

06-13-14 LETTING ITEM 066

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED
HIGHWAY PLANS

FAI ROUTE 39 (I-39)
D2 BRIDGE PAINTING 2014-3

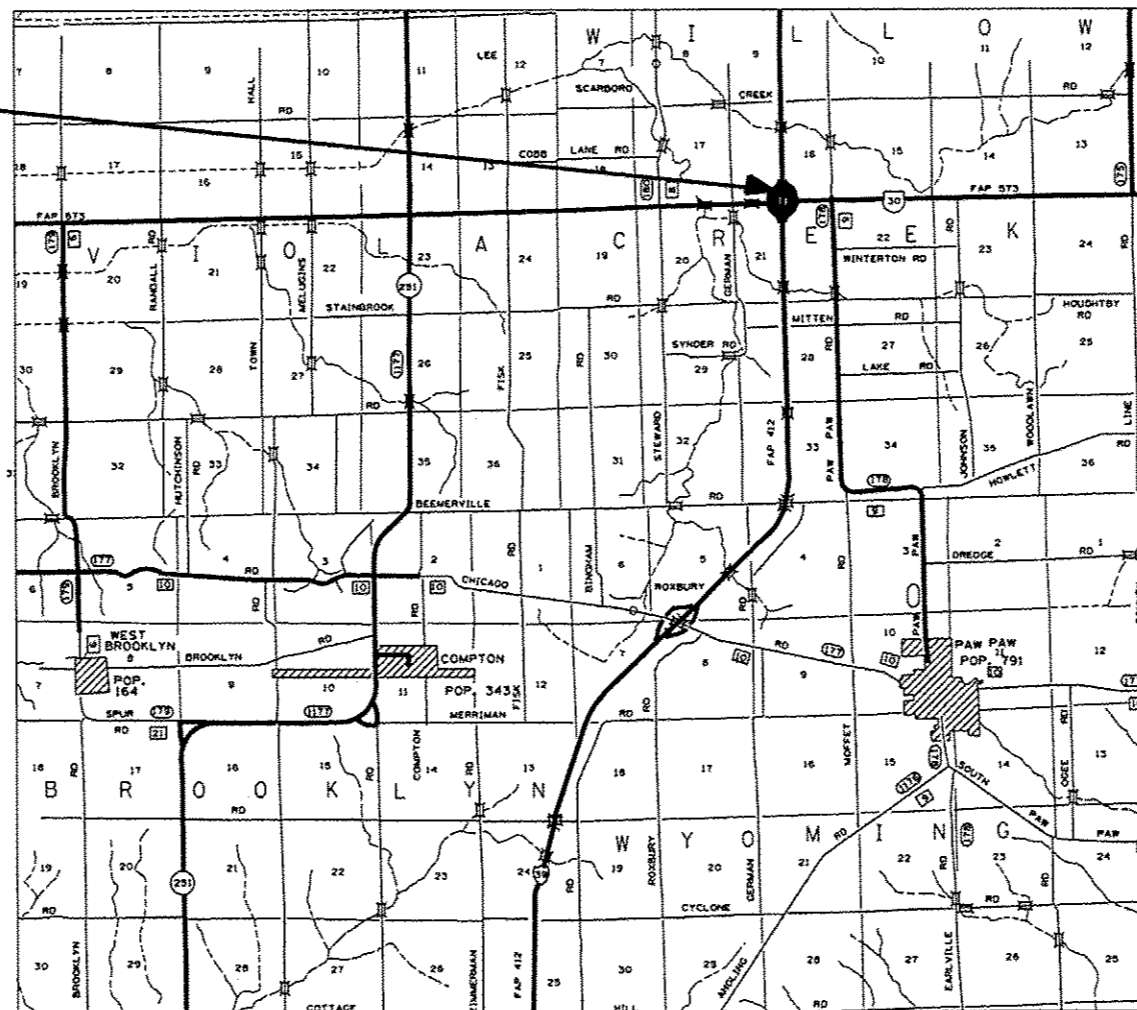
TYPE of IMPROVEMENT - BRIDGE PAINTING
LEE COUNTY

C-92-049-14

R.2E.

T.38 N.

T.38 N.

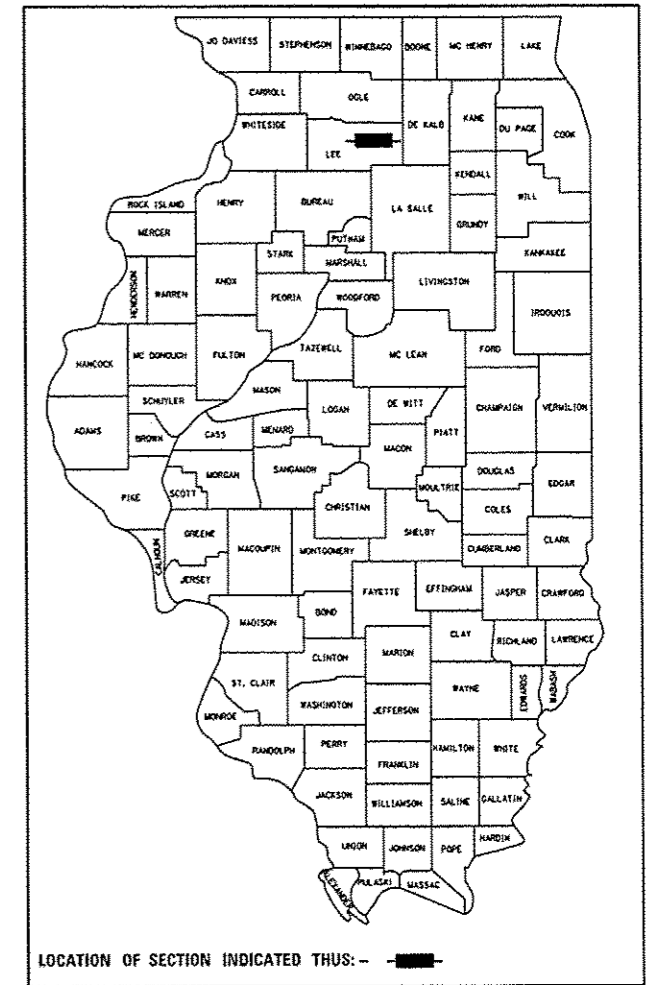


SN: 052-0052
SN: 052-0053

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|---------------------------|--------|--------------------|-----------|
| 39 | D2 BRIDGE PAINTING 2014-3 | LEE | 35 | 1 |
| ILLINOIS | | | CONTRACT NO. 64K10 | |

*35-0-27

D-92-030-14

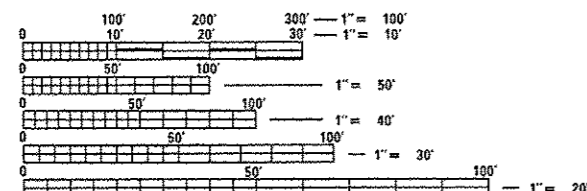


LOCATION OF SECTION INDICATED THUS: -

FOR INDEX OF SHEETS, SEE SHEET NO. 2

FOR STATE STANDARDS, DISTRICT STANDARDS
AND GENERAL NOTES, SEE SHEET NO. 2

LEE COUNTY - WILLOW TOWNSHIP - SECTION 16, 21



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

PROJECT MANAGER MAHMOUD ETEMADI (815) 284-5393

CONTRACT NO. 64K10

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
SUBMITTED March 31st 2014.
Paul C. [Signature]
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
May 9 2014
John D. Baranzelli, P.E.
ENGINEER OF DESIGN AND ENVIRONMENT
May 9 2014
Omer Osman, P.E.
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

R.2E.

INDEX OF SHEETS

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- 2 INDEX OF SHEETS, GENERAL NOTED, STATE STANDARDS, DISTRICT STANDARDS
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- 4 DISTRICT STANDARDS
- 5 EXISTING TYPICAL SECTIONS
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- 13 - 15 TEMPORARY PAVEMENT PLAN SHEETS
- 16 - 21 TRAFFIC CONTROL PLAN
- * 22 - 35 EXISTING BRIDGE PLANS
28-35 DELETED

STATE STANDARDS

- 606001 - 05 CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
- 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
- 701101 - 04 OFF-RD OPERATIONS, MULTILANE, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
- 701201 - 04 LANE CLOSURE 2L, 2W, DAY ONLY, FOR SPEEDS ≥ 45 MPH
- 701301 - 04 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
- 701311 - 03 LANE CLOSURE 2L, 2W MOVING OPERATIONS-DAY ONLY
- 701321 - 13 LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
- 701331 - 04 LANE CLOSURE, 2L, 2W, WITH RUN-AROUND, FOR SPEEDS ≥ 45 MPH
- 701502 - 06 URBAN LANE CLOSURE, 2L, 2W, BI-DIRECTIONAL LEFT TURN LANE
- 701701 - 09 URBAN LANE CLOSURE MULTILANE INTERSECTION
- 701901 - 03 TRAFFIC CONTROL DEVICES
- 704001 - 07 TEMPORARY CONCRETE BARRIER
- 720011 - 01 METAL POSTS FOR SIGNS, MARKERS & DELINEATORS
- 728001 - 01 TELESCOPING STEEL SIGN SUPPORT
- 729001 - 01 APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS & MARKERS)

DISTRICT STANDARDS

39.2 INFORMATIONAL WARNING SIGNS (FOR NARROW TRAVEL LANES)

GENERAL NOTES

ALL BORROWWASTEUSE SITES MUST BE APPROVED BY THE DEPARTMENT PRIOR TO REMOVING ANY MATERIAL FROM THE PROJECT OR INITIATING ANY EARTHMOVING ACTIVITIES, INCLUDING TEMPORARY STOCKPIILING OUTSIDE THE LIMITS OF CONSTRUCTION.

THE CONTRACTOR SHALL SEED ALL DISTURBED AREAS WITHIN THE PROJECT LIMITS. SEEDING 2A SHALL BE USED. THIS WORK WILL BE INCLUDED IN THE CONTRACT UNIT PRICE PER LUMP SUM FOR CLEANING AND PAINTING STEEL BRIDGE NO.1 AND CLEANING AND PAINTING STEEL BRIDGE NO.2 RESPECTIVELY.

MULCH METHOD II SHALL BE APPLIED OVER ALL SEEDED AREAS. THIS SHALL BE INCLUDED IN THE COST OF THE CLEANING AND PAINTING STEEL BRIDGE NO.1 AND CLEANING AND PAINTING STEEL BRIDGE NO.2 RESPECTIVELY.

FERTILIZER NUTRIENTS SHALL BE APPLIED AT THE RATE SPECIFIED IN SECTIONS 250 AND 252 OF THE STANDARD SPECIFICATIONS. THIS SHALL BE INCLUDED IN THE COST OF THE CLEANING AND PAINTING STEEL BRIDGE NO.1 AND CLEANING AND PAINTING STEEL BRIDGE NO.2 RESPECTIVELY.

THE SSPC OP1 AND OP2 CONTRACT CERTIFICATIONS WILL BE REQUIRED FOR THIS CONTRACT.

NO MATERIALS, EQUIPMENT, VEHICLES OR OTHER HAZARDS SHALL BE WITHIN 3'-6" OF THE TEMPORARY CONCRETE BARRIER WALL MEASURED FROM THE CLOSEST POINT OF THE BARRIER WALL PERPENDICULAR TO THE HAZARD. BARRIER WALL SHALL BE PINNED ON THE TRAFFIC SIDE OF THE BARRIER WALL STA. 99+15 TO STA. 99+65 & FROM STA. 100+30 TO STA. 100+88.

NOTHING SHALL BE STORED WITHIN 25 FT OF IMPACT ATTENUATORS & WITHIN 25 FT OF HINGE POINT OF BARRIER WALL

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. THE FOLLOWING LISTED UTILITIES LOCATED WITHIN THE PROJECT LIMITS OR IMMEDIATELY ADJACENT TO THE PROJECT CONSTRUCTION LIMITS ARE MEMBERS OF JULIE:

| Company | Type | Contact Name | Contact Information |
|-----------------------------|----------------|--------------------|--|
| Commonwealth Edison Company | Electric | Ms. Nora Fernandez | 123 Energy Ave. Rockford, IL 61109 Phone No. 815-490-2889 |
| Fronter | Telephone | Mr. Donald Bolnera | 2239 Newburg Road, Belvidere IL 61008 Phone No. 815-644-8171 |
| Windstream | Telephone | Mr. Paul Boumann | 1815 S. Mayores Road, Suite 900 Oak Brooke Terrace IL 60181 Phone No. 630-825-4751 |
| G4S Technology, LLC | Communications | Mr. Chance Elker | 1428 Sherman Road, Romeoville IL 60446 Phone No. 630-343-2802 |

IDOT IS NOT A MEMBER OF JULIE. IF YOU ARE NEAR ANY OVERHEAD LIGHTING, INTERSECTION LIGHTING OR TRAFFIC SIGNALS, CONTACT THE IDOT TRAFFIC OFFICE AT 815/284-5469 AT LEAST 48 HOURS PRIOR TO WORK.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE MUNICIPALITY TO DETERMINE APPROVED METHODS OF UTILITY STRUCTURE ADJUSTMENT. UTILITY STRUCTURES MAY INCLUDE, BUT ARE NOT LIMITED TO, MANHOLES, WATER VALVES, HANDHOLES, ETC. ALL MATERIALS AND WORK NECESSARY TO COMPLETE ADJUSTMENTS PER MUNICIPALITY REQUIREMENTS SHALL BE CONSIDERED INCLUDED IN THE COST OF THE ASSOCIATED ADJUSTMENT PAY ITEM.

| | | | | | | | | |
|------------------|-----------------|---|---|-----------------------------|---------------------------|--------------------------|-----------------------------|--------------|
| DESIGNED - _____ | REVISED - _____ | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | INDEX OF SHEETS, GENERAL NOTES STATE STANDARDS, DISTRICT STANDARDS | F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | | | | 39 | 02 Bridge Painting 2014-3 | LEE | 35 | 2 |
| DRAWN - _____ | REVISED - _____ | | | SHEET _____ OF _____ SHEETS | | STA. _____ TO STA. _____ | [ILLINOIS] FED. AID PROJECT | |
| CHECKED - _____ | REVISED - _____ | | | | | | CONTRACT NO. 64K10 | |
| DATE - _____ | REVISED - _____ | | | | | | Rev. | |

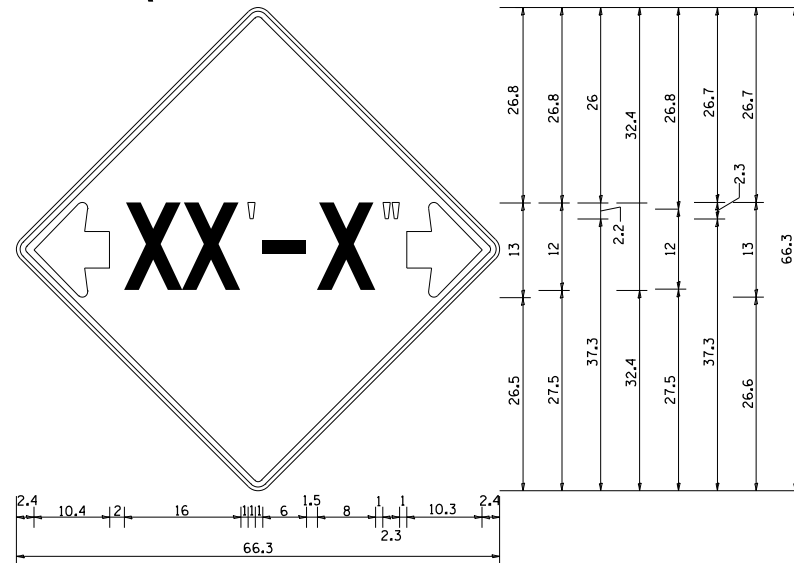
| SUMMARY OF QUANTITIES | | | 100% State 0014 |
|-----------------------|--|-------|--------------------|
| Pay Item No. | Description | Units | Total Quantity |
| 44000500 | COMBINATION CURB AND GUTTER REMOVAL | FOOT | 2,338 |
| 60608562 | COMBINATION CONCRETE CURB AND GUTTER, TYPE M-4.12 | FOOT | 2,338 |
| 60618300 | CONCRETE MEDIAN SURFACE, 4 INCH | SQ FT | 8,215 |
| 67100100 | MOBILIZATION | L SUM | 1 |
| 70100200 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701331 | EACH | 1 |
| 70100450 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701201 | L SUM | 1 |
| 70102622 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701502 | L SUM | 1 |
| 70102635 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701701 | L SUM | 1 |
| 70300100 | SHORT TERM PAVEMENT MARKING | FOOT | 170 |
| 70300210 | TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS | SQ FT | 187.2 |
| 70300220 | TEMPORARY PAVEMENT MARKING - LINE 4" | FOOT | 10,968 |
| 70300240 | TEMPORARY PAVEMENT MARKING - LINE 6" | FOOT | 1,040 |
| 70300260 | TEMPORARY PAVEMENT MARKING - LINE 12" | FOOT | 480 |
| 70301000 | WORK ZONE PAVEMENT MARKING REMOVAL | SQ FT | 4,484 |
| 70400100 | TEMPORARY CONCRETE BARRIER | FOOT | 646.17 |
| 70400200 | RELOCATE TEMPORARY CONCRETE BARRIER | FOOT | 646.17 |
| 70600250 | IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3 | EACH | 2 |
| 70600350 | IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3 | EACH | 2 |
| * 78001110 | PAINT PAVEMENT MARKING - LINE 4" | FOOT | 10,400 |
| 78300100 | PAVEMENT MARKING REMOVAL | SQ FT | 800 |
| X4400110 | TEMPORARY PAVEMENT REMOVAL | SQ YD | 1,303 |
| X4403800 | MEDIAN SURFACE REMOVAL | SQ FT | 8,215 |
| X5067501 | BRIDGE CLEANING AND PAINTING WARRANTY NUMBER 1 | L SUM | 1 |
| X5067502 | BRIDGE CLEANING AND PAINTING WARRANTY NUMBER 2 | L SUM | 1 |
| Z0007101 | CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 1 | L SUM | 1 |
| Z0007102 | CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 2 | L SUM | 1 |
| Z0010501 | CLEANING AND PAINTING STEEL BRIDGE NO. 1 | L SUM | 1 |
| Z0010502 | CLEANING AND PAINTING STEEL BRIDGE NO. 2 | L SUM | 1 |
| Z0062456 | TEMPORARY PAVEMENT | SQ YD | 1,303 |

29

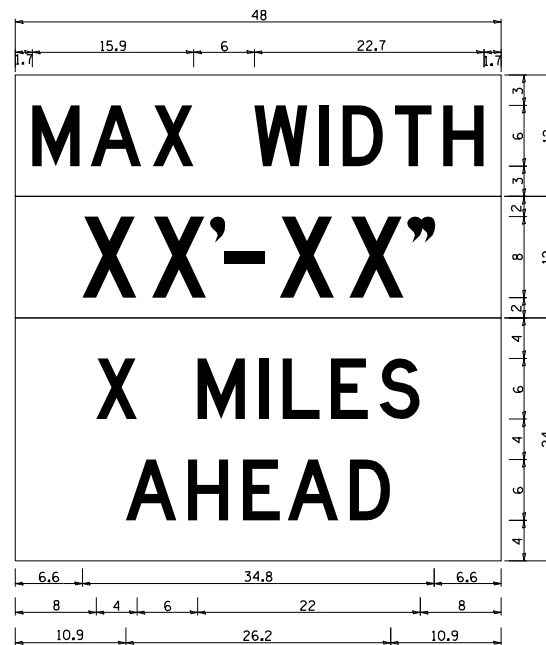
* Specialty Items

| | | | | | | | | | |
|------------------|-----------------|---|--|--|--------------------|---------------------------|--------|-----------------|--------------|
| DESIGNED - _____ | REVISED - _____ | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | SUMMARY OF QUANTITIES | | F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| DRAWN - _____ | REVISED - _____ | | | | 39 | D2 Bridge Painting 2014-3 | LEE | 35 | 3 |
| CHECKED - _____ | REVISED - _____ | | SHEET _____ OF _____ SHEETS STA. _____ TO STA. _____ | | CONTRACT NO. 64K10 | | | | |
| DATE - _____ | REVISED - _____ | | ILLINOIS FED. AID PROJECT | | | | | | |

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°



W12-1103 (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;

