

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PROPOSED  
HIGHWAY PLANS**

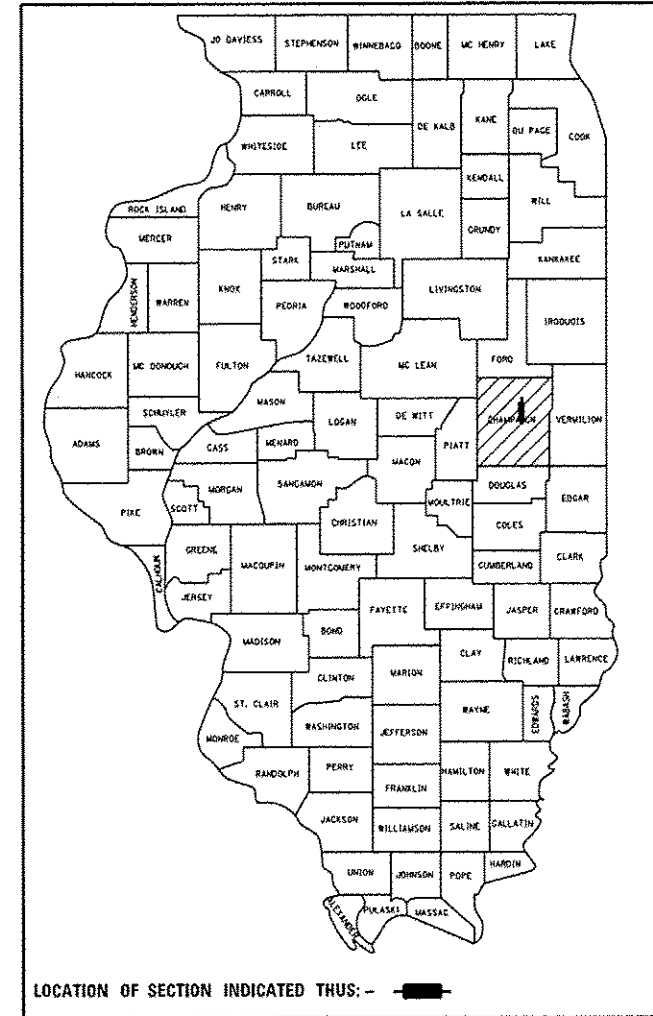
F.A.S. 502 (LEVERETT RD.)  
SECTION 106BR-1(1)  
PROJECT: ACSTP-0502 (017)  
CULVERT REPLACEMENT  
CHAMPAIGN COUNTY

C-95-120-02

STREAM AT I-57 N OF CHAMPAIGN

| F.A.S. RTE. | SECTION    | COUNTY    | TOTAL SHEETS       | SHEET NO. |
|-------------|------------|-----------|--------------------|-----------|
| 502         | 106BR-1(1) | CHAMPAIGN | 52                 | 1         |
|             |            | ILLINOIS  | CONTRACT NO. 70278 |           |

D-95-072-02



FOR INDEX OF SHEETS, SEE SHEET NO. 2  
FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 4-8

| CURRENT TRAFFIC DATA |       |
|----------------------|-------|
| 2015 ADT             | 2,850 |
| P.U. %               | 89.9  |
| S.U. %               | 5.4   |
| M.U. %               | 4.7   |

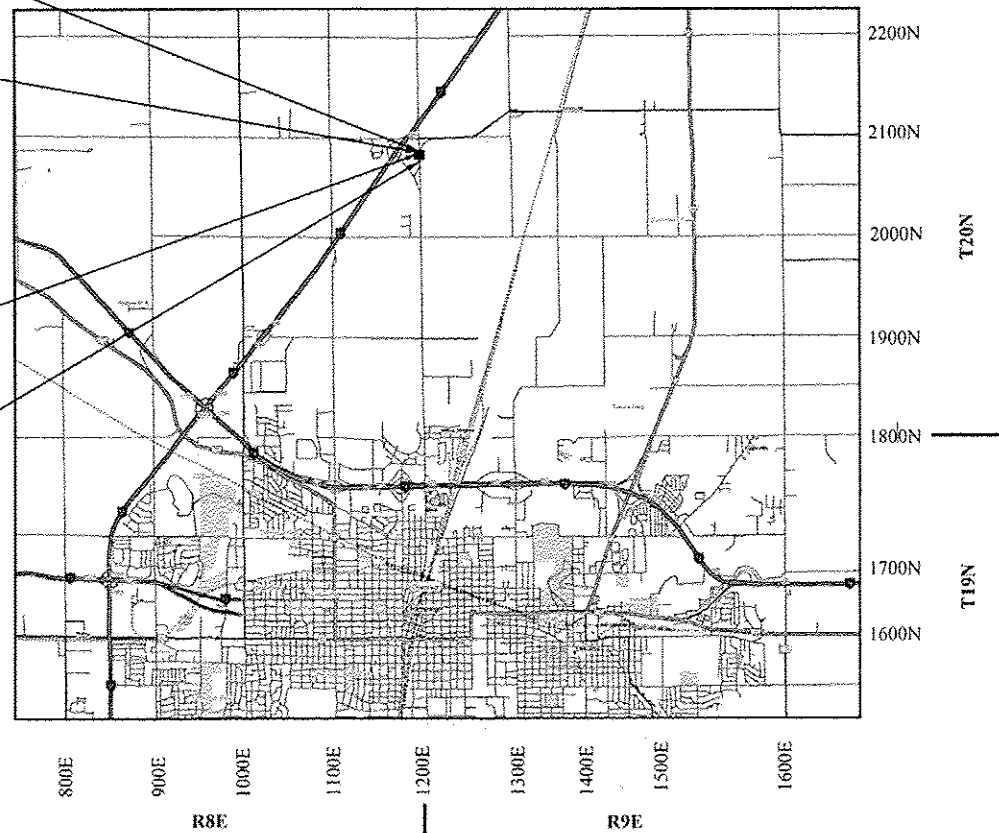
DESIGN DESIGNATION: N/A

F.A.S. 502 SECTION 106BR-1(1)  
ENDS: STATION 148+00.00

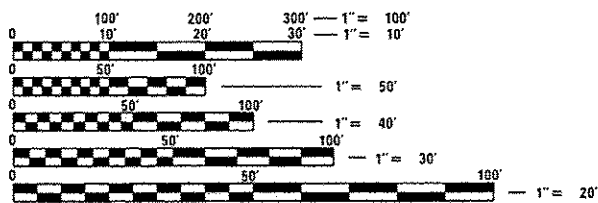
CULVERT REPLACEMENT  
EXISTING S.N. 010-2010 AT STA. 145+89.50  
TRIPLE 10' X 11' REINFORCED CONCRETE BOX CULVERT  
PROPOSED S.N. 010-2037 AT STA. 145+89.50  
TRIPLE 12' X 12' CAST IN PLACE CONCRETE  
BOX CULVERT WITH SOLDIER PILE WINGWALLS

STATION EQUATION:  
STA. 23+76.50 (BK) =  
STA. 144+96.26 (AH)

F.A.S. 502 SECTION  
106 BR-1(1) BEGINS:  
STATION: 23+00.00



GROSS LENGTH = 40.0 FT. = 0.008 MILE  
NET LENGTH = 40.0 FT. = 0.008 MILE



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  
HENSLEY & SOMMER TOWNSHIPS

PROJECT ENGINEER: NANCY FASIG  
SQUAD LEADER: BRIAN J. HOGAN  
DESIGNER: BILLY J. MURPHY

CONTRACT NO. 70278

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED MARCH 18, 2016  
Kenneth G. Burnett  
REGION THREE ENGINEER

Matthew M. Adams, PE, EA  
ENGINEER OF DESIGN AND ENVIRONMENT

Chris Cermon, PE, EA  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS



# GENERAL NOTES

G.N.-100  
ENGLISH UNITS OF MEASUREMENT SHALL GOVERN OVER AND SUPERSEDE ANY METRIC UNITS SHOWN IN THIS CONTRACT. WHERE INCLUDED, METRIC UNITS ARE FOR INFORMATION ONLY.

G.N.-100A  
ELECTRONIC FILES AND/OR ELECTRONIC SURVEY INFORMATION INCLUDING CADD FILES WILL NOT BE AVAILABLE TO THE CONTRACTOR.

G.N.-105.09A  
ALL ELEVATIONS SHOWN IN THE PLANS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988. (NAVD 88)

G.N.-107.37  
UTILITY LINES WERE PLOTTED FROM INFORMATION FURNISHED BY THE VARIOUS UTILITY COMPANIES INVOLVED (QUALITY LEVEL C &/OR QUALITY LEVEL D) AND THE ACCURACY SHOULD BE CONSIDERED APPROXIMATE ONLY.

UTILITY COMPANIES MAY BE ADJUSTING THEIR FACILITIES DURING CONSTRUCTION. THE CONTRACTOR SHALL COOPERATE WITH THESE ORGANIZATIONS WHILE THESE ADJUSTMENTS ARE BEING PERFORMED. J.U.L.I.E. - JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS SYSTEM (800) 892-0123 OR 811.

G.N.-202  
GRADING SHALL BE DONE BY HAND AROUND LIGHT POLES, UTILITY POLES, SIGN POSTS, SHRUBS, TREES OR OTHER NATURAL OR MAN-MADE OBJECTS WHERE SHALLOW FILLS OR CUTS ARE ADJACENT TO THE ITEMS. IT IS THE INTENT THAT THE LIMITS OF CONSTRUCTION BE SUCH AS TO PRESERVE IN THE ORIGINAL STATE AS MUCH AREA OF TEMPORARY EASEMENTS AS POSSIBLE. THE DECISION AS TO ITEMS TO REMAIN IN PLACE SHALL BE AS DIRECTED BY THE ENGINEER.

THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE CONTRACT UNIT PRICE PER CUBIC YARD FOR EARTH EXCAVATION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

G.N.-250C  
SEEDING, CLASS 7 AND MULCH, METHOD 2 IS INCLUDED IN THIS CONTRACT TO SEED NEW EARTH SHOULDERS DURING TIME PERIODS WHEN PERMANENT SEEDING IS NOT ALLOWED. SOME OR ALL OF THE CLASS 7 SEEDING AND MULCH WILL BE DELETED IF IT IS POSSIBLE TO PLACE PERMANENT SEEDING ON EARTH SHOULDERS AT THE TIME OF THEIR COMPLETION.

G.N.-280  
TEMPORARY EROSION CONTROL SEEDING IS INCLUDED IN THIS CONTRACT TO SEED DISTURBED EARTH DURING TIME PERIODS WHEN PERMANENT SEEDING IS NOT ALLOWED. SOME OR ALL OF THE TEMPORARY EROSION CONTROL SEEDING WILL BE DELETED IF IT IS POSSIBLE TO PLACE PERMANENT SEEDING ON EARTH AT THE TIME OF THEIR COMPLETION.

G.N.-280A  
THE VARIOUS MULCH PAY ITEMS IN THE PLANS INCLUDE QUANTITIES FOR TEMPORARY MULCH FOR EROSION CONTROL. THE TEMPORARY MULCH INCLUDES MAINTENANCE AND REMOVAL IF NECESSARY, PER THE REQUIREMENTS OF ARTICLE 280 OF THE STANDARD SPECIFICATIONS, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED. SOME OR ALL OF THE MULCH USED AS TEMPORARY EROSION CONTROL WILL BE DELETED IF IT IS NOT NECESSARY DUE TO ESTABLISHMENT OF PERMANENT SEEDING.

G.N.-406  
THE QUANTITIES INCLUDED IN THE PLANS FOR HOT-MIX ASPHALT RESURFACING ARE INTENDED TO GIVE THE COVERAGE SHOWN ON THE TYPICAL CROSS SECTIONS. IT IS NOT INTENDED TO INCREASE THE THICKNESS OF THE HOT-MIX ASPHALT MIXTURE IN ORDER TO USE ALL OF THE QUANTITIES INCLUDED IN THE CONTRACT.

GN-406H Mixture Requirements Contract 70278

| Location                   | Leverett Rd   | Leverett RD                       |
|----------------------------|---|-----------------------------------|
| Mixture Use                | Class D, Var.Depth Binder, Base<br>Cse Option, Bottom 8" HMA Shldr. | Surface, Top 1 1/2"<br>HMA Shldr. |
| AC/PG                      | PG 64-22  | PG 64-22                          |
| Design Air Voids           | 4.0% @ Ndes=50  | 4.0% @ Ndes=50                    |
| Mix Comp(Gradation)        | IL 19.0   | IL 9.5                            |
| Friction Aggregate         | N.A.  | N.A.                              |
| Mixture Weight             | 112   | 112                               |
| Quality Management Program | QC/QA   | QC/QA                             |
| Sublot Size                | N.A.  | N.A.                              |

G.N.-667  
THE RESIDENT ENGINEER SHALL CONTACT THE PROGRAM DEVELOPMENT CHIEF OF SURVEYS PRIOR TO THE PRE-CONSTRUCTION CONFERENCE FOR INSTRUCTION AS TO SETTING OF TEMPORARY OR PERMANENT TIES FOR CENTERLINE ALIGNMENT CONTROL SURVEY MARKERS (PC'S, PT'S, AND PI'S). PROJECT IMPLEMENTATION PERSONNEL WILL BE RESPONSIBLE FOR LAYOUT OF THESE MARKERS.

G.N.-703A  
SHORT TERM PAVEMENT MARKING SHALL BE APPLIED TO THE PAVEMENT AFTER ANY OF THE FOLLOWING: COLD MILLING AND/OR PLACING BITUMINOUS MATERIALS (PRIME COAT), LEVELING BINDER (MACHINE METHOD), BINDER AND SURFACE COURSES. SHORT TERM PAVEMENT MARKING PLACED ON THE SURFACE, SHALL COINCIDE WITH THE FINAL PAVEMENT STRIPING. SHORT TERM PAVEMENT MARKING PLACED PRIOR TO THE SURFACE SHALL COINCIDE WITH THE EXISTING PAVEMENT MARKINGS. USE 4 FEET PER 40 FEET (OR 10% PER STATION).

G.N.-1004.01  
COARSE AGGREGATE GRADATION CA-10 MAY BE USED WHENEVER COARSE AGGREGATE CA-6 IS SPECIFIED IN THE STANDARD SPECIFICATIONS

G.N.-Z0038  
AN ALUMINUM TABLET OF THE TYPE SHOWN ON STANDARD 667101 SHALL BE PLACED ON THE PROPOSED STRUCTURE AS DIRECTED BY THE ENGINEER. THE BENCH MARK ELEVATION WILL BE ESTABLISHED AND MARKED BY THE DEPARTMENT. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR PERMANENT BENCH MARKS.

G.N.-SPL  
THE REMOVAL AND DISPOSAL OF THE EXISTING APPROACH SLABS OR CONCRETE PAVEMENT PATCHES ARE INCLUDED WITH REMOVAL OF EXISTING STRUCTURES.

NO COMMITMENTS

|   |   |            |           |   |  |                    |                     |                           |                 |              |  |
|---|---|------------|-----------|---|--|--------------------|---------------------|---------------------------|-----------------|--------------|--|
| FILE NAME =                               | USER NAME = bergenej                      | DESIGNED - | REVISED - | <b>STATE OF ILLINOIS<br/>DEPARTMENT OF TRANSPORTATION</b> | <b>GENERAL NOTES &amp; COMMITMENTS</b> | F.A.S.<br>RTE.     | SECTION             | COUNTY                    | TOTAL<br>SHEETS | SHEET<br>NO. |  |
| p:\1\0846810\INTEG\Illinois.gov\PI\007\00 | Documents\1007 - District 5\Projects\0502 | DATE       | REVISED   |   |  | 502                | 106BR-10J           | CHAMPAIGN                 | 52              | 3            |  |
|   | PLOT SCALE = 40,0000' / in.               | CHECKED -  | REVISED - |   |  | CONTRACT NO. 70278 |                     | ILLINOIS FED. AID PROJECT |                 |              |  |
| MODELNAME4                                | PLOT DATE = 3/14/2016                     | DATE       | REVISED   |   |  | SCALE:             | SHEET 1 OF 1 SHEETS | STA.                      | TO STA.         |              |  |

LOCATION OF WORK:

FAS 502 (LEVERETT RD.)

RURAL

MAJOR COLLECTOR

STA. 23+00.00 TO STA. 148+00.00

CHAMPAIGN COUNTY

FUNDING BREAKOUT:

80% FEDERAL / 20% STATE

CONSTRUCTION TYPE CODE:

0011

| CODE NO. | ITEM                              | UNIT  | TOTAL QUANTITY |
|----------|-----------------------------------|-------|----------------|
| 20200100 | EARTH EXCAVATION                  | CU YD | 335.0          |
| 20700220 | POROUS GRANULAR EMBANKMENT        | CU YD | 420.0          |
| 25000210 | SEEDING, CLASS 2A                 | ACRE  | 0.25           |
| 25000350 | SEEDING, CLASS 7                  | ACRE  | 0.75           |
| 25000400 | NITROGEN FERTILIZER NUTRIENT      | POUND | 25.0           |
| 25000500 | PHOSPHOROUS FERTILIZER NUTRIENT   | POUND | 25.0           |
| 25000600 | POTASSIUM FERTILIZER NUTRIENT     | POUND | 25.0           |
| 25100115 | MULCH, METHOD 2                   | ACRE  | 0.75           |
| 25100630 | EROSION CONTROL BLANKET           | SQ YD | 10,890.0       |
| 28000250 | TEMPORARY EROSION CONTROL SEEDING | POUND | 600.0          |
| 28000400 | PERIMETER EROSION BARRIER         | FOOT  | 350.0          |
| 28000500 | INLET AND PIPE PROTECTION         | EACH  | 4.0            |
| 28100107 | STONE RIPRAP, CLASS A4            | SQ YD | 230.0          |
| 28200200 | FILTER FABRIC                     | SQ YD | 230.0          |

\* DENOTES SPECIALTY ITEM

|   |                      |            |           |   |   |  |                           |            |                    |                 |              |
|---|----------------------|------------|-----------|---|---|--|---------------------------|------------|--------------------|-----------------|--------------|
| FILE NAME =   | USER NAME = bergenej | DESIGNED - | REVISED - | <b>STATE OF ILLINOIS<br/>DEPARTMENT OF TRANSPORTATION</b> | <b>SUMMARY OF QUANTITIES</b>            |  | F.A.S.<br>RTE.            | SECTION    | COUNTY             | TOTAL<br>SHEETS | SHEET<br>NO. |
| \\IL064EBID\INTEG\illinois.gov\W100T\Documents\DOT Office\District 5\Projects\0507-DR\Drawings\Design\0574278-ant-502.dgn | DRANN                | REVISED -  | REVISED - |   |   |  | 502                       | 106BR-1(J) | CHAMPAIGN          | 52              | 4            |
| PLOT SCALE = 48,000' / in.  | CHECKED -            | REVISED -  | REVISED - |   | SCALE: SHEET 1 OF 5 SHEETS STA. TO STA. |  | ILLINOIS FED. AID PROJECT |            | CONTRACT NO. 70278 |                 |              |
| PLOT DATE = 3/14/2016   | DATE -               | REVISED -  | REVISED - |   |   |  |                           |            |                    |                 |              |



LOCATION OF WORK:

FAS 502 (LEVERETT RD.)

RURAL

MAJOR COLLECTOR

STA. 23+00.00 TO STA. 148+00.00

CHAMPAIGN COUNTY

FUNDING BREAKOUT:

80% FEDERAL / 20% STATE

CONSTRUCTION TYPE CODE:

0011

| CODE NO.                 | ITEM   | UNIT  | TOTAL QUANTITY |
|--------------------------|--|-------|----------------|
| 50500505                 | STUD SHEAR CONNECTORS                              | EACH  | 712.0          |
| 50800205                 | REINFORCEMENT BARS, EPOXY COATED                   | POUND | 43,510.0       |
| 50800515                 | BAR SPLICERS                                       | EACH  | 256.0          |
| 51500100                 | NAME PLATES  | EACH  | 1.0            |
| 52200010                 | TEMPORARY SHEET PILING                             | SQ FT | 953.0          |
| 52200100                 | FURNISHING SOLDIER PILES (HP SECTION)              | FOOT  | 1,192.0        |
| 52200150                 | DRIVING SOLDIER PILES                              | FOOT  | 1,192.0        |
| 52200250                 | UNTREATED TIMBER LAGGING                           | SQ FT | 804.0          |
| 54003000                 | CONCRETE BOX CULVERTS                              | CU YD | 227.1          |
| 59100100                 | GEOCOMPOSITE WALL DRAIN                            | SQ YD | 35.0           |
| 61100500                 | EXPLORATION TRENCH 52" DEPTH                       | FOOT  | 200.0          |
| * 63000001               | STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS   | FOOT  | 137.5          |
| * 63000025               | STEEL PLATE BEAM GUARDRAIL, ATTACHED TO STRUCTURES | FOOT  | 87.5           |
| * 63100167               | TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT | EACH  | 3.0            |
| * DENOTES SPECIALTY ITEM |  |       |                |

LOCATION OF WORK:

FAS 502 (LEVERETT RD.)

RURAL

MAJOR COLLECTOR

STA. 23+00.00 TO STA. 148+00.00

CHAMPAIGN COUNTY

FUNDING BREAKOUT:

80% FEDERAL / 20% STATE

CONSTRUCTION TYPE CODE:

0011

| CODE NO.                 | ITEM  | UNIT   | TOTAL QUANTITY |
|--------------------------|---|--------|----------------|
| * 63100169               | TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) FLARED             | EACH   | 1.0            |
| 63200310                 | GUARDRAIL REMOVAL   | FOOT   | 452.0          |
| 67000500                 | ENGINEER'S FIELD OFFICE, TYPE B                               | CAL MO | 8.0            |
| 67100100                 | MOBILIZATION  | LSUM   | 1.0            |
| 70106500                 | TEMPORARY BRIDGE TRAFFIC SIGNALS                              | EACH   | 1.0            |
| 70300100                 | SHORT TERM PAVEMENT MARKING                                   | FOOT   | 80.0           |
| 70300150                 | SHORT TERM PAVEMENT MARKING REMOVAL                           | SQ FT  | 20.0           |
| 70300220                 | TEMPORARY PAVEMENT MARKING - LINE 4"                          | FOOT   | 2,000.0        |
| 70400100                 | TEMPORARY CONCRETE BARRIER                                    | FOOT   | 375.0          |
| 70400200                 | RELOCATE TEMPORARY CONCRETE BARRIER                           | FOOT   | 275.0          |
| 70600250                 | IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3 | EACH   | 2.0            |
| 70600350                 | IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3  | EACH   | 2.0            |
| * 72501000               | TERMINAL MARKER - DIRECT APPLIED                              | EACH   | 4.0            |
| * 72501100               | TERMINAL MARKER - POST MOUNTED                                | EACH   | 2.0            |
| * DENOTES SPECIALTY ITEM |   |        |                |

14

LOCATION OF WORK:

FAS 502 (LEVERETT RD.)

RURAL

MAJOR COLLECTOR

STA. 23+00.00 TO STA. 148+00.00

CHAMPAIGN COUNTY

FUNDING BREAKOUT:

80% FEDERAL / 20% STATE

CONSTRUCTION TYPE CODE:

0011

| CODE NO.                 | ITEM                                       | UNIT  | TOTAL QUANTITY |
|--------------------------|--|-------|----------------|
| * 78001110               | PAINT PAVEMENT MARKING - LINE 4"           | FOOT  | 2,000.0        |
| * 78200005               | GUARDRAIL REFLECTORS, TYPE A               | EACH  | 8.0            |
| 78300100                 | PAVEMENT MARKING REMOVAL                   | SQ FT | 850.0          |
| * X6310176               | TRAFFIC BARRIER TERMINAL, TYPE 2 (SPECIAL) | EACH  | 2.0            |
| * X6330725               | STEEL PLATE BEAM GUARDRAIL (SHORT RADIUS)  | FOOT  | 25.0           |
| X7010216                 | TRAFFIC CONTROL AND PROTECTION (SPECIAL)   | LSUM  | 1.0            |
| X7200201                 | WIDTH RESTRICTION SIGNING                  | LSUM  | 1.0            |
| XZ193400                 | SURVEY MARKER, TYPE 2 (SPECIAL)            | EACH  | 3.0            |
| Z0002900                 | BASE COURSE (OPTION)                       | SQ YD | 60.0           |
| Z0013798                 | CONSTRUCTION LAYOUT                        | LSUM  | 1.0            |
| Z0038700                 | PERMANENT BENCH MARKS                      | EACH  | 1.0            |
| Z0073400                 | TEMPORARY SUPPORT SYSTEM                   | EACH  | 1.0            |
| * DENOTES SPECIALTY ITEM |  |       |                |

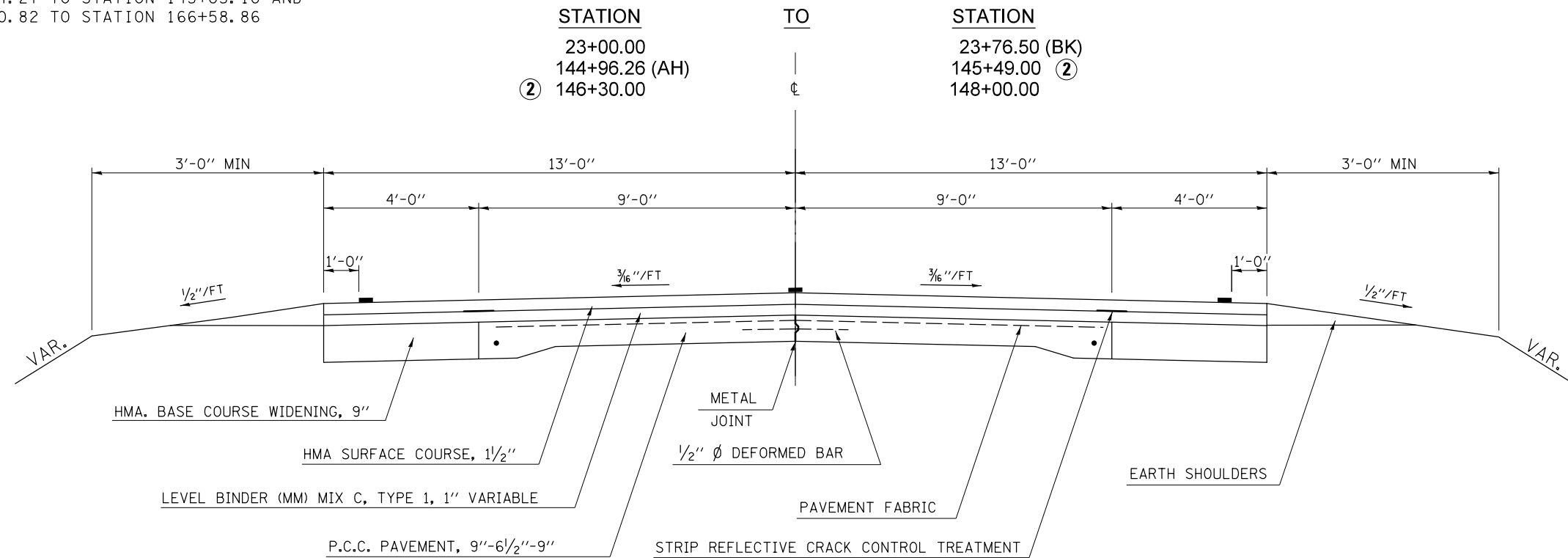
12

|   |                      |            |                           |   |                              |                                    |           |        |              |           |
|---|----------------------|------------|---------------------------|---|------------------------------|------------------------------------|-----------|--------|--------------|-----------|
| FILE NAME *   | USER NAME = bergenej | DESIGNED - | REVISED -                 | <b>STATE OF ILLINOIS<br/>DEPARTMENT OF TRANSPORTATION</b> | <b>SUMMARY OF QUANTITIES</b> | F.A.S.<br>RTE.                     | SECTION   | COUNTY | TOTAL SHEETS | SHEET NO. |
| path \\ILL084EB\INTEG\Illinois.gov\PI\DOT\Documents\DOT_Offices\District 5\Projects\0507-DRAWING\Design\0570278-ahf-500.dgn | DRAWN                | REVISED -  | 502                       |   |                              | 106BR-111                          | CHAMPAIGN | 52     | 8            |           |
| PLOT SCALE = 48.0000' / 1" =  | CHECKED -            | REVISED -  | CONTRACT NO. 70278        |   |                              |                                    |           |        |              |           |
| MODEL NAME *  | DATE -               | REVISED -  | ILLINOIS FEG. AID PROJECT |   |                              |                                    |           |        |              |           |
| SCALE:  |                      |            |                           |   |                              | SHEET 5 OF 5 SHEETS   STA. TO STA. |           |        |              |           |



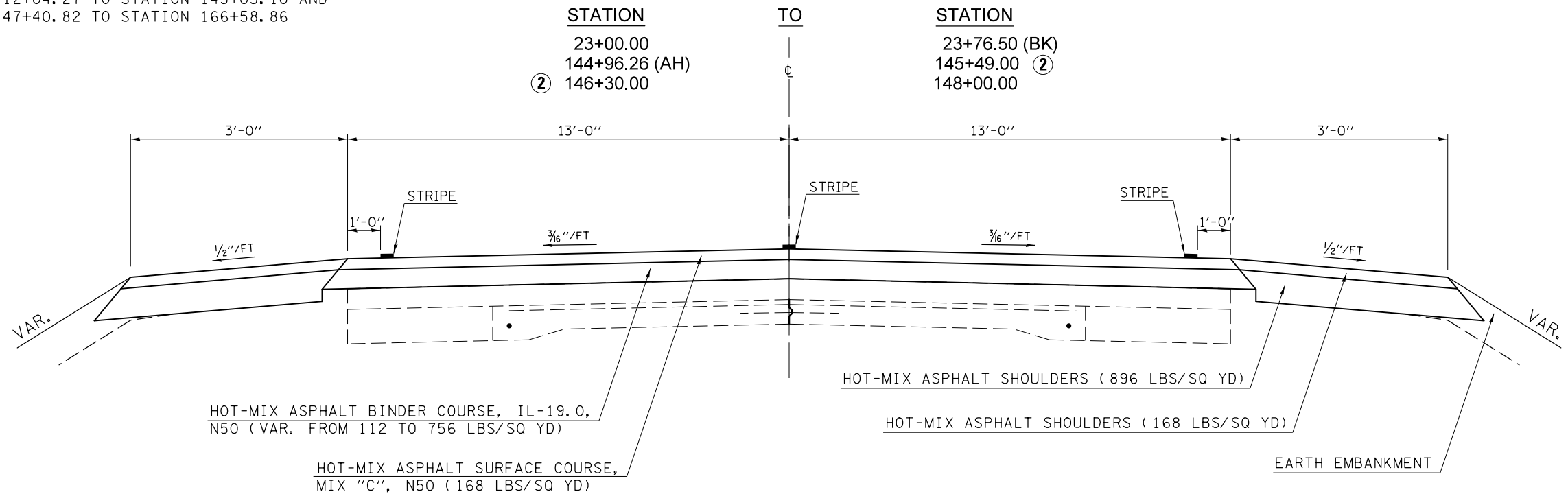
# EXISTING TYPICAL CROSS SECTION ①

NOTE: SLOPE VARIES FOR SUPERELEVATIONS IN CURVES  
 FROM STATION 12+04.27 TO STATION 145+05.10 AND  
 FROM STATION 147+40.82 TO STATION 166+58.86



# PROPOSED TYPICAL CROSS SECTION ①

NOTE: SLOPE VARIES FOR SUPERELEVATIONS IN CURVES  
 FROM STATION 12+04.27 TO STATION 145+05.10 AND  
 FROM STATION 147+40.82 TO STATION 166+58.86



|   |                      |            |                    |   |                         |             |      |             |                           |        |              |           |
|---|----------------------|------------|--------------------|---|-------------------------|-------------|------|-------------|---------------------------|--------|--------------|-----------|
| FILE NAME =   | USER NAME = bergenej | DESIGNED - | REVISED -          | <b>STATE OF ILLINOIS<br/>DEPARTMENT OF TRANSPORTATION</b> | <b>TYPICAL SECTIONS</b> |             |      | F.A.S. RTE. | SECTION                   | COUNTY | TOTAL SHEETS | SHEET NO. |
| pw:\IL\084EBIDINTEG.illinois.gov\PIWIDOT\Documents\DOT Offices\District 5\Projects\050728\Drawings\Design\0570278-shr-typical.dwg | DESIGNED -           | REVISED -  | 502                |   |                         |             |      | 106BR-1(1)  | CHAMPAIGN                 | 52     | 9            |           |
| PLOT SCALE = 40.0000' / in.   | CHECKED -            | REVISED -  | CONTRACT NO. 70278 |   |                         |             |      |             |                           |        |              |           |
| *MODELNAME*   | DATE -               | REVISED -  | SCALE:             |   | SHEET 1                 | OF 2 SHEETS | STA. | TO STA.     | ILLINOIS FED. AID PROJECT |        |              |           |



# SCHEDULE OF QUANTITIES

## BITUMINOUS MATERIALS

| DIRECTION | STA            | TO | STA           | SHLDR/<br>MAINLINE | LENGTH<br>(FOOT) | WIDTH<br>(FOOT) | AREA<br>(SQ YD) | RATE OF<br>APPLICATION<br>(LBS/SQ YD) | BIT MATLS<br>(PR CT)<br>40600275<br>(POUND) | BIT MATLS<br>(TACK CT)<br>40600290<br>(POUND) |
|-----------|----------------|----|---------------|--------------------|------------------|-----------------|-----------------|---------------------------------------|---|---|
| NB        | 23+00.00       |    | 23+76.50 (BK) | SHLDR              | 76.50            | 3.0             | 25.50           | 2.25                                  | 57.4  |   |
| NB        | 144+96.26 (AH) |    | 148+00.00     | SHLDR              | 303.74           | 3.0             | 101.25          | 2.25                                  | 227.8                                       |   |
| SB        | 23+00.00       |    | 23+76.50 (BK) | SHLDR              | 76.50            | 3.0             | 25.50           | 2.25                                  | 57.4  |   |
| SB        | 144+96.26 (AH) |    | 148+00.00     | SHLDR              | 303.74           | 3.0             | 101.25          | 2.25                                  | 227.8                                       |   |
| NB        | 145+49.00      |    | 146+30.00     | MAINLINE           | 81.00            | 13.0            | 117.00          | 2.25                                  | 263.3                                       |   |
| SB        | 145+49.00      |    | 146+30.00     | MAINLINE           | 81.00            | 13.0            | 117.00          | 2.25                                  | 263.3                                       |   |
| NB        | 23+00.00       |    | 23+34.26      | MAINLINE           | 34.26            | 13.0            | 49.49           | 0.45                                  |   | 22.3  |
| SB        | 23+00.00       |    | 23+34.26      | MAINLINE           | 34.26            | 13.0            | 49.49           | 0.45                                  |   | 22.3  |
| NB        | 23+34.26       |    | 23+76.50 (BK) | MAINLINE           | 42.24            | 13.0            | 61.01           | 0.675                                 |   | 41.2  |
| SB        | 23+34.26       |    | 23+76.50 (BK) | MAINLINE           | 42.24            | 13.0            | 61.01           | 0.675                                 |   | 41.2  |
| NB        | 144+96.26 (AH) |    | 145+05.00     | MAINLINE           | 8.74             | 13.0            | 12.62           | 0.675                                 |   | 8.5   |
| SB        | 144+96.26 (AH) |    | 145+05.00     | MAINLINE           | 8.74             | 13.0            | 12.62           | 0.675                                 |   | 8.5   |
| NB        | 145+05.00      |    | 145+49.00     | MAINLINE           | 44.00            | 13.0            | 63.56           | 0.90                                  |   | 57.2  |
| SB        | 145+05.00      |    | 145+49.00     | MAINLINE           | 44.00            | 13.0            | 63.56           | 0.90                                  |   | 57.2  |
| NB        | 145+49.00      |    | 146+30.00     | MAINLINE           | 81.00            | 13.0            | 117.00          | 0.45                                  |   | 52.7  |
| SB        | 145+49.00      |    | 146+30.00     | MAINLINE           | 81.00            | 13.0            | 117.00          | 0.45                                  |   | 52.7  |
| NB        | 146+30.00      |    | 146+75.00     | MAINLINE           | 45.00            | 13.0            | 65.00           | 0.90                                  |   | 58.5  |
| SB        | 146+30.00      |    | 146+75.00     | MAINLINE           | 45.00            | 13.0            | 65.00           | 0.90                                  |   | 58.5  |
| NB        | 146+75.00      |    | 147+52.25     | MAINLINE           | 77.25            | 13.0            | 111.58          | 0.675                                 |   | 75.3  |
| SB        | 146+75.00      |    | 147+52.25     | MAINLINE           | 77.25            | 13.0            | 111.58          | 0.675                                 |   | 75.3  |
| NB        | 147+52.25      |    | 148+00.00     | MAINLINE           | 47.75            | 13.0            | 68.97           | 0.45                                  |   | 31.0  |
| SB        | 147+52.25      |    | 148+00.00     | MAINLINE           | 47.75            | 13.0            | 68.97           | 0.45                                  |   | 31.0  |
| NB        | 23+00.00       |    | 23+76.50 (BK) | SHLDR              | 76.50            | 3.0             | 25.50           | 0.45                                  |   | 11.5  |
| SB        | 23+00.00       |    | 23+76.50 (BK) | SHLDR              | 76.50            | 3.0             | 25.50           | 0.45                                  |   | 11.5  |
| NB        | 144+96.26 (AH) |    | 148+00.00     | SHLDR              | 303.74           | 3.0             | 101.25          | 0.45                                  |   | 45.6  |
| SB        | 144+96.26 (AH) |    | 148+00.00     | SHLDR              | 303.74           | 3.0             | 101.25          | 0.45                                  |   | 45.6  |
| TOTAL =   |                |    |               |                    |                  |                 |                 |                                       | 1096.9                                      | 807.4   |
| ROUND TO  |                |    |               |                    |                  |                 |                 |                                       | 1100.0                                      | 820.0   |

NOTE: RATE OF APPLICATION FOR PRIME COAT = 0.25 LB/SQ FT x 9 (SQ FT/ SQ YD) = 2.25 LB/SQ YD  
 RATE OF APPLICATION FOR TACK COAT = 0.05 LB/SQ FT ON MILLED OR EXISTING SURFACES = 0.05 LB/SQ FT x 9 (SQ FT/SQ YD) = 0.45 LB/SQ YD  
 RATE OF APPLICATION FOR TACK COAT = 0.025 LB/SQ FT ON NEW HMA SURFACES = 0.025 LB/SQ FT x 9 (SQ FT/SQ YD) = 0.225 LB/SQ YD

## TEMPORARY RAMPS & AGGREGATE SURFACE COURSE B

| DIRECTION | STA       | TO | STA       | LENGTH<br>(FOOT)   | WIDTH<br>(FOOT) | AREA<br>(SQ YD) | DEPTH<br>(") | VOLUME<br>(CU YD) | AGG SURF<br>CSE B<br>40200800<br>(TON) | TEMPORARY<br>RAMP<br>40600990<br>(SQ YD) |
|-----------|-----------|----|-----------|--------------------|-----------------|-----------------|--------------|-------------------|--|--|
| NB        | 23+09.55  |    |           | (MEASURED IN CADD) |                 | 37.6            | 6.0          | 6.3               | 11.3                                   |  |
| SB        | 23+33.96  |    |           | (MEASURED IN CADD) |                 | 124.5           | 6.0          | 20.8              | 37.4                                   |  |
| SB        | 146+94.72 |    |           | (MEASURED IN CADD) |                 | 58.4            | 6.0          | 9.7               | 17.5                                   |  |
| NB        | 147+02.81 |    |           | (MEASURED IN CADD) |                 | 58.4            | 6.0          | 9.7               | 17.5                                   |  |
| NB MAIN   | 23+00.00  |    | 23+05.00  | 5.0                | 13.0            | 7.2             |              |                   |  | 7.2                                      |
| NB SHLDR  | 23+00.00  |    | 23+05.00  | 5.0                | 3.0             | 1.7             |              |                   |  | 1.7                                      |
| SB MAIN   | 23+00.00  |    | 23+05.00  | 5.0                | 13.0            | 7.2             |              |                   |  | 7.2                                      |
| SB SHLDR  | 23+00.00  |    | 23+05.00  | 5.0                | 3.0             | 1.7             |              |                   |  | 1.7                                      |
| NB MAIN   | 147+95.00 |    | 148+00.00 | 5.0                | 13.0            | 7.2             |              |                   |  | 7.2                                      |
| NB SHLDR  | 147+95.00 |    | 148+00.00 | 5.0                | 3.0             | 1.7             |              |                   |  | 1.7                                      |
| SB MAIN   | 147+95.00 |    | 148+00.00 | 5.0                | 13.0            | 7.2             |              |                   |  | 7.2                                      |
| SB SHLDR  | 147+95.00 |    | 148+00.00 | 5.0                | 3.0             | 1.7             |              |                   |  | 1.7                                      |
| TOTAL =   |           |    |           |                    |                 |                 |              |                   | 83.7                                   | 35.6                                     |
| ROUND TO  |           |    |           |                    |                 |                 |              |                   | 90.0                                   | 40.0                                     |

## HMA PATCHING

| DIRECTION | STA       | TO | STA       | LENGTH<br>(FOOT) | WIDTH<br>(FOOT) | CL D<br>PATCH<br>TYPE 4 8"<br>44201747<br>(SQ YD) |
|-----------|-----------|----|-----------|------------------|-----------------|---|
| NB        | 145+49.00 |    | 146+30.00 | 81.0             | 10.79           | 97.1  |
| SB        | 145+49.00 |    | 146+30.00 | 81.0             | 15.46           | 139.1   |
| TOTAL =   |           |    |           |                  |                 | 236.3   |
| ROUND TO  |           |    |           |                  |                 | 240.0   |

## REMOVAL

| DIRECTION | STA            | TO | STA           | LENGTH<br>(FOOT)   | WIDTH<br>(FOOT) | HMA SURF<br>REM<br>BUTT JT<br>40600982<br>(SQ YD) | DRIVE<br>PAVEMENT<br>REM<br>44000200<br>(SQ YD) | PAVED<br>SHLD<br>REMOVAL<br>44004250<br>(SQ YD) |
|-----------|----------------|----|---------------|--------------------|-----------------|---|---|---|
| NB & SB   | 23+00.00       |    | 23+17.29      | (MEASURED IN CADD) |                 | 52.6  |   |   |
| NB & SB   | 147+71.39      |    | 148+00.00     | (MEASURED IN CADD) |                 | 87.9  |   |   |
| NB        | 23+09.55       |    |               | (MEASURED IN CADD) |                 |   | 14.1  |   |
| SB        | 23+33.96       |    |               | (MEASURED IN CADD) |                 |   | 18.3  |   |
| NB        | 147+02.81      |    |               | (MEASURED IN CADD) |                 |   | 21.1  |   |
| SB        | 23+40.00       |    | 23+76.50 (BK) | 36.50              | 2.0             |   |   | 8.1   |
| SB        | 144+96.26 (AH) |    | 147+20.00     | 223.74             | 2.0             |   |   | 49.7  |
| TOTAL =   |                |    |               |                    |                 | 140.5   | 53.5  | 57.8  |
| ROUND TO  |                |    |               |                    |                 | 145.0   | 55.0  | 60.0  |

NOTE: REMOVAL OF BASE COURSE (OPTION) TO BE PAID AS PAVED SHOULDER REMOVAL.

