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06-14-2024 LETTING ITEM 146

| F.A.S. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|--------------------|--------------|-----------|
| 1225 | 22-00283-00-BR | BUREAU | 17 | 1 |
| WHA# 1218M23 | | CONTRACT NO. 87817 | | |
| ILLINOIS FED. AID PROJECT | | | | |

- INDEX OF SHEETS:**
- 1 COVER SHEET
 - 2 GENERAL NOTES & HIGHWAY STANDARDS
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 - 6 EROSION CONTROL PLAN
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 - 10-13 BORING LOGS
 - 14-17 CROSS SECTIONS

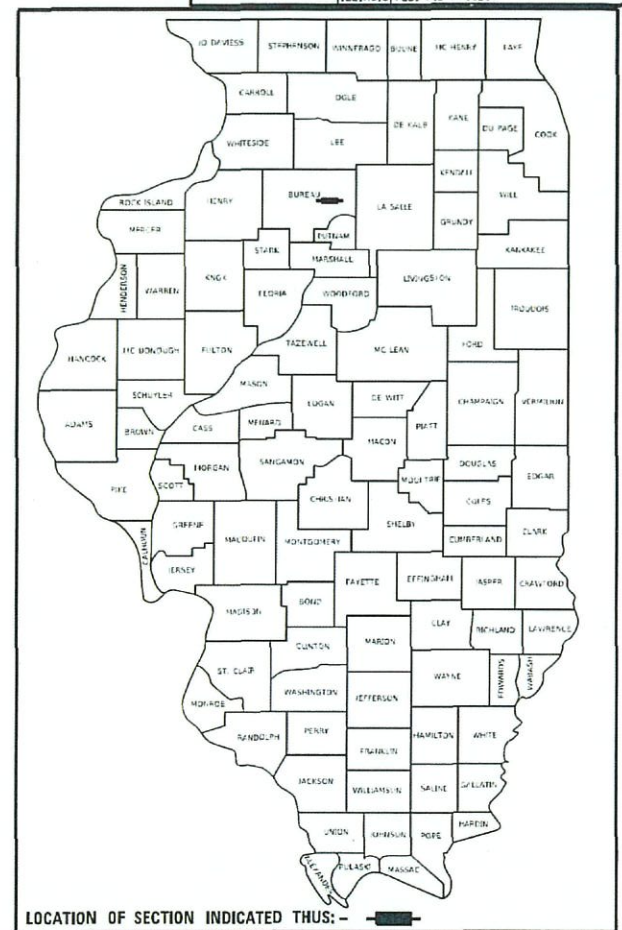
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

PLANS FOR PROPOSED FEDERAL AID PROJECT LOCAL BRIDGE FORMULA PROGRAM

F.A.S. 1225 (C.H. 12) OVER EAST BUREAU CREEK
 SECTION 22-00283-00-BR
 PROJECT NUMBER ZBL2(106)
 STRUCTURE REPLACEMENT
 BUREAU COUNTY

FOR HIGHWAY STANDARDS
 SEE SHEET NO. 2

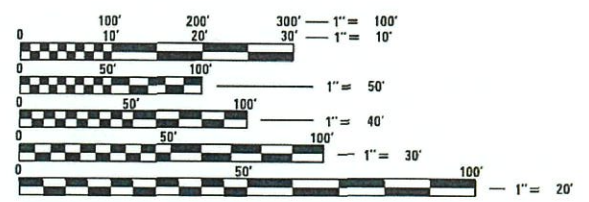
UTILITIES:
 SEE SHEET NO. 2



PRINTED BY THE AUTHORITY
 OF THE STATE OF ILLINOIS

FUNCTIONAL CLASSIFICATION
 MAJOR COLLECTOR (RURAL)
 DESIGN SPEED 40 MPH
 2024 ADT - 200

DESIGN CRITERIA
 3R GUIDELINES



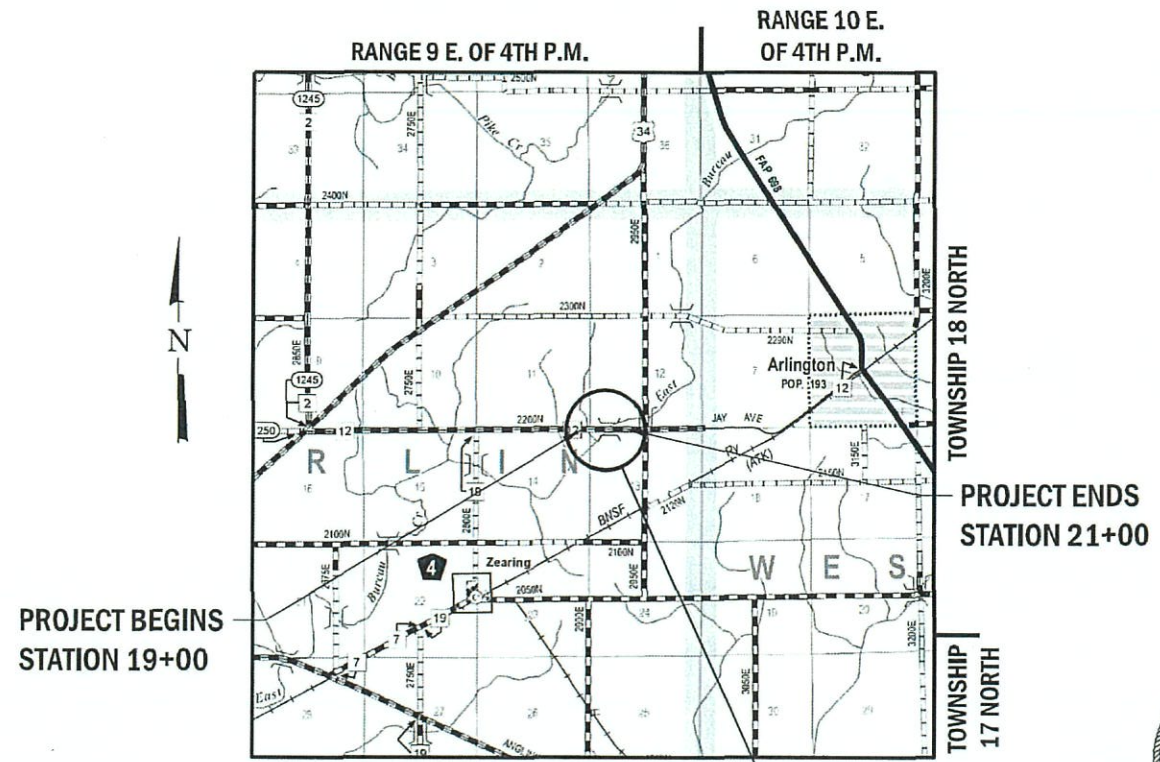
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E. A233600788
 JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
 1-800-892-0123
 OR 811

PROJECT ENGINEER – ADAM T. KUENY, P.E.
 PROJECT MANAGER – MICHAEL R. LESLIE, S.E., P.E.
 CONTRACT NO. 87817



C-93-004-24



PROJECT BEGINS
 STATION 19+00

PROJECT ENDS
 STATION 21+00

PROPOSED STRUCTURE: S.N. 006-3019
 A TRIPLE BARREL (12'-0" X 7'-9") REINFORCED BOX CULVERT AT
 STA. 20+00.00. NO SKEW

GROSS LENGTH = 200 FT. = 0.04 MILE
 NET LENGTH = 200 FT. = 0.04 MILE

| BUREAU COUNTY HIGHWAY DEPARTMENT | |
|--|--|
| APPROVED | 04/03 2024 <i>John C. [Signature]</i> BUREAU COUNTY ENGINEER |
| PASSED | APRIL 12 2024 <i>[Signature]</i> DISTRICT 3 LOCAL ROADS & STREETS ENGINEER |
| RELEASING FOR BID BASED ON LIMITED REVIEW | APRIL 12 2024 <i>Tisha Thompson</i> REGION 2 ENGINEER |



DATE: 4/3/2024
 EXPIRES 11/30/25



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GENERAL NOTES

ALL WORK COMPLETED UNDER THIS CONTRACT SHALL CONFORM TO ALL REQUIREMENTS SPECIFIED WITHIN THE ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ADOPTED JANUARY 1, 2022.

IN THESE CONTRACT DOCUMENTS THE MENTION IS MADE OF THE "ENGINEER", WHICH SHALL BE DEFINED AS STATED IN ARTICLE 101.16 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

THE CONTRACTOR SHALL CAREFULLY PRESERVE ALL PROPERTY MARKS, SECTION OR SUBSECTION MONUMENTS ENCOUNTERED, UNTIL AN OWNER OR AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION. ANY PROPERTY MARKS, SECTION OR SUBSECTION MONUMENTS UNLESS REFERENCED, DAMAGED BY THE CONTRACTOR SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.

THE CONTRACTOR SHALL COOPERATE WITH THE COUNTY AND ADJACENT LANDOWNERS WITH REGARDS TO ACCESS TO PRIVATE PROPERTY, AS WELL AS THE U.S. POSTAL SERVICE FOR MAIL DELIVERY.

THE LOCATION AND ELEVATION OF UNDERGROUND UTILITIES AS SHOWN ON THE PLANS ARE NOT TO BE TAKEN AS EXACT. THE CONTRACTOR SHALL VERIFY AND LOCATE ALL EXISTING UTILITIES ON OR ADJACENT TO THE SITE. PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES, CONTACT J.U.L.I.E. AT 1-800-892-0123 AND THE CITY FOR EXACT FIELD LOCATION OF UTILITIES. THE CONTRACTOR SHALL USE SPECIAL CARE WHEN CONDUCTING CONSTRUCTION OPERATIONS NEAR THEM TO PREVENT DAMAGE. DAMAGE, AND THE COST TO REPAIR SAID DAMAGE, SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

CONTRACTOR SHALL CLEAN UP ALL EXCESS MATERIALS AND DEBRIS CAUSED AS A RESULT OF WORK UNDER THIS CONTRACT AT THE COMPLETION OF THE PROJECT AT NO ADDITIONAL COST.

CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL DAMAGE RESULTING FROM THE PERFORMANCE OF THE WORK UNDER THIS CONTRACT.

COPIES OF ALL DELIVERY TICKETS FOR MATERIALS USED IN THE PROJECT SHALL BE SUBMITTED TO THE ENGINEER OR COUNTY PRIOR TO PAYMENT FOR THE WORK. EACH MATERIAL TICKET SHALL BE PROVIDED TO THE RESIDENT ENGINEER UPON DELIVERY.

FINAL INSPECTION OF THE WORK PERFORMED UNDER THIS CONTRACT WILL BE DONE BY THE ENGINEER AND COUNTY PRIOR TO FINAL ACCEPTANCE. DEFECTS SHALL BE CORRECTED BY THE CONTRACTOR WITHOUT COST TO THE COUNTY PRIOR TO ISSUANCE OF THE FINAL PAYMENT.

HIGHWAY STANDARDS

| | |
|-------------|--|
| 000001-08 | 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 |
| 515001-04 | NAME PLATE FOR BRIDGES |
| 701001-02 | OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5 M) AWAY |
| 701006-05 | OFF-ROAD OPERATIONS, 2L, 2W, 15' (4.5 M) TO 24" (600 MM) FROM PAVEMENT EDGE |
| 701201-05 | LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS ≥ 45MPH |
| 701301-04 | LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS |
| 701311-03 | LANE CLOSURE, 2L, 2W MOVING OPERATIONS - DAY ONLY |
| 701901-08 | TRAFFIC CONTROL DEVICES |
| 720001-01 | SIGN PANEL MOUNTING DETAILS |
| 720006-04 | SIGN PANEL ERECTION DETAILS |
| 720011-01 | METAL POSTS FOR SIGNS, MARKERS & DELINEATORS |
| 725001-01 | OBJECT AND TERMINAL MARKERS |
| 729001-01 | APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS & MARKERS) |
| B.L.R. 21-9 | TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS |
| B.L.R. 22-7 | TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS (TWO-LANE TWO WAY RURAL TRAFFIC) (ROAD CLOSED TO THRU TRAFFIC) |

GENERAL NOTES CONT.:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING UTILITY PROPERTY DURING CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.39 OF THE STANDARD SPECIFICATIONS. A MINIMUM OF 48 HOURS ADVANCE NOTICE IS REQUIRED FOR NON-EMERGENCY WORK. THE JULIE NUMBER IS 800-892-0123. NO UTILITIES WERE LOCATED WITHIN THE PROJECT LIMITS OR IMMEDIATELY ADJACENT TO THE PROJECT CONSTRUCTION LIMITS THAT ARE MEMBERS OF JULIE:

EXISTING MAIL BOXES, MONUMENTS, AND ANY MISC. SIGNS THAT ARE WITHIN THE CONSTRUCTION LIMITS SHALL BE REMOVED AND RESET BY THE CONTRACTOR. COST OF THE REMOVING AND RESETTING TO BE INCLUDED IN THE CONTRACT UNIT PRICE BID PER UNIT FOR EARTH EXCAVATION (SPECIAL).

THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION IN ORDER TO ARRANGE FOR APPROPRIATE CONSTRUCTION INSPECTION. WORK PERFORMED OR MATERIALS AND EQUIPMENT INSTALLED WITHOUT INSPECTION MAY BE CONSIDERED UNACCEPTABLE AT THE DISCRETION OF THE ENGINEER AND MY HAVE TO BE REPLACED AT NO COST TO THE ENGINEER OR OWNER.

EXISTING STRUCTURES (INCLUDING FOUNDATIONS, WALLS, CISTERNS, TANKS, WELLS OR OTHER UNDERGROUND STRUCTURES) WITHIN THE RIGHT-OF-WAY SHALL BE REMOVED IN ACCORDANCE WITH ARTICLE 501.04 OF THE STANDARD SPECIFICATIONS, WITHOUT ANY ADDITIONAL COMPENSATION, UNLESS OTHERWISE NOTED IN THE PLANS OR SPECIAL PROVISIONS.

ALL BORROW / WASTE / USE SITES MUST BE APPROVED BY THE DEPARTMENT / OWNER PRIOR TO REMOVING ANY MATERIAL FROM THE PROJECT OR INITIATING ANY EARTH MOVING ACTIVITIES, INCLUDING TEMPORARY STOCKPILING OUTSIDE THE LIMITS OF CONSTRUCTION.