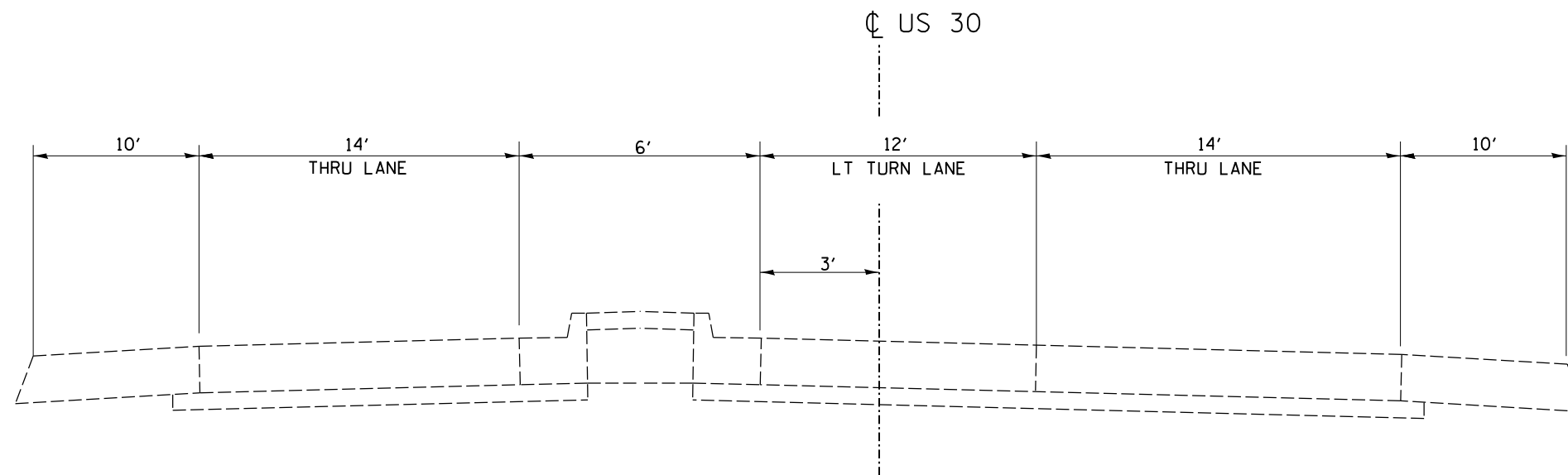
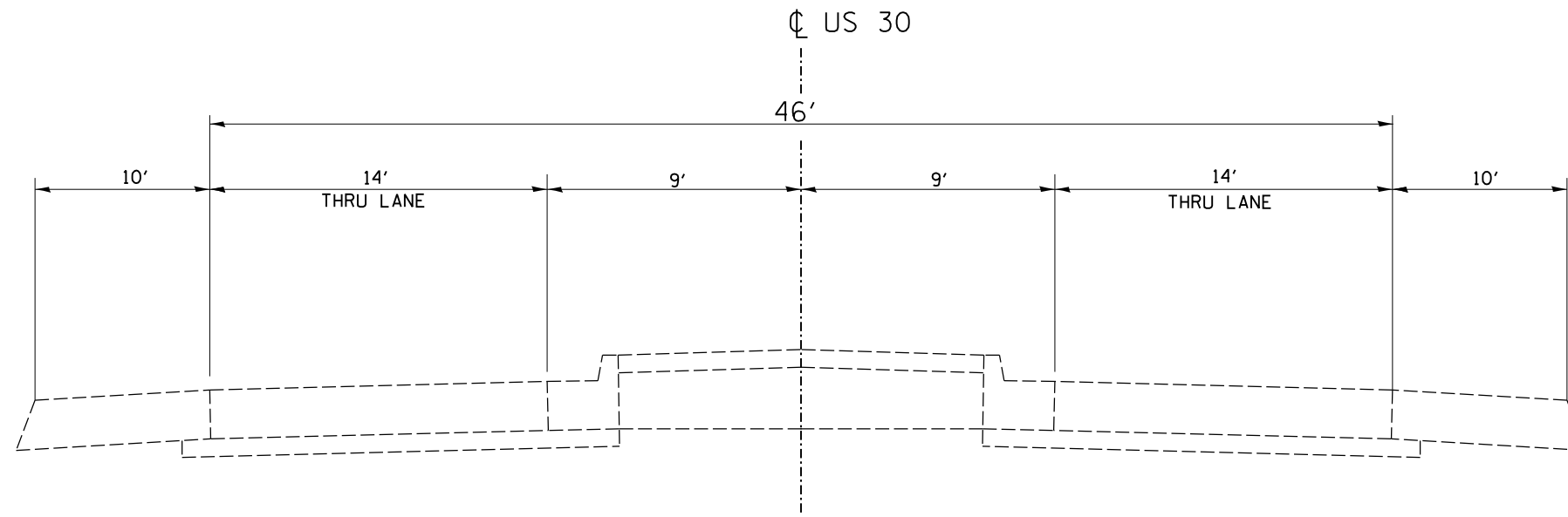
All work to furnish and install these signs shall be included in the cost of the Traffic Control Standards and shall not be paid for separately.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

REVISED - 5-15-09

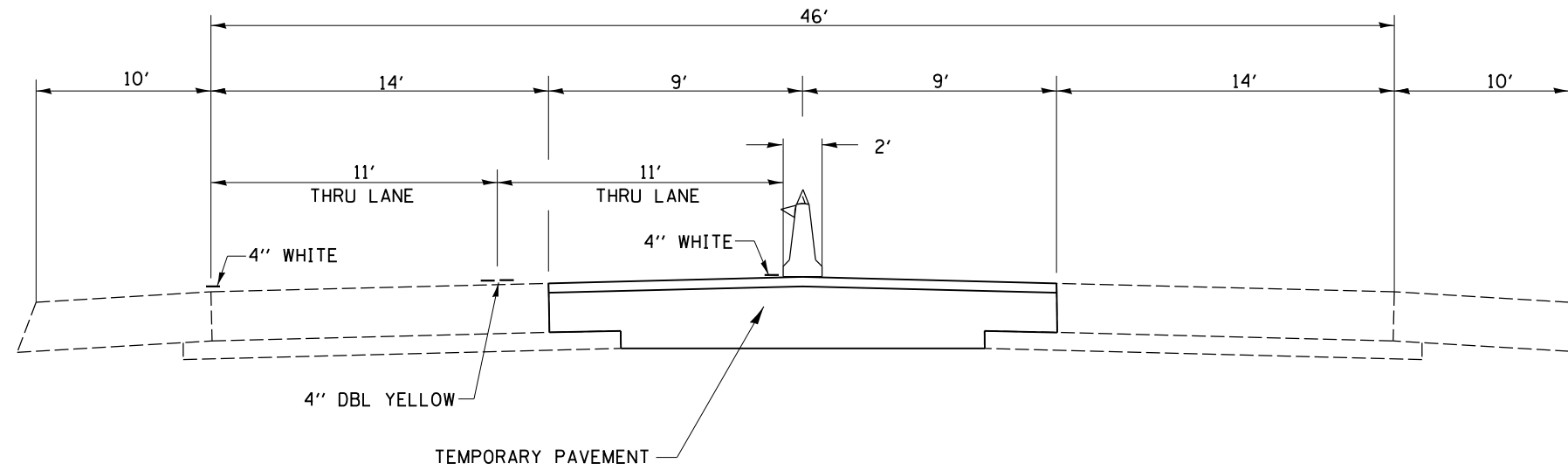
INFORMATIONAL WARNING SIGNS (FOR NARROW TRAVEL LANES) 39.2

| | | | | | | | | | |
|--|------------------|-----------------|---|---------------------------|---------------------------|---------------------------|--------|--------------|-----------|
| | DESIGNED - _____ | REVISED - _____ | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | DISTRICT STANDARDS | F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | DRAWN - _____ | REVISED - _____ | | | 39 | D2 Bridge Painting 2014-3 | LEE | 35 | 4 |
| | CHECKED - _____ | REVISED - _____ | | | CONTRACT NO. 64K10 | | | | |
| | DATE - _____ | REVISED - _____ | | | ILLINOIS FED. AID PROJECT | | | | |

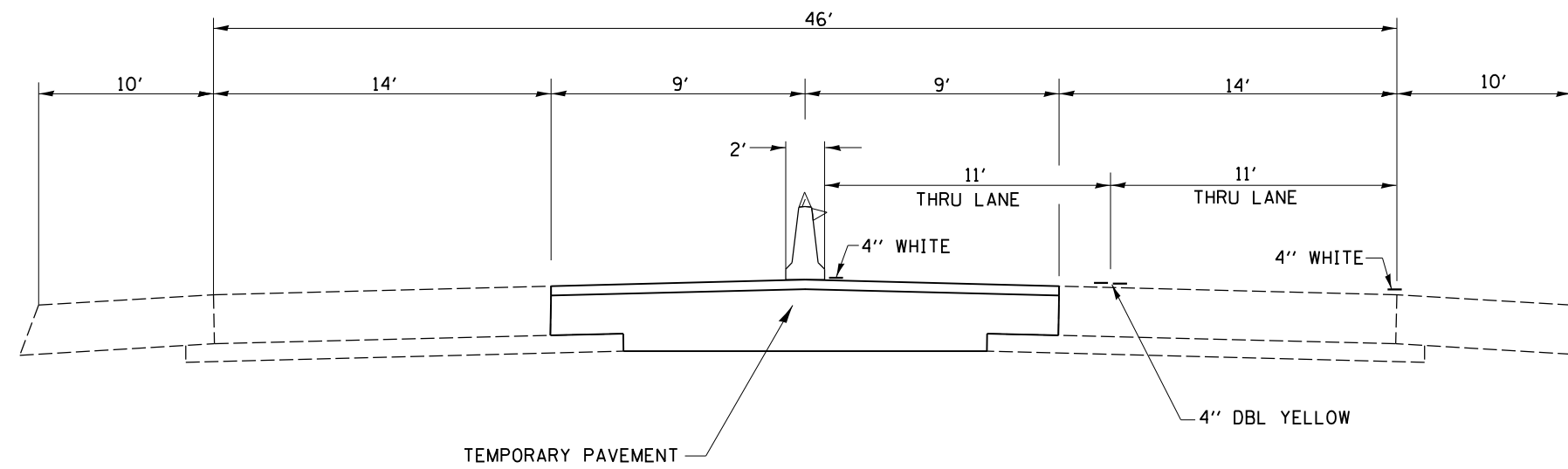


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|--|------------------|-----------------|---|----------------------------------|---|-----------------------------------|--------------------|-----------------|-------------|--|--|
| | DESIGNED - _____ | REVISED - _____ | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | EXISTING TYPICAL SECTIONS | F.A.I. RTE. 39 | SECTION D2 Bridge Painting 2014-3 | COUNTY LEE | TOTAL SHEETS 35 | SHEET NO. 5 | | |
| | DRAWN - _____ | REVISED - _____ | | | SHEET ____ OF ____ SHEETS STA. _____ TO STA. _____ | | CONTRACT NO. 64K10 | | | | |
| | CHECKED - _____ | REVISED - _____ | | | ILLINOIS FED. AID PROJECT | | | | | | |
| | DATE - _____ | REVISED - _____ | | | | | | | | | |

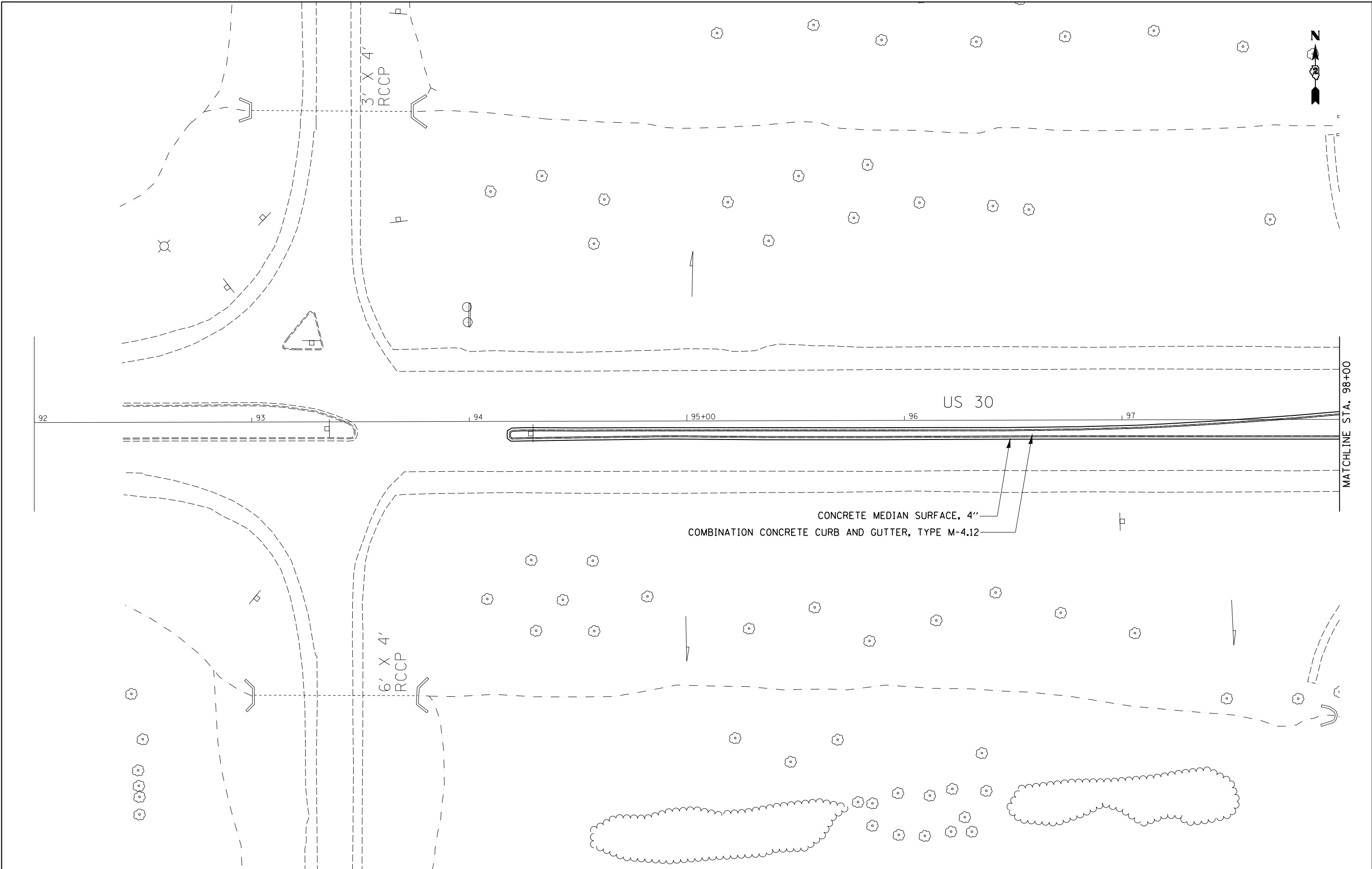
STAGE 1



STAGE 2



| | | | | | | | | | | |
|------------------|-----------------|---|-------------------------------------|-----------------------------|--------------------------|---|----------------------|------------------------------|--------------------------|--|
| DESIGNED - _____ | REVISED - _____ | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | TYPICAL SECTIONS STAGING | | F.A.I. RTE. 39 | SECTION D2 Bridge Painting 2014-3 | COUNTY LEE | TOTAL SHEETS 35 | SHEET NO. 6 | |
| DRAWN - _____ | REVISED - _____ | | SCALE: _____ | SHEET _____ OF _____ SHEETS | STA. _____ TO STA. _____ | CONTRACT NO. 64K10 | | | | |
| CHECKED - _____ | REVISED - _____ | | ILLINOIS FED. AID PROJECT | | | | | | | |
| DATE - _____ | REVISED - _____ | | | | | | | | | |



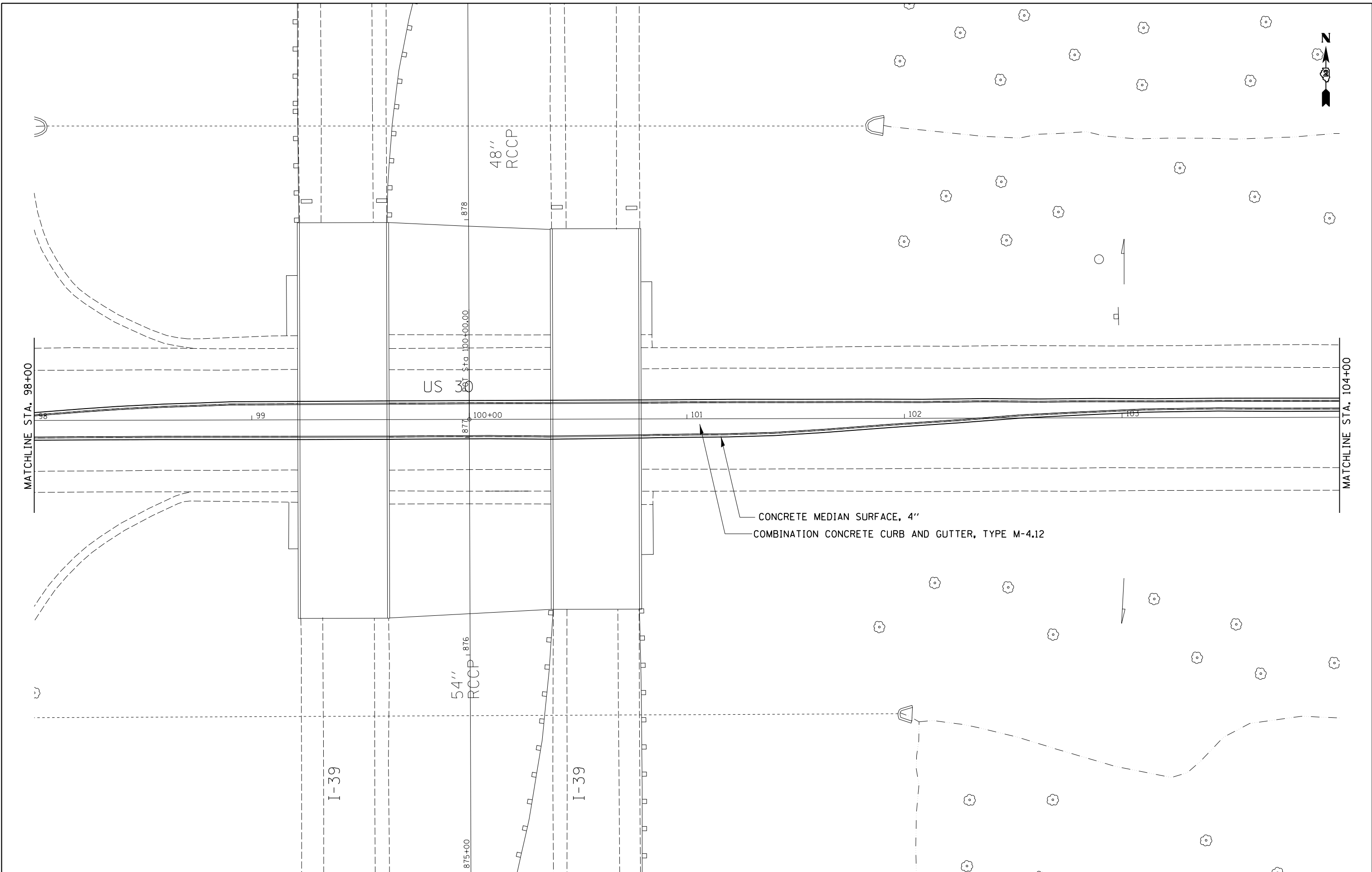
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| DESIGNED - _____ | REVISED - _____ |
| DRAWN - _____ | REVISED - _____ |
| CHECKED - _____ | REVISED - _____ |
| DATE - _____ | REVISED - _____ |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

PLAN SHEETS

SHEET ____ OF ____ SHEETS STA. _____ TO STA. _____

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|---------------------------|--------|--------------------|-----------|
| 39 | D2 Bridge Painting 2014-3 | LEE | 35 | 7 |
| ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 64K10 | |