## SURVEY MARKERS

| STA                           | OFFSET | TYPE                    | SURVEY<br>MARKER<br>T2 SPL<br>XZ193400<br>(EACH) |
|-------------------------------|--------|-------------------------|--|
| 23+20.63                      | CL     | P.T.                    | 1.0  |
| 23+76.50 BK =<br>144+96.26 AH | CL     | STA. EQUA.<br>P.I. KINK | 1.0  |
| 147+41.01                     | CL     | T.S.                    | 1.0  |
| TOTAL =                       |        |                         | 3.0  |

# SCHEDULE OF QUANTITIES

## HMA PAVING & BASE COURSE OPTION (MAINLINE)

| DIRECTION | STATION        | TO | STATION       | LENGTH (FOOT) | AVE. SURFACE WIDTH (FOOT) | AVE. BINDER WIDTH (FOOT) | SURFACE AREA (SQ YD) | BINDER AREA (SQ YD) | AVE. BINDER DEPTH (INCH) | AVE. SURFACE DEPTH (INCH) | HMA BINDER COURSE IL-19.0, N50 40603080 (TON) | HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 40603310 (TON) |
|-----------|----------------|----|---------------|---------------|---------------------------|--------------------------|----------------------|---------------------|--------------------------|---------------------------|---|---|
| NB        | 23+00.00       |    | 23+34.26      | 34.26         | 13.0                      |                          | 49.5                 |                     |                          | 2.0                       |   | 5.5   |
| NB        | 23+34.26       |    | 23+76.50 (BK) | 42.24         | 13.0                      | 13.22                    | 61.0                 | 62.05               | 2.46                     | 1.5                       | 8.5   | 5.1   |
| NB        | 144+96.26 (AH) |    | 145+20.00     | 23.74         |                           | 13.315                   |                      | 35.12               | 4.74                     |                           | 9.3   |   |
| NB        | 144+96.26 (AH) |    | 147+52.25     | 255.99        | 13.0                      |                          | 369.8                |                     |                          | 1.5                       | 0.0   | 31.1  |
| NB        | 145+20.00      |    | 145+49.00     | 29.00         |                           | 13.38                    |                      | 43.11               | 6.24                     |                           | 15.1  |   |
| NB        | 146+30.00      |    | 146+40.00     | 10.00         |                           | 13.37                    |                      | 14.86               | 5.88                     |                           | 4.9   |   |
| NB        | 146+40.00      |    | 146+80.00     | 40.00         |                           | 13.33                    |                      | 59.24               | 5.04                     |                           | 16.7  |   |
| NB        | 146+80.00      |    | 147+20.00     | 40.00         |                           | 13.27                    |                      | 58.98               | 3.60                     |                           | 11.9  |   |
| NB        | 147+20.00      |    | 147+52.25     | 32.25         |                           | 13.20                    |                      | 47.30               | 1.86                     |                           | 4.9   |   |
| NB        | 147+52.25      |    | 148+00.00     | 47.75         | 13.0                      |                          | 68.97                |                     |                          | 2.0                       |   | 7.7   |
| SB        | 23+00.00       |    | 23+34.26      | 34.26         | 13.0                      |                          | 49.5                 |                     |                          | 2.0                       |   | 5.5   |
| SB        | 23+34.26       |    | 23+76.50 (BK) | 42.24         | 13.0                      | 13.22                    | 61.01                | 62.05               | 2.46                     | 1.5                       | 8.5   | 5.1   |
| SB        | 144+96.26 (AH) |    | 145+20.00     | 23.74         |                           | 13.315                   |                      | 35.12               | 4.74                     |                           | 9.3   |   |
| SB        | 144+96.26 (AH) |    | 147+52.25     | 255.99        | 13.0                      |                          | 369.76               |                     |                          | 1.5                       |   | 31.1  |
| SB        | 145+20.00      |    | 145+49.00     | 29.00         |                           | 13.38                    |                      | 43.11               | 6.24                     |                           | 15.1  |   |
| SB        | 146+30.00      |    | 146+40.00     | 10.00         |                           | 13.37                    |                      | 14.86               | 5.88                     |                           | 4.9   |   |
| SB        | 146+40.00      |    | 146+80.00     | 40.00         |                           | 13.33                    |                      | 59.24               | 5.04                     |                           | 16.7  |   |
| SB        | 146+80.00      |    | 147+20.00     | 40.00         |                           | 13.27                    |                      | 58.98               | 3.60                     |                           | 11.9  |   |
| SB        | 147+20.00      |    | 147+52.25     | 32.25         |                           | 13.20                    |                      | 47.30               | 1.86                     |                           | 4.9   |   |
| SB        | 147+52.25      |    | 148+00.00     | 47.75         | 13.0                      |                          | 68.97                |                     |                          | 2.0                       |   | 7.7   |
| TOTAL =   |                |    |               |               |                           |                          |                      |                     |                          |                           | 142.7   | 98.9  |
| ROUND TO  |                |    |               |               |                           |                          |                      |                     |                          |                           | 150.0   | 100.0   |

## HMA PAVING & BASE COURSE OPTION (SHOULDER)

| DIRECTION | STATION        | TO | STATION       | THICKNESS (INCHES) | ( A ) LENGTH (FOOT) | ( B ) AVE. WIDTH (FOOT) | ( C ) AREA (SQ YD) | HOT-MIX ASPHALT SHOULDERS 48203100 (TON) | BASE COURSE (OPTION) Z0002900 (SQ YD) |
|-----------|----------------|----|---------------|--------------------|---------------------|-------------------------|--------------------|--|---------------------------------------|
| NB        | 23+00.00       |    | 23+76.50 (BK) | 9.5                | 76.50               | 3.40                    | 28.90              | 15.4                                     |                                       |
| NB        | 144+96.26 (AH) |    | 148+00.00     | 9.5                | 303.74              | 3.40                    | 114.75             | 61.0                                     |                                       |
| SB        | 23+00.00       |    | 23+76.50 (BK) | 9.5                | 76.50               | 3.4                     | 28.90              | 15.4                                     |                                       |
| SB        | 23+40.00       |    | 23+76.50 (BK) | 9.0                | 36.50               | 2.0                     | 8.11               |  | 8.1                                   |
| SB        | 144+96.26 (AH) |    | 147+20.00     | 9.0                | 223.74              | 2.0                     | 49.72              |  | 49.7                                  |
| SB        | 144+96.26 (AH) |    | 148+00.00     | 9.5                | 303.74              | 3.4                     | 114.75             | 61.0                                     |                                       |
| TOTAL =   |                |    |               |                    |                     |                         |                    | 152.8                                    | 57.8                                  |
| ROUND TO  |                |    |               |                    |                     |                         |                    | 160.0                                    | 60.0                                  |

## HMA PAVING & BASE COURSE OPTION (SUMMARY)

|           | HMA BINDER COURSE IL-19.0, N50 40603080 (TON) | HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 40603310 (TON) | HMA SHOULDERS 48203100 (TON) | BASE COURSE (OPTION) Z0002900 (SQ YD) |
|-----------|---|---|------------------------------|---------------------------------------|
| LOCATION: |   |   |                              |                                       |
| MAINLINE  | 142.7   | 98.9  |                              |                                       |
| SHOULDERS |   |   | 152.8                        | 57.8                                  |
| TOTAL =   | 142.7   | 98.9  | 152.8                        | 57.8                                  |
| ROUND TO  | 150.0   | 100.0   | 160.0                        | 60.0                                  |

# SCHEDULE OF QUANTITIES

## EARTHWORK

| LOCATION                 | EARTH EXCAVATION<br>20200100<br>(CU YD) | STRUCTURE EXCAVATION<br>50200100<br>(CU YD) | EARTH EXCAVATION<br>ADJUSTED FOR<br>SHRINKAGE<br>(CU YD) | EMBANKMENT<br>(CU YD) | EARTHWORK BALANCE<br>WASTE (+) OR<br>SHORTAGE (-)<br>(CU YD) | FURNISHED<br>EXCAVATION<br>20400800<br>(CU YD) |
|--------------------------|---|---|--|-----------------------|--|--|
| LEFT SIDE                | 14.0                                    | 0.0   | 10.5   | 96.0                  | -85.5  | 85.5   |
| RIGHT SIDE               | 16.0                                    | 0.0   | 12.0   | 50.0                  | -38.0  | 38.0   |
| BASE COURSE (OPTION)     | 13.0                                    | 0.0   | 9.8  | 0.0                   | 9.8  | -9.8   |
| BOX CULVERT (O/S STR EX) | 290.4                                   | 0.0   | 217.8  | 0.0                   | 217.8  | -217.8   |
| STRUCTURE                | 0.0                                     | 166.0                                       | 124.5  | 0.0                   | 124.5  | -124.5   |
| TOTAL =                  | 333.4                                   | 166.0                                       | 374.6  | 146.0                 | 228.6  | -228.6   |
| ROUNDED TO:              | 335.0                                   | 166.0                                       |  |                       |  | 0.0  |

- NOTES:
1. THE SHRINKAGE FACTOR USED IS 25%.
  2. SHRINKAGE, EMBANKMENT, AND BALANCE IS FOR INFORMATION ONLY.
  3. NO PAYMENT WILL BE ALLOWED FOR OVERHAUL.
  4. EXCAVATION REQUIRED FOR BITUMINOUS SHOULDERS IS MEASURED AND PAID FOR AS EARTH EXCAVATION.
  5. STRUCTURE EXCAVATION QUANTITY IS FOR SOLDIER PILE WINGWALLS ONLY.

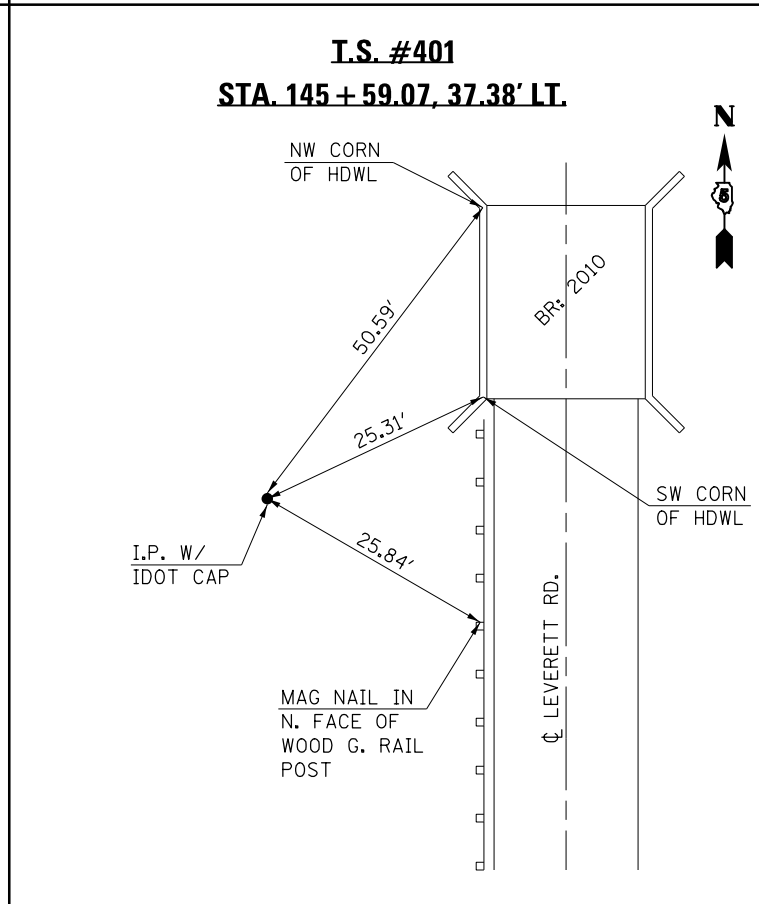
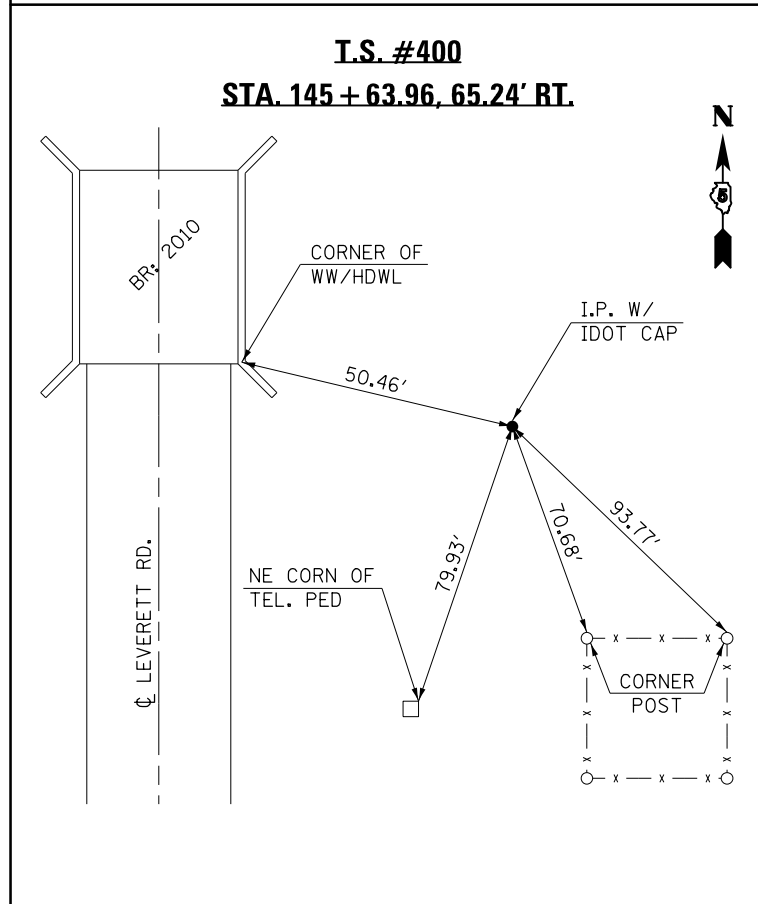
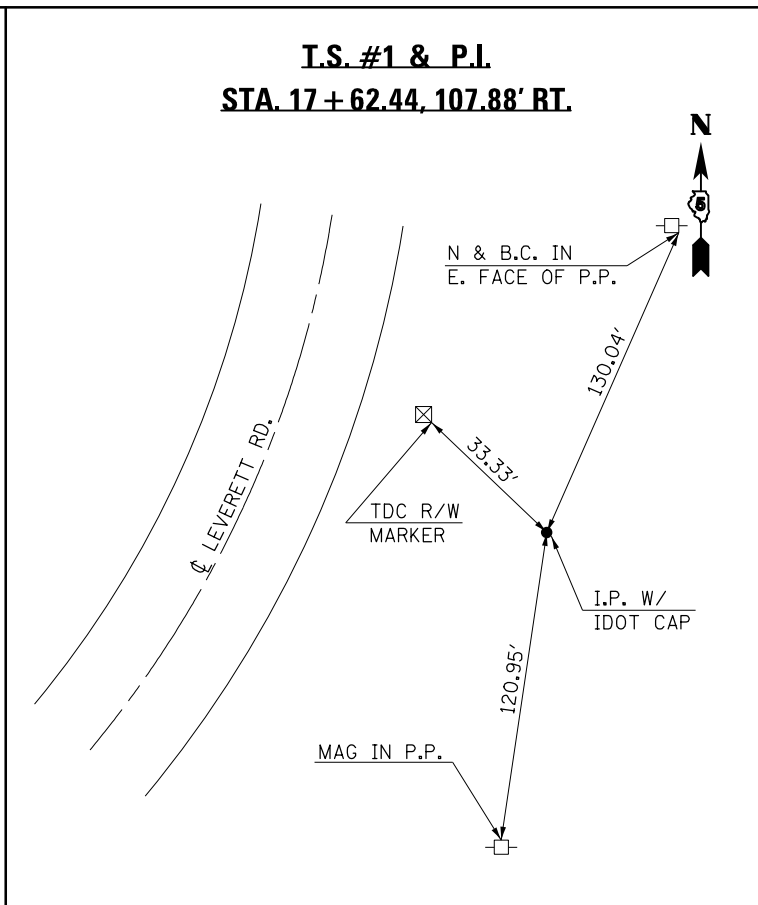
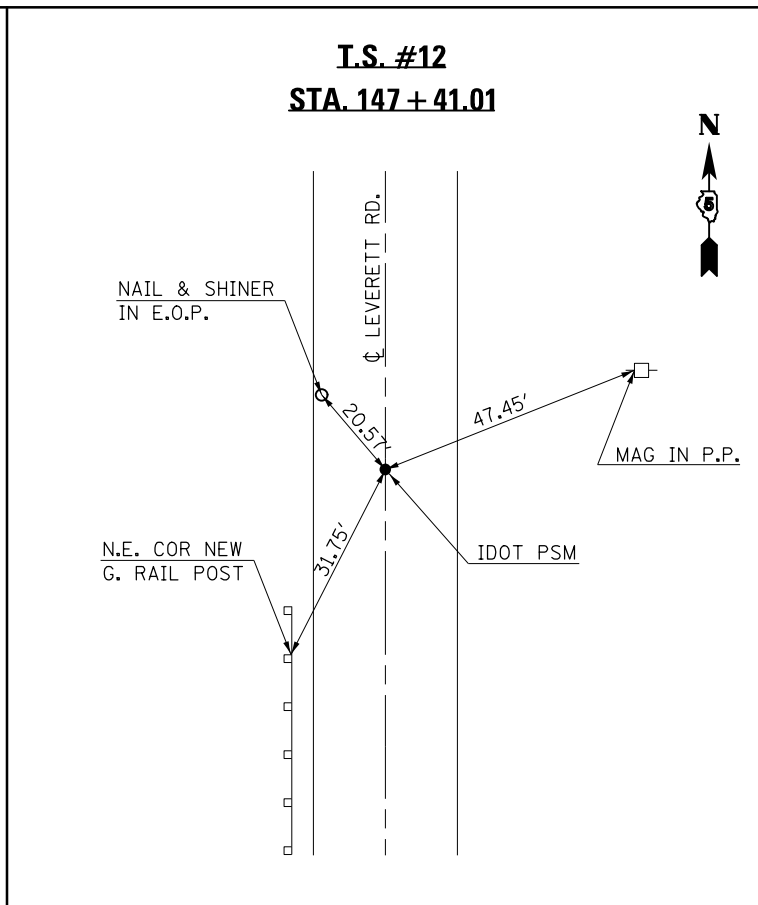
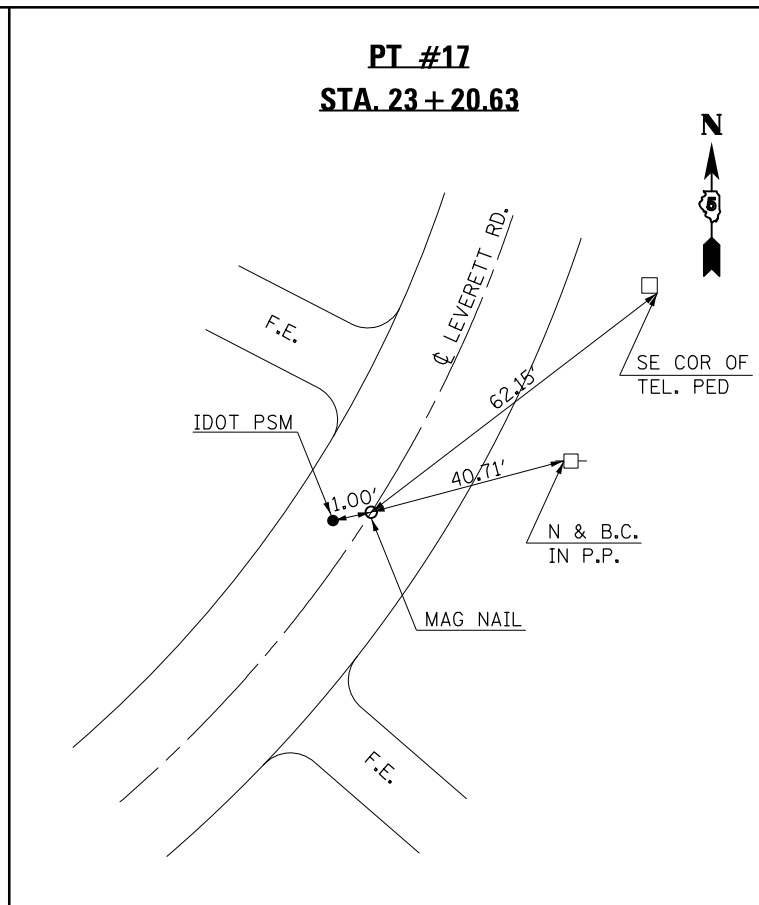
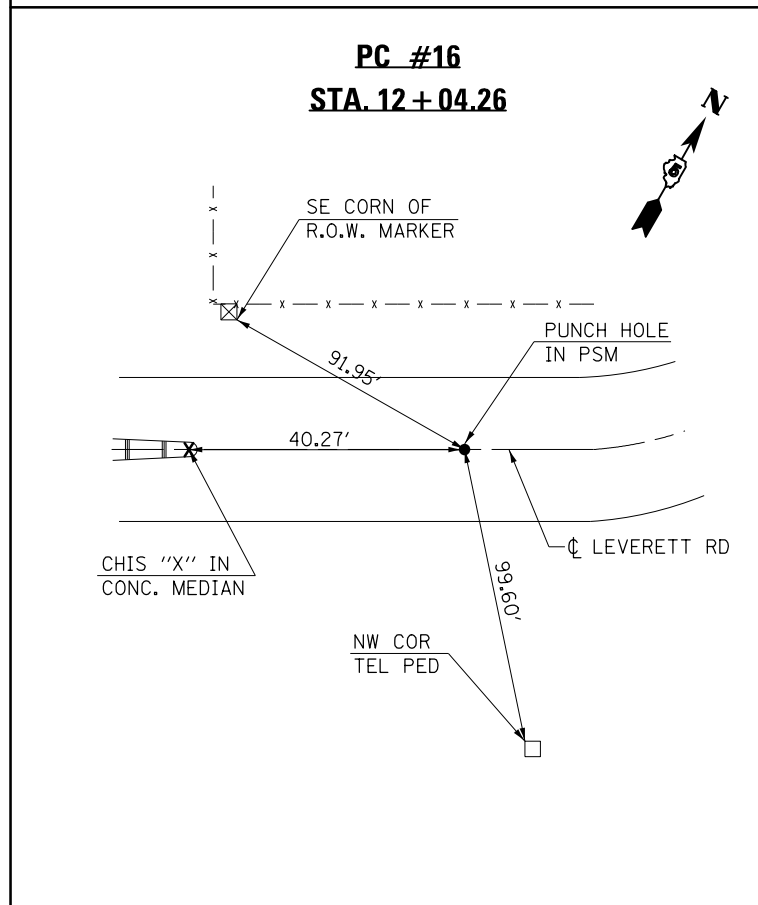
## EROSION CONTROL

| STA       | TO | STA       | OFFSET         | PERIMETER<br>EROSION<br>BARRIER<br>28000400<br>(FOOT) | INLET &<br>PIPE<br>PROTECTION<br>28000500<br>(EACH) |
|-----------|----|-----------|----------------|---|---|
| 22+81.88  |    | 23+01.88  | 40.3'-40.0' RT | 20.0  |   |
| 22+85.24  |    |           | 32.5' RT       |   | 1.0   |
| 23+14.51  |    |           | 45.1' LT       |   | 1.0   |
| 23+14.89  |    | 145+44.04 | 40.0' RT       | 110.0   |   |
| 146+15.10 |    | 146+95.10 | 40.0' RT       | 80.0  |   |
| 147+11.10 |    | 147+31.10 | 40.0' RT       | 20.0  |   |
| 146+16.72 |    | 146+86.72 | 40.0' LT       | 70.0  |   |
| 147+02.72 |    | 147+52.72 | 40.0' LT       | 50.0  |   |
| 147+31.07 |    |           | 32.2' RT       |   | 1.0   |
| 147+50.13 |    |           | 30.1' LT       |   | 1.0   |
| TOTAL =   |    |           |                | 350.0   | 4.0   |

## GUARDRAIL

| OFFSET  | STA       | TO | STA       | SPBGR<br>TY A<br>6 FT<br>POSTS<br>63000001<br>(FOOT) | SPBGR<br>ATTACH<br>TO<br>STR<br>63000025<br>(FOOT) | TR BAR<br>TRM T1<br>SPL<br>TAN<br>63100167<br>(EACH) | TR BAR<br>TRM T1<br>SPL<br>FLR<br>63100169<br>(EACH) | GUARDRAIL<br>REMOV<br>63200310<br>(FOOT) | GUARDRAIL<br>REFL,<br>TYPE A<br>78200005<br>(EACH) | TERMINAL<br>MARKER -<br>DA<br>72501000<br>(EACH) | TERMINAL<br>MARKER -<br>PM<br>72501100<br>(EACH) | TRAF BAR<br>TERM<br>T2<br>SPL<br>X6310176<br>(EACH) | SPBGR<br>(SHORT RADIUS)<br>X6330725<br>(FOOT) |
|---------|-----------|----|-----------|--|--|--|--|--|--|--|--|---|---|
| RT      | 23+22.91  |    | 23+72.89  |  |  |  | 1.0  |  |  |  |  |   |   |
| RT      | 23+72.89  |    | 145+67.63 | 75.0   |  |  |  |  |  |  |  |   |   |
| RT      | 145+67.63 |    | 146+11.38 |  | 43.75  |  |  |  |  |  |  |   |   |
| RT      | 146+11.38 |    | 146+17.63 | 6.25   |  |  |  |  |  |  |  |   |   |
| RT      | 146+17.63 |    | 146+67.63 |  |  | 1.0  |  |  |  |  |  |   |   |
| LT      | 145+17.63 |    | 145+67.63 |  |  | 1.0  |  |  |  |  |  |   |   |
| LT      | 145+67.63 |    | 146+11.37 |  | 43.75  |  |  |  |  |  |  |   |   |
| LT      | 146+11.37 |    | 146+67.62 | 56.25  |  |  |  |  |  |  |  |   |   |
| LT      | 146+67.62 |    | 146+78.89 |  |  |  |  |  |  |  |  |   | 12.5  |
| LT      | 146+78.89 |    | 146+83.62 |  |  |  |  |  |  |  |  | 1.0   |   |
| LT      | 147+05.81 |    | 147+10.54 |  |  |  |  |  |  |  |  | 1.0   |   |
| LT      | 147+10.54 |    | 147+21.81 |  |  |  |  |  |  |  |  |   | 12.5  |
| LT      | 147+21.81 |    | 147+71.79 |  |  | 1.0  |  |  |  |  |  |   |   |
| RT      | 23+36.74  |    | 146+82.50 |  |  |  |  | 226.0                                    |  |  |  |   |   |
| LT      | 144+93.05 |    | 147+19.05 |  |  |  |  | 226.0                                    |  |  |  |   |   |
| LT      | 145+65.96 |    |           |  |  |  |  |  | 1.0  |  |  |   |   |
| LT      | 146+16.79 |    |           |  |  |  |  |  | 1.0  |  |  |   |   |
| LT      | 146+67.62 |    |           |  |  |  |  |  | 1.0  |  |  |   |   |
| LT      | 147+20.96 |    |           |  |  |  |  |  | 1.0  |  |  |   |   |
| RT      | 23+72.91  |    |           |  |  |  |  |  | 1.0  |  |  |   |   |
| RT      | 145+36.41 |    |           |  |  |  |  |  | 1.0  |  |  |   |   |
| RT      | 145+80.15 |    |           |  |  |  |  |  | 1.0  |  |  |   |   |
| RT      | 146+23.89 |    |           |  |  |  |  |  | 1.0  |  |  |   |   |
| RT      | 23+22.91  |    |           |  |  |  |  |  |  | 1.0  |  |   |   |
| LT      | 145+17.63 |    |           |  |  |  |  |  |  | 1.0  |  |   |   |
| RT      | 146+67.63 |    |           |  |  |  |  |  |  | 1.0  |  |   |   |
| LT      | 147+71.79 |    |           |  |  |  |  |  |  | 1.0  |  |   |   |
| LT      | 146+67.62 |    |           |  |  |  |  |  |  |  | 1.0  |   |   |
| LT      | 147+21.81 |    |           |  |  |  |  |  |  |  | 1.0  |   |   |
| TOTAL = |           |    |           | 137.5  | 87.5   | 3.0  | 1.0  | 452.0                                    | 8.0  | 4.0  | 2.0  | 2.0   | 25.0  |

# ALIGNMENTS, TIE POINTS AND BENCHMARKS

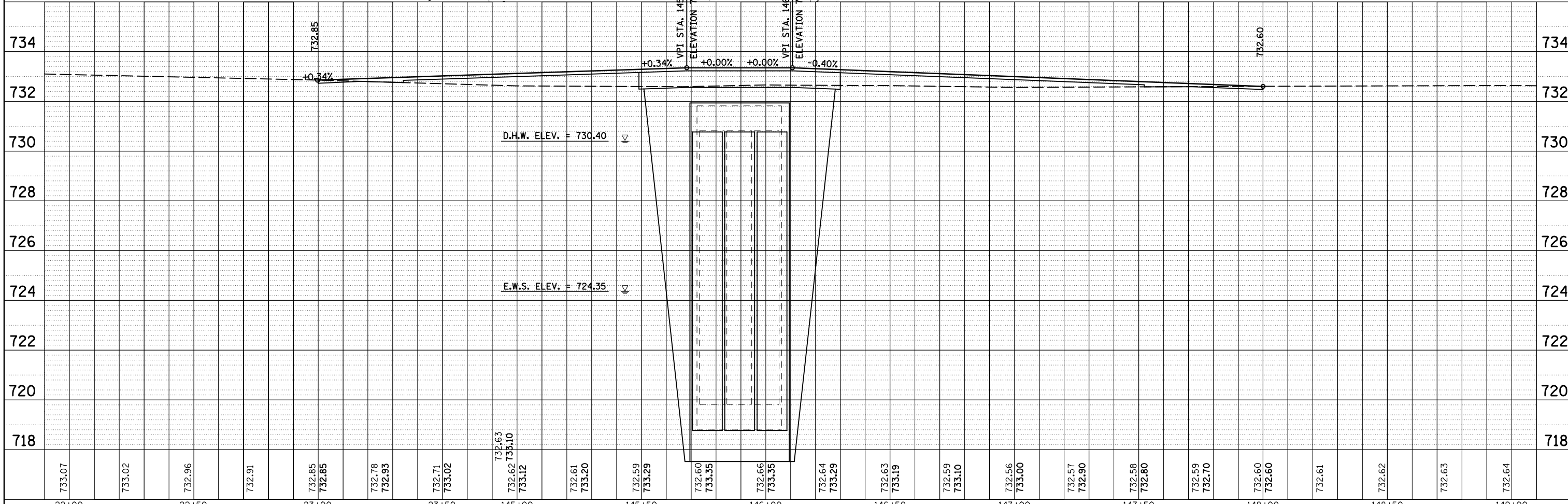
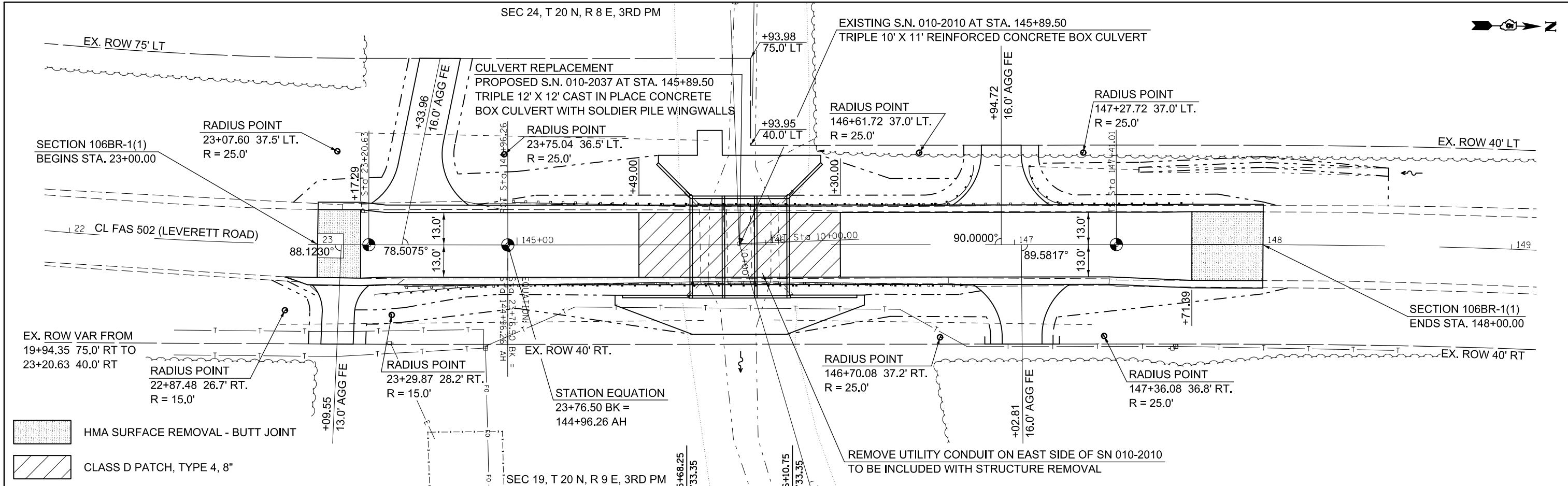


|                             |                       |            |           |   |   |           |                     |      |         |                 |                           |                  |                 |              |
|-----------------------------|-----------------------|------------|-----------|---|---|-----------|---------------------|------|---------|-----------------|---------------------------|------------------|-----------------|--------------|
| FILE NAME =                 | USER NAME = bergena.j | DESIGNED - | REVISED - | <b>STATE OF ILLINOIS<br/>DEPARTMENT OF TRANSPORTATION</b> | <b>ALIGNMENTS, TIE POINTS,<br/>AND BENCHMARKS</b> | SCALE:    | SHEET 1 OF 2 SHEETS | STA. | TO STA. | F.A.S. RTE. 502 | SECTION 106BR-1(1)        | COUNTY CHAMPAIGN | TOTAL SHEETS 52 | SHEET NO. 14 |
| DRAWN                       |                       |            |           |   |   | REVISIONS |                     |      |         |                 | CONTRACT NO. 70278        |                  |                 |              |
| PLOT SCALE = 40.0000' / in. |                       |            |           |   |   | CHECKED - |                     |      |         |                 | ILLINOIS FED. AID PROJECT |                  |                 |              |
| PLOT DATE = 3/14/2016       |                       |            |           |   |   | DATE -    |                     |      |         |                 |                           |                  |                 |              |



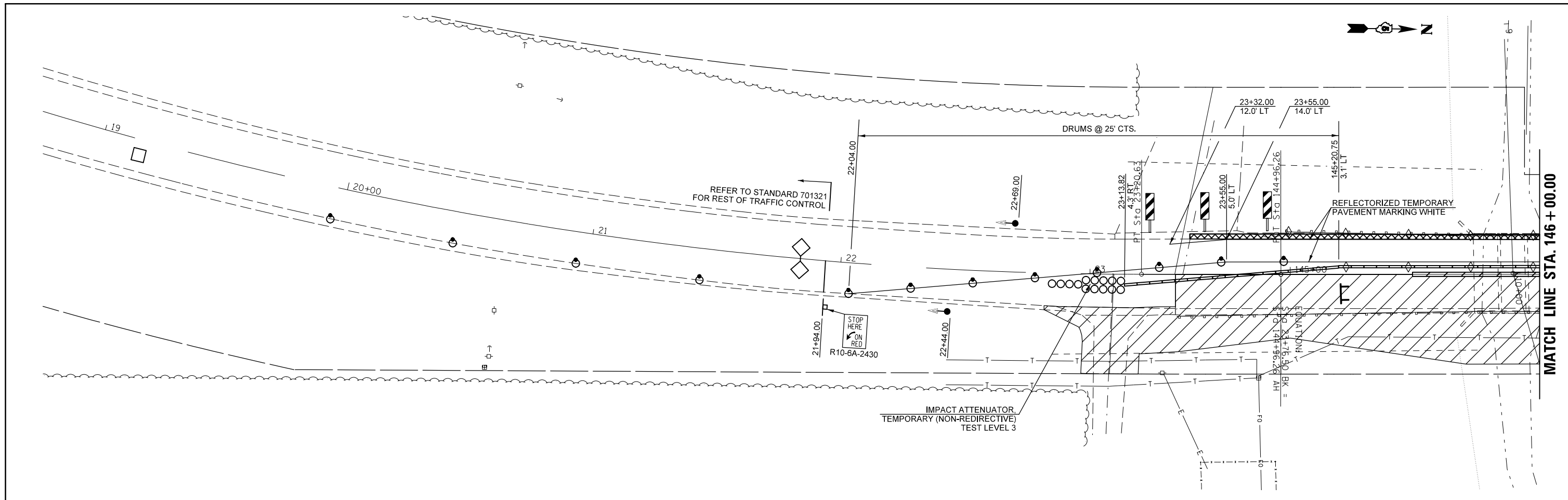
|      |                |      |
|------|----------------|------|
| PLAN | SURVEYED       | DATE |
|      | PLOTTED        | BY   |
|      | ALIGNED        |      |
|      | CHECKED        |      |
|      | NO. _____      |      |
|      | CADD FILE NAME |      |

|         |                             |      |
|---------|-----------------------------|------|
| PROFILE | SURVEYED                    | DATE |
|         | PLOTTED                     | BY   |
|         | GRADES CHECKED              |      |
|         | STRUCTURE NOTATIONS CHECKED |      |
|         | NO. _____                   |      |



|             |                             |            |           |   |                               |                    |                     |            |                           |           |  |
|-------------|-----------------------------|------------|-----------|---|-------------------------------|--------------------|---------------------|------------|---------------------------|-----------|--|
| FILE NAME = | USER NAME = hoganbj         | DESIGNED - | REVISED - | <b>STATE OF ILLINOIS</b><br><b>DEPARTMENT OF TRANSPORTATION</b> | <b>PLAN AND PROFILE SHEET</b> | F.A.S. RTE.        | SECTION             | COUNTY     | TOTAL SHEETS              | SHEET NO. |  |
| MODELNAME = | PLOT SCALE = 40.0000' / in. | CHECKED -  | REVISED - |   |                               | 502                | 106BR-1(1)          | CHAMPAIGN  | 52                        | 16        |  |
|             | PLOT DATE = 3/14/2016       | DATE -     | REVISED - |   |                               | CONTRACT NO. 70278 |                     |            | ILLINOIS FED. AID PROJECT |           |  |
|             |                             |            |           |   |                               | SCALE:             | SHEET 1 OF 1 SHEETS | STA. 22+00 | TO STA. 149+00            |           |  |





MATCH LINE STA. 146 + 00.00

**NOTES:**

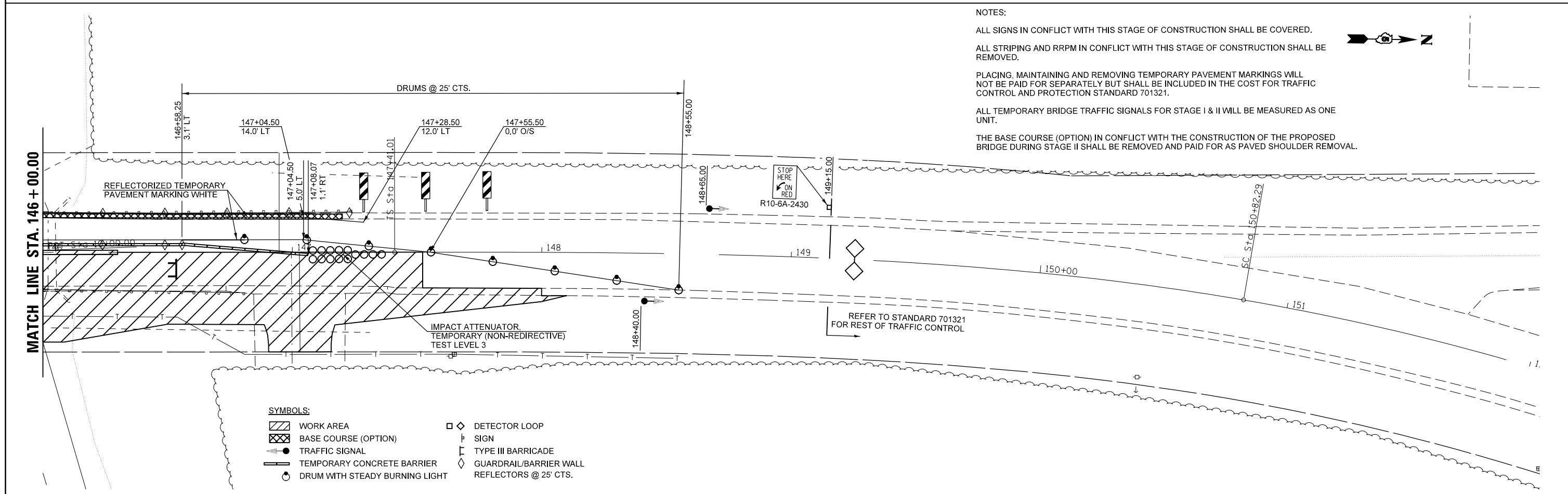
ALL SIGNS IN CONFLICT WITH THIS STAGE OF CONSTRUCTION SHALL BE COVERED.