DURING CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL INSURE POSITIVE SITE DRAINAGE AT THE CONCLUSION OF EACH DAY. SITE DRAINAGE MAY BE ACHIEVED BY DITCHING, PUMPING OR ANY OTHER METHOD ACCEPTABLE TO THE ENGINEER. THE CONTRACTOR'S FAILURE TO PROVIDE THE ABOVE WILL PRECLUDE ANY POSSIBLE ADDED COMPENSATION REQUIRED DUE TO DELAYS OR UNSTABLE MATERIALS CREATED AS A RESULT THEREOF.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL EROSION CONTROL MEASURES THROUGHOUT THE COURSE OF THE PROJECT. THE COST FOR ALL MAINTAINED AND ADJUSTMENTS TO THE EROSION CONTROL MEASURES SHALL BE INCLUDED IN THE CONTRACT UNIT BID PRICE FOR EACH EROSION CONTROL DEVICE.

HOT MIX ASPHALT MIX CHART

| | | |
|--|----------------|----------------|
| LOCATIONS: | ENTIRE PROJECT | ENTIRE PROJECT |
| MIXTURE USE(S): | HMA SURFACE | HMA BINDER |
| BINDER GRADE (PG): | PG 64-22 | PG 64-22 |
| DESIGN AIR VOIDS: | 4.0% @ N50 | 4.0% @ N50 |
| MIXTURE COMPOSITION: (MIXTURE GRADATION) | IL 9.5 | IL 19.0 |
| FRICTION AGGREGATE: | MIXTURE C | |
| MIXTURE WEIGHT: | 112.0 LB/SY/IN | 112.0 LB/SY/IN |
| QUALITY MANAGEMENT PROGRAM: | QC / QA | QC / QA |
| SUBLOT SIZE: | N / A | N / A |
| DENSITY TEST METHOD: | CORES/NUCLEAR | CORES/NUCLEAR |
| MATERIAL TRANSFER DEVICE (REQUIRED): | NO | NO |

EARTHWORK SCHEDULE

| LOCATION | EARTH EXCAVATION (SPECIAL) X2020410 (Cu Yd) | EARTH EXCAVATION ADJUSTED FOR SHRINKAGE 25% (Cu Yd) | EMBANKMENT (Cu Yd) | EARTH BALANCE WASTE (+) OR FURNISHED EXCAVATION (-) (Cu Yd) |
|---------------|--|--|-----------------------|--|
| C.H. 12 | 203 | 152 | 125 | 27 |
| TOTALS | 203 | 152 | 125 | 27 |

| REVISION | DATE | BY | REMARKS |
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| DESIGNED | ATK |
| DRAWN | DAN |
| REVIEWED | ATK |
| APPROVED | MRL |

BUREAU COUNTY HIGHWAY DEPARTMENT
F.A.S. 1225 (C.H. 12) OVER EAST BUREAU CREEK
STATION 20+00



GENERAL NOTES

SHEET NO. 1 OF 1 SHEETS

| | | | | |
|---------------------------|----------------|--------------------|--------------|-----------|
| F.A.S. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 1225 | 22-00283-00-BR | BUREAU | 17 | 2 |
| WHA# 1218M23 | | CONTRACT NO. 87817 | | |
| ILLINOIS FED. AID PROJECT | | | | |

SUMMARY OF QUANTITIES

| PAY CODE | PAY ITEM | UNIT | QUANTITY |
|----------|--|-------|----------|
| | NAME | | |
| 25100630 | EROSION CONTROL BLANKET | SQ YD | 1,341 |
| 28000250 | TEMPORARY EROSION CONTROL SEEDING | POUND | 30 |
| 28000400 | PERIMETER EROSION BARRIER | FOOT | 731 |
| 28001100 | TEMPORARY EROSION CONTROL BLANKET | SQ YD | 1,341 |
| 30300112 | AGGREGATE SUBGRADE IMPROVEMENT 12" | SQ YD | 532 |
| 40600275 | BITUMINOUS MATERIALS (PRIME COAT) | POUND | 1,196 |
| 40600290 | BITUMINOUS MATERIALS (TACK COAT) | POUND | 110 |
| 40603080 | HOT-MIX ASPHALT BINDER COURSE, IL-19 0, N50 | TON | 69 |
| 40604050 | HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N50 | TON | 41 |
| 44000100 | PAVEMENT REMOVAL | SQ YD | 504 |
| 50100100 | REMOVAL OF EXISTING STRUCTURES | EACH | 1 |
| 50105220 | PIPE CULVERT REMOVAL | FOOT | 20 |
| 50800205 | REINFORCEMENT BARS, EPOXY COATED | POUND | 25,920 |
| 51500100 | NAME PLATES | EACH | 1 |
| 54003000 | CONCRETE BOX CULVERTS | CU YD | 205.9 |

| PAY CODE | PAY ITEM | UNIT | QUANTITY |
|----------|---|-------|----------|
| | NAME | | |
| 59100100 | GEOCOMPOSITE WALL DRAIN | SQ YD | 173 |
| 63200310 | GUARDRAIL REMOVAL | FOOT | 118 |
| 67100100 | MOBILIZATION | L SUM | 1 |
| Z0013798 | CONSTRUCTION LAYOUT | L SUM | 1 |
| X2020410 | EARTH EXCAVATION (SPECIAL) | CU YD | 203 |
| X2070302 | POROUS GRANULAR EMBANKMENT (SPECIAL) | TON | 376 |
| X2501000 | SEEDING, CLASS 2 (SPECIAL) | ACRE | 0.30 |
| X2810210 | STONE RIPRAP, CLASS A5 (SPECIAL) | TON | 119 |
| X5810103 | MEMBRANE WATERPROOFING SYSTEM FOR BURIED STRUCTURES | SQ YD | 173 |
| X7010216 | TRAFFIC CONTROL AND PROTECTION, (SPECIAL) | L SUM | 1 |

| REVISION | DATE | BY | REMARKS |
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| DESIGNED | ATK |
| DRAWN | CJI |
| REVIEWED | GBC |
| APPROVED | MRL |

BUREAU COUNTY HIGHWAY DEPARTMENT
F.A.S. 1225 (C.H. 12) OVER EAST BUREAU CREEK
STATION 20+00



SUMMARY OF QUANTITIES

SHEET NO. 1 OF 1 SHEETS

| | | | | |
|-----------------------------|---------------------------|------------------|--------------------|----------------|
| F.A.S. RTE. 1225 | SECTION 22-00283-00-BR | COUNTY BUREAU | TOTAL SHEETS 17 | SHEET NO. 3 |
| WHA* 1218M23 | | | CONTRACT NO. 87817 | |
| [ILLINOIS] FED. AID PROJECT | | | | |

SCHEDULE OF QUANTITIES

| PAVEMENT REMOVAL | | |
|----------------------|------------|---------------------|
| STATION | SQ YD | REMARKS |
| C.H. 12 | | |
| 19+00 - 21+00 | 504 | EX. ROADWAY REMOVAL |
| PROJECT TOTAL | 504 | |
| 44000100 | | |

| PIPE CULVERT REMOVAL | | |
|-------------------------------------|-----------|----------------|
| STATION | FOOT | REMARKS |
| C.H. 12 | | |
| 19+67.2 LT 20.2' - 19+86.5 LT 16.7' | 20 | EX 18" CULVERT |
| PROJECT TOTAL | 20 | |
| 50105220 | | |

| GUARDRAIL REMOVAL | | |
|-------------------------------------|------------|------------------------------------|
| STATION | FOOT | REMARKS |
| C.H. 12 | | |
| 19+71.5 RT 14.3' - 20+28.7 RT 15.1' | 58 | INCLUDES RAIL ACROSS THE STRUCTURE |
| 19+70.5 LT 13.9' - 20+30.1 LT 13.4' | 60 | INCLUDES RAIL ACROSS THE STRUCTURE |
| PROJECT TOTAL | 118 | |
| 63200310 | | |

| EROSION CONTROL BLANKET | | |
|-------------------------|--------------|---------|
| STATION | SQ YD | REMARKS |
| C.H. 12 | | |
| LT 18+25 - 19+93 | 334 | |
| RT 18+25 - 19+85 | 344 | |
| LT 20+05 - 21+75 | 346 | |
| RT 19+97 - 21+75 | 317 | |
| PROJECT TOTAL | 1,341 | |
| 25100630 | | |

| TEMPORARY EROSION CONTROL SEEDING | | |
|-----------------------------------|-----------|----------------|
| STATION | POUND | REMARKS |
| C.H. 12 | | |
| LT 18+25 - 19+93 | 7 | |
| RT 18+25 - 19+85 | 8 | |
| LT 20+05 - 21+75 | 8 | |
| RT 19+97 - 21+75 | 7 | |
| PROJECT TOTAL | 30 | 100 LBS / ACRE |
| 28000250 | | |

| PERIMETER EROSION BARRIER | | |
|---------------------------|------------|---------|
| STATION | FOOT | REMARKS |
| C.H. 12 | | |
| LT 18+25 - 19+93 | 182 | |
| RT 18+25 - 19+85 | 173 | |
| LT 20+05 - 21+75 | 183 | |
| RT 19+97 - 21+75 | 193 | |
| PROJECT TOTAL | 731 | |
| 28000400 | | |

| TEMPORARY EROSION CONTROL BLANKET | | |
|-----------------------------------|--------------|---------|
| STATION | SQ YD | REMARKS |
| C.H. 12 | | |
| LT 18+25 - 19+93 | 334 | |
| RT 18+25 - 19+85 | 344 | |
| LT 20+05 - 21+75 | 346 | |
| RT 19+97 - 21+75 | 317 | |
| PROJECT TOTAL | 1,341 | |
| 28001100 | | |

| SEEDING, CLASS 2 (SPECIAL) | | |
|----------------------------|-------------|---------|
| STATION | ACRE | REMARKS |
| C.H. 12 | | |
| LT 18+25 - 19+93 | 0.07 | |
| RT 18+25 - 19+85 | 0.08 | |
| LT 20+05 - 21+75 | 0.08 | |
| RT 19+97 - 21+75 | 0.07 | |
| PROJECT TOTAL | 0.30 | |
| X2501000 | | |

| AGGREGATE SUBGRADE IMPROVEMENT 12" | | |
|------------------------------------|------------|---------|
| STATION | SQ YD | REMARKS |
| C.H. 12 | | |
| 19+00 - 21+00 | 532 | |
| PROJECT TOTAL | 532 | |
| 30300112 | | |

| BITUMINOUS MATERIALS (PRIME COAT) | | |
|-----------------------------------|--------------|------------------|
| STATION | POUND | REMARKS |
| C.H. 12 | | |
| 19+00 - 21+00 | 1,196 | |
| PROJECT TOTAL | 1,196 | 0.25 LBS / SQ FT |
| 40600275 | | |

| BITUMINOUS MATERIALS (TACK COAT) | | |
|----------------------------------|------------|-------------------|
| STATION | POUND | REMARKS |
| C.H. 12 | | |
| 19+00 - 21+00 | 110 | |
| PROJECT TOTAL | 110 | 0.025 LBS / SQ FT |
| 40600290 | | |

| HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50 | | |
|---|-----------|------------------------|
| STATION | TON | REMARKS |
| C.H. 12 | | |
| 19+00 - 21+00 | 69 | DEPTH = 2.5" |
| PROJECT TOTAL | 69 | 112 LBS / SQ YD / INCH |
| 40603080 | | |

| HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N50 | | |
|--|-----------|------------------------|
| STATION | TON | REMARKS |
| C.H. 12 | | |
| 19+00 - 21+00 | 41 | DEPTH = 1.5" |
| PROJECT TOTAL | 41 | 112 LBS / SQ YD / INCH |
| 40604050 | | |

| REVISION | DATE | BY | REMARKS |
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| DESIGNED | ATK |
| DRAWN | DAN |
| REVIEWED | ATK |
| APPROVED | MRL |

BUREAU COUNTY HIGHWAY DEPARTMENT
 F.A.S. 1225 (C.H. 12) OVER EAST BUREAU CREEK
 STATION 20+00

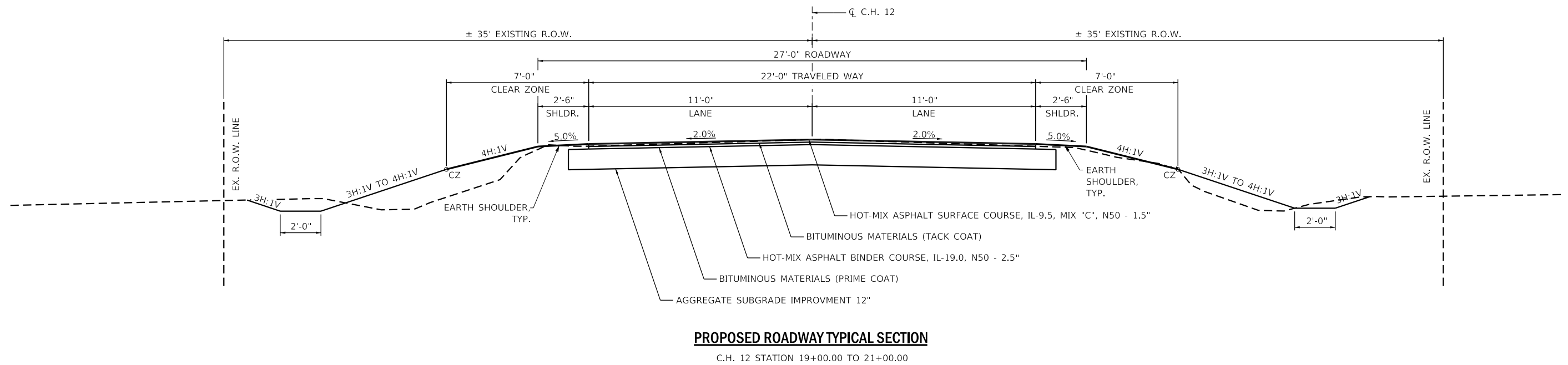
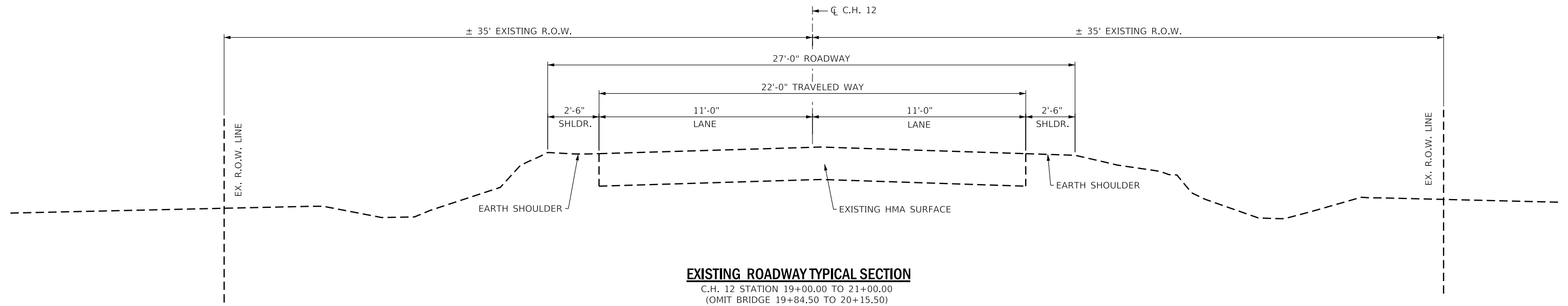


