

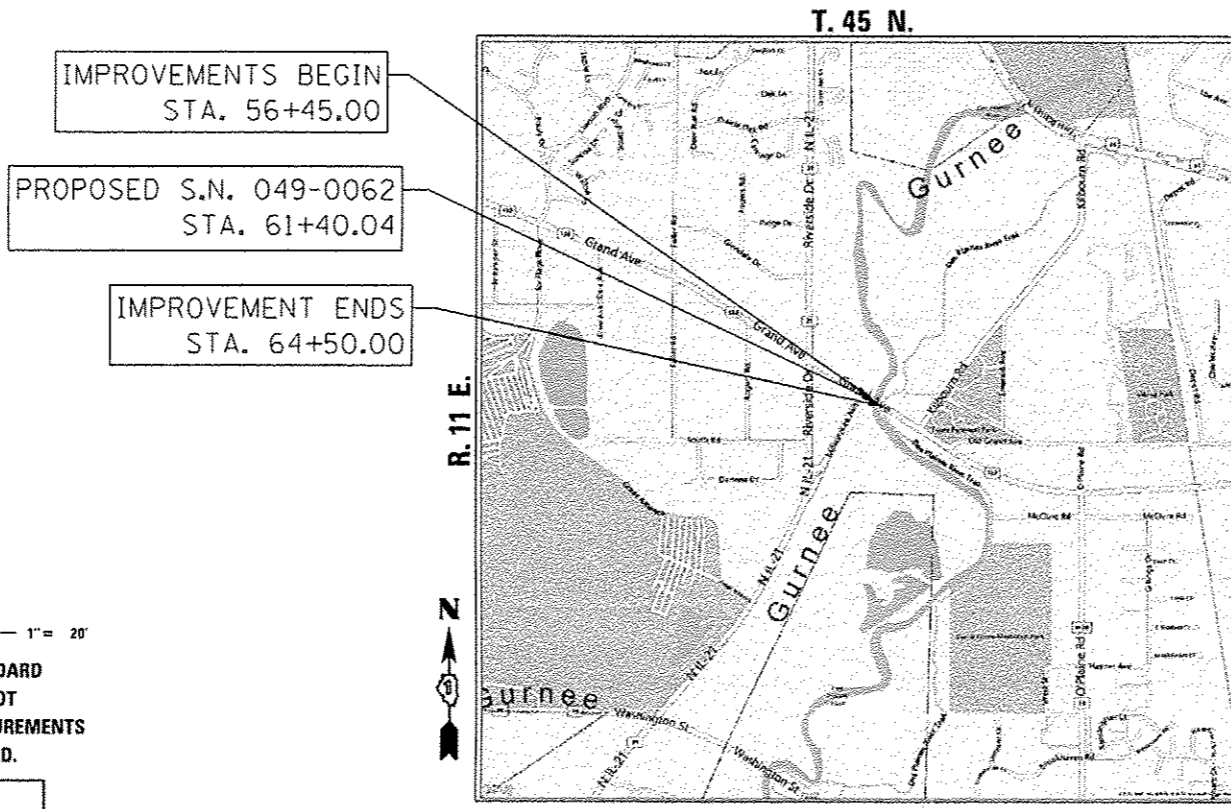
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PROPOSED
HIGHWAY PLANS
FAP ROUTE 541: IL ROUTE 132 (GRAND AVENUE)
OVER DES PLAINES RIVER
SECTION X-6-B-I-1
PROJECT: ACNHPP-0541(012)
BRIDGE SUPER-STRUCTURE REPLACEMENT
LAKE COUNTY
C-91-271-11

| | | | | |
|-------------|-----------|----------|--------------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 541 | X-6-B-I-1 | LAKE | 93 | 1 |
| | | ILLINOIS | CONTRACT NO. 60N22 | |

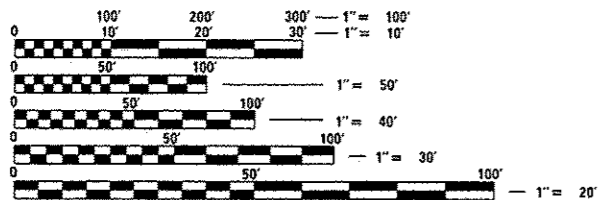
D-91-271-11



FOR INDEX OF SHEETS, SEE SHEET NO. 2
PROJECT LOCATED IN THE VILLAGE OF GURNEE



LOCATION MAP
NOT TO SCALE

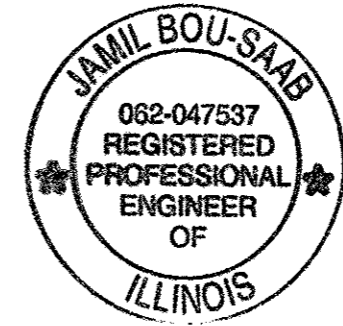


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

PROJECT MANAGER: ISSAM RAYYAN, P.E. (847) 705-4178
PROJECT ENGINEER: ROBERT T. BORO, P.E. (847) 705-4237
CONTRACT NO. 60N22

GROSS LENGTH = 805 FT. = 0.152 MILE
 NET LENGTH = 500 FT. = 0.095 MILE



Jamil Bou-Saab
 JAMIL BOU-SAAB
 LICENSED PROFESSIONAL ENGINEER
 ILLINOIS NO. 062-047537 EXPIRES 11-30-13



POSTED SPEED: 40 MPH
DESIGN SPEED: 45 MPH
FUNCTIONAL CLASSIFICATION:
OTHER PRINCIPAL ARTERIAL
 2011 ADT = 28,700; 38,000 (2030)
 P.V. = 96% S.U. = 2% M.U. = 2%

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

SUBMITTED September 3, 2013
John D. Baranzelli
 DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
October 4, 2013
John D. Baranzelli, P.E.
 acting ENGINEER OF DESIGN AND ENVIRONMENT
October 4, 2013
Omur Osman, P.E.
 DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

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LIST OF ILLINOIS DOT HIGHWAY STANDARDS

000001-06 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
 001001-02 AREAS OF REINFORCEMENT BARS
 001006 DECIMAL OF AN INCH AND OF A FOOT
 280001-07 TEMPORARY EROSION CONTROL SYSTEMS
 420001-07 PAVEMENT JOINTS
 424001-07 PERPENDICULAR CURB RAMPS AFOR SIDEWALK
 424011-01 CORNER PARALLEL CURB RAMPS FOR SIDEWALK
 515001-03 NAME PLATE FOR BRIDGES
 606001-05 CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
 606301-04 PC CONCRETE ISLANDS AND MEDIANS
 630001-10 STEEL PLATE BEAM GUARDRAIL
 630301-06 SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
 631006-08 TRAFFIC BARRIER TERMINAL, TYPE 1B
 631031-11 TRAFFIC BARRIER TERMINAL, TYPE 6
 635006-03 REFLECTOR AND TERMINAL MARKER PLACEMENT
 635011-02 REFLECTOR MARKER AND MOUNTING DETAILS
 643001-01 SAND MODULE IMPACT ATTENUATORS
 701101-03 OFF-ROAD OPERATIONS, MULTI-LANE, 15' TO 24" FROM PAVEMENT EDGE
 701301-04 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
 701602-06 URBAN LANE CLOSURE, MULTI-LANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE
 701606-08 URBAN LANE CLOSURE, MULTI-LANE 2W WITH MOUNTABLE MEDIAN
 701801-05 SIDEWALK, CORNER OR CROSSWALK CLOSURE
 701901-02 TRAFFIC CONTROL DEVICES
 704001-07 TEMPORARY CONCRETE BARRIER
 720001-01 SIGN PANEL MOUNTING DETAILS
 720006-03 SIGN PANEL ERECTION DETAILS
 720011-01 METAL POSTS FOR SIGNS, MARKERS, & DELINEATORS
 729001-01 APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS AND MARKERS)
 780001-03 TYPICAL PAVEMENT MARKINGS
 781001-03 TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS

31. ANY WASTE GENERATED AS A SPECIAL WASTE NOT CERTIFIED AS A NON-SPECIAL WASTE FROM THIS PROJECT SHALL BE MANIFESTED OFF-SITE USING GENERATOR NUMBER ASSOCIATED WITH LAKE COUNTY. THE GENERATOR NUMBER FOR LAKE COUNTY IS 0978995044.

GENERAL NOTES

- SOIL EROSION AND SEDIMENTATION CONTROL PRACTICES AND DEVICES SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF IDOT STANDARD SPECIFICATIONS AND ALL REVISIONS THERETO AND IN ACCORDANCE WITH THE DETAILS ON THE PLANS.
- THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT 847-705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
- THE CONTRACTOR SHALL CONTACT THE BUREAU OF TRAFFIC FIELD ENGINEER, DEBBIE HANLON, AT (847) 438-2300 OR CELL (847) 715-8414 A MINIMUM OF TWO WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
- THE CONTRACTOR SHALL CONTACT J.U.L.I.E. (1-800-892-0123) 48 HOURS PRIOR TO ANY WORK IN THE RIGHT OF WAY OR EASEMENTS TO LOCATE UTILITIES, AND CONTACT THE OWNER'S REPRESENTATIVE SHOULD PUBLIC UTILITIES APPEAR TO BE IN CONFLICT WITH THE PROPOSED IMPROVEMENTS.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION.
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- THE CONTRACTOR SHALL TAKE CARE TO PROTECT ALL SIGNS ALONG THE ROUTE OF CONSTRUCTION. SIGNS SHALL BE REMOVED IF THEY ARE IN CONFLICT WITH PROPOSED WORK, AND APPROVED BY ENGINEER. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY EXISTING DAMAGE TO A SIGN PRIOR TO REMOVAL. THE CONTRACTOR SHALL REPLACE ALL SIGNS AND POSTS DAMAGED DURING REMOVAL. THE COST OF ALL MATERIALS REQUIRED AND ALL LABOR NECESSARY TO COMPLY WITH THE RELOCATION OF SIGNS SHALL BE INCLUDED IN THE CONTRACT WITHOUT ANY EXTRA COMPENSATION ALLOWED TO THE CONTRACTOR ACCORDING TO ART. 107.25, UNLESS MARKED ON PLANS.**
- THE THICKNESS OF HMA SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE HMA IS PLACED.
- THE REMOVAL OF GUARDRAIL TERMINAL SECTIONS SHALL BE INCLUDED IN THE UNIT PRICE PER FOOT FOR GUARDRAIL REMOVAL.
- ALL ELEVATIONS IN THE PLANS ARE BASED UPON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAV88).
- FOR WORK OUTSIDE THE LIMITS OF BRIDGE APPROACH PAVEMENT, ALL REFERENCES IN THE HIGHWAY STANDARDS AND STANDARD SPECIFICATIONS FOR REINFORCEMENT, DOWEL BARS, AND TIE BARS IN PAVEMENT, SHOULDERS, CURB, GUTTER, COMBINATION CURB & GUTTER AND MEDIAN, AND CHAIR SUPPORTS FOR CRC PAVEMENT SHALL BE EPDXY COATED UNLESS NOTED ON THE PLANS.
- WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 1/2 INCHES WHERE THE SPEED LIMIT IS 45 MPH OR LESS. WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 V:H.
- BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT), IN ACCORDANCE WITH THE "BUTT JOINT AND HMA TAPER DETAILS" SHEET INCLUDED IN THE PLANS UNLESS OTHERWISE SPECIFIED.
- THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
- DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
- A US ARMY CORPS OF ENGINEERS (USACE) 404 PERMIT HAS BEEN SECURED BY THE DEPARTMENT. AS A CONDITION OF THIS PERMIT, THE CONTRACTOR WILL NEED TO SUBMIT AN IN-STREAM WORK PLAN TO THE DEPARTMENT FOR APPROVAL. GUIDELINES ON ACCEPTABLE IN-STREAM WORK TECHNIQUES CAN BE FOUND ON THE USACE WEBSITE. THE USACE DEFINES AND DETERMINES IN-STREAM WORK. BOUNDARIES OF THE IN-STREAM WORK AREA ARE SUBJECT TO ADJUSTMENT BY THE USACE AND THE CONTRACTOR'S MEANS AND METHODS OF CONSTRUCTING THE PROJECT. THE COST OF ALL MATERIALS AND LABOR NECESSARY TO COMPLY WITH THE ABOVE PROVISIONS TO PREPARE AND IMPLEMENT AN IN-STREAM WORK PLAN WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.**
- THE DEPARTMENT HAS NOT OBTAINED ANY PERMITS FOR OFFSITE BORROW OR WASTE/USE (BWU) AREAS. PRIOR TO WORKING IN BWU AREAS, IF THE CONTRACTOR CHOOSES TO USE ACTIVITIES REQUIRING PERMITS IT IS THE CONTRACTOR'S RESPONSIBILITY TO SECURE THE PROPER PERMITS. IN ADDITION TO THE BORROW REVIEW (BDE 2289) and USE/WASTE REVIEW (BDE 2290) SUBMITTALS, THE CONTRACTOR WILL NEED TO SUBMIT AN EROSION AND SEDIMENT CONTROL (ESC) PLAN FOR EVERY BWU SITE TO THE DEPARTMENT FOR ACCEPTANCE. GUIDELINES FOR ACCEPTABLE BWU PRACTICES CAN BE FOUND IN SECTION 11.5.a AND b of the SWPPP. THE COST OF ALL MATERIALS AND LABOR NECESSARY TO COMPLY WITH THE ABOVE PROVISIONS TO PREPARE AND IMPLEMENT ESC PLANS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.**
- THE CONTRACTOR'S ATTENTION IS CALLED TO THE FACT THAT THE PRESERVATION OF EXISTING TREES IS OF UTMOST IMPORTANCE TO THE FOREST PRESERVE DISTRICT OF LAKE COUNTY. ALL TREE PROTECTION, TREE REMOVAL, PRUNING AND ROOT PRUNING SHALL BE COMPLETED BEFORE CONSTRUCTION OPERATIONS COMMENCE IN ANY AREA. AT NO TIME SHALL THE CONTRACTOR PRUNE OR REMOVE ANY TREES UNLESS SPECIFICALLY DIRECTED BY THE ENGINEER.

- THE CONTRACTOR SHALL TAKE EXTRA CARE IN GRADING AND EXCAVATING NEAR TREES WHICH ARE NOT MARKED FOR REMOVAL SO AS NOT TO CAUSE INJURY TO THE ROOT SYSTEM OR TRUNKS. ROOTS OF A TREE THAT ARE TO REMAIN IN PLACE EXTENDING INTO THE EXCAVATION AREAS AT AN ELEVATION THAT WOULD INTERFERE WITH ANY PORTION OF THE PLANNED CONSTRUCTION SHALL BE SEVERED AT A POINT IMMEDIATELY OUTSIDE OF THE EXCAVATION AREA IN A MANNER THAT WILL CAUSE THE LEAST AMOUNT OF SYSTEMIC DAMAGE TO THE REMAINING TREE STRUCTURE. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S OWN EXPENSE.
- THE CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO INSURE THAT NO DEBRIS WILL ENDANGER OR INTERFERE WITH TRAFFIC ON THE BIKE TRAIL BENEATH THE BRIDGE ACCORDING TO ARTICLE 107.09 OF THE STANDARD SPECIFICATIONS. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE APPROPRIATE PAY ITEM INVOLVED AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- PRUNE TREE LIMBS THAT MIGHT BE DAMAGED BY EQUIPMENT OPERATIONS AT LEAST ONE WEEK PRIOR TO THE START OF CONSTRUCTION BY A CERTIFIED ARBORIST. ANY TREE LIMBS THAT ARE BROKEN BY CONSTRUCTION EQUIPMENT AFTER THE INITIAL PRUNING MUST BE PRUNED CORRECTLY WITHIN 72 HOURS.
- SUPPLEMENTAL WATERING IS SPECIFIED FOR TREES AND SHRUBS THAT WILL BE DISTURBED BY CONSTRUCTION BUT WILL REMAIN. NOTE THAT WATERING SHOULD BEGIN IMMEDIATELY AFTER ROOT PRUNING, TOP PRUNING OR OTHER CONSTRUCTION DISTURBANCE.
- SEEDING SHALL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN, WET, OR IN AN UNTILLABLE CONDITION. LOCATIONS TO BE SEEDED WILL BE DETERMINED BY THE ENGINEER.
- ONLY THOSE TREES DESIGNATED BY THE ENGINEER OR LISTED IN THE TREE REMOVAL SCHEDULE SHALL BE REMOVED. THE CONTRACTOR SHALL PROTECT ALL REMAINING TREES FROM DAMAGE DUE TO HIS OPERATIONS.
- THE FINISHED EARTHWORK SHALL HAVE A VEGETATION-SUSTAINING SOIL COVERING THE TOP SIX INCHES IN AREAS TO BE SEEDED OR SODDED. THE VEGETATION-SUSTAINING SOIL REQUIRED WILL BE PAID FOR SEPARATELY AS TOPSOIL FURNISH AND PLACE, 6".
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND VILLAGE OF GURNEE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY DURING CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.31 OF THE STANDARD SPECIFICATIONS. MEMBERS OF J.U.L.I.E. KNOWN TO BE WITHIN THE LIMITS OF THE IMPROVEMENT ARE:

AT&T LEGAL MANDATE DEPT.
 ATTN: HECTOR GARCIA
 1000 COMMERCE DRIVE, 2ND FLOOR
 OAK BROOK, IL 60523
 630-573-5465

VILLAGE OF GURNEE
 ATTN: SCOTT DRABICKI
 VILLAGE ENGINEER
 325 N. O'PLAINE ROAD
 GURNEE, IL 60031
 847-599-7550

COMMONWEALTH EDISON CO.
 ATTN: JOE STACHO
 TWO LINCOLN CENTRE
 OAKBROOK TERRACE, IL 60181
 630-424-5704

NORTH SHORE GAS COMPANY
 ATTN: GERALD CLOGOVSKY
 3001 GRAND AVE.
 WAUKEGAN, IL 60085
 847-263-4687
 CELL: 847-489-6486

COMCAST CABLE
 ATTN: ROBERT L. SCHULTER JR.
 688 INDUSTRIAL DRIVE
 ELMHURST, IL 60126
 630-600-6356

- THE BIKE TRAIL UNDER THE BRIDGE SHALL REMAIN OPEN ON WEEKENDS; ANY CLOSURE FOR THE REMOVAL AND REPLACEMENT OF THE SUPERSTRUCTURE SHOULD TAKE PLACE DURING THE WEEK.
- THE ENGINEER SHALL CONTACT JOHN NELSON, ENGINEERING MANAGER FOR THE LAKE COUNTY FOREST PRESERVE DISTRICT, AT (847) 968-3407, TWO WEEKS PRIOR TO ANY CLOSURES OF THE BIKE TRAIL.
- THE CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO ENSURE THAT NO DEBRIS WILL ENDANGER OR INTERFERE WITH TRAFFIC ON THE TRAIL BENEATH THE BRIDGE ACCORDING TO ARTICLE 107.09 OF THE STANDARD SPECIFICATIONS. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE APPROPRIATE PAY ITEM INVOLVED AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.**

COMMITMENTS

THE TRAIL UNDERPASS SHOULD REMAIN OPEN AS MUCH AS POSSIBLE AND SHIELDING SHOULD BE IN PLACE THE ENTIRE DURATION OF CONSTRUCTION, FURTHERMORE, WHILE THE LAKE COUNTY FOREST PRESERVE DISTRICT (DISTRICT) UNDERSTANDS THAT, IN THE INTEREST OF PUBLIC SAFETY, SHIELDING THE TRAIL MAY NOT PROVIDE SUFFICIENT PROTECTION DURING BEAM PLACEMENT TO KEEP THE UNDERPASS OPEN, THE DISTRICT REQUESTS THAT A TRAIL DETOUR ROUTE BE ESTABLISHED AND APPROPRIATELY SIGNED, SO THAT THE PUBLIC USE AND BENEFIT OF THE REGIONAL DES PLAINES RIVER TRAIL IS NOT INTERRUPTED. IT IS DESIRED BY THE DISTRICT, THOUGH, THAT THE DETOUR ONLY BE USED WHEN ABSOLUTELY NECESSARY, AND THAT THE MAIN TRAIL UNDERPASS BE OPEN FOR USE AS MUCH AS POSSIBLE.

31.

Rev.



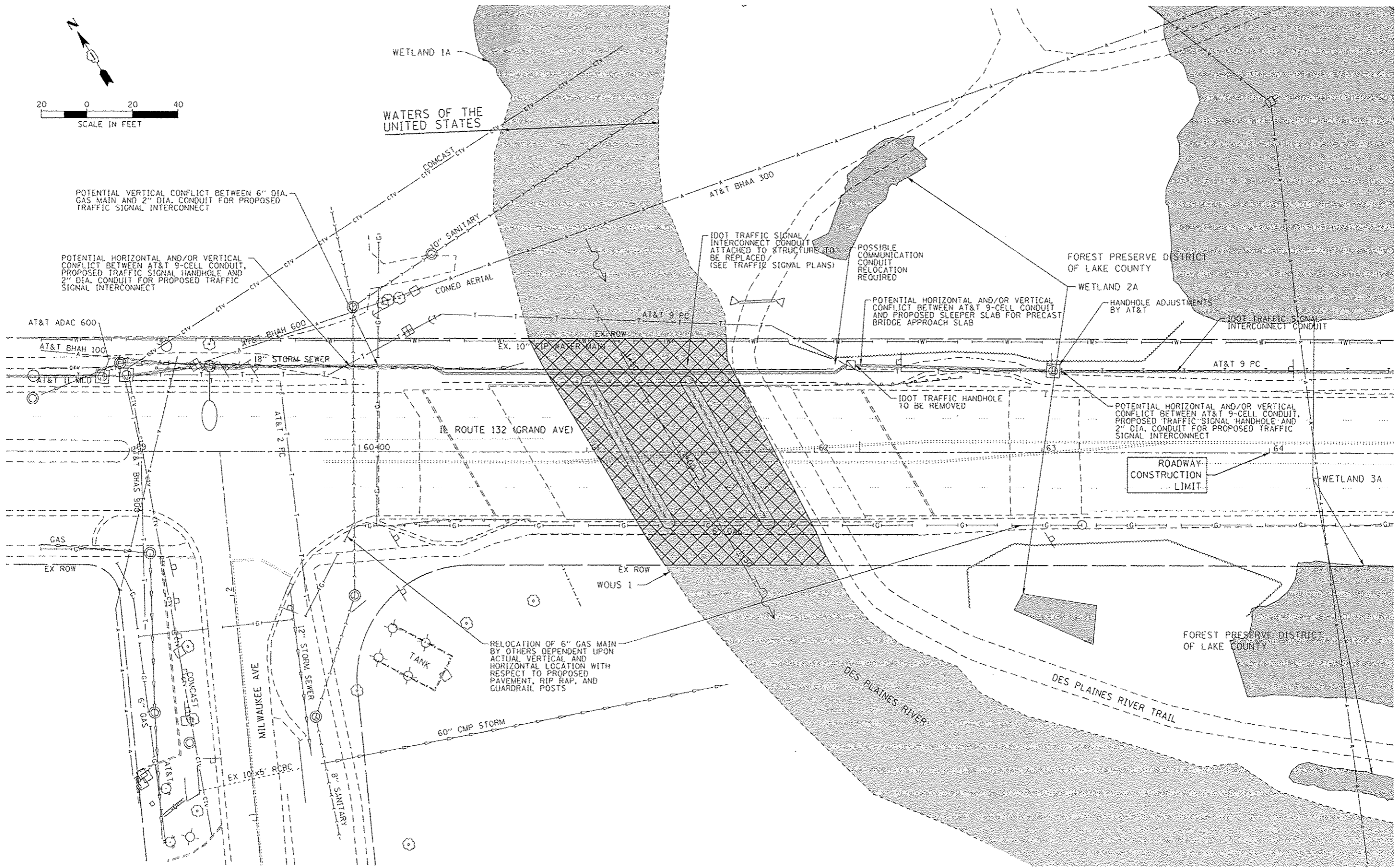
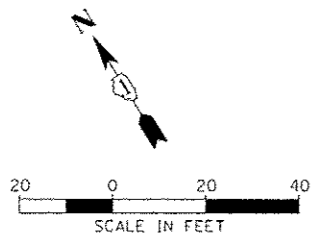
| | | | | | |
|------------|----------|----------|----------|---------|---|
| USER NAME | KyleC | DESIGNED | BCB | REVISED | - |
| PLOT SCALE | N/A | DRAWN | BCB | REVISED | - |
| PLOT DATE | 9/3/2013 | CHECKED | DPA | REVISED | - |
| | | DATE | 09/03/13 | REVISED | - |

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

IL 132 (GRAND AVE.) OVER DES PLAINES RIVER
 INDEX OF SHEETS AND GENERAL NOTES

| | | | | |
|---------------------------|-----------|--------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 541 | X-6-B-1-1 | LAKE | 93 | 2 |
| | | | CONTRACT NO. | 60N22 |
| ILLINOIS FED. AID PROJECT | | | | |

SCALE: N/A SHEET NO. 1 OF 1 SHEETS STA. TO STA.



POTENTIAL VERTICAL CONFLICT BETWEEN 6" DIA. GAS MAIN AND 2" DIA. CONDUIT FOR PROPOSED TRAFFIC SIGNAL INTERCONNECT

POTENTIAL HORIZONTAL AND/OR VERTICAL CONFLICT BETWEEN AT&T 9-CELL CONDUIT, PROPOSED TRAFFIC SIGNAL HANDHOLE AND 2" DIA. CONDUIT FOR PROPOSED TRAFFIC SIGNAL INTERCONNECT

IDOT TRAFFIC SIGNAL INTERCONNECT CONDUIT ATTACHED TO STRUCTURE TO BE REPLACED (SEE TRAFFIC SIGNAL PLANS)

POSSIBLE COMMUNICATION CONDUIT RELOCATION REQUIRED

POTENTIAL HORIZONTAL AND/OR VERTICAL CONFLICT BETWEEN AT&T 9-CELL CONDUIT AND PROPOSED SLEEPER SLAB FOR PRECAST BRIDGE APPROACH SLAB

IDOT TRAFFIC HANDHOLE TO BE REMOVED

POTENTIAL HORIZONTAL AND/OR VERTICAL CONFLICT BETWEEN AT&T 9-CELL CONDUIT, PROPOSED TRAFFIC SIGNAL HANDHOLE AND 2" DIA. CONDUIT FOR PROPOSED TRAFFIC SIGNAL INTERCONNECT

ROADWAY CONSTRUCTION LIMIT.

RELOCATION OF 6" GAS MAIN BY OTHERS DEPENDENT UPON ACTUAL VERTICAL AND HORIZONTAL LOCATION WITH RESPECT TO PROPOSED PAVEMENT, RIP RAP, AND GUARDRAIL POSTS

X:\1122 - Des Plaines River\1122-114-02\114-02\Drawings\AC03_Sheets\1122-114-02-114.dwg



| | | | | | |
|-------------|----------|----------|----------|---------|---|
| USER NAME | KyleG | DESIGNED | BCB | REVISED | - |
| PLLOT SCALE | | DRAWN | BCB | REVISED | - |
| PLLOT DATE | 9/2/2013 | CHECKED | DPA | REVISED | - |
| | | DATE | 09/03/13 | REVISED | - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 132 (GRAND AVE.) OVER DES PLAINES RIVER
STATUS OF UTILITIES

| | | | | |
|---------------------------|-----------|--------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 541 | X-6-B-1-1 | LAKE | 93 | 4 |
| CONTRACT NO. 60N22 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

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

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| SP | SI | CODE NO. | ITEM | UNIT | TOTAL QUANTITY | CONSTRUCTION CODES | | |
|----|----|----------|---|-------|----------------|--------------------|--------|----------|
| | | | | | | ROADWAY | BRIDGE | TRAINEES |
| | | | | | | 0004 | 0014 | 0042 |
| | | | | | | | | |
| | | 20100110 | TREE REMOVAL (6 TO 15 UNITS DIAMETER) | UNIT | 150 | 150 | | |
| | | 20100210 | TREE REMOVAL (OVER 15 UNITS DIAMETER) | UNIT | 36 | 36 | | |
| | | 20101000 | TEMPORARY FENCE | FOOT | 489 | 489 | | |
| | | 20101200 | TREE ROOT PRUNING | EACH | 4 | 4 | | |
| | * | 20101700 | SUPPLEMENTAL WATERING | UNIT | 279 | 279 | | |
| | | 20200100 | EARTH EXCAVATION | CU YD | 200 | 200 | | |
| | | 20201200 | REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL | CU YD | 20 | 20 | | |
| | | 20300100 | CHANNEL EXCAVATION | CU YD | 250 | 250 | | |
| | | 20400800 | FURNISHED EXCAVATION | CU YD | 95 | 95 | | |
| | * | 21101505 | TOPSOIL EXCAVATION AND PLACEMENT | CU YD | 70 | 70 | | |
| | * | 21101625 | TOPSOIL FURNISH AND PLACE, 6" | SQ YD | 339 | 339 | | |
| | * | 25000210 | SEEDING, CLASS 2A | ACRE | 0.10 | 0.10 | | |
| | * | 25000314 | SEEDING, CLASS 4B | ACRE | 0.10 | 0.10 | | |
| | * | 25000324 | SEEDING, CLASS 5B | ACRE | 0.10 | 0.10 | | |

14 • SPECIALTY ITEM
 X SPECIAL PROVISION ITEM



| | | |
|----------------------|-----------------|-----------|
| USER NAME : KyoC | DESIGNED - HTL | REVISED - |
| PLOT SCALE : | DRAWN - HTL | REVISED - |
| PLOT DATE : 9/3/2013 | CHECKED - OPA | REVISED - |
| | DATE - 09/03/13 | REVISED - |

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

IL 132 (GRAND AVE.) OVER DES PLAINES RIVER
 SUMMARY OF QUANTITIES

SCALE: N/A SHEET NO. 1 OF 9 SHEETS STA. TO STA.

| | | | | |
|--------------------|-----------|--------|---------------------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 541 | X-6-B-1-1 | LAKE | 93 | 5 |
| CONTRACT NO. 60N22 | | | ILLINOIS FED. AID PROJECT | |

Rev.

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| | | | | | | CONSTRUCTION CODES | | |
|----|----|----------|--|--------|----------------|----------------------|--------|----------|
| | | | | | | 80% FED. / 20% STATE | | |
| SP | SI | CODE NO. | ITEM | UNIT | TOTAL QUANTITY | ROADWAY | BRIDGE | TRAINEES |
| | | | | | | 0004 | 0014 | 0042 |
| | | | | | | | | |
| | * | 25000400 | NITROGEN FERTILIZER NUTRIENT | POUND | 14 | 14 | | |
| | * | 25000600 | POTASSIUM FERTILIZER NUTRIENT | POUND | 14 | 14 | | |
| | □ | 25000750 | MOWING | ACRE | 0.25 | 0.25 | | |
| | * | 25100135 | MULCH, METHOD 4 | ACRE | 0.10 | 0.10 | | |
| | * | 25100630 | EROSION CONTROL BLANKET | SQ YD | 339 | 339 | | |
| | | 28000250 | TEMPORARY EROSION CONTROL SEEDING | POUND | 168 | 168 | | |
| | | 28000400 | PERIMETER EROSION BARRIER | FOOT | 1736 | 1736 | | |
| | | 28000510 | INLET FILTERS | EACH | 2 | 2 | | |
| X | | 28100207 | STONE RIPRAP, CLASS A4 | TON | 1380 | | 1380 | |
| | | 28200200 | FILTER FABRIC | SQ YD | 1055 | | 1055 | |
| | | 31101900 | SUBBASE GRANULAR MATERIAL, TYPE C | TON | 162 | 162 | | |
| | | 35102000 | AGGREGATE BASE COURSE, TYPE B 8" | SQ YD | 125 | 125 | | |
| X | | 35400400 | PORTLAND CEMENT CONCRETE BASE COURSE WIDENING 9" | SQ YD | 306 | 306 | | |
| | | 40600100 | BITUMINOUS MATERIALS (PRIME COAT) | GALLON | 897 | 897 | | |

14

- SPECIALTY ITEM
- X SPECIAL PROVISION ITEM
- 100% STATE (N.P.)



| | | |
|----------------------|-----------------|-----------|
| USER NAME : KylaC | DESIGNED - HTL | REVISED - |
| PLOT SCALE : | DRAWN - HTL | REVISED - |
| PLOT DATE : 9/3/2013 | CHECKED - DPA | REVISED - |
| | DATE - 09/03/13 | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL 132 (GRAND AVE.) OVER DES PLAINES RIVER
SUMMARY OF QUANTITIES**

SCALE: N/A SHEET NO. 2 OF 9 SHEETS STA. TO STA.

| | | | | |
|---------------------------|-----------|--------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 541 | X-6-B-1-1 | LAKE | 93 | 6 |
| CONTRACT NO. 60N22 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

Rev

URBAN

CONSTRUCTION CODES
80% FED. / 20% STATE

| SP | SI | CODE NO. | ITEM | UNIT | TOTAL QUANTITY | CONSTRUCTION CODES | | |
|----|----|----------|--|-------|----------------|--------------------|----------------|------------------|
| | | | | | | ROADWAY 0004 | BRIDGE 0014 | TRAINEES 0042 |
| X | | 40600635 | LEVELING BINDER (MACHINE METHOD), N70 | TON | 111 | 111 | | |
| | | 40600982 | HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT | SQ YD | 107 | 107 | | |
| X | | 40603335 | HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 | TON | 14 | 14 | | |
| X | | 40603340 | HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 | TON | 221 | 221 | | |
| | | 42001420 | BRIDGE APPROACH PAVEMENT CONNECTOR (PCC) | SQ YD | 157 | 157 | | |
| | | 42400200 | PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH | SQ FT | 1950 | 1950 | | |
| | | 44000100 | PAVEMENT REMOVAL | SQ YD | 347 | 347 | | |
| | | 44000161 | HOT-MIX ASPHALT SURFACE REMOVAL, 3" | SQ YD | 1556 | 1556 | | |
| | | 44000500 | COMBINATION CURB AND GUTTER REMOVAL | FOOT | 514 | 514 | | |
| | | 44000600 | SIDEWALK REMOVAL | SQ FT | 2075 | 2075 | | |
| | | 44003100 | MEDIAN REMOVAL | SQ FT | 2531 | 2531 | | |
| | | 44004250 | PAVED SHOULDER REMOVAL | SQ YD | 68 | 68 | | |
| | | 44300200 | STRIP REFLECTIVE CRACK CONTROL TREATMENT | FOOT | 418 | 418 | | |
| | | 48101500 | AGGREGATE SHOULDERS, TYPE B 6" | SQ YD | 102 | 102 | | |

14

* SPECIALTY ITEM
X SPECIAL PROVISION ITEM

I:\1132 over DesPlaines River\1132-154-0101\Drawings\03\000 Sheets\01\1132-154-0101-000.dgn



| | | |
|----------------------|-----------------|-----------|
| USER NAME : KyleC | DESIGNED - HTC | REVISED - |
| PLOT SCALE : | DRAWN - HTC | REVISED - |
| PLOT DATE : 9/3/2013 | CHECKED - DPA | REVISED - |
| | DATE - 09/03/13 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 132 (GRAND AVE.) OVER DES PLAINES RIVER
SUMMARY OF QUANTITIES

SCALE: N/A SHEET NO. 3 OF 9 SHEETS STA. TO STA.

| | | | | |
|---------------------------|-----------|--------|--------------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 541 | X-6-B-1-1 | LAKE | 93 | 7 |
| ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 60N22 | |

CONSTRUCTION CODES

URBAN

80% FED. / 10% STATE

| SP | SI | CODE NO. | ITEM | UNIT | TOTAL QUANTITY | ROADWAY | BRIDGE | TRAINEES |
|----|----|----------|---|-------|----------------|---------|--------|----------|
| | | | | | | 0004 | 0014 | 0042 |
| | | 50101500 | REMOVAL OF EXISTING SUPERSTRUCTURES | EACH | 1 | | 1 | |
| | | 50102400 | CONCRETE REMOVAL | CU YD | 19.2 | | 19.2 | |
| | | 50200100 | STRUCTURE EXCAVATION | CU YD | 11 | | 11 | |
| | | 50300225 | CONCRETE STRUCTURES | CU YD | 107 | | 107 | |
| | | 50300255 | CONCRETE SUPERSTRUCTURE | CU YD | 117.8 | | 117.8 | |
| | | 50300260 | BRIDGE DECK GROOVING | SO YD | 1191 | | 1191 | |
| | | 50300300 | PROTECTIVE COAT | SO YD | 2309 | 462 | 1847 | |
| | | 50400405 | PRECAST PRESTRESSED CONCRETE DECK BEAMS (21" DEPTH) | SO FT | 9427 | | 9427 | |
| | | 50500405 | FURNISHING AND ERECTING STRUCTURAL STEEL | POUND | 20420 | | 20420 | |
| | | 50800205 | REINFORCEMENT BARS, EPOXY COATED | POUND | 48,130 | | 48,130 | |
| | | 50800515 | BAR SPLICERS | EACH | 279 | | 279 | |
| | | 50901720 | BICYCLE RAILING | FOOT | 457 | 76 | 381 | |
| | | 50901750 | PARAPET RAILING | FOOT | 381 | | 381 | |
| | | 51500100 | NAME PLATES | EACH | 1 | | 1 | |

14

• SPECIALTY ITEM
X SPECIAL PROVISION ITEM

ILL 132 over DesPlaines River-12-154-081A-DRAINAGE-603 Sheets-DIL132-1st-500.dgn



USER NAME = KyleC
 PLOT SCALE =
 PLOT DATE = 9/3/2013

DESIGNED - HTC
 DRAWN - HTC
 CHECKED - DPA
 DATE - 09/03/13

REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

IL 132 (GRAND AVE.) OVER DES PLAINES RIVER
 SUMMARY OF QUANTITIES

SCALE: N/A SHEET NO. 4 OF 9 SHEETS STA. TO STA.

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-----------|--------|--------------------|-----------|
| 541 | X-6-B-1-1 | LAKE | 93 | 8 |
| ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 60N22 | |

Rev.

URBAN

CONSTRUCTION CODES
80% FED. / 20% STATE

| SP | SI | CODE NO. | ITEM | UNIT | TOTAL QUANTITY | CONSTRUCTION CODES | | |
|----|----|------------|---|-------|----------------|--------------------|----------------|-------------------|
| | | | | | | ROADWAY 0004 | BRIDGE 0014 | TRAININGS 0042 |
| | | 52000110 | PREFORMED JOINT STRIP SEAL | FOOT | 358 | | 358 | |
| | | 52100505 | ANCHOR BOLTS, 5/8" | EACH | 36 | | 36 | |
| | | 542A0223 | PIPE CULVERTS, CLASS A, TYPE 1 18" | FOOT | 36 | 36 | | |
| | | 59000200 | EPOXY CRACK INJECTION | FOOT | 27 | | 27 | |
| | | 60605000 | COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24 | FOOT | 311 | 311 | | |
| | | 60618730 | CONCRETE MEDIAN, TYPE M-2.06 | SQ FT | 32 | 32 | | |
| | | * 63000001 | STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS | FOOT | 75 | 75 | | |
| | | * 63100085 | TRAFFIC BARRIER TERMINAL, TYPE 6 | EACH | 1 | 1 | | |
| | | * 63100167 | TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT | EACH | 1 | 1 | | |
| | | 63200310 | GUARDRAIL REMOVAL | FOOT | 115 | 115 | | |
| X | | 64300750 | IMPACT ATTENUATORS (SEVERE USE, NARROW), TEST LEVEL 2 | EACH | 1 | 1 | | |
| X | * | 66900200 | NON-SPECIAL WASTE DISPOSAL | CU YD | 1300 | 1300 | | |
| | * | 66900450 | SPECIAL WASTE PLANS AND REPORTS | L SUM | 1 | 1 | | |
| | * | 66900530 | SOIL DISPOSAL ANALYSIS | EACH | 3 | 3 | | |

14

* SPECIALTY ITEM
X SPECIAL PROVISION ITEM

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| | | |
|----------------------|-----------------|-----------|
| USER NAME : Kyl+C | DESIGNED - HTC | REVISED - |
| PLOT SCALE : | DRAWN - HTC | REVISED - |
| PLOT DATE : 9/3/2013 | CHECKED - DPA | REVISED - |
| | DATE - 09/03/13 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 132 (GRAND AVE.) OVER DES PLAINES RIVER
SUMMARY OF QUANTITIES

SCALE: N/A SHEET NO. 5 OF 9 SHEETS STA. TO STA.

| | | | | |
|---------------------------|-----------|--------|--------------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 541 | X-6-B-1-1 | LAKE | 93 | 9 |
| ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 60N22 | |

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| SP | SI | CODE NO. | ITEM | UNIT | TOTAL QUANTITY | CONSTRUCTION CODES | | |
|----|----|------------|--|--------|----------------|----------------------|----------------|------------------|
| | | | | | | 80% FED. / 20% STATE | | |
| | | | | | | ROADWAY 0004 | BRIDGE 0014 | TRAINEES 0042 |
| | | 67000400 | ENGINEER'S FIELD OFFICE, TYPE A | CAL MO | 14 | 14 | | |
| | | 67100100 | MOBILIZATION | L SUM | 1 | 1 | | |
| | | 70106800 | CHANGEABLE MESSAGE SIGN | CAL MO | 24 | 24 | | |
| | | 70200100 | NIGHTTIME WORK ZONE LIGHTING | L SUM | 1 | 1 | | |
| | | 70300100 | SHORT TERM PAVEMENT MARKING | FOOT | 204 | 204 | | |
| | | 70300210 | TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS | SQ FT | 41.2 | 41.2 | | |
| | | 70300220 | TEMPORARY PAVEMENT MARKING - LINE 4" | FOOT | 9330 | 9330 | | |
| | | 70301000 | WORK ZONE PAVEMENT MARKING REMOVAL | SQ FT | 3684 | 3684 | | |
| | | 70400100 | TEMPORARY CONCRETE BARRIER | FOOT | 650.0 | 650 | | |
| | | 70400200 | RELOCATE TEMPORARY CONCRETE BARRIER | FOOT | 587.5 | 587.5 | | |
| | | 70600240 | IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 2 | EACH | 2 | 2 | | |
| | | 70600340 | IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 2 | EACH | 2 | 2 | | |
| | | * 72400500 | RELOCATE SIGN PANEL ASSEMBLY - TYPE A | EACH | 3 | 3 | | |
| | | ↓ 72400710 | RELOCATE SIGN PANEL - TYPE 1 | SQ FT | 27 | 27 | | |

14

* SPECIALTY ITEM
 X SPECIAL PROVISION ITEM



| | | |
|----------------------|-----------------|-----------|
| USER NAME * KyleC | DESIGNED - HTL | REVISED - |
| PLOT SCALE * | DRAWN - HTL | REVISED - |
| PLOT DATE * 9/3/2013 | CHECKED - DPA | REVISED - |
| | DATE - 09/03/13 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 132 (GRAND AVE.) OVER DES PLAINES RIVER
SUMMARY OF QUANTITIES

SCALE: N/A SHEET NO. 6 OF 9 SHEETS STA. TO STA.

| | | | | |
|--------------------|----------------------|----------------|---------------------------|-----------------|
| F.A.P. RTE. 541 | SECTION X-6-B-1-1 | COUNTY LAKE | TOTAL SHEETS 93 | SHEET NO. 10 |
| CONTRACT NO. 60N22 | | | ILLINOIS FED. AID PROJECT | |

I:\IL 132 - Grand Plaines River\132-154-001\DRAWINGS\CADD_Sheets\01132-154-500.dwg

| SP | SI | CODE NO. | ITEM | UNIT | TOTAL QUANTITY | CONSTRUCTION CODES | | |
|----|----|----------|--|-------|----------------|----------------------|--------|----------|
| | | | | | | 80% FED. / 20% STATE | | |
| | | | | | | ROADWAY | BRIDGE | TRAINEES |
| | | | | | | 0004 | 0014 | 0042 |
| | * | 78008300 | POLYUREA PAVEMENT MARKING TYPE II - LETTERS AND SYMBOLS | SQ FT | 35 | 35 | | |
| | * | 78008310 | POLYUREA PAVEMENT MARKING TYPE II - LINE 4" | FOOT | 5908 | 5908 | | |
| | * | 78008330 | POLYUREA PAVEMENT MARKING TYPE II - LINE 6" | FOOT | 635 | 635 | | |
| | * | 78008350 | POLYUREA PAVEMENT MARKING TYPE II - LINE 12" | FOOT | 71 | 71 | | |
| | * | 78008370 | POLYUREA PAVEMENT MARKING TYPE II - LINE 24" | FOOT | 20 | 20 | | |
| | * | 78100100 | RAISED REFLECTIVE PAVEMENT MARKER | EACH | 26 | 26 | | |
| | * | 78100105 | RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE) | EACH | 22 | 22 | | |
| | * | 78200410 | GUARDRAIL MARKERS, TYPE A | EACH | 3 | 3 | | |
| | * | 78200530 | BARRIER WALL MARKERS, TYPE C | EACH | 10 | 10 | | |
| | * | 78201000 | TERMINAL MARKER - DIRECT APPLIED | EACH | 1 | 1 | | |
| | | 78300100 | PAVEMENT MARKING REMOVAL | SQ FT | 2536 | 2536 | | |
| | | 78300101 | PAVEMENT MARKING REMOVAL (4" DOTTED WHITE) | SQ FT | 8 | 8 | | |
| | * | 81028200 | UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA. | FOOT | 335 | 335 | | |
| | * | 81300830 | JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 18" X 18" X 8" | EACH | 2 | 2 | | |

* SPECIALTY ITEM
 X SPECIAL PROVISION ITEM



| | | |
|----------------------|-----------------|-----------|
| USER NAME * KyjwC | DESIGNED - HTL | REVISED - |
| PLOT SCALE * | DRAWN - HTL | REVISED - |
| PLOT DATE * 9/3/2013 | CHECKED - DPA | REVISED - |
| | DATE - 09/03/13 | REVISED - |

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

IL 132 (GRAND AVE.) OVER DES PLAINES RIVER
 SUMMARY OF QUANTITIES

SCALE: N/A SHEET NO. 7 OF 9 SHEETS STA. TO STA.

| | | | | |
|---------------------------|-----------|--------|--------------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 541 | X-6-B-1-1 | LAKE | 93 | 11 |
| ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 60N22 | |

Rev.

URBAN

CONSTRUCTION CODES
80% FED./20% STATE

| SP | SI | CODE NO. | ITEM | UNIT | TOTAL QUANTITY | CONSTRUCTION CODES | | |
|----|----|----------|---|-------|----------------|--------------------|----------------|------------------|
| | | | | | | ROADWAY 0004 | BRIDGE 0014 | TRAINEES 0042 |
| | * | 81400100 | HANDHOLE | EACH | 3 | 3 | | |
| | * | 85000200 | MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION | EACH | 2 | 2 | | |
| | * | 87300925 | ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C | FOOT | 3630 | 3630 | | |
| | * | 87301305 | ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR | FOOT | 24 | 24 | | |
| | * | 88600100 | DETECTOR LOOP, TYPE I | FOOT | 66 | 66 | | |
| | * | 89502380 | REMOVE EXISTING HANDHOLE | EACH | 3 | 3 | | |
| | * | A2006516 | TREE, QUERCUS BICOLOR (SWAMP WHITE OAK), 2" CALIPER, BALLED AND BURLAPPED | EACH | 10 | 10 | | |
| X | * | K1004595 | PRUNING FOR SAFETY AND EQUIPMENT CLEARANCE | L SUM | 1 | 1 | | |
| | * | X0325938 | TEMPORARY WIRELESS INTERCONNECT, COMPLETE | L SUM | 1 | 1 | | |
| X | | X2010507 | CLEARING, SPECIAL | ACRE | 0.10 | 0.10 | | |
| X | | X5030305 | CONCRETE WEARING SURFACE, 5" | SQ YD | 1572 | | 1572 | |
| X | | X5040100 | PRECAST BRIDGE APPROACH SLAB | SQ FT | 4185 | | 4185 | |
| X | * | X6310187 | TRAFFIC BARRIER TERMINAL, TYPE 6 (MODIFIED) | EACH | 1 | 1 | | |
| X | | X7010216 | TRAFFIC CONTROL AND PROTECTION, (SPECIAL) | L SUM | 1 | 1 | | |
| | * | X8710040 | FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM24F SM12F | FOOT | 3630 | 3630 | | |

* SPECIALTY ITEM
X SPECIAL PROVISION ITEM

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| | | |
|-----------------------|-----------------|-----------|
| USER NAME - KJLcC | DESIGNED - HTL | REVISED - |
| PLLOT SCALE - | DRAWN - HTL | REVISED - |
| PLLOT DATE - 4/3/2013 | CHECKED - DPA | REVISED - |
| | DATE - 09/03/13 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 132 (GRAND AVE.) OVER DES PLAINES RIVER
SUMMARY OF QUANTITIES

SCALE: N/A SHEET NO. 8 OF 9 SHEETS STA. TO STA.

| | | | | |
|---------------------------|-----------|--------|--------------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 541 | X-6-B-1-1 | LAKE | 93 | 12 |
| ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 60N22 | |

Rev.

CONSTRUCTION CODES
80% FED. / 20% STATE

URBAN

| SP | SI | CODE NO. | ITEM | UNIT | TOTAL QUANTITY | ROADWAY | BRIDGE | TRAINEES |
|--------------|----|---------------------|--|------------------|----------------|--------------|--------|----------|
| | | | | | | 0004 | 0014 | 0042 |
| X | | Z0012754 | STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES) | SO FT | 75 | | 75 | |
| X | | Z0013798 | CONSTRUCTION LAYOUT | L SUM | 1 | 1 | | |
| X | | Z0019600 | DUST CONTROL WATERING | UNIT | 10 | 10 | | |
| X | | Z0026407 | TEMPORARY SHEET PILING | SO FT | 71 | | 71 | |
| X | | Z0030850 | TEMPORARY INFORMATION SIGNING | SO FT | 255 | 255 | | |
| X | | Z0058668 | GRADING AND SHAPING FORESLOPES | SO YD | 775 | 775 | | |
| X | | Z0073500 | TEMPORARY SUPPORT SYSTEM | L SUM | 1 | 1 | | |
| X | | Z0073510 | TEMPORARY TRAFFIC SIGNAL TIMING | EACH | 2 | 2 | | |
| X | Ø | Z0076600 | TRAINEES | HOURL | 500 | | | 500 |
| | Ø | Z0076604 | TRAINEES-TRAINING PROGRAM GRADUATE | HOURL | 500 | | | 500 |
| X | | B1100605 | CONDUIT ATTACHED TO STRUCTURE, 2" DIA., PVC COATED GALVANIZED STEEL | FOOT | 150 | | 150 | |

• SPECIALTY ITEM
X SPECIAL PROVISION ITEM
Ø 0042

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USER NAME - KyleG
PLOT SCALE -
PLOT DATE - 9/3/2013

DESIGNED - HTL
DRAWN - HTL
CHECKED - DPA
DATE - 09/03/13

REVISED -
REVISED -
REVISED -
REVISED -

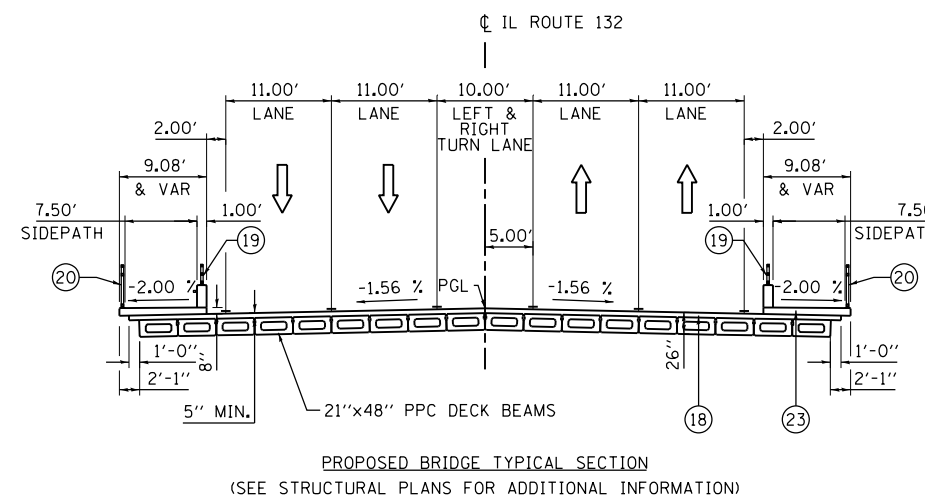
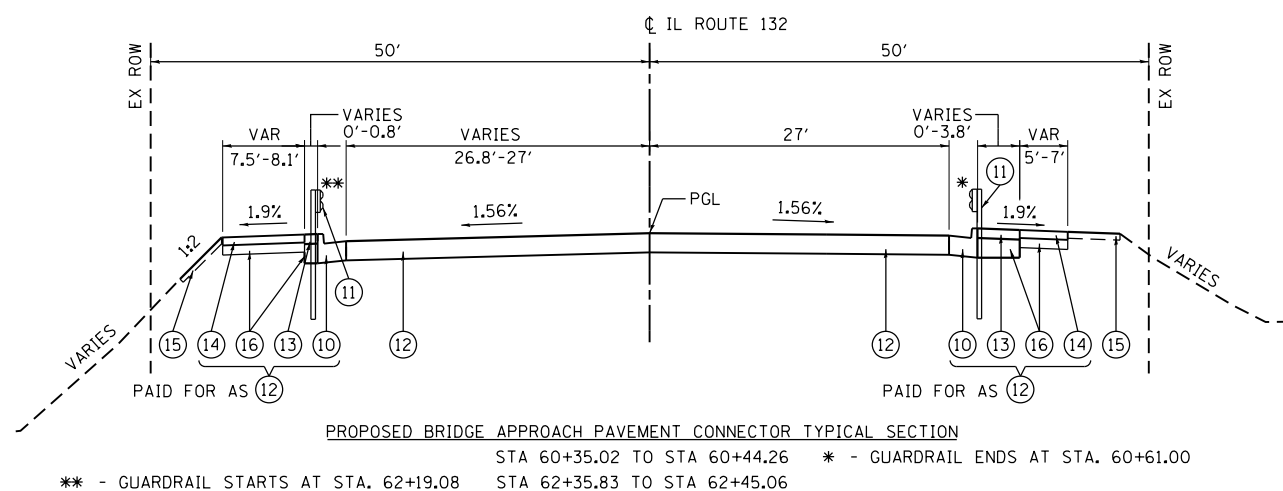
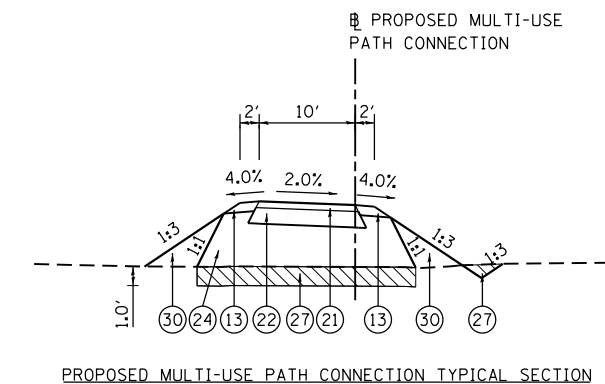
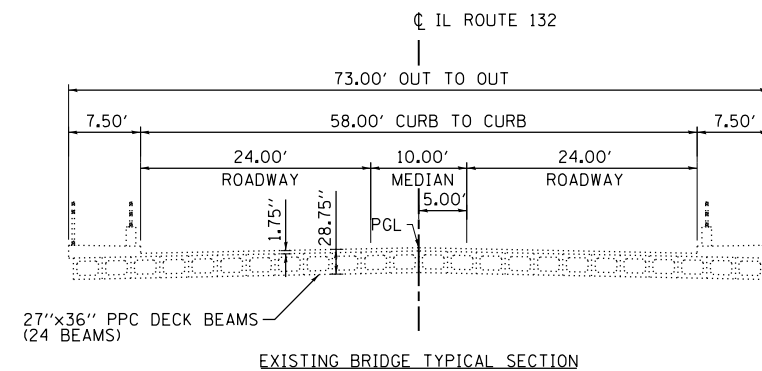
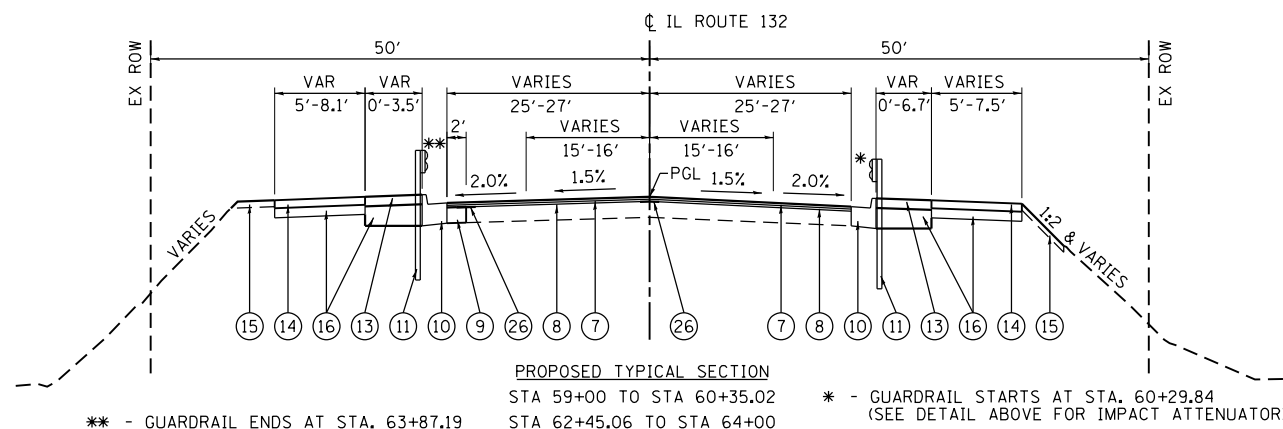
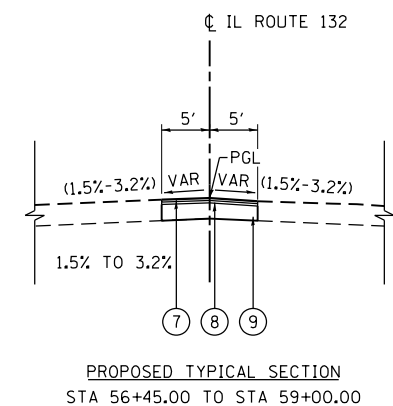
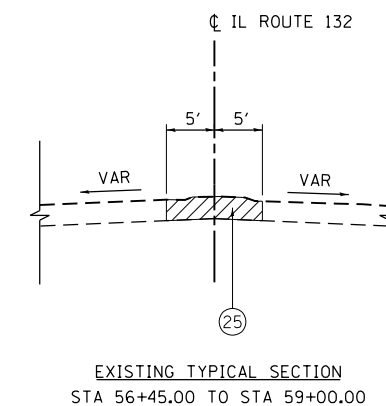
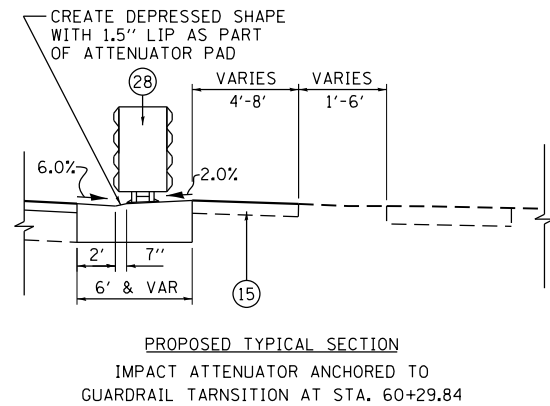
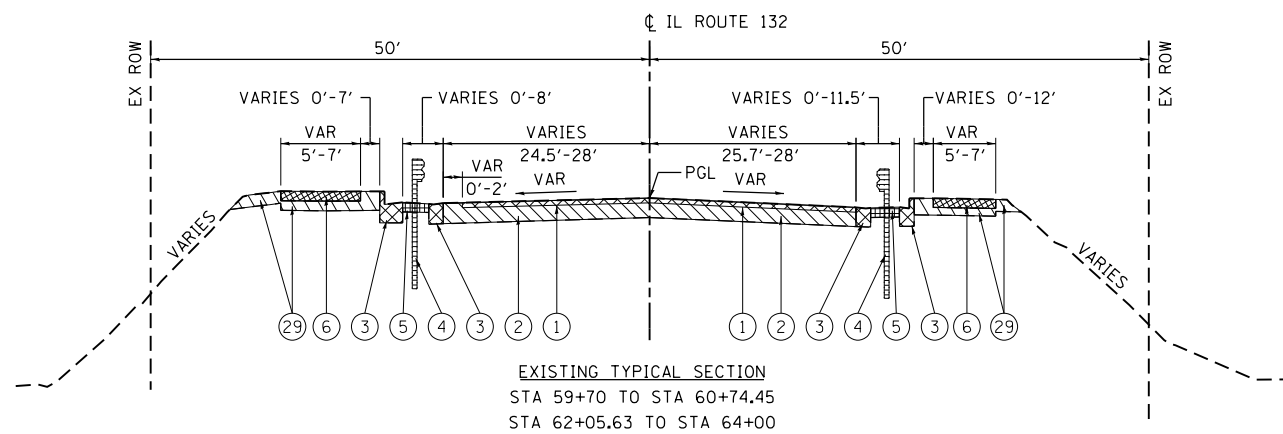
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 132 (GRAND AVE.) OVER DES PLAINES RIVER
SUMMARY OF QUANTITIES

SCALE: N/A SHEET NO. 9 OF 9 SHEETS STA. TO STA.

| | | | | |
|--------------------|-----------|--------|---------------------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 541 | X-6-B-1-1 | LAKE | 93 | 13 |
| CONTRACT NO. 60N22 | | | ILLINOIS FED. AID PROJECT | |

Rev.



HOT-MIX ASPHALT MIXTURE REQUIREMENTS

| MIXTURE TYPE | AIR VOIDS @ NDES |
|--|------------------|
| HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, (IL 9.5mm) | 4.0% @ 70GYR |
| LEVELING BINDER (MACHINE METHOD), N70, (IL 9.5MM) | 4.0% @ 70GYR |
| HMA SURFACE COURSE, MIX "D", N50 (IL 9.5mm) | 4.0% @ 50GYR |

NOTE
THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LB/SQ YD/IN.
THE AC TYPE FOR POLYMERIZED HMA MIXTURES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS
FOR USE OF RECYCLED MATERIALS SEE DISTRICT ONE SPECIAL PROVISION.

