

FAP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	(130BR-1)B-1	MACON	95	1

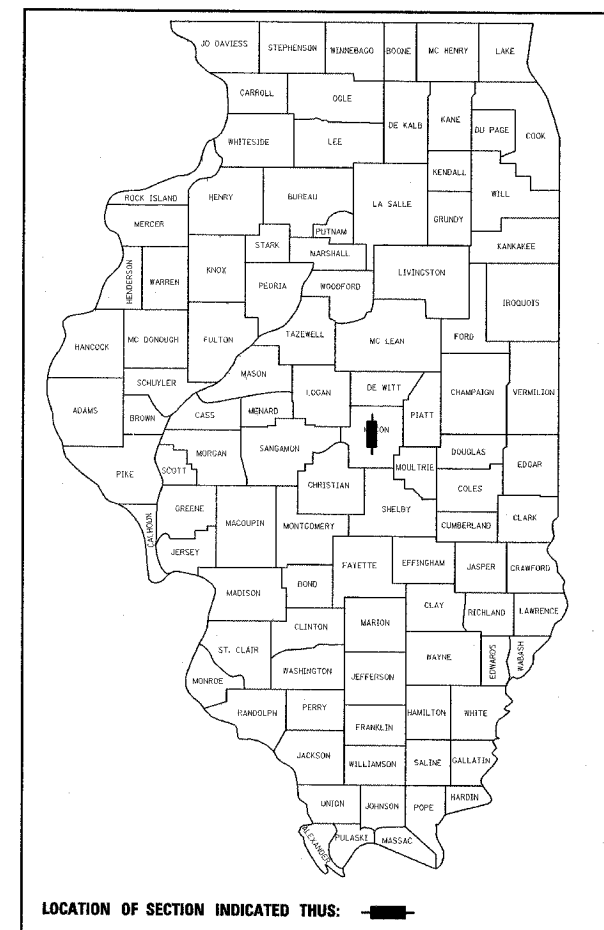
P-97-027-06
D-97-039-06

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

PROPOSED HIGHWAY PLANS

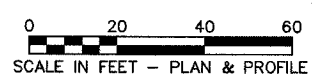
FAP ROUTE 716 (IL 48 /OAKLAND AVE.)
SECTION (130BR-1)B-1
PROJECT BRF-0716-(012)
MACON COUNTY
C-97-077-06
IL ROUTE 48 OVER SPRING CREEK
STRUCTURE REPLACEMENT



LOCATION OF SECTION INDICATED THUS: [Black rectangle symbol]

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
ROADWAY PLANS	
1.	COVER SHEET
2.	GENERAL NOTES, STANDARDS, AND LEGEND
3.-4.	SUMMARY OF QUANTITIES
5.-8.	TYPICAL SECTIONS
9.-11.	SCHEDULES OF QUANTITIES
12.-14.	FAP RTE 716 (ILLINOIS 48) PLAN AND PROFILE
15.	McKINLEY AVENUE PLAN AND PROFILE
16.-18.	STAGE I CONSTRUCTION
19.-20.	STAGE II CONSTRUCTION
21.	STAGE CONSTRUCTION DETAILS
22.	McKINLEY AVENUE ROAD CLOSURE DETAILS
23.	EROSION CONTROL, UTILITY, AND DRAINAGE PLAN
24.	SANITARY SEWER DETAILS
25.-27.	PAVEMENT MARKING AND MARKERS
28.-29.	TYPICAL APPLICATION OF PAVEMENT MARKINGS
30.	BRIDGE APPROACH PAVEMENT (SPECIAL)
31.	BRIDGE APPROACH SHOULDER PAVEMENT (SPECIAL)
32.	McKINLEY AVENUE INTERSECTION DETAILS
33.-34.	MISCELLANEOUS DETAILS
STRUCTURE PLANS	
35.	GENERAL PLAN
36.	GENERAL DATA
37.-38.	STAGE CONSTRUCTION DETAILS
39.	TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
40.-41.	TOP OF SLAB ELEVATIONS
42.	TOP OF NORTH APPROACH SLAB ELEVATIONS
43.	TOP OF SOUTH APPROACH SLAB ELEVATIONS
44.	SUPERSTRUCTURE
45.-47.	SUPERSTRUCTURE DETAILS
48.	BEARING DETAILS
49.	NORTH ABUTMENT
50.	SOUTH ABUTMENT
51.	ABUTMENT DETAILS
52.	PIER 1
53.	PIER 2
54.	PIER DETAILS
55.	SANITARY SEWER SUPPORT DETAILS
56.	PARAPET RAILING
57.	PREFORMED JOINT STRIP SEAL
58.	DRAINAGE SCUPPER, DS-12
59.	BAR SPLICER ASSEMBLY DETAILS
60.	STEEL H-PILE DETAILS
61.-62.	SOIL BORINGS
EXISTING STRUCTURE PLANS	
63.-81.	EXISTING BRIDGE PLANS
CROSS SECTIONS	
82.-93.	FAP 716 (IL 48) CROSS SECTIONS
94.-95.	McKINLEY AVENUE CROSS SECTIONS



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.

MICROFILMED
REEL NUMBER _____
AWARDED _____
RESIDENT ENGINEER _____
AS BUILT CHANGES WERE MADE ON THE FOLLOWING SHEETS _____

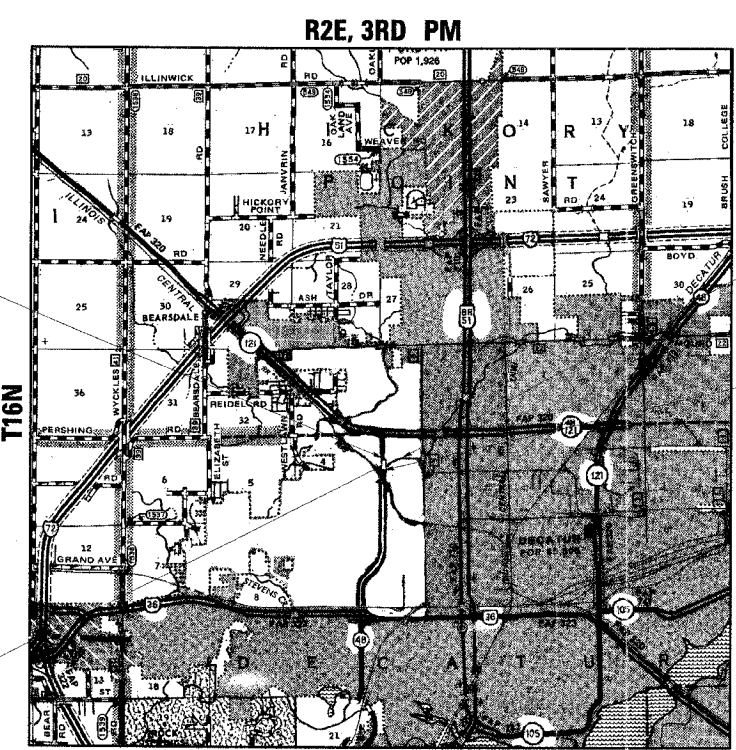
J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123

DISTRICT 7 NO. (217) 342-3951
PROJECT ENGINEER: BILL STANLEY

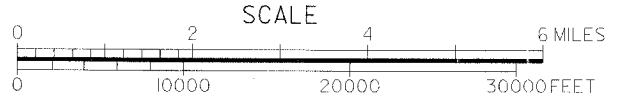
CONTRACT NO.: 74166



STATION 135+77.11
EXIST. S.N. 058-0056
PROP. S.N. 058-0135
THREE-SPAN 25' CIP RC SLAB
147'-75/8" BK TO BK ABUTMENTS



LOCATION MAP



GROSS LENGTH = 600 FT. = 0.11 MI.
NET LENGTH = 600 FT. = 0.11 MI.



SPRING CREEK

IMPROVEMENTS BEGIN STA 133+00

IMPROVEMENTS END STA 139+00

FUNCTIONAL CLASSIFICATION: OTHER PRINCIPAL ARTERIAL
DESIGN SPEED: 40 mph
POSTED SPEED: 40 mph
ADT: 17115 (2009)
PV: 96.8%
SU: 2.1%
MU: 1.1%

DESIGN DESIGNATION
N.A.



Richard D. Payne DATE: 6/26/07
ILLINOIS PROFESSIONAL LICENSE NO. 37421
(EXPIRATION DATE: 11-30-07)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED JUNE 28, 2007
Christ H. Reed
 DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

August 17, 2007
Eric E. Hovland
 ENGINEER OF DESIGN AND ENVIRONMENT

August 17, 2007
Milton R. See, P.E./P
 DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS**



LIST OF ILLINOIS DOT HIGHWAY STANDARDS

STANDARD NO.	DESCRIPTION
000001-04	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-01	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-03	TEMPORARY EROSION CONTROL SYSTEMS
420001-06	PAVEMENT JOINTS
420401-05	BRIDGE APPROACH PAVEMENT
421001-01	BAR REINFORCEMENT FOR CRC PAVEMENT
442201-02	CLASS C AND D PATCHES
515001-02	NAME PLATE FOR BRIDGES
602401-01	MANHOLE TYPE A
602601-01	PRECAST REINFORCED CONCRETE FLAT SLAB TOP
602701-01	MANHOLE STEPS
604001-02	FRAME AND LIDS TYPE 1
604041-01	FRAME AND GRATE TYPE 9
604056-02	FRAME AND GRATE TYPE 11V
606001-03	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
609006-03	BRIDGE APPROACH PAVEMENT (DRAIN DETAIL)
630001-07	STEEL PLATE BEAM GUARDRAIL
630301-04	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631031-06	TRAFFIC BARRIER TERMINAL, TYPE 6
635006-02	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-01	REFLECTOR MARKER AND MOUNTING DETAILS
701101-01	OFF-RD OPERATIONS, MULTILANE, 4.5m (15') TO 600mm (24") FROM PAVEMENT EDGE
701106-01	OFF-RD OPERATIONS, MULTILANE, MORE THAN 4.5m (15') AWAY
701426-02	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATION, FOR SPEEDS ≥ 45 MPH
701602-02	URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE
701801-03	LANE CLOSURE MULTILANE 1W OR 2W CROSSWALK OR SIDEWALK CLOSURE
702001-06	TRAFFIC CONTROL DEVICES
704001-03	TEMPORARY CONCRETE BARRIER
720001	SIGN PANEL MOUNTING DETAILS
720006-01	SIGN PANEL ERECTION DETAILS
720011	METAL POSTS FOR SIGNS, MARKERS & DELINEATORS
729001	APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS & MARKERS)
780001-01	TYPICAL PAVEMENT MARKINGS
781001-02	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
BLR22-4	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

GENERAL NOTES

- THIS SECTION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PLANS, THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", ADOPTED JANUARY 1, 2007; THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS" INDICATED ON THE CHECK SHEET, AND THE SPECIAL PROVISIONS INCLUDED IN THE PROPOSAL.
- THE FINISHED EARTHWORK SHALL HAVE A VEGETATION SUSTAINING SOIL COVERING THE TOP 4" IN AREAS TO BE SEEDED. THE VEGETATION SUSTAINING SOIL REQUIRED SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF EXCAVATION.
- THE ENGINEER SHALL BE THE SOLE JUDGE CONCERNING CURING TIME FOR THE VARIOUS HOT-MIX ASPHALT LIFTS.
- EXCEPT AS NOTED ON THE PLANS, PAVEMENT GRADES SHOWN ARE AT THE TOP OF PAVEMENT SURFACES.
- ALL SAWCUTTING OF EXISTING PAVEMENT SHALL BE CONSIDERED INCLUDED IN THE PAY ITEMS INVOLVED. THE MINIMUM SAW DEPTH IN THE PAVEMENT SHALL BE 1/2" UNLESS OTHERWISE NOTED.
- THE THICKNESS OF HOT-MIX ASPHALT MIXTURES 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 HOT-MIX ASPHALT MIXTURE IS PLACED.
- BEFORE ORDERING SANITARY SEWERS, STORM SEWERS OR PIPE UNDERDRAINS, THE CONTRACTOR SHALL CONSULT THE ENGINEER FOR EXACT LENGTHS.
- ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER LISTED ON THE INDEX OF SHEETS OR THE COPY OF THE STANDARD INCLUDED IN THESE PLANS.
- THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN CALCULATING PLAN QUANTITIES:

GRANULAR MATERIALS	2.05 TON/CU YD
BITUMINOUS MATERIALS (PRIME COAT)	0.08 GAL/SQ YD
HOT-MIX ASPHALT	112 LBS/SQ YD/INCH
SHORT TERM PAVEMENT MARKING	10 FT/100 FT OF APPLICATION
- ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY ACCORDING TO ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.
- ALL DISTURBED AREAS WITHIN THE CONSTRUCTION LIMITS SHALL BE FERTILIZED AND SEEDED. SEEDING SHALL BE CLASS 1A. 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.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY FROM CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.31 OF THE STANDARD SPECIFICATIONS. THE CONTRACTOR SHALL CONTACT J.U.L.I.E. AT LEAST 48 HOURS PRIOR TO EXCAVATION TO DETERMINE WHICH UTILITIES ARE IN THE AREA.
- FOR STABILIZATION, ALL TYPE III BARRICADES SHALL REQUIRE A MINIMUM OF FOUR SANDBAGS PER BARRICADE.
- ONLY THOSE TREES DESIGNATED BY THE ENGINEER SHALL BE REMOVED. THE CONTRACTOR SHALL PROTECT ALL REMAINING TREES FROM DAMAGE DUE TO HIS OPERATIONS.
- EXCELSIOR BLANKET SHALL BE USED AT ALL EROSION CONTROL BLANKET LOCATIONS.
- THE COST OF REMOVAL OF HOT-MIX ASPHALT ON TOP OF EXISTING CURB AND GUTTER TO BE REMOVED SHALL BE INCLUDED IN COMBINATION CURB AND GUTTER REMOVAL.
- THE COST OF MAKING ANY SEWER CONNECTIONS TO A PROPOSED OR EXISTING CATCH BASIN, MANHOLE, OR PIPE SHALL BE INCLUDED IN THE COST OF THE NEW SEWER.
- THE TREES LISTED IN THE SUMMARY OF QUANTITIES SHALL BE APPROVED AND HAND PLANTED AT LOCATIONS APPROXIMATELY 4 MILES NORTH OF DECATUR ALONG I-72 AND AS DIRECTED BY THE ROADSIDE MAINTENANCE TECHNICIAN, TOM WILSON, (217)-342-8270. THE CONTRACTOR SHALL BE REQUIRED TO GIVE TWO WEEKS NOTICE TO SCHEDULE A TIME FOR THE LOCATIONS TO BE STAKED AND ON THE SAME DAY THE TREES SHALL BE DELIVERED TO THE JOBSITE FOR ACCEPTANCE OF THE PLANTING MATERIAL BY THE ROADSIDE MAINTENANCE TECHNICIAN.
- WHEN PLANTING THE WHITE PINES THAT ARE SPECIFIED THEY SHALL BE TRIPLE STAKED IN PLACE







- PAVEMENT MARKING SHALL BE APPLIED IN ACCORDANCE WITH SECTION 780 OF THE STANDARD SPECIFICATIONS. SHORT TERM PAVEMENT MARKING SHALL BE APPLIED AS SPECIFIED IN SECTION 703 OF THE STANDARD SPECIFICATIONS. TEMPORARY TAPE SHALL BE USED FOR SHORT TERM PAVEMENT MARKING.
 THE TOTAL QUANTITY OF SHORT TERM PAVEMENT MARKING CONSISTS OF 1126 FEET OF WHITE AND 1474 FEET OF YELLOW USING TWO APPLICATIONS.
 THE TOTAL QUANTITY OF EPOXY PAVEMENT MARKING - LINE 4" CONSISTS OF 2155 FEET OF YELLOW.
 THE TOTAL QUANTITY OF EPOXY PAVEMENT MARKING - LINE 6" CONSISTS OF 1143 FEET OF WHITE AND 216 FEET OF YELLOW.
 THE TOTAL QUANTITY OF EPOXY PAVEMENT MARKING - LINE 12" CONSISTS OF 85 FEET OF YELLOW.
 THE TOTAL QUANTITY OF EPOXY PAVEMENT MARKING - LINE 24" CONSISTS OF 22 FEET OF WHITE.
 THE TOTAL QUANTITY OF EPOXY PAVEMENT MARKING - LETTERS AND SYMBOLS CONSISTS OF 175 SQ FT OF WHITE.
- THE TOTAL QUANTITY OF RAISED REFLECTIVE PAVEMENT MARKERS IS 23 TWO-WAY AMBER AND 14 ONE-WAY CRYSTAL. THE TOTAL QUANTITY OF RAISED REFLECTIVE PAVEMENT MARKERS (BRIDGE) IS 6 TWO-WAY AMBER AND 6 ONE-WAY CRYSTAL.
- THE CONTRACTOR SHALL PROVIDE INTERNET ACCESSIBILITY TO THE HMA PLANT QUALITY CONTROL LAB SO THAT HMA PLANT REPORTS CAN BE E-MAILED TO THE DISTRICT HEADQUARTERS. THIS WORK SHALL BE INCLUDED IN THE COST OF ALL HOT-MIX ASPHALT ITEMS.
- THE CONTRACTOR SHALL USE EITHER RC-70 OR AN EMULSIFIED POLYMER PRIME SS-1HP FOR THE PAY ITEM BITUMINOUS MATERIALS (PRIME COAT).
- THE FOLLOWING UTILITIES ARE INVOLVED IN THIS PROJECT:

NAME/ADDRESS OF UTILITY COMPANY	TYPE	LOCATION	EST. DATE OF RELOCATION
AMERENIP ELECTRIC 2460 N. JASPER ST. DECATUR, IL 62526	ELECTRIC	PROJECT LIMITS	AS REQ'D BY CONSTRUCTION
AMERENIP GAS 370 S. MAIN ST. DECATUR, IL 62521	HP GAS	PARALLEL ON LEFT	SEPT. 1, 2007
CITY OF DECATUR SEWER AND WATER FACILITIES #1 GARY ANDERSON PLAZA #177 DECATUR, IL 62523-1196	SEWER AND WATER	PROJECT LIMITS	SEPT. 21, 2007
INSIGHT COMMUNICATIONS 1275 NORTH WATER STREET DECATUR, IL 62521	CABLE	PROJECT LIMITS	N/A
AT&T 2250 N. JASPER DECATUR, IL 62521	PHONE	PROJECT LIMITS	N/A
LIGHTCORE 14567 N. OUTER FORTY RD. SUITE 500 CHESTERFIELD, MO 63017	FIBER OPTIC	PROJECT LIMITS	N/A

COMMITMENTS

NONE

LEGEND

-  PAVEMENT REMOVAL
-  HMA SURFACE REMOVAL (VARIABLE DEPTH)
-  STONE RIPRAP CLASS A4
-  PCC BASE COURSE WIDENING
-  PCC SURFACE REMOVAL (VARIABLE DEPTH)
-  CLASS C PAVEMENT PATCHING

**GENERAL NOTES,
STANDARDS, AND LEGEND
FAP ROUTE 716 (IL 48)
OAKLAND AVENUE
SECTION (130BR-1)B-1
MACON COUNTY**

CONTRACT NO. 74166				
FAP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	(130BR-1)B-1	MACON	95	2
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT AID		

ESCA
CONSULTANTS, INC.

DESIGNED BY:	ELH	05/07
DRAWN BY:	HAG/JPC	05/07
CHECKED BY:	ELH	06/07
APPROVED BY:	RDP	06/07



SUMMARY OF QUANTITIES

			URBAN 801.FED./201.STATE CONSTRUCTION TYPE CODE
CODE NO.	ITEM	UNIT	X020-2A
20100500	TREE REMOVAL, ACRES	ACRE	0.3
20200100	EARTH EXCAVATION	CU YD	50
20300100	CHANNEL EXCAVATION	CU YD	870
20700400	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	265
20800150	TRENCH BACKFILL	CU YD	56
* 25000110	SEEDING, CLASS 1A	ACRE	0.6
* 25000400	NITROGEN FERTILIZER NUTRIENT	POUND	54
* 25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	54
* 25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	54
* 25100115	MULCH, METHOD 2	ACRE	0.6
* 25100630	EROSION CONTROL BLANKET	SQ YD	166
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	120
28000400	PERIMETER EROSION BARRIER	FOOT	1140
28100107	STONE RIPRAP, CLASS A4	SQ YD	840
28200200	FILTER FABRIC	SQ YD	840
31101000	SUB-BASE GRANULAR MATERIAL, TYPE B	TON	110
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	460
40603085	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70	TON	660
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	276
42001300	PROTECTIVE COAT	SQ YD	814
42001400	BRIDGE APPROACH PAVEMENT (SPECIAL)	SQ YD	447
42001430	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SQ YD	86
42001510	P.C. CONCRETE BRIDGE APPROACH SHOULDER PAVEMENT (SPECIAL)	SQ YD	95
44000100	PAVEMENT REMOVAL	SQ YD	726
44000198	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SQ YD	504
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	992
44201396	CLASS C PATCHES, TYPE IV, 13 INCH	SQ YD	64
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
50200100	STRUCTURE EXCAVATION	CU YD	890
50300225	CONCRETE STRUCTURES	CU YD	349.6
50300255	CONCRETE SUPERSTRUCTURE	CU YD	1052.7
50300260	BRIDGE DECK GROOVING	SQ YD	1032
50300280	CONCRETE ENCASEMENT	CU YD	29.4

SUMMARY OF QUANTITIES

			URBAN 801.FED./201.STATE CONSTRUCTION TYPE CODE
CODE NO.	ITEM	UNIT	X020-2A
50300300	PROTECTIVE COAT	SQ YD	1435
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	172,110
50800515	BAR SPLICERS	EACH	391
50901750	PARAPET RAILING	FOOT	288
51201400	FURNISHING STEEL PILES HP10X42	FOOT	4600
51202305	DRIVING PILES	FOOT	4600
51203400	TEST PILE STEEL HP10X42	EACH	4
51204650	PILE SHOES	EACH	84
51500100	NAME PLATES	EACH	1
52000110	PREFORMED JOINT STRIP SEAL	FOOT	110
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	16
52100520	ANCHOR BOLTS, 1"	EACH	32
550A0050	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	99
55100500	STORM SEWER REMOVAL 12"	FOOT	205
58700300	CONCRETE SEALER	SQ FT	1075
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	140
60109580	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	280
* 60228110	MANHOLES, SANITARY, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	4
60251300	CATCH BASINS TO BE ADJUSTED WITH NEW TYPE 9 FRAME AND GRATE	EACH	1
60251520	CATCH BASINS TO BE ADJUSTED WITH NEW TYPE 11V FRAME AND GRATE	EACH	6
60255500	MANHOLES TO BE ADJUSTED	EACH	2
60257600	MANHOLES TO BE ADJUSTED WITH FRAME AND GRATE (SPECIAL)	EACH	2
60266600	VALVE BOXES TO BE ADJUSTED	EACH	2
60500050	REMOVING CATCH BASINS	EACH	4
60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	697
60608250	COMBINATION CONCRETE CURB AND GUTTER, TYPE M-2.06	FOOT	109
60900150	TYPE B INLET BOX, STANDARD 609006 (SPECIAL)	EACH	2
* 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	2
* 63100167	TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT)	EACH	1
* 63100169	TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (FLARED)	EACH	1
63200310	GUARDRAIL REMOVAL	FOOT	512
63301000	REMOVE AND RE-ERECT STEEL PLATE BEAM GUARD RAIL	FOOT	90
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	13
67100100	MOBILIZATION	L SUM	1

* SPECIALITY ITEM

CONTRACT NO. 74166				
FAP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	(130BR-1)B-1	MACON	95	3
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

ESCA
CONSULTANTS, INC.

DESIGNED BY:	ELH	05/07
DRAWN BY:	JPC	05/07
CHECKED BY:	ELH	06/07
APPROVED BY:	RDP	06/07

SUMMARY OF QUANTITIES
FAP ROUTE 716 (IL 48)
OAKLAND AVENUE
SECTION (130BR-1)B-1
MACON COUNTY

Rev.



SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	URBAN 801.FED./201.STATE CONSTRUCTION TYPE CODE X020-2A
70101800	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L SUM	1
70101835	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 22	L SUM	1
70102632	TRAFFIC CONTROL AND PROTECTION, STANDARD 701602	L SUM	1
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	30
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	2600
70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	175
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	2155
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	1359
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	85
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	22
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	2570
70400100	TEMPORARY CONCRETE BARRIER	FOOT	350
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	350
72400100	REMOVE SIGN PANEL ASSEMBLY - TYPE A	EACH	3
* 78005100	EPOXY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	175
* 78005110	EPOXY PAVEMENT MARKING - LINE 4"	FOOT	2155
* 78005130	EPOXY PAVEMENT MARKING - LINE 6"	FOOT	1359
* 78005150	EPOXY PAVEMENT MARKING - LINE 12"	FOOT	85
* 78005180	EPOXY PAVEMENT MARKING - LINE 24"	FOOT	22
* 78200410	GUARDRAIL MARKERS, TYPE A	EACH	2
* 78200520	BARRIER WALL MARKERS, TYPE B	EACH	4
* 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	2
78300100	PAVEMENT MARKING REMOVAL	SQ FT	300
* A2005316	TREE, LIQUIDAMBAR STYRACIFLUA (AMERICAN SWEETGUM), 2" CALIPER, BALLED AND BURLAPPED	EACH	10
* A2005416	TREE, LIRIODENDRON TULIPIFERA (TULIP TREE), 2" CALIPER, BALLED AND BURLAPPED	EACH	10
* A2005816	TREE, PLATANUS OCCIDENTALIS (SYCAMORE), 2" CALIPER, BALLED AND BURLAPPED	EACH	10
* B2001116	TREE, CERCIS CANADENSIS (EASTERN REDBUD), 2" CALIPER, TREE FORM, BALLED AND BURLAPPED	EACH	10
* D2002972	EVERGREEN, PINUS STROBUS (EASTERN WHITE PINE), 6' HEIGHT, BALLED AND BURLAPPED	EACH	10
* X0320374	PLUG EXISTING SANITARY SEWERS	EACH	1
* X0320591	SANITARY MANHOLES TO BE REMOVED	EACH	3
* X0322786	SANITARY SEWER TESTING	L SUM	1

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	URBAN 801.FED./201.STATE CONSTRUCTION TYPE CODE X020-2A
* X0323200	SANITARY SEWER, DUCTILE IRON, 12"	FOOT	398
X0323988	TEMPORARY SOIL RETENTION SYSTEM	SQ FT	370
* X0325352	PIPE SUPPORT	EACH	16
* X0487800	SANITARY SEWER REMOVAL 12"	FOOT	356
* X0840000	SANITARY SEWER REMOVAL 8"	FOOT	35
X3540550	PORTLAND CEMENT CONCRETE BASE COURSE WIDENING 12-1/2"	SQ YD	18
X4400100	PORTLAND CEMENT CONCRETE SURFACE REMOVAL (VARIABLE DEPTH)	SQ YD	12
X5020501	UNDERWATER STRUCTURE EXCAVATION PROTECTION - LOCATION 1	EACH	1
X5020502	UNDERWATER STRUCTURE EXCAVATION PROTECTION - LOCATION 2	EACH	1
X0323080	DRAINAGE SCUPPERS 25-12	EACH	6
Z0030240	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 2	EACH	2
Z0030340	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 2	EACH	2
* Z0058000	SANITARY SEWER, SPECIAL	FOOT	356
Z0073400	TEMPORARY SUPPORT SYSTEM	EACH	1
Z0076600	TRAINEES	—HOUR—	—500—
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	37
78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	12

* SPECIALITY ITEM

CONTRACT NO. 74166				
FAP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	(130BR-1)B-1	MACON	95	4
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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APPROVED BY:	RDP	06/07

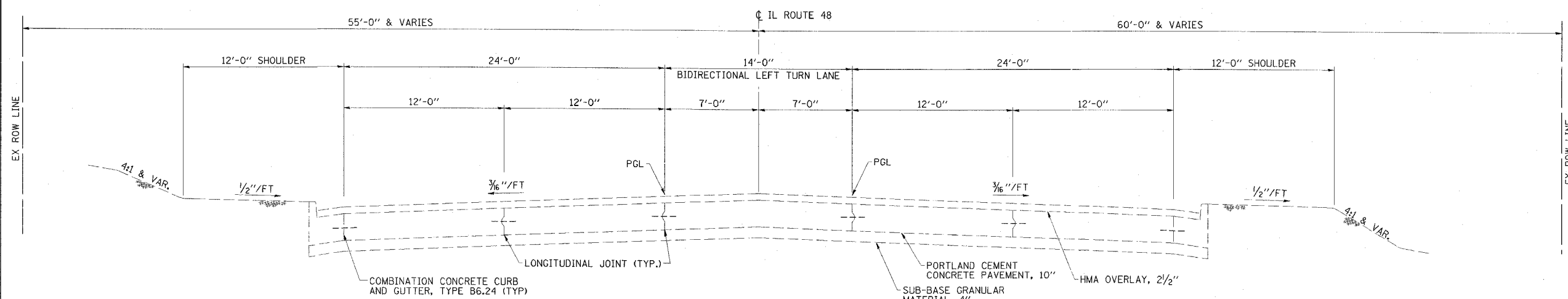
SUMMARY OF QUANTITIES
FAP ROUTE 716 (IL 48)
OAKLAND AVENUE
SECTION (130BR-1)B-1
MACON COUNTY

Rev.



CONTRACT NO. 74166

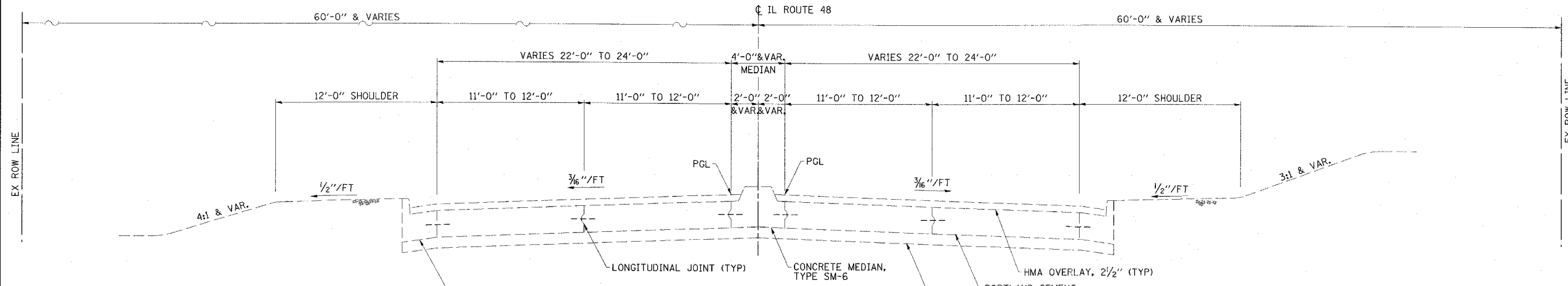
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STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



EXISTING TYPICAL CROSS SECTION

FAP 716 (IL ROUTE 48)

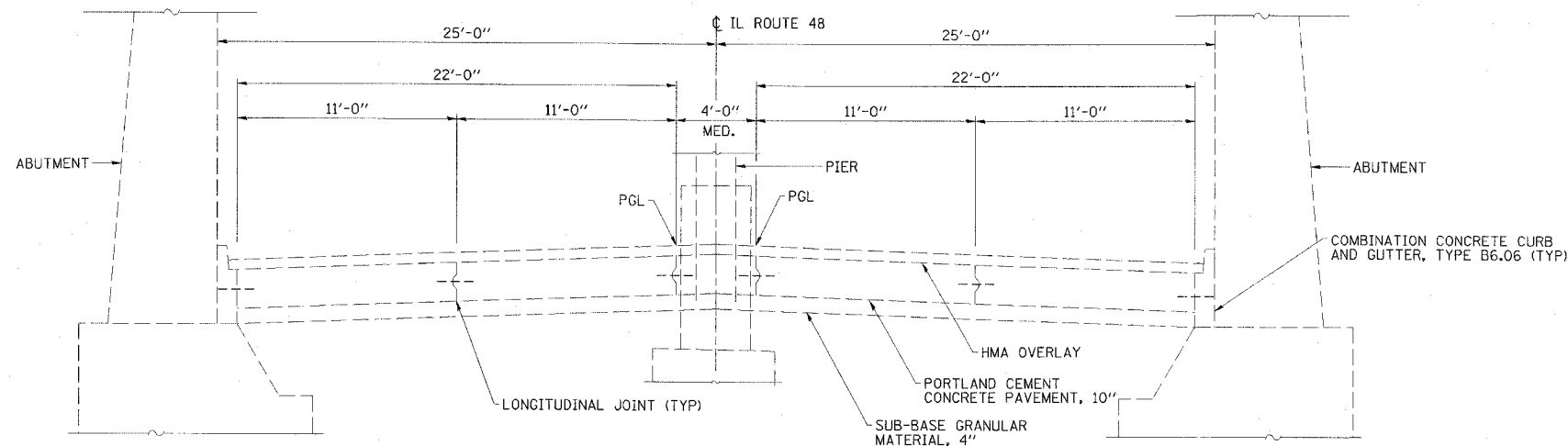
STA 126+50 TO STA 128+97.10 RT & TO STA 129+30.10 LT
STA 136+82.90 TO STA 145+00



EXISTING TYPICAL CROSS SECTION

FAP 716 (IL ROUTE 48)

STA 128+97.10 RT & STA 129+30.10 LT & TO STA 130+78.10
STA 132+85.10 TO STA 134+71.30



EXISTING TYPICAL CROSS SECTION

FAP 716 (IL ROUTE 48)

STA 130+78.10 TO STA 132+85.10

EXISTING TYPICAL SECTIONS
FAP ROUTE 716 (IL 48)
OAKLAND AVENUE
SECTION (130BR-1)B-1
MACON COUNTY

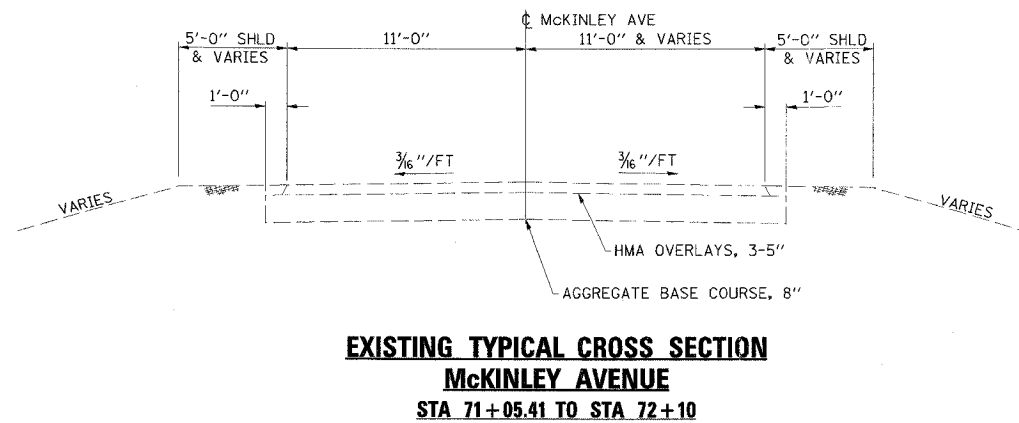
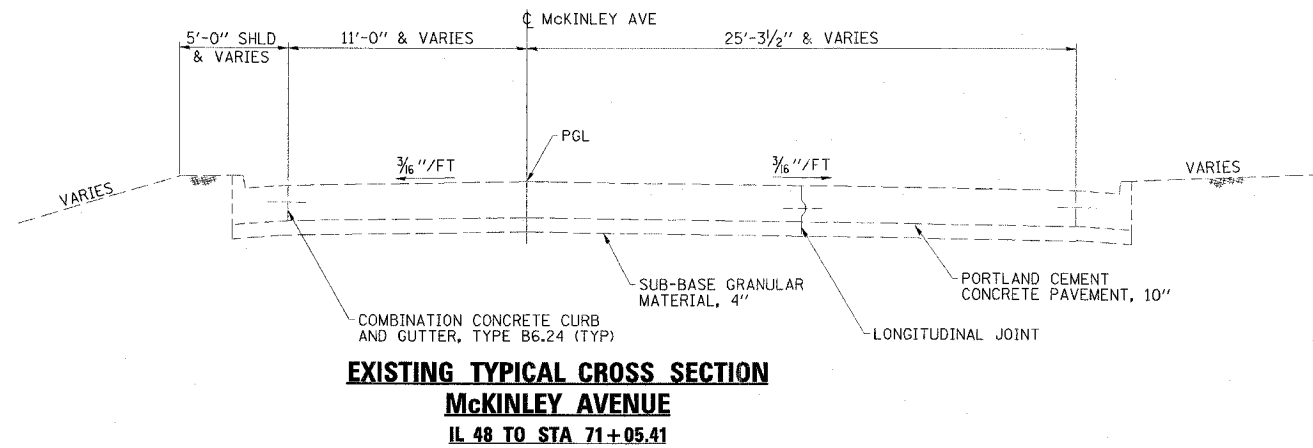
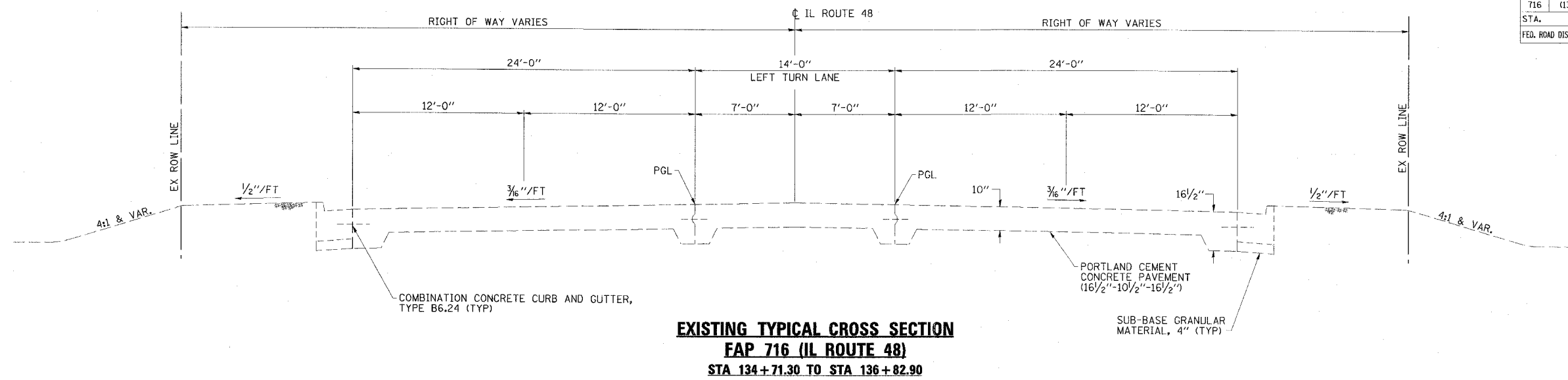
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CONTRACT NO. 74166

FAP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	(130BR-1)B-1	MACON	95	6
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



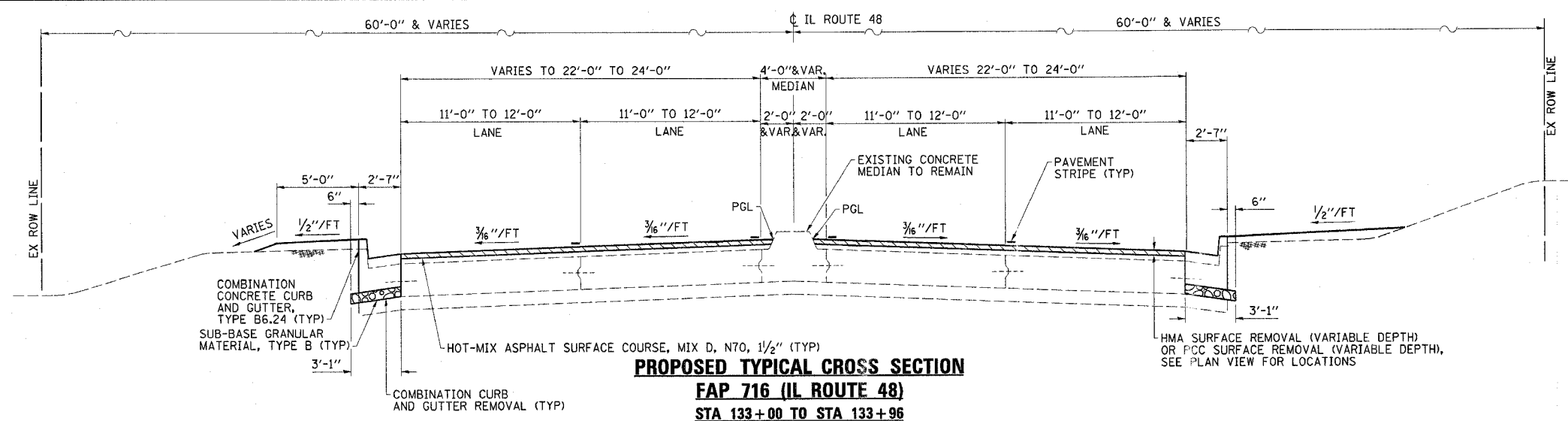
**EXISTING TYPICAL SECTIONS
FAP ROUTE 716 (IL 48)
OAKLAND AVENUE
SECTION (130BR-1)B-1
MACON COUNTY**

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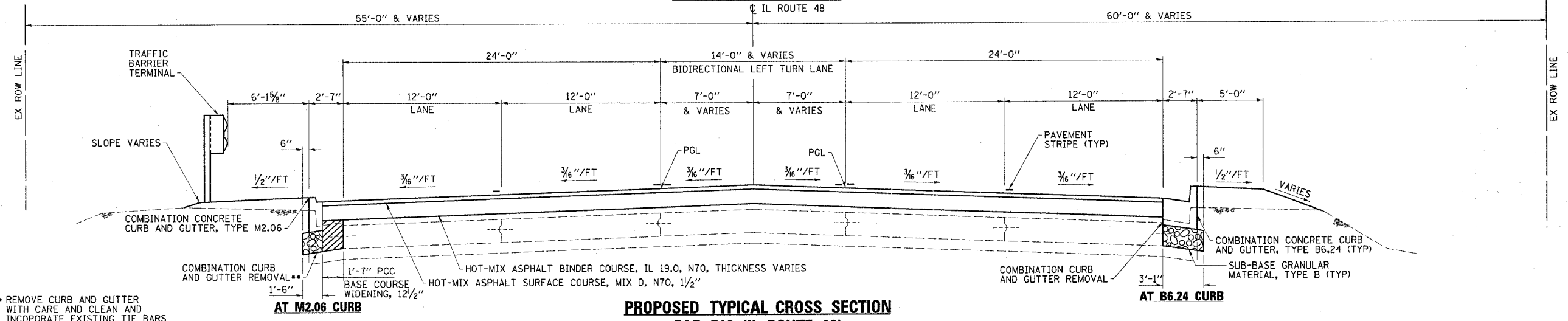
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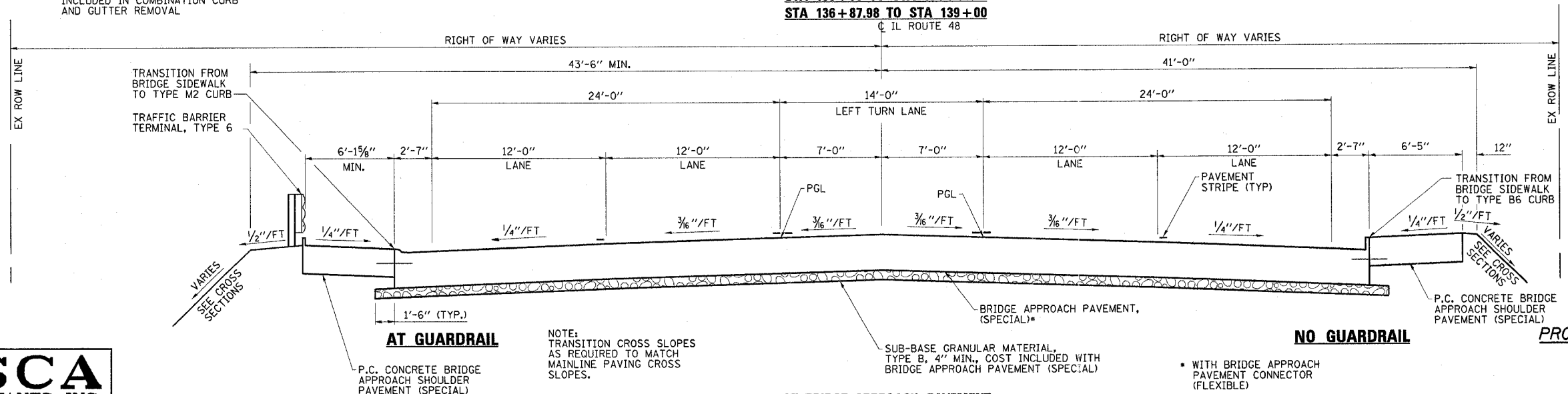
CONTRACT NO. 74166				
FAP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	(130BR-1)B-1	MACON	95	7
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



PROPOSED TYPICAL CROSS SECTION
FAP 716 (IL ROUTE 48)
STA 133+00 TO STA 133+96



PROPOSED TYPICAL CROSS SECTION
FAP 716 (IL ROUTE 48)
STA 133+96 TO STA 134+68.68
STA 136+87.98 TO STA 139+00



PROPOSED TYPICAL CROSS SECTION
AT BRIDGE APPROACH PAVEMENT
STA 134+68.68 TO STA 136+87.98
BRIDGE OMISSION STA 135+04.68 TO STA 136+51.98

** REMOVE CURB AND GUTTER WITH CARE AND CLEAN AND INCORPORATE EXISTING TIE BARS INTO PROPOSED PCC BASE COURSE WIDENING CONSTRUCTION, COST INCLUDED IN COMBINATION CURB AND GUTTER REMOVAL

NOTE: TRANSITION CROSS SLOPES AS REQUIRED TO MATCH MAINLINE PAVING CROSS SLOPES.

* WITH BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)

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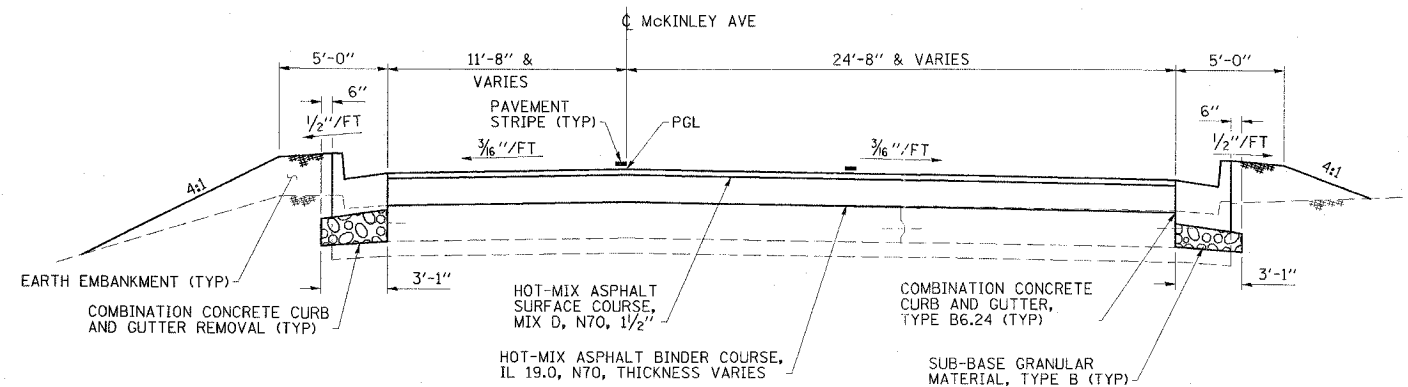
PROPOSED TYPICAL SECTIONS
FAP ROUTE 716 (IL 48)
OAKLAND AVENUE
SECTION (130BR-1)B-1
MACON COUNTY



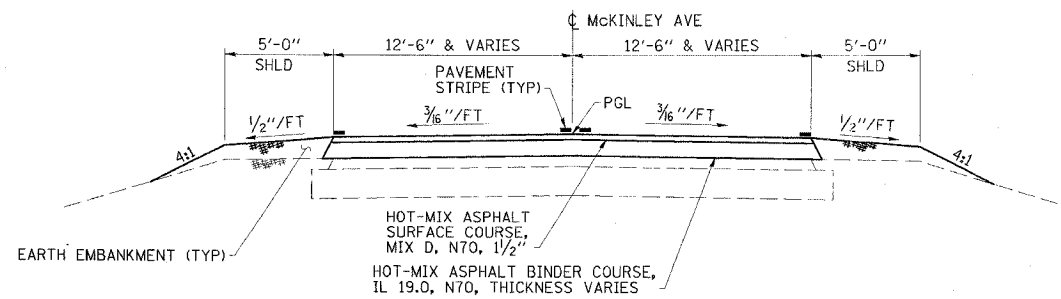
CONTRACT NO. 74166				
FAP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	(130BR-1)B-1	MACON	95	8
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

BITUMINOUS MIXTURES REQUIREMENTS SCHEDULE

	SURFACE	APPR PVMT CONNECTOR, BINDER COURSE
PG GRADE	PG 64-22	PG 64-22
DESIGN AIR VOIDS	4% @ N70	4% @ N70
MIXTURE COMPOSITION	IL 12.5 OR IL 9.5	IL 19.0
FRICTION AGGREGATE	MIXTURE D	NA



**PROPOSED TYPICAL CROSS SECTION
McKINLEY AVENUE
IL 48 TO STA 71+05.41**



**PROPOSED TYPICAL CROSS SECTION
McKINLEY AVENUE
STA 71+05.41 TO STA 72+00**

**PROPOSED TYPICAL SECTIONS
FAP ROUTE 716 (IL 48)
OAKLAND AVENUE
SECTION (130BR-1)B-1
MACON COUNTY**

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FAP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	(130BR-1)B-1	MACON	95	9
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

EARTHWORK SCHEDULE

LOCATION	SUITABLE EARTH EXCAVATION	SUITABLE EARTH EXCAVATION ADJUSTED FOR SHRINKAGE	SUITABLE INCIDENTAL EXCAVATION MATERIAL	INCIDENTAL EXCAVATION MATERIAL ADJUSTED FOR SHRINKAGE	EMBANKMENT (NOT A PAY ITEM)	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)
	CU YD	CU YD	CU YD	CU YD	CU YD	CU YD
LEFT SIDE CUTS & FILLS	40	30			163	-133
RIGHT SIDE CUTS & FILLS	10	7			117	-110
STRUCTURE EXCAVATION			668	500		+500
CHANNEL EXCAVATION			217	163		+163
TOTALS	50	37	985	663	280	+420

NOTE:

EXCAVATION USED AS EMBANKMENT = (SUITABLE EARTH EXCAVATION + SUITABLE INCIDENTAL EXCAVATION)*0.75

PAVING SCHEDULE

LOCATION	BITUMINOUS MATERIALS (PRIME COAT)	HOT-MIX ASPHALT SURFACE CSE. MIX D, N70	HOT-MIX ASPHALT BINDER CSE. IL-19.0, N70	PCC BASE COURSE WID 12 1/2"
	GALLON	TON	TON	SQ YD
NORTH OF SN 058-0135	222	128	340	9
SOUTH OF SN 058-0135	238	148	320	9
TOTALS	460	276	660	18

SEEDING SCHEDULE

LOCATION	SEEDING, CLASS 1A	NITROGEN FERTILIZER NUTRIENT	PHOSPHORUS FERTILIZER NUTRIENT	POTASSIUM FERTILIZER NUTRIENT	MULCH, METHOD 2
	ACRE	POUND	POUND	POUND	ACRE
NORTHWEST QUADRANT	0.25	23	23	23	0.25
SOUTHWEST QUADRANT	0.06	5	5	5	0.06
NORTHEAST QUADRANT	0.13	12	12	12	0.13
SOUTHEAST QUADRANT	0.16	14	14	14	0.16
TOTALS	0.6	54	54	54	0.6

TREE REMOVAL (ACRES) SCHEDULE

LOCATION	ACRES
SOUTHWEST QUADRANT	0.07
NORTHWEST QUADRANT	0.18
NORTHEAST QUADRANT	0
SOUTHEAST QUADRANT	0.05
TOTAL	0.30

EROSION CONTROL SCHEDULE

LOCATION	EROSION CONTROL BLANKET	PERIMETER EROSION BARRIER	TEMPORARY EROSION CONTROL SEEDING (2 APPLICATIONS)
	SQ YD	FOOT	POUND
NORTHWEST QUADRANT	44	660	50
SOUTHWEST QUADRANT	39	480	12
NORTHEAST QUADRANT	41		26
SOUTHEAST QUADRANT	42		32
TOTALS	166	1140	120

REMOVAL SCHEDULE

LOCATION	PAVEMENT REMOVAL	HMA SURF REMOVAL (VAR DEPTH)	STORM SEWER REMOVAL	GUARDRAIL REMOVAL	COMBINATION CURB & GUTTER REMOVAL	REMOVING CATCH BASINS	PCC SURF REMOVAL (VAR DEPTH)	SANITARY SEWER REMOVAL 8"	SANITARY SEWER REMOVAL 12"	SAN. MH TO BE REMOVED
	SQ YD	SQ YD	FOOT	FOOT	FOOT	EACH	SQ YD	FOOT	FOOT	EACH
NORTH OF SN 058-0135	368		120		527	2				
SOUTH OF SN 058-0135	358		85		465	2				
STA 133+00-133+58		311					12			
STA 138+84-139+00		113								
STA 71+72-72+00		80								
NORTHWEST CORNER				99				35	356	
NORTHEAST CORNER				285						
SOUTHEAST CORNER				128						
SOUTHWEST CORNER										
STA 134+76, 38' LT										1
STA 136+83, 37' LT										1
STA 138+14, 20' LT										1
TOTALS	726	504	205	512	992	4	12	35	356	3

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SCHEDULES OF QUANTITIES
FAP ROUTE 716 (IL 48)
OAKLAND AVENUE
SECTION (130BR-1)B-1
MACON COUNTY



CONTRACT NO. 74166

FAP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	(130BR-1)B-1	MACON	95	10
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

APPROACH DRAINAGE SCHEDULE

LOCATION	PIPE UNDERDRAINS FOR STRUCTURES 4"	TYPE B INLET BOX STD 609006 (SPECIAL)	STORM SEWERS CL A TY1 12"
	FOOT	EACH	FOOT
STRUCTURE NO. 058-0135 - NW CORNER	140	1	87
STRUCTURE NO. 058-0135 - SW CORNER	140		
STRUCTURE NO. 058-0135 - NE CORNER		1	12
STRUCTURE NO. 058-0135 - SE CORNER			
TOTALS	280	2	99

BRIDGE APPROACH PAVEMENT SCHEDULE

LOCATION	BRIDGE APPROACH PAVEMENT (SPECIAL)	PROTECTIVE COAT	CONNECTOR (FLEXIBLE)	BRIDGE APPR SHLD PAVEMENT (SPECIAL)
	SQ YD	SQ YD	SQ YD	SQ YD
STRUCTURE NO. 058-0135 - NORTH APPROACH	223	274	43	49
STRUCTURE NO. 058-0135 - SOUTH APPROACH	224	275	43	46
TOTALS	447	549	86	95

PAVEMENT MARKING REMOVAL SCHEDULE

LOCATION	PAVEMENT MARKING DESCRIPTION	WORK ZONE PAVEMENT MARKING REMOVAL	PAVEMENT MARKING REMOVAL
		SQ FT	SQ FT
	SHORT-TERM	868	
	TEMPORARY	1702	
	ARROWS		95
STA 126+25-127+20	LINES		40
STA 127+20-128+10	LINES		60
STA 139+00-140+25	LINES		52
STA 140+25-141+50	LINES		53
TOTALS		2570	300

GUARDRAIL SCHEDULE

LOCATION	TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT)	TRAFFIC BARRIER TERMINAL TYPE 6	TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (FLARED)	GUARDRAIL MARKERS, TYPE A	BARRIER WALL MARKERS, TYPE B	TERMINAL MARKER-DIRECT APPLIED
	EACH	EACH	EACH	EACH	EACH	EACH
STRUCTURE NO. 058-0135 - NW CORNER	1	1		1		1
STRUCTURE NO. 058-0135 - SW CORNER						
STRUCTURE NO. 058-0135 - NE CORNER						
STRUCTURE NO. 058-0135 - SE CORNER		1	1	1		1
STRUCTURE NO. 058-0135 - BRIDGE					4	
TOTALS	1	2	1	2	4	2

PAVEMENT MARKING SCHEDULE

LOCATION	DESCRIPTION	SHORT-TERM PAVEMENT MARKING (2 APPLICATIONS)	EPOXY PAVEMENT MARKING - LINE				TEMPORARY PAVEMENT MARKING - LINE				EPOXY PAVEMENT MKG - LETTERS AND SYMBOLS	TEMPORARY PAVEMENT MKG - LETTERS AND SYMBOLS	
			4"		6"		12"		24"				
			FOOT	FOOT	FOOT	FOOT	FOOT	FOOT	FOOT	FOOT			SQ FT
SEE PAVEMENT MARKING SHEETS	SOLID WHITE LINE	60		393						393			
	STOP BARS	130							22				
	ARROWS	330										175	175
	SOLID YELLOW LINE	1290	1925	216	85			1925	216	85			
	SKIP-DASH YELLOW LTL LINE	190	230					230					
	SKIP-DASH WHITE LANE LINE	600		750					750				
TOTALS		2600	2155	1359	85	22	2155	1359	85	22	175	175	

SIGN REMOVAL SCHEDULE

LOCATION	REMOVE SIGN PANEL ASSEMBLY TYPE A
	EACH
STA 133+20, RT	1
STA 137+10, LT	1
STA 138+90, LT	1
TOTAL	3

RAISED REFLECTIVE PAVEMENT MARKER SCHEDULE

	RRPM	RRPM (BRIDGE)
	EACH	EACH
TWO-WAY AMBER	23	6
ONE-WAY CRYSTAL	14	6
TOTALS	37	12

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SCHEDULES OF QUANTITIES
FAP ROUTE 716 (IL 48)
OAKLAND AVENUE
SECTION (130BR-1)B-1
MACON COUNTY



CONTRACT NO. 74166

FAP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	(130BR-1)B-1	MACON	95	11
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

APPURTENANCE ADJUSTMENT SCHEDULE

LOCATION	VALVE BOXES TO BE ADJUSTED	MH TO BE ADJUSTED	MH TO BE ADJUSTED WITH F&G (SPECIAL)	CB TO BE ADJUSTED WITH TYPE 11V F&G	CB TO BE ADJUSTED WITH TYPE 9 F&G
	EACH	EACH	EACH	EACH	EACH
STA 133+04, 25.64' LT				1	
STA 133+40, 26.72' LT				1	
STA 133+68, 54.2' RT			1		
STA 133+81, 28' RT	1				
STA 133+81, 40' RT	1				
STA 134+30, 51.3' RT			1		
STA 135+02, 49' RT		1			
STA 136+96, 32.56' LT					1
STA 137+00, 45' RT		1			
STA 138+21, 32.76' LT				1	
STA 138+47, 32.76' RT				1	
STA 138+75, 32.76' LT				1	
STA 138+86, 32.76' LT				1	
TOTALS	2	2	2	6	1

TRENCH BACKFILL SCHEDULE

LOCATION	CU YD
12" SS REMOVAL S. OF SN 058-0135	23
PR 12" SS N. OF BRIDGE	13
PR 12" SAN. SEWER N. OF SN 058-0135	20
TOTAL	56

SANITARY SEWER SCHEDULE

LOCATION	SANITARY MH, 4' TYPE 1F, CL1D	SANITARY SEWER DUCTILE IRON 12"	SANITARY SEWER, SPECIAL	PIPE SUPPORT	TEMPORARY SUPPORT SYSTEM	PLUG EX SANITARY SEWERS
	EACH	FOOT	FOOT	EACH	EACH	EACH
SN 058-0135				16		
STAGE I		398	356		1	1
STA 134+60, 42' LT	1					
STA 136+55, 42' LT	1					
STA 138+14, 57' LT	1					
STA 138+14, 20' LT	1					
TOTALS	4	398	356	16	1	1

COMBINATION CURB AND GUTTER SCHEDULE

LOCATION	CCC&G TYPE B6.24	CCC&G TYPE M2.06
	FOOT	FOOT
STA 133+00 TO MCKINLEY, RT	96	
STA 133+00 TO SN 058-0135, LT	146	
MCKINLEY TO STA 134+50, RT	77	
STA 137+05 TO STA 138+93, LT	189	
SN 058-0135 TO STA 139+00, RT	189	
STA 134+50 TO SN 058-0135, RT		56
SN 058-0135 TO STA 137+05, LT		53
TOTALS	697	109

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FAP ROUTE 716 (IL 48)
OAKLAND AVENUE
SECTION (130BR-1)B-1
MACON COUNTY



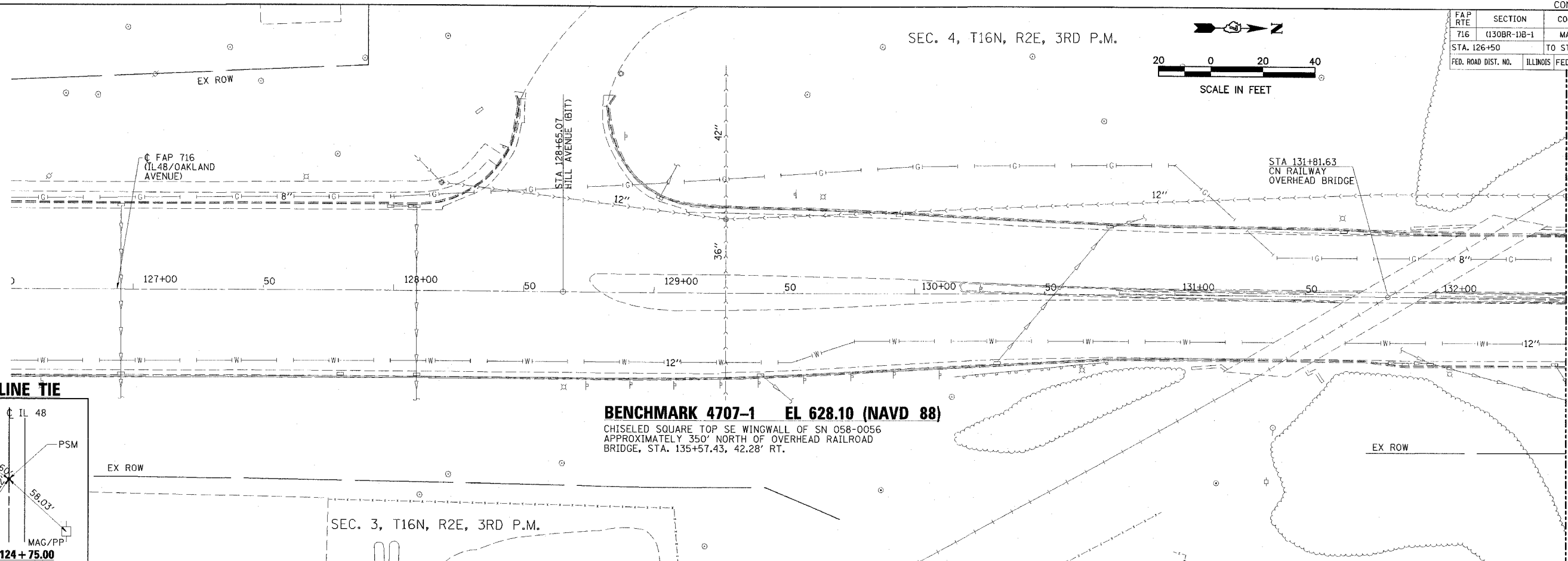
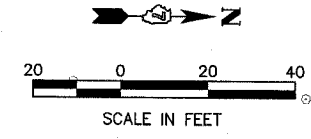
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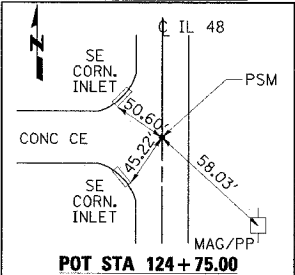
CONTRACT NO. 74166

FAP RTE	SECTION	COUNTY	TOTAL SHEETS
716	(130BR-1B-1	MACON	95
	STA. 126+50	TO STA. 132+50	12
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	

SEC. 4, T16N, R2E, 3RD P.M.

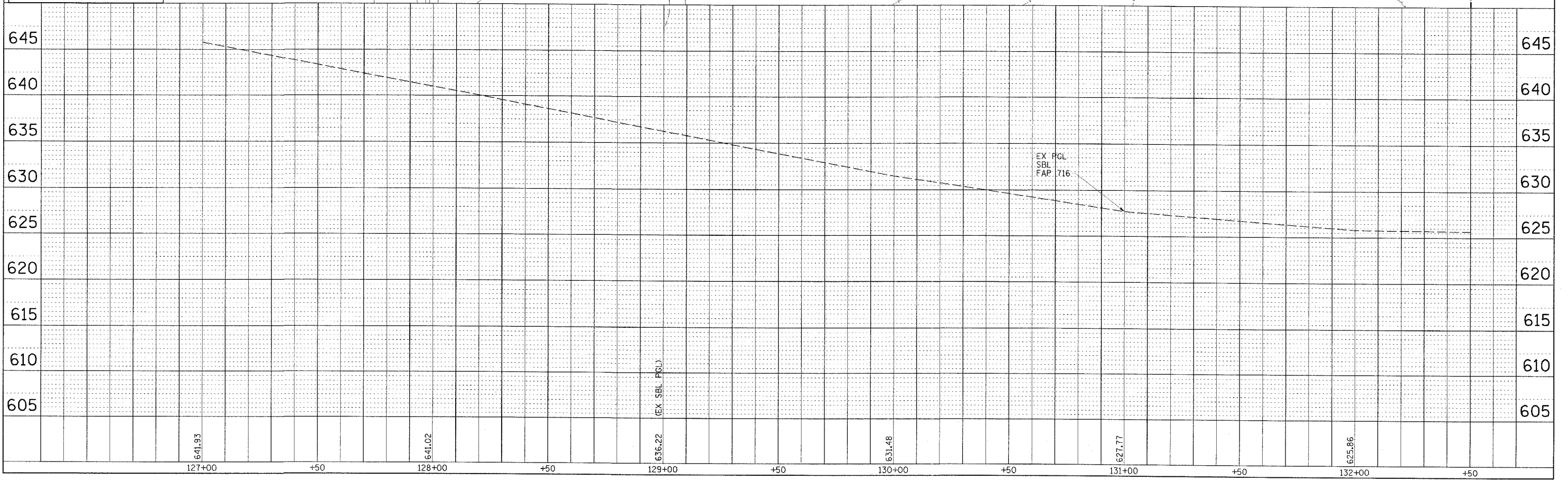


CENTERLINE TIE



BENCHMARK 4707-1 EL 628.10 (NAVD 88)
 CHISELED SQUARE TOP SE WINGWALL OF SN 058-0056
 APPROXIMATELY 350' NORTH OF OVERHEAD RAILROAD
 BRIDGE, STA. 135+57.43, 42.28' RT.

MATCH LINE STA 132+50
SEE SHT. 13 FOR CONT.

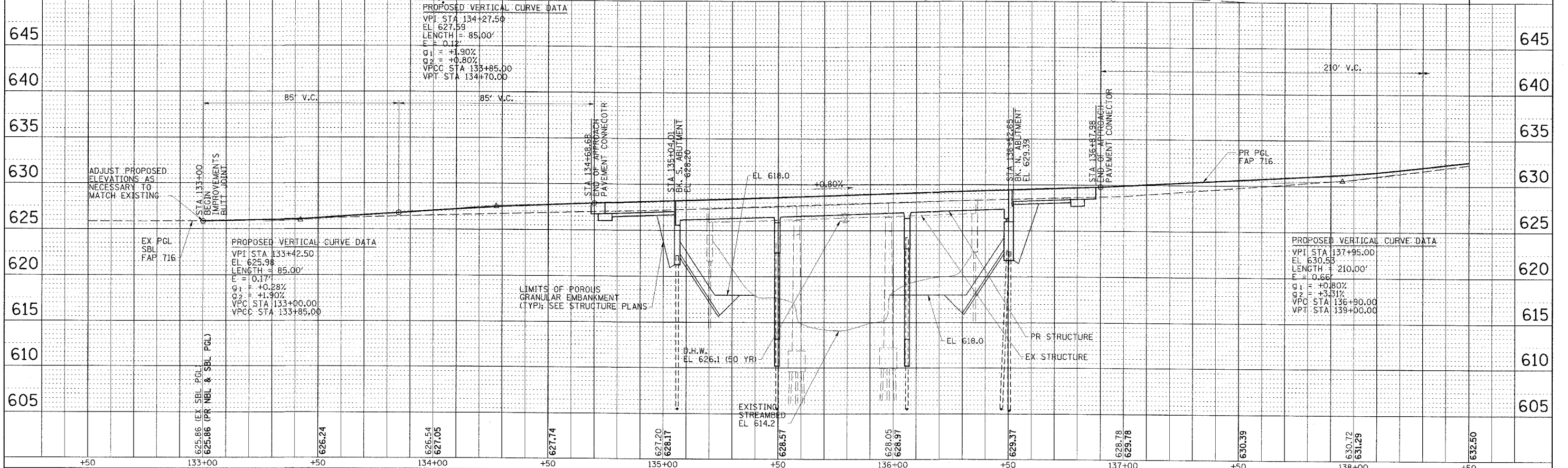
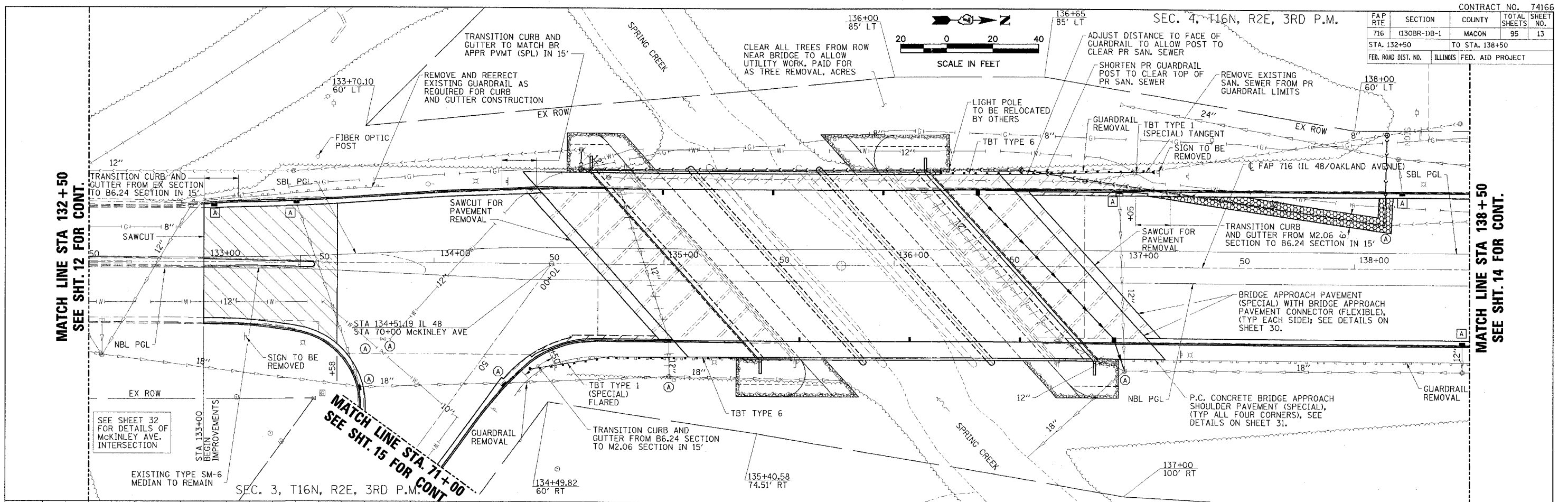




PLAN	DATE	BY
NO.		
NO.		
NO.		
NO.		