WILLETT HOFMANN & ASSOCIATES, INC.
 ENGINEERING ARCHITECTURE LAND SURVEYING
 1515 FIFTH AVENUE, SUITE 102, MOLINE, IL 61265
 T: 309-517-1119 DESIGN FIRM: # 184-000918

SCHEDULE OF QUANTITIES

SHEET NO. 1 OF 1 SHEETS

| F.A.S. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|--------------------|--------------|-----------|
| 1225 | 22-00283-00-BR | BUREAU | 17 | 4 |
| WHA# 1218M23 | | CONTRACT NO. 87817 | | |
| ILLINOIS FED. AID PROJECT | | | | |



| REVISION | DATE | BY | REMARKS |
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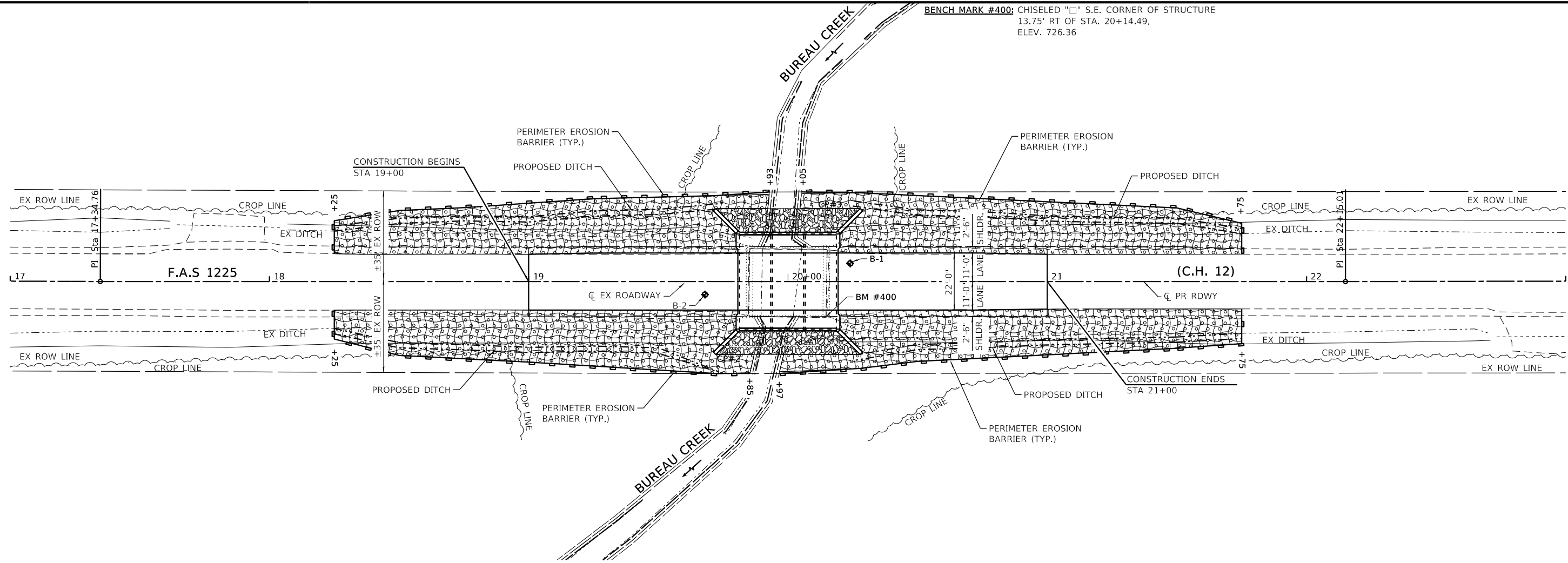
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| DESIGNED | ATK |
| DRAWN | DAL |
| REVIEWED | ATK |
| APPROVED | MRL |

BUREAU COUNTY HIGHWAY DEPARTMENT
F.A.S. 1225 (C.H. 12) OVER EAST BUREAU CREEK
STATION 20+00



TYPICAL SECTIONS
SHEET NO. 1 OF 1

| | | | | |
|---------------------------|----------------|--------------------|--------------|-----------|
| F.A.S. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 1225 | 22-00283-00-BR | BUREAU | 17 | 5 |
| WHA# 1218M23 | | CONTRACT NO. 87817 | | |
| ILLINOIS FED. AID PROJECT | | | | |



EROSION CONTROL NOTES

THE SOIL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE INSPECTED WEEKLY AND AFTER 1/2" OF RAIN OR MORE BY THE INDIVIDUAL ON SITE IN CHARGE OF SOIL EROSION AND SEDIMENT CONTROL DURING THE CONSTRUCTION OF THE PROJECT.

PERIMETER EROSION BARRIER SHALL COMPLY WITH SECTION 280 OF THE STANDARD SPECIFICATIONS AND SHALL BE PLACED AS SHOWN ON THIS EROSION CONTROL PLAN AND IN ACCORDANCE WITH STATIONS SHOWN ON THE SCHEDULE OF QUANTITIES SHEET OR AS DIRECTED BY THE ENGINEER.



EROSION CONTROL BLANKET SHALL BE PLACED ON ALL DISTURBED AREAS AS SHOWN ON THIS EROSION CONTROL PLAN SHEET AND IN ACCORDANCE WITH SECTION 251 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

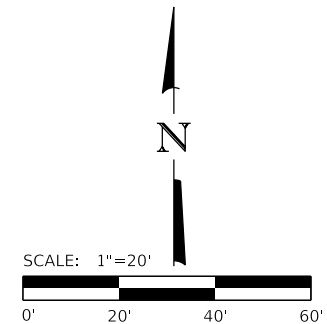
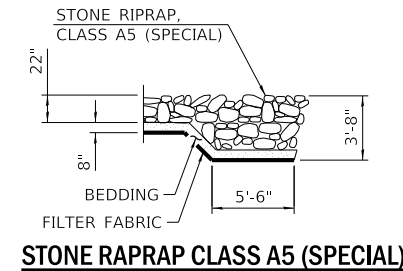
THE USE OF GREEN DYE IN THE EROSION CONTROL BLANKET IS NOT ACCEPTABLE.

STOCKPILES OF SOIL AND OTHER BUILDING MATERIALS TO REMAIN IN PLACE MORE THAN 3 DAYS SHALL BE FURNISHED WITH EROSION AND SEDIMENT CONTROL MEASURES (I.E. PERIMETER SILT FENCE). STOCKPILES TO REMAIN IN PLACE FOR 14 DAYS OR MORE SHALL RECEIVE TEMPORARY SEEDING.

ALL ADJACENT STREETS MUST BE KEPT CLEAR OF DEBRIS, INSPECTED DAILY, AND CLEANED WHEN NECESSARY.

LEGEND

-  PERIMETER EROSION BARRIER
-  SEEDING, CLASS 2 (SPECIAL)
-  EROSION CONTROL BLANKET
-  STONE RIPRAP, CLASS A5 (SPECIAL)



| REVISION | DATE | BY | REMARKS |
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| DESIGNED | ATK |
| DRAWN | DAL |
| REVIEWED | ATK |
| APPROVED | MRL |

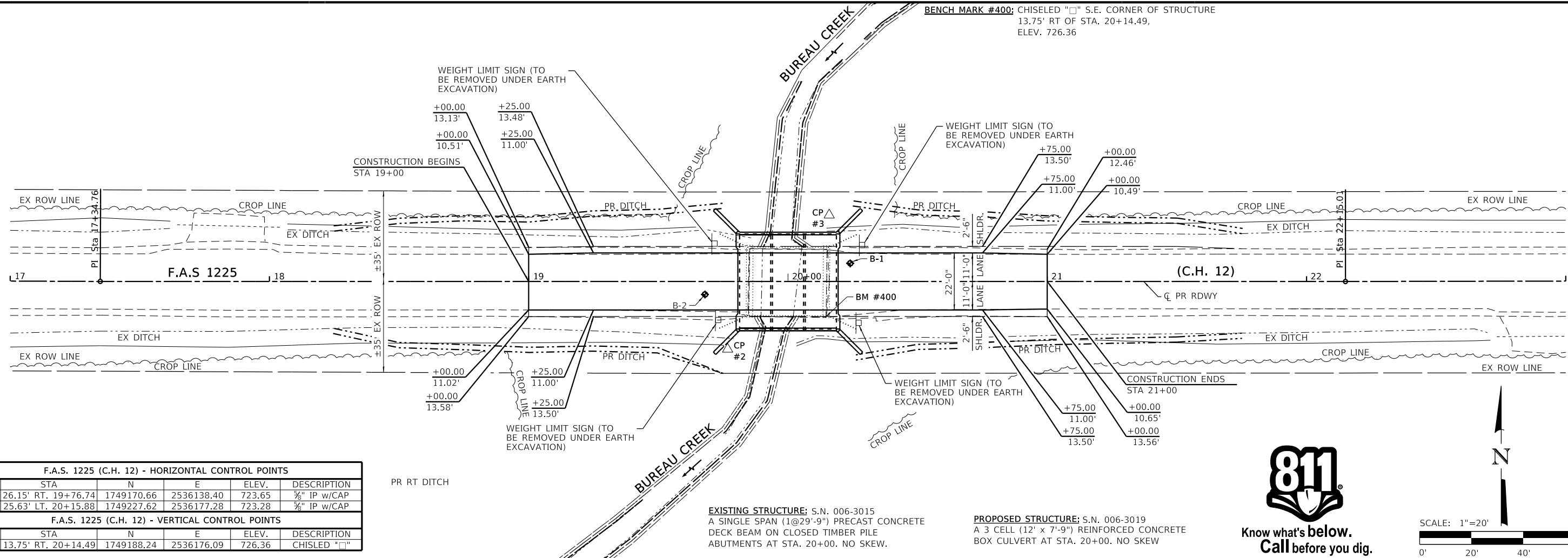
BUREAU COUNTY HIGHWAY DEPARTMENT
F.A.S. 1225 (C.H. 12) OVER EAST BUREAU CREEK
STATION 20+00



WILLET HOFMANN & ASSOCIATES INC.
 ENGINEERING ARCHITECTURE LAND SURVEYING
 1515 FIFTH AVENUE, SUITE 102, MOULINE, IL 61265
 T: 309-517-1119 DESIGN FIRM: # 184-000918

EROSION CONTROL PLAN
 SHEET NO. 1 OF 1 SHEETS

| | | | | |
|---------------------------|----------------|--------------------|--------------|-----------|
| F.A.S. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 1225 | 22-00283-00-BR | BUREAU | 17 | 6 |
| WHA# 1218M23 | | CONTRACT NO. 87817 | | |
| ILLINOIS FED. AID PROJECT | | | | |

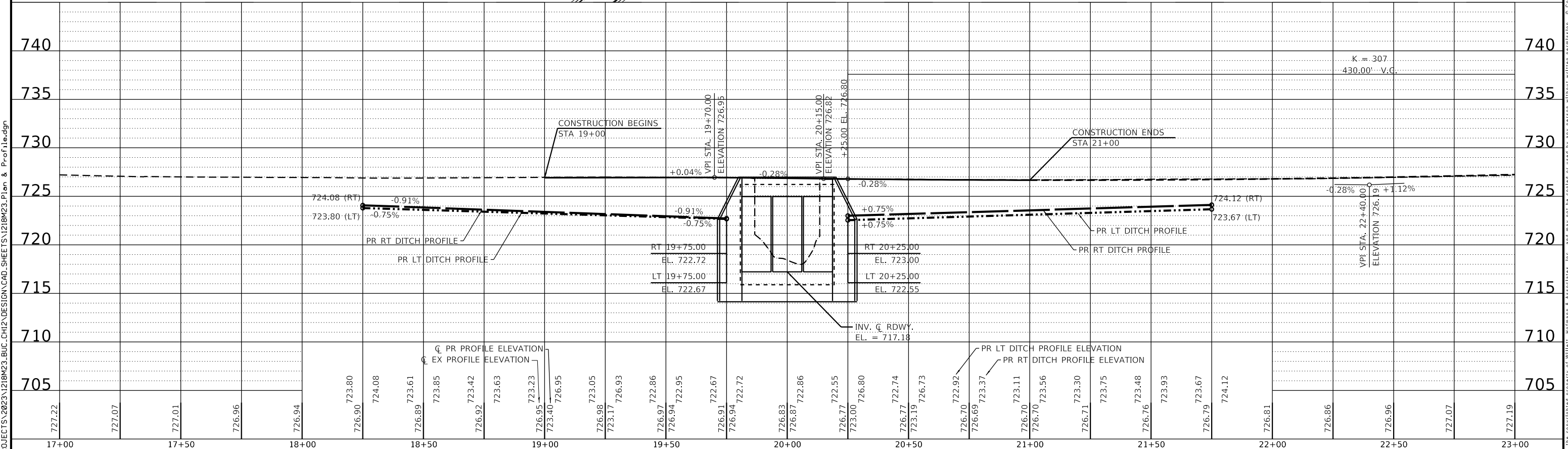
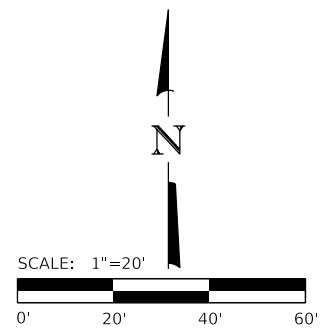


| F.A.S. 1225 (C.H. 12) - HORIZONTAL CONTROL POINTS | | | | | |
|---|---------------------|------------|------------|--------|---------------|
| PT # | STA | N | E | ELEV. | DESCRIPTION |
| 2 | 26.15' RT. 19+76.74 | 1749170.66 | 2536138.40 | 723.65 | 3/8" IP w/CAP |
| 3 | 25.63' LT. 20+15.88 | 1749227.62 | 2536177.28 | 723.28 | 3/8" IP w/CAP |

| F.A.S. 1225 (C.H. 12) - VERTICAL CONTROL POINTS | | | | | |
|---|---------------------|------------|------------|--------|--------------|
| BM # | STA | N | E | ELEV. | DESCRIPTION |
| 400 | 13.75' RT. 20+14.49 | 1749188.24 | 2536176.09 | 726.36 | CHISELED "□" |

EXISTING STRUCTURE: S.N. 006-3015
A SINGLE SPAN (1@29'-9") PRECAST CONCRETE DECK BEAM ON CLOSED TIMBER PILE ABUTMENTS AT STA. 20+00. NO SKEW.