LEGEND

- ① HOT-MIX ASPHALT SURFACE REMOVAL, 3"
- ② PAVEMENT REMOVAL
- ③ COMBINATION CURB AND GUTTER REMOVAL
- ④ GUARDRAIL REMOVAL
- ⑤ PAVED SHOULDER REMOVAL
- ⑥ SIDEWALK REMOVAL
- ⑦ HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 2"
- ⑧ LEVELING BINDER (MACHINE METHOD), N70, 1"
- ⑨ PORTLAND CEMENT CONCRETE BASE COURSE WIDENING 9"
- ⑩ COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
- ⑪ STEEL PLATE BEAM GUARDRAIL, TYPE A
- ⑫ BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)
- ⑬ AGGREGATE SHOULDERS, TYPE B 6"
- ⑭ PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH
- ⑮ TOPSOIL AND SEEDING
- ⑯ SUB-BASE GRANULAR MATERIAL, TYPE C
- ⑰ PRECAST BRIDGE APPROACH SLAB
- ⑱ CONCRETE WEARING SURFACE, 5"
- ⑲ PARAPET RAILING
- ⑳ BICYCLE RAILING
- ㉑ HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 2"
- ㉒ AGGREGATE BASE COURSE, TYPE B 8"
- ㉓ CONCRETE STRUCTURES
- ㉔ FURNISHED EXCAVATION
- ㉕ MEDIAN REMOVAL
- ㉖ STRIP REFLECTIVE CRACK CONTROL TREATMENT
- ㉗ TOPSOIL EXCAVATION AND REPLACEMENT
- ㉘ IMPACT ATTENUATOR (SEVERE USE), NARROW, TEST LRVEL 3
- ㉙ EXCAVATION
- ㉚ HYDRIC WOODLAND TOPSOIL REPLACEMENT

M:\IL_132_cover_DeepPlaner_River\12-154-001\DRAWINGS\CADD_Sheets\0111132-plt-typical.dgn



| | | |
|----------------------|-----------------|-----------|
| USER NAME = Kjeic | DESIGNED - BCB | REVISED - |
| PLOT SCALE = | DRAWN - BCB | REVISED - |
| PLOT DATE = 9/3/2013 | CHECKED - DPA | REVISED - |
| | DATE - 09/03/13 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 132 (GRAND AVE.) OVER DES PLAINES RIVER
TYPICAL SECTIONS

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

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-----------|--------|--------------|-----------|
| 541 | X-6-B-1-1 | LAKE | 93 | 14 |
| CONTRACT NO. 60N22 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

EARTHWORK SCHEDULE

| STA | TO | STA | LENGTH FT | EARTH EXCAVATION CU YD | CHANNEL EXCAVATION CU YD | HYDRIC TOPSOIL EXCAVATION CU YD | EXCAVATION FOR PROPOSED RIPRAP CU YD | EXCAVATION FOR RIPRAP BEDDING CU YD | EARTH EXCAVATION ADJUSTED FOR SHRINKAGE CU YD | EMBANKMENT CU YD | FURNISHED EXCAVATION CU YD |
|-----------------------------|----|-------|--------------|------------------------------|--------------------------------|---------------------------------------|---|--|--|---------------------|----------------------------------|
| IL 132 (GRAND AVE.) | | | | | | | | | | | |
| 59+70 | TO | 60+00 | 30 | 12.48 | N/A | N/A | N/A | N/A | 10.61 | 0.00 | -10.61 |
| 60+00 | TO | 60+34 | 34 | 32.62 | N/A | N/A | N/A | N/A | 27.72 | 0.00 | -27.72 |
| 60+34 | TO | 60+46 | 12 | 18.40 | N/A | N/A | N/A | N/A | 15.64 | 0.00 | -15.64 |
| 60+46 | TO | 60+76 | 30 | 31.86 | N/A | N/A | N/A | N/A | 27.08 | 0.00 | -27.08 |
| 60+76 | TO | 62+04 | 128 | 0.00 | N/A | N/A | N/A | N/A | 0.00 | 0.00 | 0.00 |
| 62+04 | TO | 62+34 | 30 | 35.97 | N/A | N/A | N/A | N/A | 30.58 | 2.16 | -28.42 |
| 62+34 | TO | 62+46 | 12 | 6.44 | N/A | N/A | N/A | N/A | 5.48 | 0.83 | -4.65 |
| 62+46 | TO | 62+50 | 4 | 2.05 | N/A | N/A | N/A | N/A | 1.74 | 0.10 | -1.64 |
| 62+50 | TO | 63+00 | 50 | 19.24 | N/A | N/A | N/A | N/A | 16.35 | 1.15 | -15.21 |
| 63+00 | TO | 63+50 | 50 | 15.21 | N/A | N/A | N/A | N/A | 12.93 | 0.00 | -12.93 |
| 63+50 | TO | 64+00 | 50 | 12.27 | N/A | N/A | N/A | N/A | 10.43 | 0.00 | -10.43 |
| 64+00 | TO | 64+50 | 50 | 5.14 | N/A | N/A | N/A | N/A | 4.37 | 0.00 | -4.37 |
| SUBTOTALS | | | 480 | 191.67 | 0.00 | 0.00 | 0.00 | 0.00 | 162.92 | 4.23 | -158.69 |
| BIKE PATH CONNECTION | | | | | | | | | | | |
| 00+00 | TO | 00+20 | 20 | N/A | N/A | 8.00 | N/A | N/A | 6.80 | 43.12 | 36.32 |
| 00+20 | TO | 00+25 | 5 | N/A | N/A | 4.49 | N/A | N/A | 3.81 | 24.57 | 20.76 |
| 00+25 | TO | 00+50 | 25 | N/A | N/A | 19.78 | N/A | N/A | 16.82 | 97.64 | 80.83 |
| 00+50 | TO | 00+75 | 25 | N/A | N/A | 17.77 | N/A | N/A | 15.10 | 62.56 | 47.46 |
| 00+75 | TO | 00+98 | 23 | N/A | N/A | 14.48 | N/A | N/A | 12.31 | 33.65 | 21.34 |
| 00+98 | TO | 01+00 | 2 | N/A | N/A | 1.55 | N/A | N/A | 1.31 | 3.06 | 1.75 |
| 01+00 | TO | 01+12 | 12 | N/A | N/A | 3.82 | N/A | N/A | 3.24 | 7.69 | 4.44 |
| SUBTOTALS | | | 112 | 0.00 | 0.00 | 69.88 | 0.00 | 0.00 | 59.40 | 272.30 | 212.90 |
| DES PLAINES RIVER | | | | | | | | | | | |
| 00+43 | TO | 00+50 | 7 | 1.19 | 10.11 | N/A | 79.41 | 14.78 | 1.01 | 0.98 | -0.03 |
| 00+50 | TO | 00+57 | 7 | 0.20 | 21.82 | N/A | 64.12 | 15.21 | 0.17 | 2.34 | 2.18 |
| 00+57 | TO | 00+61 | 4 | 0.28 | 15.48 | N/A | 25.85 | 9.49 | 0.23 | 1.60 | 1.37 |
| 00+61 | TO | 00+66 | 5 | 0.76 | 16.21 | N/A | 22.23 | 8.27 | 0.65 | 1.52 | 0.87 |
| 00+66 | TO | 01+00 | 34 | 0.00 | 96.46 | N/A | 131.13 | 49.24 | 0.00 | 13.36 | 13.36 |
| 01+00 | TO | 01+34 | 34 | 0.00 | 61.78 | N/A | 131.84 | 49.51 | 0.00 | 17.99 | 17.99 |
| 01+34 | TO | 01+39 | 5 | 1.78 | 6.52 | N/A | 21.98 | 8.13 | 1.51 | 2.17 | 0.66 |
| 01+39 | TO | 01+43 | 4 | 2.48 | 6.10 | N/A | 27.97 | 10.24 | 2.11 | 2.13 | 0.03 |
| 01+43 | TO | 01+50 | 7 | 1.61 | 10.21 | N/A | 74.35 | 17.12 | 1.37 | 4.67 | 3.30 |
| 01+50 | TO | 01+57 | 7 | 0.36 | 5.72 | N/A | 88.83 | 15.70 | 0.30 | 2.53 | 2.23 |
| SUBTOTALS | | | 113 | 8.65 | 250.41 | 0.00 | 667.72 | 197.70 | 7.35 | 49.30 | 41.95 |
| GRAND TOTALS | | | | 200 | 250 | 70 | 670 | 200 | 230 | 325 | 95 |

NOTES:

1. A SHRINKAGE FACTOR OF 15% WAS USED FOR CALCULATIONS.
2. THE HYDRIC TOPSOIL EXCAVATED FOR THE MULTI-USE PATH MUST BE USED FOR THE TOPSOIL REPLACEMENT WHICH IS INCLUDED WITHIN THE MULTI-USE PATH EMBANKMENT VOLUME.
3. THE USE OF EXCAVATED SOILS FROM THE DES PLAINES RIVER BED AND THE IL ROUTE 132 ROADWAY FOR USE AS EMBANKMENT BENEATH THE MULTI-USE PATH IS DEPENDENT UPON PSI RESTRICTIONS DETAILED IN THE NON-SPECIAL WASTE DISPOSAL SPECIAL PROVISION.

| RELOCATE SIGN PANEL ASSEMBLY - TYPE A | | | |
|---|--------|----|----------|
| ALIGNMENT: IL ROUTE 132 | | | |
| STA | OFFSET | | EACH |
| 62+41 | 40.22 | LT | 1 |
| 62+91 | 40.22 | LT | 1 |
| 64+01 | 38.70 | LT | 1 |
| TOTAL | | | 3 |

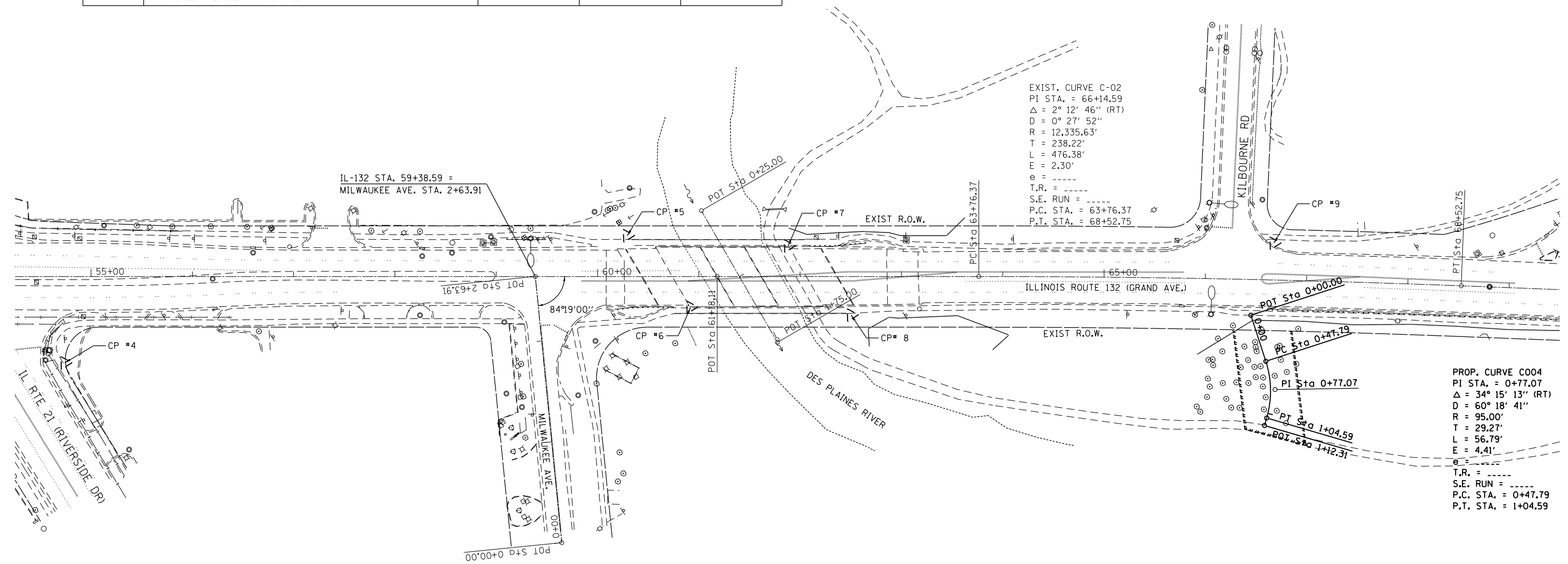
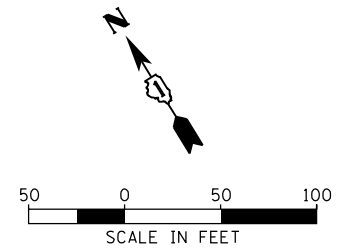
| PIPE CULVERTS, CLASS A, TYPE 1 18" | | | | | | | |
|--|--------|----|----|-------|--------|----|----------------|
| ALIGNMENT: IL ROUTE 132 | | | | | | | |
| STA | OFFSET | | | STA | OFFSET | | LENGTH FOOT |
| 66+51 | 90.01 | RT | TO | 66+88 | 89.43 | RT | 36.25 |
| TOTAL | | | | | | | 36 |

| RELOCATE SIGN PANEL - TYPE 1 | | | | | | |
|---------------------------------|----|-------|--------|----------------|-------------------|-------------------|
| ALIGNMENT: IL ROUTE 132 | | | | | | |
| STA | TO | STA | OFFSET | LENGTH FEET | AVG WIDTH FEET | QUANTITY SQ FT |
| 62+41 | TO | 62+41 | LT | 0.00 | 0.00 | 9.00 |
| 62+91 | TO | 62+91 | LT | 0.00 | 0.00 | 9.00 |
| 64+01 | TO | 64+01 | LT | 0.00 | 0.00 | 9.00 |
| TOTAL | | | | | | 27 |

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HORIZONTAL CONTROL & SITE BENCHMARKS

| NUMBER | DESCRIPTION | NORTHING | EASTING | ELEVATION (FT.) |
|--------|--|-------------|-------------|-----------------|
| CP #4 | 5/8" RB FOUND AT THE SOUTHEAST CORNER OF IL RTE 21 (RIVERDALE DR) AND IL RTE 132 (GRAND AVE) | 2078730.246 | 1094853.705 | 673.41 |
| CP # 5 | SET 5/8" RB AT THE NORTHWEST CORNER OF THE BRIDGE ON IL 132 OVER DES PLAINES RIVER. | 2078543.607 | 1095391.527 | 667.48 |
| CP #6 | CUT CROSS SET ON BARRIER WALL AT THE SOUTHWEST CORNER OF THE BRIDGE ON IL 132 OVER DES PLAINES RIVER | 2078450.503 | 1095407.332 | 671.05 |
| CP #7 | CUT CROSS SET ON BARRIER WALL AT THE NORTHEAST CORNER OF THE BRIDGE OVER DES PLAINES RIVER | 2078451.170 | 1095521.027 | 671.50 |
| CP #8 | SET 5/8" RB AT THE SOUTHEAST CORNER OF THE BRIDGE OVER DES PLAINES RIVER. | 2078360.396 | 1095537.861 | 667.56 |
| CP #9 | SET 5/8" RB AT THE NORTHEAST CORNER OF KILBOURNE RD AND IL RTE 132 (GRAND AVE) | 2078200.250 | 1095929.641 | NOT RELIABLE |



EXIST. CURVE C-02
 PI STA. = 66+14.59
 $\Delta = 2^\circ 12' 46''$ (RT)
 $D = 0^\circ 27' 52''$
 $R = 12,335.63'$
 $T = 238.22'$
 $L = 476.38'$
 $E = 2.30'$
 $e = \text{---}$
 $T.R. = \text{---}$
 $S.E. RUN = \text{---}$
 $P.C. STA. = 63+76.37$
 $P.T. STA. = 68+52.75$

PROP. CURVE C004
 PI STA. = 0+77.07
 $\Delta = 34^\circ 15' 13''$ (RT)
 $D = 60^\circ 18' 41''$
 $R = 95.00'$
 $T = 29.27'$
 $L = 56.79'$
 $E = 4.41'$
 $e = \text{---}$
 $T.R. = \text{---}$
 $S.E. RUN = \text{---}$
 $P.C. STA. = 0+47.79$
 $P.T. STA. = 1+04.59$

SOURCE BENCHMARK

VILLAGE OF GURNEE BENCH MARK #15
 ON KILBOURNE AT THE MOTHER RUDD HOUSE PARKING LOT.
 CUT SQUARE IN CONC. PAD FOR STREET LIGHT CONTROL BOX.
 PAD IS $\pm 35'$ SELY OF SE CORNER OF RUDD HOUSE.
 ELEVATION: 666.131
 VERTICAL DATUM: NAVD 88

ILLINOIS ROUTE 132 (GRAND AVE.) ALIGNMENT DATA

| DESCRIPTION | NORTHING | EASTING | STATION |
|--------------------|-------------|-------------|----------|
| POINT OF TANGENT | 2079539.805 | 1093713.316 | 40+78.13 |
| POINT OF TANGENT | 2078462.506 | 1095445.641 | 61+18.11 |
| POINT OF CURVATURE | 2078326.125 | 1095664.946 | 63+76.37 |
| POINT OF TANGENT | 2078066.803 | 1096064.527 | 68+52.75 |

PROPOSED MULTI-USE PATH CONNECTION ALIGNMENT DATA

| DESCRIPTION | NORTHING | EASTING | STATION |
|--------------------|-------------|-------------|---------|
| POINT OF TANGENT | 2078151.860 | 1095872.886 | 0+00.00 |
| POINT OF CURVATURE | 2078105.465 | 1095861.418 | 0+47.79 |
| POINT OF TANGENT | 2078057.509 | 1095832.592 | 1+04.59 |
| POINT OF TANGENT | 2078052.356 | 1095826.841 | 1+12.31 |

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| | | |
|----------------------|-----------------|-----------|
| USER NAME = KyoC | DESIGNED - BCB | REVISED - |
| PLOT SCALE = | DRAWN - BCB | REVISED - |
| PLOT DATE = 9/3/2013 | CHECKED - DPA | REVISED - |
| | DATE - 09/03/13 | REVISED - |

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

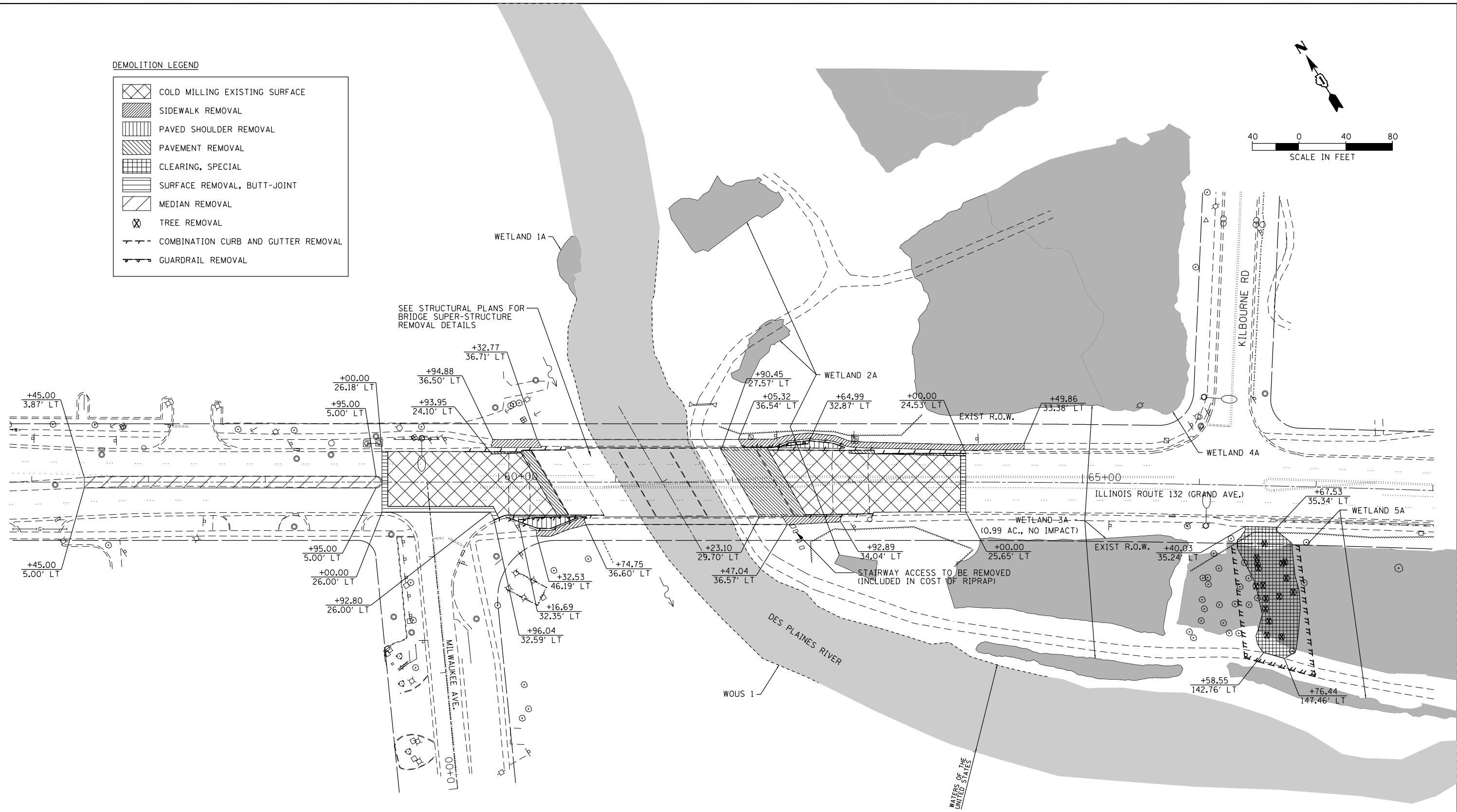
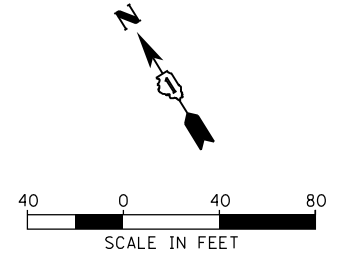
IL 132 (GRAND AVE.) OVER DES PLAINES RIVER
 ALIGNMENT, TIES AND BENCHMARKS

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

| | | | | |
|---------------------------|-----------|--------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 541 | X-6-B-1-1 | LAKE | 93 | 16 |
| CONTRACT NO. 60N22 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

DEMOLITION LEGEND

| | |
|--|-------------------------------------|
| | COLD MILLING EXISTING SURFACE |
| | SIDEWALK REMOVAL |
| | PAVED SHOULDER REMOVAL |
| | PAVEMENT REMOVAL |
| | CLEARING, SPECIAL |
| | SURFACE REMOVAL, BUTT-JOINT |
| | MEDIAN REMOVAL |
| | TREE REMOVAL |
| | COMBINATION CURB AND GUTTER REMOVAL |
| | GUARDRAIL REMOVAL |



SEE LANDSCAPE, EROSION CONTROL AND SEDIMENT PLAN FOR REQUIRED TREE PROTECTION MEASURES.

M:\IL_132_cover_DesPlaines_River\12-154-001\DRAWINGS\CADD_Sheets\0111132-plt-rem.dgn



| | | |
|-----------------------|-----------------|-----------|
| USER NAME = JPS | DESIGNED - BCB | REVISED - |
| | DRAWN - BCB | REVISED - |
| PLOT SCALE = | CHECKED - DPA | REVISED - |
| PLOT DATE = 9/25/2013 | DATE - 09/25/13 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

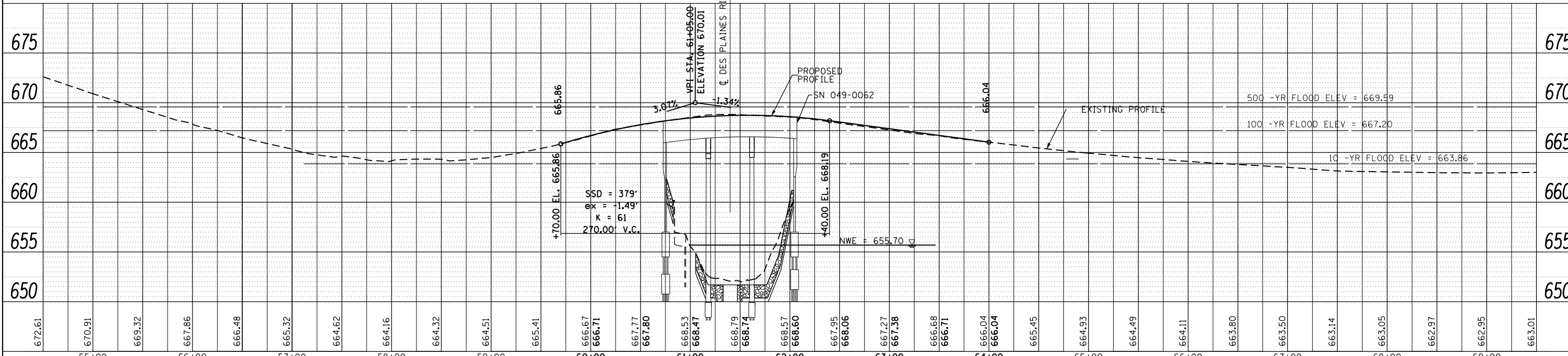
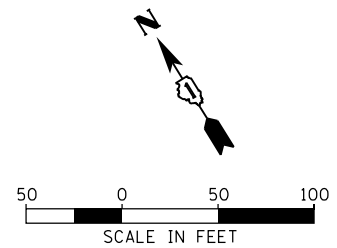
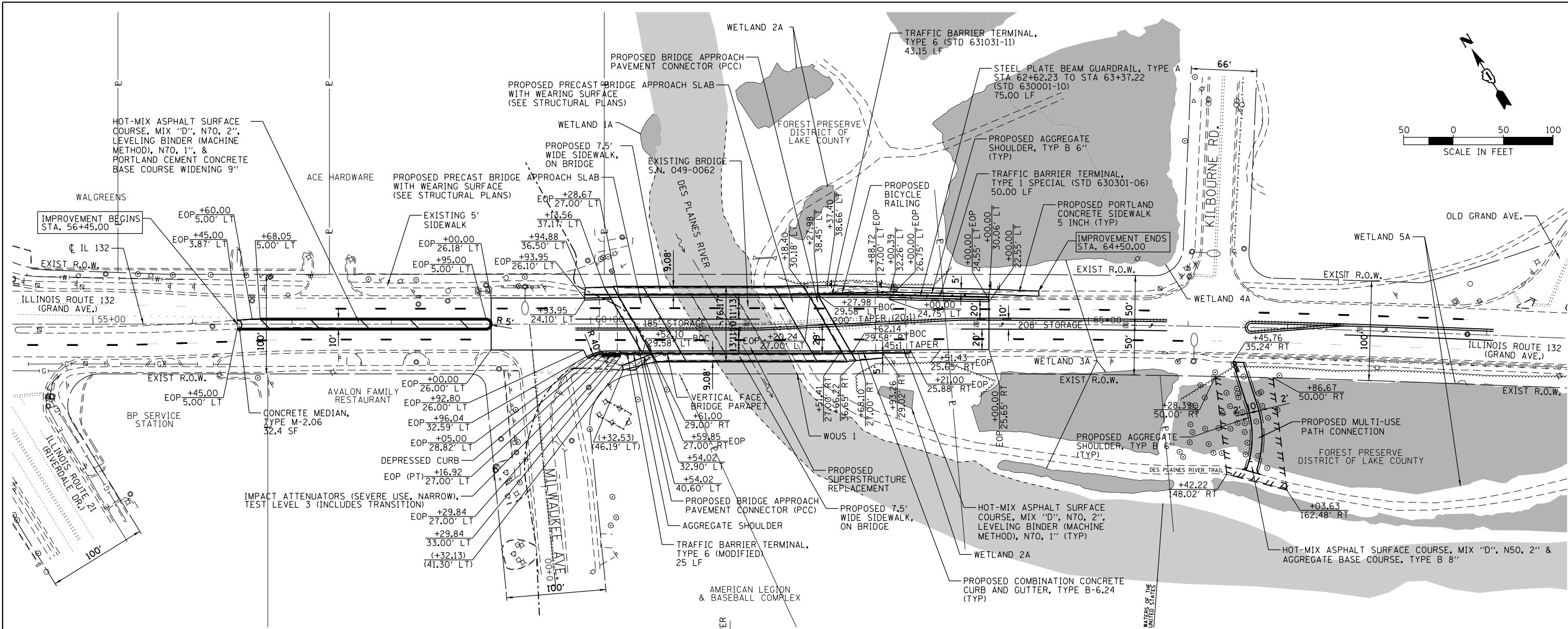
IL 132 (GRAND AVE.) OVER DES PLAINES RIVER
EXISTING CONDITIONS AND DEMOLITION PLAN

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

| | | | | |
|---------------------------|-----------|--------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 541 | X-6-B-1-1 | LAKE | 93 | 17 |
| CONTRACT NO. 60N22 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

| | |
|------|----------|
| DATE | |
| BY | |
| PLAN | SURVEYED |
| | NOTED |
| | ALIGNED |
| | CHECKED |
| | PLOTTED |
| | FILED |
| | NO. |

| | |
|---------|-----------|
| DATE | |
| BY | |
| PROFILE | SURVEYED |
| | NOTED |
| | GRADES |
| | CHECKED |
| | STRUCTURE |
| | NOTATIONS |
| | CHKD |
| | NO. |

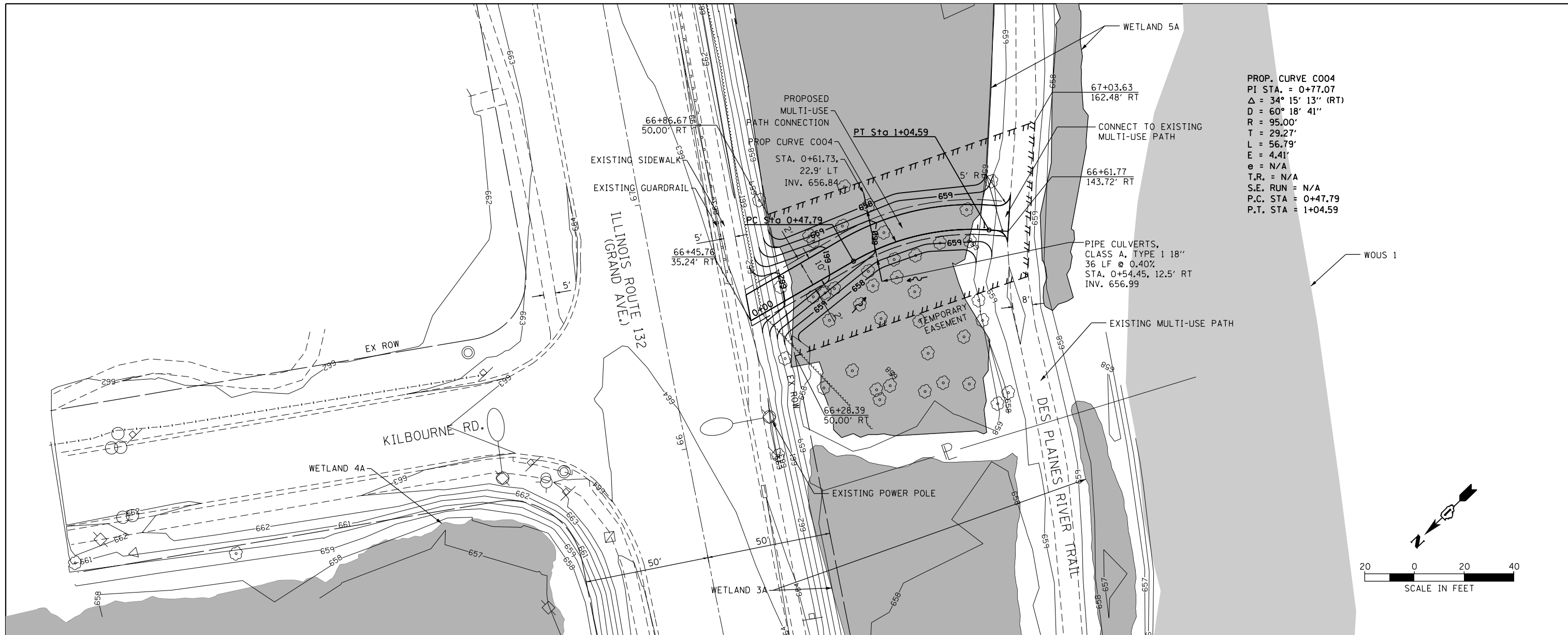


| | | | | | | | | | | |
|---|---|-------------------|-----------|---|---|--------------------|---------|--------|--------------|-----------|
| FILE NAME = | USER NAME = JPS | DESIGNED - BCB | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | IL 132 (GRAND AVE.) OVER DES PLAINES RIVER PROPOSED PLAN AND PROFILE | F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| M:\IL 132 over DesPlaines River(12-154-001) | DRAWINGS\CADD Sheets\DIIL132-sht-plnprf.dgn | DRAWN - BCB | REVISED - | | | 541 | X-6B-R | LAKE | 93 | 18 |
| DTM | PLOT DATE = 12/17/2013 | CHECKED - DPA | REVISED - | | | CONTRACT NO. 60N22 | | | | |
| | | DATE - 12-11-2013 | REVISED - | SCALE: | SHEET | OF | SHEETS | STA. | TO | STA. |

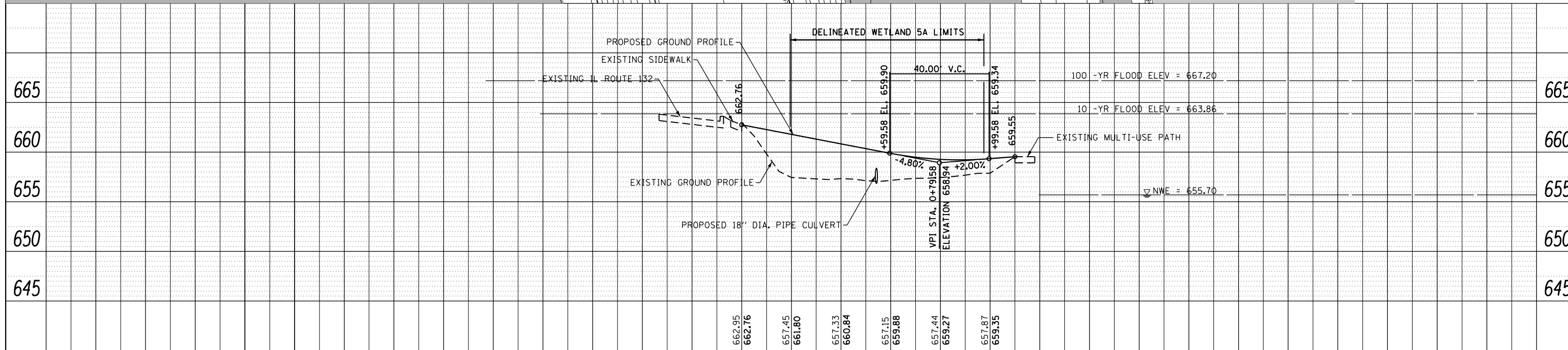
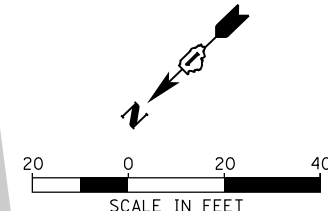
ILLINOIS FED. AID PROJECT

| | | |
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| PLAN | SURVEYED | DATE |
| | PLOTTED | |
| | ALIGNED | |
| | CHECKED | |
| | FILED | |
| | NO. | |

| | | |
|---------|-----------|------|
| PROFILE | SURVEYED | DATE |
| | GRADES | |
| | CHECKED | |
| | STRUCTURE | |
| | NOTATIONS | |
| | CPAD | |
| | NO. | |



PROP. CURVE C004
 PI STA. = 0+77.07
 $\Delta = 34^\circ 15' 13''$ (RT)
 $D = 60^\circ 18' 41''$
 $R = 95.00'$
 $T = 29.27'$
 $L = 56.79'$
 $E = 4.41'$
 $e = N/A$
 $T.R. = N/A$
 $S.E. RUN = N/A$
 $P.C. STA = 0+47.79$
 $P.T. STA = 1+04.59$



| | | | | | | | | | | | |
|--|------------------------|-------------------|-----------|---|--|---|-----------|----------|----------------|-------------|------|
| FILE NAME = | USER NAME = JPS | DESIGNED - KC | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | IL 132 (GRAND AVE.) OVER DES PLAINES RIVER IL 132 CONNECTION PATH PLAN, PROFILE & GRADING | F.A.P. RTE. = | SECTION = | COUNTY = | TOTAL SHEETS = | SHEET NO. = | |
| M:\IL 132 over DesPlaines River(12-154-001)\DRAWINGS\CADD Sheets\DIIL132-sht-plnprf.Path | DRAWING.dgn | KC | REVISED - | | | 541 | X-6B-R | LAKE | 93 | 19 | |
| PLOT SCALE = | CHECKED - DPA | REVISED - | SCALE: | | | SHEET | OF | SHEETS | STA. | TO | STA. |
| Default | PLOT DATE = 12/17/2013 | DATE - 12-11-2013 | REVISED - | | | CONTRACT NO. 60N22 ILLINOIS FED. AID PROJECT | | | | | |

PRE STAGE

CONSTRUCTION

1. REMOVE COMPLETELY A SEGMENT OF EXISTING MOUNTABLE MEDIAN BETWEEN RIVERSIDE DR. AND THE BRIDGE OVER THE DES PLAINES RIVER.
2. RECONSTRUCT THE MEDIAN FLUSH WITH EXISTING PAVEMENT WITH A NOSE FOR THE REMAINING MOUNTABLE CURB.

TRAFFIC

IL ROUTE 132

1. USE IDOT STANDARD 701602 FOR TRAFFIC CONTROL
2. APPLY STAGE 2 MOT PLAN FOR ALL APPROACHES TO AND FROM IL 132 (GRAND AVE)/IL 21 (RIVERSIDE DR) INTERSECTION.
3. APPLY DISTRICT ONE STANDARD DETAIL TC-14 TO PROVIDE WB IL 132 LEFT TURNS TO SB MILWAUKEE AVE.

STAGE 1

CONSTRUCTION

1. CONSTRUCT NEW PROPOSED SIDEWALK THAT CONNECTS THE SIDEWALK ON THE EASTBOUND SIDE OF GRAND AVE AT APPROXIMATE STATION 66+50 TO THE BIKE TRAIL DIRECTLY SOUTH. THIS NEW SIDEWALK IS TO BE COMPLETED AND OPEN TO PEDESTRIANS AND BIKE TRAFFIC PRIOR TO ANY OTHER WORK IN THIS PROJECT.
2. CONSTRUCT EASTBOUND HALF OF THE PROPOSED BRIDGE OVER DES PLAINES RIVER.
3. CONSTRUCT EASTBOUND PAVEMENT AND SIDEWALK ADJACENT TO THE EASTBOUND BRIDGE FROM STATION 59+70 TO 64+00

TRAFFIC

IL ROUTE 132 (GRAND AVE) EASTBOUND

1. THE RIGHT LANE WILL BE CLOSED EAST OF IL ROUTE 21 (RIVERDALE DR). RIGHT LANE TRAFFIC WILL BE FORCED TO TURN RIGHT ONTO SOUTHBOUND IL ROUTE 21. BOTH LANES WILL REOPEN EAST OF STATION 65+00.
2. THROUGH TRAFFIC WILL UTILIZE THE LEFT LANE THROUGH IL ROUTE 21 (RIVERSIDE DR). TRAFFIC WILL SHIFT LEFT JUST EAST OF THE IL ROUTE 21 INTERSECTION TO THE EXISTING WESTBOUND LEFT LANE THROUGH THE EXISTING BRIDGE.
3. TRAFFIC WILL SHIFT RIGHT AND REOPEN TO 2 LANES BY APPROXIMATE STATION 70+00

IL ROUTE 132 (GRAND AVE) WESTBOUND

1. THE LEFT LANE WILL BE CLOSED AND BEGIN MERGING INTO THE RIGHT LANE BY APPROXIMATE STATION 71+00.
2. THROUGH TRAFFIC WILL UTILIZE THE EXISTING WESTBOUND RIGHT LANE BETWEEN APPROXIMATE STATION 66+00 TO 56+00.
3. TRAFFIC WILL REOPEN TO 2 LANES AT APPROXIMATE STATION 56+00.

MILWAUKEE AVE/IL ROUTE 21

1. WESTBOUND IL ROUTE 132 (GRAND AVE) WILL NOT BE PERMITTED TO TURN LEFT ONTO SOUTHBOUND MILWAUKEE AVE. TRAFFIC CAN STILL ACCESS AT THE SOUTH END VIA IL ROUTE 21 (RIVERSIDE DR) VIA THE DETOUR. SEE DETOUR PLAN
2. NORTHBOUND MILWAUKEE AVE WILL NOT BE PERMITTED TO ACCESS GRAND AVE. TRAFFIC WILL USE DETOUR TO RIVERSIDE DR TO ACCESS GRAND AVE. SEE DETOUR PLAN.

OLD GRAND AVE

1. SOUTHBOUND TRAFFIC WILL BE PROHIBITED FROM LEFT TURNS TO EASTBOUND IL ROUTE 132 (GRAND AVE).

THIS WORK WILL AFFECT THE LAKE COUNTY DIVISION OF TRANSPORTATION'S ICON (FIBER SYSTEM). THE CONTRACTOR SHALL NOTIFY THE LCDOT ONE WEEK PRIOR TO INITIATION OF STAGE 1 MILWAUKEE AVENUE DETOUR AND ALSO ONE WEEK PRIOR TO TURN-ON OF THE IL 132 TEMPORARY WIRELESS INTERCONNECT.

PERMANENT SEEDING/STABILIZATION OF ALL AREAS DISTURBED BY STAGE 1 WORK SHALL BE COMPLETED BEFORE TRAFFIC IS MOVED FOR STAGE 2 CONSTRUCTION.

STAGE 2

CONSTRUCTION

1. CONSTRUCT WESTBOUND HALF OF THE PROPOSED BRIDGE OVER DES PLAINES RIVER.
2. CONSTRUCT WESTBOUND PAVEMENT AND SIDEWALK ADJACENT TO THE EASTBOUND BRIDGE FROM STATION 59+70 TO 64+00

TRAFFIC

IL ROUTE 132 (GRAND AVE) WESTBOUND

1. TRAFFIC WILL MERGE LEFT TO ONE LANE IN THE EXISTING WESTBOUND LEFT LANE AT APPROXIMATE STATION 73+00.
2. TRAFFIC WILL SHIFT LEFT AND DRIVE ON THE PROPOSED EASTBOUND LEFT LANE THROUGH THE BRIDGE
3. TRAFFIC WILL SHIFT RIGHT AND REOPEN TO 2 LANES BY APPROXIMATE STATION 57+54.

IL ROUTE 132 (GRAND AVE) EASTBOUND

1. THE LEFT LANE WILL BE CLOSED BEGINING AT STATION 51+30. LEFT LANE TRAFFIC WILL BE FORCED TO TURN LEFT ONTO NORTHBOUND IL ROUTE 21.
2. THROUGH TRAFFIC WILL UTILIZE THE RIGHT LANE THROUGH IL ROUTE 21 (RIVERSIDE DR) AND CONTINUE THROUGH THE PROPOSED BRIDGE ON THE RIGHT LANE.
3. TRAFFIC WILL REOPEN TO 2 LANES AT STATION 67+75.

KILBOURNE RD

1. SOUTHBOUND TRAFFIC WILL BE PROHIBITED FROM TURNING LEFT ONTO EASTBOUND IL ROUTE 132. SEE DETOUR PLAN.

THE IL RTE 132 TEMPORARY WIRELESS INTERCONNECT SHALL BE OPERATIONAL PRIOR TO REMOVAL OF ANY COMPONENTS OF THE EXISTING IL RTE 132 INTERCONNECT.

THE NEW DETECTORE LOOPS FOR THE WESTBOUND APPROACH TO THE IL 132 (GRAND AVE.) / IL 21 (RIVERSIDE DR) INTERSECTION SHALL BE INSTALLED AND OPERATIONAL PRIOR TO THE IMPLEMENTATION OF STAGE 2 TRAFFIC CONTROL.

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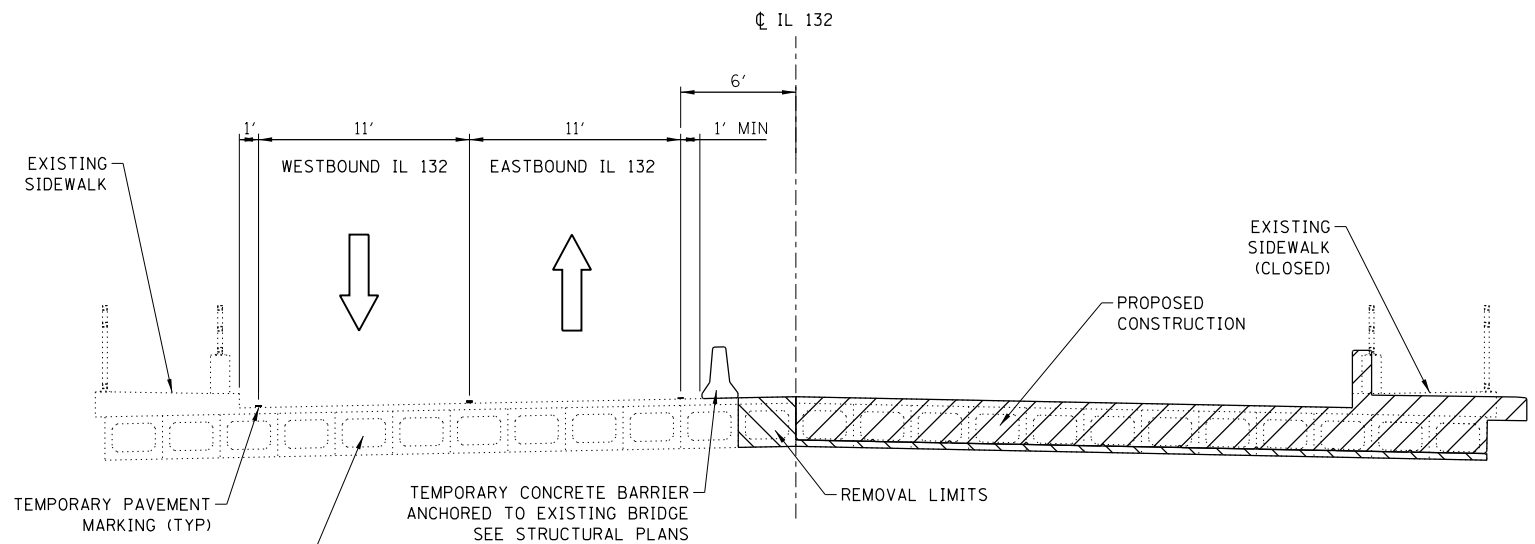
| | | |
|----------------------|-----------------|-----------|
| USER NAME = KyieC | DESIGNED - HTL | REVISED - |
| | DRAWN - HTL | REVISED - |
| PLOT SCALE = | CHECKED - DPA | REVISED - |
| PLOT DATE = 9/3/2013 | DATE - 09/03/13 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 132 (GRAND AVE.) OVER DES PLAINES RIVER
MAINTENANCE OF TRAFFIC – GENERAL NOTES

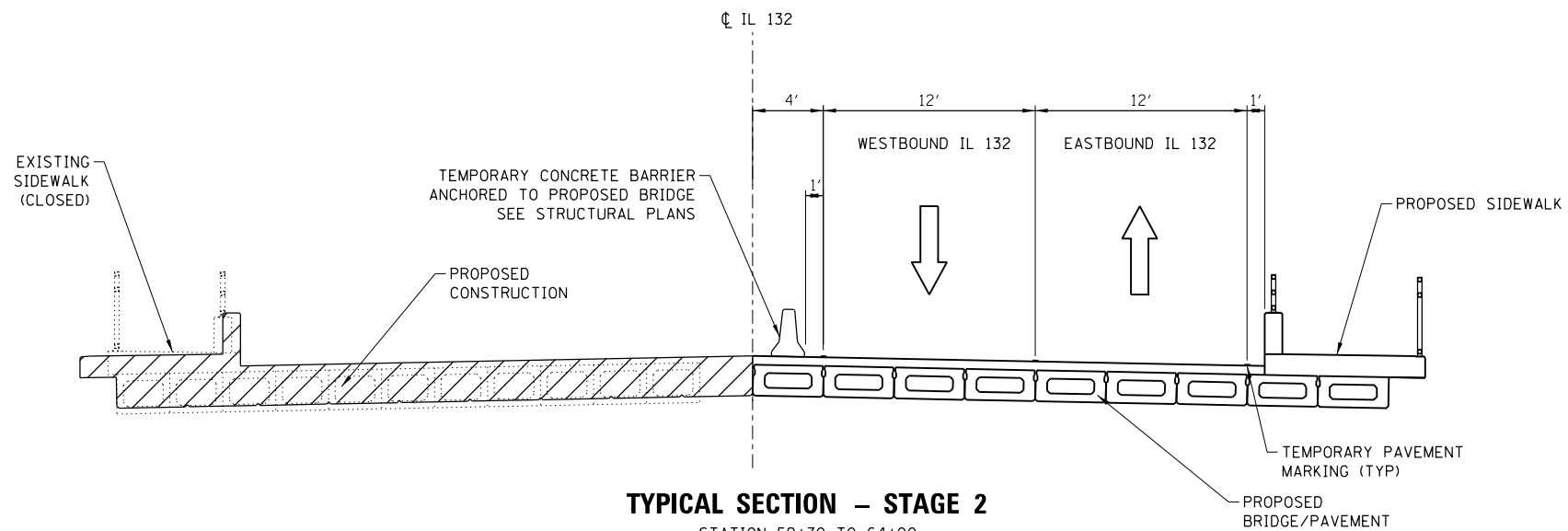
SCALE: N/A SHEET NO. 1 OF 2 SHEETS STA. TO STA.

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-----------|--------|--------------|-----------|
| 541 | X-6-B-1-1 | LAKE | 93 | 20 |
| CONTRACT NO. 60N22 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



TYPICAL SECTION - STAGE 1

STATION 59+70 TO 64+00



TYPICAL SECTION - STAGE 2

STATION 59+70 TO 64+00

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| | | |
|----------------------|-----------------|-----------|
| USER NAME = KyieC | DESIGNED - BCB | REVISED - |
| | DRAWN - BCB | REVISED - |
| PLOT SCALE = | CHECKED - DPA | REVISED - |
| PLOT DATE = 9/3/2013 | DATE - 09/03/13 | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL 132 (GRAND AVE.) OVER DES PLAINES RIVER
MAINTENANCE OF TRAFFIC - TYPICAL SECTIONS**

SCALE: N/A SHEET NO. 2 OF 2 SHEETS STA. TO STA.

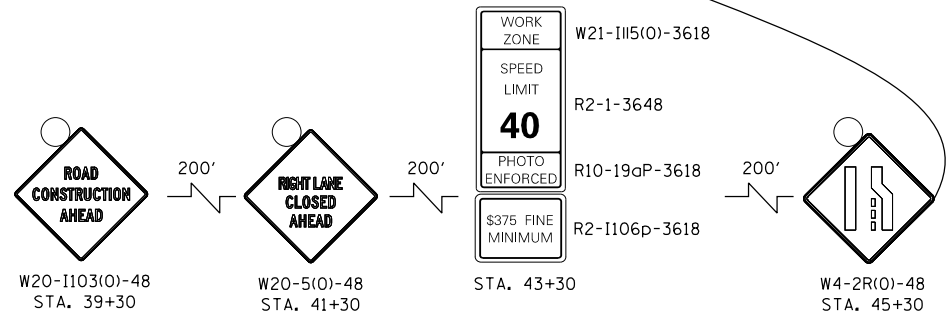
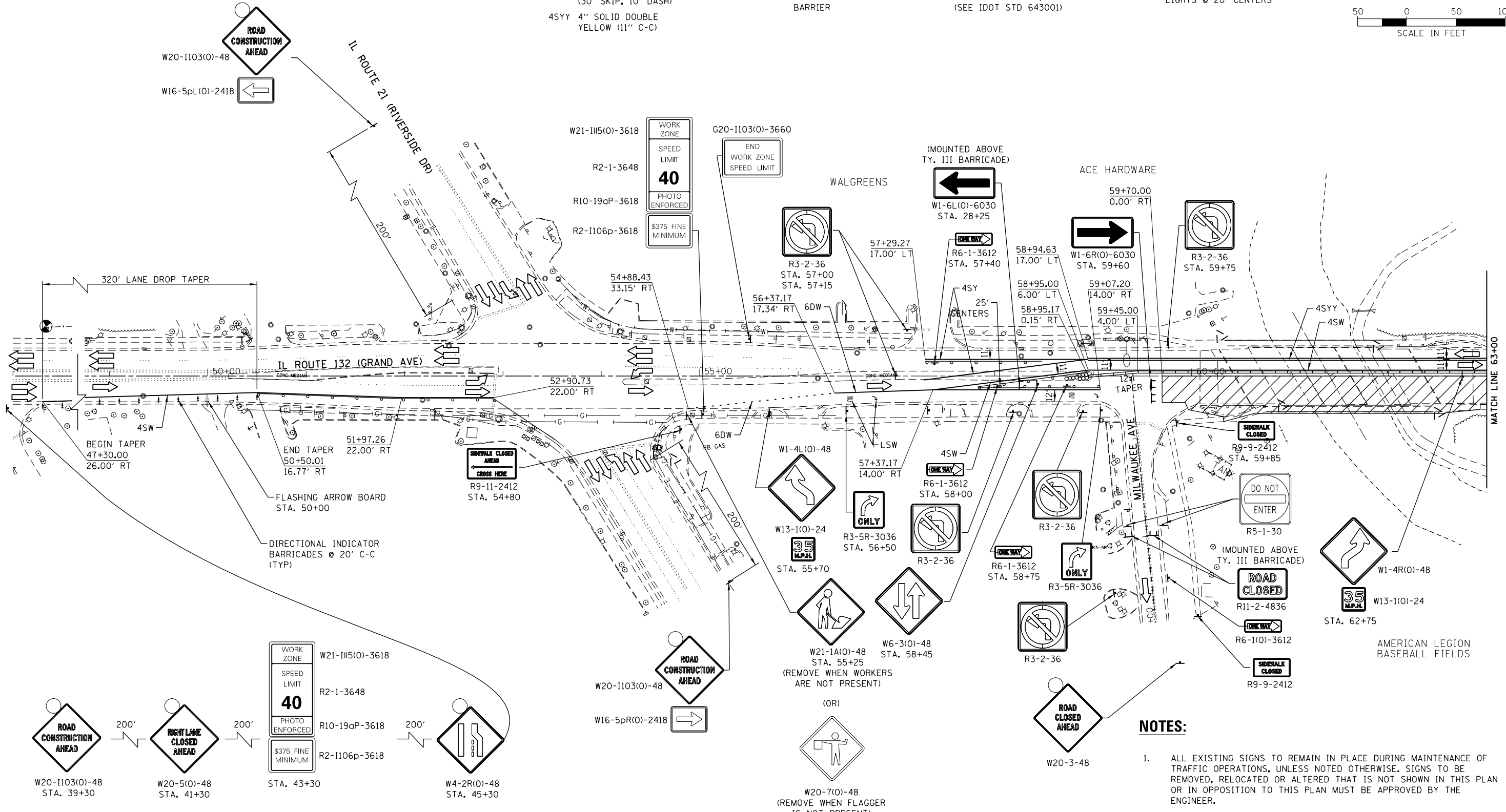
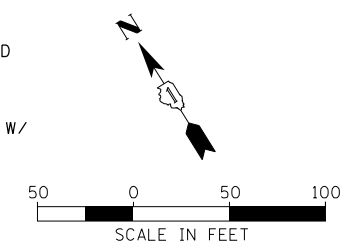
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-----------|--------|--------------|-----------|
| 541 | X-6-B-1-1 | LAKE | 93 | 21 |
| CONTRACT NO. 60N22 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

PAVEMENT MARKING LEGEND

| | | | |
|------|--|------|--|
| (E) | EXISTING PAVEMENT MARKING | 4SW | 4" SOLID WHITE |
| (T) | TEMPORARY PAVEMENT MARKING FROM PREVIOUS STAGE TO REMAIN | 4SY | 4" SOLID YELLOW |
| LSW | LETTERS AND SYMBOLS, WHITE | 6DW | 6" DOTTED WHITE (2' SKIP, 6' DASH) |
| 24SW | 24" SOLID WHITE STOP BAR | 4KY | 4" SKIP-DASH YELLOW (30' SKIP, 10' DASH) |
| | | 4SYY | 4" SOLID DOUBLE YELLOW (11" C-C) |

LEGEND

| | | | | | |
|--|--------------------------------|--|--|--|--|
| | PROPOSED PAVEMENT CONSTRUCTION | | BARRICADE, TYPE III | | DRUMS @ 25' CENTERS (UNLESS NOTED OTHERWISE) WITH STEADY BURNING WARNING LIGHTS |
| | DIRECTION OF TRAFFIC | | FLASHING ARROW BOARD | | DIRECTIONAL INDICATOR BARRICADES W/ STEADY BURNING MONO-DIRECTIONAL LIGHTS @ 20' CENTERS |
| | TEMPORARY CONCRETE BARRIER | | IMPACT ATTENUATORS (NON-REDIRECTIVE), TEST LEVEL 2 (SEE IDOT STD 643001) | | |



NOTES:

1. ALL EXISTING SIGNS TO REMAIN IN PLACE DURING MAINTENANCE OF TRAFFIC OPERATIONS, UNLESS NOTED OTHERWISE. SIGNS TO BE REMOVED, RELOCATED OR ALTERED THAT IS NOT SHOWN IN THIS PLAN OR IN OPPOSITION TO THIS PLAN MUST BE APPROVED BY THE ENGINEER.
2. SEE DETOUR PLAN FOR IL 132 WB TRAFFIC ACCESS TO MILWAUKEE AVE.

M:\IL_132_cover_Dept\Planes_River\12-154-001\DRAWINGS\CADD_Sheets\111132-ent-staging\11.dgn



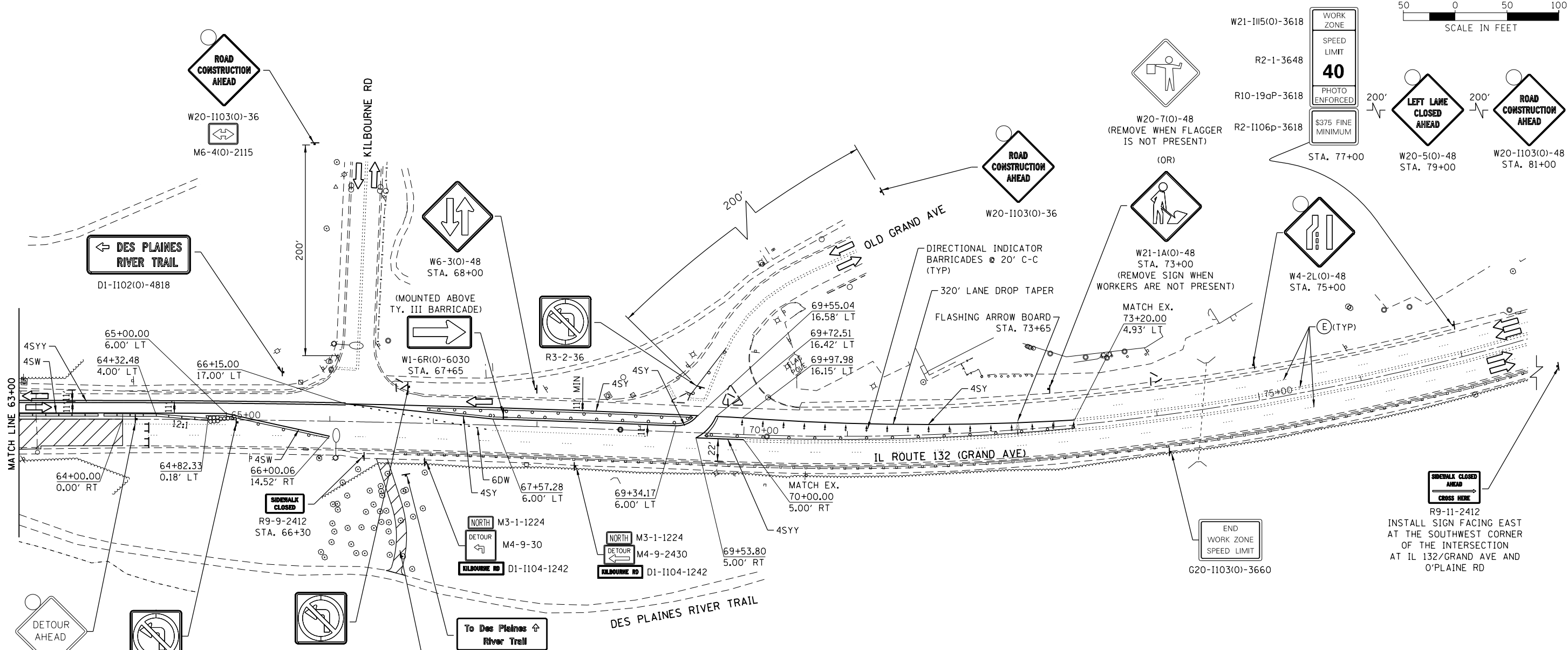
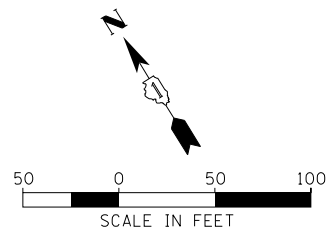
| | | |
|-----------------------|-----------------|-----------|
| USER NAME = JPS | DESIGNED - HTL | REVISED - |
| PLOT SCALE = | DRAWN - HTL | REVISED - |
| PLOT DATE = 9/25/2013 | CHECKED - DPA | REVISED - |
| | DATE - 09/25/13 | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL 132 (GRAND AVE.) OVER DES PLAINES RIVER
MAINTENANCE OF TRAFFIC - STAGE 1**

SCALE: 1"=50' SHEET NO. 1 OF 4 SHEETS STA. 49+00 TO STA. 63+00

| | | | | |
|---------------------------|-------------------|-------------|-----------------|--------------|
| F.A.P. RTE. 541 | SECTION X-6-B-1-1 | COUNTY LAKE | TOTAL SHEETS 93 | SHEET NO. 22 |
| CONTRACT NO. 60N22 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



- NOTES:**
- ALL EXISTING SIGNS TO REMAIN IN PLACE DURING MAINTENANCE OF TRAFFIC OPERATIONS, UNLESS NOTED OTHERWISE. SIGNS TO BE REMOVED, RELOCATED OR ALTERED THAT IS NOT SHOWN IN THIS PLAN OR IN OPPOSITION TO THIS PLAN MUST BE APPROVED BY THE ENGINEER.
 - SEE DETOUR PLAN FOR WB IL 132 TRAFFIC ACCESS TO MILWAUKEE AVE.

PAVEMENT MARKING LEGEND

| | | | |
|------|--|------|--|
| (E) | EXISTING PAVEMENT MARKING | 4SW | 4" SOLID WHITE |
| (T) | TEMPORARY PAVEMENT MARKING FROM PREVIOUS STAGE TO REMAIN | 4SY | 4" SOLID YELLOW |
| LSW | LETTERS AND SYMBOLS, WHITE | 6DW | 6" DOTTED WHITE (2' SKIP, 6' DASH) |
| 24SW | 24" SOLID WHITE STOP BAR | 4KY | 4" SKIP-DASH YELLOW (30' SKIP, 10' DASH) |
| | | 4SYY | 4" SOLID DOUBLE YELLOW (11" C-C) |

LEGEND

| | | | | | |
|--|--------------------------------|--|--|--|--|
| | PROPOSED PAVEMENT CONSTRUCTION | | BARRICADE, TYPE III | | DRUMS @ 25' CENTERS (UNLESS NOTED OTHERWISE) WITH STEADY BURNING WARNING LIGHTS |
| | DIRECTION OF TRAFFIC | | FLASHING ARROW BOARD | | DIRECTIONAL INDICATOR BARRICADES W/ STEADY BURNING MONO-DIRECTIONAL LIGHTS @ 20' CENTERS |
| | TEMPORARY CONCRETE BARRIER | | IMPACT ATTENUATORS (NON-REDIRECTIVE), TEST LEVEL 2 (SEE IDOT STD 643001) | | |

MULTI-USE PATH CONNECTOR TO BE COMPLETED AND OPEN TO PEDESTRIANS/BIKES AS SOON AS FEASIBLE SUBJECT TO LIMITING CLIMATIC FACTORS.

To Des Plaines River Trail
INSTALL PROPOSED SIGN

SIDEWALK CLOSED AHEAD
CROSS HERE
R9-11-2412
INSTALL SIGN FACING EAST AT THE SOUTHWEST CORNER OF THE INTERSECTION AT IL 132/GRAND AVE AND O'PLAINE RD

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| | | |
|-----------------------|-----------------|-----------|
| USER NAME = JPS | DESIGNED - HTL | REVISED - |
| | DRAWN - HTL | REVISED - |
| PLOT SCALE = | CHECKED - DPA | REVISED - |
| PLOT DATE = 9/25/2013 | DATE - 09/25/13 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | |
|--|-------------------------|
| IL 132 (GRAND AVE.) OVER DES PLAINES RIVER MAINTENANCE OF TRAFFIC - STAGE 1 | |
| SCALE: 1"=50' | SHEET NO. 2 OF 4 SHEETS |
| STA. 63+00 | TO STA. 77+00 |

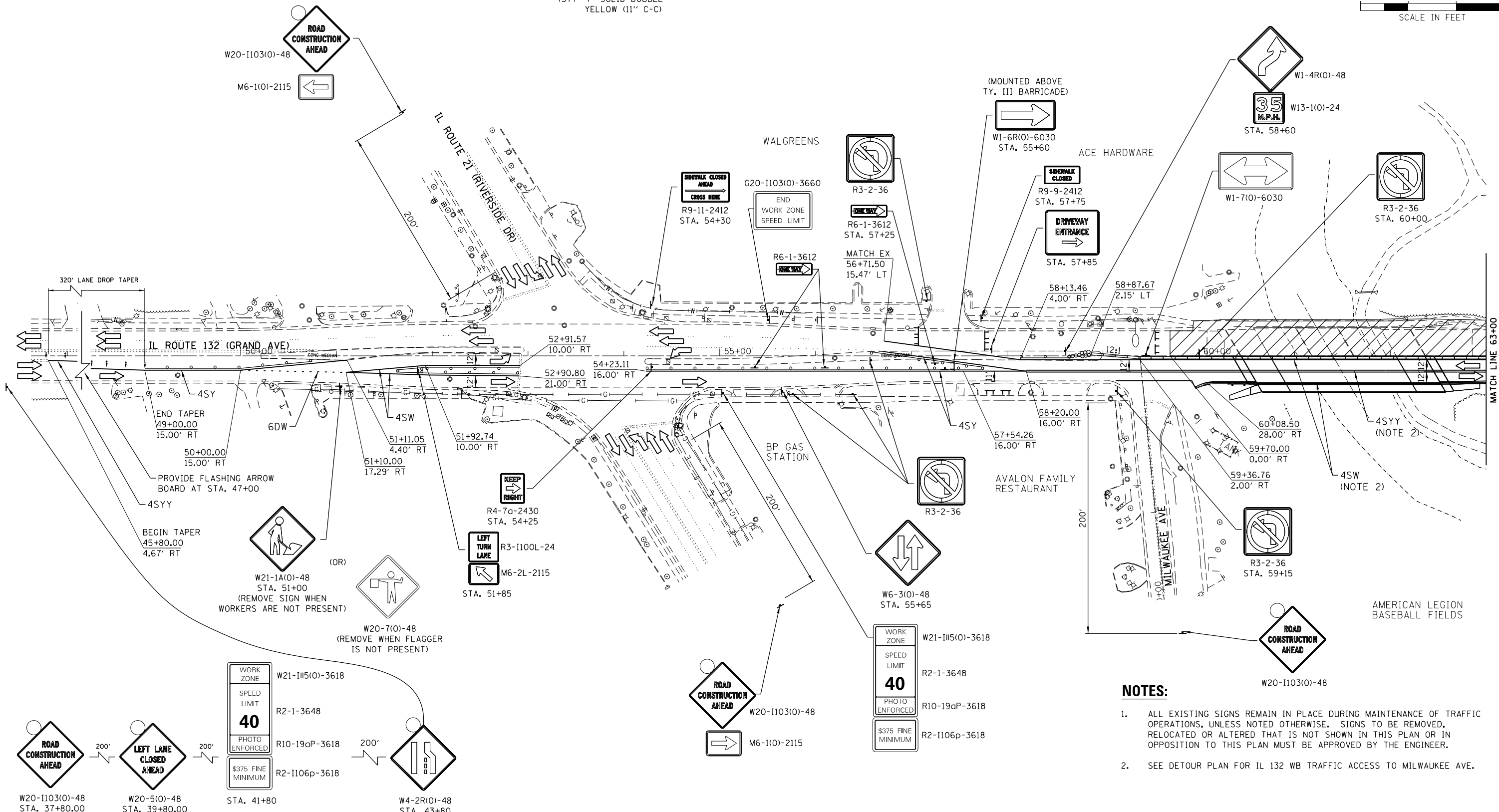
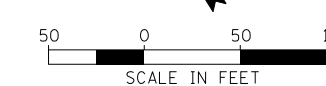
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|---------------------------|-------------------|-------------|-----------------|--------------|
| F.A.P. RTE. 541 | SECTION X-6-B-1-1 | COUNTY LAKE | TOTAL SHEETS 93 | SHEET NO. 23 |
| CONTRACT NO. 60N22 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

PAVEMENT MARKING LEGEND

| | | | |
|------|--|-----|--|
| (E) | EXISTING PAVEMENT MARKING | 4SW | 4" SOLID WHITE |
| (T) | TEMPORARY PAVEMENT MARKING FROM PREVIOUS STAGE TO REMAIN | 4SY | 4" SOLID YELLOW |
| LSW | LETTERS AND SYMBOLS, WHITE | 6DW | 6" DOTTED WHITE (2' SKIP, 6' DASH) |
| 24SW | 24" SOLID WHITE STOP BAR | 4KY | 4" SKIP-DASH YELLOW (30' SKIP, 10' DASH) |
| | | 4SY | 4" SOLID DOUBLE YELLOW (11" C-C) |

LEGEND

| | | | |
|--|--------------------------------|--|--|
| | PROPOSED PAVEMENT CONSTRUCTION | | BARRICADE, TYPE III |
| | DIRECTION OF TRAFFIC | | FLASHING ARROW BOARD |
| | TEMPORARY CONCRETE BARRIER | | IMPACT ATTENUATORS (NON-REDIRECTIVE), TEST LEVEL 2 (SEE IDOT STD 643001) |
| | | | DRUMS @ 25' CENTERS (UNLESS NOTED OTHERWISE) WITH STEADY BURNING WARNING LIGHTS |
| | | | DIRECTIONAL INDICATOR BARRICADES W/ STEADY BURNING MONO-DIRECTIONAL LIGHTS @ 20' CENTERS |



- NOTES:**
- ALL EXISTING SIGNS REMAIN IN PLACE DURING MAINTENANCE OF TRAFFIC OPERATIONS, UNLESS NOTED OTHERWISE. SIGNS TO BE REMOVED, RELOCATED OR ALTERED THAT IS NOT SHOWN IN THIS PLAN OR IN OPPOSITION TO THIS PLAN MUST BE APPROVED BY THE ENGINEER.
 - SEE DETOUR PLAN FOR IL 132 WB TRAFFIC ACCESS TO MILWAUKEE AVE.

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| | | |
|-----------------------|-----------------|-----------|
| USER NAME = JPS | DESIGNED - HTL | REVISED - |
| PLOT SCALE = | DRAWN - HTL | REVISED - |
| PLOT DATE = 9/25/2013 | CHECKED - DPA | REVISED - |
| | DATE - 09/25/13 | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL 132 (GRAND AVE.) OVER DES PLAINES RIVER
MAINTENANCE OF TRAFFIC - STAGE 2**

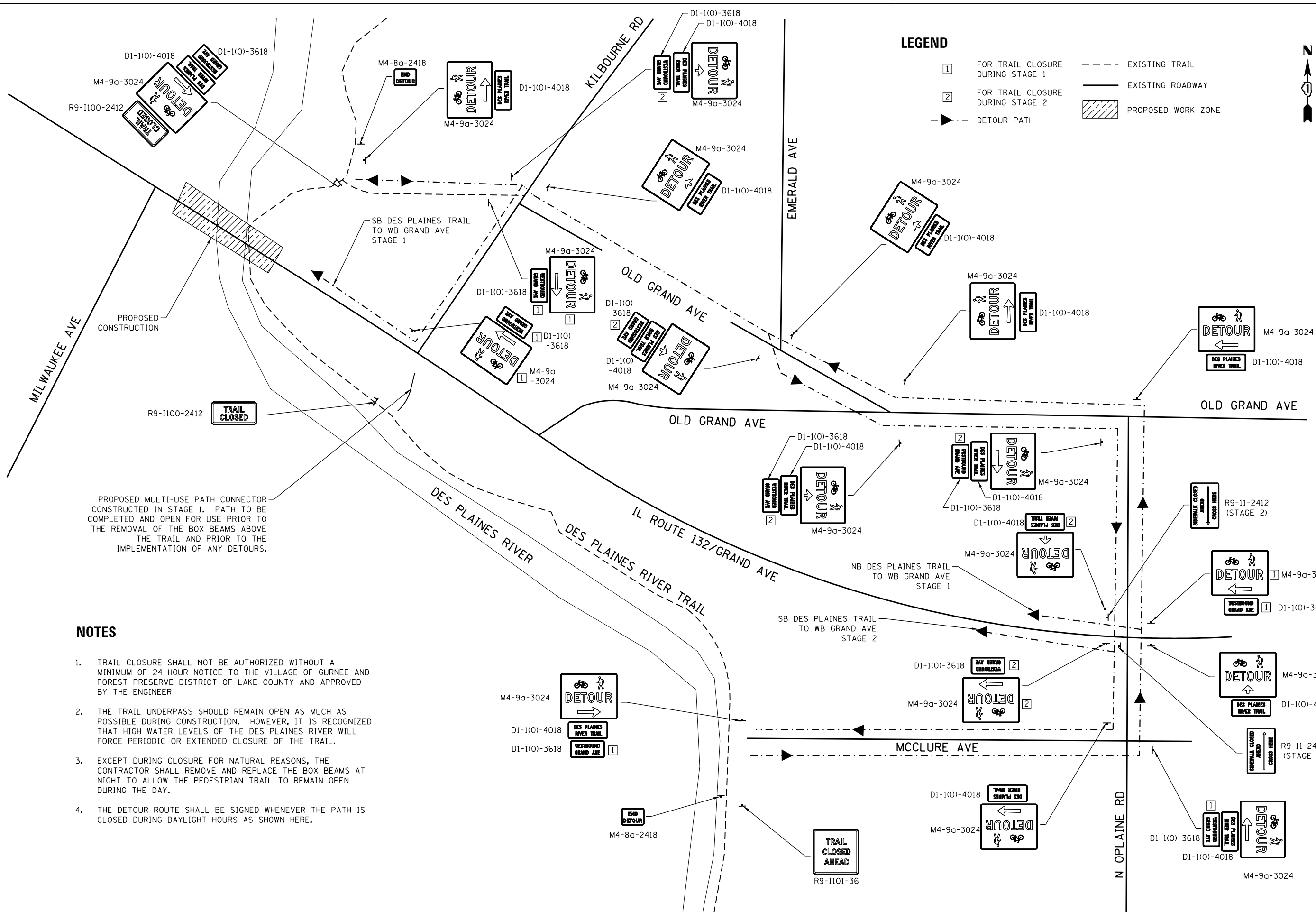
SCALE: 1"=50' SHEET NO. 3 OF 4 SHEETS STA. 49+00 TO STA. 63+00

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-----------|--------|--------------|-----------|
| 541 | X-6-B-1-1 | LAKE | 93 | 24 |
| CONTRACT NO. 60N22 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



LEGEND

- ① FOR TRAIL CLOSURE DURING STAGE 1
- ② FOR TRAIL CLOSURE DURING STAGE 2
- EXISTING TRAIL
- EXISTING ROADWAY
- ▨ PROPOSED WORK ZONE
- > DETOUR PATH



SB DES PLAINES TRAIL TO WB GRAND AVE STAGE 1

NB DES PLAINES TRAIL TO WB GRAND AVE STAGE 1

SB DES PLAINES TRAIL TO WB GRAND AVE STAGE 2

PROPOSED MULTI-USE PATH CONNECTOR CONSTRUCTED IN STAGE 1. PATH TO BE COMPLETED AND OPEN FOR USE PRIOR TO THE REMOVAL OF THE BOX BEAMS ABOVE THE TRAIL AND PRIOR TO THE IMPLEMENTATION OF ANY DETOURS.

NOTES

1. TRAIL CLOSURE SHALL NOT BE AUTHORIZED WITHOUT A MINIMUM OF 24 HOUR NOTICE TO THE VILLAGE OF GURNEE AND FOREST PRESERVE DISTRICT OF LAKE COUNTY AND APPROVED BY THE ENGINEER
2. THE TRAIL UNDERPASS SHOULD REMAIN OPEN AS MUCH AS POSSIBLE DURING CONSTRUCTION. HOWEVER, IT IS RECOGNIZED THAT HIGH WATER LEVELS OF THE DES PLAINES RIVER WILL FORCE PERIODIC OR EXTENDED CLOSURE OF THE TRAIL.
3. EXCEPT DURING CLOSURE FOR NATURAL REASONS, THE CONTRACTOR SHALL REMOVE AND REPLACE THE BOX BEAMS AT NIGHT TO ALLOW THE PEDESTRIAN TRAIL TO REMAIN OPEN DURING THE DAY.
4. THE DETOUR ROUTE SHALL BE SIGNED WHENEVER THE PATH IS CLOSED DURING DAYLIGHT HOURS AS SHOWN HERE.

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| | | |
|----------------------|-----------------|-----------|
| USER NAME = Kjeac | DESIGNED - HTL | REVISED - |
| PLOT SCALE = | DRAWN - HTL | REVISED - |
| PLOT DATE = 9/3/2013 | CHECKED - DPA | REVISED - |
| | DATE - 09/03/13 | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

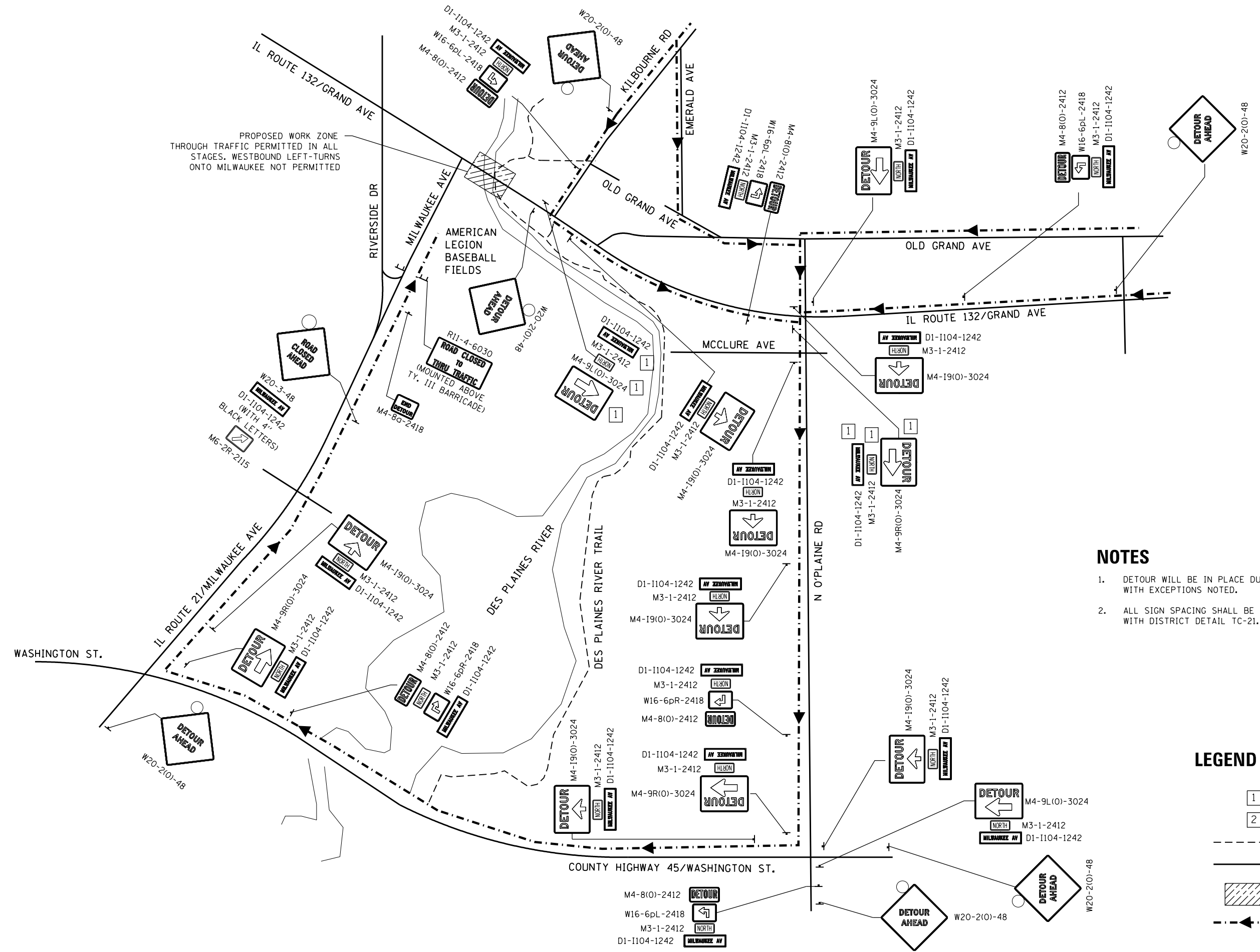
**IL 132 (GRAND AVE.) OVER DES PLAINES RIVER
MAINTENANCE OF TRAFFIC - DES PLAINES RIVER TRAIL DETOUR**

SCALE: NTS SHEET NO. 1 OF 1 SHEETS STA. N/A TO STA. N/A

| | | | | |
|---------------------------|-------------------|-------------|-----------------|--------------|
| F.A.P. RTE. 541 | SECTION X-6-B-1-1 | COUNTY LAKE | TOTAL SHEETS 93 | SHEET NO. 26 |
| CONTRACT NO. 60N22 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



PROPOSED WORK ZONE THROUGH TRAFFIC PERMITTED IN ALL STAGES. WESTBOUND LEFT-TURNS ONTO MILWAUKEE NOT PERMITTED



NOTES

1. DETOUR WILL BE IN PLACE DURING STAGE 1 AND STAGE 2, WITH EXCEPTIONS NOTED.
2. ALL SIGN SPACING SHALL BE IN ACCORDANCE WITH DISTRICT DETAIL TC-21.