ALL STRIPING AND RRPM IN CONFLICT WITH THIS STAGE OF CONSTRUCTION SHALL BE REMOVED.

PLACING, MAINTAINING AND REMOVING TEMPORARY PAVEMENT MARKINGS WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST FOR TRAFFIC CONTROL AND PROTECTION STANDARD 701321.

ALL TEMPORARY BRIDGE TRAFFIC SIGNALS FOR STAGE I & II WILL BE MEASURED AS ONE UNIT.

THE BASE COURSE (OPTION) IN CONFLICT WITH THE CONSTRUCTION OF THE PROPOSED BRIDGE DURING STAGE II SHALL BE REMOVED AND PAID FOR AS PAVED SHOULDER REMOVAL.



- SYMBOLS:**
- WORK AREA
  - BASE COURSE (OPTION)
  - TRAFFIC SIGNAL
  - TEMPORARY CONCRETE BARRIER
  - DRUM WITH STEADY BURNING LIGHT
  - DETECTOR LOOP
  - SIGN
  - TYPE III BARRICADE
  - GUARDRAIL/BARRIER WALL REFLECTORS @ 25' CTS.

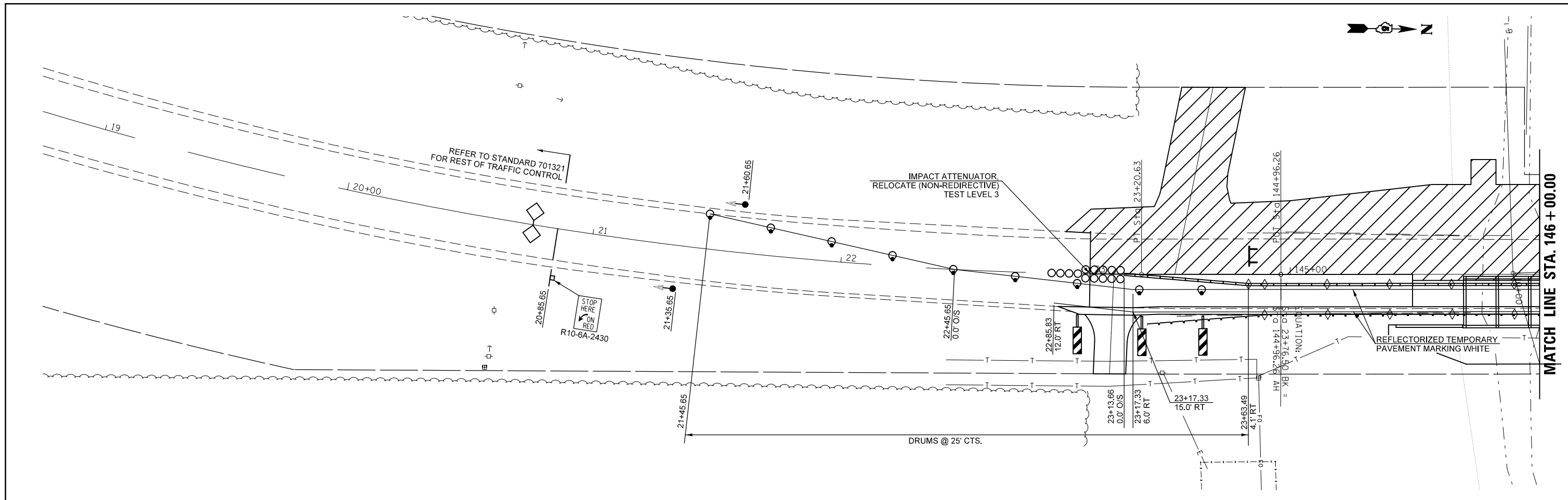
|   |                             |            |           |
|---|-----------------------------|------------|-----------|
| FILE NAME =   | USER NAME = bergena.j       | DESIGNED - | REVISED - |
| pw:\IL\084EBID\INTEG\illinois.gov\PI\DOT\Documents\DOT Offices\District 5\Projects\0507278\Design\0570278-sh1-Staging.dwg |                             | DRAWN -    | REVISED - |
|   | PLOT SCALE = 40.0000' / in. | CHECKED -  | REVISED - |
| #MODELNAME#   | PLOT DATE = 3/14/2016       | DATE -     | REVISED - |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

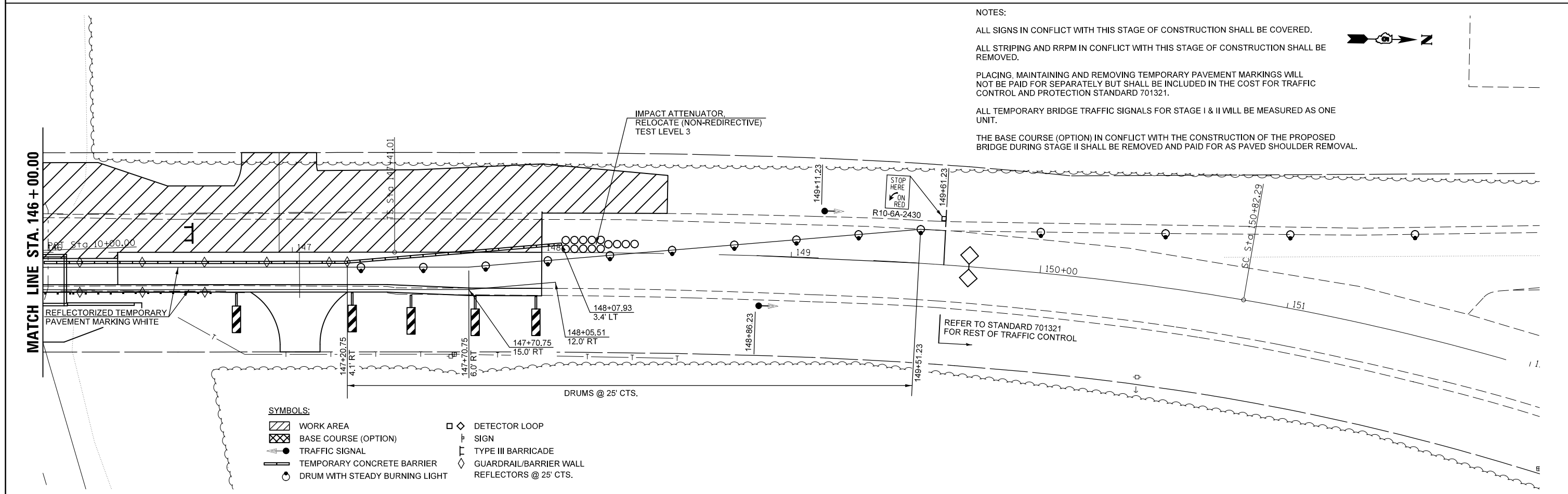
**TRAFFIC CONTROL & PROTECTION  
STAGE 1 F.A.S. ROUTE 502**

SCALE: SHEET 1 OF 1 SHEETS STA. 19+00.00 TO STA. 152+00.00

|                    |            |           |                           |           |
|--------------------|------------|-----------|---------------------------|-----------|
| F.A.S. RTE.        | SECTION    | COUNTY    | TOTAL SHEETS              | SHEET NO. |
| 502                | 106BR-1(1) | CHAMPAIGN | 52                        | 17        |
| CONTRACT NO. 70278 |            |           | ILLINOIS FED. AID PROJECT |           |



MATCH LINE STA. 146 + 00.00



**NOTES:**

ALL SIGNS IN CONFLICT WITH THIS STAGE OF CONSTRUCTION SHALL BE COVERED.

ALL STRIPING AND RRPM IN CONFLICT WITH THIS STAGE OF CONSTRUCTION SHALL BE REMOVED.

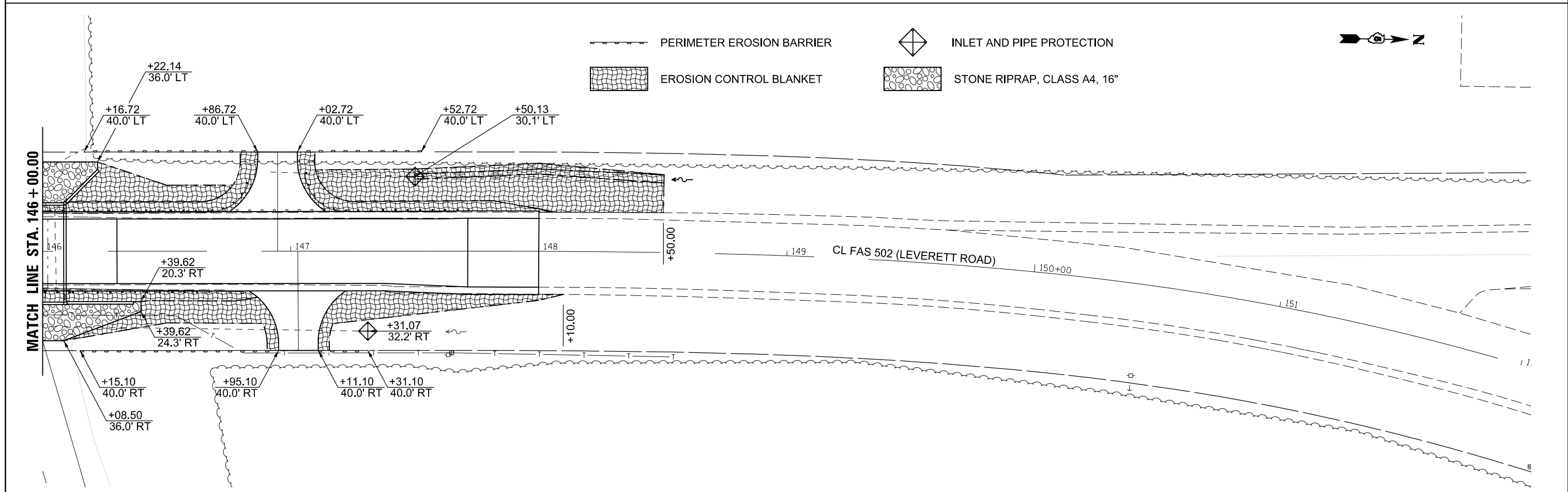
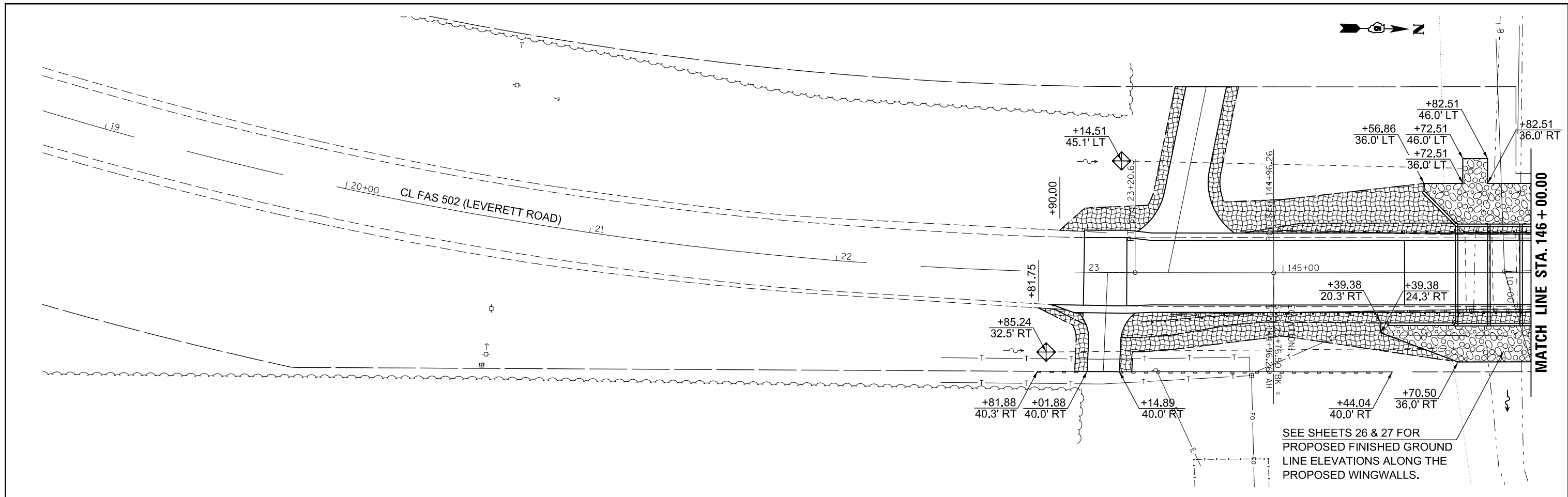
PLACING, MAINTAINING AND REMOVING TEMPORARY PAVEMENT MARKINGS WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST FOR TRAFFIC CONTROL AND PROTECTION STANDARD 701321.

ALL TEMPORARY BRIDGE TRAFFIC SIGNALS FOR STAGE I & II WILL BE MEASURED AS ONE UNIT.

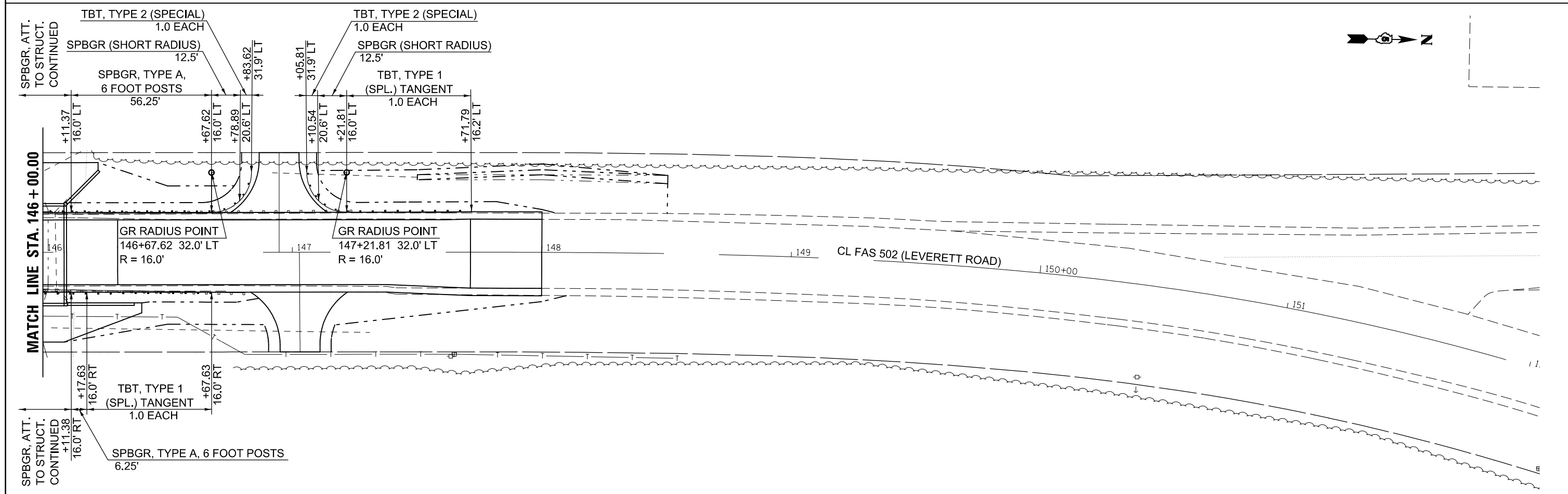
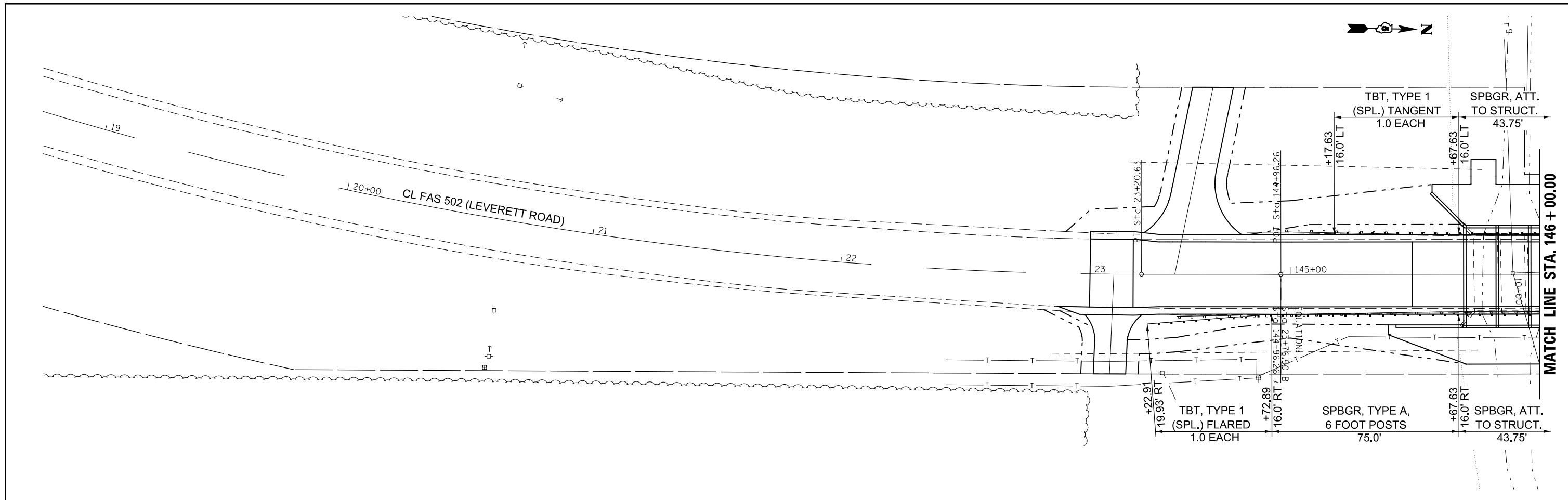
THE BASE COURSE (OPTION) IN CONFLICT WITH THE CONSTRUCTION OF THE PROPOSED BRIDGE DURING STAGE II SHALL BE REMOVED AND PAID FOR AS PAVED SHOULDER REMOVAL.

- SYMBOLS:**
- WORK AREA
  - BASE COURSE (OPTION)
  - TRAFFIC SIGNAL
  - TEMPORARY CONCRETE BARRIER
  - DRUM WITH STEADY BURNING LIGHT
  - DETECTOR LOOP
  - SIGN
  - TYPE III BARRICADE
  - GUARDRAIL/BARRIER WALL
  - REFLECTORS @ 25' CTS.

|                             |                       |                     |           |   |  |             |            |           |                           |           |
|-----------------------------|-----------------------|---------------------|-----------|---|--|-------------|------------|-----------|---------------------------|-----------|
| FILE NAME =                 | USER NAME = bergena.j | DESIGNED -          | REVISED - | <b>STATE OF ILLINOIS<br/>DEPARTMENT OF TRANSPORTATION</b> | <b>TRAFFIC CONTROL &amp; PROTECTION<br/>STAGE 2 F.A.S. ROUTE 502</b> | F.A.S. RTE. | SECTION    | COUNTY    | TOTAL SHEETS              | SHEET NO. |
| DRAWN                       |                       |                     |           |   |  | 502         | 106BR-1(1) | CHAMPAIGN | 52                        | 18        |
| PLOT SCALE = 40.0000' / in. |                       |                     |           |   |  | CHECKED -   |            |           | CONTRACT NO. 70278        |           |
| DATE -                      |                       |                     |           |   |  | REVIS       |            |           | ILLINOIS FED. AID PROJECT |           |
| SCALE:                      |                       | SHEET 1 OF 1 SHEETS |           | STA. 19+00.00 TO STA. 152+00.00                           |  |             |            |           |                           |           |



|  |                                |                           |           |   |   |  |  |                    |            |                           |              |           |
|--|--------------------------------|---------------------------|-----------|---|---|--|--|--------------------|------------|---------------------------|--------------|-----------|
| FILE NAME =  | USER NAME = bergena.j          | DESIGNED - BJH 01/14/2016 | REVISED - | <b>STATE OF ILLINOIS<br/>DEPARTMENT OF TRANSPORTATION</b> | <b>EROSION AND SEDIMENT CONTROL<br/>PLAN SHEET</b>          |  |  | F.A.S. RTE.        | SECTION    | COUNTY                    | TOTAL SHEETS | SHEET NO. |
| pw:\IL\084EBIDINTEG\Illinois.gov\PI\DOT\Documents\DOT Offices\District 5\Projects\0507\Drawings\Design\0570278-shr-Erosion.dwg | PLotted SCALE = 40.0000' / in. | CHECKED -                 | REVISED - |   |   |  |  | 502                | 106BR-1(1) | CHAMPAIGN                 | 52           | 19        |
| #MODELNAME#  | PLotted DATE = 3/14/2016       | DATE -                    | REVISED - |   | SCALE: SHEET 1 OF 1 SHEETS STA. 146+00.00 TO STA. 151+00.00 |  |  | CONTRACT NO. 70278 |            |                           |              |           |
|  |                                |                           |           |   |   |  |  |                    |            | ILLINOIS FED. AID PROJECT |              |           |



|                             |                       |                           |           |   |                             |                            |                                 |                           |                      |                    |                   |                |
|-----------------------------|-----------------------|---------------------------|-----------|---|-----------------------------|----------------------------|---------------------------------|---------------------------|----------------------|--------------------|-------------------|----------------|
| FILE NAME =                 | USER NAME = bergena.j | DESIGNED - BJH 01/14/2016 | REVISED - | <b>STATE OF ILLINOIS<br/>DEPARTMENT OF TRANSPORTATION</b> | <b>GUARDRAIL PLAN SHEET</b> |                            |                                 | F.A.S. R.E. = 502         | SECTION = 106BR-1(1) | COUNTY = CHAMPAIGN | TOTAL SHEETS = 52 | SHEET NO. = 20 |
| DRAWN                       |                       |                           |           |   | REVISED -                   | SCALE: SHEET 1 OF 1 SHEETS | STA. 19+00.00 TO STA. 151+00.00 | ILLINOIS FED. AID PROJECT |                      |                    |                   |                |
| PLOT SCALE = 48.0000' / in. |                       |                           |           |   | CHECKED -                   | REVISED -                  | CONTRACT NO. 70278              |                           |                      |                    |                   |                |
| PLOT DATE = 3/14/2016       |                       |                           |           |   | DATE -                      | REVISED -                  |                                 |                           |                      |                    |                   |                |

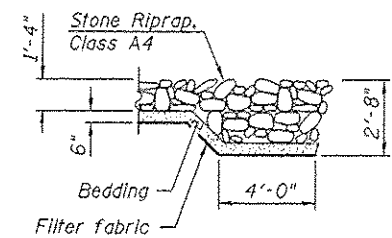
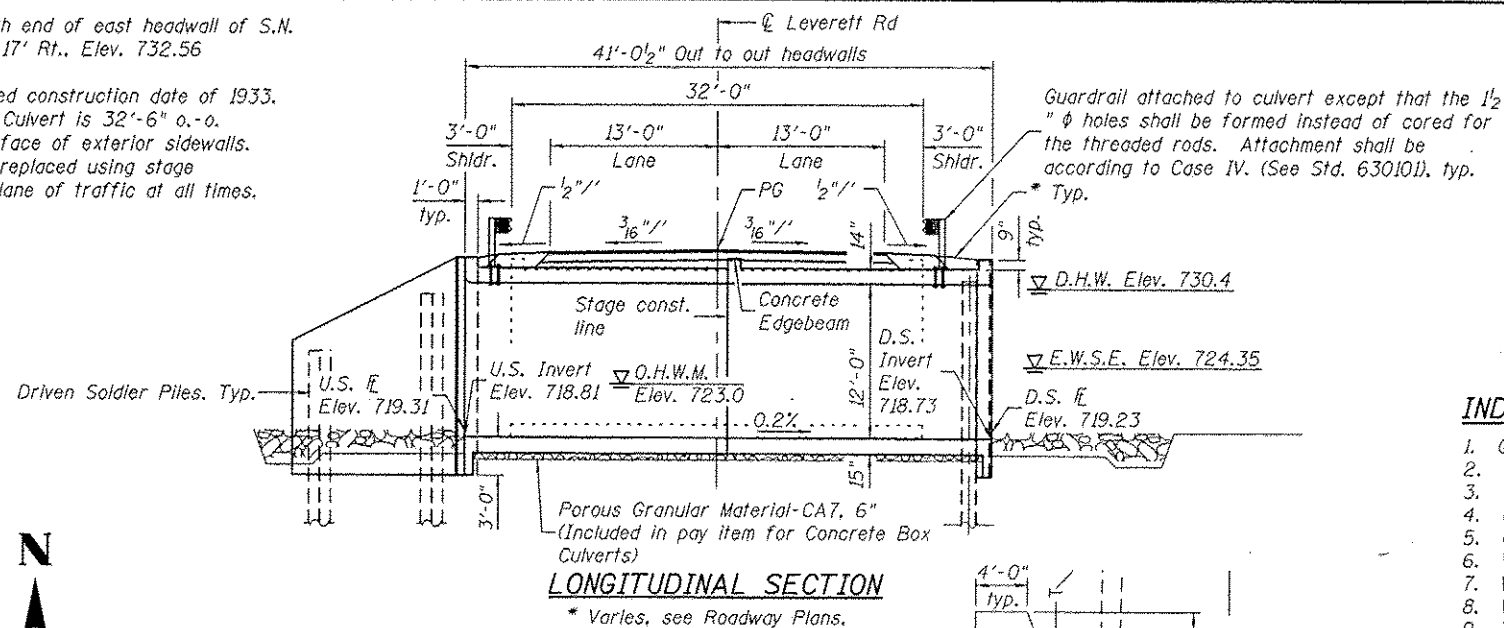
Benchmark: 4683-1. Stamped disk on south end of east headwall of S.N. 010-2010; Sta. 145+74.31, 15.17' Rt., Elev. 732.56

Existing Structure: S.N. 010-2010 has an estimated construction date of 1933. The 10'x11' Triple Barrel CIP Culvert is 32'-6" o.-o. headwalls and 35'-3" face - face of exterior sidewalls. Structure to be removed and replaced using stage construction, maintaining one lane of traffic at all times.

Salvage: None

**WATERWAY INFORMATION**

| Drainage Area = 8.3 sq. mi. |           | Exist. Low Grade Elev. 732.6 @ Sta. 147+00 |                 | Prop. Low Grade Elev. 732.6 @ Sta. 148+00 |                   |                      |                     |
|-----------------------------|-----------|--|-----------------|---|-------------------|----------------------|---------------------|
| Flood                       | Freq. Yr. | Q C.F.S.                                   | Opening Sq. Ft. | Nat. H.W.E. Exist.                        | Head - Ft. Exist. | Headwater El. Exist. | Headwater El. Prop. |
|                             | 10        | 1280                                       | 282             | 730.0                                     | 0.8               | 0.7                  | 730.8               |
| Design                      | 30        | 1846                                       | 294             | 730.4                                     | 1.5               | 1.2                  | 731.9               |
| Base                        | 100       | 2480                                       | 306             | 730.8                                     | 2.5               | 2.1                  | 733.3               |
| Overtop Exist.              | 45        | 2055                                       | 297             | 730.5                                     | 2.1               |                      | 732.6               |
| Overtop Prop.               | 80        | 2367                                       | 410             | 730.7                                     | 2.0               |                      | 732.7               |



**SECTION A-A**

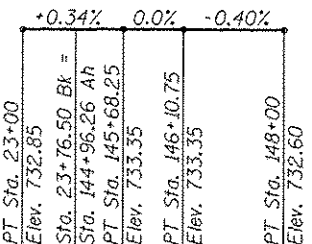
**INDEX OF SHEETS**

1. General Plan and Elevation
2. Stage Construction Details
3. Temporary Concrete Barrier For Stage Construction
4. Culvert Details - Top and Bottom Slab
5. Culvert Details
6. Wingwall Details
7. Wingwall Details
8. Wingwall Details
9. Temporary Support Details
10. HP Pile Details
11. Bar Splicer Assembly and Mechanical Splicer Details
12. Boring Logs

**TOTAL BILL OF MATERIAL**

| ITEM                                  | UNIT    | TOTAL |
|---------------------------------------|---------|-------|
| Porous Granular Embankment            | Cu. Yd. | 420   |
| Stone Riprap, Class A4                | Sq. Yd. | 230   |
| Filter Fabric                         | Sq. Yd. | 230   |
| Removal of Existing Structures        | Each    | 1     |
| Structure Excavation                  | Cu. Yd. | 166   |
| Concrete Structures                   | Cu. Yd. | 46.1  |
| Stud Shear Connectors                 | Each    | 712   |
| Reinforcement Bars, Epoxy Coated      | Pound   | 43510 |
| Bar Splicers                          | Each    | 256   |
| Name Plates                           | Each    | 1     |
| Temporary Sheet Piling                | Sq. Ft. | 953   |
| Furnishing Soldier Piles (HP Section) | Foot    | 1192  |
| Driving Soldier Piles                 | Foot    | 1192  |
| Untreated Timber Lagging              | Sq. Ft. | 804   |
| Concrete Box Culverts                 | Cu. Yd. | 227.1 |
| Geocomposite Wall Drain               | Sq. Yd. | 35    |
| Temporary Support System              | Each    | 1     |

Quantity of Structure Excavation is for soldier pile wingwalls only.



**PROFILE GRADE**

Along Centerline Roadway

STATION 145+89.50  
BUILT 20 BY  
STATE OF ILLINOIS  
F.A.S. RTE. 502  
SEC. 106BR-1(I)  
LOADING HL-93  
STRUCTURE NO. 010-2037

**NAME PLATE**

See Std. 515001

**LOADING HL-93**

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

**DESIGN SPECIFICATIONS**

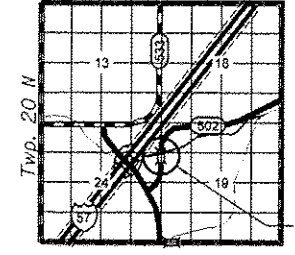
2014 AASHTO LRFD Bridge Design Specifications, 7th Edition with 2015 Interims

**DESIGN STRESSES**

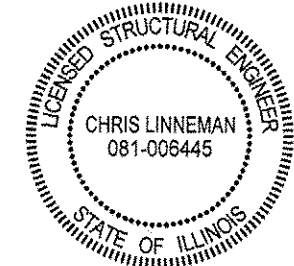
**FIELD UNITS**

f'c = 3,500 psi  
fy = 60,000 psi (Reinforcement)  
fy = 36,000 psi (Soldier Piles)  
AASHTO M270 Grade 36

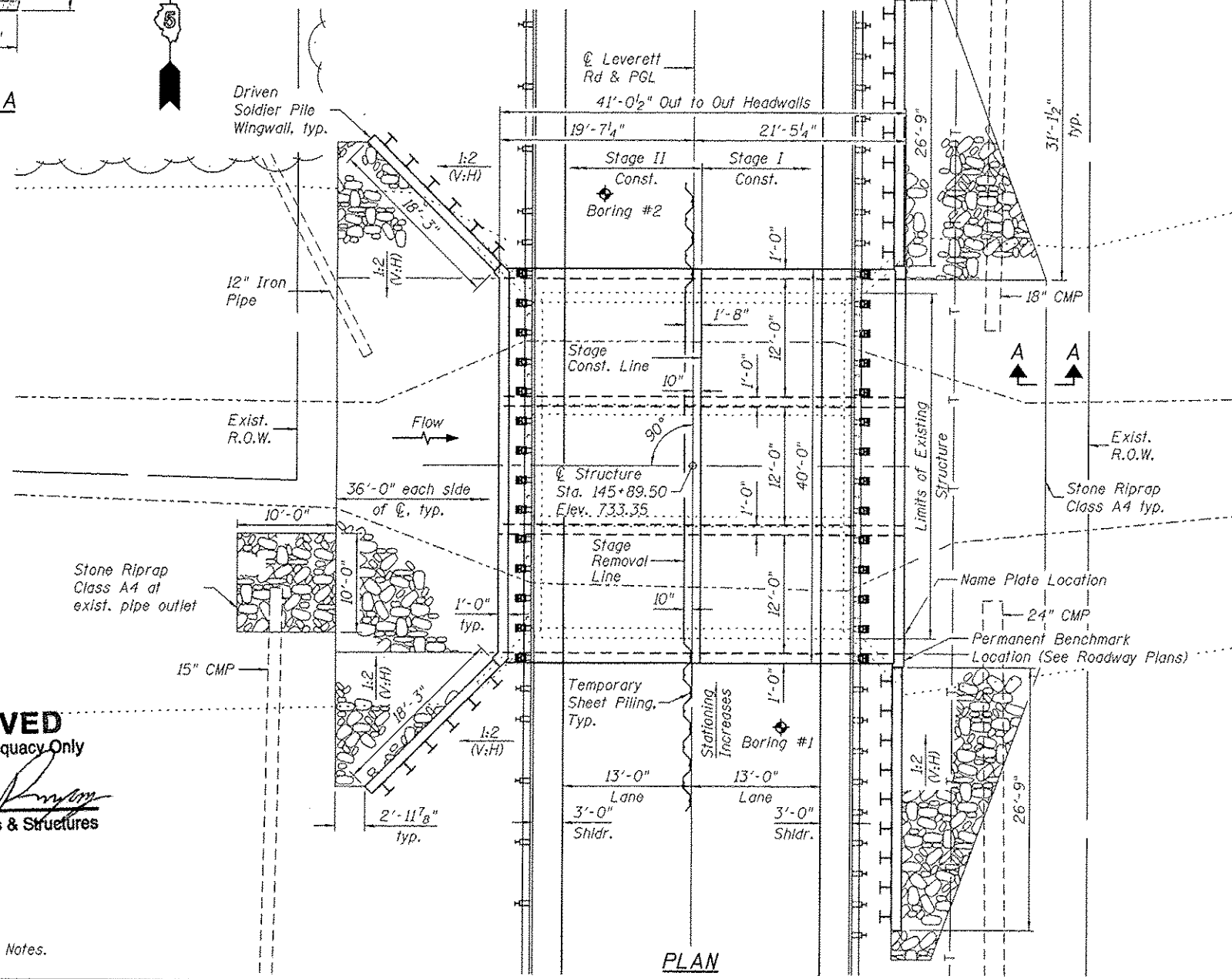
**LOCATION SKETCH**



**GENERAL PLAN & ELEVATION**  
**LEVERETT ROAD OVER**  
**TRIBUTARY OF SALINE BRANCH**  
**F.A.S. RTE. 502 - SEC. 106BR-1(I)**  
**CHAMPAIGN COUNTY**  
**STATION 145+89.50**  
**STRUCTURE NO. 010-2037**



Signed: *[Signature]*  
Date: 2/26/2016  
License Expires: 11/30/2016



**PLAN**

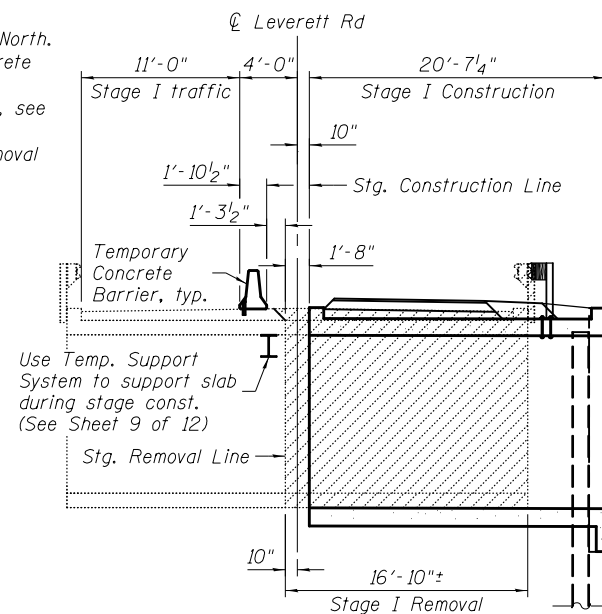
**APPROVED**  
For Structural Adequacy Only  
*[Signature]*  
Engineer of Bridges & Structures

Note:  
See Sheet 2 of 12 for General Notes.

