

|                       |                |                    |              |           |
|-----------------------|----------------|--------------------|--------------|-----------|
| F.A.U. RTE.           | SECTION        | COUNTY             | TOTAL SHEETS | SHEET NO. |
| 2332                  | 03-14185-02-BR | KANE               | 73           | 1         |
| FED. ROAD DIST. NO. 1 | ILLINOIS       | CONTRACT NO. 63521 |              |           |

+1 = 74

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**PLANS FOR PROPOSED  
FEDERAL AID HIGHWAY**

FOR INDEX OF SHEETS, SEE SHEET NO. 2

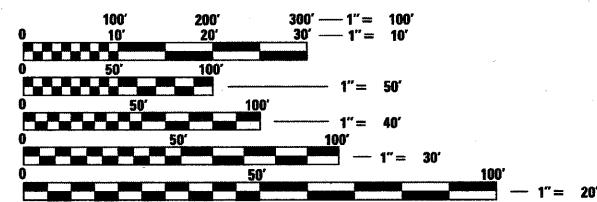
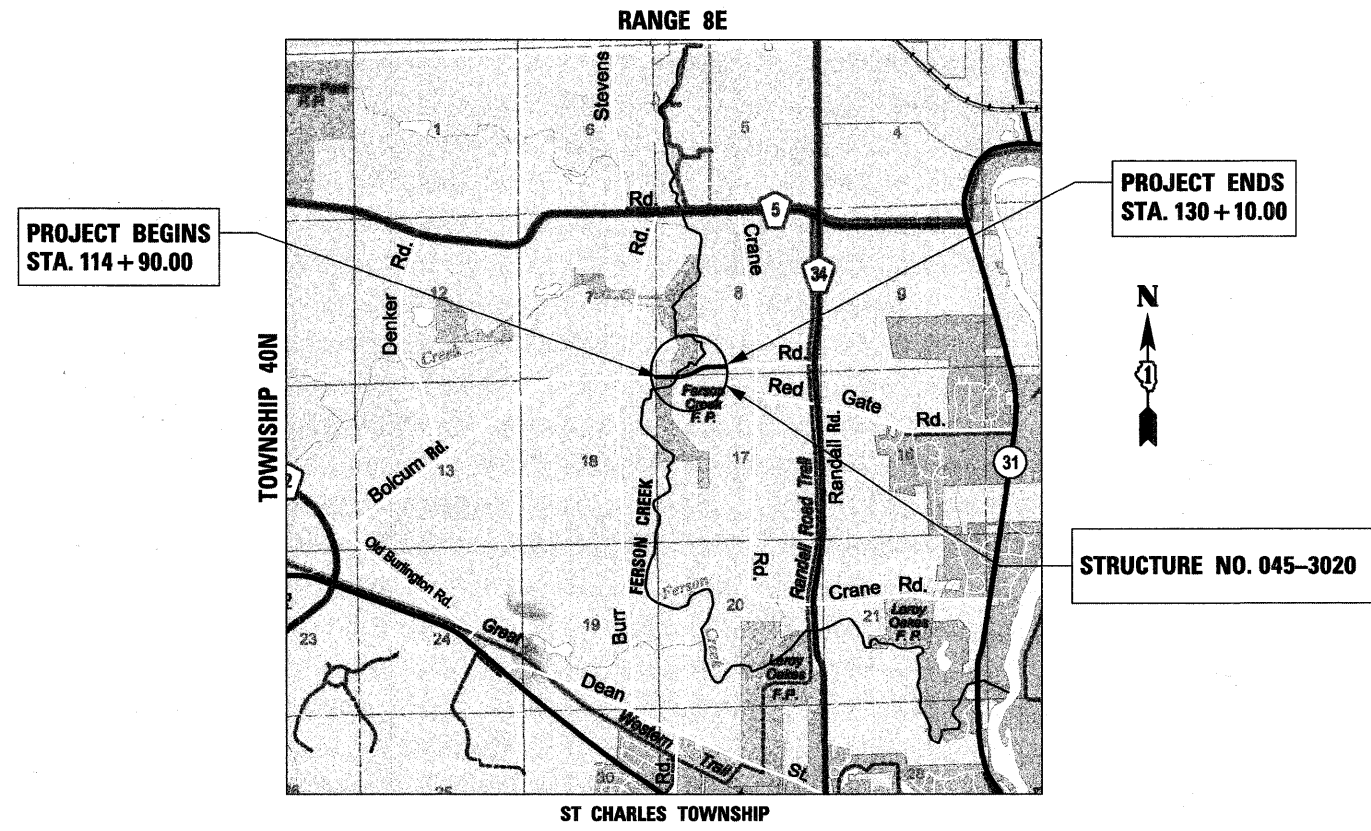
PROJECT LOCATED IN ST. CHARLES TOWNSHIP

F.A.U. RTE 2332 (BOLCUM ROAD)  
OVER FERSON CREEK  
SECTION 03-14185-02-BR  
PROJECT BHOS-00D(639)  
BRIDGE REMOVAL AND REPLACEMENT  
JOB NO. C-91-140-04  
KANE COUNTY

**TRAFFIC DATA**

2006 ADT = 4,650  
2030 ADT = 14,500  
DESIGN SPEED: 50 MPH

DESIGN DESIGNATION:  
1,000 (30) MAJOR COLLECTOR (HMA-20)



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

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

PROJECT NET AND GROSS LENGTH = 1520 FT (0.288 MILE)  
PROJECT LOCATED IN:  
PART OF SECTIONS 8 AND 17 IN TOWNSHIP 40N, RANGE 8E, OF THE THIRD PRINCIPAL MERIDIAN,  
KANE COUNTY, ILLINOIS



October 20, 2010  
*Kevin M. Anderson*  
KEVIN M. ANDERSON  
ILLINOIS REG. PROFESSIONAL ENGINEER NO. 062-055652  
EXPIRATION DATE 11-30-2011



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

APPROVED October 20, 2010  
*Ronald Johnson*  
ST. CHARLES TOWNSHIP

PASSED NOVEMBER 5, 2010  
*Christoph Heller*  
DISTRICT 1 ENGINEER OF LOCAL ROADS & STREETS

RELEASING FOR BID  
BASED ON LIMITED  
REVIEW NOVEMBER 8, 2010  
*Diane M. O'Keefe*  
DEPUTY DIRECTOR OF HIGHWAYS, REGION 1 ENGINEER

**PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS**

CONTRACT NO. 63521

PROGRAM AND OFFICE ENGINEER: CHARLES F. RIDDLE, P.E. (847) 705-4406 SCHAUMBURG, IL

**GENERAL NOTES**

1. ALL CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE APPLICABLE REQUIREMENT SET FORTH IN "THE CONSTRUCTION SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED JANUARY 1, 2007 THEREINAFTER REFERRED TO AS STANDARD SPECIFICATIONS, THE LATEST EDITION OF THE "ILLINOIS MANUAL ON UNIFORM MANUAL TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" IN EFFECT ON THE DATE OF INVITATION FOR BIDS; THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS" LATEST EDITION; INTERIM SPECIAL PROVISIONS AS INCLUDED IN THE CONTRACT DOCUMENTS; AND THE DETAILS AND STANDARDS CONTAINED IN THESE PLANS.
2. BEFORE STARTING ANY EXCAVATIONS, THE CONTRACTOR SHALL CALL "JULIE" AT 1-800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES. (48 HOUR NOTIFICATION IS REQUIRED)
3. THE LOCATIONS OF THE EXISTING UTILITIES, AS SHOWN ON THE DRAWINGS, REPRESENT DATA RECEIVED FROM VARIOUS SOURCES, IT IS NOT GUARANTEED TO BE CORRECT OR ALL INCLUSIVE. THE CONTRACTOR SHALL CONDUCT HIS OWN INVESTIGATIONS INTO THE LOCATION, SIZE, DEPTH, AND NATURE OF ANY AND ALL EXISTING UTILITIES WHICH MAY INTERFERE WITH THE WORK UNDER THIS CONTRACT. ANY EXISTING UTILITIES WHICH ARE TO REMAIN IN SERVICE SHALL BE FULLY PROTECTED BY THE CONTRACTOR AND ANY DAMAGE CAUSED BY THE CONSTRUCTION SHALL BE IMMEDIATELY REPAIRED AT NO ADDITIONAL COST IN ACCORDANCE WITH ARTICLE 105.07.
4. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES.
5. ALL WORK SHALL BE COMPLETED WITHIN THE LIMITS OF THE PROJECT SHOWN. NO EQUIPMENT, MATERIALS OR A YARD OR FIELD OFFICE SHALL BE SET UP OR STORED ON COUNTY OR PRIVATE PROPERTY WITHOUT WRITTEN PERMISSION OF THE ENGINEER.
6. MAINTENANCE OF TRAFFIC-GENERAL: TRAFFIC CONDITIONS, ACCIDENTS AND OTHER UNFORESEEN EMERGENCY CONDITIONS MAY REQUIRE THE ENGINEER TO RESTRICT, MODIFY OR REMOVE LANE CLOSURES OR CHANNELIZATION SHOWN IN THE PLANS. THE CONTRACTOR SHALL RESPOND WITHIN 30 MINUTES OF THE TIME OF NOTIFICATION BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC CONTROL DEVICES.
7. TRAFFIC CONTROL DEVICES: ALL TRAFFIC CONTROL DEVICES USED FOR THE MAINTENANCE OF TRAFFIC AS DETAILED ON THE PLANS SHALL BE REFLECTORIZED PRIOR TO INSTALLATION AND CLEANED AS NECESSARY THROUGHOUT THE DURATION OF THE CONTRACT.
8. BARRICADES: THE CONTRACTOR SHALL PROVIDE AND INSTALL TWO (2) WEIGHTED SANDBAGS ON EACH TYPE I OR TYPE II BARRICADE USED- ONE (1) WEIGHTED SAND BAG ACROSS EACH BOTTOM RAIL.

**DRAINAGE NOTES**

1. DURING CONSTRUCTION OPERATIONS ALL LOOSE MATERIAL DEPOSITED IN THE FLOW LINE OF DRAINAGE STRUCTURES AND TEMPORARY DITCHES THAT OBSTRUCTS THE NATURAL FLOW OF WATER SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY AT THE CONCLUSION OF THE CONSTRUCTION OPERATIONS. ALL DRAINAGE STRUCTURES SHALL BE CLEANED AS NECESSARY TO INSURE THAT THEY ARE FREE FROM ALL DIRT AND DEBRIS PRIOR TO THE FINAL INSPECTION OF THE PROJECT. THIS WORK WILL NOT BE MEASURED SEPERATELY FOR PAYMENT, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF EARTH EXCAVATION.
2. ANY FARM DRAIN, FIELD TILE SYSTEM OR OTHER UNDERGROUND TILE FACILITY ENCOUNTERED IN THE WORK SHALL BE LOCATED AND STAKED AND REPORTED TO THE RESIDENT ENGINEER. ANY DRAINAGE LINES WHICH ARE CUT OR DAMAGED BY GRADING, TRENCHING, EXCAVATION OR OTHER CONSTRUCTION ACTIVITIES SHALL BE REPAIRED SO AS TO MAINTAIN ITS ORIGINAL ALIGNMENT. IF THIS CANNOT BE ACCOMPLISHED, THE TILE SHALL BE REPAIRED AND CONNECTED TO THE PROPOSED STORM SEWER SYSTEM IN SUCH A MANNER AS TO RENDER THE LINES USABLE FOR THE PURPOSES INTENDED. THE WORK SHALL BE DONE IN ACCORDANCE WITH THE SPECIAL PROVISION "DRAIN TILE REPAIR".

**KANE-DUPAGE SOIL & WATER CONSERVATION DISTRICT NOTES**

1. THE CONTRACTOR AND ENGINEER SHALL MEET WITH THE KANE-DUPAGE SOIL & WATER CONSERVATION DISTRICT TO COORDINATE ALL IN-STREAM WORK ACTIVITIES.
2. THE CONTRACTOR'S IN-STREAM WORK PLAN SHALL BE SUBMITTED TO THE SOIL & WATER CONSERVATION DISTRICT AND KANE COUNTY FOR REVIEW AND APPROVAL PRIOR TO STARTING ANY WORK. THERE WILL NO ADDITIONAL COMPENSATION FOR THIS PROVIDING THE PLAN AND COORDINATION.
3. SEE EROSION CONTROL PLAN SHEETS FOR ADDITIONAL DETAILS, CONDITONS AND NOTES.

**EARTHWORK AND ROADWAY**

1. EARTHWORK SHALL BE PAID FOR ONLY ONCE, REGARDLESS OF STAGING. STOCK PILING OF MATERIALS FOR LATER USE AND REDISTRIBUTION SHALL BE DONE AT THE CONTRACTOR'S EXPENSE. STOCK PILING NECESSARY FOR RESPREADING IN SHOULDERS, CONSTRUCTING EMBANKMENTS, CUT OR BORROW AREAS SHALL BE CONSIDERED INCLUDED IN THE UNIT PRICE OF EARTH EXCAVATION.
2. ALL AGGREGATE AND BITUMINOUS BASE COURSES SHALL BE PRIMED. THIS WORK SHALL CONFORM TO THE APPROPRIATE ARTICLES OF SECTION 406 OF THE STANDARD SPECIFICATIONS. THE PRIME COAT FOR AGGREGATE SURFACES SHALL BE MC-30 APPLIED AT A RATE OF 0.30 GALLONS PER SQUARE YARD AND SS-1 APPLIED AT THE RATE OF 0.10 GALLONS PER SQUARE YARD FOR HMA BASES. WHEN THE PRIMED AREA IS TO BE OPEN TO TRAFFIC, A FINE AGGREGATE SHALL BE PLACED IMMEDIATELY AFTER THE PRIME COAT HAS BEEN APPLIED. THE FINE AGGREGATE SHALL CONFORM TO ARTICLES 406.06 OF THE STANDARD SPECIFICATIONS. THESE ITEMS WILL BE PAID FOR SEPARATELY AS BITUMINOUS MATERIALS (PRIME COAT) AND AGGREGATE (PRIME COAT).
3. GEOTECHNICAL FABRIC FOR GROUND STABILIZATION:  
ITEM NO. 2100100 GEOTECHNICAL FABRIC FOR GROUND STABILIZATION WILL ONLY BE UTILIZED IN AREAS THAT HAVE BEEN IDENTIFIED AS SUBGRADE UNDERCUTS AREAS OR WHERE DETERMINED IN THE FIELD BY A GEOTECHNICAL ENGINEER. THE FABRIC WILL BE USED IN COMBINATION WITH PGE SUBGRADE. THE QUANTITY INCLUDED IN THE PLANS IS BASED ON THE SUBSURFACE INVESTIGATION PREPARED BY TESTING SERVICE CORPORATION RECOMMENDATIONS FOR UNDERCUT AREAS.
4. ALL EXCAVATION AND EMBANKMENT LOCATIONS REQUIRING SEEDING OR SODDING SHALL BE CONSTRUCTED TO 6 INCHES BELOW FINISHED GRADE LINE TO ALLOW TOPSOIL PLACEMENT.
5. PAVEMENT ELEVATIONS: THE ELEVATIONS SHOWN ON THE PLANS ARE FINISHED GRADES FOR THE PROPOSED PAVEMENT OR SURFACE COURSE, UNLESS OTHERWISE INDICATED.
6. THE HORIZONTAL DATUM IS NAD 83 AND THE VERTICAL DATUM IS NAVD 29.

**SUMMARY OF COMMITMENTS**

1. THE PRIMROSE PARK LAND THAT WILL BE USED FOR COMPENSATORY STORMWATER STORAGE SHALL BE RESTORED WITH NATIVE GRASSES OR TO MATCH THE EXISTING SURROUNDING VEGETATION.
2. NO LAND ON PRIMROSE PARK THAT IS CURRENTLY USED FOR RECREATIONAL PURPOSES SHALL BE UTILIZED FOR COMPENSATORY STORAGE.
3. BECAUSE AN ILLINOIS ENDANGERED SPECIES, SPECKLED ALDER (ALNUS ICANA), IS LOCATED NEARBY, STAGING IS PERMITTED ONLY ON THE NORTH SIDE OF THE ROAD TO AVOID ANY POTENTIAL IMPACTS. THE LOCATION IS APPROXIMATELY 100 FEET SOUTH OF BOLCUM ROAD NEAR THE WESTERN TERMINUS OF THE PROJECT.

**OWNER OF RECORD**

THE ILLINOIS DEPARTMENT OF TRANSPORTATION IS NOT THE OWNER OF RECORD FOR THIS BRIDGE. THOSE SEEKING HISTORIC, AS-BUILT OR OTHER EXISTING DOCUMENTS AND PLANS MUST CONTACT THE OWNER OF RECORD TO MAKE ARRANGEMENTS FOR ACCESS TO THIS INFORMATION.

**INDEX OF SHEETS**

| SHEET NO. | DESCRIPTION   |
|-----------|---|
| 1         | COVER SHEET   |
| 2         | GENERAL NOTES, INDEX & STANDARDS  |
| 3-5       | SUMMARY OF QUANTITIES   |
| 6         | SCHEDULE OF QUANTITIES  |
| 7         | EARTHWORK SCHEDULE  |
| 8-11      | TYPICAL SECTIONS  |
| 12        | ALIGNMENT, TIES & BENCHMARKS  |
| 13        | MAINTENANCE OF TRAFFIC - DETOUR PLAN  |
| 14-15     | EXISTING CONDITIONS & REMOVAL PLAN  |
| 16-18     | PLAN & PROFILE  |
| 19        | COMPENSATORY STORAGE GRADING PLAN   |
| 20-21     | PAVEMENT MARKING & SIGNING PLAN   |
| 22-24     | EROSION CONTROL PLAN  |
| 25-45     | STRUCTURAL PLANS  |
| 46-48     | EXISTING STRUCTURE PLANS FOR REFERENCE ONLY   |
| 49        | DRIVEWAY DETAILS - DISTANCE BETWEEN R.O.W. AND FACE OF CURB & EDGE OF SHOULDER >= 15' (4.5 m) |
| 50        | BUTT JOINT AND HMA TAPER DETAILS  |
| 50A       | BENCHING DETAIL FOR EMBANKMENT WIDENING   |
| 51        | DISTRICT ONE TYPICAL PAVEMENT MARKINGS  |
| 52        | ARTERIAL ROAD INFORMATION SIGN  |
| 53-65     | CROSS SECTIONS - BOLCUM ROAD  |
| 66-73     | CROSS SECTIONS - COMPENSATORY STORAGE   |

**HIGHWAY STANDARDS**

| STANDARD NO. | DESCRIPTION  |
|--------------|--|
| 000001-06    | STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS                 |
| 001001-02    | AREAS OF REINFORCEMENT BARS                                  |
| 280001-05    | TEMPORARY EROSION CONTROL SYSTEMS                            |
| 420401-08    | BRIDGE APPROACH PAVEMENT CONNECTOR                           |
| 482001-02    | HMA SHOULDER ADJACENT TO FLEXIBLE PAVEMENT                   |
| 515001-03    | NAME PLATE FOR BRIDGES                                       |
| 542401-01    | METAL END SECTION FOR PIPE CULVERTS                          |
| 601001-04    | SUB-SURFACE DRAINS   |
| 602301-03    | INLET - TYPE A   |
| 604001-03    | FRAMES AND LIDS TYPE 1                                       |
| 630201-06    | PCC/HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL          |
| 630301-05    | SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS   |
| 631031-09    | TRAFFIC BARRIER TERMIAL, TYPE 6                              |
| 635006-03    | REFLECTOR AND TERMINAL MARKER PLACEMENT                      |
| 635011-02    | REFLECTOR MARKER AND MOUNTING DETAILS                        |
| 665001-02    | WOVEN WIRE FENCE   |
| 666001-01    | RIGHT OF WAY MARKERS   |
| 701001-02    | OFF-RD OPERATION 2L, 2W, MORE THAN 15' AWAY                  |
| 701006-03    | OFF-RD OPERATION 2L, 2W, 4.5 M 15' TO 24" FROM PAVEMENT EDGE |
| 701011-02    | OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY                   |
| 701301-04    | LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS                  |
| 701311-03    | LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY           |
| 701901-01    | TRAFFIC CONTROL DEVICES                                      |
| 720001-01    | SIGN PANEL MOUNTING DETAILS                                  |
| 720006-02    | SIGN PANEL ERECTION DETAILS                                  |
| BLR 26-2     | STEEL PLATE BEAM GUARDRAIL 27 1/2" HEIGHT                    |

**DISTRICT STANDARDS**

| STANDARD NO. | DESCRIPTION  |
|--------------|--|
| BD-01        | DRIVEWAY DETAILS - DISTANCE BETWEEN R.O.W. AND CURB OR EDGE GREATER THAN OR EQUAL TO 15' (4.5 m) |
| BD-32        | BUTT JOINTS AND HMA TAPER  |
| BD-51        | BENCHING DETAIL FOR EMBANKMENT WIDENING  |
| TC-13        | DISTRICT ONE TYPICAL PAVEMENT MARKINGS   |
| TC-22        | ARTERIAL ROAD INFORMATION SIGN (DISTRICT 1)  |

FILE NAME = P:\CIBBEL WEST Projects\230871\03-14185-02\03-14185-02-01\Drawings\GENNOTES.dwg



**WILLIS BURKE KELSEY ASSOCIATES LTD.**  
110 West Main Street, Suite 201  
St. Charles, Illinois 60174

|                       |                 |           |
|-----------------------|-----------------|-----------|
| USER NAME = #USER#    | DESIGNED -      | REVISED - |
| PLOT SCALE =          | DRAWN -         | REVISED - |
| PLOT DATE = 12/6/2018 | CHECKED -       | REVISED - |
|                       | DATE = 10/22/10 | REVISED - |

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

| GENERAL NOTES, INDEX & STANDARDS |                          | F.A.J. RTE.                                     | SECTION        | COUNTY | TOTAL SHEETS | SHEET NO. |
|----------------------------------|--------------------------|---|----------------|--------|--------------|-----------|
| SCALE:                           | SHEET NO. 2 OF 73 SHEETS | 2332  | 03-14185-02-BR | KANE   | 73           | 2         |
| STA.                             | TO STA.                  | FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |                |        |              |           |
| CONTRACT NO.63521                |                          |   |                |        |              |           |

| SPECIALTY ITEM | CODE NO. | ITEM  | UNIT  | TOTAL QUANTITY | CONSTRUCTION CODE        |                         |                          |
|----------------|----------|---|-------|----------------|--------------------------|-------------------------|--------------------------|
|                |          |   |       |                | 80% FEDERAL<br>20% STATE |                         | 100% LOCAL               |
|                |          |   |       |                | ROADWAY<br>0004<br>RURAL | BRIDGE<br>0011<br>RURAL | ROADWAY<br>0004<br>RURAL |
|                | 20100110 | TREE REMOVAL (6 TO 15 UNITS DIAMETER)         | UNIT  | 72             | 72                       |                         |                          |
|                | 20100210 | TREE REMOVAL (OVER 15 UNITS DIAMETER)         | UNIT  | 204            | 204                      |                         |                          |
|                | 20101000 | TEMPORARY FENCE                               | FOOT  | 30             | 30                       |                         |                          |
|                | 20200100 | EARTH EXCAVATION                              | CU YD | 410            | 410                      |                         |                          |
|                | 20201200 | REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL   | CU YD | 2,460          | 2,460                    |                         |                          |
|                | 20400800 | FURNISHED EXCAVATION                          | CU YD | 1,040          | 1,040                    |                         |                          |
|                | 21001000 | GEOTECHNICAL FABRIC FOR GROUND STABILIZATION  | SQ YD | 2,357          | 2,357                    |                         |                          |
|                | 21101505 | TOPSOIL EXCAVATION AND PLACEMENT              | CU YD | 365            | 365                      |                         |                          |
| S              | 25000210 | SEEDING, CLASS 2A                             | ACRE  | 0.25           | 0.25                     |                         |                          |
| S              | 25000400 | NITROGEN FERTILIZER NUTRIENT                  | POUND | 248            | 248                      |                         |                          |
| S              | 25000500 | PHOSPHORUS FERTILIZER NUTRIENT                | POUND | 248            | 248                      |                         |                          |
| S              | 25000600 | POTASSIUM FERTILIZER NUTRIENT                 | POUND | 248            | 248                      |                         |                          |
| S              | 25100630 | EROSION CONTROL BLANKET                       | SQ YD | 7,260          | 7,260                    |                         |                          |
| S              | 28000250 | TEMPORARY EROSION CONTROL SEEDING             | POUND | 303            | 303                      |                         |                          |
|                | 28000305 | TEMPORARY DITCH CHECKS                        | FOOT  | 50             | 50                       |                         |                          |
|                | 28000400 | PERIMETER EROSION BARRIER                     | FOOT  | 2,220          | 2,220                    |                         |                          |
|                | 28000500 | INLET AND PIPE PROTECTION                     | EACH  | 3              | 3                        |                         |                          |
|                | 28100105 | STONE RIPRAP, CLASS A3                        | SQ YD | 21             | 21                       |                         |                          |
|                | 28100107 | STONE RIPRAP, CLASS A4                        | SQ YD | 517            |                          | 517                     |                          |
|                | 28200200 | FILTER FABRIC                                 | SQ YD | 538            | 21                       | 517                     |                          |
|                | 31101100 | SUBBASE GRANULAR MATERIAL, TYPE B             | CU YD | 55             | 47                       |                         | 8                        |
|                | 40600200 | BITUMINOUS MATERIALS (PRIME COAT)             | TON   | 3              | 3                        |                         |                          |
|                | 40600625 | LEVELING BINDER (MACHINE METHOD), N50         | TON   | 105            |                          |                         | 105                      |
|                | 40600982 | HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT  | SQ YD | 153            | 153                      |                         |                          |
|                | 40603080 | HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50   | TON   | 872            | 840                      |                         | 32                       |
|                | 40603335 | HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50  | TON   | 418            | 187                      |                         | 231                      |
|                | 42001430 | BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE) | SQ YD | 46             | 46                       |                         |                          |
|                | 44000100 | PAVEMENT REMOVAL                              | SQ YD | 1,798          | 1,798                    |                         |                          |
|                | 44300200 | STRIP REFLECTIVE CRACK CONTROL TREATMENT      | FOOT  | 730            | 730                      |                         |                          |
|                | 48101500 | AGGREGATE SHOULDERS, TYPE B 6"                | SQ YD | 110            | 110                      |                         |                          |
|                | 48102100 | AGGREGATE WEDGE SHOULDER, TYPE B              | TON   | 24             |                          |                         | 24                       |
|                | 48203029 | HOT-MIX ASPHALT SHOULDERS, 8"                 | SQ YD | 560            | 560                      |                         |                          |
|                | 50100100 | REMOVAL OF EXISTING STRUCTURES                | EACH  | 1              |                          | 1                       |                          |
|                | 50104000 | BRIDGE RAIL REMOVAL                           | FOOT  | 186            |                          | 186                     |                          |

FILE NAME = P:\CBBEL WEST Projects\2009\09-0282 Bolcum PHIL CV11 Dgn\SHA\S00\_01.dgn

**WBK** WILLS BURKE KELSEY ASSOCIATES LTD.  
110 West Main Street, Suite 201  
St. Charles, Illinois 60174

|                        |                 |           |
|------------------------|-----------------|-----------|
| USER NAME = #USER#     | DESIGNED -      | REVISED - |
| PLOT SCALE =           | DRAWN -         | REVISED - |
| PLOT DATE = 10/21/2010 | CHECKED -       | REVISED - |
|                        | DATE - 10/22/10 | REVISED - |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

|                              |                                       |
|------------------------------|---------------------------------------|
| <b>SUMMARY OF QUANTITIES</b> |                                       |
| SCALE:                       | SHEET NO. 3 OF 73 SHEETS STA. TO STA. |

|   |                           |                |                    |                |
|---|---------------------------|----------------|--------------------|----------------|
| F.A.U. RTE.<br>2332                               | SECTION<br>03-14185-02-BR | COUNTY<br>KANE | TOTAL SHEETS<br>73 | SHEET NO.<br>3 |
| CONTRACT NO. 63521                                |                           |                |                    |                |
| FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT |                           |                |                    |                |

| SPECIALTY ITEM | CODE NO. | ITEM   | UNIT  | TOTAL QUANTITY | CONSTRUCTION CODE        |                         |                          |
|----------------|----------|--|-------|----------------|--------------------------|-------------------------|--------------------------|
|                |          |  |       |                | 80% FEDERAL<br>20% STATE |                         | 100% LOCAL               |
|                |          |  |       |                | ROADWAY<br>0004<br>RURAL | BRIDGE<br>0011<br>RURAL | ROADWAY<br>0004<br>RURAL |
|                | 50105220 | PIPE CULVERT REMOVAL                               | FOOT  | 33             |                          |                         | 33                       |
|                | 50200100 | STRUCTURE EXCAVATION                               | CU YD | 186            |                          | 186                     |                          |
|                | 50200300 | COFFERDAM EXCAVATION                               | CU YD | 58             |                          | 58                      |                          |
|                | 50202901 | COFFERDAM (LOCATION - 1)                           | EACH  | 1              |                          | 1                       |                          |
|                | 50300225 | CONCRETE STRUCTURES                                | CU YD | 85.7           |                          | 85.7                    |                          |
|                | 50300255 | CONCRETE SUPERSTRUCTURE                            | CU YD | 237.5          |                          | 237.5                   |                          |
|                | 50300260 | BRIDGE DECK GROOVING                               | SQ YD | 553            |                          | 553                     |                          |
|                | 50300265 | SEAL COAT CONCRETE                                 | CU YD | 24.8           |                          | 24.8                    |                          |
|                | 50300280 | CONCRETE ENCASEMENT                                | CU YD | 4.2            |                          | 4.2                     |                          |
|                | 50300300 | PROTECTIVE COAT                                    | SQ YD | 671            |                          | 671                     |                          |
|                | 50500105 | FURNISHING AND ERECTING STRUCTURAL STEEL           | L SUM | 1              |                          | 1                       |                          |
|                | 50500505 | STUD SHEAR CONNECTORS                              | EACH  | 1,920          |                          | 1,920                   |                          |
|                | 50800205 | REINFORCEMENT BARS, EPOXY COATED                   | POUND | 64,540         |                          | 64,540                  |                          |
|                | 50800515 | BAR SPLICERS                                       | EACH  | 72             |                          | 72                      |                          |
|                | 51201600 | FURNISHING STEEL PILES HP12X53                     | FOOT  | 300            |                          | 300                     |                          |
|                | 51201800 | FURNISHING STEEL PILES HP14X73                     | FOOT  | 192            |                          | 192                     |                          |
|                | 51202305 | DRIVING PILES                                      | FOOT  | 300            |                          | 300                     |                          |
|                | 51203600 | TEST PILE STEEL HP12X53                            | EACH  | 2              |                          | 2                       |                          |
|                | 51204650 | PILE SHOES   | EACH  | 12             |                          | 12                      |                          |
|                | 51500100 | NAME PLATES  | EACH  | 1              |                          | 1                       |                          |
|                | 52100520 | ANCHOR BOLTS, 1"                                   | EACH  | 30             |                          | 30                      |                          |
|                | 54215547 | METAL END SECTIONS 12"                             | EACH  | 2              |                          |                         | 2                        |
|                | 59100100 | GEOCOMPOSITE WALL DRAIN                            | SQ YD | 54             |                          | 54                      |                          |
|                | 60100060 | CONCRETE HEADWALLS FOR PIPE DRAINS                 | EACH  | 6              | 6                        |                         |                          |
|                | 60100945 | PIPE DRAINS 12"                                    | FOOT  | 100            | 100                      |                         |                          |
|                | 60103500 | PIPE DRAINS, CORRUGATED STEEL 12"                  | FOOT  | 29             | 29                       |                         |                          |
|                | 60107600 | PIPE UNDERDRAINS 4"                                | FOOT  | 439            | 439                      |                         |                          |
|                | 60235300 | INLETS, TYPE A, TYPE 1 FRAME, CLOSED LID           | EACH  | 2              | 2                        |                         |                          |
| S              | 63000001 | STEEL PLATE BEAM GUARD RAIL, TYPE A, 6 FOOT POSTS  | FOOT  | 437.5          | 437.5                    |                         |                          |
| S              | 63100085 | TRAFFIC BARRIER TERMINAL, TYPE 6                   | EACH  | 4              | 4                        |                         |                          |
| S              | 63100167 | TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT | EACH  | 4              | 4                        |                         |                          |
| S              | 63200310 | GUARDRAIL REMOVAL                                  | FOOT  | 1,028          | 1,028                    |                         |                          |
| S              | X665020Z | WOVEN WIRE FENCE REMOVAL                           | FOOT  | 320            | 320                      |                         |                          |
| S              | 66600105 | FURNISHING AND ERECTING RIGHT-OF-WAY MARKERS       | EACH  | 6              | 6                        |                         |                          |

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| USER NAME = *USER*    | DESIGNED -      | REVISED - |
| PLOT SCALE =          | DRAWN -         | REVISED - |
| PLOT DATE = 11/9/2010 | CHECKED -       | REVISED - |
|                       | DATE - 10/22/10 | REVISED - |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

| SUMMARY OF QUANTITIES |                          |      |         |
|-----------------------|--------------------------|------|---------|
| SCALE:                | SHEET NO. 4 OF 73 SHEETS | STA. | TO STA. |

|   |                |        |              |           |
|---|----------------|--------|--------------|-----------|
| F.A.U. RTE.                                     | SECTION        | COUNTY | TOTAL SHEETS | SHEET NO. |
| 2332  | 03-14185-02-BR | KANE   | 73           | 4         |
| CONTRACT NO. 63521                              |                |        |              |           |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |                |        |              |           |

| SPECIALTY ITEM | CODE NO.            | ITEM  | UNIT   | TOTAL QUANTITY | CONSTRUCTION CODE     |                   |                    |
|----------------|---------------------|---|--------|----------------|-----------------------|-------------------|--------------------|
|                |                     |   |        |                | 80% FEDERAL 20% STATE |                   | 100% LOCAL         |
|                |                     |   |        |                | ROADWAY 0004 RURAL    | BRIDGE 0011 RURAL | ROADWAY 0004 RURAL |
|                | 67000400            | ENGINEER'S FIELD OFFICE, TYPE A   | CAL MO | 8              | 8                     |                   |                    |
|                | 67100100            | MOBILIZATION  | L SUM  | 1              | 1                     |                   |                    |
|                | <del>XX008438</del> | TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR   | EACH   | 1              | 1                     |                   |                    |
|                | <del>X7010238</del> | CHANGEABLE MESSAGE SIGN, SPECIAL  | CAL MO | 5              | 5                     |                   |                    |
| S              | 72000100            | SIGN PANEL - TYPE 1   | SQ FT  | 35             | 35                    |                   |                    |
| S              | 72400100            | REMOVE SIGN PANEL ASSEMBLY - TYPE A   | EACH   | 7              | 7                     |                   |                    |
| S              | 72400500            | RELOCATE SIGN PANEL ASSEMBLY - TYPE A   | EACH   | 2              | 2                     |                   |                    |
| S              | 73000100            | WOOD SIGN SUPPORT   | FOOT   | 126            | 126                   |                   |                    |
| S              | 78000200            | THERMOPLASTIC PAVEMENT MARKING - LINE 4"  | FOOT   | 6,080          | 3,160                 |                   | 2,920              |
| S              | 78200410            | GUARDRAIL MARKERS, TYPE A   | EACH   | 10             | 10                    |                   |                    |
| S              | 78200420            | GUARDRAIL MARKERS, TYPE B   | EACH   | 4              | 4                     |                   |                    |
| S              | 78201000            | TERMINAL MARKER - DIRECT APPLIED  | EACH   | 4              | 4                     |                   |                    |
| S              | A2002716            | TREE, CARYA OVATA (SHAGBARK HICKORY), 2" CALIPER, BALLED AND BURLAPPED                      | EACH   | 5              | 5                     |                   |                    |
| S              | A2002916            | TREE, CELTIS OCCIDENTALIS (COMMON HACKBERRY), 2" CALIPER, BALLED AND BURLAPPED              | EACH   | 5              | 5                     |                   |                    |
| S              | A2005016            | TREE, GYMNOCLADUS DIOICUS (KENTUCKY COFFEETREE), 2" CALIPER, BALLED AND BURLAPPED           | EACH   | 5              | 5                     |                   |                    |
| S              | A2005670            | TREE, OSTRYA VIRGINIANA (AMERICAN HOPHORNBEAM), 8' HEIGHT, CLUMP FORM, BALLED AND BURLAPPED | EACH   | 5              | 5                     |                   |                    |
| S              | K1005420            | SEEDING (SPECIAL)   | SQ YD  | 150            | 150                   |                   |                    |
|                | X0323017            | TEMPORARY INFORMATIONAL SIGNS   | EACH   | 2              | 2                     |                   |                    |
|                | X0326806            | WASHOUT BASIN   | L SUM  | 1              | 1                     |                   |                    |
|                | X2070304            | POROUS GRANULAR EMBANKMENT, SPECIAL   | CU YD  | 97             |                       | 97                |                    |
|                | X2130010            | EXPLORATION TRENCH, SPECIAL   | FOOT   | 100            | 100                   |                   |                    |
| S              | X2501800            | SEEDING, CLASS 4 (MODIFIED)   | ACRE   | 1.25           | 1.25                  |                   |                    |
| S              | X2501820            | SEEDING, CLASS 5 (MODIFIED)   | ACRE   | 1.25           | 1.25                  |                   |                    |
|                | XX006345            | TURBIDITY BARRIER   | FOOT   | 140            | 140                   |                   |                    |
|                | Z0001050            | AGGREGATE SUBGRADE 12"  | SQ YD  | 2,357          | 2,357                 |                   |                    |
|                | Z0013797            | STABILIZED CONSTRUCTION ENTRANCE  | SQ YD  | 75             | 75                    |                   |                    |
|                | Z0013798            | CONSTRUCTION LAYOUT   | L SUM  | 1              | 1                     |                   |                    |
|                | Z0042002            | POROUS GRANULAR EMBANKMENT, SUBGRADE  | CU YD  | 1,495          | 1,495                 |                   |                    |
|                | Z0046304            | PIPE UNDERDRAINS FOR STRUCTURES 4"  | FOOT   | 145            |                       | 145               |                    |
|                | Z0065000            | SETTING PILES IN ROCK   | EACH   | 6              |                       | 6                 |                    |
|                | $\Delta$ Z0076600   | TRAINEES  | HOUR   | 500            | 500 *                 |                   |                    |

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$\Delta=0042$

\* CONSTRUCTION CODE 0042



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| USER NAME = #USER#    | DESIGNED -      | REVISED - |
| PLOT SCALE =          | DRAWN -         | REVISED - |
| PLOT DATE = 11/9/2010 | CHECKED -       | REVISED - |
|                       | DATE - 10/22/10 | REVISED - |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

| SUMMARY OF QUANTITIES |                          |      |         |
|-----------------------|--------------------------|------|---------|
| SCALE:                | SHEET NO. 5 OF 73 SHEETS | STA. | TO STA. |

|   |                        |             |                 |             |
|---|------------------------|-------------|-----------------|-------------|
| F.A.U. RTE. 2332                                | SECTION 03-14185-02-BR | COUNTY KANE | TOTAL SHEETS 73 | SHEET NO. 5 |
| CONTRACT NO. 63521                              |                        |             |                 |             |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |                        |             |                 |             |



SUMMARY OF EARTHWORK

| SCHEDULE OF EARTHWORK |              |            |                                   |                  |              |   |                                 |
|-----------------------|--------------|------------|-----------------------------------|------------------|--------------|---|---------------------------------|
| LOCATION              | TOPSOIL      |            |                                   | EARTH WORK       |              |   |                                 |
|                       | EXCAVATION   | PLACEMENT  | 20201200                          | 20200100         | EMBANKMENT   | 20400800                                      | 20201200 & Z0042002             |
|                       |              |            | BALANCE WASTE (+) or SHORTAGE (-) | EARTH EXCAVATION |              | BALANCE WASTE (+) or SHORTAGE (-) (FURNISHED) | ESTIMATED UNSUITABLE (UNDERCUT) |
| (CY)                  | (CY)         | (CY)       | (CY)                              | (CY)             | (CY)         | (CY)  | (CY)                            |
| 118+70.00             |              |            |                                   |                  |              |   |                                 |
| 119+00.00             | 16.3         | 12.4       | 3.9                               | 33.72            | 11.44        | +17.22  | 71.67                           |
| 119+04.35             | 3.3          | 2.5        | 0.9                               | 5.31             | 2.96         | +1.55   | 10.59                           |
| 119+39.35             | 25.8         | 18.5       | 7.3                               | 44.85            | 17.82        | +20.30  | 85.94                           |
| 119+50.00             | 7.8          | 5.7        | 2.1                               | 14.04            | 3.37         | +8.56   | 24.77                           |
| 119+91.87             | 27.7         | 18.7       | 9.0                               | 51.10            | 14.11        | +29.33  | 119.87                          |
| 120+00.00             | 4.7          | 2.6        | 2.1                               | 8.96             | 3.19         | +4.43   | 23.19                           |
| 120+26.87             | 16.4         | 9.5        | 6.9                               | 25.23            | 13.78        | +7.67   | 76.43                           |
| 120+37.37             | 6.7          | 4.2        | 2.5                               | 8.11             | 5.11         | +1.78   | 28.66                           |
| 120+50.00             | 8.4          | 5.6        | 2.8                               | 7.74             | 4.77         | +1.81   | 34.48                           |
| 121+00.00             | 35.8         | 24.7       | 11.1                              | 12.50            | 55.28        | -44.66  | 107.96                          |
| 121+24.00             | 17.6         | 12.3       | 5.3                               | 0.00             | 51.33        | -51.33  | 42.93                           |
| 121+42.50             | 13.5         | 10.0       | 3.5                               | 0.00             | 49.95        | -49.95  | 31.66                           |
| 121+50.00             | 5.6          | 4.4        | 1.2                               | 0.00             | 23.04        | -23.04  | 11.94                           |
| 121+72.50             | 16.3         | 12.6       | 3.7                               | 0.00             | 83.58        | -83.58  | 26.67                           |
| BRIDGE OMISSION       |              |            |                                   |                  |              |   |                                 |
| 122+77.50             |              |            |                                   |                  |              |   |                                 |
| 123+00.00             | 17.5         | 13.5       | 4.0                               | 0.00             | 101.88       | -101.88                                       | 23.25                           |
| 123+07.50             | 6.0          | 4.8        | 1.2                               | 0.00             | 33.07        | -33.07  | 8.44                            |
| 123+50.00             | 48.7         | 25.9       | 22.8                              | 0.00             | 180.00       | -180.00                                       | 61.55                           |
| 124+00.00             | 79.2         | 28.0       | 51.2                              | 0.00             | 170.28       | -170.28                                       | 112.96                          |
| 124+22.38             | 37.6         | 11.8       | 25.8                              | 1.24             | 55.70        | -54.65  | 57.11                           |
| 124+32.77             | 16.8         | 5.4        | 11.4                              | 1.54             | 23.03        | -21.72  | 27.63                           |
| 124+50.00             | 25.6         | 9.4        | 16.2                              | 4.21             | 37.49        | -33.91  | 47.35                           |
| 124+67.77             | 25.0         | 9.9        | 15.1                              | 6.71             | 32.91        | -27.21  | 50.09                           |
| 125+00.00             | 45.2         | 18.0       | 27.2                              | 19.10            | 48.64        | -32.41  | 74.73                           |
| 125+14.21             | 20.4         | 7.6        | 12.8                              | 11.16            | 20.68        | -11.19  | 34.84                           |
| 125+50.00             | 84.3         | 18.6       | 65.7                              | 32.81            | 67.27        | -39.38  | 87.75                           |
| 126+00.00             | 185.5        | 28.8       | 156.7                             | 46.39            | 84.91        | -45.48  | 95.74                           |
| 126+50.00             | 201.0        | 26.0       | 175.0                             | 42.31            | 99.17        | -63.21  | 95.74                           |
| 126+60.00             | 38.8         | 4.4        | 34.4                              | 8.24             | 28.63        | -21.63  | 19.15                           |
| 127+00.00             | 130.4        | 8.7        | 121.7                             | 17.85            | 57.48        | -42.31  | 0.00                            |
| 127+50.00             | 136.5        | 0.0        | 136.5                             | 3.24             | 1.11         | +1.64   | 0.00                            |
| 127+60.00             | 24.5         | 0.0        | 24.5                              | 0.50             | 0.22         | +0.21   | 0.00                            |
| <b>TOTAL</b>          | <b>1,329</b> | <b>364</b> | <b>964</b>                        | <b>407</b>       | <b>1,382</b> | <b>-1,036</b>                                 | <b>1,493</b>                    |
| <b>ROUNDED QTY.</b>   |              | <b>365</b> | <b>965</b>                        | <b>410</b>       |              | <b>1,040</b>                                  | <b>1,495</b>                    |

EARTHWORK GENERAL NOTES

ALL EARTHWORK QUANTITIES ARE CALCULATED BY THE METHOD OF AVERAGE END AREAS USING THE PLAN CROSS SECTIONS. SHRINKAGE FACTOR, ASSUMED TO BE 15% FOR THIS PROJECT, ARE ESTIMATED FOR THE SOLE PURPOSE OF DETERMINING A BALANCE OF EARTHWORK. THE CONTRACTOR SHALL ESTIMATE HIS OWN SHRINKAGE FACTORS IN DETERMINING HIS EARTHWORK. NO PAYMENT WILL BE MADE ON EARTHWORK QUANTITIES DUE TO VARIATION IN THE SHRINKAGE FACTOR SINCE EARTHWORK IS MEASURED IN ITS FINAL POSITION.

IN ADDITION TO NUCLEAR DENSITY TESTING OF EMBANKMENTS AND SUBGRADES, THE FINAL SHALL BE PROOF ROLLED USING A FULLY LOADED SEMI TRUCK. THE PROOF-ROLL SHOULD DEMONSTRATE A MAXIMUM ONE-QUARTER (1/4) INCH DEFLECTION AT TOP OF SUBGRADE LEVEL. THE NUMBER OF PROOF ROLLS AS REQUIRED BY THE ENGINEER SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

TEMPORARY EARTH STOCKPILES WILL NOT BE ALLOWED ON THE ADJACENT PROPERTIES WITHOUT THE PERMISSION OF THE OWNER AND APPROVAL OF THE ENGINEER. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO ACQUIRE PERMISSION FROM THE APPROPRIATE OWNER PRIOR TO STOCK PILING ANY MATERIALS ON THOSE PROPERTIES. IF THIS SPACE IS NOT AVAILABLE, THE CONTRACTOR SHALL MAKE OTHER PROVISIONS FOR HANDLING THESE MATERIALS DURING CONSTRUCTION OPERATIONS.

EARTH EXCAVATION AND EMBANKMENT SHALL BE PAID FOR ONLY ONCE, REGARDLESS OF STAGING OR SEQUENCING OF CONTRACTORS OPERATIONS THAT REQUIRE STOCKPILING OF MATERIALS FOR LATER USE, REDISTRIBUTION AND RESPREADING IN SHOULDERS AND CONSTRUCTING OF EMBANKMENTS.

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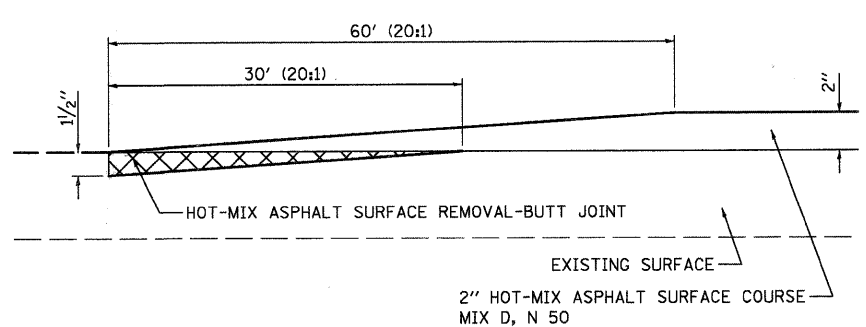
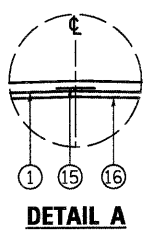
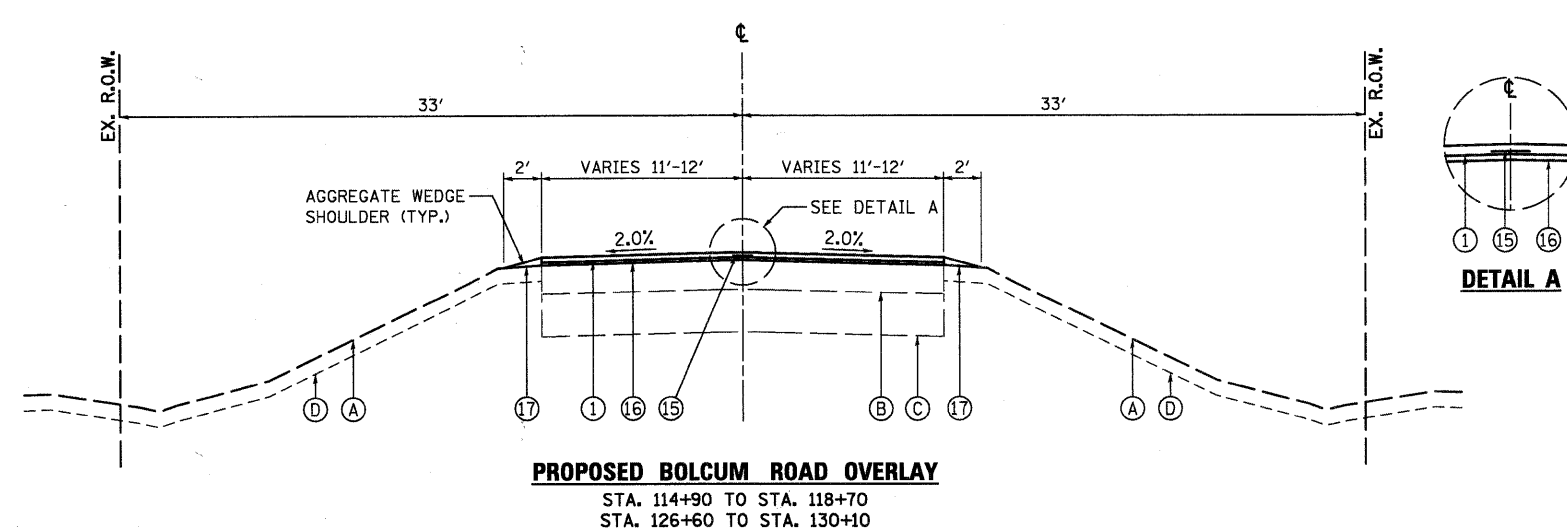
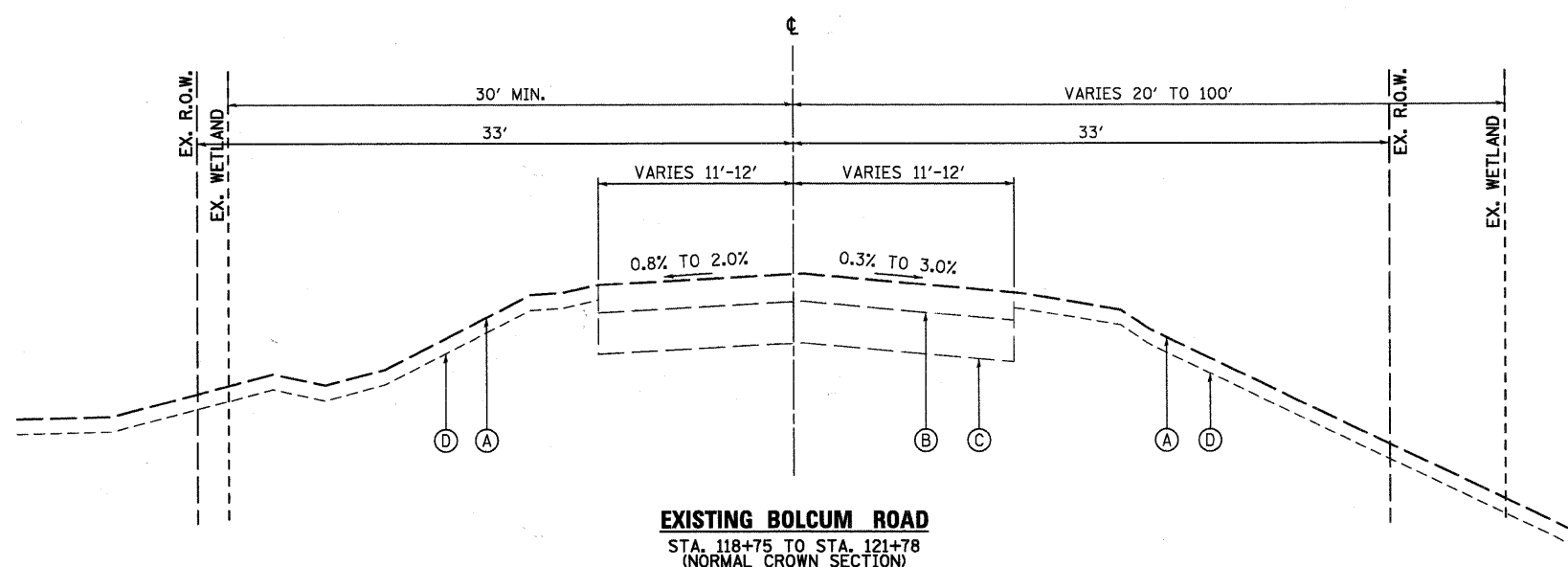
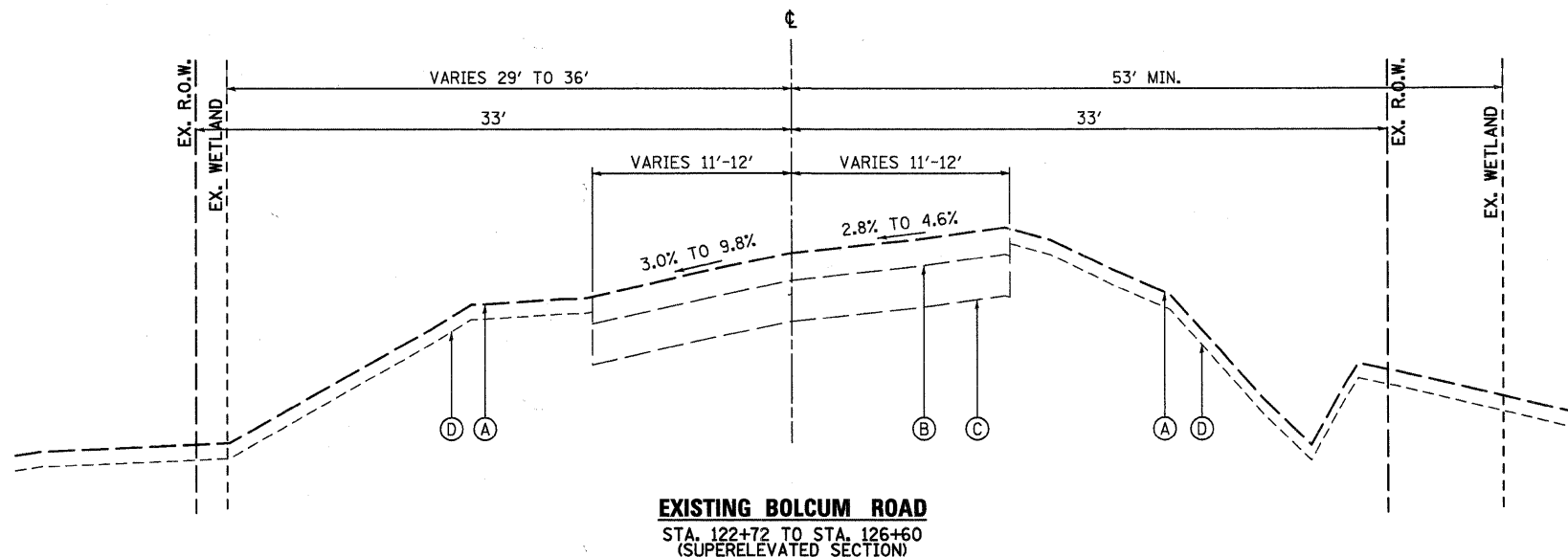


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|                        | DRAWN -         | REVISED - |
| PLOT SCALE =           | CHECKED -       | REVISED - |
| PLOT DATE = 10/21/2010 | DATE - 10/22/10 | REVISED - |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**EARTHWORK SCHEDULE**

|                          |                          |        |              |   |
|--------------------------|--------------------------|--------|--------------|---|
| F.A.U. RTE.              | SECTION                  | COUNTY | TOTAL SHEETS | SHEET NO.                                       |
| 2332                     | 03-14185-02-BR           | KANE   | 73           | 7   |
| <b>CONTRACT NO.63521</b> |                          |        |              |   |
| SCALE:                   | SHEET NO. 7 OF 73 SHEETS | STA.   | TO STA.      | FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |



**LEGEND, EXISTING**

- (A) EXISTING GROUND
- (B) EXISTING HOT-MIX ASPHALT PAVEMENT, 7.0"-7.3"
- (C) EXISTING AGGREGATE BASE, 11"\*
- (D) EXISTING TOPSOIL

\* INFORMATION ON PAVEMENT AND BASE COURSE THICKNESS WAS TAKEN FROM INFORMATION DOCUMENTED IN THE SUBSURFACE INVESTIGATION REPORT PREPARED BY TESTING SERVICE CORPORATION DATED OCTOBER 13, 2004. SEE ADDITIONAL NOTES BELOW.

**EXISTING PAVEMENT NOTES**

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE THICKNESS OF THE EXISTING PAVEMENTS TO BE REMOVED AND THE EXTENT TO WHICH IT IS REINFORCED, NO ADDITIONAL COMPENSATION WILL BE ALLOWED BECAUSE OF VARIATIONS FROM THE ASSUMED THICKNESS SHOWN ON THE PLANS OR FOR VARIATIONS IN THE AMOUNT OF REINFORCEMENT.

**LEGEND, PROPOSED**

- (1) 2" HMA SURFACE COURSE, MIX "D", N50 (40603335)
- (2) 9" HMA BINDER COURSE, IL-19.0, N50 (2 LIFTS - 40603080)
- (3) AGGREGATE SUBGRADE, 12" (Z0001050)
- (4) GEOTECHNICAL FABRIC FOR GRND. STABILIZATION (21001000)
- (5) AGGREGATE SHOULDERS, TYPE B 6" (48101500)
- (6) HMA SHOULDERS, 8" (48203029)
- (7) SUB-BASE GRANULAR MATERIAL, TYPE B (31101100)
- (8) 6" TOPSOIL EXCAVATION AND PLACEMENT (21101505)
- (9) SEEDING CLASS 2A, 4(MOD.), 5(MOD.) W/EROSION CONTROL BLANKET
- (10) STRUCTURAL EMBANKMENT (TO BE PAID AS FURNISHED EXCAVATION - 20400800)
- (11) STEEL PLATE BEAM GUARDRAIL, TYPE A, 6' POSTS (63000001)
- (12) PIPE UNDERDRAIN WITH FILTER FABRIC ENVELOPE, 4" (60107600)
- (13) POROUS GRANULAR EMBANKMENT, SUBGRADE (20700420)
- (14) PARAPET (SEE STRUCTURAL PLANS)
- (15) STRIP REFLECTIVE CRACK CONTROL TREATMENT (44300200)
- (16) LEVELING BINDER (MACHINE METHOD), N50 (40600625)
- (17) AGGREGATE WEDGE SHOULDER, TYPE B (48102100)

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**WBK** WILLS BURKE KELSEY ASSOCIATES LTD.  
 110 West Main Street, Suite 201  
 St. Charles, Illinois 60174

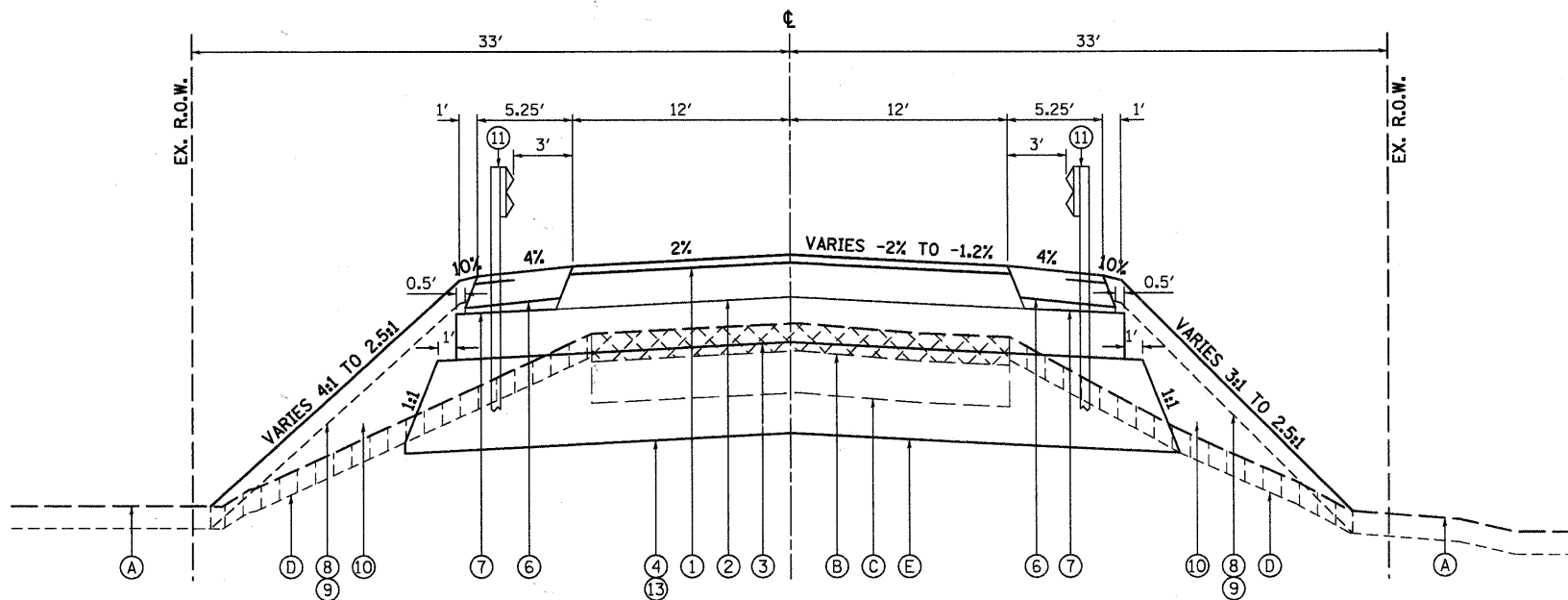
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| PLOT SCALE =           | DRAWN -         | REVISED - |
| PLOT DATE = 10/21/2010 | CHECKED -       | REVISED - |
|                        | DATE - 10/22/10 | REVISED - |

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

|                         |                                       |
|-------------------------|---------------------------------------|
| <b>TYPICAL SECTIONS</b> |                                       |
| EXISTING                |                                       |
| SCALE:                  | SHEET NO. 8 OF 73 SHEETS STA. TO STA. |

|   |                |        |              |           |
|---|----------------|--------|--------------|-----------|
| F.A.J. RTE.                                     | SECTION        | COUNTY | TOTAL SHEETS | SHEET NO. |
| 2332  | 03-14185-02-BR | KANE   | 73           | 8         |
| CONTRACT NO. 63521                              |                |        |              |           |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |                |        |              |           |





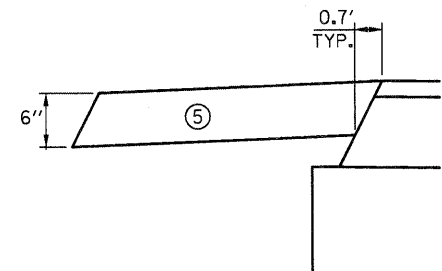
**PROPOSED BOLCUM ROAD**

STA. 119+67.9 LT./STA. 118+77.9 RT. TO STA 121+42.5

ADD STATION RANGE AND THICKNESS ON UNDERCUT.

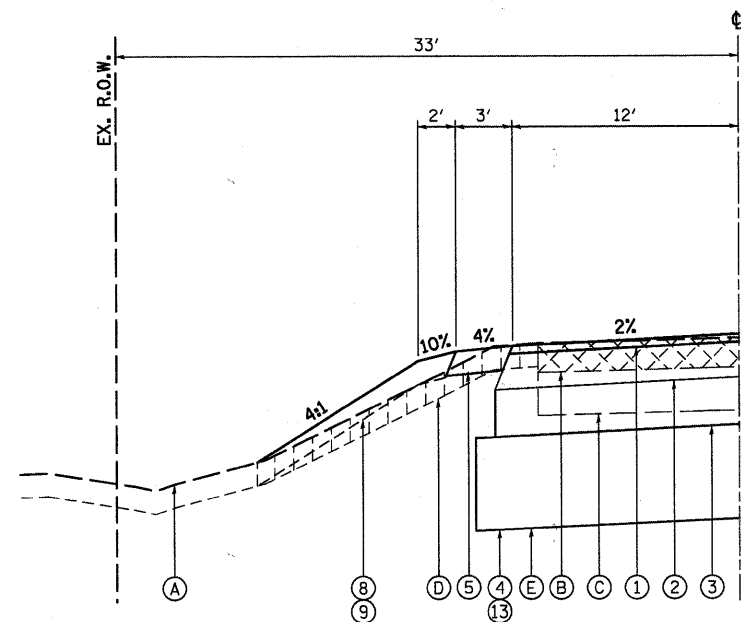
ESTIMATED QUANTITIES FOR UNDERCUTTING, PGES, AND GEOTECHNICAL FABRIC

| STATION LIMITS |        | ESTIMATED THICKNESS PGES |
|----------------|--------|--------------------------|
| FROM           | TO     |                          |
| 118+70         | 126+60 | 24 INCHES                |



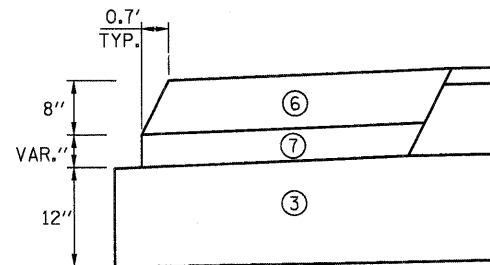
FROM STA. 118+70.00 TO STA. 119+67.86 LT  
FROM STA. 125+74.04 TO STA. 126+60.00 LT

**AGGREGATE SHOULDER DETAIL**



**PROPOSED BOLCUM ROAD**

STA. 118+70 LT. TO STA 119+67.9 LT.