LEGEND

- 1 STAGE 1 ONLY
- 2 STAGE 2 ONLY
- - - - EXISTING TRAIL
- EXISTING ROADWAY
- ▨ PROPOSED WORK ZONE
- - - -> DETOUR ROUTE

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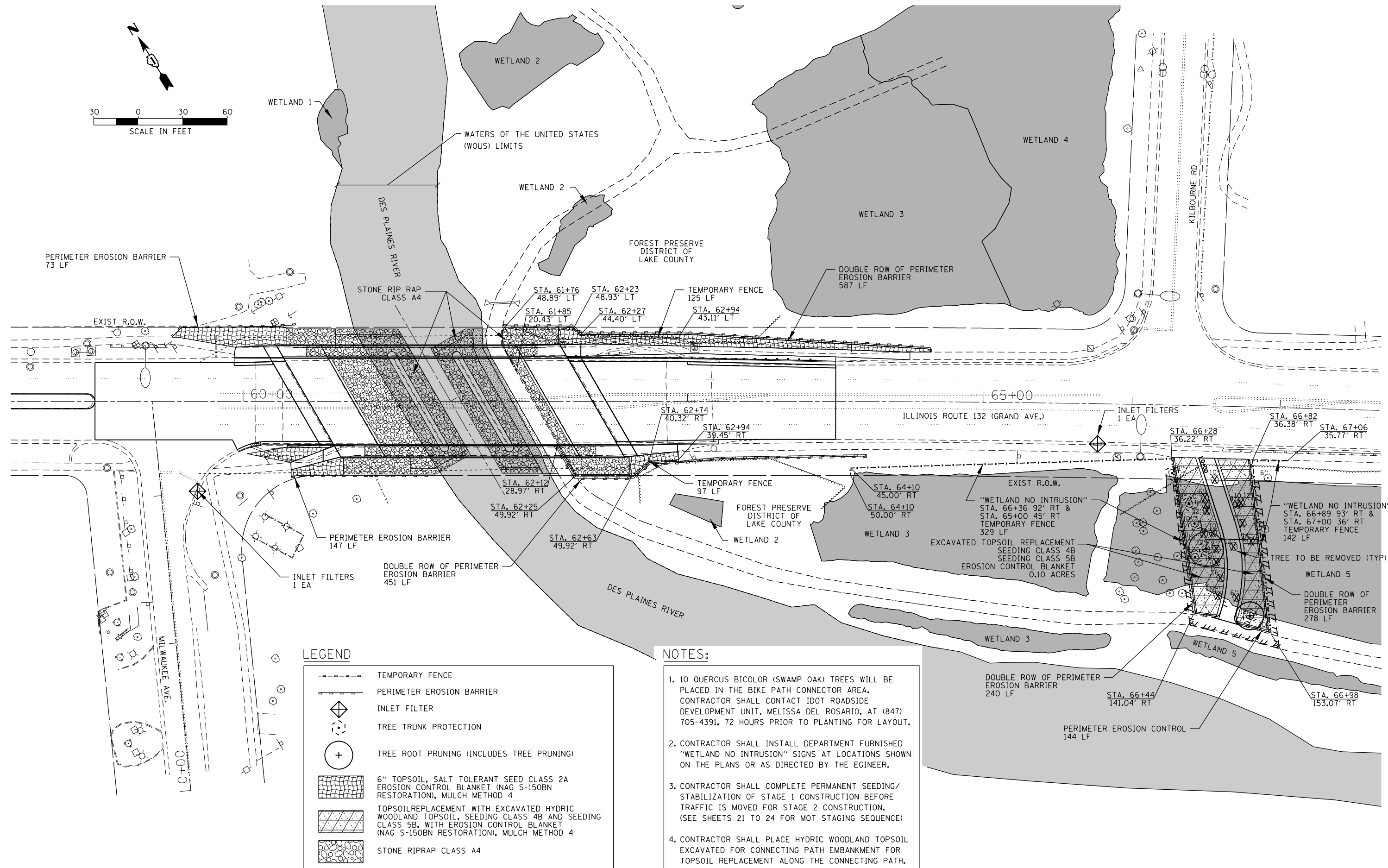
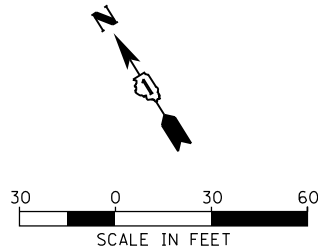
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|---------------------|-----------------|-----------|
| USER NAME = JPS | DESIGNED - HTL | REVISED - |
| | DRAWN - HTL | REVISED - |
| PLOT SCALE = | CHECKED - DPA | REVISED - |
| PLOT DATE = 9/25/13 | DATE - 09/25/13 | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL 132 (GRAND AVE.) OVER DES PLAINES RIVER
MAINTENANCE OF TRAFFIC – MILWAUKEE AVE DETOUR**

SCALE: N/A SHEET NO. 2 OF 2 SHEETS STA. TO STA.

| | | | | |
|---------------------------|-------------------|-------------|-----------------|--------------|
| F.A.P. RTE. 541 | SECTION X-6-B-1-1 | COUNTY LAKE | TOTAL SHEETS 93 | SHEET NO. 27 |
| CONTRACT NO. 60N22 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



LEGEND

| | |
|--|---|
| | TEMPORARY FENCE |
| | PERIMETER EROSION BARRIER |
| | INLET FILTER |
| | TREE TRUNK PROTECTION |
| | TREE ROOT PRUNING (INCLUDES TREE PRUNING) |
| | 6" TOPSOIL, SALT TOLERANT SEED CLASS 2A EROSION CONTROL BLANKET (NAG S-150BN RESTORATION), MULCH METHOD 4 |
| | TOPSOIL REPLACEMENT WITH EXCAVATED HYDRIC WOODLAND TOPSOIL, SEEDING CLASS 4B AND SEEDING CLASS 5B, WITH EROSION CONTROL BLANKET (NAG S-150BN RESTORATION), MULCH METHOD 4 |
| | STONE RIPRAP CLASS A4 |

- NOTES:**
- 10 QUERCUS BICOLOR (SWAMP OAK) TREES WILL BE PLACED IN THE BIKE PATH CONNECTOR AREA. CONTRACTOR SHALL CONTACT IDOT ROADSIDE DEVELOPMENT UNIT, MELISSA DEL ROSARIO, AT (847) 705-4391, 72 HOURS PRIOR TO PLANTING FOR LAYOUT.
 - CONTRACTOR SHALL INSTALL DEPARTMENT FURNISHED "WETLAND NO INTRUSION" SIGNS AT LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
 - CONTRACTOR SHALL COMPLETE PERMANENT SEEDING/STABILIZATION OF STAGE 1 CONSTRUCTION BEFORE TRAFFIC IS MOVED FOR STAGE 2 CONSTRUCTION. (SEE SHEETS 21 TO 24 FOR MOT STAGING SEQUENCE)
 - CONTRACTOR SHALL PLACE HYDRIC WOODLAND TOPSOIL EXCAVATED FOR CONNECTING PATH EMBANKMENT FOR TOPSOIL REPLACEMENT ALONG THE CONNECTING PATH.

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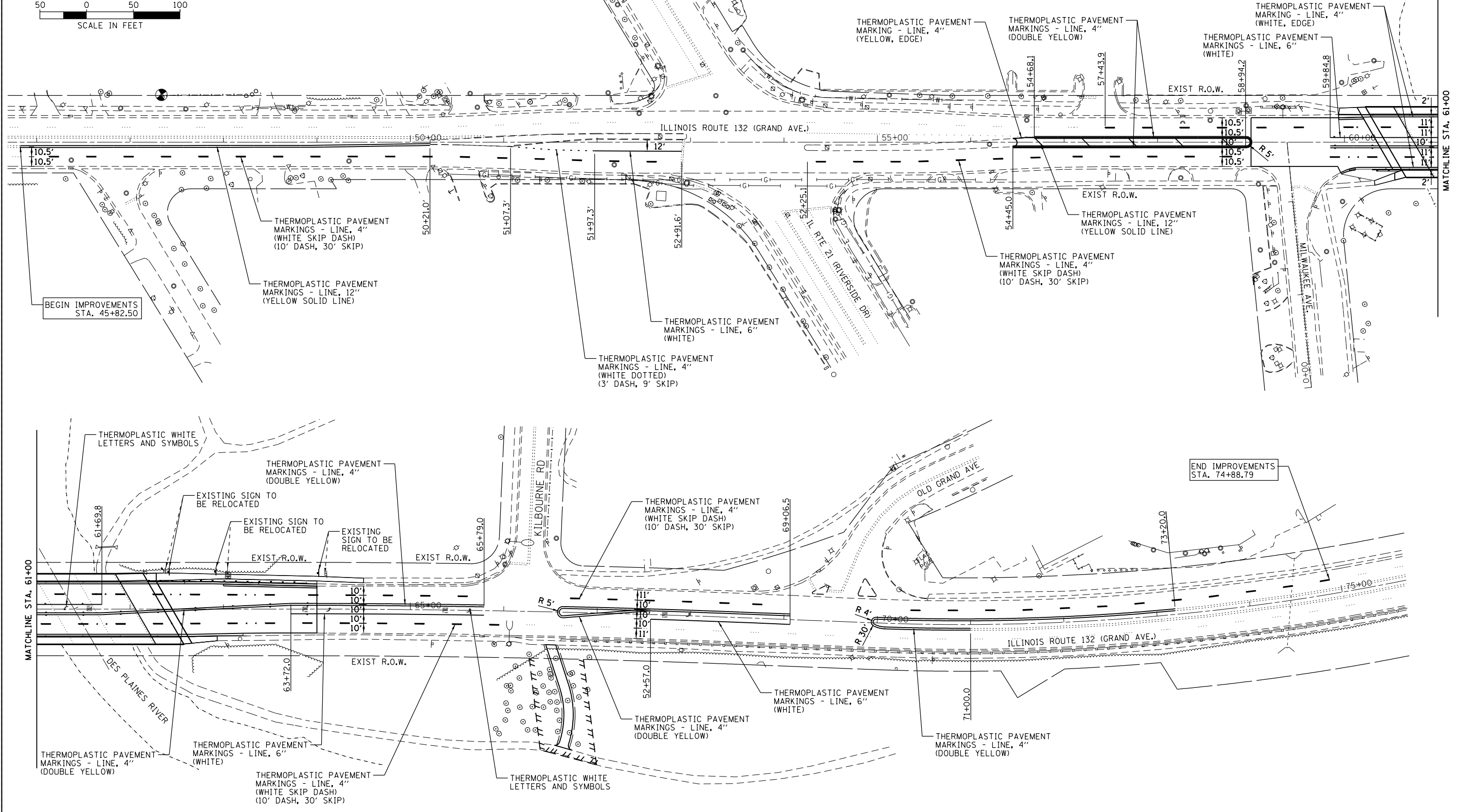
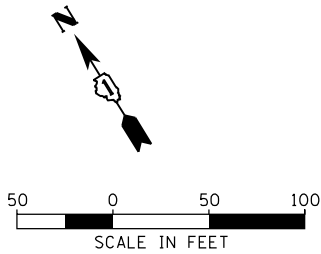
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|-----------------------|-----------------|-----------|
| USER NAME = JPS | DESIGNED - BCB | REVISED - |
| | DRAWN - BCB | REVISED - |
| PLOT SCALE = | CHECKED - DPA | REVISED - |
| PLOT DATE = 9/25/2013 | DATE - 09/25/13 | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL 132 (GRAND AVE.) OVER DES PLAINES RIVER
LANDSCAPE, EROSION AND SEDIMENT CONTROL PLAN**

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

| | | | | |
|---------------------------|-------------------|-------------|-----------------|--------------|
| F.A.P. RTE. 541 | SECTION X-6-B-1-1 | COUNTY LAKE | TOTAL SHEETS 93 | SHEET NO. 28 |
| CONTRACT NO. 60N22 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



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| | | |
|----------------------|-----------------|-----------|
| USER NAME = KyleC | DESIGNED - BCB | REVISED - |
| PLOT SCALE = | DRAWN - BCB | REVISED - |
| PLOT DATE = 9/3/2013 | CHECKED - DPA | REVISED - |
| | DATE - 09/03/13 | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL 132 (GRAND AVE.) OVER DES PLAINES RIVER
PAVEMENT MARKING & SIGNING PLAN**

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

| | | | | |
|---------------------------|-------------------|-------------|-----------------|--------------|
| F.A.P. RTE. 541 | SECTION X-6-B-1-1 | COUNTY LAKE | TOTAL SHEETS 93 | SHEET NO. 29 |
| CONTRACT NO. 60N22 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

SUMMARY OF TRAFFIC SIGNAL QUANTITIES

| CODE | PAY ITEM | UNIT | QUANTITY | IL 132 @ RIVERSIDE DR | IL 132 @ O'PLAINE RD | INTERCONNECT |
|----------|---|-------|----------|-----------------------|----------------------|--------------|
| 81028200 | UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA. | FOOT | 335 | | | 335 |
| 81300830 | JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 18" X 18" X 8" | EACH | 2 | | | 2 |
| 81400100 | HANDHOLE | EACH | 3 | 1 | | 2 |
| 85000200 | MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION | EACH | 2 | 1 | 1 | |
| 87300925 | ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C | FOOT | 3630 | | | 3630 |
| 87301305 | ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR | FOOT | 24 | 24 | | |
| 88600100 | DETECTOR LOOP, TYPE I | FOOT | 66 | 66 | | 2 |
| 89502380 | REMOVE EXISTING HANDHOLE | EACH | 3 | 1 | | 1 |
| X0325938 | TEMPORARY WIRELESS INTERCONNECT, COMPLETE | L SUM | 1 | | | 3630 |
| X8710040 | FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM24F SM12F | FOOT | 3630 | | | |
| Z0073510 | TEMPORARY TRAFFIC SIGNAL TIMING | EACH | 2 | 1 | 1 | |
| | CONDUIT ATTACHED TO STRUCTURE, 2" DIA. RIGID GALVANIZED STEEL, PVC COATED | FOOT | 150 | | | 150 |

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| | | |
|------------------------|-----------------|-----------|
| USER NAME = JPS | DESIGNED - KC | REVISED - |
| | DRAWN - KC | REVISED - |
| PLOT SCALE = | CHECKED - MCH | REVISED - |
| PLOT DATE = 12/19/2013 | DATE - 12/17/13 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 132 (GRAND AVE.) OVER DES PLAINES RIVER
SUMMARY OF TRAFFIC SIGNAL QUANTITIES

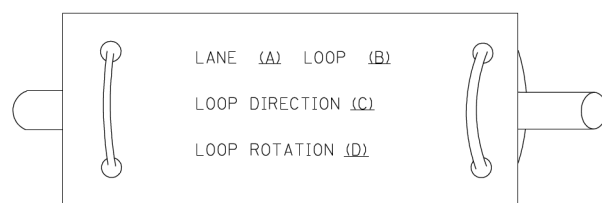
SCALE: SHEET NO. OF SHEETS STA. TO STA.

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|-----------|--------|---------------------------|-----------|
| 541 | X-6-B-1-1 | LAKE | 93 | 30 |
| CONTRACT NO. 60N22 | | | ILLINOIS FED. AID PROJECT | |

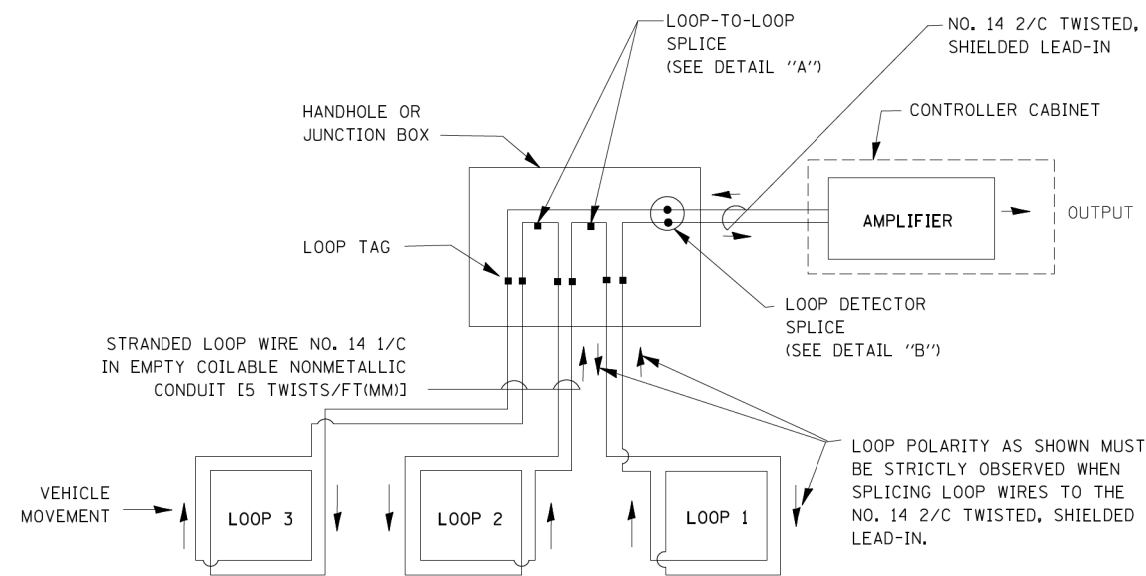
LOOP DETECTOR NOTES

- EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
- THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
- EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
- ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
- IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
- LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
- PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

LOOP LEAD-IN CABLE TAG

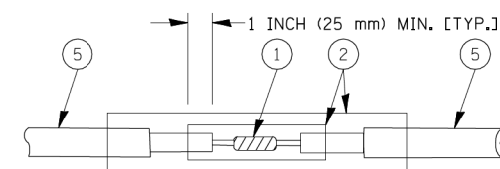


- LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

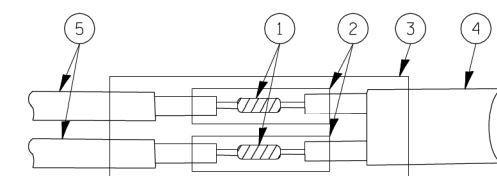


DETECTOR LOOP WIRING SCHEMATIC

- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE, THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.

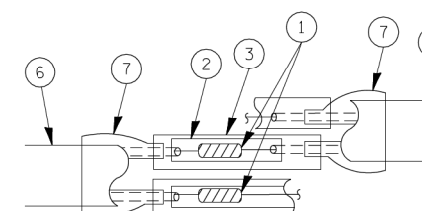


DETAIL "A"
LOOP-TO-LOOP SPLICE

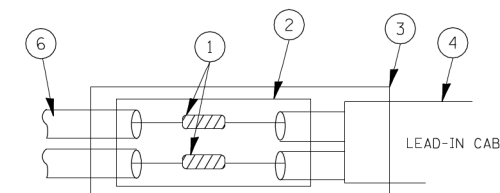


DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

LOOP DETECTOR SPLICE

- WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.
- WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGTH 6" (150 mm), UNDERWATER GRADE.
- NO. 14 2/C TWISTED, SHIELDED CABLE.
- LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- PREFORMED LOOP
- XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS, TYCO CBR-2 OR APPROVED EQUAL

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

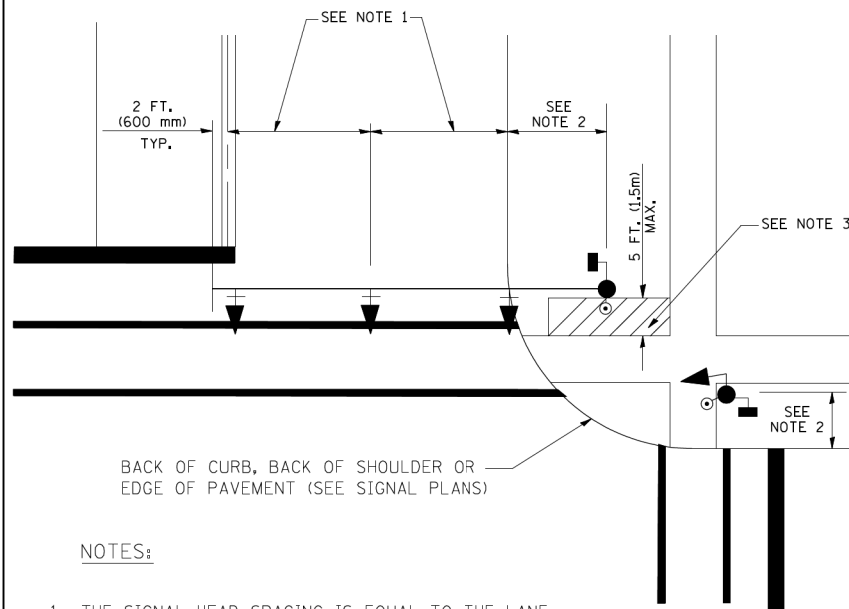
DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE SHEET NO. 1 OF 6 SHEETS STA. TO STA.

| | | | | |
|---|-----------|--------------------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 541 | X-6-B-1-1 | LAKE | 93 | 31 |
| TS-05 | | CONTRACT NO. 60N22 | | |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | | |

TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

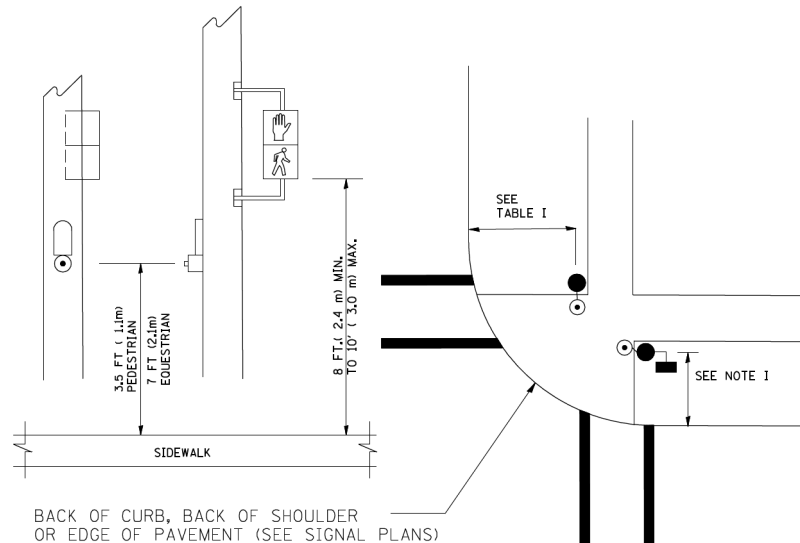
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



NOTES:

1. THE SIGNAL HEAD SPACING IS EQUAL TO THE LANE WIDTH OR AS SHOWN ON THE TRAFFIC SIGNAL PLAN.
2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
5. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

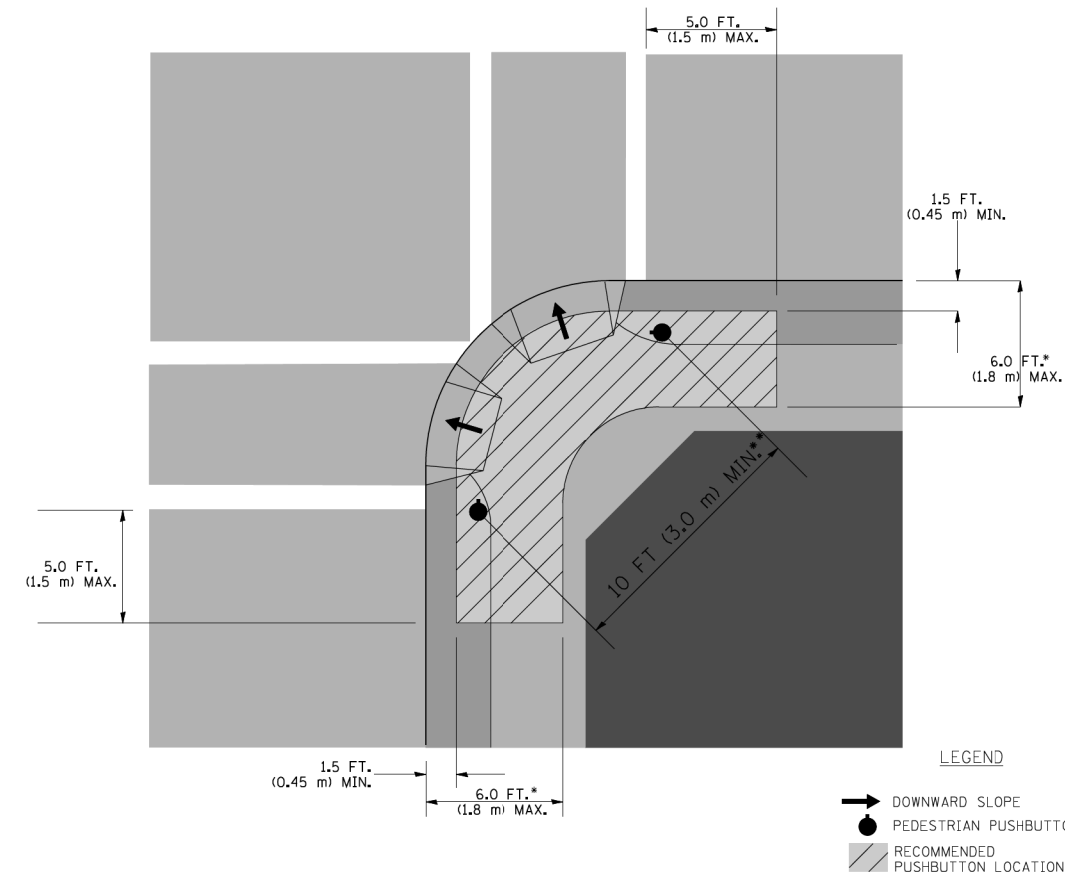
PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



NOTES:

1. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
2. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE PEDESTRIAN SIGNAL POST OR THE PEDESTRIAN PUSH BUTTON POST.
3. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
4. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

RECOMMENDED PUSHBUTTON LOCATIONS



- * WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT (1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
- ** WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPERATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

NOTES:

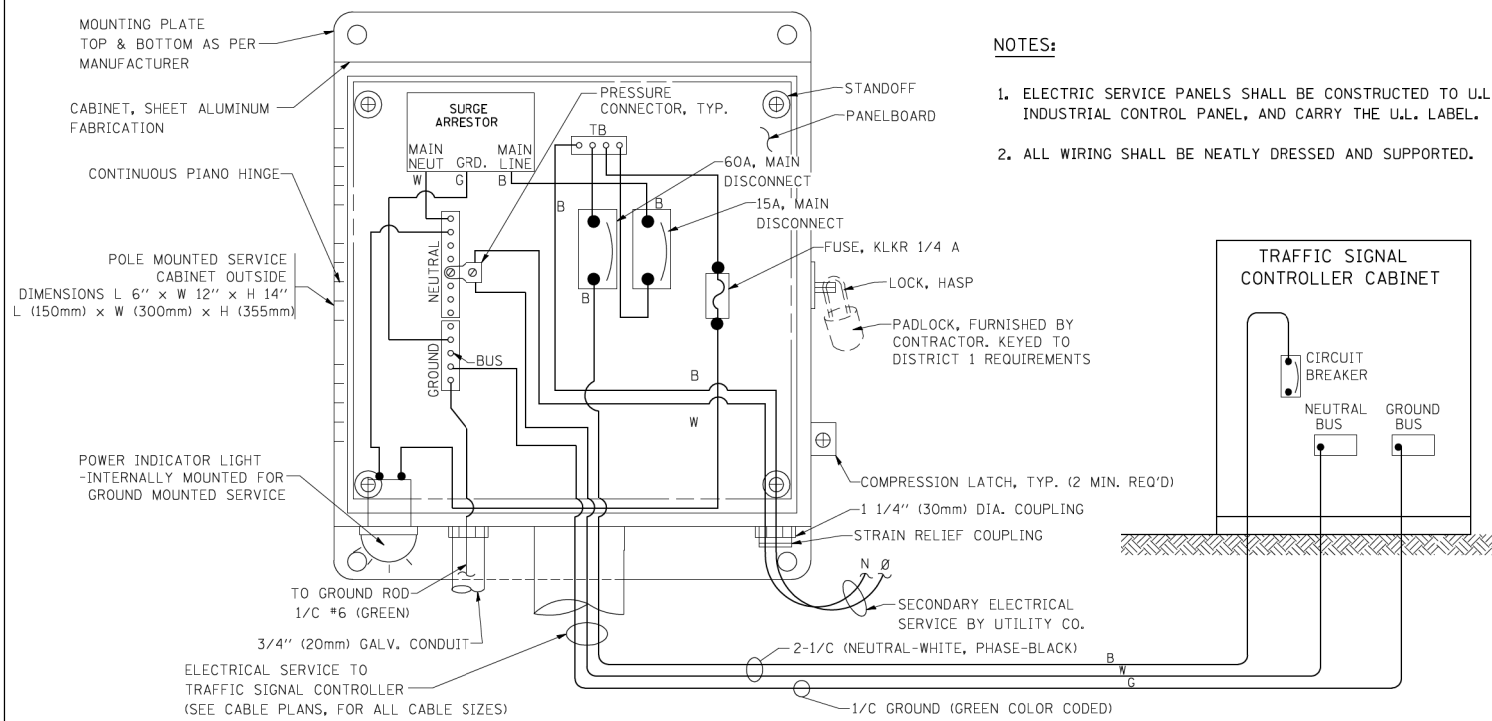
1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.
3. THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5.0 m) AND A MAXIMUM OF 18 FT. (5.5 m) FROM THE HIGHEST POINT OF PAVEMENT.
4. THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT.
5. THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAVEMENT.

TRAFFIC SIGNAL EQUIPMENT OFFSET

| TRAFFIC SIGNAL EQUIPMENT | COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION) | SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION) |
|------------------------------------|---|---|
| TRAFFIC SIGNAL MAST ARM POLE | 6 FT (1.8m) | SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m) |
| TRAFFIC SIGNAL POST | 4 FT (1.2m) | SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m) |
| PEDESTRIAN SIGNAL POST | 4 FT (1.2m) | SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m) |
| PEDESTRIAN PUSHBUTTON POST | 4 FT (1.2m) | SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m) |
| TEMPORARY WOOD POLE | 6 FT (1.8m) | SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m) |
| CONTROLLER CABINET | 6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2 | SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3. |
| SERVICE INSTALLATION, GROUND MOUNT | 6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2 | SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3. |

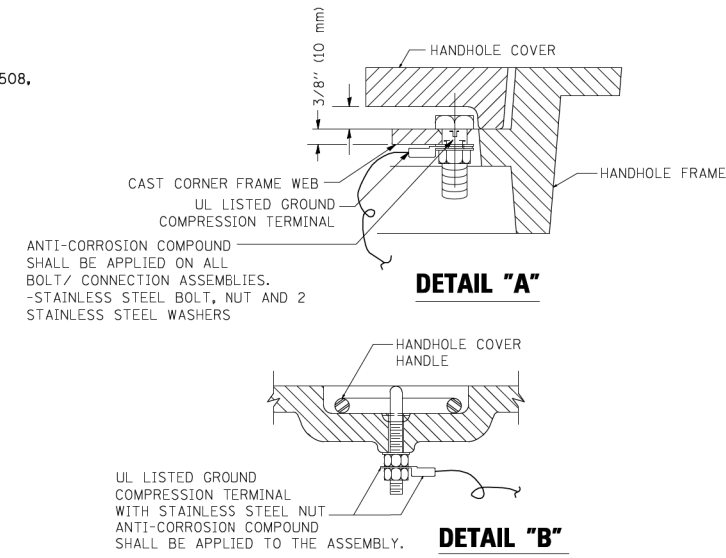
NOTES:

1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TO THE ROADWAY SIDE OF THE FOUNDATION.
4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD EFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.



NOTES:

1. ELECTRIC SERVICE PANELS SHALL BE CONSTRUCTED TO U.L. STD 508, INDUSTRIAL CONTROL PANEL, AND CARRY THE U.L. LABEL.
2. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.



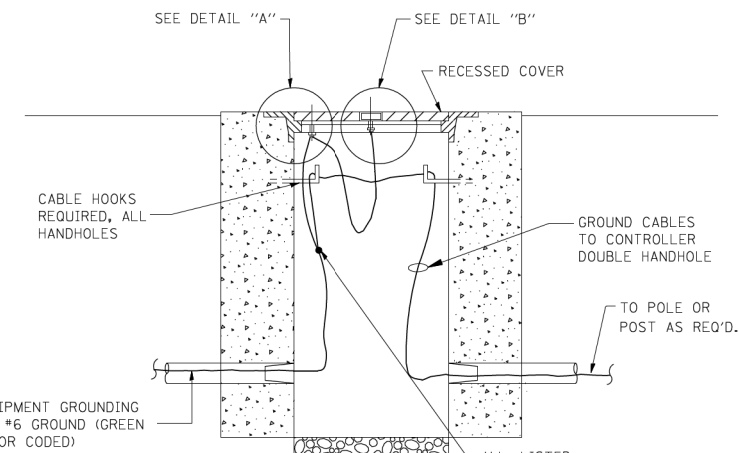
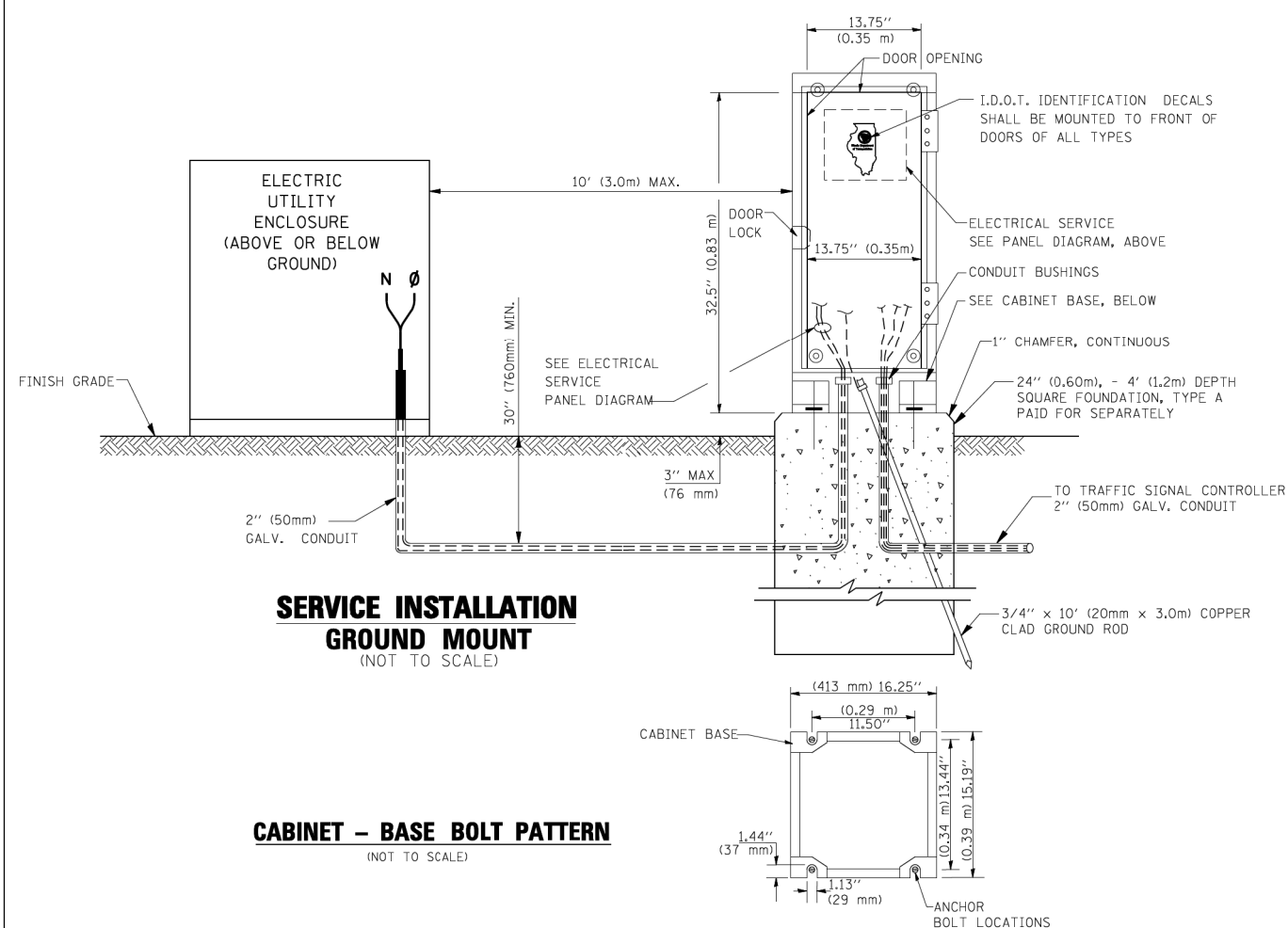
NOTES:

GROUNDING SYSTEM

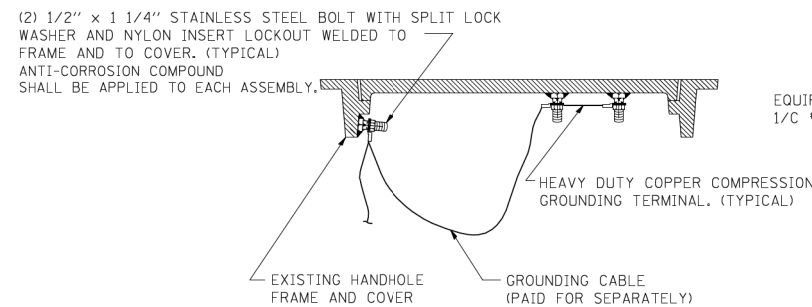
1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
2. THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
3. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.

ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)

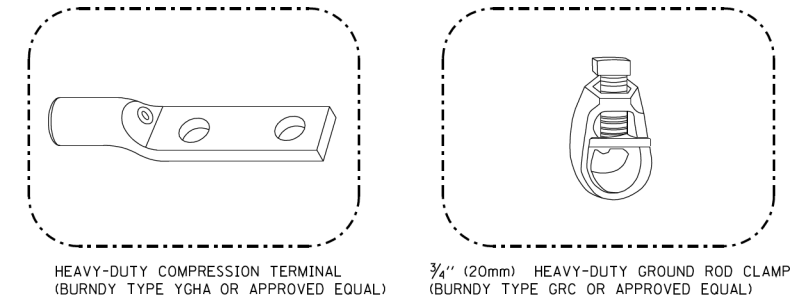
SERVICE INSTALLATION POLE MOUNT (SHOWN) (NOT TO SCALE)



HANDHOLE COVER & FRAME - GROUNDING DETAIL (NOT TO SCALE)

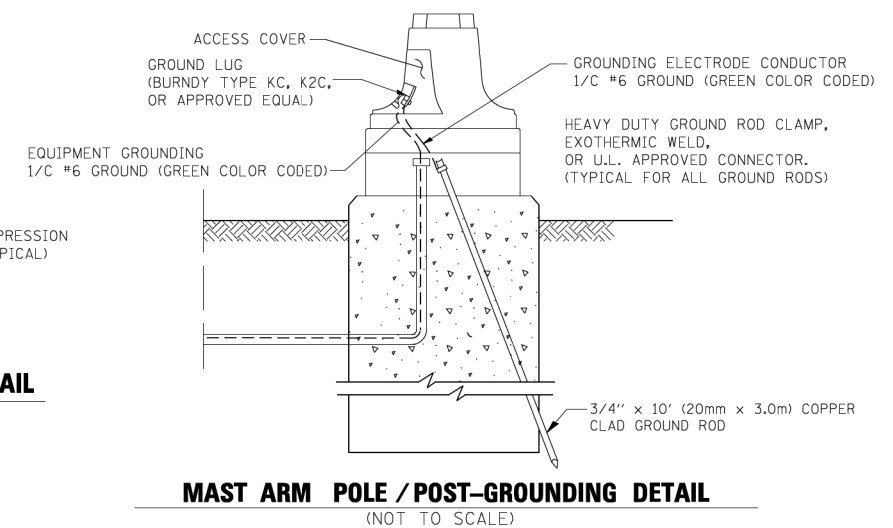


EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL (NOT TO SCALE)



NOTES:

- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
- GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



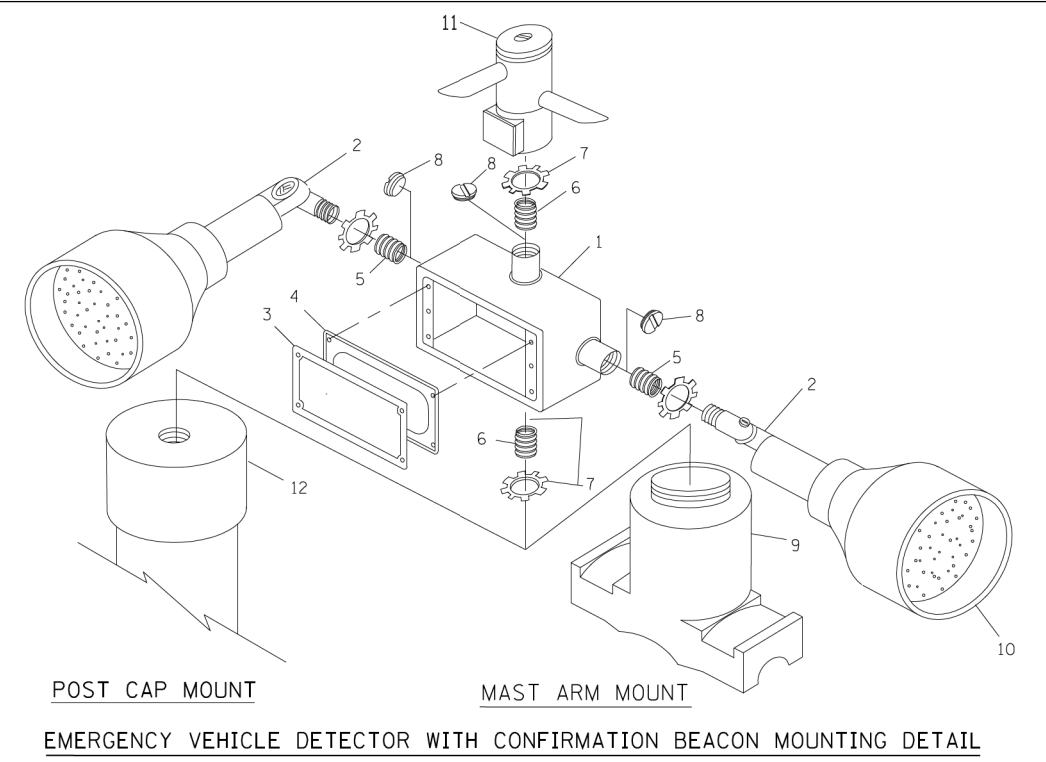
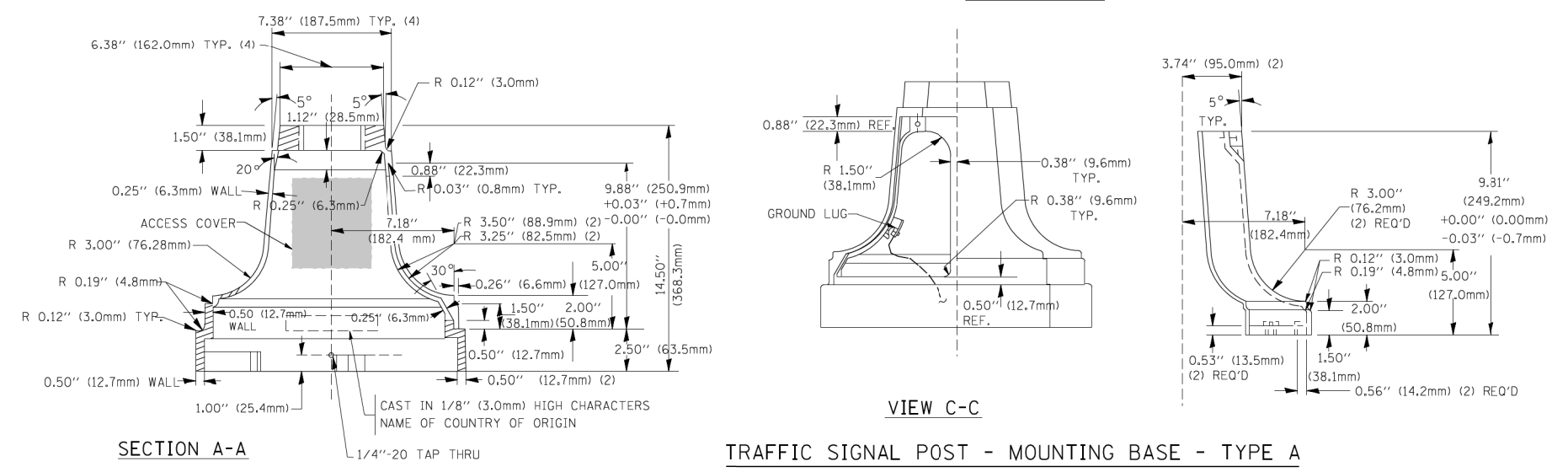
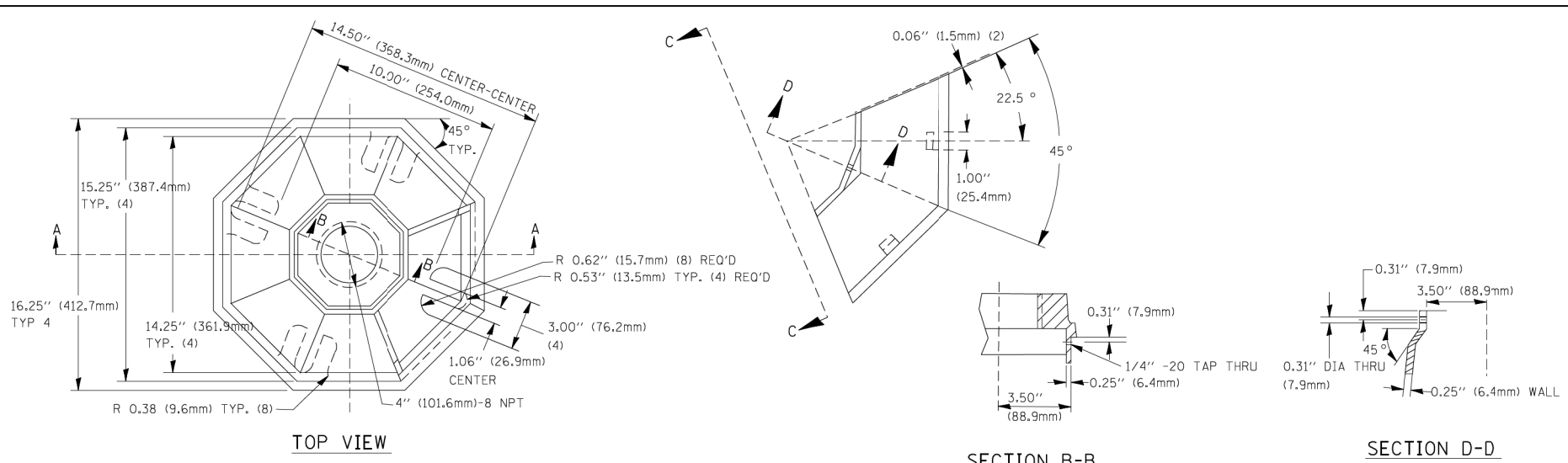
MAST ARM POLE / POST-GROUNDING DETAIL (NOT TO SCALE)

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

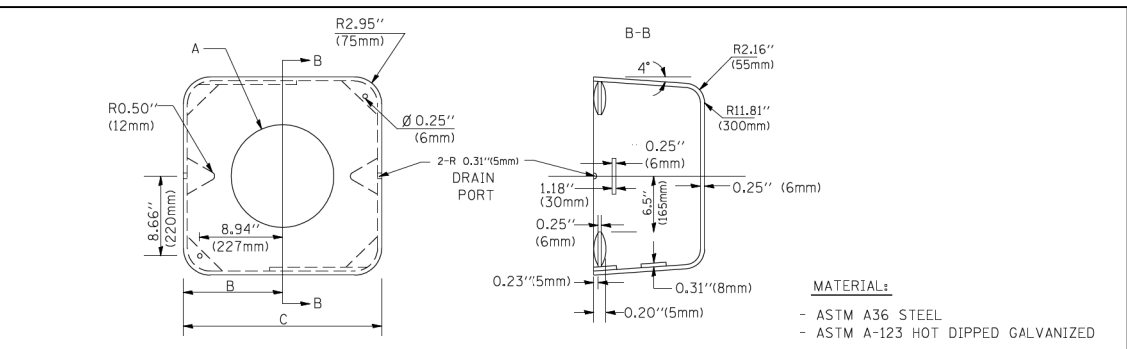
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| DISTRICT ONE | | | |
| STANDARD TRAFFIC SIGNAL DESIGN DETAILS | | | |
| SCALE: NONE | SHEET NO. 3 OF 6 SHEETS | STA. | TO STA. |

| | | | | |
|---|-----------|--------------------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 541 | X-6-B-1-1 | LAKE | 93 | 33 |
| TS-05 | | CONTRACT NO. 60N22 | | |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | | |



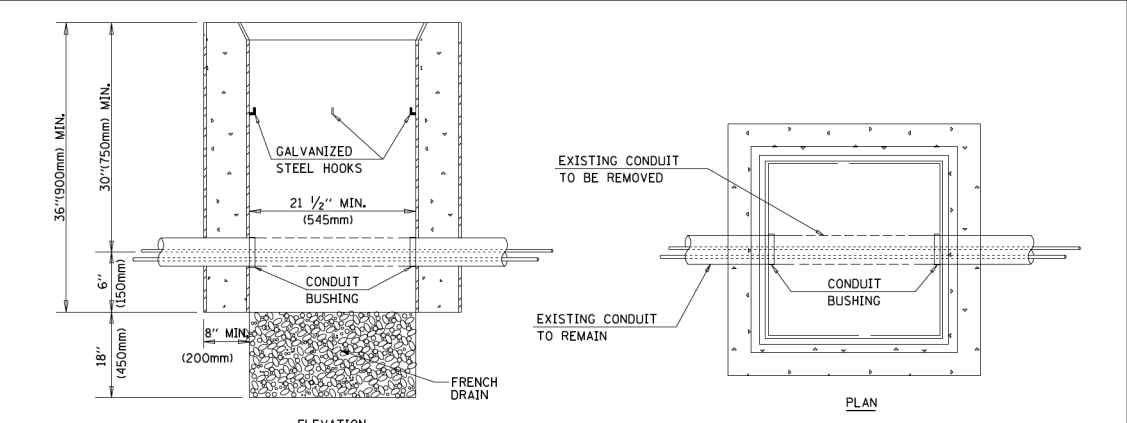
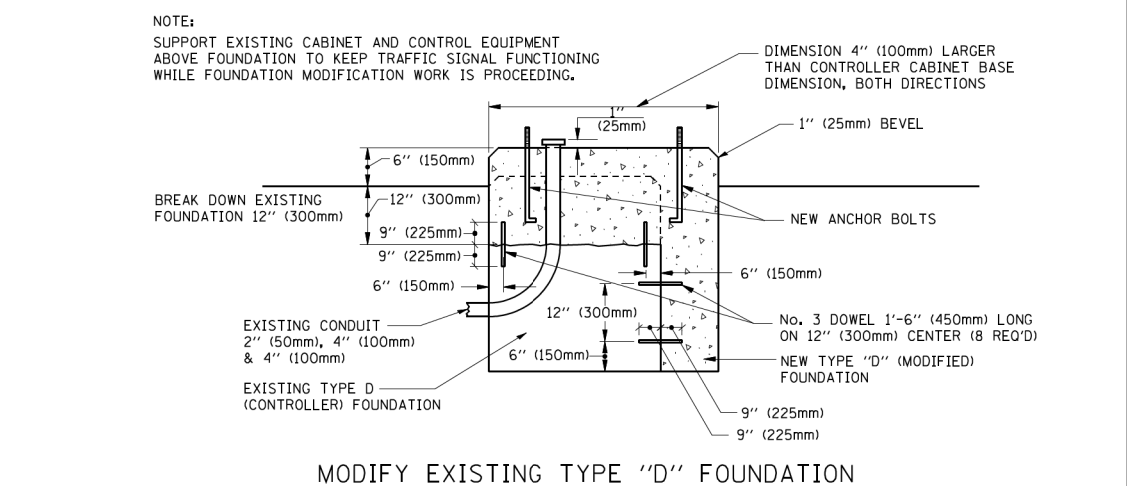
| ITEM NO. | IDENTIFICATION |
|----------|---|
| 1 | OUTLET BOX- GALV. 21 CU.IN. (0.000344 CU-M) |
| 2 | LAMP HOLDER AND COVER |
| 3 | OUTLET BOX COVER |
| 4 | RUBBER COVER GASKET |
| 5 | REDUCING BUSHING |
| 6 | 3/4\"(19 mm) CLOSE NIPPLE |
| 7 | 3/4\"(19 mm) LOCKNUT |
| 8 | 3/4\"(19 mm) HOLE PLUG |
| 9 | SADDLE BRACKET - GALV. |
| 10 | 6 WATT PAR 38 LED FLOOD LAMP |
| 11 | DETECTOR UNIT |
| 12 | POST CAP [18 FT. (5.4 m) POST MIN.] |

- NOTES:**
- ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
 - ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
ITEM #2- MULBERRY CON-0-SHADE LAMP SHIELD OR EQUIVALENT
ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
 - WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4\"(19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.



| A | B | C | HEIGHT | WEIGHT |
|-----------|----------------|---------------|--------------------------|-----------------|
| VARIABLES | 9.5\"(241mm) | 19\"(483mm) | 7\"(178mm) - 12\"(300mm) | 53 lbs (24kg) |
| VARIABLES | 10.75\"(273mm) | 21.5\"(546mm) | 7\"(178mm) - 12\"(300mm) | 68 lbs (31 kg) |
| VARIABLES | 13.0\"(330mm) | 26\"(660mm) | 7\"(178mm) - 12\"(300mm) | 81 lbs (37 kg) |
| VARIABLES | 18.5\"(470mm) | 37\"(940mm) | 7\"(178mm) - 12\"(300mm) | 126 lbs (57 kg) |

- SHROUD**
- NOTES:**
- DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
 - THE SUPPLIER SHALL VERIFY THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
 - THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.



- NOTES:**
- HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
 - REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCIDENTAL TO THE HANDHOLE.

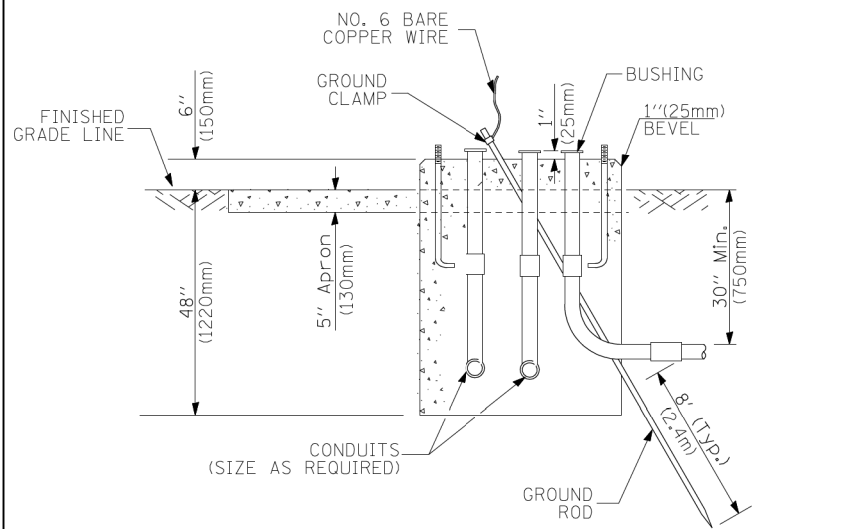
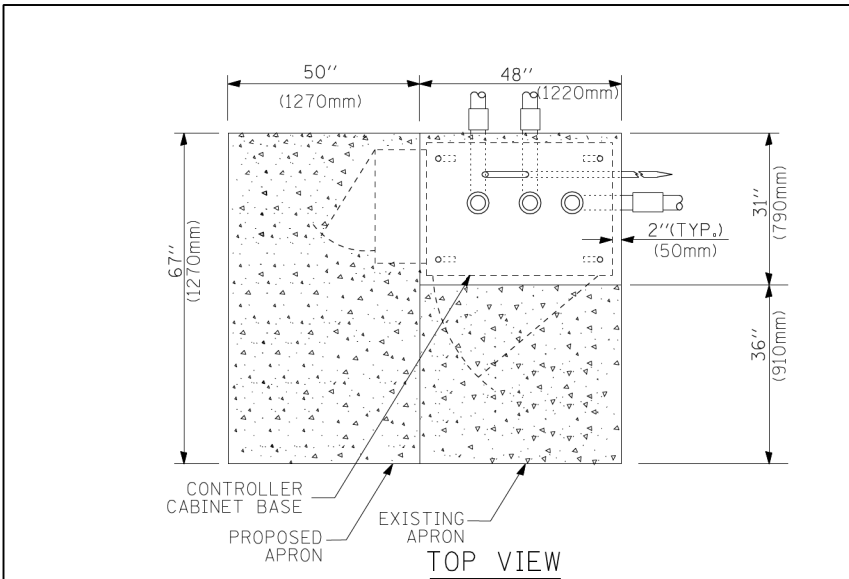
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

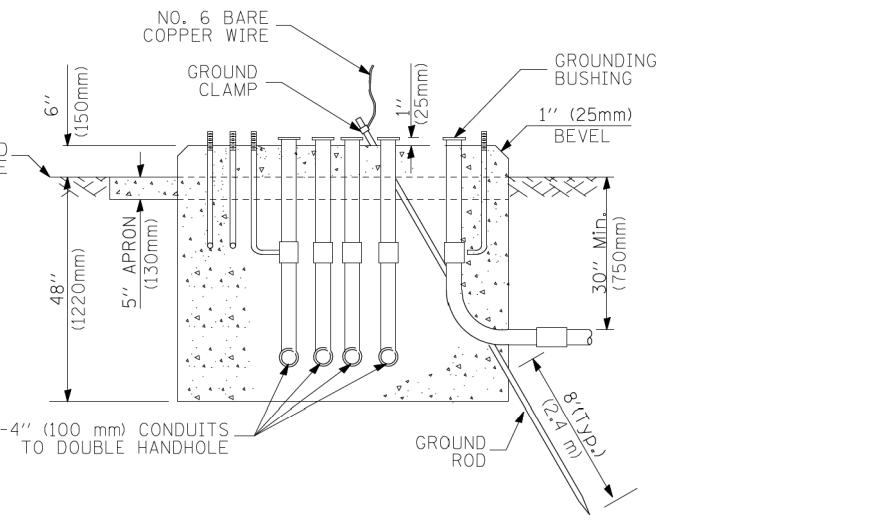
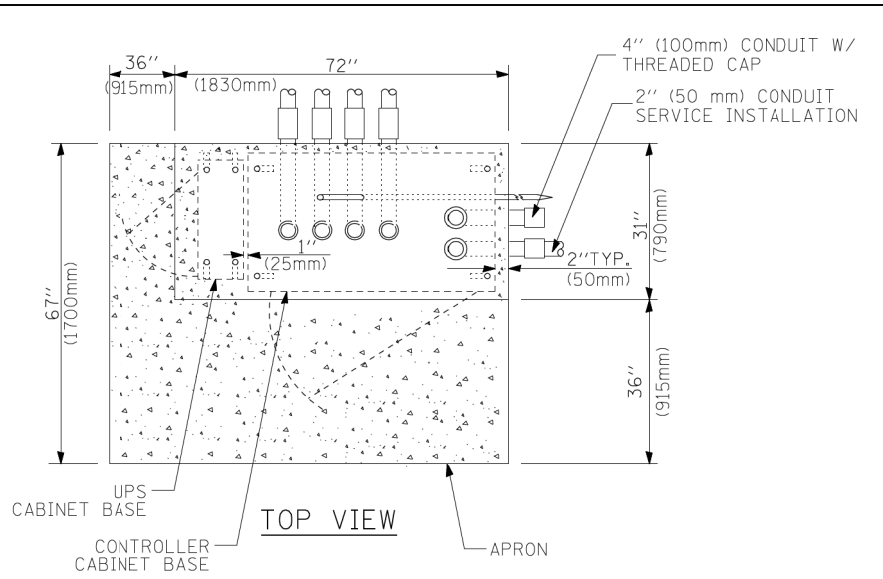
**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: NONE SHEET NO. 4 OF 6 SHEETS STA. TO STA.

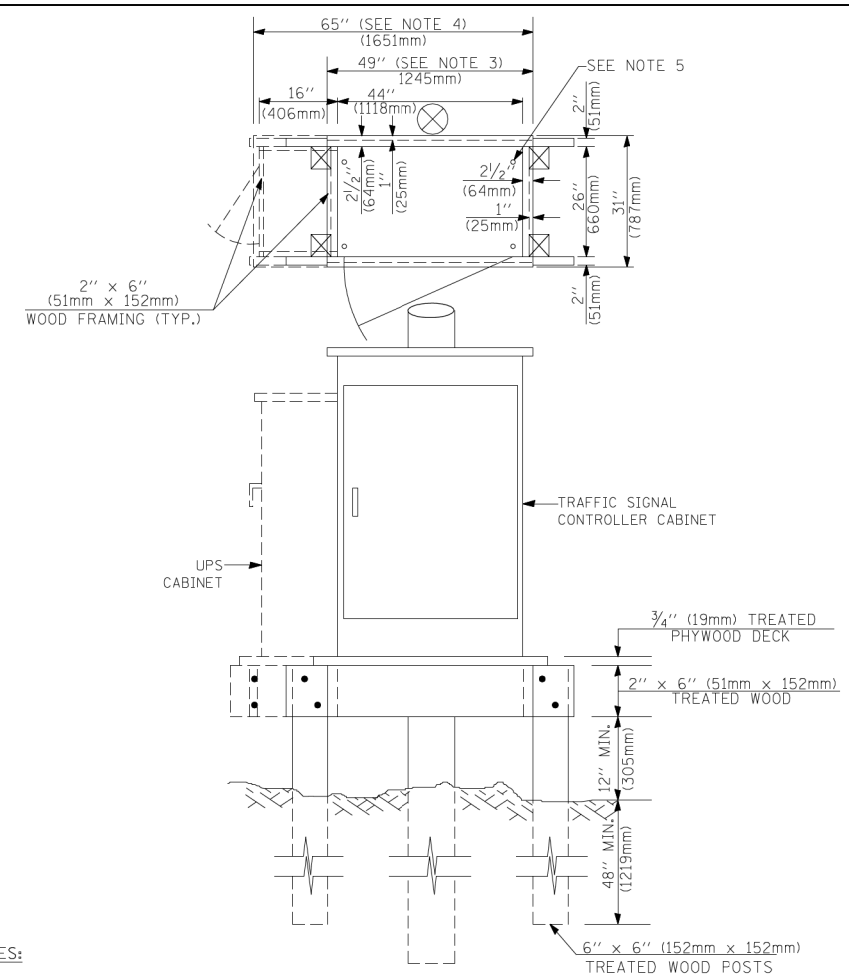
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| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 541 | X-6-B-I-1 | LAKE | 93 | 34 |
| TS-05 | | CONTRACT NO. 60N22 | FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | |



**TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET**



**TYPE C
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET**



- NOTES:**
- BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF 26" x 44" (660mm x 1118mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
 - BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16" x 25" (406mm x 635mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
 - PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
 - PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
 - DRILLED HOLES THROUGH THE PLATFORM BASE TO MATCH THE CONTROLLER CABINET BOLT TEMPLATE. FASTEN THE CONTROLLER CABINET TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS AND NUTS.
 - FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION.

**TEMPORARY SIGNAL CONTROLLER
WOOD SUPPORT PLATFORM**

| CABLE SLACK LENGTH | FEET | METER |
|---|------|-------|
| HANDHOLE | 6.5 | 2.0 |
| DOUBLE HANDHOLE | 13.0 | 4.0 |
| SIGNAL POST | 2.0 | 0.6 |
| MAST ARM | 2.0 | 0.6 |
| CONTROLLER CABINET | 1.5 | 0.5 |
| FIBER OPTIC AT CABINET | 13.0 | 4.0 |
| ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION) | 1.5 | 0.5 |
| GROUND CABLE (SIGNAL POST, MAST ARM, CABINET) | 1.5 | 0.5 |
| GROUND CABLE (BETWEEN FRAME AND COVER) | 5.0 | 1.6 |

CABLE SLACK

| VERTICAL CABLE LENGTH | FEET | METER |
|---|--------|-------|
| MAST ARM POLE (MAST ARM MOUNTED SIGNAL HEAD) (L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM) | 20.0+L | 6.0+L |
| BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE) | 13.0 | 4.0 |
| PEDESTRIAN PUSH BUTTON | 6.0 | 2.0 |
| SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP | 13.5 | 4.1 |
| SERVICE INSTALLATION POLE MOUNT TO GROUND | 13.5 | 4.1 |
| SERVICE INSTALLATION GROUND MOUNT | 6.0 | 2.0 |
| FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT) | 3.0 | 1.0 |

VERTICAL CABLE LENGTH

| FOUNDATION | DEPTH |
|---|--------------|
| TYPE A - Signal Post | 4'-0" (1.2m) |
| TYPE C - CONTROLLER W/ UPS | 4'-0" (1.2m) |
| TYPE D - CONTROLLER | 4'-0" (1.2m) |
| SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE | 4'-0" (1.2m) |

DEPTH OF FOUNDATION

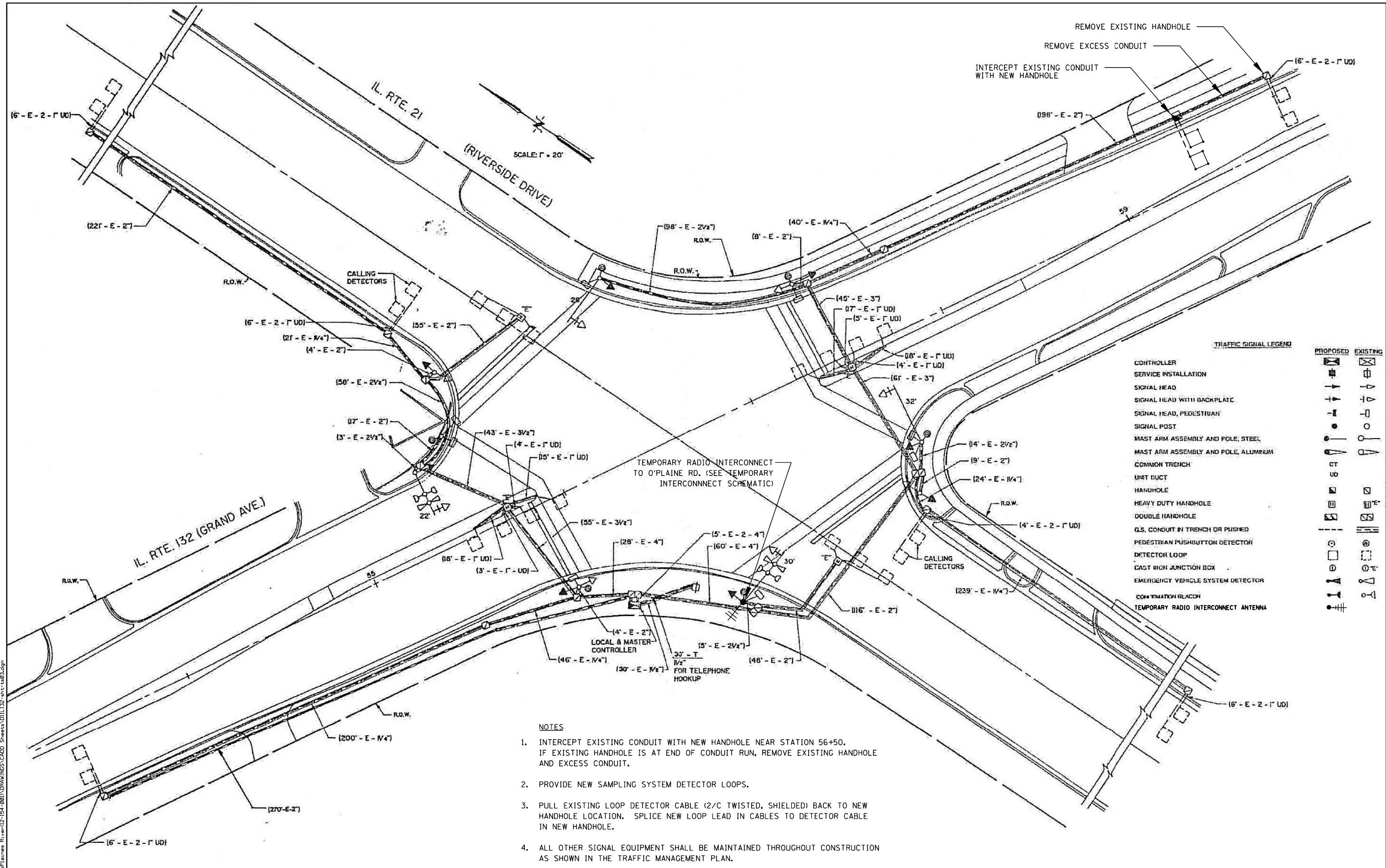
| Mast Arm Length | ① Foundation Depth | Foundation Diameter | Spiral Diameter | Quantity of Rebars | Size of Rebars |
|--|--------------------|---------------------|-----------------|--------------------|----------------|
| Less than 30' (9.1 m) | 10'-0" (3.0 m) | 30" (750mm) | 24" (600mm) | 8 | 6(19) |
| Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m) | 13'-6" (4.1 m) | 30" (750mm) | 24" (600mm) | 8 | 6(19) |
| Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m) | 11'-0" (3.4 m) | 36" (900mm) | 30" (750mm) | 12 | 7(22) |
| Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m) | 13'-0" (4.0 m) | 36" (900mm) | 30" (750mm) | 12 | 7(22) |
| Greater than or equal to 55' (16.8 m) and less than 65' (19.8 m) | 15'-0" (4.6 m) | 36" (900mm) | 30" (750mm) | 12 | 7(22) |
| Greater than or equal to 65' (19.8 m) and less than 75' (22.9 m) | 21'-0" (6.4 m) | 42" (1060mm) | 36" (900mm) | 16 | 8(25) |
| Greater than or equal to 75' (22.9 m) | 25'-0" (7.6 m) | 42" (1060mm) | 36" (900mm) | 16 | 8(25) |

- NOTES:**
- These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (Qu) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & structures should be contacted for a revised design if other conditions are encountered.
 - Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.
 - Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations.
 - For mast arm assemblies with dual arms refer to state standard 878001.