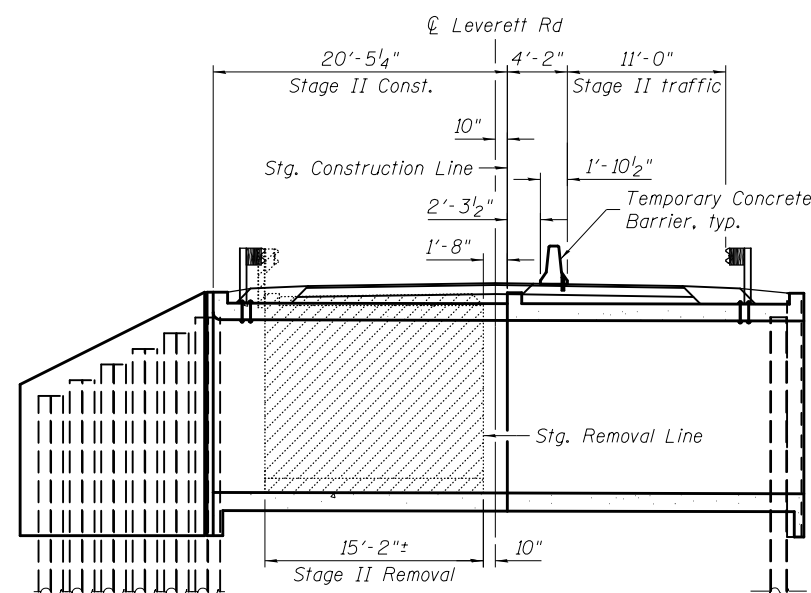
PRINT DATE: 2/26/2016 8:23:37 AM Y:\10053.04 100T D5 Leverett Road\DRN\Bridg\Final\Plotsheets\010-2037-01-General Plan and Elevation.dgn

|  |                              |                  |           |   |  |                            |                      |                    |                   |                |
|--|------------------------------|------------------|-----------|---|--|----------------------------|----------------------|--------------------|-------------------|----------------|
| <b>EFK Moen, LLC</b><br>Civil Engineering Design<br>303 Fountains Parkway, Suite 240<br>Fairview Heights, IL 62208<br>Phone 618-206-4250 | USER NAME - ctw              | DESIGNED - CDL   | REVISED - | <b>STATE OF ILLINOIS</b><br><b>DEPARTMENT OF TRANSPORTATION</b> | <b>GENERAL PLAN AND ELEVATION</b><br><b>STRUCTURE NO. 010-2037</b> | F.A.S. RTE. - 502          | SECTION - 106BR-1(I) | COUNTY - CHAMPAIGN | TOTAL SHEETS - 52 | SHEET NO. - 21 |
|  | PLOT SCALE - 012' 1" = 1 in. | CHECKED - CTW    | REVISED - |   |  | SHEET NO. - 1 OF 12 SHEETS | CONTRACT NO. - 70278 |                    |                   |                |
|  | PLOT DATE - 2/26/2016        | DATE - 2/26/2016 | REVISED - |   |  | ILLINOIS FED. AID PROJECT  |                      |                    |                   |                |

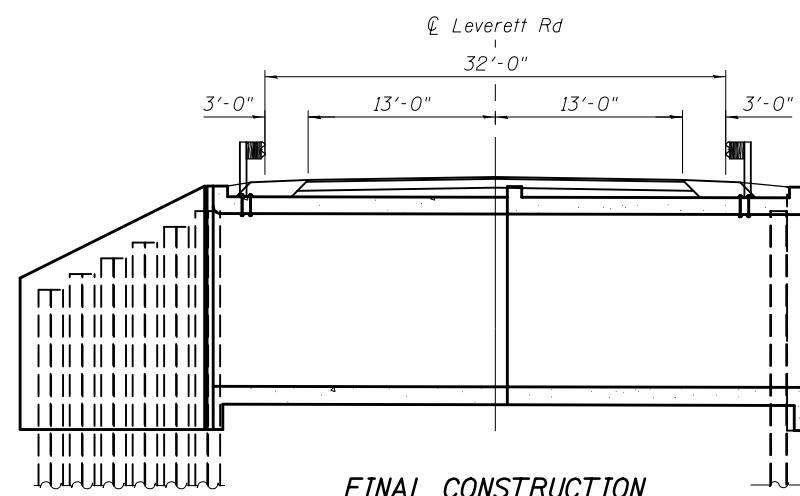
Notes:  
 All staging sections are looking North.  
 For quantity of Temporary Concrete Barrier, see roadway plans.  
 For Temporary Concrete Barrier, see Sheet 3 of 12.  
 Crosshatched areas indicate Removal of Existing Structures.



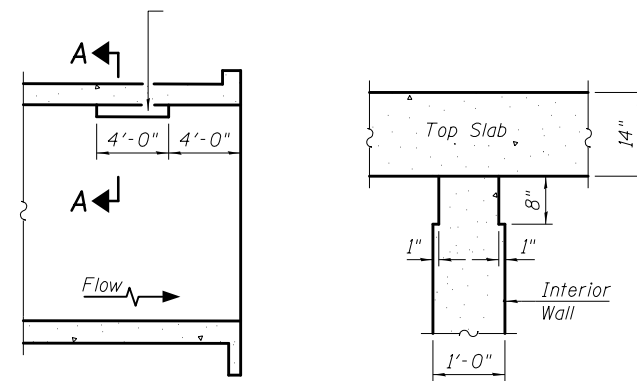
**STAGE I CONSTRUCTION**



**STAGE II CONSTRUCTION**



**FINAL CONSTRUCTION**



**LONGITUDINAL SECTION**

**SECTION A-A**

**PHOEBE NESTING SITE DETAILS**  
 (Downstream End Only)

**GENERAL NOTES**

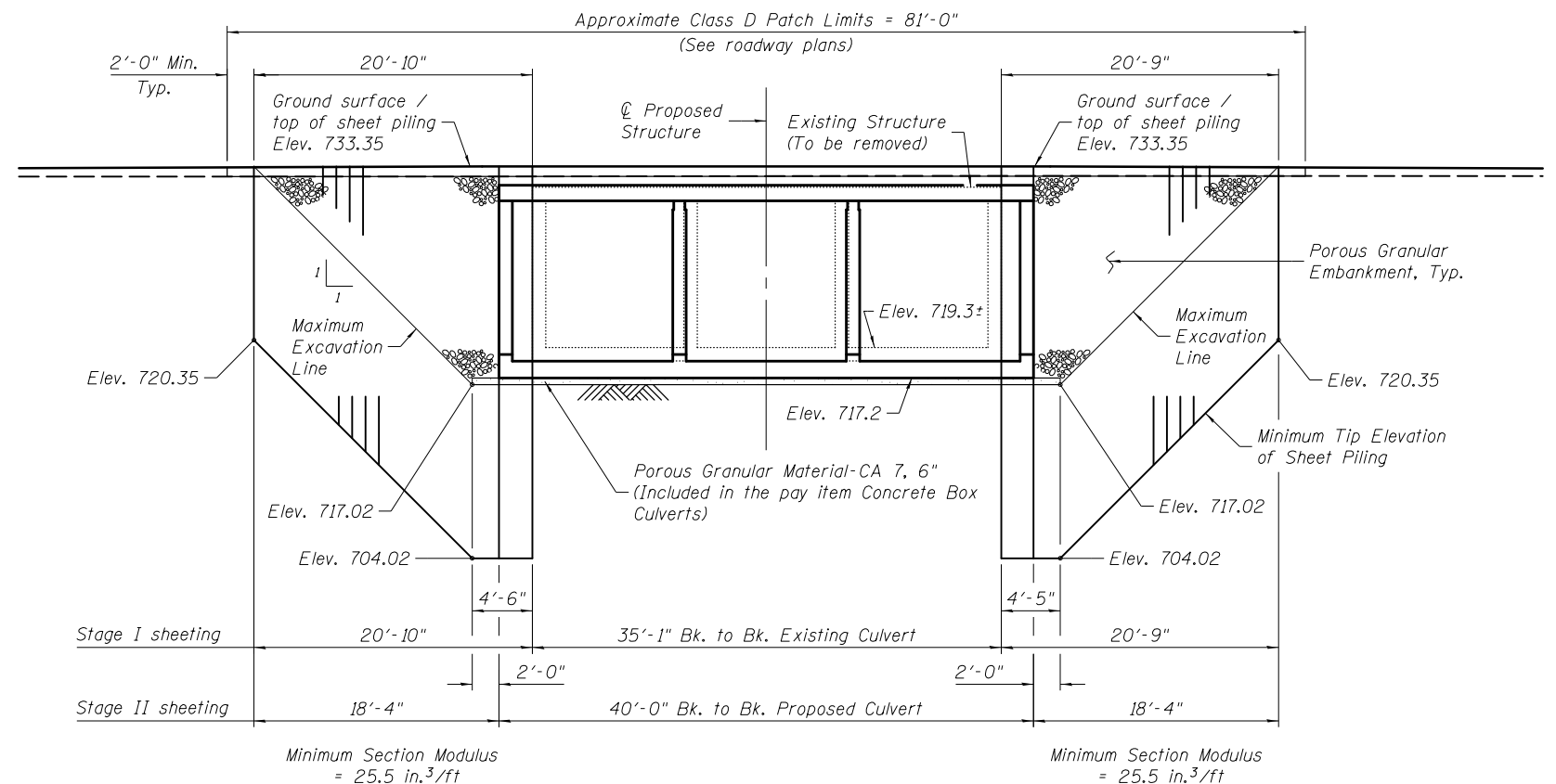
Reinforcement bars designated (E) shall be epoxy coated.

Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.

It shall be the responsibility of the Contractor to divert the stream flow during construction in order to keep the construction area free of water. The method of the water diversion shall be subjected to the approval of the Engineer and the cost shall be included with the cost of the Concrete Box Culverts.

The limit of the Porous Granular Material-CA 7 shall include a layer of at least 6 in. in thickness, below the elevation of the bottom of the box for the plan area of the box. The Porous Granular Embankment shall extend at least 6" beyond the shoulder and extend up to the bottom of the Class D Patch.

Modify existing channel to match culvert at each end as directed by the Engineer. Cost included in the pay item for Stone Riprap, Class A4.



**TEMPORARY SHEET PILING DETAILS**  
 (Looking West)

**BILL OF MATERIAL**

| ITEM                   | UNIT    | QUANTITY |
|------------------------|---------|----------|
| Temporary Sheet Piling | Sq. Ft. | 953      |

PRINT DATE: 3/14/2016 \$TIME\$ \$FILE\$

**EFK•Moen, LLC**  
 Civil Engineering Design  
 303 Fountains Parkway, Suite 240  
 Fairview Heights, IL 62208  
 Phone 618-206-4250

|                        |                  |           |
|------------------------|------------------|-----------|
| USER NAME = bergena.j  | DESIGNED - CDL   | REVISED - |
| PLOT SCALE = 1/8" = 1' | CHECKED - CTW    | REVISED - |
| PLOT DATE = 3/14/2016  | DRAWN - JAA      | REVISED - |
|                        | DATE - 3/14/2016 | REVISED - |

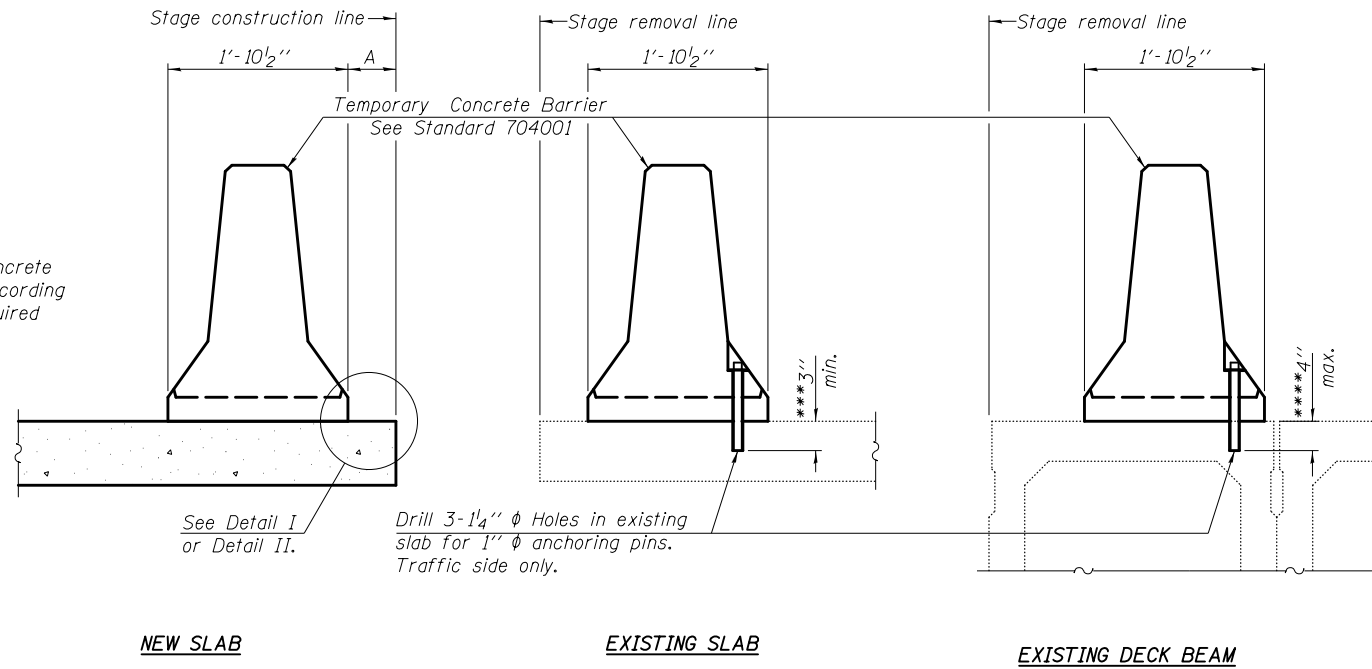
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**STAGE CONSTRUCTION DETAILS**  
**STRUCTURE NO. 010-2037**

SHEET NO. 2 OF 12 SHEETS

|                           |                    |                  |                 |              |
|---------------------------|--------------------|------------------|-----------------|--------------|
| F.A.S. RTE. 502           | SECTION 106BR-1(1) | COUNTY CHAMPAIGN | TOTAL SHEETS 52 | SHEET NO. 22 |
| CONTRACT NO. 70278        |                    |                  |                 |              |
| ILLINOIS FED. AID PROJECT |                    |                  |                 |              |

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



**SECTIONS THRU SLAB OR DECK BEAM**

**NOTES**

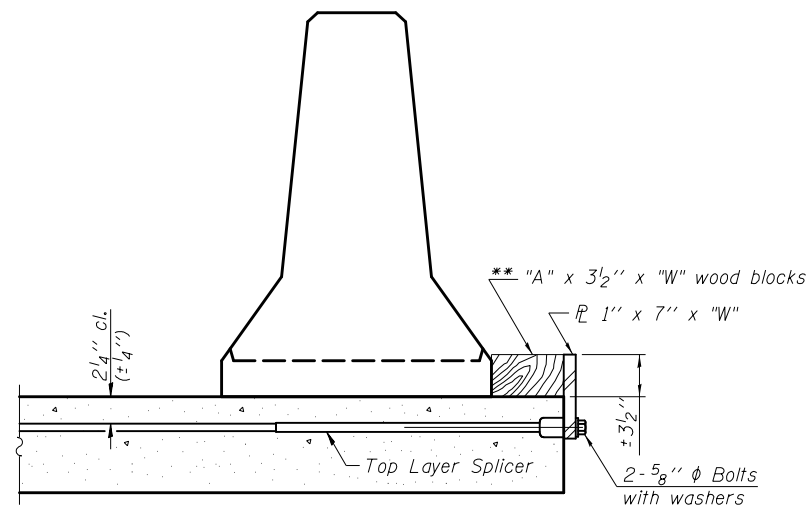
Detail I - With Bar Splicer or Couplers:  
Connect one (1) 1" x 7" x "W" steel PL to the top layer of couplers with 2-5/8" diameter bolts screwed to coupler at approximate center of each barrier panel.

Detail II - With Extended Reinforcement Bars:  
Connect one (1) 1" x 7" x "W" steel PL to the concrete slab or concrete wearing surface with 2-5/8" diameter Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate center of each barrier panel.

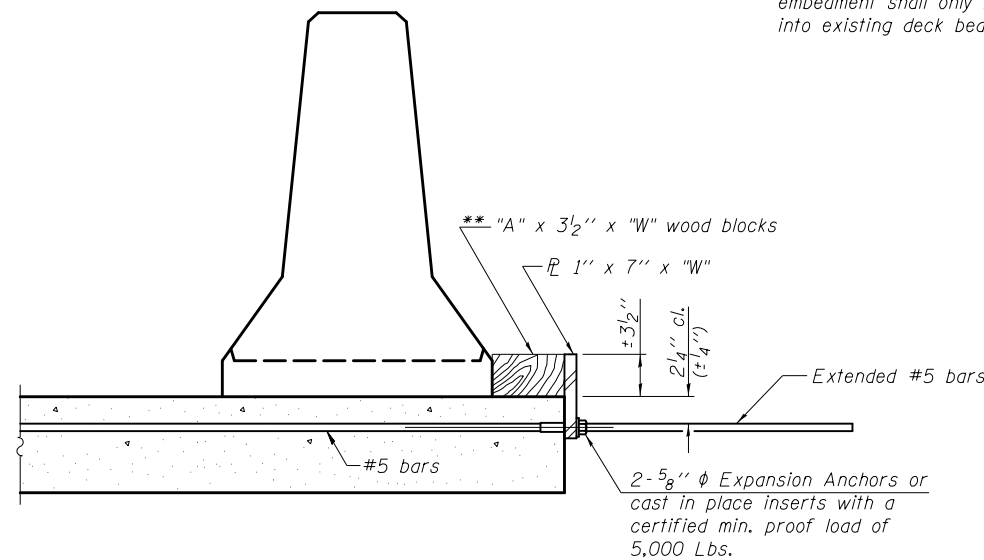
Cost of retainer assembly is included with Temporary Concrete Barrier. The 1" x 7" x "W" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

\*\*\* Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.

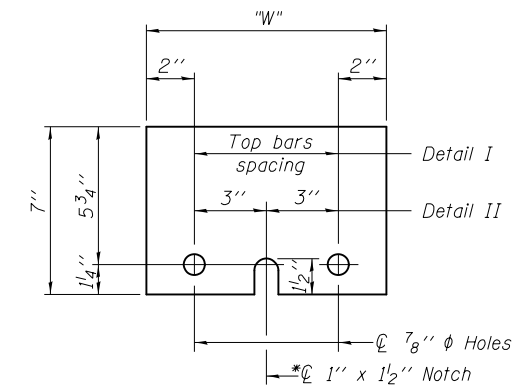
\*\*\*\* If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



**DETAIL I**



**DETAIL II**



**STEEL RETAINER PL 1" x 7" x "W"**

\* Required only with Detail II

**RETAINER ASSEMBLY**

\*\* Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.

PRINT DATE: 3/14/2016 \$TIME\$ \$FILE\$

R-27

1-12-15

**EFK Moen, LLC**  
Civil Engineering Design  
303 Fountains Parkway, Suite 240  
Fairview Heights, IL 62208  
Phone 618-206-4250

|                               |                  |           |
|-------------------------------|------------------|-----------|
| USER NAME = berganaj          | DESIGNED - CDL   | REVISED - |
| PLOT SCALE = 0:2' = 1" = 1/2" | CHECKED - CTW    | REVISED - |
| PLOT DATE = 3/14/2016         | DRAWN - JAA      | REVISED - |
|                               | DATE - 3/14/2016 | REVISED - |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

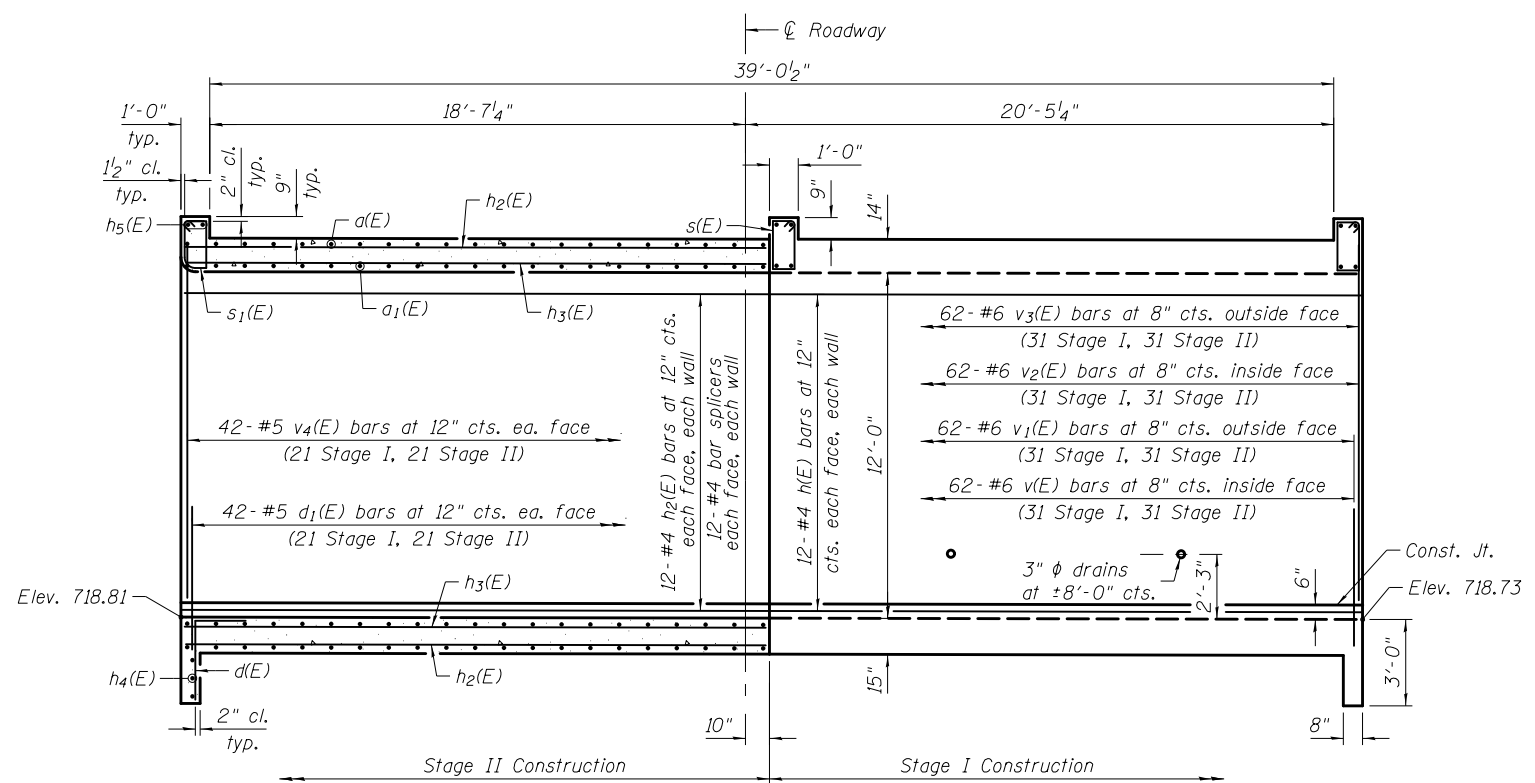
**TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION  
STRUCTURE NO. 010-2037**

SHEET NO. 3 OF 12 SHEETS

| F.A.S. RTE.        | SECTION    | COUNTY    | TOTAL SHEETS              | SHEET NO. |
|--------------------|------------|-----------|---------------------------|-----------|
| 502                | 106BR-1(1) | CHAMPAIGN | 52                        | 23        |
| CONTRACT NO. 70278 |            |           | ILLINOIS FED. AID PROJECT |           |

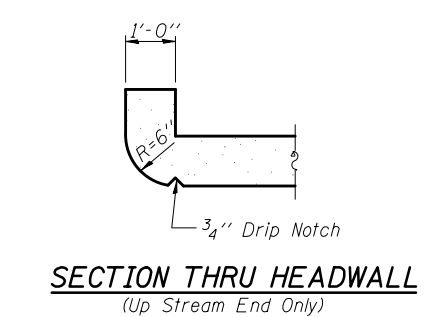
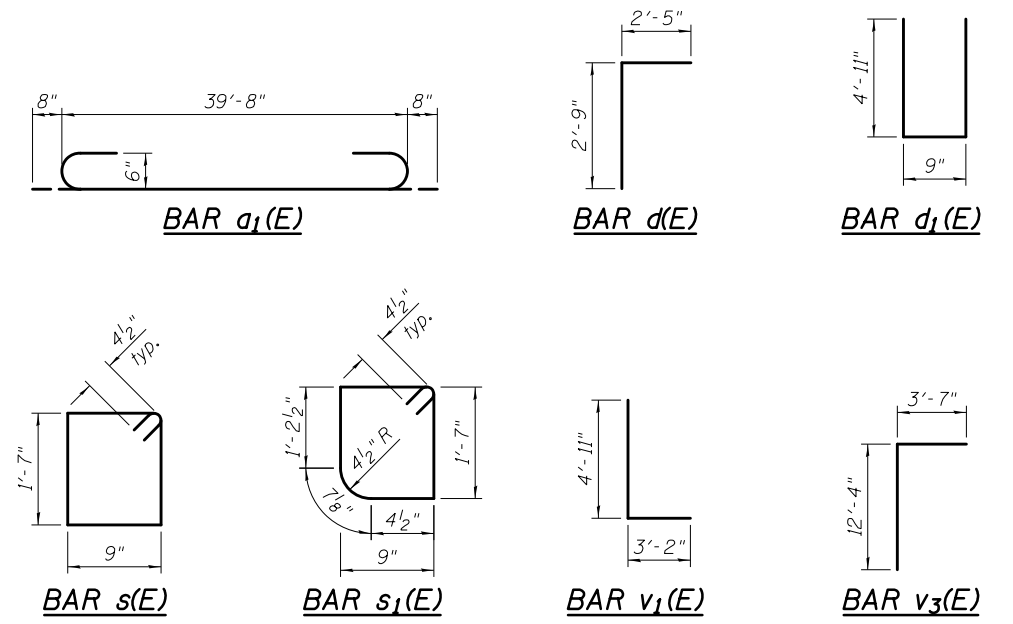






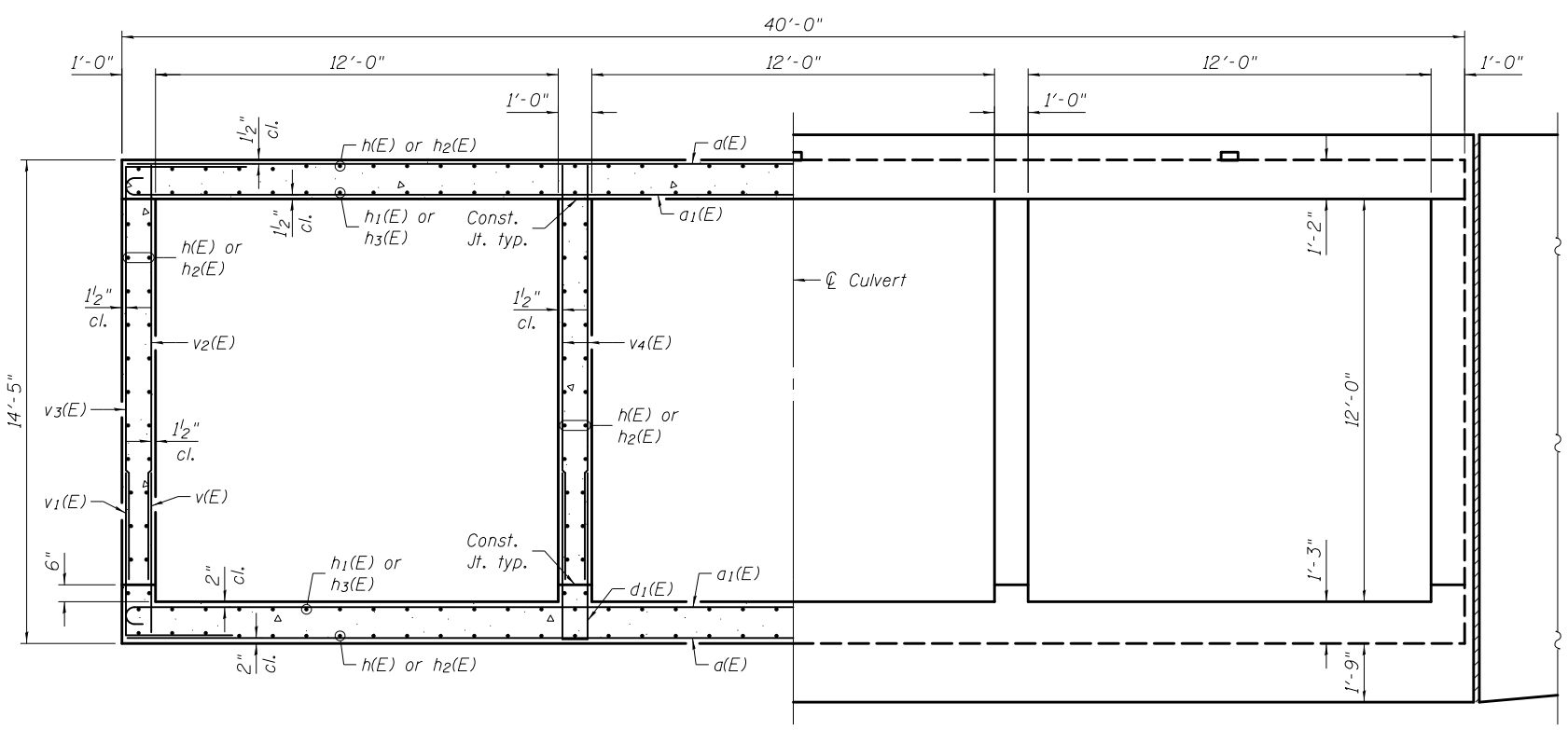
**HALF LONG SECTION**  
Showing bars in Interior Wall

**HALF ELEVATION**  
Showing bars in Exterior Wall



**BILL OF MATERIAL FOR BOX CULVERT**

| Bar                              | No. | Size    | Length  | Shape |
|----------------------------------|-----|---------|---------|-------|
| d(E)                             | 164 | #5      | 39'-8"  | —     |
| a1(E)                            | 164 | #6      | 41'-0"  | ⌋     |
| d(E)                             | 80  | #4      | 5'-2"   | ⌋     |
| d1(E)                            | 84  | #5      | 10'-7"  | ⌋     |
| h(E)                             | 176 | #4      | 20'-3"  | —     |
| h1(E)                            | 80  | #5      | 20'-3"  | —     |
| h2(E)                            | 176 | #4      | 20'-1"  | —     |
| h3(E)                            | 80  | #5      | 20'-1"  | —     |
| h4(E)                            | 6   | #4      | 39'-8"  | —     |
| h5(E)                            | 12  | #8      | 39'-8"  | —     |
| s(E)                             | 76  | #4      | 5'-5"   | ⌋     |
| s1(E)                            | 38  | #4      | 5'-3"   | ⌋     |
| v(E)                             | 124 | #6      | 4'-11"  | —     |
| v1(E)                            | 124 | #6      | 8'-1"   | ⌋     |
| v2(E)                            | 124 | #6      | 12'-4"  | ⌋     |
| v3(E)                            | 124 | #6      | 15'-11" | ⌋     |
| v4(E)                            | 168 | #5      | 12'-4"  | —     |
| v5(E)                            | 8   | #5      | 6'-8"   | —     |
| v6(E)                            | 8   | #5      | 13'-1"  | —     |
| Concrete Box Culverts            |     | Cu. Yd. | 227.1   |       |
| Reinforcement Bars, Epoxy Coated |     | Pound   | 38,040  |       |



**HALF SECTION THRU BARREL**

**HALF END ELEVATION**

PRINT DATE: 3/14/2016 \$TIME\$ \$FILE\$

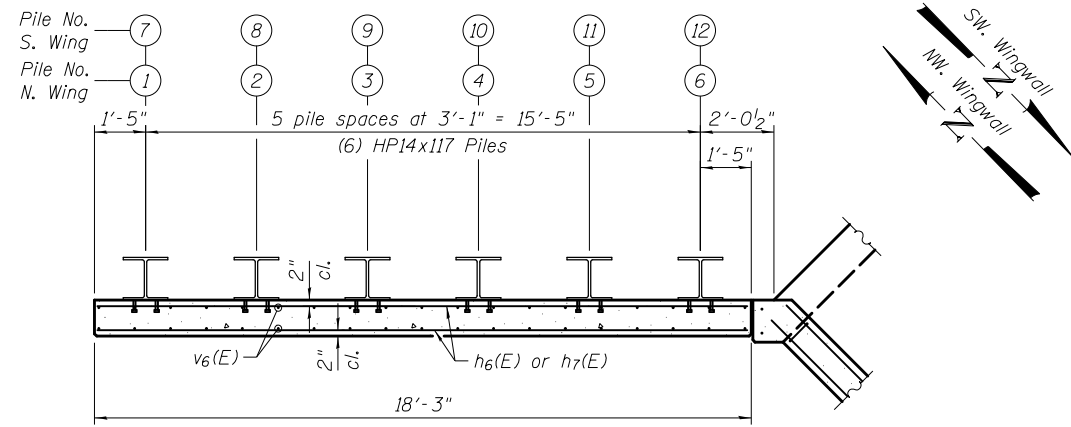
**EFK Moen, LLC**  
Civil Engineering Design  
303 Fountains Parkway, Suite 240  
Fairview Heights, IL 62208  
Phone 618-206-4250

|                              |                  |           |
|------------------------------|------------------|-----------|
| USER NAME = bergena.j        | DESIGNED - CDL   | REVISED - |
| PLOT SCALE = 0.2" = 1' / in. | CHECKED - CTW    | REVISED - |
| PLOT DATE = 3/14/2016        | DRAWN - JAA      | REVISED - |
|                              | DATE - 3/14/2016 | REVISED - |

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

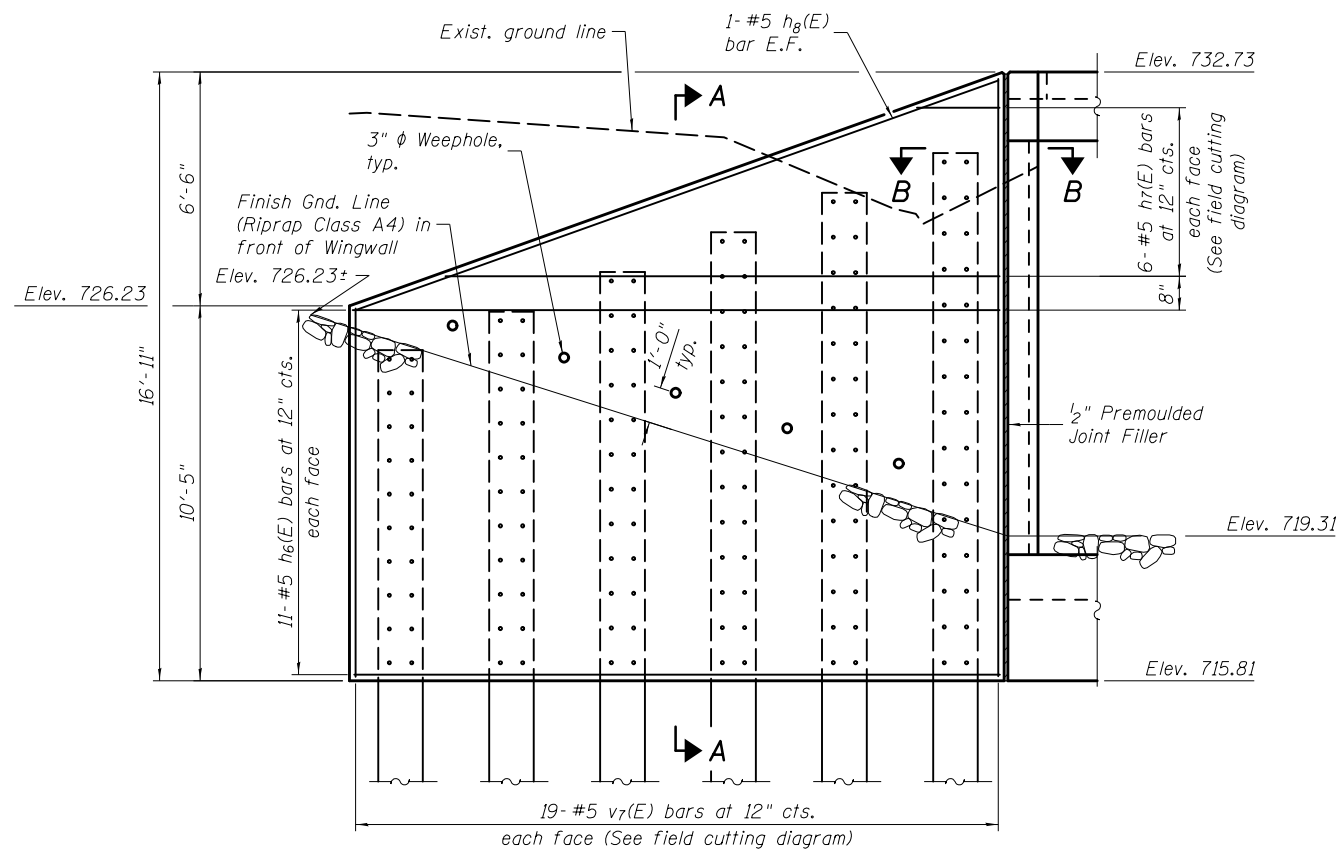
**CULVERT DETAILS**  
**STRUCTURE NO. 010-2037**  
SHEET NO. 5 OF 12 SHEETS

|                           |            |           |              |           |
|---------------------------|------------|-----------|--------------|-----------|
| F.A.S. RTE.               | SECTION    | COUNTY    | TOTAL SHEETS | SHEET NO. |
| 502                       | 106BR-1(1) | CHAMPAIGN | 52           | 25        |
| CONTRACT NO. 70278        |            |           |              |           |
| ILLINOIS FED. AID PROJECT |            |           |              |           |



**PLAN**

Northwest Wingwall shown, Southwest Wingwall opposite

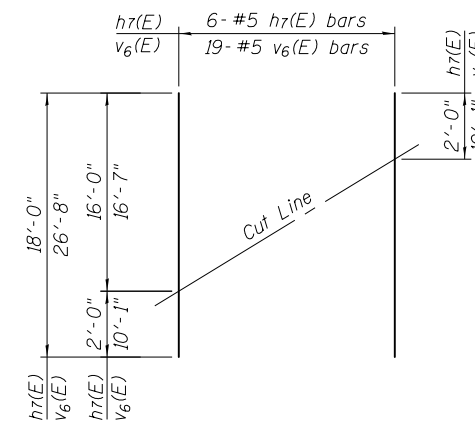


**ELEVATION**

(Looking Northeast)  
Northwest Wingwall shown, Southwest Wingwall opposite

**SOLDIER PILE DATA**

| Soldier Pile | Pile      |        | Pile Size | Top of Pile Elevation | Bottom of Pile Elevation | Length of Pile (Ft.) | Number of Shear Studs |
|--------------|-----------|--------|-----------|-----------------------|--------------------------|----------------------|-----------------------|
|              | Station   | Offset |           |                       |                          |                      |                       |
| 1            | 146+22.26 | -30.88 | HP14x117  | 725.07                | 690.07                   | 35                   | 18                    |
| 2            | 146+20.08 | -28.70 | HP14x117  | 726.17                | 690.17                   | 36                   | 20                    |
| 3            | 146+17.90 | -26.52 | HP14x117  | 727.26                | 690.26                   | 37                   | 22                    |
| 4            | 146+15.72 | -24.34 | HP14x117  | 728.36                | 690.36                   | 38                   | 24                    |
| 5            | 146+13.54 | -22.16 | HP14x117  | 729.46                | 689.46                   | 40                   | 26                    |
| 6            | 146+11.36 | -19.98 | HP14x117  | 730.56                | 689.56                   | 41                   | 28                    |
| 7            | 145+56.73 | -30.88 | HP14x117  | 725.07                | 690.07                   | 35                   | 18                    |
| 8            | 145+58.91 | -28.70 | HP14x117  | 726.17                | 690.17                   | 36                   | 20                    |
| 9            | 145+61.09 | -26.52 | HP14x117  | 727.26                | 690.26                   | 37                   | 22                    |
| 10           | 145+63.27 | -24.34 | HP14x117  | 728.36                | 690.36                   | 38                   | 24                    |
| 11           | 145+65.46 | -22.16 | HP14x117  | 729.46                | 689.46                   | 40                   | 26                    |
| 12           | 145+67.64 | -19.98 | HP14x117  | 730.56                | 689.56                   | 41                   | 28                    |



**BAR CUTTING DIAGRAM**

Order bars full length. Cut as shown and use remainder of bars in opposite face.