PROPOSED STRUCTURE: S.N. 006-3019
A 3 CELL (12' x 7'-9") REINFORCED CONCRETE BOX CULVERT AT STA. 20+00. NO SKEW



| REVISION | DATE | BY | REMARKS |
|----------|------|----|---------|
| | | | |
| | | | |
| | | | |

| DESIGNED | ATK |
|----------|-----|
| DRAWN | DAL |
| REVIEWED | ATK |
| APPROVED | MRL |

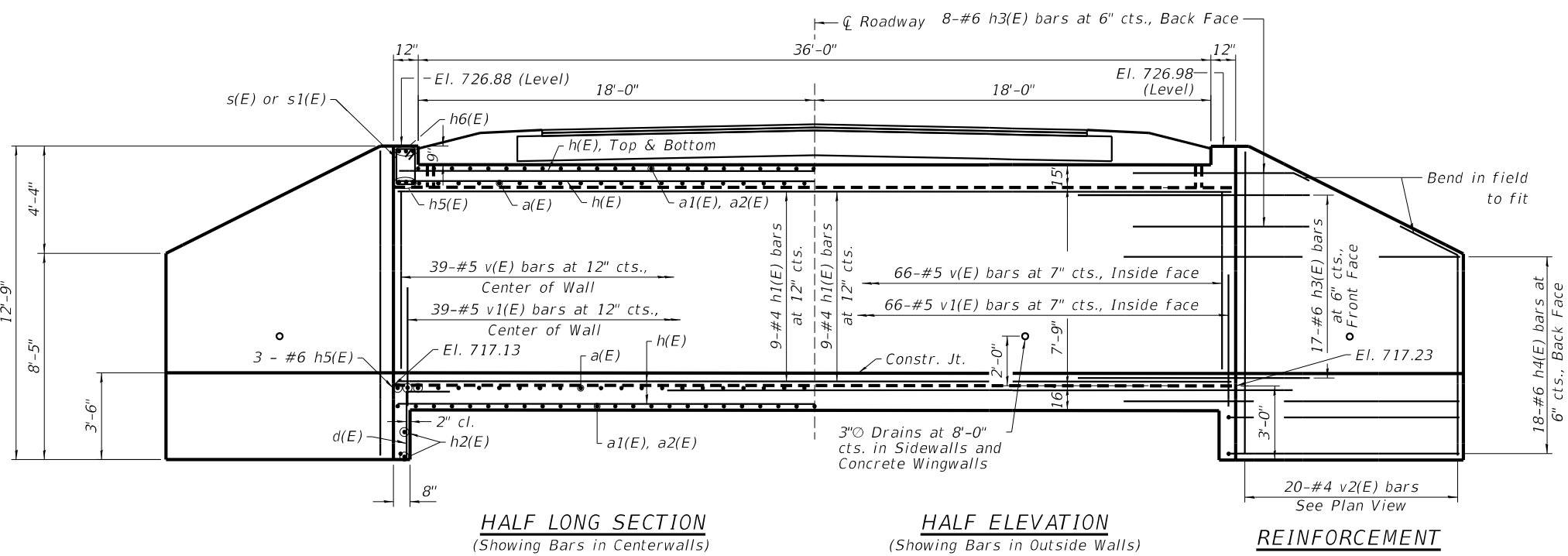
BUREAU COUNTY HIGHWAY DEPARTMENT
F.A.S. 1225 (C.H. 12) OVER EAST BUREAU CREEK
STATION 20+00



PLAN AND PROFILE

SCALE: 1" = 20'-0" SHEET NO. 1 OF 1 SHEETS STA. 17+00.00 TO STA. 23+00.00

| F.A.S. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|--------------------|--------------|-----------|
| 1225 | 22-00283-00-BR | BUREAU | 17 | 7 |
| WHA# 1218M23 | | CONTRACT NO. 87817 | | |
| ILLINOIS FED. AID PROJECT | | | | |



| MINIMUM BAR LAP | |
|-----------------|--------|
| Size | Lap |
| #4 | 2'-7" |
| #5 | 3'-2" |
| #6 | 3'-10" |

LOADING HL-93
Allow 50#/sq. ft. for future wearing surface.

DESIGN STRESSES
FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)

DESIGN SPECIFICATIONS
2020 AASHTO LRFD Bridge Design Specifications, 9th Edition

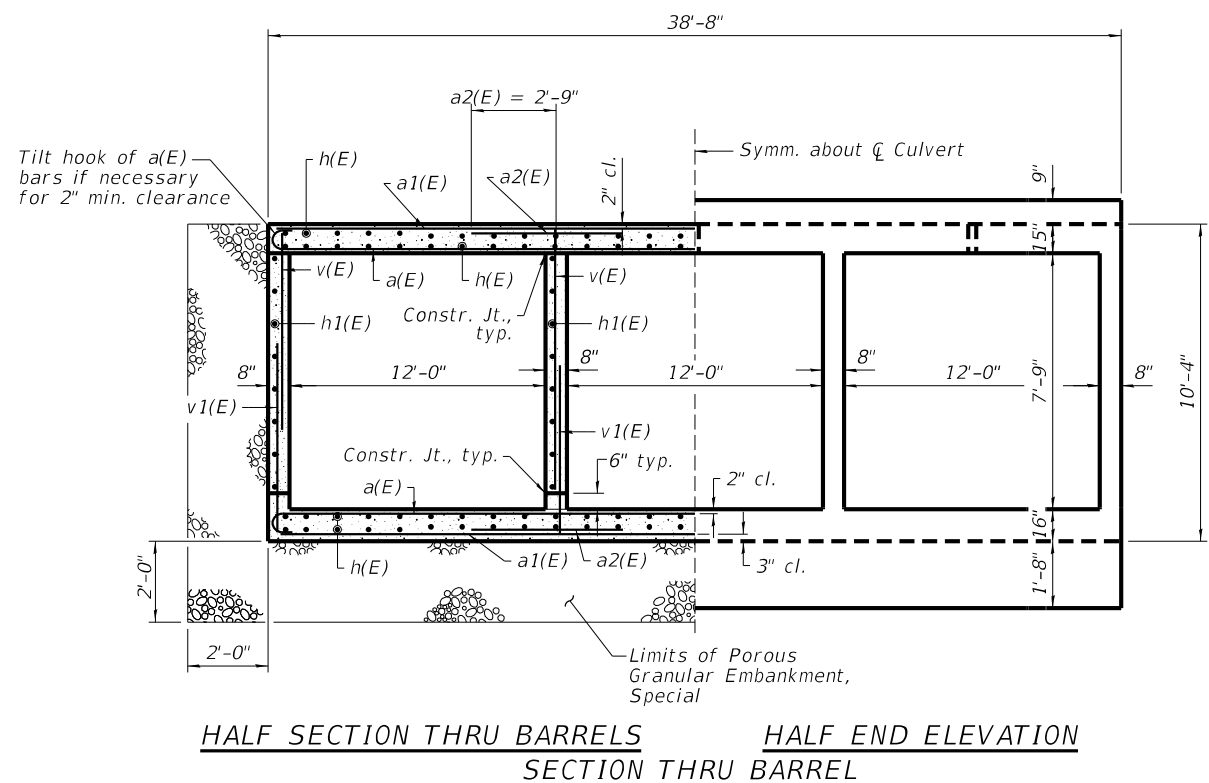
WATERWAY INFORMATION

Drainage Area = 6.46 Square Miles Low Grade Ex.: 726.67 @ Sta. 21+25 Pr.: 726.67 @ Sta. 21+25

| Flood | Freq. Yr. | Q C.F.S. | Opening ft. | | Nat. H.W.E. | Head - ft. | | Headwater El. | |
|-----------------------------|-----------|----------|-------------|-------|-------------|------------|-------|---------------|-------|
| | | | Exist. | Prop. | | Exist. | Prop. | Exist. | Prop. |
| Design | 20 | 1204 | 158 | 279 | 725.0 | 1.4 | 1.0 | 726.4 | 725.9 |
| Base | 100 | 1790 | 171 | 279 | 725.5 | 2.0 | 1.4 | 727.5 | 726.8 |
| Scour (Pr. Overtopping) | 200 | 2058 | 189 | 279 | 725.7 | 2.0 | 1.5 | 727.7 | 727.2 |
| Max. Calc (Ex. Overtopping) | 500 | 2430 | 214 | 279 | 725.9 | 2.2 | 1.6 | 728.1 | 727.5 |

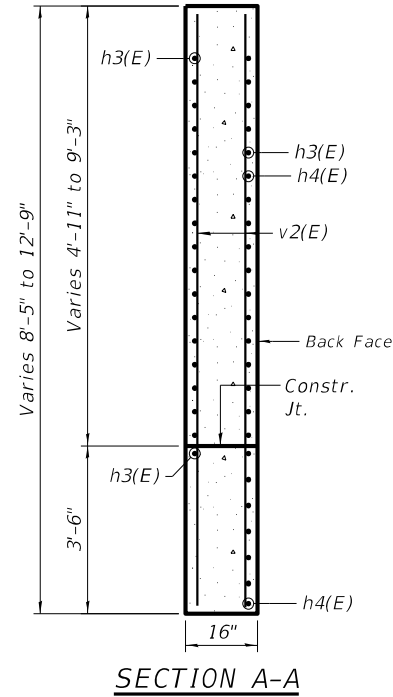
BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|---|---------|------|---------|-------|
| a(E) | 104 | #7 | 40'-0" | |
| a1(E) | 52 | #6 | 38'-4" | |
| a2(E) | 100 | #6 | 6'-3" | |
| d(E) | 80 | #4 | 5'-2" | |
| h(E) | 160 | #4 | 37'-8" | |
| h1(E) | 36 | #4 | 37'-8" | |
| h2(E) | 4 | #4 | 38'-4" | |
| h3(E) | 100 | #6 | 8'-10" | |
| h4(E) | 72 | #6 | 16'-10" | |
| h5(E) | 12 | #6 | 38'-4" | |
| h6(E) | 6 | #7 | 38'-4" | |
| s(E) | 40 | #4 | 5'-5" | |
| s1(E) | 40 | #4 | 5'-3" | |
| v(E) | 214 | #5 | 8'-2" | |
| v1(E) | 214 | #5 | 4'-11" | |
| v2(E) | 80 | #4 | 12'-4" | |
| Removal of Existing Structures | Each | | 1 | |
| Reinforcement Bars, Epoxy Coated | Pound | | 25,920 | |
| Name Plates | Each | | 1 | |
| Concrete Box Culverts | Cu. Yd. | | 205.9 | |
| Geocomposite Wall Drain | Sq. Yd. | | 173 | |
| * Porous Granular Embankment, Special | Ton | | 376 | |
| * Stone Riprap, Class A5, (Special) | Ton | | 119 | |
| * Membrane Waterproofing System for Buried Structures | Sq. Yd. | | 173 | |



DATE: 04/03/2024
EXPIRES 11/30/24

"I CERTIFY THAT TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THIS CULVERT DESIGN IS STRUCTURALLY ADEQUATE FOR THE DESIGN LOADING SHOWN ON THE PLANS, THE DESIGN IS AN ECONOMICAL ONE COMPLIES WITH REQUIREMENTS OF THE CURRENT 'AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES'."



NOTES:
* See Special Provisions.
Precast Box Culvert option not allowed.
All exposed edges shall be chamfered 3/4" unless otherwise noted.