DEPTH OF MAST ARM FOUNDATIONS, TYPE E

TRAFFIC SIGNAL LEGEND

| ITEM | REMOVAL | EXISTING | PROPOSED | ITEM | REMOVAL | EXISTING | PROPOSED | ITEM | REMOVAL | EXISTING | PROPOSED |
|---|---------|----------|----------|---|---------|----------|----------|---|---------|----------|----------|
| CONTROLLER CABINET | | | | EMERGENCY VEHICLE LIGHT DETECTOR | | | | ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C, UNLESS NOTED OTHERWISE | | | |
| RAILROAD CONTROL CABINET | | | | CONFIRMATION BEACON | | | | COAXIAL CABLE | | | |
| COMMUNICATIONS CABINET | | | | HANDHOLE | | | | VENDOR CABLE FOR CAMERA | | | |
| MASTER CONTROLLER | | | | HEAVY DUTY HANDHOLE | | | | COPPER INTERCONNECT CABLE, NO. 18 3 PAIR TWISTED, SHIELDED | | | |
| MASTER MASTER CONTROLLER | | | | DOUBLE HANDHOLE | | | | FIBER OPTIC CABLE NO. 62.5/125, MM12F | | | |
| UNINTERRUPTIBLE POWER SUPPLY | | | | JUNCTION BOX | | | | FIBER OPTIC CABLE NO. 62.5/125, MM12F SM12F | | | |
| SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT | | | | GALVANIZED STEEL CONDUIT IN TRENCH (T) OR PUSHED (P) | | | | FIBER OPTIC CABLE NO. 62.5/125, MM12F SM24F | | | |
| TELEPHONE CONNECTION (P) POLE OR (G) GROUND MOUNT | | | | TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE | | | | FIBER OPTIC CABLE NO. 62.5/125, (NUMBER OF FIBERS & TYPE TO BE NOTED ON PLANS) | | | |
| STEEL MAST ARM ASSEMBLY AND POLE | | | | COMMON TRENCH | | | | GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE | | | |
| ALUMINUM MAST ARM ASSEMBLY AND POLE | | | | COILABLE NONMETALLIC CONDUIT (EMPTY) | | | | CONTROLLER CABINET AND FOUNDATION TO BE REMOVED | | | |
| STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE | | | | SYSTEM ITEM | | S | S | STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED | | | |
| STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA | | | | INTERSECTION ITEM | | I | IP | ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED | | | |
| SIGNAL POST | | | | REMOVE ITEM | R | | | STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED | | | |
| TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM | | | | RELOCATE ITEM | RL | | | SIGNAL POST AND FOUNDATION TO BE REMOVED | | | |
| GUY WIRE | | | | ABANDON ITEM | A | | | INTERSECTION & SAMPLING (SYSTEM) DETECTOR | | | |
| SIGNAL HEAD | | | | 12" (300mm) TRAFFIC SIGNAL SECTION | | | | SAMPLING (SYSTEM) DETECTOR | | | |
| SIGNAL HEAD CONSTRUCTION STAGES (NUMBERS INDICATE THE CONSTRUCTION STAGE) | | | | 12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE | | | | EXISTING INTERSECTION LOOP DETECTOR PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR | | | |
| SIGNAL HEAD WITH BACKPLATE | | | | SIGNAL FACE | | | | EXISTING PREFORMED INTERSECTION LOOP DETECTOR PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR | | | |
| SIGNAL HEAD OPTICALLY PROGRAMMED | | | | SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD | | | | PREFORMED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR | | | |
| FLASHER INSTALLATION (S DENOTES SOLAR POWER) | | | | 12" (300mm) PEDESTRIAN SIGNAL HEAD WALK/DON'T WALK SYMBOL | | | | PREFORMED SAMPLING (SYSTEM) DETECTOR | | | |
| PEDESTRIAN SIGNAL HEAD | | | | 12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, OUTLINED | | | | RAILROAD SYMBOLS | | | |
| PEDESTRIAN PUSHBUTTON DETECTOR | | | | 12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, SOLID | | | | RAILROAD CONTROL CABINET | | | |
| ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR | | | | PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER | | | | RAILROAD CANTILEVER MAST ARM | | | |
| ILLUMINATED SIGN "NO LEFT TURN" | | | | RADIO INTERCONNECT | | | | FLASHING SIGNAL | | | |
| ILLUMINATED SIGN "NO RIGHT TURN" | | | | RADIO REPEATER | | | | CROSSING GATE | | | |
| DETECTOR LOOP, TYPE I | | | | DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE, ALL DETECTOR LOOP CABLE TO BE SHIELDED | | | | CROSSBUCK | | | |
| PREFORMED DETECTOR LOOP | | | | GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN) | | | | | | | |
| MICROWAVE VEHICLE SENSOR | | | | | | | | | | | |
| VIDEO DETECTION CAMERA | | | | | | | | | | | |
| VIDEO DETECTION ZONE | | | | | | | | | | | |
| PAN, TILT, ZOOM CAMERA | | | | | | | | | | | |
| WIRELESS DETECTOR SENSOR | | | | | | | | | | | |
| WIRELESS ACCESS POINT | | | | | | | | | | | |



TRAFFIC SIGNAL LEGEND

| | PROPOSED | EXISTING |
|--------------------------------------|----------|----------|
| CONTROLLER | [Symbol] | [Symbol] |
| SERVICE INSTALLATION | [Symbol] | [Symbol] |
| SIGNAL HEAD | [Symbol] | [Symbol] |
| SIGNAL HEAD WITH BACKPLATE | [Symbol] | [Symbol] |
| SIGNAL HEAD, PEDESTRIAN | [Symbol] | [Symbol] |
| SIGNAL POST | [Symbol] | [Symbol] |
| MAST ARM ASSEMBLY AND POLE, STEEL | [Symbol] | [Symbol] |
| MAST ARM ASSEMBLY AND POLE, ALUMINUM | [Symbol] | [Symbol] |
| COMMON TRENCH | [Symbol] | [Symbol] |
| UNIT DUCT | [Symbol] | [Symbol] |
| HANDHOLE | [Symbol] | [Symbol] |
| HEAVY DUTY HANDHOLE | [Symbol] | [Symbol] |
| DOUBLE HANDHOLE | [Symbol] | [Symbol] |
| G.S. CONDUIT IN TRENCH OR PUSHED | [Symbol] | [Symbol] |
| PEDESTRIAN PUSHBUTTON DETECTOR | [Symbol] | [Symbol] |
| DETECTOR LOOP | [Symbol] | [Symbol] |
| CAST IRON JUNCTION BOX | [Symbol] | [Symbol] |
| EMERGENCY VEHICLE SYSTEM DETECTOR | [Symbol] | [Symbol] |
| CONTINUATION BEACON | [Symbol] | [Symbol] |
| TEMPORARY RADIO INTERCONNECT ANTENNA | [Symbol] | [Symbol] |

- NOTES**
1. INTERCEPT EXISTING CONDUIT WITH NEW HANDHOLE NEAR STATION 56+50. IF EXISTING HANDHOLE IS AT END OF CONDUIT RUN, REMOVE EXISTING HANDHOLE AND EXCESS CONDUIT.
 2. PROVIDE NEW SAMPLING SYSTEM DETECTOR LOOPS.
 3. PULL EXISTING LOOP DETECTOR CABLE (2/C TWISTED, SHIELDED) BACK TO NEW HANDHOLE LOCATION. SPLICE NEW LOOP LEAD IN CABLES TO DETECTOR CABLE IN NEW HANDHOLE.
 4. ALL OTHER SIGNAL EQUIPMENT SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION AS SHOWN IN THE TRAFFIC MANAGEMENT PLAN.



| | | |
|------------------------|-----------------|-----------|
| USER NAME = BernardB | DESIGNED - KC | REVISED - |
| PLOT SCALE = | DRAWN - KC | REVISED - |
| PLOT DATE = 11/25/2013 | CHECKED - MCH | REVISED - |
| | DATE - 11/25/13 | REVISED - |

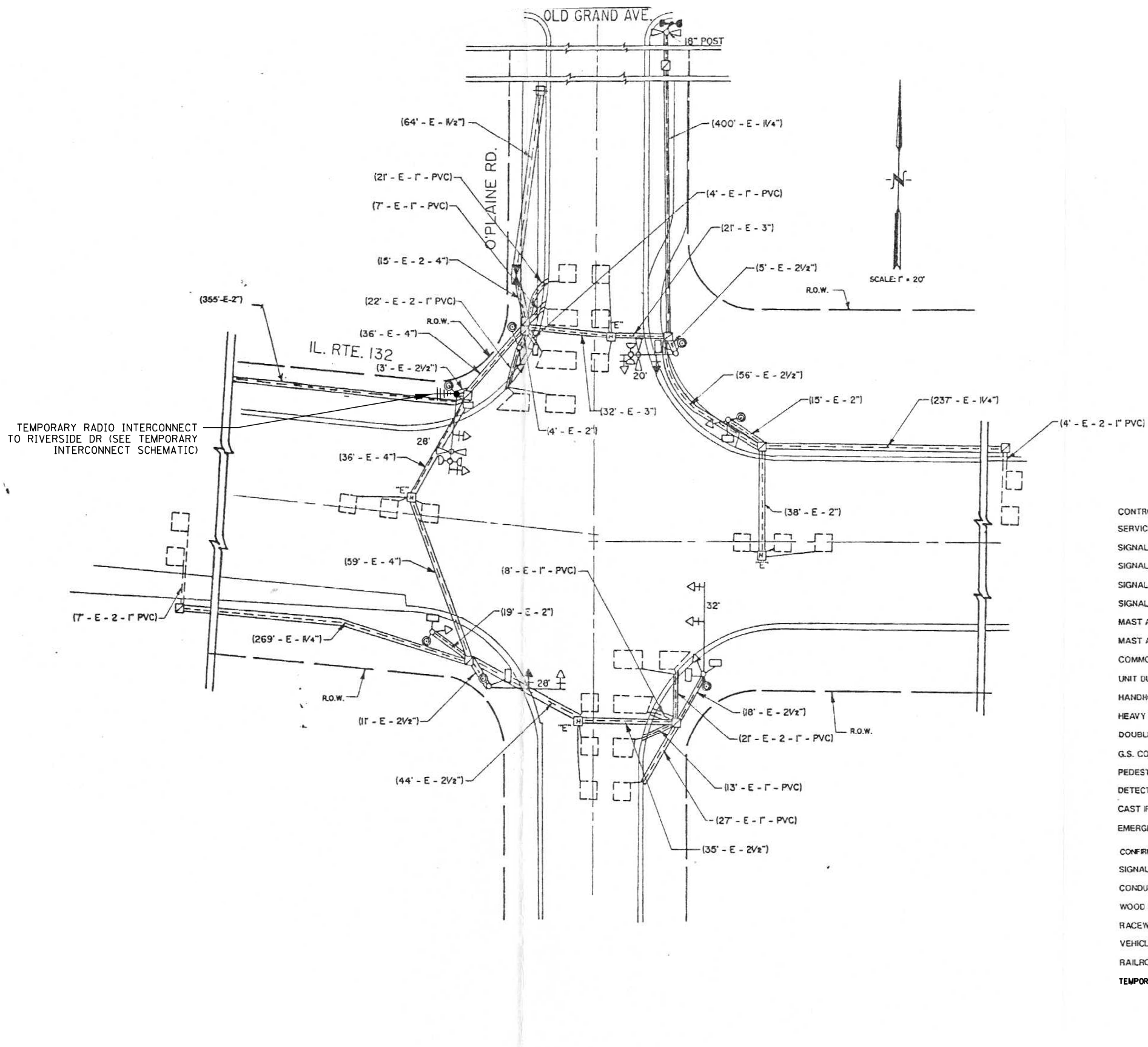
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL 132 (GRAND AVE.) OVER DES PLAINES RIVER
TRAFFIC SIGNAL PLAN - IL RTE 132 AT IL RTE 21**

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

| | | | | |
|---------------------------|-------------------|-------------|-----------------|--------------|
| F.A.P. RTE. 541 | SECTION X-6-B-1-1 | COUNTY LAKE | TOTAL SHEETS 93 | SHEET NO. 37 |
| CONTRACT NO. 60N22 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

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TEMPORARY RADIO INTERCONNECT TO RIVERSIDE DR (SEE TEMPORARY INTERCONNECT SCHEMATIC)

TRAFFIC SIGNAL LEGEND

| | PROPOSED | EXISTING |
|--|----------|----------|
| CONTROLLER | | |
| SERVICE INSTALLATION | | |
| SIGNAL HEAD | | |
| SIGNAL HEAD WITH BACKPLATE | | |
| SIGNAL HEAD, PEDESTRIAN | | |
| SIGNAL POST | | |
| MAST ARM ASSEMBLY AND POLE, STEEL | | |
| MAST ARM ASSEMBLY AND POLE, ALUMINUM | | |
| COMMON TRENCH | | |
| UNIT DUCT | | |
| HANDHOLE | | |
| HEAVY DUTY HANDHOLE | | |
| DOUBLE HANDHOLE | | |
| G.S. CONDUIT IN TRENCH OR PUSHED | | |
| PEDESTRIAN PUSHBUTTON DETECTOR | | |
| DETECTOR LOOP | | |
| CAST IRON JUNCTION BOX | | |
| EMERGENCY VEHICLE SYSTEM DETECTOR | | |
| CONFIRMATION BEACON | | |
| SIGNAL HEAD OPTICALLY PROGRAMMED | | |
| CONDUIT SPLICE | | |
| WOOD POLE | | |
| RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II | | |
| VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE | | |
| RAILROAD CONTROL CABINET | | |
| TEMPORARY RADIO INTERCONNECT ANTENNA | | |

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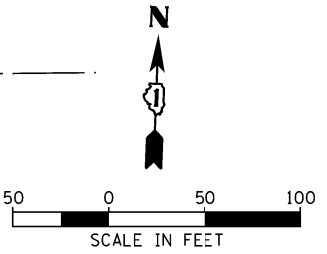
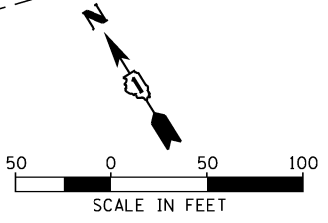
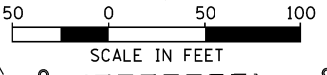
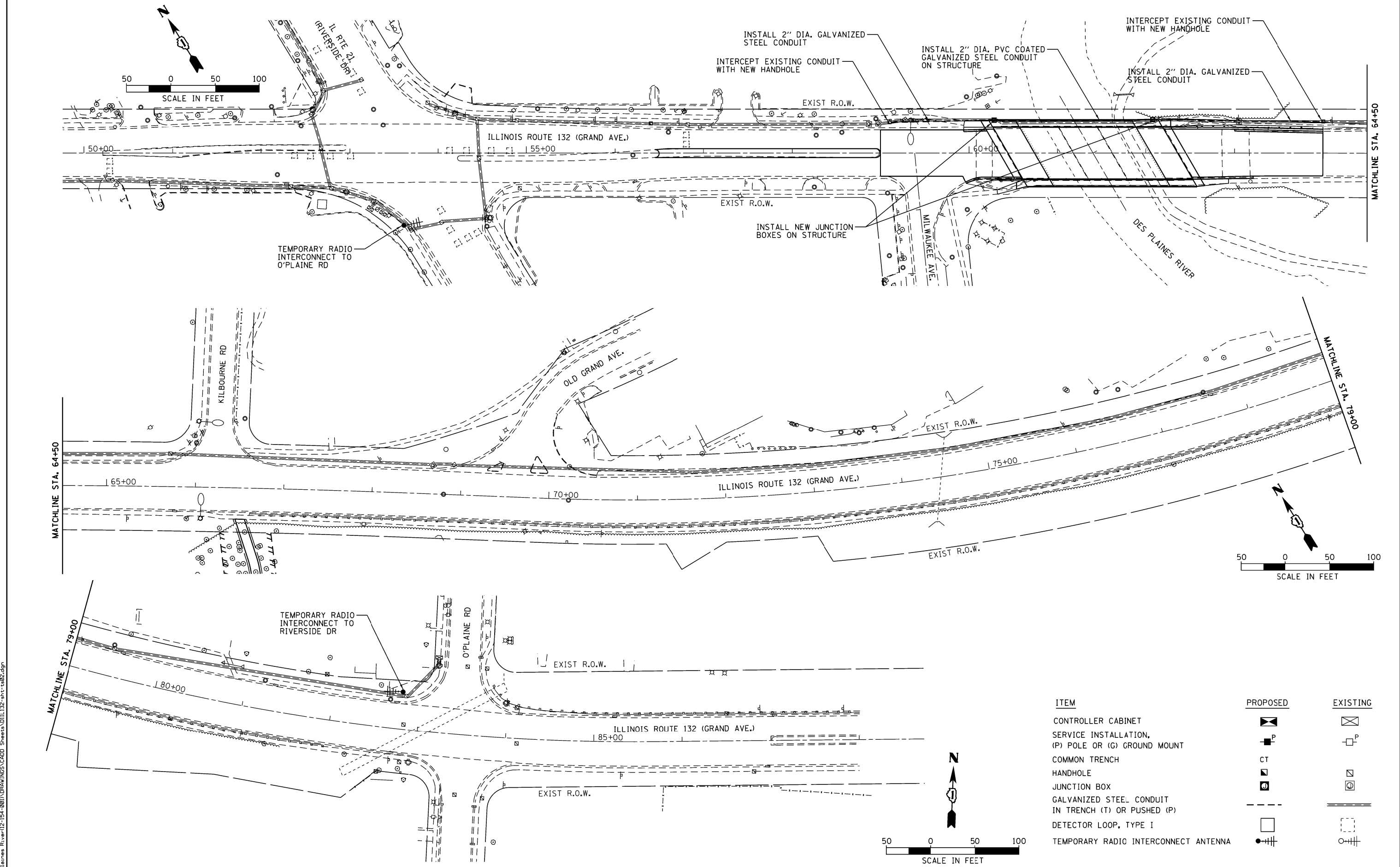
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| | DRAWN - KC | REVISED - |
| PLOT SCALE = | CHECKED - MCH | REVISED - |
| PLOT DATE = 11/25/2013 | DATE - 11/25/13 | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL 132 (GRAND AVE.) OVER DES PLAINES RIVER
TRAFFIC SIGNAL PLAN - IL RTE 132 AT O'PLAINE RD**

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

| | | | | |
|---------------------------|-----------|--------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 541 | X-6-B-1-1 | LAKE | 93 | 38 |
| CONTRACT NO. 60N22 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



| ITEM | PROPOSED | EXISTING |
|---|----------|----------|
| CONTROLLER CABINET | | |
| SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT | | |
| COMMON TRENCH | CT | |
| HANDHOLE | | |
| JUNCTION BOX | | |
| GALVANIZED STEEL CONDUIT IN TRENCH (T) OR PUSHED (P) | | |
| DETECTOR LOOP, TYPE I | | |
| TEMPORARY RADIO INTERCONNECT ANTENNA | | |

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USER NAME = BernardB
 PLOT SCALE =
 PLOT DATE = 11/25/2013

DESIGNED - KC
 DRAWN - KC
 CHECKED - MCH
 DATE - 11/25/13

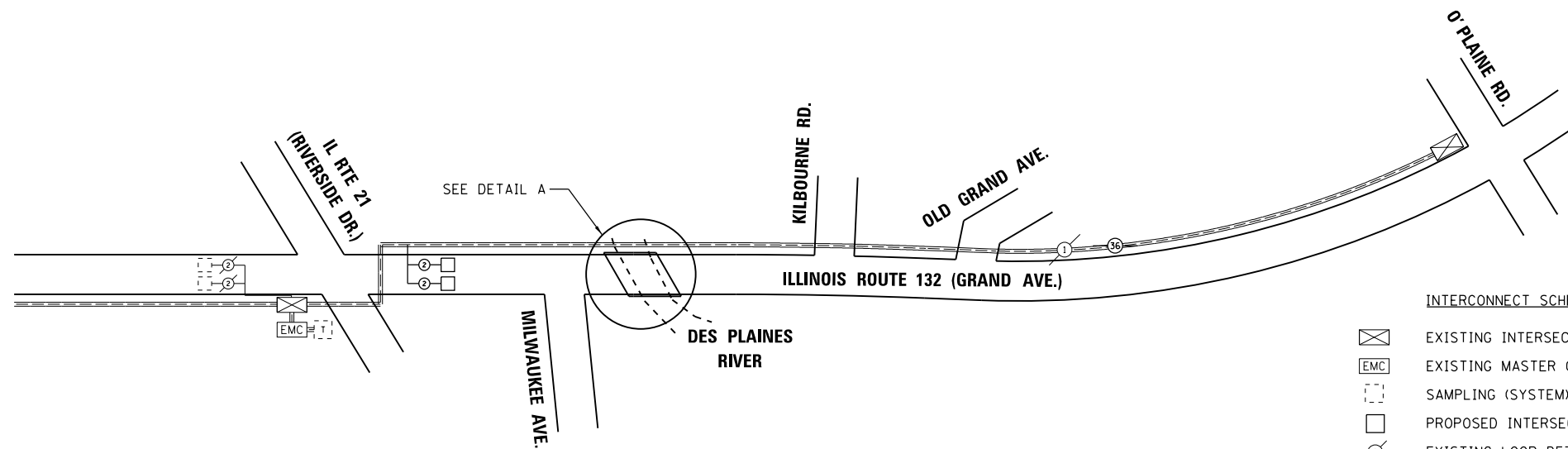
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**IL 132 (GRAND AVE.) OVER DES PLAINES RIVER
 INTERCONNECT PLAN**

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

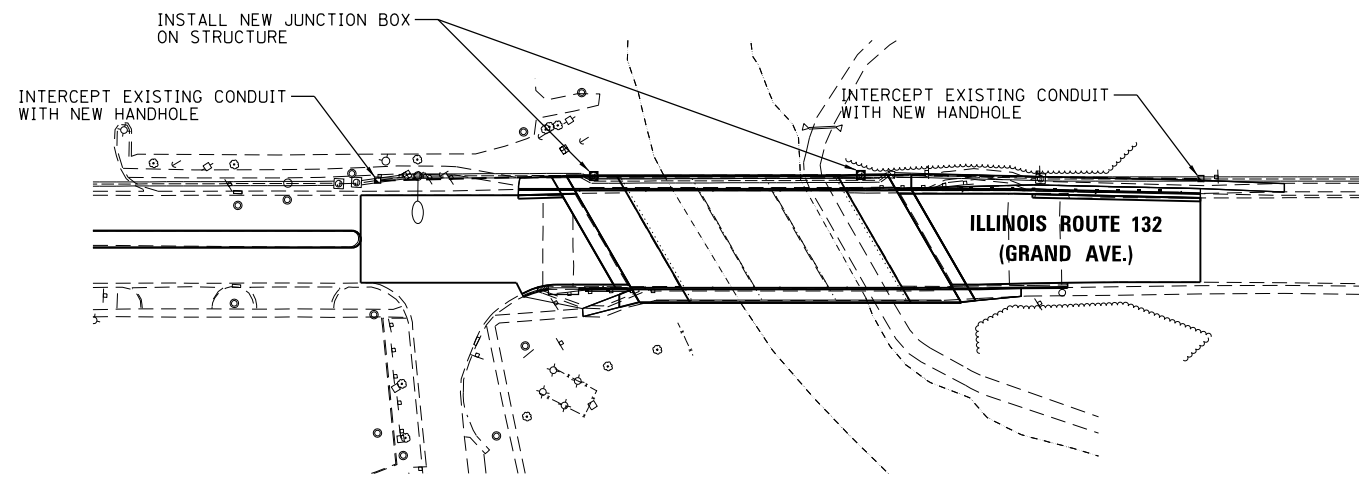
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| F.A.P. RTE. 541 | SECTION X-6-B-1-1 | COUNTY LAKE | TOTAL SHEETS 93 | SHEET NO. 39 |
| CONTRACT NO. 60N22 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



INTERCONNECT SCHEMATIC LEGEND

- EXISTING INTERSECTION CONTROLLER
- EXISTING MASTER CONTROLLER
- SAMPLING (SYSTEM) DETECTOR
- PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR
- EXISTING LOOP DETECTOR CABLE, 2/C TWISTED, SHIELDED
- EXISTING TRACER CABLE, NO. 14 1/C
- PROPOSED INTERCONNECT CABLE NO. 62.5/125, 24F MULTIMODE AND 12F SINGLE MODE
- PROPOSED LOOP DETECTOR CABLE, 2/C TWISTED, SHIELDED
- EXISTING TELEPHONE CONNECTION

INTERCONNECT SCHEMATIC



DETAIL A

INTERCONNECT SCHEMATIC NOTES

1. EXISTING FIBER OPTIC CABLE SHALL BE PULLED OUT OF THE EXISTING CONDUIT BETWEEN THE MASTER CONTROLLER AT IL RTE 21 (RIVERSIDE DR) AND O'PLAINE ROAD. EXISTING TRACER CABLE MAY BE DISCONNECTED AND PULLED BACK FROM THE RIVERSIDE CONTROLLER TO THE PROPOSED HANDHOLE IMMEDIATELY EAST OF THE BRIDGE OVER THE DES PLAINES RIVER AND SPOOLED AND PROTECTED AT THIS LOCATION FOR THE DURATION OF BRIDGE CONSTRUCTION. AFTER BRIDGE CONSTRUCTION IS COMPLETED AND NEW JUNCTION BOXES AND CONDUIT ARE INPLACE, THE EXISTING TRACER CABLE SHALL BE REINSTALLED IN THE CONDUIT TO THE RIVERSIDE CONTROLLER. IF TRACER CABLE IS NOT SALVAGEABLE, PROVIDE NEW 1C TRACER CABLE. THE REMOVAL OF EXISTING FIBER OPTIC CABLE AS WELL AS THE REMOVAL AND REINSTALLATION OF EXISTING TRACER CABLE SHALL NOT BE PAID FOR SEPERATELY, BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE NEW FIBER OPTIC CABLE.
2. AFTER BRIDGE CONSTRUCTION IS COMPLETED, INSTALL NEW 36 FIBER (24 MULTIMODE 12 SINGLEMODE) OPTIC CABLE BETWEEN THE IL 21 (RIVERSIDE DR.) CONTROLLER AND THE EXISTING CONTROLLER AT O'PLAINE RD.
3. ANY HARDWARE OR ACCESSORIES REQUIRED TO ATTACH THE NEW CONDUIT TO THE JUNCTION BOXES OR TO THE EXISTING CONDUIT WILL NOT BE PAID FOR SEPERATELY, BUT SHALL BE INCLUDED WITH THE CONTRACT UNIT PRICE BID FOR "CONDUIT ATTACHED TO STRUCTURE, 2" DIA., PVC COATED GALVANIZED STEEL."
4. SEE SPECIFICATIONS AND SPECIAL PROVISIONS FOR MORE INFORMATION.
5. CONTRACTOR MUST NOTIFY LAKE COUNTY DIVISION OF TRANSPORTATION THAT THIS WORK WILL AFFECT THEIR ICON (FIBER) SYSTEM. TRAFFIC SIGNAL PLANS SHALL BE PROVIDED TO LAKE COUNTY DIVISION OF TRANSPORTATION FOR THEIR REVIEW.
6. INTERCEPT EXISTING CONDUIT ON EACH SIDE OF THE BRIDGE AND PROVIDE A NEW HANDHOLE IN A LOCATION WHICH WILL NOT BE DISTURBED DURING BRIDGE CONSTRUCTION. REMOVE ANY EXISTING HANDHOLES AND CONDUIT BETWEEN THE NEW HANDHOLE PROVIDED AND EXISTING BRIDGE.
7. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL PROPOSED MATERIALS FOR INSTALLING EXPOSED RACEWAYS AS SPECIFIED IN SECTION 811 OF THE STANDARD SPECIFICATIONS.
8. THE EXPOSED CONDUIT ACROSS THE STRUCTURE SHALL BE ATTACHED TO THE UNDERSIDE OF THE CANTILEVERED SIDEWALK / EXTENDED BRIDGE DECK AS SHOWN ON THE STRUCTURAL PLANS. THIS PLACEMENT WILL CONTINUE ONTO THE PRECAST BRIDGE APPROACH SLABS ON EACH SIDE OF THE STRUCTURE. THE JUNCTION CABINET SHALL BE ATTACHED TO THE CAST-IN-PLACE UNDERSIDE OF THE CANTILEVERED SIDEWALK AND OUTER SIDE OF THE CONCRETE WEARING SURFACE WHICH ARE CONSTRUCTED ATOP THE PRECAST BRIDGE APPROACH SLAB. THE CONTRACTOR SHALL PROVIDE WORKING DRAWINGS THAT DETAIL ALL CONDUIT AND JUNCTION BOX ATTACHMENTS TO THE STRUCTURE.

BILL OF MATERIAL

| CODE | PAY ITEM | UNIT | QUANTITY |
|----------|---|-------|----------|
| 81028200 | UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA. | FOOT | 335 |
| 81300830 | JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 18" X 18" X 8" | EACH | 2 |
| 81400100 | HANDHOLE | EACH | 3 |
| 85000200 | MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION | EACH | 2 |
| 87300925 | ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C | FOOT | 3630 |
| 87301305 | ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR | FOOT | 24 |
| 88600100 | DETECTOR LOOP, TYPE I | FOOT | 66 |
| 89502380 | REMOVE EXISTING HANDHOLE | EACH | 3 |
| X0325938 | TEMPORARY WIRELESS INTERCONNECT, COMPLETE | L SUM | 1 |
| X8710040 | FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM24F SM12F | FOOT | 3630 |
| Z0073510 | TEMPORARY TRAFFIC SIGNAL TIMING | EACH | 2 |
| | CONDUIT ATTACHED TO STRUCTURE, 2" DIA. RIGID GALVANIZED STEEL, PVC COATED | FOOT | 150 |

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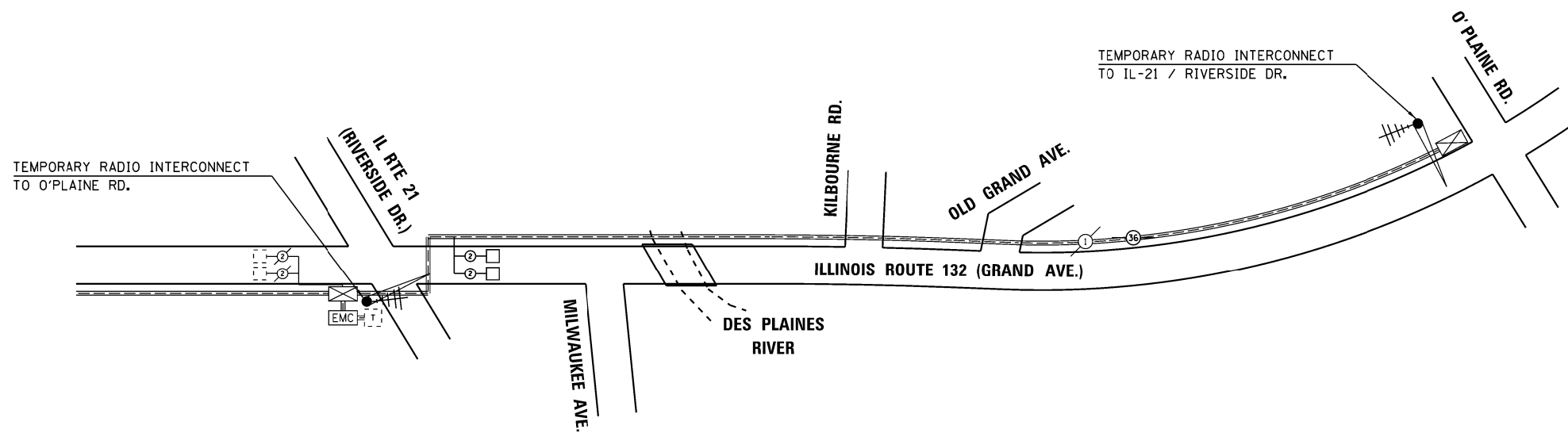
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|------------------------|-----------------|-----------|
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| | DRAWN - KC | REVISED - |
| PLOT SCALE = | CHECKED - MCH | REVISED - |
| PLOT DATE = 12/19/2013 | DATE - 12/17/13 | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL 132 (GRAND AVE.) OVER DES PLAINES RIVER
INTERCONNECT SCHEMATICS**











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

| | | | | |
|---------------------------|-----------|--------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 541 | X-6-B-1-1 | LAKE | 93 | 40 |
| CONTRACT NO. 60N22 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



TEMPORARY INTERCONNECT SCHEMATIC

INTERCONNECT SCHEMATIC LEGEND

-  EXISTING INTERSECTION CONTROLLER
-  EXISTING MASTER CONTROLLER
-  SAMPLING (SYSTEM) DETECTOR
-  PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR
-  EXISTING LOOP DETECTOR CABLE, 2/C TWISTED, SHIELDED
-  EXISTING TRACER CABLE, NO. 14 1/C
-  PROPOSED INTERCONNECT CABLE NO. 62.5/125, 24F MULTIMODE AND 12F SINGLE MODE
-  PROPOSED LOOP DETECTOR CABLE, 2/C TWISTED, SHIELDED
-  EXISTING TELEPHONE CONNECTION
-  TEMPORARY RADIO INTERCONNECT ANTENNA

INTERCONNECT SCHEMATIC NOTES

1. ALL WORK SPECIFIED IN THE TEMPORARY TRAFFIC SIGNAL INTERCONNECT PLAN SHALL BE COMPLETED ACCORDING TO THE MOST RECENT VERSION OF THE IDOT STANDARD SPECIFICATIONS AND DISTRICT ONE TRAFFIC SIGNAL SPECIFICATIONS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE EXISTING TRAFFIC SIGNAL INSTALLATION AT THE GRAND AVENUE INTERSECTIONS WITH RIVERSIDE DRIVE AND O'PLAINE ROAD AND THE INTERCONNECT SYSTEM BETWEEN THE TWO INTERSECTIONS.
3. INSTALL A TEMPORARY WIRELESS INTERCONNECT SYSTEM TO MAINTAIN THE CONNECTION BETWEEN THE CONTROLLER AT RIVERSIDE DR AND THE O'PLAINE CONTROLLER THROUGHOUT THE DURATION OF CONSTRUCTION. REMOVAL OF THE EXISTING FIBER OPTIC SYSTEM SHALL NOT BEGIN UNTIL ALL COMPONENTS OF THE TEMPORARY WIRELESS INTERCONNECT SYSTEM ARE IN PLACE AND OPERATIONAL.
4. THE TEMPORARY TRAFFIC SIGNAL INTERCONNECT SYSTEM BETWEEN THE INTERSECTION OF RIVERSIDE DRIVE AND O'PLAINE SHALL BE WIRELESS INTERCONNECT ACCORDING TO THE TEMPORARY TRAFFIC SIGNAL SPECIFICATION OF THE DISTRICT ONE TRAFFIC SIGNAL SPECIFICATIONS. THE ANTENNA SHALL BE PLACED ON THE EXISTING MAST ARM ASSEMBLY AND POLE LOCATED CLOSEST TO THE SIGNAL CONTROLLER AT EACH INTERSECTION AND CONNECTED TO THE EXISTING CONTROLLER. AT EACH INTERSECTION IT WILL BE NECESSARY TO INSTALL TEMPORARY RF CABLE BETWEEN THE ANTENNA AND CONTROLLER CABINET.
5. ALL NECESSARY CABLES, ANTENNA, AND OTHER COMPONENTS REQUIRED FOR FULLY FUNCTIONAL TEMPORARY RADIO INTERCONNECT SYSTEM SHALL BE INCLUDED AND PAID FOR AS THE ITEM TEMPORARY WIRELESS INTERCONNECT, COMPLETE.
6. THE ANTENNAE AND ALL CABLES SHALL BE REMOVED UPON COMPLETION OF THE PROPOSED FIBER OPTIC INTERCONNECT SYSTEM. ANY HOLES IN THE MAST ARMS SHALL BE PLUGGED. COST FOR THIS WORK SHALL BE INCLUDED IN THE PAY ITEM TEMPORARY WIRELESS INTERCONNECT, COMPLETE.
7. THE CONTRACTOR MUST PROVIDE ASSURANCE THAT THE RADIO DEVICE WILL OPERATE PROPERLY AT ALL TIMES AND DURING ALL CONSTRUCTION STAGES. IF WIRELESS INTERCONNECT FAILS DURING TESTING OR OPERATIONS, CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING NECESSARY POLES, FIBER OPTIC CABLE AND OTHER INFRASTRUCTURE FOR PROVIDING TEMPORARY FIBER INTERCONNECT AT NO COST TO THE CONTRACT.

M:\IL_132 over DesPlaines River\12-154-001\DRAWINGS\CADD_Sheets\0111132-xt-ts01B.dwg



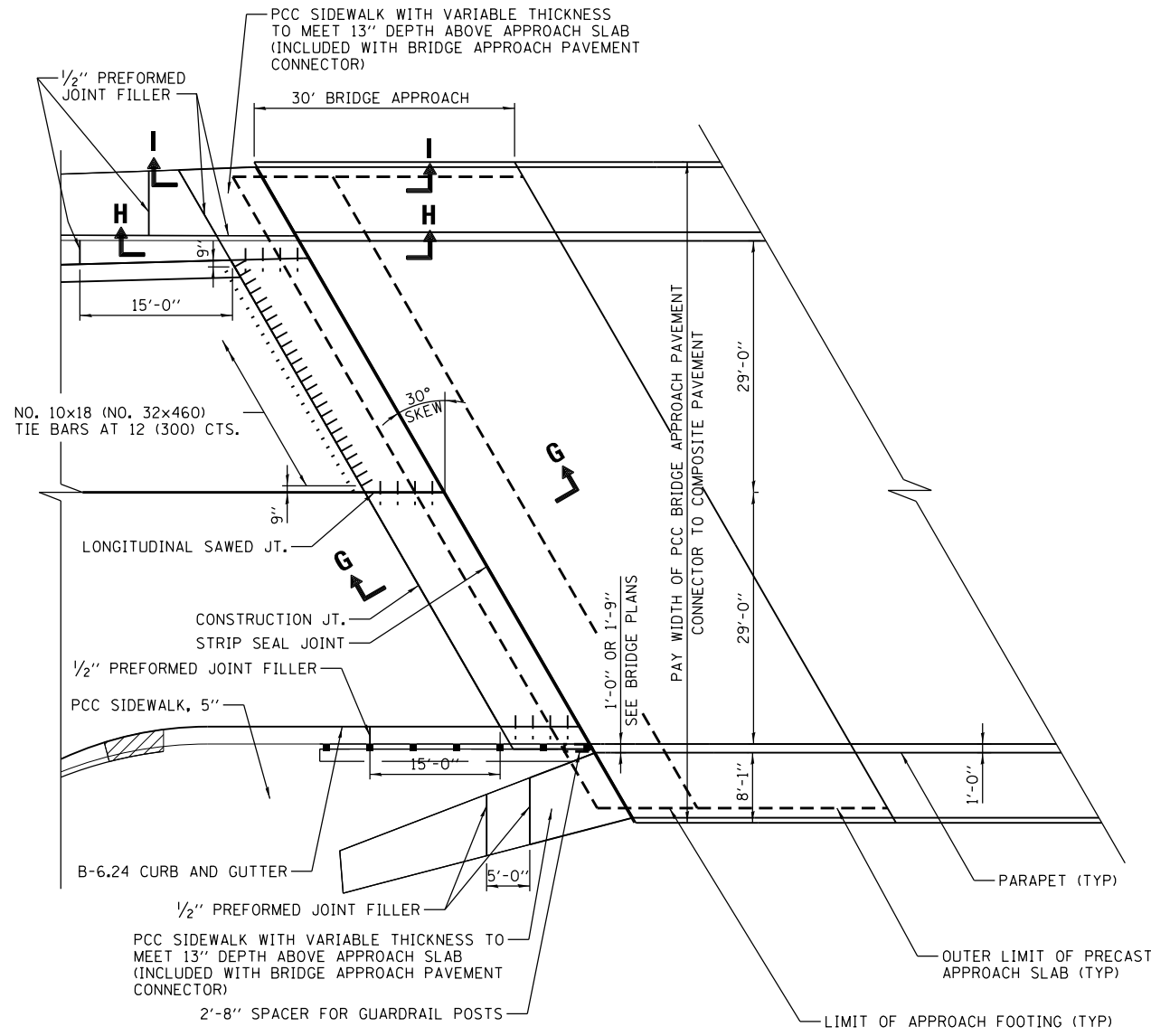
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|------------------------|-----------------|-----------|
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| | DRAWN - KC | REVISED - |
| PLOT SCALE = | CHECKED - MCH | REVISED - |
| PLOT DATE = 11/25/2013 | DATE - 11/25/13 | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

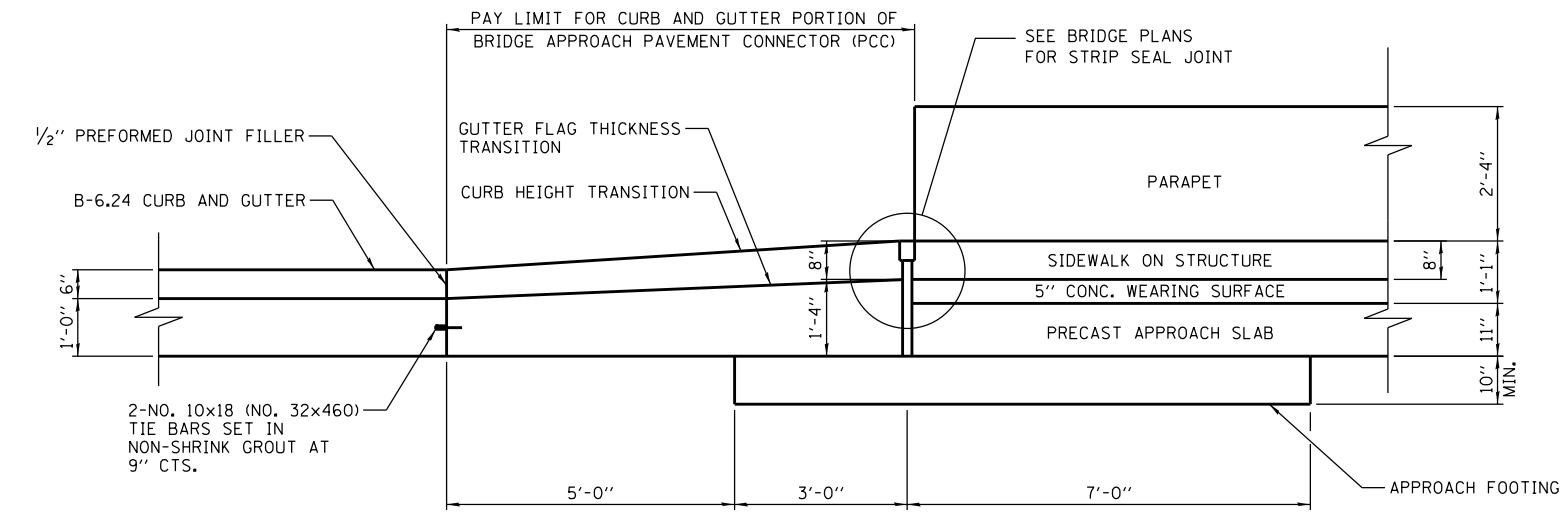
**IL 132 (GRAND AVE.) OVER DES PLAINES RIVER
TEMPORARY INTERCONNECT SCHEMATICS**

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

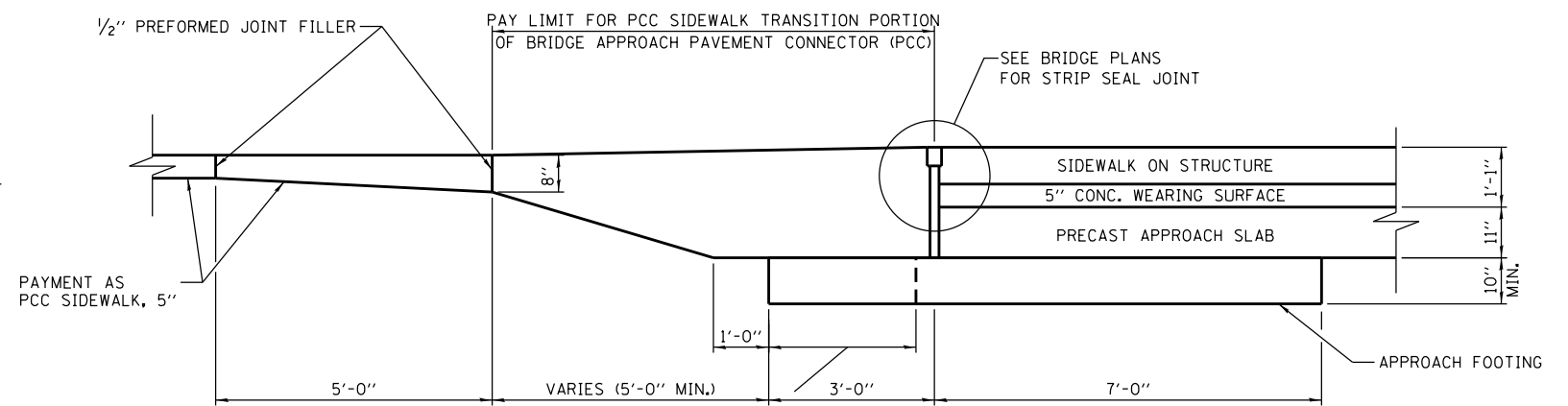
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-----------|--------|--------------|-----------|
| 541 | X-6-B-1-1 | LAKE | 93 | 40A |
| CONTRACT NO. 60N22 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



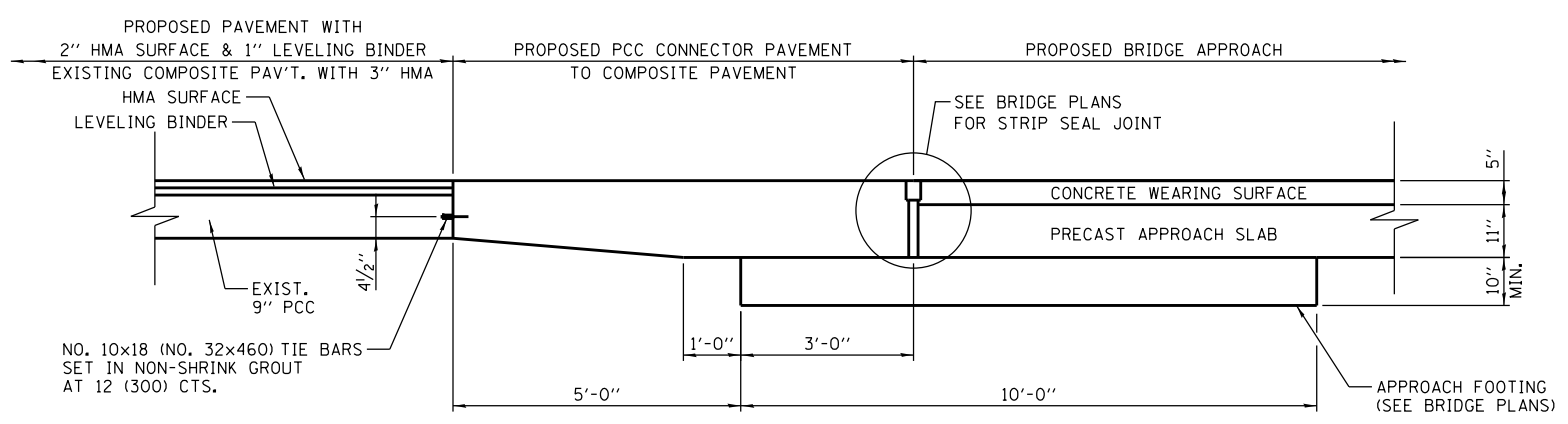
PLAN
PCC APPROACH TO COMPOSITE PAVEMENT



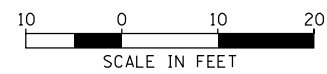
SECTION H-H
TRANSITION CURB AND GUTTER PAVEMENT CONNECTOR



SECTION I-I
TRANSITION SIDEWALK PAVEMENT CONNECTOR



SECTION G-G
PCC CONNECTOR PAVEMENT TO COMPOSITE PAVEMENT



M:\IL_132_cover_Design\Drawings\Road\12-154-001\Drawings\CADD_Sheets\1111132-plt-detailed.dgn



| | | |
|----------------------|-----------------|-----------|
| USER NAME = Kjeac | DESIGNED - BCB | REVISED - |
| PLOT SCALE = | DRAWN - BCB | REVISED - |
| PLOT DATE = 9/3/2013 | CHECKED - DPA | REVISED - |
| | DATE - 09/03/13 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 132 (GRAND AVE.) OVER DES PLAINES RIVER
BRIDGE APPROACH PAVEMENT CONNECTOR DETAIL

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

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-----------|--------|--------------|-----------|
| 541 | X-6-B-1-1 | LAKE | 93 | 41 |
| CONTRACT NO. 60N22 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

Stamped "IDNR" Brass Plug in Southwest Headwall, Elev. 671.36.

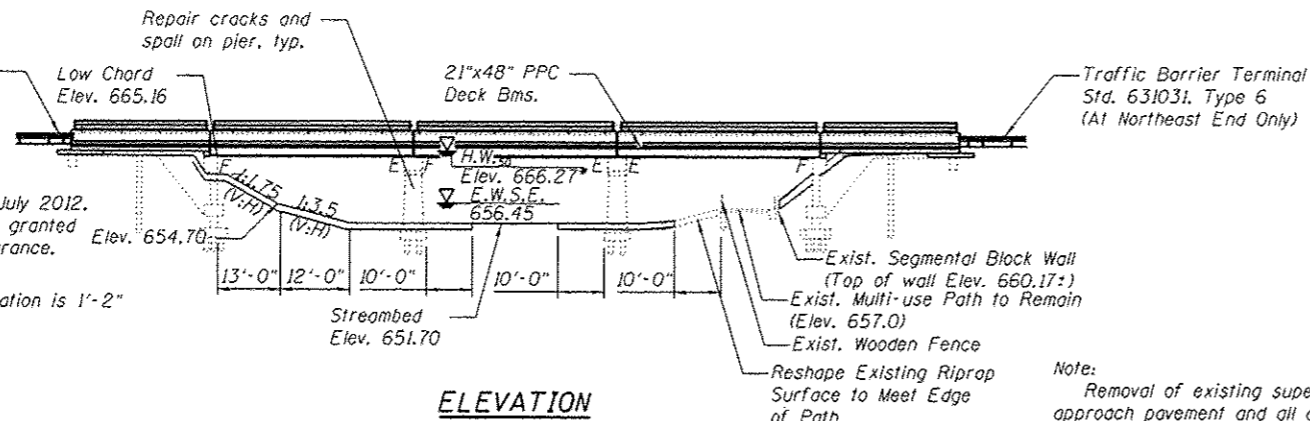
Existing Structure: Built as SN 049-0062 in 1920 as FAP-541 Section X-6B; a 3 span concrete T-beam superstructure with abutments and piers on pile caps with timber piles. Widened in 1957 by extending abutments and piers and placing PPC Dk. Bms. for the superstructure. Superstructure widened to 73' in 1995 by replacing the PPC Dk. Bms. and cantilevering the abut and pier caps; 131'-2" bk.-bk. abutments. Superstructure to be removed and replaced with PPC deck beams; minor spalls in substructure to be repaired. Traffic to be maintained using stage construction.

No Salvage.

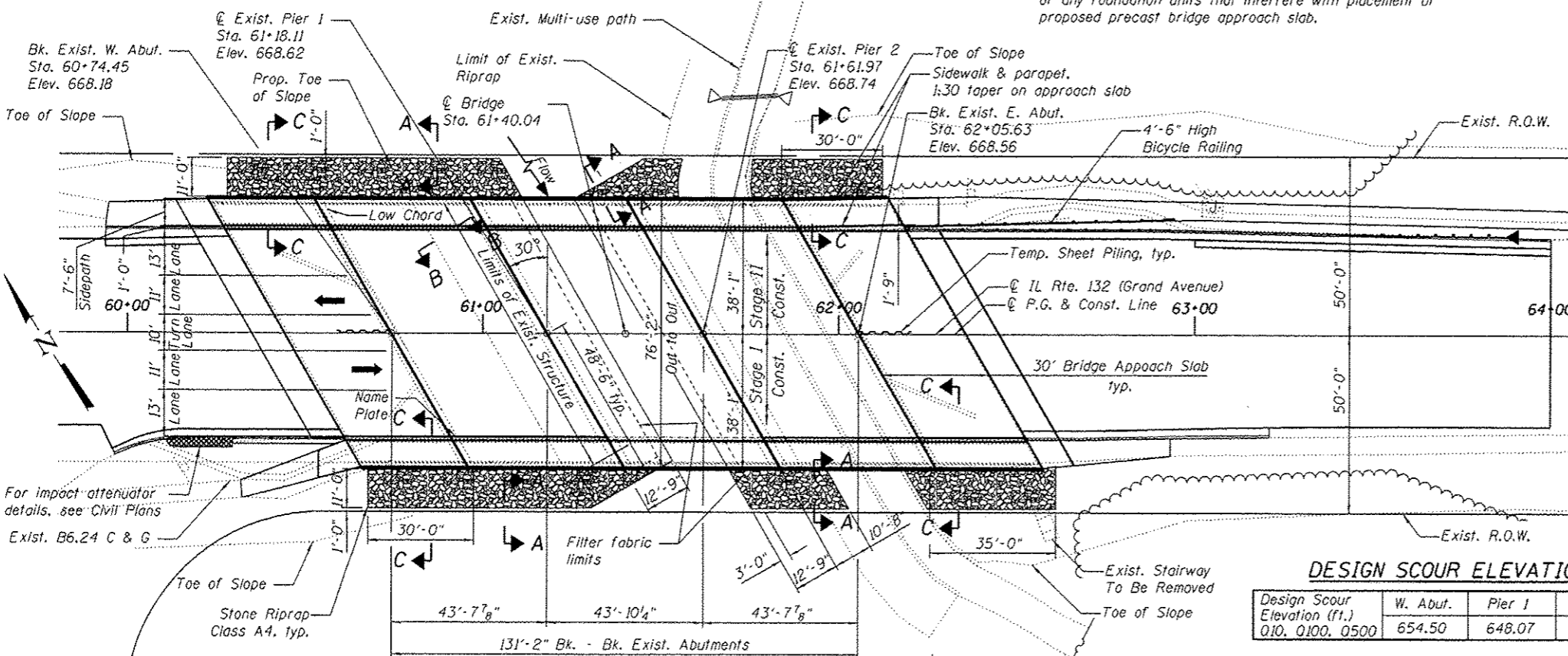
Traffic Barrier Terminal Type 6 (Modified), (At Southwest End Only) See Civil Plans

* Per Project Report dated July 2012, Design Exception has been granted for inadequate vertical clearance.

** The Design High Water elevation is 1'-2" higher than the low beam.



Note: Removal of existing superstructures includes removal of approach pavement and all appurtenances attached to the approach pavement and adjacent sidewalks, and the removal of any foundation units that interfere with placement of proposed precast bridge approach slab.



WATERWAY INFORMATION

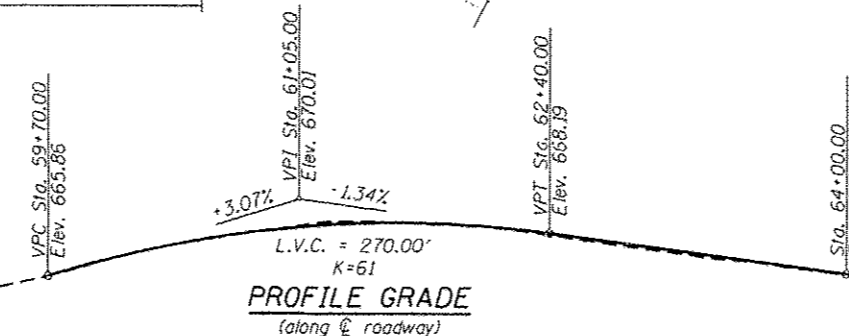
| Flood | Freq. Yr. | Q | C.F.S. | Opening Sq. Ft. | | Head - Ft. | | Headwater El. | |
|-------------|-----------|------|--------|-----------------|--------|---------------|-------|---------------|--------|
| | | | | Exist. | Prop. | H.W.E. Exist. | Prop. | Exist. | Prop. |
| Design | 10 | 3027 | 1030 | 1030 | 663.84 | 0.06 | 0.06 | 663.90 | 663.90 |
| Base | 50 | 4836 | 1197 | 1224 | 666.27 | 0.11 | 0.11 | 666.38 | 666.38 |
| Overlapping | 100 | 5644 | 1197 | 1224 | 667.19 | 0.06 | 0.06 | 667.25 | 667.25 |
| Max. Calc. | 500 | 7723 | 1197 | 1224 | 669.58 | 0.02 | 0.02 | 669.60 | 669.60 |

Existing Low Grade Elev. 662.95 (East of Bridge)
Proposed Low Grade Elev. 662.95 (East of Bridge)

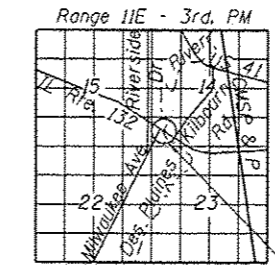
Drainage Area = (225 Sq. Mi.)

10 year velocity through existing and proposed structures = 1.95 ft/sec

PROFILE GRADE
(along roadway)



LOCATION SKETCH



STATION 61+40.04
RE-BUILT 2013 BY
STATE OF ILLINOIS
LOADING HL-93
STRUCTURE NO. 049-0062

NAME PLATE

See Std. 515001

Existing Name Plate shall be cleaned and relocated next to new Name Plate. Cost included with Name Plates.

DESIGN SPECIFICATIONS

2012 AASHTO LRFD Bridge Design Specifications
6th Edition for Superstructure
2002 AASHTO LRFD Bridge Design Specifications
17th Edition for Substructure

LOADING HL-93

ORIGINAL DESIGN STRESSES

FIELD UNITS

f'c = 1,400 psi (Superstructure)
f'c = 800 psi (Substructure)
fs = 20,000 psi (Reinforcement)
fs = 18,000 psi (Structural)
n = 10

DESIGN STRESSES

FIELD UNITS

f'c = 5,000 psi (Wearing Surface)
f'c = 3,500 psi (Substructure)
fy = 60,000 psi (Reinforcement)

PRECAST PRESTRESSED UNITS

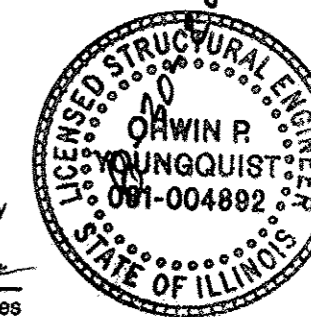
f'c = 6,000 psi
f'ci = 5,000 psi
fpu = 270,000 psi (1/2" φ Low Relaxation Strands)
fpbt = 201,960 psi (1/2" φ Low Relaxation Strands)

SEISMIC DATA

Seismic Performance Category (SPC) = A
Horizontal Bedrock Acceleration Coefficient (A) = 0.04g
Site Coefficient (S) = 1.0

APPROVED
For Structural Adequacy Only

Dr. Carl Perry
Engineer of Bridges & Structures



Sheets: S1, S2, S3, S4, S5, S6, S7, S8, S9, S10, S11, S12, S13, S14, S15, S16, S17, S18, S19, S20, S21, S22, S23

Arwin R. Youngquist
Expires: 11/30/2014

GENERAL PLAN AND ELEVATION
ILLINOIS ROUTE 132 OVER DES PLAINES RIVER

F.A.P. 541 (IL 132) - SECTION X-6B-R

LAKE COUNTY

STATION 61+40.04

STRUCTURE NO. SN 049-0062

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 049-0062

SHEET NO. S1 OF S23 SHEETS

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|---------|--------|--------------|-----------|
| 541 | X-6B-R | LAKE | 93 | 42 |

CONTRACT NO. 60N22

ILLINOIS FED. AID PROJECT

M.I.L. 132 over DesPlaines River(12-154-001)GRANDS Structural Final Plans(CADD Sheets)049-0062.01.DP&E.dgn



USER NAME: ryanf
FILE NAME: 049-0062.01.DP&E.dgn
PLOT DATE: 8/24/2013

DESIGNED - OY
CHECKED - DB
DRAWN - CM
CHECKED - OY

REVISED
REVISED
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REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

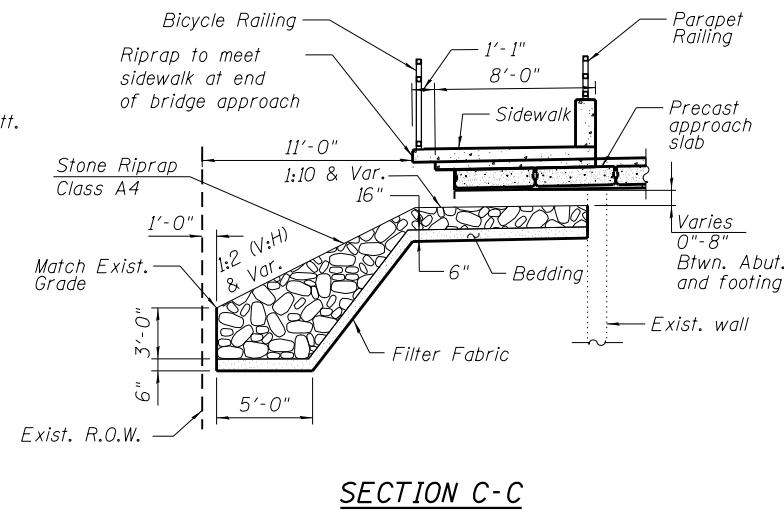
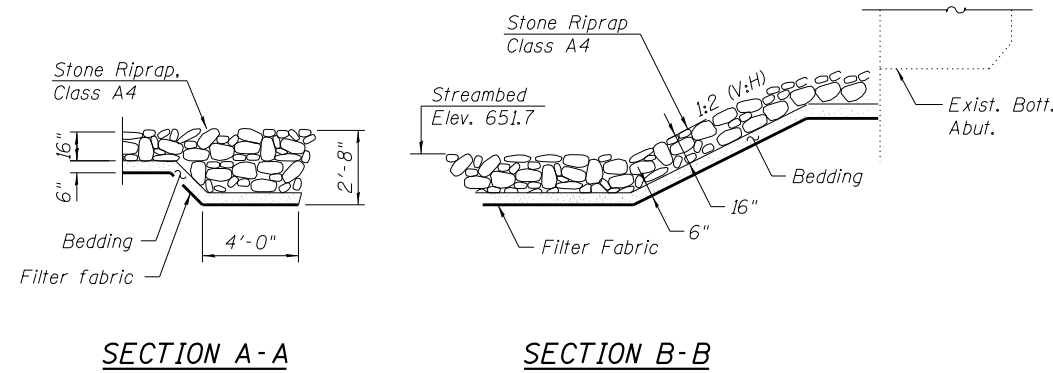
1. Reinforcement bars designated (E) shall be epoxy coated.
2. Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
3. Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
4. Slipforming of the parapets will not be allowed.

INDEX OF SHEETS

| | |
|-----------------|---|
| S1 | General Plan and Elevation |
| S2 | General Data |
| S3 | Stage Construction Details |
| S4 | Temporary Concrete Barrier for Stage Construction |
| S5 | Top of West Approach Slab Elevations |
| S6 | Top of East Approach Slab Elevations |
| S7 | Superstructure Plan |
| S8 | Superstructure Cross Section |
| S9,S10 | Superstructure Details |
| S11,S12,S13,S14 | Precast Bridge Approach Slab |
| S15 | Bicycle Railing and Parapet Railing Details |
| S16 | Expansion Joint Details |
| S17 | 21" x 48" PPC Deck Beam |
| S18 | 21" x 48" PPC Deck Beam Details |
| S19 | Abutments Removal |
| S20 | Abutments |
| S21 | Pier 1 Repairs |
| S22 | Pier 2 Repairs |
| S23 | Bar Splicer Assembly Details |

TOTAL BILL OF MATERIAL

| ITEM | UNIT | SUPER | SUB | TOTAL |
|--|---------|-------|-------|-------|
| Stone Riprap, Class A4 | Ton | - | 1380 | 1380 |
| Filter Fabric | Sq. Yd. | - | 1055 | 1055 |
| Removal of Existing Superstructures | Each | 1 | - | 1 |
| Concrete Removal | Cu. Yd. | - | 19.2 | 19.2 |
| Structure Excavation | Cu. Yd. | - | 11 | 11 |
| Concrete Structures | Cu. Yd. | - | 107.0 | 107.0 |
| Concrete Superstructure | Cu. Yd. | 117.8 | - | 117.8 |
| Bridge Deck Grooving | Sq. Yd. | 1191 | - | 1191 |
| Protective Coat | Sq. Yd. | 1847 | - | 1847 |
| Precast Prestressed Concrete Deck Beams, 21" Depth | Sq. Ft. | 9427 | - | 9427 |
| Furnishing and Erecting Structural Steel | Pound | - | 20420 | 20420 |
| Reinforcement Bars, Epoxy Coated | Pound | 37370 | 10760 | 48130 |
| Bar Splicers | Each | 191 | 88 | 279 |
| Bicycle Railing | Foot | 381 | - | 381 |
| Parapet Railing | Foot | 381 | - | 381 |
| Name Plates | Each | 1 | - | 1 |
| Preformed Joint Strip Seal | Foot | 358 | - | 358 |
| Anchor Bolts, 5/8" | Each | - | 36 | 36 |
| Epoxy Crack Injection | Foot | - | 27 | 27 |
| Concrete Wearing Surface, 5" | Sq. Yd. | 1572 | - | 1572 |
| Precast Bridge Approach Slab | Sq. Ft. | 4185 | - | 4185 |
| Structural Repair of Concrete (Depth Less Than 5 Inches) | Sq. Ft. | - | 75 | 75 |
| Temporary Sheet Piling | Sq. Ft. | - | 71 | 71 |



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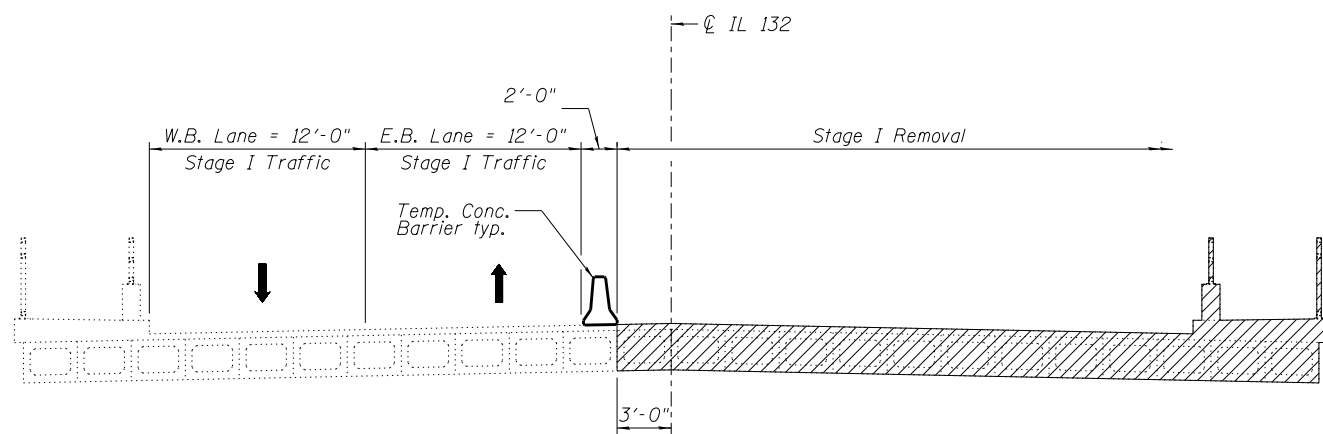
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| PLOT DATE = 12/17/2013 | DRAWN - CM | REVISED |
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

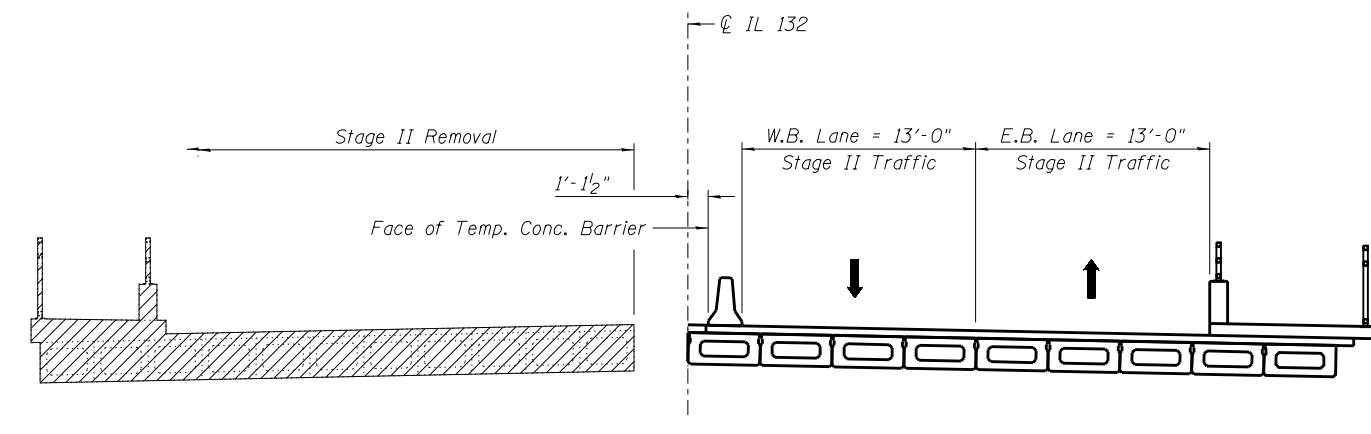
**GENERAL DATA
STRUCTURE NO. 049-0062**

SHEET NO. S2 OF S23 SHEETS

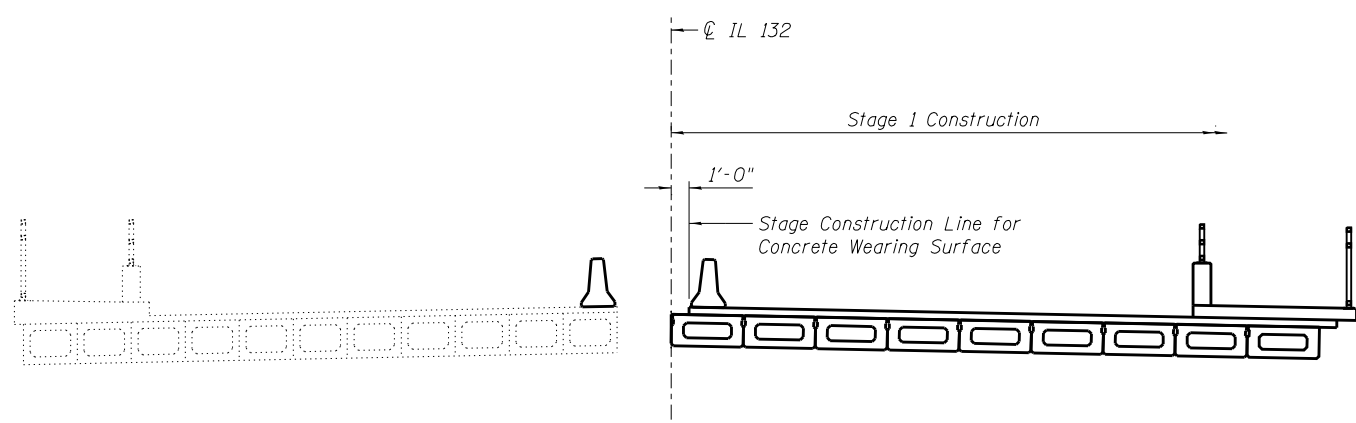
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|---------|--------|--------------------|-----------|
| 541 | X-6B-R | LAKE | 93 | 43 |
| ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 60N22 | |



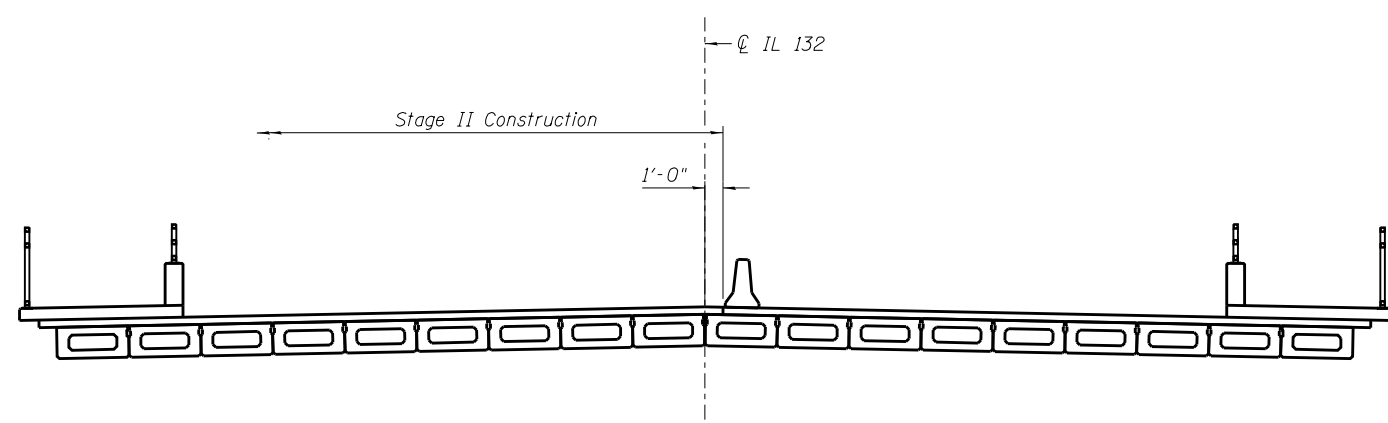
STAGE I REMOVAL



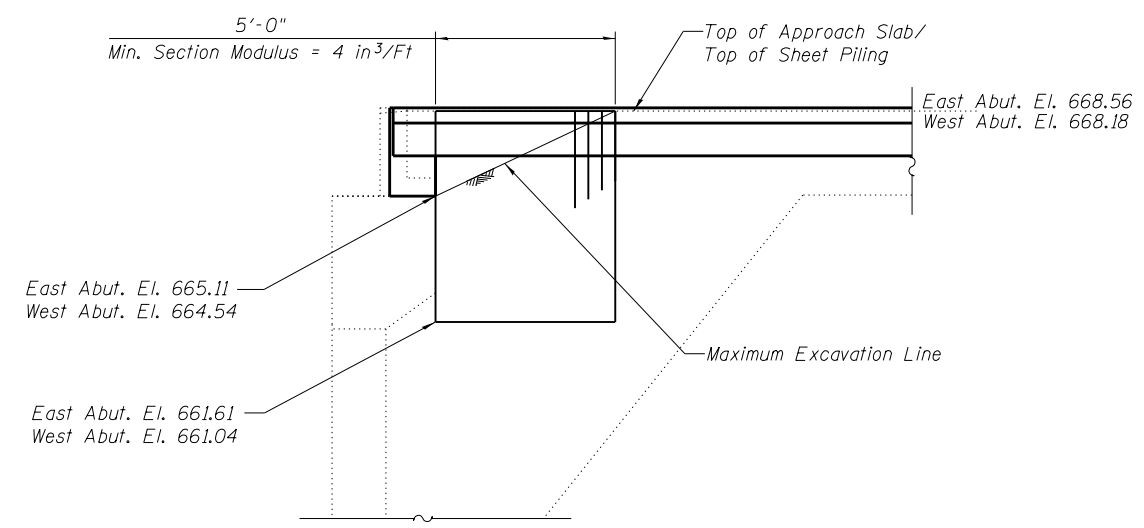
STAGE II REMOVAL



STAGE I CONSTRUCTION



STAGE II CONSTRUCTION



TEMPORARY SHEET PILING
(At East and West Abut.)