**BILL OF MATERIAL FOR TWO WALLS**

| Bar                                   | No.     | Size | Length  | Shape |
|---------------------------------------|---------|------|---------|-------|
| h6(E)                                 | 44      | #5   | 17'-11" | —     |
| h7(E)                                 | 12      | #5   | 18'-0"  | —     |
| h8(E)                                 | 4       | #5   | 19'-0"  | —     |
| v7(E)                                 | 38      | #5   | 26'-8"  | —     |
| Structure Excavation                  | Cu. Yd. |      | 75      |       |
| Concrete Structures                   | Cu. Yd. |      | 18.5    |       |
| Stud Shear Connectors                 | Each    |      | 276     |       |
| Reinforcement Bars, Epoxy Coated      | Pound   |      | 2,180   |       |
| Furnishing Soldier Piles (HP Section) | Foot    |      | 454     |       |
| Driving Soldier Piles                 | Foot    |      | 454     |       |
| Untreated Timber Lagging              | Sq. Ft. |      | 318     |       |
| Geocomposite Wall Drain               | Sq. Yd. |      | 13      |       |

**NOTES**

See Sheet 4 of 12 for corner detail.  
See Sheet 8 of 12 for wall sections and details.

PRINT DATE: 3/14/2016 \$FILE\$ \$TIME\$

**EFK Moen, LLC**  
Civil Engineering Design  
303 Fountains Parkway, Suite 240  
Fairview Heights, IL 62208  
Phone 618-206-4250

|                              |                  |           |
|------------------------------|------------------|-----------|
| USER NAME = bergena.j        | DESIGNED - CDL   | REVISED - |
|                              | CHECKED - CTW    | REVISED - |
| PLOT SCALE = 0.2" = 1' / in. | DRAWN - JAA      | REVISED - |
| PLOT DATE = 3/14/2016        | DATE - 3/14/2016 | REVISED - |

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

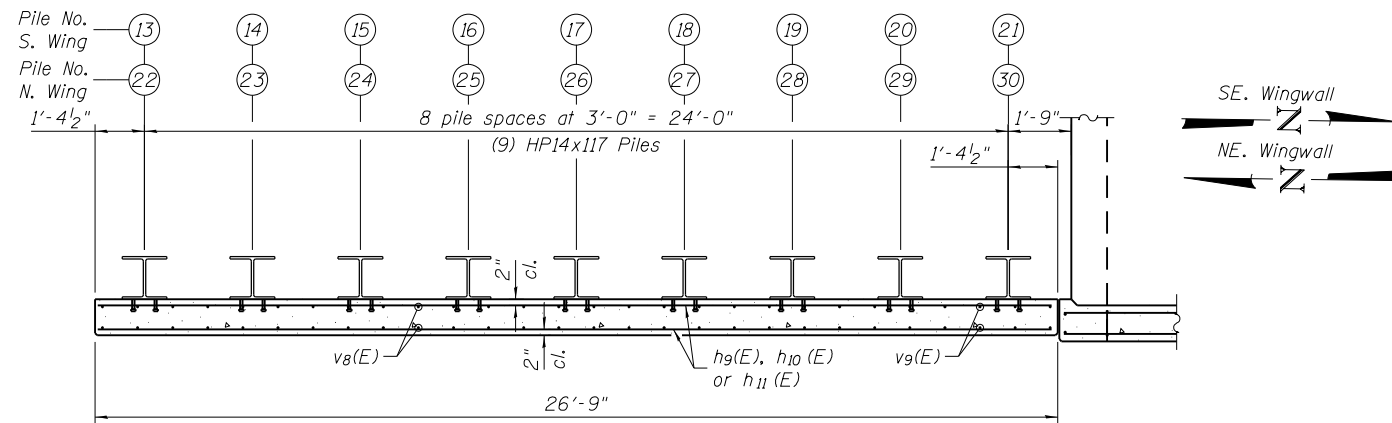
**WINGWALL DETAILS**  
**STRUCTURE NO. 010-2037**

SHEET NO. 6 OF 12 SHEETS

|                           |            |           |              |                    |
|---------------------------|------------|-----------|--------------|--------------------|
| F.A.S. RTE.               | SECTION    | COUNTY    | TOTAL SHEETS | SHEET NO.          |
| 502                       | 106BR-1(1) | CHAMPAIGN | 52           | 26                 |
|                           |            |           |              | CONTRACT NO. 70278 |
| ILLINOIS FED. AID PROJECT |            |           |              |                    |

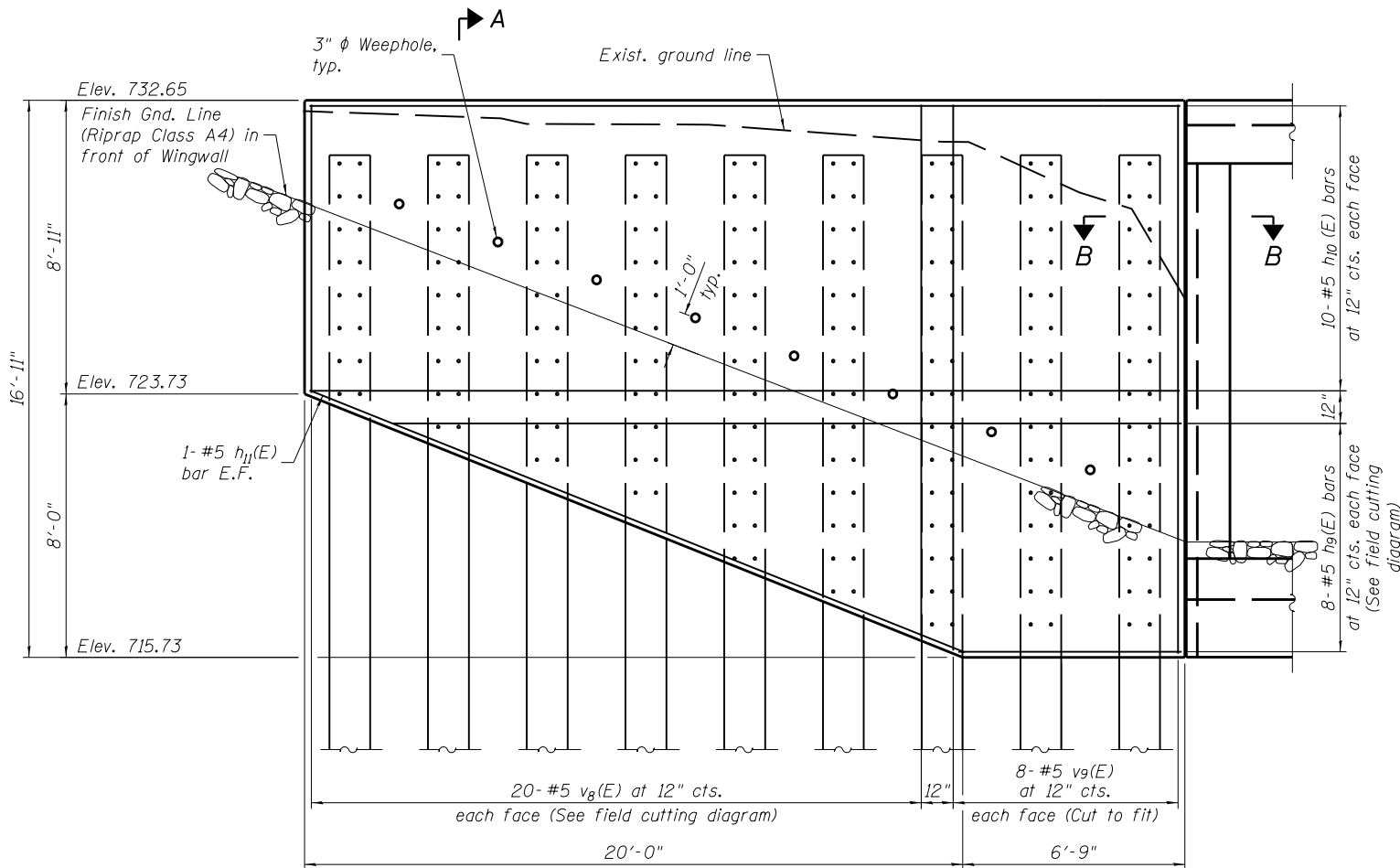
**SOLDIER PILE DATA**

| Soldier Pile | Station   | ☉ Pile Offset | Pile Size | Top of Pile Elevation | Bottom of Pile Elevation | Length of Pile (Ft.) | Number of Shear Studs |
|--------------|-----------|---------------|-----------|-----------------------|--------------------------|----------------------|-----------------------|
| 13           | 146+35.25 | 19.68         | HP14x117  | 730.97                | 689.97                   | 41                   | 30                    |
| 14           | 146+32.25 | 19.68         | HP14x117  | 730.97                | 689.97                   | 41                   | 30                    |
| 15           | 146+29.25 | 19.68         | HP14x117  | 730.97                | 689.97                   | 41                   | 30                    |
| 16           | 146+26.25 | 19.68         | HP14x117  | 730.97                | 689.97                   | 41                   | 28                    |
| 17           | 146+23.25 | 19.68         | HP14x117  | 730.97                | 689.97                   | 41                   | 24                    |
| 18           | 146+20.25 | 19.68         | HP14x117  | 730.97                | 689.97                   | 41                   | 22                    |
| 19           | 146+17.25 | 19.68         | HP14x117  | 730.97                | 689.97                   | 41                   | 20                    |
| 20           | 146+14.25 | 19.68         | HP14x117  | 730.97                | 689.97                   | 41                   | 18                    |
| 21           | 146+11.25 | 19.68         | HP14x117  | 730.97                | 689.97                   | 41                   | 16                    |
| 22           | 145+43.75 | 19.68         | HP14x117  | 730.97                | 689.97                   | 41                   | 30                    |
| 23           | 145+46.75 | 19.68         | HP14x117  | 730.97                | 689.97                   | 41                   | 30                    |
| 24           | 145+49.75 | 19.68         | HP14x117  | 730.97                | 689.97                   | 41                   | 30                    |
| 25           | 145+52.75 | 19.68         | HP14x117  | 730.97                | 689.97                   | 41                   | 28                    |
| 26           | 145+55.75 | 19.68         | HP14x117  | 730.97                | 689.97                   | 41                   | 24                    |
| 27           | 145+58.75 | 19.68         | HP14x117  | 730.97                | 689.97                   | 41                   | 22                    |
| 28           | 145+61.75 | 19.68         | HP14x117  | 730.97                | 689.97                   | 41                   | 20                    |
| 29           | 145+64.75 | 19.68         | HP14x117  | 730.97                | 689.97                   | 41                   | 18                    |
| 30           | 145+67.75 | 19.68         | HP14x117  | 730.97                | 689.97                   | 41                   | 16                    |



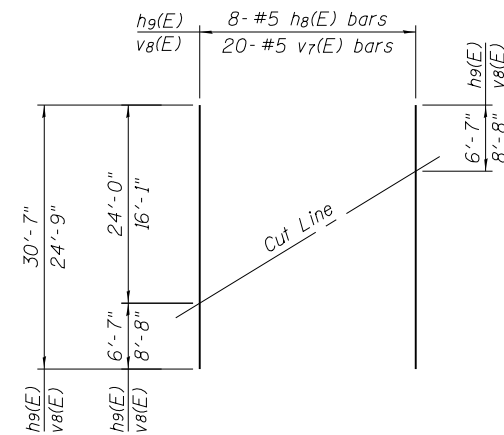
**PLAN**

Southeast Wingwall shown, Northeast Wingwall opposite



**ELEVATION**

(Looking Southwest)  
Southeast Wingwall shown, Northeast Wingwall opposite



**BAR CUTTING DIAGRAM**

Order bars full length. Cut as shown and use remainder of bars in opposite face.

**BILL OF MATERIAL FOR TWO WALLS**

| Bar                                   | No. | Size | Length | Shape        |
|---------------------------------------|-----|------|--------|--------------|
| h9(E)                                 | 16  | #5   | 30'-7" | —            |
| h10(E)                                | 40  | #5   | 26'-5" | —            |
| h11(E)                                | 4   | #5   | 21'-5" | —            |
| v8(E)                                 | 40  | #5   | 24'-9" | —            |
| v9(E)                                 | 32  | #5   | 16'-7" | —            |
| Structure Excavation                  |     |      |        | Cu. Yd. 91   |
| Concrete Structures                   |     |      |        | Cu. Yd. 27.6 |
| Stud Shear Connectors                 |     |      |        | Each 436     |
| Reinforcement Bars, Epoxy Coated      |     |      |        | Pound 3,290  |
| Furnishing Soldier Piles (HP Section) |     |      |        | Foot 738     |
| Driving Soldier Piles                 |     |      |        | Foot 738     |
| Untreated Timber Lagging              |     |      |        | Sq. Ft. 486  |
| Geocomposite Wall Drain               |     |      |        | Sq. Yd. 22   |

**NOTES**

See Sheet 4 of 12 for corner detail.  
See Sheet 8 of 12 for wall sections and details.

PRINT DATE: 4/26/2016 9:29:43 AM Y:\0053\04 IDOT D5 Leverett Road\DCN\Bridg\Final\Plotsheets\010-2037-007-Wingwall Details.dgn

**EFK Moen, LLC**  
Civil Engineering Design  
303 Fountains Parkway, Suite 240  
Fairview Heights, IL 62208  
Phone 618-206-4250

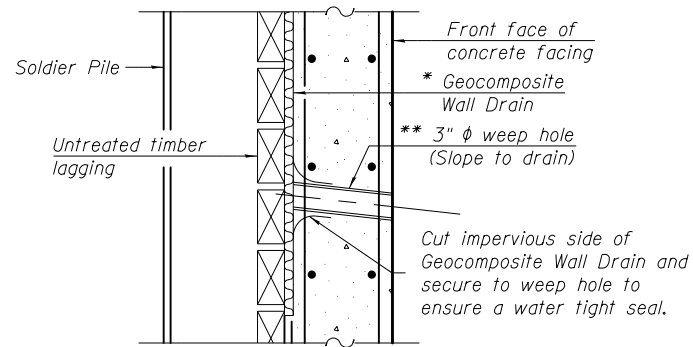
|                              |                  |           |
|------------------------------|------------------|-----------|
| USER NAME = ctw              | DESIGNED - CDL   | REVISED - |
| PLOT SCALE = 0.2" = 1' / in. | CHECKED - CTW    | REVISED - |
| PLOT DATE = 4/26/2016        | DRAWN - JAA      | REVISED - |
|                              | DATE - 4/26/2016 | REVISED - |

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

**WINGWALL DETAILS**  
**STRUCTURE NO. 010-2037**

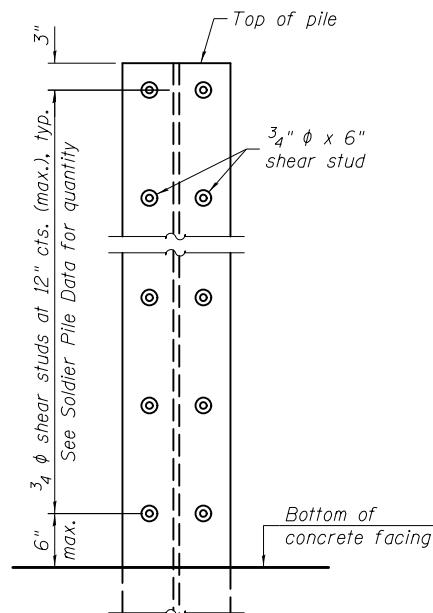
SHEET NO. 7 OF 12 SHEETS

|                           |            |           |              |                    |
|---------------------------|------------|-----------|--------------|--------------------|
| F.A.S. RTE.               | SECTION    | COUNTY    | TOTAL SHEETS | SHEET NO.          |
| 502                       | 106BR-1(1) | CHAMPAIGN | 52           | 27                 |
| ILLINOIS FED. AID PROJECT |            |           |              | CONTRACT NO. 70278 |

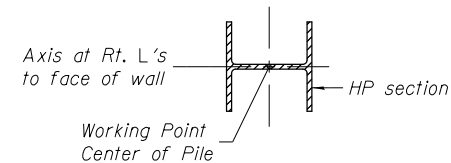


**WEEP HOLE DRAIN DETAIL**

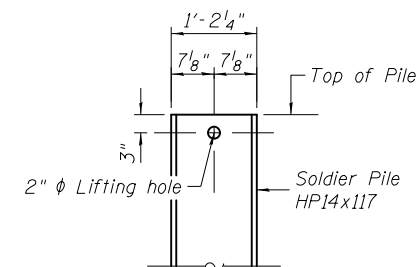
\*\* Cost of the weep hole drain and connection to the Geocomposite Wall Drain is included in the cost of Concrete Structures.



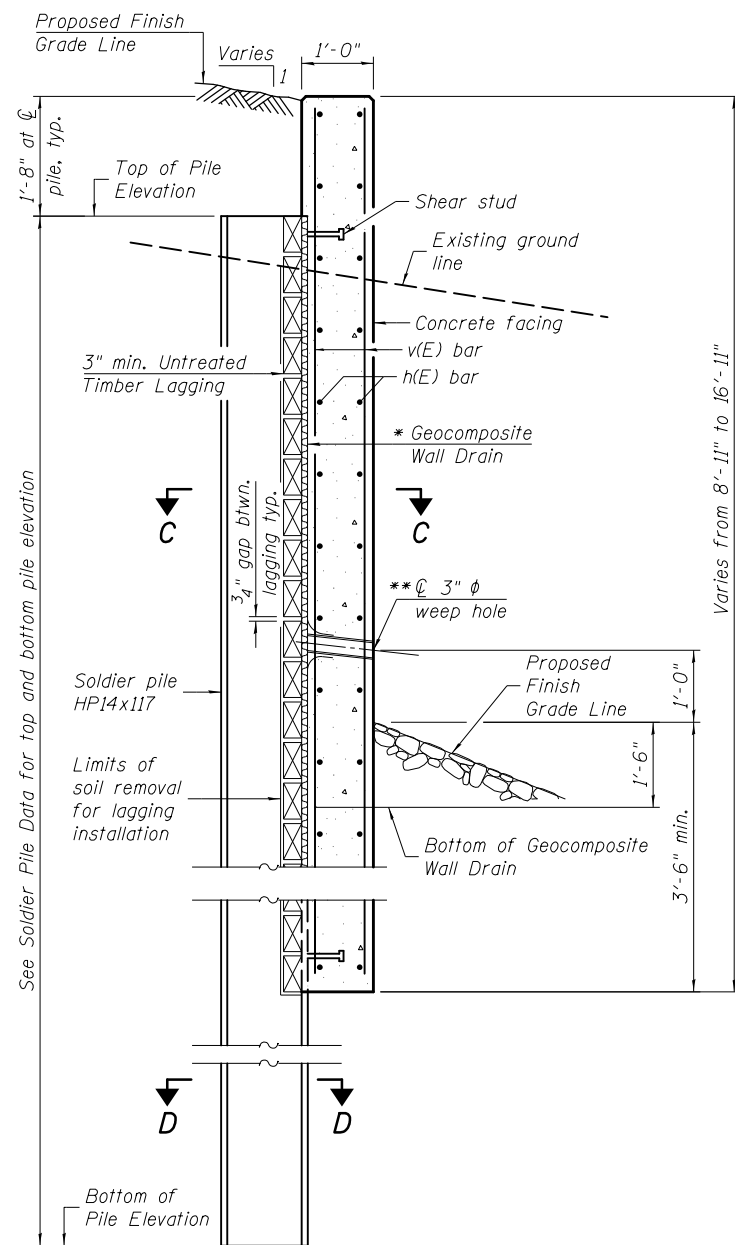
**SHEAR STUD DETAIL**  
(Elevation of pile shown)



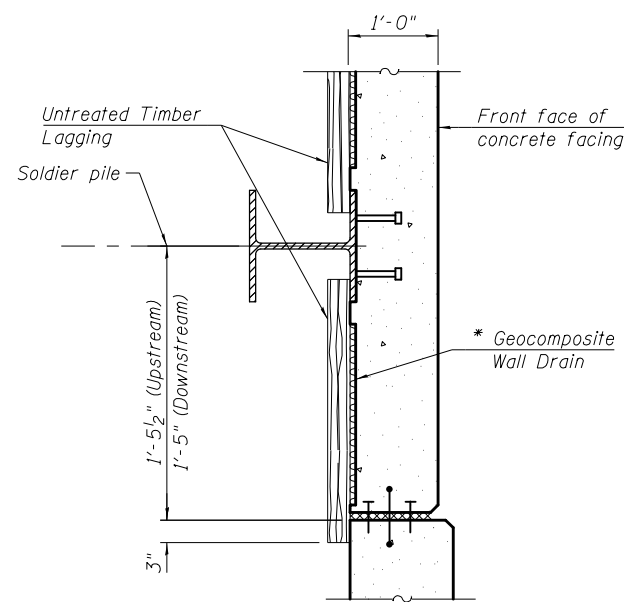
**SECTION D-D**



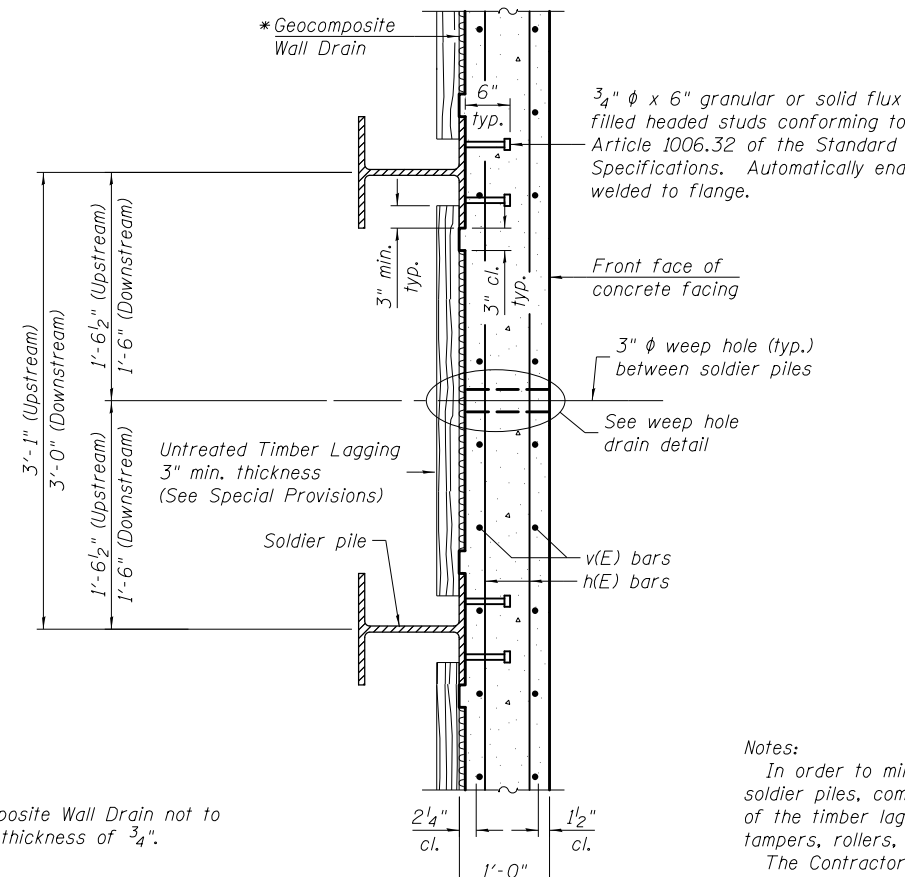
**LIFTING HOLE DETAIL**



**SECTION A-A**



**SECTION B-B**



**SECTION C-C**

**SOLDIER PILE WINGWALL SUGGESTED CONSTRUCTION SEQUENCE**

1. Construct concrete box culvert.
2. Drive soldier piles (may be completed prior to completing construction of box culvert).
3. Install timber lagging.
4. Place and compact backfill behind wingwall to top of timber lagging.
5. Place reinforcement and form concrete wall face.
6. Cast concrete wingwall facing.
7. Place remainder of backfill to proposed ground surface elevations on both sides of wall (backfill front side of wall as much as possible before backfilling is completed).

Notes:  
In order to minimize excessive deflection and/or stresses in the soldier piles, compaction equipment used within 4 ft of the back face of the timber lagging shall be limited to lightweight mechanical tampers, rollers, or vibratory systems.  
The Contractor is responsible for the design and performance of the timber lagging using no less than a 3 inch nominal rough-sawn thickness and timber with a minimum allowable bending stress of 1000 psi.

PRINT DATE: 3/14/2016 \$TIME\$ \$FILE\$

**EFK•Moen, LLC**  
Civil Engineering Design  
303 Fountains Parkway, Suite 240  
Fairview Heights, IL 62208  
Phone 618-206-4250

|                              |                  |           |
|------------------------------|------------------|-----------|
| USER NAME = bergena.j        | DESIGNED - CDL   | REVISED - |
| PLOT SCALE = 0:2" = 1' / in. | CHECKED - CTW    | REVISED - |
| PLOT DATE = 3/14/2016        | DRAWN - JAA      | REVISED - |
|                              | DATE - 3/14/2016 | REVISED - |

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

**WINGWALL DETAILS**  
**STRUCTURE NO. 010-2037**

SHEET NO. 8 OF 12 SHEETS

| F.A.S. RTE.               | SECTION    | COUNTY    | TOTAL SHEETS | SHEET NO. |
|---------------------------|------------|-----------|--------------|-----------|
| 502                       | 106BR-1(1) | CHAMPAIGN | 52           | 28        |
| CONTRACT NO. 70278        |            |           |              |           |
| ILLINOIS FED. AID PROJECT |            |           |              |           |

**NOTES**

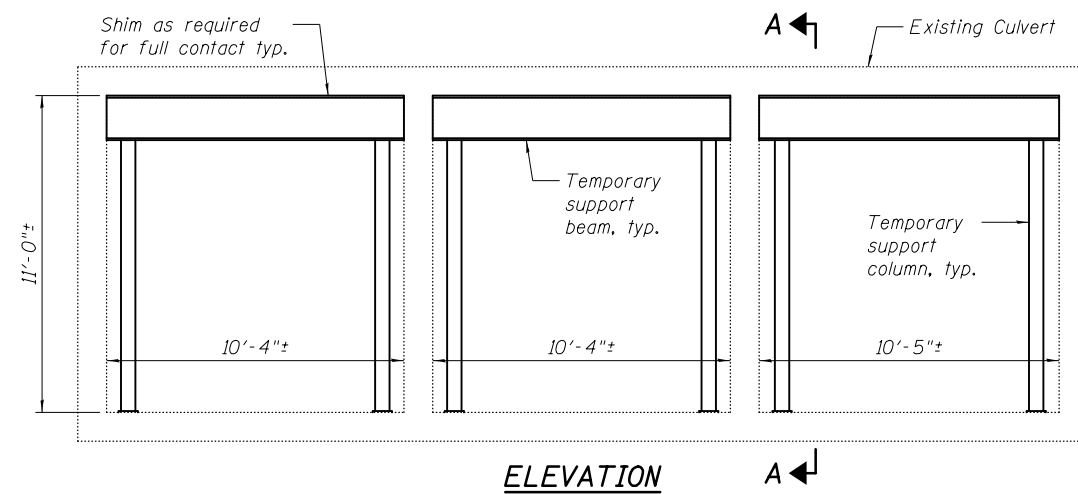
This work shall consist of furnishing, installing and subsequent removal of the temporary shoring according to the dimensions and details shown on the plans and according to the applicable portions of Section 512 of the Standard Specifications.

This work shall include furnishing, installing and subsequent removal of all miscellaneous steel shapes, plates and connecting hardware when required to attach the shoring to the existing structure.

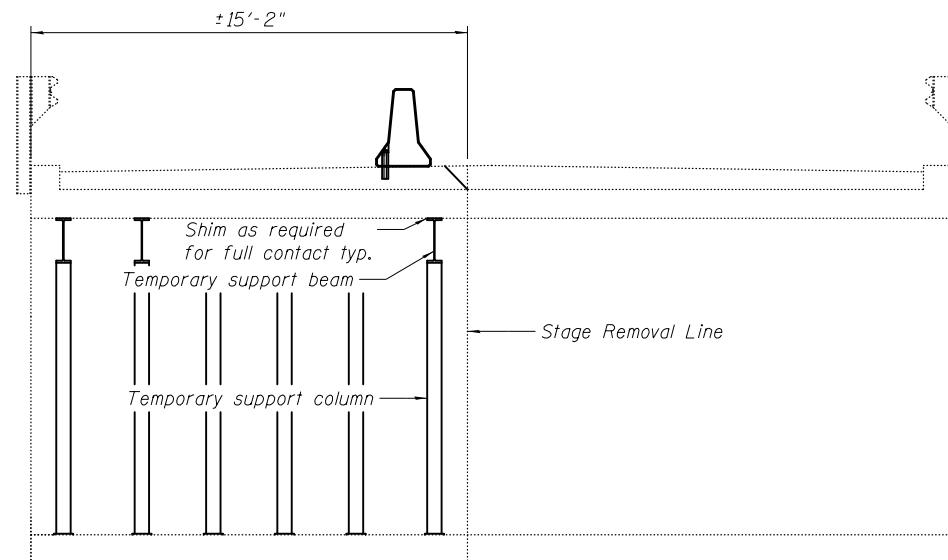
Temporary shoring minimum limits are shown in the plans. The contractor shall submit plans and details to the engineer for approval. The methods shown on the plans are for information only. The contractor may propose other means of supporting the construction/traffic staging provided they are done so at no extra cost to the department. The calculations shall be prepared and sealed by an Illinois Licensed Structural Engineer. This approval will not relieve the contractor of responsibility for the safety of the shoring.

Any disturbance or damage to existing structures, utilities or other property, caused by the contractors operation, shall be repaired by the contractor in a manner satisfactory to the Engineer at no additional cost to the Department. The contractor shall be responsible for determining the appropriate equipment necessary to install the contractors approved design. The shoring shall remain in place until removal of the existing structure.

This work shall be paid for at the contract unit price per Each for Temporary Support System.



Note:  
Place Temporary Support prior to Stage I Removal.



**SECTION A-A**  
(Looking North)

**BILL OF MATERIAL**

| ITEM                     | UNIT | QUANTITY |
|--------------------------|------|----------|
| Temporary Support System | Each | 1        |
|                          |      |          |
|                          |      |          |

PRINT DATE: 3/14/2016 \$ FILE \$ \$ TIME \$

**EFK Moen, LLC**  
Civil Engineering Design  
303 Fountains Parkway, Suite 240  
Fairview Heights, IL 62208  
Phone 618-206-4250

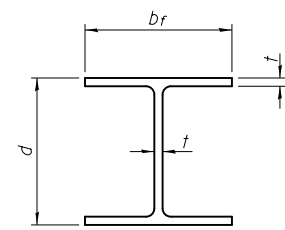
|                            |                  |           |
|----------------------------|------------------|-----------|
| USER NAME = bergena.j      | DESIGNED - CDL   | REVISED - |
|                            | CHECKED - CTW    | REVISED - |
| PLOT SCALE = 0.2" = 1' in. | DRAWN - JAA      | REVISED - |
| PLOT DATE = 3/14/2016      | DATE - 3/14/2016 | REVISED - |

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

**TEMPORARY SUPPORT DETAILS**  
**STRUCTURE NO. 010-2037**

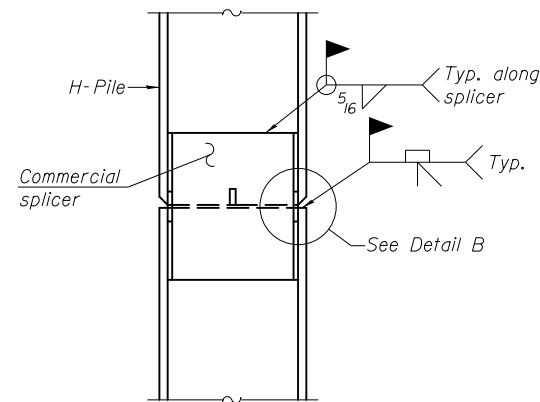
SHEET NO. 9 OF 12 SHEETS

| F.A.S. RTE.               | SECTION    | COUNTY    | TOTAL SHEETS | SHEET NO. |
|---------------------------|------------|-----------|--------------|-----------|
| 502                       | 106BR-1(1) | CHAMPAIGN | 52           | 29        |
| CONTRACT NO. 70278        |            |           |              |           |
| ILLINOIS FED. AID PROJECT |            |           |              |           |

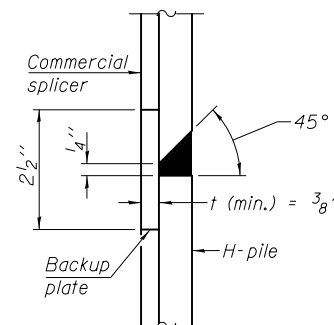


**STEEL PILE TABLE**

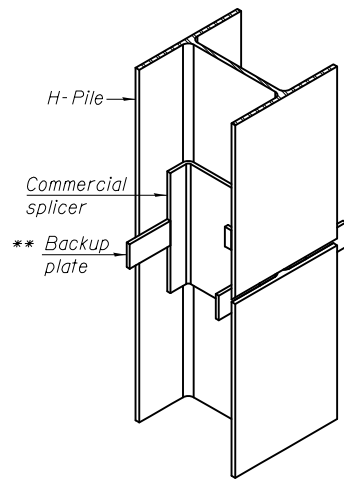
| Designation | Depth d | Flange width br | Web and Flange thickness t | Encasement diameter A |
|-------------|---------|-----------------|----------------------------|-----------------------|
| HP 14x117   | 14 1/4" | 14 7/8"         | 13/16"                     | 30"                   |
| x102        | 14"     | 14 3/4"         | 1/16"                      | 30"                   |
| x89         | 13 7/8" | 14 3/4"         | 5/8"                       | 30"                   |
| x73         | 13 5/8" | 14 5/8"         | 1/2"                       | 30"                   |
| HP 12x84    | 12 1/4" | 12 1/4"         | 1/16"                      | 24"                   |
| x74         | 12 1/8" | 12 1/4"         | 5/8"                       | 24"                   |
| x63         | 12"     | 12 1/8"         | 1/2"                       | 24"                   |
| x53         | 11 3/4" | 12"             | 7/16"                      | 24"                   |
| HP 10x57    | 10"     | 10 1/4"         | 9/16"                      | 24"                   |
| x42         | 9 3/4"  | 10 1/8"         | 7/16"                      | 24"                   |
| HP 8x36     | 8"      | 8 1/8"          | 7/16"                      | 18"                   |



**ELEVATION**

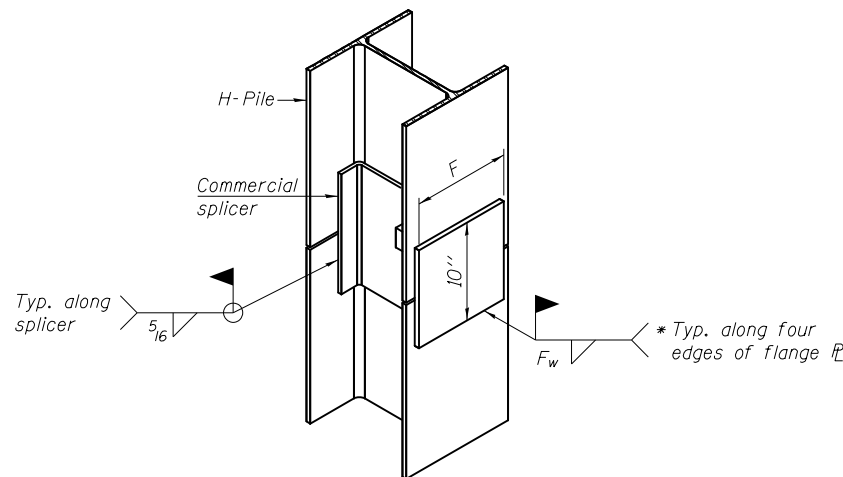


**DETAIL "B"**



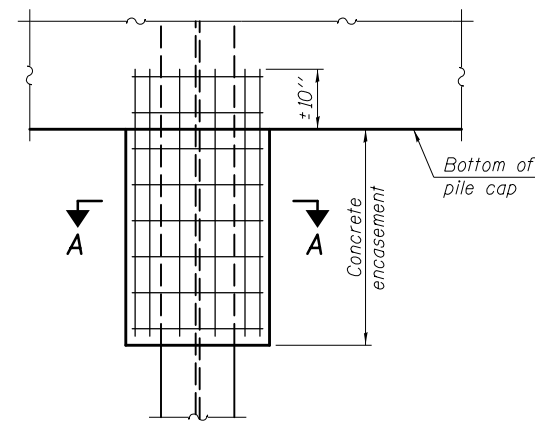
**ISOMETRIC VIEW**

**WELDED COMMERCIAL SPLICE**



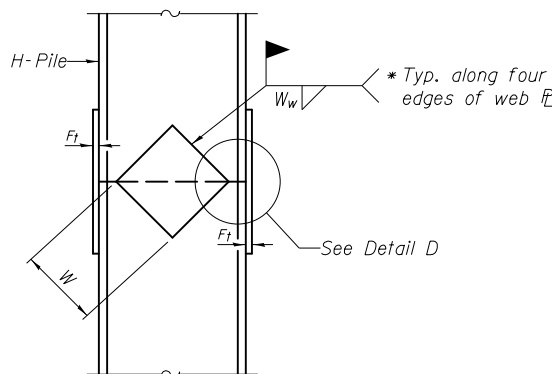
**WELDED COMMERCIAL SPLICE ALTERNATE**

- \* Interrupt welds 1/4" from end of web and/or each flange.
- \*\* Remove portions of backup plates that extend outside the flanges.
- \*\*\* Weld size per pile shoe manufacturer (5/16" min.).

