

# PROPOSED HIGHWAY PLANS

FAP ROUTE 116 (IL 130)

SECTION (113B)B-1

PROJECT ACF-0116(060)

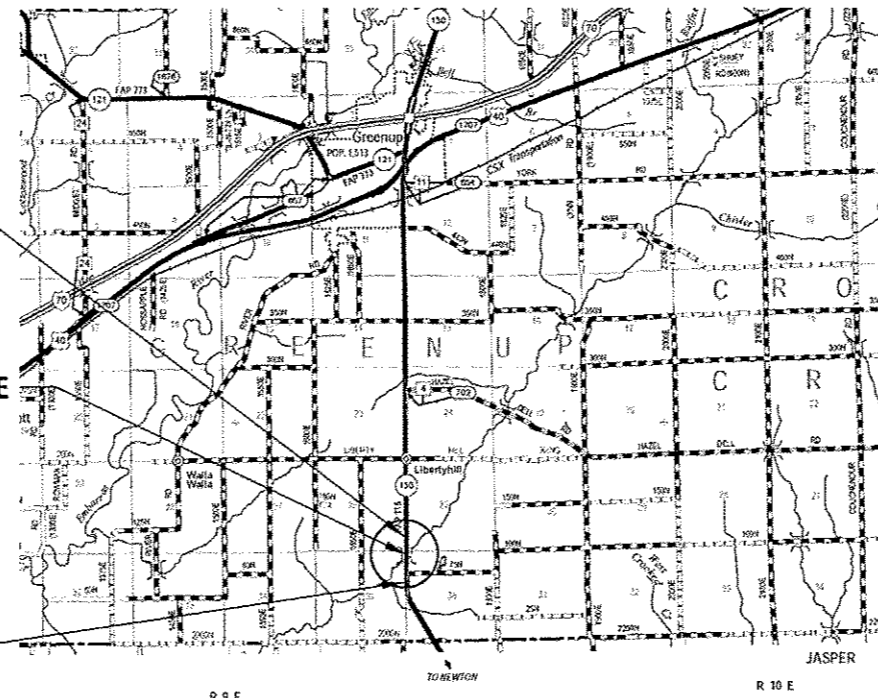
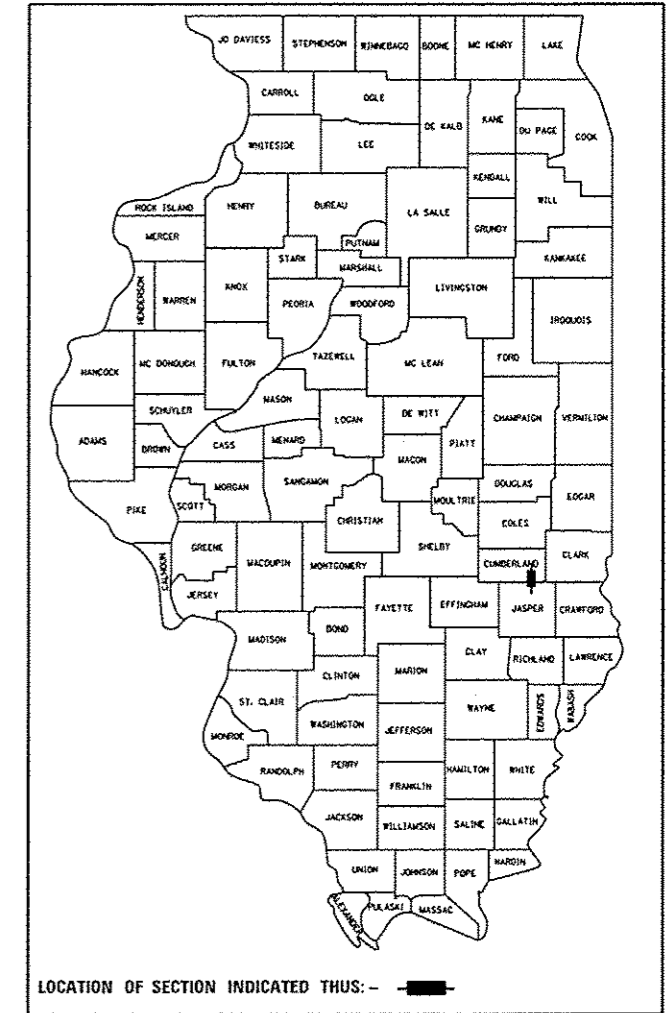
## STRUCTURE REPLACEMENT OVER RANGE CREEK CUMBERLAND COUNTY

C-97-087-08

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
116	(113B)B-1	CUMBERLAND	83	1
ILLINOIS			CONTRACT NO. 74324	
D-97-039-08				

### INDEX OF SHEETS

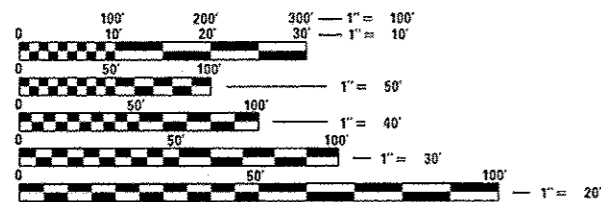
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PROJECT BEGINS  
STA 699 + 50

PROPOSED STRUCTURE  
STA 708 + 12.50  
PROP SN 018-0067  
EXIST SN 018-0027

PROJECT ENDS  
STA 719 + 50



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  
PHONE : (217) 342-8320

CONTRACT NO. 74324

**CHASTAIN & ASSOCIATES LLC**  
CONSULTING ENGINEERS  
DECATUR (217) 422-8544  
CHICAGO (773) 714-0050  
ROCKFORD (815) 489-0050  
184-001397

GROSS LENGTH = 2,000 FT. = 0.379 MILE  
NET LENGTH = 2,000 FT. = 0.379 MILE  
ADT = 2,200 (2013)  
FUNCTIONAL CLASSIFICATION = RURAL MINOR ARTERIAL



*Kenneth C. McDonough* 1/27/2015  
KEN MCDONOUGH, P.E., S.E. DATE  
EXPIRES 11/30/2015  
SHEETS 20-25



*Christopher A. Siefert* 1/27/2015  
CHRISTOPHER A. SIEFERT, P.E. DATE  
EXPIRES 11/30/2015  
SHEETS 1-19, 62-82

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED *February 6* 20 *15*  
*Roger L. Drishell*  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

*May 8* 20 *15*  
*John D. Baranzello* P.E. for  
ENGINEER OF DESIGN AND ENVIRONMENT

*May 8* 20 *15*  
*Omer Osman* P.E. for  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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

**GENERAL NOTES**

- THIS SECTION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PLANS, THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", ADOPTED JANUARY 1, 2012 (SSRB); THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS" INDICATED ON THE CHECK SHEET; AND "THE SPECIAL PROVISIONS" INCLUDED IN THE PROPOSAL.
- THIS PROJECT IS LOCATED ON ILLINOIS ROUTE 130 IN CUMBERLAND COUNTY APPROXIMATELY 0.8 MILES NORTH OF THE JASPER COUNTY LINE. THE WORK INCLUDED IN SECTION (113B)B-1 CONSISTS OF REMOVAL AND REPLACEMENT OF SN 018-0027 WITH SN 018-0067 A 4-SPAN COMPOSITE STEEL GIRDER STRUCTURE OVER RANGE CREEK UTILIZING STAGED CONSTRUCTION, ROADWAY EMBANKMENT, HOT-MIX ASPHALT PAVEMENT, HOT-MIX ASPHALT SHOULDERS, AGGREGATE SHOULDERS, GUARDRAIL, PAVEMENT MARKING, SEEDING, PLACEMENT OF RIPRAP, AND ANY OTHER WORK NECESSARY TO COMPLETE THIS PROJECT. THERE ARE WETLAND AREAS WITHIN THE PROJECT LIMITS.
- THE LOCATION OF EXISTING UTILITIES AS SHOWN ON THE PLANS ARE BASED ON CAREFUL FIELD INVESTIGATION AND THE BEST INFORMATION AVAILABLE, BUT ARE NOT GUARANTEED. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THEIR EXACT LOCATIONS FROM THE UTILITY COMPANY AND BY FIELD INSPECTION. THE CONTRACTOR IS REQUIRED TO CONTACT J.U.L.I.E. AT 1-800-892-0123 PRIOR TO PROCEEDING WITH ANY EXCAVATION AND WORK ON THE PROJECT.
- ALL ELEVATIONS ARE BASED ON NAVD 88 DATUM, THE PROPOSED GRADE ELEVATIONS SHOWN ON THE PLANS ARE THE ELEVATIONS FOR THE FINISHED SURFACE AT THE LOCATIONS INDICATED.
- THE PLANS ARE BASED ON SURVEY INFORMATION AND RECORD DOCUMENTS PROVIDED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION, DISTRICT 7. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- DIMENSIONS FOR THE RADII SHOWN ON THE PLAN SHEETS ARE TO THE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
- WHERE SECTION OR SUB-SECTION MONUMENTS ARE ENCOUNTERED THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKERS AND/OR MONUMENTS UNTIL THE OWNER, AUTHORIZED SURVEYOR, OR AGENT HAS WITNESSED OR REFERENCED THEIR LOCATION. THE CONTRACTOR WILL BE RESPONSIBLE FOR HAVING AN AUTHORIZED SURVEYOR RE-ESTABLISH ANY SECTION OR SUB-SECTION MONUMENTS DESTROYED BY THEIR OPERATIONS.
- ACCESS TO ALL ENTRANCES AND SIDE ROADS SHALL BE MAINTAINED AT ALL TIMES.
- PAVEMENT MARKING SHALL BE APPLIED IN ACCORDANCE WITH SECTION 780 OF THE SSRB. SHORT TERM PAVEMENT MARKING SHALL BE APPLIED TO THE MILLED SURFACE, BITUMINOUS MATERIALS (PRIME COAT), HOT-MIX ASPHALT BINDER, AND HOT-MIX ASPHALT SURFACE COURSE AS SPECIFIED IN SECTION 703 OF THE SSRB. PAINT SHALL BE USED ON THE MILLED SURFACES AND TAPE SHALL BE USED ON THE SURFACE COURSE.
- THE CONTRACTOR SHALL PROVIDE INTERNET ACCESSIBILITY TO THE HOT-MIX ASPHALT PLANT QUALITY CONTROL LAB SO THAT HOT-MIX ASPHALT PLANT REPORTS CAN BE E-MAILED TO THE DISTRICT HEADQUARTERS. THIS WORK SHALL BE INCLUDED IN THE COST OF ALL HOT-MIX ASPHALT ITEMS.
- THE PAY ITEM TEMPORARY RAMP HAS BEEN INCLUDED FOR THE CONSTRUCTION OF TEMPORARY RAMPS IN ACCORDANCE WITH ARTICLE 406.08 OF THE SSRB. THE COST SHALL INCLUDE BOTH THE INSTALLATION AND THE REMOVAL OF THE TEMPORARY RAMPS.
- ALL EXISTING AND PROPOSED RIGHT-OF-WAY LINES SHOWN ON THE PLAN SHEETS ARE GRAPHICAL REPRESENTATIONS AND SHALL NOT BE USED AS A MEANS TO ESTABLISH OWNERSHIP. IN ALL MATTERS RELATING TO THE RIGHT-OF-WAY, THE PLAT OF HIGHWAYS SHALL BE THE CONTROLLING DOCUMENT.
- THE RESIDENT ENGINEER SHALL BE THE SOLE JUDGE CONCERNING THE CURING TIME FOR ALL HOT-MIX ASPHALT.
- A UNIFORMLY STRAIGHT SAW CUT SHALL BE MADE AT LOCATIONS WHERE PROPOSED NEW CONSTRUCTION WILL ABUT EXISTING HOT-MIX ASPHALT SURFACES. THE SAW CUT SHALL BE MADE THE SAME DEPTH AS THE HOT-MIX ASPHALT SURFACE REMOVAL. THIS WORK WILL BE CONSIDERED INCLUDED IN THE COST OF THE CONTRACT ITEMS INVOLVED AND NO EXTRA COMPENSATION WILL BE ALLOWED.
- THE MATERIAL USED FOR AGGREGATE SURFACE COURSE, TYPE B AND AGGREGATE SHOULDERS, TYPE B, 6" SHALL BE CRUSHED STONE OR CRUSHED CONCRETE.
- THE RESIDENT ENGINEER WILL VERIFY AND MARK ALL TREES REQUIRED TO BE REMOVED. TREES OUTSIDE THE LIMITS OF CONSTRUCTION SHALL NOT BE DISTURBED UNLESS DESIGNATED BY THE ENGINEER. THE RESIDENT ENGINEER SHALL CONTACT PHIL NOSBISCH, THE DISTRICT ROADSIDE MAINTENANCE TECHNICIAN, AT (217) 342-8276 A MINIMUM OF SEVEN DAYS PRIOR TO DELIVERY OF THE TREES SO HE CAN INSPECT THEM FOR ACCEPTANCE AND DETERMINE THE LOCATIONS TO PLANT THE NEW TREES.
- THE UNIT PRICE FOR CLASS SI CONCRETE (OUTLET) SHALL INCLUDE THE REQUIRED WELDED WIRE FABRIC.

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

TEMPORARY SEEDING	-	100 LBS/ACRE - 2 APPLICATIONS
NITROGEN FERTILIZER NUTRIENT	-	90 LBS/ACRE
PHOSPHOROUS FERTILIZER NUTRIENT	-	90 LBS/ACRE
POTASSIUM FERTILIZER NUTRIENT	-	90 LBS/ACRE
MULCH METHOD	-	2.0 TON/ACRE
RIPRAP, A4	-	1.5 TON/CU YD
AGGREGATE MATERIALS	-	1.8 TON/CU YD
BITUMINOUS MATERIALS (PRIME COAT)	-	0.25 LBS/50 FT (ON AGGREGATE)
BITUMINOUS MATERIALS (PRIME COAT)	-	0.05 LBS/50 FT (ON PAVEMENT)
HOT-MIX ASPHALT SURFACE / BINDER	-	112 LBS/50 YD/IN

**MIXTURE REQUIREMENTS**

Mixture Use:	Surface Course (Full-Depth Pavement and regular resurfacing)
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
Mixture Use:	Binder Course (Full-Depth Pavement 7")
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
Mixture Use:	Binder Course (Full-Depth Pavement 9")
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
Mixture Use:	Binder Course (Binder for transition area)
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
Mixture Use:	Pavement Patching
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
Mixture Use:	Hot-Mix Asphalt Shoulders 9" (Bottom Lifts)
Application:	Hot-Mix Asphalt Shoulders
PG Grade:	PG 64-22
Design Air Voids:	4.0% @ Ndesign = 30
Mixture Composition:	IL-19.0L
Friction Aggregate:	N/A
Mixture Use:	Hot-Mix Asphalt Shoulders 9" (Top Lift)
Application:	Hot-Mix Asphalt Shoulders
PG Grade:	PG 64-22
Design Air Voids:	4.0% @ Ndesign = 30
Mixture Composition:	IL-9.5L
Friction Aggregate:	Mixture C
Mixture Use:	Incidental HMA Surfacing, Entrances
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

**HIGHWAY STANDARDS**

000001-06	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMALS OF AN INCH AND OF A FOOT
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
406201-01	MAILBOX TURNOUT
420401-11	BRIDGE APPROACH PAVEMENT CONNECTOR
442201-03	CLASS C AND D PATCHES
482001-02	HMA SHOULDER ADJACENT TO FLEXIBLE PAVEMENT
515001-03	NAME PLATE FOR BRIDGES
542011	CONCRETE END SECTIONS FOR ELLIPTICAL PIPE CULVERTS 15" THRU 72" EQUIVALENT DIAMETER
542311-05	TRAVERSABLE PIPE GRATE
542401-01	METAL END SECTION FOR PIPE CULVERTS
601101-01	CONCRETE HEADWALL FOR PIPE DRAIN
606201-02	TYPE B CUTTER (INLET, OUTLET & ENTRANCE)
630001-10	STEEL PLATE BEAM GUARDRAIL
630201-06	PCC/HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
630301-06	SHOULDER WIDENING FOR TYPE I (SPECIAL) GUARDRAIL TERMINALS
631031-13	TRAFFIC BARRIER TERMINAL, TYPE 6
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-02	REFLECTOR MARKER AND MOUNTING DETAILS
666001-01	RIGHT OF WAY MARKERS
667101-02	PERMANENT SURVEY MARKERS
701001-02	OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY
701006-05	OFF-RD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
701011-04	OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701201-04	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS >= 45 MPH
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701306-03	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY FOR SPEEDS >= 45 MPH
701311-03	LANE CLOSURE 2L, 2W, MOVING OPERATIONS - DAY ONLY
701321-14	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
701326-04	LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS >= 45 MPH
701901-04	TRAFFIC CONTROL DEVICES
704001-07	TEMPORARY CONCRETE BARRIER
780001-05	TYPICAL PAVEMENT MARKINGS
781001-03	TYPICAL APPLICATION OF RAISED REFLECTIVE PAVEMENT MARKERS

FILE NAME:	USER NAME: dpl1lock	DESIGNED: CAS	REVISED:	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>GENERAL NOTES AND HIGHWAY STANDARDS</b>				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1110016800 - 07 Var Var Work Order 5	IL 130 Roadway Plans/CADD/Drawings/0774324-sh	CHECKED: DLB	REVISED:		<b>FAP 116 (IL 130)</b>				116	(113B)B-1	CUMBERLAND	83	2
	PLOT SCALE: 1/8" = 1'-0"	CHECKED: JMB	REVISED:		SCALE: SHEET OF SHEETS STA. TO STA.				CONTRACT NO. 74324				
Default	PLOT DATE: 2/4/2015	DATE: 1/27/15	REVISED:						ILLINOIS FED. AID PROJECT				

CONSTR. CODE  
 80% FEDERAL  
 20% STATE  
 BRIDGE  
 0011

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	
20100110	TREE REMOVAL ( 6 TO 15 UNITS DIAMETER)	UNIT	101.5	101.5
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	69	69
20101000	TEMPORARY FENCE	FOOT	242	242
20200100	EARTH EXCAVATION	CU YD	4510	4510
20400800	FURNISHED EXCAVATION	CU YD	9132	9132
20600110	GRANULAR EMBANKMENT, SPECIAL	TON	569	569
* 25000200	SEEDING, CLASS 2	ACRE	2.1	2.1
* 25000305	SEEDING, CLASS 3A	ACRE	0.1	0.1
* 25000400	NITROGEN FERTILIZER NUTRIENT	POUND	198	198
* 25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	198	198
* 25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	198	198
* 25100115	MULCH, METHOD 2	ACRE	2.1	2.1
* 25100630	EROSION CONTROL BLANKET	SO YD	494	494
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	440	440

\* SPECIALTY ITEM

FILE NAME :	USER NAME :	DESIGNED -	REVISIONS -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SUMMARY OF QUANTITIES FAP 116 (IL 130)</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
h:\1001\6008 - D7 Var Var\Work Order 5	IL 130 Roadway Plans\CADD\Civil\10774324-01	DRAWN -	REVISIONS -					116	(113B18-1)	CUMBERLAND	83	3
	PLOT SCALE = 100.0000' / 1" =	CHECKED -	REVISIONS -		SCALE:			SHEET 1 OF 8 SHEETS STA. TO STA.				
Default	PLOT DATE = 2/4/2015	DATE =	REVISIONS -					ILLINOIS FED. AID PROJECT				

14

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE
				80% FEDERAL 20% STATE BRIDGE 0011
28000305	TEMPORARY DITCH CHECKS	FOOT	127	127
28000400	PERIMETER EROSION BARRIER	FOOT	817	817
28000500	INLET AND PIPE PROTECTION	EACH	3	3
28100207	STONE RIPRAP, CLASS A4	TON	857	857
28200200	FILTER FABRIC	SQ YD	1284	1284
35101600	AGGREGATE BASE COURSE, TYPE B 4"	SQ YD	345	345
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	1091	1091
35650400	BASE COURSE WIDENING 9"	SQ YD	512	512
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	9862	9862
40600990	TEMPORARY RAMP	SQ YD	51	51
40603085	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70	TON	250	250
40603315	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N70	TON	577	577
40701821	HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 7"	SQ YD	170	170
40701861	HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 9"	SQ YD	1974	1974
14				

CONSTR. CODE  
80% FEDERAL  
20% STATE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE
				0011
40800050	INCIDENTAL HOT-MIX ASPHALT SURFACING	TON	164	164
42001420	BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)	SQ YD	182	182
44000100	PAVEMENT REMOVAL	SQ YD	5	5
44000400	CUTTER REMOVAL	FOOT	745	745
44201789	CLASS D PATCHES, TYPE I1, 12 INCH	SQ YD	134	134
48101500	AGGREGATE SHOULDERS, TYPE B 6"	SQ YD	1175	1175
48203033	HOT-MIX ASPHALT SHOULDERS, 9"	SQ YD	1117	1117
50100300	REMOVAL OF EXISTING STRUCTURES NO. 1	EACH	1	1
50100400	REMOVAL OF EXISTING STRUCTURES NO. 2	EACH	1	1
50200100	STRUCTURE EXCAVATION	CU YD	355	355
50200300	COFFERDAM EXCAVATION	CU YD	141	141
50201101	COFFERDAM (TYPE 1) (LOCATION - 1)	EACH	1	1
50300100	FLOOR DRAINS	EACH	20	20
50300225	CONCRETE STRUCTURES	CU YD	370.1	370.1
14				

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CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE
				0011
50300255	CONCRETE SUPERSTRUCTURE	CU YD	448.4	448.4
50300260	BRIDGE DECK GROOVING	SD YD	1423	1423
50300300	PROTECTIVE COAT	SD YD	1852	1852
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1	1
50500505	STUD SHEAR CONNECTORS	EACH	7464	7464
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	161910	161910
50800515	BAR SPLICERS	EACH	1420	1420
50800530	MECHANICAL SPLICERS	EACH	238	238
51201900	FURNISHING STEEL PILES HP14X89	FOOT	5013	5013
51202305	DRIVING PILES	FOOT	5013	5013
51203900	TEST PILE STEEL HP14X89	EACH	5	5
51500100	NAME PLATES	EACH	1	1
52000110	PREFORMED JOINT STRIP SEAL	FOOT	96	96
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	12	12
14				

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CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE
				0011
52100510	ANCHOR BOLTS, 3/4"	EACH	12	12
52100520	ANCHOR BOLTS, 1"	EACH	48	48
542A5527	PIPE CULVERTS, CLASS A, TYPE 1 EQUIVALENT ROUND-SIZE 72"	FOOT	27	27
54260311	TRAVERSABLE PIPE GRATE	FOOT	117	117
54263372	CONCRETE END SECTION, STANDARD 542011, 72", 1:3	EACH	2	2
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	98	98
60600095	CLASS S1 CONCRETE (OUTLET)	CU YD	7	7
60602800	CONCRETE CUTTER, TYPE B	FOOT	494	494
* 63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	125	125
* 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	5	5
63200310	GUARDRAIL REMOVAL	FOOT	1050	1050
66600105	FURNISHING AND ERECTING RIGHT OF WAY MARKERS	EACH	13	13
66700305	PERMANENT SURVEY MARKERS, TYPE II	EACH	2	2
14				

\* SPECIALTY ITEM

FILE NAME : H:\1001\6008 - D7 Var Var\Work Order 5	USER NAME : dbullock IL 130 Roadway Plans\CADD\Civil\10774324-sh	DESIGNED - CAS DRAWN - DLB	REVISIONS - REVISIONS -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SUMMARY OF QUANTITIES FAP 116 (IL 130)</b>			F.A.P. RATE: 116	SECTION (113B18-1)	COUNTY CUMBERLAND	TOTAL SHEETS 83	SHEET NO. 7
PLOT SCALE * 100.0000' / in	CHECKED - JMB	REVISIONS -	SCALE:		SHEET 5 OF 8 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT				
Default	PLOT DATE * 2/4/2015	DATE - 1/27/15	REVISIONS -		CONTRACT NO. 74324							

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20% STATE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE
				0011
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	16	16
67100100	MOBILIZATION	L SUM	1	1
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	1
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1	1
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	5	5
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1
70300100	SHORT TERM PAVEMENT MARKING	FOOT	408	408
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	9259	9259
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	1985	1985
70400100	TEMPORARY CONCRETE BARRIER	FOOT	1900	1900
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	1887.5	1887.5
70600250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2	2
14				



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CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE 0011
70600251	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	6	6
70600350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2	2
70600352	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	4	4
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	4423	4423
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	21	21
* 78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	4	4
* 78200410	GUARDRAIL MARKERS, TYPE A	EACH	10	10
* 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	5	5
78300100	PAVEMENT MARKING REMOVAL	SQ FT	803	803
* A2001016	TREE, ACER RUBRUM (RED MAPLE), 2" CALIPER, BALLED AND BURLAPPED	EACH	4	4
* A2004620	TREE, GLEDITSIA TRIACANTHOS INERMIS (THORNLESS COMMON HONEYLOCUST), 2-1/2" CALIPER, BALLED AND BURLAPPED	EACH	5	5
* A2006516	TREE, QUERCUS BICOLOR (SWAMP WHITE OAK), 2" CALIPER, BALLED AND BURLAPPED	EACH	5	5
X4021000	TEMPORARY ACCESS (PRIVATE ENTRANCE)	EACH	3	3
X4023000	TEMPORARY ACCESS (ROAD)	EACH	1	1
X4024000	TEMPORARY ACCESS (FIELD ENTRANCE)	EACH	1	1

\* SPECIALTY ITEM

FILE NAME =	USER NAME = dbullock	DESIGNED - CAS	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SUMMARY OF QUANTITIES FAP 116 (IL 130)</b>			F.A.P. RATE:	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
11\1001\6000 - 07 Ver Var\Work Order 5	IL 130 Roadway Plans\CA00.Civil\10774324.dwg	DRAWN - DLB	REVISED -					116	(113B18-1)	CUMBERLAND	83	9
	PLOT SCALE = 100.0000' / in.	CHECKED - JMB	REVISED -		SCALE:			SHEET 7 OF 8 SHEETS STA. TO STA.				
Default	PLOT DATE = 2/4/2015	DATE - 1/27/15	REVISED -					ILLINOIS FED. AID PROJECT				

CONTRACT NO. 74324

CONSTR. CODE  
80% FEDERAL  
20% STATE  
BRIDGE  
0011

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	
X4060995	TEMPORARY RAMP, SPECIAL	SO YD	36	36
X4401198	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SO YD	2297	2297
X5030305	CONCRETE WEARING SURFACE, 5"	SO YD	230	230
X5040100	PRECAST BRIDGE APPROACH SLAB	SO FT	1980	1980
X5860110	GRANULAR BACKFILL FOR STRUCTURES	CU YD	129	129
X7015005	CHANGEABLE MESSAGE SIGN	CAL DA	28	28
X7040125	PINNING TEMPORARY CONCRETE BARRIER	EACH	174	174
Z0004552	APPROACH SLAB REMOVAL	SO YD	248	248
Z0004638	PAVEMENT BREAKING	SO YD	2109	2109
Z0005010	HOT-MIX ASPHALT FOR PATCHING POTHOLES (COLD MIX)	TON	3	3
Z0018002	DRAINAGE SCUPPERS, DS-11	EACH	4	4
Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	225	225
Z0049799	PROTECTING OR RESETTING SURVEY MARKERS	EACH	2	2
Z0070202	SURVEY MARKER VAULT	EACH	3	3
Z0073002	TEMPORARY SOIL RETENTION SYSTEM	SO FT	2607	2607
<del>Z0076604</del>	TRAINEES TRAINING PROGRAM GRADUATE	Hour	1000	1000
Z0076600	TRAINEES	Hour	1000	1000

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17 φ

FILE NAME : H:\1007\6008 - D7 Var Var\Work Order 5	USER NAME : dbulloch	DESIGNED - CAS	REVISED - 10	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SUMMARY OF QUANTITIES FAP 116 (IL 130)</b>			F.A.P. RATE: 116	SECTION 113B1B-1	COUNTY CUMBERLAND	TOTAL SHEETS 83	SHEET NO. 10
IL 130 Roadway Plans\CAD00.Civ\110774324-sh	OSANN - DLB	CHECKED - JMB	REVISED -		SCALE:	SHEET 8	OF 8 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT CONTRACT NO. 74324		
PLOT SCALE = 100.0000' / 1" IN		DATE - 1/27/15	REVISED -									
Default	PLOT DATE = 2/4/2015											

RIPRAP			FILTER FABRIC AREA (SQ YD)	CLASS A4 RIPRAP TON
STATION	STATION	OFFSET		
703+97.50	704+26.40	RT	93.1	62.1
706+12.00	706+46.00	RT	75.6	50.4
NORTH ABUTMENT			474.0	316.0
SOUTH ABUTMENT			641.0	428.0
TOTAL			1284	857

GUTTER REMOVAL				
BEGINNING		ENDING		
STATION	OFFSET (FT)	STATION	OFFSET (FT)	LENGTH (FT)
714+25.35	LT	717+56.26	LT	336.00
714+54.34	RT	718+61.14	RT	409.00
TOTAL				745.0

PAVEMENT BREAKING				
STATION	STATION	OFFSET	AREA (SF)	AREA (SY)
703+60.00	705+74.95	LT & RT	5,589	621
710+50.05	715+65.00	LT & RT	13,389	1,488
TOTAL			18,978	2,109

GUARDRAIL REMOVAL				
BEGINNING		ENDING		
STATION	OFFSET (FT)	STATION	OFFSET (FT)	LENGTH (FT)
699+07.50	RT	701+70.00	RT	262.5
701+70.01	RT	705+77.28	RT	407.3
704+90.07	LT	706+04.05	LT	114.0
706+00.00	RT	706+51.67	RT	51.7
709+69.31	LT	710+82.66	LT	113.4
710+16.95	RT	711+18.20	RT	101.3
TOTAL				1050

PAVING SCHEDULE										
LOCATION	OFFSET	AGGREGATE BASE COURSE TYPE B 4"	AGGREGATE BASE COURSE TYPE B 12"	GRANULAR EMBANKMENT SPECIAL (TON)	BITUMINOUS MATERIALS (PRIME COAT) (POUND)	HOT-MIX ASPHALT BINDER IL 19.0 N70 (TON)	HOT-MIX ASPHALT SURFACE COURSE MIX "C, N70 (TON)	HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH) 7" (SQ YD)	HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH) 9" (SQ YD)	HOT-MIX ASPHALT SURFACE REMOVAL VAR-DEPTH (SQ YD)
		STA 699+50 TO STA 702+47					356.4			
STA 702+47 TO STA 703+60					271.2	105.5	36.6		326.4	
STA 703+60 TO STA 704+32				92.3	658.8		23.3	194.7	427.6	
STA 704+32 TO STA 705+74.93			489.5		1307.8		46.2	386.4	684.7	
STA 710+50.07 TO STA 712+24			601		1591.5		56.3	470.2		
STA 712+24 TO STA 715+65				436.9	3120.2		110.3	922.0		
STA 715+65 TO STA 717+13					355.2	138.1	47.9			
STA 717+13 TO STA 719+50					284.4		76.7			
STA 699+15 TO STA 699+50	RT				11.7		1.5			
STA 699+50 TO STA 706+17.5	RT				244.7		30.5			
STA 710+39.68 TO STA 719+50	RT				351.3		43.7			
STA 719+50 TO STA 720+84.97	RT				19.4		4.8			
STA 699+50 TO STA 705+77.5	LT				114.0					
STA 710+03.68 TO STA 716+61.5	LT				120.1					
STA 717+08.1 TO STA 719+50	LT				34.2					
STA 702+47 TO STA 703+00	LT					5.9	2.7			
STA 703+65.32 (FE)	RT	168			526.1					
STA 716+84.5 (TR 75N)	LT	177			494.6			170		
TOTALS		345	1091	530	9862	250	577	170	1974	2297

PERIMETER EROSION CONTROL				
BEGINNING		ENDING		
STATION	OFFSET (FT)	STATION	OFFSET (FT)	LENGTH (FT)
713+50	52' LT	714+00	44' LT	51
714+00	44' LT	714+50	26' LT	53
714+50	26' LT	715+00	50' LT	56
715+00	50' LT	715+50	66' LT	53
715+50	66' LT	716+00	45' LT	54
716+00	45' LT	716+50	42' LT	50
717+00	35' LT	718+00	30' LT	100
718+00	30' LT	719+00	25' LT	100
712+00	60' RT	715+00	60' RT	300
TOTAL				817

FURNISHING AND ERECTING RIGHT OF WAY MARKERS			
STATION	POINT	O/S	QUANTITY (EA)
698+00	LT	45.0	1
698+00	RT	40.0	1
701+50	LT	85.0	1
701+50	RT	85.0	1
705+00	LT	100.0	1
705+00	RT	100.0	1
707+00	RT	100.0	1
711+22.80	LT	100.0	1
712+00	RT	70.0	1
715+00	LT	75.0	1
716+61.31	LT	75.0	1
714+86.65	RT	70.0	1
714+86.53	RT	45.0	1
TOTAL			13

TEMPORARY SOIL RETENTION SYSTEM		
STATION	STATION	TEMPORARY SOIL RETENTION SYSTEM AREA (SQ FT)
703+00.00	705+99.42	623.0
BRIDGE		816.0
710+25.58	716+10.00	1168.0
TOTAL		2607

SURVEY MARKERS		
STATION	O/S	QUANTITY (EA)
703+65.29	0.77 RT	1
716+86.32	1.88 RT	1
Total		2

INLET AND PIPE PROTECTION		
STATION	O/S	QUANTITY (EA)
703+30.3	67.6 RT	1
711+26.5	79.4 LT	1
716+98.3	51.1 LT	1
TOTAL		3

SURVEY MARKER VAULT		
STATION	O/S	QUANTITY (EA)
683+00	CL	1
715+00	CL	1
724+51.95	CL	1
Total		3

EARTHWORK SCHEDULE				
LOCATION	1	2	3	4
	20200100 EARTH EXCAVATION (CU YD)	*EXCAVATION TO BE USED IN EMBANKMENT (ADJUSTED FOR SHRINKAGE) (COL 1 X 0.75) (CU YD)	*EMBANKMENT (FILL) (CU YD)	20400800 FURNISHED EXCAVATION (COL 2 - COL 3) (CU YD)
IL RTE 130				
STA 699+50 TO				
STA 719+50	4,510	3,383	12,514	
TOTAL	4,510	3,383	12,514	9,132

EARTH EXCAVATION SHRINKAGE FACTOR ASSUMED TO BE 25%  
ITEMS MARKED WITH AN ASTERISK (\*) ARE FOR INFORMATIONAL PURPOSES ONLY

GUARDRAIL SCHEDULE				SPBG TYP A LENGTH (FT)	TERMINAL TYPE 6 EACH	TERMINAL TYPE 1, SPC EACH
BEGINNING		ENDING				
STATION	OFFSET (FT)	STATION	OFFSET (FT)			
699+07.50	RT	699+57.50	RT	50.0		1
704+65.85	LT	705+15.85	LT			1
705+15.85	LT	705+53.35	LT	37.5		
705+53.35	LT	705+96.50	LT		1	
705+10.35	RT	705+60.35	RT			1
705+60.35	RT	705+85.35	RT	25.0		
705+85.35	RT	706+28.50	RT		1	
709+92.68	LT	710+35.82	LT		1	
710+35.82	LT	710+85.82	LT			1
710+24.67	RT	710+67.82	RT		1	
710+67.82	RT	710+80.32	RT	12.5		
710+80.32	RT	711+30.32	RT			1
TOTAL				125.0	4	5

SHOULDERS SCHEDULE			
LOCATION	OFFSET	AGGREGATE SHOULDERS TYPE B 6"	HOT-MIX ASPHALT SHOULDERS 9"
		SQ YD	SQ YD
STA 699+50 TO STA 705+77.5	LT	254.9	
STA 703+00 TO STA 705+77.5	LT		123.9
STA 710+03.68 TO STA 716+61.5	LT	288.5	256.2
STA 717+08.1 TO STA 719+50	LT	79.8	
STA 699+15 TO STA 699+50	RT	11.7	12.7
STA 699+50 TO STA 706+17.50	RT	296.7	286.8
STA 710+39.68 TO STA 714+70.3	RT	191.4	
STA 710+39.68 TO STA 719+50	RT		393.6
STA 718+51.5 TO STA 720+84.97	RT	51.9	
STA 719+50 TO STA 720+84.97	RT		43.3
TOTALS		1175	1117

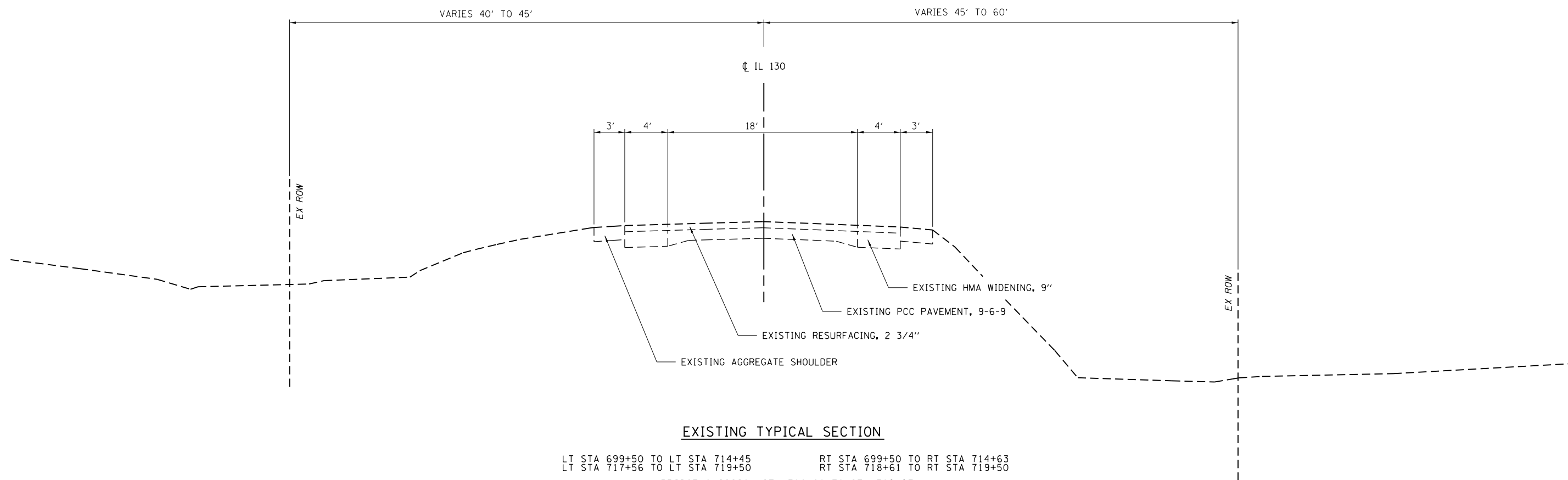
TEMPORARY DITCH CHECKS				
LEFT		RIGHT		
STATION	LENGTH (FT)	STATION	LENGTH (FT)	LENGTH (FT)
700+50.00	8	700+50.00	11	19
701+50.00	8	701+50.00	11	19
702+50.00	8	702+50.00	11	19
703+50.00	8	704+50.00	11	19
704+50.00	8	705+50.00	11	19
705+50.00	8			8
706+46.00	8			8
709+77.50	8			8
710+50.00	8			8
TOTAL				127

TEMPORARY CONCRETE BARRIER SCHEDULE								
LOCATION	STAGE	TEMPORARY CONCRETE BARRIER (FOOT)	RELOCATE TEMPORARY CONCRETE BARRIER (FOOT)	PINNING TEMPORARY CONCRETE BARRIER (EACH)	IMPACT ATTENUATORS TEMPORARY (NON-REDIRECTIVE) TEST LEVEL 3 (EACH)	IMPACT ATTENUATORS TEMPORARY (NON-REDIRECTIVE, NARROW) TEST LEVEL 3 (EACH)	IMPACT ATTENUATORS RELOCATE (NON-REDIRECTIVE) TEST LEVEL 3 (EACH)	IMPACT ATTENUATORS RELOCATE (NON-REDIRECTIVE, NARROW) TEST LEVEL 3 (EACH)
					STA 698+36 TO STA 699+25	1	89	
STA 699+25 TO STA 703+11	1	386				1		
STA 704+21 TO STA 714+58.5	1	1037.5				2		
STA 715+68.5 TO STA 717+56	1	187.5				2		
STA 718+66 TO STA 719+75	1	109				1		
STA 719+75 TO STA 720+66	1	91			1			
STA 699+42 TO STA 700+25	2		83				1	
STA 700+25 TO STA 710+54.5	2		1029.5					1
STA 711+64.5 TO STA 716+27	2		462.5					2
STA 717+45 TO STA 719+75	2		229.5					1
STA 719+75 TO STA 720+58	2		83				1	
STA 703+11.92 TO STA 703+36.92	2			3				
STA 703+36.92 TO STA 705+99.42	2			63				
STA 710+25.58 TO STA 710+38.08	2			3				
STA 711+77.00 TO STA 716+14.50	2			105				
TOTALS		1900	1887.5	174	2	6	2	4

FILE NAME =	USER NAME = dbulloek	DESIGNED - CAS	REVISED -
\\11001\6008 - 07 Var Var\Work Order 5	IL 130 Roadway Plans\CADD\Civil\10774324-sh-	DRAWN - DLB	REVISED -
Default	PLOT SCALE = 100.0000' / 1in.	CHECKED - JMB	REVISED -
	PLOT DATE = 2/4/2015	DATE - 1/27/15	REVISED -

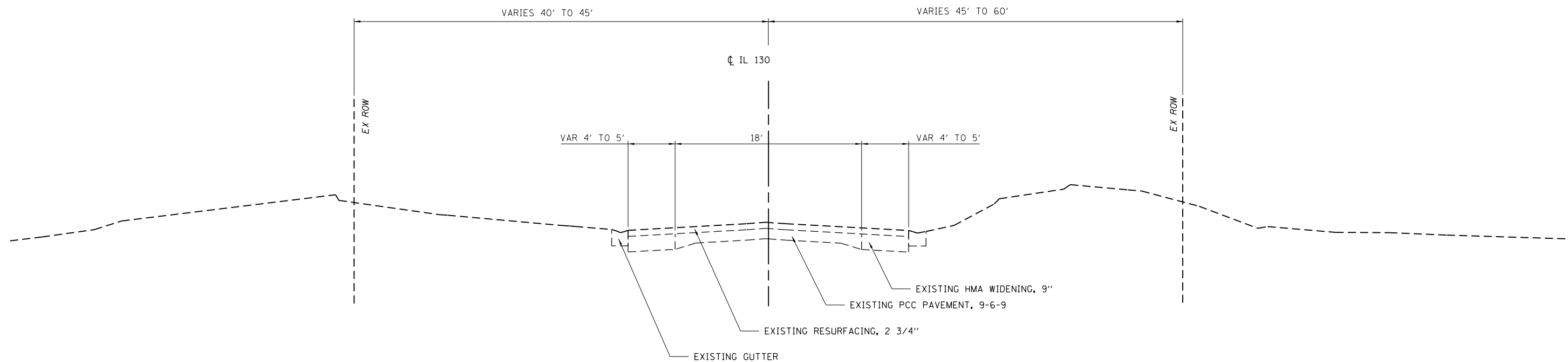
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES				F.A.P. R.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 116 (IL 130)				116	(113)BIB-1	CUMBERLAND	83	11
SCALE: SHEET OF SHEETS STA. TO STA.				CONTRACT NO. 74324				
				ILLINOIS FED. AID PROJECT				



**EXISTING TYPICAL SECTION**

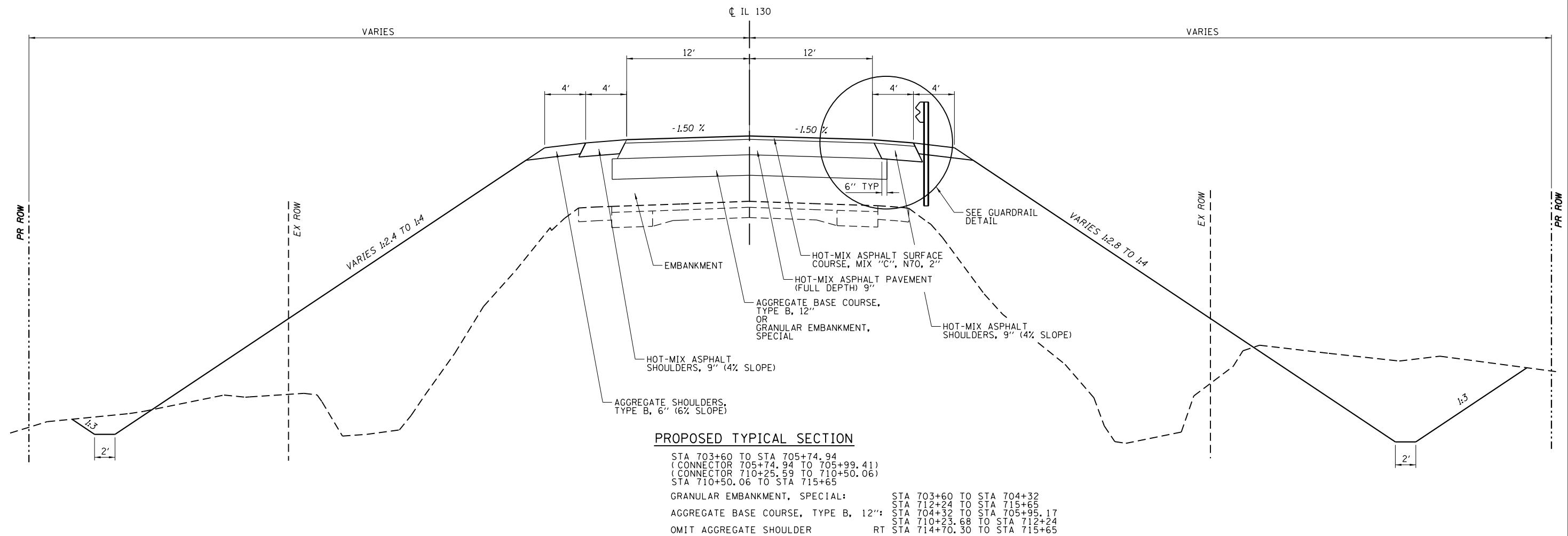
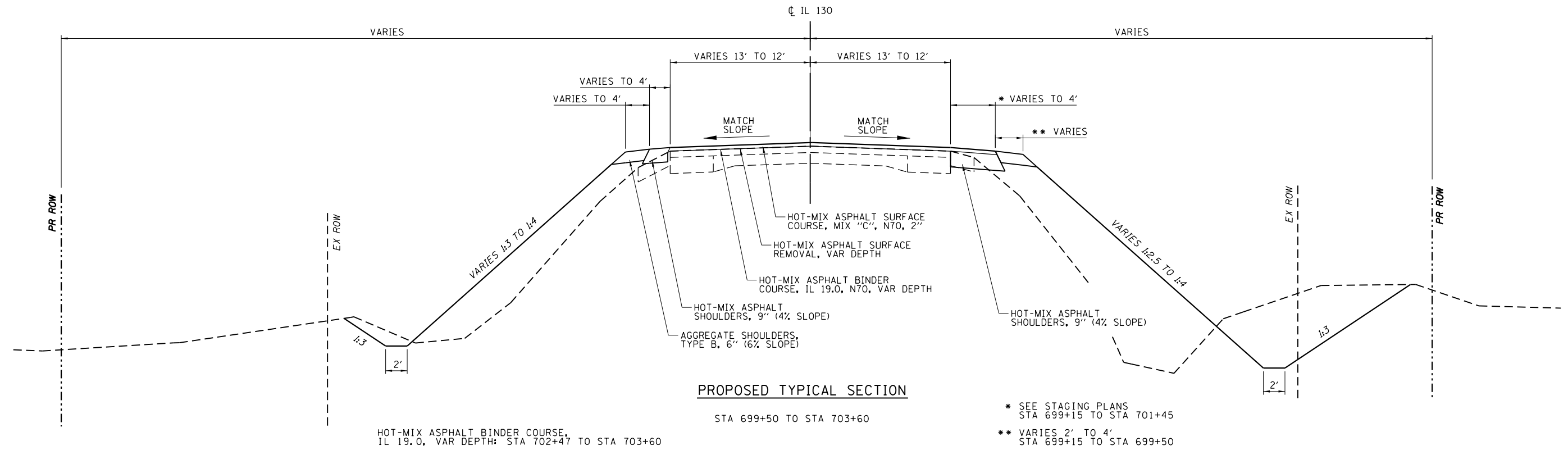
LT STA 699+50 TO LT STA 714+45      RT STA 699+50 TO RT STA 714+63  
 LT STA 717+56 TO LT STA 719+50      RT STA 718+61 TO RT STA 719+50  
 BRIDGE OMISSION STA 706+28 TO STA 709+97



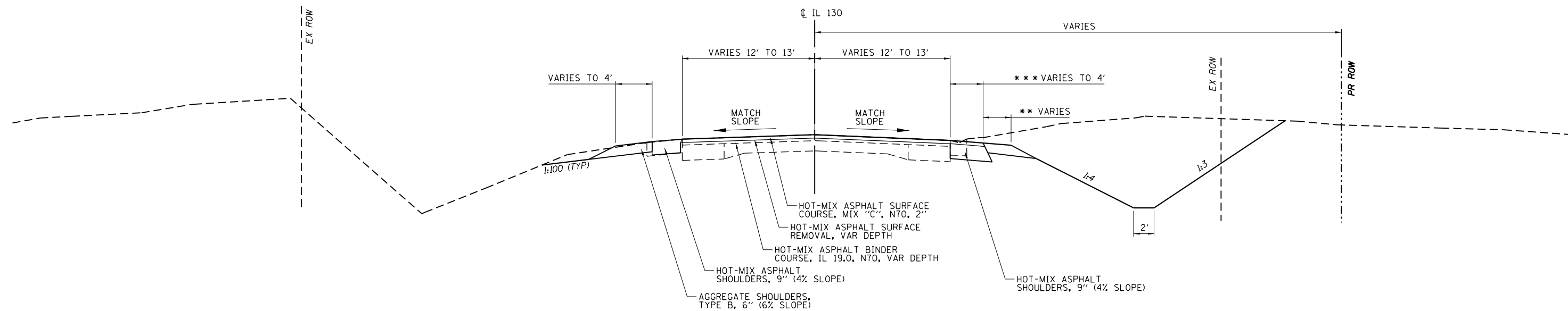
**EXISTING TYPICAL SECTION**

LT STA 714+45 TO LT STA 717+56      RT STA 714+63 TO RT STA 718+61

FILE NAME =	USER NAME = dbullock	DESIGNED - CAS	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>EXISTING TYPICAL SECTIONS FAP 116 (IL 130)</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
11\IDOT\6008 - 07 Var Var\Work Order 5	IL 130 Roadway Plans\CADD\Civil\0774324-sh	DRAWN - DLB	REVISED -					116	(113)B-1	CUMBERLAND	83	12
Default	PLOT SCALE = 100.0000' / 1in.	CHECKED - JMB	REVISED -		CONTRACT NO. 74324			ILLINOIS FED. AID PROJECT				
	PLOT DATE = 2/4/2015	DATE - 1/27/15	REVISED -		SCALE:	SHEET 1 OF 3 SHEETS	STA.	TO STA.				



FILE NAME =	USER NAME = dbullock	DESIGNED - CAS	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PROPOSED TYPICAL SECTIONS FAP 116 (IL 130)</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
11\DOT\6008 - 07 Var Var\Work Order 5	IL 130 Roadway Plans\CADD\Civil\0774324-sh	DRAWN - DLB	REVISED -		116	(113)B-1	CUMBERLAND	83	13			
Default	PLOT SCALE = 100.0000' / 1".	CHECKED - JMB	REVISED -		SCALE: SHEET 2 OF 3 SHEETS STA. TO STA.			CONTRACT NO. 74324				
	PLOT DATE = 2/4/2015	DATE - 1/27/15	REVISED -		ILLINOIS FED. AID PROJECT							

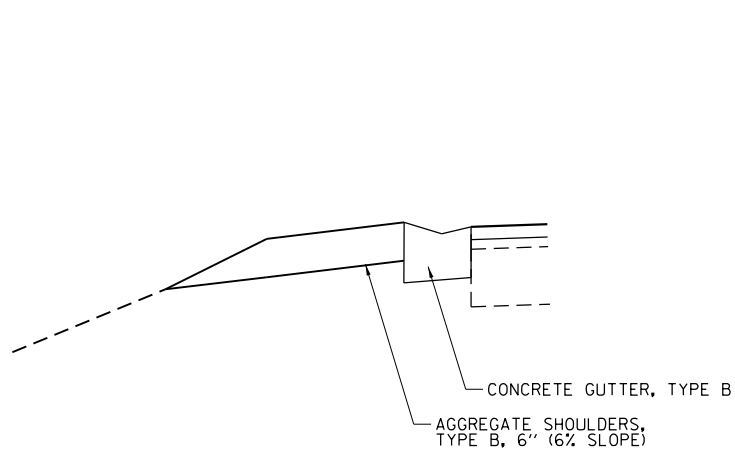


**PROPOSED TYPICAL SECTION**

STA 715+65 TO STA 719+50

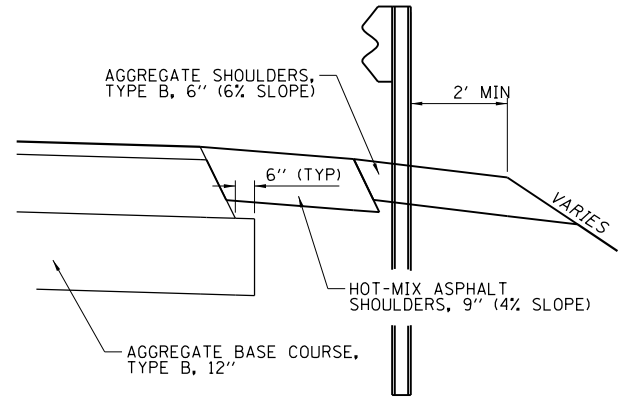
HOT-MIX ASPHALT BINDER COURSE, IL 19.0, VAR DEPTH: STA 715+65 TO STA 717+13

- \*\* VARIES 0' - STA 714+70.3 TO STA 718+51.5 (CONCRETE GUTTER TYPE B)
- VARIES 4' TO 0' - STA 718+51.5 TO STA 720+84.97
- \*\*\* SEE STAGING PLANS STA 717+70 TO STA 720+84.97



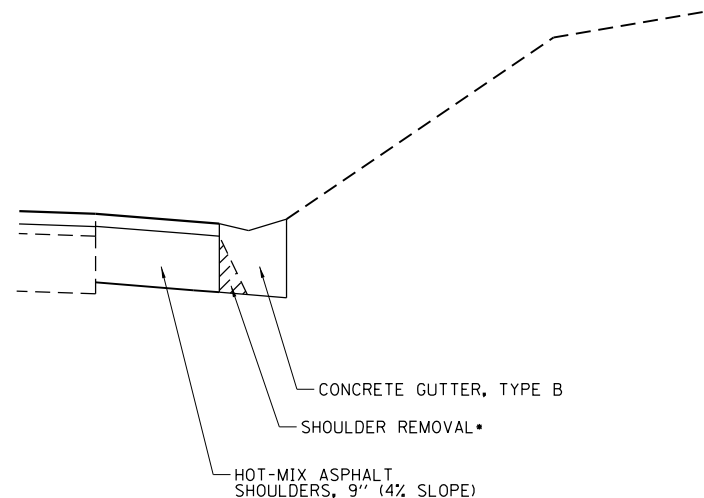
**TYPICAL LT GUTTER DETAIL**

CONCRETE GUTTER, TYPE B  
STA 716+22.5 TO STA 717+35



**TYPICAL GUARDRAIL DETAIL**

LT STA 704+65.85 TO STA 705+96.50  
 LT STA 709+92.68 TO STA 710+85.82  
 RT STA 699+07.50 TO STA 700+07.50  
 STA 705+10.35 TO STA 706+28.50  
 STA 710+24.67 TO STA 711+30.32



**TYPICAL RT GUTTER DETAIL**

CONCRETE GUTTER, TYPE B  
 STA 714+49.5 TO STA 718+51.5  
 • SHOULDER SHALL BE SAWED FULL-DEPTH AND REMOVED PRIOR TO INSTALLATION OF GUTTER. THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE PER FOOT FOR CONCRETE GUTTER, TYPE B.

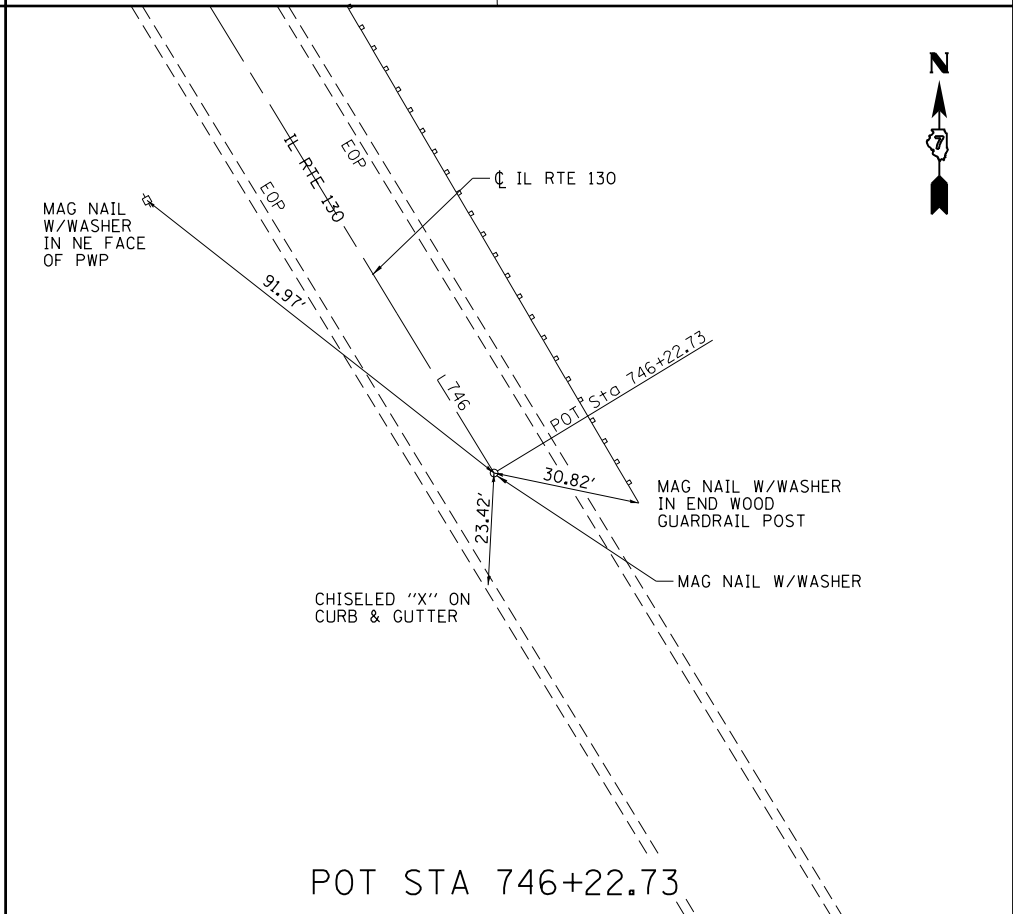
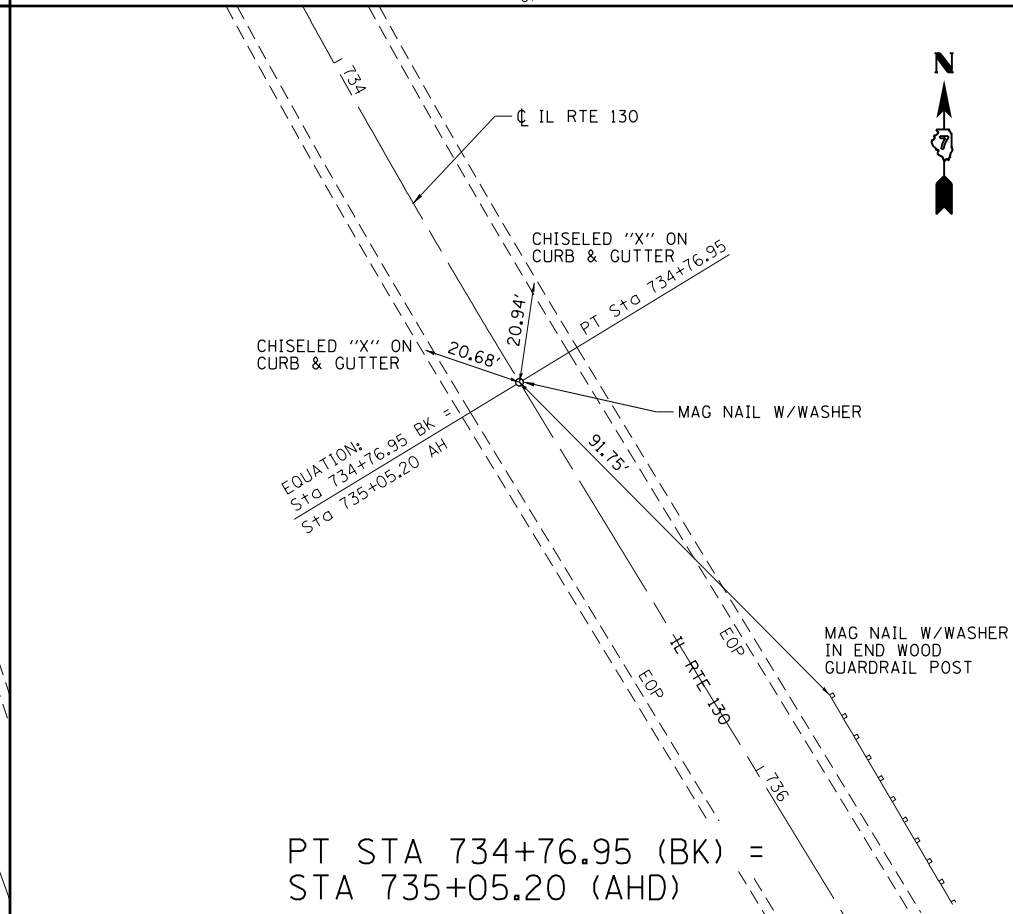
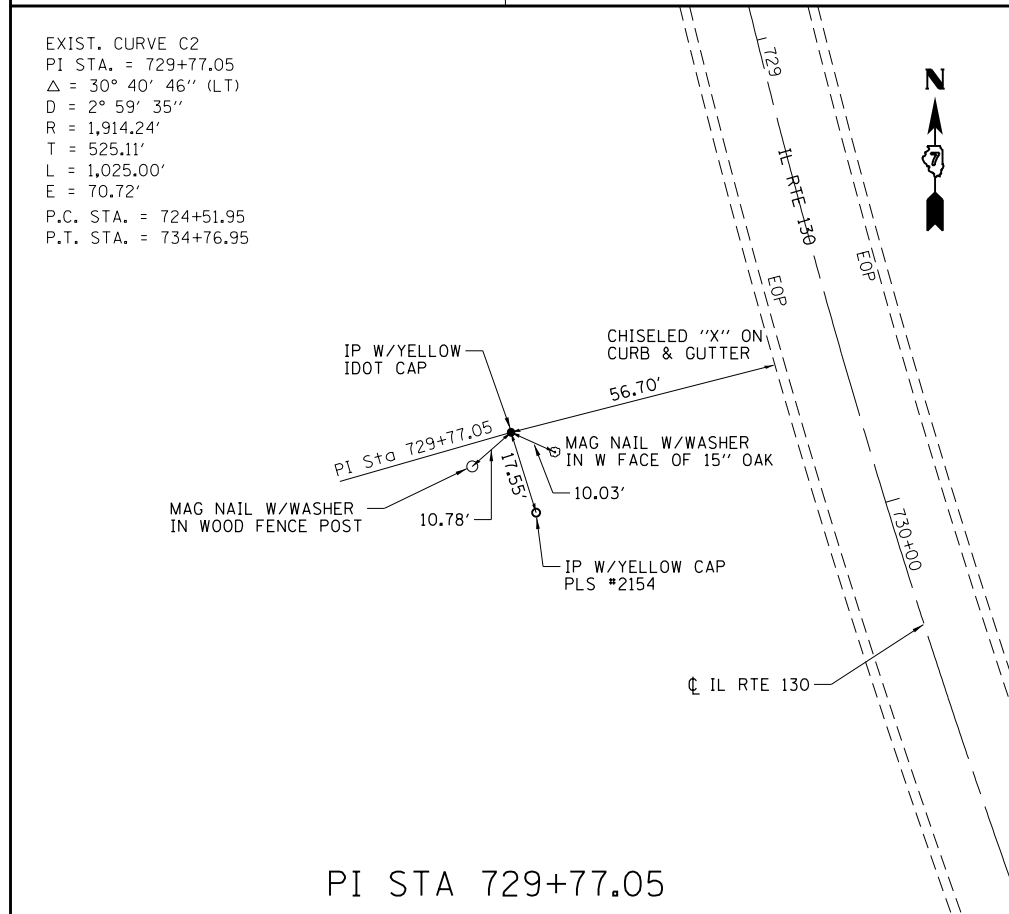
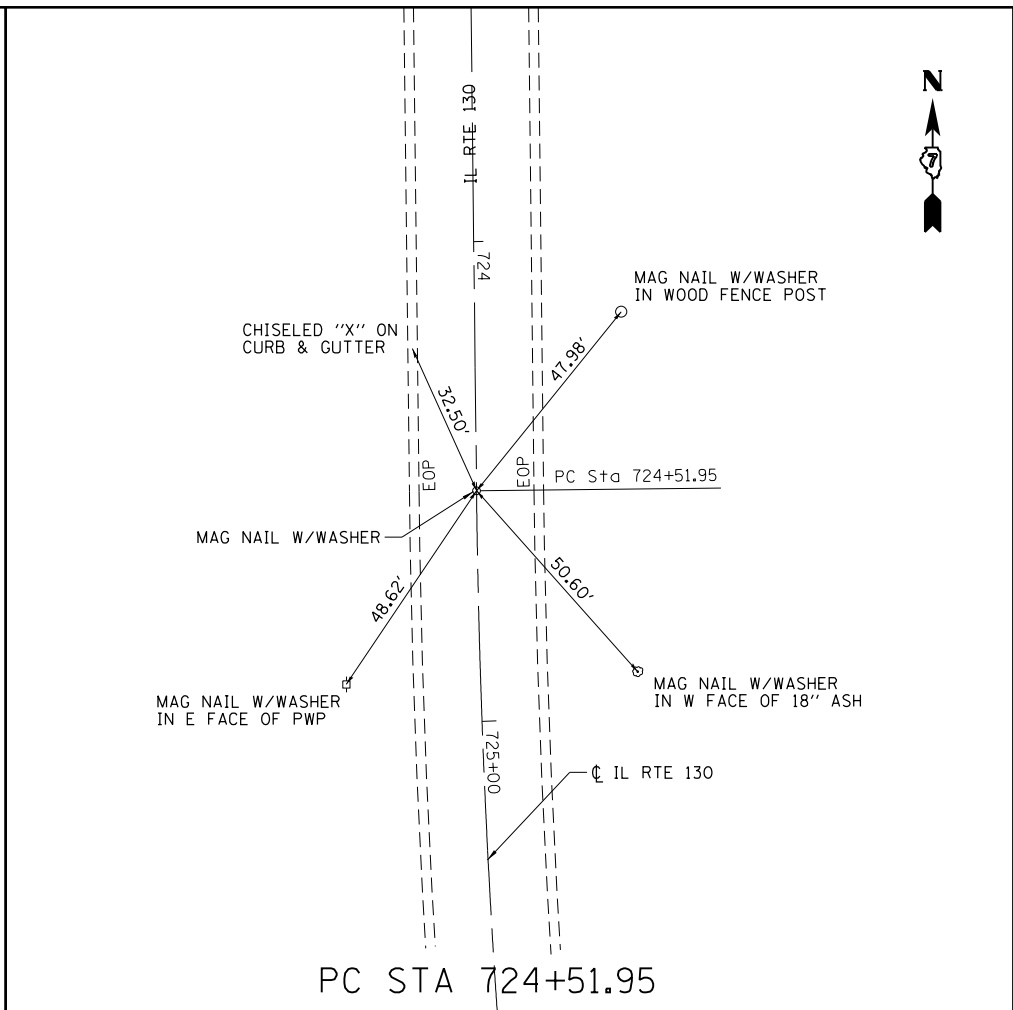
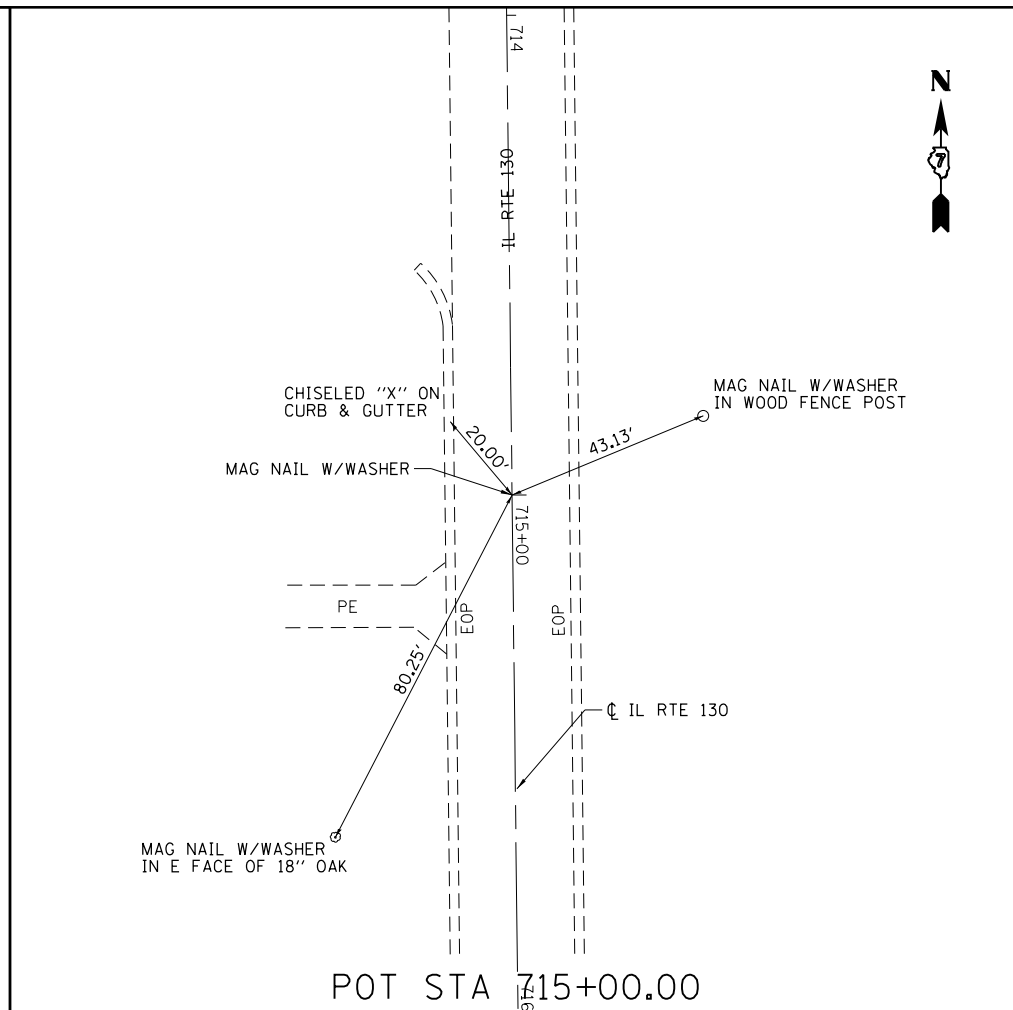
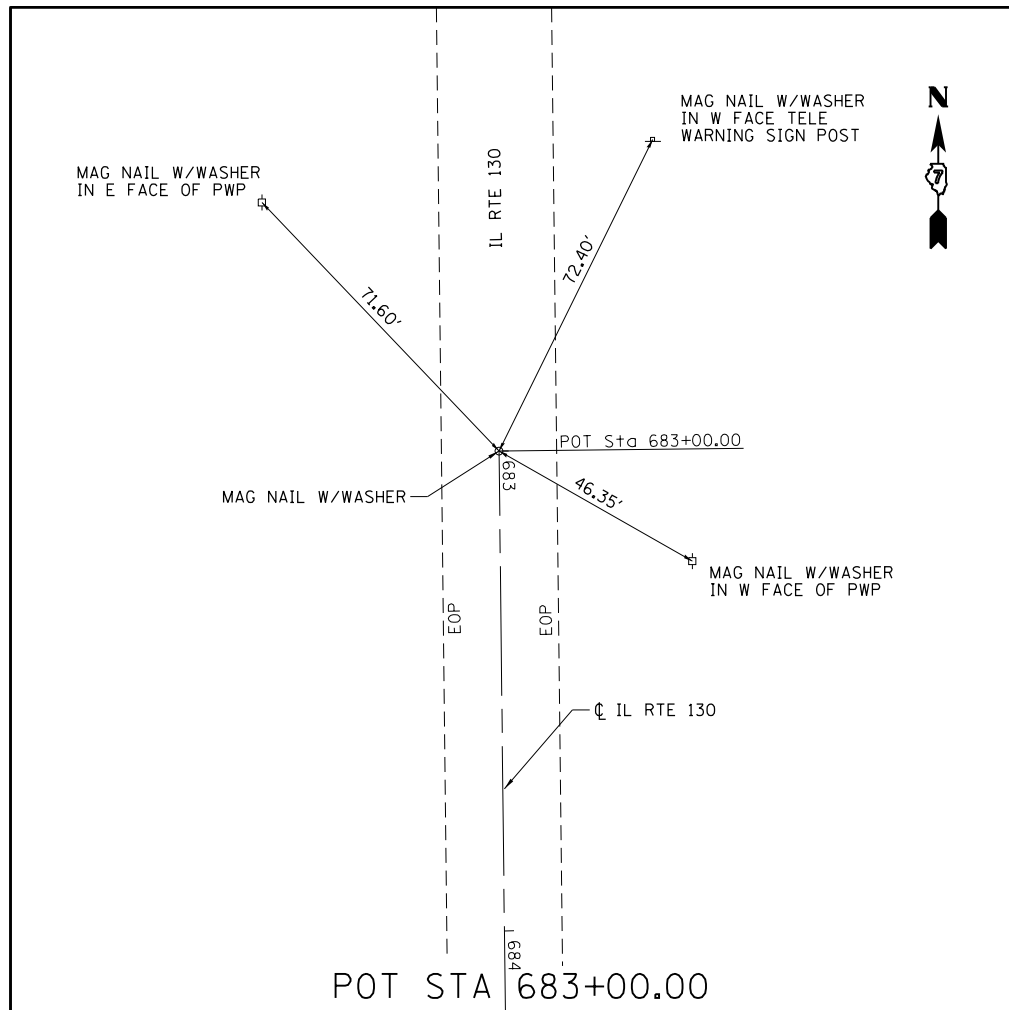
FILE NAME =	USER NAME = dbullock	DESIGNED - CAS	REVISED -
11\DOT\6008 - 07 Var Var\Work Order 5	IL 130 Roadway Plans\CADD\Civil\0774324-sh	DRAWN - DLB	REVISED -
Default	PLOT SCALE = 100.0000' / 1in.	CHECKED - JMB	REVISED -
	PLOT DATE = 2/4/2015	DATE - 1/27/15	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PROPOSED TYPICAL SECTIONS  
FAP 116 (IL 130)**