| REVISION | DATE | BY | REMARKS |
|----------|------|----|---------|
| | | | |

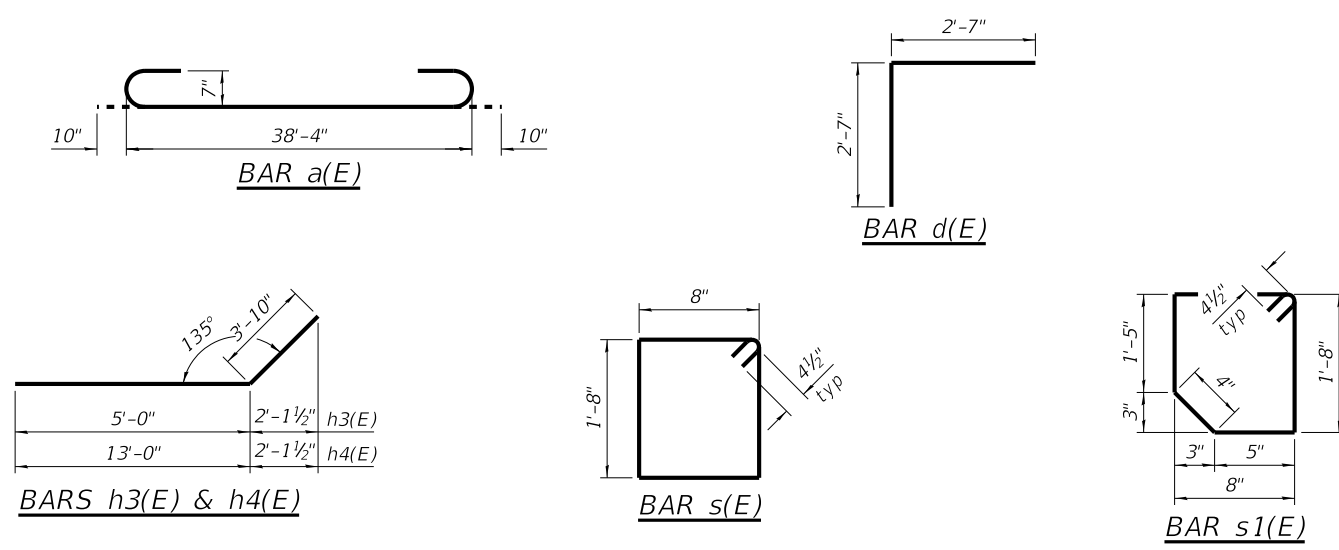
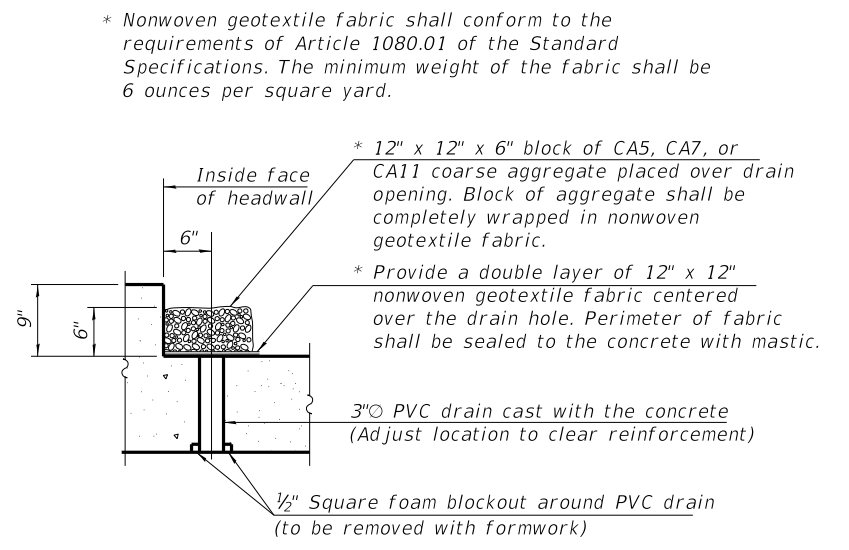
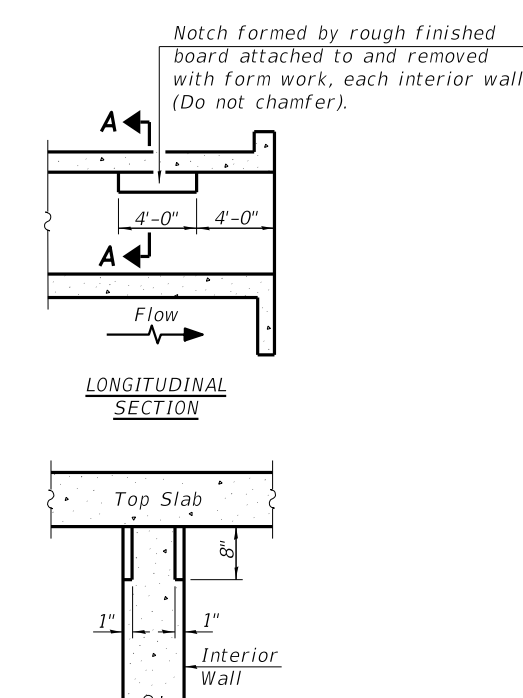
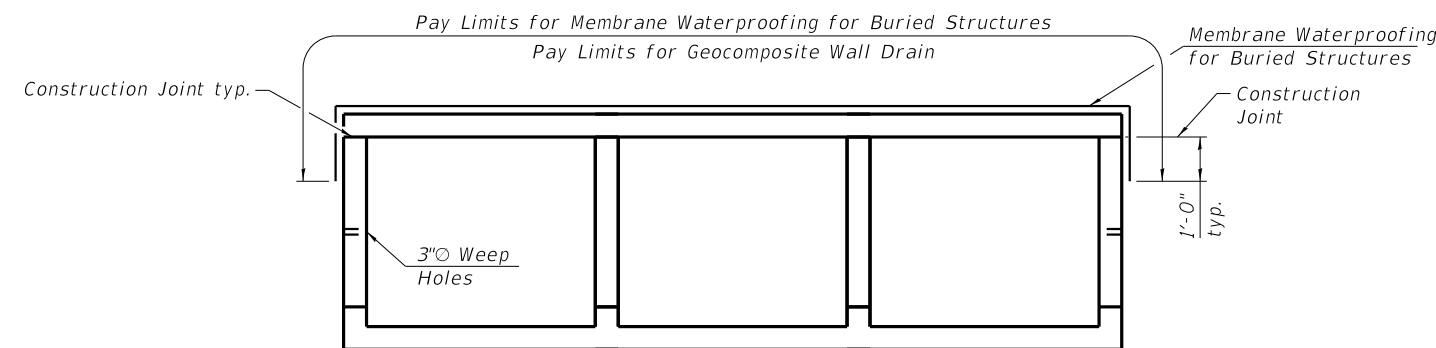
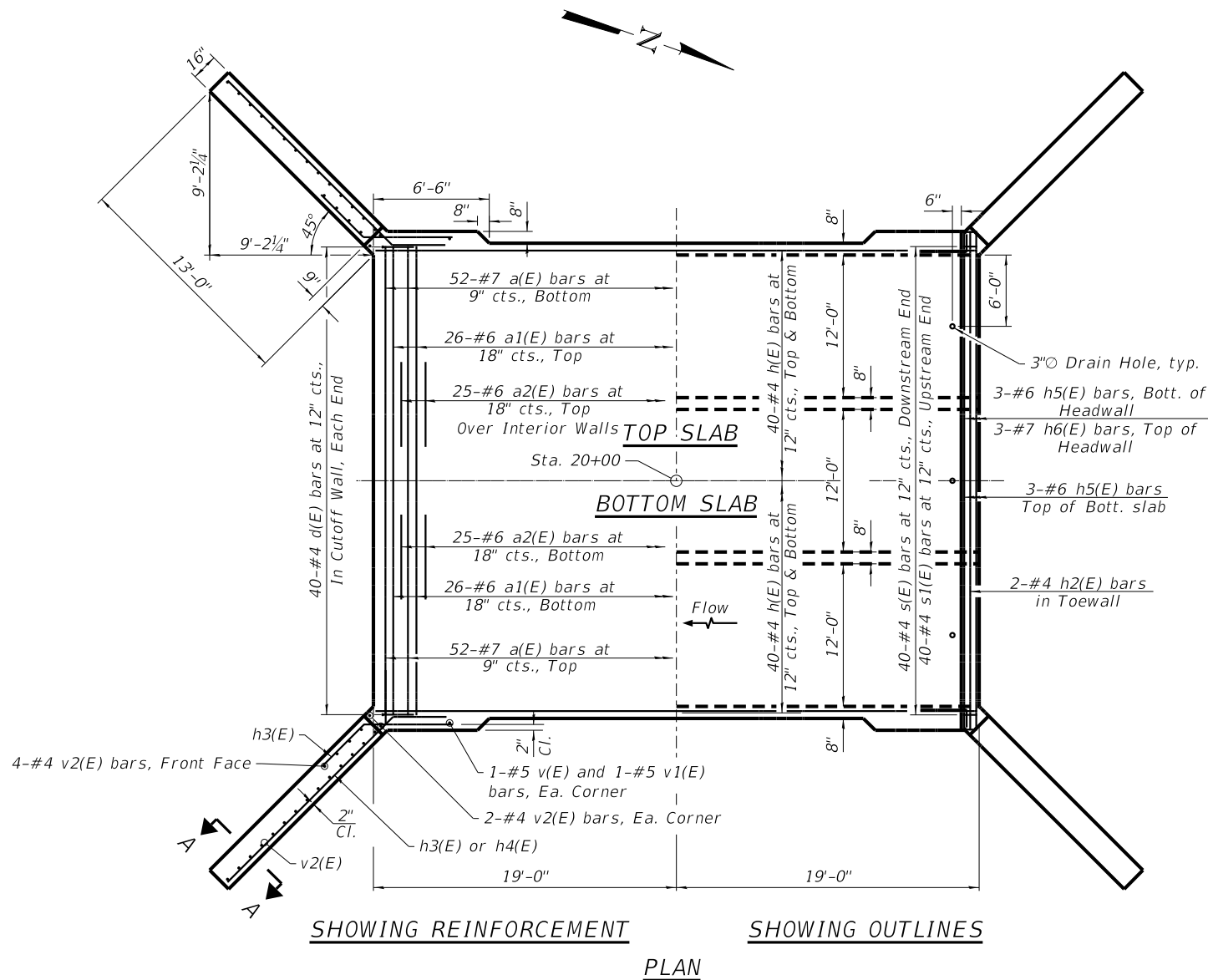
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| DESIGNED | ATK |
| DRAWN | DAN |
| REVIEWED | ATK |
| APPROVED | EEL |

BUREAU COUNTY HIGHWAY DEPARTMENT
F.A.S. 1225 (C.H. 12) OVER EAST BUREAU CREEK
STATION 20+00



TRIPLE BARREL BOX CULVERT DETAILS
STRUCTURE NO. 006-3019
STRUCTURAL SHEET NO. 1 OF 6 SHEETS

| F.A.S. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|--------------------|--------------|-----------|
| 1225 | 22-00283-00-BR | BUREAU | 17 | 8 |
| WHA# 1218M23 | | CONTRACT NO. 87817 | | |
| ILLINOIS FED. AID PROJECT | | | | |



SECTION A-A

PHOEBE NESTING

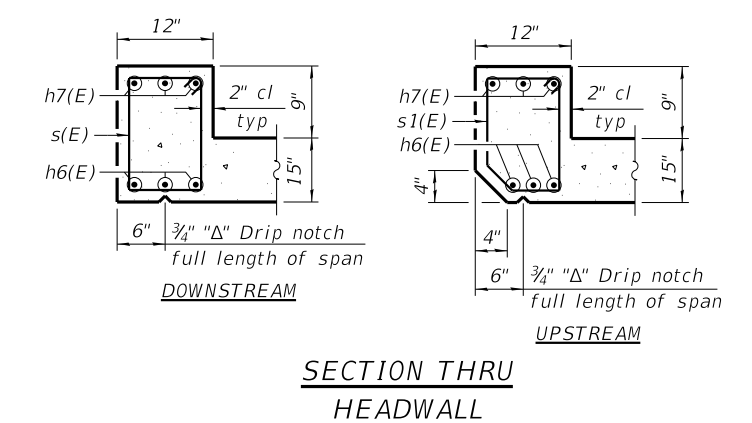
SITE DETAILS

(Downstream End Only)

NAME PLATE LETTERING

See Sta. 515001

EAST BUREAU CREEK
BUILT 20XX BY
BUREAU COUNTY
SEC. 22-00283-00-BR
F.A.S. 1225 (C.H. 12) STA. 20+00
STR. NO. 006-3019 LOADING HL-93



| REVISION | DATE | BY | REMARKS | DESIGNED | ATK |
|----------|------|----|---------|----------|-----|
| | | | | DRAWN | DAN |
| | | | | REVIEWED | ATK |
| | | | | APPROVED | EEL |

BUREAU COUNTY HIGHWAY DEPARTMENT

F.A.S. 1225 (C.H. 12) OVER EAST BUREAU CREEK

STATION 20+00

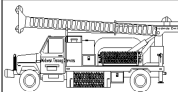


TRIPLE BARREL BOX CULVERT DETAILS

STRUCTURE NO. 006-3019

STRUCTURAL SHEET NO. 2 OF 6 SHEETS

| F.A.S. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|--------------------|--------------|-----------|
| 1225 | 22-00283-00-BR | BUREAU | 17 | 9 |
| WHA# 1218M23 | | CONTRACT NO. 87817 | | |
| ILLINOIS FED. AID PROJECT | | | | |

| | | | |
|--|----------------------------|--|--|
|  Midwest Testing Services, Inc. 3705 Progress Blvd. Peru, IL 61354 | BORING LOG | | Phone: 815-223-6696 |
| | Sheet <u>1</u> of <u>4</u> | | Fax: 815-223-6659 e-mail: mts37@comcast.net |

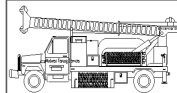
Client: Willett Hofmann & Associates, Inc.
 Project Name: F.A.S. 1225 (C.H. 12) over East Bureau Creek
 Project Site: S. N.: 006-3015 Berlin Twp.
Bureau County, Illinois

Boring No. B-1
 Surface Elev. 726.11
 Auger Depth 76' Rotary Depth NA
 Start Date 08/19/23 Finish Date 08/19/23

Location: Station: 20+24 7' LT

| (DEPTH) ELEV. | DESCRIPTION OF MATERIALS | Graphic Log | Depth in feet | SAMPLES | | | | | | DRILLED BY | REMARKS | |
|------------------|---|-------------|---------------|------------|-------------|----------|-----------------|---------------|--------------|------------|---------|-------------------|
| | | | | Sample No. | Sample Type | Qu (TSF) | N Value (Blows) | Bulge / Shear | Moisture (%) | | | Dry Density (PCF) |
| 726.11 | | | | | | | | | | | | |
| 725.11 | Asphalt over Aggregate | | 1 | | | | | | | | | |
| 724.11 | | | 2 | | | | | | | | | |
| 723.11 | Medium Stiff Black/Brown Silty Clay Fill | | 3 | 1 | SS | 1.0 | 5 | B | 18 | | | |
| 722.11 | | | 4 | | | | | | | | | |
| 721.11 | | | 5 | | | | | | | | | |
| 720.11 | Soft Black Silty Clay Topsoil | | 6 | 2 | SS | 0.5 | 3 | B | 29 | | | |
| 719.11 | | | 7 | | | | | | | | | |
| 718.11 | Soft to Medium Stiff Black/Gray Silty Clay | | 8 | 3 | SS | 0.6 | 3 | B | 22 | | | |
| 717.11 | | | 9 | | | | | | | | | |
| 716.11 | | | 10 | | | | | | | | | |
| 715.11 | Soft Gray Clay | | 11 | 4 | SS | 1.0 | 4 | B | 23 | | | |
| 714.11 | | | 12 | | | | | | | | | |
| 713.11 | | | 13 | | | | | | | | | |
| 712.11 | Very Loose Gray Fine Sand | | 14 | 5 | SS | 1.0 | 3 | B | 24 | | | |
| 711.11 | | | 15 | | | | | | | | | |
| 710.11 | | | 16 | 6 | SS | --- | 4 | --- | 10 | | | |
| 709.11 | | | 17 | | | | | | | | | |
| 708.11 | Loose Gray Fine Sand & Fine Gravel | | 18 | 7 | SS | --- | 4 | --- | --- | | | |
| 707.11 | | | 19 | | | | | | | | | |
| 706.11 | | | 20 | 8 | SS | --- | 5 | --- | --- | | | |