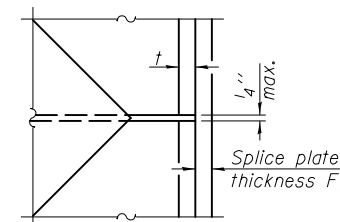


**ELEVATION**

**PILE ENCASEMENT**

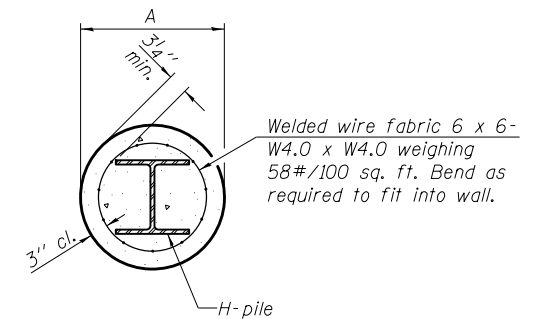


**ELEVATION**



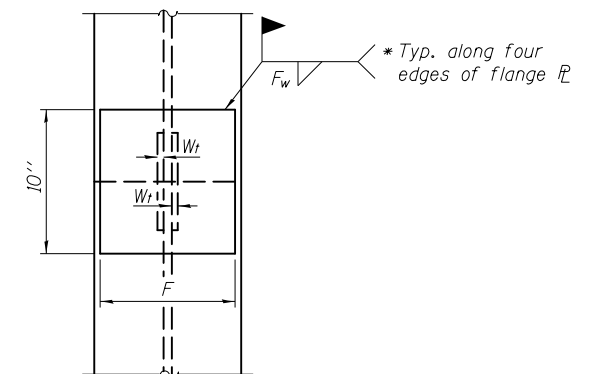
**DETAIL D**

**WELDED PLATE FIELD SPLICE**



**SECTION A-A**

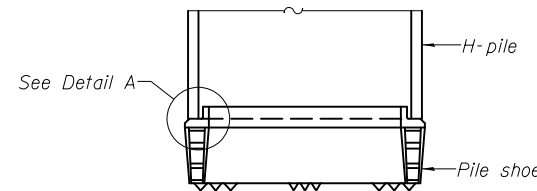
Note:  
Forms for encasement may be omitted when soil conditions permit.



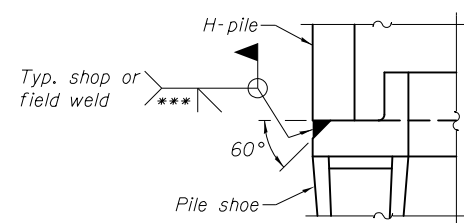
**END VIEW**

| Designation | F       | Ft   | Fw    | W      | Wt   | Ww   |
|-------------|---------|------|-------|--------|------|------|
| HP 14x117   | 12 1/2" | 1"   | 7/8"  | 7 3/4" | 5/8" | 1/2" |
| x102        | 12 1/2" | 7/8" | 3/4"  | 7 3/4" | 5/8" | 1/2" |
| x89         | 12 1/2" | 3/4" | 1/16" | 7 3/4" | 5/8" | 1/2" |
| x73         | 12 1/2" | 5/8" | 9/16" | 7 3/4" | 5/8" | 1/2" |
| HP 12x84    | 10"     | 7/8" | 1/16" | 6 1/2" | 5/8" | 1/2" |
| x74         | 10"     | 7/8" | 1/16" | 6 1/2" | 5/8" | 1/2" |
| x63         | 10"     | 5/8" | 1/2"  | 6 1/2" | 1/2" | 3/8" |
| x53         | 10"     | 5/8" | 1/2"  | 6 1/2" | 1/2" | 3/8" |
| HP 10x57    | 8"      | 3/4" | 9/16" | 5 1/4" | 1/2" | 3/8" |
| x42         | 8"      | 5/8" | 9/16" | 5 1/4" | 1/2" | 3/8" |
| HP 8x36     | 7"      | 5/8" | 7/16" | 4 1/4" | 1/2" | 3/8" |

Note:  
The steel H-piles shall be according to AASHTO M270 Grade 50.



**ELEVATION**



**DETAIL A**

**H-PILE SHOE ATTACHMENT**

F-HP 1-27-12

**EFK Moen, LLC**  
Civil Engineering Design  
303 Fountains Parkway, Suite 240  
Fairview Heights, IL 62208  
Phone 618-206-4250

|                              |                  |           |
|------------------------------|------------------|-----------|
| USER NAME = bergena.j        | DESIGNED - CDL   | REVISED - |
| PLOT SCALE = 0:2' = 1" / in. | CHECKED - CTW    | REVISED - |
| PLOT DATE = 3/14/2016        | DRAWN - JAA      | REVISED - |
|                              | DATE - 3/14/2016 | REVISED - |

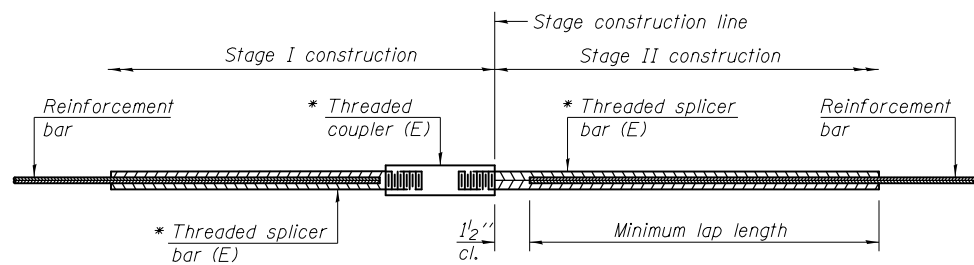
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**HP PILE DETAILS**  
**STRUCTURE NO. 010-2037**

SHEET NO. 10 OF 12 SHEETS

|                    |                    |                  |                           |              |
|--------------------|--------------------|------------------|---------------------------|--------------|
| F.A.S. RTE. 502    | SECTION 106BR-1(1) | COUNTY CHAMPAIGN | TOTAL SHEETS 52           | SHEET NO. 30 |
| CONTRACT NO. 70278 |                    |                  | ILLINOIS FED. AID PROJECT |              |

PRINT DATE: 3/14/2016 \$TIME\$ \$FILE\$

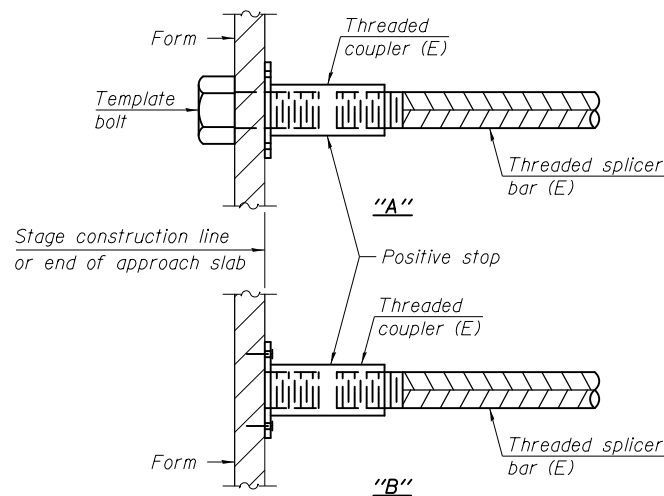


**STANDARD BAR SPLICER ASSEMBLY**

Threaded splicer bar length = min. lap length + 1/2" + thread length

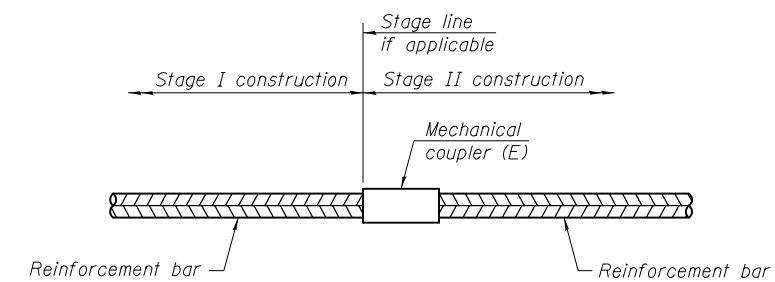
\* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

| Location            | Bar size | No. assemblies required | Minimum lap length |
|---------------------|----------|-------------------------|--------------------|
| Bott. of Bott. Slab | 4        | 40                      | 2'-11"             |
| Top of Bott. Slab   | 5        | 40                      | 3'-7"              |
| Walls               | 4        | 96                      | 2'-11"             |
| Bott. of Top Slab   | 5        | 40                      | 3'-7"              |
| Top of Top Slab     | 4        | 40                      | 2'-11"             |



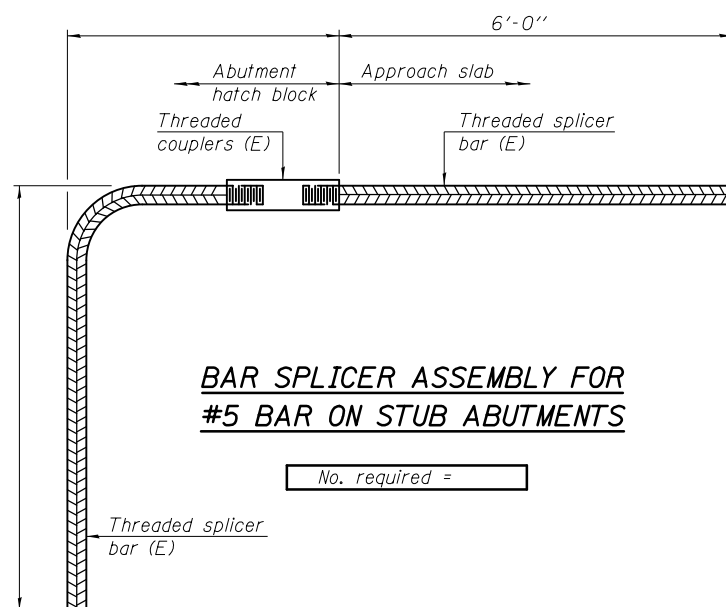
**INSTALLATION AND SETTING METHODS**

"A" : Set bar splicer assembly by means of a template bolt.  
 "B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.  
 (E) : Indicates epoxy coating.



**STANDARD MECHANICAL SPLICER**

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



**BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS**

No. required =

**NOTES**

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.  
 All reinforcement shall be lapped and tied to the splicer bars.  
 Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.  
 See approved list of bar splicer assemblies and mechanical splicers for alternatives.

PRINT DATE: 3/14/2016 \$FILE\$ \$TIME\$

BSD-1

6-8-15

**EFK•Moen, LLC**  
 Civil Engineering Design  
 303 Fountains Parkway, Suite 240  
 Fairview Heights, IL 62208  
 Phone 618-206-4250

|                              |                  |           |
|------------------------------|------------------|-----------|
| USER NAME = bergena.j        | DESIGNED - CDL   | REVISED - |
| PLOT SCALE = 0:2" = 1' / in. | CHECKED - CTW    | REVISED - |
| PLOT DATE = 3/14/2016        | DRAWN - JAA      | REVISED - |
|                              | DATE - 3/14/2016 | REVISED - |

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS  
 STRUCTURE NO. 010-2037**

SHEET NO. 11 OF 12 SHEETS

| F.A.S. RTE.        | SECTION    | COUNTY    | TOTAL SHEETS | SHEET NO. |
|--------------------|------------|-----------|--------------|-----------|
| 502                | 106BR-1(1) | CHAMPAIGN | 52           | 31        |
| CONTRACT NO. 70278 |            |           |              |           |

ILLINOIS FED. AID PROJECT



**Illinois Department of Transportation**  
Division of Highways  
Illinois Department of Transportation

### SOIL BORING LOG

Page 1 of 1

Date 9/21/11

ROUTE FAS 502 (Leverett Rd.) DESCRIPTION Leverett Road over Tributary to Saline Branch Drainage Ditch LOGGED BY CNA

SECTION 106BR-1 LOCATION NW, SEC. 19, TWP. 20N, RNG. 8E, 3<sup>rd</sup> PM GPS:

COUNTY Champaign DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. 010-2010E/2037P  
Station 145+89.5  
BORING NO. 1 SE Boring  
Station 145+63  
Offset 9.0 ft Rt.  
Ground Surface Elev. 732.6 ft

| Elev. (ft) | Depth (ft) | B   | L | U  | M | Description   | D | B | U | M |
|------------|------------|-----|---|----|---|---|---|---|---|---|
|            |            |     |   |    |   |   |   |   |   |   |
| 732.6      |            |     |   |    |   | Asphalt Pavement  |   |   |   |   |
| 730.6      |            |     |   |    |   | Brown Clay Loam (Fill)  |   |   |   |   |
|            | 1          |     |   |    |   |   |   |   |   |   |
|            | 2          | 2.1 |   | 19 |   |   |   |   |   |   |
|            | 3          | B   |   |    |   |   |   |   |   |   |
| 727.1      |            |     |   |    |   | Gray Mottled Silty Clay   |   |   |   |   |
|            | 0          |     |   |    |   |   |   |   |   |   |
| 725.6      |            |     |   | 15 |   | Gray Sand Loam Till to Dirty Coarse Sand with Trace of Free Water |   |   |   |   |
|            | 2          |     |   |    |   |   |   |   |   |   |
|            | 3          |     |   |    |   |   |   |   |   |   |
|            | 4          |     |   |    |   |   |   |   |   |   |
| 722.1      |            |     |   |    |   | Gray/Brown Clay Loam Till   |   |   |   |   |
|            | 1          |     |   |    |   |   |   |   |   |   |
|            | 2          | 1.6 |   | 14 |   |   |   |   |   |   |
|            | 4          | B   |   |    |   |   |   |   |   |   |
|            | 3          |     |   |    |   |   |   |   |   |   |
|            | 4          | 1.5 |   | 12 |   |   |   |   |   |   |
|            | 6          | B   |   |    |   |   |   |   |   |   |
| 717.1      |            |     |   |    |   | Gray Clay Loam Till   |   |   |   |   |
|            | 3          |     |   |    |   |   |   |   |   |   |
|            | 6          | 2.5 |   | 12 |   |   |   |   |   |   |
|            | 6          | B   |   |    |   |   |   |   |   |   |
|            | 3          |     |   |    |   |   |   |   |   |   |
|            | 6          | 2.8 |   | 13 |   |   |   |   |   |   |
|            | 7          | B   |   |    |   |   |   |   |   |   |

An assumed centerline elevation of 100.00 and station of 10+00 is used when this information is not available.  
The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N Value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)



**Illinois Department of Transportation**  
Division of Highways  
Illinois Department of Transportation

### SOIL BORING LOG

Page 1 of 1

Date 9/21/11

ROUTE FAS 502 (Leverett Rd.) DESCRIPTION Leverett Road over Tributary to Saline Branch Drainage Ditch LOGGED BY CNA

SECTION 106BR-1 LOCATION NW, SEC. 19, TWP. 20N, RNG. 8E, 3<sup>rd</sup> PM GPS:

COUNTY Champaign DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. 010-2010E/2037P  
Station 145+89.5  
BORING NO. 2 NW Boring  
Station 146+17  
Offset 9.0 ft Lt.  
Ground Surface Elev. 732.6 ft

| Elev. (ft) | Depth (ft) | B   | L | U  | M | Description  | D | B | U | M |
|------------|------------|-----|---|----|---|--|---|---|---|---|
|            |            |     |   |    |   |  |   |   |   |   |
| 732.6      |            |     |   |    |   | Asphalt Pavement   |   |   |   |   |
| 730.6      |            |     |   |    |   | Brown Clay Loam (Fill)                                       |   |   |   |   |
|            | 2          |     |   |    |   |  |   |   |   |   |
|            | 6          | 2.1 |   | 12 |   |  |   |   |   |   |
| 728.6      |            |     |   |    |   | Brown/Gray/Black Mixed Mottled Silty Clay Loam               |   |   |   |   |
|            | 2          | 1.4 |   | 27 |   |  |   |   |   |   |
|            | 3          | B   |   |    |   |  |   |   |   |   |
| 727.1      |            |     |   |    |   | Gray Sandy Clay Loam Till to Sand Loam Till                  |   |   |   |   |
|            | 1          |     |   |    |   |  |   |   |   |   |
| 725.6      |            |     |   | 25 |   | Gray Dirty Coarse Sand to Sand Loam with Trace of Free Water |   |   |   |   |
|            | 2          | 1.0 |   |    |   |  |   |   |   |   |
|            | 3          | B   |   |    |   |  |   |   |   |   |
|            | 3          |     |   |    |   |  |   |   |   |   |
|            | 5          | 3.1 |   | 11 |   |  |   |   |   |   |
|            | 8          | B   |   |    |   |  |   |   |   |   |
| 722.1      |            |     |   |    |   | Gray Clay Loam Till  |   |   |   |   |
|            | 3          |     |   |    |   |  |   |   |   |   |
|            | 4          | 2.9 |   | 14 |   |  |   |   |   |   |
|            | 6          | B   |   |    |   |  |   |   |   |   |
|            | 3          |     |   |    |   |  |   |   |   |   |
| 718.6      |            |     |   |    |   | Brown Clay Loam Till   |   |   |   |   |
|            | 3          | 1.4 |   | 15 |   |  |   |   |   |   |
|            | 5          | B   |   |    |   |  |   |   |   |   |
| 717.1      |            |     |   |    |   | Gray Clay Loam Till  |   |   |   |   |
|            | 3          |     |   |    |   |  |   |   |   |   |
|            | 5          | 2.5 |   | 13 |   |  |   |   |   |   |
|            | 5          | B   |   |    |   |  |   |   |   |   |
|            | 3          |     |   |    |   |  |   |   |   |   |
|            | 5          | 3.3 |   | 12 |   |  |   |   |   |   |
|            | 7          | B   |   |    |   |  |   |   |   |   |

An assumed centerline elevation of 100.00 and station of 10+00 is used when this information is not available.  
The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N Value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

PRINT DATE: 3/14/2016 \$ TIME \$ \$ FILE \$

**EFK•Moen, LLC**  
Civil Engineering Design  
303 Fountains Parkway, Suite 240  
Fairview Heights, IL 62208  
Phone 618-206-4250

|                              |                  |           |
|------------------------------|------------------|-----------|
| USER NAME = bergena.j        | DESIGNED - CDL   | REVISED - |
| PLOT SCALE = 0.2" = 1' / in. | CHECKED - CTW    | REVISED - |
| PLOT DATE = 3/14/2016        | DRAWN - JAA      | REVISED - |
|                              | DATE - 3/14/2016 | REVISED - |

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

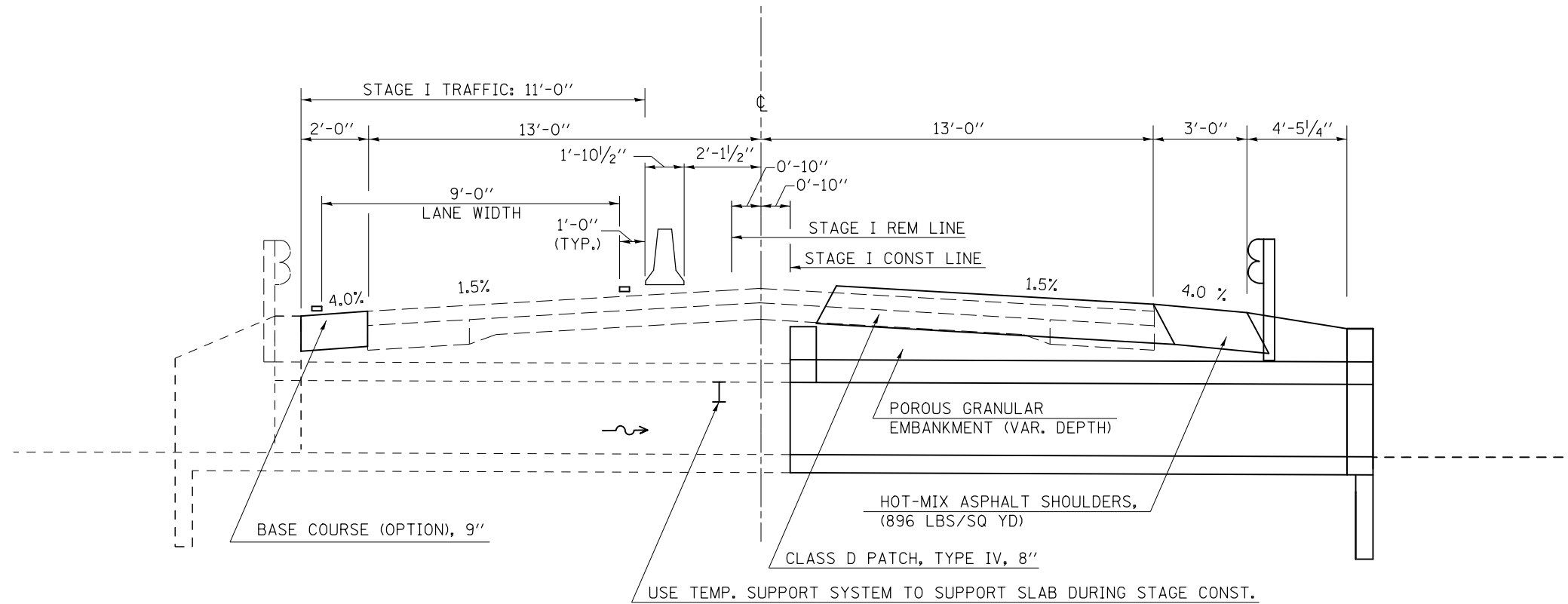
**BORING LOGS**  
**STRUCTURE NO. 010-2037**

SHEET NO. 12 OF 12 SHEETS

| F.A.S. RTE.               | SECTION    | COUNTY    | TOTAL SHEETS | SHEET NO.          |
|---------------------------|------------|-----------|--------------|--------------------|
| 502                       | 106BR-1(1) | CHAMPAIGN | 52           | 32                 |
|                           |            |           |              | CONTRACT NO. 70278 |
| ILLINOIS FED. AID PROJECT |            |           |              |                    |

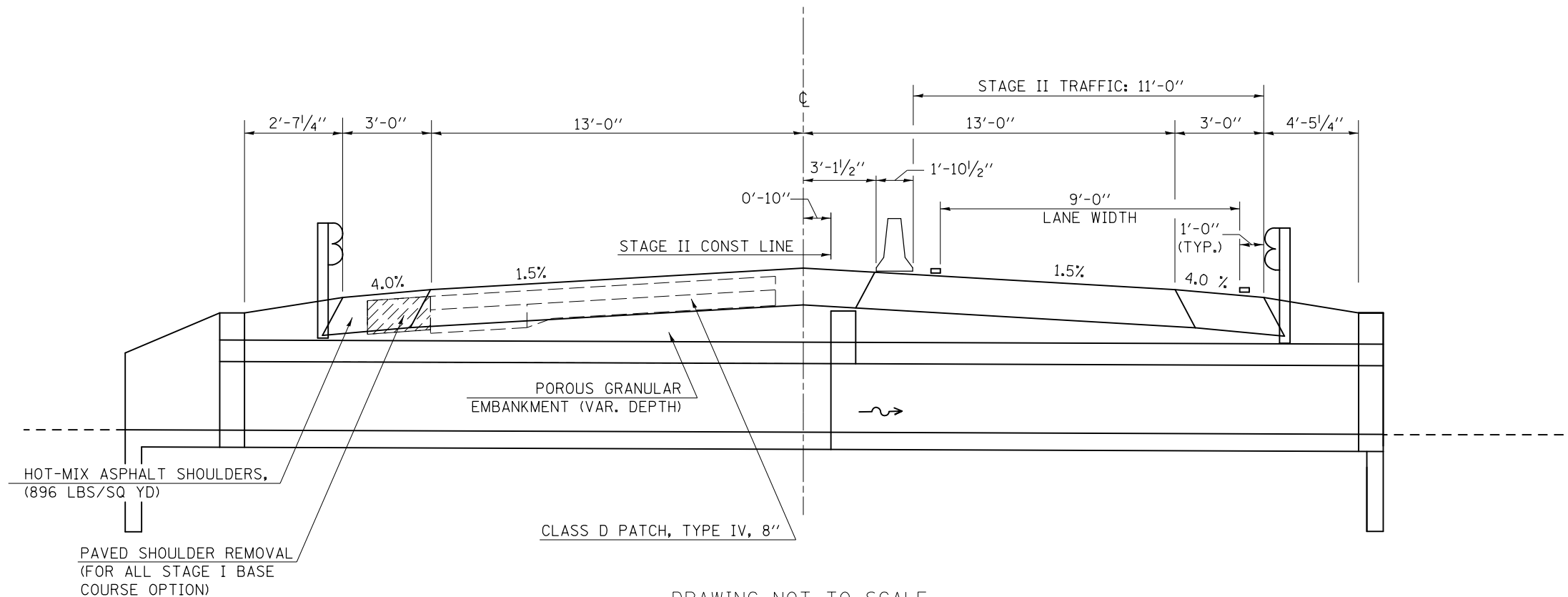


## TYPICAL STAGING DETAILS SN 010-2010(E), SN 010-2037(P) STAGE I



DRAWING NOT TO SCALE

## TYPICAL STAGING DETAILS SN 010-2010(E), SN 010-2037(P) STAGE II

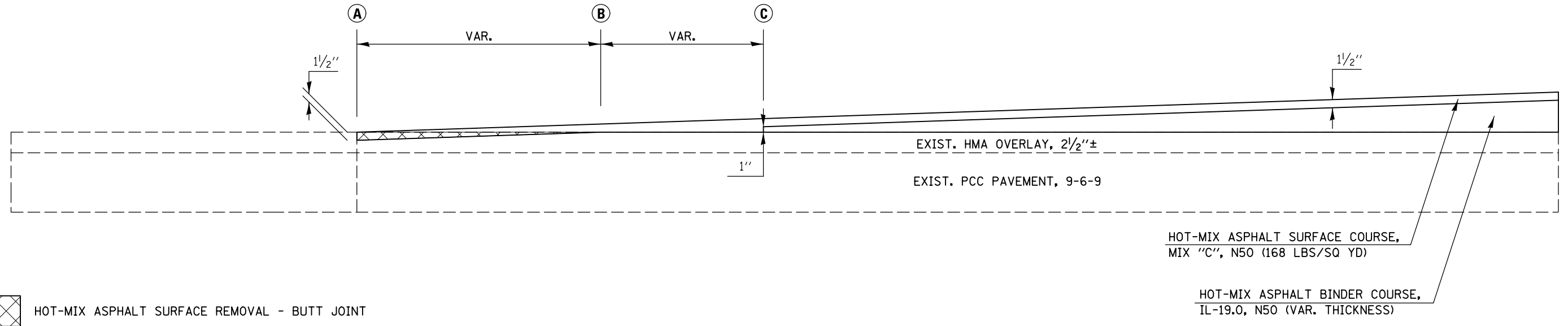


DRAWING NOT TO SCALE

|  |                      |                           |           |   |                        |  |  |                |                           |            |                 |              |    |
|--|----------------------|---------------------------|-----------|---|------------------------|--|--|----------------|---------------------------|------------|-----------------|--------------|----|
| FILE NAME =  | USER NAME = bergenej | DESIGNED - BJH 12/21/2015 | REVISED - | <b>STATE OF ILLINOIS<br/>DEPARTMENT OF TRANSPORTATION</b> | <b>STAGING DETAILS</b> |  |  | F.A.S.<br>RTE. | SECTION                   | COUNTY     | TOTAL<br>SHEETS | SHEET<br>NO. |    |
| pw:\IL\084EBIDINTEG.illinois.gov\PIWIDOT\Documents\IDOT Offices\District 5\Projects\050728\Drawings\Design\0570278-shr-details.dwg |                      |                           |           |   | DRAWN                  |  |  |                | 502                       | 106BR-1(1) | CHAMPAIGN       | 52           | 33 |
| PLOT SCALE = 40.0000' / in.  |                      |                           |           |   | CHECKED -              |  |  |                | CONTRACT NO. 70278        |            |                 |              |    |
| DATE = 3/14/2016   |                      |                           |           |   | DATE -                 |  |  |                | ILLINOIS FED. AID PROJECT |            |                 |              |    |

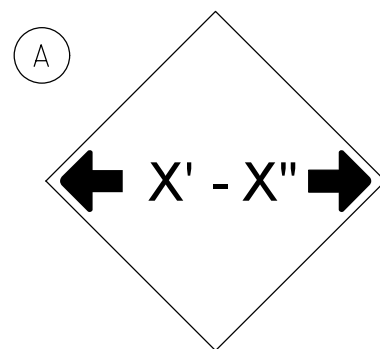
# DETAIL FOR FAS 502 BUTT JOINTS AND PAVING TRANSITIONS

|           |          |           |
|-----------|----------|-----------|
| <b>Ⓐ</b>  | <b>Ⓑ</b> | <b>Ⓒ</b>  |
| STATION   | TO       | STATION   |
| 23+00.00  |          | 23+17.29  |
| 148+00.00 |          | 147+71.39 |
|           |          | 23+34.26  |
|           |          | 147+52.25 |

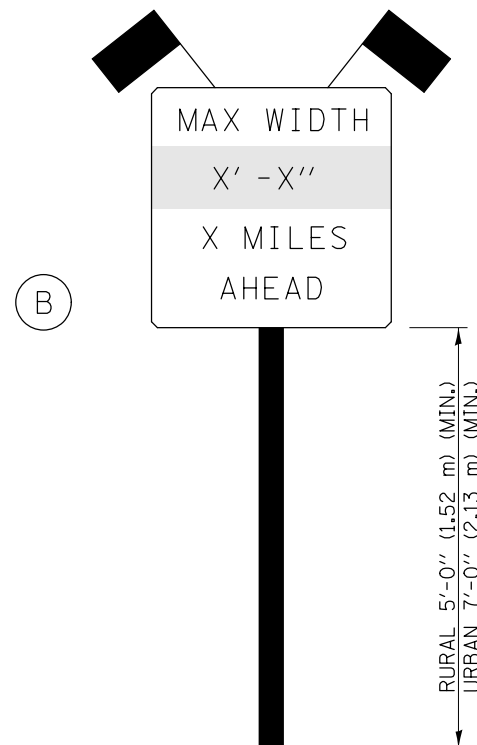


|                             |                      |                            |           |   |  |                    |                    |                  |                 |                           |  |  |
|-----------------------------|----------------------|----------------------------|-----------|---|--|--------------------|--------------------|------------------|-----------------|---------------------------|--|--|
| FILE NAME =                 | USER NAME = bergenej | DESIGNED - B.JH 12/21/2015 | REVISED - | <b>STATE OF ILLINOIS<br/>DEPARTMENT OF TRANSPORTATION</b> | <b>MILLING AND PAVING TRANSITION DETAILS</b> | F.A.S. RTE. 502    | SECTION 106BR-1(1) | COUNTY CHAMPAIGN | TOTAL SHEETS 52 | SHEET NO. 34              |  |  |
| DRAWN                       |                      |                            |           |   |  | CONTRACT NO. 70278 |                    |                  |                 |                           |  |  |
| PLOT SCALE = 40.0000' / in. |                      |                            |           |   |  | CHECKED -          |                    | REVISED -        |                 |                           |  |  |
| PLOT DATE = 3/14/2016       |                      |                            |           |   |  | DATE -             |                    | REVISED -        |                 | ILLINOIS FED. AID PROJECT |  |  |
| SCALE:                      |                      | SHEET 1 OF 1 SHEETS        |           | STA. TO STA.  |  |                    |                    |                  |                 |                           |  |  |

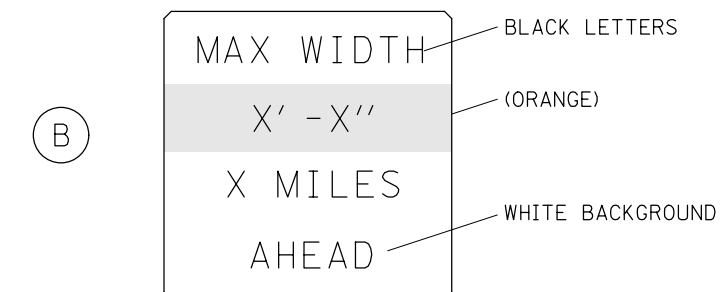




W12-2(0)-48"x48"(1200x1200)



SIGN PANEL, TYPE II



W12-I103(0)-48"x48"(1200x1200)  
"D" LETTERS/NUMBERS

SIGN (A) 2 SIGNS - W12-2(0)-48"x48"(1200x1200) ARE TO BE PLACED AS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER.

SIGN (B) 2 SIGNS - (SIGN PANEL, TYPE II) AS SHOWN ARE TO BE PLACED AS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER.

GENERAL NOTES

1. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED AND MAINTAINED BY THE CONTRACTOR.
2. ALL (B) SIGNS SHALL HAVE FLAGS INSTALLED UNLESS OTHERWISE DIRECTED.
3. LOCATIONS OF TRAFFIC CONTROL DEVICES MAY BE ADJUSTED BY THE ENGINEER.
4. ALL TRAFFIC CONTROL SHOWN ON THIS SHEET SHALL BE PAID FOR AT THE CONTRACT LUMP SUM PRICE FOR WIDTH RESTRICTION SIGNING.
5. ALL SIGNS SHALL BE POST MOUNTED UNLESS OTHERWISE DIRECTED.
6. ALL SIGNS SHOWN ORANGE (O) SHALL BE FLUORESCENT ORANGE.
7. ALL SIGNS SHOWN SHALL CONSIST OF THE CURRENT RETROREFLECTIVE SHEETING REQUIREMENTS AS OUTLINED IN SECTION 1106.01 OF THE STANDARD SPECIFICATIONS BOOK.

Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

|  |                             |            |                       |
|--|-----------------------------|------------|-----------------------|
| FILE NAME =  | USER NAME = bergenej        | DESIGNED - | REVISED - 03/11 -KJT  |
| pw:\IL\084EBIDINTEG.illinois.gov\PWIDOT\Documents\DOT Offices\District 5\Projects\05072016\Drawings\Design\0570278-shr-details.dwg |                             | DRAWN -    | REVISED - 05/08       |
|  | PLOT SCALE = 40.0000' / in. | CHECKED -  | REVISED - 10/08 - KJT |
|  | PLOT DATE = 3/14/2016       | DATE -     | REVISED - 7/09 - KJT  |

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

WIDTH RESTRICTION SIGNING

SCALE: SHEET NO. 2 OF 2 SHEETS STA. TO STA.