Notes:
 All Stage construction sections are looking east.
 Hatched area indicates Removal of Existing Structures.
 For quantity of Temporary Concrete Barrier, see roadway plans.
 If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.

BILL OF MATERIAL

| Item | Unit | Total |
|------------------------|---------|-------|
| Temporary Sheet Piling | Sq. Ft. | 71 |

M:\IL 132 over- Des\James River\12-15-4-001\DRAWINGS\Structure\Final Plans\CADD Sheets\049-0062_03.staging.dgn



USER NAME = JPS
 FILE NAME = 049-0062_03.staging.dgn
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| | |
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| CHECKED - DB | REVISED |
| DRAWN - CM | REVISED |
| CHECKED - OY | REVISED |

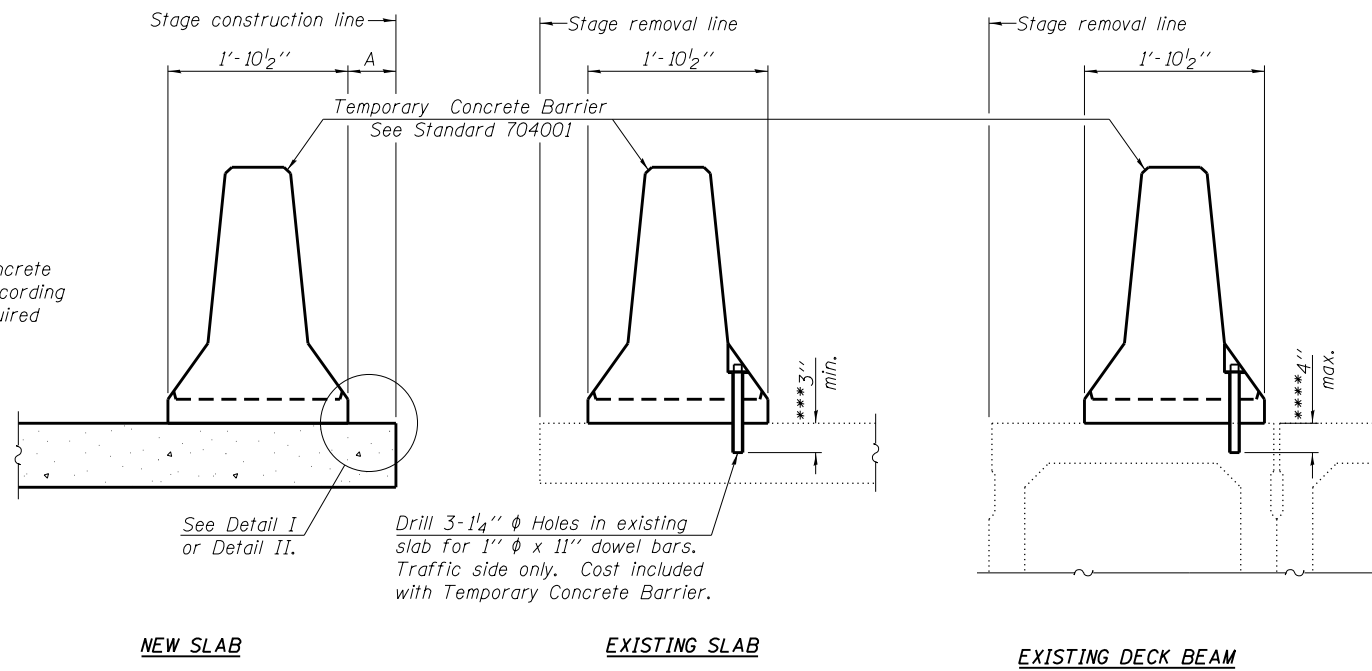
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**STAGE CONSTRUCTION DETAILS
 STRUCTURE NO. 049-0062**

SHEET NO. S3 OF S23 SHEETS

| | | | | |
|---------------------------|---------|--------|--------------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 541 | X-6B-R | LAKE | 93 | 44 |
| ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 60N22 | |

When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".



SECTIONS THRU SLAB OR DECK BEAM

NOTES

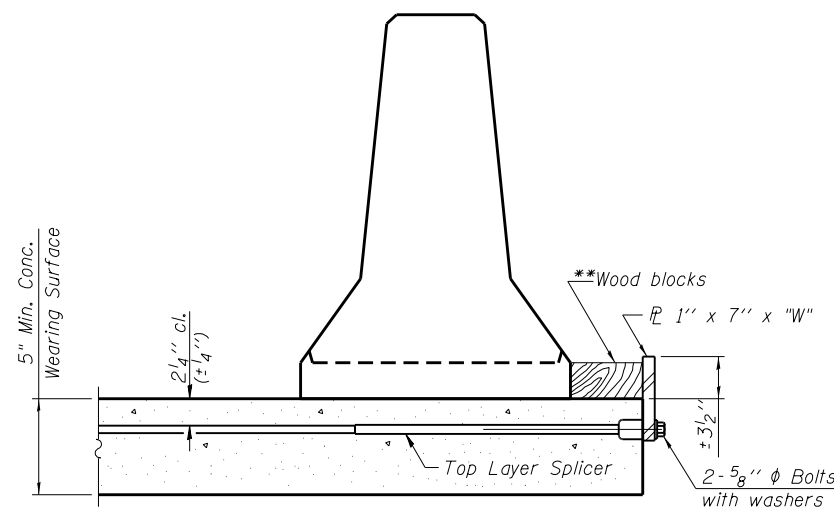
Detail I - With Bar Splicer or Couplers:
Connect one (1) 1" x 7" x "W" steel PL to the top layer of couplers with 2-5/8" φ bolts screwed to coupler at approximate C of each barrier panel.

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

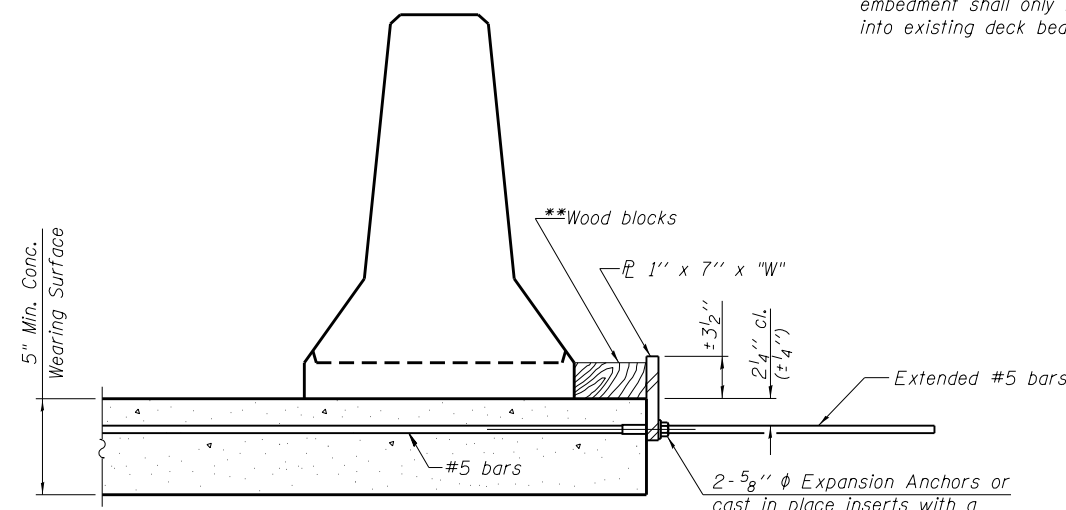
Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" x "W" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

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

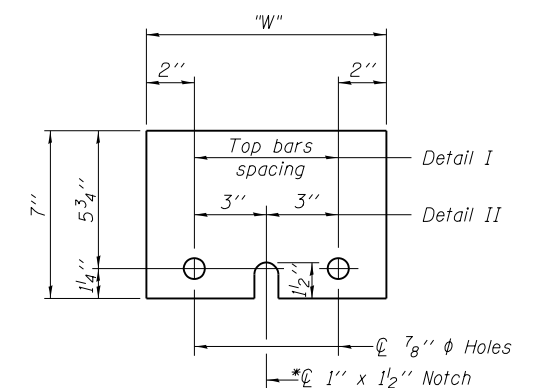
**** If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



DETAIL I



DETAIL II



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

* Required only with Detail II

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

"W" = Top bars spacing + 4"

R-27

7-1-10

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USER NAME = JPS
FILE NAME = 049-0062_04.tc.barrier.dgn
PLOT DATE = 9/3/2013

| | |
|---------------|---------|
| DESIGNED - OY | REVISED |
| CHECKED - DB | REVISED |
| DRAWN - CM | REVISED |
| CHECKED - OY | REVISED |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
STRUCTURE NO. 049-0062**

SHEET NO. S4 OF S23 SHEETS

| | | | | |
|--------------------|---------|--------|--------------|-----------|
| F.A.P. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 541 | X-6B-R | LAKE | 93 | 45 |
| CONTRACT NO. 60N22 | | | | |

ILLINOIS FED. AID PROJECT

NORTH EDGE OF PRECAST APPROACH SLAB

| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------------|-----------|----------|------------------------------|
| W. End West Appr. Pav't | 060+23.48 | 36.00 Lt | 666.71 |
| A1 | 060+33.48 | 36.00 Lt | 666.92 |
| A2 | 060+43.48 | 36.00 Lt | 667.11 |
| E. End West Appr. Pav't | 060+53.48 | 36.00 Lt | 667.29 |

NORTH GUTTER LINE

| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------------|----------|----------|------------------------------|
| W. End West Appr. Pav't | 60+27.52 | 29.00 Lt | 666.90 |
| A1 | 60+37.52 | 29.00 Lt | 667.11 |
| A2 | 60+47.52 | 29.00 Lt | 667.30 |
| E. End West Appr. Pav't | 60+57.52 | 29.00 Lt | 667.47 |

CENTERLINE RDWY. & PROFILE GRADE

| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------------|----------|--------|------------------------------|
| W. End West Appr. Pav't | 60+44.26 | 0.00 | 667.69 |
| A1 | 60+54.26 | 0.00 | 667.87 |
| A2 | 60+64.26 | 0.00 | 668.03 |
| E. End West Appr. Pav't | 60+74.26 | 0.00 | 668.17 |

STAGE CONSTR. LINE FOR WEARING SURFACE

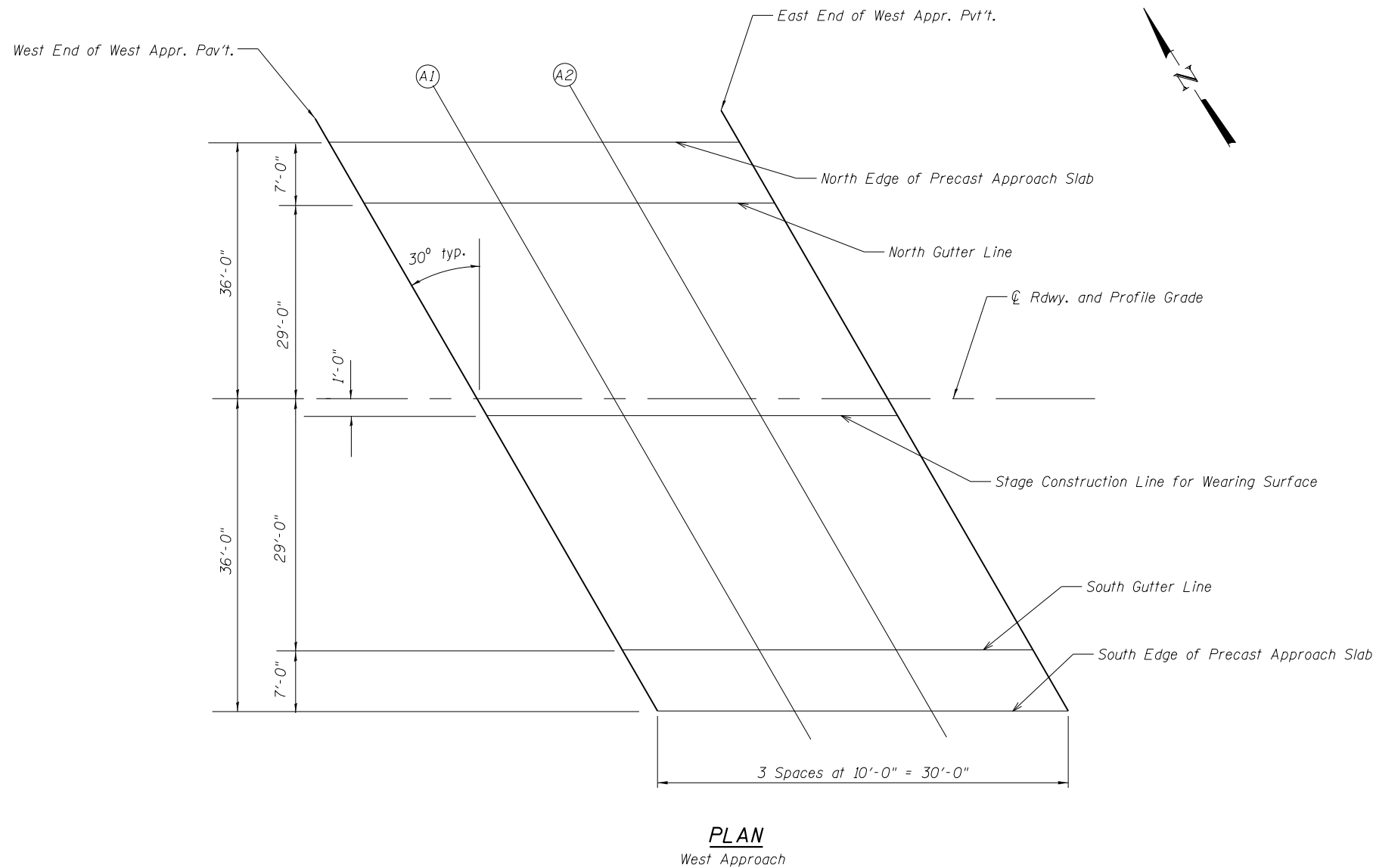
| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------------|-----------|---------|------------------------------|
| W. End West Appr. Pav't | 060+44.84 | 1.00 Rt | 667.69 |
| A1 | 060+54.84 | 1.00 Rt | 667.86 |
| A2 | 060+64.84 | 1.00 Rt | 668.02 |
| E. End West Appr. Pav't | 060+74.84 | 1.00 Rt | 668.17 |

SOUTH GUTTER LINE

| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------------|-----------|----------|------------------------------|
| W. End West Appr. Pav't | 060+61.00 | 29.00 Rt | 667.53 |
| A1 | 060+71.00 | 29.00 Rt | 667.68 |
| A2 | 060+81.00 | 29.00 Rt | 667.81 |
| E. End West Appr. Pav't | 060+91.00 | 29.00 Rt | 667.93 |

SOUTH EDGE OF PRECAST APPROACH SLAB

| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------------|-----------|----------|------------------------------|
| W. End West Appr. Pav't | 060+65.04 | 36.00 Rt | 667.48 |
| A1 | 060+75.04 | 36.00 Rt | 667.62 |
| A2 | 060+85.04 | 36.00 Rt | 667.75 |
| E. End West Appr. Pav't | 060+95.04 | 36.00 Rt | 667.86 |



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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF WEST APPROACH SLAB ELEVATIONS
STRUCTURE NO. 049-0062**

SHEET NO. S5 OF S23 SHEETS

| | | | | |
|---------------------------|---------|--------|--------------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 541 | X-6B-R | LAKE | 93 | 46 |
| ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 60N22 | |

NORTH EDGE OF PRECAST APPROACH SLAB

| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------------|-----------|----------|------------------------------|
| W. End East Appr. Pav't | 061+85.04 | 36.00 Lt | 668.12 |
| A3 | 061+95.04 | 36.00 Lt | 668.07 |
| A4 | 062+05.04 | 36.00 Lt | 668.00 |
| E. End East Appr. Pav't | 062+15.04 | 36.00 Lt | 667.91 |

NORTH GUTTER LINE

| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------------|----------|----------|------------------------------|
| W. End East Appr. Pav't | 61+89.08 | 29.00 Lt | 668.21 |
| A3 | 61+99.08 | 29.00 Lt | 668.15 |
| A4 | 62+09.08 | 29.00 Lt | 668.08 |
| E. End East Appr. Pav't | 62+19.08 | 29.00 Lt | 667.98 |

CENTERLINE RDWY. & PROFILE GRADE

| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------------|----------|--------|------------------------------|
| W. End East Appr. Pav't | 62+05.82 | 0.00 | 668.56 |
| A3 | 62+15.82 | 0.00 | 668.47 |
| A4 | 62+25.82 | 0.00 | 668.36 |
| E. End East Appr. Pav't | 62+35.82 | 0.00 | 668.24 |

STAGE CONSTR. LINE FOR WEARING SURFACE

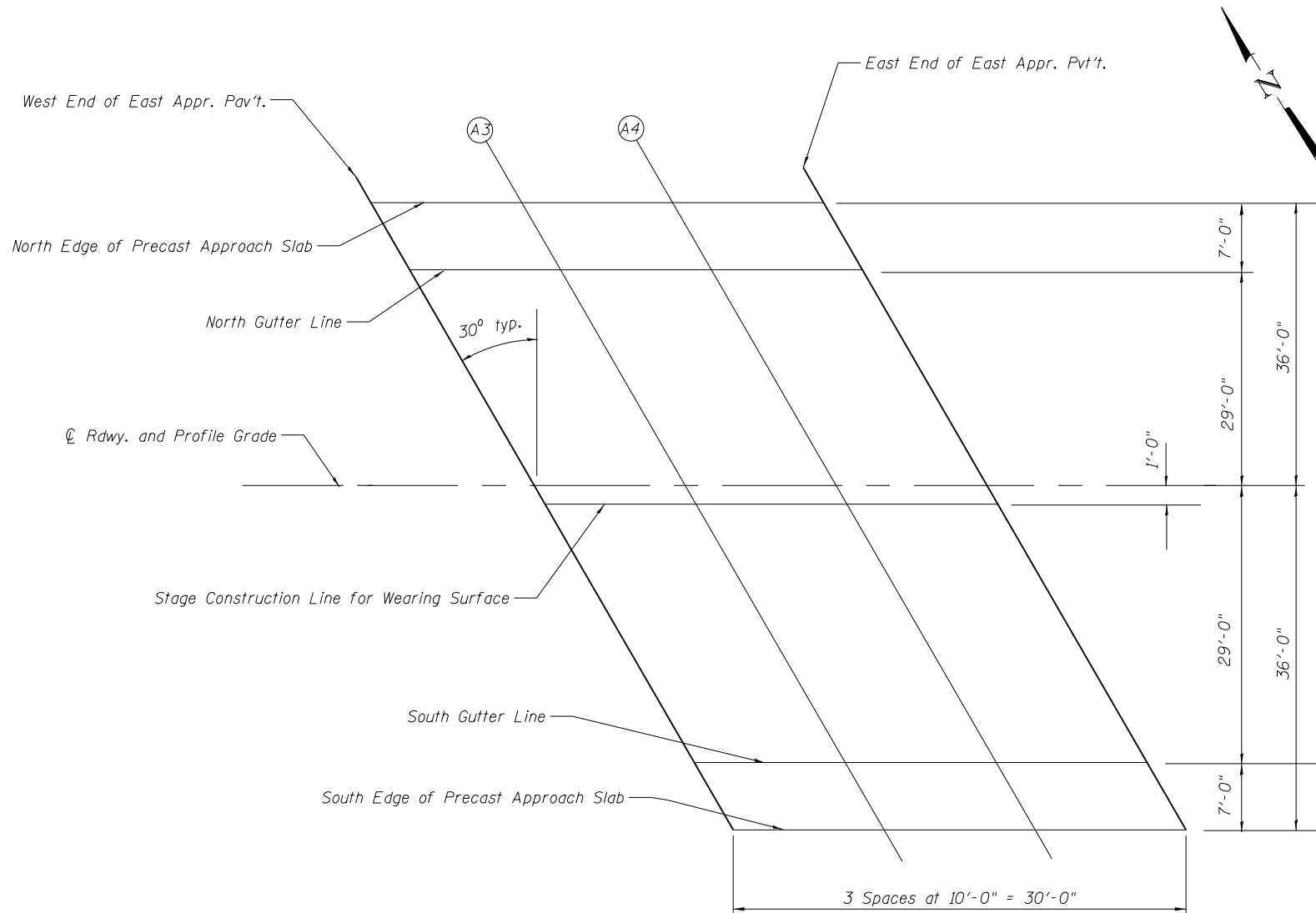
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| W. End East Appr. Pav't | 062+06.40 | 1.00 Rt | 668.53 |
| A3 | 062+16.40 | 1.00 Rt | 668.45 |
| A4 | 062+26.40 | 1.00 Rt | 668.34 |
| E. End East Appr. Pav't | 062+36.40 | 1.00 Rt | 668.22 |

SOUTH GUTTER LINE

| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------------|-----------|----------|------------------------------|
| W. End East Appr. Pav't | 062+22.56 | 29.00 Rt | 667.95 |
| A3 | 062+32.56 | 29.00 Rt | 667.83 |
| A4 | 062+42.56 | 29.00 Rt | 667.70 |
| E. End East Appr. Pav't | 062+52.56 | 29.00 Rt | 667.57 |

SOUTH EDGE OF PRECAST APPROACH SLAB

| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------------|-----------|----------|------------------------------|
| W. End East Appr. Pav't | 062+26.60 | 36.00 Rt | 667.79 |
| A3 | 062+36.60 | 36.00 Rt | 667.67 |
| A4 | 062+46.60 | 36.00 Rt | 667.54 |
| E. End East Appr. Pav't | 062+56.60 | 36.00 Rt | 667.40 |



PLAN
East Approach

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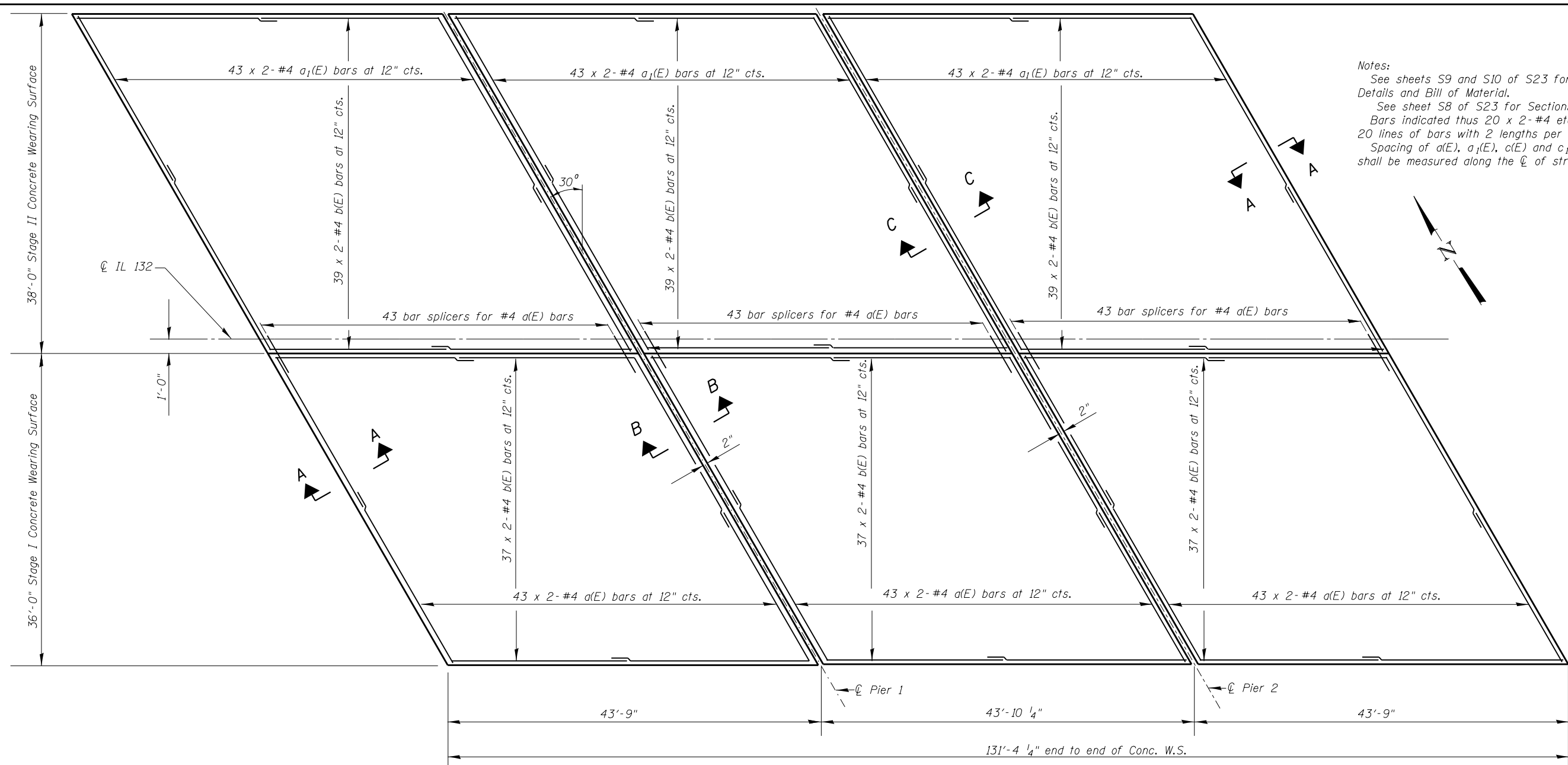
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF EAST APPROACH SLAB ELEVATIONS
STRUCTURE NO. 049-0062

SHEET NO. 56 OF 523 SHEETS

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
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| 541 | X-6B-R | LAKE | 93 | 47 |
| ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 60N22 | |



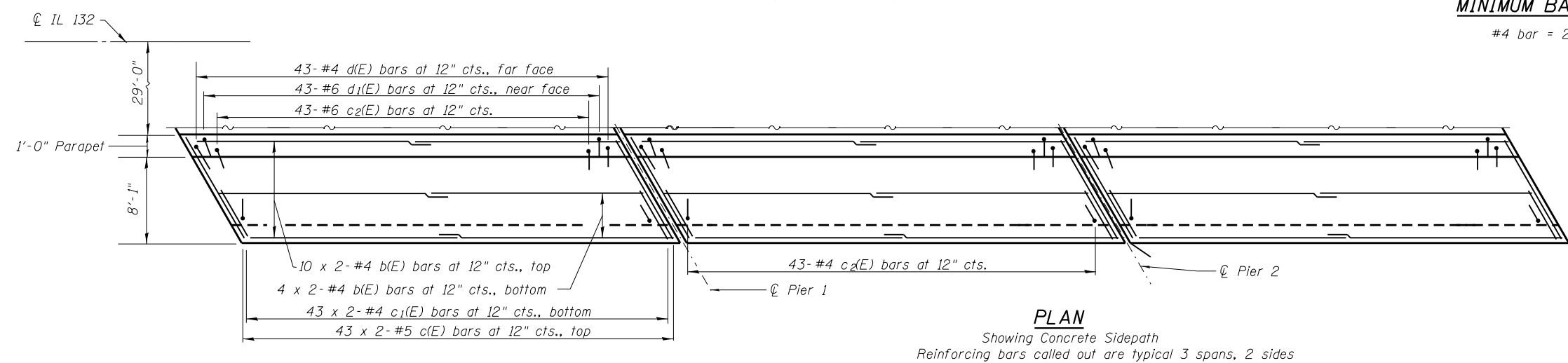
Notes:
 See sheets S9 and S10 of S23 for Superstructure Details and Bill of Material.
 See sheet S8 of S23 for Sections A-A, B-B and C-C.
 Bars indicated thus 20 x 2-#4 etc. indicates 20 lines of bars with 2 lengths per line.
 Spacing of a(E), a1(E), c(E) and c1(E) bars shall be measured along the ϕ of structure.

PLAN

Showing Concrete Wearing Surface

MINIMUM BAR LAP

#4 bar = 2'-7"



PLAN

Showing Concrete Sidepath
 Reinforcing bars called out are typical 3 spans, 2 sides



| | |
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| DRAWN - CM | REVISED |
| CHECKED - OY | REVISED |

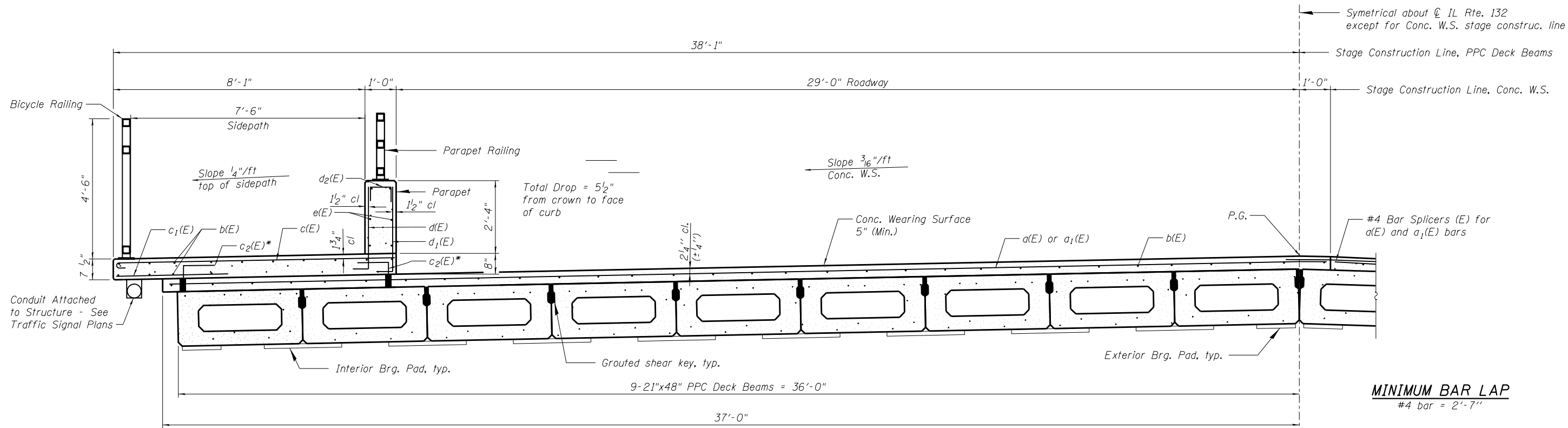
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE PLAN
 STRUCTURE NO. 049-0062

SHEET NO. S7 OF S23 SHEETS

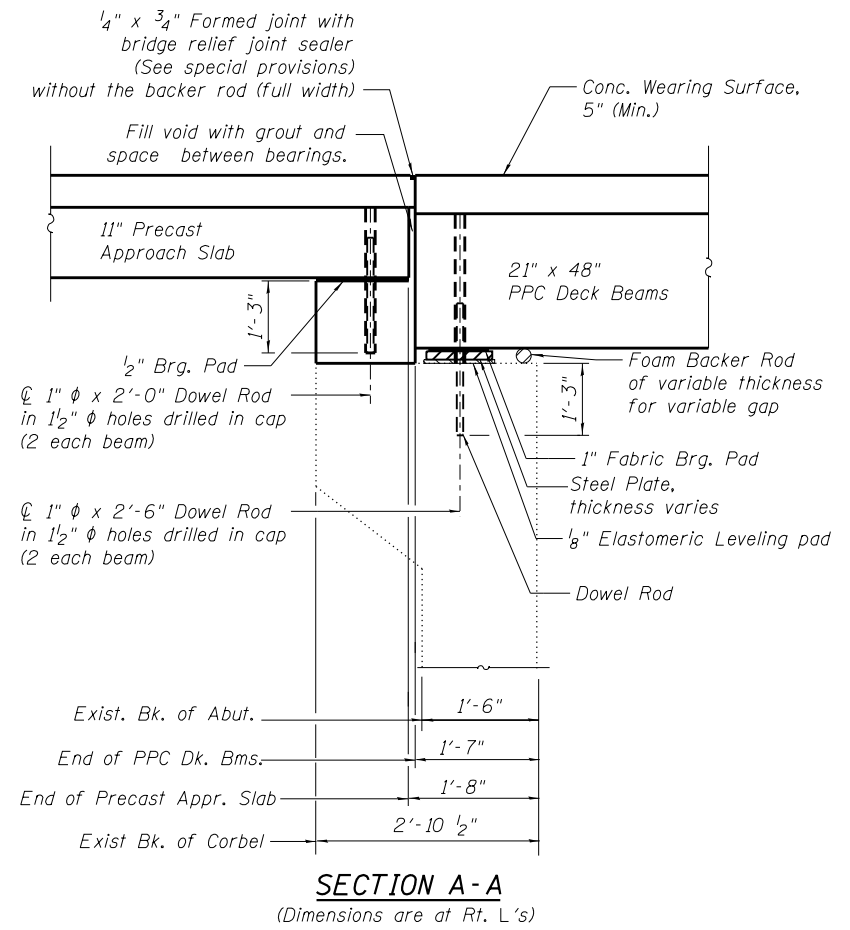
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| 541 | X-6B-R | LAKE | 93 | 48 |
| CONTRACT NO. 60N22 | | | | |

ILLINOIS FED. AID PROJECT

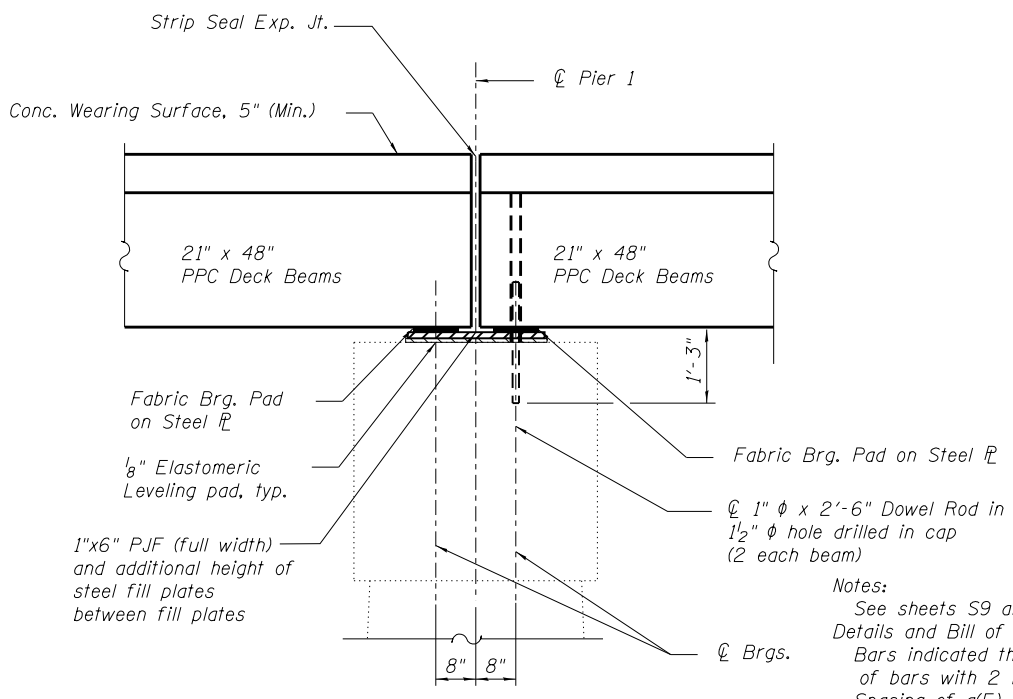


MINIMUM BAR LAP
#4 bar = 2'-7"

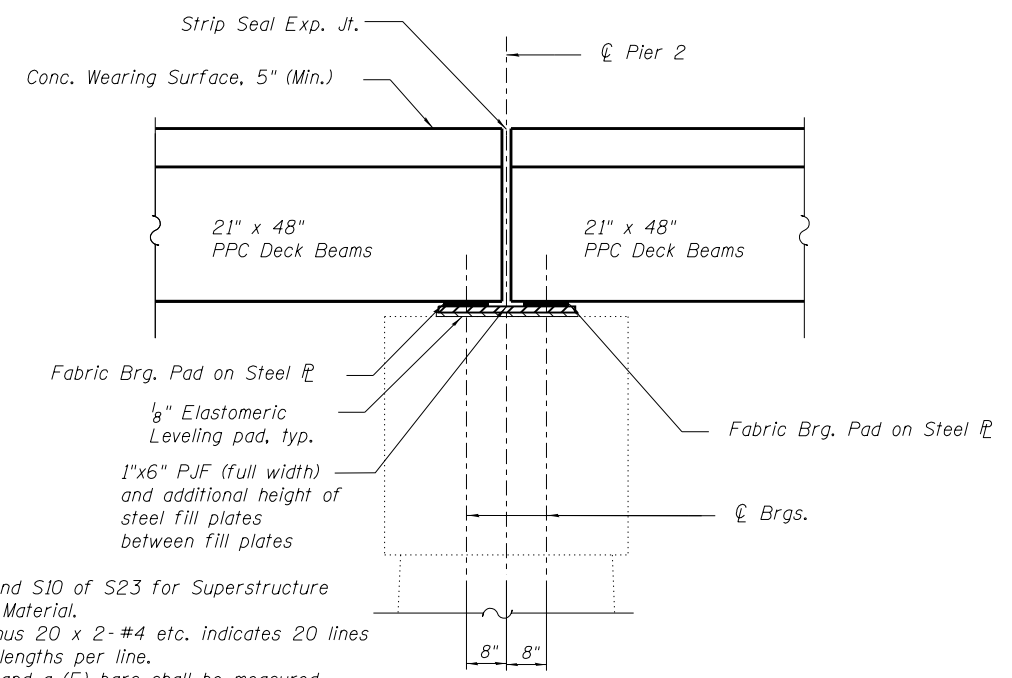
CROSS SECTION
(Looking East)



SECTION A-A
(Dimensions are at Rt. L's)



SECTION B-B
(Dimensions are at Rt. L's)



SECTION C-C
(Dimensions are at Rt. L's)

Notes:
See sheets S9 and S10 of S23 for Superstructure Details and Bill of Material.
Bars indicated thus 20 x 2-#4 etc. indicates 20 lines of bars with 2 lengths per line.
Spacing of a(E) and a1(E) bars shall be measured along the C of structure.
*Epoxy grout bars into 5" deep drilled holes in the Concrete Wearing Surface accordance with Section 584 of the Standard Specifications.
All concrete wearing surface on deck beams shall be placed prior to casting a backwall and/or approach slab.
See sheet S18 of S23 for fabric bearing pad details.
Foam backer rod and grout included in Cost for PPC Deck Beams, 21" Depth.
Cost of grout included in PPC Deck Beams, 21" Depth.
1/8" Elastomeric leveling pads shall have material properties according to Art. 1052.02 of the Standard Specifications.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

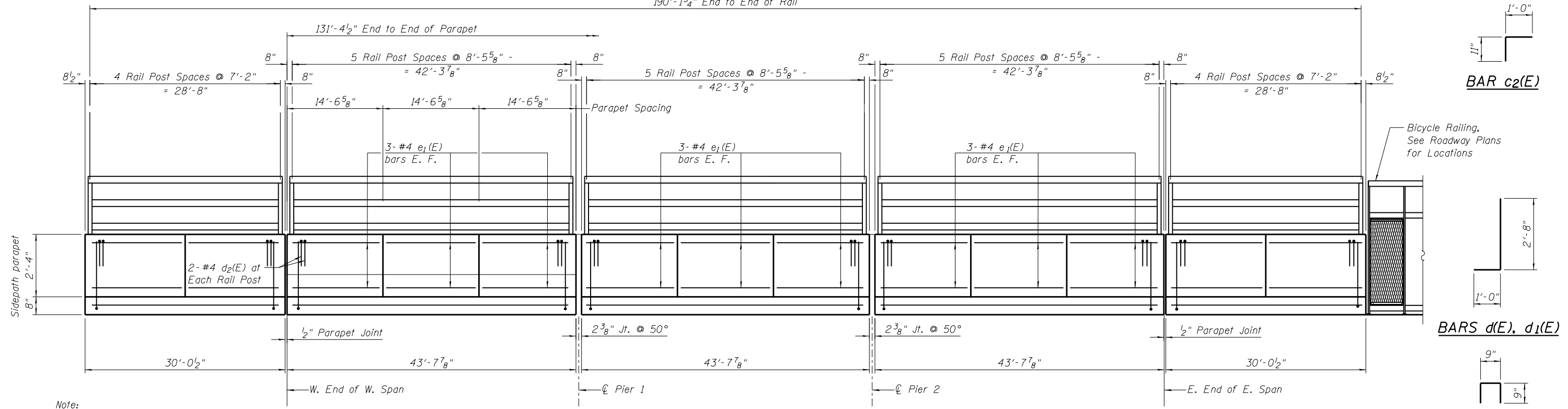
SUPERSTRUCTURE CROSS SECTION
STRUCTURE NO. 049-0062

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|--------------------|----------------|-------------|-----------------|--------------|
| F.A.P. RTE. 541 | SECTION X-6B-R | COUNTY LAKE | TOTAL SHEETS 93 | SHEET NO. 49 |
| CONTRACT NO. 60N22 | | | | |

SHEET NO. 58 OF S23 SHEETS

ILLINOIS FED. AID PROJECT

190'-1 3/4" End to End of Rail



Note:
See sheet S12 of S23 for Approach Parapet reinforcement.

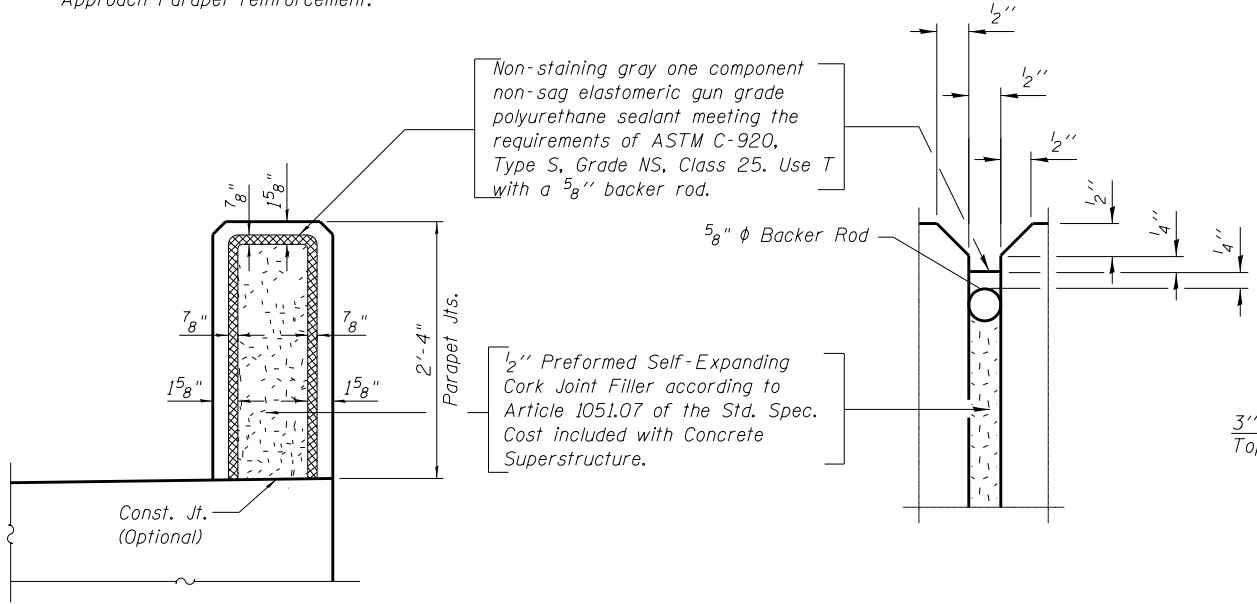
INSIDE ELEVATION OF PARAPET

BAR c2(E)

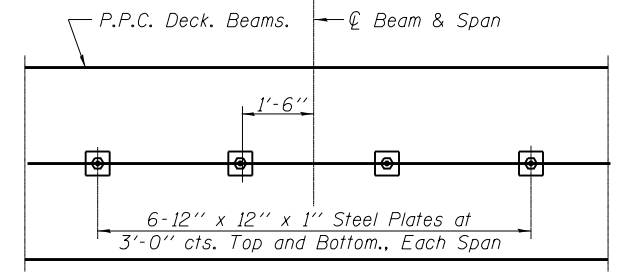
BARS d(E), d1(E)

BAR d2(E)

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

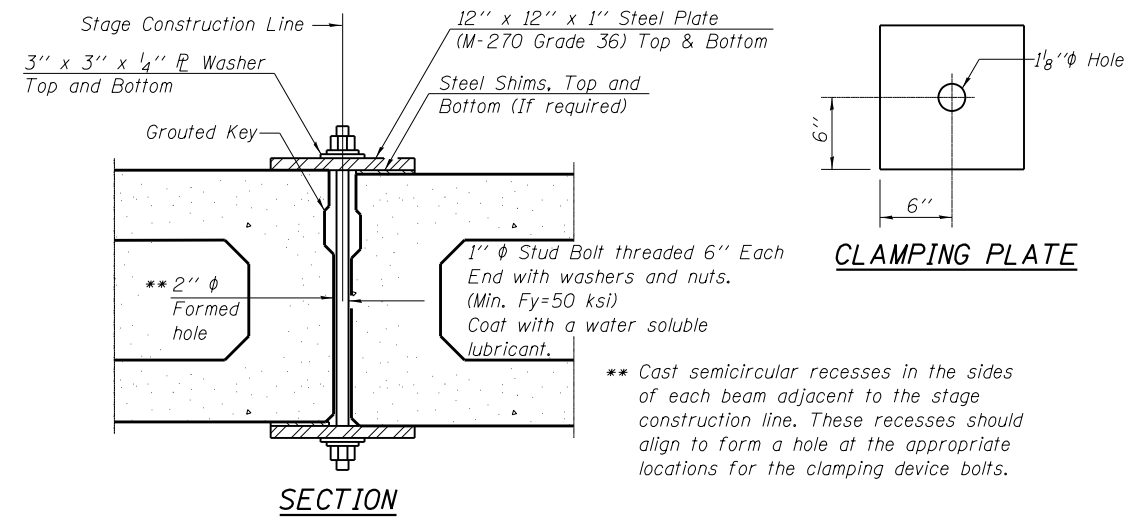


PARAPET JOINT DETAILS



PLAN

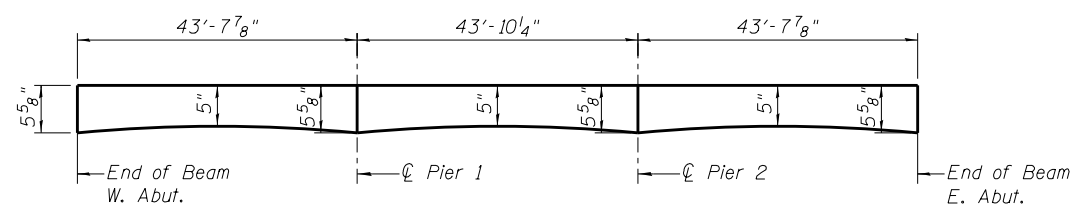
BAR c(E)



SECTION

SHEAR KEY CLAMPING DETAILS AT STAGE CONST. JT.

Cost included with Precast Prestressed Concrete Deck Beams.
See Stage Construction Details for traffic lanes.



ANTICIPATED CONCRETE WEARING SURFACE PROFILE
Concrete Wearing Surface along Roadway

SUPERSTRUCTURE BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|----------------------------------|-----|------|---------|-------|
| a(E) | 258 | #4 | 21'-11" | — |
| a1(E) | 258 | #4 | 23'-1" | — |
| b(E) | 624 | #4 | 23'-1" | — |
| c(E) | 258 | #5 | 10'-8" | ┌ |
| c1(E) | 258 | #4 | 3'-8" | — |
| c2(E) | 516 | #6 | 1'-11" | └ |
| d(E) | 258 | #4 | 3'-8" | └ |
| d1(E) | 258 | #6 | 3'-8" | └ |
| d2(E) | 72 | #4 | 2'-3" | └ |
| e1(E) | 108 | #4 | 14'-3" | — |
| Reinforcement Bars, Epoxy Coated | | | Pound | 25560 |
| Concrete Superstructure | | | Cu. Yd. | 80 |
| Concrete Wearing Surface, 5" | | | Sq. Yd. | 1079 |
| Preformed Joint Strip Seal | | | Foot | 179 |

Bars indicated thus 1 x 2-#8 etc. indicates 1 line of bars with 2 lengths per line.

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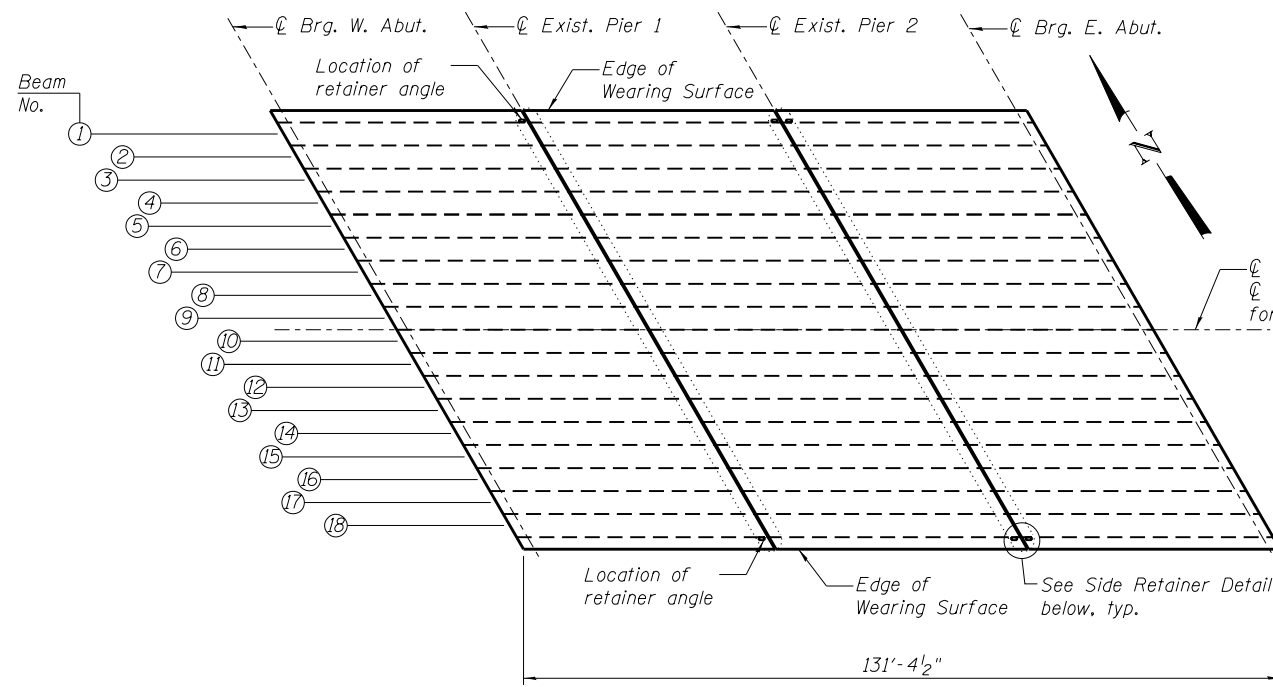
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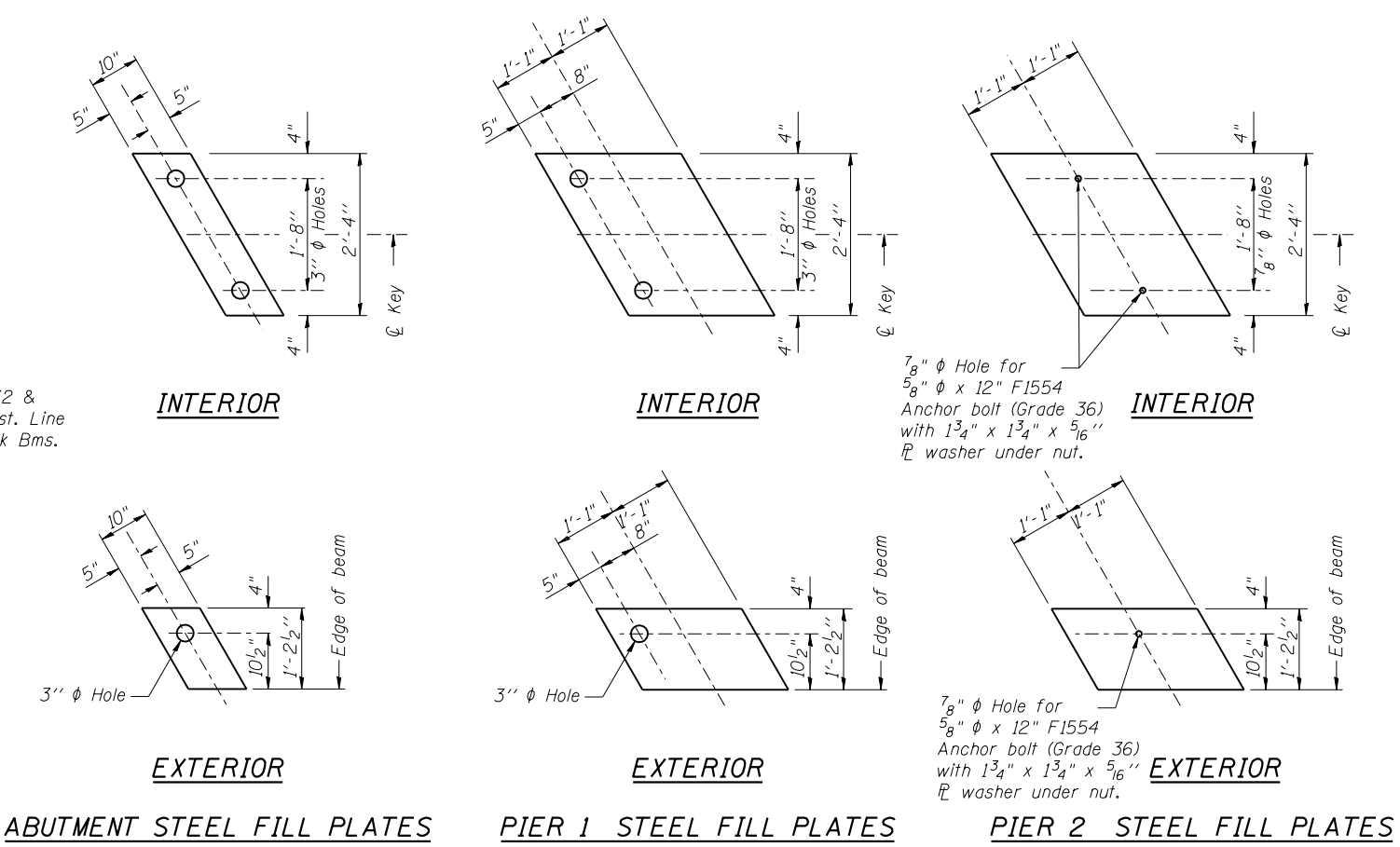
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SHEET NO. 59 OF 523 SHEETS

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|---------|--------|--------------|-----------|
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| CONTRACT NO. 60N22 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

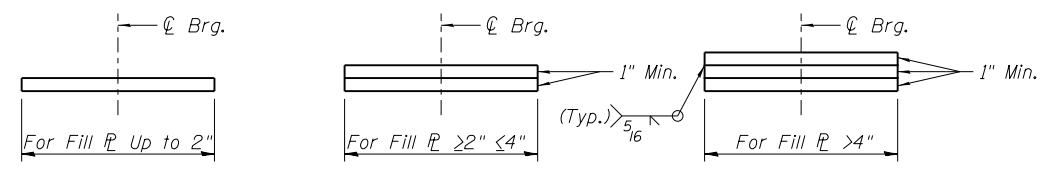


KEY PLAN



ESTIMATED FILL PLATE THICKNESS

| Beam No. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| W. Abut. | 5 3/8" | 5" | 4 5/8" | 4 1/8" | 3 3/4" | 3 3/8" | 2 7/8" | 2 1/2" | 2 1/8" | 1 5/8" | 1 3/4" | 1 7/8" | 2" | 2 1/8" | 2 1/4" | 2 3/8" | 2 1/2" | 2 1/2" | 2 5/8" |
| Pier 1 | 3 3/4" | 3 1/2" | 3 1/4" | 3" | 2 3/4" | 2 1/2" | 2 1/4" | 2" | 1 3/4" | 1 1/2" | 1 5/8" | 1 5/8" | 1 3/4" | 1 3/4" | 1 7/8" | 1 7/8" | 2" | 2" | 2 1/8" |
| Pier 2 | 1 5/8" | 1 5/8" | 1 3/4" | 1 3/4" | 1 3/4" | 1 7/8" | 1 7/8" | 1 7/8" | 1 7/8" | 2" | 2" | 2 1/8" | 2 1/8" | 2 1/8" | 2 1/4" | 2 1/4" | 2 3/8" | 2 3/8" | 2 1/2" |
| E. Abut. | 5/8" | 3/4" | 1" | 1 1/4" | 1 1/2" | 1 3/4" | 2" | 2 1/4" | 2 3/8" | 2 5/8" | 2 7/8" | 3 1/8" | 3 1/4" | 3 1/2" | 3 3/4" | 3 7/8" | 4 1/8" | 4 3/8" | 4 1/2" |

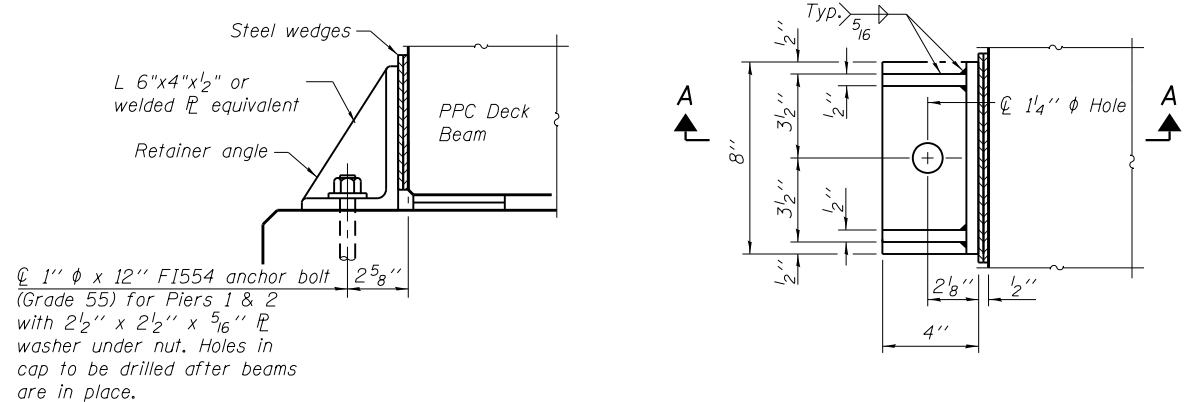


ELEVATION STEEL FILL PLATES

Notes: After the bearing seats have been repaired, the Contractor shall survey the elevation of each beam seat, then prepare a Table of Fill Plate Thicknesses that will support each beam at its required elevation. This table and supporting calculations shall be provided to the Engineer before fabrication of the fill plates.

Note: One 1/8" elastomeric leveling pad shall be supplied for each fill plate location. The exterior dimensions of the elastomeric leveling pad shall be 1/4" larger than the associated fill plate and it shall have holes that align with the fill plate.

Notes:
 Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
 Anchor bolts for side retainers may be cast in place or installed in holes drilled before or after members are in place.
 Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
 The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade 50.
 Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.



SECTION A-A

PLAN

SIDE RETAINER

Notes:
 Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.
 The side retainers shall be galvanized after shop fabrication according to AASHTO M III and ASTM 385.
 Anchor bolts and plate washers shall be galvanized according to AASHTO M 232.
 After the concrete overlay is poured and cured, the steel wedges shall be removed.
 Bolt one permanent retainer angle to pier on outside face of each expansion span. One on each end of Pier 1 and two on each end of Pier 2.
 Permanent side retainers shall be provided outside the fascia beams at the expansion ends of all spans.
 Temporary side retainers shall be provided outside the fascia beams at the expansion ends of all spans at the stage construction line.
 All retainers and associated anchor bolts are included in the cost of Precast Prestressed Concrete Deck Beams of the applicable depth.
 After the Concrete Wearing Surface has been poured and cured the temporary retainer angles and anchor bolts shall be removed. Anchor bolts shall be cut off flush, ground smooth, and sealed with epoxy.
 Retainers shall be shimmed tight until the concrete wearing is poured and cured. The shims shall then be removed from the permanent retainers and the retainers left in place.

BILL OF MATERIAL

| Item | Unit | Total |
|--|-------|--------|
| Anchor Bolts, 5/8" | Each | 36 |
| Furnishing and Erecting Structural Steel | Pound | 20,420 |

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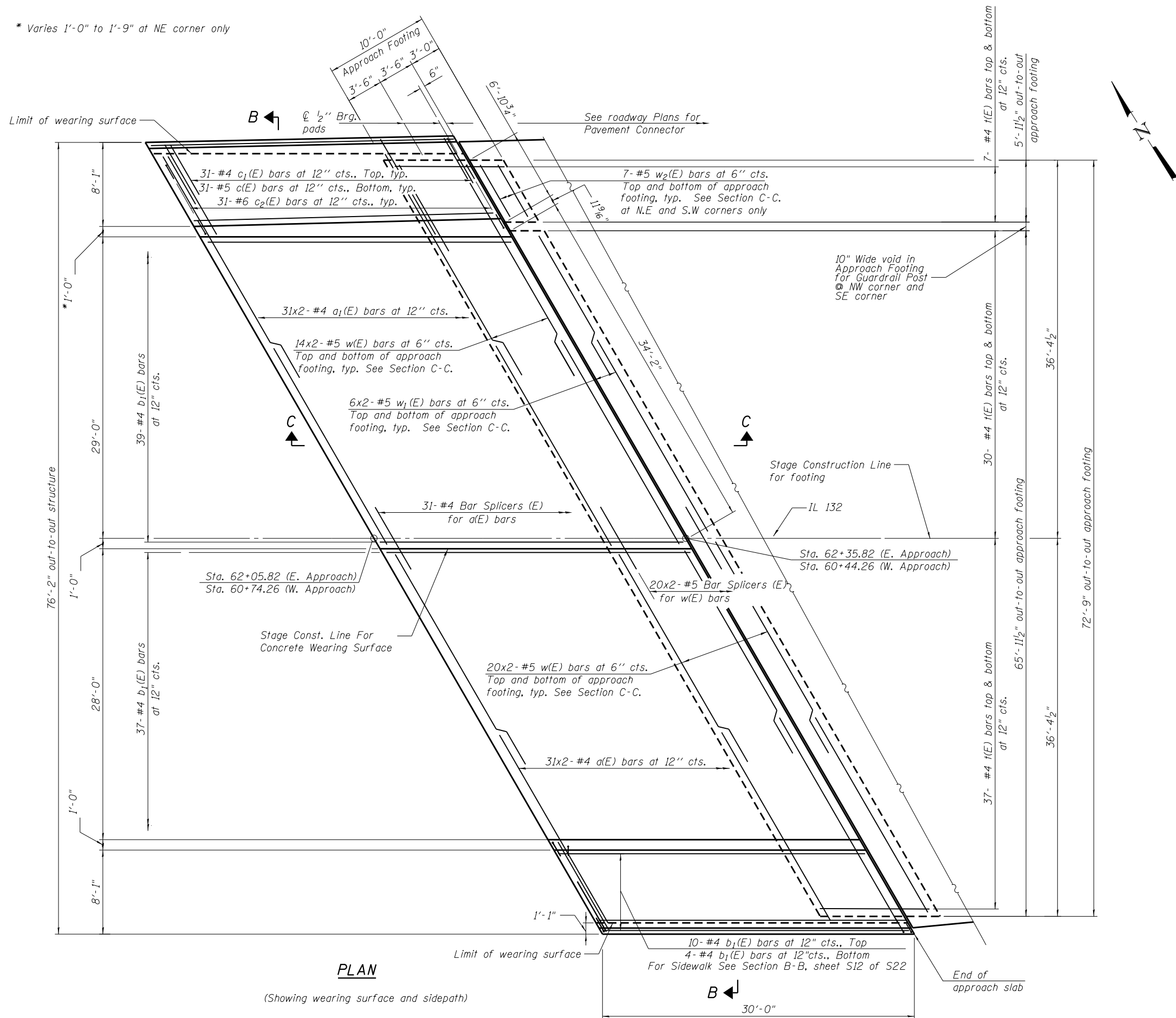
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
 STRUCTURE NO. 049-0062
 SHEET NO. S10 OF S23 SHEETS

| | | | | |
|---------------------------|---------|--------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 541 | X-6B-R | LAKE | 93 | 51 |
| CONTRACT NO. 60N22 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

* Varies 1'-0" to 1'-9" at NE corner only



PLAN
(Showing wearing surface and sidepath)

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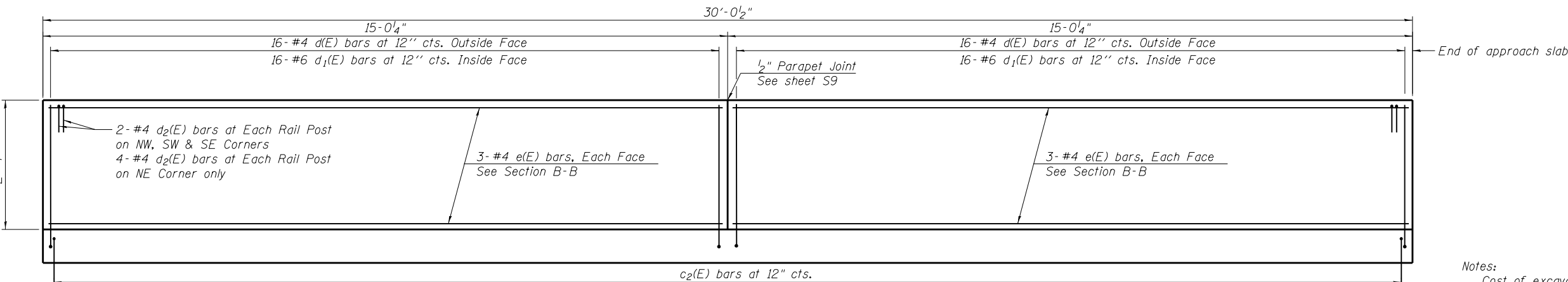
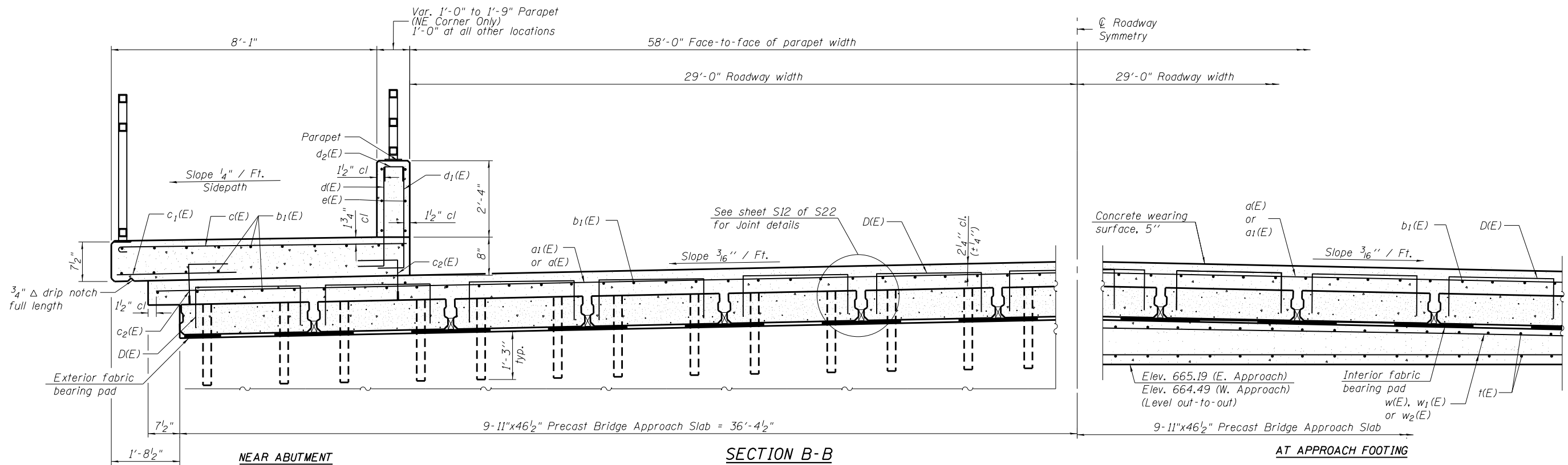
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DEPARTMENT OF TRANSPORTATION

PRECAST BRIDGE APPROACH SLAB
STRUCTURE NO. 049-0062

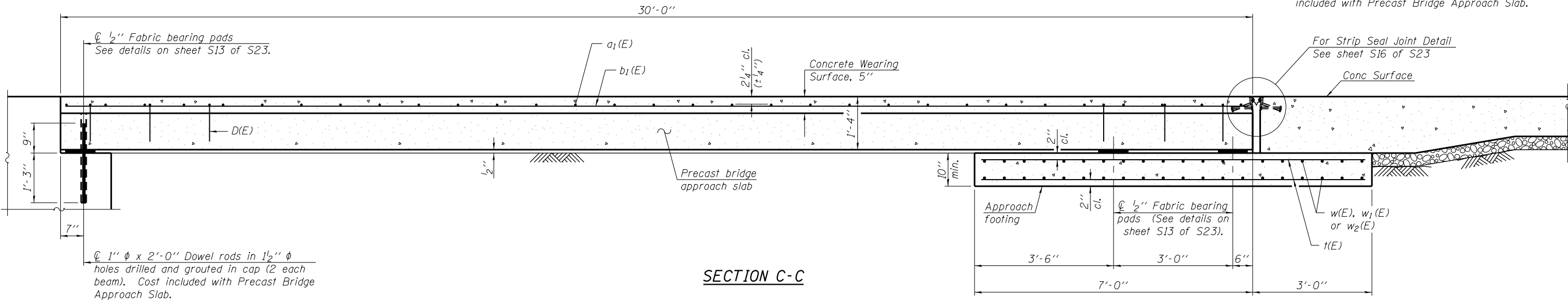
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| CONTRACT NO. 60N22 | | | | |

SHEET NO. S11 OF S23 SHEETS

ILLINOIS FED. AID PROJECT



Notes:
 Cost of excavation for approach footing included with Concrete Structures.
 Cost of excavation for Precast Bridge Approach Slab included with Precast Bridge Approach Slab.