PROFILE	DATE	BY
NO.		
NO.		
NO.		
NO.		

CONTRACT NO. 74166	
FAP RTE	SECTION
716	(130BR-1)B-1
COUNTY	TOTAL SHEETS
MACON	95
NO. SHEETS	13
STA. 132+50 TO STA. 138+50	
ILLINOIS FED. AID PROJECT	



FAP 716 (ILLINOIS 48) PLAN AND PROFILE
 STA 132+50 TO STA 138+50

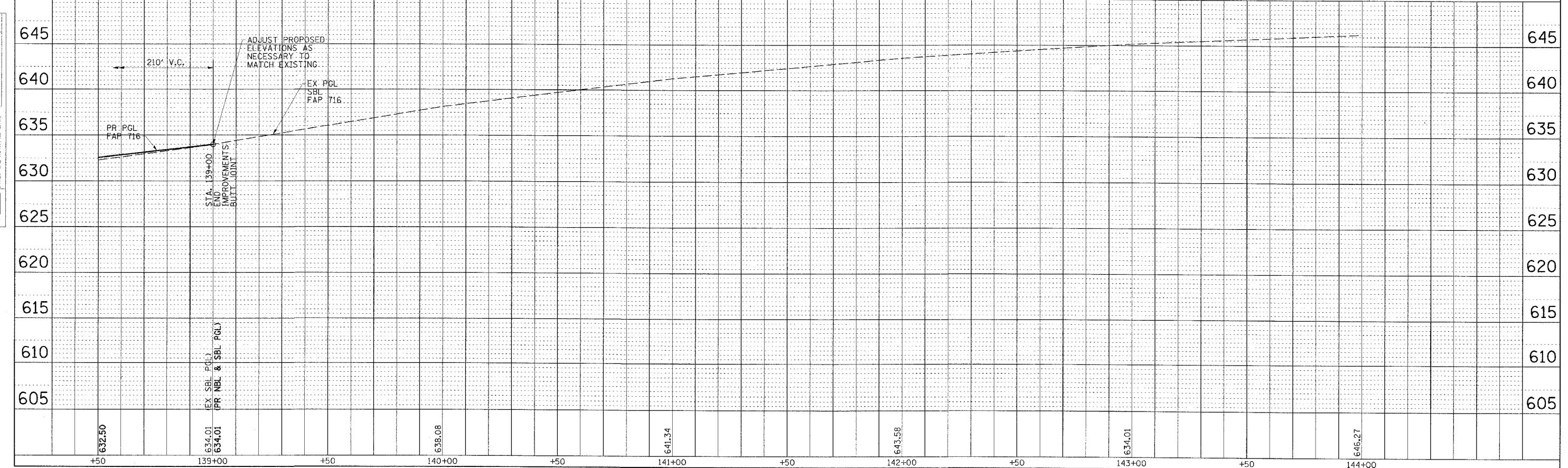
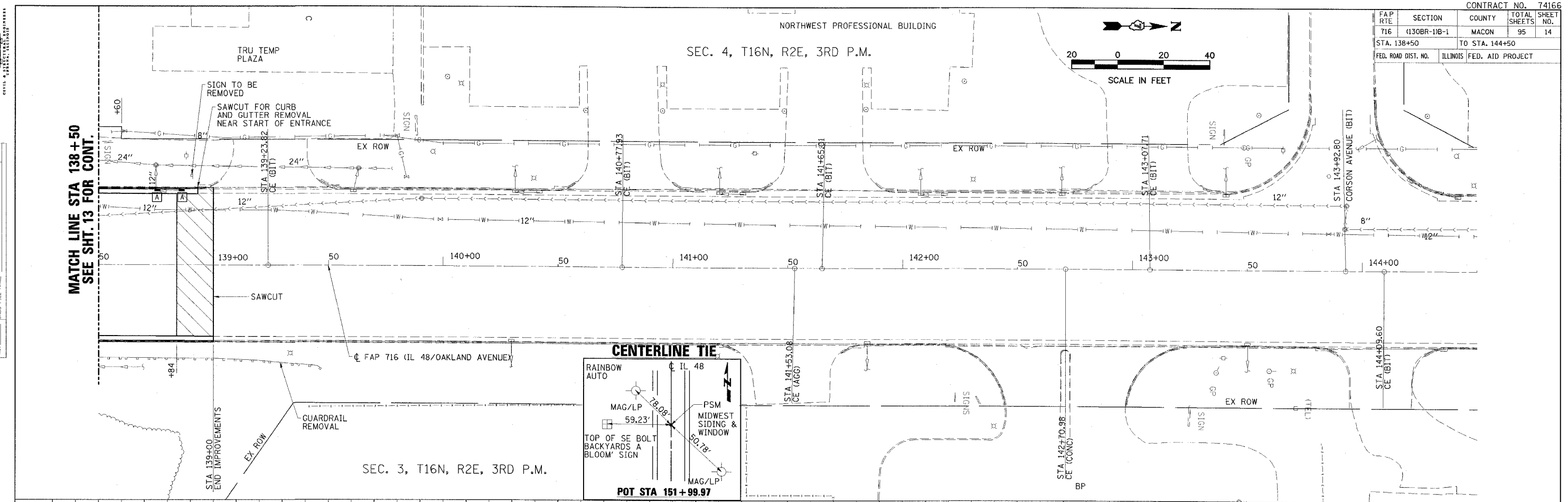


PLAN	NO.	DATE
NO.	BY	
NO.	BY	
NO.	BY	
NO.	BY	

PROFILE	NO.	DATE
NO.	BY	
NO.	BY	
NO.	BY	
NO.	BY	

CONTRACT NO. 74166

FAP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	(130BR-1)B-1	MACON	95	14
STA. 138+50		TO STA. 144+50		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



FAP 716 (ILLINOIS 48) PLAN AND PROFILE
 STA 138+50 TO STA 144+50



PLAN	REVISION	DATE
NO.	BY	
NO.	BY	
NO.	BY	
NO.	BY	
NO.	BY	
NO.	BY	
NO.	BY	
NO.	BY	
NO.	BY	

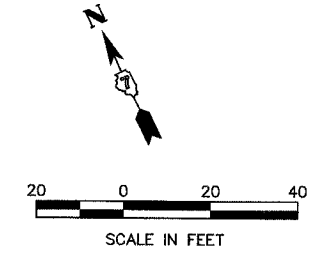
PROFILE	REVISION	DATE
NO.	BY	
NO.	BY	
NO.	BY	
NO.	BY	
NO.	BY	
NO.	BY	
NO.	BY	
NO.	BY	
NO.	BY	

SEC. 3, T16N, R2E, 3RD P.M.

DAVITA DIALYSIS CENTER

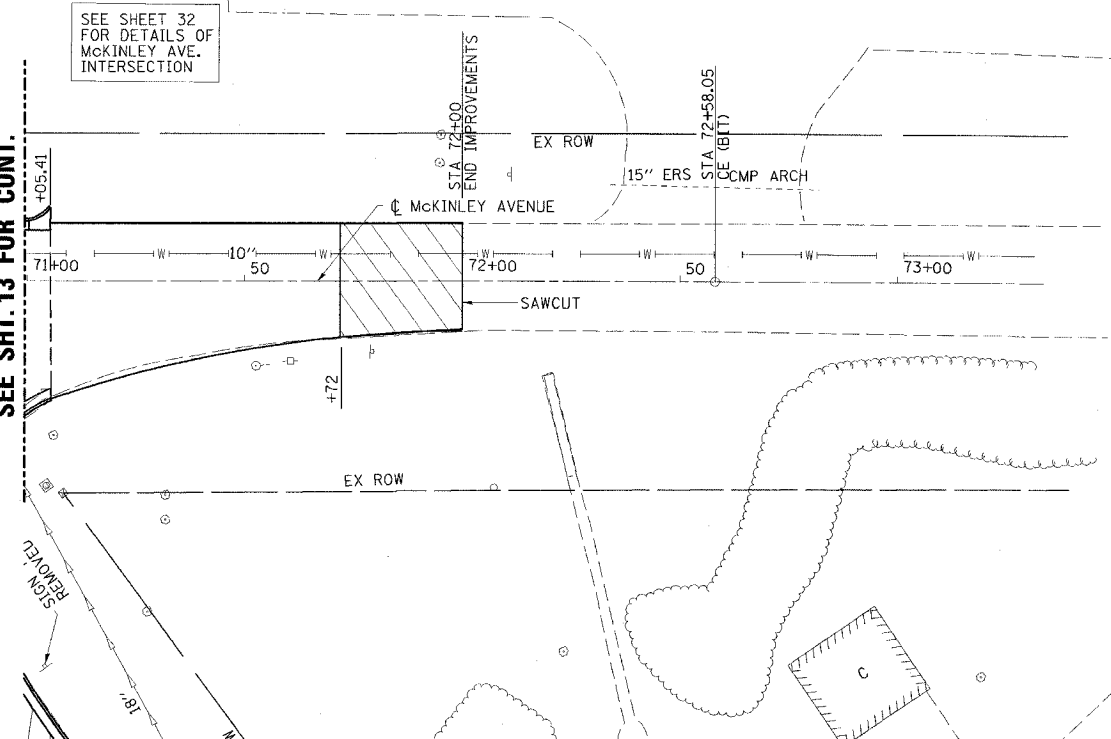
CONTRACT NO. 74166

FAP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	(130BR-1)B-1	MACON	95	15
STA. 71+00		TO STA. 73+00		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



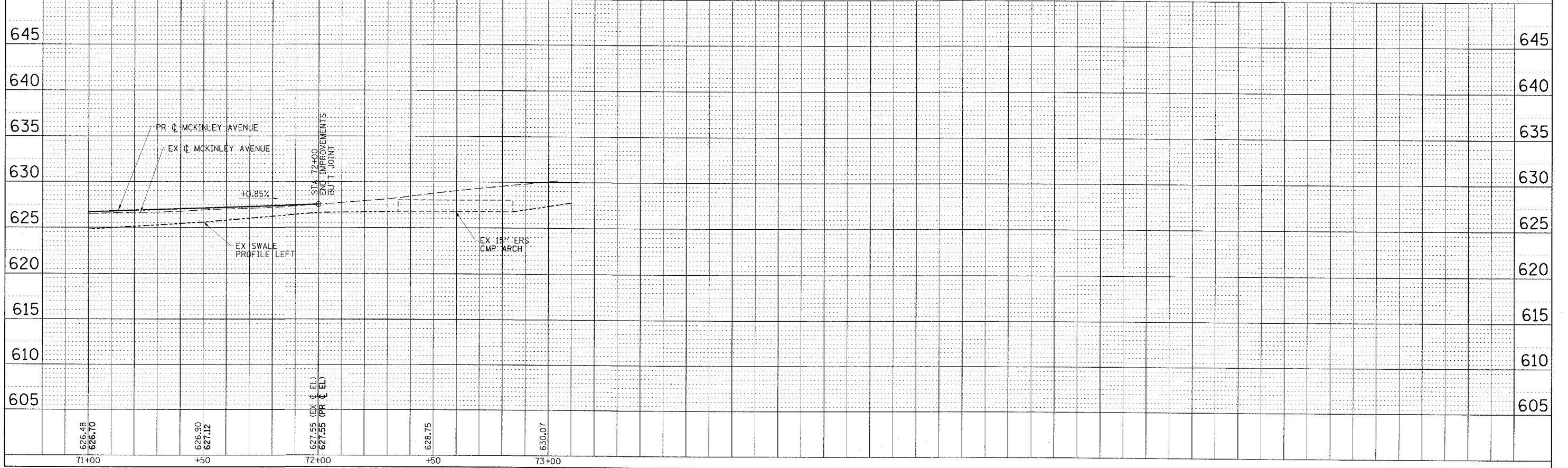
MATCH LINE STA 71+00
SEE SHT. 13 FOR CONT.

SEE SHEET 32 FOR DETAILS OF MCKINLEY AVE. INTERSECTION



BENCHMARK 4707-1 EL 628.10 (NAVD 88)

CHISELED SQUARE TOP SE WINGWALL OF SN 058-0056 APPROXIMATELY 350' NORTH OF OVERHEAD RAILROAD BRIDGE, STA. 135+57.43, 42.28' RT.



MCKINLEY AVENUE PLAN AND PROFILE

STA 71+00 TO STA 73+00



NOTES

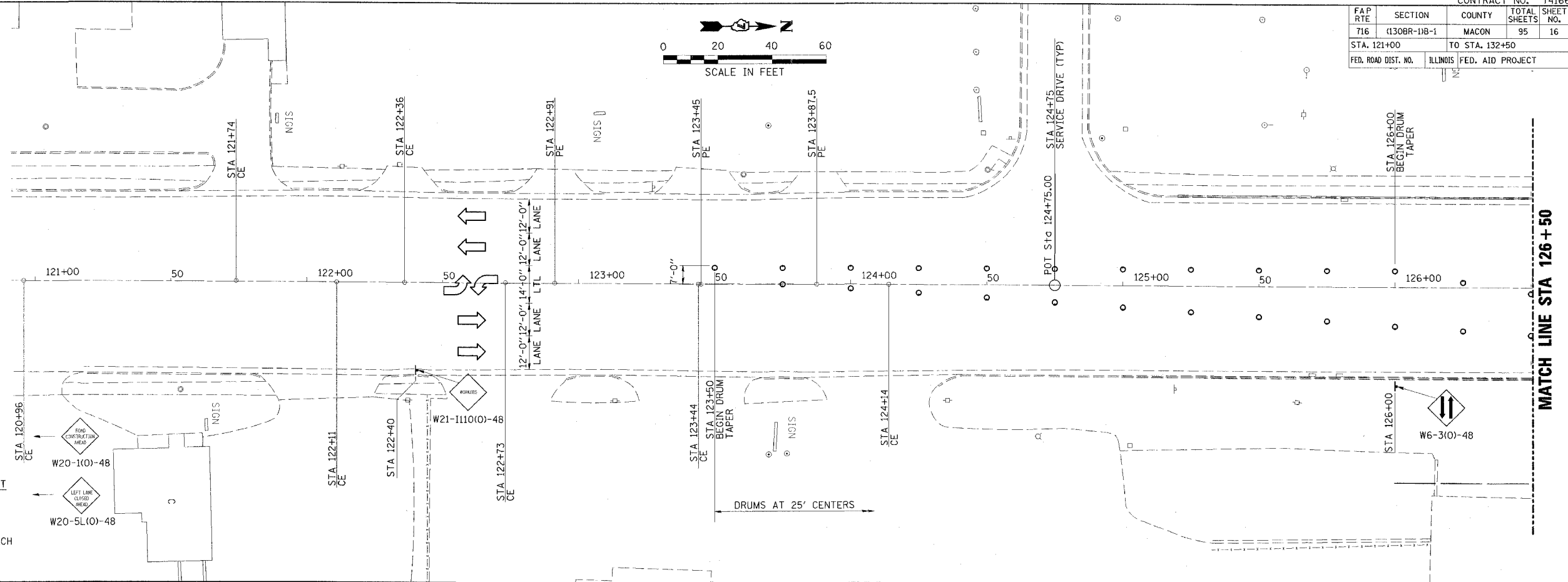
1. TRAFFIC CONTROL SHALL BE ERECTED AS SHOWN AND ACCORDING TO TRAFFIC CONTROL AND PROTECTION, STANDARD 701602. SEE STANDARD FOR LOCATIONS OF ITEMS NOT SHOWN HERE.
2. CONTRACTOR PROVIDE AND INSTALL LINEAR DELINEATION PANELS AND DOUBLE VERTICAL PANELS WITH STEADY BURNING LIGHTS FOR TEMPORARY CONCRETE BARRIER. SEE DETAILS ON SHEET 21.
3. THE LEFT TURN LANE IS CURRENTLY CLOSED DUE TO THE CONDITION OF THE EXISTING BRIDGE. TRAFFIC WILL NOT BE ALLOWED ON THIS PORTION OF THE STRUCTURE DURING THIS PROJECT.
4. THE CONTRACTOR SHALL COLLECT ALL EXISTING TRAFFIC CONTROL DEVICES USED FOR THE CURRENT LANE CLOSURES SUCH AS SIGNS, BARRICADES, DRUMS, ARROW BOARDS, ETC; DELIVER THEM TO THE IDOT MAINTENANCE YARD IN DECATUR; AND UNLOAD AND STACK THEM IN A LOCATION AS DETERMINED BY THE ENGINEER.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING, INSTALLING, MAINTAINING, AND REMOVING ALL TRAFFIC CONTROL ITEMS SHOWN ON SHEETS 16 THRU 20. THIS WORK WILL BE PAID FOR AS TRAFFIC CONTROL AND PROTECTION (SPECIAL).
6. SEE SHEET 21 FOR SECTIONS.
7. SEE SPECIAL PROVISIONS FOR ADDITIONAL TRAFFIC CONTROL REQUIREMENTS.

SCHEDULE OF QUANTITIES

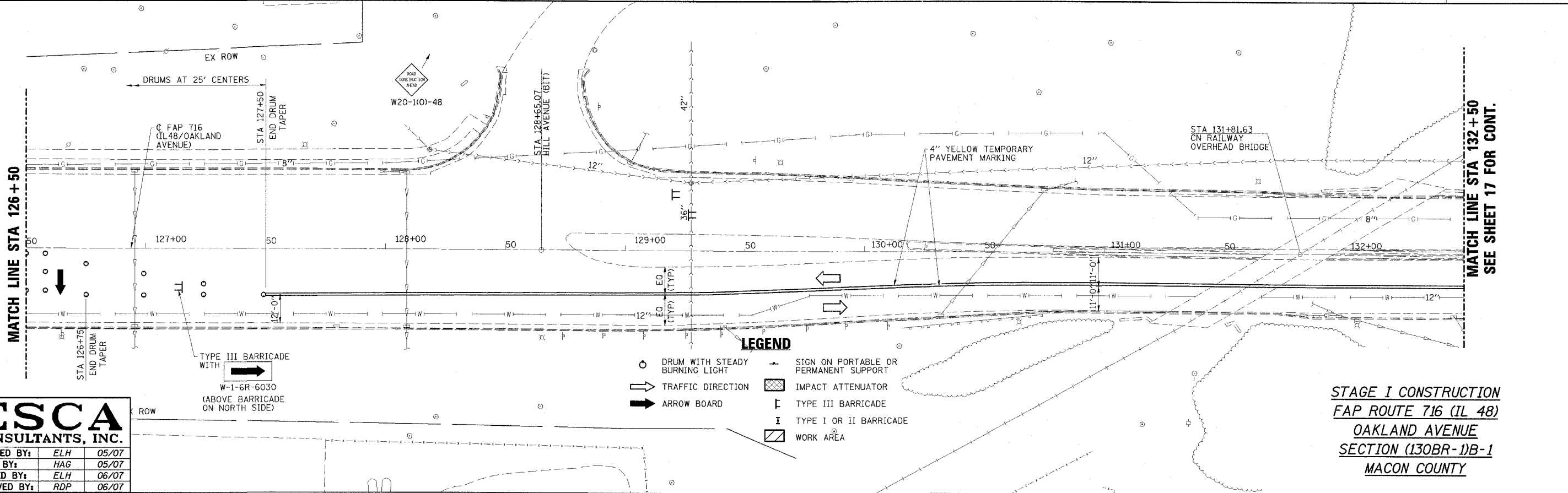
TEMPORARY CONCRETE BARRIER		
STATION TO	STATION	TOTAL FEET
134+00	137+50	350

IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 2	
	- 2 EACH

CONTRACT NO. 74166				
FAP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	(130BR-1)B-1	MACON	95	16
STA. 121+00		TO STA. 132+50		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



MATCH LINE STA 126 + 50



MATCH LINE STA 126 + 50

MATCH LINE STA 132 + 50
SEE SHEET 17 FOR CONT.

LEGEND

○	DRUM WITH STEADY BURNING LIGHT	+	SIGN ON PORTABLE OR PERMANENT SUPPORT
⇨	TRAFFIC DIRECTION	▨	IMPACT ATTENUATOR
⇨	ARROW BOARD	⊥	TYPE III BARRICADE
		I	TYPE I OR II BARRICADE
		▭	WORK AREA

ESCA
CONSULTANTS, INC.

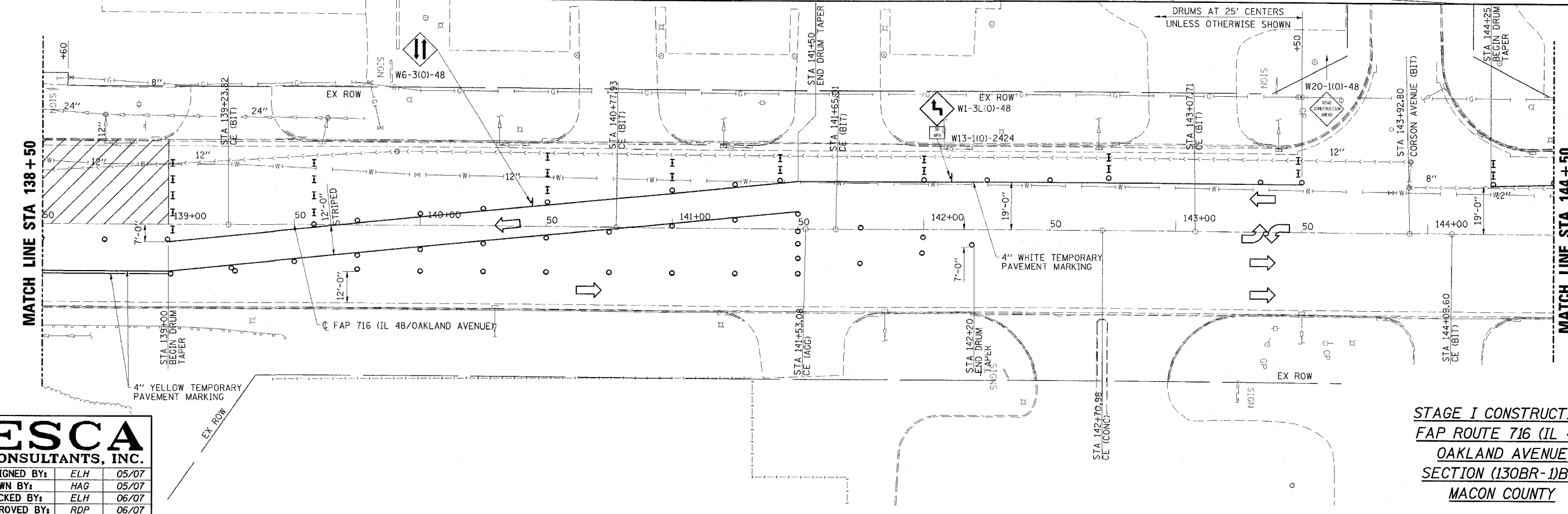
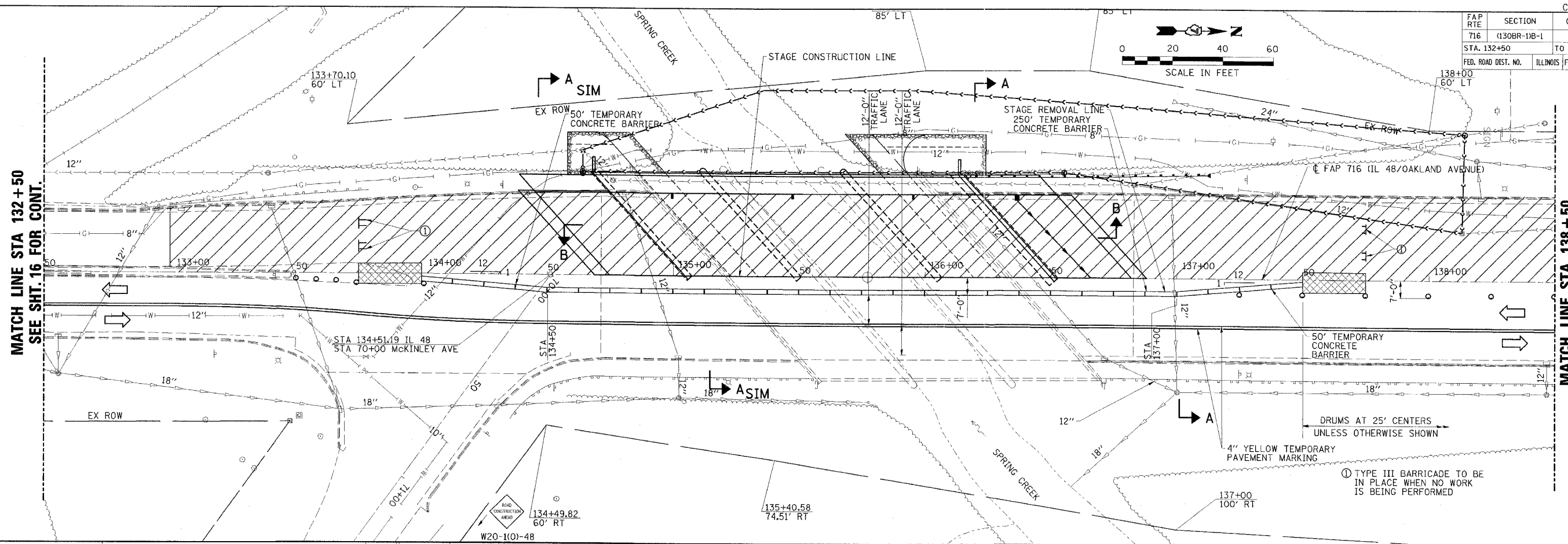
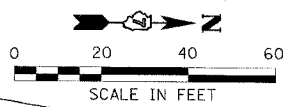
DESIGNED BY:	ELH	05/07
DRAWN BY:	HAG	05/07
CHECKED BY:	ELH	06/07
APPROVED BY:	RDP	06/07

STAGE I CONSTRUCTION
FAP ROUTE 716 (IL 48)
OAKLAND AVENUE
SECTION (130BR-1)B-1
MACON COUNTY



CONTRACT NO. 74166

FAP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	(130BR-1)B-1	MACON	95	17
STA. 132+50		TO STA. 144+50		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



ESCA
CONSULTANTS, INC.

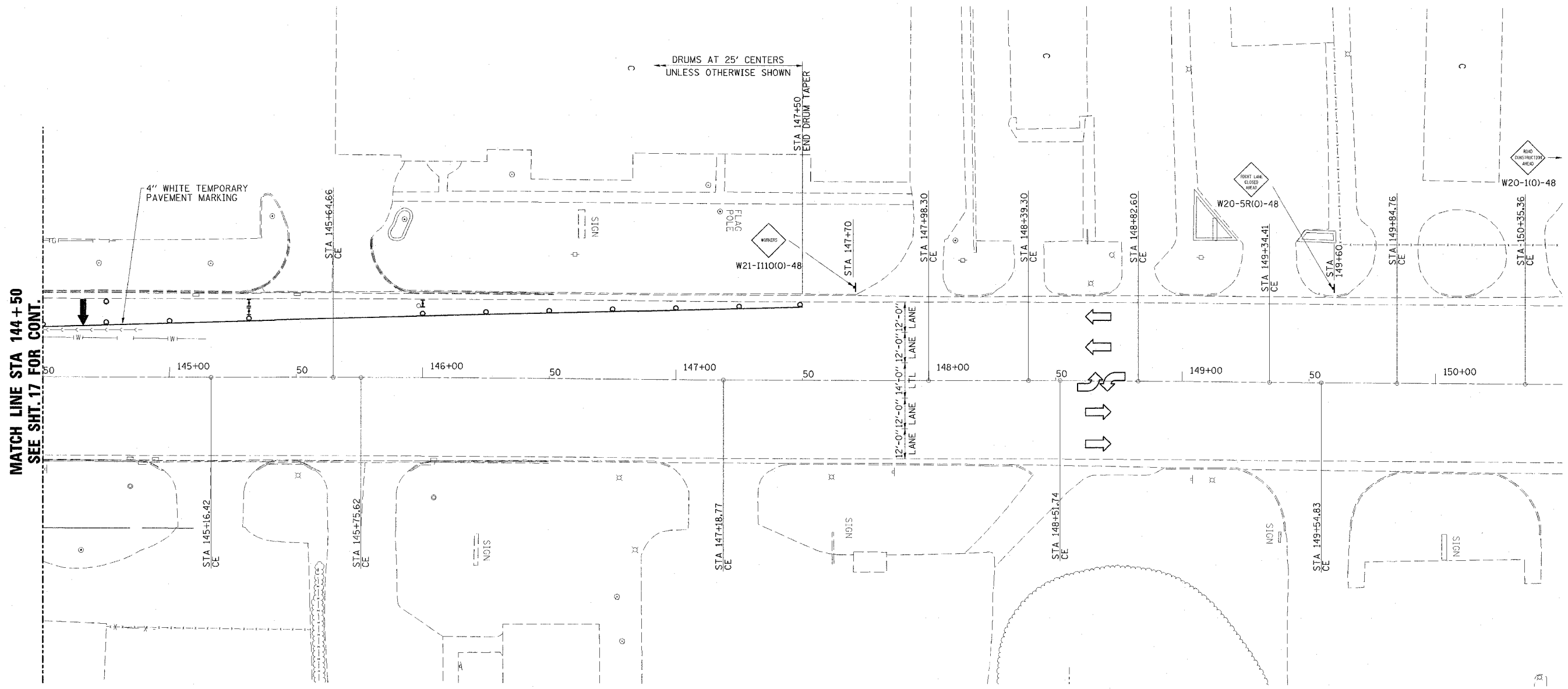
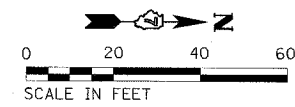
DESIGNED BY:	ELH	05/07
DRAWN BY:	HAG	05/07
CHECKED BY:	ELH	06/07
APPROVED BY:	RDP	06/07

STAGE I CONSTRUCTION
FAP ROUTE 716 (IL 48)
OAKLAND AVENUE
SECTION (130BR-1)B-1
MACON COUNTY



CONTRACT NO. 74166

FAP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	(130BR-1)B-1	MACON	95	18
STA. 144+50		TO STA. 150+50		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



MATCH LINE STA 144 + 50
SEE SHT. 17 FOR CONT.

ESCA CONSULTANTS, INC.		
DESIGNED BY:	ELH	05/07
DRAWN BY:	HAG	05/07
CHECKED BY:	ELH	05/07
APPROVED BY:	RDP	05/07

STAGE I CONSTRUCTION
FAP ROUTE 716 (IL 48)
OAKLAND AVENUE
SECTION (130BR-1)B-1
MACON COUNTY



CONTRACT NO. 74166

FAP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	(130BR-1)B-1	MACON	95	19
STA. 121+00		TO STA. 132+50		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

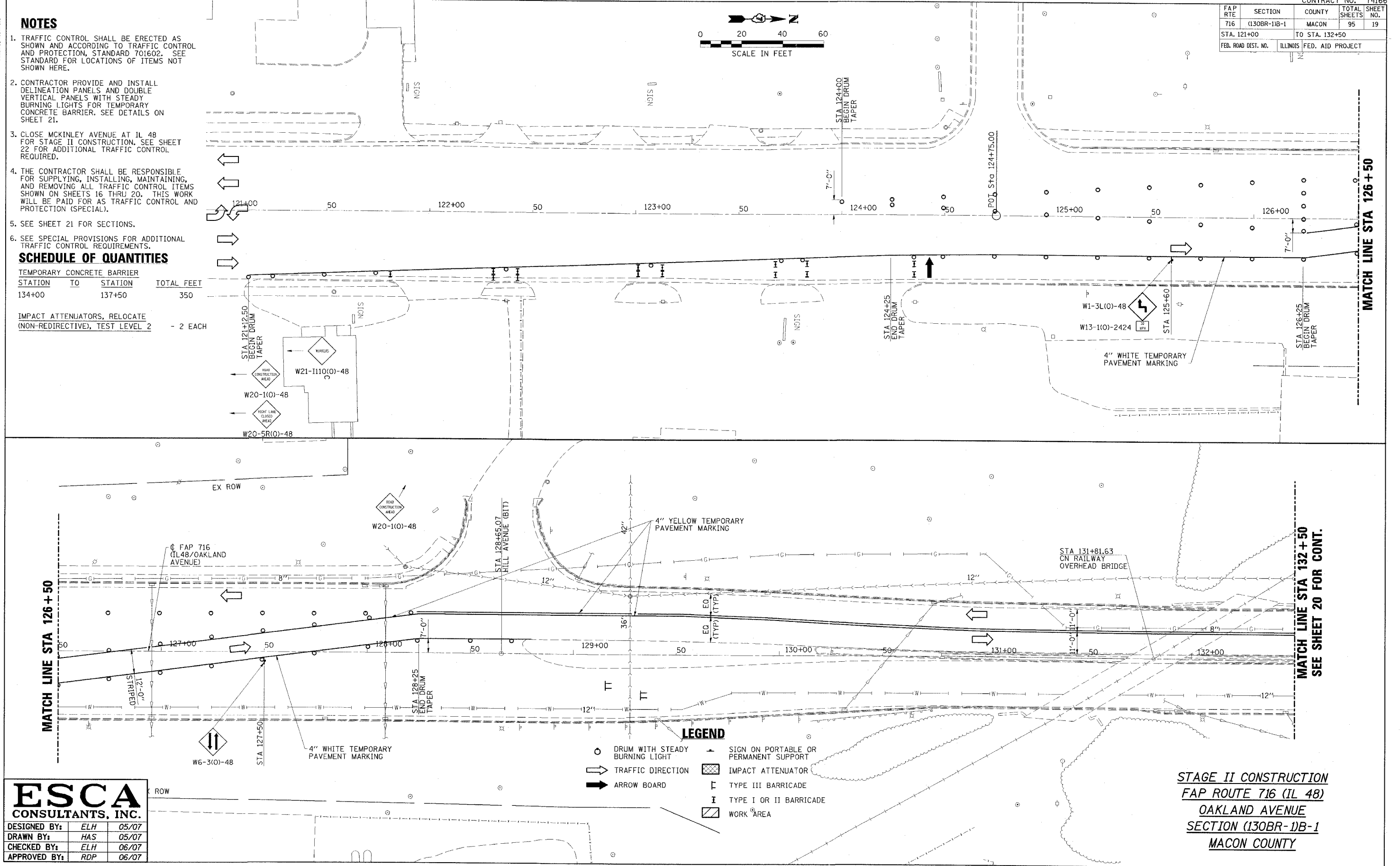
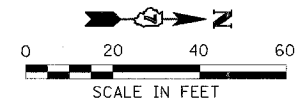
NOTES

1. TRAFFIC CONTROL SHALL BE ERECTED AS SHOWN AND ACCORDING TO TRAFFIC CONTROL AND PROTECTION, STANDARD 701602. SEE STANDARD FOR LOCATIONS OF ITEMS NOT SHOWN HERE.
2. CONTRACTOR PROVIDE AND INSTALL DELINEATION PANELS AND DOUBLE VERTICAL PANELS WITH STEADY BURNING LIGHTS FOR TEMPORARY CONCRETE BARRIER. SEE DETAILS ON SHEET 21.
3. CLOSE MCKINLEY AVENUE AT IL 48 FOR STAGE II CONSTRUCTION. SEE SHEET 22 FOR ADDITIONAL TRAFFIC CONTROL REQUIRED.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING, INSTALLING, MAINTAINING, AND REMOVING ALL TRAFFIC CONTROL ITEMS SHOWN ON SHEETS 16 THRU 20. THIS WORK WILL BE PAID FOR AS TRAFFIC CONTROL AND PROTECTION (SPECIAL).
5. SEE SHEET 21 FOR SECTIONS.
6. SEE SPECIAL PROVISIONS FOR ADDITIONAL TRAFFIC CONTROL REQUIREMENTS.

SCHEDULE OF QUANTITIES

TEMPORARY CONCRETE BARRIER	STATION TO	STATION	TOTAL FEET
	134+00	137+50	350

IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 2 - 2 EACH



LEGEND

○	DRUM WITH STEADY BURNING LIGHT	▲	SIGN ON PORTABLE OR PERMANENT SUPPORT
⇨	TRAFFIC DIRECTION	▨	IMPACT ATTENUATOR
➡	ARROW BOARD	⊥	TYPE III BARRICADE
		I	TYPE I OR II BARRICADE
		▭	WORK AREA

ESCA
CONSULTANTS, INC.

DESIGNED BY:	ELH	05/07
DRAWN BY:	HAS	05/07
CHECKED BY:	ELH	06/07
APPROVED BY:	RDP	06/07

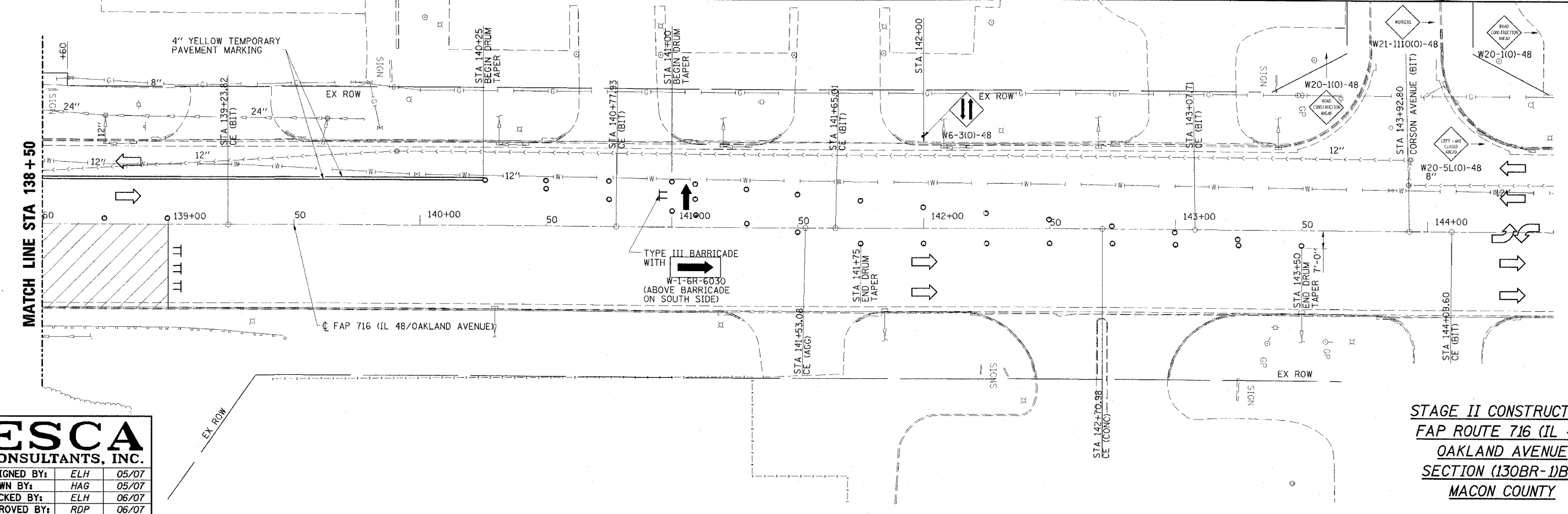
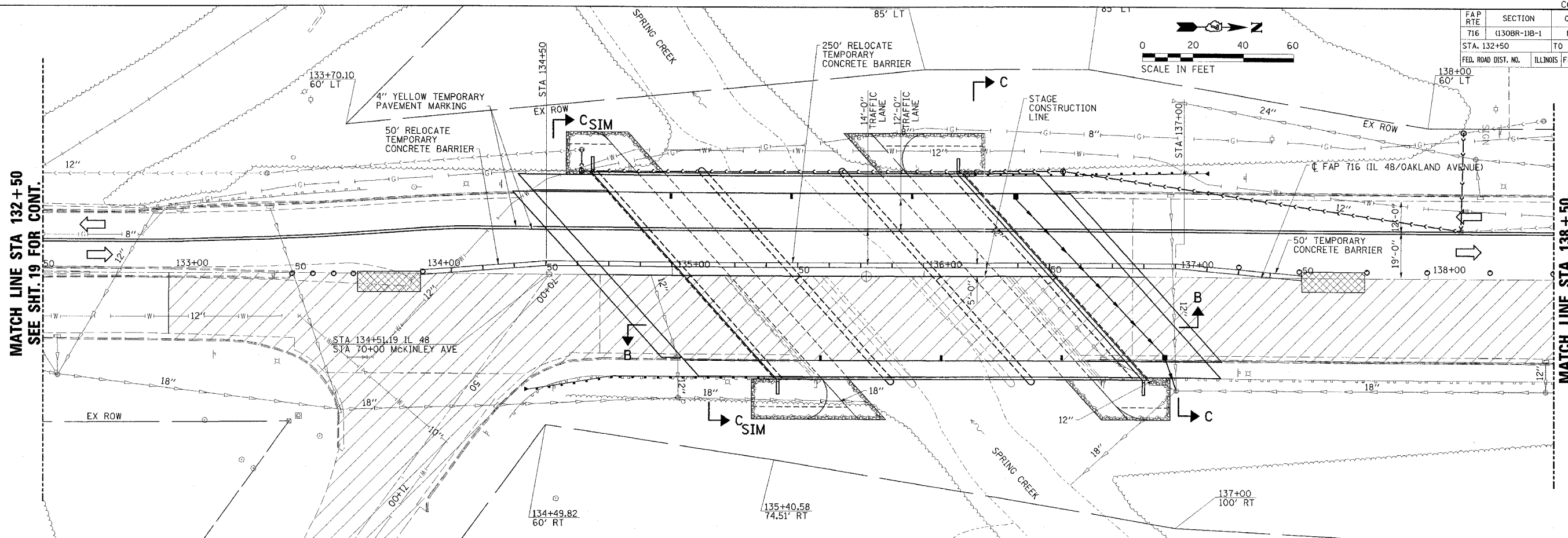
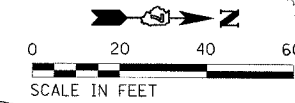
STAGE II CONSTRUCTION
FAP ROUTE 716 (IL 48)
OAKLAND AVENUE
SECTION (130BR-1)B-1
MACON COUNTY

MATCH LINE STA 132+50
SEE SHEET 20 FOR CONT.



CONTRACT NO. 74166

FAP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	(130BR-1)B-1	MACON	95	20
STA. 132+50		TO STA. 144+50		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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CONSULTANTS, INC.

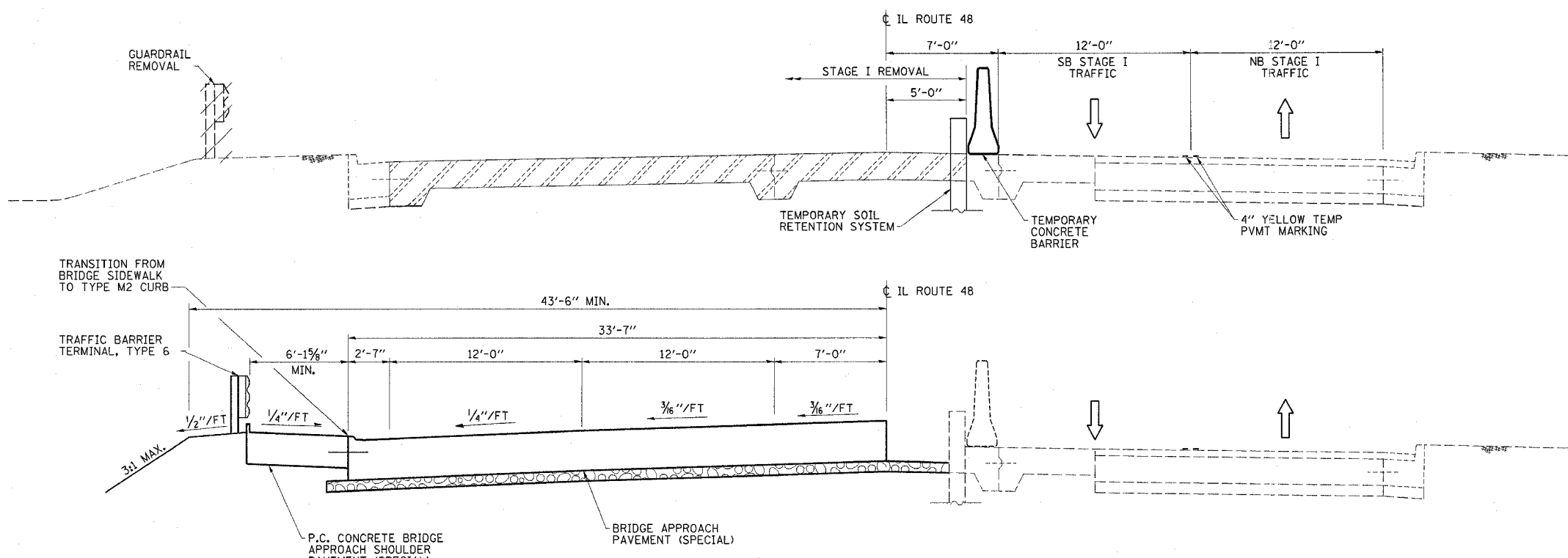
DESIGNED BY:	ELH	05/07
DRAWN BY:	HAG	05/07
CHECKED BY:	ELH	06/07
APPROVED BY:	RDP	06/07

STAGE II CONSTRUCTION
FAP ROUTE 716 (IL 48)
OAKLAND AVENUE
SECTION (130BR-1)B-1
MACON COUNTY

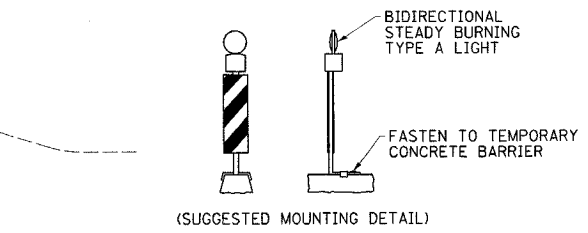


CONTRACT NO. 74166

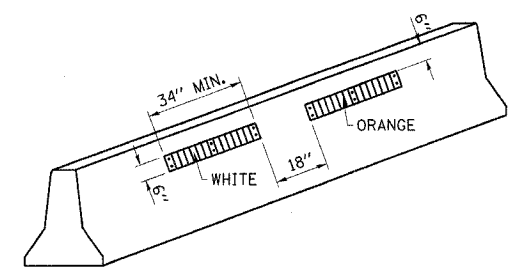
FAP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	(130BR-1)B-1	MACON	95	21
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



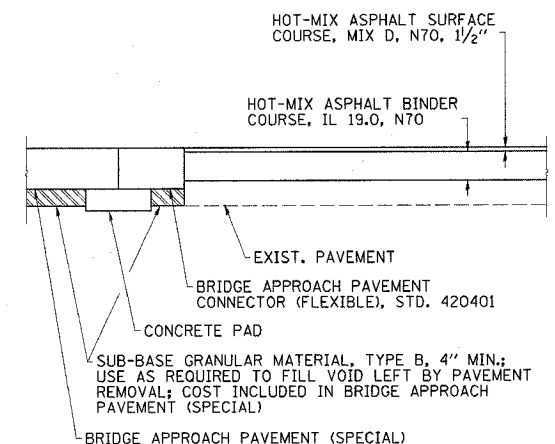
SECTION A-A
(LOOKING NORTH)



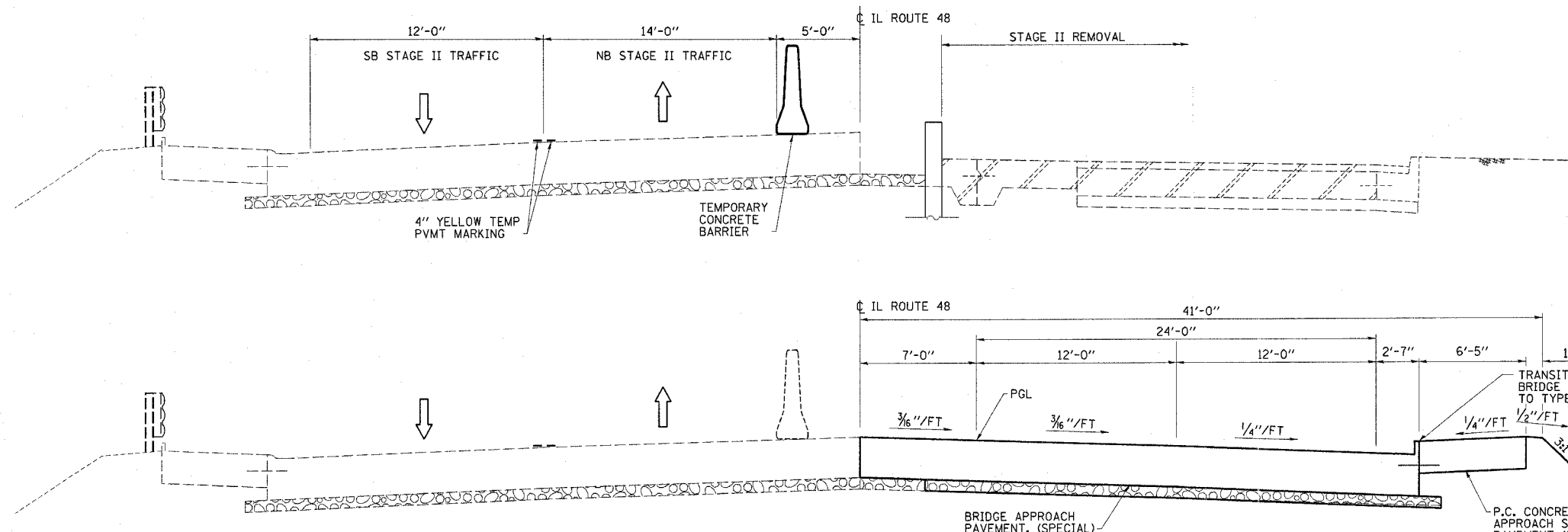
VERTICAL PANELS



LINEAR DELINEATION PANELS



SECTION B



SECTION C-C
(LOOKING NORTH)

STAGE CONSTRUCTION DETAILS
 FAP ROUTE 716 (IL 48)
 OAKLAND AVENUE
 SECTION (130BR-1)B-1
 MACON COUNTY

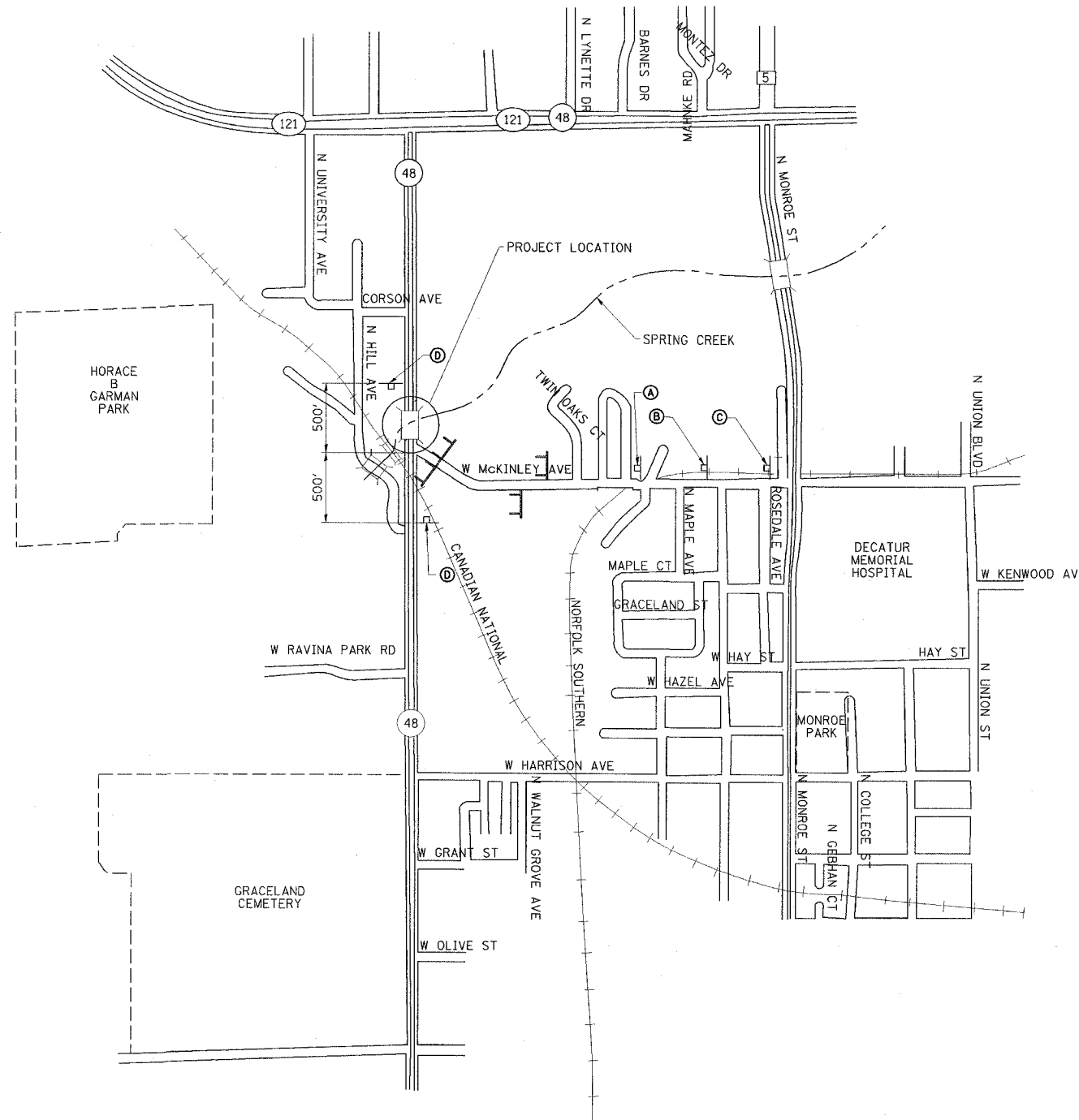
ESCA
CONSULTANTS, INC.

DESIGNED BY:	ELH	05/07
DRAWN BY:	HAG	05/07
CHECKED BY:	ELH	06/07
APPROVED BY:	RDP	06/07



CONTRACT NO. 74166

FAP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	(130BR-1)B-1	MACON	95	22
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT AID		



LEGEND

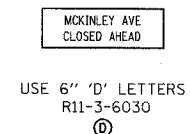
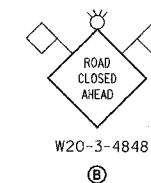
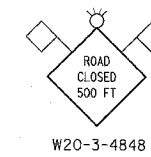
- TYPE III BARRICADE WITH 2 FLASHING LIGHTS PER BARRICADE
- SIGNS ON PERMANENT SUPPORTS
- FLASHING LIGHT ABOVE SIGN
- 18"x18" ORANGE FLAG
- STANDARD 702001 "ROAD CLOSED TO ALL TRAFFIC" APPLICATION
- STANDARD 702001 "ROAD CLOSED TO THRU TRAFFIC" APPLICATION

GENERAL NOTES

1. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED AND MAINTAINED BY THE CONTRACTOR, UNLESS NOTED OTHERWISE.
2. ALL SIGNS NOT ATTACHED TO BARRICADES SHALL BE POST MOUNTED.
3. LOCATIONS OF TRAFFIC CONTROL DEVICES MAY BE ADJUSTED BY THE ENGINEER.
4. COVER ALL MCKINLEY AVENUE SIGNS UNTIL IT IS REOPENED TO TRAFFIC.
5. ALL TRAFFIC CONTROL SHOWN ON THIS SHEET SHALL BE PAID FOR PER LUMP SUM FOR TRAFFIC CONTROL AND PROTECTION STANDARD BLR 22. OTHER ITEMS REQUIRED BY THE ENGINEER AND NOT SHOWN ON THIS DRAWING SHALL BE INCLUDED IN THE PAY ITEM AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

SIGN MOUNTING LOCATIONS

- ⓐ 1000' IN ADVANCE OF ⓐ
- ⓑ 500' IN ADVANCE OF "ROAD CLOSED TO THRU TRAFFIC"



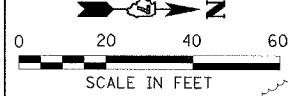
ROAD CLOSURE PLAN

NO SCALE

ESCA
CONSULTANTS, INC.

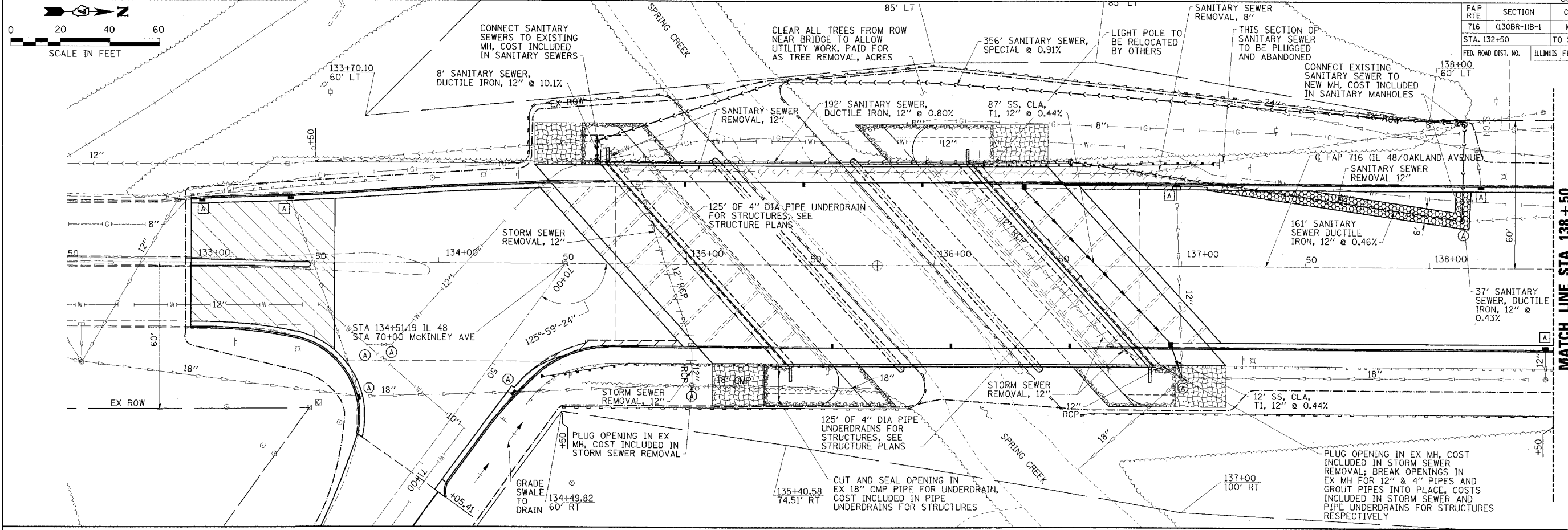
DESIGNED BY:	ELH	12/06
DRAWN BY:	HAG/JPC	12/06
CHECKED BY:	ELH	04/07
APPROVED BY:	RDP	04/07

McKINLEY AVENUE
ROAD CLOSURE DETAILS
FAP ROUTE 716 (IL 48)
OAKLAND AVENUE
SECTION (130BR-1)B-1
MACON COUNTY

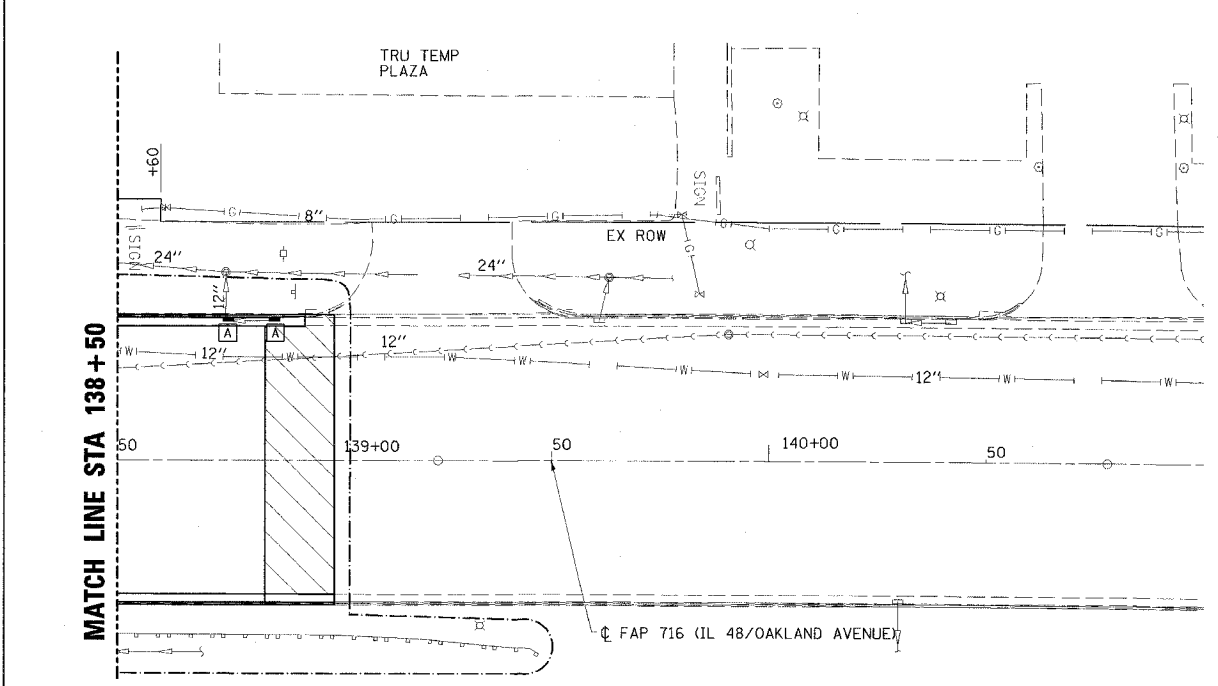


CONTRACT NO. 74166

FAP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	(130BR-1)B-1	MACON	95	23
STA. 132+50		TO STA. 141+00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



MATCH LINE STA 138 + 50



UTILITY STRUCTURE SCHEDULE

STA 133+04, 25.64' LT NEW T11V F&G P&G (SPL) EL 625.37	STA 136+13, 32' LT CB TO BE REMOVED EX EL 627.28 INV. 624.11 EX 12" SS (OUT) E	STA 138+14, 20' LT SAN MH TO BE REMOVED SAN MH 4' DIA. TIF CLID RIM EL 631.28 INV. 628.50 EX 12" SAN (IN) N INV. 627.60 12" SAN (IN) W INV. 627.60 12" SAN (OUT) S
STA 133+40, 26.72' LT CB TO BE ADJUSTED WITH NEW T11V F&G EL 625.64	STA 136+36.26, 32.17' LT TB INLET BOX, STD 609006 (SPL) EL 628.78 INV. 626.20 12" SS (OUT) E	STA 138+14, 57' LT SAN MH 4' DIA. TIF CLID RIM EL 633.90 INV. 627.76 EX 8" SAN (IN) N INV. 627.76 12" SAN (OUT) E
STA 133+68, 54.2' RT MH TO BE ADJUSTED WITH F&G (SPL) EL 625.65	STA 136+55, 42' LT SAN MH 4' DIA. TIF CLID RIM EL 629.30 INV. 626.86 12" SAN (IN) N INV. 626.86 12" SAN (OUT) S	STA 138+21, 32.76' LT CB TO BE ADJUSTED WITH NEW T11V F&G EL 631.30
STA 133+81, 40' RT VALVE BOX TO BE ADJUSTED	STA 136+72, 32' RT CB TO BE REMOVED EX EL 628.03	STA 138+47, 32.76' RT CB TO BE ADJUSTED WITH NEW T11V F&G EL 631.96
STA 133+81, 28' RT VALVE BOX TO BE ADJUSTED	STA 136+53, 12" SS (IN) W INV. 623.45 EX 12" SS (OUT) NE	STA 138+75, 32.76' LT CB TO BE ADJUSTED WITH NEW T11V F&G EL 632.76
STA 134+30, 51.3' RT MH TO BE ADJUSTED WITH F&G (SPL) EL 626.16	STA 136+83, 37' LT SAN MH TO BE REMOVED	STA 138+86, 32.76' LT CB TO BE ADJUSTED WITH NEW T11V F&G EL 633.09
STA 134+60, 42' LT SAN MH 4' DIA. TIF CLID RIM EL 627.85 INV. 625.40 12" SAN (IN) N INV. 625.40 12" SAN (OUT) W	STA 136+95.69, 31.92' RT TB INLET BOX, STD 609006 (SPL) EL 629.66 INV. 625.80 12" SS (IN) W INV. 625.74 12" SS (OUT) E	STA 137+00, 45' RT MH TO BE ADJUSTED RIM EL 626.90 INV. 621.93 EX 12" SS (IN) W INV. 625.68 12" SS (IN) W INV. 621.53 EX 18" SS (IN) N INV. 621.00 4" PU (IN) SW INV. 619.33 EX 18" SS (OUT) SE
STA 134+76, 38' LT SAN MH TO BE REMOVED	STA 136+96, 32.56' LT CB TO BE ADJUSTED WITH NEW T9 F&G EL 629.28	
STA 134+81, 32' LT CB TO BE REMOVED EX EL 626.42 INV. 623.34 EX 12" SS (OUT) E		
STA 135+02, 32' RT CB TO BE REMOVED EX EL 626.43 INV. 622.68 EX 12" SS (IN) W INV. 622.51 EX 12" SS (OUT) E		
STA 135+02, 49' RT MH TO BE ADJUSTED RIM EL 625.90		

LEGEND

- PERIMETER EROSION BARRIER
- EROSION CONTROL BLANKET
- CONSTRUCTION LIMITS
- STONE RIPRAP CLASS A4
- CATCH BASIN TO BE ADJUSTED
- MANHOLE TO BE ADJUSTED
- VALVE BOX TO BE ADJUSTED

NOTES

1. LAYOUT OF THE EROSION CONTROL ITEMS MAY BE VARIED IN THE FIELD TO SUIT CONDITIONS AS DIRECTED BY THE ENGINEER.
2. SEE SHEET 24 FOR ADDITIONAL DETAILS OF TEMPORARY AND PERMANENT SANITARY SEWER.

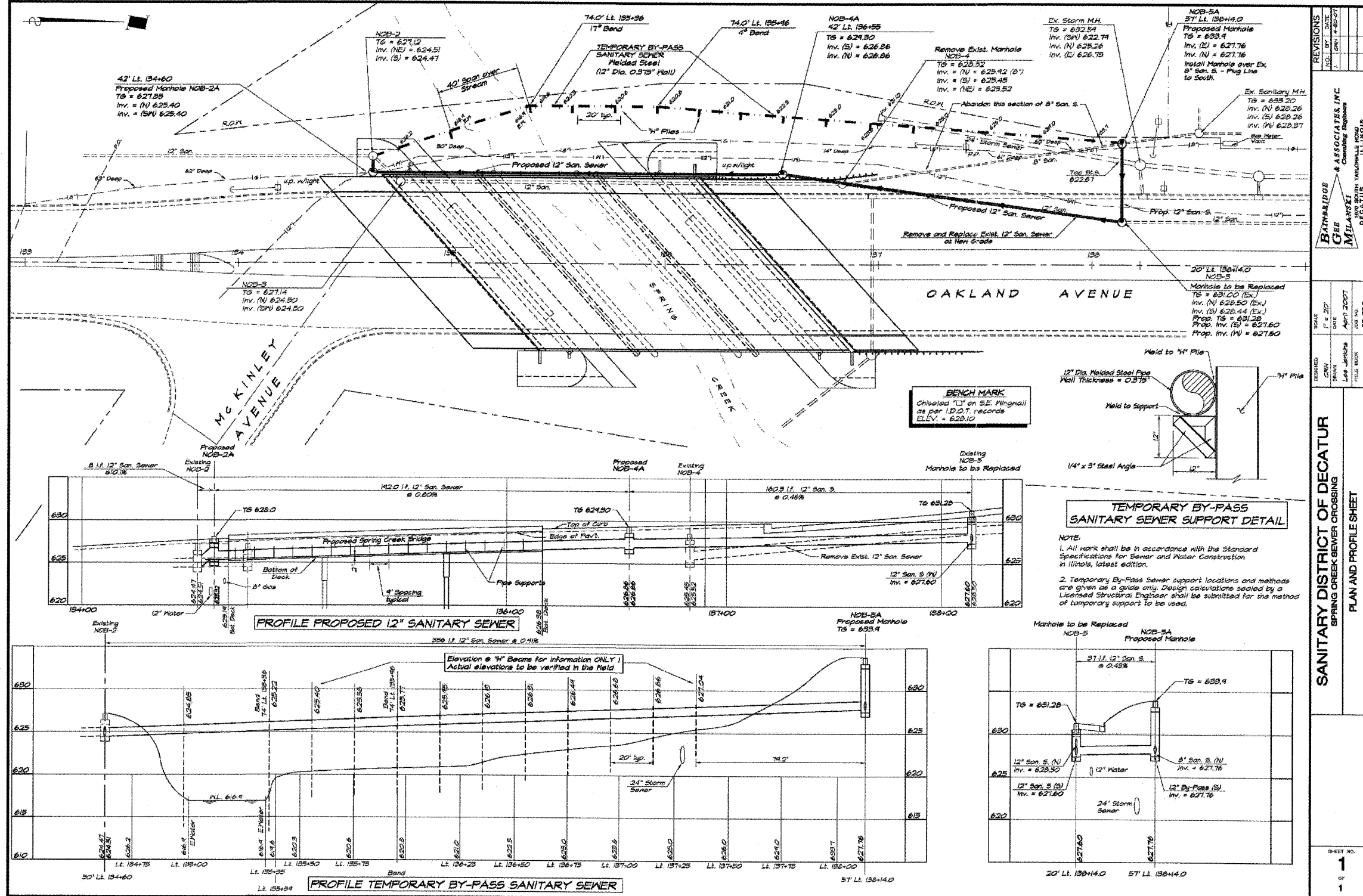
ESCA
CONSULTANTS, INC.