Groundwater Data: Static water after auger removal, elevation 712.11.
 Comments: B.M. #400, Chisel mark at Southeast Wingwall elevation 726.36

| | | | |
|--|----------------------------|--|--|
|  Midwest Testing Services, Inc. 3705 Progress Blvd. Peru, IL 61354 | BORING LOG | | Phone: 815-223-6696 |
| | Sheet <u>2</u> of <u>4</u> | | Fax: 815-223-6659 e-mail: mts37@comcast.net |

Client: Willett Hofmann & Associates, Inc.
 Project Name: F.A.S. 1225 (C.H. 12) over East Bureau Creek
 Project Site: S. N.: 006-3015 Berlin Twp.
Bureau County, Illinois

Boring No. B-1
 Surface Elev. 726.11
 Auger Depth 76' Rotary Depth NA
 Start Date 08/19/23 Finish Date 08/19/23

Location: Station: 20+24 7' LT

| (DEPTH) ELEV. | DESCRIPTION OF MATERIALS | Graphic Log | Depth in feet | SAMPLES | | | | | | DRILLED BY | REMARKS | |
|------------------|--|-------------|---------------|------------|-------------|----------|-----------------|---------------|--------------|------------|---------|-------------------|
| | | | | Sample No. | Sample Type | Qu (TSF) | N Value (Blows) | Bulge / Shear | Moisture (%) | | | Dry Density (PCF) |
| 705.11 | | | | | | | | | | | | |
| 704.11 | | | 22 | | | | | | | | | |
| 703.11 | | | 23 | 9 | SS | --- | 4 | --- | --- | | | |
| 702.11 | Loose Gray Fine Sand & Fine Gravel | | 24 | | | | | | | | | |
| 701.11 | | | 25 | | | | | | | | | |
| 700.11 | | | 26 | 10 | SS | --- | 9 | --- | --- | | | |
| 699.11 | | | 27 | | | | | | | | | |
| 698.11 | | | 28 | | | | | | | | | |
| 697.11 | | | 29 | | | | | | | | | |
| 696.11 | | | 30 | | | | | | | | | |
| 695.11 | Medium Dense Gray Fine Sand & Coarse Gravel | | 31 | 11 | SS | --- | 14 | --- | --- | | | |
| 694.11 | | | 32 | | | | | | | | | |
| 693.11 | | | 33 | | | | | | | | | |
| 692.11 | | | 34 | | | | | | | | | |
| 691.11 | | | 35 | 12 | SS | --- | 17 | --- | --- | | | |
| 690.11 | | | 36 | | | | | | | | | |
| 689.11 | | | 37 | | | | | | | | | |
| 688.11 | | | 38 | | | | | | | | | |
| 687.11 | Dense Gray Coarse Sand | | 39 | | | | | | | | | |
| 686.11 | | | 40 | 13 | SS | --- | 32 | --- | --- | | | |
| 685.11 | | | 41 | | | | | | | | | |

Groundwater Data: Static water after auger removal, elevation 712.11.
 Comments: B.M. #400, Chisel mark at Southeast Wingwall elevation 726.36

| REVISION | DATE | BY | REMARKS |
|----------|------|----|---------|
| | | | |
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| DESIGNED | ATK |
| DRAWN | DAN |
| REVIEWED | ATK |
| APPROVED | EEL |

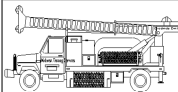
BUREAU COUNTY HIGHWAY DEPARTMENT
F.A.S. 1225 (C.H. 12) OVER EAST BUREAU CREEK
STATION 20+00



WILLETT HOFMANN & ASSOCIATES, INC.
 ENGINEERING ARCHITECTURE LAND SURVEYING
 1515 FIFTH AVENUE, SUITE 102, MOLINE, IL 61265
 T: 309-517-1119 DESIGN FIRM: # 184-000918

BORING LOGS
STRUCTURAL SHEET NO. 3 OF 6 SHEETS

| | | | | |
|---------------------------|----------------|--------------------|--------------|-----------|
| F.A.S. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 1225 | 22-00283-00-BR | BUREAU | 17 | 10 |
| WHA# 1218M23 | | CONTRACT NO. 87817 | | |
| ILLINOIS FED. AID PROJECT | | | | |

| | | | |
|---|--|---|---|
|  | Midwest Testing Services, Inc. 3705 Progress Blvd. Peru, IL 61354 | BORING LOG Sheet <u>3</u> of <u>4</u> | Phone: 815-223-6696 Fax: 815-223-6659 e-mail: mts37@comcast.net |
|---|--|---|---|

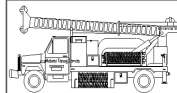
Client: Willett Hofmann & Associates, Inc.
 Project Name: F.A.S. 1225 (C.H. 12) over East Bureau Creek
 Project Site: S. N.: 006-3015 Berlin Twp.
Bureau County, Illinois

Boring No. B-1
 Surface Elev. 726.11
 Auger Depth 76' Rotary Depth NA
 Start Date 08/19/23 Finish Date 08/19/23

Location: Station: 20+24 7' LT

| (DEPTH) ELEV. | DESCRIPTION OF MATERIALS | Graphic Log | Depth in feet | SAMPLES | | | | | | DRILLED BY | REMARKS |
|------------------|--------------------------|----------------|------------------|------------|-------------|----------|-----------------|---------------|--------------|-----------------------------------|---------|
| | | | | Sample No. | Sample Type | Qu (TSF) | N Value (Blows) | Bulge / Shear | Moisture (%) | Dry Density (PCF) | |
| 684.11 | | | | | | | | | | Randy Safranski Diedrich D-120 | |
| 683.11 | Hard Gray Clay Till | | 43 | | | | | | | | |
| 682.11 | | | 44 | | | | | | | | |
| 681.11 | | | 45 | 14 | SS | 5.0 | 40 | S | 10 | | |
| 680.11 | | | 46 | | | | | | | | |
| 679.11 | | | 47 | | | | | | | | |
| 678.11 | | | 48 | | | | | | | | |
| 677.11 | | | 49 | | | | | | | | |
| 676.11 | | | 50 | 15 | SS | 4.7 | 36 | S | 11 | | |
| 675.11 | | | 51 | | | | | | | | |
| 674.11 | | | 52 | | | | | | | | |
| 673.11 | | 53 | | | | | | | | | |
| 672.11 | | 54 | | | | | | | | | |
| 671.11 | | 55 | 16 | SS | 4.5 | 35 | S | 12 | | | |
| 670.11 | | 56 | | | | | | | | | |
| 669.11 | | 57 | | | | | | | | | |
| 668.11 | | 58 | | | | | | | | | |
| 667.11 | | 59 | | | | | | | | | |
| 666.11 | | 60 | 17 | SS | 5.5 | 36 | S | 11 | | | |
| 665.11 | | 61 | | | | | | | | | |
| 664.11 | | 62 | | | | | | | | | |

Groundwater Data: Static water after auger removal, elevation 712.11.
 Comments: B.M. #400, Chisel mark at Southeast Wingwall elevation 726.36

| | | | |
|---|--|---|---|
|  | Midwest Testing Services, Inc. 3705 Progress Blvd. Peru, IL 61354 | BORING LOG Sheet <u>4</u> of <u>4</u> | Phone: 815-223-6696 Fax: 815-223-6659 e-mail: mts37@comcast.net |
|---|--|---|---|

Client: Willett Hofmann & Associates, Inc.
 Project Name: F.A.S. 1225 (C.H. 12) over East Bureau Creek
 Project Site: S. N.: 006-3015 Berlin Twp.
Bureau County, Illinois

Boring No. B-1
 Surface Elev. 726.11
 Auger Depth 76' Rotary Depth NA
 Start Date 08/19/23 Finish Date 08/19/23

Location: Station: 20+24 7' LT

| (DEPTH) ELEV. | DESCRIPTION OF MATERIALS | Graphic Log | Depth in feet | SAMPLES | | | | | | DRILLED BY | REMARKS |
|------------------|--------------------------|----------------|------------------|------------|-------------|----------|-----------------|---------------|--------------|-----------------------------------|---------|
| | | | | Sample No. | Sample Type | Qu (TSF) | N Value (Blows) | Bulge / Shear | Moisture (%) | Dry Density (PCF) | |
| 663.11 | | | | | | | | | | Randy Safranski Diedrich D-120 | |
| 662.11 | Hard Gray Clay Till | | 64 | | | | | | | | |
| 661.11 | | | 65 | 18 | SS | 5.2 | 37 | S | 10 | | |
| 660.11 | | | 66 | | | | | | | | |
| 659.11 | | | 67 | | | | | | | | |
| 658.11 | | | 68 | | | | | | | | |
| 657.11 | | | 69 | | | | | | | | |
| 656.11 | | | 70 | 19 | SS | 5.4 | 38 | S | 10 | | |
| 655.11 | | | 71 | | | | | | | | |
| 654.11 | | | 72 | | | | | | | | |
| 653.11 | | | 73 | | | | | | | | |
| 652.11 | | 74 | | | | | | | | | |
| 651.11 | | 75 | 20 | SS | 5.8 | 39 | S | 10 | | | |
| 650.11 | Boring Terminated | | 76 | | | | | | | | |
| 649.11 | | | 77 | | | | | | | | |
| 648.11 | | | 78 | | | | | | | | |
| 647.11 | | | 79 | | | | | | | | |
| 646.11 | | | 80 | | | | | | | | |
| 645.11 | | | 81 | | | | | | | | |
| 644.11 | | | 82 | | | | | | | | |
| 643.11 | | | 83 | | | | | | | | |

Groundwater Data: Static water after auger removal, elevation 712.11.
 Comments: B.M. #400, Chisel mark at Southeast Wingwall elevation 726.36

| REVISION | DATE | BY | REMARKS |
|----------|------|----|---------|
| | | | |
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|----------|-----|
| DESIGNED | ATK |
| DRAWN | DAN |
| REVIEWED | ATK |
| APPROVED | EEL |

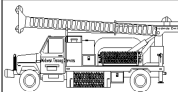
BUREAU COUNTY HIGHWAY DEPARTMENT
F.A.S. 1225 (C.H. 12) OVER EAST BUREAU CREEK
STATION 20+00



WILLETT HOFMANN & ASSOCIATES, INC.
 ENGINEERING ARCHITECTURE LAND SURVEYING
 1515 FIFTH AVENUE, SUITE 102, MOLINE, IL 61265
 T: 309-517-1119 DESIGN FIRM: # 184-000918

BORING LOGS
STRUCTURAL SHEET NO. 4 OF 6 SHEETS

| | | | | |
|---------------------------|----------------|--------------------|--------------|-----------|
| F.A.S. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 1225 | 22-00283-00-BR | BUREAU | 17 | 11 |
| WHA# 1218M23 | | CONTRACT NO. 87817 | | |
| ILLINOIS FED. AID PROJECT | | | | |

| | | | |
|--|----------------------------|--|--|
|  Midwest Testing Services, Inc. 3705 Progress Blvd. Peru, IL 61354 | BORING LOG | | Phone: 815-223-6696 |
| | Sheet <u>1</u> of <u>4</u> | | Fax: 815-223-6659 e-mail: mts37@comcast.net |

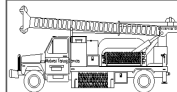
Client: Willett Hofmann & Associates, Inc.
 Project Name: F.A.S. 1225 (C.H. 12) over East Bureau Creek
 Project Site: S. N.: 006-3015 Berlin Twp.
Bureau County, Illinois

Boring No. B-2
 Surface Elev. 725.78
 Auger Depth 76' Rotary Depth NA
 Start Date 08/19/23 Finish Date 08/19/23

Location: Station: 19+68 5' RT

| (DEPTH) ELEV. | DESCRIPTION OF MATERIALS | Graphic Log | Depth in feet | SAMPLES | | | | | | DRILLED BY | REMARKS |
|------------------|---|----------------|------------------|------------|-------------|----------|-----------------|---------------|--------------|----------------------------------|---------|
| | | | | Sample No. | Sample Type | Qu (TSF) | N Value (Blows) | Bulge / Shear | Moisture (%) | | |
| 725.78 | Asphalt over Aggregate | | 1 | | | | | | | Randy Safanski Diedrich D-120 | |
| 724.78 | | | 2 | | | | | | | | |
| 723.78 | | | 3 | 1 | SS | 1.0 | 4 | B | 19 | | |
| 722.78 | Medium Stiff Black/Brown Silty Clay Fill | | 4 | | | | | | | | |
| 721.78 | | | 5 | | | | | | | | |
| 720.78 | | | 6 | 2 | SS | 0.5 | 3 | B | 27 | | |
| 719.78 | Soft Black Silty Clay Topsoil | | 7 | | | | | | | | |
| 718.78 | | | 8 | 3 | SS | 0.6 | 3 | B | 22 | | |
| 717.78 | Soft to Medium Stiff Black/Gray Silty Clay | | 9 | | | | | | | | |
| 716.78 | | | 10 | | | | | | | | |
| 715.78 | | | 11 | 4 | SS | 1.0 | 4 | B | 22 | | |
| 714.78 | Soft Gray Clay | | 12 | | | | | | | | |
| 713.78 | | | 13 | | | | | | | | |
| 712.78 | | | 14 | 5 | SS | 0.9 | 3 | B | 23 | | |
| 711.78 | Very Loose Gray Fine Sand | | 15 | | | | | | | | |
| 710.78 | | | 16 | 6 | SS | --- | 4 | --- | 10 | | |
| 709.78 | | | 17 | | | | | | | | |
| 708.78 | | | 18 | | | | | | | | |
| 707.78 | | | 19 | 7 | SS | --- | 5 | --- | --- | | |
| 706.78 | Loose Gray Fine Sand & Fine Gravel | | 20 | | | | | | | | |
| 705.78 | | | | 8 | SS | --- | 5 | --- | --- | | |

Groundwater Data: Static water after auger removal, elevation 711.78.
 Comments: B.M. #400, Chisel mark at Southeast Wingwall elevation 726.36

| | | | |
|--|----------------------------|--|--|
|  Midwest Testing Services, Inc. 3705 Progress Blvd. Peru, IL 61354 | BORING LOG | | Phone: 815-223-6696 |
| | Sheet <u>2</u> of <u>4</u> | | Fax: 815-223-6659 e-mail: mts37@comcast.net |