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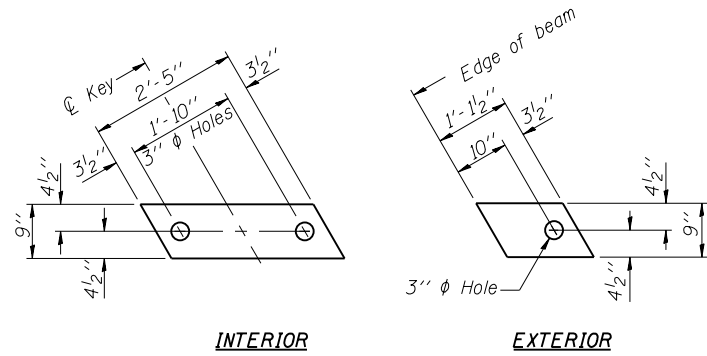
PRECAST BRIDGE APPROACH SLAB
 STRUCTURE NO. 049-0062

SHEET NO. S12 OF S23 SHEETS

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
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| CONTRACT NO. 60N22 | | | | |

ILLINOIS FED. AID PROJECT

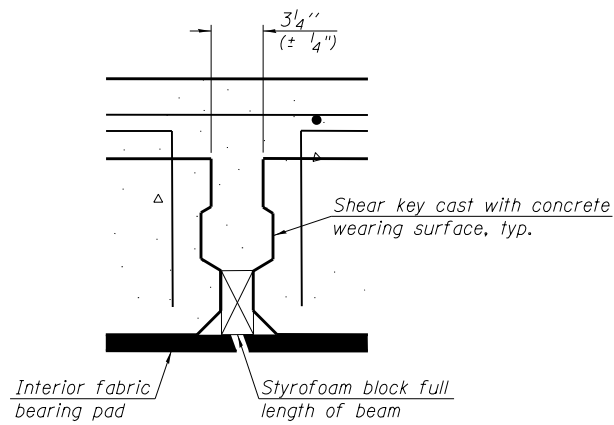
(Sheet 2 of 4)



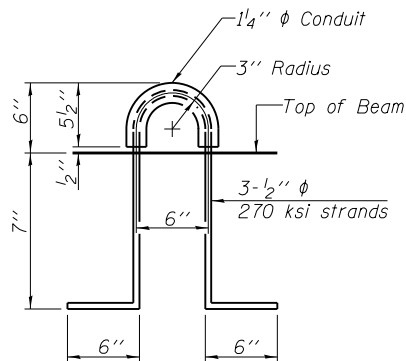
INTERIOR **EXTERIOR**

FABRIC BEARING PAD

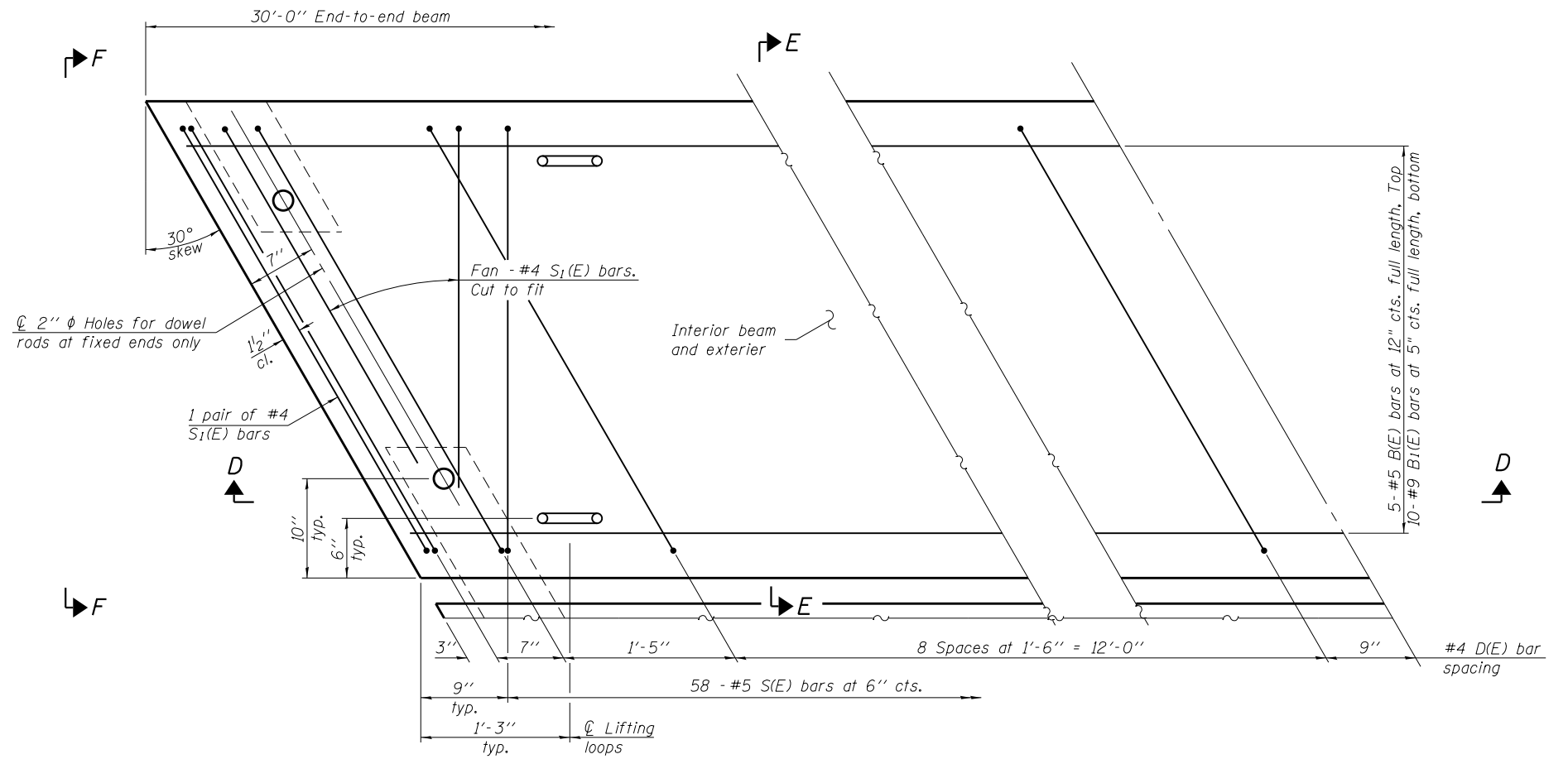
Notes:
 All bearing pads shall be 1/2" thick.
 Omit holes for fabric bearing pads at approach slab footing end of beams.
 Expansion bearing pad shall be bonded to the approach slab footing.



SECTION THRU SHEAR KEY JOINT



LIFTING LOOP DETAIL



PLAN VIEW
 (showing precast bridge approach beams)

M:\L 132 over- Dep\James River\12-15-00\1\DRAWINGS\Structural\Final Plans\CADD Sheets\049-0062.13.appr.slab.dgn



| | | |
|---------------------------------------|---------------|---------|
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| FILE NAME = 049-0062.13.appr.slab.dgn | CHECKED - DB | REVISED |
| PLOT DATE = 9/3/2013 | DRAWN - CM | REVISED |
| | CHECKED - OY | REVISED |

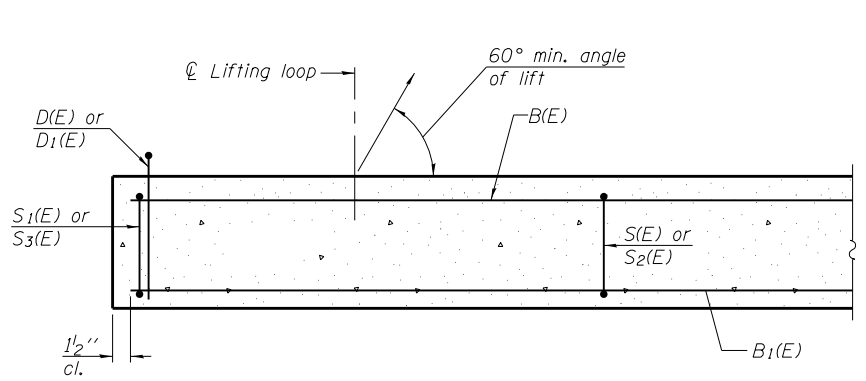
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PRECAST BRIDGE APPROACH SLAB
STRUCTURE NO. 049-0062

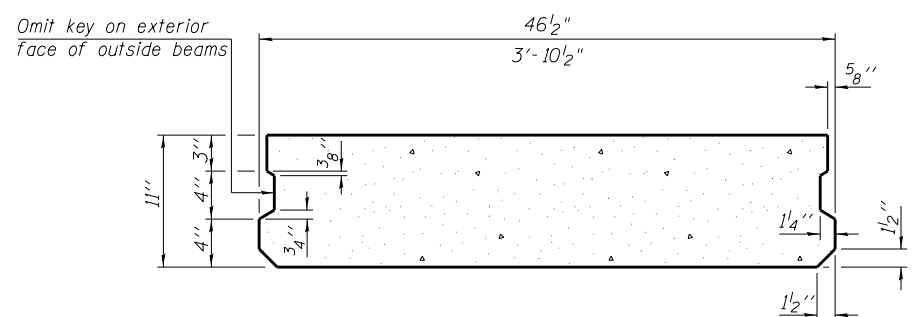
SHEET NO. S13 OF S23 SHEETS

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|---------|--------|--------------|-----------|
| 541 | X-6B-R | LAKE | 93 | 54 |
| CONTRACT NO. 60N22 | | | | |

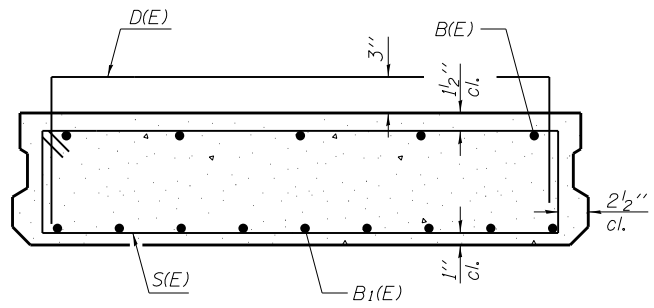
ILLINOIS FED. AID PROJECT



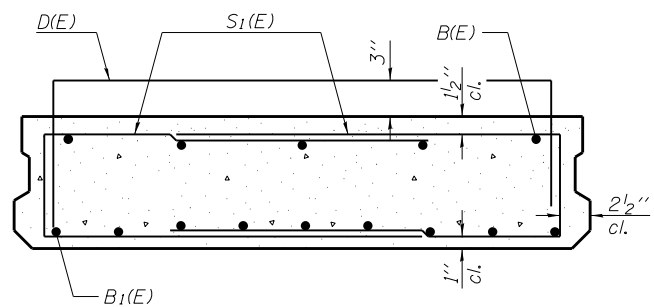
SECTION D-D



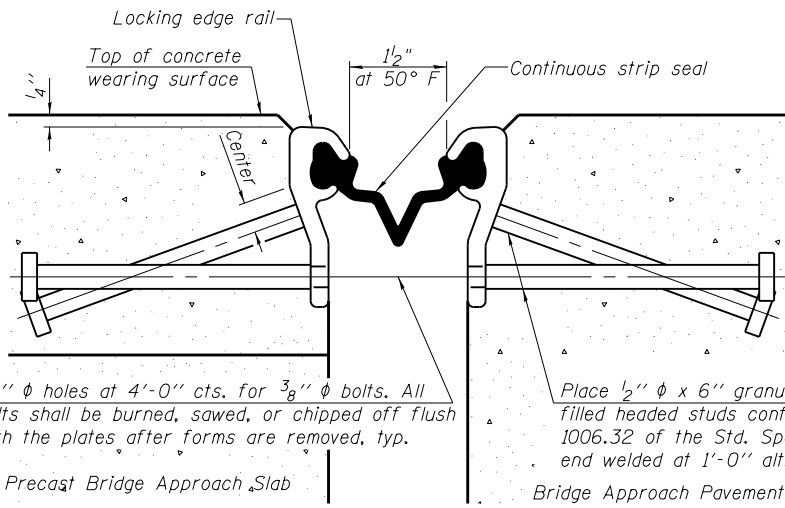
SECTION E-E
(Showing dimensions)



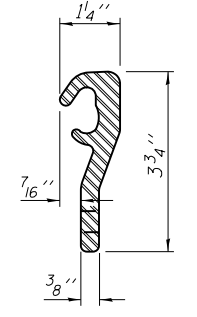
SECTION E-E
(Showing reinforcement)



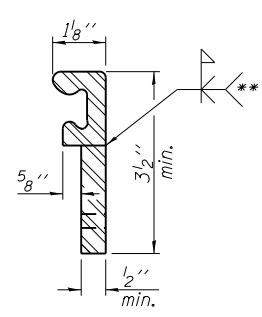
VIEW F-F
(Showing reinforcement)



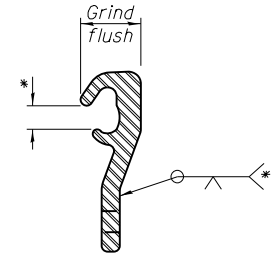
SECTION THRU STRIP SEAL JOINT
(at rt. angles)



ROLLED (EXTRUDED) RAIL



WELDED RAIL

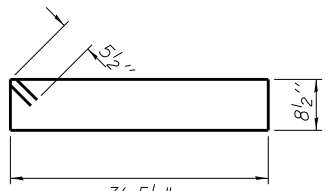


LOCKING EDGE RAIL SPLICE

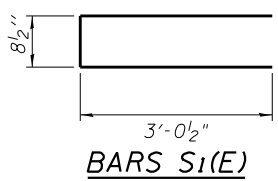
Rolled rail shown, welded rail similar.

LOCKING EDGE RAIL

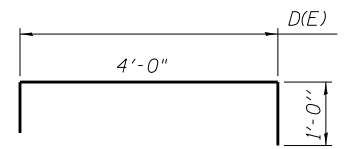
- * Omit weld at seal opening.
- ** Back gouge not required if complete joint penetration is verified by mock-up.



BARS S(E)



BARS S1(E)



BARS D(E)

BAR LIST
1 EACH BEAM
(For information only)

| Bar | No. | Size | Length | Shape |
|-------|-----|------|-----------|-------|
| B(E) | 5 | #5 | 29'-8" | — |
| B1(E) | 10 | #9 | 29'-8" | — |
| D(E) | 22 | #4 | 6'-0" | ┌ |
| S(E) | 58 | #5 | 9'-3" | ▬ |
| S1(E) | 7 | #4 | 6'-9 1/2" | ▬ |

Notes:
 The precast bridge approach slab shall be according to Section 504 of the Standard Specifications and shall be paid for at the contract unit price per square foot for Precast Bridge Approach Slab.
 Cast-in-place substitution of Precast Bridge Approach Slab is not allowed. Parapet concrete shall be paid for as Concrete Superstructure.
 Parapet and wearing surface reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
 Approach footing concrete shall be paid for as Concrete Structures.
 The top surface of precast bridge approach slabs shall be roughened to a depth of 1/4" according to the IDOT "Manual for Fabrication of Precast Prestressed Concrete Products."
 After precast bridge approach slab has been erected, holes shall be drilled into abutment and anchor dowels placed. Dowel holes shall be filled with non-shrink grout to top of precast slab and allowed to cure fully prior to grouting the longitudinal shear keys.
 Two 1/8" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location. Cost included with Precast Bridge Approach Slab.
 A minimum 2 1/2" diameter lifting pins shall be used to engage the lifting loops during handling.
 Compressive strength of precast concrete, f'c shall be 6,000 psi.
 For additional parapet details, see sheet S12 of S23.
 Any concrete poured monolithically with the wearing surface, such as curbs, will not be paid for separately, but will be included in the cost of Concrete Wearing Surface, 5".
 The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The strip seal shall extend 6" beyond the edge of the approach slab on each end. The configuration of the strip seal shall match the configuration of the Locking Edge Rails.
 The height and thickness of the Locking Edge Rails shown are minimum dimensions. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed.
 The inside of the Locking Edge Rail groove shall be free of weld residue. Locking Edge Rails may be spliced at slope discontinuities and stage construction joints.
 The manufacturer's recommended installation methods shall be followed.
 All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.
 Maximum space between rail segments at stage lines shall be 3/16", sealed with a suitable sealant.
 For bar bend details for c(E), c2(E), d(E), d1(E), and d2(E) bars see sheet S9 of S23.

TWO APPROACHES
BILL OF MATERIAL

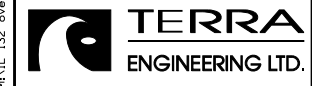
| Bar | No. | Size | Length | Shape |
|----------------------------------|-----|------|---------|--------|
| d(E) | 124 | #4 | 21'-11" | ┌ |
| a1(E) | 124 | #4 | 23'-1" | ┌ |
| b1(E) | 208 | #4 | 29'-8" | — |
| c(E) | 124 | #5 | 10'-8" | ┌ |
| c1(E) | 124 | #4 | 3'-8" | ┌ |
| c2(E) | 248 | #6 | 1'-11" | ┌ |
| d(E) | 128 | #4 | 3'-8" | ┌ |
| d1(E) | 128 | #6 | 3'-8" | ┌ |
| d2(E) | 50 | #4 | 2'-3" | ┌ |
| e(E) | 48 | #4 | 14'-8" | — |
| t(E) | 296 | #4 | 11'-2" | — |
| w(E) | 272 | #5 | 22'-2" | — |
| w1(E) | 48 | #5 | 18'-7" | — |
| w2(E) | 28 | #5 | 6'-6" | — |
| Concrete Superstructure | | | Cu. Yd. | 37.8 |
| Concrete Structures | | | Cu. Yd. | 96.8 |
| Reinforcement Bars, Epoxy Coated | | | Pound | 21,430 |
| Precast Bridge Approach Slab | | | Sq. Ft. | 4185 |
| Concrete Wearing Surface, 5" | | | Sq. Yd. | 493 |
| Preformed Joint Strip Seal | | | Foot | 179 |

BA-P-R

12-12-12

(Beams: 36" min. width; 72" max. width)

(Sheet 4 of 4)



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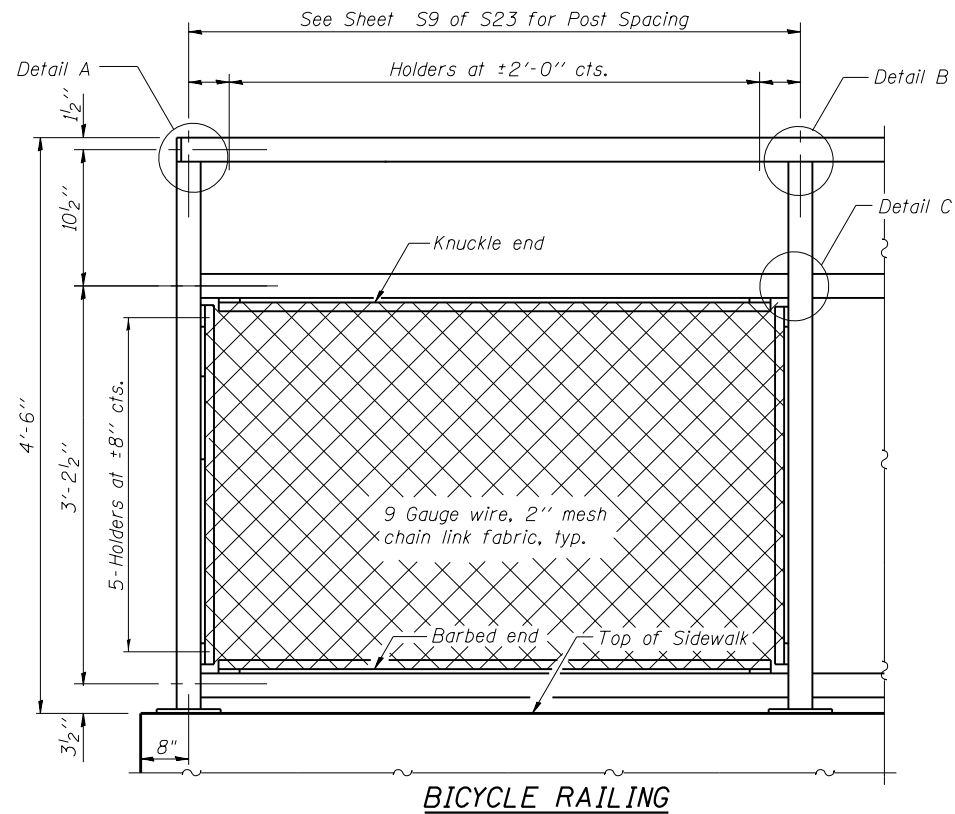
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 CHECKED - DB
 DRAWN - CM
 CHECKED - OY

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

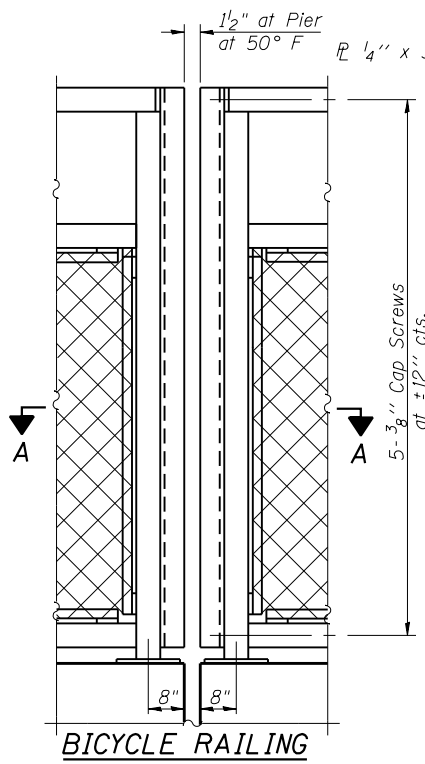
PRECAST BRIDGE APPROACH SLAB
 STRUCTURE NO. 049-0062
 SHEET NO. S14 OF S23 SHEETS

F.A.P. RE. 541
 SECTION X-6B-R
 COUNTY LAKE
 TOTAL SHEETS 93
 SHEET NO. 55
 CONTRACT NO. 60N22
 ILLINOIS FED. AID PROJECT

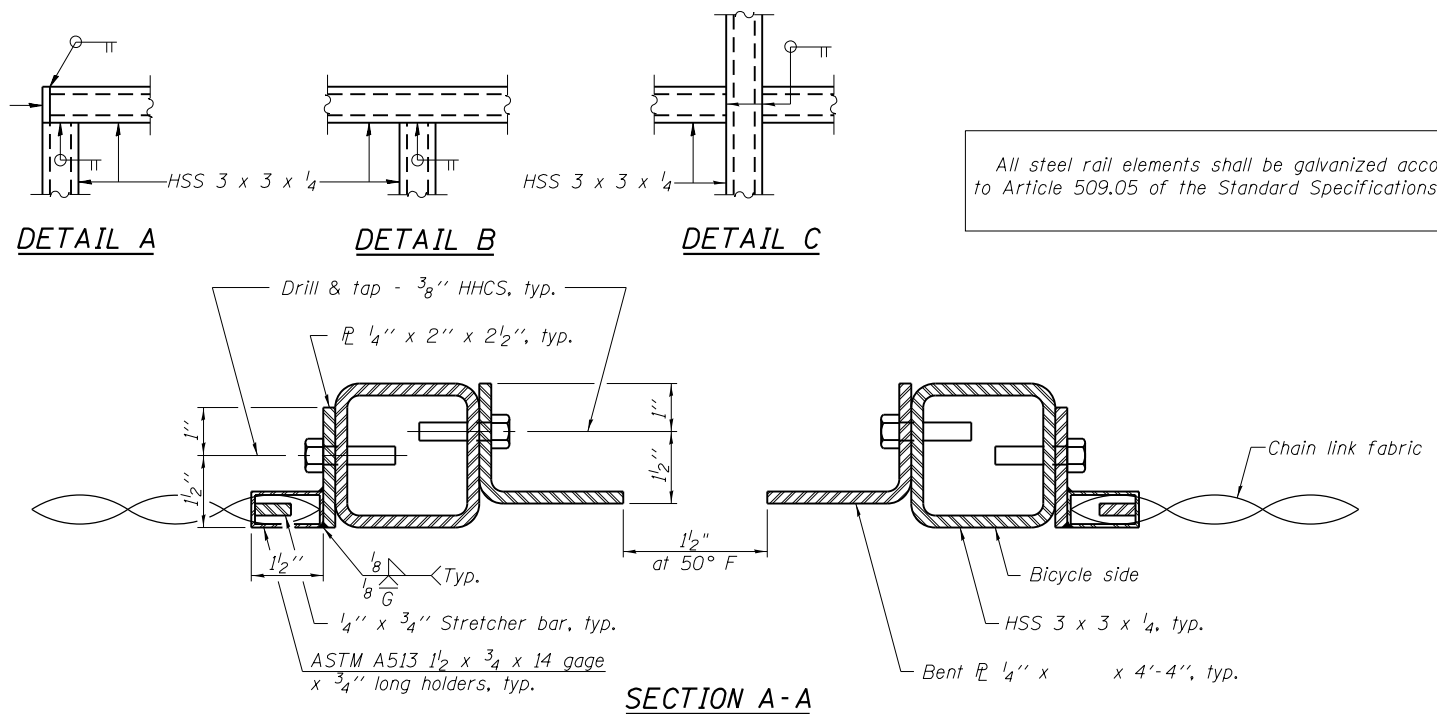
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BICYCLE RAILING

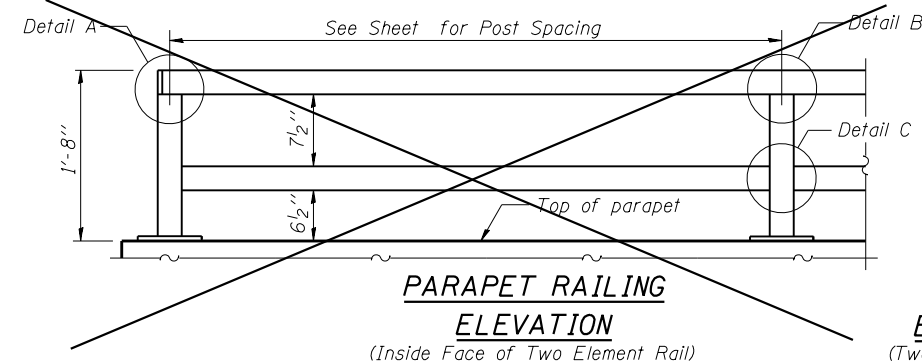


BICYCLE RAILING

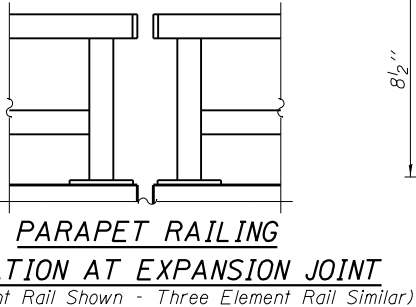


All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.

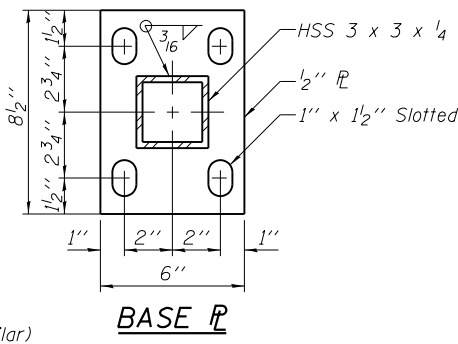
SECTION A-A



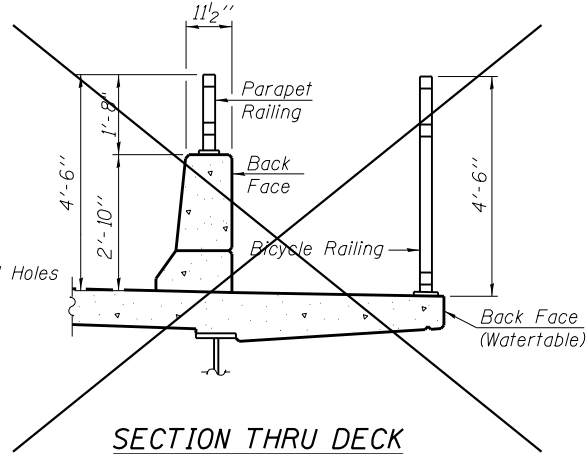
PARAPET RAILING ELEVATION
(Inside Face of Two Element Rail)



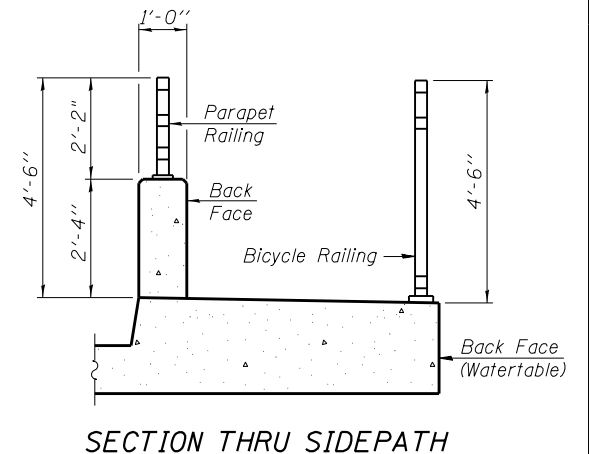
PARAPET RAILING ELEVATION AT EXPANSION JOINT
(Two Element Rail Shown - Three Element Rail Similar)



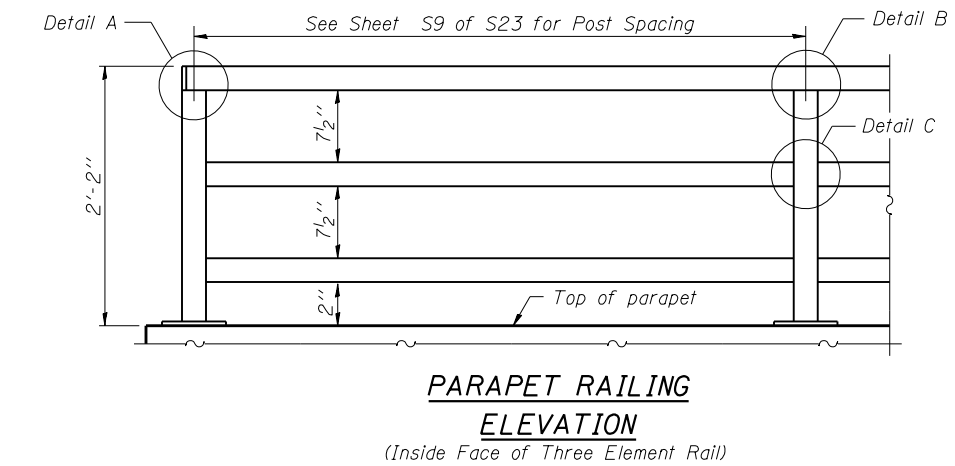
BASE PLATE



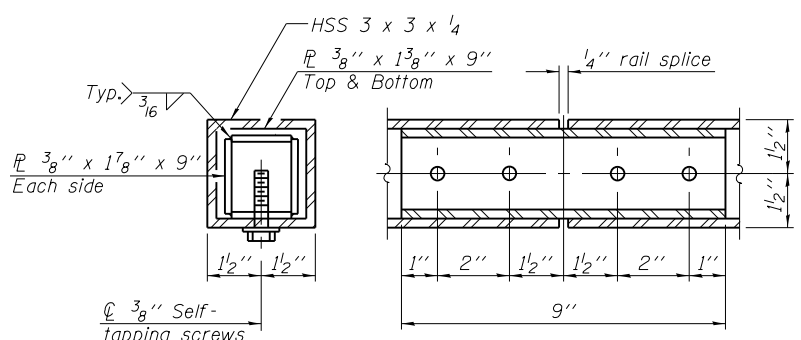
SECTION THRU DECK



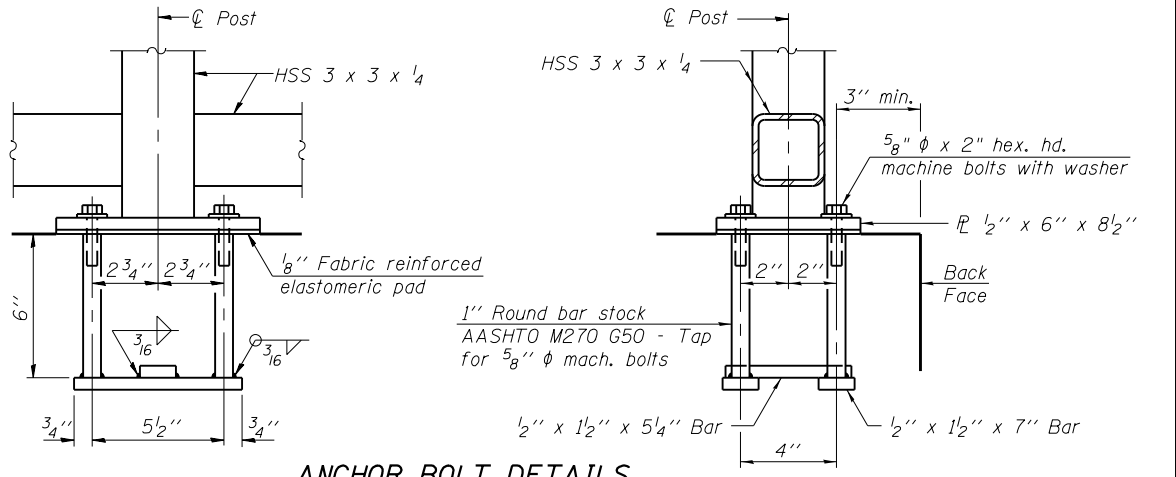
SECTION THRU SIDEPATH



PARAPET RAILING ELEVATION
(Inside Face of Three Element Rail)



RAIL SPLICE



ANCHOR BOLT DETAILS

In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 5/8 inch diameter anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.

BILL OF MATERIAL

| Item | Unit | Quantity |
|-----------------|------|----------|
| Bicycle Railing | Foot | 381 |
| Parapet Railing | Foot | 381 |

R-29 1-27-12 (10'-0" Maximum Post Spacing)

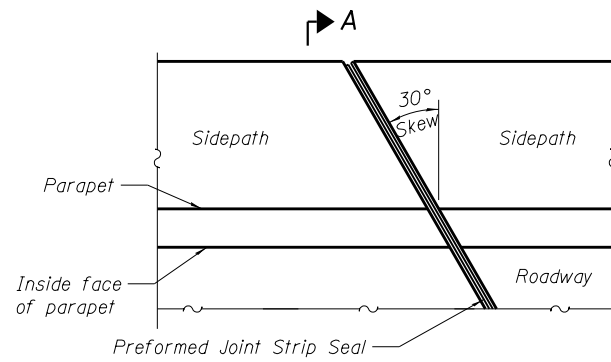
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

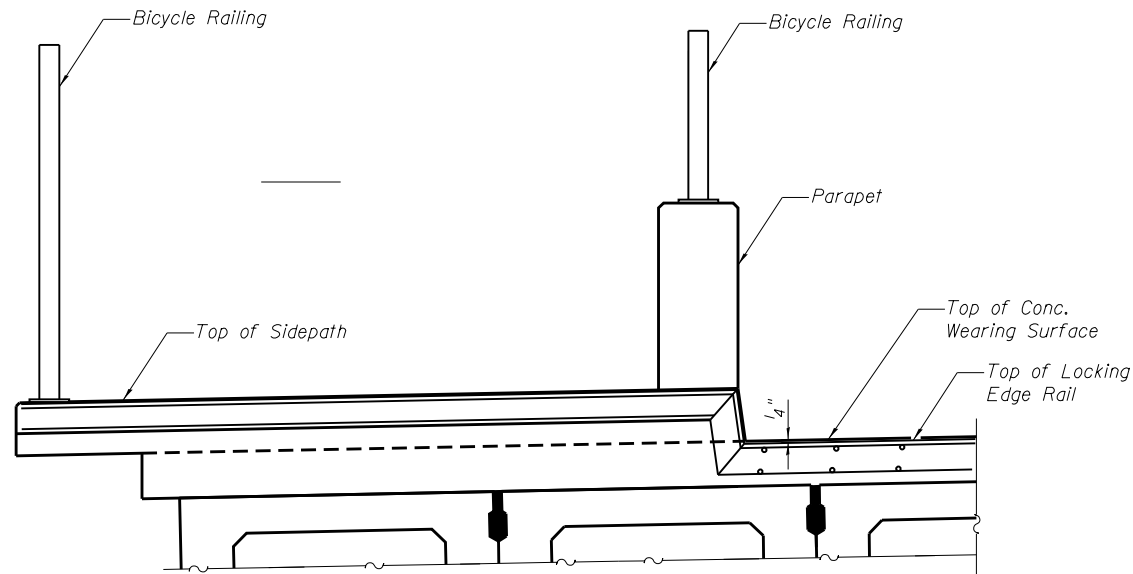
BICYCLE RAILING AND PARAPET RAILING DETAILS
STRUCTURE NO. 049-0062

| | | | | |
|--------------------|----------------|-------------|-----------------|---------------------------|
| F.A.P. RTE. 541 | SECTION X-6B-R | COUNTY LAKE | TOTAL SHEETS 93 | SHEET NO. 56 |
| CONTRACT NO. 60N22 | | | | ILLINOIS FED. AID PROJECT |

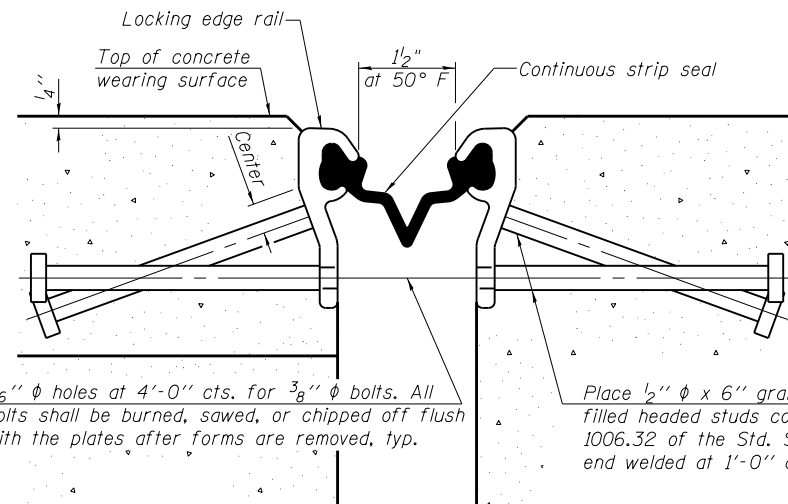
SHEET NO. S15 OF S23 SHEETS



PLAN
(For skews $\leq 30^\circ$)



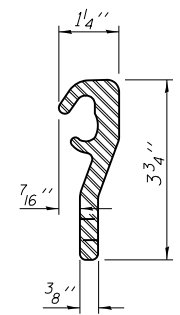
SECTION A-A
TYPICAL END TREATMENT
AT SIDEPATH



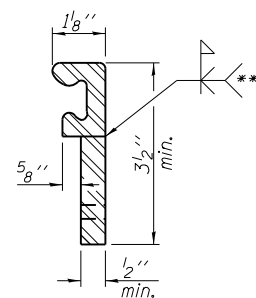
$\frac{7}{16}$ " ϕ holes at 4'-0" cts. for $\frac{3}{8}$ " ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

Place $\frac{1}{2}$ " ϕ x 6" granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded at 1'-0" alt. cts.

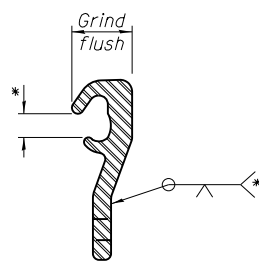
SECTION THRU STRIP SEAL JOINT
(at rt. angles)



ROLLED (EXTRUDED) RAIL



WELDED RAIL



LOCKING EDGE RAIL SPLICE

Rolled rail shown, welded rail similar.

LOCKING EDGE RAIL

* Omit weld at seal opening.

** Back gouge not required if complete joint penetration is verified by mock-up.

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of $\frac{1}{4}$ ". The configuration of the strip seal shall match the configuration of the Locking Edge Rails.

The height and thickness of the Locking Edge Rails shown are minimum dimensions. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed.

The inside of the Locking Edge Rail groove shall be free of weld residue. Locking Edge Rails may be spliced at slope discontinuities and stage construction joints.

The manufacturer's recommended installation methods shall be followed. All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

Maximum space between rail segments at stage lines shall be $\frac{3}{16}$ ", sealed with a suitable sealant



| | |
|---------------|---------|
| DESIGNED - OY | REVISED |
| CHECKED - DB | REVISED |
| DRAWN - CM | REVISED |
| CHECKED - OY | REVISED |

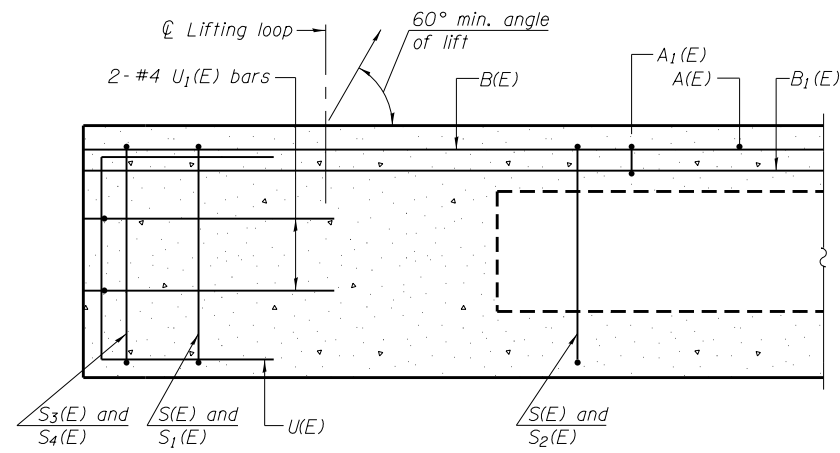
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXPANSION JOINT DETAILS
STRUCTURE NO. 049-0062

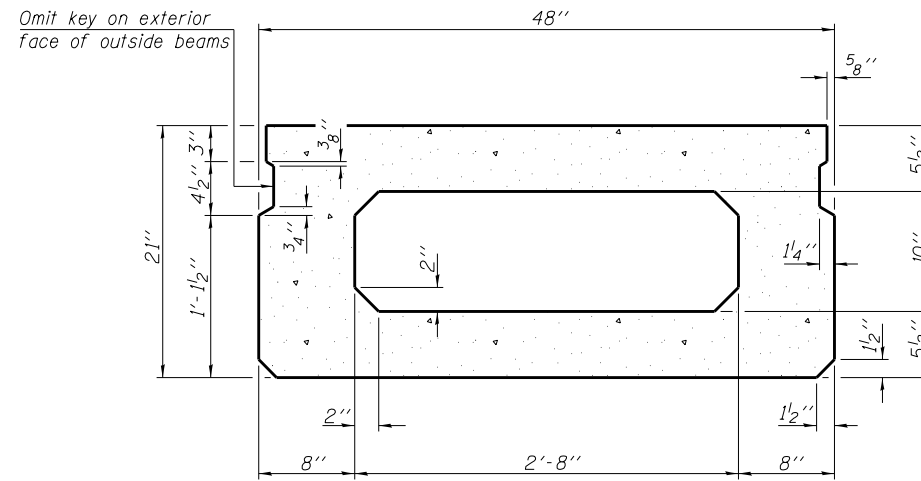
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| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|---------|--------|--------------|-----------|
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| CONTRACT NO. 60N22 | | | | |

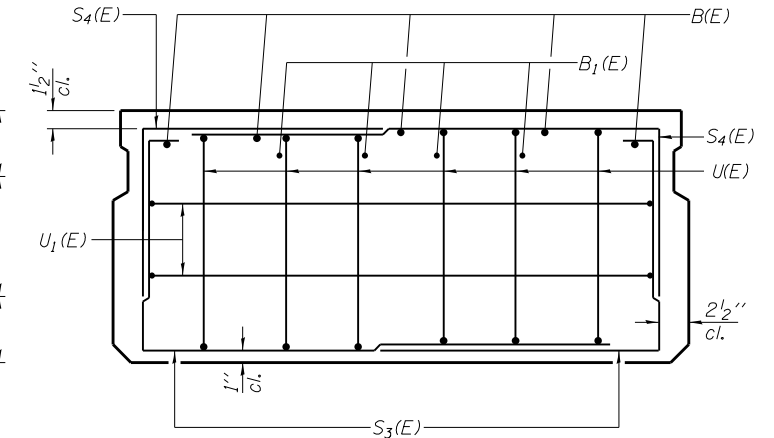
ILLINOIS FED. AID PROJECT



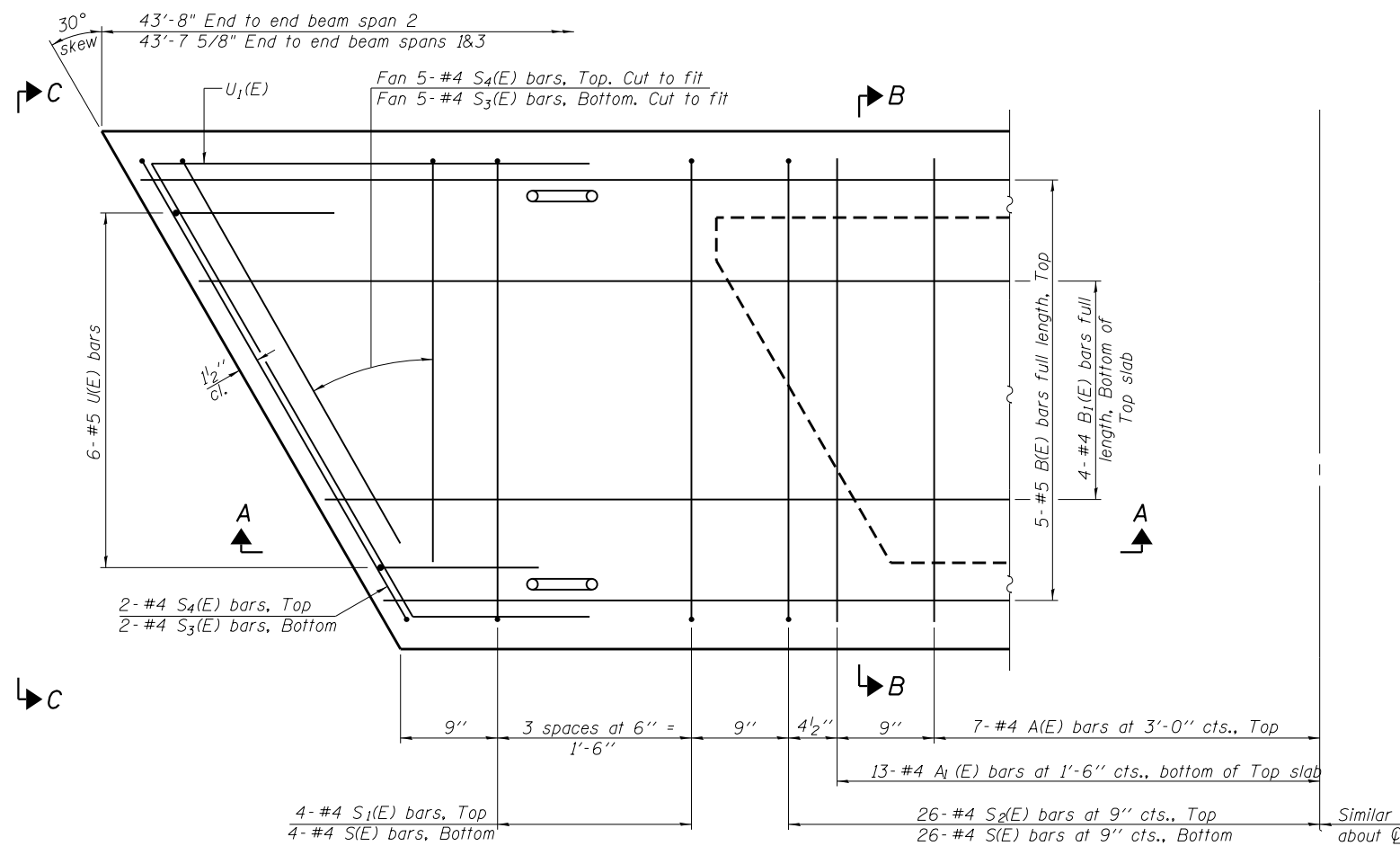
SECTION A-A



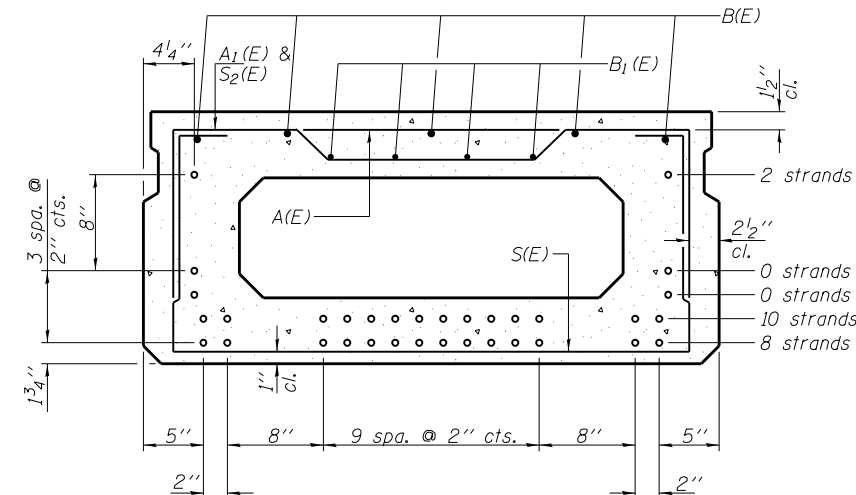
SECTION B-B
(Showing dimensions)



VIEW C-C



PLAN VIEW



SECTION B-B
(Showing reinforcement and permissible strand locations)

Note: Place the number of strands specified in each row symmetrically about the centerline of beam in the permissible strand locations shown.

BAR LIST
ONE BEAM ONLY

(For information only)

| Bar | No. | Size | Length | Shape |
|-------|-----|------|--------|-------|
| A(E) | 14 | #4 | 3'-7" | — |
| A1(E) | 26 | #4 | 3'-10" | — |
| B(E) | 5 | #5 | 43'-4" | — |
| B1(E) | 4 | #4 | 43'-4" | — |
| S(E) | 60 | #4 | 7'-5" | ⌈ |
| S1(E) | 8 | #4 | 5'-11" | ⌈ |
| S2(E) | 52 | #4 | 6'-2" | ⌈ |
| S3(E) | 14 | #4 | 5'-0" | ⌈ |
| S4(E) | 14 | #4 | 4'-3" | ⌈ |
| U(E) | 12 | #5 | 4'-0" | ⌈ |
| U1(E) | 4 | #4 | 9'-2" | ⌈ |

Note: See sheet S18 of S23 for additional details and Bill of Material.

MINIMUM BAR LAP

#4 bar = 2'-0"
#5 bar = 2'-6"

Note: Spacing of S(E) and S2(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.

PD-2148-R

7-1-10



USER NAME = JPS
FILE NAME = 049-0062.17_ppc_deck_bm.dgn
PLOT DATE = 9/3/2013

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CHECKED - DB
DRAWN - CM
CHECKED - OY

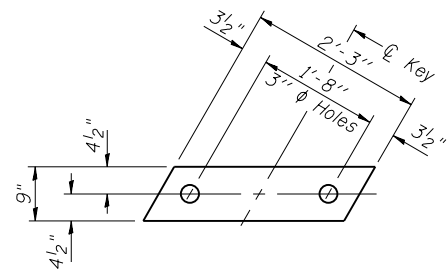
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

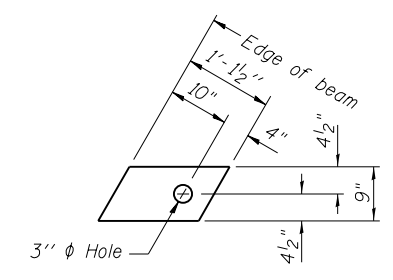
21" x 48" PPC DECK BEAM
STRUCTURE NO. 049-0062

SHEET NO. S17 OF S23 SHEETS

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|---------|--------|--------------------|-----------|
| 541 | X-6B-R | LAKE | 93 | 58 |
| ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 60N22 | |



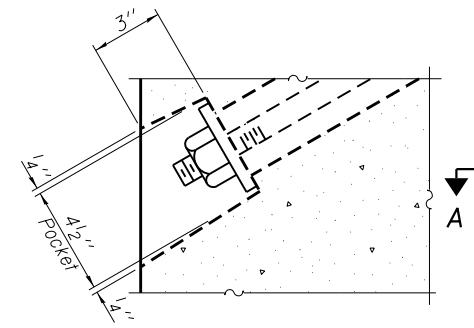
FABRIC BEARING PAD
(Interior)



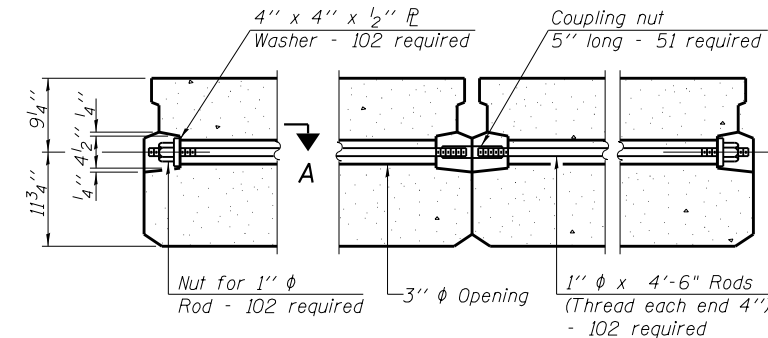
FABRIC BEARING PAD
(Exterior)

FIXED

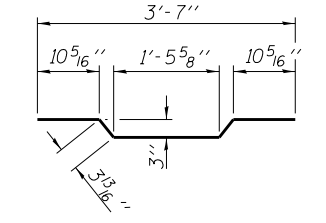
Notes:
All bearing pads shall be 1" thick.
Omit holes when using expansion bearings.
Expansion bearing pad shall be bonded to the steel fill plate.



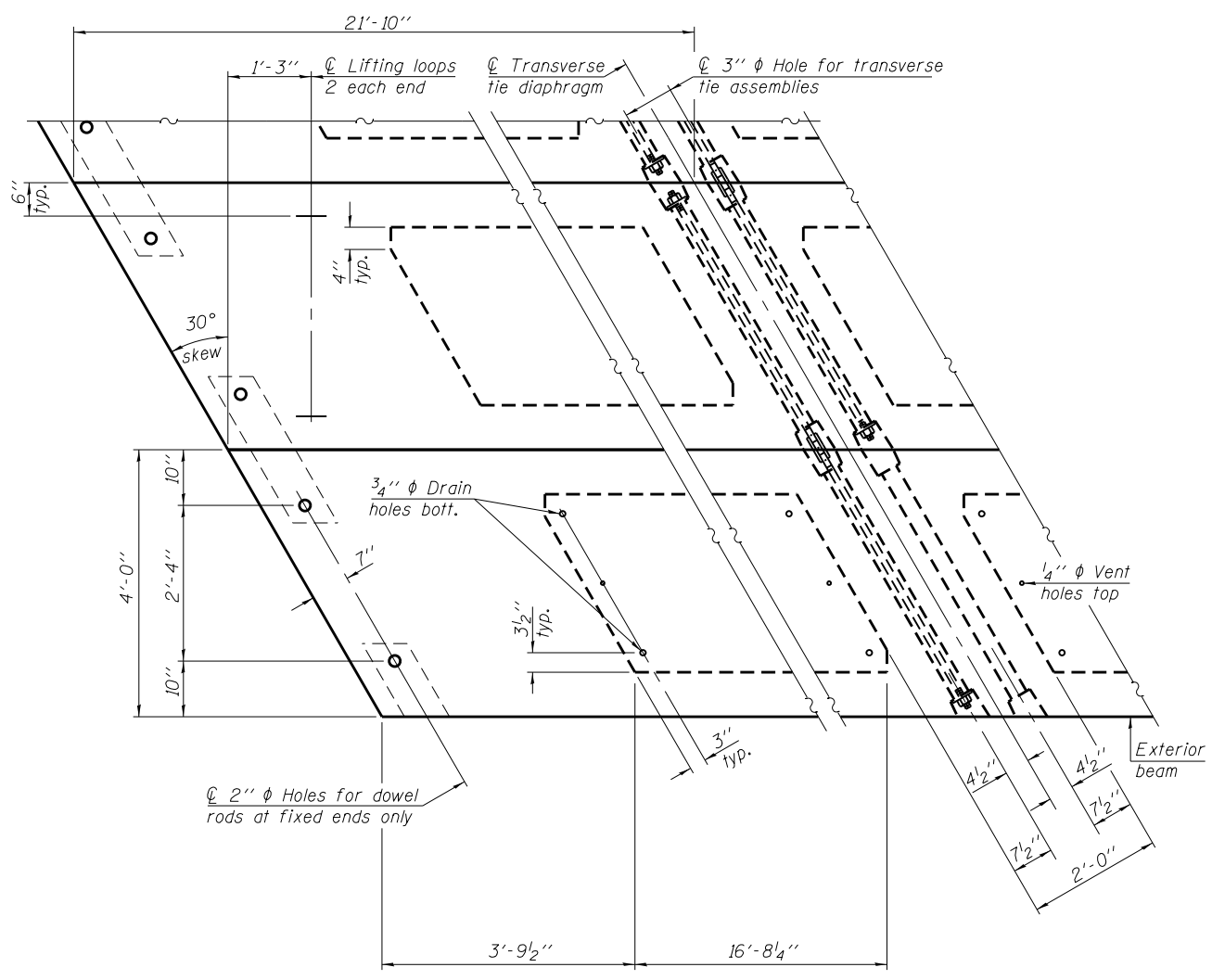
SECTION A-A



TYPICAL TRANSVERSE TIE ASSEMBLY

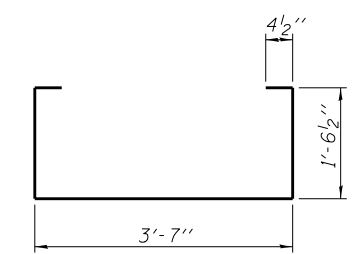


BAR A1(E)

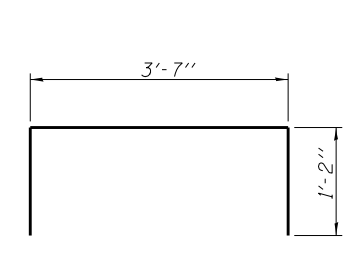


PLAN VIEW

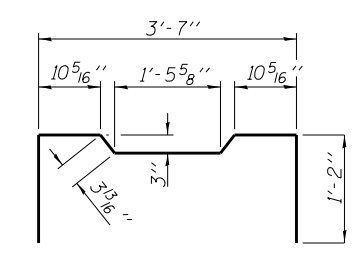
Note: Connect beams in pairs with the transverse tie configuration shown.



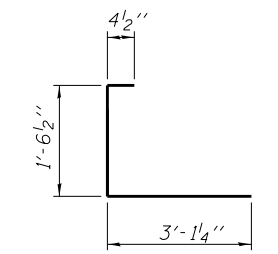
BAR S(E)



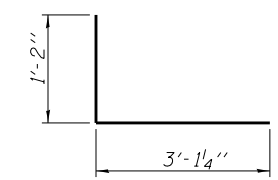
BAR S1(E)



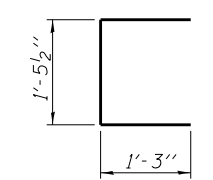
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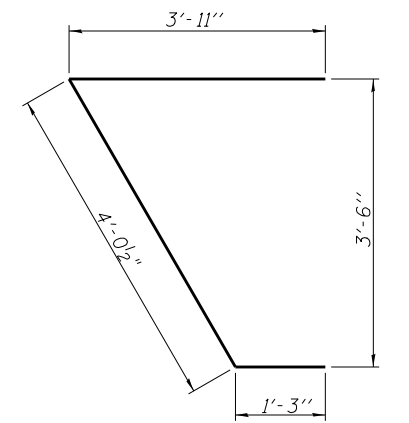
BAR S3(E)



BAR S4(E)



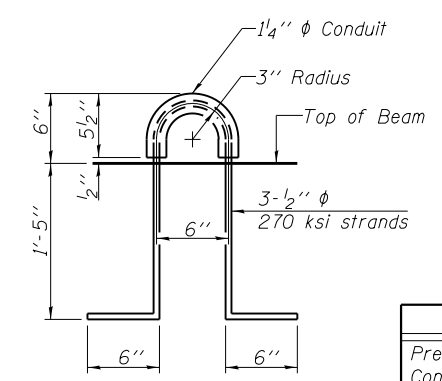
BAR U(E)



BAR U1(E)

NOTES

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in. The 1" rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place.
Reinforcement bars shall conform to ASTM A 706, Grade 60.
Two 1/8" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.
A minimum 2 1/2" lifting pin shall be used to engage the lifting loops during handling.
Corrosion Inhibitor, per Article 1020.05(b)(12) and 1021.06 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.
Compressive strength of prestressed concrete, f'c, shall be 6000 psi.
Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.



LIFTING LOOP DETAIL

TOTAL BILL OF MATERIAL

| Item | Unit | Total |
|--|---------|-------|
| Precast Prestressed Concrete Deck Beams, (21' Depth) | Sq. Ft. | 9427 |

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PD-2148-RD

7-1-10



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FILE NAME = 049-0062.18.ppc_deck_details.dgn
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DRAWN - CM
CHECKED - OY

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REVISED

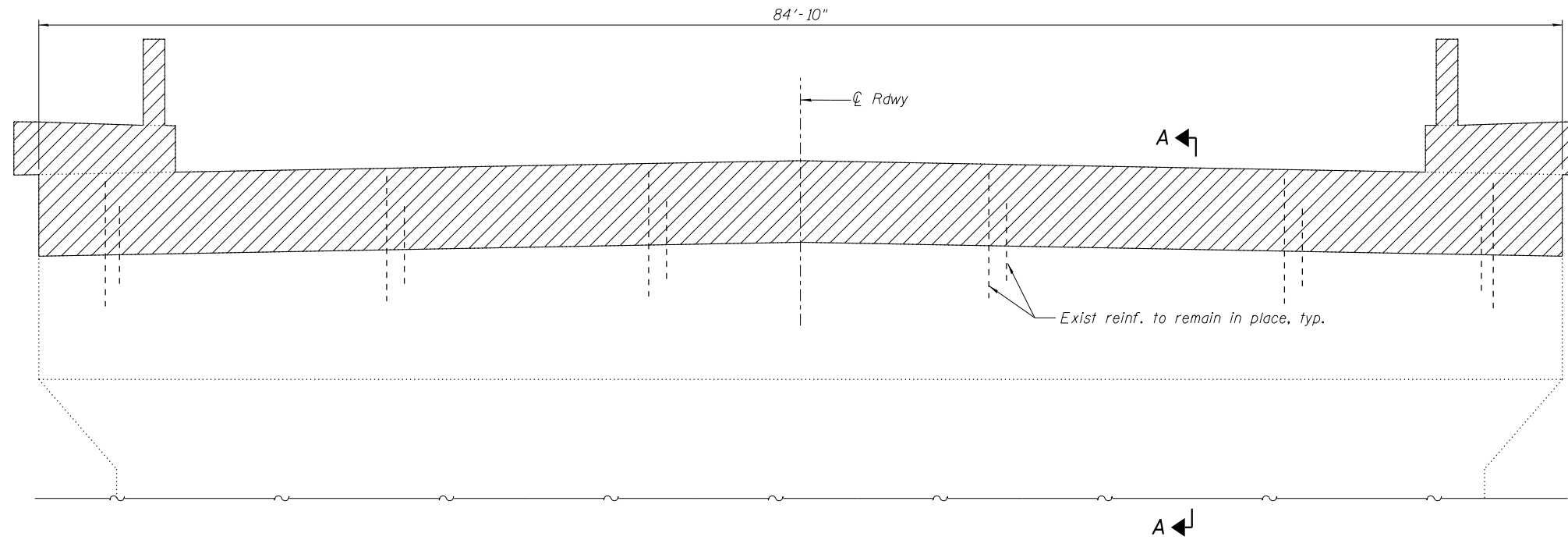
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**21" x 48" PPC DECK BEAM DETAILS
STRUCTURE NO. 049-0062**

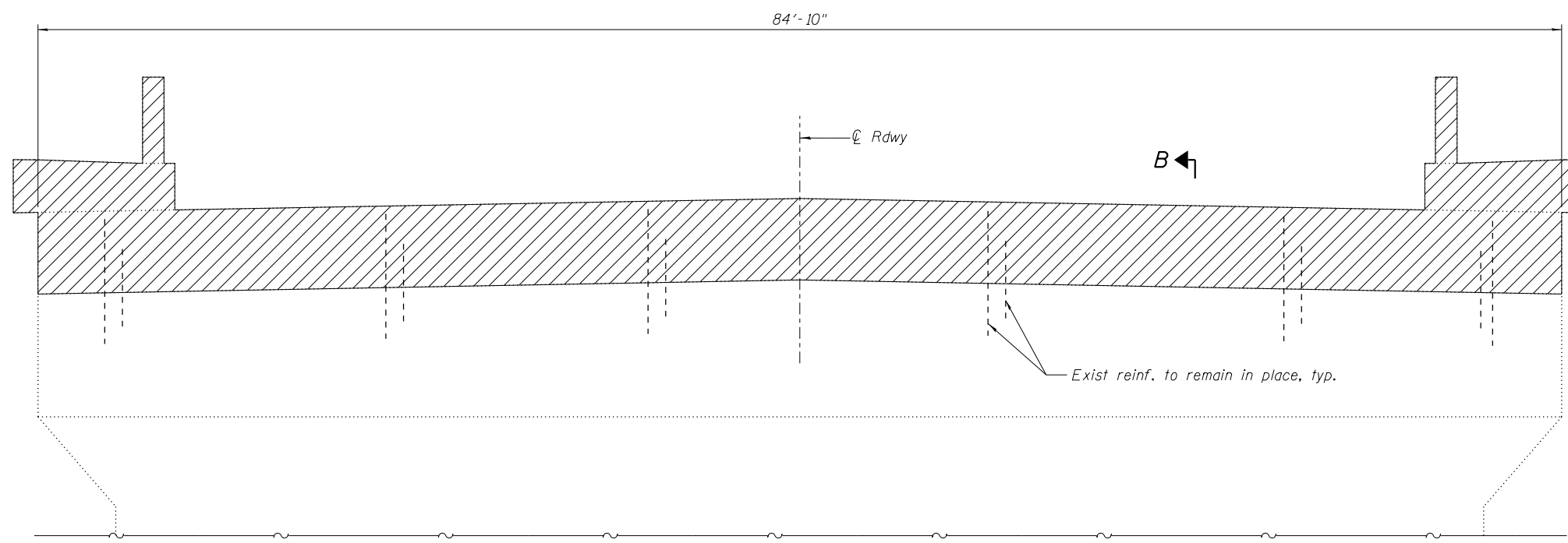
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| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
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| CONTRACT NO. 60N22 | | | | |

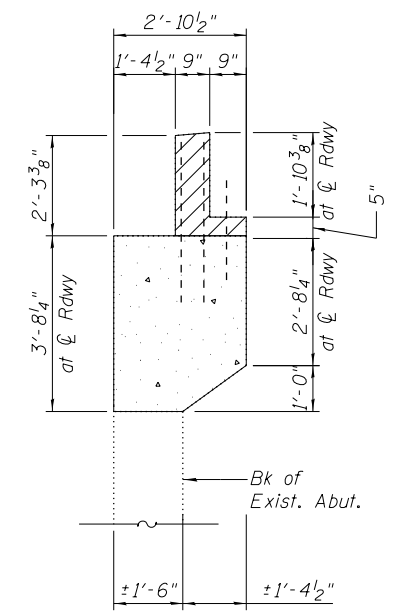
ILLINOIS FED. AID PROJECT



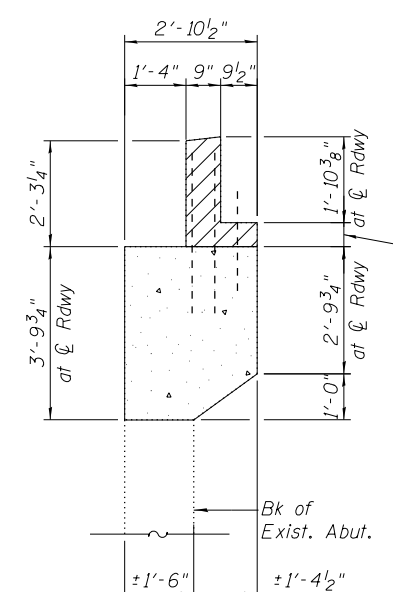
EAST ABUTMENT ELEVATION
(Looking east)



WEST ABUTMENT ELEVATION
(Looking west)



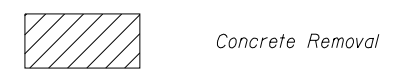
SECTION A-A



SECTION B-B

CONCRETE REMOVAL
STRUCTURE EXCAVATION

LEGEND



BILL OF MATERIAL

| Item | Unit | Total |
|----------------------|---------|-------|
| Concrete Removal | Cu. Yd. | 19.2 |
| Structure Excavation | Cu. Yd. | 11 |

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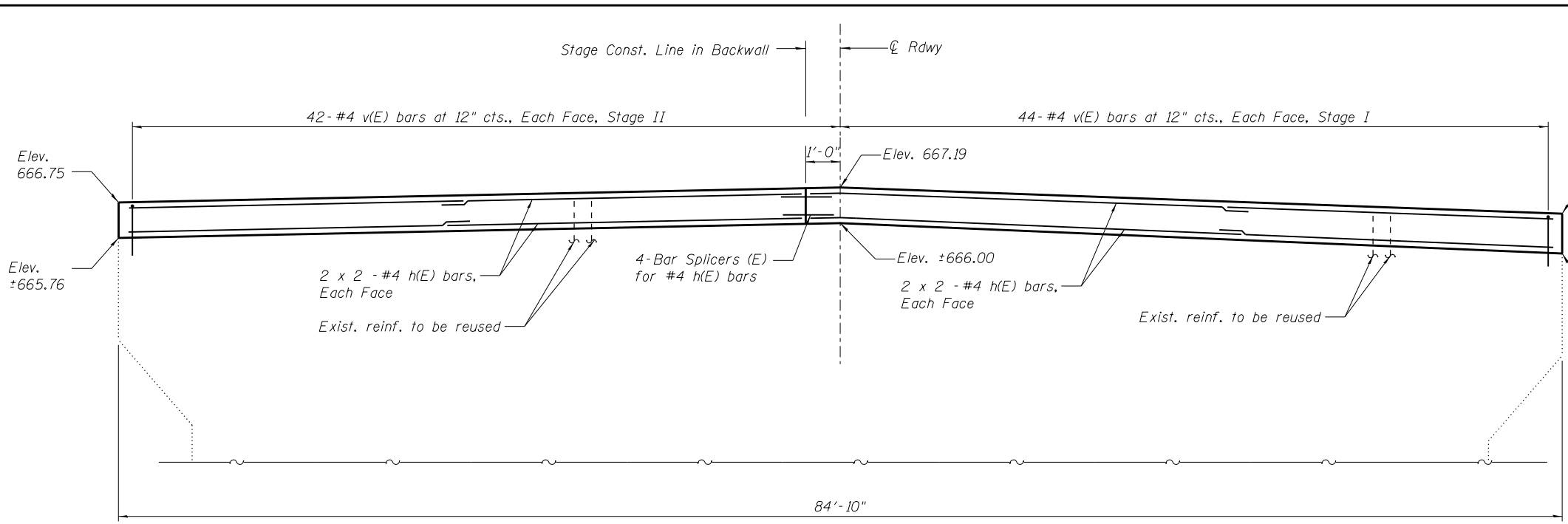
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ABUTMENTS REMOVAL
STRUCTURE NO. 049-0062

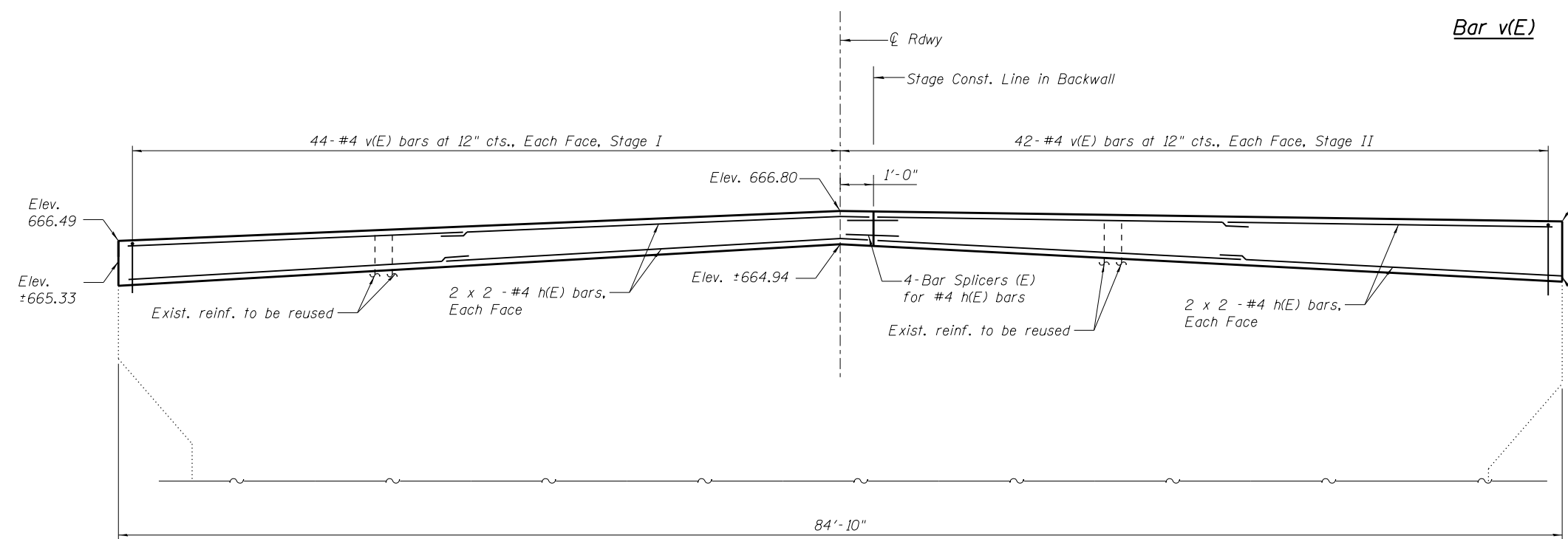
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| CONTRACT NO. 60N22 | | | | |

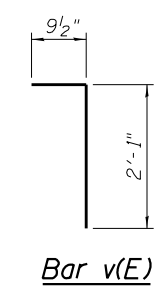
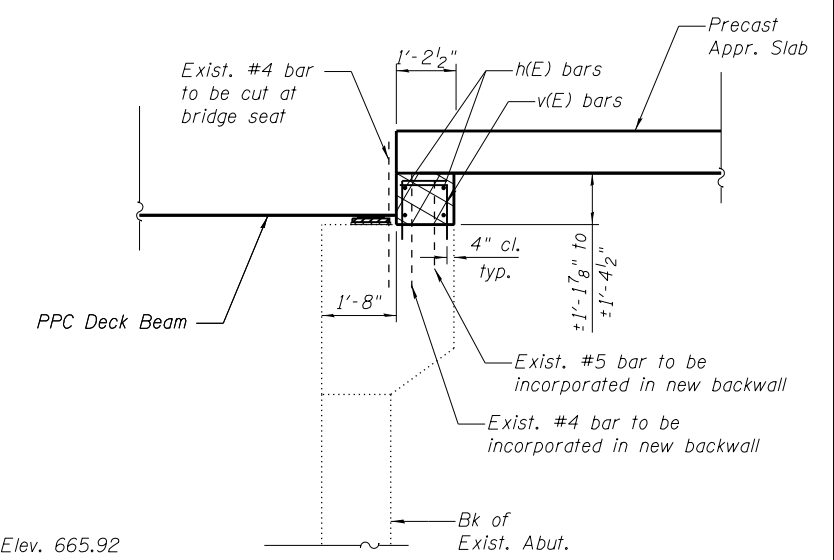
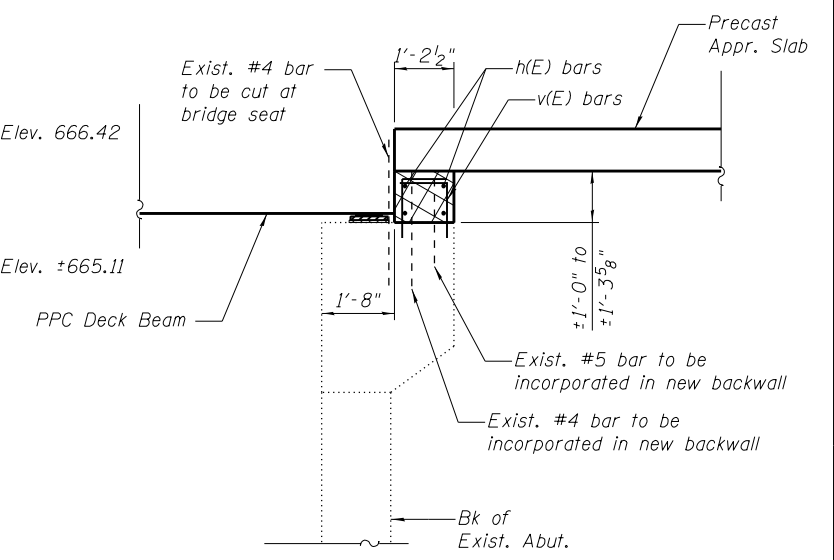
ILLINOIS FED. AID PROJECT



EAST ABUTMENT ELEVATION
(Looking east)



WEST ABUTMENT ELEVATION
(Looking West)



**TWO ABUTMENTS
BILL OF MATERIAL**

| Bar | No. | Size | Length | Shape |
|----------------------------------|-----|------|------------|-------|
| h(E) | 32 | #4 | 22'-7" | — |
| v(E) | 344 | #4 | 2'-10 1/2" | ┌ |
| Concrete Structures | | | Cu. Yd. | 10.2 |
| Reinforcement Bars, Epoxy Coated | | | Pound | 1140 |

Notes:
 shall be poured after PPC Deck beams are in place.
 v(E) bars shall be drilled and grouted into a minimum of 6" of sound concrete in accordance with Section 584 of the Standard Specification. Holes shall be approx. 4" from edge of existing member to avoid existing longitudinal reinf. Cost included in Reinforcement Bars, Epoxy Coated.