FROM STA. 119+49.86 TO STA. 121+42.50 LT  
FROM STA. 118+70.00 TO STA. 121+42.50 RT  
FROM STA. 123+07.58 TO STA. 125+92.04 LT  
FROM STA. 123+07.42 TO STA. 125+09.77 RT

**HMA SHOULDER DETAIL**

**LEGEND, EXISTING**

- (A) EXISTING GROUND
- (B) EXISTING HOT-MIX ASPHALT PAVEMENT, 7.0"-7.3" (TO BE REMOVED - 44000100)
- (C) EXISTING AGGREGATE BASE, 11" (REMOVED AS NECESSARY- INCLUDED IN EARTH EXCAVATION)
- (D) EXISTING TOPSOIL - (TO BE REMOVED - 20201200)
- (E) EXISTING UNSUITABLE MATERIAL - (TO BE REMOVED - 20201200)

**LEGEND, PROPOSED**

- (1) 2" HMA SURFACE COURSE, MIX "D", N50 (40603335)
- (2) 9" HMA BINDER COURSE, IL-19.0, N50 (2 LIFTS - 40603080)
- (3) AGGREGATE SUBGRADE, 12" (Z0001050)
- (4) GEOTECHNICAL FABRIC FOR GRND. STABILIZATION (21001000)
- (5) AGGREGATE SHOULDERS, TYPE B 6" (48101500)
- (6) HMA SHOULDERS, 8" (48203029)
- (7) SUB-BASE GRANULAR MATERIAL, TYPE B (31101100)
- (8) 6" TOPSOIL EXCAVATION AND PLACEMENT (21101505)
- (9) SEEDING CLASS 2A, 4(MOD.), 5(MOD.) W/EROSION CONTROL BLANKET
- (10) STRUCTURAL EMBANKMENT (TO BE PAID AS FURNISHED EXCAVATION - 20400800)
- (11) STEEL PLATE BEAM GUARDRAIL, TYPE A, 6" POSTS (63000001)
- (12) PIPE UNDERDRAIN WITH FILTER FABRIC ENVELOPE, 4" (60107600)
- (13) POROUS GRANULAR EMBANKMENT, SUBGRADE (20700420)
- (14) PARAPET (SEE STRUCTURAL PLANS)
- (15) STRIP REFLECTIVE CRACK CONTROL TREATMENT (44300200)
- (16) LEVELING BINDER (MACHINE METHOD), N50 (40600625)
- (17) AGGREGATE WEDGE SHOULDER, TYPE B (48102100)

**STRUCTURAL PAVEMENT DESIGN**

STRUCTURAL DESIGN TRAFFIC: Year 2030  
PV = 9400 SU = 300 MU = 300  
ROAD/STREET CLASSIFICATION: Class 2  
PERCENT OF STRUCTURAL DESIGN TRAFFIC IN DESIGN LANE:  
P = 94 S = 3 M = 3  
TRAFFIC FACTOR: Actual TF = 1.51 AC Type = PG 64-22  
Minimum TF = NA  
PG GRADE: Binder = PG 64-22 /58-22 Surface = PG 64-22  
SUBGRADE SUPPORT RATING: SSR = POOR

| HOT-MIX ASPHALT MIXTURE REQUIREMENTS                         |                  |
|--|------------------|
| ITEM   | AIR VOIDS @ Ndes |
| <b>BOLCUM ROAD - RECONSTRUCTION</b>                          |                  |
| HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5 mm); 2" | 4% @ 50 GYR.     |
| HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50; 9"              | 4% @ 50 GYR.     |
| <b>BOLCUM ROAD - RESURFACING</b>                             |                  |
| HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5 mm); 2" | 4% @ 50 GYR.     |
| LEVELING BINDER (MACHINE METHOD), N50                        | 4% @ 50 GYR.     |
| <b>BOLCUM ROAD - APPROACH PAVEMENT CONNECTOR (FLEXIBLE)</b>  |                  |
| HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5 mm); 2" | 4% @ 50 GYR.     |
| HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50                  | 4% @ 50 GYR.     |
| <b>HMA SHOULDERS</b>   |                  |
| HOT-MIX ASPHALT SHOULDER (HMA BINDER IL-19 mm), 8"           | 2% @ 30 GYR.     |
| <b>DRIVEWAYS- C.E.</b>                                       |                  |
| HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5 mm); 2" | 4% @ 50 GYR.     |
| HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL-19 mm), 8"        | 4% @ 50 GYR.     |

THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LB/SQ YD/IN.  
THE AC TYPE FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR "PERCENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.

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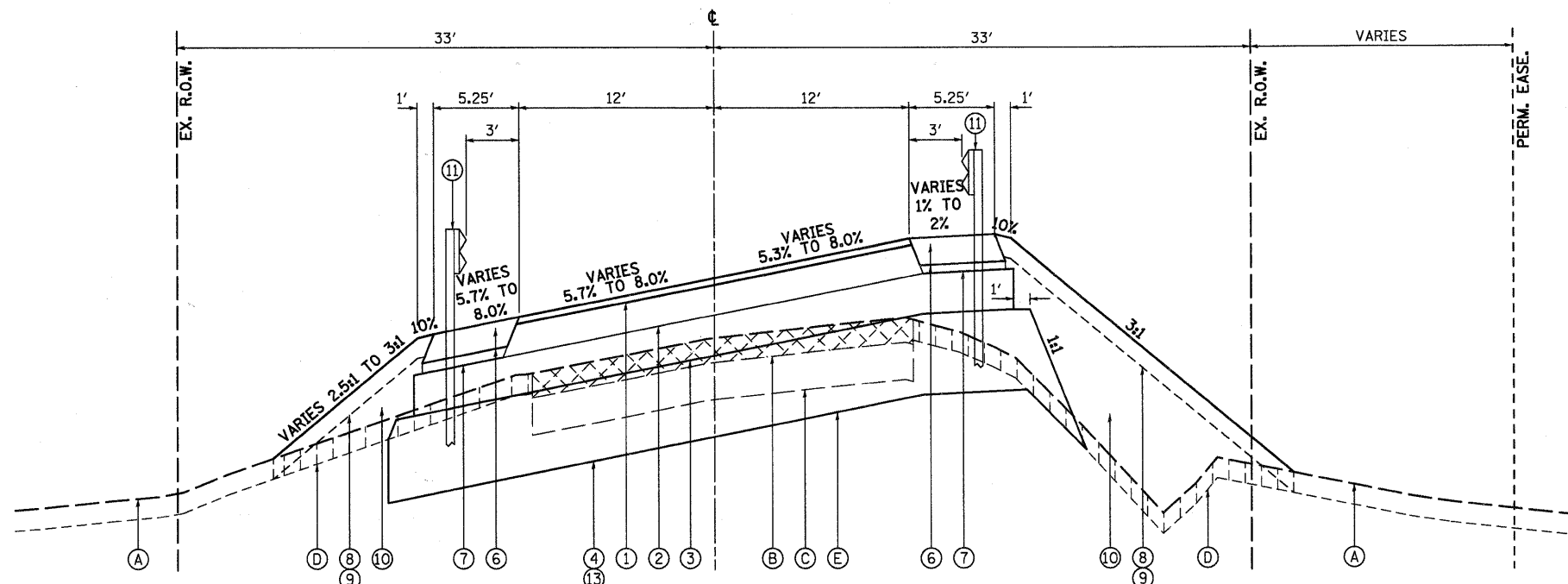


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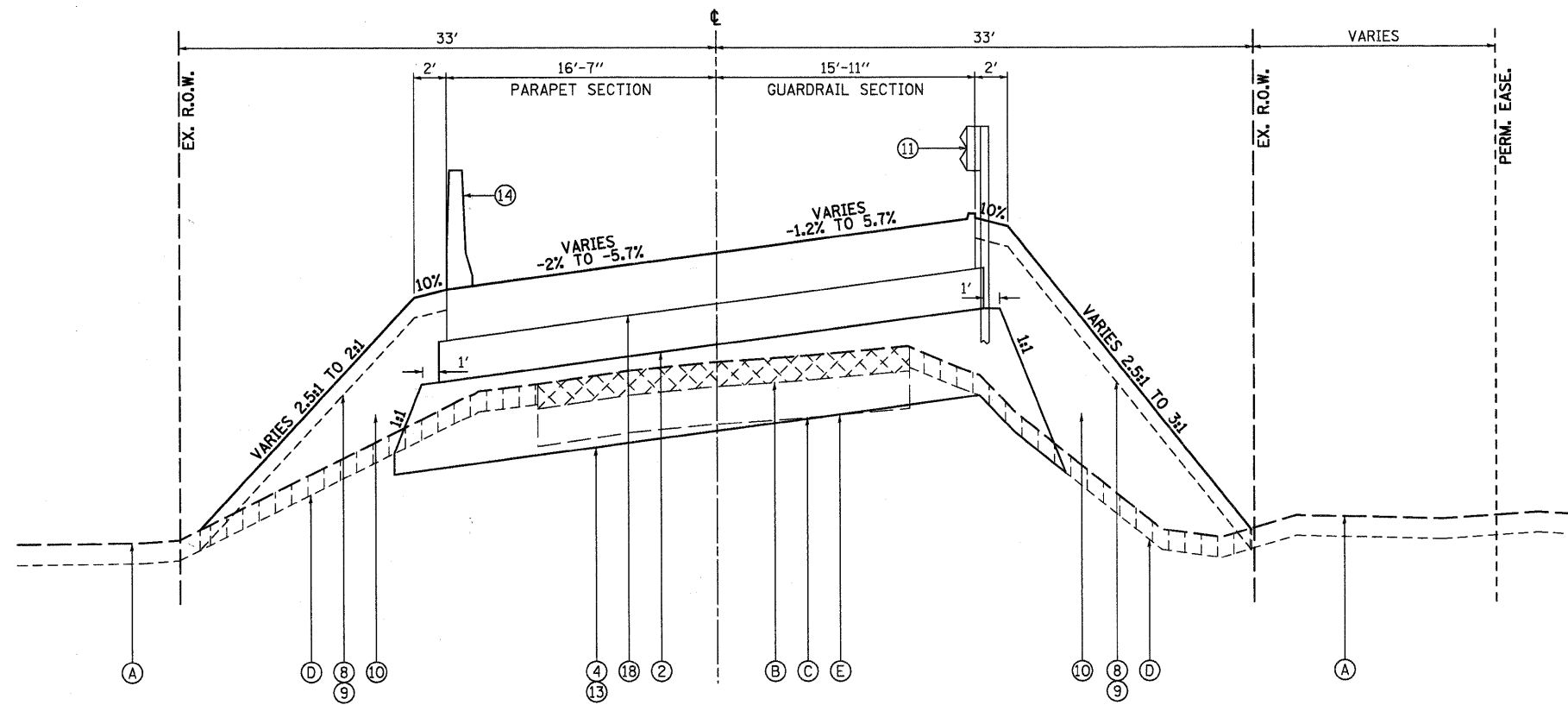
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

|                                      |                                       |
|--------------------------------------|---------------------------------------|
| <b>TYPICAL SECTIONS<br/>PROPOSED</b> |                                       |
| SCALE:                               | SHEET NO. 9 OF 73 SHEETS STA. TO STA. |

|   |                        |             |                 |             |
|---|------------------------|-------------|-----------------|-------------|
| F.A.J. RTE. 2332                                | SECTION 03-14185-02-BR | COUNTY KANE | TOTAL SHEETS 73 | SHEET NO. 9 |
| CONTRACT NO. 63521                              |                        |             |                 |             |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |                        |             |                 |             |



**PROPOSED BOLCUM ROAD**  
STA. 123+07.50 TO STA. 123+64



**PROPOSED BOLCUM ROAD**  
STA. 121+42.50 TO STA. 121+75.50  
STA. 122+77.50 TO STA. 123+07.50

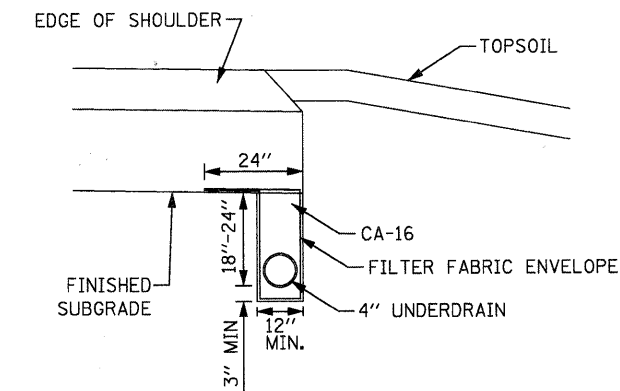
PARAPET WALL BETWEEN STA. 121+57.5 AND 122+92.5.

**LEGEND, EXISTING**

- (A) EXISTING GROUND
- (B) EXISTING HOT-MIX ASPHALT PAVEMENT, 7.0"-7.3" (TO BE REMOVED - 44000100)
- (C) EXISTING AGGREGATE BASE, 11" (REMOVED AS NECESSARY- INCLUDED IN EARTH EXCAVATION)
- (D) EXISTING TOPSOIL - (TO BE REMOVED - 20201200)
- (E) EXISTING UNSUITABLE MATERIAL - (TO BE REMOVED - 20201200)

**LEGEND, PROPOSED**

- (1) 2" HMA SURFACE COURSE, MIX "D", N50 (40603335)
- (2) 9" HMA BINDER COURSE, IL-19.0, N50 (2 LIFTS - 40603080)
- (3) AGGREGATE SUBGRADE, 12" (Z0001050)
- (4) GEOTECHNICAL FABRIC FOR GRND. STABILIZATION (21001000)
- (5) AGGREGATE SHOULDERS, TYPE B 6" (48101500)
- (6) HMA SHOULDERS, 8" (48203029)
- (7) SUB-BASE GRANULAR MATERIAL, TYPE B (31101100)
- (8) 6" TOPSOIL EXCAVATION AND PLACEMENT (21101505)
- (9) SEEDING CLASS 2A, 4(MOD.), 5(MOD.) W/EROSION CONTROL BLANKET
- (10) STRUCTURAL EMBANKMENT (TO BE PAID AS FURNISHED EXCAVATION - 20400800)
- (11) STEEL PLATE BEAM GUARDRAIL, TYPE A, 6' POSTS (63000001)
- (12) PIPE UNDERDRAIN WITH FILTER FABRIC ENVELOPE, 4" (60107600)
- (13) POROUS GRANULAR EMBANKMENT, SUBGRADE (20700420)
- (14) PARAPET (SEE STRUCTURAL PLANS)
- (15) STRIP REFLECTIVE CRACK CONTROL TREATMENT (44300200)
- (16) LEVELING BINDER (MACHINE METHOD), N50 (40600625)
- (17) AGGREGATE WEDGE SHOULDER, TYPE B (48102100)
- (18) BRIDGE APPROACH PAVEMENT (SEE STRUCTURAL PLANS)



**UNDERDRAIN DETAIL**  
STA. 123+08.00 TO STA. 125+60.00 LT

**UNDERDRAIN NOTES**

1. PIPE UNDERDRAINS TO BE PLACED AS INDICATED ON THE PLANS.
2. CAPS, PLUGS, WYES, AND TEES ARE CONSIDERED INCLUDED IN THE COST OF THE UNDERDRAINS.
3. ALL END RUNS SHALL HAVE A CAP OR PLUG.
4. UNDERDRAINS SHALL BE CONNECTED AS SHOWN ON THE PLANS WHICH COST IS INCLUDED IN THE COST OF THE UNDERDRAINS.
5. UNDERDRAIN MATERIAL SHALL BE PERFORATED CORRUGATED POLYETHYLENE TUBING.
6. EXCAVATION, FABRIC AND POROUS GRANULAR BACKFILL AS SPECIFIED SHALL BE INCLUDED IN THE COST OF THE UNDERDRAIN.

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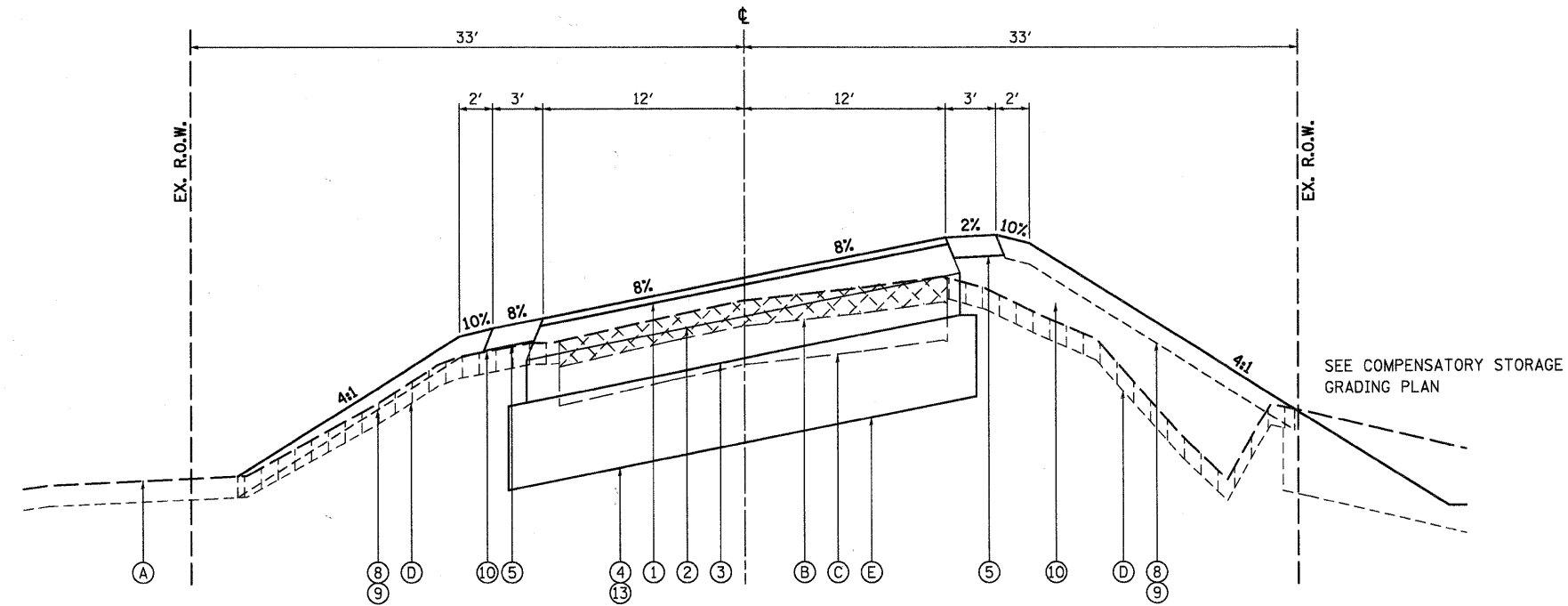
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| PLOT DATE = 10/21/2010 | DATE - 10/22/10 | REVISED - |

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

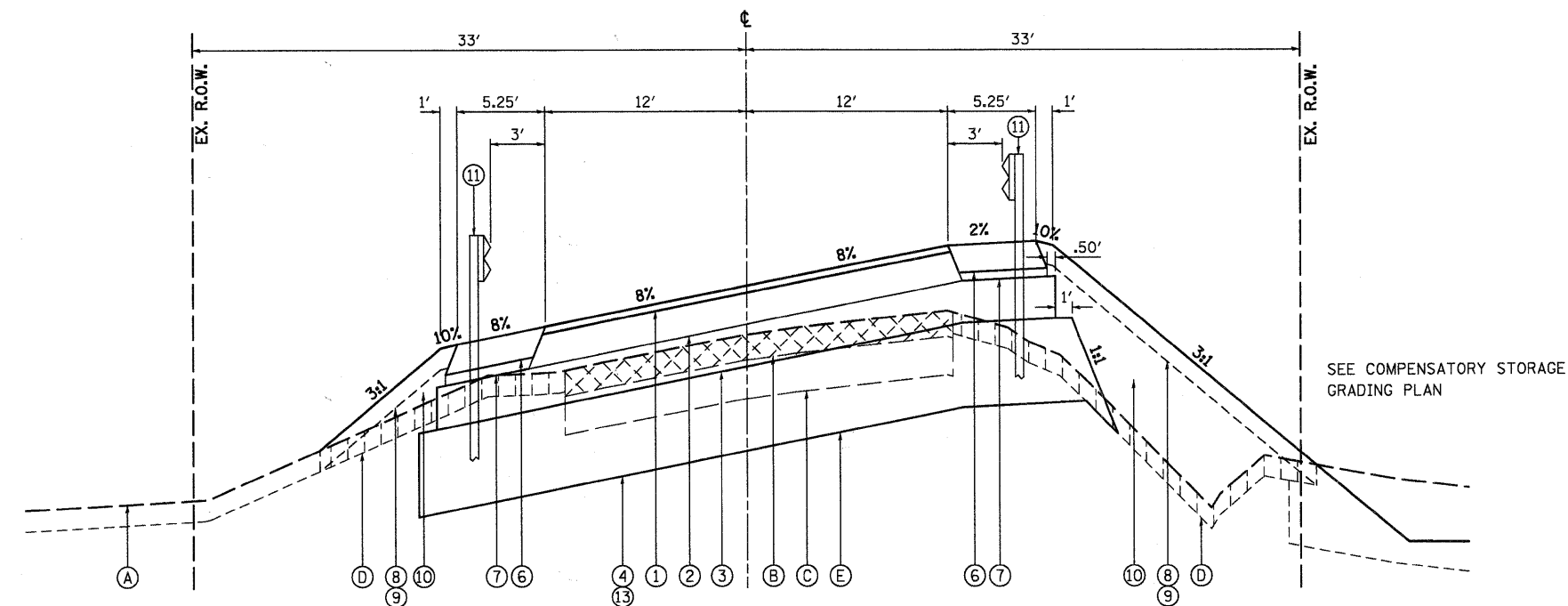
**TYPICAL SECTIONS**  
**PROPOSED**

SCALE: SHEET NO. 10 OF 73 SHEETS STA. TO STA.

|   |                |        |              |           |
|---|----------------|--------|--------------|-----------|
| F.A.U. RTE.                                     | SECTION        | COUNTY | TOTAL SHEETS | SHEET NO. |
| 2332  | 03-14185-02-BR | KANE   | 73           | 10        |
| CONTRACT NO. 63521                              |                |        |              |           |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |                |        |              |           |



**PROPOSED BOLCUM ROAD**  
 STA. 125+74 LT./STA. 124+91.8 RT. TO STA. 126+75



**PROPOSED BOLCUM ROAD**  
 STA. 123+64 TO STA. 125+74 LT./STA. 124+91.8 RT.

**LEGEND, EXISTING**

- (A) EXISTING GROUND
- (B) EXISTING HOT-MIX ASPHALT PAVEMENT, 7.0"-7.3" (TO BE REMOVED - 44000100)
- (C) EXISTING AGGREGATE BASE, 11" (REMOVED AS NECESSARY- INCLUDED IN EARTH EXCAVATION)
- (D) EXISTING TOPSOIL - (TO BE REMOVED - 20201200)
- (E) EXISTING UNSUITABLE MATERIAL - (TO BE REMOVED - 20201200)

**LEGEND, PROPOSED**

- (1) 2" HMA SURFACE COURSE, MIX "D", N50 (40603335)
- (2) 9" HMA BINDER COURSE, IL-19.0, N50 (2 LIFTS - 40603080)
- (3) AGGREGATE SUBGRADE, 12" (Z0001050)
- (4) GEOTECHNICAL FABRIC FOR GRND. STABILIZATION (21001000)
- (5) AGGREGATE SHOULDERS, TYPE B 6" (48101500)
- (6) HMA SHOULDERS, 8" (48203029)
- (7) SUB-BASE GRANULAR MATERIAL, TYPE B (31101100)
- (8) 6" TOPSOIL EXCAVATION AND PLACEMENT (21101505)
- (9) SEEDING CLASS 2A, 4(MOD.), 5(MOD.) W/EROSION CONTROL BLANKET
- (10) STRUCTURAL EMBANKMENT (TO BE PAID AS FURNISHED EXCAVATION - 20400800)
- (11) STEEL PLATE BEAM GUARDRAIL, TYPE A, 6' POSTS (63000001)
- (12) PIPE UNDERDRAIN WITH FILTER FABRIC ENVELOPE, 4" (60107600)
- (13) POROUS GRANULAR EMBANKMENT, SUBGRADE (20700420)
- (14) PARAPET (SEE STRUCTURAL PLANS)
- (15) STRIP REFLECTIVE CRACK CONTROL TREATMENT (44300200)
- (16) LEVELING BINDER (MACHINE METHOD), N50 (40600625)
- (17) AGGREGATE WEDGE SHOULDER, TYPE B (48102100)

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| PLOT DATE = 10/21/2010 | DATE - 10/22/10 | REVISED - |

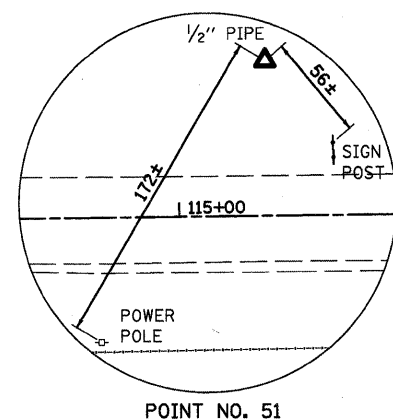
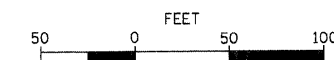
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

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| <b>TYPICAL SECTIONS</b> |  |
| <b>PROPOSED</b>         |  |
| SCALE:                  | SHEET NO. 11 OF 73 SHEETS STA. TO STA. |

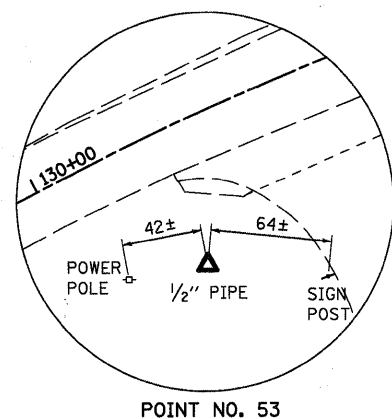
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| F.A.J. RTE.                                       | SECTION        | COUNTY | TOTAL SHEETS | SHEET NO. |
| 2332  | 03-14185-02-BR | KANE   | 73           | 11        |
| CONTRACT NO. 63521                                |                |        |              |           |
| FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT |                |        |              |           |



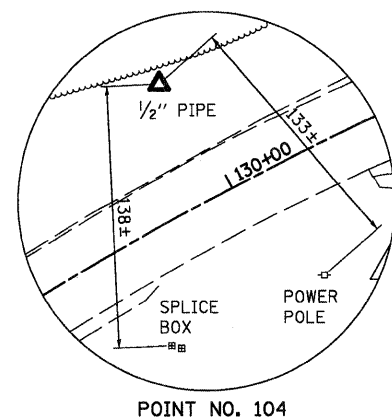
GRAPHIC SCALE



POINT NO. 51

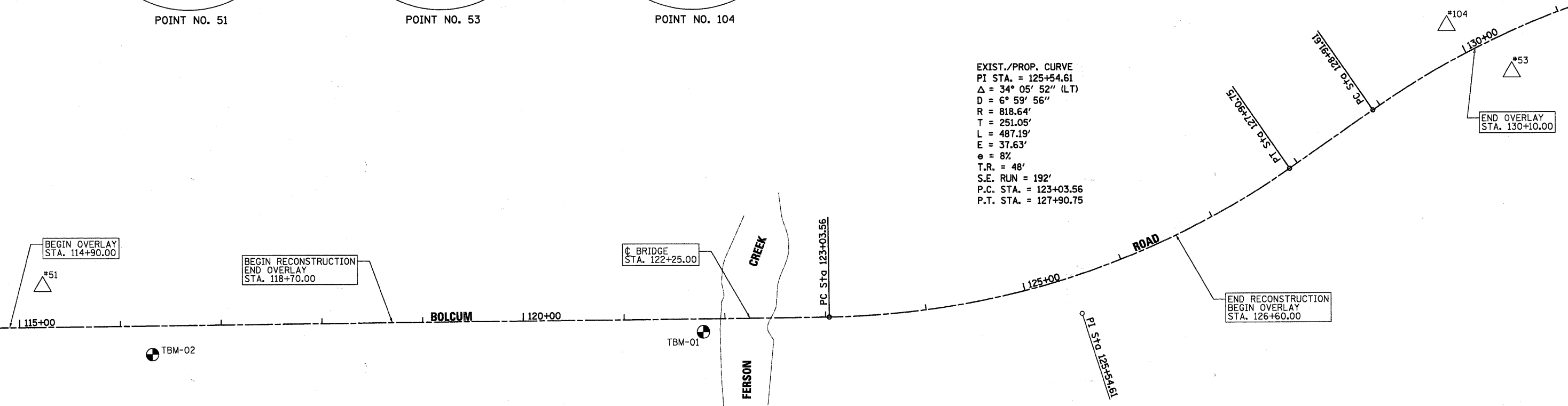


POINT NO. 53



POINT NO. 104

EXIST./PROP. CURVE  
 PI STA. = 125+54.61  
 $\Delta = 34^\circ 05' 52''$  (LT)  
 $D = 6^\circ 59' 56''$   
 $R = 818.64'$   
 $T = 251.05'$   
 $L = 487.19'$   
 $E = 37.63'$   
 $e = 8\%$   
 $T.R. = 48'$   
 $S.E. RUN = 192'$   
 $P.C. STA. = 123+03.56$   
 $P.T. STA. = 127+90.75$



**DATUM**

HORIZONTAL: NAD 83  
VERTICAL: NAVD 29

**LEGEND**

- = TEMPORARY BENCHMARK LOCATION
- = HORIZONTAL CONTROL POINT LOCATION

CONTROL POINTS COORDINATE TABLE

| POINT NO. | NORTHING      | EASTING     | STATION   | OFFSET    |
|-----------|---------------|-------------|-----------|-----------|
| 51        | 1,926,467.908 | 976,995.117 | 115+23.25 | 40.76' LT |
| 53        | 1,926,675.358 | 978,454.026 | 130+32.58 | 37.37' RT |
| 104       | 1,926,721.856 | 978,389.566 | 129+95.61 | 33.06' LT |

**TBM ELEVATION DESCRIPTION**

| TBM | ELEVATION | DESCRIPTION  |
|-----|-----------|--|
| 01  | 753.96    | CHISLED 'X' ON THE SOUTHWESTERLY END OF SOUTH CONCRETE CURB OF BOLCUM ROAD BRIDGE OVER FERSON CREEK.   |
| 02  | 749.97    | POINT LOCATED ON TOP OF THE SOUTHERLY END OF THE WESTERLY CULVERT PIPE UNDER BOLCUM ROAD, APPROXIMATELY 547 FEET WEST OF BOLCUM ROAD BRIDGE OVER FERSON CREEK. |

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**ALIGNMENT, TIES & BENCHMARKS**

SCALE: SHEET NO. 12 OF 73 SHEETS STA. 118+70 TO STA. 126+60

|   |                        |             |                 |              |
|---|------------------------|-------------|-----------------|--------------|
| F.A.J. RTE. 2332                                    | SECTION 03-14185-02-BR | COUNTY KANE | TOTAL SHEETS 73 | SHEET NO. 12 |
| CONTRACT NO. 63521                                  |                        |             |                 |              |
| FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT |                        |             |                 |              |

**TEMPORARY DETOUR DURATION**

THE CONTRACT DOCUMENTS WILL ALLOW THE ROADWAY CLOSURE AND TEMPORARY DETOUR DETAILED ON THIS SHEET TO REMAIN IN PLACE UNTIL AUGUST 19, 2011. THE CONTRACTOR WILL BE EXPECTED TO COMPLETE ALL THE PROPOSED WORK RELATED TO THE CONSTRUCTION OF THE PROPOSED BRIDGE AND ROADWAY DURING THIS CLOSURE. THE ROADWAY MUST HAVE THE HMA SURFACE COURSE PLACED AND THE GUARDRAIL INSTALLED BEFORE THE ROADWAY IS OPENED TO TRAFFIC. IF THE SURFACE COURSE AND GUARD RAIL ARE NOT COMPLETE IN THE ALLOWED TIME, ADDITIONAL TRAFFIC CONTROL DEVICES REQUIRED FOR THE COMPLETION OF REMAINING CONSTRUCTION OPERATIONS WILL BE AT THE CONTRACTOR COSTS.

**CHANGEABLE MESSAGE SIGN**

THE ST. CHARLES TOWNSHIP HIGHWAY DEPARTMENT REQUIRES THAT ELECTRONIC CHANGEABLE MESSAGE SIGNS BE PLACED ON THE EAST AND WEST SIDE OF THE BRIDGE TO WARN THE PUBLIC OF THE PENDING CLOSURE. THE MESSAGE BOARDS WILL NEED TO BE PLACED AND SET OUT FOR SEVEN (7) DAYS IN ADVANCE OF THE ANTICIPATED FIRST DAY OF CONSTRUCTION. THE SIGNS SHALL REMAIN IN PLACE FOR THE SPECIFIED CONTRACT TIME. THE CONTRACTOR WILL COORDINATE WITH THE RESIDENT ENGINEER ON THE EXACT PLACEMENT OF THE MESSAGE BOARDS AND THE MESSAGE THAT IS TO BE DISPLAYED. THE MESSAGE MAY PERIODICALLY BE CHANGED BY THE TOWNSHIP. THERE WILL BE NO ADDITIONAL COMPENSATION FOR CHANGING OF THE MESSAGE(S). THE MESSAGE BOARDS WILL BE PAID FOR AS CHANGEABLE MESSAGE SIGN, PER CALENDAR MONTH FOR EACH MESSAGE SIGN UTILIZED.

**TEMPORARY INFORMATION SIGN**

BE ERECTED ON THE EAST AND WEST SIDE OF THE BRIDGE TO INFORM THE PUBLIC OF THE CONSTRUCTION DURATION. THE CONTRACTOR WILL COORDINATE WITH THE RESIDENT ENGINEER ON THE EXACT PLACEMENT OF THE SIGN. THE SIGN SHALL BE IN PLACE FOR THE ENTIRE DURATION OF THE CONTRACT OR AS DIRECTED BY THE RESIDENT ENGINEER. THE TEMPORARY SIGN WILL BE AS DIMENSIONED ON STD. TC22 EXCEPT THE MESSAGE SHALL BE AS DETAILED ON THE DETOUR PLAN. THE SIGNING, WHICH INCLUDES POST AND MOUNTING, WILL BE PAID AS TEMPORARY INFORMATION SIGNING, PER EACH SIGN ERECTED. THE ST. CHARLES TOWNSHIP HIGHWAY DEPARTMENT REQUIRES THAT TEMPORARY INFORMATION SIGNING WILL

**CONTACTS**

THE CONTRACTOR WILL BE REQUIRED TO COORDINATE ALL MAINTENANCE OF TRAFFIC OPERATIONS WITH ALL MUNICIPALITIES, TOWNSHIP, AND COUNTY ENTITIES WITHIN THE PROJECT LIMITS. THE FOLLOWING IS THE CONTACT FOR THE ST. CHARLES TOWNSHIP HIGHWAY DEPARTMENT.

RON JOHNSON, 630-584-3496

**LIMITATIONS OF CONSTRUCTION**

THE CONTRACTOR SHALL COORDINATE THE ITEMS OF WORK IN ORDER TO KEEP HAZARDS AND TRAFFIC INCONVENIENCES TO A MINIMUM, AS SPECIFIED BELOW:

1. DURING THE CONSTRUCTION WHEN THE ROADWAY IS NOT CLOSED, CONSTRUCTION OPERATIONS WILL BE CONDUCTED SO ONE LANE IN EACH DIRECTION ON BOLCUM ROAD REMAINS OPEN.
2. THE CONTRACTOR SHALL PROVIDE, ERECT, AND MAINTAIN ALL THE NECESSARY SIGNS, BARRICADES, CONES, DRUMS, AND LIGHTS FOR THE WARNING AND PROTECTION OF TRAFFIC, AS REQUIRED BY SECTIONS 107 AND 701 THROUGH 703 OF THE STANDARD SPECIFICATIONS, AND AS MODIFIED.
3. THE CONTRACTOR SHALL FURNISH AND ERECT "ROAD CONSTRUCTION AHEAD" SIGNS (W20-1 (0)-4B) AT BOTH ENDS OF THE PROJECT AND AT ALL SIDE ROADS WITHIN THE LIMITS OF THIS SECTION WHEN WORKING IN THE VICINITY OF THE SIDE ROAD INTERSECTION.

**OFF-PEAK HOURS**

FOR CONSTRUCTION OPERATION OUTSIDE THE DESIGNATED DETOUR PERIOD, THE "OFF-PEAK" HOURS ARE DEFINED AS THE DAYTIME HOURS FROM 9:00 A.M. TO 3:00 P.M. AND NIGHT TIME HOURS FROM 9:00 P.M. TO 6:00 A.M., MONDAY THROUGH FRIDAY.

**KEEPING ROADS OPEN TO TRAFFIC**

THE CONTRACTOR SHALL SCHEDULE HIS SEQUENCE OF OPERATIONS TO PERMIT THE CONSTRUCTION OF THIS SECTION WITH THE LEAST INCONVENIENCE TO THE TRAVELING PUBLIC. THE CONTRACTOR'S SCHEDULE SHALL REFLECT THE FOLLOWING REQUIREMENTS AND SEQUENCE OF CONSTRUCTION. THESE REQUIREMENTS FOLLOW THE SUGGESTED TRAFFIC CONTROL PLAN INCLUDED IN THE DRAWINGS.

1. BOLCUM ROAD MAY BE COMPLETELY CLOSED TO TRAFFIC FOR THE DURATION SPECIFIED IN THE CONTRACT DOCUMENTS.
2. ACCESS TO FIELD AND PRIVATE ENTRANCES SHALL REMAIN OPEN AT ALL TIMES. ON PROPERTIES THAT HAVE MORE THAN ONE ACCESS, ONE ENTRANCE MAY BE TEMPORARILY CLOSED. HOWEVER, VEHICULAR ACCESS MUST REMAIN OPEN TO TRAFFIC FOR THE OPPOSITE ENTRANCE. WHEN IT IS NECESSARY TO CLOSE AN ENTRANCE, THE CONTRACTOR SHALL COORDINATE WITH THE RESIDENT ENGINEER AND THE PROPERTY OWNER FORTY-EIGHT (48) HOURS IN ADVANCE OF THE WORK. IN ALL CASES, THE ENTRANCE SHALL BE OPEN AT THE END OF THE WORKDAY.

**TRAILER MOUNTED ARROW BOARD**

UNLESS OTHERWISE REQUIRED BY A SPECIFIED TRAFFIC CONTROL STANDARD, THE USE OF A TRAILER MOUNTED ARROW BOARD(S) ARE NOT ANTICIPATED FOR THIS PROJECT.

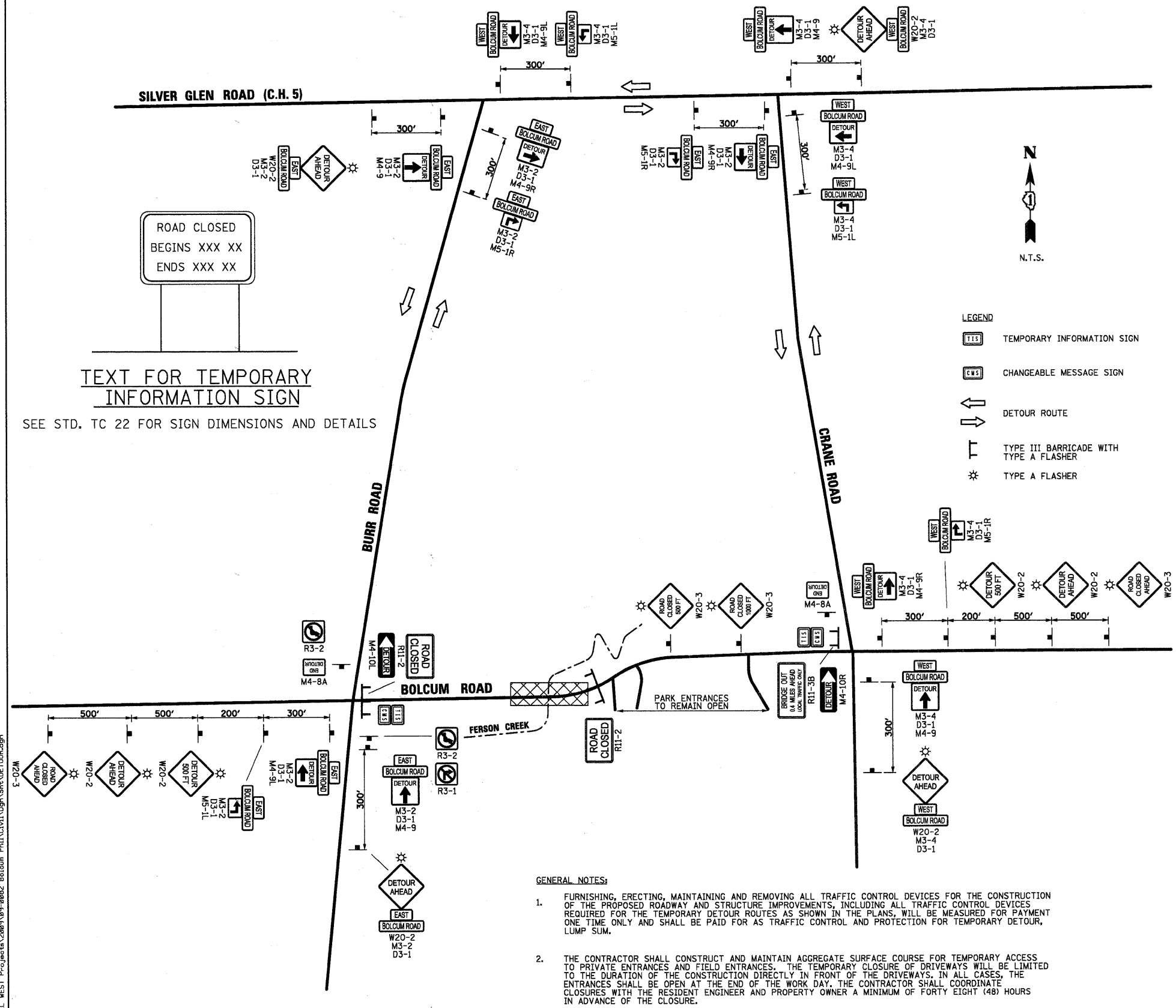
**SEQUENCE OF CONSTRUCTION**

IN GENERAL, THE STAGING OF CONSTRUCTION FOR THIS SECTION SHALL BE AS FOLLOWS:

- MAJOR WORK ITEMS - STAGE 1 BOLCUM ROAD**
- COORDINATE UTILITY RELOCATES.
  - SET UP CHANGEABLE MESSAGE BOARD.
  - SET UP DETOUR AS DETAILED IN THE PLANS.
  - SET UP TEMPORARY EROSION CONTROL MEASURES.
  - REMOVE EXISTING VEGETATION, PAVEMENTS, AND BRIDGE STRUCTURE (SEE REMOVAL PLANS SHEETS).
  - CONSTRUCT THE PROPOSED BRIDGE, SUBGRADE, AGGREGATE BASE COURSES, PAVEMENTS (TO SURFACE), AND UNDERDRAINS.
  - CONSTRUCT GUARDRAILS AND SIGNAGE.

**MAJOR WORK ITEMS - STAGE 2 - RESTORATION**

- THESE ITEMS MAY TAKE PLACE AFTER THE ROADWAY IS OPEN TO TRAFFIC.
- PLACE PERMANENT RESTORATION.
  - PLACE PERMANENT PAVEMENT MARKINGS.
  - FINALIZE PUNCH LIST AND SITE CLEANUP.



ROAD CLOSED  
BEGINS XXX XX  
ENDS XXX XX

TEXT FOR TEMPORARY  
INFORMATION SIGN

SEE STD. TC 22 FOR SIGN DIMENSIONS AND DETAILS

- LEGEND**
- TIS TEMPORARY INFORMATION SIGN
  - EMS CHANGEABLE MESSAGE SIGN
  - DETOUR ROUTE
  - TYPE III BARRICADE WITH TYPE A FLASHER
  - TYPE A FLASHER

**GENERAL NOTES:**

1. FURNISHING, ERECTING, MAINTAINING AND REMOVING ALL TRAFFIC CONTROL DEVICES FOR THE CONSTRUCTION OF THE PROPOSED ROADWAY AND STRUCTURE IMPROVEMENTS, INCLUDING ALL TRAFFIC CONTROL DEVICES REQUIRED FOR THE TEMPORARY DETOUR ROUTES AS SHOWN IN THE PLANS, WILL BE MEASURED FOR PAYMENT ONE TIME ONLY AND SHALL BE PAID FOR AS TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR, LUMP SUM.
2. THE CONTRACTOR SHALL CONSTRUCT AND MAINTAIN AGGREGATE SURFACE COURSE FOR TEMPORARY ACCESS TO PRIVATE ENTRANCES AND FIELD ENTRANCES. THE TEMPORARY CLOSURE OF DRIVEWAYS WILL BE LIMITED TO THE DURATION OF THE CONSTRUCTION DIRECTLY IN FRONT OF THE DRIVEWAYS. IN ALL CASES, THE ENTRANCES SHALL BE OPEN AT THE END OF THE WORK DAY. THE CONTRACTOR SHALL COORDINATE CLOSURES WITH THE RESIDENT ENGINEER AND PROPERTY OWNER A MINIMUM OF FORTY EIGHT (48) HOURS IN ADVANCE OF THE CLOSURE.

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**WILLS BURKE KELSEY ASSOCIATES LTD.**  
116 West Main Street, Suite 201  
St. Charles, Illinois 60174

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| PLOT DATE = 10/21/2010 | CHECKED -       | REVISED - |
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

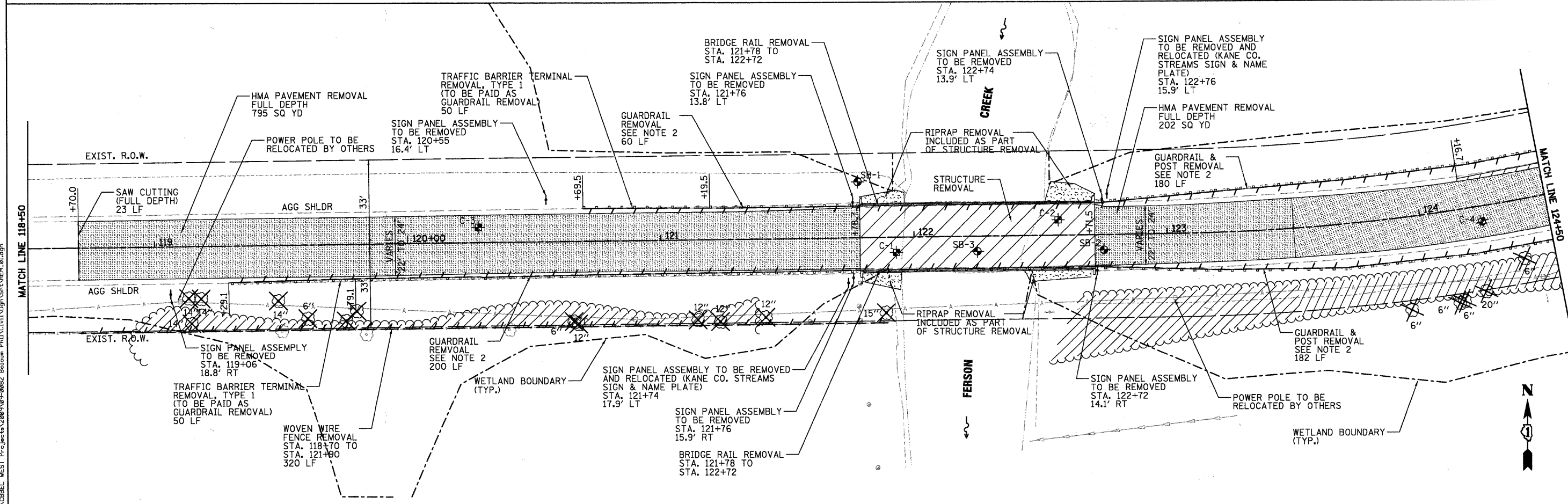
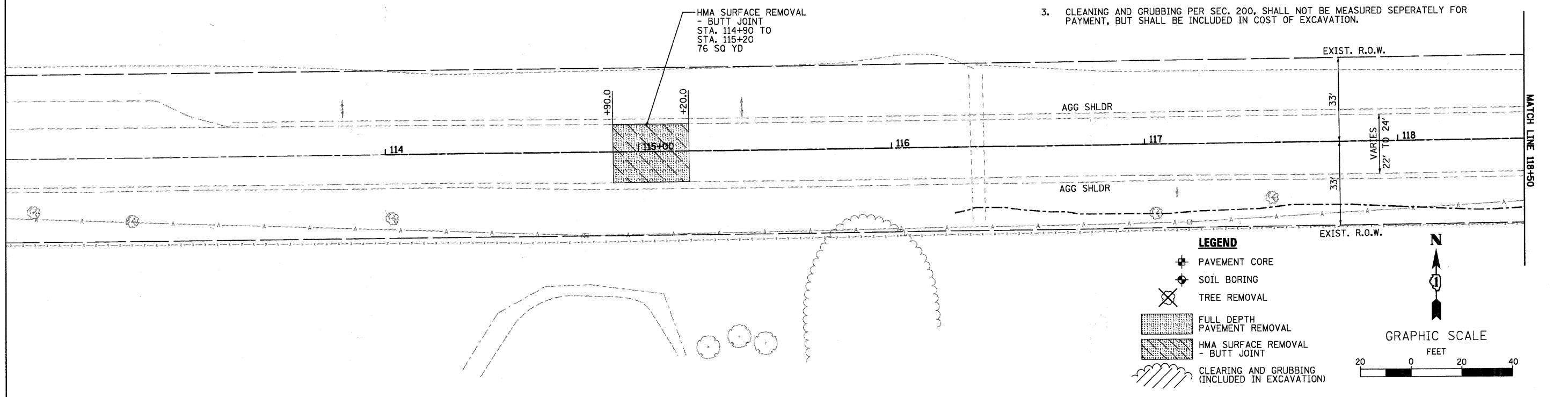
**MAINTENANCE OF TRAFFIC  
DETOUR PLAN**

|        |                           |              |
|--------|---------------------------|--------------|
| SCALE: | SHEET NO. 13 OF 73 SHEETS | STA. TO STA. |
|--------|---------------------------|--------------|

|   |                |        |              |           |
|---|----------------|--------|--------------|-----------|
| F.A.U. RTE.                                       | SECTION        | COUNTY | TOTAL SHEETS | SHEET NO. |
| 2332  | 03-14185-02-BR | KANE   | 73           | 13        |
| CONTRACT NO. 63521                                |                |        |              |           |
| FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT |                |        |              |           |

**NOTES:**

1. ALL REMOVED SIGN PANELS SHALL REMAIN THE PROPERTY OF THE ST. CHARLES TOWNSHIP. ONCE PANELS HAVE BEEN REMOVED THE CONTRACTOR WILL RETURN THEM TO A LOCATION SPECIFIED BY THE TOWNSHIP.
2. ALL GUARDRAIL, POSTS AND TERMINAL SECTIONS SHALL BE REMOVED AND SALVAGED. ALL MATERIALS SHALL BE RETURNED TO A LOCATION SPECIFIED BY ST. CHARLES TOWNSHIP. ANY MATERIAL DAMAGED BY THE CONTRACTOR SHALL BE REPLACED AT CONTRACTORS EXPENSE.
3. CLEANING AND GRUBBING PER SEC. 200, SHALL NOT BE MEASURED SEPERATELY FOR PAYMENT, BUT SHALL BE INCLUDED IN COST OF EXCAVATION.



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**WILLIS BURKE KELSEY ASSOCIATES LTD.**  
 110 West Main Street, Suite 201  
 St. Charles, Illinois 60174

|                        |                 |           |
|------------------------|-----------------|-----------|
| USER NAME = #USER#     | DESIGNED -      | REVISED - |
| PLOT SCALE =           | DRAWN -         | REVISED - |
| PLOT DATE = 10/21/2010 | CHECKED -       | REVISED - |
|                        | DATE - 10/22/10 | REVISED - |

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**EXISTING CONDITIONS  
 & REMOVAL PLAN**

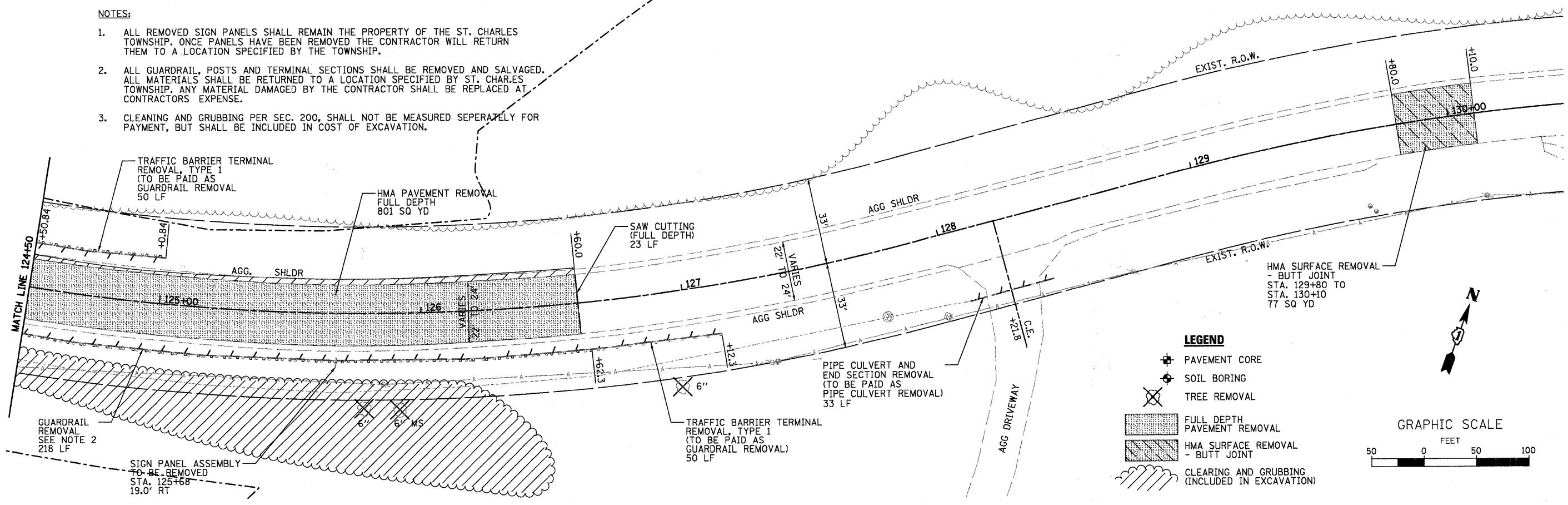
SCALE: SHEET NO. 14 OF 73 SHEETS STA. 118+70 TO STA. 127+12

|   |                        |             |                 |              |
|---|------------------------|-------------|-----------------|--------------|
| F.A.U. RTE. 2332                                  | SECTION 03-14185-02-BR | COUNTY KANE | TOTAL SHEETS 73 | SHEET NO. 14 |
| FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT |                        |             |                 |              |

CONTRACT NO. 63521

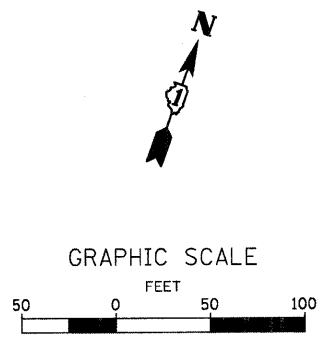
**NOTES:**

1. ALL REMOVED SIGN PANELS SHALL REMAIN THE PROPERTY OF THE ST. CHARLES TOWNSHIP. ONCE PANELS HAVE BEEN REMOVED THE CONTRACTOR WILL RETURN THEM TO A LOCATION SPECIFIED BY THE TOWNSHIP.
2. ALL GUARDRAIL, POSTS AND TERMINAL SECTIONS SHALL BE REMOVED AND SALVAGED. ALL MATERIALS SHALL BE RETURNED TO A LOCATION SPECIFIED BY ST. CHARLES TOWNSHIP. ANY MATERIAL DAMAGED BY THE CONTRACTOR SHALL BE REPLACED AT CONTRACTORS EXPENSE.
3. CLEANING AND GRUBBING PER SEC. 200, SHALL NOT BE MEASURED SEPERATELY FOR PAYMENT, BUT SHALL BE INCLUDED IN COST OF EXCAVATION.