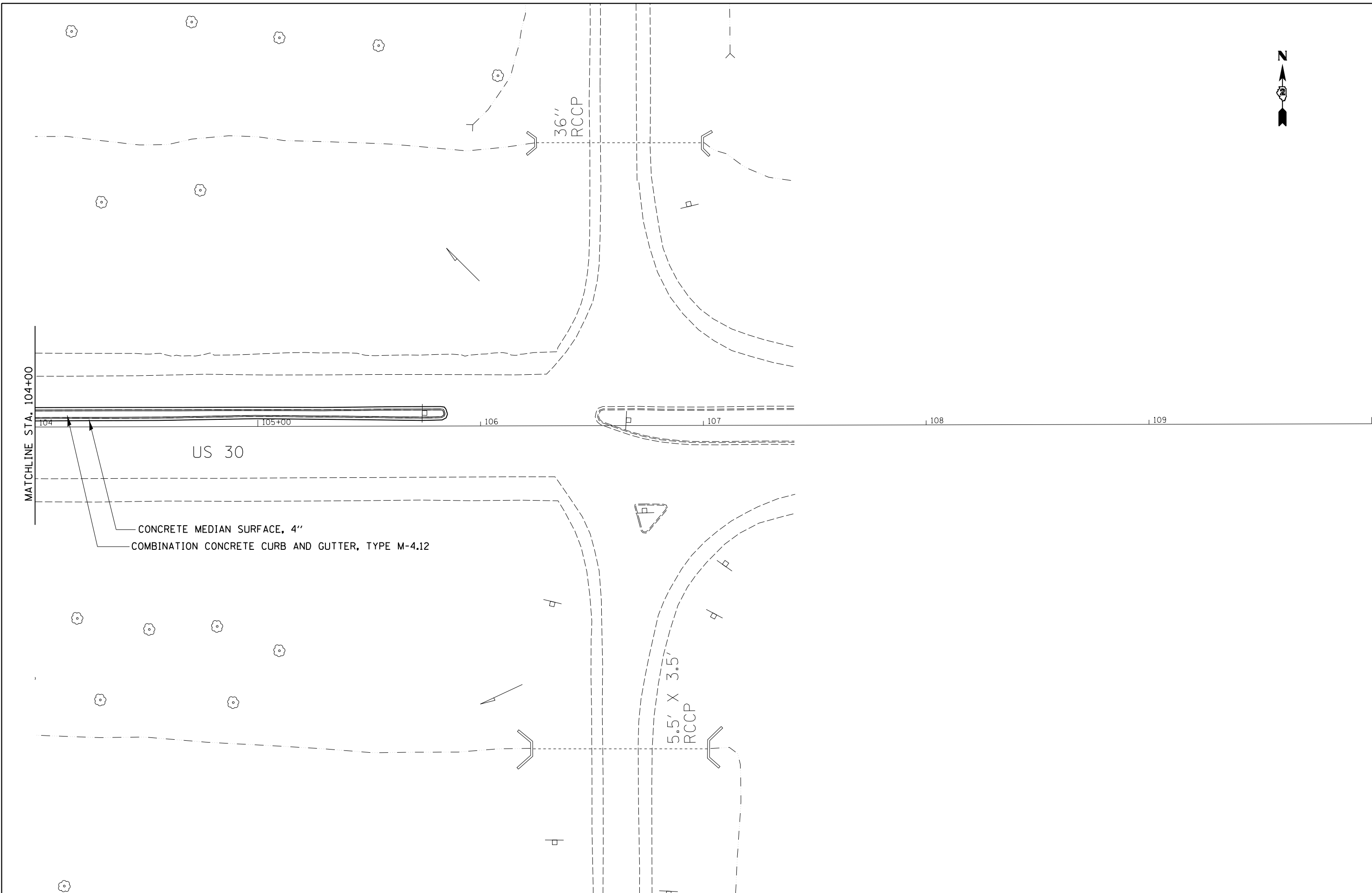
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| DESIGNED - _____ | REVISED - _____ |
| DRAWN - _____ | REVISED - _____ |
| CHECKED - _____ | REVISED - _____ |
| DATE - _____ | REVISED - _____ |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

PLAN SHEETS

SHEET _____ OF _____ SHEETS STA. _____ TO STA. _____

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|---------------------------|--------|--------------------|-----------|
| 39 | D2 Bridge Painting 2014-3 | LEE | 35 | 8 |
| ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 64K10 | |



MATCHLINE STA. 104+00

CONCRETE MEDIAN SURFACE, 4"
COMBINATION CONCRETE CURB AND GUTTER, TYPE M-4.12

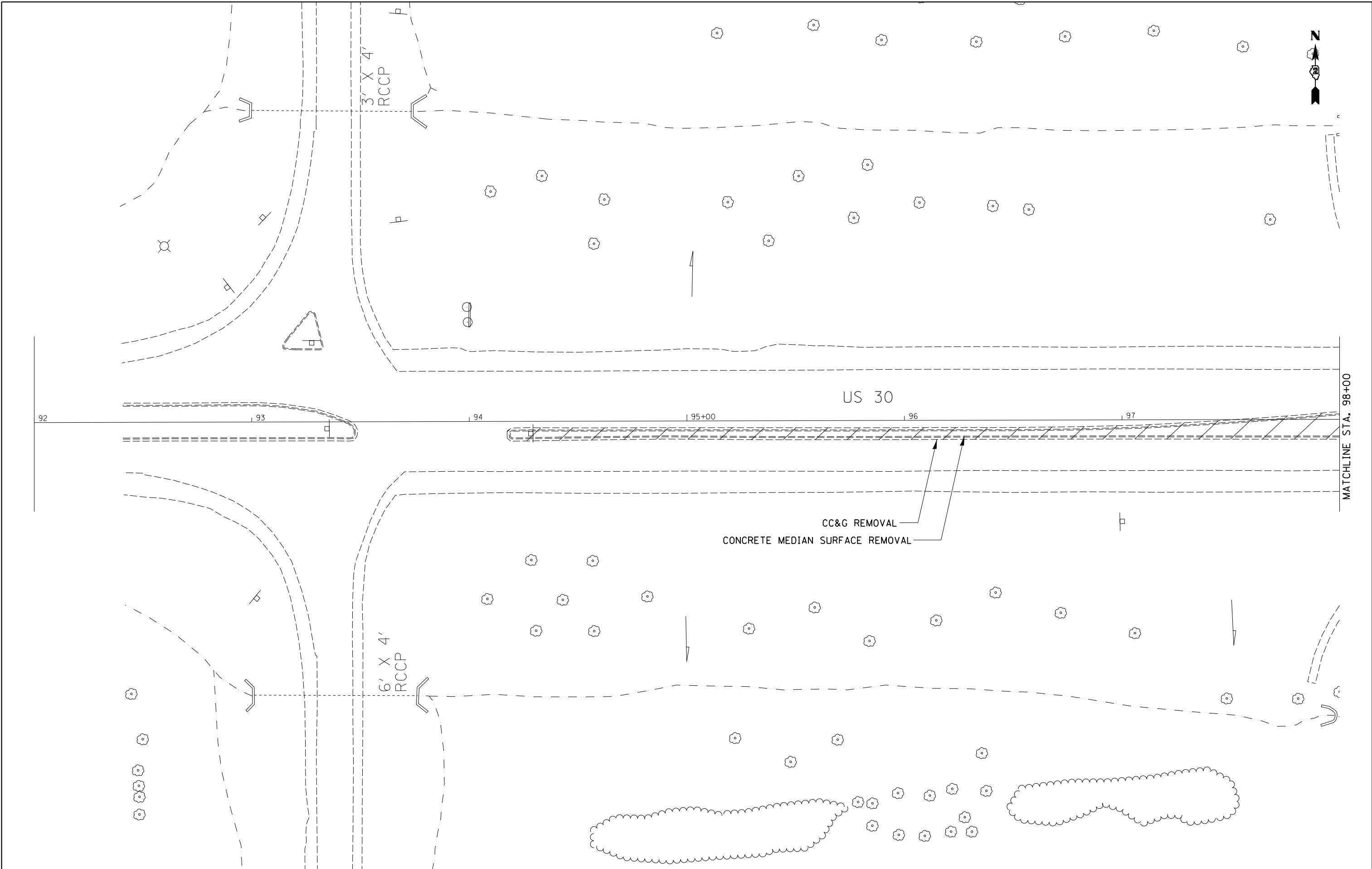
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

PLAN SHEETS

| | |
|------------------|-----------------|
| DESIGNED - _____ | REVISED - _____ |
| DRAWN - _____ | REVISED - _____ |
| CHECKED - _____ | REVISED - _____ |
| DATE - _____ | REVISED - _____ |

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|---------------------------|--------|--------------------|-----------|
| 39 | D2 Bridge Painting 2014-3 | LEE | 35 | 9 |
| ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 64K10 | |

SHEET ____ OF ____ SHEETS STA. _____ TO STA. _____



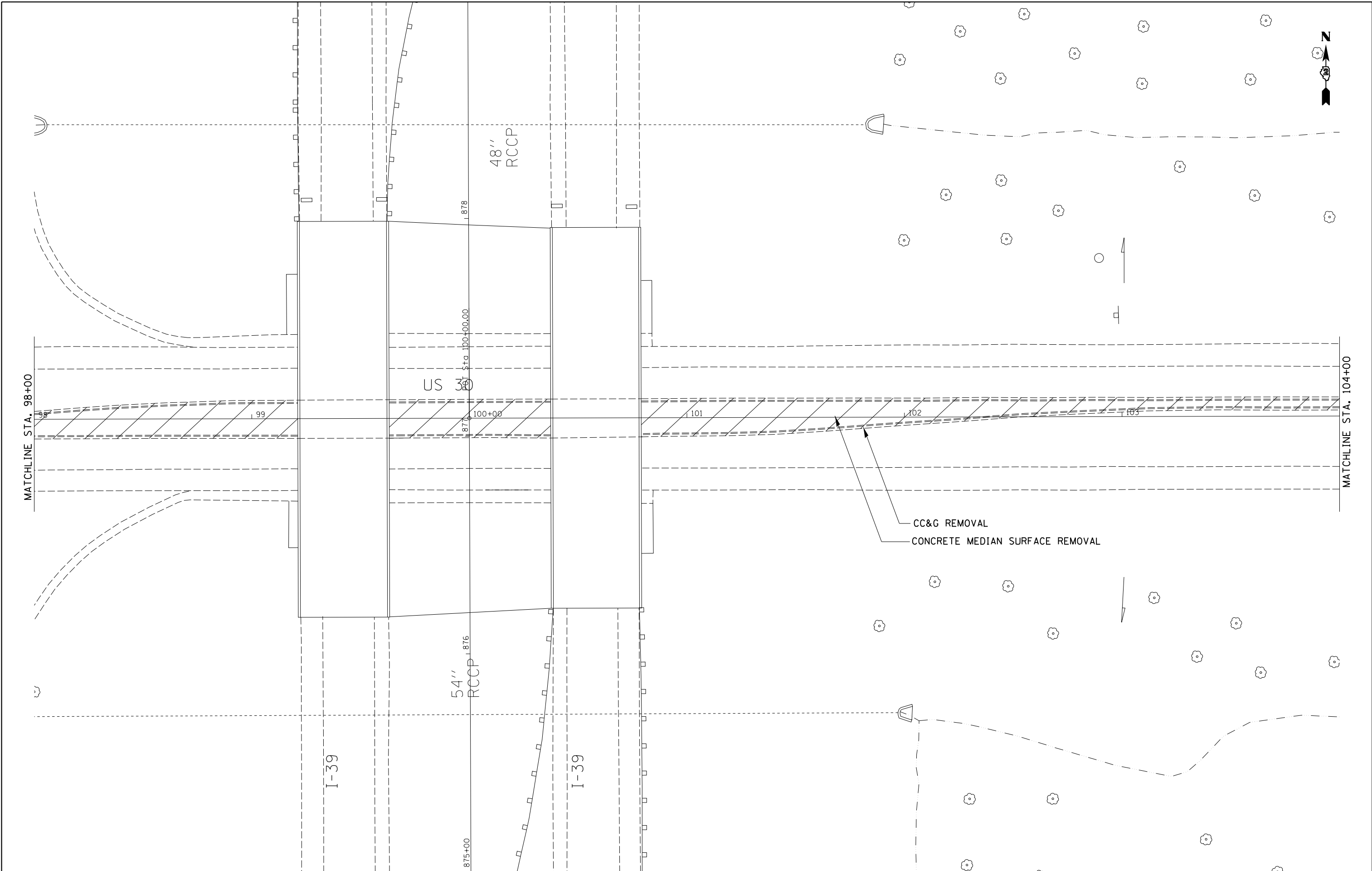
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| DESIGNED | - | _____ | REVISED | - | _____ |
| DRAWN | - | _____ | REVISED | - | _____ |
| CHECKED | - | _____ | REVISED | - | _____ |
| DATE | - | _____ | REVISED | - | _____ |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

ISLAND REMOVAL PLAN SHEET

SHEET ____ OF ____ SHEETS STA. _____ TO STA. _____

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|---------------------------|--------|--------------------|-----------|
| 39 | D2 Bridge Painting 2014-3 | LEE | 35 | 10 |
| ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 64K10 | |



CC&G REMOVAL
 CONCRETE MEDIAN SURFACE REMOVAL

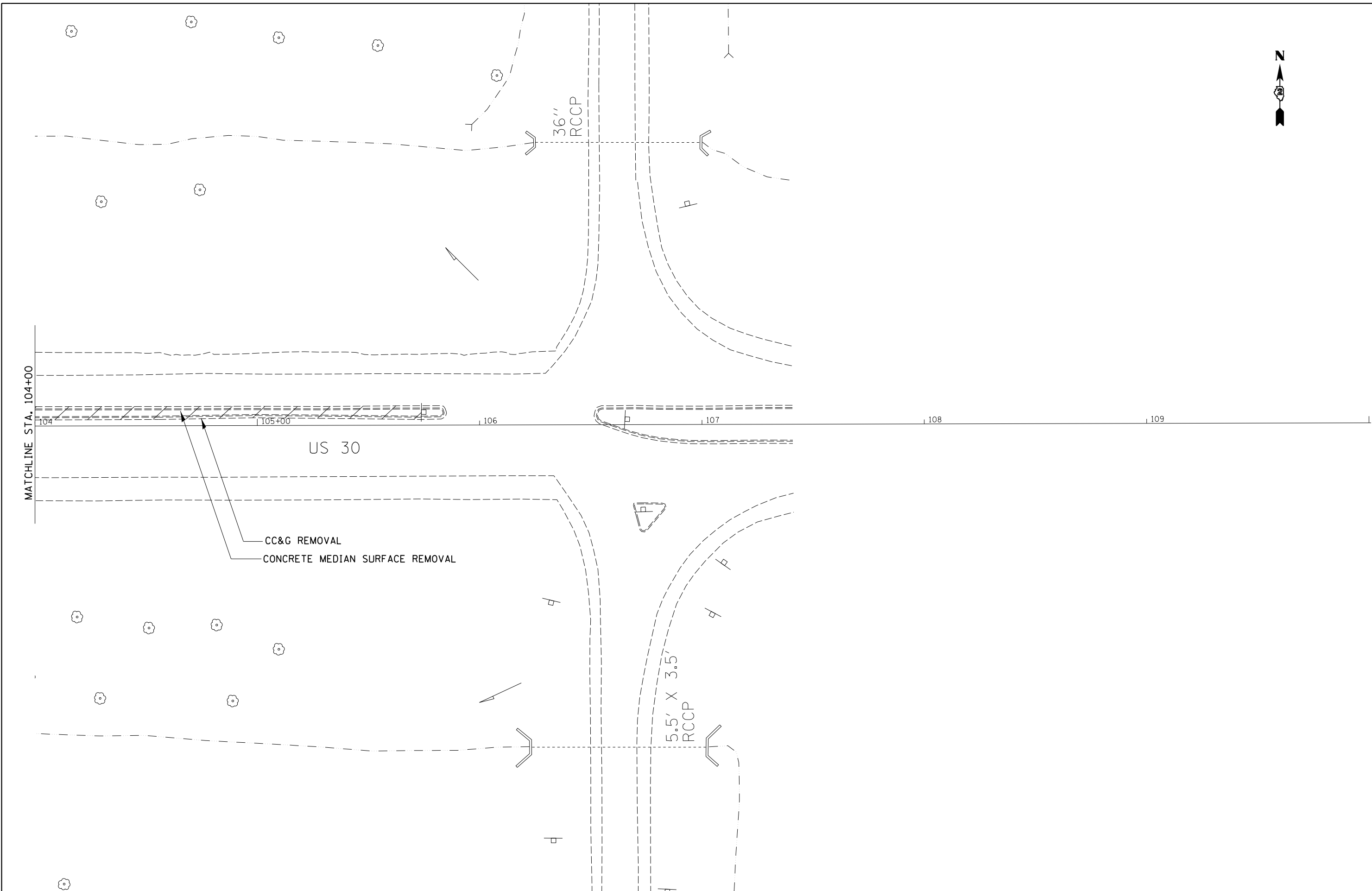
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| DESIGNED - _____ | REVISED - _____ |
| DRAWN - _____ | REVISED - _____ |
| CHECKED - _____ | REVISED - _____ |
| DATE - _____ | REVISED - _____ |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

ISLAND REMOVAL PLAN SHEET

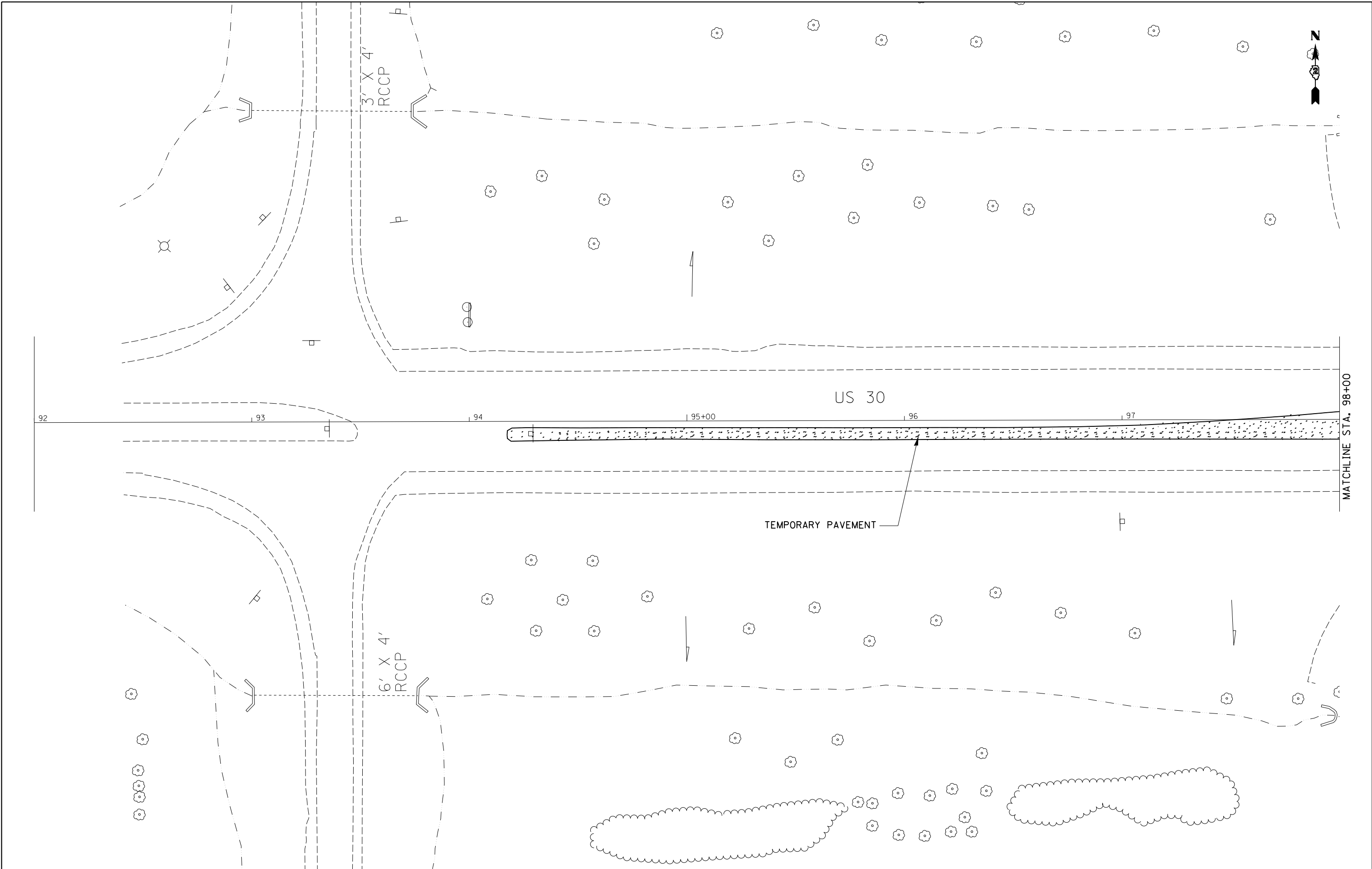
SHEET ____ OF ____ SHEETS STA. _____ TO STA. _____

