11-18-11 LETTING ITEM 067

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	(102BY)B-1	MOULTRIE	48	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 74280		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

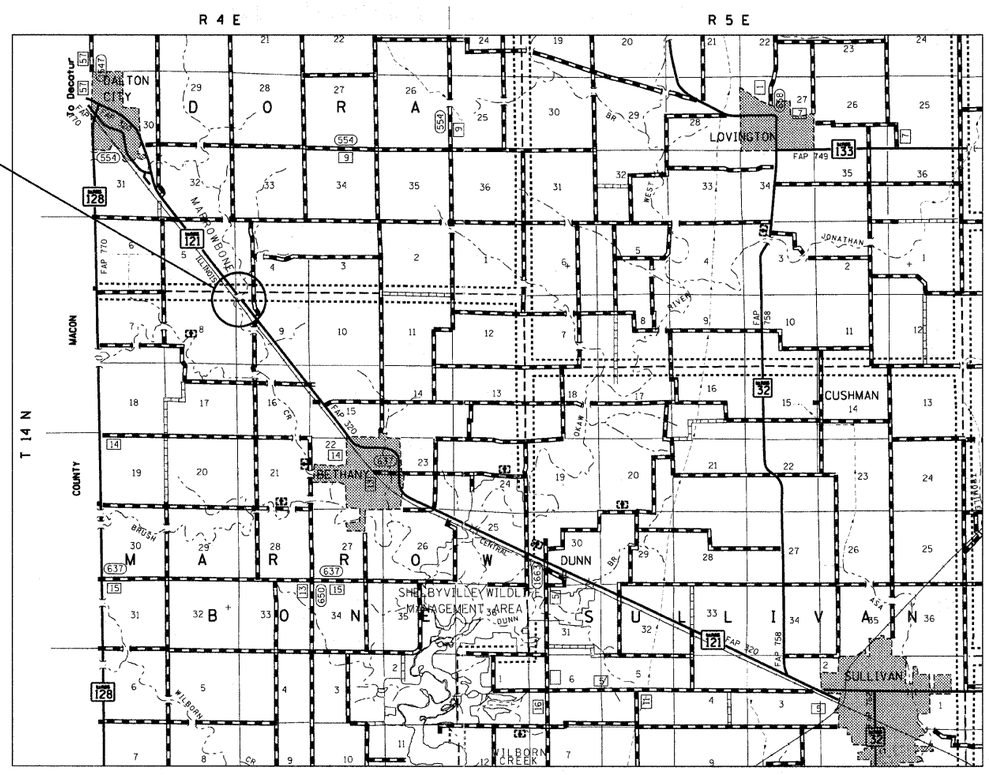
PROPOSED
HIGHWAY PLANS

F.A.P. ROUTE 320 (IL. RTE. 121)
SECTION (102BY)B-1
PROJECT ACBRF-0320(036)
BRIDGE REPLACEMENT
MOULTRIE COUNTY
C-97-113-07

FOR INDEX OF SHEETS, SEE SHEET NO. 2

ADT = 5,500 (2010)

FAP 320 (IL 121)
SECTION (102BY)B-1
MOULTRIE COUNTY
STRUCTURE # 070-0050
STATION 139+14.00



100' 200' 300' — 1" = 100'
0 10' 20' 30' — 1" = 10'
0 50' 100' — 1" = 50'
0 50' 100' — 1" = 40'
0 50' 100' — 1" = 30'
0 50' 100' — 1" = 20'

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

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

PROJECT ENGINEER: TOM RONAN
PROJECT MANAGER: KEVIN BRADY

TOWNSHIP: DORA, MARROWBONE

CONTRACT NO. 74280

GROSS LENGTH = 500 FT. = .095 MILE
NET LENGTH = 500 FT. = .095 MILE

D-97-073-07

LOCATION OF SECTION INDICATED THUS: —

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED August 11 20 11
Darren J. Brackett /mpw
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

October 14 20 11
Scott E. Stitt, P.E. /bs
acting ENGINEER OF DESIGN AND ENVIRONMENT

October 14 20 11
Christine M. Reed /bs
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

INDEX OF SHEETS

THE FOLLOWING STANDARDS ARE A PART OF THESE PLANS AND ARE INCLUDED FOLLOWING SHEET NUMBER 48.

STD NO.	DESCRIPTION
000001-06	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND A FOOT
280001-05	TEMPORARY EROSION CONTROL SYSTEMS
420401-08	BRIDGE APPROACH PAVEMENT CONNECTOR
515001-03	NAME PLATE FOR BRIDGES
601101-01	CONCRETE HEADWALL FOR PIPE DRAINS
630001-09	STEEL PLATE BEAM GUARDRAIL
630201-06	PCC/BITUMINOUS STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
630301-05	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631031-09	TRAFFIC BARRIER TERMINAL, TYPE 6
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-02	REFLECTOR MARKER AND MOUNTING DETAILS
667101-01	PERMANENT SURVEY MARKERS
668001-01	US GEOLOGICAL SURVEY AND NATIONAL GEODETIC SURVEY BENCHMARKS, RESETTING METHOD
701001-02	OFF ROAD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY
701006-03	OFF ROAD OPERATIONS, 2L, 2W, 15' TO EDGE OF PAVEMENT
701301-04	LANE CLOSURE - SHORT TERM OPERATIONS
701306-03	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATION DAY ONLY, FOR SPEEDS > 45 MPH
701311-03	LANE CLOSURE - MOVING OPERATIONS - DAY ONLY
701321-11	LANE CLOSURE 2L, 2W BRIDGE REPAIR WITH BARRIER
701901-01	TRAFFIC CONTROL DEVICES
704001-06	TEMPORARY CONCRETE BARRIER
780001-02	TYPICAL PAVEMENT MARKINGS
781001-03	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS

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" ADOPTED JANUARY 1, 2011; AND THE SPECIAL PROVISIONS INCLUDED IN THE PROPOSAL.

THE WORK INCLUDED IN SECTION (102BY)B-1 CONSISTS OF THE COMPLETE REMOVAL AND REPLACEMENT OF EXISTING STRUCTURE NUMBER 070-0001 WITH A NEW STRUCTURE, BRIDGE APPROACH PAVEMENTS, HOT-MIX ASPHALT RESURFACING, RIP RAP, GUARDRAIL, PAVEMENT MARKING AND ANY OTHER WORK NECESSARY TO COMPLETE THIS SECTION. THE WORK SHALL BE COMPLETED UTILIZING STAGE CONSTRUCTION WITH TEMPORARY TRAFFIC SIGNALS. THE EXISTING STRUCTURE # 070-0001, CARRIES ILLINOIS ROUTE 121 OVER MARROWBONE CREEK AND IS LOCATED APPROXIMATELY 2 MILES SOUTHEAST OF DALTON CITY IN MOULTRIE COUNTY.

THE COST OF TEMPORARY PAVEMENT MARKING FOR STAGED CONSTRUCTION IS INCLUDED IN THE COST OF STANDARD 701321. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR PLACEMENT OR REMOVAL AS STATED IN ARTICLE 703.07 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

THE EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH STAGE I & II OF STANDARD 701321 WILL BE REMOVED. THE REMOVED MARKINGS WILL BE PAID FOR AS PAVEMENT MARKING REMOVAL.

PAINT PAVEMENT MARKING LINE - 4" SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARDS, AS SHOWN IN THE PLANS, AND AS DETERMINED BY THE ENGINEER. THE TOTAL QUANTITY CALCULATED CONSISTS OF 368 FEET OF YELLOW AND 1288 FEET OF WHITE.

RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 781 OF THE STANDARD SPECIFICATIONS. THE TOTAL QUANTITY OF RAISED REFLECTIVE PAVEMENT MARKERS CONSISTS OF 10 TWO-WAY AMBER MARKERS.

GENERAL NOTES (Cont'd)

THE MATERIAL USED FOR AGGREGATE SHOULDERS, TYPE B SHALL BE CRUSHED STONE, CRUSHED CONCRETE, OR RAP.

THE CONTRACTOR SHALL USE EITHER RC-70, SS1H, OR SS1HP, APPLIED AT THE RATE DIRECTED BY THE ENGINEER, FOR THE PAY ITEM BITUMINOUS MATERIALS (PRIME COAT).

THE CONTRACTOR SHALL PROVIDE INTERNET ACCESSIBILITY TO THE BITUMINOUS PLANT QUALITY CONTROL LAB SO THAT BITUMINOUS PLANT REPORTS CAN BE E-MAILED TO THE DISTRICT HEADQUARTERS. THIS WORK SHALL BE INCLUDED IN THE COST OF ALL BITUMINOUS ITEMS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRS TO ANY DAMAGED UTILITIES AS A RESULT OF WORK IN THE AREA.

THE LOCATIONS AND/OR DEPTHS OF UNDERGROUND UTILITIES SHOWN HAVE BEEN TAKEN FROM INFORMATION FURNISHED BY THE UTILITY OWNERS AND MUST BE CONSIDERED APPROXIMATE. FIELD MARKINGS OF FACILITIES IN CRITICAL AREAS MAY BE OBTAINED BY PROVIDING A MINIMUM OF 48 HOURS ADVANCE NOTICE THROUGH THE J.U.L.I.E. SYSTEM BY CALLING 800-892-0123.

THE EXISTING TRAFFIC BARRIER TERMINAL TYPE 1 (SPECIAL) END SECTIONS, INCLUDING POSTS AND ALL HARDWARE, SHALL BE SALVAGED AND WILL BECOME THE PROPERTY OF THE STATE UPON REMOVAL. THE RESIDENT ENGINEER SHALL CONTACT DOUG RUDOLPHI, OPERATIONS FIELD ENGINEER, TO MAKE ARRANGEMENTS FOR MAINTENANCE TO PICK UP THE SALVAGED END SECTIONS.

ALL EXCAVATION ABOVE THE BOTTOM OF THE RIPRAP EXCAVATION LINE SHALL BE INCLUDED IN THE COST OF STONE RIPRAP, CLASS A4 AND NO ADDITIONAL COMPENSATION WILL BE PERMITTED.

ALL WORK NECESSARY TO ATTACH THE 4" PIPE DRAINS TO THE ABUTMENT DRAIN PIPES, TRENCHING IN THE PIPE DRAINS AND INSTALLING THE PIPE INTO THE CONCRETE HEADWALLS IS INCLUDED IN THE CONTRACT UNIT PRICE PER FOOT FOR PIPE DRAIN 4". THE ESTIMATED QUANTITY OF 62' WAS CALCULATED BY TAKING THE DIFFERENCE BETWEEN THE STRUCTURE PIPE UNDERDRAIN ELEVATIONS AND THE TOE OF SLOPE ELEVATIONS FROM THE CROSS SECTIONS.

A TYPE II CAST IN PLACE PERMANENT SURVEY MARKER SHALL BE PLACED NEAR THE PROPOSED STRUCTURE. THE TABLET STYLE SHALL CONFORM TO STANDARD 667101-01 AND THE CAST IN PLACE BASE WILL CONFORM TO STANDARD 668001-01. THE LOCATION OF THE SURVEY MARKER SHALL BE DETERMINED BY THE ENGINEER AND THE CHIEF OF SURVEYS. THE SURVEY MARKER LOCATION WILL ALSO BE CROSS TIED AND ELEVATED BY IDOT PERSONNEL.

THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT:

BINDER COURSE	
APPLICATION:	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70
PG GRADE:	PG 64-22
DESIGN AIR VOIDS:	4.0% @ NDESIGN = 70
MIXTURE COMPOSITION:	IL-19.0
FRICTION AGGREGATE:	N/A
SURFACE COURSE (1 1/2")	
APPLICATION:	HOT-MIX ASPHALT SURFACE COURSE, MIX "C" N70
PG GRADE:	PG 64-22
DESIGN AIR VOIDS:	4.0% @ NDESIGN = 70
MIXTURE COMPOSITION:	IL-9.5
FRICTION AGGREGATE:	MIXTURE C
BITUMINOUS SHOULDERS	
APPLICATION:	HOT-MIX BITUMINOUS SHOULDERS
PG GRADE:	PG 58-22
DESIGN AIR VOIDS:	4.0% @ NDESIGN = 30
MIXTURE COMPOSITION:	IL-19.0 L
FRICTION AGGREGATE:	N/A
BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	
APPLICATION:	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70
PG GRADE:	PG 64-22
DESIGN AIR VOIDS:	4.0% @ NDESIGN = 70
MIXTURE COMPOSITION:	IL-19.0
FRICTION AGGREGATE:	N/A

THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN THE CALCULATING PLAN QUANTITIES:

AGGREGATE SHOULDERS	2.05 TONS/CU. YD.
BITUMINOUS MATERIALS (PRIME COAT)	0.10 GAL./SQ. YD.
AGGREGATE (PRIME COAT)	4 LBS./SQ. YD
HOT-MIX ASPHALT	112 LBS./SQ. YD/INCH

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS AND GENERAL NOTES

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	(102BY)B-1	MOUILTRIE	48	2
		CONTRACT NO. 74280		
	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	TOTAL QUANTITIES	CONSTRUCTION TYPE CODE 80% FED. 20% STATE 0011
20200100	EARTH EXCAVATION	CU YD	763	763
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	27	27
28000305	TEMPORARY DITCH CHECKS	FOOT	48	48
28000400	PERIMETER EROSION BARRIER	FOOT	1000	1000
28100207	STONE RIPRAP, CLASS A4	TON	749	749
28200200	FILTER FABRIC	SQ YD	833	833
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	119	119
40600300	AGGREGATE (PRIME COAT)	TON	2	2
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	213	213
40600990	TEMPORARY RAMP	SQ YD	239	239
40603085	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70	TON	307	307
40603315	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N70	TON	100	100
42001430	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SQ YD	56	56
44000100	PAVEMENT REMOVAL	SQ YD	402	402
44201863	CLASS D PATCHES, TYPE II, 18 INCH	SQ YD	26	26
44201867	CLASS D PATCHES, TYPE III, 18 INCH	SQ YD	18	18
48101200	AGGREGATE SHOULDERS, TYPE B	TON	208	208
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1	1
50200100	STRUCTURE EXCAVATION	CU YD	92	92
50300225	CONCRETE STRUCTURES	CU YD	65.2	65.2
50300255	CONCRETE SUPERSTRUCTURE	CU YD	290.3	290.3
50300260	BRIDGE DECK GROOVING	SQ YD	650	650
50300280	CONCRETE ENCASEMENT	CU YD	4.2	4.2
50300300	PROTECTIVE COAT	SQ YD	797	797
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1	1
50500505	STUD SHEAR CONNECTORS	EACH	1368	1368
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	71980	71980
50800515	BAR SPLICERS	EACH	676	676
51201610	FURNISHING STEEL PILES HP12X63	FOOT	760	760
51202305	DRIVING PILES	FOOT	760	760
51203610	TEST PILE STEEL HP12X63	EACH	2	2
51500100	NAME PLATES	EACH	1	1
52100520	ANCHOR BOLTS, 1"	EACH	24	24
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	96.2	96.2
60100060	CONCRETE HEADWALL FOR PIPE DRAINS	EACH	4	4

SUMMARY OF QUANTITIES (Cont'd)

	CODE NO	ITEM	UNIT	TOTAL QUANTITIES	CONSTRUCTION TYPE CODE 80% FED 20% STATE 0011
	60100905	PIPE DRAINS 4"	FOOT	62	62
*	63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	300	300
*	63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4
*	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	4
	63200310	GUARDRAIL REMOVAL	FOOT	567	567
	66700305	PERMANENT SURVEY MARKERS, TYPE II	EACH	1	1
	67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	7	7
	67100100	MOBILIZATION	L SUM	1	1
	70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1
	70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	1
	70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1
	70300100	SHORT-TERM PAVEMENT MARKING	FOOT	184	184
	70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	1656	1656
	70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	24	24
	70400100	TEMPORARY CONCRETE BARRIER	FOOT	412.5	412.5
	70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	312.5	312.5
*	78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	1656	1656
*	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	8	8
*	78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	2	2
*	78200410	GUARDRAIL MARKERS, TYPE A	EACH	9	9
*	78200520	BARRIER WALL MARKERS, TYPE B	EACH	2	2
*	78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4
	78300100	PAVEMENT MARKING REMOVAL	SQ FT	484	484
	X2070304	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	156	156
	X2501000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.1	0.1
	X4401198	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SQ YD	974	974
	Z0001900	ASBESTOS BEARING PAD REMOVAL	EACH	30	30
	Z0026407	TEMPORARY SHEET PILING	SQ FT	1165	1165
	Z0030250	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2	2
	Z0030260	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	1	1
	Z0030350	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2	2
	Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	168	168

*SPECIALTY ITEM

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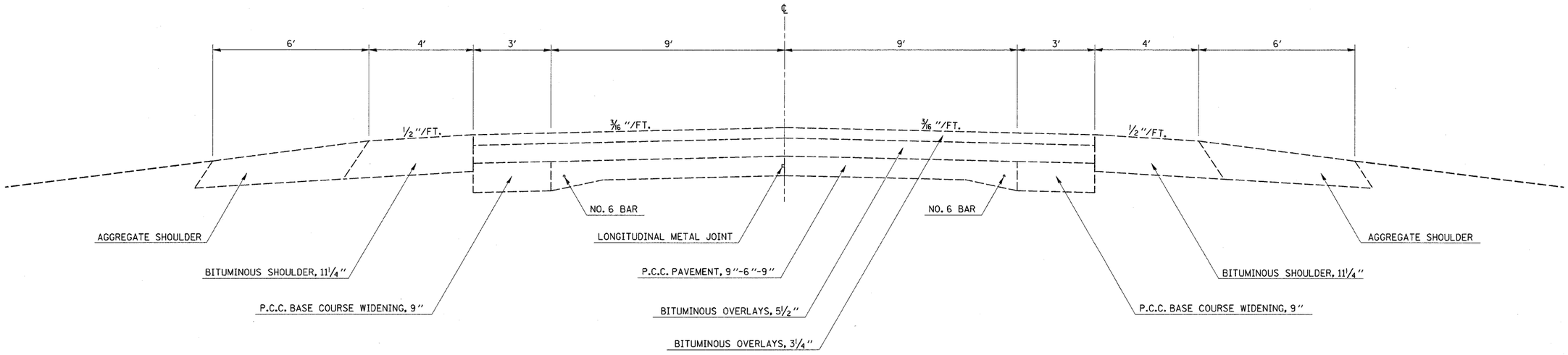
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

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

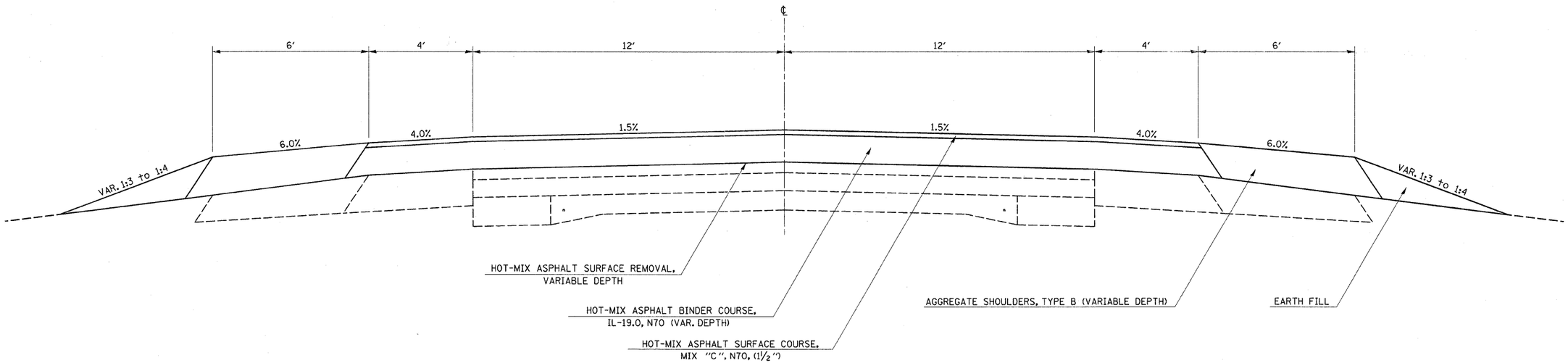
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	(102BY)B-1	MOULTRIE	48	3
		CONTRACT NO. 74280		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

EXISTING TYPICAL CROSS SECTION



PROPOSED TYPICAL CROSS SECTION

STA. 137+50 TO STA. 138+31
STA. 139+97 TO STA. 142+50



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL CROSS SECTIONS

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

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	(102BY)B-1	MOULTRIE	48	4
		CONTRACT NO. 74280		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

RESURFACING SCHEDULE

STATION TO STATION	LENGTH	AVERAGE PAVEMENT & SHOULDER WIDTH	AREA	BITUMINOUS MATERIALS (PRIME COAT)	AGGREGATE (PRIME COAT)	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N70	AGGREGATE SHOULDERS, TYPE B	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	TEMPORARY RAMP
	FOOT	FOOT	SQ YD	GALLON	TON	TON	TON	TON	SQ YD	SQ YD	SQ YD	SQ YD
137+50.00 TO 137+80.00	30.0	32.0	106.7	10.7	0.2	0.0	9.0	9.1	0.0	0.0	106.7	13.3
137+80.00 TO 138+31.00	51.0	32.0	181.3	18.1	0.4	40.6	15.2	29.0	181.3	0.0	0.0	63.0
138+31.00 TO 139+97.00	166.0									55.8		
139+97.00 TO 142+20.00	223.0	32.0	792.9	79.3	1.6	266.4	66.6	160.8	792.9	0.0	0.0	149.3
142+20.00 TO 142+50.00	30.0	32.0	106.7	10.7	0.2	0.0	9.0	9.1	0.0	0.0	106.7	13.3
TOTALS			1188.0	119.0	2.0	307.0	100.0	208.0	974.0	56.0	213.0	239.0

GUARDRAIL SCHEDULE

LOCATION	GUARDRAIL REMOVAL	TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT)	STEEL PLATE BEAM GUARD RAIL, TYPE A, 6 FOOT POSTS	TRAFFIC BARRIER TERMINAL, TYPE 6	GUARDRAIL MARKERS, TYPE A	BARRIER WALL MARKERS, TYPE B	TERMINAL MARKERS - DIRECT APPLIED
	FOOT	EACH	FOOT	FOOT	EACH	EACH	EACH
NORTHEAST CORNER	89.0	1.0	12.5	1.0			1.0
SOUTHEAST CORNER	189.0	1.0	125.0	1.0			1.0
NORTHWEST CORNER	189.0	1.0	125.0	1.0			1.0
SOUTHWEST CORNER	100.0	1.0	37.5	1.0			1.0
LEFT SIDE					4.0	1.0	
RIGHT SIDE					5.0	1.0	
TOTALS=	567.0	4.0	300.0	4.0	9.0	2.0	4.0

PAVEMENT MARKING SCHEDULE

STATION TO STATION	LENGTH	PAINT PAVEMENT MARKING - LINE 4"	TEMPORARY PAVEMENT MARKING - LINE 4"	SHORT-TERM PAVEMENT MARKING	WORK ZONE PAVEMENT MARKING REMOVAL	RAISED REFLECTIVE PAVEMENT MARKER	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	PAVEMENT MARKING REMOVAL
	FOOT	FOOT	FOOT	FOOT	SQ FT	EACH	EACH	SQ FT
135+48.00 TO 138+31.00	283.0	636.0	636.0	84.0	9.3	4.0	0.0	212.0
138+31.00 TO 139+95.00	164.0	368.0	368.0	16.0	5.3	0.0	2.0	54.7
139+95.00 TO 142+86.00	291.0	652.0	652.0	84.0	9.3	4.0	0.0	217.3
TOTALS		1656.0	1656.0	184.0	24.0	8.0	2.0	484.0

PAVEMENT PATCHING SCHEDULE

LOCATION	CLASS D PATCHES, TYPE II 18 INCH	CLASS D PATCHES, TYPE III 18 INCH
	SQ YD	SQ YD
IL 121 (RT & LT)	26.0	18.0
TOTALS	26.0	18.0

PATCH THICKNESS BASED ON THE MAXIMUM EXISTING PAVEMENT THICKNESS

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		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

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

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	(102BY)B-1	MOULTRIE	48	5
		CONTRACT NO. 74280		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SEEDING & FERTILIZER SCHEDULE

STATION TO STATION	SEEDING, CLASS 2 (SPECIAL)	TEMPORARY EROSION CONTROL SEEDING	NITROGEN FERTILIZER NURTIENT *	PHOSPHORUS FERTILIZER NURTIENT *	POTASSIUM FERTILIZER NURTIENT *	MULCH, METHOD 2 *	AGRICULTURAL GROUND LIMESTONE *
	ACRE	POUND	POUND	POUND	POUND	ACRE	TON
136+00.0 TO 136+25.0	0.00	0.00	0.13	0.13	0.13	0.00	0.00
136+25.0 TO 136+50.0	0.00	0.29	0.26	0.26	0.26	0.00	0.01
136+50.0 TO 136+75.0	0.00	0.21	0.19	0.19	0.19	0.00	0.00
136+75.0 TO 137+00.0	0.00	0.09	0.09	0.09	0.09	0.00	0.00
137+00.0 TO 137+25.0	0.00	0.06	0.05	0.05	0.05	0.00	0.00
137+25.0 TO 137+50.0	0.00	0.03	0.03	0.03	0.03	0.00	0.00
137+50.0 TO 137+75.0	0.00	0.08	0.07	0.07	0.07	0.00	0.00
137+75.0 TO 138+00.0	0.00	0.25	0.22	0.22	0.22	0.00	0.00
138+00.0 TO 138+25.0	0.01	0.79	0.71	0.71	0.71	0.01	0.02
138+25.0 TO 138+50.0	0.02	1.99	1.79	1.79	1.79	0.02	0.04
138+50.0 TO 138+57.0	0.01	0.54	0.49	0.49	0.49	0.01	0.01
139+71.0 TO 139+75.0	0.00	0.13	0.12	0.12	0.12	0.00	0.00
139+75.0 TO 140+00.0	0.01	0.68	0.61	0.61	0.61	0.01	0.01
140+00.0 TO 140+25.0	0.01	0.74	0.67	0.67	0.67	0.01	0.01
140+25.0 TO 140+50.0	0.01	0.59	0.53	0.53	0.53	0.01	0.01
140+50.0 TO 140+75.0	0.00	0.47	0.42	0.42	0.42	0.00	0.01
140+75.0 TO 141+00.0	0.00	0.39	0.35	0.35	0.35	0.00	0.01
141+00.0 TO 141+25.0	0.00	0.33	0.30	0.30	0.30	0.00	0.01
141+25.0 TO 141+50.0	0.00	0.25	0.22	0.22	0.22	0.00	0.00
141+50.0 TO 141+75.0	0.00	0.29	0.26	0.26	0.26	0.00	0.01
141+75.0 TO 142+00.0	0.00	0.36	0.33	0.33	0.33	0.00	0.01
142+00.0 TO 142+25.0	0.00	0.25	0.23	0.23	0.23	0.00	0.01
142+25.0 TO 142+50.0	0.00	0.07	0.06	0.06	0.06	0.00	0.00
142+50.0 TO 0+00.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS	0.10	27.00	8.00	8.00	8.00	0.10	0.20

* FOR INFORMATION ONLY: NOT A PAY ITEM

EARTHWORK SCHEDULE

STATION TO STATION	EARTH EXCAVATION	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE (25%)	EARTH FILL	EARTHWORK BALANCE, WASTE (+) OR SHORTAGE (-)
	CU YD	CU YD	CU YD	CU YD
137+50.00 TO 137+75.00	0.0	0.0	0.1	-0.1
137+75.00 TO 138+00.00	0.0	0.0	0.6	-0.6
138+00.00 TO 138+25.00	0.0	0.0	3.1	-3.1
138+25.00 TO 138+50.00	0.0	0.0	16.1	-16.1
138+50.00 TO 138+67.00	0.0	0.0	18.4	-18.4
BRIDGE	763.0	572.3	0.0	+572.3
139+61.00 TO 139+75.0	0.0	0.0	2.5	-2.5
139+75.00 TO 140+00.0	0.0	0.0	4.5	-4.5
140+00.00 TO 140+25.0	0.0	0.0	3.8	-3.8
140+25.00 TO 140+50.0	0.0	0.0	2.7	-2.7
140+50.00 TO 140+75.0	0.0	0.0	1.8	-1.8
140+75.00 TO 141+00.0	0.0	0.0	1.1	-1.1
141+00.00 TO 141+25.0	0.0	0.0	0.8	-0.8
141+25.00 TO 141+50.0	0.0	0.0	0.6	-0.6
141+50.00 TO 141+75.0	0.0	0.0	0.4	-0.4
141+75.00 TO 142+00.0	0.0	0.0	0.4	-0.4
142+00.00 TO 142+25.0	0.0	0.0	0.3	-0.3
142+25.00 TO 142+50.0	0.0	0.0	0.1	-0.1
TOTALS	763.0	572.0	57.0	+515.0