At areas of Concrete Removal, the existing reinforcement extending into the areas of new construction shall be cleaned, straightened and incorporated into the new construction. Included in cost of Concrete Removal.

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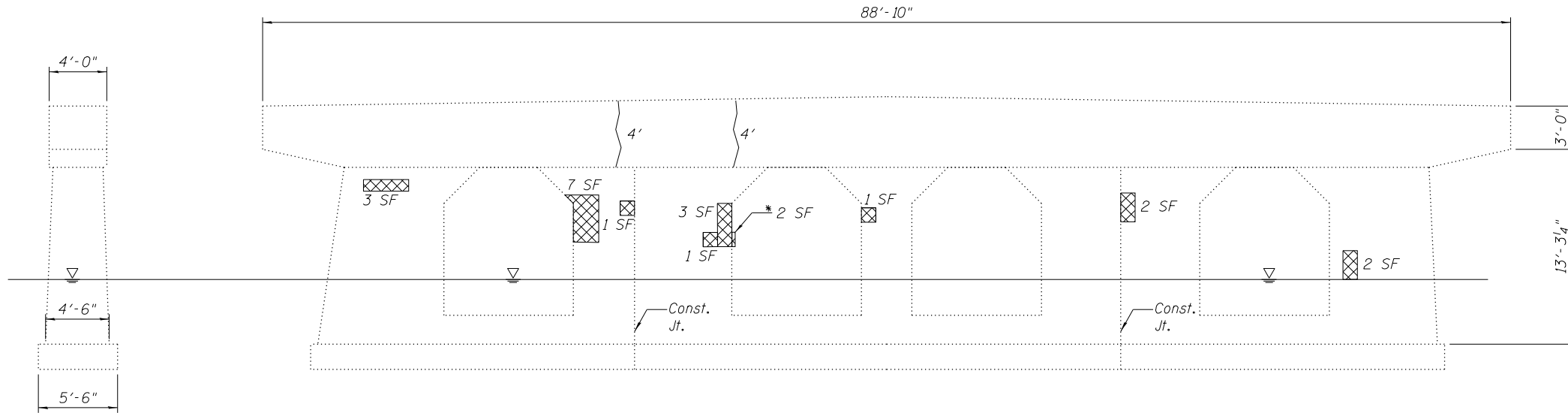


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| PLOT DATE = 9/3/2013 | DRAWN - CM | REVISED |
| | CHECKED - OY | REVISED |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ABUTMENTS
STRUCTURE NO. 049-0062**
SHEET NO. S20 OF S23 SHEETS

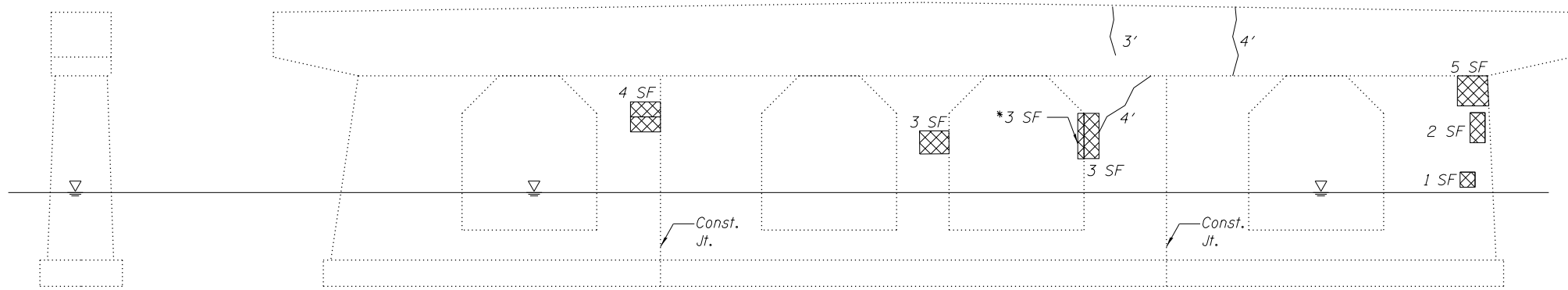
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|---------------------------|---------|--------|--------------------|-----------|
| 541 | X-6B-R | LAKE | 93 | 61 |
| ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 60N22 | |



NORTH FACE

WEST FACE


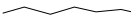

Notes:
 After removing PPC Deck Beams, the Contractor shall sound top of pier and mark all deteriorated spalled and delaminated concrete. Those areas when confirmed by the engineer shall be repaired at the contract price for Structural Repair of Concrete (Depth less than 5") and Epoxy Crack Injection.
 The repairs shown on this sheet follow the defects reported in the Bridge Condition Report. Field verification of the extent of repairs will be required.



SOUTH FACE

EAST FACE

LEGEND

-  Structural Repair of Concrete (Depth Less Than 5")
-  Epoxy Crack Injection
-  * Denotes that Quantity is on Horizontal Surface

BILL OF MATERIAL

| Item | Unit | Total |
|--|---------|-------|
| Epoxy Crack Injection | Foot | 19 |
| Structural Repair of Concrete (Depth Less Than 5") | Sq. Ft. | 43 |

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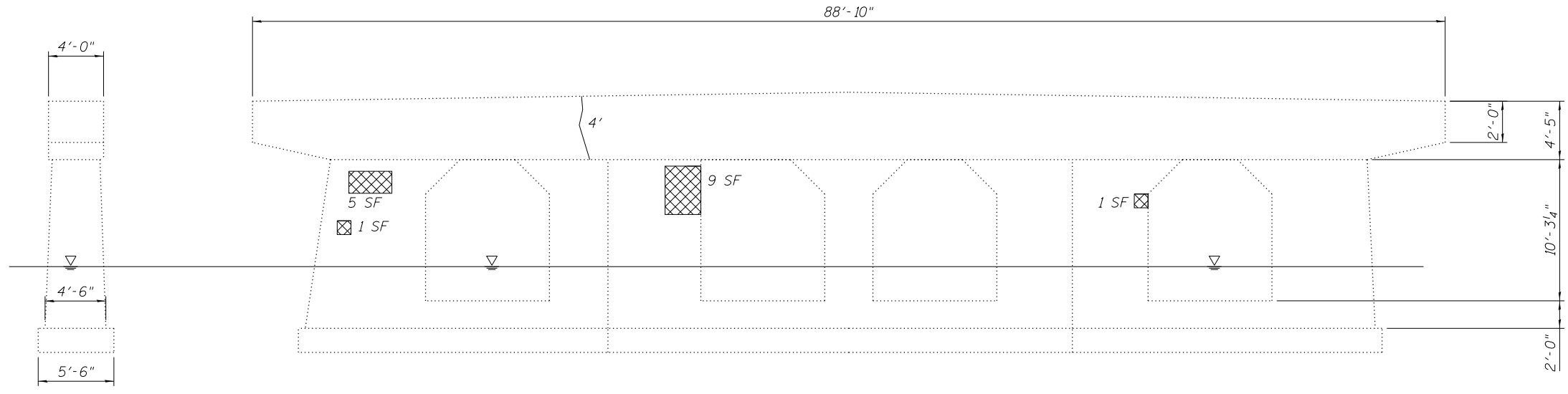
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**PIER 1 REPAIRS
 STRUCTURE NO. 049-0062**

SHEET NO. S21 OF S23 SHEETS

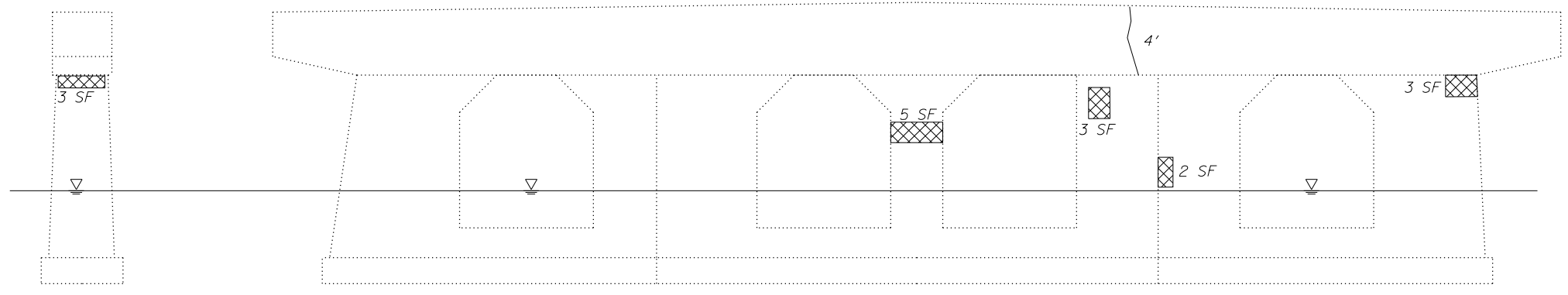
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| | X-6B-R | LAKE | 93 | 62 |
| CONTRACT NO. 60N22 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



NORTH FACE

WEST FACE


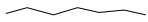

Notes:
 After removing PPC Deck Beams, the Contractor shall sound top of pier and mark all deteriorated spalled and delaminated concrete. Those areas when confirmed by the engineer shall be repaired at the contract price for Structural Repair of Concrete (Depth less than 5") and Epoxy Crack Injection.
 The repairs shown on this sheet follow the defects reported in the Bridge Condition Report. Field verification of the extent of repairs will be required.



SOUTH FACE

EAST FACE

LEGEND

-  Structural Repair of Concrete (Depth Less Than 5")
-  Epoxy Crack Injection
-  Denotes that Quantity is on Horizontal Surface

BILL OF MATERIAL

| Item | Unit | Total |
|--|---------|-------|
| Epoxy Crack Injection | Foot | 8 |
| Structural Repair of Concrete (Depth Less Than 5") | Sq. Ft. | 32 |

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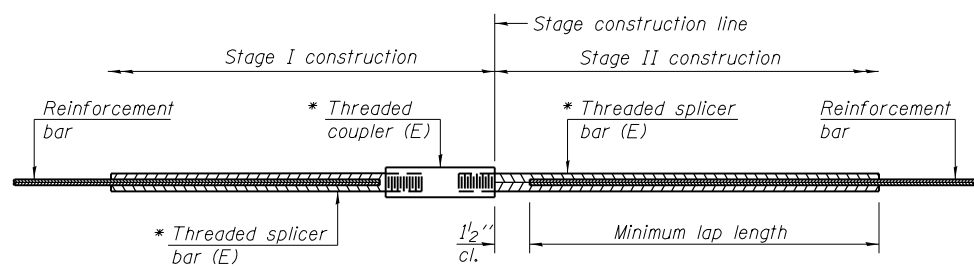
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| DRAWN - CM | REVISED |
| CHECKED - OY | REVISED |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**PIER 2 REPAIRS
 STRUCTURE NO. 049-0062**
 SHEET NO. S22 OF S23 SHEETS

| | | | | |
|---------------------------|---------|--------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 541 | X-6B-R | LAKE | 93 | 63 |
| CONTRACT NO. 60N22 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



STANDARD BAR SPLICER ASSEMBLY

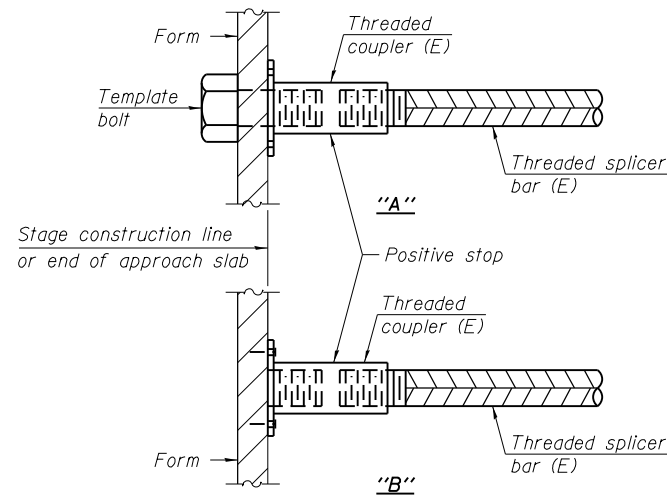
| Minimum Lap Lengths | | | | | | |
|------------------------|---------|---------|---------|---------|---------|---------|
| Bar size to be spliced | Table 1 | Table 2 | Table 3 | Table 4 | Table 5 | Table 6 |
| 3, 4 | 1'-5" | 1'-11" | 2'-1" | 2'-4" | 2'-7" | 2'-11" |
| 5 | 1'-9" | 2'-5" | 2'-7" | 2'-11"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

- Table 1: Black bar, 0.8 Class C
- Table 2: Black bar, Top bar lap, 0.8 Class C
- Table 3: Epoxy bar, 0.8 Class C
- Table 4: Epoxy bar, Top bar lap, 0.8 Class C
- Table 5: Epoxy bar, Class C
- Table 6: Epoxy bar, Top bar top, Class C

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

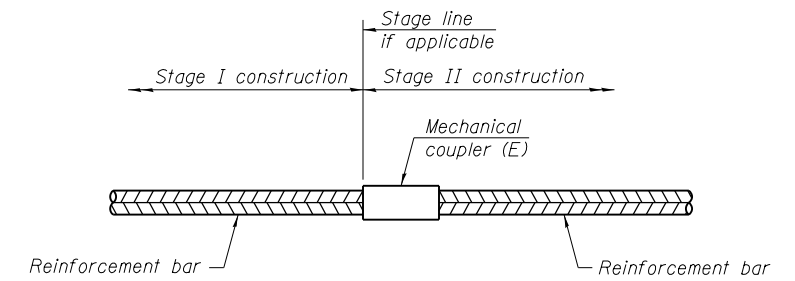
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

| Location | Bar size | No. assemblies required | Table for minimum lap length |
|--------------------------|----------|-------------------------|------------------------------|
| Deck | 4 | 129 | 5 |
| Approach Wearing Surface | 4 | 62 | 5 |
| Approach Footing | 5 | 80 | 5 |
| Abutment Backwall | 4 | 8 | 5 |
| Total | | 279 | |



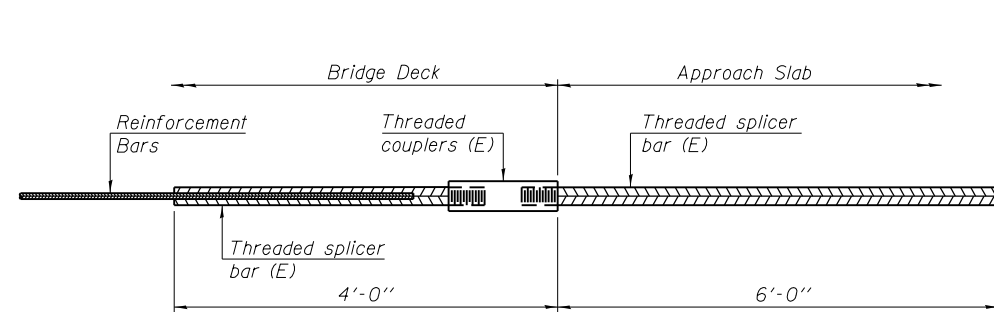
INSTALLATION AND SETTING METHODS

"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.



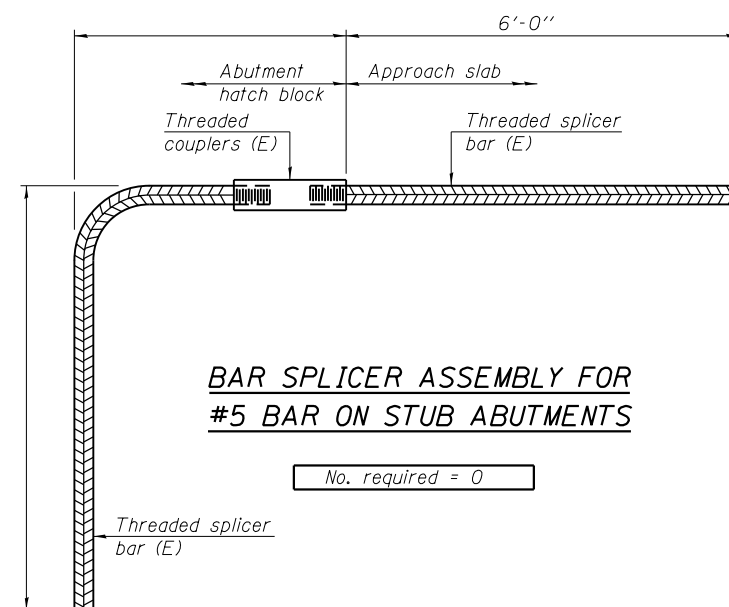
STANDARD MECHANICAL SPLICER

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



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

No. required = 0



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required = 0

NOTES

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

BSD-1

1-27-12



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DESIGNED - OY
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

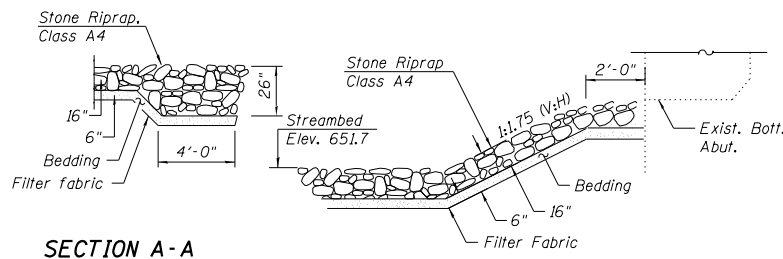
BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
 STRUCTURE NO. 049-0062

SHEET NO. S23 OF S23 SHEETS

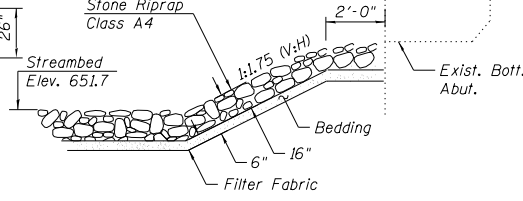
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
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| 541 | X-6B-R | LAKE | 93 | 64 |
| CONTRACT NO. 60N22 | | | | |

ILLINOIS FED. AID PROJECT

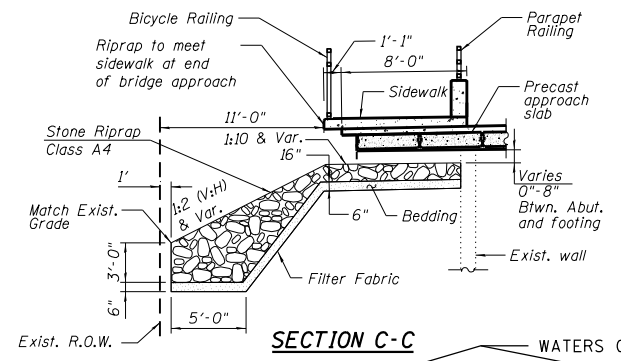
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SECTION A-A



SECTION B-B

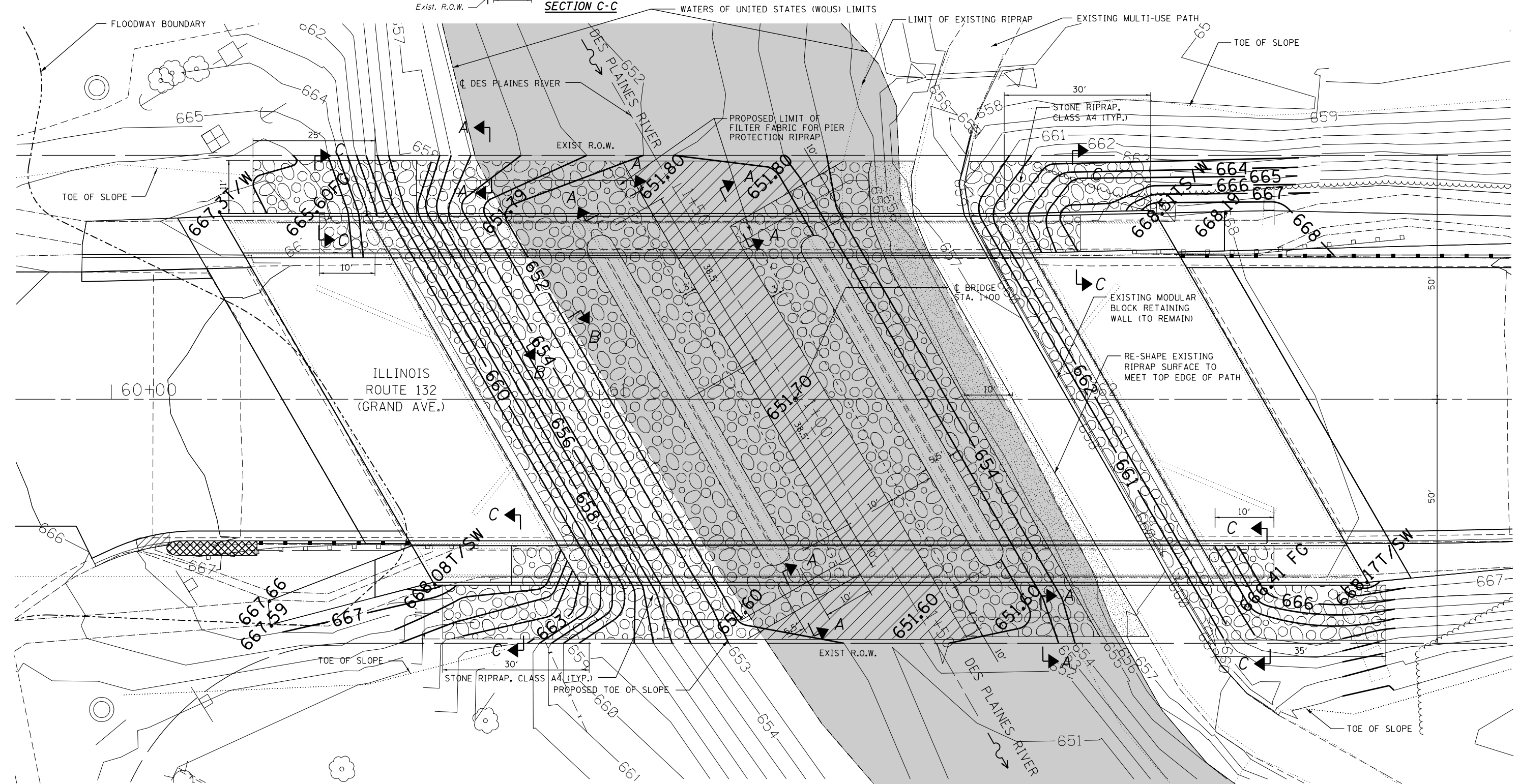
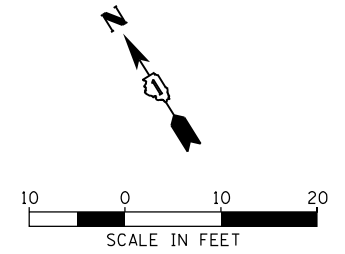


SECTION C-C

- NOTES:**
1. THE EXISTING RIPRAP ALONG THE WEST ABUTMENT AND THE EXISTING RIPRAP PROTECTION AT THE BASE OF THE MULTI-USE TRAIL MAY BE SALVAGED FOR RE-USE ON THE PROJECT SUBJECT TO PSI SPECIAL PROVISIONS.
 2. ACCESS TO THIS SITE IS LIMITED. THE CONTRACTOR SHALL ONLY ACCESS THIS SITE BY RAISING AND/OR LOWERING ALL EQUIPMENT AND MATERIAL OVER THE SIDES OF THE BRIDGE. THE CONTRACTOR WILL NOT BE ALLOWED OTHER ACCESS WITHOUT WRITTEN PERMISSION FROM THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE CONTRACT UNIT PRICES FOR THE CONSTRUCTION ITEMS INVOLVED AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

LEGEND

- CHANNEL EXCAVATION (TO REGRADE CHANNEL BED)
- STONE RIPRAP, CLASS A4 (16" THICK AND VARIES)
- EXISTING RIPRAP TO BE RE-USED AND RE-SHAPED



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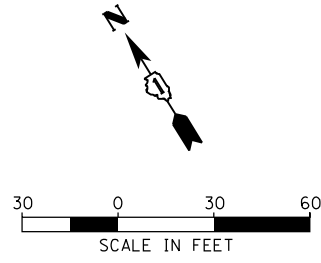
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| | DRAWN - BCB | REVISED - |
| PLOT SCALE = | CHECKED - DPA | REVISED - |
| PLOT DATE = 9/25/2013 | DATE - 09/25/13 | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL 132 (GRAND AVE.) OVER DES PLAINES RIVER
SN 049-062 PROPOSED GRADING AND RIPRAP DETAIL**

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

| | | | | |
|---------------------------|-------------------|-------------|-----------------|--------------|
| F.A.P. RTÉ. 541 | SECTION X-6-B-1-1 | COUNTY LAKE | TOTAL SHEETS 93 | SHEET NO. 65 |
| CONTRACT NO. 60N22 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



WETLAND 1 - (0.01 AC., NO IMPACT)

WATERS OF THE UNITED STATES

WETLAND 2 - (0.11 AC., NO IMPACT)

KILBOURNE RD

EASTERN FLOODWAY BOUNDARY IS EAST OF COVERAGE SHOWN IN THIS EXHIBIT.

WESTERN FLOODWAY BOUNDARY
WESTERN FLOODPLAIN BOUNDARY IS WEST OF COVERAGE SHOWN IN THIS EXHIBIT.
EXIST R.O.W.

WETLAND 4 - (0.67 AC., NO IMPACT)

160+00

ILLINOIS ROUTE 132 (GRAND AVE.)

165+00

WETLAND 3 - (0.99 AC., NO IMPACT)

TEMPORARY EASEMENT LIMITS

WETLAND 5 - (1.19 AC., 0.11 AC. PERMANENT IMPACT)

MILWAUKEE AVE.

WOUS 1 - (0.12 AC. PERMANENT IMPACT) (NO MITIGATION REQUIRED)

EXIST R.O.W.

DES PLAINES RIVER TRAIL

DES PLAINES RIVER

| LEGEND | |
|--------|---------------------------|
| | WETLAND |
| | WATERS OF THE U.S. (WOUS) |
| | PERMANENT IMPACT AREA |

WATERS OF THE UNITED STATES

WETLAND 6 (0.05 AC., NO IMPACT). THIS WETLAND IS LOCATED TO THE EAST, BEYOND PROJECTS LIMITS ON THE SOUTH SIDE OF IL 132

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| | | |
|-----------------------|-----------------|-----------|
| USER NAME = JPS | DESIGNED - BCB | REVISED - |
| | DRAWN - BCB | REVISED - |
| PLOT SCALE = | CHECKED - DPA | REVISED - |
| PLOT DATE = 9/25/2013 | DATE - 09/25/13 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 132 (GRAND AVE.) OVER DES PLAINES RIVER
WETLAND / WOUS IMPACT EXHIBIT

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

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-----------|--------|--------------|-----------|
| 541 | X-6-B-1-1 | LAKE | 93 | 66 |
| CONTRACT NO. 60N22 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

VARIABLE - TO MEET EXISTING DIMENSIONS AND FIELD CONDITIONS (SEE NOTE ②)

PROP. CONC. CURB OR CURB AND GUTTER REPLACEMENT IN ACCORDANCE WITH STATE STANDARD 606001. (SEE NOTE ②)

SAW CUT FULL DEPTH - INCLUDED IN THE COST OF SIDEWALK, DRIVEWAY OR MEDIAN SURFACE REMOVAL PAY ITEM.

SEE STATE STANDARD 606001
EXISTING OR PROPOSED HMA SURFACE (IF APPLICABLE)

18" (450) MAX.

1/4" (5) **

EXISTING SIDEWALK, DRIVEWAY, MEDIAN SURFACE, SOD OR GROUND.

PROPOSED SIDEWALK, DRIVEWAY PAVEMENT, MEDIAN SURFACE OR SODDING SALT TOLERANT WITH TOP SOIL, 4" (100) SOD RESTORATION (SEE NOTE ①).

EXISTING CONCRETE PAVEMENT, CONCRETE BASE COURSE OR FLEXIBLE PAVEMENT

3" (75) MIN.

SUITABLE BACKFILL MATERIAL (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT)

PROPOSED 3/4" (20) PREFORMED EXPANSION JOINT AT CONCRETE SIDEWALKS, DRIVEWAYS, AND MEDIANS. (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.)

* 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.

** IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

NOTE: ① SIDEWALK, DRIVEWAY PAVEMENT OR MEDIAN SURFACE SHALL BE SIMILAR TO THE MATERIAL BEING REMOVED AND WILL BE PAID FOR SEPARATELY.

SODDING, SALT TOLERANT AND TOP SOIL, FURNISH AND PLACE 4" WILL BE PAID FOR SEPARATELY.

② FERTILIZER FOR THE PLACEMENT OF THE SOD IS NOT REQUIRED

③ CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.

④ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.

⑤ LONGITUDINAL BARS, IF ENCOUNTERED IN THE EXISTING CURB OR CURB AND GUTTER, ARE NOT TO BE REPLACED. CUTTING AND REMOVING LONGITUDINAL BARS SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

⑥ THE COST OF HMA SURFACE REMOVAL IN THE EXISTING GUTTER FLAG SHALL BE INCLUDED IN THE COST OF THE CURB AND GUTTER REMOVAL AND REPLACEMENT.

⑦ THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606 OF THE STANDARD SPECIFICATIONS.

⑧ THE LOCATIONS OF REMOVAL AND REPLACEMENT OF EXISTING CURB OR CURB AND GUTTER SHALL BE DETERMINED BY THE RESIDENT ENGINEER AT THE TIME OF CONSTRUCTION.

UNSUITABLE SUB-BASE MATERIAL TO BE REMOVED, IF DIRECTED BY THE ENGINEER, SHALL BE REPLACED WITH EITHER SUB-BASE GRANULAR MATERIAL, TYPE B OR ADDITIONAL THICKNESS OF CONCRETE.

REMOVAL AND REPLACEMENT 4" (100) OR LESS IS INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

REMOVAL AND REPLACEMENT IN EXCESS OF 4" (100) WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

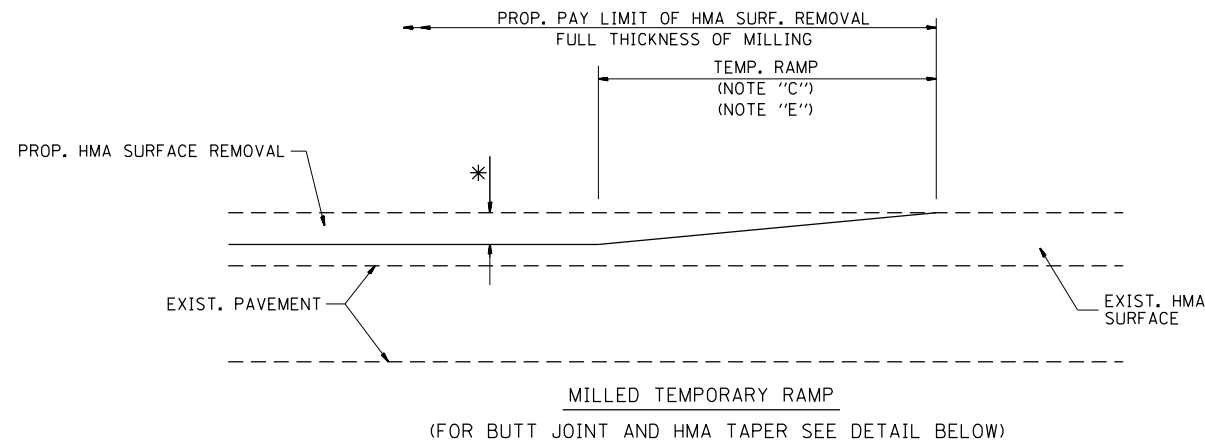
PROPOSED #6 (20) EPOXY COATED TIE BARS 24" (600) LONG AT 24" (600) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY COATED TIE BARS IF EXISTING TIE BARS ARE USABLE AS DETERMINED BY THE ENGINEER. (SEE NOTE ③).

BASIS OF PAYMENT:
THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT (METER) FOR "CURB REMOVAL AND REPLACEMENT" OR "COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT".

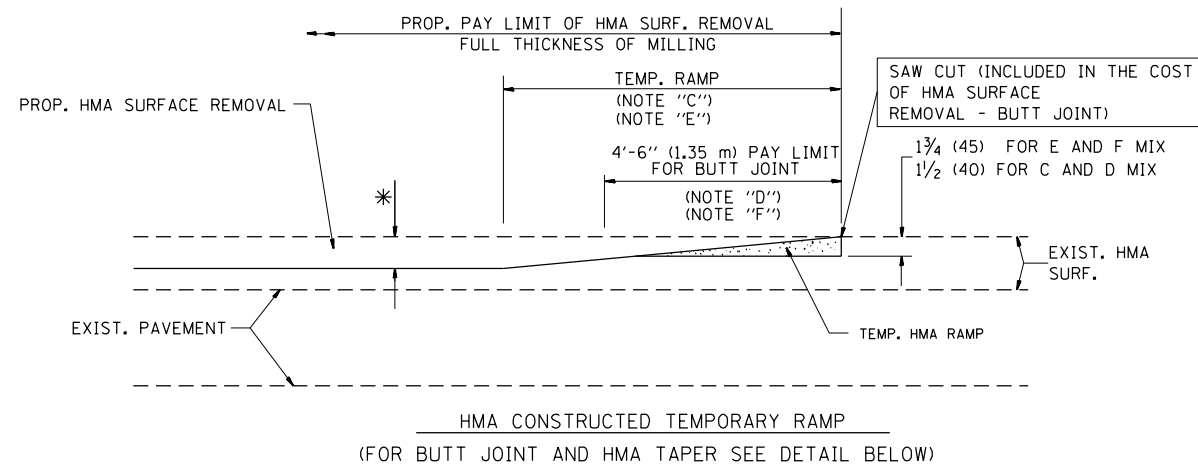
CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

| | | | | | | | | | | |
|---|--|----------------------|-----------------------------|---|--|-------------------------|-------------------------|---------------------------|--------------|---|
| FILE NAME = | USER NAME = Kjelc | DESIGNED - A. HOUSEH | REVISED - R. SHAH 10-03-96 | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT | F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| Me\NL 132 over DesPlaines River\12-154-00 | DRAWINGS\CADD Sheets\DISTRICT 1 STANDARD | DETAILED | REVISED - A. ABBAS 03-21-97 | | | 541 | X-6-B-1-1 | LAKE | 93 | 67 |
| | PLOT SCALE = 100.000' / in. | CHECKED - | REVISED - M. GOMEZ 01-22-01 | | | BD600-06 (BD-24) | | CONTRACT NO. 60N22 | | |
| | PLOT DATE = 9/3/2013 | DATE - 03-11-94 | REVISED - R. BORO 12-15-09 | | | SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA. | FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |

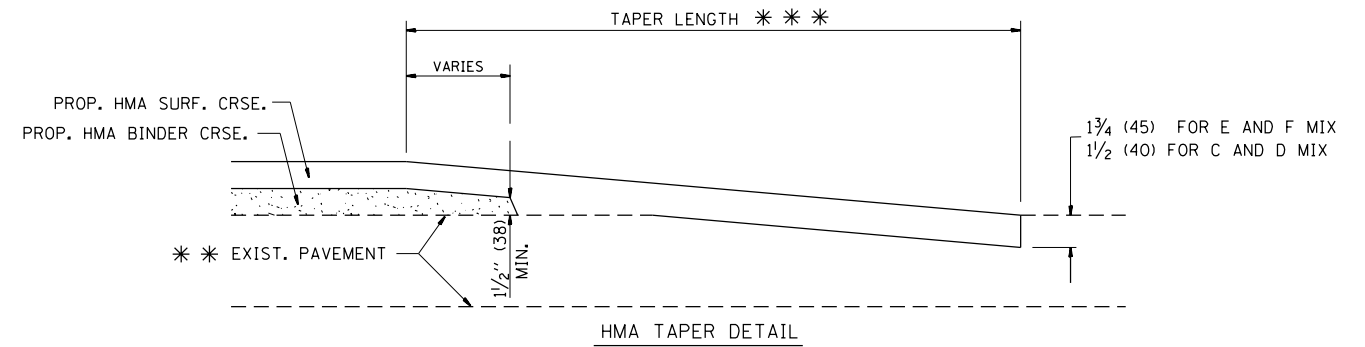
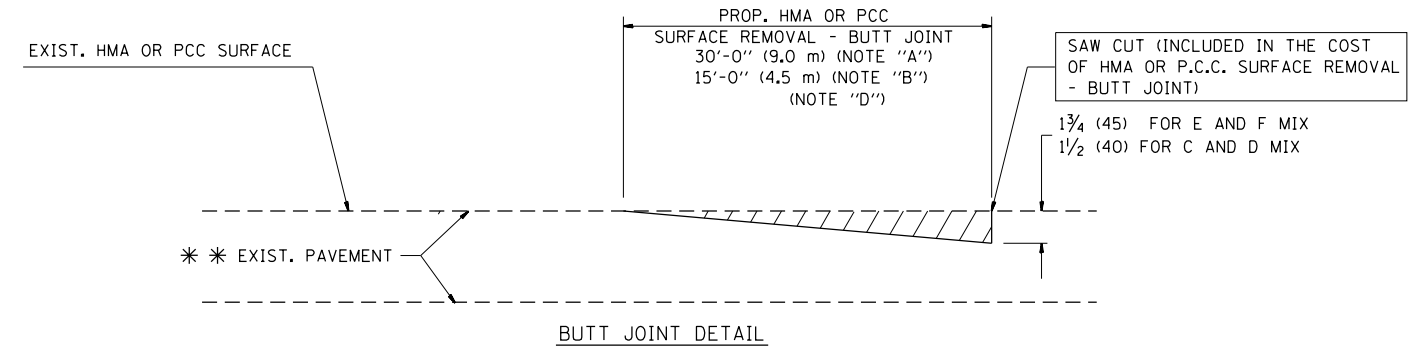


OPTION 1



OPTION 2

TYPICAL TEMPORARY RAMP



TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

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

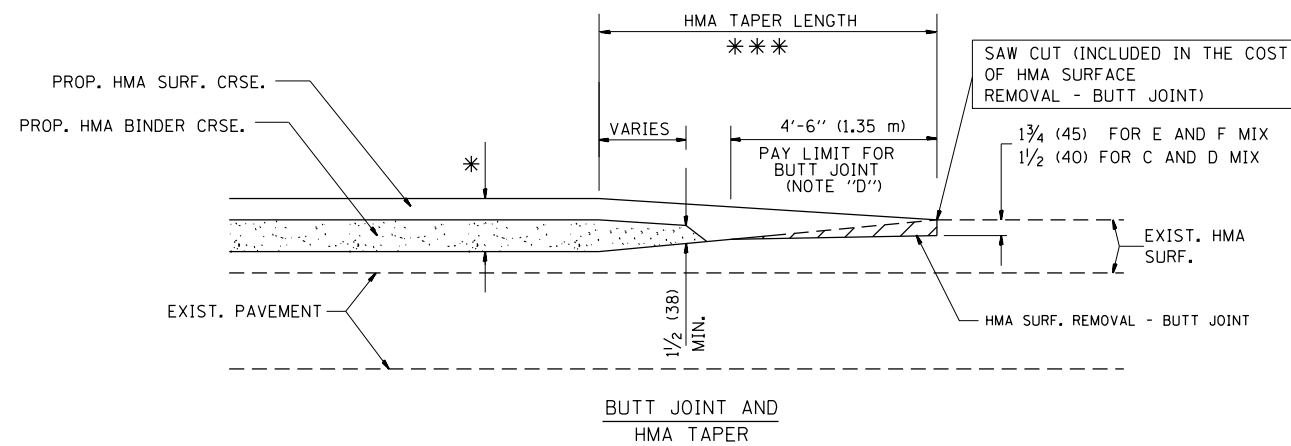
NOTES

- 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.



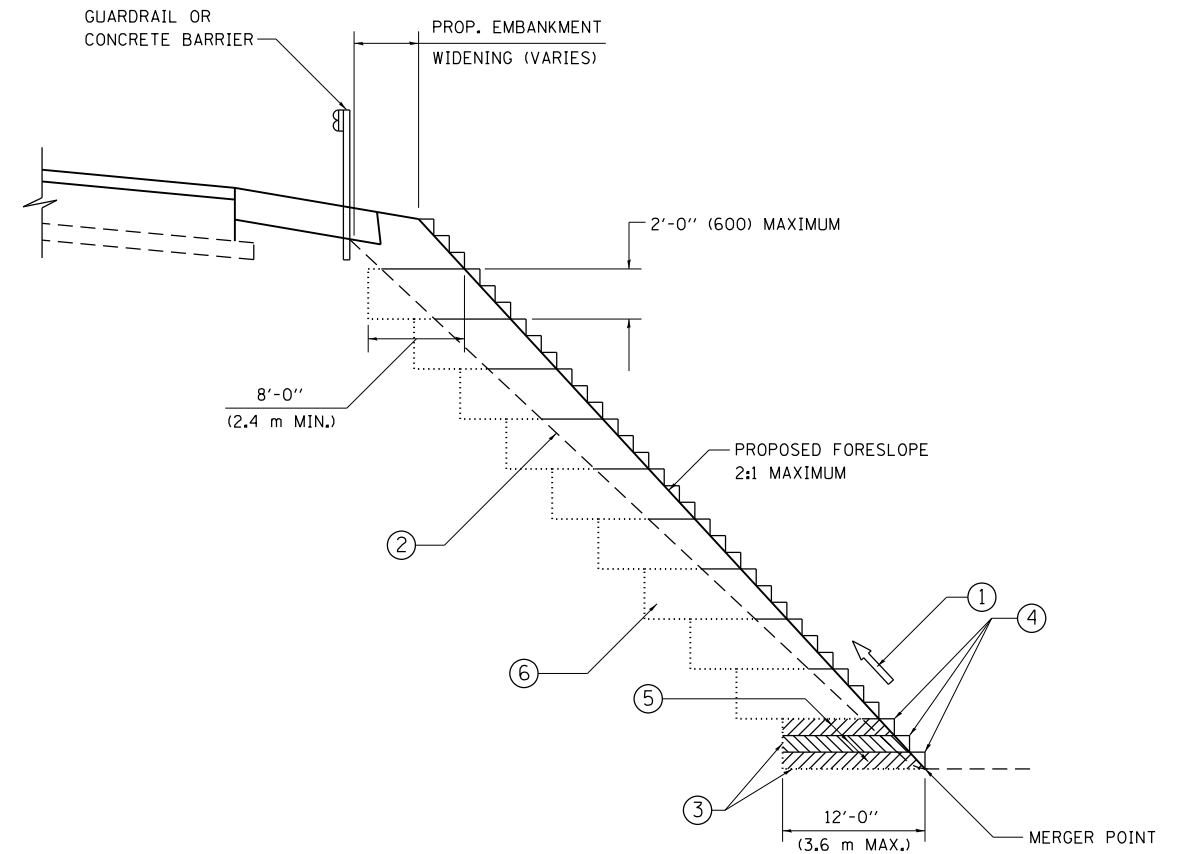
TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

| | | | |
|--|--|-----------------------|-----------------------------|
| FILE NAME = | USER NAME = KyleC | DESIGNED - M. DE YONG | REVISED - R. SHAH 10-25-94 |
| Me:IL 132 over DesPlaines River(12-154-00) | DRAWINGS\CADD Sheets\DISTRICT 1 STANDARD | DE:RAWNbd32.dgn | REVISED - A. ABBAS 03-21-97 |
| | PLOT SCALE = 99.9998' / in. | CHECKED - | REVISED - M. GOMEZ 04-06-01 |
| | PLOT DATE = 9/3/2013 | DATE - 06-13-90 | REVISED - R. BORO 01-01-07 |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

| | |
|---|--------------------------------------|
| BUTT JOINT AND HMA TAPER DETAILS | |
| SCALE: NONE | SHEET NO. 1 OF 1 SHEETS STA. TO STA. |

| | | | | |
|---|-----------|---------------------------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 541 | X-6-B-1-1 | LAKE | 93 | 68 |
| BD400-05 BD32 | | CONTRACT NO. 60N22 | | |
| 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).

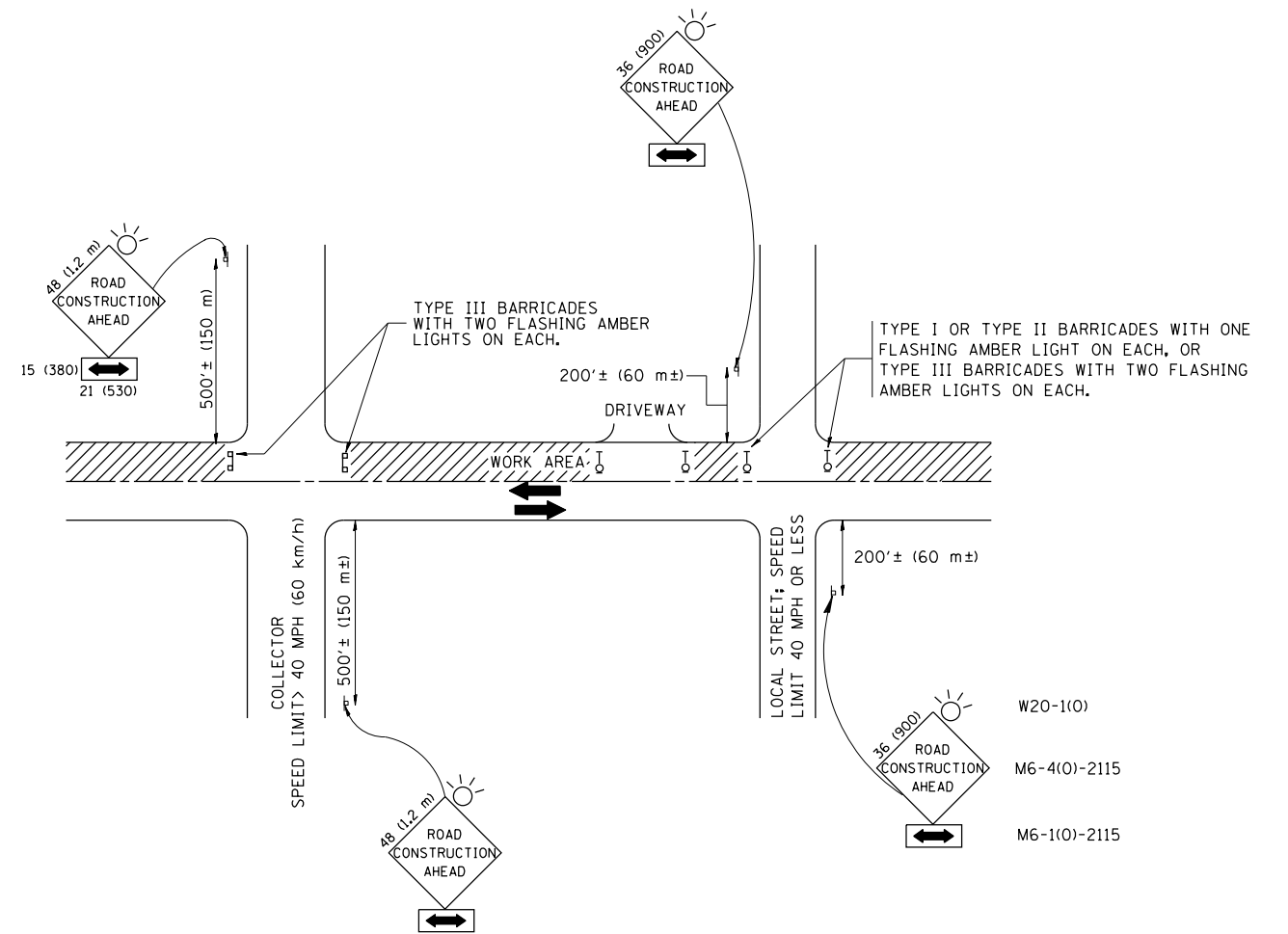
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

| | | | |
|--|-------------------|------------|-----------|
| FILE NAME = | USER NAME = KyleC | DESIGNED - | REVISED - |
| M:\IL 132 over DesPlaines River\12-154-00\DRAWINGS\CADD Sheets\DISTRICT 1 STANDARD | DETAILED.dgn | CADD | REVISED - |
| PLOT SCALE = 99.9998 ' / in. | CHECKED - S.E.B. | REVISED - | REVISED - |
| PLOT DATE = 9/3/2013 | DATE - 06-16-04 | REVISED - | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

| | | | |
|--|-------------------------|------|---------|
| BENCHING DETAIL FOR EMBANKMENT WIDENING | | | |
| SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA. |

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|-----------|--------|---------------------------|-----------|
| 541 | X-6-B-1-1 | LAKE | 93 | 69 |
| BD-51 | | | CONTRACT NO. 60N22 | |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | | |



TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

NOTES:

A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:

a) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.

b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.

2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:

a) ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.

b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.

3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.

C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.

D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

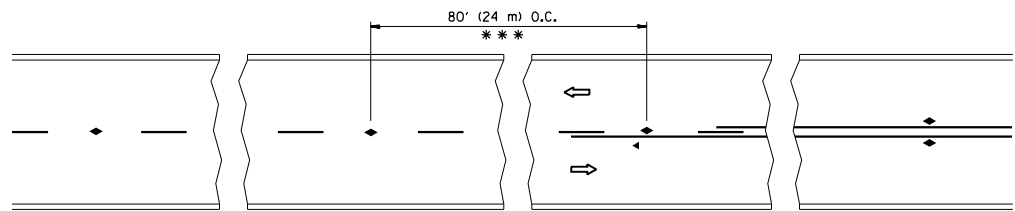
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|--|-----------------------------|----------------|---------------------------------|
| FILE NAME = | USER NAME = KyleC | DESIGNED - LHA | REVISED - J. OBERLE 10-18-95 |
| M:\IL 132 over DesPlaines River\12-154-00\DRAWINGS\CADD Sheets\DISTRICT 1 STANDARD | DRAWING | DATE = 06-89 | REVISED - A. HOUSEH 03-06-96 |
| | PLOT SCALE = 100.000' / in. | DATE = 06-89 | REVISED - A. HOUSEH 10-15-96 |
| | PLOT DATE = 9/3/2013 | DATE = 06-89 | REVISED - T. RAMMACHER 01-06-00 |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND PROTECTION FOR
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

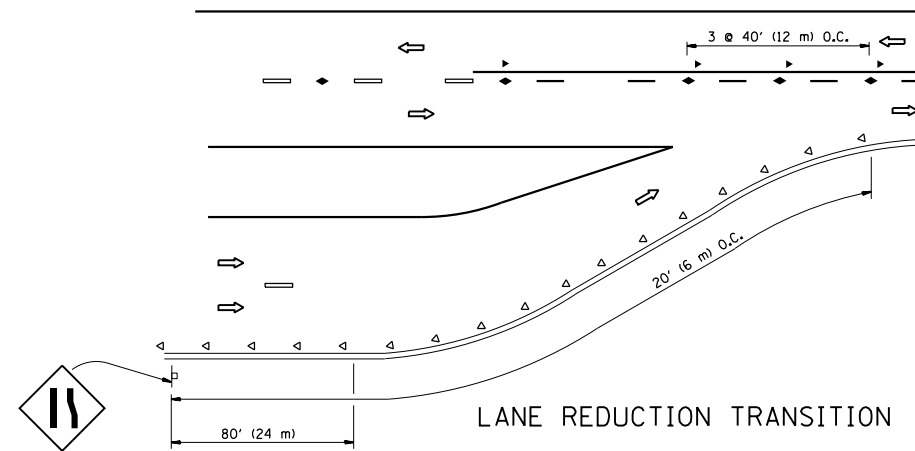
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|-----------|--------|--------------------|-----------|
| 541 | X-6-B-1-1 | LAKE | 93 | 70 |
| TC-10 | | | CONTRACT NO. 60N22 | |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | | |

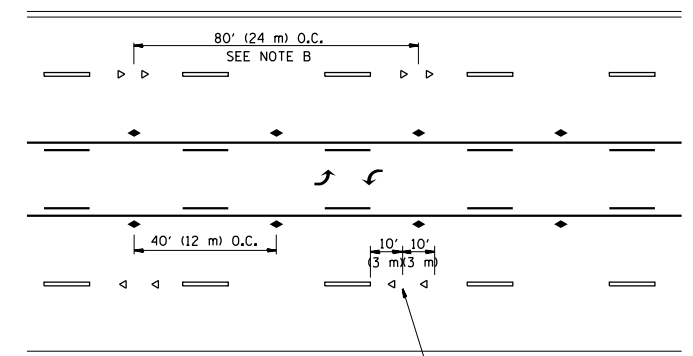


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

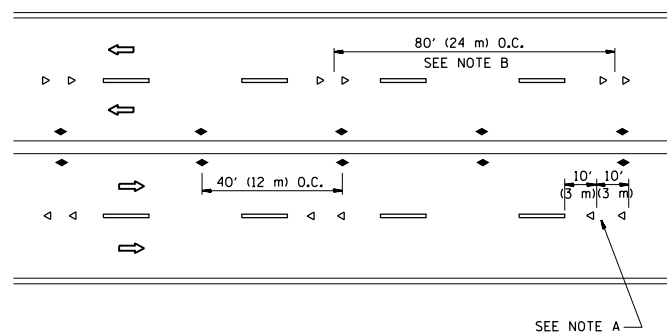
TWO-LANE/TWO-WAY



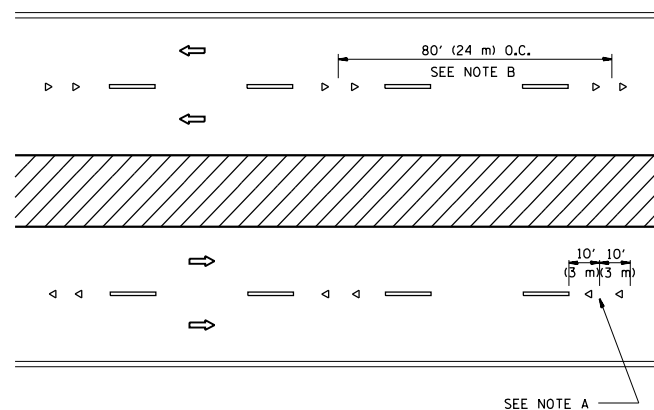
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

SYMBOLS

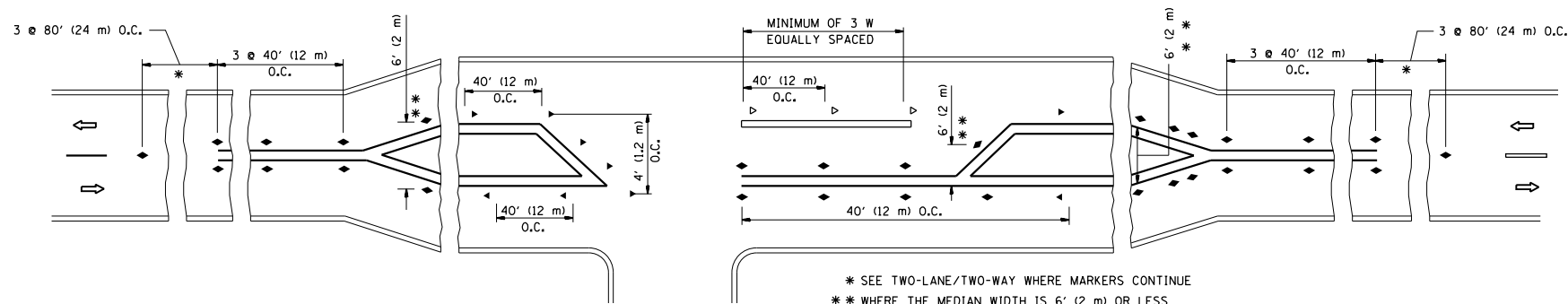
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.
- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.

DESIGN NOTES

1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHALL BE INCLUDED IN THE PLANS WHEN STANDARD SPECIFICATIONS ARE NOT BEING USED.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.



LEFT TURN

* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE
 ** WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

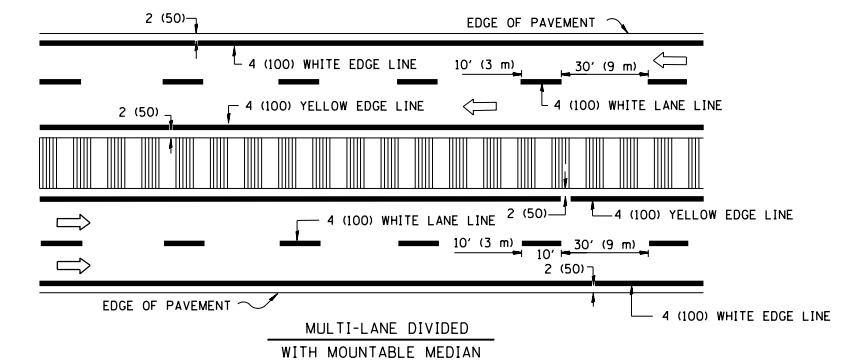
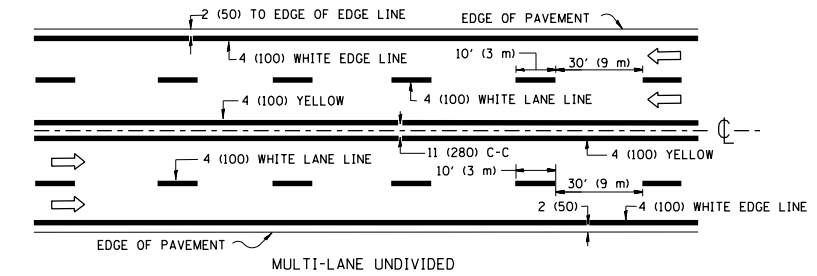
All dimensions are in inches (millimeters) unless otherwise shown.

| | | | |
|--|-------------------|------------|---------------------------------|
| FILE NAME = | USER NAME = KyleC | DESIGNED - | REVISED - T. RAMMACHER 09-19-94 |
| M:\IL 132 over DesPlaines River\12-154-00\DRAWINGS\CADD Sheets\DISTRICT 1 STANDARD | DETAILED | CHECKED - | REVISED - T. RAMMACHER 03-12-99 |
| | | DATE - | REVISED - T. RAMMACHER 01-06-00 |
| | | | REVISED - C. JUCIUS 09-09-09 |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

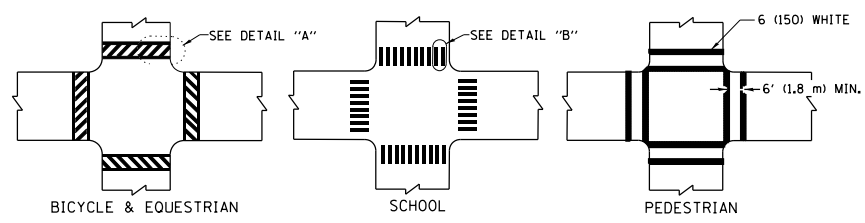
| TYPICAL APPLICATIONS | | | |
|--|-------------------------|------|---------|
| RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) | | | |
| SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA. |

| | | | | |
|---|-----------|--------------------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 541 | X-6-B-1-1 | LAKE | 93 | 71 |
| TC-11 | | CONTRACT NO. 60N22 | | |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | | |

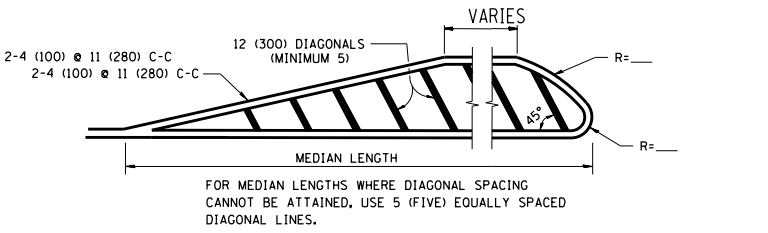
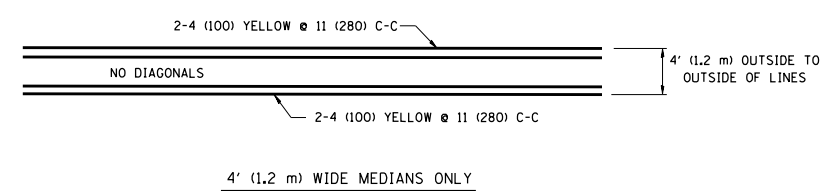


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

TYPICAL LANE AND EDGE LINE MARKING

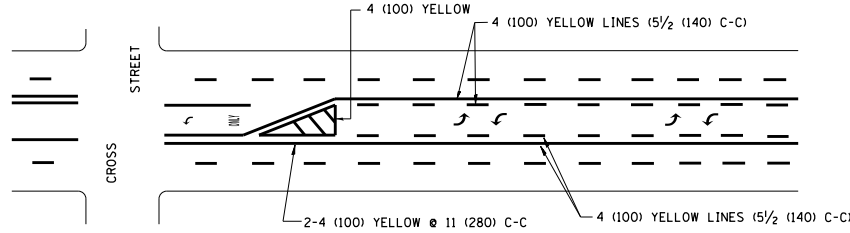


TYPICAL CROSSWALK MARKING

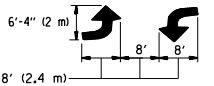


DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

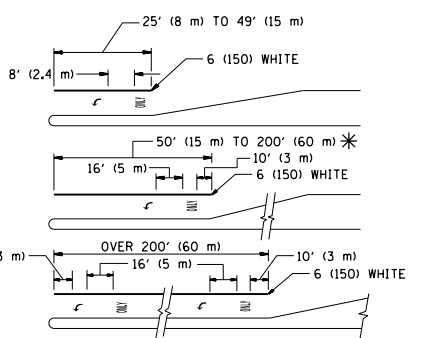


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

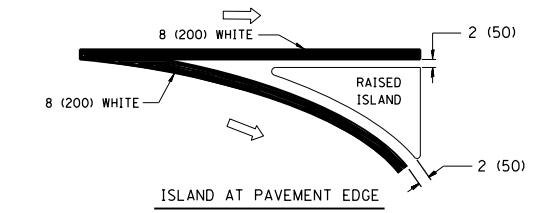
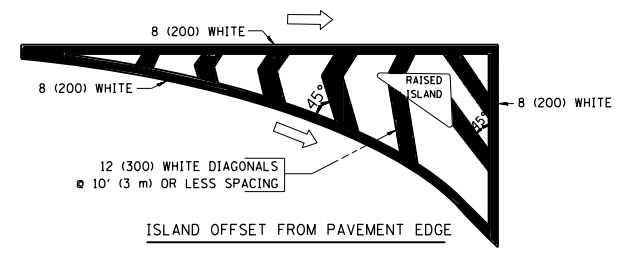


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)

* 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 | 4 (100) | SOLID | YELLOW | 5/2 (140) C-C FROM SKIP-DASH CENTERLINE |
| NO PASSING ZONE LINES: FOR BOTH DIRECTIONS | 2 @ 4 (100) | SOLID | YELLOW | 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN |
| LANE LINES | 4 (100) 5 (125) ON FREEWAYS | SKIP-DASH SKIP-DASH | WHITE 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 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 8' (2.4m) LEFT ARROW | SKIP-DASH AND SOLID IN PAIRS | YELLOW 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. SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL |
| CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL) | 2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90° | SOLID SOLID SOLID | WHITE WHITE WHITE | NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART 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° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS | SOLID | YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC | 11 (280) C-C FOR THE DOUBLE LINE. SEE TYPICAL PAINTED MEDIAN MARKING. |
| GORE MARKING AND CHANNELIZING LINES | 8 (200) WITH 12 (300) DIAGONALS @ 45° | SOLID | WHITE | DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h)) |
| RAILROAD CROSSING | 24 (600) TRANSVERSE LINES; "RR" 15 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X" | SOLID | WHITE | SEE STATE STANDARD 780001 AREA OF: "R": 3.6 SQ. FT. (0.33 m ²) EACH "X": 54.0 SQ. FT. (5.0 m ²) EACH |
| SHOULDER DIAGONALS | 12 (300) @ 45° | SOLID | WHITE - RIGHT YELLOW - LEFT | 50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 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.