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|---------------------------|--------|--------------------|-----------|
| 39 | D2 Bridge Painting 2014-3 | LEE | 35 | 11 |
| ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 64K10 | |



| | | | | | | | | | | |
|--|------------------|-----------------|---|----------------------------------|---------------------------|----------------|---------|--------|-----------------|--------------|
| | DESIGNED - _____ | REVISED - _____ | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | ISLAND REMOVAL PLAN SHEET | | F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | DRAWN - _____ | REVISED - _____ | | 39 | D2 Bridge Painting 2014-3 | LEE | 35 | 12 | | |
| | CHECKED - _____ | REVISED - _____ | | CONTRACT NO. 64K10 | | | | | | |
| | DATE - _____ | REVISED - _____ | | ILLINOIS FED. AID PROJECT | | | | | | |

SHEET ____ OF ____ SHEETS STA. _____ TO STA. _____



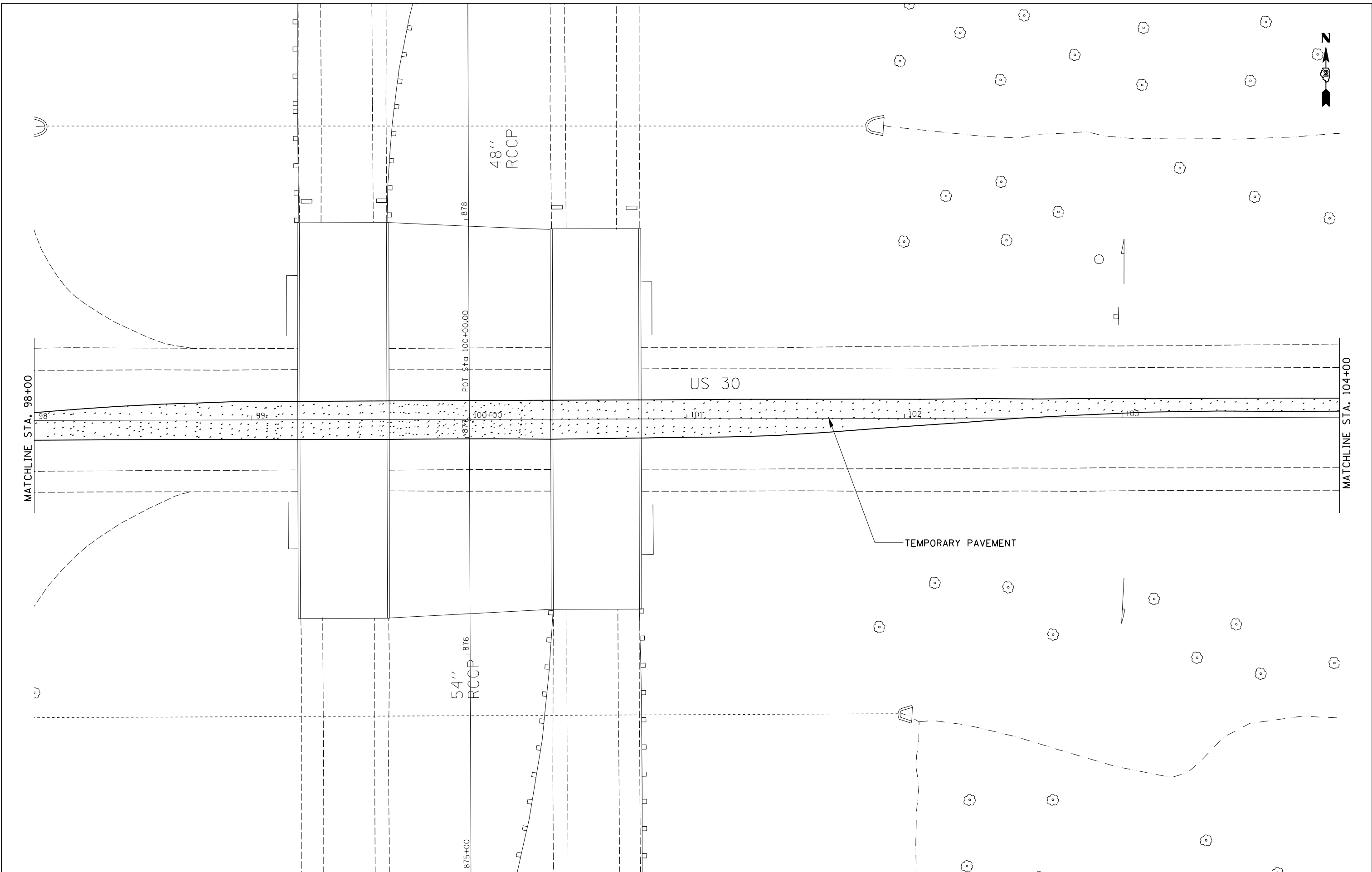
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|------------------|-----------------|
| DESIGNED - _____ | REVISED - _____ |
| DRAWN - _____ | REVISED - _____ |
| CHECKED - _____ | REVISED - _____ |
| DATE - _____ | REVISED - _____ |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY PAVEMENT
PLAN SHEET**

SHEET ____ OF ____ SHEETS STA. _____ TO STA. _____

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|---------------------------|--------|--------------------|-----------|
| 39 | D2 Bridge Painting 2014-3 | LEE | 35 | 13 |
| ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 64K10 | |



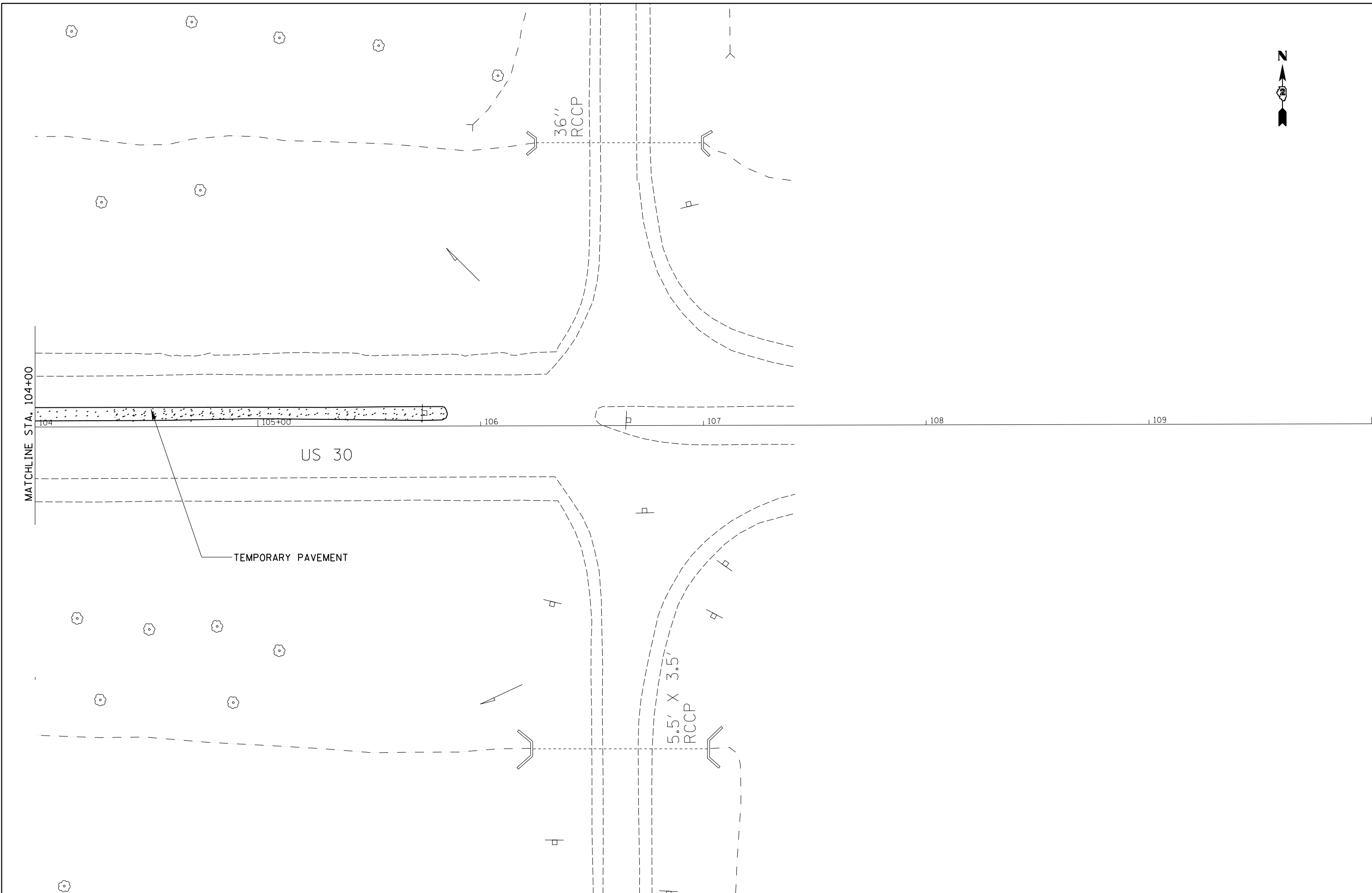
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|------------------|-----------------|
| DESIGNED - _____ | REVISED - _____ |
| DRAWN - _____ | REVISED - _____ |
| CHECKED - _____ | REVISED - _____ |
| DATE - _____ | REVISED - _____ |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY PAVEMENT
PLAN SHEET**

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

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|---------------------------|--------|--------------------|-----------|
| 39 | D2 Bridge Painting 2014-3 | LEE | 35 | 14 |
| ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 64K10 | |



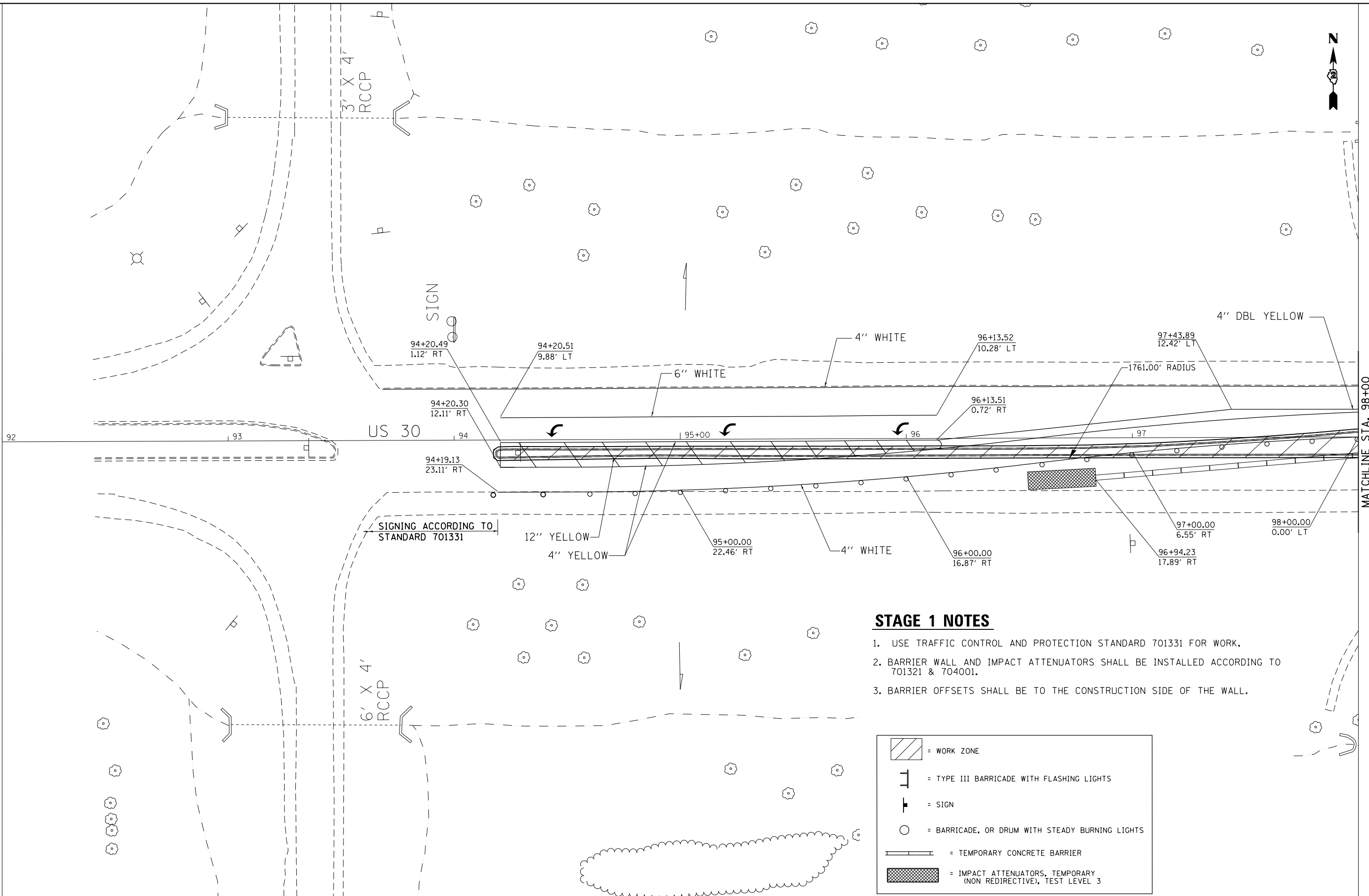
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|------------------|-----------------|
| DESIGNED - _____ | REVISED - _____ |
| DRAWN - _____ | REVISED - _____ |
| CHECKED - _____ | REVISED - _____ |
| DATE - _____ | REVISED - _____ |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY PAVEMENT
PLAN SHEET**

SHEET ____ OF ____ SHEETS STA. _____ TO STA. _____

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|---------------------------|--------|--------------------|-----------|
| 39 | D2 Bridge Painting 2014-3 | LEE | 35 | 15 |
| ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 64K10 | |



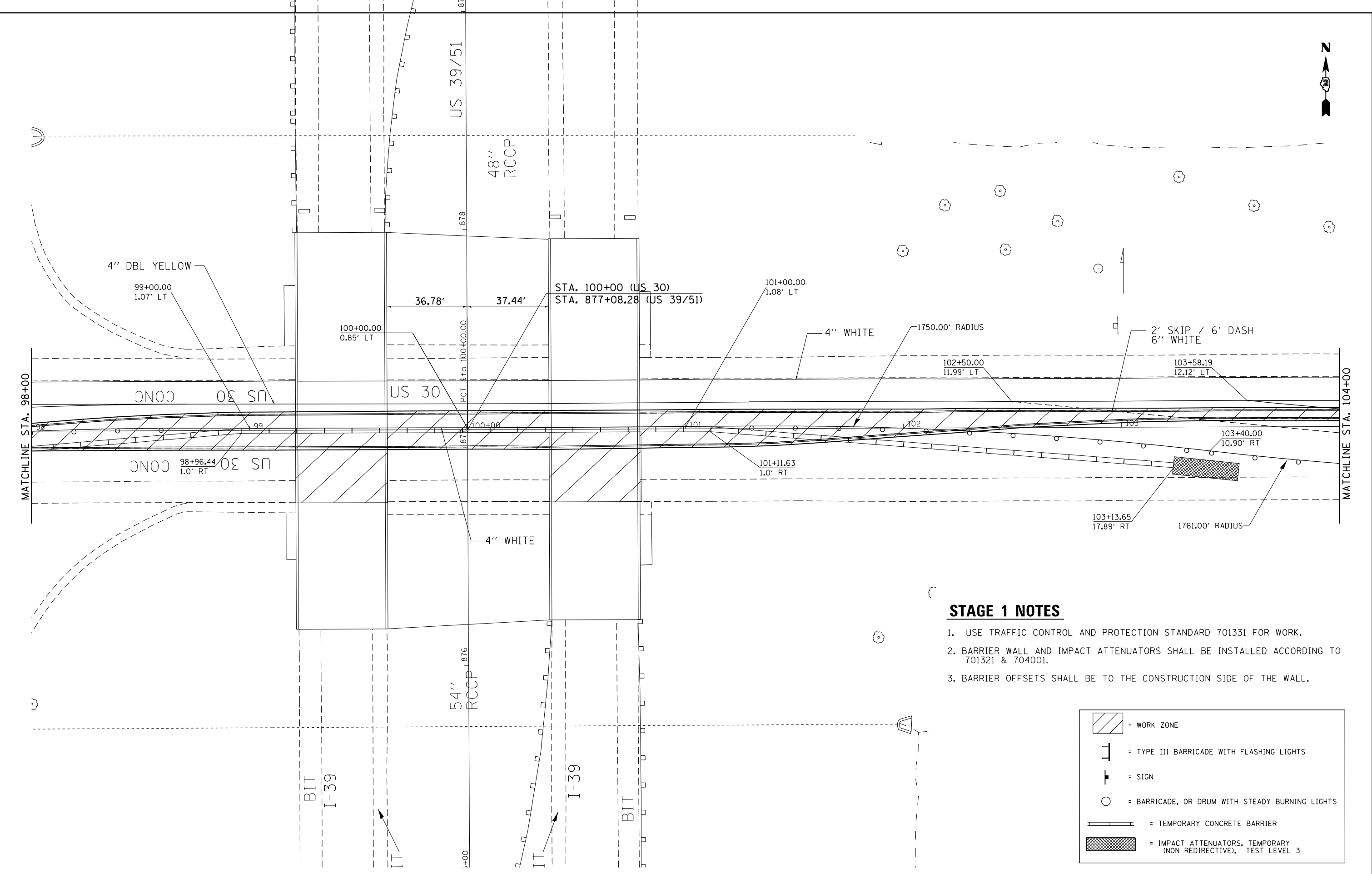
SIGNING ACCORDING TO STANDARD 701331

STAGE 1 NOTES

1. USE TRAFFIC CONTROL AND PROTECTION STANDARD 701331 FOR WORK.
2. BARRIER WALL AND IMPACT ATTENUATORS SHALL BE INSTALLED ACCORDING TO 701321 & 704001.
3. BARRIER OFFSETS SHALL BE TO THE CONSTRUCTION SIDE OF THE WALL.

| | |
|--|---|
| | = WORK ZONE |
| | = TYPE III BARRICADE WITH FLASHING LIGHTS |
| | = SIGN |
| | = BARRICADE, OR DRUM WITH STEADY BURNING LIGHTS |
| | = TEMPORARY CONCRETE BARRIER |
| | = IMPACT ATTENUATORS, TEMPORARY (NON REDIRECTIVE), TEST LEVEL 3 |

| | | | | | | | | | |
|--|------------------|-----------------|---|------------------------------------|--------------------------|--|------------|-----------------|--------------|
| | DESIGNED - _____ | REVISED - _____ | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | STAGE 1 TRAFFIC CONTROL | F.A.I. RTE. 39 | SECTION D2 BRIDGE PAINTING 2014-3 | COUNTY LEE | TOTAL SHEETS 35 | SHEET NO. 16 |
| | DRAWN - _____ | REVISED - _____ | | SHEET _____ OF _____ SHEETS | STA. _____ TO STA. _____ | CONTRACT NO. 64K10 <small>ILLINOIS FED. AID PROJECT</small> | | | |
| | CHECKED - _____ | REVISED - _____ | | | | | | | |
| | DATE - _____ | REVISED - _____ | | | | | | | |



STAGE 1 NOTES

1. USE TRAFFIC CONTROL AND PROTECTION STANDARD 701331 FOR WORK.
2. BARRIER WALL AND IMPACT ATTENUATORS SHALL BE INSTALLED ACCORDING TO 701321 & 704001.
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| | = IMPACT ATTENUATORS, TEMPORARY (NON REDIRECTIVE), TEST LEVEL 3 |