DESIGNED BY:	ELH	05/07
DRAWN BY:	HAG	05/07
CHECKED BY:	ELH	06/07
APPROVED BY:	RDP	06/07

**EROSION CONTROL, UTILITY,
AND DRAINAGE PLAN**
FAP ROUTE 716 (IL 48)
OAKLAND AVENUE
SECTION (130BR-1)B-1
MACON COUNTY



CONTRACT NO. 74166			
FAP RTE	SECTION	COUNTY	TOTAL SHEETS
716	(130BR-1)B-1	MACON	95
NO.	TO STA.		NO.
STA.			24
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT	



REVISIONS

NO.	BY	DATE	DESCRIPTION
1	ML	4/20/07	ISSUE FOR PERMIT

BATHURIDGE & ASSOCIATES, INC.
GEB MILANSKI
 Consulting Engineers
 100 SOUTH WALSHVILLE ROAD
 DECATUR, ILLINOIS 62521

SANITARY DISTRICT OF DECATUR
 SPRING CREEK SEWER CROSSING
 PLAN AND PROFILE SHEET

SCALE: P = 20'
 DATE: April 2007
 JOB NO.: 07-026
 FILE NO.: 07-026

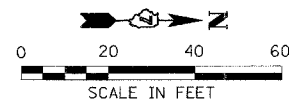
SHEET NO. **1** OF **1**

SANITARY SEWER DETAILS
FAP ROUTE 716 (IL 48)
OAKLAND AVENUE
SECTION (130BR-1)B-1
MACON COUNTY

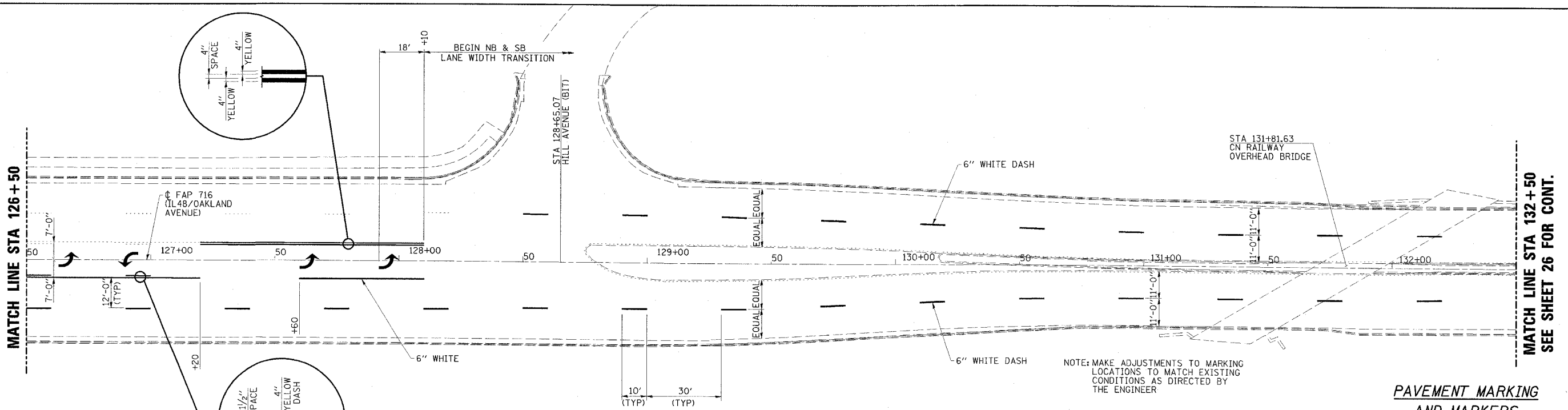
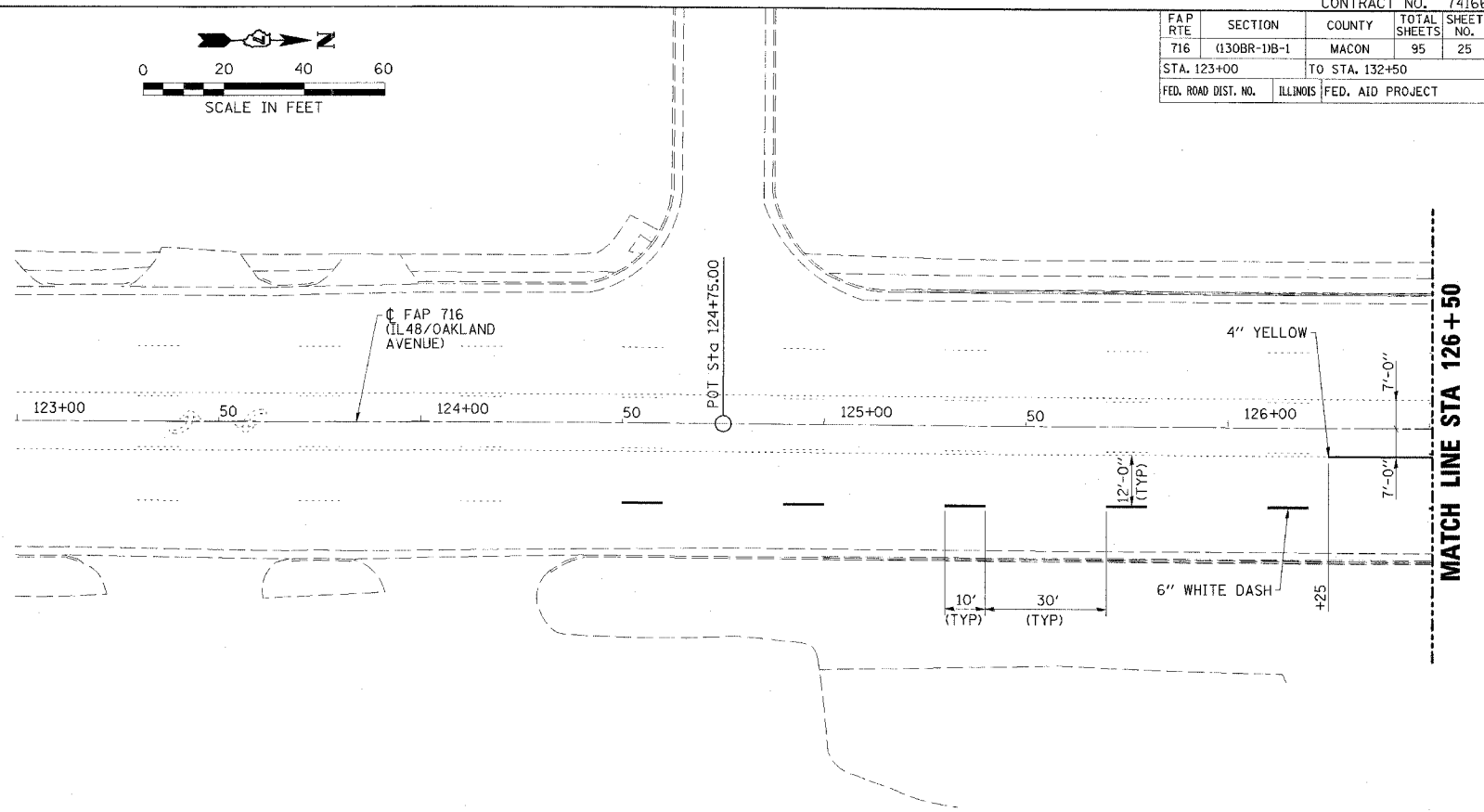


LEGEND

- PROPOSED MARKING STRIPE
- - - EXISTING MARKING STRIPE
- ↔ PROPOSED DOUBLE TURN ARROWS
- - - ↔ EXISTING DOUBLE TURN ARROWS
- TWO-WAY AMBER MARKER
- ▽ ONE-WAY CRYSTAL MARKER



CONTRACT NO. 74166				
FAP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	(130BR-1)B-1	MACON	95	25
STA. 123+00		TO STA. 132+50		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



NOTE: MAKE ADJUSTMENTS TO MARKING LOCATIONS TO MATCH EXISTING CONDITIONS AS DIRECTED BY THE ENGINEER

ESCA
CONSULTANTS, INC.

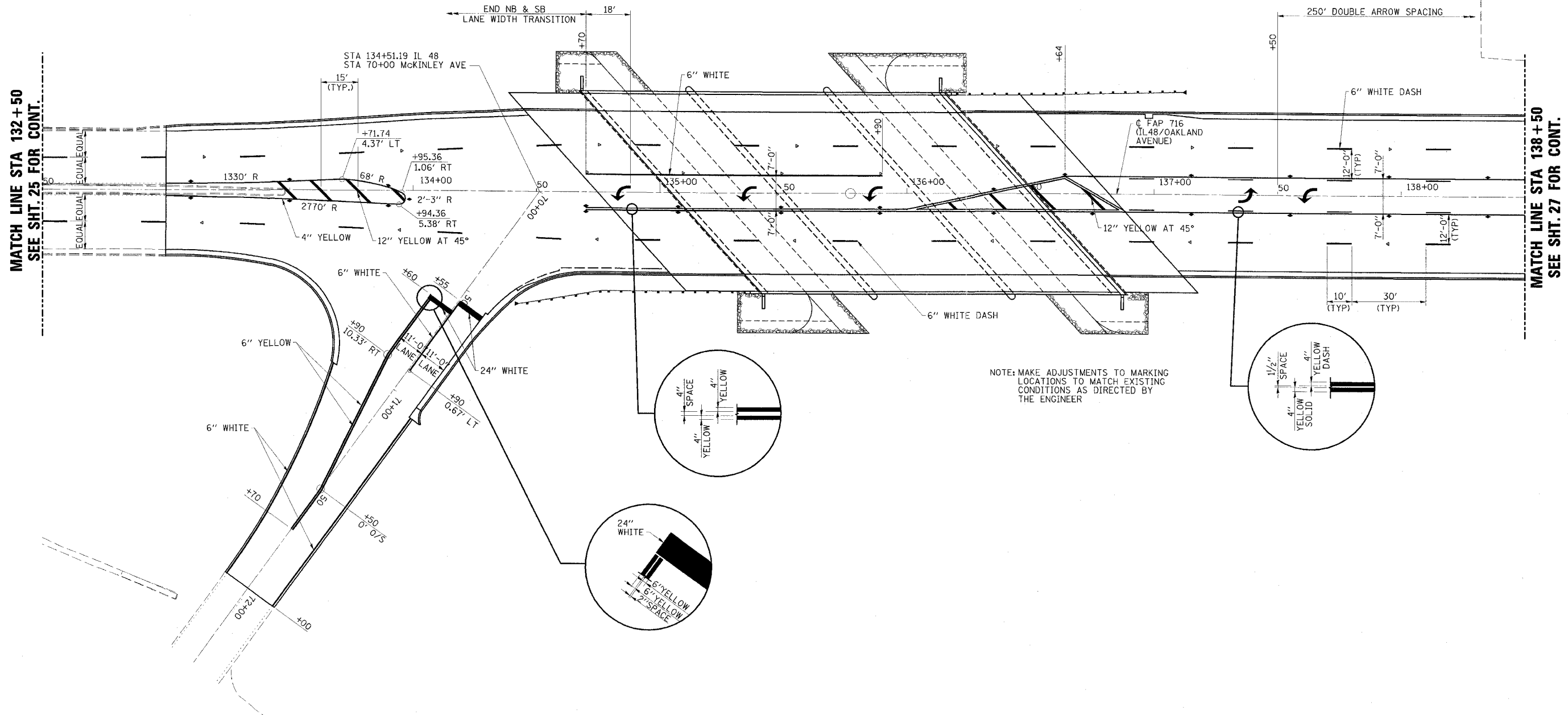
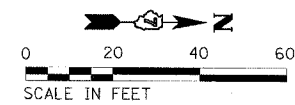
DESIGNED BY:	ELH	05/07
DRAWN BY:	DWH	05/07
CHECKED BY:	ELH	06/07
APPROVED BY:	RDP	06/07

**PAVEMENT MARKING
AND MARKERS**
FAP ROUTE 716 (IL 48)
OAKLAND AVENUE
SECTION (130BR-1)B-1
MACON COUNTY



CONTRACT NO. 74166

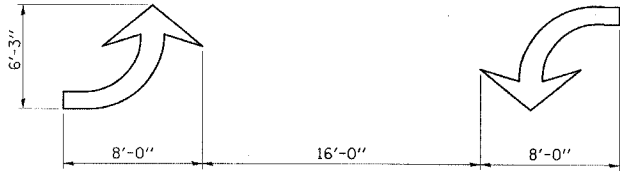
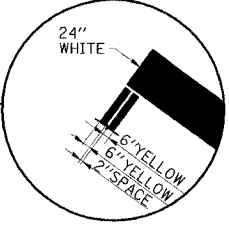
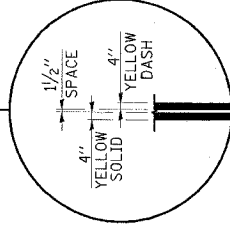
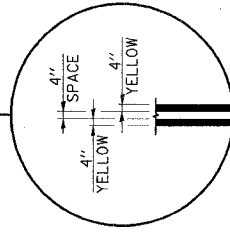
FAP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	(130BR-1)B-1	MACON	95	26
STA. 132+50		TO STA. 138+50		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



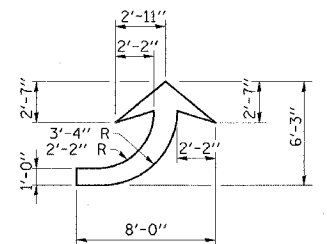
MATCH LINE STA 132+50
SEE SHT. 25 FOR CONT.

MATCH LINE STA 138+50
SEE SHT. 27 FOR CONT.

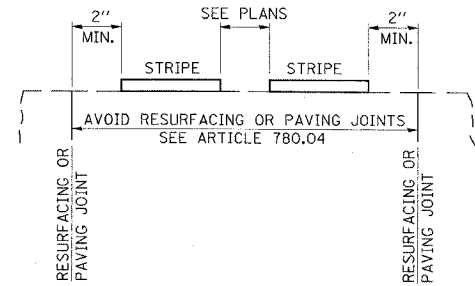
NOTE: MAKE ADJUSTMENTS TO MARKING LOCATIONS TO MATCH EXISTING CONDITIONS AS DIRECTED BY THE ENGINEER



TYPICAL DOUBLE TURN ARROWS (WHITE)



LEFT ARROW (WHITE)
AREA = 15.6 SQ FT



RELATIONSHIP OF STRIPES AND JOINTS

PAVEMENT MARKING AND MARKERS
FAP ROUTE 716 (IL 48)
OAKLAND AVENUE
SECTION (130BR-1)B-1
MACON COUNTY

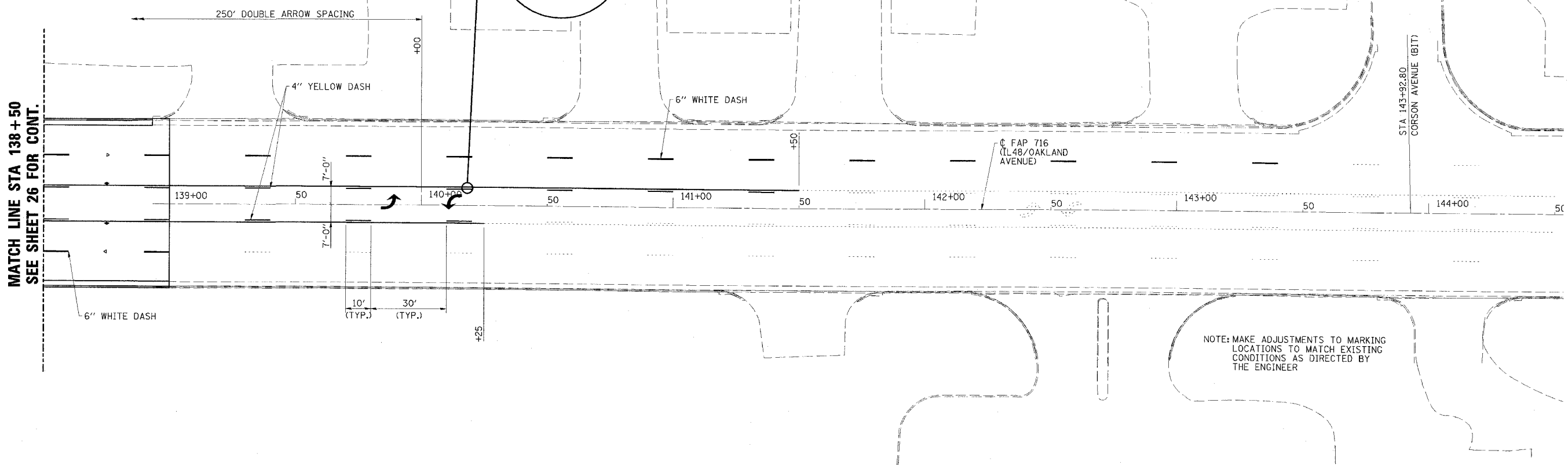
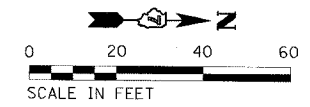
ESCA
CONSULTANTS, INC.

DESIGNED BY:	ELH	05/07
DRAWN BY:	DWH	05/07
CHECKED BY:	ELH	06/07
APPROVED BY:	RDP	06/07



CONTRACT NO. 74166

FAP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	(130BR-1)B-1	MACON	95	27
STA. 138+50		TO STA. 144+50		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



MATCH LINE STA 138+50
SEE SHEET 26 FOR CONT.

STA 143+92.80
CORSON AVENUE (BIT)

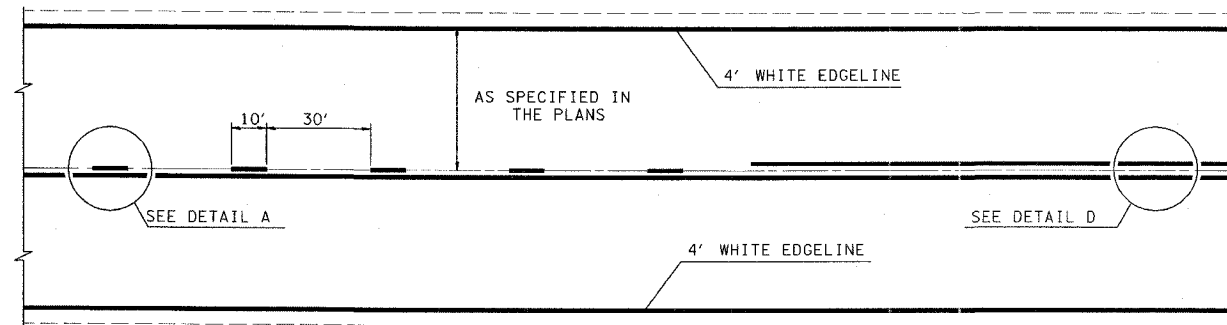
C. FAP 716
(IL 48/OAKLAND AVENUE)

NOTE: MAKE ADJUSTMENTS TO MARKING LOCATIONS TO MATCH EXISTING CONDITIONS AS DIRECTED BY THE ENGINEER

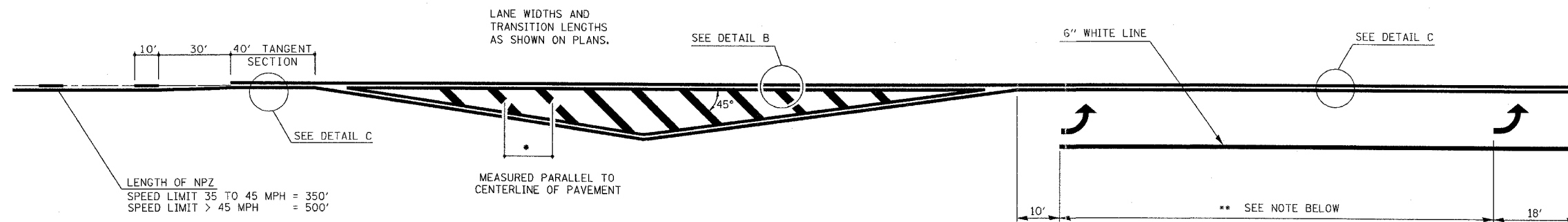
ESCA CONSULTANTS, INC.		
DESIGNED BY:	ELH	05/07
DRAWN BY:	DWH	05/07
CHECKED BY:	ELH	06/07
APPROVED BY:	RDP	06/07

**PAVEMENT MARKING
AND MARKERS**
FAP ROUTE 716 (IL 48)
OAKLAND AVENUE
SECTION (130BR-1)B-1
MACON COUNTY

F&P R.P.E.	SECTION	COUNTY	TOTAL SHEET	SHEET NO.
716	(130BR-1)B-1	MACON	95	28
FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT NO.		



TYPICAL CENTERLINE, NO PASSING ZONE LINE (NPZ) & EDGELINE MARKINGS
2-LANE PAVEMENT



LENGTH OF NPZ
SPEED LIMIT 35 TO 45 MPH = 350'
SPEED LIMIT > 45 MPH = 500'

LANE WIDTHS AND
TRANSITION LENGTHS
AS SHOWN ON PLANS.

MEASURED PARALLEL TO
CENTERLINE OF PAVEMENT

***DIAGONAL SPACING**

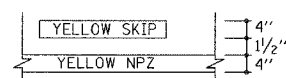
SPEED LIMIT	< 30 MPH =	15'
SPEED LIMIT	30 TO 45 MPH =	20'
SPEED LIMIT	> 45 MPH =	30'

** PLACE THE FIRST ARROW EVEN WITH THE BEGINNING OF THE TURN BAY.
PLACE ANOTHER ARROW 18' BACK FROM THE STOP BAR, IF REQUIRED.
ADD ADDITIONAL ARROWS TO MAINTAIN A MAXIMUM OF 80' SPACING.

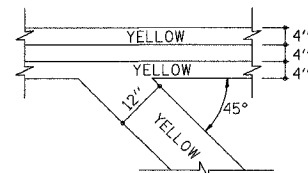
NOTES:

1. OMIT EDGELINE THRU SIDE ROADS.
2. TAPER RATES, LANE WIDTHS, AND STORAGE LENGTHS AS SHOWN ON THE PLANS.
3. WHEN MEDIANS ARE PRESENT, PLACE A SINGLE YELLOW STRIPE AROUND ITS PERIMETER.

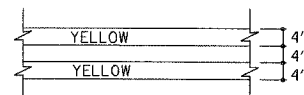
DETAIL A



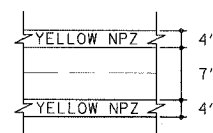
DETAIL B



DETAIL C



DETAIL D



NOT TO SCALE

REVISIONS	
NAME	DATE
MMO	12-99
DRM	08-04

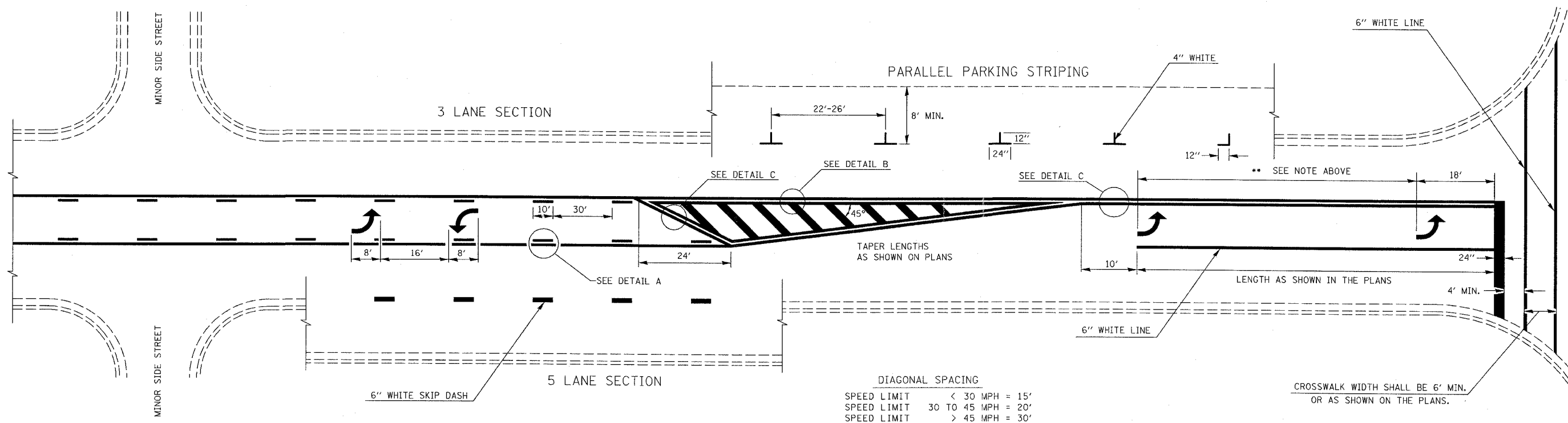
ILLINOIS DEPARTMENT OF TRANSPORTATION

**TYPICAL APPLICATION OF
PAVEMENT MARKINGS
SHEET 1 OF 2**

SCALE: VERT. DRAWN BY
 HORIZ. CHECKED BY
DATE ISSUED: 05-06-96

FAP RTE.	SECTION	COUNTY	TOTAL SHEET	SHEET NO.
716	(130BR-1)B-1	MACON	95	29
FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT NO.		

** PLACE THE FIRST ARROW EVEN WITH THE BEGINNING OF THE TURN BAY.
PLACE ANOTHER ARROW 18' BACK FROM THE STOP BAR, IF REQUIRED,
ADD ADDITIONAL ARROWS TO MAINTAIN A MAXIMUM OF 80' SPACING.

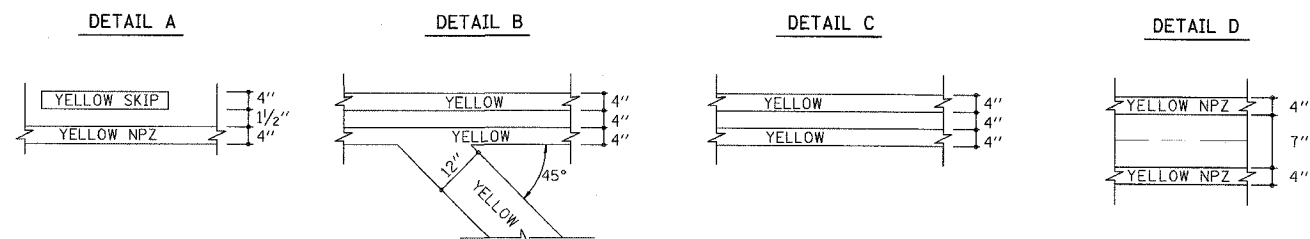


DIAGONAL SPACING

SPEED LIMIT	< 30 MPH	= 15'
SPEED LIMIT	30 TO 45 MPH	= 20'
SPEED LIMIT	> 45 MPH	= 30'

TYPICAL BI-DIRECTIONAL TURN LANE MARKINGS
(SHOWING TRANSITION TO EXCLUSIVE LEFT TURN LANE)

- NOTES:
1. NO LESS THAN 2 ARROWS SHALL BE USED.
 2. TAPER RATES, LANE WIDTHS, AND STORAGE LENGTHS AS SHOWN ON THE PLANS.
 3. AVOID PLACING BI-DIRECTIONAL ARROWS IN INTERSECTIONS.
 4. BI-DIRECTIONAL ARROWS SHALL BE SPACED A MAXIMUM OF 250'.



MMO 12-99
DRM 08-04

NOT TO SCALE

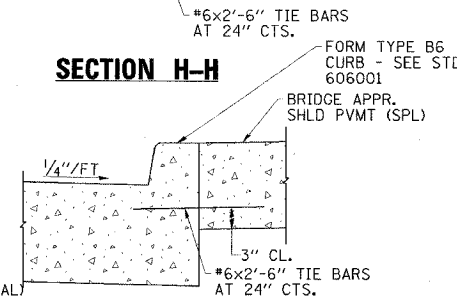
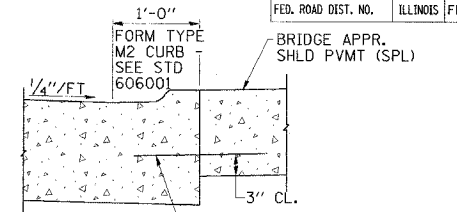
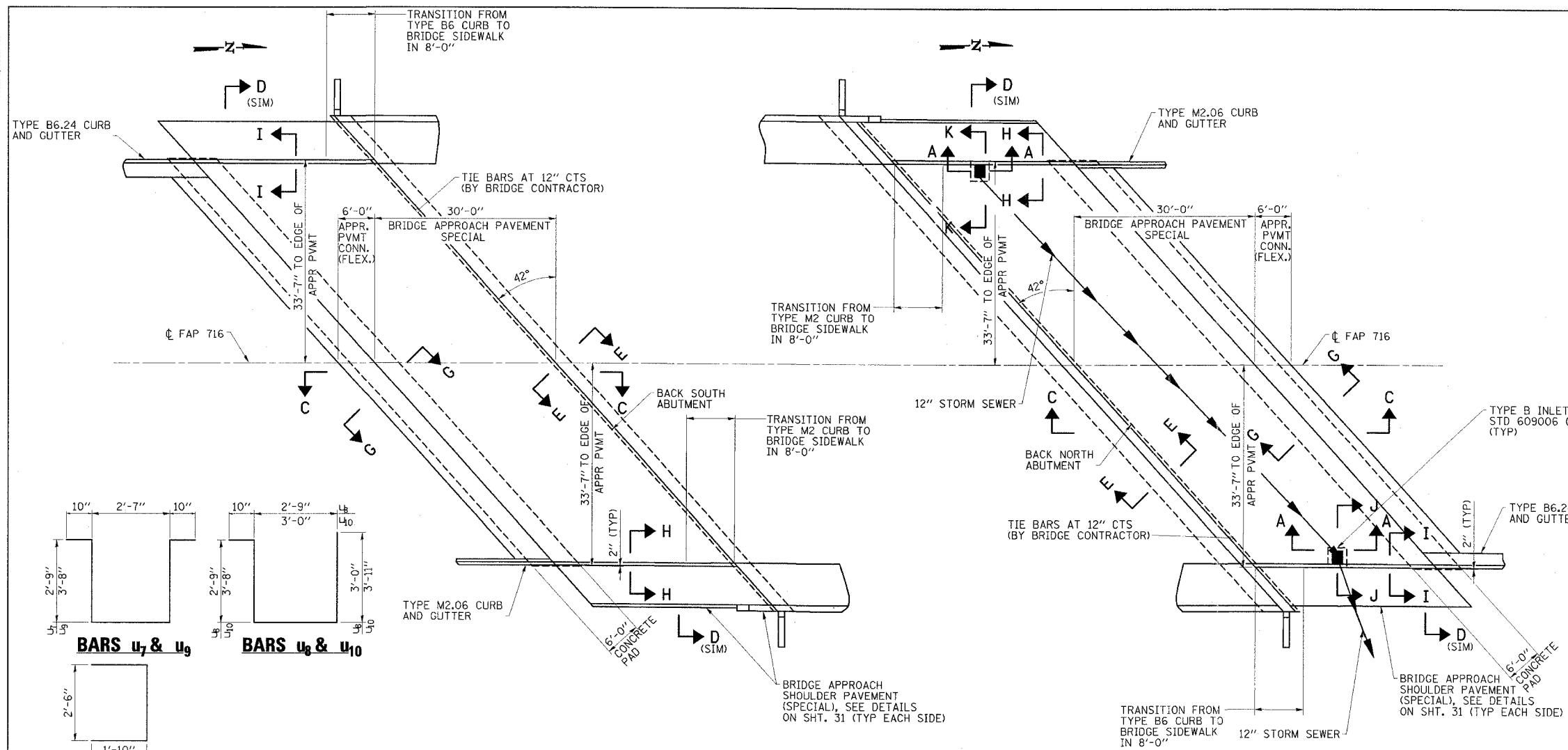
REVISIONS	
NAME	DATE
MMO	12-99
DRM	08-04

ILLINOIS DEPARTMENT OF TRANSPORTATION
**TYPICAL APPLICATION OF
PAVEMENT MARKINGS**
SHEET 2 OF 2

SCALE: VERT. _____
HORIZ. _____
DATE _____ DRAWN BY _____
CHECKED BY _____



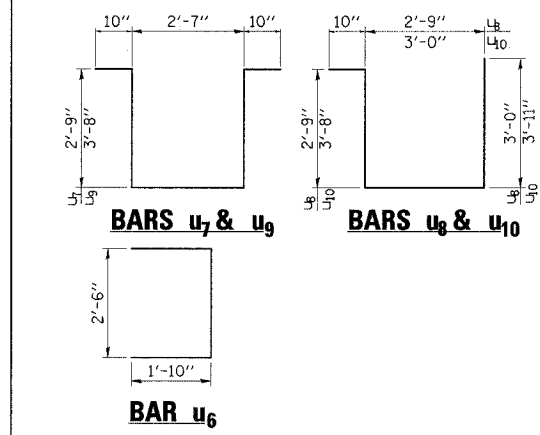
FAP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	(130BR-1)B-1	MACON	95	30
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



- NOTES**
1. SEE STANDARD 421001 FOR REINFORCEMENT DETAILS NOT SHOWN.
 2. SEE STANDARD 420001 FOR DETAILS OF JOINTS NOT SHOWN.
 3. SEE STANDARD 420401 FOR ADDITIONAL DETAILS AND FOR SECTIONS C-C, DISIM-DISIM, E-E, AND G-G.
 4. SEE STANDARD 609006 FOR INLET BOX AND DRAIN DETAILS NOT SHOWN. FIELD CUT INLET BOX REBAR TO CLEAR STORM SEWER.

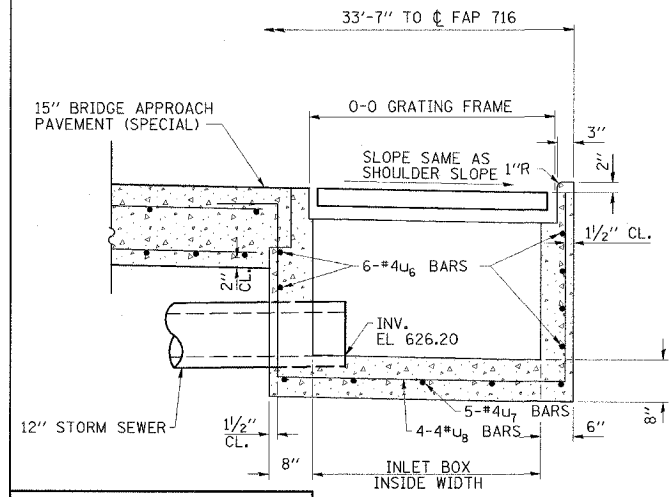
INLET BOX TYPE B (SPECIAL) REQUIRED MATERIAL (TOTAL FOR BOTH BOXES)

BAR	QUANTITY	SIZE	LENGTH
U ₆	12	#4	6'-2"
U ₇	5	#4	9'-9"
U ₈	4	#4	9'-4"
U ₉	5	#4	11'-7"
U ₁₀	4	#4	11'-5"
ITEM	UNITS	QUANTITY	
CONCRETE	CU YD	1.9	
REINF. BARS	POUND	180	
GRATING	SQ FT	7.2	

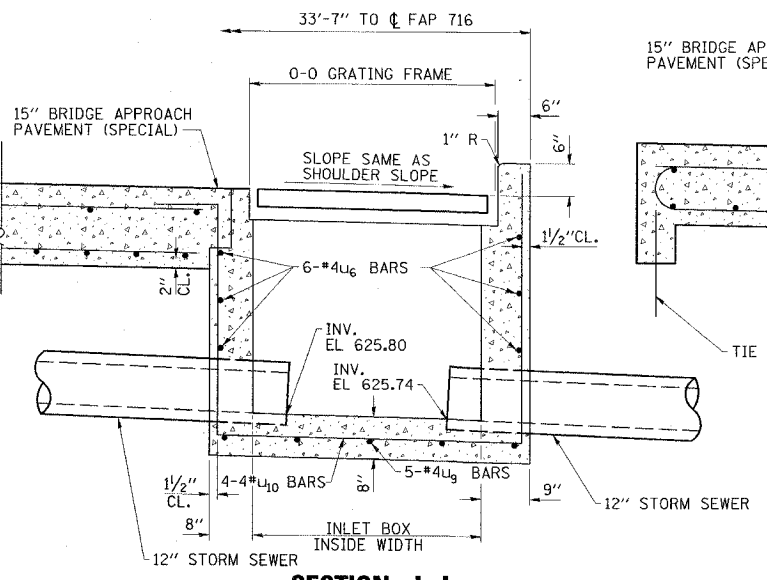


SOUTH APPROACH PLAN

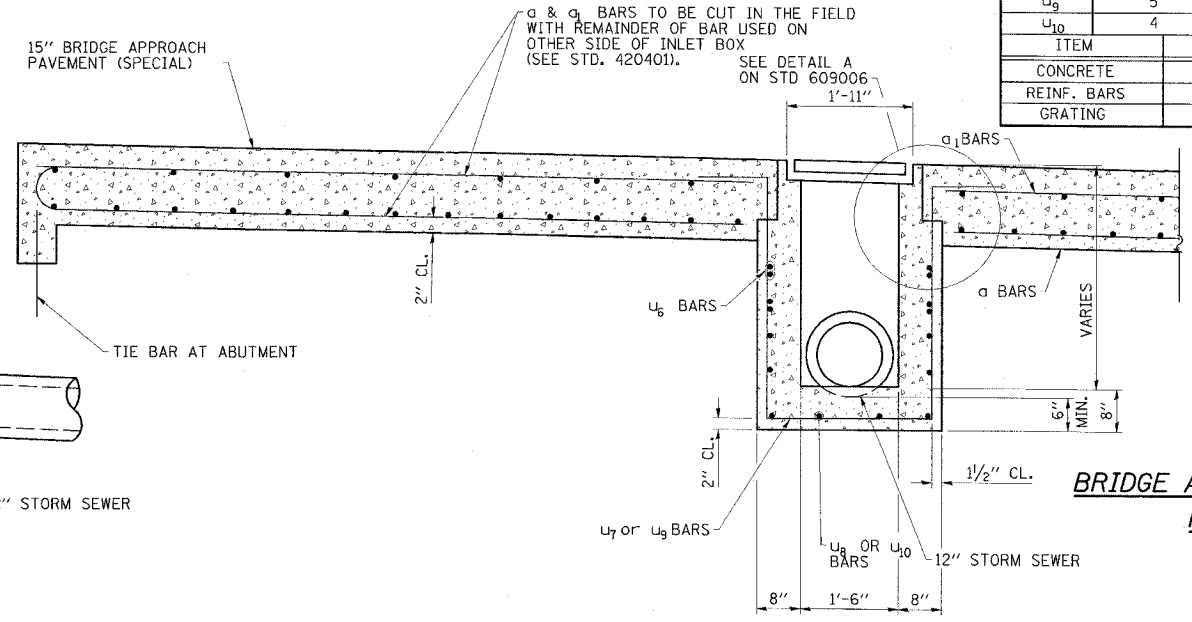
NORTH APPROACH PLAN



SECTION K-K



SECTION J-J



SECTION A-A

ESCA CONSULTANTS, INC.

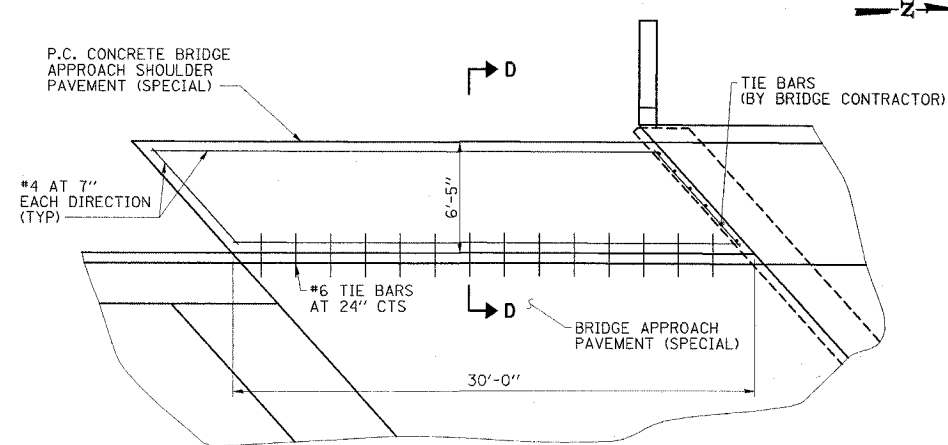
DESIGNED BY:	ELH	05/07
DRAWN BY:	KAH	05/07
CHECKED BY:	ELH	06/07
APPROVED BY:	RDP	06/07

BRIDGE APPROACH PAVEMENT (SPECIAL)
FAP ROUTE 716 (IL 48)
OAKLAND AVENUE
SECTION (130BR-1)B-1
MACON COUNTY

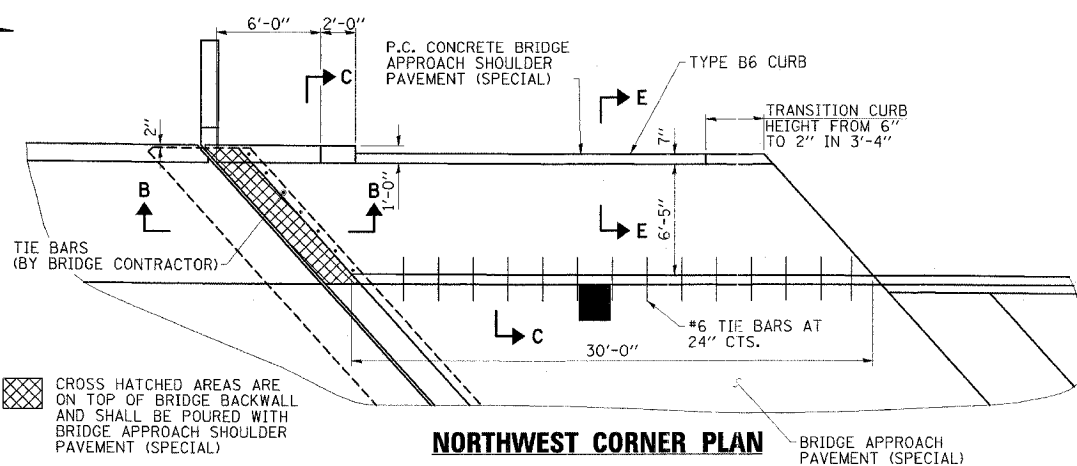


CONTRACT NO. 74166

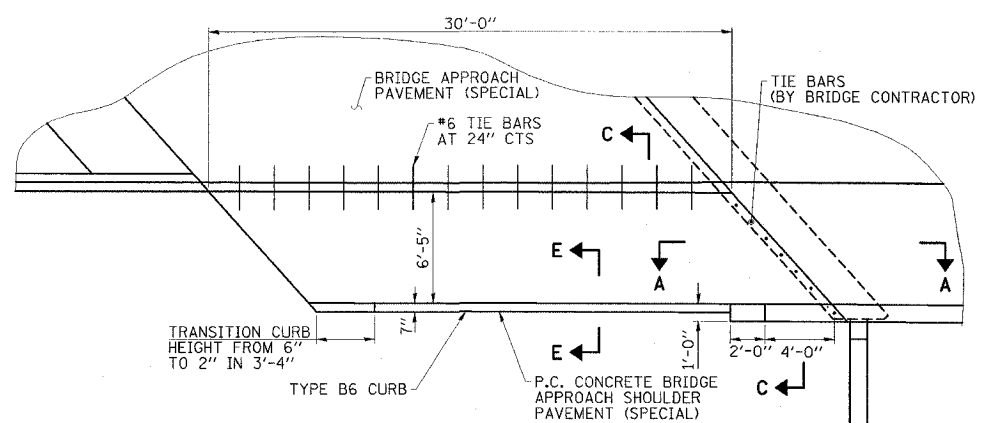
FAP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	(130BR-1)B-1	MACON	95	31
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



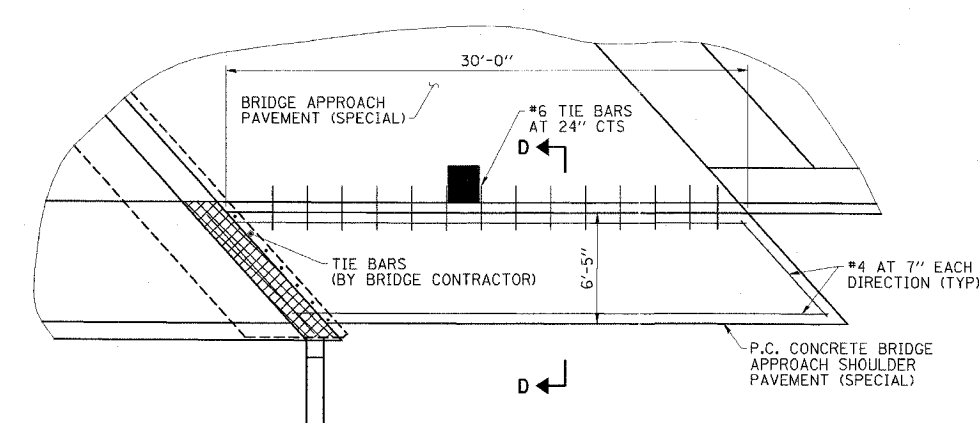
SOUTHWEST CORNER PLAN



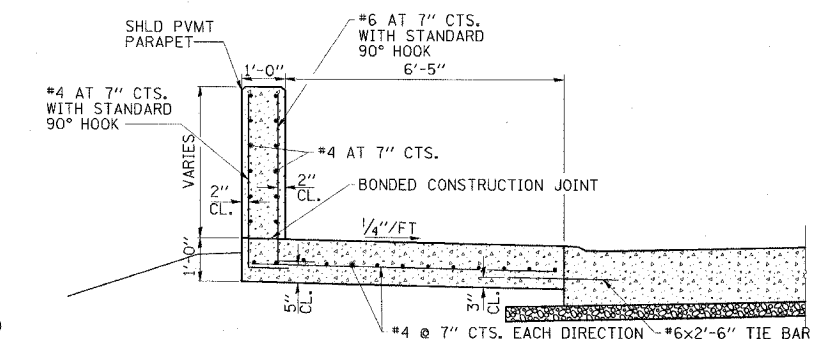
NORTHWEST CORNER PLAN



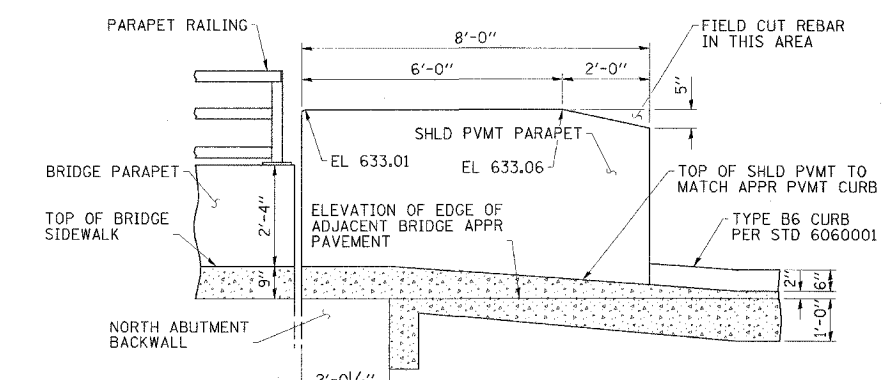
SOUTHEAST CORNER PLAN



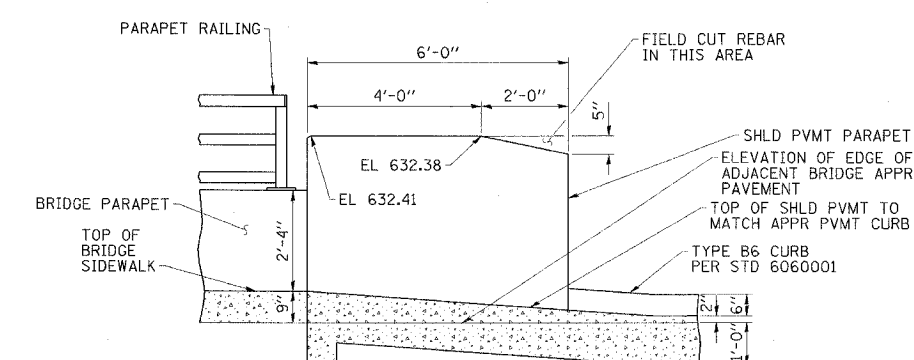
NORTHEAST CORNER PLAN



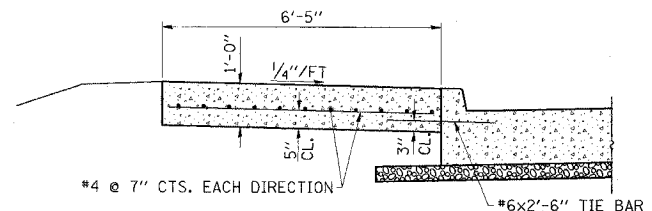
SECTION C-C



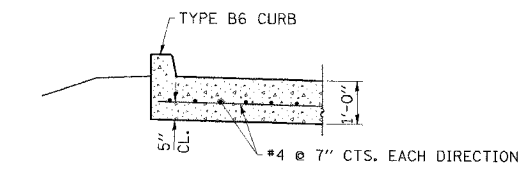
SECTION B-B



SECTION A-A



SECTION D-D



SECTION E-E

- NOTES**
- ALL REINFORCEMENT SHALL BE EPOXY COATED AND INCLUDED IN THE COST OF P.C. CONCRETE BRIDGE APPROACH SHOULDER PAVEMENT (SPECIAL).
 - LOCATE REBAR IN PARAPET TO CLEAR ANCHOR BOLTS FOR TYPE 6 TRAFFIC BARRIER TERMINALS, SEE STD 631031 FOR LOCATIONS.
 - THE COST OF THE APPROACH SHOULDER PARAPET AND CURB AS WELL AS THE PAVEMENT PORTION POURED ON TOP OF THE NORTH ABUTMENT BACKWALL SHALL BE INCLUDED IN P.C. CONCRETE BRIDGE APPROACH SHOULDER PAVEMENT (SPECIAL).

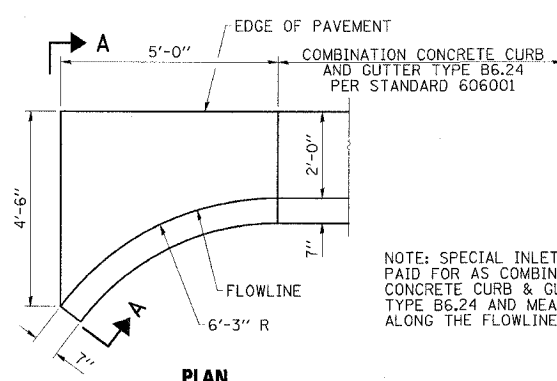
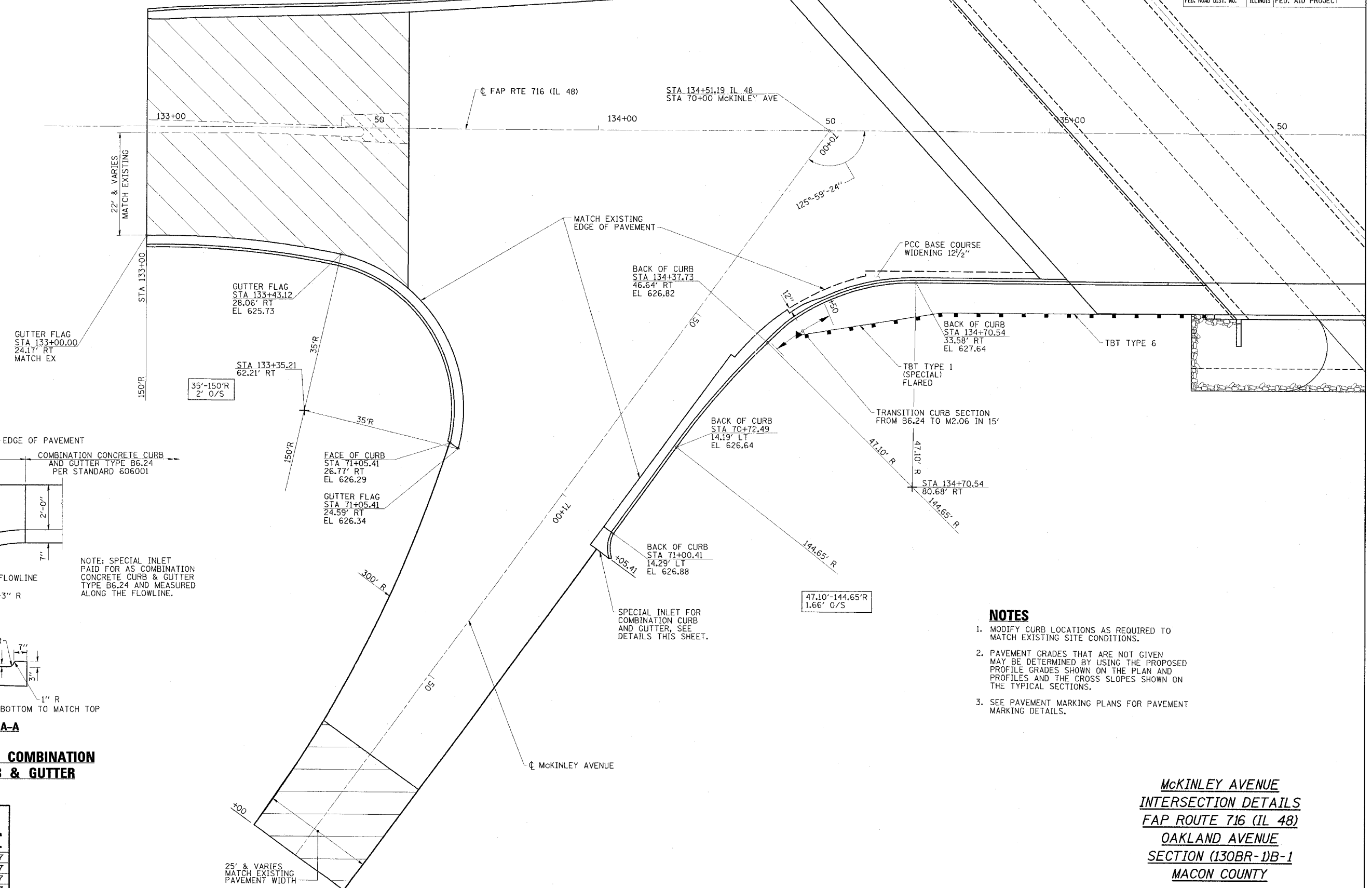
ESCA CONSULTANTS, INC.

DESIGNED BY:	ELH	05/07
DRAWN BY:	JPC/HAS	05/07
CHECKED BY:	ELH	06/07
APPROVED BY:	RDP	06/07

BRIDGE APPROACH SHOULDER PAVEMENT (SPECIAL)
 FAP ROUTE 716 (IL 48)
 OAKLAND AVENUE
 SECTION (130BR-1)B-1
 MACON COUNTY



CONTRACT NO. 74166				
FAP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	(130BR-1)B-1	MACON	95	32
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



NOTE: SPECIAL INLET PAID FOR AS COMBINATION CONCRETE CURB & GUTTER TYPE B6.24 AND MEASURED ALONG THE FLOWLINE.

- NOTES**
1. MODIFY CURB LOCATIONS AS REQUIRED TO MATCH EXISTING SITE CONDITIONS.
 2. PAVEMENT GRADES THAT ARE NOT GIVEN MAY BE DETERMINED BY USING THE PROPOSED PROFILE GRADES SHOWN ON THE PLAN AND PROFILES AND THE CROSS SLOPES SHOWN ON THE TYPICAL SECTIONS.
 3. SEE PAVEMENT MARKING PLANS FOR PAVEMENT MARKING DETAILS.

**McKINLEY AVENUE
INTERSECTION DETAILS
FAP ROUTE 716 (IL 48)
OAKLAND AVENUE
SECTION (130BR-1)B-1
MACON COUNTY**

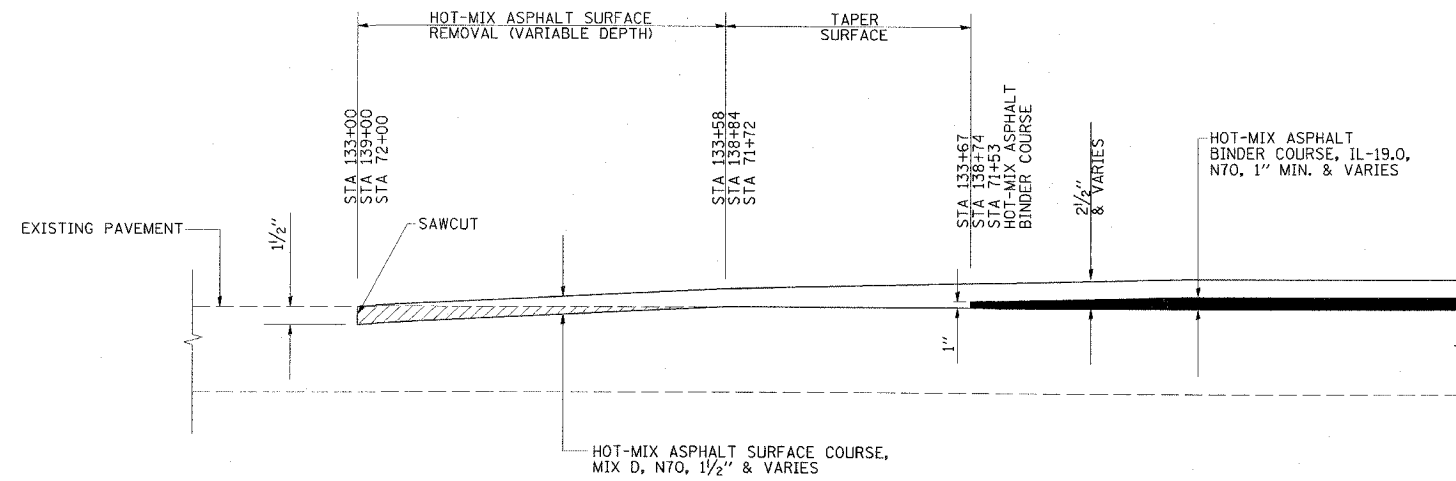
ESCA
CONSULTANTS, INC.

DESIGNED BY:	ELH	05/07
DRAWN BY:	HAS	05/07
CHECKED BY:	ELH	06/07
APPROVED BY:	RDP	06/07

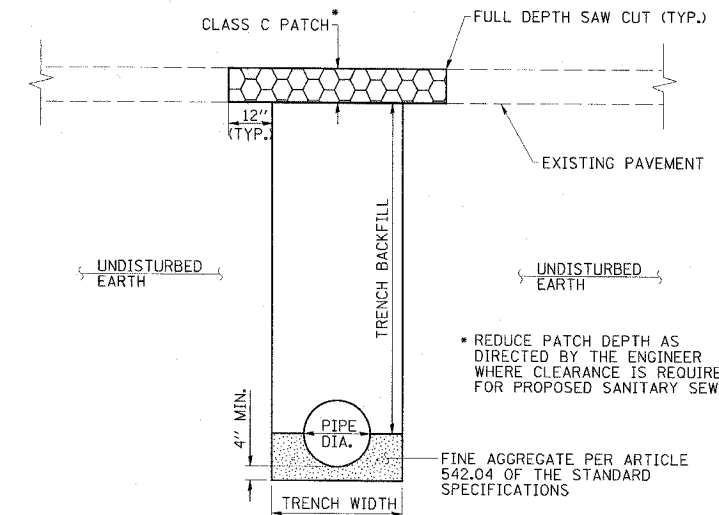


CONTRACT NO. 74166

FAP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	(130BR-1)B-1	MACON	95	33
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

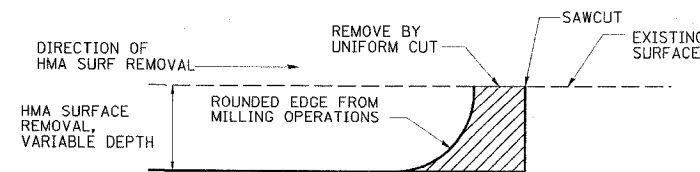


TYPICAL BUTT JOINT SECTION



NOTE:
TRENCH EXCAVATION AND FOUNDATION SHALL BE PER ARTICLE 542.04 OF THE STANDARD SPECIFICATIONS, COST INCLUDED IN THE COST OF THE PROPOSED PIPE

TYPICAL ROADWAY CROSSING FOR PIPE



DETAIL AT BUTT JOINT

NOTE:
WHEN MILLING OPERATIONS PRODUCE A ROUNDED EDGE, THEN A SAWCUT SHALL BE USED TO MANUFACTURE A PERPENDICULAR EDGE AS SHOWN IN THE DETAIL. THE COST OF ALL WORK SHOWN IN THE DETAIL IS INCLUDED IN HOT-MIX ASPHALT SURFACE REMOVAL (VARIABLE DEPTH). THE ENGINEER SHALL BE THE SOLE JUDGE CONCERNING THE USE OF THIS DETAIL.

ESCA
CONSULTANTS, INC.

DESIGNED BY:	ELH	05/07
DRAWN BY:	KAH	05/07
CHECKED BY:	ELH	05/07
APPROVED BY:	RDP	05/07

MISCELLANEOUS DETAILS
FAP ROUTE 716 (IL 48)
OAKLAND AVENUE
SECTION (130BR-1)B-1
MACON COUNTY

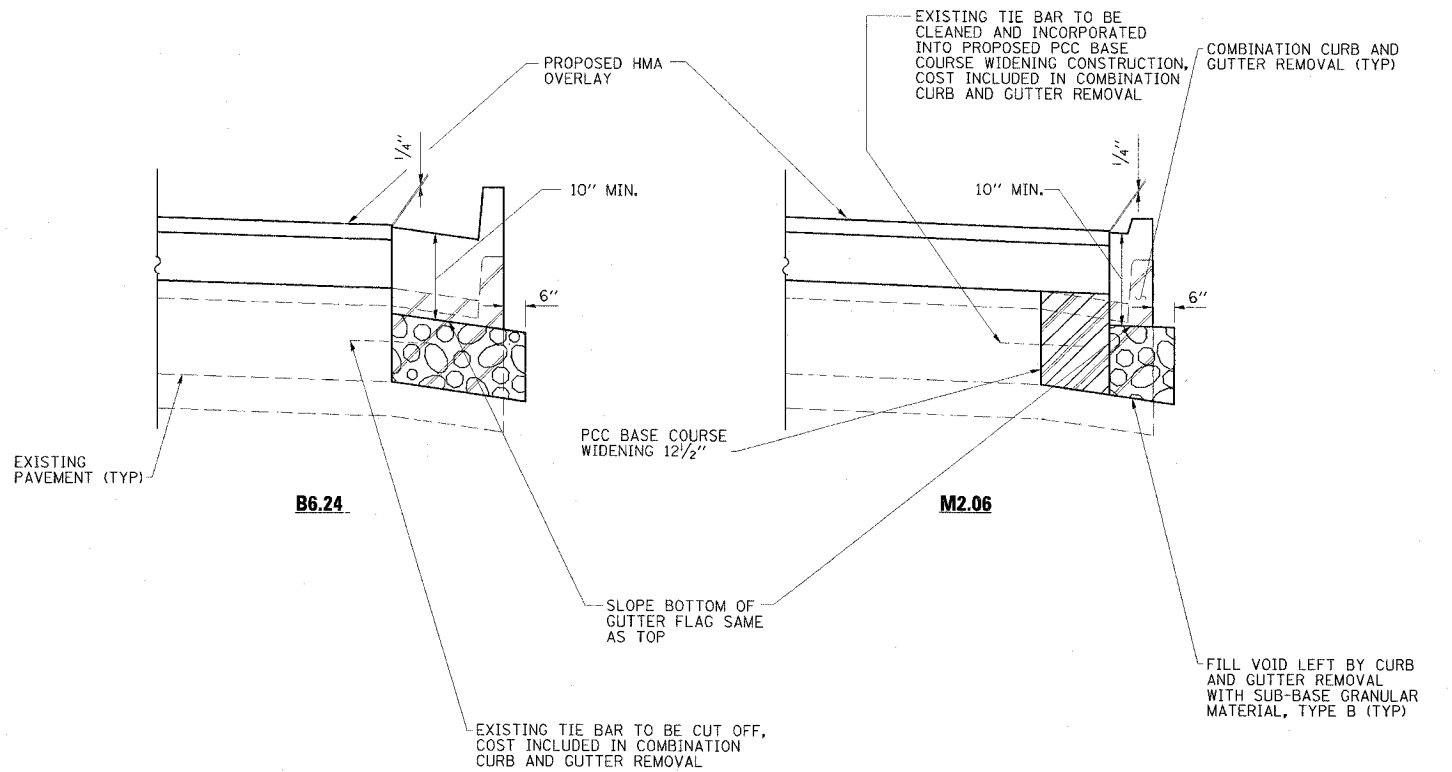
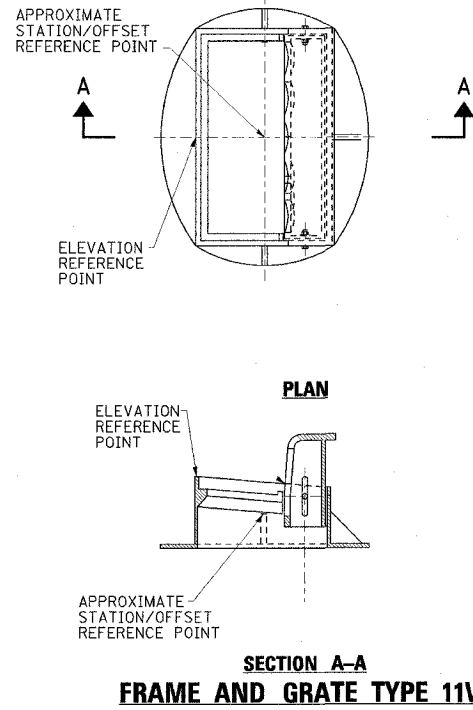


CONTRACT NO. 74166

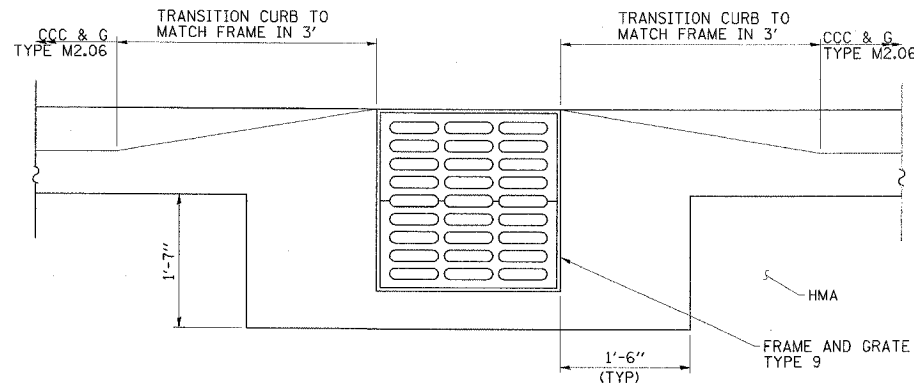
FAP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	(130BR-1)B-1	MACON	95	34
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

NOTE:
WITH THE EXCEPTION OF TYPE 11V FRAMES & GRATES
APPROXIMATE STATION/OFFSET REFERENCE POINTS WILL
BE THE CENTER-LINE OF CASTING AND THE ELEVATION
REFERENCE POINTS WILL BE THE TOP OF LID.

THE FOLLOWING DIAGRAMS ILLUSTRATE THE TYPE 11V
FRAME AND GRATE.



TYPICAL CURB AND GUTTER DETAILS



NOTE: CURB AND GUTTER TRANSITIONS AND WIDENING AT FRAME AND GRATE INCLUDED IN THE COST OF CURB AND GUTTER TYPE M2.06

INLET PLAN
STA 136 + 96.32.56' LT

ESCA
CONSULTANTS, INC.

DESIGNED BY:	ELH	05/07
DRAWN BY:	KAH	05/07
CHECKED BY:	ELH	06/07
APPROVED BY:	RDP	06/07

MISCELLANEOUS DETAILS
FAP ROUTE 716 (IL 48)
OAKLAND AVENUE
SECTION (130BR-1)B-1
MACON COUNTY

BENCHMARK: Chiseled square top SE wingwall of SN 058-0056, approximately 350' north of overhead railroad bridge, Sta. 135+57.43, 42.28' Rt., Elev. 628.10

EXISTING STRUCTURE: SN 058-0056 was originally built in 1932. The superstructure was replaced, and the substructure widened in 1975. The structure consists of 3 spans of PPC deck beams on closed abutments and solid wall piers supported on untreated timber piles. In September of 2006, repairs were made to remove and replace the top 3'-4" of concrete of select deck beams. A deck beam replacement contract is scheduled for a June 2007 Letting date. The bridge is 117'-1 1/2" bk.-bk. abuts. and 82'-0" a.-a. deck. Existing structure is to be removed and replaced. One lane of traffic will be maintained in each direction utilizing stage construction.