**LEGEND**

- ✦ PAVEMENT CORE
- ⊙ SOIL BORING
- ⊗ TREE REMOVAL
- [Hatched Box] FULL DEPTH PAVEMENT REMOVAL
- [Diagonal Lines Box] HMA SURFACE REMOVAL - BUTT JOINT
- [Wavy Lines Box] CLEARING AND GRUBBING (INCLUDED IN EXCAVATION)

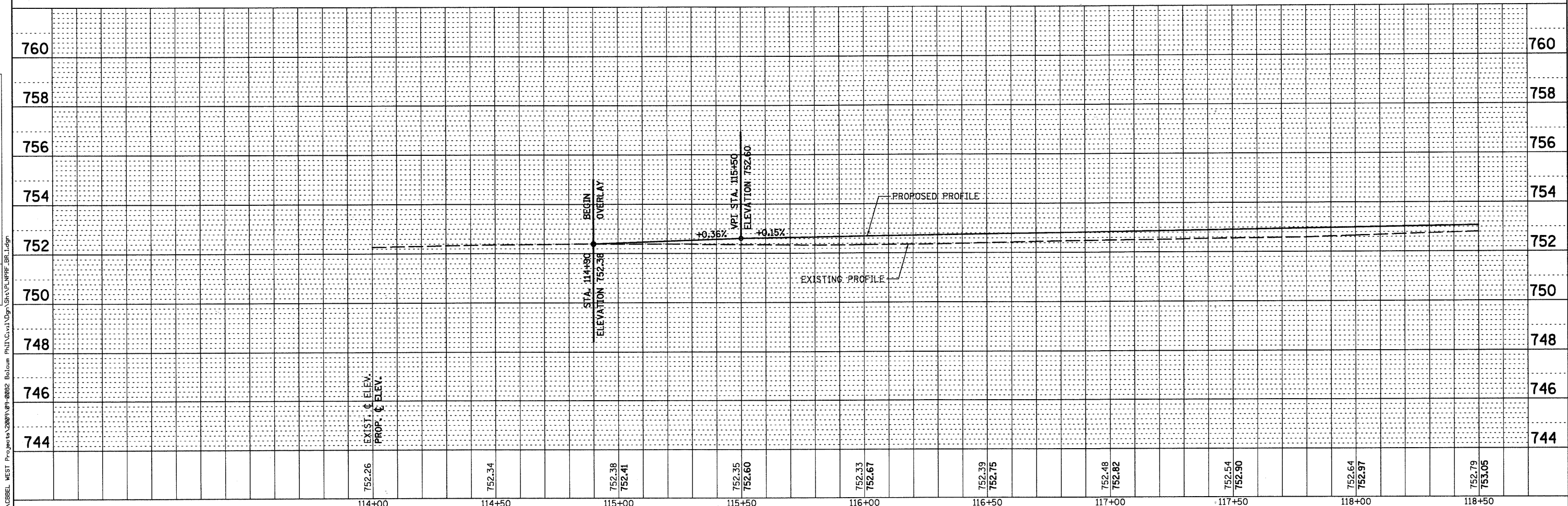
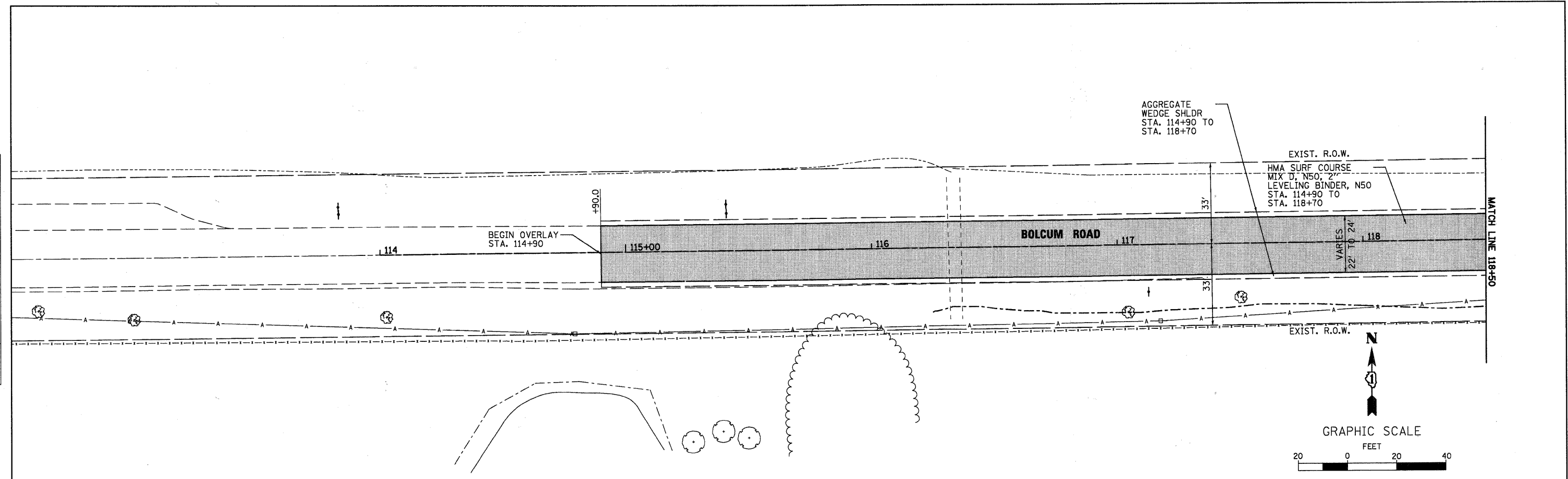


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| <b>WILLS BURKE KELSEY ASSOCIATES LTD.</b><br>116 West Main Street, Suite 201<br>St. Charles, Illinois 60174 | USER NAME = #USER# | DESIGNED - | REVISED - | <b>STATE OF ILLINOIS</b><br><b>DEPARTMENT OF TRANSPORTATION</b> | <b>EXISTING CONDITIONS</b><br><b>&amp; REMOVAL PLAN</b> | F.A.J. RTE.                                     | SECTION        | COUNTY             | TOTAL SHEETS | SHEET NO. |  |
|   | PLOT SCALE =       | CHECKED -  | REVISED - |   |   | 2332  | 03-14185-02-BR | KANE               | 73           | 15        |  |
| PLOT DATE = 10/21/2010  | DATE = 10/22/10    | REVISED -  | REVISED - |   |   | SCALE: SHEET NO. 15 OF 73 SHEETS STA. TO STA.   |                | CONTRACT NO. 63521 |              |           |  |
|   |                    |            |           |   |   | FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |                |                    |              |           |  |

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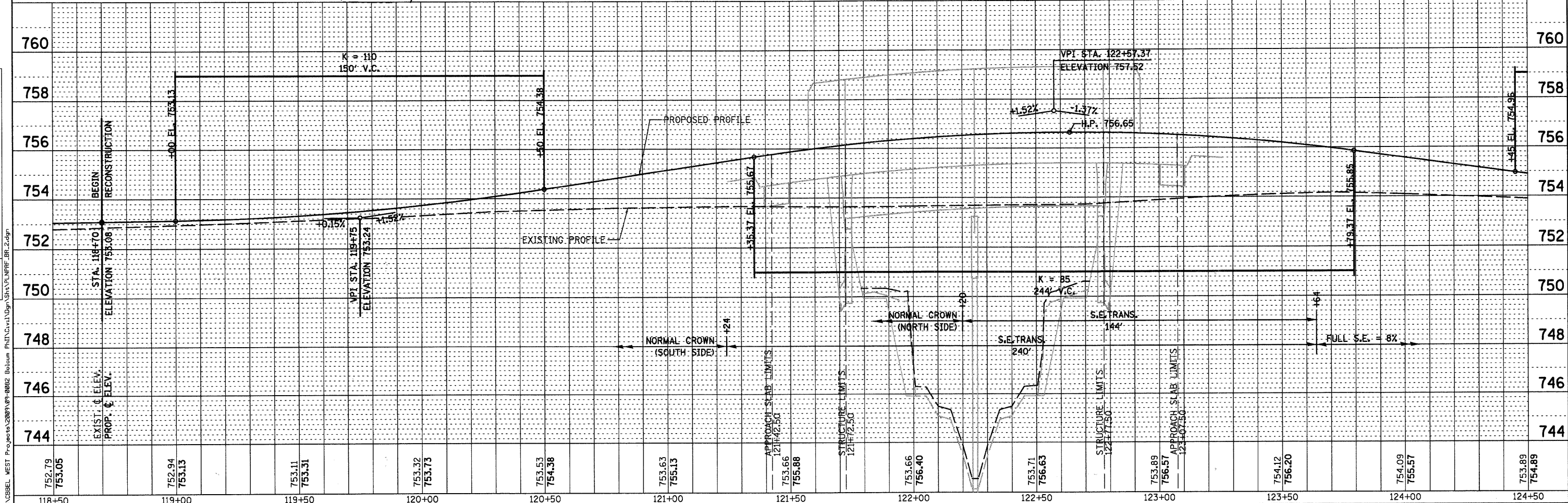
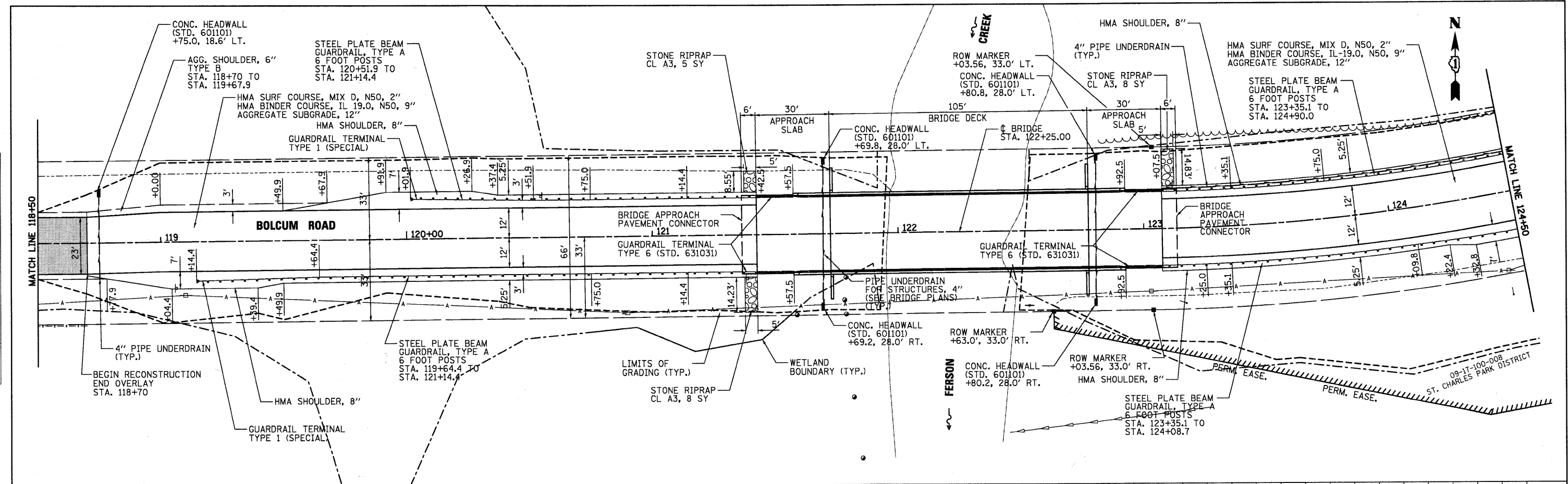
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| <b>WILLS BURKE KELSEY ASSOCIATES LTD.</b><br>110 West Main Street, Suite 201<br>St. Charles, Illinois 60174 | USER NAME = #USER#      | DESIGNED -      | REVISED - | <b>STATE OF ILLINOIS</b><br><b>DEPARTMENT OF TRANSPORTATION</b> | <b>PLAN &amp; PROFILE</b>                                   |                |      | F.A.U. RTE.        | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|   | PLLOT SCALE =           | CHECKED -       | REVISED - |   | 2332  | 03-14185-02-BR | KANE | 73                 | 16      |        |              |           |
|   | PLLOT DATE = 10/21/2010 | DATE - 10/22/10 | REVISED - |   | SCALE: SHEET NO. 16 OF 73 SHEETS STA. 118+70 TO STA. 123+50 |                |      | CONTRACT NO. 63521 |         |        |              |           |
|   |                         |                 |           |   | FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT           |                |      |                    |         |        |              |           |

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| PROFILE | REVIEWED | DATE |
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**WILLS BURKE KELSEY ASSOCIATES LTD.**  
 115 West Main Street, Suite 201  
 St. Charles, Illinois 60174

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| USER NAME = #USER#     | DESIGNED -      | REVISED - |
| PLOT SCALE =           | DRAWN -         | REVISED - |
| PLOT DATE = 10/21/2010 | CHECKED -       | REVISED - |
|                        | DATE = 10/22/10 | REVISED - |

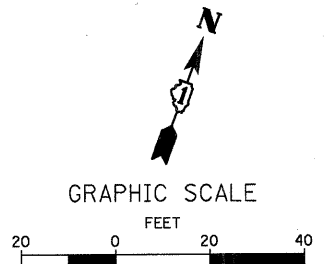
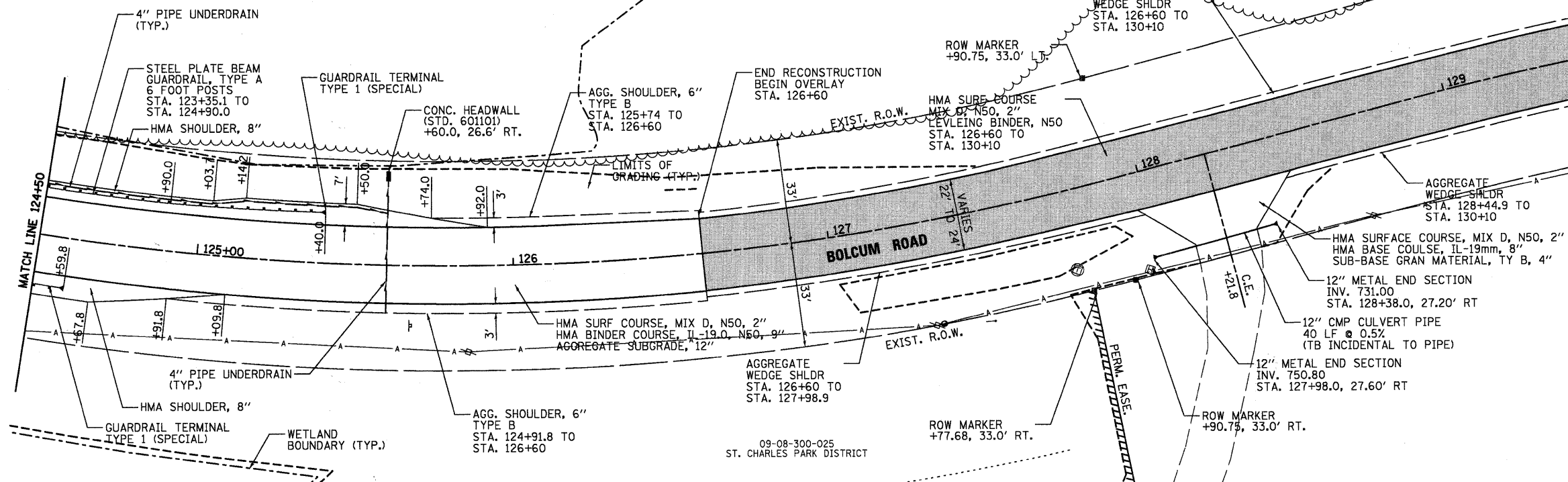
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

|                           |                           |                            |
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| <b>PLAN &amp; PROFILE</b> |                           |                            |
| SCALE:                    | SHEET NO. 17 OF 73 SHEETS | STA. 123+50 TO STA. 126+60 |

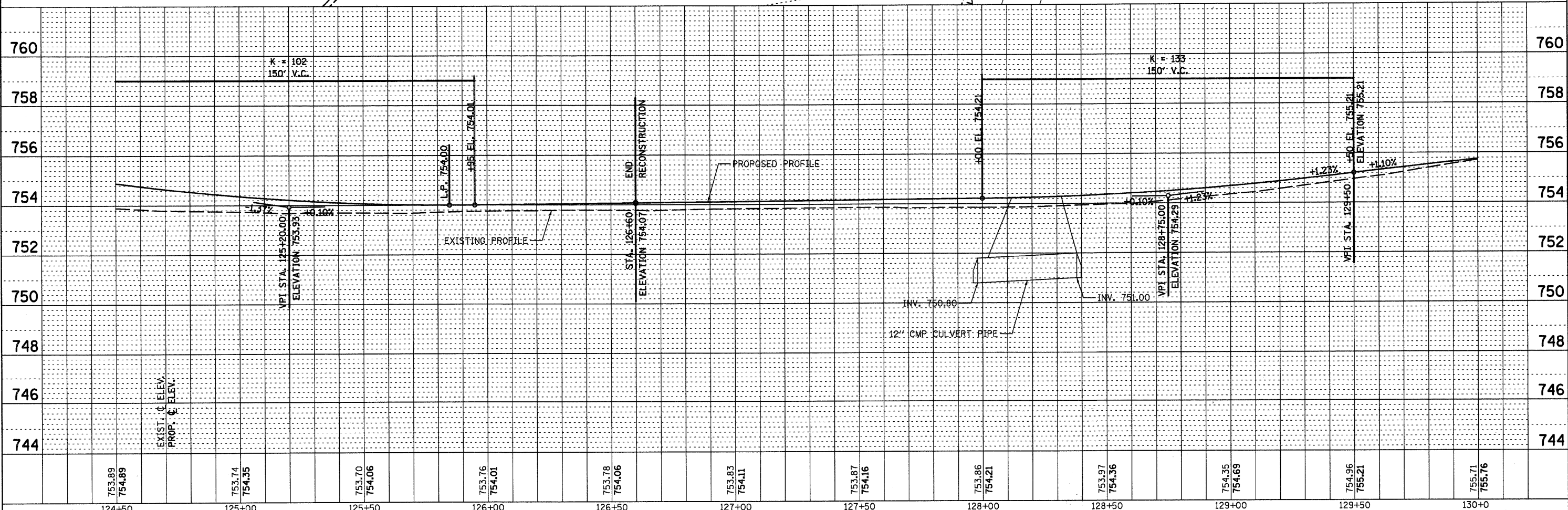
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|---|------------------------|-------------|-----------------|--------------|
| F.A.U. RTE. 2332                                | SECTION 03-14185-02-BR | COUNTY KANE | TOTAL SHEETS 73 | SHEET NO. 17 |
| CONTRACT NO. 63521                              |                        |             |                 |              |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |                        |             |                 |              |

09-08-300-014  
FOREST PRESERVE DISTRICT  
OF KANE COUNTY

|            |  |
|------------|--|
| DATE       |  |
| BY         |  |
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| DATE       |  |
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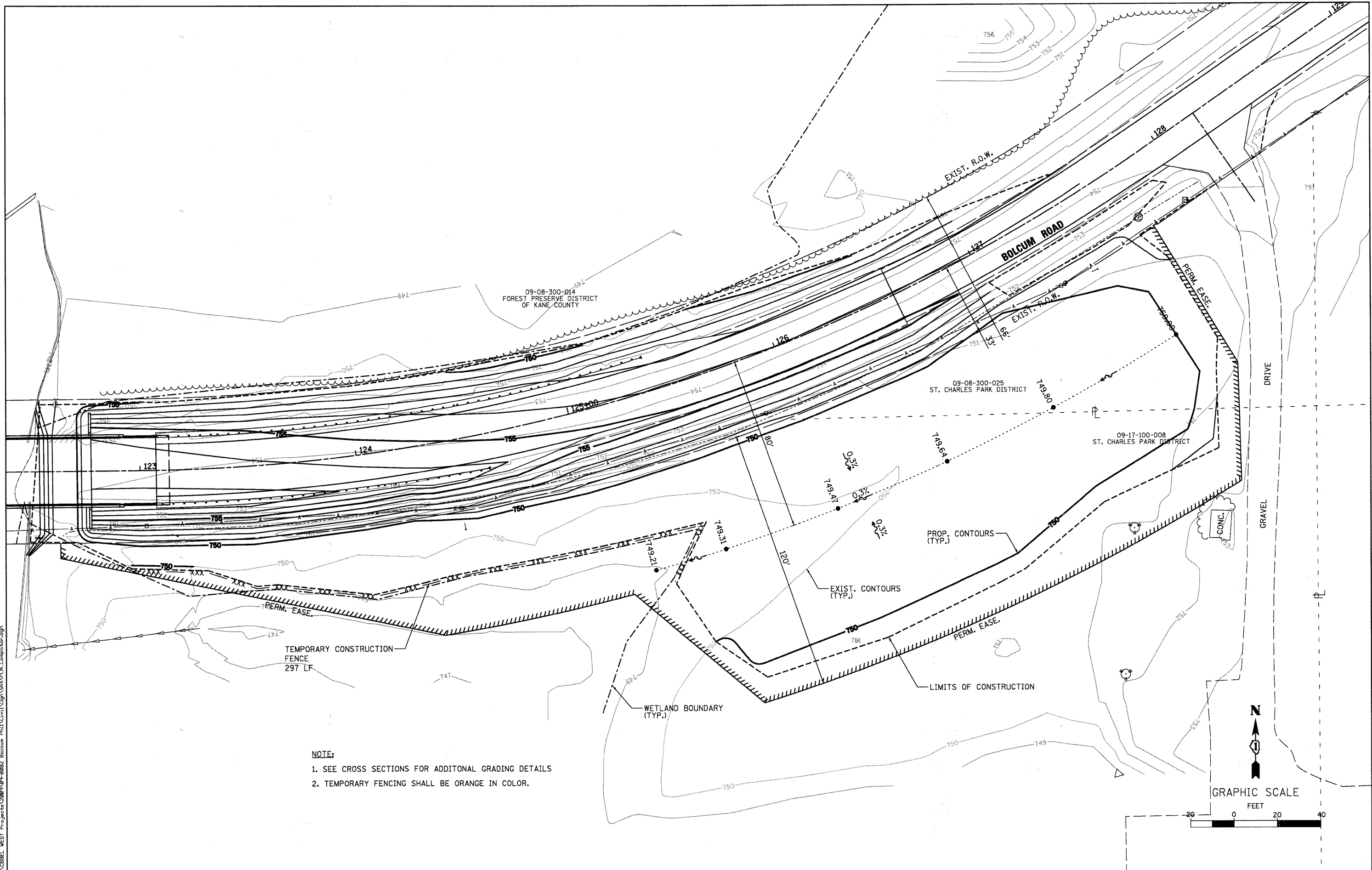
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|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| 124+50           | 125+00           | 125+50           | 126+00           | 126+50           | 127+00           | 127+50           | 128+00           | 128+50           | 129+00           | 129+50           | 130+00           |
| 753.89<br>754.89 | 753.74<br>754.35 | 753.70<br>754.06 | 753.76<br>754.01 | 753.78<br>754.06 | 753.83<br>754.11 | 753.87<br>754.16 | 753.86<br>754.21 | 753.97<br>754.36 | 754.35<br>754.69 | 754.96<br>755.21 | 755.71<br>755.76 |

|                           |                 |           |   |                           |                |                    |
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| USER NAME = #USER#        | DESIGNED -      | REVISED - | STATE OF ILLINOIS<br>DEPARTMENT OF TRANSPORTATION |                           | PLAN & PROFILE |                    |
| DRAWN -                   | CHECKED -       | REVISED - | SCALE:  | SHEET NO. 18 OF 73 SHEETS | STA. TO STA.   | F.A.U. R.T.E. 2332 |
| PLotted SCALE =           | DATE - 10/22/10 | REVISED - | SECTION 03-14185-02-BR                            |                           |                |                    |
| PLotted DATE = 10/21/2010 |                 |           | COUNTY KANE                                       |                           |                |                    |
|                           |                 |           | TOTAL SHEETS 73                                   |                           |                |                    |
|                           |                 |           | SHEET NO. 18                                      |                           |                |                    |
|                           |                 |           | CONTRACT NO. 63521                                |                           |                |                    |
|                           |                 |           | FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT   |                           |                |                    |

**WILLS BURKE KELSEY ASSOCIATES LTD.**  
118 West Main Street, Suite 201  
St. Charles, Illinois 60174



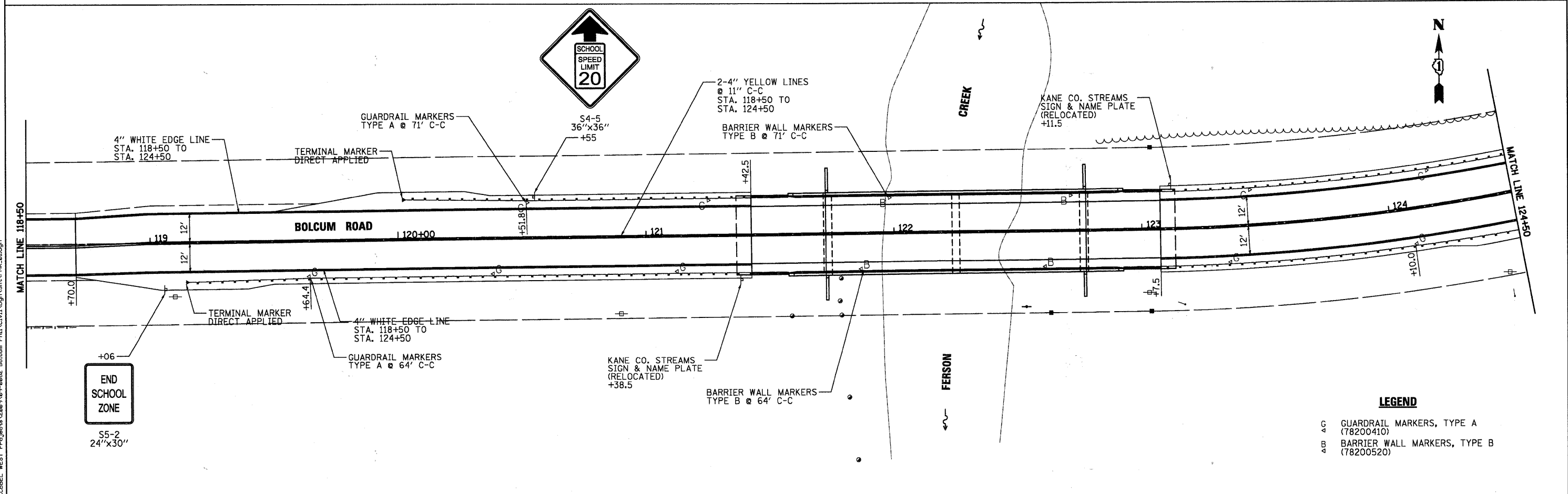
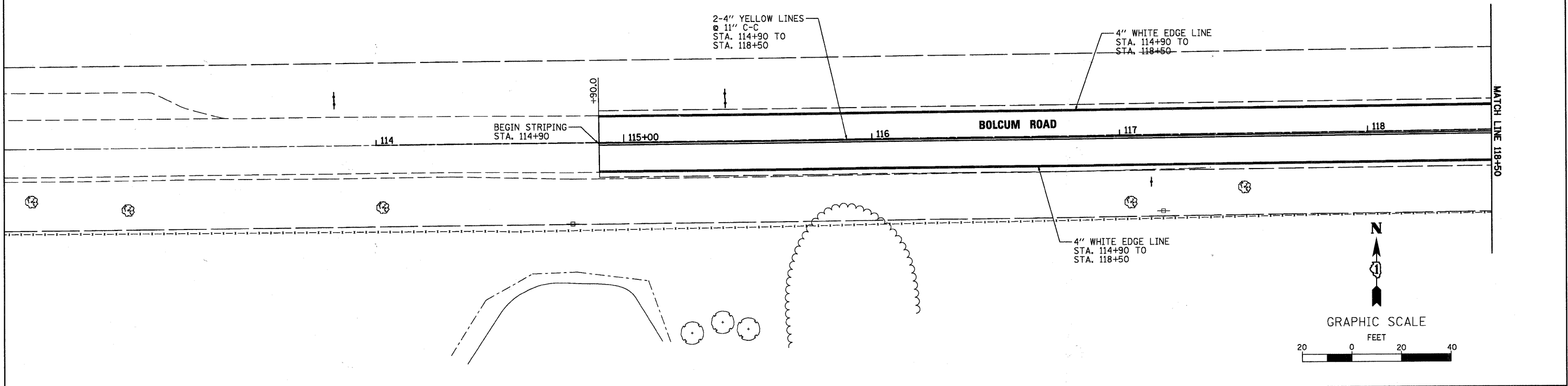
**NOTE:**  
 1. SEE CROSS SECTIONS FOR ADDITIONAL GRADING DETAILS  
 2. TEMPORARY FENCING SHALL BE ORANGE IN COLOR.

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|---|------------------------|-----------------|-----------|---|--|--|---------------------|---------------------------|----------------|---|-----------------|
| <b>WILLS BURKE KELSEY ASSOCIATES LTD.</b><br>118 West Main Street, Suite 201<br>St. Charles, Illinois 60174 | USER NAME = #USER#     | DESIGNED -      | REVISED - | <b>STATE OF ILLINOIS</b><br><b>DEPARTMENT OF TRANSPORTATION</b> | <b>COMPENSATORY STORAGE</b><br><b>GRADING PLAN</b> |  | F.A.U. RTE.<br>2332 | SECTION<br>03-14185-02-BR | COUNTY<br>KANE | TOTAL SHEETS<br>73                                | SHEET NO.<br>19 |
|   | PLOT SCALE =           | CHECKED -       | REVISED - |   |  |  | CONTRACT NO. 63521  |                           |                |   |                 |
|   | PLOT DATE = 10/21/2010 | DATE = 10/22/10 | REVISED - |   |  |  | SCALE:              | SHEET NO. 19 OF 73 SHEETS | STA. TO STA.   | FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT |                 |

**NOTES:**

1. ALL SIGN POSTS SHALL BE NEW AND SHALL BE MADE OF WOOD PER SECTION 703 OF THE STANDARD SPECIFICATIONS.
2. PAVEMENT MARKINGS SHALL BE THERMOPLASTIC ON ALL SURFACES.

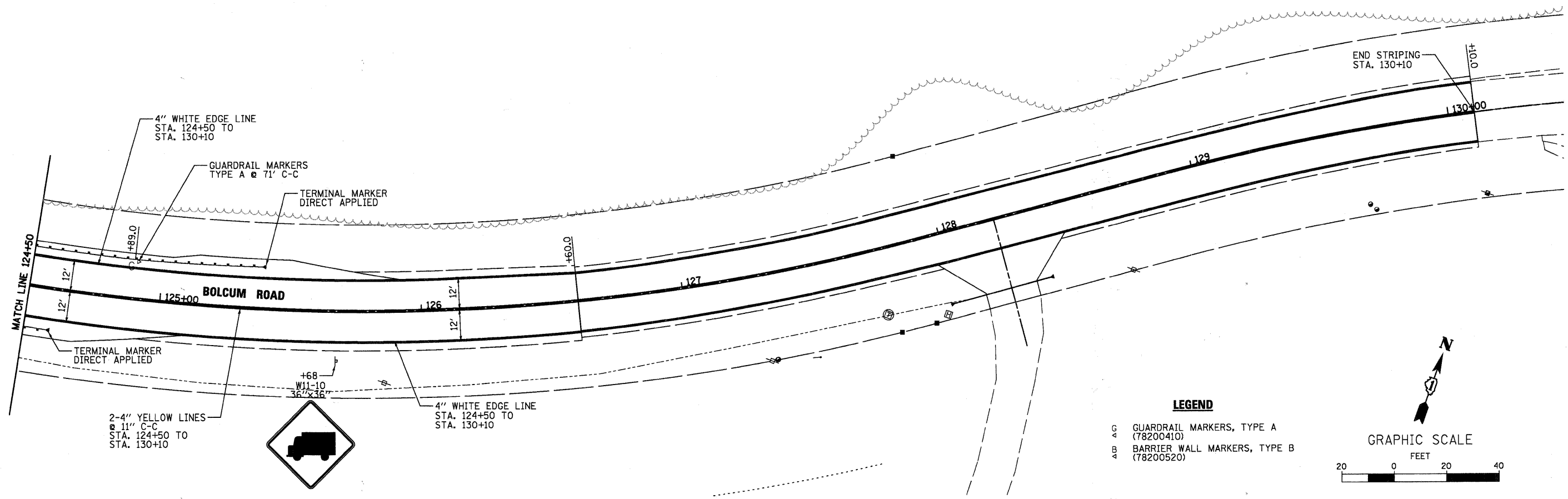


**LEGEND**

- G GUARDRAIL MARKERS, TYPE A (78200410)
- B BARRIER WALL MARKERS, TYPE B (78200520)

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| <b>WILLS BURKE KELSEY ASSOCIATES LTD.</b><br>116 West Main Street, Suite 201<br>St. Charles, Illinois 60174 | USER NAME = #USER#     | DESIGNED -      | REVISED - | <b>STATE OF ILLINOIS</b><br><b>DEPARTMENT OF TRANSPORTATION</b> | <b>PAVEMENT MARKING &amp; SIGNING PLAN</b> |                           | F.A.J. RTE. 2332 | SECTION 03-14185-02-BR                          | COUNTY KANE | TOTAL SHEETS 73    | SHEET NO. 20 |
|   | PLOT SCALE =           | CHECKED -       | REVISED - |   | SCALE:                                     | SHEET NO. 20 OF 73 SHEETS | STA. TO STA.     | FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |             | CONTRACT NO. 63521 |              |
|   | PLOT DATE = 10/21/2010 | DATE = 10/22/10 | REVISED - |   |  |                           |                  |   |             |                    |              |



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**WBK** WILLS BURKE KELSEY ASSOCIATES LTD.  
116 West Main Street, Suite 201  
St. Charles, Illinois 60174

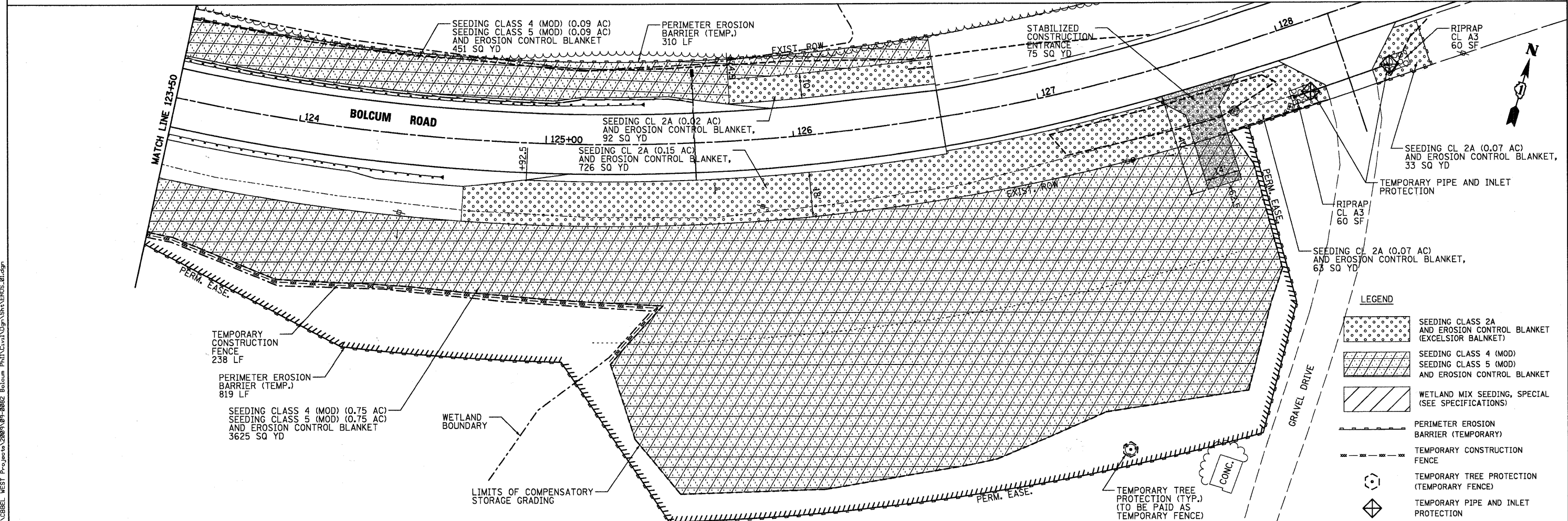
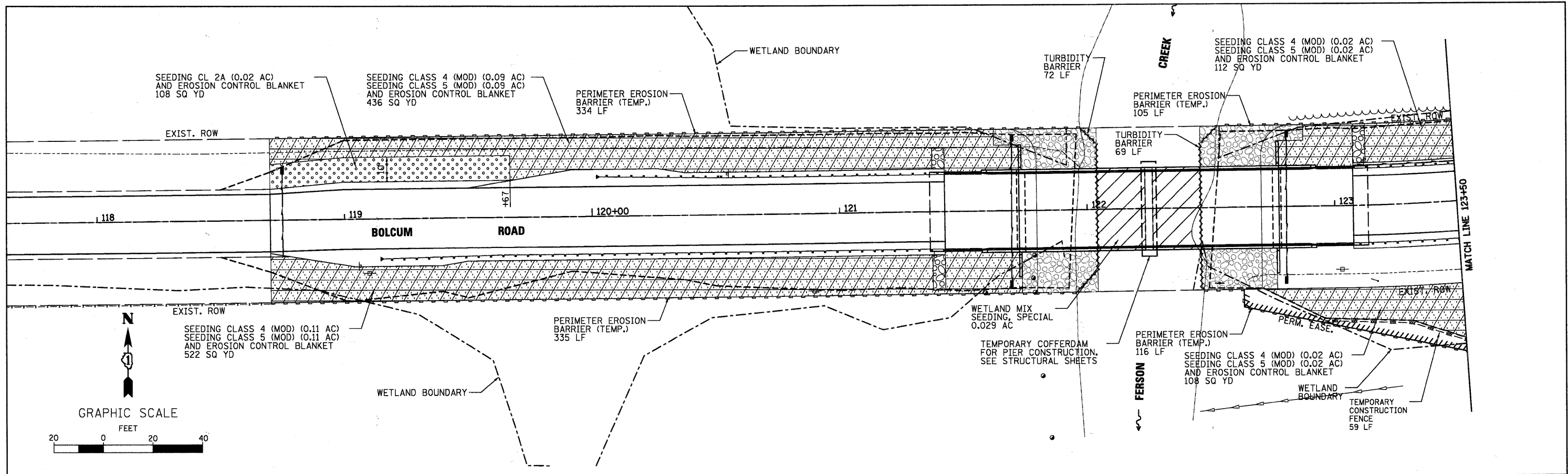
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| USER NAME = #USER#     | DESIGNED -      | REVISED - |
| PLOT SCALE =           | DRAWN -         | REVISED - |
| PLOT DATE = 10/21/2010 | CHECKED -       | REVISED - |
|                        | DATE = 10/22/10 | REVISED - |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PAVEMENT MARKING  
& SIGNING PLAN**

SCALE: SHEET NO. 21 OF 73 SHEETS STA. TO STA.

|   |                |        |                    |           |
|---|----------------|--------|--------------------|-----------|
| F.A.U. RTE.                                     | SECTION        | COUNTY | TOTAL SHEETS       | SHEET NO. |
| 2332  | 03-14185-02-BR | KANE   | 73                 | 21        |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |                |        | CONTRACT NO. 63521 |           |



**LEGEND**

|  |   |
|--|---|
|  | SEEDING CLASS 2A AND EROSION CONTROL BLANKET (EXCELSIOR BALKNET)        |
|  | SEEDING CLASS 4 (MOD) SEEDING CLASS 5 (MOD) AND EROSION CONTROL BLANKET |
|  | WETLAND MIX SEEDING, SPECIAL (SEE SPECIFICATIONS)                       |
|  | PERIMETER EROSION BARRIER (TEMPORARY)                                   |
|  | TEMPORARY CONSTRUCTION FENCE  |
|  | TEMPORARY TREE PROTECTION (TEMPORARY FENCE)                             |
|  | TEMPORARY PIPE AND INLET PROTECTION                                     |

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**WILLS BURKE KELSEY ASSOCIATES LTD.**  
 118 West Main Street, Suite 201  
 St. Charles, Illinois 60114

|                        |                 |           |
|------------------------|-----------------|-----------|
| USER NAME = #USER#     | DESIGNED -      | REVISED - |
| PLOT SCALE =           | DRAWN -         | REVISED - |
| PLOT DATE = 10/21/2010 | CHECKED -       | REVISED - |
|                        | DATE = 10/22/10 | REVISED - |

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**EROSION CONTROL PLAN**

SCALE: SHEET NO. 22 OF 73 SHEETS STA. TO STA.

|   |                        |             |                 |              |
|---|------------------------|-------------|-----------------|--------------|
| F.A.U. RTE. 2332                                  | SECTION 03-14185-02-BR | COUNTY KANE | TOTAL SHEETS 73 | SHEET NO. 22 |
| CONTRACT NO. 63521                                |                        |             |                 |              |
| FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT |                        |             |                 |              |

**EROSION CONTROL INSPECTION**

ALL EROSION CONTROL MEASURES MUST BE INSPECTED WEEKLY AND AFTER EACH 1/2" RAIN EVENT.

**WINTER SHUT DOWN**

A WINTER SHUT DOWN IS NOT ANTICIPATED FOR THIS PROJECT. BUT IN THE EVENT THAT UNAVOIDABLE CIRCUMSTANCE REQUIRE A WINTER SHUT DOWN, THE CONDITION OF THE CONSTRUCTION SITE FOR WINTER SHUTDOWN SHALL BE ADDRESSED EARLY IN THE FALL GROWING SEASON SO THAT SLOPES AND OTHER BARE EARTH AREAS MAY BE STABILIZED WITH TEMPORARY AND/OR PERMANENT VEGETATIVE COVER FOR PROPER EROSION AND SEDIMENT CONTROL. ALL OPEN AREAS THAT ARE TO REMAIN IDLE THROUGHOUT THE WINTER SHALL RECEIVE TEMPORARY EROSION CONTROL MEASURES INCLUDING TEMPORARY SEEDING, MULCHING AND/OR EROSION CONTROL BLANKET PRIOR TO THE END OF THE FALL GROWING SEASON. THE AREAS TO BE WORKED BEYOND THE END OF THE GROWING SEASON MUST INCORPORATE SOIL STABILIZATION MEASURES THAT DO NOT RELY ON VEGETATIVE COVER SUCH AS EROSION CONTROL BLANKET AND HEAVY MULCHING.

**TEMPORARY DITCH CHECKS**

THE PLANS HAVE A PLAN ALLOWANCE FOR FIVE (5) TEMPORARY DITCH CHECKS. THE DITCH CHECKS WILL BE REQUIRED AT THOSE LOCATIONS WHERE THE CONTRACTORS OPERATIONS REQUIRE TEMPORARY DITCHES OR SWALES. THE EXACT LOCATION WILL BE COORDINATED IN THE FIELD WITH THE ENGINEER.

**PROTECTING STOCK PILE AREAS**

CONTRACTOR MAY OPT TO STOCK PILES MATERIALS. STAGING OF THE PROJECT IS AT HIS DISCRETION AND COORDINATION OF STOCK PILES WILL BE WITH RE, TOWNSHIP AND KANE-DUPAGE. STOCKPILES OF SOIL AND OTHER BUILDING MATERIALS TO REMAIN IN PLACE MORE THAN THREE (3) DAYS SHALL BE FURNISHED WITH EROSION AND SEDIMENT CONTROL MEASURES (I.E. PERIMETER SILT FENCE). STOCKPILES, NOT BEING ACTIVITY WORKED AND TO REMAIN IN PLACE FOR 14 DAYS OR MORE SHALL RECEIVE TEMPORARY SEEDING.

**KEEPING PAVEMENTS CLEAN**

THE CONTRACTOR WILL KEEP ALL PERMANENT PAVEMENT SURFACES CLEAN OF DIRT OR CONSTRUCTION DEBRIS. THE PAVEMENT SHALL BE CLEANED AT THE END OF EACH DAYS OPERATION OR MORE FREQUENTLY AS REQUIRED BY THE ENGINEER IF THE DEBRIS IS DEEMED TO BE A HAZARD TO THE MOTORING PUBLIC.

**GENERAL NOTES**

- A) UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS IN THE ILLINOIS URBAN MANUAL REVISED FEBRUARY 2002.
- B) THE KANE-DUPAGE SOIL AND WATER CONSERVATION DISTRICT (KDSWCD) MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITIES, AND ONE WEEK PRIOR TO THE FINAL INSPECTION.
- C) A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
- D) PRIOR TO COMMENCING LAND-DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING BUT NOT LIMITED TO, ADDITIONAL PHASES OF DEVELOPMENT AND OFF-SITE BORROW OR WASTE AREAS) A SUPPLEMENTARY EROSION CONTROL PLAN SHALL BE SUBMITTED TO THE OWNER FOR REVIEW BY THE KDSWCD.
- E) THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE KDSWCD.
- F) DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO SEDIMENT BASINS OR SILT TRAPS. DEWATERING DIRECTLY INTO FIELD TILES OR STORMWATER STRUCTURES IS PROHIBITED.
- G) IT IS THE RESPONSIBILITY OF THE LANDOWNER AND/OR GENERAL CONTRACTOR TO INFORM ANY SUB-CONTRACTOR(S) WHO MAY PERFORM WORK ON THIS PROJECT, OF THE REQUIREMENTS IN IMPLEMENTING AND MAINTAINING THESE EROSION CONTROL PLANS AND THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT REQUIREMENTS SET FORTH BY THE ILLINOIS EPA.

**CONSTRUCTION SEQUENCE NOTES**

- A) CONSTRUCTION OF A PIER, CREEK EBANKMENT AND RIP RAP ARE ANTICIPATED TO REQUIRE WORK WITHIN THE CREEK, WORK MUST BE TIMED TO TAKE PLACE DURING LOW OR NO-FLOW CONDITIONS.
- B) DURING CONSTRUCTION OF THE PIER, CONCENTRATED FLOW MUST BE ISOLATED FROM THE WORK AREA USING A NON-ERODIBLE COFFERDAM (STEEL SHEETS, AQUA BARRIERS, ETC.). EXACT MEANS AND METHODS SHOULD BE DISCUSSED DURING A SCHEDULED PRE-CONSTRUCTION MEETING.
- C) BYPASS IS NOT ANTICIPATED FOR THIS PROJECT. HOWEVER, IF BYPASS IS NECESSARY, THE INLET OF THE HOSE SHALL BE PLACED IN A SUMP PIT AND THE OUTLET PLACED ON A NON-ERODIBLE, ENERGY DISSIPATING SURFACE PRIOR TO REJOINING THE CREEK FLOW.
- D) IF DEWATERING THE CONSTRUCTION AREA IS NECESSARY, ALL WATERS SHALL BE FILTERED BY USING FILTER BAGS OR AN ALTERNATIVE MEASURE. WATER MUST HAVE SEDIMENT REMOVED BEFORE BEING ALLOWED TO RETURN TO THE ORIGINAL CREEK.
- E) THE SIDE SLOPES MUST BE RESEEDED AND STABILIZED WITH AN APPROPRIATE EROSION CONTROL BLANKET PRIOR TO ACCEPTING FLOWS. THE BOTTOM OF THE SWALE MUST BE BROUGHT BACK TO ITS ORIGINAL GRADE AND STABLE ENOUGH TO ACCEPT FLOWS.

**DEWATERING - BASIS OF PAYMENT**

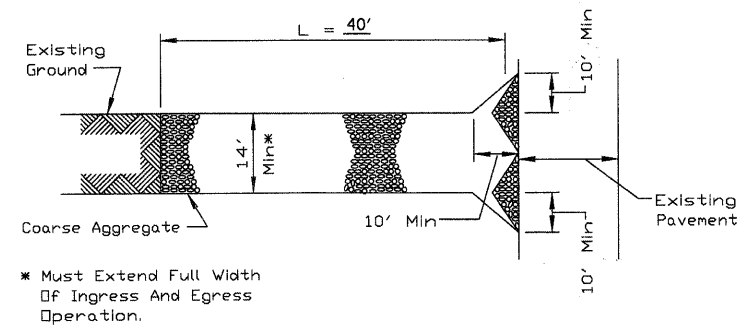
DEWATERING FOR ALL CONSTRUCTION OPERATIONS WILL NOT BE MEASURED SEPERATELY FOR PAYMENT BUT SHALL BE INCLUDED IN THE COST OF CONCRETE STRCUTURES. DEWATERING WILL INCLUDE MEANS, METHODS AND ALL MATERIALS TO DEWATER AND TO PROVIDE FILTRATION OF WATERS BEFORE RE-ENTERING THE CREEK.

| STABILIZATION TYPE      | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEPT. | OCT. | NOV. | DEC. |
|-------------------------|------|------|------|------|-----|------|------|------|-------|------|------|------|
| PERMANENT SEEDING       |      |      |      |      |     | *    | *    | A    |       |      |      |      |
| DORMANT SEEDING         | B    |      |      |      |     |      |      |      |       |      | B    |      |
| TEMPORARY SEEDING       |      |      | C    |      |     |      |      |      |       |      |      |      |
| EROSION CONTROL BLANKET |      |      |      |      |     |      |      | D    |       |      |      |      |

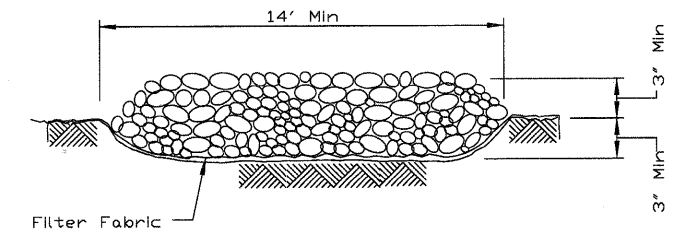
- A. CLASS 2A  
CLASS 4 (MODIFIED)  
CLASS 5 (MODIFIED)
- B. INCREASE SEEDING RATES BY 25% WHEN DORANT SEEDING (NOT ANTICIPATED)
- C. TEMPORARY SEEDING (PERENIAL RYE GRASS, SPRING OATS)
- D. EROSION CONTROL BLANKET (EXCELSIOR) (PERMANENT SEED AREAS ONLY)

\* IRRIGATION MAY BE NEEDED DURING JUNE AND JULY

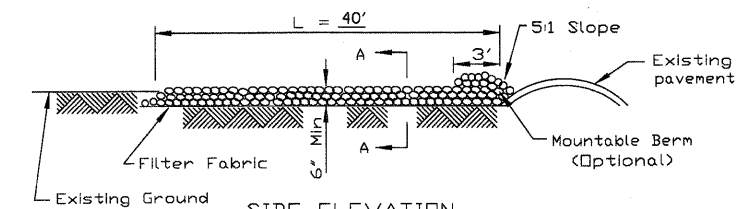
NOTE: SEEDING TO BE COMPLETED PER REQUIREMENTS OF SECTION 250 OF THE IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGES.



PLAN VIEW



SECTION A-A



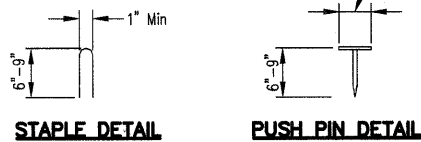
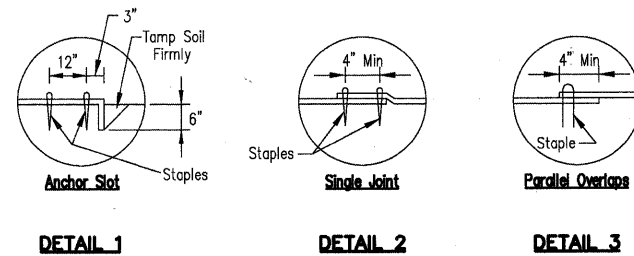
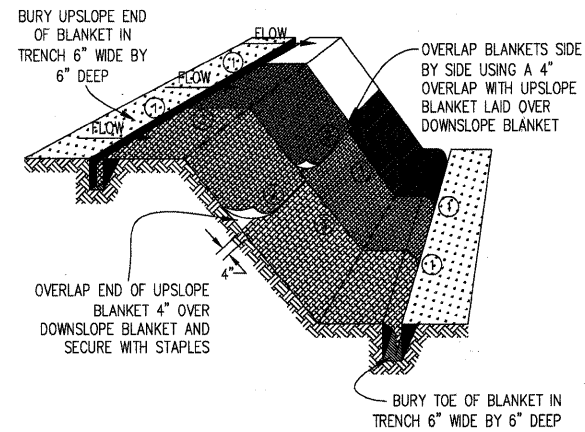
SIDE ELEVATION

**NOTES:**

1. FILTER FABRIC SHALL MEE THE REQUIREMENTS OF SECTION 1080.03 OF THE STANDARD SPECIFICATIONS AND SHALL BE PALCED OVER THE CLEARED SUBGRADE AREA PRIOR TO PLACING THE ROCK.
2. AGGREGATE FILL SHALL MEET ONE OF THE FOLLOWING IDOT COARSE AGGREGATE GRADATIONS, CA-1, CA-2, CA-3 OR CA-4 AND BE PLACED ACCORDING TO SPECIAL PROVISION " STABILIZED CONSTRUCION ENTRANCE.
3. ANY DRAINAGE FACILTIES REQUIRED BECASUE OF WASHING SHALL BE CONSTRCTUCED ACCORDING TO MANUFACTURERS SPECIFICATIONS.
4. IF WASH RACKS ARE USED THEY SHALL BE INSTALLED ACCORDING TO MANUFACTURERS SPECIFICATIONS.

**STABILIZED CONSTRUCTION ENTRANCE PLAN**

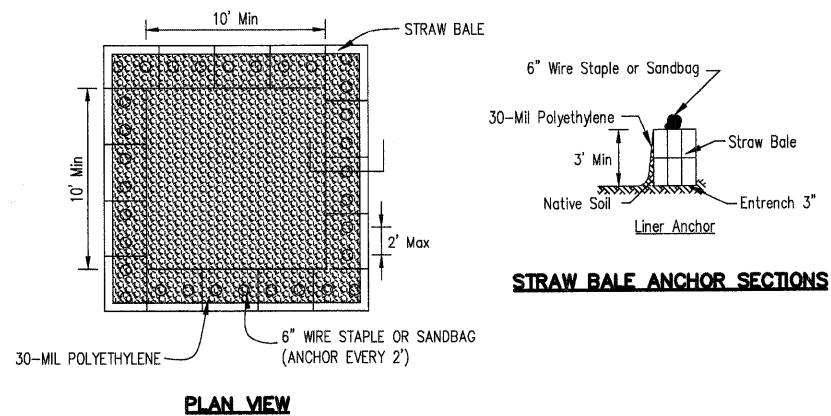
FILE NAME = P:\CBBEL WEST Projects\2009\09-08B2 Baloum PHIT.G.v1\09n\SHA\EROS.02.dgn



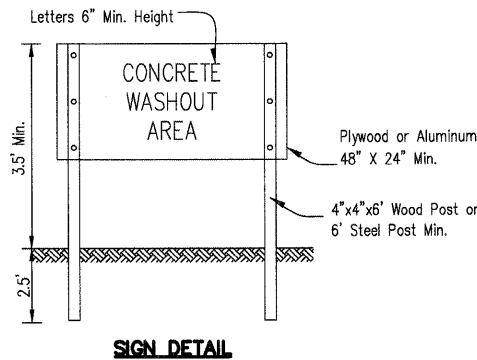
**NOTES:**

1. STAPLES SHALL BE PLACED IN A DIAMOND PATTERN AT 2 PER S.Y. FOR STITCHED BLANKETS. NON-STICHED SHALL USE 4 STAPLES PER S.Y. OF MATERIAL. THIS EQUATES TO 200 STAPLES WITH STITCHED BLANKET AND 400 STAPLES WITH NON-STICHED BLANKET PER 100 S.Y. OF MATERIAL.
2. STAPLE OR PUSH PIN LENGTHS SHALL BE SELECTED BASED ON SOIL TYPE AND CONDITIONS. (MINIMUM STAPLE LENGTH IS 6")
3. EROSION CONTROL MATERIAL SHALL BE PLACED IN CONTACT WITH THE SOIL OVER A PREPARED SEEDBED.
4. ALL ANCHOR SLOTS SHALL BE STAPLED AT APPROXIMATELY 12" INTERVALS.

**EROSION CONTROL  
BLANKET INSTALLATION DETAILS**



**PLAN VIEW**

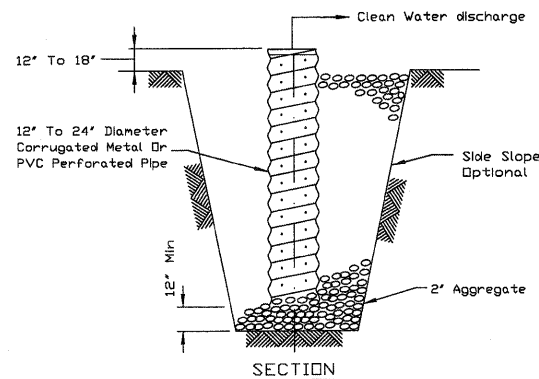


**SIGN DETAIL**

**NOTES:**

1. MAINTAINING TEMPORARY CONCRETE WASHOUT FACILITIES SHALL INCLUDE REMOVING AND DISPOSING OF HARDENED CONCRETE AND/OR SLURRY AND RETURNING THE FACILITIES TO A FUNCTIONAL CONDITION.
2. FACILITY SHALL BE CLEANED OR RECONSTRUCTED IN A NEW AREA ONCE WASHOUT BECOMES TWO-THIRDS FULL.
3. EACH STRAW BALE IS TO BE STAKED IN PLACE USING (2) 2"x2"x4" WOODEN STAKES.

**TEMPORARY CONCRETE  
WASHOUT FACILITY - STRAW BALE**

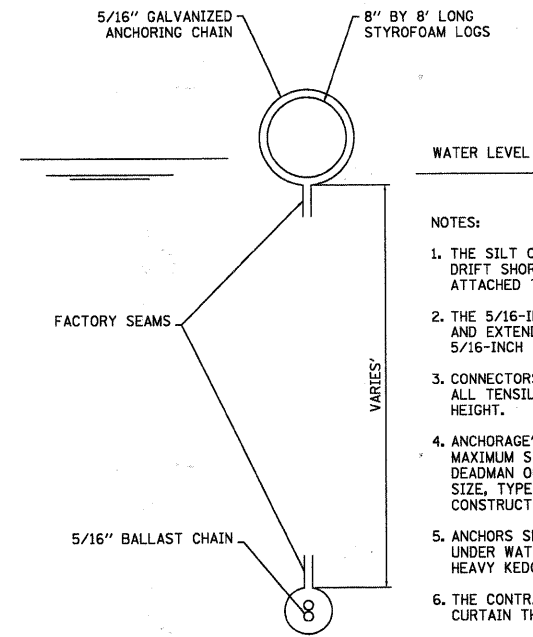


**SECTION**

**NOTES:**

1. PIT DIMENSIONS ARE OPTIONAL.
2. THE STANDPIPE WILL BE CONSTRUCTED BY PERFORATING A 12"-24" DIAMETER CORRUGATED METAL OR PVC PIPE.
3. A BASE OF 2" AGGREGATED WILL BE PLACED IN THE PIT TO A MINIMUM DEPTH OF 12". AFTER INSTALLING THE STANDPIPE, THE PIT SURROUNDING THE STANDPIPE WILL THEN BE BACKFILLED WITH 2" AGGREGATE.
4. THE STANDPIPE WILL EXTEND 12" TO 18" ABOVE THE LIP OF THE PIT.
5. IF DISCHARGE WILL BE PUMPED DIRECTLY TO A STORM DRAINAGE SYSTEM, THE STANDPIPE WILL BE WRAPPED WITH FILTER FABRIC BEFORE INSTALLATION.
6. IF DESIRED, 1/4"-1/2" HARDWARE CLOTH MAY BE PLACED AROUND THE STANDPIPE PRIOR TO ATTACHING THE FILTER FABRIC. THIS WILL INCREASE THE RATE OF WATER SEEPAGE INTO THE PIPE.

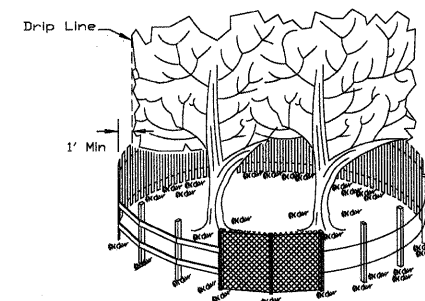
**SUMP PIT PLAN**



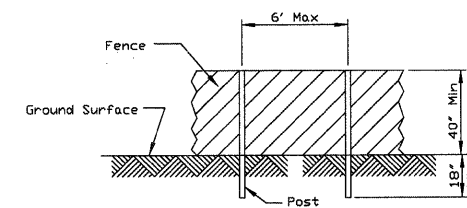
**SECTION  
TRIBIDITY CURTAIN  
(FLOATING SILT CURTAIN)  
N.T.S**

**NOTES:**

1. THE SILT CURTAIN SHALL BE INSTALLED IN SUCH A MANNER AS TO PREVENT DRIFT SHOREWARD OR DOWNSTREAM. THE FLOATATION LOG SHALL BE SECURELY ATTACHED TO THE FABRIC IN BOTH THE HORIZONTAL AND VERTICAL DIRECTION.
2. THE 5/16-INCH CABLE SHALL BE ATTACHED ABOVE THE FLOATATION MEMBERS AND EXTEND THE ENTIRE LENGTH OF EACH SECTION OF SILT CURTAIN. A 5/16-INCH CHAIN SHALL BE SEALED ON THE LOWER HEM FOR BALLAST.
3. CONNECTORS SHALL JOIN THE MAIN LOAD LINE AND BALLAST CHAIN TO CARRY ALL TENSILE PRESSURE. THE FABRIC SHALL BE JOINTED FOR ITS ENTIRE HEIGHT.
4. ANCHORAGE'S SHALL BE INSTALLED ON BOTH SHORE AND STREAM SIDE TO MAXIMUM STABILITY. SHORE ANCHORS SHALL CONSIST OF A POST WITH DEADMAN OR APPROVED EQUAL. STREAM ANCHORS SHALL BE OF SUFFICIENT SIZE, TYPE AND STRENGTH TO STABILIZE THE BARRIER BEYOND THE CONSTRUCTION AREA.
5. ANCHORS SHALL BE BUOYED TO PREVENT THE SILT CURTAIN FROM BEING PULLED UNDER WATER. DANFORTH-TYPE ANCHORS SHALL BE USED IN SANDY BOTTOM AND HEAVY KEDGE TYPE OR MUSHROOM ANCHORS ON MUD BOTTOMS.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE SILT CURTAIN THROUGHOUT CONSTRUCTION OPERATIONS.
7. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL REMOVE THE SILT CURTAIN IN A MANNER THAT WILL PREVENT SILTATION OF THE RIVER/CREEK.



**SIDE VIEW**



**POST AND FENCE DETAIL**

**NOTES:**

1. THE FENCE SHALL BE LOCATED A MINIMUM OF 1 FOOT OUTSIDE THE DRIP LINE OF THE TREE TO BE SAVED AND IN NO CASE CLOSER THAN 5 FEET TO THE TRUNK OF ANY TREE.
2. FENCE POSTS SHALL BE EITHER STANDARD STEEL POSTS OR WOOD POSTS WITH A MINIMUM CROSS SECTIONAL AREA OF 3.0 SQ. IN.
3. THE FENCE MAY BE EITHER 40" HIGH SNOW FENCE, 40" PLASTIC WEB FENCING OR ANY OTHER MATERIAL AS APPROVED BY THE ENGINEER/INSPECTOR.
4. TO BE PAID FOR AS "TEMPORARY FENCE."

**TREE PROTECTION FENCING**

FILE NAME = FACBIBEL WEST Projects\2009\09-0882 Bolcum PHIL\CG.v1\Dgn\SH\EROS.03.dgn



|                        |                 |           |
|------------------------|-----------------|-----------|
| USER NAME = *USER*     | DESIGNED -      | REVISED - |
| PLOT SCALE =           | DRAWN -         | REVISED - |
| PLOT DATE = 10/21/2010 | CHECKED -       | REVISED - |
|                        | DATE - 10/22/10 | REVISED - |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**EROSION CONTROL  
DETAILS**

SCALE: SHEET NO. 24 OF 73 SHEETS STA. TO STA.

|   |                |        |              |           |
|---|----------------|--------|--------------|-----------|
| F.A.U. RTE.                                       | SECTION        | COUNTY | TOTAL SHEETS | SHEET NO. |
| 2332  | 03-14185-02-BR | KANE   | 73           | 24        |
| CONTRACT NO. 63521                                |                |        |              |           |
| FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT |                |        |              |           |

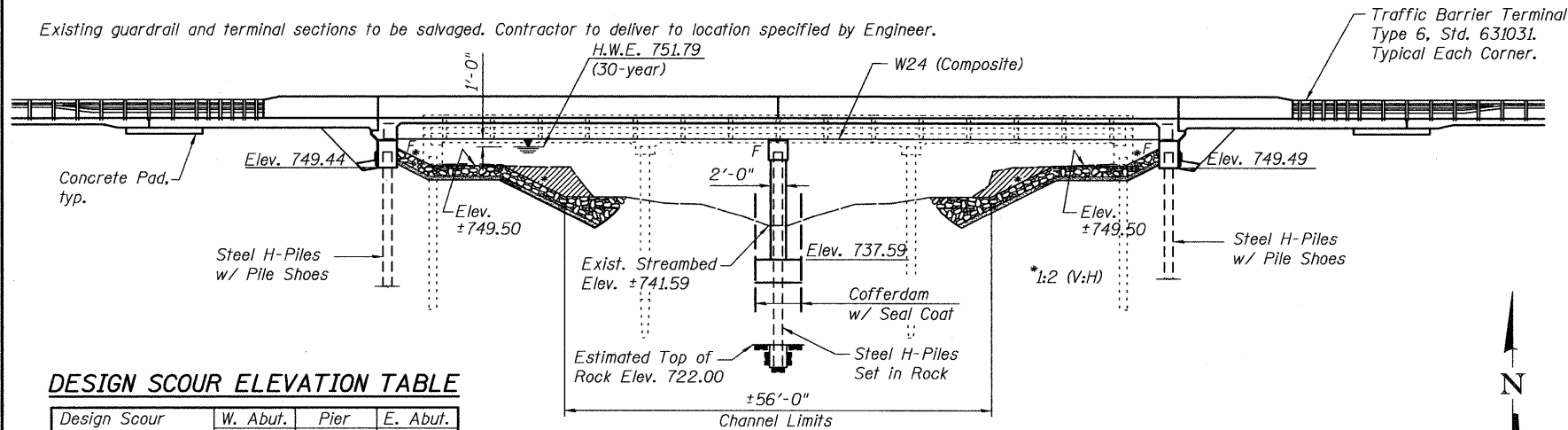


Bench Mark: Chiseled "X" on SW wingwall of SN 045-3042 (Elev. 753.96 - NGVD 29)

**Existing Structure:**  
SN 045-3042, three span reinforced concrete slab superstructure measuring 93'-1" back to back abutments and 26'-0" out to out of deck supported on timber pile bent abutments and concrete pile bent piers. Built as SA Route 73, Section 185 B-MFT at Station 122+25.00 in 1959. The Contractor shall remove the existing structure and replace it with a two span steel beam structure on integral abutments. The road will be closed and traffic detoured during construction.

Existing guardrail and terminal sections to be salvaged. Contractor to deliver to location specified by Engineer.

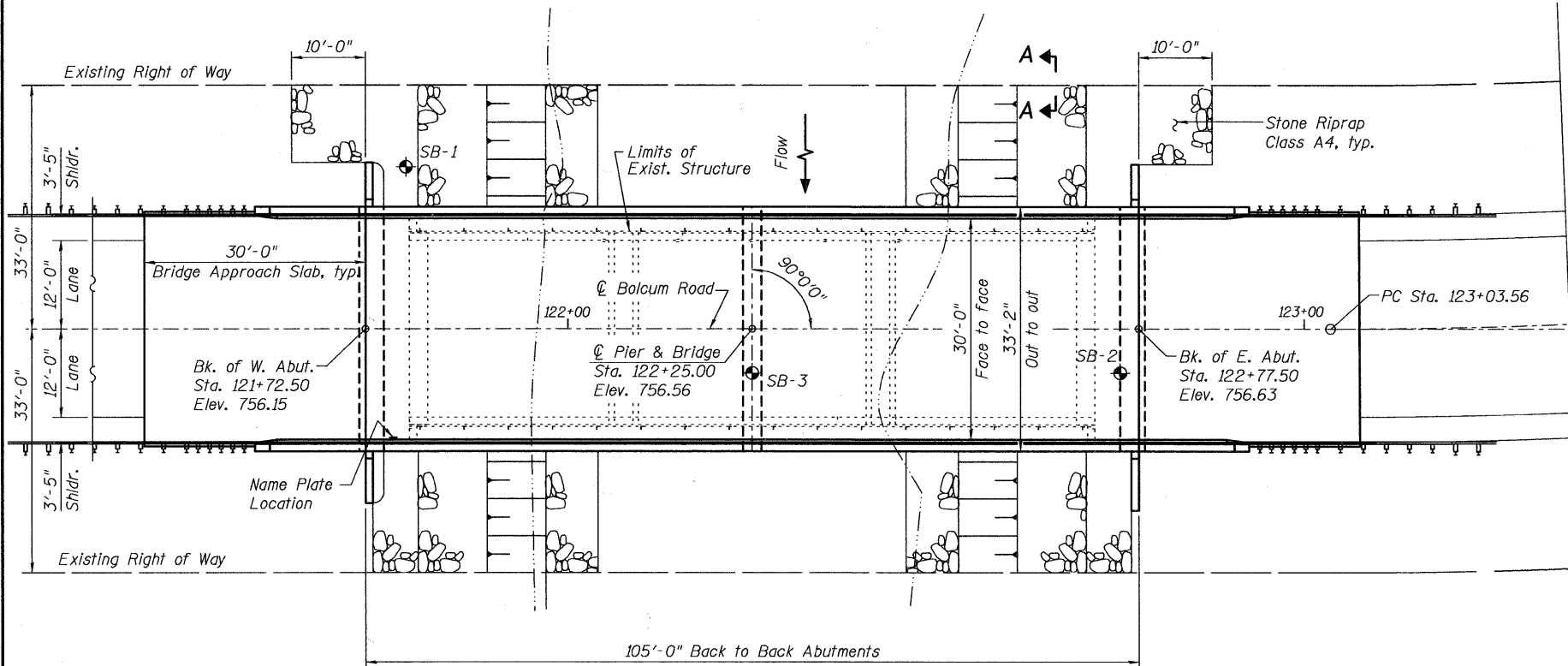
Hatched areas indicate excavation required for stone riprap placement. For earth excavation quantities, see Roadway Plans.



**DESIGN SCOUR ELEVATION TABLE**

| Design Scour Elevation (ft.) | W. Abut. | Pier   | E. Abut. |
|------------------------------|----------|--------|----------|
|                              | 749.44   | 733.93 | 749.49   |

**ELEVATION**

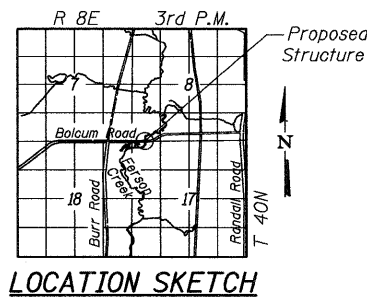


**PLAN**

Indicates Soil Boring Location

**WATERWAY INFORMATION**

| Drainage Area = 43.92 sq. mi. |          | Low Grade Elev. 752.30 |       | Sta. 114+00       |        |
|-------------------------------|----------|------------------------|-------|-------------------|--------|
| Flood Yr.                     | Q C.F.S. | Opening Sq. Ft. Exist. | Prop. | Head - Ft. Exist. | Prop.  |
| Design                        | 30       | 2083                   | 459   | 535               | 751.79 |
| Base                          | 100      | 3027                   | 489   | 589               | 752.48 |
| Overlapping                   | 500      | 5649                   | 489   | 640               | 754.10 |
|                               |          |                        |       |                   | 0.14   |
|                               |          |                        |       |                   | 0.12   |
|                               |          |                        |       |                   | 751.93 |
|                               |          |                        |       |                   | 751.91 |
|                               |          |                        |       |                   | 0.22   |
|                               |          |                        |       |                   | 0      |
|                               |          |                        |       |                   | 752.70 |
|                               |          |                        |       |                   | 752.48 |
|                               |          |                        |       |                   | 0.03   |
|                               |          |                        |       |                   | 0      |
|                               |          |                        |       |                   | 754.13 |
|                               |          |                        |       |                   | 754.10 |



**LOCATION SKETCH**

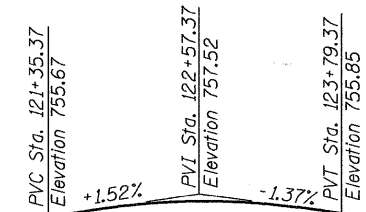
**FERSON CREEK**  
BUILT 2011 BY  
ST. CHARLES TOWNSHIP  
SEC. 03-14185-02-BR  
F.A.U. 2332 STA. 122+25  
STR. NO. 045-3020 LOADING HL 93

**NAME PLATE**

See Std. 515001

**CURVE DATA**

$\Delta = 34^{\circ}-05'-52''$  (LT)  
 $D = 6^{\circ}-29'-56''$   
 $T = 251.05'$   
 $L = 487.19'$   
 $E = 37.63'$   
 $R = 818.64'$   
 $S.E. = 0.04$  '/'  
 $P.C. = Sta. 123+03.56$   
 $P.T. = Sta. 127+90.75$   
 $P.I. = Sta. 125+54.61$



**PROPOSED STRUCTURE**

LVC = 244'

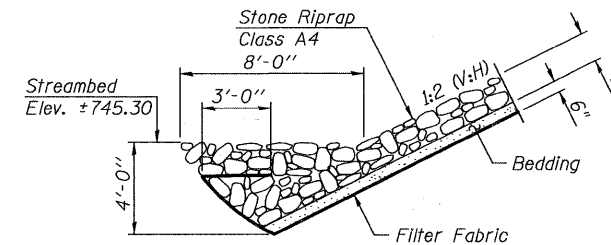
**PROFILE GRADE**

(Along  $\phi$  Balcum Road)

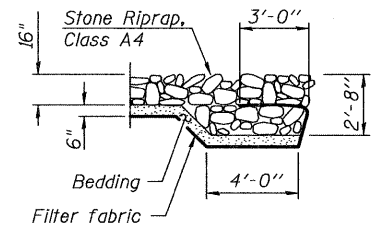
| Grade (%) | Station     |
|-----------|-------------|
| 8%        | Sta. 123+64 |
| 5.33%     | Sta. 123+00 |
| 2%        | Sta. 122+20 |
| 2%        | Sta. 121+72 |
| 2%        | Sta. 121+24 |

**DECK CROSS-SLOPE TRANSITIONS**

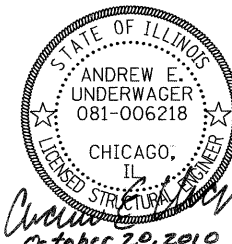
(Looking Upstation)



**STONE RIPRAP ANCHOR DETAIL**



**SECTION A-A**



"I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current 'AASHTO LRFD Bridge Design Specifications'."