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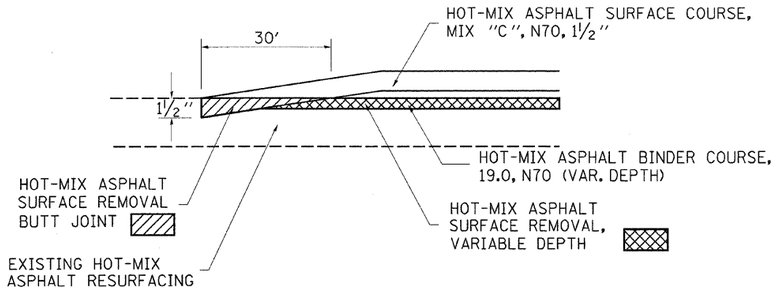
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

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

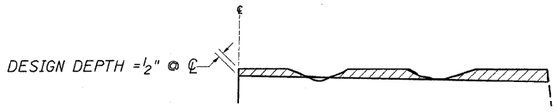
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	(102BY)B-1	MOULTRIE	48	6
		CONTRACT NO. 74280		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



BUTT JOINT DETAIL

STA. 137+50 TO STA. 137+80
STA. 142+20 TO STA. 142+50

NOTE: NOT DRAWN TO SCALE



NOTES:

1. *MILLING SHALL BE DONE TO ATTAIN A 3/16"/' SLOPE IN CROWN SECTIONS*
2. *EXISTING S.E. AND S.E. TRANSITIONS SHALL BE MAINTAINED UNLESS OTHERWISE SHOWN ON THE PLANS.*
3. *MILLING TO THE BOTTOM OF WHEEL RUTS SHALL NOT BE NECESSARY UNLESS REQUIRED TO OBTAIN SLOPE OR THE DESIGN DEPTH AT CENTERLINE.*
4. *THE AVERAGE DEPTH OF MILLING IS ESTIMATED TO BE ½" BUT MAY VARY IN ISOLATED LOCATIONS.*

HOT-MIX ASPHALT SURFACE REMOVAL (VARIABLE DEPTH) DETAIL

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	PLOT DATE = 8/9/2011	DATE -	REVISED -

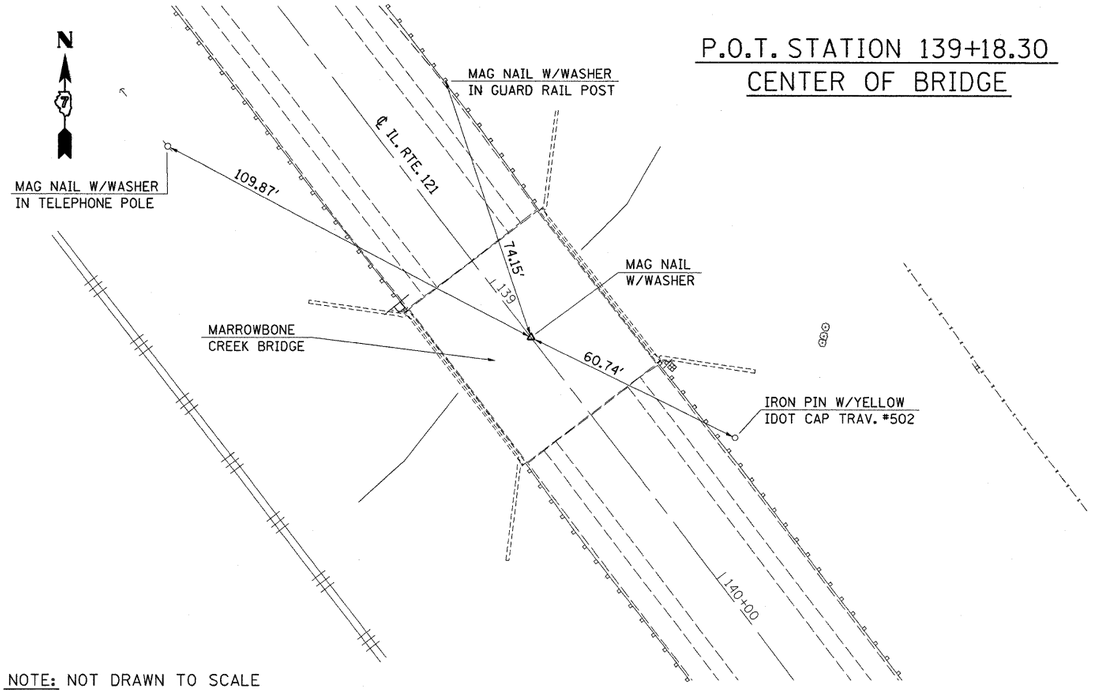
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BUTT JOINT DETAIL AND HMA SURFACE REMOVAL DETAIL

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

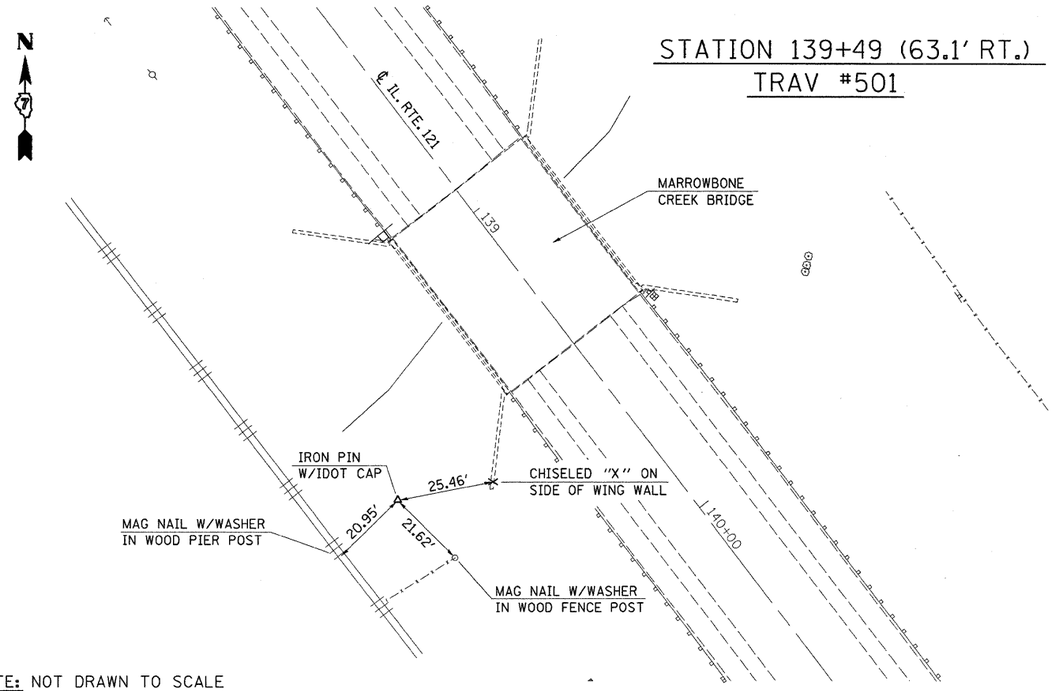
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	(102BY)B-1	MOULTRIE	48	7
		CONTRACT NO. 74280		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

P.O.T. STATION 139+18.30
CENTER OF BRIDGE



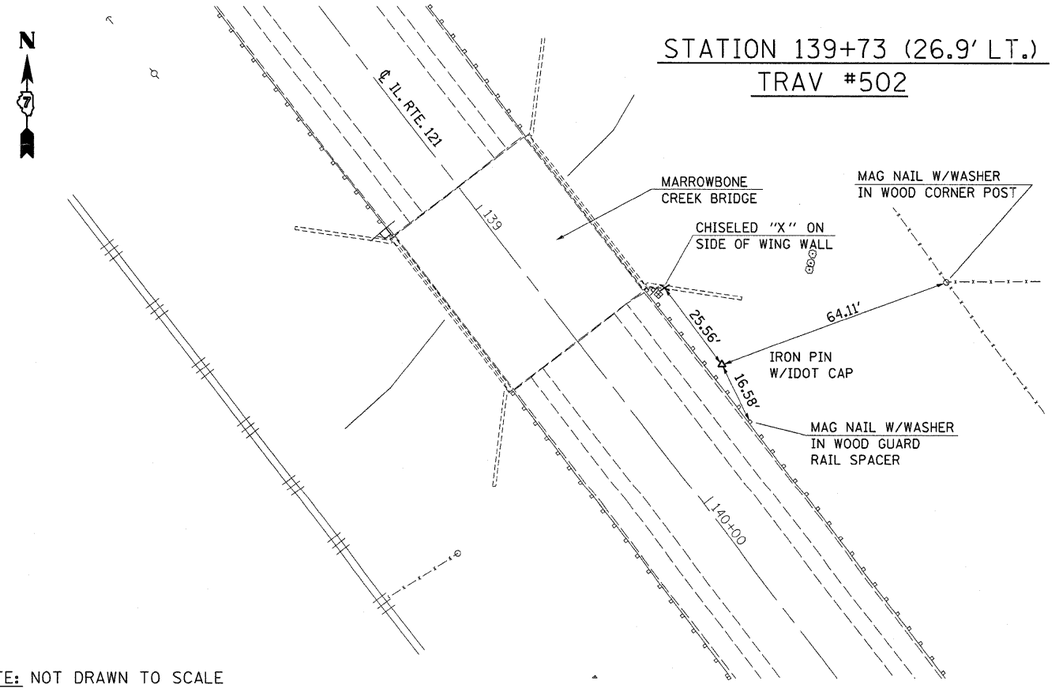
NOTE: NOT DRAWN TO SCALE

STATION 139+49 (63.1' RT.)
TRAV #501



NOTE: NOT DRAWN TO SCALE

STATION 139+73 (26.9' LT.)
TRAV #502



NOTE: NOT DRAWN TO SCALE

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	PLOT DATE = 8/9/2011	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

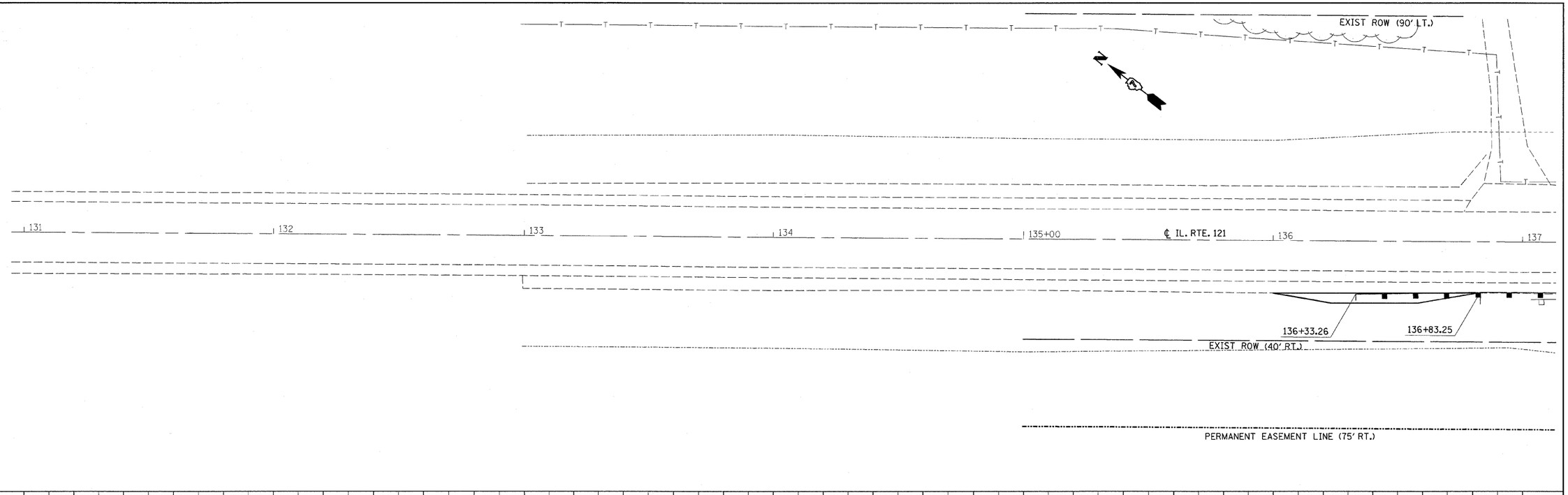
ALIGNMENT TIE POINTS

SCALE: 20 | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	(102BY)B-1	MOULTRIE	48	8
		CONTRACT NO. 74280		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PLAN
SURVEYED
ALIGNMENT CHECKED
TIES, R/W MONUMENTS CHECKED
CADD FILE NAME
NOTE BOOK
NO.
DATE

PROFILE
SURVEYED
ALIGNMENT
GRADES CHECKED
R/W, NO ITEM
STRUCTURES NO PAYNS CHKD
NOTE BOOK
NO.
BY
DATE



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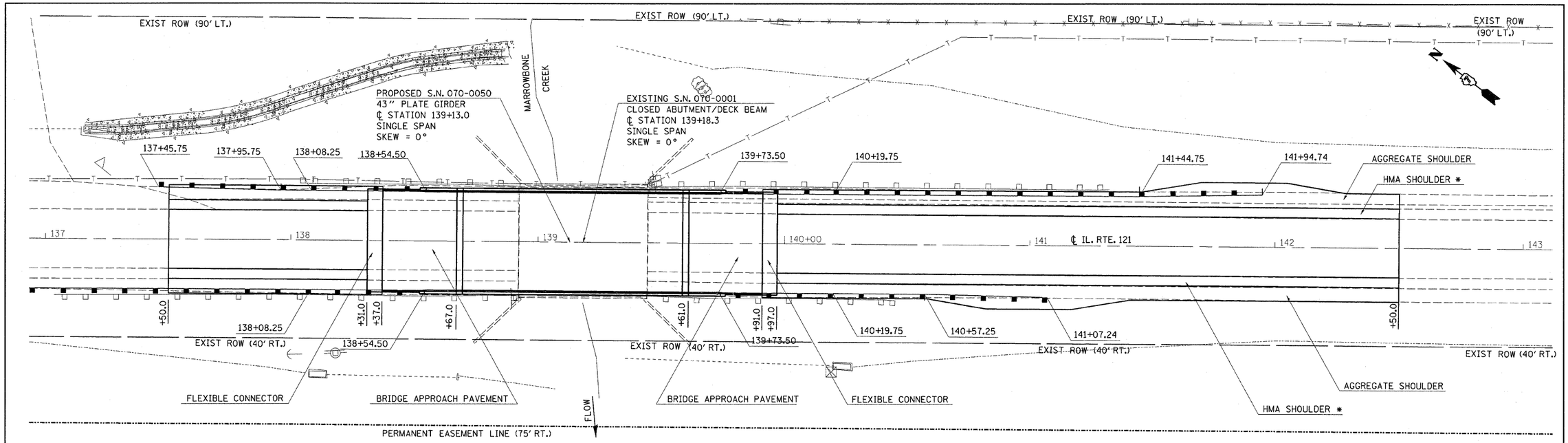
	PLOT DATE = 8/9/2011	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

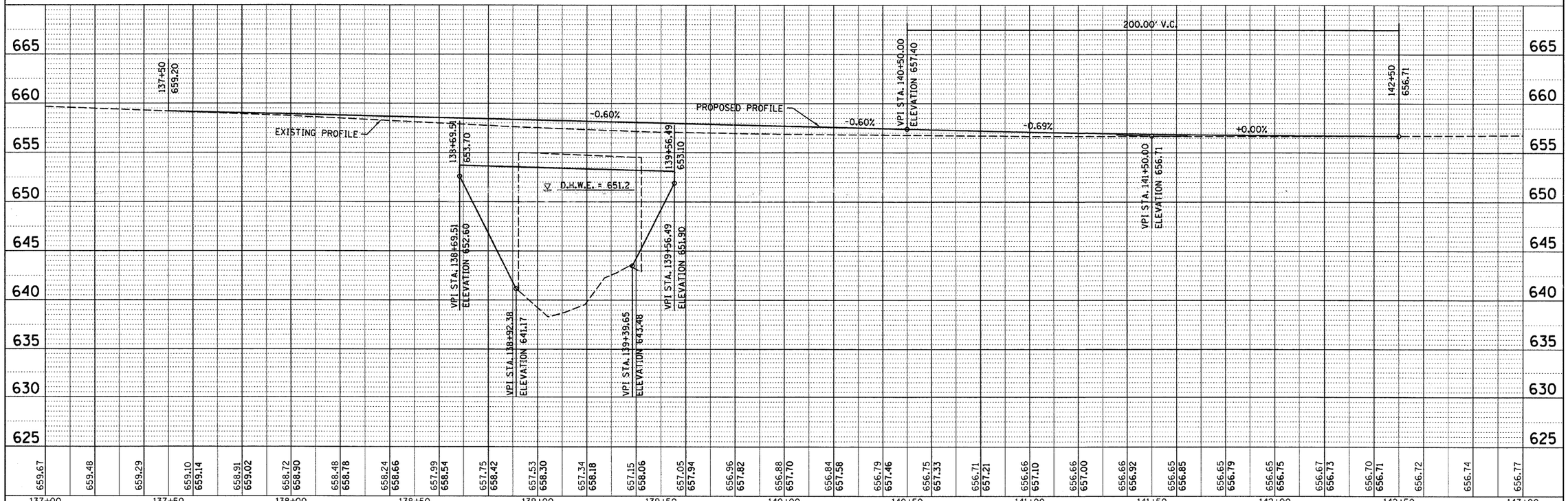
PLAN PROFILE SHEET

SCALE: 20 | SHEET NO. 1 OF 2 SHEETS | STA. 131+00 | TO STA. 137+00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	(102BY)B-1	MOULTRIE	48	9
		CONTRACT NO. 74280		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



* PAID FOR AS HMA BINDER AND SURFACE COURSE



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	PLOT DATE = 8/9/2011	CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN PROFILE SHEET

SCALE: 20 | SHEET NO. 2 OF 2 SHEETS | STA. 137+00 | TO STA. 143+00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	(102BY)B-1	MOULTRIE	48	10
		CONTRACT NO. 74280		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PLAN — SURVEYED / PLOTTED / ALIGNMENT CHECKED / GRADES CHECKED / CADD FILE NAME / NOTE BOOK / NO. / DATE / BY

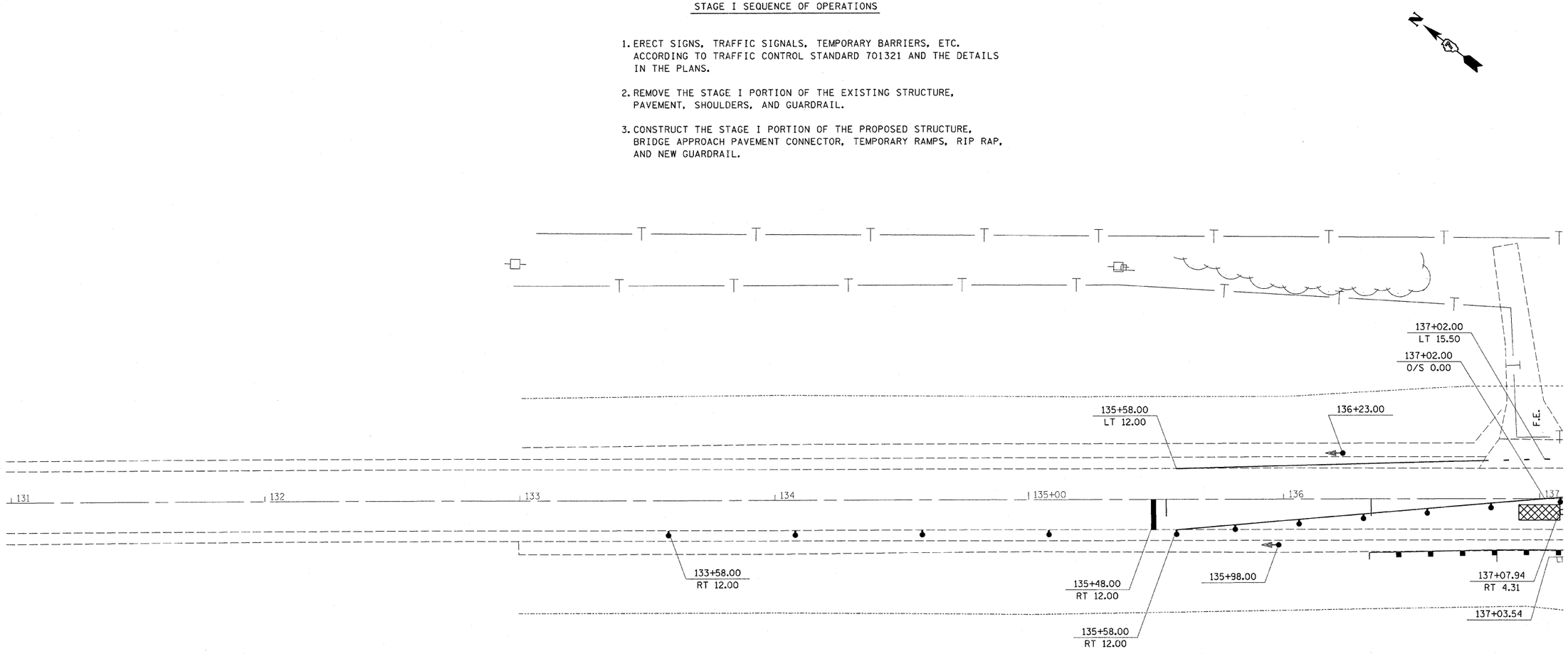
PROFILE — SURVEYED / PLOTTED / GRADES CHECKED / ALIGNMENT CHECKED / STRUCTURE NO(S) CHKD / NOTE BOOK / NO. / DATE / BY

STAGE I SEQUENCE OF OPERATIONS

1. ERECT SIGNS, TRAFFIC SIGNALS, TEMPORARY BARRIERS, ETC. ACCORDING TO TRAFFIC CONTROL STANDARD 701321 AND THE DETAILS IN THE PLANS.

2. REMOVE THE STAGE I PORTION OF THE EXISTING STRUCTURE, PAVEMENT, SHOULDERS, AND GUARDRAIL.

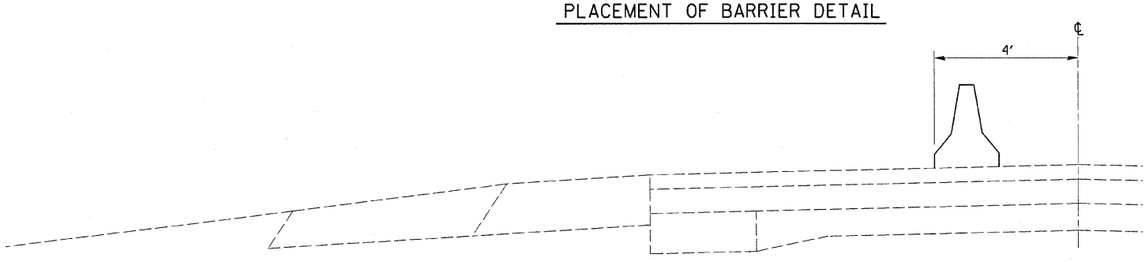
3. CONSTRUCT THE STAGE I PORTION OF THE PROPOSED STRUCTURE, BRIDGE APPROACH PAVEMENT CONNECTOR, TEMPORARY RAMPS, RIP RAP, AND NEW GUARDRAIL.



LEGEND

- TEMPORARY BRIDGE TRAFFIC SIGNALS
- IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE) TEST LEVEL 3
- TEMPORARY CONCRETE BARRIER
- STOP BAR

PLACEMENT OF BARRIER DETAIL



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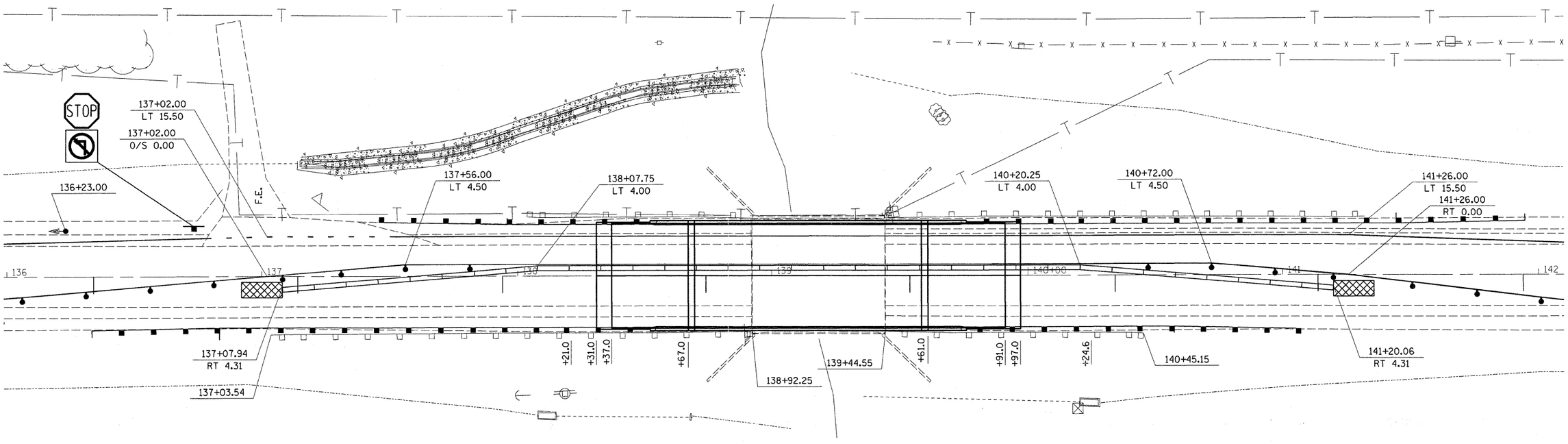
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE I CONSTRUCTION

SCALE: 20 | SHEET NO. 1 OF 3 SHEETS | STA. 131+00 | TO STA. 137+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	(102BY)B-1	MOULTRIE	48	11
		CONTRACT NO. 74280		
	ILLINOIS FED. AID PROJECT			



LEGEND

- TEMPORARY BRIDGE TRAFFIC SIGNALS
- IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE) TEST LEVEL 3
- TEMPORARY CONCRETE BARRIER
- STOP BAR

TEMPORARY CONCRETE BARRIER

137+08 TO 138+08	100.0 FOOT
138+08 TO 140+20	212.5 FOOT
140+20 TO 141+20	100.0 FOOT
TOTAL =	413.0 FOOT

IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3

137+08	1.0 EACH
141+20	1.0 EACH
TOTAL =	2.0 EACH

TEMPORARY BRIDGE TRAFFIC SIGNALS

S.N. 070-0050	1.0 EACH
TOTAL =	1.0 EACH

PAVEMENT REMOVAL

138+31 TO 138+92	118.6 SQ YD
139+45 TO 139+97	101.1 SQ YD
TOTAL =	220.0 SQ YD

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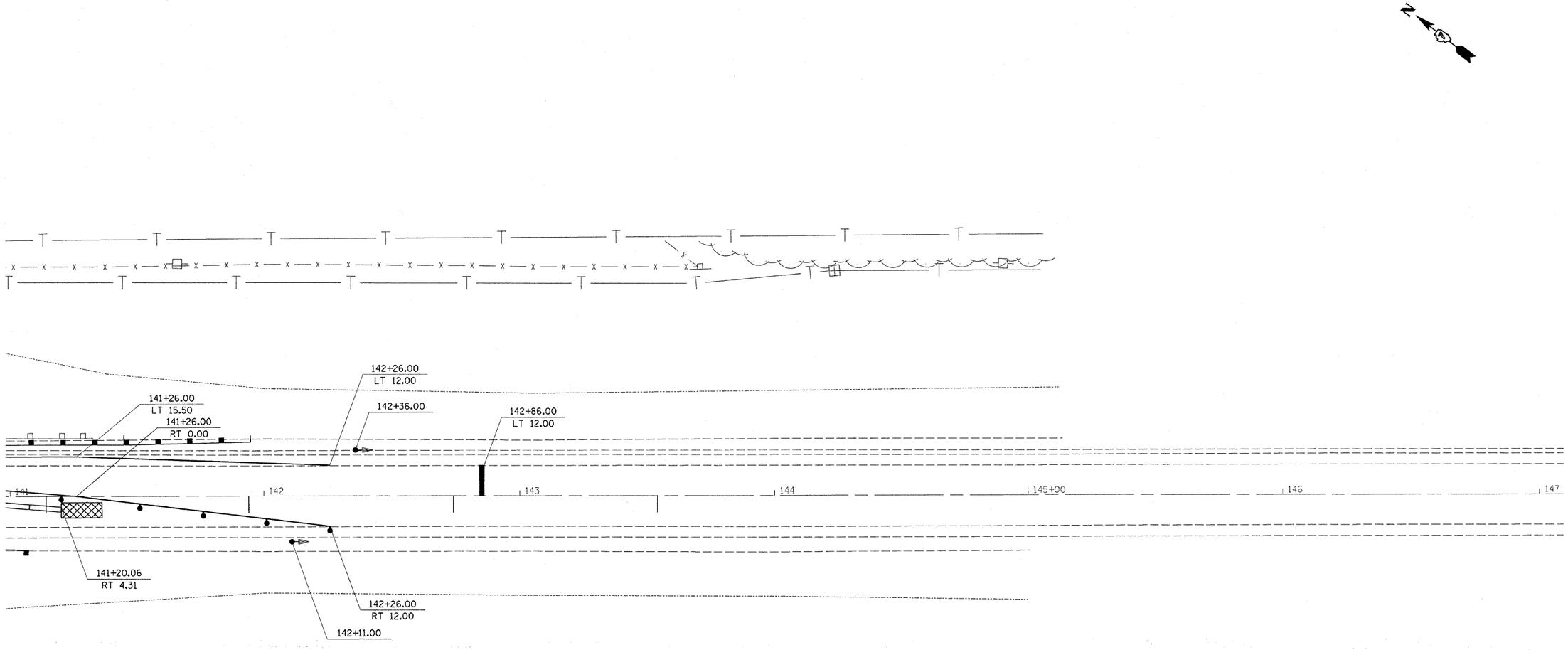
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE I CONSTRUCTION