SCALE: SHEET 3 OF 3 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
116	(113)B-1	CUMBERLAND	83	14
CONTRACT NO. 74324				
ILLINOIS FED. AID PROJECT				



EXIST. CURVE C2  
 PI STA. = 729+77.05  
 $\Delta = 30^\circ 40' 46''$  (LT)  
 $D = 2^\circ 59' 35''$   
 $R = 1,914.24'$   
 $T = 525.11'$   
 $L = 1,025.00'$   
 $E = 70.72'$   
 P.C. STA. = 724+51.95  
 P.T. STA. = 734+76.95

EQUATION:  
 $Sta\ 734+76.95\ BK =$   
 $Sta\ 735+05.20\ AHD$

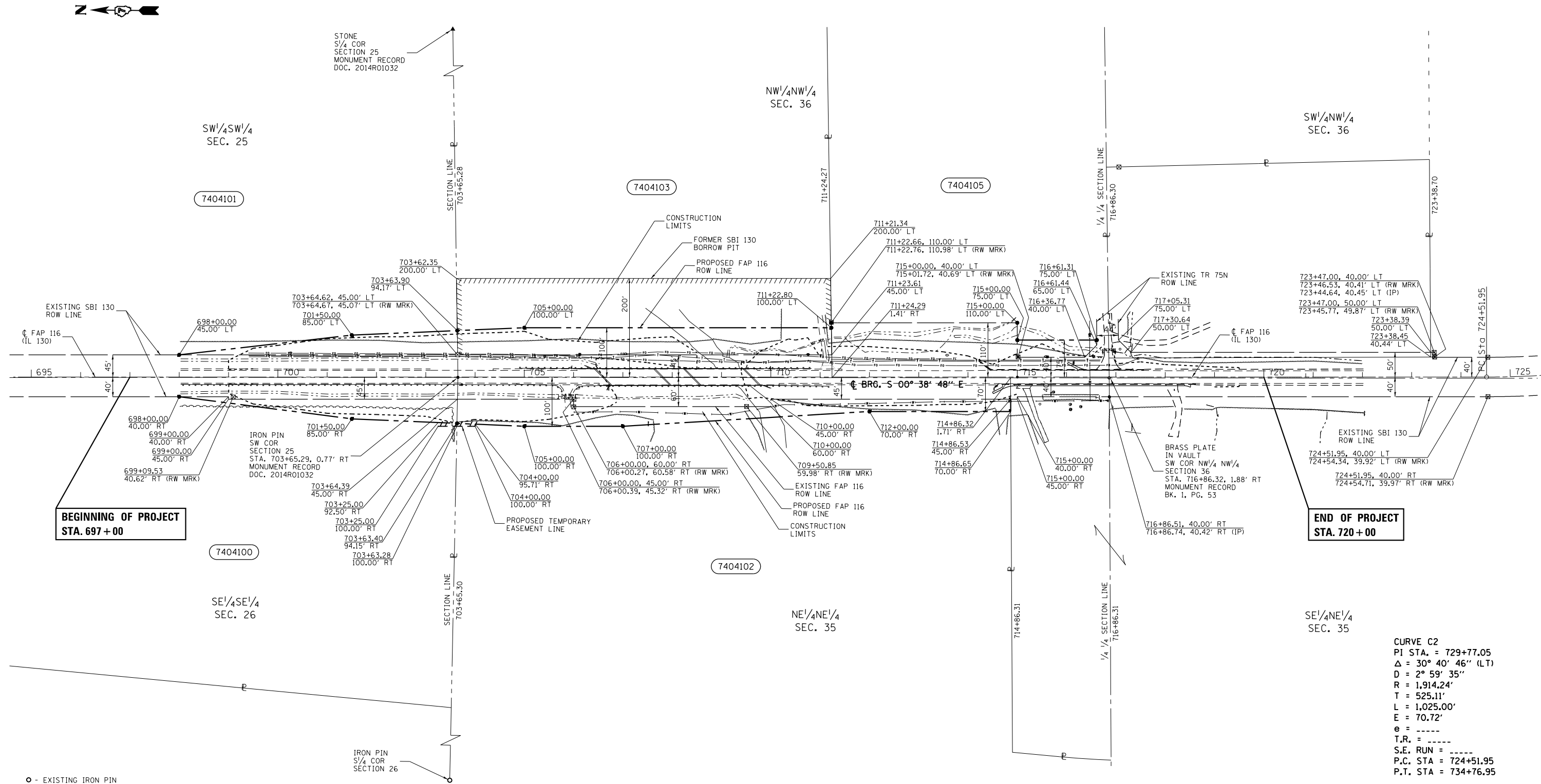
FILE NAME =	USER NAME = dbullock	DESIGNED - CAS	REVISED -
\\IDOT\6008 - 07 Var Var\Work Order 5	IL 130 Roadway Plans\CADD\Civil\774324-sh	DRAWN - DLB	REVISED -
Default	PLOT SCALE = 40.0000' / in.	CHECKED - JMB	REVISED -
	PLOT DATE = 2/4/2015	DATE - 1/27/15	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

<b>ALIGNMENT AND TIES</b>			
<b>FAP 116 (IL 130)</b>			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
116	(113B)B-1	CUMBERLAND	83	15
CONTRACT NO. 74324				
ILLINOIS FED. AID PROJECT				

# T.9N.-R.9E., 3rd P.M., GREENUP TWP.



- - EXISTING IRON PIN
- - SET IRON PIN
- ▲ - EXISTING STONE
- ▣ - EXISTING ROW MARKER
- (R) RECORDED DISTANCE

NOTE:  
 BEARINGS ARE REFERENCED TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM EAST ZONE DATUM OF 1983(07)  
 TEMPORARY EASEMENTS NEEDED FOR A WORK AREA

PARCEL	OWNER	AREA TAKEN		EASEMENT	AREA REM	INST	RECORDED				EXCESS		
		ADD	EXIST				MICRO FILM NO	DATE	BOOK	PAGE	AREA	SOLD	
7404100	ROBERT L. AND TINA L. GABEL	0.371 AC.	2.287 AC.	0.006 AC.	25,150 AC.								
7404101	CHARLES W. RUNDIEE, TRUSTEE	0.380 AC.	1.430 AC.		75,524 AC.								
7404102	NELLIE R. MARKWELL ET AL.	0.901 AC.	0.724 AC.	0.004 AC.	34,919 AC.								
7404103	VELVA A. PAUL	0.949 AC.	0.803 AC.		21,135 AC.								
7404105	CLIFF AND LYNN CARRELL	0.123 AC.	1.169 AC.		10,744 AC.								

FILE NAME =	USER NAME = dbullock	DESIGNED - JMD	REVISED -
IL 130 Roadway Plans\CADD\Civil\774324-sh-		DRAWN - JMD	REVISED -
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	PLOT DATE = 2/4/2015	DATE - 07/21/14	REVISED -

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

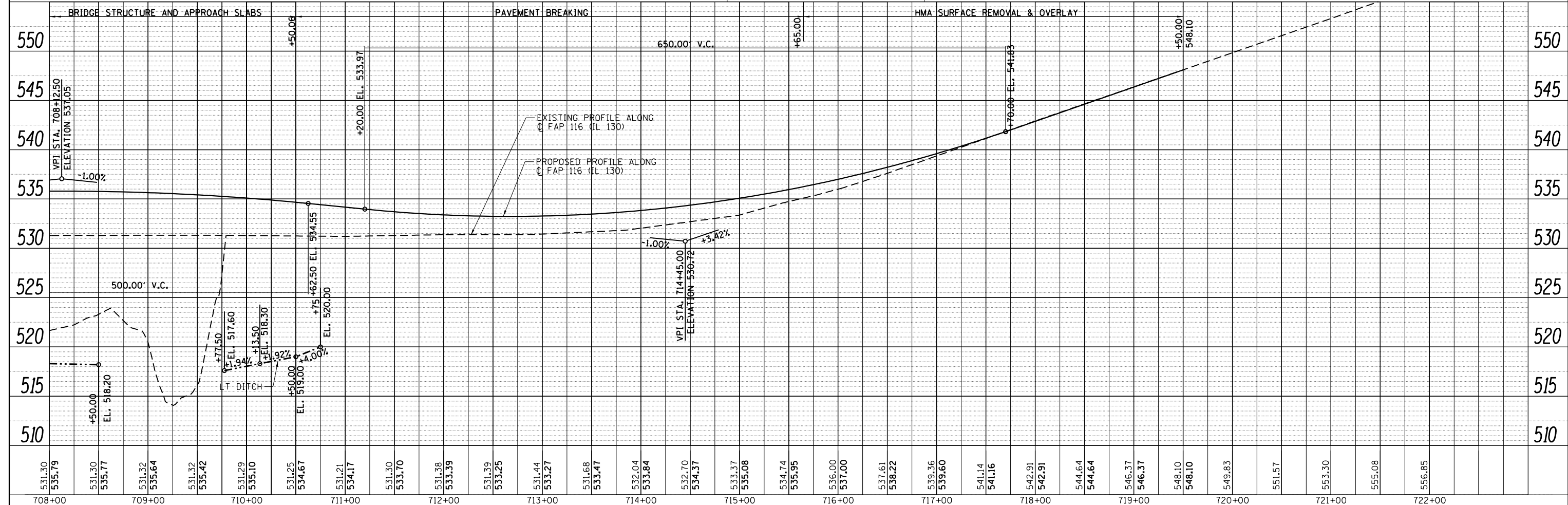
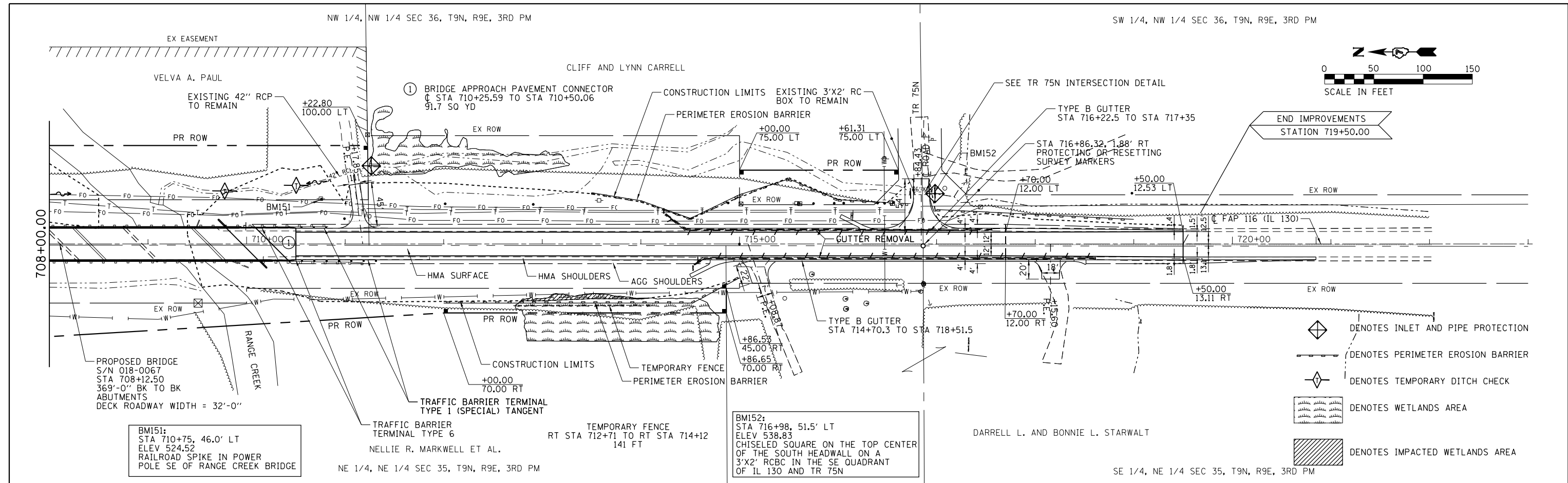
RIGHT OF WAY PLAN		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 116 (IL 130)		116	(113)BIB-1	CUMBERLAND	83	16
PROJECT	JOB NO. R-97-004-14	CONTRACT NO. 74324				
SCALE: 1" = 100'	SHEET NO. 1 OF 1 SHEETS	STA. 695+00.00 TO 720+00.00	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			



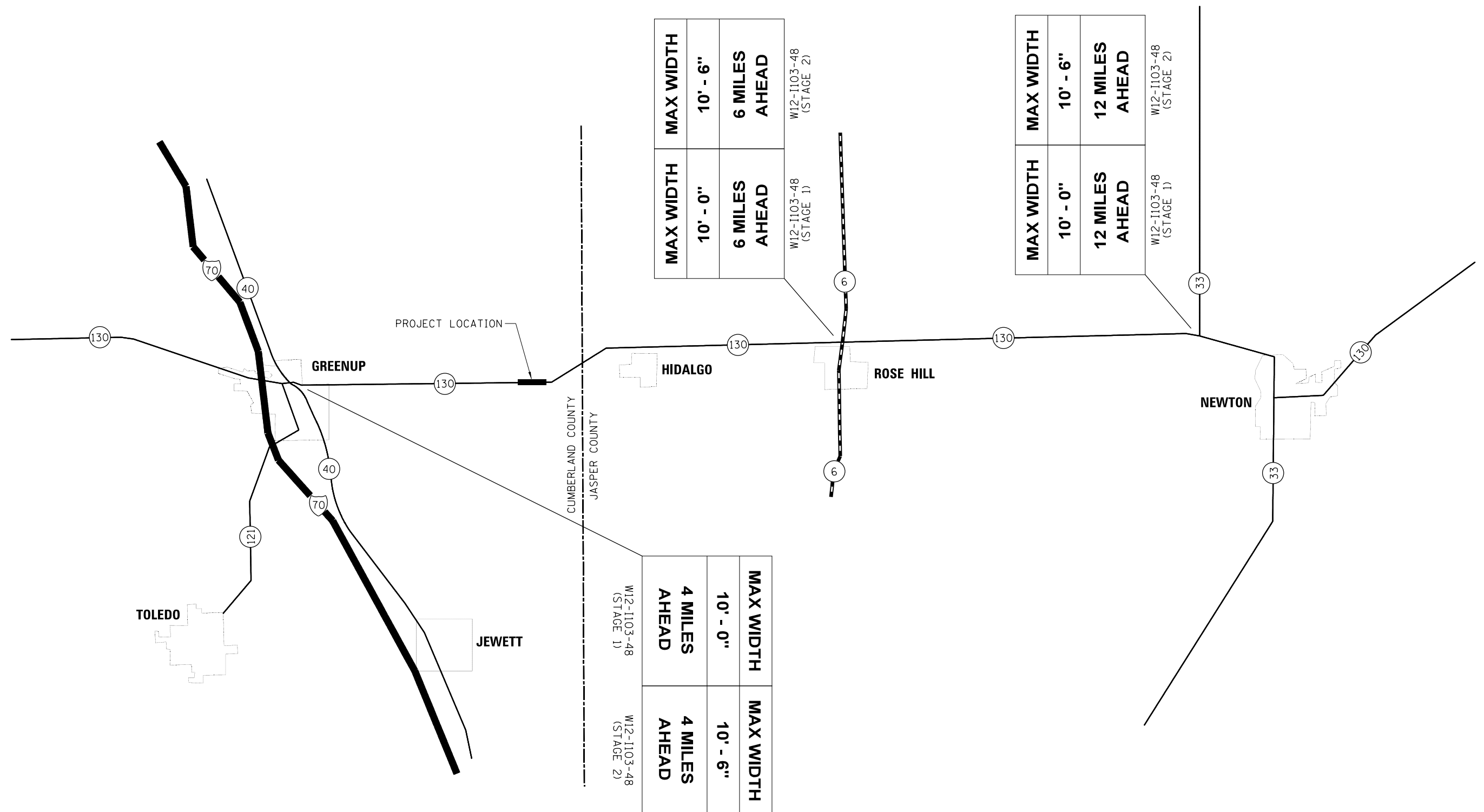


PLAN	SURVEYED	BY	DATE
	ALIGNED		
	NOTED		
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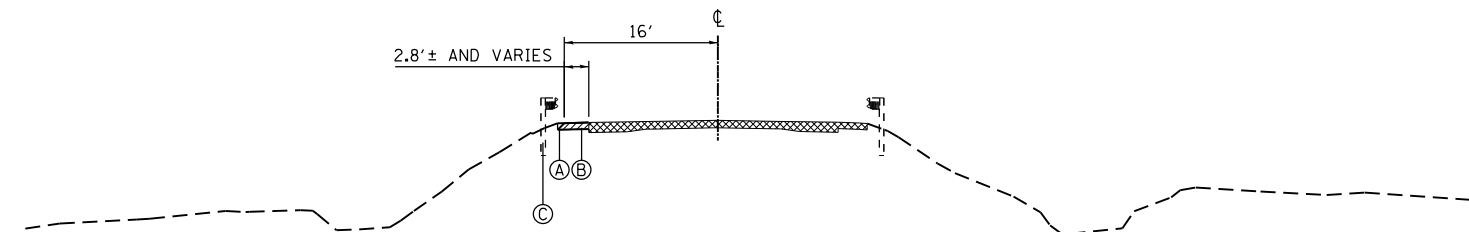
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	GRADES		
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	CHKD		
	NO.		



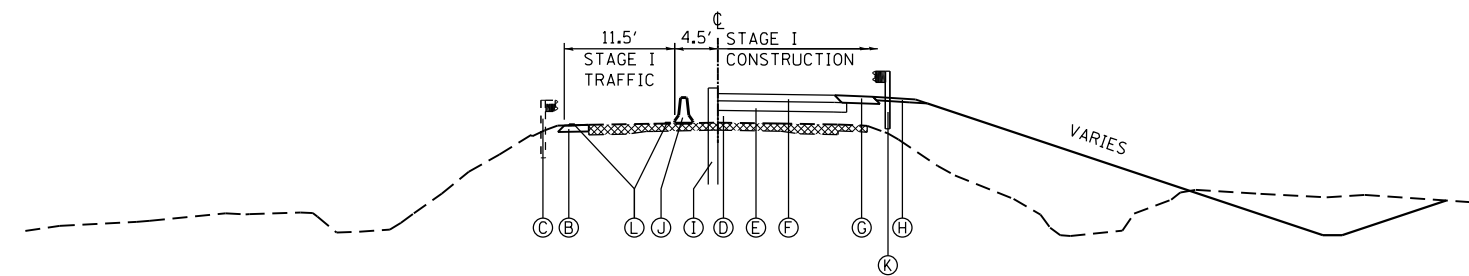
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Default	L:\100\Roadway Plans\CADD\Civil\0774324-shr	DRAWN -	REVISED -		SCALE: 1"=50'	SHEET 2	OF 2 SHEETS	STA. 708+00	TO STA. 722+00	CONTRACT NO. 74324		
	PLOT SCALE = 100.0000' / in.	CHECKED - JMB	REVISED -		ILLINOIS FED. AID PROJECT							
	PLOT DATE = 2/4/2015	DATE - 1/27/15	REVISED -									



FILE NAME = I:\DDT\6008 - D7 Var - Var - Work - Order 5 - IL 130 - Roadway Plans\CADD\2015-02-02 174324 - Wk Stage Sheets Revised Final\CADD Sheets\074324-sht-staging-1.dgn



**PRE-STAGE CONSTRUCTION TYPICAL SECTION**



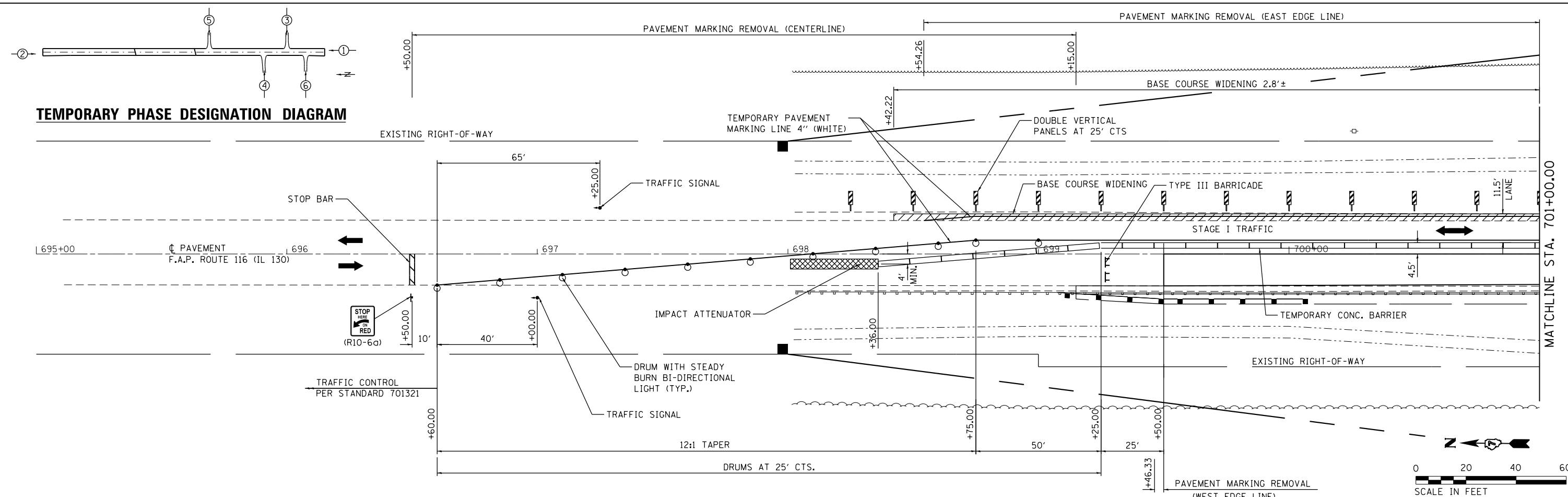
**STAGE I CONSTRUCTION TYPICAL SECTION**

**LEGEND**

- (A) EXISTING AGGREGATE SHOULDER TO BE REMOVED
- (B) BASE COURSE WIDENING (9") (STAGE I TRAFFIC)
- (C) EXISTING GUARDRAIL
- (D) FURNISHED EMBANKMENT
- (E) AGGREGATE BASE COURSE
- (F) HOT-MIX ASPHALT BINDER COURSE
- (G) HOT-MIX ASPHALT SHOULDERS (9")  
STA. 699+15.00 TO 706+17.50  
STA. 710+39.68 TO 720+84.97
- (H) AGGREGATE SHOULDERS
- (I) TEMPORARY SOIL RETENTION SYSTEM  
STA 703+36.00 TO STA 705+99.42  
STA 710+25.58 TO STA 716+10.00
- (J) TEMPORARY CONCRETE BARRIER  
STA 698+36.00 TO STA 703+11.00  
STA 704+21.00 TO STA 714+58.50  
STA 715+68.50 TO STA 717+56.00  
STA 718+66.00 TO STA 720+66.00
- (K) PROPOSED STEEL PLATE BEAM GUARDRAIL
- (L) WHITE TEMPORARY PAVEMENT MARKING LINE

**NOTES:**

1. ALL DIMENSIONS, BARRICADES, SIGNS, ETC. AS SHOWN ON TRAFFIC CONTROL AND PROTECTION STANDARD 701321 SHALL APPLY.
  2. ALL TEMPORARY PAVEMENT MARKING NECESSARY TO COMPLY WITH THIS DETAIL SHALL BE CONSIDERED INCLUDED IN THE TRAFFIC CONTROL PAY ITEMS IN THE PLANS.
  3. CONTRACTOR SHALL FILL EXISTING GUARDRAIL POST HOLES AFTER REMOVING AND SHALL BE CONSIDERED INCLUDED IN THE STEEL PLATE BEAM GUARDRAIL REMOVAL PAY ITEM.
  4. CONTRACTOR SHALL PROVIDE ACCESS TO ALL ENTRANCES DURING CONSTRUCTION. CONTRACTOR SHALL FLAG AT ENTRANCES WITHOUT SIGNALS AS NEEDED TO PROVIDE ACCESS.
- SUGGESTED PRE-STAGE PROCEDURES**
1. CONSTRUCT BASE COURSE WIDENING ON EAST SIDE OF F.A.P. ROUTE 116 (IL 130). TRAFFIC CONTROL PER STANDARD 701326
  2. INSTALL TEMPORARY TRAFFIC SIGNALS.
- SUGGESTED STAGE I PROCEDURES**
1. ACTIVATE TEMPORARY TRAFFIC SIGNALS.
  2. MOVE ALL TRAFFIC TO NORTHBOUND LANE.
  3. INSTALL TEMPORARY CONCRETE BARRIERS, TEMPORARY IMPACT ATTENUATORS AND TRAFFIC CONTROL DEVICES.
  4. REMOVE EXISTING GUARDRAIL.
  5. CONSTRUCT ENTRANCE AT STATION 703+65.32 RT AS SHOWN ON PLANS.
  6. REMOVE STAGE I OF EXISTING BRIDGE STRUCTURE AND CONSTRUCT TEMPORARY SOIL RETENTION SYSTEM, AND STAGE I OF PROPOSED STRUCTURE.
  7. CONSTRUCT NEW ROADWAY (USING TEMPORARY SOIL RETENTION SYSTEM) AND ENTRANCES AS SHOWN ON PLANS, EXCEPT FOR HMA SURFACE COURSE.
  8. INSTALL NEW GUARDRAIL AS SHOWN ON PLANS.



**TEMPORARY PHASE DESIGNATION DIAGRAM**



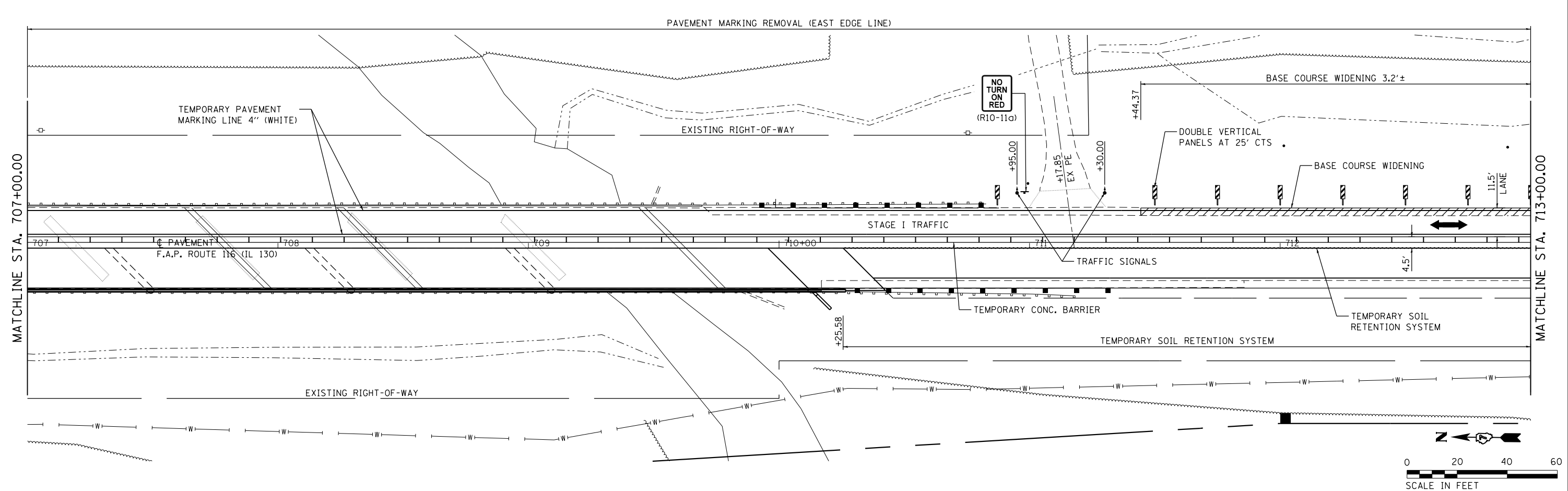
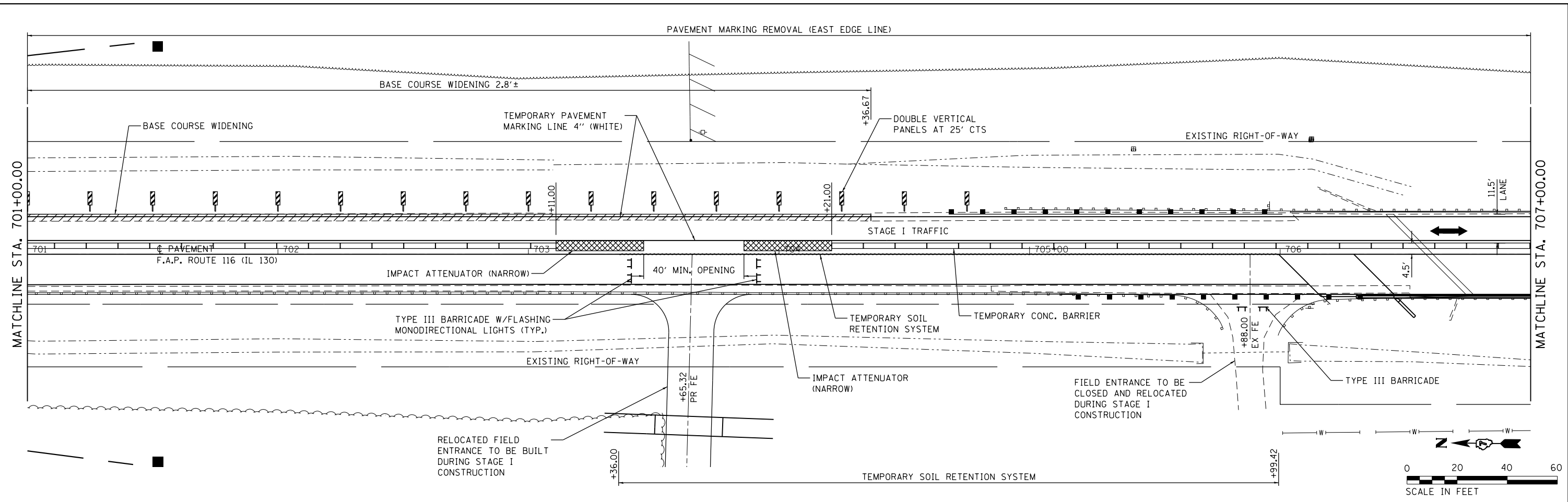
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PLOT DATE = 2/4/2015	CHECKED - KCM	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>PRE-STAGE &amp; STAGE I CONSTRUCTION</b>			
<b>FAP 116 (IL 130)</b>			
SCALE: 1"=20'	SHEET 1	OF 3 SHEETS	STA. 695+00.00 TO STA. 701+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
116	(113)B-1	CUMBERLAND	83	20
CONTRACT NO. 74324				
ILLINOIS FED. AID PROJECT				

FILE NAME = s:\DDT\6008 - D7 Var. Var. Work. Order 5 - IL 130 Roadway Plans\CADD\Civil\McDonough\Whitlow\2015-02-02 174324\_MW\_Stage Sheets Revised Final\CADD Sheets\0774324-shr-staging-2.dgn



McDonough-Whitlow, P.C.  
 Consulting Engineers & Land Surveyors  
 PROFESSIONAL DESIGN No. 184-002754

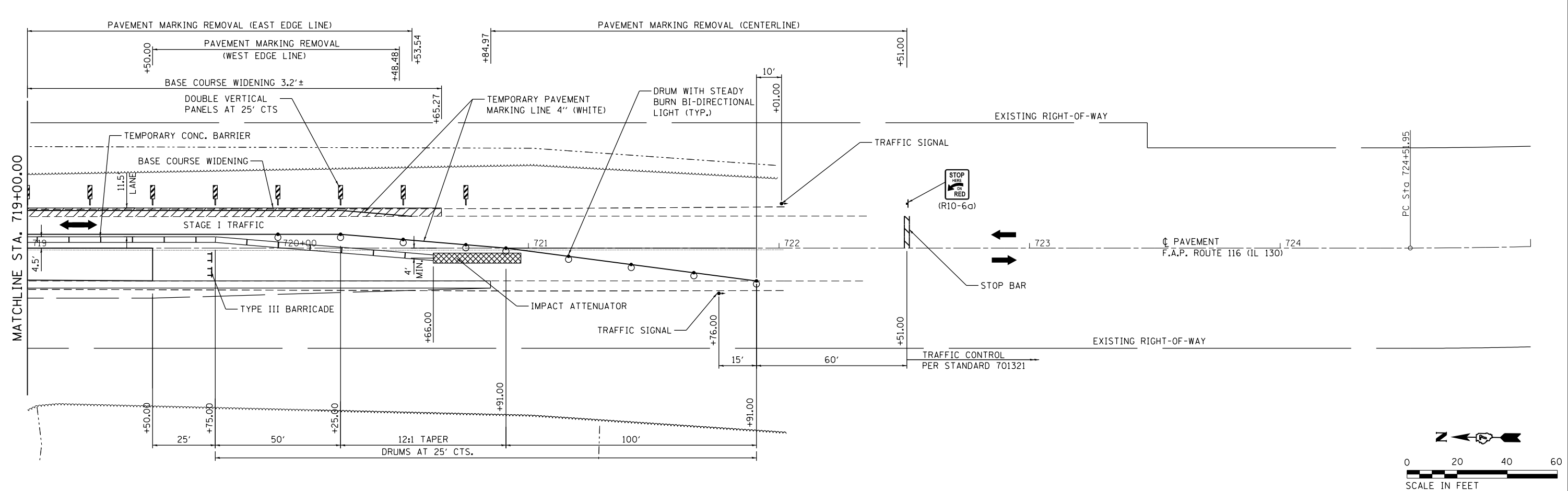
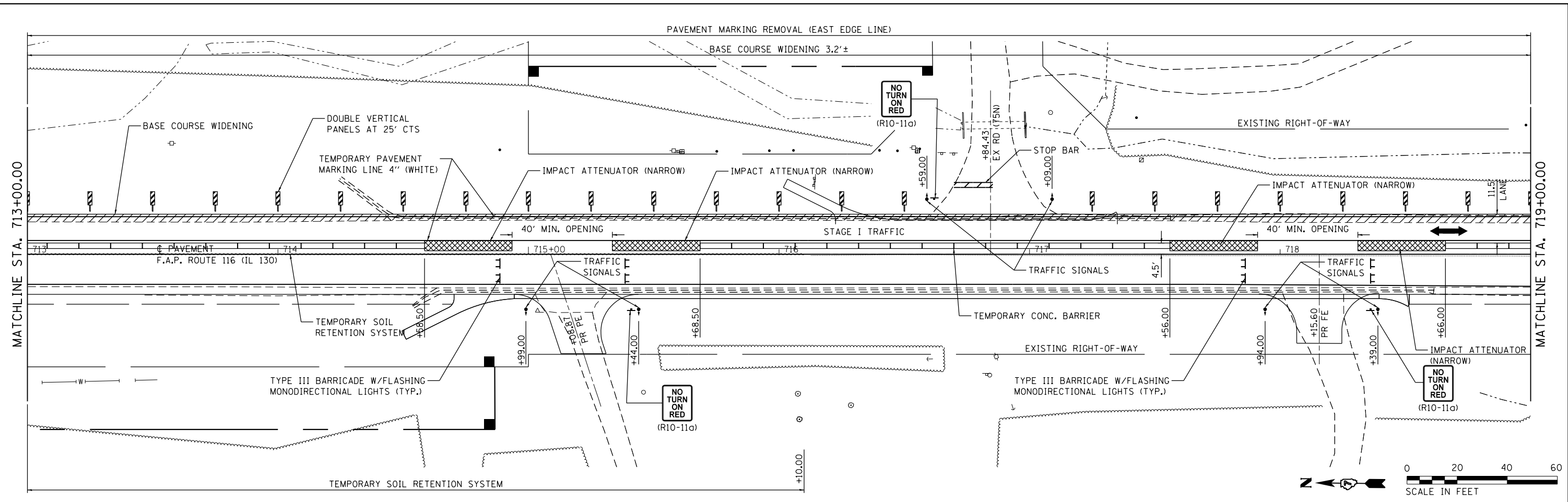
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PLOT DATE = 2/4/2015	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**PRE-STAGE & STAGE I CONSTRUCTION**  
**FAP 116 (IL 130)**  
 SCALE: 1"=20' SHEET 2 OF 3 SHEETS STA. 701+00.00 TO STA. 713+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
116	(113)B1-1	CUMBERLAND	83	21
CONTRACT NO. 74324				
ILLINOIS FED. AID PROJECT				

FILE NAME = I:\DDT\6008 - D7 Var. Var. Work. Order 5 - IL 130 Roadway Plans\CADD\McDonough-Whitlow\2015-02-02 (74324) M7 Stage Sheets Revised Final\CADD Sheets\074324-shr-staging-3.dgn



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 PROFESSIONAL DESIGN No. 184-002754

USER NAME = dbullock  
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 PLOT DATE = 2/4/2015

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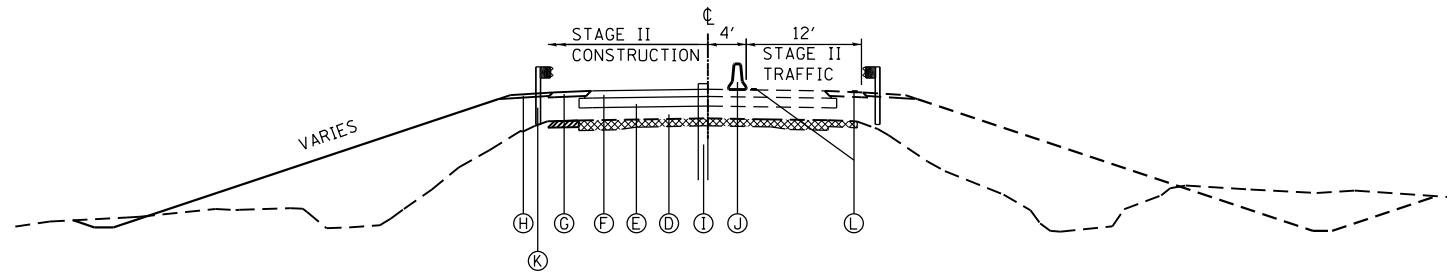
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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

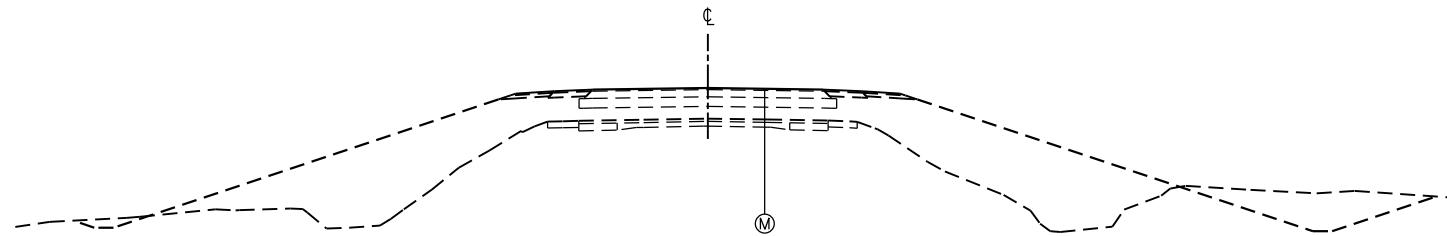
**PRE-STAGE & STAGE I CONSTRUCTION  
 FAP 116 (IL 130)**  
 SCALE: 1"=20' SHEET 3 OF 3 SHEETS STA. 713+00.00 TO STA. 725+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
116	(113B)B-1	CUMBERLAND	83	22
CONTRACT NO. 74324				
ILLINOIS FED. AID PROJECT				

FILE NAME = s:\DDT\6008 - D7 Var - Var - Work - Order 5 - IL 130 - Roadway Plans\CADD\McDonough-Whitlow\2015-02-02 174324 - M7 Stage Sheets Revised Final\CADD Sheets\074324-sht-staging2-1.dgn



**STAGE II CONSTRUCTION TYPICAL SECTION**



**FINAL STAGE CONSTRUCTION TYPICAL SECTION**

**NOTES:**

1. ALL DIMENSIONS, BARRICADES, SIGNS, ETC. AS SHOWN ON TRAFFIC CONTROL AND PROTECTION STANDARD 701321 SHALL APPLY.
2. ALL TEMPORARY PAVEMENT MARKING NECESSARY TO COMPLY WITH THIS DETAIL SHALL BE CONSIDERED INCLUDED IN THE TRAFFIC CONTROL PAY ITEMS IN THE PLANS.
3. CONTRACTOR SHALL FILL EXISTING GUARDRAIL POST HOLES AFTER REMOVING AND COST SHALL BE CONSIDERED INCLUDED IN THE STEEL PLATE BEAM GUARDRAIL REMOVAL PAY ITEM.
4. CONTRACTOR SHALL PROVIDE ACCESS TO ALL ENTRANCES DURING CONSTRUCTION. CONTRACTOR SHALL FLAG AT ENTRANCES WITHOUT SIGNALS AS NEEDED TO PROVIDE ACCESS.

**LEGEND**

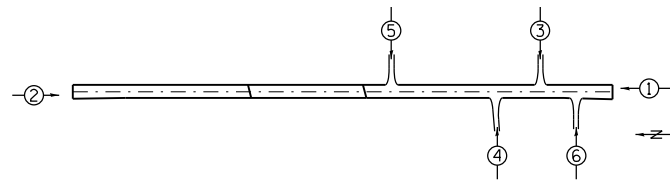
- Ⓧ FURNISHED EMBANKMENT
- Ⓨ AGGREGATE BASE COURSE
- Ⓩ HOT-MIX ASPHALT BINDER COURSE
- ⓓ HOT-MIX ASPHALT SHOULDERS
- ⓔ AGGREGATE SHOULDERS
- ⓕ TEMPORARY SOIL RETENTION SYSTEM (FROM STAGE I)
- ⓖ TEMPORARY CONCRETE BARRIER  
STA 698+42.00 TO STA 710+54.50  
STA 711+64.50 TO STA 716+27.00  
STA 717+45.50 TO STA 720+58.00
- ⓗ PINNING TEMPORARY CONCRETE BARRIER  
STA 703+11.92 TO STA 705+99.42  
STA 710+25.58 TO STA 710+38.08  
STA 711+77.00 TO STA 716+14.50
- ⓙ PROPOSED STEEL PLATE BEAM GUARDRAIL
- ⓚ WHITE TEMPORARY PAVEMENT MARKING LINE
- ⓛ HMA SURFACE COURSE & PAINT PAVEMENT MARKING

**SUGGESTED STAGE II PROCEDURES**

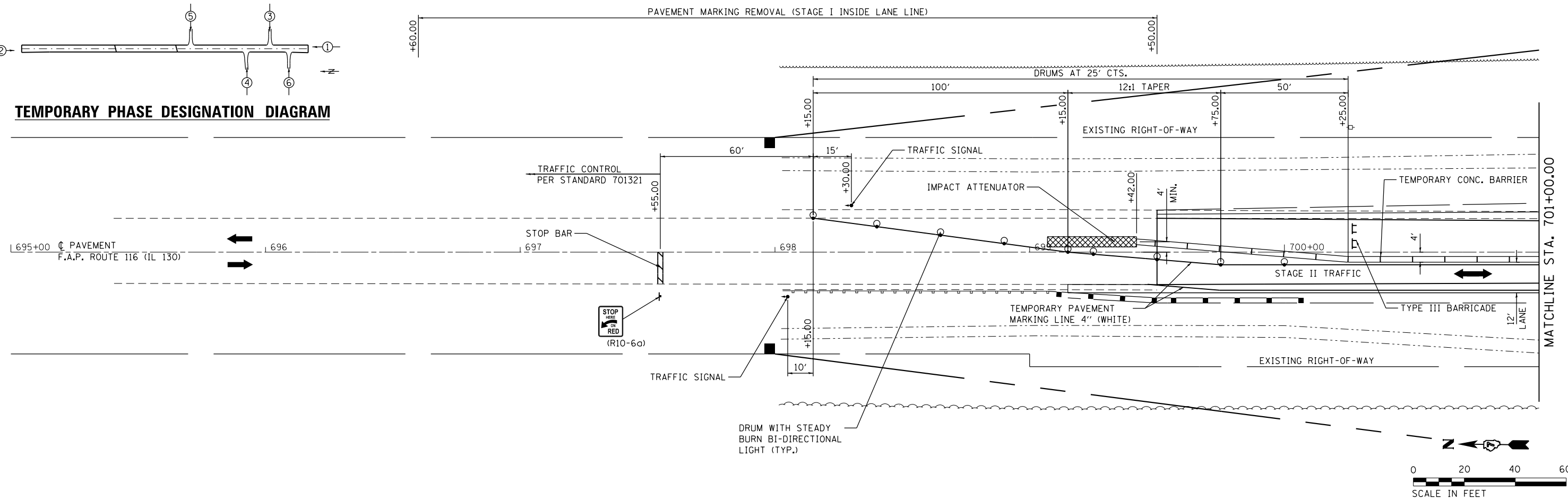
1. RELOCATE TEMPORARY CONCRETE BARRIERS, IMPACT ATTENUATORS, AND TRAFFIC CONTROL DEVICES AS REQUIRED.
2. MOVE ALL TRAFFIC TO SOUTHBOUND LANE.
3. REMOVE REMAINING PORTION OF EXISTING BRIDGE STRUCTURE AND CONSTRUCT STAGE II PORTION OF BRIDGE STRUCTURE AS SHOWN ON PLANS.
4. REMOVE EXISTING GUARDRAIL.
5. CONSTRUCT STAGE II ROADWAY AND ENTRANCES AS SHOWN ON PLANS, EXCEPT FOR HMA SURFACE COURSE.
6. INSTALL NEW GUARDRAIL AS SHOWN ON PLANS.

**SUGGESTED FINAL STAGE PROCEDURES**

1. REMOVE ALL TEMPORARY TRAFFIC BARRIERS AND CONTROL DEVICES.
2. INSTALL SHORT-TERM PAVEMENT MARKINGS.
3. OPEN ROADWAY TO TWO-WAY TRAFFIC.
4. CONSTRUCT SURFACE COURSE, HMA SHOULDER SURFACE AND AGGREGATE SHOULDER SURFACE. TRAFFIC CONTROL PER STANDARD 701306.
5. CONSTRUCT STRIPING ON ROADWAY AS SHOWN ON PLANS. TRAFFIC CONTROL PER STANDARD 701311.

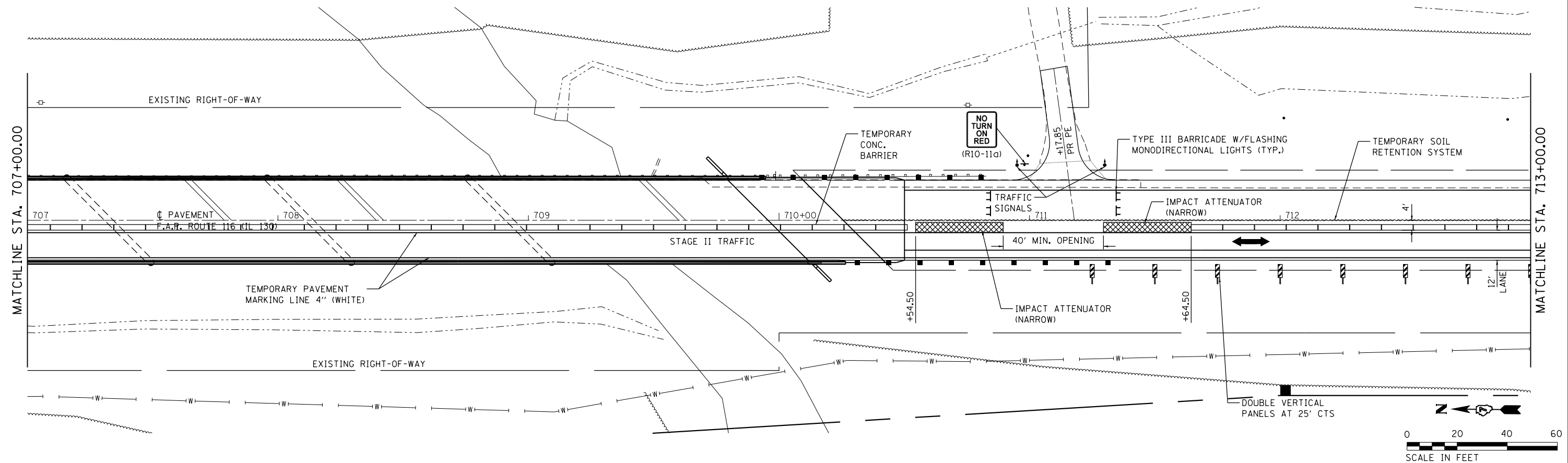
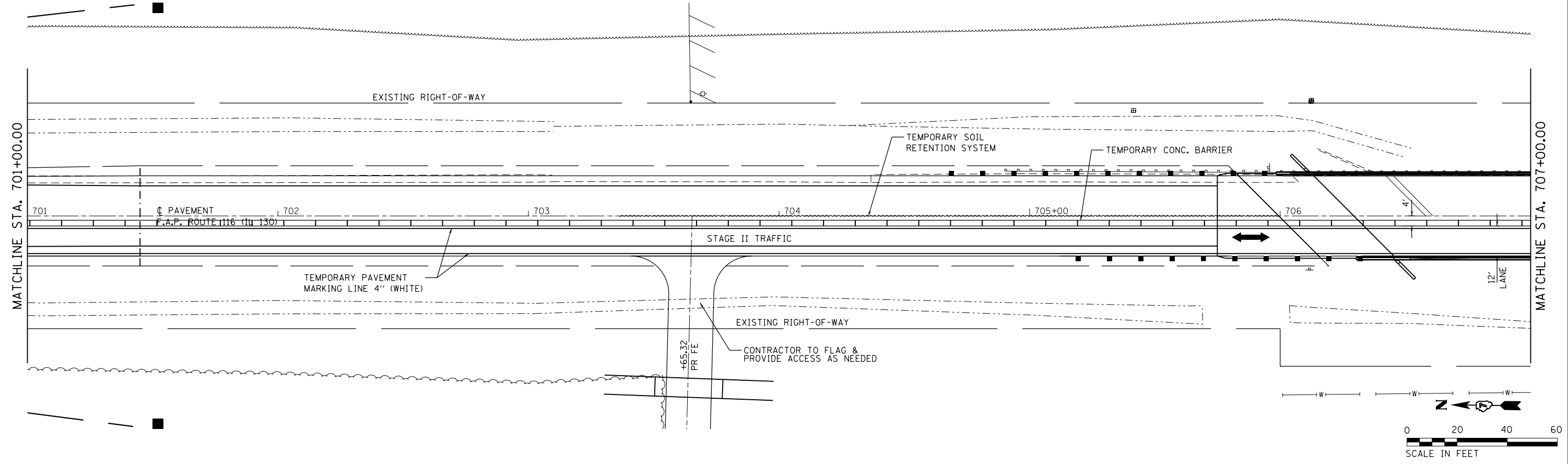


**TEMPORARY PHASE DESIGNATION DIAGRAM**



<p>McDonough-Whitlow, P.C. Consulting Engineers &amp; Land Surveyors PROFESSIONAL DESIGN No. 184-002754</p>	USER NAME = dbullock	DESIGNED - JAH	REVISED -	<p align="center"><b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b></p>	<p align="center"><b>STAGE II &amp; FINAL STAGE CONSTRUCTION FAP 116 (IL 130)</b></p>			F.A.P. RTE. 116	SECTION (113)B-1	COUNTY CUMBERLAND	TOTAL SHEETS 83	SHEET NO. 23
	PLOT SCALE = 48.0000' / in.	CHECKED - KCM	REVISED -		SCALE: 1"=20'	SHEET 1	OF 3 SHEETS	STA. 695+00.00 TO STA. 701+00.00	CONTRACT NO. 74324		ILLINOIS FED. AID PROJECT	
PLOT DATE = 2/4/2015	DATE -	REVISED -										

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 Consulting Engineers & Land Surveyors  
 PROFESSIONAL DESIGN No. 184-002754

USER NAME = dbullock	DESIGNED - JAH	REVISED -
DRAWN - RNH	REVISED -	
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DATE -	REVISED -	
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PLOT DATE = 2/4/2015		

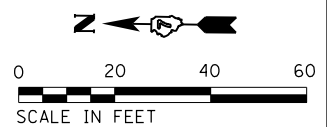
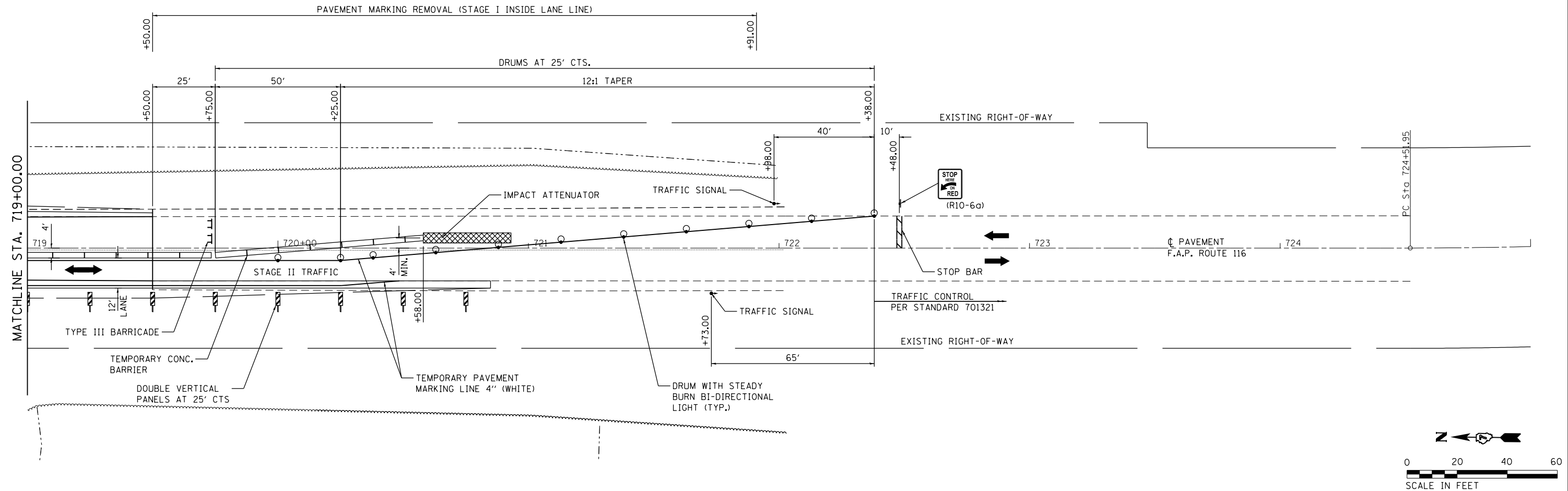
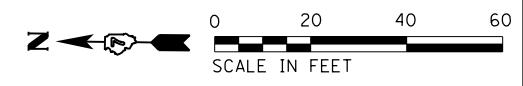
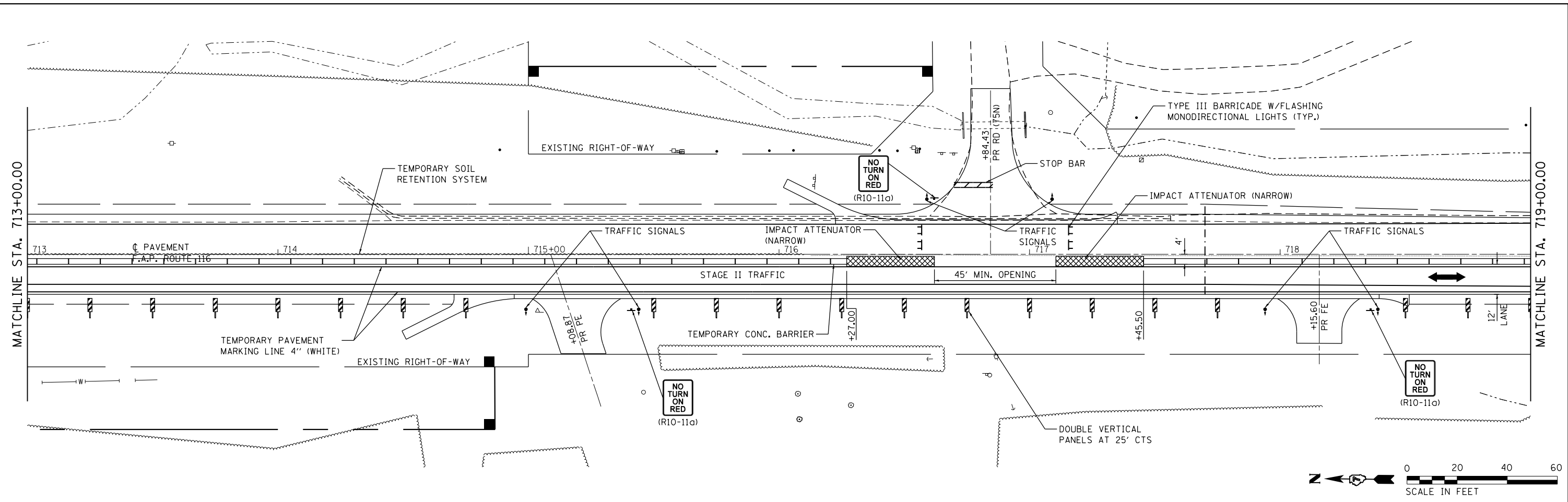
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**STAGE II & FINAL STAGE CONSTRUCTION**  
**FAP 116 (IL 130)**  
 SCALE: 1"=20' SHEET 2 OF 3 SHEETS STA. 701+00.00 TO STA. 713+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
116	(113B)B-1	CUMBERLAND	83	24
CONTRACT NO. 74324				
ILLINOIS FED. AID PROJECT				



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McDonough-Whitlow, P.C.  
Consulting Engineers & Land Surveyors  
PROFESSIONAL DESIGN No. 184-002754

USER NAME = dbullock	DESIGNED - JAH	REVISED -
PLOT SCALE = 48.0000' / in.	DRAWN - RNH	REVISED -
PLOT DATE = 2/4/2015	CHECKED - KCM	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**STAGE II & FINAL STAGE CONSTRUCTION  
FAP 116 (IL 130)**  
SCALE: 1"=20' SHEET 3 OF 3 SHEETS STA. 713+00.00 TO STA. 725+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
116	(113)B-1	CUMBERLAND	83	25
CONTRACT NO. 74324				
ILLINOIS FED. AID PROJECT				



**INDEX OF SHEETS**

- 1 General Plan and Elevation
- 2 General Structure Data
- 3 Footing Layout and Details
- 4 Stage Construction Details
- 5 Stage Construction Details-Soil Retention
- 6 Temporary Construction Barrier for Stage Construction
- 7-9 Top of Slab Elevations
- 10 Top of North Approach Slab Elevations
- 11 Top of South Approach Slab Elevations
- 12 Superstructure
- 13 Superstructure Details
- 14 Diaphragm Details
- 15-18 Precast Bridge Approach Slab
- 19 Drainage Scupper, DS-11
- 20 Framing Plan and Details
- 21 Framing Details
- 22 Interior Beam Moment Tables
- 23 Bearing Details
- 24 North Abutment Details
- 25 South Abutment Details
- 26 Pier 1 Details
- 27 Pier 2 Details
- 28 Pier 3 Details
- 29 Steel HP Pile Details
- 30 Bar Splicer Assembly and Mechanical Splicer Details
- 31-36 Soil Boring Logs

**GENERAL NOTES:**

Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts  
Bolts  $\frac{7}{8}$ "  $\phi$  in holes  $\frac{5}{8}$ "  $\phi$ , unless otherwise noted.

Calculated weight of Structural Steel = 542650 (AASHTO M 270 Grade 50)  
33380 (AASHTO M 270 Grade 36)

No field welding is permitted except as specified in the contract documents.  
Reinforcement bars designated (E) shall be epoxy coated.

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

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

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

The concrete for bridge decks finished according to Article 503.16(a) of the Standard Specifications shall be placed and compacted parallel to the skew in uniform increments along centerline of bridge. The machine used for finishing shall be set parallel to the skew for striking off and screeding the concrete.

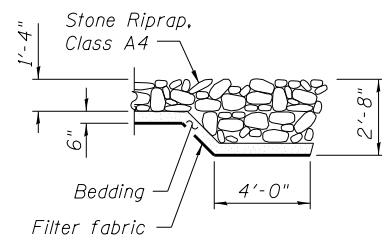
Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure. The Contractor shall sawcut the upper portion of the existing abutment at the stage removal line before Stage I removal to ensure the remaining portion will not be prematurely damaged.

The 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 No. 5B 7/1.

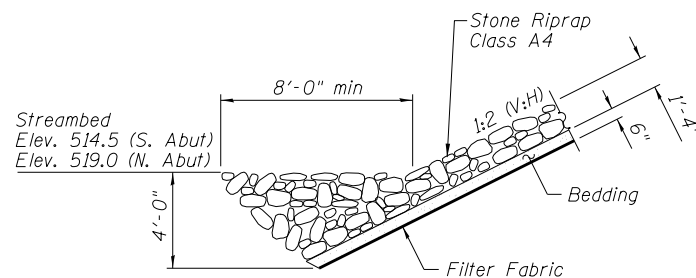
Slipforming of parapets is not allowed.

**TOTAL BILL OF MATERIAL**

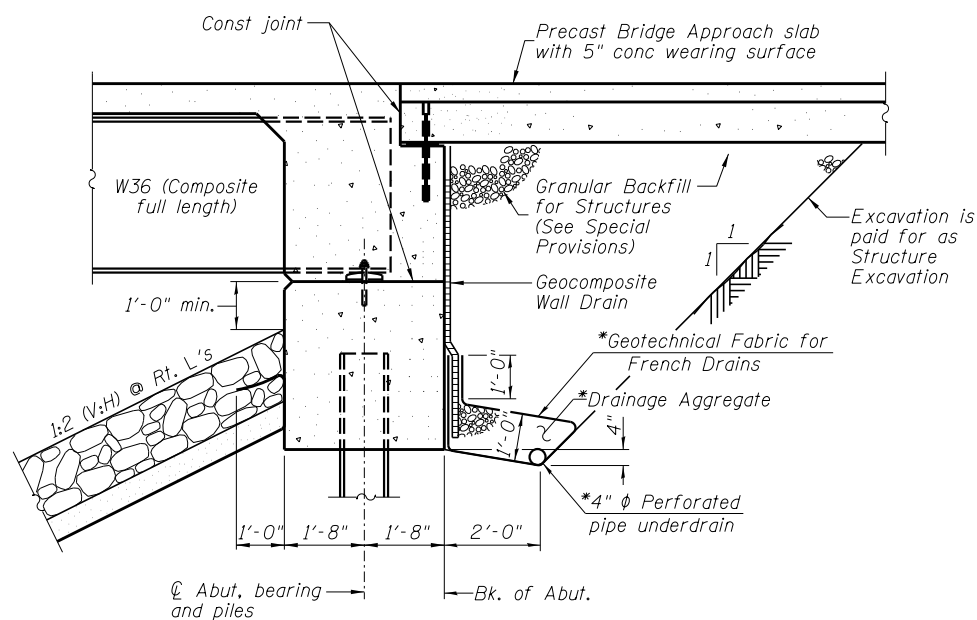
Item	Unit	Super	Sub	Total
Stone Riprap, Class A4	Ton	---	744	744
Filter Fabric	Sq. Yd.	---	1115	1115
Removal of Existing Structures No. 1	Each	1	---	1
Structure Excavation	Cu. Yd.	---	355	355
Cofferdam Excavation	Cu. Yd.	---	141	141
Cofferdam (Type I)(Location-1)	Each	---	1	1
Floor Drains	Each	20	---	20
Concrete Structures	Cu. Yd.	---	370.1	370.1
Concrete Superstructure	Cu. Yd.	448.4	---	448.4
Bridge Deck Grooving	Sq. Yd.	1423	---	1423
Protective Coat	Sq. Yd.	1852	---	1852
Furnishing and Erecting Structural Steel	L. Sum	1	---	1
Stud Shear Connectors	Each	7464	---	7464
Reinforcement Bars, Epoxy Coated	Pound	112,420	49,490	161,910
Bar Splicers	Each	1270	150	1420
Mechanical Splicers	Each	---	238	238
Furnishing Steel Piles HP14x89	Foot	---	5013	5013
Driving Piles	Foot	---	5013	5013
Test Pile Steel HP14x89	Each	---	5	5
Name Plates	Each	1	---	1
Preformed Joint Strip Seal	Foot	96	---	96
Elastomeric Bearing Assembly, Type I	Each	---	12	12
Anchor Bolts, 3/4"	Each	---	12	12
Anchor Bolts, 1"	Each	---	48	48
Geocomposite Wall Drain	Sq. Yd.	---	98	98
Drainage Scuppers, DS-11	Each	4	---	4
Pipe Underdrains for Structures 4"	Foot	---	225	225
Temporary Soil Retention System	Sq. Ft.	---	816	816
Concrete Wearing Surface, 5 in	Sq. Yd.	230	---	230
Precast Bridge Approach Slab	Sq. Ft.	1980	---	1980
Granular Backfill for Structures	Cu. Yd.	---	129	129



**SECTION A-A**



**SECTION B-B**

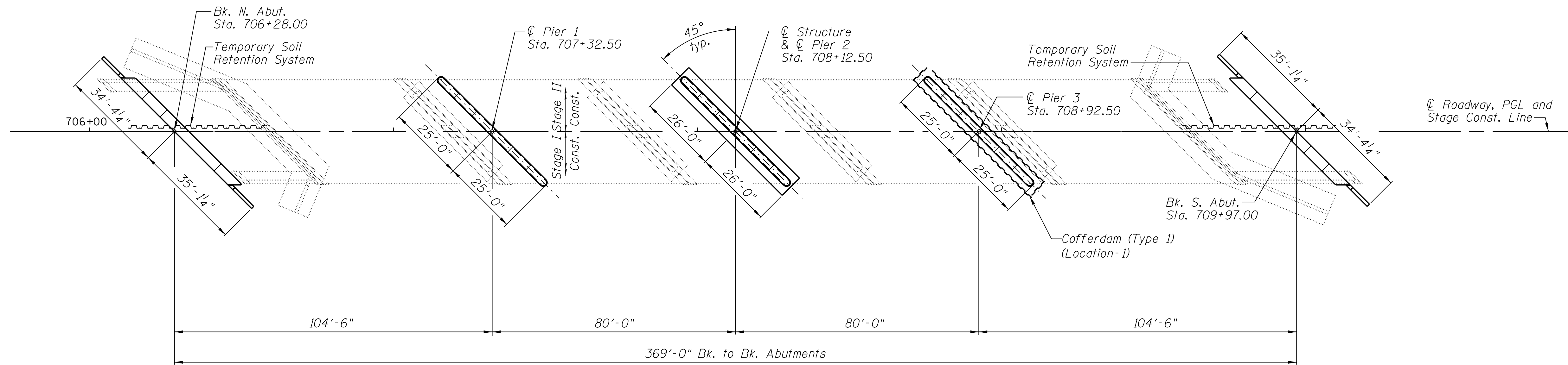


**SECTION THRU INTEGRAL ABUTMENT**  
(Horiz. dim. @ Rt. L's)

\*Included in the cost of Pipe Underdrains for Structures. (See Special Provisions)

Note:  
All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend to the toe of the slope. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 60110).