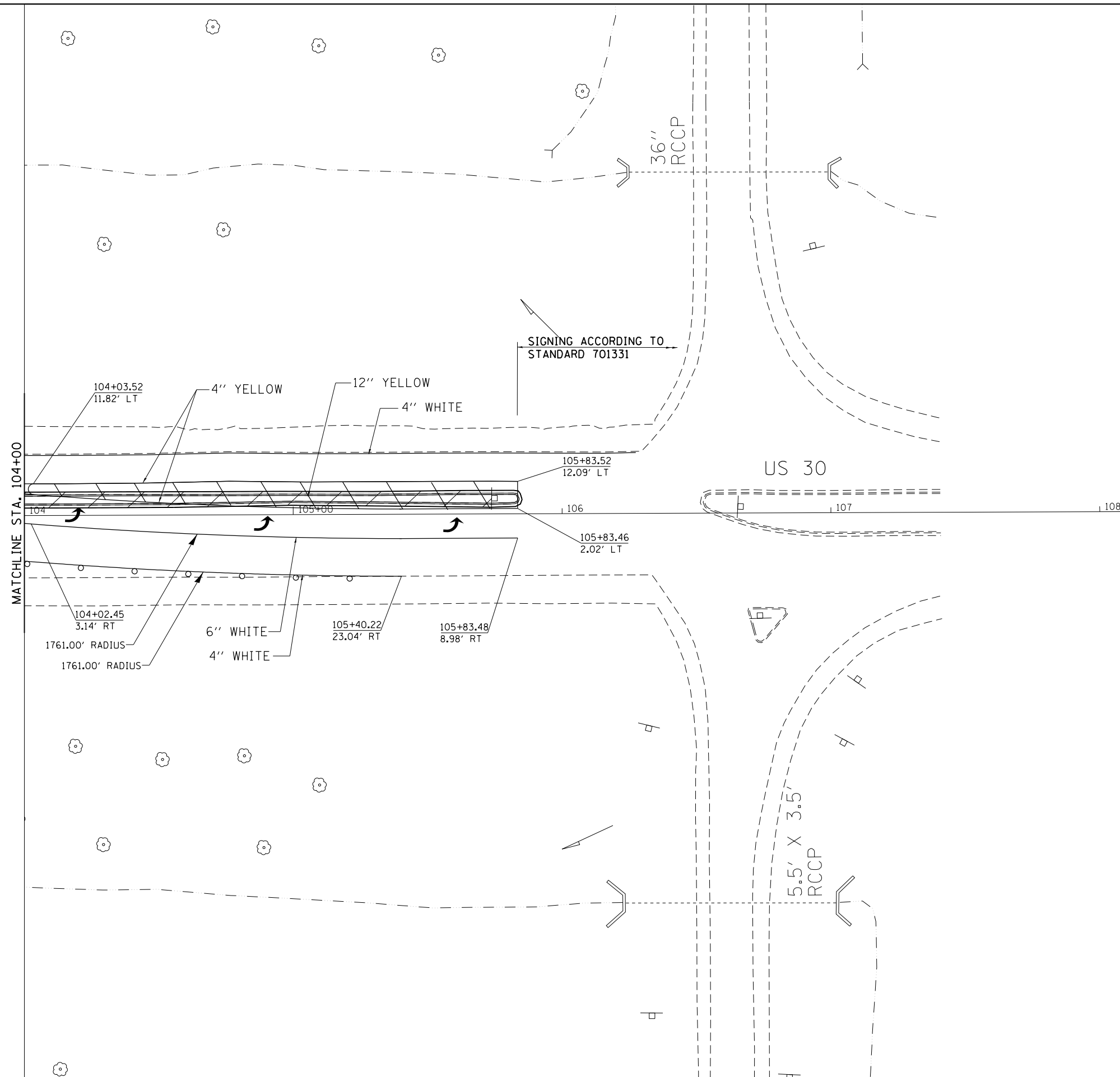
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|------------------|-----------------|
| DESIGNED - _____ | REVISED - _____ |
| DRAWN - _____ | REVISED - _____ |
| CHECKED - _____ | REVISED - _____ |
| DATE - _____ | REVISED - _____ |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STAGE 1
TRAFFIC CONTROL**

SHEET _____ OF _____ SHEETS STA. _____ TO STA. _____

| | | | | |
|--------------------|---------------------------|--------|---------------------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 39 | D2 BRIDGE PAINTING 2014-3 | LEE | 35 | 17 |
| CONTRACT NO. 64K10 | | | ILLINOIS FED. AID PROJECT | |



SIGNING ACCORDING TO STANDARD 701331

STAGE 1 NOTES

1. USE TRAFFIC CONTROL AND PROTECTION STANDARD 701331 FOR WORK.
2. BARRIER WALL AND IMPACT ATTENUATORS SHALL BE INSTALLED ACCORDING TO 701321 & 704001.
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| | = IMPACT ATTENUATORS, TEMPORARY (NON REDIRECTIVE), TEST LEVEL 3 |

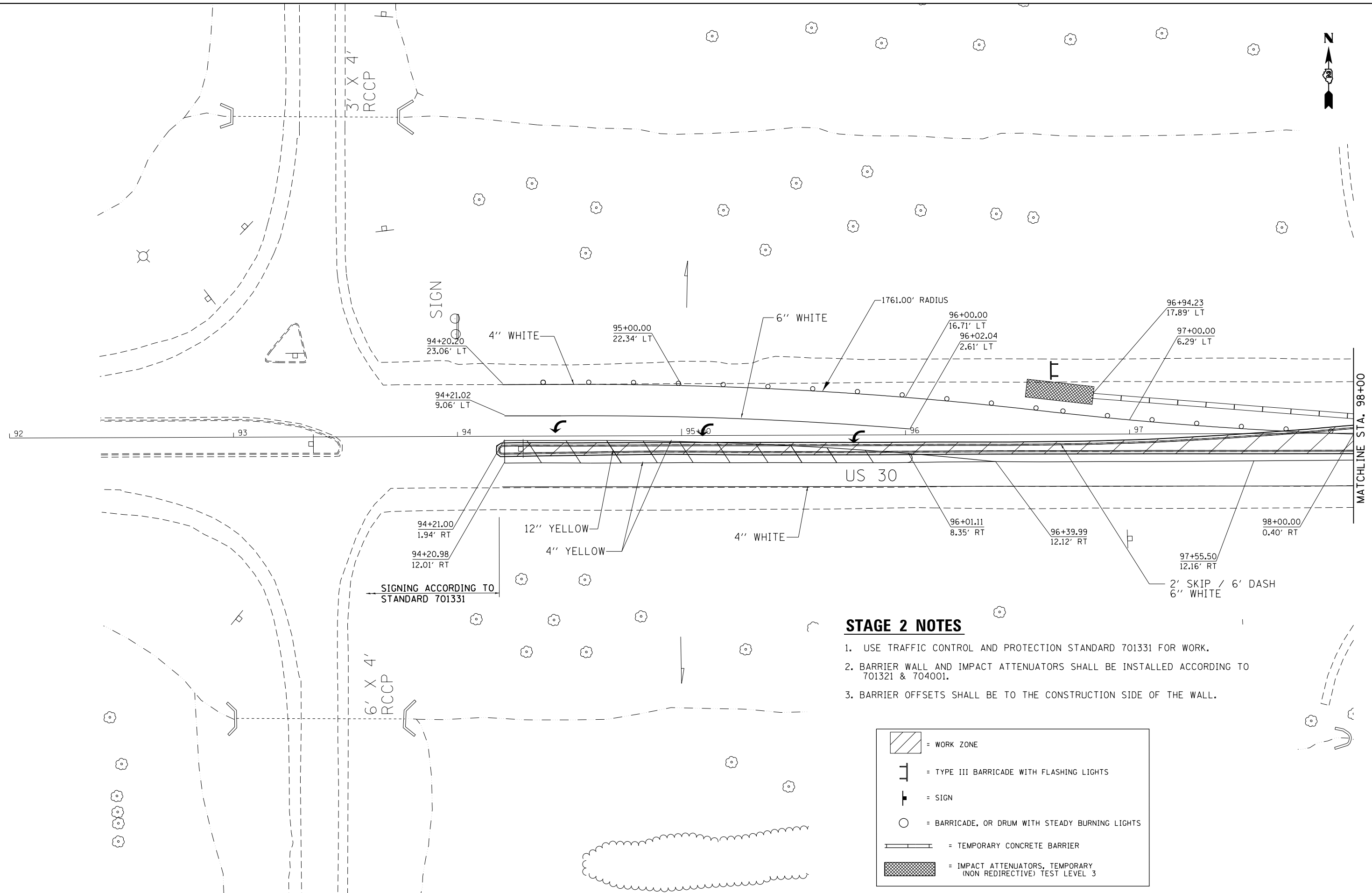
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|------------------|-----------------|
| DESIGNED - _____ | REVISED - _____ |
| DRAWN - _____ | REVISED - _____ |
| CHECKED - _____ | REVISED - _____ |
| DATE - _____ | REVISED - _____ |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STAGE 1
TRAFFIC CONTROL**

SHEET ____ OF ____ SHEETS STA. _____ TO STA. _____

| | | | | |
|--------------------|---------------------------|--------|---------------------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 39 | D2 BRIDGE PAINTING 2014-3 | LEE | 35 | 18 |
| CONTRACT NO. 64K10 | | | ILLINOIS FED. AID PROJECT | |



STAGE 2 NOTES

1. USE TRAFFIC CONTROL AND PROTECTION STANDARD 701331 FOR WORK.
2. BARRIER WALL AND IMPACT ATTENUATORS SHALL BE INSTALLED ACCORDING TO 701321 & 704001.
3. BARRIER OFFSETS SHALL BE TO THE CONSTRUCTION SIDE OF THE WALL.

| | |
|--|--|
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| | = TYPE III BARRICADE WITH FLASHING LIGHTS |
| | = SIGN |
| | = BARRICADE, OR DRUM WITH STEADY BURNING LIGHTS |
| | = TEMPORARY CONCRETE BARRIER |
| | = IMPACT ATTENUATORS, TEMPORARY (NON REDIRECTIVE) TEST LEVEL 3 |

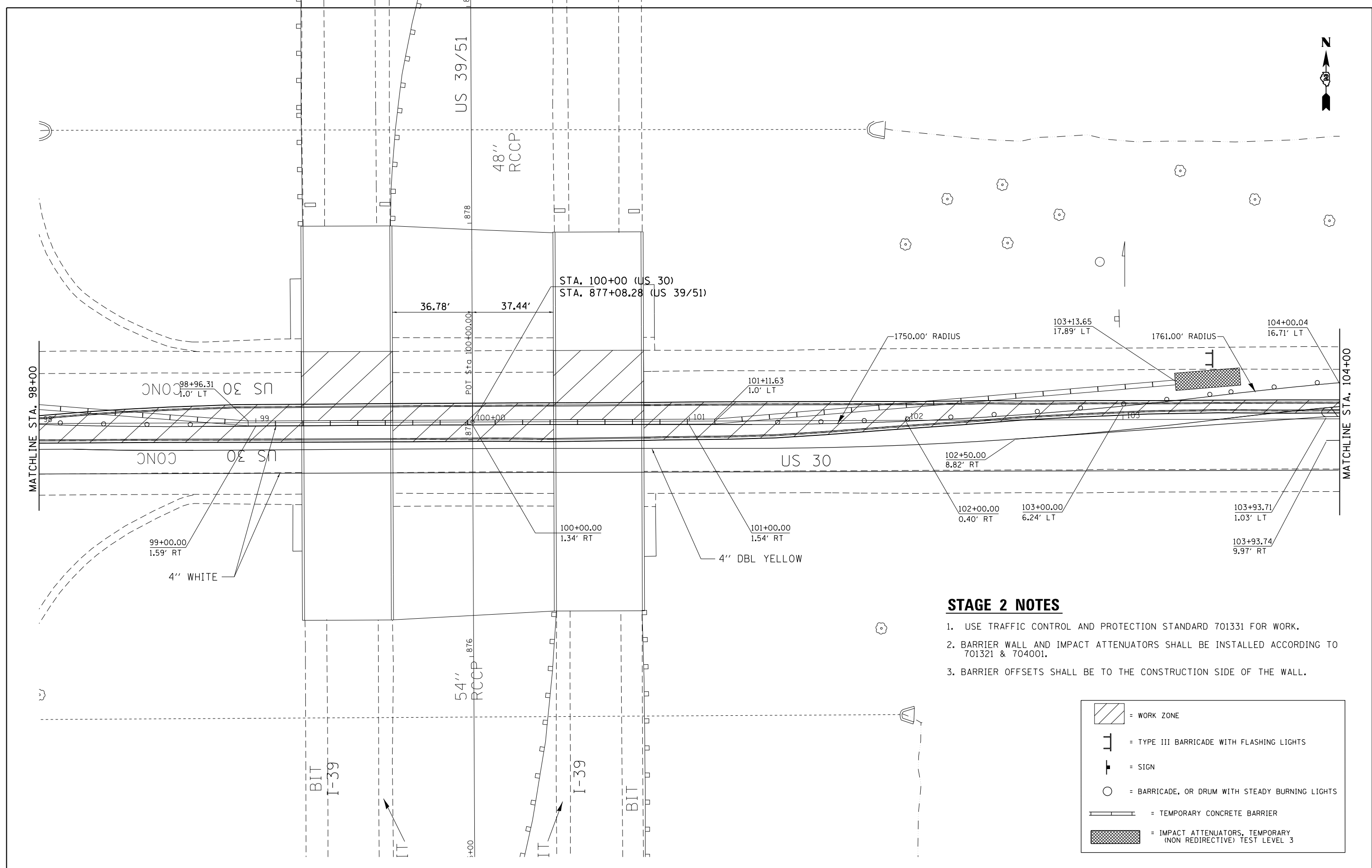
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|------------------|-----------------|
| DESIGNED - _____ | REVISED - _____ |
| DRAWN - _____ | REVISED - _____ |
| CHECKED - _____ | REVISED - _____ |
| DATE - _____ | REVISED - _____ |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STAGE 2
TRAFFIC CONTROL**







SHEET _____ OF _____ SHEETS STA. _____ TO STA. _____

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|---------------------------|--------|---------------------------|-----------|
| 39 | D2 BRIDGE PAINTING 2014-3 | LEE | 35 | 19 |
| CONTRACT NO. 64K10 | | | ILLINOIS FED. AID PROJECT | |

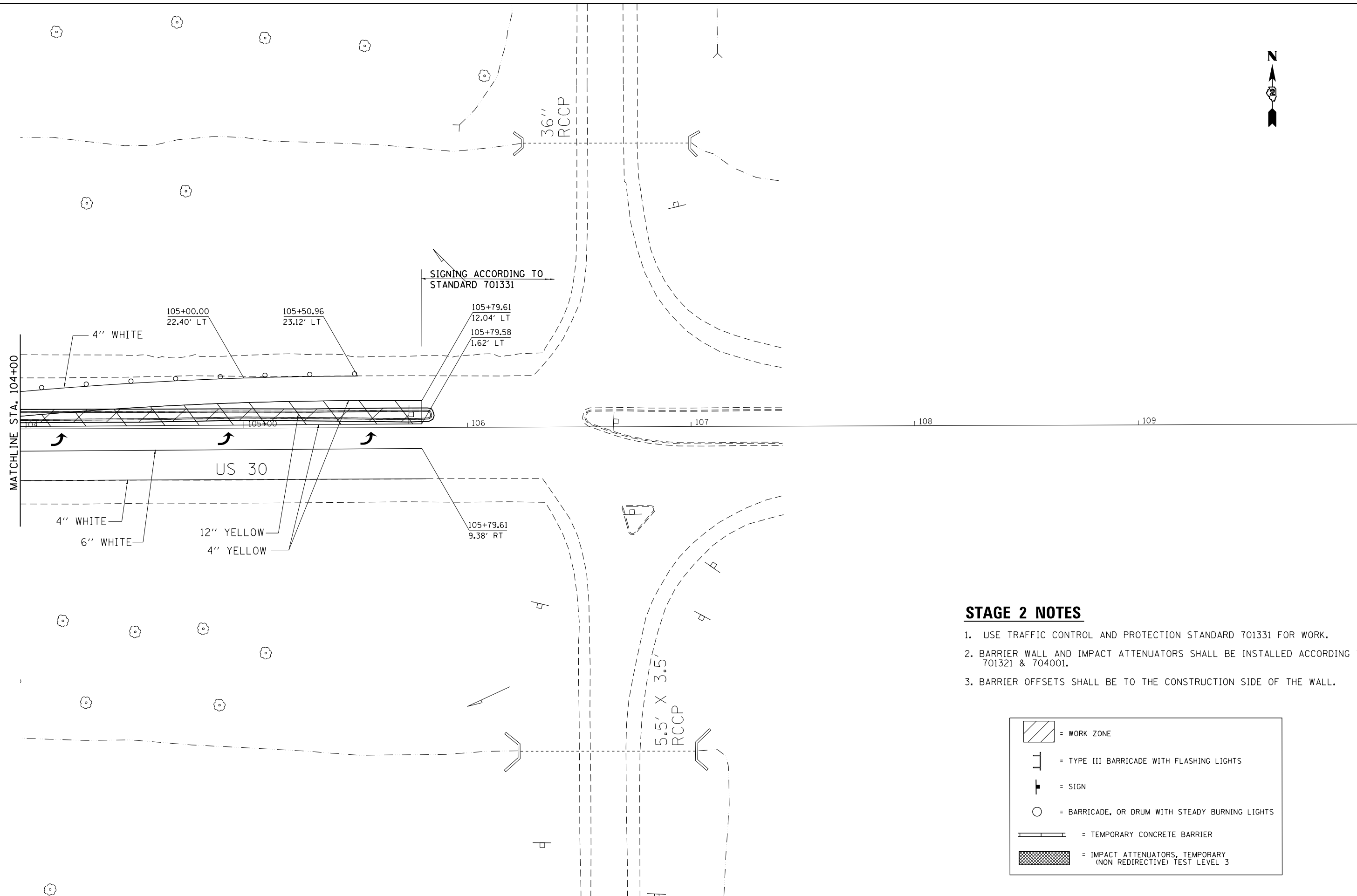


STAGE 2 NOTES

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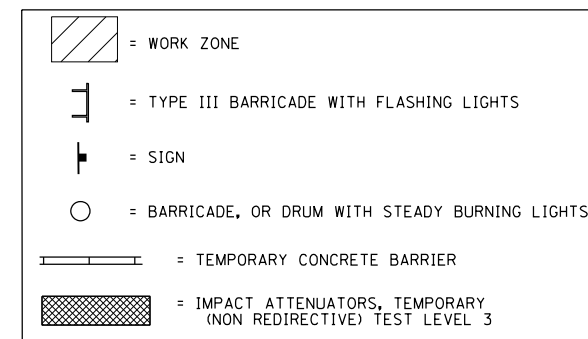
| | |
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|  | = BARRICADE, OR DRUM WITH STEADY BURNING LIGHTS |
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|  | = IMPACT ATTENUATORS, TEMPORARY (NON REDIRECTIVE) TEST LEVEL 3 |

| | | | | | | | | | |
|--|------------------|-----------------|---|------------------------------------|--------------------------|--------------------------------------|---------------|-----------------------|--------------------|
| | DESIGNED - _____ | REVISED - _____ | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | STAGE 2 TRAFFIC CONTROL | F.A.I. RTE. 39 | SECTION D2 BRIDGE PAINTING 2014-3 | COUNTY LEE | TOTAL SHEETS 35 | SHEET NO. 20 |
| | DRAWN - _____ | REVISED - _____ | | SHEET _____ OF _____ SHEETS | STA. _____ TO STA. _____ | CONTRACT NO. 64K10 | | | |
| | CHECKED - _____ | REVISED - _____ | | ILLINOIS FED. AID PROJECT | | | | | |
| | DATE - _____ | REVISED - _____ | | | | | | | |



STAGE 2 NOTES

1. USE TRAFFIC CONTROL AND PROTECTION STANDARD 701331 FOR WORK.
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3. BARRIER OFFSETS SHALL BE TO THE CONSTRUCTION SIDE OF THE WALL.



| | |
|------------------|-----------------|
| DESIGNED - _____ | REVISED - _____ |
| DRAWN - _____ | REVISED - _____ |
| CHECKED - _____ | REVISED - _____ |
| DATE - _____ | REVISED - _____ |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