**WILLS BURKE KELSEY ASSOCIATES LTD.**  
116 West Main Street, Suite 201  
St. Charles, Illinois 60174

SHEET NO. 1  
21 SHEETS

**GENERAL PLAN & ELEVATION**  
**BOLCUM ROAD OVER FERSON CREEK**  
**SECTION 03-14185-02-BR**  
**KANE COUNTY**  
**STATION 122+25**  
**STRUCTURE NO. 045-3020**

| F.A.U.              | SECTION        | COUNTY           | TOTAL SHEETS | SHEET NO. |
|---------------------|----------------|------------------|--------------|-----------|
| 2332                | 03-14185-02-BR | KANE             | 73           | 25        |
| CONTRACT NO. 63521  |                |                  |              |           |
| FED. ROAD DIST. NO. | ILLINOIS       | FED. AID PROJECT |              |           |

FILE NAME = F:\CIBEL\WEST Projects\2010\09-0882 Bolcum Ph111\Structure\0453020-63521-01-CPE.dgn

PLOT CREATION DATE = 10/21/2010

**GENERAL NOTES**

Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts in painted areas and M164 Type 3 in unpainted areas. Bolts  $\frac{7}{8}$ -in.  $\phi$ , holes  $\frac{15}{16}$ -in.  $\phi$ , unless otherwise noted.

Calculated weight of Structural Steel = 63,370 lb.

All structural steel shall be AASHTO M 270 Grade 50W.

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

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

Reinforcement bars designated (E) shall be epoxy coated.

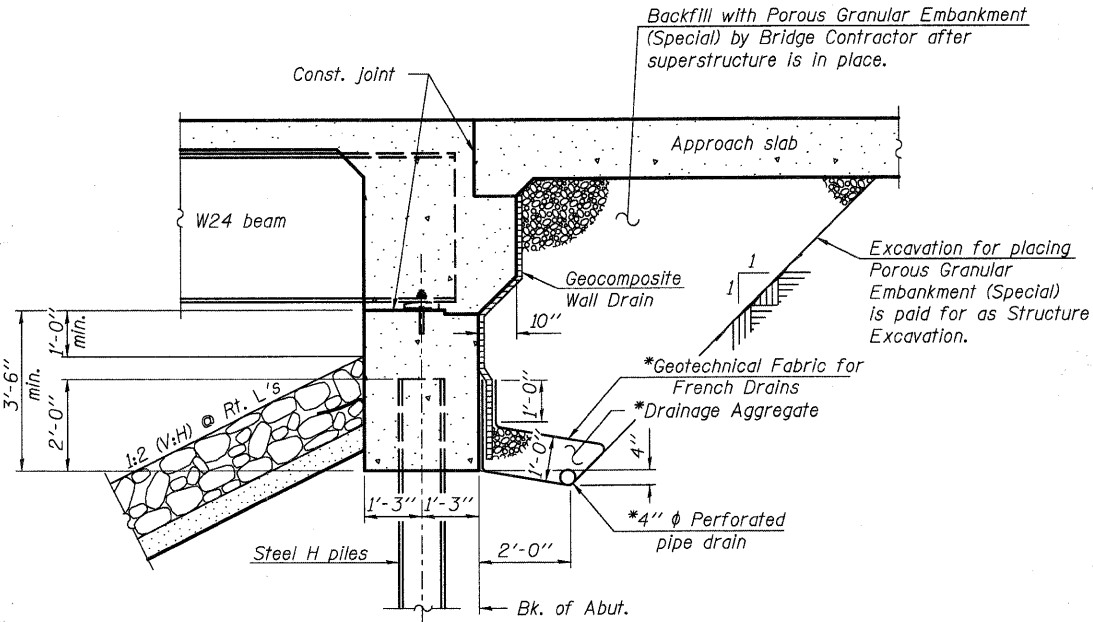
Bearing seat surfaces shall be constructed or adjusted to their designated elevations within a tolerance of  $\frac{1}{8}$  inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.

Structural steel shall only be painted for a distance equal to the depth of embedment into the concrete cap plus 3 inches. Those areas shall be primed in the shop with a Department approved zinc rich primer. No field painting shall be required. All structural steel shall be cleaned as specified in the Special Provision for "Surface Preparation and Painting Requirements for Weathering Steel".

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

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

The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at substructures specified or approved by the Engineer before ordering the remainder of piles.



**SECTION THRU INTEGRAL ABUTMENT**

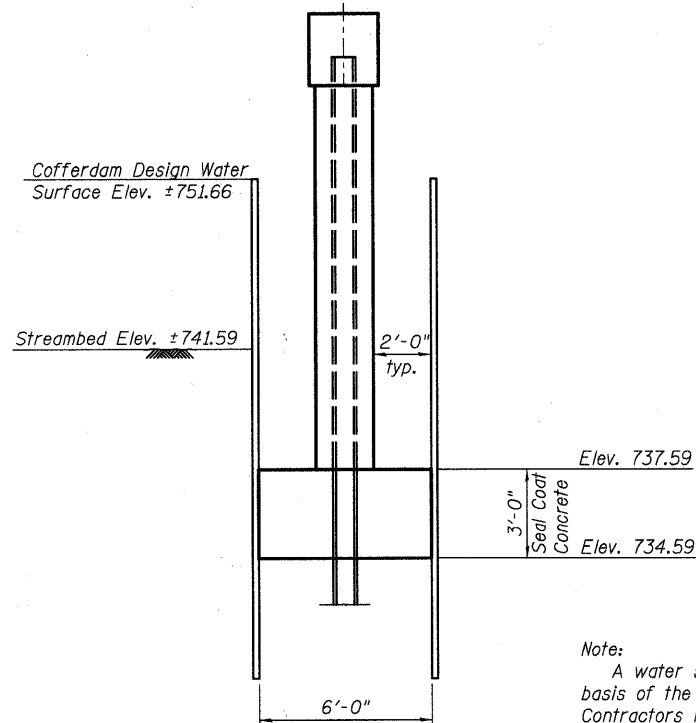
\*Included in the cost of Pipe Underdrains for Structures.

Note:

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

**TOTAL BILL OF MATERIAL**

| ITEM                                     | UNIT    | SUPER  | SUB   | TOTAL  |
|--|---------|--------|-------|--------|
| Stone Riprap, Class A4                   | Sq. Yd. |        | 517   | 517    |
| Filter Fabric                            | Sq. Yd. |        | 517   | 517    |
| Removal of Existing Structures           | Each    | 1      |       | 1      |
| Bridge Rail Removal                      | Foot    | 186    |       | 186    |
| Structure Excavation                     | Cu. Yd. |        | 186   | 186    |
| Cofferdam Excavation                     | Cu. Yd. |        | 58    | 58     |
| Cofferdam, Location 1                    | Each    |        | 1     | 1      |
| Concrete Structures                      | Cu. Yd. |        | 85.7  | 85.7   |
| Concrete Superstructure                  | Cu. Yd. | 237.5  |       | 237.5  |
| Bridge Deck Grooving                     | Sq. Yd. | 553    |       | 553    |
| Seal Coat Concrete                       | Cu. Yd. |        | 24.8  | 24.8   |
| Concrete Encasement                      | Cu. Yd. |        | 4.2   | 4.2    |
| Protective Coat                          | Sq. Yd. | 671    |       | 671    |
| Furnishing and Erecting Structural Steel | L. Sum  |        | 1     | 1      |
| Stud Shear Connectors                    | Each    | 1,920  |       | 1,920  |
| Reinforcement Bars, Epoxy Coated         | Pound   | 57,260 | 7,280 | 64,540 |
| Bar Splacers                             | Each    | 72     |       | 72     |
| Furnishing Steel Piles HP 12x53          | Foot    |        | 300   | 300    |
| Furnishing Steel Piles HP 14x73          | Foot    |        | 192   | 192    |
| Driving Piles                            | Foot    |        | 300   | 300    |
| Test Pile Steel HP 12x53                 | Each    |        | 2     | 2      |
| Pile Shoes                               | Each    |        | 12    | 12     |
| Name Plates                              | Each    | 1      |       | 1      |
| Anchor Bolts, 1"                         | Each    |        | 30    | 30     |
| Geocomposite Wall Drain                  | Sq. Yd. |        | 54    | 54     |
| Pipe Underdrains for Structures 4"       | Foot    |        | 145   | 145    |
| Porous Granular Embankment, Special      | Cu. Yd. |        | 97    | 97     |
| Setting Piles In Rock                    | Each    |        | 6     | 6      |



**COFFERDAM DETAIL**

Note:

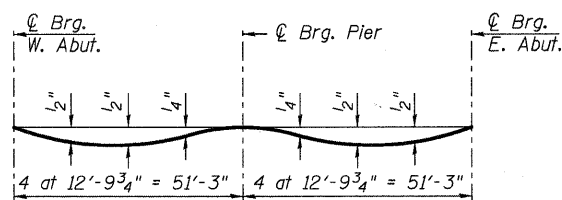
A water surface elevation of ±748.66 will be the basis of the cofferdam design. It is the Contractor's responsibility to provide a design for the cofferdam, verification of seal coat thickness shown and all other required appurtenances, subject to approval of the Engineer. Plan dimensions of cofferdam are 6'-0" x 37'-2".

|                |
|----------------|
| DESIGNED - AEU |
| CHECKED - DLS  |
| DRAWN - AWH    |
| CHECKED - AEU  |

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 St. Charles, Illinois 60174  
 (630) 443-7755

|                     |           |          |                    |              |           |
|---------------------|-----------|----------|--------------------|--------------|-----------|
| SHEET NO. 2         | F.A.U.    | SECTION  | COUNTY             | TOTAL SHEETS | SHEET NO. |
|                     | 21 SHEETS | 2332     | 03-14185-02-BR     | KANE         | 73        |
|                     |           |          | CONTRACT NO. 63521 |              |           |
| FED. ROAD DIST. NO. |           | ILLINOIS | FED. AID PROJECT   |              |           |

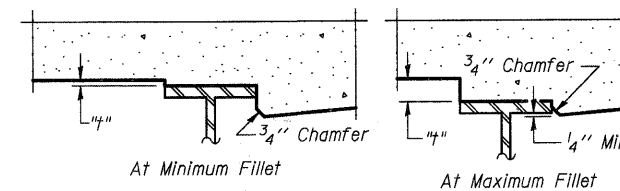
**GENERAL DATA  
STRUCTURE NO. 045-3020**



**DEAD LOAD DEFLECTION DIAGRAM**

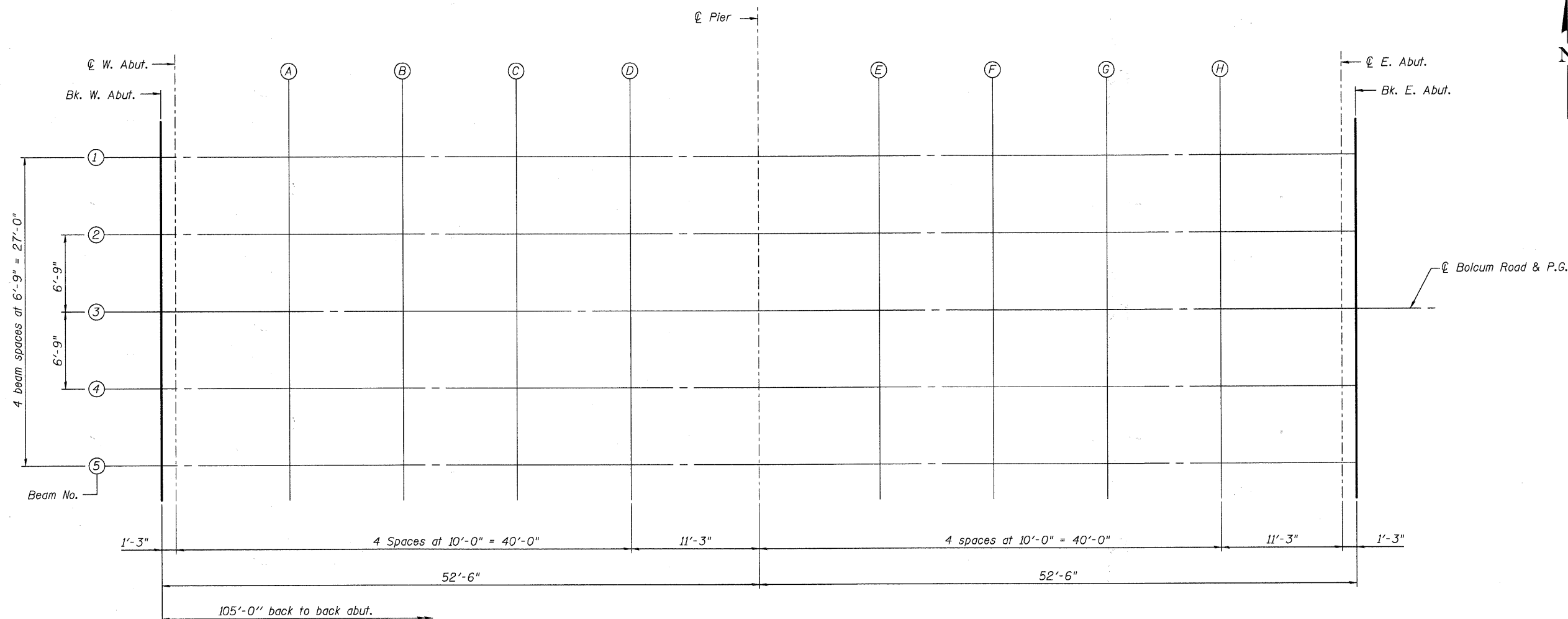
(Includes weight of concrete only.)

Note:  
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown below.



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown below, minus slab thickness, equals the fillet heights "t" above top flange of beams.

**FILLET HEIGHTS**



**PLAN**

|                |
|----------------|
| DESIGNED - MLH |
| CHECKED - AEU  |
| DRAWN - AWH    |
| CHECKED - AEU  |

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116 West Main Street, Suite 201  
St. Charles, Illinois 60174  
(630) 443-7755

|                           |        |                |          |                  |           |
|---------------------------|--------|----------------|----------|------------------|-----------|
| SHEET NO. 3<br>21 SHEETS  | F.A.U. | SECTION        | COUNTY   | TOTAL SHEETS     | SHEET NO. |
|                           | 2332   | 03-14185-02-BR | KANE     | 73               | 27        |
| FED. ROAD DIST. NO.       |        |                | ILLINOIS | FED. AID PROJECT |           |
| <b>CONTRACT NO. 63521</b> |        |                |          |                  |           |

**TOP OF SLAB ELEVATIONS  
STRUCTURE NO. 045-3020**

FILE NAME = P:\CBBEL\WEST Projects\2009\09-0882 Bolcum PHITS\Structural\Dgn\0453020-63521-003-TOS.Plan.dgn  
PLOT CREATION DATE = 10/19/2010

**BEAM 1**

| Location         | Station   | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|------------------|-----------|--------|------------------------------|--|
| Bk. W. Abut.     | 121+72.50 | -13.50 | 755.88                       | 755.88   |
| CL Brg. W. Abut. | 121+73.75 | -13.50 | 755.90                       | 755.90   |
| A                | 121+83.75 | -13.50 | 756.00                       | 756.03   |
| B                | 121+93.75 | -13.50 | 756.09                       | 756.13   |
| C                | 122+03.75 | -13.50 | 756.16                       | 756.20   |
| D                | 122+13.75 | -13.50 | 756.23                       | 756.25   |
| CL Pier          | 122+25.00 | -13.50 | 756.26                       | 756.26   |
| E                | 122+35.00 | -13.50 | 756.24                       | 756.25   |
| F                | 122+45.00 | -13.50 | 756.21                       | 756.25   |
| G                | 122+55.00 | -13.50 | 756.17                       | 756.22   |
| H                | 122+65.00 | -13.50 | 756.12                       | 756.15   |
| CL Brg. E. Abut. | 122+76.25 | -13.50 | 756.05                       | 756.05   |
| Bk. E. Abut.     | 122+77.50 | -13.50 | 756.04                       | 756.04   |

**BEAM 2**

| Location         | Station   | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|------------------|-----------|--------|------------------------------|--|
| Bk. W. Abut.     | 121+72.50 | -6.75  | 756.02                       | 756.02   |
| CL Brg. W. Abut. | 121+73.75 | -6.75  | 756.03                       | 756.03   |
| A                | 121+83.75 | -6.75  | 756.13                       | 756.16   |
| B                | 121+93.75 | -6.75  | 756.22                       | 756.27   |
| C                | 122+03.75 | -6.75  | 756.30                       | 756.34   |
| D                | 122+13.75 | -6.75  | 756.36                       | 756.38   |
| CL Pier          | 122+25.00 | -6.75  | 756.41                       | 756.41   |
| E                | 122+35.00 | -6.75  | 756.42                       | 756.43   |
| F                | 122+45.00 | -6.75  | 756.42                       | 756.45   |
| G                | 122+55.00 | -6.75  | 756.41                       | 756.45   |
| H                | 122+65.00 | -6.75  | 756.38                       | 756.42   |
| CL Brg. E. Abut. | 122+76.25 | -6.75  | 756.34                       | 756.34   |
| Bk. E. Abut.     | 122+77.50 | -6.75  | 756.34                       | 756.34   |

**BEAM 3 & P.G.L.**

| Location         | Station   | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|------------------|-----------|--------|------------------------------|--|
| Bk. W. Abut.     | 121+72.50 | 0.00   | 756.15                       | 756.15   |
| CL Brg. W. Abut. | 121+73.75 | 0.00   | 756.17                       | 756.17   |
| A                | 121+83.75 | 0.00   | 756.27                       | 756.30   |
| B                | 121+93.75 | 0.00   | 756.36                       | 756.40   |
| C                | 122+03.75 | 0.00   | 756.43                       | 756.47   |
| D                | 122+13.75 | 0.00   | 756.50                       | 756.52   |
| CL Pier          | 122+25.00 | 0.00   | 756.56                       | 756.56   |
| E                | 122+35.00 | 0.00   | 756.60                       | 756.61   |
| F                | 122+45.00 | 0.00   | 756.62                       | 756.66   |
| G                | 122+55.00 | 0.00   | 756.64                       | 756.69   |
| H                | 122+65.00 | 0.00   | 756.65                       | 756.68   |
| CL Brg. E. Abut. | 122+76.25 | 0.00   | 756.64                       | 756.64   |
| Bk. E. Abut.     | 122+77.50 | 0.00   | 756.63                       | 756.63   |

**BEAM 4**


| Location         | Station   | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|------------------|-----------|--------|------------------------------|--|
| Bk. W. Abut.     | 121+72.50 | 6.75   | 756.15                       | 756.15   |
| CL Brg. W. Abut. | 121+73.75 | 6.75   | 756.17                       | 756.17   |
| A                | 121+83.75 | 6.75   | 756.30                       | 756.33   |
| B                | 121+93.75 | 6.75   | 756.42                       | 756.46   |
| C                | 122+03.75 | 6.75   | 756.52                       | 756.56   |
| D                | 122+13.75 | 6.75   | 756.61                       | 756.63   |
| CL Pier          | 122+25.00 | 6.75   | 756.71                       | 756.71   |
| E                | 122+35.00 | 6.75   | 756.78                       | 756.79   |
| F                | 122+45.00 | 6.75   | 756.83                       | 756.87   |
| G                | 122+55.00 | 6.75   | 756.88                       | 756.92   |
| H                | 122+65.00 | 6.75   | 756.91                       | 756.94   |
| CL Brg. E. Abut. | 122+76.25 | 6.75   | 756.93                       | 756.93   |
| Bk. E. Abut.     | 122+77.50 | 6.75   | 756.93                       | 756.93   |

**BEAM 5**

| Location         | Station   | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|------------------|-----------|--------|------------------------------|--|
| Bk. W. Abut.     | 121+72.50 | 13.50  | 756.14                       | 756.14   |
| CL Brg. W. Abut. | 121+73.75 | 13.50  | 756.16                       | 756.16   |
| A                | 121+83.75 | 13.50  | 756.31                       | 756.34   |
| B                | 121+93.75 | 13.50  | 756.45                       | 756.50   |
| C                | 122+03.75 | 13.50  | 756.58                       | 756.62   |
| D                | 122+13.75 | 13.50  | 756.70                       | 756.72   |
| CL Pier          | 122+25.00 | 13.50  | 756.82                       | 756.82   |
| E                | 122+35.00 | 13.50  | 756.91                       | 756.93   |
| F                | 122+45.00 | 13.50  | 756.99                       | 757.03   |
| G                | 122+55.00 | 13.50  | 757.06                       | 757.11   |
| H                | 122+65.00 | 13.50  | 757.12                       | 757.15   |
| CL Brg. E. Abut. | 122+76.25 | 13.50  | 757.17                       | 757.17   |
| Bk. E. Abut.     | 122+77.50 | 13.50  | 757.17                       | 757.17   |

**TOP OF SLAB ELEVATIONS  
STRUCTURE NO. 045-3020**

|                |
|----------------|
| DESIGNED - MLH |
| CHECKED - AEU  |
| DRAWN - AWH    |
| CHECKED - AEU  |

|   |             |                     |                |                    |              |           |
|---|-------------|---------------------|----------------|--------------------|--------------|-----------|
|  <b>WILLS BURKE KELSEY ASSOCIATES LTD.</b><br>116 West Main Street, Suite 201<br>St. Charles, Illinois 60174<br>(630) 443-7755 | SHEET NO. 4 | F.A.U.              | SECTION        | COUNTY             | TOTAL SHEETS | SHEET NO. |
|   | 21 SHEETS   | 2332                | 03-14185-02-BR | KANE               | 73           | 28        |
|   |             |                     |                | CONTRACT NO. 63521 |              |           |
|   |             | FED. ROAD DIST. NO. | ILLINOIS       | FED. AID PROJECT   |              |           |

FILE NAME = PACBBEL\_MEST\_Projects\2009\UP-0882\_Bolcum\_Phil\Structure\Draw\0453020-63521-004-TOS.Elevation.dgn  
PLOT CREATION DATE = 10/19/2010

**NORTH CURB LINE**

| Location          | Station   | Offset | Theoretical Grade Elevations |
|-------------------|-----------|--------|------------------------------|
| End W. Appr. Slab | 121+42.50 | -15.42 | 755.47                       |
| A1                | 121+52.50 | -15.42 | 755.60                       |
| A2                | 121+62.50 | -15.00 | 755.74                       |
| Bk. W. Abut.      | 121+72.50 | -15.00 | 755.85                       |

**NORTH EDGE OF PAVEMENT**

| Location          | Station   | Offset | Theoretical Grade Elevations |
|-------------------|-----------|--------|------------------------------|
| End W. Appr. Slab | 121+42.50 | -12.00 | 755.54                       |
| A1                | 121+52.50 | -12.00 | 755.67                       |
| A2                | 121+62.50 | -12.00 | 755.80                       |
| Bk. W. Abut.      | 121+72.50 | -12.00 | 755.91                       |

**☉ ROADWAY & PG**

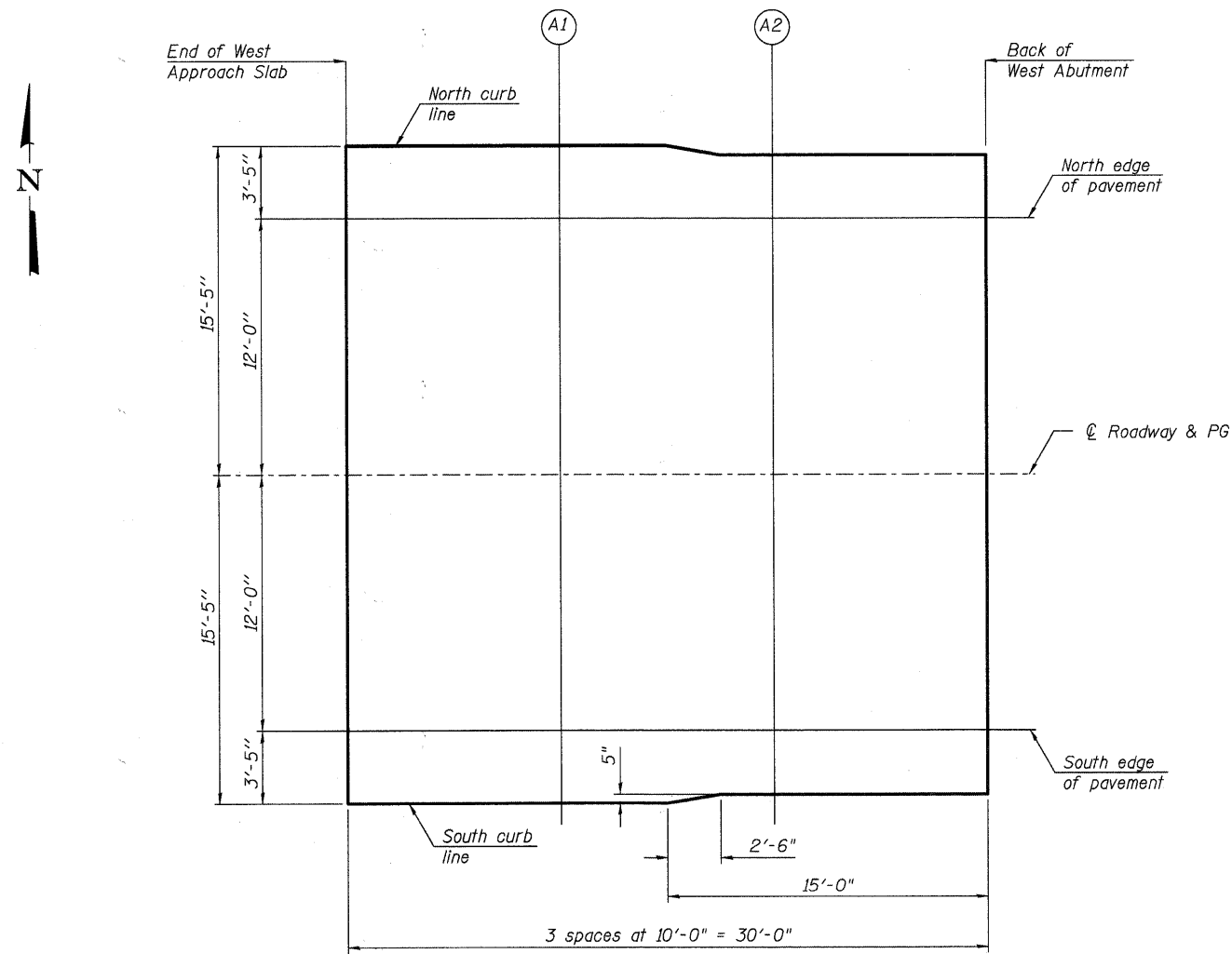
| Location          | Station   | Offset | Theoretical Grade Elevations |
|-------------------|-----------|--------|------------------------------|
| End W. Appr. Slab | 121+42.50 | 0.00   | 755.78                       |
| A1                | 121+52.50 | 0.00   | 755.91                       |
| A2                | 121+62.50 | 0.00   | 756.04                       |
| Bk. W. Abut.      | 121+72.50 | 0.00   | 756.15                       |

**SOUTH EDGE OF PAVEMENT**

| Location          | Station   | Offset | Theoretical Grade Elevations |
|-------------------|-----------|--------|------------------------------|
| End W. Appr. Slab | 121+42.50 | 12.00  | 755.63                       |
| A1                | 121+52.50 | 12.00  | 755.82                       |
| A2                | 121+62.50 | 12.00  | 755.99                       |
| Bk. W. Abut.      | 121+72.50 | 12.00  | 756.15                       |

**SOUTH CURB LINE**


| Location          | Station   | Offset | Theoretical Grade Elevations |
|-------------------|-----------|--------|------------------------------|
| End W. Appr. Slab | 121+42.50 | 15.42  | 755.57                       |
| A1                | 121+52.50 | 15.42  | 755.76                       |
| A2                | 121+62.50 | 15.00  | 755.95                       |
| Bk. W. Abut.      | 121+72.50 | 15.00  | 756.12                       |



**PLAN**

**TOP OF WEST APPROACH  
SLAB ELEVATIONS  
STRUCTURE NO. 045-3020**

|                |
|----------------|
| DESIGNED - AEU |
| CHECKED - RPD  |
| DRAWN - AWH    |
| CHECKED - AEU  |

|   |             |                     |                |                  |              |           |
|---|-------------|---------------------|----------------|------------------|--------------|-----------|
|  <b>WILLS BURKE KELSEY ASSOCIATES LTD.</b><br>116 West Main Street, Suite 201<br>St. Charles, Illinois 60174<br>(630) 443-7755 | SHEET NO. 5 | F.A.U.              | SECTION        | COUNTY           | TOTAL SHEETS | SHEET NO. |
|   | 21 SHEETS   | 2332                | 03-14185-02-BR | KANE             | 73           | 29        |
|   |             | FED. ROAD DIST. NO. | ILLINOIS       | FED. AID PROJECT |              |           |
|   |             | CONTRACT NO. 63521  |                |                  |              |           |

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PLOT CREATION DATE = 10/19/2010

**NORTH CURB LINE**

| Location          | Station   | Offset | Theoretical Grade Elevations |
|-------------------|-----------|--------|------------------------------|
| Bk. E. Abut.      | 122+77.50 | -15.00 | 755.97                       |
| A3                | 122+87.50 | -15.00 | 755.89                       |
| A4                | 122+97.50 | -15.42 | 755.77                       |
| End E. Appr. Slab | 123+07.50 | -15.42 | 755.66                       |

**NORTH EDGE OF PAVEMENT**

| Location          | Station   | Offset | Theoretical Grade Elevations |
|-------------------|-----------|--------|------------------------------|
| Bk. E. Abut.      | 122+77.50 | -12.00 | 756.11                       |
| A3                | 122+87.50 | -12.00 | 756.03                       |
| A4                | 122+97.50 | -12.00 | 755.95                       |
| End E. Appr. Slab | 123+07.50 | -12.00 | 755.85                       |

**CL ROADWAY & PG**

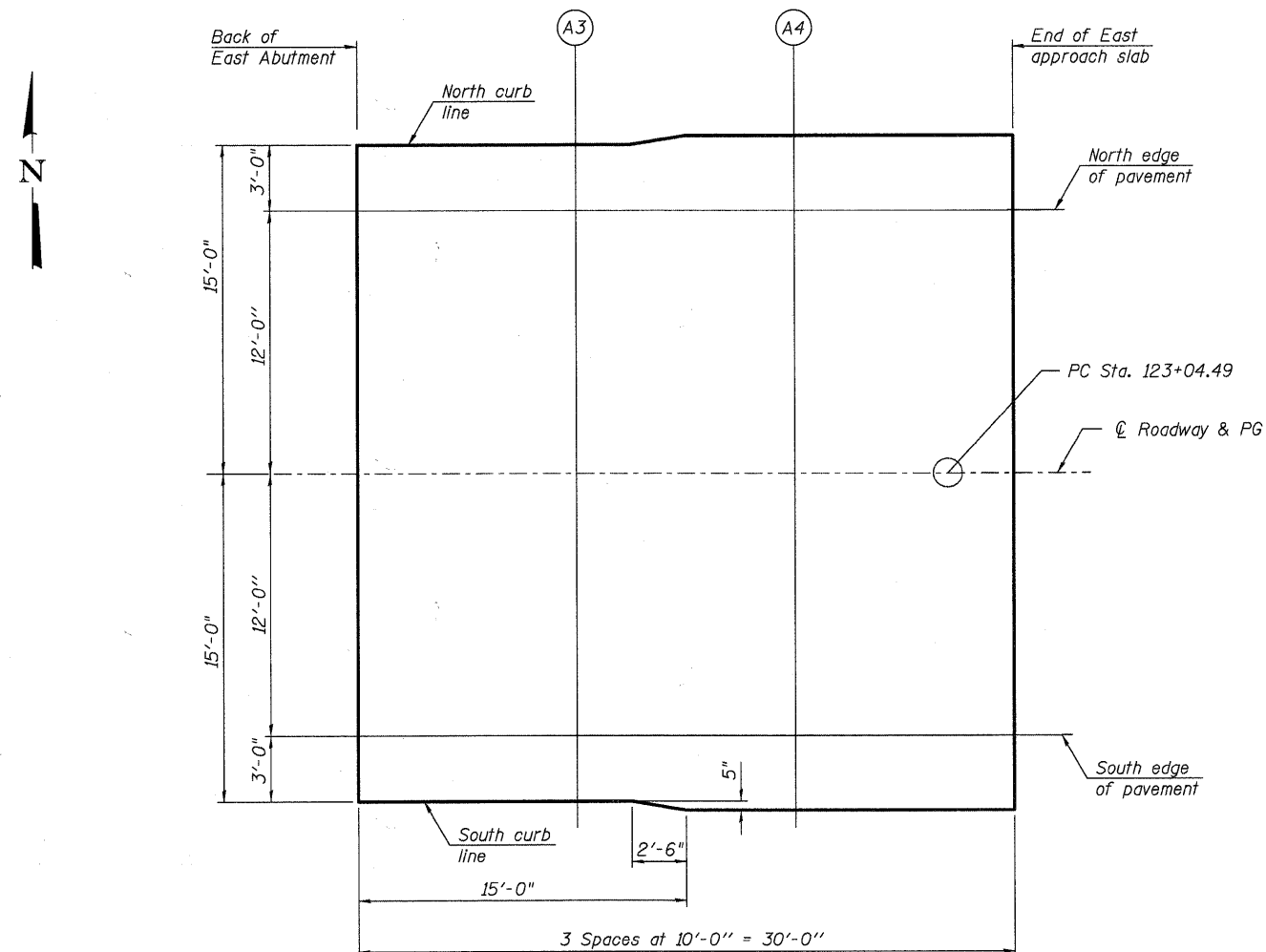
| Location          | Station   | Offset | Theoretical Grade Elevations |
|-------------------|-----------|--------|------------------------------|
| Bk. E. Abut.      | 122+77.50 | 0.00   | 756.63                       |
| A3                | 122+87.50 | 0.00   | 756.61                       |
| A4                | 122+97.50 | 0.00   | 756.58                       |
| End E. Appr. Slab | 123+07.50 | 0.00   | 756.53                       |

**SOUTH EDGE OF PAVEMENT**

| Location          | Station   | Offset | Theoretical Grade Elevations |
|-------------------|-----------|--------|------------------------------|
| Bk. E. Abut.      | 122+77.50 | 12.00  | 757.16                       |
| A3                | 122+87.50 | 12.00  | 757.19                       |
| A4                | 122+97.50 | 12.00  | 757.21                       |
| End E. Appr. Slab | 123+07.50 | 12.00  | 757.21                       |

**SOUTH CURB LINE**

| Location          | Station   | Offset | Theoretical Grade Elevations |
|-------------------|-----------|--------|------------------------------|
| Bk. E. Abut.      | 122+77.50 | 15.00  | 757.18                       |
| A3                | 122+87.50 | 15.00  | 757.21                       |
| A4                | 122+97.50 | 15.42  | 757.24                       |
| End E. Appr. Slab | 123+07.50 | 15.42  | 757.25                       |



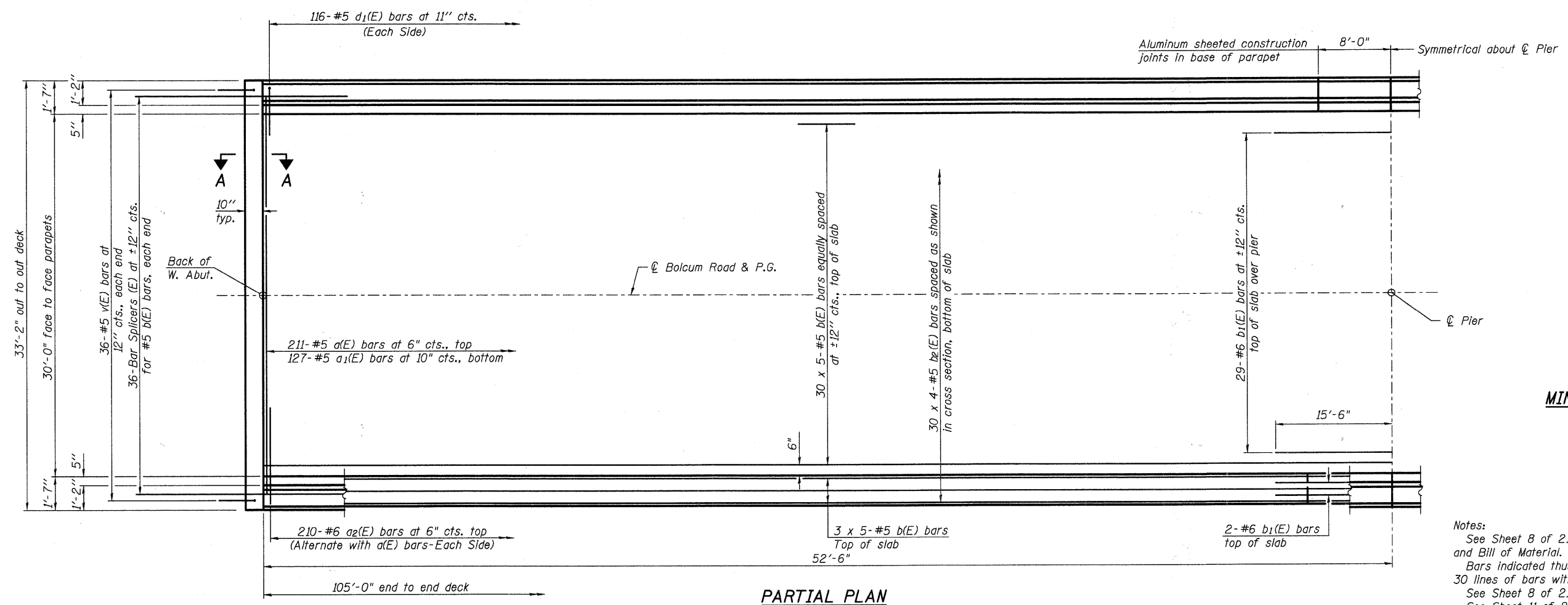
**PLAN**

**TOP OF EAST APPROACH  
SLAB ELEVATIONS  
STRUCTURE NO. 045-3020**

|                |
|----------------|
| DESIGNED - AEU |
| CHECKED - RPD  |
| DRAWN - AWH    |
| CHECKED - AEU  |

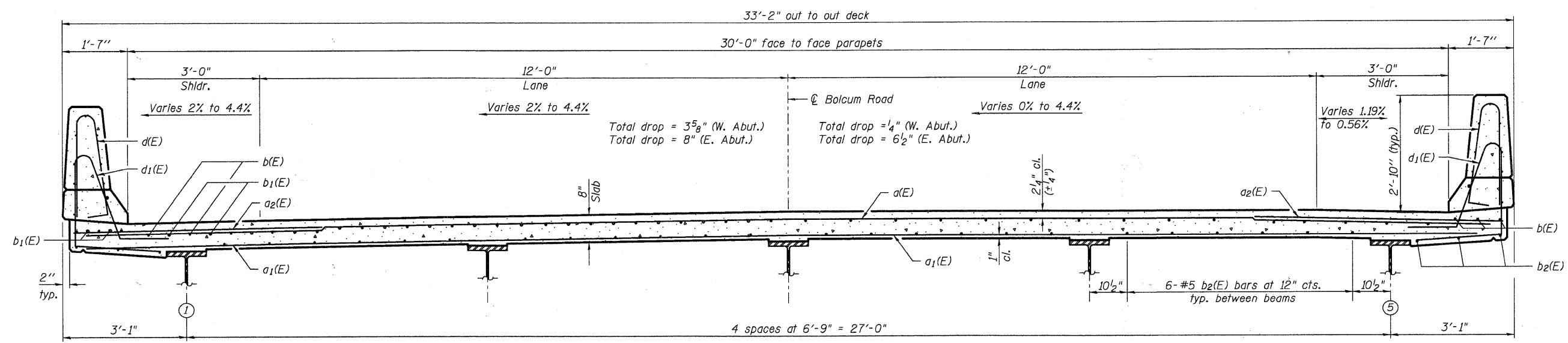
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| <b>WILLS BURKE KELSEY ASSOCIATES LTD.</b><br>116 West Main Street, Suite 201<br>St. Charles, Illinois 60174<br>(630) 443-7755 | SHEET NO. 6 | F.A.U.              | SECTION            | COUNTY           | TOTAL SHEETS | SHEET NO. |
|   | 21 SHEETS   | 2332                | 03-14185-02-BR     | KANE             | 73           | 30        |
|   |             |                     | CONTRACT NO. 63521 |                  |              |           |
|   |             | FED. ROAD DIST. NO. | ILLINOIS           | FED. AID PROJECT |              |           |

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PLOT CREATION DATE = 10/19/2010



**MINIMUM BAR LAP**  
(Deck)  
#5 bar = 2'-7"

Notes:  
See Sheet 8 of 21 for superstructure details and Bill of Material.  
Bars indicated thus 30 x 5-#5 etc. indicates 30 lines of bars with 5 lengths per line.  
See Sheet 8 of 21 for parapet reinforcement.  
See Sheet 11 of 21 for Section A-A.



**PARTIAL PLAN**

**CROSS SECTION**  
(Looking East)

**SUPERSTRUCTURE**  
**STRUCTURE NO. 045-3020**

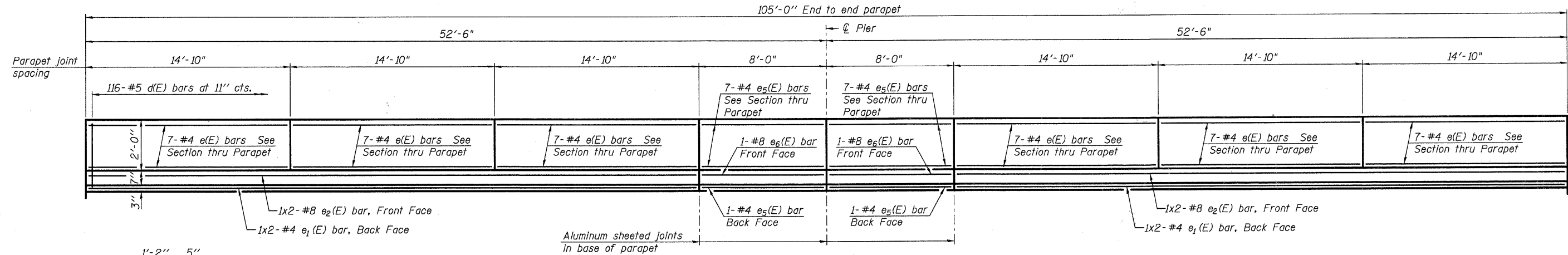
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|----------------|
| DESIGNED - AEU |
| CHECKED - DLS  |
| DRAWN - AWH    |
| CHECKED - DLS  |

**WILLS BURKE KELSEY ASSOCIATES LTD.**  
116 West Main Street, Suite 201  
St. Charles, Illinois 60174  
(630) 443-7755

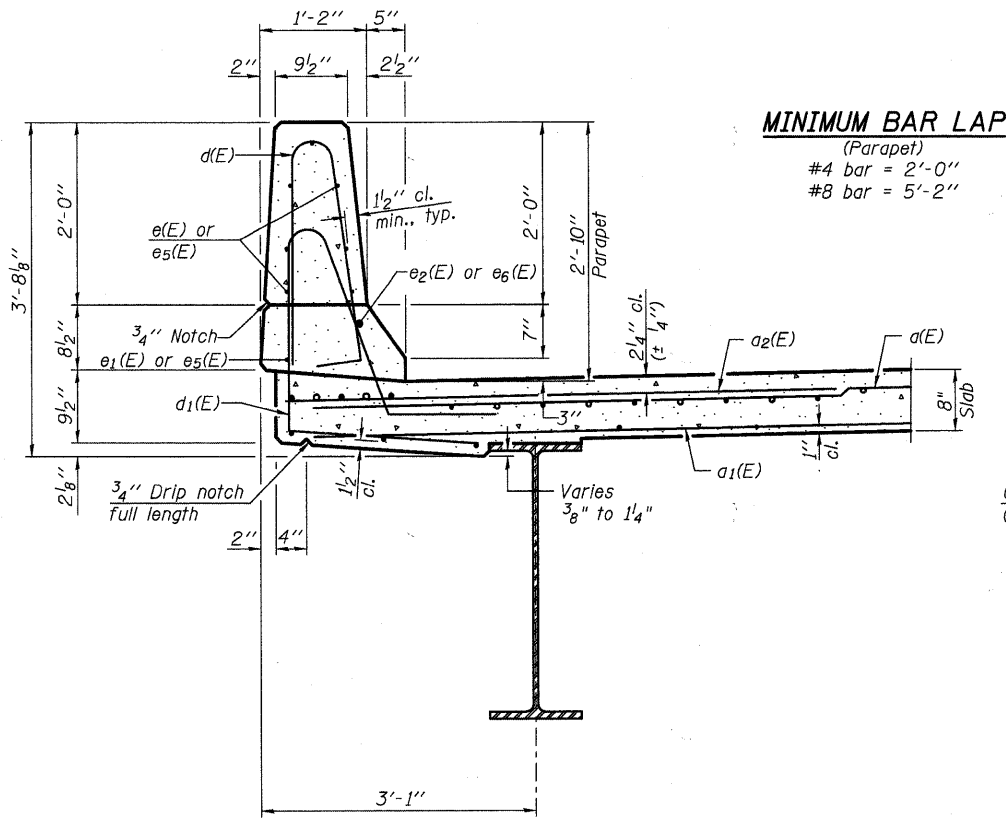
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|--------------------------|--------|----------------|----------|------------------|-----------|
| SHEET NO. 7<br>21 SHEETS | F.A.U. | SECTION        | COUNTY   | TOTAL SHEETS     | SHEET NO. |
|                          | 2332   | 03-14185-02-BR | KANE     | 73               | 31        |
| FED. ROAD DIST. NO.      |        |                | ILLINOIS | FED. AID PROJECT |           |
| CONTRACT NO. 63521       |        |                |          |                  |           |

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PLOT CREATION DATE = 10/19/2010

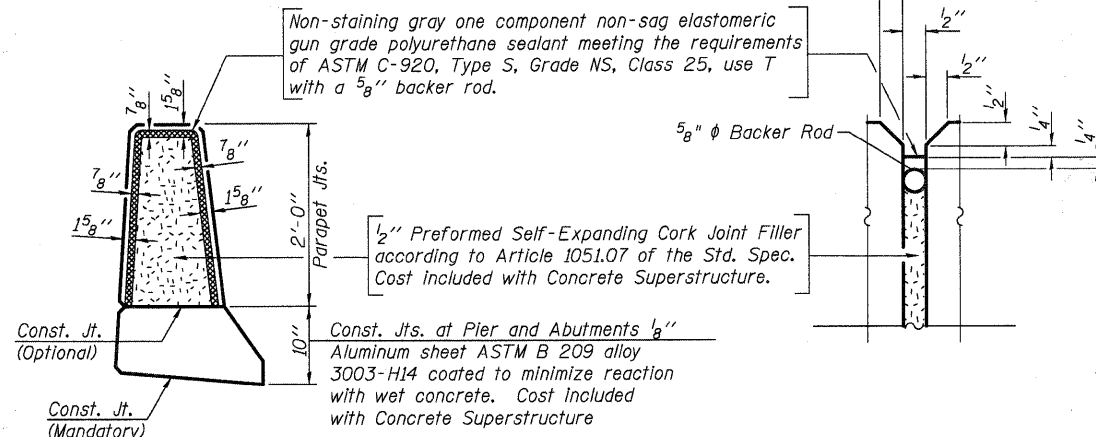


**INSIDE ELEVATION OF PARAPET**

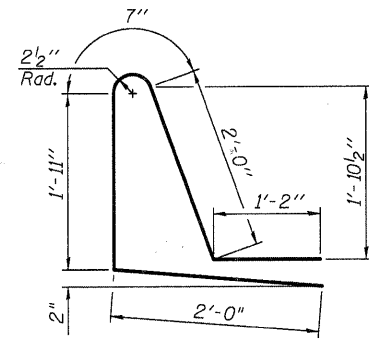


**SECTION THRU PARAPET**

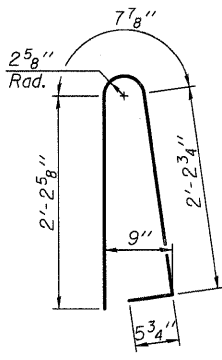
**MINIMUM BAR LAP**  
(Parapet)  
#4 bar = 2'-0"  
#8 bar = 5'-2"



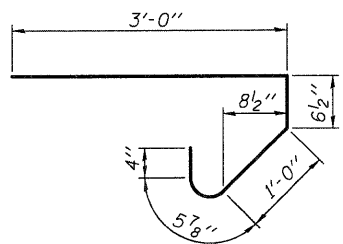
**PARAPET JOINT DETAILS**



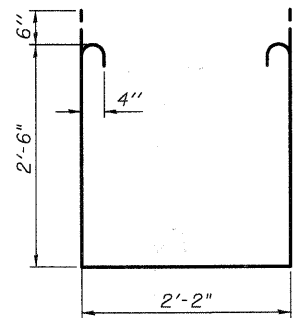
**BAR d1(E)**



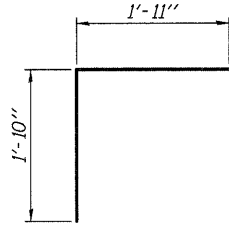
**BAR d(E)**



**BAR s(E)**



**BAR s1(E)**



**BAR v(E)**

**SUPERSTRUCTURE BILL OF MATERIAL**

| Bar                              | No. | Size     | Length  | Shape |
|----------------------------------|-----|----------|---------|-------|
| a(E)                             | 211 | #5       | 32'-6"  | —     |
| a1(E)                            | 127 | #5       | 31'-10" | —     |
| a2(E)                            | 420 | #6       | 6'-6"   | —     |
| b(E)                             | 180 | #5       | 23'-0"  | —     |
| b1(E)                            | 33  | #6       | 31'-0"  | —     |
| b2(E)                            | 120 | #5       | 28'-2"  | —     |
| d(E)                             | 232 | #5       | 5'-7"   | ⌒     |
| d1(E)                            | 232 | #5       | 7'-8"   | ⌒     |
| e(E)                             | 84  | #4       | 14'-6"  | —     |
| e1(E)                            | 8   | #4       | 23'-1"  | —     |
| e2(E)                            | 8   | #8       | 24'-8"  | —     |
| e5(E)                            | 32  | #4       | 7'-8"   | —     |
| e6(E)                            | 4   | #8       | 7'-8"   | —     |
| m(E)                             | 20  | #6       | 18'-1"  | —     |
| m1(E)                            | 12  | #6       | 10'-1"  | —     |
| m2(E)                            | 8   | #6       | 6'-5"   | —     |
| m3(E)                            | 4   | #6       | 2'-9"   | —     |
| m4(E)                            | 8   | #6       | 7'-10"  | —     |
| s(E)                             | 68  | #5       | 5'-5"   | ⌒     |
| s1(E)                            | 60  | #4       | 8'-2"   | ⌒     |
| v(E)                             | 72  | #5       | 3'-9"   | ⌒     |
| Reinforcement Bars, Epoxy Coated |     | Pound    | 31,670  |       |
| Concrete Superstructure          |     | Cu. Yds. | 134.1   |       |

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

**SUPERSTRUCTURE DETAILS  
STRUCTURE NO. 045-3020**

DESIGNED - AEU  
CHECKED - DLS  
DRAWN - AWH  
CHECKED - DLS

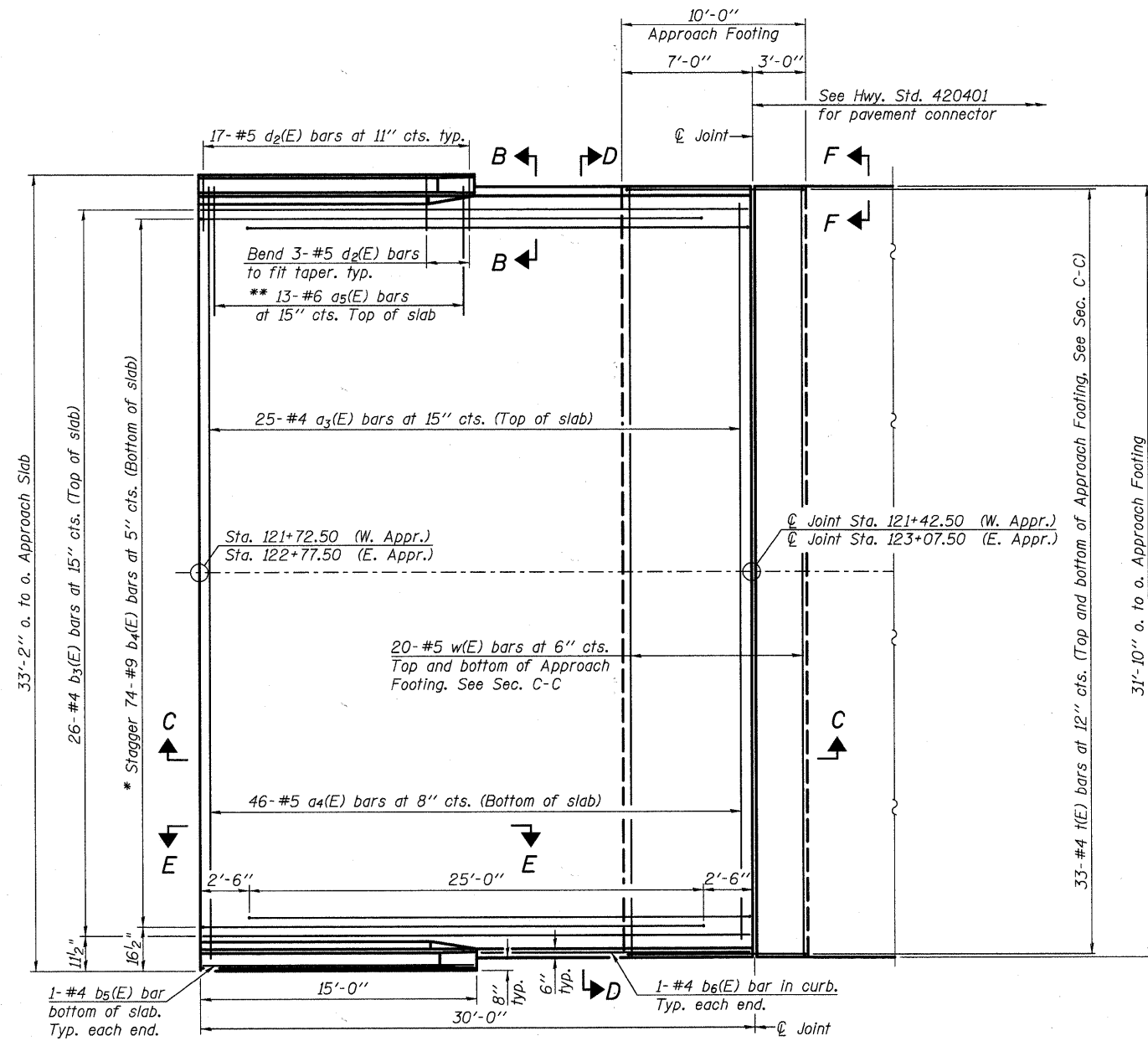
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116 West Main Street, Suite 201  
St. Charles, Illinois 60174  
(630) 443-7755

|                     |        |                |          |                    |           |
|---------------------|--------|----------------|----------|--------------------|-----------|
| SHEET NO. 8         | F.A.U. | SECTION        | COUNTY   | TOTAL SHEETS       | SHEET NO. |
| 21 SHEETS           | 2332   | 03-14185-02-BR | KANE     | 73                 | 32        |
| FED. ROAD DIST. NO. |        |                | ILLINOIS | CONTRACT NO. 63521 |           |
| FED. AID PROJECT    |        |                |          |                    |           |

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PLOT CREATION DATE = 10/19/2010

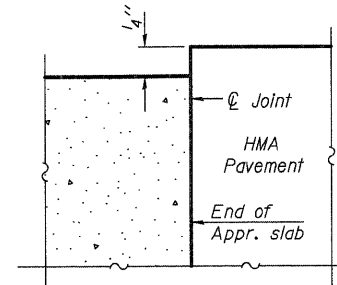


Notes:  
See Sheet 10 of 21 for Sections C-C & D-D and View E-E.



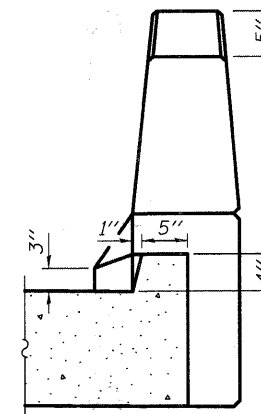
PLAN

\* Tilt #9 b4(E) bars as required to maintain clearance.  
\*\* Space between a3(E) bars, typ. ea. parapet.

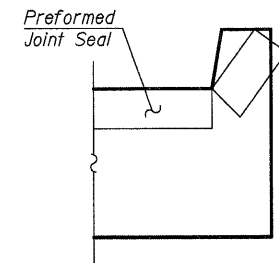


FLEXIBLE PAVEMENT

DETAIL A



VIEW B-B




VIEW F-F

Angle Preformed Joint Seal at 45° at curbs when req'd for drainage.

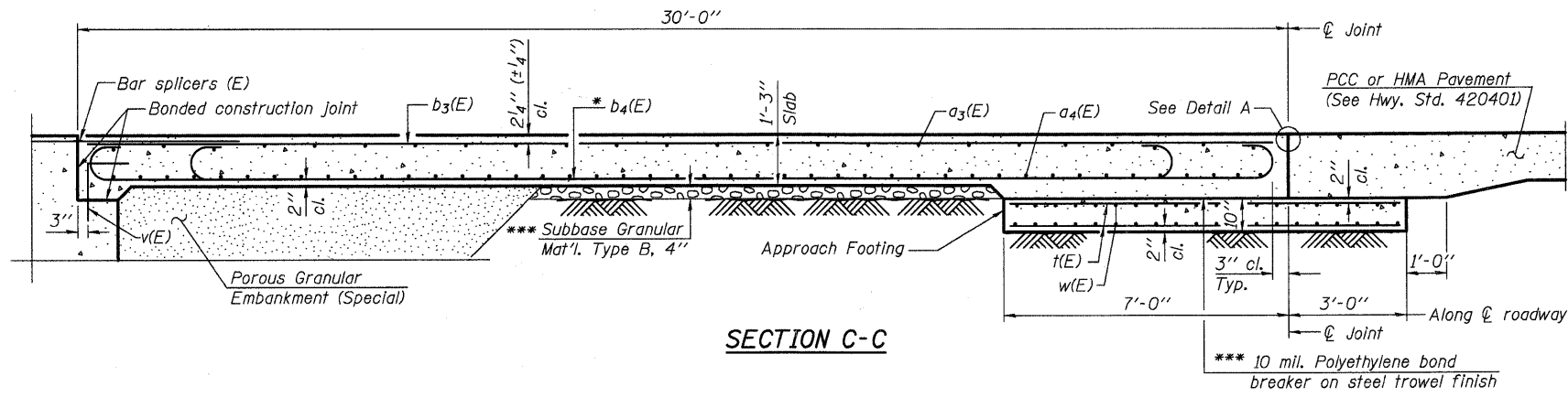
|                |
|----------------|
| DESIGNED - AEU |
| CHECKED - DLS  |
| DRAWN - AWH    |
| CHECKED - AEU  |

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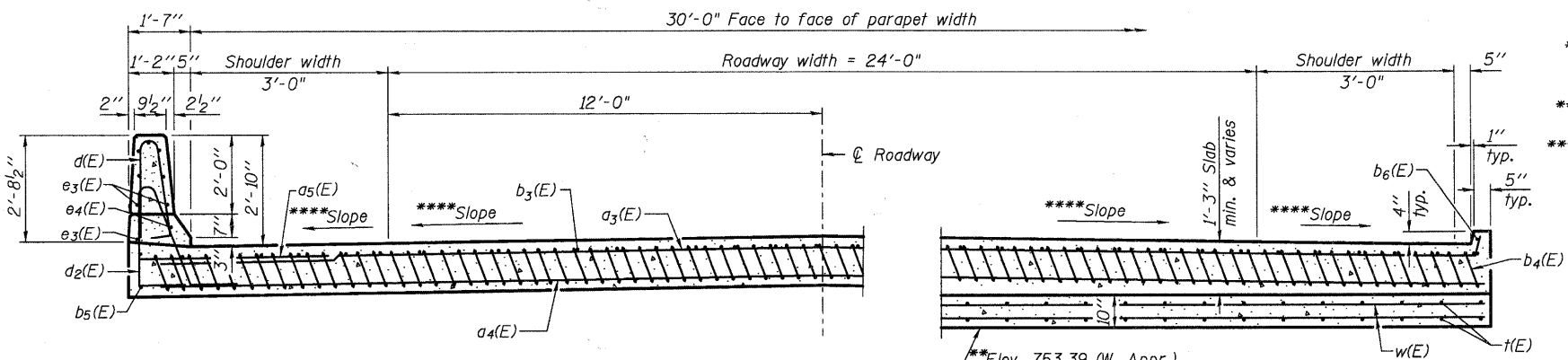
(Sheet 1 of 2)  
**BRIDGE APPROACH SLAB DETAILS**  
**STRUCTURE NO. 045-3020**

|   |                              |                     |                |                  |              |           |
|---|------------------------------|---------------------|----------------|------------------|--------------|-----------|
|  <b>WILLS BURKE KELSEY ASSOCIATES LTD.</b><br>116 West Main Street, Suite 201<br>St. Charles, Illinois 60174<br>(630) 443-7755 | SHEET NO. 9<br><br>21 SHEETS | F.A.U.              | SECTION        | COUNTY           | TOTAL SHEETS | SHEET NO. |
|   |                              | 2332                | 03-14185-02-BR | KANE             | 73           | 33        |
|   |                              | CONTRACT NO. 63521  |                |                  |              |           |
|   |                              | FED. ROAD DIST. NO. | ILLINOIS       | FED. AID PROJECT |              |           |

Notes:  
 See Sheet 9 of 21 for Detail A and View B-B.  
 Approach slab and parapet concrete shall be paid for as Concrete Superstructure.  
 Approach footing concrete shall be paid for as Concrete Structures.  
 Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.  
 For v(E) bar details, see Sheet 8 of 21.  
 The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.  
 For bar splicer details, see Sheet 19 of 21.  
 Cost of excavation for approach footing included with Concrete Structures.  
 For Porous Granular Embankment (Special) and drainage treatment details, see Sheet 2 of 21.  
 For additional parapet details, see Sheet 9 of 21.



SECTION C-C

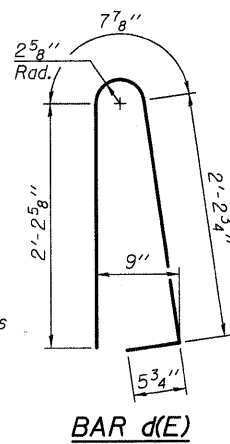


NEAR ABUTMENT

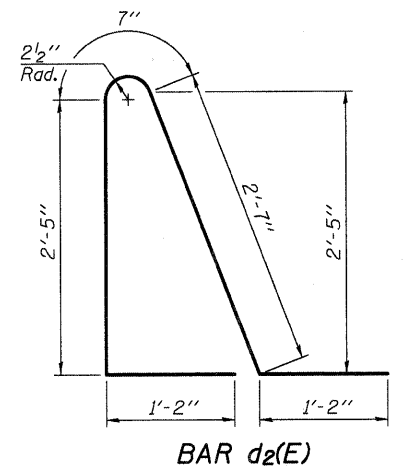
SECTION D-D

AT APPROACH FOOTING

- \* Tilt #9 b4(E) bars as required to maintain clearance.
- \*\* East approach footing to be constructed parallel to bottom of approach slab.
- \*\*\* Cost included with Concrete Superstructure.
- \*\*\*\* Slope varies due to superelevation transition. See sheets 5 & 6 of 21 for Top of Approach Slab Elevations.