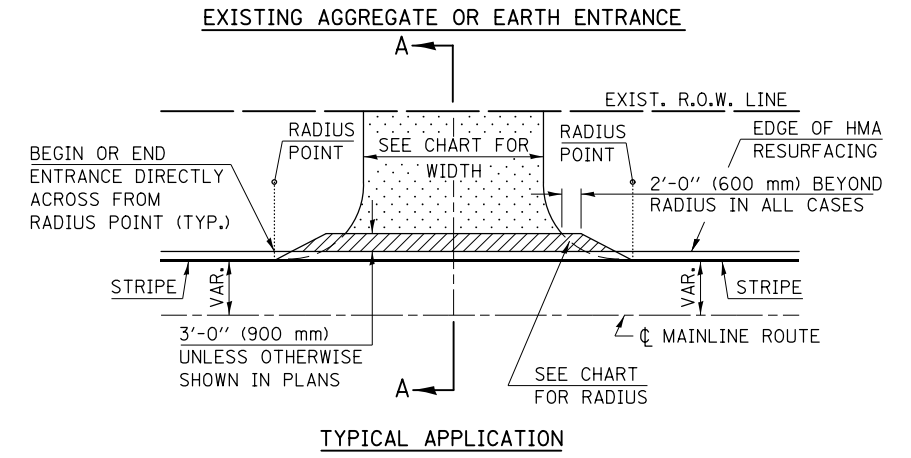
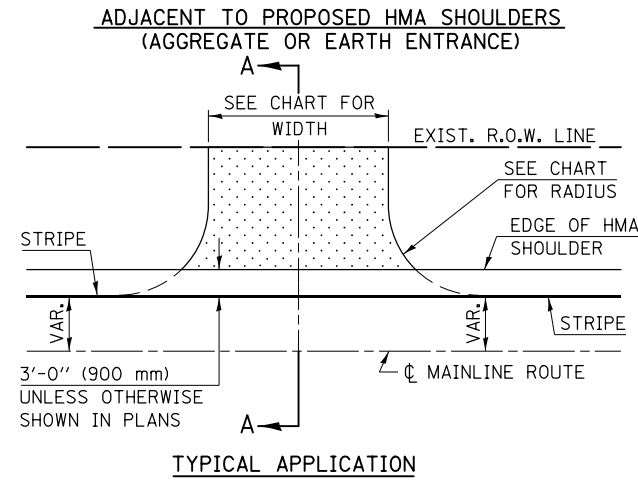
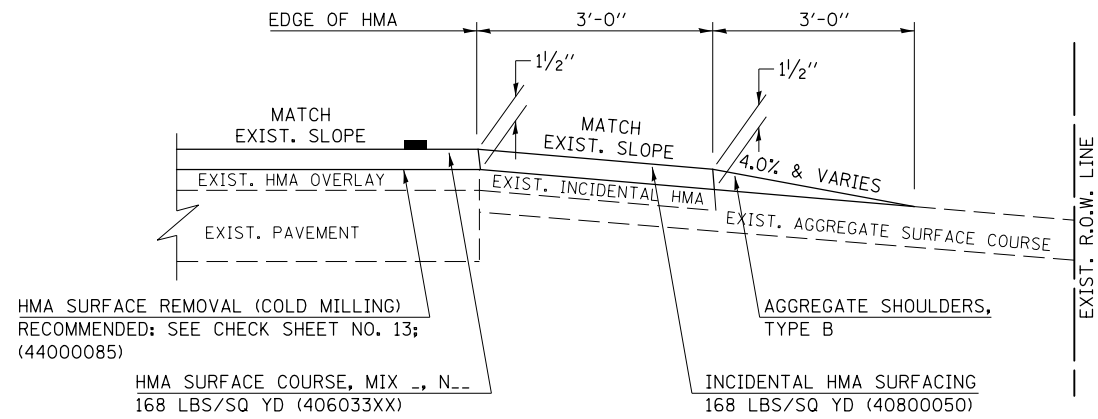
DISTRICT 5 DETAIL NO. X7200201

| F.A.S. RTE.                                   | SECTION    | COUNTY    | TOTAL SHEETS       | SHEET NO. |
|---|------------|-----------|--------------------|-----------|
| 502   | 106BR-1(1) | CHAMPAIGN | 52                 | 36        |
| FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT |            |           | CONTRACT NO. 70278 |           |

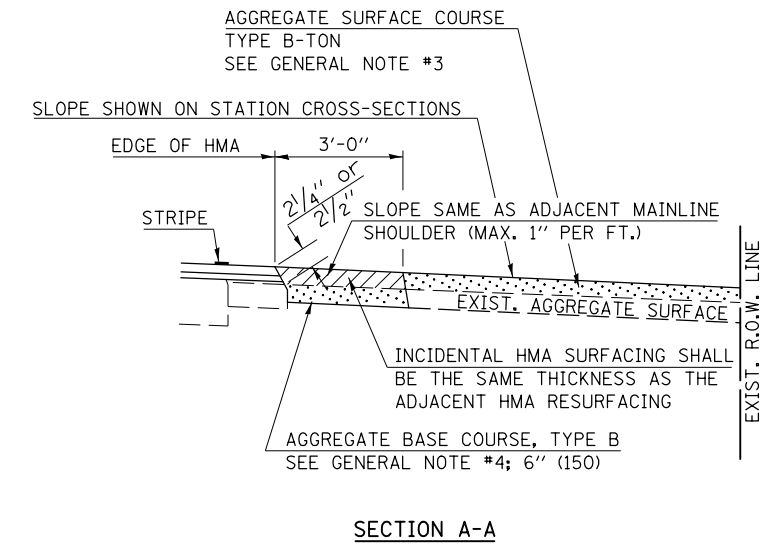
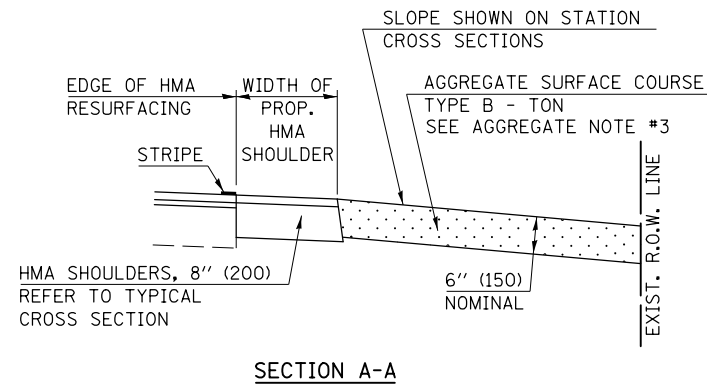
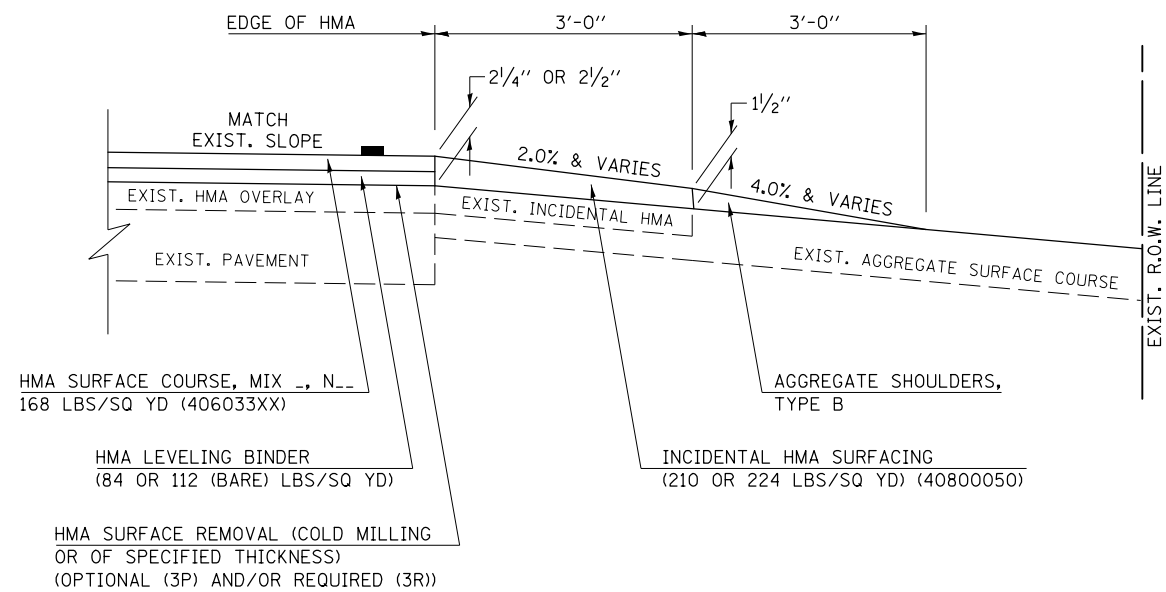
**PROJECTS WITHOUT RECONSTRUCTION**  
 ("3R" WITHOUT RECONSTRUCTION, 3P, SMART AND CM)

**PROJECTS WITH RECONSTRUCTION**  
 ("3R" IMPROVEMENTS AND SMART/3P "SPOT" LOCATIONS)

**S.M.A.R.T. IMPROVEMENTS**  
 (POLICY RESURFACING; BDE 53-4.03; 1/2")



**"3P" OR "3R" IMPROVEMENTS**  
 (POLICY RESURFACING; BDE 53-4.02; 2/4" OR 2/2" ON BARE CONCRETE)



Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

**DISTRICT 5 DETAIL NO. 40800050A**

|   |                             |            |                        |
|---|-----------------------------|------------|------------------------|
| FILE NAME =   | USER NAME = bergena.j       | DESIGNED - | REVISED - 12/01/06 TJB |
| pw:\IL\084EBIDINTEG.illinois.gov\PIWIDOT\Documents\DOT Offices\District 5\Projects\050728\Drawings\Design\0570278-shd-details.dwg |                             | DRAWN -    | REVISED - 09/21/07 KAG |
|   | PLOT SCALE = 40.0000' / in. | CHECKED -  | REVISED - 04/30/08 KJT |
|   | PLOT DATE = 3/14/2016       | DATE -     | REVISED -              |

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

FIELD ENTRANCES (NONCOMMERCIAL RURAL)

SCALE: NA SHEET NO. 1 OF 2 SHEETS STA. TO STA.

| F.A.S. RTE.                                   | SECTION    | COUNTY    | TOTAL SHEETS       | SHEET NO. |
|---|------------|-----------|--------------------|-----------|
| 502   | 106BR-1(1) | CHAMPAIGN | 52                 | 37        |
| FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT |            |           | CONTRACT NO. 70278 |           |

**GENERAL NOTES**

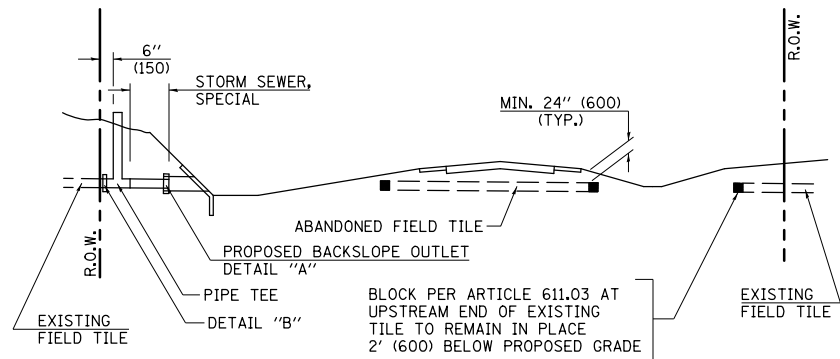
1. THE EXISTING SURFACE SHALL BE PREPARED IN ACCORDANCE WITH SECTION 408 OF THE STANDARD SPECIFICATIONS.
2. ANY NECESSARY WORK BEHIND THE HMA SHOULDER OR THE INCIDENTAL HMA SURFACING SHALL BE AS SHOWN IN THE PLANS AND/OR AS DIRECTED BY THE ENGINEER.
3. EARTH EXCAVATION REQUIRED FOR THE CONSTRUCTION OF THE AGGREGATE SURFACE COURSE SHALL BE INCLUDED IN THE COST OF AGGREGATE SURFACE COURSE.
4. AGGREGATE BASE COURSE, TYPE B, 6" (150 mm) MIN. SHALL BE USED WHERE IN THE OPINION OF THE ENGINEER THERE IS NOT SUFFICIENT BASE MATERIAL FOR THE PROPOSED ENTRANCES. THIS MATERIAL SHALL GENERALLY BE USED TO WIDEN ANY EXISTING RETURN OR TO CONSTRUCT NEW ENTRANCES WHERE NONE NOW EXISTS.
5. THE AGGREGATE BASE COURSE SHALL BE CONSTRUCTED 12" (300 mm) WIDER THAN THE SURFACE DIMENSIONS AS SHOWN ABOVE.
6. EXISTING FIELD ENTRANCES OF AGGREGATE OR EARTH WITH NO HMA APRON SHALL NOT RECEIVE A NEW HMA APRON WITHOUT PROPER APPROVAL THROUGH THE BUREAU OF OPERATIONS "POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS".
7. TO ASSURE APPROPRIATE ACCESS POLICIES ARE FOLLOWED ALL NEW ACCESS SHALL BE APPLIED FOR THROUGH THE BUREAU OF OPERATIONS PERMIT APPLICATION PROCESS. PLAN PREPARATION MEMORANDUMS 40-09 AND 40-11 ALONG WITH DISTRICT CONSTRUCTION MEMORANDUM 03/14 DISCUSS THIS PROCEDURE.

| RURAL ENTRANCE DESIGN STANDARDS (PPM 40-09) |   |        |          |                          |          |        |   |         |   |                 |      |      |               |      |  |  |
|---|---|--------|----------|--------------------------|----------|--------|---|---------|---|-----------------|------|------|---------------|------|--|--|
| DESIGN ELEMENT                              | NEW CONSTRUCTION & 3R with RECONSTRUCTION |        |          |                          |          |        | 3R w/out RECONSTRUCTION, 3P, SMART & CM |         |   |                 |      |      |               |      |  |  |
|   | NONCOMMERCIAL                             |        |          | FIELD W/ FARM IMPLEMENTS |          |        | COMMERCIAL                              |         |   | NONCOMMERCIAL   |      |      | COMMERCIAL    |      |  |  |
|   | PRIVATE & FIELD                           |        |          | FIELD W/ FARM IMPLEMENTS |          |        | COMMERCIAL                              |         |   | PRIVATE & FIELD |      |      | COMMERCIAL    |      |  |  |
|   | min.                                      | des.   | max.     | min.                     | max.     | min.   | des.                                    | max.    | min.  | des.            | max. | min. | des.          | max. |  |  |
| SURFACE WIDTH (FT)                          |   |        |          |                          |          |        | 1 LANE, 1 WAY                           |         |   |                 |      |      | 1 LANE, 1 WAY |      |  |  |
|   | 12  | 16     | 24       | 24                       | 30       | 14     | 16                                      | 24      |   |                 |      |      |               |      |  |  |
|   |   |        |          |                          |          |        | 2 LANE, 2 WAY                           |         |   |                 |      |      | 2 LANE, 2 WAY |      |  |  |
|   |   |        |          |                          |          | 24     | 30                                      | 35      |   |                 |      |      |               |      |  |  |
| RADIUS (FT)                                 | 15  | 25     | 40       | 30                       |          | 20     | 30                                      | 50      | resurface existing configuration; existing aggregate or earth entrances shall have the continuation of aggregate shoulders placed behind them |                 |      |      |               |      |  |  |
| SHOULDER WIDTH (FT)                         | 2   | 2      |          | 2                        |          | 1      | 3                                       |         |   |                 |      |      |               |      |  |  |
| SHOULDER SLOPE (%)                          | 2   | 4      | 6        | 4                        |          | 2      | 4                                       | 6       |   |                 |      |      |               |      |  |  |
| ENTRANCE GRADE (%)                          | 0   | 2 to 5 | 10 or 12 | 2 to 5                   | 10 or 12 | 0      | 2 to 5                                  | 8 or 10 |   |                 |      |      |               |      |  |  |
| SIDE SLOPE (FT)                             | 1:4                                       | 1:6    | 1:10     | 1:4                      | 1:6      | 1:4    | 1:6                                     | 1:10    |   |                 |      |      |               |      |  |  |
| <b>SURFACE TYPE</b>                         |   |        |          |                          |          |        |   |         |   |                 |      |      |               |      |  |  |
| INCIDENTAL HMA SURFACING (INCH)             |   | 2      |          | 2                        |          | 3 or 4 |   |         | taper from hma resurfacing thickness (2 1/2", 2 1/4" or 1 1/2") to 1 1/2" to minimize aggregate shoulder                                      |                 |      |      |               |      |  |  |
| AGGREGATE SURFACE COURSE, TYPE B (INCH)     |   | 6      |          | 6                        |          | 8      |   |         | if applicable use items: Preparation of Base & Aggregate Base Repair; see PPM 30-02   |                 |      |      |               |      |  |  |
| PCC DRIVEWAY PAVEMENT (INCH)                |   | 6      |          |                          |          |        |   | 6 or 8  |   |                 |      |      |               |      |  |  |

Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

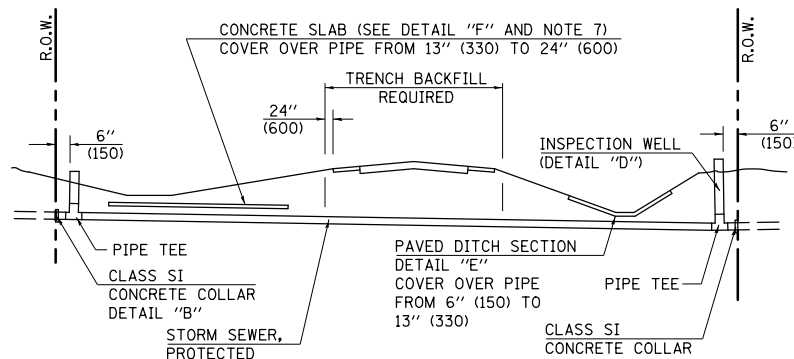
**DISTRICT 5 DETAIL NO. 40800050A**

|   |                             |                        |                        |   |  |                    |                         |        |              |                     |
|---|-----------------------------|------------------------|------------------------|---|--|--------------------|-------------------------|--------|--------------|---------------------|
| FILE NAME =   | USER NAME = bergenej        | DESIGNED -             | REVISED - 12/01/06 TJB | <b>STATE OF ILLINOIS<br/>DEPARTMENT OF TRANSPORTATION</b> | <b>FIELD ENTRANCES (NONCOMMERCIAL RURAL)</b> | F.A.S. RTE.        | SECTION                 | COUNTY | TOTAL SHEETS | SHEET NO.           |
| p:\11\084EBIDINTEG.illinois.gov\PI\DOT\Documents\DOT Offices\District 5\Projects\0507\Drawings\Design\0570278-shr-details.dwg | DRAWN -                     | REVISED - 09/21/07 KAG | 502                    |   |  | 106BR-1(1)         | CHAMPAIGN               | 52     | 38           |                     |
|   | PLOT SCALE = 40.0000' / in. | CHECKED -              | REVISED - 04/30/08 KJT |   |  | CONTRACT NO. 70278 |                         |        |              |                     |
|   | PLOT DATE = 3/14/2016       | DATE -                 | REVISED -              |   |  | SCALE: NA          | SHEET NO. 2 OF 2 SHEETS | STA.   | TO STA.      | FED. ROAD DIST. NO. |



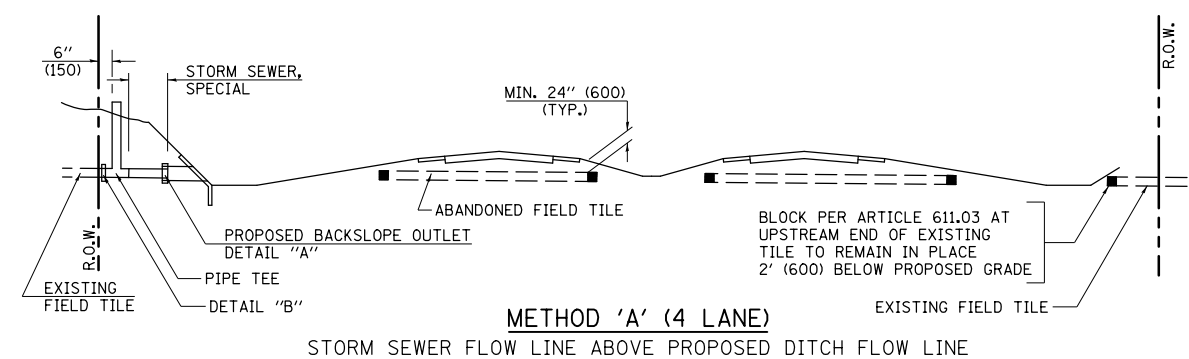
**METHOD 'A' (2 LANE)**

STORM SEWER FLOW LINE ABOVE PROPOSED DITCH FLOW LINE



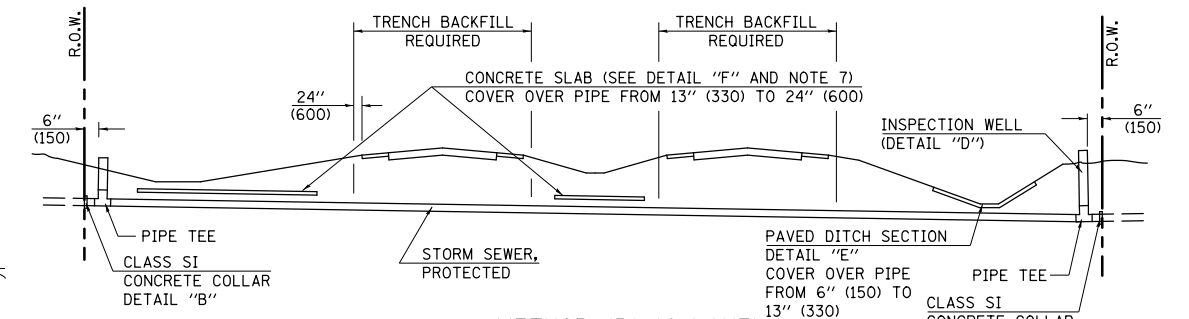
**METHOD 'B' (2 LANE)**

STORM SEWER LESS THAN 2' (600 mm) BELOW DITCH FLOW LINE AND STORM SEWERS CROSSING UNDER PAVEMENT AND PAVED DITCH



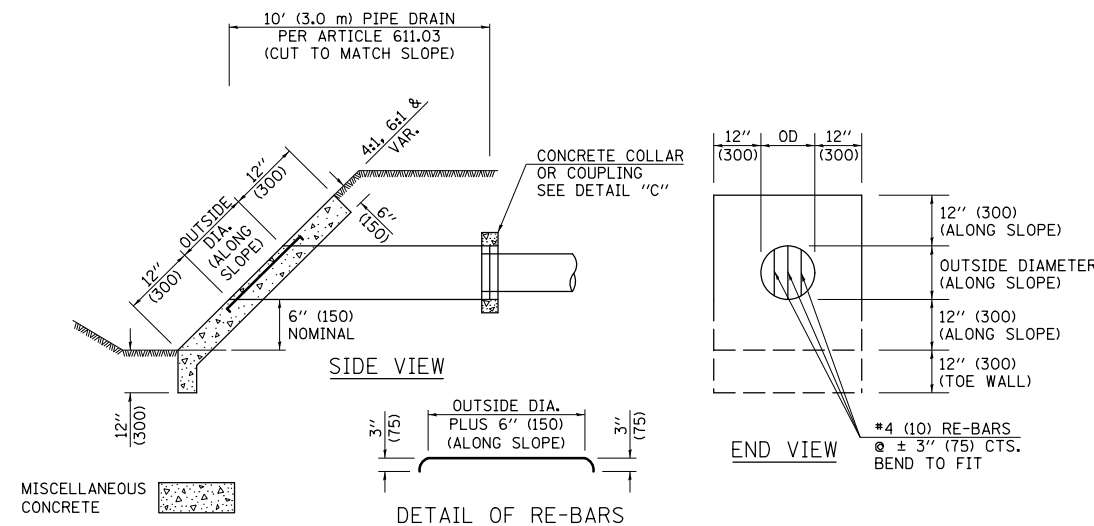
**METHOD 'A' (4 LANE)**

STORM SEWER FLOW LINE ABOVE PROPOSED DITCH FLOW LINE

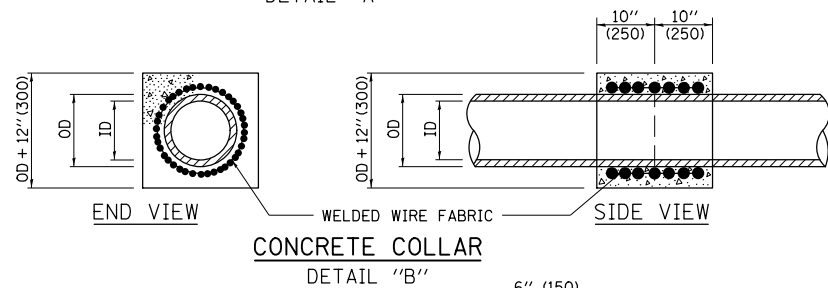


**METHOD 'B' (4 LANE)**

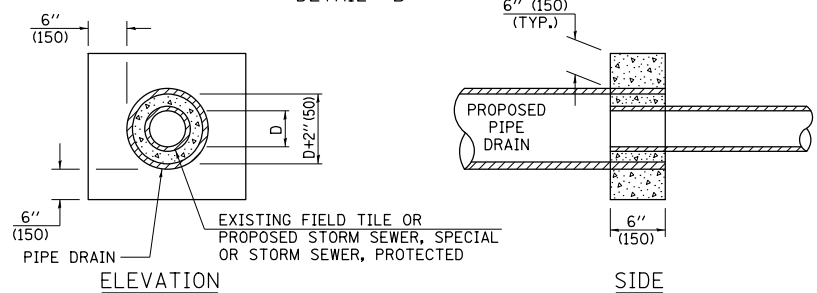
STORM SEWER LESS THAN 2' (600 mm) BELOW DITCH FLOW LINE AND STORM SEWERS CROSSING UNDER PAVEMENTS AND PAVED DITCHES



**HEADWALL FOR BACKSLOPE OUTLET  
DETAIL "A"**



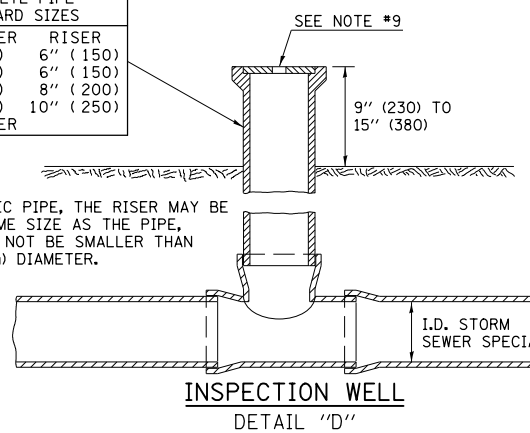
**CONCRETE COLLAR  
DETAIL "B"**



**CLASS SI COLLAR  
DETAIL "C"**

| CONCRETE PIPE STANDARD SIZES |           |
|------------------------------|-----------|
| STORM SEWER                  | RISER     |
| 6" (150)                     | 6" (150)  |
| 8" (200)                     | 6" (150)  |
| 10" (250)                    | 8" (200)  |
| 12" (300)                    | 8" (200)  |
| OR GREATER                   | 10" (250) |

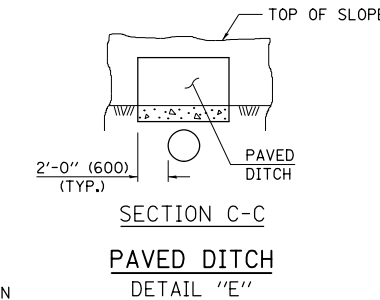
FOR PLASTIC PIPE, THE RISER MAY BE OF THE SAME SIZE AS THE PIPE, BUT SHALL NOT BE SMALLER THAN 4" (100 mm) DIAMETER.



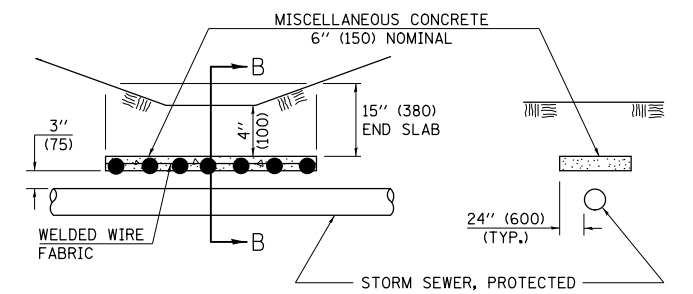
**INSPECTION WELL  
DETAIL "D"**

**GENERAL NOTES**

- EXISTING FIELD TILE ENCOUNTERED BY EXPLORATION TRENCH SHALL BE INSPECTED BY THE ENGINEER FOR UNOBSTRUCTED FLOW WITHIN THE LIMITS OF THE RIGHT-OF-WAY.
- ONLY FIELD TILE THAT DOES NOT HAVE SATISFACTORY FLOW AND OR HAS VISIBLE SIGNS OF DETERIORATION (SINK HOLES, ETC.) SHALL BE REPLACED WITHIN THE LIMITS OF THE RIGHT-OF-WAY IN ACCORDANCE WITH METHOD "B".
- INSPECTION WELLS SHALL BE CONSTRUCTED APPROXIMATELY 6" (150 mm) INSIDE OF BOTH RIGHT-OF-WAY LINES AT ALL FIELD TILE LOCATIONS.
- EXISTING FIELD TILE ABANDONED UNDER EXISTING PAVEMENTS OR PAVED SHOULDERS SHALL BE FILLED WITH FLOWABLE GROUT AS DIRECTED BY THE ENGINEER. THIS WORK WILL BE PAID FOR ACCORDING TO ARTICLE 109.04.
- NON-CIRCULAR FIELD TILE SHALL BE REPLACED WITH STORM SEWER, SPECIAL OF AT LEAST THE SAME CROSS SECTIONAL AREA. ALL EXISTING FIELD TILE SHALL BE REPLACED WITH STORM SEWER OF THE TYPE REQUIRED FOR THE MINIMUM DEPTH OF COVER.
- THE 6" (150 mm) CONCRETE SLAB OR DITCH LINING SHALL BE POURED THE LENGTH OF THE TRENCH AT ALL DITCH FLOW LINE LOCATIONS WITHIN THE RIGHT-OF-WAY WITH LESS THAN 2' (600 mm) OF EARTH COVER. MISCELLANEOUS CONCRETE SHALL BE USED ACCORDING TO SECTION 611.
- ALL MISCELLANEOUS SLABS, APRONS AND DITCH LININGS SHALL BE REINFORCED WITH WELDED WIRE FABRIC AS SHOWN FOR PAVED DITCH IN STANDARD 606401.
- HEADWALL FOR BACKSLOPE OUTLET MAY BE USED FOR PIPE DRAIN DIAMETERS UP TO 10" (250 mm). SPECIAL DESIGNS WILL BE REQUIRED FOR LARGER SIZES.
- THE INSPECTION WELL LID FOR P.C.C. PIPE SHALL BE CONSTRUCTED OF 3/8" (10 mm) CAST IRON AND PROVIDED WITH A 1" (25 mm) DIAMETER HOLE IN CENTER. THE LID FOR THE OTHER PIPE MATERIALS SHALL BE A GRATE ASSEMBLY PREFABRICATED FOR AND COMPATIBLE WITH THE PIPE SYSTEM.

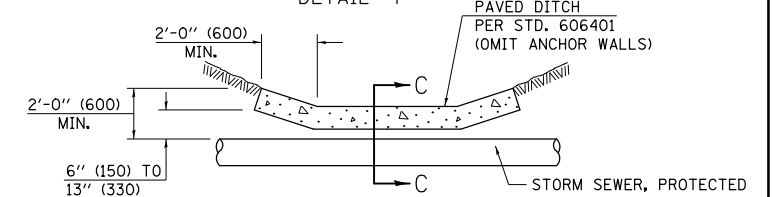


**PAVED DITCH  
DETAIL "E"**



**SLAB ELEVATION**

**CONCRETE SLAB  
DETAIL "F"**



**PAVED DITCH ELEVATION**

Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

**DISTRICT 5 DETAIL NO. 61101011A**

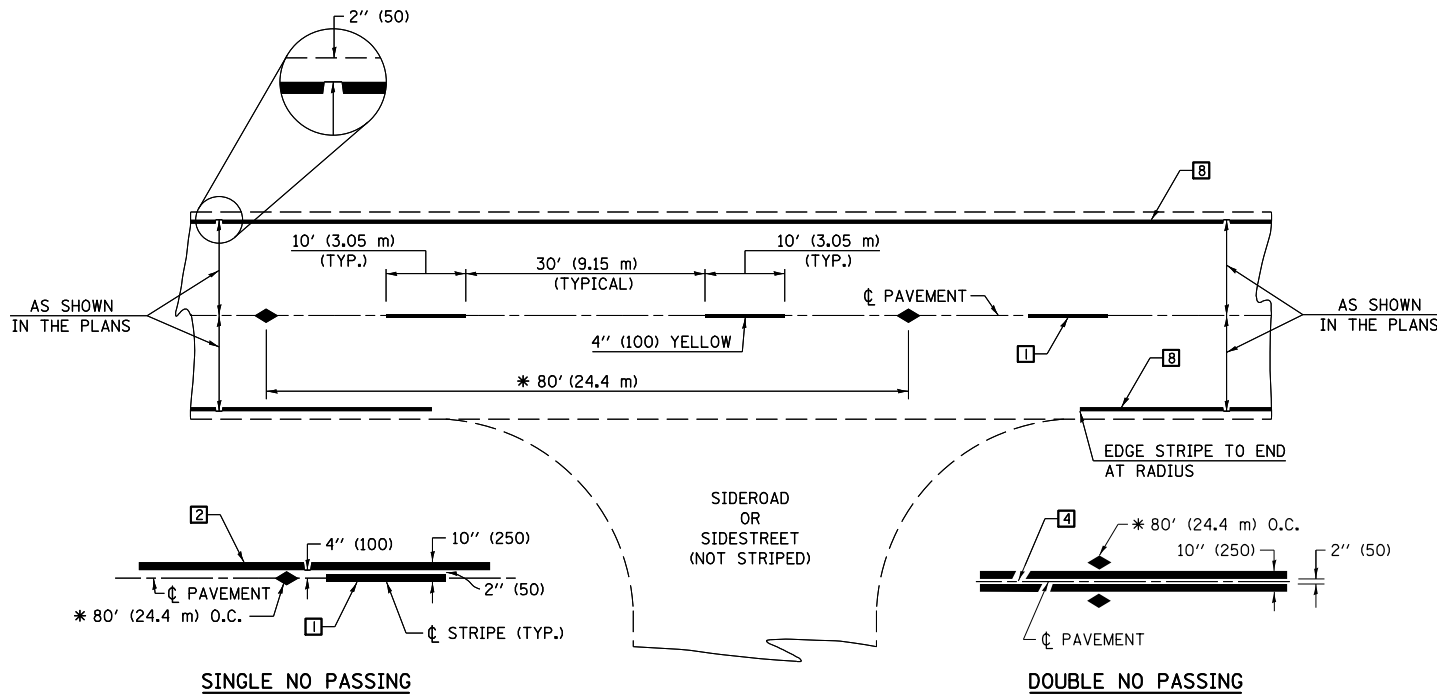
|  |                       |            |                 |
|--|-----------------------|------------|-----------------|
| FILE NAME =  | USER NAME = bergena.j | DESIGNED - | REVISED - 11/06 |
| pw:\11\084EBID\INTEG.illinois.gov\PI\DOT\Documents\DOT Offices\District 5\Projects\050728\Design\0570278-shd-details.dwg |                       | CHECKED -  | REVISED -       |
|  |                       | DATE -     | REVISED -       |
|  |                       |            |                 |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**FIELD TILE SYSTEMS (TREATMENT OF EXISTING)**

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

| F.A.S. RTE.        | SECTION    | COUNTY    | TOTAL SHEETS                                  | SHEET NO. |
|--------------------|------------|-----------|---|-----------|
| 502                | 106BR-1(1) | CHAMPAIGN | 52  | 39        |
| CONTRACT NO. 70278 |            |           | FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT |           |



\* REDUCE TO 40' (12.2 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEEDS OF 45 mph (70 km/h) OR LESS.

**TWO LANE/TWO WAY**

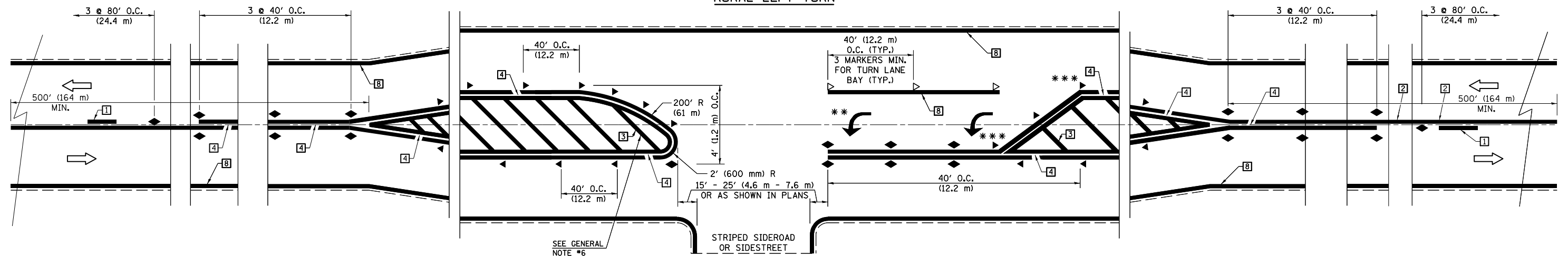
**TYPICAL PAVEMENT MARKING LEGEND**

- 1 4" (100) SKIP-DASH (YELLOW)
- 2 4" (100) SOLID (YELLOW)
- 3 12" (300) DIAGONAL (YELLOW)
- 4 4" (100) DOUBLE YELLOW (NARROW)
- 5 RESERVED
- 6 RESERVED
- 7 4" (100) SKIP-DASH (WHITE)
- 8 4" (100) SOLID (WHITE)
- 9 12" (300) DIAGONAL (WHITE)
- 10 6" (150) SOLID (WHITE)
- 11 24" (600) STOP BAR (WHITE)
- 12 8" (200) SOLID (WHITE)
- 13 4" (100) LANE LINE EXTENSIONS (WHITE)
- 14 4" (100) PARKING WHITE

**TYPICAL PAVEMENT MARKERS LEGEND**

- ◆ TWO-WAY AMBER MARKER
- ▶ ONE-WAY AMBER MARKER
- ▷ ONE-WAY CRYSTAL MARKER

**RURAL LEFT TURN**



\*\*\* REDUCE SPACING IF NECESSARY TO ASSURE MARKERS AT CORNER POINTS.

\*\* TURN ARROWS SHALL BE PLACED AS SHOWN ON SHEET #2.

Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

|  |                             |            |                         |
|--|-----------------------------|------------|-------------------------|
| FILE NAME =  | USER NAME = bergena.j       | DESIGNED - | REVISED - 11/06         |
| pw:\IL\084EBIDINTEG\illinois.gov\PWIDOT\Documents\DOT Offices\District 5\Projects\050728\Drawings\Design\0570278-shr-details.dwg |                             | DRAWN -    | REVISED - 09/2009 - KJT |
|  | PLOT SCALE = 40.0000' / in. | CHECKED -  | REVISED - 04/14 - JLA   |
|  | PLOT DATE = 3/14/2016       | DATE -     | REVISED -               |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

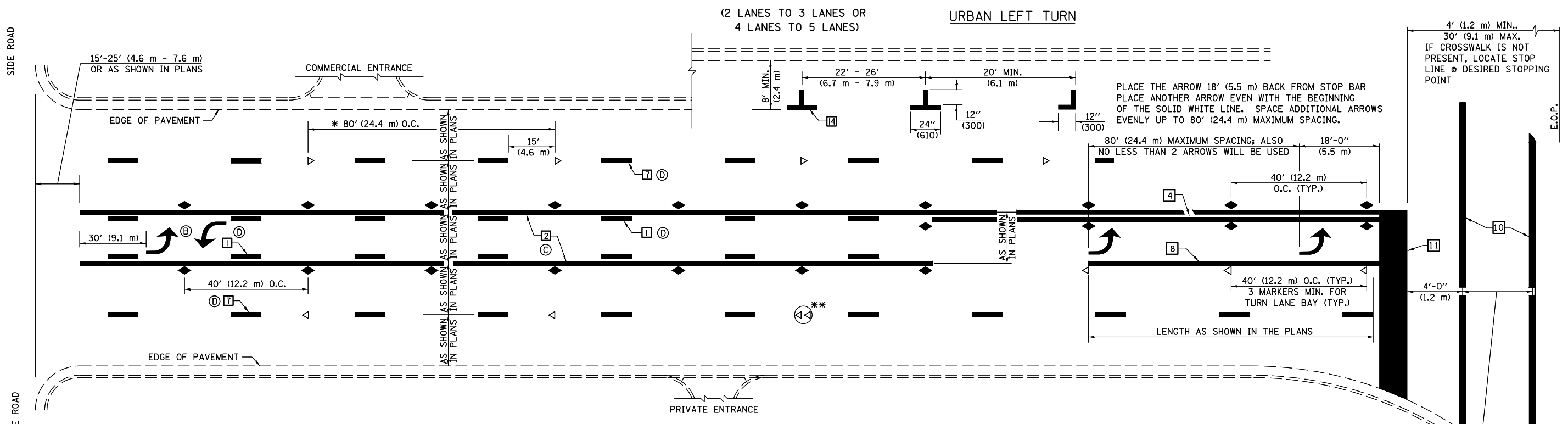
**PAVEMENT MARKING AND MARKERS  
(RURAL & URBAN APPLICATIONS)**

SCALE: SHEET NO. 1 OF 4 SHEETS STA. TO STA.

**DISTRICT 5 DETAIL NO. 7800AAA**

| F.A.S. RTE.                                   | SECTION    | COUNTY    | TOTAL SHEETS | SHEET NO. |
|---|------------|-----------|--------------|-----------|
| 502   | 106BR-1(1) | CHAMPAIGN | 52           | 40        |
| CONTRACT NO. 70278                            |            |           |              |           |
| FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT |            |           |              |           |



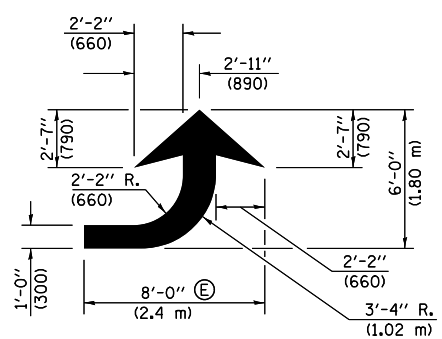


\* REDUCE TO 40 FEET (12.2 METERS) ON CENTER ON CURVES WHERE ADVISORY SPEEDS ARE 10 MPH (15 km/h) LOWER THAN POSTED SPEEDS.

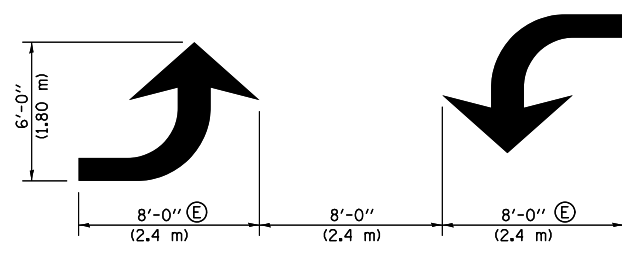
\*\* DOUBLE LANE LINE MARKERS SHALL BE SPECIFIED AND SPACED AS SHOWN IN HIGHWAY STANDARD 781001 FOR MULTI-LANE DIVIDED AND UNDIVIDED HIGHWAYS.

