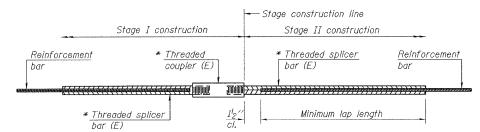
| DESIGNED - G.G.E. | EXAMINED JOYNE F. All DATE | January 11, 2011 | FLOOR DRAIN DETAILS | F.A.U. SEC | CTION C | COUNTY TO | OTAL SHEE |
|--------------------------|--|--|--------------------------|------------|----------------------|------------|-------------------|
| DRAWN - Drew Christopher | PASSED ACTING ENGINEER OF STRUCTURE SERVICES | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | STRUCTURE NO. 081-0047 | 5834 (115 | 0.00 | k Island 2 | 22 18 IO. 64G7 |
| CHECKED - G.G.E. I.J.L. | ACTING ENGINEER OF BRIDGES AND STRUCTURES | | SHEET NO. 7 OF 11 SHEETS | | ILLINOIS FED. AID PR | | |

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STANDARD BAR SPLICER ASSEMBLY

| Minimum Lap Lengths | | | | | |
|---------------------------|---------|---------|---------|---------|---------|
| Bar size to be spliced | Table 1 | Table 2 | Table 3 | Table 4 | Table 5 |
| 3, 4 | 1'-5'' | 1'-11'' | 2'-1" | 2'-4" | 2'-3" |
| 5 | 1'-9'' | 2'-5" | 2'-7'' | 2'-11'' | 2'-10'' |
| 6 | 2'-1" | 2'-11'' | 3'-1'' | 3'-6'' | 3'-4'' |
| 7 | 2'-9'' | 3'-10'' | 4'-2'' | 4'-8'' | 4'-6'' |
| 8 | 3′-8′′ | 5'-1'' | 5′-5″ | 6'-2'' | 5′-10′′ |
| 9 | 4'-7'' | 6′-5′′ | 6'-10'' | 7'-9'' | 7′-5′′ |

Table 1: Black bar, 0.8 Class C

Table 2: Black bar, Top bar lap, 0.8 Class C

Table 3: Epoxy bar, 0.8 Class C

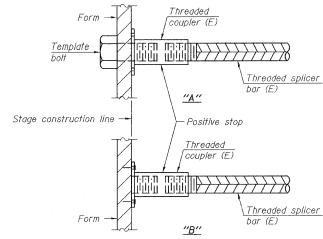
Table 4: Epoxy bar, Top bar lap, 0.8 Class C

Table 5: Epoxy bar, Top bar lap, Class B

Threaded splicer bar length = min. lap length + $1_2^{l}{}^{\prime\prime}$ + thread length

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

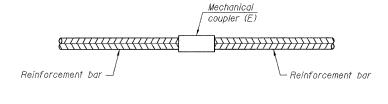
| Location | Bar size | No. assemblies required | Table for minimu lap length |
|-------------|-------------|-------------------------|--------------------------------|
| Abutments | #5 | 22 | 3 |
| | | | |
| | - | | |
| | | | |



INSTALLATION AND SETTING METHODS

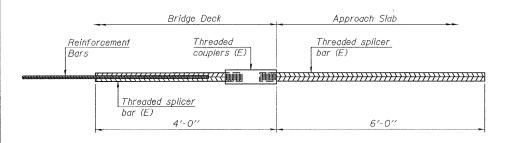
"A": Set bar splicer assembly by means of a template bott.
"B": Set bar splicer assembly by nailing to wood forms or cementing to steel forms.

(E): Indicates epoxy coating.



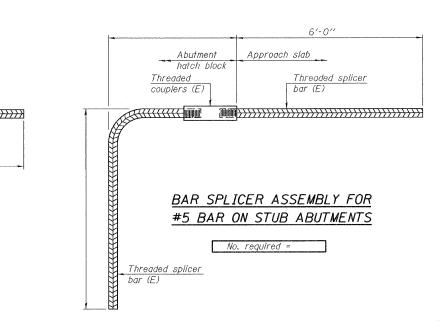
STANDARD MECHANICAL SPLICER

| Location | Bar size | No. assemblies required |
|----------|-------------|----------------------------|
| | | |
| ~~~~ | | |
| | | |



BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

No. required =



<u>NOTES</u>

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.

All reinforcement shall be lapped and tied to the splicer bars.

Bar splicer assemblies shall be epoxy coated according to the requirements

Bar spiloer assemblies shall be epoxy coarea according to the requirement for reinforcement bars. See Section 508 of the Standard Specifications. See special provision for Mechanical Splicers.

See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BSD-1

7-1-10

DESIGNED - G.G.E.

CHECKED - I.J.L.

DRAWN - Drew Christopher

CHECKED - G.G.E. I.J.L.

SLT-92-001-10

DATE - January 11, 2010
SERVICES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER DETAILS

SN 081-0047

SHEET NO. 11 OF 11 SHEETS