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FOOTING LAYOUT

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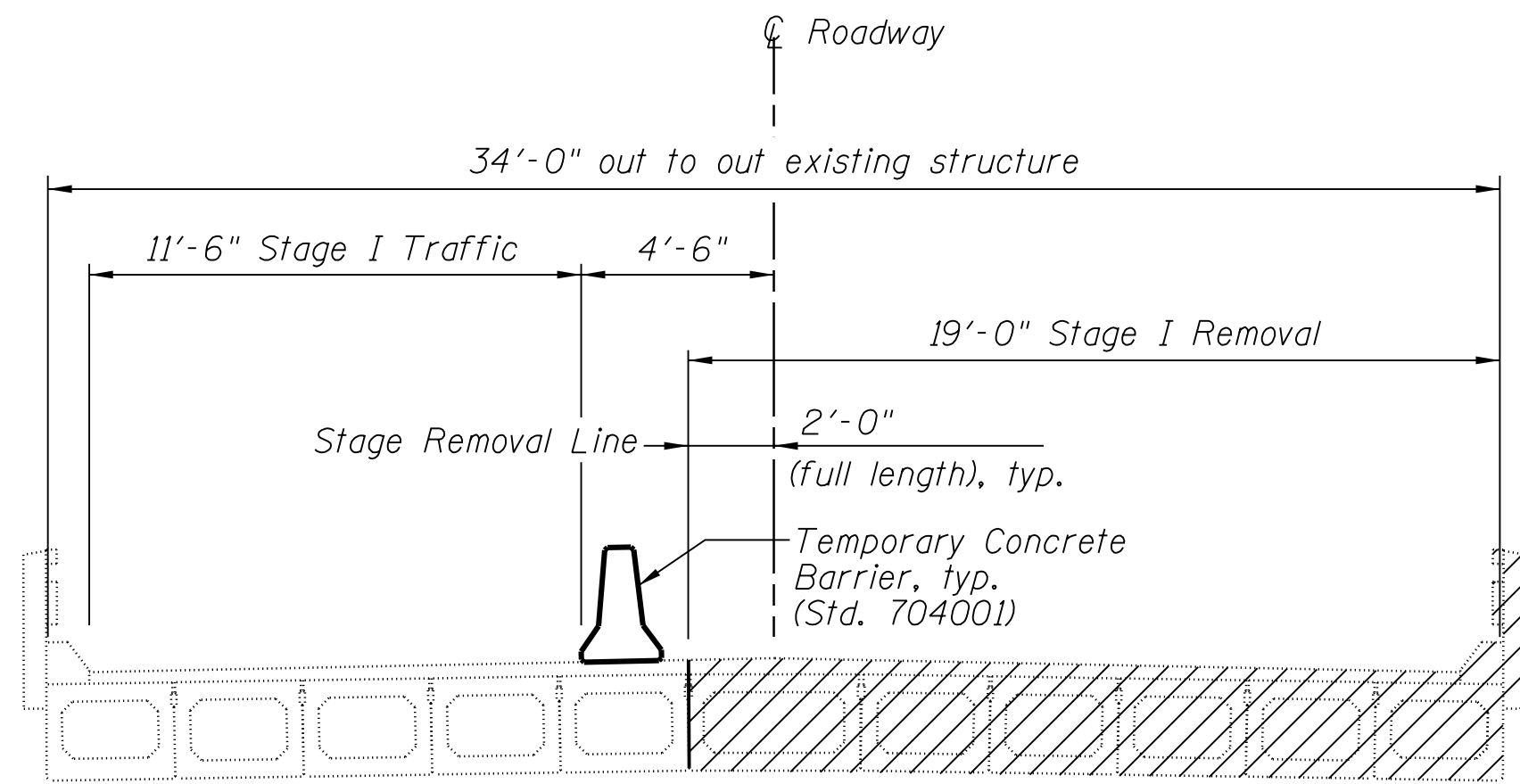
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DEPARTMENT OF TRANSPORTATION

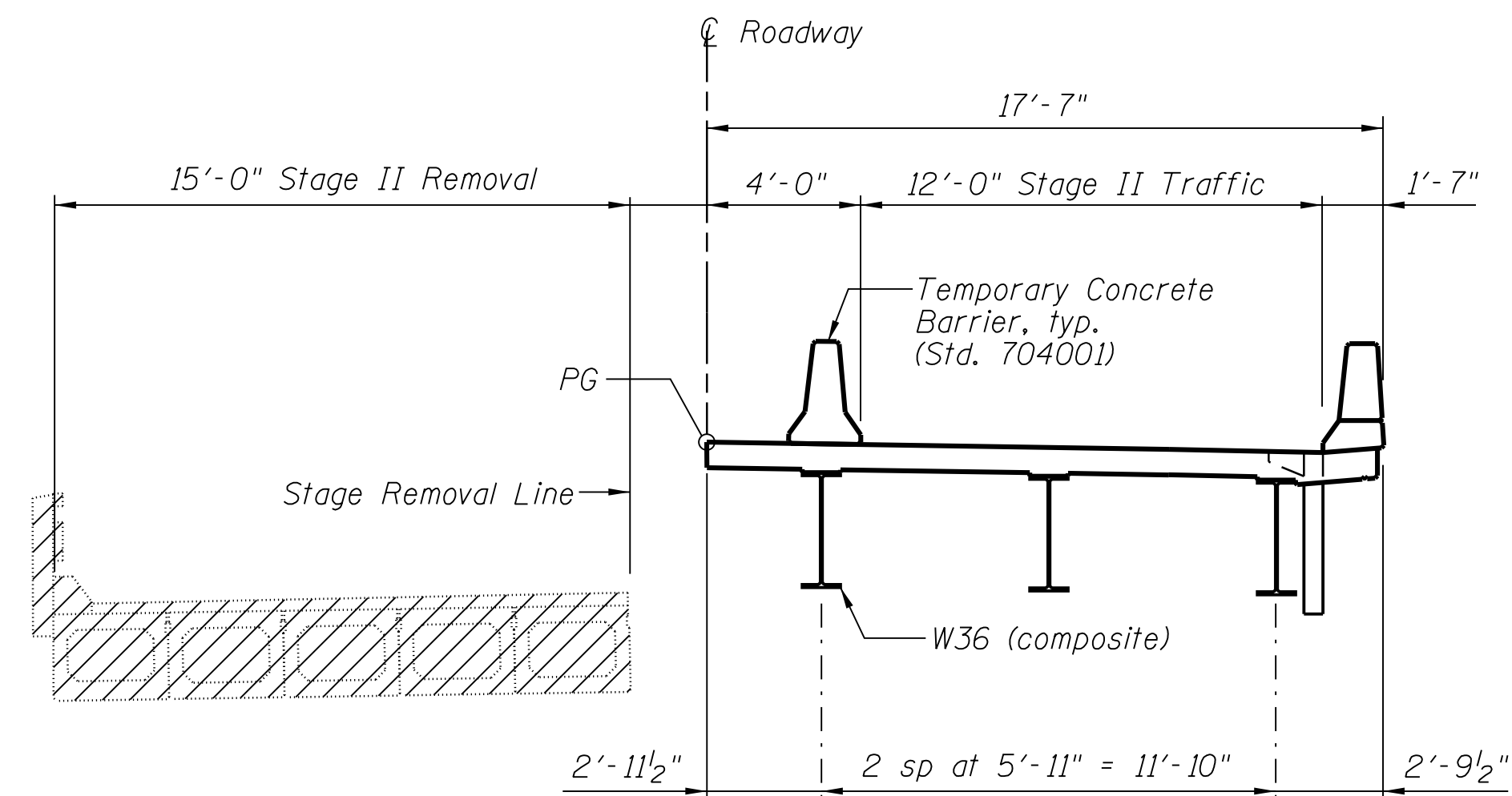
FOOTING LAYOUT AND DETAILS  
STRUCTURE NO. 018-0067

SHEET NO. 3 OF 36 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
116	(113B)B-1	CUMBERLAND	83	28
SN. 018-0067		CONTRACT NO. 74324		
STA.	ILLINOIS FED. AID PROJECT			

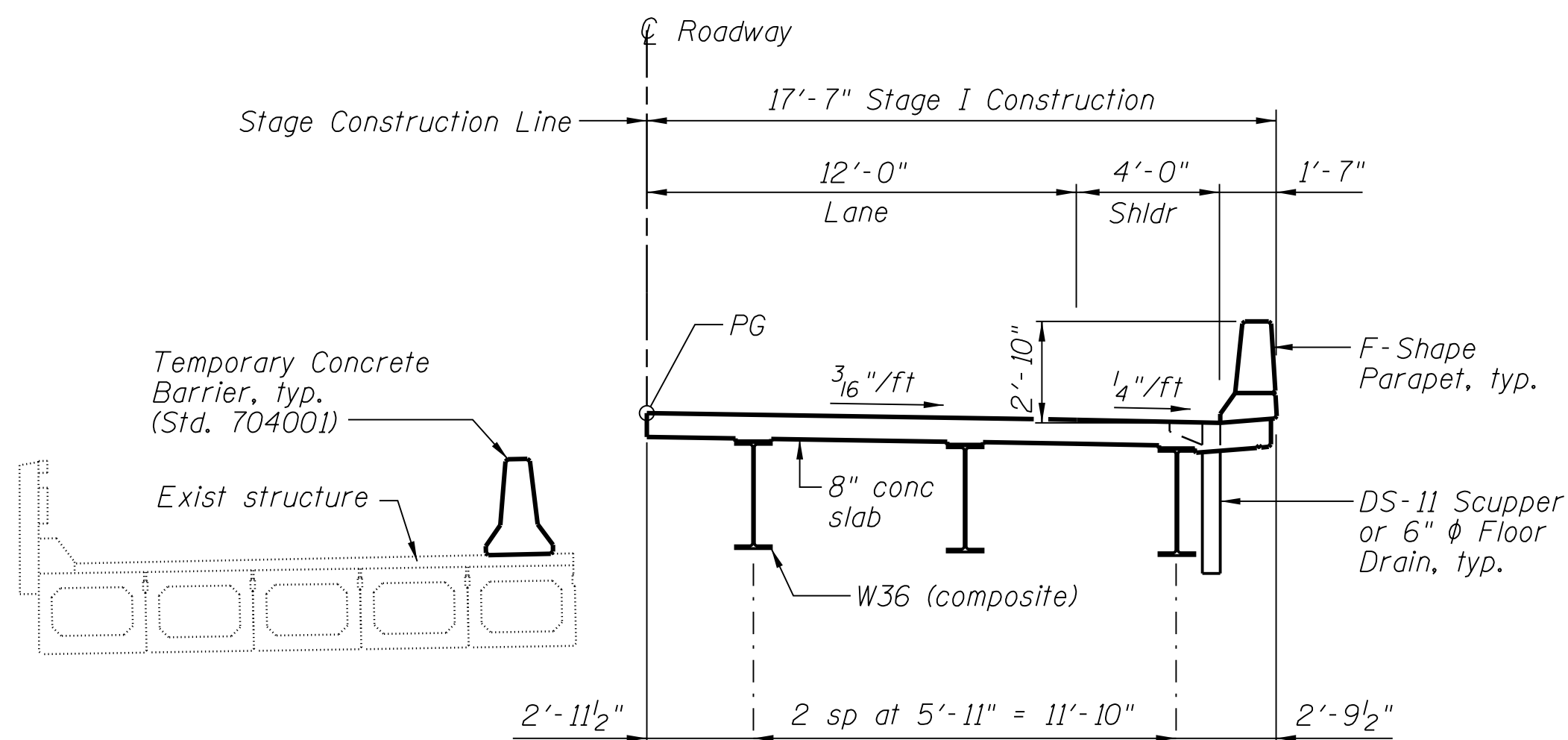


**STAGE I REMOVAL**  
(Looking South)

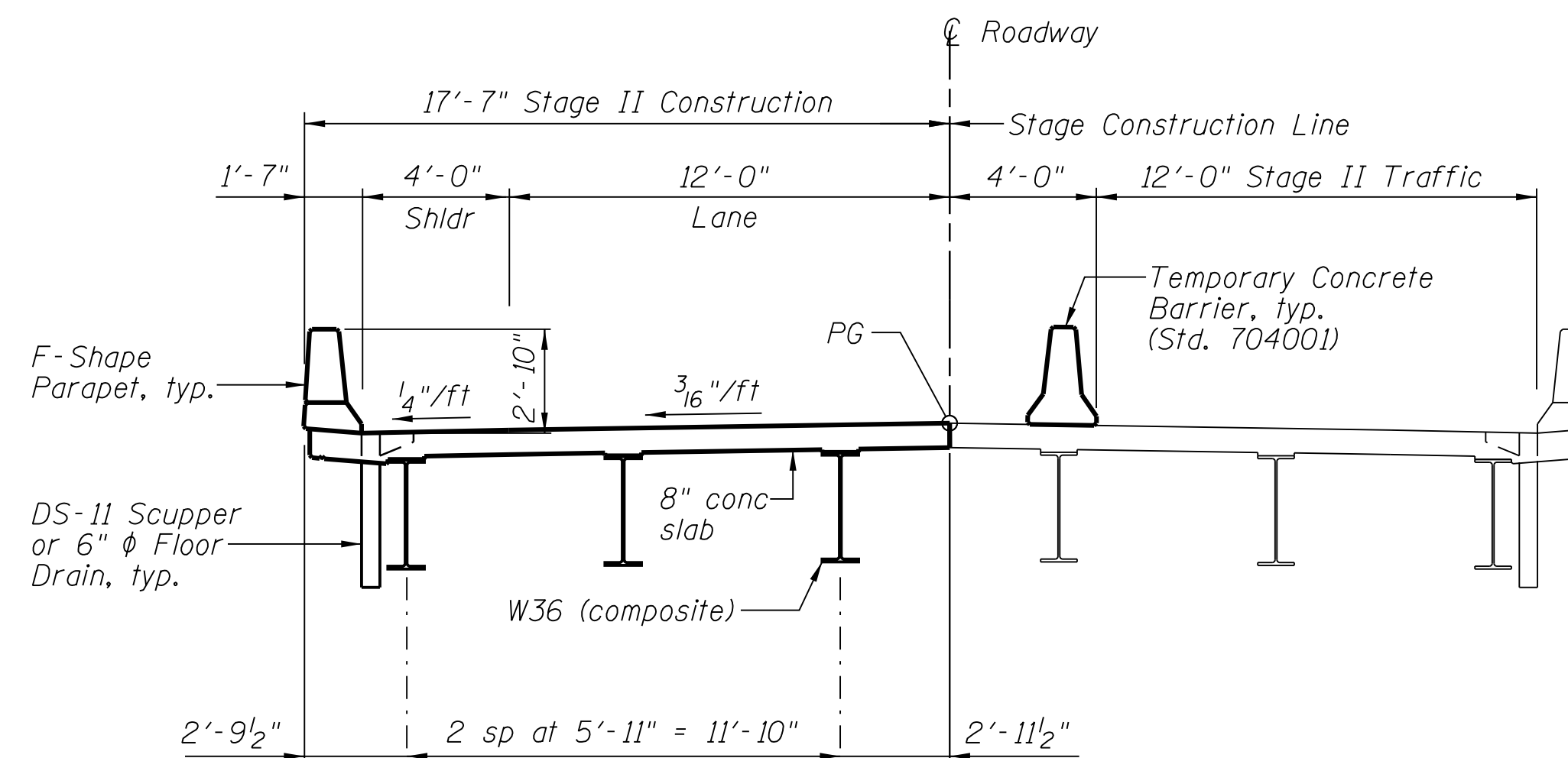


**STAGE II REMOVAL**  
(Looking South)

Notes:  
For quantity of Temporary Concrete Barrier See Roadway Plans.  
For details of Temporary Concrete Barrier See Sheet 6 of 36.



**STAGE I CONSTRUCTION**  
(Looking South)

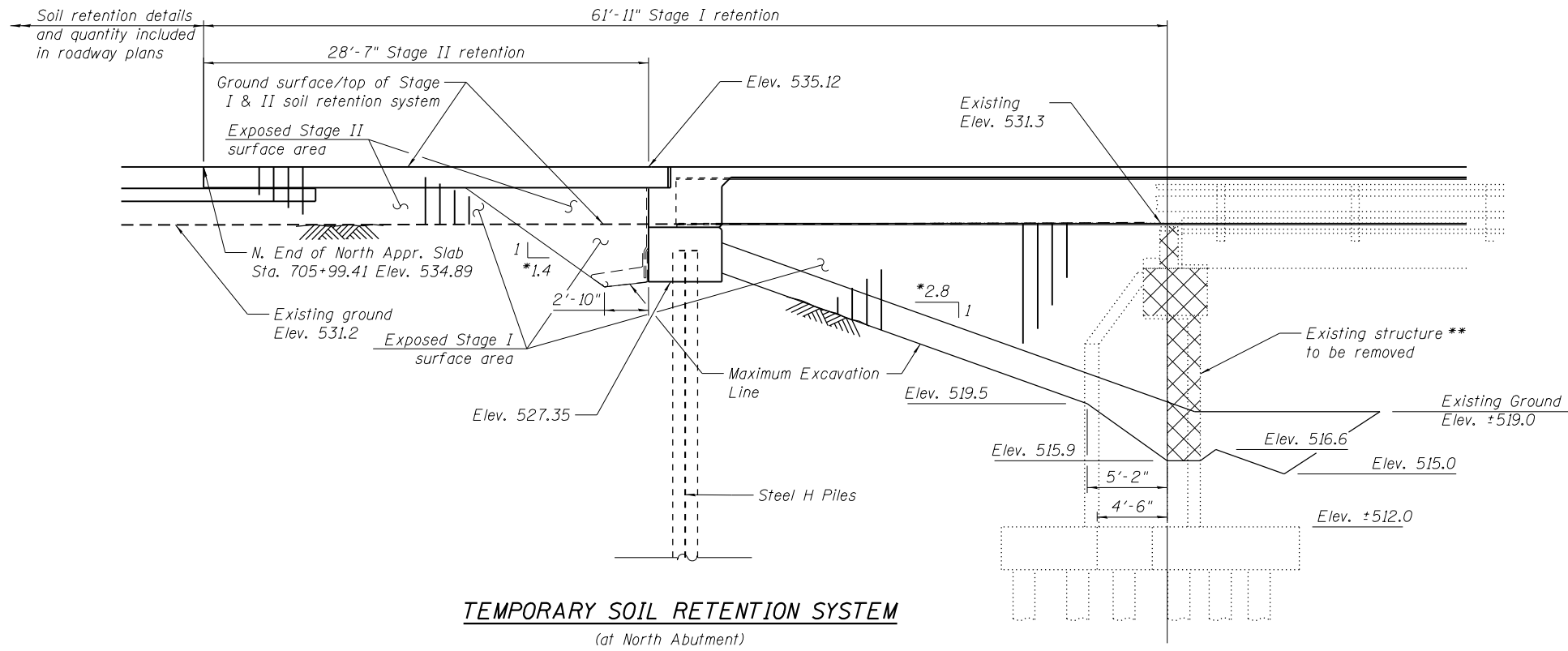


**STAGE II CONSTRUCTION**  
(Looking South)

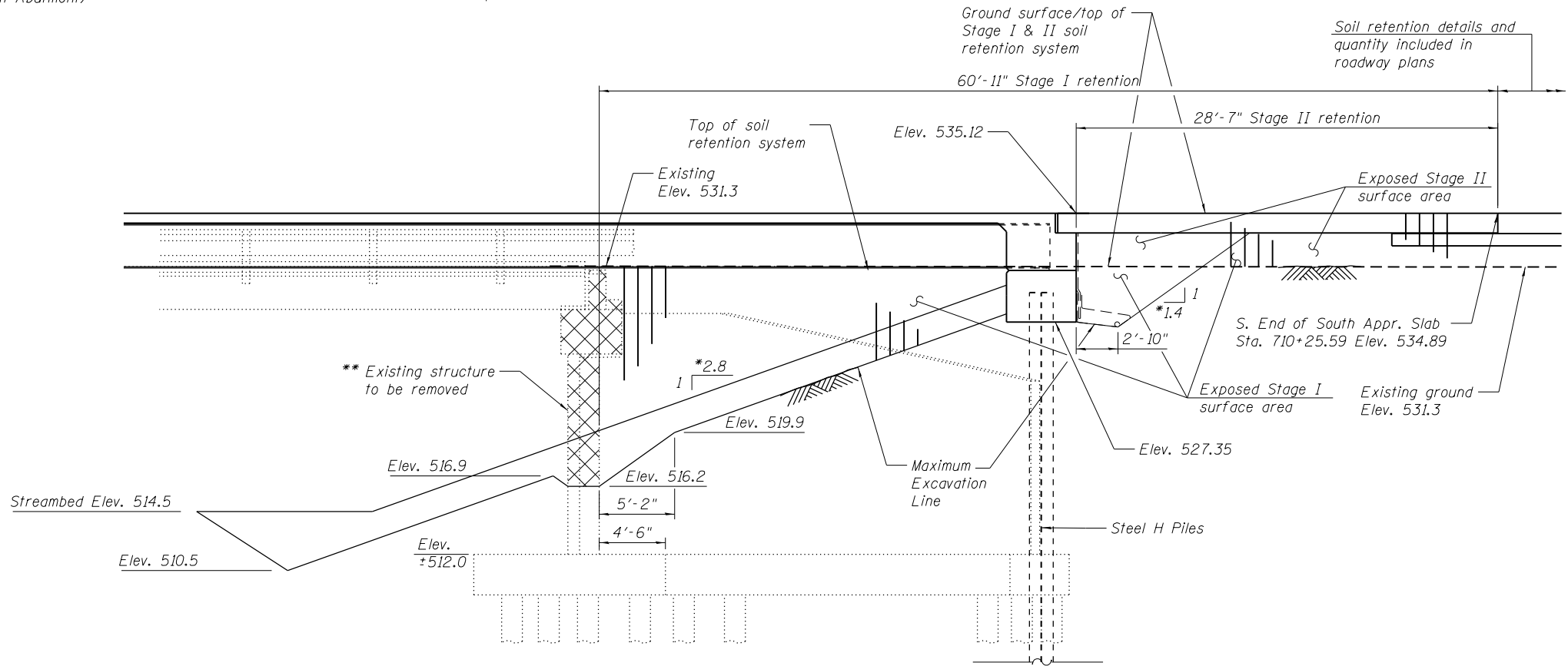
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
116	(113B)B-1	CUMBERLAND	83	29
SN. 018-0067		CONTRACT NO. 74324		
STA.	ILLINOIS FED. AID PROJECT			



**TEMPORARY SOIL RETENTION SYSTEM**  
(at North Abutment)



**TEMPORARY SOIL RETENTION SYSTEM**  
(at South Abutment)

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

\* Along skew  
\*\* Portion of wingwalls above grade or entire wingwall to be removed with abutments.

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**McDonough-Whitlow, P.C.**  
Consulting Engineers & Land Surveyors  
PROFESSIONAL DESIGN No. 184-002754

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**DEPARTMENT OF TRANSPORTATION**

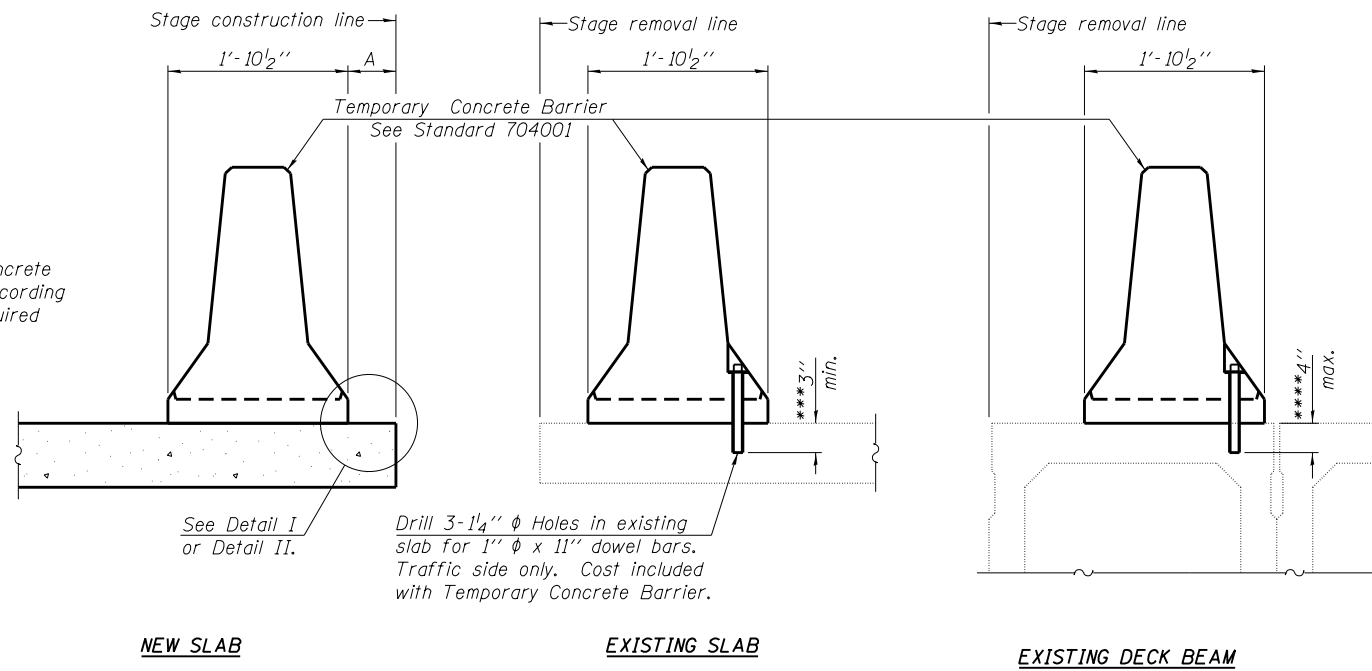
**STAGE CONSTRUCTION DETAILS - SOIL RETENTION**  
**STRUCTURE NO. 018-0067**

SHEET NO. 5 OF 36 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
116	(113B)B-1	CUMBERLAND	83	30
CONTRACT NO. 74324				

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".



**NOTES**

Detail I - With Bar Splicer or Couplers:  
Connect one (1) 1" x 7" x "W" steel  $\bar{r}$  to the top layer of couplers with 2- $\frac{5}{8}$ "  $\phi$  bolts screwed to coupler at approximate  $\bar{c}$  of each barrier panel.

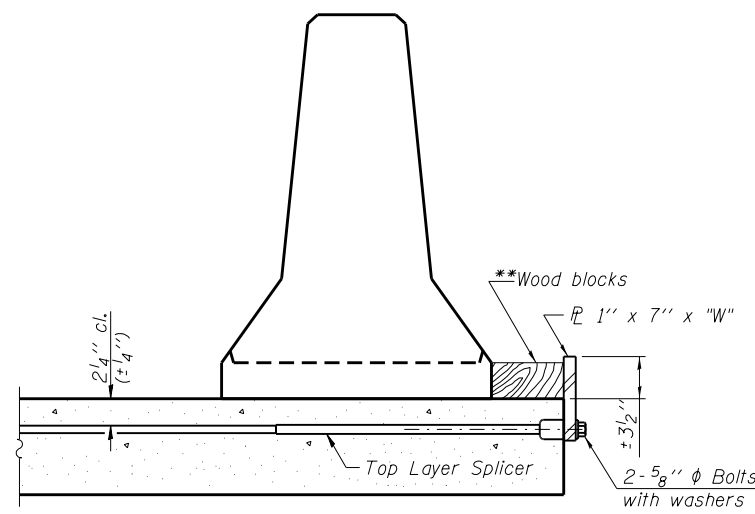
Detail II - With Extended Reinforcement Bars:  
Connect one (1) 1" x 7" x "W" steel  $\bar{r}$  to the concrete slab or concrete wearing surface with 2- $\frac{5}{8}$ "  $\phi$  Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate  $\bar{c}$  of each barrier panel.

Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" 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.

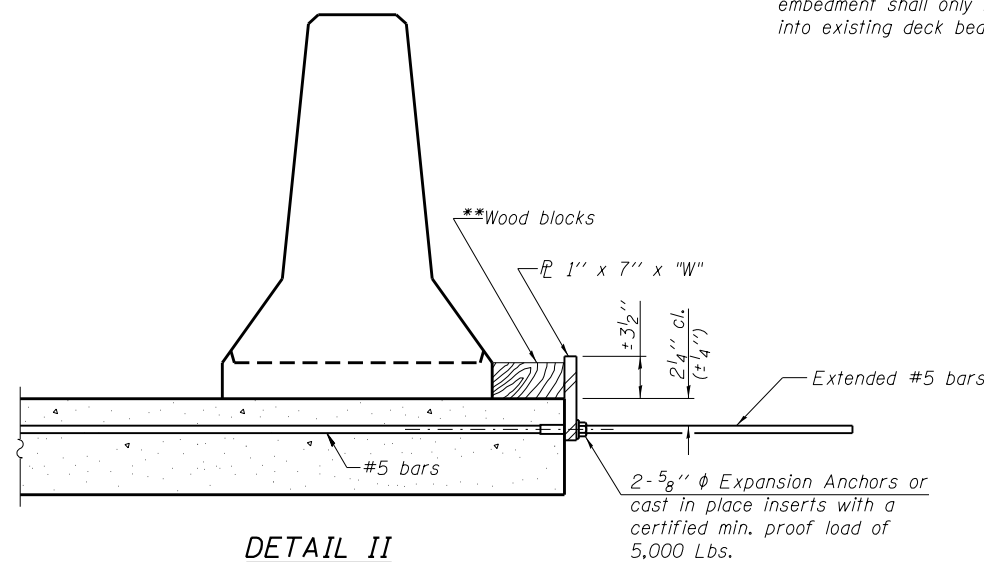
**SECTIONS THRU SLAB OR DECK BEAM**

\*\*\* 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.

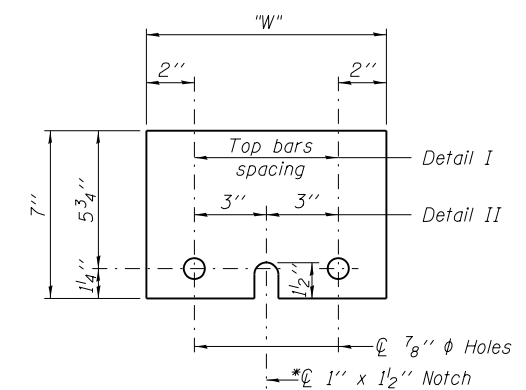
\*\*\*\* If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



**DETAIL I**



**DETAIL II**



**STEEL RETAINER  $\bar{r}$  1" x 7" x "W"**

\* Required only with Detail II

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

"W" = Top bars spacing + 4"

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R-27 7-1-10

**CHASTAIN & ASSOCIATES LLC**  
CONSULTING ENGINEERS  
184-001397

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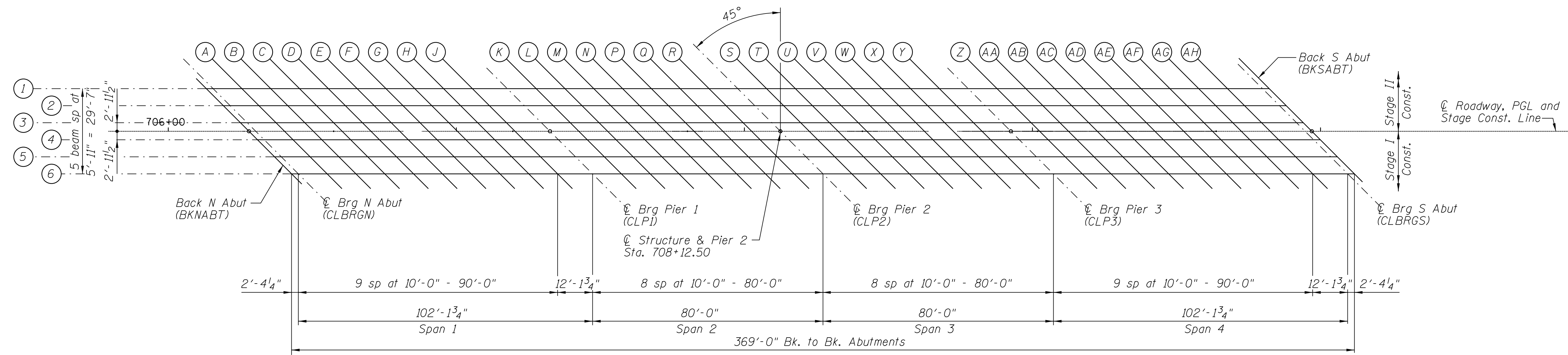
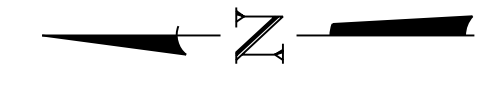
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

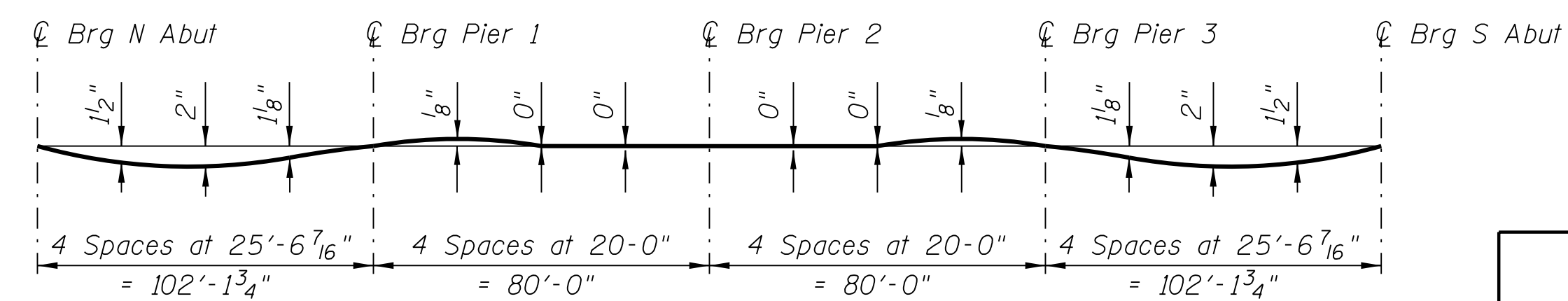
**TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION  
STRUCTURE NO. 018-0067**

SHEET NO. 6 OF 36 SHEETS

F.A.P. R.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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SN. 018-0067		CONTRACT NO. 74324		
STA.	ILLINOIS FED. AID PROJECT			



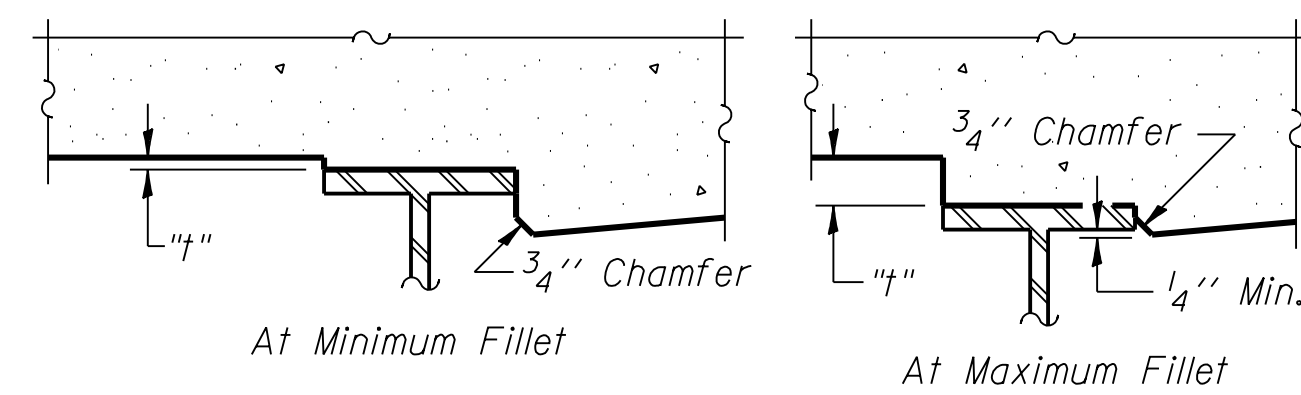
**DECK ELEVATION LAYOUT**



**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 in the tables on Sheets 7, 8 & 9 of 36.



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown above. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on Sheets 7, 8 & 9 of 36, minus slab thickness, equals the fillet heights "t" above top flange of beams.

**FILLET HEIGHTS**

**GIRDER 1**

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
BKNABUT	706+13.21	-14.79	534.76	534.76
CLBRGN	706+15.57	-14.79	534.78	534.78
A	706+25.57	-14.79	534.86	534.91
B	706+35.57	-14.79	534.93	535.04
C	706+45.57	-14.79	535.00	535.14
D	706+55.57	-14.79	535.06	535.23
E	706+65.57	-14.79	535.12	535.29
F	706+75.57	-14.79	535.18	535.33
G	706+85.57	-14.79	535.23	535.35
H	706+95.57	-14.79	535.28	535.36
J	707+05.57	-14.79	535.33	535.37
CLP1	707+17.71	-14.79	535.37	535.37
K	707+27.71	-14.79	535.41	535.40
L	707+37.71	-14.79	535.44	535.43
M	707+47.71	-14.79	535.47	535.47
N	707+57.71	-14.79	535.49	535.50
P	707+67.71	-14.79	535.51	535.52
Q	707+77.71	-14.79	535.53	535.54
R	707+87.71	-14.79	535.54	535.54
CLP2	707+97.71	-14.79	535.55	535.55

**GIRDER 1 (Continued)**

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
S	708+07.71	-14.79	535.55	535.56
T	708+17.71	-14.79	535.55	535.56
U	708+27.71	-14.79	535.55	535.56
V	708+37.71	-14.79	535.54	535.54
W	708+47.71	-14.79	535.53	535.53
X	708+57.71	-14.79	535.51	535.50
Y	708+67.71	-14.79	535.49	535.48
CLP3	708+77.71	-14.79	535.47	535.47
Z	708+87.71	-14.79	535.44	535.47
AA	708+97.71	-14.79	535.41	535.48
AB	709+07.71	-14.79	535.37	535.49
AC	709+17.71	-14.79	535.33	535.48
AD	709+27.71	-14.79	535.29	535.45
AE	709+37.71	-14.79	535.24	535.41
AF	709+47.71	-14.79	535.19	535.34
AG	709+57.71	-14.79	535.13	535.25
AH	709+67.71	-14.79	535.07	535.14
CLBRGS	709+79.85	-14.79	534.99	534.99
BKSABUT	709+82.21	-14.79	534.98	534.98

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS  
STRUCTURE NO. 018-0067

SHEET NO. 7 OF 36 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
116	(113BIB-1)	CUMBERLAND	83	32
STA.	SN. 018-0067	CONTRACT NO. 74324		
ILLINOIS FED. AID PROJECT				



**GIRDER 2**

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
BKNABUT	706+19.13	-8.87	534.91	534.91
CLBRGN	706+21.48	-8.87	534.93	534.93
A	706+31.48	-8.87	535.01	535.06
B	706+41.48	-8.87	535.08	535.19
C	706+51.48	-8.87	535.14	535.29
D	706+61.48	-8.87	535.21	535.37
E	706+71.48	-8.87	535.26	535.43
F	706+81.48	-8.87	535.32	535.47
G	706+91.48	-8.87	535.37	535.49
H	707+01.48	-8.87	535.41	535.50
J	707+11.48	-8.87	535.46	535.50
CLP1	707+23.63	-8.87	535.50	535.50
K	707+33.63	-8.87	535.54	535.53
L	707+43.63	-8.87	535.57	535.56
M	707+53.63	-8.87	535.59	535.59
N	707+63.63	-8.87	535.61	535.62
P	707+73.63	-8.87	535.63	535.64
Q	707+83.63	-8.87	535.64	535.65
R	707+93.63	-8.87	535.65	535.66
CLP2	708+03.63	-8.87	535.66	535.66
S	708+13.63	-8.87	535.66	535.66
T	708+23.63	-8.87	535.66	535.66
U	708+33.63	-8.87	535.65	535.66
V	708+43.63	-8.87	535.64	535.64
W	708+53.63	-8.87	535.63	535.62
X	708+63.63	-8.87	535.61	535.60
Y	708+73.63	-8.87	535.59	535.58
CLP3	708+83.63	-8.87	535.56	535.56
Z	708+93.63	-8.87	535.53	535.56
AA	709+03.63	-8.87	535.50	535.57
AB	709+13.63	-8.87	535.46	535.57
AC	709+23.63	-8.87	535.41	535.56
AD	709+33.63	-8.87	535.37	535.53
AE	709+43.63	-8.87	535.32	535.49
AF	709+53.63	-8.87	535.26	535.41
AG	709+63.63	-8.87	535.20	535.32
AH	709+73.63	-8.87	535.14	535.21
CLBRGS	709+85.77	-8.87	535.06	535.06
BKSABUT	709+88.13	-8.87	535.04	535.04

**GIRDER 3**

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
BKNABUT	706+25.04	-2.96	535.05	535.05
CLBRGN	706+27.40	-2.96	535.07	535.07
A	706+37.40	-2.96	535.14	535.20
B	706+47.40	-2.96	535.21	535.32
C	706+57.40	-2.96	535.27	535.42
D	706+67.40	-2.96	535.33	535.50
E	706+77.40	-2.96	535.39	535.56
F	706+87.40	-2.96	535.44	535.59
G	706+97.40	-2.96	535.49	535.61
H	707+07.40	-2.96	535.53	535.61
J	707+17.40	-2.96	535.57	535.61
CLP1	707+29.54	-2.96	535.62	535.62
K	707+39.54	-2.96	535.65	535.64
L	707+49.54	-2.96	535.67	535.66
M	707+59.54	-2.96	535.70	535.69
N	707+69.54	-2.96	535.72	535.72
P	707+79.54	-2.96	535.73	535.74
Q	707+89.54	-2.96	535.74	535.75
R	707+99.54	-2.96	535.75	535.75
CLP2	708+09.54	-2.96	535.75	535.75
S	708+19.54	-2.96	535.75	535.76
T	708+29.54	-2.96	535.75	535.75
U	708+39.54	-2.96	535.74	535.74
V	708+49.54	-2.96	535.73	535.73
W	708+59.54	-2.96	535.71	535.71
X	708+69.54	-2.96	535.69	535.68
Y	708+79.54	-2.96	535.66	535.65
CLP3	708+89.54	-2.96	535.64	535.64
Z	708+99.54	-2.96	535.60	535.63
AA	709+09.54	-2.96	535.57	535.64
AB	709+19.54	-2.96	535.52	535.64
AC	709+29.54	-2.96	535.48	535.63
AD	709+39.54	-2.96	535.43	535.60
AE	709+49.54	-2.96	535.38	535.55
AF	709+59.54	-2.96	535.32	535.47
AG	709+69.54	-2.96	535.26	535.38
AH	709+79.54	-2.96	535.20	535.27
CLBRGS	709+91.68	-2.96	535.11	535.11
BKSABUT	709+94.04	-2.96	535.09	535.09

**ROADWAY, PGL AND STAGE CONSTRUCTION LINE**

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
BKNABUT	706+28.00	0.00	535.12	535.12
CLBRGN	706+30.36	0.00	535.14	535.14
A	706+40.36	0.00	535.21	535.27
B	706+50.36	0.00	535.27	535.38
C	706+60.36	0.00	535.34	535.48
D	706+70.36	0.00	535.40	535.56
E	706+80.36	0.00	535.45	535.62
F	706+90.36	0.00	535.50	535.65
G	707+00.36	0.00	535.55	535.67
H	707+10.36	0.00	535.59	535.67
J	707+20.36	0.00	535.63	535.67
CLP1	707+32.50	0.00	535.67	535.67
K	707+42.50	0.00	535.70	535.69
L	707+52.50	0.00	535.73	535.72
M	707+62.50	0.00	535.75	535.75
N	707+72.50	0.00	535.77	535.77
P	707+82.50	0.00	535.78	535.79
Q	707+92.50	0.00	535.79	535.80
R	708+02.50	0.00	535.80	535.80
CLP2	708+12.50	0.00	535.80	535.80
S	708+22.50	0.00	535.80	535.80
T	708+32.50	0.00	535.79	535.80
U	708+42.50	0.00	535.78	535.79
V	708+52.50	0.00	535.77	535.77
W	708+62.50	0.00	535.75	535.75
X	708+72.50	0.00	535.73	535.72
Y	708+82.50	0.00	535.70	535.69
CLP3	708+92.50	0.00	535.67	535.67
Z	709+02.50	0.00	535.64	535.67
AA	709+12.50	0.00	535.60	535.67
AB	709+22.50	0.00	535.56	535.67
AC	709+32.50	0.00	535.51	535.66
AD	709+42.50	0.00	535.46	535.63
AE	709+52.50	0.00	535.41	535.58
AF	709+62.50	0.00	535.35	535.50
AG	709+72.50	0.00	535.29	535.41
AH	709+82.50	0.00	535.22	535.29
CLBRGS	709+94.64	0.00	535.14	535.14
BKSABUT	709+97.00	0.00	535.12	535.12

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS  
STRUCTURE NO. 018-0067

SHEET NO. 8 OF 36 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
116	(113B)B-1	CUMBERLAND	83	33
SN. 018-0067		CONTRACT NO. 74324		
STA.	ILLINOIS FED. AID PROJECT			

**GIRDER 4**

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
BKNABUT	706+30.96	2.96	535.09	535.09
CLBRGN	706+33.32	2.96	535.11	535.11
A	706+43.32	2.96	535.18	535.24
B	706+53.32	2.96	535.25	535.36
C	706+63.32	2.96	535.31	535.45
D	706+73.32	2.96	535.37	535.53
E	706+83.32	2.96	535.42	535.59
F	706+93.32	2.96	535.47	535.62
G	707+03.32	2.96	535.52	535.64
H	707+13.32	2.96	535.56	535.64
J	707+23.32	2.96	535.59	535.63
CLP1	707+35.46	2.96	535.64	535.64
K	707+45.46	2.96	535.66	535.65
L	707+55.46	2.96	535.69	535.68
M	707+65.46	2.96	535.71	535.71
N	707+75.46	2.96	535.73	535.73
P	707+85.46	2.96	535.74	535.74
Q	707+95.46	2.96	535.75	535.75
R	708+05.46	2.96	535.75	535.76
CLP2	708+15.46	2.96	535.75	535.75
S	708+25.46	2.96	535.75	535.75
T	708+35.46	2.96	535.74	535.75
U	708+45.46	2.96	535.73	535.74
V	708+55.46	2.96	535.72	535.72
W	708+65.46	2.96	535.70	535.69
X	708+75.46	2.96	535.67	535.66
Y	708+85.46	2.96	535.65	535.64
CLP3	708+95.46	2.96	535.62	535.62
Z	709+05.46	2.96	535.58	535.61
AA	709+15.46	2.96	535.54	535.61
AB	709+25.46	2.96	535.50	535.61
AC	709+35.46	2.96	535.45	535.60
AD	709+45.46	2.96	535.40	535.57
AE	709+55.46	2.96	535.35	535.51
AF	709+65.46	2.96	535.29	535.44
AG	709+75.46	2.96	535.22	535.34
AH	709+85.46	2.96	535.16	535.23
CLBRGS	709+97.60	2.96	535.07	535.07
BKSABUT	709+99.96	2.96	535.05	535.05

**GIRDER 5**

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
BKNABUT	706+36.88	8.88	535.04	535.04
CLBRGN	706+39.23	8.88	535.06	535.06
A	706+49.23	8.88	535.13	535.19
B	706+59.23	8.88	535.19	535.30
C	706+69.23	8.88	535.25	535.40
D	706+79.23	8.88	535.31	535.47
E	706+89.23	8.88	535.36	535.52
F	706+99.23	8.88	535.40	535.56
G	707+09.23	8.88	535.45	535.57
H	707+19.23	8.88	535.49	535.57
J	707+29.23	8.88	535.52	535.56
CLP1	707+41.38	8.88	535.56	535.56
K	707+51.38	8.88	535.59	535.58
L	707+61.38	8.88	535.61	535.60
M	707+71.38	8.88	535.63	535.62
N	707+81.38	8.88	535.64	535.64
P	707+91.38	8.88	535.65	535.66
Q	708+01.38	8.88	535.66	535.66
R	708+11.38	8.88	535.66	535.66
CLP2	708+21.38	8.88	535.66	535.66
S	708+31.38	8.88	535.65	535.66
T	708+41.38	8.88	535.64	535.65
U	708+51.38	8.88	535.63	535.64
V	708+61.38	8.88	535.61	535.62
W	708+71.38	8.88	535.59	535.59
X	708+81.38	8.88	535.57	535.56
Y	708+91.38	8.88	535.54	535.53
CLP3	709+01.38	8.88	535.50	535.50
Z	709+11.38	8.88	535.47	535.50
AA	709+21.38	8.88	535.42	535.50
AB	709+31.38	8.88	535.38	535.49
AC	709+41.38	8.88	535.33	535.48
AD	709+51.38	8.88	535.28	535.44
AE	709+61.38	8.88	535.22	535.39
AF	709+71.38	8.88	535.16	535.31
AG	709+81.38	8.88	535.09	535.21
AH	709+91.38	8.88	535.02	535.09
CLBRGS	710+03.52	8.88	534.93	534.93
BKSABUT	710+05.88	8.88	534.91	534.91

**GIRDER 6**

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
BKNABUT	706+42.79	14.79	534.98	534.98
CLBRGN	706+45.15	14.79	534.99	534.99
A	706+55.15	14.79	535.06	535.12
B	706+65.15	14.79	535.12	535.23
C	706+75.15	14.79	535.18	535.32
D	706+85.15	14.79	535.23	535.40
E	706+95.15	14.79	535.28	535.45
F	707+05.15	14.79	535.32	535.47
G	707+15.15	14.79	535.36	535.49
H	707+25.15	14.79	535.40	535.48
J	707+35.15	14.79	535.43	535.47
CLP1	707+47.29	14.79	535.47	535.47
K	707+57.29	14.79	535.49	535.48
L	707+67.29	14.79	535.51	535.50
M	707+77.29	14.79	535.53	535.53
N	707+87.29	14.79	535.54	535.54
P	707+97.29	14.79	535.55	535.56
Q	708+07.29	14.79	535.55	535.56
R	708+17.29	14.79	535.55	535.56
CLP2	708+27.29	14.79	535.55	535.55
S	708+37.29	14.79	535.54	535.54
T	708+47.29	14.79	535.53	535.54
U	708+57.29	14.79	535.51	535.52
V	708+67.29	14.79	535.49	535.50
W	708+77.29	14.79	535.47	535.47
X	708+87.29	14.79	535.44	535.43
Y	708+97.29	14.79	535.41	535.40
CLP3	709+07.29	14.79	535.37	535.37
Z	709+17.29	14.79	535.33	535.37
AA	709+27.29	14.79	535.29	535.36
AB	709+37.29	14.79	535.24	535.36
AC	709+47.29	14.79	535.19	535.34
AD	709+57.29	14.79	535.14	535.30
AE	709+67.29	14.79	535.08	535.24
AF	709+77.29	14.79	535.01	535.16
AG	709+87.29	14.79	534.94	535.06
AH	709+97.29	14.79	534.87	534.94
CLBRGS	710+09.43	14.79	534.78	534.78
BKSABUT	710+11.79	14.79	534.76	534.76

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS  
STRUCTURE NO. 018-0067

SHEET NO. 9 OF 36 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
116	(113)B-1	CUMBERLAND	83	34
SN. 018-0067		CONTRACT NO. 74324		
STA.	ILLINOIS FED. AID PROJECT			

EAST EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
N. End of N. Appr.	705+83.41	-16.00	534.48
A	705+93.41	-16.00	534.57
B	706+03.41	-16.00	534.65
S. End of N. Appr.	706+13.41	-16.00	534.74

EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
N. End of N. Appr.	705+87.41	-12.00	534.60
A	705+97.41	-12.00	534.69
B	706+07.41	-12.00	534.77
S. End of N. Appr.	706+17.41	-12.00	534.85

CL ROADWAY, PGL & STAGE CONST LINE

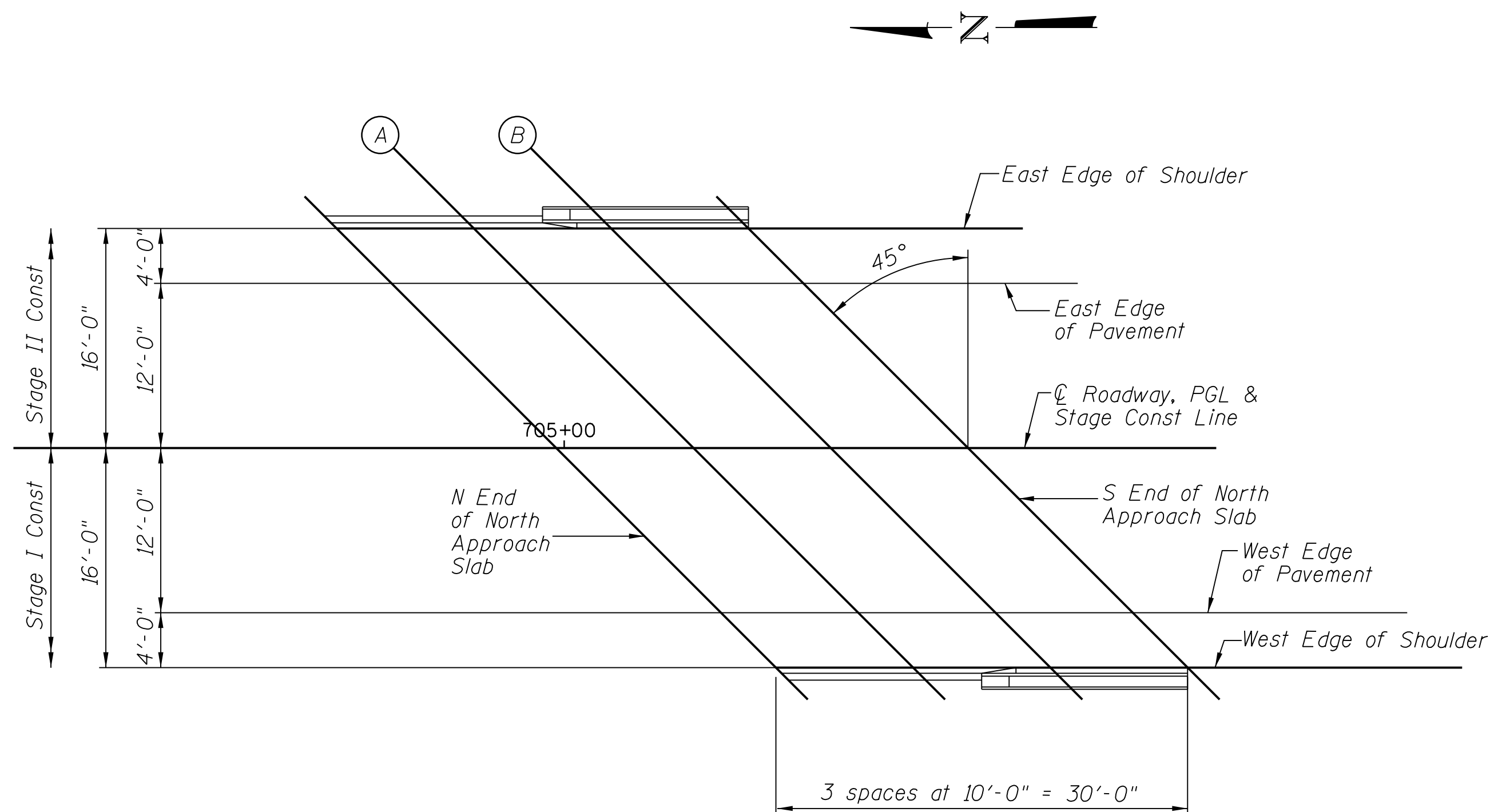
Location	Station	Offset	Theoretical Grade Elevations
N. End of N. Appr.	705+99.41	0.00	534.89
A	706+09.41	0.00	534.98
B	706+19.41	0.00	535.05
S. End of N. Appr.	706+29.41	0.00	535.13

WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
N. End of N. Appr.	706+11.41	12.00	534.80
A	706+21.41	12.00	534.88
B	706+31.41	12.00	534.96
S. End of N. Appr.	706+41.41	12.00	535.03

WEST EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
N. End of N. Appr.	706+15.41	16.00	534.75
A	706+25.41	16.00	534.83
B	706+35.41	16.00	534.90
S. End of N. Appr.	706+45.41	16.00	534.97



PLAN

FILE NAME = I:\DOT\6008 - D7 Ver. Ver\Work Order 4 - IL 130 Structure Plans\CADD\_Structural\apprev.dgn



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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TOP OF NORTH APPROACH SLAB ELEVATIONS  
STRUCTURE NO. 018-0067**

SHEET NO. 10 OF 36 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
116	(113B)B-1	CUMBERLAND	83	35
SN. 018-0067		CONTRACT NO. 74324		
STA.	ILLINOIS FED. AID PROJECT			

EAST EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
N. End of S. Appr.	709+79.59	-16.00	534.97
A	709+89.59	-16.00	534.90
B	709+99.59	-16.00	534.83
S. End of S. Appr.	710+09.59	-16.00	534.75

EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
N. End of S. Appr.	709+83.59	-12.00	535.03
A	709+93.59	-12.00	534.96
B	710+03.59	-12.00	534.88
S. End of S. Appr.	710+13.59	-12.00	534.80

☉ ROADWAY, PGL & STAGE CONST LINE

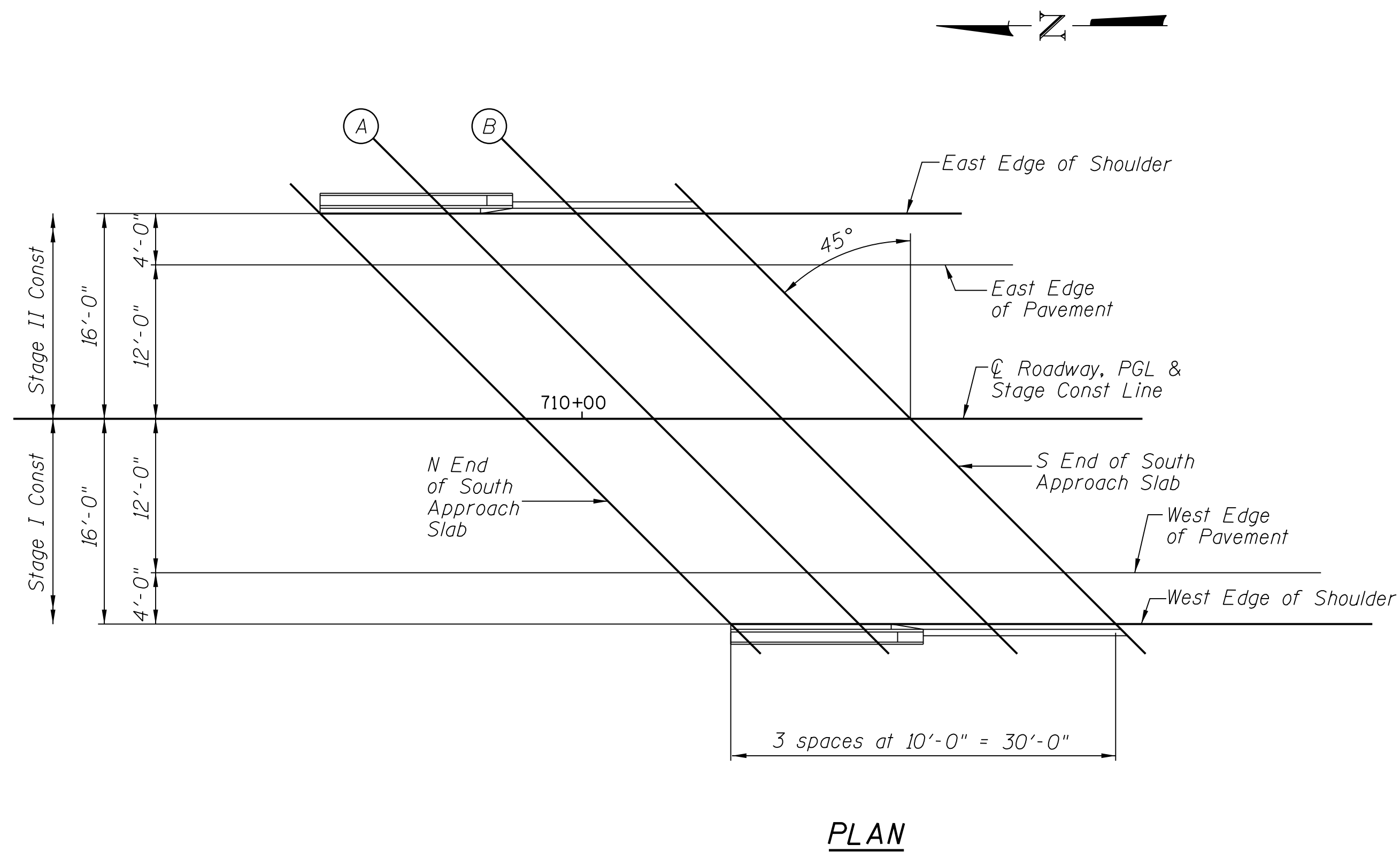
Location	Station	Offset	Theoretical Grade Elevations
N. End of S. Appr.	709+95.59	0.00	535.13
A	710+05.59	0.00	535.05
B	710+15.59	0.00	534.98
S. End of S. Appr.	710+25.59	0.00	534.89

WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
N. End of S. Appr.	710+07.59	12.00	534.85
A	710+17.59	12.00	534.77
B	710+27.59	12.00	534.69
S. End of S. Appr.	710+37.59	12.00	534.60

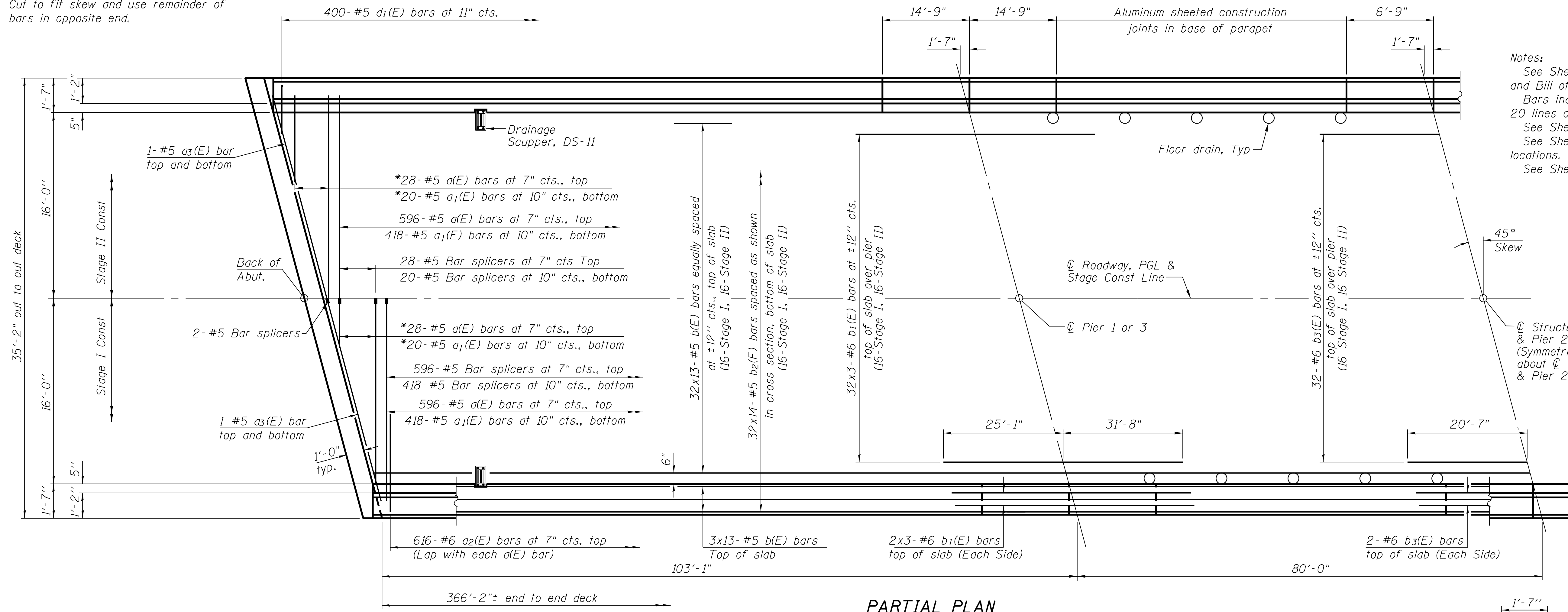
WEST EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
N. End of S. Appr.	710+11.59	16.00	534.74
A	710+21.59	16.00	534.65
B	710+31.59	16.00	534.57
S. End of S. Appr.	710+41.59	16.00	534.48



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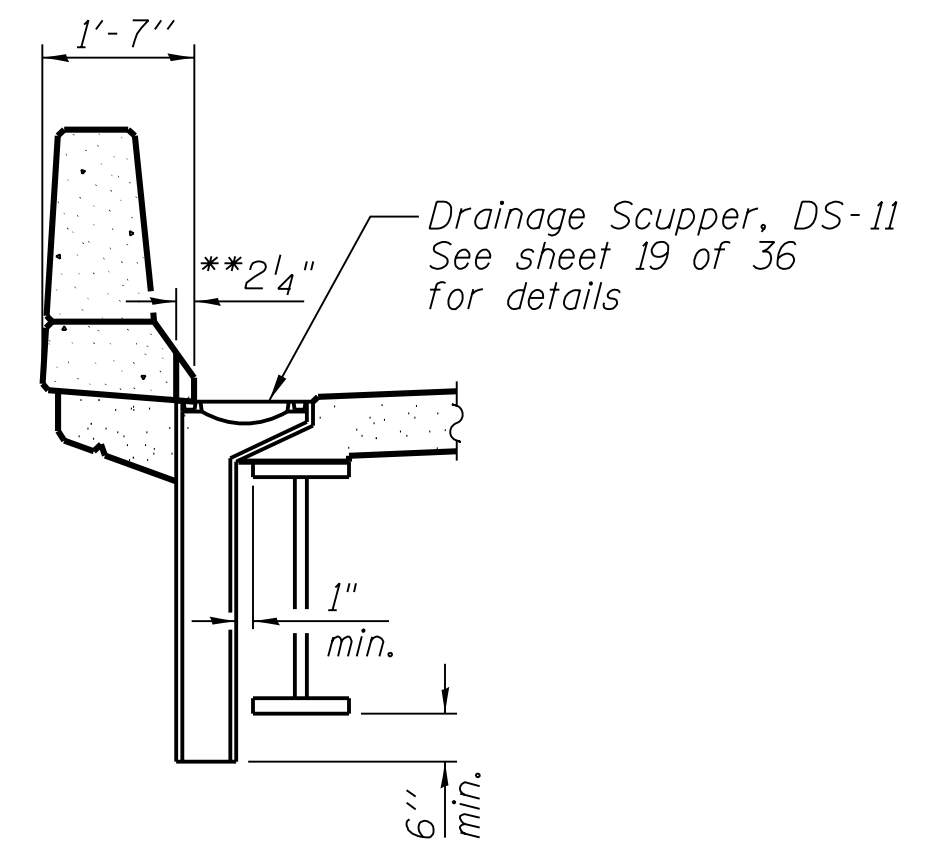
\* Order a(E) and a<sub>1</sub>(E) bars full length.  
Cut to fit skew and use remainder of  
bars in opposite end.