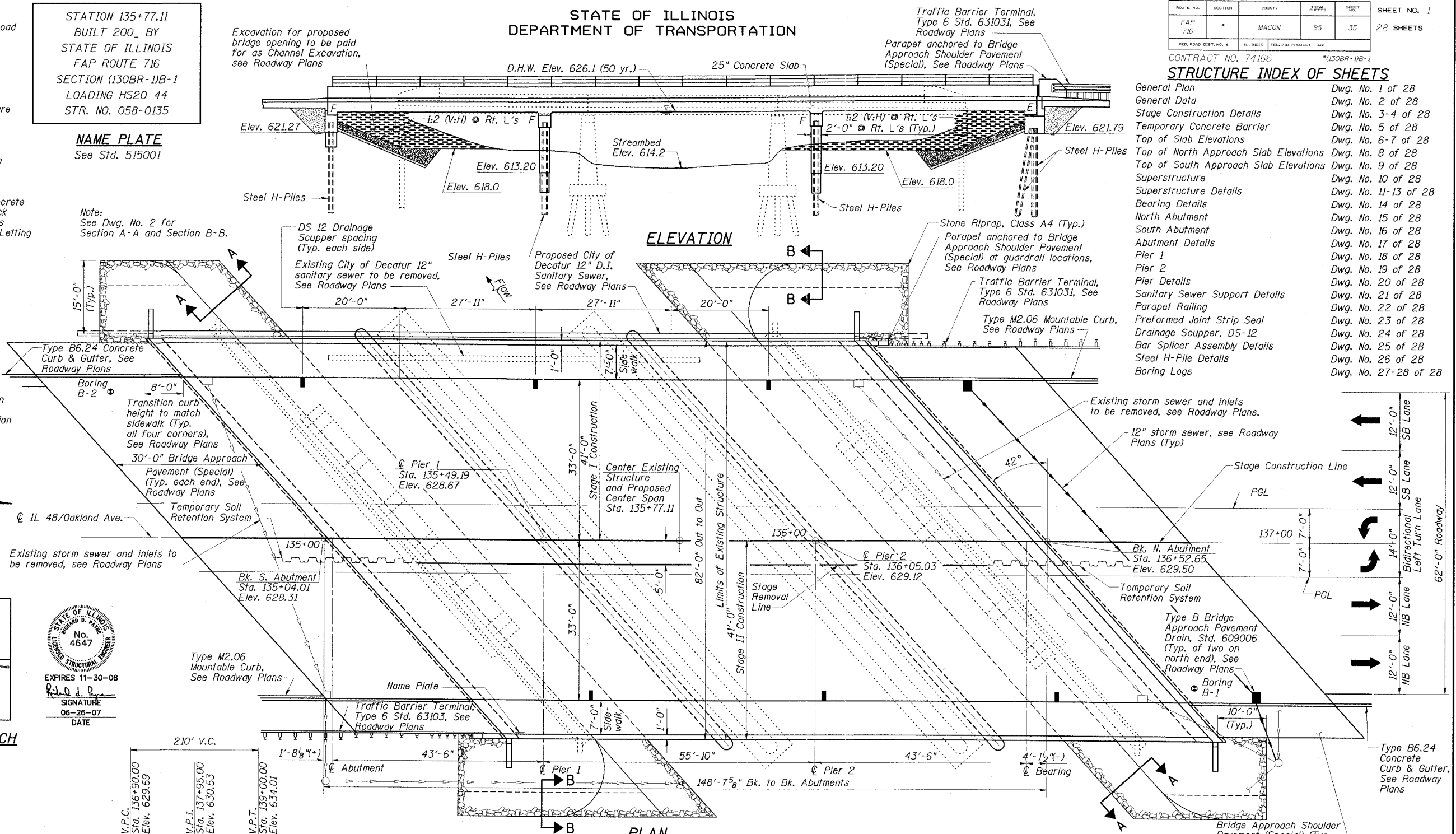
No salvage.

STATIONING: Centerline stationing was established by IDOT District 5 surveys by honoring a permanent survey marker at plan station 124+75.00. This put the center of the bridge at station 135+77.11. Existing bridge plans show the center of bridge at 135+77.00.

STATION 135+77.11
BUILT 200_ BY
STATE OF ILLINOIS
FAP ROUTE 716
SECTION (130BR-1)B-1
LOADING HS20-44
STR. NO. 058-0135

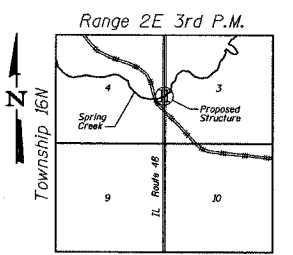
NAME PLATE
See Std. 515001

Note:
See Dwg. No. 2 for
Section A-A and Section B-B.

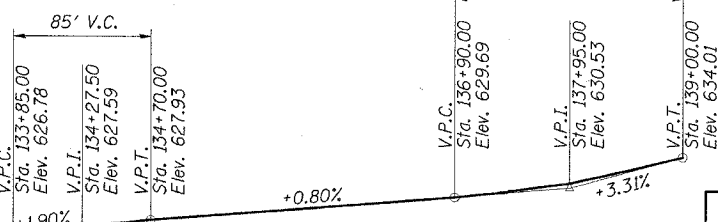


ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET NO.
FAP 716	*	MACON	95	35
CONTRACT NO. 74166				
STRUCTURE INDEX OF SHEETS				

General Plan	Dwg. No. 1 of 28
General Data	Dwg. No. 2 of 28
Stage Construction Details	Dwg. No. 3-4 of 28
Temporary Concrete Barrier	Dwg. No. 5 of 28
Top of Slab Elevations	Dwg. No. 6-7 of 28
Top of North Approach Slab Elevations	Dwg. No. 8 of 28
Top of South Approach Slab Elevations	Dwg. No. 9 of 28
Superstructure	Dwg. No. 10 of 28
Superstructure Details	Dwg. No. 11-13 of 28
Bearing Details	Dwg. No. 14 of 28
North Abutment	Dwg. No. 15 of 28
South Abutment	Dwg. No. 16 of 28
Abutment Details	Dwg. No. 17 of 28
Pier 1	Dwg. No. 18 of 28
Pier 2	Dwg. No. 19 of 28
Pier Details	Dwg. No. 20 of 28
Sanitary Sewer Support Details	Dwg. No. 21 of 28
Parapet Railing	Dwg. No. 22 of 28
Preformed Joint Strip Seal	Dwg. No. 23 of 28
Drainage Scupper, DS-12	Dwg. No. 24 of 28
Bar Splicer Assembly Details	Dwg. No. 25 of 28
Steel H-Pile Details	Dwg. No. 26 of 28
Boring Logs	Dwg. No. 27-28 of 28



LOCATION SKETCH



PROFILE GRADE

(Along inside edge of northbound and southbound passing lanes)

ESCA CONSULTANTS, INC.
DESIGNED BY: ELH 03/07
DRAWN BY: cj 03/07
CHECKED BY: ELH 06/07
APPROVED BY: RDP 06/07

DESIGN SCOUR ELEVATIONS	
North Abutment	621.6
Pier 1	612.0
Pier 2	612.0
South Abutment	621.1

Drainage Area = 23.12 Sq. Mi.		Exist. Low Grade Elev. = 626.53 Ft. @ Sta. 134+00		Prop. Low Grade Elev. = 627.30 Ft. @ Sta. 134+00		
Flood	Frequency Year	Discharge (CFS)	Waterway Opening - Sq. Ft.	Nat. H.W.E.	Head - Ft.	Headwater El.
			Exist. Prop.	Exist. Prop.	Exist. Prop.	Exist. Prop.
Design	10	2125	527 680	624.6	0.3 0.2	624.9 624.8
Base	50	3119	553 741	626.1	1.0 0.4	627.1 626.5
Overtopping	100	3764	553 741	627.3	0.4 0.3	627.7 627.6
Overtopping	40	2927	553 -	625.8	0.9 -	626.7 -
Overtopping	60	3549	- 741	627.0	- 0.4	- 627.4

DESIGN SPECIFICATIONS

2002 AASHTO
LOADING HS20-44
Allow 50 psf for future wearing surface.
DESIGN STRESSES
FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (Reinf.)
SEISMIC DATA
Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.048g
Site Coefficient (S) = 1.5

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Ralph E. Anderson (PE)
ENGINEER OF BRIDGES AND STRUCTURES

GENERAL PLAN
IL ROUTE 48
OVER SPRING CREEK
FAP ROUTE 716 - SECTION (130BR-1)B-1
MACON COUNTY
STATION 135+77.11
STRUCTURE NO. 058-0135

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

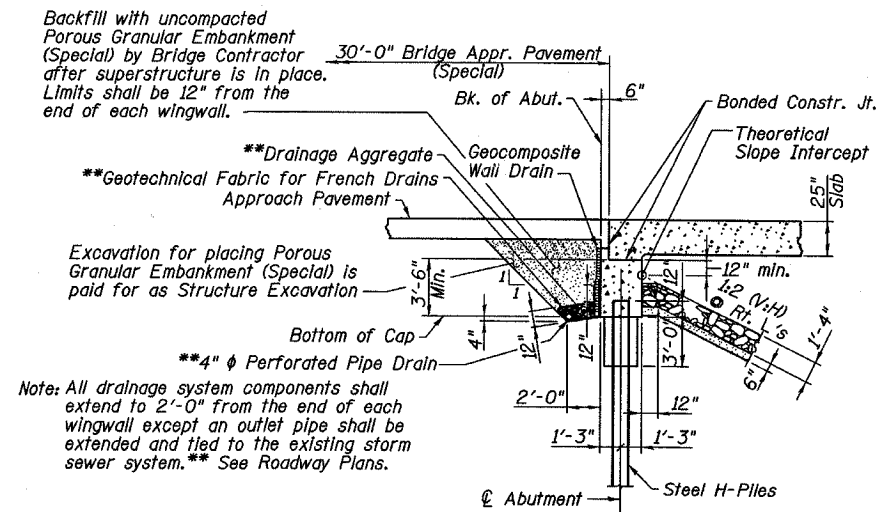
ROUTE NO.	SECTION	COUNTY	SHEET	TOTAL	SHEET NO. 2 28 SHEETS
FAP 716	#	MACON	95	36	
FED. ROAD DIST. NO. #		ILLINOIS	FED. AID PROJECT - AID		
CONTRACT NO. 74166					*130BR-1B-1

GENERAL NOTES

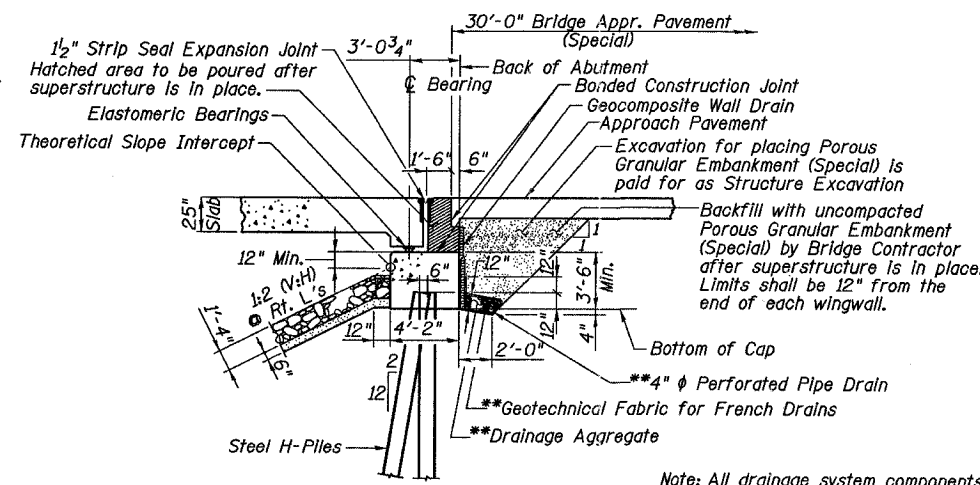
- The Contractor shall make allowance for the deflection of forms, shrinkage and settlement of falsework, in addition to allowance for dead load deflection. Forms for deck slab shall be removed prior to placement of bridge approach pavement.
- Concrete Sealer shall be applied to the designated areas of the North Abutment.
- Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions.
- Reinforcement bars designated (E) shall be epoxy coated.
- Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before Stage I removal of the existing superstructure. The Contractor shall sawcut the upper portion of the existing abutment at the stage removal line before Stage I removal to ensure the remaining portion will not be prematurely damaged.
- The Contractor shall drive test piles in production locations at substructures specified or approved by the Engineer before ordering the remainder of piles. The test piles shall be driven to 110 percent of the Nominal Required Bearing Indicated in the pile data information.
- Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
- The Contractor is advised that the existing PPC Deck Beams are in a deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the condition of the beams when developing construction procedures.
- If the Contractor's procedure for existing deck beam removal or placement of new deck beams involves placement of cranes or other heavy equipment on deck beams, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, prepared and sealed by an Illinois Licensed Structural Engineer, verifying that the equipment and procedure used will not overstress the deck beams.
- If required to be anchored, temporary concrete barrier shall only be anchored into the overlay and not the PPC Deck Beams.
- A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.

TOTAL BILL OF MATERIAL

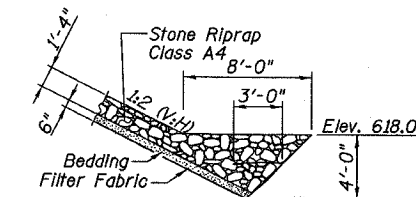
ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment, Special	Cu. Yd.		265	265
Stone Riprap, Class A4	Sq. Yd.		840	840
Filter Fabric	Sq. Yd.		840	840
Removal of Existing Structures	Each	0.5	0.5	1
Structure Excavation	Cu. Yd.		890	890
Concrete Structures	Cu. Yd.		349.6	349.6
Concrete Superstructure	Cu. Yd.	1052.7		1052.7
Bridge Deck Grooving	Sq. Yd.	1032		1032
Protective Coat	Sq. Yd.	1435		1435
Reinforcement Bars, Epoxy Coated	Pound	144300	27810	172110
Concrete Sealer	Sq. Ft.		1075	1075
Pipe Underdrains for Structures 4"	Foot		280	280
Geocomposite Wall Drain	Sq. Yd.		140	140
Furnishing Steel Piles HP10x42	Foot		4600	4600
Driving Piles	Foot		4600	4600
Test Pile Steel HP10x42	Each		4	4
Pile Shoes	Each		84	84
Underwater Structure Excavation Protection-Location 1	Each		1	1
Underwater Structure Excavation Protection-Location 2	Each		1	1
Drainage Scuppers DS-12	Each	6		6
Name Plates	Each	1		1
Temporary Soil Retention System	Sq. Ft.		370	370
Bar Splacers	Each	311	80	391
Anchor Bolts, 1"	Each		32	32
Concrete Encasement	Cu. Yd.		29.4	29.4
Parapet Railing	Foot	288		288
Elastomeric Bearing Assembly, Type I	Each	16		16
Preformed Joint Strip Seal	Foot	110		110
Pipe Support	Each	16		16
Temporary Support System	Each	1		1



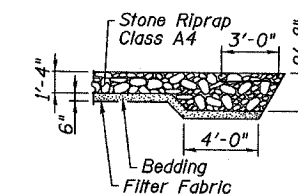
SECTION THRU SOUTH ABUTMENT
(Horizontal Dim. @ Rt. L's)



SECTION THRU NORTH ABUTMENT
(Horizontal Dim. @ Rt. L's)



SECTION A-A



SECTION B-B

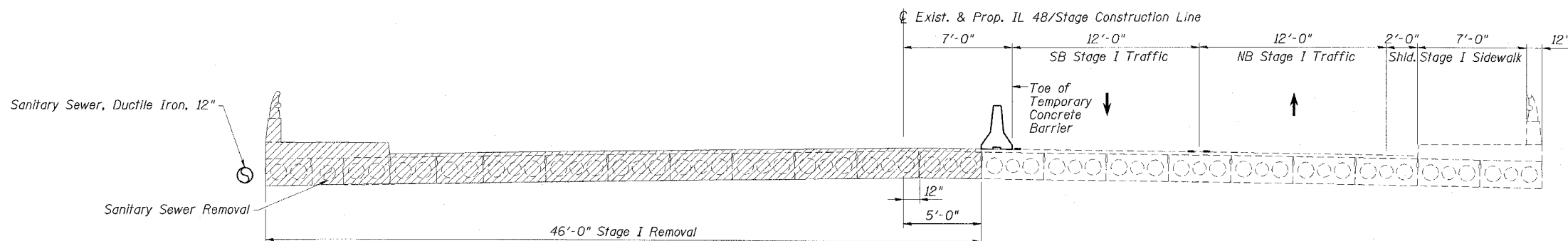
GENERAL DATA
IL ROUTE 48
OVER SPRING CREEK
FAP ROUTE 716 - SECTION (130BR-1B-1)
MACON COUNTY
STATION 135+77.11
STRUCTURE NO. 058-0135

ESCA
CONSULTANTS, INC.

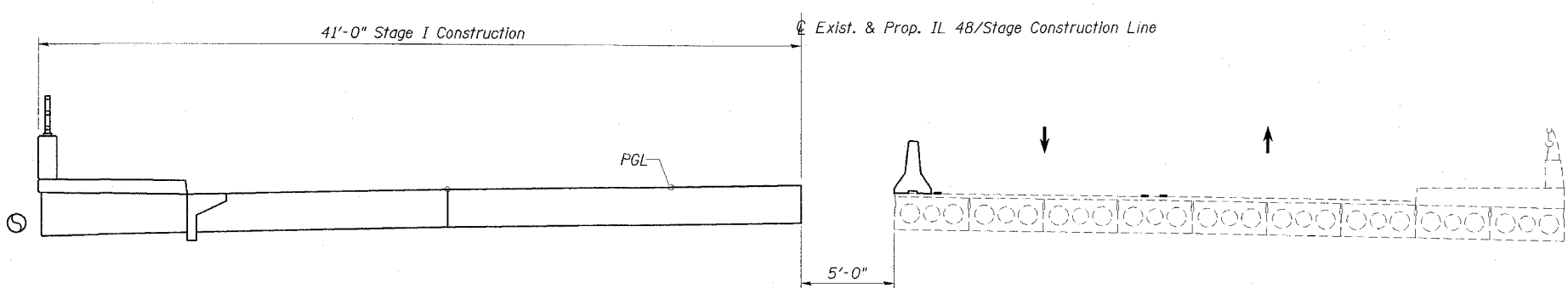
DESIGNED BY:	ELH	03/07
DRAWN BY:	cj	03/07
CHECKED BY:	ELH	06/07
APPROVED BY:	RDP	06/07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

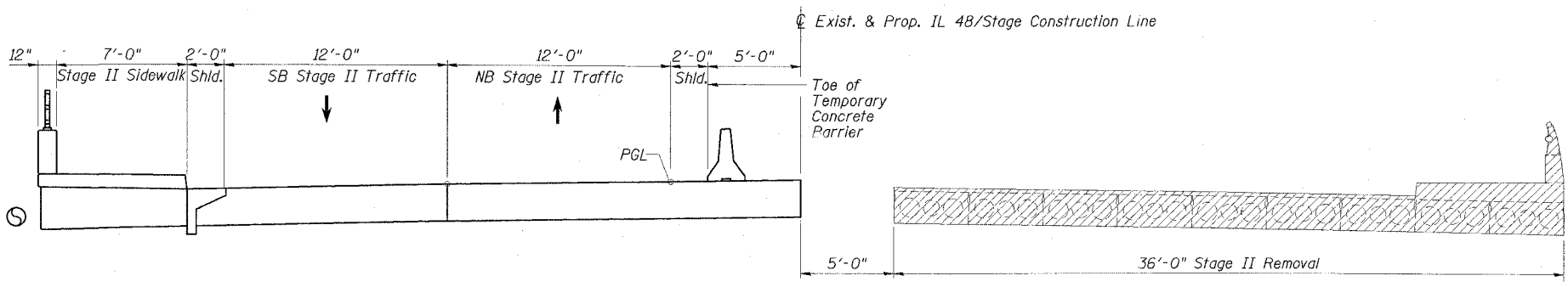
ROUTE NO. 716	SECTION *	COUNTY MACON	TOTAL SHEETS 95	SHEET 37	SHEET NO. 3 28 SHEETS
FED. ROAD DIST. NO. #		ILLINOIS	FED. AID PROJECT- AID		CONTRACT NO. 74166
					*130BR-1B-1



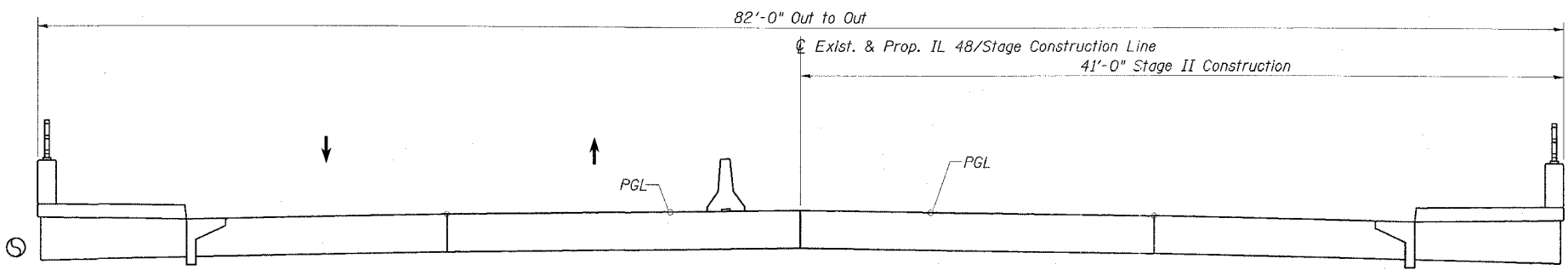
STAGE I REMOVAL



STAGE I CONSTRUCTION



STAGE II REMOVAL



STAGE II CONSTRUCTION

STAGE CONSTRUCTION NOTES

1. Hatched areas indicate removal.
2. All staging sections are looking North.
3. For quantities of Temporary Concrete Barrier, Sanitary Sewer Removal, and Sanitary Sewer, Ductile Iron, 12", see Roadway Plans.
4. The stage construction lines for the substructure units differ from the stage construction line for the superstructure. See details on the individual substructure sheets.
5. Prior to removing the existing sanitary sewer, a temporary sewer shall be constructed on the Temporary Support System provided by the Contractor. The proposed permanent sanitary sewer shall be constructed prior to removal of the temporary sewer. See Roadway Plans for details and locations of the temporary sewer and the proposed permanent sanitary sewer.

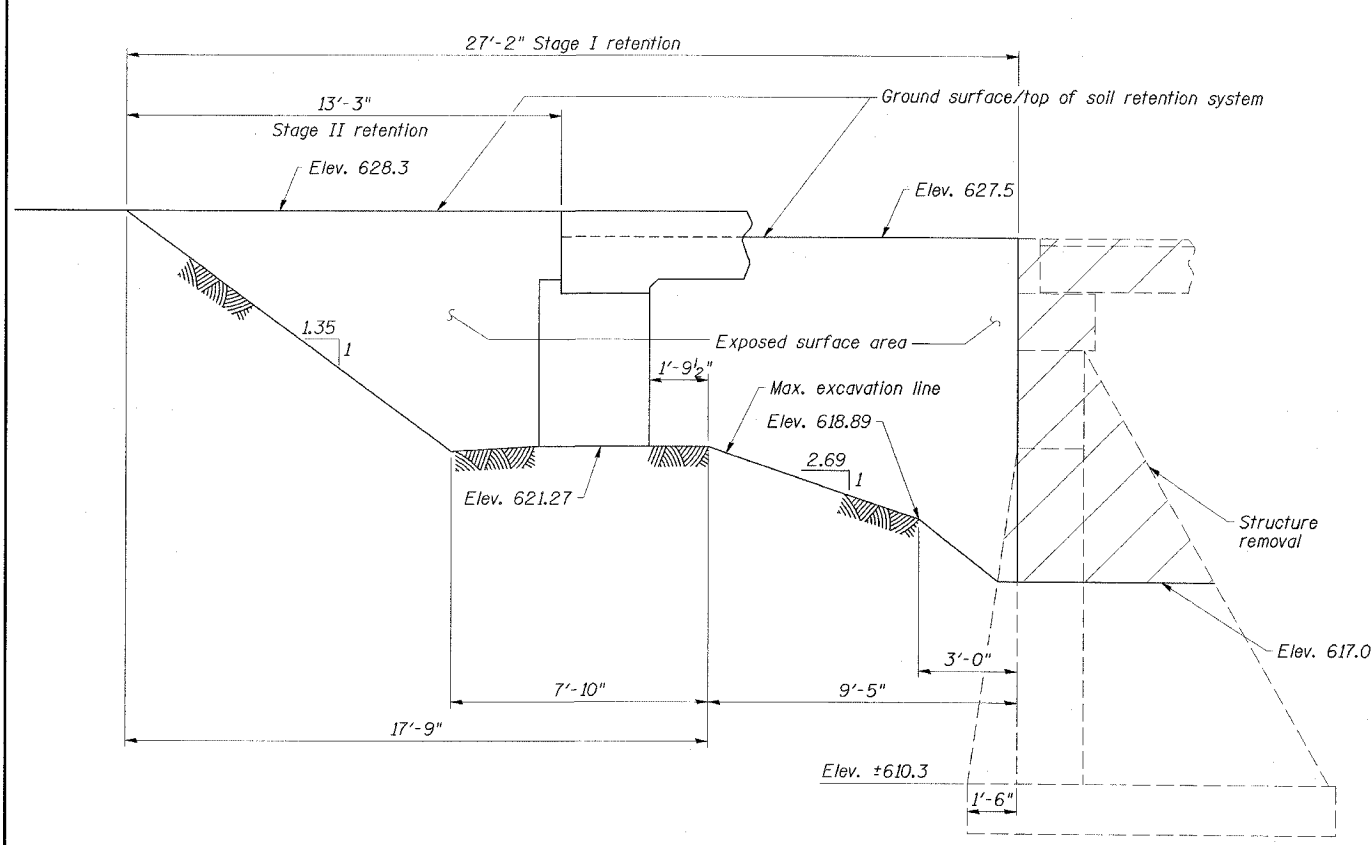
STAGE CONSTRUCTION DETAILS
IL ROUTE 48
OVER SPRING CREEK
FAP ROUTE 716 - SECTION (130BR-1)B-1
MACON COUNTY
STATION 135+77.11
STRUCTURE NO. 058-0135

ESCA
CONSULTANTS, INC.

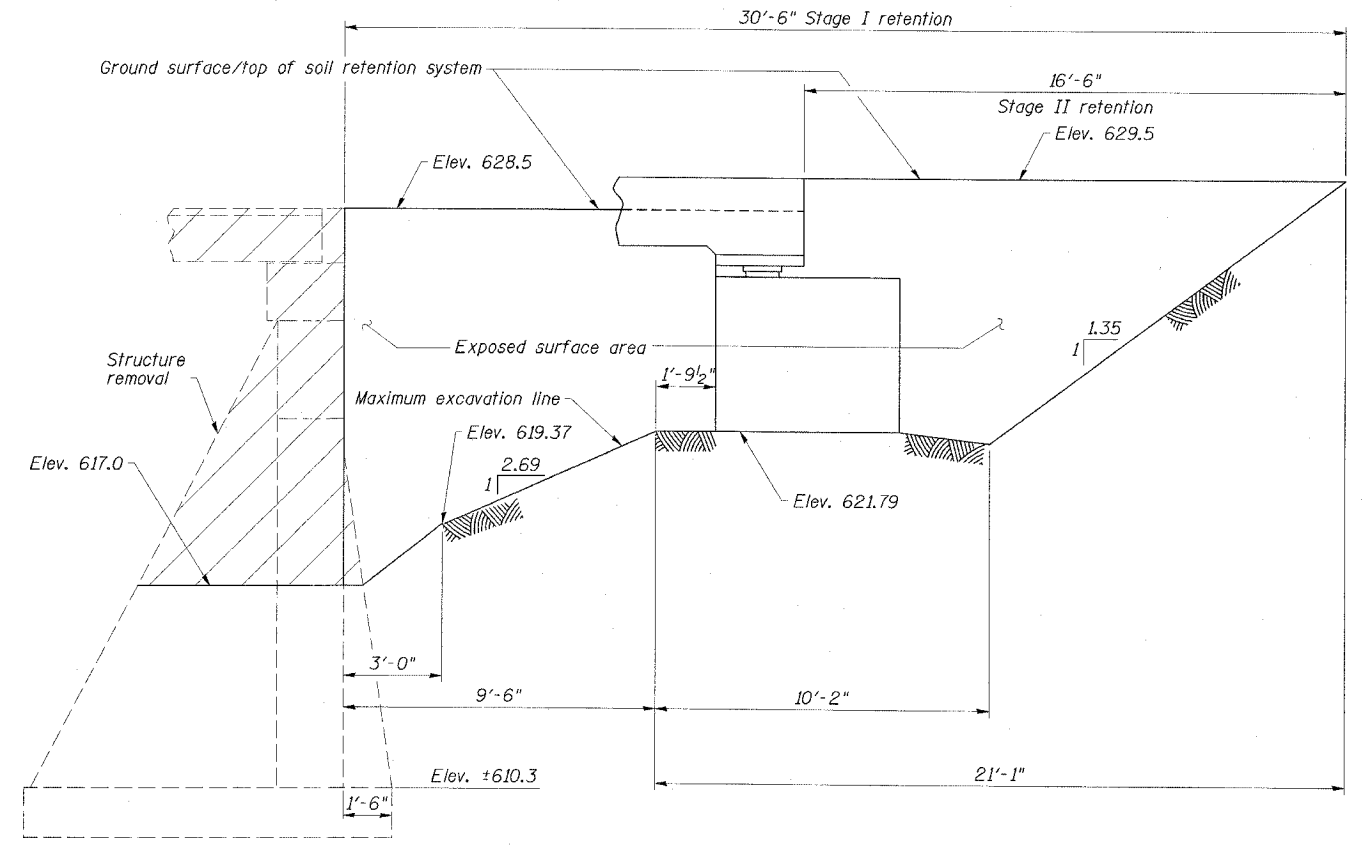
DESIGNED BY:	ELH	03/07
DRAWN BY:	cj	03/07
CHECKED BY:	ELH	06/07
APPROVED BY:	RDP	06/07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET	SHEET NO.
FAP 716	*	MACON	95	38	28 SHEETS
FED. ROAD DIST. NO.		ILLINOIS	TEMP. AND PROJECT		
			CONTRACT NO. 74166		* (130BR-1)B-1



**SOUTH ABUTMENT
TEMPORARY SOIL RETENTION SYSTEM**



**NORTH ABUTMENT
TEMPORARY SOIL RETENTION SYSTEM**

TEMPORARY SOIL RETENTION SYSTEM NOTES

1. A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.

ESCA
CONSULTANTS, INC.

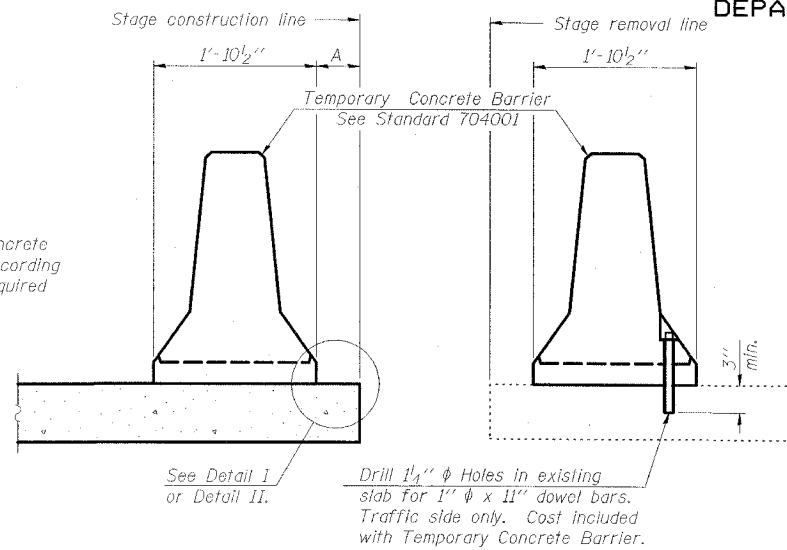
DESIGNED BY:	ELH	03/07
DRAWN BY:	HAS	03/07
CHECKED BY:	ELH	06/07
APPROVED BY:	RDP	06/07

**STAGE CONSTRUCTION DETAILS
IL ROUTE 48
OVER SPRING CREEK
FAP ROUTE 716-SECTION (130BR-1)B-1
MACON COUNTY
STATION 135+77.11
STRUCTURE NO. 058-0135**

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET	SHEET NO. 5
FAP 716	*	MACON	95	39	28 SHEETS
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	CONTRACT NO. 74166 * (130BR-1)B-1		

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".



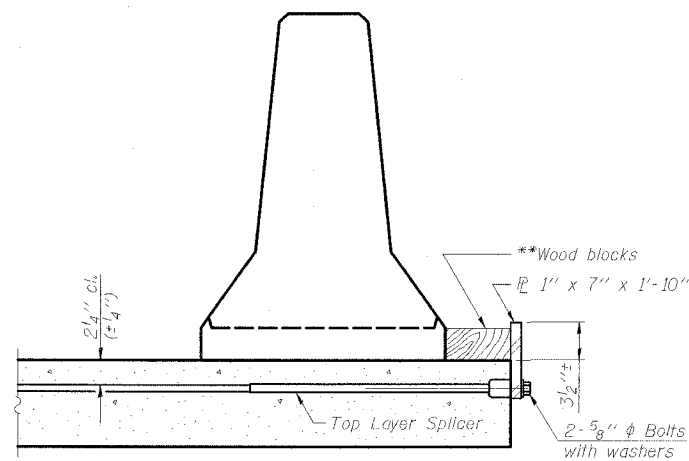
NEW SLAB

EXISTING SLAB

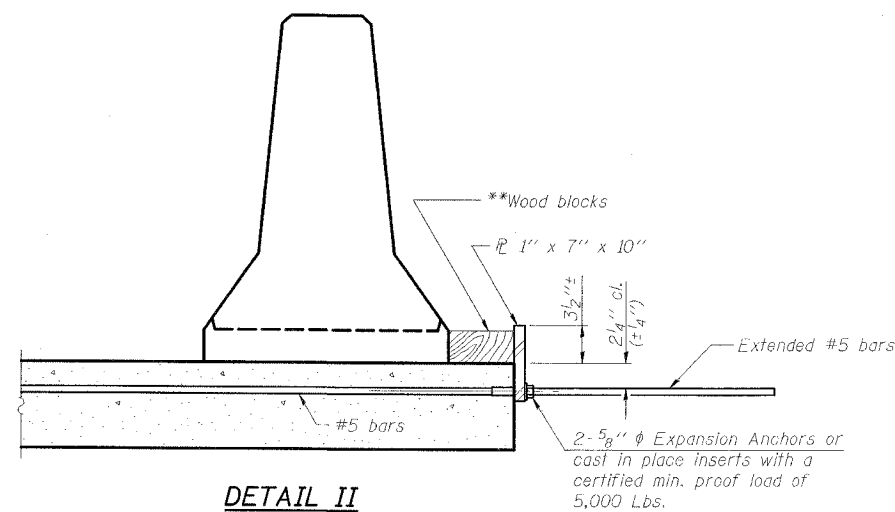
SECTIONS THRU SLAB

NOTES

- Detail I - With Bar Splicer or Couplers:**
Connect one (1) 1"x7"x1'-10" steel \bar{P} to the top layer of couplers with 2-5/8" ϕ bolts screwed to coupler at approximate \bar{C} of each barrier panel.
- Detail II - With Extended Reinforcement Bars:**
Connect one (1) 1"x7"x10" steel \bar{P} to the concrete slab with 2-5/8" ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate \bar{C} of each barrier panel.
- Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" 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.

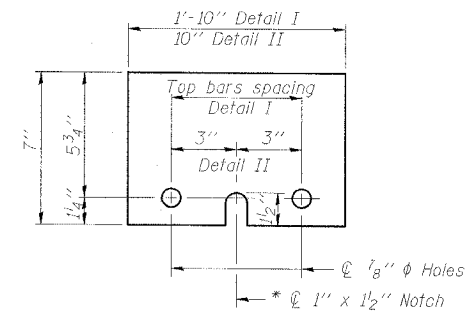


DETAIL I



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.



STEEL RETAINER \bar{P} 1' x 7"

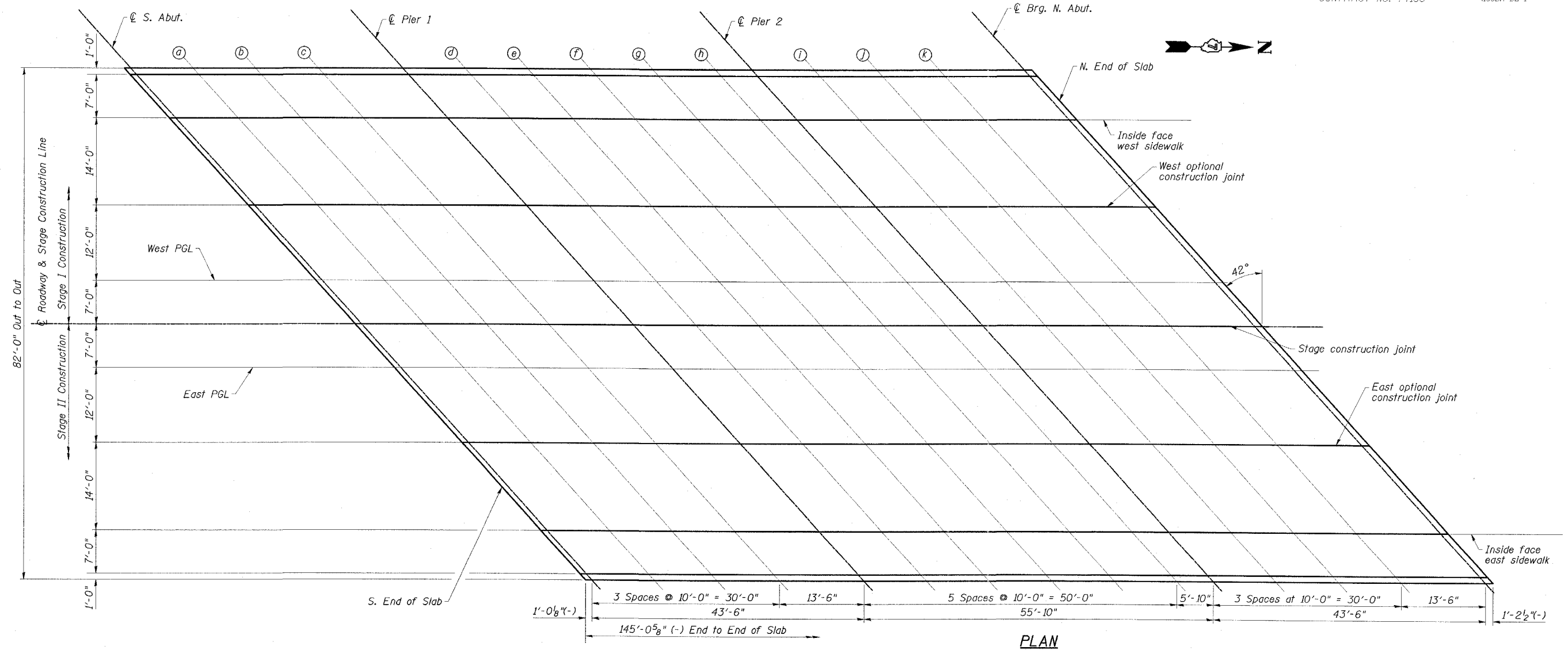
* Required only with Detail II

TEMPORARY CONCRETE BARRIER
FOR STAGE CONSTRUCTION
IL ROUTE 48
OVER SPRING CREEK
FAP ROUTE 716-SECTION (130BR-1)B-1
MACON COUNTY
STATION 135+77.11
STRUCTURE NO. 058-0135

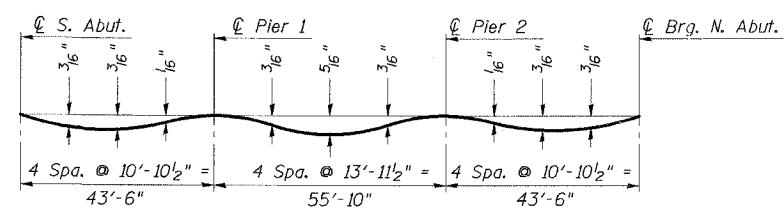
ESCA CONSULTANTS, INC.		
DESIGNED BY:	ELH	03/07
DRAWN BY:	HAS	03/07
CHECKED BY:	ELH	03/07
APPROVED BY:	RDP	03/07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET NO. 6
FAP 716	#	MACON	95	40
CONTRACT NO. 74166				* (130BR-1)B-1



PLAN



Note:
The above deflections are not to be used in the field if the Engineer is working from the grade elevations adjusted for dead load deflections as shown on Dwg. No. 7 of 2B.

DEAD LOAD DEFLECTION DIAGRAM
(Includes weight of concrete only.)

TOP OF SLAB ELEVATIONS
IL ROUTE 48
OVER SPRING CREEK
FAP ROUTE 716-SECTION (130BR-1)B-1
MACON COUNTY
STATION 135+77.11
STRUCTURE NO. 058-0135

ESCA
CONSULTANTS, INC.

DESIGNED BY:	ELH	03/07
DRAWN BY:	HAS	03/07
CHECKED BY:	ELH	03/07
APPROVED BY:	RDP	03/07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	DATE	SHEET
FAP 716	*	MACON	95	41
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
		CONTRACT NO. 74166 * (130BR-1)B-1		

SHEET NO. 7
28 SHEETS

INSIDE FACE WEST SIDEWALK

Location	Station	Offset (ft.)	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
S. End of Slab	134+74.97	-33.00	627.49	627.49
☉ S. Abut.	134+75.98	-33.00	627.50	627.50
a	134+85.98	-33.00	627.58	627.59
b	134+95.98	-33.00	627.66	627.68
c	135+05.98	-33.00	627.74	627.75
☉ Pier 1	135+19.48	-33.00	627.85	627.85
d	135+29.48	-33.00	627.93	627.94
e	135+39.48	-33.00	628.01	628.03
f	135+49.48	-33.00	628.09	628.11
g	135+59.48	-33.00	628.17	628.18
h	135+69.48	-33.00	628.25	628.25
☉ Pier 2	135+75.31	-33.00	628.29	628.29
i	135+85.31	-33.00	628.37	628.38
j	135+95.31	-33.00	628.45	628.47
k	136+05.31	-33.00	628.53	628.55
☉ Brg. N. Abut.	136+18.81	-33.00	628.64	628.64
N. End of Slab	136+20.02	-33.00	628.65	628.65

WEST OPTIONAL CONSTRUCTION JOINT

Location	Station	Offset (ft.)	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
S. End of Slab	134+87.57	-19.00	627.88	627.88
☉ S. Abut.	134+88.58	-19.00	627.89	627.89
a	134+98.58	-19.00	627.97	627.98
b	135+08.58	-19.00	628.05	628.07
c	135+18.58	-19.00	628.13	628.14
☉ Pier 1	135+32.08	-19.00	628.24	628.24
d	135+42.08	-19.00	628.32	628.33
e	135+52.08	-19.00	628.40	628.42
f	135+62.08	-19.00	628.48	628.51
g	135+72.08	-19.00	628.56	628.58
h	135+82.08	-19.00	628.64	628.64
☉ Pier 2	135+87.92	-19.00	628.69	628.69
i	135+97.92	-19.00	628.77	628.77
j	136+07.92	-19.00	628.85	628.86
k	136+17.92	-19.00	628.93	628.94
☉ Brg. N. Abut.	136+31.42	-19.00	629.03	629.03
N. End of Slab	136+32.63	-19.00	629.04	629.04

WEST PGL

Location	Station	Offset (ft.)	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
S. End of Slab	134+98.38	-7.00	628.16	628.16
☉ S. Abut.	134+99.39	-7.00	628.17	628.17
a	135+09.39	-7.00	628.25	628.26
b	135+19.39	-7.00	628.33	628.34
c	135+29.39	-7.00	628.41	628.41
☉ Pier 1	135+42.89	-7.00	628.51	628.51
d	135+52.89	-7.00	628.59	628.60
e	135+62.89	-7.00	628.67	628.70
f	135+72.89	-7.00	628.75	628.78
g	135+82.89	-7.00	628.83	628.85
h	135+92.89	-7.00	628.91	628.92
☉ Pier 2	135+98.72	-7.00	628.96	628.96
i	136+08.72	-7.00	629.04	629.05
j	136+18.72	-7.00	629.12	629.13
k	136+28.72	-7.00	629.20	629.22
☉ Brg. N. Abut.	136+42.22	-7.00	629.31	629.31
N. End of Slab	136+43.43	-7.00	629.32	629.32

☉ ROADWAY & STAGE CONSTRUCTION LINE

Location	Station	Offset (ft.)	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
S. End of Slab	135+04.68	0.00	628.32	628.32
☉ S. Abut.	135+05.69	0.00	628.32	628.32
a	135+15.69	0.00	628.40	628.42
b	135+25.69	0.00	628.48	628.50
c	135+35.69	0.00	628.56	628.57
☉ Pier 1	135+49.19	0.00	628.67	628.67
d	135+59.19	0.00	628.75	628.76
e	135+69.19	0.00	628.83	628.86
f	135+79.19	0.00	628.91	628.94
g	135+89.19	0.00	628.99	629.01
h	135+99.19	0.00	629.07	629.08
☉ Pier 2	136+05.03	0.00	629.12	629.12
i	136+15.03	0.00	629.20	629.21
j	136+25.03	0.00	629.28	629.29
k	136+35.03	0.00	629.36	629.38
☉ Brg. N. Abut.	136+48.53	0.00	629.47	629.47
N. End of Slab	136+49.73	0.00	629.48	629.48

EAST PGL

Location	Station	Offset (ft.)	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
S. End of Slab	135+10.98	7.00	628.26	628.26
☉ S. Abut.	135+11.99	7.00	628.27	628.27
a	135+21.99	7.00	628.35	628.36
b	135+31.99	7.00	628.43	628.44
c	135+41.99	7.00	628.51	628.52
☉ Pier 1	135+55.49	7.00	628.61	628.61
d	135+65.49	7.00	628.69	628.70
e	135+75.49	7.00	628.77	628.80
f	135+85.49	7.00	628.85	628.88
g	135+95.49	7.00	628.93	628.95
h	136+05.49	7.00	629.01	629.02
☉ Pier 2	136+11.33	7.00	629.06	629.06
i	136+21.33	7.00	629.14	629.15
j	136+31.33	7.00	629.22	629.24
k	136+41.33	7.00	629.30	629.32
☉ Brg. N. Abut.	136+54.83	7.00	629.41	629.41
N. End of Slab	136+56.04	7.00	629.42	629.42

EAST OPTIONAL CONSTRUCTION JOINT

Location	Station	Offset (ft.)	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
S. End of Slab	135+21.79	19.00	628.16	628.16
☉ S. Abut.	135+22.80	19.00	628.16	628.16
a	135+32.80	19.00	628.24	628.26
b	135+42.80	19.00	628.32	628.34
c	135+52.80	19.00	629.40	628.41
☉ Pier 1	135+66.30	19.00	629.51	628.51
d	135+76.30	19.00	628.59	628.60
e	135+86.30	19.00	628.67	628.70
f	135+96.30	19.00	628.75	628.78
g	136+06.30	19.00	628.83	628.85
h	136+16.30	19.00	628.91	628.92
☉ Pier 2	136+22.13	19.00	628.96	628.96
i	136+32.13	19.00	629.04	629.05
j	136+42.13	19.00	629.12	629.13
k	136+52.13	19.00	629.20	629.22
☉ Brg. N. Abut.	136+65.63	19.00	629.31	629.31
N. End of Slab	136+66.84	19.00	629.32	629.32

INSIDE FACE EAST SIDEWALK

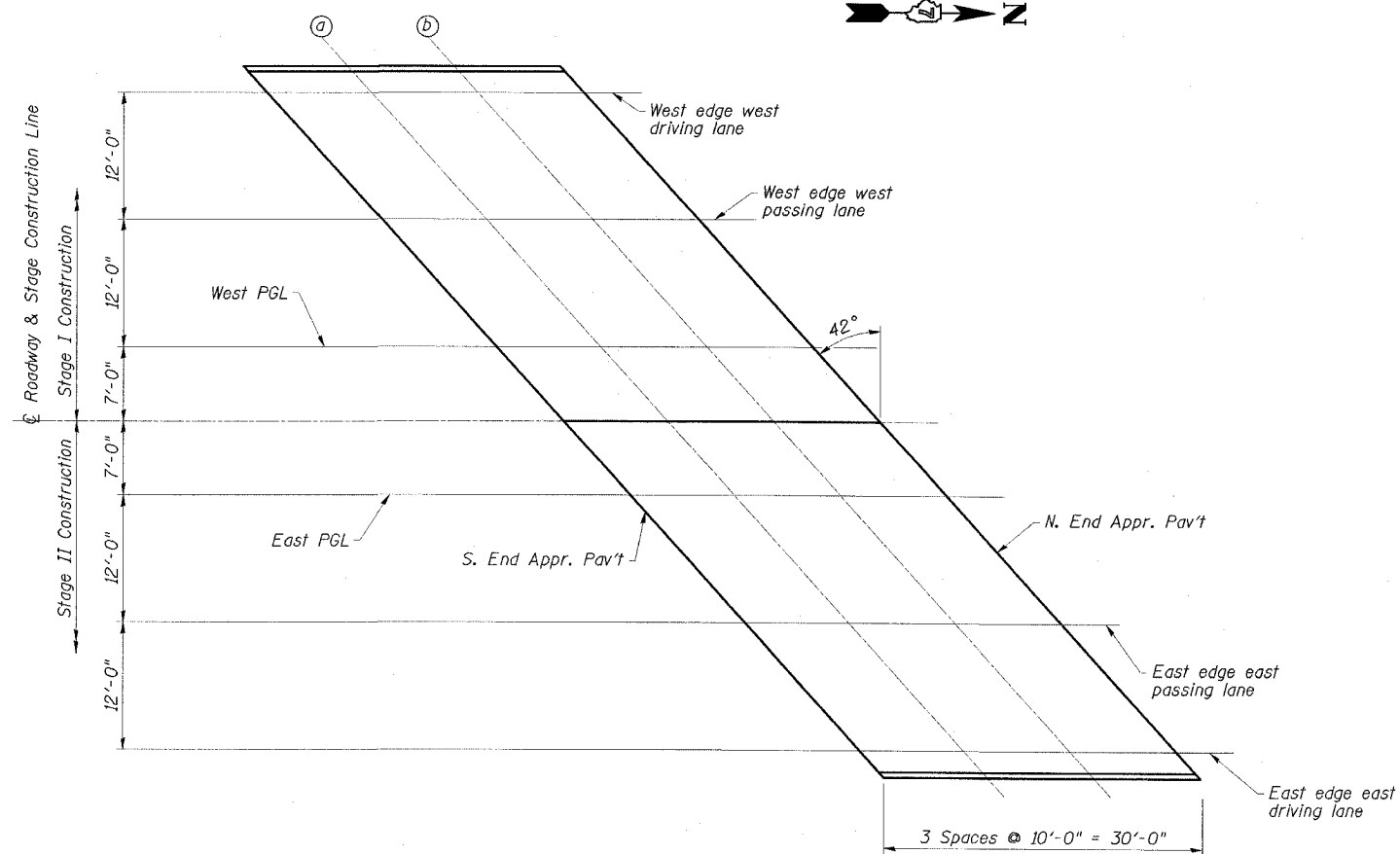
Location	Station	Offset (ft.)	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
S. End of Slab	135+34.39	33.00	627.97	627.97
☉ S. Abut.	135+35.41	33.00	627.97	627.97
a	135+45.41	33.00	628.05	628.07
b	135+55.41	33.00	628.13	628.15
c	135+65.41	33.00	628.21	628.22
☉ Pier 1	135+78.91	33.00	628.32	628.32
d	135+88.91	33.00	628.40	628.41
e	135+98.91	33.00	628.48	628.51
f	136+08.91	33.00	628.56	628.59
g	136+18.91	33.00	628.64	628.66
h	136+28.91	33.00	628.72	628.73
☉ Pier 2	136+34.74	33.00	628.77	628.77
i	136+44.74	33.00	628.85	628.85
j	136+54.74	33.00	628.93	628.94
k	136+64.74	33.00	629.01	629.02
☉ Brg. N. Abut.	136+78.24	33.00	629.12	629.12
N. End of Slab	136+79.45	33.00	629.13	629.13

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DRAWN BY: HAS 03/07
CHECKED BY: ELH 06/07
APPROVED BY: RDP 06/07

TOP OF SLAB ELEVATIONS
IL ROUTE 48
OVER SPRING CREEK
FAP ROUTE 716-SECTION (130BR-1)B-1
MACON COUNTY
STATION 135+77.11
STRUCTURE NO. 058-0135

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO. FAP 716	SECTION #	COUNTY MACON	SHEETS 95	SHEET 42	SHEET NO. 8 28 SHEETS
FED. ROAD DIST. NO.		ILLINOIS		FED. AID PROJECT	
				CONTRACT NO. 74166 * (130BR-1B-1)	



WEST EDGE WEST PASSING LANE

Location	Station	Offset (ft.)	Theoretical Grade Elevations
S. End Appr. Pav't.	136+34.87	-19.00	629.06
a	136+44.87	-19.00	629.14
b	136+54.87	-19.00	629.22
N. End Appr. Pav't.	136+64.87	-19.00	629.30

WEST PGL

Location	Station	Offset (ft.)	Theoretical Grade Elevations
S. End Appr. Pav't.	136+45.67	-7.00	629.34
a	136+55.67	-7.00	629.42
b	136+65.67	-7.00	629.50
N. End Appr. Pav't.	136+75.67	-7.00	629.58

ROADWAY & STAGE CONSTRUCTION LINE

Location	Station	Offset (ft.)	Theoretical Grade Elevations
S. End Appr. Pav't.	136+51.98	0.00	629.50
a	136+61.98	0.00	629.58
b	136+71.98	0.00	629.66
N. End Appr. Pav't.	136+81.98	0.00	629.74

EAST PGL

Location	Station	Offset (ft.)	Theoretical Grade Elevations
S. End Appr. Pav't.	136+58.28	7.00	629.44
a	136+68.28	7.00	629.52
b	136+78.28	7.00	629.60
N. End Appr. Pav't.	136+88.28	7.00	629.68

EAST EDGE EAST PASSING LANE

Location	Station	Offset (ft.)	Theoretical Grade Elevations
S. End Appr. Pav't.	136+69.08	19.00	629.34
a	136+79.08	19.00	629.42
b	136+89.08	19.00	629.50
N. End Appr. Pav't.	136+99.08	19.00	629.58

WEST EDGE WEST DRIVING LANE

Location	Station	Offset (ft.)	Theoretical Grade Elevations
S. End Appr. Pav't.	136+24.06	-31.00	628.73
a	136+34.06	-31.00	628.81
b	136+44.06	-31.00	628.89
N. End Appr. Pav't.	136+54.06	-31.00	628.97

EAST EDGE EAST DRIVING LANE

Location	Station	Offset (ft.)	Theoretical Grade Elevations
S. End Appr. Pav't.	136+79.89	31.00	629.17
a	136+89.89	31.00	629.25
b	136+99.89	31.00	629.33
N. End Appr. Pav't.	137+09.89	31.00	629.44

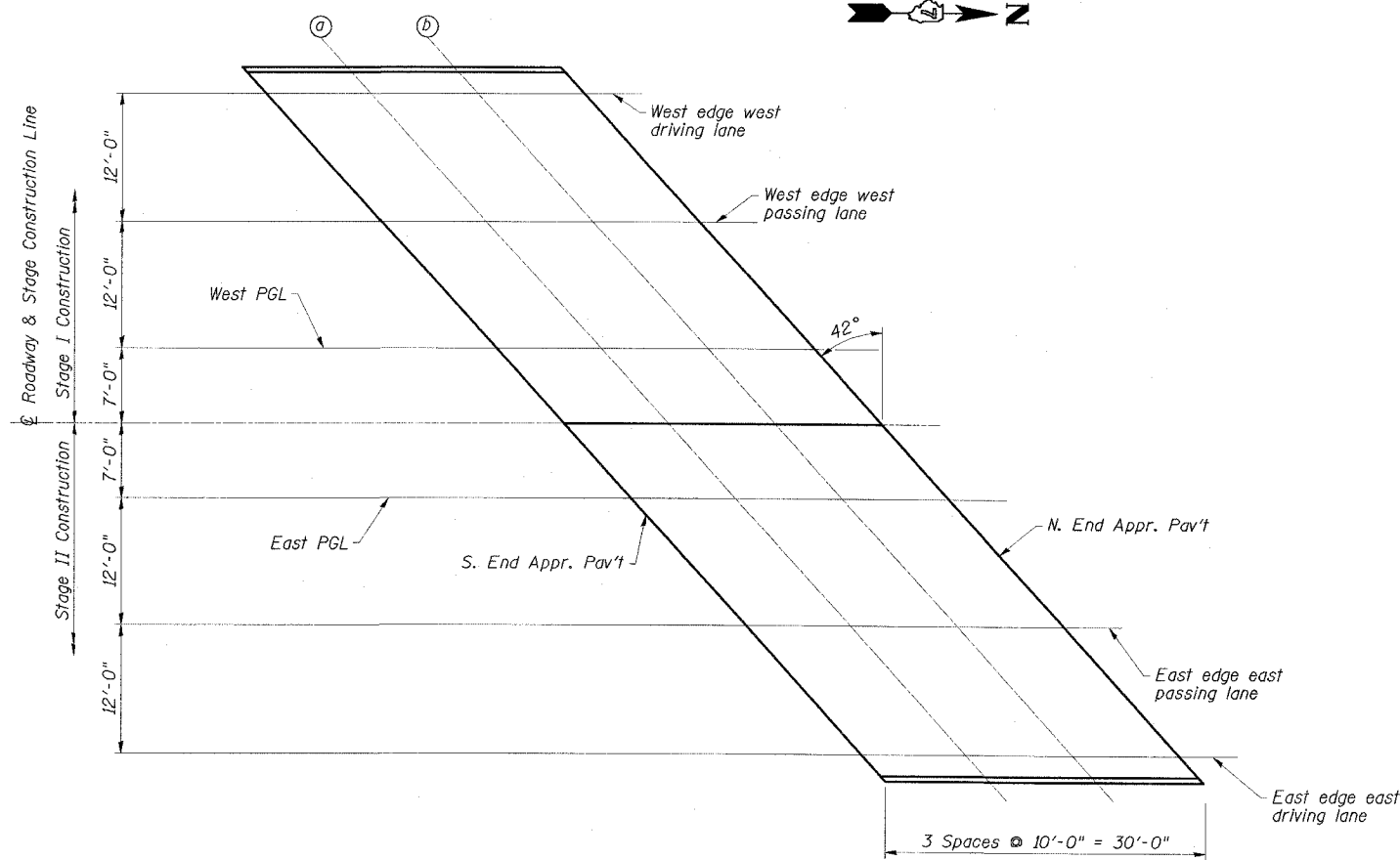
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CHECKED BY:	ELH	06/07
APPROVED BY:	RDP	06/07

TOP OF NORTH APPROACH
SLAB ELEVATIONS
IL ROUTE 48
OVER SPRING CREEK
FAP ROUTE 716-SECTION (130BR-1)B-1
MACON COUNTY
STATION 135+77.11
STRUCTURE NO. 058-0135

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	DIRECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 9 28 SHEETS
FAP 716	*	MACON	95	43	
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT-		
			CONTRACT NO. 74166 * (130BR-1B-1)		



PLAN

WEST EDGE WEST PASSING LANE

Location	Station	Offset (ft.)	Theoretical Grade Elevations
S. End Appr. Pav't.	134+57.57	-19.00	627.63
a	134+67.57	-19.00	627.72
b	134+77.57	-19.00	627.80
N. End Appr. Pav't.	134+87.57	-19.00	627.88

WEST PGL

Location	Station	Offset (ft.)	Theoretical Grade Elevations
S. End Appr. Pav't.	134+68.38	-7.00	627.91
a	134+78.38	-7.00	628.00
b	134+88.38	-7.00	628.08
N. End Appr. Pav't.	134+98.38	-7.00	628.16

ROADWAY & STAGE CONSTRUCTION LINE

Location	Station	Offset (ft.)	Theoretical Grade Elevations
S. End Appr. Pav't.	134+74.68	0.00	628.08
a	134+84.68	0.00	628.16
b	134+94.68	0.00	628.24
N. End Appr. Pav't.	135+04.68	0.00	628.32

EAST PGL

Location	Station	Offset (ft.)	Theoretical Grade Elevations
S. End Appr. Pav't.	134+80.98	7.00	628.02
a	134+90.98	7.00	628.10
b	135+00.98	7.00	628.18
N. End Appr. Pav't.	135+10.98	7.00	628.26

EAST EDGE EAST PASSING LANE

Location	Station	Offset (ft.)	Theoretical Grade Elevations
S. End Appr. Pav't.	134+91.79	19.00	627.92
a	135+01.79	19.00	628.00
b	135+11.79	19.00	628.08
N. End Appr. Pav't.	135+21.79	19.00	628.16

WEST EDGE WEST DRIVING LANE

Location	Station	Offset (ft.)	Theoretical Grade Elevations
S. End Appr. Pav't.	134+46.77	-31.00	627.27
a	134+56.77	-31.00	627.37
b	134+66.77	-31.00	627.46
N. End Appr. Pav't.	134+76.77	-31.00	627.55

EAST EDGE EAST DRIVING LANE

Location	Station	Offset (ft.)	Theoretical Grade Elevations
S. End Appr. Pav't.	135+02.59	31.00	627.75
a	135+12.59	31.00	627.83
b	135+22.59	31.00	627.91
N. End Appr. Pav't.	135+32.59	31.00	627.99

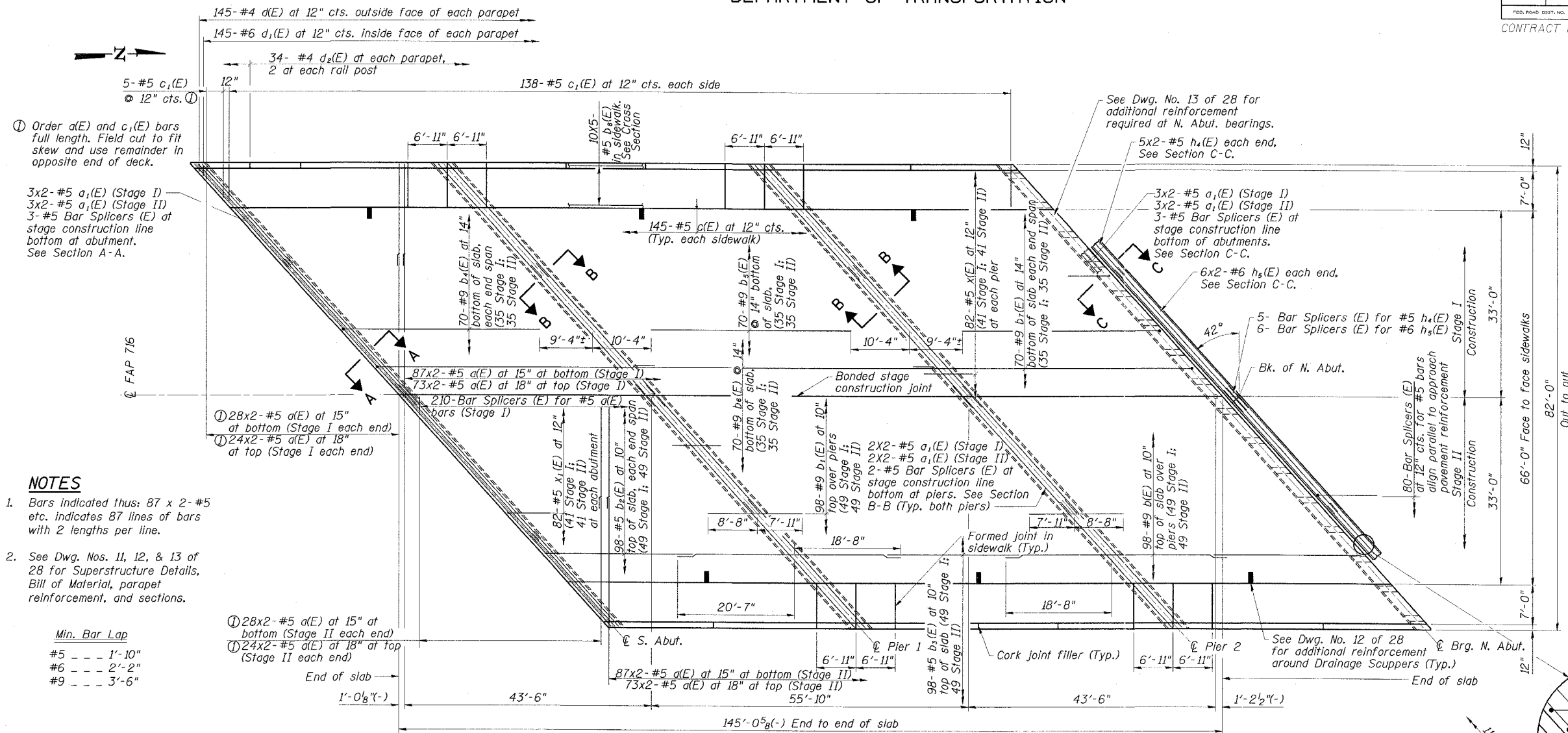
TOP OF SOUTH APPROACH
SLAB ELEVATIONS
IL ROUTE 48
OVER SPRING CREEK
FAP ROUTE 716-SECTION (130BR-1)B-1
MACON COUNTY
STATION 135+77.11
STRUCTURE NO. 058-0135

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DRAWN BY:	HAS	03/07
CHECKED BY:	ELH	03/07
APPROVED BY:	RDP	03/07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	DATE	SHEET	SHEET NO. 10 28 SHEETS
FAP 716	*	MACON	95	44	
CONTRACT NO. 74166		ILLINOIS		FED. AID PROJECT*	



① Order a(E) and c1(E) bars full length. Field cut to fit skew and use remainder in opposite end of deck.

3x2-#5 a1(E) (Stage I)
3x2-#5 a1(E) (Stage II)
3-#5 Bar Splicers (E) at stage construction line bottom at abutment. See Section A-A.

NOTES

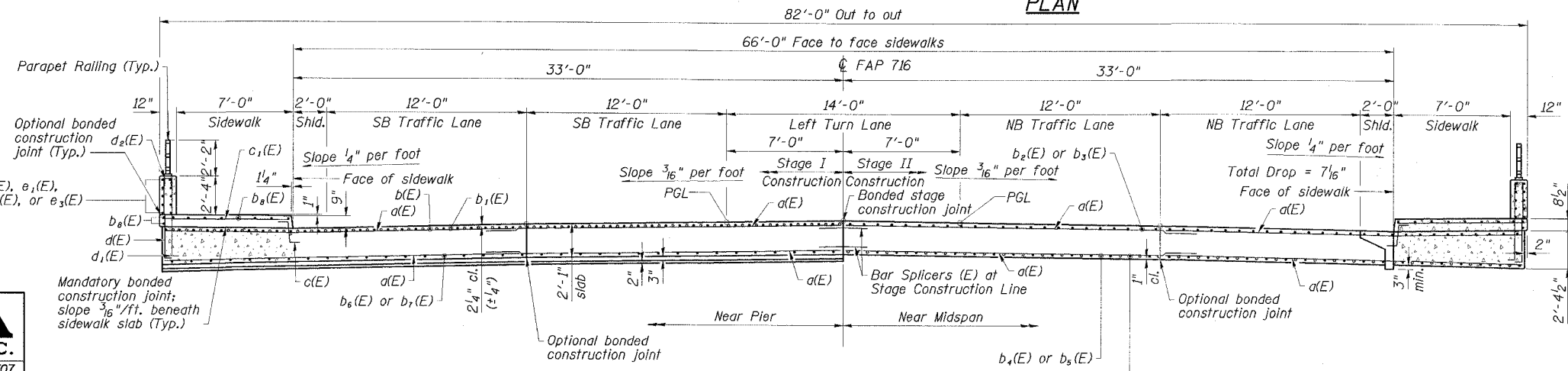
- Bars indicated thus: 87 x 2-#5 etc. indicates 87 lines of bars with 2 lengths per line.
- See Dwg. Nos. 11, 12, & 13 of 28 for Superstructure Details, Bill of Material, parapet reinforcement, and sections.