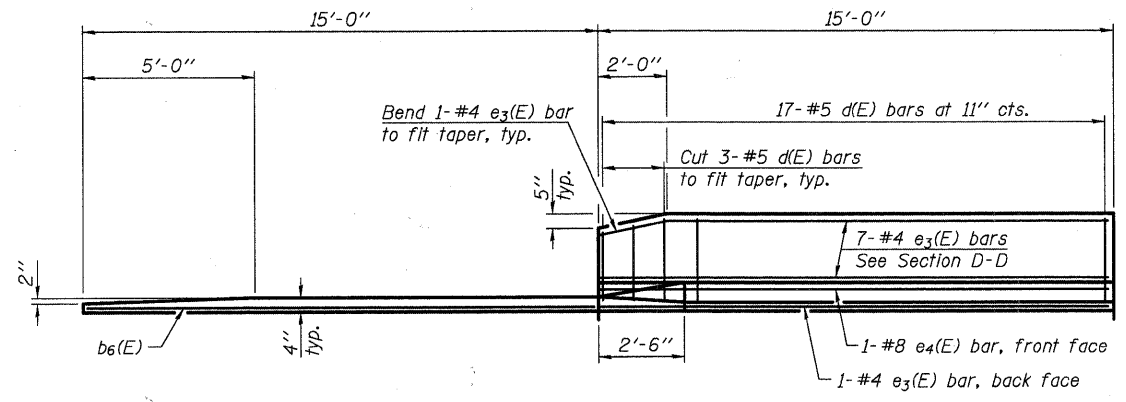
BAR d(E)



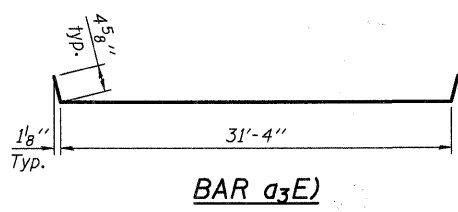
BAR d2(E)

TWO APPROACHES  
 BILL OF MATERIAL

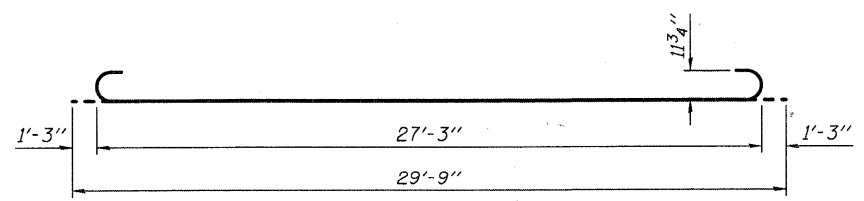
| Bar                              | No. | Size | Length  | Shape  |
|----------------------------------|-----|------|---------|--------|
| a3(E)                            | 50  | #4   | 32'-1"  | ┌───┐  |
| a4(E)                            | 92  | #5   | 31'-6"  | ┌───┐  |
| a5(E)                            | 52  | #6   | 6'-6"   | ┌───┐  |
| b3(E)                            | 52  | #4   | 29'-8"  | ┌───┐  |
| b4(E)                            | 148 | #9   | 29'-9"  | ┌───┐  |
| b5(E)                            | 4   | #4   | 14'-8"  | ┌───┐  |
| b6(E)                            | 4   | #4   | 14'-8"  | ┌───┐  |
| d(E)                             | 68  | #5   | 5'-7"   | ┌───┐  |
| d2(E)                            | 68  | #5   | 7'-11"  | ┌───┐  |
| e3(E)                            | 32  | #4   | 14'-8"  | ┌───┐  |
| e4(E)                            | 4   | #8   | 14'-8"  | ┌───┐  |
| t(E)                             | 132 | #4   | 9'-8"   | ┌───┐  |
| w(E)                             | 80  | #5   | 31'-6"  | ┌───┐  |
| Concrete Superstructure          |     |      | Cu. Yd. | 103.4  |
| Concrete Structures              |     |      | Cu. Yd. | 19.7   |
| Reinforcement Bars, Epoxy Coated |     |      | Pound   | 25,590 |



VIEW E-E



BAR a3(E)



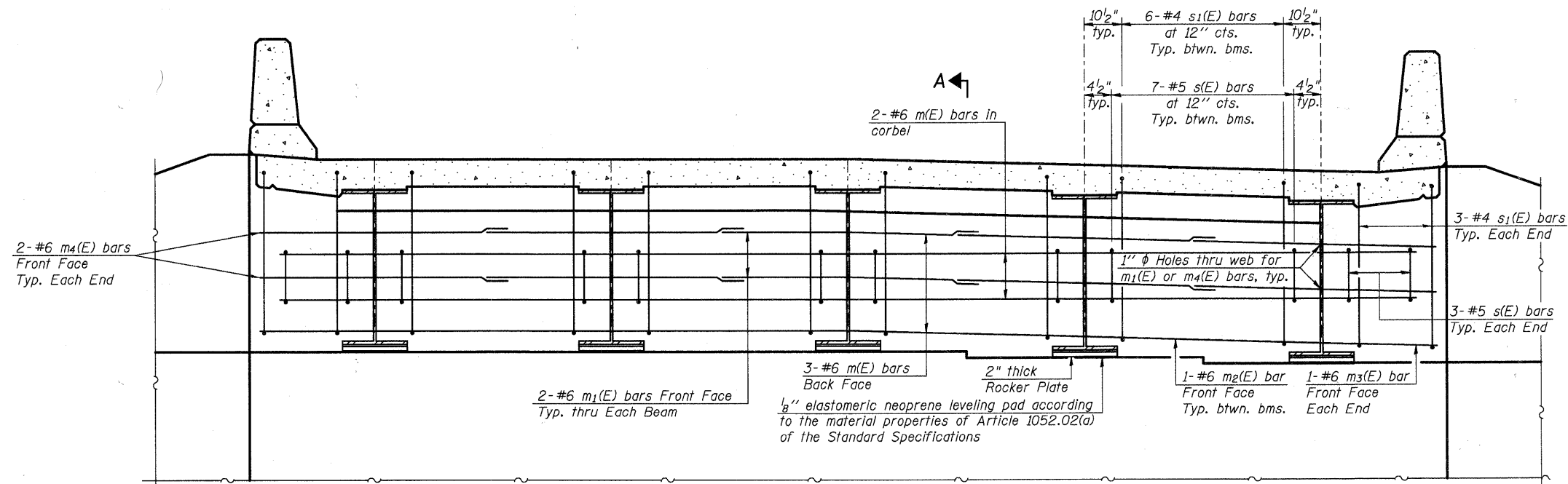
BAR b4(E)

|                |
|----------------|
| DESIGNED - AEU |
| CHECKED - DLS  |
| DRAWN - AWH    |
| CHECKED - AEU  |

BA-0 11-1-09

(Sheet 2 of 2)  
 BRIDGE APPROACH SLAB DETAILS  
 STRUCTURE NO. 045-3020

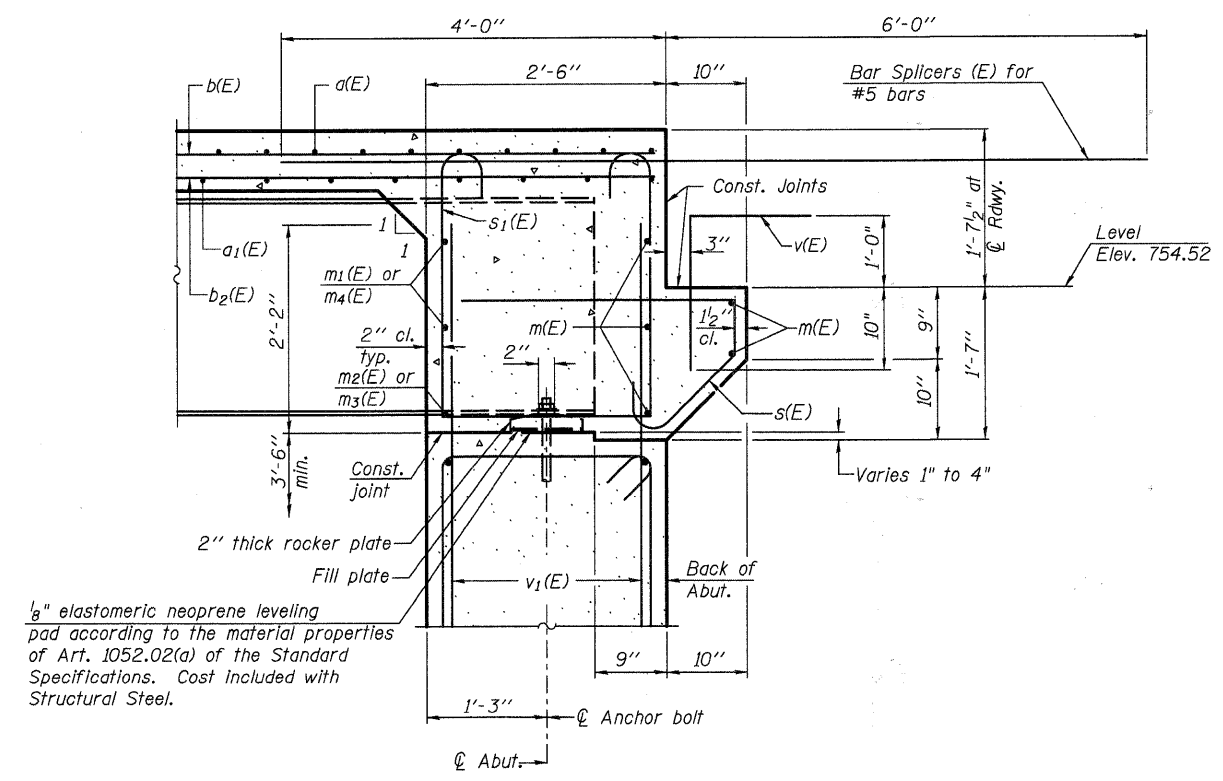
|   |              |                    |                |   |              |           |
|---|--------------|--------------------|----------------|---|--------------|-----------|
| <b>WILLS BURKE KELSEY ASSOCIATES LTD.</b><br>116 West Main Street, Suite 201<br>St. Charles, Illinois 60174<br>(630) 443-7755 | SHEET NO. 10 | F.A.U.             | SECTION        | COUNTY  | TOTAL SHEETS | SHEET NO. |
|   | 21 SHEETS    | 2332               | 03-14185-02-BR | KANE  | 73           | 34        |
|   |              | CONTRACT NO. 63521 |                | FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT |              |           |



**DIAPHRAGM ELEVATION AT ABUTMENT**

Notes:  
 Reinforcement bars in diaphragm are billed with superstructure on Sheet 8 of 21.  
 Concrete in diaphragm is included with Concrete Superstructure on Sheet 8 of 21.  
 For details of bars s(E) & s<sub>1</sub>(E) see Sheet 8 of 21.

**MIN. BAR LAP**  
 #6 bar = 3'-4"



**SECTION A-A**

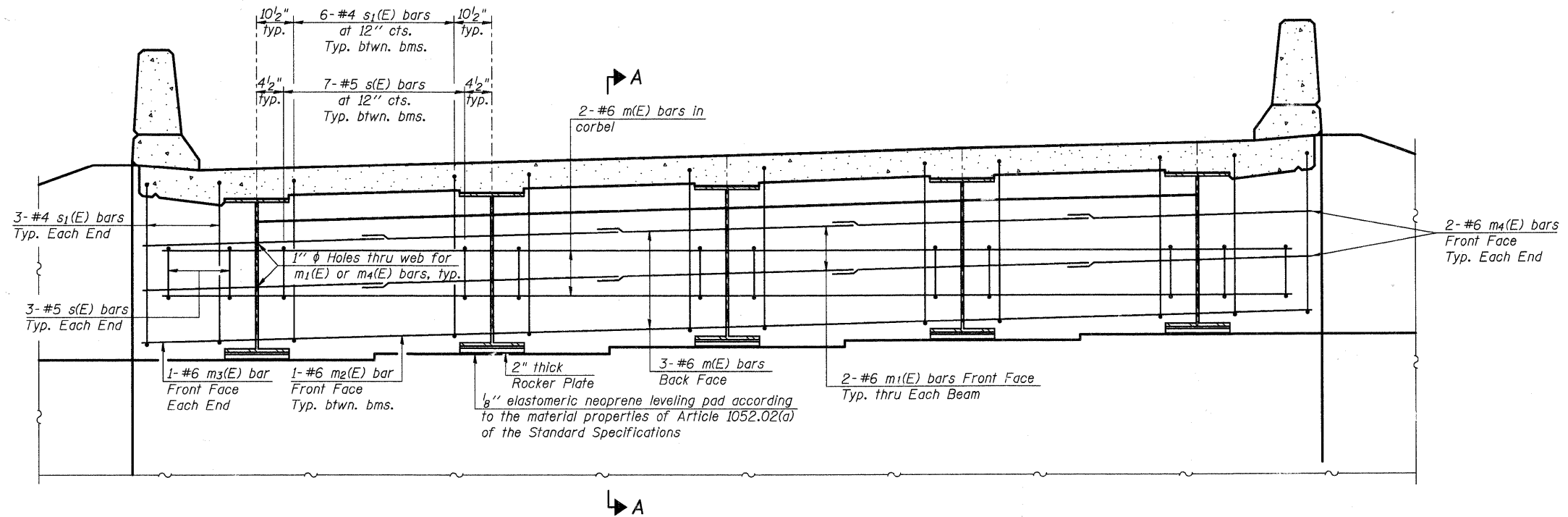
**WEST ABUTMENT  
 DIAPHRAGM DETAILS  
 STRUCTURE NO. 045-3020**

|                |
|----------------|
| DESIGNED - AEU |
| CHECKED - DLS  |
| DRAWN - AWH    |
| CHECKED - AEU  |

|   |              |                     |                |          |                  |           |
|---|--------------|---------------------|----------------|----------|------------------|-----------|
| <b>WILLS BURKE KELSEY ASSOCIATES LTD.</b><br>116 West Main Street, Suite 201<br>St. Charles, Illinois 60174<br>(630) 443-7755 | SHEET NO. 11 | F.A.U.              | SECTION        | COUNTY   | TOTAL SHEETS     | SHEET NO. |
|   | 21 SHEETS    | 2332                | 03-14185-02-BR | KANE     | 73               | 35        |
|   |              | FED. ROAD DIST. NO. |                | ILLINOIS | FED. AID PROJECT |           |
|   |              | CONTRACT NO. 63521  |                |          |                  |           |

FILE NAME = P:\CBBEL\_WEST Projects\2009\05-0802\_Bolcum PH\1\Structural\Drawings\0453020-63521-01-W\_Abut\_Diaph\_Details.dgn

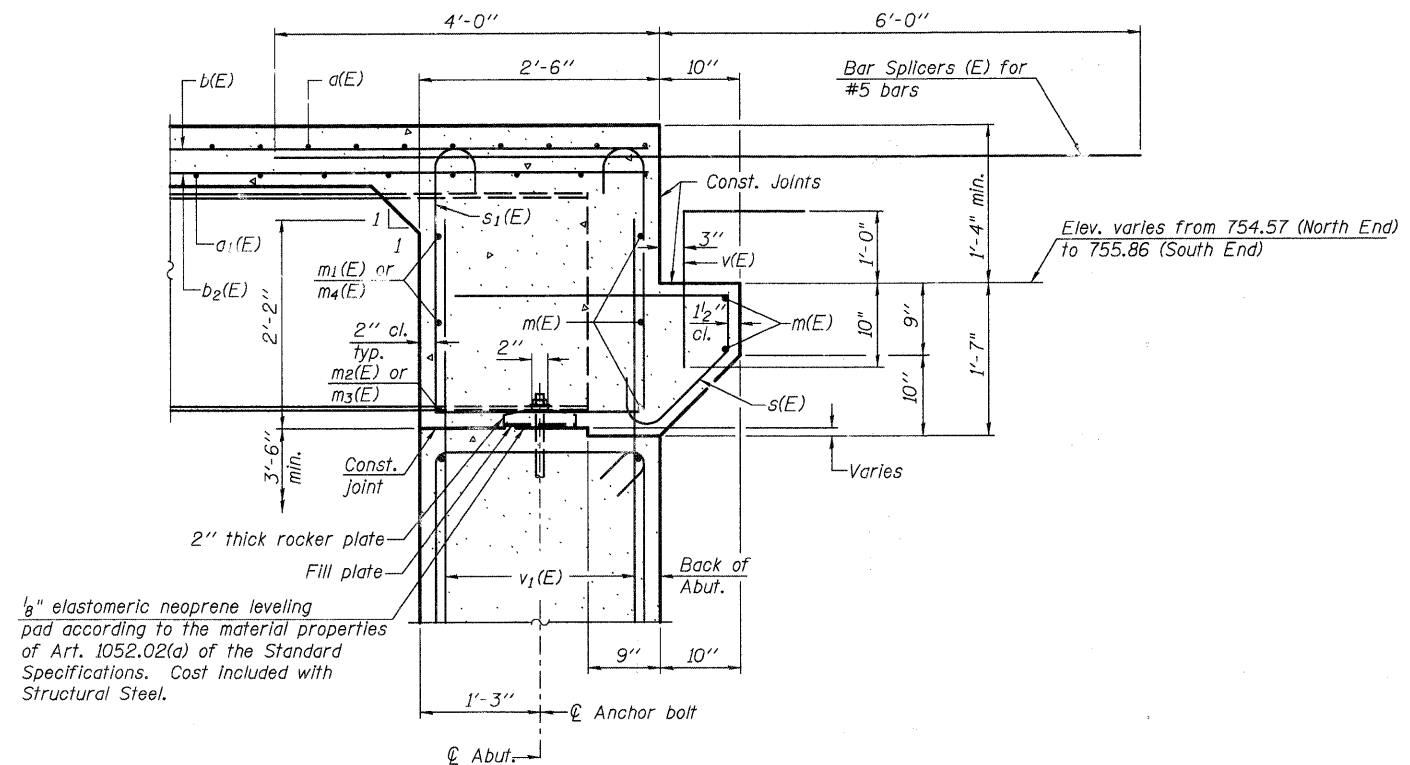
PLOT CREATION DATE = 10/19/2010



DIAPHRAGM ELEVATION AT ABUTMENT

Notes:  
 Reinforcement bars in diaphragm are billed with superstructure on Sheet 8 of 21.  
 Concrete in diaphragm is included with Concrete Superstructure on Sheet 8 of 21.  
 For details of bars s(E) & s1(E) see Sheet 8 of 21.

**MIN. BAR LAP**  
 #6 bar = 3'-4"



SECTION A-A

**EAST ABUTMENT  
 DIAPHRAGM DETAILS  
 STRUCTURE NO. 045-3020**

|                |
|----------------|
| DESIGNED - AEU |
| CHECKED - DLS  |
| DRAWN - AWH    |
| CHECKED - AEU  |

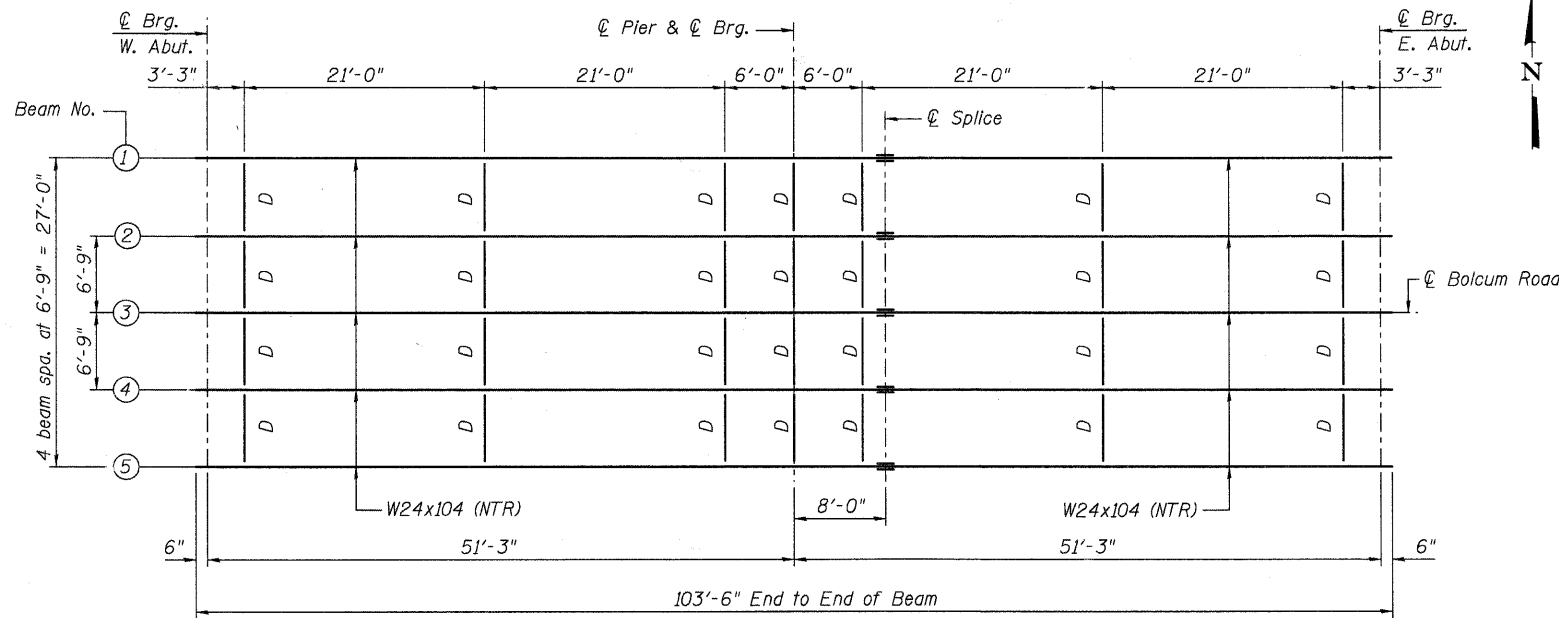
SI-DS2

11-1-09

**WILLS BURKE KELSEY ASSOCIATES LTD.**  
 116 West Main Street, Suite 201  
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 (630) 443-7755

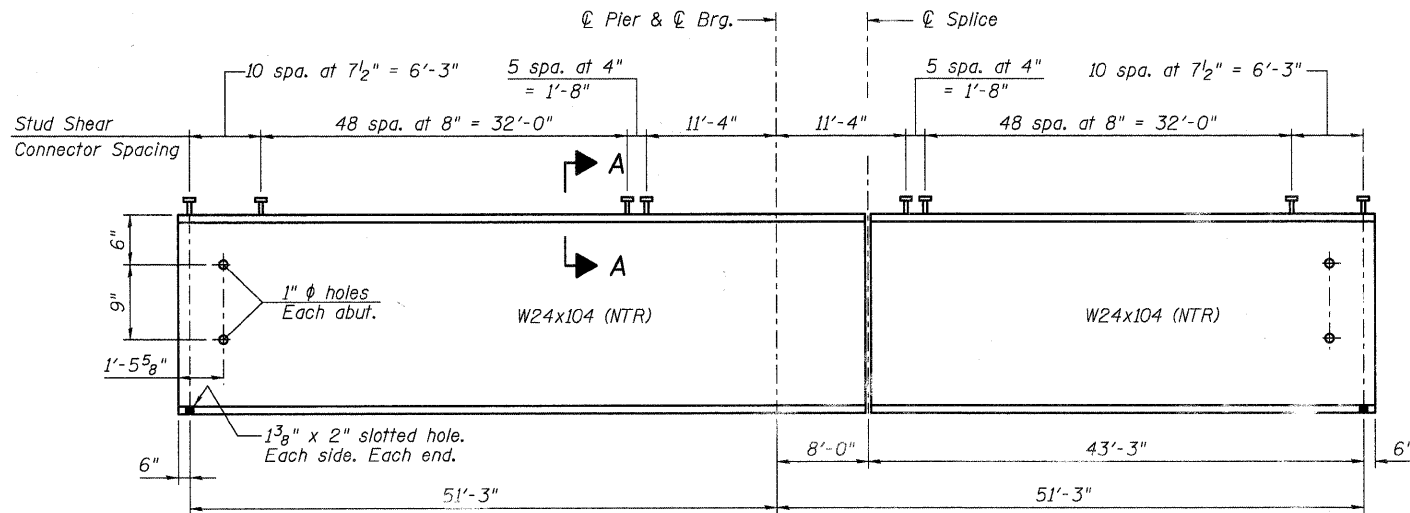
SHEET NO. 12  
 21 SHEETS

|                     |                |                  |              |           |
|---------------------|----------------|------------------|--------------|-----------|
| F.A.U.              | SECTION        | COUNTY           | TOTAL SHEETS | SHEET NO. |
| 2332                | 03-14185-02-BR | KANE             | 73           | 36        |
| CONTRACT NO. 63521  |                |                  |              |           |
| FED. ROAD DIST. NO. | ILLINOIS       | FED. AID PROJECT |              |           |



**FRAMING PLAN**

"D" denotes Interior Diaphragm. See Sheet 14 of 21.



**ELEVATION**

**TOP OF BEAM ELEVATIONS**

(For Fabrication Only)

| Location        | Beam 1 | Beam 2 | Beam 3 | Beam 4 | Beam 5 |
|-----------------|--------|--------|--------|--------|--------|
| ℄ Brg. W. Abut. | 755.19 | 755.32 | 755.46 | 755.46 | 755.45 |
| ℄ Brg. Pier     | 755.49 | 755.64 | 755.79 | 755.94 | 756.05 |
| ℄ Splice        | 755.48 | 755.65 | 755.82 | 755.99 | 756.12 |
| ℄ Brg. E. Abut. | 755.34 | 755.63 | 755.93 | 756.22 | 756.46 |

|                |
|----------------|
| DESIGNED - DLS |
| CHECKED - AEU  |
| DRAWN - AWH    |
| CHECKED - DLS  |

|                             | 0.4 Sp 1<br>0.6 Sp2      | Pier  |
|-----------------------------|--------------------------|-------|
| $I_s$                       | (in <sup>4</sup> ) 3,100 | 3,100 |
| $I_c(n)$                    | (in <sup>4</sup> ) 9,016 | ---   |
| $I_c(3n)$                   | (in <sup>4</sup> ) 6,693 | ---   |
| $S_s$                       | (in <sup>3</sup> ) 258   | 258   |
| $S_c(n)$                    | (in <sup>3</sup> ) 387   | ---   |
| $S_c(3n)$                   | (in <sup>3</sup> ) 350   | ---   |
| $Z$                         | (in <sup>3</sup> ) ---   | 289   |
| DC1                         | (k/ft.) 0.80             | 0.80  |
| $M_{dc1}$                   | (k) 147                  | 263   |
| DC2                         | (k/ft.) 0.18             | 0.18  |
| $M_{dc2}$                   | (k) 38                   | 47    |
| DW                          | (k/ft.) 0.30             | 0.30  |
| $M_{DW}$                    | (k) 63                   | 78    |
| $M_k + IM$                  | (k) 573                  | 302   |
| $M_u$ (Strength I)          | (k) 1,329                | 1,033 |
| $\phi_r M_n, \phi_r M_{nc}$ | (k) 1,956                | 1,204 |
| $f_s$ DC1                   | (ksi) 6.83               | 12.23 |
| $f_s$ DC2                   | (ksi) 1.30               | 2.19  |
| $f_s$ DW                    | (ksi) 2.16               | 3.63  |
| $f_s$ 1.3( $\ell + IM$ )    | (ksi) 23.10              | 18.26 |
| $f_s$ (Service II)          | (ksi) 33.39              | 36.31 |
| $V_r$                       | (k) 20.9                 | ---   |

\* Compact section

|                 | Abut.    | Pier  |
|-----------------|----------|-------|
| $R_{DC1}$       | (k) 16.2 | 51.3  |
| $R_{DC2}$       | (k) 3.7  | 11.0  |
| $R_{DW}$        | (k) 6.2  | 13.4  |
| $R_{\ell + IM}$ | (k) 66.3 | 93.8  |
| $R_{Total}$     | (k) 92.4 | 174.5 |

$I_s, S_s$ : Non-composite moment of inertia and section modulus of the steel section used for computing  $f_s$  (Total-Strength I, and Service II) due to non-composite dead loads (in<sup>4</sup> and in<sup>3</sup>).

$I_c(n), S_c(n)$ : Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing  $f_s$  (Total-Strength I, and Service II) due to short-term composite live loads (in<sup>4</sup> and in<sup>3</sup>).

$I_c(3n), S_c(3n)$ : Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing  $f_s$  (Total-Strength I, and Service II) due to long-term composite (superimposed) dead loads (in<sup>4</sup> and in<sup>3</sup>).

$Z$ : Plastic Section Modulus of the steel section in non-composite areas. Omit line in Moment Table if not used in design calculations (in<sup>3</sup>).

DC1: Un-factored non-composite dead load (kips/ft.).

$M_{dc1}$ : Un-factored moment due to non-composite dead load (kip-ft.).

DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).

$M_{dc2}$ : Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).

DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).

$M_{DW}$ : Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).

$M_k + IM$ : Un-factored live load moment plus dynamic load allowance (Impact) (kip-ft.).

$M_u$  (Strength I): Factored design moment (kip-ft.).

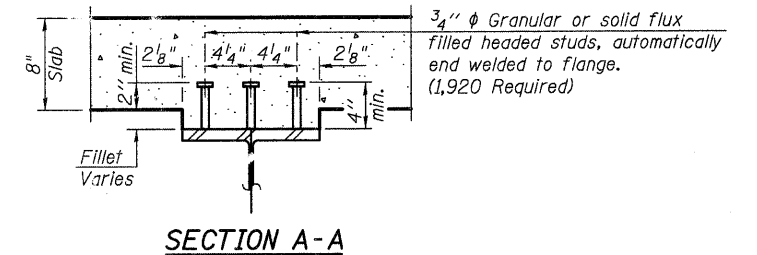
$\phi_r M_n$ : Compact composite positive moment capacity computed according to Article 6.10.7.1 (kip-ft.).

$\phi_r M_{nc}$ : Compact non-composite negative moment capacity computed according to Article A6.1.1 (kip-ft.).

$f_s$  (Service II): Sum of stresses as computed from the moments below (ksi).

$f_s$  (Total)(Strength I): Sum of stresses as computed from the moments below on non-compact section (ksi).

$V_r$ : Maximum factored shear range in composite portion of span computed according to Article 6.10.10.



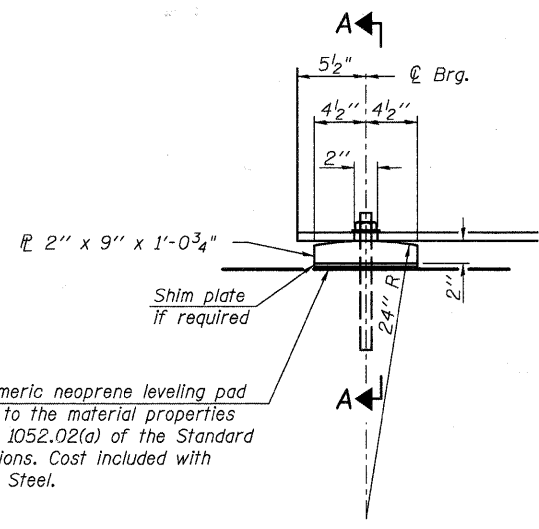
**NOTES:**

- All beams shall be W24x104 AASHTO M270 Grade 50W (NTR). All diaphragms and connecting angles shall be AASHTO M270 Grade 50W. All bearing plates shall be AASHTO M270 Grade 50W.
- All diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted.
- Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.
- Anchor Bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
- Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

**FRAMING PLAN & BEAM DETAILS**  
**STRUCTURE NO. 045-3020**

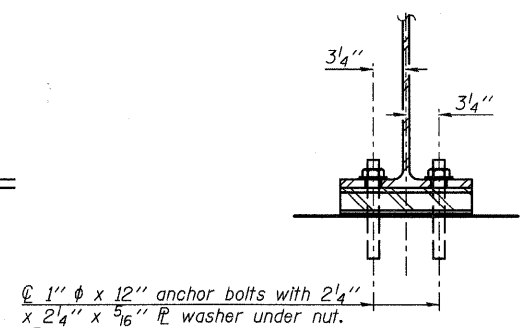
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|---|--------------|---------------------|----------------|----------|------------------|-----------|
| <b>WILLS BURKE KELSEY ASSOCIATES LTD.</b><br>116 West Main Street, Suite 201<br>St. Charles, Illinois 60174<br>(630) 443-7755 | SHEET NO. 13 | F.A.U.              | SECTION        | COUNTY   | TOTAL SHEETS     | SHEET NO. |
|   | 21 SHEETS    | 2332                | 03-14185-02-BR | KANE     | 73               | 37        |
|   |              | FED. ROAD DIST. NO. |                | ILLINOIS | FED. AID PROJECT |           |
|   |              | CONTRACT NO. 63521  |                |          |                  |           |

FILE NAME = P:\CBBEL WEST Projects\2009\091-00682 Bolam PH11\Structural\Ugpn\453820-63821-014-Struct.Steel-Details.dgn



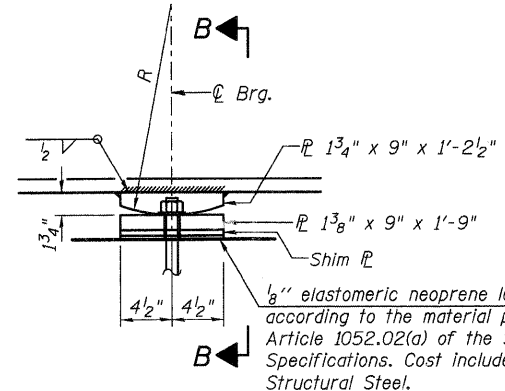
1/8" elastomeric neoprene leveling pad according to the material properties of Article 1052.02(a) of the Standard Specifications. Cost included with Structural Steel.

**ELEVATION AT ABUTMENT**



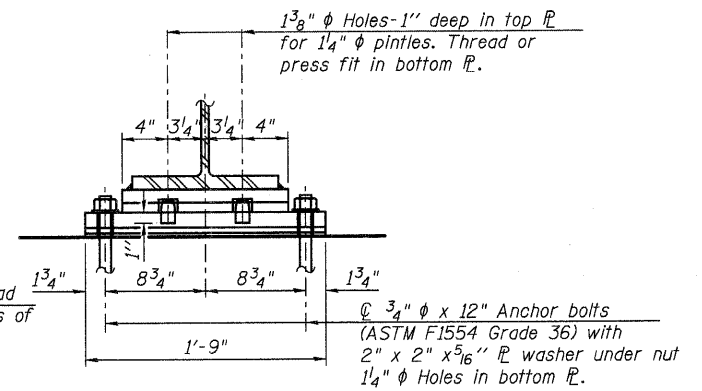
1"  $\phi$  x 12" anchor bolts with 2 1/4" x 2 1/4" x 5/16"  $\phi$  washer under nut. 1 3/8" x 2" slotted hole in flange. 1 1/2"  $\phi$  holes in bearing plate.

**SECTION A-A**



1/8" elastomeric neoprene leveling pad according to the material properties of Article 1052.02(a) of the Standard Specifications. Cost included with Structural Steel.

**ELEVATION AT PIER**



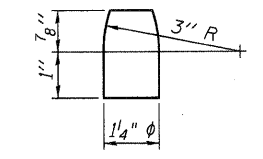
1 3/8"  $\phi$  Holes-1" deep in top  $\phi$  for 1 1/4"  $\phi$  pintles. Thread or press fit in bottom  $\phi$ .

1 3/4"  $\phi$  x 12" Anchor bolts (ASTM F1554 Grade 36) with 2" x 2" x 5/16"  $\phi$  washer under nut 1 1/4"  $\phi$  Holes in bottom  $\phi$ .

**SECTION B-B**

**FIXED BEARING**  
(10 Required)

**FIXED BEARING**  
(5 Required)



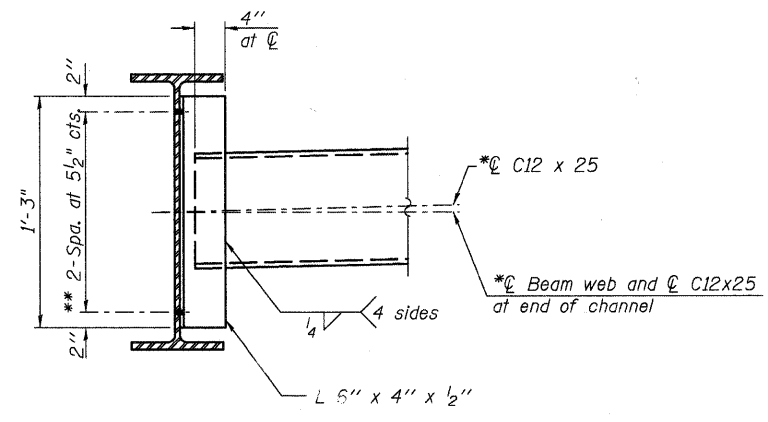
**PINTLE**

**NOTES:**  
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.

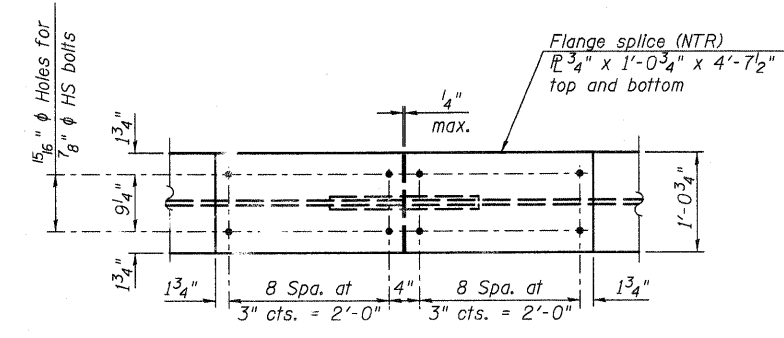
Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

Two 1/8 in. adjusting shims shall be provided for each bearing location in addition to all other plates or shims and placed as shown on bearing details.

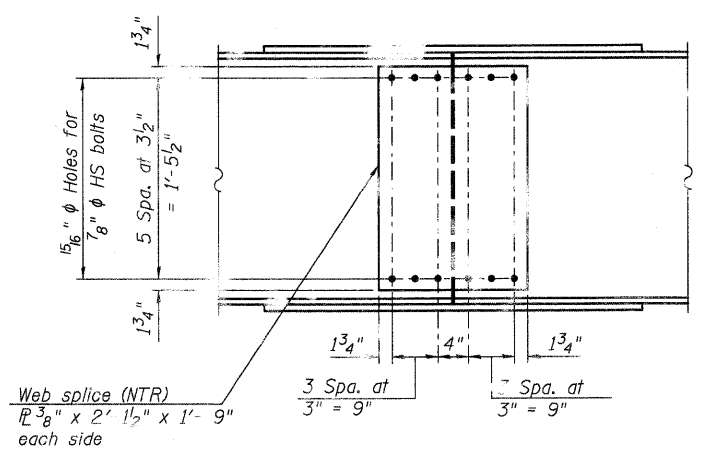


**INTERIOR DIAPHRAGM**  
(28 Required)

**Note:**  
Two hardened washers required for each set of oversized holes.  
\*C12x30 is permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section.  
The alternate, if utilized, shall be provided at no additional cost to the Department.  
\*\*3/4"  $\phi$  HS bolts, 1 5/16"  $\phi$  holes



**PLAN**



**ELEVATION**

**FIELD SPLICE DETAIL**  
(5 Required)

**BILL OF MATERIAL**

| Item             | Unit | Total |
|------------------|------|-------|
| Anchor Bolts, 1" | Each | 30    |

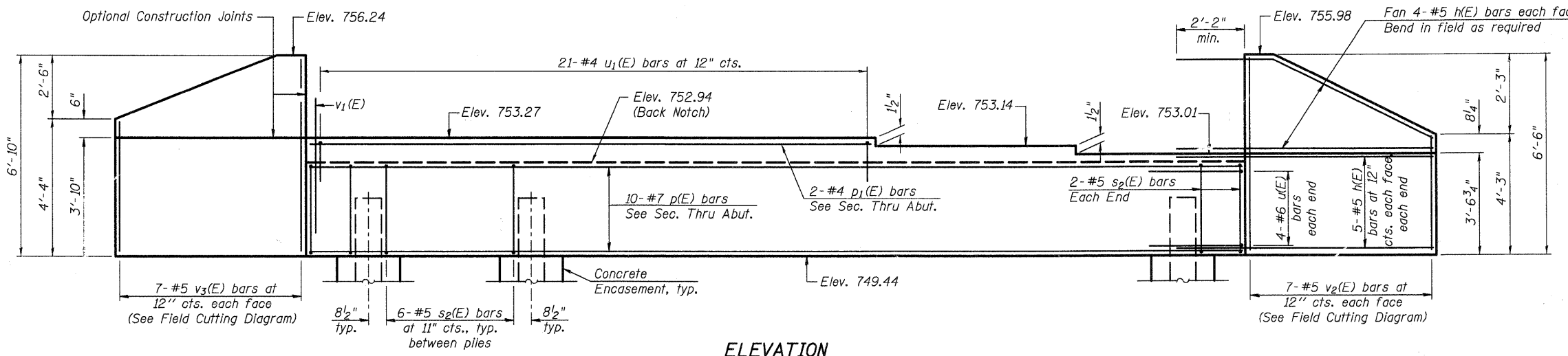
**STRUCTURAL STEEL DETAILS**  
**STRUCTURE NO. 045-3020**

|                |
|----------------|
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| CHECKED - DLS  |
| DRAWN - AWH    |
| CHECKED - AEU  |

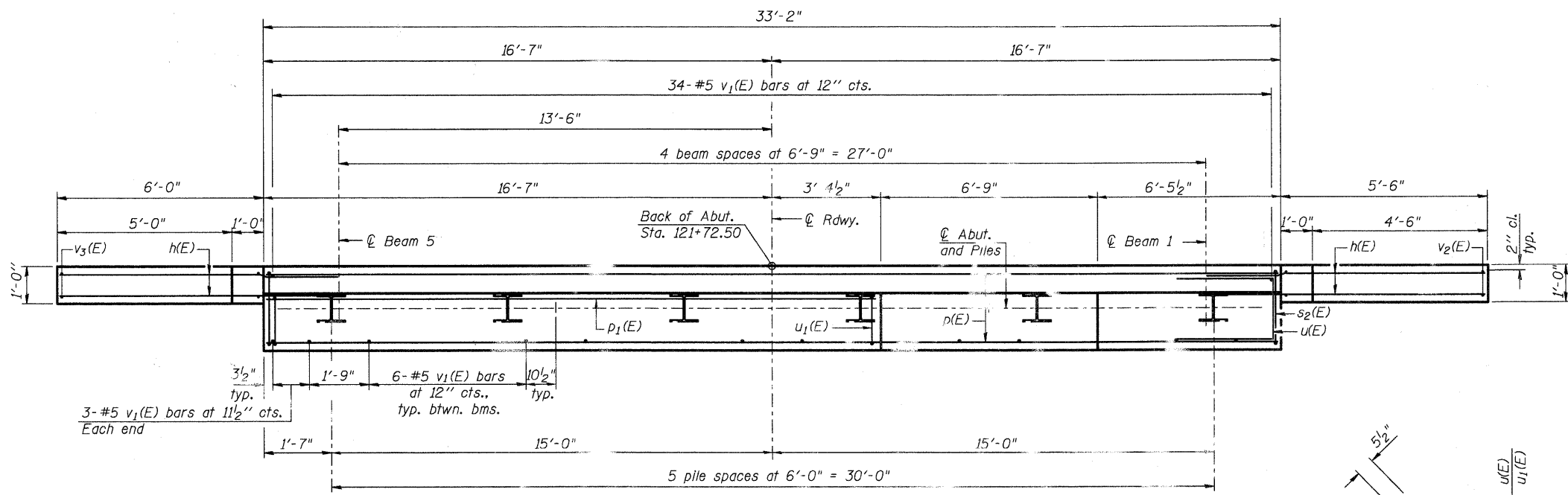
**WILLS BURKE KELSEY ASSOCIATES LTD.**  
116 West Main Street, Suite 201  
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(630) 443-7755

|                               |        |                |          |                  |           |
|-------------------------------|--------|----------------|----------|------------------|-----------|
| SHEET NO. 14<br><br>21 SHEETS | F.A.U. | SECTION        | COUNTY   | TOTAL SHEETS     | SHEET NO. |
|                               | 2332   | 03-14185-02-BR | KANE     | 73               | 38        |
| FED. ROAD DISY. NO.           |        |                | ILLINOIS | FED. AID PROJECT |           |
| CONTRACT NO. 63521            |        |                |          |                  |           |

Notes:  
Pour steps monolithically with cap.

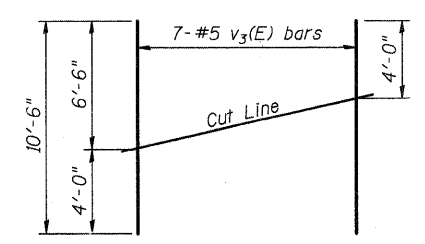


**ELEVATION**

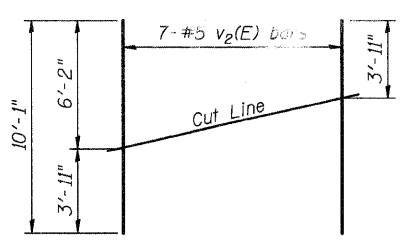


**PLAN**

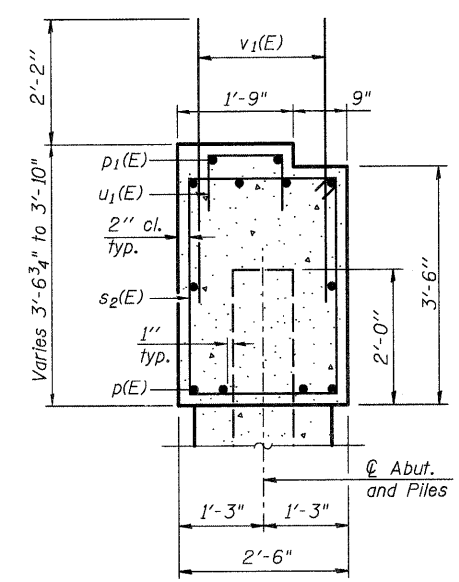
**PILE DATA**  
Type: Steel HP 12x53 w/ Pile Shoes  
Nominal Required Bearing: 419  
Factored Resistance Available: 209  
Est. Length: 25'  
No. Production Piles: 5  
No. Test Piles: 1



**FIELD CUTTING DIAGRAM**  
Order v3(E) bars full length. Cut as shown and use remainder of bars in opposite face.



**FIELD CUTTING DIAGRAM**  
Order v2(E) bars full length. Cut as shown and use remainder of bars in opposite face.

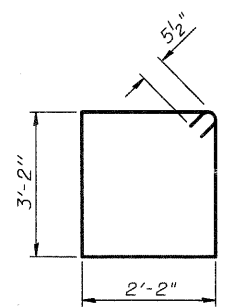


**SEC. THRU ABUT.**

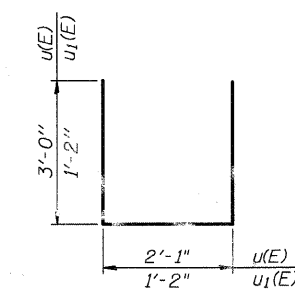
**BILL OF MATERIAL**

| Bar                              | No. | Size    | Length  | Shape |
|----------------------------------|-----|---------|---------|-------|
| h(E)                             | 36  | #5      | 8'-0"   | —     |
| p(E)                             | 10  | #7      | 32'-10" | —     |
| p1(E)                            | 2   | #4      | 19'-7"  | —     |
| s2(E)                            | 34  | #5      | 11'-7"  | □     |
| u(E)                             | 8   | #6      | 8'-1"   | —     |
| u1(E)                            | 21  | #4      | 3'-6"   | —     |
| v1(E)                            | 64  | #5      | 4'-4"   | —     |
| v2(E)                            | 7   | #5      | 10'-1"  | —     |
| v3(E)                            | 7   | #5      | 10'-6"  | —     |
| Structure Excavation             |     | Cu. Yd. | 92      |       |
| Concrete Structures              |     | Cu. Yd. | 13.7    |       |
| Concrete Encasement              |     | Cu. Yd. | 2.1     |       |
| Reinforcement Bars, Epoxy Coated |     | Pound   | 1,990   |       |
| Furnishing Steel Piles, HP 12x53 |     | Foot    | 125     |       |
| Driving Piles                    |     | Foot    | 125     |       |
| Test Pile Steel HP 12x53         |     | Each    | 1       |       |
| Pile Shoes                       |     | Each    | 6       |       |

For details of piles and Concrete Encasement, see sheet 18 of 21.



**BAR s2(E)**



**BARS u(E) & u1(E)**

|                |
|----------------|
| DESIGNED - AEU |
| CHECKED - DLS  |
| DRAWN - AWH    |
| CHECKED - AEU  |

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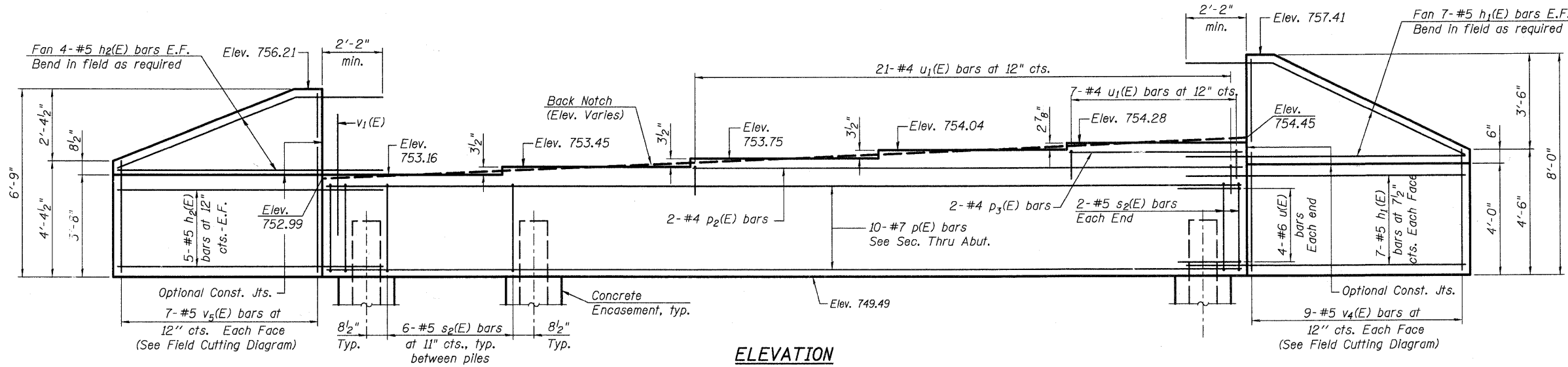
SHEET NO. 15  
21 SHEETS

|                     |                |                  |              |           |
|---------------------|----------------|------------------|--------------|-----------|
| F.A.U.              | SECTION        | COUNTY           | TOTAL SHEETS | SHEET NO. |
| 2332                | 03-14185-02-BR | KANE             | 73           | 39        |
| CONTRACT NO. 63521  |                |                  |              |           |
| FED. ROAD DIST. NO. | ILLINOIS       | FED. AID PROJECT |              |           |

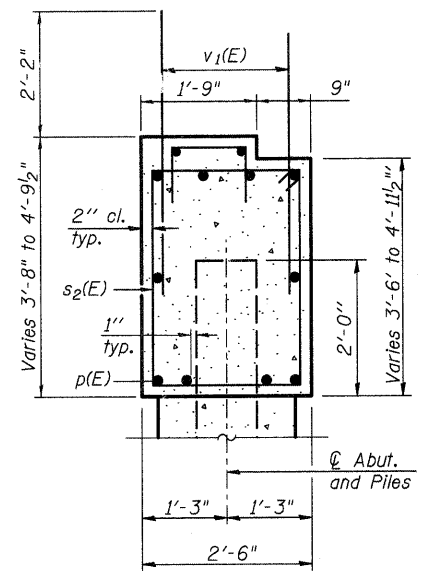
**WEST ABUTMENT DETAILS  
STRUCTURE NO. 045-3020**

FILE NAME = F:\CBBEL WEST Project\2009\09-0082 Bolcum PHA\Structural\09\0453020-63521-015-W.Abut.Detail.dgn PLOT CREATION DATE = 10/19/2010

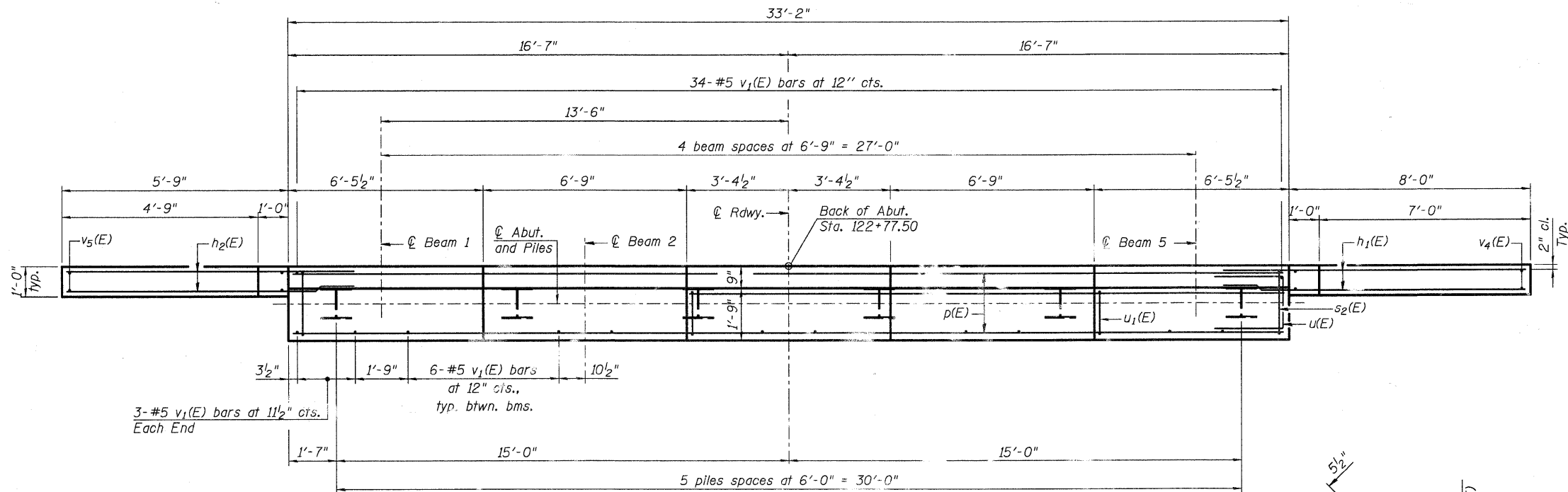
Notes:  
Pour steps monolithically with cap.



ELEVATION



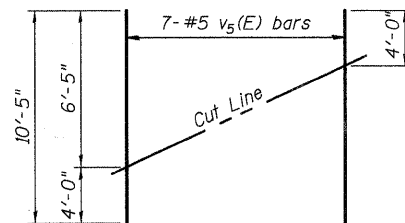
SEC. THRU ABUT.



PLAN

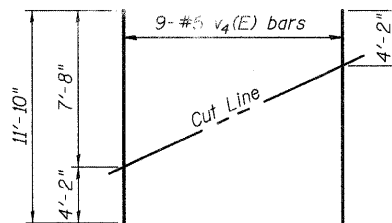
**PILE DATA**

Type: HP 12x53 w/ Pile Shoes  
Nominal Required Bearing: 419 kips  
Factored Resistance Available: 209 kips  
Est. Length: 35'  
No. Production Piles: 5  
No. Test Piles: 1



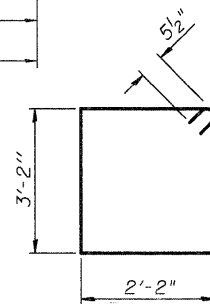
FIELD CUTTING DIAGRAM

Order v5(E) full length. Cut as shown and use remainder of bars in opposite face.

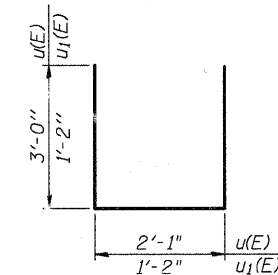


FIELD CUTTING DIAGRAM

Order v4(E) full length. Cut as shown and use remainder of bars in opposite face.



BAR s2(E)



BARS u(E) & u1(E)

**BILL OF MATERIAL**

| Bar                              | No. | Size | Length  | Shape |
|----------------------------------|-----|------|---------|-------|
| h1(E)                            | 28  | #5   | 10'-0"  | —     |
| h2(E)                            | 18  | #5   | 7'-9"   | —     |
| p(E)                             | 10  | #7   | 32'-10" | —     |
| p2(E)                            | 2   | #4   | 19'-8"  | —     |
| p3(E)                            | 2   | #4   | 6'-2"   | —     |
| s2(E)                            | 34  | #5   | 11'-7"  | □     |
| u(E)                             | 8   | #6   | 8'-1"   | —     |
| u1(E)                            | 28  | #4   | 3'-6"   | —     |
| v1(E)                            | 64  | #5   | 4'-4"   | —     |
| v4(E)                            | 9   | #5   | 11'-10" | —     |
| v5(E)                            | 7   | #5   | 10'-5"  | —     |
| Structure Excavation             |     |      | Cu. Yd. | 94    |
| Concrete Structures              |     |      | Cu. Yd. | 15.9  |
| Concrete Encasement              |     |      | Cu. Yd. | 2.1   |
| Reinforcement Bars, Epoxy Coated |     |      | Pound   | 2,190 |
| Furnishing Steel Piles, HP 12x53 |     |      | Foot    | 175   |
| Driving Piles                    |     |      | Foot    | 175   |
| Test Pile Steel, HP 12x53        |     |      | Each    | 1     |
| Pile Shoes                       |     |      | Each    | 6     |

For details of piles and Concrete Encasement, see Sheet 18 of 21.

E.F. refers to each face.

**EAST ABUTMENT DETAILS  
STRUCTURE NO. 045-3020**

|                |
|----------------|
| DESIGNED - DLS |
| CHECKED - AEU  |
| DRAWN - MLH    |
| CHECKED - DLS  |

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|                           |        |                |                  |              |           |
|---------------------------|--------|----------------|------------------|--------------|-----------|
| SHEET NO. 16<br>21 SHEETS | F.A.U. | SECTION        | COUNTY           | TOTAL SHEETS | SHEET NO. |
|                           | 2332   | 03-14185-02-BR | KANE             | 73           | 40        |
| FED. ROAD DIST. NO.       |        | ILLINOIS       | FED. AID PROJECT |              |           |
| CONTRACT NO. 63521        |        |                |                  |              |           |

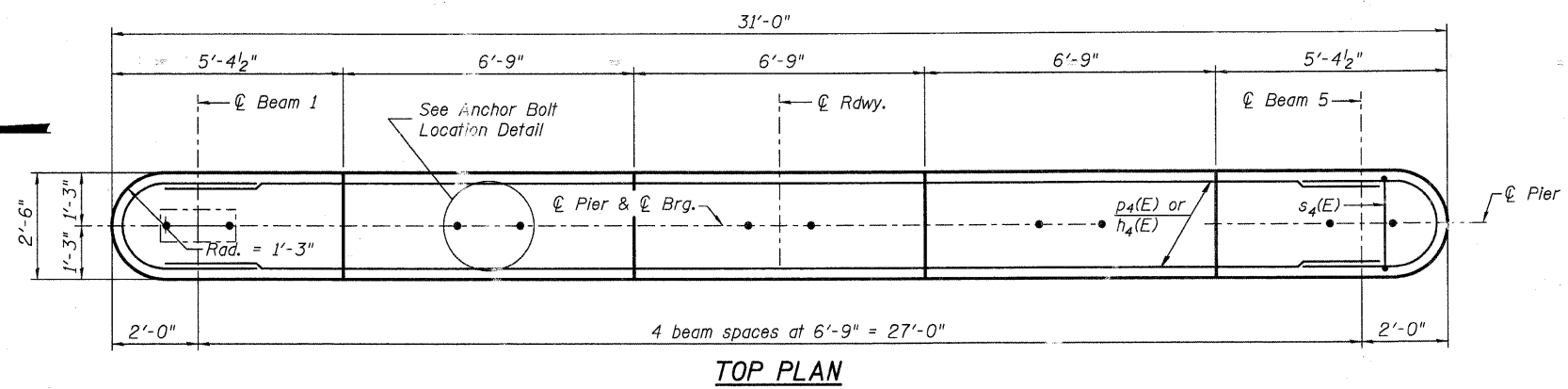
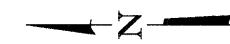
FILE NAME = F:\CBBEL\WEST Projects\2004\09-0802 Bolcum PH11\Structure\045-3020-016-E.Abut.Detail.dgn



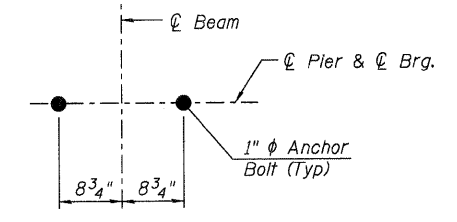
Notes:  
 Space reinforcement in cap to miss anchor bolts.  
 Pour steps monolithically with cap.  
 For details of piles, see sheet 18 of 21.