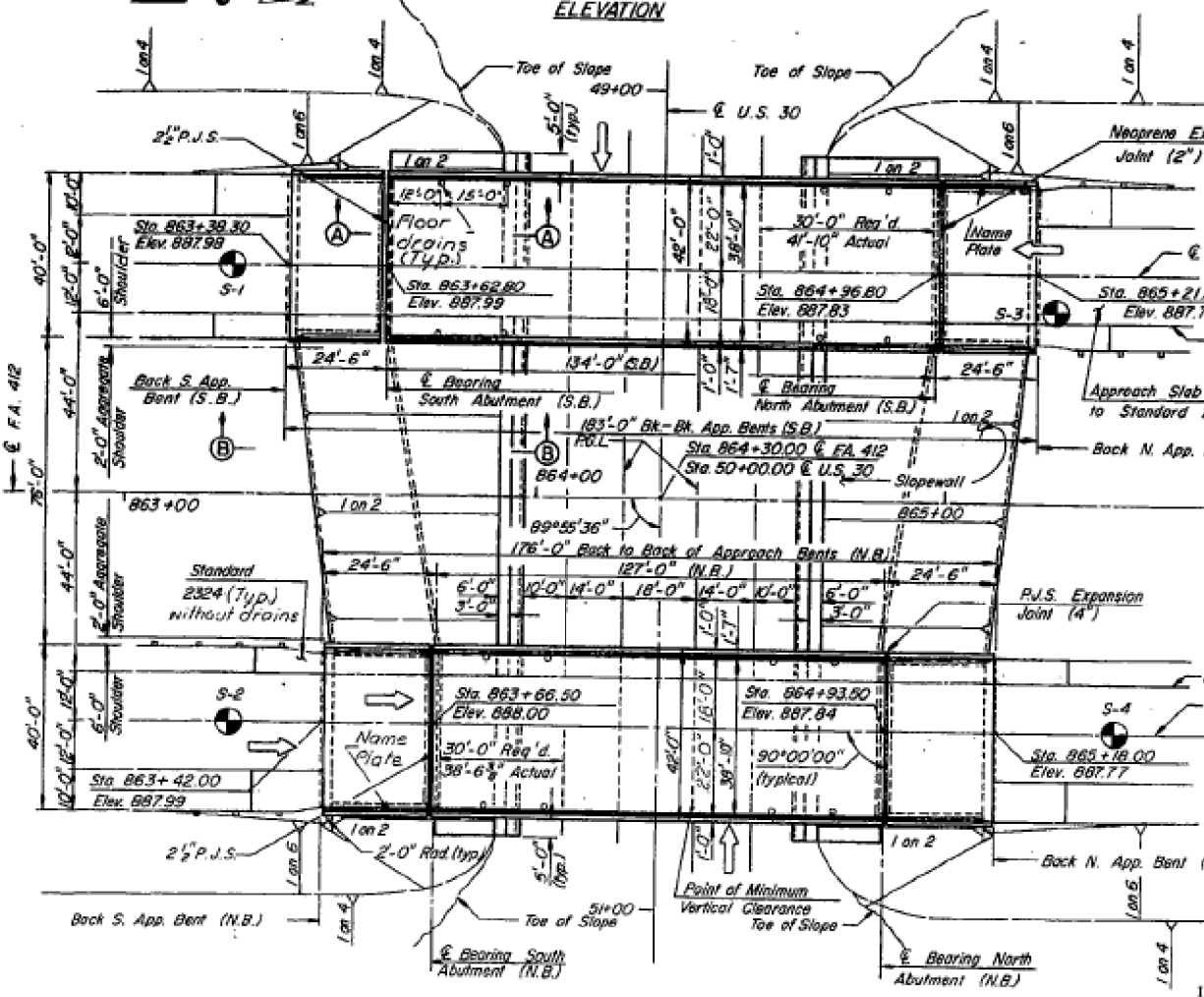
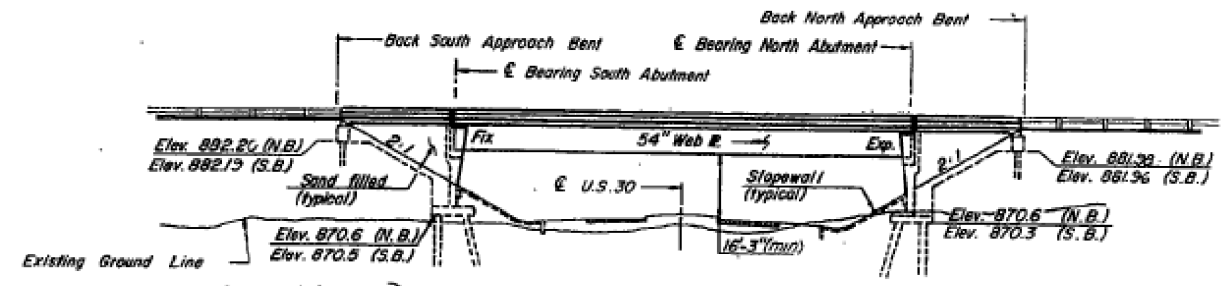
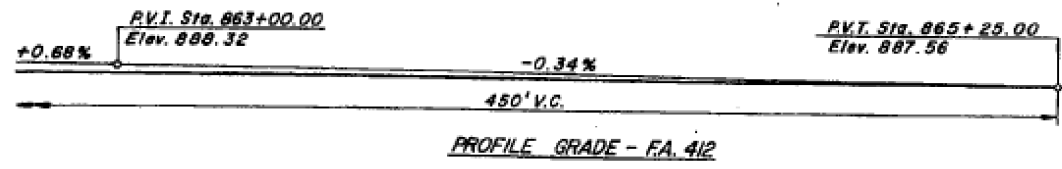
**STAGE 2
TRAFFIC CONTROL**

SHEET ____ OF ____ SHEETS STA. _____ TO STA. _____

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|---------------------------|--------|---------------------------|-----------|
| 39 | D2 BRIDGE PAINTING 2014-3 | LEE | 35 | 21 |
| CONTRACT NO. 64K10 | | | ILLINOIS FED. AID PROJECT | |

BENCHMARK: Benchmark No. 101-9, approximately 700 feet left of (F.A. 412 Station 864+40, is square cut in southeast end of headwall) north side of U.S. Route 30. Elevation 846.25.

| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------------|----------|---------|--------------|-----------|
| FA 412 | 103-2NB | LEE | 42 | 1 |
| STA. | TO STA. | | | |
| RD ROAD DIST NO 2 | ILLINOIS | PROJECT | | |



DESIGN SPECIFICATIONS: American Association of State Highway and Transportation Officials Standard Specifications for Highway Bridges, 1977 thru 1982 Interim Specifications.
DESIGN LOADING: A.A.S.H.T.O. HS20-44 (25 pounds per square foot for future wearing surface on bridge deck).
DECK SLAB (Main Span & Appr. Spans)
 $f'c = 3500$ psi.
 $f_y = 60,000$ psi.
 $f_c = 1,400$ psi.

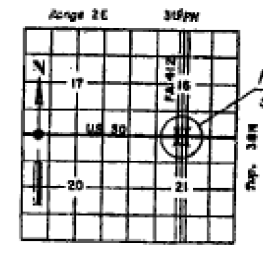
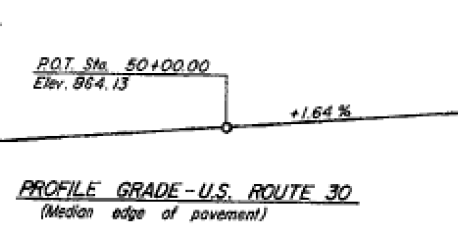
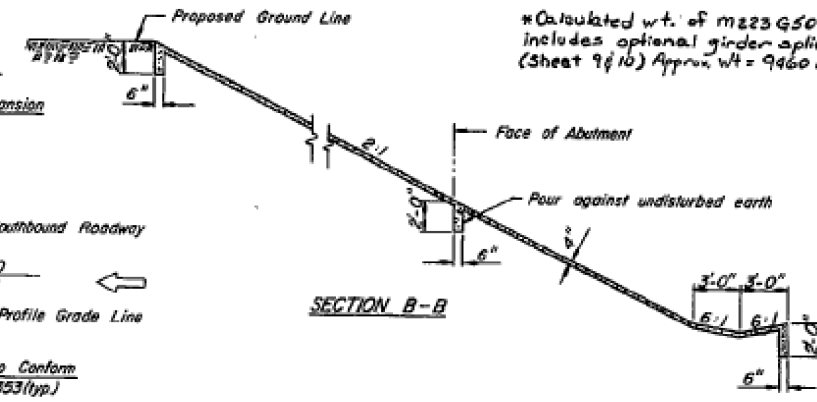
$vc = 56.2$ PSI
 $n = 9$
 Reinforcing Steel $f_s = 24,000$ PSI
 Structural Steel M183, $f_s = 20,000$ PSI
 M223, $f_s = 27,000$ PSI Grade 50
ANCHOR BOLTS: Anchor bolts for bearing devices shall be set before bolting cross frames over supports.
EMBARKMENT: The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the abutments.

GENERAL NOTES
CONCRETE PILING: Concrete piles of the North Approach Bent 3B, and South Approach Bents shall be driven in holes pre-cast through the embankment in accordance with Article 513.09(C) of the Standard Specifications.
STRUCTURAL STEEL: Structural steel for webs, all stiffeners, cross frames, bearings, gusset plates, expansion joint angles, and attached bars shall conform to AASHTO designation M183. Structural steel for flanges, flange splice plates, web splice plates and flange splice fill plates shall conform to AASHTO designation M223-Gr 50.

SLOPE WALL: Slope wall shall be reinforced with welded wire fabric, 6"x6" mesh, W4.0 x W4.0 weighing 36 pounds per 100 square feet. All reinforcement bars shall conform to AASHTO M31 gr. 60 or M53 gr. 60.
PAINTING: The basic lead silice chromate paint system shall be used for shop and field painting of Structural Steel.
FIELD WELDING: Field welding of construction accessories will not be permitted to the bottom flange of the girders. Field welding in other areas will be permitted only when approved by the Engineer.
FIELD CONNECTIONS: Fasteners shall be high strength bolts. Bolts 7/8" diameter, open holes 1/2" diameter, unless otherwise noted. The main load carrying member components subject to the tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are the tension flanges, webs and a splice plate material designated NTR or the steel of bolts.

Calculated weight of structural steel = 194,150 pounds (M183), 273,230 lbs. (M223-Gr 50)
TEST PILING: The Contractor shall drive four concrete test piles in permanent locations, one at each abutment as directed by the Engineer, before ordering the remainder of piles.

| TOTAL BILL OF MATERIALS | | | |
|---------------------------------|----------|---------|-----------------|
| ITEM | UNIT | Substr. | Superstr. TOTAL |
| Sand Backfill | Cu. Yd. | 470 | 470 |
| Structure Excavation | Cu. Yd. | 714 | 714 |
| Protective Coat | Sq. Yd. | 1831 | 1831 |
| Class X Concrete | Cu. Yd. | 3680 | 5235 |
| Floor Drains | Each | 16 | 16 |
| Stud Shear Connectors | Each | 3528 | 3528 |
| Preformed Joint Seal (2") | Lin. Ft. | 84 | 84 |
| Preformed Joint Seal (4") | Lin. Ft. | 42 | 42 |
| Reinforcement Bars | Pounds | 41700 | 59840 |
| Reinforcement Bars (Epoxy Coat) | Pounds | | 50770 |
| Structural Steel | Lump Sum | | 1 |
| Slope Wall (4") | Sq. Yds. | 1770 | 1770 |
| Concrete Piles | Lin. Ft. | 3791 | 3791 |
| Test Pile Concrete | Each | 4 | 4 |
| Neoprene Expansion Joint (2") | Lin. Ft. | 41 | 41 |
| Name Plates | Each | 2 | 2 |

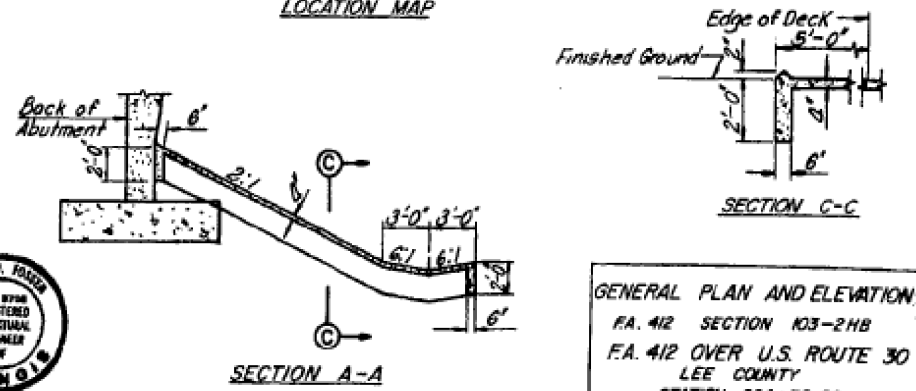


STATION 864+30.00
 BUILT IN BY
 STATE OF ILLINOIS
 F.A. RT. 412 SEC. 103-2NB
 F.A. PROJ. PD 41-4(B)
 LOADING HS20
 NAME PLATE
 (See Sid. 2113)
 ** Structure No. to be supplied by the District.

APPROVED
 FOR STRUCTURAL ADOPTION ONLY



I hereby certify that this plan and specification was prepared by me or under my direct personal supervision and that I am a duly registered Structural Engineer under the laws of the State of Illinois.
 Signed *Leslie J. Posen* Date 2-27-76
 Leslie J. Posen, S.E. Illinois Reg. No. 91-3703



GENERAL PLAN AND ELEVATION
 FA. 412 SECTION 103-2NB
 FA. 412 OVER U.S. ROUTE 30
 LEE COUNTY
 STATION 864+30.00
 STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

HNTB
 M.B. J.J.G. 10.29.75 C.K. R.B.D. 11.25.75
 Rev DAB/RKM 2-3-83

| | |
|------------|-----------|
| DESIGNED - | REVISED - |
| DRAWN - | REVISED - |
| CHECKED - | REVISED - |
| DATE - | REVISED - |

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS

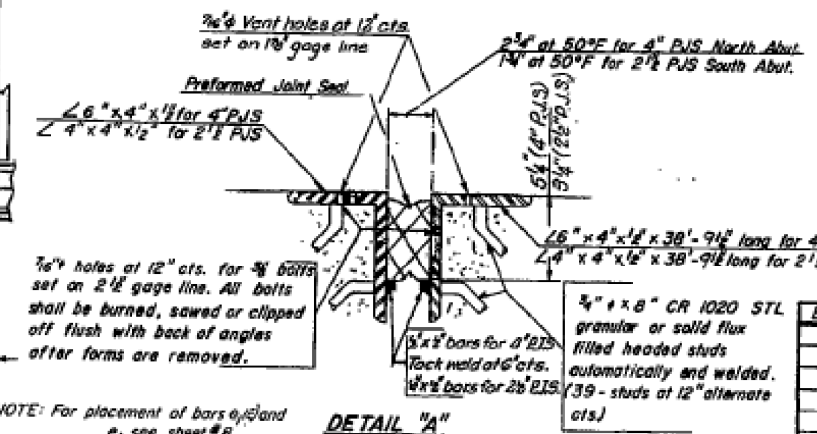
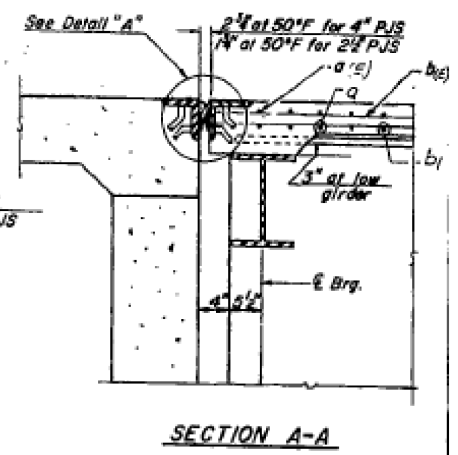
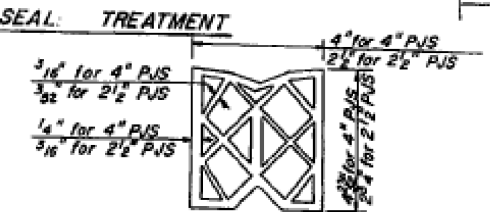
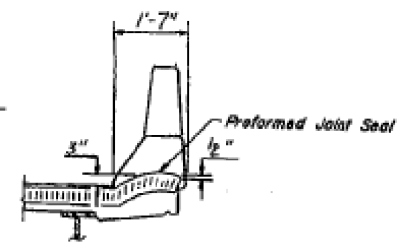
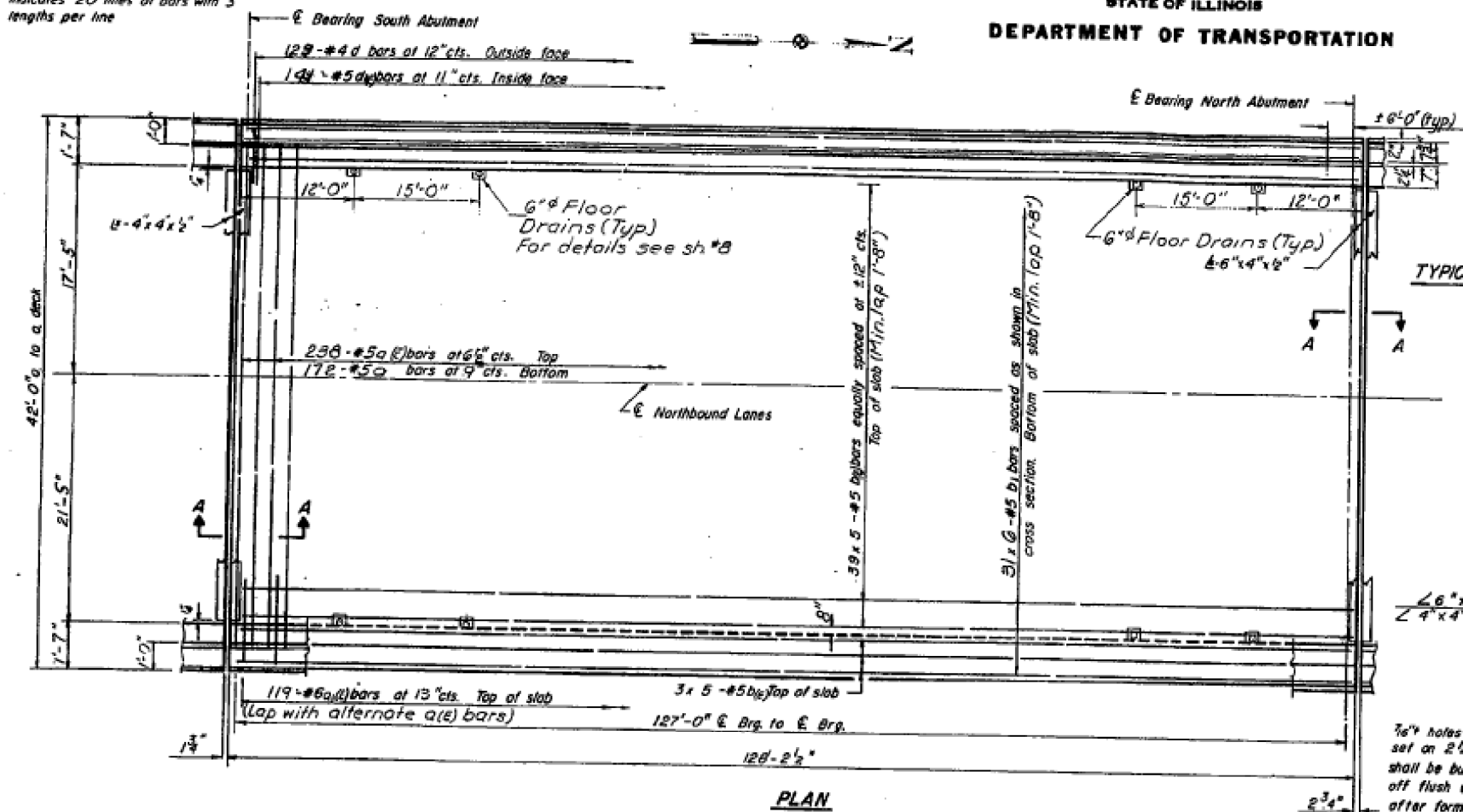
SHEET ___ OF ___ SHEETS STA. ___ TO STA. ___

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|---------------------------|--------|--------------|--------------------|
| 39 | D2 Bridge Painting 2014-3 | LEE | 35 | 22 |
| | | | | CONTRACT NO. 64K10 |
| ILLINOIS FED. AID PROJECT | | | | |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