Client: Willett Hofmann & Associates, Inc.
 Project Name: F.A.S. 1225 (C.H. 12) over East Bureau Creek
 Project Site: S. N.: 006-3015 Berlin Twp.
Bureau County, Illinois

Boring No. B-2
 Surface Elev. 725.78
 Auger Depth 76' Rotary Depth NA
 Start Date 08/19/23 Finish Date 08/19/23

Location: Station: 19+68 5' RT

| (DEPTH) ELEV. | DESCRIPTION OF MATERIALS | Graphic Log | Depth in feet | SAMPLES | | | | | | DRILLED BY | REMARKS |
|------------------|--|----------------|------------------|------------|-------------|----------|-----------------|---------------|--------------|----------------------------------|---------|
| | | | | Sample No. | Sample Type | Qu (TSF) | N Value (Blows) | Bulge / Shear | Moisture (%) | | |
| 704.78 | | | 22 | | | | | | | Randy Safanski Diedrich D-120 | |
| 703.78 | | | 23 | 9 | SS | --- | 5 | --- | --- | | |
| 702.78 | | | 24 | | | | | | | | |
| 701.78 | Loose Gray Fine Sand & Fine Gravel | | 25 | | | | | | | | |
| 700.78 | | | 26 | 10 | SS | --- | 10 | --- | --- | | |
| 699.78 | | | 27 | | | | | | | | |
| 698.78 | | | 28 | | | | | | | | |
| 697.78 | | | 29 | | | | | | | | |
| 696.78 | | | 30 | | | | | | | | |
| 695.78 | | | 31 | 11 | SS | --- | 18 | --- | --- | | |
| 694.78 | Medium Dense Gray Coarse Gravel & Fine Sand | | 32 | | | | | | | | |
| 693.78 | | | 33 | | | | | | | | |
| 692.78 | | | 34 | | | | | | | | |
| 691.78 | | | 35 | | | | | | | | |
| 690.78 | | | 36 | 12 | SS | --- | 23 | --- | --- | | |
| 689.78 | | | 37 | | | | | | | | |
| 688.78 | | | 38 | | | | | | | | |
| 687.78 | | | 39 | | | | | | | | |
| 686.78 | | | 40 | | | | | | | | |
| 685.78 | Very Stiff Gray Clay Till | | 41 | 13 | SS | 3.7 | 25 | S | 13 | | |
| 684.78 | | | | | | | | | | | |

Groundwater Data: Static water after auger removal, elevation 711.78.
 Comments: B.M. #400, Chisel mark at Southeast Wingwall elevation 726.36

| REVISION | DATE | BY | REMARKS |
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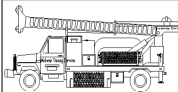
BUREAU COUNTY HIGHWAY DEPARTMENT
F.A.S. 1225 (C.H. 12) OVER EAST BUREAU CREEK
STATION 20+00



WILLETT HOFMANN & ASSOCIATES, INC.
 ENGINEERING ARCHITECTURE LAND SURVEYING
 1515 FIFTH AVENUE, SUITE 102, MOLINE, IL 61265
 T: 309-517-1119 DESIGN FIRM: # 184-000918

BORING LOGS
STRUCTURAL SHEET NO. 5 OF 6 SHEETS

| | | | | |
|---------------------------|------------------------|--------------------|-----------------|--------------|
| F.A.S. RTE. 1225 | SECTION 22-00283-00-BR | COUNTY BUREAU | TOTAL SHEETS 17 | SHEET NO. 12 |
| WHA# 1218M23 | | CONTRACT NO. 87817 | | |
| ILLINOIS FED. AID PROJECT | | | | |

| | | | |
|--|----------------------------|--|--|
|  Midwest Testing Services, Inc. 3705 Progress Blvd. Peru, IL 61354 | BORING LOG | | Phone: 815-223-6696 |
| | Sheet <u>3</u> of <u>4</u> | | Fax: 815-223-6659 e-mail: mts37@comcast.net |

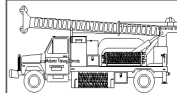
Client: Willett Hofmann & Associates, Inc.
 Project Name: F.A.S. 1225 (C.H. 12) over East Bureau Creek
 Project Site: S. N.: 006-3015 Berlin Twp.
Bureau County, Illinois

Boring No. B-2
 Surface Elev. 725.78
 Auger Depth 76' Rotary Depth NA
 Start Date 08/19/23 Finish Date 08/19/23

Location: Station: 19+68 5' RT

| (DEPTH) ELEV. | DESCRIPTION OF MATERIALS | Graphic Log | Depth in feet | SAMPLES | | | | | | DRILLED BY | REMARKS |
|------------------|--------------------------|----------------|------------------|------------|-------------|----------|-----------------|---------------|--------------|-------------------|---------|
| | | | | Sample No. | Sample Type | Qu (TSF) | N Value (Blows) | Bulge / Shear | Moisture (%) | Dry Density (PCF) | |
| 683.78 | | | | | | | | | | | |
| 682.78 | | | 43 | | | | | | | | |
| 681.78 | | | 44 | | | | | | | | |
| 680.78 | | | 45 | | | | | | | | |
| 679.78 | | | 46 | 14 | SS | 5.5 | 48 | S | 10 | | |
| 678.78 | | | 47 | | | | | | | | |
| 677.78 | | | 48 | | | | | | | | |
| 676.78 | | | 49 | | | | | | | | |
| 675.78 | | | 50 | | | | | | | | |
| 674.78 | Hard Gray Clay Till | | 51 | 15 | SS | 5.0 | 40 | S | 10 | | |
| 673.78 | | | 52 | | | | | | | | |
| 672.78 | | | 53 | | | | | | | | |
| 671.78 | | | 54 | | | | | | | | |
| 670.78 | | | 55 | | | | | | | | |
| 669.78 | | | 56 | 16 | SS | 4.6 | 37 | S | 11 | | |
| 668.78 | | | 57 | | | | | | | | |
| 667.78 | | | 58 | | | | | | | | |
| 666.78 | | | 59 | | | | | | | | |
| 665.78 | | | 60 | | | | | | | | |
| 664.78 | | | 61 | 17 | SS | 5.0 | 37 | S | 11 | | |
| 663.78 | | | 62 | | | | | | | | |

Groundwater Data: Static water after auger removal, elevation 711.78.
 Comments: B.M. #400, Chisel mark at Southeast Wingwall elevation 726.36

| | | | |
|--|----------------------------|--|--|
|  Midwest Testing Services, Inc. 3705 Progress Blvd. Peru, IL 61354 | BORING LOG | | Phone: 815-223-6696 |
| | Sheet <u>4</u> of <u>4</u> | | Fax: 815-223-6659 e-mail: mts37@comcast.net |

Client: Willett Hofmann & Associates, Inc.
 Project Name: F.A.S. 1225 (C.H. 12) over East Bureau Creek
 Project Site: S. N.: 006-3015 Berlin Twp.
Bureau County, Illinois

Boring No. B-2
 Surface Elev. 725.78
 Auger Depth 76' Rotary Depth NA
 Start Date 08/19/23 Finish Date 08/19/23

Location: Station: 19+68 5' RT

| (DEPTH) ELEV. | DESCRIPTION OF MATERIALS | Graphic Log | Depth in feet | SAMPLES | | | | | | DRILLED BY | REMARKS |
|------------------|--------------------------|----------------|------------------|------------|-------------|----------|-----------------|---------------|--------------|-------------------|---------|
| | | | | Sample No. | Sample Type | Qu (TSF) | N Value (Blows) | Bulge / Shear | Moisture (%) | Dry Density (PCF) | |
| 662.78 | | | | | | | | | | | |
| 661.78 | | | 64 | | | | | | | | |
| 660.78 | | | 65 | | | | | | | | |
| 659.78 | | | 66 | 18 | SS | 4.0 | 36 | S | 10 | | |
| 658.78 | | | 67 | | | | | | | | |
| 657.78 | | | 68 | | | | | | | | |
| 656.78 | Hard Gray Clay Till | | 69 | | | | | | | | |
| 655.78 | | | 70 | | | | | | | | |
| 654.78 | | | 71 | 19 | SS | 5.0 | 38 | S | 10 | | |
| 653.78 | | | 72 | | | | | | | | |
| 652.78 | | | 73 | | | | | | | | |
| 651.78 | | | 74 | | | | | | | | |
| 650.78 | | | 75 | | | | | | | | |
| 649.78 | | | 76 | 20 | SS | 5.4 | 40 | S | 10 | | |
| 648.78 | Boring Terminated | | 77 | | | | | | | | |
| 647.78 | | | 78 | | | | | | | | |
| 646.78 | | | 79 | | | | | | | | |
| 645.78 | | | 80 | | | | | | | | |
| 644.78 | | | 81 | | | | | | | | |
| 643.78 | | | 82 | | | | | | | | |
| 642.78 | | | 83 | | | | | | | | |

Groundwater Data: Static water after auger removal, elevation 711.78.
 Comments: B.M. #400, Chisel mark at Southeast Wingwall elevation 726.36

| REVISION | DATE | BY | REMARKS |
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| DESIGNED | ATK |
| DRAWN | DAN |
| REVIEWED | ATK |
| APPROVED | EEL |

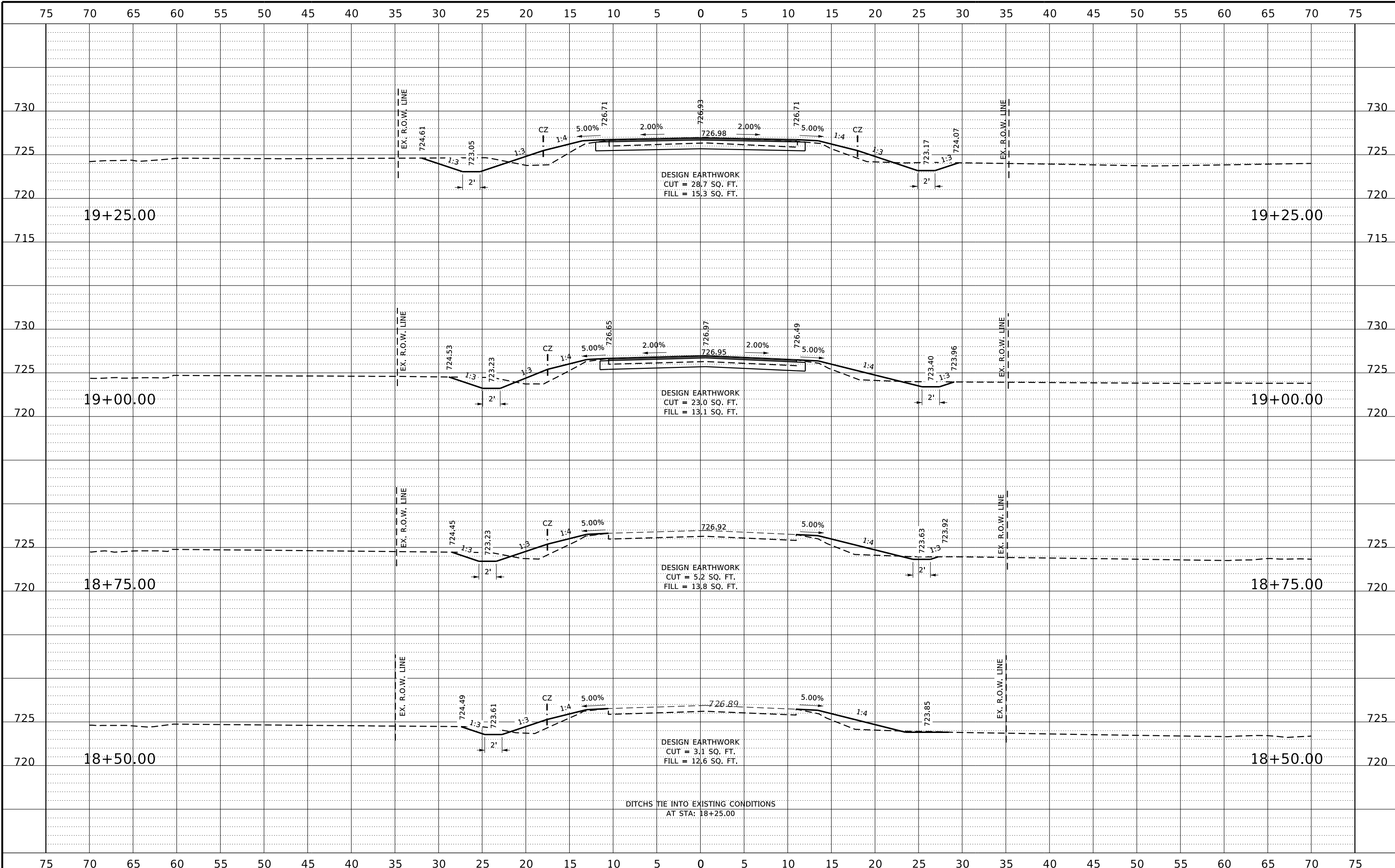
BUREAU COUNTY HIGHWAY DEPARTMENT
F.A.S. 1225 (C.H. 12) OVER EAST BUREAU CREEK
STATION 20+00



WILLETT HOFMANN & ASSOCIATES, INC.
 ENGINEERING ARCHITECTURE LAND SURVEYING
 1515 FIFTH AVENUE, SUITE 102, MOLINE, IL 61265
 T: 309-517-1119 DESIGN FIRM: # 184-000918

BORING LOGS
STRUCTURAL SHEET NO. 6 OF 6 SHEETS

| | | | | |
|---------------------------|----------------|--------------------|--------------|-----------|
| F.A.S. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 1225 | 22-00283-00-BR | BUREAU | 17 | 13 |
| WHA# 1218M23 | | CONTRACT NO. 87817 | | |
| ILLINOIS FED. AID PROJECT | | | | |



| REVISION | DATE | BY | REMARKS |
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| DESIGNED | ATK |
| DRAWN | C.J.I. |
| REVIEWED | GBG |
| APPROVED | MRL |