**GENERAL NOTES:**

- ⓑ TURN ARROW PAIRS SHALL BE PLACED AT 250' (75 m) INTERVALS AND SHALL BE EVENLY SPACED BETWEEN BOTH ENDS OF THE BIDIRECTIONAL LEFT TURN LANE.
- ⓒ THE SOLID YELLOW PAVEMENT MARKINGS [2] SHOULD GENERALLY START OR END NEAR THE RADIUS POINT OF EACH STREET RETURN EXCEPT WHERE ONE OR BOTH ENDS WOULD INCLUDE STOP BARS.
- ⓓ THE SKIP-DASH PAVEMENT MARKINGS [1] OR [7] SHOULD BE CENTERED BETWEEN BOTH ENDS OF EACH CITY BLOCK AND SHALL BE PLACED SO THEY LINE UP ACROSS FROM EACH OTHER. SEE EXAMPLE ON SHEET 2 OF 3.
- ⓔ USE LARGE ARROW SIZE FOR BOTH RURAL AND URBAN LOCATIONS. (SEE LAST PAGE OF SECTION 780x FOR SYMBOLS TABLE)

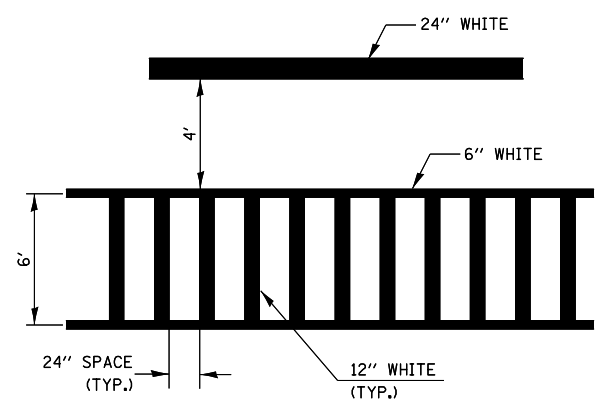


**LEFT ARROW**  
REVERSE FOR RIGHT ARROW  
AREA = 15.6 SQ. FT. (1.47 m<sup>2</sup>)  
(WHITE)

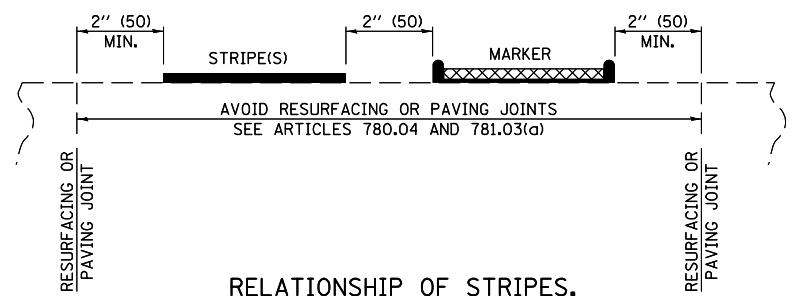


**TYPICAL DOUBLE TURN ARROWS (WHITE)**

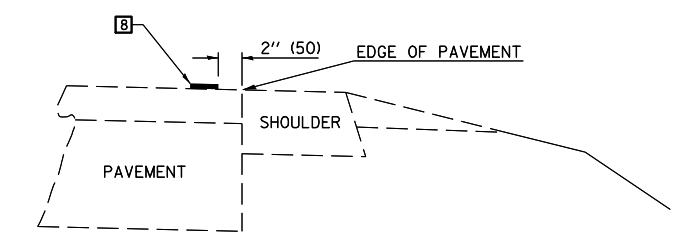
**BLOOMINGTON-NORMAL CITY LIMITS ONLY**



**TYPICAL SPACING FOR CROSSWALKS & STOP BARS**



**RELATIONSHIP OF STRIPES, MARKERS AND JOINTS**



**RELATIONSHIP OF EDGE LINE TO EDGE OF PAVEMENT**  
(SAFETY SHOULDER OR PAVED SURFACE)  
SEE ARTICLE 780.04

CROSSWALK WIDTH 6'-0" (1.8 m) OR AS SHOWN IN THE PLANS

Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

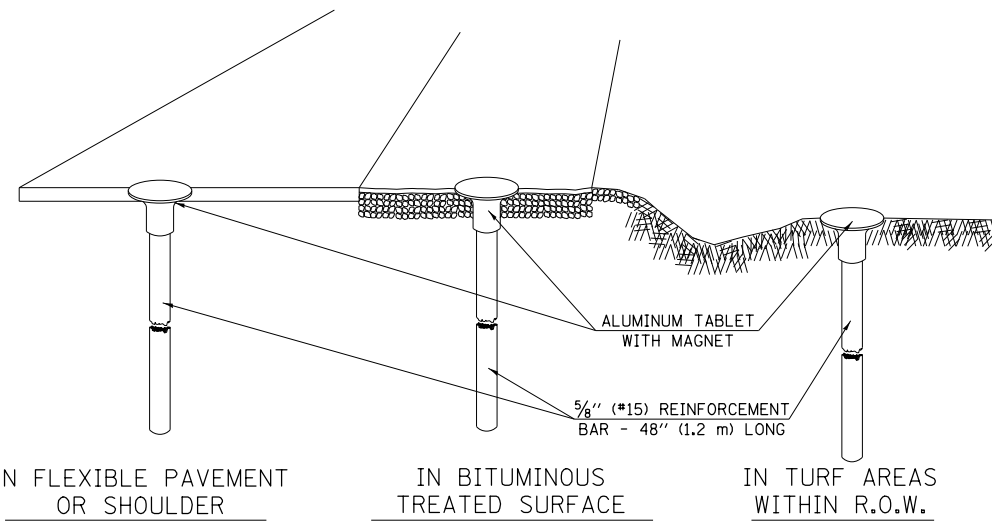
|   |                       |            |                         |   |  |   |            |           |              |           |  |
|---|-----------------------|------------|-------------------------|---|--|---|------------|-----------|--------------|-----------|--|
| FILE NAME =   | USER NAME = bergena.j | DESIGNED - | REVISED - 11/06         | <b>STATE OF ILLINOIS<br/>DEPARTMENT OF TRANSPORTATION</b> | <b>PAVEMENT MARKING AND MARKERS<br/>(RURAL &amp; URBAN APPLICATIONS)</b> | F.A.S. RTE.                                   | SECTION    | COUNTY    | TOTAL SHEETS | SHEET NO. |  |
| pw:\11\084EBIDINTEG.illinois.gov\PIWIDOT\Documents\DOT Offices\District 5\Projects\05072016\Drawings\Design\0570278-shd-details.dwg |                       | DRAWN -    | REVISED - 09/2009 - KJT |   |  | 502   | 106BR-1(1) | CHAMPAIGN | 52           | 41        |  |
|   |                       | CHECKED -  | REVISED - 04/14 - JLA   |   |  | CONTRACT NO. 70278                            |            |           |              |           |  |
|   |                       | DATE -     | REVISED -               |   |  | FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT |            |           |              |           |  |





## XZ193300 – SURVEY MARKER, TYPE 1 (SPECIAL)

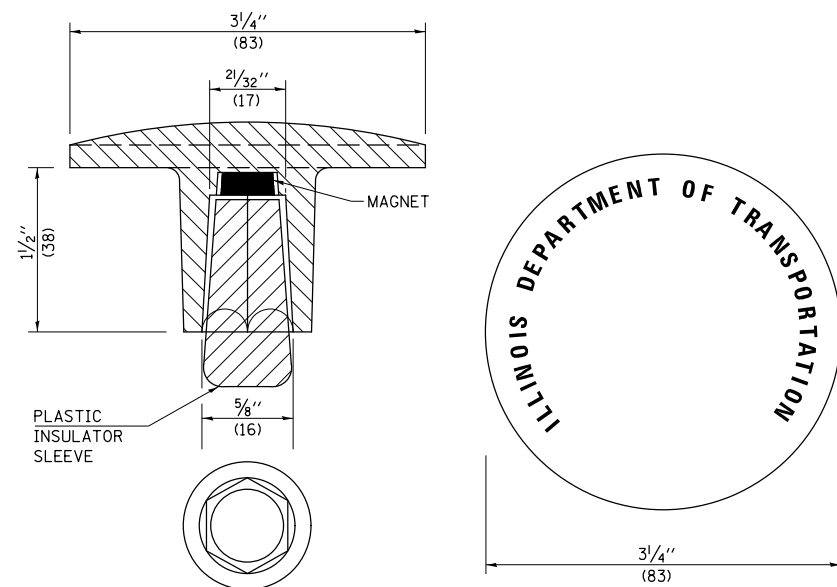
TO BE INSTALLED IN FLEXIBLE PAVEMENT OR SHOULDER, BITUMINOUS TREATED SURFACE AND TURF AREAS WITHIN THE RIGHT-OF-WAY FOR PRESERVING PERMANENT SURVEY MARKERS (PI'S, PT'S, PC'S, POC'S, & POT'S)



IN FLEXIBLE PAVEMENT OR SHOULDER

IN BITUMINOUS TREATED SURFACE

IN TURF AREAS WITHIN R.O.W.



THE DIMENSIONS SHOWN SHALL BE EXACT, OTHERS MAY VARY, BUT SHALL BE SHOWN ON SHOP DRAWINGS.

### GENERAL NOTES

1. THE CONTRACT UNIT PRICE, EACH, FOR SURVEY MARKER, TYPE 1 (SPECIAL) SHALL BE PAYMENT IN FULL FOR FURNISHING THE REINFORCEMENT BAR AND ALUMINUM TABLET AND FOR ALL LABOR AND MATERIAL REQUIRED TO SET THE MARKER IN PLACE.
2. ALL SURVEY MARKERS, TYPE 1 (SPECIAL) SHALL BE PLACED  $\pm 1/4$ " (6 mm) BELOW THE FINAL SURFACE.
3. WHEN THE TABLET AND REBAR ARE PLACED AS PART OF A SURVEY MARKER VAULT, THEY SHALL BE CONSIDERED AS INCLUDED IN THAT PAY ITEM AND THERE WILL BE NO PAYMENT FOR THE SURVEY MARKER, TYPE 1 (SPECIAL).

### SPECIFICATIONS FOR ALUMINUM TABLET

SURVEY CAP FOR REBAR.  $3/4$ " (83 mm) CONVEX SURVEY CAP FOR  $5/8$ " (15 mm) REBAR WITH ILLINOIS DEPARTMENT OF TRANSPORTATION LOGO. THIS LOGO SHALL PROVIDE LETTERS RECESSED INTO THE SURFACE A MINIMUM OF  $1/32$ " (0.8 mm) FOR EASY AND LONG-TERM LEGIBILITY. THE ALUMINUM CAP FOR REBAR SHALL BE PRODUCED BY THE PROCESS OF ORBITAL FORGING TO PRODUCE A HIGH-STRENGTH AND DURABLE MARKER CAP WHICH WILL NOT CHIP OR BREAK AND PROVIDE A SMOOTH FINISH FOR STAMPING OF DATA IN THE FIELD. THE ALUMINUM CAP FOR REBAR SHALL BE TAPERED FOR A PERFECT COMPRESSION FIT. A SPECIAL PLASTIC INSULATOR SHALL BE INSTALLED TO PREVENT DISSIMILAR METAL CONTACT AND CORROSION. THE PLASTIC INSULATOR SHALL FORM READILY TO THE OUTER SHAPE OF THE REBAR AND TO THE INNER SHAPE OF THE ALUMINUM CAP SOCKET. THE PLASTIC INSULATOR SHALL BE LOW DENSITY POLYETHYLENE, A MINIMUM  $1/2$ " (38 mm) LONG AND CONFORM TO FEDERAL SPECIFICATION L-P 390.

COMPOSITION: ALUMINUM 98.3-98.7%; OTHER 1.3-1.7%; STRENGTH: YIELD 28 KSI (193 MPa), ULTIMATE 32 KSI (221 MPa). ELONGATION 15% [IN 2" (50 mm)]. SPECIFICATIONS: ALUMINUM ALLOY 6101-0; ASTM B317-83 (EXCEPT TEMPER) AS FORGED. NO EXCEPTIONS.

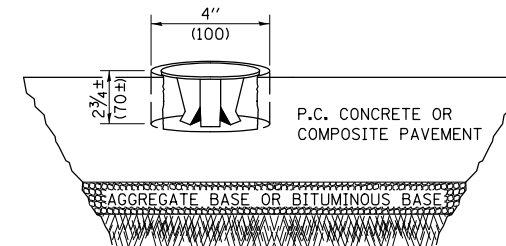
### SPECIFICATIONS FOR REBAR

REBAR FOR ALUMINUM TABLET. REINFORCEMENT BAR SHALL BE  $5/8$ " (#15) X 48" (1.2 m) (DEFORMED).

INSPECTION OF REINFORCEMENT BAR  $5/8$ " (#15) SHALL BE DONE BY DISTRICT PERSONNEL OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS.

## XZ193400 – SURVEY MARKER, TYPE 2 (SPECIAL)

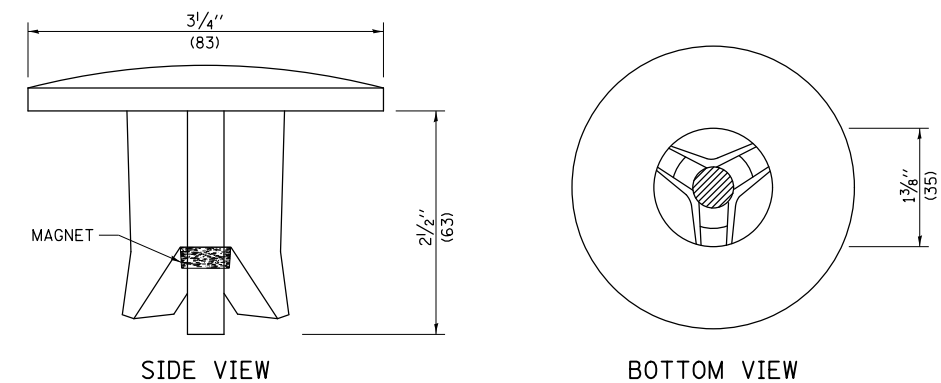
TO BE INSTALLED IN RIGID OR COMPOSITE PAVEMENT FOR PRESERVING PERMANENT SURVEY MARKERS (PI'S, PT'S, PC'S, POC'S, & POT'S)



### SPECIFICATIONS FOR ALUMINUM TABLET (FORKED)

ALUMINUM TABLET (FORKED) FOR USE WITH "SURVEY MARKER, TYPE 2, (SPECIAL)" SHALL BE AS SHOWN ON THE DETAIL FOR THE  $3/4$ " (83 mm) CONVEX SURVEY TABLET WITH ILLINOIS DEPARTMENT OF TRANSPORTATION LOGO. THIS LOGO SHALL PROVIDE FOR LETTERS RECESSED INTO THE SURFACE A MINIMUM OF  $1/32$ " (0.8 mm) FOR EASY AND LONG-TERM LEGIBILITY. THE ALUMINUM TABLET SHALL BE PRODUCED BY THE PROCESS OF ORBITAL FORGING TO PRODUCE A HIGH-STRENGTH AND DURABLE MARKER CAP WHICH WILL NOT CHIP OR BREAK AND PROVIDE A SMOOTH FINISH FOR STAMPING OF DATA IN THE FIELD. THE ALUMINUM TABLET SHALL BE DESIGNED NOT TO TURN OR ROTATE. THREE PRONGS ON A  $2/2$ " (63 mm) STEM SHALL BE SUCH THAT THE ALUMINUM TABLET CANNOT BE EASILY REMOVED.

COMPOSITION: ALUMINUM 92-93%; MAGNESIUM 6.5-7.5%. STRENGTH: YIELD 19,000-21,000 PSI (131-145 MPa); TENSILE 38,000-44,000 PSI (262-303 MPa); ELONGATION 10-15% [IN 2" (50 mm)]. SPECIFICATIONS: ALLOY 535.0; QQ-A-601ES. NO EXCEPTIONS.



THE DIMENSIONS SHOWN SHALL BE EXACT, OTHERS MAY VARY, BUT SHALL BE SHOWN ON SHOP DRAWINGS.

### GENERAL NOTES

1. WORK ON THIS ITEM SHALL NOT START UNTIL THE FINAL SURFACE IS COMPLETED.
2. THE ALUMINUM TABLET (FORKED) SHALL REST UPON THE BOTTOM OF THE 4" (100 mm) CORE HOLE. IF THE HOLE IS TOO DEEP, EPOXY GROUT MUST BE USED TO DECREASE THE DEPTH AND ALLOWED TO HARDEN BEFORE PROCEEDING.
3. THE ALUMINUM TABLET SHALL BE ANCHORED IN THE 4" (100 mm) DIAMETER HOLE IN THE NEW PAVEMENT WITH TWO-COMPONENT EPOXY CONFORMING TO APPLICABLE PORTIONS OF ARTICLE 1025.01 OF THE STANDARD SPECIFICATIONS.
4. THE 4" (100 mm) CORE HOLE SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.
5. THE CONTRACT PRICE, EACH, FOR SURVEY MARKER, TYPE 2 (SPECIAL) SHALL BE PAYMENT IN FULL FOR FURNISHING THE ALUMINUM TABLET AND FOR ALL LABOR AND MATERIAL REQUIRED TO SET THE MARKER IN PLACE, AS SPECIFIED, INCLUDING CORING THE NEW PAVEMENT.
6. ALL SURVEY MARKERS, TYPE 2 (SPECIAL) SHALL BE PLACED  $\pm 1/4$ " (6 mm) BELOW THE FINAL SURFACE.

Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

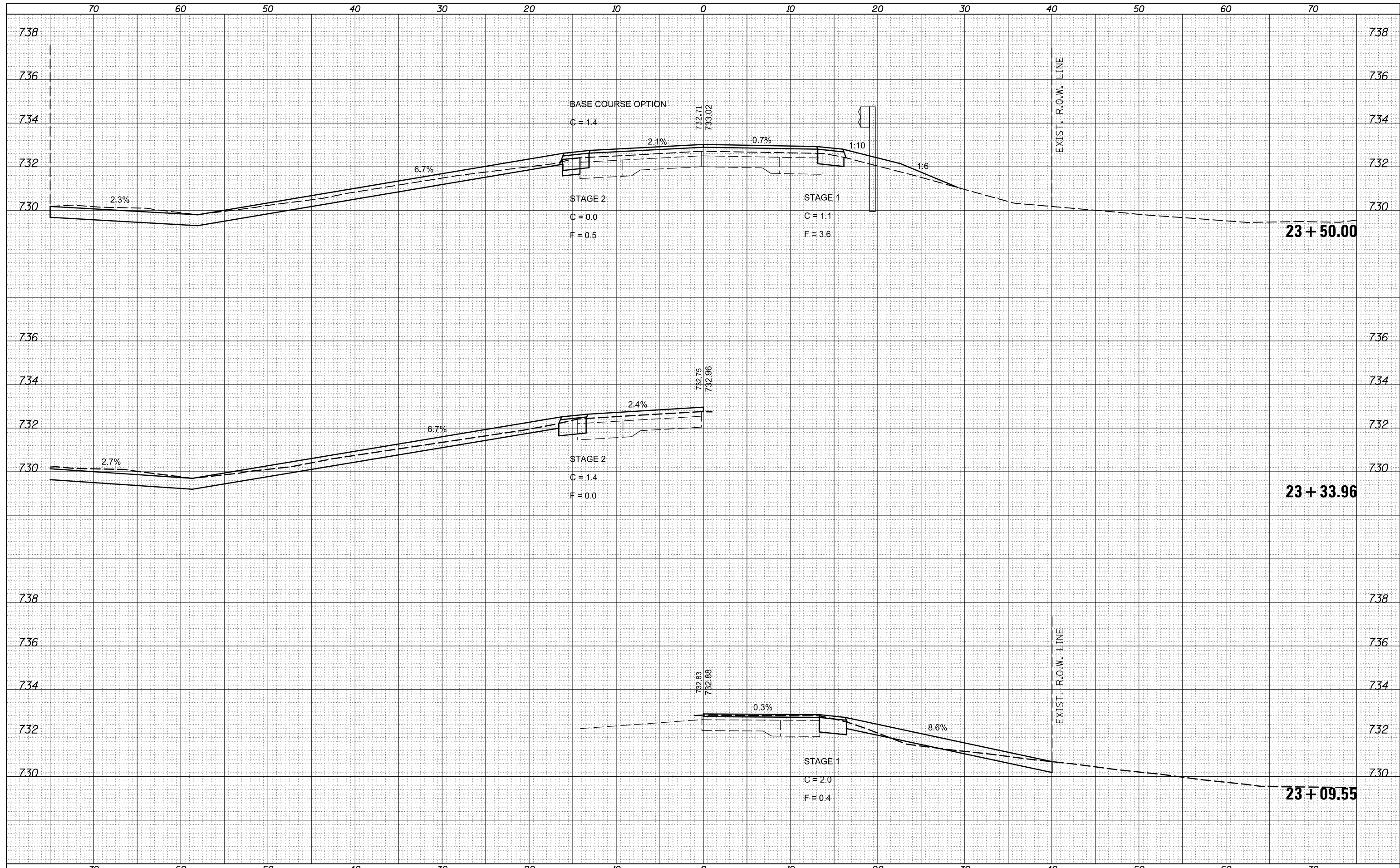
|   |                             |            |                 |   |  |                         |      |               |                     |                           |              |           |
|---|-----------------------------|------------|-----------------|---|--|-------------------------|------|---------------|---------------------|---------------------------|--------------|-----------|
| FILE NAME =   | USER NAME = bergena.j       | DESIGNED - | REVISED - 11/06 | <b>STATE OF ILLINOIS<br/>DEPARTMENT OF TRANSPORTATION</b> | <b>SURVEY MARKERS TYPE 1 &amp; 2 (SPECIAL)</b> |                         |      | F.A.S. R.T.E. | SECTION             | COUNTY                    | TOTAL SHEETS | SHEET NO. |
| pw:\IL\084EBID\INTEG.illinois.gov\PI\DOT\Documents\DOT Offices\District 5\Projects\0507\Drawings\Design\0570278-shr-details.dwg | DRAWN                       | REVISION   | REVISION        |   |  |                         |      | 502           | 106BR-1(1)          | CHAMPAIGN                 | 52           | 44        |
|   | PLOT SCALE = 40.0000' / in. | CHECKED -  | REVISED -       |   | CONTRACT NO. 70278                             |                         |      |               |                     |                           |              |           |
|   | PLOT DATE = 3/14/2016       | DATE -     | REVISED -       |   | SCALE:   | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.       | FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT |              |           |

### DISTRICT 5 DETAIL NO. XZ193AAA



|                 |  |
|-----------------|--|
| DATE            |  |
| BY              |  |
| ORIGINAL SURVEY |  |
| SURVEYED        |  |
| PLOTTED         |  |
| TEMPLATE        |  |
| AREAS           |  |
| CHECKED         |  |
| NO.             |  |

|                 |  |
|-----------------|--|
| DATE            |  |
| BY              |  |
| ORIGINAL SURVEY |  |
| SURVEYED        |  |
| PLOTTED         |  |
| TEMPLATE        |  |
| AREAS           |  |
| CHECKED         |  |
| NO.             |  |

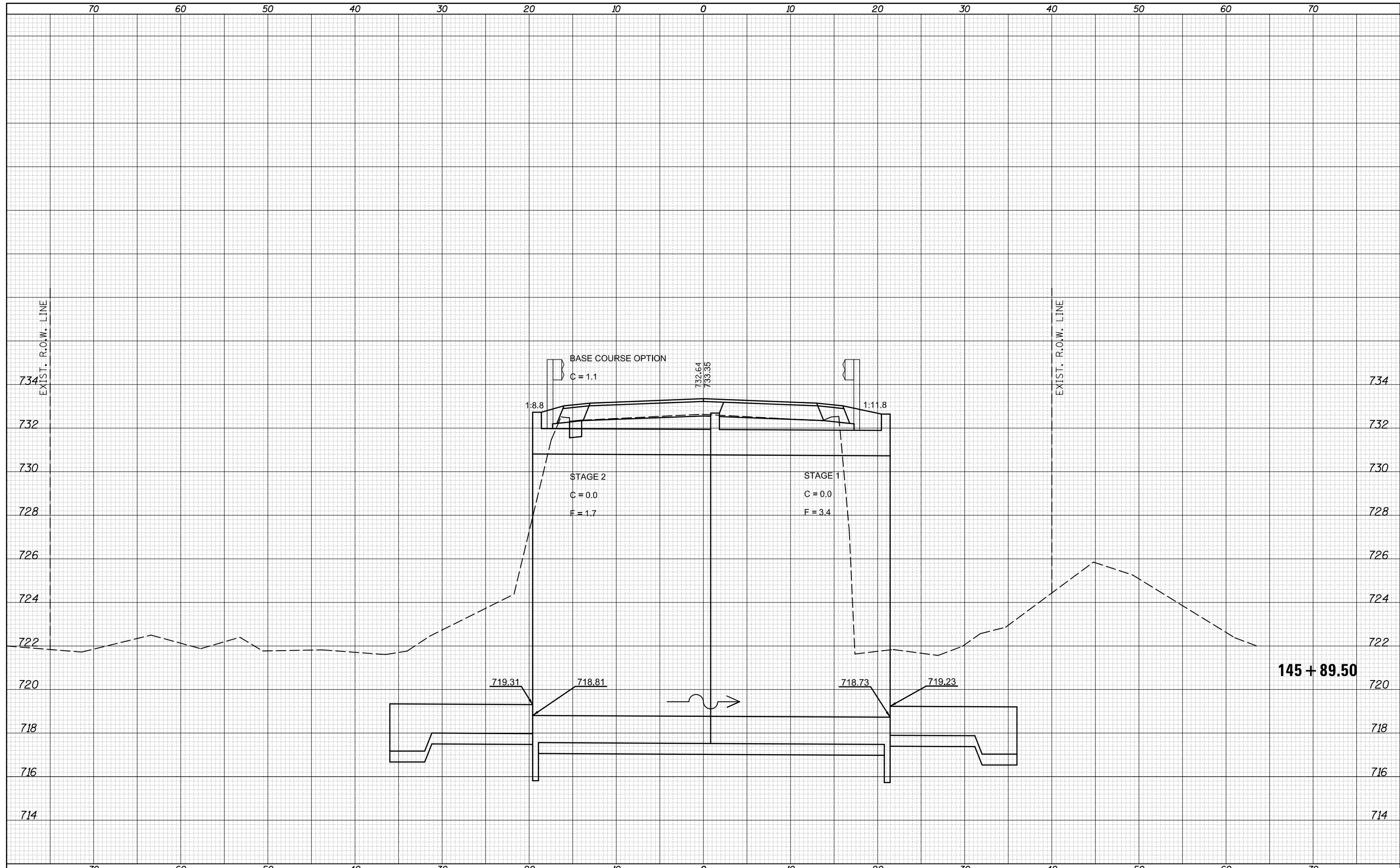






|                         |  |
|-------------------------|--|
| DATE                    |  |
| BY                      |  |
| FINAL SURVEY NO.        |  |
| SURVEYED PLOTTED        |  |
| TEMPLATE AREAS CHECKED  |  |
| NOTE BOOK AREAS CHECKED |  |

|                         |  |
|-------------------------|--|
| DATE                    |  |
| BY                      |  |
| ORIGINAL SURVEY NO.     |  |
| SURVEYED PLOTTED        |  |
| TEMPLATE AREAS CHECKED  |  |
| NOTE BOOK AREAS CHECKED |  |



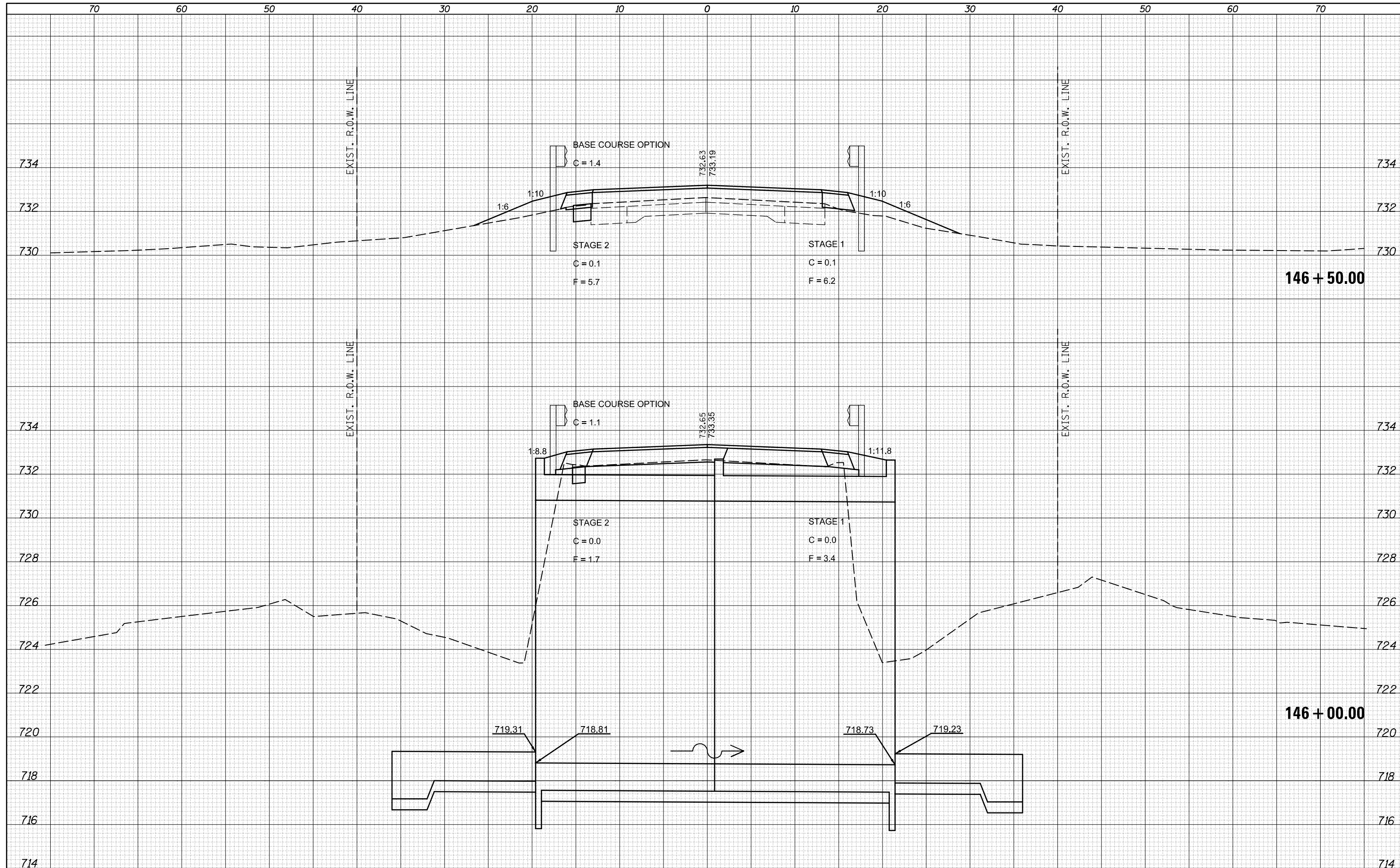
|  |                             |            |          |   |   |                    |            |           |                           |           |
|--|-----------------------------|------------|----------|---|---|--------------------|------------|-----------|---------------------------|-----------|
| FILE NAME =  | USER NAME = bergena.j       | DESIGNED - | REVISÉ - | <b>STATE OF ILLINOIS</b><br><b>DEPARTMENT OF TRANSPORTATION</b> | <b>LEVERETT ROAD</b><br><b>CROSS SECTION SHEETS</b> | F.A.S. RTE.        | SECTION    | COUNTY    | TOTAL SHEETS              | SHEET NO. |
| pw:\IL084EBIDINTEG.Illinois.gov\PIWIDOT\Documents\IDOT Offices\District 5\Projects\0507202\CADD\Design\0570278-sht-xs.leverett.dgn | PLOT SCALE = 10.0000' / in. | CHECKED -  | REVISÉ - |   |   | 502                | 106BR-1(1) | CHAMPAIGN | 52                        | 48        |
| \$MODELNAME\$  | PLOT DATE = 3/14/2016       | DATE -     | REVISÉ - |   |   | CONTRACT NO. 70278 |            |           | ILLINOIS FED. AID PROJECT |           |

SCALE: SHEET 4 OF 8 SHEETS STA. 145+89.50 TO STA. 145+89.50



|          |  |
|----------|--|
| DATE     |  |
| BY       |  |
| SURVEYED |  |
| PLOTTED  |  |
| TEMPLATE |  |
| AREAS    |  |
| CHECKED  |  |
| NO.      |  |

|          |  |
|----------|--|
| DATE     |  |
| BY       |  |
| SURVEYED |  |
| PLOTTED  |  |
| TEMPLATE |  |
| AREAS    |  |
| CHECKED  |  |
| NO.      |  |



FILE NAME =  
 p:\11084EBIDINTEG\Illinois.gov\PIDOT\Documents\NIDOT Offices\District 5\Projects\0507202\CADD\Design\0570278-sht-xs-leverett.dgn  
 \*MODELNAME\*

|                             |            |          |
|-----------------------------|------------|----------|
| USER NAME = bergena.j       | DESIGNED - | REVISÉ - |
| PLLOT SCALE = 10.0000 / in. | CHECKED -  | REVISÉ - |
| PLLOT DATE = 3/14/2016      | DATE -     | REVISÉ - |

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**LEVERETT ROAD  
 CROSS SECTION SHEETS**

SCALE: SHEET 5 OF 8 SHEETS STA. 146+00.00 TO STA. 146+50.00

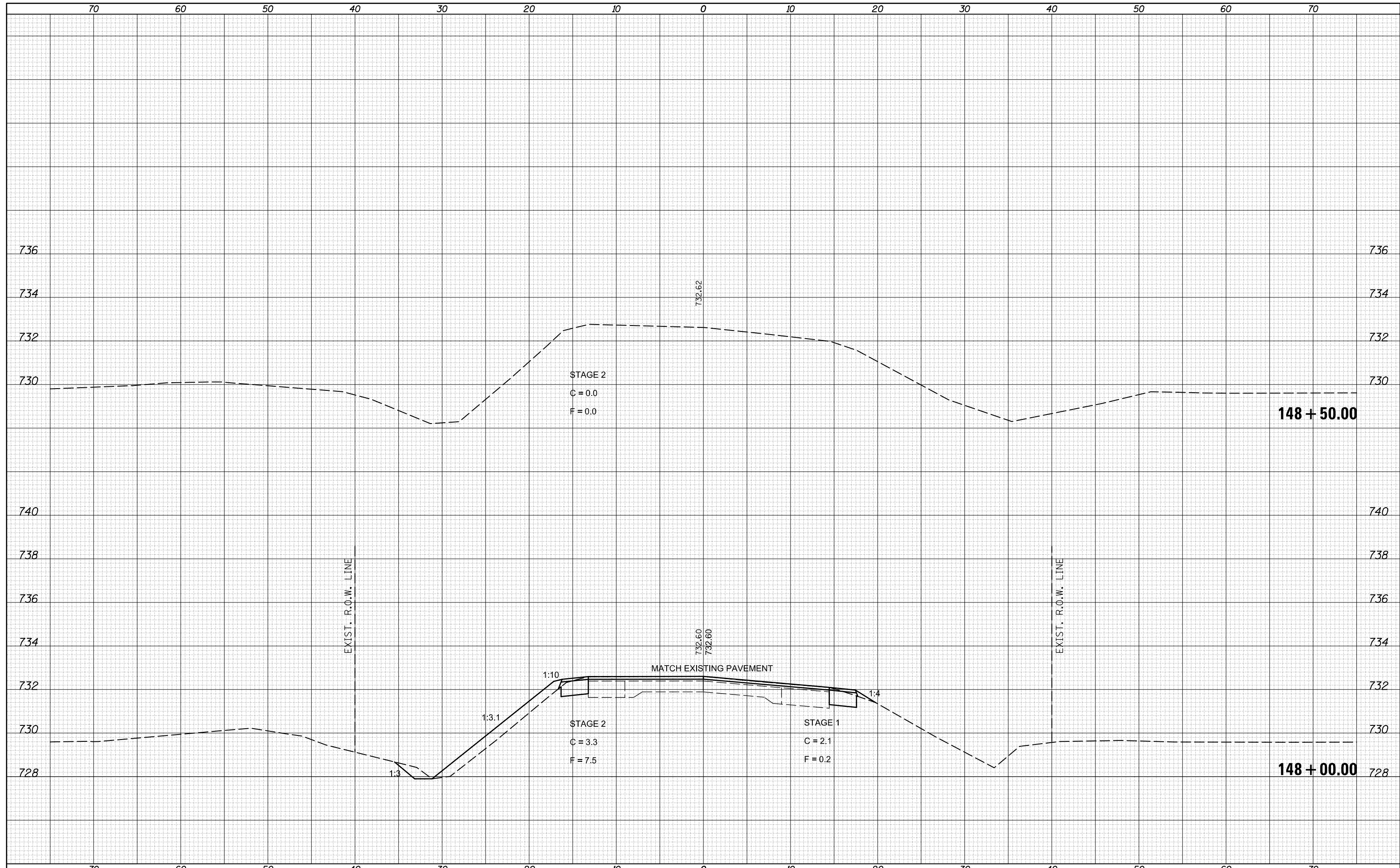
|                    |            |           |                           |           |
|--------------------|------------|-----------|---------------------------|-----------|
| F.A.S. RTE.        | SECTION    | COUNTY    | TOTAL SHEETS              | SHEET NO. |
| 502                | 106BR-1(1) | CHAMPAIGN | 52                        | 49        |
| CONTRACT NO. 70278 |            |           | ILLINOIS FED. AID PROJECT |           |





|              |  |
|--------------|--|
| DATE         |  |
| BY           |  |
| FINAL SURVEY |  |
| NOTE BOOK    |  |
| NO.          |  |
| SURVEYED     |  |
| PLOTTED      |  |
| TEMPLATE     |  |
| AREAS        |  |
| CHECKED      |  |

|                 |  |
|-----------------|--|
| DATE            |  |
| BY              |  |
| ORIGINAL SURVEY |  |
| NOTE BOOK       |  |
| NO.             |  |
| SURVEYED        |  |
| PLOTTED         |  |
| TEMPLATE        |  |
| AREAS           |  |
| CHECKED         |  |



|   |                       |            |          |   |   |  |                           |                    |            |           |              |           |
|---|-----------------------|------------|----------|---|---|--|---------------------------|--------------------|------------|-----------|--------------|-----------|
| FILE NAME =   | USER NAME = bergena.j | DESIGNED - | REVISÉ - | <b>STATE OF ILLINOIS</b><br><b>DEPARTMENT OF TRANSPORTATION</b> | <b>LEVERETT ROAD</b><br><b>CROSS SECTION SHEETS</b> |  |                           | F.A.S. RTE.        | SECTION    | COUNTY    | TOTAL SHEETS | SHEET NO. |
| \\IL084EBIDINTEG.Illinois.gov\PIWIDOT\Documents\IDOT Offices\District 5\Projects\0507202\CADD\Design\570278-sht-xs.leverett.dgn | DRAWN                 | REVISÉ -   | REVISÉ - |   |   |  |                           | 502                | 106BR-1(1) | CHAMPAIGN | 52           | 52        |
| PLOT SCALE = 10.0000' / in.   | CHECKED -             | REVISÉ -   | REVISÉ - |   |   |  |                           | CONTRACT NO. 70278 |            |           |              |           |
| *MODELNAME*   | PLOT DATE = 3/14/2016 | DATE -     | REVISÉ - | SCALE: SHEET 8 OF 8 SHEETS STA. 148+00.00 TO STA. 148+50.00     |   |  | ILLINOIS FED. AID PROJECT |                    |            |           |              |           |