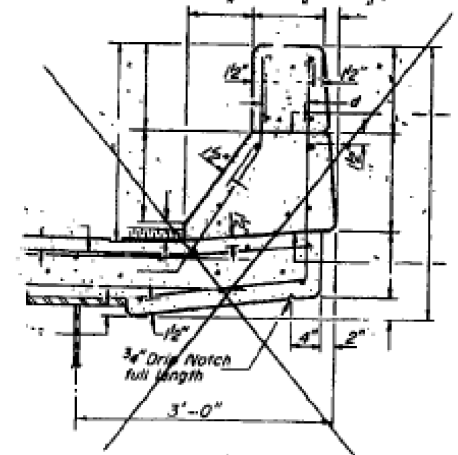
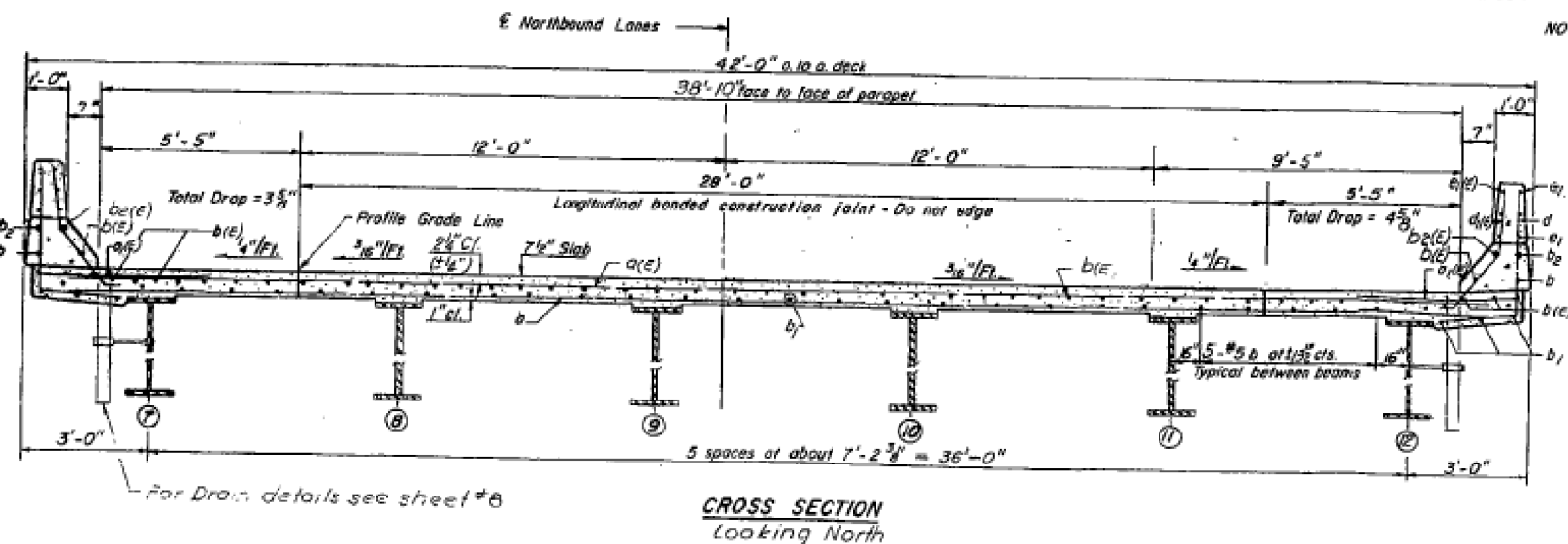
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|-----------------------|----------|---------|--------------|-----------|------------------------|
| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. | SHEET NO. OF 20 SHEETS |
| F.A. 412 | 103-2HB | LEE | 115 | 47 | |
| STA. | TO STA. | | | | |
| FED. ROAD DIST. NO. 7 | ILLINOIS | PROJECT | | | |

NOTE:
Bars indicated thus 20 x 3 #5 etc
indicates 20 lines of bars with 3
lengths per line



BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|---------------------------|-----|------|----------|--------|
| a(e) | 238 | #5 | 40'-2" | |
| a | 172 | #5 | 40'-2" | |
| a(e) | 238 | #6 | 4'-0" | |
| b(e) | 225 | #5 | 27'-6" | |
| b | 186 | #5 | 22'-9" | |
| d | 238 | #4 | 5'-0" | |
| d(e) | 238 | #5 | 3'-11" | |
| Reinf Bars (Epoxy Coat) | | | Lbs. | 19,010 |
| Reinforcement Bars | | | Lbs. | 12,480 |
| Class X Concrete | | | Cu Yds. | 73.0 |
| 4" Preformed Jt. Seal | | | Lin. Ft. | 42 |
| 2 1/2" Preformed Jt. Seal | | | Lin. Ft. | 42 |



| | |
|----------|-----|
| DESIGNED | DNC |
| CHECKED | RBD |
| DRAWN | DNC |
| CHECKED | JJG |

Rev DAD/JRM 2-3-33

Note: For Section thru Parapet, see Sheet 8.

Notes:
Parapet Reinforcement and Class X Concrete are billed on sheet #8
Floor Drain details, see Sheet #3
Reinforcement Bars designate a(e) shall be Epoxy Coated See Spec. Provs.

DECK DETAILS
NORTHBOUND
F.A. 412 SECTION 103-2HB
F.A. 412 OVER U.S. ROUTE 30
LEE COUNTY
STATION 854+30.00
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS

| | | | |
|----------|---|---------|---|
| DESIGNED | - | REVISED | - |
| DRAWN | - | REVISED | - |
| CHECKED | - | REVISED | - |
| DATE | - | REVISED | - |

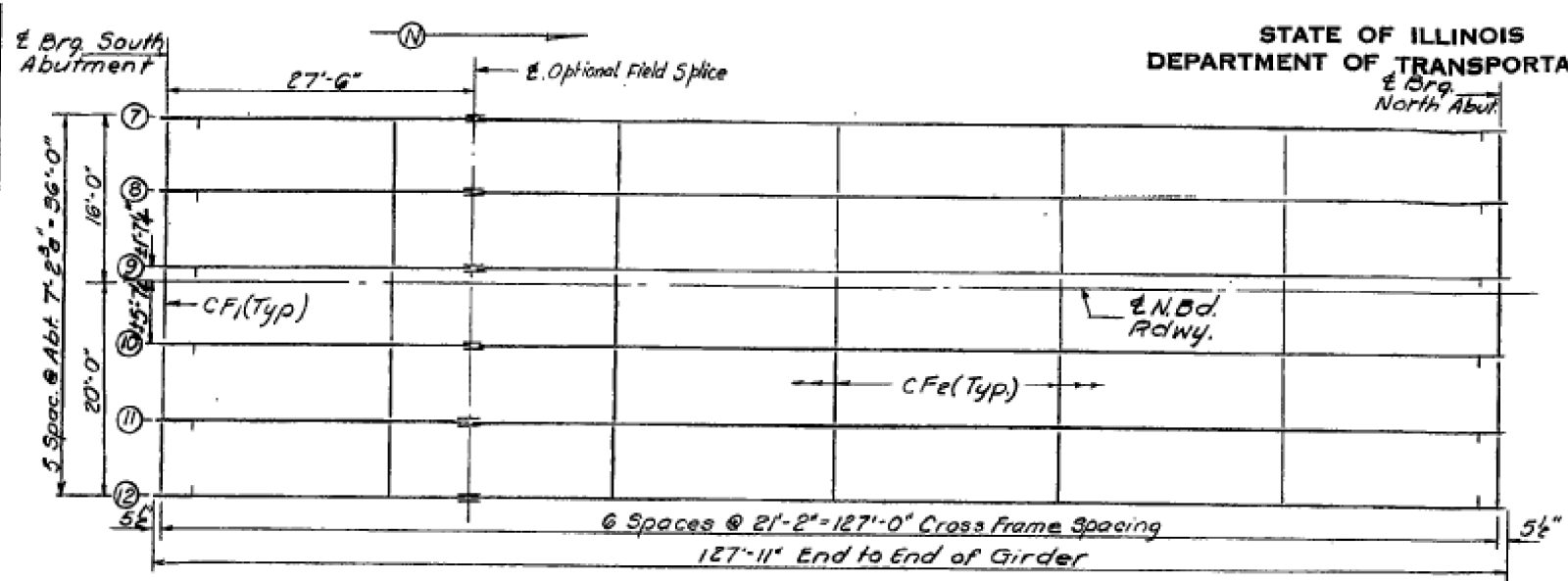
SHEET ___ OF ___ SHEETS STA. ___ TO STA. ___

| | | | | |
|---------------------------|---------------------------|--------|--------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 39 | D2 Bridge Painting 2014-3 | LEE | 35 | 23 |
| CONTRACT NO. 64K10 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

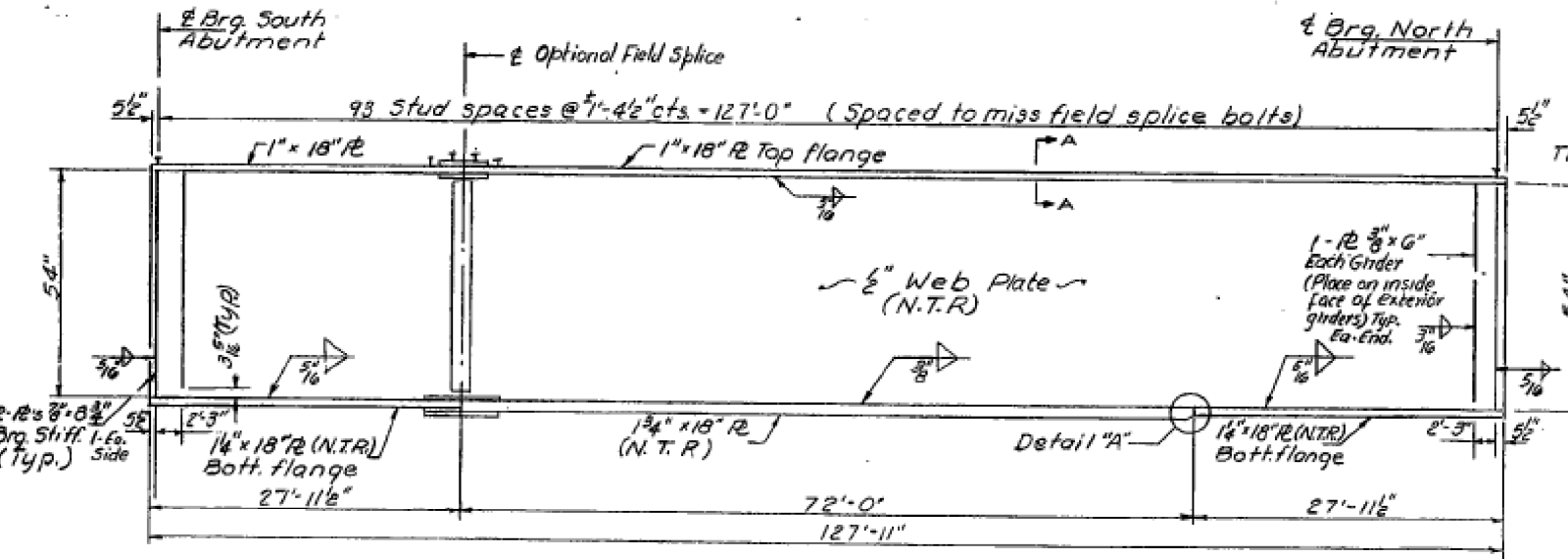
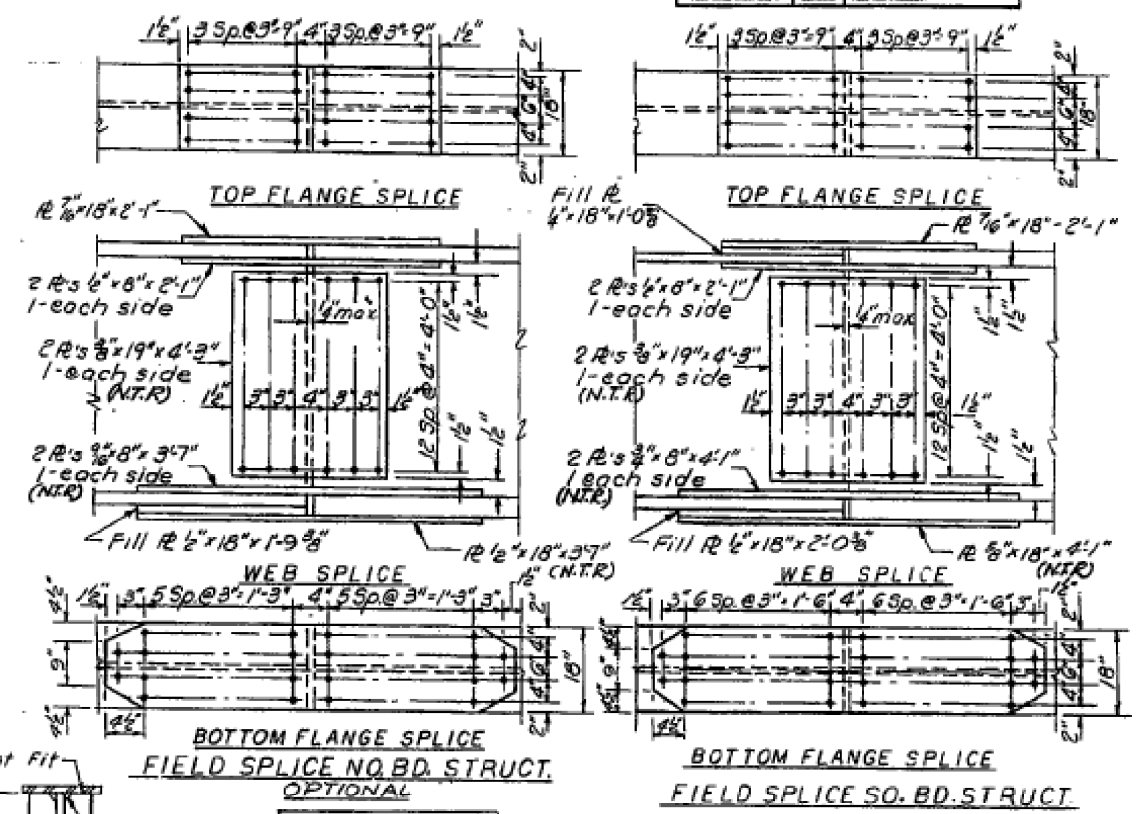
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | | | | | |
|---------|----------|-----|-----|------|-----|
| DATE | REVISION | BY | NO. | DATE | NO. |
| 10/1/12 | L.A.G. | 113 | 50 | | |

SHEET NO. 9
20 SHEETS



FRAMING PLAN



INTERIOR GIRDER ELEVATION

"N.T.R." designates plates to which Notch Toughness Requirements are applicable.

TOP OF WEB ELEVATIONS

| Girder | 7 | 8 | 9 | 10 | 11 | 12 |
|------------------|--------|--------|--------|--------|--------|--------|
| ± Brg. So. Abut. | 886.96 | 887.09 | 887.20 | 887.14 | 887.02 | 886.87 |
| ± Splice* | 887.14 | 887.27 | 887.38 | 887.32 | 887.20 | 887.03 |
| ± Brg. No. Abut. | 886.80 | 886.93 | 887.04 | 886.98 | 886.86 | 886.71 |

(For Fabrication only)

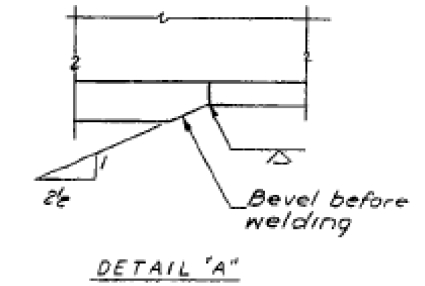
INTERIOR GIRDER MOMENT TABLE (N.B.)

| Midspan | |
|----------------------------|-------|
| Is (in ⁴) | 42741 |
| Ic (in ⁴) | 94557 |
| Ss (in ³) | 1800 |
| Sc (in ³) | 2262 |
| Q (k/ft) | 0.972 |
| M _Q (k) | 1959 |
| f _s (ksi) | 13.1 |
| S _Q (k) | .299 |
| M ₅₀ (k) | 603 |
| M _Q (k) | 1312 |
| M _{Imp} (k) | 260 |
| M _{50+Imp} | 2175 |
| I _{50+Imp} | 11.5 |
| f _s total (ksi) | 24.6 |
| VR (k) | 523 |

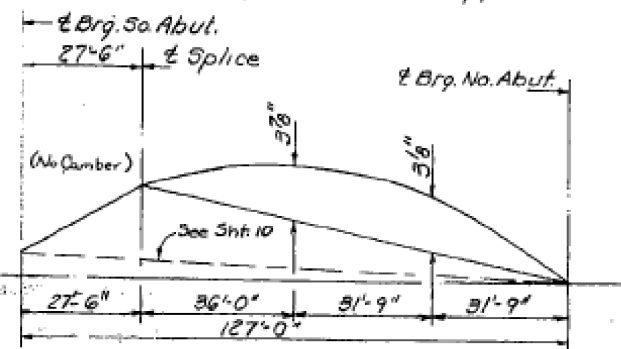
INTERIOR GIRDER REACTION TABLE (N.B.)

| Abutment | |
|------------------------|-------|
| R _Q (k) | 80.7 |
| R ₅ (k) | 43.6 |
| R _{Imp} (k) | 8.7 |
| R _{Total} (k) | 133.0 |

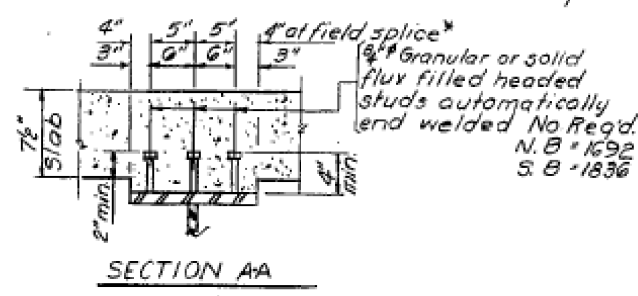
Notes:
All contact surfaces of the joints for the cross frames shall be free of paint or lacquer.
All structural steel for girder flanges and splice plates shall be AASHTO M 229 Gr. 50 and the girder web, stiffeners and cross frames shall be AASHTO M 183.
For cross frame details see sheet #10
See Sheet #10 for Camber Diagram without the optional field splice.



DETAIL "A"



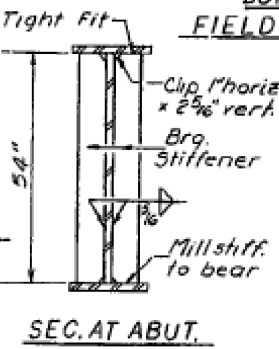
CAMBER DIAGRAM - No. Bd. Struct. (WITH OPTIONAL FIELD SPLICE)



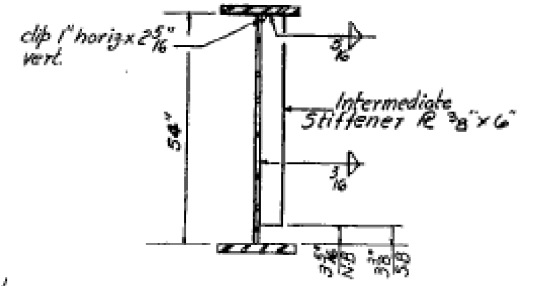
SECTION AA

*Optional

Is and Ss are the moment of inertia and section modulus of the steel section used in computing f_s Q.
Ic and Sc are the moment of inertia and section modulus of the composite section used in computing f_s (S_Q + ± Imp.)
VR is the maximum ± Impact shear range in span used to determine shear connector spacing.



SEC. AT ABUT.