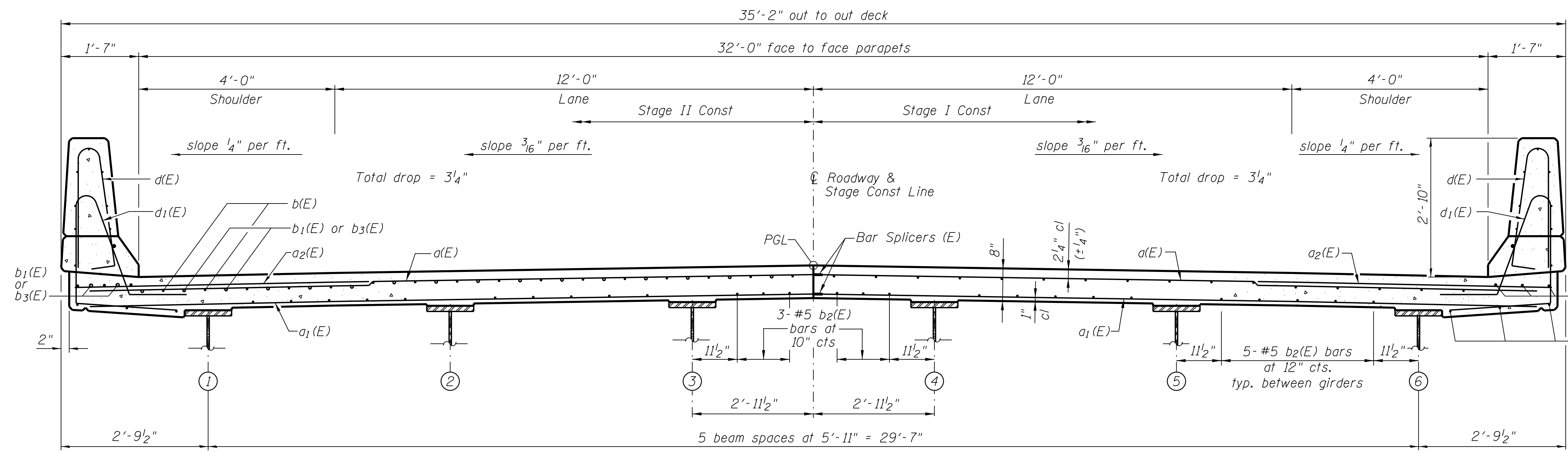
Notes:  
See Sheet 13 of 36 for superstructure details and Bill of Material.  
Bars indicated thus 20 x 3- #5 etc. indicates 20 lines of bars with 3 lengths per line.  
See Sheet 13 of 36 for parapet reinforcement.  
See Sheet 1 of 36 for scupper and floor drain locations.  
See Sheet 30 of 36 for bar splicer details.

**MIN BAR LAP**

(Deck)  
#5 bar = 2'-7"  
#6 bar = 3'-1"



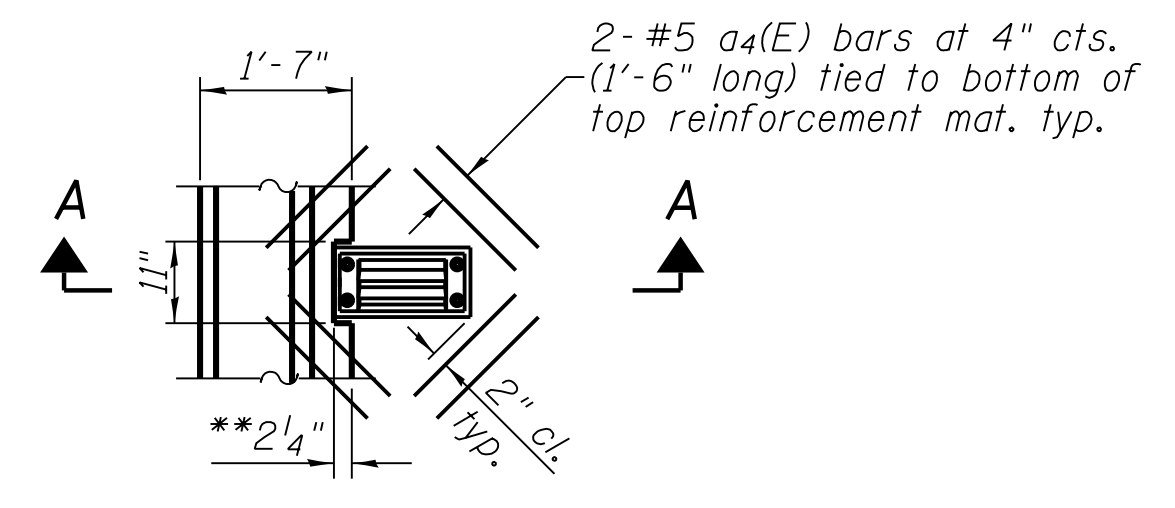
**SECTION A-A**



**NEAR PIER**

**CROSS SECTION**  
(Looking Up Station)

**NEAR MIDSPAN**



**PLAN**

Note:  
Cut longitudinal reinforcement to clear drainage scuppers.  
\*\*Notch Parapet 1 1/2"x2 1/4" to allow placement of Scuppers and future removal of grate. 2 1/4" dimension may be reduced if Scupper can be moved closer to fascia beam.

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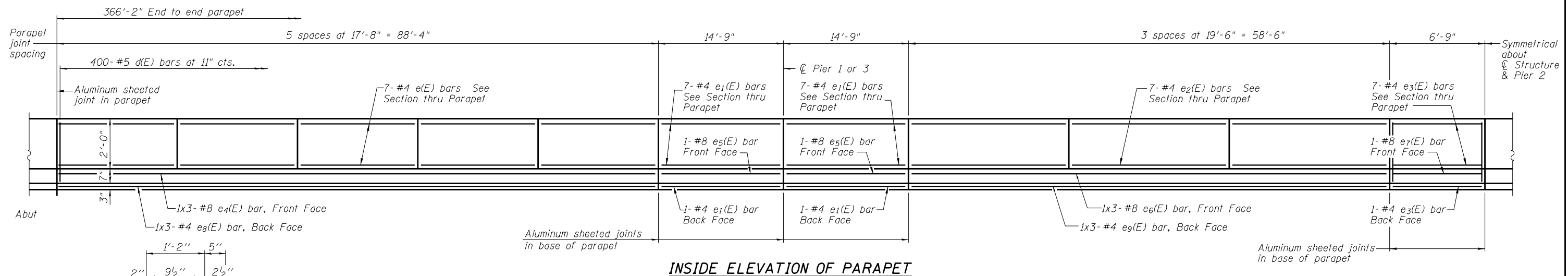
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**SUPERSTRUCTURE**  
**STRUCTURE NO. 018-0067**

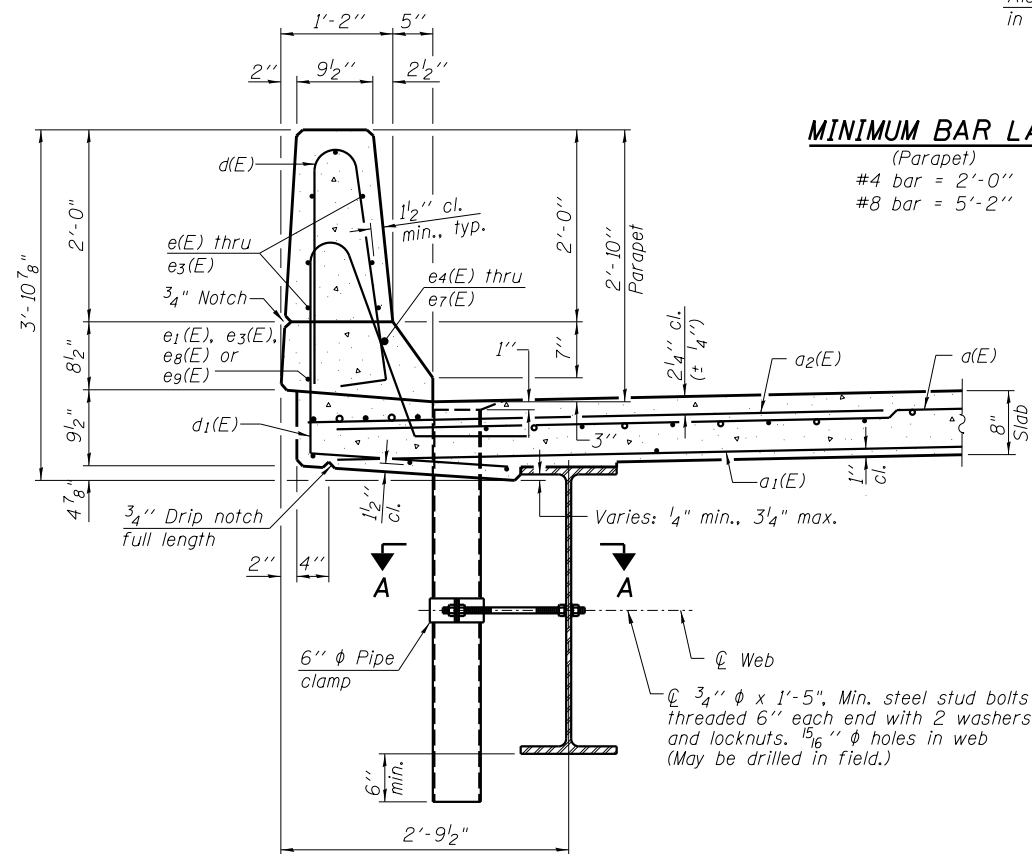
SHEET NO. 12 OF 36 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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	SN. 018-0067	CONTRACT NO. 74324		

STA. ILLINOIS FED. AID PROJECT



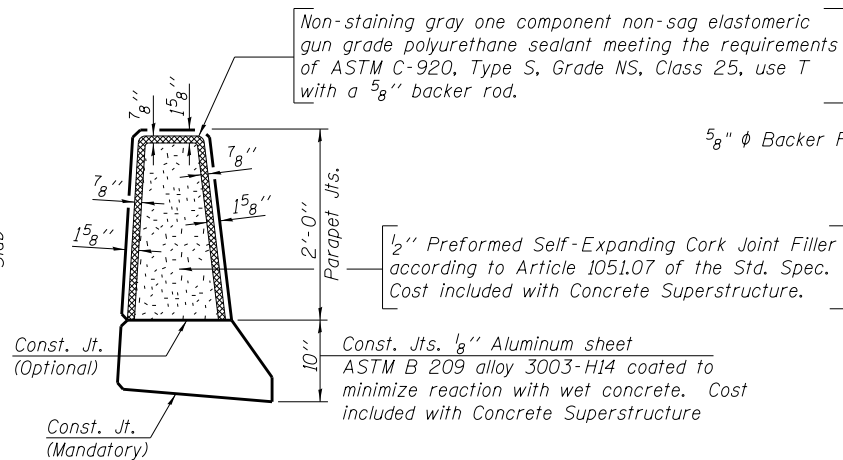
**INSIDE ELEVATION OF PARAPET**



**SECTION THRU PARAPET**

**MINIMUM BAR LAP**

(Parapet)  
 #4 bar = 2'-0"  
 #8 bar = 5'-2"



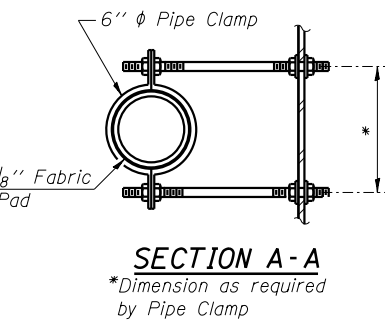
**PARAPET JOINT DETAILS**

Notes:  
 The exterior surfaces of the floor drains shall be painted with the finish coat as specified in Art. 506 of the Standard Specifications.  
 The exterior surfaces of the drains shall be cleaned according to Society of Protective Coatings Spec. SSPC-SPI prior to painting.  
 Fiberglass pipe shall conform to ASTM D 2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.  
 Galvanize clamping device according to AASHTO M232. Cost of clamping device and inserts is included with Floor Drains.

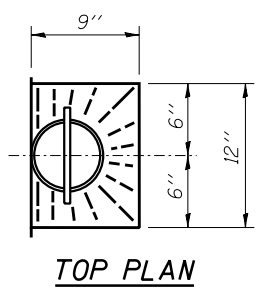
**SUPERSTRUCTURE BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a(E)	1248	#5	17'-1"	—
a1(E)	876	#5	16'-9"	—
a2(E)	1232	#6	6'-6"	—
a3(E)	8	#5	24'-4"	—
a4(E)	32	#5	1'-6"	—
b(E)	494	#5	30'-7"	—
b1(E)	216	#6	21'-1"	—
b2(E)	448	#5	28'-7"	—
b3(E)	36	#6	41'-2"	—
d(E)	800	#5	5'-7"	—
d1(E)	800	#5	7'-4"	—
e(E)	140	#4	17'-5"	—
e1(E)	64	#4	14'-5"	—
e2(E)	84	#4	19'-3"	—
e3(E)	32	#4	6'-5"	—
e4(E)	12	#8	32'-11"	—
e5(E)	8	#8	14'-5"	—
e6(E)	12	#8	22'-11"	—
e7(E)	4	#8	6'-5"	—
e8(E)	12	#4	30'-9"	—
e9(E)	12	#4	20'-10"	—
m(E)	16	#6	24'-5"	—
m1(E)	30	#6	7'-10"	—
m2(E)	12	#6	3'-5"	—
m3(E)	36	#5	4'-0"	—
s(E)	64	#5	10'-6"	—
s1(E)	64	#5	10'-11"	—
Reinforcement Bars, Epoxy Coated		Pound	107400	
Concrete Superstructure		Cu. Yd.	441.7	
Bridge Deck Grooving		Sq. Yd.	1221	
Protective Coat		Sq. Yd.	1608	

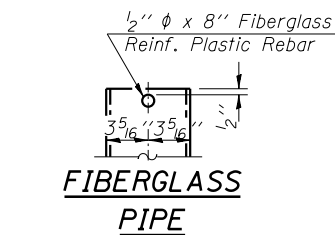
Bars indicated thus 1 x 2-#8 etc. indicates 1 line of bars with 2 lengths per line.



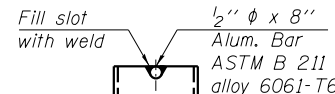
**SECTION A-A**  
 \*Dimension as required by Pipe Clamp



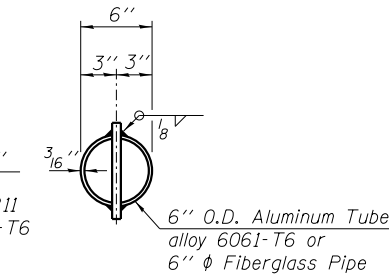
**TOP PLAN**



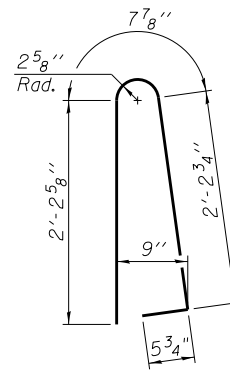
**FIBERGLASS PIPE**



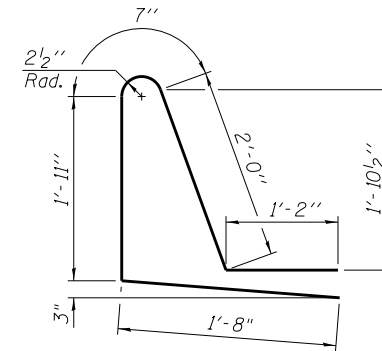
**ALUMINUM TUBE**



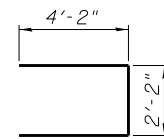
**TOP PLAN (Showing Aluminum Tube)**



**BAR d(E)**

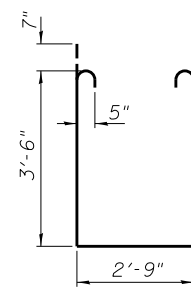


**BAR d1(E)**



**BAR m3(E)**

**BAR s(E)**



**BAR s1(E)**

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SI-D2-LR

8-31-12

**CHASTAIN & ASSOCIATES LLC**  
 CONSULTING ENGINEERS  
 184-001397

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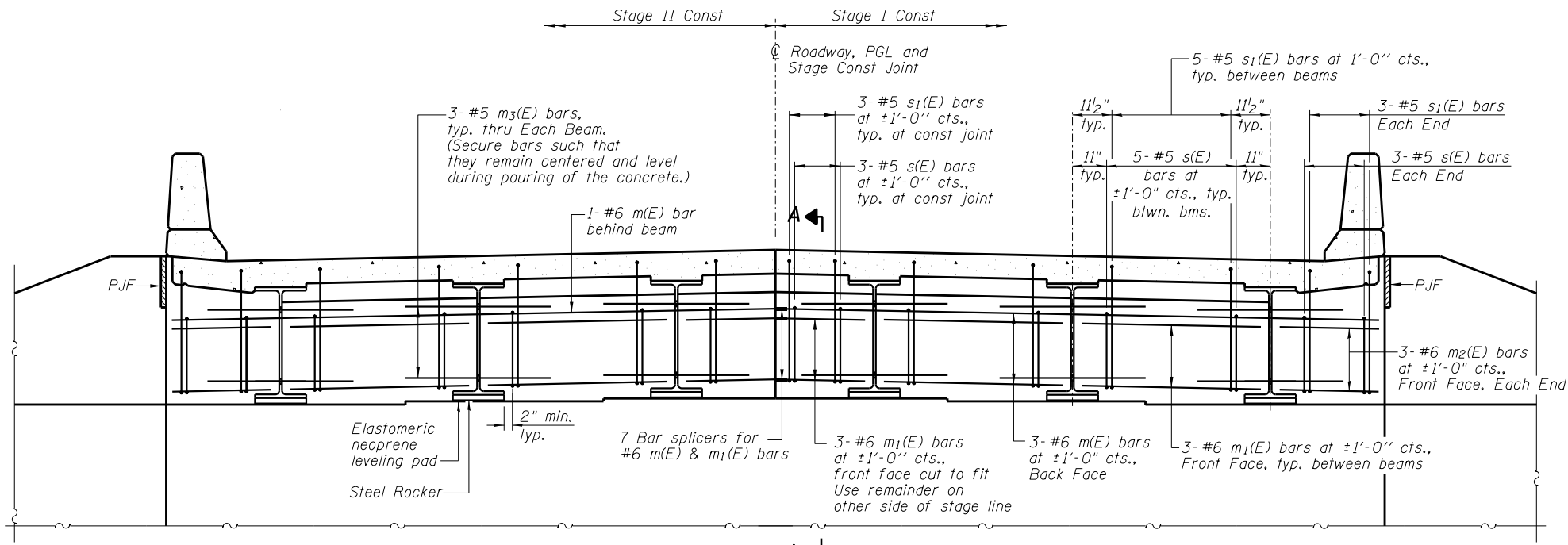
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**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

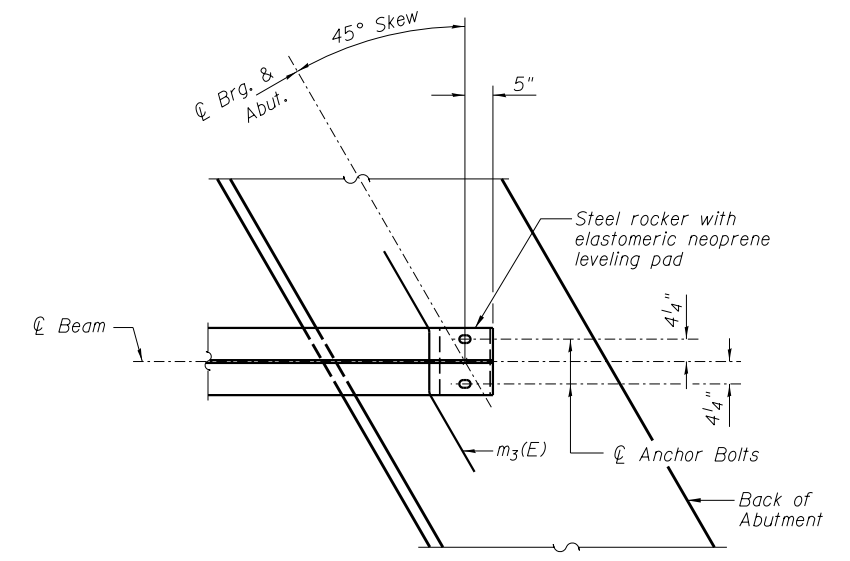
**SUPERSTRUCTURE DETAILS**  
**STRUCTURE NO. 018-0067**

SHEET NO. 13 OF 36 SHEETS

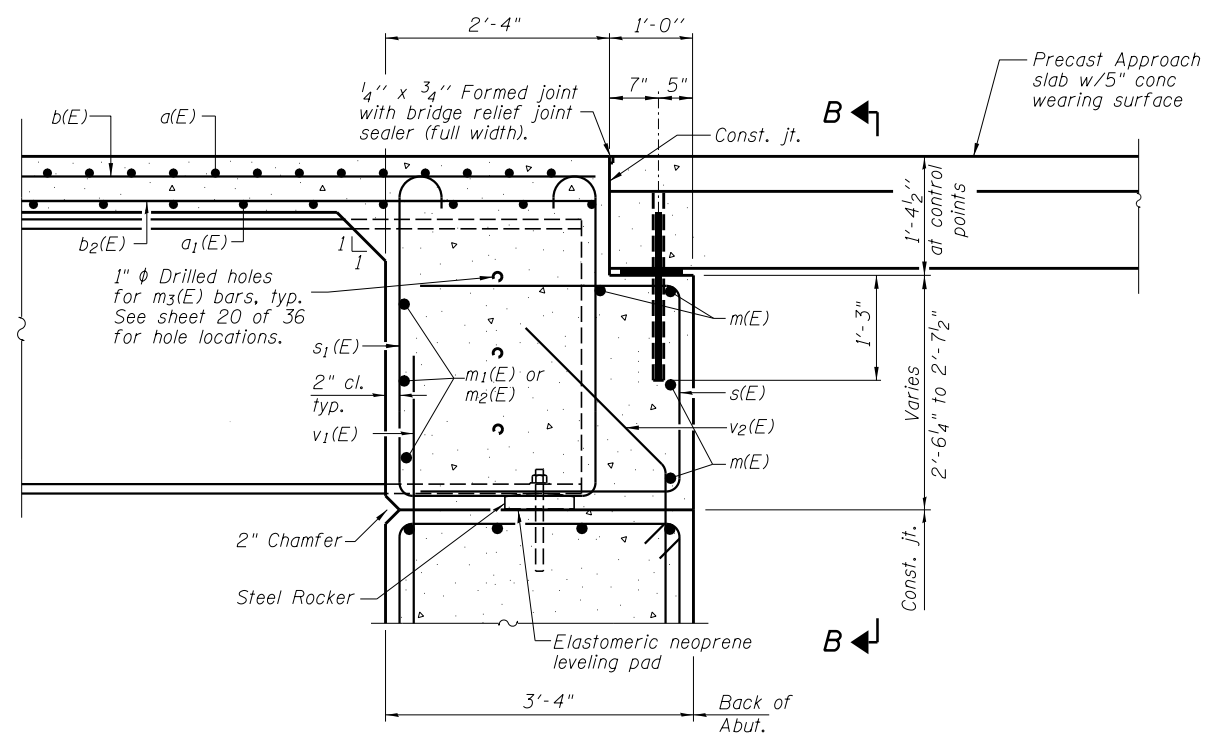
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116	(113B1-1)	CUMBERLAND	83	38
	SN. 018-0067	CONTRACT NO.	74324	
STA.	ILLINOIS FED. AID PROJECT			



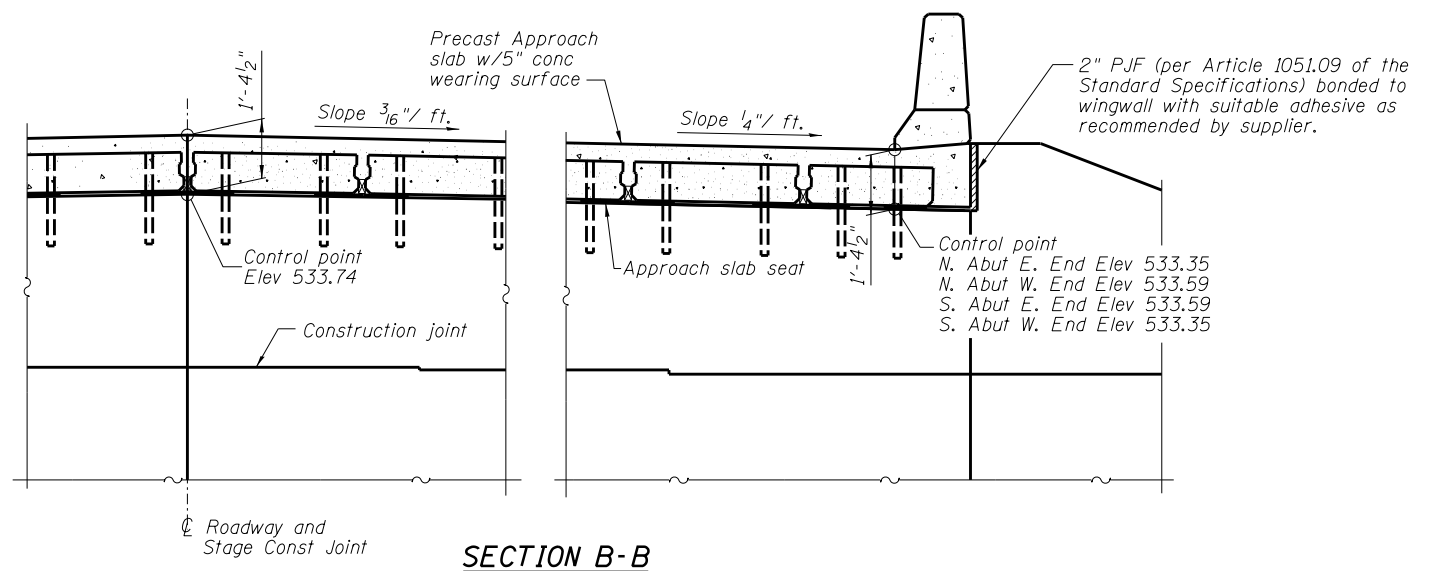
**DIAPHRAGM ELEVATION AT SOUTH ABUTMENT**  
(North abutment similar)



**PARTIAL PLAN AT ABUTMENT**  
(Showing bottom flange of beam)



**SECTION A-A**  
(at Rt. L's)



**SECTION B-B**

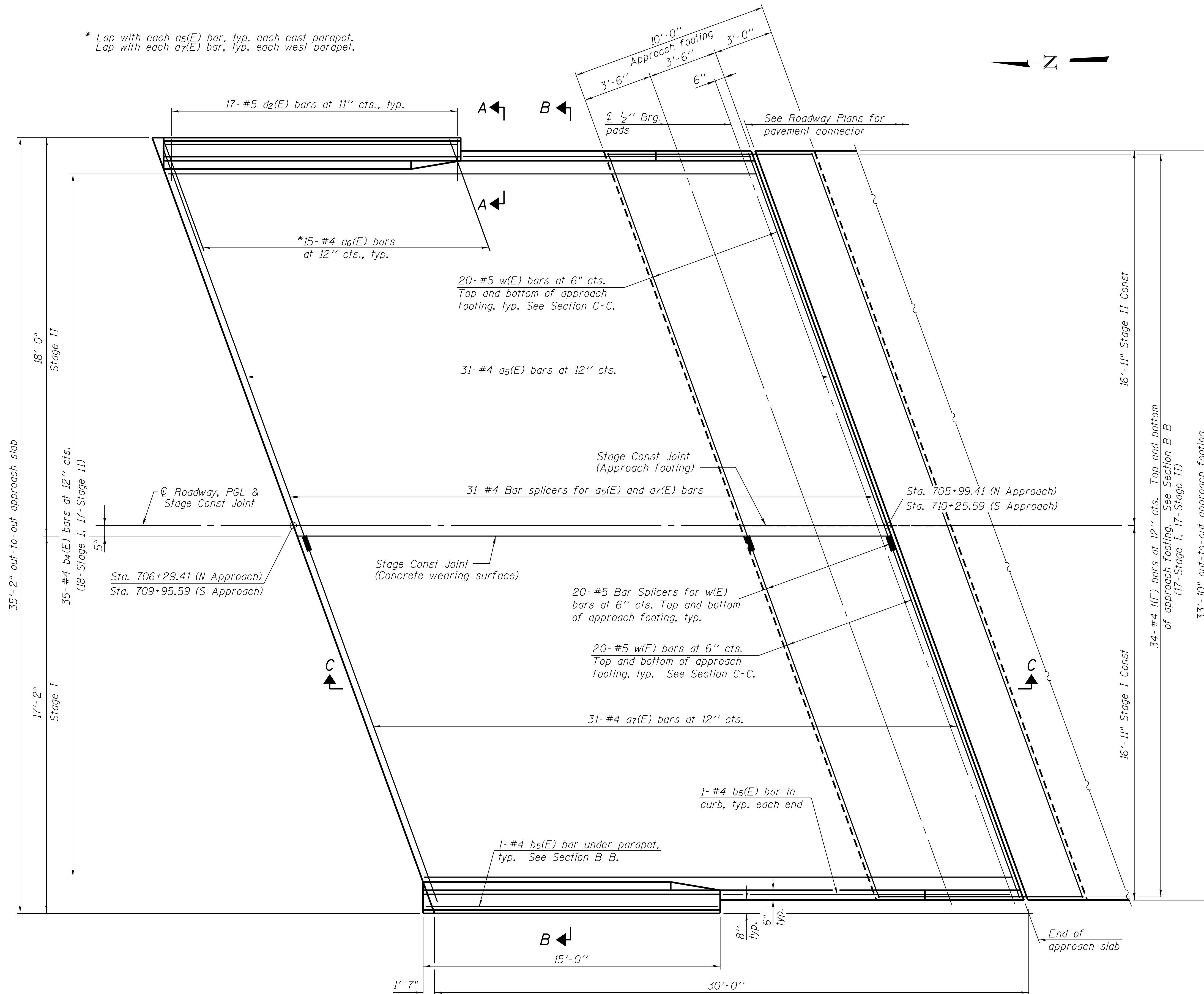
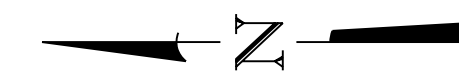
Notes:  
 Reinforcement bars in diaphragm are billed with superstructure on sheet 13 of 36.  
 Concrete in diaphragm is included with Concrete Superstructure on sheet 13 of 36.  
 For details of bars s(E) and s1(E) see sheet 13 of 36.  
 The s(E) and s1(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.  
 The approach slab seat shall have a constant slope determined from the control points shown.  
 For bearing details see sheet 23 of 36.

FILE NAME = I:\1001\6008 - D7 Ver. Var\Work Order 4 - IL 130 Structure Plans\CADD\_Structural\diaphragm.dgn

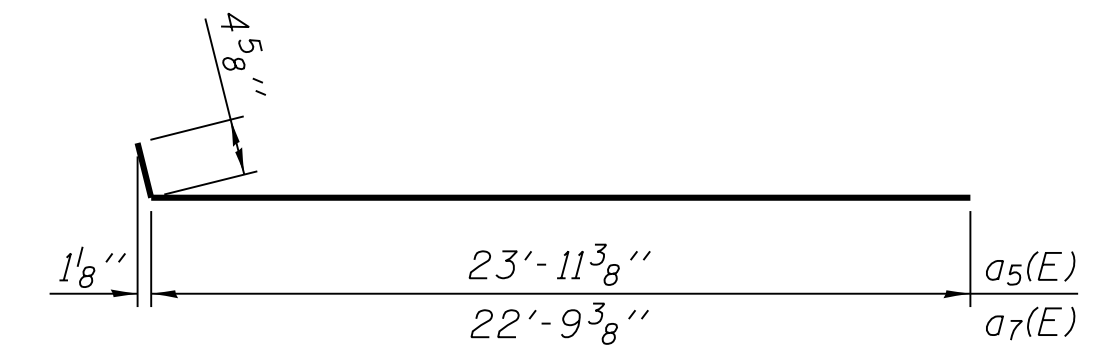
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
116	(113B)B-1	CUMBERLAND	83	39
	SN. 018-0067	CONTRACT NO. 74324		
STA.	ILLINOIS FED. AID PROJECT			

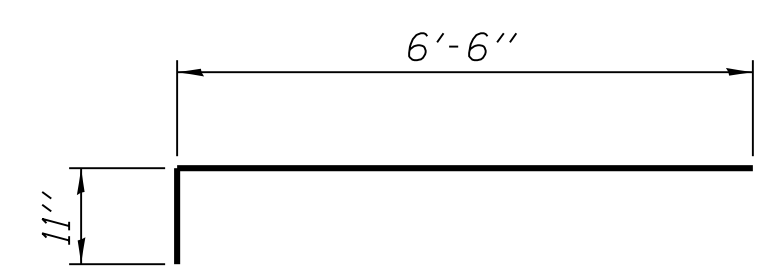
\* Lap with each a<sub>5</sub>(E) bar, typ. each east parapet.  
Lap with each a<sub>7</sub>(E) bar, typ. each west parapet.



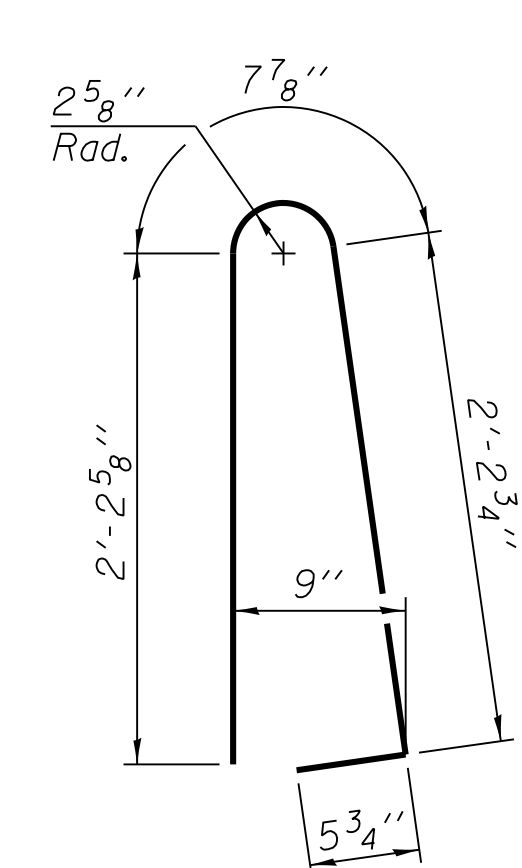
SECTION A-A



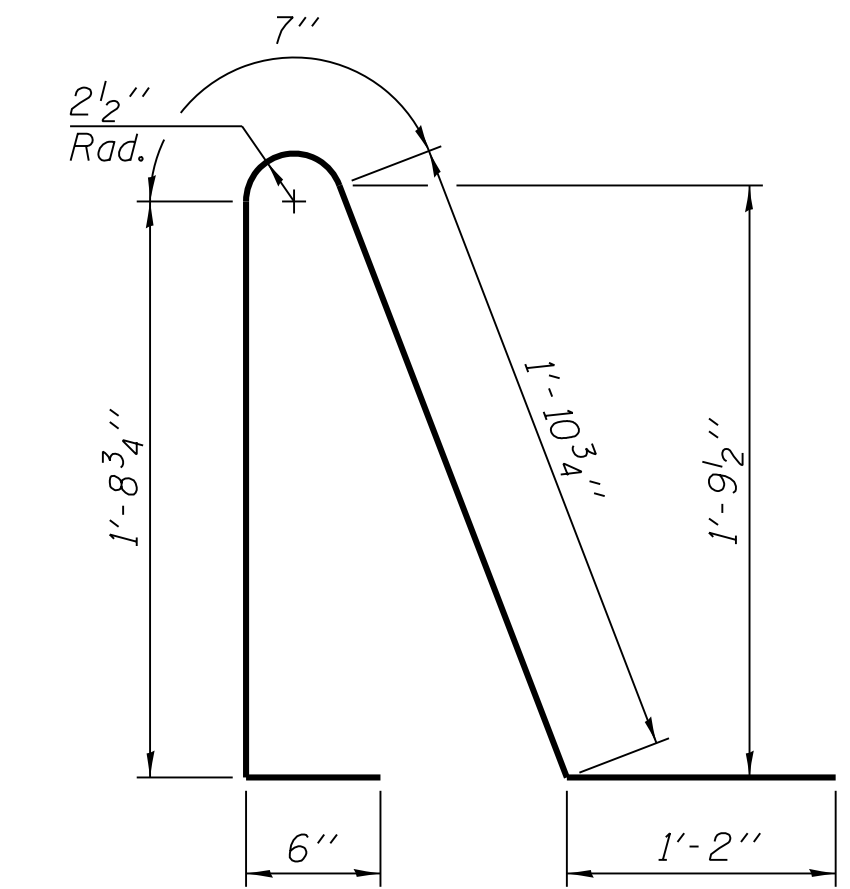
BAR a<sub>5</sub>(E) & a<sub>7</sub>(E)



BAR a<sub>6</sub>(E)



BAR d(E)



BAR d<sub>2</sub>(E)

**PLAN**  
(Showing wearing surface)  
(South approach shown, North approach similar)

(Sheet 1 of 4)

FILE NAME = I:\1001\6008 - D7 Ver. Ver\Work Order 4 - IL 130 Structure Plans\CADD\_Structural\apprslabdetail.sldgn



USER NAME = rking	DESIGNED - JMB	REVISED -
PLOT TIME = 11:33:08 AM	CHECKED - ACB	REVISED -
PLOT SCALE = 1:10,000 1' = 10'	DRAWN - RLK	REVISED -
PLOT DATE = 2/4/2015	CHECKED - JMB	REVISED -

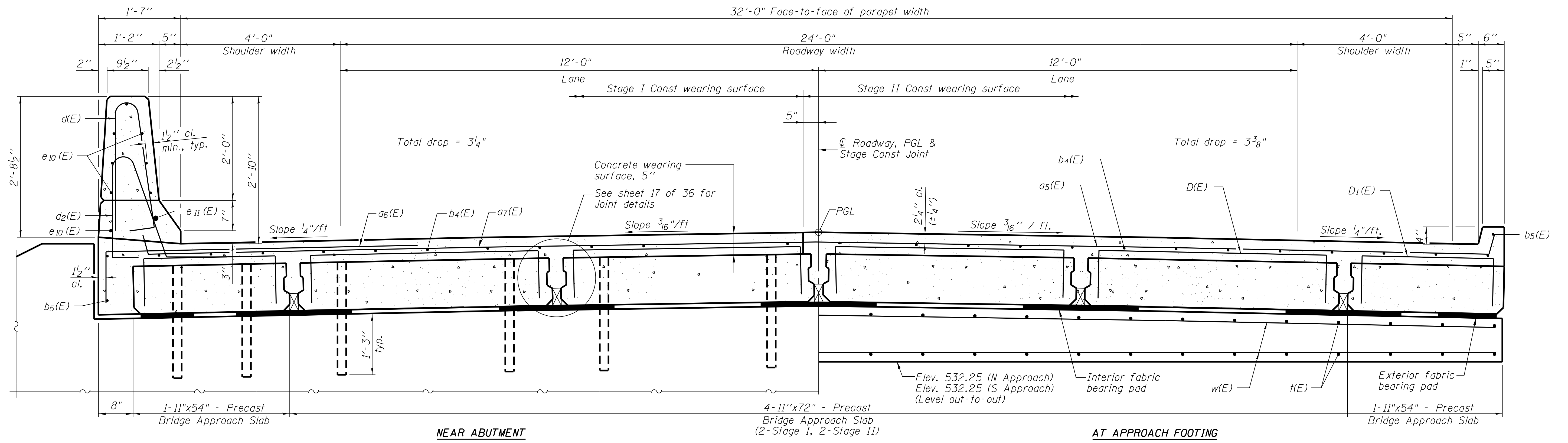
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PRECAST BRIDGE APPROACH SLAB  
STRUCTURE NO. 018-0067

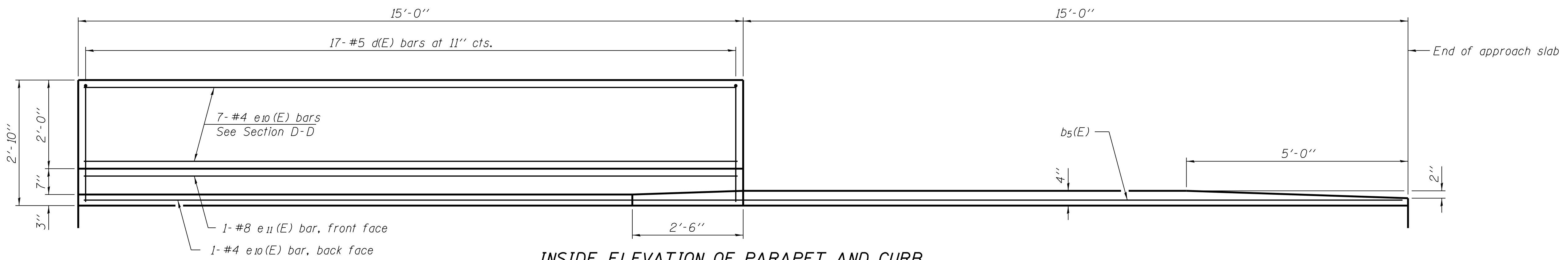
SHEET NO. 15 OF 36 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
116	(113)B1-1	CUMBERLAND	83	40
	SN. 018-0067		CONTRACT NO. 74324	
STA.	ILLINOIS FED. AID PROJECT			

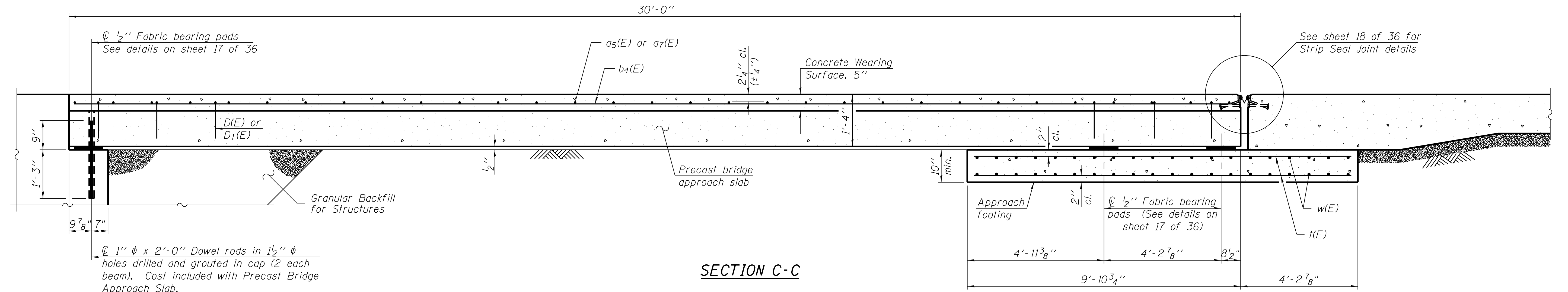




**SECTION B-B**



**INSIDE ELEVATION OF PARAPET AND CURB**



**SECTION C-C**

(Sheet 2 of 4)

FILE NAME = I:\1001\6008 - D7 Ver. Ver-Work Order 4 - IL 130 Structure Plans\CADD\_Structural\appslabdetails.dgn



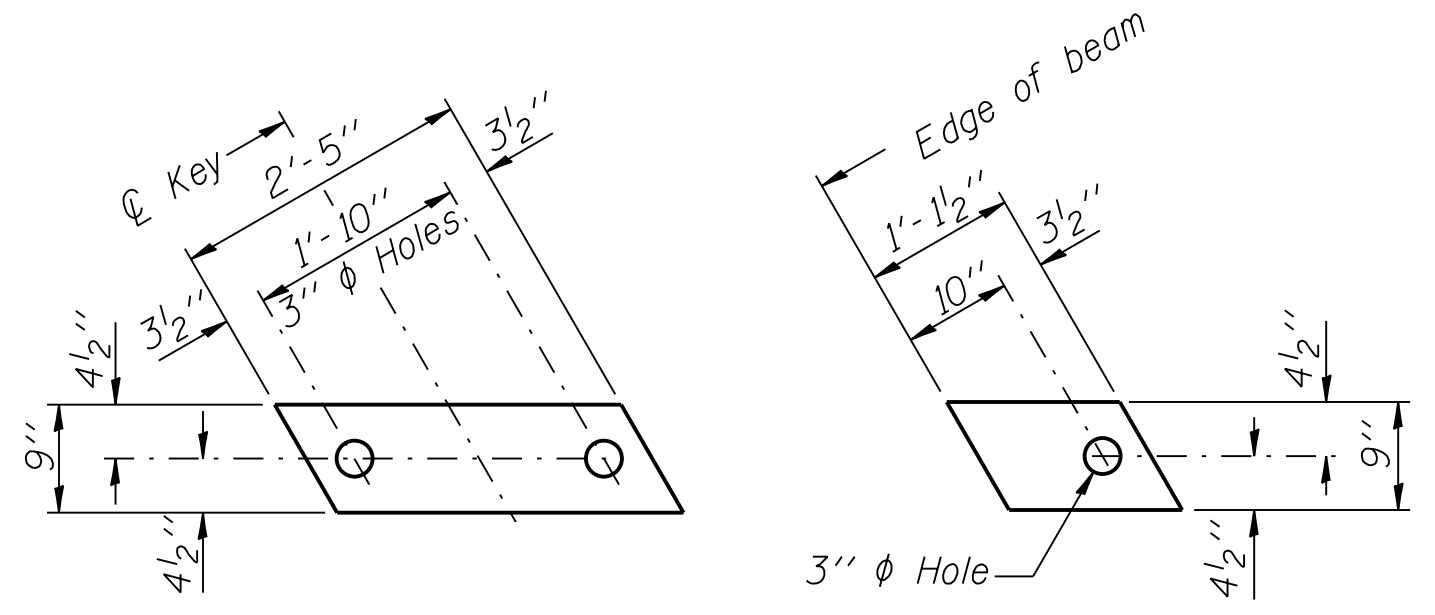
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PLOT DATE = 2/4/2015	CHECKED - JMB	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PRECAST BRIDGE APPROACH SLAB  
STRUCTURE NO. 018-0067**

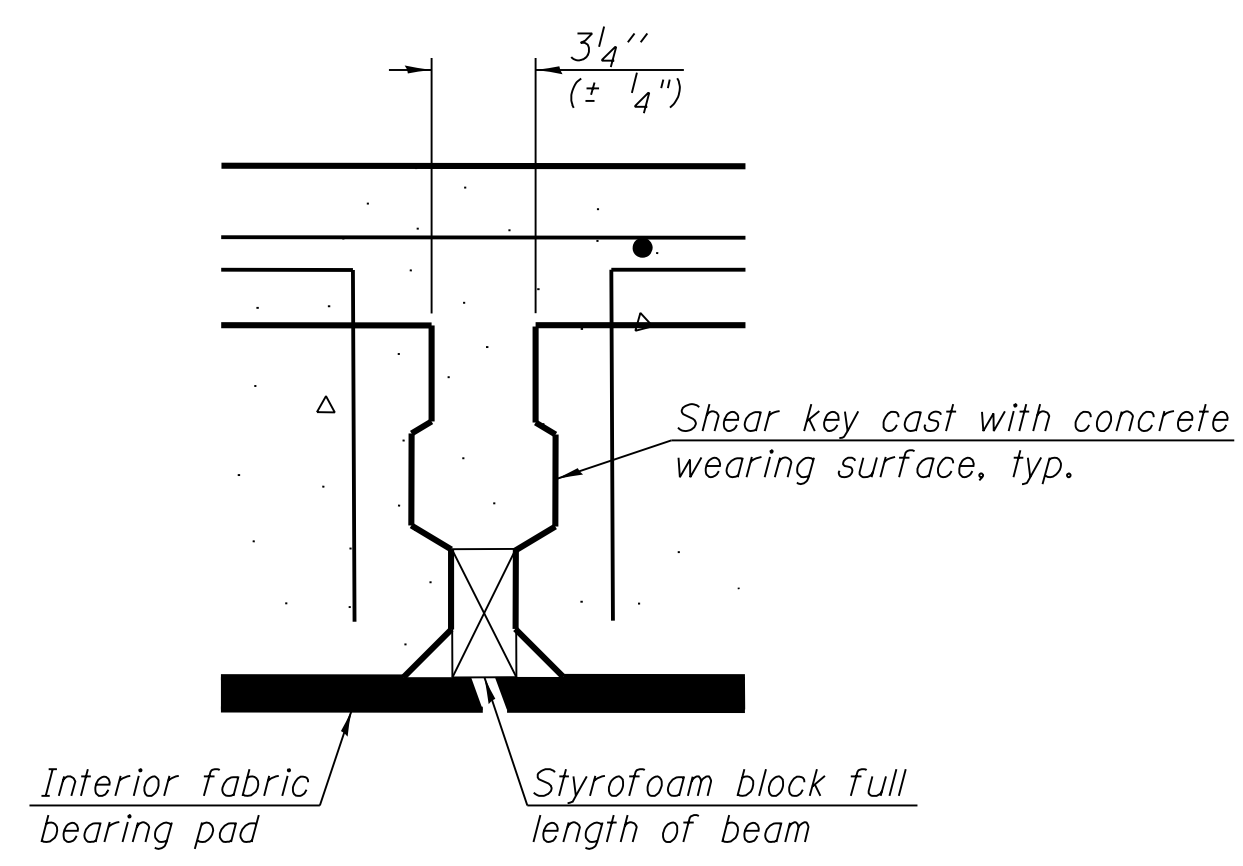
SHEET NO. 16 OF 36 SHEETS

F.A.P. RTE. 116	SECTION (113B)B-1	COUNTY CUMBERLAND	TOTAL SHEETS 83	SHEET NO. 41
STA.	SN. 018-0067	CONTRACT NO. 74324		
ILLINOIS FED. AID PROJECT				

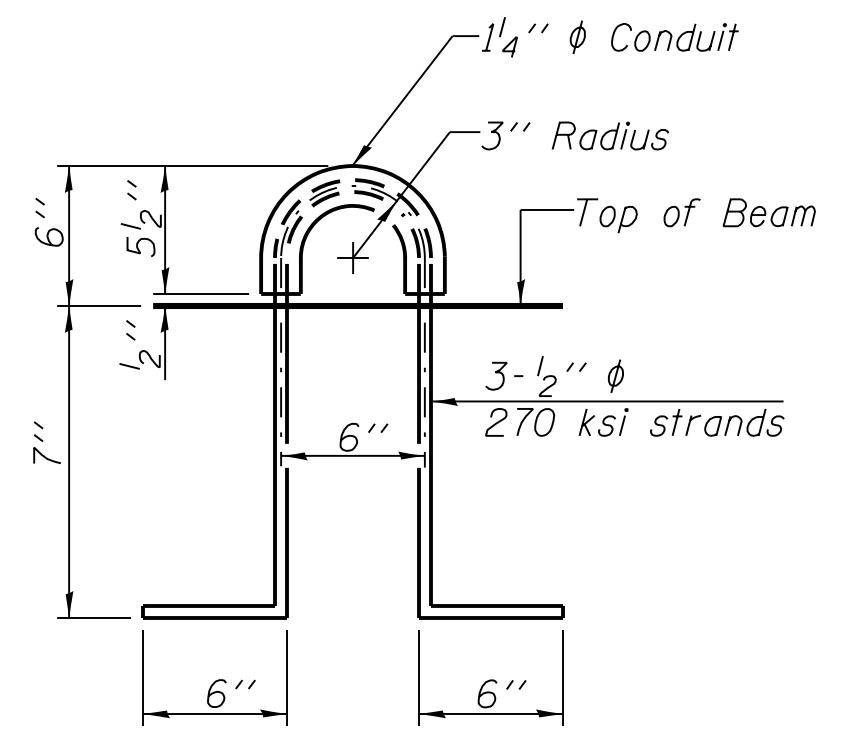


**INTERIOR**      **EXTERIOR**  
**FABRIC BEARING PAD**

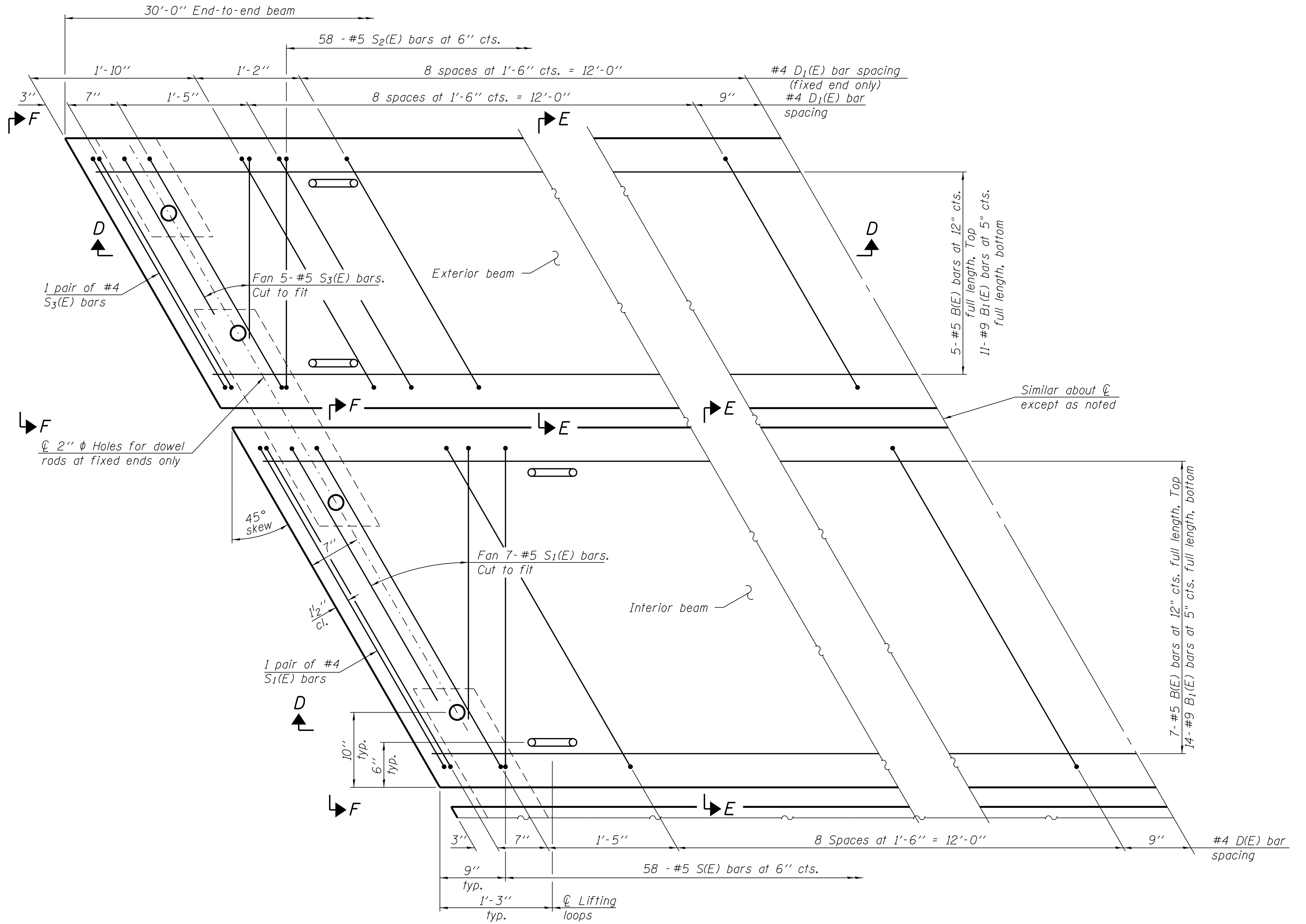
Notes:  
All bearing pads shall be 1/2" thick.  
Omit holes for fabric bearing pads at approach slab footing end of beams.  
Expansion bearing pad shall be bonded to the approach slab footing.



**SECTION THRU SHEAR KEY JOINT**



**LIFTING LOOP DETAIL**



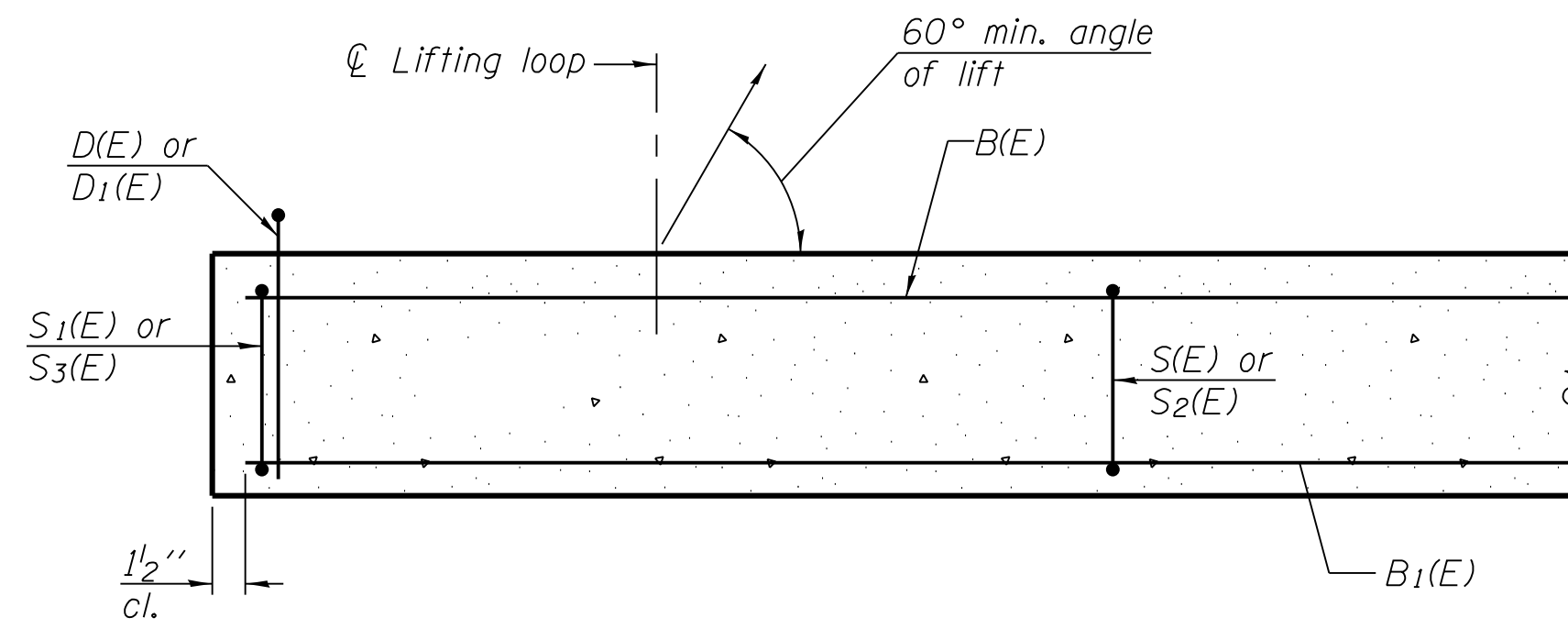
**PLAN VIEW**

(showing precast bridge approach beams)

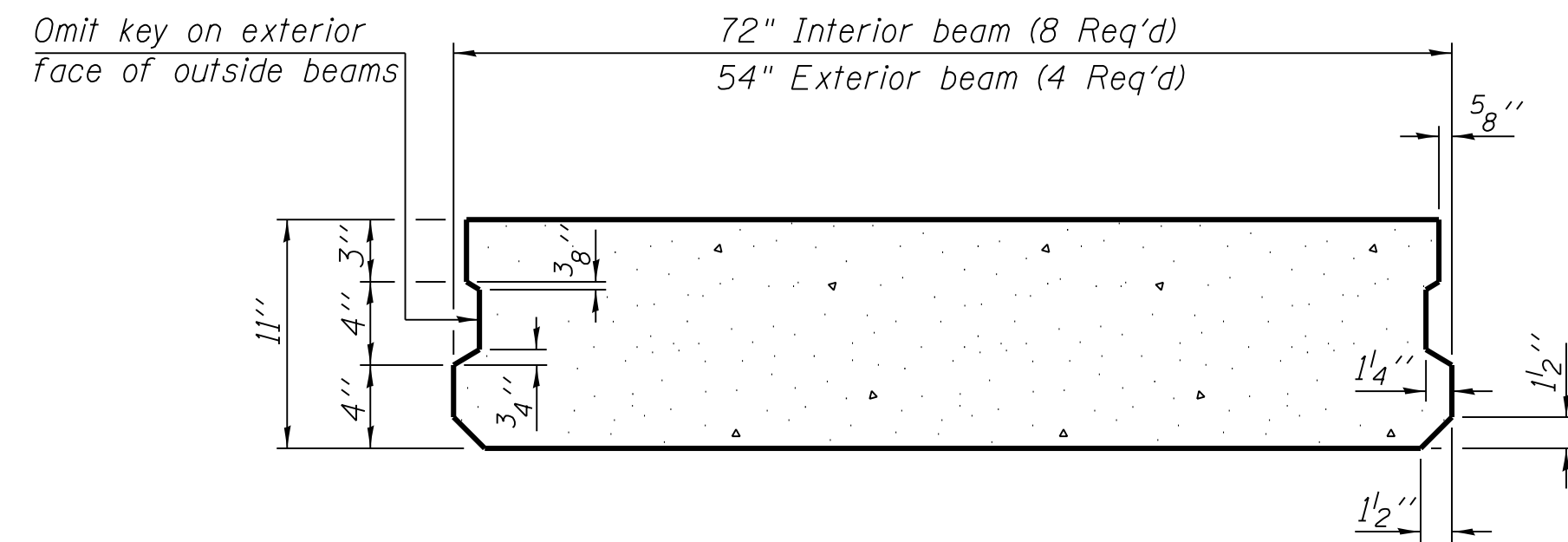
(Sheet 3 of 4)

FILE NAME = I:\DOT\6008 - D7 Ver-Work\Order 4 - IL 130 Structure Plans\CADD\_Structural\apprslabdetail.sldgn

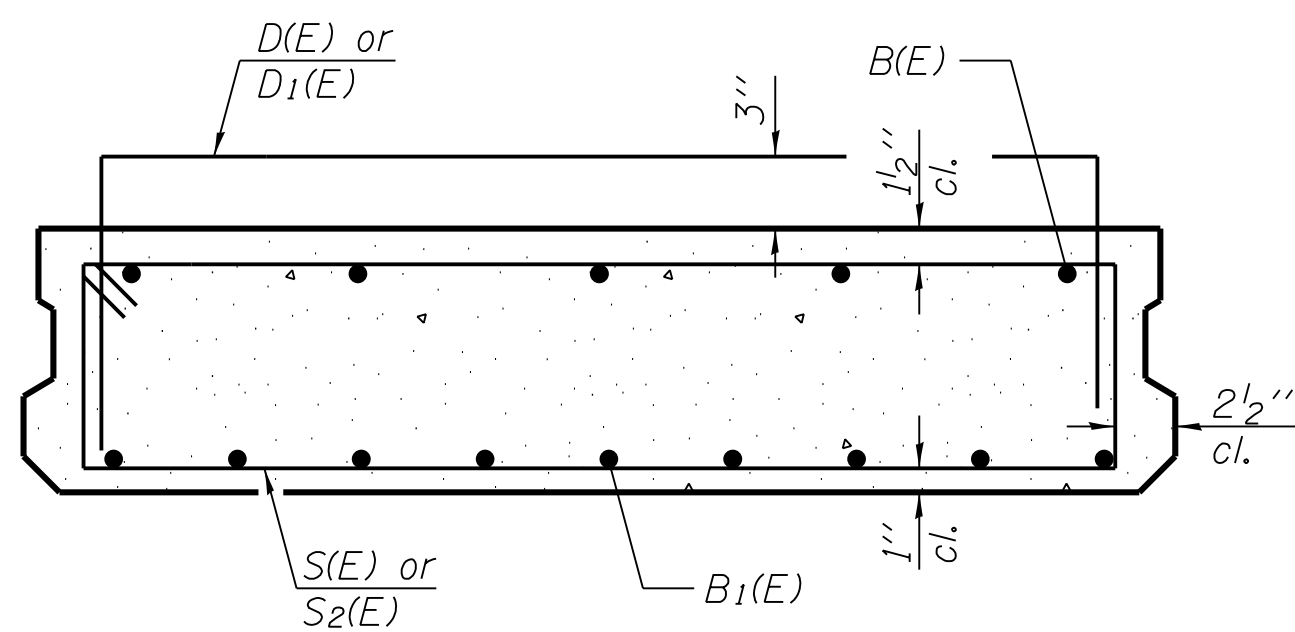
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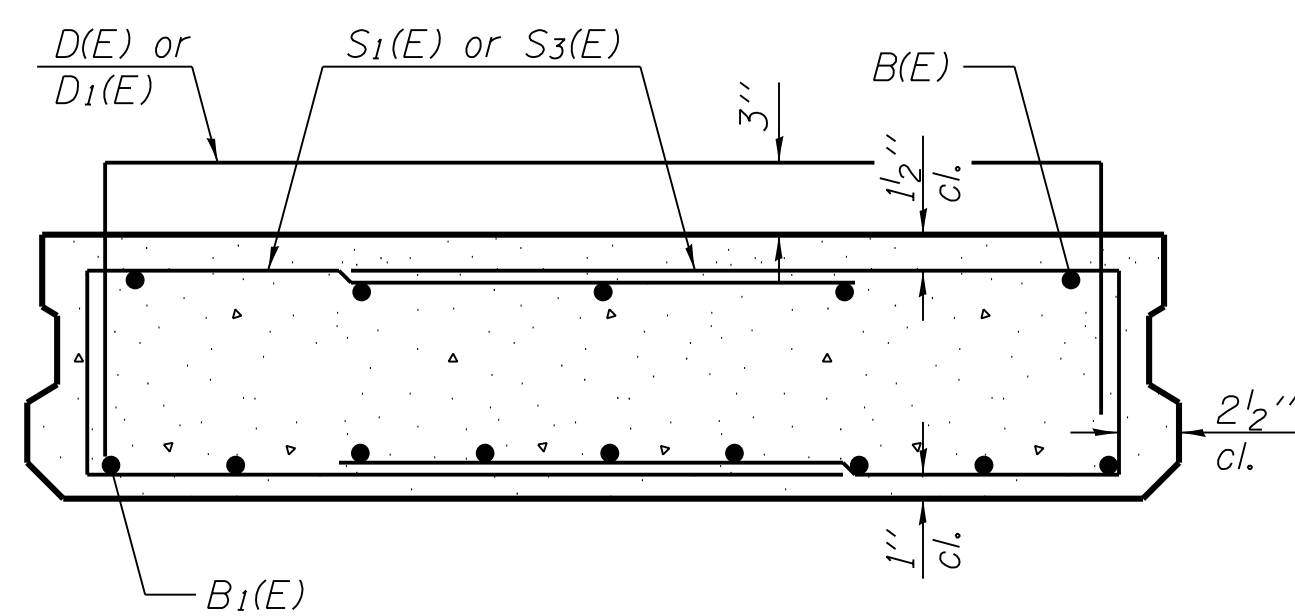
SECTION D-D



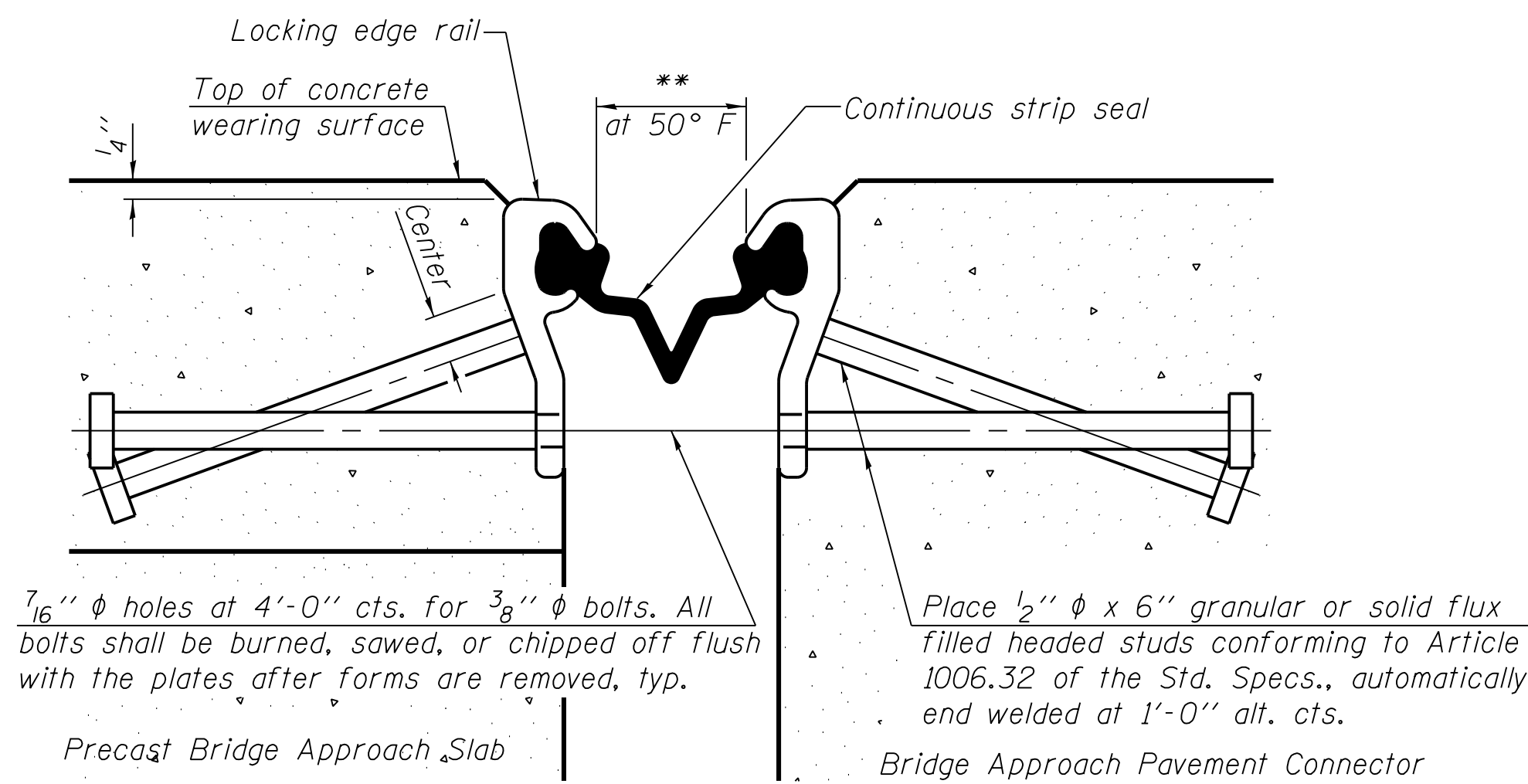
SECTION E-E  
(Showing dimensions)



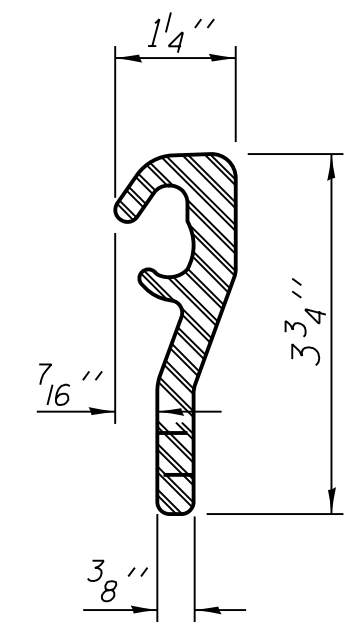
SECTION E-E  
(Showing reinforcement)



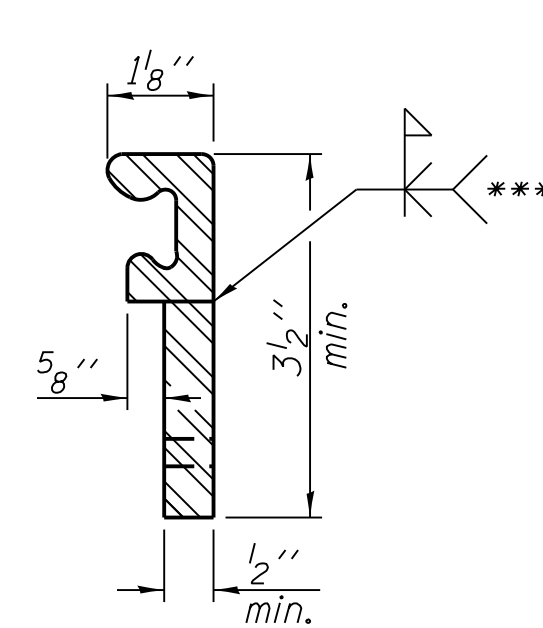
VIEW F-F  
(Showing reinforcement)



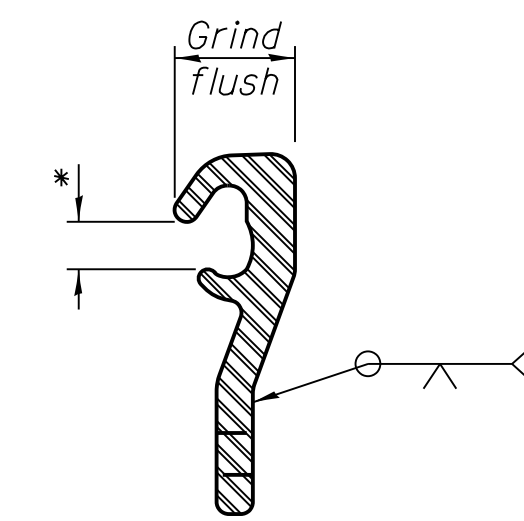
SECTION THRU STRIP SEAL JOINT  
(at rt. angles)



ROLLED  
(EXTRUDED) RAIL



WELDED RAIL

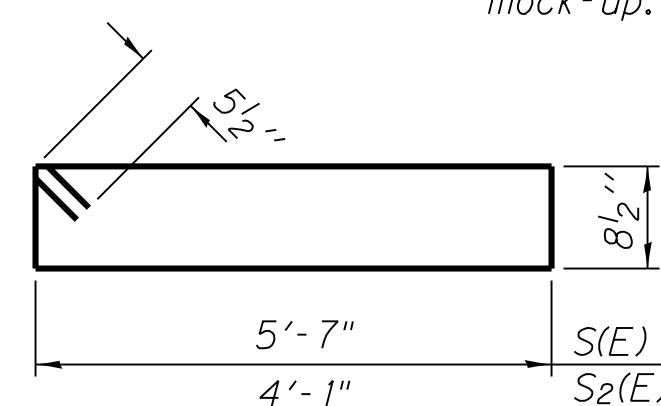


LOCKING EDGE  
RAIL SPLICE

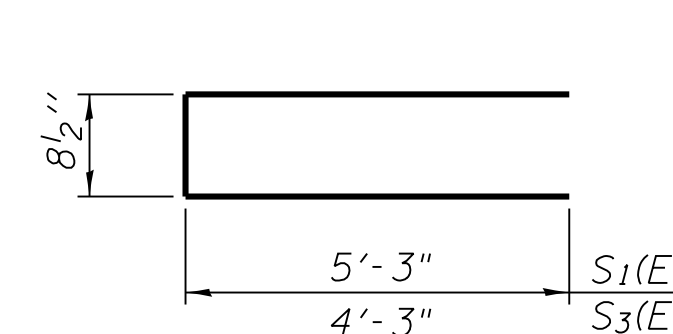
Rolled rail shown, welded rail similar.