**PILE DATA**

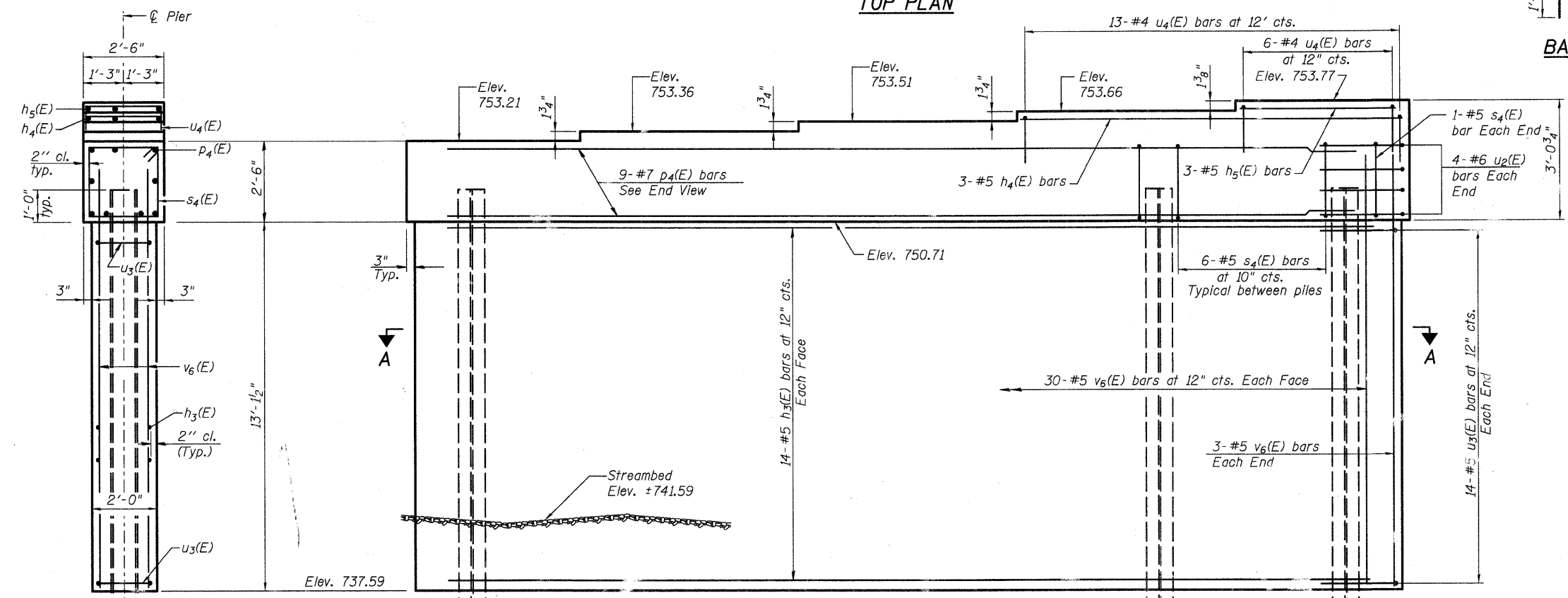
Type: Steel HP 14x73  
 Nominal Required Bearing: Set in Rock  
 Factored Resistance Available: 259 kips  
 Est. Length: 32'  
 No. Production Piles: 6  
 No. Test Piles: 0  
 Estimated Top of Rock: 722.00  
 Rock Socket Depth: 2'  
 Rock Socket Diameter: 1'-6"



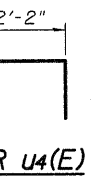
**TOP PLAN**



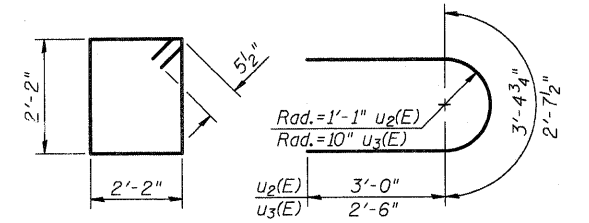
**ANCHOR BOLT LOCATION DETAIL**



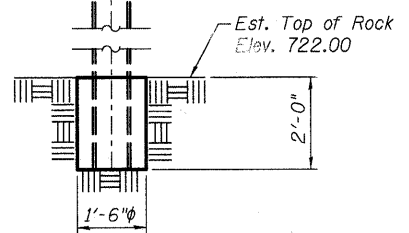
**ELEVATION (Looking East)**



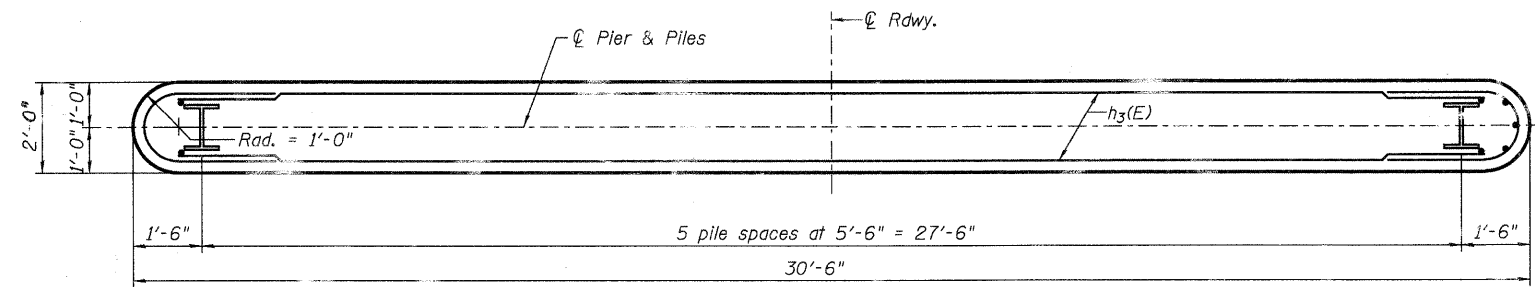
**BAR u4(E)**



**BAR s4(E) BARS u2(E) & u3(E)**



**END VIEW**



**SECTION A-A**

**BILL OF MATERIAL**

| Bar                              | No. | Size    | Length | Shape |
|----------------------------------|-----|---------|--------|-------|
| h3(E)                            | 28  | #5      | 28'-6" | —     |
| h4(E)                            | 3   | #5      | 10'-8" | —     |
| h5(E)                            | 3   | #5      | 4'-0"  | —     |
| p4(E)                            | 8   | #7      | 28'-6" | —     |
| s4(E)                            | 32  | #5      | 9'-7"  | □     |
| u2(E)                            | 8   | #6      | 9'-5"  | U     |
| u3(E)                            | 28  | #5      | 7'-8"  | U     |
| u4(E)                            | 19  | #4      | 4'-2"  | U     |
| v6(E)                            | 66  | #5      | 15'-2" | —     |
| Cofferdam Excavation             |     | Cu. Yd. | 58     |       |
| Cofferdam, Location 1            |     | Each    | 1      |       |
| Concrete Structures              |     | Cu. Yd. | 36.4   |       |
| Seal Coat Concrete               |     | Cu. Yd. | 24.8   |       |
| Reinforcement Bars, Epoxy Coated |     | Pound   | 3,100  |       |
| Furnishing Steel Piles, HP 14x73 |     | Foot    | 192    |       |
| Setting Piles in Rock            |     | Each    | 6      |       |

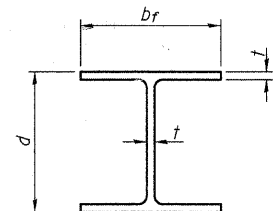
**PIER DETAILS  
 STRUCTURE NO. 045-3020**

DESIGNED - AEU  
 CHECKED - DLS  
 DRAWN - AWH  
 CHECKED - AEU

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 St. Charles, Illinois 60174  
 (630) 443-7755

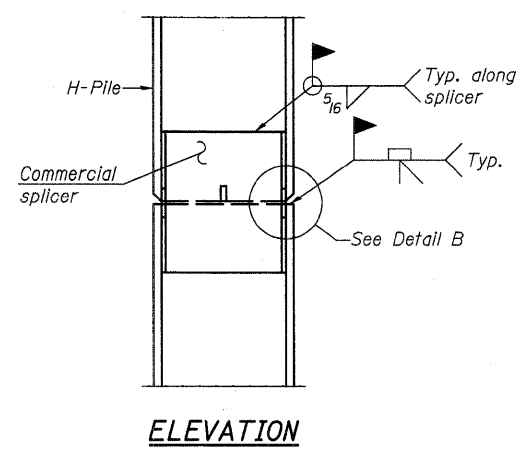
|                           |        |                |                  |              |           |
|---------------------------|--------|----------------|------------------|--------------|-----------|
| SHEET NO. 17<br>21 SHEETS | F.A.U. | SECTION        | COUNTY           | TOTAL SHEETS | SHEET NO. |
|                           | 2332   | 03-14185-02-BR | KANE             | 73           | 41        |
| CONTRACT NO. 63521        |        |                |                  |              |           |
| FED. ROAD DIST. NC.       |        | ILLINOIS       | FED. AID PROJECT |              |           |

FILE NAME = P:\CIBEL WEST Projects\2007\045-3020\045-3020-63521-017-Per\_Detail.dgn

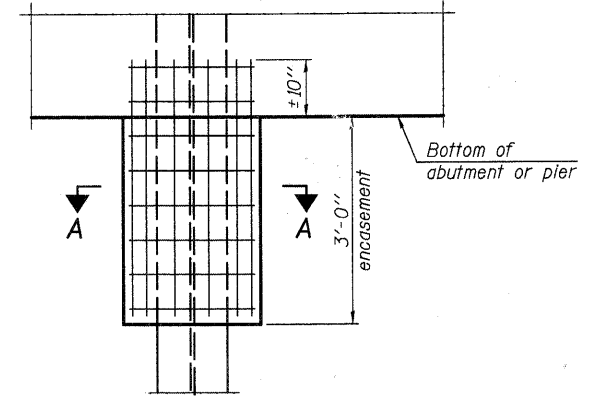


**STEEL PILE TABLE**

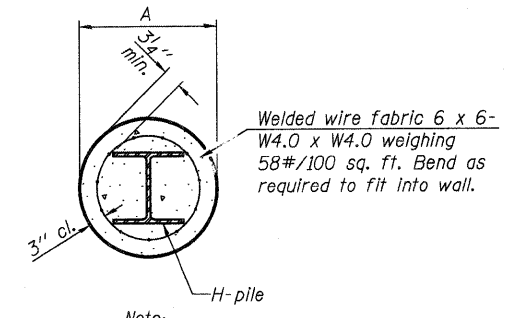
| Designation | Depth d | Flange width br | Web and Flange thickness t | Encasement diameter A |
|-------------|---------|-----------------|----------------------------|-----------------------|
| HP 14x117   | 14 1/4" | 14 7/8"         | 13/16"                     | 30"                   |
| x102        | 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**



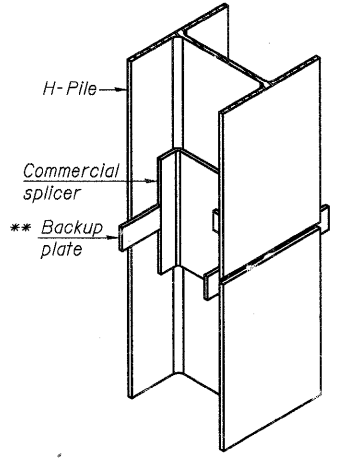
**ELEVATION**



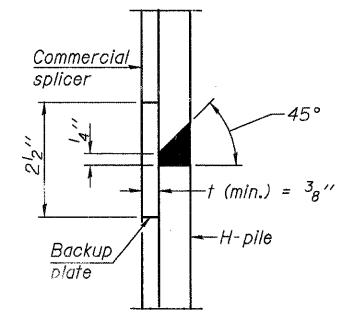
**SECTION A-A**

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

**PILE ENCASEMENT**

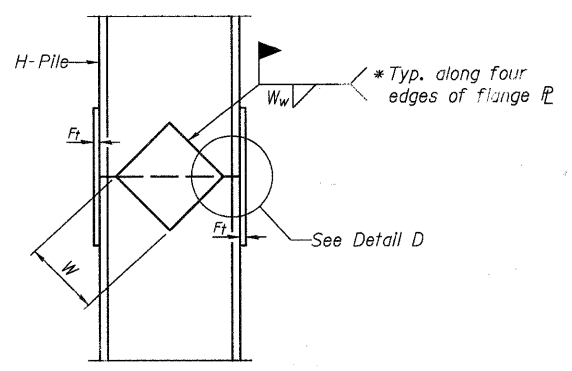


**ISOMETRIC VIEW**

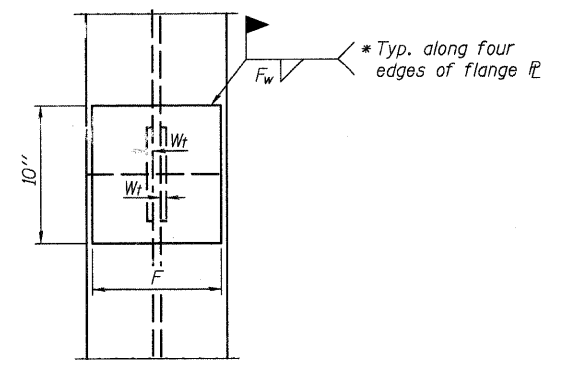


**DETAIL "B"**

**WELDED COMMERCIAL SPLICE**



**ELEVATION**



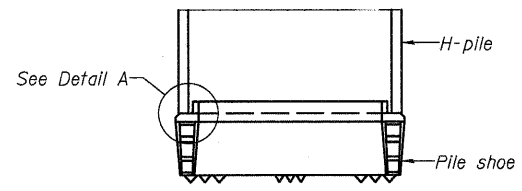
**END VIEW**

| 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" |

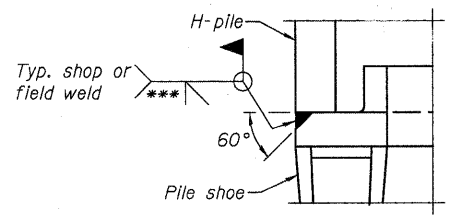
**WELDED PLATE FIELD SPLICE**

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

**HP PILE DETAILS  
STRUCTURE NO. 045-3020**

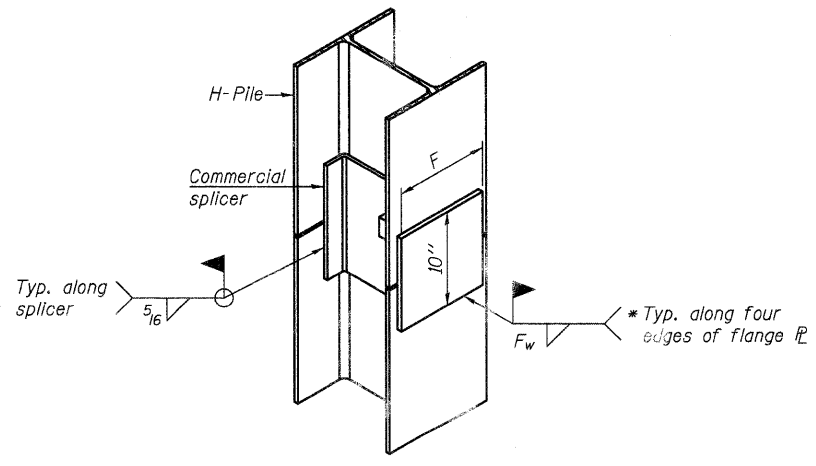


**ELEVATION**



**DETAIL A**

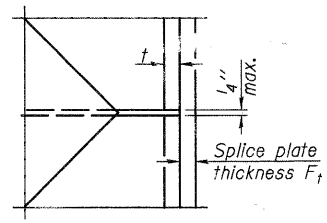
**H-PILE SHOE ATTACHMENT**



**ISOMETRIC VIEW**

**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.).



**DETAIL D**

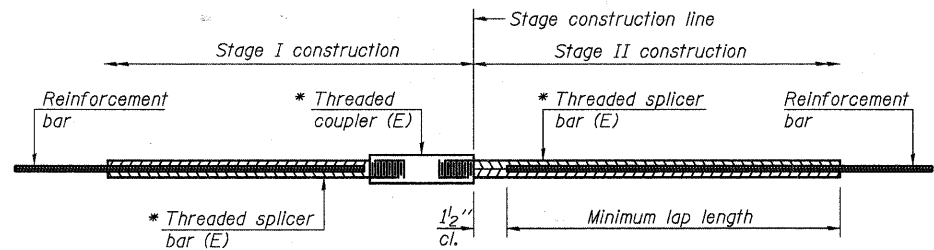
|                |
|----------------|
| DESIGNED - AEU |
| CHECKED - DS   |
| DRAWN - AWH    |
| CHECKED - AEU  |
| <b>F-HP</b>    |

11-1-09

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|                           |        |                |                  |              |           |
|---------------------------|--------|----------------|------------------|--------------|-----------|
| SHEET NO. 18<br>21 SHEETS | F.A.U. | SECTION        | COUNTY           | TOTAL SHEETS | SHEET NO. |
|                           | 2332   | 03-14185-02-BR | KANE             | 73           | 42        |
| CONTRACT NO. 63521        |        |                |                  |              |           |
| FED. ROAD DIST. NO.       |        | ILLINOIS       | FED. AID PROJECT |              |           |

FILE NAME = P:\CIBEL\EST Projects\2009\08-0822\08-0822-63521-018-H-pile-Details.dgn



**STANDARD BAR SPLICER ASSEMBLY**

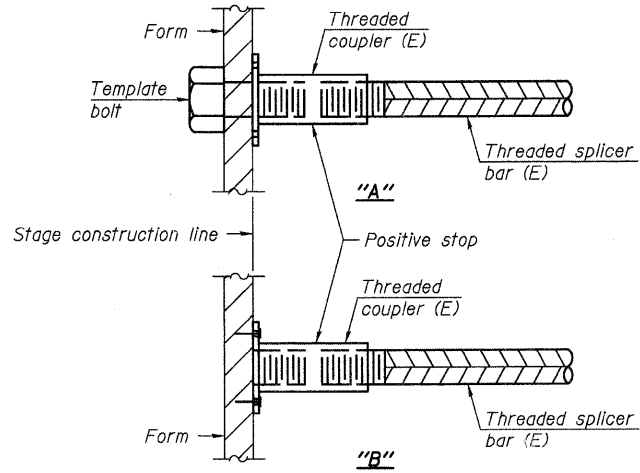
| Bar size to be spliced | Minimum Lap Lengths |         |         |         |
|------------------------|---------------------|---------|---------|---------|
|                        | Table 1             | Table 2 | Table 3 | Table 4 |
| 3, 4                   | 1'-5"               | 1'-11"  | 2'-1"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

Table 1: Black bar, 0.8 Class C  
 Table 2: Black bar, Top bar lap, 0.8 Class C  
 Table 3: Epoxy bar, 0.8 Class C  
 Table 4: Epoxy bar, Top bar lap, 0.8 Class C

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

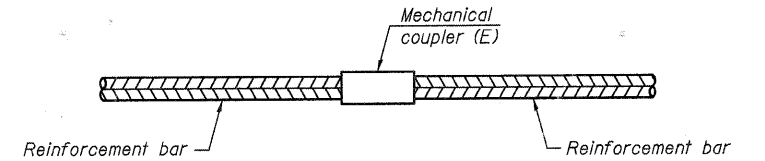
\* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

| Location | Bar size | No. assemblies required | Table for minimum lap length |
|----------|----------|-------------------------|------------------------------|
|          |          |                         |                              |
|          |          |                         |                              |
|          |          |                         |                              |
|          |          |                         |                              |



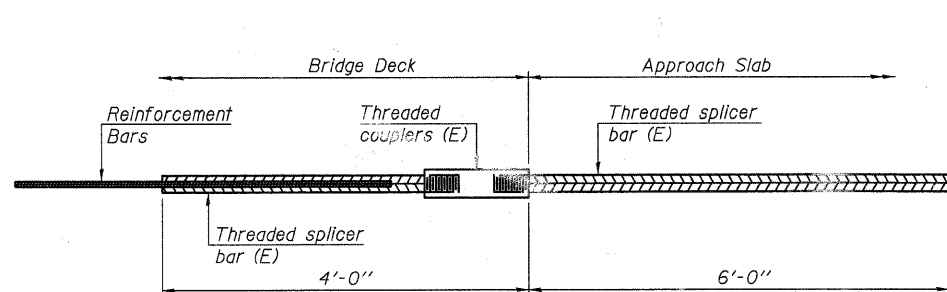
**INSTALLATION AND SETTING METHODS**

"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.



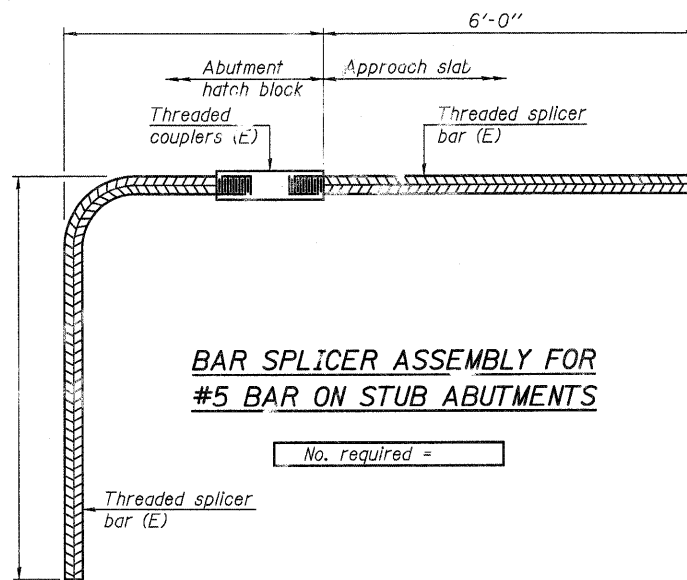
**STANDARD MECHANICAL SPLICER**

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



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

No. required = 72



**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 special provision for Mechanical Splicers.  
 See approved list of bar splicer assemblies and mechanical splicers for alternatives.

**BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS  
 STRUCTURE NO. 045-3020**

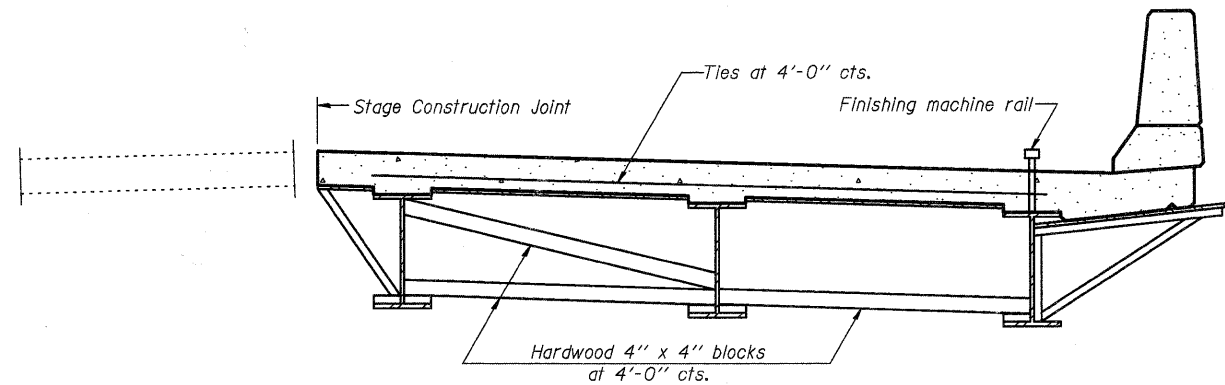
|                |
|----------------|
| DESIGNED - AEU |
| CHECKED - DLS  |
| DRAWN - AWH    |
| CHECKED - AEU  |

BSD-1

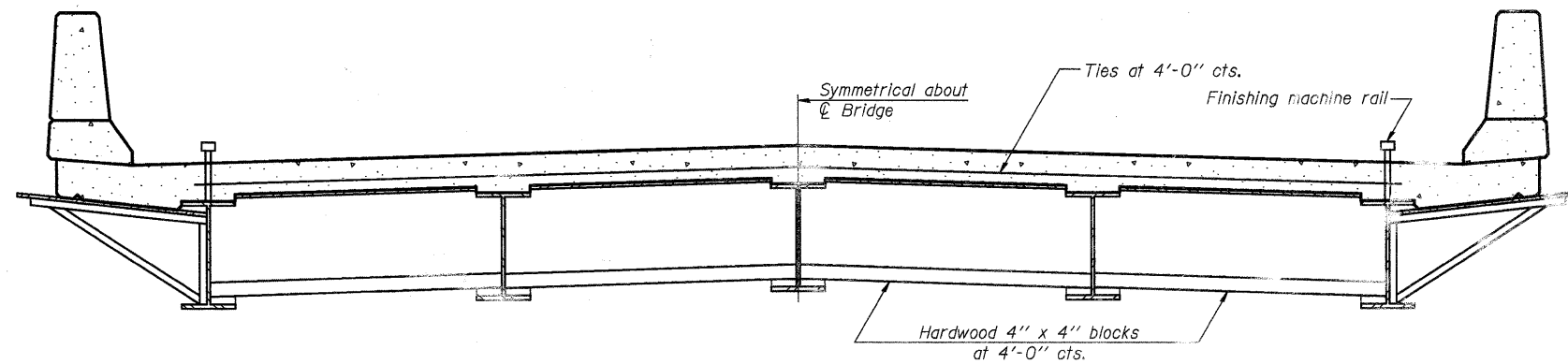
11-1-09

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|                          |        |                |          |                  |           |
|--------------------------|--------|----------------|----------|------------------|-----------|
| SHEET NO.19<br>21 SHEETS | F.A.U. | SECTION        | COUNTY   | TOTAL SHEETS     | SHEET NO. |
|                          | 2332   | 03-14185-02-BR | KANE     | 73               | 43        |
| FED. ROAD DIST. NO.      |        |                | ILLINOIS | FED. AID PROJECT |           |
| CONTRACT NO. 63521       |        |                |          |                  |           |



**FORM BRACES FOR  
STAGE CONSTRUCTION**



**FORM BRACES FOR  
STANDARD CONSTRUCTION**

When cantilever forming brackets are used, the work shall be done according to Article 503.06(b) of the Standard Specifications, except as modified below and in the details shown on this sheet.  
 The finishing machine rails shall be placed on the top flange of the exterior beams.  
 The beams or girders, supporting cantilever forming brackets, shall be tied together at 4 foot intervals.  
 For Standard construction, or Stage Construction the Hardwood bracing materials shall be placed as shown between webs of beams in each bay.

FILE NAME = P:\CBBEL WEST Projects\2009\09-082 Bolcum PHH\Structural\Dgn\453820-63521-020-Cantilever-Brackets.dgn

|                |
|----------------|
| DESIGNED - AEU |
| CHECKED - DLS  |
| DRAWN - AWH    |
| CHECKED - AEU  |

**WBK** WILLS BURKE KELSEY ASSOCIATES LTD.  
 116 West Main Street, Suite 201  
 St. Charles, Illinois 60174  
 (630) 443-7755

|                           |        |                |                  |              |           |
|---------------------------|--------|----------------|------------------|--------------|-----------|
| SHEET NO. 20<br>21 SHEETS | F.A.U. | SECTION        | COUNTY           | TOTAL SHEETS | SHEET NO. |
|                           | 2332   | 03-14185-02-BR | KANE             | 73           | 44        |
| CONTRACT NO. 63521        |        |                |                  |              |           |
| FED. ROAD DIST. NO.       |        | ILLINOIS       | FED. AID PROJECT |              |           |

**CANTILEVER FORMING BRACKETS  
FOR SUPERSTRUCTURES WITH  
W27 BEAMS AND SMALLER  
STRUCTURE NO. 045-3020**

ILLINOIS DEPARTMENT OF TRANSPORTATION  
Testing Service Corporation  
STRUCTURE BORING LOG

Page 1 of 1  
Date Started 8/3/04  
Date Completed 8/3/04

ROUTE \_\_\_\_\_ DESCRIPTION Bolcum Road over Ferson Creek  
SECT. \_\_\_\_\_ STRUCT. NO. 045-3042 DRILLED BY TSC L-60,780  
COUNTY Kane LOCATION North End West Abutment S. 8-SW 1/4, TWP. 40 N, RNG. 8 E

| Boring No. | Station | Offset     | Surface Elev. | DEPTH | TEST | DESCRIPTION  | DEPTH | TEST | DESCRIPTION |
|------------|---------|------------|---------------|-------|------|--|-------|------|-------------|
| SB-1       | 121+78  | 22.00ft LT | 749.80 ft     |       |      |  |       |      |             |
|            |         |            |               | 2     | P    | Possible Boulder Zone or very weathered/fractured Dolomite, some clay filled joints and cracks |       |      |             |
|            |         |            |               | 3     | P    | Core Run 23.5 to 29 feet Recovery = 48% RQD = 13%  | 743.8 |      |             |
|            |         |            |               | 4     | P    |  | 744.8 |      |             |
|            |         |            |               | 5     |      |  |       |      |             |
|            |         |            |               | 6     |      |  |       |      |             |
|            |         |            |               | 7     |      |  |       |      |             |
|            |         |            |               | 8     |      |  |       |      |             |
|            |         |            |               | 9     |      |  |       |      |             |
|            |         |            |               | 10    |      |  |       |      |             |
|            |         |            |               | 11    |      |  |       |      |             |
|            |         |            |               | 12    |      |  |       |      |             |
|            |         |            |               | 13    |      |  |       |      |             |
|            |         |            |               | 14    |      |  |       |      |             |
|            |         |            |               | 15    |      |  |       |      |             |
|            |         |            |               | 16    |      |  |       |      |             |
|            |         |            |               | 17    |      |  |       |      |             |
|            |         |            |               | 18    |      |  |       |      |             |
|            |         |            |               | 19    |      |  |       |      |             |
|            |         |            |               | 20    |      |  |       |      |             |
|            |         |            |               | 21    |      |  |       |      |             |
|            |         |            |               | 22    |      |  |       |      |             |
|            |         |            |               | 23    |      |  |       |      |             |
|            |         |            |               | 24    |      |  |       |      |             |
|            |         |            |               | 25    |      |  |       |      |             |

\*\* See above right  
SPT. (N) = Sum of last two blow values in sample. (Qu) B=Bulge S=Shear P=Penetration Test Stations, Depths, Offset, and Elevations are in Feet

ILLINOIS DEPARTMENT OF TRANSPORTATION  
Testing Service Corporation  
STRUCTURE BORING LOG

Page 1 of 1  
Date Started 7/8/04  
Date Completed 7/8/04

ROUTE \_\_\_\_\_ DESCRIPTION Bolcum Road over Ferson Creek  
SECT. \_\_\_\_\_ STRUCT. NO. 045-3042 DRILLED BY TSC L-60,780  
COUNTY Kane LOCATION South End East Abutment S. 8-SW 1/4, TWP. 40 N, RNG. 8 E

| Boring No. | Station | Offset    | Surface Elev. | DEPTH | TEST | DESCRIPTION  | DEPTH  | TEST | DESCRIPTION |
|------------|---------|-----------|---------------|-------|------|--|--------|------|-------------|
| SB-2       | 122+75  | 6.00ft RT | 753.80 ft     |       |      |  |        |      |             |
|            |         |           |               | 1     |      | 7" Asphaltic Concrete                                    | 753.20 |      |             |
|            |         |           |               | 2     |      | FILL - Brown SAND and GRAVEL, damp A-1                   | 751.80 |      |             |
|            |         |           |               | 3     |      |  |        |      |             |
|            |         |           |               | 4     |      | Medium stiff black CLAY LOAM (topsoil), very moist A-7-6 | 726.80 |      |             |
|            |         |           |               | 5     |      |  |        |      |             |
|            |         |           |               | 6     |      |  |        |      |             |
|            |         |           |               | 7     |      |  |        |      |             |
|            |         |           |               | 8     |      |  |        |      |             |
|            |         |           |               | 9     |      |  |        |      |             |
|            |         |           |               | 10    |      |  |        |      |             |
|            |         |           |               | 11    |      |  |        |      |             |
|            |         |           |               | 12    |      |  |        |      |             |
|            |         |           |               | 13    |      |  |        |      |             |
|            |         |           |               | 14    |      |  |        |      |             |
|            |         |           |               | 15    |      |  |        |      |             |
|            |         |           |               | 16    |      |  |        |      |             |
|            |         |           |               | 17    |      |  |        |      |             |
|            |         |           |               | 18    |      |  |        |      |             |
|            |         |           |               | 19    |      |  |        |      |             |
|            |         |           |               | 20    |      |  |        |      |             |
|            |         |           |               | 21    |      |  |        |      |             |
|            |         |           |               | 22    |      |  |        |      |             |
|            |         |           |               | 23    |      |  |        |      |             |
|            |         |           |               | 24    |      |  |        |      |             |
|            |         |           |               | 25    |      |  |        |      |             |

SPT. (N) = Sum of last two blow values in sample. (Qu) B=Bulge S=Shear P=Penetration Test Stations, Depths, Offset, and Elevations are in Feet

ILLINOIS DEPARTMENT OF TRANSPORTATION  
Testing Service Corporation  
STRUCTURE BORING LOG

Page 1 of 1  
Date Started 8/26/04  
Date Completed 8/26/04

ROUTE \_\_\_\_\_ DESCRIPTION Bolcum Road over Ferson Creek  
SECT. \_\_\_\_\_ STRUCT. NO. 045-3042 DRILLED BY TSC L-60,780  
COUNTY Kane LOCATION Center of Bridge S. 8-SW 1/4, TWP. 40 N, RNG. 8 E

| Boring No. | Station | Offset    | Surface Elev. | DEPTH | TEST | DESCRIPTION                    | DEPTH  | TEST | DESCRIPTION |
|------------|---------|-----------|---------------|-------|------|--------------------------------|--------|------|-------------|
| SB-3       | 122+25  | 6.00ft RT | 753.59 ft     |       |      |                                |        |      |             |
|            |         |           |               | 1     |      | Asphalt & Concrete Bridge Deck | 751.89 |      |             |
|            |         |           |               | 2     |      |                                |        |      |             |
|            |         |           |               | 3     |      |                                |        |      |             |
|            |         |           |               | 4     |      |                                |        |      |             |
|            |         |           |               | 5     |      |                                |        |      |             |
|            |         |           |               | 6     |      |                                |        |      |             |
|            |         |           |               | 7     |      |                                |        |      |             |
|            |         |           |               | 8     |      |                                |        |      |             |
|            |         |           |               | 9     |      |                                |        |      |             |
|            |         |           |               | 10    |      |                                |        |      |             |
|            |         |           |               | 11    |      |                                |        |      |             |
|            |         |           |               | 12    |      |                                |        |      |             |
|            |         |           |               | 13    |      |                                |        |      |             |
|            |         |           |               | 14    |      |                                |        |      |             |
|            |         |           |               | 15    |      |                                |        |      |             |
|            |         |           |               | 16    |      |                                |        |      |             |
|            |         |           |               | 17    |      |                                |        |      |             |
|            |         |           |               | 18    |      |                                |        |      |             |
|            |         |           |               | 19    |      |                                |        |      |             |
|            |         |           |               | 20    |      |                                |        |      |             |
|            |         |           |               | 21    |      |                                |        |      |             |
|            |         |           |               | 22    |      |                                |        |      |             |
|            |         |           |               | 23    |      |                                |        |      |             |
|            |         |           |               | 24    |      |                                |        |      |             |
|            |         |           |               | 25    |      |                                |        |      |             |

SPT. (N) = Sum of last two blow values in sample. (Qu) B=Bulge S=Shear P=Penetration Test Stations, Depths, Offset, and Elevations are in Feet

|                |
|----------------|
| DESIGNED - AEU |
| CHECKED - DLS  |
| DRAWN - AWH    |
| CHECKED - AEU  |



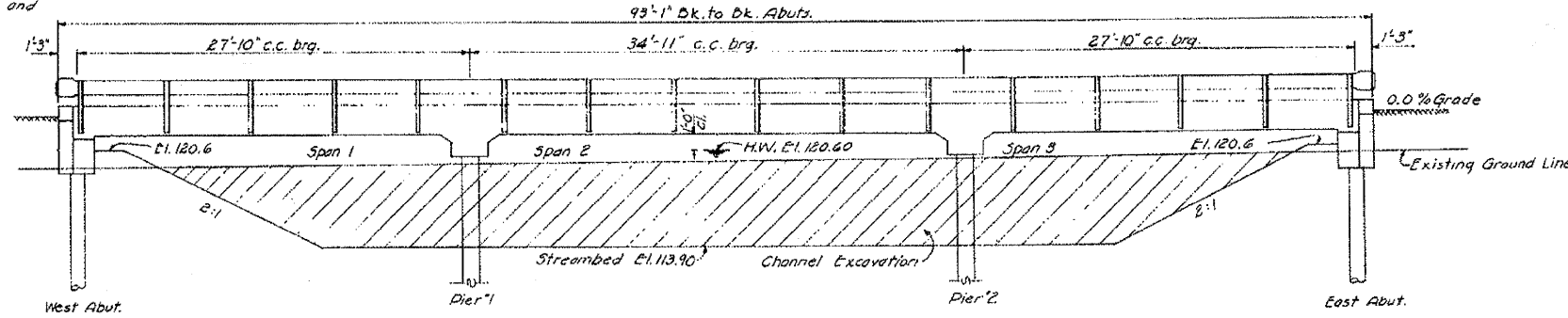
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|---------------------|--------|----------------|----------|------------------|-----------|
| SHEET NO. 21        | F.A.U. | SECTION        | COUNTY   | TOTAL SHEETS     | SHEET NO. |
| 21 SHEETS           | 2332   | 03-14185-02-BR | KANE     | 73               | 45        |
| FED. ROAD DIST. NO. |        |                | ILLINOIS | FED. AID PROJECT |           |
| CONTRACT NO. 63521  |        |                |          |                  |           |

SOIL BORING LOGS  
STRUCTURE NO. 045-3020

FILE NAME = P:\CBBEL WEST Projects\2004\09-0082 Bolcum Pk\AS\Structure\045-3020-63521-02-Soil Boring Log.dwg

| ROUTE NO. | COUNTY | SECTION  | TOTAL SHEETS | SHEET NO. |
|-----------|--------|----------|--------------|-----------|
| 73        | KANE   | 185B-MFT | 7            | 5         |

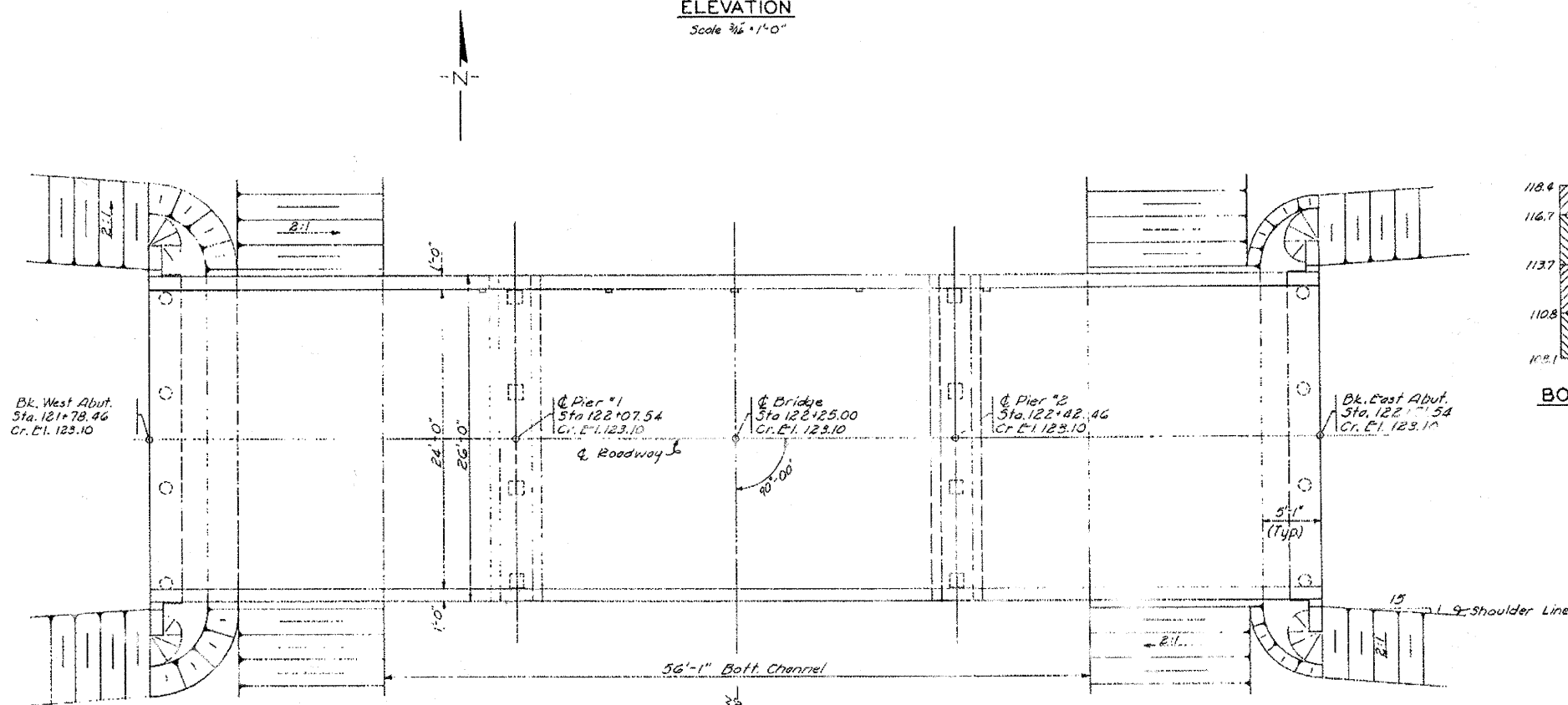
B.M. Top N.E. Cor. W. Abut.  
Left Sta. 124+34 E.L. 124.01.  
Existing Structure: Pony  
Truss, one span of 35.5' with  
closed concrete abuts. and  
wingwalls.  
To be removed by the  
Contractor after new  
bridge is constructed.  
No salvage.



**GENERAL NOTES**

Class X Concrete shall be used throughout.  
The concrete floor slab shall be finished in accordance with  
article 51.19 of the Std. Specs.  
The curbs shall be poured monolithically with the slab.  
All metal handrail and posts shall receive one shop coat  
of red lead paint and two field coats of aluminum paint.  
Each handrail shall have a curved metal section at each  
end.  
The Contractor shall drive two (2) test piles. One timber  
test pile shall be driven as directed by the engineer before  
ordering the remainder of the timber piles. One concrete test  
pile shall be driven in a permanent location before casting  
the remainder of the piles.  
Pier piles shall have a minimum penetration of 15'  
below streambed  
For item Channel Excavation see sheets no. 3&4

**ELEVATION**  
Scale 3/16" = 1'-0"



**PLAN**  
Scale 3/16" = 1'-0"

**WATERWAY DATA**

|                  |              |
|------------------|--------------|
| Drainage Area    | 29,280 Acres |
| Required Opening | 450 Sq. Ft.  |
| Present Opening  | 179 Sq. Ft.  |
| Proposed Opening | 450 Sq. Ft.  |

STATION 122+25.00  
OTTER CREEK  
BUILT 1959 BY  
KANE COUNTY  
SEC. 185-B-M.F.T.  
LOADING H15-512

**LETTERING FOR NAME PLATE**  
See Std. 2113

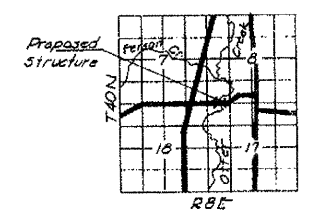
**DESIGN STRESSES**

$f_s = 20,000$  psi Reinf  
 $f_c = 1,400$  psi  
 $n = 10$

LOADING H15-512-44

**BORING DATA**

|       |  |
|-------|--|
| 118.4 | Black Loam   |
| 116.7 | Sandy Loam   |
| 113.7 | Fine Gravel  |
| 110.8 | Silt w/ Fine Gravel                                |
| 108.1 | Exploration did not reach bottom of this material. |



**LOCATION SKETCH**

**TOTAL BILL OF MATERIAL**

| Item                           | Super         | Sub.  | Total  |
|--------------------------------|---------------|-------|--------|
| Class X Concrete               | Cu. Yds. 1192 | 13.7  | 1329   |
| Reinforcement Bars             | Lbs. 27,750   | 13,90 | 29,140 |
| Metal Plate Bridge Rail        | Lin. Ft. 180  | -     | 180    |
| Precast Concrete Piles (14")   | Lin. Ft. -    | 175   | 175    |
| Crested Piles                  | Lin. Ft. -    | 160   | 160    |
| Test Piles (Concrete)          | Ea. -         | 1     | 1      |
| Test Piles (Timber)            | Ea. -         | 1     | 1      |
| Name Plates                    | Ea. 1         | -     | 1      |
| Removal of Existing Structures | Ea. -         | -     | 1      |
| Channel Excavation             | Cu. Yds. -    | -     | 2622   |

**GENERAL PLAN & ELEVATION**  
**CORYN BRIDGE**  
SEC. 185 B-MFT  
STA. 122+25.00  
S.A. ROUTE 73  
KANE COUNTY

**HANSON, COLLINS & RICE**  
CONSULTING ENGINEERS

CHECKED V.F.S. DATE 8-24-59  
DRAWN A.E.E. DATE 8-24-59 W.B-58-44

SHEET 1 OF 3

**FOR REFERENCE ONLY**

FILE NAME = P:\WBEL\WEST Projects\2009\99-0082 Bolcum "R11\Gv1\Dgn\SH-EXSTR01.dgn

**WILLS BURKE KELSEY ASSOCIATES LTD.**  
116 West Main Street, Suite 201  
St. Charles, Illinois 60174

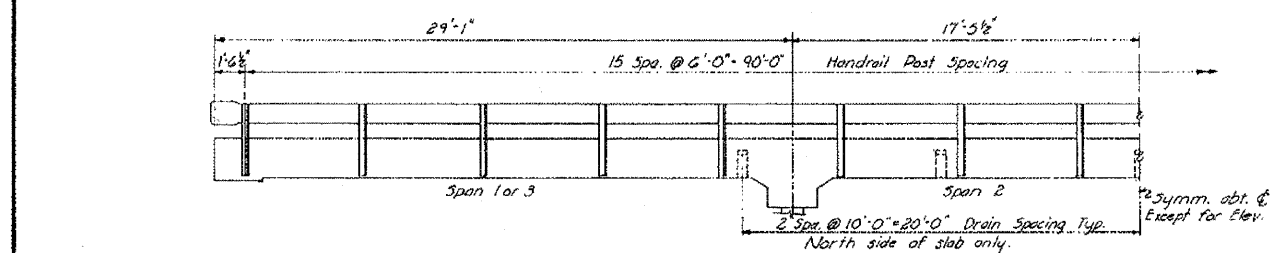
| USER NAME = #USER#     | DESIGNED -      | REVISED - |
|------------------------|-----------------|-----------|
|                        | DRAWN -         | REVISED - |
| PLOT SCALE =           | CHECKED -       | REVISED - |
| PLOT DATE = 10/21/2010 | DATE - 10/22/10 | REVISED - |

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

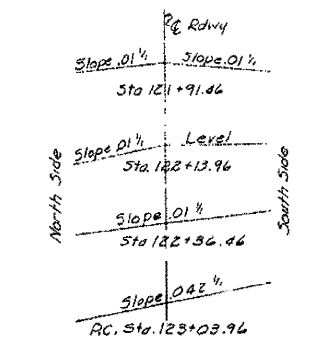
**EXISTING STRUCTURE PLANS**  
**FOR REFERENCE ONLY**

| F.A. RTE.   | SECTION        | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|----------------|--------|--------------|-----------|
| 2332  | 03-14185-02-BR | KANE   | 73           | 46        |
| CONTRACT NO. 63521  |                |        |              |           |
| SCALE: SHEET NO. 46 OF 73 SHEETS STA. TO STA. FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT |                |        |              |           |

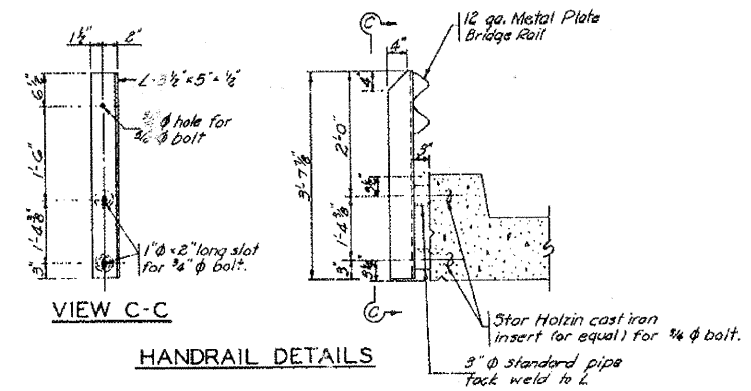
| STATE AID DIST. NO. | COUNTY | SECTION  | TOTAL SHEETS | SHEET NO. |
|---------------------|--------|----------|--------------|-----------|
| 73                  | KANE   | 185B-MFT | 7            | 6         |



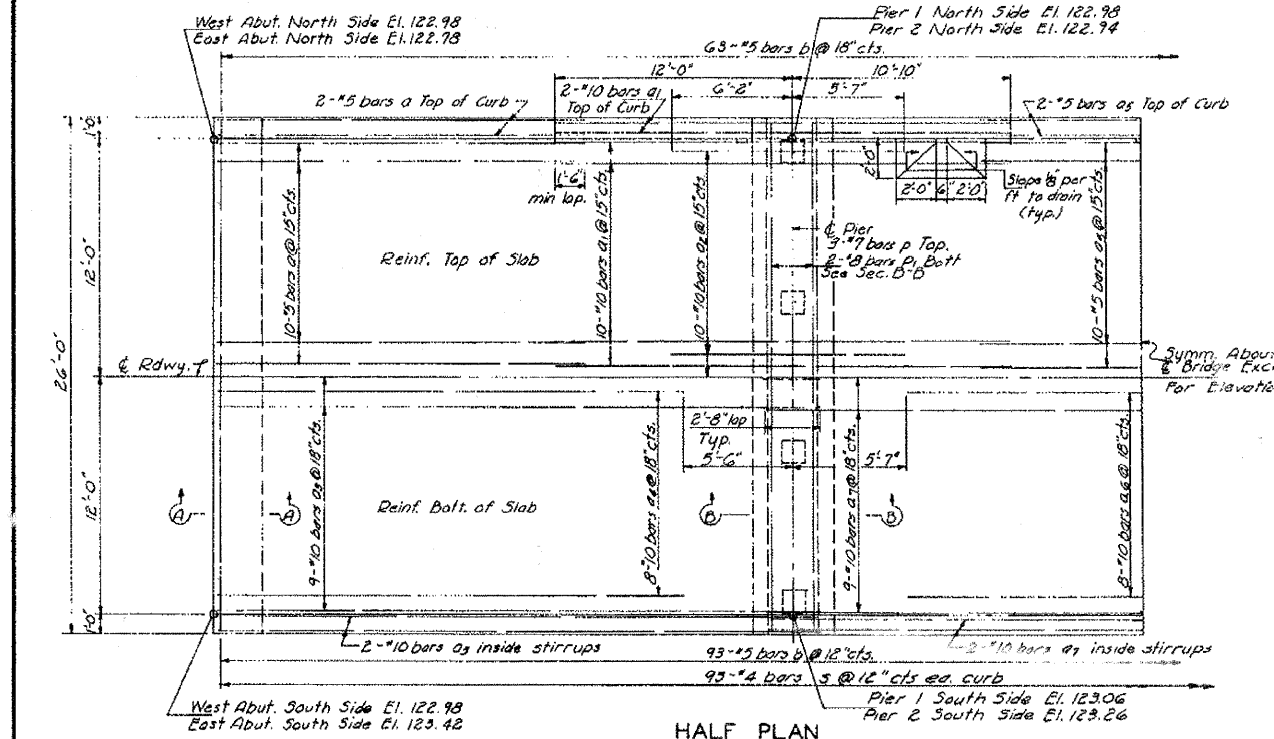
HALF ELEVATION



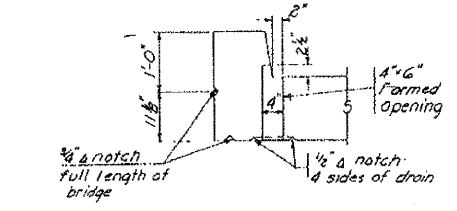
SUPERELEVATION TRANSITION DETAILS



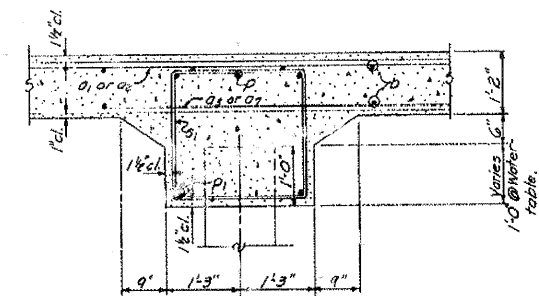
HANDRAIL DETAILS



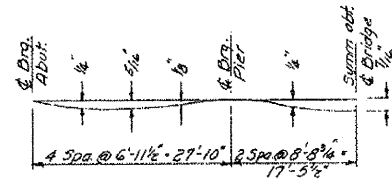
HALF PLAN



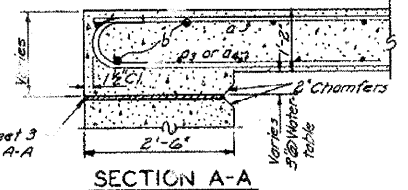
DRAIN DETAILS



SECTION B-B



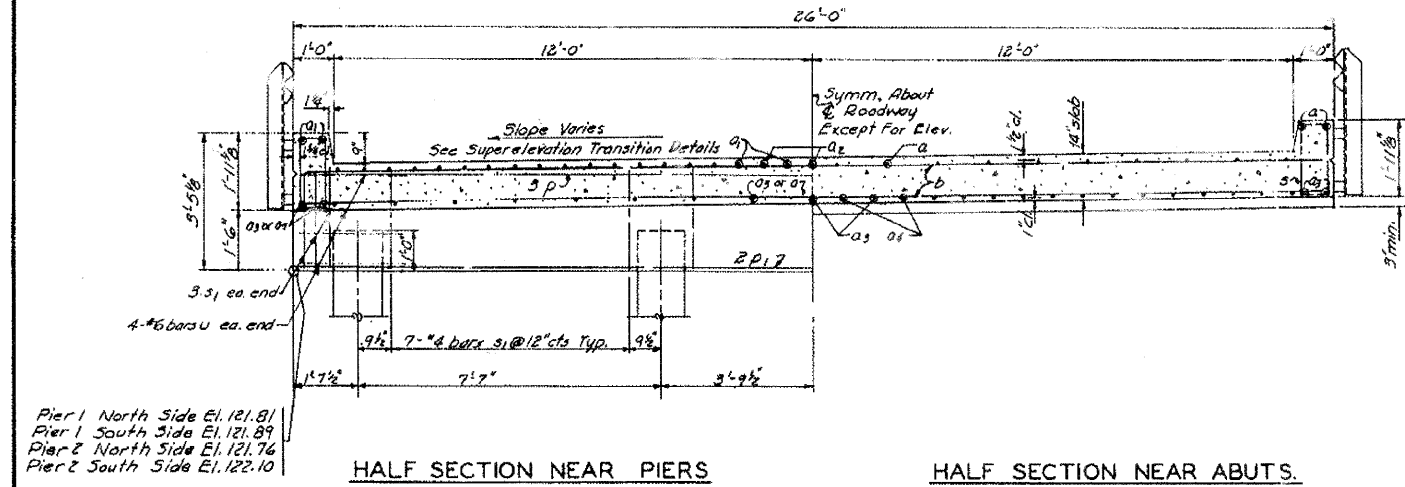
D.L. DEFLECTION DIAGRAM  
In addition to D.L. deflection the Contractor shall make allowance for shrinkage & settlement of falsework



SECTION A-A

BILL OF MATERIAL SUPERSTRUCTURE & PIERS

| Bar                             | No  | Size | Length  | Shape        |
|---------------------------------|-----|------|---------|--------------|
| a                               | 46  | #5   | 18'-6"  | —            |
| a1                              | 46  | #10  | 22'-10" | —            |
| a2                              | 40  | #10  | 11'-9"  | —            |
| a3                              | 42  | #10  | 30'-4"  | —            |
| a4                              | 32  | #10  | 24'-11" | —            |
| a5                              | 25  | #5   | 16'-5"  | —            |
| a6                              | 16  | #10  | 25'-9"  | —            |
| a7                              | 21  | #10  | 37'-7"  | —            |
| b                               | 156 | #5   | 25'-8"  | —            |
| b1                              | 6   | #7   | 25'-8"  | —            |
| b2                              | 4   | #8   | 25'-8"  | —            |
| c                               | 186 | #4   | 5'-5"   | □            |
| c1                              | 54  | #4   | 9'-9"   | □            |
| d                               | 16  | #6   | 8'-8"   | □            |
| Class X Concrete                |     |      |         | Cu Yds 119.2 |
| Reinforcement Bars              |     |      |         | Lbs 27,750   |
| Metal Plate Bridge Rail Lin.Pt. |     |      |         | 180          |
| Precast Concrete Piles Lin.Pt.  |     |      |         | 175          |
| Test Piles (Concrete)           |     |      |         | 1            |



HALF SECTION NEAR PIERS

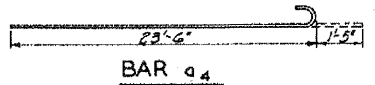
HALF SECTION NEAR ABUTS.



BAR s1

BAR s

BAR u



BAR a4

PILE DATA

Type 14" Precast Concrete  
No. 8"  
Capacity 34 Ton  
Est. Length 25'  
(See sheet 3 for details of the conc. piles)  
Includes one test pile

SLAB  
CORYN BRIDGE  
SEC. 185 B-MFT  
STA. 122+25.00  
S.A. ROUTE 73  
KANE COUNTY  
HANSON, COLLINS & RICE  
CONSULTING ENGINEERS

DESIGNED V.F.S.  
CHECKED R.A.C.  
DATE 2-24-59

FILE NAME = P:\CBBEL WEST Projects\2009\09-0882 Bolcum PH11.G.v1\09\SHA\EXSTRUC2.dgn

**WILLS BURKE KELSEY ASSOCIATES LTD.**  
116 West Main Street, Suite 201  
St. Charles, Illinois 60174

|                        |                 |           |
|------------------------|-----------------|-----------|
| USER NAME = #USER#     | DESIGNED -      | REVISED - |
| PLOT SCALE =           | DRAWN -         | REVISED - |
| PLOT DATE = 10/21/2010 | CHECKED -       | REVISED - |
|                        | DATE = 10/22/10 | REVISED - |

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

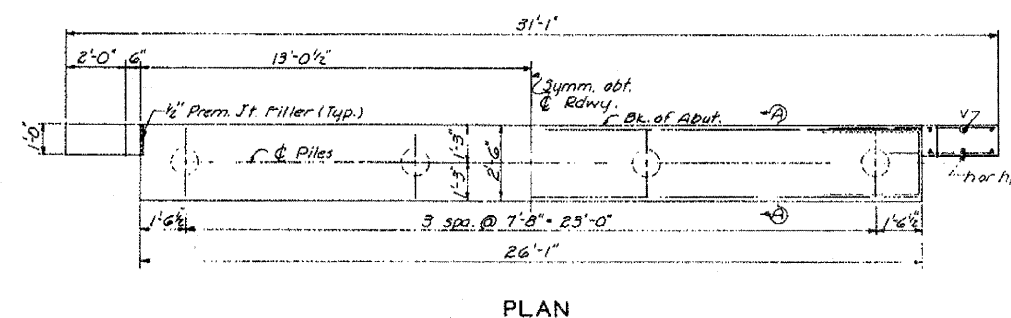
EXISTING STRUCTURE PLANS  
FOR REFERENCE ONLY

|        |                           |      |         |
|--------|---------------------------|------|---------|
| SCALE: | SHEET NO. 47 OF 73 SHEETS | STA. | TO STA. |
|--------|---------------------------|------|---------|

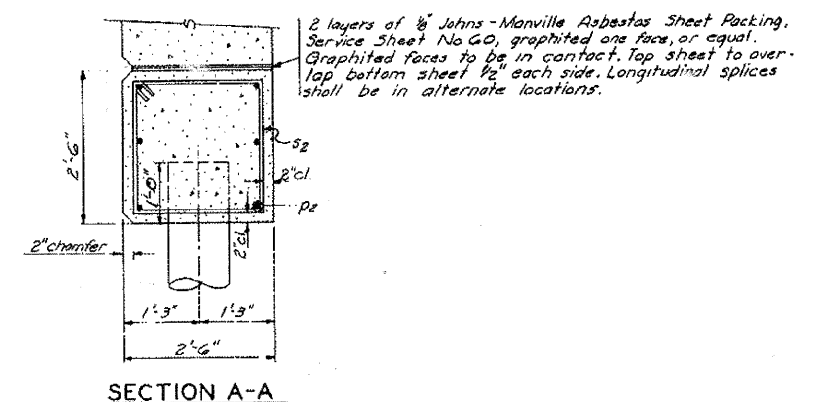
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|---|----------------|--------|--------------|-----------|
| F.A. RTE.   | SECTION        | COUNTY | TOTAL SHEETS | SHEET NO. |
| 2332  | 03-14185-02-BR | KANE   | 73           | 47        |
| CONTRACT NO. 63521                                |                |        |              |           |
| FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT |                |        |              |           |

FOR REFERENCE ONLY

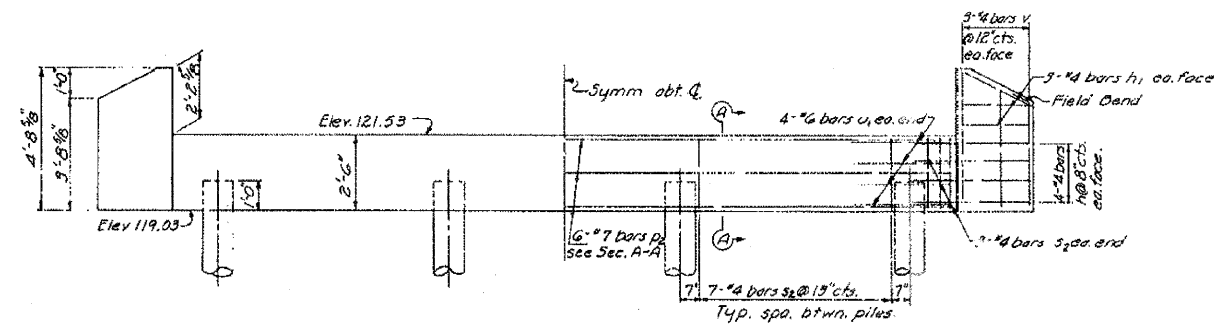
| STATE AID PROJECT NO. | COUNTY | SECTION  | TOTAL SHEETS | SHEET NO. |
|-----------------------|--------|----------|--------------|-----------|
| 73                    | KANE   | 185B-MFT | 7            | 7         |



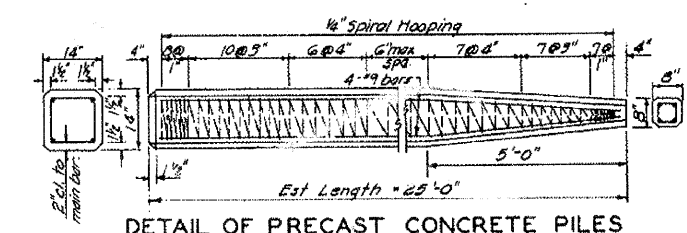
PLAN



SECTION A-A

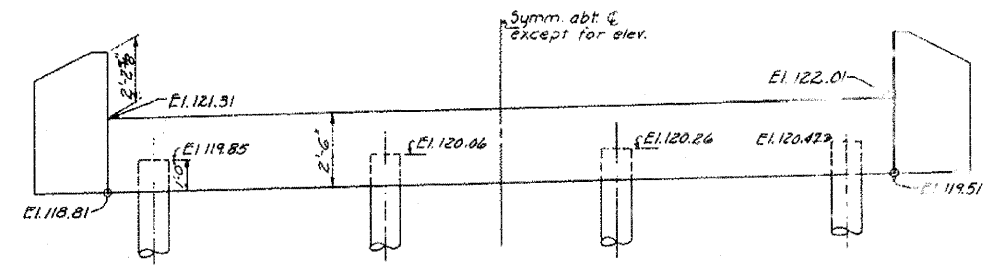


ELEVATION WEST ABUTMENT

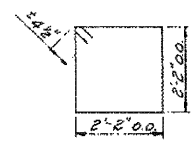


DETAIL OF PRECAST CONCRETE PILES

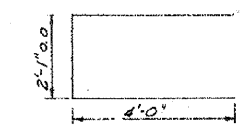
Note to Contractor:  
For pile lengths up to 45' use two slings placed at a distance of 0.21L from each end. On piles larger than 45' use three slings placed at 0.12L from each end and at mid-point of pile.



ELEVATION EAST ABUTMENT



BAR S2



BAR U1

BILL OF MATERIAL-ABUTMENTS

| Bar                | No | Size     | Length | Shape |
|--------------------|----|----------|--------|-------|
| n                  | 32 | #4       | 3'-9"  | —     |
| p1                 | 24 | #4       | 2'-9"  | —     |
| p2                 | 12 | #7       | 25'-9" | —     |
| s2                 | 56 | #4       | 9'-5"  | □     |
| u1                 | 16 | #6       | 10'-1" | □     |
| v                  | 24 | #4       | 4'-0"  | —     |
| Class X Concrete   |    | Cu Yds   | 13.7   |       |
| Reinforcement Bars |    | Lbs.     | 1390   |       |
| Crested Piles      |    | Lin. Ft. | 160    |       |
| Test Piles         |    | Eq.      | 1      |       |

PILE DATA

|              |         |
|--------------|---------|
| Type         | Crested |
| No. Req'd    | 8       |
| Min Capacity | 19 Ton  |
| Est. Length  | 20'     |

ABUTMENTS  
CORYN BRIDGE  
SEC. 185 B-MFT  
STA. 122+25.00  
S.A. ROUTE 73  
KANE COUNTY

HANSON, COLLINS & RICE  
CONSULTING ENGINEERS

DESIGNED V.F.S. CHECKED R.O.C.  
DRAWN A.F.E. DATE 2-24-59 NO. B-58-44

FILE NAME = P:\CBBEL WEST Projects\2008\99-0082 Bolcum PH11\G1\1\0gr\Nht\EXSTR03.dgn

**WBK** WILLS BURKE KELSEY ASSOCIATES LTD.  
116 West Main Street, Suite 201  
St. Charles, Illinois 60174

|                        |                 |           |
|------------------------|-----------------|-----------|
| USER NAME = #USER#     | DESIGNED -      | REVISED - |
| PLOT SCALE =           | DRAWN -         | REVISED - |
| PLOT DATE = 10/21/2010 | CHECKED -       | REVISED - |
|                        | DATE - 10/22/10 | REVISED - |

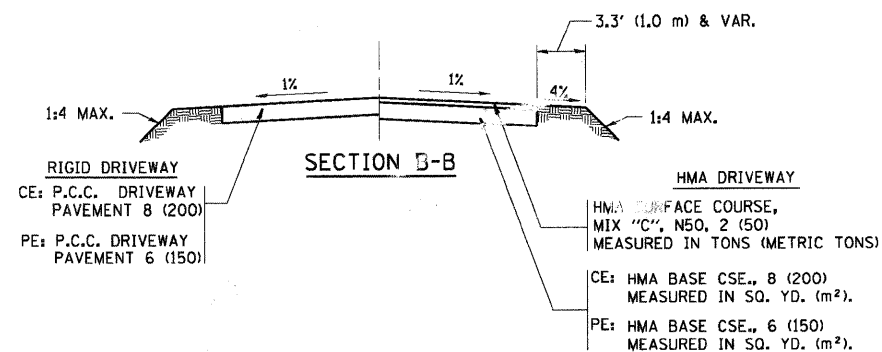
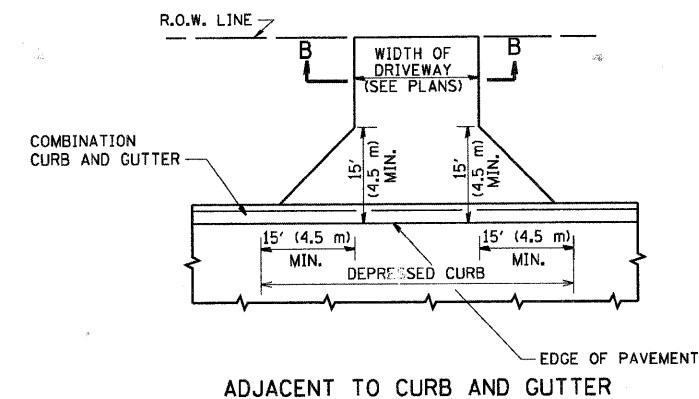
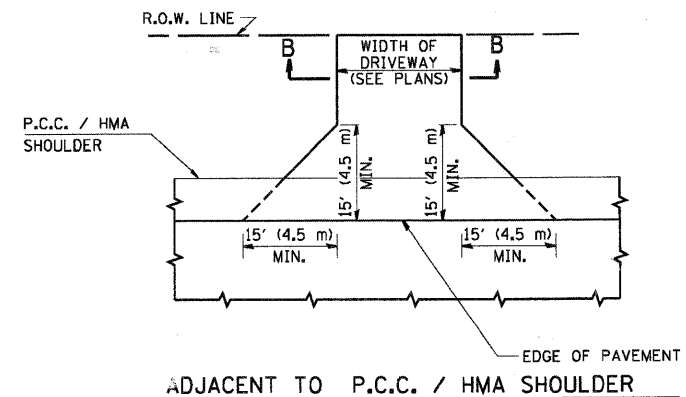
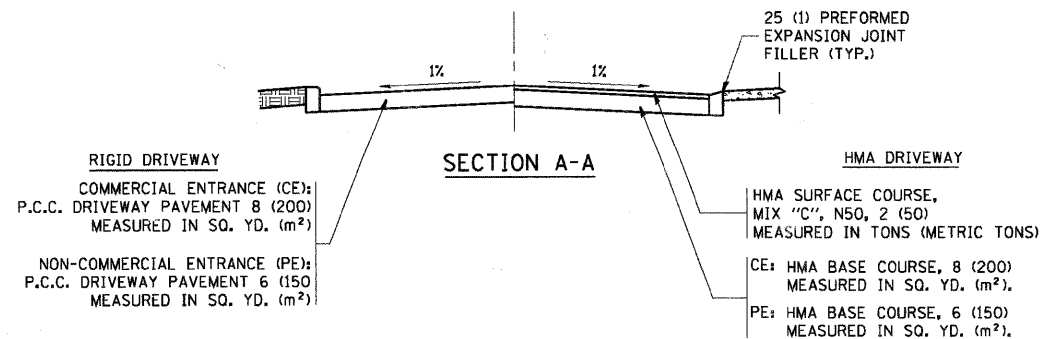
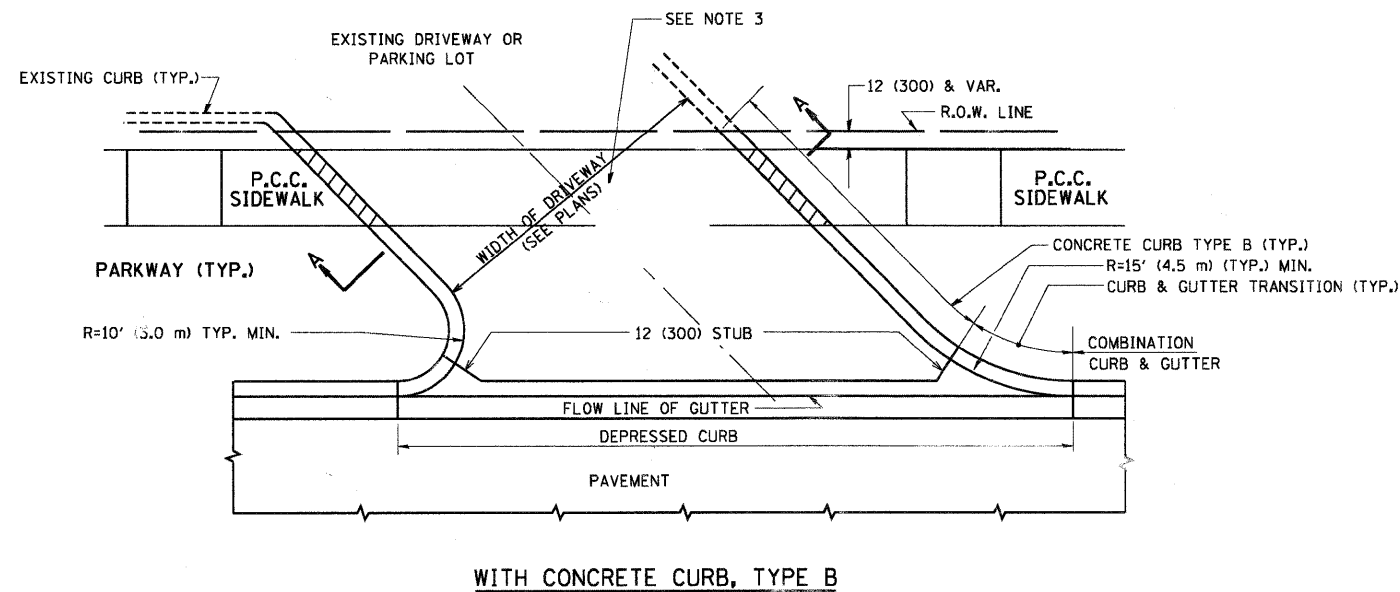
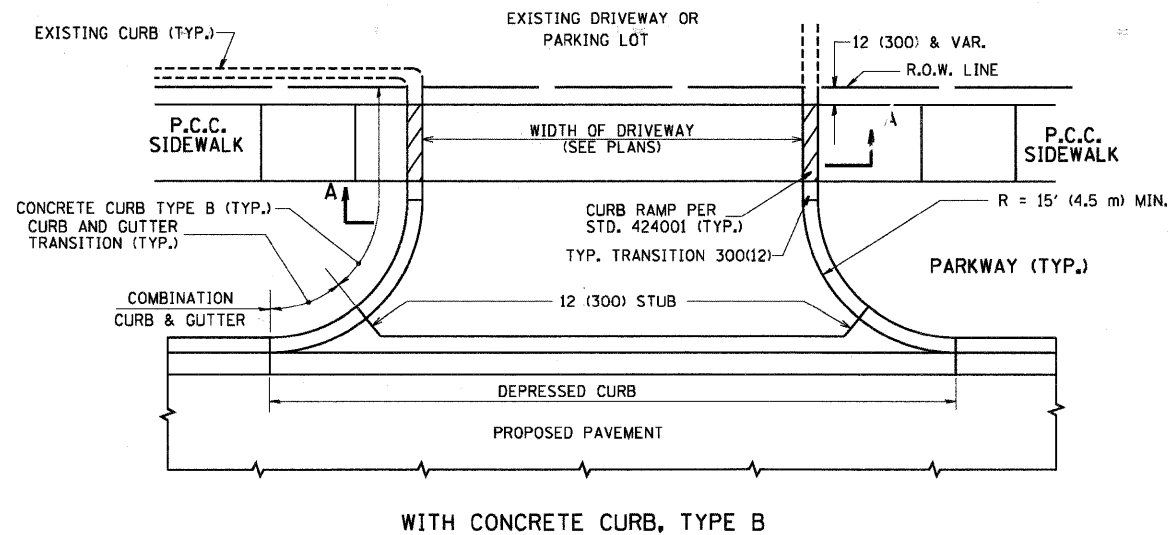
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS  
FOR REFERENCE ONLY

|        |                           |      |         |   |                |        |              |           |
|--------|---------------------------|------|---------|---|----------------|--------|--------------|-----------|
| SCALE: | SHEET NO. 48 OF 73 SHEETS | STA. | TO STA. | F.A. RTE.   | SECTION        | COUNTY | TOTAL SHEETS | SHEET NO. |
|        |                           |      |         | 2332  | 03-14185-02-BR | KANE   | 73           | 48        |
|        |                           |      |         | CONTRACT NO. 63521                                  |                |        |              |           |
|        |                           |      |         | FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT |                |        |              |           |

FOR REFERENCE ONLY





**GENERAL NOTES:**

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATIONS IN THE PERMIT HANDBOOK. DRIVEWAYS SHALL BE REPLACED IN KIND, UNLESS OTHERWISE NOTED ON THE PLANS.