SCALE: 20 | SHEET NO. 2 OF 3 SHEETS | STA. 137+00 | TO STA. 142+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	(102BY)B-1	MOULTRIE	48	12
		CONTRACT NO. 74280		
		ILLINOIS FED. AID PROJECT		



LEGEND

- TEMPORARY BRIDGE TRAFFIC SIGNALS
- IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE) TEST LEVEL 3
- TEMPORARY CONCRETE BARRIER
- STOP BAR

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE I CONSTRUCTION

SCALE: 20 | SHEET NO. 3 OF 3 SHEETS | STA. 141+00 | TO STA. 147+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	(102BY)B-1	MOULTRIE	48	13
		CONTRACT NO. 74280		
	ILLINOIS	FED. AID PROJECT		

STAGE II SEQUENCE OF OPERATIONS

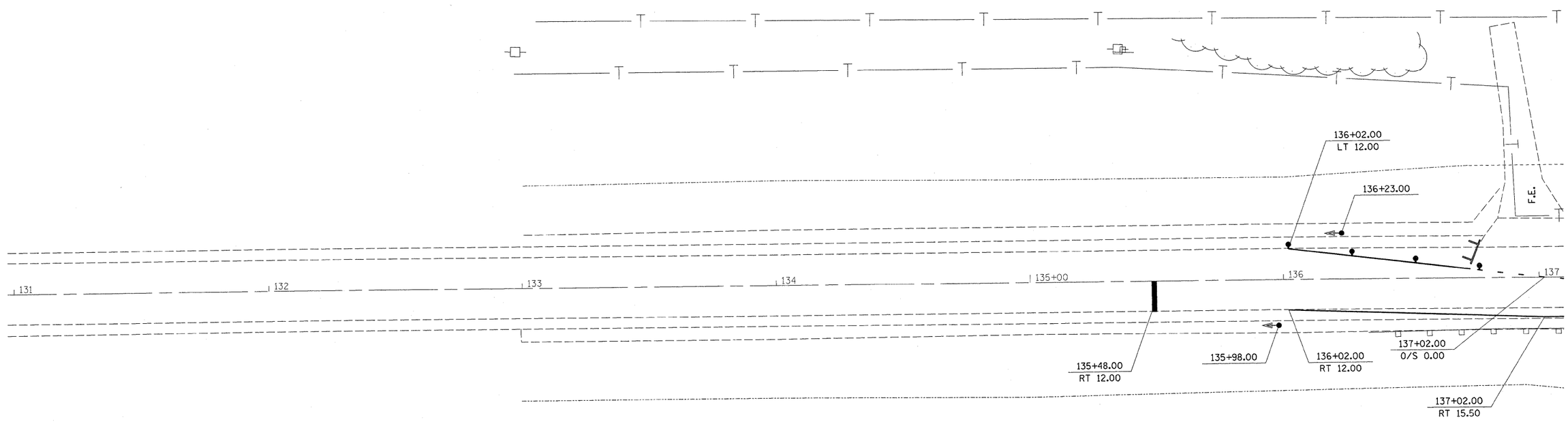
1. RELOCATE TEMPORARY CONCRETE BARRIERS, SIGNS, ETC. ACCORDING TO TRAFFIC CONTROL STANDARD 701321 AND THE DETAILS IN THE PLANS.

2. REMOVE THE STAGE II PORTION OF THE EXISTING STRUCTURE, PAVEMENT, SHOULDERS, AND GUARDRAIL.

3. CONSTRUCT THE STAGE II PORTION OF THE STRUCTURE, BRIDGE APPROACH PAVENT CONNECTOR, TEMPORARY RAMPS, RIP RAP, AND NEW GUARDRAIL. REMOVE TRAFFIC CONTROL STANDARD 701321.

4. COMPLETE ALL HOT-MIX ASPHALT RESURFACING. CONSTRUCT HOT-MIX ASPHALT AND AGGREGATE SHOULDERS. COMPLETE EARTHWORK.

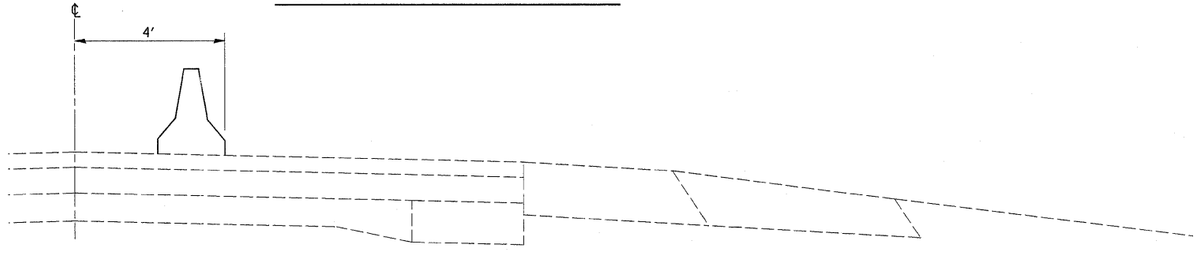
5. CONSTRUCT SEEDING, PAVEMENT MARKING, AND ANY OTHER WORK NECESSARY TO COMPLETE THE PROJECT.



LEGEND

- TEMPORARY BRIDGE TRAFFIC SIGNALS
- IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE) TEST LEVEL 3
- TEMPORARY CONCRETE BARRIER
- STOP BAR
- IMPACT ATTENUATOR, TEMPORARY (FULLY-REDIRECTIVE, NARROW) TEST LEVEL 3
- TYPE III BARRICADE

PLACEMENT OF BARRIER DETAIL



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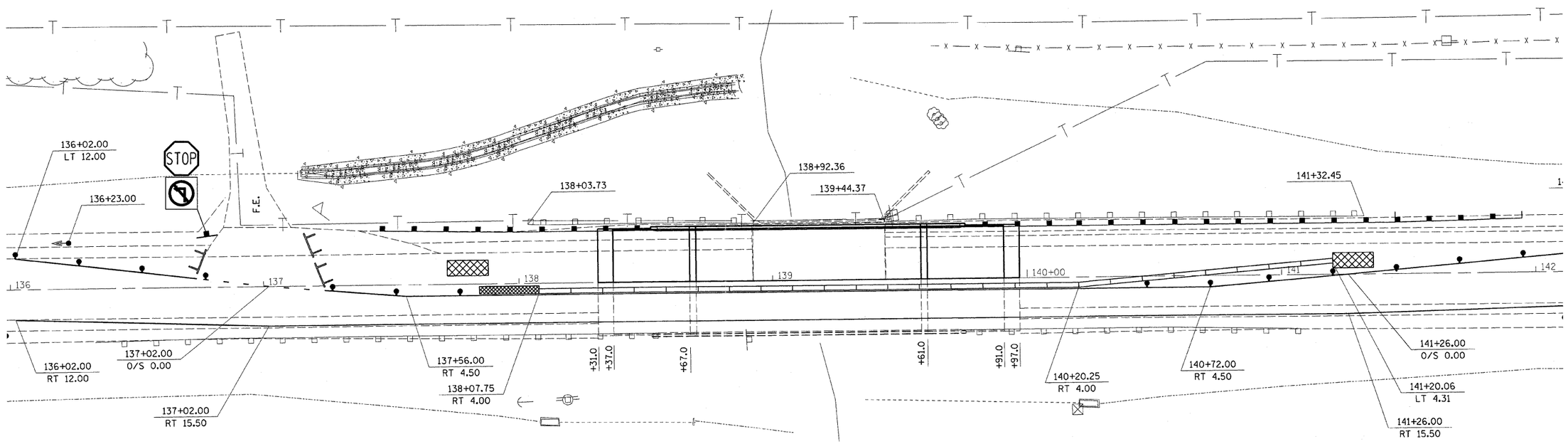
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE II CONSTRUCTION

SCALE: 20 | SHEET NO. 1 OF 3 SHEETS | STA. 131+00 | TO STA. 137+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	(102BY)B-1	MOULTRIE	48	14
		CONTRACT NO. 74280		
		ILLINOIS FED. AID PROJECT		



LEGEND

TEMPORARY BRIDGE TRAFFIC SIGNALS

IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE) TEST LEVEL 3

TEMPORARY CONCRETE BARRIER

STOP BAR

IMPACT ATTENUATOR, TEMPORARY (FULLY-REDIRECTIVE, NARROW) TEST LEVEL 3

TYPE III BARRICADE

RELOCATE TEMPORARY CONCRETE BARRIER

138+08 TO 140+20	212.5 FOOT
140+20 TO 141+26	100.0 FOOT
TOTAL =	312.5 FOOT

IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3

137+75	1.0 EACH
141+26	1.0 EACH
TOTAL =	2.0 EACH

IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3

138+08	1.0 EACH
TOTAL =	1.0 EACH

PAVEMENT REMOVAL

138+31 TO 138+92	98.3 SQ YD
139+45 TO 139+97	83.8 SQ YD
TOTAL =	182.0 SQ YD

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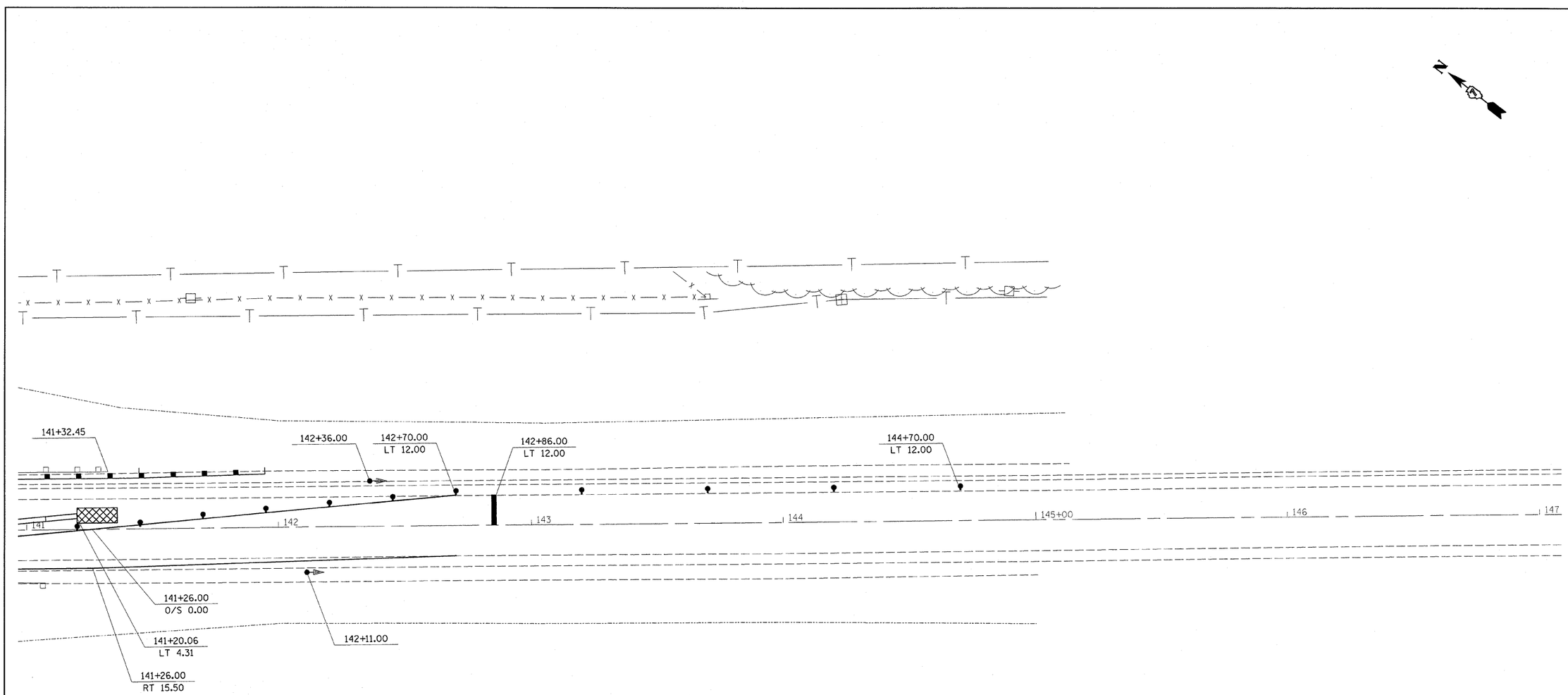
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE II CONSTRUCTION

SCALE: 20 | SHEET NO. 2 OF 3 SHEETS | STA. 136+00 | TO STA. 142+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	(102BY)B-1	MOULTRIE	48	15
		CONTRACT NO. 74280		
	ILLINOIS	FED. AID PROJECT		



LEGEND

- TEMPORARY BRIDGE TRAFFIC SIGNALS
- IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE) TEST LEVEL 3
- TEMPORARY CONCRETE BARRIER
- STOP BAR
- IMPACT ATTENUATOR, TEMPORARY (FULLY-REDIRECTIVE, NARROW) TEST LEVEL 3
- TYPE III BARRICADE

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE II CONSTRUCTION

SCALE: 20 | SHEET NO. 3 OF 3 SHEETS | STA. 141+00 | TO STA. 147+00

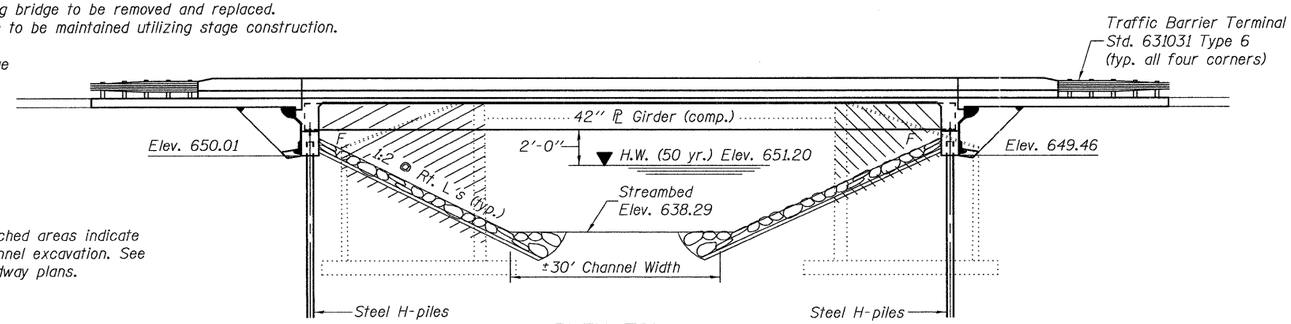
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	(102BY)B-1	MOULTRIE	48	16
		CONTRACT NO. 74280		
		ILLINOIS FED. AID PROJECT		

Bench Mark: #201 Chiseled square on top of Southwest Wingwall of Structure 070-0001
Station 139+44; 23.4' Lt. Elevation 657.57

Existing Structure: S.N. 070-0001 Built 1930 as SBI Route 132, Section 102 at Station 139+30 as a reinforced concrete T-beam bridge, 53'-2" Bk. to Bk. closed abutments supported on untreated timber piles. In 1970, bridge widening & superstructure replacement with PPC deck beams. Existing bridge to be removed and replaced.

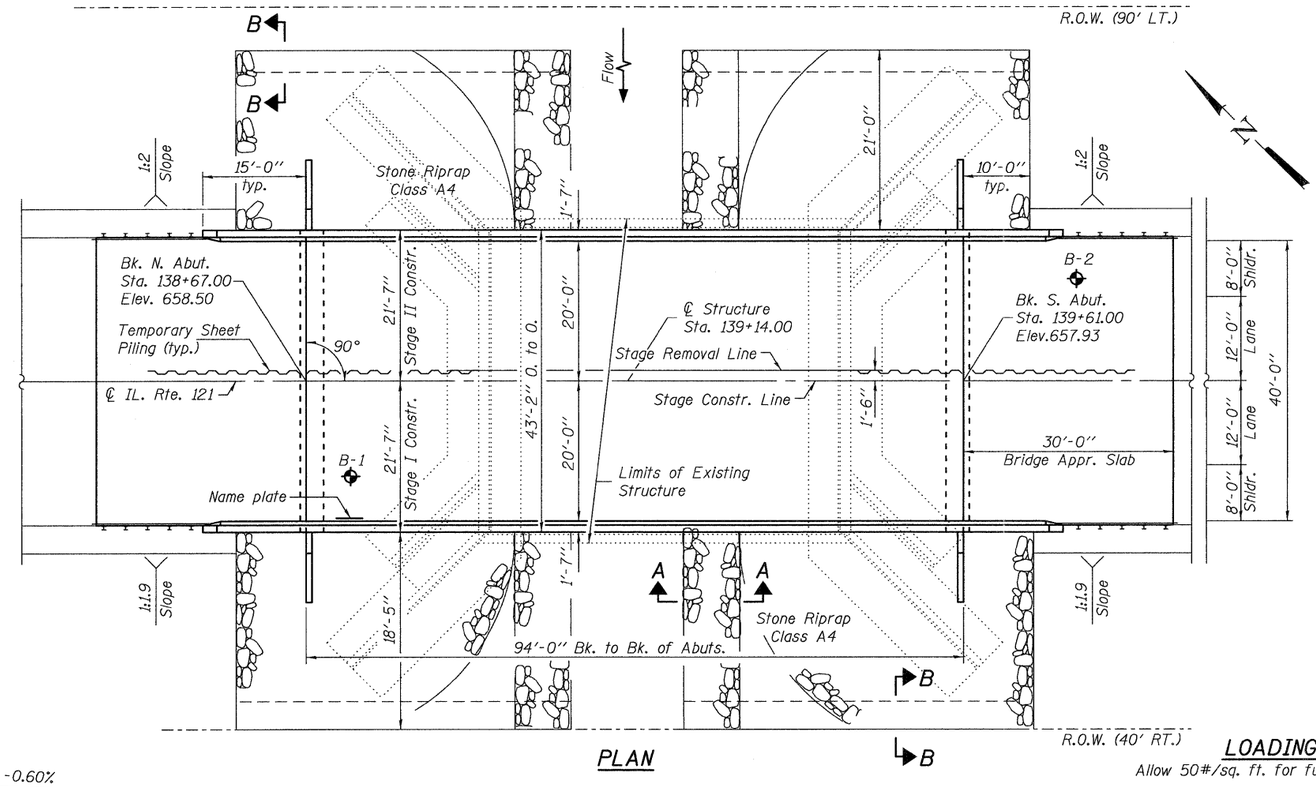
Traffic to be maintained utilizing stage construction.

No salvage

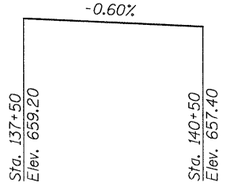


Note: Hatched areas indicate channel excavation. See roadway plans.

ELEVATION



PLAN



PROFILE GRADE
(IL. Rte. 121)

EXPIRES 11-30-2010

WATERWAY INFORMATION

Proposed Low Grade Elev. 656.66 @ Sta. 141+50.00
Existing Low Grade Elev. 656.66 @ Sta. 114+50.00
Drainage Area = 17.1 sq. mi.

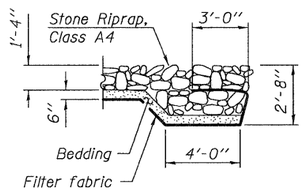
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	1175	454	565	649.7	0	0	649.7	649.7
Design	50	2873	529	689	651.2	0.1	0	651.3	651.2
Base	100	3364	554	732	651.8	0.2	0	652.0	651.8
Overtopping Max. Calc.	500	4566	618	848	653.0	0.5	0.1	653.5	653.1

10 yr. velocity thru exist. bridge = 3.97 cfs
10 yr. velocity thru prop. bridge = 3.24 cfs

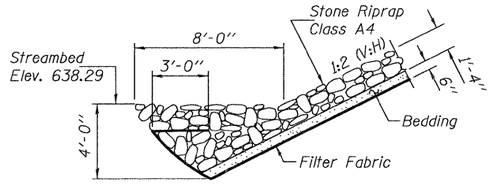
INDEX OF SHEETS

STATION 139+14.00
BUILT 20 BY
STATE OF ILLINOIS
F.A.P. RTE. 320 SEC. (102BY)B-1
LOADING HL93
STRUCTURE NO. 070-0050

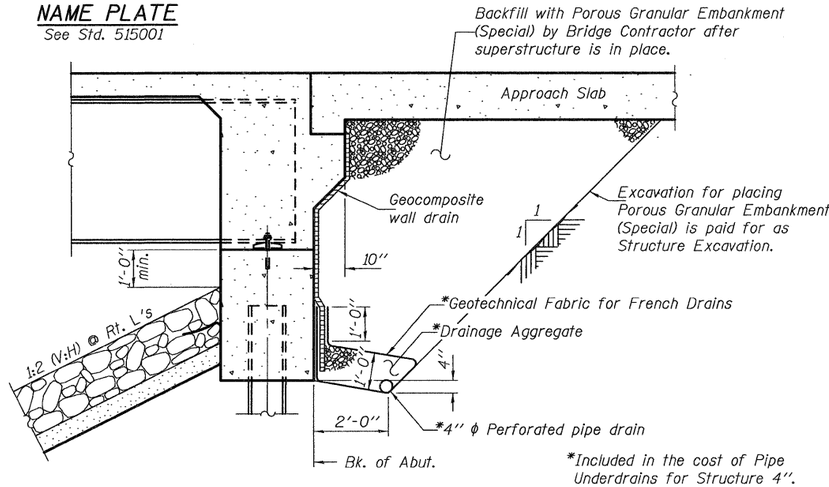
NAME PLATE
See Std. 515001



SECTION B-B



SECTION A-A



*Included in the cost of Pipe Underdrains for Structure 4".

SECTION THRU INTEGRAL ABUTMENT

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

LOADING HL 93

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

DESIGN SPECIFICATIONS

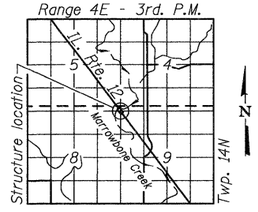
2007 LRFD Bridge Design Specifications, 4th. Edition

DESIGN STRESSES

f'_c = 3,500 psi
f_y = 60,000 psi (reinforcement)
f_y = 50,000 psi (structural steel)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Bedrock Acceleration Coefficient (A) = 4.95%g
Site Coefficient (S) = 1.0



LOCATION SKETCH

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (feet)	North Abut.	South Abut.
	650.01	649.46

GENERAL PLAN & ELEVATION
IL. RTE. 121 OVER MARROWBONE CREEK
F.A.P. RTE. 320 - SEC. (102BY)B-1
MOULTRIE COUNTY
STATION 139+14.00
STRUCTURE NO. 070-0050

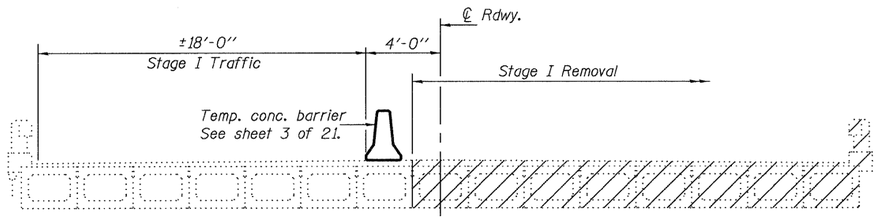
DESIGNED	Stephen M Ryan	EXAMINED	Thomas Domagalski
CHECKED	Fessehaa Tekle-Giwargis	DATE	10/11/2011
DRAWN	h.t. duong	PASSED	
CHECKED	SMR/FT		

ENGINEER OF BRIDGE DESIGN
ENGINEER OF BRIDGES AND STRUCTURES

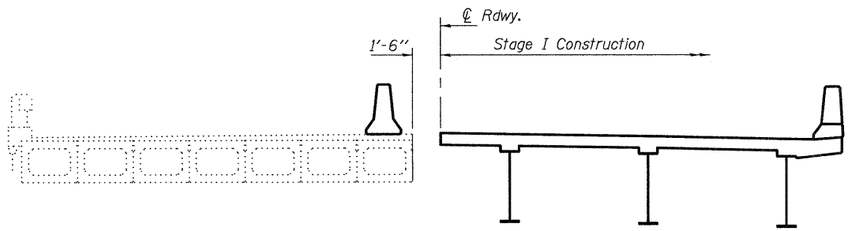
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
STRUCTURE NO. 070-0050
SHEET NO. 1 OF 21 SHEETS

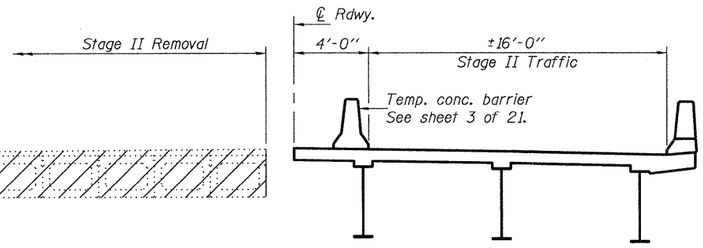
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	(102BY)B-1	MOULTRIE	48	17
		CONTRACT NO. 74280		
		ILLINOIS FED. AID PROJECT		



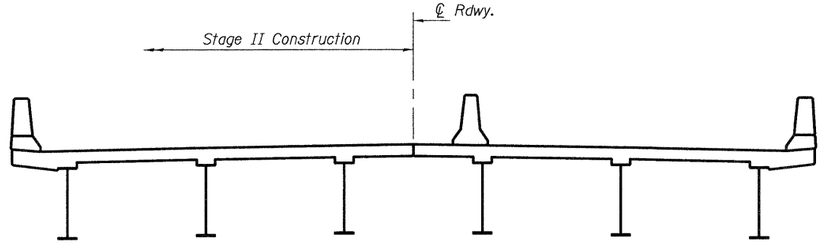
STAGE I REMOVAL



STAGE I CONSTRUCTION

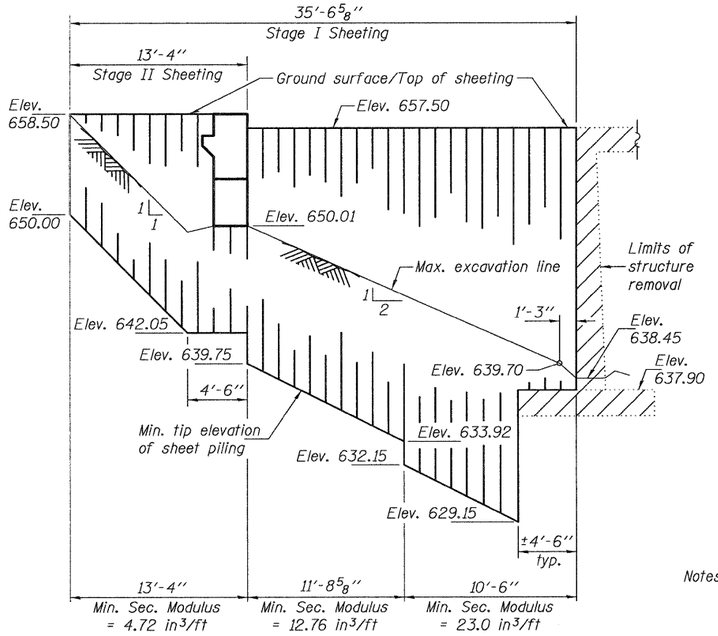


STAGE II REMOVAL

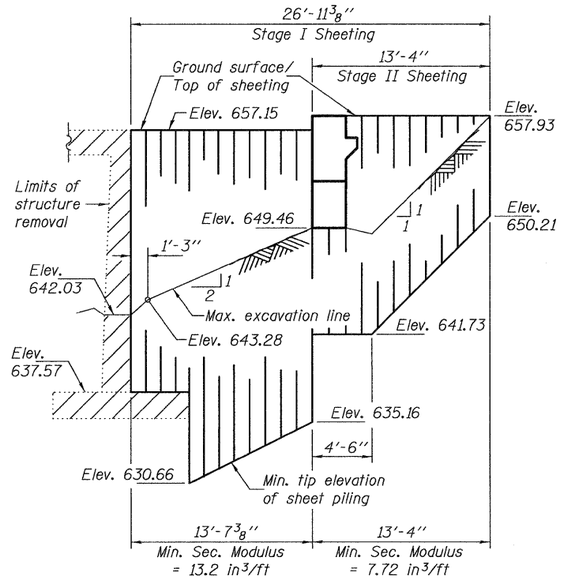


STAGE II CONSTRUCTION

Notes: Hatched areas indicate removal of existing structures.
For quantity of temporary concrete barrier, see Roadway Plans.
All cross sections are looking south.