Min. Bar Lap

#5	1'-10"
#6	2'-2"
#9	3'-6"

- ① 28x2-#5 a(E) at 15" at bottom (Stage II each end)
- ① 24x2-#5 a(E) at 18" at top (Stage II each end)

PLAN



CROSS SECTION
(Looking North)

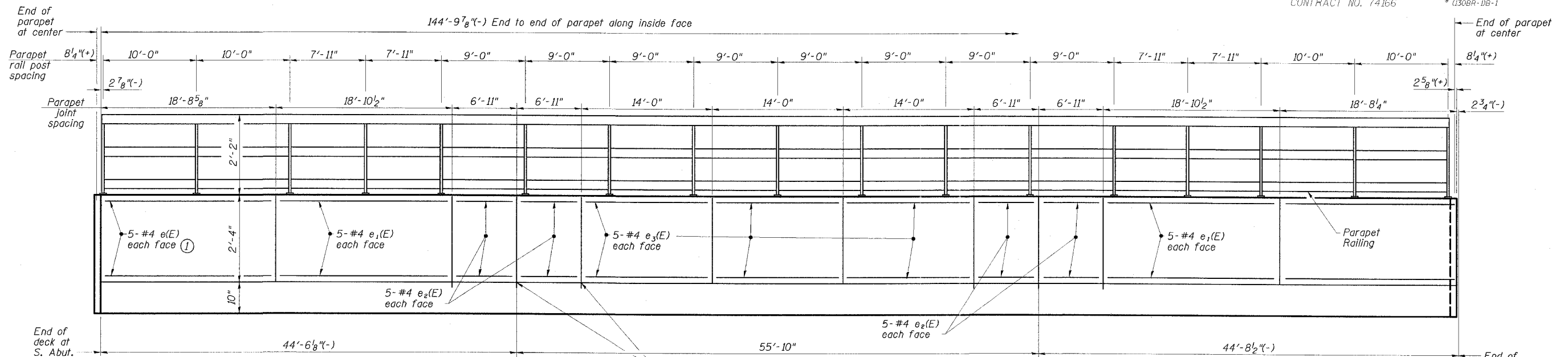
SUPERSTRUCTURE
IL ROUTE 48
OVER SPRING CREEK
FAP ROUTE 716-SECTION (130BR-1)B-1
MACON COUNTY
STATION 135+77.11
STRUCTURE NO. 058-0135

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APPROVED BY:	RDP	06/07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 11 28 SHEETS
FAP 716	*	MACON	95	45	
FPL ROAD DIST. NO.		ILLINOIS	FPL ROAD PROJECT		CONTRACT NO. 74166 * (130BR-1B-1)



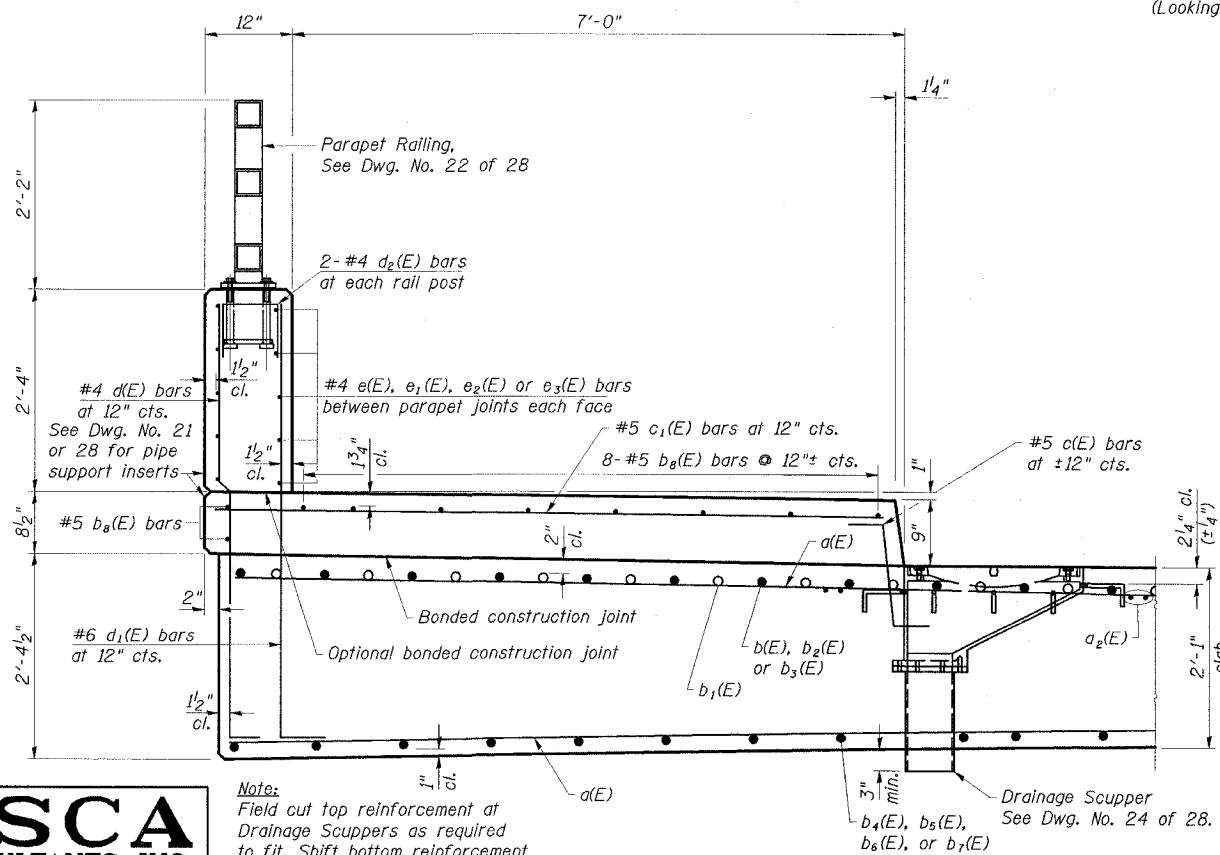
① Order e(E) bars full length. Field cut to fit skew and use remainder in opposite end of parapet.

② Pier 1 at inside face of parapet

③ 1⁴"x3⁴" formed joint with concrete sealer in top of sidewalk (Typ. 6 locations)

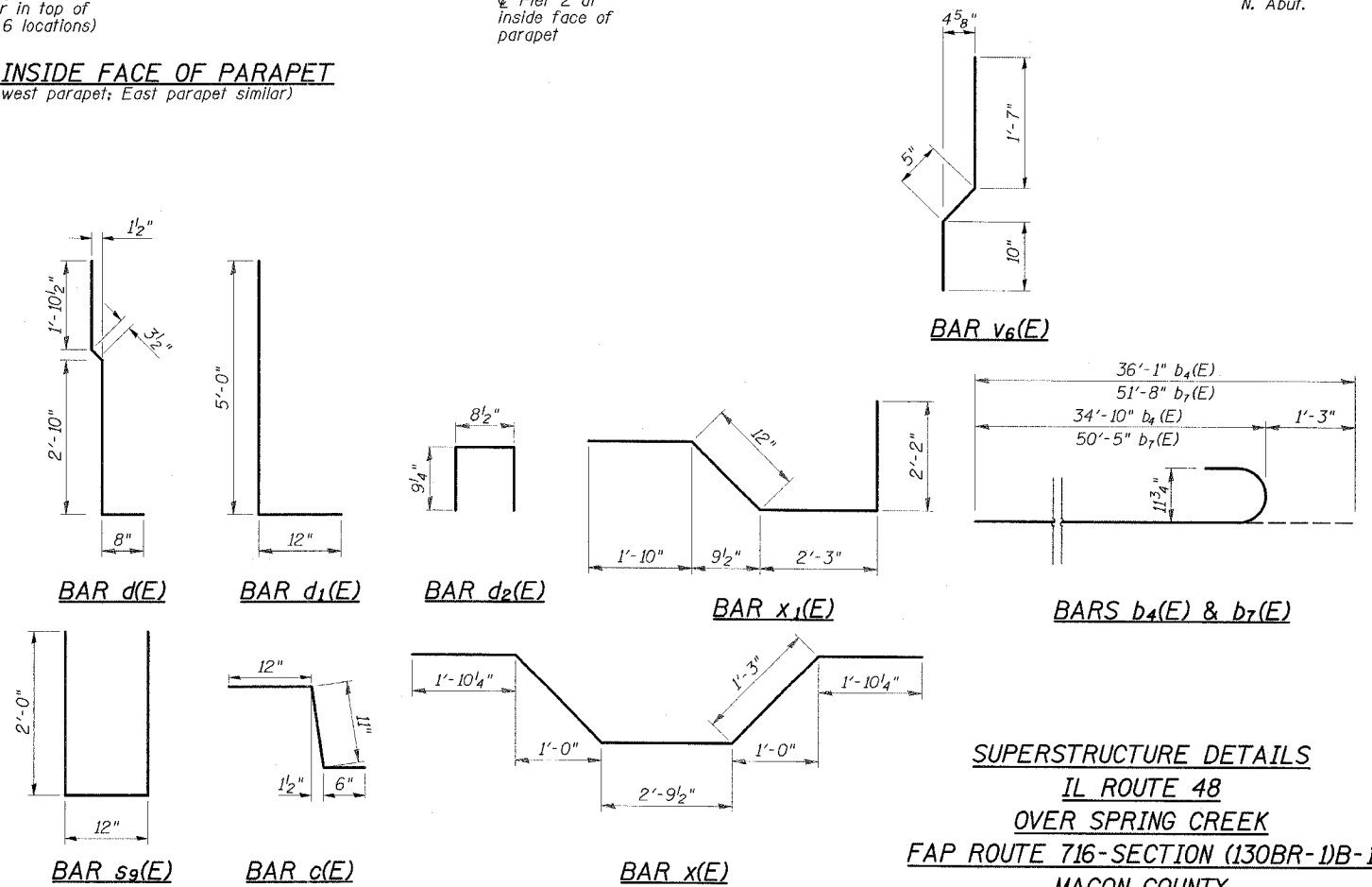
④ Pier 2 at inside face of parapet

ELEVATION OF INSIDE FACE OF PARAPET
(Looking west at west parapet; East parapet similar)



Notes:
Field cut top reinforcement at Drainage Scuppers as required to fit. Shift bottom reinforcement transversely to clear.

SECTION THRU PARAPET



SUPERSTRUCTURE DETAILS
IL ROUTE 48
OVER SPRING CREEK
FAP ROUTE 716-SECTION (130BR-1B-1)
MACON COUNTY
STATION 135+77.11
STRUCTURE NO. 058-0135

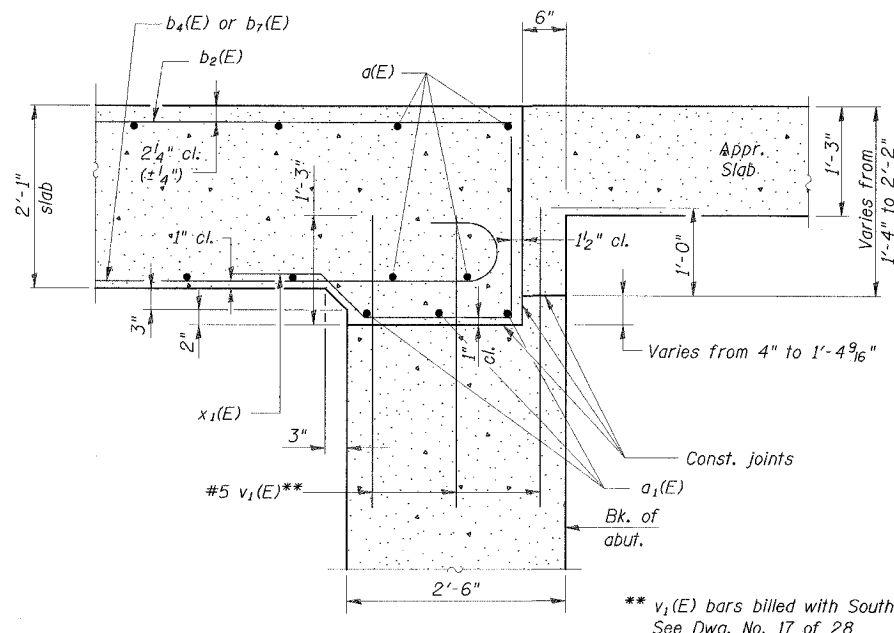
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CHECKED BY: ELH 06/07
APPROVED BY: RDP 06/07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

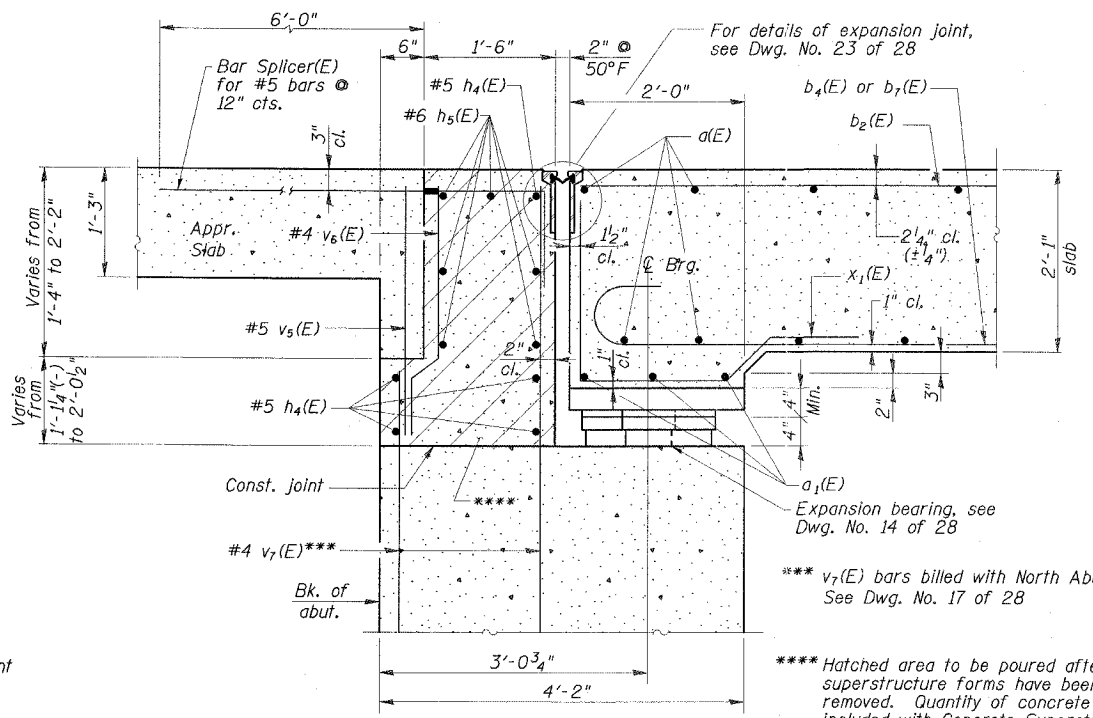
ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET NO.
FAP 716		MACON	95	46
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT-	
			CONTRACT NO. 74166	

SHEET NO. 12
28 SHEETS



SECTION A-A

** v₁(E) bars billed with South Abutment
See Dwg. No. 17 of 28



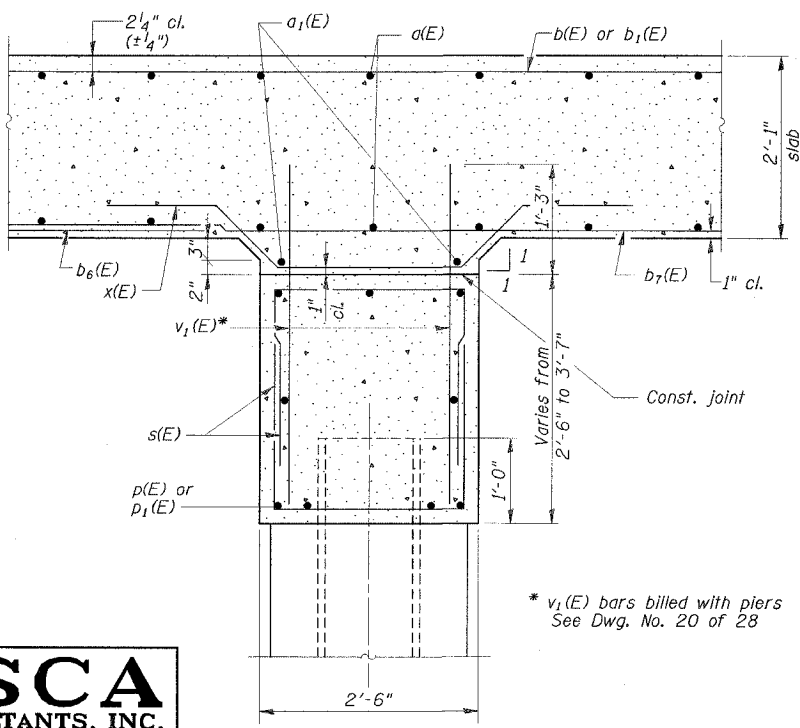
SECTION C-C

*** v₇(E) bars billed with North Abutment
See Dwg. No. 17 of 28

**** Hatched area to be poured after
superstructure forms have been
removed. Quantity of concrete
included with Concrete Superstructure.

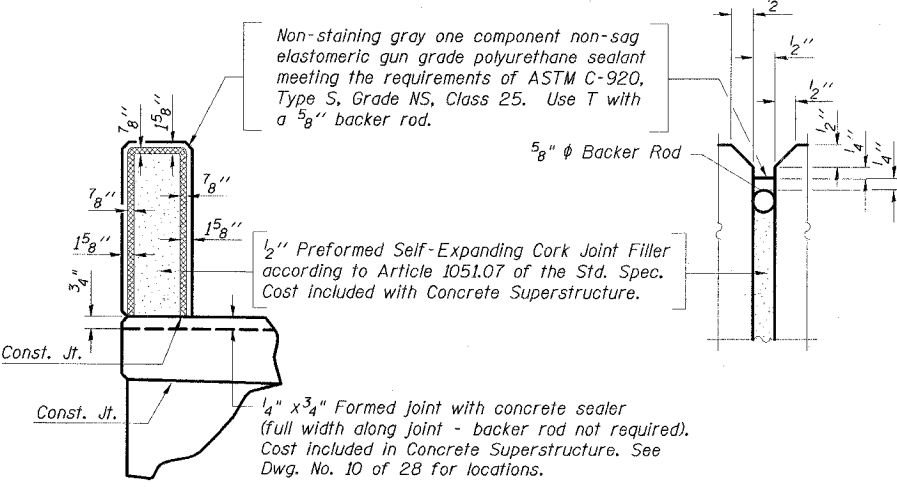
SUPERSTRUCTURE
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	848	#5	21'-3"	—
a ₁ (E)	40	#5	28'-3"	—
a ₂ (E)	48	#5	2'-0"	—
b(E)	196	#9	39'-3"	—
b ₁ (E)	196	#9	16'-7"	—
b ₂ (E)	196	#5	24'-6"	—
b ₃ (E)	98	#5	23'-2"	—
b ₄ (E)	140	#9	36'-1"	—
b ₅ (E)	70	#9	35'-2"	—
b ₆ (E)	70	#9	52'-0"	—
b ₇ (E)	140	#9	51'-8"	—
b ₈ (E)	100	#5	30'-5"	—
c(E)	290	#5	2'-5"	—
c ₁ (E)	286	#5	7'-7"	—
d(E)	290	#4	5'-8"	—
d ₁ (E)	290	#6	6'-0"	—
d ₂ (E)	68	#4	2'-3"	—
e(E)	20	#4	36'-9"	—
e ₁ (E)	40	#4	18'-6"	—
e ₂ (E)	80	#4	6'-7"	—
e ₃ (E)	60	#4	13'-8"	—
h ₄ (E)	20	#5	29'-2"	—
h ₅ (E)	24	#6	29'-4"	—
m(E)	48	#4	2'-4"	—
s ₉ (E)	64	#4	5'-0"	—
v ₅ (E)	110	#5	2'-8"	—
v ₆ (E)	110	#4	2'-10"	—
x(E)	164	#5	9'-0"	—
x ₁ (E)	164	#5	7'-3"	—
Reinforcement Bars, Epoxy Coated		Pound	144,300	
Concrete Superstructure		Cu. Yd.	1052.7	
Bar Splicers		Each	311	

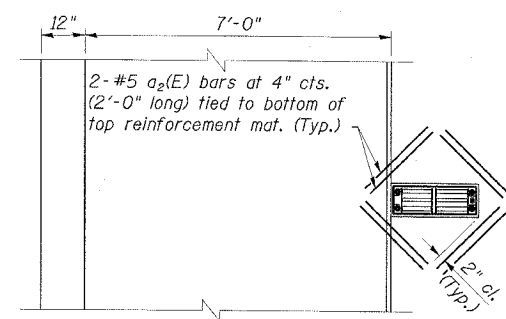


SECTION B-B

* v₁(E) bars billed with piers
See Dwg. No. 20 of 28



PARAPET JOINT DETAILS



DRAINAGE SCUPPER PLAN

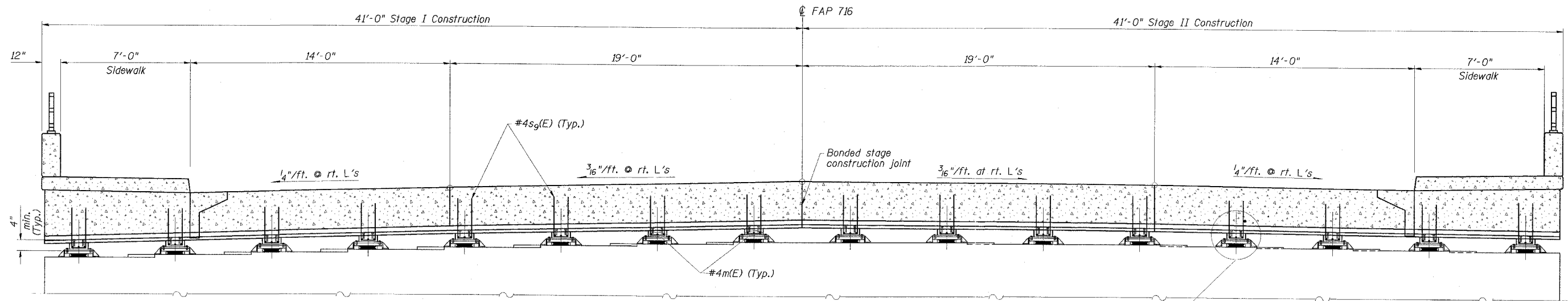
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APPROVED BY:	RDP	06/07

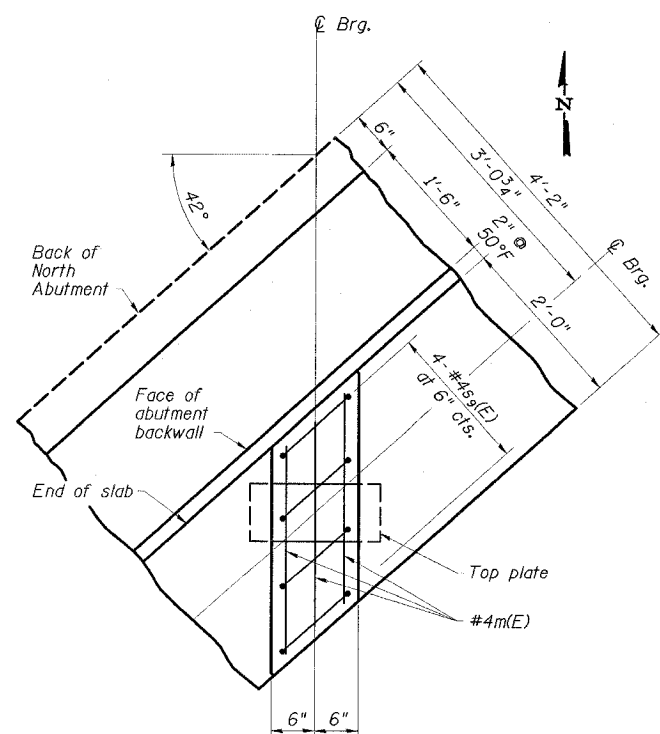
SUPERSTRUCTURE DETAILS
IL ROUTE 48
OVER SPRING CREEK
FAP ROUTE 716-SECTION (130BR-1)B-1
MACON COUNTY
STATION 135+77.11
STRUCTURE NO. 058-0135

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

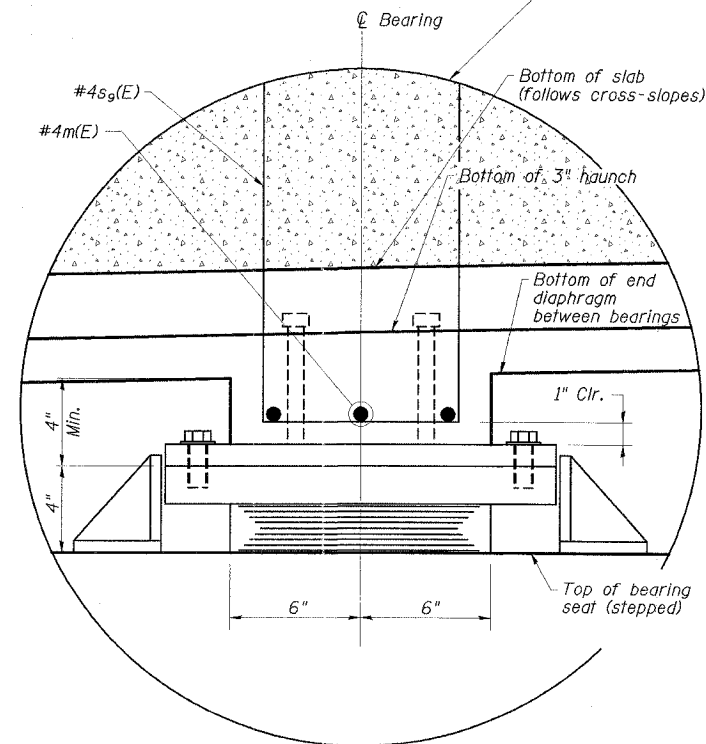
ROUTE NO.	SECTION	COUNTY	STATION	SHEET	SHEET NO. 13
FAP 716	*	MACON	95	47	28 SHEETS
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	CONTRACT NO. 74166 * (130BR-1B-1)		



CROSS SECTION AT NORTH ABUTMENT BEARINGS
(Looking north along \odot roadway)



**PLAN OF ADDITIONAL SLAB REINFORCEMENT
AT NORTH ABUTMENT BEARING**



**SECTION SHOWING ADDITIONAL REINFORCEMENT
AT NORTH ABUTMENT BEARING**

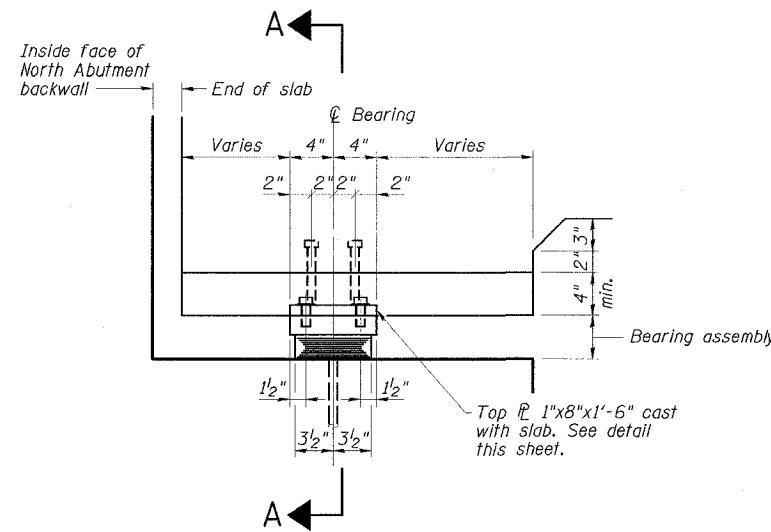
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APPROVED BY:	RDP	03/07

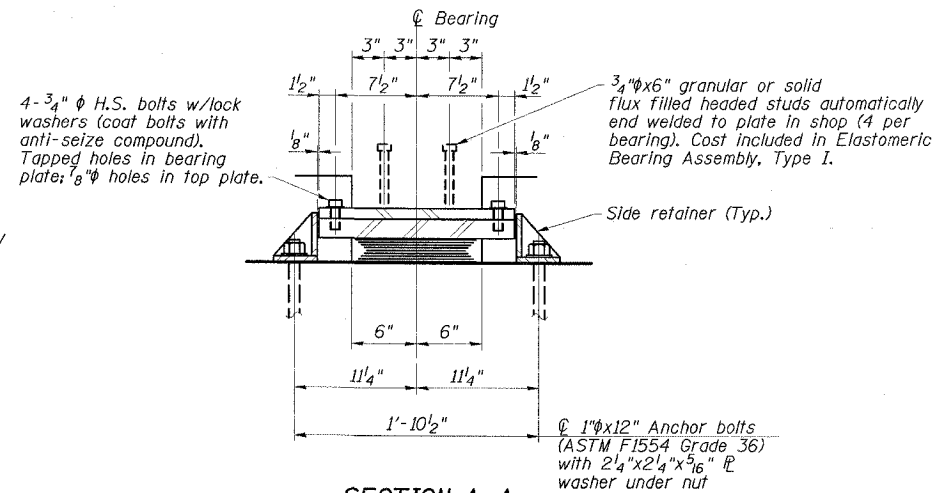
SUPERSTRUCTURE DETAILS
IL ROUTE 48
OVER SPRING CREEK
FAP ROUTE 716-SECTION (130BR-1B-1)
MACON COUNTY
STATION 135+77.11
STRUCTURE NO. 058-0135

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	DATE	SHEET	SHEET NO. 14 28 SHEETS
FAP 716	*	MACON	95	48	
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		CONTRACT NO. 74166 * (130BR-1)B-1

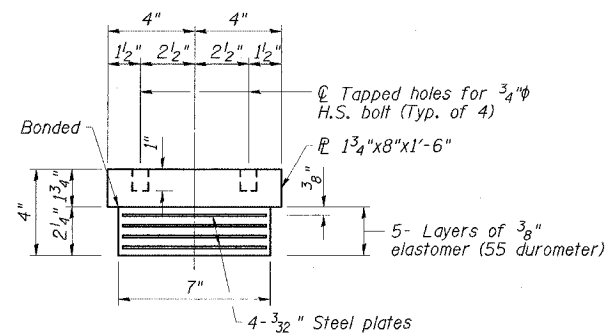


ELEVATION AT NORTH ABUTMENT
(Horizontal dimensions are parallel to ϕ roadway)



SECTION A-A
(Horizontal dimensions are perpendicular to ϕ roadway)

TYPE I ELASTOMERIC EXPANSION BEARING



BEARING ASSEMBLY

Note:
Shim plates shall not be placed under bearing assembly

Notes:

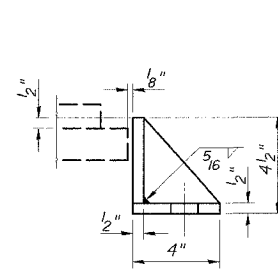
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of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

Anchor bolts for side retainers may be cast in place or installed in drilled holes but must be installed prior to casting the slab.

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

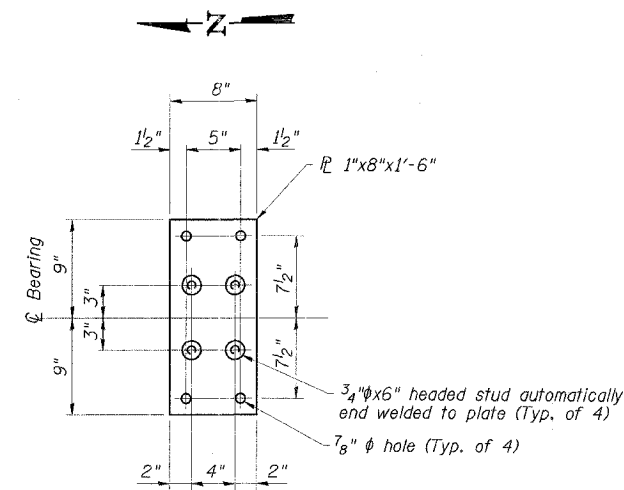
All embedded and separate bearing plates, side retainers, anchor bolts, nuts, washers, and stud bolts shall be galvanized according to AASHTO M111 or M232 (as applicable).

Side retainers, plates, and other steel members required for the bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



TOP PLATE DETAIL

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly, Type I	Each	16
Anchor Bolts 1" ϕ	Each	32

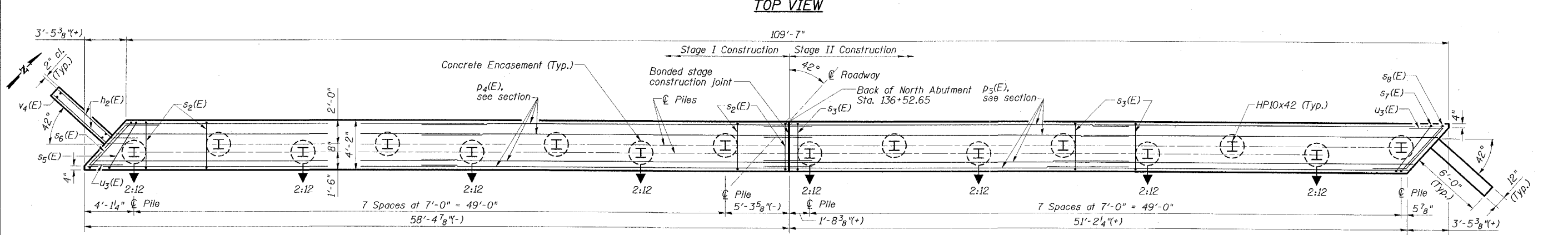
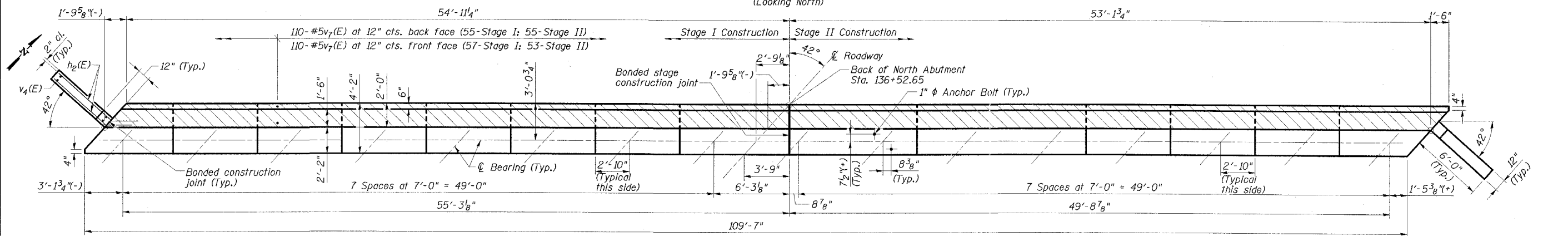
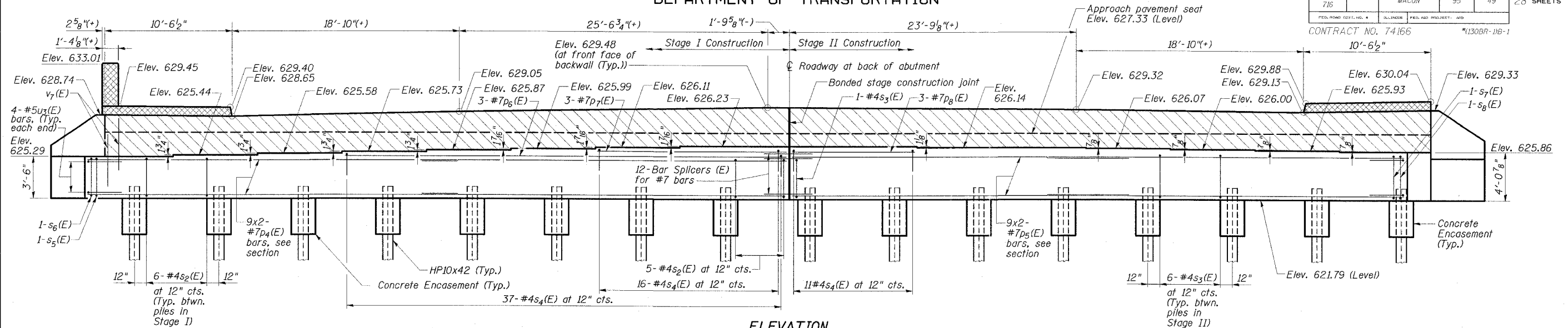
BEARING DETAILS
IL ROUTE 48
OVER SPRING CREEK
FAP ROUTE 716-SECTION (130BR-1)B-1
MACON COUNTY
STATION 135+77.11
STRUCTURE NO. 058-0135

ESCA
CONSULTANTS, INC.

DESIGNED BY:	ELH	03/07
DRAWN BY:	HAS	03/07
CHECKED BY:	ELH	03/07
APPROVED BY:	RDP	03/07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET NO.
FAP 716		MACON	95	49
CONTRACT NO. 74166				
*130BR-11B-1				



PILE DATA
 Pile Type & Size: HP10x42 with pile shoes
 Nominal Required Bearing: 276 kips
 Allowable Resistance Available: 92 kips
 Estimated Pile Length: 60'
 No. of Production Piles: 15
 No. of Test Piles: 1

MIN. BAR LAP
 #4 1'-4"
 #7 2'-11"

NOTES

- For Bill of Material, Bar Bending Details, Section Thru North Abutment, and Wingwall Details see Dwg. No. 17 of 28.
- For pile details and concrete encasement details see Dwg. No. 26 of 28.
- Bars indicated thus: 10x2-#7 etc. indicates 10 lines of bars with 2 lengths per line.

PILE CAP PLAN

- Hatched area to be poured after superstructure forms have been removed. Quantity of concrete included with Concrete Superstructure.
- Cross hatched areas to be poured with and quantity included with Bridge Approach Shoulder Pavement (Special), see Roadway Plans.
- Space reinforcement to clear anchor bolt locations.

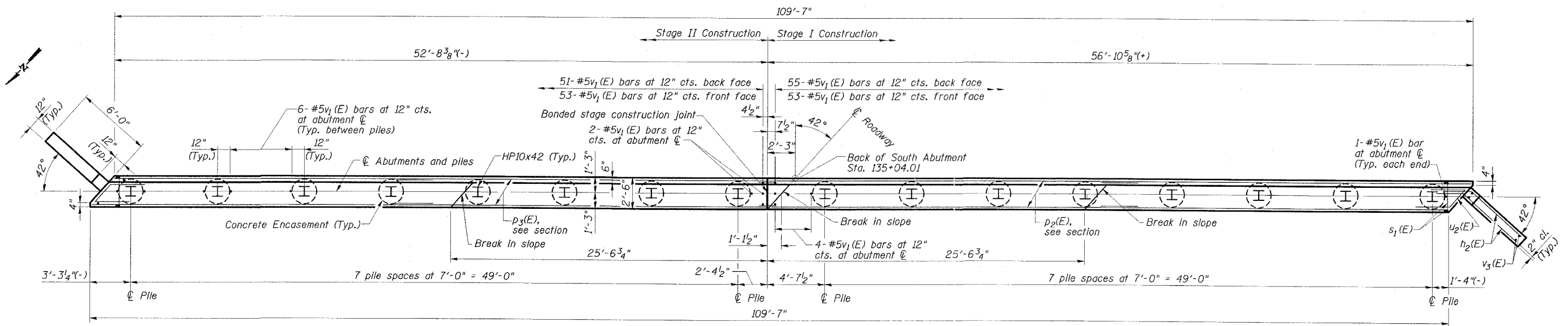
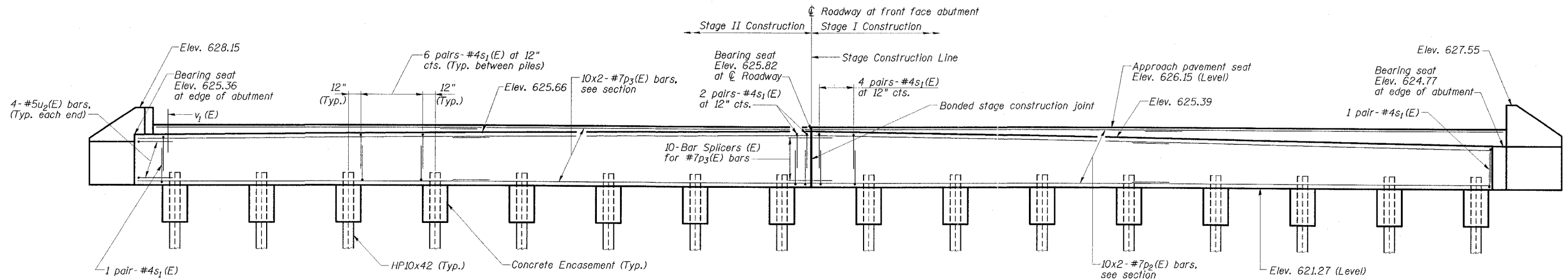
NORTH ABUTMENT
 IL ROUTE 48
 OVER SPRING CREEK
 FAP ROUTE 716 - SECTION (130BR-1)B-1
 MACON COUNTY
 STATION 135+77.11
 STRUCTURE NO. 058-0135

ESCA
CONSULTANTS, INC.

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DRAWN BY:	oj	03/07
CHECKED BY:	ELH	06/07
APPROVED BY:	RDP	06/07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET	SHEET NO. 16
FAP 716	*	MACON	95	50	28 SHEETS
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT - AID	CONTRACT NO. 74166		
			*130BR-1B-1		



PILE DATA

Pile Type & Size: HP10x42 with pile shoes
 Nominal Required Bearing: 240 kips
 Allowable Resistance Available: 80 kips
 Estimated Pile Length: 45'
 No. of Production Piles: 15
 No. of Test Piles: 1

MIN. BAR LAP

#4 1'-4"
 #7 2'-11"

NOTES

1. For Bill of Material, Bar Bending Details, Section Thru South Abutment, and Wingwall Details see Dwg. No. 17 of 28.
2. For pile details and concrete encasement details see Dwg. No. 26 of 28.
3. Bars indicated thus: 10x2-#7 etc. indicates 10 lines of bars with 2 lengths per line.

SOUTH ABUTMENT
IL ROUTE 48
OVER SPRING CREEK
FAP ROUTE 716 - SECTION (130BR-1)B-1
MACON COUNTY
STATION 135+77.11
STRUCTURE NO. 058-0135

ESCA
CONSULTANTS, INC.

DESIGNED BY:	ELH	03/07
DRAWN BY:	aj	03/07
CHECKED BY:	ELH	06/07
APPROVED BY:	RDP	06/07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

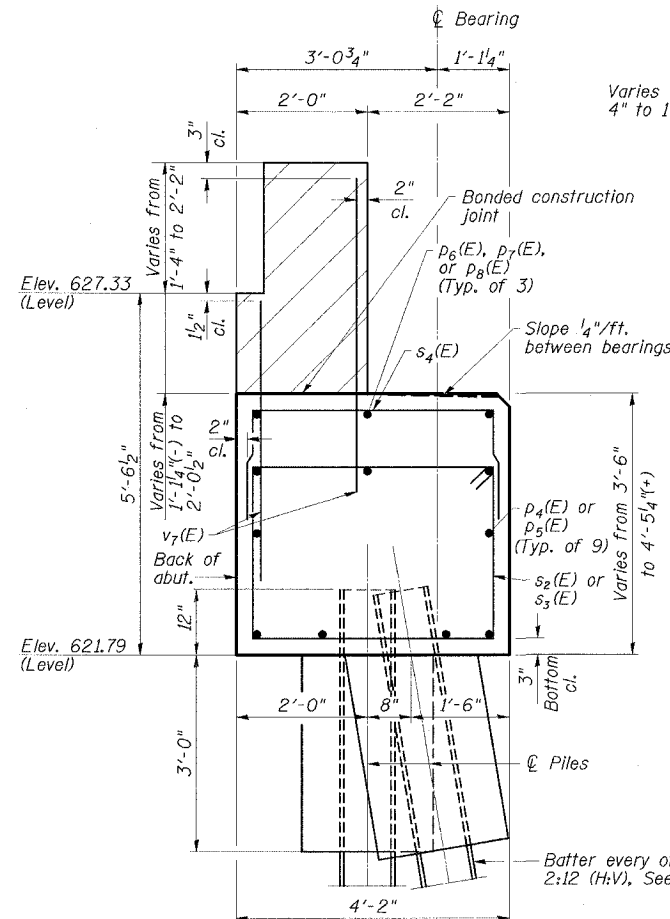
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 17 28 SHEETS
FAP 716	*	MACON	95	51	
FED. ROAD DIST. NO. *		ILLINOIS	FED. PROJ. NO. 441		CONTRACT NO. 74166 *130BR-1B-1

**SOUTH ABUTMENT
BILL OF MATERIAL**

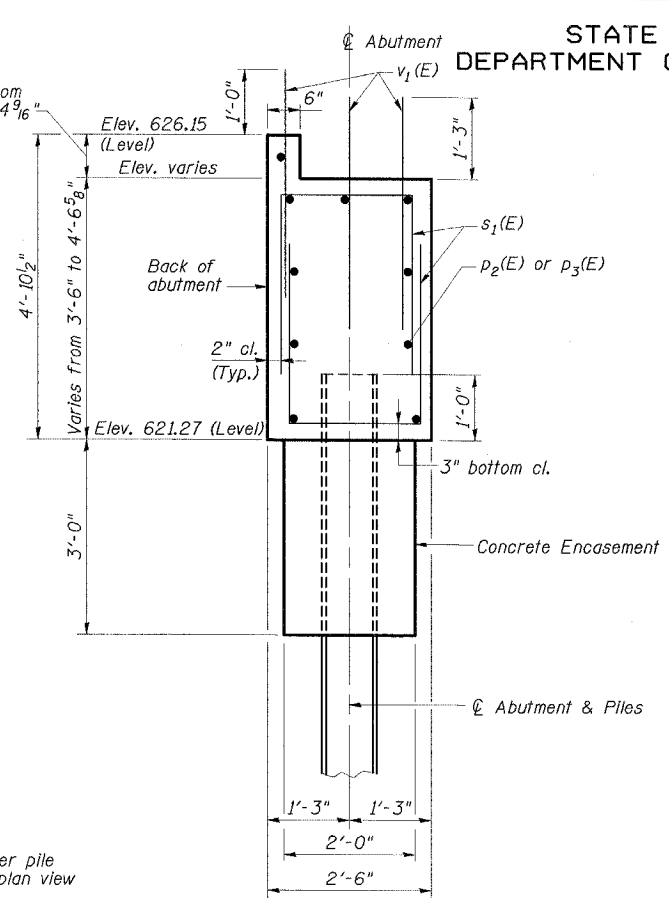
Bar	No.	Size	Length	Shape
$h_2(E)$	36	#5	8'-0"	—
$h_3(E)$	16	#5	2'-0"	—
$p_2(E)$	10	#7	29'-9"	—
$p_3(E)$	10	#7	28'-8"	—
$s_1(E)$	184	#4	7'-8"	□
$u_2(E)$	8	#5	8'-4"	┘
$v_1(E)$	304	#5	3'-6"	—
$v_3(E)$	14	#5	9'-10"	—
Reinforcement Bars, Epoxy Coated	Pound		3800	
Concrete Structures	Cu. Yd.		46.6	
Structure Excavation	Cu. Yd.		261	
Furnishing Steel	Foot		675	
Piles HP10x42	Foot		675	
Driving Piles	Foot		675	
Test Pile Steel HP10x42	Each		1	
Porous Granular Embankment, Special	Cu. Yd.		120	
Bar Splicers	Each		10	
Concrete Encasement	Cu. Yd.		5.6	
Pile Shoes	Each		16	
Geocomposite Wall Drain	Sq. Yd.		65	
Pipe Underdrains for Structures, 4"	Foot		140	

**NORTH ABUTMENT
BILL OF MATERIAL**

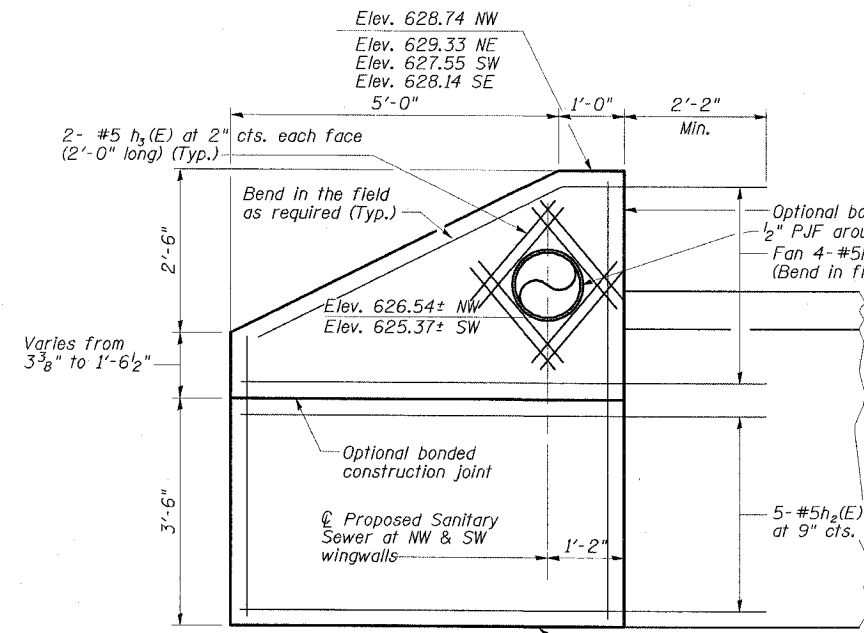
Bar	No.	Size	Length	Shape
$h_2(E)$	36	#5	8'-0"	—
$h_3(E)$	16	#5	2'-0"	—
$p_4(E)$	18	#7	30'-7"	—
$p_5(E)$	18	#7	28'-8"	—
$p_6(E)$	3	#7	36'-9"	—
$p_7(E)$	3	#7	15'-9"	—
$p_8(E)$	3	#7	10'-3"	—
$s_2(E)$	47	#4	14'-6"	□
$s_3(E)$	43	#4	15'-6"	□
$s_4(E)$	64	#4	7'-2"	□
$s_5(E)$	1	#4	15'-4"	□
$s_6(E)$	1	#4	17'-2"	□
$s_7(E)$	1	#4	16'-4"	□
$s_8(E)$	1	#4	18'-2"	□
$u_3(E)$	8	#5	10'-7"	┘
$v_4(E)$	14	#5	11'-11"	—
$v_7(E)$	220	#5	4'-9"	—
Reinforcement Bars, Epoxy Coated	Pound		5510	
Concrete Structures	Cu. Yd.		73.0	
Structure Excavation	Cu. Yd.		345	
Furnishing Steel	Foot		900	
Piles HP10x42	Foot		900	
Driving Piles	Foot		900	
Test Pile Steel HP10x42	Each		1	
Porous Granular Embankment, Special	Cu. Yd.		145	
Bar Splicers	Each		12	
Concrete Encasement	Cu. Yd.		5.6	
Pile Shoes	Each		16	
Geocomposite Wall Drain	Sq. Yd.		75	
Pipe Underdrains for Structures, 4"	Foot		140	
Concrete Sealer	Sq. Ft.		1075	



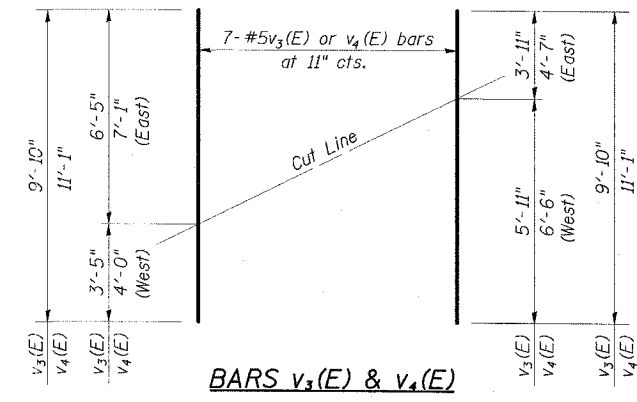
SECTION THRU NORTH ABUTMENT
(Horizontal dimensions at right angles)



SECTION THRU SOUTH ABUTMENT
(Horizontal dimensions at right angles)

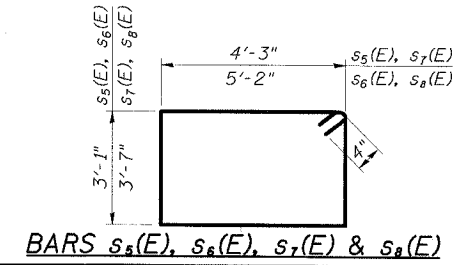


WINGWALL DETAIL

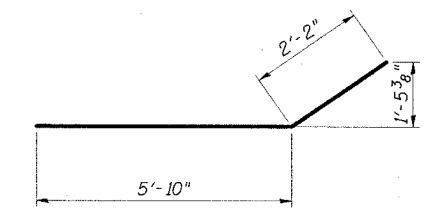


FIELD CUTTING DIAGRAM

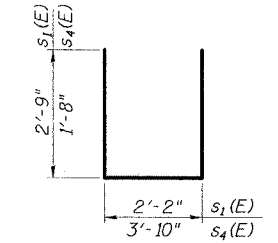
Order $v_3(E)$ & $v_4(E)$ full length. Cut as shown and use remainder of bars in opposite wingwall.



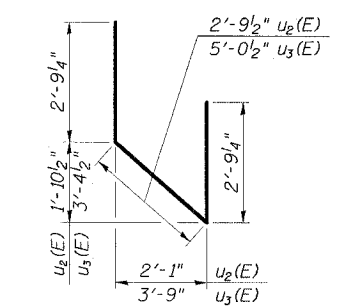
BARS $s_2(E)$, $s_3(E)$, $s_7(E)$ & $s_8(E)$



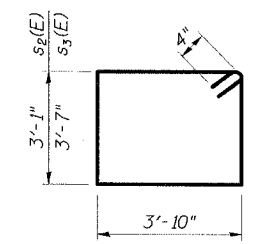
BAR $h_2(E)$



BARS $s_1(E)$ & $s_4(E)$



BARS $u_2(E)$ & $u_3(E)$



BARS $s_2(E)$ & $s_3(E)$

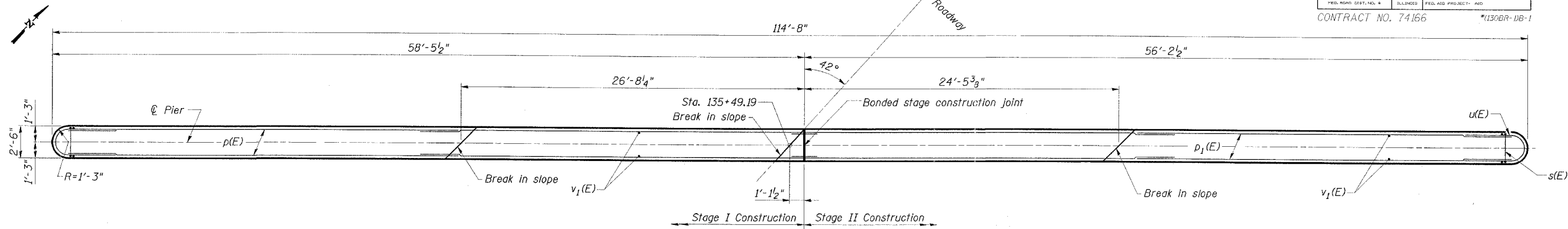
ESCA
CONSULTANTS, INC.

DESIGNED BY:	ELH	05/07
DRAWN BY:	oj	05/07
CHECKED BY:	ELH	06/07
APPROVED BY:	RDP	06/07

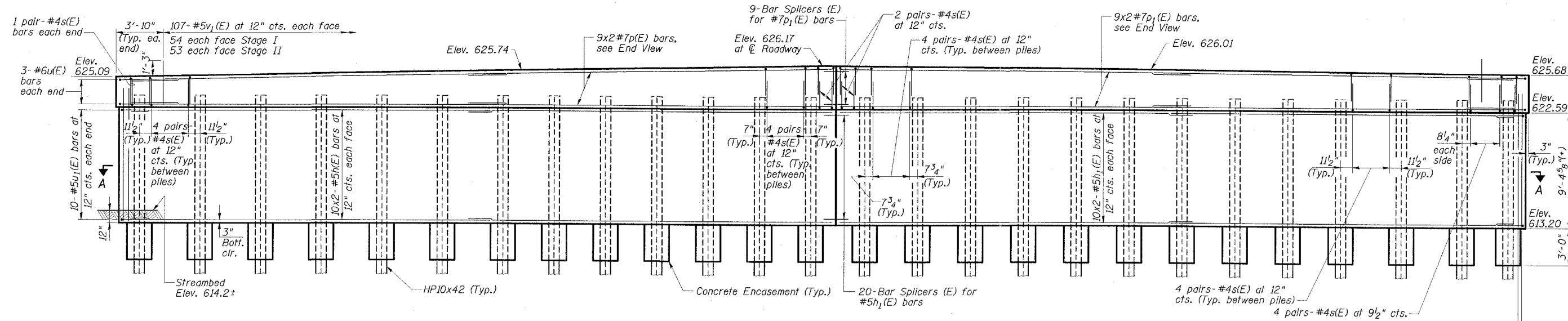
ABUTMENT DETAILS
IL ROUTE 48
OVER SPRING CREEK
FAP ROUTE 716 - SECTION (130BR-1B-1)
MACON COUNTY
STATION 135+77.11
STRUCTURE NO. 058-0135

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

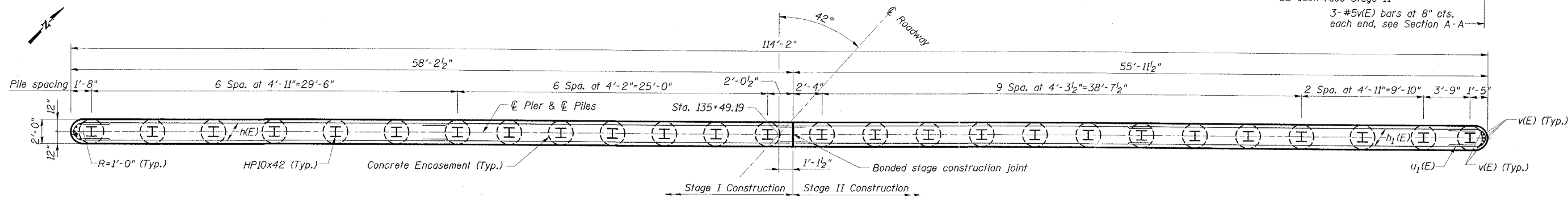
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET	SHEET NO. 18
FAP 716	*	MACON	95	52	28 SHEETS
FED. ROAD DIST. NO. #		ILLINOIS	FED. AID PROJECT - NO.		
			CONTRACT NO. 74166		*130BR-1B-1



TOP PLAN



ELEVATION
(Looking North)



SECTION A-A

PILE DATA

Pile Type & Size: HP10x42 with pile shoes
Nominal Required Bearing: 335 kips
Allowable Resistance Available: 111 kips
Estimated Pile Length: 54'
No. of Production Piles: 25
No. of Test Piles: 1

MIN. BAR LAP

#4 1'-4"
#5 1'-10"
#7 2'-11"

NOTES

- For Bill of Material, Bar Bending Details and End View see Dwg. No. 20 of 28.
- For pile details and concrete encasement details see Dwg. No. 25 of 28.
- Bars indicated thus: 9x2-#7 etc. indicates 9 lines of bars with 2 lengths per line.

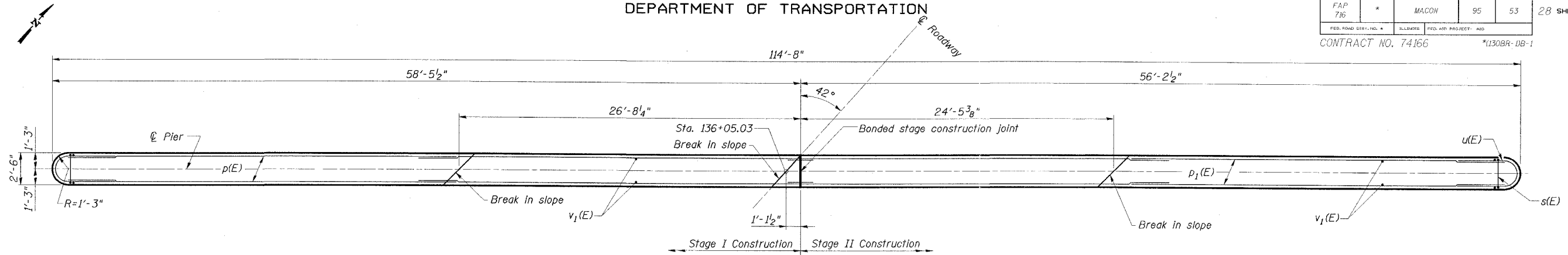
PIER 1
IL ROUTE 48
OVER SPRING CREEK
FAP ROUTE 716 - SECTION (130BR-1)B-1
MACON COUNTY
STATION 135+77.11
STRUCTURE NO. 058-0135



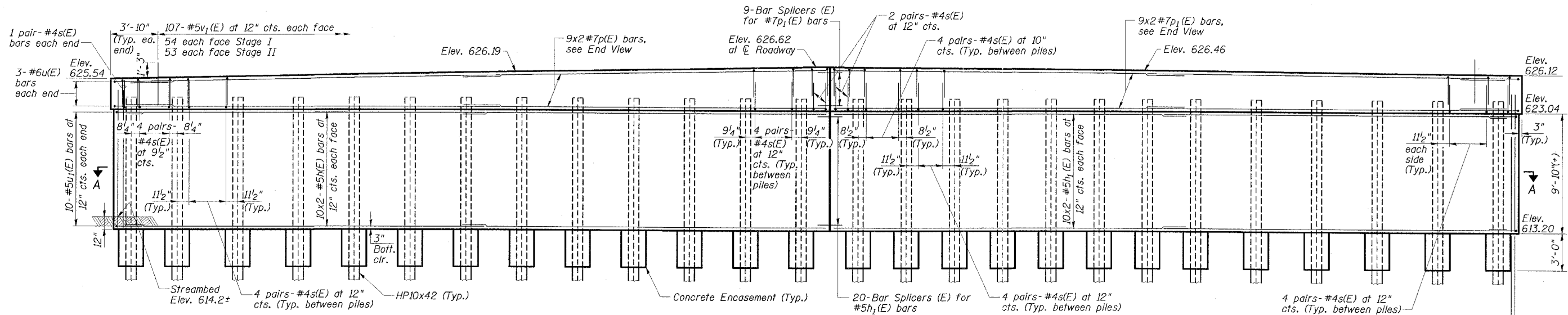
DESIGNED BY:	ELH	03/07
DRAWN BY:	ej	03/07
CHECKED BY:	ELH	06/07
APPROVED BY:	RDP	06/07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

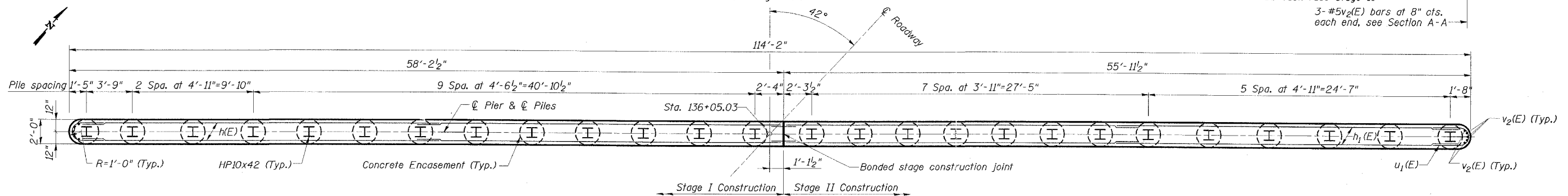
ROUTE NO.	SECTION	COUNTY	DATE	SHEET	SHEET NO. 19 28 SHEETS
FAP 716	*	MACON	95	53	
FED. ROAD DIST. NO. *		ILLINOIS	FED. AID PROJECT NO.		CONTRACT NO. 74166
				*130BR-DB-1	



TOP PLAN



ELEVATION
(Looking North)



SECTION A-A

PILE DATA

Pile Type & Size: HP10x42 with pile shoes
Nominal Required Bearing: 335 kips
Allowable Resistance Available: 111 kips
Estimated Pile Length: 67'
No. of Production Piles: 25
No. of Test Piles: 1

MIN. BAR LAP

#4 1'-4"
#5 1'-10"
#7 2'-11"

NOTES

- For Bill of Material, Bar Bending Details and End View see Dwg. No. 20 of 28.
- For pile details and concrete encasement details see Dwg. No. 26 of 28.
- Bars indicated thus: 9x2-#7 etc. indicates 9 lines of bars with 2 lengths per line.

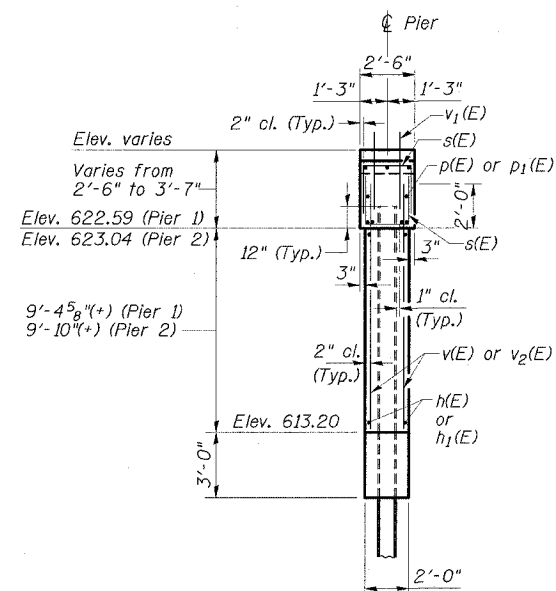
PIER 2
IL ROUTE 48
OVER SPRING CREEK
FAP ROUTE 716 - SECTION (130BR-DB-1)
MACON COUNTY
STATION 135+77.11
STRUCTURE NO. 058-0135

ESCA
CONSULTANTS, INC.

DESIGNED BY:	ELH	03/07
DRAWN BY:	oj	03/07
CHECKED BY:	ELH	03/07
APPROVED BY:	RDP	03/07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	DISTRICT	SHEET	SHEET NO. 20
FAP 716	#	MACON	95	54	28 SHEETS
FED. ROAD DIST. NO. 1	S.I. DIST.	FED. AID PROJECT	AID		
					CONTRACT NO. 74166 *130BR-1B-1



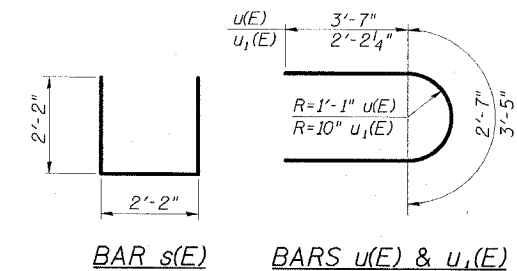
END VIEW
PIER 1 & PIER 2

PIER 1
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	40	#5	29'-6"	—
h ₁ (E)	40	#5	28'-4"	—
p(E)	18	#7	30'-0"	—
p ₁ (E)	18	#7	28'-11"	—
s(E)	204	#4	6'-6"	□
u(E)	6	#6	10'-7"	U
u ₁ (E)	20	#5	7'-0"	U
v(E)	232	#5	11'-2"	—
v ₁ (E)	214	#5	3'-6"	—
Reinforcement Bars, Epoxy Coated			Pound	9200
Concrete Structures			Cu. Yd.	113.1
Structure Excavation			Cu. Yd.	121
Furnishing Steel Piles HPI0x42			Foot	1350
Driving Piles			Foot	1350
Test Pile Steel HPI0x42			Each	1
Underwater Structure Excavation Protection-Location 1			Each	1
Bar Splicers			Each	29
Concrete Encasement			Cu. Yd.	9.1
Pile Shoes			Each	26

PIER 2
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	40	#5	29'-6"	—
h ₁ (E)	40	#5	28'-4"	—
p(E)	18	#7	30'-0"	—
p ₁ (E)	18	#7	28'-11"	—
s(E)	204	#4	6'-6"	□
u(E)	6	#6	10'-7"	U
u ₁ (E)	20	#5	7'-0"	U
v ₁ (E)	214	#5	3'-6"	—
v ₂ (E)	232	#5	11'-7"	—
Reinforcement Bars, Epoxy Coated			Pound	9300
Concrete Structures			Cu. Yd.	116.9
Structure Excavation			Cu. Yd.	16.3
Furnishing Steel Piles HPI0x42			Foot	1675
Driving Piles			Foot	1675
Underwater Structure Excavation Protection-Location 2			Each	1
Bar Splicers			Each	29
Concrete Encasement			Cu. Yd.	9.1
Pile Shoes			Each	26
Test Pile Steel HPI0x42			Each	1



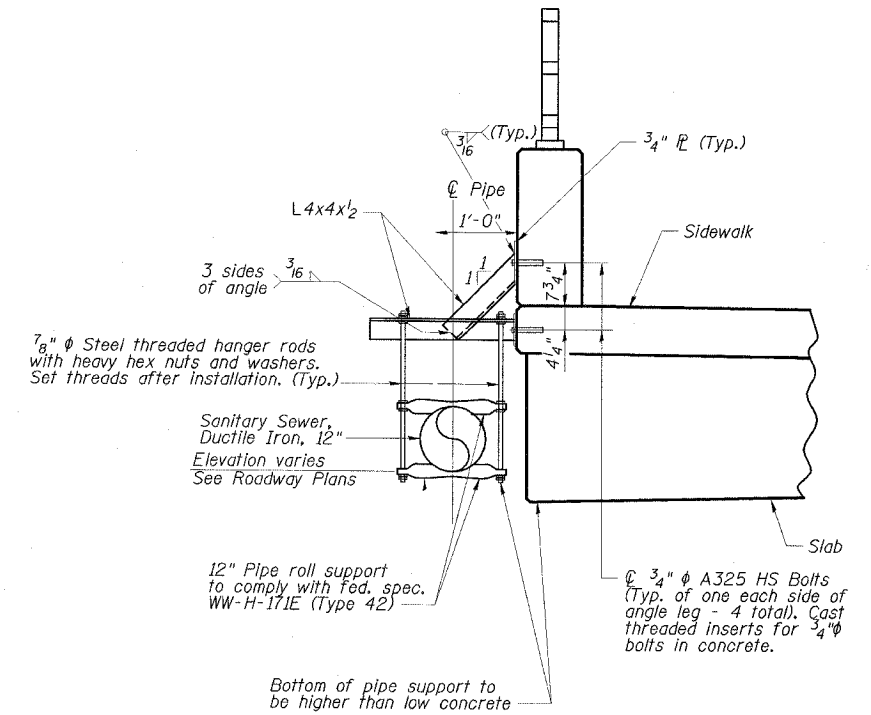
ESCA
CONSULTANTS, INC.