LOCKING EDGE RAIL

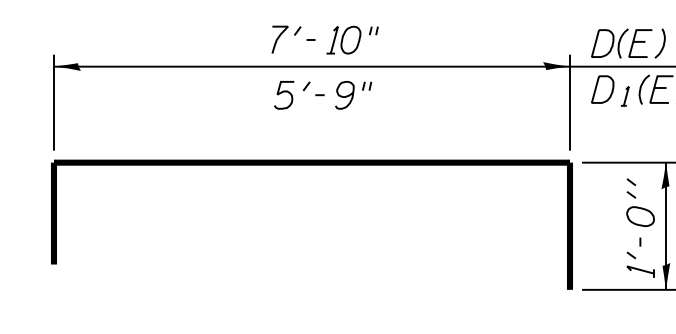
- \* Omit weld at seal opening.
- \*\* The joint opening shall be determined per Article 520.04 except that on jointless structures, the distance described as the bridge length between the nearest fixed bearings each way from the joint shall be taken as half the bridge length plus the approach slab length. The minimum dimension shall be 1 1/2" for installation purposes.
- \*\*\* Back gouge not required if complete joint penetration is verified by mock-up.



BARS S(E) & S2(E)



BARS S1(E) & S3(E)



BARS D(E) & D1(E)

BAR LIST  
EACH INTERIOR BEAM  
(For information only)

Bar	No.	Size	Length	Shape
B(E)	7	#5	29'-8"	—
B1(E)	14	#9	29'-8"	—
D(E)	22	#4	9'-10"	□
S(E)	58	#5	13'-6"	□
S1(E)	18	#5	11'-3"	□

BAR LIST  
EACH EXTERIOR BEAM  
(For information only)

Bar	No.	Size	Length	Shape
B(E)	5	#5	29'-8"	—
B1(E)	11	#9	29'-8"	—
D1(E)	32	#4	7'-9"	□
S2(E)	58	#5	10'-6"	□
S3(E)	14	#5	9'-3"	□

MIN BAR LAP  
(Beams)  
#5 bar = 2'-6"

Notes:

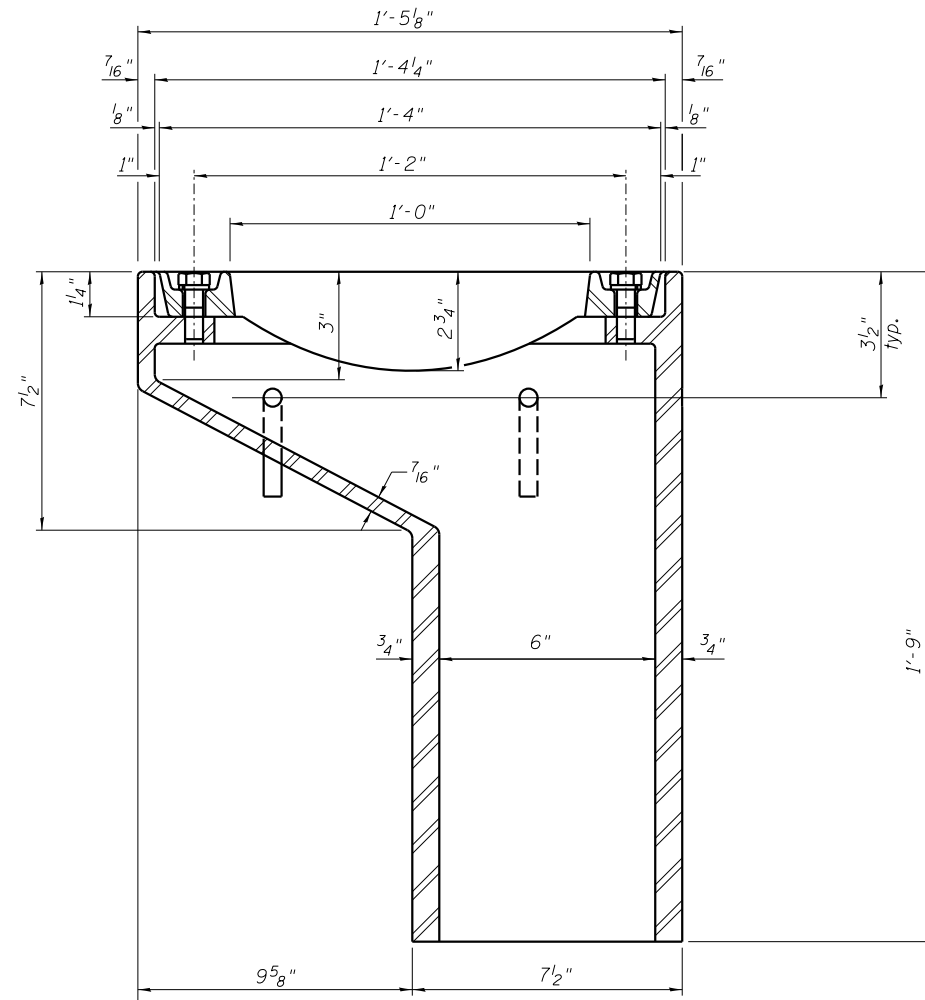
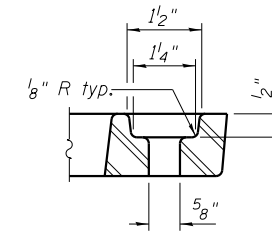
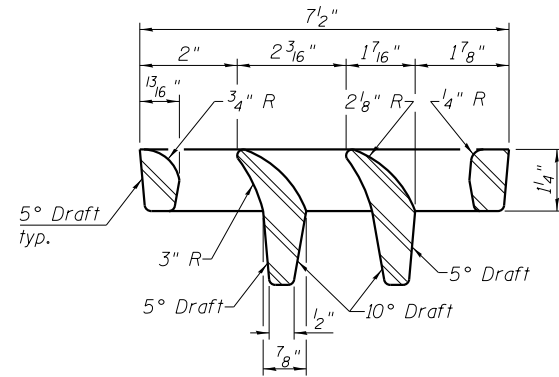
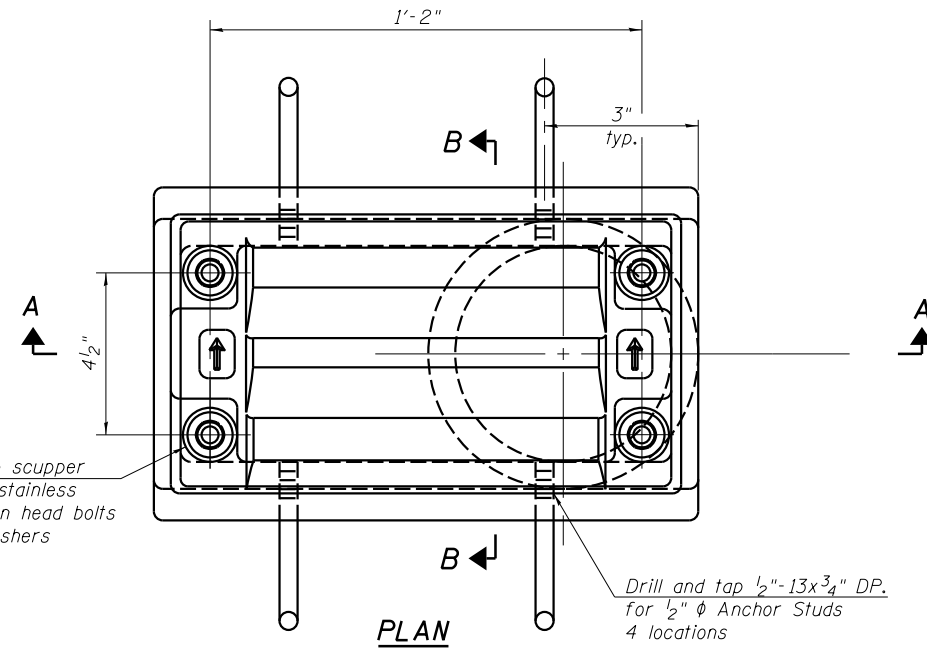
- The precast bridge approach slab shall be according to Section 504 of the Standard Specifications and shall be paid for at the contract unit price per square foot for Precast Bridge Approach Slab.
- Cast-in-place substitution of Precast Bridge Approach Slab is not allowed.
- Parapet concrete shall be paid for as Concrete Superstructure.
- Parapet and wearing surface reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
- Approach footing concrete shall be paid for as Concrete Structures.
- The top surface of precast bridge approach slabs shall be roughened to a depth of 1/4" according to the IDOT "Manual for Fabrication of Precast Prestressed Concrete Products."
- After precast bridge approach slab has been erected, holes shall be drilled into abutment and anchor dowels placed. Dowel holes shall be filled with non-shrink grout to top of precast slab and allowed to cure fully prior to grouting the longitudinal shear keys.
- Two 1/8" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location. Cost included with Precast Bridge Approach Slab.
- A minimum 2 1/2" φ lifting pins shall be used to engage the lifting loops during handling.
- Compressive strength of precast concrete, f'c shall be 6,000 psi.
- For additional parapet details, see sheet 13 of 36.
- Any concrete poured monolithically with the wearing surface, such as curbs, will not be paid for separately, but will be included in the cost of Concrete Wearing Surface, 5".
- The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The strip seal shall extend 6" beyond the edge of the approach slab on each end. The configuration of the strip seal shall match the configuration of the Locking Edge Rails.
- The height and thickness of the Locking Edge Rails shown are minimum dimensions. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed.
- The inside of the Locking Edge Rail groove shall be free of weld residue.
- Locking Edge Rails may be spliced at slope discontinuities and stage construction joints.
- The manufacturer's recommended installation methods shall be followed.
- All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.
- Maximum space between rail segments at stage lines shall be 3/16", sealed with a suitable sealant.

TWO APPROACHES  
BILL OF MATERIAL

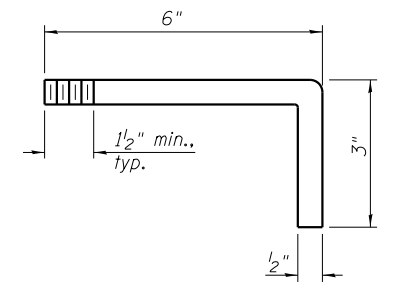
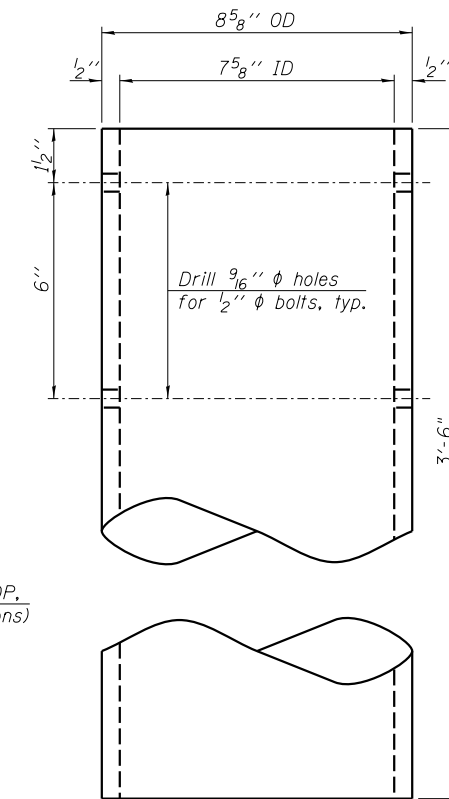
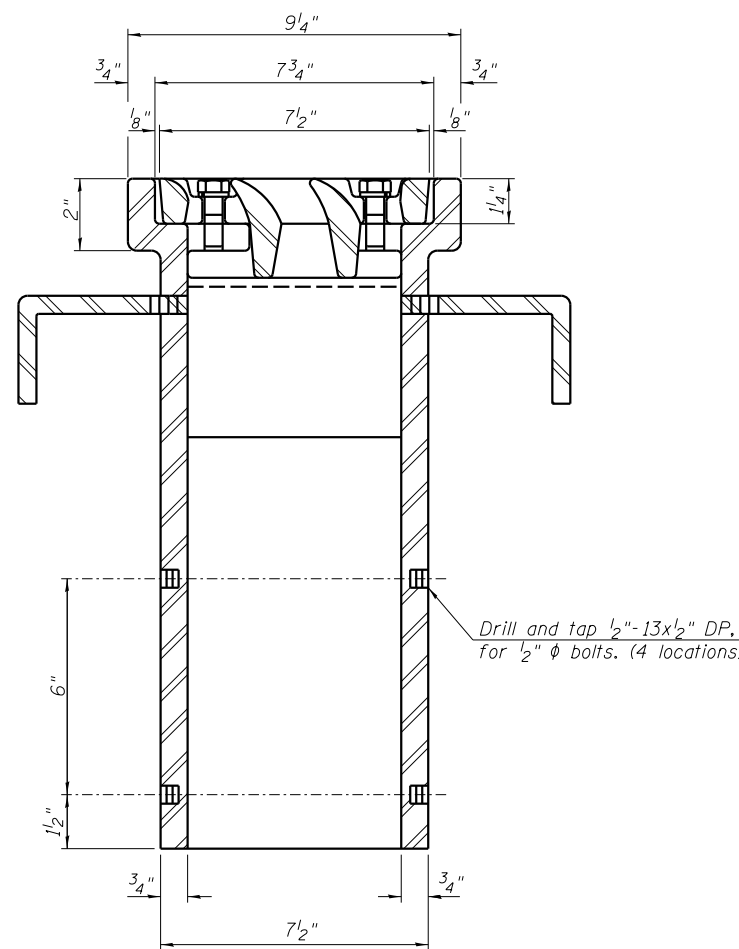
Bar	No.	Size	Length	Shape
a5(E)	62	#4	24'-4"	—
a6(E)	60	#4	7'-5"	—
a7(E)	62	#4	23'-2"	—
b4(E)	70	#4	29'-8"	—
b5(E)	8	#4	14'-8"	—
d(E)	68	#5	5'-7"	□
d2(E)	68	#5	5'-11"	□
e10(E)	32	#4	14'-8"	—
e11(E)	4	#8	14'-8"	—
t(E)	136	#4	9'-8"	—
w(E)	160	#5	23'-6"	—
Concrete Superstructure			Cu. Yd.	6.7
Concrete Structures			Cu. Yd.	34.9
Reinforcement Bars, Epoxy Coated			Pound	9820
Precast Bridge Approach Slab			Sq. Ft.	1980
Concrete Wearing Surface, 5"			Sq. Yd.	230
Protective Coat			Sq. Yd.	244
Bridge Deck Grooving			Sq. Yd.	202
Preformed Joint Strip Seal			Foot	96

(Sheet 4 of 4)

FILE NAME = I:\1001\6008 - D7 Var. Var\Work Order 4 - IL 130 Structure Plans\CADD\_Structural\DS11scupper.dgn



**SECTION A-A**  
See sheet 12 of 36 for scupper location relative to parapet.



**ANCHOR STUD DETAIL**

**BILL OF MATERIAL**

Item	Unit	Quantity
Drainage Scupper, DS-11	Each	4

DS-11

7-1-10

**CHASTAIN & ASSOCIATES LLC**  
CONSULTING ENGINEERS  
184-001397

USER NAME = abenz  
PLOT TIME = 4:10:05 PM  
PLOT SCALE = 20.0000 1" = 1 in.  
PLOT DATE = 5/5/2015

DESIGNED - JMB  
CHECKED - ACB  
DRAWN - RLK  
CHECKED - JMB

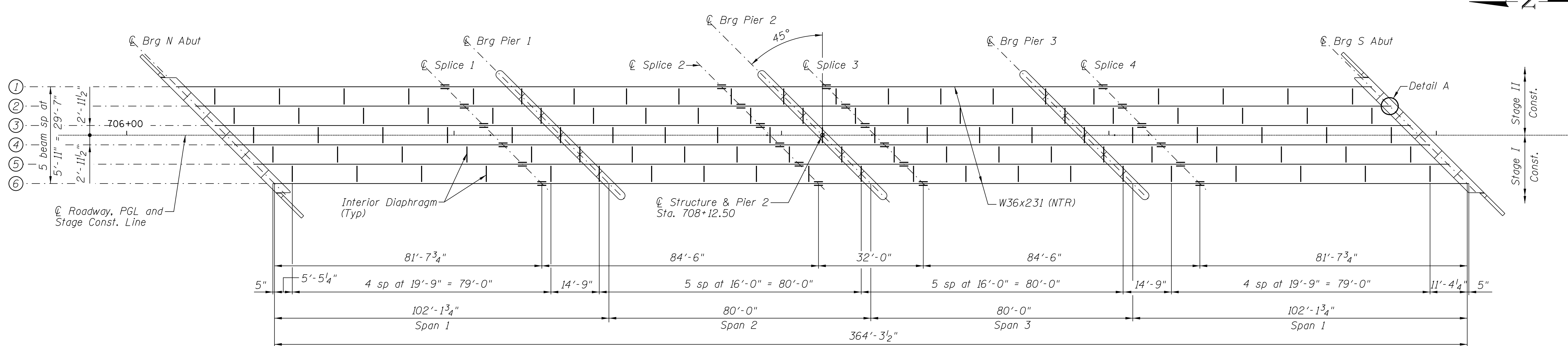
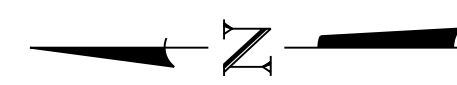
REVISED -  
REVISED -  
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REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

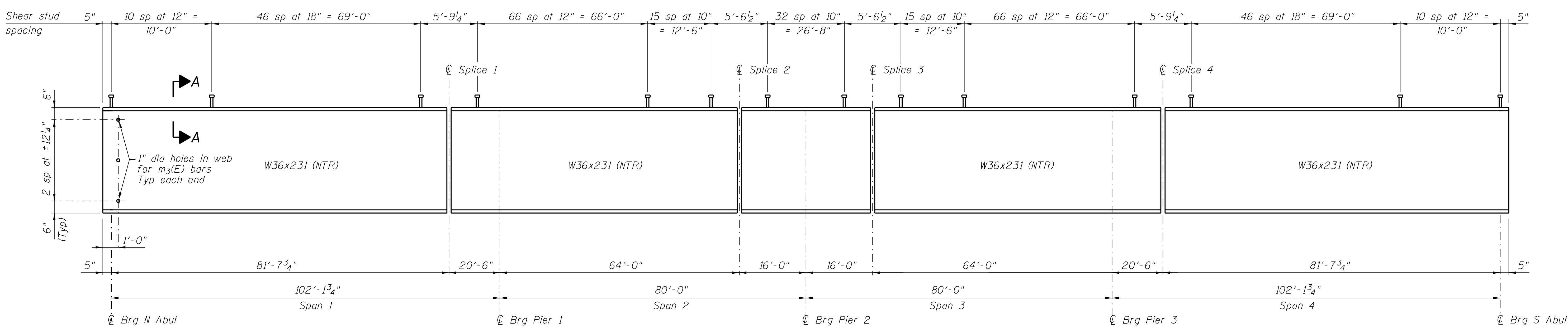
DRAINAGE SCUPPER, DS-11  
STRUCTURE NO. 018-0067

SHEET NO. 19 OF 36 SHEETS

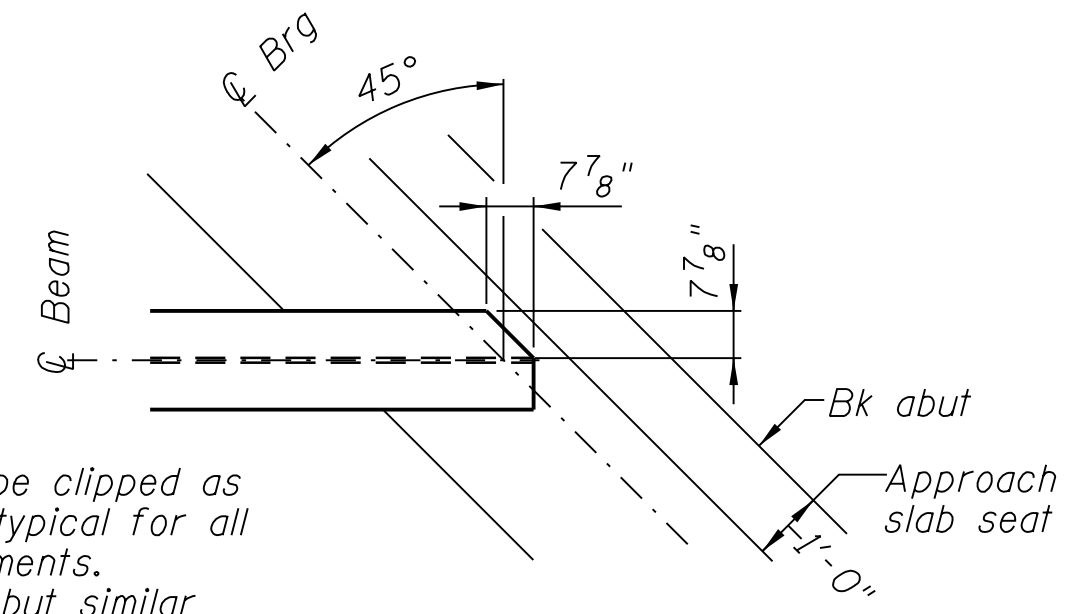
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
116	(113)B-1	CUMBERLAND	83	44
STA.	SN. 018-0067	CONTRACT NO. 74324		
ILLINOIS FED. AID PROJECT				



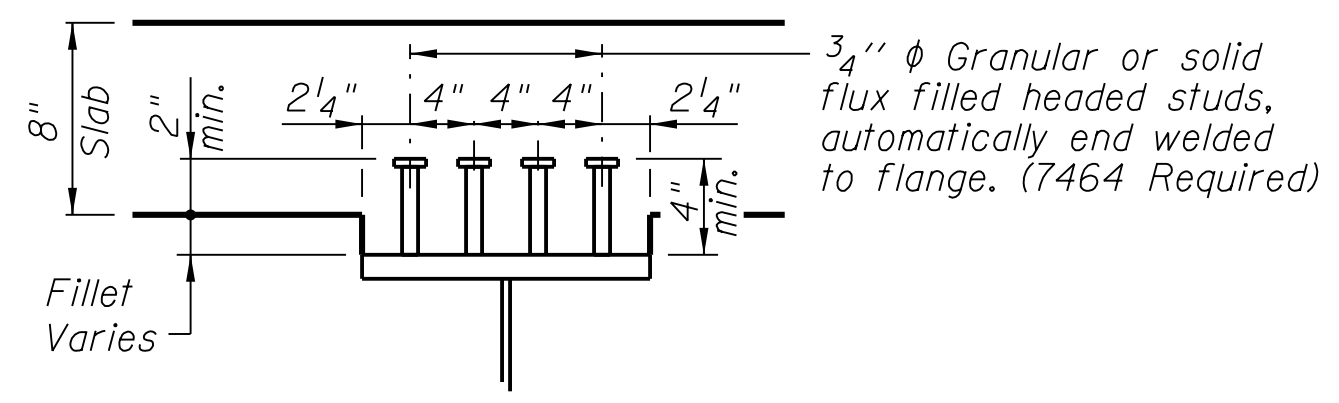
**FRAMING PLAN**



**BEAM ELEVATION**



**DETAIL A**



**SECTION A-A**

**NOTES:**

All beams and splice plates shall be AASHTO M270 Grade 50.  
Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.

FILE NAME = I:\DOT\6008 - D7 Ver. Work Order - IL 130 Structure Plans\CADD\_Structural\Framing.dgn



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PLOT DATE = 2/4/2015	CHECKED - JMB	REVISED -

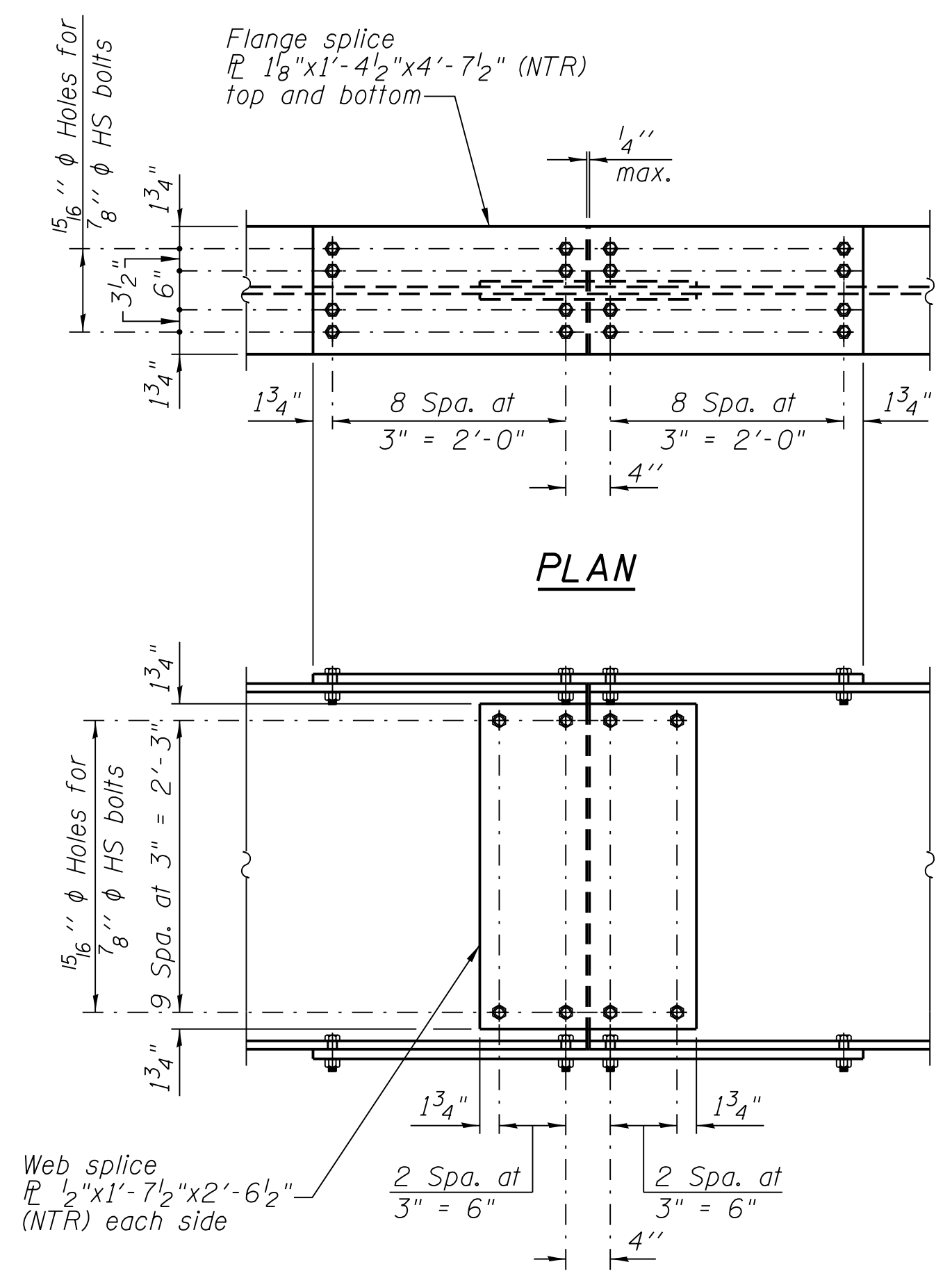
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**FRAMING PLAN AND DETAILS  
STRUCTURE NO. 018-0067**

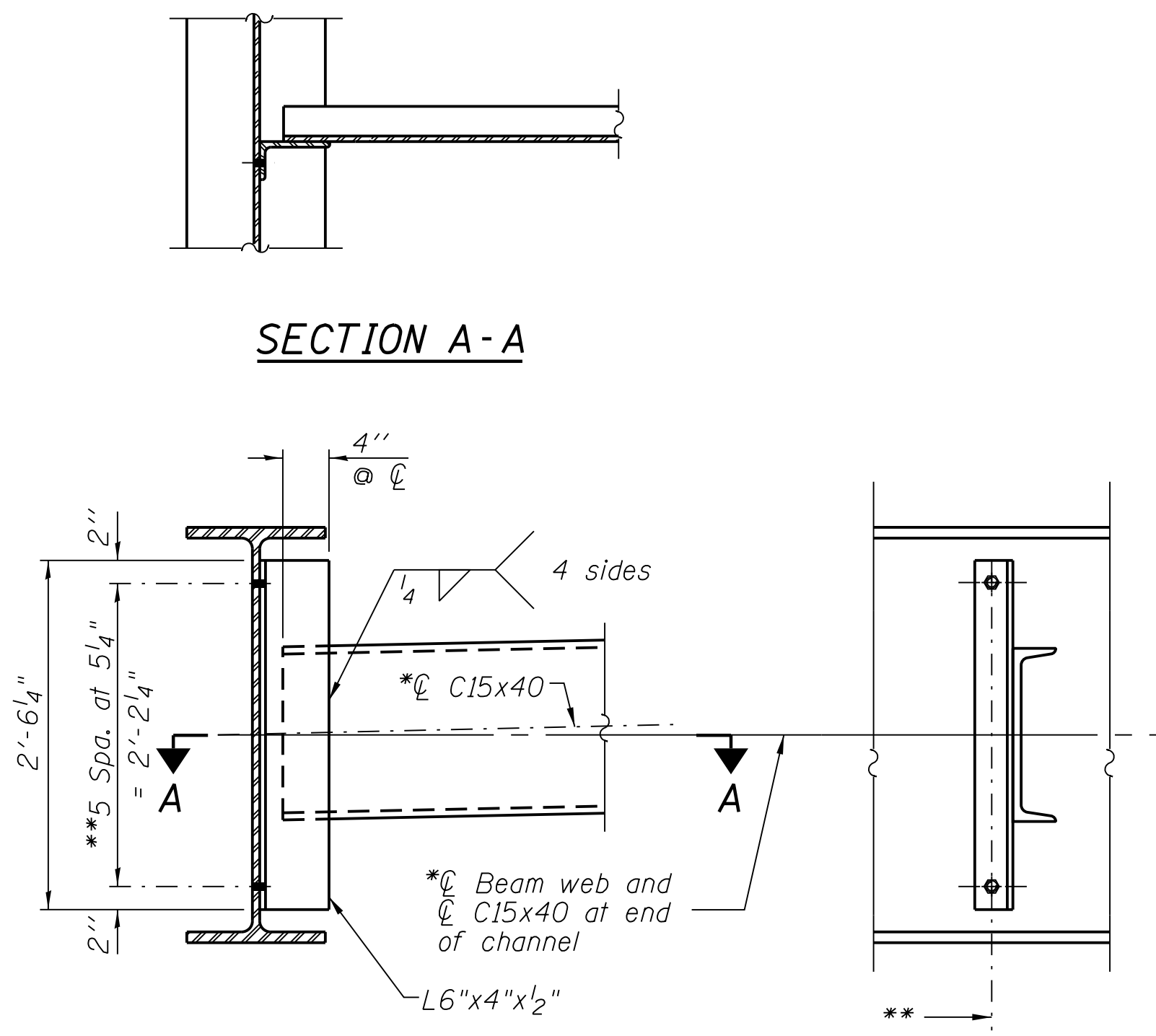
SHEET NO. 20 OF 36 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
116	(113B1B-1)	CUMBERLAND	83	45
	SN. 018-0067		CONTRACT NO. 74324	
STA.	ILLINOIS FED. AID PROJECT			

FILE NAME = I:\1001\6008 - D7 Ver-Work\Drawings\130 Structure Plans\CADD\_Structural\Frmgdetaila.dgn

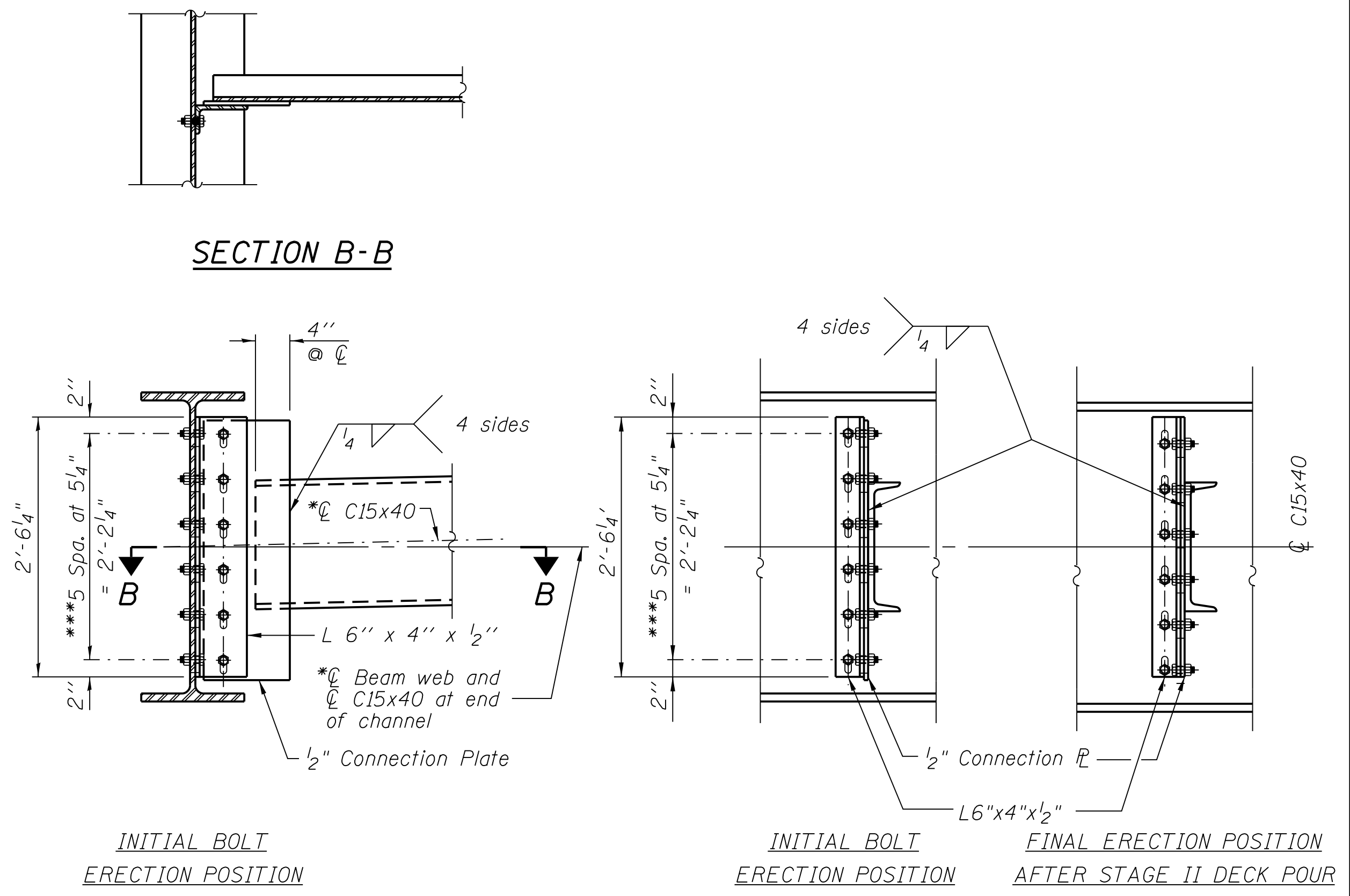


**ELEVATION**  
**SPLICE DETAIL**  
(24 Required)



**INTERIOR DIAPHRAGM**

Note:  
Two hardened washers required for each set of oversized holes.  
\*Alternate channels C15x50 are permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section.  
The alternate, if utilized, shall be provided at no additional cost to the Department.  
\*\*\*3/4 inch diameter HS bolts, 15/16 inch diameter holes



**DIAPHRAGM**  
(West side Beam 3 - 21 locations)

\*\*\* 3/4 inch diameter HS bolts on the west side of Beam 3 with 1 3/16 inch x 1 7/8 inch vertical slotted holes in the leg of the angle which is bolted to the web and in the connection plate. Bolts in slotted holes shall be finger tightened until the second stage pour is completed. Position slots so bolts move from one end with no concrete load to the opposite end under the deck load. The slotted holes in the angle and connection plate shall be positioned as shown to allow the bolts to move to the final erection position under deck load. The holes shall be positioned to allow maximum bolt displacement without laterally stressing the girders.

**TOP OF BEAM ELEVATIONS**  
(For Fabrication Only)

Location	Girder 1	Girder 2	Girder 3	Girder 4	Girder 5	Girder 6
CL Brg at N. Abut	534.056	534.21	534.35	534.39	534.34	534.27
CL Splice 1	534.563	534.70	534.82	534.84	534.77	534.68
CL Brg at Pier 1	534.602	534.73	534.85	534.87	534.79	534.70
CL Splice 2	534.724	534.84	534.94	534.94	534.85	534.74
CL Brg at Pier 2	534.733	534.85	534.94	534.94	534.85	534.73
CL Splice 3	534.743	534.85	534.94	534.94	534.84	534.72
CL Brg at Pier 3	534.697	534.79	534.87	534.85	534.73	534.60
CL Splice 4	534.682	534.77	534.84	534.82	534.70	534.56
CL Brg at S. Abut	534.272	534.34	534.39	534.35	534.21	534.06

**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.  
Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.  
All splice plates shall be AASHTO M270 Grade 50.

FILE NAME = I:\DOT\6008 - D7 Ver- Ver-Work Order 4 - IL 130 Structure Plans\CADD\_Structural\momenttable.dgn

INTERIOR BEAM MOMENT TABLE								
		0.4 Sp. 1	Pier 1	0.6 Sp. 2	Pier 2	0.4 Sp. 3	Pier 3	0.6 Sp. 4
$I_s$	(in <sup>4</sup> )	15600	15600	15600	15600	15600	15600	15600
$I_c(n)$	(in <sup>4</sup> )	32890	-	32890	-	32890	-	32890
$I_c(3n)$	(in <sup>4</sup> )	24031	-	24031	-	24031	-	24031
$I_c(cr)$	(in <sup>4</sup> )	-	18468	-	18468	-	18468	-
$S_s$	(in <sup>3</sup> )	854.8	854.8	854.8	854.8	854.8	854.8	854.8
$S_c(n)$	(in <sup>3</sup> )	1121.2	-	1121.2	-	1121.2	-	1121.2
$S_c(3n)$	(in <sup>3</sup> )	1011.8	-	1011.8	-	1011.8	-	1011.8
$S_c(cr)$	(in <sup>3</sup> )	-	1125.6	-	1125.6	-	1125.6	-
DC1	(k/')	0.87	0.87	0.87	0.87	0.87	0.87	0.87
M <sub>DC1</sub>	(k)	729	867	165	247	165	867	729
DC2	(k/')	0.15	0.15	0.15	0.15	0.15	0.15	0.15
M <sub>DC2</sub>	(k)	127	153	28	44	28	153	127
DW	(k/')	0.27	0.27	0.27	0.27	0.27	0.27	0.27
M <sub>DW</sub>	(k)	225	272	50	77	50	272	225
M <sub>ℓ + IM</sub>	(k)	1093	1017	687	758	687	1017	1093
M <sub>u</sub> (Strength I)	(k)	3320	3463	1519	1806	1519	3463	3320
φ <sub>r</sub> M <sub>n</sub>	(k)	5237	4556	5237	4556	5237	4556	5237
f <sub>s</sub> DC1	(ksi)	10.2	12.2	2.3	3.5	2.3	12.2	10.2
f <sub>s</sub> DC2	(ksi)	1.5	1.6	0.3	0.5	0.3	1.6	1.5
f <sub>s</sub> DW	(ksi)	2.7	2.9	0.6	0.8	0.6	2.9	2.7
f <sub>s</sub> (ℓ+IM)	(ksi)	11.7	10.8	7.4	8.1	7.4	10.8	11.7
f <sub>s</sub> (Service II)	(ksi)	29.6	30.8	12.8	15.3	12.8	30.8	29.6
0.95R <sub>n</sub> F <sub>yf</sub>	(ksi)	47.5	47.5	47.5	47.5	47.5	47.5	47.5
f <sub>s</sub> (Total)(Strength I)	(ksi)	-	-	-	-	-	-	-
φ <sub>r</sub> F <sub>n</sub>	(ksi)	-	-	-	-	-	-	-
V <sub>r</sub>	(k)	18.3	27.4	16.5	28.6	15.9	25.6	18.3

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

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

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

$I_c(cr), S_c(cr)$ : Composite moment of inertia and section modulus of the steel and longitudinal deck reinforcement, used for computing  $f_s$  (Total-Strength I and Service II) in cracked sections, due to both short-term composite live loads and long-term composite (superimposed) dead loads (in<sup>4</sup> and in<sup>3</sup>).

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

M<sub>DC1</sub>: 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<sub>DC2</sub>: 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<sub>DW</sub>: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).

M<sub>ℓ + IM</sub>: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).

M<sub>u</sub> (Strength I): Factored design moment (kip-ft.).

1.25 (M<sub>DC1</sub> + M<sub>DC2</sub>) + 1.5 M<sub>DW</sub> + 1.75 M<sub>ℓ + IM</sub>

φ<sub>r</sub>M<sub>n</sub>: Compact composite positive moment capacity computed according to Article 6.10.7.1 or non-slender negative moment capacity according to Article A6.1.1 or A6.1.2 (kip-ft.).

f<sub>s</sub> DC1: Un-factored stress at edge of flange for controlling steel flange due to vertical non-composite dead loads as calculated below (ksi).

M<sub>DC1</sub> / S<sub>nc</sub>

f<sub>s</sub> DC2: Un-factored stress at edge of flange for controlling steel flange due to vertical composite dead loads as calculated below (ksi).

M<sub>DC2</sub> / S<sub>c(3n)</sub> or M<sub>DC2</sub> / S<sub>c(cr)</sub> as applicable.

f<sub>s</sub> DW: Un-factored stress at edge of flange for controlling steel flange due to vertical composite future wearing surface loads as calculated below (ksi).

M<sub>DW</sub> / S<sub>c(3n)</sub> or M<sub>DW</sub> / S<sub>c(cr)</sub> as applicable.

f<sub>s</sub> (ℓ+IM): Un-factored stress at edge of flange for controlling steel flange due to vertical composite live load plus impact loads as calculated below (ksi).

M<sub>ℓ + IM</sub> / S<sub>c(n)</sub> or M<sub>ℓ + IM</sub> / S<sub>c(cr)</sub> as applicable.

f<sub>s</sub> (Service II): Sum of stresses as computed below (ksi).

f<sub>sDC1</sub> + f<sub>sDC2</sub> + f<sub>sDW</sub> + 1.3 f<sub>s</sub> (ℓ + IM)

0.95R<sub>n</sub>F<sub>yf</sub>: Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).

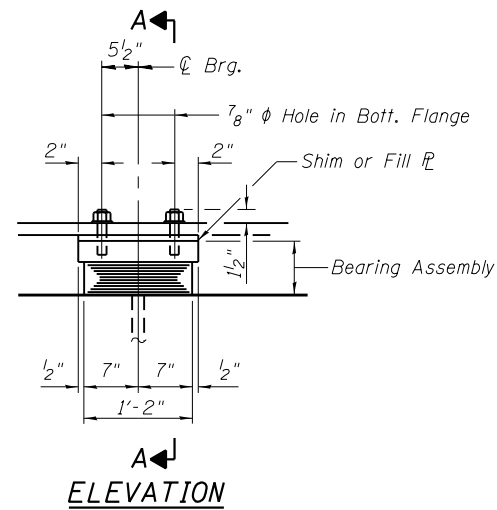
f<sub>s</sub> (Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi).

1.25 (f<sub>sDC1</sub> + f<sub>sDC2</sub>) + 1.5 f<sub>sDW</sub> + 1.75 f<sub>s</sub> (ℓ + IM)

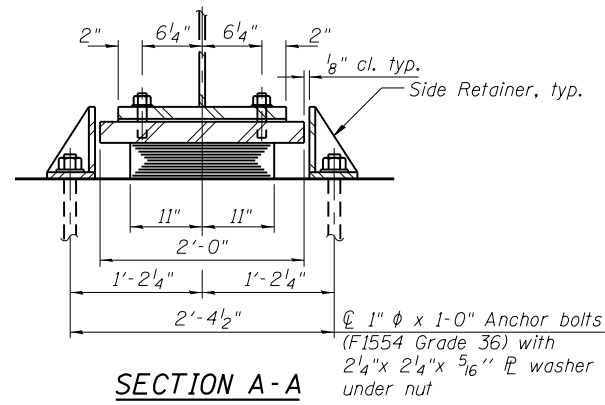
φ<sub>r</sub>F<sub>n</sub>: Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7 or 6.10.8 (ksi).

V<sub>r</sub>: Maximum factored shear range in span computed according to Article 6.10.10.

INTERIOR BEAM REACTION TABLE HL93 Loading						
		N. Abut.	Pier 1	Pier 2	Pier 3	S. Abut.
R <sub>DC1</sub>	(k)	36.2	94.5	53.2	94.5	36.2
R <sub>DC2</sub>	(k)	6.2	16.5	9.3	16.5	6.2
R <sub>DW</sub>	(k)	11.0	29.4	16.5	29.4	11.0
R <sub>ℓ + IM</sub>	(k)	75.0	129.6	105.3	129.6	75.0
R <sub>Total</sub>	(k)	128.3	269.9	184.3	269.9	128.3

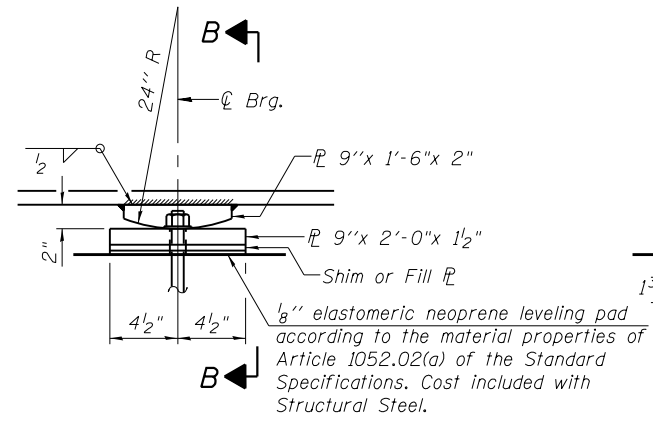


**ELEVATION**

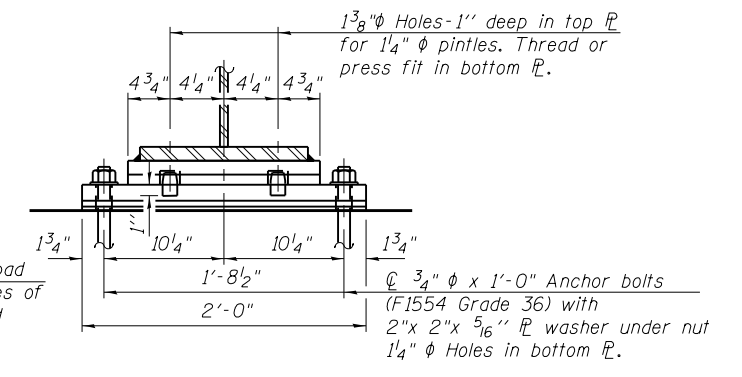


**SECTION A-A**

**TYPE I ELASTOMERIC EXP. BRG. AT PIERS 1 & 3**

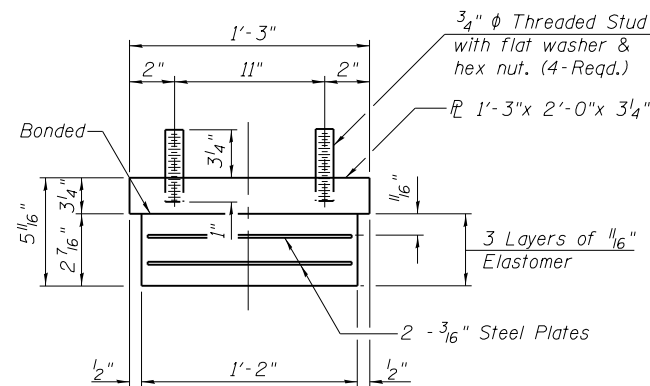


**ELEVATION AT PIER 2**



**SECTION B-B**

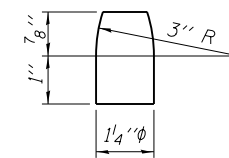
**FIXED BEARING**



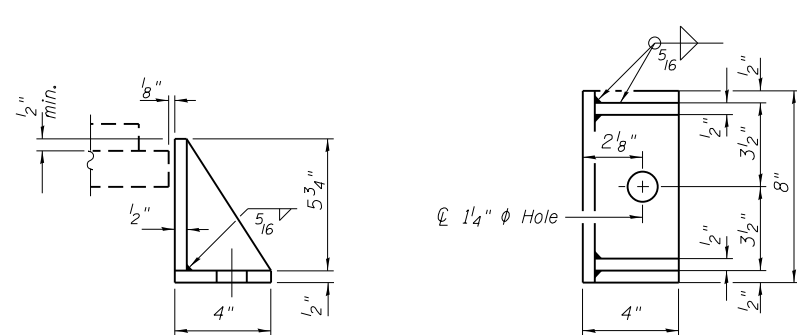
**BEARING ASSEMBLY**

Note:  
Shim plates shall not be placed under Bearing Assembly.

Notes:  
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.  
Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.  
Anchor bolts for side retainers may be cast in place or installed in holes drilled before or after members are in place.  
Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.  
Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.  
Two 1/8 inch adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.  
The anchor bolt sizes and grades shown constitute a calculated seismic structural fuse. Substitution of higher diameter and/or grade anchor bolts will not be allowed.

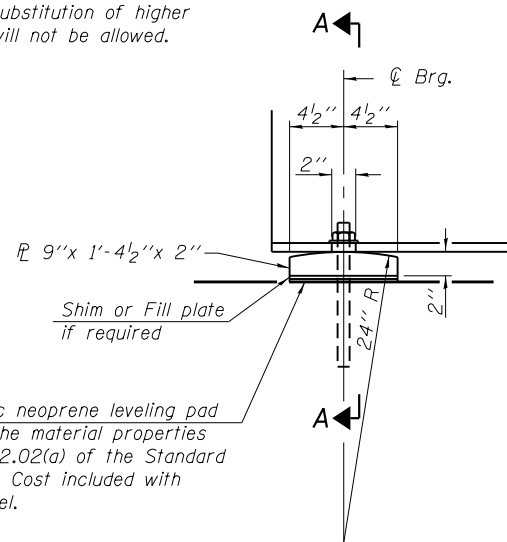


**PINTLE**

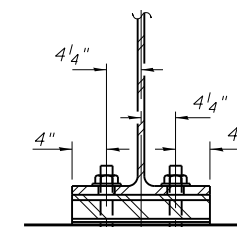


**SIDE RETAINER**

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



**ELEVATION AT ABUTMENT**



**SECTION A-A**

**FIXED BEARING AT INTEGRAL ABUTMENT**

**FILL PLATE THICKNESS REQUIRED**

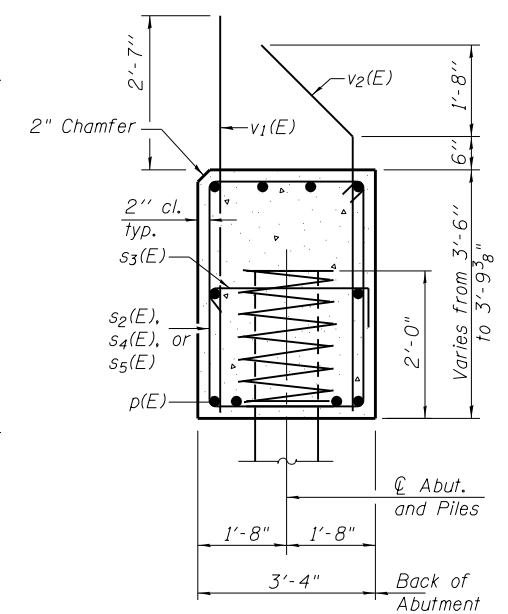
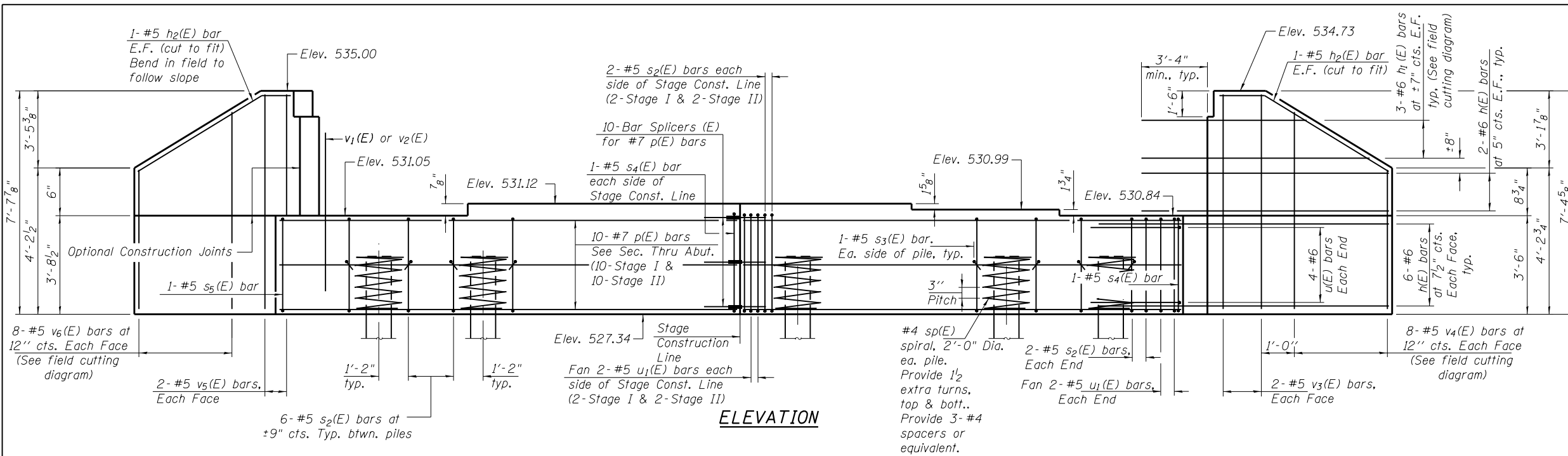
Beam #	N Abut	Pier 1	Pier 2	Pier 3	S Abut
1	--	--	--	--	--
2	--	--	--	--	--
3	1/8"	--	--	1/4"	5/8"
4	5/8"	1/4"	--	--	1/8"
5	--	--	--	--	--
6	--	--	--	--	--

**BILL OF MATERIAL**

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	12
Anchor Bolts, 3/4"	Each	12
Anchor Bolts, 1"	Each	48

FILE NAME = F:\Projects\DOT PROJECTS\13-052-4 Bridge\Drawings\CADD\_Sheets\0180067-74324.dgn



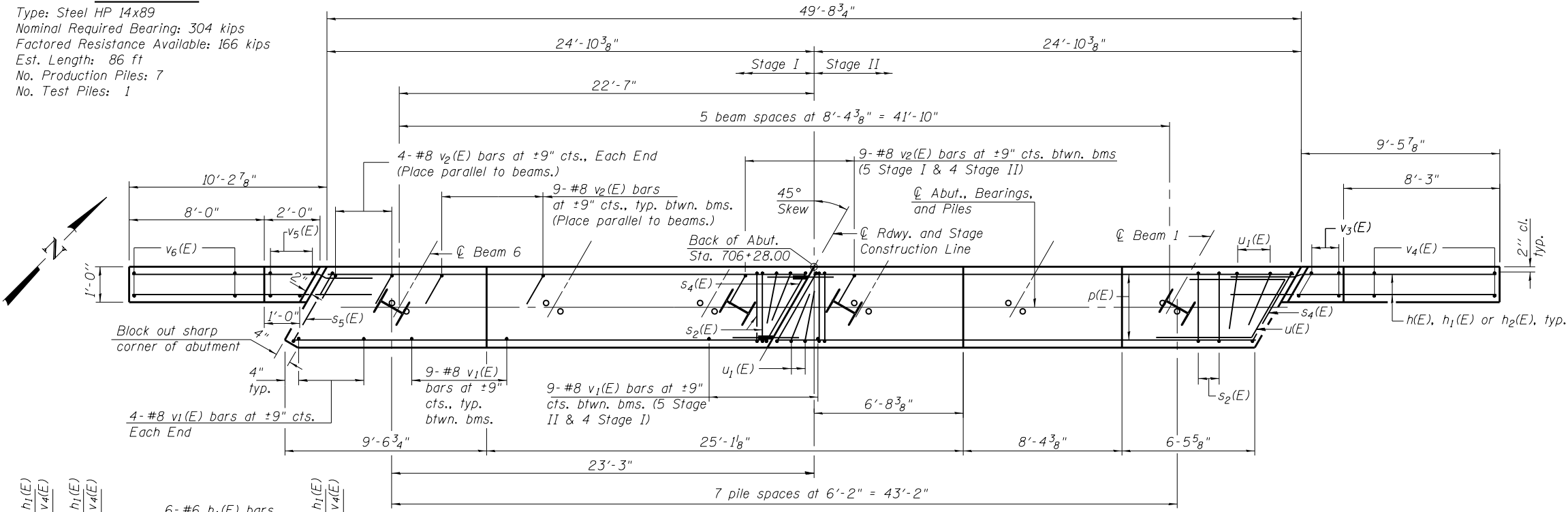


**SEC. THRU ABUT.**

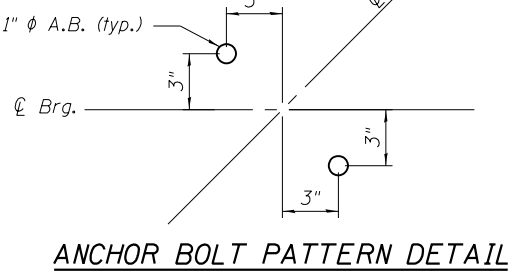
Dimensions at right angles to abutment.

**PILE DATA**

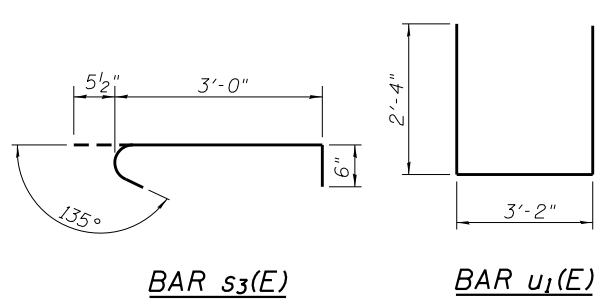
Type: Steel HP 14x89  
 Nominal Required Bearing: 304 kips  
 Factored Resistance Available: 166 kips  
 Est. Length: 86 ft  
 No. Production Piles: 7  
 No. Test Piles: 1



**PLAN**

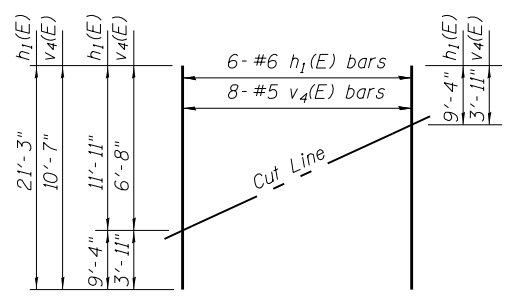


**ANCHOR BOLT PATTERN DETAIL**



**BAR s3(E)**

**BAR u1(E)**



**FIELD CUTTING DIAGRAM**

Order h1(E) and v4(E) full length. Cut as shown and use remainder of bars in opposite face.

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	32	#6	13'-6"	—
h1(E)	6	#6	21'-3"	—
h2(E)	4	#5	10'-3"	—
p(E)	20	#7	24'-6"	—
s2(E)	44	#5	13'-3"	□
s3(E)	16	#5	4'-0"	□
s4(E)	3	#5	15'-7"	□
s5(E)	1	#5	15'-3"	□
sp(E)	8	#4	2'-0"	≡≡≡
u(E)	8	#6	11'-9"	—
u1(E)	8	#5	7'-10"	—
v1(E)	53	#8	5'-11"	—
v2(E)	53	#8	6'-2"	—
v3(E)	4	#5	7'-0"	—
v4(E)	8	#5	10'-7"	—
v5(E)	4	#5	7'-3"	—
v6(E)	8	#5	10'-10"	—
Structure Excavation		Cu. Yd.	60	
Concrete Structures		Cu. Yd.	27.2	
Reinforcement Bars, Epoxy Coated		Pound	5150	
Furnishing Steel Piles HP 14x89		Foot	602	
Driving Piles		Foot	602	
Test Pile Steel HP 14x89		Each	1	

\* Length is height of spiral.

Notes:  
 Pour steps monolithically with cap.  
 Location of the Test Pile shall be in a production location for North Abutment, and shall be selected based on coordination with the Engineer.  
 For details of piles see sheet 29 of 36.  
 See sheet 25 of 36 for Bars h2(E), s2(E), s4(E), s5(E), u(E), and v2(E) details.  
 See sheet 25 of 36 for Bar v6(E) field cutting diagram.

FILE NAME = F:\Projects\13-0952-4 Bridge\Drawings\CADD\_Sheets\0180067-74324.dgn



USER NAME = Jim	DESIGNED - CMF	REVISED -
PLOT SCALE = 0:2.0000 "1" / 1"	CHECKED - TMM	REVISED -
PLOT DATE = 1/23/2015	DRAWN - RNH	REVISED -
	CHECKED - TMM	REVISED -

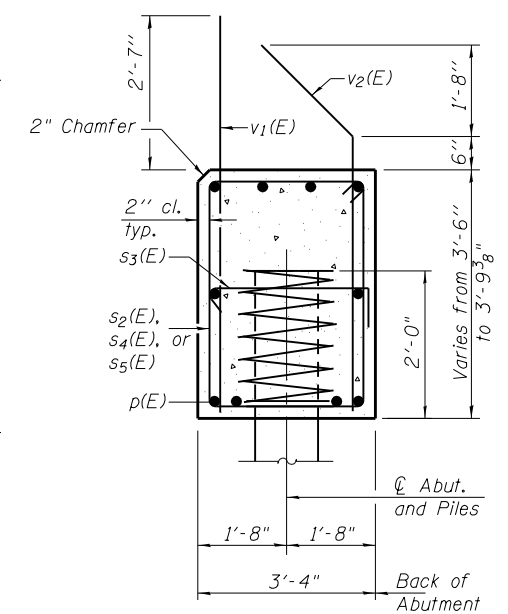
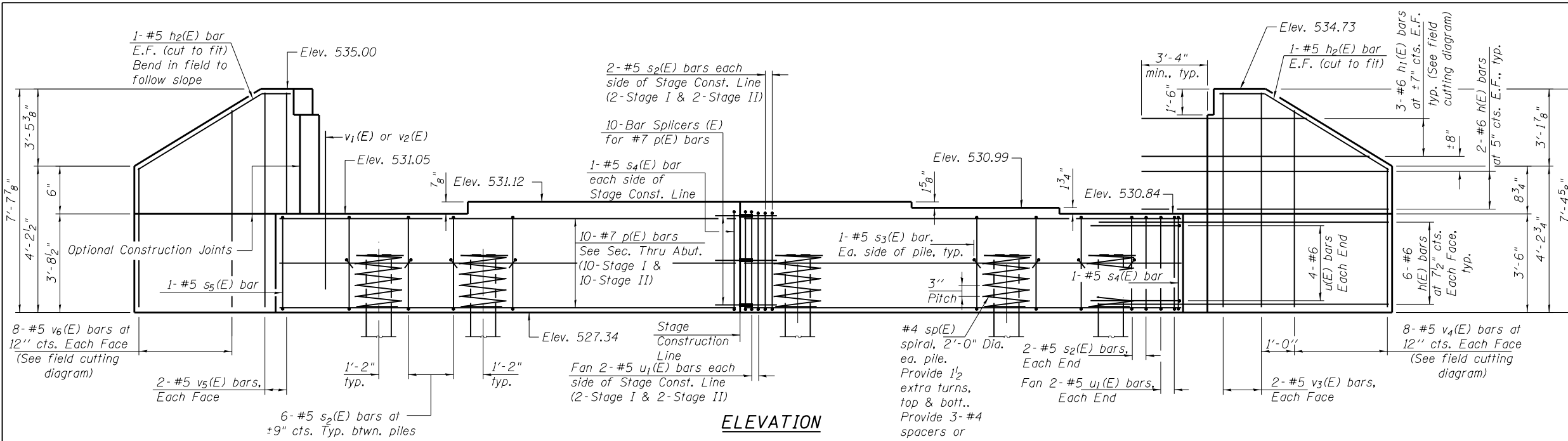
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**NORTH ABUTMENT DETAILS  
 STRUCTURE NO. 018-0067**

SHEET NO. 24 OF 36 SHEETS

F.A.P. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
116	(113)BIB-1	CUMBERLAND	83	49
CONTRACT NO. 74324				

ILLINOIS FED. AID PROJECT



**SEC. THRU ABUT.**

Dimensions at right angles to abutment.