TEMPORARY SHEET PILING AT NORTH ABUT.



TEMPORARY SHEET PILING AT SOUTH ABUT.

Notes: If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.

The Contractor shall connect the first sheet to the existing abutment wall to ensure stability of sheets driven to the top of the existing footing. This connection shall be reviewed and accepted by the Engineer and included in the cost for Temporary Sheet Piling.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment (Special)	Cu. Yd.		156	156
Stone Riprap, Class A4	Ton		749	749
Filter Fabric	Sq. Yd.		832.6	832.6
Removal of Existing Structures	Each			1
Structure Excavation	Cu. Yd.		92	92
Concrete Structures	Cu. Yd.		65.2	65.2
Concrete Superstructure	Cu. Yd.	290.3		290.3
Bridge Deck Grooving	Sq. Yd.	650		650
Protective Coat	Sq. Yd.	797		797
Furnishing and Erecting Structural Steel	L. Sum	1		1
Stud Shear Connectors	Each	1368		1368
Reinforcement Bars, Epoxy Coated	Pound	67740	4240	71980
Bar Splicers	Each	578	98	676
Furnishing Steel Piles HP12x63	Foot		760	760
Driving Piles	Foot		760	760
Test Pile Steel HP12x63	Each		2	2
Temporary Sheet Piling	Sq. Ft.		1165	1165
Name Plates	Each	1		1
Anchor Bolt 1″	Each	24		24
Geocomposite Wall Drain	Sq. Yd.		96.2	96.2
Pipe Underdrains for Structures, 4″	Foot		168.0	168.0
Concrete Encasement	Cu. Yd.		4.2	4.2
Asbestos Bearing Pad Removal	Each		30	30

GENERAL NOTES

Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts 3/4″ ϕ, holes 15/16″ ϕ, unless otherwise noted.

Calculated weight of Structural Steel = 117990 lbs. (Grade 50)
9190 lbs. (Grade 36)

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

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

Reinforcement bars designated (E) shall be epoxy coated.

The Inorganic Zinc Rich Primer/Acrylic/Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the final finish coat for all interior steel surfaces shall be gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be gray, Munsell 5B 7/1. See Special Provision for "Cleaning and Painting New Metal Structures".

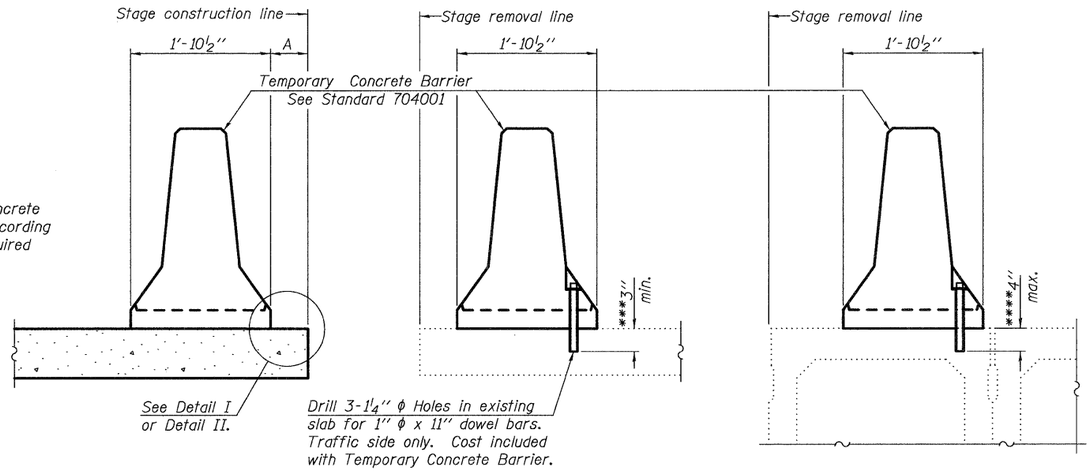
Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.

Slipforming of the parapet is not allowed.

The Contractor is advised that the existing PPC Deck Beams are in a deteriorated condition with reduced load carrying capacity. It is the contractors responsibility to account for the condition of the beams when developing construction procedures for removal and replacement of the superstructure.

DESIGNED - Stephen M. Ryan	EXAMINED Thomas J. Domagalski	DATE - 10/11/2011	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL DATA & STAGE CONSTRUCTION DETAILS STRUCTURE NO. 070-0050	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - F. Tekiehaimanot	ENGINEER OF BRIDGE DESIGN				320	(102BY)B-1	MOULTRIE	43	18
DRAWN - h.t. duong	PASSED Carl Lang			SHEET NO. 2 OF 21 SHEETS			CONTRACT NO. 74280		
CHECKED - SMR/FT	ENGINEER OF BRIDGES AND STRUCTURES						ILLINOIS FED. AID PROJECT		

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 | EXISTING DECK BEAM

NOTES

Detail I - With Bar Splicer or Couplers:
Connect one (1) 1" x 7" x "W" steel ℙ to the top layer of couplers with 2-⅝" ϕ bolts screwed to coupler at approximate ℄ of each barrier panel.

Detail II - With Extended Reinforcement Bars:
Connect one (1) 1" x 7" x "W" steel ℙ to the concrete slab or concrete wearing surface with 2-⅝" ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate ℄ of each barrier panel.

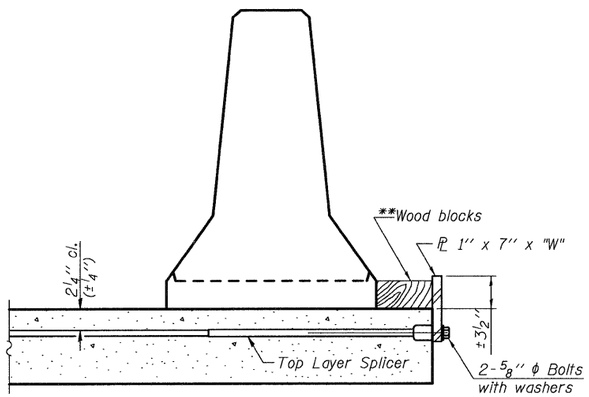
Cost of anchorage is included with Temporary Concrete Barrier.

The 1" x 7" x "W" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

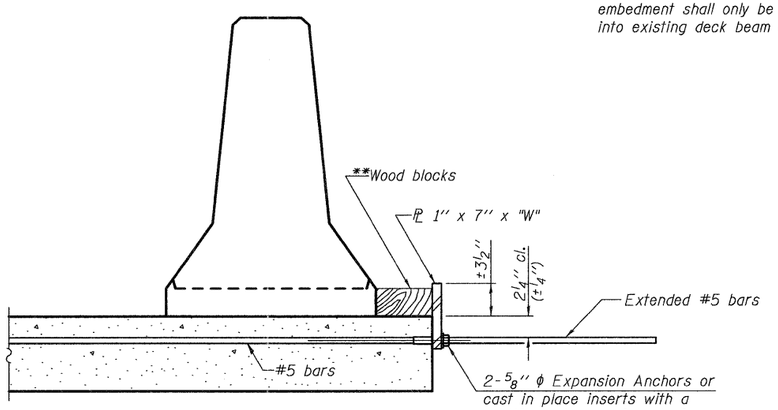
SECTIONS THRU SLAB OR DECK BEAM

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

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



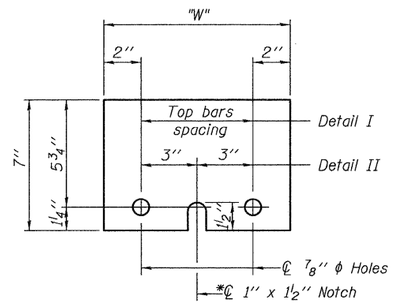
DETAIL I



DETAIL II

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

"W" = Top bars spacing + 4"

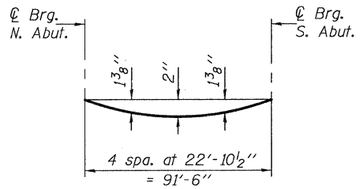


STEEL RETAINER ℙ 1" x 7" x "W"

* Required only with Detail II

R-27 7-1-10

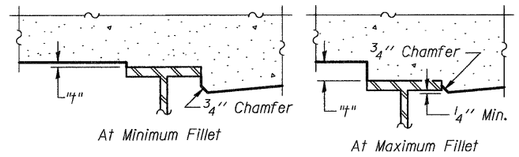
DESIGNED - Stephen M. Ryan	EXAMINED	Thomas J. Domagalski ENGINEER OF BRIDGE DESIGN	DATE - 10/11/2011	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION STRUCTURE NO. 070-0050	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - F. Teklehaimanot						320	(102BY)B-1	MOULTRIE	48	19
DRAWN - h.t. duong	PASSED	A. Carl Prussog ENGINEER OF BRIDGES AND STRUCTURES						CONTRACT NO. 74280		
CHECKED - SMR/FT					SHEET NO. 3 OF 21 SHEETS			ILLINOIS FED. AID PROJECT		



DEAD LOAD DEFLECTION DIAGRAM

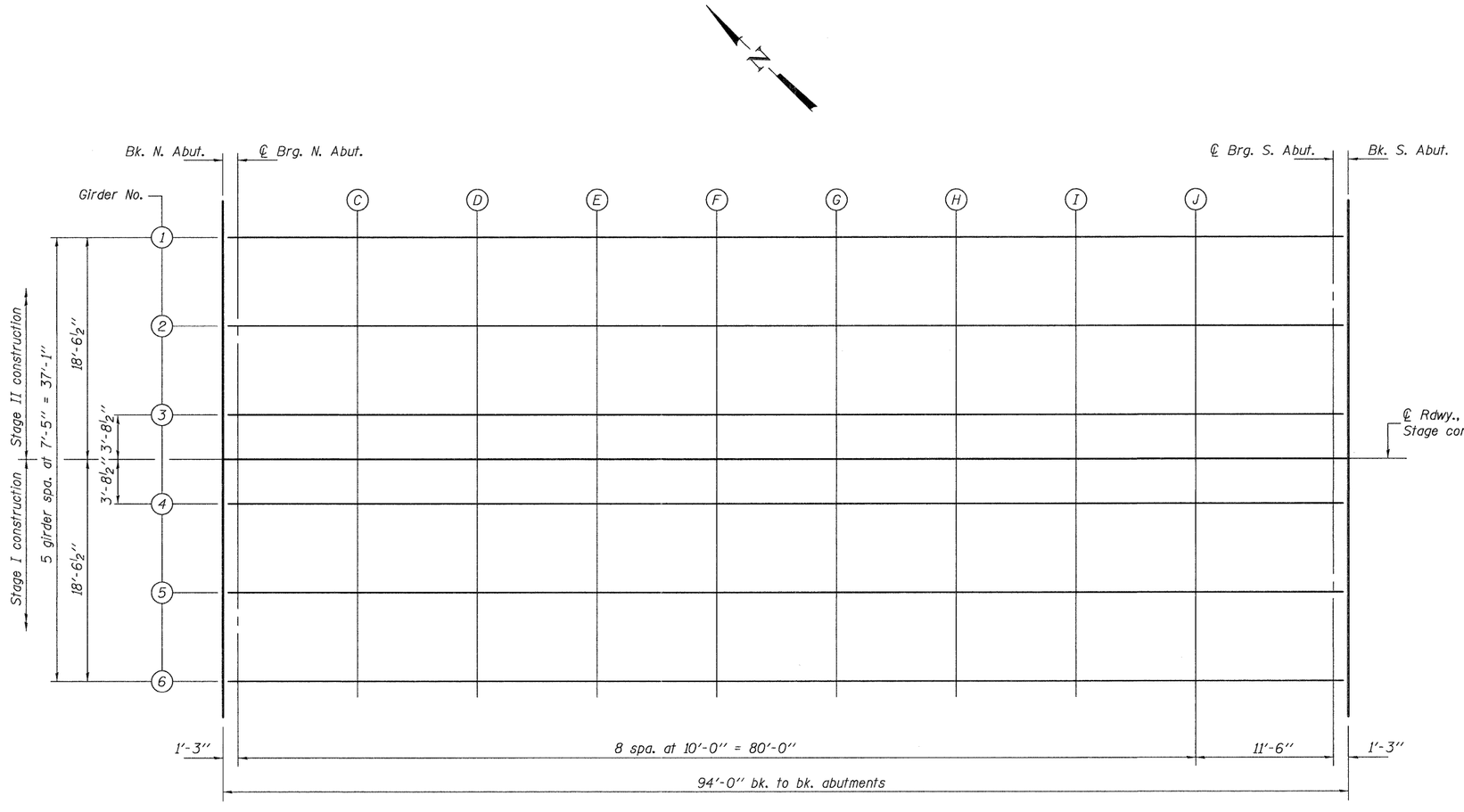
(Includes weight of concrete only.)

Note: The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on sheet 5 of 21.



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on sheet 5 of 21, minus 8" deck thickness, equals the fillet heights "t" above top flange of girders.

FILLET HEIGHTS



PLAN

DESIGNED - Stephen M. Ryan	EXAMINED	Thomas J. Domagalski	DATE - 10/11/2011	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TOP OF SLAB ELEVATIONS STRUCTURE NO. 070-0050	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - F. Teklehalmanot		ENGINEER OF BRIDGE DESIGN				320	(102BY)B-1	MOULTRIE	43	20
DRAWN - h.t. duong	PASSED	Carl Puzey			SHEET NO. 4 OF 21 SHEETS			CONTRACT NO. 74280		
CHECKED - SMR/FT		ENGINEER OF BRIDGES AND STRUCTURES						ILLINOIS FED. AID PROJECT		

GIRDER 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. N. ABUT.	13867.00	-18.54	658.17	658.17
CL. BRG. N. ABUT.	13868.25	-18.54	658.17	658.17
C	13878.25	-18.54	658.11	658.16
D	13888.25	-18.54	658.05	658.15
E	13898.25	-18.54	657.99	658.12
F	13908.25	-18.54	657.93	658.08
G	13918.25	-18.54	657.87	658.03
H	13928.25	-18.54	657.81	657.94
I	13938.25	-18.54	657.75	657.86
J	13948.25	-18.54	657.69	657.75
CL. BRG. S. ABUT.	13959.75	-18.54	657.62	657.62
BK. S. ABUT.	13961.00	-18.54	657.61	657.61

GIRDER 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. N. ABUT.	13867.00	-11.13	658.32	658.32
CL. BRG. N. ABUT.	13868.25	-11.13	658.32	658.32
C	13878.25	-11.13	658.26	658.31
D	13888.25	-11.13	658.20	658.30
E	13898.25	-11.13	658.14	658.27
F	13908.25	-11.13	658.08	658.23
G	13918.25	-11.13	658.02	658.18
H	13928.25	-11.13	657.96	658.09
I	13938.25	-11.13	657.90	658.01
J	13948.25	-11.13	657.84	657.90
CL. BRG. S. ABUT.	13959.75	-11.13	657.77	657.77
BK. S. ABUT.	13961.00	-11.13	657.76	657.76

GIRDER 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. N. ABUT.	13867.00	-3.71	658.44	658.44
CL. BRG. N. ABUT.	13868.25	-3.71	658.43	658.43
C	13878.25	-3.71	658.37	658.42
D	13888.25	-3.71	658.31	658.42
E	13898.25	-3.71	658.25	658.39
F	13908.25	-3.71	658.19	658.35
G	13918.25	-3.71	658.13	658.29
H	13928.25	-3.71	658.07	658.21
I	13938.25	-3.71	658.01	658.12
J	13948.25	-3.71	657.95	658.01
CL. BRG. S. ABUT.	13959.75	-3.71	657.88	657.88
BK. S. ABUT.	13961.00	-3.71	657.88	657.88

℄ ROADWAY, PROFILE GRADE & STAGE CONST. JOINT

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. N. ABUT.	13867.00	0.00	658.50	658.50
CL. BRG. N. ABUT.	13868.25	0.00	658.49	658.49
C	13878.25	0.00	658.43	658.48
D	13888.25	0.00	658.37	658.47
E	13898.25	0.00	658.31	658.44
F	13908.25	0.00	658.25	658.41
G	13918.25	0.00	658.19	658.35
H	13928.25	0.00	658.13	658.27
I	13938.25	0.00	658.07	658.18
J	13948.25	0.00	658.01	658.07
CL. BRG. S. ABUT.	13959.75	0.00	657.94	657.94
BK. S. ABUT.	13961.00	0.00	657.93	657.93

GIRDER 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. N. ABUT.	13867.00	3.71	658.44	658.44
CL. BRG. N. ABUT.	13868.25	3.71	658.43	658.43
C	13878.25	3.71	658.37	658.42
D	13888.25	3.71	658.31	658.42
E	13898.25	3.71	658.25	658.39
F	13908.25	3.71	658.19	658.35
G	13918.25	3.71	658.13	658.29
H	13928.25	3.71	658.07	658.21
I	13938.25	3.71	658.01	658.12
J	13948.25	3.71	657.95	658.01
CL. BRG. S. ABUT.	13959.75	3.71	657.88	657.88
BK. S. ABUT.	13961.00	3.71	657.88	657.88

GIRDER 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. N. ABUT.	13867.00	11.13	658.32	658.32
CL. BRG. N. ABUT.	13868.25	11.13	658.32	658.32
C	13878.25	11.13	658.26	658.31
D	13888.25	11.13	658.20	658.30
E	13898.25	11.13	658.14	658.27
F	13908.25	11.13	658.08	658.23
G	13918.25	11.13	658.02	658.18
H	13928.25	11.13	657.96	658.09
I	13938.25	11.13	657.90	658.01
J	13948.25	11.13	657.84	657.90
CL. BRG. S. ABUT.	13959.75	11.13	657.77	657.77
BK. S. ABUT.	13961.00	11.13	657.76	657.76

GIRDER 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. N. ABUT.	13867.00	18.54	658.17	658.17
CL. BRG. N. ABUT.	13868.25	18.54	658.17	658.17
C	13878.25	18.54	658.11	658.16
D	13888.25	18.54	658.05	658.15
E	13898.25	18.54	657.99	658.12
F	13908.25	18.54	657.93	658.08
G	13918.25	18.54	657.87	658.03
H	13928.25	18.54	657.81	657.94
I	13938.25	18.54	657.75	657.86
J	13948.25	18.54	657.69	657.75
CL. BRG. S. ABUT.	13959.75	18.54	657.62	657.62
BK. S. ABUT.	13961.00	18.54	657.61	657.61

DESIGNED - Stephen M. Ryan	EXAMINED Thomas J. Domagalski	DATE - 10/11/2011	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**TOP OF SLAB ELEVATIONS STRUCTURE NO. 070-0050**	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - F. Teklehaimanot	ENGINEER OF BRIDGE DESIGN				320	(102BY)B-1	MOULTRIE	43	21
DRAWN - h.t. duong	PASSED R. Carl Long						CONTRACT NO. 74280		
CHECKED - SMR/FT	ENGINEER OF BRIDGES AND STRUCTURES			SHEET NO. 5 OF 21 SHEETS		ILLINOIS	FED. AID PROJECT		

EAST CURB LINE

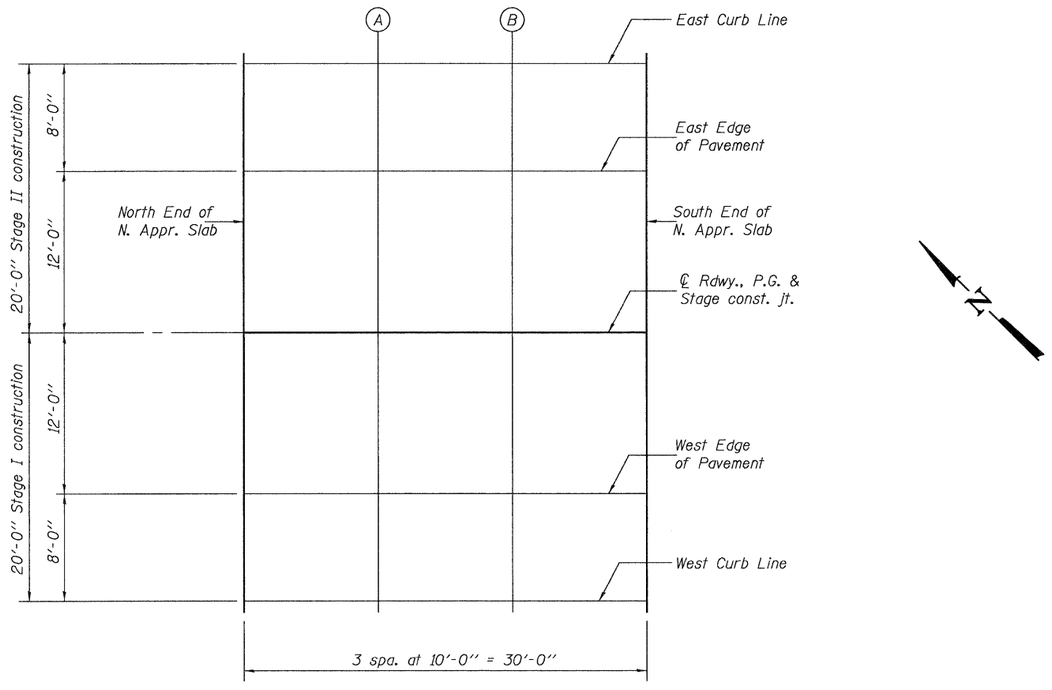
Location	Station	Offset	Theoretical Grade Elevations
North End of N. Appr. Slab	13837.00	-20.00	658.32
A	13847.00	-20.00	658.26
B	13857.00	-20.00	658.20
South End of N. Appr. Slab	13867.00	-20.00	658.14

EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
North End of N. Appr. Slab	13837.00	-12.00	658.49
A	13847.00	-12.00	658.43
B	13857.00	-12.00	658.37
South End of N. Appr. Slab	13867.00	-12.00	658.31

℄ ROADWAY, P.G. & STAGE CONST. JOINT

Location	Station	Offset	Theoretical Grade Elevations
North End of N. Appr. Slab	13837.00	0.00	658.68
A	13847.00	0.00	658.62
B	13857.00	0.00	658.56
South End of N. Appr. Slab	13867.00	0.00	658.50



PLAN

WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
North End of N. Appr. Slab	13837.00	12.00	658.49
A	13847.00	12.00	658.43
B	13857.00	12.00	658.37
South End of N. Appr. Slab	13867.00	12.00	658.31

WEST CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
North End of N. Appr. Slab	13837.00	20.00	658.32
A	13847.00	20.00	658.26
B	13857.00	20.00	658.20
South End of N. Appr. Slab	13867.00	20.00	658.14

DESIGNED -	Stephen M. Ryan	EXAMINED	Thomas J. Domagalski, ENGINEER OF BRIDGE DESIGN
CHECKED -	F. Teklehalmanot	PASSED	ENGINEER OF BRIDGES AND STRUCTURES
DRAWN -	h.t. duong	DATE -	10/11/2011
CHECKED -	SMR/FT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF NORTH APPROACH SLAB ELEVATIONS
STRUCTURE NO. 070-0050
SHEET NO. 6 OF 21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	(102BY)B-1	MOULTRIE	18	22
		CONTRACT NO. 74280		
	ILLINOIS FED. AID PROJECT			

EAST CURB LINE

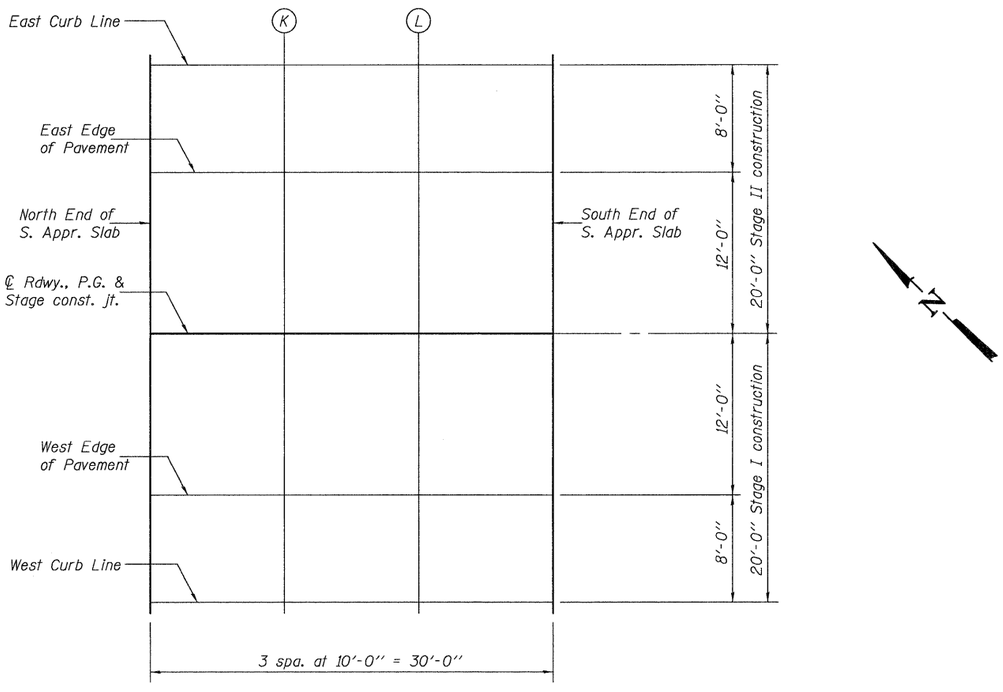
Location	Station	Offset	Theoretical Grade Elevations
North End of S. Appr. Slab	13961.00	-20.00	657.58
K	13971.00	-20.00	657.52
L	13981.00	-20.00	657.46
South End of S. Appr. Slab	13991.00	-20.00	657.40

EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
North End of S. Appr. Slab	13961.00	-12.00	657.75
K	13971.00	-12.00	657.69
L	13981.00	-12.00	657.63
South End of S. Appr. Slab	13991.00	-12.00	657.57

℄ ROADWAY, P.G. & STAGE CONST. JOINT

Location	Station	Offset	Theoretical Grade Elevations
North End of S. Appr. Slab	13961.00	0.00	657.93
K	13971.00	0.00	657.87
L	13981.00	0.00	657.81
South End of S. Appr. Slab	13991.00	0.00	657.75



PLAN

WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
North End of S. Appr. Slab	13961.00	12.00	657.75
K	13971.00	12.00	657.69
L	13981.00	12.00	657.63
South End of S. Appr. Slab	13991.00	12.00	657.57