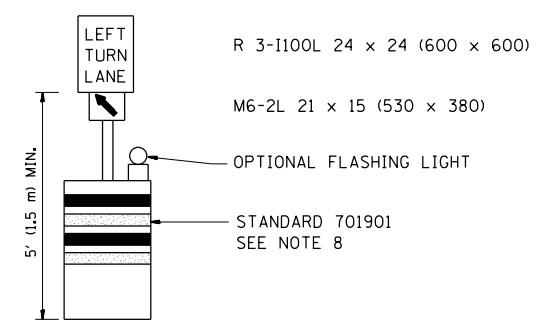
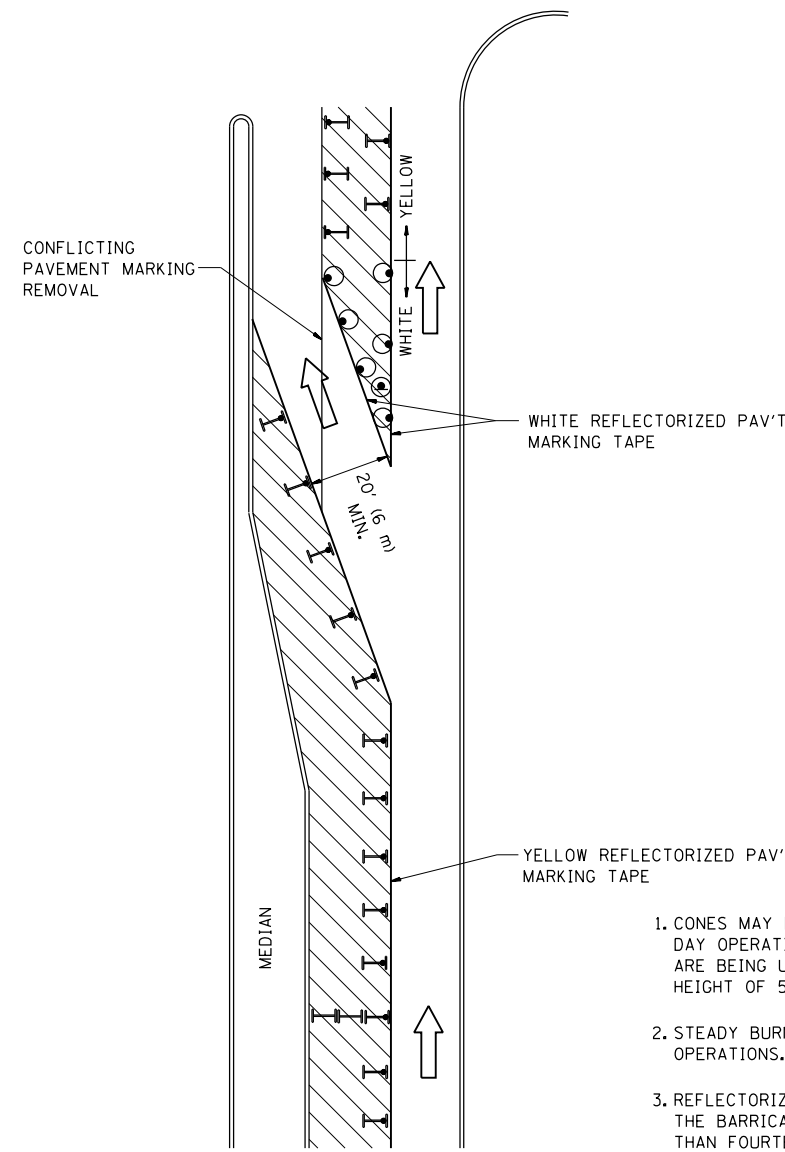
All dimensions are in inches (millimeters) unless otherwise shown.

| | | | |
|--|-------------------|------------------|---------------------------------|
| FILE NAME = | USER NAME = Kjelc | DESIGNED - EVERS | REVISED - T. RAMMACHER 10-27-94 |
| M:\NL 132 over DesPlaines River\12-154-00\DRAWINGS\CADD Sheets\DISTRICT 1 STANDARD | DRAWN = tcl3.dgn | CHECKED - | REVISED - C. JUCIUS 09-09-09 |
| PLOT SCALE = 100.000 / in. | DATE = 03-19-90 | REVISI | REVISI |
| PLOT DATE = 9/3/2013 | | | |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

| | | | |
|---------------------------|-------------------------|------|---------|
| DISTRICT ONE | | | |
| TYPICAL PAVEMENT MARKINGS | | | |
| SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA. |

| | | | | |
|---|-----------|--------------------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 541 | X-6-B-1-1 | LAKE | 93 | 72 |
| TC-13 | | CONTRACT NO. 60N22 | | |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | | |









GENERAL NOTES

1. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT. WHEN CONES ARE BEING USED, THE "LEFT TURN LANE" SIGN MAY BE SKID MOUNTED AT A MINIMUM HEIGHT OF 5' (1.5 m).
2. STEADY BURNING LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
3. REFLECTORIZED TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE BARRICADED AREA OF EACH TURN BAY WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS.
4. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-100 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
5. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
6. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
7. FORM OPER 725 IS REQUIRED.
8. IF A DRUM OR TYPE II BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 REQUIREMENTS IS NOT AVAILABLE, THE SIGNS SHALL BE MOUNTED, ABOVE THE BARRICADES, ON SEPARATE SIGNS SUPPORTS THAT MEET NCHRP 350 PREQUIREMENTS.
9. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

LEGEND

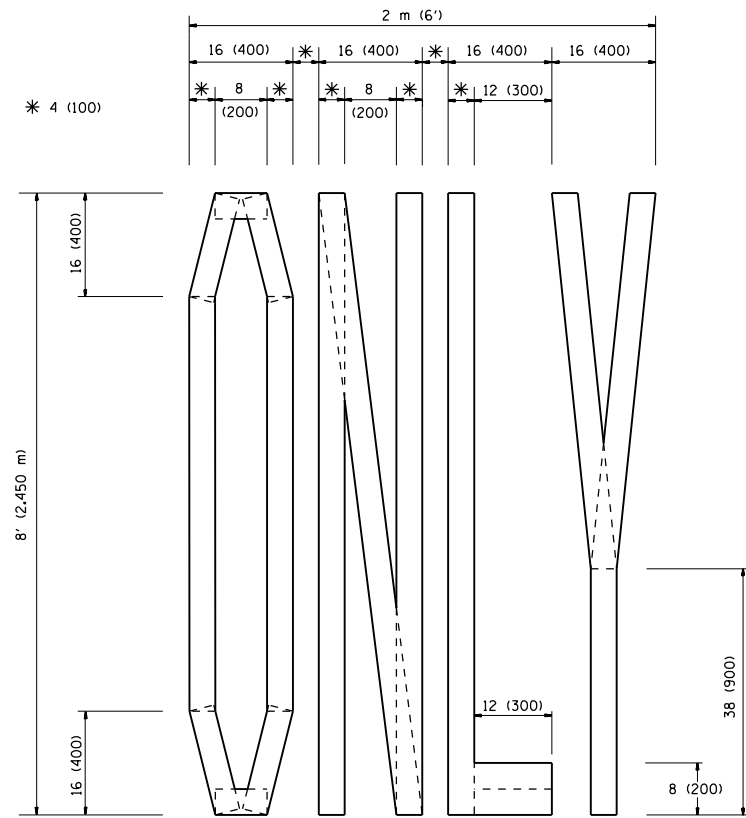
-  WORK AREA
-  LANE OPEN TO TRAFFIC
-  TYPE I OR II BARRICADE WITH STEADY BURN LIGHT
-  DRUM WITH STEADY BURN LIGHT
-  DRUM WITH SIGN (WITH OPTIONAL FLASHING LIGHT) SEE DETAIL
-  TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

| | | | |
|--|--|--------------------------------|----------------------------|
| FILE NAME = | USER NAME = KyleC | REVISED -T. RAMMACHER 09-08-94 | REVISED - R. BORO 09-14-09 |
| Me\NL 132 over DesPlaines River(12-154-00) | DRAWINGS\CADD Sheets\DISTRICT 1 STANDARD | REVISED - A. HOUSEH 11-07-95 | REVISED - |
| | PLOT SCALE = 99.9998 ' / in. | REVISED - A. HOUSEH 10-12-96 | REVISED - |
| | PLOT DATE = 9/3/2013 | REVISED -T. RAMMACHER 01-06-00 | REVISED - |

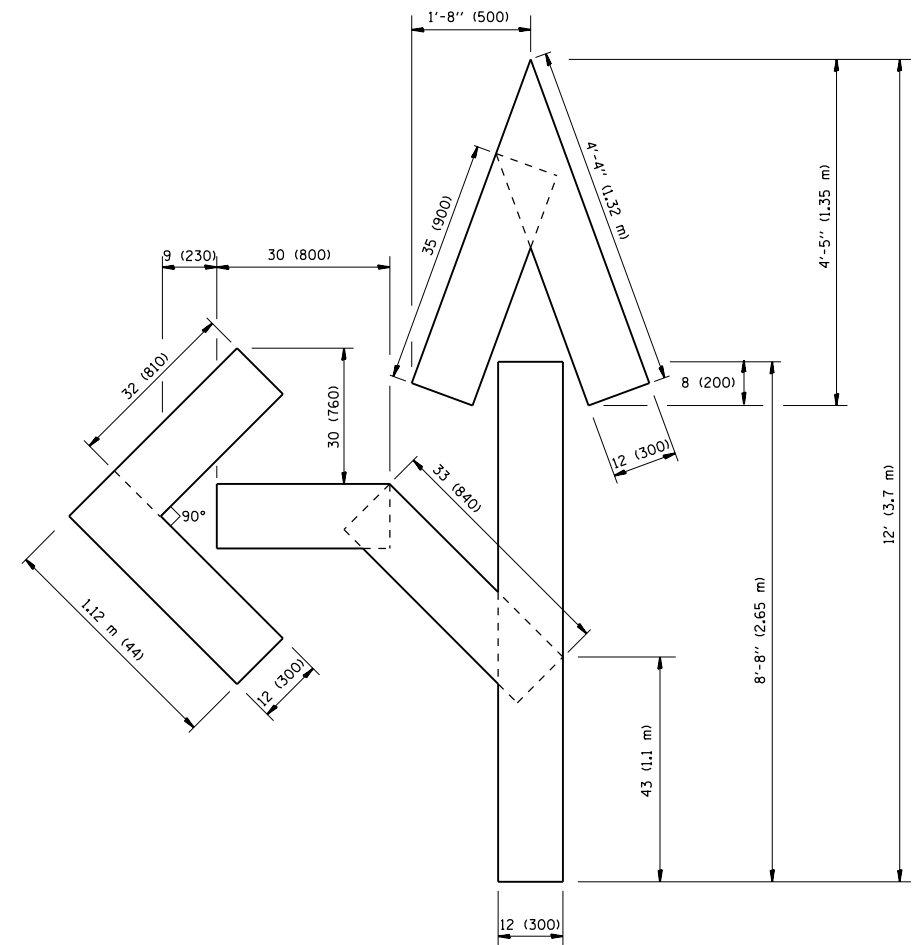
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

| TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) | | | |
|--|-------------------------|------|---------|
| SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA. |

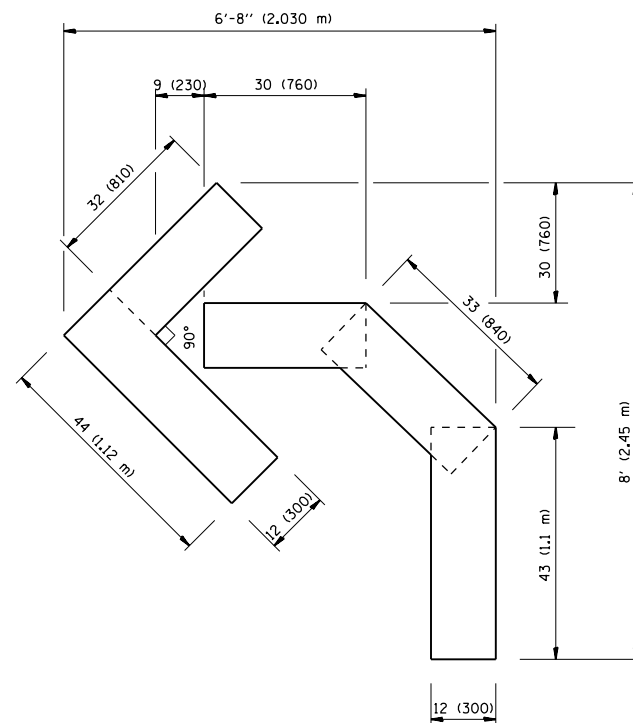
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|---|-----------|--------------------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 541 | X-6-B-1-1 | LAKE | 93 | 73 |
| TC-14 | | CONTRACT NO. 60N22 | | |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | | |



QUANTITY
4 (100) LINE = 64.1 ft. (19.7 m)
21.1 sq. ft. (1.97 sq. m)



QUANTITY
4 (100) LINE = 82.5 ft. (25.3 m)
27.5 sq. ft. (2.53 sq. m)



QUANTITY
4 (100) LINE = 45.5 ft. (13.9 m)
15.2 sq. ft. (1.39 sq. m)

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

| | | | |
|--|-------------------|------------|--------------------------------|
| FILE NAME = | USER NAME = KyleC | DESIGNED - | REVISED -T. RAMMACHER 06-05-96 |
| M:\IL 132 over DesPlaines River\12-154-00\DRAWINGS\CADD Sheets\DISTRICT 1 STANDARD | DRAWN=tc16.dgn | CHECKED - | REVISED -T. RAMMACHER 11-04-97 |
| PLOT SCALE = 99.9998' / in. | DATE - 09-18-94 | CHECKED - | REVISED -T. RAMMACHER 03-02-98 |
| PLOT DATE = 9/3/2013 | DATE - 09-18-94 | CHECKED - | REVISED -E. GOMEZ 08-28-00 |



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING LETTERS AND SYMBOLS
FOR TRAFFIC STAGING






SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

| | | | | |
|---|-----------|--------------------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 541 | X-6-B-I-1 | LAKE | 93 | 74 |
| TC-16 | | CONTRACT NO. 60N22 | | |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | | |






ROUTE MARKERS

-  FOR U.S. ROUTES
M1-40-2424
-  FOR ILLINOIS ROUTES
M1-50-2424
-  R.R., UNMARKED ROUTES
SPECIAL 24" x 18" VARIABLE
4" BLACK LETTERS ON WHITE
REFLECTIVE BACKGROUND

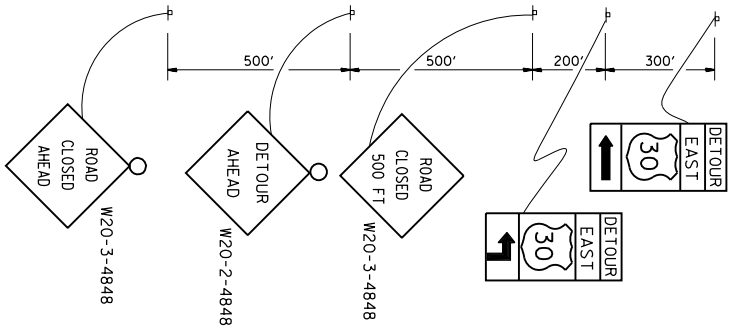
ARROWS SIGNS

-  M5-1L-2115
-  M5-1R-2115
-  M6-1-2115
-  M6-1-2115
-  M6-3-2115

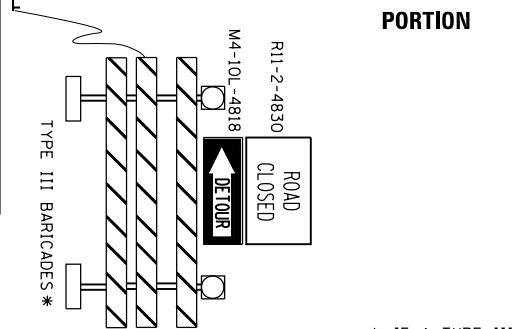
CARDINAL DIRECTION & DETOUR SIGNS

-  NORTH M3-1-2412
-  EAST M3-2-2412
-  SOUTH M3-3-2412
-  WEST M3-4-2412
-  DETOUR M4-8-2412

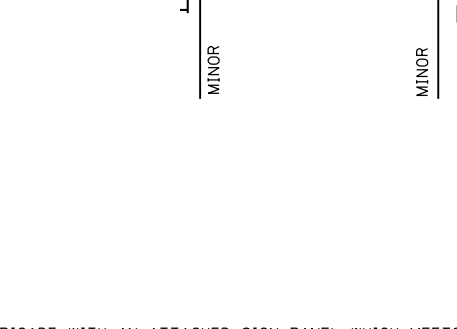
STATE ROUTE



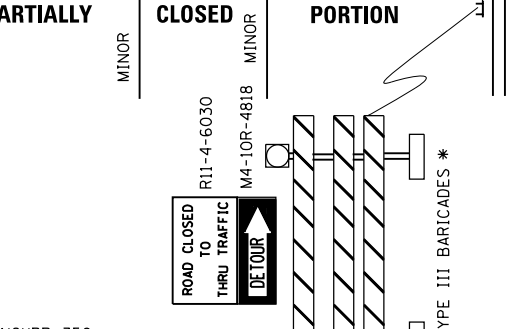
COMPLETELY CLOSED PORTION



PARTIALLY CLOSED PORTION



STATE ROUTE



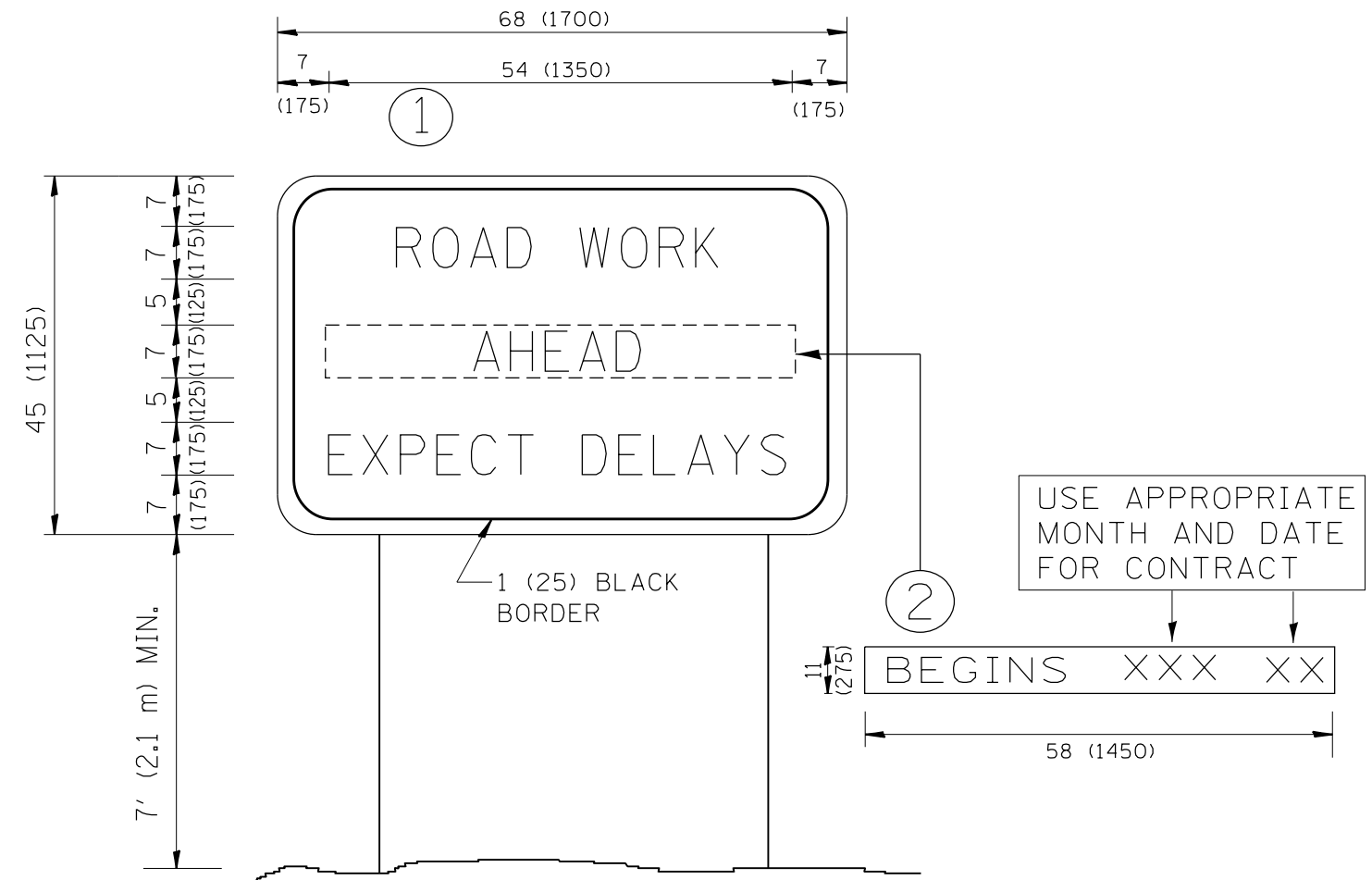
* IF A TYPE III BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 REQUIREMENTS IS NOT AVAILABLE, THE SIGNS SHALL BE MOUNTED, ABOVE THE BARRICADES, ON SEPARATE SIGNS SUPPORTS THAT MEET NCHRP 350 REQUIREMENTS.

| | | | |
|--|-------------------|------------|----------------------------|
| FILE NAME = | USER NAME = Kjelc | DESIGNED - | REVISED - 10-18-02 |
| M:\IL 132 over DesPlaines River\112-154-00\DRAWINGS\CADD Sheets\DISTRICT 1 STANDARD DRAWING\TC21.dgn | | CHECKED - | REVISED - R. BORO 09-14-09 |
| | | DATE - | REVISED - |
| | | | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

| | | | |
|--|-------------------------|------|---------|
| DETOUR SIGNING FOR CLOSING STATE HIGHWAYS | | | |
| SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA. |

| | | | | |
|---|-----------|---------------------------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 541 | X-6-B-1-1 | LAKE | 93 | 76 |
| TC-21 | | CONTRACT NO. 60N22 | | |
| 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.

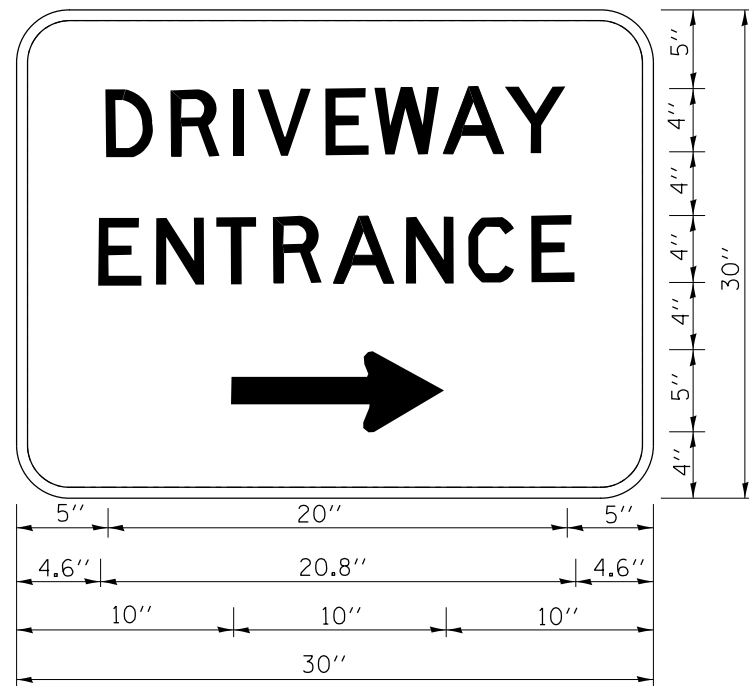
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| FILE NAME = | USER NAME = KyieC | DESIGNED - | REVISED - R. MIRS 09-15-97 |
| M:\IL 132 over DesPlaines River\12-154-00\DRAWINGS\CADD Sheets\DISTRICT 1 STANDARD | DRAWING | DRAWN | REVISED - R. MIRS 12-11-97 |
| PLOT SCALE = 100.000 / in. | CHECKED - | REVISED - T. RAMMACHER 02-02-99 | REVISED - C. JUCIUS 01-31-07 |
| PLOT DATE = 9/3/2013 | DATE - | | |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD
INFORMATION SIGN**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

| | | | | |
|---|-----------|--------------------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 541 | X-6-B-1-1 | LAKE | 93 | 77 |
| TC-22 | | CONTRACT NO. 60N22 | | |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | | |



3.0" RADIUS, 0.5" BORDER, WHITE ON GREEN; REFLECTORIZED
 "DRIVEWAY" D; "ENTRANCE" D; STANDARD ARROW CUSTOM 12.0" x 5.0"

NOTES:

1. HALF OF THE SIGNS WILL REQUIRE A LEFT HAND FACING ARROW.
2. TWO SIGNS SHALL BE USED AT EACH COMMERCIAL ENTRANCE
 PLACED BACK-TO-BACK; ONE WITH A RIGHT HAND ARROW (SHOWN)
 SHALL BE PLACED ON THE NEAR RIGHT SIDE THE DRIVEWAY
 AND ONE WITH A LEFT HAND ARROW SHALL BE PLACED ON THE
 FAR LEFT SIDE OF THE DRIVEWAY.
3. SIGNS TO BE PAID FOR AS ITEM "TEMPORARY INFORMATION SIGNING".

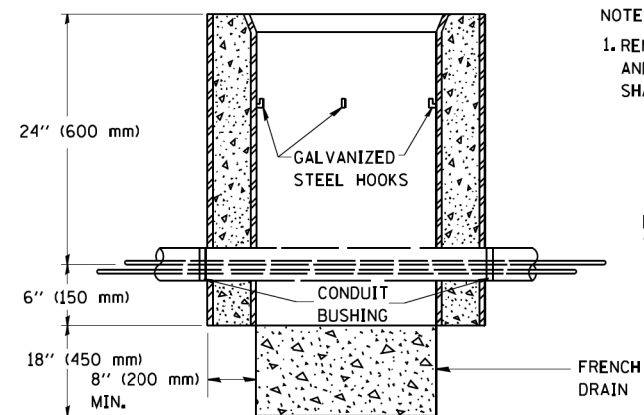
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| FILE NAME = | USER NAME = KYLEC | DESIGNED - | REVISED - C. JUCIUS 02-15-07 |
| M:\IL 132 over DesPlaines River\12-154-00\DRAWINGS\CADD Sheets\DISTRICT 1 STANDARD | DRAWING | tc26.dgn | REVISED - |
| PLOT SCALE = 100.000' / in. | CHECKED - | REVISED - | REVISED - |
| PLOT DATE = 9/3/2013 | DATE - | REVISED - | REVISED - |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

DRIVEWAY ENTRANCE SIGNING

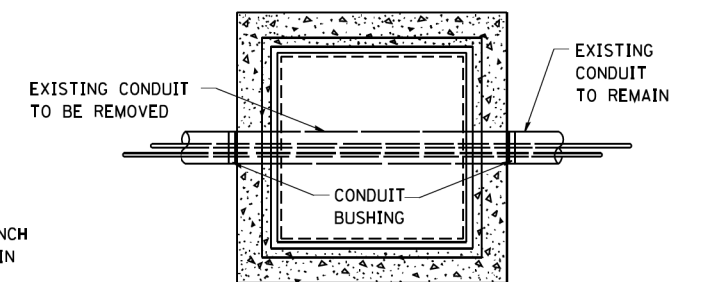
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|-----------|--------|---------------------------|-----------|
| 541 | X-6-B-1-1 | LAKE | 93 | 78 |
| TC-26 | | | CONTRACT NO. 60N22 | |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | | |



NOTES:

1. REMOVAL OF EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHING SHALL BE INCIDENTAL TO THE HANDHOLE.



ELEVATION

PLAN

**DETAIL
HANDHOLE TO INTERCEPT EXISTING CONDUIT**

| | | | |
|--|-----------------------------|------------|--------------------|
| FILE NAME = W:\diststd\22x34\ts03.dgn | USER NAME = gegl1enobt | DESIGNED - | REVISED - 10-01-00 |
| | | DRAWN - | REVISED - |
| | PLOT SCALE = 50.0000' / IN. | CHECKED - | REVISED - |
| | PLOT DATE = 1/4/2008 | DATE - | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

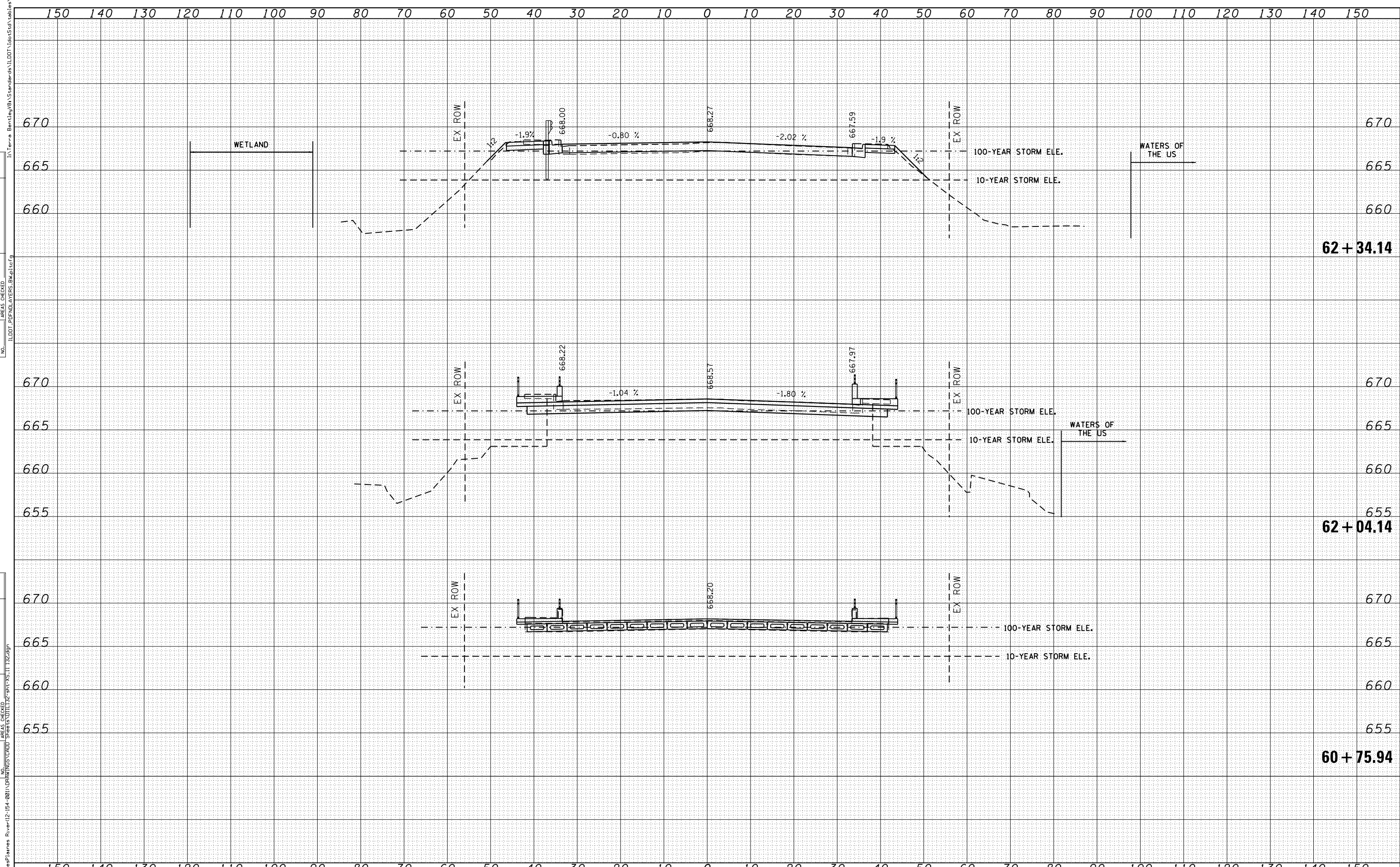
HANDHOLE TO INTERCEPT EXISTING CONDUIT

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

| | | | | |
|---|-----------|--------------------|-----------------|--------------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 541 | X-6-B-1-1 | LAKE | 93 | 79 |
| TS-03 | | CONTRACT NO. 60N22 | | |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | | |

| | |
|---------------|--|
| DATE | |
| BY | |
| FINAL SURVEY | |
| NOTE BOOK | |
| SURVEYED | |
| PLOTTED | |
| TEMPLATE | |
| AREAS CHECKED | |

| | |
|-----------------|--|
| DATE | |
| BY | |
| ORIGINAL SURVEY | |
| NOTE BOOK | |
| SURVEYED | |
| PLOTTED | |
| TEMPLATE | |
| AREAS CHECKED | |



| | | | | | |
|-------------|-----------------------|----------|------------|---------|---|
| USER NAME | - JasonM | DESIGNED | - BCB | REVISED | - |
| DESIGNED | - BCB | DRAWN | - BCB | REVISED | - |
| PLLOT SCALE | - 20.000' / in. | CHECKED | - DPA | REVISED | - |
| PLLOT DATE | - 9/3/2013 3:58:29 PM | DATE | - 09/03/13 | REVISED | - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

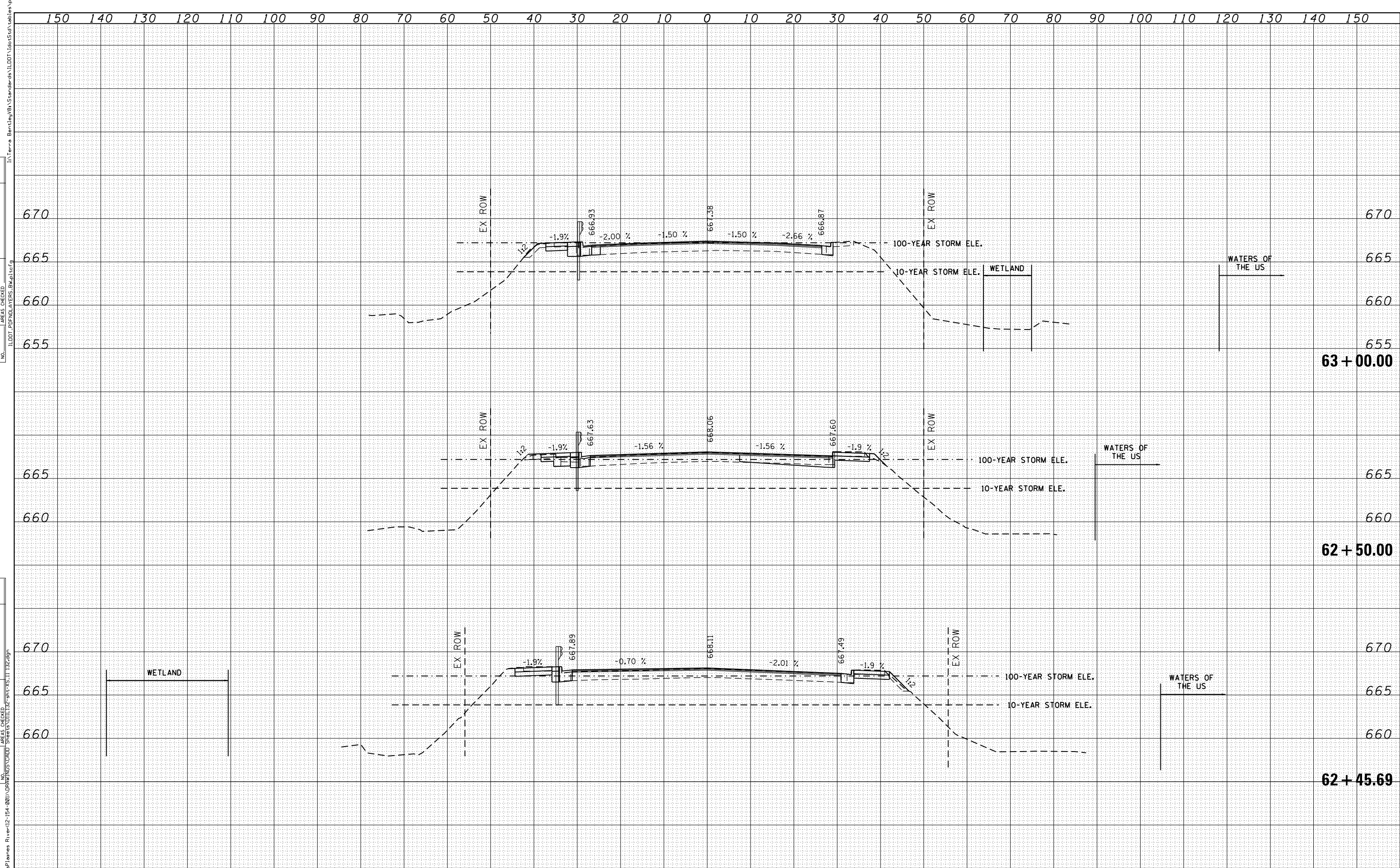
**IL 132 (GRAND AVE.) OVER DES PLAINES RIVER
IL 132 CROSS SECTIONS**

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

| | | | | |
|---------------------------|-----------|--------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 541 | X-6-B-1-1 | LAKE | 93 | 82 |
| CONTRACT NO. 60N22 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

| | |
|--------------|---------------|
| DATE | |
| BY | |
| FINAL SURVEY | SURVEYED |
| NOTE BOOK | PLOTTED |
| | TEMPLATE |
| | AREAS CHECKED |
| | AREAS CHECKED |

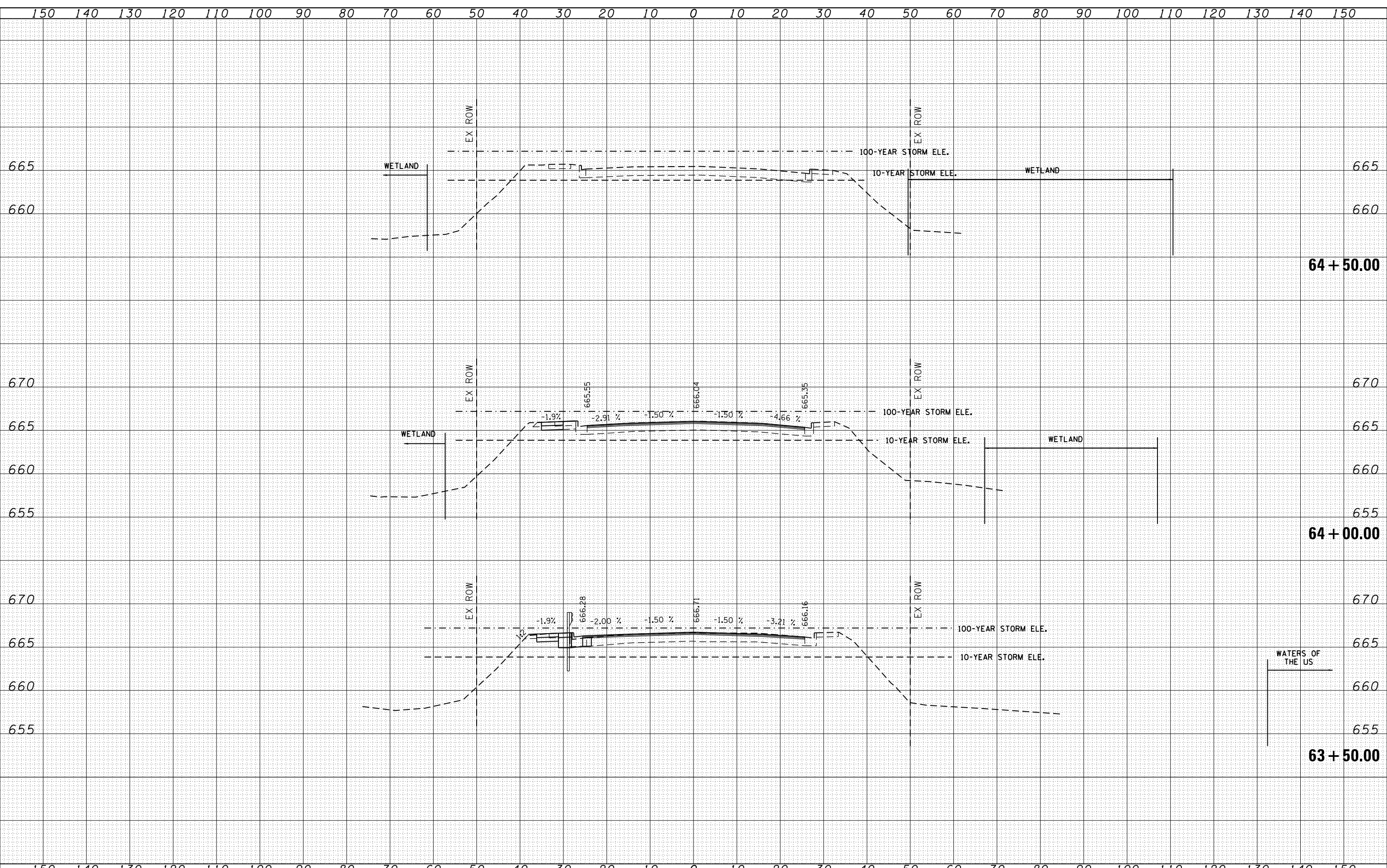
| | |
|-----------------|---------------|
| DATE | |
| BY | |
| ORIGINAL SURVEY | SURVEYED |
| NOTE BOOK | PLOTTED |
| | TEMPLATE |
| | AREAS CHECKED |
| | AREAS CHECKED |



| | |
|--------------|---------------|
| DATE | |
| BY | |
| FINAL SURVEY | SURVEYED |
| NOTE BOOK | PLOTTED |
| | TEMPLATE |
| | AREAS CHECKED |
| | AREAS CHECKED |

| | |
|-----------------|---------------|
| DATE | |
| BY | |
| ORIGINAL SURVEY | SURVEYED |
| NOTE BOOK | PLOTTED |
| | TEMPLATE |
| | AREAS CHECKED |
| | AREAS CHECKED |

I:\Terra Bentley\81\Standards\ILDOT\IdeaStd\Tables\p...
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 DesPlaines River(12-154-001)\DRAWINGS\12-CROSS-SECTIONS\12-CROSS-SECTION-63.dwg
 M:\132 over DesPlaines River(12-154-001)\DRAWINGS\12-CROSS-SECTIONS\12-CROSS-SECTION-64.dwg



| | | | | | |
|------------|-----------------------|----------|------------|---------|---|
| USER NAME | - JasonM | DESIGNED | - BCB | REVISED | - |
| | | DRAWN | - BCB | REVISED | - |
| PLOT SCALE | - 20.000' / in. | CHECKED | - DPA | REVISED | - |
| PLOT DATE | - 9/3/2013 3:59:49 PM | DATE | - 09/03/13 | REVISED | - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 132 (GRAND AVE.) OVER DES PLAINES RIVER
IL 132 CROSS SECTIONS

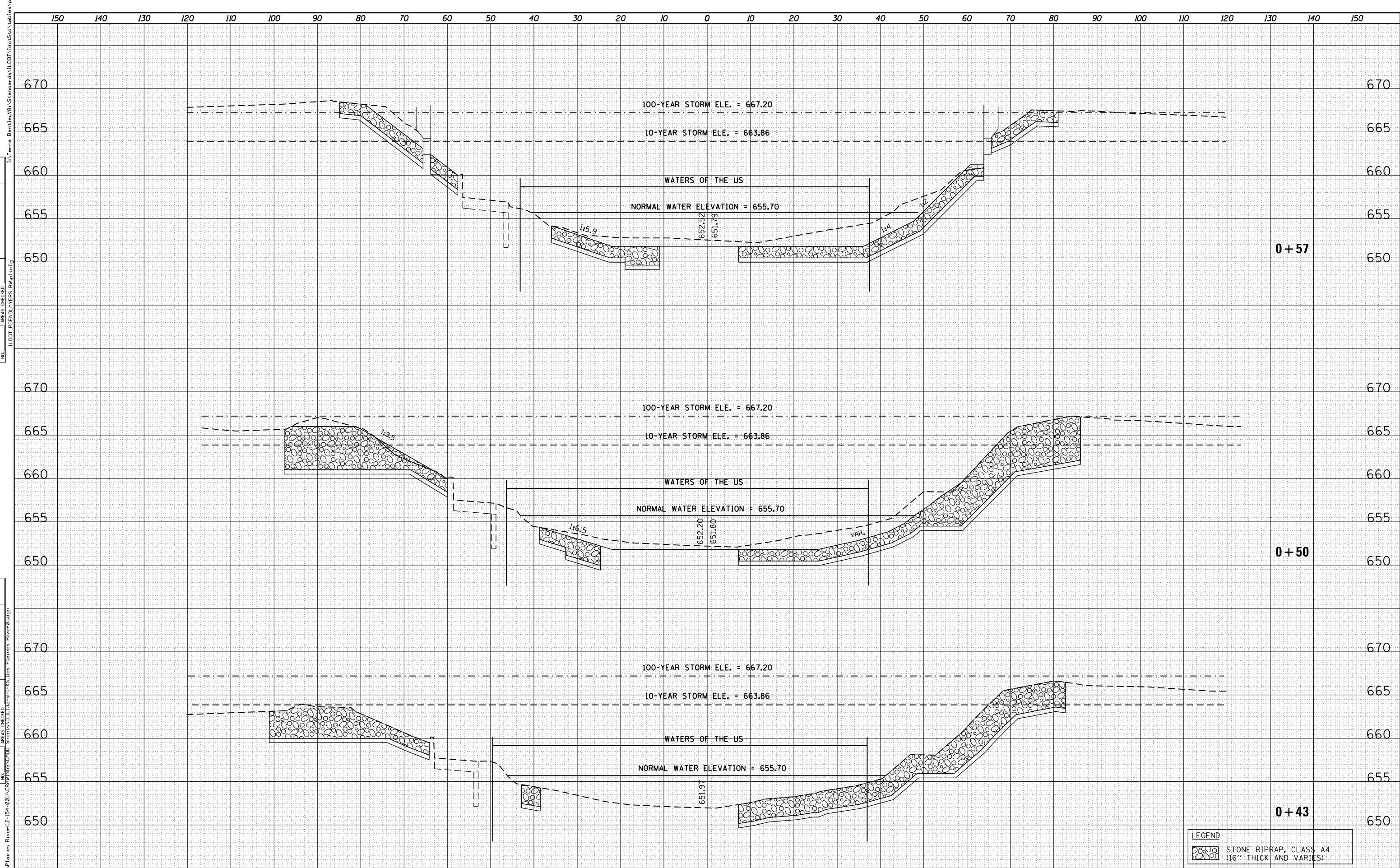
SCALE: SHEET NO. OF SHEETS STA. TO STA.

| | | | | |
|--------------------|-----------|--------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 541 | X-6-B-1-1 | LAKE | 93 | 84 |
| CONTRACT NO. 60N22 | | | | |

ILLINOIS FED. AID PROJECT

| | |
|-------------------------|--|
| DATE | |
| BY | |
| FINAL SURVEY | |
| NOTE BOOK | |
| NO. | |
| NO. OF SHEETS | |
| NO. OF SHEETS PLOTTED | |
| NO. OF SHEETS CHECKED | |
| NO. OF SHEETS REVISIONS | |
| NO. OF SHEETS APPROVED | |

| | |
|-------------------------|--|
| DATE | |
| BY | |
| ORIGINAL SURVEY | |
| NOTE BOOK | |
| NO. | |
| NO. OF SHEETS | |
| NO. OF SHEETS PLOTTED | |
| NO. OF SHEETS CHECKED | |
| NO. OF SHEETS REVISIONS | |
| NO. OF SHEETS APPROVED | |



| | |
|--------|--|
| LEGEND | |
| | STONE RIPRAP, CLASS A4 (16" THICK AND VARIES) |



| | | |
|---------------------------------|-----------------|-----------|
| USER NAME = JasonM | DESIGNED - BCB | REVISED - |
| | DRAWN - BCB | REVISED - |
| PLOT SCALE = 20.000' / in. | CHECKED - DPA | REVISED - |
| PLOT DATE = 9/3/2013 3:53:14 PM | DATE - 09/03/13 | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

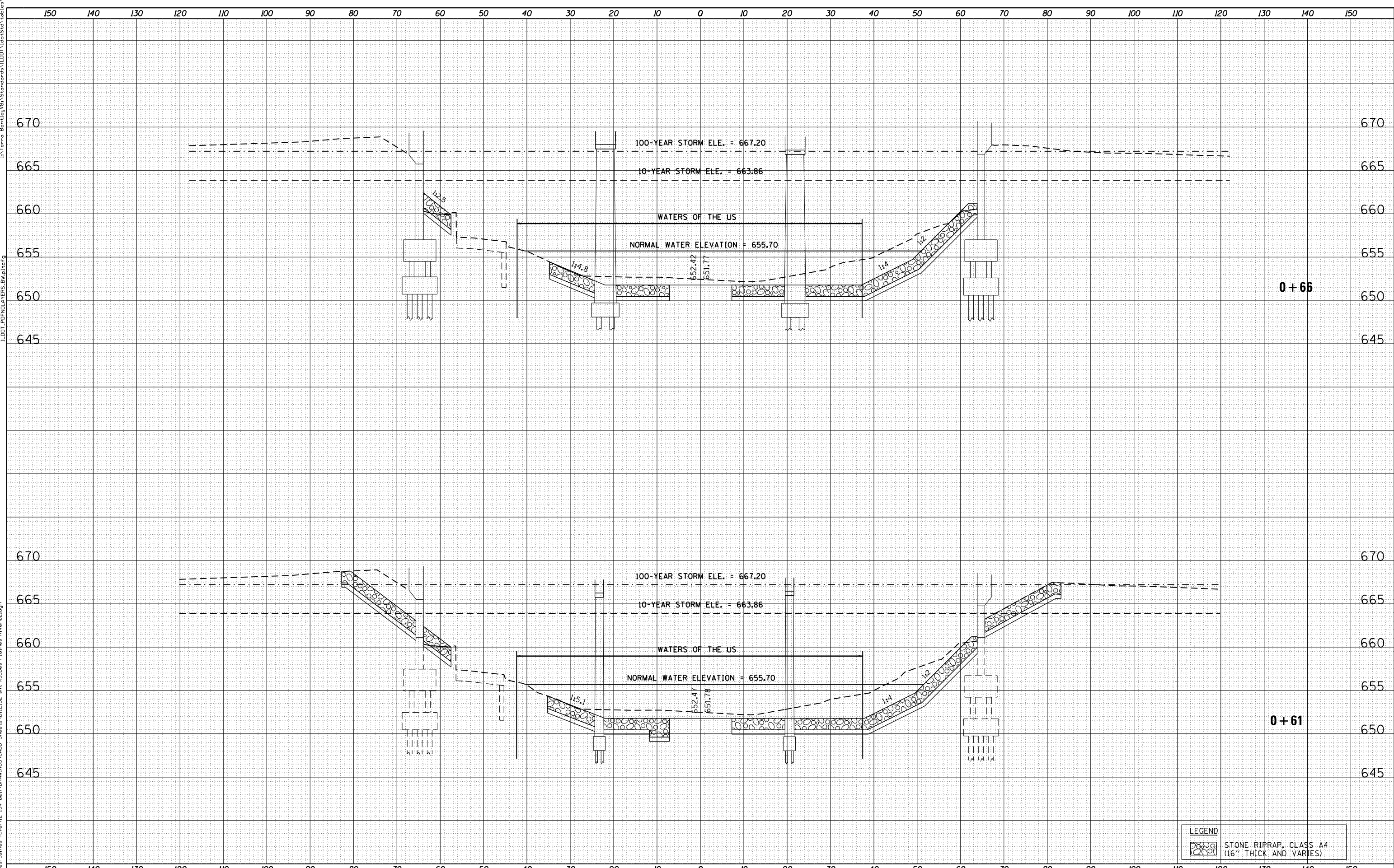
**IL 132 (GRAND AVE.) OVER DES PLAINES RIVER
DES PLAINES RIVER CROSS SECTIONS**

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

| | | | | |
|---------------------------|-----------|--------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 541 | X-6-B-1-1 | LAKE | 93 | 85 |
| CONTRACT NO. 60N22 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

| | |
|------------------------|--|
| DATE | |
| BY | |
| FINAL SURVEY | |
| SURVEYED | |
| PLOTTED | |
| TEMPLATE | |
| AREAS CHECKED | |
| NO. ILLDOT PROJECT NO. | |

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



| LEGEND | |
|--------|---|
| | STONE RIPRAP, CLASS A4 (16" THICK AND VARIES) |



| | | |
|---------------------------------|-----------------|-----------|
| USER NAME = JasonM | DESIGNED - BCB | REVISED - |
| | DRAWN - BCB | REVISED - |
| PLOT SCALE = 20.000' / in. | CHECKED - DPA | REVISED - |
| PLOT DATE = 9/3/2013 3:53:51 PM | DATE - 09/03/13 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

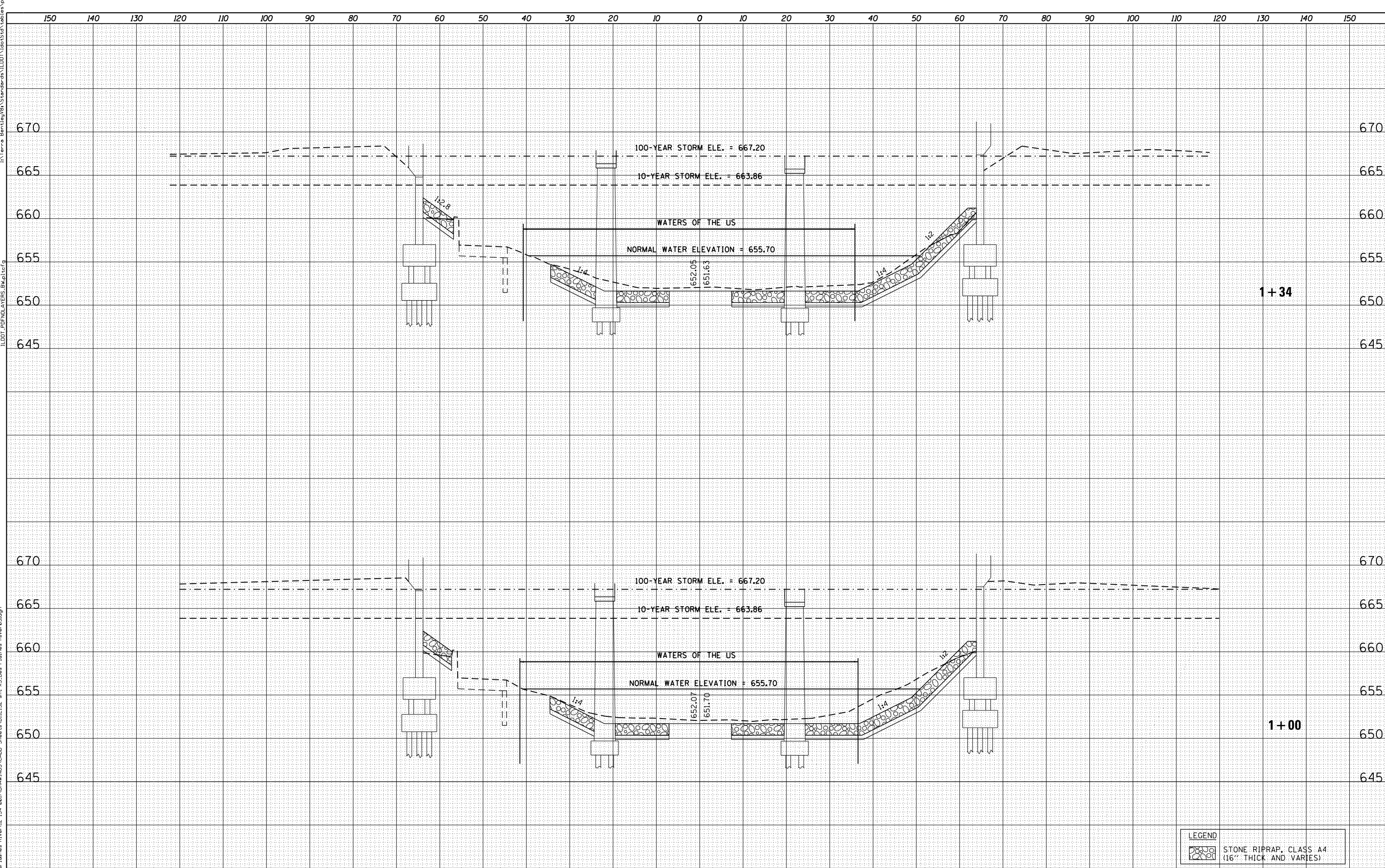
IL 132 (GRAND AVE.) OVER DES PLAINES RIVER
DES PLAINES RIVER CROSS SECTIONS

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

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-----------|--------|--------------|-----------|
| 541 | X-6-B-1-1 | LAKE | 93 | 86 |
| CONTRACT NO. 60N22 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

| | |
|------------------------|--|
| DATE | |
| BY | |
| FINAL SURVEY | |
| SURVEYED | |
| PLOTTED | |
| TEMPLATE | |
| AREAS CHECKED | |
| NO. ILLDOT PROJECT NO. | |

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



| LEGEND | |
|--------|---|
| | STONE RIPRAP, CLASS A4 (16" THICK AND VARIES) |



| | |
|-------------|-----------------------|
| USER NAME | = JasonM |
| DESIGNED | - BCB |
| DRAWN | - BCB |
| CHECKED | - DPA |
| DATE | - 09/03/13 |
| PLLOT SCALE | = 20.000' / in. |
| PLLOT DATE | = 9/3/2013 3:54:35 PM |

| | |
|---------|---|
| REVISED | - |
| REVISED | - |
| REVISED | - |
| REVISED | - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

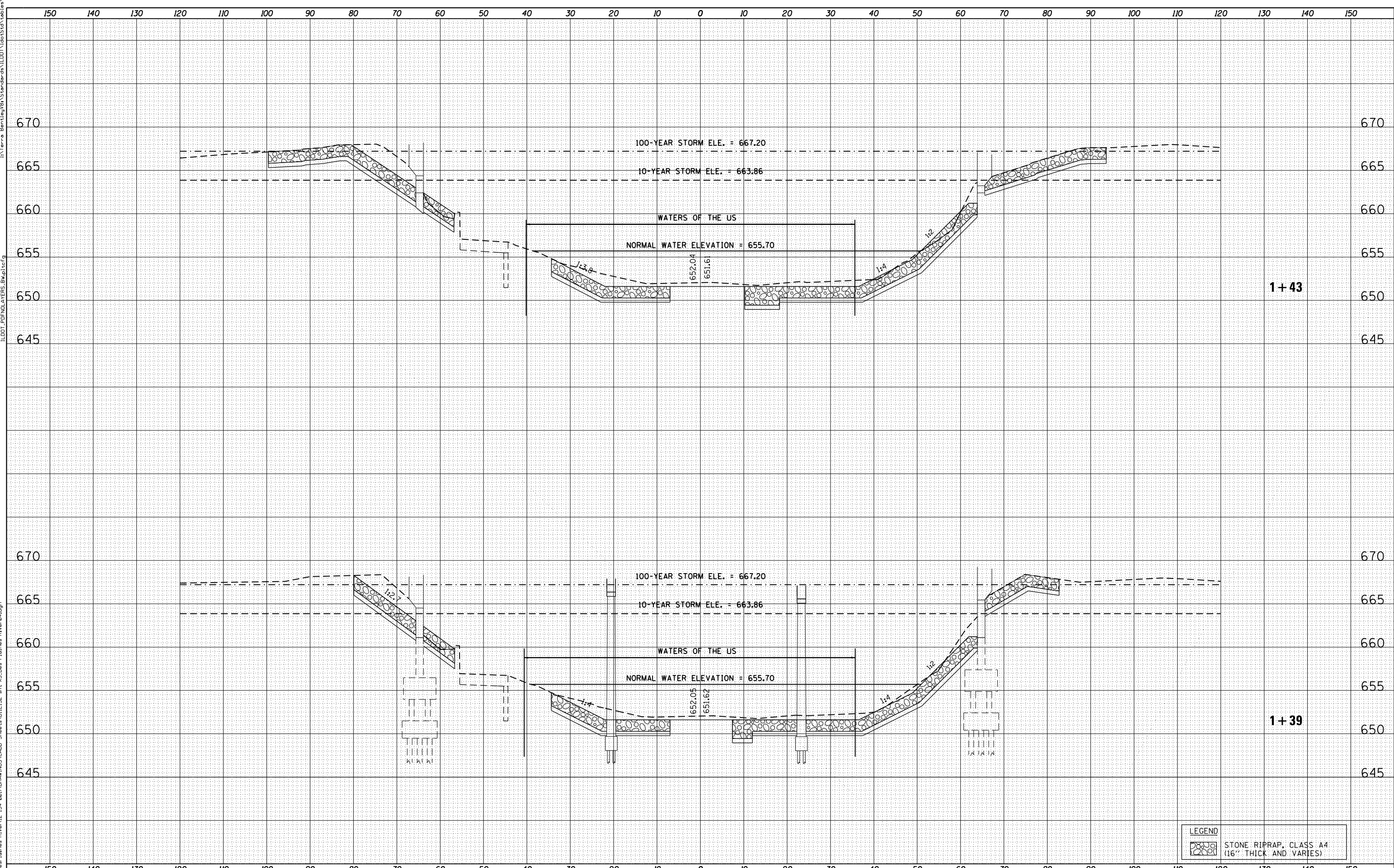
IL 132 (GRAND AVE.) OVER DES PLAINES RIVER
DES PLAINES RIVER CROSS SECTIONS

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

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-----------|--------|--------------|-----------|
| 541 | X-6-B-1-1 | LAKE | 93 | 87 |
| CONTRACT NO. 60N22 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

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

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



| LEGEND | |
|--------|---|
| | STONE RIPRAP, CLASS A4 (16" THICK AND VARIES) |



| | | |
|---------------------------------|-----------------|-----------|
| USER NAME = JasonM | DESIGNED - BCB | REVISED - |
| | DRAWN - BCB | REVISED - |
| PLOT SCALE = 20.000' / in. | CHECKED - DPA | REVISED - |
| PLOT DATE = 9/3/2013 3:55:20 PM | DATE - 09/03/13 | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

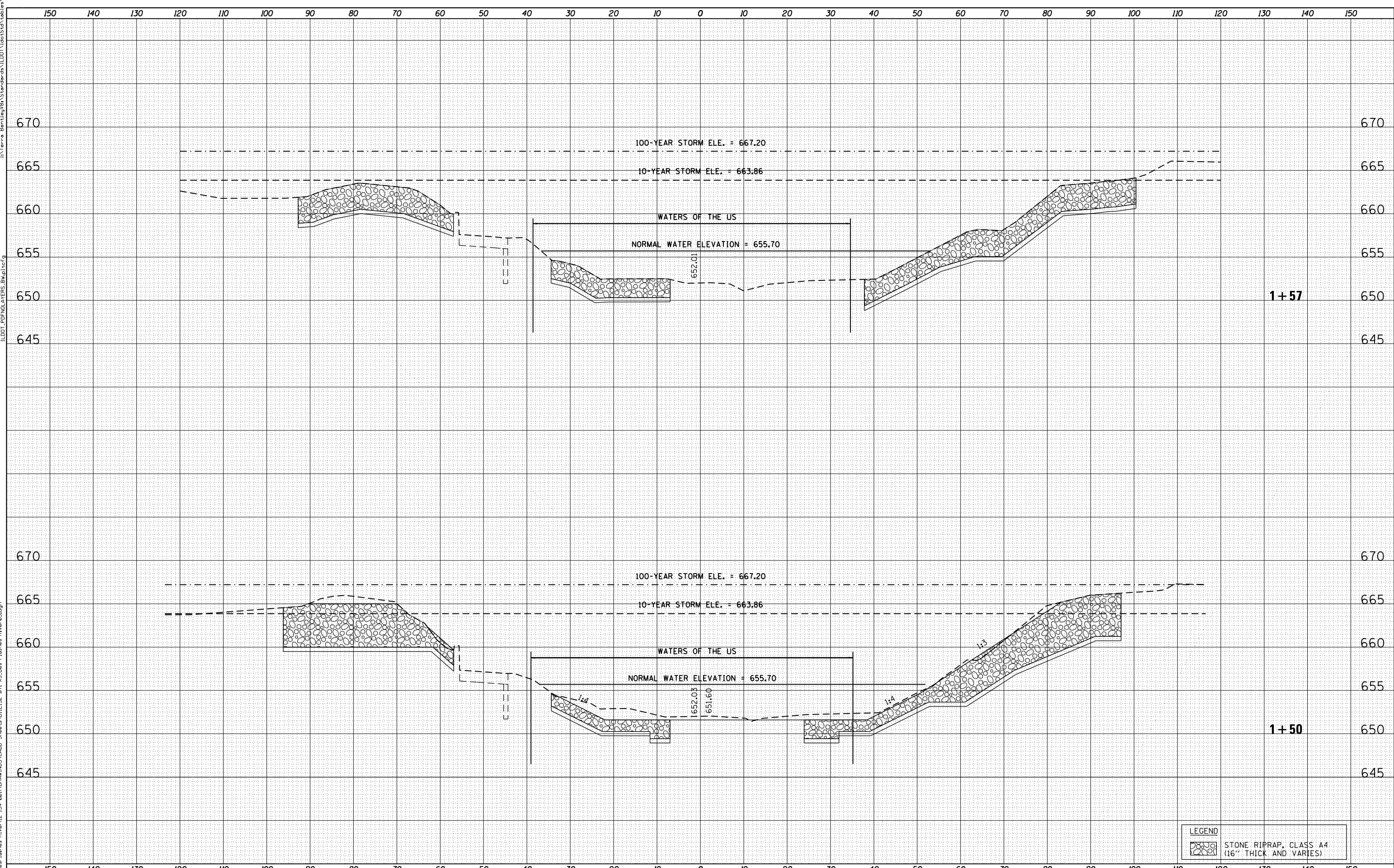
**IL 132 (GRAND AVE.) OVER DES PLAINES RIVER
DES PLAINES RIVER CROSS SECTIONS**

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

| | | | | |
|---------------------------|-----------|--------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 541 | X-6-B-1-1 | LAKE | 93 | 88 |
| CONTRACT NO. 60N22 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

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

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



| LEGEND | |
|--------|---|
| | STONE RIPRAP, CLASS A4 (16" THICK AND VARIES) |



| | | |
|---------------------------------|-----------------|-----------|
| USER NAME = JasonM | DESIGNED - BCB | REVISED - |
| | DRAWN - BCB | REVISED - |
| PLOT SCALE = 20.000' / in. | CHECKED - DPA | REVISED - |
| PLOT DATE = 9/3/2013 3:57:00 PM | DATE - 09/03/13 | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

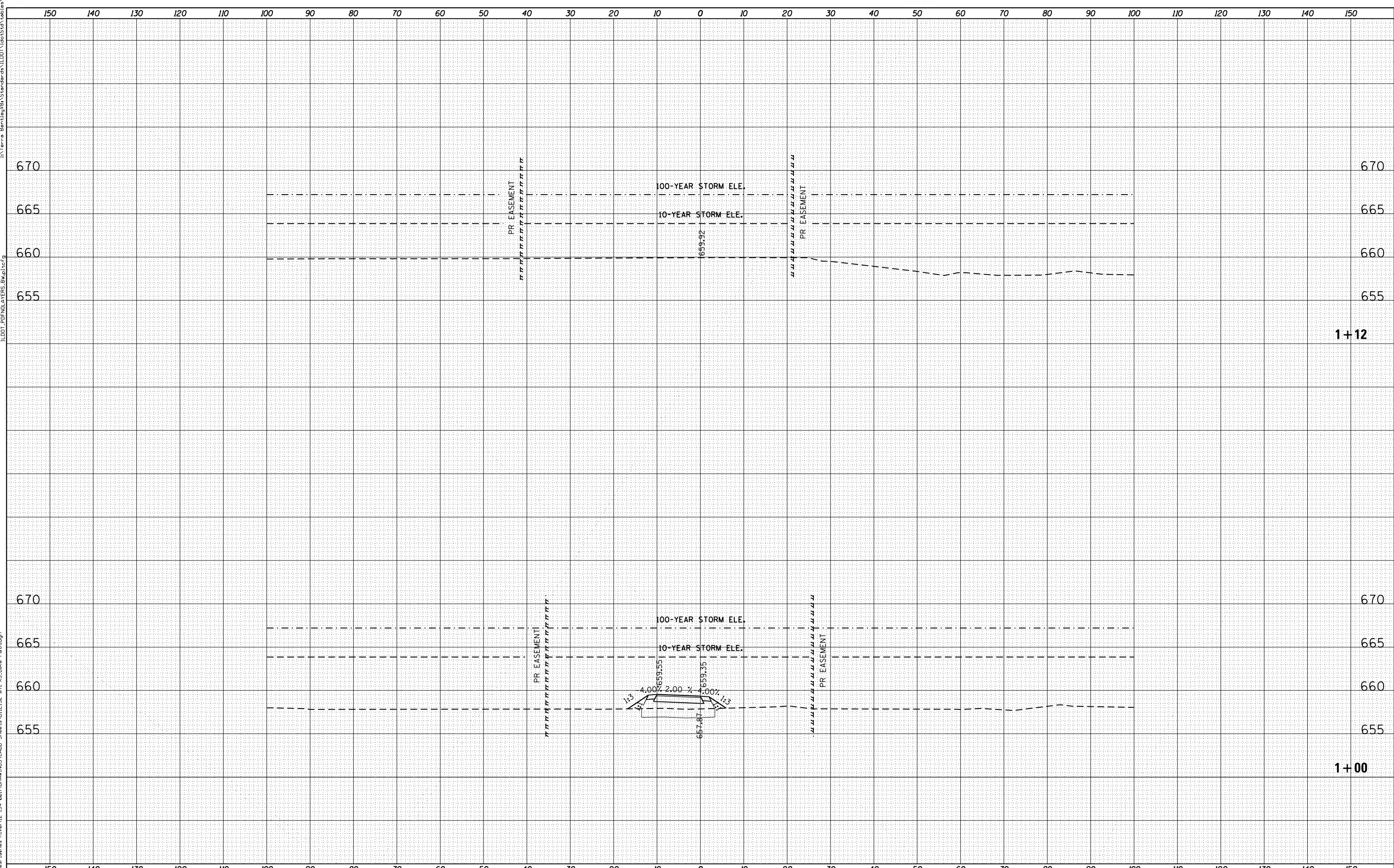
**IL 132 (GRAND AVE.) OVER DES PLAINES RIVER
DES PLAINES RIVER CROSS SECTIONS**

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

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-----------|--------|--------------|-----------|
| 541 | X-6-B-1-1 | LAKE | 93 | 89 |
| CONTRACT NO. 60N22 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

| | |
|--------------|---------------|
| DATE | |
| BY | |
| FINAL SURVEY | SURVEYED |
| NOTE BOOK | PLOTTED |
| | TEMPLATE |
| | AREAS CHECKED |
| | AREAS CHECKED |

| | |
|-----------------|---------------|
| DATE | |
| BY | |
| ORIGINAL SURVEY | SURVEYED |
| NOTE BOOK | PLOTTED |
| | TEMPLATE |
| | AREAS CHECKED |
| | AREAS CHECKED |



| | | | | | |
|------------|-----------------------|----------|------------|---------|---|
| USER NAME | = JasonM | DESIGNED | - KC | REVISED | - |
| | | DRAWN | - KC | REVISED | - |
| PLOT SCALE | = 20.000' / in. | CHECKED | - DPA | REVISED | - |
| PLOT DATE | = 9/3/2013 3:51:55 PM | DATE | - 09/03/13 | REVISED | - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 132 (GRAND AVE.) OVER DES PLAINES RIVER
BIKE PATH CONNECTOR CROSS SECTIONS

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

| | | | | |
|---------------------------|-----------|--------|--------------|--------------------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 541 | X-6-B-1-1 | LAKE | 93 | 93 |
| | | | | CONTRACT NO. 60N22 |
| ILLINOIS FED. AID PROJECT | | | | |