COMMERCIAL DRIVEWAYS SHALL BE CONSTRUCTED WITH CONCRETE CURB, TYPE B RETURNS EXCEPT WHEN THE SIDEWALK EDGE IS 4 FEET (1.2 METERS) OR LESS FROM THE BACK OF CURB, CONSTRUCT A FLARE DRIVEWAY WITHOUT CURB.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/ 705-4131 FOR ANY QUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS, SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

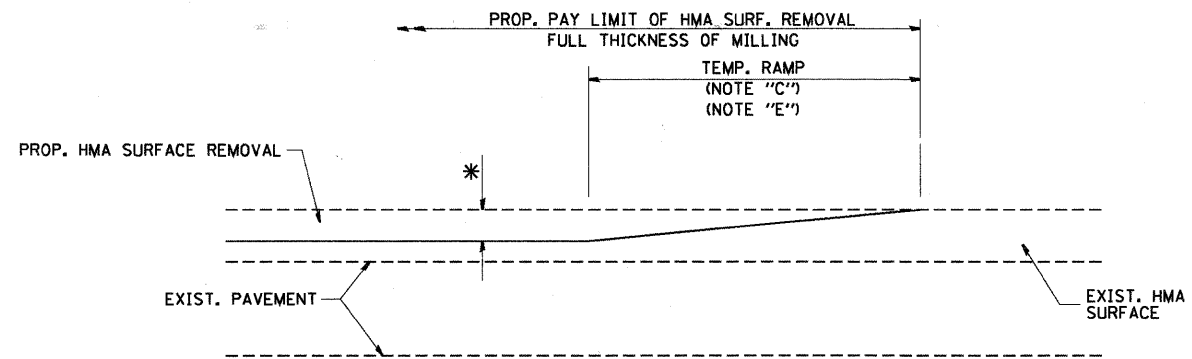
COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

WHEN THE P.C.C. SIDEWALK EXTENDS THROUGH THE DRIVEWAY, THE THICKNESS OF THE SIDEWALK IN THE DRIVEWAY AREA SHALL BE THE SAME AS THE DRIVEWAY THICKNESS. SIDEWALK WILL BE PAID FOR AS P.C.C. SIDEWALK OF THE THICKNESS SPECIFIED. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

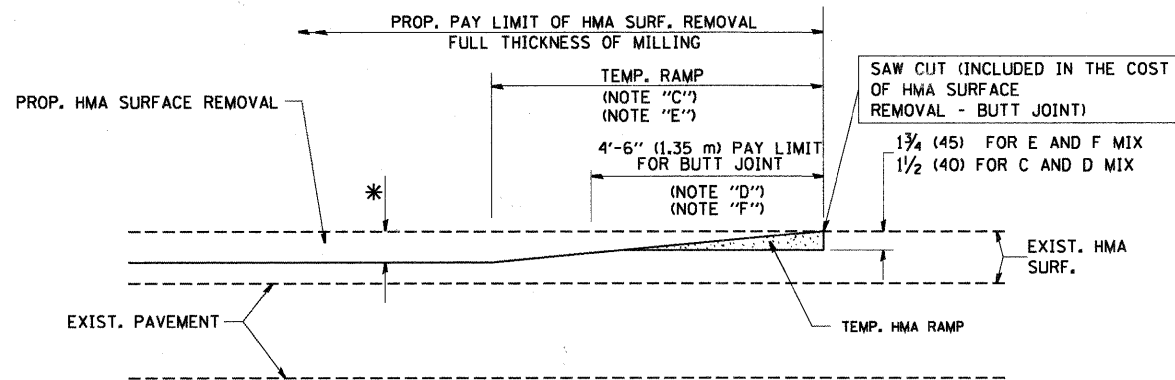
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|  |                             |                    |                               |   |   |             |                           |              |           |   |             |                 |              |  |  |
|--|-----------------------------|--------------------|-------------------------------|---|---|-------------|---------------------------|--------------|-----------|---|-------------|-----------------|--------------|--|--|
| FILE NAME = F:\COBBEL WEST Projects\2009\09-0802 Bolcum PHU\G.v1\Drawn\Sh&UT_01-BD01.dgn | USER NAME = bouerd1         | DESIGNED - R. SHAH | REVISED - M. GOMEZ 04-06-01   | <b>STATE OF ILLINOIS<br/>DEPARTMENT OF TRANSPORTATION</b> | <b>DRIVEWAY DETAILS - DISTANCE BETWEEN R.O.W.<br/>AND FACE OF CURB &amp; EDGE OF SHOULDER &gt;= 15' (4.5 m)</b> | SCALE: NONE | SHEET NO. 49 OF 73 SHEETS | STA. TO STA. | RTE. 2332 | SECTION 03-14185-02-BR                            | COUNTY KANE | TOTAL SHEETS 73 | SHEET NO. 49 |  |  |
|  | PLOT SCALE = 49.9999' / IN. | DRAWN -            | REVISED - P. LGFLUER 04-15-03 |   |   |             |                           |              |           |   |             |                 |              |  |  |
|  | PLOT DATE = 10/21/2010      | CHECKED -          | REVISED - R. BORO 01-01-07    |   |   |             |                           |              |           |   |             |                 |              |  |  |
|  |                             | DATE - 11-04-95    | REVISED - R. BORO 06-11-08    |   |   |             |                           |              |           |   |             |                 |              |  |  |
|  |                             |                    |                               |   |   |             |                           |              |           | <b>BD0156-07 (BD-01) CONTRACT NO.63521</b>        |             |                 |              |  |  |
|  |                             |                    |                               |   |   |             |                           |              |           | FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT |             |                 |              |  |  |



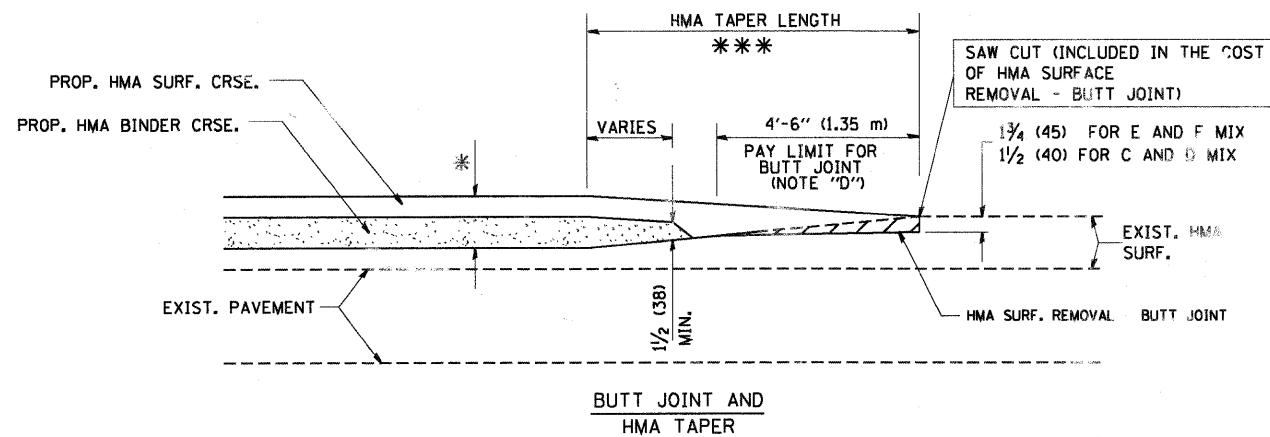
MILLED TEMPORARY RAMP  
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

**OPTION 1**

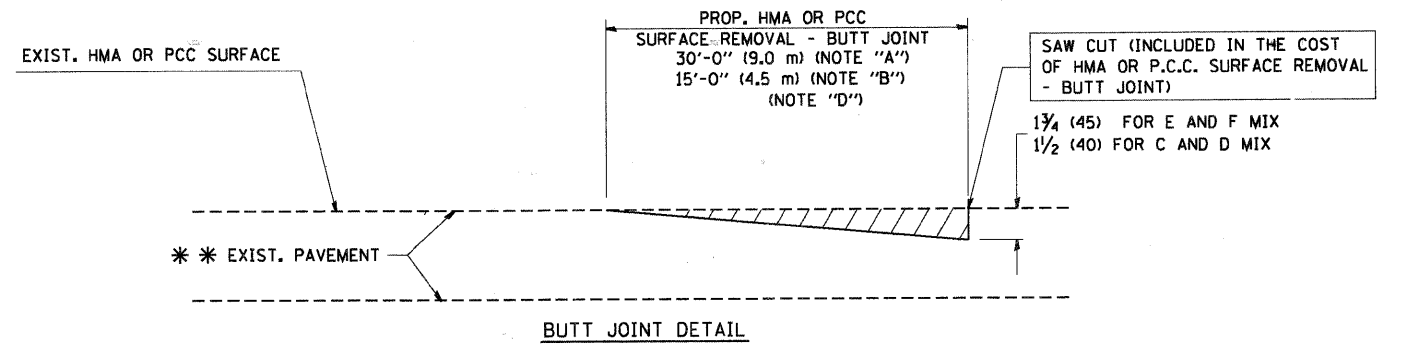


HMA CONSTRUCTED TEMPORARY RAMP  
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

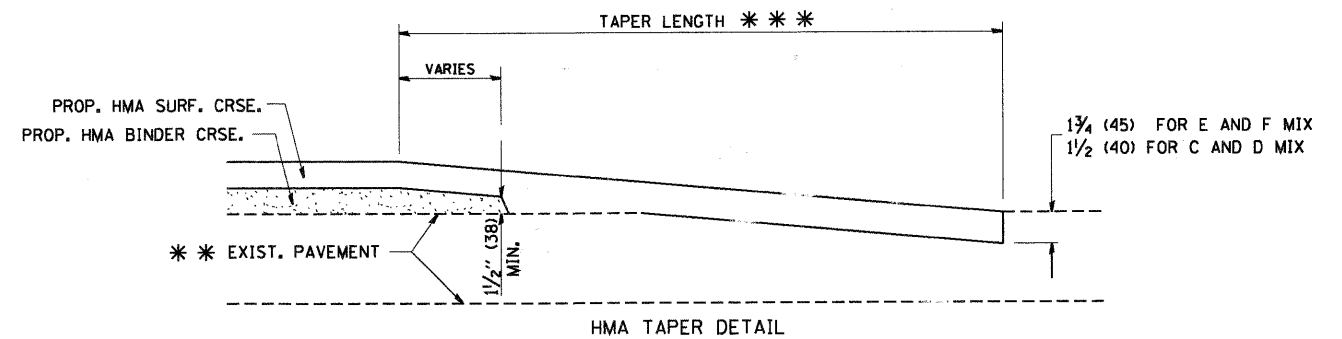
**OPTION 2**  
**TYPICAL TEMPORARY RAMP**



**TYPICAL BUTT JOINT AND HMA TAPER**  
**FOR MILLING AND RESURFACING**



**BUTT JOINT DETAIL**



**HMA TAPER DETAIL**

**TYPICAL BUTT JOINT AND HMA TAPER**  
**FOR RESURFACING ONLY**

\*\*\* PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

**NOTES**

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
  - B: MINOR SIDE ROADS.
  - C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
  - D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
  - E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
  - F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT
  - G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- \* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- \*\*\* 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")  
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

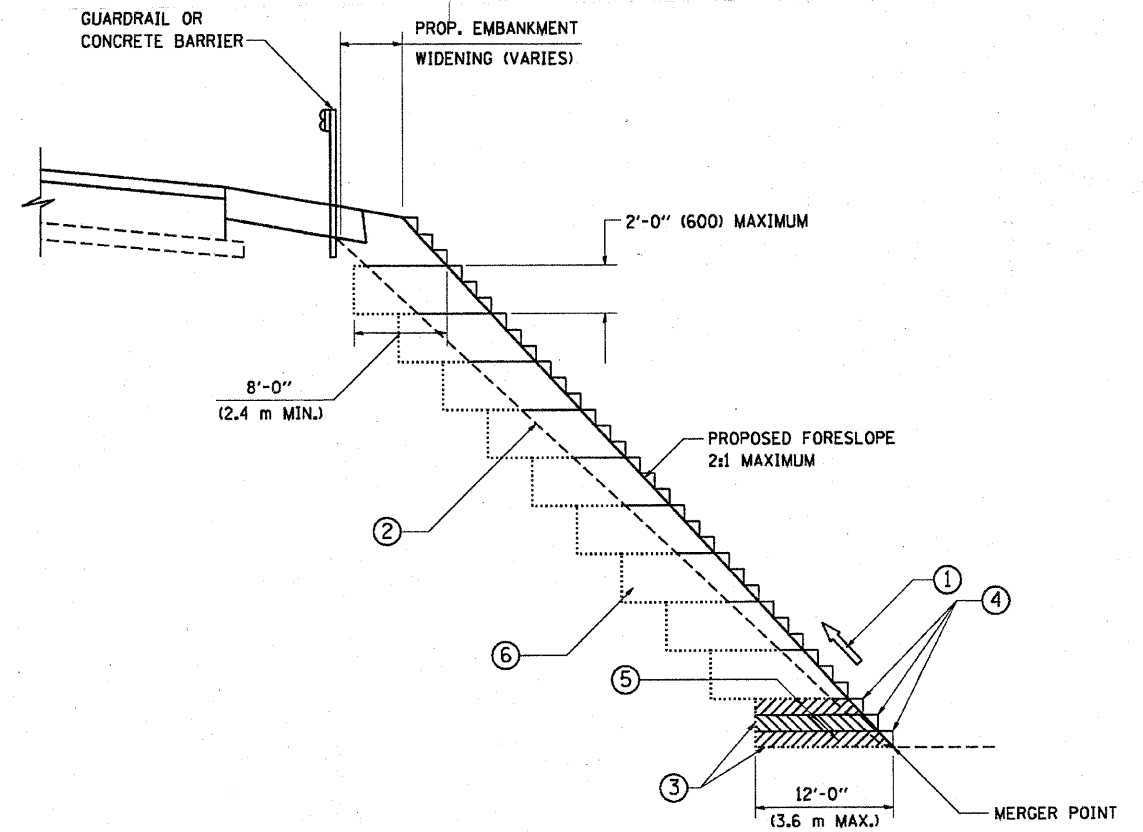
**BASIS OF PAYMENT:**

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT".

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME = P:\BIBEL WEST Projects\2009\09-0802 Bolcum Phil\Civil\Ugr\Shet\DT-DI-BD32.dgn

|   |                        |                             |                             |   |   |                           |      |   |         |                |                           |           |    |
|---|------------------------|-----------------------------|-----------------------------|---|---|---------------------------|------|---|---------|----------------|---------------------------|-----------|----|
| FILE NAME = P:\BIBEL WEST Projects\2009\09-0802 Bolcum Phil\Civil\Ugr\Shet\DT-DI-BD32.dgn | USER NAME = geglienobt | DESIGNED - M. DE YONG       | REVISED - R. SHAH 10-25-94  | <b>STATE OF ILLINOIS<br/>DEPARTMENT OF TRANSPORTATION</b> | <b>BUTT JOINT AND<br/>HMA TAPER DETAILS</b> |                           |      | RTE.  | SECTION | COUNTY         | TOTAL SHEETS              | SHEET NO. |    |
|   |                        | DRAWN -                     | REVISED - A. ABBAS 03-21-97 |   | SCALE: NONE                                 | SHEET NO. 50 OF 73 SHEETS | STA. | TO STA.   | 2332    | 03-14185-02-BR | KANE                      | 73        | 50 |
|   |                        | PLOT SCALE = 50.0000' / IN. | REVISED - M. GOMEZ 04-06-01 |   |   |                           |      | <b>BD400-05 BD32</b>                            |         |                | <b>CONTRACT NO. 63521</b> |           |    |
|   |                        | PLOT DATE = 10/21/2010      | REVISED - R. BORO 01-01-07  |   |   |                           |      | FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |         |                |                           |           |    |



**TYPICAL BENCHING DETAIL  
FOR EMBANKMENT**

**NOTES:**

- ① CONSTRUCT SUCCEEDING BENCH CUTS AND EMBANKMENT PLACEMENT AND COMPACTION FROM BOTTOM TO TOP IN STAIRSTEP FASHION.
- ② EXISTING FORESLOPE PREPARED IN ACCORDANCE WITH ARTICLE 205.03 OF THE STANDARD SPECIFICATIONS.
- ③ BENCH CUT EXISTING SLOPE TYPICAL FOR EACH STEP.
- ④ TRIM TO FINAL SLOPE.
- ⑤ EQUAL 8-INCH (200) LIFTS OF EMBANKMENT COMPACTED IN ACCORDANCE WITH ARTICLE 205.05 OF THE STANDARD SPECIFICATIONS.
- ⑥ EXCAVATION OF BENCH CUTS WITHIN EXISTING EMBANKMENT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC METER OR CUBIC YARD FOR "EARTH EXCAVATION". THIS PRICE WILL INCLUDE ALL LABOR AND MATERIAL, NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- ⑦ SLOPES SHALL BE BENCHED ACCORDING TO THIS DETAIL WHEN THE SLOPE IS STEEPER THAN 4:1 AND THE HEIGHT IS GREATER THAN 5' (1.5 m).

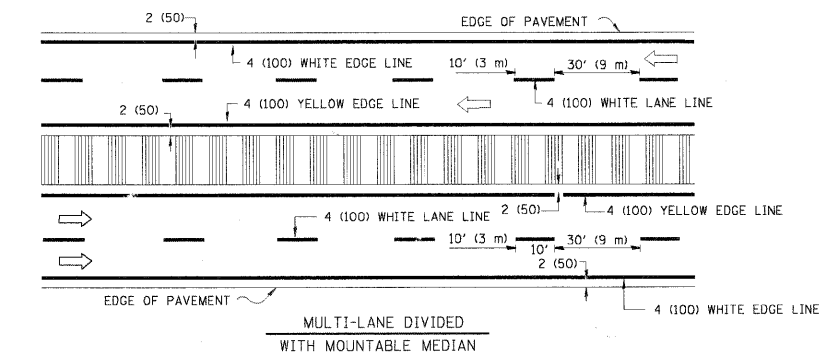
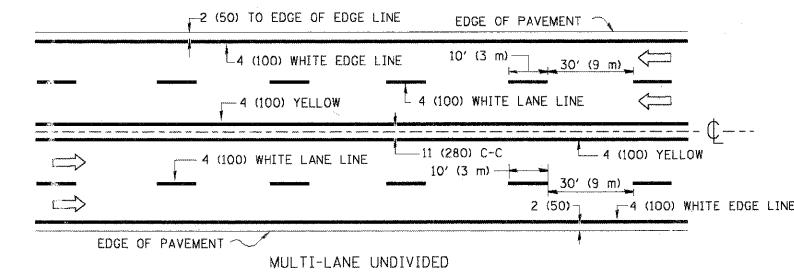
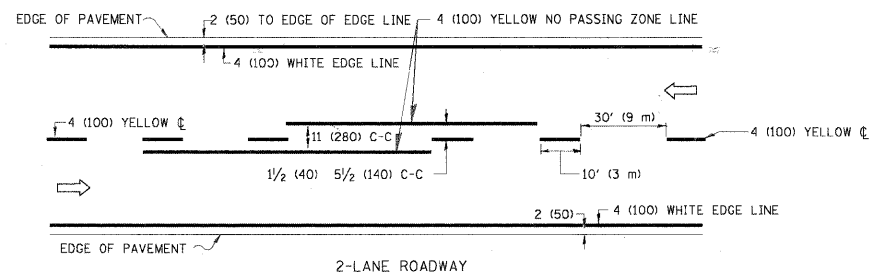
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

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|  |                             | DRAWN - CADD     | REVISED - |
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|  | PLOT DATE = 12/6/2010       | DATE - 06-16-04  | REVISED - |

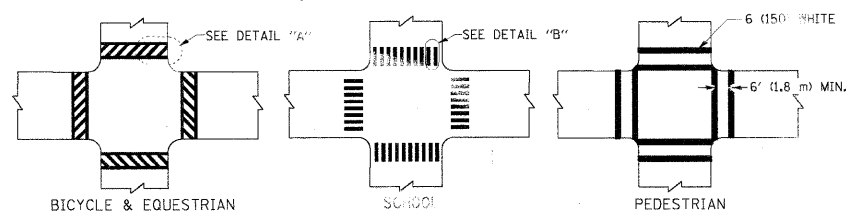
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

| BENCHING DETAIL<br>FOR EMBANKMENT WIDENING |                            | RT.   | SECTION        | COUNTY             | TOTAL SHEETS | SHEET NO. |
|--|----------------------------|---|----------------|--------------------|--------------|-----------|
| SCALE: NONE                                | SHEET NO. 50A OF 73 SHEETS | 2332  | 03-14185-02-BR | KANE               | 73           | 50A       |
|  |                            | BD-51   |                | CONTRACT NO. 63521 |              |           |
|  |                            | FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |                |                    |              |           |

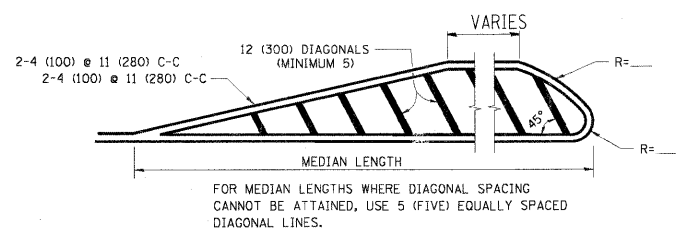
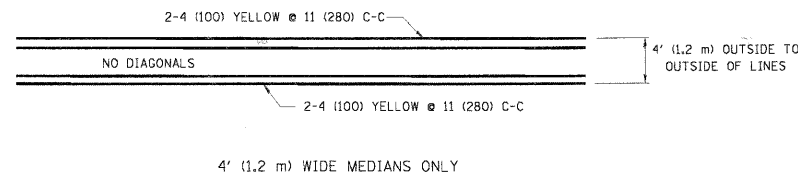


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

**TYPICAL LANE AND EDGE LINE MARKING**

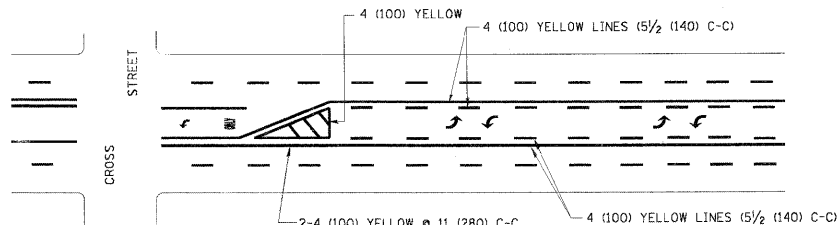


**TYPICAL CROSSWALK MARKING**

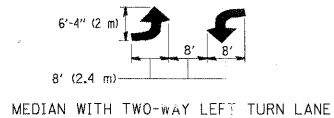


DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))  
75' (25 m) C-C (30MPH (50 km/h) TO 45MPH (70 km/h))  
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

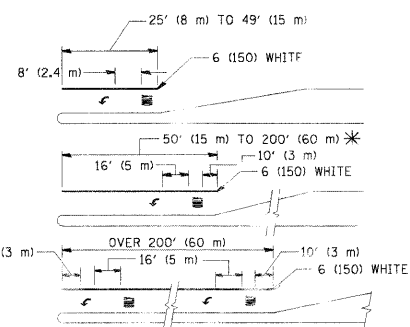
**MEDIANS OVER 4' (1.2 m) WIDE**



A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



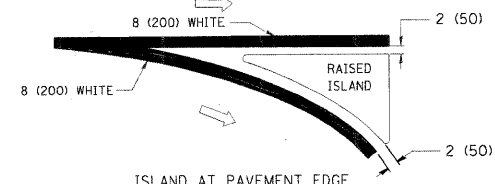
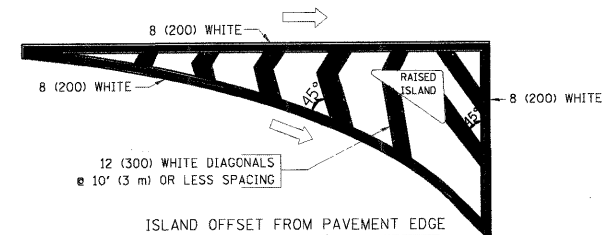
**TYPICAL PAINTED MEDIAN MARKING**



FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  
AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup>) ONLY AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)  
\* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY"

**TYPICAL LEFT (OR RIGHT) TURN LANE**

**TYPICAL TURN LANE MARKING**



**TYPICAL ISLAND MARKING**

| TYPE OF MARKING   | WIDTH OF LINE  | PATTERN                         | COLOR   | SPACING / REMARKS  |
|---|--|---------------------------------|---|--|
| CENTERLINE ON 2 LANE PAVEMENT   | 4 (100)  | SKIP-DASH                       | YELLOW  | 10' (3 m) LINE WITH 30' (9 m) SPACE  |
| CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT   | 2 @ 4 (100)  | SOLID                           | YELLOW  | 11 (280) C-C   |
| NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS                                      | 4 (100)<br>2 @ 4 (100)   | SOLID<br>SOLID                  | YELLOW<br>YELLOW                                  | 5/2 (140) C-C FROM SKIP-DASH CENTERLINE<br>11 (280) C-C<br>OMIT SKIP-DASH CENTERLINE BETWEEN   |
| LANE LINES  | 4 (100)<br>5 (125) ON FREEWAYS   | SKIP-DASH<br>SKIP-DASH          | WHITE<br>WHITE                                    | 10' (3 m) LINE WITH 30' (9 m) SPACE  |
| DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)                                   | SAME AS LINE BEING EXTENDED  | SKIP-DASH                       | SAME AS LINE BEING EXTENDED                       | 2' (600) LINE WITH 6' (1.8 m) SPACE  |
| EDGE LINES  | 4 (100)  | SOLID                           | YELLOW-LEFT<br>WHITE-RIGHT                        | OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB  |
| TURN LANE MARKINGS  | 6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))                                      | SOLID                           | WHITE   | SEE TYPICAL TURN LANE MARKING DETAIL   |
| TWO WAY LEFT TURN MARKING   | 2 @ 4 (100) EACH DIRECTION<br>8' (2.4m) LEFT ARROW   | SKIP-DASH AND SOLID<br>IN PAIRS | YELLOW<br>WHITE                                   | 10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE<br>SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL             |
| CROSSWALK LINES (PEDESTRIAN)<br>A. DIAGONALS (BIKE & EQUESTRIAN)<br>B. LONGITUDINAL BARS (SCHOOL) | 2 @ 6 (150)<br>12 (300) @ 45°<br>12 (300) @ 90°  | SOLID<br>SOLID<br>SOLID         | WHITE<br>WHITE<br>WHITE                           | NOT LESS THAN 6' (1.8 m) APART<br>2' (600) APART<br>2' (600) APART<br>SEE TYPICAL CROSSWALK MARKING DETAILS.   |
| STOP LINES  | 24 (600)   | SOLID                           | WHITE   | PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE |
| PAINTED MEDIANS   | 2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45°<br>NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS | SOLID                           | YELLOW; TWO WAY TRAFFIC<br>WHITE; ONE WAY TRAFFIC | 11 (280) C-C FOR THE DOUBLE LINE<br>SEE TYPICAL PAINTED MEDIAN MARKING.  |
| GORE MARKING AND CHANNELIZING LINES   | 8 (200) WITH 12 (300) DIAGONALS @ 45°  | SOLID                           | WHITE   | DIAGONALS:<br>15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h))<br>20' (6 m) C-C (30MPH (50 km/h) TO 45MPH (70 km/h))<br>30' (9 m) C-C (OVER 45MPH (70 km/h))            |
| RAILROAD CROSSING   | 24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"               | SOLID                           | WHITE   | SEE STATE STANDARD 780001<br>AREA OF "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"   |
| SHOULDER DIAGONALS  | 12 (300) @ 45°   | SOLID                           | WHITE - RIGHT<br>YELLOW - LEFT                    | 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))<br>75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h))<br>150' (45 m) C-C (OVER 45MPH (70 km/h))                       |

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

All dimensions are in inches (millimeters) unless otherwise shown.

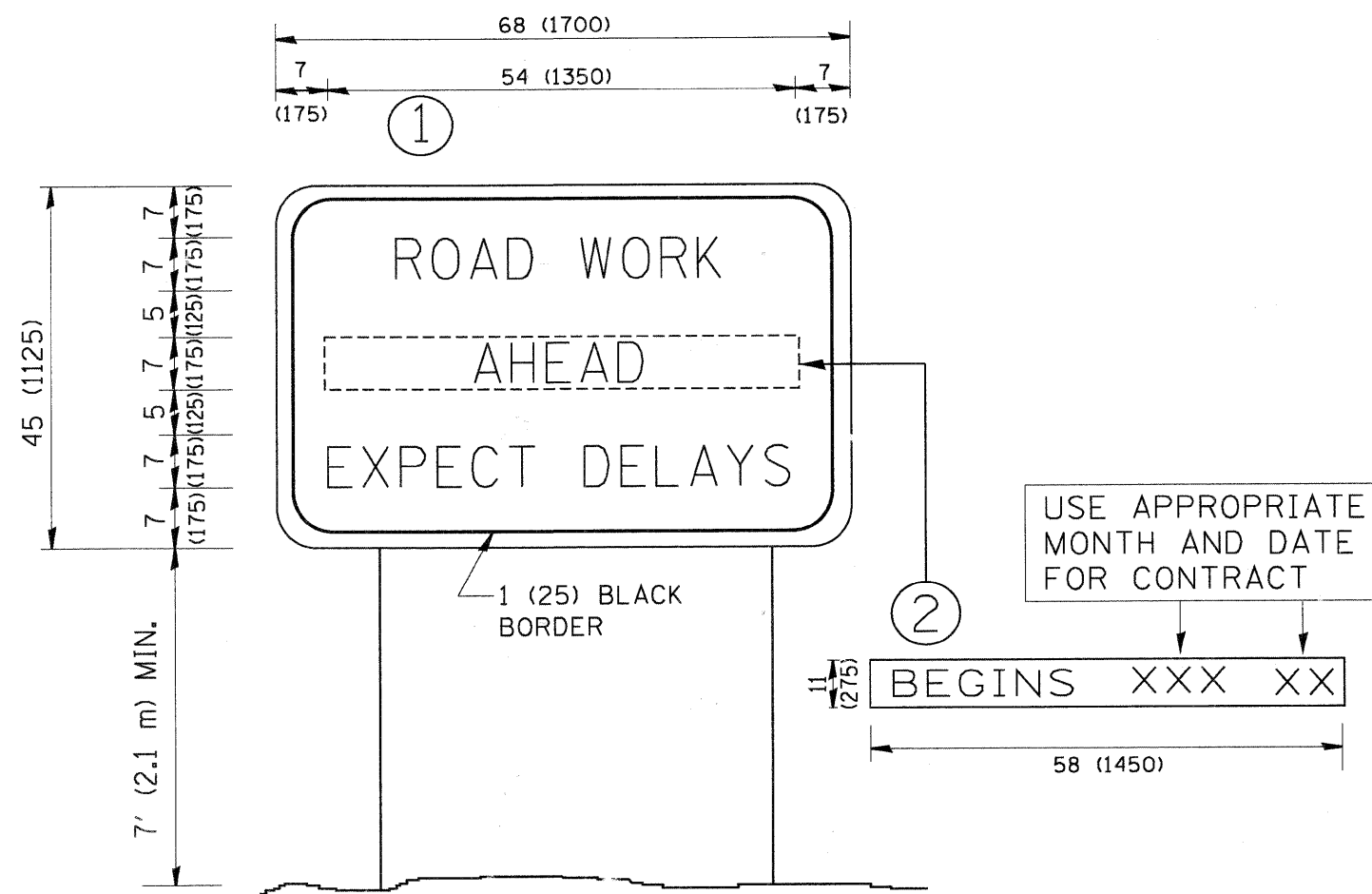
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|   |                       |                  |                                 |
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| os\pwwork\pwwork\drvakosgn\d0188315\3.dgn |                       | DRAWN -          | REVISED - C. JUCIUS 09-09-09    |
| PLOT SCALE = 50.000' / IN.                |                       | CHECKED -        | REVISED -                       |
| PLOT DATE = 10/21/2010                    |                       | DATE - 03-19-90  | REVISED -                       |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE  
TYPICAL PAVEMENT MARKINGS**

|   |                           |              |           |                        |             |                    |              |
|---|---------------------------|--------------|-----------|------------------------|-------------|--------------------|--------------|
| SCALE: NONE                                       | SHEET NO. 51 OF 73 SHEETS | STA. TO STA. | RTE. 2332 | SECTION 03-14185-02-BR | COUNTY KANE | TOTAL SHEETS 73    | SHEET NO. 51 |
| TC-13   |                           |              |           |                        |             | CONTRACT NO. 63521 |              |
| FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT |                           |              |           |                        |             |                    |              |



NOTES:

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

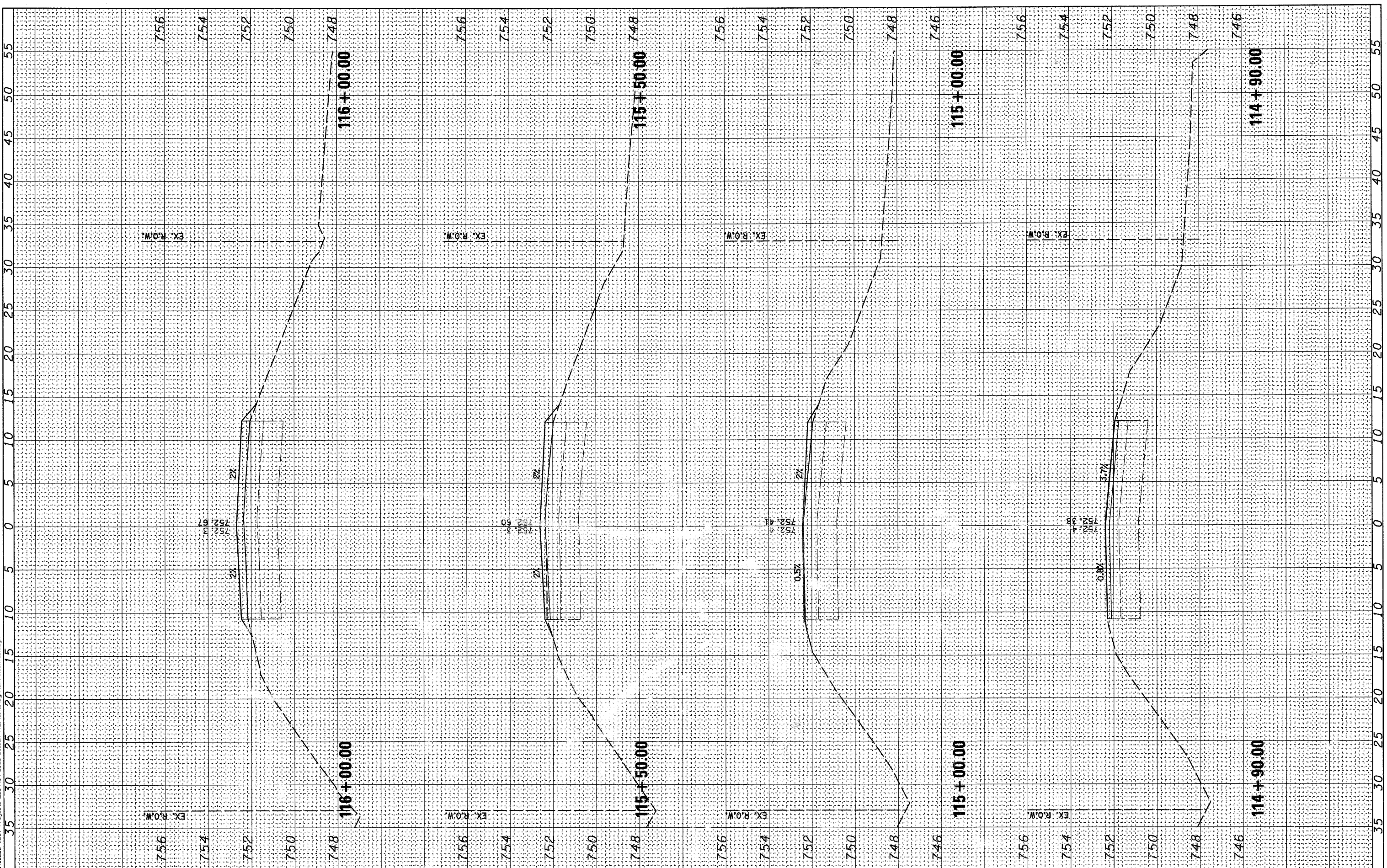
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|  |                        |                        |                                 |   |   |                           |      |                           |   |        |              |           |
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| FILE NAME = P:\BIBEL WEST Projects\2009\09-0802 Beloum PH\1\Gv1\Ogn\Sh\ADT_DI-TC22.dgn | USER NAME = geglianobt | DESIGNED -             | REVISED - R. MIRS 09-15-97      | <b>STATE OF ILLINOIS<br/>DEPARTMENT OF TRANSPORTATION</b> | <b>ARTERIAL ROAD<br/>INFORMATION SIGN</b> |                           |      | RTE.                      | SECTION   | COUNTY | TOTAL SHEETS | SHEET NO. |
|  |                        | DRAWN -                | REVISED - R. MIRS 12-11-97      |   | 2332                                      | 03-14185-02-BR            | KANE | 73                        | 52  |        |              |           |
|  |                        | CHECKED -              | REVISED - T. RAMMACHER 02-02-99 |   | <b>TC-22</b>                              |                           |      | <b>CONTRACT NO. 63521</b> |   |        |              |           |
|  |                        | PLOT DATE = 10/21/2010 | REVISED - C. JUCIUS 01-31-07    |   | SCALE: NONE                               | SHEET NO. 52 OF 73 SHEETS | STA. | TO STA.                   | FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT |        |              |           |

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| FINAL SURVEY  | SURVEYED     | BY | DATE |
| NOTE BOOK NO. | PLOTTED      |    |      |
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| ORIGINAL SURVEY | SURVEYED     | BY | DATE |
| NOTE BOOK NO.   | PLOTTED      |    |      |
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**WILLS BURKE KELSEY ASSOCIATES LTD.**  
116 West Main Street, Suite 201  
St. Charles, Illinois 60174

|                        |                 |           |
|------------------------|-----------------|-----------|
| USER NAME = *USER*     | DESIGNED -      | REVISED - |
| PLOT SCALE =           | DRAWN -         | REVISED - |
| PLOT DATE = 10/21/2010 | CHECKED -       | REVISED - |
|                        | DATE - 10/22/10 | REVISED - |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS  
BOLCUM ROAD**

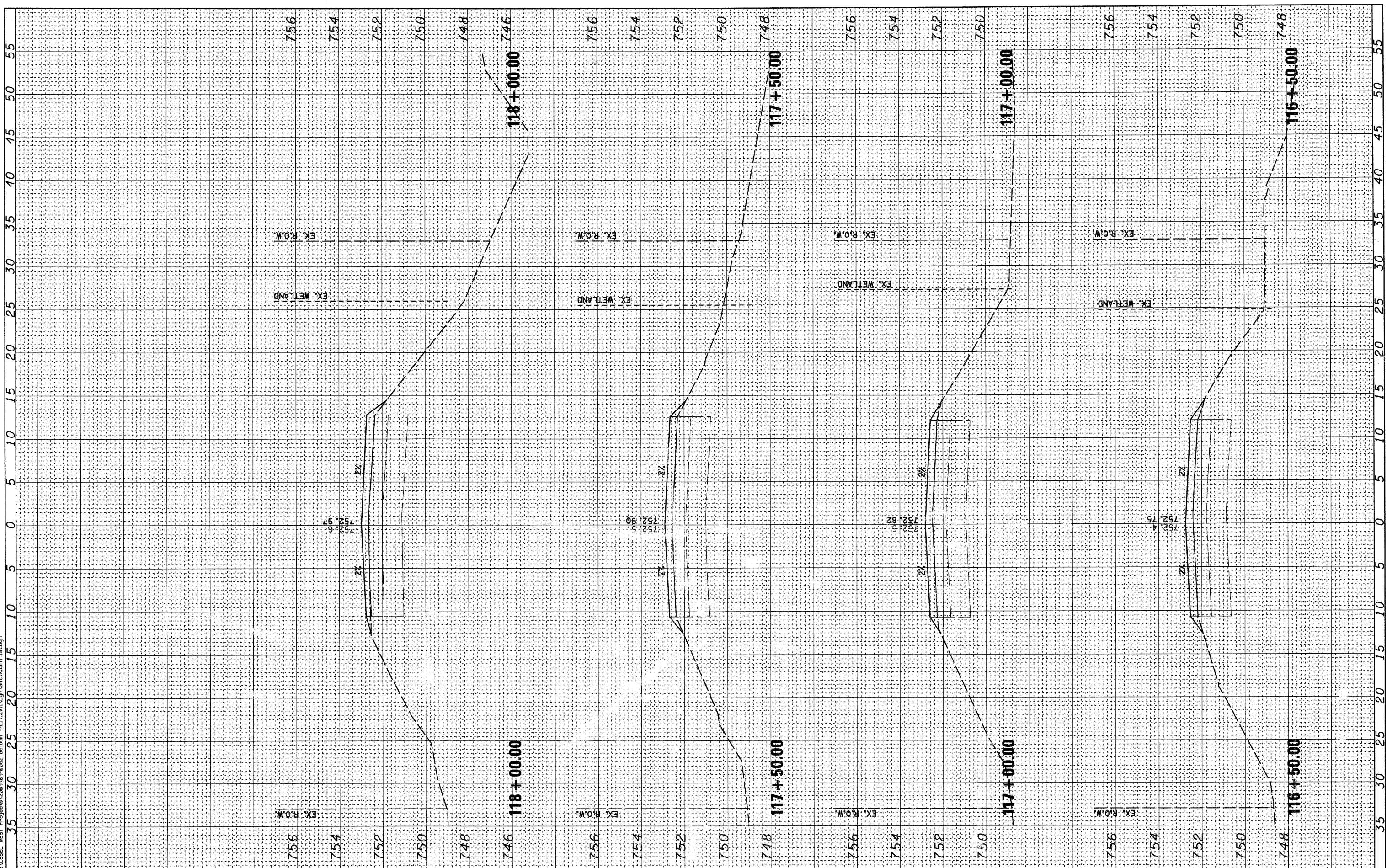
SCALE: SHEET NO. OF 73 SHEETS STA. 114+90.00 TO STA. 116+00.00

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|---|----------------|--------|--------------|-----------|
| RT.   | SECTION        | COUNTY | TOTAL SHEETS | SHEET NO. |
| 2332  | 03-14185-02-BR | KANE   | 73           | 53        |
| CONTRACT NO. 63521                              |                |        |              |           |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |                |        |              |           |

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| ORIGINAL SURVEY | SURVEYED      | BY | DATE |
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|                 | TEMPLATE      |    |      |
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| ORIGINAL SURVEY | SURVEYED      | BY | DATE |
| NOTE BOOK       | PLOTTED       |    |      |
|                 | TEMPLATE      |    |      |
|                 | AREAS CHECKED |    |      |
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|-------------------------|-----------------|-----------|
| USER NAME = #USER*      | DESIGNED -      | REVISED - |
| PLLOT SCALE =           | DRAWN -         | REVISED - |
| PLLOT DATE = 10/21/2010 | CHECKED -       | REVISED - |
|                         | DATE - 10/22/10 | REVISED - |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

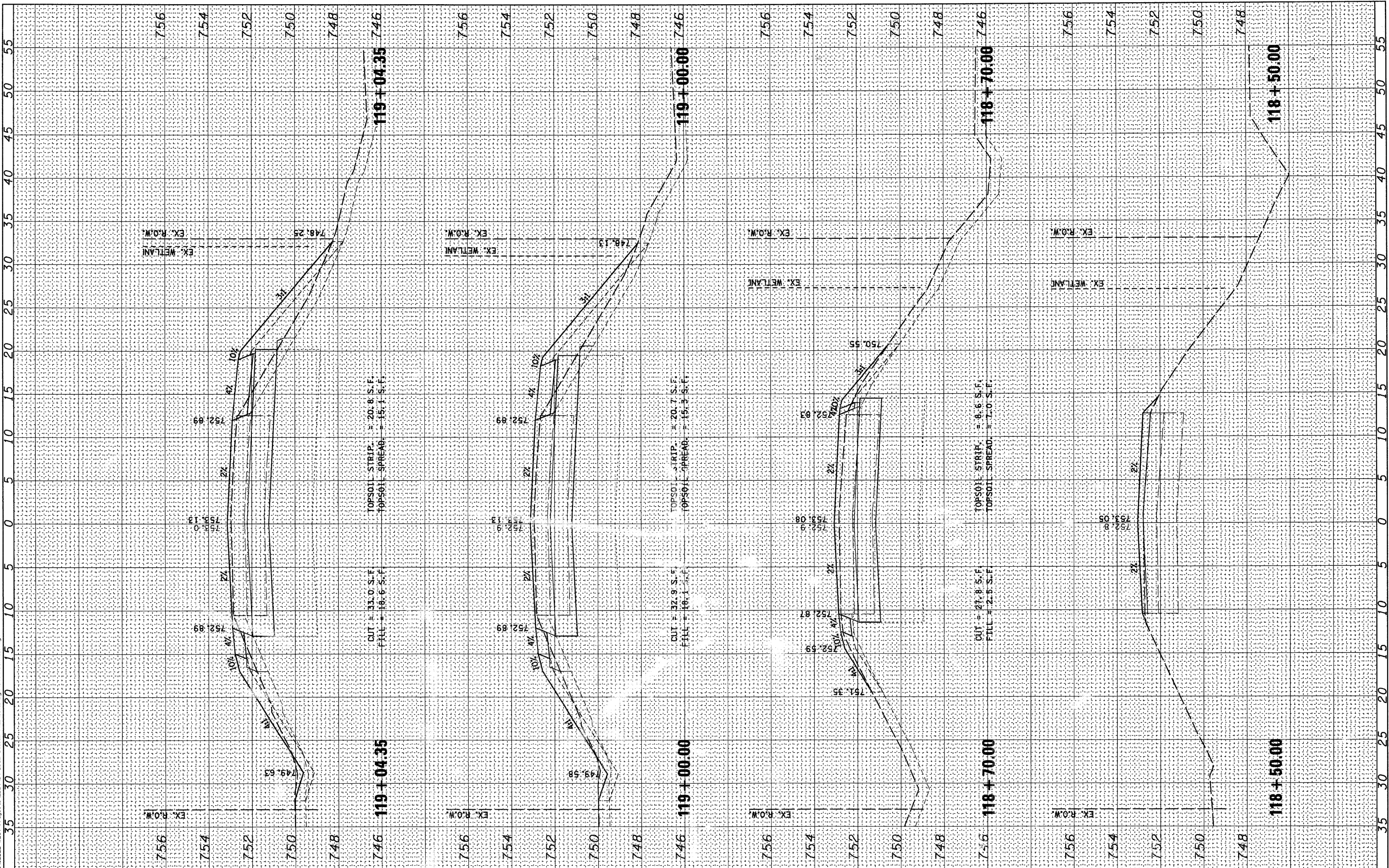
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| <b>CROSS SECTIONS</b> |           |              |                                  |
| <b>BOLCUM ROAD</b>    |           |              |                                  |
| SCALE:                | SHEET NO. | OF 73 SHEETS | STA. 116+50.00 TO STA. 118+00.00 |

|   |                |        |              |           |
|---|----------------|--------|--------------|-----------|
| RT.   | SECTION        | COUNTY | TOTAL SHEETS | SHEET NO. |
| 2332  | 03-14185-02-BR | KANE   | 73           | 54        |
| CONTRACT NO. 63521                              |                |        |              |           |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |                |        |              |           |

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

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USER NAME = \*USER\*  
DESIGNED -  
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DATE = 10/22/10

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS  
BOLCUM ROAD  
SCALE: SHEET NO. OF 73 SHEETS STA. 118+50.00 TO STA. 119+04.35

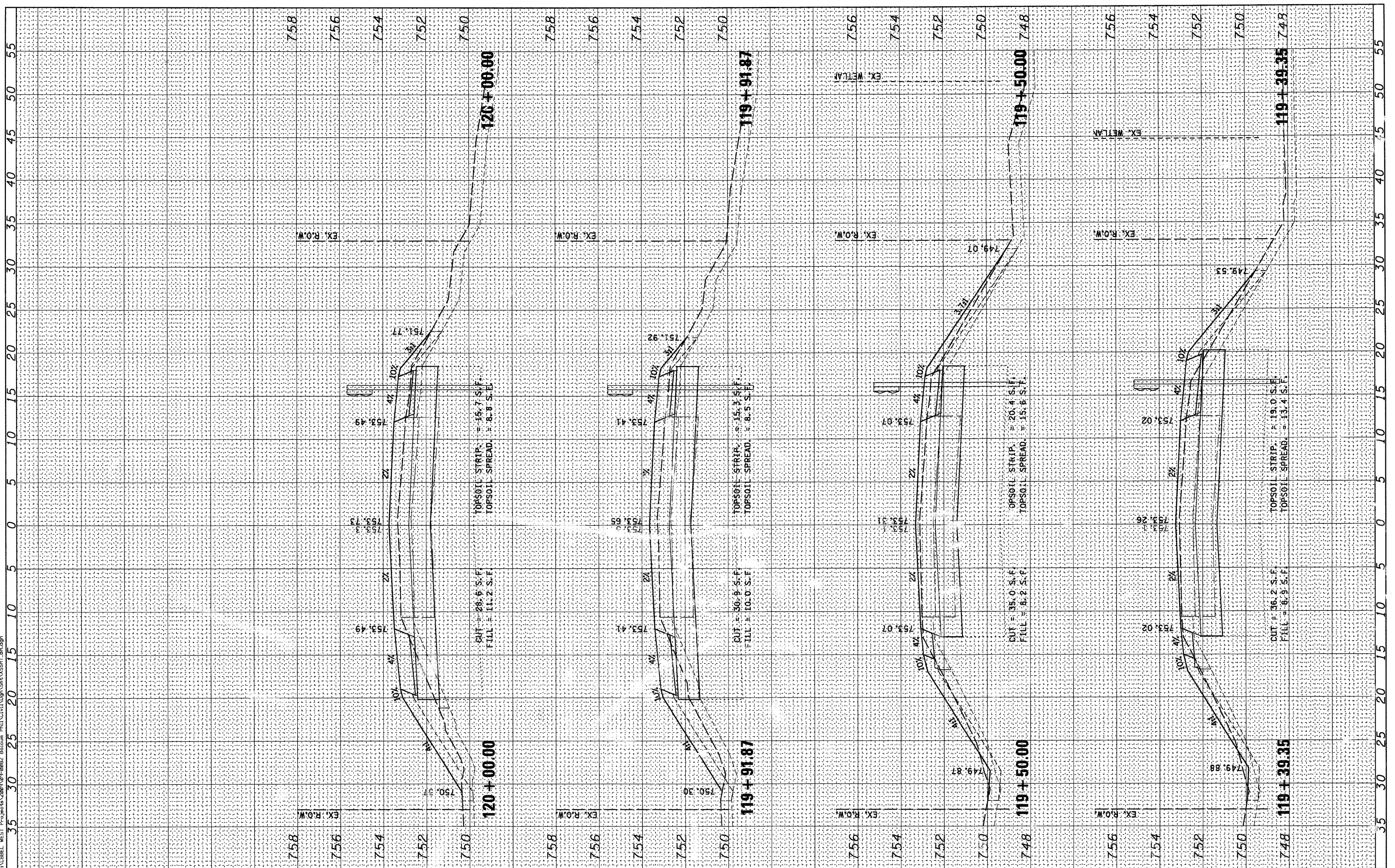
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|---|----------------|--------|--------------|-----------|
| ROUTE   | SECTION        | COUNTY | TOTAL SHEETS | SHEET NO. |
| 2332  | 03-14185-02-BR | KANE   | 73           | 55        |
| CONTRACT NO. 63521                              |                |        |              |           |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |                |        |              |           |



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| NOTE BOOK    | PLOTTED       |    |      |
| NO.          | TEMPLATE      |    |      |
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| ORIGINAL SURVEY | SURVEYED      | BY | DATE |
| NOTE BOOK       | PLOTTED       |    |      |
| NO.             | TEMPLATE      |    |      |
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| USER NAME = #USER#     | DESIGNED -      | REVISED - |
| PLOT SCALE =           | DRAWN -         | REVISED - |
| PLOT DATE = 10/21/2010 | CHECKED -       | REVISED - |
|                        | DATE - 10/22/10 | REVISED - |

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS  
 BOLCUM ROAD**

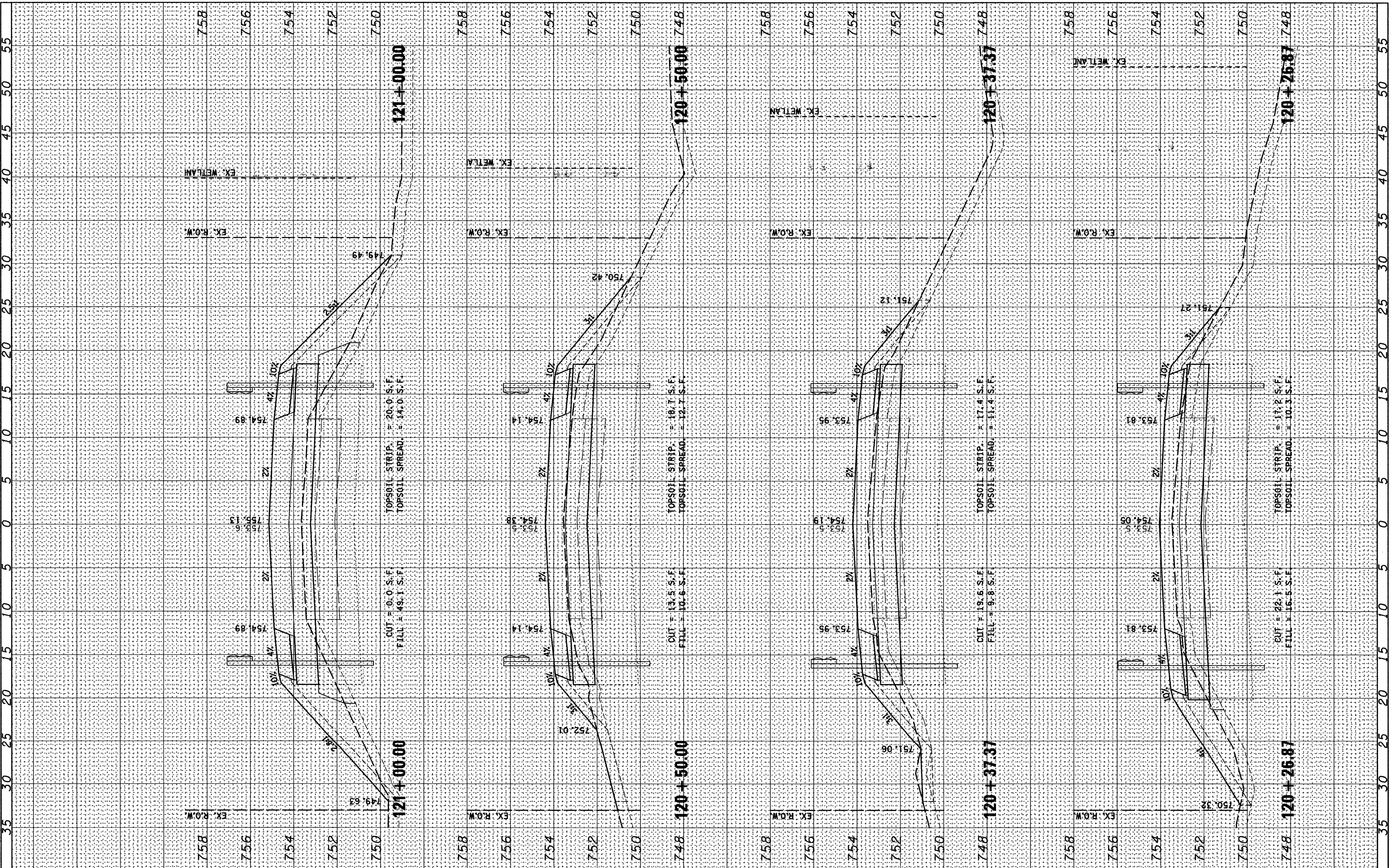
SCALE: SHEET NO. OF 73 SHEETS STA. 119+39.35 TO STA. 120+00.00

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|---|----------------|--------|--------------|-----------|
| ROUTE   | SECTION        | COUNTY | TOTAL SHEETS | SHEET NO. |
| 2332  | 03-14185-02-BR | KANE   | 73           | 56        |
| CONTRACT NO. 63521                              |                |        |              |           |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |                |        |              |           |

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| NOTE BOOK    | PLOTTED       |      |
| NO.          | TEMPLATE      |      |
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| ORIGINAL SURVEY | CHECKED       | DATE |
| NOTE BOOK       | PLOTTED       |      |
| NO.             | TEMPLATE      |      |
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| USER NAME = *USER*    | DESIGNED -      | REVISED - |
| PLOT SCALE =          | DRAWN -         | REVISED - |
| PLOT DATE = 11/9/2010 | CHECKED -       | REVISED - |
|                       | DATE - 10/22/10 | REVISED - |

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS  
 BOLCUM ROAD**

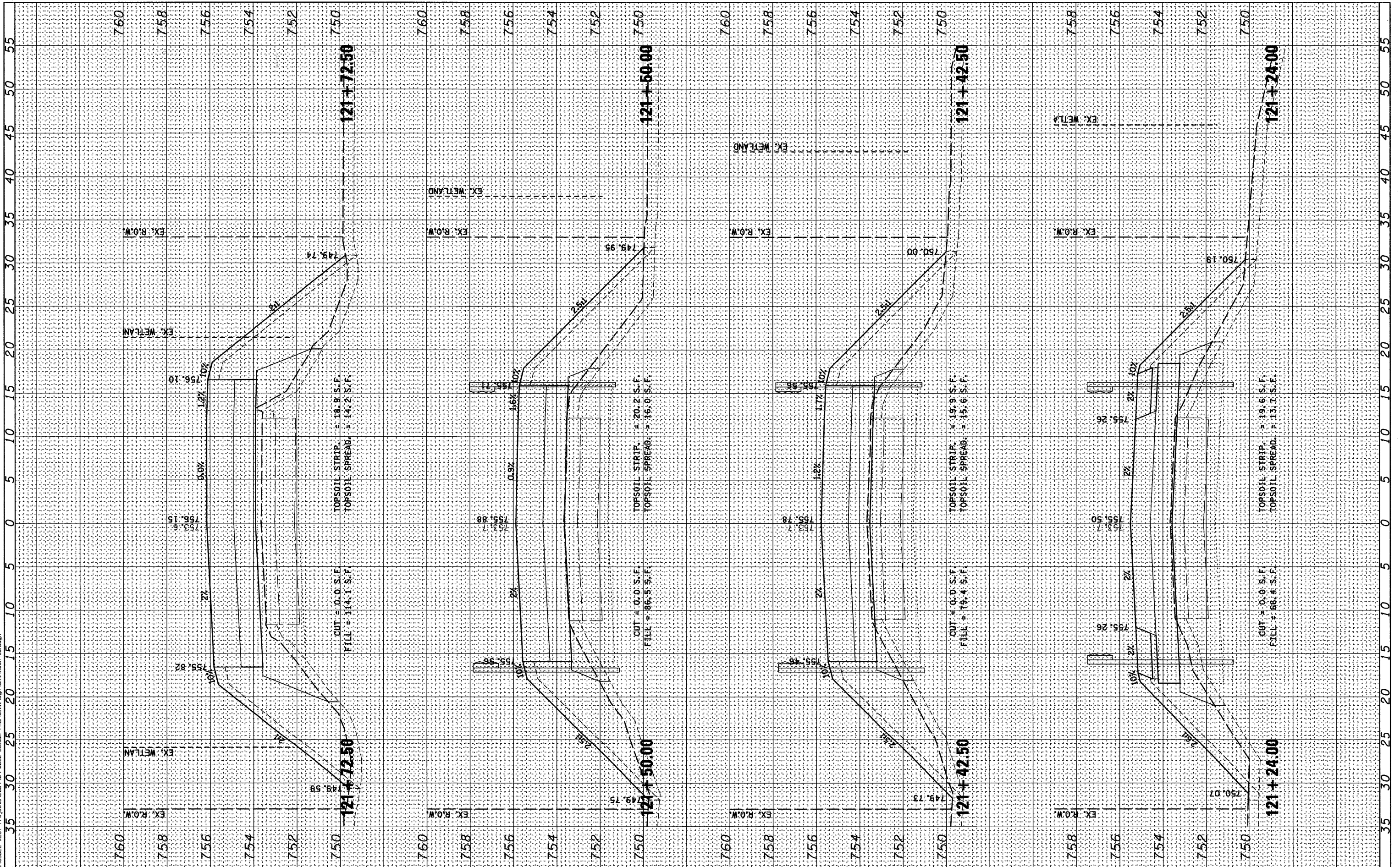
SCALE: SHEET NO. OF 73 SHEETS STA. 120+26.87 TO STA. 121+00.00

| RTE.  | SECTION        | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|----------------|--------|--------------|-----------|
| 2332  | 03-14185-02-BR | KANE   | 73           | 57        |
| CONTRACT NO. 63521                              |                |        |              |           |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |                |        |              |           |