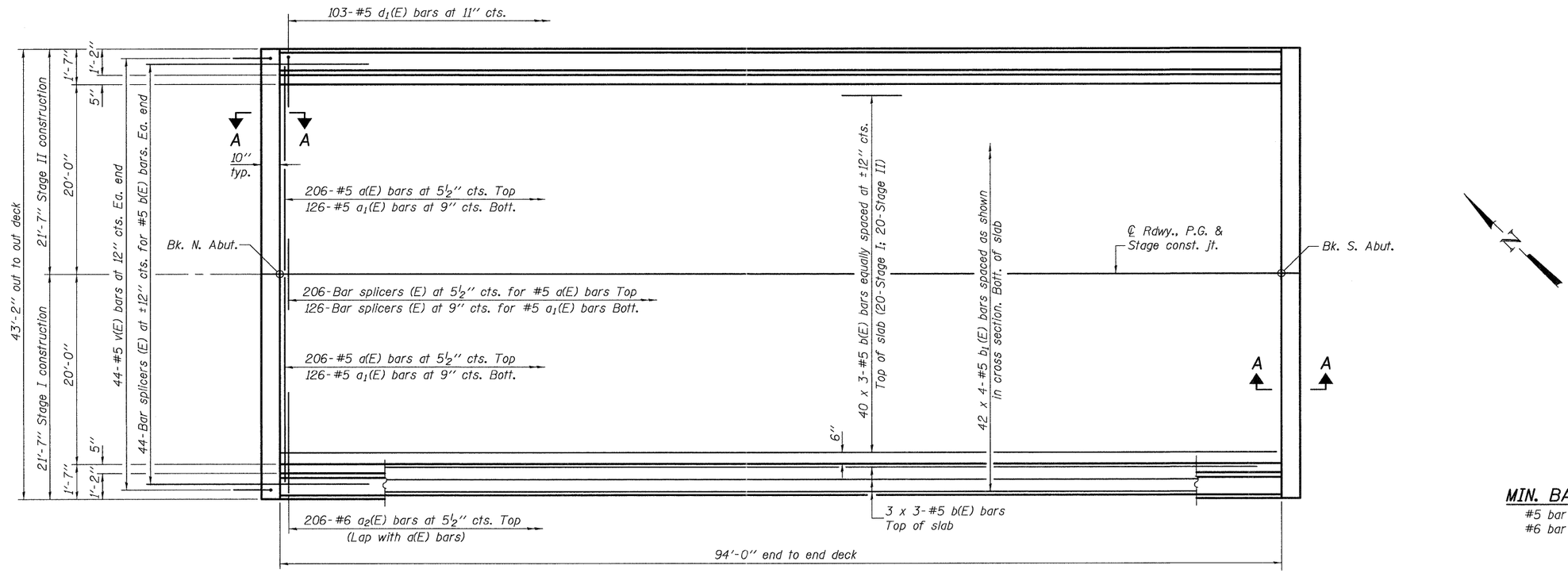
WEST CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
North End of S. Appr. Slab	13961.00	20.00	657.58
K	13971.00	20.00	657.52
L	13981.00	20.00	657.46
South End of S. Appr. Slab	13991.00	20.00	657.40

DESIGNED - Stephen M. Ryan	EXAMINED Thomas J. Domagalski	DATE - 10/11/2011	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**
CHECKED - F. Teklehalmanot	ENGINEER OF BRIDGE DESIGN		
DRAWN - h.t. duong	PASSED Carl Lang		
CHECKED - SMR/FT	ENGINEER OF BRIDGES AND STRUCTURES		

TOP OF SOUTH APPROACH SLAB ELEVATIONS
STRUCTURE NO. 070-0050
SHEET NO. 7 OF 21 SHEETS

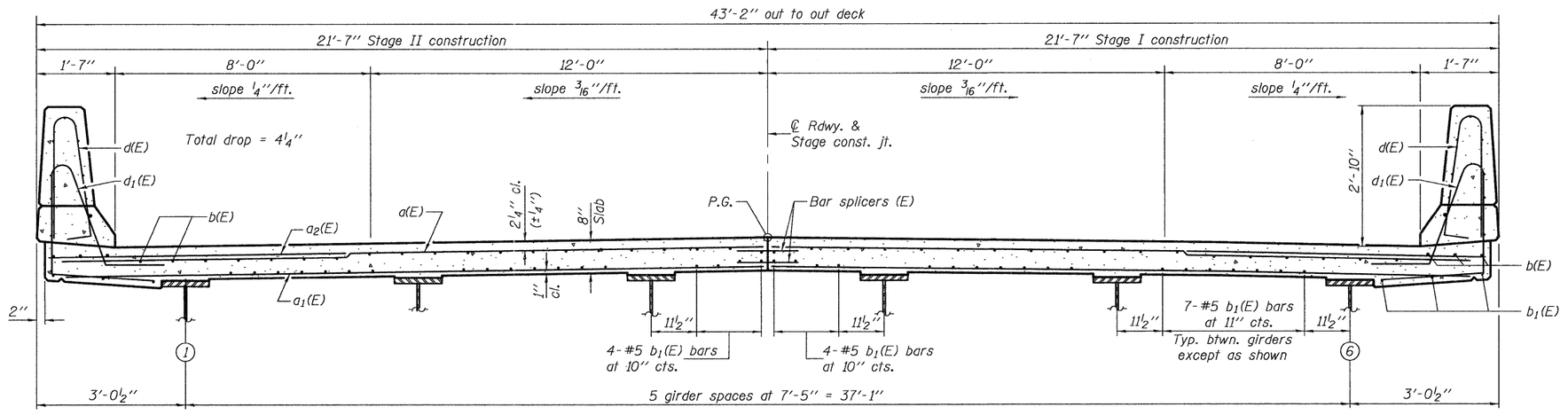
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	(102BY)B-1	MOULTRIE	48	23
		CONTRACT NO. 74280		
		ILLINOIS FED. AID PROJECT		



PLAN

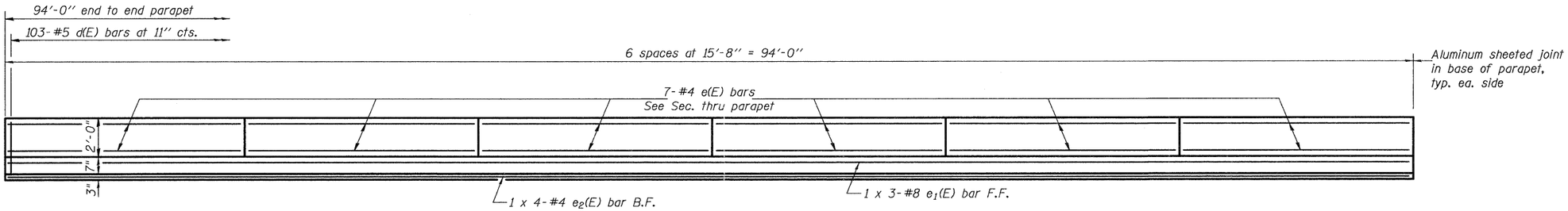
MIN. BAR LAPS
#5 bar = 1'-8"
#6 bar = 2'-0"

Notes: See sheet 9 of 21 for superstructure details and Bill of Material.
Bars indicated thus 40 x 3-#5 etc. indicates 40 lines of bars with 3 lengths per line.
See sheet 9 of 21 for parapet reinforcement.
See sheet 10 of 21 for Section A-A.
See sheet 15 of 21 for bar splicer details.



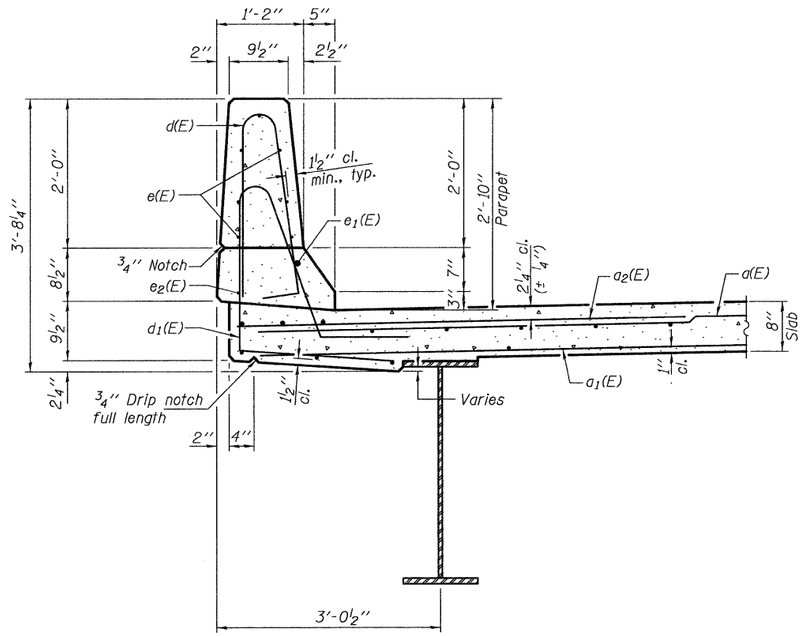
CROSS SECTION
(Looking South)

DESIGNED - Stephen M. Ryan	EXAMINED Thomas J. Domagalski ENGINEER OF BRIDGE DESIGN	DATE - 10/11/2011	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**SUPERSTRUCTURE STRUCTURE NO. 070-0050**	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - F. Teklehaimanot					320	(102BY)B-1	MOULTRIE	48	24
DRAWN - h.t. duong	PASSED J. Carl Ingram ENGINEER OF BRIDGES AND STRUCTURES						CONTRACT NO. 74280		
CHECKED - SMR/FT				SHEET NO. 8 OF 21 SHEETS			ILLINOIS FED. AID PROJECT		

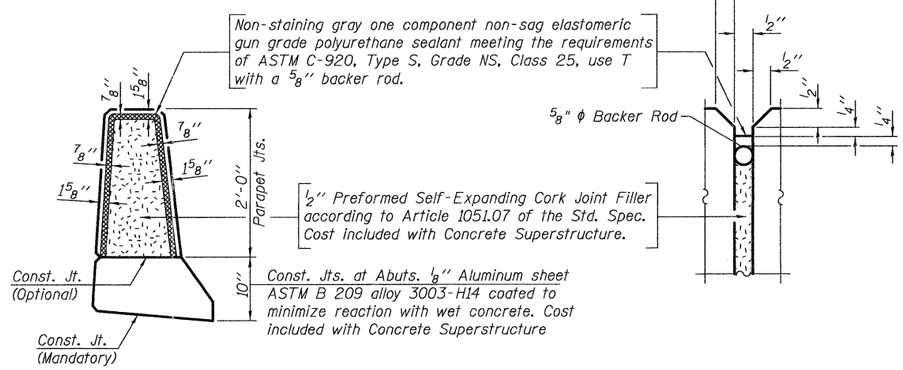


INSIDE ELEVATION OF EAST PARAPET

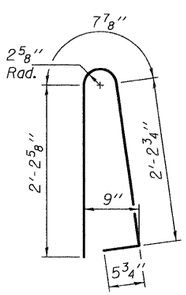
(Looking East - West parapet similar)



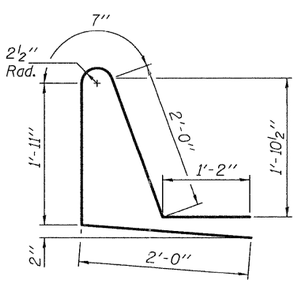
SECTION THRU PARAPET



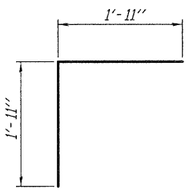
PARAPET JOINT DETAILS



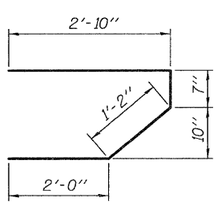
BAR d(E)



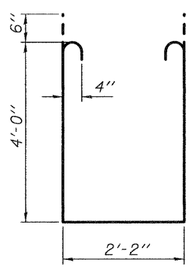
BAR d1(E)



BAR v(E)



BAR s(E)



BAR s1(E)

MIN. BAR LAPS

(Parapet)

#4 bar = 2'-0"

#8 bar = 5'-2"

SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d(E)	412	#5	21'-1"	
a1(E)	252	#5	20'-10"	
a2(E)	412	#6	6'-0"	
b(E)	138	#5	32'-5"	
b1(E)	168	#5	24'-9"	
d(E)	206	#5	5'-7"	
d1(E)	206	#5	7'-8"	
e(E)	84	#4	15'-5"	
e1(E)	6	#8	34'-8"	
e2(E)	8	#4	24'-11"	
m1(E)	20	#6	21'-3"	
m2(E)	24	#6	10'-9"	
m3(E)	8	#6	7'-0"	
m4(E)	4	#6	2'-8"	
m5(E)	4	#6	3'-5"	
s(E)	92	#5	6'-7"	
s1(E)	84	#4	11'-2"	
v(E)	88	#5	3'-10"	
Reinforcement Bars, Epoxy Coated		Pound	34410	
Concrete Superstructure		Cu. Yds.	158.3	

Bars indicated thus 1 x 3-#4 etc. indicates 1 line of bars with 3 lengths per line.

DESIGNED	-	Stephen M. Ryan	
CHECKED	-	F. Teklehalmanot	
DRAWN	-	h.t. duong	
CHECKED	-	SMR/FT	

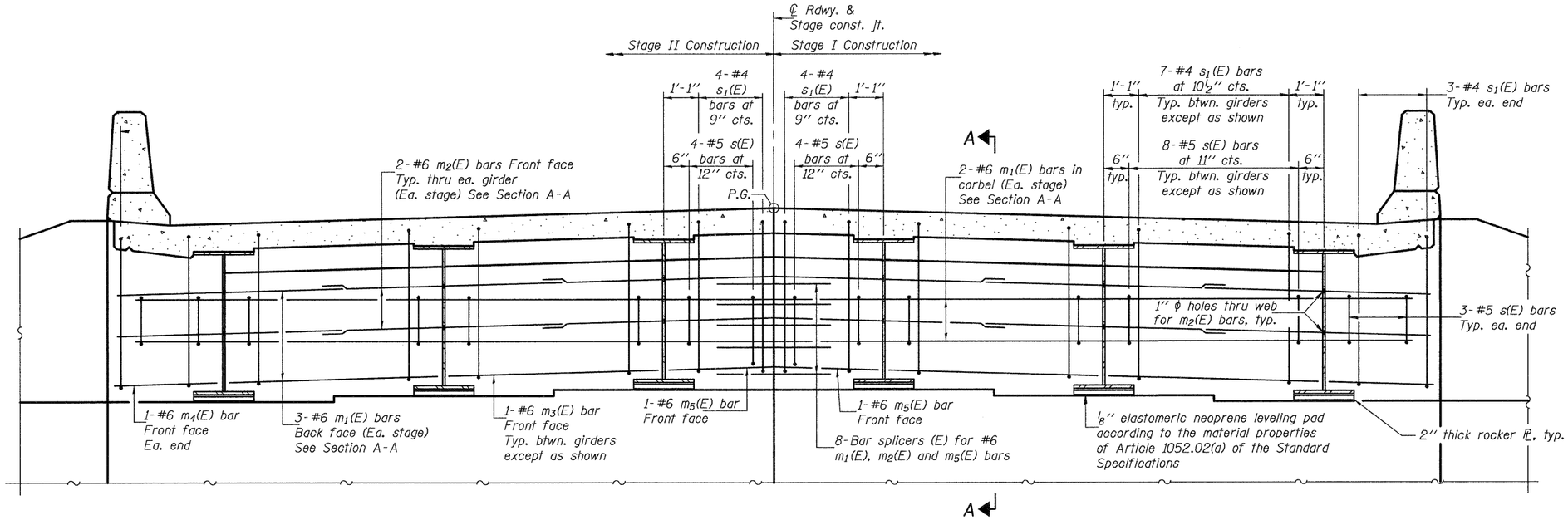
EXAMINED — Thomas J. Domagalski, ENGINEER OF BRIDGE DESIGN — DATE - 10/11/2011

PASSED — A. Carl Lange, ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

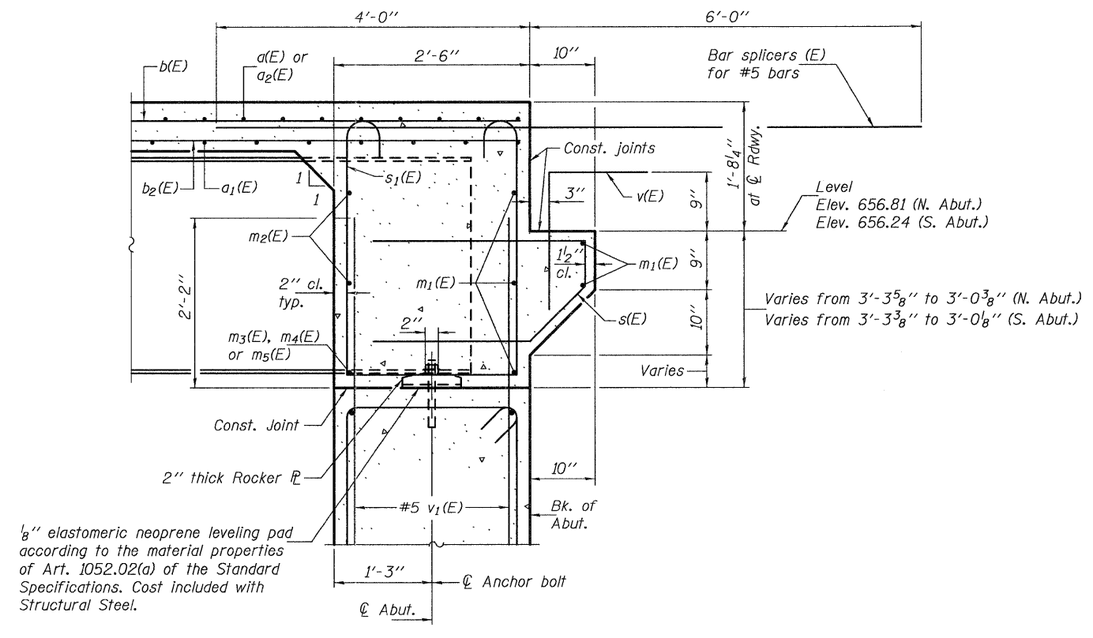
SUPERSTRUCTURE DETAILS
STRUCTURE NO. 070-0050
SHEET NO. 9 OF 21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	(102BY)B-1	MOULTRIE	48	25
		CONTRACT NO. 74280		
		ILLINOIS FED. AID PROJECT		



DIAPHRAGM ELEVATION AT SOUTH ABUTMENT

(Looking South - North abutment similar)



SECTION A-A

Notes: Reinforcement bars in diaphragm are billed with superstructure on sheet 9 of 21.

Concrete in diaphragm is included with Concrete Superstructure on sheet 9 of 21.

For details of bars s(E) & s_1(E) see sheet 9 of 21.

See sheet 13 of 21 for holes thru web for m_2(E) bars.

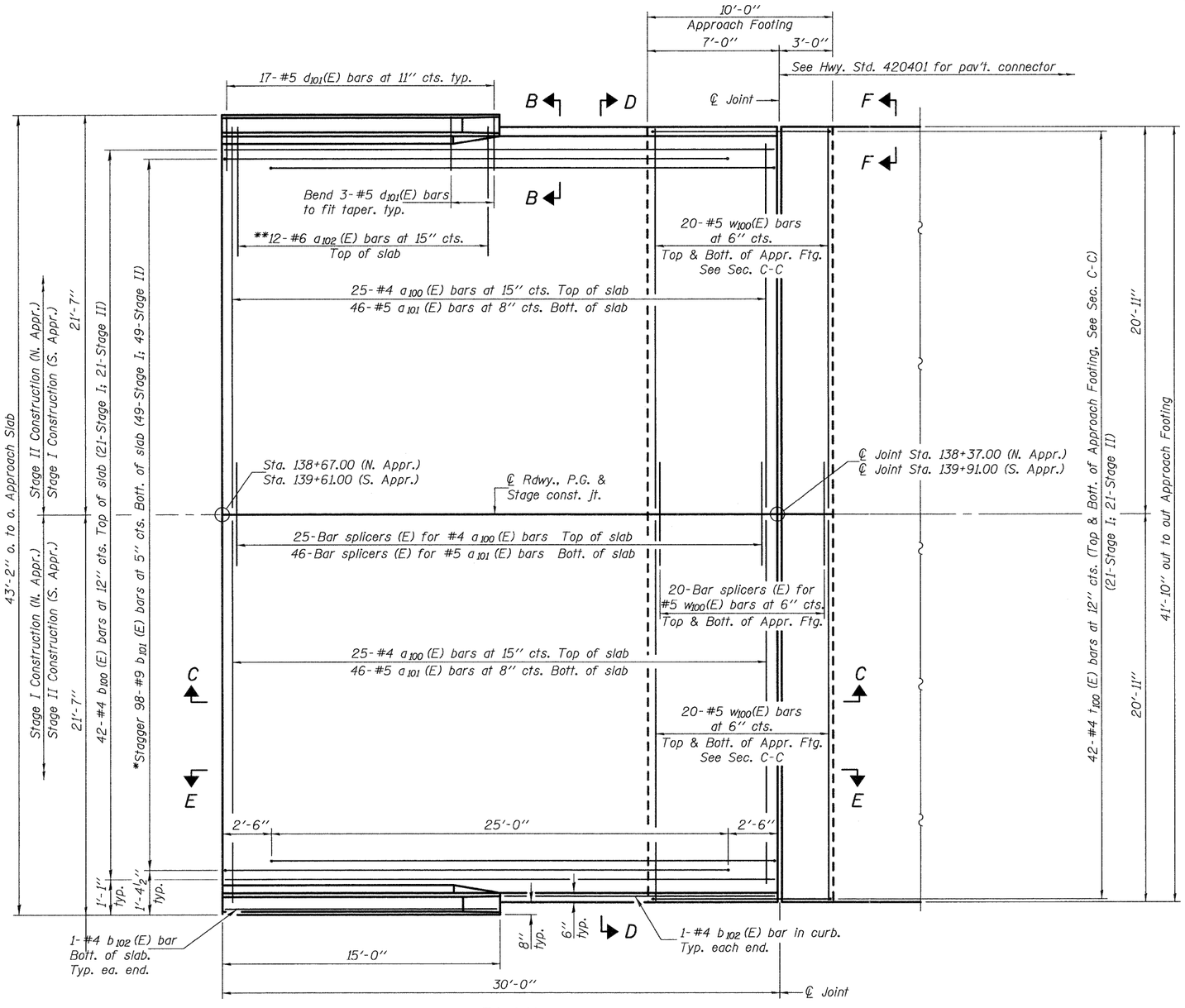
For bar splicer (E) details see sheet 17 of 21.

See sheets 15 & 16 of 21 for vertical v_1(E) bars extending out of the abutment caps into the abutment diaphragms.

MIN. BAR LAP

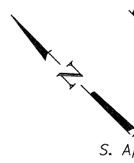
#6 bar = 3'-4''

DESIGNED - Stephen M. Ryan	EXAMINED	Thomas J. Domagalski	DATE - 10/11/2011	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DIAPHRAGM DETAILS STRUCTURE NO. 070-0050	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - F. Teklehaimanot		ENGINEER OF BRIDGE DESIGN				320	(102BY)B-1	MOULTRIE	43	26
DRAWN - h.t. duong	PASSED							CONTRACT NO. 74280		
CHECKED - SMR/FT		ENGINEER OF BRIDGES AND STRUCTURES			SHEET NO. 10 OF 21 SHEETS			ILLINOIS FED. AID PROJECT		



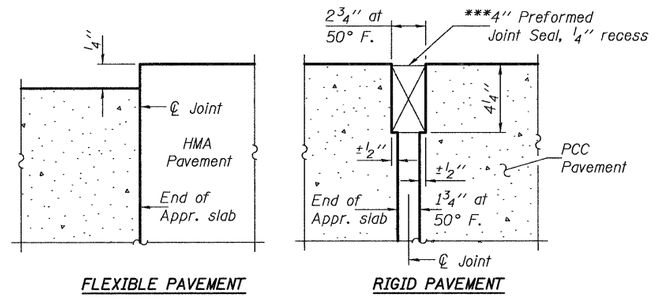
PLAN

*Tilt #9 b_{101} (E) bars as required to maintain clearance.
**Spaced between a_{100} (E) bars, typ. ea. parapet.

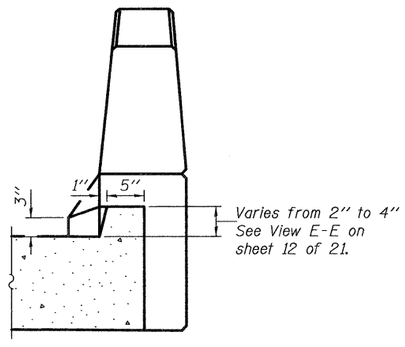


Notes: See sheet 12 of 21 for Sections C-C & D-D and View E-E.
a_{100} (E), a_{101} (E), and w_{100} (E) bar spacings measured perpendicular to ℄ Rdwy.

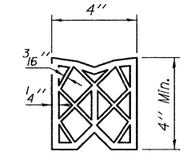
***Cost included with Concrete Superstructure.



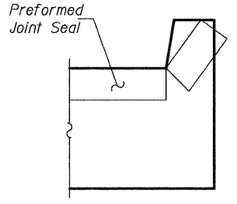
DETAIL A



VIEW B-B



PREFORMED JOINT SEAL

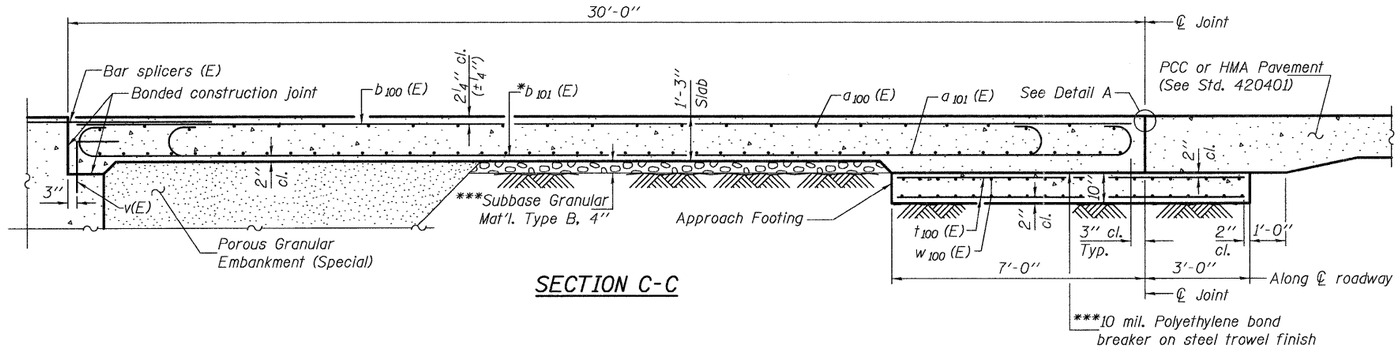


VIEW F-F

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

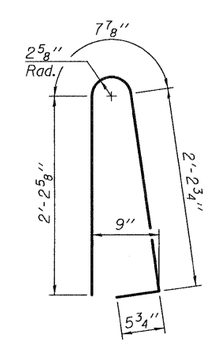
DESIGNED - Stephen M. Ryan	EXAMINED Thomas J. Domagalski, ENGINEER OF BRIDGE DESIGN	DATE - 10/11/2011	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BRIDGE APPROACH SLAB DETAILS STRUCTURE NO. 070-0050	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - F. Teklehaimanot	PASSED A. Carl Lang, ENGINEER OF BRIDGES AND STRUCTURES				320	(102BY)B-1	MOULTRIE	48	27
DRAWN - h.t. duong				SHEET NO. 11 OF 21 SHEETS			CONTRACT NO. 74280		
CHECKED - SMR/FT							ILLINOIS FED. AID PROJECT		

Notes:
See sheet 11 of 21 for Detail A and View B-B.
Approach slab and parapet concrete shall be paid for as Concrete Superstructure.
Approach footing concrete shall be paid for as Concrete Structures.
Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
For v(E) bar details, see sheet 9 of 21.
The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
For bar splicer details, see sheet 17 of 21.
Cost of excavation for approach footing included with Concrete Structures.
For Porous Granular Embankment (Special) and drainage treatment details, see sheet 1 of 21.
For additional parapet details, see sheet 9 of 21.

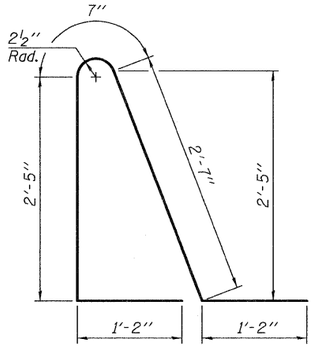


SECTION C-C

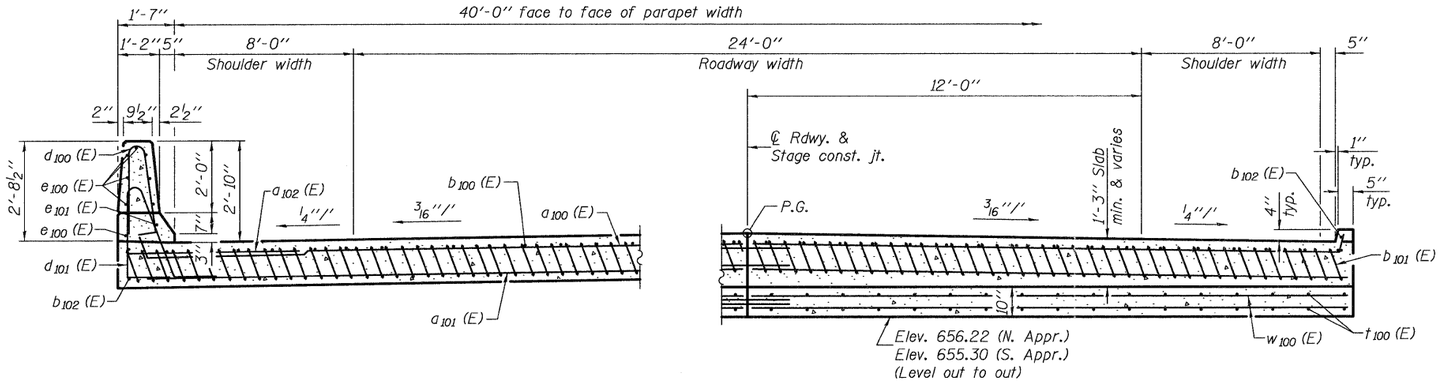
*Tilt #9 b_{101} (E) bars as required to maintain clearance.
***Cost included with Concrete Superstructure.