BUREAU COUNTY HIGHWAY DEPARTMENT
F.A.S. 1225 (C.H. 12) OVER EAST BUREAU CREEK
STATION 20+00

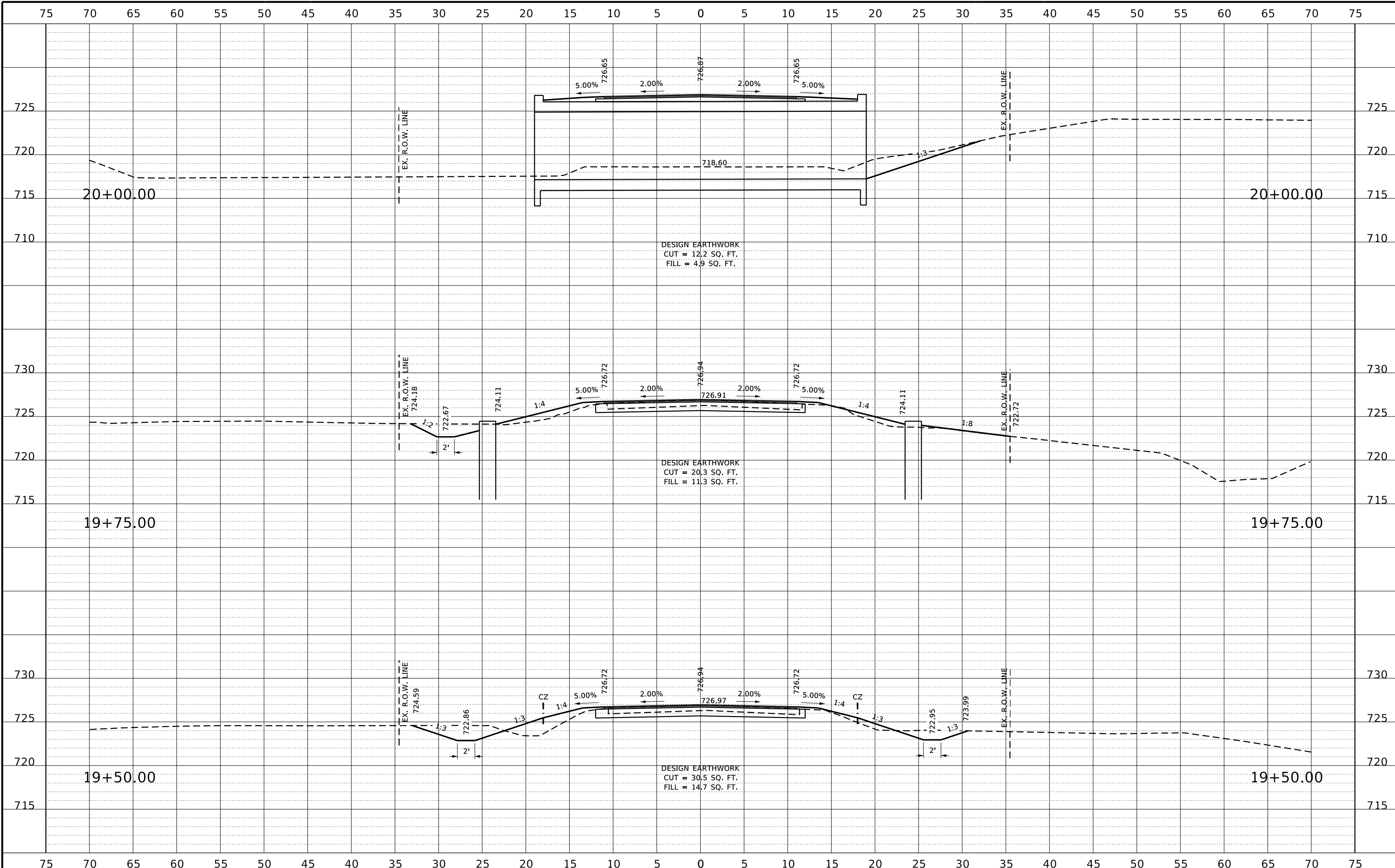


CROSS SECTIONS
 SCALE: 1" = 5'-0"
 SHEET NO. 1 OF 4 SHEETS
 STA. 18+75.00 TO STA. 19+25.00

| | | | | |
|---------------------------|----------------|--------------------|--------------|-----------|
| F.A.S. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 1225 | 22-00283-00-BR | BUREAU | 17 | 14 |
| WHA# 1218M23 | | CONTRACT NO. 87817 | | |
| ILLINOIS FED. AID PROJECT | | | | |

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| REVISION | DATE | BY | REMARKS |
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| DESIGNED | ATK |
| DRAWN | C.J.I. |
| REVIEWED | GBG |
| APPROVED | MRL |

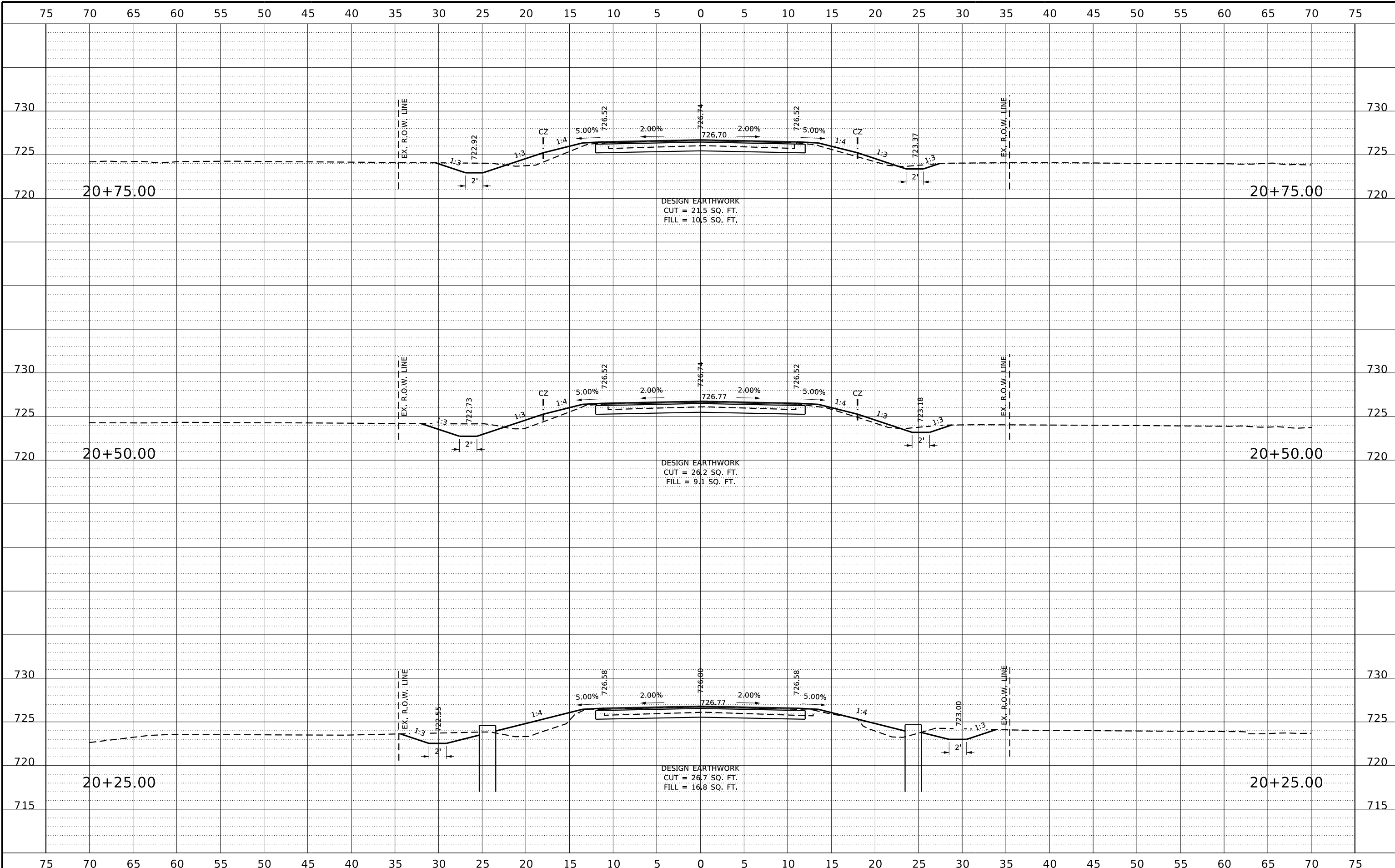
BUREAU COUNTY HIGHWAY DEPARTMENT
F.A.S. 1225 (C.H. 12) OVER EAST BUREAU CREEK
STATION 20+00



| | | |
|-----------------------|-------------------------|--------------------------------|
| CROSS SECTIONS | | |
| SCALE: 1" = 5'-0" | SHEET NO. 2 OF 4 SHEETS | STA. 19+50.00 TO STA. 20+00.00 |

| | | | | |
|---------------------------|------------------------|--------------------|-----------------|--------------|
| F.A.S. RTE. 1225 | SECTION 22-00283-00-BR | COUNTY BUREAU | TOTAL SHEETS 17 | SHEET NO. 15 |
| WHA# 1218M23 | | CONTRACT NO. 87817 | | |
| ILLINOIS FED. AID PROJECT | | | | |

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| REVISION | DATE | BY | REMARKS |
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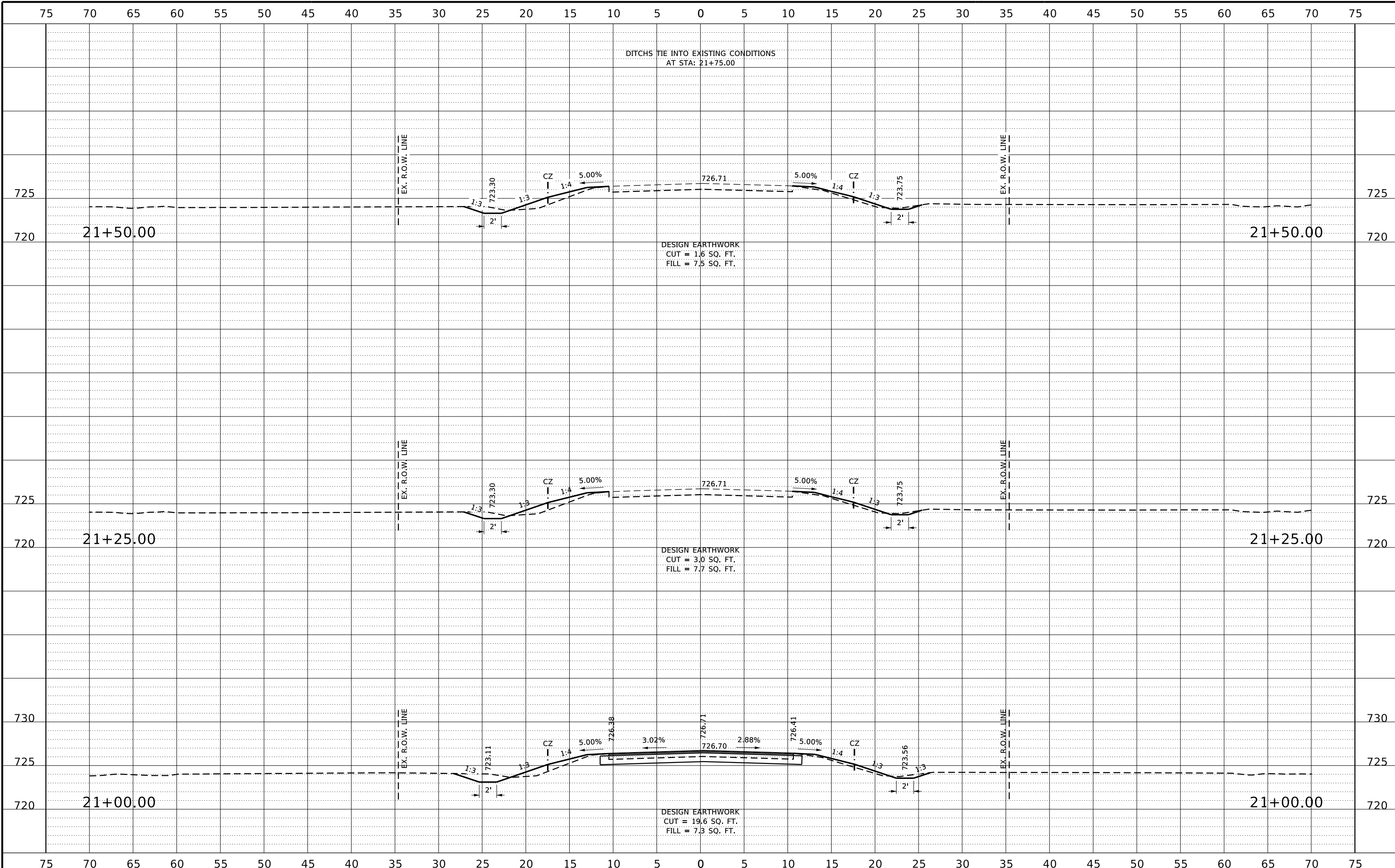
| | |
|----------|--------|
| DESIGNED | ATK |
| DRAWN | C.J.I. |
| REVIEWED | GBG |
| APPROVED | MRL |

BUREAU COUNTY HIGHWAY DEPARTMENT
F.A.S. 1225 (C.H. 12) OVER EAST BUREAU CREEK
STATION 20+00



CROSS SECTIONS
 SCALE: 1" = 5'-0" SHEET NO. 3 OF 4 SHEETS STA. 20+25.00 TO STA. 20+75.00

| | | | | |
|---------------------------|----------------|--------------------|--------------|-----------|
| F.A.S. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 1225 | 22-00283-00-BR | BUREAU | 17 | 16 |
| WHA# 1218M23 | | CONTRACT NO. 87817 | | |
| ILLINOIS FED. AID PROJECT | | | | |



| REVISION | DATE | BY | REMARKS |
|----------|------|----|---------|
| | | | |
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| | | | |

| | |
|----------|--------|
| DESIGNED | ATK |
| DRAWN | C.J.I. |
| REVIEWED | GBG |
| APPROVED | MRL |

BUREAU COUNTY HIGHWAY DEPARTMENT
F.A.S. 1225 (C.H. 12) OVER EAST BUREAU CREEK
STATION 20+00



CROSS SECTIONS
 SCALE: 1" = 5'-0" SHEET NO. 4 OF 4 SHEETS STA. 21+00.00 TO STA. 21+25.00

| | | | | |
|---------------------------|----------------|--------------------|--------------|-----------|
| F.A.S. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 1225 | 22-00283-00-BR | BUREAU | 17 | 17 |
| WHA# 1218M23 | | CONTRACT NO. 87817 | | |
| ILLINOIS FED. AID PROJECT | | | | |