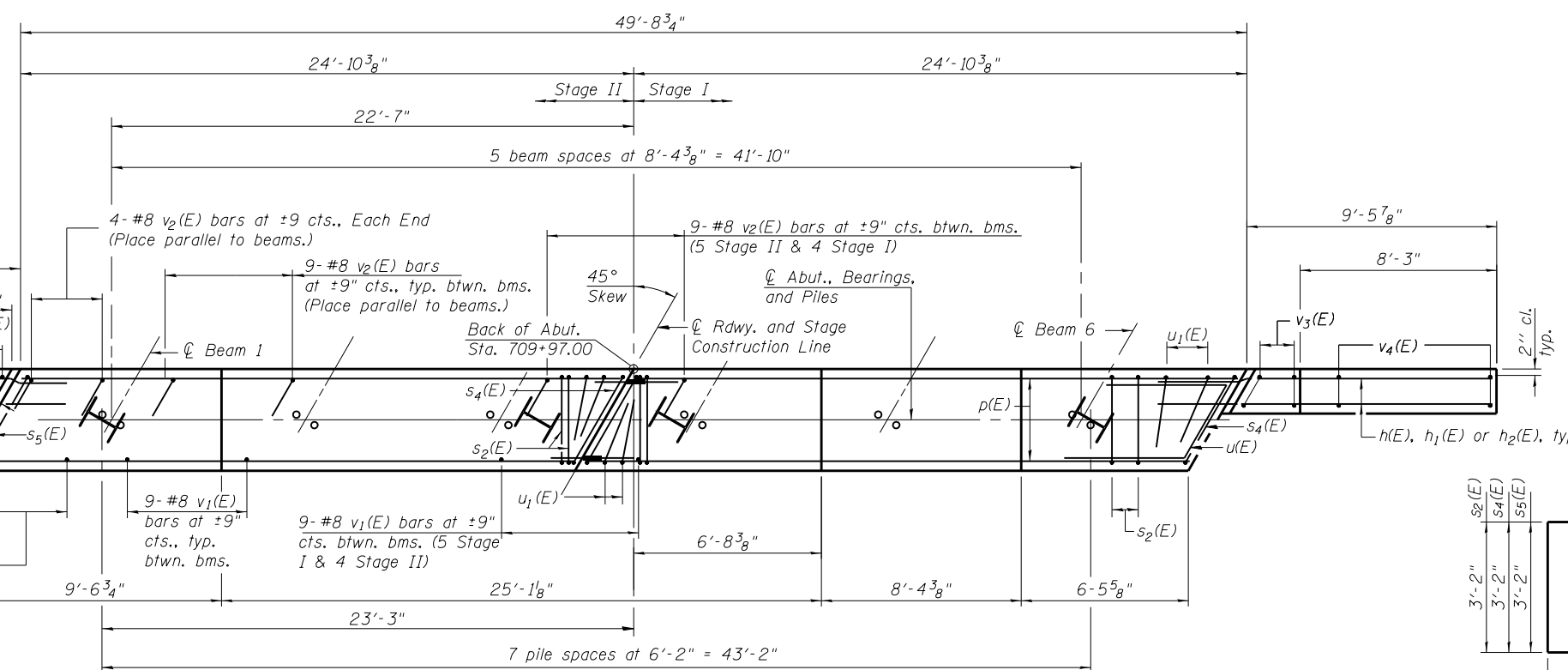
**PILE DATA**

Type: Steel HP 14x89  
 Nominal Required Bearing: 302 kips  
 Factored Resistance Available: 166 kips  
 Est. Length: 108 ft  
 No. Production Piles: 7  
 No. Test Piles: 1

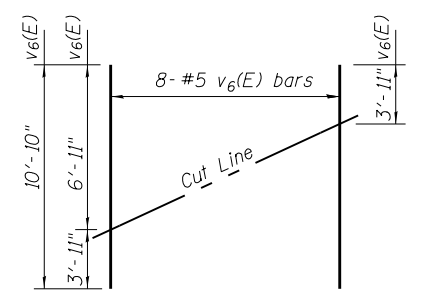
**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	32	#6	13'-6"	—
h1(E)	6	#6	21'-3"	—
h2(E)	4	#5	10'-3"	—
p(E)	20	#7	24'-6"	—
s2(E)	44	#5	13'-3"	□
s3(E)	16	#5	4'-0"	□
s4(E)	3	#5	15'-7"	□
s5(E)	1	#5	15'-3"	□
sp(E)	8	#4	2'-0"	WWW
u(E)	8	#6	11'-9"	—
u1(E)	8	#5	7'-10"	—
v1(E)	53	#8	5'-11"	—
v2(E)	53	#8	6'-2"	—
v3(E)	4	#5	7'-0"	—
v4(E)	8	#5	10'-7"	—
v5(E)	4	#5	7'-3"	—
v6(E)	8	#5	10'-10"	—
Structure Excavation			Cu. Yd.	60
Concrete Structures			Cu. Yd.	27.2
Reinforcement Bars, Epoxy Coated			Pound	5150
Furnishing Steel Piles HP 14x89			Foot	756
Driving Piles			Foot	756
Test Pile Steel HP 14x89			Each	1

\* Length is height of spiral.

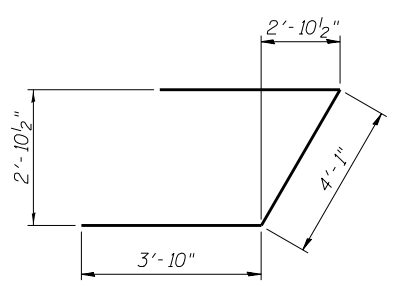


**PLAN**

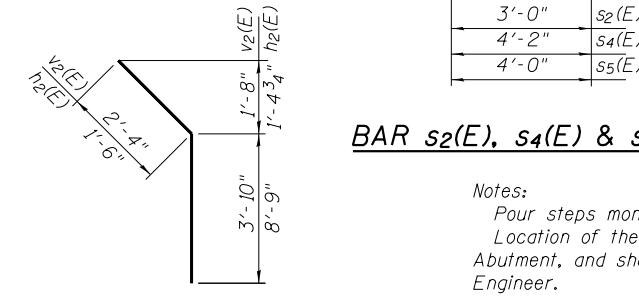


**FIELD CUTTING DIAGRAM**

Order v6(E) full length. Cut as shown and use remainder of bars in opposite face.



**BAR u(E)**



**BAR v2(E) & h2(E)**

**BAR s2(E), s4(E) & s5(E)**

Notes:  
 Pour steps monolithically with cap.  
 Location of the Test Pile shall be in a production location for South Abutment, and shall be selected based on coordination with the Engineer.  
 For details of piles see sheet 29 of 36.  
 See sheet 24 of 36 for Bars s3(E) & u1(E) details and Anchor Bolt Pattern Detail.  
 See sheet 24 of 36 for Bars h1(E) & v4(E) field cutting diagram.

FILE NAME = F:\Projects\DOT PROJECTS\13-052-4 Bridge\Drawings\CADD\_Sheets\0180067-74324.dgn

McDonough-Whitlow, P.C.  
 Consulting Engineers & Land Surveyors  
 PROFESSIONAL DESIGN NO. 184-002754

USER NAME = Jim	DESIGNED - CMF	REVISOR -
PLOT SCALE = 0:2.0000 "1" / in.	CHECKED - TMM	REVISIONS -
PLOT DATE = 1/23/2015	DRAWN - RNH	REVISIONS -
	CHECKED - TMM	REVISIONS -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

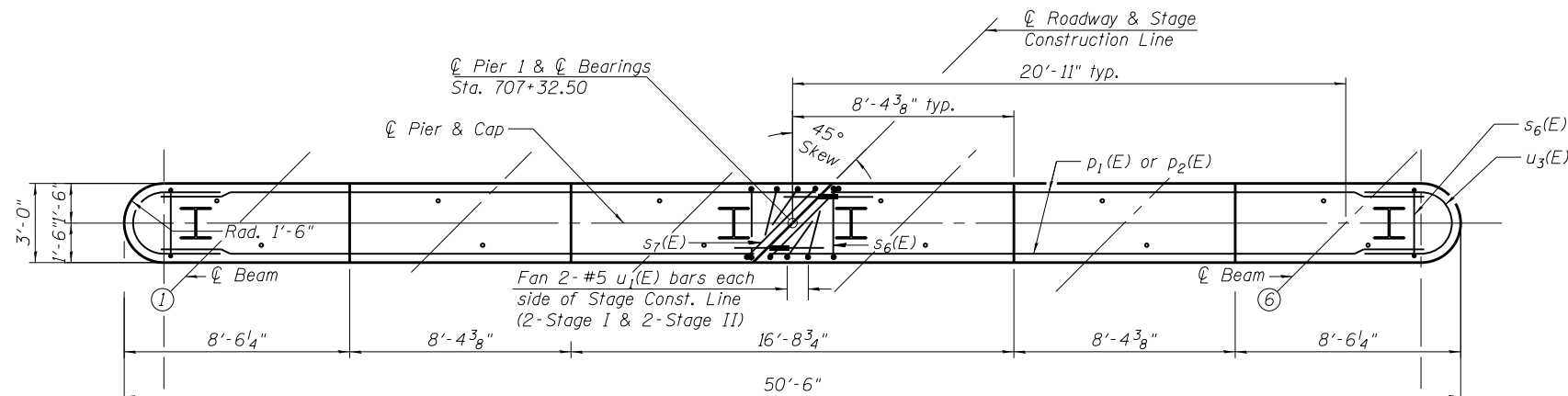
SOUTH ABUTMENT DETAILS  
 STRUCTURE NO. 018-0067

SHEET NO. 25 OF 36 SHEETS

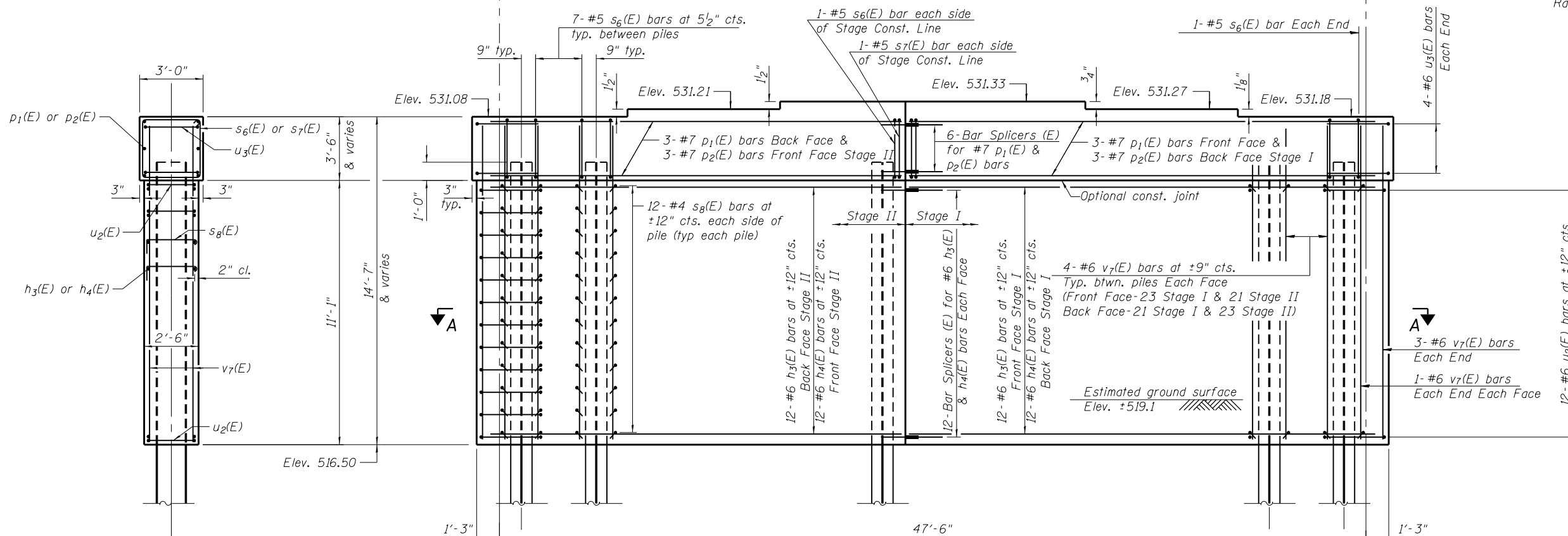
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
116	(113)BIB-1	CUMBERLAND	83	50
CONTRACT NO. 74324				
ILLINOIS FED. AID PROJECT				

**PILE DATA**

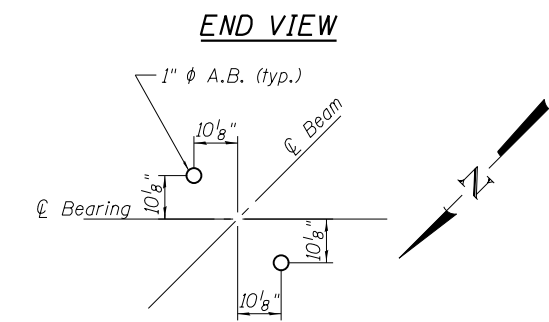
Type: Steel HP 14x89  
 Nominal Required Bearing: 422 kips  
 Factored Resistance Available: 231 kips  
 Est. Length: 98 ft  
 No. Production Piles: 11  
 No. Test Piles: 1



**TOP PLAN**

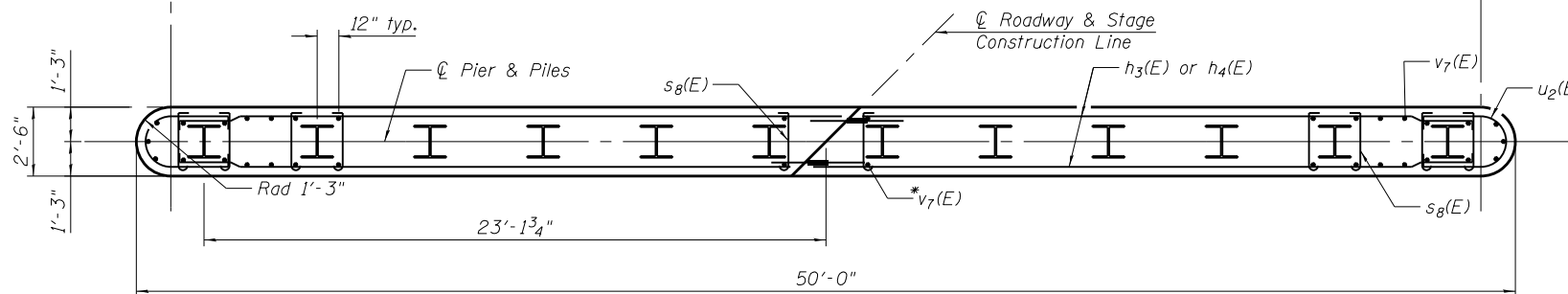


**ELEVATION**  
(Looking South)



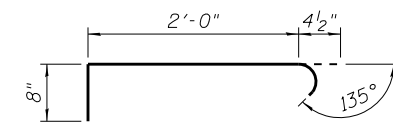
**END VIEW**

**ANCHOR BOLT  
PATTERN DETAIL PIER 1 & 3**

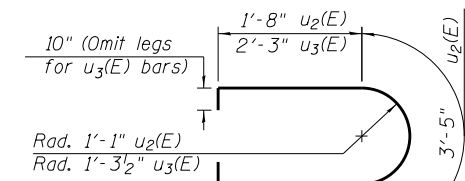


**SECTION A-A**

\* Adjust location of v7(E) bars at piles adjacent to the Stage Construction Line to facilitate placement of s8(E) bars.



**BAR s8(E)**



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

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h3(E)	24	#6	24'-9"	—
h4(E)	24	#6	22'-8"	—
p1(E)	6	#7	25'-0"	—
p2(E)	6	#7	22'-5"	—
s6(E)	74	#5	12'-7"	□
s7(E)	2	#5	14'-9"	□
s8(E)	288	#4	3'-1"	┌┐
u1(E)	4	#5	7'-10"	U
u2(E)	24	#6	8'-5"	U
u3(E)	8	#6	8'-7"	U
v7(E)	98	#6	14'-2"	—
Structure Excavation		Cu. Yd.	33	
Concrete Structures		Cu. Yd.	71.0	
Reinforcement Bars, Epoxy Coated		Pound	6410	
Furnishing Steel Piles HP 14x89		Foot	1078	
Driving Piles		Foot	1078	
Test Pile Steel HP 14x89		Each	1	

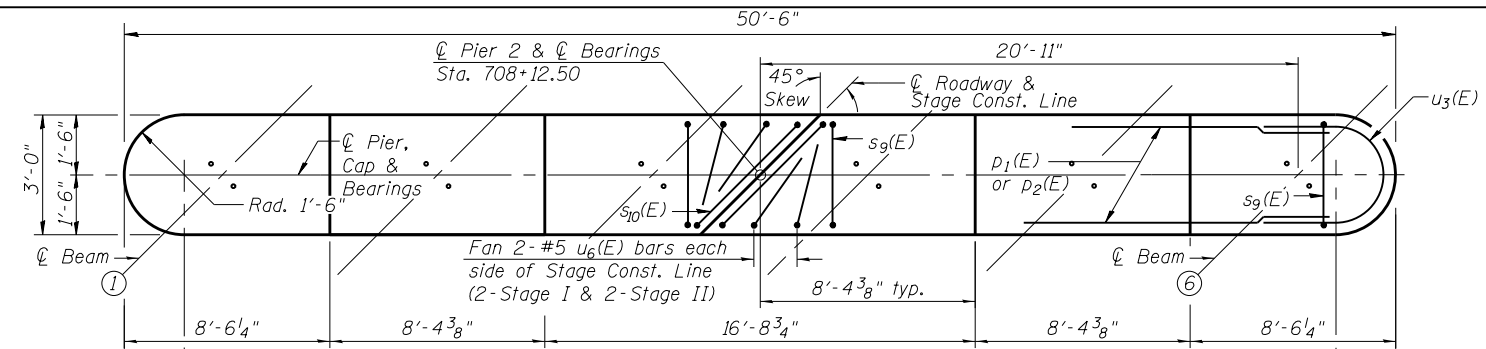
Notes:  
 Space reinforcement in cap to miss anchor bolts. Pour steps monolithically with cap.  
 For details of piles, see sheet 29 of 36.  
 See sheet 24 of 36 for Bar u1(E) details.  
 Location of the Test Pile shall be in a production location for Pier 1, and shall be selected based on coordination with the Engineer.  
 See sheet 28 of 36 for Bars s6(E) & s7(E) details.

FILE NAME = F:\Projects\DOT PROJECTS\13-052-4 Bridge\Drawings\CADD\_Sheets\0180067-74324.dgn

**PILE DATA**

Type: Steel HP 14x89  
 Nominal Required Bearing: 291 kips  
 Factored Resistance Available: 159 kips  
 Est. Length: 83 ft  
 No. Production Piles: 17  
 No. Test Piles: 1

- \* Includes 1 bar in each line within the footing.
- \*\* n(E) & n<sub>1</sub>(E) bars shall be spaced alternately, and shall be mechanically spliced with v<sub>8</sub>(E) bars.
- \*\*\* Trim Bar Splicers and t<sub>1</sub>(E) bars to fit inside footing. Use 1 full length t<sub>1</sub>(E) bar and 7 splicers each side of Pier 2 centerline.

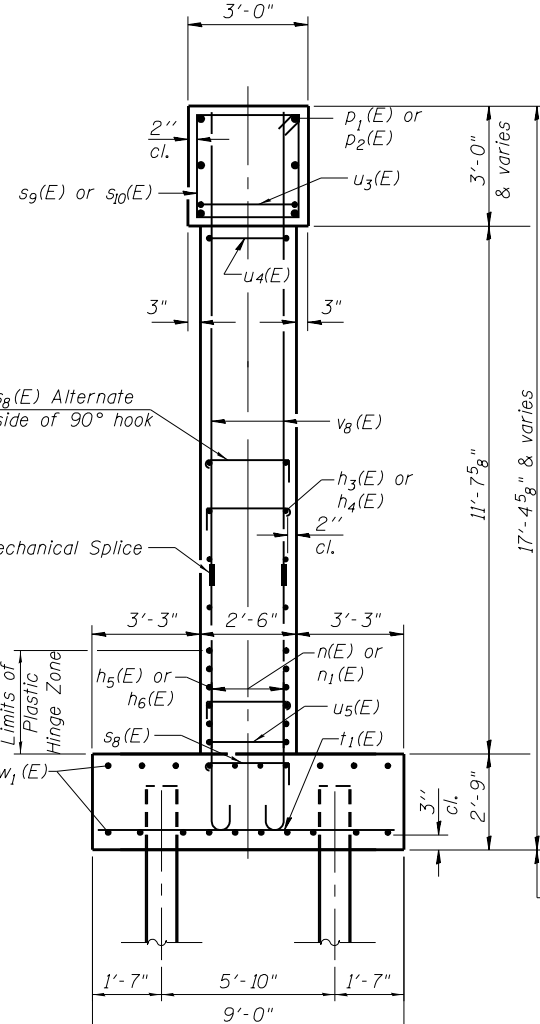


**TOP PLAN**

**BARS n(E) & n<sub>1</sub>(E)**

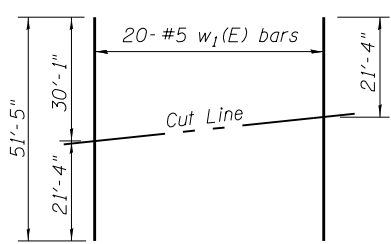
**BARS s<sub>9</sub>(E) & s<sub>10</sub>(E)**

**PILE TOP DETAIL**



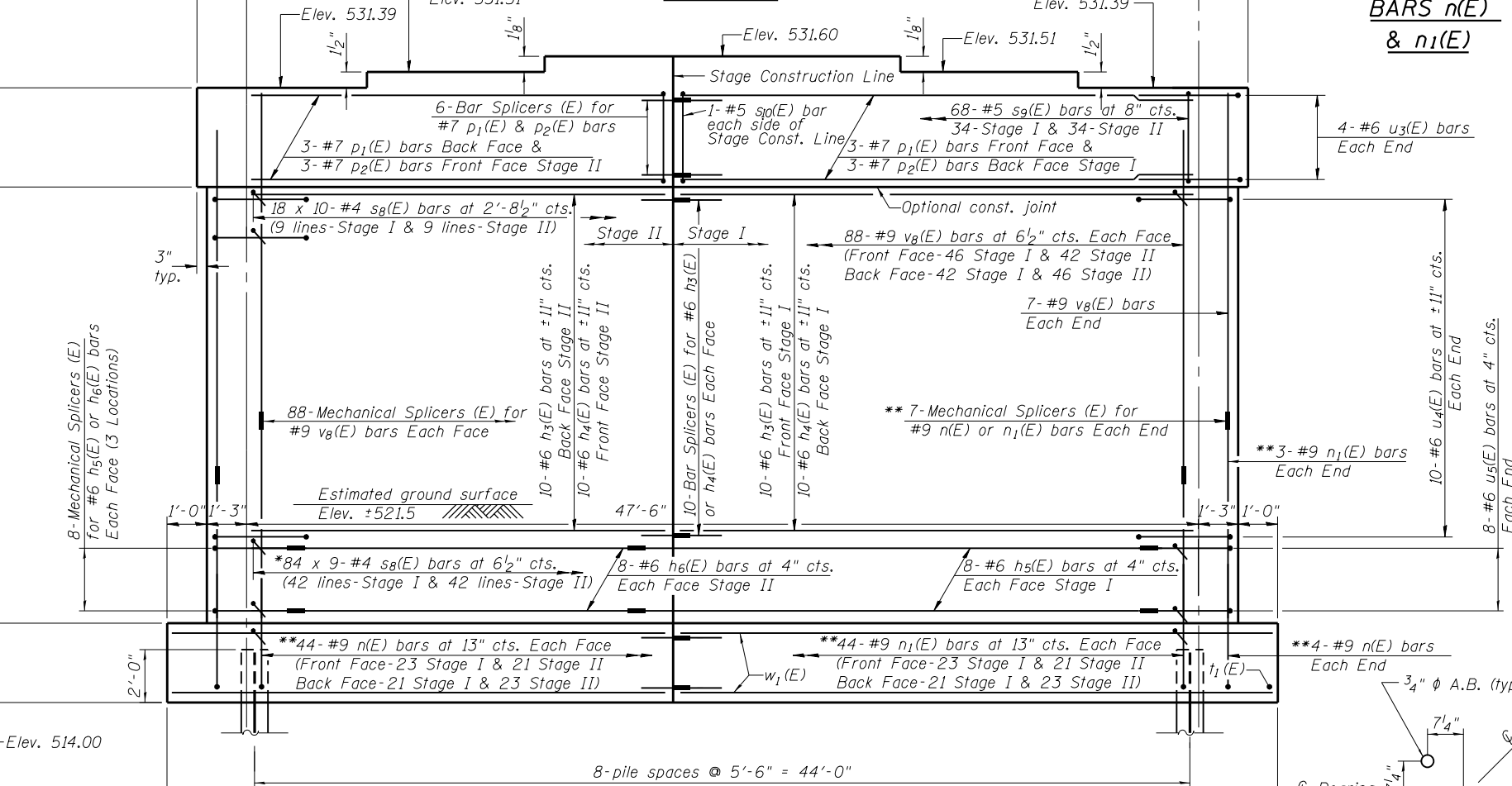
**END VIEW**

See Pile Top Detail this sheet.



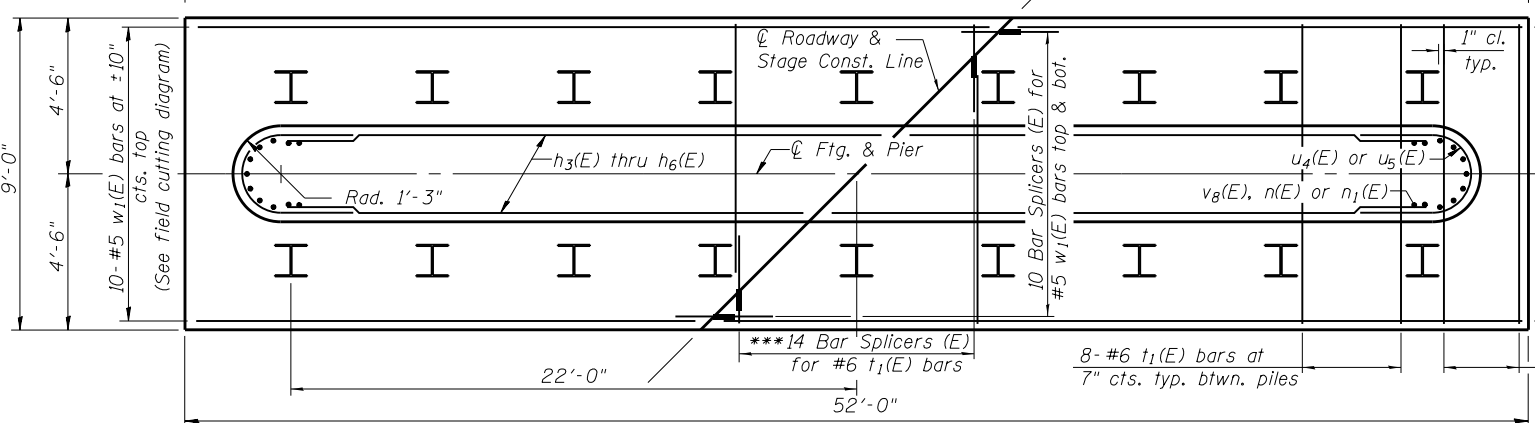
**FIELD CUTTING DIAGRAM**

Order w<sub>1</sub>(E) full length. Cut as shown and use remainder of bars in Stage II.

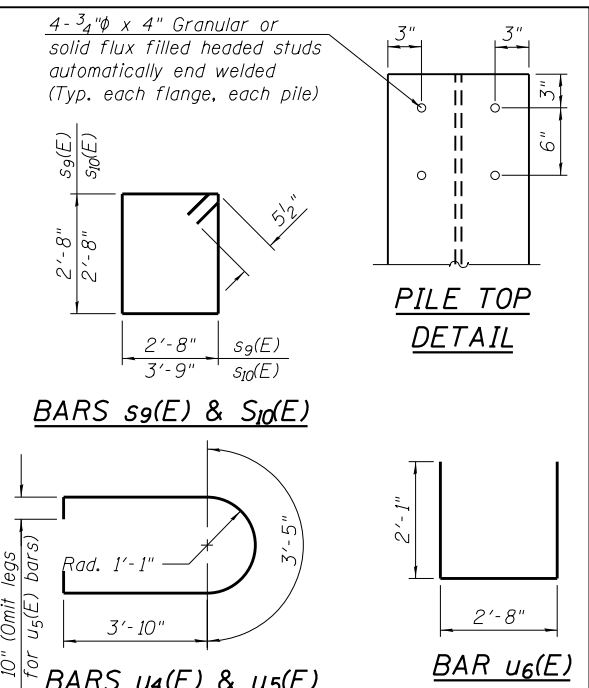


**ELEVATION**  
(Looking South)

**ANCHOR BOLT PATTERN DETAIL**



**FOOTING PLAN**



**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h <sub>3</sub> (E)	20	#6	24'-9"	—
h <sub>4</sub> (E)	20	#6	22'-8"	—
h <sub>5</sub> (E)	16	#6	22'-2"	—
h <sub>6</sub> (E)	16	#6	17'-8"	—
n(E)	96	#9	8'-9"	U
n <sub>1</sub> (E)	94	#9	7'-3"	U
p <sub>1</sub> (E)	6	#7	25'-0"	—
p <sub>2</sub> (E)	6	#7	22'-5"	—
s <sub>8</sub> (E)	936	#4	3'-1"	┌
s <sub>9</sub> (E)	68	#5	11'-7"	┌
s <sub>10</sub> (E)	2	#5	13'-9"	┌
t <sub>1</sub> (E)	76	#6	8'-6"	—
u <sub>3</sub> (E)	8	#6	8'-7"	U
u <sub>4</sub> (E)	20	#6	12'-9"	U
u <sub>5</sub> (E)	16	#6	11'-1"	U
u <sub>6</sub> (E)	4	#5	6'-10"	┌
v <sub>8</sub> (E)	190	#9	9'-5"	—
w <sub>1</sub> (E)	20	#5	51'-5"	—

Structure Excavation	Cu. Yd.	202
Concrete Structures	Cu. Yd.	118.2
Reinforcement Bars, Epoxy Coated	Pound	19820
Furnishing Steel Piles HP 14x89	Foot	1411
Driving Piles	Foot	1411
Test Pile Steel HP 14x89	Each	1

Notes:  
 Space reinforcement in cap to miss anchor bolts. Pour steps monolithically with cap.  
 For details of piles, see sheet 29 of 36.  
 Bars indicated thus 10 x 10-#4 etc. on this sheet indicates 10 lines of 10 bars per line. Locate each bar in a line at the horizontal bar spacing.  
 See sheet 26 of 36 for Bar s<sub>8</sub>(E) and Bar u<sub>3</sub>(E) details. Location of the Test Pile shall be in a production location for Pier 2, and shall be selected based on coordination with the Engineer.

FILE NAME = F:\Projects\DOT PROJECTS\13-952-4 Bridge Drawings\CADD\_Sheets\0180067-74324.dgn

McDonough-Whitlow, P.C.  
 Consulting Engineers & Land Surveyors  
 PROFESSIONAL DESIGN No. 184-002754

USER NAME = Jim	DESIGNED - CMF	REVISD -
PLOT SCALE = 0:2.0000 "1" / 1in.	CHECKED - TMM	REVISD -
PLOT DATE = 1/23/2015	DRAWN - RNH	REVISD -
	CHECKED - TMM	REVISD -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

PIER 2 DETAILS  
 STRUCTURE NO. 018-0067

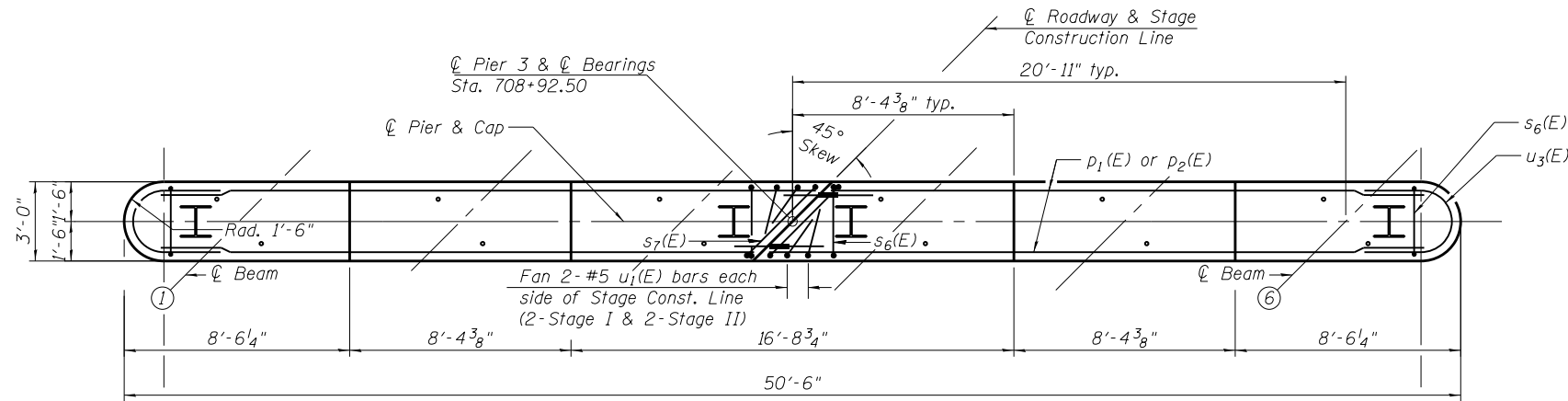
SHEET NO. 27 OF 36 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
116	(113)BIB-1	CUMBERLAND	83	52
CONTRACT NO. 74324				

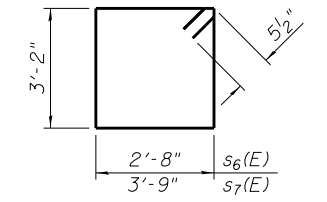
ILLINOIS FED. AID PROJECT

**PILE DATA**

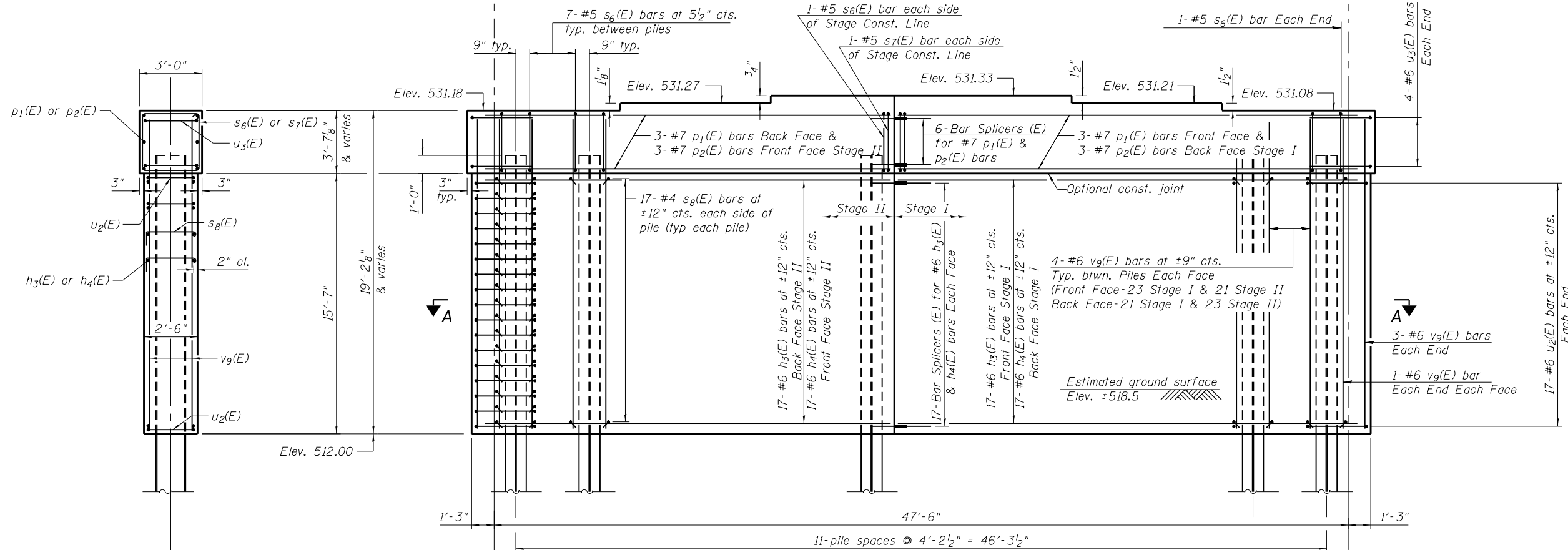
Type: Steel HP14x89  
 Nominal Required Bearing: 412 kips  
 Factored Resistance Available: 219 kips  
 Est. Length: 106 ft  
 No. Production Piles: 11  
 No. Test Piles: 1



**TOP PLAN**

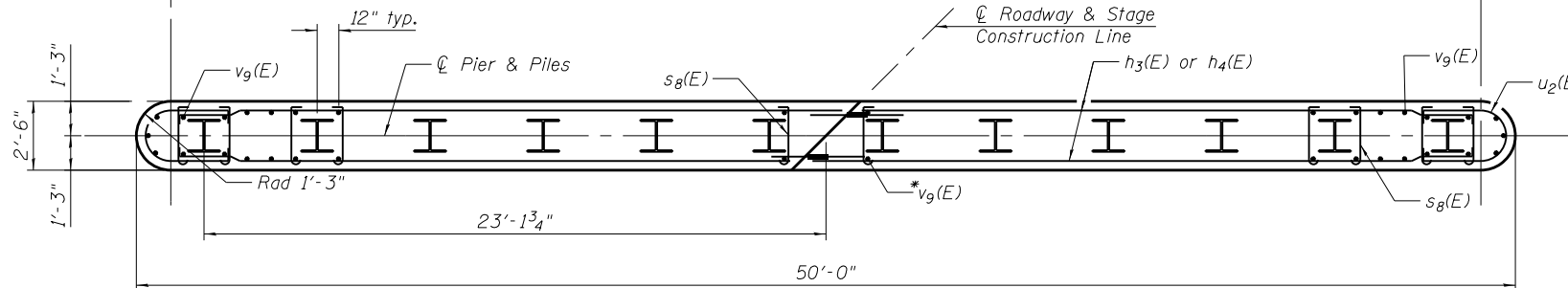


**BARS s6(E) & s7(E)**



**ELEVATION**  
(Looking South)

**END VIEW**



**SECTION A-A**

\* Adjust location of v9(E) bars at piles adjacent to the Stage Construction Line to facilitate placement of s8(E) bars.

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h3(E)	34	#6	24'-9"	—
h4(E)	34	#6	22'-8"	—
p1(E)	6	#7	25'-0"	—
p2(E)	6	#7	22'-5"	—
s6(E)	74	#5	12'-7"	□
s7(E)	2	#5	14'-9"	□
s8(E)	408	#4	3'-1"	┌
u1(E)	4	#5	7'-10"	U
u2(E)	34	#6	8'-5"	U
u3(E)	8	#6	8'-7"	U
v9(E)	98	#6	18'-8"	—
Cofferdam Excavation		Cu. Yd.	141	
Cofferdam (Type 1) (Location-1)		Each	1	
Concrete Structures		Cu. Yd.	91.6	
Reinforcement Bars, Epoxy Coated		Pound	8160	
Furnishing Steel Piles HP 14x89		Foot	1166	
Driving Piles		Foot	1166	
Test Pile Steel HP 14x89		Each	1	

Notes:  
 Space reinforcement in cap to miss anchor bolts. Pour steps monolithically with cap.  
 For details of piles, see sheet 29 of 36.  
 See sheet 24 of 36 for Bar u1(E) details.  
 Location of the Test Pile shall be in a production location for Pier 3, and shall be selected based on coordination with the Engineer.  
 See sheet 26 of 36 for Bars s8(E), u2(E), & u3(E) details and for the Anchor Bolt Pattern Detail.

FILE NAME = F:\Projects\DOT PROJECTS\13-052-4 Bridge\Drawings\CADD\_Sheets\0180067-74324.dgn

McDonough-Whitlow, P.C.  
 Consulting Engineers & Land Surveyors  
 PROFESSIONAL DESIGN No. 184-002754

USER NAME =	Jim	DESIGNED -	CMF	REVISED -	
CHECKED -	TMM	REVISIONS -			
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PLOT DATE =	1/23/2015	CHECKED -	TMM	REVISED -	

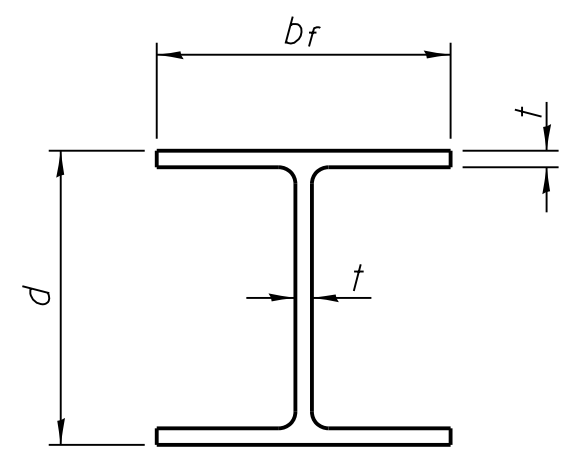
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**PIER 3 DETAILS**  
**STRUCTURE NO. 018-0067**

SHEET NO. 28 OF 36 SHEETS

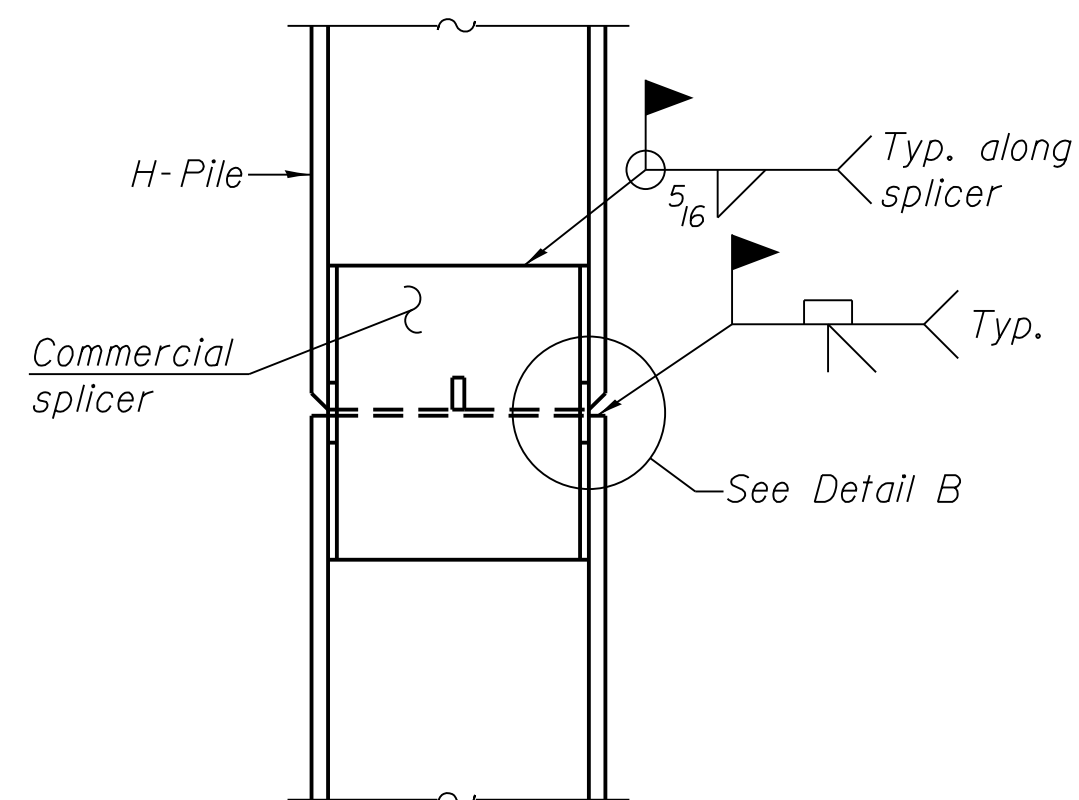
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
116	(113B)B-1	CUMBERLAND	83	53
CONTRACT NO. 74324				

ILLINOIS FED. AID PROJECT

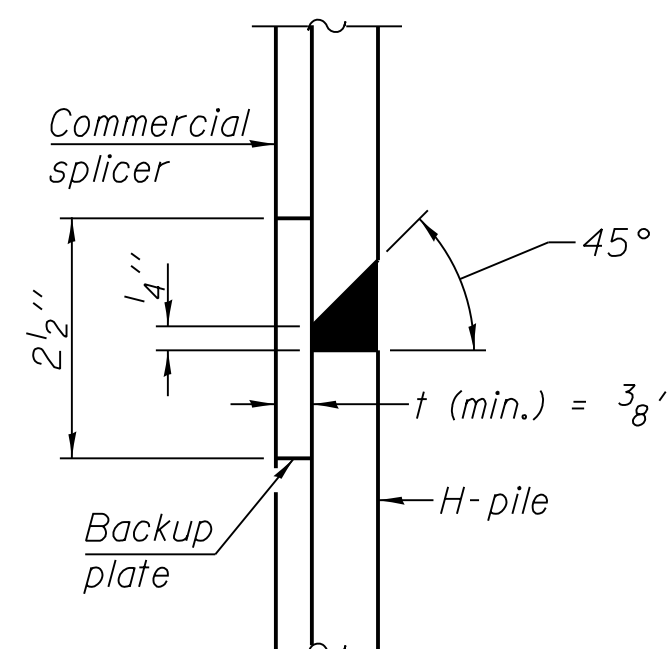


**STEEL PILE TABLE**

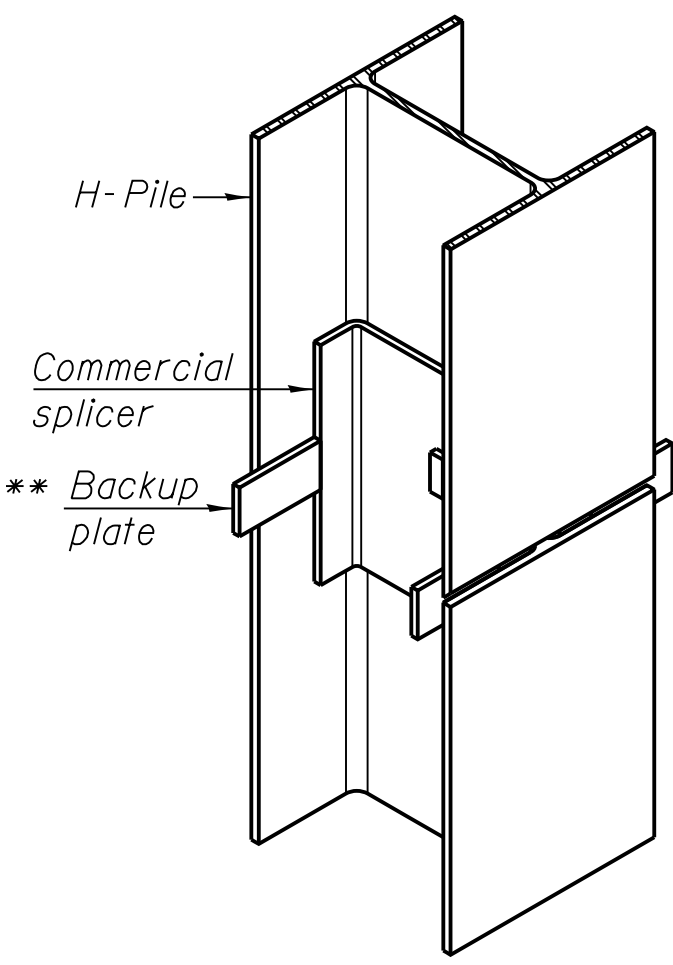
Designation	Depth d	Flange width br	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	1 3/16"	30"
x102	14"	14 3/4"	1/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"
x53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



**ELEVATION**

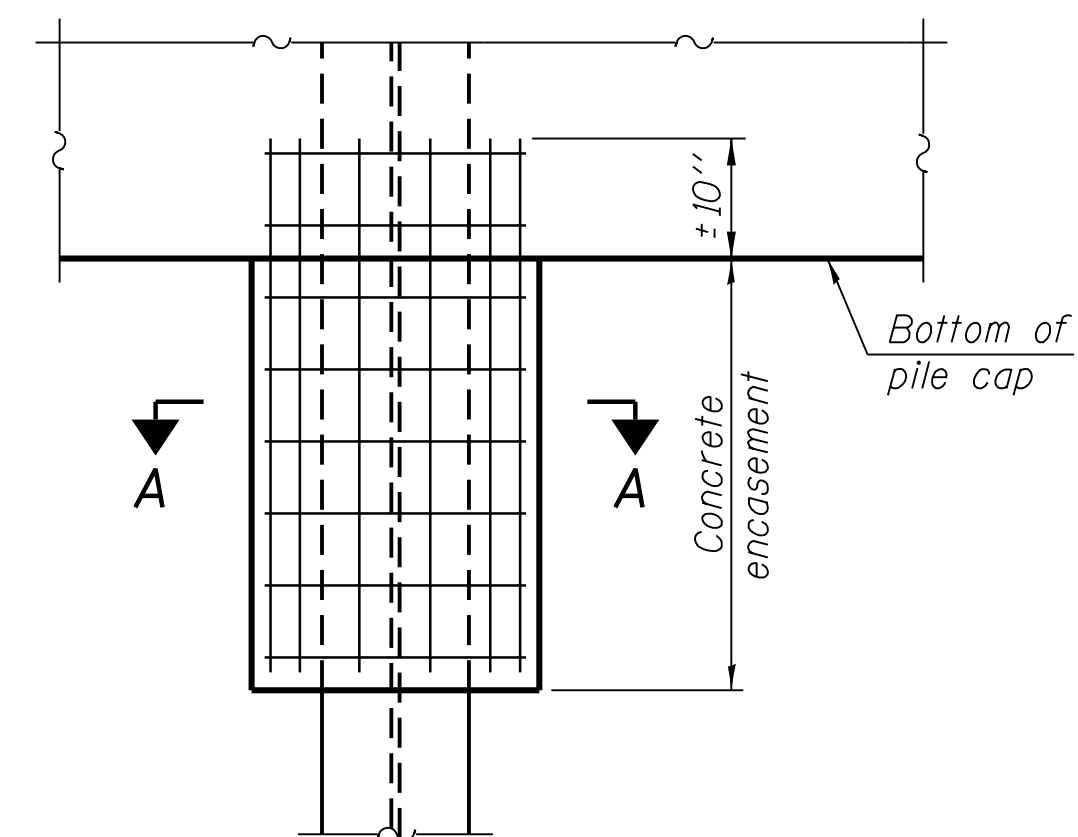


**DETAIL "B"**



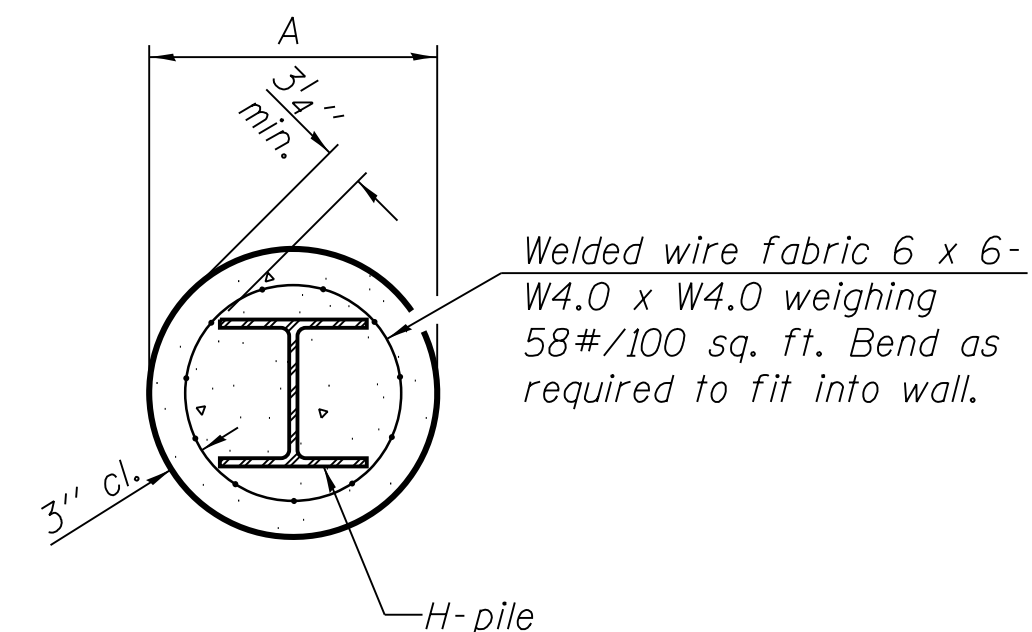
**ISOMETRIC VIEW**

**WELDED COMMERCIAL SPLICE**



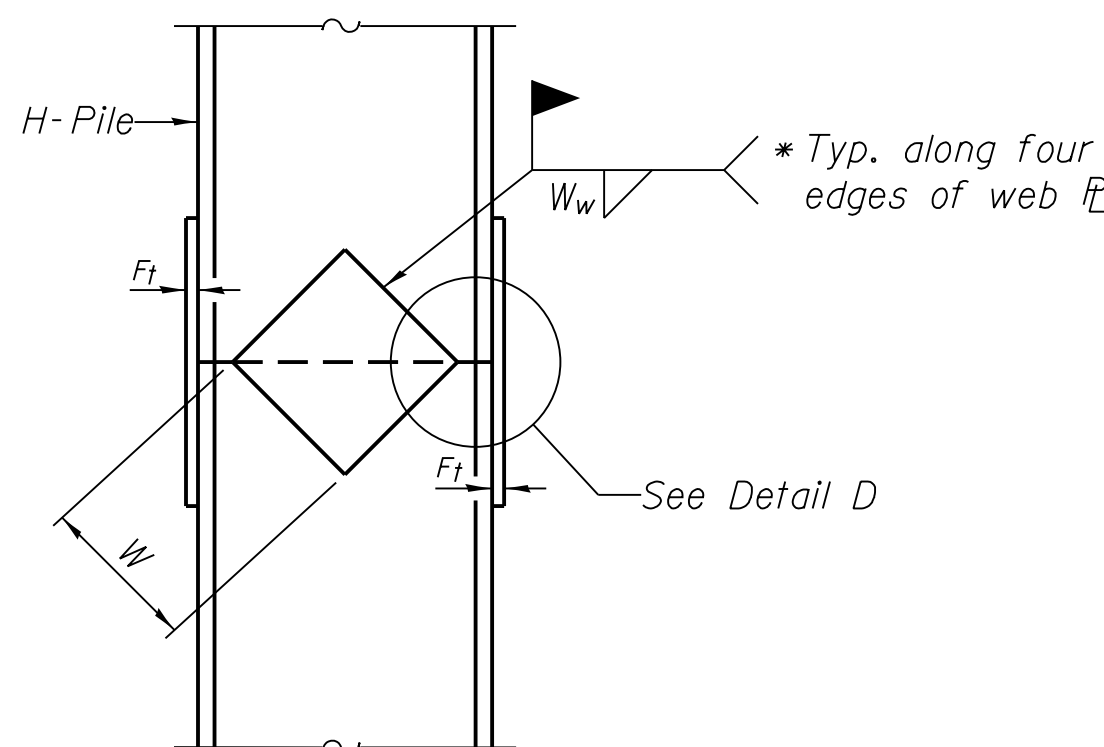
**ELEVATION**

**PILE ENCASEMENT**

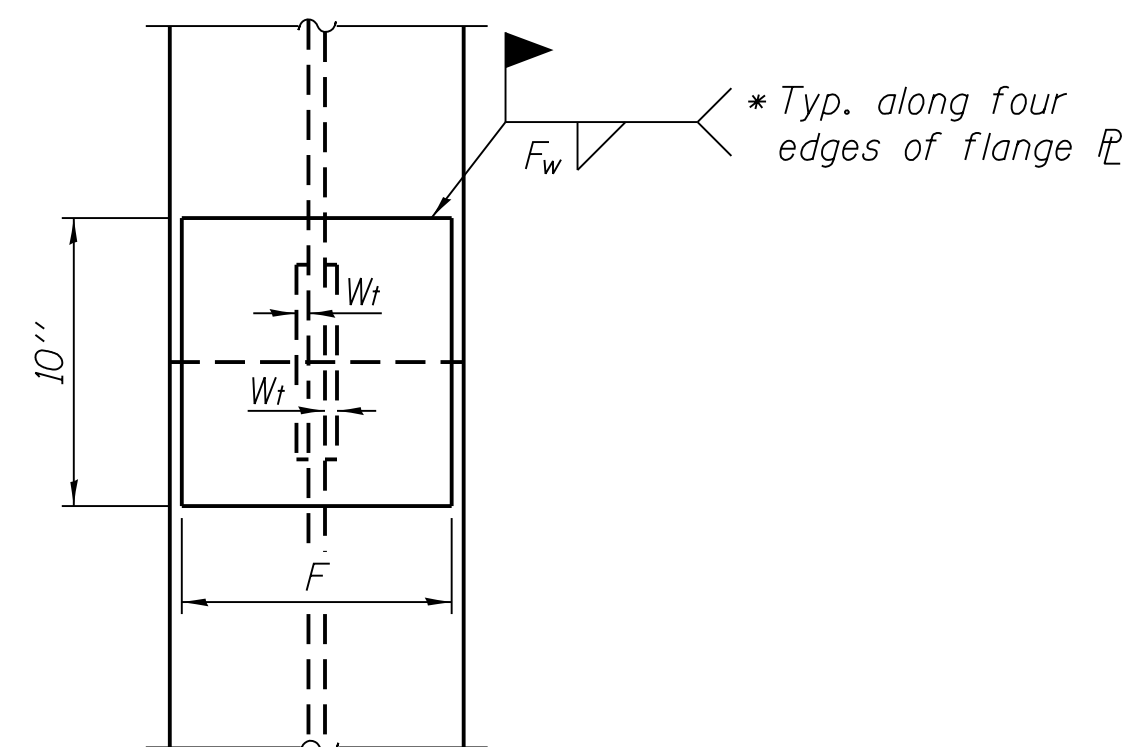


**SECTION A-A**

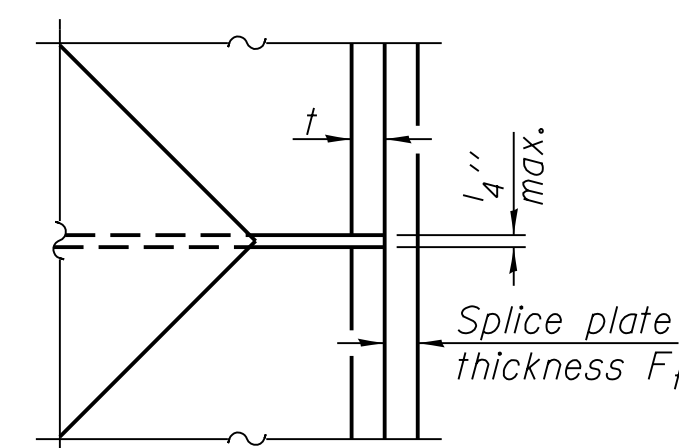
Note: Forms for encasement may be omitted when soil conditions permit.



**ELEVATION**



**END VIEW**



**DETAIL D**

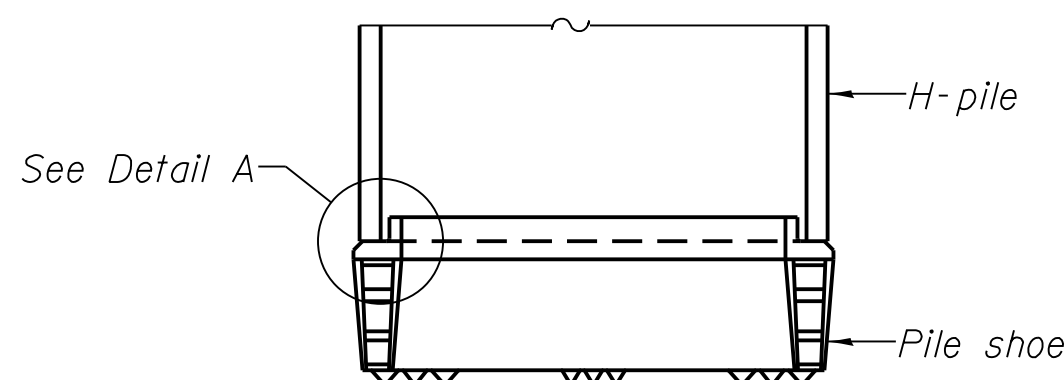
**WELDED PLATE FIELD SPLICE**

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

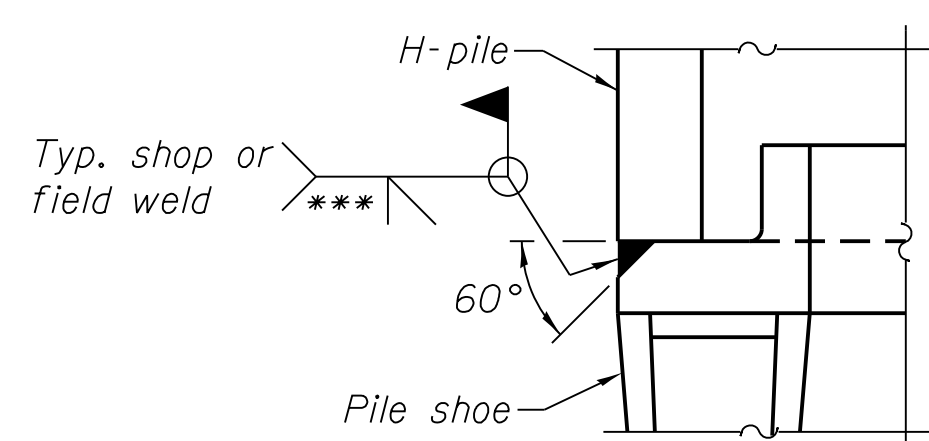
**WELDED COMMERCIAL SPLICE ALTERNATE**

- \* 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.).

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

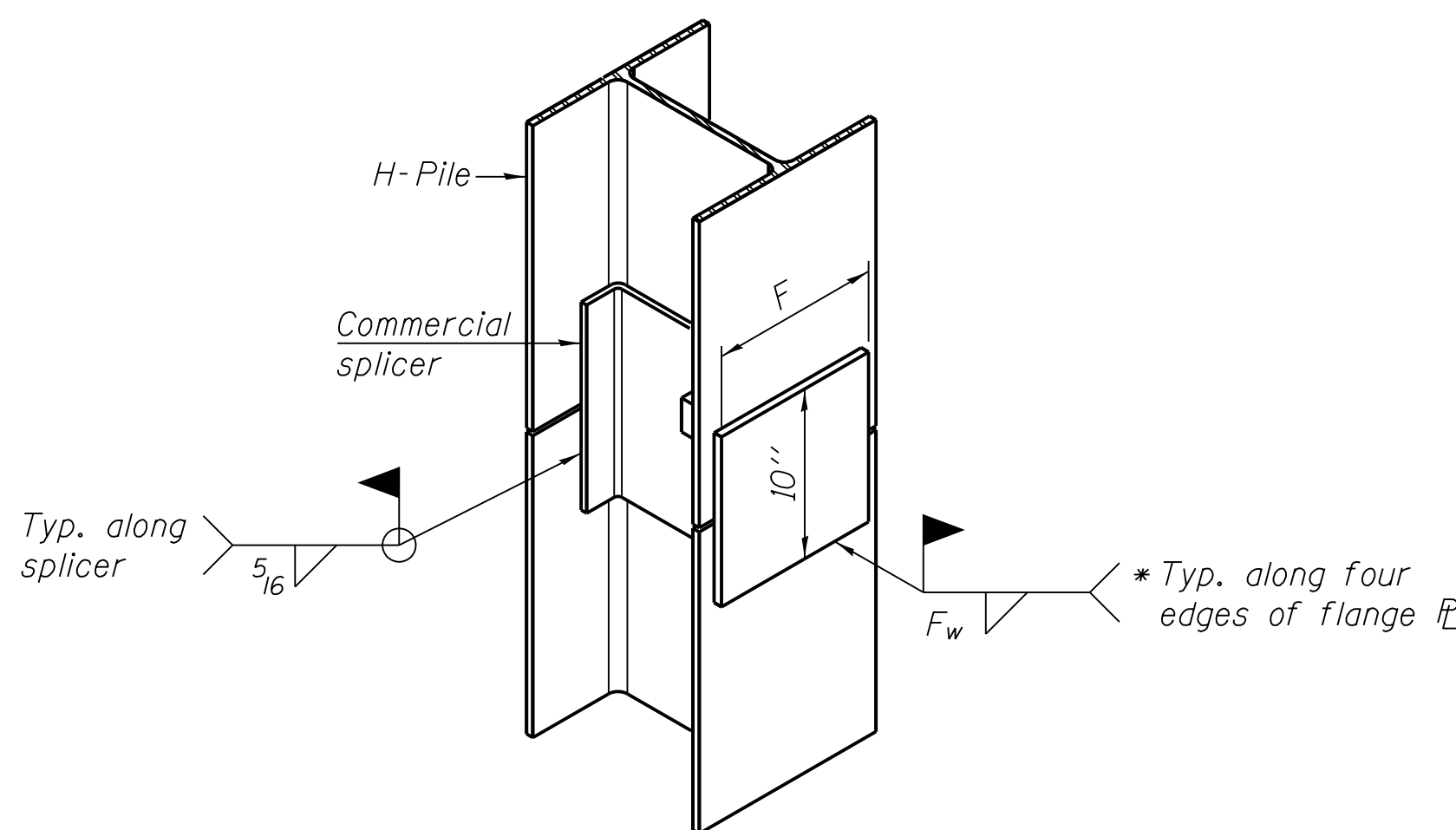


**ELEVATION**



**DETAIL A**

**H-PILE SHOE ATTACHMENT**



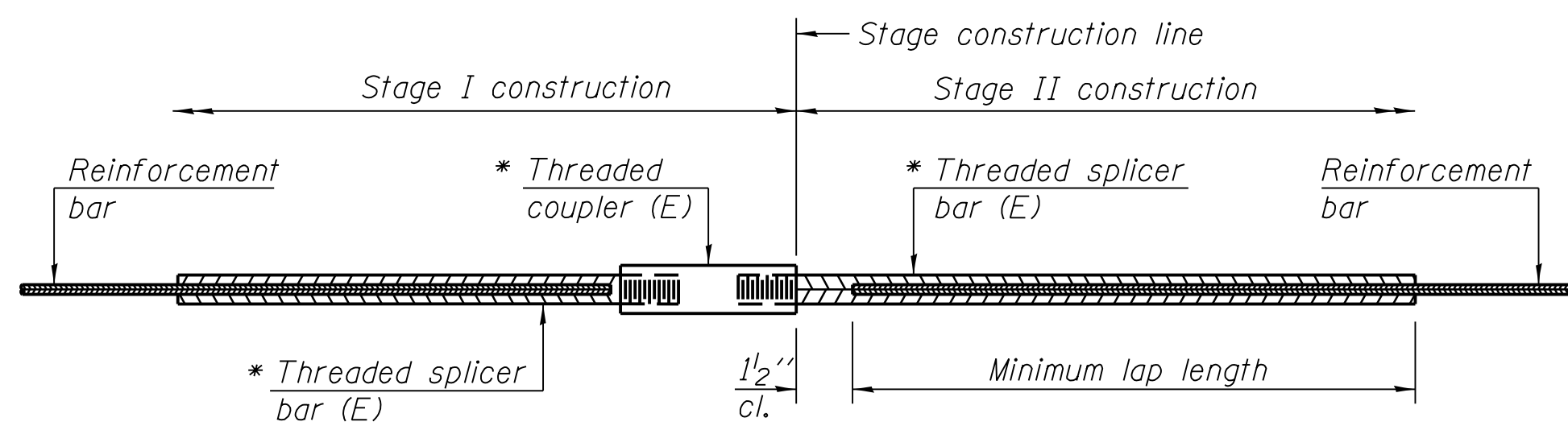
**ISOMETRIC VIEW**

**WELDED COMMERCIAL SPLICE ALTERNATE**

- \* Interrupt welds 1/4" from end of web and/or each flange.
- \*\* Remove portions of backup plates that extend outside the flanges.
- \*\*\* Weld size per pile shoe manufacturer (5/16" min.).