BAR d_{100} (E)



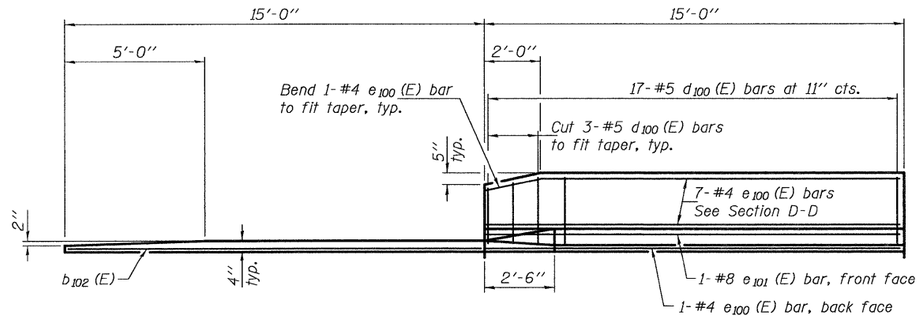
BAR d_{101} (E)



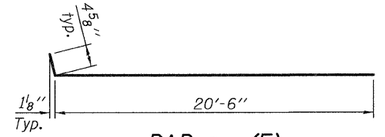
NEAR ABUTMENT

AT APPROACH FOOTING

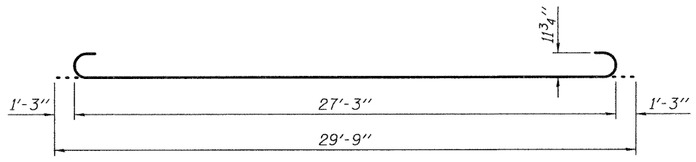
SECTION D-D
(See Plan for dimensions not shown)



VIEW E-E



BAR a_{100} (E)

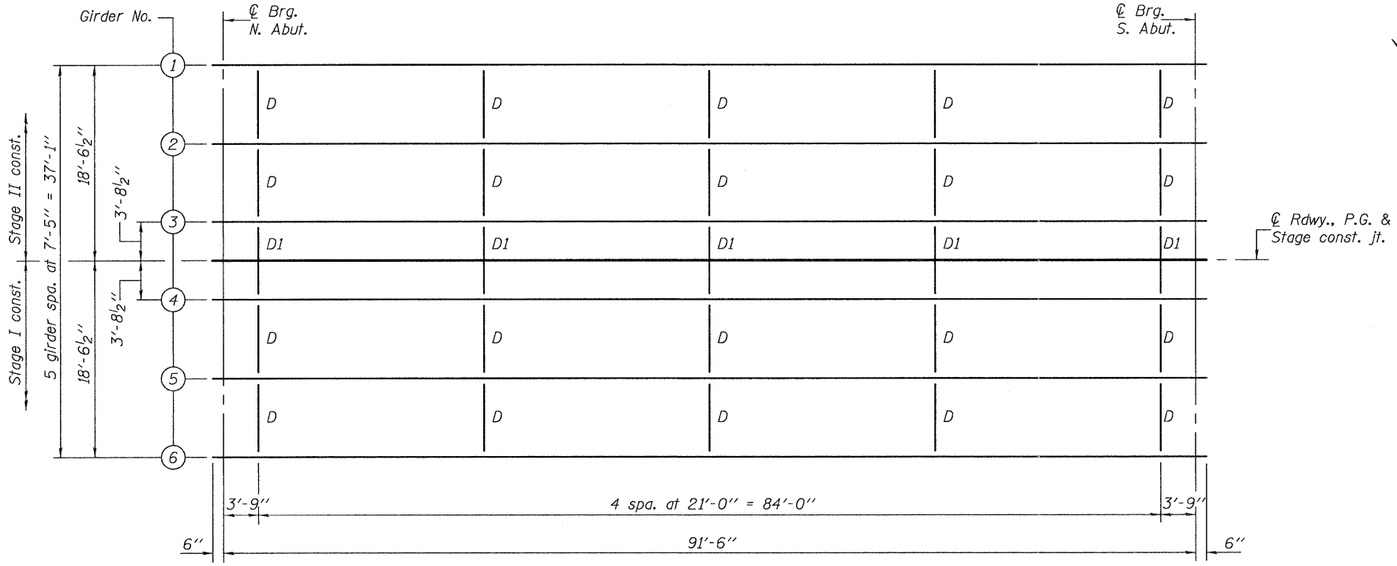


BAR b_{101}(E)

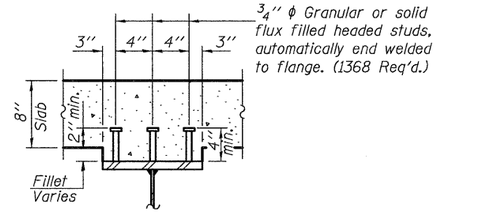
TWO APPROACHES
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a_{100} (E)	100	#4	20'-11"	
a_{101} (E)	184	#5	20'-7"	
a_{102} (E)	48	#6	6'-6"	
b_{100} (E)	84	#4	29'-8"	
b_{101} (E)	196	#9	29'-9"	
b_{102} (E)	8	#4	14'-8"	
d_{100} (E)	68	#5	5'-7"	
d_{101} (E)	68	#5	7'-11"	
e_{100} (E)	32	#4	14'-8"	
e_{101} (E)	4	#8	14'-8"	
t_{100} (E)	168	#4	9'-8"	
w_{100} (E)	160	#5	20'-7"	
Concrete Superstructure			Cu. Yd.	132.0
Concrete Structures			Cu. Yd.	25.6
Reinforcement Bars, Epoxy Coated			Pound	33330

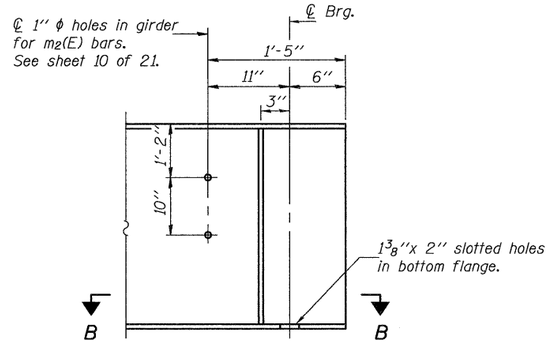
DESIGNED - Stephen M. Ryan	EXAMINED	Thomas J. Domagalski	DATE - 10/11/2011	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BRIDGE APPROACH SLAB DETAILS STRUCTURE NO. 070-0050	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - F. Teklehaimanot		ENGINEER OF BRIDGE DESIGN				320	(102BY)B-1	MOULTRIE	43	28
DRAWN - h.t. duong	PASSED	R Carl Pfeifer			SHEET NO. 12 OF 21 SHEETS			CONTRACT NO. 74280		
CHECKED - SMR/FT		ENGINEER OF BRIDGES AND STRUCTURES						ILLINOIS FED. AID PROJECT		



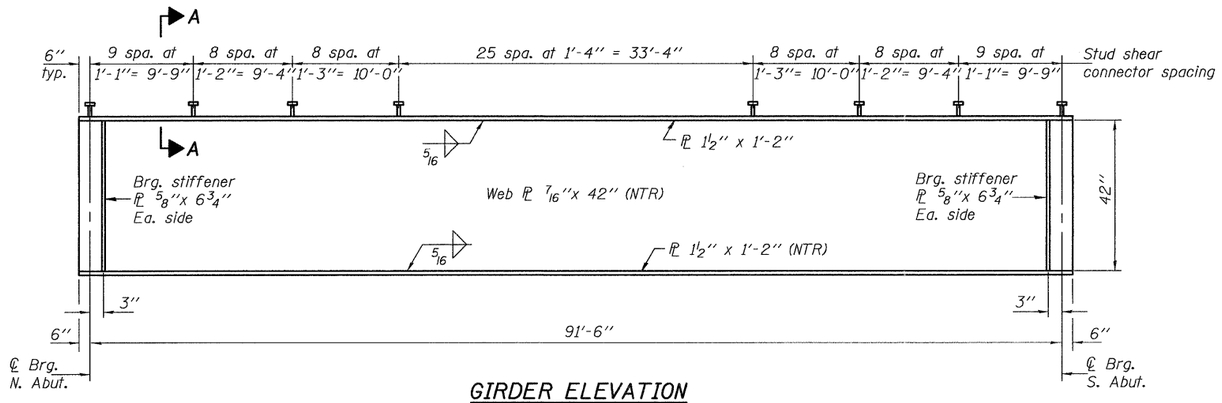
PLAN



SECTION A-A

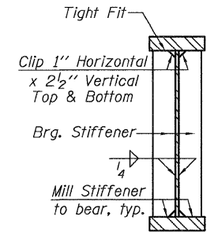


END OF GIRDER ELEVATION

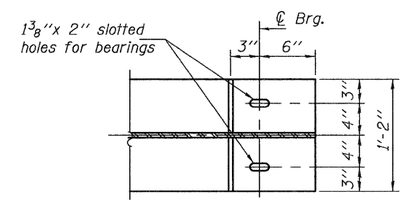


GIRDER ELEVATION

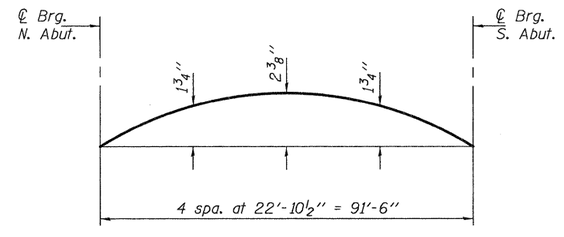
All girder structural steel shall be AASHTO M270 Grade 50.



SECTION AT ABUT.



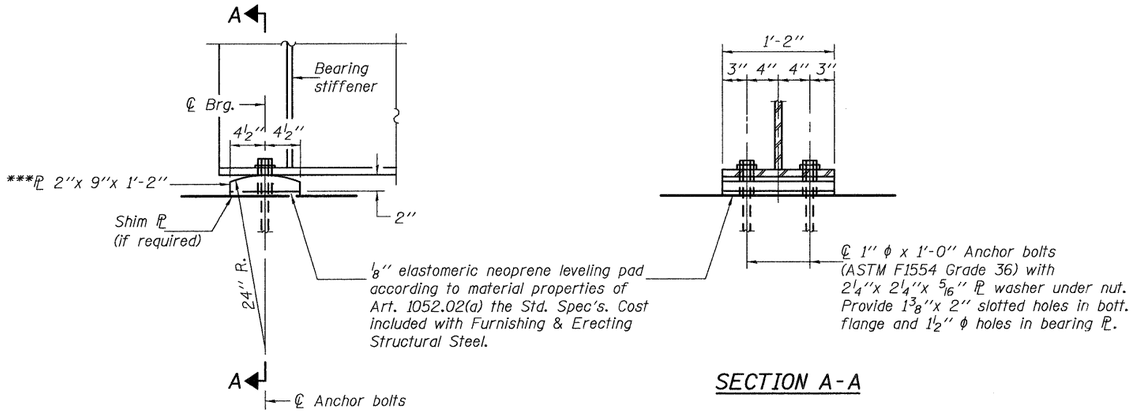
SECTION B-B



CAMBER DIAGRAM

Notes: Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.
Two hardened washers shall be required for all oversized holes in diaphragms.
All diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted.

DESIGNED - Stephen M. Ryan	EXAMINED Thomas J. Domagalski, ENGINEER OF BRIDGE DESIGN	DATE - 10/11/2011	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**STRUCTURAL STEEL STRUCTURE NO. 070-0050**	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - F. Teklehaimanot					320	(102BY)B-1	MOULTRIE	43	29
DRAWN - h.t. duong	PASSED						CONTRACT NO. 74280		
CHECKED - SMR/FT	ENGINEER OF BRIDGES AND STRUCTURES			SHEET NO. 13 OF 21 SHEETS			ILLINOIS FED. AID PROJECT		



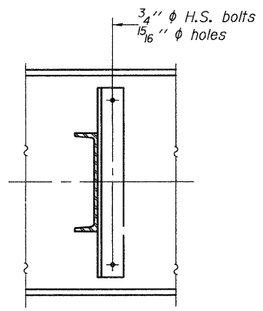
ELEVATION AT ABUTMENTS

SECTION A-A

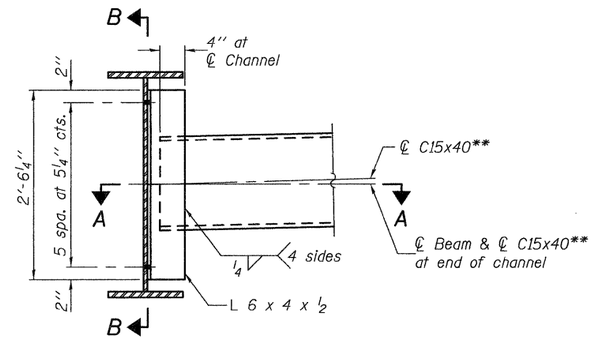
***AASHTO M 270 Grade 50.

ABUTMENT BEARING

(12 Required)



SECTION B-B



DIAPHRAGM D

(20 Required)

**Alternate channel C15x50 is permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section.

INTERIOR GIRDER MOMENT TABLE		0.5 Sp.
I_s	(in^4)	22575
$I_c(n)$	(in^4)	48419
$I_c(3n)$	(in^4)	36343
S_s	(in^3)	1003
$S_c(n)$	(in^3)	1276
$S_c(3n)$	(in^3)	1180
DC1	(k/')	1.004
M_{DC1}	('k)	1051
DC2	(k/')	0.150
M_{DC2}	('k)	157
DW	(k/')	0.371
M_{DW}	('k)	388
M_{L+IM}	('k)	1510
M_u(Strength I)	('k)	4735
$\phi_f M_n$	('k)	6110
f_s DC1	(ksi)	12.6
f_s DC2	(ksi)	1.6
f_s DW	(ksi)	3.9
f_s 1.3(L+IM)	(ksi)	18.5
f_s (Service II)	(ksi)	36.6
V_f	(k)	27.2

INTERIOR GIRDER REACTION TABLE - HL93 Loading		Abutments
R_{DC1}	(k)	45.9
R_{DC2}	(k)	6.9
R_{DW}	(k)	17.0
R_{L+IM}	(k)	89.1
R_{Total}	(k)	158.9

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

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

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

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

M_{DC1}: Un-factored moment due to non-composite dead load (kip-ft.).

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

M_{DC2}: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).

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

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

M_{L+IM}: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).

M_u (Strength I): Factored design moment (kip-ft.). $1.25\ (M_{DC1} + M_{DC2}) + 1.5\ M_{DW} + 1.75\ M_{L+IM}$

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

f_s (Service II): Sum of stresses as computed from the moments below (ksi). $M_{DC1} + M_{DC2} + M_{DW} + 1.3\ M_{L+IM}$

V_f: Factored shear range computed according to Article 6.10.10.

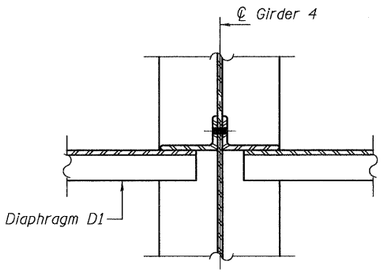
Notes: All diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual diaphragms at supports may be temporarily disconnected to install bearing anchor rods.

Two hardened washers are required for each set of oversized holes.

*TOP OF WEB ELEVATIONS

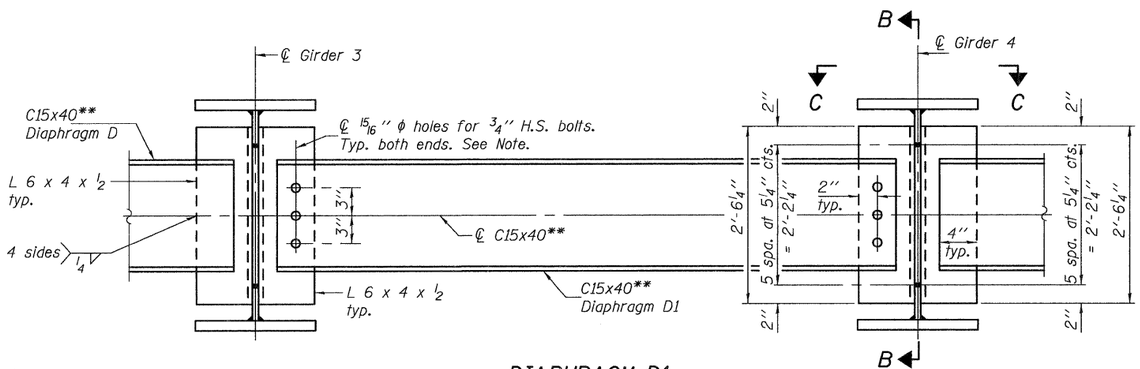
Location	℄ Brg. N. Abut.	℄ Brg. S. Abut.
Girder 1	657.32	656.77
Girder 2	657.47	656.92
Girder 3	657.58	657.03
Girder 4	657.58	657.03
Girder 5	657.47	656.92
Girder 6	657.32	656.77

*For fabrication use only.



SECTION C-C

(Top flange not shown)

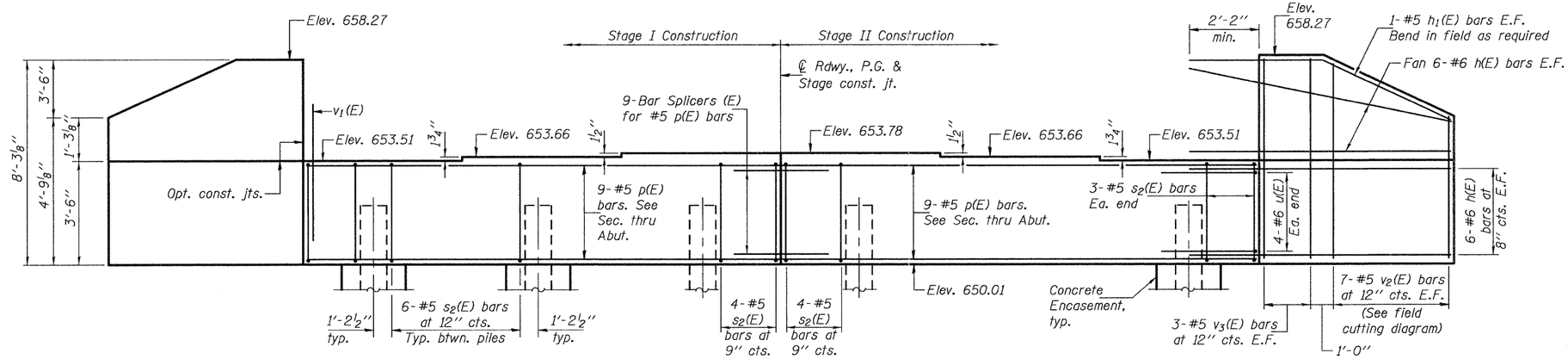


DIAPHRAGM D1

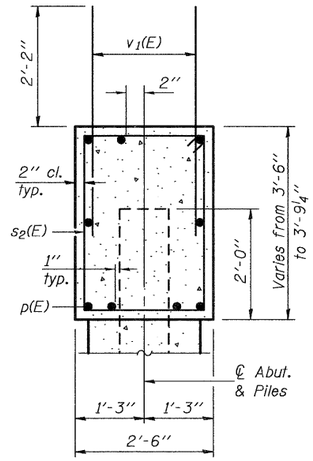
(Looking south - 5 Required)

Note: Install only the center bolt at each end of diaphragm D1. The bolts shall be finger tightened prior to deck pour to permit rotation of diaphragm D1. Install the remaining bolts and fully tighten after stage two deck pour is complete.

DESIGNED - Stephen M. Ryan	EXAMINED	Thomas J. Domagalski, ENGINEER OF BRIDGE DESIGN	DATE - 10/11/2011	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STRUCTURAL STEEL DETAILS STRUCTURE NO. 070-0050	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - F. Tekiehalmanot						320	(102BY)B-1	MOULTRIE	43	30
DRAWN - h.t. duong	PASSED	Carl Puzey, ENGINEER OF BRIDGES AND STRUCTURES			SHEET NO. 14 OF 21 SHEETS			CONTRACT NO. 74280		
CHECKED - SMR/FT								ILLINOIS FED. AID PROJECT		



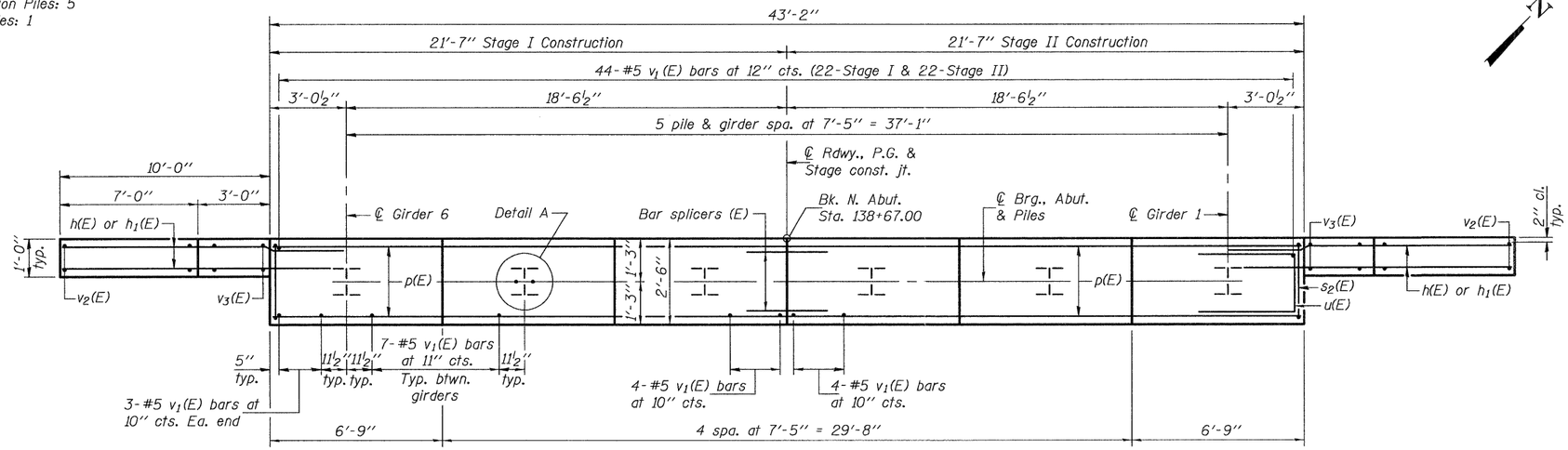
ELEVATION
(Looking North)



SEC. THRU ABUT.

PILE DATA

Type: Steel HP12x63
Nominal Required Bearing: 470 Kips
Factored Resistance Available: 235 Kips
Est. Length: 65'
No. Production Piles: 5
No. Test Piles: 1

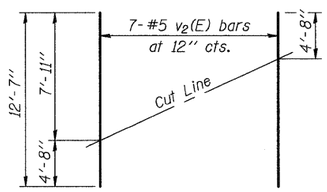


PLAN

BILL OF MATERIAL

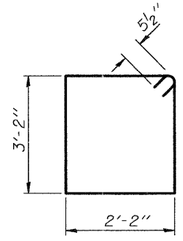
Bar	No.	Size	Length	Shape
h(E)	24	#6	12'-6"	——
h1(E)	4	#5	12'-4"	——
p(E)	18	#5	21'-3"	——
s2(E)	38	#5	11'-7"	□
u(E)	8	#6	7'-3"	▭
v1(E)	86	#5	4'-4"	——
v2(E)	14	#5	12'-7"	——
v3(E)	12	#5	7'-11"	——
Structure Excavation		Cu. Yd.	46.0	
Concrete Structures		Cu. Yd.	19.8	
Reinforcement Bars, Epoxy Coated		Pound	2120	
Furnishing Steel Piles HP12x63		Foot	325	
Driving Piles		Foot	325	
Test Pile Steel HP12x63		Each	1	
Concrete Encasement		Cu. Yd.	2.1	
Anchor Bolts 1" ϕ		Each	12	

Notes: Pour steps monolithically with cap.
For details of piles and concrete encasement, see sheet 18 of 21.
Bend h(E) bars in field to miss piles and girders.

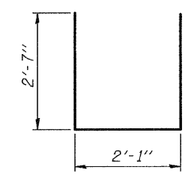


FIELD CUTTING DIAGRAM

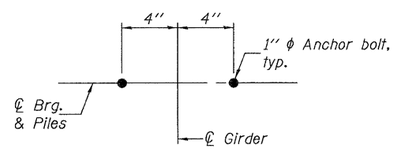
Order v2(E) full length. Cut as shown and use remainder of bars in opposite face.



BAR s2(E)

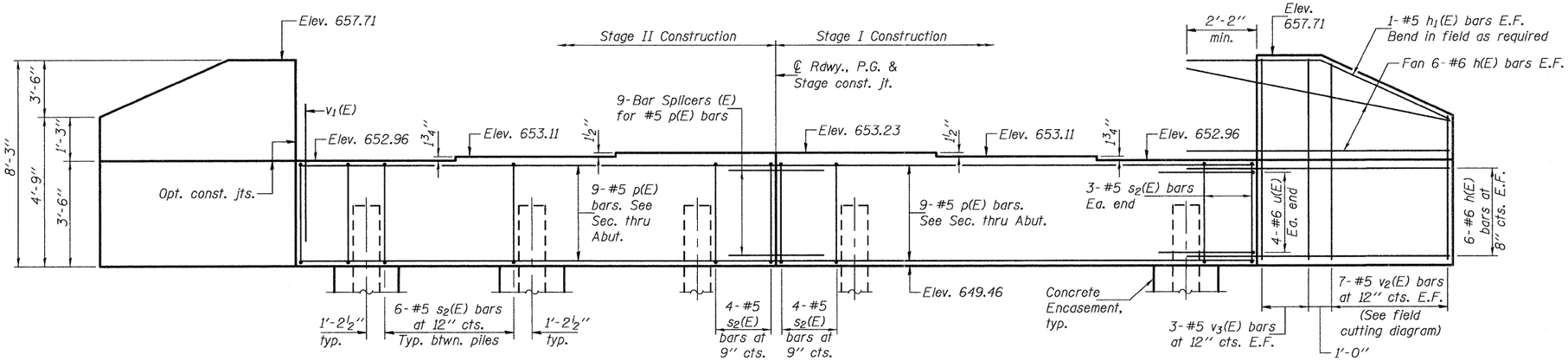


BAR u(E)

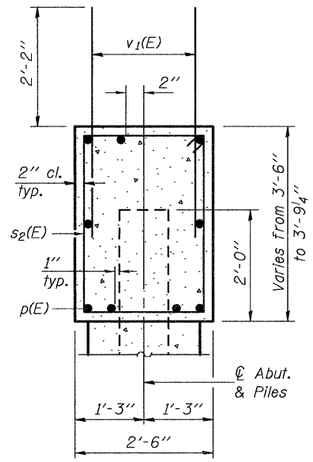


DETAIL A

DESIGNED - Stephen M. Ryan	EXAMINED	Thomas J. Domagalski ENGINEER OF BRIDGE DESIGN	DATE - 10/11/2011	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	NORTH ABUTMENT STRUCTURE NO. 070-0050	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - F. Teklehalmanot	PASSED	Carl Puzey ENGINEER OF BRIDGES AND STRUCTURES			SHEET NO. 15 OF 21 SHEETS	320	(102BY)B-1	MOULTRIE	42	31
DRAWN - h.t. duong								CONTRACT NO. 74280		
CHECKED - SMR/FT								ILLINOIS FED. AID PROJECT		



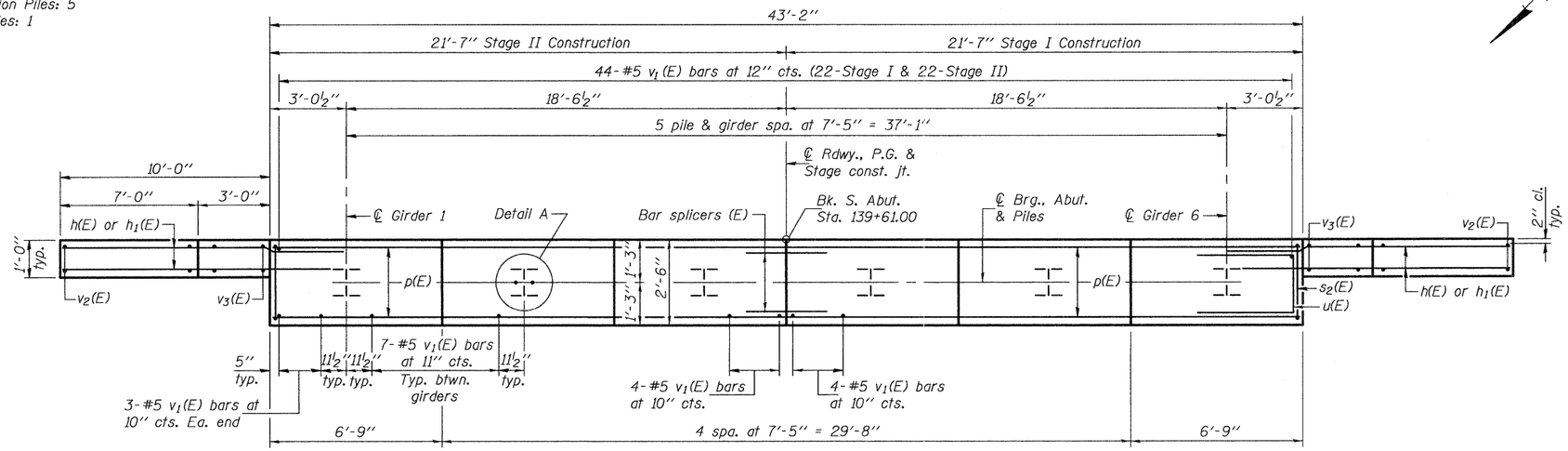
ELEVATION
(Looking South)



SEC. THRU ABUT.