DESIGNED BY:	ELH	03/07
DRAWN BY:	oj	03/07
CHECKED BY:	ELH	06/07
APPROVED BY:	RDP	06/07

PIER DETAILS
IL ROUTE 48
OVER SPRING CREEK
FAP ROUTE 716 - SECTION (130BR-1B-1)
MACON COUNTY
STATION 135+77.11
STRUCTURE NO. 058-0135

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET	SHEET NO. 21
FAP 716	#	MACON	95	55	28 SHEETS
FED. ROAD DIST. NO. *	ILLINOIS	FED. AID PROJECT# AND	CONTRACT NO. 74165 * (130BR-1)B-1		



PIPE SUPPORT DETAILS
(Provide supports at 9'-0" max. centers)

PIPE SUPPORT NOTES

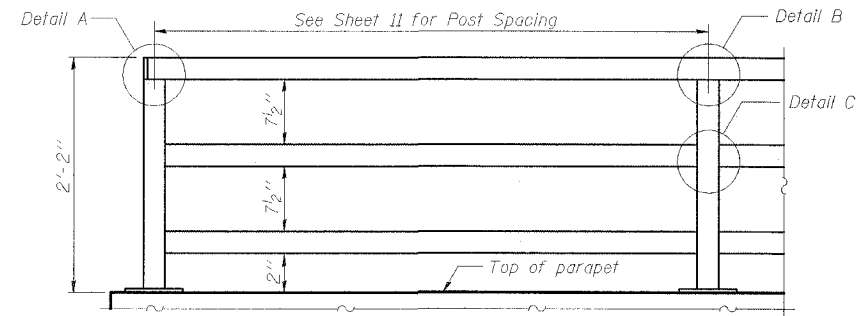
1. All hanger rods, angles, washers, nuts, and plates shall be stainless steel. Bolts, inserts, and other permanent pipe support items shall be galvanized.
2. All structural steel angles and plates for pipe supports shall be Type 304 stainless steel with a minimum yield strength of 38 ksi.
3. The cost of all materials, labor, and equipment necessary to install the pipe supports on the proposed bridge shall be included in Pipe Support.

SANITARY SEWER SUPPORT DETAILS
IL ROUTE 48
OVER SPRING CREEK
FAP ROUTE 716 - SECTION (130BR-1)B-1
MACON COUNTY
STATION 135+77.11
STRUCTURE NO. 058-0135

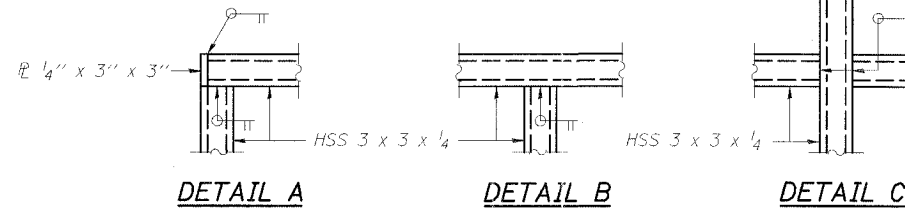
ESCA CONSULTANTS, INC.		
DESIGNED BY:	ELH	04/07
DRAWN BY:	HAS	04/07
CHECKED BY:	ELH	06/07
APPROVED BY:	RDP	06/07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET	SHEET NO. 22
FAP 716	*	MACON	95	56	28 SHEETS
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	CONTRACT NO. 74166 * (130BR-1)B-1		

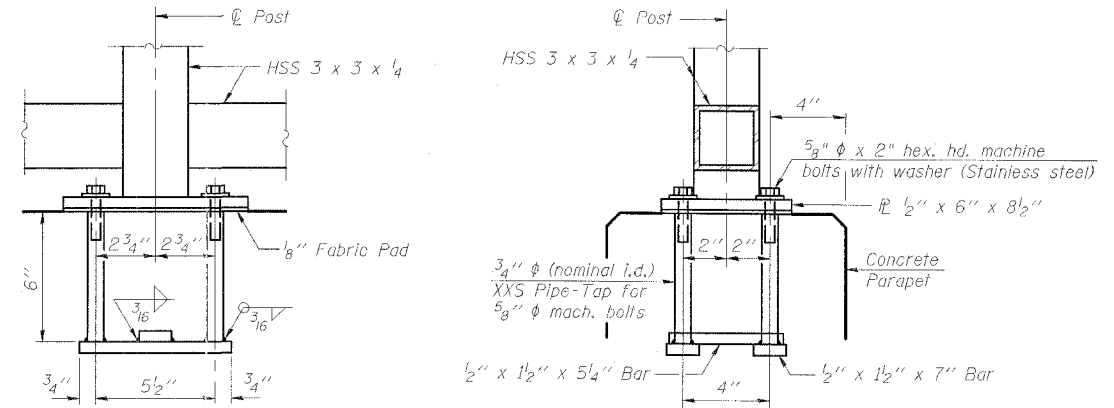


**PARAPET RAILING
ELEVATION**



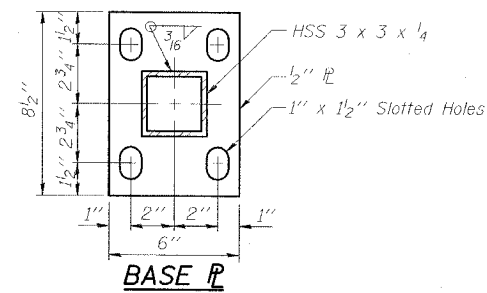
NOTES

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

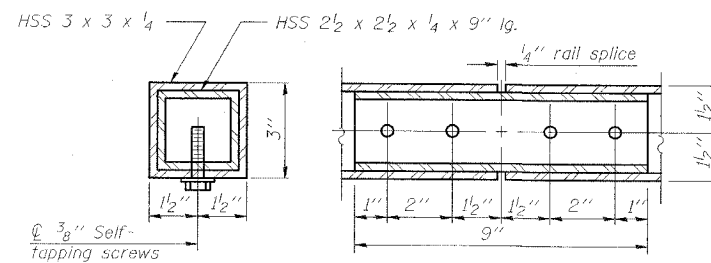


ANCHOR BOLT DETAILS

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



BASE PL



RAIL SPLICE

BILL OF MATERIAL

Item	Unit	Quantity
Parapet Railing	Foot	288

ESCA
CONSULTANTS, INC.

DESIGNED BY:	ELH	03/07
DRAWN BY:	HAS	03/07
CHECKED BY:	ELH	03/07
APPROVED BY:	RDP	03/07

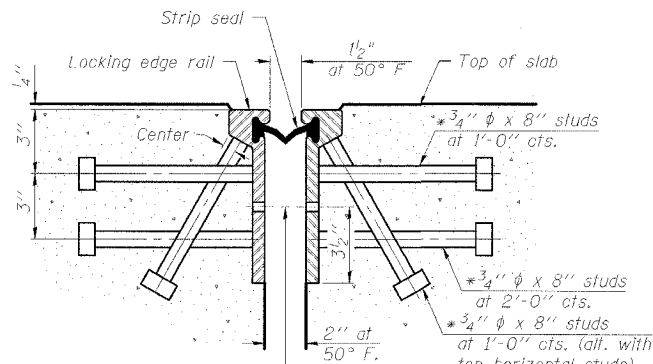
**PARAPET RAILING
IL ROUTE 48
OVER SPRING CREEK
FAP ROUTE 716-SECTION (130BR-1)B-1
MACON COUNTY
STATION 135+77.11
STRUCTURE NO. 058-0135**

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	WORKS	SHEET	SHEET NO. 23 28 SHEETS
FAP 716	*	MACON	95	57	
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT			

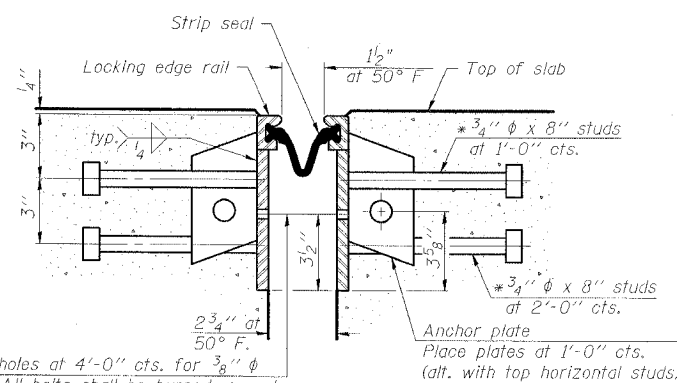
CONTRACT NO. 74166 * (130BR-1)B-1

* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



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

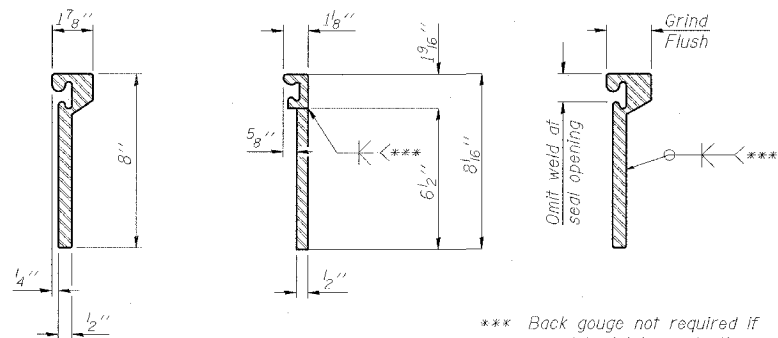
SECTION THRU
ROLLED RAIL JOINT



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

SECTION THRU
WELDED RAIL JOINT

Notes:
The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.
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. Locking Edge Rails may be spliced at slope discontinuities and stage construction joints.
The manufacturer's recommended installation methods shall be followed. The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.
All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

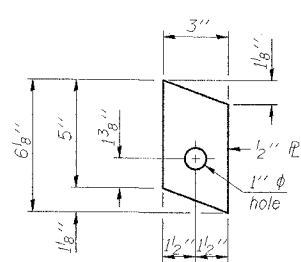


ROLLED (EXTRUDED) RAIL WELDED RAIL

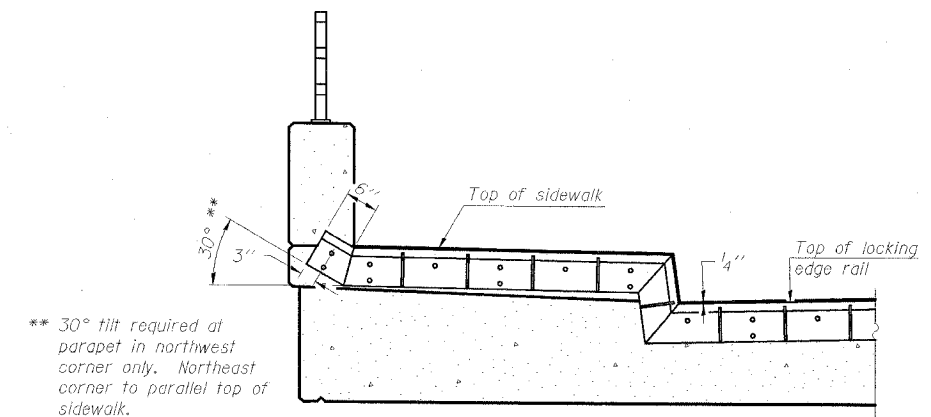
*** Back gouge not required if complete joint penetration is verified by mock-up.

LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue.



ANCHOR PLATE
(for welded rail)

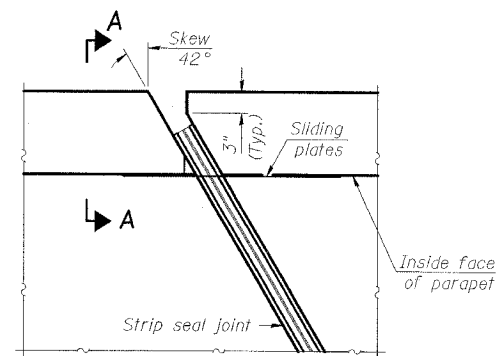


** 30° tilt required at parapet in northwest corner only. Northeast corner to parallel top of sidewalk.

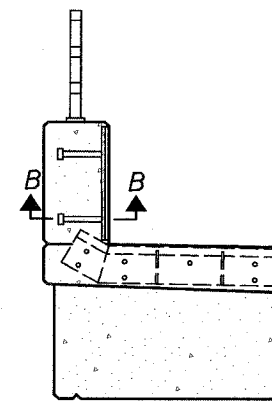
END TREATMENT AT SIDEWALK

Shorter plates with a single row of studs at 12" cts. may be necessary on medians which are shallower than 9". See manufacturer's recommendation.

LOCKING EDGE RAILS

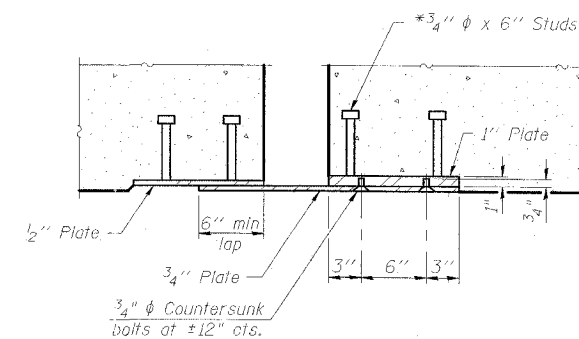


PLAN



SECTION A-A

TYPICAL END TREATMENTS



SECTION B-B

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	110

PERFORMED JOINT STRIP SEAL
IL ROUTE 48
OVER SPRING CREEK
FAP ROUTE 716-SECTION (130BR-1)B-1
MACON COUNTY
STATION 135+77.11
STRUCTURE NO. 058-0135

ESCA
CONSULTANTS, INC.

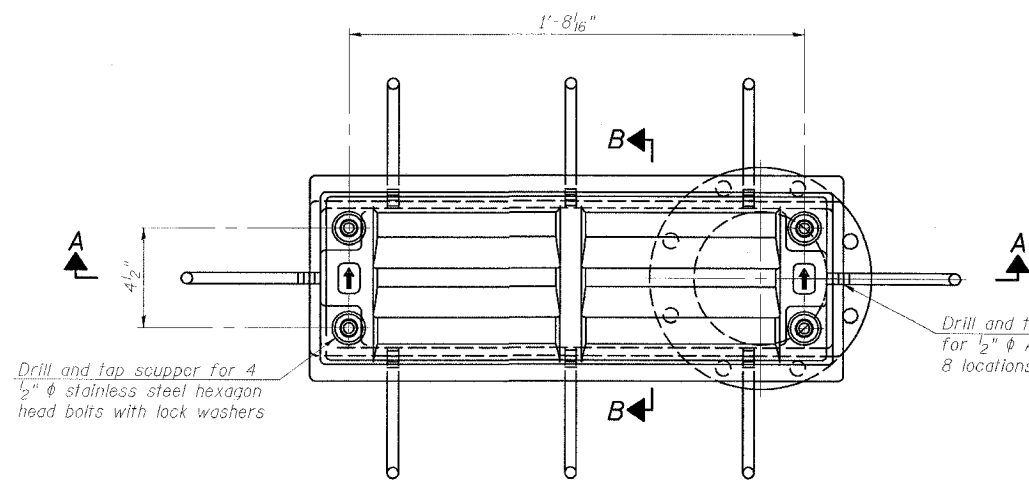
DESIGNED BY:	ELH	03/07
DRAWN BY:	HAS	03/07
CHECKED BY:	ELH	06/07
APPROVED BY:	RDP	06/07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

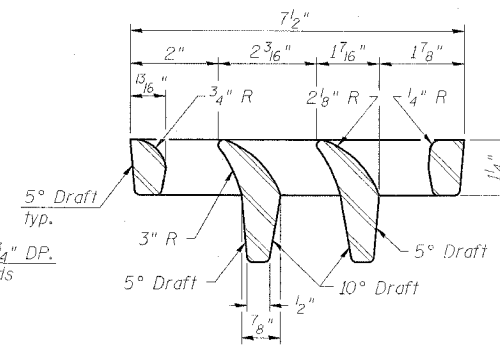
ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET	SHEET NO. 24
FAP 716	*	MACON	95	58	28 SHEETS
CONTRACT NO. 74166					(130BR-1)B-1

Notes:

All cast iron parts shall be gray iron conforming to the requirements of AASHTO M 105, Class 35B.
Bolts, anchor studs, washers and nuts shall conform to the requirements of ASTM A 307 and shall be galvanized according to AASHTO M 232.
Downspouts located on the exterior side of a painted steel fascia beam shall be painted with the finish coat specified for the exterior side of the fascia beam.
As an alternate, bolts, anchor studs, washers and nuts may be stainless steel according to Article 1006.29(d) of the Standard Specifications.
Structural steel weldments of equal sections and of the same configuration may be substituted for the cast iron scupper grate. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval. Structural steel weldments shall not be substituted for the cast iron scupper grate. Structural steel frames and downspouts shall be galvanized according to AASHTO M111.
The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the scupper.
Cost of the Grate, Frame, Downspout, Anchor Studs, Bolts, Washers and Nuts including complete installation of the scupper shall be paid for at the contract unit price each for Drainage Scupper, DS-12.
Alternate fiberglass downspout conforming to ASTM D 2996 with a short-time rupture strength hoop tensile stress of 30,000 psi min. may be used in lieu of the cast iron or steel equivalent.

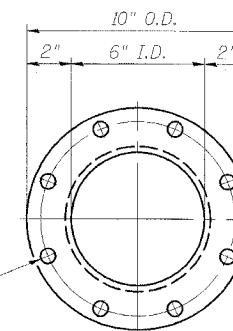


PLAN

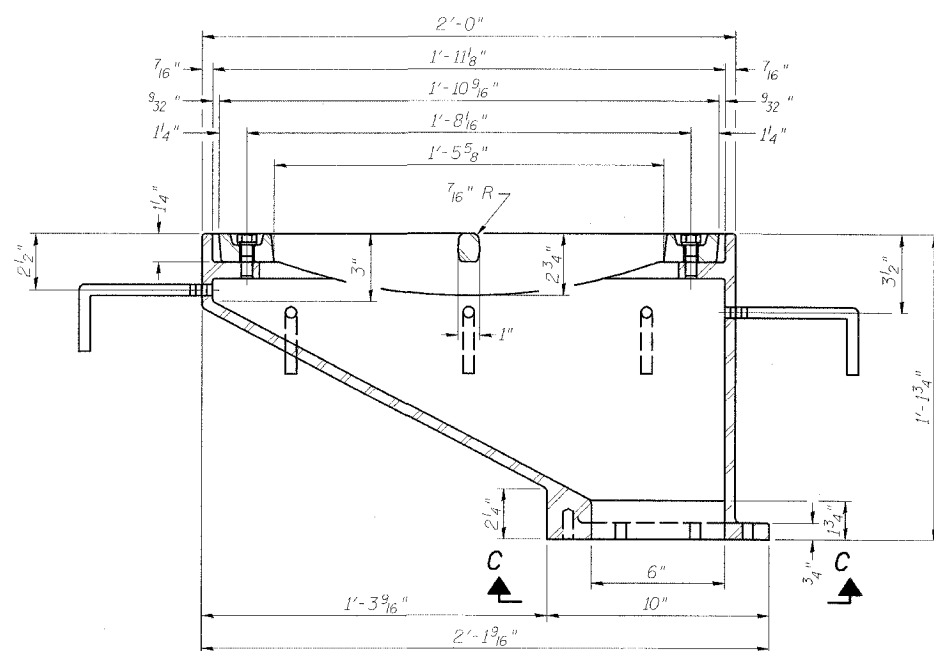


VANE GRATE DETAIL

8-9/16" φ holes on an 8-3/4" φ bolt circle

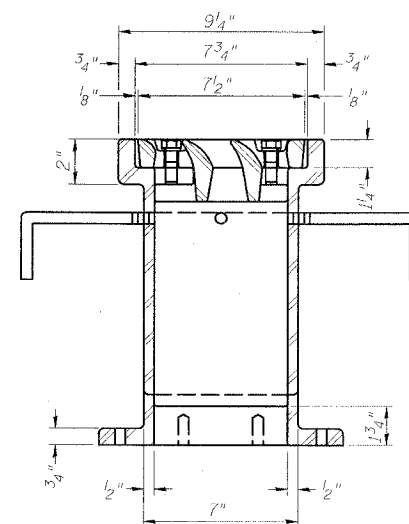


VIEW C-C

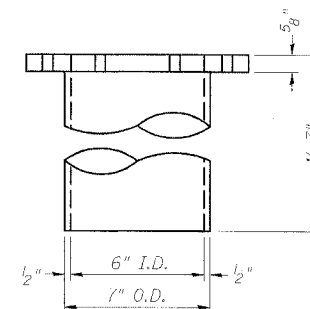


SECTION A-A

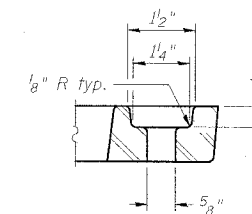
See sheet 10 of 28 for scupper location relative to sidewalk.



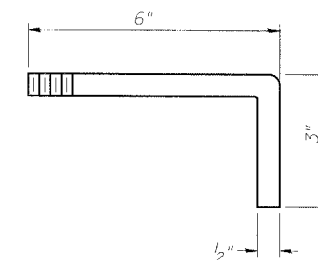
SECTION B-B



DOWNSPOUT



BOLT HOLE DETAIL



ANCHOR STUD DETAIL

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scupper, DS-12	Each	6

DRAINAGE SCUPPER, DS-12
IL ROUTE 48
OVER SPRING CREEK
FAP ROUTE 716-SECTION (130BR-1)B-1
MACON COUNTY
STATION 135+77.11
STRUCTURE NO. 058-0135

Drill and tap 8 holes for 1/2"-13 bolts on an 8-3/4" φ bolt circle. (2 blind holes are 1 1/4" deep, 6 thru holes)

ESCA
CONSULTANTS, INC.

DESIGNED BY:	ELH	03/07
DRAWN BY:	HAS	03/07
CHECKED BY:	ELH	03/07
APPROVED BY:	RDP	03/07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET NO.
FAP 716	*	MACON	95	59
SHEET NO. 25 28 SHEETS				
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 74166			* (130BR-1)B-1	

NOTES

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.
Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.
All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.
Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.
Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

- ① Minimum Capacity (Tension in kips) = $1.25 \times f_y \times A_t$
- ② Minimum *Pull-out Strength (Tension in kips) = $0.66 \times f_y \times A_t$

Where f_y = Yield strength of lapped reinforcement bars in ksi.
 A_t = Tensile stress area of lapped reinforcement bars.
* = 28 day concrete

Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	7.9
#5	2'-0"	23.0	12.3
#6	2'-7"	33.1	17.4
#7	3'-5"	45.1	23.8
#8	4'-6"	58.9	31.3
#9	5'-9"	75.0	39.6
#10	7'-3"	95.0	50.3
#11	9'-0"	117.4	61.8

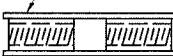
The diameter of this part is equal or larger than the diameter of bar spliced.
The diameter of this part is the same as the diameter of the bar spliced.

ROLLED THREAD DOWEL BAR



**** ONE PIECE**

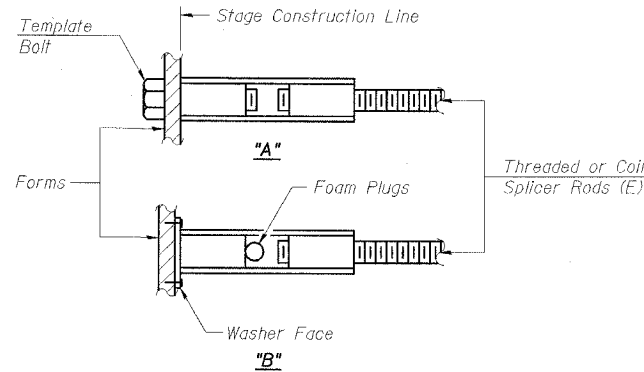
Wire Connector



WELDED SECTIONS

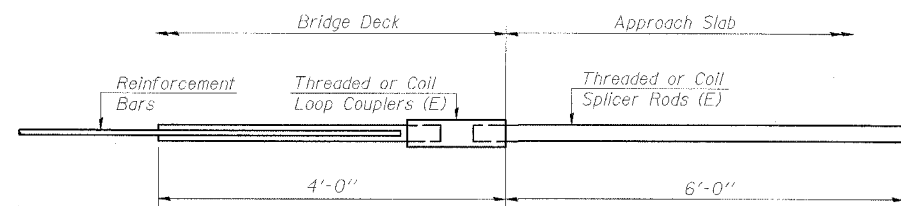
BAR SPLICER ASSEMBLY ALTERNATIVES

** Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



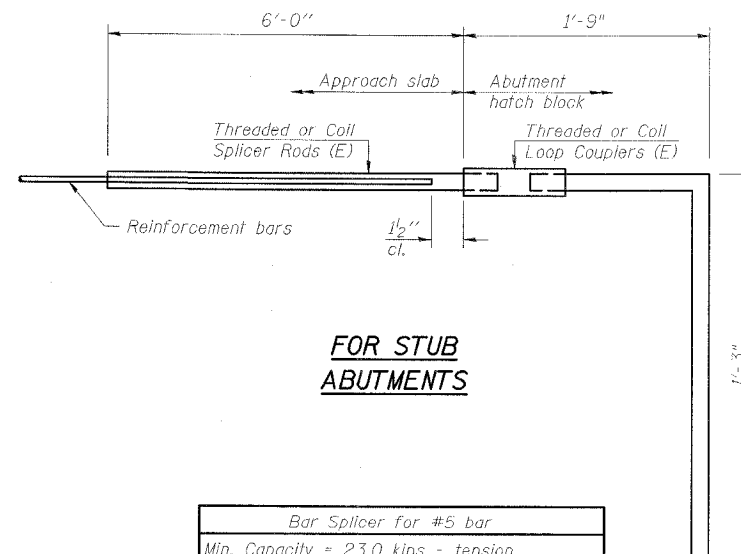
INSTALLATION AND SETTING METHODS

"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.



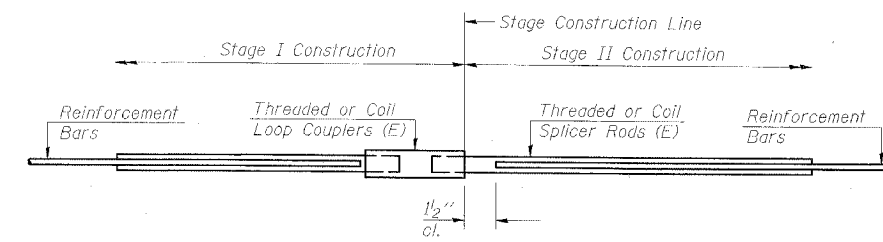
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required = 0



FOR STUB ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required = 80



STANDARD

Bar Size	No. Assemblies Required	Location
#5	40	Piers
#7	18	Piers
#7	10	S. Abut.
#7	12	N. Abut.
#5	5	N. Abut. Backwall
#6	6	N. Abut. Backwall
#5	220	Slab

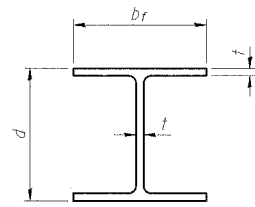
BAR SPLICER ASSEMBLY DETAILS
IL ROUTE 48
OVER SPRING CREEK
FAP ROUTE 716-SECTION (130BR-1)B-1
MACON COUNTY
STATION 135+77.11
STRUCTURE NO. 058-0135

ESCA
CONSULTANTS, INC.

DESIGNED BY:	ELH	03/07
DRAWN BY:	HAS	03/07
CHECKED BY:	ELH	03/07
APPROVED BY:	RDP	03/07

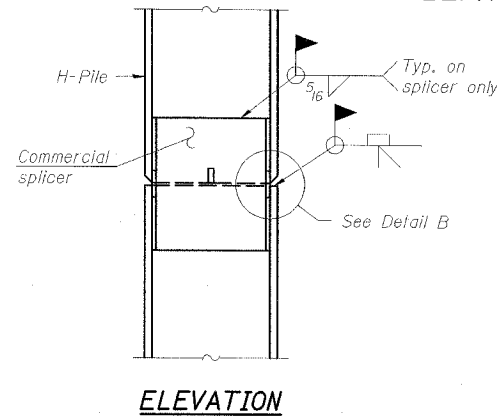
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEETS	POST	SHEET NO. 26
FAP 716	#	MACON	95	60	28 SHEETS
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		CONTRACT NO. 74166
				* (130BR-1)B-1	

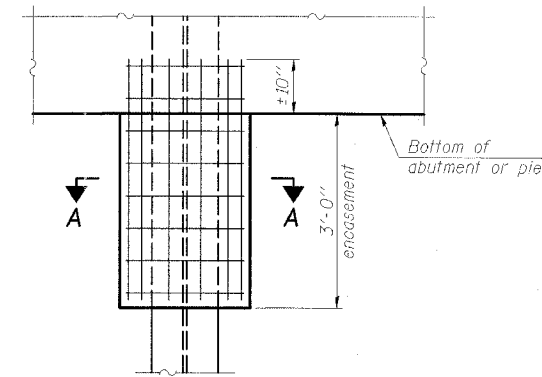


STEEL PILE TABLE

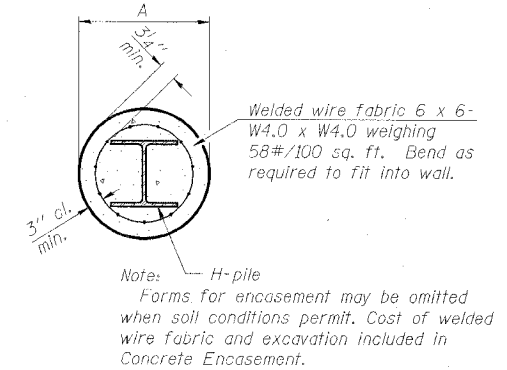
Designation	Depth d	Flange width bf	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	5/8"	30"
x102	14"	14 3/4"	5/8"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/2"	12 1/4"	5/8"	24"
x74	12 1/2"	12 1/4"	5/8"	24"
x63	12"	12 5/8"	1/2"	24"
x53	11 3/4"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



ELEVATION

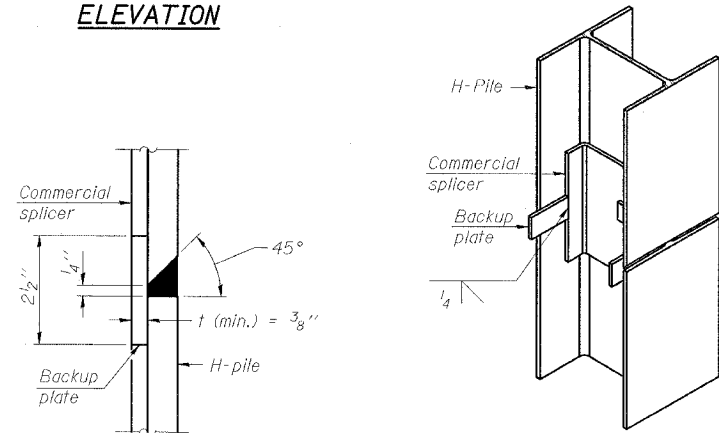


ELEVATION

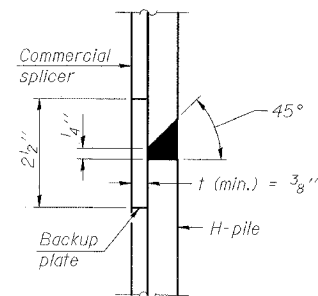


SECTION A-A

PILE ENCASEMENT

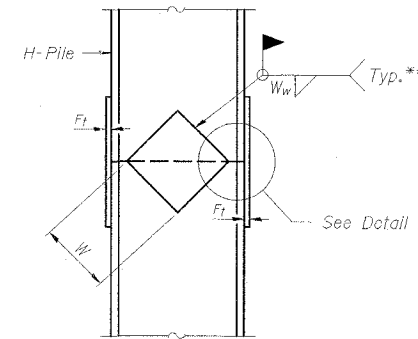


ISOMETRIC VIEW

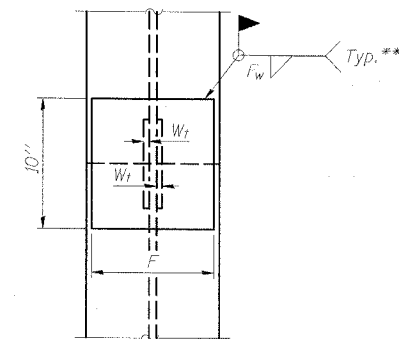


DETAIL "B"

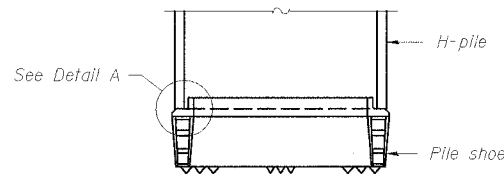
WELDED COMMERCIAL SPLICE



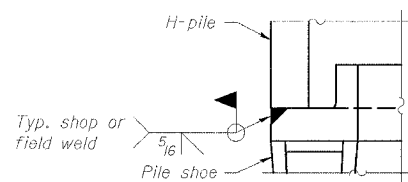
ELEVATION



END VIEW

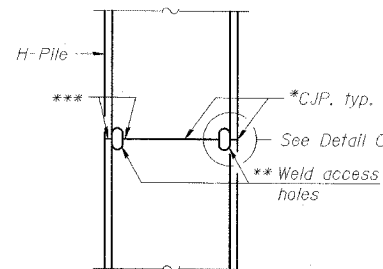


ELEVATION

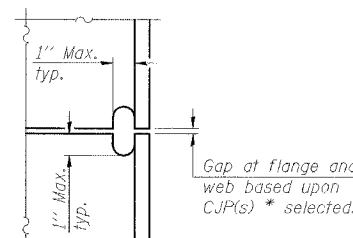


DETAIL A

H-PILE SHOE ATTACHMENT

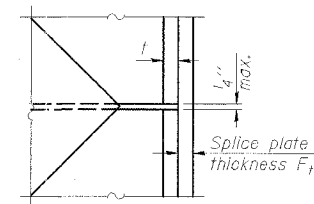


ELEVATION



DETAIL C

COMPLETE PENETRATION WELD SPLICE



DETAIL D

WELDED PLATE FIELD SPLICE

Designation	F	F1	Fw	W	Wt	Ww
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5/8"	1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5/8"	1/2"
x89	12 1/2"	3/4"	9/16"	7 3/4"	5/8"	1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5/8"	1/2"
HP 12x84	10"	7/8"	1/2"	6 1/2"	5/8"	1/2"
x74	10"	7/8"	1/2"	6 1/2"	5/8"	1/2"
x63	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
x53	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
HP 10x57	8"	3/4"	9/16"	5 1/4"	1/2"	3/8"
x42	8"	5/8"	9/16"	5 1/4"	1/2"	3/8"
HP 8x36	7"	5/8"	7/16"	4 1/4"	1/2"	3/8"

STEEL H-PILE DETAILS

IL ROUTE 48
OVER SPRING CREEK
FAP ROUTE 716-SECTION (130BR-1)B-1
MACON COUNTY
STATION 135+77.11
STRUCTURE NO. 058-0135

- * Use joint conforming to Figure 3.4 in AWS D1.1, Structure Welding Code - Steel.
- ** Preparation per Fig. 5.2 in AWS D1.1, Structure Welding Code - Steel.
- *** Interrupt welds 1/4" from end of each pile.

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

ESCA
CONSULTANTS, INC.

DESIGNED BY:	ELH	03/07
DRAWN BY:	HAS	03/07
CHECKED BY:	ELH	03/07
APPROVED BY:	RDP	03/07



SOIL BORING LOG

Page 1 of 3
Date 9/13/06

ROUTE DESCRIPTION Spring Creek LOGGED BY E. Sandschafer
SECTION (130BR-1)B-1 LOCATION NE 1/4, SEC. 3, TWP. 16 N, RNG. 2 E, 3 PM
COUNTY Macon DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO.	Station	DEPTH	BLOW	UCS	MOIST	DESCRIPTION	DEPTH	BLOW	UCS	MOIST	DESCRIPTION
058-0056	135+77	H	S	Qu	T		H	S	Qu	T	
						Surface Water Elev. 614.78 ft					
						Stream Bed Elev. 613.66 ft					
						Groundwater Elev.: 611.7 ft					
						First Encounter 611.7 ft					
						Upon Completion 617.2 ft					
						After 120 Hrs. 617.2 ft					
						Ground Surface Elev. 626.68 ft					
						1 1/2" asphalt on 8 1/2" concrete pavement					
						Very stiff, damp, brown mottled gray, CLAY.					
						Medium to stiff, damp, gray, CLAY. (continued)					
						Very stiff, damp, gray, CLAY TILL					
						Very stiff, damp, brown, SANDY CLAY TILL					
						Very stiff, damp, gray, CLAY TILL					
						Very stiff, damp, brown, SANDY CLAY TILL					
						Very stiff, damp, gray, CLAY TILL					
						Very soft, very damp, black, SILTY LOAM w/ many organics					
						4" layer of wood.					
						Very soft, wet, gray, SANDY LOAM w/ many fine gravel.					
						Stiff, damp, gray, CLAY.					
						Gray, fine grained, SAND					

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)



SOIL BORING LOG

Page 2 of 3
Date 9/13/06

ROUTE DESCRIPTION Spring Creek LOGGED BY E. Sandschafer
SECTION (130BR-1)B-1 LOCATION NE 1/4, SEC. 3, TWP. 16 N, RNG. 2 E, 3 PM
COUNTY Macon DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO.	Station	DEPTH	BLOW	UCS	MOIST	DESCRIPTION	DEPTH	BLOW	UCS	MOIST	DESCRIPTION
058-0056	135+77	H	S	Qu	T		H	S	Qu	T	
						Surface Water Elev. 614.78 ft					
						Stream Bed Elev. 613.66 ft					
						Groundwater Elev.: 611.7 ft					
						First Encounter 611.7 ft					
						Upon Completion 617.2 ft					
						After 120 Hrs. 617.2 ft					
						Ground Surface Elev. 626.68 ft					
						Very stiff, damp, gray, CLAY TILL (continued)					
						Hard, very moist, gray, SANDY CLAY TILL					
						Stiff, damp, gray, SANDY LOAM (continued)					
						Very stiff, damp, gray, SANDY LOAM TILL					
						Very stiff, damp, gray, SANDY LOAM TILL					
						Stiff, damp, gray, SANDY LOAM					

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)



SOIL BORING LOG

Page 3 of 3
Date 9/13/06

ROUTE DESCRIPTION Spring Creek LOGGED BY E. Sandschafer
SECTION (130BR-1)B-1 LOCATION NE 1/4, SEC. 3, TWP. 16 N, RNG. 2 E, 3 PM
COUNTY Macon DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO.	Station	DEPTH	BLOW	UCS	MOIST	DESCRIPTION	DEPTH	BLOW	UCS	MOIST	DESCRIPTION
058-0056	135+77	H	S	Qu	T		H	S	Qu	T	
						Surface Water Elev. 614.78 ft					
						Stream Bed Elev. 613.66 ft					
						Groundwater Elev.: 611.7 ft					
						First Encounter 611.7 ft					
						Upon Completion 617.2 ft					
						After 120 Hrs. 617.2 ft					
						Ground Surface Elev. 626.68 ft					
						Very stiff, damp, gray, CLAY to CLAY SHALE. (continued)					
						Very dense, moist, gray, SILTY CLAY SHALE					
						Extent of exploration.					
						Benchmark: BM 4707-1 Chiseled square on SE wingwall of existing bridge, Sta 135+57, 42 Rt = 628.10'. Provided by Program Development.					

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)

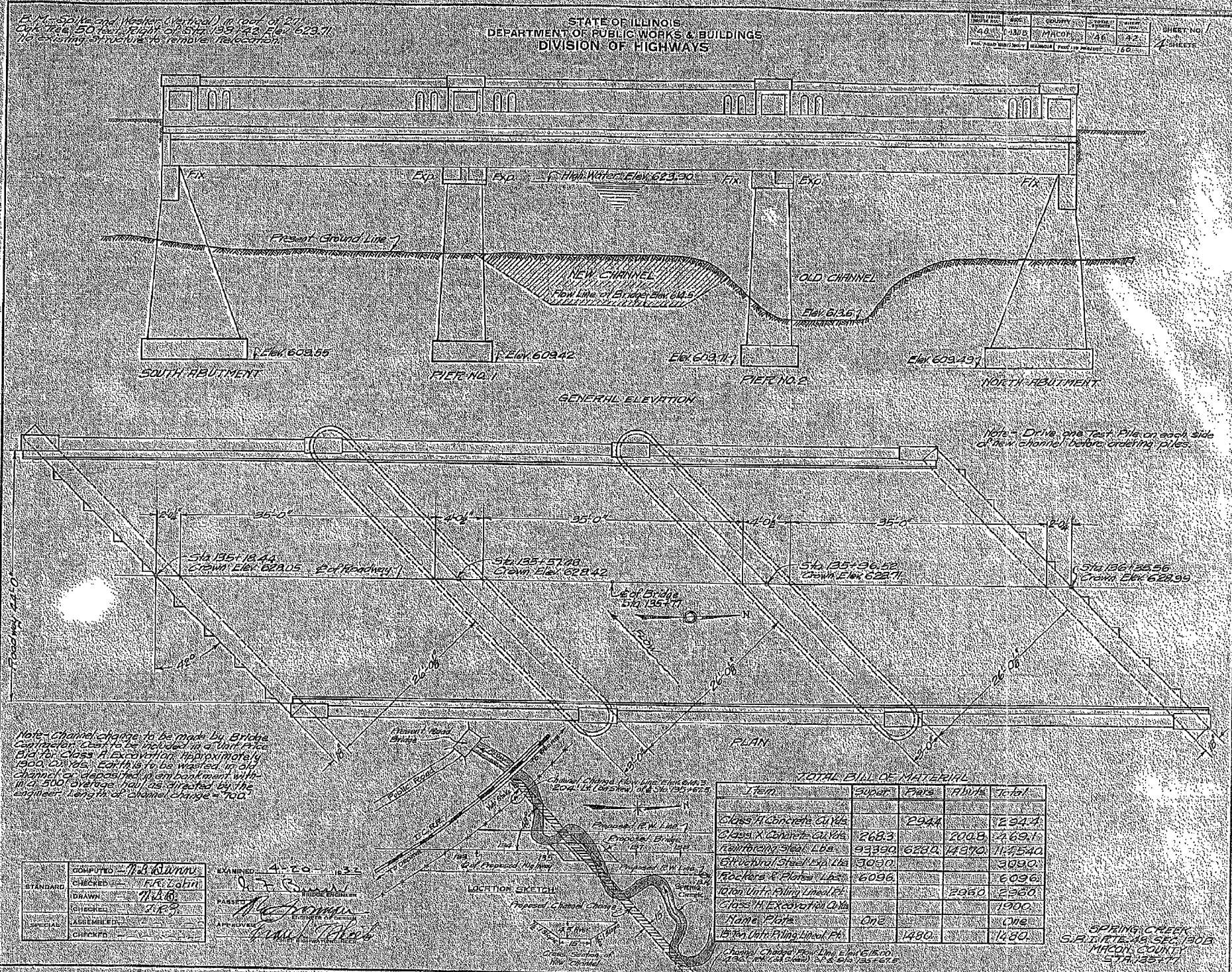
ESCA
CONSULTANTS, INC.

DESIGNED BY:	ELH	11/06
DRAWN BY:	KAH	11/06
CHECKED BY:	ELH	11/06
APPROVED BY:	RDP	11/06

BORING LOGS
IL ROUTE 48
OVER SPRING CREEK
FAP ROUTE 716 - SECTION (130BR-1)B-1
MACON COUNTY
STATION 135+77.11
STRUCTURE NO. 058-0135

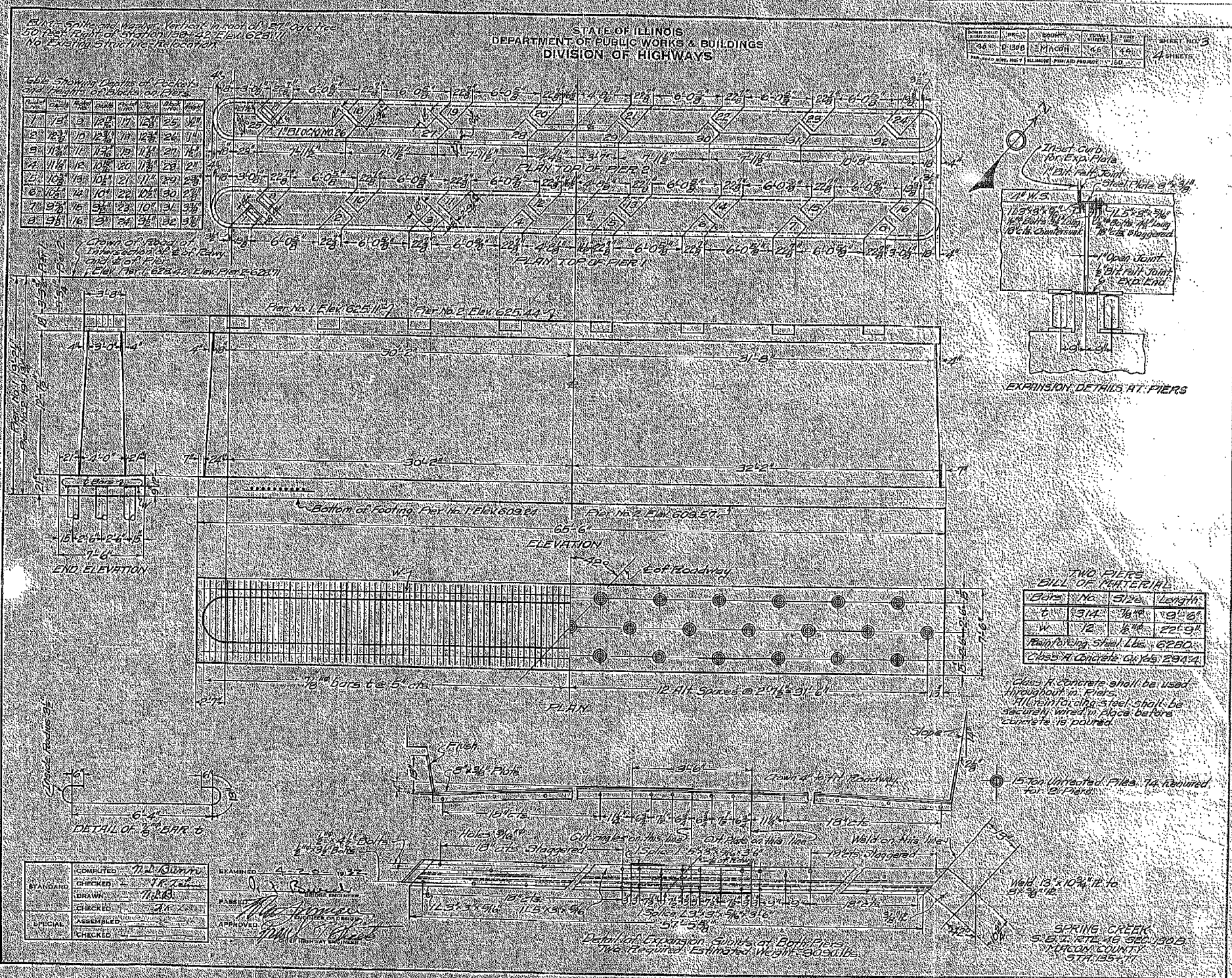
FOR INFORMATION ONLY

CONTRACT NO. 74166				
FAP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	130BR-1B-1	MACON	95	63
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



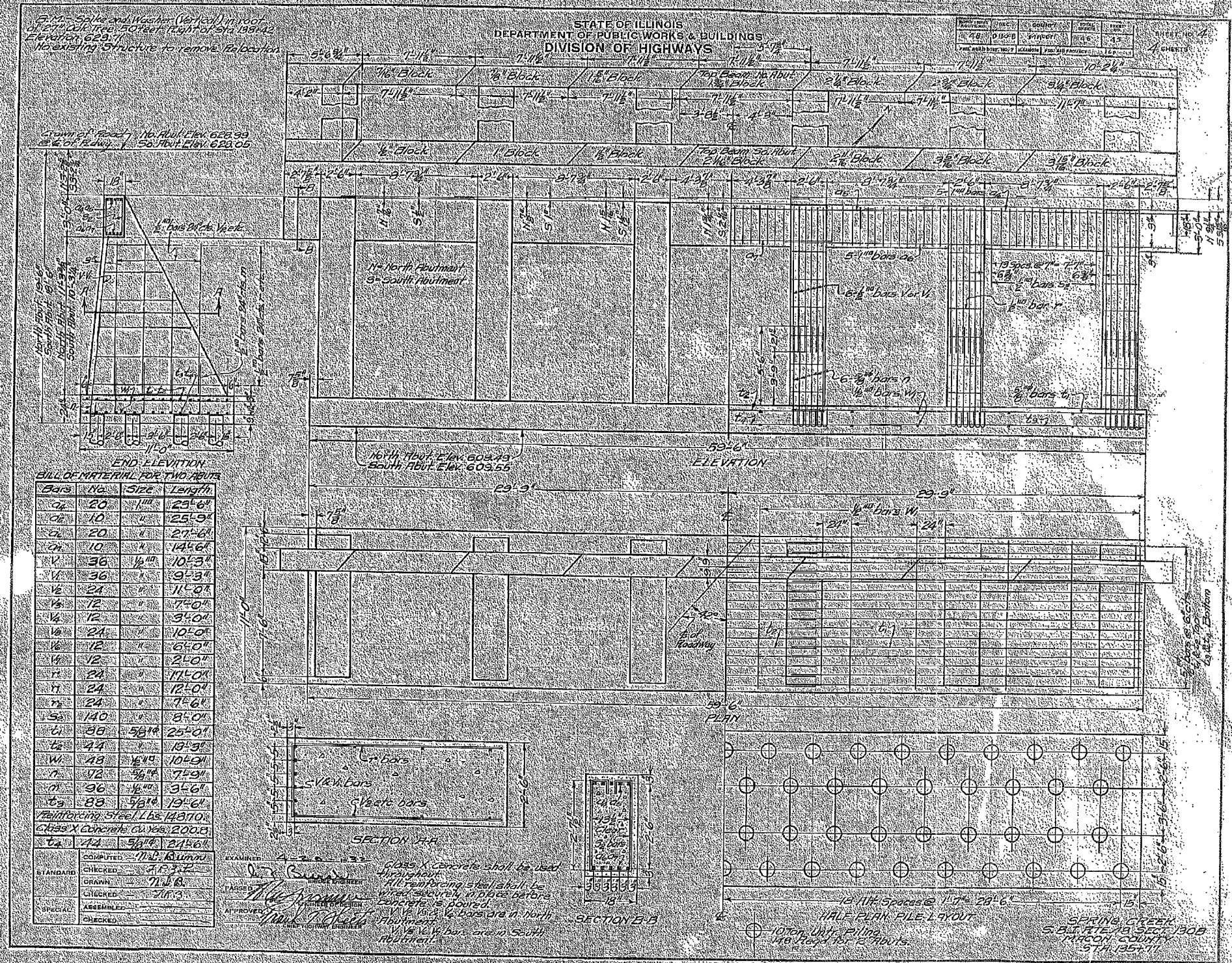
FOR INFORMATION ONLY

CONTRACT NO. 74166				
F&P RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	(130BR-1)B-1	MACON	95	64
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



FAP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T16	(130BR-1)B-1	MACON	95	65
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

FOR INFORMATION ONLY



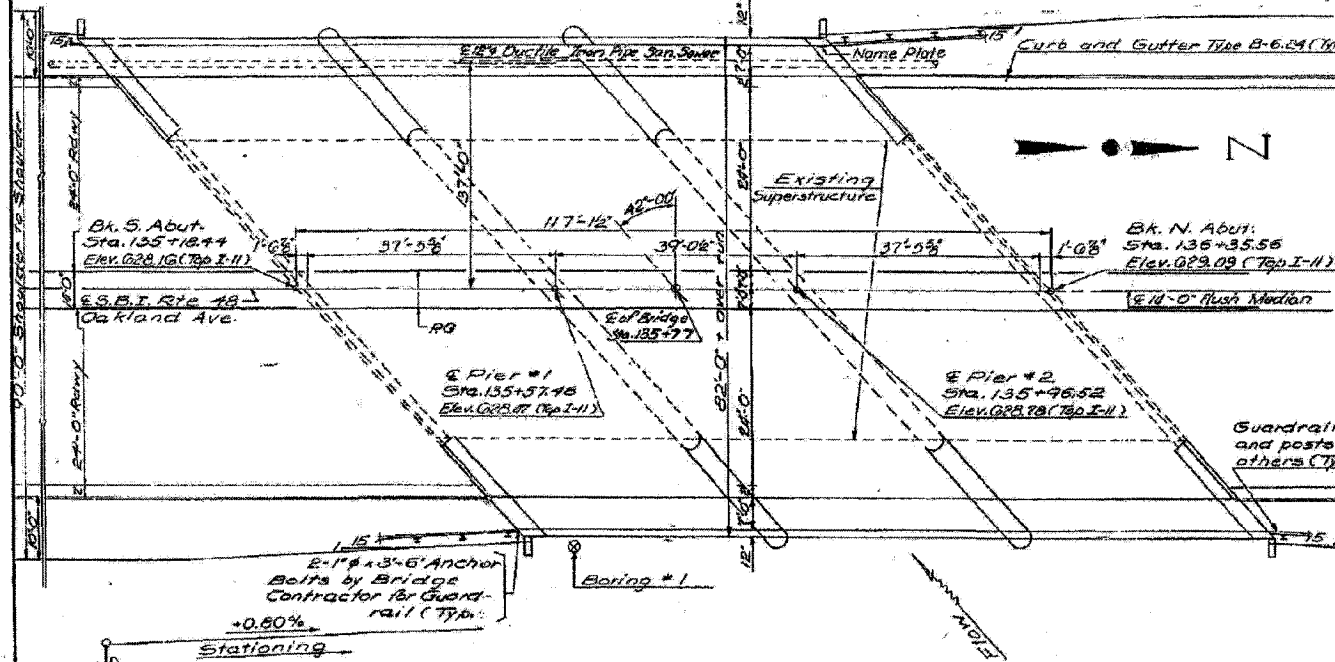
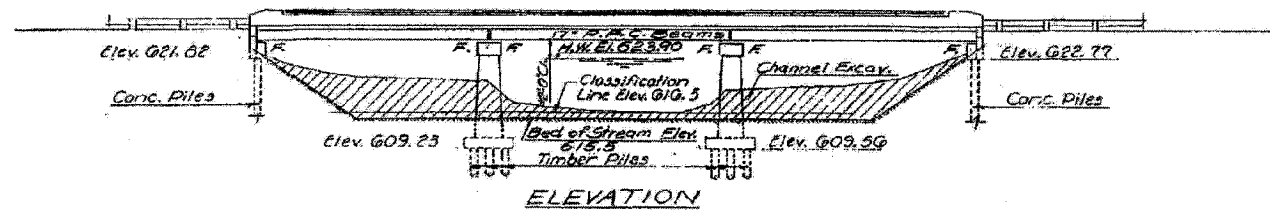
FOR INFORMATION ONLY

CONTRACT NO. 74166				
F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	(130BR-1)B-1	MACON	95	66
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

B.M. #17 Chis. S. End E. Par. Wall on Existing Bridge over Spring Creek. Elev. 628.80
Existing Structure @ Sta. 135+77 Built in 1932 as S.B.I. Rte. 48 Sec. 130 B. Existing superstructure to be removed utilizing stage construction so as to maintain traffic over the bridge at all times. Existing Piers and Abutments to be widened.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NO. 1	NO. 2	NO. 3	NO. 4	NO. 5	SHEET NO. 1
100R	MACON	57	22	11	6 SHEETS



PROFILE SBI RTE 48
(Inside Edge Part.)

DESIGNED Smith, T. Desai	EXAMINED [Signature]
CHECKED [Signature]	DATE September 10, 1970
DRAWN [Signature]	PROJECT 11-180(23)
CHECKED [Signature]	DESIGNER [Signature]

WATERWAY INFORMATION

Drainage Area 26.3 sq. mi.
Character: Suburban & Farm, level to rolling.
Over one half in Grass and woods. Rest
Farm Land & some parking lots & streets.
Required Opening (50 Years Req.) 659 sq. ft.
Present Opening 4087 sq. ft.
Proposed Opening 659 sq. ft.

Ordinary Water Elev. 617.7
Low Water Elev. 616.0
Design H.W. Elev. 623.9
G.M. +410acfs

PRECAST PRESTRESSED UNITS

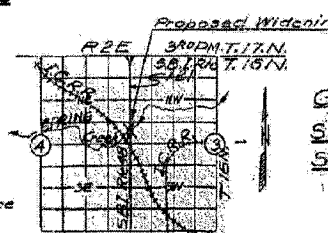
$f_c = 5000$ p.s.i.
 $f_{ci} = 4000$ p.s.i.
 $f_s = 248,000$ p.s.i. Strands (7/16")
 $f_{sf} = 175,600$ p.s.i. Strands (7/16")

DESIGN STRESSES FIELD UNITS

$f_c = 4400$ p.s.i.
 $f_s = 20000$ p.s.i. (Reinf.)
 $f_s = 20000$ p.s.i. (Struct.)
 $f_c = 75$ p.s.i. (Footings)
 $n = 10$

Allow 25% for additional future wearing surface
Loading H.S. 20-44

Design Specifications: AASHTO 1969 as
amended.



GENERAL NOTES

All reinforcement bars shall be lapped 24 diameters unless otherwise shown.

It shall be the responsibility of the Contractor to verify all dimensions and conditions existing in the field prior to construction and ordering of materials.

An alternate strand pattern using Extra High Strength Prestressing strand (270ksi) is permitted.

Expansion bolts shall consist of self-drilling expansion anchors and 3/4" hooked bolts. Hooked bolts shall extend a minimum of 12" into new concrete, unless otherwise shown.

Limits of Cast-In-Place Protective Coat shall be back to back of abutments and out to out of deck.

Protective Coat shall not be applied to surfaces to which Waterproofing Membrane System is applied.

The parapet and sidewalk shall be constructed of Class X Concrete, except the aggregates shall conform to the requirements of Handrail Concrete.

The Contractor shall drive 2 test piles in a permanent location, one timber test pile at Pier #2 and one conc. test pile at North Abut., as directed by the Engineer before ordering the remainder of piles.

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Bituminous Conc. Surface Cse, Class I	Tons	86		86
Concrete Removal	Cu. Yds.		24	24
Expansion Bolts (3/4")	Each		350	350
Structure Excavation	Cu. Yds.		363	363
Protective Coat	Sq. Yds.	827		827
Class A Concrete	Cu. Yds.		3127	3127
Class X Concrete	Cu. Yds.	623	510	1133
Precast Prestressed Conc. Deck Slabs (17')	Sq. Ft.	9226		9226
Aluminum Railing, Type L	Lin. Ft.	195		195
Steel Railing, Type M	Lin. Ft.	195		195
Reinforcement Bars	Lbs.	9790	18080	26870
Untreated Piles (Up to 30 Ft.)	Lin. Ft.		1075	1075
Test Pile (Timber)	Each		1	1
Concrete Piles	Lin. Ft.		722	722
Test Pile (Concrete)	Each		1	1
Name Plates	Each	1		1
Temporary Guardrail	Lin. Ft.		115	115
Waterproofing Membrane System	Sq. Yds.	840		840
Removal of Existing Superstructures	Each		1	1
Preformed Joint Sealer 1/2"	Lin. Ft.		40	40

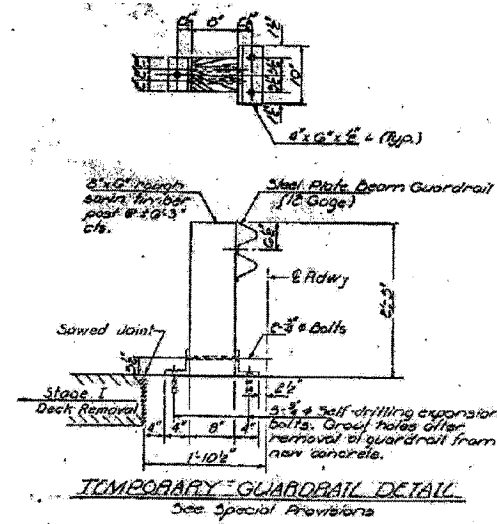
PROJECT 11-180(23)
GENERAL PLAN & ELEVATION
S.B.I. RTE 48 OVER SPRING CREEK
S.B.I. RTE 48 SECTION 130 BR
MACON COUNTY
STA. 135+77.00

FOR INFORMATION ONLY

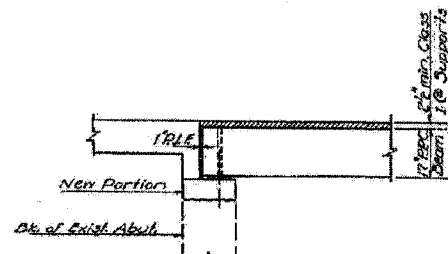
CONTRACT NO. 74166				
F&P RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	(130BR-1B-1)	MACON	95	67
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STATE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
130BR	1B-1	MACON	95	67
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS		
FED. AID PROJECT				



Station	Depth	Soils	Remarks	Dr. No.	W.C.	Wt. of Solids
135+77.00	0	STEEL BEAM GUARDRAIL				
	10	STEEL BEAM GUARDRAIL				
	15	STEEL BEAM GUARDRAIL				
	20	STEEL BEAM GUARDRAIL				
	25	STEEL BEAM GUARDRAIL				
	30	STEEL BEAM GUARDRAIL				
	35	STEEL BEAM GUARDRAIL				
	40	STEEL BEAM GUARDRAIL				
	45	STEEL BEAM GUARDRAIL				
	50	STEEL BEAM GUARDRAIL				
	55	STEEL BEAM GUARDRAIL				
	60	STEEL BEAM GUARDRAIL				
	65	STEEL BEAM GUARDRAIL				
	70	STEEL BEAM GUARDRAIL				
	75	STEEL BEAM GUARDRAIL				
	80	STEEL BEAM GUARDRAIL				
	85	STEEL BEAM GUARDRAIL				
	90	STEEL BEAM GUARDRAIL				
	95	STEEL BEAM GUARDRAIL				



STATION 135+77.00
REBUILT 1971 BY
STATE OF ILLINOIS
S.B.L. RT. 48 SEC. 130BR
FA. PROJ. U-160(23)
LOADING H320.

NAME PLATE
(See Std. 2113)

DESIGNED: Smith T. Deane
CHECKED: J. Jacobs
DRAWN: J. Jacobs
CHECKED: J. Jacobs

SEPT. 10, 1970
EXAMINED: [Signature]
APPROVED: [Signature]

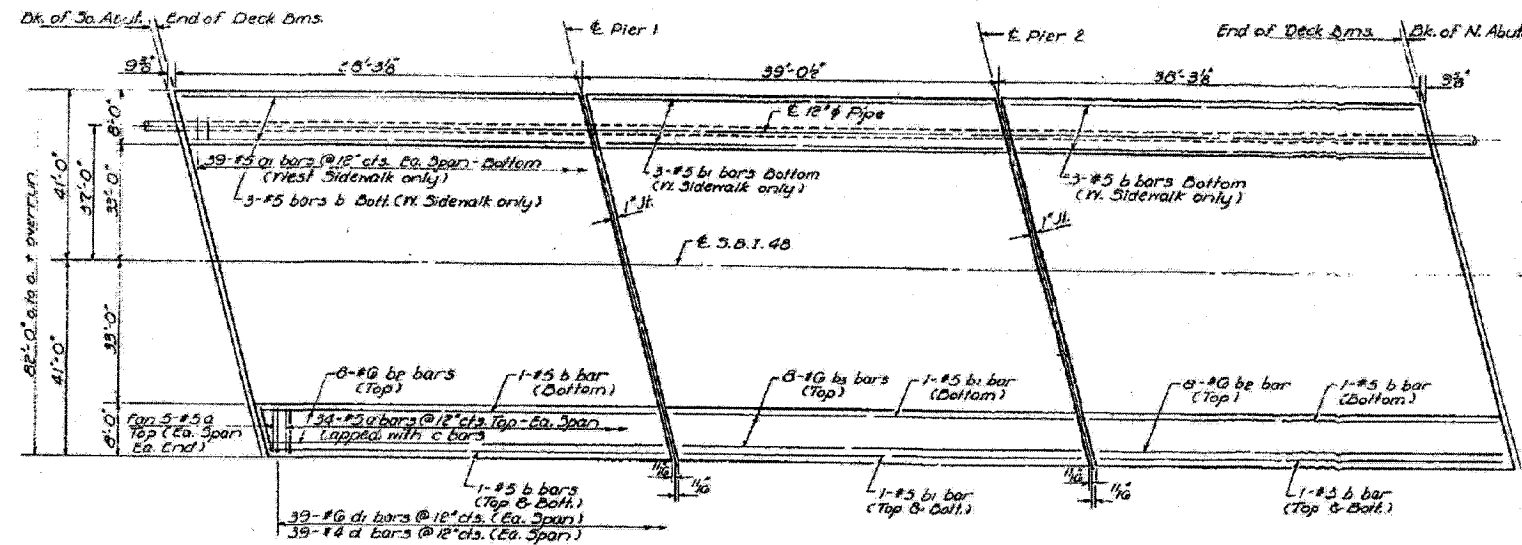
BORING
S.B.L. RT. 48 SEC. 130BR
MACON COUNTY
STA. 135+77.00

FOR INFORMATION ONLY

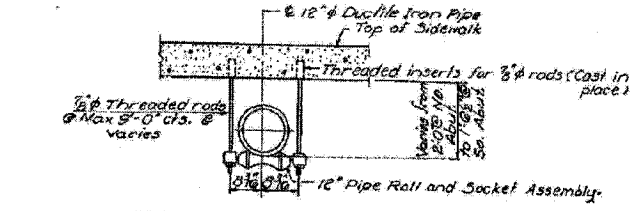
FAP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	(130BR-11B-1)	MACON	95	68
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

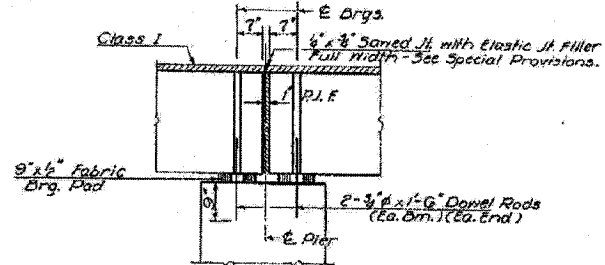
PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
65	130BR	MACON	97	24
SHEET NO. 3				
11 SHEETS				



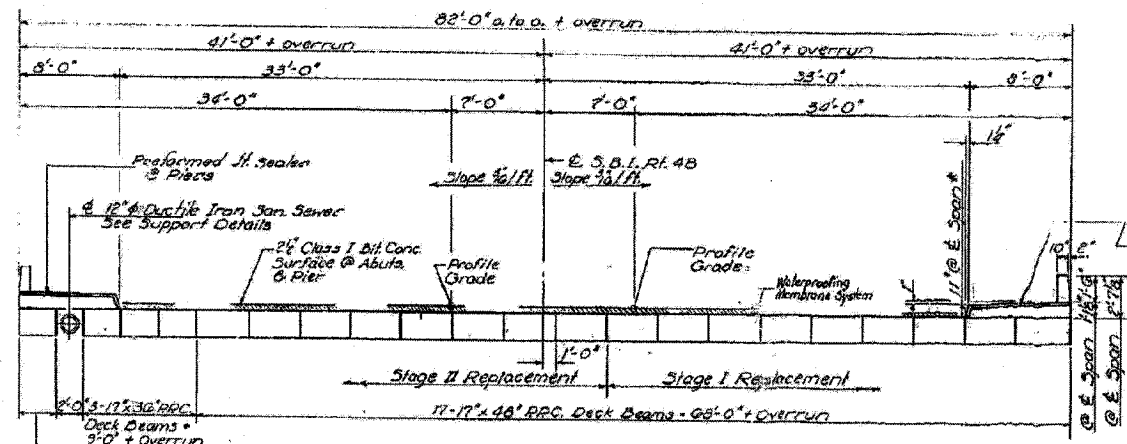
PLAN



PIPE SUPPORT DETAILS



SEC. AT PIER

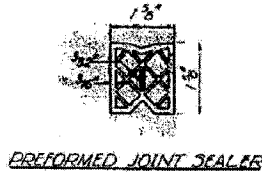


CROSS SECTION

BILL OF MATERIAL

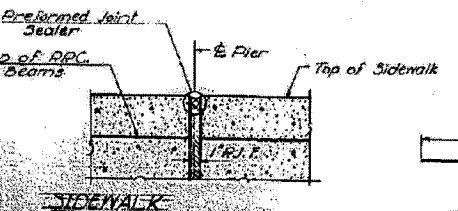
Bar No.	Size	Length	Shape
a	#5	8'-5"	—
a1	#5	7'-9"	—
b	#5	38'-0"	—
b1	#5	38'-9"	—
b2	#6	38'-0"	—
b3	#6	38'-9"	—
d	#6	8'-9"	L
d1	#6	5'-5"	L
Class X Concrete		Cu. Yds.	69.0
Reinforcement Bars		Lbs.	8230

* Construct Top of Sidewalk parallel to grade.
For Cross Sections thru Sidewalk See Sheets 4 & 5.

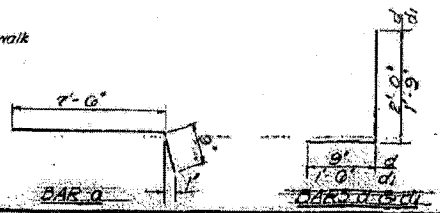


PREFORMED JOINT SEALER

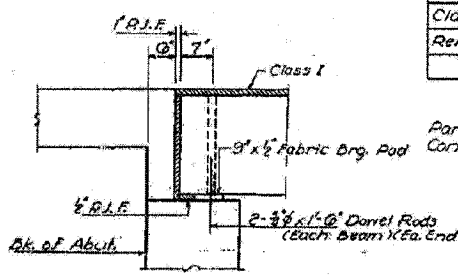
DESIGNED	Supers T. Dean
CHECKED	John P. ...
DRAWN	Jacobs
CHECKED	JP



SEC. AT PIER



BAR-D



SEC. AT ABUT

Parapet Reinforcement and Class X Concrete are billed on Sheet No. 6

STRUCTURE
SEC. 130BR
MACON COUNTY
STA. 135+11.00

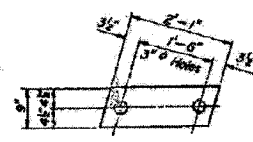
Revised 8-24-73

FOR INFORMATION ONLY

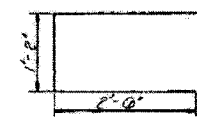
CONTRACT NO. 74166				
F&P RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	(130BR-1)B-1	MACON	95	69
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

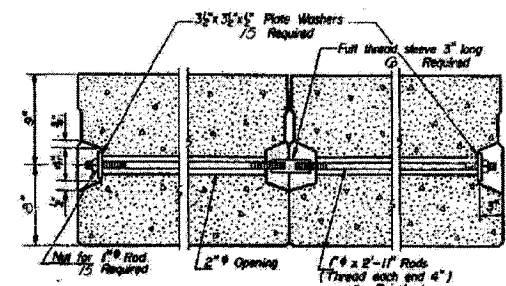
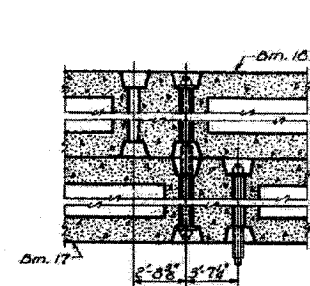
PROJECT NO.	SECTION	COUNTY	SHEET NO.	TOTAL SHEETS
65	130BR	MACON	37	25
SHEET NO. 4				



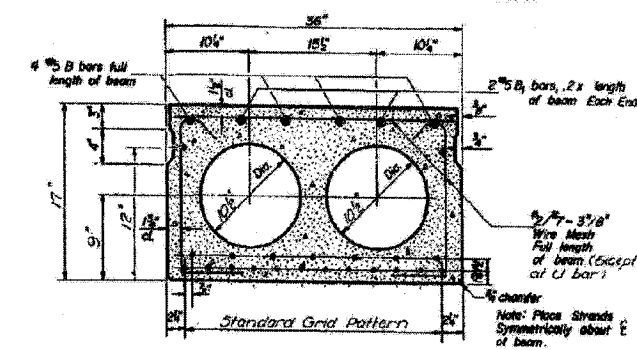
FABRIC BEARING PAD



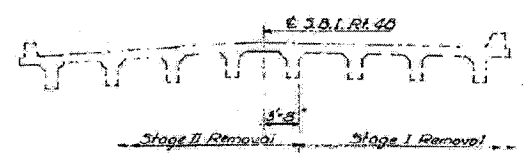
U BAR



TYPICAL TRANSVERSE TIE ASSEMBLY

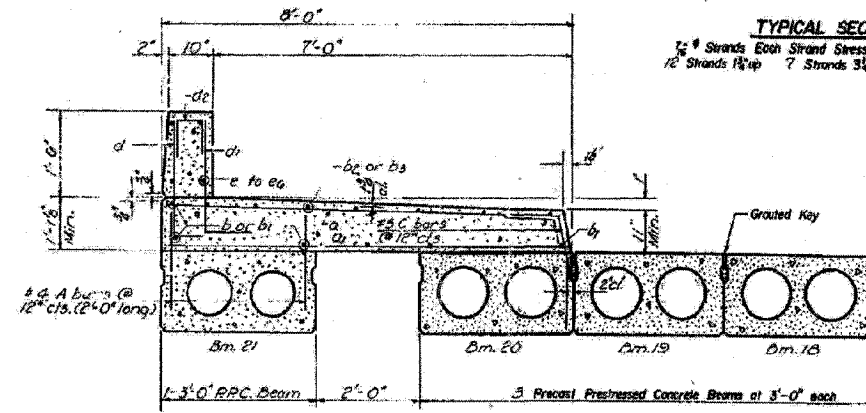


TYPICAL SECTION



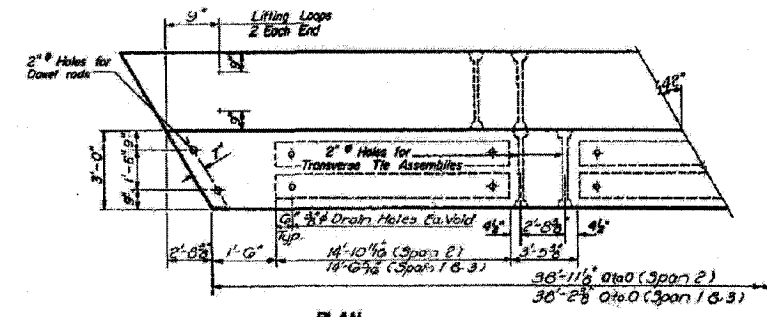
CROSS SECTION - EXISTING STRUCTURE
Looking North

Note: Dm. #21 is not tied transversely to the other Beams.

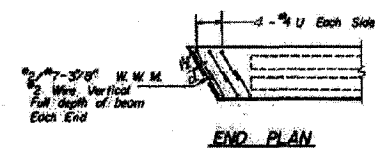


PARTIAL CROSS SECTION

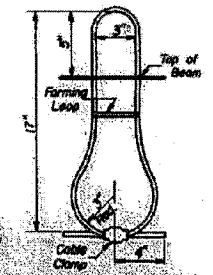
For detail of bar c see Sheet No. 5



PLAN



END PLAN



LIFTING LOOP DETAIL

DESIGNED	SMITH T. DESAI
CHECKED	J. Jacobs
DRAWN	JAMES R. CANNON
CHECKED	J.P.

EXAMINED	SWT. 10
APPROVED	[Signature]
DATE	11-19-65

GENERAL NOTES

Prestressing steel shall be non-galvanized, high strength, stress-relieved 7-wire strand. The nominal diameter shall be 7/8" and the nominal cross-sectional area shall be 0.109 sq. in. Lifting loops shall be 3/4" diameter 6 x 15 class wire rope with fiber core and shall have a minimum ultimate tensile strength of 29,000 lbs. The 1/2" rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets that receive transverse tie bar on outside beam shall be filled with grout after transverse tie assembly is in place. Longitudinal shear keys shall be packed with a very dry mix of 2-1 sand and P.C. mortar. After beams have been erected, holes for the doveil anchors shall be drilled into the sub-structure and the anchor doveils shall be grouted in place.

After fabrication the transverse tie assemblies (tie rods, nuts, washers and sleeves) shall be hot-dip galvanized in accordance with A.S.T.M. Specification A 153. Cost of reinforcement and accessories cast into the beam, of bearing girders, of armor angles, and of grouting longitudinal shear keys is included in unit price bid for Precast Prestressed Concrete Deck Beams.

Steel for doveil rods shall be ASTM A-306 or ASTM A-315.

Steel for transverse tie rods shall be ASTM A-306, Grade 70-80.

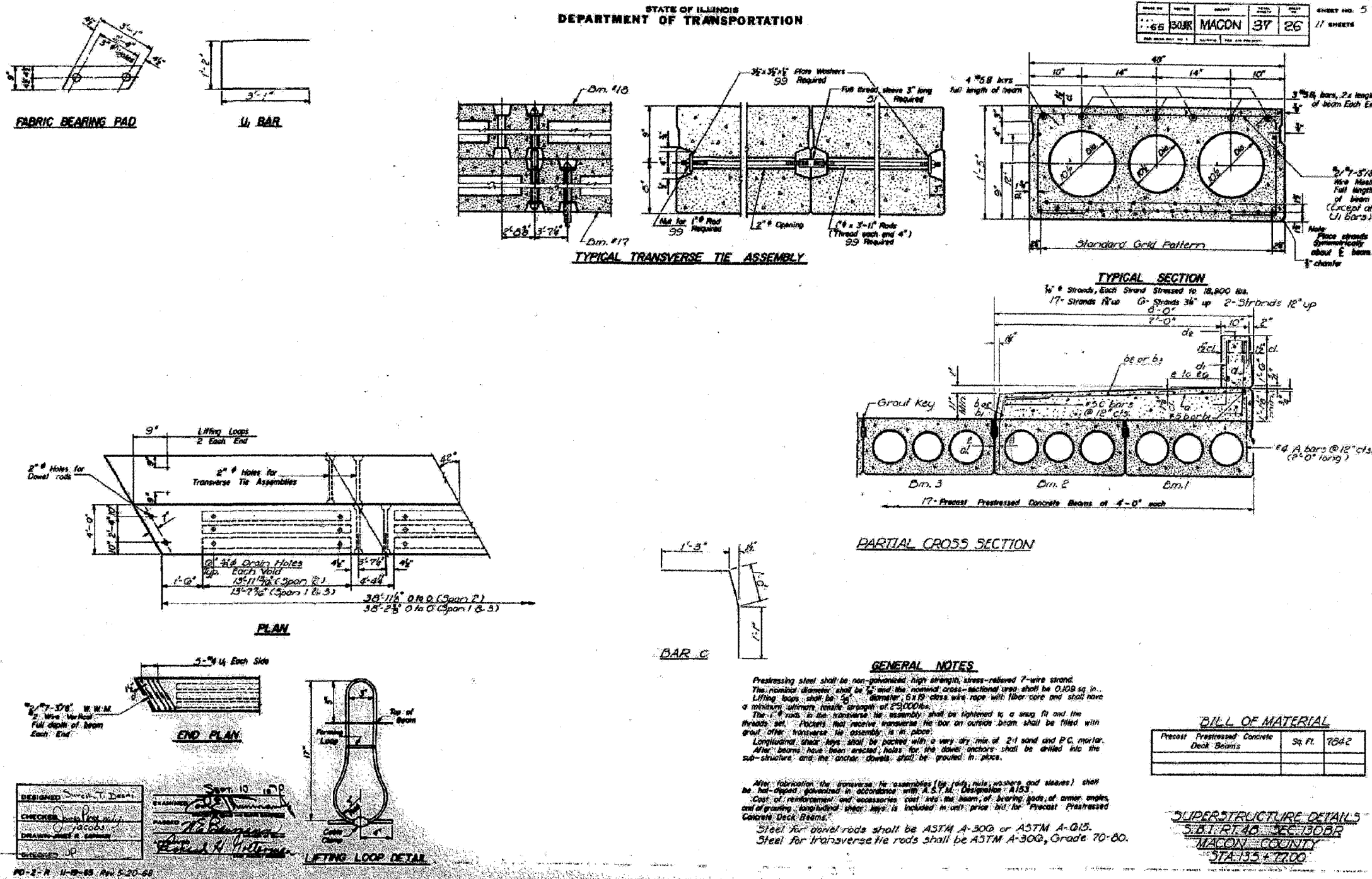
BILL OF MATERIAL

Precast Prestressed Concrete Deck Beams	Sq. Ft.	1504

SUPERSTRUCTURE DETAILS
S.P.D.R. 48, SEC. 130BR
MACON COUNTY
STA. 135+27.00

FOR INFORMATION ONLY

CONTRACT NO. 74166				
F&P RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	(130BR-1)B-1	MACON	95	70
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

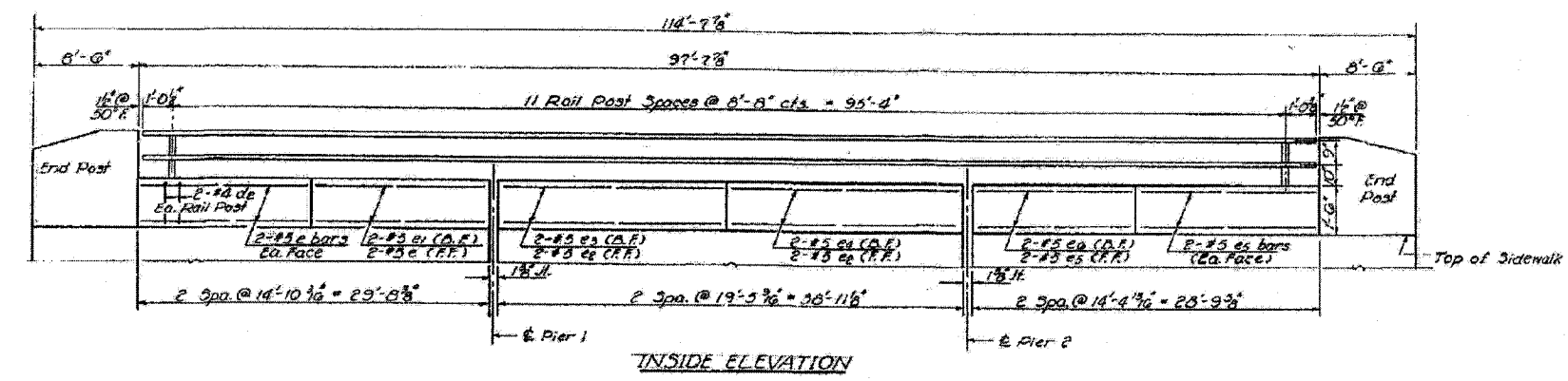


FOR INFORMATION ONLY

CONTRACT NO. 74166				
FAP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	(130BR-1B-1	MACON	95	71
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

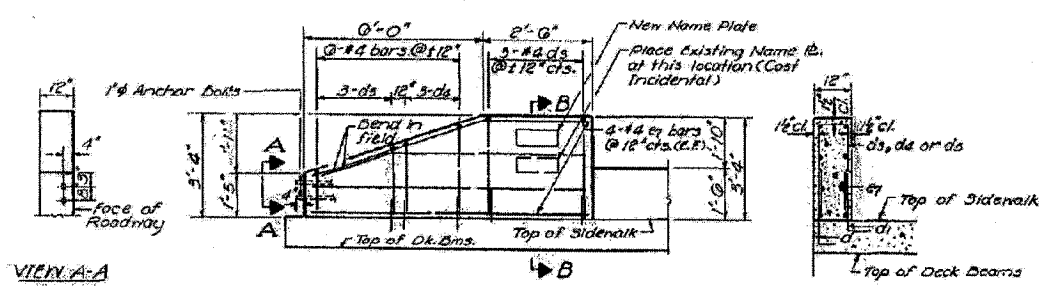
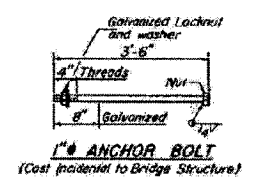
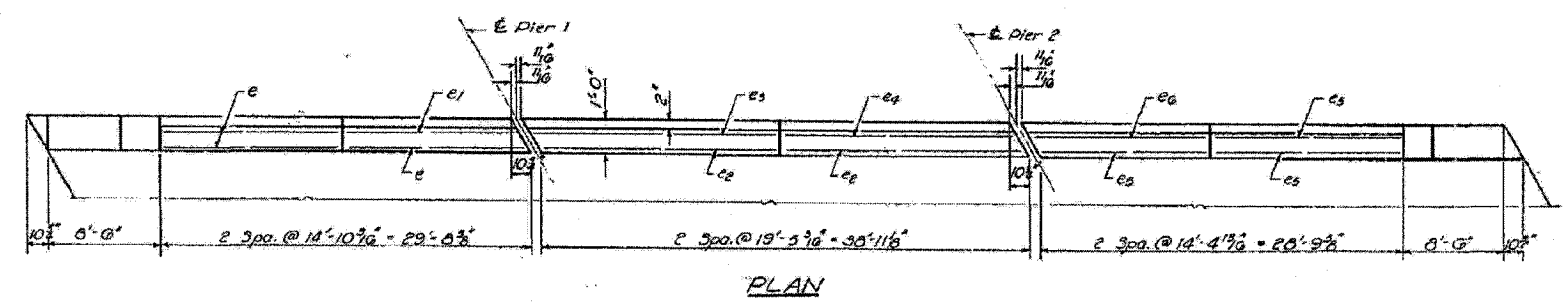
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	COUNTY	SHEET NO.	TOTAL SHEETS
65	130BR	MACON	37	27
				11 SHEETS



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d ₂	48	#4	2'-1"	□
d ₃	12	#6	6'-9"	□
d ₄	12	#4	4'-9"	□
d ₅	12	#4	5'-3"	□
e	12	#5	14'-7"	—
e ₁	4	#5	13'-3"	—
e ₂	8	#5	19'-3"	—
e ₃	4	#5	20'-1"	—
e ₄	4	#5	18'-3"	—
e ₅	12	#5	14'-1"	—
e ₆	4	#5	15'-0"	—
e ₇	32	#4	8'-5"	—
		Class X Concrete	Cu. Yds.	15.3
		Reinforcement Bars	Lbs.	1160



A-B-DIMENSIONS

Bar	A	B
d ₂	9"	7"
d ₃	5'-0"	9"
d ₄	2'-0"	9"
d ₅	1'-3"	9"

Note: For Section Thru Parapet See Sheets Nos. 4 & 5

DESIGNED: Sured T. Deak
CHECKED: [Signature]
DRAWN: Jacobs
CHECKED: JP

PARAPET DETAILS
S.D.T. RT. 48, SEC. 130BR
MACON COUNTY
STA. 1357.7700

FOR INFORMATION ONLY

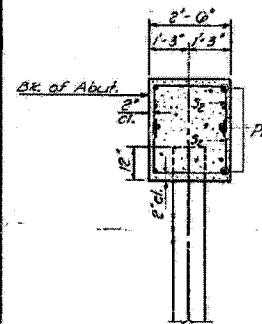
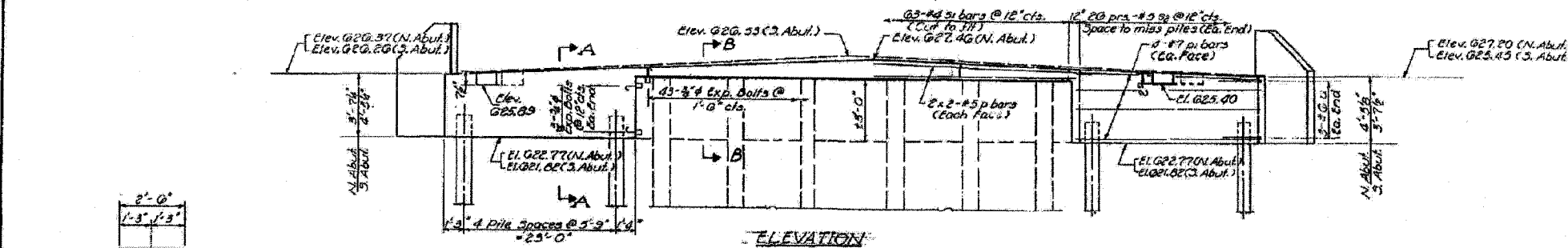
CONTRACT NO. 74166				
FAP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	(130BR-1B-1)	MACON	95	72
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

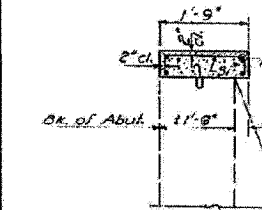
PROJECT NO.	SECTION	SHEET NO.	TOTAL SHEETS
1308	MACON 37	30	11 SHEETS

PILE DATA

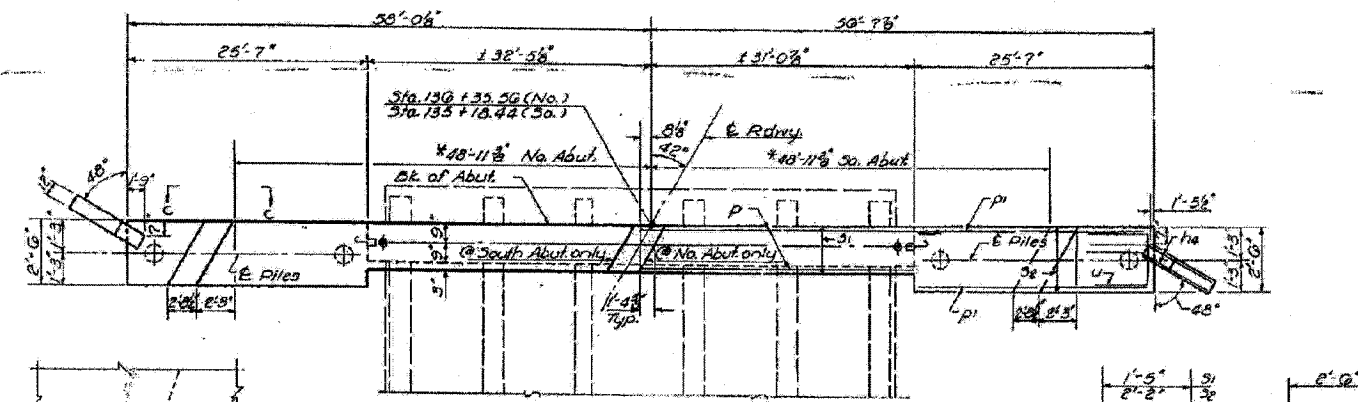
Type Concrete
Capacity 25 Tons
Std. Length 30 Ft.
No. Reqd. 19 + 1 test pile



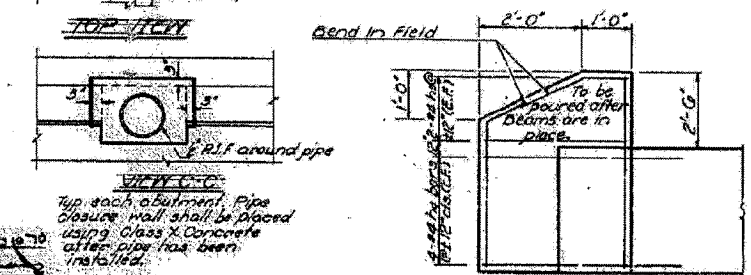
SEC. A-A



SEC. B-B



PLAN



TYPICAL DETAILS

2 ABUTMENTS
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
1a	32	#4	4'-0"	—
1b	10	#4	2'-9"	—
p	10	#5	33'-9"	—
pi	32	#7	25'-3"	—
s1	120	#4	3'-11"	□
s2	208	#5	7'-8"	□
u	12	#6	7'-1"	□
vi	10	#4	0'-8"	—
vc	10	#4	5'-10"	—
Class X Concrete			Cu. Yds.	31.8
Reinforcement Bars			Lbs.	4580
Expansion Bolts (3/4")			Each	96
Concrete Piles			Lin. Ft.	782
Test Pile (Concrete)			Each	1

*Dimensions include an allowance for the maximum overrun of the R.P.C. Beams. For a lesser overrun increase the rest sidewalk width so that the outside R.P.C. Beam is completely seated on the abutment.

Notes: All edges shall have 1/4" chamfer. Cut reinforcement bars in the field to provide opening for 12" pipe.

ABUTMENTS
S.B.T. RT. 48 SEC. 130DR
MACON COUNTY
STA. 135+7100

DESIGNED	S. T. DEAN
CHECKED	J. P. JACOBS
DRAWN	JACOBS
CHECKED	J. P.

SECT. 101070

W. H. BARNETT
D. H. WILSON

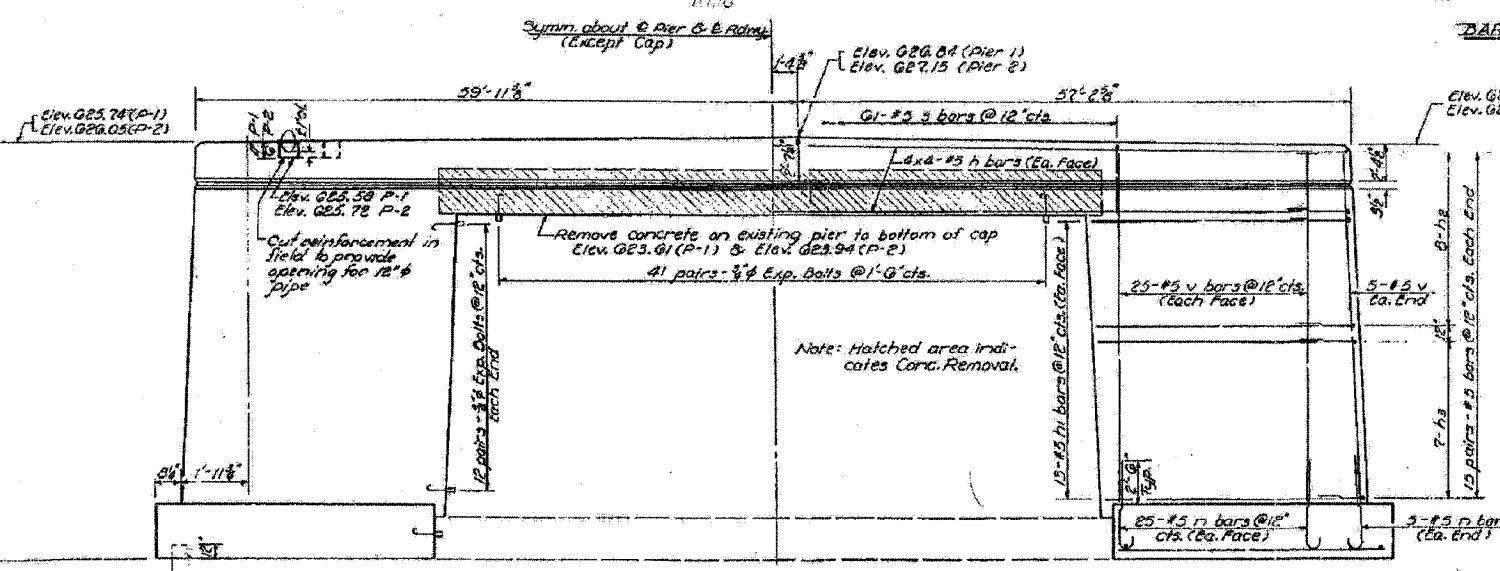
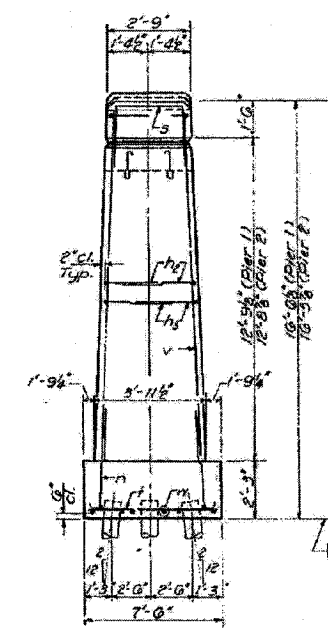
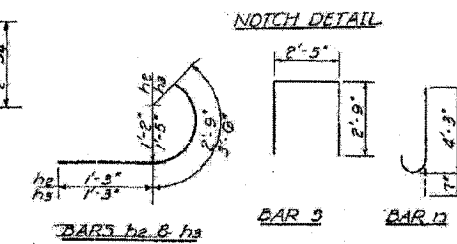
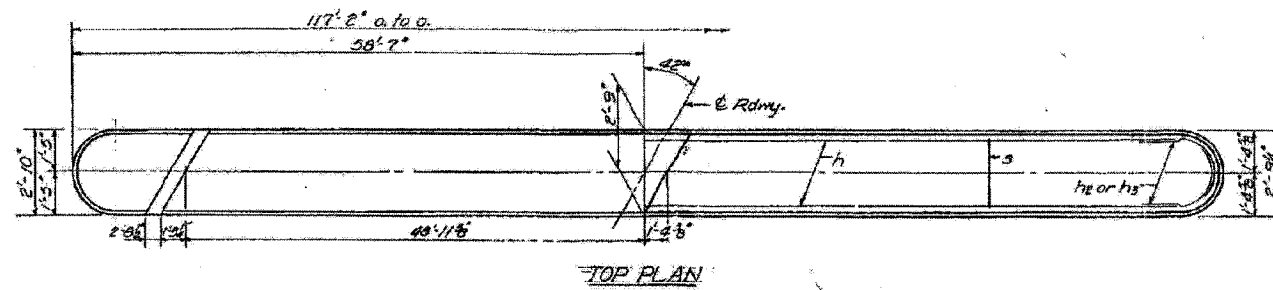
FOR INFORMATION ONLY

CONTRACT NO. 74166				
FAP	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	(130BR-1B-1)	MACON	95	73
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	SHEET NO.	TOTAL SHEETS
130BR	MACON	37	31
SHEET NO. 10			
11 SHEETS			

PILE DATA
Type: Untreated
Capacity: 22 tons
Est'd. Length: 25 Ft.
No. Req'd.: G7 + 1 Test Pile

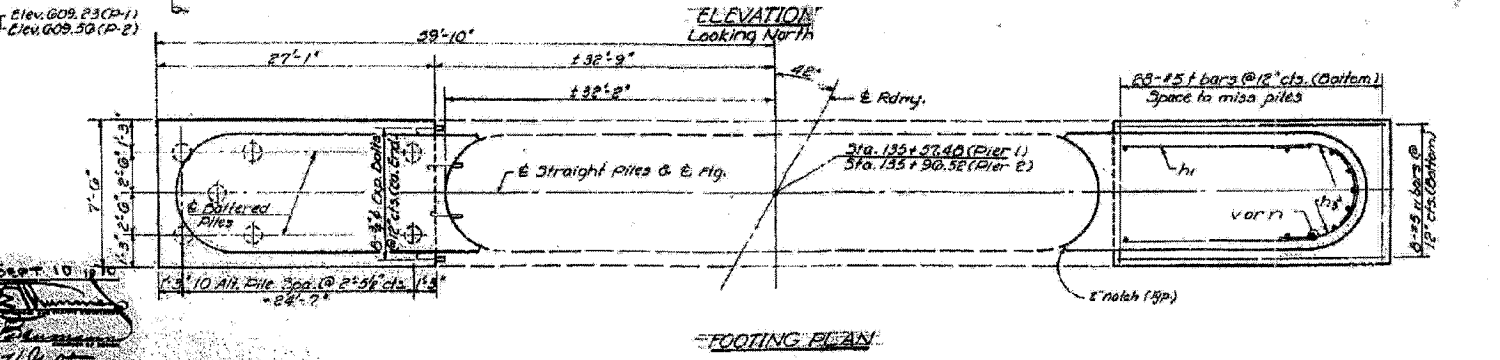


2 PIERS
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h	64	#5	30'-3"	U
h1	104	#5	28'-9"	U
h2	64	#5	4'-0"	U
h3	56	#5	4'-9"	U
n	220	#5	4'-10"	J
s	122	#5	7'-11"	□
l	112	#5	7'-3"	—
v	220	#5	13'-9"	—
v1	32	#5	26'-9"	—
Concrete Removal		Cu. Yds.	24	
Class A Concrete		Cu. Yds.	318.7	
Reinforcement Bars		Lbs.	18,480	
Expansion Bolts (3/4")		Each	232	
Untreated Piles		Lvs. ft.	1,073	
Test Pile (Timber)		Each	1	

DESIGNED Sureth T. Dean
CHECKED [Signature]
DRAWN JACOBS
CHECKED [Signature]

SEPT 10 1974



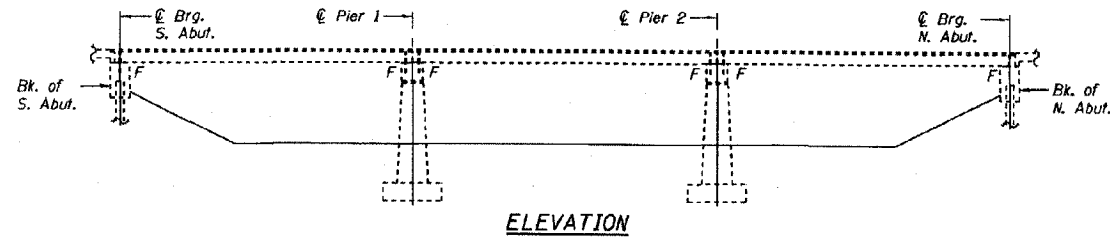
PIERS
30.1 RT. 45 SEC. 130BR
MACON COUNTY
STA. 135+71.00

Rev. 5-10-74

FOR INFORMATION ONLY

CONTRACT NO. 74166				
FAP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	(130BR-1)B-1	MACON	95	74
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



ELEVATION

ROUTE NO.	SECTION	COUNTY	DATE	SHEET NO.
		MACON		2 SHEETS
Contract Number: ---				

GENERAL NOTES

Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field 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 the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

If required to be anchored, temporary concrete barrier shall only be anchored into the overlay and not the PPC Deck Beams.

All construction joints shall be bonded.

Existing reinforcement extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost shall be included with Concrete Removal.

Truck mixers, concrete pumps, vacuum trucks or other heavy equipment will not be allowed on any portion of the bridge.

Scarification equipment, combined with other equipment shall not exceed 15 tons in one span.

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Concrete Removal (Special)	Cu. Yd.	65.1
Concrete Superstructures	Cu. Yd.	89.5
Reinforcing Bars, Epoxy Coated	Pound	4,620
Bituminous Concrete Surface Removal	Sq. Yd.	367.9

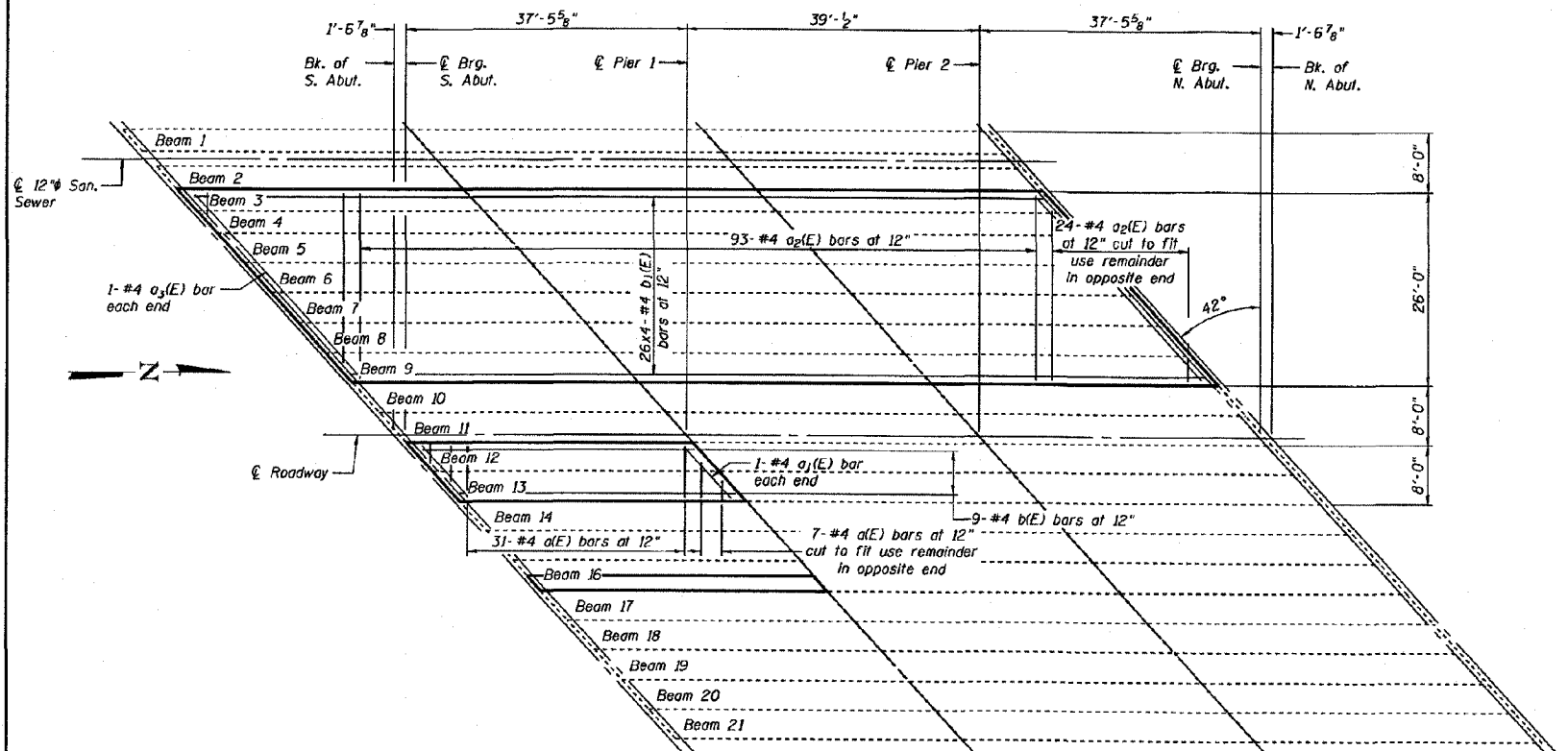
Bar List

Bar	No.	Size	Length	Shape
a(E)	38	#4	7'-9"	---
a1(E)	2	#4	10'-6"	---
a2(E)	117	#4	25'-9"	---
a3(E)	2	#4	34'-6"	---
b(E)	9	#4	38'-0"	---
b1(E)	104	#4	30'-7"	---

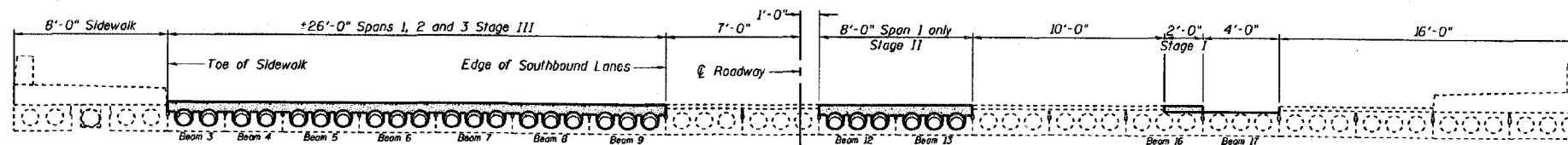
Reinforcement bars designated (E) shall be epoxy coated.
Bars indicated thus 1 x 2-#5 etc. Indicates 1 line of bars with 2 lengths per line.

Min. Bar Lap

#4 Bar = 1'-8"



PLAN



TYPICAL CROSS SECTION

Expires November 30, 2006

DESIGNED	D.C.P.
CHECKED	M.A.C.
DRAWN	Drew Christopher
CHECKED	D.C.P. M.A.C.

EXAMINED *John A. Morris*
ENGINEER OF STRUCTURAL SERVICES
PASSED *Walter E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

PRE-FINAL
DATE: 07/27/2006

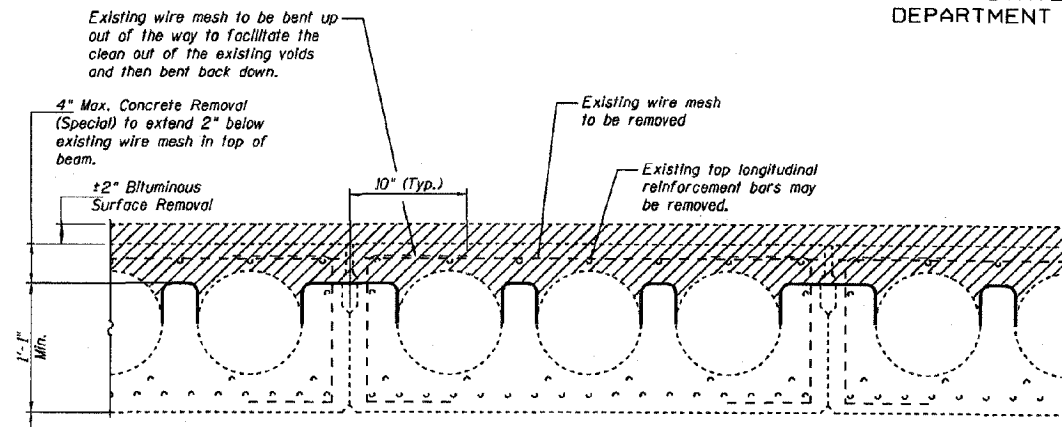
PLAN AND ELEVATION
RT. 48 / SPRING CREEK
MACON COUNTY
SN 058-0056

FOR INFORMATION ONLY

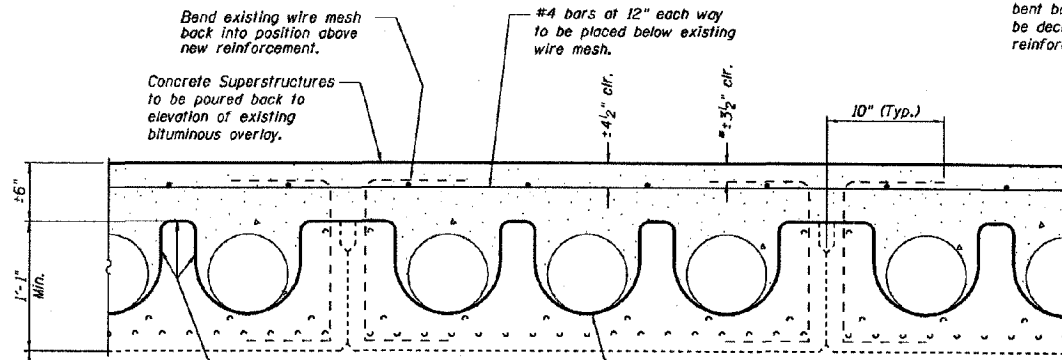
CONTRACT NO. 74166				
F&P RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	(130BR-1)B-1	MACON	95	75
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

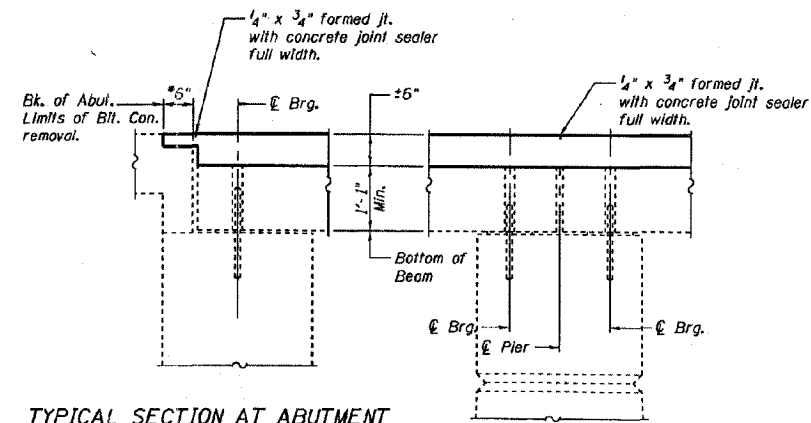
PROJECT NO.	SECTION	COUNTY	DATE	SHEET
		MACON		2
SHEET NO. 2				
2 SHEETS				
Contract Number: ---				



TYPICAL STAGE II AND III REMOVAL SECTION
(Hatched area indicates areas of removal)



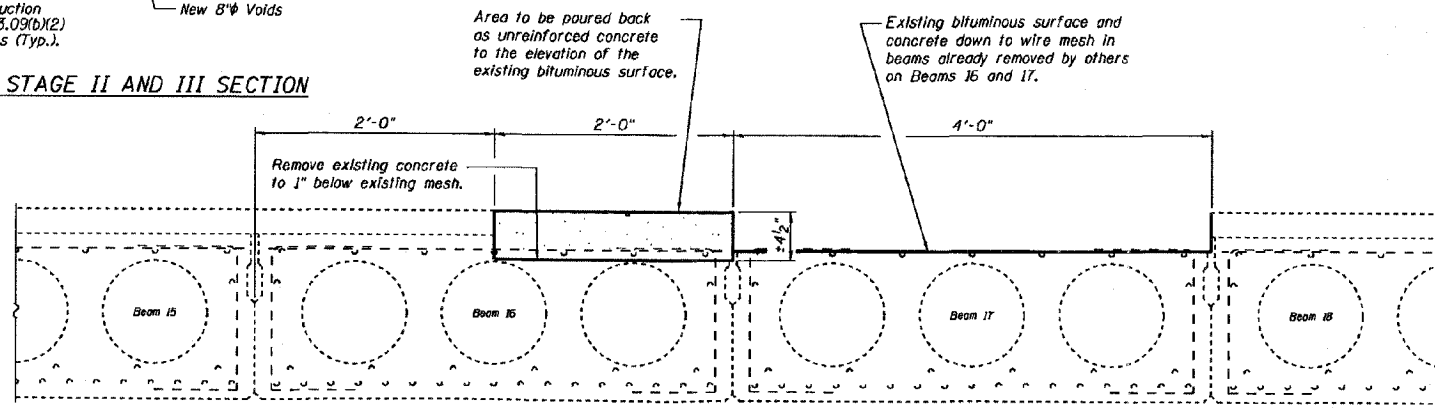
TYPICAL STAGE II AND III SECTION



TYPICAL SECTION AT ABUTMENT
Horizontal Dimensions are at Rt. L's

TYPICAL SECTION AT PIERS
Horizontal Dimensions are at Rt. L's

*The clearance shown applies to the mesh being bent back to original position. This dimension may be decreased to 2" if helpful in placing the new #4 reinforcement bars below the existing mesh.



TYPICAL STAGE I SECTION

DESIGNED	D.C.P.
CHECKED	M.A.C.
DRAWN	Drew Christopher
CHECKED	D.C.P. M.A.C.

EXAMINED *John A. Morris*
ENGINEER OF STRUCTURAL SERVICES
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

PRE-FINAL
DATE: 07/27/2006

DECK DETAILS
RT. 48 / SPRING CREEK
MACON COUNTY
SN 058-0056

CONTRACT NO. 74166

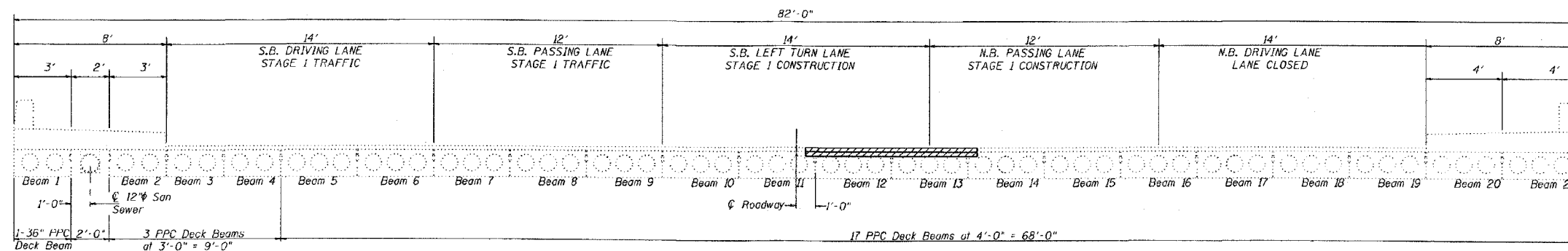
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STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

FOR INFORMATION ONLY

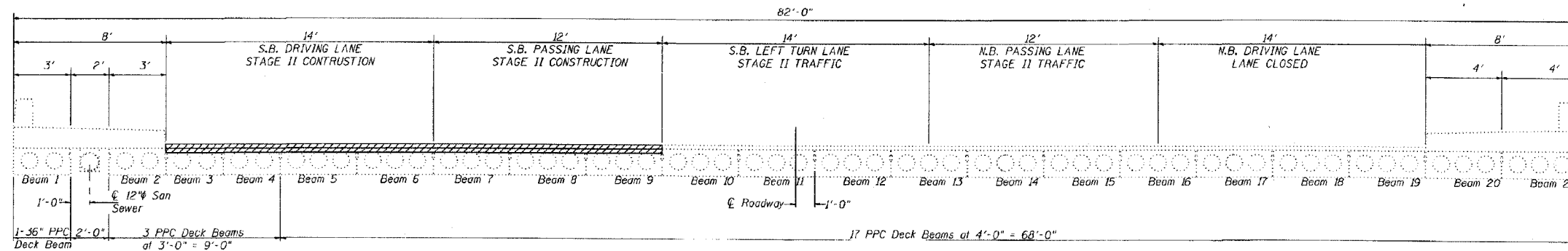
Squad Check Print Dates: 1st: 05/17/06 2nd: 06/15/06 3rd: 07/13/06 4th: -- 5th: -- 6th: -- 7th: -- 8th: -- 9th: -- 10th: -- Pre-Final: --

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET
		MACON		3
SHEET NO. 3 3 SHEETS				
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
Contract Number: ---				



STAGE 1 CONSTRUCTION
LOOKING NORTH



STAGE 2 CONSTRUCTION
LOOKING NORTH

DESIGNED	A.T.H.
CHECKED	S.J.B.
DRAWN	Drew Christopher
CHECKED	A.T.H. S.J.B.

EXAMINED *John A. Morris*
ENGINEER OF STRUCTURAL SERVICES

PASSED *Walter E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

STAMP AREA
PRE-FINAL
Line Types are turned off. Snap to the Center of this rectangle to center STAMP at the 1/8" offset.
STAMP on this Title-Block Model.

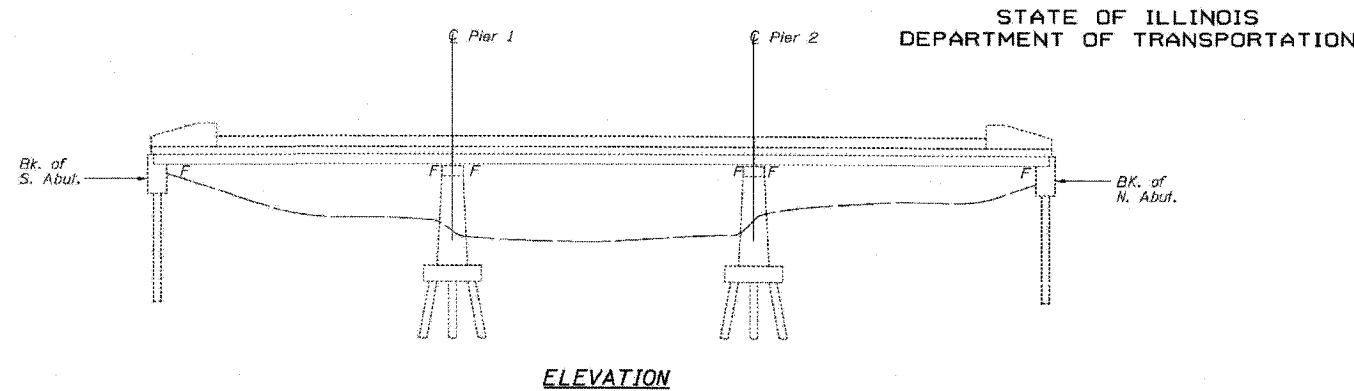
STAGE CONSTRUCTION DETAILS
RT. 48 / SPRING CREEK
MACON COUNTY
SN 058-0056

SLT-97-001-05

EXISTING BRIDGE PLANS

FOR INFORMATION ONLY

FAP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	(130BR-1)B-1	MACON	95	77
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



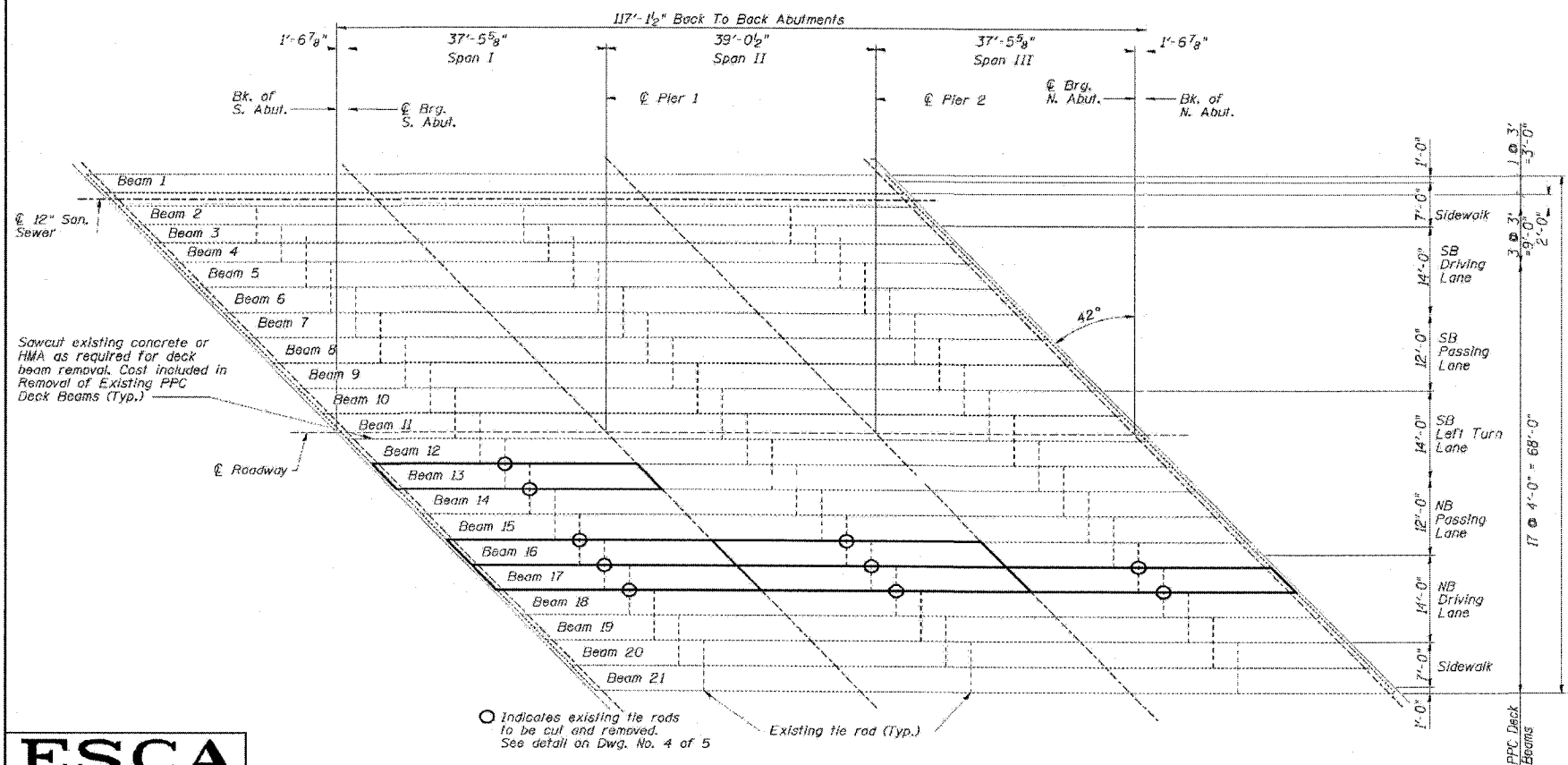
ELEVATION

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	(130BR-1)B-1	MACON	95	77
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

GENERAL NOTES

- Plan dimensions and details relative to existing plans are subject to routine 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 based upon the unit price bid for the work.
- Truck mixers, concrete pumps, vacuum trucks or other heavy equipment will not be allowed on any portion of the bridge. The sum of all equipment shall not exceed 15 tons in one span.
- Any damage done to the bridge during beam removal shall be repaired by the Contractor. Cost to be included in the cost of Removal of Existing PPC Deck Beams.
- The thickness of Hot-Mix Asphalt overlay shall match the existing thickness and shall be adjusted for the new expected beam camber.
- Beam 13 in Span I and Beam 17 in Spans I, II, and III shall be 47" wide. Beam 16 in Spans I and II shall be 48" wide.



DECK BEAM PLAN

TOTAL BILL OF MATERIAL

Item	Unit	Quantity
Removal of Existing Precast Prestressed Concrete Deck Beams	Sq. Ft.	924
Precast Prestressed Concrete Deck Beams (17" Depth)	Sq. Ft.	910
Hot-Mix Asphalt Surface Course, Mix "D", NSQ	Ton	2.3
Hot-Mix Asphalt Surface Removal, Special	Sq. Yd.	115



**DESIGN STRESSES
PRECAST UNITS**

$f'_c = 5,000$ psi
 $f'_{ci} = 4,000$ psi
 $f'_s = 270,000$ psi ($1/2$ " ϕ low lax strands)
 $f'_s = 201,960$ psi ($3/8$ " ϕ low lax strands)

GENERAL PLAN
FAP ROUTE 716 (IL 48)
OAKLAND AVENUE
SECTION (130BR-1)B-1
MACON COUNTY
SN 058-0056

ESCA
CONSULTANTS, INC.

DESIGNED BY:	ELH	02/07
DRAWN BY:	JPC	02/07
CHECKED BY:	ELH	03/07
APPROVED BY:	RDP	03/07

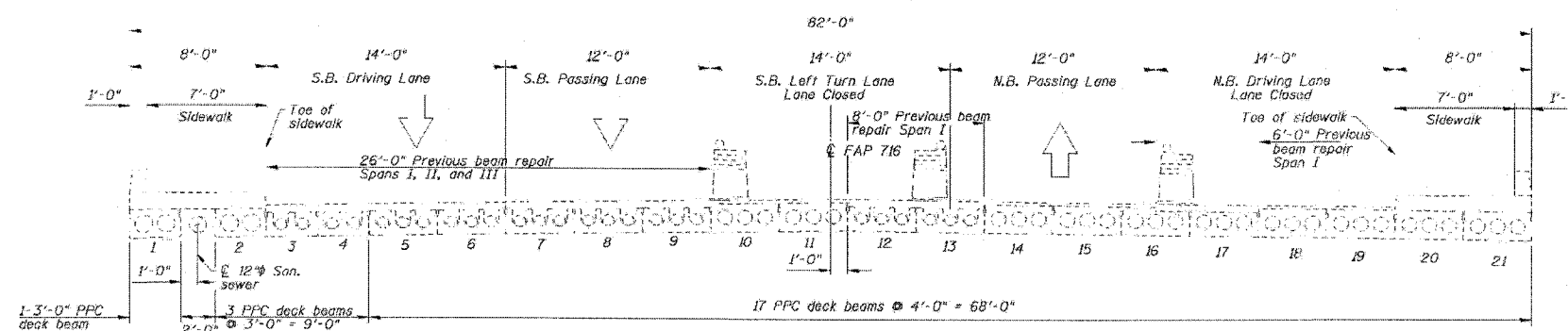
○ Indicates existing tie rods to be cut and removed. See detail on Dwg. No. 4 of 5

FOR INFORMATION ONLY

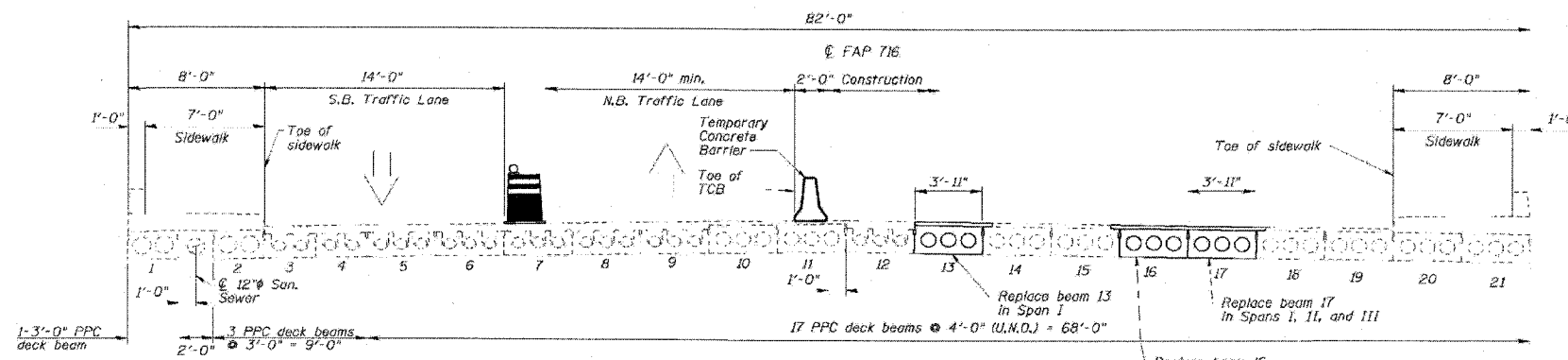
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716	(130BR-1)B-1	MACON	95	78
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

DATE	SECTION	QUANTITY	UNITS	PRICE	SHEET NO.
FAP 716	MACON	22	S		5 SHEETS
TOTAL SHEETS		TOTAL PRICE		448	
CONTRACT NO. 74166					

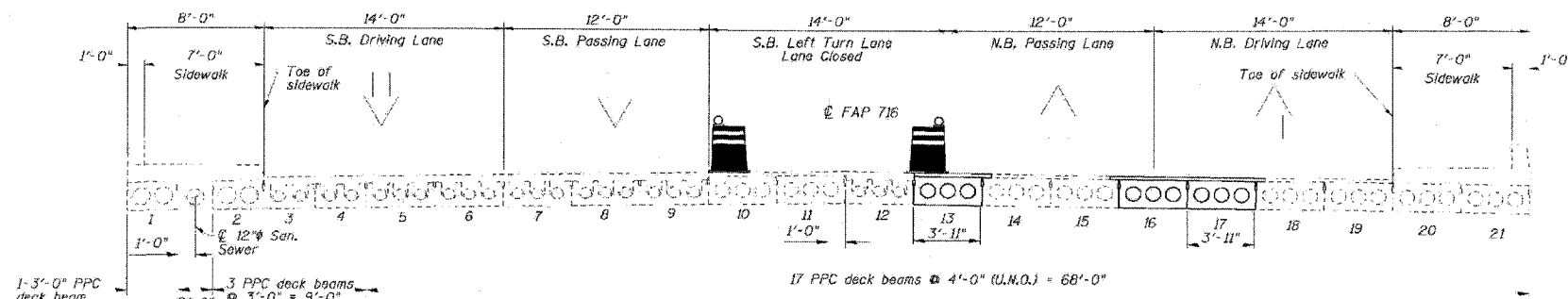
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



EXISTING BRIDGE SECTION
(Looking North)



CONSTRUCTION SECTION
(Looking North)



POST CONSTRUCTION SECTION
(Looking North)

CONSTRUCTION DETAILS
FAP ROUTE 716 (IL 48)
OAKLAND AVENUE
SECTION (130BR-1)BR
MACON COUNTY
SN 058-0056

ESCA
CONSULTANTS, INC.

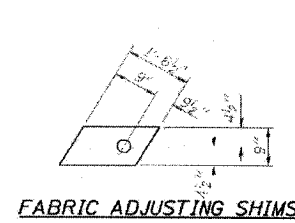
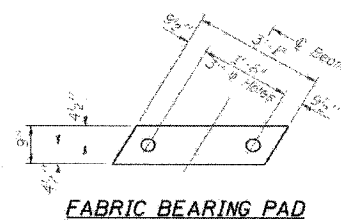
DESIGNED BY:	ELH	02/07
DRAWN BY:	JPC	02/07
CHECKED BY:	ELH	03/07
APPROVED BY:	RDP	03/07

FOR INFORMATION ONLY

CONTRACT NO. 74166				
FAP	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	130BR-1B-1	MACON	95	79
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

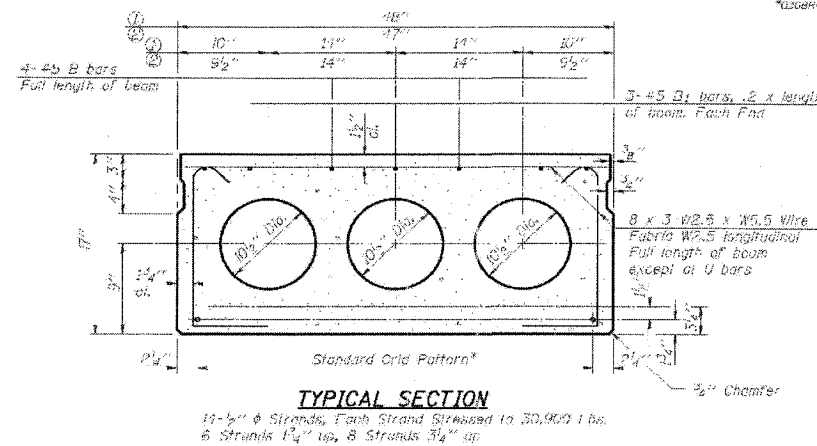
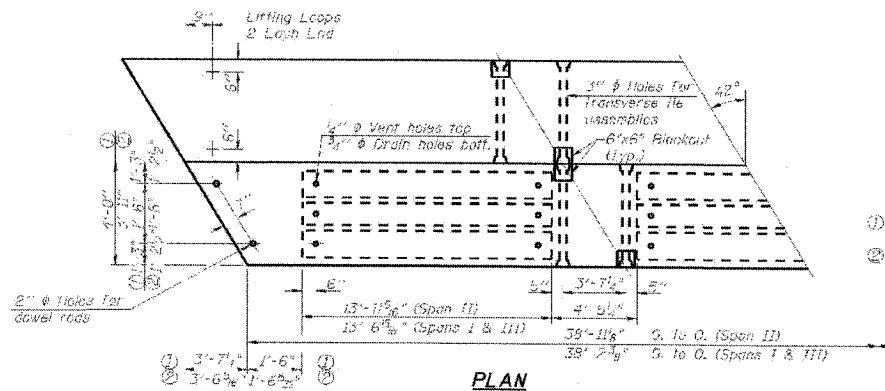
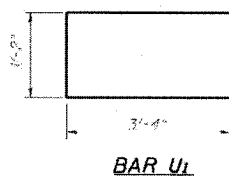
DATE	SECTION	REVISION	BY	CHKD	SHEET NO.
7/16	MACON	22	9		5 SHEETS
CONTRACT NO. 74166					



*** TRANSVERSE PLACEMENT GUIDELINES**

1. Place strands symmetrically about centerline of beam.
2. The minimum distance from center to center of strands in all directions shall be 2".
3. The minimum clearance from strand to dove tail hole shall be 1/2".
4. The minimum clearance from strand to void shall be 1/2".

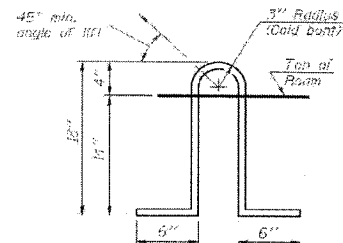
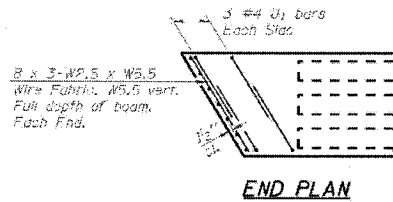
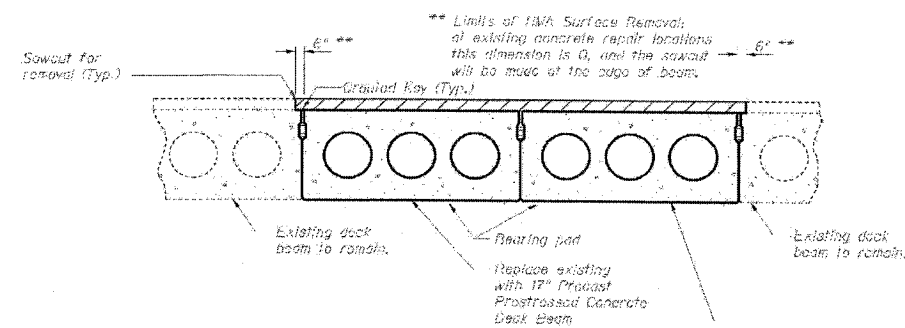
Vertical placement of strands shall not be adjusted to satisfy the above guidelines.



TYPICAL SECTION

14-#4 # Strands, Each Strand Stressed to 30,000 lbs.
6 Strands 1 1/4" up, 8 Strands 3/4" up

PARTIAL CROSS SECTION



NOTES

1. Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 7/8" and the nominal cross-sectional area shall be 6.25 sq. in. Lifting loops shall be 2 #4 & 2TC #5 strands, as shown.

2. The 1" # rods in the transverse tie assembly shall be tightened to a snug fit and the threads cut. Non prestressing steel shall conform to ASTM A 706 (II MOD), Grade 60.

3. The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. 1/2" fabric adjusting shims of the dimensions shown shall be provided for each bearing.

4. Keyway surfaces shall be cleaned to remove form oil or other bond breaking material prior to shipment of the beams. Cleaning shall be done by sandblasting the keyway across between top of the beam and the bottom edge of the key.

5. Required Release Strength, P_{rel} shall be 4,000 p.s.i.

6. The top surface of the beams shall be finished according to the IDOT Manual for Fabrication of Precast Prestressed Concrete Products.

7. The end strands of each beam end shall be given two coats of zinc dust spray or paint meeting the requirements of ASTM A700. The zinc dust spray or paint shall be applied before corrosion appears and allowed to dry according to manufacturer's specifications prior to another coat of zinc. This work shall be performed by the producer and finished with the coat of zinc.

8. Corrosion inhibitor, per Article 1020.02B(1)(2) of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.

BILL OF MATERIAL

Item	Unit	Total
Precast Prestressed Conc. Deck Bms. (17" Depth)	Sq. Ft.	910

DECK BEAMS
FAP ROUTE 716 (IL 48)
OAKLAND AVENUE
SECTION 130BR-1BR
MACON COUNTY
SN 058-0056

ESCA
CONSULTANTS, INC.

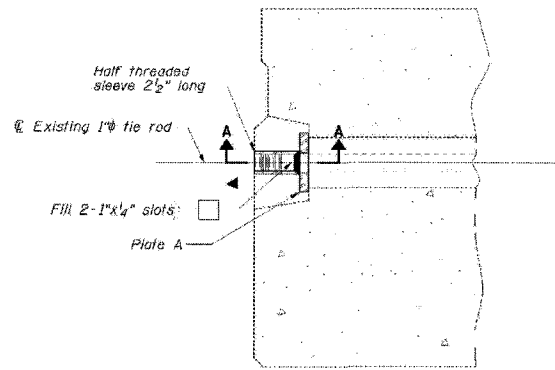
DESIGNED BY:	ELH	02/07
DRAWN BY:	JPC	02/07
CHECKED BY:	ELH	03/07
APPROVED BY:	RDP	03/07

FOR INFORMATION ONLY

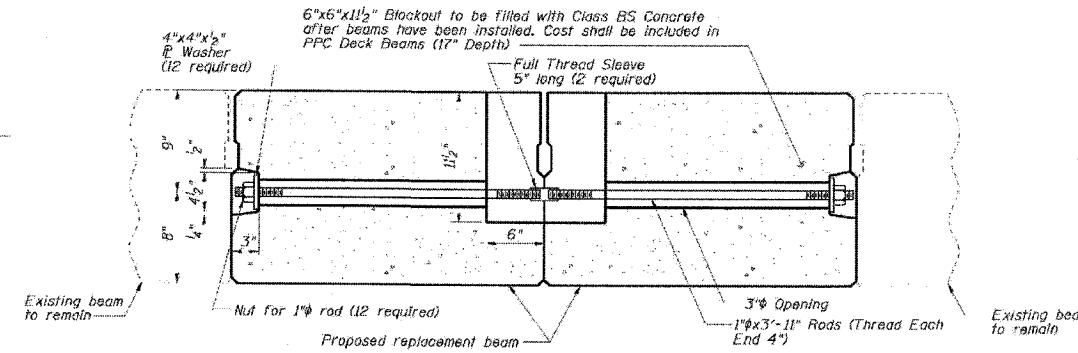
CONTRACT NO. 74166				
FAP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	(130BR-1)B-1	MACON	95	80
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	DATE	SCALE	DATE	SHEET NO. OF
FAP 716	130BR-1	MAY 07	AS SHOWN	20	5 SHEETS
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	CONTRACT NO. 74166	



DETAIL A
(6 Required)



TRANSVERSE TIE ASSEMBLY-DETAIL 1

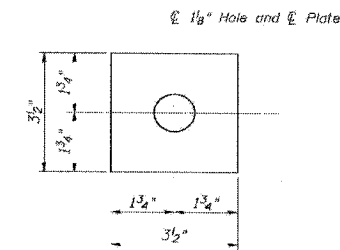
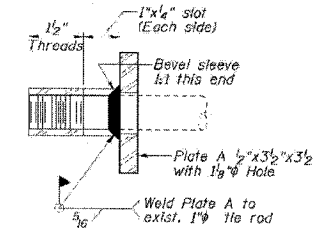
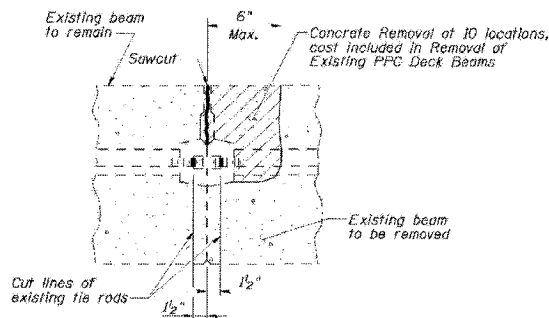


PLATE A

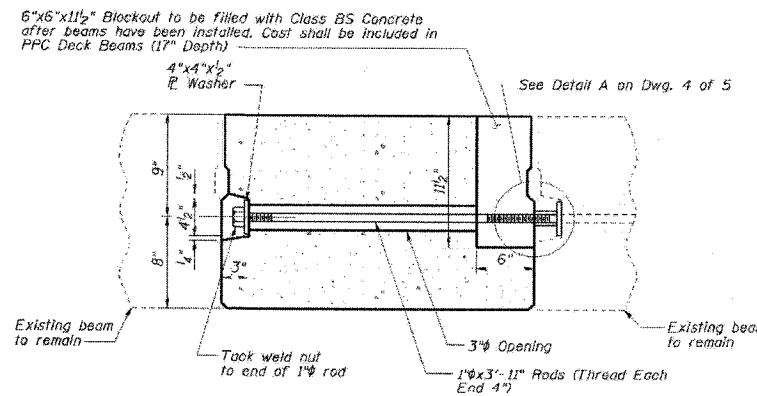


SECTION A-A

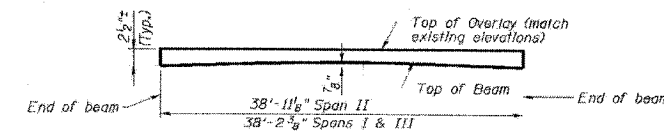


BEAM REMOVAL DETAIL AT TRANSVERSE TIES

Note:
Existing grout covering nuts for transverse tie assemblies shall be removed. Existing rods shall be cut as detailed to allow beam removal. Cost included in Removal of Existing PPC Deck Beams.



TRANSVERSE TIE ASSEMBLY-DETAIL 2



ANTICIPATED INITIAL CAMBER DIAGRAM

DECK BEAM DETAILS
FAP ROUTE 716 (IL 48)
OAKLAND AVENUE
SECTION (130BR-1)B
MACON COUNTY
SN Q58-0056

ESCA
CONSULTANTS, INC.

DESIGNED BY:	ELH	02/07
DRAWN BY:	JPC	02/07
CHECKED BY:	ELH	03/07
APPROVED BY:	RDP	03/07

FOR INFORMATION ONLY

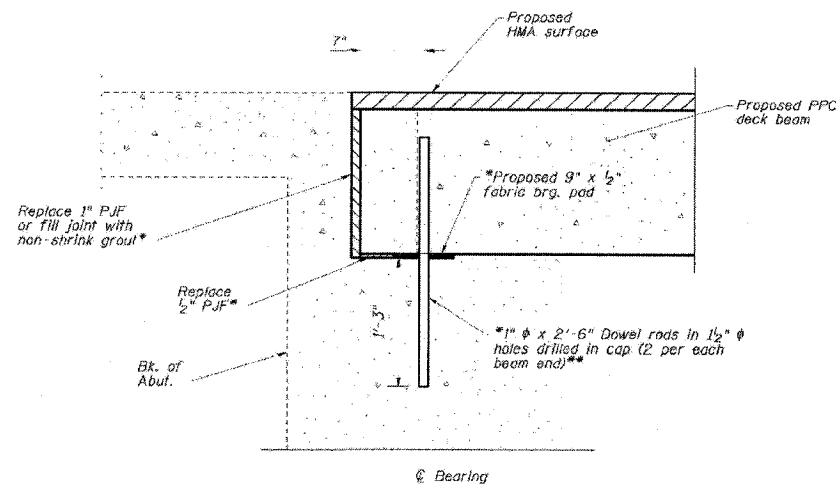
CONTRACT NO. 74166				
FAP	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	(130BR-1)B-1	MACON	95	81
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

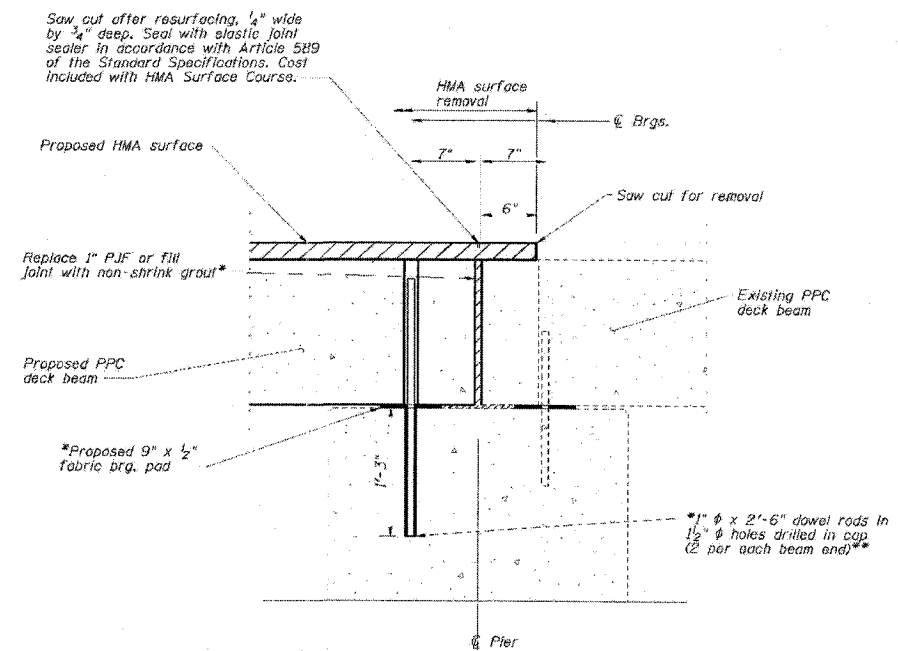
DATE	SECTION	DESIGN	DATE	SHEET NO.
FAP	716	MACON	22	11
SHEETS				
CONTRACT NO. 74166				

*Cost included in PPC Deck Beams

** Existing dowel rods are to be burned off and ground flush prior to placement of new beams. Cost included in Removal of Existing PPC Deck Beams. After beams have been erected holes shall be drilled into cap and dowel rods placed. Dowel holes shall be filled with non-shrink grout to top of beam and allowed to cure a minimum of 24 hours prior to grouting the shear keys, cost included in PPC Deck Beams.



TYPICAL SECTION AT ABUTMENT
(Horizontal dimensions are at right angles to beam ends)



TYPICAL SECTION AT PIER
(Horizontal dimensions are at right angles to beam ends)

ESCA
CONSULTANTS, INC.

DESIGNED BY:	ELH	02/07
DRAWN BY:	JPC	02/07
CHECKED BY:	ELH	02/07
APPROVED BY:	RDP	02/07

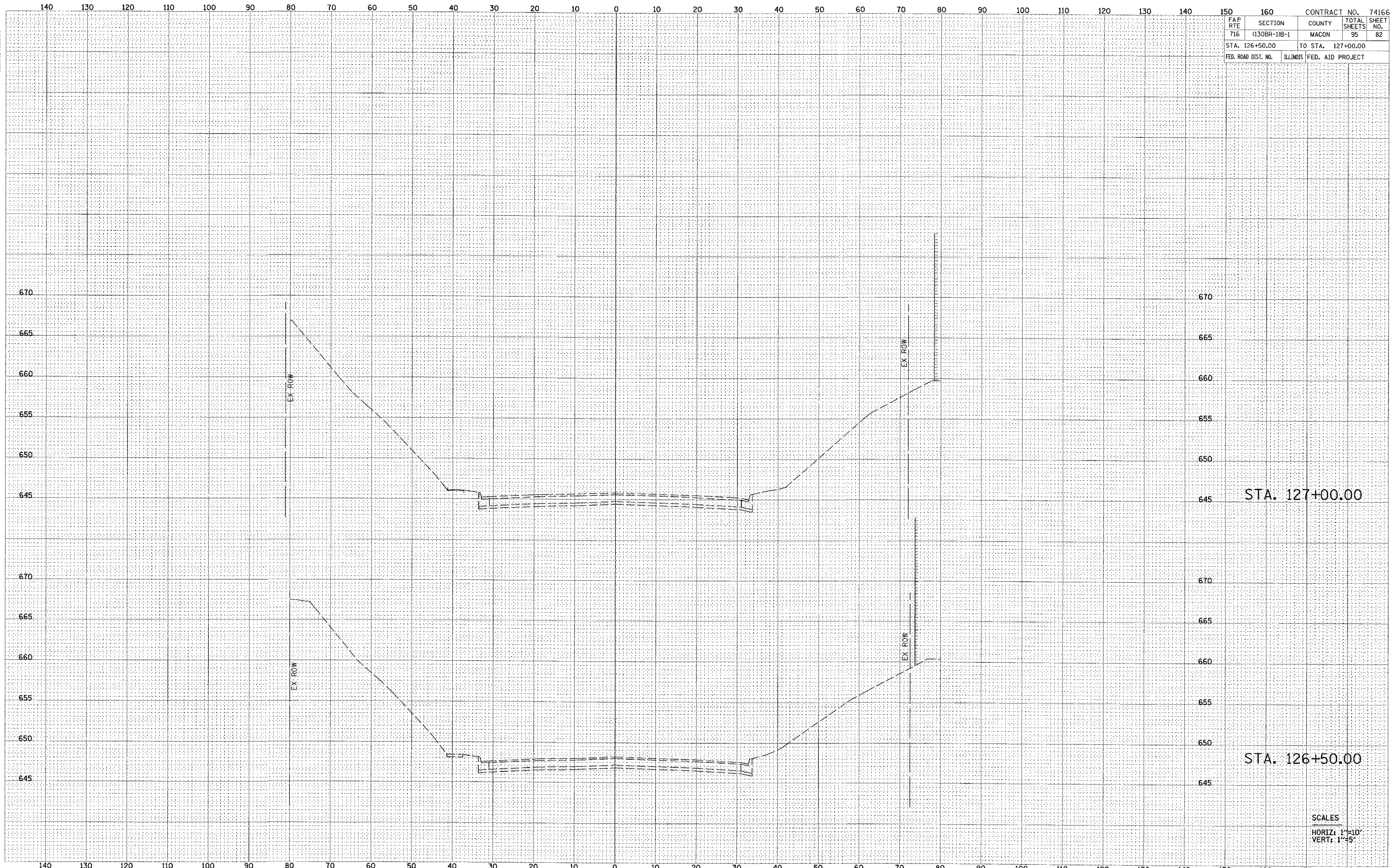
DECK BEAM DETAILS
FAP ROUTE 716 (IL 48)
OAKLAND AVENUE
SECTION (130BR-1)BR
MACON COUNTY
SN 05B-0056



FINAL SURVEY	PROJECTS	DATE
NOTE BOOK	PLOTTED	BY
NO.	TEMPLATE	
	AREAS CHECKED	

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

FAP RTE		SECTION		COUNTY		TOTAL SHEETS		CONTRACT NO.	
716	(130BR-1)B-1	MACON	95	74166					
STA. 126+50.00				TO STA. 127+00.00					
FED. ROAD DIST. NO.		ILLINOIS		FED. AID PROJECT					



STA. 127+00.00

STA. 126+50.00

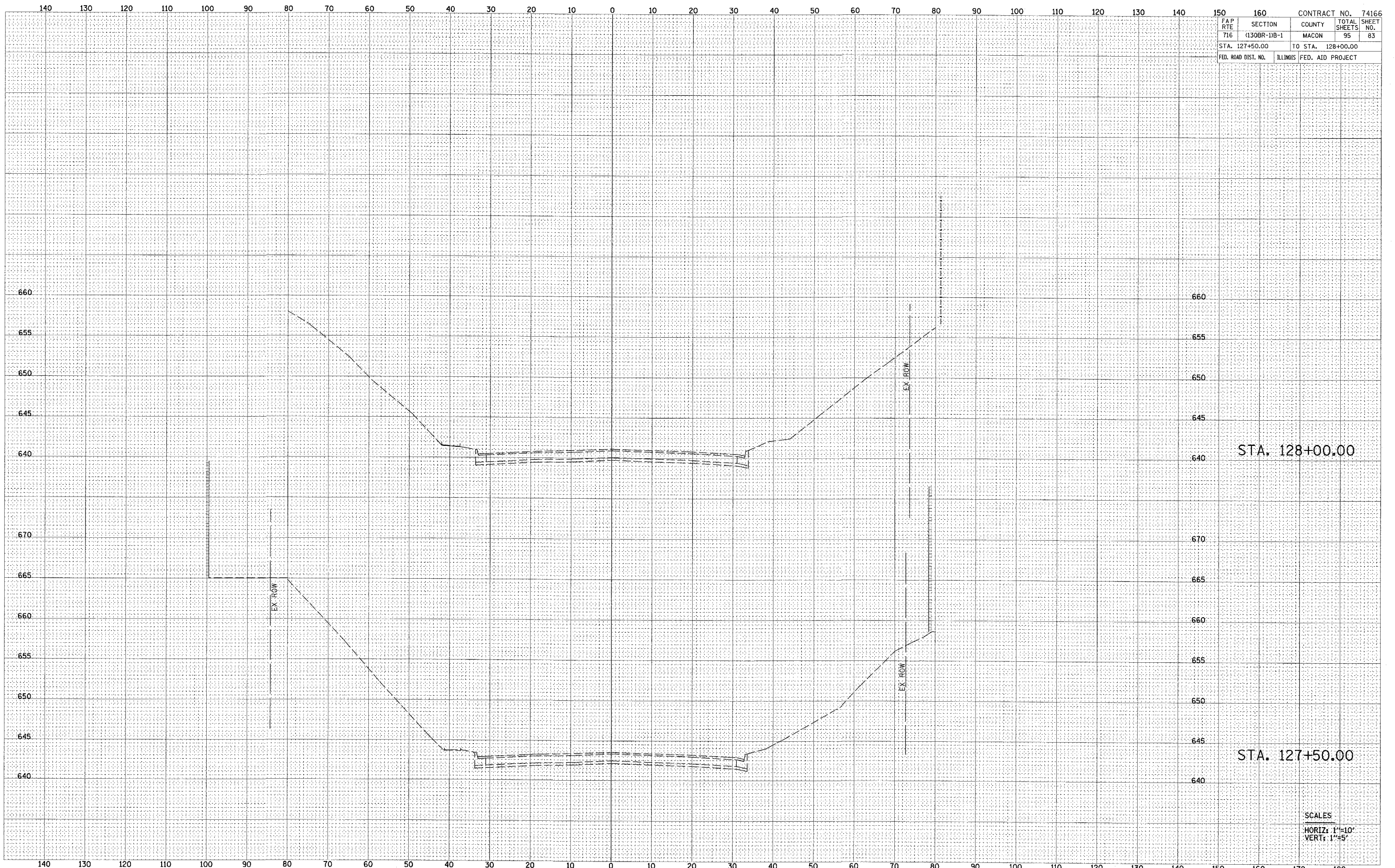
SCALES
HORIZ: 1"=10'
VERT: 1"=5'



FINAL SURVEY	SUBMITTED	DATE
NOTE BOOK	PLOTTED	BY
NO.	TEMPLATE	
	AREAS CHECKED	

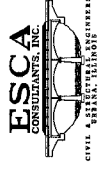
ORIGINAL SURVEY	SUBMITTED	DATE
NOTE BOOK	PLOTTED	BY
NO.	TEMPLATE	
	AREAS CHECKED	

FAP 716		CONTRACT NO. 74166	
SECTION (130BR-1)B-1	COUNTY MACON	TOTAL SHEETS 95	SHEET NO. 83
STA. 127+50.00	TO STA. 128+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	



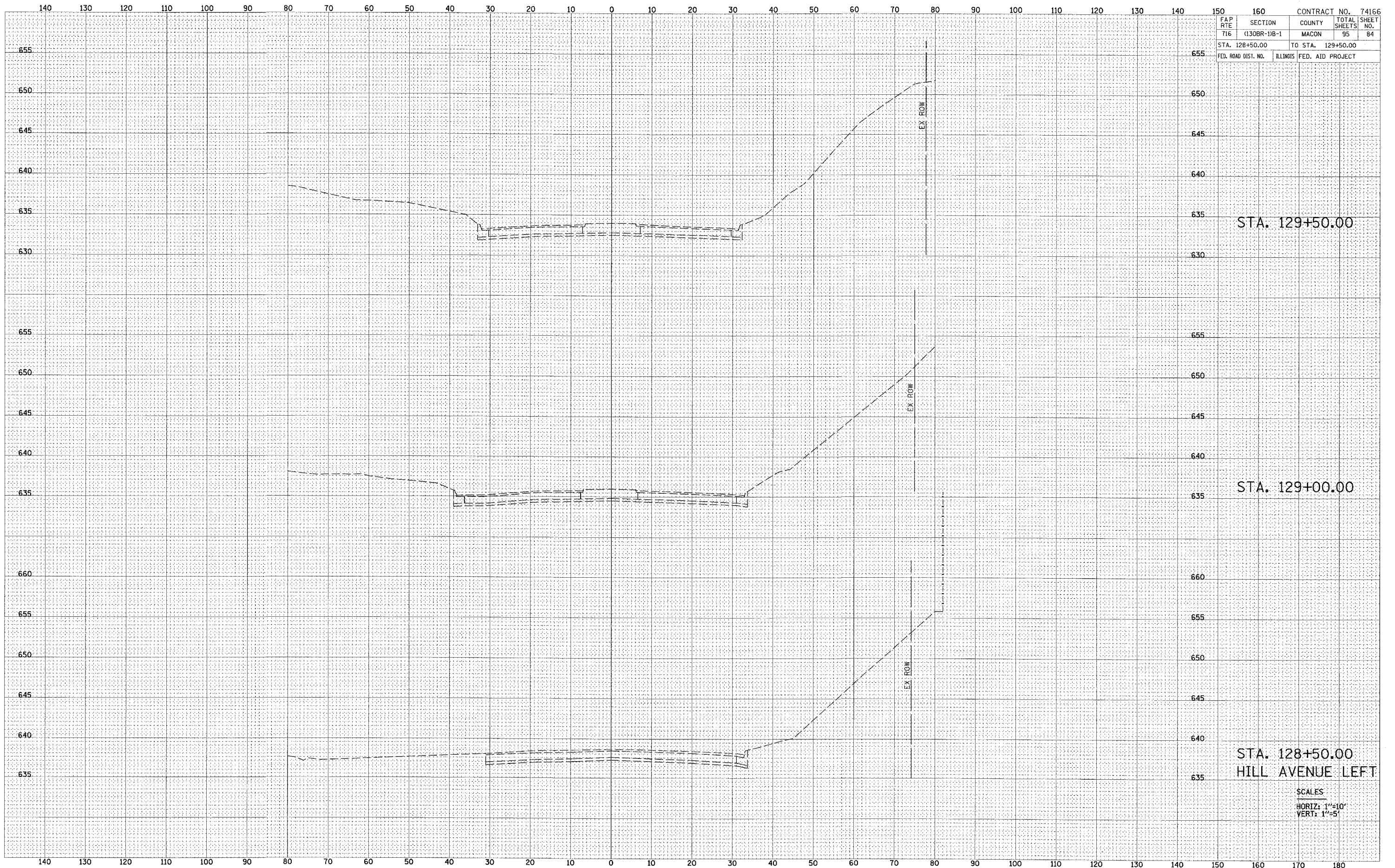
SCALES
HORIZ: 1"=10'
VERT: 1"=5'

FAP 716 (IL 48) CROSS SECTIONS
STA. 127+50 TO STA. 128+00



FINAL SURVEY	SURVEYED	DATE
NOTE BOOK	PLOTTED	
	TEMPLATE	
	AREAS CHECKED	

ORIGINAL SURVEY	SURVEYED	DATE
NOTE BOOK	PLOTTED	
	TEMPLATE	
	AREAS CHECKED	



FAP		CONTRACT NO. 74166	
716	SECTION 160	COUNTY MACON	TOTAL SHEETS 95
STA. 128+50.00		TO STA. 129+50.00	
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT

STA. 129+50.00

STA. 129+00.00

STA. 128+50.00
HILL AVENUE LEFT

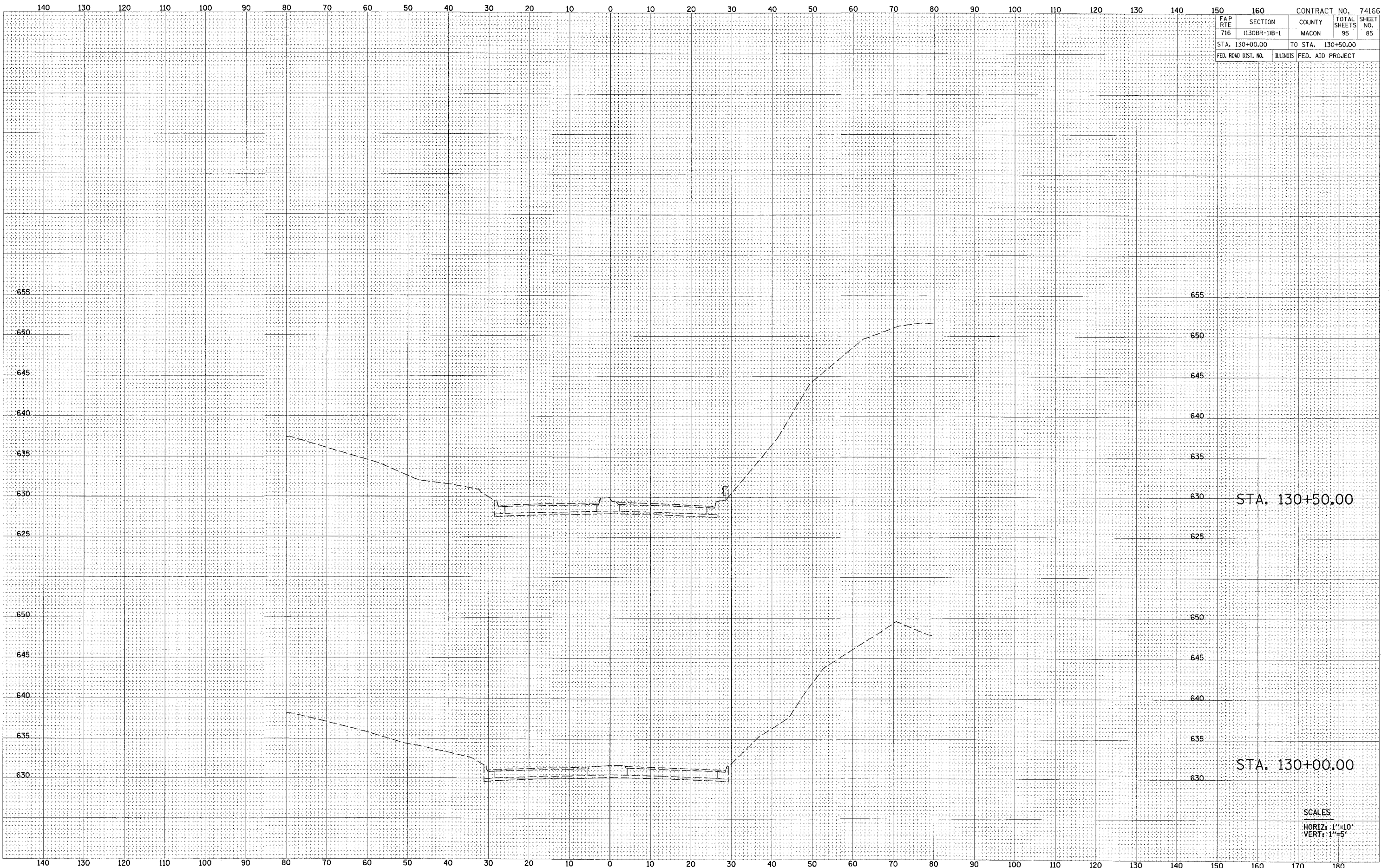
SCALES
HORIZ: 1"=10'
VERT: 1"=5'



BY: _____ DATE: _____
FINAL SURVEY SURVEYED _____ PLOTTED _____
NOTE BOOK NO. _____ DATE _____
AREAS CHECKED _____

BY: _____ DATE: _____
ORIGINAL SURVEY SURVEYED _____ PLOTTED _____
NOTE BOOK NO. _____ DATE _____
AREAS CHECKED _____

FAP	SECTION	COUNTY	TOTAL	SHEET
716	(130BR-1B-1)	MACON	95	85
STA. 130+00.00		TO STA. 130+50.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



STA. 130+50.00

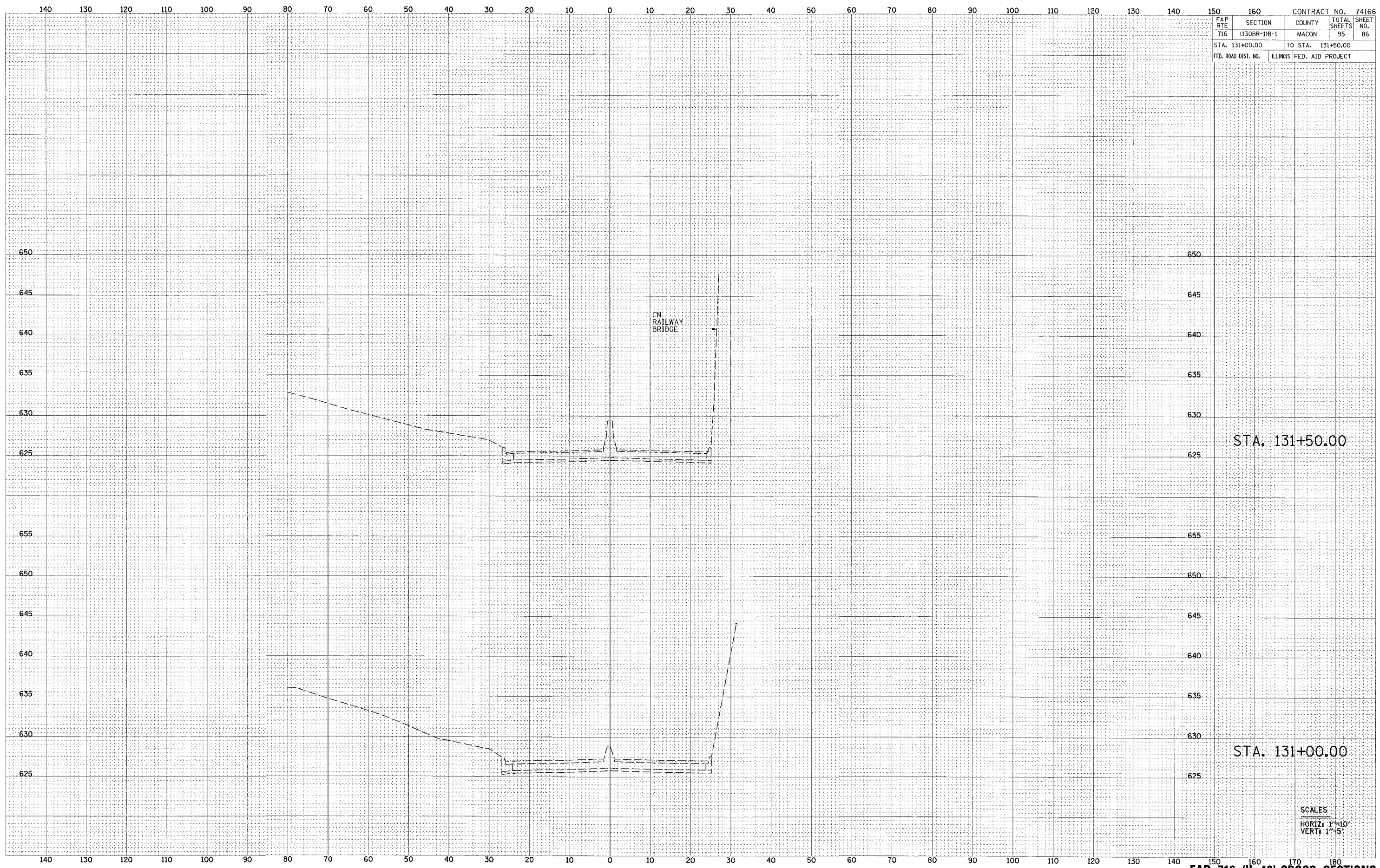
STA. 130+00.00

SCALES
HORIZ: 1"=10'
VERT: 1"=5'



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

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



FAP RTE		SECTION		COUNTY		TOTAL SHEETS		CONTRACT NO.	
716		(130BR-1)B-1		MACON		95		74166	
STA. 131+00.00				TO STA. 131+50.00					
FED. ROAD DIST. NO.		ILLINOIS		FED. AID PROJECT					

STA. 131+50.00

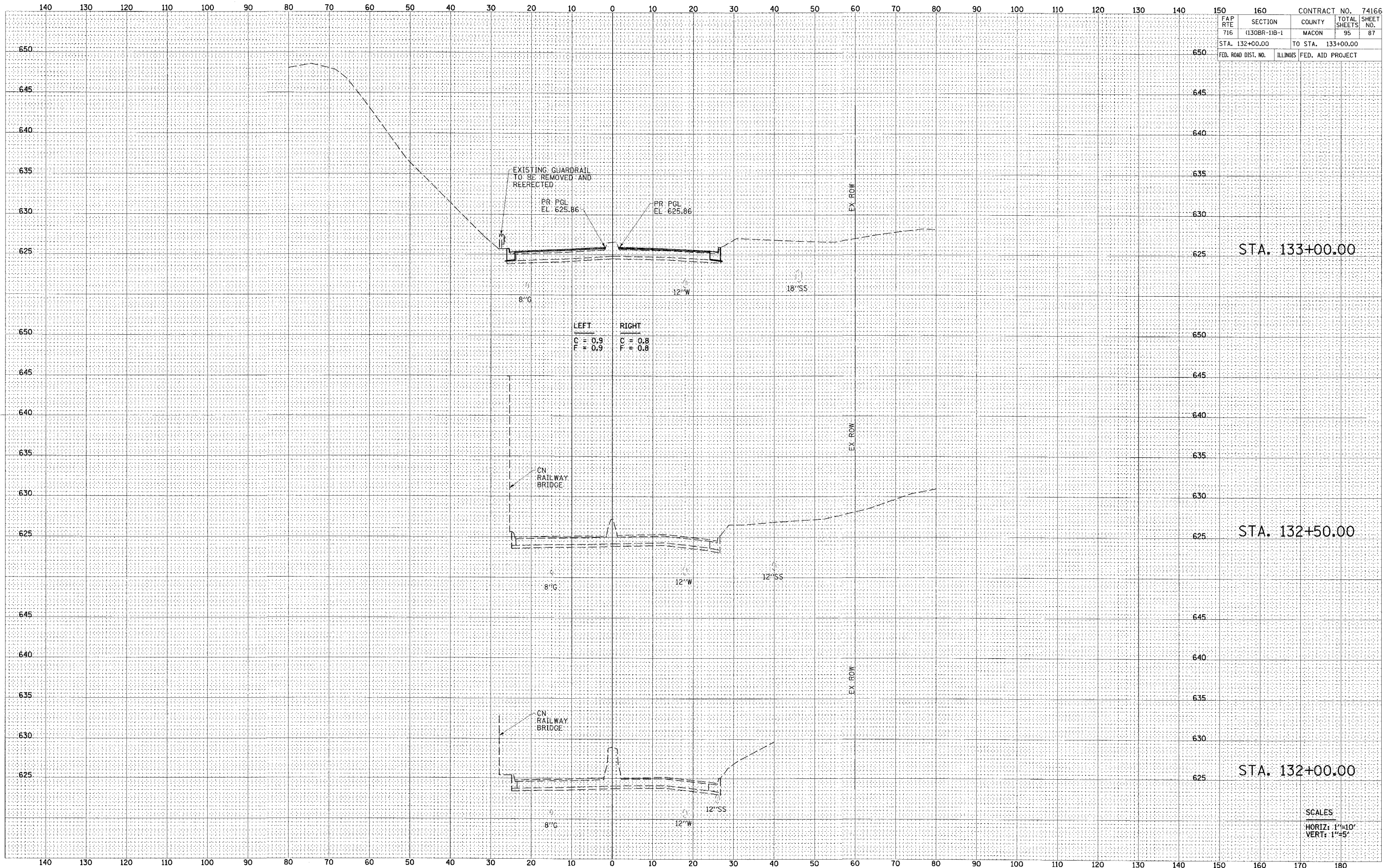
STA. 131+00.00

SCALES
HORIZ: 1"=10'
VERT: 1"=5'



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

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



FAP RTE	SECTION	COUNTY	CONTRACT NO.	TOTAL SHEETS	SHEET NO.
716	(130BR-1)B-1	MACON	74166	95	87
STA. 132+00.00		TO STA. 133+00.00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT			

STA. 133+00.00

STA. 132+50.00

STA. 132+00.00

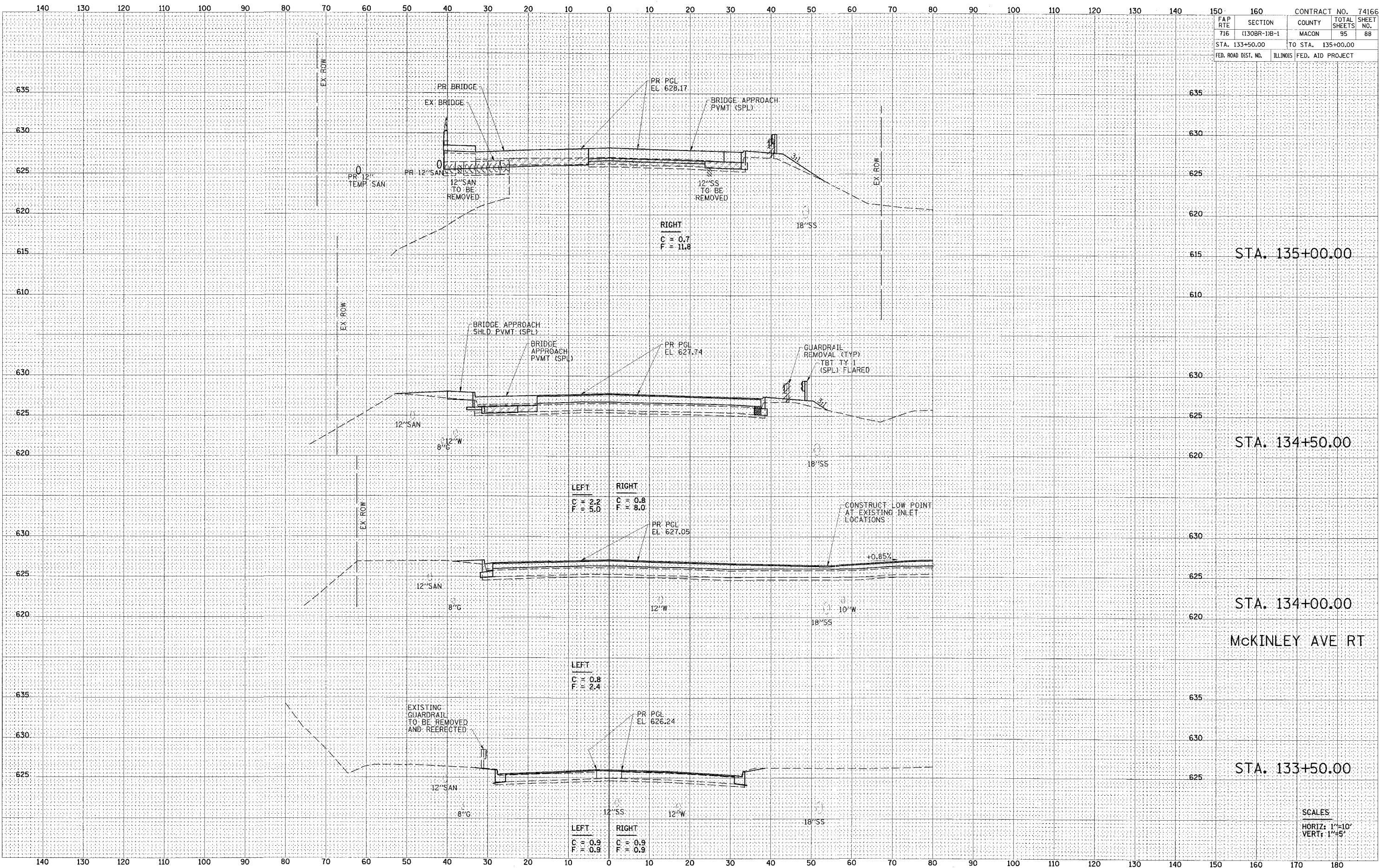
SCALES
HORIZ: 1"=10'
VERT: 1"=5'



BY	DATE
FINAL SURVEY	SUPPLEMENTED
NOTE BOOK	PLOTTED
	AREAS CHECKED

BY	DATE
ORIGINAL SURVEY	SUPPLEMENTED
NOTE BOOK	PLOTTED
	AREAS CHECKED

FAP R/T/E	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	(130BR-1B-1)	MACON	95	88
STA. 133+50.00		TO STA. 135+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



STA. 135+00.00

STA. 134+50.00

STA. 134+00.00

McKINLEY AVE RT

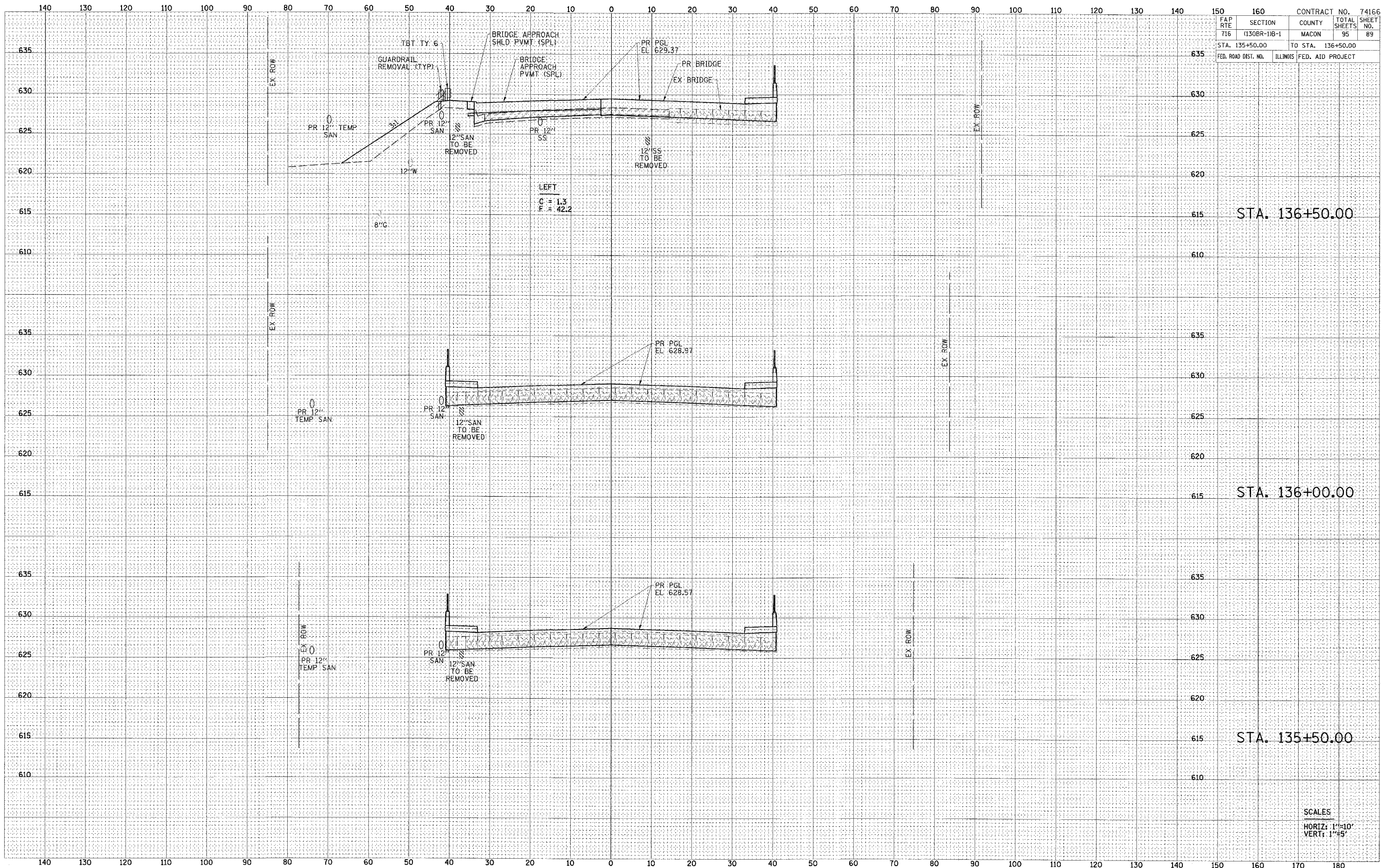
STA. 133+50.00

SCALES
HORIZ: 1"=10'
VERT: 1"=5'



DATE	BY
SURVEYED	SURVEYED
PLOTTED	PLOTTED
NOTE BOOK	NOTE BOOK
AREAS CHECKED	AREAS CHECKED
NO.	NO.

DATE	BY
SURVEYED	SURVEYED
PLOTTED	PLOTTED
NOTE BOOK	NOTE BOOK
AREAS CHECKED	AREAS CHECKED
NO.	NO.



FAP	SECTION	COUNTY	TOTAL	SHEET
RTE	(130BR-10B-1)	MACON	SHEETS	NO.
716			95	89
STA. 135+50.00		TO STA. 136+50.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

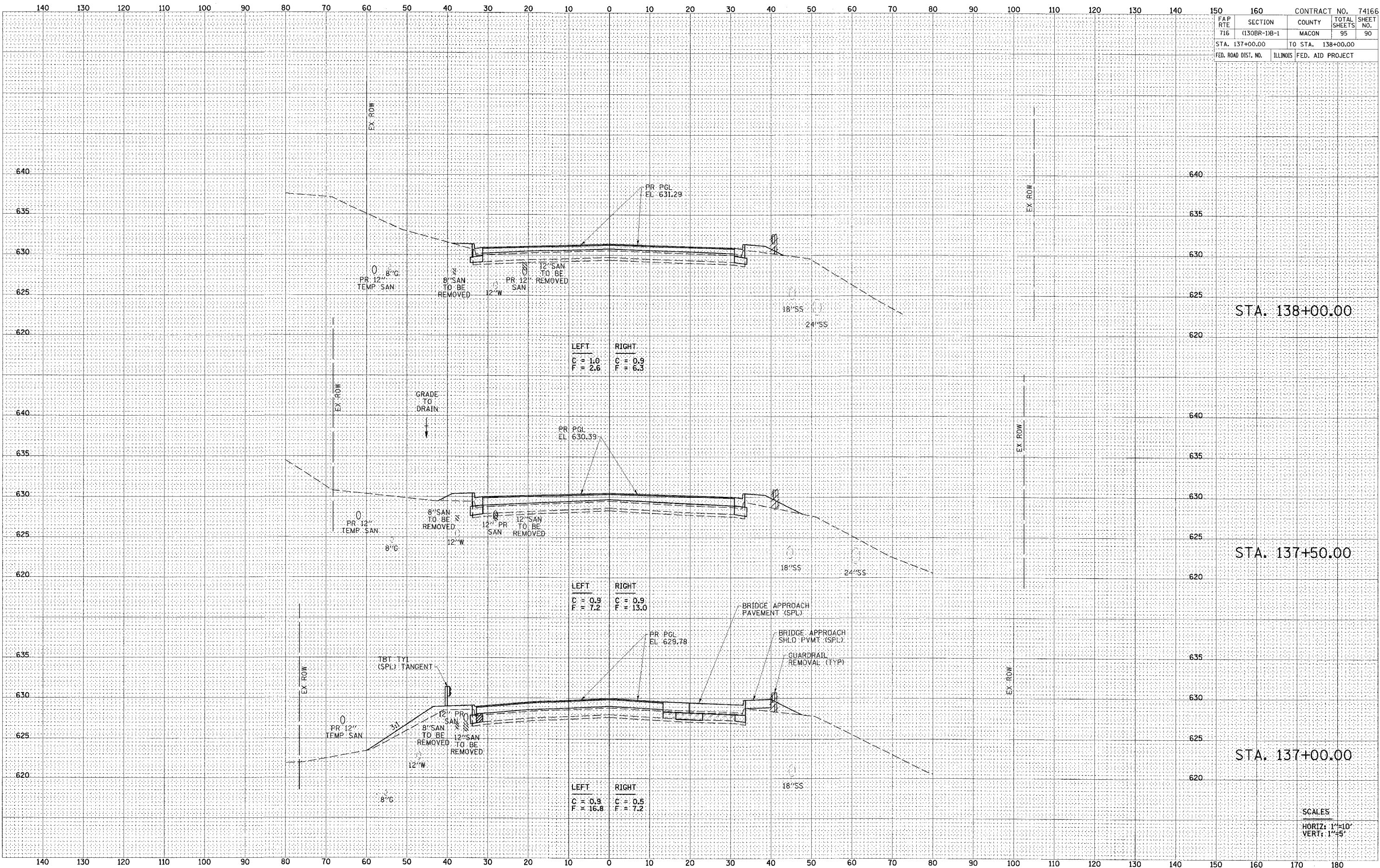
STA. 136+50.00

STA. 136+00.00

STA. 135+50.00

SCALES
HORIZ: 1"=10'
VERT: 1"=4'

FAP RTE 716	SECTION (130BR-1B-1)	COUNTY MACON	CONTRACT NO. 74166	TOTAL SHEETS 95	SHEET NO. 90
STA. 137+00.00		TO STA. 138+00.00			
FED. ROAD DIST. NO.		ILLINOIS		FED. AID PROJECT	



LEFT
C = 1.0
F = 2.6

RIGHT
C = 0.9
F = 6.3

LEFT
C = 0.9
F = 7.2

RIGHT
C = 0.9
F = 13.0

LEFT
C = 0.9
F = 16.8

RIGHT
C = 0.5
F = 7.2

STA. 138+00.00

STA. 137+50.00

STA. 137+00.00

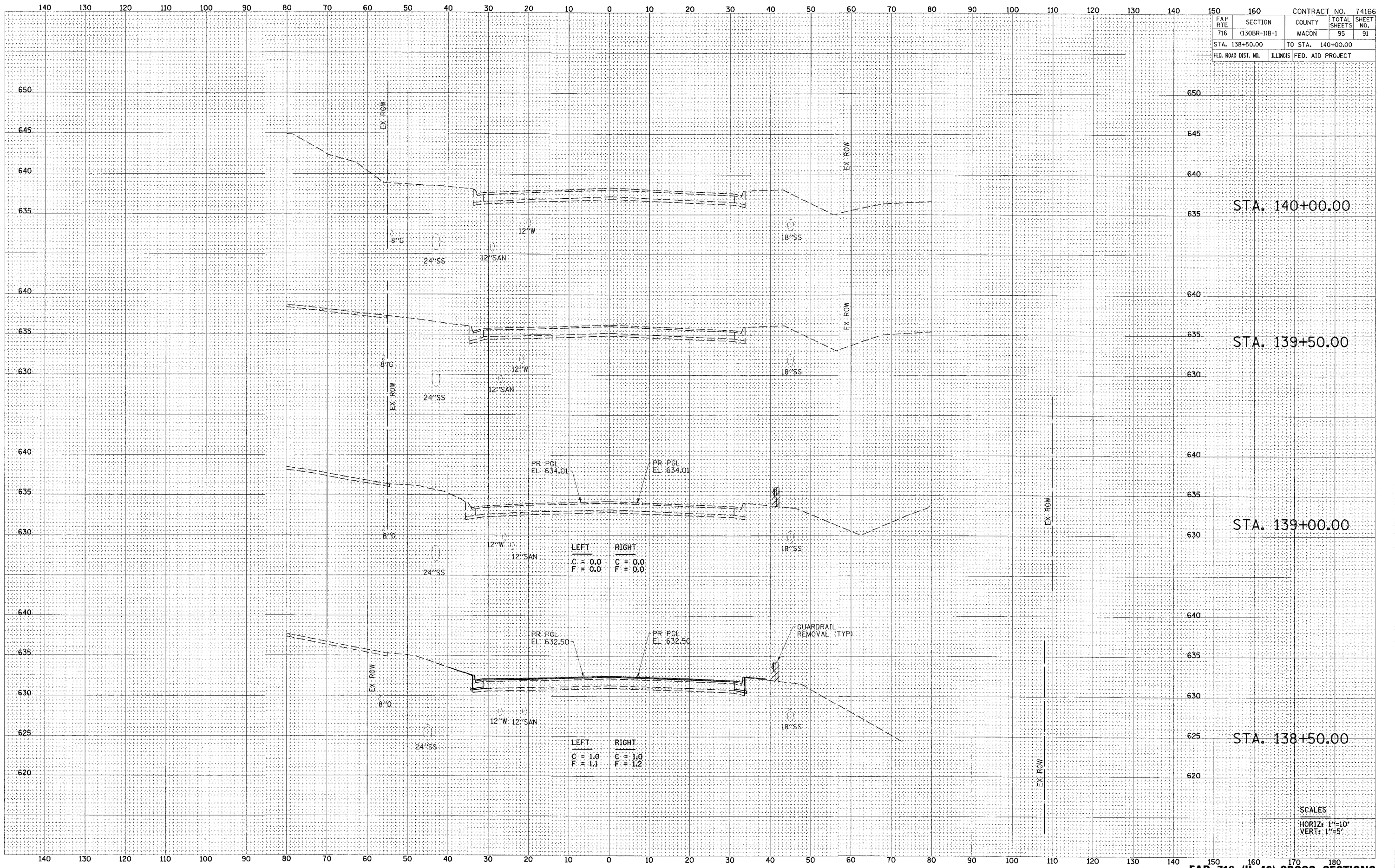
SCALES
HORIZ: 1"=10'
VERT: 1"=5'



FINAL SURVEY	DATE
BY	
NO.	
ORIGINAL SURVEY	DATE
BY	
NO.	
SPONSORED	DATE
BY	
NO.	
EXEMPTED	DATE
BY	
NO.	
PLOTTED	DATE
BY	
NO.	
TEMPLATE	DATE
BY	
NO.	
AREAS CHECKED	DATE
BY	
NO.	

FINAL SURVEY	DATE
BY	
NO.	
ORIGINAL SURVEY	DATE
BY	
NO.	
SPONSORED	DATE
BY	
NO.	
EXEMPTED	DATE
BY	
NO.	
PLOTTED	DATE
BY	
NO.	
TEMPLATE	DATE
BY	
NO.	
AREAS CHECKED	DATE
BY	
NO.	

FAP	SECTION	COUNTY	TOTAL SHEETS	CONTRACT NO.
716	(130BR-1)B-1	MACON	95	74166
STA. 138+50.00		TO STA. 140+00.00		
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			



LEFT	RIGHT
C = 0.0	C = 0.0
F = 0.0	F = 0.0

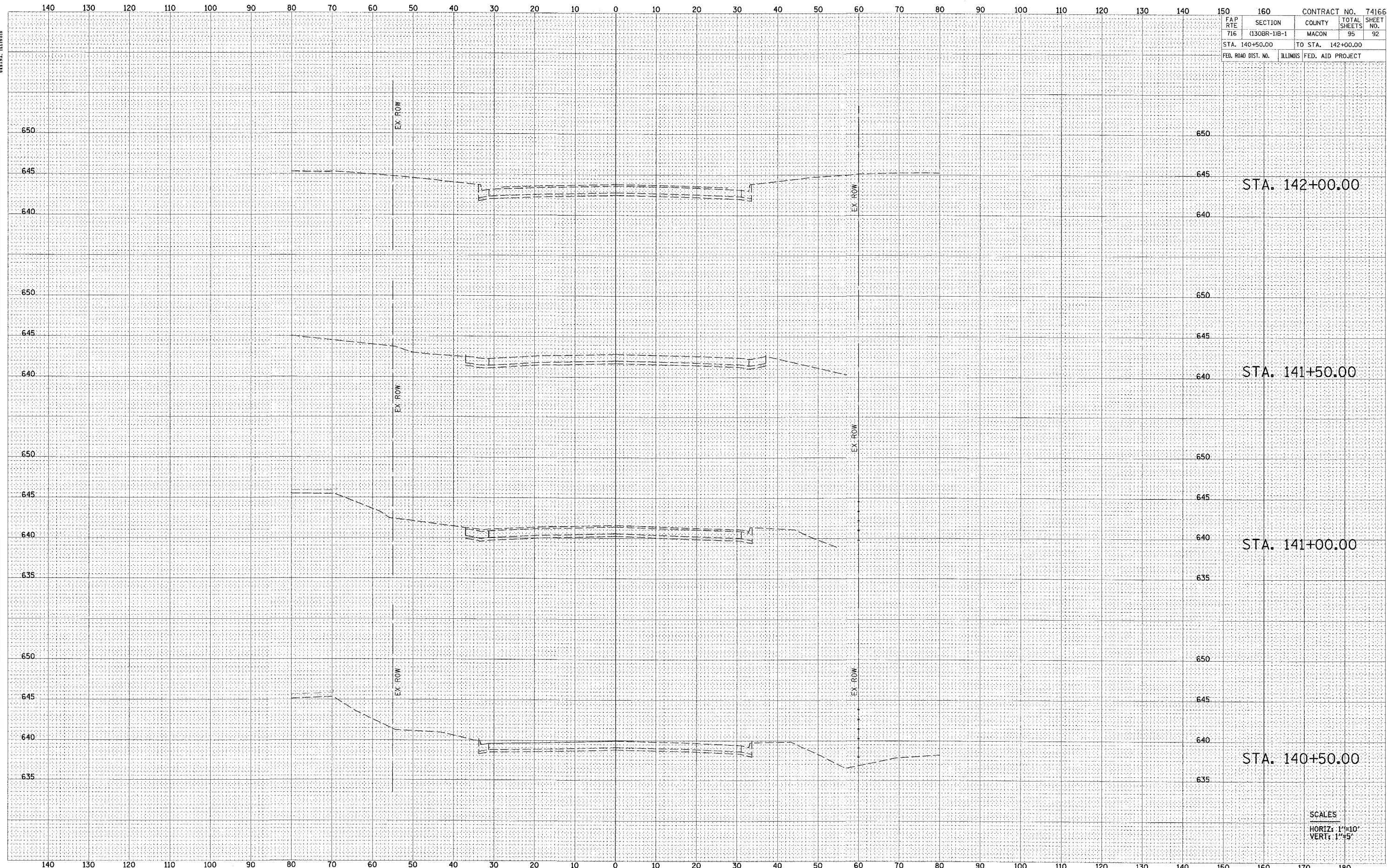
LEFT	RIGHT
C = 1.0	C = 1.0
F = 1.1	F = 1.2

SCALES
HORIZ: 1"=10'
VERT: 1"=5'



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

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



CONTRACT NO. 74166	
FAP RITE 716	SECTION (130BR-1)B-1
COUNTY MACON	TOTAL SHEETS 95
STA. 140+50.00	TO STA. 142+00.00
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT

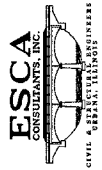
STA. 142+00.00

STA. 141+50.00

STA. 141+00.00

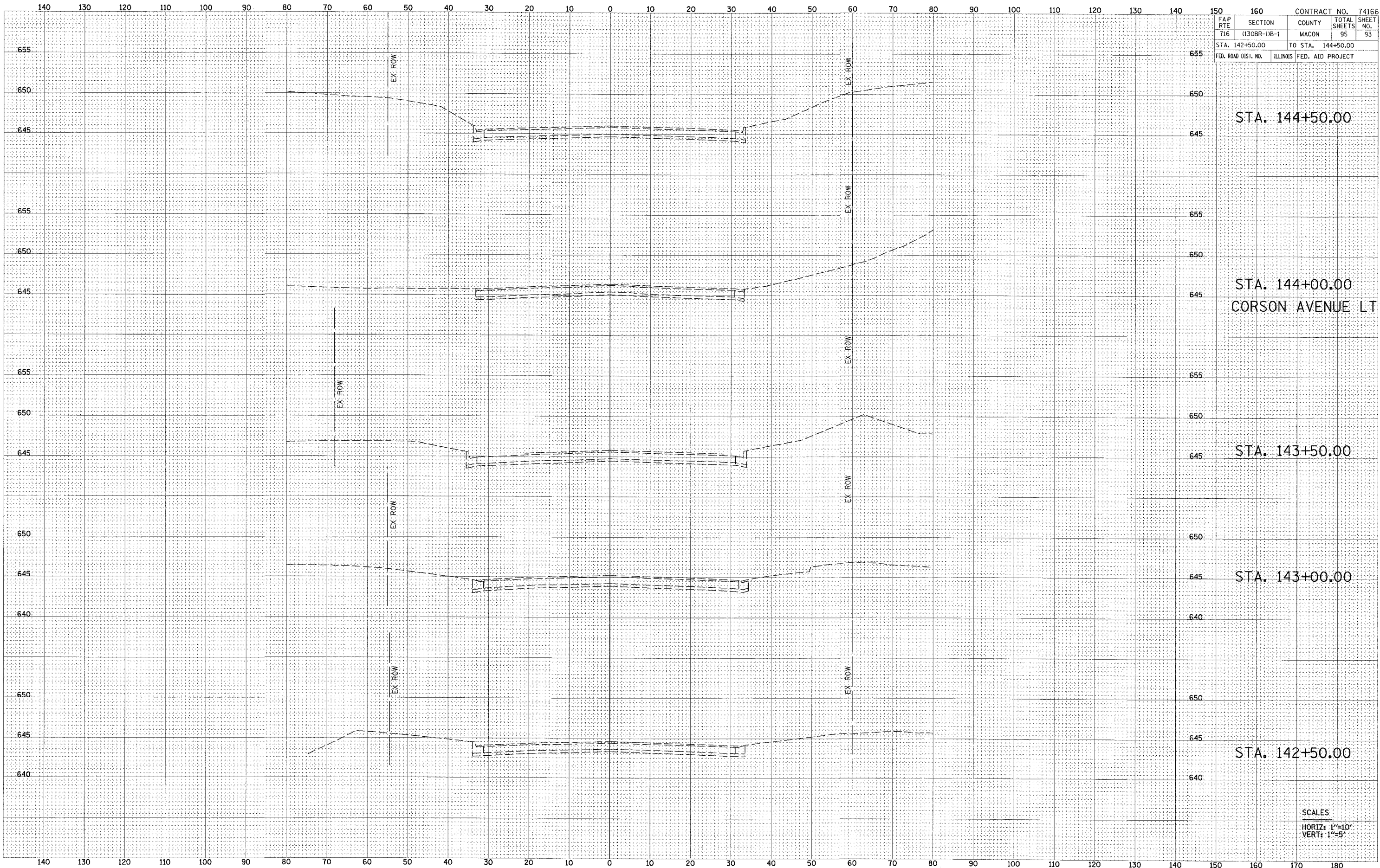
STA. 140+50.00

SCALES
HORIZ: 1"=10'
VERT: 1"=5'



FINAL SURVEY	SURVEYED	DATE
NOTE BOOK	PLOTTED	
NO.	AREAS CHECKED	

ORIGINAL SURVEY	SURVEYED	DATE
NOTE BOOK	PLOTTED	
NO.	AREAS CHECKED	



FAP 160		CONTRACT NO. 74166	
SECTION 716	(130BR-11B-1)	COUNTY MACON	TOTAL SHEETS 95
STA. 142+50.00		TO STA. 144+50.00	
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	

STA. 144+50.00

STA. 144+00.00
CORSON AVENUE LT

STA. 143+50.00

STA. 143+00.00

STA. 142+50.00

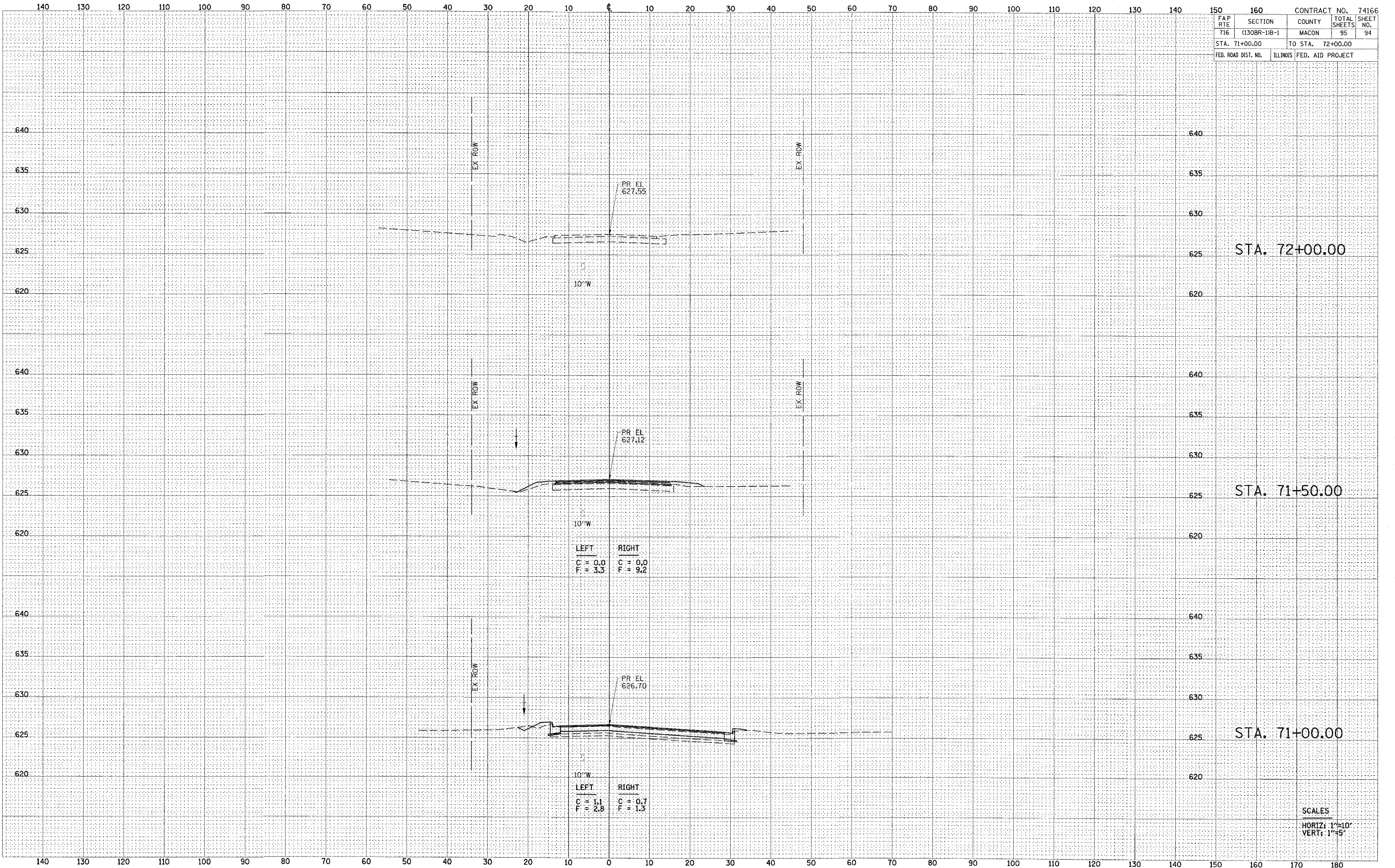
SCALES
HORIZ: 1"=10'
VERT: 1"=5'



FINAL SURVEY	SURVEYED	DATE
NOTE BOOK	PLOTTED	
AREAS CHECKED	DATE	
NO.		

ORIGINAL SURVEY	SURVEYED	DATE
NOTE BOOK	PLOTTED	
AREAS CHECKED	DATE	
NO.		

FAP RITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	(130BR-1)B-1	MACON	95	94
STA. 71+00.00		TO STA. 72+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



LEFT	RIGHT
C = 0.0	C = 0.0
F = 3.3	F = 9.2

LEFT	RIGHT
C = 1.1	C = 0.7
F = 2.8	F = 1.3

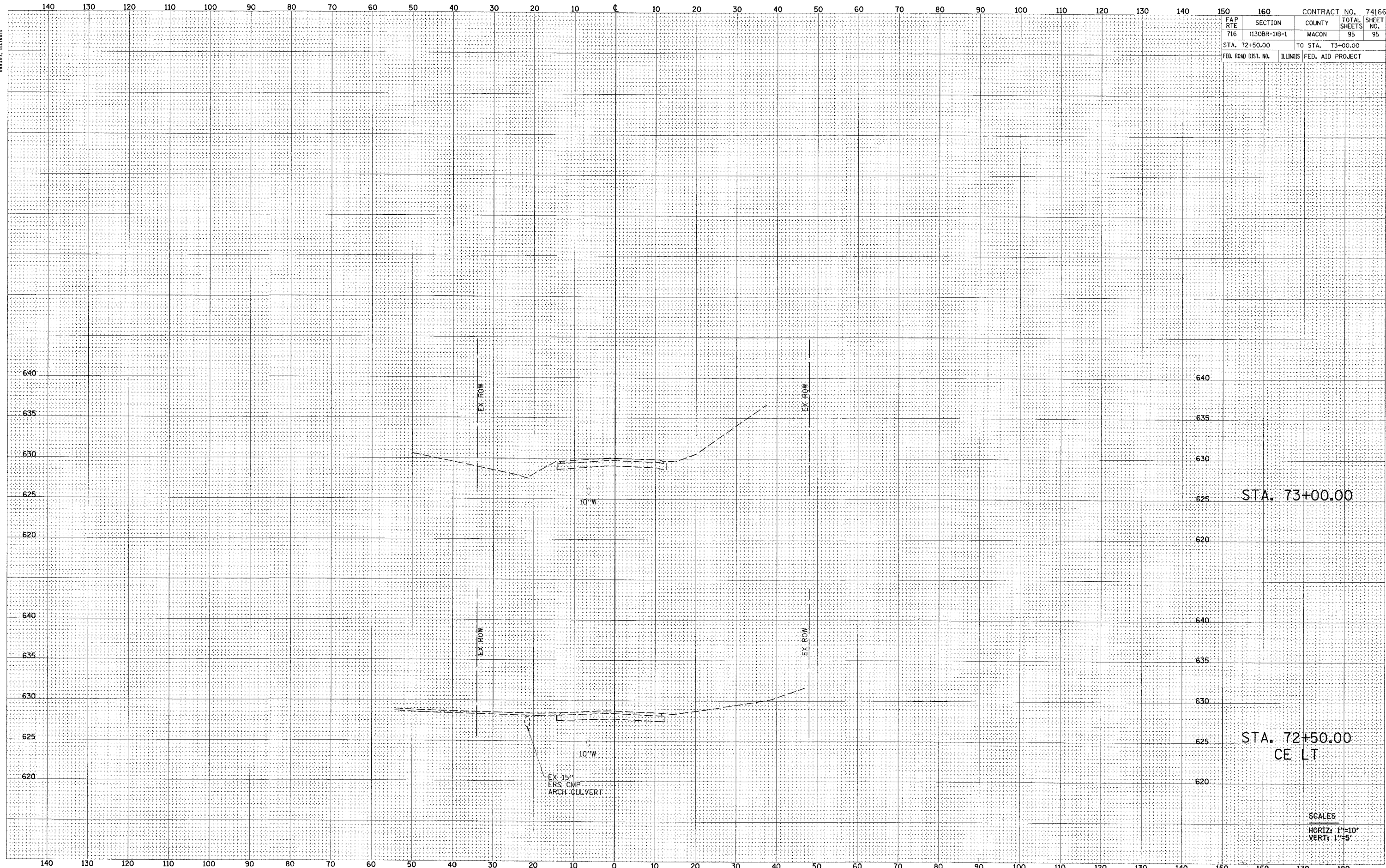
SCALES
 HORIZ: 1"=10'
 VERT: 1"=5'



DATE	
BY	
REVIEWED	
DATE	
BY	
FINAL SURVEY	
NOTE BOOK	
NO.	

DATE	
BY	
REVIEWED	
DATE	
BY	
ORIGINAL SURVEY	
NOTE BOOK	
NO.	

FAP	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
RTE	(130BR-1)B-1	MACON	95	95
716				
STA. 72+50.00		TO STA. 73+00.00		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



McKINLEY AVE CROSS SECTIONS
STA. 72+50 TO STA. 73+00

SCALES
 HORIZ: 1"=10'
 VERT: 1"=5'