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|                       |                 |           |
|-----------------------|-----------------|-----------|
| USER NAME = *USER*    | DESIGNED -      | REVISED - |
| PLOT SCALE =          | DRAWN -         | REVISED - |
| PLOT DATE = 11/9/2010 | CHECKED -       | REVISED - |
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

|                       |   |
|-----------------------|---|
| <b>CROSS SECTIONS</b> |   |
| <b>BOLCUM ROAD</b>    |   |
| SCALE:                | SHEET NO. OF 73 SHEETS STA. 121+24.00 TO STA. 121+72.50 |

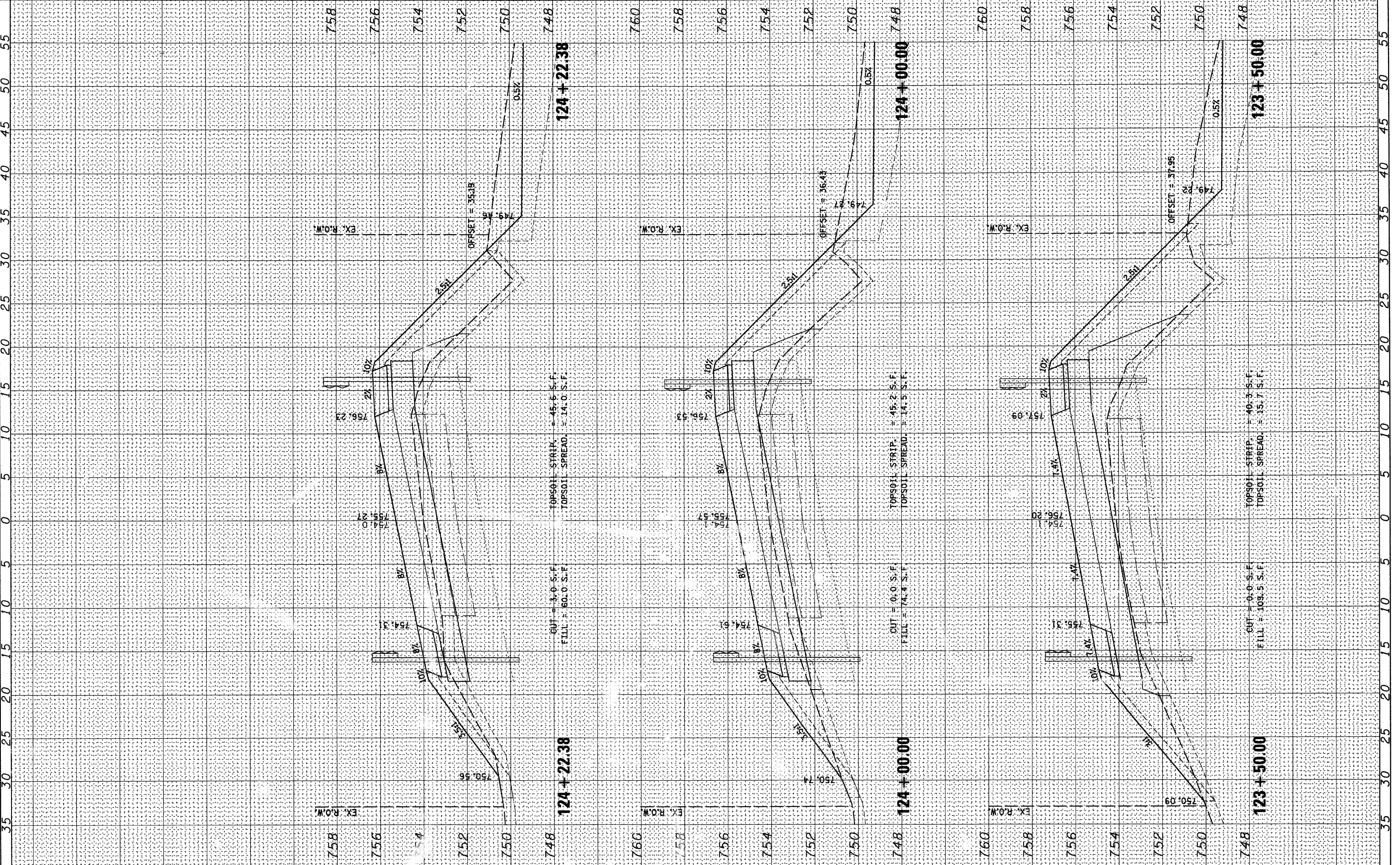
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|---|----------------|--------|--------------|-----------|
| RTE.  | SECTION        | COUNTY | TOTAL SHEETS | SHEET NO. |
| 2332  | 03-14185-02-BR | KANE   | 73           | 58        |
| CONTRACT NO. 63521                              |                |        |              |           |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |                |        |              |           |



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| ORIGINAL SURVEY | SURVEYED      | BY | DATE |
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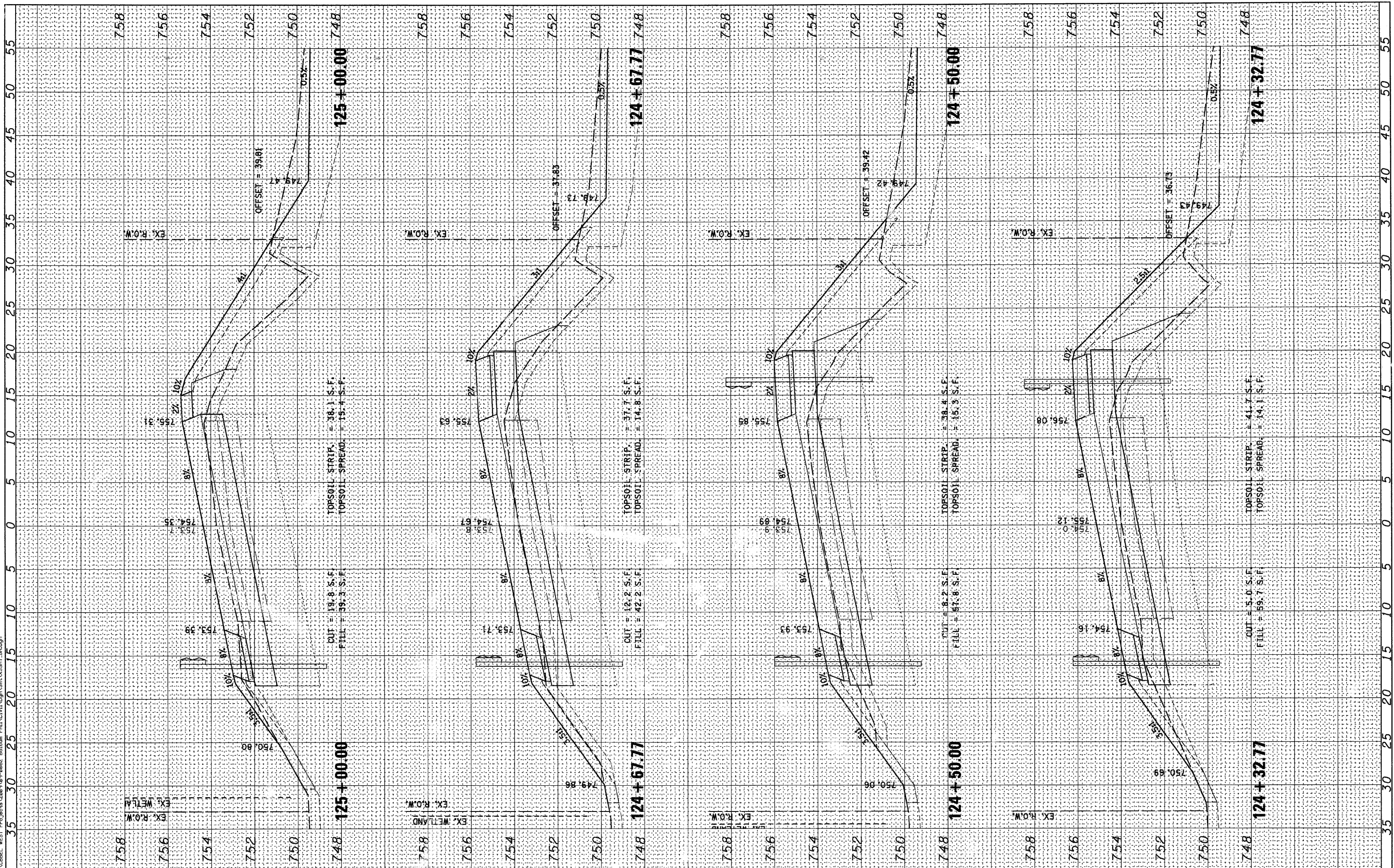


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|---|------------------------|-----------------|-----------|---|---|---|--|--------------|---------------------------|----------------|--------------------|-----------------|--|
| <b>WILLS BURKE KELSEY ASSOCIATES LTD.</b><br>116 West Main Street, Suite 201<br>St. Charles, Illinois 60174 | USER NAME = #USER#     | DESIGNED -      | REVISED - | <b>STATE OF ILLINOIS</b><br><b>DEPARTMENT OF TRANSPORTATION</b> | <b>CROSS SECTIONS</b><br><b>BOLCUM ROAD</b> |   |  | RTE.<br>2332 | SECTION<br>03-14185-02-BR | COUNTY<br>KANE | TOTAL SHEETS<br>73 | SHEET NO.<br>60 |  |
|   | PLOT SCALE =           | CHECKED -       | REVISED - |   | SCALE:                                      | SHEET NO. OF 73 SHEETS STA. 123+50.00 TO STA. 124+22.38 |  |              | CONTRACT NO.63521         |                |                    |                 |  |
|   | PLOT DATE = 10/21/2010 | DATE = 10/22/10 | RE -      |   | ED -  | FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT       |  |              |                           |                |                    |                 |  |
|   |                        |                 |           |   |   |   |  |              |                           |                |                    |                 |  |

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| FINAL SURVEY  | SURVEYED | BY | DATE |
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|------------------------|-----------------|-----------|
| USER NAME = #USER#     | DESIGNED -      | REVISED - |
| PLOT SCALE =           | DRAWN -         | REVISED - |
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

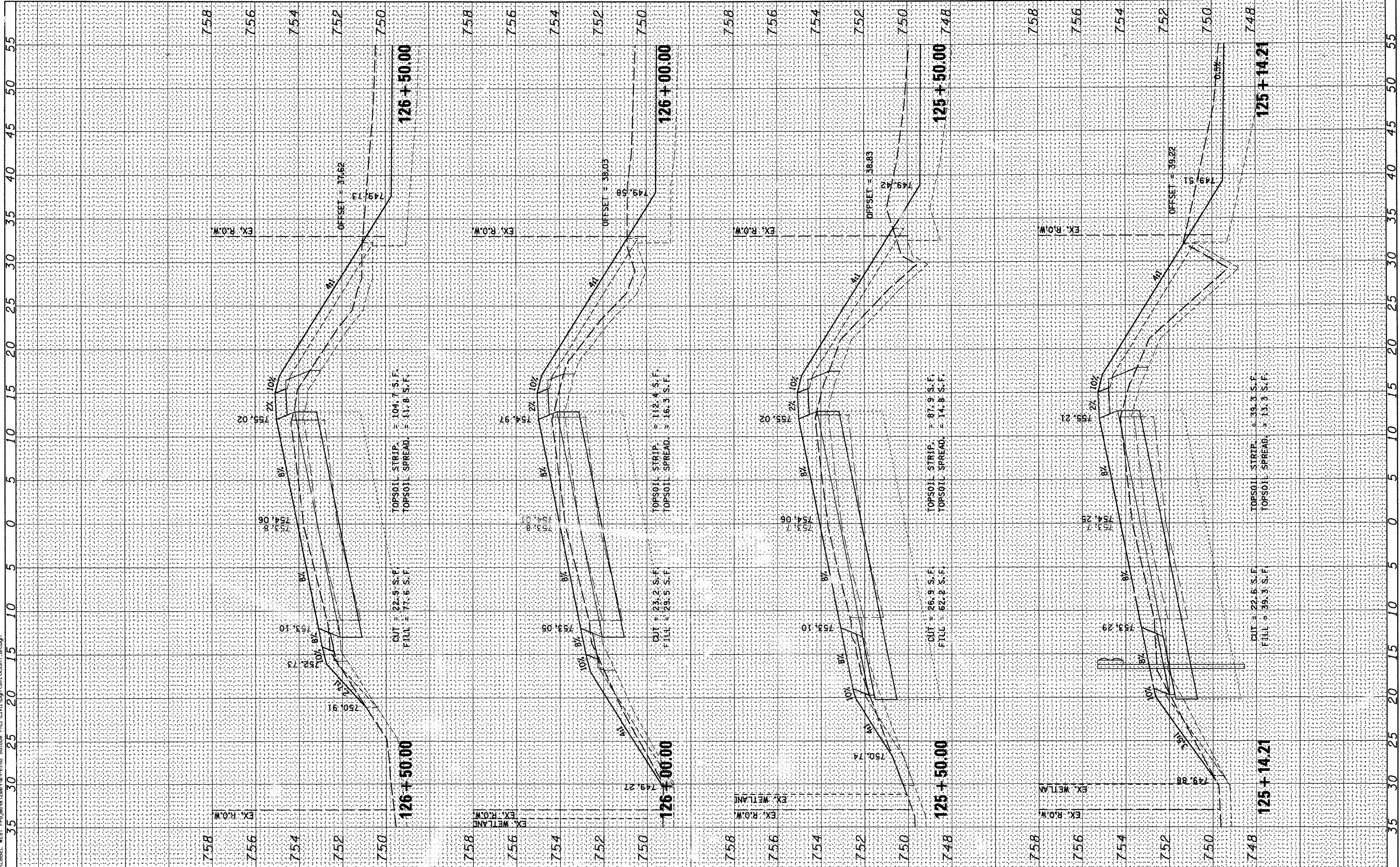
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| CROSS SECTIONS |           |              |                                  |
| BOLCUM ROAD    |           |              |                                  |
| SCALE:         | SHEET NO. | OF 73 SHEETS | STA. 124+32.77 TO STA. 125+00.00 |

|   |                |        |              |           |
|---|----------------|--------|--------------|-----------|
| ROUTE   | SECTION        | COUNTY | TOTAL SHEETS | SHEET NO. |
| 2332  | 03-14185-02-BR | KANE   | 73           | 61        |
| CONTRACT NO. 63521                                |                |        |              |           |
| FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT |                |        |              |           |

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| ORIGINAL SURVEY | SURVEYED      | BY | DATE |
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|                        |                 |           |
|------------------------|-----------------|-----------|
| USER NAME = #USER#     | DESIGNED -      | REVISED - |
| PLOT SCALE =           | DRAWN -         | REVISED - |
| PLOT DATE = 10/21/2010 | CHECKED -       | REVISED - |
|                        | DATE - 10/22/10 | REV'D -   |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS  
BOLCUM ROAD**

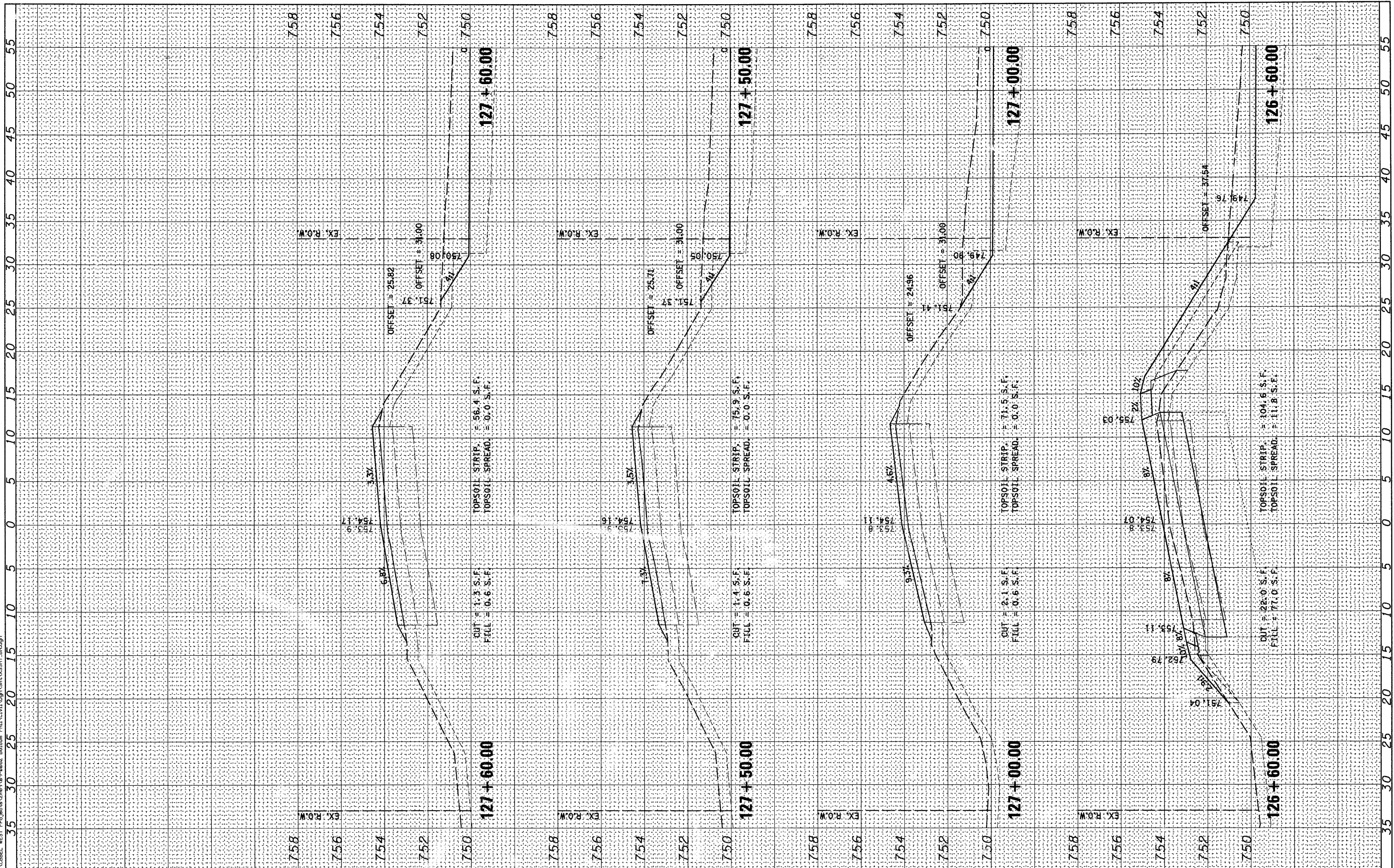
SCALE: SHEET NO. OF 73 SHEETS STA. 125+14.21 TO STA. 126+50.00

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|---|----------------|--------|--------------|-----------|
| RT.   | SECTION        | COUNTY | TOTAL SHEETS | SHEET NO. |
| 2332  | 03-14185-02-BR | KANE   | 73           | 62        |
| CONTRACT NO.63521                                   |                |        |              |           |
| FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT |                |        |              |           |

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| FINAL SURVEY  | SURVEYED      | BY | DATE |
| NOTE BOOK NO. | PLOTTED       |    |      |
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|                         |                 |           |
|-------------------------|-----------------|-----------|
| USER NAME = #USER#      | DESIGNED -      | REVISED - |
| PLLOT SCALE =           | DRAWN -         | REVISED - |
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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

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|---------------------------------------|-----------|--------------|----------------------------------|
| <b>CROSS SECTIONS<br/>BOLCUM ROAD</b> |           |              |                                  |
| SCALE:                                | SHEET NO. | OF 73 SHEETS | STA. 126+60.00 TO STA. 127+60.00 |

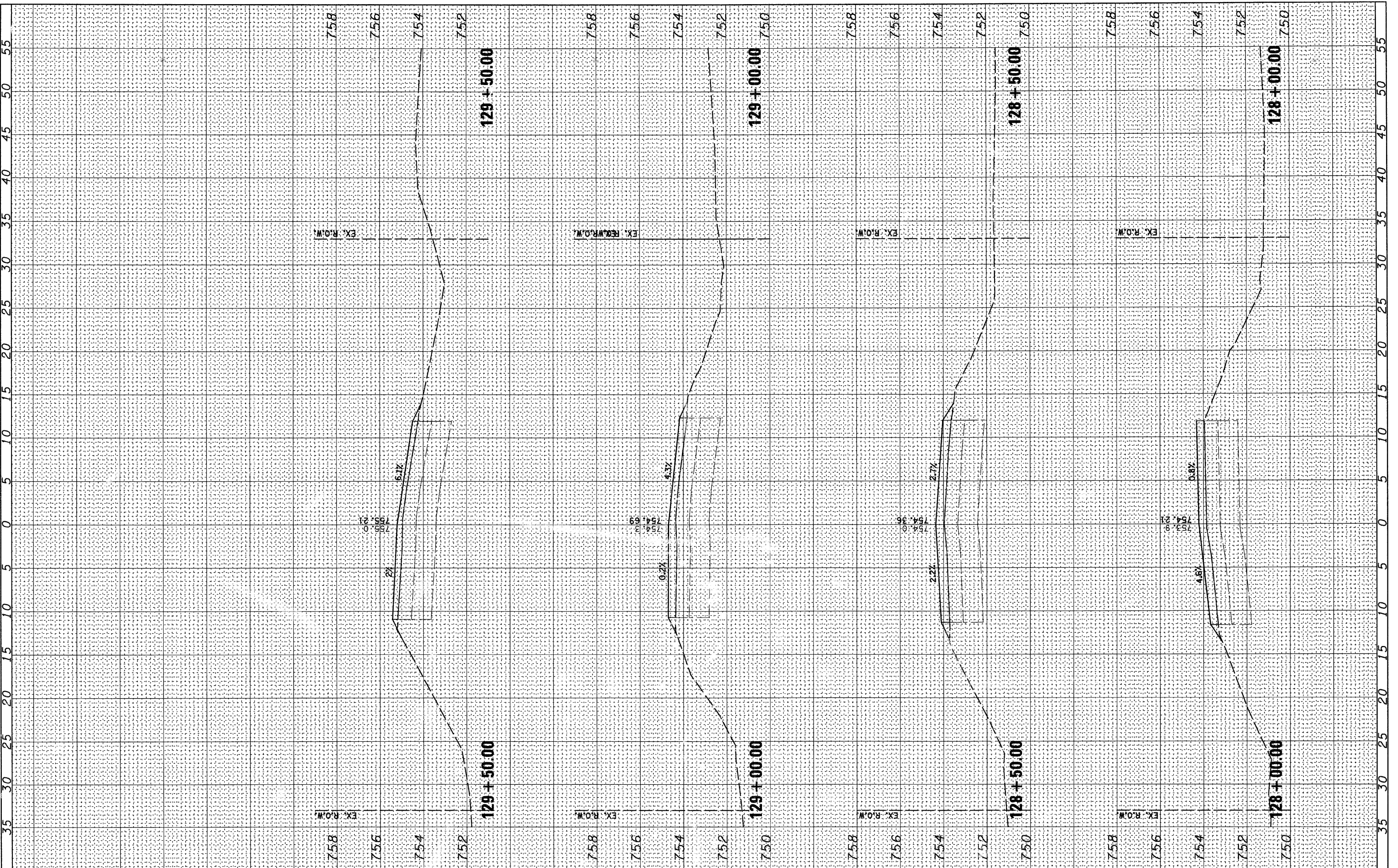
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|---|----------------|--------|--------------|-----------|
| RTE.  | SECTION        | COUNTY | TOTAL SHEETS | SHEET NO. |
| 2332  | 03-14185-02-BR | KANE   | 73           | 63        |
| CONTRACT NO. 63521                              |                |        |              |           |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |                |        |              |           |



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

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|                        |                 |           |
|------------------------|-----------------|-----------|
| USER NAME = \$USER#    | DESIGNED -      | REVISED - |
| PLOT SCALE =           | DRAWN -         | REVISED - |
| PLOT DATE = 10/21/2010 | CHECKED -       | REVISED - |
|                        | DATE - 10/22/10 | REVISED - |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

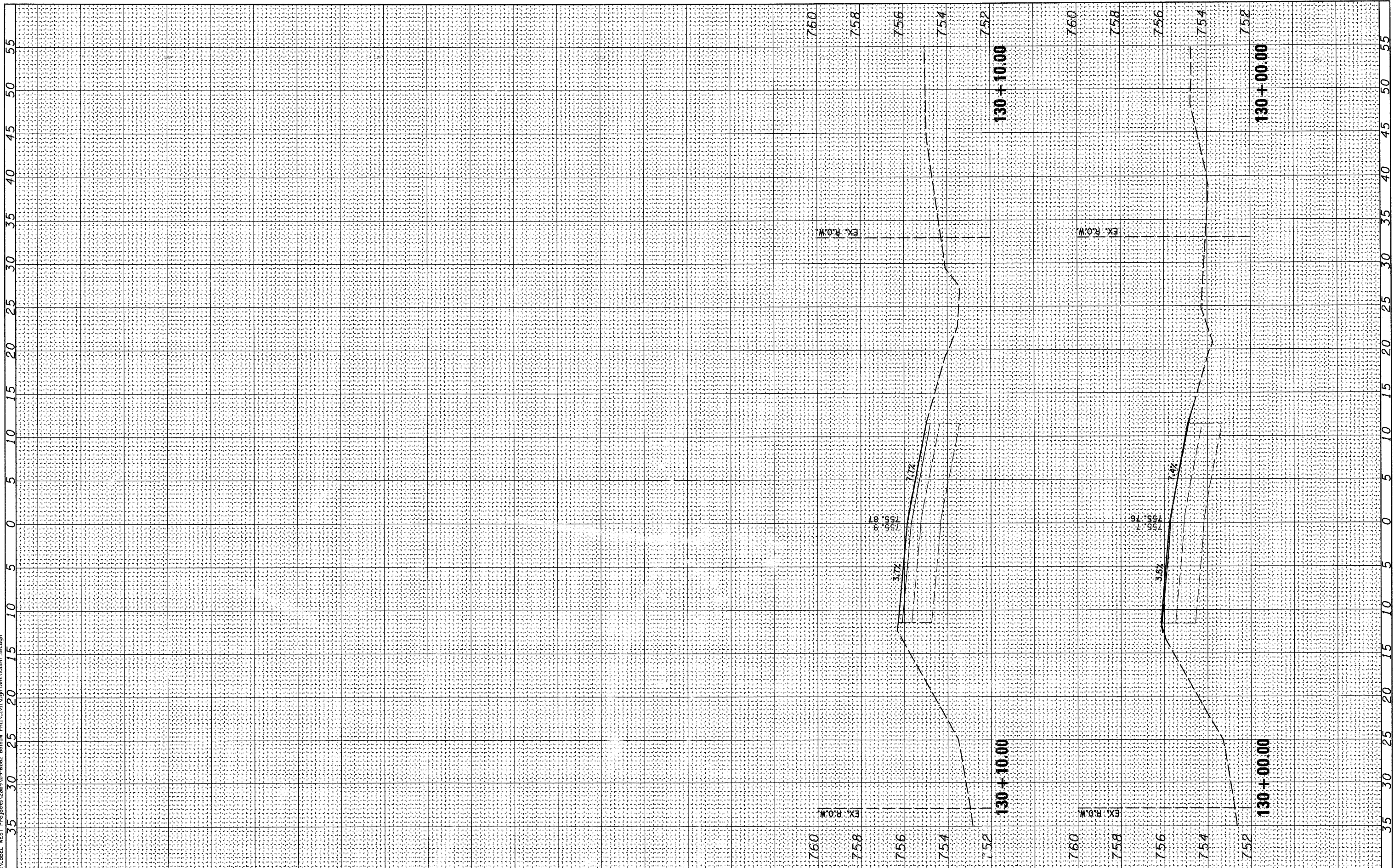
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| <b>CROSS SECTIONS<br/>BOLCUM ROAD</b> |   |
| SCALE:                                | SHEET NO. OF 73 SHEETS STA. 128+00.00 TO STA. 129+50.00 |

|   |                |        |              |           |
|---|----------------|--------|--------------|-----------|
| RT#   | SECTION        | COUNTY | TOTAL SHEETS | SHEET NO. |
| 2332  | 03-14185-02-BR | KANE   | 73           | 64        |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |                |        |              |           |
| CONTRACT NO.63521                               |                |        |              |           |

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|------------------|------------------------|----|------|
| FINAL SURVEY NO. | SURVEYED PLOTTED       | BY | DATE |
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| ORIGINAL SURVEY NO. | SURVEYED PLOTTED       | BY | DATE |
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**WILLS BURKE KELSEY ASSOCIATES LTD.**  
 116 West Main Street, Suite 201  
 St. Charles, Illinois 60174

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| USER NAME = #USER*     | DESIGNED -      | REVISED - |
| PLOT SCALE =           | DRAWN -         | REVISED - |
| PLOT DATE = 10/21/2010 | CHECKED -       | REVISED - |
|                        | DATE - 10/22/10 | REVISED - |

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS  
 BOLCUM ROAD**

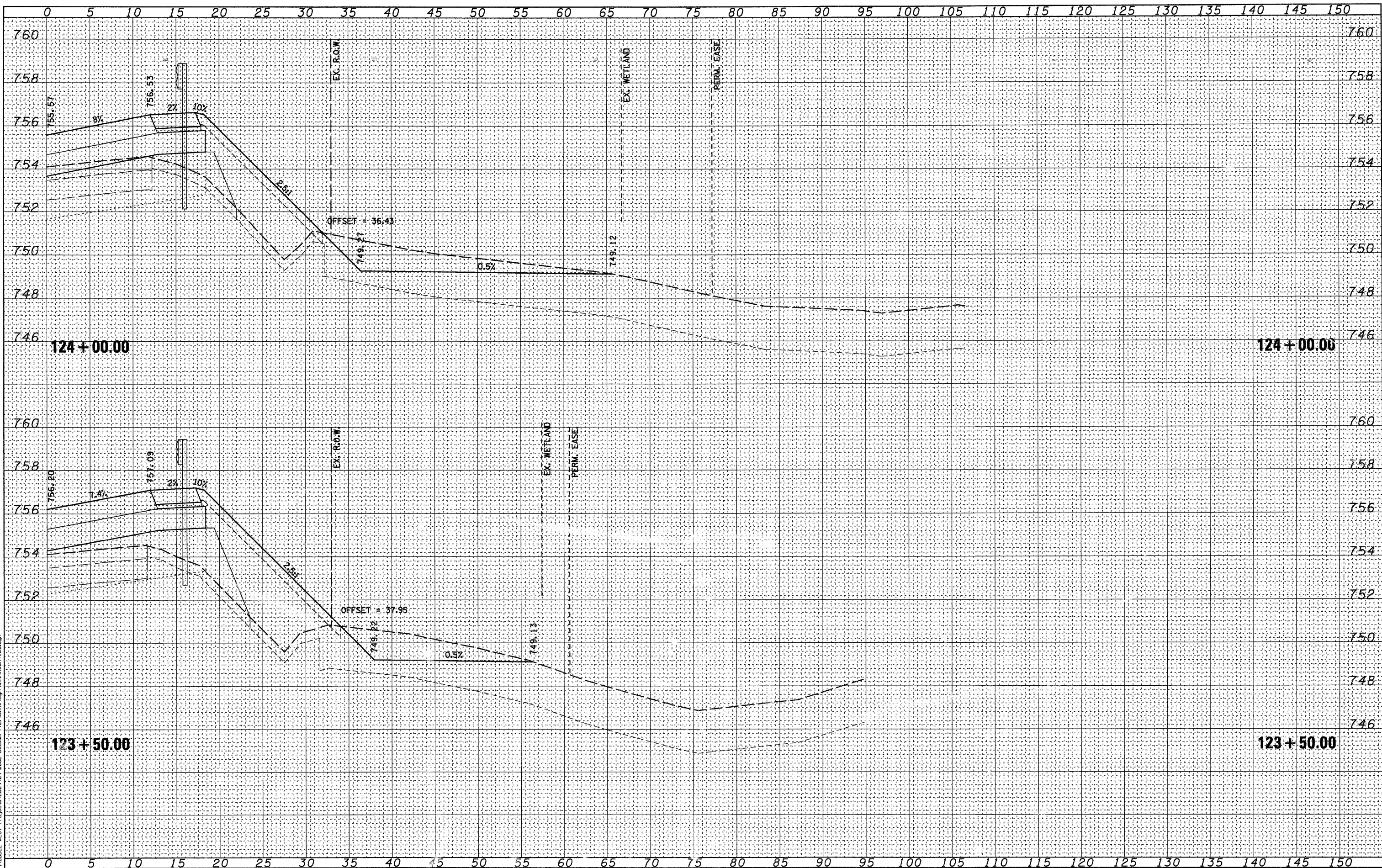
SCALE: SHEET NO. OF 73 SHEETS STA. 130+00.00 TO STA. 130+10.00

|   |                        |             |                 |              |
|---|------------------------|-------------|-----------------|--------------|
| RTE. 2332                                       | SECTION 03-14185-02-BR | COUNTY KANE | TOTAL SHEETS 73 | SHEET NO. 65 |
| CONTRACT NO. 63521                              |                        |             |                 |              |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |                        |             |                 |              |

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| WILLS BURKE KELSEY ASSOCIATES LTD.<br>116 West Main Street, Suite 201<br>St. Charles, Illinois 60174 |                 |           |
| USER NAME = #USER#   | DESIGNED -      | REVISED - |
|  | DRAWN -         | REVISED - |
|  | CHECKED -       | REVISED - |
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| PLOT DATE = 10/21/2010   | DATE - 10/22/10 | REVISED - |

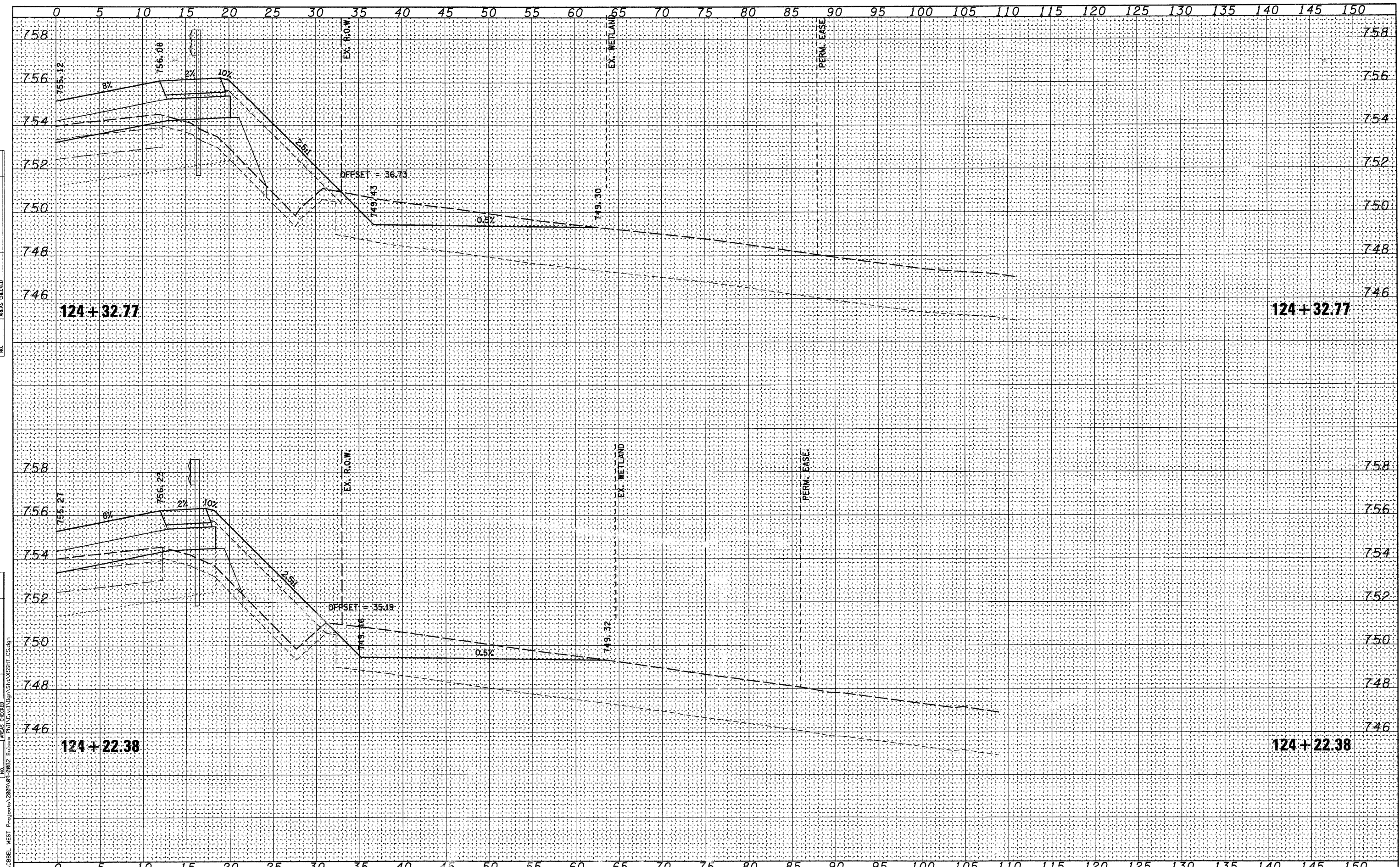
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

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| <b>CROSS SECTIONS<br/>COMPENSATORY STORAGE</b> |           |              |                                  |
| SCALE:   | SHEET NO. | OF 73 SHEETS | STA. 123+50.00 TO STA. 124+00.00 |

|                       |                |        |              |                           |
|-----------------------|----------------|--------|--------------|---------------------------|
| RTE.                  | SECTION        | COUNTY | TOTAL SHEETS | SHEET NO.                 |
| 2332                  | 03-14185-02-BR | KANE   | 73           | 66                        |
| FED. ROAD DIST. NO. 1 |                |        |              | ILLINOIS FED. AID PROJECT |
| CONTRACT NO.63521     |                |        |              |                           |

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| PLOT SCALE =           | DRAWN -         | REVISED - |
| PLOT DATE = 10/21/2010 | CHECKED -       | REVISED - |
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STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

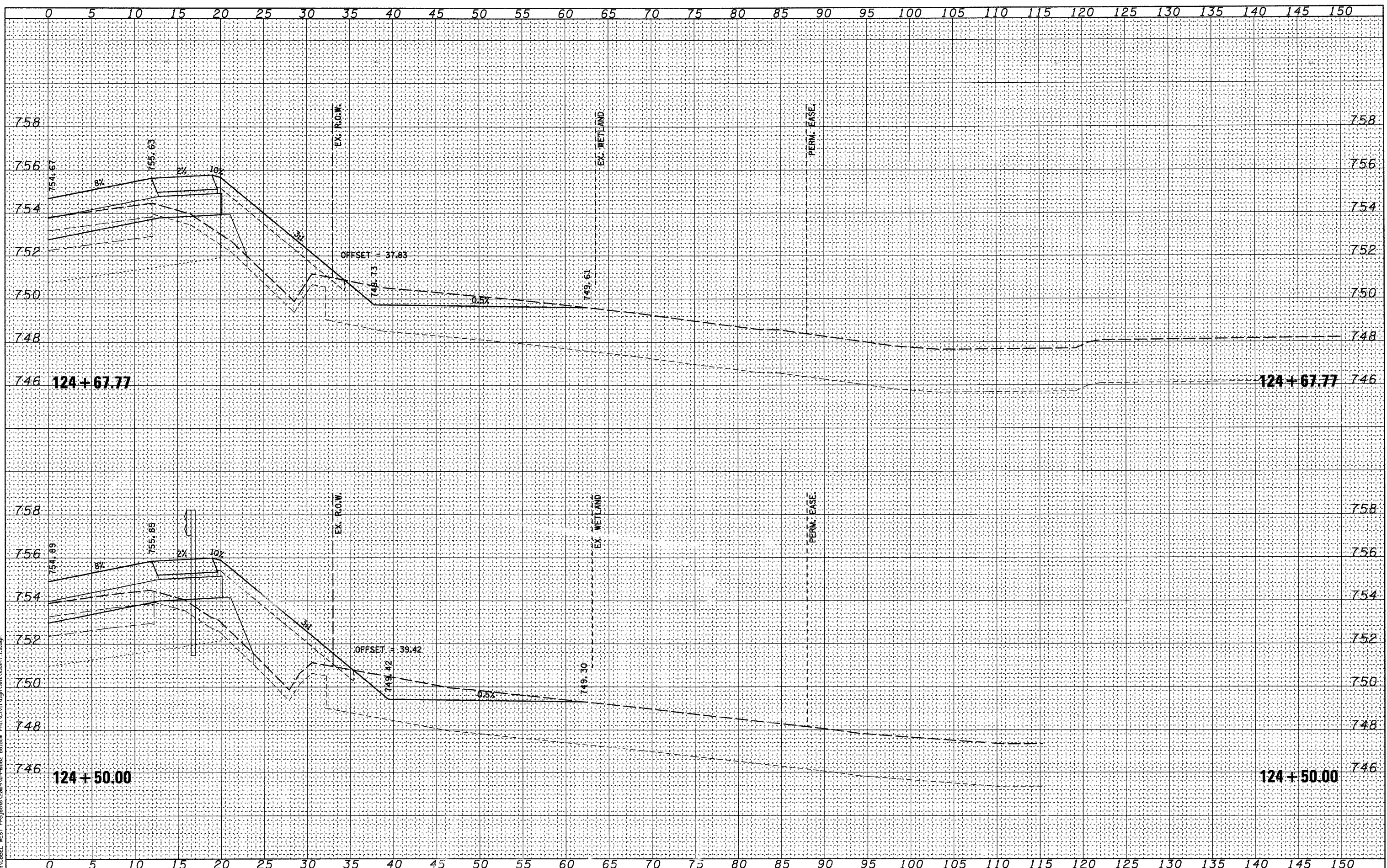
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| CROSS SECTIONS                   |                        |
| COMPENSATORY STORAGE             |                        |
| SCALE:                           | SHEET NO. OF 73 SHEETS |
| STA. 124+22.38 TO STA. 124+32.77 |                        |

|   |                |        |              |           |
|---|----------------|--------|--------------|-----------|
| RTE.  | SECTION        | COUNTY | TOTAL SHEETS | SHEET NO. |
| 2332  | 03-14185-02-BR | KANE   | 73           | 67        |
| CONTRACT NO.63521                                   |                |        |              |           |
| FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT |                |        |              |           |

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| PLLOT SCALE =           | DRAWN -         | REVISED - |
| PLLOT DATE = 10/21/2010 | CHECKED -       | REVISED - |
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

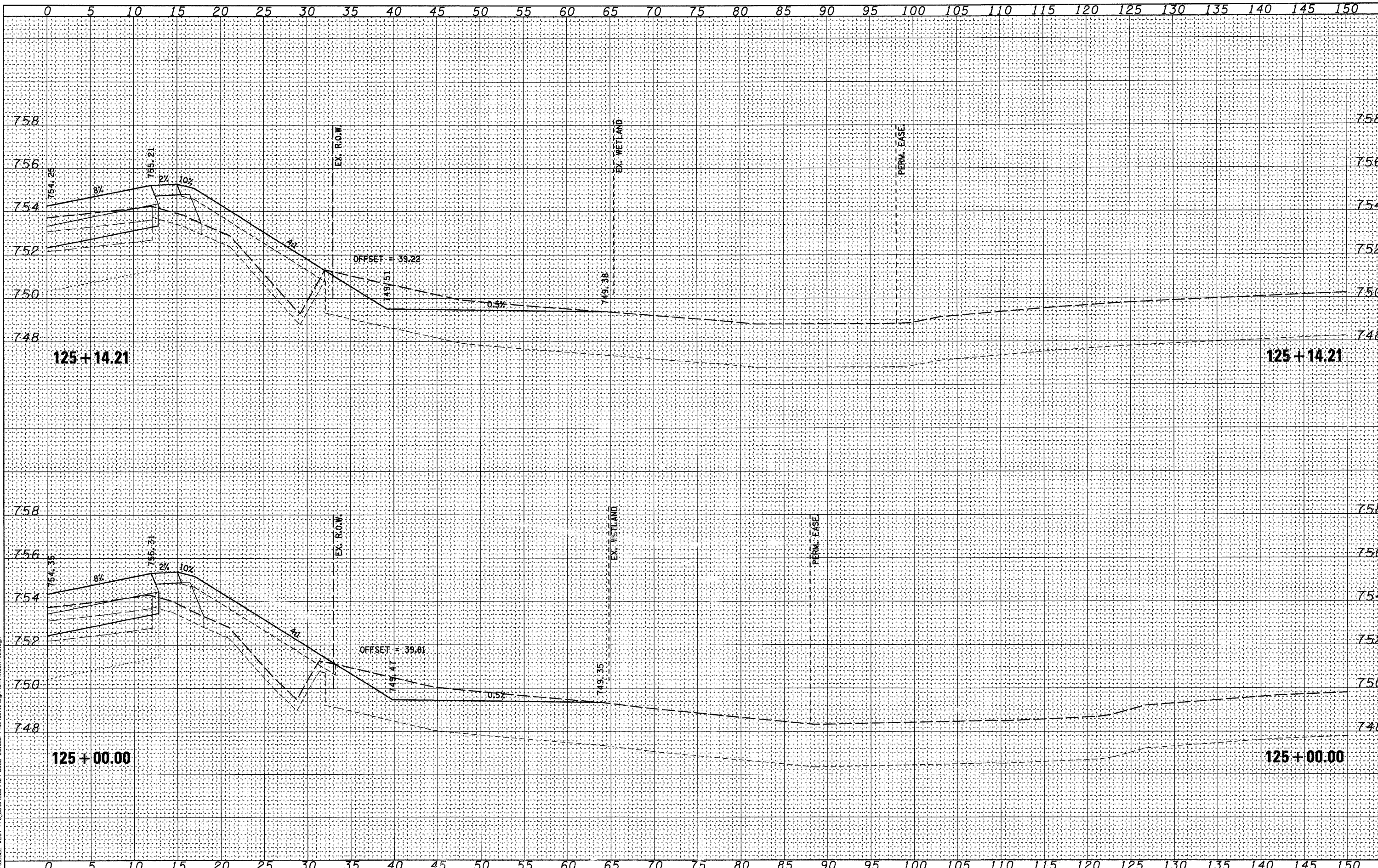
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| COMPENSATORY STORAGE |           |              |                                  |
| SCALE:               | SHEET NO. | OF 73 SHEETS | STA. 124+50.00 TO STA. 124+67.77 |

| RTE.  | SECTION        | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|----------------|--------|--------------|-----------|
| 2332  | 03-14185-02-BR | KANE   | 73           | 68        |
| CONTRACT NO. 63521                                  |                |        |              |           |
| FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT |                |        |              |           |

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| BY            | DATE          |
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| BY              | DATE          |
| ORIGINAL SURVEY | SURVEYED      |
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**WBK WILLIS BURKE KELSEY ASSOCIATES LTD.**  
 116 West Main Street, Suite 201  
 St. Charles, Illinois 60174

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| USER NAME = #USER*     | DESIGNED -      | REVISED - |
|                        | DRAWN -         | REVISED - |
| PLOT SCALE =           | CHECKED -       | REVISED - |
| PLOT DATE = 10/21/2010 | DATE - 10/22/10 | REVISED - |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

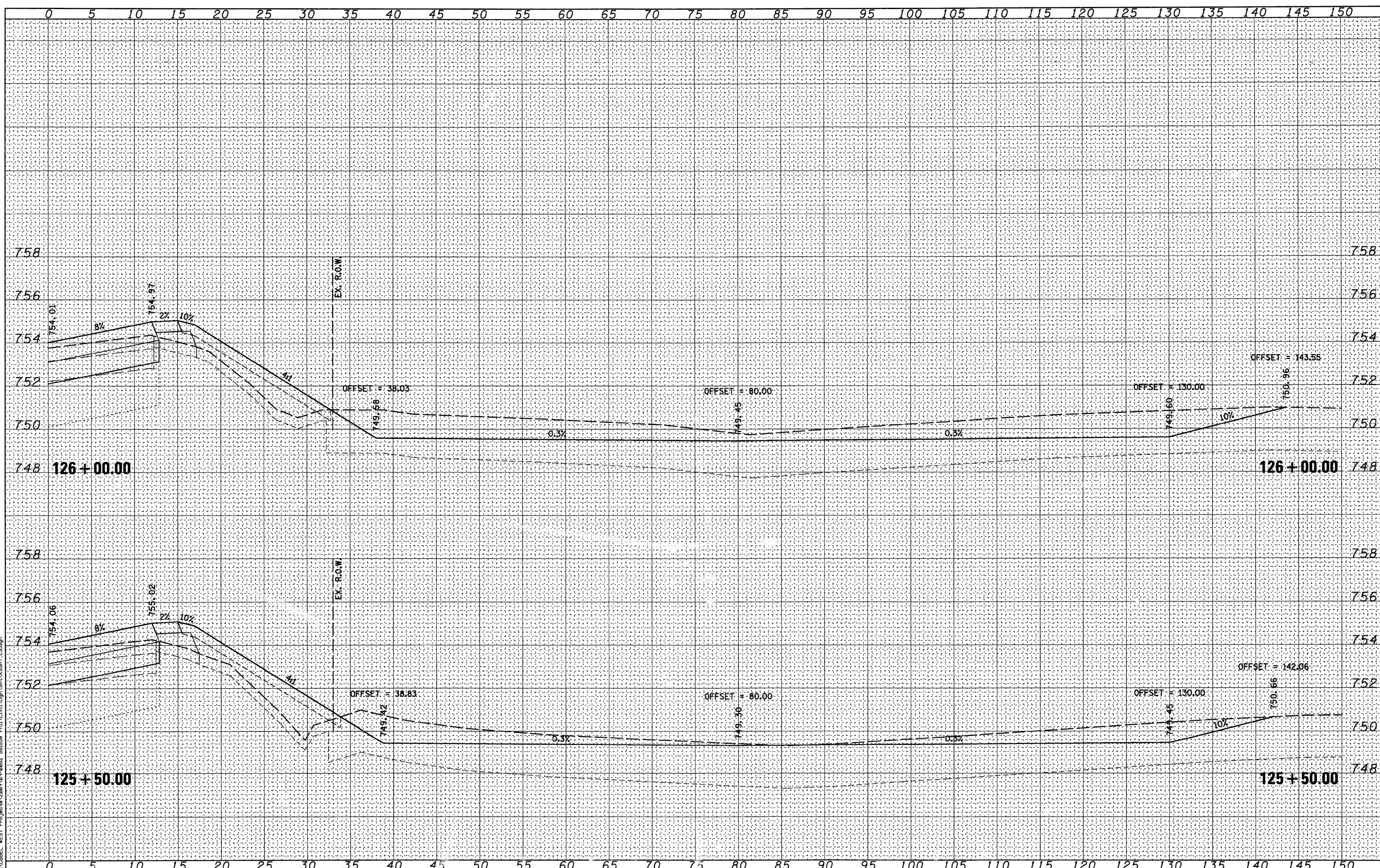
**CROSS SECTIONS  
COMPENSATORY STORAGE**

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|--------|------------------------|----------------------------------|
| SCALE: | SHEET NO. OF 73 SHEETS | STA. 125+00.00 TO STA. 125+14.21 |
|--------|------------------------|----------------------------------|

| RTE.   | SECTION        | COUNTY | TOTAL SHEETS | SHEET NO. |
|--|----------------|--------|--------------|-----------|
| 2332   | 03-14185-02-BR | KANE   | 73           | 69        |
| CONTRACT NO.63521                                |                |        |              |           |
| FED. ROAD DIST. NO.1 [ILLINOIS] FED. AID PROJECT |                |        |              |           |

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| NOTE BOOK       | PLOTTED       |
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 St. Charles, Illinois 60174

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| PLLOT SCALE =           | DRAWN -         | REVISED - |
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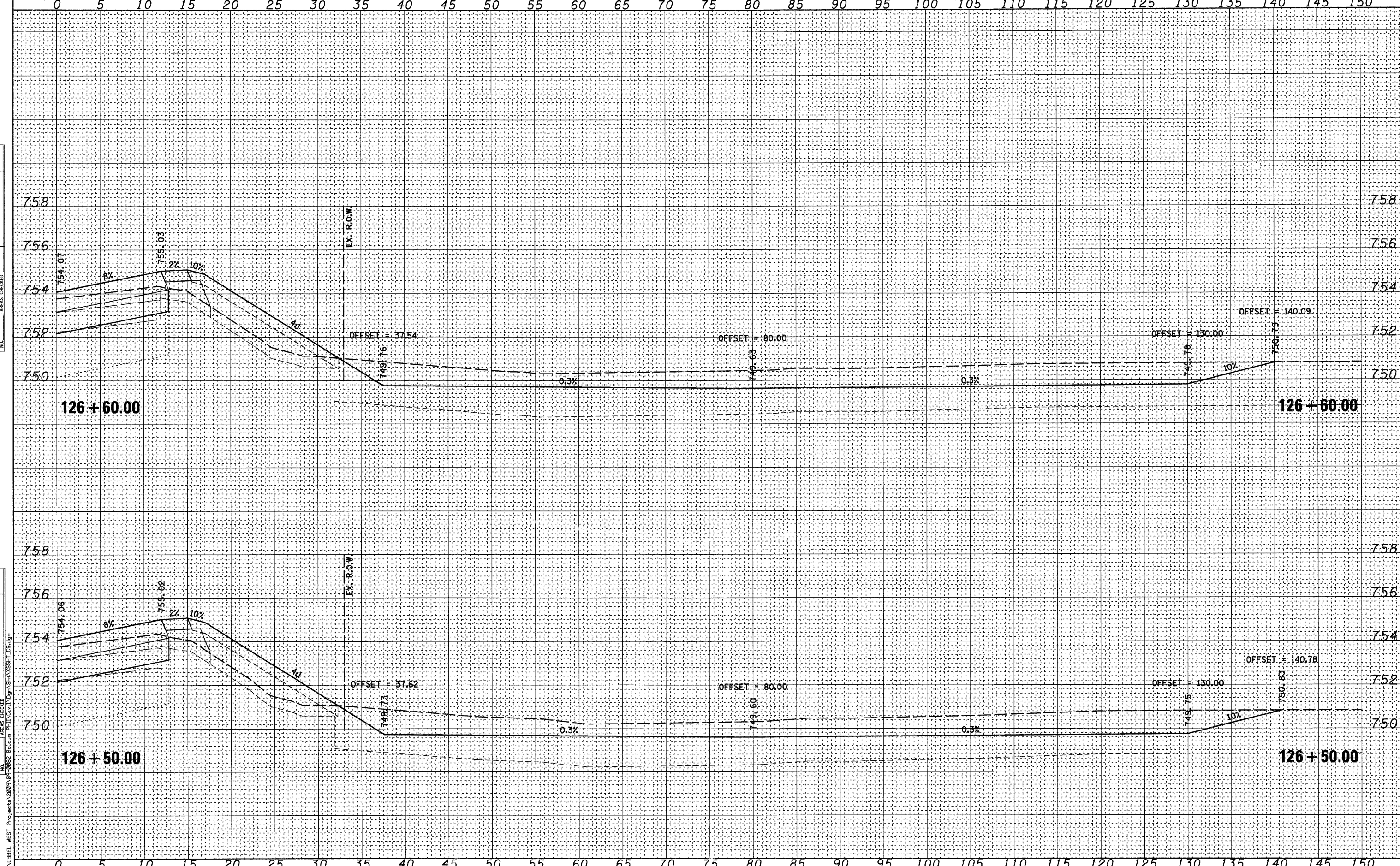
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

| CROSS SECTIONS       |           |              |                                  |
|----------------------|-----------|--------------|----------------------------------|
| COMPENSATORY STORAGE |           |              |                                  |
| SCALE:               | SHEET NO. | OF 73 SHEETS | STA. 125+50.00 TO STA. 126+00.00 |

|   |                |        |              |           |
|---|----------------|--------|--------------|-----------|
| RTE.  | SECTION        | COUNTY | TOTAL SHEETS | SHEET NO. |
| 2332  | 03-14185-02-BR | KANE   | 73           | 70        |
| CONTRACT NO.63521                                 |                |        |              |           |
| FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT |                |        |              |           |

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**WBK** WILLS BURKE KELSEY ASSOCIATES LTD.  
 116 West Main Street, Suite 201  
 St. Charles, Illinois 60174

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| USER NAME = #USER*     | DESIGNED -      | REVISED - |
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| PLOT DATE = 10/21/2010 | DATE - 10/22/10 | REVISED   |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

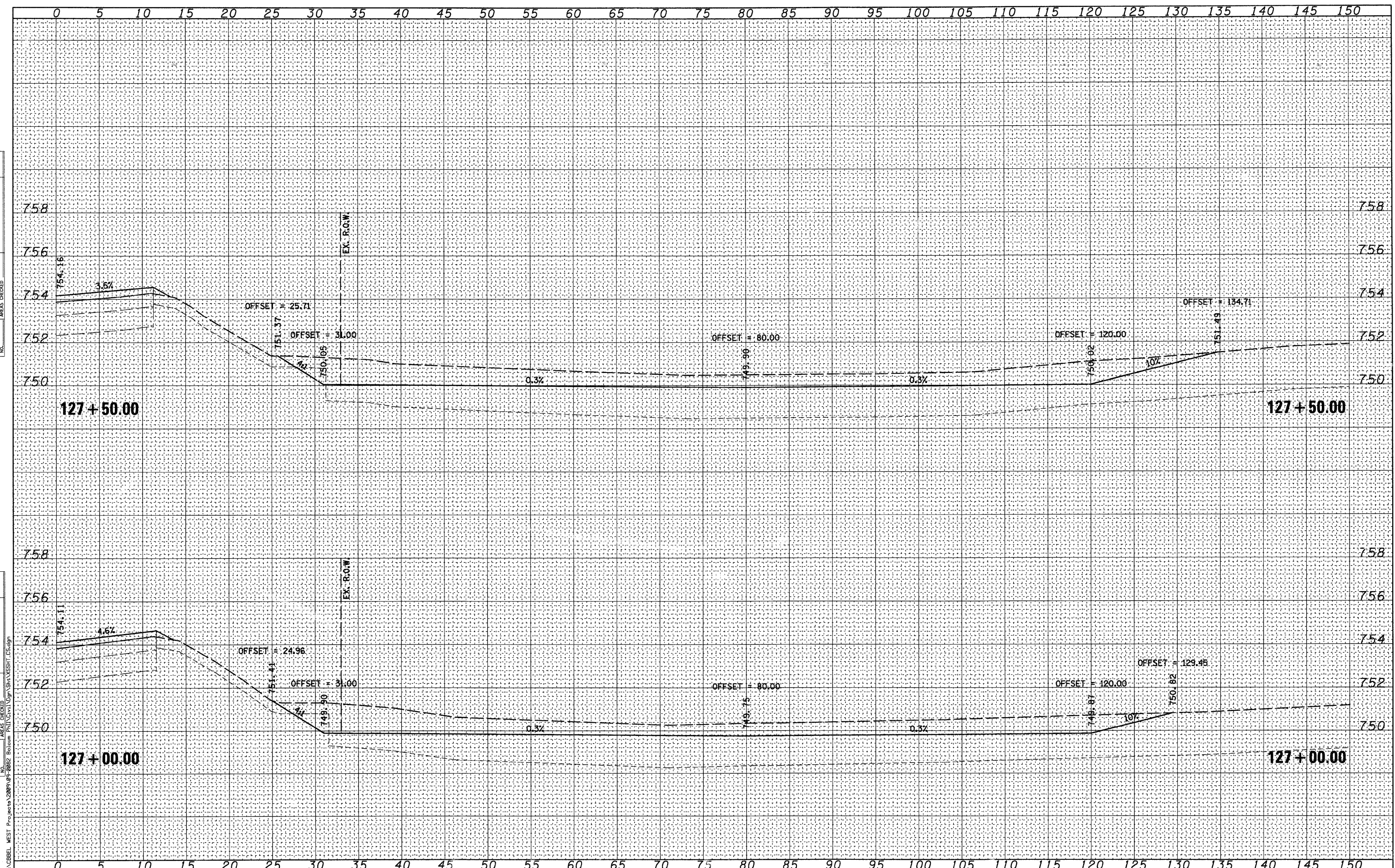
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| <b>CROSS SECTIONS<br/>COMPENSATORY STORAGE</b> |           |              |                                  |
| SCALE:   | SHEET NO. | OF 73 SHEETS | STA. 126+50.00 TO STA. 126+60.00 |

|   |                |        |              |           |
|---|----------------|--------|--------------|-----------|
| RTE.  | SECTION        | COUNTY | TOTAL SHEETS | SHEET NO. |
| 2332  | 03-14185-02-BR | KANE   | 73           | 71        |
| CONTRACT NO.63521                                 |                |        |              |           |
| FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT |                |        |              |           |



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| PLLOT SCALE =           | DRAWN -         | REVISED - |
| PLLOT DATE = 10/21/2010 | CHECKED -       | REVISED - |
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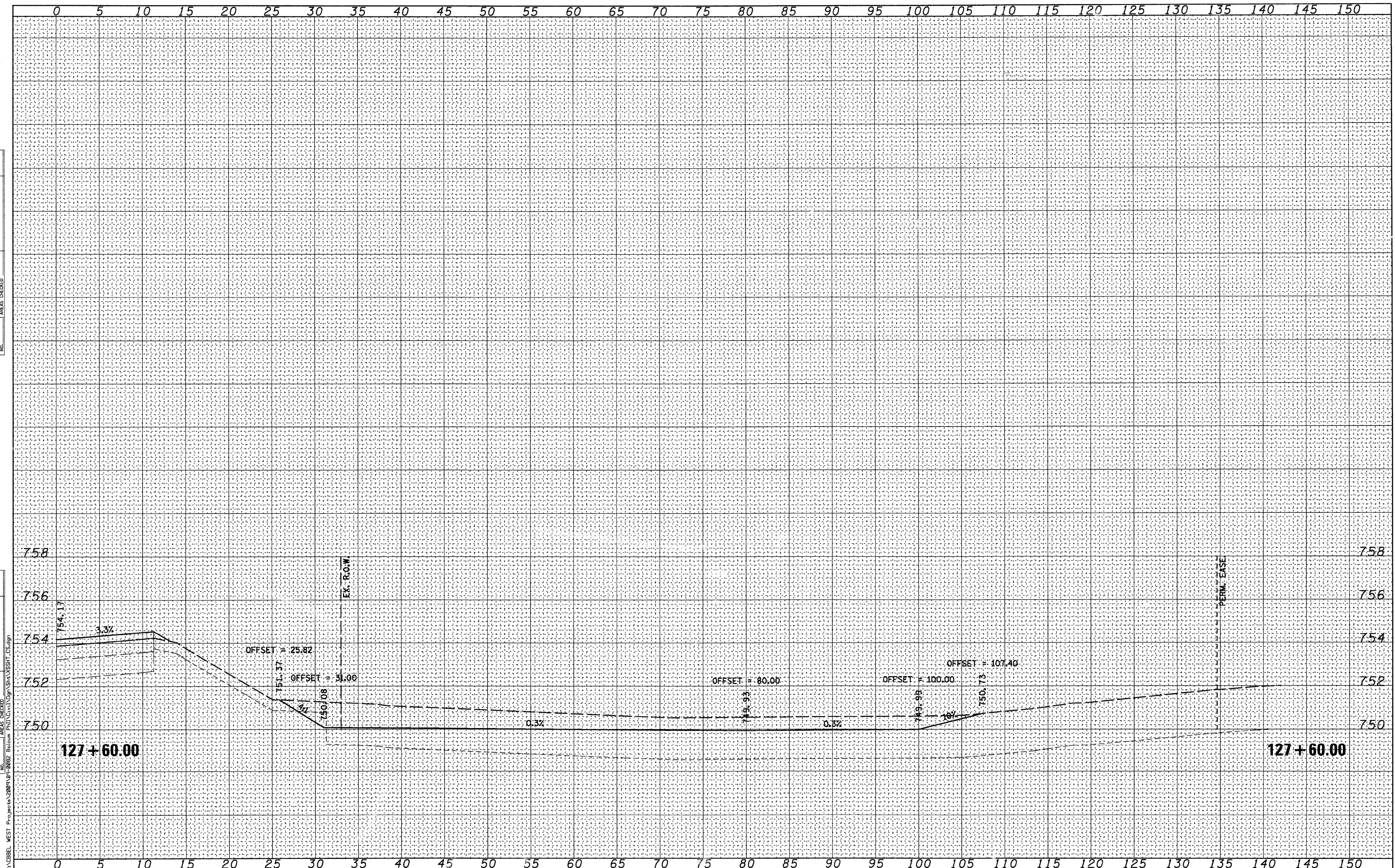
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

| CROSS SECTIONS       |           |              |                                  |
|----------------------|-----------|--------------|----------------------------------|
| COMPENSATORY STORAGE |           |              |                                  |
| SCALE:               | SHEET NO. | OF 73 SHEETS | STA. 127+00.00 TO STA. 127+50.00 |

| RTE.  | SECTION        | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|----------------|--------|--------------|-----------|
| 2332  | 03-14185-02-BR | KANE   | 73           | 72        |
| CONTRACT NO.63521                               |                |        |              |           |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |                |        |              |           |

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| PLLOT DATE = 10/21/2010 | CHECKED -       | REVISED - |
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

| CROSS SECTIONS       |           |              |                                  |
|----------------------|-----------|--------------|----------------------------------|
| COMPENSATORY STORAGE |           |              |                                  |
| SCALE:               | SHEET NO. | OF 73 SHEETS | STA. 127+60.00 TO STA. 127+60.00 |

| RT.   | SECTION        | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|----------------|--------|--------------|-----------|
| 2332  | 03-14185-02-BR | KANE   | 73           | 73        |
| CONTRACT NO.63521                               |                |        |              |           |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |                |        |              |           |