PILE DATA

Type: Steel HP12x63
Nominal Required Bearing: 470 Kips
Factored Resistance Available: 235 Kips
Est. Length: 87'
No. Production Piles: 5
No. Test Piles: 1

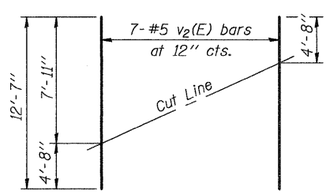


PLAN

BILL OF MATERIAL

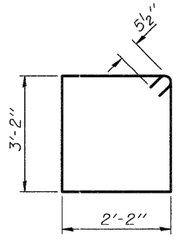
Bar	No.	Size	Length	Shape
h(E)	24	#6	12'-6"	——
h1(E)	4	#5	12'-4"	——
p(E)	18	#5	21'-3"	——
s2(E)	38	#5	11'-7"	□
u(E)	8	#6	7'-3"	⊐
v1(E)	86	#5	4'-4"	——
v2(E)	14	#5	12'-7"	——
v3(E)	12	#5	7'-11"	——
Structure Excavation		Cu. Yd.	46.0	
Concrete Structures		Cu. Yd.	19.8	
Reinforcement Bars, Epoxy Coated		Pound	2120	
Furnishing Steel Piles HP12x63		Foot	435	
Driving Piles		Foot	435	
Test Pile Steel HP12x63		Each	1	
Concrete Encasement		Cu. Yd.	2.1	
Anchor Bolts 1" ϕ		Each	12	

Notes: Pour steps monolithically with cap.
For details of piles and concrete encasement, see sheet 18 of 21.
Bend h(E) bars in field to miss piles and girders.

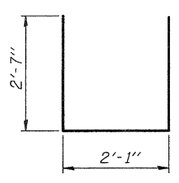


FIELD CUTTING DIAGRAM

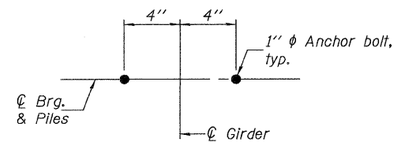
Order v2(E) full length. Cut as shown and use remainder of bars in opposite face.



BAR s2(E)



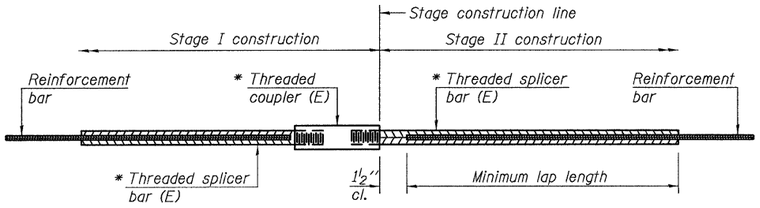
BAR u(E)



DETAIL A

DESIGNED - Stephen M. Ryan	EXAMINED	Thomas J. Domagalski	DATE - 10/11/2011	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SOUTH ABUTMENT STRUCTURE NO. 070-0050
CHECKED - F. Teklehalmanot		ENGINEER OF BRIDGE DESIGN			SHEET NO. 16 OF 21 SHEETS
DRAWN - h.t. duong	PASSED				
CHECKED - SMR/FT		ENGINEER OF BRIDGES AND STRUCTURES			

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	(102BY)B-1	MOULTRIE	43	32
		CONTRACT NO. 74280		
	ILLINOIS FED. AID PROJECT			



STANDARD BAR SPLICER ASSEMBLY

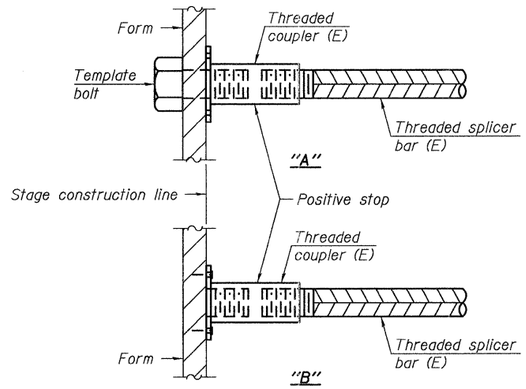
Minimum Lap Lengths					
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-3"
5	1'-9"	2'-5"	2'-7"	2'-11"	2'-10"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-4"
7	2'-9"	3'-10"	4'-2"	4'-8"	4'-6"
8	3'-8"	5'-1"	5'-5"	6'-2"	5'-10"
9	4'-7"	6'-5"	6'-10"	7'-9"	7'-5"

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

Threaded splicer bar length = min. lap length + 1½" + thread length

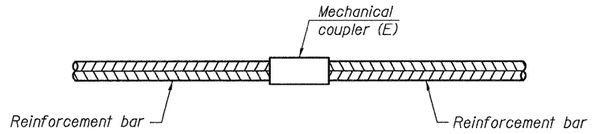
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
Deck	#5	332	3
Conc. Diaphragm	#6	16	3
Abutment Subs.	#5	18	3
Appr. Slab	#4	50	3
Appr. Slab	#5	172	3



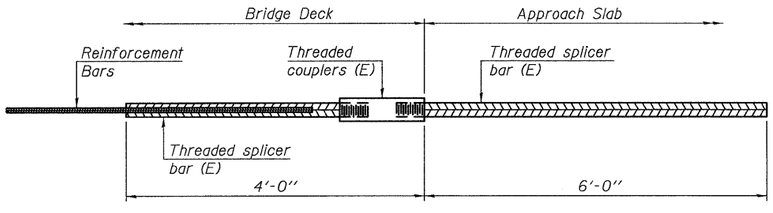
INSTALLATION AND SETTING METHODS

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



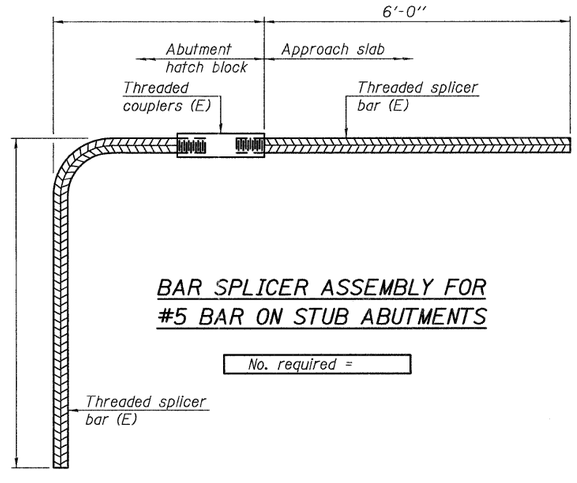
STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



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

No. required = 88



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

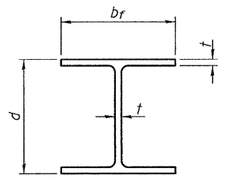
No. required =

NOTES

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

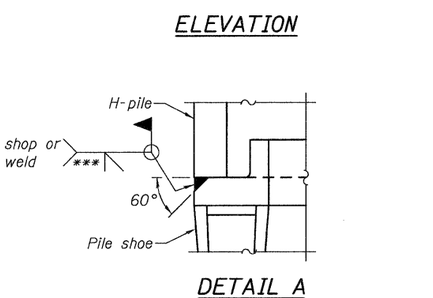
BSD-1 7-1-10

DESIGNED - Stephen M. Ryan	EXAMINED	Thomas J. Domagalski, ENGINEER OF BRIDGE DESIGN	DATE - 10/11/2011	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS STRUCTURE NO. 070-0050	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - F. Teklehaimanot						320	(102BY)B-1	MOULTRIE	4%	33
DRAWN - h.t. duong	PASSED	Carl Puzey, ENGINEER OF BRIDGES AND STRUCTURES			SHEET NO. 17 OF 21 SHEETS			CONTRACT NO. 74280		
CHECKED - SMR/FT								ILLINOIS FED. AID PROJECT		



STEEL PILE TABLE

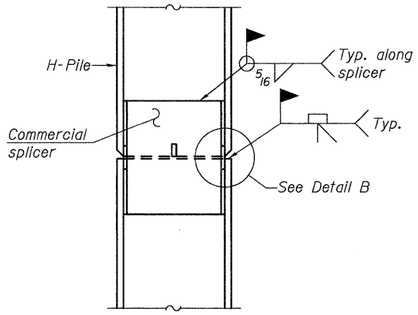
Designation	Depth d	Flange width b_f	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	13/16"	30"
x102	14"	14 3/4"	11/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	11/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"
x53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



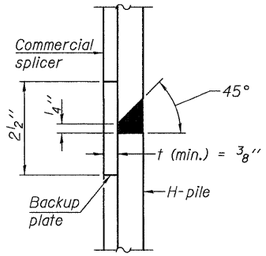
ELEVATION

DETAIL A

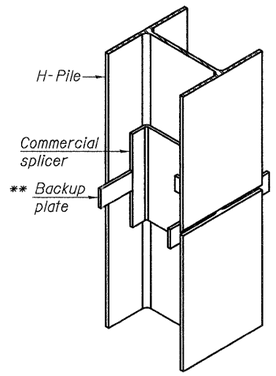
H-PILE SHOE ATTACHMENT



ELEVATION

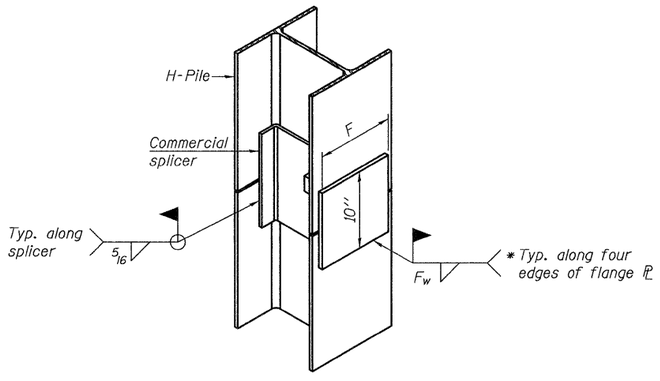


DETAIL "B"



ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE



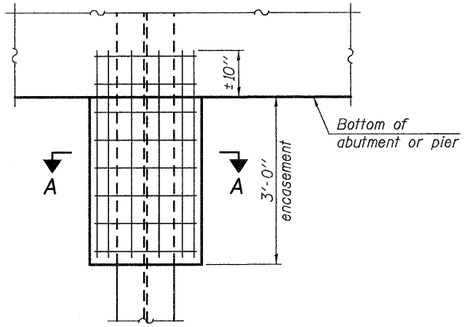
ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE

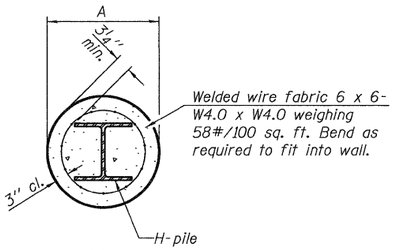
* Interrupt welds 1/4" from end of web and/or each flange.

** Remove portions of backup plates that extend outside the flanges.

*** Weld size per pile shoe manufacturer (5/16" min.).



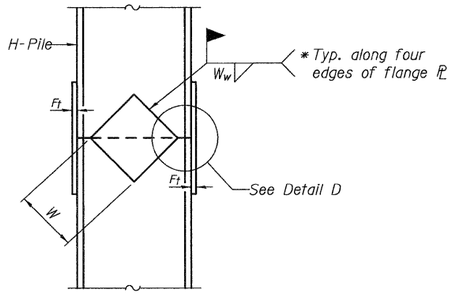
ELEVATION



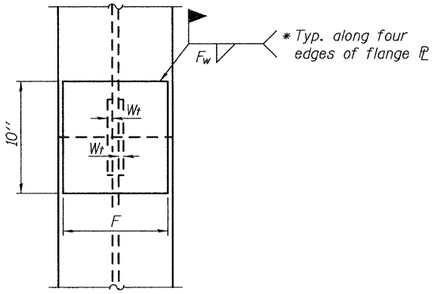
SECTION A-A

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

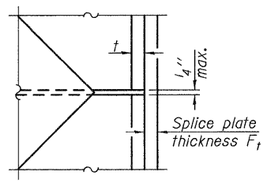
PILE ENCASEMENT



ELEVATION



END VIEW



DETAIL D

Designation	F	F_t	F_w	W	W_t	W_w
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"	11/16"	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"	11/16"	6 1/2"	5/8"	1/2"
x74	10"	7/8"	11/16"	6 1/2"	5/8"	1/2"
x63	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
x53	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
HP 10x57	8"	3/4"	9/16"	5 1/4"	1/2"	3/8"
x42	8"	5/8"	9/16"	5 1/4"	1/2"	3/8"
HP 8x36	7"	5/8"	7/16"	4 1/4"	1/2"	3/8"

WELDED PLATE FIELD SPLICE

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

F-HP 7-1-10

DESIGNED	-	Stephen M. Ryan	
CHECKED	-	F. Teklehaimanot	
DRAWN	-	h.t. duong	
CHECKED	-	SMR/FT	

EXAMINED — Thomas J. Domagalski — ENGINEER OF BRIDGE DESIGN

PASSED — ENGINEER OF BRIDGES AND STRUCTURES

DATE - 10/11/2011

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HP PILE DETAILS
STRUCTURE NO. 070-0050
SHEET NO. 18 OF 21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	(102BY)B-1	MOULTRIE	43	39
		CONTRACT NO. 74280		
	ILLINOIS FED. AID PROJECT			

Illinois Department of Transportation
Division of Highways
District 7 – Materials

SOIL BORING LOG

Date 7/31/07

ROUTE FAP 320 (IL 121) DESCRIPTION Marrow Bone Creek LOGGED BY E. Sandschafer

SECTION (102BY)B-1 LOCATION NW 1/4, SEC. 9, TWP. 14 N, RNG. 4 E, 3 PM

COUNTY Moultrie DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO. 070-0001
Station 139+18.3

BORING NO. 1
Station 138+71
Offset 15.00ft Rt
Ground Surface Elev. 657.63 ft

Surface Water Elev. 639.80 ft
Stream Bed Elev. 639.10 ft

Groundwater Elev.:
First Encounter 634.3 ft
Upon Completion Washed ft
After 24 Hrs. 643.2 ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
10.5" asphalt pavement. 656.73			
Hard, damp, brown, CLAY TILL.	2		
	4	4.5	13
	6	PP	
653.13			
Medium, damp, brown, CLAY LOAM TILL.	2		
	2	0.9	15
	3	B	
650.63			
Soft to medium, damp, LOAM TILL.	1		
	2	0.5	25
	3	B	
648.13			
Medium, damp, gray, LOAM.	1		
	2	0.8	29
	3	B	
645.63			
Medium, damp, dark gray, SILTY LOAM.	0		
	3	0.9	28
	3	B	
642.63			
Stiff to medium, damp, dark gray, CLAY w/ trace fine gravel.	3	1.7	22
	4	B	
	2		
	2	0.9	21
	4	B	
637.63	3		
Very stiff, damp, gray, CLAY LOAM TILL.	6	2.8	13
	10	B	
	3		
	7	3.6	11
634.33	14	B	
Gray, fine grained, SAND. 633.13			
Very stiff, damp, gray, CLAY LOAM TILL.	4		
	7	4.1	12
	11	B	
	3		
	5	2.8	12
	8	B	
	4		
	7	3.4	12
	11	B	
623.13	2		
Medium, damp, dark gray, SANDY LOAM TILL w/ trace Coal fragments.	4	0.9	17
	5	B	
618.13	3		

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)

Lattitude N 88 deg 46.469 min, Longitude W 39 deg 49.837 min, Map Datum WGS 84

Date 7/31/07

ROUTE FAP 320 (IL 121) DESCRIPTION Marrow Bone Creek LOGGED BY E. Sandschafer

SECTION (102BY)B-1 LOCATION NW 1/4, SEC. 9, TWP. 14 N, RNG. 4 E, 3 PM

COUNTY Moultrie DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO. 070-0001
Station 139+18.3

BORING NO. 1
Station 138+71
Offset 15.00ft Rt
Ground Surface Elev. 657.63 ft

Surface Water Elev. 639.80 ft
Stream Bed Elev. 639.10 ft

Groundwater Elev.:
First Encounter 634.3 ft
Upon Completion Washed ft
After 24 Hrs. 643.2 ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Very stiff, damp, gray, CLAY LOAM TILL. (continued)	4	1.7	22
	5	B	
	5		
	7	3.0	12
	9	B	
608.13			
Brown, fine grained, SAND. 5% passing #200 sieve.	12		
607.13	50	+4.5	6
Hard, very moist, gray, SANDY CLAY TILL. Very hard drilling.	50/3"	PP	
Hard, very moist, gray, SANDY CLAY TILL. Very hard drilling. (continued)	39	4.3	8
	50/5"	S	
	24		
	31	9.3	9
	40	S	
	12		

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)

Lattitude N 88 deg 46.469 min, Longitude W 39 deg 49.837 min, Map Datum WGS 84

Date 7/31/07

ROUTE FAP 320 (IL 121) DESCRIPTION Marrow Bone Creek LOGGED BY E. Sandschafer

SECTION (102BY)B-1 LOCATION NW 1/4, SEC. 9, TWP. 14 N, RNG. 4 E, 3 PM

COUNTY Moultrie DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO. 070-0001
Station 139+18.3

BORING NO. 1
Station 138+71
Offset 15.00ft Rt
Ground Surface Elev. 657.63 ft

Surface Water Elev. 639.80 ft
Stream Bed Elev. 639.10 ft

Groundwater Elev.:
First Encounter 634.3 ft
Upon Completion Washed ft
After 24 Hrs. 643.2 ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Hard, very moist, gray, SANDY CLAY TILL. Very hard drilling. (continued)	27	7.3	10
	40	S	
Hard, damp, brown, CLAY LOAM TILL. (continued)	22	5.6	11
	32	S	
548.13			
Very stiff, moist, gray, SILTY CLAY SHALE.	50		
547.33	50/2"	3.2	7
Extent of exploration.	50/2"	S	

Benchmark: BM 201 Chiseled square on top of NE wingwall on existing structure 070-0001, Sta 139+44, 23.4 Lt = 657.57 elevation. Provided by Program Development.

558.13	13		

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)

Lattitude N 88 deg 46.469 min, Longitude W 39 deg 49.837 min, Map Datum WGS 84

DESIGNED -	EXAMINED	DATE - 10/11/2011	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**
CHECKED -	ENGINEER OF BRIDGE DESIGN		
DRAWN -	PASSED		
CHECKED -	ENGINEER OF BRIDGES AND STRUCTURES		

SOIL BORING LOGS
STRUCTURE NO. 070-0050
SHEET NO. 19 OF 21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	(102BY)B-1	MOULTRIE	43	35
		CONTRACT NO. 74280		
	ILLINOIS FED. AID PROJECT			

Illinois Department of Transportation
Division of Highways
District 7 – Materials

SOIL BORING LOG

Date 7/30/07

ROUTE FAP 320 (IL 121) DESCRIPTION Marrow Bone Creek LOGGED BY E. Sandschafer

SECTION (102BY)B-1 LOCATION NW 1/4, SEC. 9, TWP. 14 N, RNG. 4 E, 3 PM

COUNTY Moultrie DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO. 070-0001
Station 139+18.3

BORING NO. 2
Station 139+70
Offset 13.00ft Lt
Ground Surface Elev. 656.85 ft

Surface Water Elev. 639.80 ft
Stream Bed Elev. 639.10 ft

Groundwater Elev.:
First Encounter 638.5 ft
Upon Completion Washed ft
After 22 Hrs. 645.4 ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
11.5" asphalt pavement.			
655.85			
Gray, SANDY CLAY.			
654.85			
Stiff, damp, brown, CLAY w/ loce fine gravel.	1		
	3	1.2	16
	4	B	
652.35			
Very stiff to medium, damp, brown, CLAY TILL.	2		
	2	3.1	14
	3	PP	
	1		
	2	0.7	19
	2	B	
	1		
	2	0.6	14
	2	B	
	1		
644.05	2	0.9	17
Medium to very soft, damp, dark gray, SANDY LOAM.	3	S	
	1		
	2	0.5	19
	2	B	
	1		
	1	0.2	22
638.45	3	B	
Gray, SAND.			
637.35			
	4		

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Very stiff, damp, gray, CLAY LOAM TILL. (continued)	6	3.2	12
	10	B	
	4		
	7	3.9	12
	11	B	
	3		
	5	2.3	13
	9	B	
	2		
	4	2.1	14
	10	B	
	6		
	8	3.1	11
	11	B	
622.35			
Very stiff, damp, gray, SANDY LOAM TILL.	3		
	5	1.9	16
	6	B	
617.35			
	2		

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)

Latitude N 88 deg 46.450 min. Longitude W 39 deg 43.849 min. Map Datum WGS 84

Date 7/30/07

ROUTE FAP 320 (IL 121) DESCRIPTION Marrow Bone Creek LOGGED BY E. Sandschafer

SECTION (102BY)B-1 LOCATION NW 1/4, SEC. 9, TWP. 14 N, RNG. 4 E, 3 PM

COUNTY Moultrie DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO. 070-0001
Station 139+18.3

BORING NO. 2
Station 139+70
Offset 13.00ft Lt
Ground Surface Elev. 656.85 ft

Surface Water Elev. 639.80 ft
Stream Bed Elev. 639.10 ft

Groundwater Elev.:
First Encounter 638.5 ft
Upon Completion Washed ft
After 22 Hrs. 645.4 ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Medium to stiff, damp, brown marbled gray, CLAY LOAM TILL. (continued)	3	1.0	22
	6	B	
612.35			
Hard, damp, gray, SANDY CLAY TILL.	14		
611.85	28	4.6	11
Brown, wet, fine grained, SAND. 10% passing #200 sieve.	47	S	
607.35			
Hard, damp, gray, SANDY CLAY TILL.	17		
	30	4.9	8
	50	S	
597.35	16		

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Hard, very moist, gray, CLAY LOAM TILL. (continued)	30	7.5	8
	38	S	
	16		
	25	6.4	9
	32	BS	
	6		

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)

Latitude N 88 deg 46.450 min. Longitude W 39 deg 43.849 min. Map Datum WGS 84

DESIGNED -	EXAMINED _____ DATE - 10/11/2011	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**SOIL BORING LOGS STRUCTURE NO. 070-0050**
CHECKED -	ENGINEER OF BRIDGE DESIGN		SHEET NO. 20 OF 21 SHEETS
DRAWN -	PASSED _____		
CHECKED -	ENGINEER OF BRIDGES AND STRUCTURES		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	(102BY)B-1	MOULTRIE	48	20
		CONTRACT NO. 74280		
	ILLINOIS FED. AID PROJECT			

Illinois Department of Transportation
Division of Highways
District 7 – Materials

SOIL BORING LOG

Page 3 of 4

Date 7/30/07

ROUTE FAP 320 (IL 121) DESCRIPTION Marrow Bone Creek LOGGED BY E. Sandschafer

SECTION (102BY)B-1 LOCATION NW 1/4, SEC. 9, TWP. 14 N, RNG. 4 E, 3 PM

COUNTY Moultrie DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO. 070-0001
Station 139+18.3

BORING NO. 2
Station 139+70
Offset 13.00ft Lt
Ground Surface Elev. 656.85 ft

Surface Water Elev. 639.80 ft
Stream Bed Elev. 639.10 ft

Groundwater Elev.:
First Encounter 638.5 ft
Upon Completion Washed ft
After 22 Hrs. 645.4 ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Hard, very moist, gray, CLAY LOAM TILL. (continued)	18 32	4.3 S	15
	19 28 32	4.5 PP	10
	12		
Hard, very moist, gray, CLAY LOAM TILL. (continued)	22 35	4.6 B	11
Very dense, moist, gray, SILTY CLAY SHALE. (547.35 / 546.75)	50/5"		
Borehole continued with rock coring.	50/2" 50/1"	2.4 S	5

Latitude N 39 deg 48.430 min, Longitude W 88 deg 43.848 min, Map Datum NAD 84

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B–Bulge, S–Shear, P–Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8–99)

Illinois Department of Transportation
Division of Highways
District 7 – Materials

ROCK BORING LOG

Page 4 of 4

Date 7/30/07

ROUTE FAP 320 (IL 121) DESCRIPTION Marrow Bone Creek LOGGED BY E. Sandschafer

SECTION (102BY)B-1 LOCATION NW 1/4, SEC. 9, TWP. 14 N, RNG. 4 E, 3 PM

COUNTY Moultrie CORING METHOD Rotary, surf set diamond bit

STRUCT. NO. 070-0001
Station 139+18.3

CORING BARREL TYPE & SIZE NW, conv dbl bbl, split inner

Core Diameter 2.06 in
Top of Rock Elev. 547.35 ft
Begin Core Elev. 546.75 ft

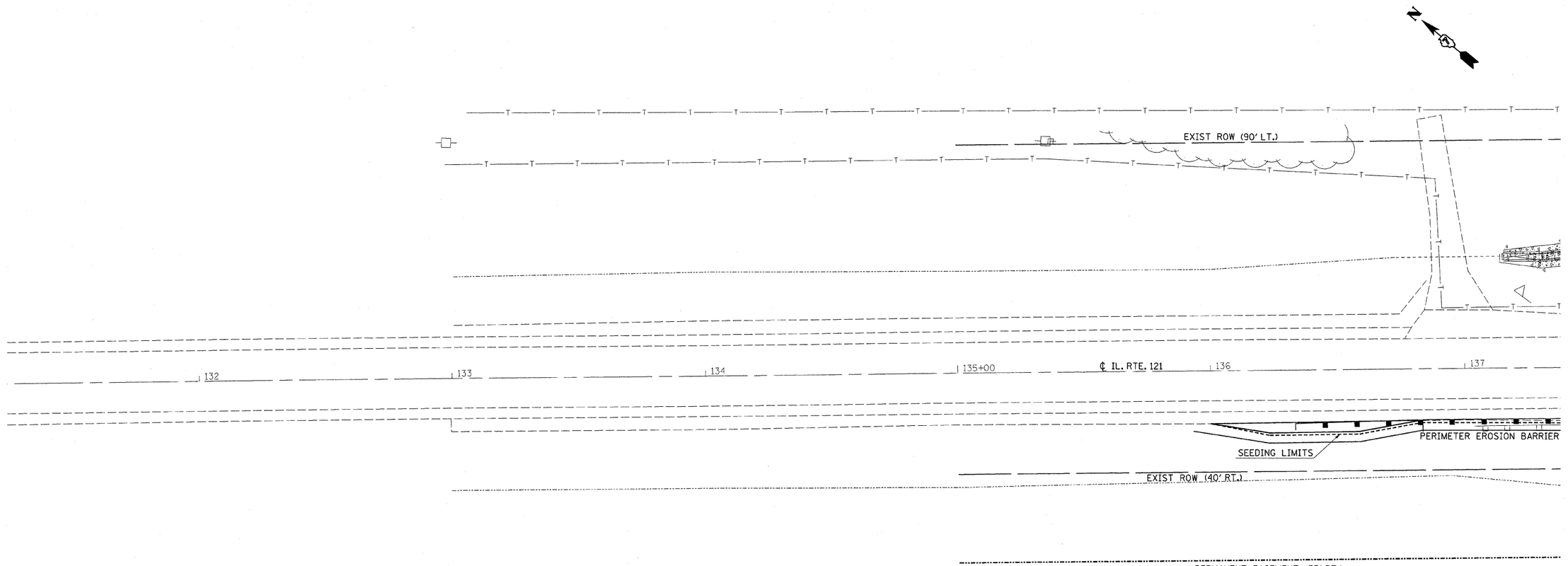
BORING NO. 2
Station 139+70
Offset 13.00ft Lt
Ground Surface Elev. 656.85 ft

DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
Gray, moderately weathered, SILTY CLAY SHALE. (546.75)	B2-1	91	54	0.9	
Rock core sample B2C1 @ 111.6' to 112.1' depth = 5.9 tsf Qu.					
	B2-2	94	78	1.2	
Rock core sample B2C2 @ 115.6' to 116.1' depth = 9.0 tsf Qu.					
Extent of exploration. (537.05)					
Benchmark: BM 201 Chiseled square on top of NE wingwall on existing structure 070–0001, Sta 139+44, 23.4 Lt = 657.57' elevation. Provided by Program Development.					

Color pictures of the cores Available on request
Cores will be stored for examination until 07/30/08
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D–2936)

BBS, form 138 (Rev. 8–99)

DESIGNED –	EXAMINED		DATE – 10/11/2011	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**SOIL BORING LOGS STRUCTURE NO. 070–0050**	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED –		ENGINEER OF BRIDGE DESIGN				320	(102BY)B-1	MOULTRIE	43	37
DRAWN –	PASSED							CONTRACT NO. 74280		
CHECKED –		ENGINEER OF BRIDGES AND STRUCTURES			SHEET NO. 21 OF 21 SHEETS			ILLINOIS FED. AID PROJECT		



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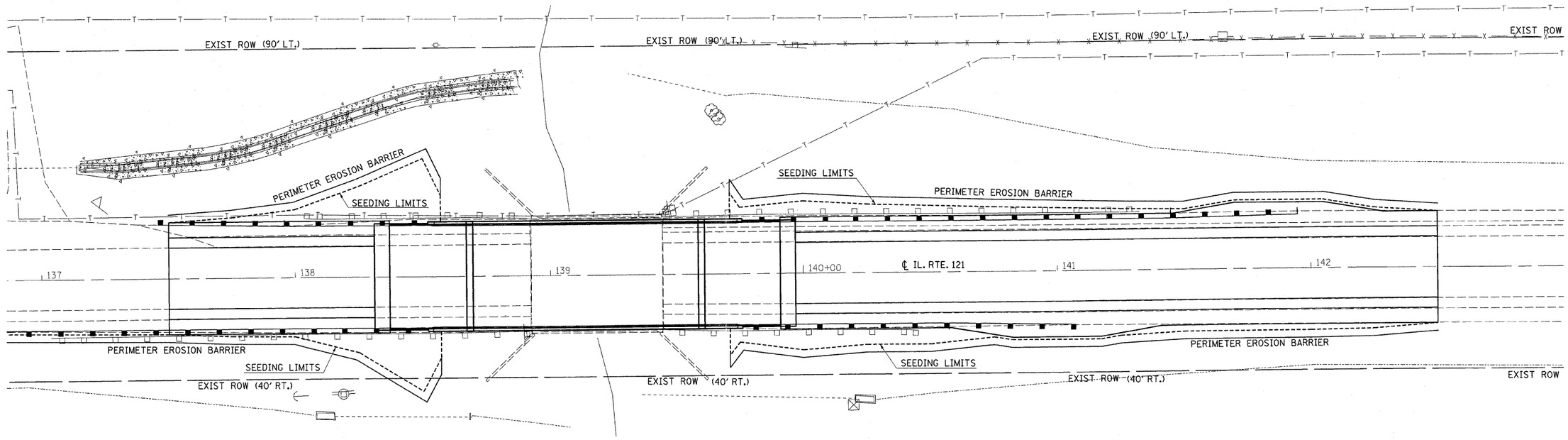
	PLOT SCALE = 20.0000 ' / in.	CHECKED -	REVISED -					320	(102BY)B-1	MOULTRIE	48	38
	PLOT DATE = 8/9/2011	DATE -	REVISED -		SCALE: 20	SHEET NO. 1 OF 2 SHEETS	STA. 132+00 TO STA. 137+00			CONTRACT NO. 74280		
								FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



EROSION CONTROL GENERAL NOTES

EROSION CONTROL MEASURES AT THE START OF CONSTRUCTION:

1. THE AREAS OF EXCAVATION AND EMBANKMENT PLACEMENT SHALL BE MANAGED FOR THE PURPOSES OF CONTROLLING EROSION WITHIN THE IMPROVEMENT AREA, REDUCING WATER FLOW BY TEMPORARY DIVERSION, MINIMIZING SILTATION AT THE RIGHT-OF-WAY LINE, AND ESTABLISHING VEGETATIVE COVER WHICH WILL BECOME PERMANENT VEGETATION AND ACT AS AN EROSION CONTROL BARRIER. WORK AT THE START OF CONSTRUCTION SHALL CONSIST OF THE FOLLOWING:

   (a) AREAS OF EXISTING VEGETATION (WOODS AND GRASSLANDS) OUTSIDE THE PROPOSED CONSTRUCTION LIMITS SHALL BE IDENTIFIED FOR PRESERVING AND SHALL BE PROTECTED FROM MOWING, BRUSH CUTTING, TREE REMOVAL, AND OTHER ACTIVITIES THAT WOULD BE DETRIMENTAL TO THEIR MAINTENANCE AND DEVELOPMENT.

   (b) DEAD, DISEASED, OR UNSUITABLE VEGETATION WITHIN THE SITE SHALL BE REMOVED AS DIRECTED BY THE ENGINEER.

   (C) BARE AND SPARSELY VEGETATED GROUND IN HIGHLY ERODABLE AREAS AS DETERMINED BY THE ENGINEER SHALL BE TEMPORARY SEEDED AT THE START OF CONSTRUCTION WHEN NO CONSTRUCTION ACTIVITIES ARE EXPECTED WITHIN SEVEN CALENDAR DAYS.

EROSION CONTROL MEASURES DURING CONSTRUCTION:

1. DURING CONSTRUCTION, AREAS OUTSIDE THE CONSTRUCTION LIMITS AS OUTLINED PREVIOUSLY HEREIN SHALL BE PROTECTED FROM DAMAGING EFFECTS OF CONSTRUCTION. THE CONTRACTOR SHALL NOT USE THIS AREA FOR PARKING OF VEHICLES OR CONSTRUCTION EQUIPMENT, STORAGE OF MATERIALS, OR OTHER CONSTRUCTION RELATED ACTIVITIES.

   (a) WITHIN THE CONSTRUCTION ZONE, CRITICAL AREAS WHICH HAVE A HIGH FLOW OF WATER, AS DETERMINED BY THE ENGINEER, SHALL REMAIN UNDISTURBED UNTIL CONTINUOUS OPERATIONS CAN ENSURE TIMELY COMPLETION OF WORK IN THESE AREAS TO MINIMIZE SOIL EROSION.

   (b) EARTH STOCKPILES SHALL BE TEMPORARY SEEDED IF THEY ARE TO REMAIN UNUSED FOR MORE THAN FOURTEEN CALENDAR DAYS.

EROSION CONTROL MEASURES AFTER FINAL GRADING:

1. EXCAVATION AND EMBANKMENT AREAS SHALL BE PERMANENTLY SEEDED WHEN FINAL GRADE.

   (a) TEMPORARY EROSION CONTROL SYSTEMS SHALL REMAIN IN PLACE WITH PROPER MAINTENANCE UNTIL PERMANENT EROSION CONTROL IS IN PLACE AND WORKING PROPERLY WITH ALL PROPOSED TURF AREAS SEEDED AND A PROPER STAND ESTABLISHED.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION CONTROL

SCALE: 20 | SHEET NO. 2 OF 2 SHEETS | STA. 137+00 | TO STA. 142+00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	(102BY)B-1	MOULTRIE	48	39
		CONTRACT NO. 74280		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

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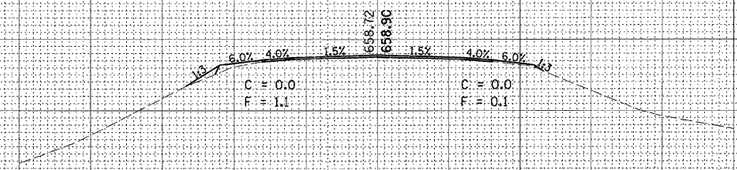
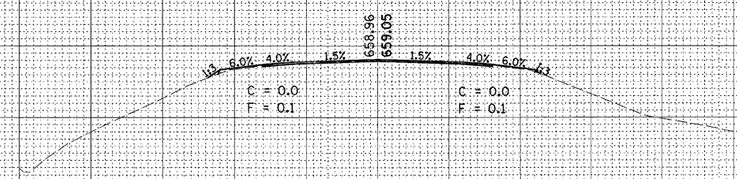
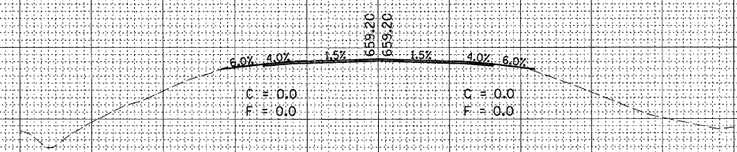


138 + 00.00



137 + 75.00



137 + 50.00

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		DRAWN -	REVISED -					320	(102BY)B-1	Moultrie	48	40
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	PLOT DATE = 8/9/2011	DATE -	REVISED -		SCALE: 10	SHEET NO. 1 OF 9 SHEETS	STA. 137+50.00 TO STA. 138+00.00			ILLINOIS	FED. AID PROJECT	

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

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

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

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

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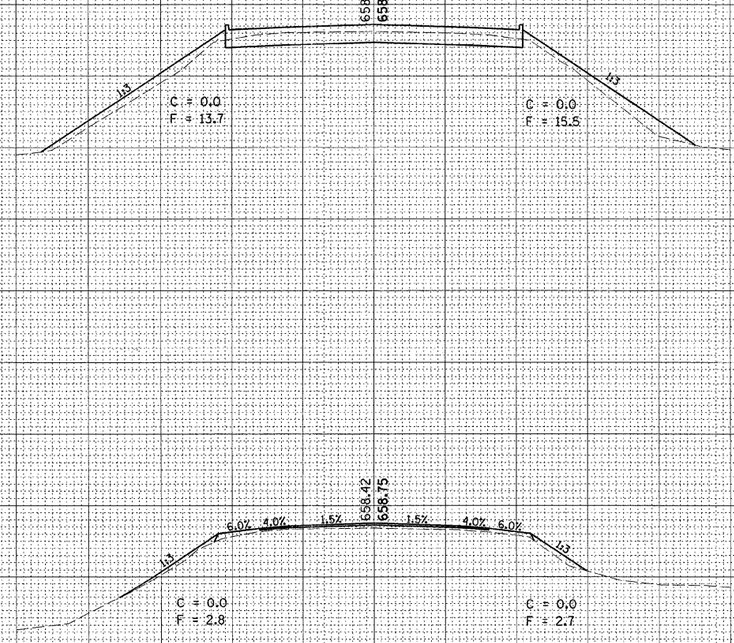

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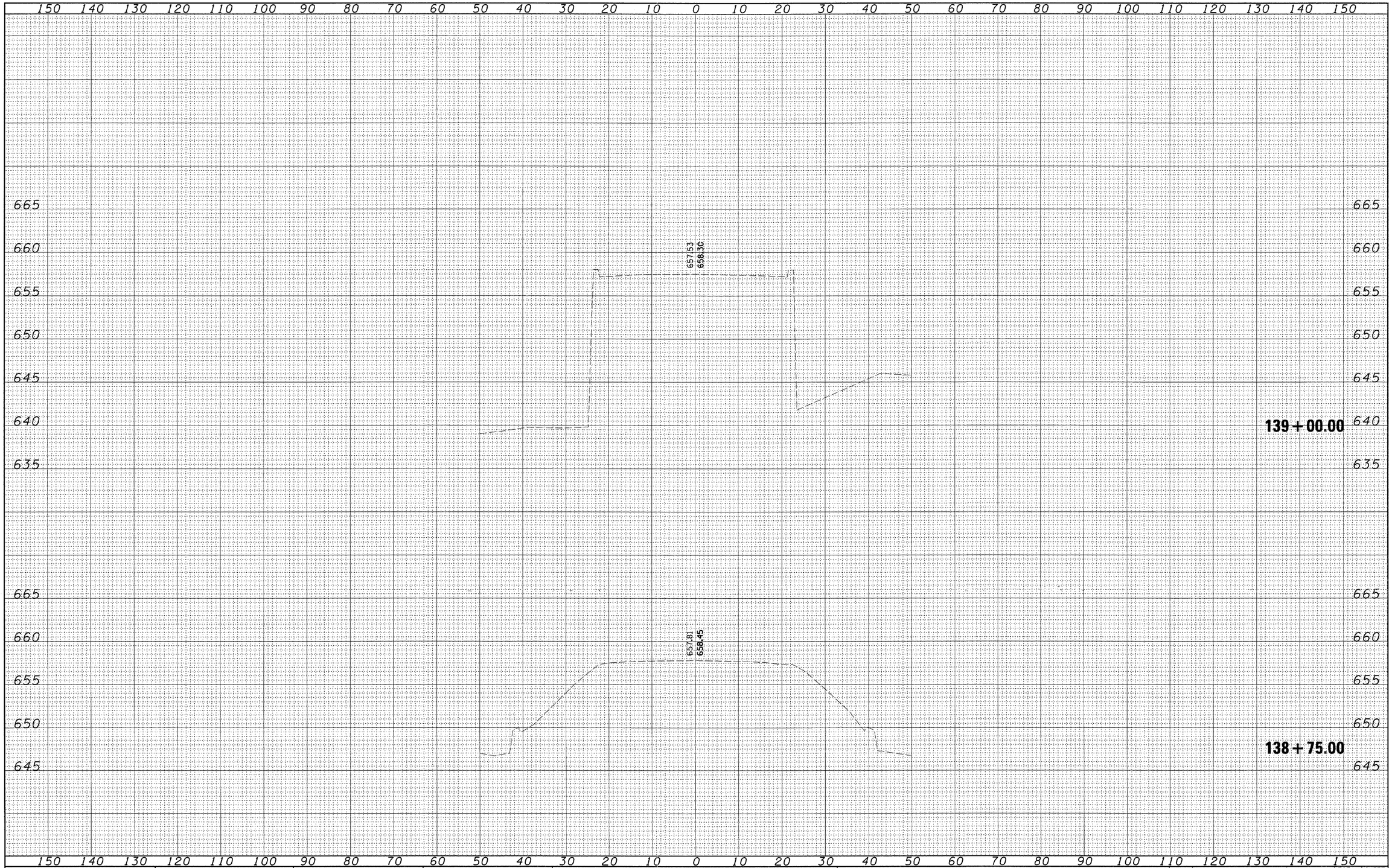
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	(102BY)B-1	Moultrie	48	41
		CONTRACT NO. 74280		
	ILLINOIS FED. AID PROJECT			



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

ORIGINAL SURVEY
NOTE BOOK
NO.
SURVEYED
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AREAS
AREAS CHECKED
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DATE

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: 10 | SHEET NO. 3 OF 9 SHEETS | STA. 138+75.00 TO STA. 139+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	(102BY)B-1	Moultrie	48	42
		CONTRACT NO. 74280		
	ILLINOIS FED. AID PROJECT			

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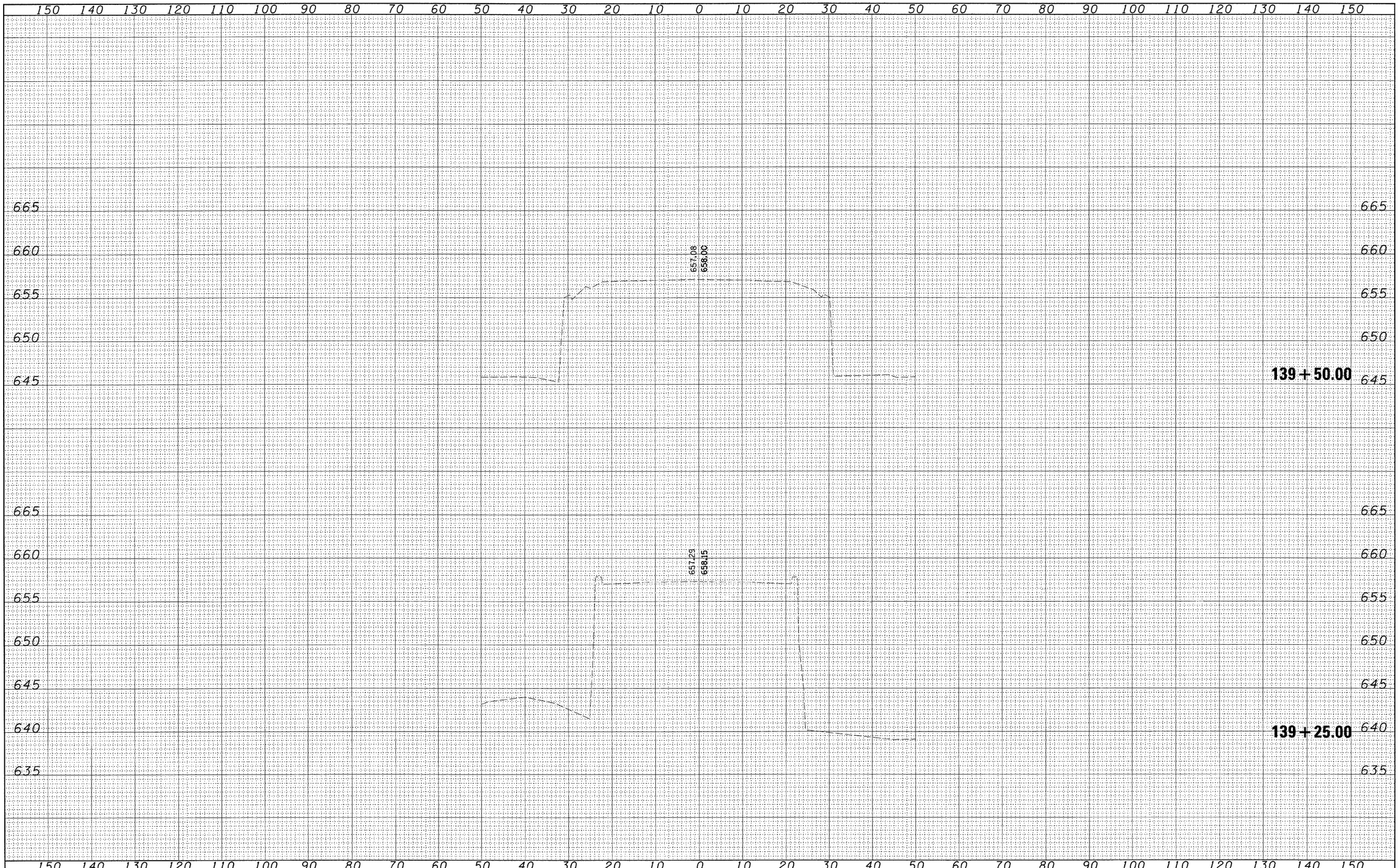
SURVEYED		BY
PLOTTED		DATE
TEMPLATE		
AREAS		
AREAS CHECKED		



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

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		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: 10 | SHEET NO. 4 OF 9 SHEETS | STA. 139+25.00 TO STA. 139+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	(102BY)B-1	Moultrie	48	43
		CONTRACT NO. 74280		
	ILLINOIS	FED. AID PROJECT		

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

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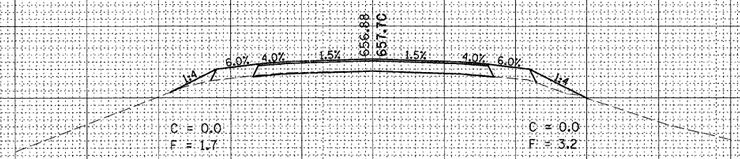

140 + 00.00

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660
655
650

139 + 75.00

645

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

ORIGINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
NO.	AREAS		
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: 10 | SHEET NO. 5 OF 9 SHEETS | STA. 139+75.00 TO STA. 140+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	(102BY)B-1	Moultrie	48	44
		CONTRACT NO. 74280		
	ILLINOIS FED. AID PROJECT			

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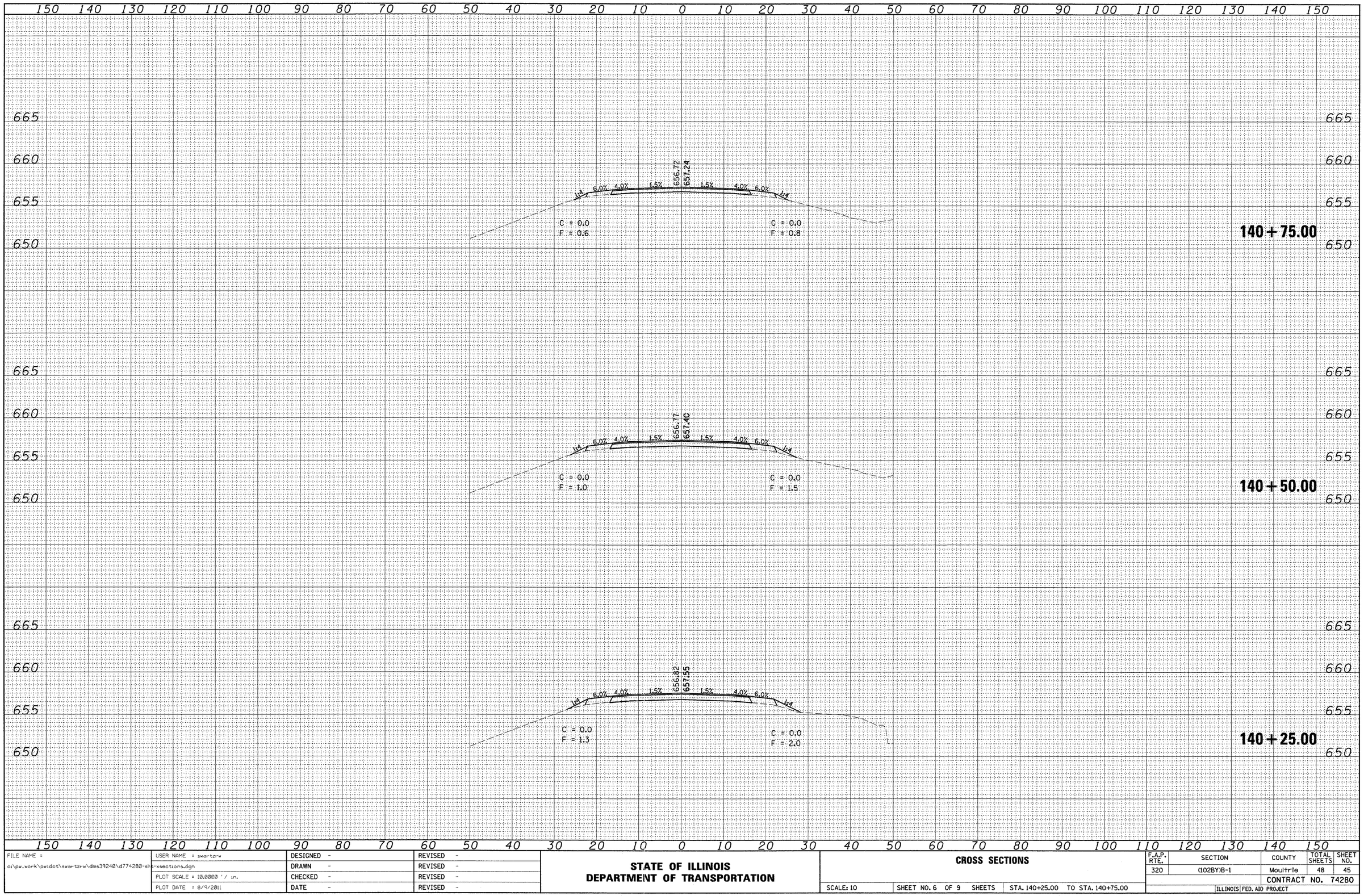
NOTE BOOK		
AREAS		
NO.	AREAS CHECKED	



ORIGINAL SURVEY	BY	DATE
SURVEYED		
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AREAS		
NO.	AREAS CHECKED	

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: 10 | SHEET NO. 6 OF 9 SHEETS | STA. 140+25.00 TO STA. 140+75.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	(102BY)B-1	Moultrie	48	45
		CONTRACT NO. 74280		
	ILLINOIS FED. AID PROJECT			

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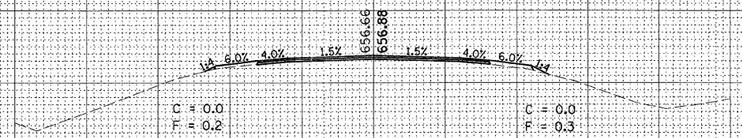
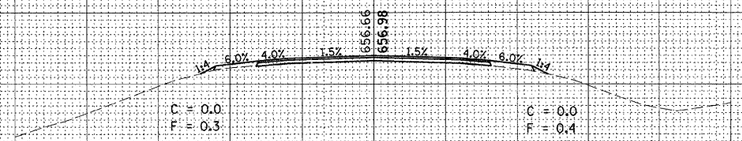
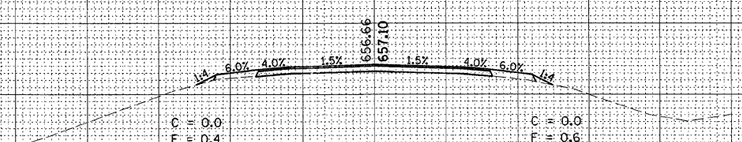


141 + 50.00



141 + 25.00



141 + 00.00

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		DRAWN -	REVISED -					320	(102BYJB-1	Moultrie	48	46
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	PLOT DATE = 8/9/2011	DATE -	REVISED -		SCALE: 10	SHEET NO. 7 OF 9 SHEETS	STA. 141+00.00 TO STA. 141+50.00			ILLINOIS	FED. AID PROJECT	

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

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

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

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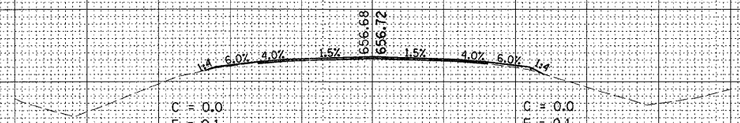
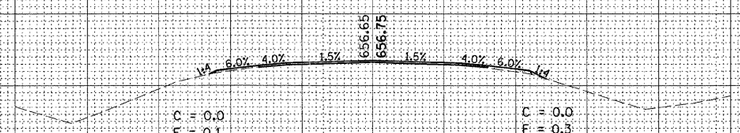
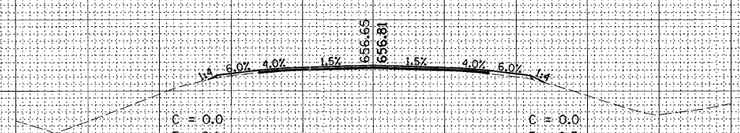


142 + 25.00



142 + 00.00



141 + 75.00

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

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: 10 | SHEET NO. 8 OF 9 SHEETS | STA. 141+75.00 TO STA. 142+25.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	(102BY)B-1	Moultrie	48	47

CONTRACT NO. 74280

ILLINOIS FED. AID PROJECT

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

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
NOTE BOOK AREAS		
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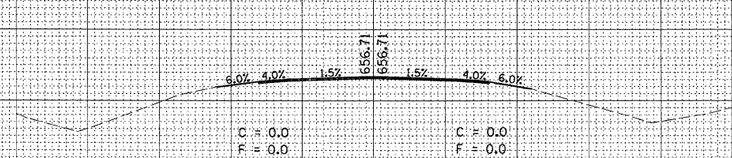

142 + 50.00

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: 10 | SHEET NO. 9 OF 9 SHEETS | STA. 142+50.00 TO STA. 142+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	(102BY)B-1	Moultrie	48	48
		CONTRACT NO. 74280		
	ILLINOIS FED. AID PROJECT			