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

FILE NAME = I:\1001\6008 - D7 Ver. Ver\Work Order 4 - IL 130 Structure Plans\CADD\_Structural\piles.dgn



**STANDARD BAR SPLICER ASSEMBLY**

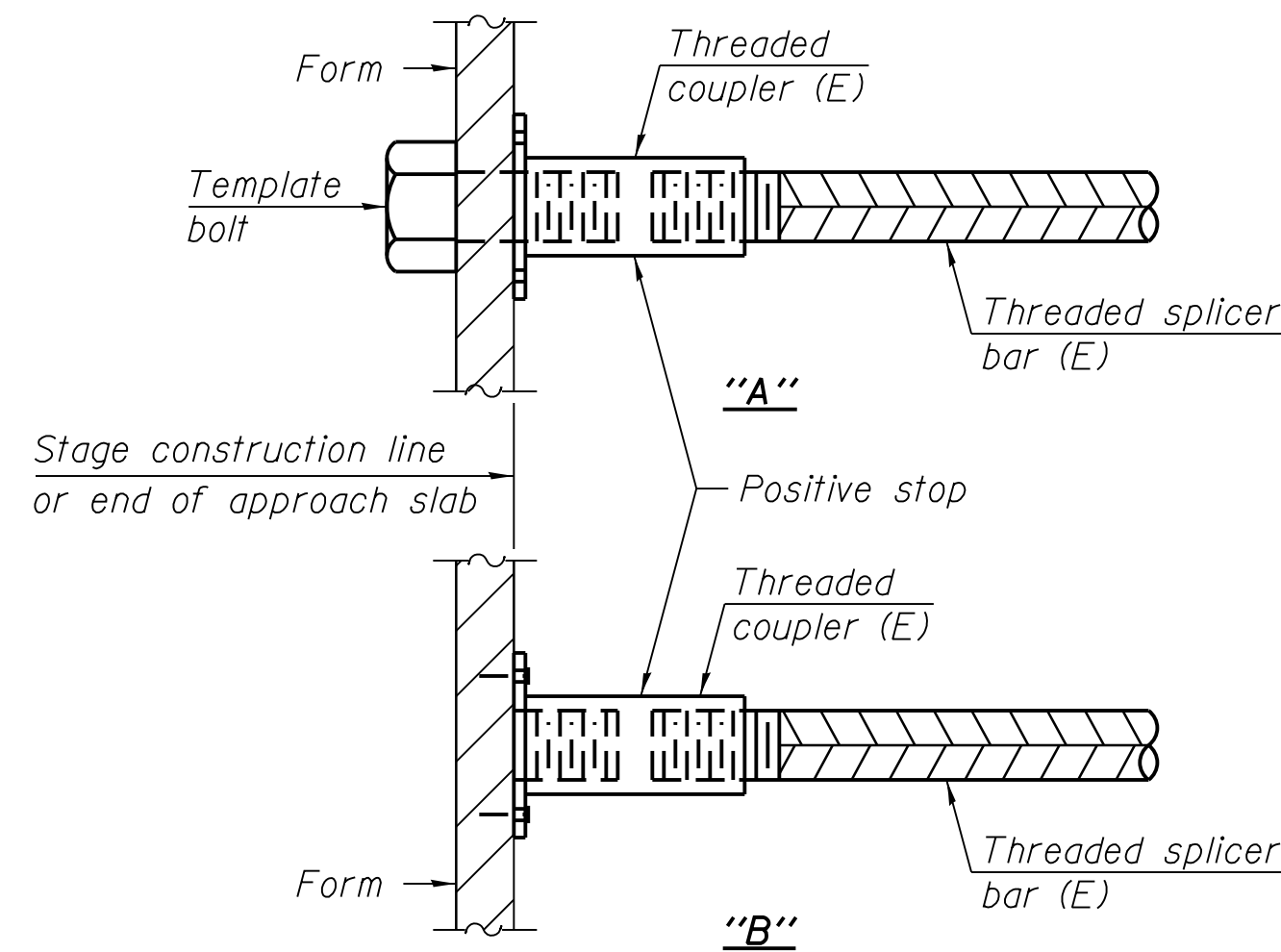
Minimum Lap Lengths						
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-7"	2'-11"
5	1'-9"	2'-5"	2'-7"	2'-11"	3'-3"	3'-8"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-10"	4'-5"
7	2'-9"	3'-10"	4'-2"	4'-8"	5'-2"	5'-10"
8	3'-8"	5'-1"	5'-5"	6'-2"	6'-9"	7'-8"
9	4'-7"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

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

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

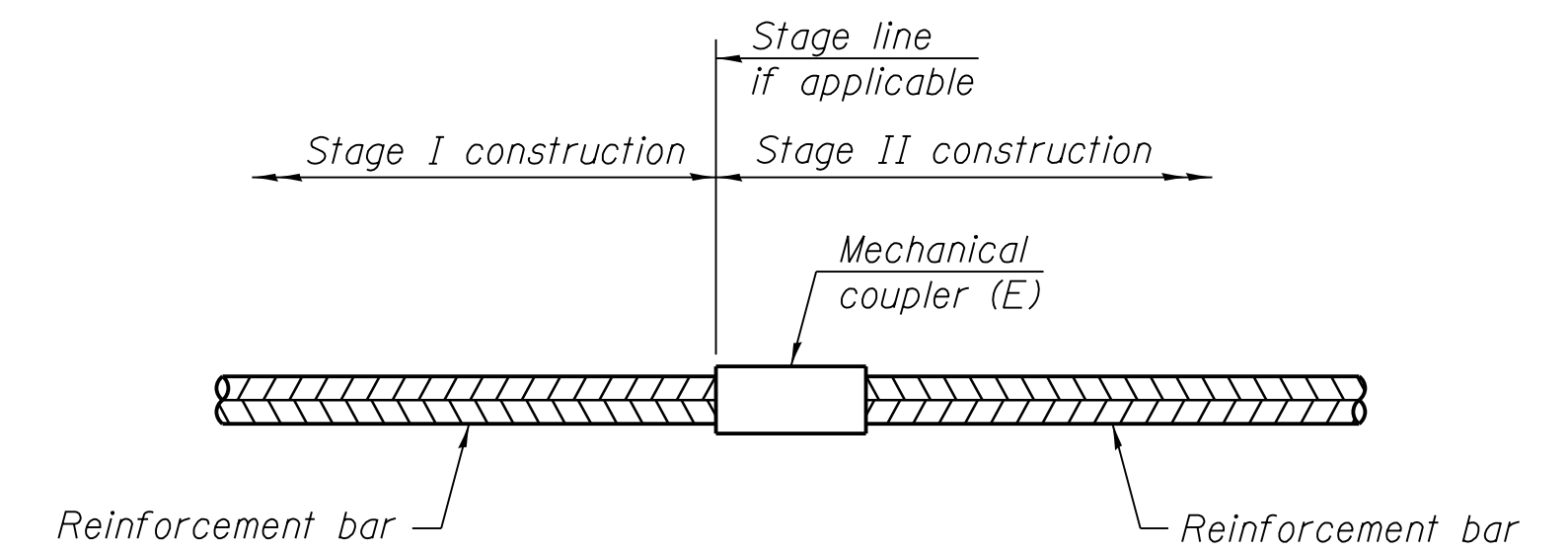
\* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
Deck	#5	1114	3
Diaphragms	#6	14	4
Approach Slab	#4	62	3
Approach Footing	#5	80	3
N. Abutment	#7	10	4
S. Abutment	#7	10	4
Pier 1	#7	6	4
Pier 1	#6	24	4
Pier 2	#7	6	4
Pier 2	#6	34	4
Pier 2	#5	20	4
Pier 3	#7	6	4
Pier 3	#6	34	4



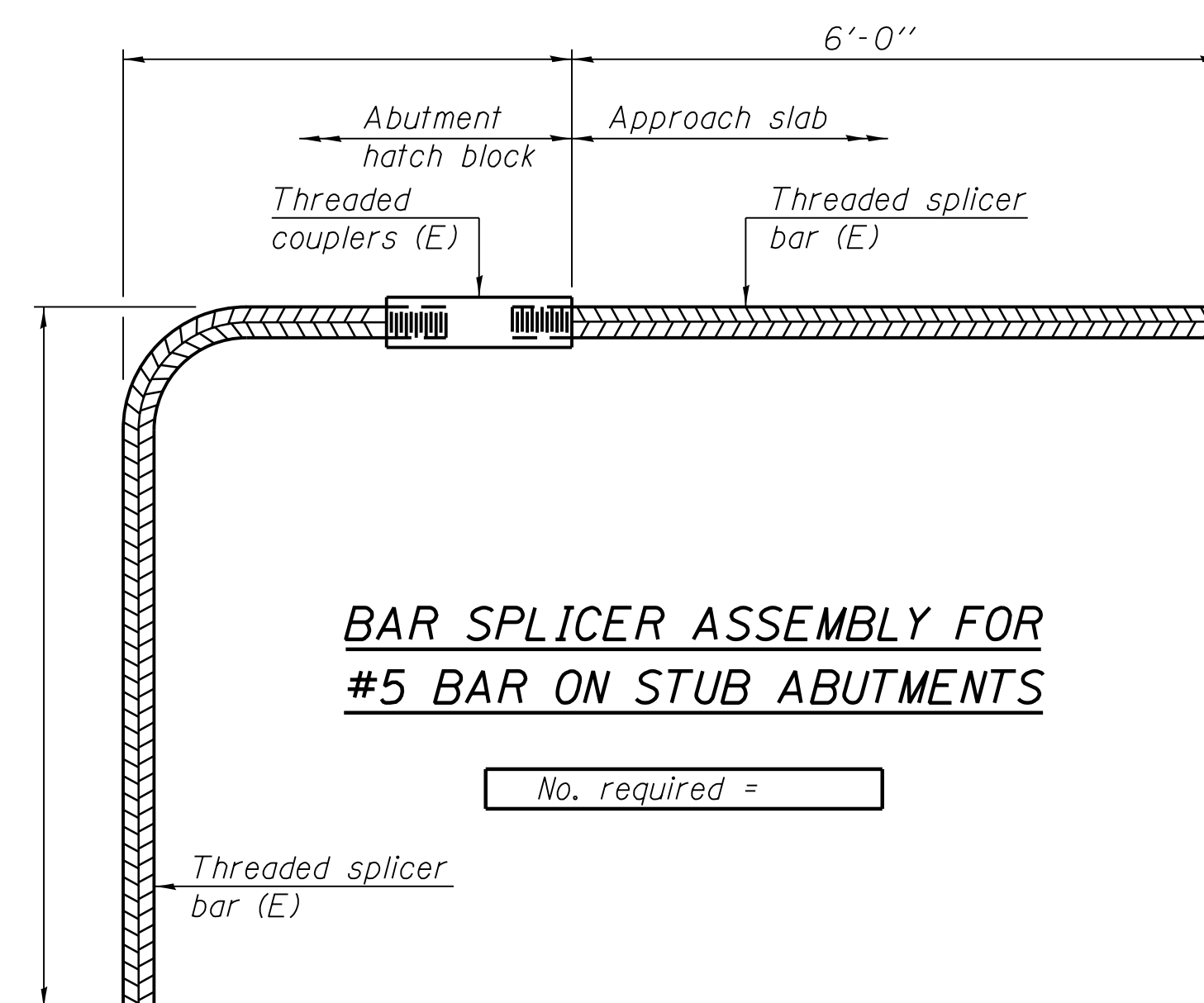
**INSTALLATION AND SETTING METHODS**

"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
Pier 2	#9	190
Pier 2	#6	48



**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 approved list of bar splicer assemblies and mechanical splicers for alternatives.

FILE NAME = I:\1001\6008 - D7 Ver. Ver-Work Order 4 - IL 130 Structure Plans\CADD\_Structural\barsplicer.dgn

BSD-1

8-31-12



USER NAME = rking  
 PLOT TIME = 11:38:36 AM  
 PLOT SCALE = 1:0.0000 '1' / 1"  
 PLOT DATE = 2/4/2015

DESIGNED - JMB  
 CHECKED - ACB  
 DRAWN - RLK  
 CHECKED - JMB

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS  
 STRUCTURE NO. 018-0067

SHEET NO. 30 OF 36 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
116	(113B)B-1	CUMBERLAND	83	55
	SN. 018-0067			

CONTRACT NO. 74324  
 ILLINOIS FED. AID PROJECT



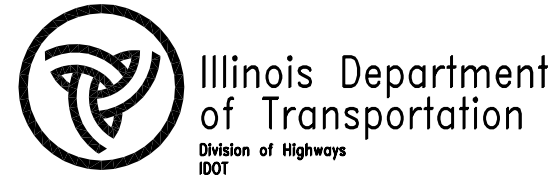
SOIL BORING LOG

Date 9/13/11

ROUTE FAP 116 (IL 130) DESCRIPTION Range Creek LOGGED BY E. Sandschafer
SECTION (113B)B-1 LOCATION Sec 35 - NE 1/4, Sec 36 - NW 1/4, SEC. , TWP. 9 N, RNG. 9 E, 3 PM
COUNTY Cumberland DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

Table with columns for Soil Description, Depth (ft), and SPT values (Blows/6" / (ft) / 6" (tsf) (%) for D, B, U, M categories.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated)
Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Sealing
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-99)



SOIL BORING LOG

Date 9/13/11

ROUTE FAP 116 (IL 130) DESCRIPTION Range Creek LOGGED BY E. Sandschafer
SECTION (113B)B-1 LOCATION Sec 35 - NE 1/4, Sec 36 - NW 1/4, SEC. , TWP. 9 N, RNG. 9 E, 3 PM
COUNTY Cumberland DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

Table with columns for Soil Description, Depth (ft), and SPT values (Blows/6" / (ft) / 6" (tsf) (%) for D, B, U, M categories.

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



SOIL BORING LOG

Date 9/13/11

ROUTE FAP 116 (IL 130) DESCRIPTION Range Creek LOGGED BY E. Sandschafer
SECTION (113B)B-1 LOCATION Sec 35 - NE 1/4, Sec 36 - NW 1/4, SEC. , TWP. 9 N, RNG. 9 E, 3 PM
COUNTY Cumberland DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

Table with columns for Soil Description, Depth (ft), and SPT values (Blows/6" / (ft) / 6" (tsf) (%) for D, B, U, M categories.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated)
Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Sealing
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)

FILE NAME = I:\DOT\6008 - D7 Ver. Ver\Work Order 4 - IL 130 Structure Plans\CADD\_Structural\borings\1.dgn



Table with columns for USER NAME, DESIGNED, CHECKED, DRAWN, PLOT DATE, REVISED, and CHECKED.

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS STRUCTURE NO. 018-0067

SHEET NO. 31 OF 36 SHEETS

Table with columns for F.A.P. RTE., SECTION, COUNTY, TOTAL SHEETS, SHEET NO., CONTRACT NO., and STA.





SOIL BORING LOG

Date 9/1/11

ROUTE FAP 116 (IL 130) DESCRIPTION Range Creek LOGGED BY E. Sandschafer
SECTION (113B)B-1 LOCATION Sec 35 - NE 1/4, Sec 36 - NW 1/4, SEC. TWP. 9 N, RNG. 9 E, 3 PM
COUNTY Cumberland DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

Table with columns for Depth (ft), Soil Description, and Soil Properties (D, B, U, M, S, Qu, T). Includes data for Surface Water Elev., Stream Bed Elev., Groundwater Elev., and various soil types like SILTY LOAM, SANDY LOAM, and CLAY LOAM.

File Name: \\s:\projects\1130\1130-0067\1130-0067.dwg Date Plotted: 9/1/11
Plot Date: 9/1/11 11:41:05 AM
Plot Scale: 1.0000' = 1"
Plot Date: 2/4/2015

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated)
Abbreviations W.O.H - Sampler Advanced by Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Sealing
The SPT (N value) is the sum of the last two blow values in each sampling zone (ASTM 1206) BBS, from 137 (Rev. 8-99)



SOIL BORING LOG

Date 9/1/11

ROUTE FAP 116 (IL 130) DESCRIPTION Range Creek LOGGED BY E. Sandschafer
SECTION (113B)B-1 LOCATION Sec 35 - NE 1/4, Sec 36 - NW 1/4, SEC. TWP. 9 N, RNG. 9 E, 3 PM
COUNTY Cumberland DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

Table with columns for Depth (ft), Soil Description, and Soil Properties (D, B, U, M, S, Qu, T). Includes data for Surface Water Elev., Stream Bed Elev., Groundwater Elev., and various soil types like SANDY LOAM, CLAY LOAM, and SILTY CLAY.

File Name: \\s:\projects\1130\1130-0067\1130-0067.dwg Date Plotted: 9/1/11
Plot Date: 9/1/11 11:41:05 AM
Plot Scale: 1.0000' = 1"
Plot Date: 2/4/2015

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated)
Abbreviations W.O.H - Sampler Advanced by Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Sealing
The SPT (N value) is the sum of the last two blow values in each sampling zone (ASTM 1206) BBS, from 137 (Rev. 8-99)

FILE NAME = I:\DOT\6008 - D7 Ver-Work Order - IL 130 Structure Plans\CADD\_Structural\borings\1.dwg



Table with columns for USER NAME, DESIGNED, CHECKED, DRAWN, PLOT DATE, REVISED, and CHECKED.

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS STRUCTURE NO. 018-0067 SHEET NO. 32 OF 36 SHEETS

Table with columns for F.A.P. RTE., SECTION, COUNTY, TOTAL SHEETS, SHEET NO., STA., and CONTRACT NO.



FILE NAME = I:\DOT\6008 - D7 Ver-Work-Order 4 - IL 130 Structure Plans\CADD\_Structural\borings\1.dgn

**Illinois Department of Transportation**  
Division of Highways

## SOIL BORING LOG

Page 1 of 4  
Date 9/7/11

ROUTE FAP 116 (IL 130) DESCRIPTION Range Creek LOGGED BY E. Sandschafer  
SECTION (113B)B-1 LOCATION Sec 35 - NE 1/4, Sec 36 - NW 1/4, SEC. TWP. 9 N, RNG. 9 E, 3 PM  
COUNTY Cumberland DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO. 018-0067 DEPTWTHS Qu S  
Station 708+12.50 E L C O I  
BORING NO. 3 (P2) H S Qu S  
Station 708+99 T W S Qu S  
Offset 63.0ft RI T H S Qu S  
Ground Surface Elev. 523.79 ft (ft) /6" (tsf) (%)

Soil Description	Depth (ft)	Bulge (ft)	Shear (tsf)	Penetrometer (lb)	Soil Description	Depth (ft)	Bulge (ft)	Shear (tsf)	Penetrometer (lb)
Soft to medium, damp, brown, SANDY LOAM.	0-4			0.1	Very soft, damp, gray, SANDY LOAM. (continued)	0-1			0.1
	4-10	0.5	13			1-2			24
	10-11				Loose to medium, wet, gray, fine grained, SAND. 8% passing #200 sieve.	2-3			19
	11-12					3-4			
	12-13					4-5			
	13-14					5-6			
	14-15					6-7			
	15-16					7-8			
	16-17					8-9			
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	88-89					80-81			
	89-90					81-82			
	90-91					82-83			
	91-92					83-84			
	92-93					84-85			
	93-94					85-86			
	94-95					86-87			
	95-96					87-88			
	96-97					88-89			
	97-98					89-90			
	98-99					90-91			
	99-100					91-92			

504.29 484.29

Gray, fine grained, SAND. \* 15% passing #200 sieve. (continued)

464.29 463.79

File Name: \\s:\dot\6008 - D7 Ver-Work-Order 4 - IL 130 Structure Plans\CADD\_Structural\borings\1.dgn  
Date: 09/07/11 10:00:00 AM  
User: E. Sandschafer  
Printer: E. Sandschafer  
Plotter: HP DesignJet 5000 Series  
Scale: 1:1  
Sheet: 1 of 4

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated)  
Abbreviations W.O.H - Sampler Advanced by Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Sealing  
The SPT (N value) is the sum of the last two blow values in each sampling zone (ASTM 1206) BBS, from 137 (Rev. 8-99)

**Illinois Department of Transportation**  
Division of Highways

## SOIL BORING LOG

Page 2 of 4  
Date 9/7/11

ROUTE FAP 116 (IL 130) DESCRIPTION Range Creek LOGGED BY E. Sandschafer  
SECTION (113B)B-1 LOCATION Sec 35 - NE 1/4, Sec 36 - NW 1/4, SEC. TWP. 9 N, RNG. 9 E, 3 PM  
COUNTY Cumberland DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO. 018-0067 DEPTWTHS Qu S  
Station 708+12.50 E L C O I  
BORING NO. 3 (P2) H S Qu S  
Station 708+99 T W S Qu S  
Offset 63.0ft RI T H S Qu S  
Ground Surface Elev. 523.79 ft (ft) /6" (tsf) (%)

Soil Description	Depth (ft)	Bulge (ft)	Shear (tsf)	Penetrometer (lb)	Soil Description	Depth (ft)	Bulge (ft)	Shear (tsf)	Penetrometer (lb)
Soft to medium, damp, brown, SANDY LOAM.	0-4			0.1	Very soft, damp, gray, SANDY LOAM. (continued)	0-1			0.1
	4-10	0.5	13			1-2			24
	10-11				Loose to medium, wet, gray, fine grained, SAND. 8% passing #200 sieve.	2-3			19
	11-12					3-4			
	12-13					4-5			
	13-14					5-6			
	14-15					6-7			
	15-16					7-8			
	16-17					8-9			
	17-18					9-10			
	18-19					10-11			
	19-20					11-12			
	20-21					12-13			
	21-22					13-14			
	22-23					14-15			
	23-24					15-16			
	24-25					16-17			
	25-26					17-18			
	26-27					18-19			
	27-28					19-20			
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	30-31					22-23			
	31-32					23-24			
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	35-36					27-28			
	36-37					28-29			
	37-38					29-30			
	38-39					30-31			
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	43-44					35-36			
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	48-49					40-41			
	49-50					41-42			
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	67-68					59-60			
	68-69					60-61			
	69-70					61-62			
	70-71					62-63			
	71-72					63-64			
	72-73					64-65			

FILE NAME = I:\DOT\6008 - D7 Ver-Work-Order 4 - IL 130 Structure Plans\CADD\_Structural\borings01.dgn

Page 3 of 4

Illinois Department of Transportation  
Division of Highways  
SOIL BORING LOG

ROUTE FAP 116 (IL 130) DESCRIPTION Range Creek LOGGED BY E. Sandschafer  
 SECTION (113B)B-1 LOCATION Sec 35 - NE 1/4, Sec 36 - NW 1/4, SEC. 35, TWP. 9 N, RNG. 9 E, 3 PM  
 COUNTY Cumberland DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO. 018-0067 DEPTH (ft) 0 10 20 30 40 50 60 70 80 90 100  
 Station 708+12.50 B L U M  
 T W S Qu S  
 H S Qu T

BORING NO. 3 (P2) Surface Water Elev. 514.06 ft  
 Station 708+99 Stream Bed Elev. 513.96 ft  
 Offset 63.0ft Rt Groundwater Elev.:  
 Ground Surface Elev. 523.79 ft (ft) /6" (tsf) (%)

SHIT, damp, gray, CLAY LOAM TILL. (continued)  
 422.79  
 Hard, moist, bluish gray, SILTY CLAY SHALE.  
 418.79 -105 50 5.9 10  
 Borehole continued with rock coring.  
 50/2' S  
 50/2'  
 SAND.  
 Sand blow in hollow stem auger. Augered down to 104.5' depth.  
 434.29  
 -90  
 -95  
 -100

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated)  
 Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Sealing  
 The SPT (N value) is the sum of the last two blow values in each sampling zone (ASTHO 1206) BBS, from 137 (Rev. 8-99)

Page 4 of 4

Illinois Department of Transportation  
Division of Highways  
ROCK CORE LOG

ROUTE FAP 116 (IL 130) DESCRIPTION Range Creek LOGGED BY E. Sandschafer  
 SECTION (113B)B-1 LOCATION Sec 35 - NE 1/4, Sec 36 - NW 1/4, SEC. 35, TWP. 9 N, RNG. 9 E, 3 PM  
 COUNTY Cumberland CORING METHOD Rotary, surf set diamond bit

STRUCT. NO. 018-0067 CORING BARREL TYPE & SIZE NW, conv dbl bbl, split inner  
 Station 708+12.50 DEPTH (ft) 0 10 20 30 40 50 60 70 80 90 100  
 BORING NO. 3 (P2) Core Diameter 2.06 in  
 Station 708+99 Top of Rock Elev. 422.79 ft  
 Offset 63.0ft Rt Begin Core Elev. 418.79 ft  
 Ground Surface Elev. 523.79 ft (ft) (#) (%) (%) (min/ft) (tsf)

Gray, slight to moderate weathered, CLAY LOAM SHALE. 418.79 B3C1 87 71 1.8  
 418.29  
 Dark gray, slight to moderate weathered, SILTY CLAY SHALE.  
 Rock core B3C1 from 107.5' to 108.0' depth, Qu = 4.2 tsf.  
 -110  
 B3C2 98 80 1.8  
 Severe weathered.  
 Rock core B3C2 from 113.2' to 113.7' depth, Qu = 85.3 tsf.  
 408.79 -115  
 Extent of exploration.  
 -120  
 Benchmark: BM 150 Chiseled square on NW Wingwall of existing structure, Sta 706+65, 17.5' Rt = 528.53  
 -125

Color pictures of the cores Available on request  
 Cores will be stored for examination until 09/07/2016  
 The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)  
 RQD is the ratio of the total length of sound core specimens >4" to total length of core run BBS, form 138 (Rev. 8-99)



USER NAME = rking	DESIGNED - JMB	REVISED -
PLOT TIME = 11:42:21 AM	CHECKED - ACB	REVISED -
PLOT SCALE = 1.0000' / in.	DRAWN - RLK	REVISED -
PLOT DATE = 2/4/2015	CHECKED - JMB	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SOIL BORING LOGS  
STRUCTURE NO. 018-0067**

SHEET NO. 35 OF 36 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
116	(113B)B-1	CUMBERLAND	83	60
	SN. 018-0067	CONTRACT NO. 74324		
STA.	ILLINOIS FED. AID PROJECT			

FILE NAME = I:\DOT\6008 - D7 Ver-Work-Order 4 - IL 130 Structure Plans\CADD\_Structural\borings\1.dgn

**Illinois Department of Transportation**  
Division of Highways  
SOIL BORING LOG

Page 1 of 3  
Date 9/12/11

ROUTE FAP 116 (IL 130) DESCRIPTION Range Creek LOGGED BY E. Sandschafer  
SECTION (113B)B-1 LOCATION Sec 35 - NE 1/4, Sec 36 - NW 1/4, SEC. 1, TWP. 9 N, RNG. 9 E, 3 PM  
COUNTY Cumberland DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO. 018-0067  
Station 708+12.50

BORING NO. 4 (S Abut)  
Station 710+00  
Offset 7.0ft Lt  
Ground Surface Elev. 531.30 ft (H) /6" (tsf) (%)

DEPTH (ft)	D	B	U	M	Surface Water Elev.	D	B	U	M
	E	L	C	O		E	L	C	O
	P	O	S	I		P	O	S	I
	T	W	Qu	S		T	W	Qu	S
	H	S		T		H	S		T
12.5" asphalt pavement.					514.06				
530.30					513.96				
Medium to stiff, damp, brown marbled gray, CLAY. (continued)					501.8				
509.30					514.4				
Skipped this trip.					514.3				
Very soft, very damp, gray, SILTY LOAM.									
524.30									
Very loose to medium, damp, gray to brown, SANDY LOAM.									
503.50									
Gray, SANDY LOAM.									
501.80									
Very loose, wet, gray, fine grained, SAND. 11% passing #200 sieve.									
481.80									
Shiff, damp, gray, CLAY LOAM TILL.									
471.30									
5% passing #200 sieve.									
491.30									

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated)  
Abbreviations W.O.H - Sampler Advanced by Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Sealing  
The SPT (N value) is the sum of the last two blow values in each sampling zone (ASHTO 1206) BBS, from 137 (Rev. 8-99)

**Illinois Department of Transportation**  
Division of Highways  
SOIL BORING LOG

Page 2 of 3  
Date 9/12/11

ROUTE FAP 116 (IL 130) DESCRIPTION Range Creek LOGGED BY E. Sandschafer  
SECTION (113B)B-1 LOCATION Sec 35 - NE 1/4, Sec 36 - NW 1/4, SEC. 1, TWP. 9 N, RNG. 9 E, 3 PM  
COUNTY Cumberland DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO. 018-0067  
Station 708+12.50

BORING NO. 4 (S Abut)  
Station 710+00  
Offset 7.0ft Lt  
Ground Surface Elev. 531.30 ft (H) /6" (tsf) (%)

DEPTH (ft)	D	B	U	M	Surface Water Elev.	D	B	U	M
	E	L	C	O		E	L	C	O
	P	O	S	I		P	O	S	I
	T	W	Qu	S		T	W	Qu	S
	H	S		T		H	S		T
Very loose, wet, gray, fine grained, SAND.					514.06				
509.30					513.96				
Shiff, damp, gray, CLAY LOAM TILL.					501.8				
481.80					514.4				
5% passing #200 sieve.					514.3				
471.30									
Shiff, damp, gray, CLAY LOAM TILL.									
451.30									

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated)  
Abbreviations W.O.H - Sampler Advanced by Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Sealing  
The SPT (N value) is the sum of the last two blow values in each sampling zone (ASHTO 1206) BBS, from 137 (Rev. 8-99)

**Illinois Department of Transportation**  
Division of Highways  
SOIL BORING LOG

Page 3 of 3  
Date 9/12/11

ROUTE FAP 116 (IL 130) DESCRIPTION Range Creek LOGGED BY E. Sandschafer  
SECTION (113B)B-1 LOCATION Sec 35 - NE 1/4, Sec 36 - NW 1/4, SEC. 1, TWP. 9 N, RNG. 9 E, 3 PM  
COUNTY Cumberland DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO. 018-0067  
Station 708+12.50

BORING NO. 4 (S Abut)  
Station 710+00  
Offset 7.0ft Lt  
Ground Surface Elev. 531.30 ft (H) /6" (tsf) (%)

DEPTH (ft)	D	B	U	M	Surface Water Elev.	D	B	U	M
	E	L	C	O		E	L	C	O
	P	O	S	I		P	O	S	I
	T	W	Qu	S		T	W	Qu	S
	H	S		T		H	S		T
Shiff, damp, gray, CLAY LOAM TILL.					514.06				
509.30					513.96				
Very loose, wet, gray, fine grained, SAND. 3% passing #200 sieve. (continued)					501.8				
481.80					514.4				
Very soft, wet, gray, SANDY LOAM.					514.3				
471.30									
Very dense, moist, gray, CLAY SHALE.									
418.80									
Extent of exploration.									
416.50									
Benchmark: BM 150 Chiseled square on NW Wingwall of existing structure, Sta 706+65, 17.5' RH = 528.53									
(B4 Location = 43' S of existing S Abut.)									
431.80									

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated)  
Abbreviations W.O.H - Sampler Advanced by Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Sealing  
The SPT (N value) is the sum of the last two blow values in each sampling zone (ASHTO 1206) BBS, from 137 (Rev. 8-99)



USER NAME = rking  
PLOT TIME = 11:42:50 AM  
PLOT SCALE = 1.0000 ' / in.  
PLOT DATE = 2/4/2015

DESIGNED - JMB  
CHECKED - ACB  
DRAWN - RLK  
CHECKED - JMB

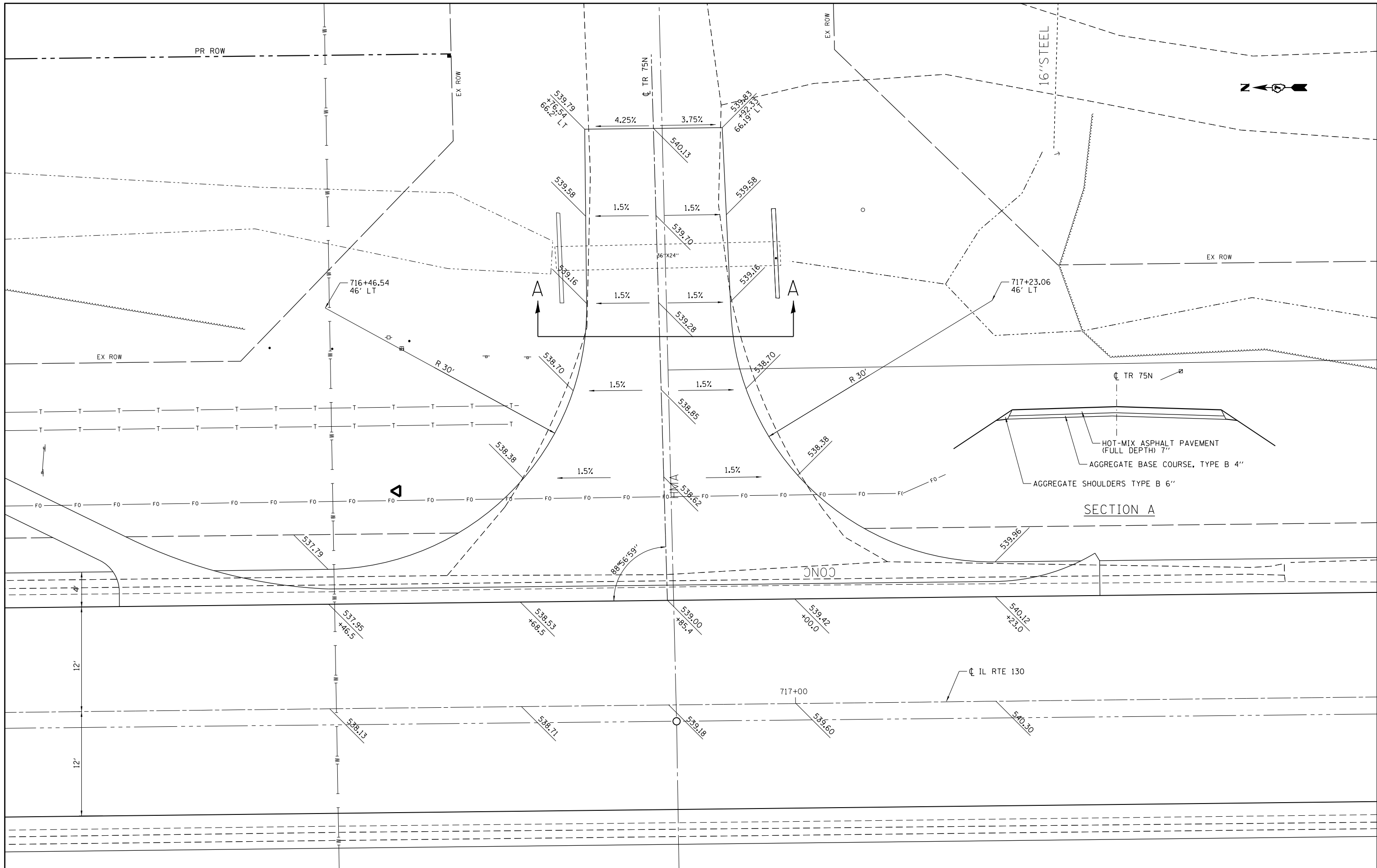
REVISED -  
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REVISED -  
REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SOIL BORING LOGS  
STRUCTURE NO. 018-0067**

SHEET NO. 36 OF 36 SHEETS

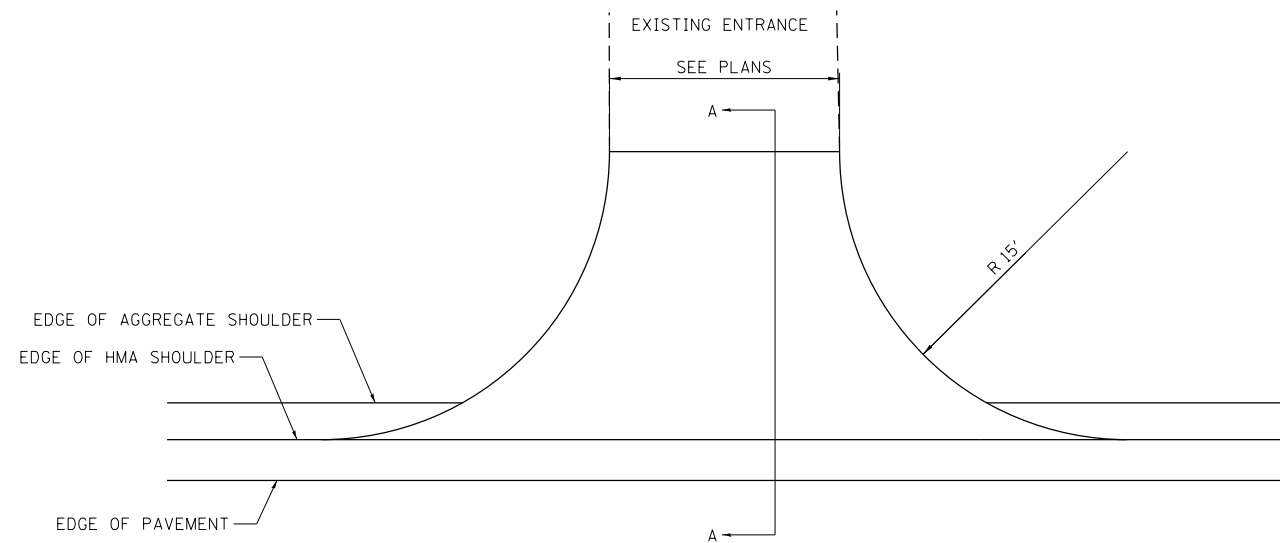
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
116	(113B)B-1	CUMBERLAND	83	61
	SN. 018-0067	CONTRACT NO. 74324		
STA.	ILLINOIS FED. AID PROJECT			



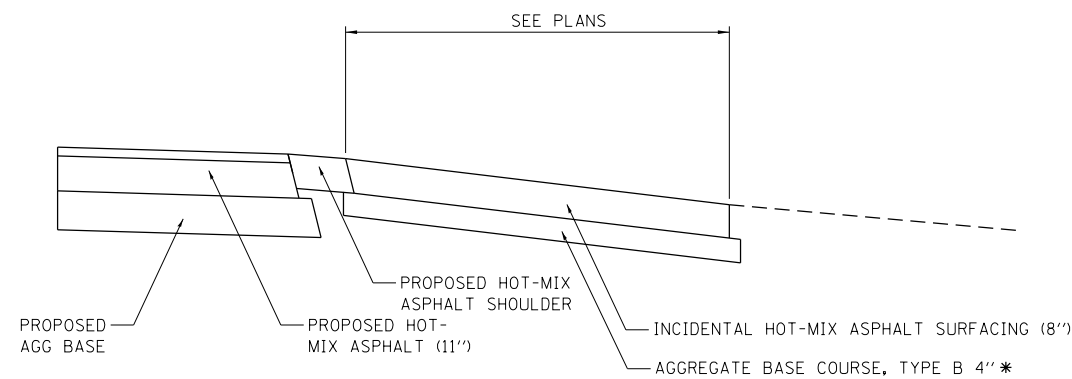
SECTION A

HOT-MIX ASPHALT PAVEMENT  
(FULL DEPTH) 7"  
AGGREGATE BASE COURSE, TYPE B 4"  
AGGREGATE SHOULDERS TYPE B 6"

FILE NAME = I:\DOT\6008 - 07 Var Var\Work Order 5	USER NAME = dbullock	DESIGNED - CAS	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TR 75N INTERSECTION DETAIL FAP 116 (IL 130)</b>		F.A.P. RTE. 116	SECTION (113B)B-1	COUNTY CUMBERLAND	TOTAL SHEETS 83	SHEET NO. 62
	Default	IL 130 Roadway Plans\CADD\Civil\0774324-sh	DRAWN - DLB				REVISED -	SCALE: 1"=5'	SHEET 1 OF 5 SHEETS	STA. TO STA.	CONTRACT NO. 74324 ILLINOIS FED. AID PROJECT
	PLOT SCALE = 10.0000' / in.	CHECKED - JMB	REVISED -								
	PLOT DATE = 2/4/2015	DATE - 1/27/15	REVISED -								



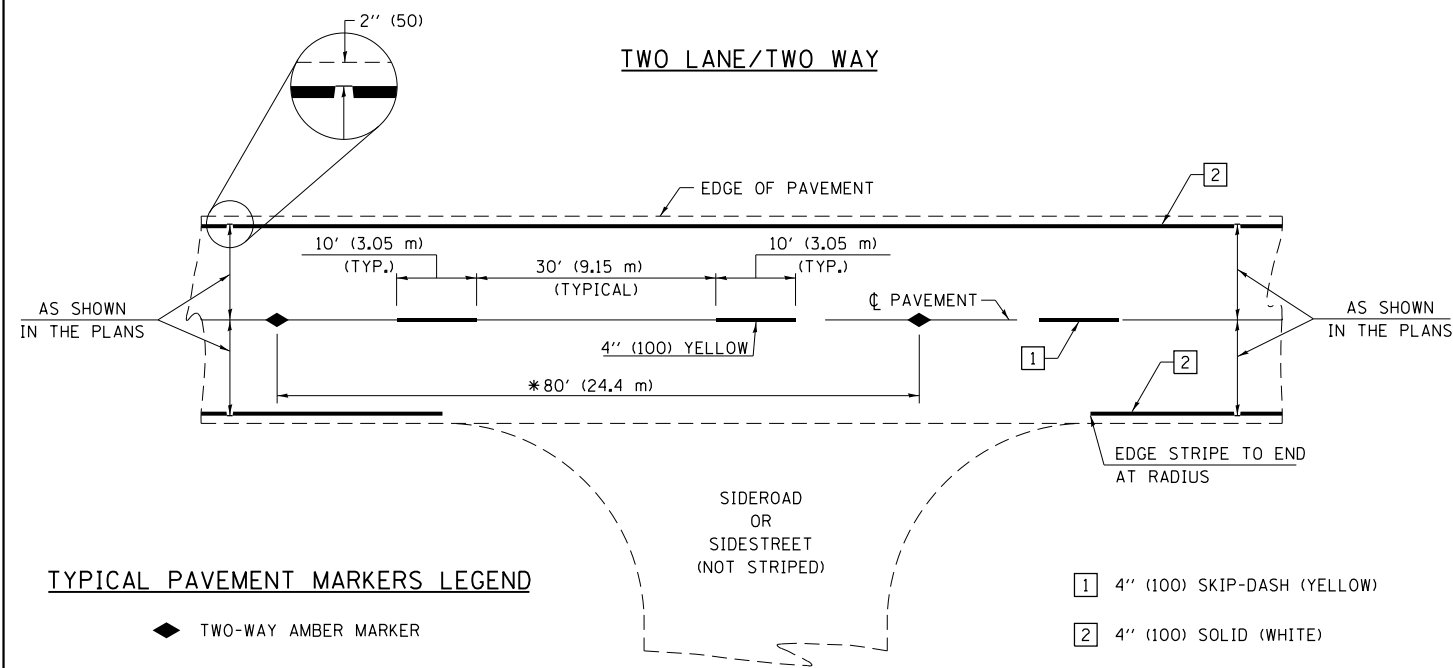
**ENTRANCE DETAIL**



**SECTION A-A**

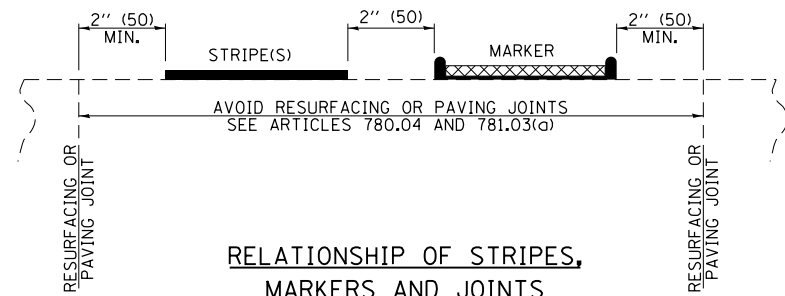
INCIDENTAL HOT-MIX ASPHALT SURFACING

STATION	O/S	AREA ( SF)	TON
703+65.32	RT	1501.6	74.7
711+17.85	LT	592.1	29.5
715+08.87	RT	546.8	27.2
718+15.60	RT	456.6	22.7
		TOTAL	154.2

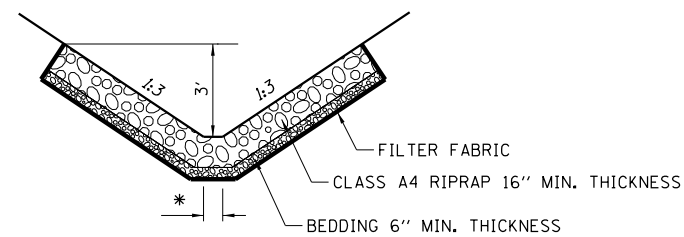


**TYPICAL PAVEMENT MARKERS LEGEND**

\* REDUCE TO 40' (12.2 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEEDS OF 45 mph (70 km/h) OR LESS.



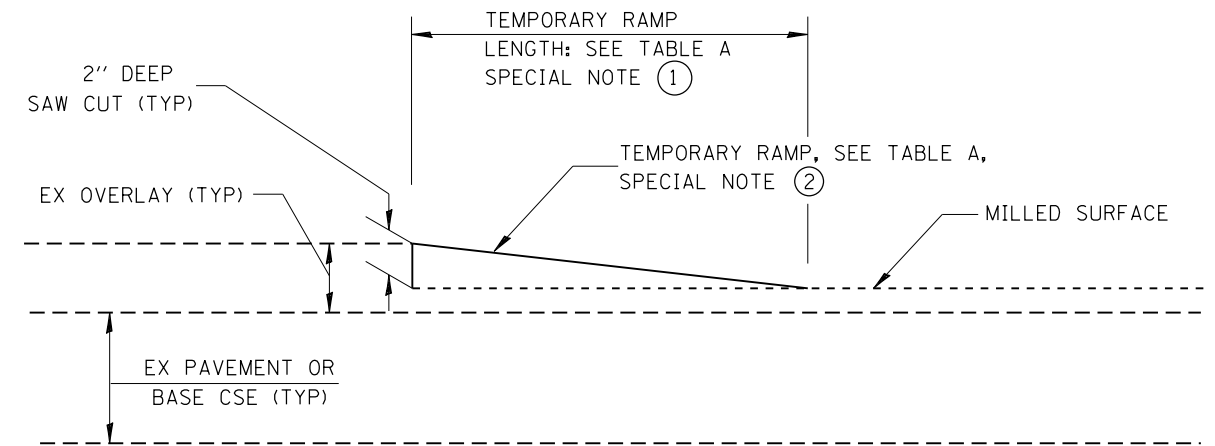
**RELATIONSHIP OF STRIPES, MARKERS AND JOINTS**



\* WIDTH IS 10' STA 703+97.5 TO STA 704+26.4  
\* WIDTH IS 2' STA 706+12 TO STA 706+46

STATION	STATION	OFFSET	AREA (SQ YD)	TON
703+97.5	704+26.4	RT	93.1	62.1
706+12.00	706+46.00	RT	75.6	50.4
	TOTAL		169	113

**RIPRAP DETAIL (ROADWAY ONLY)**



**DETAIL TEMPORARY RAMP**

**TABLE A (LENGTHS AND TAPER RATES)**

SPECIAL NOTE NUMBER	ELEMENT	RATE/LENGTH
①	TEMPORARY RAMP TAPER RATE	1:40
②	TEMPORARY RAMP LENGTH	6.67'

**GENERAL NOTES**

1. THIS WORK SHALL BE DONE IN ACCORDANCE WITH ARTICLE 406.08, AND THE DETAILS IN THE PLANS.
2. THE PAVEMENT SURFACE TO BE REMOVED MAY BE EITHER HOT-MIX ASPHALT OR P.C. CONCRETE. THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH ARTICLE 440.04 AND THE DETAILS IN THE PLANS.
3. THE SAW CUT JOINTS SHALL BE PRIMED JUST PRIOR TO THE PLACING OF BITUMINOUS MATERIAL. THIS WORK WILL BE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF ARTICLE 406.05.

**TEMPORARY RAMP**

STATION	STATION	WIDTH	AREA (SF)	AREA (SY)
699+50.00	699+56.67	26.00	173.42	19.27
719+43.33	719+50.00	25.60	170.75	18.97
TR75N		16.00	106.72	11.86

Total	450.89	51.00
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FILE NAME =	USER NAME = dbullock	DESIGNED - CAS	REVISED -
11\DOT\6008 - 07 Var Var\Work Order 5	IL 130 Roadway Plans\CADD\Civil\774324-sh	DRAWN - DLB	REVISED -
Default	PLOT SCALE = 100.0000' / 1"	CHECKED - JMB	REVISED -
	PLOT DATE = 2/4/2015	DATE - 1/27/15	REVISED -

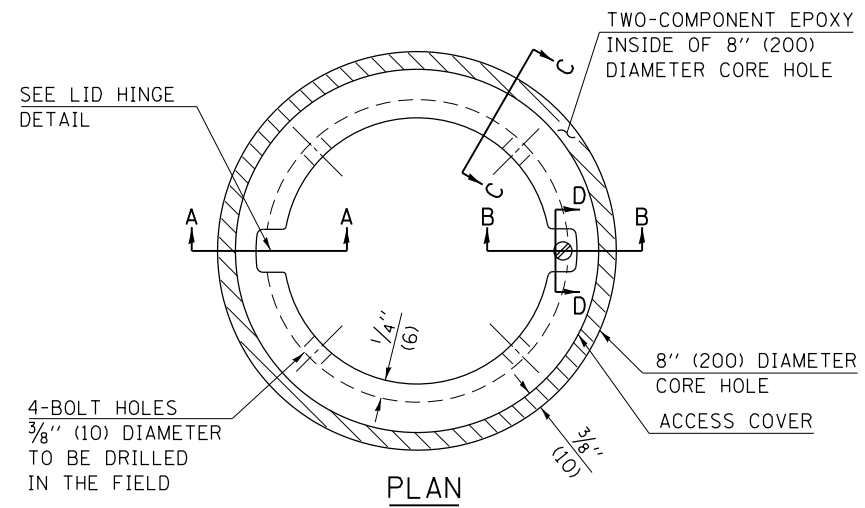
**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

**RIPRAP, PAVEMENT MARKINGS AND TEMPORARY RAMP DETAIL FAP 116 (IL 130)**

SCALE: 1"=5' SHEET 3 OF 5 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
116	(113B)B-1	CUMBERLAND	83	64
CONTRACT NO. 74324				
ILLINOIS FED. AID PROJECT				

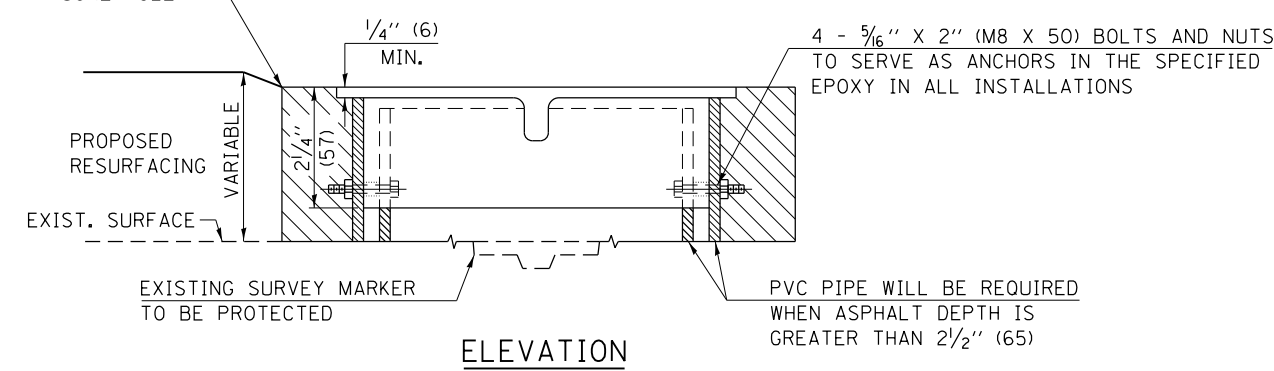
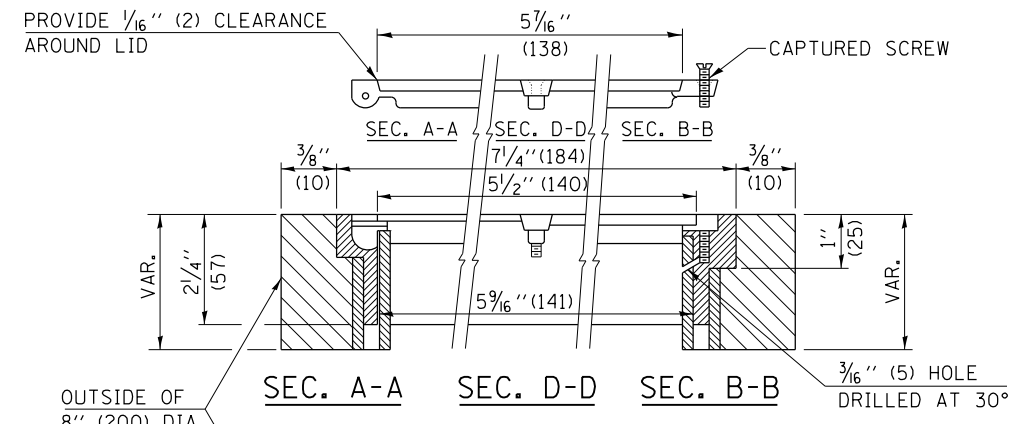
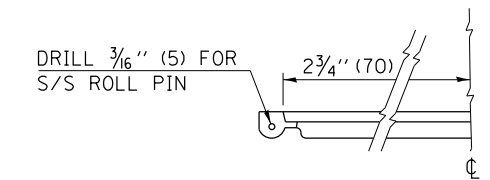
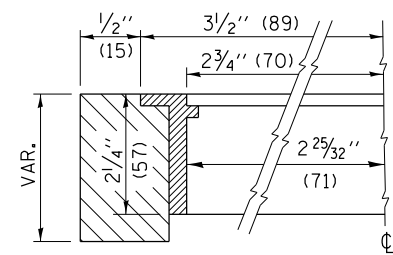




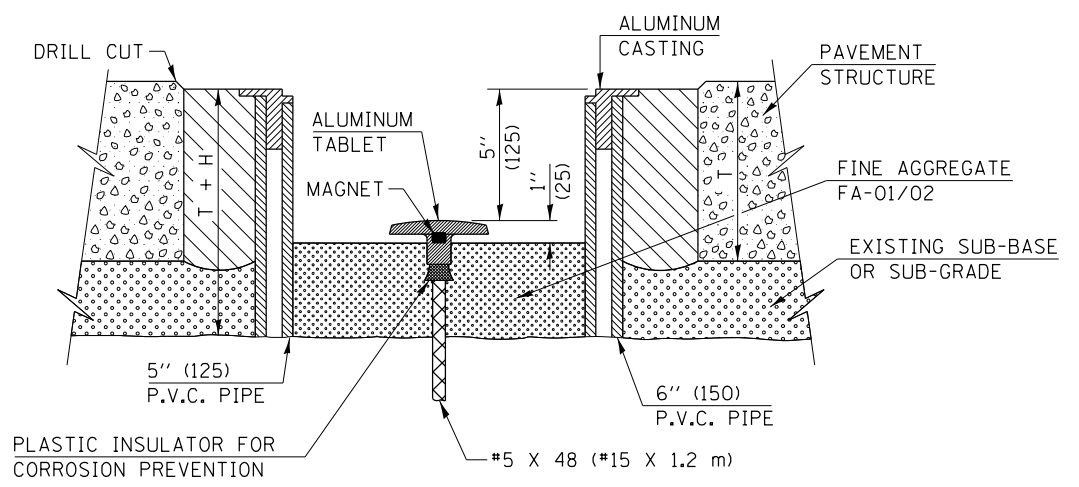
- LEGEND**
- ALUMINUM CASTING
  - 5" (125) OR 6" (150) P.V.C. PIPE
  - TWO-COMPONENT EPOXY
- T = THICKNESS OF PAVEMENT STRUCTURE  
H = THE THICKNESS OF THE SUB-BASE GRANULAR + 1" (25)

**BILL OF MATERIAL**

ALUMINUM CASTING OF THE DIMENSIONS AND SPECIFICATIONS SHOWN OR OTHER SUBJECT TO ENGINEER'S APPROVAL OF SHOP DRAWINGS, 4 EACH - 5/16" X 2" (M8 X 50) BOLTS WITH NUTS, EPOXY, 5" OR 6" (125 mm OR 150 mm) DIAMETER P.V.C. PIPE, SCHEDULE 40 (WHEN REQUIRED).



**EXISTING SURVEY MARKER**



**PROPOSED SURVEY MARKER**

NOT TO SCALE  
Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

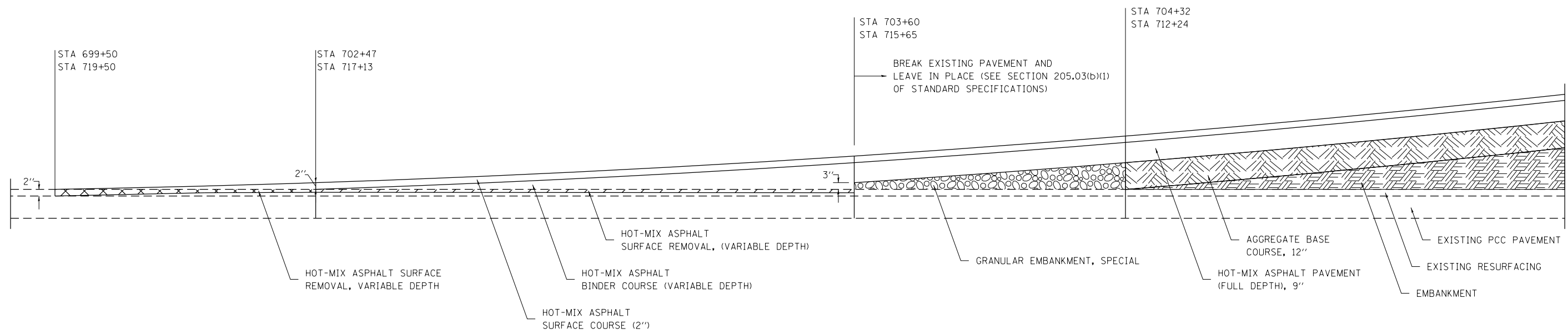
**DISTRICT 7 DETAIL NO. 20070202**

FILE NAME =	USER NAME = dbullo	DESIGNED - CAS	REVISED -
11\DOT\6008 - 07 Var Var\Work Order 5	IL 130 Roadway Plans\CADD\Civil\ND774324-sh	DRAWN - DLB	REVISED -
Default	PLOT SCALE = 100.0000' / 1"	CHECKED - JMB	REVISED -
	PLOT DATE = 2/4/2015	DATE - 1/27/15	REVISED -

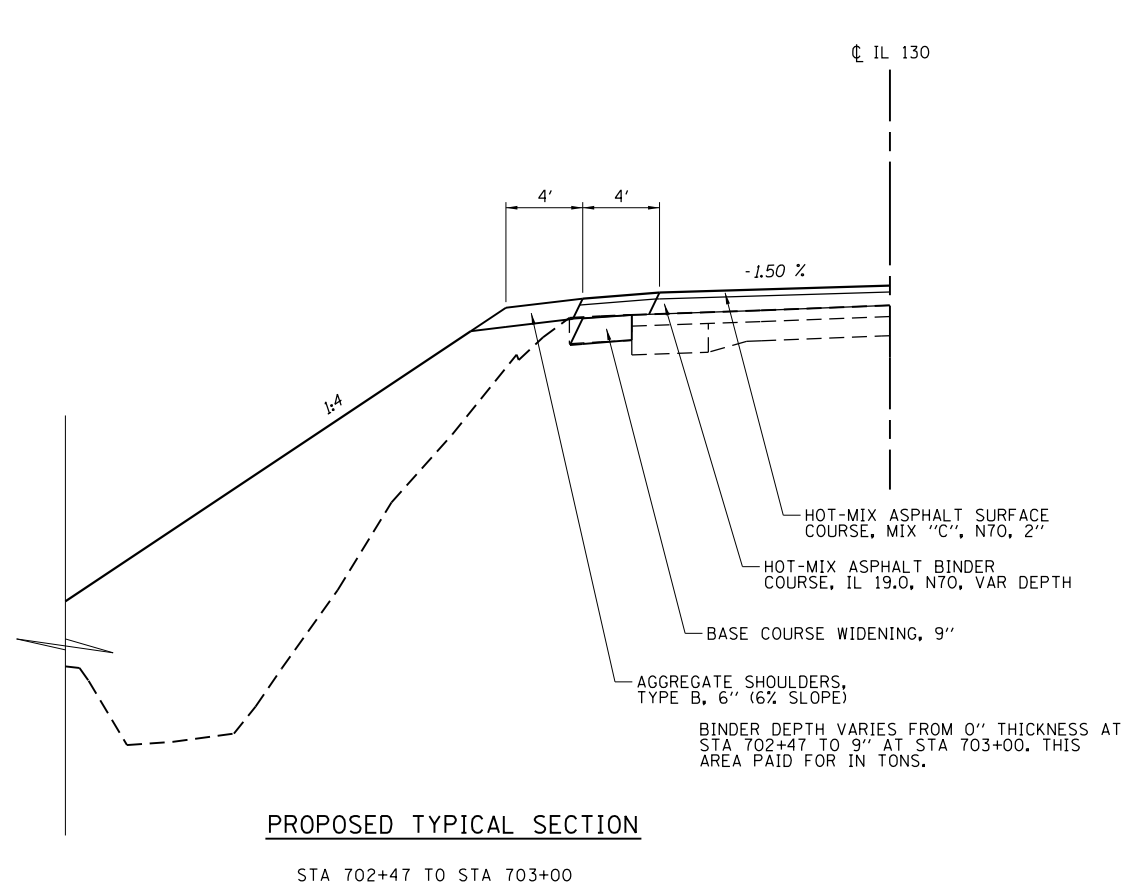
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>EXISTING AND PROPOSED SURVEY MARKERS</b>			
<b>FAP 116 (IL 130)</b>			
SCALE: 1"=5'	SHEET 4	OF 5 SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
116	(113B)-1	CUMBERLAND	83	65
CONTRACT NO. 74324				
ILLINOIS FED. AID PROJECT				

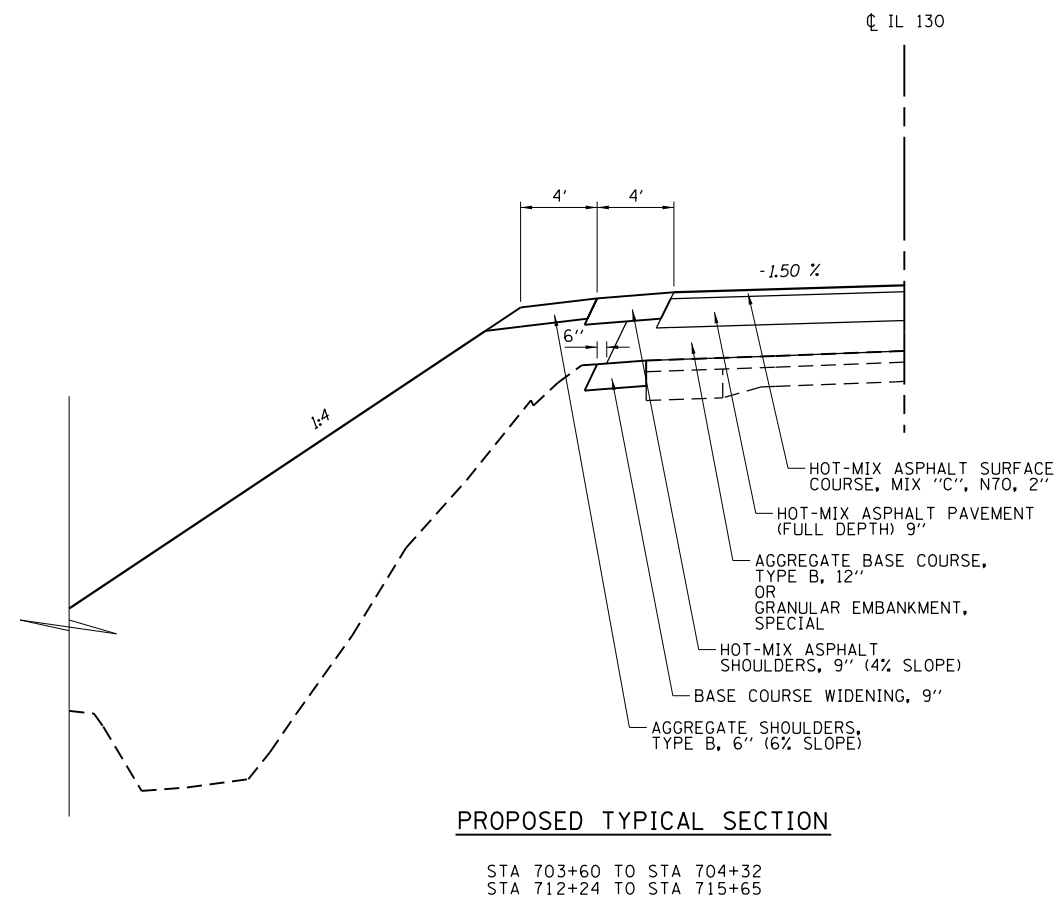


HMA PROFILE GRADE CHANGE DETAIL  
(NOT TO SCALE)



PROPOSED TYPICAL SECTION

STA 702+47 TO STA 703+00



PROPOSED TYPICAL SECTION

STA 703+60 TO STA 704+32  
STA 712+24 TO STA 715+65

FILE NAME =	USER NAME = dbullock	DESIGNED - CAS	REVISED -
11\DOT\6008 - 07 Var Var\Work Order 5	IL 130 Roadway Plans\CADD\Civil\0774324-sh	DRAWN - DLB	REVISED -
Default	PLOT SCALE = 100.0000' / in.	CHECKED - JMB	REVISED -
	PLOT DATE = 2/4/2015	DATE - 1/27/15	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

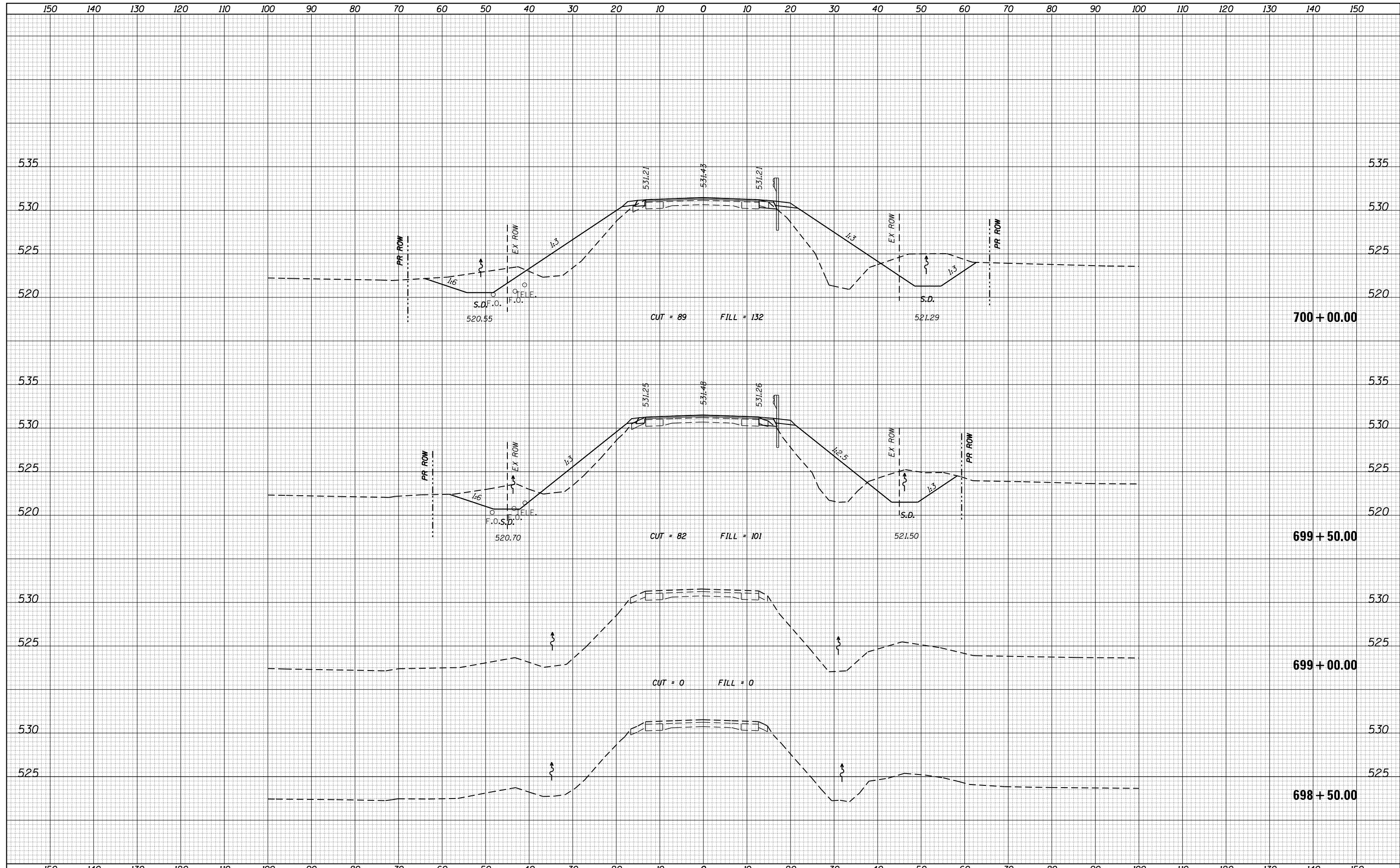
HMA PROFILE GRADE CHANGE DETAIL  
FAP 116 (IL 130)

SCALE: 1"=5' SHEET 5 OF 5 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
116	(113B)B-1	CUMBERLAND	83	66
CONTRACT NO. 74324				
ILLINOIS FED. AID PROJECT				

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
FINAL SURVEY	
NOTE BOOK	
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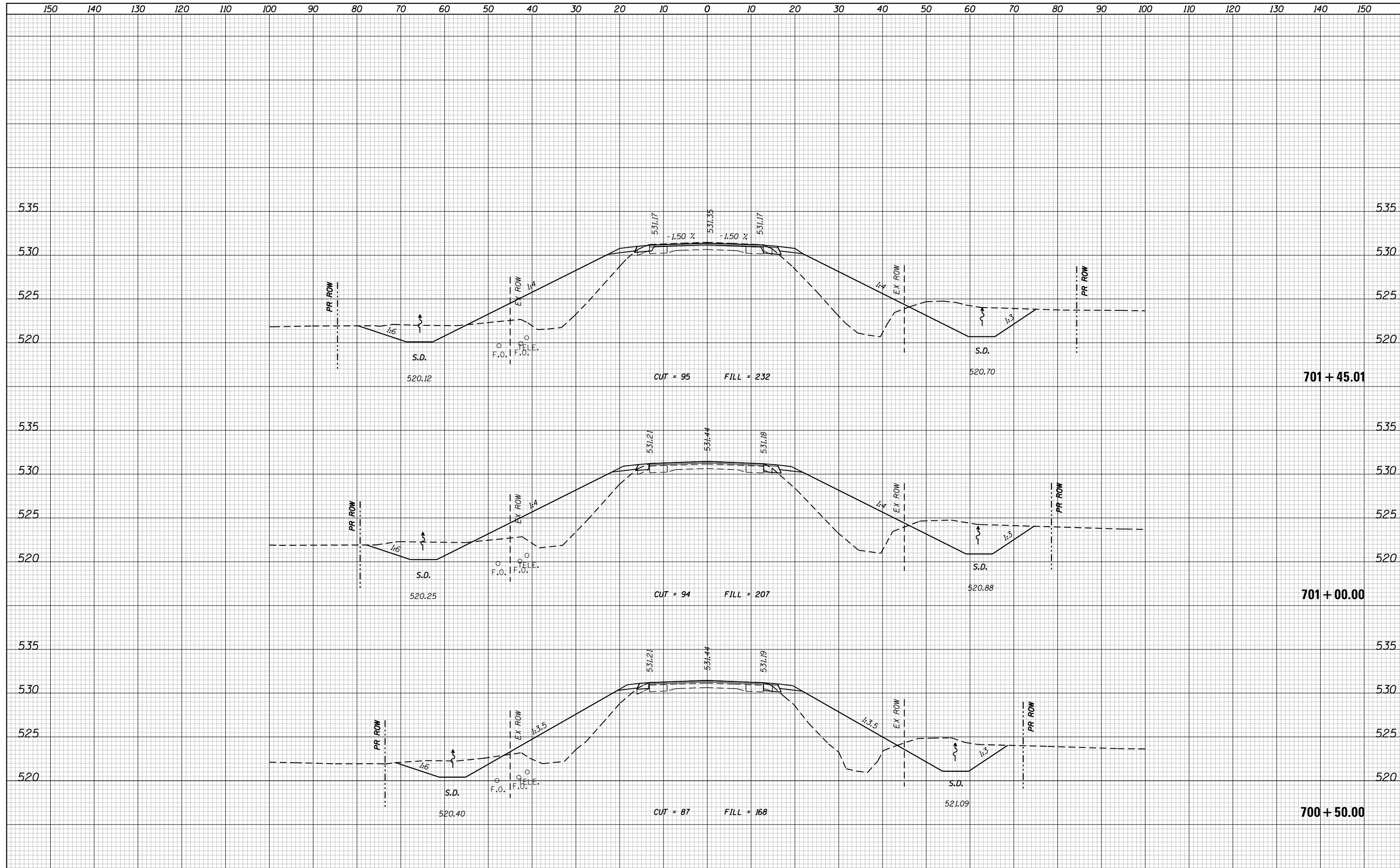
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PLOTTED	
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AREAS	
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ORIGINAL SURVEY	
NOTE BOOK	
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FILE NAME =	USER NAME = dbullock	DESIGNED - CAS	REVISIED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>CROSS SECTIONS FAP 116 (IL 130)</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1:\1007\6008 - D7 Var Var\Work Order 5 - IL 130	Roadway Plans\CADD\Civil\10774324-sht-xssht.dwg	DRAWN - DLB	REVISIED -					116	(113BR)B-1	CUMBERLAND	83	67
Default	PLOT SCALE = 20.0000' / in.	CHECKED - JMB	REVISIED -		CONTRACT NO. 74324			ILLINOIS FED. AID PROJECT				
	PLOT DATE = 2/4/2015	DATE - 1/27/15	REVISIED -		SCALE:	SHEET	OF	SHEETS	STA. 698+50.00	TO STA. 700+00.00		

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

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



FILE NAME =  
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USER NAME = dbullock  
 DESIGNED - CAS  
 DRAWN - DLB  
 CHECKED - JMB  
 DATE - 1/27/15

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 REVISIED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

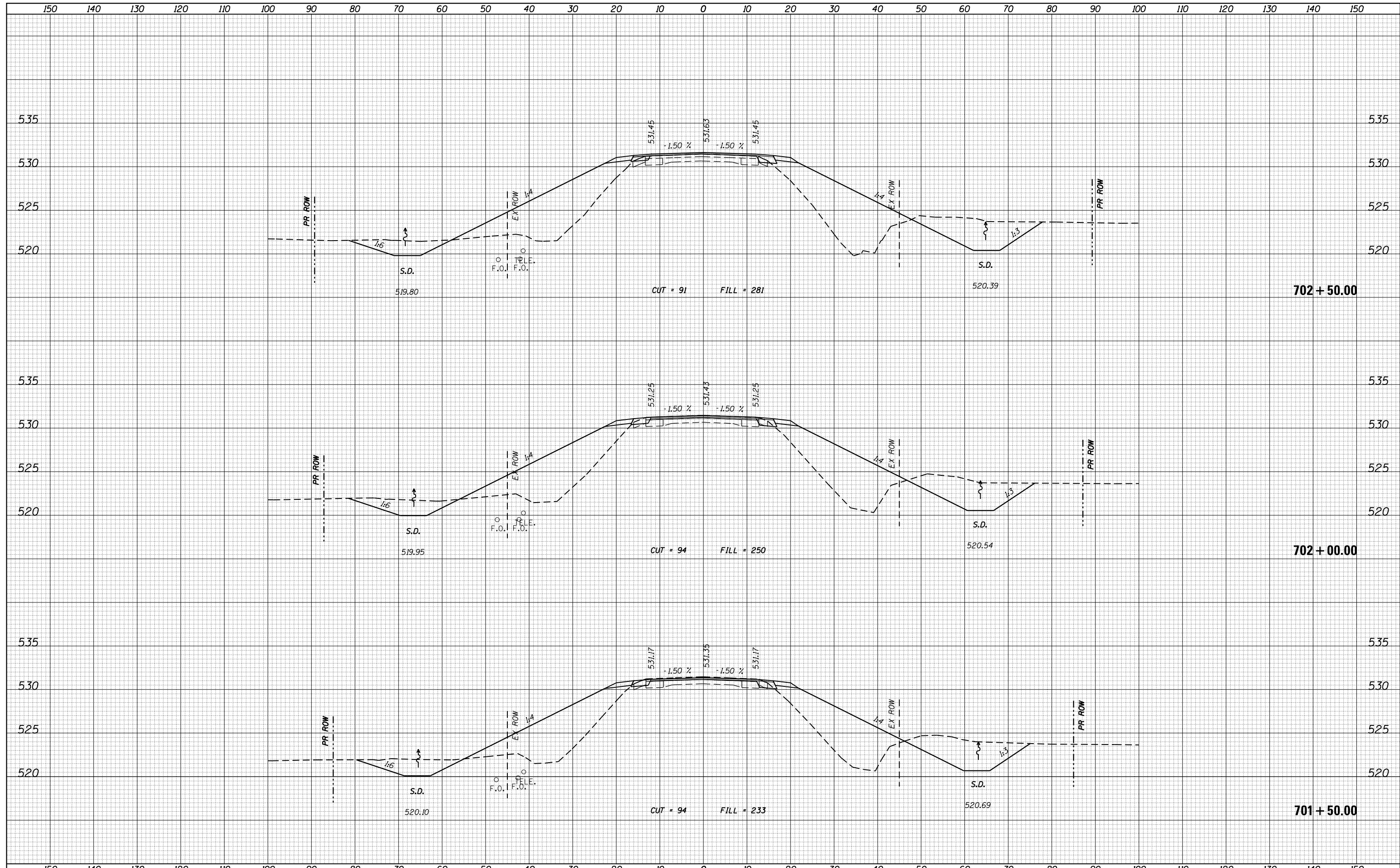
**CROSS SECTIONS FAP 116 (IL 130)**

SCALE: SHEET OF SHEETS STA. 700+50.00 TO STA. 701+45.01

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
116	(113BR)B-1	CUMBERLAND	83	68
CONTRACT NO. 74324			ILLINOIS FED. AID PROJECT	

DATE	
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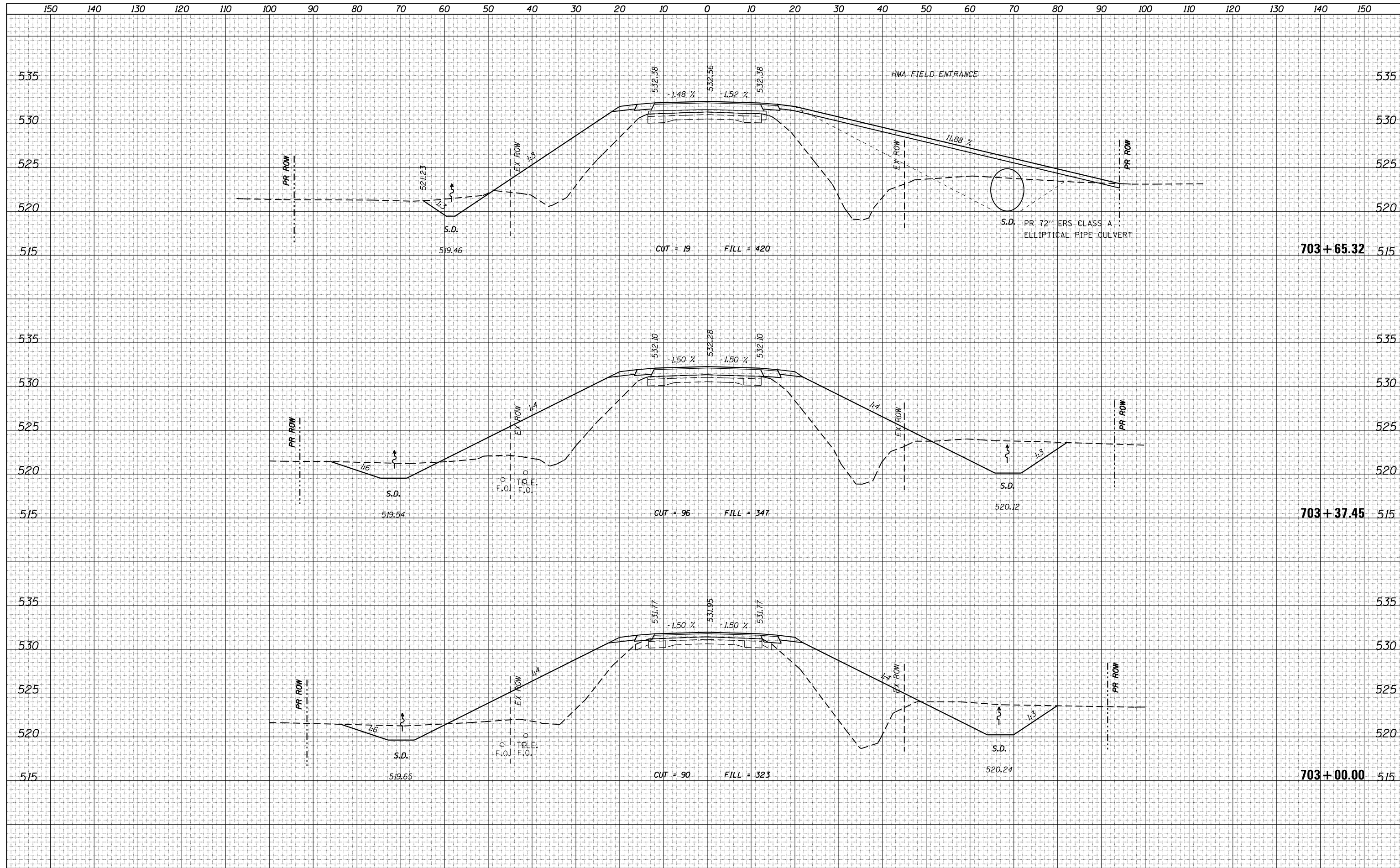
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PLOTTED	
TEMPLATE	
AREAS	
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NO.	



FILE NAME =	USER NAME = dbullock	DESIGNED - CAS	REVISIED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>CROSS SECTIONS FAP 116 (IL 130)</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
11\1007\6008 - D7 Var Var\Work Order 5 - IL 130	Roadway Plans\CADD\Civil\10774324-shr-xssht.dwg	DRAWN - DLB	REVISIED -					116	(113BR/B-1)	CUMBERLAND	83	69
Default	PLOT SCALE = 20.0000' / in.	CHECKED - JMB	REVISIED -		SCALE: SHEET OF SHEETS STA. 701+50.00 TO STA. 702+50.00			CONTRACT NO. 74324				
	PLOT DATE = 2/4/2015	DATE - 1/27/15	REVISIED -		ILLINOIS FED. AID PROJECT							

DATE	
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SURVEYED	
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TEMPLATE	
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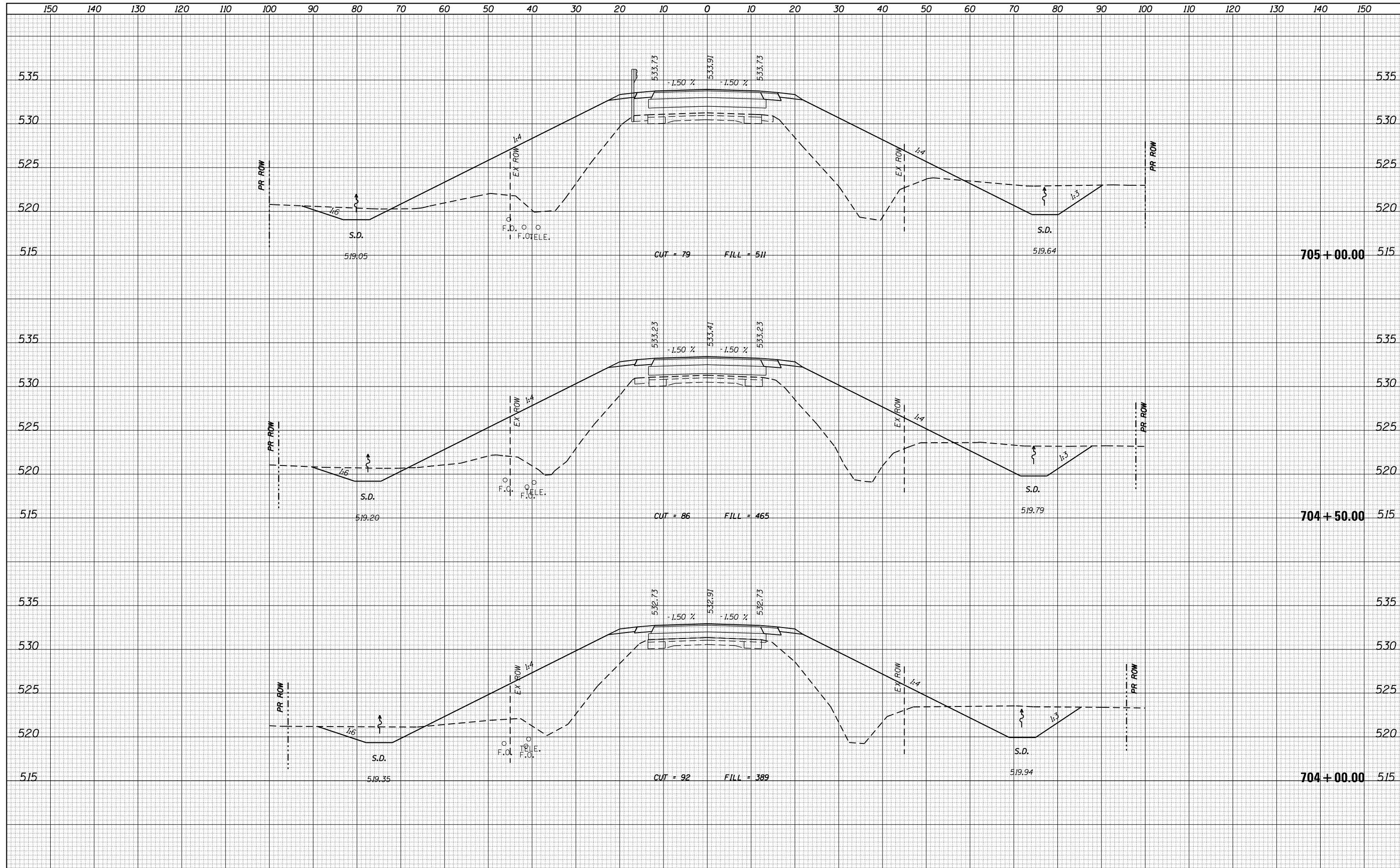
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SURVEYED	
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FILE NAME =	USER NAME = dbullock	DESIGNED - CAS	REVISD -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>CROSS SECTIONS FAP 116 (IL 130)</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1:\1007\6008 - D7 Var Var\Work Order 5 - IL 130	Roadway Plans\CADD\Civil\10774324-shr-xssht.dwg	DRAWN - DLB	REVISD -					116	(113BR)-1	CUMBERLAND	83	70
Default	PLOT SCALE = 20.0000' / in.	CHECKED - JMB	REVISD -		SCALE: SHEET OF SHEETS STA. 703+00.00 TO STA. 703+65.32			CONTRACT NO. 74324				
	PLOT DATE = 2/4/2015	DATE - 1/27/15	REVISD -		ILLINOIS FED. AID PROJECT							

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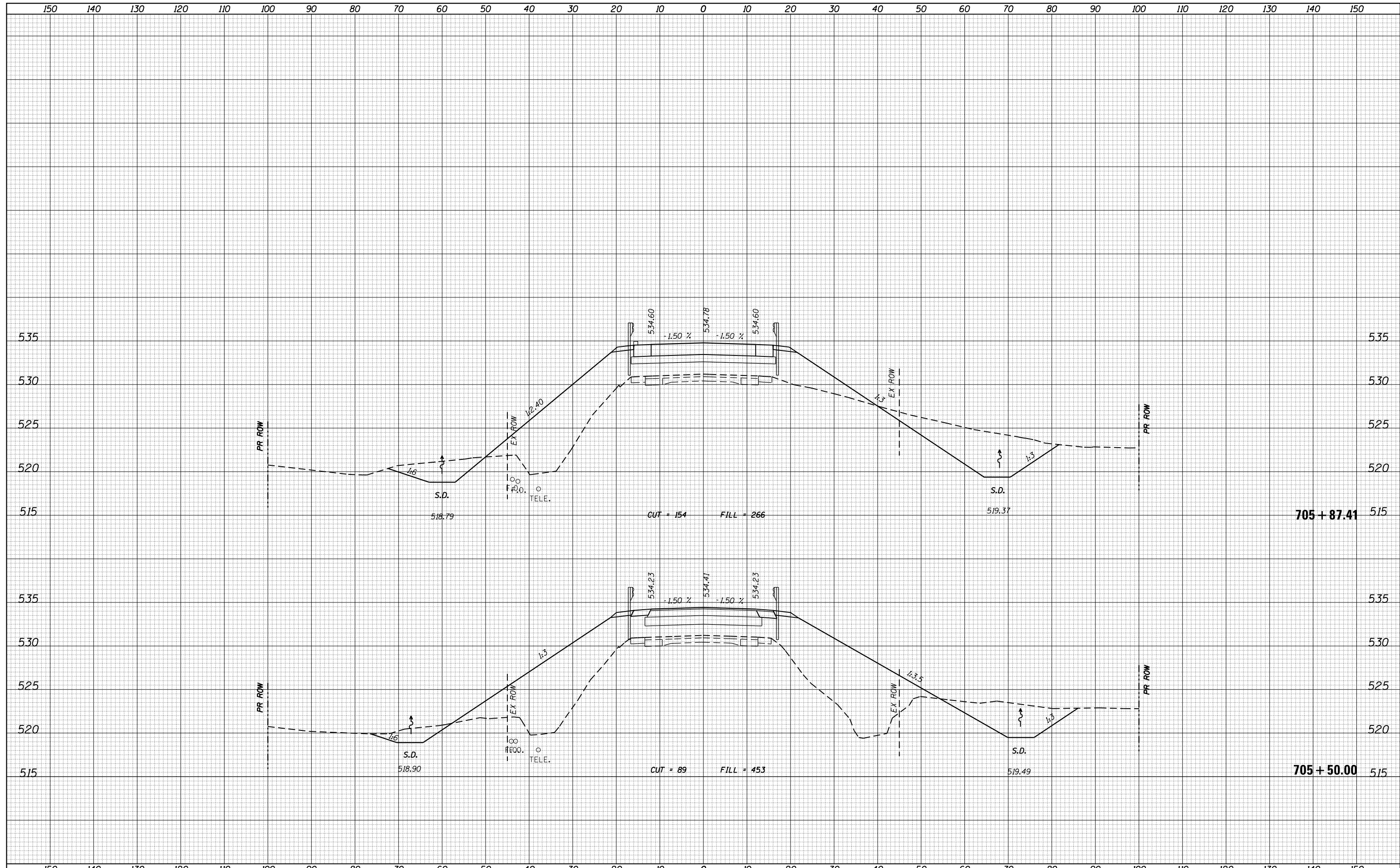
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FILE NAME =	USER NAME = dbullock	DESIGNED - CAS	REVISD -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>CROSS SECTIONS FAP 116 (IL 130)</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1:\1007\6008 - D7 Var Var\Work Order 5 - IL 130	Roadway Plans\CADD\Civil\10774324-shr-xssht.dwg	DRAWN - DLB	REVISD -		116	(113BR)B-1	CUMBERLAND	83	71			
Default	PLOT SCALE = 20.0000' / in.	CHECKED - JMB	REVISD -		SCALE: SHEET OF SHEETS STA. 704+00.00 TO STA. 705+00.00			CONTRACT NO. 74324				
	PLOT DATE = 2/4/2015	DATE - 1/27/15	REVISD -		ILLINOIS FED. AID PROJECT							

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

DATE	
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TEMPLATE	
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ORIGINAL SURVEY NOTE BOOK NO.	



FILE NAME =  
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 PLOT DATE = 2/4/2015

DESIGNED - CAS  
 DRAWN - DLB  
 CHECKED - JMB  
 DATE - 1/27/15

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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

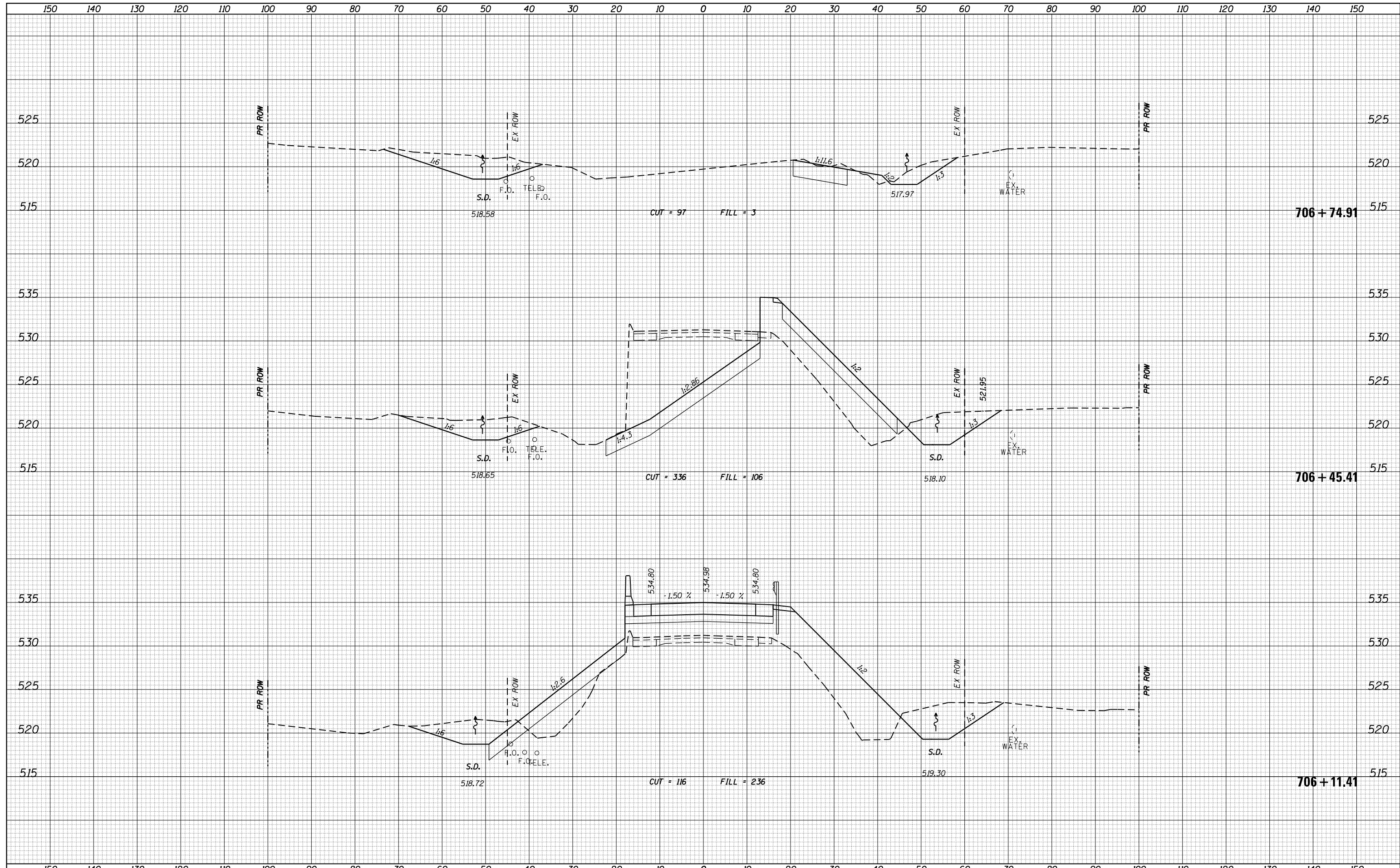
**CROSS SECTIONS FAP 116 (IL 130)**  
 SCALE: SHEET OF SHEETS STA. 705+50.00 TO STA. 705+87.41

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
116	(113BR)B-1	CUMBERLAND	83	72
			CONTRACT NO. 74324	
ILLINOIS FED. AID PROJECT				



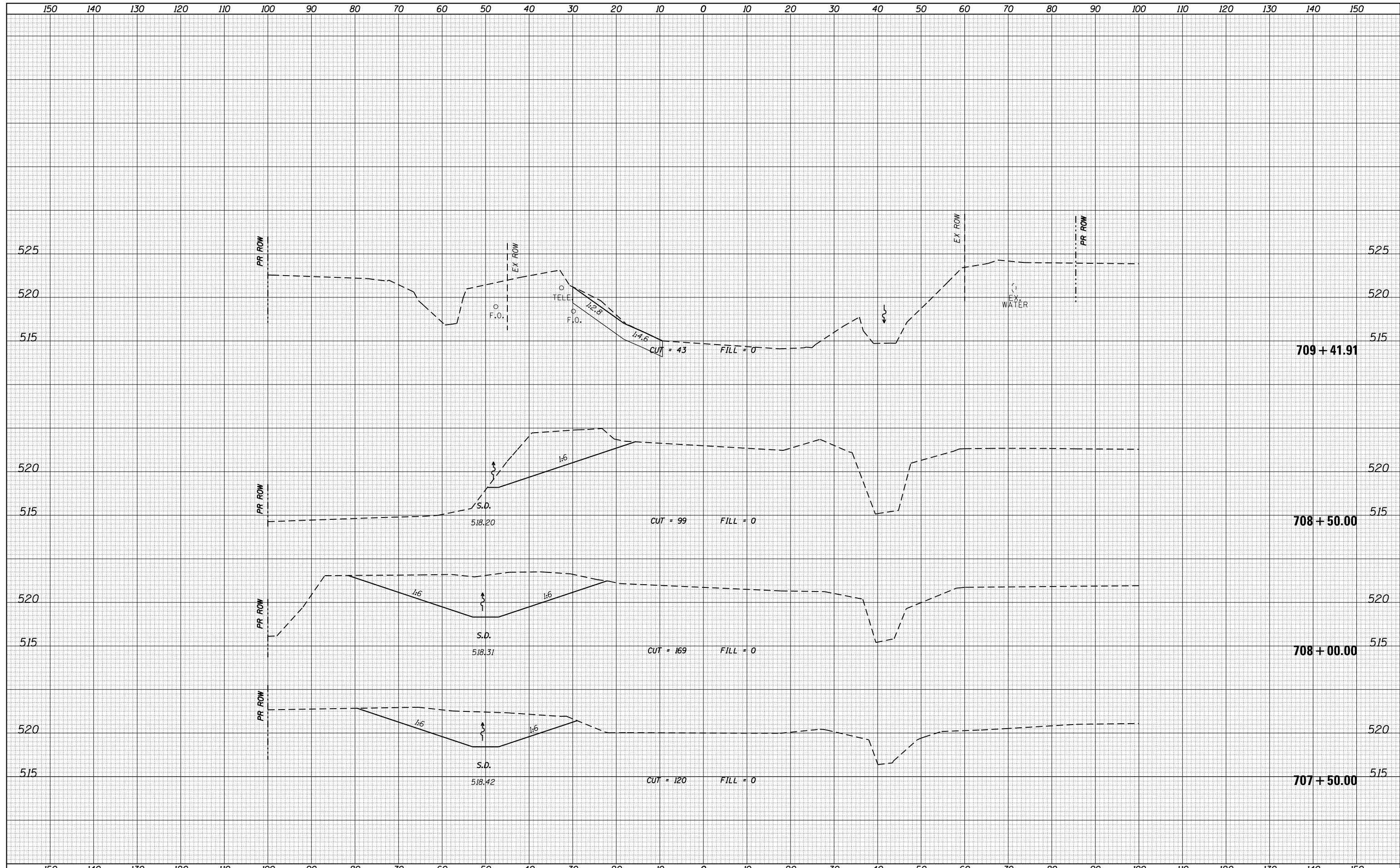
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DATE	
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DATE	
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FINAL SURVEY NO.	
SURVEYED AREAS CHECKED	
PLOTTED TEMPLATE	
NOTE BOOK NO.	

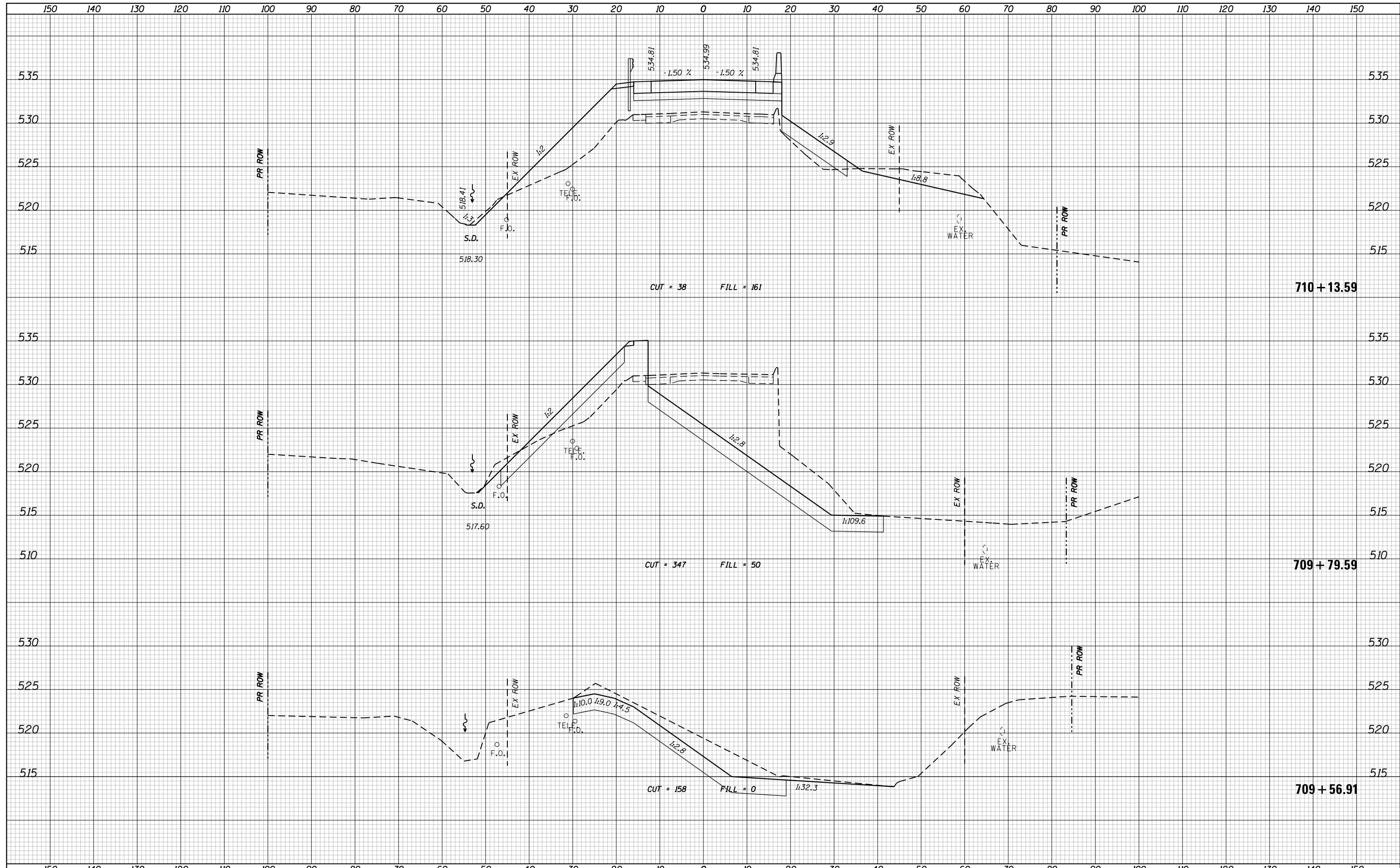
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NOTE BOOK NO.	



FILE NAME =	USER NAME = dbullock	DESIGNED - CAS	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>CROSS SECTIONS FAP 116 (IL 130)</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
11\1007\6008 - D7 Var Var\Work Order 5 - IL 130	Roadway Plans\CADD\Civil\10774324-shr-xssht.dwg	DRAWN - DLB	REVISED -					116	(113BR)B-1	CUMBERLAND	83	74
Default	PLOT SCALE = 20.0000' / in.	CHECKED - JMB	REVISED -		CONTRACT NO. 74324							
	PLOT DATE = 2/4/2015	DATE - 1/27/15	REVISED -		SCALE:	SHEET	OF	SHEETS	STA. 707+50.00 TO STA. 709+41.91	ILLINOIS FED. AID PROJECT		

DATE	
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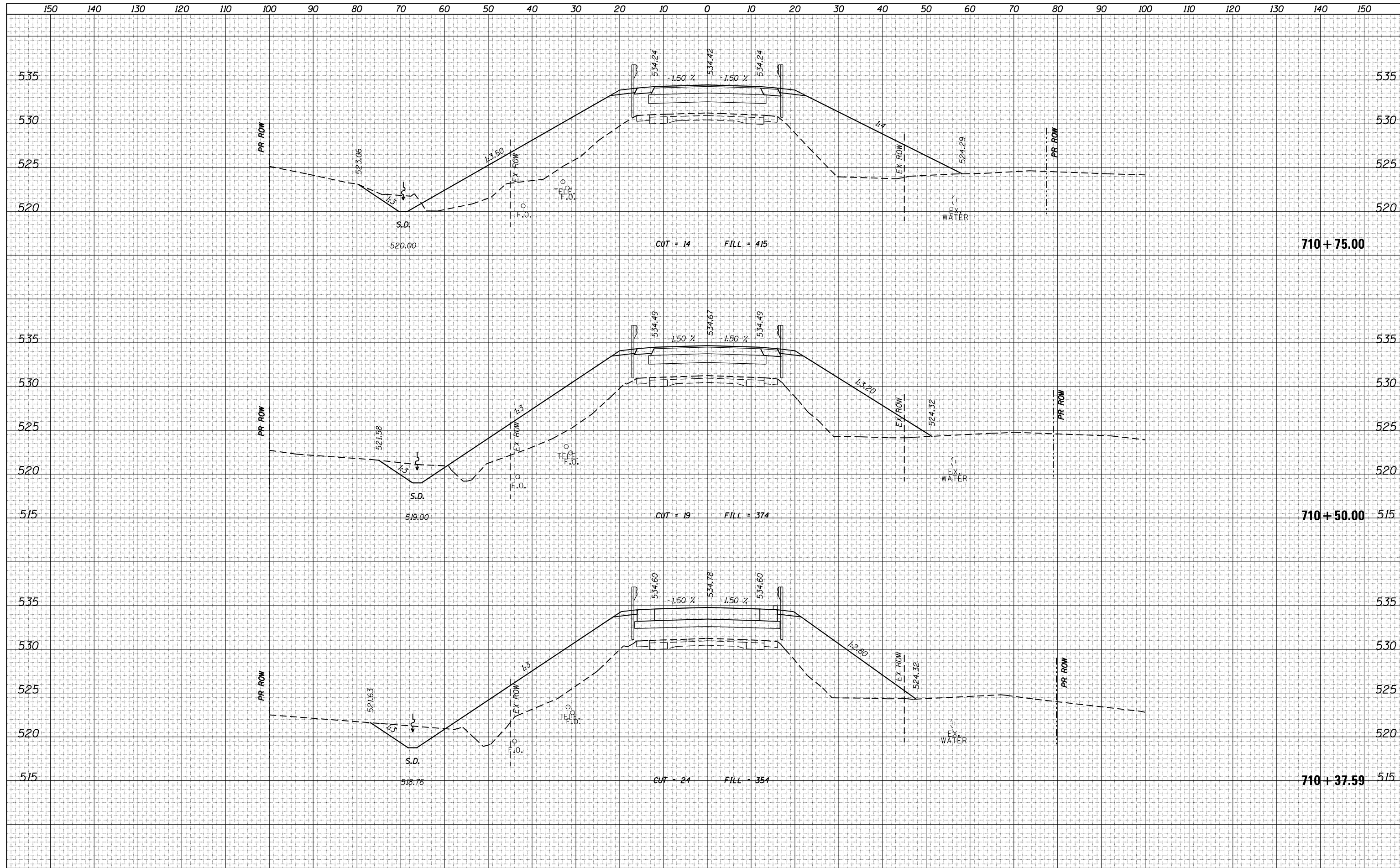
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ORIGINAL SURVEY	
NOTE BOOK	
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FILE NAME =	USER NAME = dbullock	DESIGNED - CAS	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>CROSS SECTIONS FAP 116 (IL 130)</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1:\1007\6008 - D7 Var Var\Work Order 5 - IL 130	Roadway Plans\CADD\Civil\10774324-sht-xssht.dwg	DRAWN - DLB	REVISED -		116	(113BR)B-1	CUMBERLAND	83	75			
Default	PLOT SCALE = 20.0000' / in.	CHECKED - JMB	REVISED -		CONTRACT NO. 74324							
	PLOT DATE = 2/4/2015	DATE - 1/27/15	REVISED -		ILLINOIS FED. AID PROJECT							
				SCALE:	SHEET	OF	SHEETS	STA. 709+56.91	TO STA. 710+13.59			

DATE	
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FILE NAME =  
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USER NAME = dbullock  
 DESIGNED - CAS  
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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

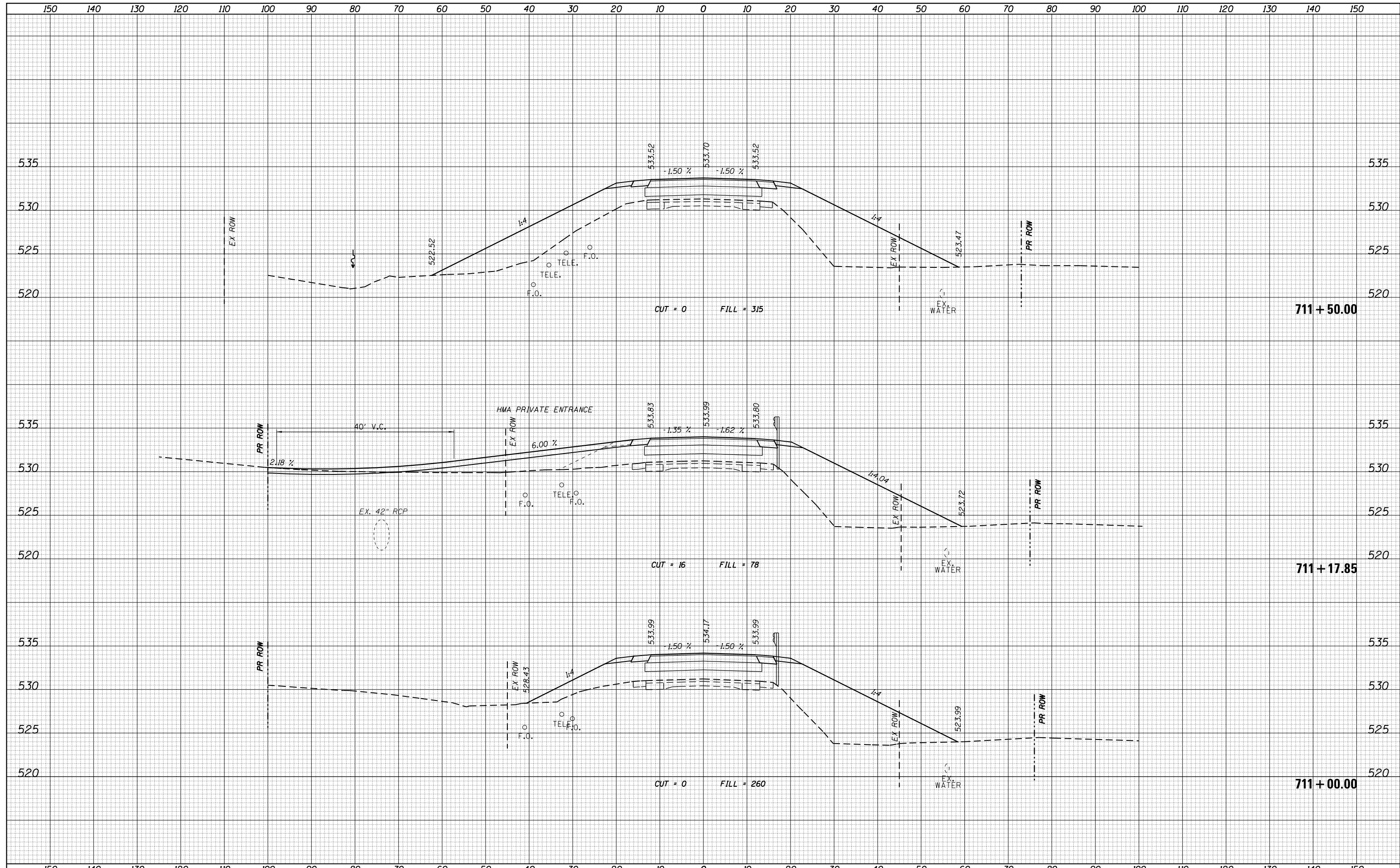
**CROSS SECTIONS FAP 116 (IL 130)**

SCALE: SHEET OF SHEETS STA. 710+37.59 TO STA. 710+75.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
116	(113BR)B-1	CUMBERLAND	83	76
CONTRACT NO. 74324			ILLINOIS FED. AID PROJECT	

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
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FINAL SURVEY	
NOTE BOOK	
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DATE	
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FILE NAME =  
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USER NAME = dbullock  
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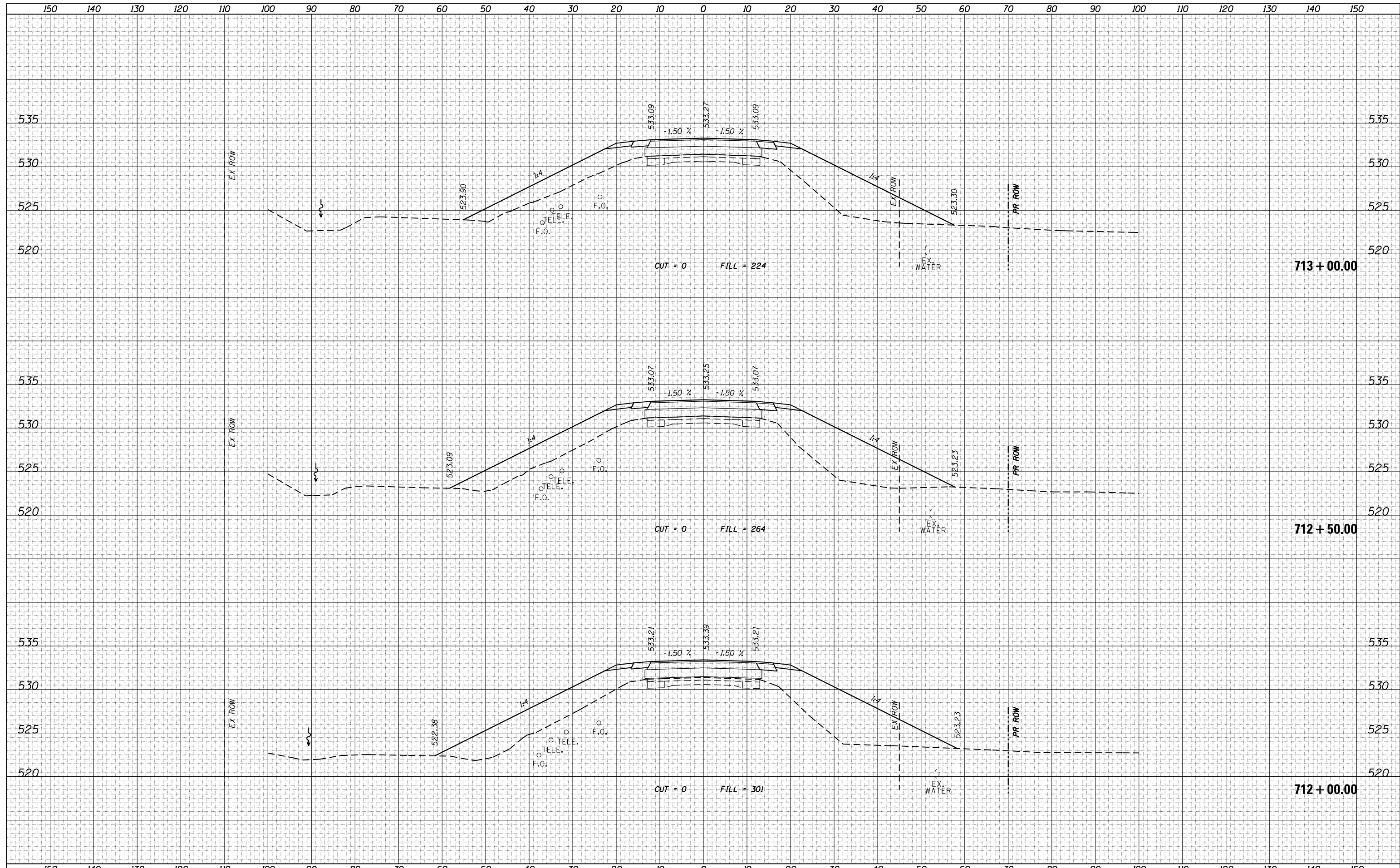
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS FAP 116 (IL 130)**  
 SCALE: SHEET OF SHEETS STA. 711+00.00 TO STA. 711+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
116	(113BR)B-1	CUMBERLAND	83	77
CONTRACT NO. 74324			ILLINOIS FED. AID PROJECT	

DATE	
BY	
SURVEYED	
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FINAL SURVEY	
NOTE BOOK	
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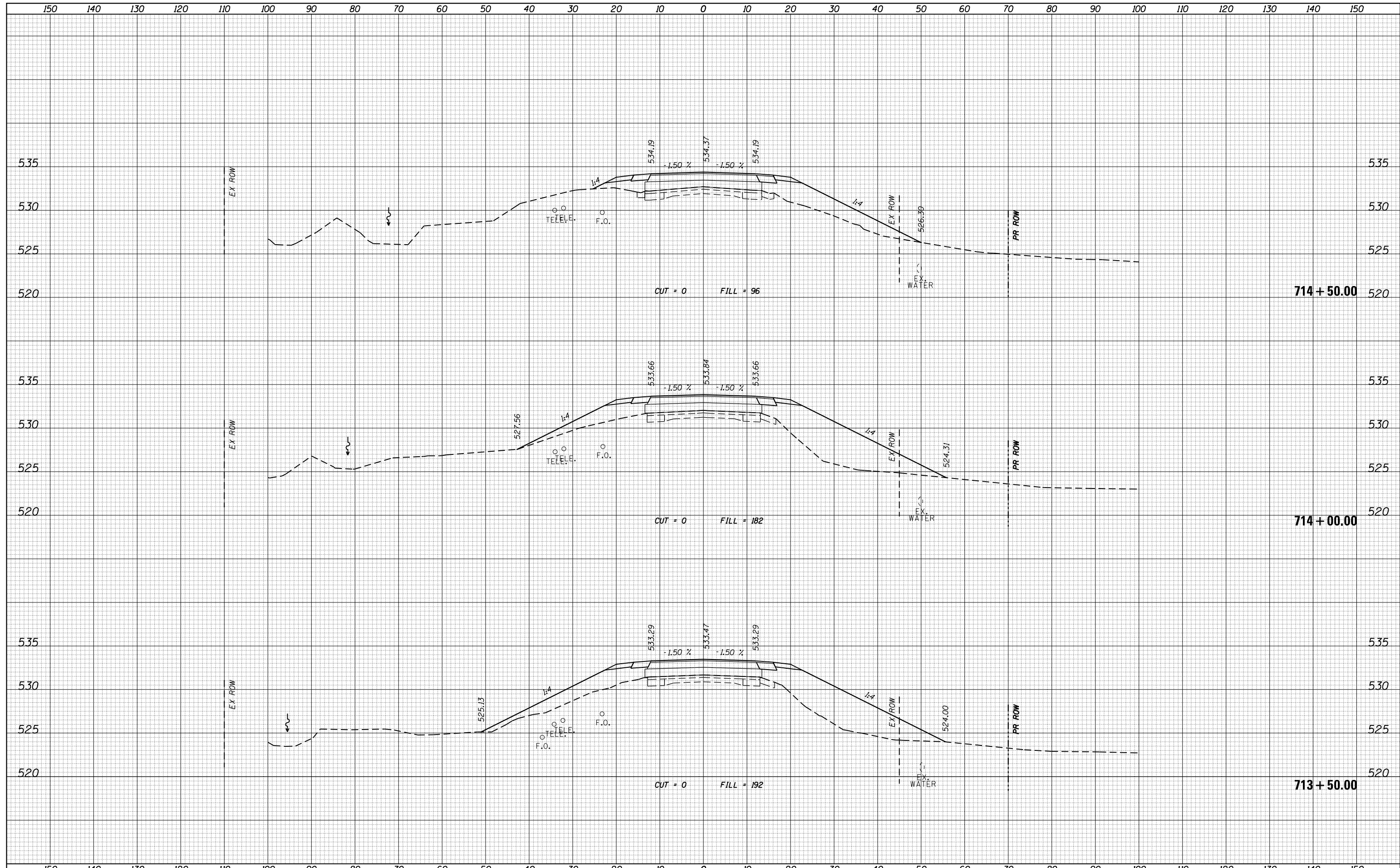
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ORIGINAL SURVEY	
NOTE BOOK	
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FILE NAME =	USER NAME = dbullock	DESIGNED - CAS	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>CROSS SECTIONS FAP 116 (IL 130)</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1:\1007\6008 - D7 Var Var\Work Order 5 - IL 130	Roadway Plans\CADD\Civil\10774324-sht-xssht.dwg	DRAWN - DLB	REVISED -					116	(113BR/B-1)	CUMBERLAND	83	78
Default	PLOT SCALE = 20.0000' / in.	CHECKED - JMB	REVISED -		SCALE: SHEET OF SHEETS STA. 712+00.00 TO STA. 713+00.00			CONTRACT NO. 74324				
	PLOT DATE = 2/4/2015	DATE - 1/127/15	REVISED -		ILLINOIS FED. AID PROJECT							

DATE	
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NOTE BOOK	
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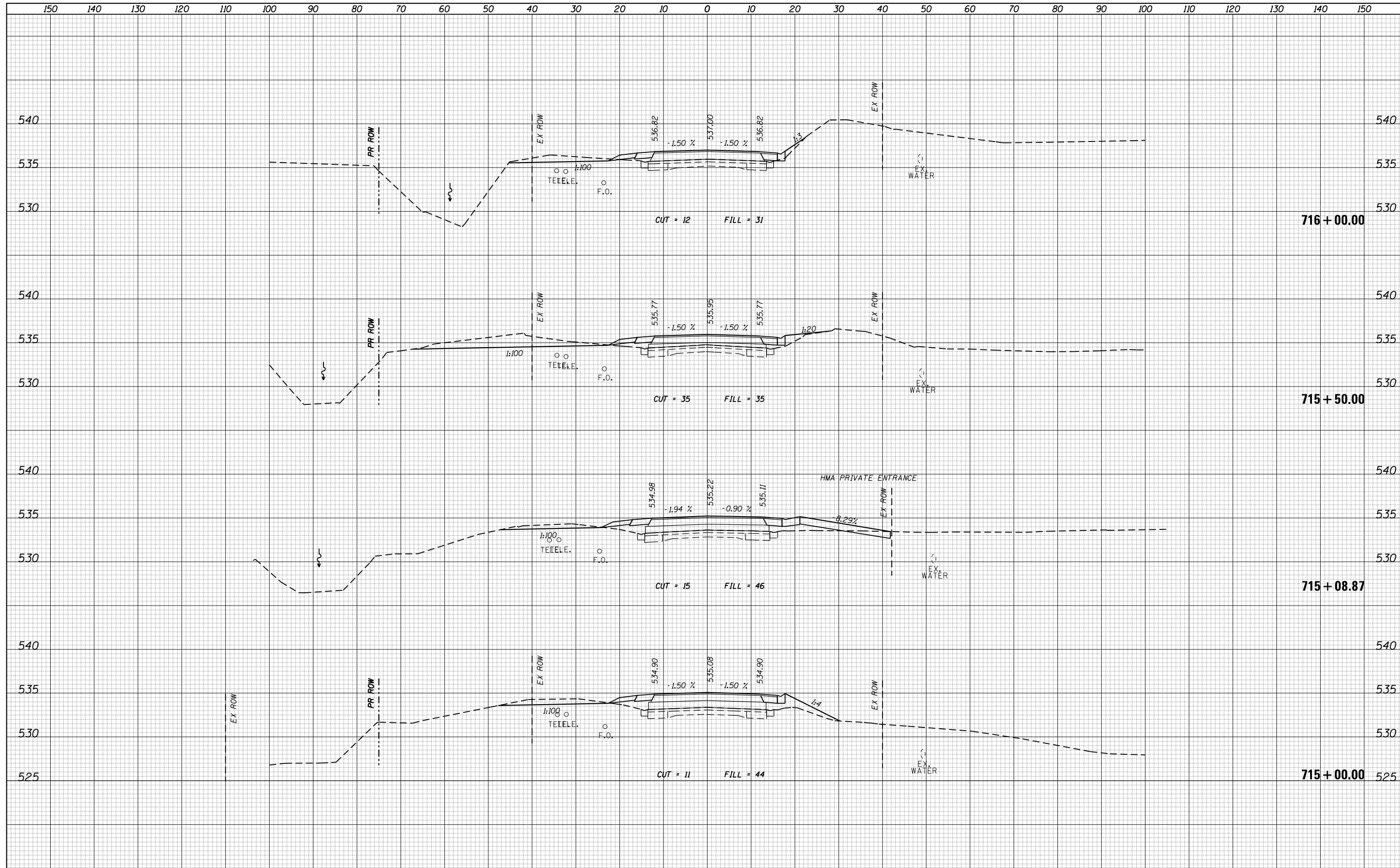
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NOTE BOOK	
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FILE NAME =	USER NAME = dbullock	DESIGNED - CAS	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>CROSS SECTIONS FAP 116 (IL 130)</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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Default	PLOT SCALE = 20.0000' / in.	CHECKED - JMB	REVISED -		SCALE: SHEET OF SHEETS STA. 713+50.00 TO STA. 714+50.00			CONTRACT NO. 74324				
	PLOT DATE = 2/4/2015	DATE - 1/27/15	REVISED -		ILLINOIS FED. AID PROJECT							

DATE	
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TEMPLATE	
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DATE	
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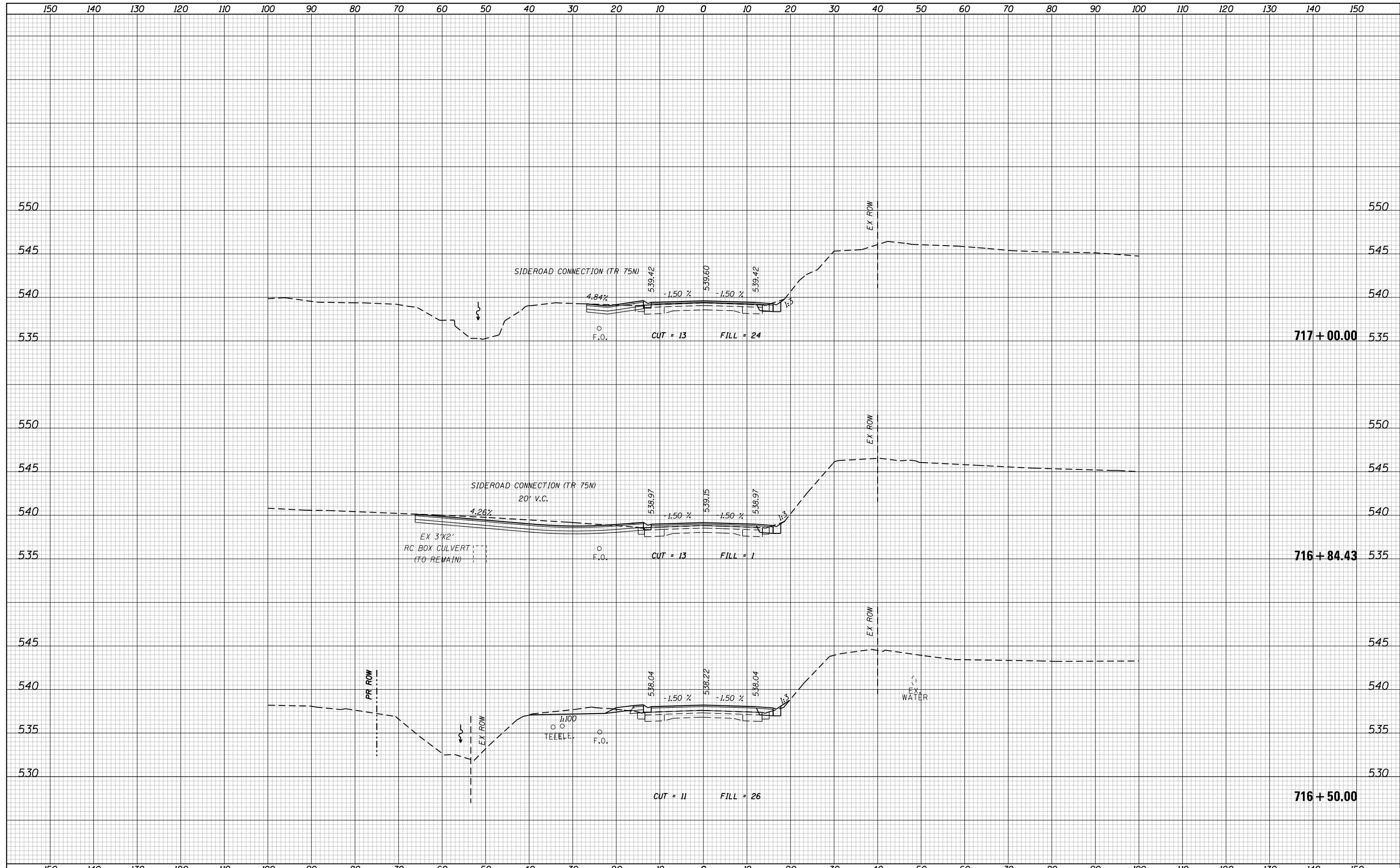


FILE NAME =	USER NAME = dbullock	DESIGNED - CAS	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>CROSS SECTIONS FAP 116 (IL 130)</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1:\1007\6008 - D7 Var Var\Work Order 5 - IL 130	Roadway Plans\CADD\Civil\10774324-shr-xssht.dwg	DRAWN - DLB	REVISED -					116	(113BR)B-1	CUMBERLAND	83	80
Default	PLOT SCALE = 20.0000' / in.	CHECKED - JMB	REVISED -		CONTRACT NO. 74324							
	PLOT DATE = 2/4/2015	DATE - 1/27/15	REVISED -		ILLINOIS FED. AID PROJECT							



DATE	
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NOTE BOOK	
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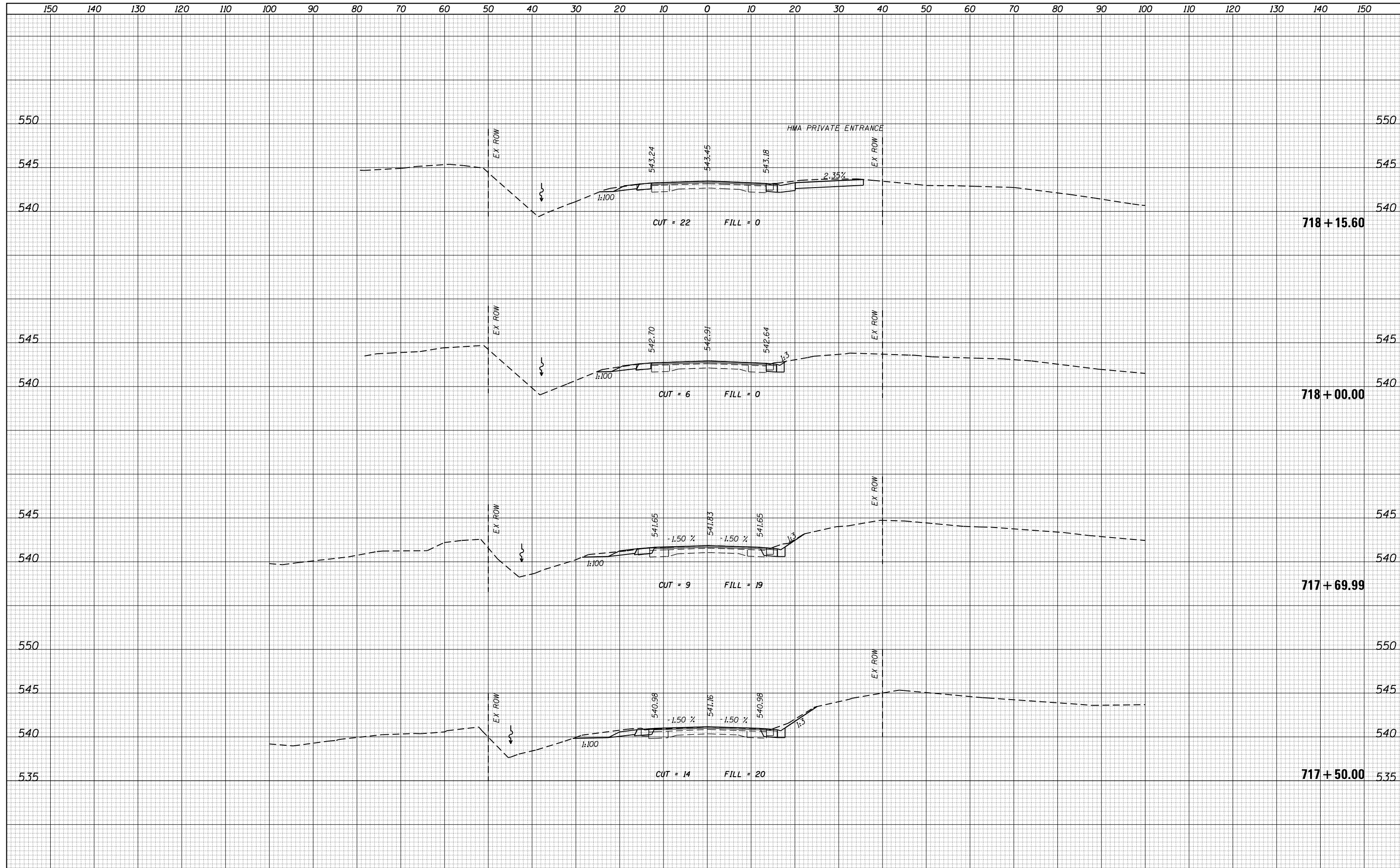
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ORIGINAL SURVEY	
NOTE BOOK	
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FILE NAME =	USER NAME = dbullock	DESIGNED - CAS	REVISIED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>CROSS SECTIONS FAP 116 (IL 130)</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1:\1007\6008 - D7 Var Var\Work Order 5 - IL 130	Roadway Plans\CADD\Civil\10774324-shr-xssht.dwg	DRAWN - DLB	REVISIED -					116	(113BR)B-1	CUMBERLAND	83	81
Default	PLOT SCALE = 20.0000' / in.	CHECKED - JMB	REVISIED -		CONTRACT NO. 74324			ILLINOIS FED. AID PROJECT				
	PLOT DATE = 2/4/2015	DATE - 1/27/15	REVISIED -		SCALE:	SHEET	OF	SHEETS	STA. 716+50.00	TO STA. 717+00.00		

DATE	
BY	
SURVEYED	
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TEMPLATE	
AREAS	
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DATE	
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PLOTTED	
TEMPLATE	
AREAS	
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FILE NAME =  
 I:\1007\6008 - D7 Var Var\Work Order 5 - IL 130

USER NAME = dbullock  
 DESIGNED - CAS  
 DRAWN - DLB  
 CHECKED - JMB  
 DATE - 1/27/15

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 REVISIED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

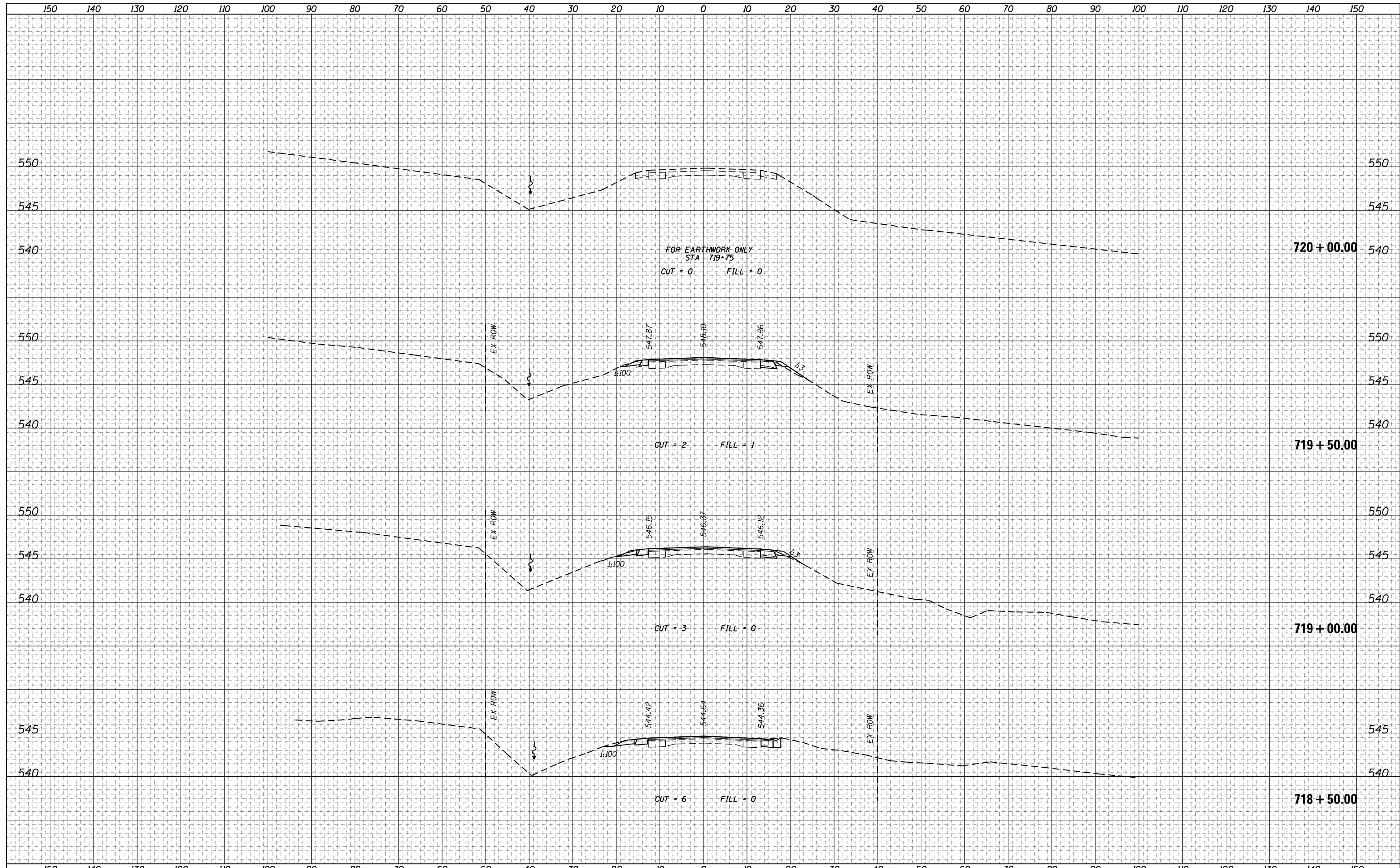
**CROSS SECTIONS FAP 116 (IL 130)**

SCALE: SHEET OF SHEETS STA. 717+50.00 TO STA. 718+15.60

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
116	(113BR)B-1	CUMBERLAND	83	82
			CONTRACT NO. 74324	
ILLINOIS FED. AID PROJECT				

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

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



FILE NAME =	USER NAME = dbullock	DESIGNED - CAS	REVISSED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>CROSS SECTIONS FAP 116 (IL 130)</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1:\1007\6008 - D7 Var Var\Work Order 5 - IL 130	Roadway Plans\CADD\Civil\10774324-sht-xssht.dwg	DRAWN - DLB	REVISSED -		116	(113BR)B-1	CUMBERLAND	83	83			
Default	PLOT SCALE = 20.0000' / in.	CHECKED - JMB	REVISSED -		SCALE: SHEET OF SHEETS STA. 718+50.00 TO STA. 720+00.00			CONTRACT NO. 74324				
	PLOT DATE = 2/4/2015	DATE - 1/17/15	REVISSED -		ILLINOIS FED. AID PROJECT							