SECTION AT INTERMEDIATE STIFFENER

FRAMING PLAN NORTHBOUND

STRUCTURAL STEEL DETAILS

F.A.R.T.E. 412 SEC. 103-2HB

LEE COUNTY

STA. 864+30.00

REVISED 5-28-83

Rev 2-3-83 Rev 3-28-83 D.D.

| | |
|----------|-----|
| DESIGNED | VRB |
| CHECKED | RKM |
| DRAWN | FM |
| CHECKED | RKM |

| | |
|----------|----------|
| DESIGNED | REVISION |
| DRAWN | REVISION |
| CHECKED | REVISION |
| DATE | REVISION |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

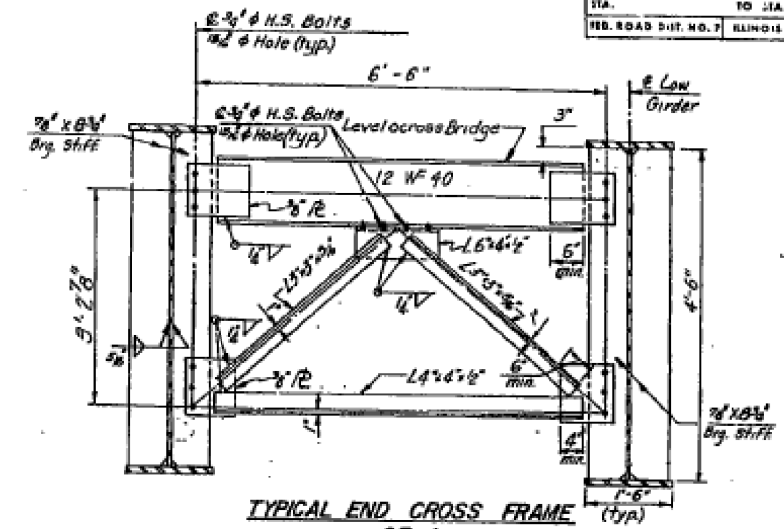
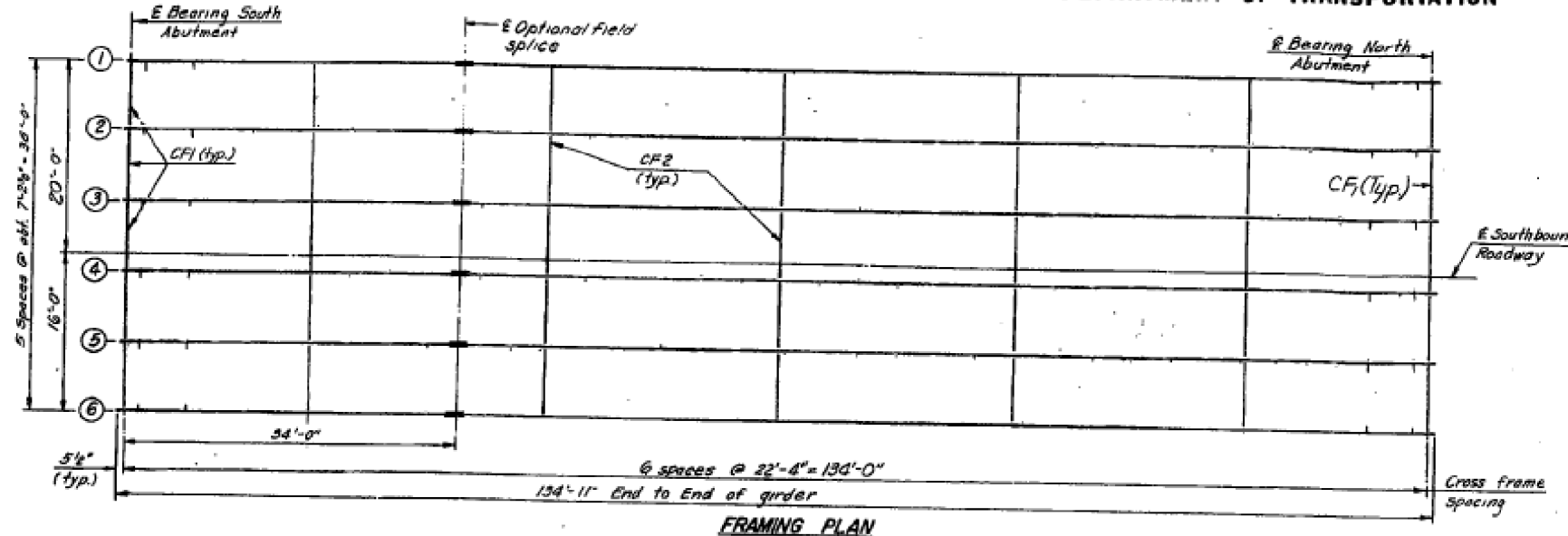
EXISTING BRIDGE PLANS

SHEET OF SHEETS STA. TO STA.

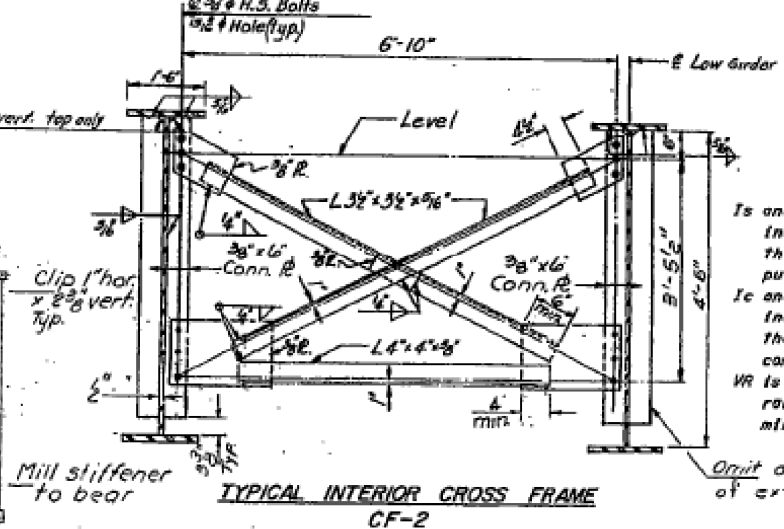
| | | | | |
|---------------------------|---------------------------|--------|--------------|-----------|
| F.A.I. RT.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 39 | D2 Bridge Painting 2014-3 | LEE | 35 | 25 |
| CONTRACT NO. 64K10 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | | |
|---|-----------------------------|-------------|
| LOCAL P.L. SECTION COUNTY TOTAL SHEETS SHEET NO. OF 20 SHEETS | PA. 412 103-248 LEE 11 5 51 | SHIT NO. 10 |
| STA. TO STA. | TO STA. | |
| FED. ROAD DIST. NO. 7 ILLINOIS PROJECT | | |



| INTERIOR GIRDER MOMENT TABLE (SB) | |
|-----------------------------------|------------|
| Moment | TABLE (SB) |
| I_s | Midspan |
| I_c (in ⁴) | 50,224 |
| S_s (in ³) | 1041.8 |
| S_c (in ³) | 2515 |
| E (K/ft) | 992 |
| M_e (K) | 2291 |
| F_{aE} (K/ft) | 15.0 |
| S_E (K) | 299 |
| M_{sE} (K) | 671 |
| M_t (K) | 1392 |
| M_{imp} (K) | 269 |
| $M_{max-imp}$ (K) | 2332 |
| $S_{imp-imp}$ (K) | 11.1 |
| F_s total (K/ft) | 24.1 |
| V_R (K) | 53.7 |



| INTERIOR GIRDER REACTION TABLE (SB) | |
|-------------------------------------|------------|
| Reaction | TABLE (SB) |
| R_e (K) | 86.6 |
| R_t (K) | 45.1 |
| R_{sp} (K) | 3.7 |
| R_{total} (K) | 140.4 |

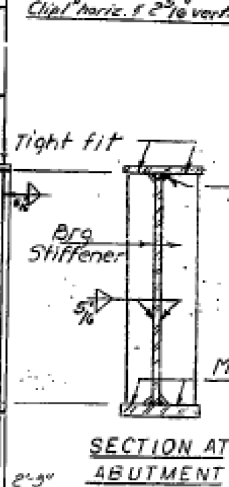
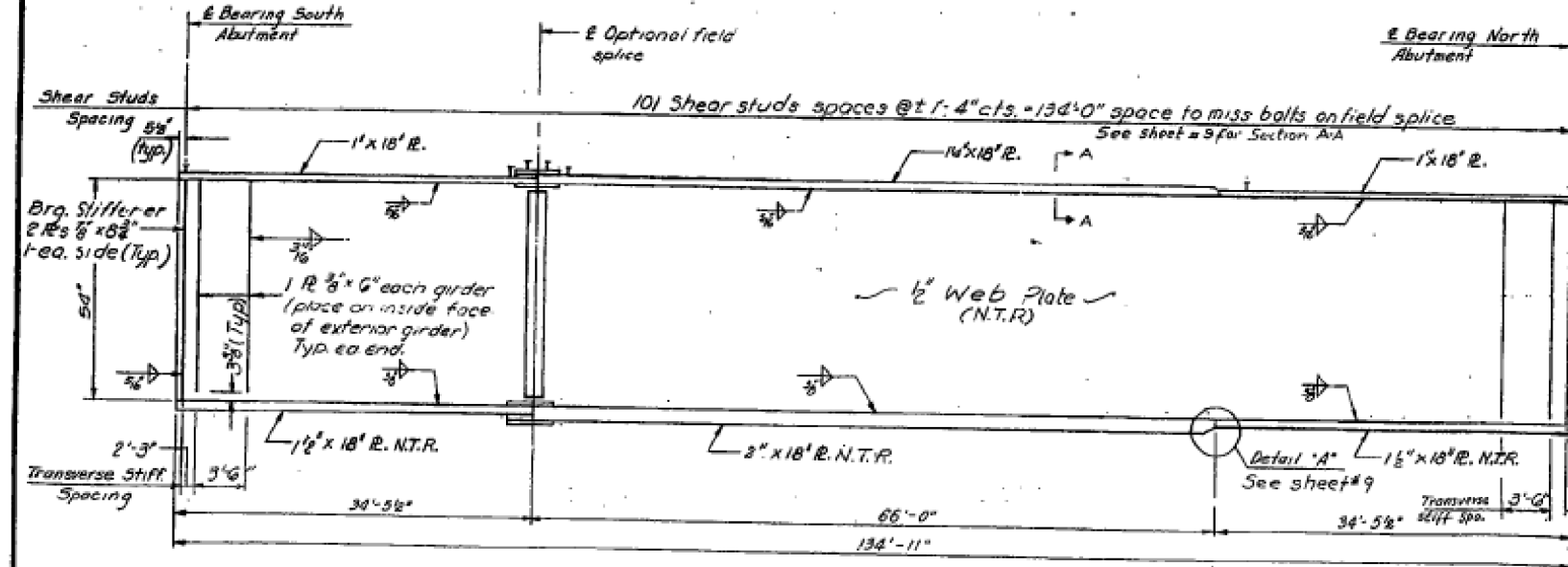
I_s and S_s are the moment of inertia and section modulus of the steel section used in computing f_s .

I_c and S_c are the moment of inertia and section modulus of the composite section used in computing f_s (neglecting IMP).

V_R is the maximum W Impact shear range in span used to determine shear connector spacing.

Omit on outside face of exterior girders

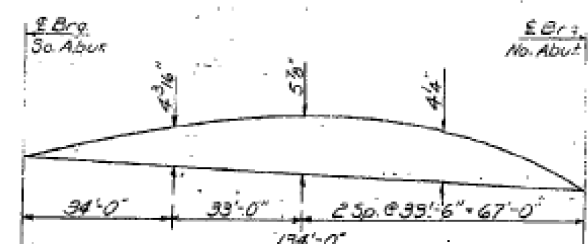
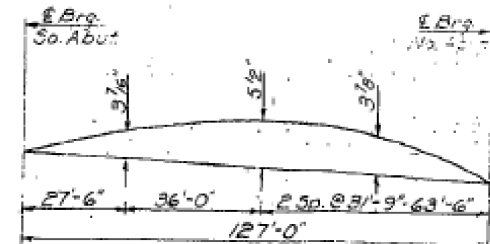
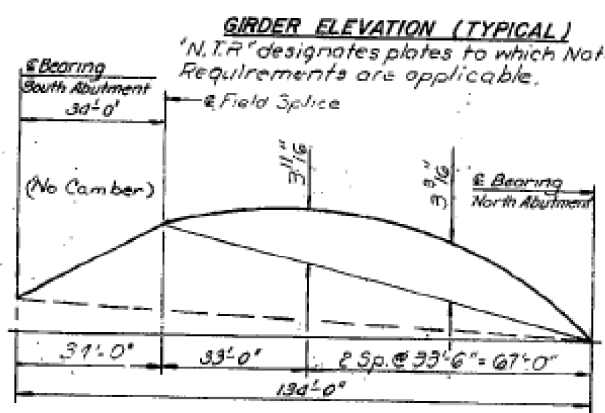
Notes:
Hardened washers shall be required over f_g holes in cross frame.
All contact surfaces of the joints for the cross frames shall be true at point or locquer.
All structural steel for girder flanges shall be AASHTO M223 Gr. 50 and the girder web, stiffeners and cross frames shall be AASHTO M183.
See sheet #9 for splice details, and sec. @ intermediate stiffener.



TOP OF WEB ELEVATIONS FOR FABRICATION

| Girder | So. Abut. | @ Splice | No. Abut. |
|--------|-----------|----------|-----------|
| 1 | 886.87 | 887.10 | 886.70 |
| 2 | 887.02 | 887.25 | 886.85 |
| 3 | 887.14 | 887.37 | 886.97 |
| 4 | 887.20 | 887.43 | 887.03 |
| 5 | 887.09 | 887.32 | 886.92 |
| 6 | 886.95 | 887.19 | 886.79 |

DESIGNED R.B.D.
CHECKED M.P.S.
DRAWN D.N.C.
CHECKED R.B.D.



CAMBER DIAGRAM - So. Bd. Struct. (With Optional Field Splice)

CAMBER DIAGRAM - No. Bd. Struct. (Without optional field splice)

CAMBER DIAGRAM - So. Bd. Struct. (Without optional field splice)

HOWARD, NEEDLES, TAMMEN & BERGENSHOFER
Rev DAB/RKM 2-3-83

FRAMING PLAN SOUTHBOUND & STRUCTURAL STEEL DETAILS
FA. 412 SECTION 103-248
FA. 412 OVER U.S. ROUTE 30
LEE COUNTY STATION 864+30.00
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

| | |
|----------|----------|
| DESIGNED | REVISION |
| DRAWN | REVISION |
| CHECKED | REVISION |
| DATE | REVISION |

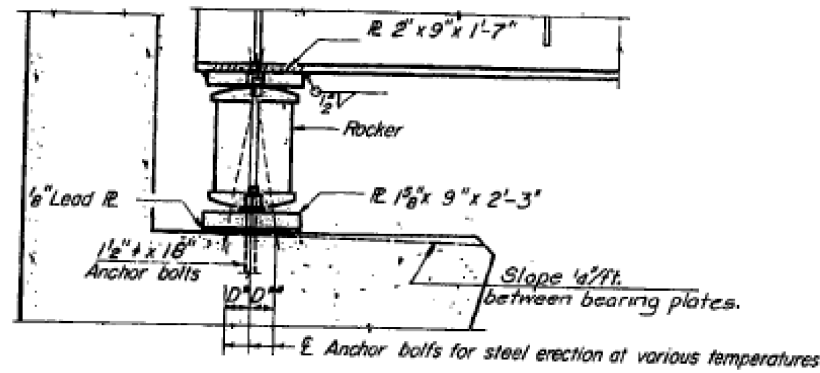
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS

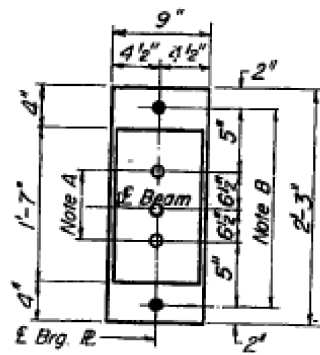
SHEET OF SHEETS STA. TO STA.

| | | | | |
|---------------------------|---------------------------|--------|--------------|--------------------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 39 | D2 Bridge Painting 2014-3 | LEE | 35 | 26 |
| | | | | CONTRACT NO. 64K10 |
| ILLINOIS FED. AID PROJECT | | | | |

| | | | | | |
|----------------------|---------|---------|--------------|-----------|------------------------------|
| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. | SHEET NO. 11 of 20 SHEETS |
| FA. 412 | 103-2H3 | LEE | 153 | 52 | |
| STA. | TO STA. | | | | |
| RD. ROAD DIST. NO. 7 | RUNOFF | PROJECT | | | |



ELEVATION



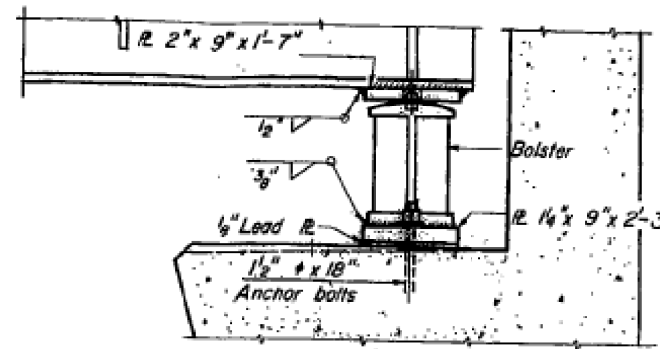
PLAN

AT NORTH ABUTMENT

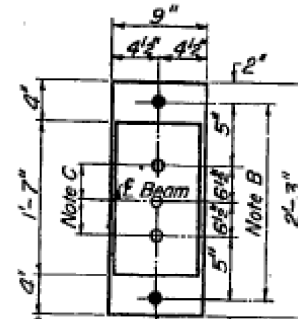
NOTES ON SETTING OF ANCHOR BOLTS AT EXP. BRGS.

- a) D* (Side of brg. away from fixed brg.)
D* = 1/8" per each 100' of expansion for every 15° fall below the normal temp. of 50°F.
- D** (Side of brg. toward fixed brg.)
D** = 1/8" per each 100' of expansion for every 15° rise above the normal temp. of 50°F.
- b) After beams have been erected and dimensions D* or D** determined, holes shall be drilled and anchor bolts shall be grouted in place. All fixed anchor bolts may be built into the masonry.

NOTE A
1 3/8" Holes - 1" deep in top R. for pintles. Thread or press fit pintles into bottom R.



ELEVATION



PLAN

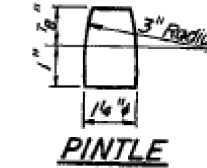
AT SOUTH ABUTMENT

NOTE B
2" Holes for 1 1/2" anchor bolts. 1 1/2 x 2 1/2 x 2 1/2" R. Washers under nut.

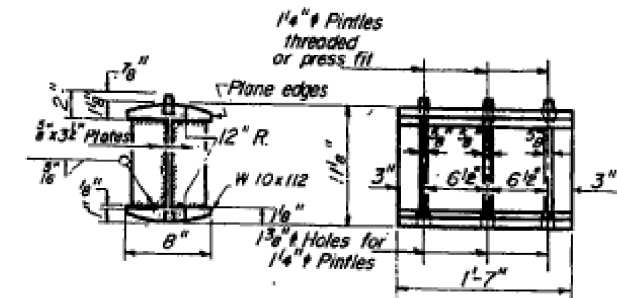
NOTE C
1 3/8" Holes 1" deep in top R. only for 1 1/4" pintles.

BEARING ASSEMBLY DETAILS

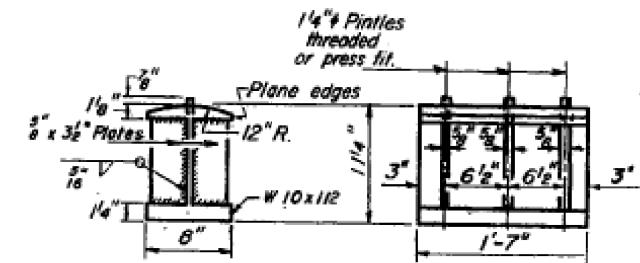
All Bearing Steel shall be AAS-79 M1233



PINTLE



ROCKER



BOLSTER

| | |
|----------|--------|
| DESIGNED | C.B.L. |
| CHECKED | M.P.S. |
| DRAWN | Gal |
| CHECKED | M.P.S. |

HOWARD, NEEDLES, TAMMEN & BERGENOFF HNTB

Rev DAB/RKM 2-5-83

BEARING DEVICES
FA. 412 SECTION 103-2H3
FA. 412 OVER U.S. ROUTE 30
LEE COUNTY
STATION 854+30.00
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | | | |
|----------|---|---------|---|
| DESIGNED | - | REVISED | - |
| DRAWN | - | REVISED | - |
| CHECKED | - | REVISED | - |
| DATE | - | REVISED | - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS

SHEET ___ OF ___ SHEETS STA. _____ TO STA. _____

| | | | | |
|---------------------------|---------------------------|--------|--------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 39 | D2 Bridge Painting 2014-3 | LEE | 35 | 27 |
| CONTRACT NO. 64K10 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |