053

03-06-2020 LETTING ITEM 053

INDEX OF SHEETS

FOR LIST OF HIGHWAY STANDARDS, SEE SHEET NO. 2

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

PROPOSED HIGHWAY PLANS

F.A.P. ROUTE 673 (ILL. ROUTE 116)
SECTION (108–BR)BRR
STRUCTURE NO. 102–0042
PROJECT STP–CD30(752)
OVER W. BRANCH OF PANTHER CREEK
SUPERSTRUCTURE REPLACEMENT
WOODFORD COUNTY

C–94–062–08

F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	* 51	1
	ILLINOIS	CONTRACT NO. 68805		

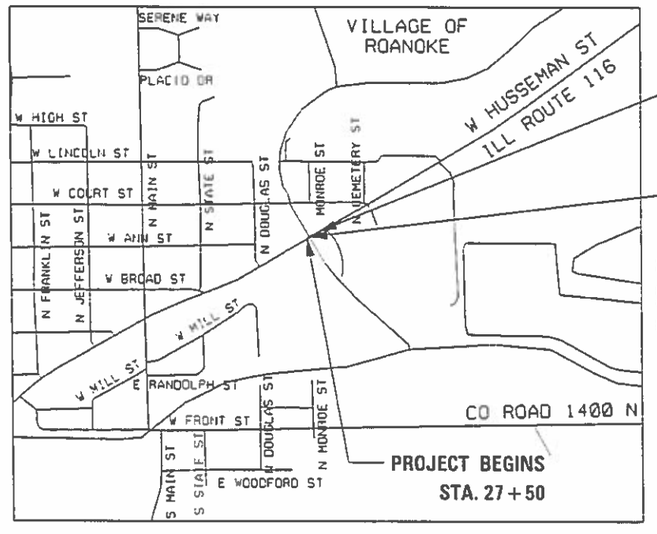
* 51 + 1 = 52 TOTAL SHEETS

D–94–043–08

LOCATION OF SECTION INDICATED THUS: –

FUNCTIONAL CLASSIFICATION
MINOR ARTERIAL (NON–URBAN)
2017 ADT = 2,700
2017 ADTT = 465
POSTED SPEED: 40 MPH

R 01 W



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LOCATION MAP
NOT TO SCALE

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

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

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED Dec 10 2019
Kenneth A Barnett KSD
REGIONAL ENGINEER
Jan 31 2020
ENGINEER OF DESIGN AND ENVIRONMENT
Jan 31 2020
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PROJECT ENGINEER: CHRISTOPHER MAUSHARD, P.E. (309) 671–3453
PROJECT MANAGER: CHRISTOPHER MAUSHARD, P.E. (309) 671–3453

CATALOG NO. 033807–00D
CONTRACT NO. 68805

GROSS LENGTH = 575 FT. = 0.109 MILE
NET LENGTH = 575 FT. = 0.109 MILE

TERRA ENGINEERING LTD.
401 Main Street, Suite 1550
Peoria, IL 61602
309-999-0123

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REV. 1/15/20

HIGHWAY STANDARDS

000001-07	STANDARD SYMBOLS, ABREVIATIONS AND PATTERNS
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
420406	PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB
482011-03	HMA SHLD. STRIPS/SHLDS. WITH RESURFACING OR WIDENING AND RESURFACING OR PROJECTS
515001-04	NAME PLATE FOR BRIDGES
630001-12	STEEL PLATE BEAM GUARDRAIL
630301-09	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631032-09	TRAFFIC BARRIER TERMINAL, TYPE 6A
643001-02	SAND MODULE IMPACT ATTENUATORS
701001-02	OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5m) AWAY
701006-05	OFF-ROAD OPERATIONS, 2L, 2W, 15' (4.5m) TO 24" (600mm) FROM PAVEMENT EDGE
701011-04	OFF-ROAD OPERATIONS, 2L, 2W, DAY ONLY
701201-0S	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEED > 45 MPH
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701321-18	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
701326-04	LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS > 45 MPH
701901-08	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
725001-01	OBJECT AND TERMINAL MARKERS
780001-05	TYPICAL PAVEMENT MARKINGS
781001-04	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
782006-0I	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

DISTRICT 4 STANDARDS

406101-D4	BUTT JOINTS
406301-D4	RURAL ENTRANCE FOR "3R" PROJECTS
606201-D4	CONCRETE GUTTER, TYPE B, (SPECIAL) (INLET, OUTLET & ENTRANCE)
630101-D4	GUARDRAIL EROSION CONTROL TREATMENT
667101-D4	PERMANENT SURVEY TIE & PERMANENT SURVEY MARKERS TY. I - TY. II
780001-D4	TYPICAL PAVEMENT MARKINGS

GENERAL NOTES

1. AVAILABILITY OF ELECTRONIC FILES

MICROSTATION AND GEOPAK FILES OF THIS PROJECT WILL BE MADE AVAILABLE TO THE CONTRACTOR AFTER CONTRACT AWARD. IF THERE IS A CONFLICT BETWEEN THE ELECTRONIC FILES AND THE PRINTED CONTRACT PLANS AND DOCUMENTS, THE PRINTED CONTRACT PLANS AND DOCUMENTS SHALL TAKE PRECEDENCE OVER THE ELECTRONIC FILES. THE CONTRACTOR SHALL ACCEPT ALL RISK ASSOCIATED WITH USING THE ELECTRONIC FILES AND SHALL HOLD THE DEPARTMENT HARMLESS FOR ANY ERRORS OR OMISSIONS IN THE ELECTRONIC FILES AND THE DATA CONTAINED THEREIN. ERRORS OR DELAYS RESULTING FROM THE USE OF THE ELECTRONIC FILES BY THE CONTRACTOR SHALL NOT RESULT IN AN EXTENSION OF TIME FOR ANY INTERIM OR FINAL COMPLETION DATE OR SHALL NOT BE CONSIDERED CAUSE FOR ADDITIONAL COMPENSATION. THE CONTRACTOR SHALL NOT USE, SHARE, OR DISTRIBUTE THESE ELECTRONIC FILES EXCEPT FOR THE PURPOSE OF CONSTRUCTING THIS CONTRACT. ANY CLAIMS BY THIRD PARTIES DUE TO USE OR ERRORS SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL INCLUDE THIS DISCLAIMER WITH THE TRANSFER OF THESE ELECTRONIC FILES TO ANY OTHER PARTIES AND SHALL INCLUDE APPROPRIATE LANGUAGE BINDING THEM TO SIMILAR RESPONSIBILITIES.

2. PLAN ELEVATIONS - U.S.G.S. MEAN SEA LEVEL DATUM

ALL ELEVATIONS SHOWN ON THE PLANS ARE ESTABLISHED FROM U.S.G.S. MEAN SEA LEVEL DATUM.

3. PROPERTY OWNER ACCESS REQUIREMENT

ACCESS MUST BE MAINTAINED TO ALL EXISTING PROPERTIES DURING CONSTRUCTION PER ARTICLE 107.09 UNLESS ARRANGEMENTS ARE MADE IN WRITING BY THE CONTRACTOR WITH THE PROPERTY OWNERS WITH A COPY TO THE ENGINEER FOR SHORT-TERM CLOSURES.

4. ENVIRONMENTAL REVIEWS

PRIOR TO THE USE OF ANY PROPOSED BORROW AREAS, USE AREAS (TEMPORARY ACCESS ROADS, DETOURS, RUN-AROUNDS, ETC.) AND/OR WASTE AREAS, THE CONTRACTOR SHALL FILE THE REQUIRED ENVIRONMENTAL RESOURCE REQUEST SURVEYS ACCORDING TO SECTION 107.22 OF THE STANDARD SPECIFICATIONS. THESE SURVEYS ARE REQUIRED IN ORDER FOR THE DEPARTMENT TO CONDUCT CULTURAL AND BIOLOGICAL RESOURCE SURVEYS FOR THE PROPOSED SITE.

THE REQUIRED ENVIRONMENTAL RESOURCE DOCUMENTATION SHALL INCLUDE THE FOLLOWING:

- BDE FORM 2289 (CULTURAL AND NATURAL RESOURCES REVIEW OF BORROW AREAS)
- BDE FORM 2290 (WASTE/USE AREA REVIEW)
- A LOCATION MAP SHOWING THE SIZE LIMITS AND LOCATION OF THE USE AREA
- COLOR PHOTOGRAPHS DEPICTING THE USE AREA
- BORROW AREA ENTRY AGREEMENT FORM - D4 PI0101

PRIOR TO ANY WASTE MATERIALS BEING REMOVED FROM THE CONSTRUCTION SITE THE REQUIRED ENVIRONMENTAL RESOURCE SURVEYS SHALL BE OBTAINED AND FILED BY THE CONTRACTOR. EXCESS WASTE PRODUCTS REMOVED FROM THE CONSTRUCTION SITE SHALL BE DISPOSED OF AS REQUIRED IN SETION 202.03 OF THE STANDARD SPECIFICATIONS.

ANY PROTRUDING METAL BARS SHALL BE REMOVED PRIOR TO THE DISPOSAL OF BROKEN CONCRETE AT APPROVED DISPOSAL SITES.

PLEASE NOTE THAT A MINIMUM OF FOUR WEEKS SHALL BE ALLOWED FOR THE DISTRICT TO OBTAIN THE REQUIRED WASTE SITE ENVIRONMENTAL CLEARANCES AND SIX WEEKS FOR THE REQUIRED BORROW SITE ENVIRONMENTAL CLEARANCES.

GENERAL NOTES (CONT'D)

5. AGGREGATE FOR DRIVEWAY REPLACEMENT

THE MATERIAL USED FOR CONSTRUCTION OF PERMANENT AGGREGATE DRIVEWAYS SHALL BE GRAVEL OR CRUSHED STONE, AS DIRECTED BY THE ENGINEER, TO REPLACE IN KIND THE EXISTING AGGREGATE DRIVEWAYS. NO ADDITIONAL COMPENSATION SHALL BE PROVIDED FOR THIS REQUIREMENT BUT SHALL BE CONSIDERED AS INCLUDED IN THE COST OF THE PAY ITEM FOR THE AGGREGATE AS SPECIFIED ON THE PLANS.

6. BUTT JOINT CUTTING TIME RESTRICTION

BUTT JOINTS SHALL NOT BE MILLED MORE THAN THREE (3) DAYS PRIOR TO PLACEMENT OF THE HMA SURFACE COURSE.

7. PAVING SURFACE COURSE

CONTINUOUS PAVING OPERATIONS ON THE MAIN ROADWAY SHALL BE MAINTAINED AT ALL TIMES DURING THE CONSTRUCTION OF THE HOT-MIX ASPHALT SURFACE. NO INTERRUPTIONS FOR SIDE ROADS, ENTRANCES, TURN LANES, ETC. WILL BE ALLOWED.

8. SAW CUT - 18" (450 mm) SHOULDER REMOVAL - IN-PLACE WHEEL SAW GRINDING PERMITTED

A FULL DEPTH SAW CUT SHALL BE REQUIRED AT THE JOINT BETWEEN THE PAVEMENT THAT IS TO BE LEFT IN PLACE AND THE EXISTING SHOULDER THAT IS TO BE REMOVED. THE CONTRACTOR MAY HAVE THE OPTION OF USING A WHEEL SAW TO GRIND UP THE EXISTING SHOULDER AND LEAVE THE FINELY GROUND PIECES ON SITE UNDER THE NEW SHOULDER AND ON THE FORESLOPE, WITH THE APPROVAL OF THE ENGINEER. MAXIMUM SIZE OF PIECES SHALL BE NO MORE THAN 3" (75 MM). LARGER PIECES SHALL BE PICKED UP/REMOVED FROM THE JOBSITE. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR VARIATIONS IN ASSUMED THICKNESS. THIS WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF THE REMOVAL ITEMS.

9. CROSSING EXISTING STRUCTURES WITH EQUIPMENT

NO STRUCTURES HAVE BEEN PRE-APPROVED TO BE CROSSED WITH THE EMPTY MTD.

ANY STRUCTURES SHALL BE VERIFIED BY THE RESIDENT PRIOR TO BEGINNING WORK.

10. ADDITIONAL SUPPLEMENTAL TRAFFIC CONTROL

THE DEPARTMENT RESERVES THE RIGHT AT ANY TIME TO ADD ADDITIONAL TRAFFIC CONTROL SYSTEMS OR DEVICES WITHIN THE ACTIVE CONTRACT LIMITS, BY MEANS OF AN ADDITIONAL CONTRACT. ALL TERMS OF ARTICLE 105.08 OF THE STANDARD SPECIFICATIONS SHALL BE FOLLOWED BY EACH CONTRACTOR.

POLYMERIZED BITUMINOUS MATERIALS (TACK COAT) RATES

SURFACE TYPE	RESIDUAL RATE
MILLED (HMA OR PCC)	0.08 LB/SF
EXISTING PAVEMENT	0.04 LB/SF
FOG COAT (BETWEEN LIFTS)	0.04 LB/SF

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

MIXTURE USE(S):	POLY. HOT-MIX ASPHALT SURFACE COURSE, IL-9.5FG, MIX D, N50 AND HOT-MIX ASPHALT SHOULDER
AC/PG:	SBS76-28
DESIGN AIR VOIDS:	4.0% @ 50GYR
MIXTURE COMPOSITION: (GRADATION MIXTURE):	IL 9.5mm
FRICTION AGGREGATE:	D SURFACE
QUALITY MANAGEMENT:	QC/QA

MIXTURE USE(S):	POLY. HOT-MIX ASPHALT BINDER CSE., IL-4.75, N50
AC/PG:	SBS76-22
DESIGN AIR VOIDS:	4.0% @ 50GYR
MIXTURE COMPOSITION: (GRADATION MIXTURE):	IL 4.75mm
FRICTION AGGREGATE:	NA
QUALITY MANAGEMENT:	QC/QA

NOTES: INDIVIDUAL LIFT THICKNESS OF EACH MIX TYPE WILL BE NO LESS THAN 3 TIMES NOMINAL MAXIMUM AGGREGATE SIZE AND NO MORE THAN 6 TIMES NOMINAL AGGREGATE SIZE.

NOTE:

THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LB/SQ YD/IN.

COMMITMENTS:

COMMITMENTS ARE NOT TO BE ALTERED WITHOUT THE WRITTEN CONSENT OF ALL PARTIES TO WHICH THE COMMITMENT WAS MADE.

CONTACT MR. MARK AESCHLEMAN, ROANOKE DIRECTOR OF PUBLIC WORKS, 14 DAYS BEFORE SETTING UP TRAFFIC CONTROL ON IL ROUTE 116 AND CLOSURE OF N. DOUGLAS STREET. HIS CONTACT INFORMATION IS 309-303-8001 PHONE AND MAROANOKE@MCHSI.COM E-MAIL ADDRESS.

TERRA ENGINEERING LTD.

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PLOT DATE = 12/10/2019	DATE - 4-11-2019	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 116 OVER WEST BRANCH OF PANTHER CREEK

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	51	2
		CONTRACT NO. 68805		
	ILLINOIS	FED. AID PROJECT		

REV. 1/15/20

Illinois Department of Transportation

Status of Utilities

Name of Utility Company

Ameren Illinois (Electric)

Route	FAP 673 (IL 116)
Section	(108-BR)BRR
County	Woodford
Contract No.	68805
Catalog No.	033807-00D

Route	Offset	Location	Type of Utility	Type of Conflict	Disposition
IL116	41' LT.	Sta. 27+48	Pole w/aerial	Project Limit	Caution
IL116	18' LT.	Sta. 28+75	Pole w/aerial & light	Guardrail/erosion control	Relocate
IL116	18' LT.	Sta. 30+30	Pole w/aerial & light	Guardrail/erosion control	Relocate
IL116	19' LT.	Sta. 31+77	Pole w/aerial & light	Guardrail/erosion control	Relocate

NOTE: Please check all your facilities within the construction limits of this project.

RH:pjl\O:\PD\MGR1\WINWORD\Progdev\Utilities\Status of Utilities\68805_AmerenIllinoisElectric.docx

Printed 5/16/2019

D4 PD0100 (Rev. 02/24/10)

Illinois Department of Transportation

Status of Utilities

Name of Utility Company

Ameren Illinois (Gas)

Route	FAP 673 (IL 116)
Section	(108-BR)BRR
County	Woodford
Contract No.	68805
Catalog No.	033807-00D

Route	Offset	Location	Type of Utility	Type of Conflict	Disposition
IL116	33' RT.	Sta. 27+95	4" Gas Main	Concrete Outlet	Caution
IL116	36' RT.	Sta. 32+60 to Sta. 32+85	4" Gas Main	Driveway entrance	Caution

NOTE: Please check all your facilities within the construction limits of this project.

RH:pjl\O:\PD\MGR1\WINWORD\Progdev\Utilities\Status of Utilities\68805_AmerenIllinoisGas.docx

Printed 5/16/2019

D4 PD0100 (Rev. 02/24/10)

CONTACTS:

AMEREN ELECTRIC
Mr. Cody Davis
Ameren Illinois
8420 N. University
Peoria, Illinois 61615

AMEREN GAS
Mr. Kent Kowalske
Ameren Illinois
8420 N. University
Peoria, Illinois 61615

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 116 OVER WEST BRANCH OF PANTHER CREEK
STATUS OF UTILITIES

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	51	2A
		CONTRACT NO. 68805		
	ILLINOIS	FED. AID PROJECT		

				CONSTRUCTION CODES		
				80/20 FUNDS	80/20 FUNDS	100% STATE
				ROADWAY	BRIDGE	
			TOTAL	0013	0013	0013
CODE NO.	ITEM	UNIT	QUANTITY	RURAL	SN 102-0042	
20101700	SUPPLEMENTAL WATERING	UNIT	5	5		
20200100	EARTH EXCAVATION	CU YD	115	115		
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	40	40		
20300100	CHANNEL EXCAVATION	CU YD	700	700		
21101505	TOPSOIL EXCAVATION AND PLACEMENT	CU YD	5	5		
21101600	TOPSOIL FURNISH AND PLACE, VARIABLE DEPTH	SQ YD	528	528		
21400100	GRADING AND SHAPING DITCHES	FOOT	40	40		
25000210	SEEDING, CLASS 2A	ACRE	0.25	0.25		
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	10	10		
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	10	10		
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	10	10		
25000750	MOWING	ACRE	0.50			0.50
25100630	EROSION CONTROL BLANKET	SQ YD	528	528		
25200110	SODDING, SALT TOLERANT	SQ YD	23	23		

* SPECIALTY ITEM

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
IL 116 OVER WEST BRANCH OF PANTHER CREEK

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	51	3
		CONTRACT NO. 68805		
		ILLINOIS	FED. AID PROJECT	

REV. 1/16/20

				CONSTRUCTION CODES		
				80/20 FUNDS	80/20 FUNDS	100% STATE
				ROADWAY	BRIDGE	
				0013	0013	0013
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	RURAL	SN 102-0042	
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	20	20		
28000305	TEMPORARY DITCH CHECKS	FOOT	8	8		
28000400	PERIMETER EROSION BARRIER	FOOT	960	960		
28000510	INLET FILTERS	EACH	1	1		
28001100	TEMPORARY EROSION CONTROL BLANKET	SQ YD	528	528		
28100107	STONE RIPRAP, CLASS A4	SQ YD	553		553	
28200200	FILTER FABRIC	SQ YD	553		553	
31101200	SUBBASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	526	526		
35400400	PORTLAND CEMENT CONCRETE BASE COURSE WIDENING 9"	SQ YD	227	227		
40600295	POLYMERIZED BITUMINOUS MATERIALS (TACK COAT)	POUND	1410	1410		
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	76	76		
40600990	TEMPORARY RAMP	SQ YD	38	38		
40603200	POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-4.75, N50	TON	139	139		
40604110	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, IL-9.5FG, MIX D, N50	TON	74	74		

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PLOT DATE = 12/10/2019	DATE - 4-11-2019	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
IL 116 OVER WEST BRANCH OF PANTHER CREEK

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	51	4
		CONTRACT NO. 68805		
	ILLINOIS FED. AID PROJECT			

REV. 1/16/20

				CONSTRUCTION CODES		
				80/20 FUNDS	80/20 FUNDS	100% STATE
				ROADWAY	BRIDGE	
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0013	0013	0013
				RURAL	SN 102-0042	
42000070	PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB	SQ YD	113	113		
42300400	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH	SQ YD	114	114		
44000100	PAVEMENT REMOVAL	SQ YD	89	89		
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 2"	SQ YD	939	939		
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	604	604		
44004250	PAVED SHOULDER REMOVAL	SQ YD	98	98		
48101200	AGGREGATE SHOULDERS, TYPE B	TON	13	13		
48203100	HOT-MIX ASPHALT SHOULDERS	TON	24	24		
50101500	REMOVAL OF EXISTING SUPERSTRUCTURES	EACH	1		1	
50200100	STRUCTURE EXCAVATION	CU YD	9		9	
50300225	CONCRETE STRUCTURES	CU YD	28.5		28.5	
50300260	BRIDGE DECK GROOVING	SQ YD	429		429	
50300300	PROTECTIVE COAT	SQ YD	458		458	
50301350	CONCRETE SUPERSTRUCTURE (APPROACH SLAB)	CU YD	88.9		88.9	

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
IL 116 OVER WEST BRANCH OF PANTHER CREEK

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	51	5
		CONTRACT NO. 68805		
	ILLINOIS	FED. AID PROJECT		

REV. 1/16/20

					CONSTRUCTION CODES		
					80/20 FUNDS	80/20 FUNDS	100% STATE
					ROADWAY	BRIDGE	
					0013	0013	0013
	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	RURAL	SN 102-0042	
	50400505	PRECAST PRESTRESSED CONCRETE DECK BEAMS (27" DEPTH)	SQ FT	2194		2194	
	50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	43130		43130	
	50800515	BAR SPLICERS	EACH	369		369	
	50901050	STEEL RAILING, TYPE SM	FOOT	138		138	
	51500100	NAME PLATES	EACH	1		1	
	55100500	STORM SEWER REMOVAL 12"	FOOT	127	127		
	59000200	EPOXY CRACK INJECTION	FOOT	6		6	
	60500060	REMOVING INLETS	EACH	7	7		
	60600095	CLASS SI CONCRETE (OUTLET)	CU YD	10.4	10.4		
*	63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	187.5	187.5		
*	63000003	STEEL PLATE BEAM GUARDRAIL, TYPE A, 9 FOOT POSTS	FOOT	100	100		
*	63100087	TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	4	4		
*	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	4		
	63200310	GUARDRAIL REMOVAL	FOOT	498	498		

*= SPECIALTY ITEM

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DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
IL 116 OVER WEST BRANCH OF PANTHER CREEK

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	51	6
		CONTRACT NO. 68805		
	ILLINOIS FED. AID PROJECT			

REV. 1/16/20

				CONSTRUCTION CODES		
				80/20 FUNDS	80/20 FUNDS	100% STATE
				ROADWAY	BRIDGE	
				0013	0013	0013
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	RURAL	SN 102-0042	
* 66700205	PERMANENT SURVEY MARKERS, TYPE I	EACH	1	1		
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6		
67100100	MOBILIZATION	L SUM	1	1		
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1		
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1		
70300100	SHORT TERM PAVEMENT MARKING	FOOT	200	200		
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	67	67		
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	1188	1188		
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	36	36		
70400100	TEMPORARY CONCRETE BARRIER	FOOT	400	400		
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	338	338		
70600255	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	2	2		
70600322	IMPACT ATTENUATORS, RELOCATE (FULLY- REDIRECTIVE,NARROW), TEST LEVEL 2	EACH	2	2		
* 72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4		

*= SPECIALTY ITEM

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PLOT DATE = 12/10/2019	DATE - 4-11-2019	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
IL 116 OVER WEST BRANCH OF PANTHER CREEK

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	51	7
		CONTRACT NO. 68805		
	ILLINOIS	FED. AID PROJECT		

REV. 1/16/20

				CONSTRUCTION CODES		
				80/20 FUNDS	80/20 FUNDS	100% STATE
				ROADWAY	BRIDGE	
				0013	0013	0013
	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	RURAL	SN 102-0042	
*	78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	200	200		
*	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	4	4		
*	78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	6	6		
	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	4	4		
	X0327979	PAVEMENT MARKING REMOVAL - GRINDING	SQ FT	37	37		
	X5030305	CONCRETE WEARING SURFACE, 5"	SQ YD	244		244	
	X7010202	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321 (SPECIAL)	EACH	1	1		
	70107025	CHANGEABLE MESSAGE SIGN	CAL DA	210	210		
	X7030005	TEMPORARY PAVEMENT MARKING REMOVAL	SQ FT	469	469		
	X7040125	PINNING TEMPORARY CONCRETE BARRIER	EACH	26	26		
	Z0001002	GUARDRAIL AGGREGATE EROSION CONTROL	TON	39	39		
	Z0001900	ASBESTOS BEARING PAD REMOVAL	EACH	18		18	
	Z0004552	APPROACH SLAB REMOVAL	SQ YD	184	184		
	Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	7		7	

*= SPECIALTY ITEM

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
IL 116 OVER WEST BRANCH OF PANTHER CREEK

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	51	8
		CONTRACT NO. 68805		
	ILLINOIS	FED. AID PROJECT		

REV. 1/16/20

				CONSTRUCTION CODES		
				80/20 FUNDS	80/20 FUNDS	100% STATE
				ROADWAY	BRIDGE	
			TOTAL	0013	0013	0013
CODE NO.	ITEM	UNIT	QUANTITY	RURAL	SN 102-0042	
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1		
Z0034105	MATERIAL TRANSFER DEVICE	TON	213	213		
Z0076600	TRAINEES	HOUR	1000	1000		
Z0076604	TRAINEES - TRAINING PROGRAM GRADUATE	HOUR	1000	1000		

Ø 0042

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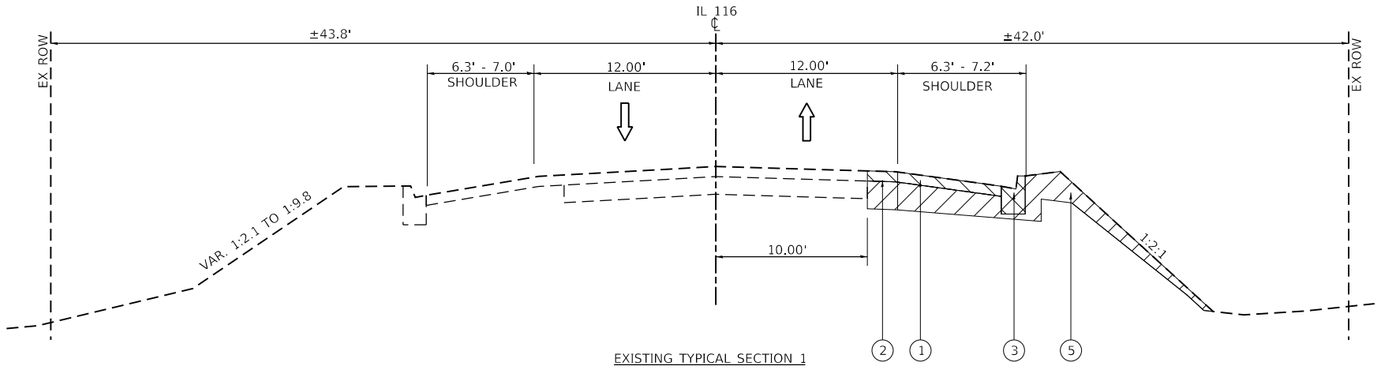
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
IL 116 OVER WEST BRANCH OF PANTHER CREEK

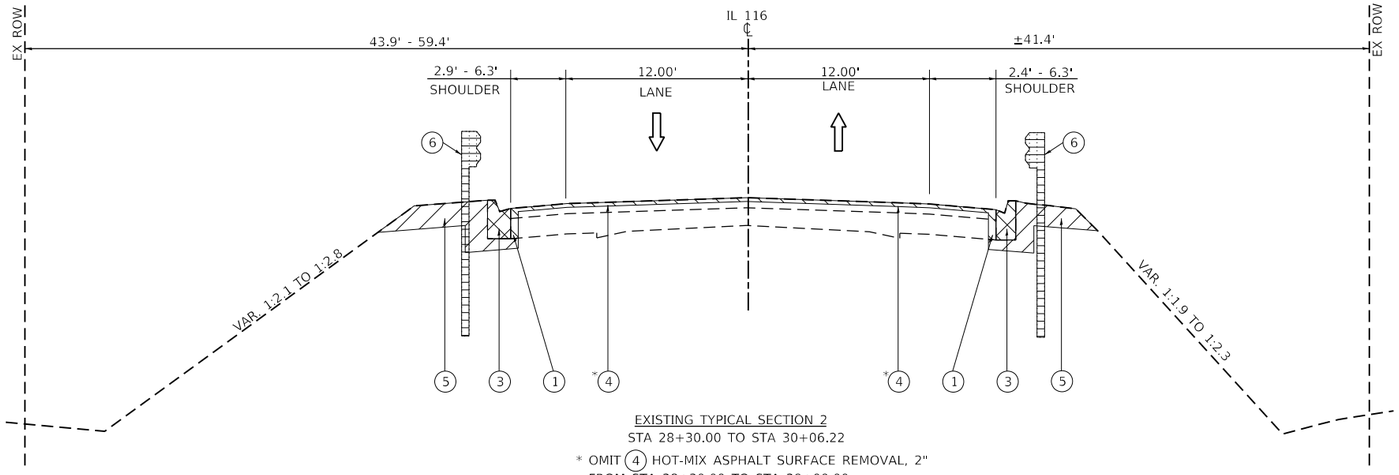
SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	51	9
		CONTRACT NO. 68805		
		ILLINOIS	FED. AID PROJECT	

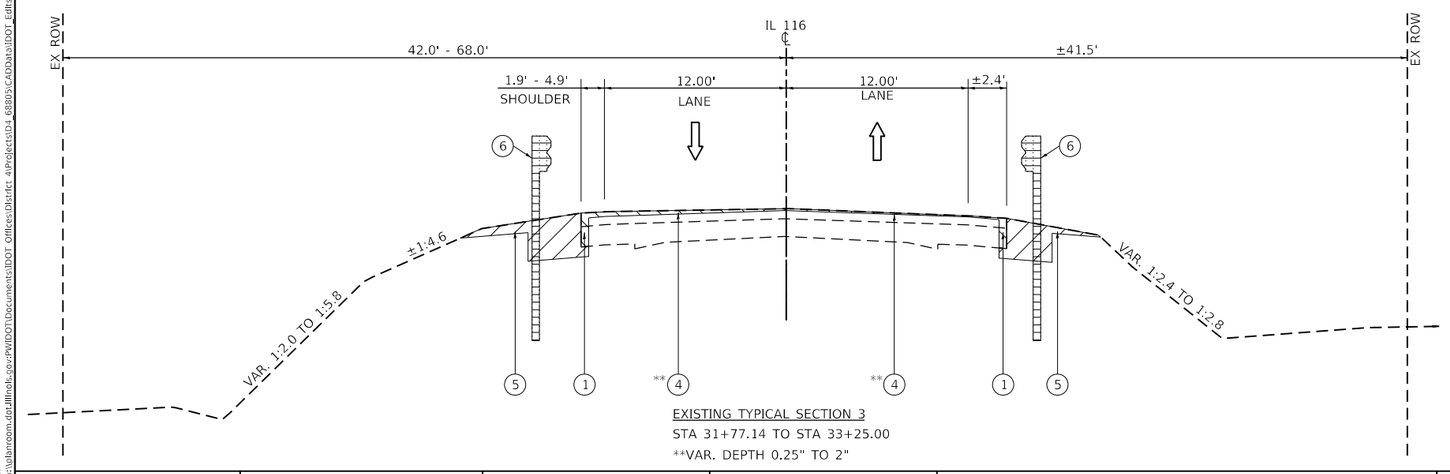
REV. 1/28/20 REV. 1/16/20



EXISTING TYPICAL SECTION 1
STA 27+50.00 TO STA 28+30.00



EXISTING TYPICAL SECTION 2
STA 28+30.00 TO STA 30+06.22
* OMIT (4) HOT-MIX ASPHALT SURFACE REMOVAL, 2"
FROM STA 28+30.00 TO STA 29+00.00



EXISTING TYPICAL SECTION 3
STA 31+77.14 TO STA 33+25.00
**VAR. DEPTH 0.25" TO 2"

LEGEND

1. PAVED SHOULDER REMOVAL
2. PAVEMENT REMOVAL
3. COMBINATION CURB AND GUTTER REMOVAL
4. HOT-MIX ASPHALT SURFACE REMOVAL, 2"
5. EXCAVATION
6. GUARDRAIL REMOVAL
7. POLY HOT-MIX ASPHALT SURFACE COURSE, IL-9.5FG, MIX "D", N50, 1 ½"
8. POLY HOT-MIX ASPHALT BINDER COURSE, IL-4.75, N50, VAR. DEPTH
9. PORTLAND CEMENT CONCRETE BASE COURSE WIDENING 9"
10. GUARDRAIL AGGREGATE EROSION CONTROL
11. STEEL PLATE BEAM GUARDRAIL, TYPE A
12. TOPSOIL FURNISH AND PLACE, VARIABLE DEPTH
13. CONCRETE WEARING SURFACE, 5"
14. BRIDGE RAILING
15. LONG JOINT SEALENT
16. SUBBASE GRANULAR MATERIAL, TYPE B 4"
17. AGGREGATE SHOULDERS, TYPE B 6"
18. PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB

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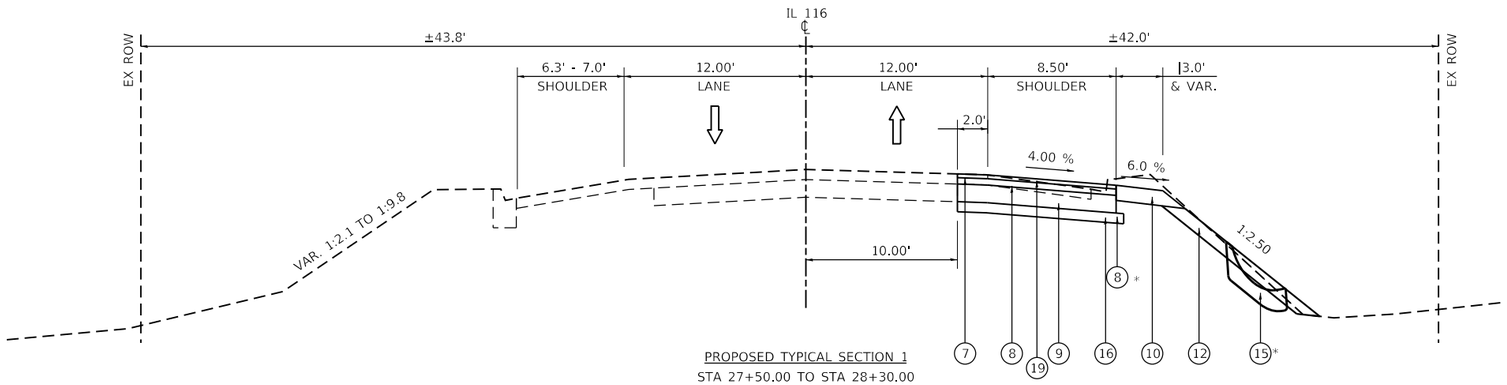
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

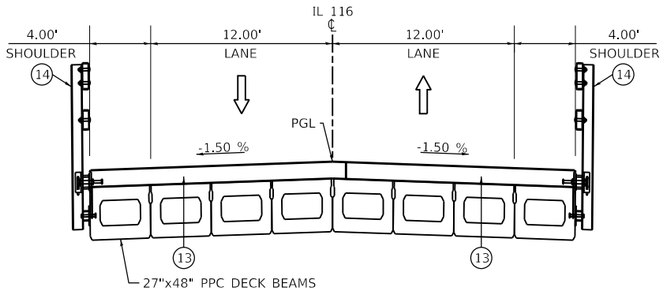
EXISTING TYPICAL SECTIONS
IL 116 OVER WEST BRANCH OF PANTHER CREEK

SCALE: | SHEET 1 OF 2 SHEETS | STA. | TO STA.

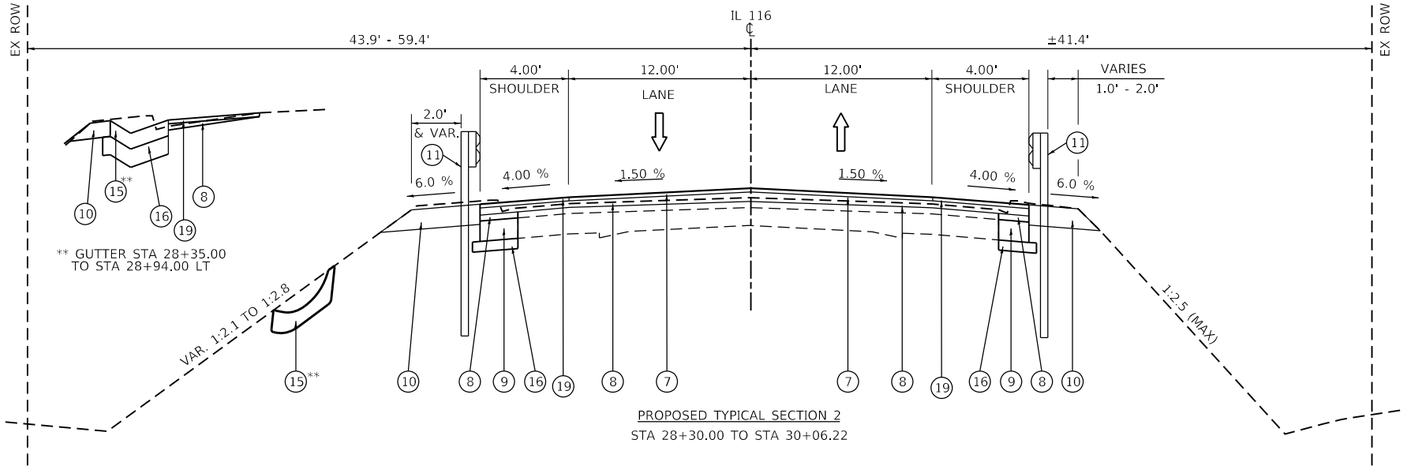
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	51	10
		CONTRACT NO. 68805		
	ILLINOIS	FED. AID PROJECT		



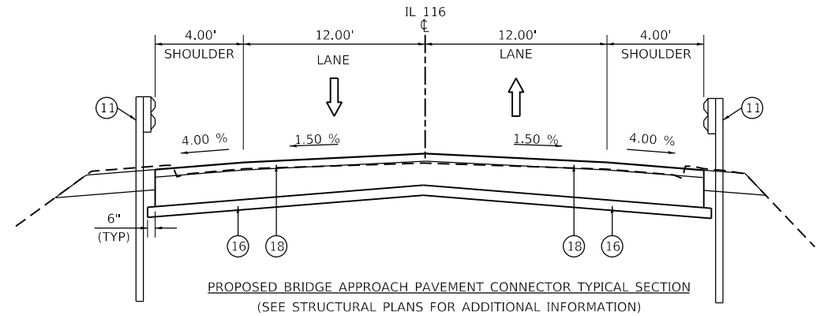
PROPOSED TYPICAL SECTION 1
STA 27+50.00 TO STA 28+30.00
* GUTTER STA 27+55.00 TO STA 27+95.00 RT



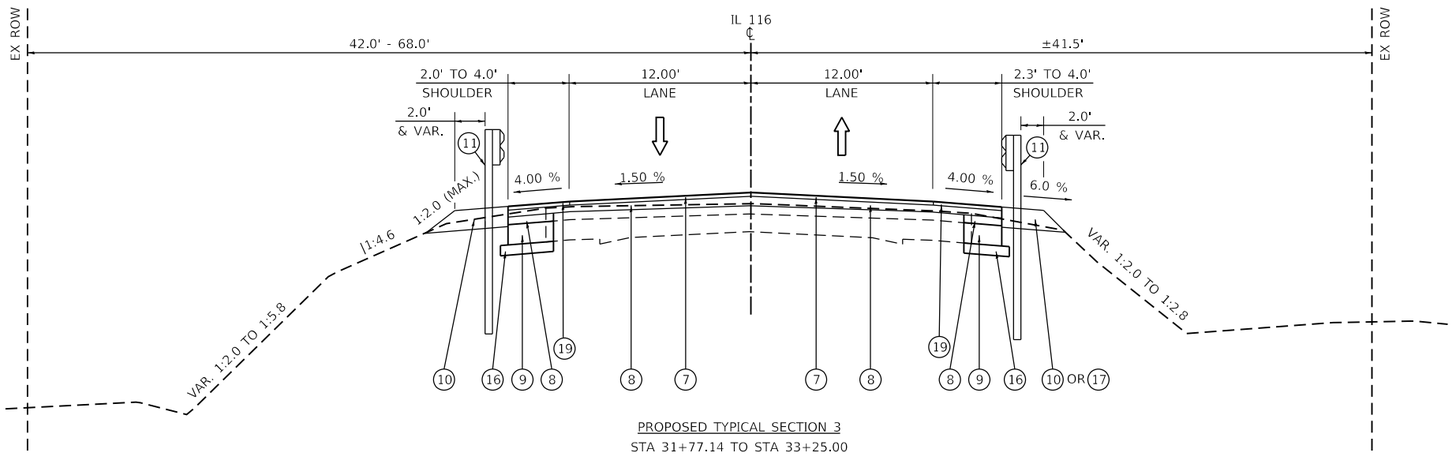
PROPOSED BRIDGE TYPICAL SECTION
(SEE STRUCTURAL PLANS FOR ADDITIONAL INFORMATION)
STA 30+57.43 TO STA 31+25.99



PROPOSED TYPICAL SECTION 2
STA 28+30.00 TO STA 30+06.22



PROPOSED BRIDGE APPROACH PAVEMENT CONNECTOR TYPICAL SECTION
(SEE STRUCTURAL PLANS FOR ADDITIONAL INFORMATION)
STA 30+06.22 TO STA 30+27.43 & STA 31+55.99 TO STA 31+77.14
APPROACH SLAB FROM STA. 30+27.43 TO STA. 30+57.43 & STA. 31+25.94 TO STA. 31+55.94



PROPOSED TYPICAL SECTION 3
STA 31+77.14 TO STA 33+25.00

LEGEND

1. PAVED SHOULDER REMOVAL
2. PAVEMENT REMOVAL
3. COMBINATION CURB AND GUTTER REMOVAL
4. HOT-MIX ASPHALT SURFACE REMOVAL, 2"
5. EARTH EXCAVATION
6. GUARDRAIL REMOVAL
7. POLY HOT-MIX ASPHALT SURFACE COURSE, IL-9.5FG, MIX D, N50, 1 ½"
8. POLY HOT-MIX ASPHALT BINDER COURSE, IL 4.75, N50, VAR. 0.75" to 4.1"
9. PORTLAND CEMENT CONCRETE BASE COURSE WIDENING 9"
10. GUARDRAIL AGGREGATE EROSION CONTROL
11. STEEL PLATE BEAM GUARDRAIL, TYPE A
(WITH 6' AND/OR 9' POSTS - SEE SHEDULE FOR STATION RANGE)
12. TOPSOIL FURNISH AND PLACE, VARIABLE DEPTH
13. CONCRETE WEARING SURFACE, 5"
14. STEEL RAILING, TYPE SM
15. CLASS SI CONCRETE (OUTLET)
16. SUBBASE GRANULAR MATERIAL, TYPE B 4"
17. AGGREGATE SHOULDERS, TYPE B 6"
18. PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB
19. HOT-MIX ASPHALT SHOULDER

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED TYPICAL SECTIONS
IL 116 OVER WEST BRANCH OF PANTHER CREEK

SCALE: | SHEET 2 OF 2 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	51	11
		CONTRACT NO. 68805		
	ILLINOIS	FED. AID PROJECT		

GUARDRAIL SCHEDULE

LOCATION STATION			GUARDRAIL REMOVAL	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	STEEL PLATE BEAM GUARDRAIL, TYPE A, 9 FOOT POSTS	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	TRAFFIC BARRIER TERMINAL, TYPE 6A	GUARDRAIL REFLECTORS, TYPE A	GUARDRAIL AGG. EROS. CONTROL	TERMINAL MARKER-DIRECT APPLIED
ALIGNMENT: IL RTE 116			FEET	FEET	FEET	EACH	EACH	EACH	TON	EACH
N.W. QUAD								1		
STA		STA								
28+54.00	TO	30+56.21							10.4	
31+37.84	TO	32+65.44	128							
31+37.20	TO	31+74.47					1*			
31+74.47	TO	32+11.97		37.50						1
32+11.97	TO	32+61.97				1				
S.W. QUAD								1		
STA		STA								
27+79.00	TO	28+30.00							2.2	
28+30.00	TO	30+47.00							10.0	
29+77.31	TO	30+67.49	90							
28+75.15	TO	29+25.15				1				
29+25.15	TO	30+31.40		106.25						1
30+31.40	TO	30+68.64					1			
S.E. QUAD								1		
STA		STA								
28+54.96	TO	30+44.79	190							
28+15.23	TO	28+65.23				1*				
28+65.23	TO	30+08.98		43.75	100.00					1
30+08.98	TO	30+46.22					1*			
31+17.00	TO	32+45.00						1	8.6	
N.E. QUAD										
STA		STA								
31+15.22	TO	32+05.46	90							1
31+14.78	TO	31+52.02					1			
31+35.00	TO	33+25.00				1			8.1	
31+52.02	TO	32+02.02								
STEEL RAILING, TYPE SM								2		
TOTAL			498	187.5	100.00	4	4	6	39	4

* PROVIDE 9 FOOT POSTS WITHIN TERMINAL WHERE AGGREGATE SHOULDER BEHIND THE GUARDRAIL IS LESS THAN 2 FEET IN WIDTH.

TRAFFIC CONTROL SCHEDULE

LOCATION STATION			TEMPORARY BRIDGE TRAFFIC SIGNALS	TEMPORARY CONCRETE BARRIER	RELOCATE TEMPORARY CONCRETE BARRIER	PINNING TEMPORARY CONCRETE BARRIER	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2	IMPACT ATTENUATORS, RELOCATE (FULLY-REDIRECTIVE, NARROW), TEST LEVEL 2
ALIGNMENT: IL RTE 116			EACH	FOOT	FOOT	EACH	EACH	EACH
STAGE I								
STA		STA						
27+50.00	TO	33+25.00	1	338		26	2	2
STAGE II								
STA		STA						
27+50.00	TO	33+25.00		62	338			
TOTAL			1	400	338	26	2	2

REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL SCHEDULE

LOCATION STATION			REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL
ALIGNMENT: IL RTE 116			CU YD
STA		STA	
27+50.00	TO	33+25.00	40
TOTAL			40

CHANNEL EXCAVATION SCHEDULE

LOCATION STATION			CHANNEL EXCAVATION
ALIGNMENT: IL RTE 116			CU YD
STA		STA	
30+27.43	TO	31+55.99	700
TOTAL			700

PAVEMENT MARKING SCHEDULE

LOCATION STATION			SHORT TERM PAVEMENT MARKING	SHORT TERM PAVEMENT MARKING REMOVAL	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	RAISED REFLECTIVE PAVEMENT MARKER	PAVEMENT MARKING REMOVAL - GRINDING	TEMPORARY PAVEMENT MARKING - LINE 4"	TEMPORARY PAVEMENT MARKING - LINE 24"	TEMPORARY PAVEMENT MARKING REMOVAL	MOD. URETHANE PAVEMENT MARKING - LINE 4"
ALIGNMENT: IL RTE 116			FOOT	SQ FT	EACH	EACH	SQ FT	FOOT	FOOT	SQ FT	FOOT
STA		STA									
27+07.00	TO	30+27.43	80	26.7	2	2	16.7				80
30+27.43	TO	31+55.99	40	13.3							40
31+55.99	TO	34+77.00	80	26.7	2	2	20.0				80
26+76.80	TO	29+66.66						609	12	227.4	
32+16.75	TO	34+88.75						579	24	241.1	
TOTAL			200	67	4	4	37	1188	36	469	200

EARTHWORK SCHEDULE

STA	TO	STA	LENGTH FT	EARTH EXCAVATION CU YD	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE CU YD	EMBANKMENT CU YD	SURPLUS OR WASTE (-) CU YD
IL RTE 116							
27+50.00	TO	28+00.00	50	21.50	18.28	1.26	17.02
28+00.00	TO	28+25.00	25	8.08	6.87	7.36	-0.49
28+25.00	TO	28+50.00	25	7.03	5.98	0.93	5.05
28+50.00	TO	28+75.00	25	11.14	9.47	5.65	3.82
28+75.00	TO	29+00.00	25	12.89	10.96	0.00	10.96
29+00.00	TO	29+20.00	20	9.45	8.03	0.00	8.03
29+20.00	TO	29+50.00	30	12.63	10.73	0.00	10.73
29+50.00	TO	29+75.00	25	9.97	8.47	0.00	8.47
29+75.00	TO	30+00.00	25	9.51	8.08	0.00	8.08
30+00.00	TO	30+10.00	10	3.67	3.12	0.00	3.12
30+10.00	TO	30+45.00	35	9.13	7.76	0.00	7.76
30+45.00	TO	30+56.21	11.21	1.93	1.64	0.00	1.64
30+56.21	TO	31+27.21	71	14.36	12.20	0.00	12.20
31+27.21	TO	31+30.00	2.79	0.65	0.55	0.00	0.55
31+30.00	TO	31+40.00	10	1.90	1.62	0.00	1.62
31+40.00	TO	31+75.00	35	9.95	8.46	0.00	8.46
31+75.00	TO	32+00.00	25	10.19	8.66	0.00	8.66
32+00.00	TO	32+50.00	50	22.08	18.77	0.00	18.77
32+50.00	TO	32+72.68	22.68	18.50	15.73	0.00	15.73
32+72.68	TO	33+00.00	27.32	20.79	17.67	0.00	17.67
33+00.00	TO	33+25.00	25	4.74	4.03	0.00	4.03
SUBTOTALS			575	115	98	15	83

NOTES:

1. A SHRINKAGE FACTOR OF 15% WAS USED FOR CALCULATIONS.
2. EARTH EXCAVATION QUANTITY INCLUDES TOPSOIL REMOVAL WHERE PRESENT.

REMOVAL SCHEDULE

LOCATION STATION		COMBINATION CURB AND GUTTER REMOVAL	STORM SEWER REMOVAL 12"	HMA SURF. REMOVAL, 2"	APPROACH SLAB REMOVAL	PAVED SHOULDER REMOVAL	PAVEMENT REMOVAL
ALIGNMENT: IL RTE 116		FOOT	FEET	SQ YD	SQ YD	SQ YD	SQ YD
STA TO STA	OFFSET						
27+50.00 - 30+47.43	RT.	297.4				70.7	
28+30.00 - 30+67.83	LT.	237.8				8.5	
31+16.00 - 31+60.91	RT.	44.9				7.6	
31+36.78 - 31+60.55	LT.	23.8				11.3	
STATION							
28+25.00	19' RT.		14.4				
29+16.00	17.5' LT.		21.1				
29+17.80	17.4' RT.		17.6				
30+10.00	15.1' LT.		22.2				
30+10.00	15.4' RT.		19.3				
31+32.10	15' RT.		18.6				
31+50.00	15' LT.		14.0				
STA TO STA							
27+50.00 - 28+30.00							88.9
28+30.00 - 30+27.43				479.4	92		
31+55.99 - 33+25.00				459.3	92		
TOTAL		604	127	939	184	98	89

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULES OF QUANTITIES
IL 116 OVER WEST BRANCH OF PANTHER CREEK

SCALE: | SHEET 1 OF 2 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	51	12
		CONTRACT NO. 68805		
		ILLINOIS	FED. AID PROJECT	

PAVEMENT SCHEDULE

LOCATION STATION				SUBBASE GRANULAR MATERIAL TY. B, 4"	PCC BASE COURSE WIDENING 9"	POLYMERIZED BITUMINOUS MATERIALS (TACK COAT)	POLY. HMA BINDER CSE. IL 4.75, N50	HMA SURF. REMOVAL - BUTT JOINT	TEMPORARY RAMP	POLY. HMA SURFACE CSE, IL-9.5FG, MIX "D", N50	PVMT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB	PCC DRIVEWAY PAVEMENT 8"	AGGREGATE SHOULDERS TYPE B	HMA SHOULDERS	MATERIAL TRANSFER DEVICE
ALIGNMENT: IL RTE 116				SQ YD	SQ YD	POUND	TON	SQ YD	SQ YD	TON	SQ YD	SQ YD	TON	TON	TON
STA		STA	OFFSET												
27+50.00	TO	28+30.00		93.3	93.3	101	3.2			1.5				6.3	4.7
28+30.00	TO	30+27.43		167.4	91.4	712	87.1	35.6	17.8	39.5	56.6			13.2	126.6
31+55.99	TO	33+25.00		265.6	41.8	597	48.4	40.0	20.0	33.1	56.4	114	13	4.1	81.5
27+50.00	TO	28+30.00	RT.												
28+30.00	TO	31+16.40	RT.												
28+56.00	TO	30+36.02	LT.												
31+47.50	TO	32+42.68	RT.												
33+03.92	TO	33.25.00	RT.												
31+66.32	TO	33+25.00	LT.												
TOTAL				526	227	1410	139	76	38	74	113	114	13	24	213

DRAINAGE SCHEDULE

LOCATION STATION				CLASS SI CONCRETE (OUTLET)	REMOVING INLETS
ALIGNMENT: IL RTE 116				CU YD	EACH
STA		STA	OFFSET		
27+55.00	TO	27+95.00	RT	4.3	
28+35.00	TO	28+94.00	LT	6.1	
STATION			OFFSET		
28+25.00			RT. 18.2'		1
28+25.00			LT. 18.4'		1
29+17.30			RT. 16.3'		1
29+17.30			LT. 16.9'		1
30+10.00			RT. 14.6'		1
30+10.00			LT. 14.8'		1
31+32.10			RT. 15.0'		1
31+49.50			LT. 14.0'		1
TOTAL				10.4	7

SURVEY SCHEDULE

LOCATION STATION	PERMANENT SURVEY MARKERS, TYPE 1
ALIGNMENT: IL RTE 116	EACH
TBD BY RESIDENT ENGINEER	1
TOTAL	1

CONSTRUCTION SCHEDULE

LOCATION STATION	ENGINEER'S FIELD OFFICE, TYPE A	MOBILIZATION	TRAFFIC CONTROL PROTECTION, STANDARD 701201	TRAFFIC CONTROL PROTECTION,STANDARD 701321 (SPECIAL)	CHANGEABLE MESSAGE SIGN	CONSTRUCTION LAYOUT
ALIGNMENT: IL RTE 116	CAL MO	L SUM	L SUM	EACH	CAL DA	L SUM
STA 27+50.00 TO STA 33+25.00	6	1	1	1	210	1
TOTAL	6	1	1	1	210	1

LANDSCAPE SCHEDULE

LOCATION STATION			TOPSOIL EXCAVATION & PLACEMENT	TOPSOIL FURN. AND PLACE, VAR. DEPTH	GRADING & SHAPING DITCHES	SEEDING, CLASS 2A	NITROGEN FERTILIZER NUTRIENT	PHOSPHORUS FERTILIZER NUTRIENT	POTASSIUM FERTILIZER NUTRIENT	MOWING	EROSION CONTROL BLANKET	SODDING, SALT TOLERANT	TEMP. EROSION CONTROL SEEDING	TEMP. DITCH CHECKS	PERIMETER EROSION BARRIER	INLET FILTERS	TEMP. EROSION CONTROL BLANKET	SUPPLEMENTAL WATERING
ALIGNMENT: IL RTE 116			CU YD	SQ YD	FOOT	ACRE	POUND	POUND	POUND	ACRE	SQ YD	SQ YD	POUND	FOOT	FOOT	EACH	SQ YD	UNIT
N.W. QUAD																		
STA		STA																
31+40.64	TO	33+26.03		62.1		0.01	1	1	1	0.08	62.1		1		212		62.1	
S.W. QUAD																		
STA		STA																
28+28.90	TO	30+68.18	5	248.6	40	0.05	5	5	5	0.22	248.6	23	5	4	258	1	248.6	
S.E. QUAD																		
STA		STA																
27+49.00	TO	30+43.24		195.2		0.04	4	4	4	0.18	195.2		4	4	252		195.2	
N.E. QUAD																		
STA		STA																
31+14.97	TO	33+26.04		22.3		0.01	1	1	1	0.02	22.3		1		238		22.3	
BRIDGE																		
STA		STA																
30+35.18	TO	31+53.44																
TOTAL			5	528	40	0.25	10	10	10	0.5	528	23	20	8	960	1	528	5

TERRA ENGINEERING LTD.

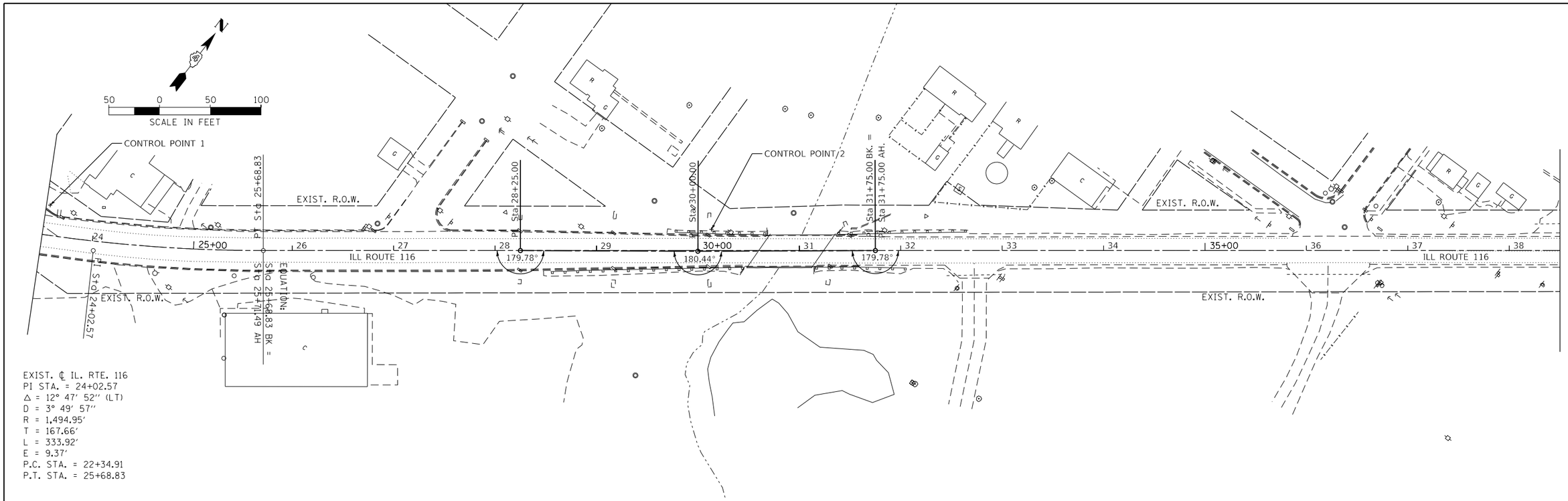
USER NAME = $USER$	DESIGNED - BCB	REVISED -	
	DRAWN - BCB	REVISED -	
PLOT SCALE = 1:20.0015	CHECKED - BKR	REVISED -	
PLOT DATE = 12/10/2019	DATE - 4-11-2019	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULES OF QUANTITIES
IL 116 OVER WEST BRANCH OF PANTHER CREEK

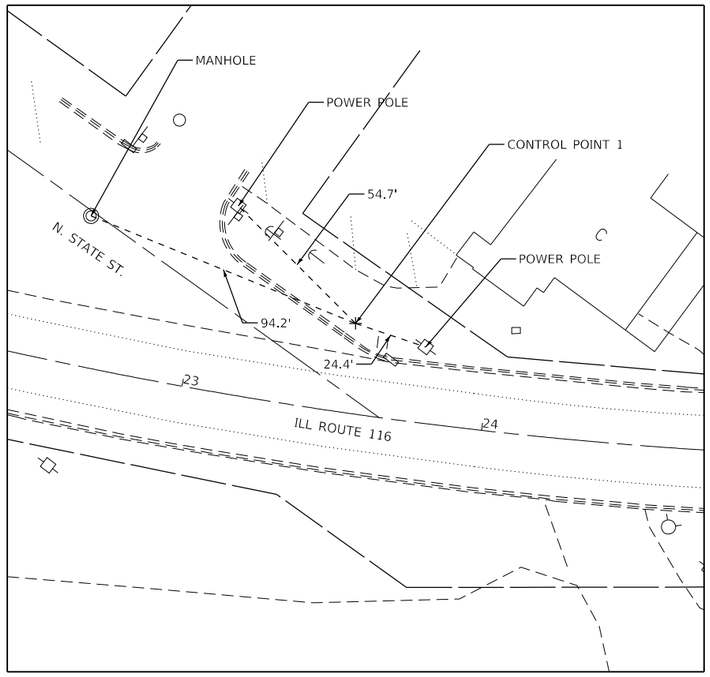
SCALE: | SHEET 2 OF 2 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	51	13
		CONTRACT NO. 68805		
	ILLINOIS FED. AID PROJECT			

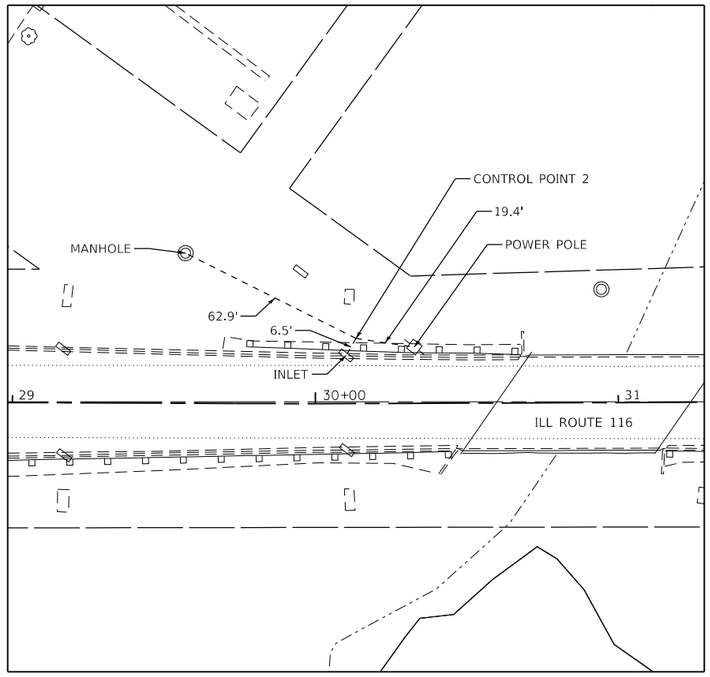


EXIST. ℄ IL. RTE. 116
PI STA. = 24+02.57
△ = 12° 47′ 52″ (LT)
D = 3° 49′ 57″
R = 1,494.95′
T = 167.66′
L = 333.92′
E = 9.37′
P.C. STA. = 22+34.91
P.T. STA. = 25+68.83

CONTROL PONT 1 (STA. 23+53.74, 29.70' LT)



CONTROL PONT 2 (STA. 30+13.49, 21.46' LT)



CONTROL POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	1,505,680.11	2,565,638.39	726.03	PIN AT THE NE CORNER OF STATE ST. AND ILL ROUTE 116 INTERSECTION
2	1,506,055.57	2,566,171.97	719.45	PIN AT THE SW QUADRANT OF ILL ROUTE 116 BRIDGE OVER W. BRANCH OF PANTHER CREEK

PROPOSED ALIGNMENT COORDINATES - ILL ROUTE 116

POINT	STATION	NORTHING	EASTING
PI	28+25.00	1,505,924.97	2,566,034.60
PI	30+00.00	1,506,030.34	2,566,174.32
PI	31+75.00	1,506,136.77	2,566,313.24

BENCHMARK

CHISELED SQUARE ON NORTHEAST CORNER OF
CURB HUBGUARD FOR SN 102-0042.
ELEVATION 720.48

NOTE

THE LOCATION OF THE PROPOSED PERMANENT SURVEY MARKER, TYPE 1
SHALL BE DETERMINED BY THE RESIDENT ENGINEER DURING CONSTRUCTION.

TERRA ENGINEERING LTD.

USER NAME = $USER$	DESIGNED - BCB	REVISED -
	DRAWN - BCB	REVISED -
PLOT SCALE = 1:100	CHECKED - BKR	REVISED -
PLOT DATE = 12/10/2019	DATE - 4-11-2019	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ALIGNMENT, TIES AND BENCHMARKSA
IL 116 OVER WEST BRANCH OF PANTHER CREEK

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	51	14
		CONTRACT NO. 68805		
	ILLINOIS FED. AID PROJECT			

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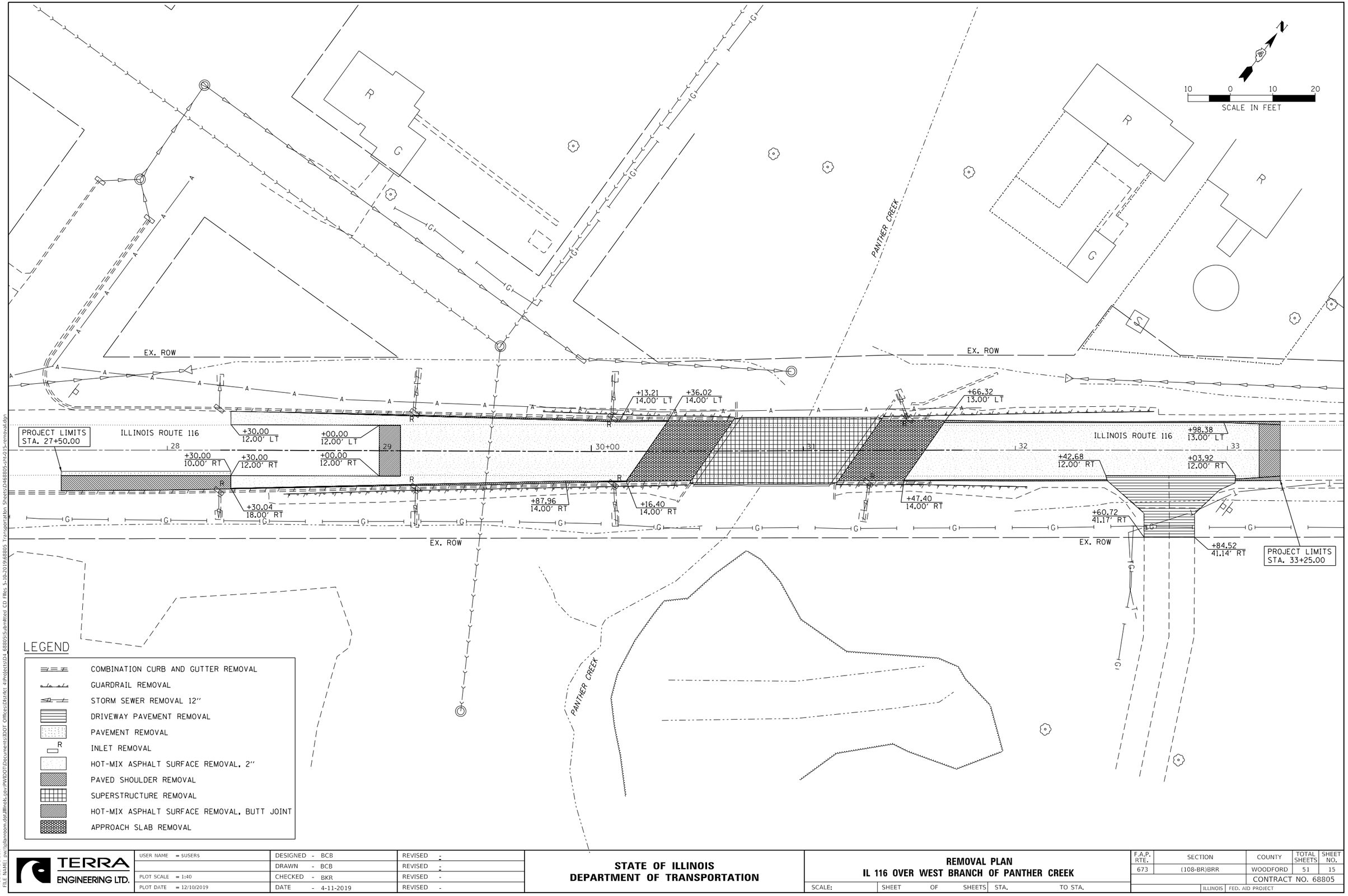

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TERRA ENGINEERING LTD.

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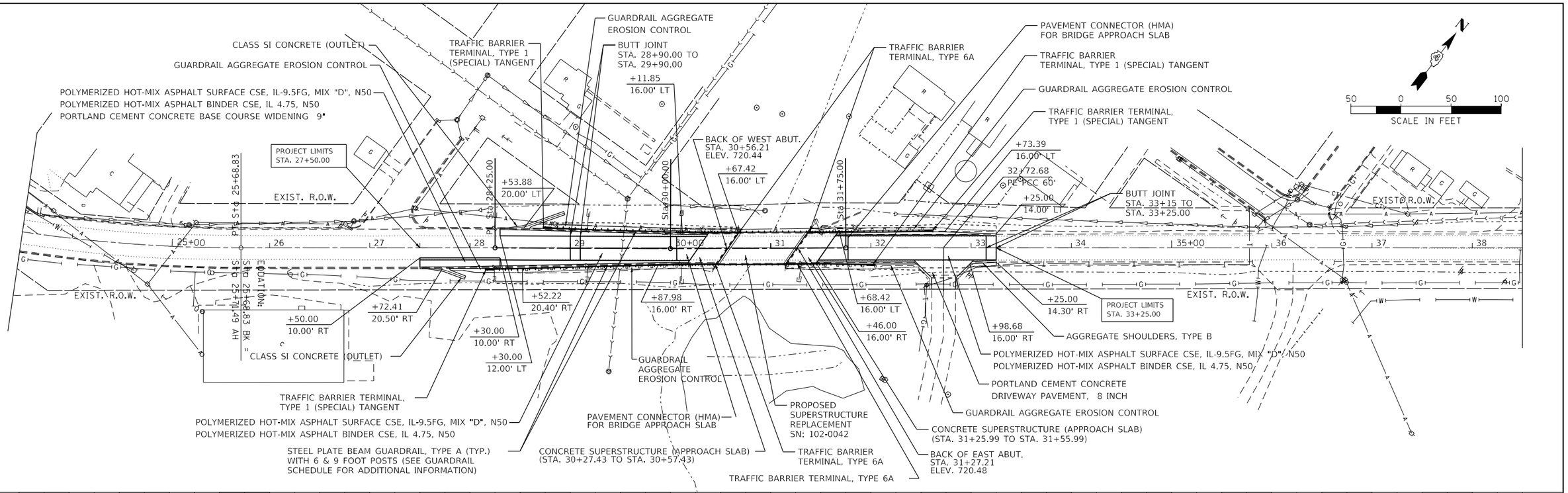
	DRAWN - BCB	REVISED -
PLOT SCALE = 1:40	CHECKED - BKR	REVISED -
PLOT DATE = 12/10/2019	DATE - 4-11-2019	REVISED -

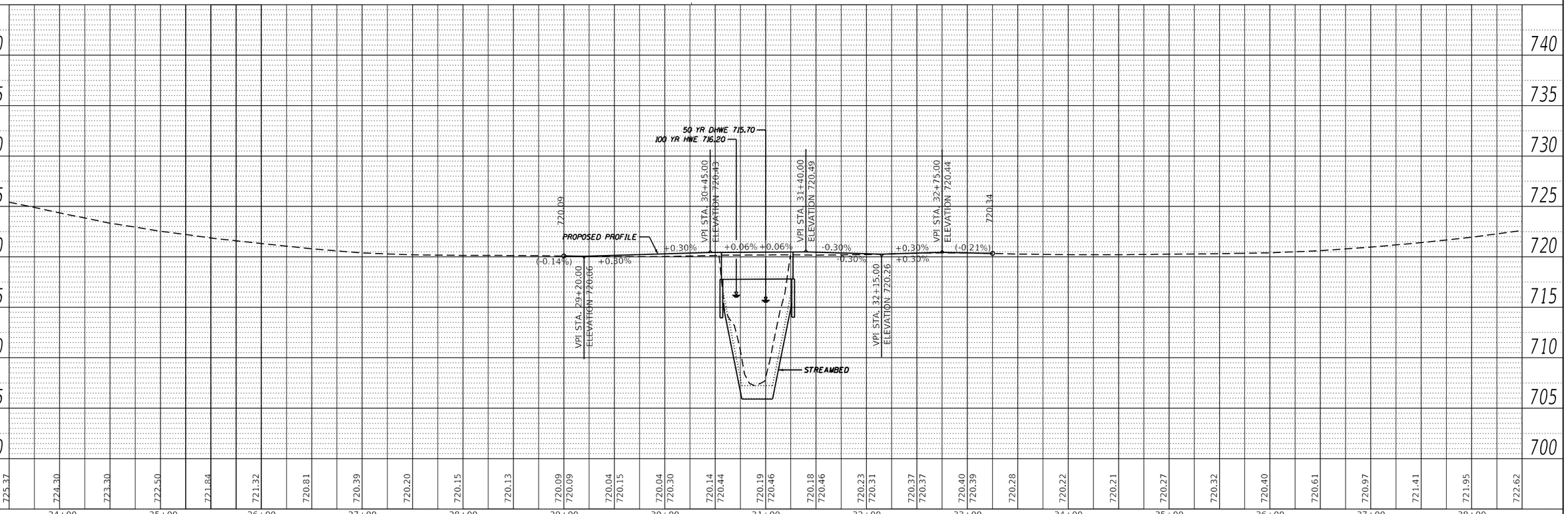
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REMOVAL PLAN
IL 116 OVER WEST BRANCH OF PANTHER CREEK

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	51	15
		CONTRACT NO. 68805		
	ILLINOIS FED. AID PROJECT			





PLAN
SURVEYED
PLOTTED
CHANGES CHECKED
NOTE BOOK
NO.
BY
DATE

PROFILE
SURVEYED
PLOTTED
CHANGES CHECKED
NOTE BOOK
NO.
B.M. NOTED
STRUCTURE NOTATIONS CHKD
BY
DATE

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TERRA ENGINEERING LTD.

USER NAME = $USER$	DESIGNED - BCB	REVISED -
	DRAWN - BCB	REVISED -
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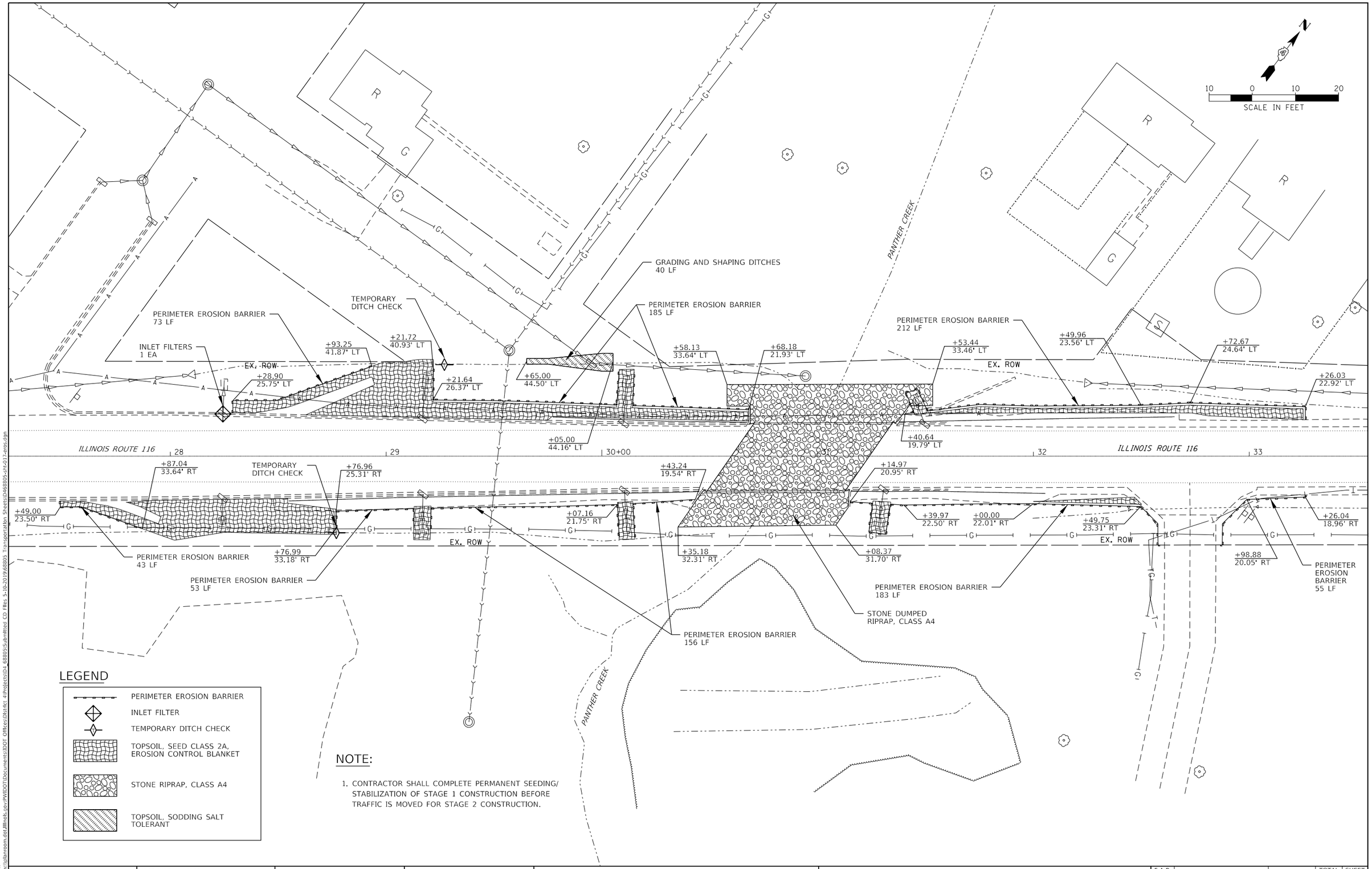
PLOT DATE = 12/10/2019	DATE - 6/8/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE
IL ROUTE 116 OVER WEST BRANCH OF PANTHER CREEK
SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	51	16
		CONTRACT NO. 68805		
	ILLINOIS	FED. AID PROJECT		



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TERRA ENGINEERING LTD.	USER NAME = $USER$	DESIGNED - BCB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EROSION CONTROL PLAN IL 116 OVER WEST BRANCH OF PANTHER CREEK
		DRAWN - BCB	REVISED -		
	PLOT SCALE = 1:40	CHECKED - BKR	REVISED -		
	PLOT DATE = 12/10/2019	DATE - 4-11-2019	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.

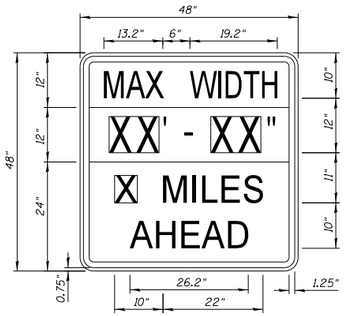
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	51	17
		CONTRACT NO. 68805		
	ILLINOIS	FED. AID PROJECT		

LEGEND

- TEMPORARY SIGNAGE
- TYPE III BARRICADE
- DRUM WITH STEADY BURNING BI-DIRECTIONAL LIGHT
- TRAFFIC SIGNAL WITH BACKPLATE, SIGNAL DIRECTION INDICATED
- MICROWAVE DETECTORS
- TEMPORARY CONCRETE BARRIER
- CONSTRUCTION ZONE
- TEMORARY RAMP
- PAVED SHOULDER REMOVAL AND BASE COURSE WIDENING (CONSTRUCTED IN PRE-STAGE)
- CURB AND GUTTER REMOVAL

NOTES:

1) APPROACH TRAFFIC CONTROL NOT SHOWN SHALL BE ERECTED ACCORDING TO IDOT STANDARD 701321.
2) SEE SPECIAL PROVSIONS FOR ADDITIONAL TRAFFIC CONTROL REQUIREMENTS.
3) ADDITIONAL SIGNAGE FOR ENTRANCE AND ADVANCE WIDTH RESTRICTION WARNING SHALL BE INCLUDED IN THE COST OF STANDARD 701321 (SPECIAL).
4) ALL TRAFFIC SIGNALS SHOWN ARE INCLUDED IN TEMPORARY BRIDGE TRAFFIC SIGNALS - 1 EACH.
5) THE ADDITIONAL DETECTION LOOPS AT THE ENTRANCE (STA. 32+70 RT.) ARE INCLUDED IN THE TEMPORARY BRIDGE TRAFFIC SIGNALS - 1 EACH.
6) TEMPORARY BRIDGE TRAFFIC SIGNALS SHALL BE A 4-PHASE SIGNAL WITH ACTUATION PROVIDED FOR THE ENTRANCE AT STA. 32+70 RT. AS WELL AS FOR IL. 116 INTERSECTION.



W12-I103

NOTES:

1) THE CONTRACTOR SHALL FURNISH THE POSTS AND ERECT THE SIGNS AT THE LOCATION DIRECTED BY THE ENGINEER.
2) THE "X" AHEAD WILL BE DETERMINED BY THE ENGINEER.
3) TOP AND BOTTOM OF BACKGROUND WHITE
4) LEGEND AND BORDER BLACK
5) BACKGROUND (WIDTH) ORANGE

TERRA ENGINEERING LTD.	USER NAME = $USER$	DESIGNED - BCB	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**STAGE I TRAFFIC CONTROL IL 116 OVER WEST BRANCH OF PANTHER CREEK**
		DRAWN - BCB	REVISED -		
	PLOT SCALE = 1:100	CHECKED - BKR	REVISED -		SCALE: SHEET 1 OF 2 SHEETS STA. TO STA.
	PLOT DATE = 12/10/2019	DATE - 4-11-2019	REVISED -		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	51	18
		CONTRACT NO. 68805		
	ILLINOIS FED. AID PROJECT			

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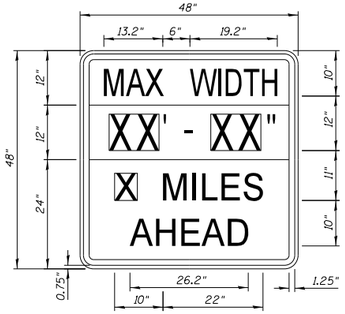
LEGEND

- TEMPORARY SIGNAGE
- TYPE III BARRICADE
- DRUM WITH STEADY BURNING BI-DIRECTIONAL LIGHT
- TRAFFIC SIGNAL WITH BACKPLATE, SIGNAL DIRECTION INDICATED
- MICROWAVE DETECTORS
- TEMPORARY CONCRETE BARRIER
- CONSTRUCTION ZONE
- TEMORARY RAMP
- PAVED SHOULDER REMOVAL AND BASE COURSE WIDENING (CONSTRUCTED IN PRE-STAGE)

NOTES:

1) APPROACH TRAFFIC CONTROL NOT SHOWN SHALL BE ERECTED ACCORDING TO IDOT STANDARD 701321.
2) SEE SPECIAL PROVSIONS FOR ADDITIONAL TRAFFIC CONTROL REQUIREMENTS.
3) ADDITIONAL SIGNAGE FOR ENTRANCE AND ADVANCE WIDTH RESTRICTION WARNING SHALL BE INCLUDED IN THE COST OF STANDARD 701321 (SPECIAL).
4) ALL TRAFFIC SIGNALS SHOWN ARE INCLUDED IN TEMPORARY BRIDGE TRAFFIC SIGNALS - 1 EACH.
5) THE ADDITIONAL DETECTION LOOPS AT THE ENTRANCE (STA. 32+70 RT.) AND AT DOUGLAS ST. ARE INCLUDED IN THE TEMPORARY BRIDGE TRAFFIC SIGNALS - 1 EACH.
6) TEMPORARY BRIDGE TRAFFIC SIGNALS SHALL BE A 4-PHASE SIGNAL WITH ACTUATION PROVIDED FOR THE ENTRANCE AT STA. 32+70 RT. AS WELL AS FOR THE NORTH LEG OF DOUGLAS ST. AND IL. 116 INTERSECTION.



W12-I103

NOTES:

1) THE CONTRACTOR SHALL FURNISH THE POSTS AND ERECT THE SIGNS AT THE LOCATION DIRECTED BY THE ENGINEER.
2) THE "X" AHEAD WILL BE DETERMINED BY THE ENGINEER.
3) TOP AND BOTTOM OF BACKGROUND WHITE
4) LEGEND AND BORDER BLACK
5) BACKGROUND (WIDTH) ORANGE

TERRA ENGINEERING LTD.	USER NAME = $USER$	DESIGNED - BCB	REVISED -
		DRAWN - BCB	REVISED -
	PLOT SCALE = 1:100	CHECKED - BKR	REVISED -
	PLOT DATE = 12/10/2019	DATE - 4-11-2019	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE II TRAFFIC CONTROL
IL 116 OVER WEST BRANCH OF PANTHER CREEK

SCALE: | SHEET 2 OF 2 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	51	19
		CONTRACT NO. 68805		
		ILLINOIS	FED. AID PROJECT	

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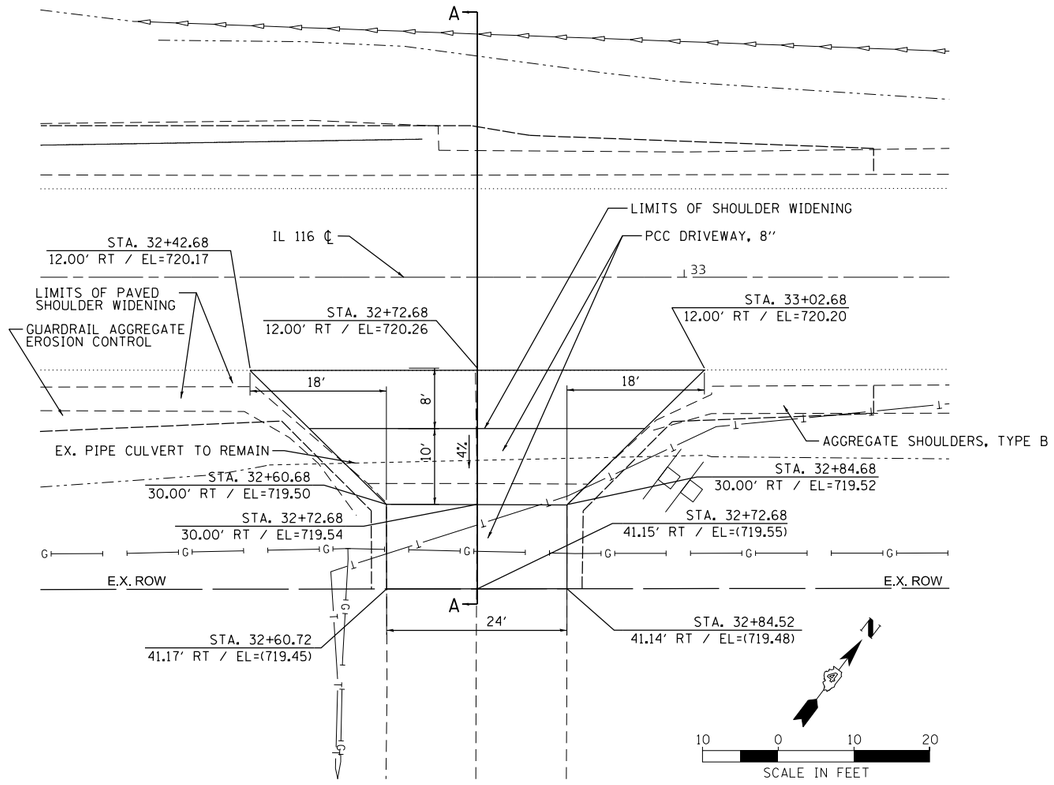
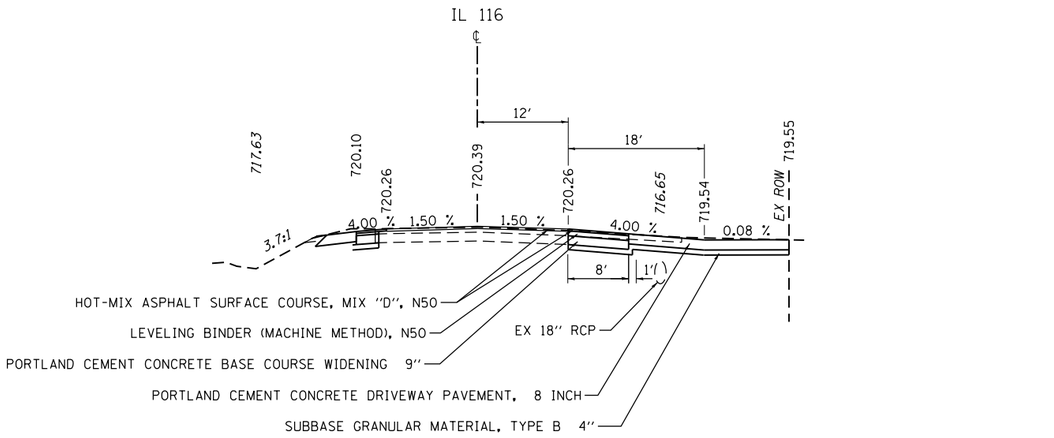


PLAN VIEW



SECTION A-A

DRIVEWAY DETAIL (STA. 32+72.68)

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TERRA ENGINEERING LTD.	USER NAME = $USER$	DESIGNED - BCB	REVISED -
		DRAWN - BCB	REVISED -
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	PLOT DATE = 12/10/2019	DATE - 4-11-2019	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRIVEWAY DETAILS
IL 116 OVER WEST BRANCH OF PANTHER CREEK

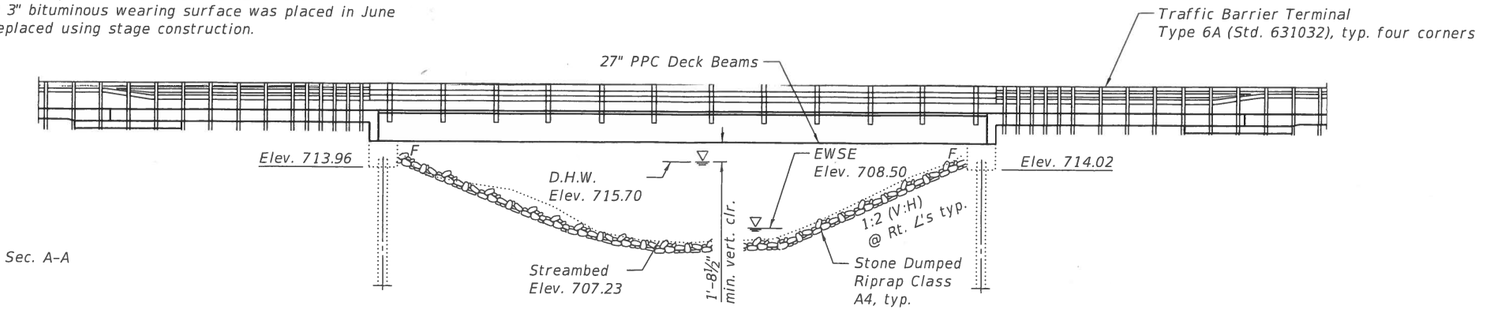
SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	51	20
		CONTRACT NO. 68805		
	ILLINOIS	FED. AID PROJECT		

Benchmark: Chiseled "□" on northeast corner of curb hubguard for SN 102-0042, Sta. 141+10±, Offset 15.5' left, Elevation 720.48.

Existing Structure: SN 102-0042 was built in 1984 as F.A.P. Route 673, Section 108BR at Sta. 30+91.71 as a single span precast prestressed concrete deck beam bridge. Back-to-back of abutment length is 71'-0", width is 32'-0" out-out and supported on steel H-piles. A 3" bituminous wearing surface was placed in June 2009. Superstructure to be replaced using stage construction.

No Salvage.

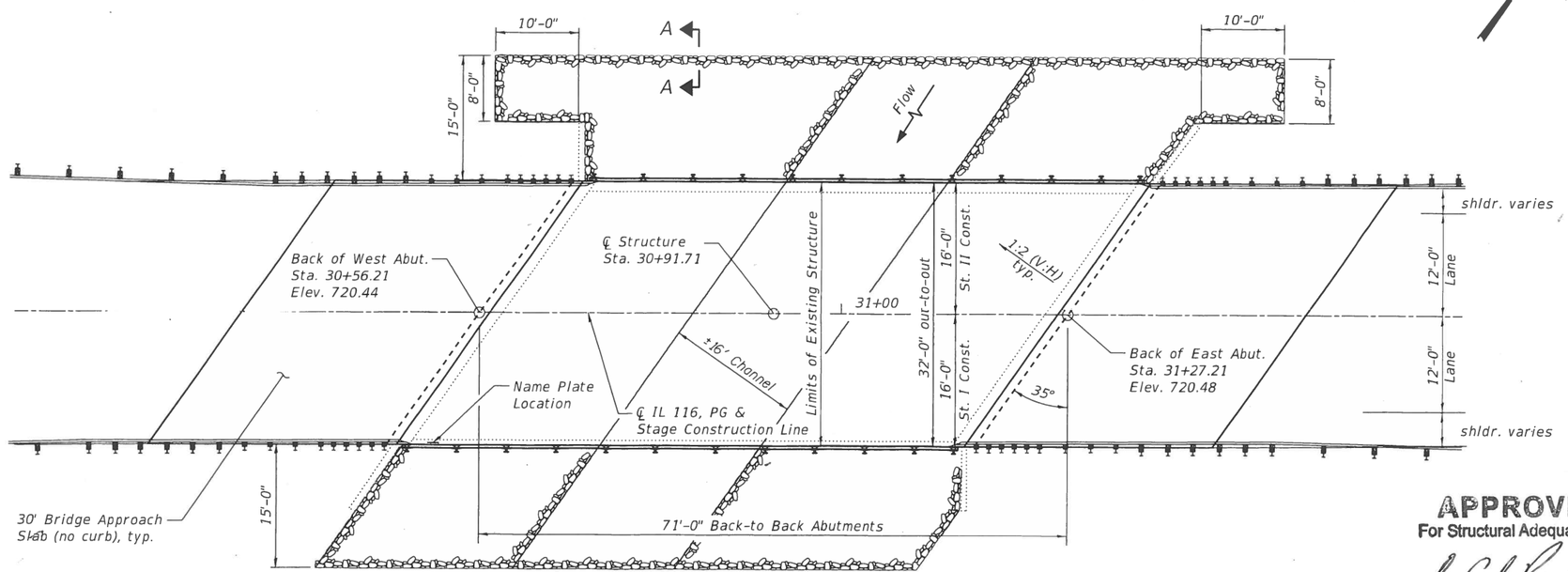


Note: See Sheet 2 of 12 for Sec. A-A

ELEVATION

SCOPE OF WORK

1. Remove and replace existing Superstructure
2. Repair the Substructure.
3. Install Riprap.



PLAN

DESIGN SPECIFICATIONS

2017 AASHTO LRFD Bridge Design Specification, 8th Edition
1995 FHWA Seismic Retrofit Manual for Highway Bridges

DESIGN STRESSES

FIELD UNITS (NEW CONST.)

f'c = 3,500psi (Substructure)
f'c = 4,000 psi (Approach Pavements)
f'c = 5,000 psi (Concrete Wearing Surface)
fy = 60,000 (Reinforcement)

FIELD UNITS (EXIST. CONST.)

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)

PRECAST PRESTRESSED UNITS

f'c = 6,000 psi
f'ci = 5,000 psi
fpu = 270,000 psi (½"ø Low Lax Strands)
fpbt = 201,960 psi (½"ø Low Lax Strands)

LOADING HL-93 (NEW CONST.)

Allow 25#/sq. ft. for Future Wearing Surface.

SEISMIC DATA

Seismic Performance Category (SPC) = A
Horizontal Bedrock Acceleration Coefficient = 0.042g
Site Coefficient (S) = 1.5

DESIGN SCOUR ELEVATION TABLE

Event / Limit State	Design Scour Elevations (ft.) W. Abut.	Design Scour Elevations (ft.) E. Abut.	Item 113
Q100	713.96	714.02	8
Q200	713.96	714.02	
Design	713.96	714.02	
Check	N/A	N/A	

APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures

LICENSED STRUCTURAL ENGINEER
DONALD D. BELK
081-004544
PEORIA, IL
STATE OF ILLINOIS
DATE SIGNED : 4-24-19
LIC. EXP. DATE : 11/30/2020

+0.30% | +0.06% | -0.30% | +0.30%

Sta. 29+20.00	Sta. 30+45.00	Sta. 31+40.00	Sta. 32+15.00	Sta. 32+75.00
Elev. 720.06	Elev. 720.43	Elev. 720.49	Elev. 720.26	Elev. 720.44

PROFILE GRADE

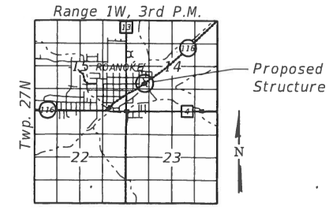
(Along ℄ IL 116)

WATERWAY INFORMATION

Drainage Area = 4.3 sq. mi.
Existing Overtopping Elev. = 720.03 at Sta. 29+50
Proposed Overtopping Elev. = 720.09 at Sta. 29+00

Flood Event	Freq. Yr.	Discharge Ft³/s	Waterway Opening - ft² Existing	Waterway Opening - ft² Proposed	Natural H.W.E. ft.	Head - ft. Existing	Head - ft. Proposed	Headwater Elevation ft. Existing	Headwater Elevation ft. Proposed
	10	672	220	231	714.10	0.1	0.1	714.20	714.20
Design	50	1090	306	317	715.70	0.1	0.1	715.80	715.80
Base	100	1280	343	354	716.20	0.2	0.2	716.40	716.40
Scour Design Check	200	1405	366	377	716.60	0.2	0.2	716.80	716.80
Overtop Existing									
Overtop Proposed									
Max. Calc.	500	1740	418	429	717.40	0.4	0.4	717.80	717.80

10 Year Velocity Through Existing Bridge = 3.50ft/s
10 Year Velocity Through Proposed Bridge = 3.50ft/s



LOCATION SKETCH

GENERAL PLAN
ILLINOIS ROUTE 116 OVER
WEST BRANCH OF PANTHER CREEK
F.A.P. RTE. 673 - SEC. (108-BR)BRR
WOODFORD COUNTY
STA 30+91.71
STRUCTURE NO. 102-0042

TERRA ENGINEERING LTD.	USER NAME = ———	DESIGNED - DDB	REVISED -
		CHECKED - PMH	REVISED -
	PLOT SCALE = ———	DRAWN - SI	REVISED -
	PLOT DATE = ———	CHECKED - DDB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 102-0042
SHEET 1 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	51	21
		CONTRACT NO. 68805		
	ILLINOIS	FED. AID PROJECT		

MODEL: Default
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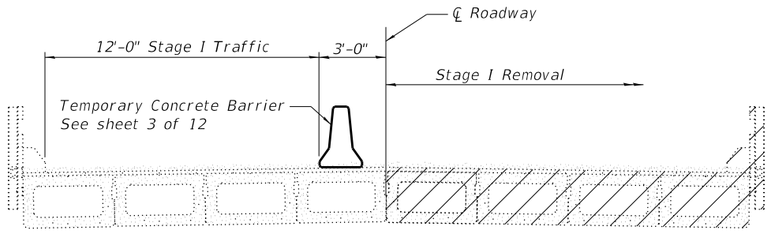
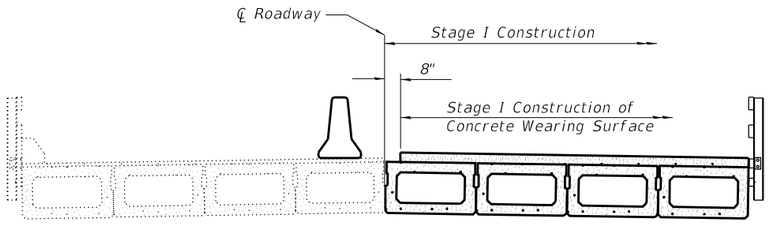
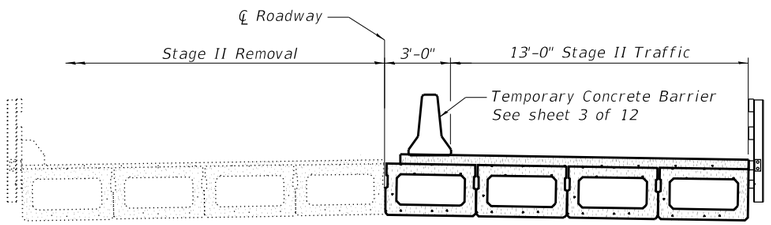


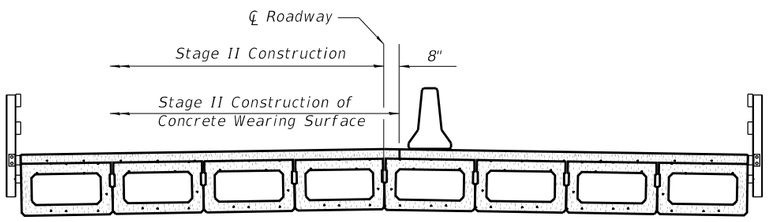
STAGE I REMOVAL



STAGE I CONSTRUCTION



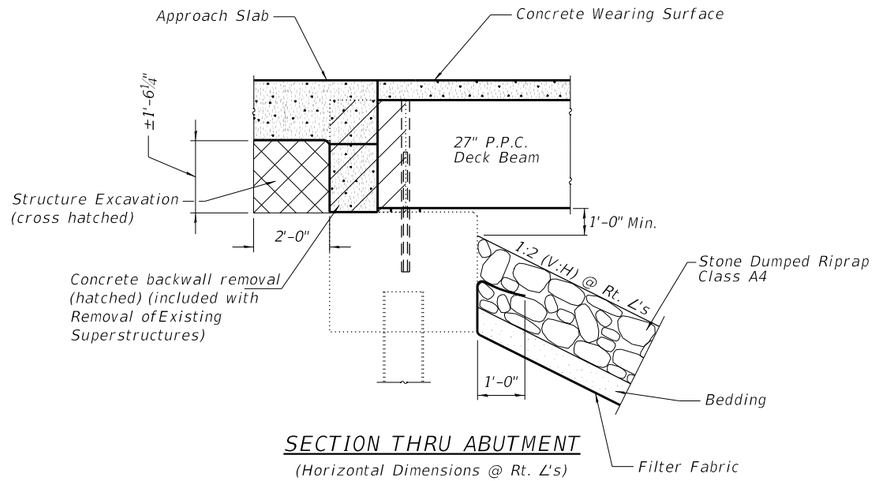
STAGE II REMOVAL



STAGE II CONSTRUCTION

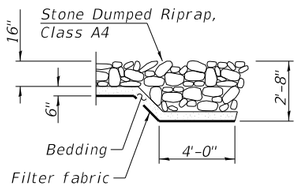
Notes:

All staging cross sections are looking East.
For quantity of Temporary Concrete Barrier, see roadway plans.
Hatched area indicates Removal of Existing Superstructures.
See sheet 5 of 12 for shear key clamping details at stage construction joint.



SECTION THRU ABUTMENT

(Horizontal Dimensions @ Rt. ℄'s)



SECTION A-A

GENERAL NOTES

Reinforcement bars designated (E) shall be epoxy coated.

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

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

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

INDEX OF SHEETS

STATION 30+91.71
RE-BUILT BY
STATE OF ILLINOIS
FAP RT. 673 SEC. (108-BR)BRR
LOADING HL-93
STRUCTURE NO. 102-0042

NAME PLATE

See Std. 515001
Existing Name Plate shall be cleaned and relocated next to new Name Plate. Cost included with Name Plates.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Stone Dumped Riprap, Class A4	SQ YD		553	553
Filter Fabric	SQ YD		553	553
Removal Of Existing Superstructures	EACH	1		1
Structure Excavation	CU YD		9	9
Concrete Structures	CU YD		28.5	28.5
Bridge Deck Grooving	SQ YD	429		429
Protective Coat	SQ YD	458		458
Concrete Superstructure (Approach Slab)	CU YD	88.9		88.9
Precast Prestressed Concrete Deck Beams (27" Depth)	SQ FT	2194		2194
Reinforcement Bars, Epoxy Coated	POUND	38,860	4270	43,130
Bar Splicers	EACH	283	86	369
Epoxy Crack Injection	FOOT		6	6
Steel Railing, Type SM	FOOT	138		138
Name Plates	EACH	1		1
Concrete Wearing Surface, 5"	SQ YD	244		244
Asbestos Bearing Pad Removal	EACH		18	18
Structural Repair Of Concrete (Depth Equal to or less Than 5 Inches)	SQ FT		7	7

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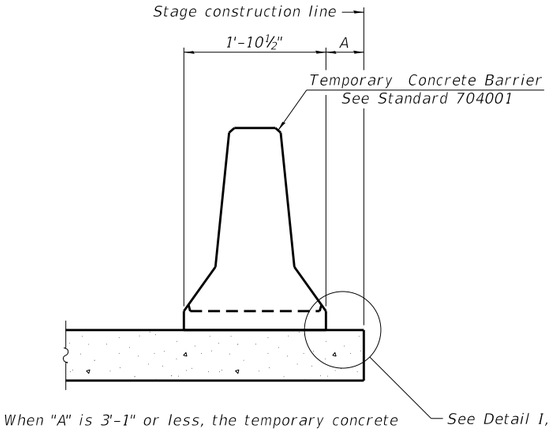
PLOT DATE = -----	CHECKED - DDB	REVISED -			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

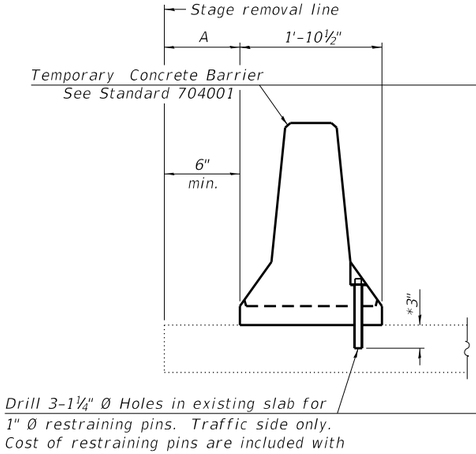
GENERAL DATA AND STAGE CONSTRUCTION DETAILS
STRUCTURE NO. 102-0042
SHEET 2 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	51	22
		CONTRACT NO. 68805		
	ILLINOIS	FED. AID PROJECT		



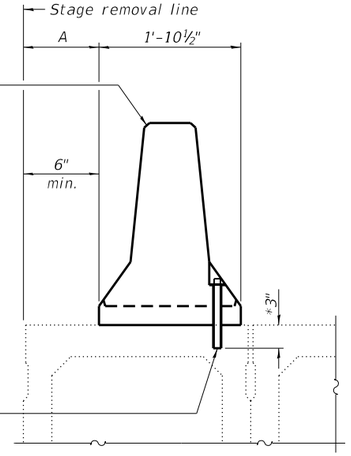
When "A" is 3'-1" or less, the temporary concrete barrier shall be restrained to the new slab according to Detail I, II or III. No restraint is required when "A" is greater than 3'-1".

NEW SLAB OR NEW DECK BEAM



Drill 3-1¼" Ø Holes in existing slab for 1" Ø restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

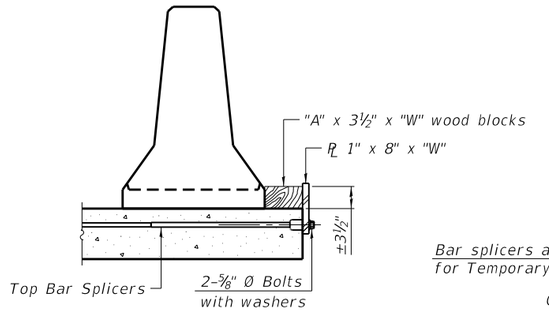
EXISTING SLAB



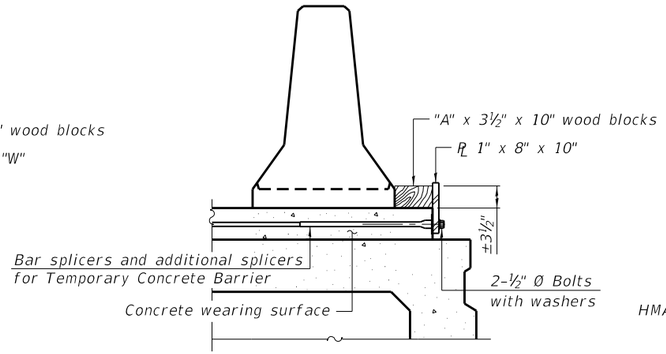
* When hot-mix asphalt wearng surface is present, embedment shall be 3" plus the wearing surface depth.

EXISTING DECK BEAM

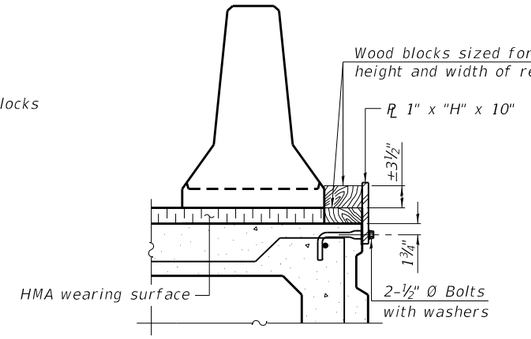
SECTIONS THRU SLAB OR DECK BEAM



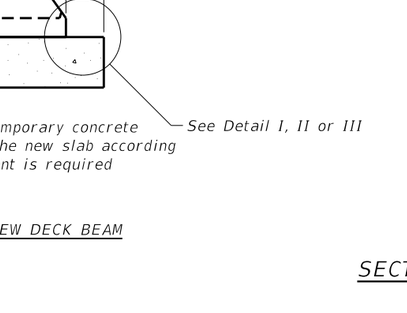
DETAIL I



DETAIL II

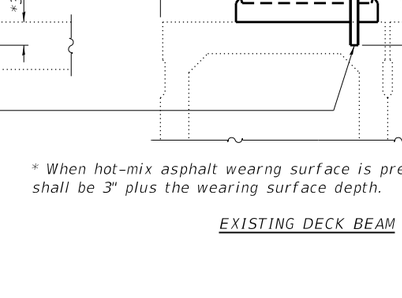


DETAIL III



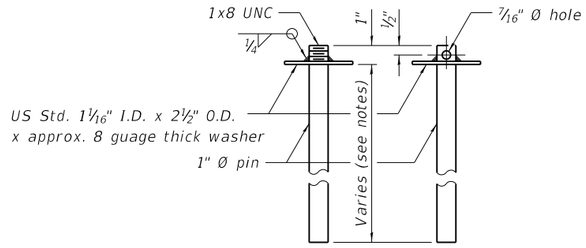
STEEL RETAINER PL 1" x 8" x "W"

(Detail I and II)

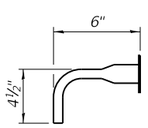


STEEL RETAINER PL 1" x "H" x 10"

(Detail III)



RESTRAINING PIN



BAR SPLICER FOR #4 BAR - DETAIL III

Notes:

Cost of retainer assembly is included with Temporary Concrete Barrier.

A retainer assembly shall be located at the approximate ℄ of each temporary concrete barrier.

The retainer plate shall not be removed until the concrete on the adjacent stage is ready to be poured. For Detail III applications the retainer plate shall not be removed until just prior to placing the adjacent beam.

When the 'A' dimension is less than 1½", the wood block shall be omitted and the barrier shall be placed in direct contact with the steel retainer plate. For deck beam applications the minimum required 'A' distance is 6" to accommodate the shear key clamping device.

Detail I - Installation for a new bridge deck or bridge slab.

Detail II - Installation for a new deck beam with an initial concrete wearing surface. Additional bar splicers shall be provided at 6'-0" centers and paired with the bar splicers of the concrete wearing surface reinforcement to accommodate the installation of the retainer assemblies. The cost of the additional bar splicers is included with the concrete wearing surface.

Detail III - Installation for a new deck beam with no initial wearing surface or with an initial hot-mix asphalt (HMA) wearing surface present. The deck beam directly beneath the temporary concrete barrier shall be fabricated with bar splicer inserts in the side of the beam, as detailed, to accommodate the installation of the retainer assemblies. A pair of bar splicers, 6" apart, shall be placed at 6'-0" centers along the length of the beam. The cost of the bar splicers is included with the deck beam.

R-27

8-11-2017

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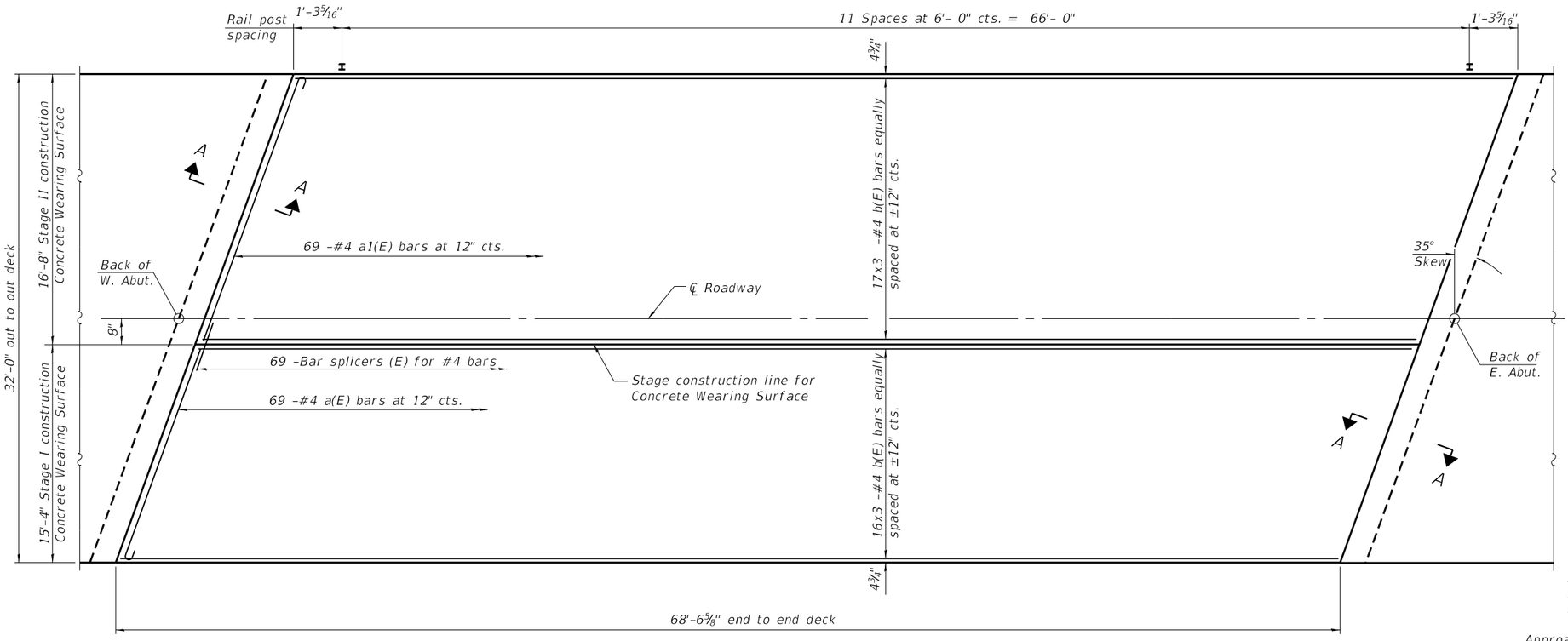
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
STRUCTURE NO. 102-0042

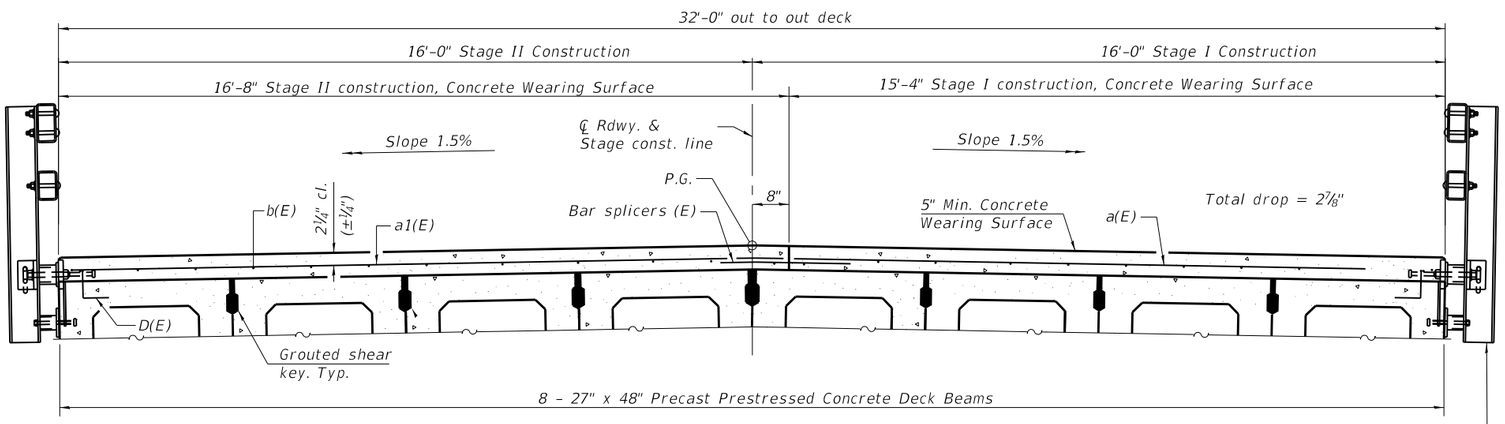
SHEET 3 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	51	23
		CONTRACT NO. 68805		
	ILLINOIS	FED. AID PROJECT		



PLAN

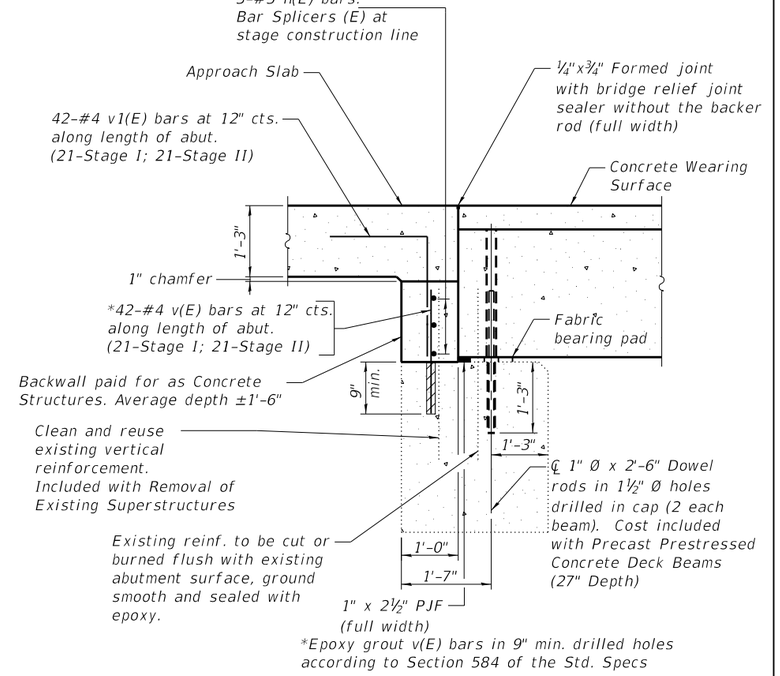
Notes:
See sheet 5 of 12 for Superstructure Details and Bill of Material.
Bars indicated thus 20 x 2-#4 etc. indicates 20 lines of bars with 2 lengths per line.
Spacing of a(E) and a1(E) bars shall be measured along the ℄ of structure.



CROSS SECTION
(Looking east)

Steel Railing, Type SM, typ. See sheet 10 of 12 for details

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



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

Notes:
Concrete wearing surfaces for a Stage shall be placed prior to casting a backwall and/or approach slab for that Stage of construction.
See sheet 7 of 12 for fabric bearing pad details.

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SUPERSTRUCTURE
STRUCTURE NO. 102-0042
SHEET 4 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 68805		
		ILLINOIS	FED. AID PROJECT	

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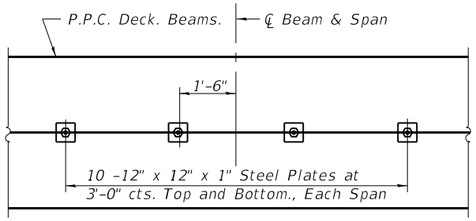
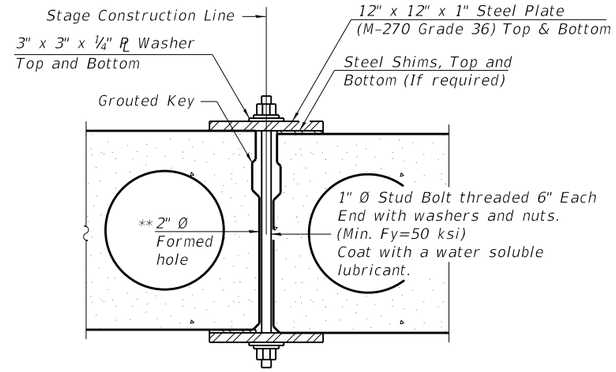


PLAN



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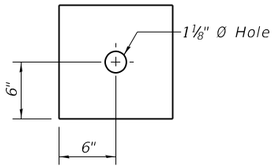
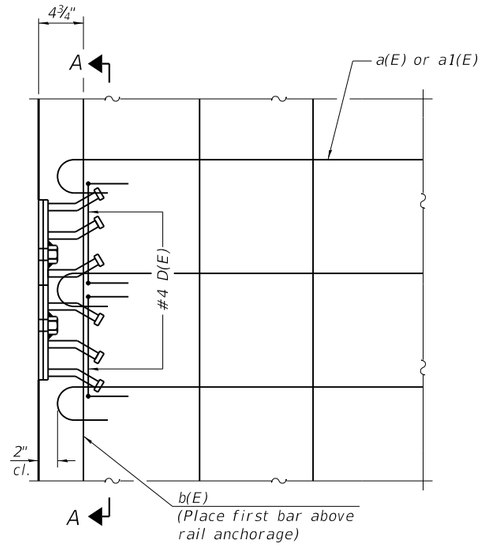


CLAMPING PLATE

SHEAR KEY CLAMPING DETAILS AT STAGE CONST. JT.

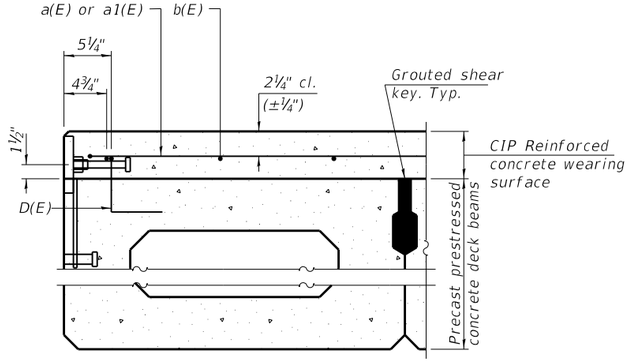
Cost included with Precast Prestressed Concrete Deck Beams.
See Stage Construction Details for traffic lanes.

** Cast semicircular recesses in the sides of each beam adjacent to the stage construction line. These recesses should align to form a hole at the appropriate locations for the clamping device bolts.

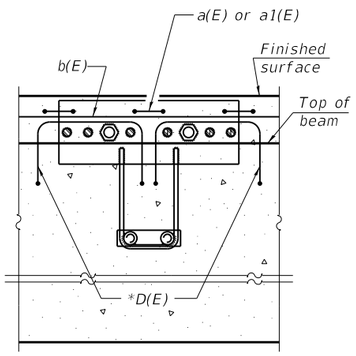


PLAN

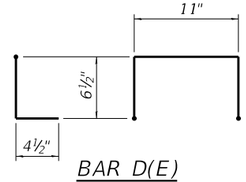
Notes:
Formwork necessary for the wearing surface may be secured utilizing the bottom rail anchorage inserts and/or additional inserts cast into the beam.



SECTION THRU FASCIA BEAM

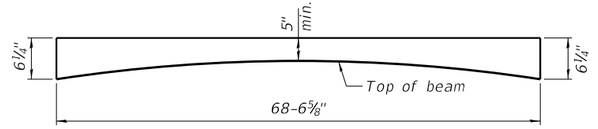


SECTION A-A

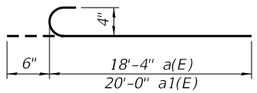


BAR D(E)

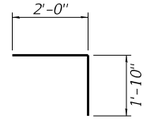
* Place 2-#4 D(E) bars in beam at each post location as shown. D(E) bar included in cost of beam.



ANTICIPATED CONCRETE WEARING SURFACE PROFILE
(For information only)



BAR a(E) and a1(E)



v1(E)

SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	69	#4	18'-10"	
a1(E)	69	#4	20'-6"	
b(E)	99	#4	24'-3"	
h(E)	6	#5	19'-2"	
v(E)	84	#4	1'-8"	
v1(E)	84	#4	3'-10"	
Reinforcement Bars, Epoxy Coated		Pound	3850	
Concrete Wearing Surface, 5"		Sq. Yd.	244	
Concrete Structures		Cu. Yd.	4.4	
Protective Coat		Sq. Yd.	244	
Bridge Deck Grooving		Sq. Yd.	229	

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
STRUCTURE NO. 102-0042
SHEET 5 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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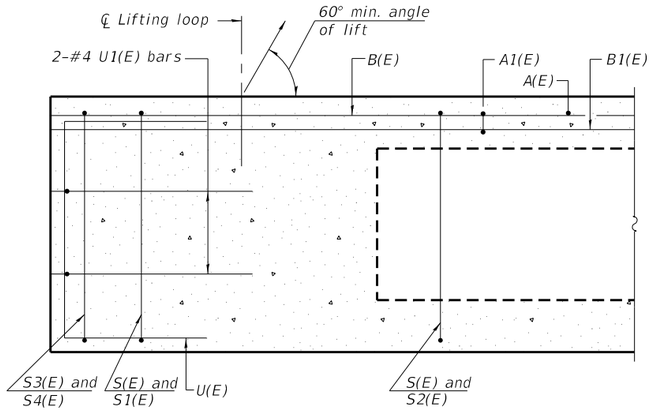
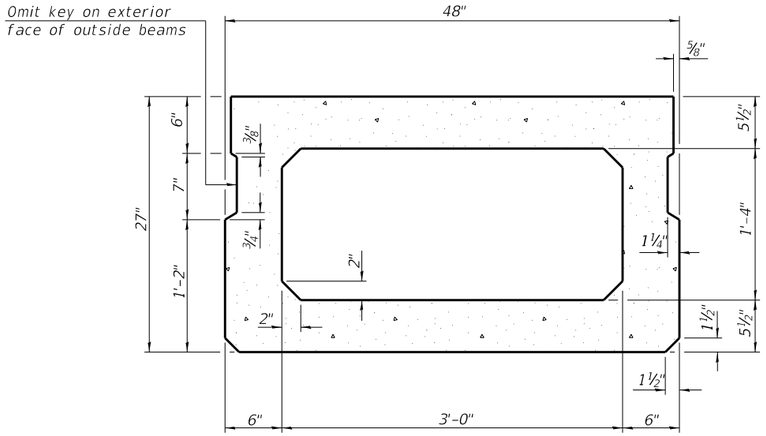
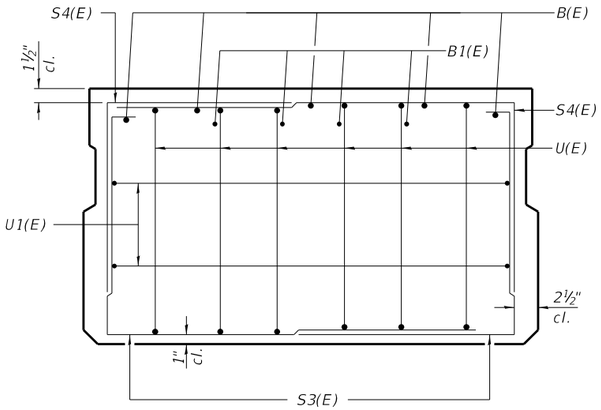
		CONTRACT NO. 68805		
	ILLINOIS	FED. AID PROJECT		



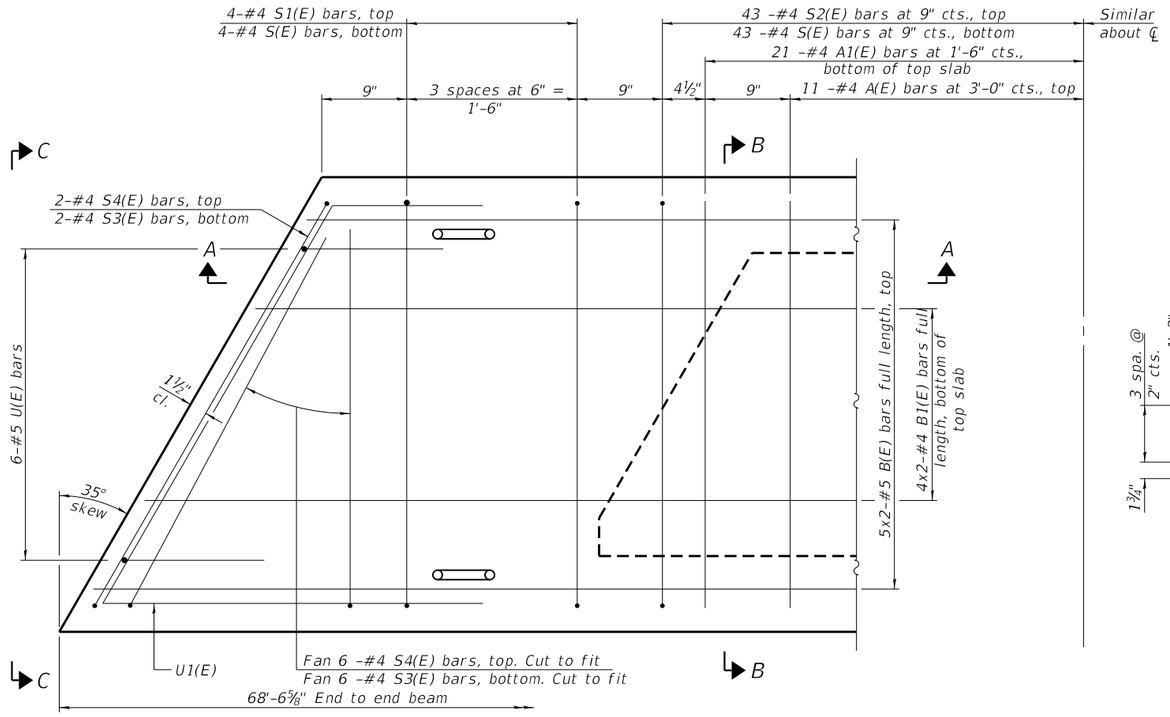
SECTION A-A



SECTION B-B
(Showing dimensions)

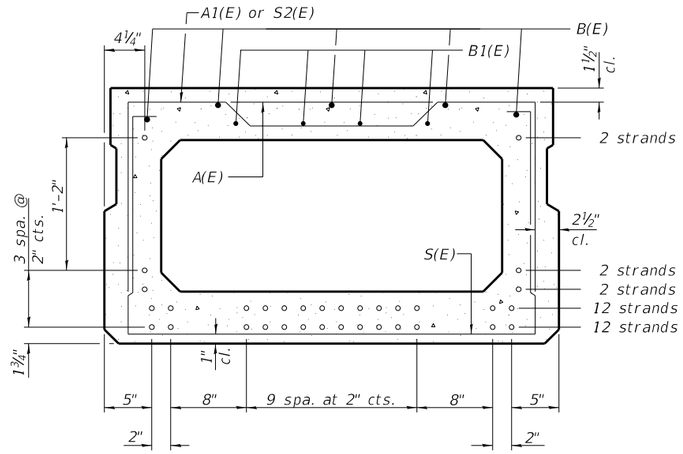


VIEW C-C



PLAN VIEW

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



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

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

MINIMUM BAR LAP
#4 bar = 1'-11"
#5 bar = 2'-6"

BAR LIST
ONE BEAM ONLY
(For information only)

	Bar	No.	Size	Length	Shape
	A(E)	22	#4	3'-7"	——
	A1(E)	42	#4	3'-10"	~
	B(E)	10	#5	35'-4"	——
	B1(E)	8	#4	35'-1"	——
*	D(E)	24	#4	2'-9"	⊔
	S(E)	94	#4	8'-5"	□
	S1(E)	8	#4	6'-11"	⌐
	S2(E)	86	#4	7'-2"	⌐~
	S3(E)	16	#4	6'-9"	⌐
	S4(E)	16	#4	6'-0"	⌐
	U(E)	12	#5	4'-6"	⊏
	U1(E)	4	#4	9'-3"	⊏

Note:
See Sheet 7 of 12 for additional Details and bill of Material
See sheet 5 of 12 for D(E) bars.
*External Beams only.

PD-2748-L 2-17-2017

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PLOT DATE = ------		CHECKED - DDB		REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

27" X 48" PPC DECK BEAM
STRUCTURE NO. 102-0042
SHEET 6 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	51	26
		CONTRACT NO. 68805		
	ILLINOIS	FED. AID PROJECT		

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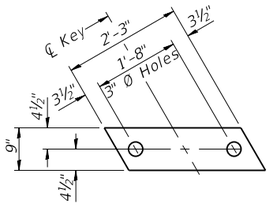
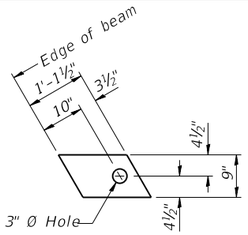


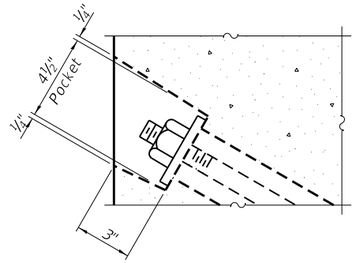
FABRIC BEARING PAD
(Interior)



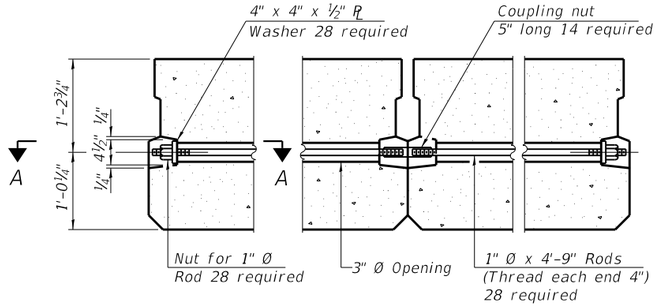
FABRIC BEARING PAD
(Exterior)

FIXED

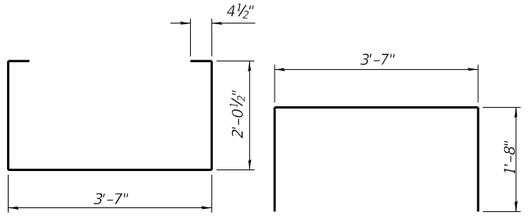
Notes:
All bearing pads shall be 1" thick.
Omit holes when using expansion bearings.
Expansion bearing pad shall be bonded to the substructure.



SECTION A-A

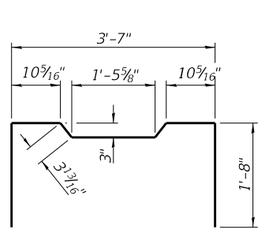


TYPICAL TRANSVERSE TIE ASSEMBLY

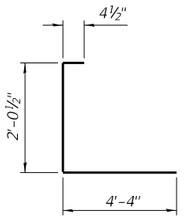


BAR S(E)

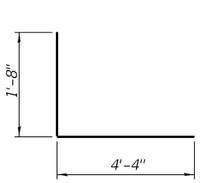
BAR S1(E)



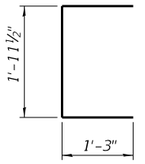
BAR S2(E)



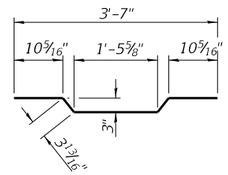
BAR S3(E)



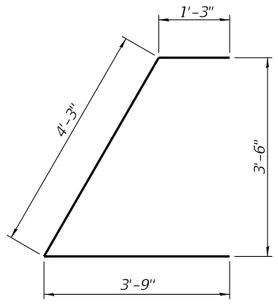
BAR S4(E)



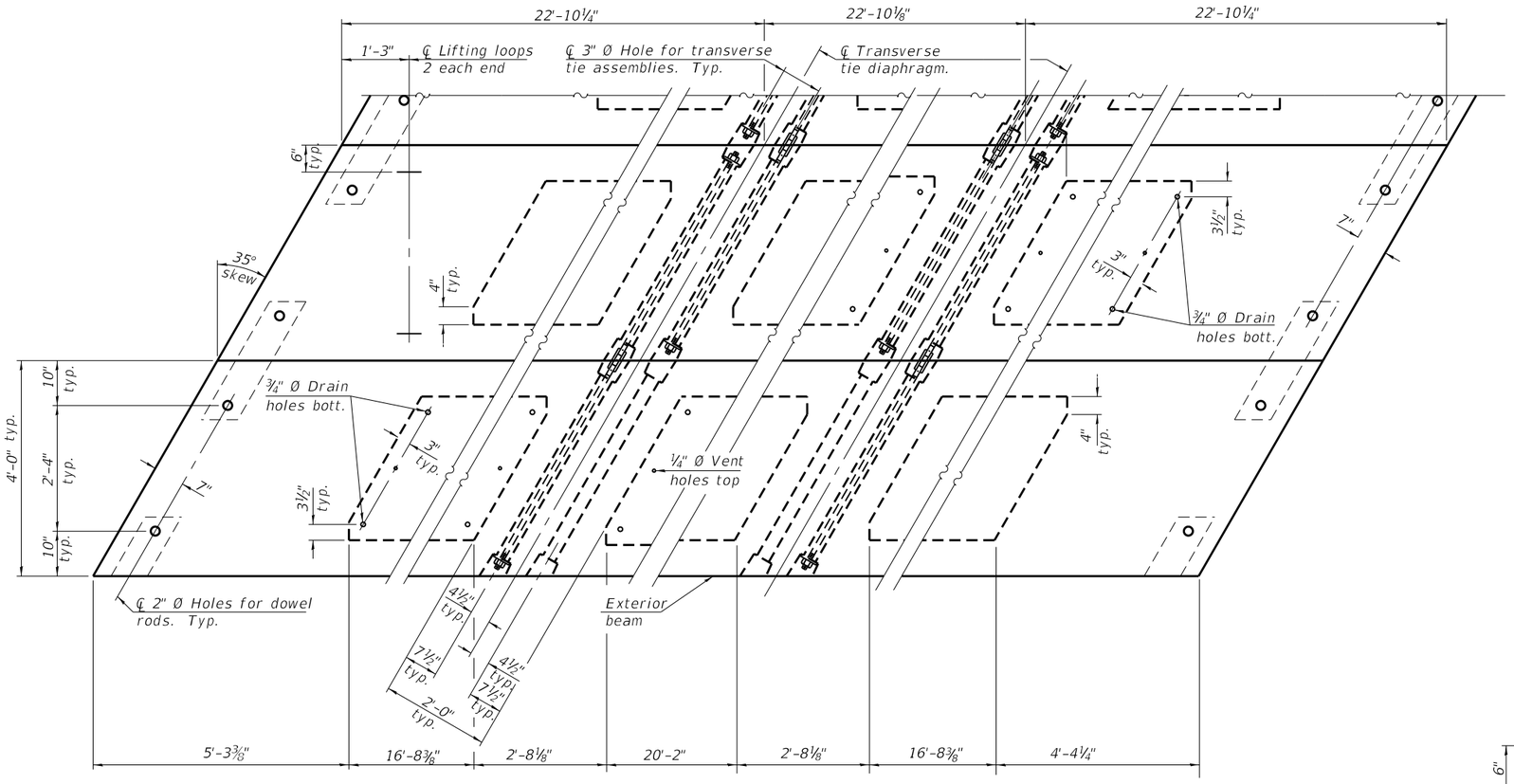
BAR U(E)



BAR A1(E)



BAR U1(E)



PLAN VIEW

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

NOTES

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be ½" and the nominal cross-sectional area shall be 0.153 sq. in.

The 1" Ø rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place.

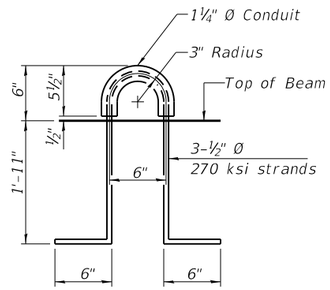
Two ⅛" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.

A minimum 2½" Ø lifting pin shall be used to engage the lifting loops during handling.

Corrosion Inhibitor, per Article 1020.05(b)(10) and 1021.07 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.

Compressive strength of prestressed concrete, f'c, shall be 6000 psi.

Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.



LIFTING LOOP DETAIL

BILL OF MATERIAL

Precast Prestressed Conc. Deck Bms. (27" depth)	Sq. Ft.	2194

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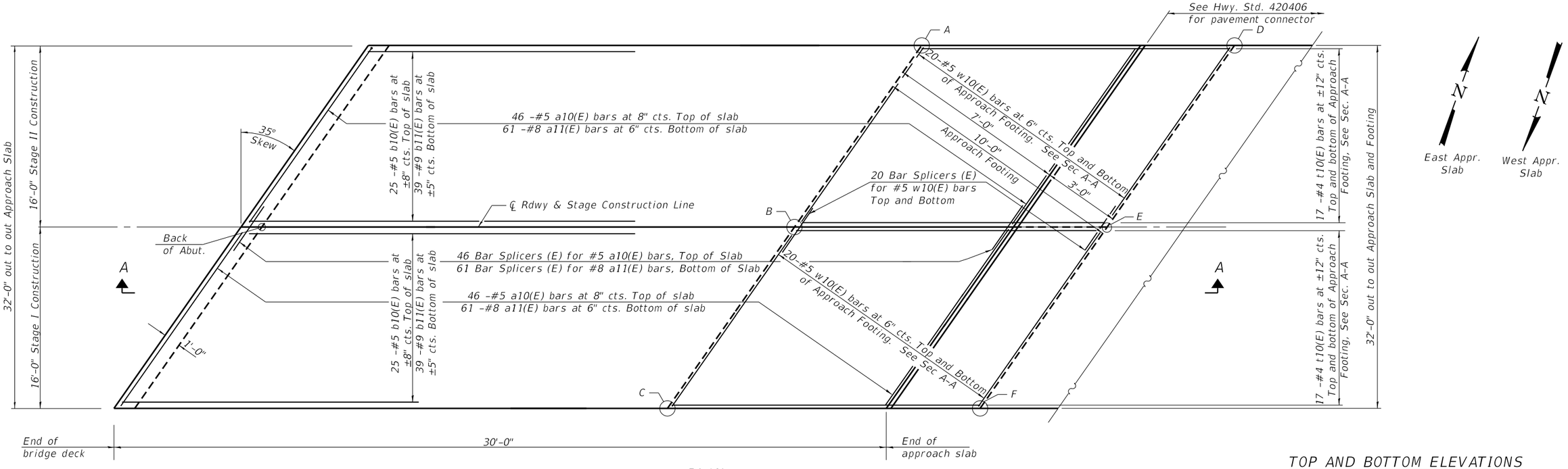
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

27" x 48" PPC DECK BEAM DETAILS
STRUCTURE NO. 102-0042

SHEET 7 OF 12 SHEETS

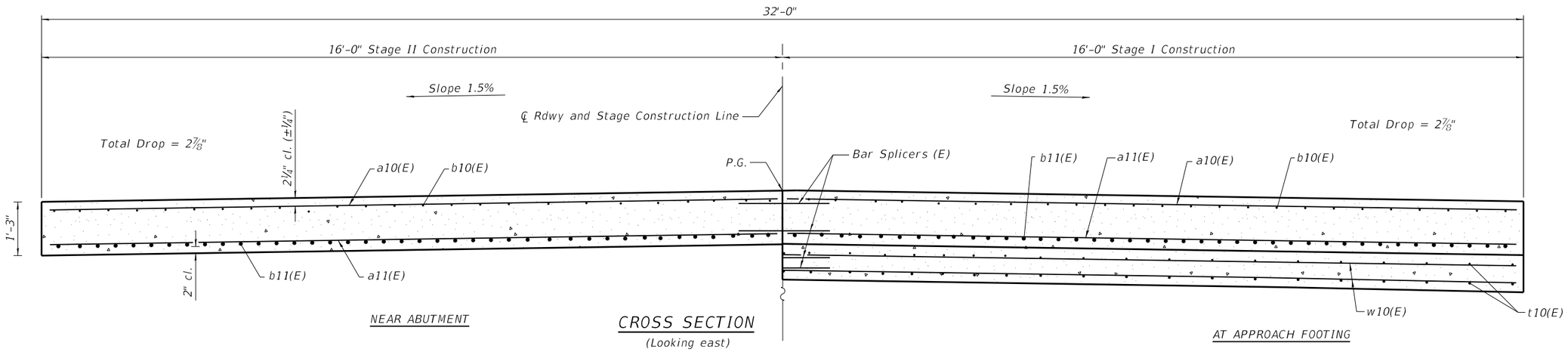
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	51	27
		CONTRACT NO. 68805		
	ILLINOIS	FED. AID PROJECT		



PLAN

TOP AND BOTTOM ELEVATIONS FOR APPROACH FOOTING

	West Approach		East Approach	
Point	Top	Bottom	Top	Bottom
A	718.88	718.05	718.94	718.11
B	719.15	718.32	719.22	718.38
C	718.94	718.11	719.00	718.16
D	718.84	718.01	718.91	718.07
E	719.12	718.28	719.18	718.35
F	718.91	718.08	718.97	718.14



NEAR ABUTMENT

CROSS SECTION
(Looking east)

AT APPROACH FOOTING

TERRA ENGINEERING LTD.	USER NAME = ------	DESIGNED - DDB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BRIDGE APPROACH SLAB DETAILS 1 STRUCTURE NO. 102-0042
		CHECKED - PMH	REVISED -		
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	PLOT DATE = ------	CHECKED - DDB	REVISED -		SHEET 8 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	51	28
		CONTRACT NO. 68805		
	ILLINOIS	FED. AID PROJECT		

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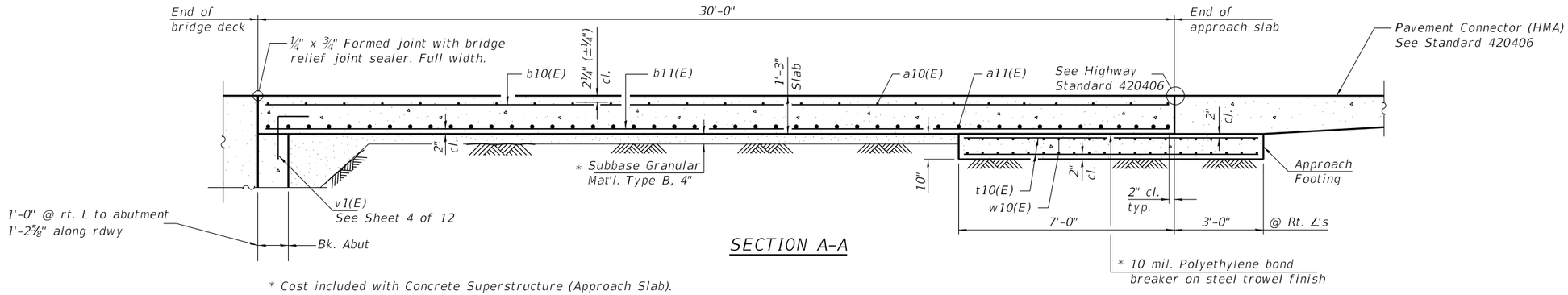

SECTION A-A

* Cost included with Concrete Superstructure (Approach Slab).

TWO APPROACHES
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a10(E)	184	#5	19'-2"	———
a11(E)	244	#8	19'-2"	———
b10(E)	100	#5	29'-8"	———
b11(E)	156	#9	29'-8"	———
t10(E)	136	#4	11'-10"	———
w10(E)	160	#5	19'-2"	———
Concrete Superstructure (Approach Slab)		Cu. Yd.	88.9	
Concrete Structures		Cu. Yd.	24.1	
Reinforcement Bars, Epoxy Coated		Pound	39,280	
Bridge Deck Grooving		Sq. Yd.	200	
Protective Coat		Sq. Yd.	214	

Notes:
- Approach slab shall be paid for as Concrete Superstructure (Approach Slab).
- Approach footing concrete shall be paid for as Concrete Structures.
- The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
- Cost of excavation for approach footing included with Concrete Structures.
- Spacing of a10(E) and a11(E) bars shall be measured along the ℄ at the structure.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS 2
STRUCTURE NO. 102-0042
SHEET 9 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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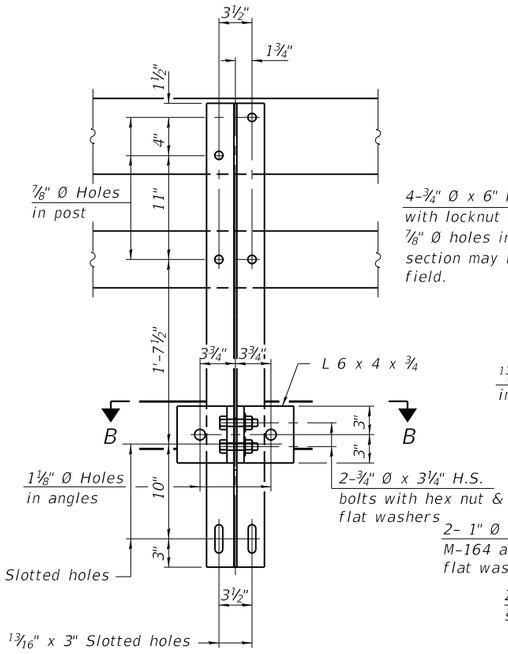
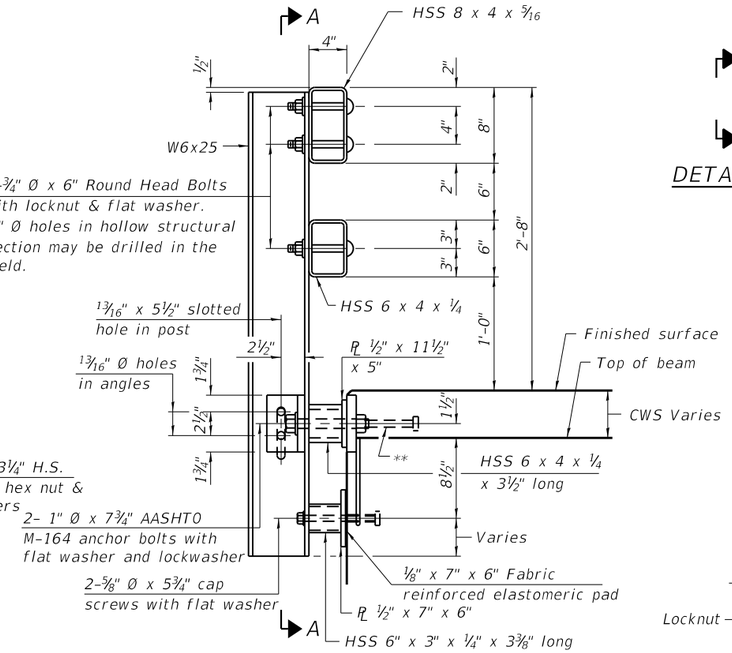
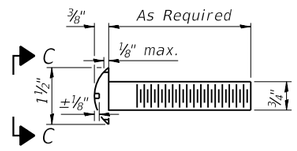
		CONTRACT NO. 68805		
	ILLINOIS	FED. AID PROJECT		



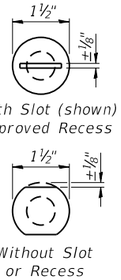
SECTION A-A



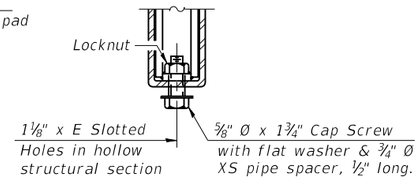
SECTION AT RAIL POST



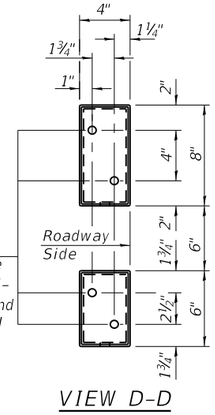
DETAIL OF ¾" Ø ROUND HEAD BOLT



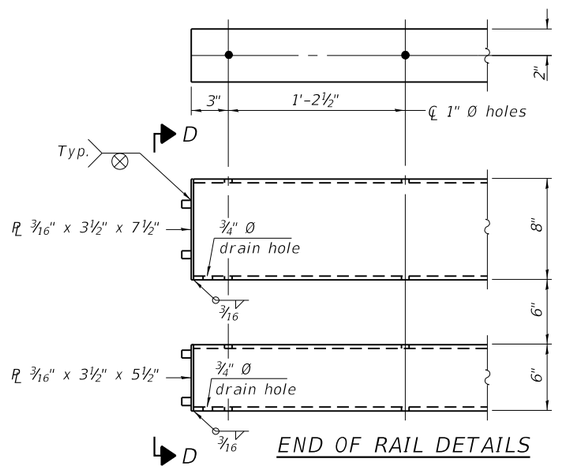
VIEW C-C



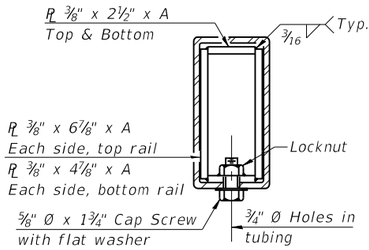
RAIL SPLICE CONNECTION AT EXPANSION JT.



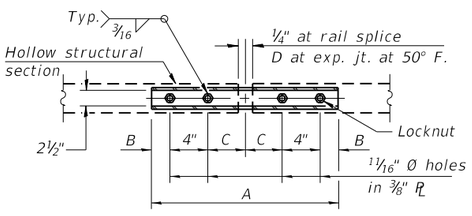
VIEW D-D



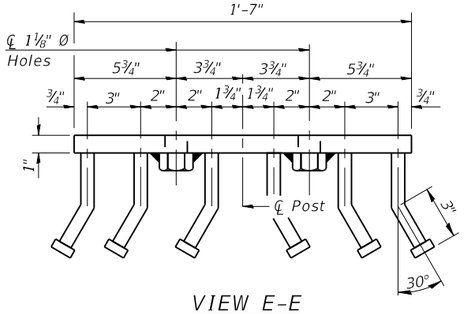
END OF RAIL DETAILS



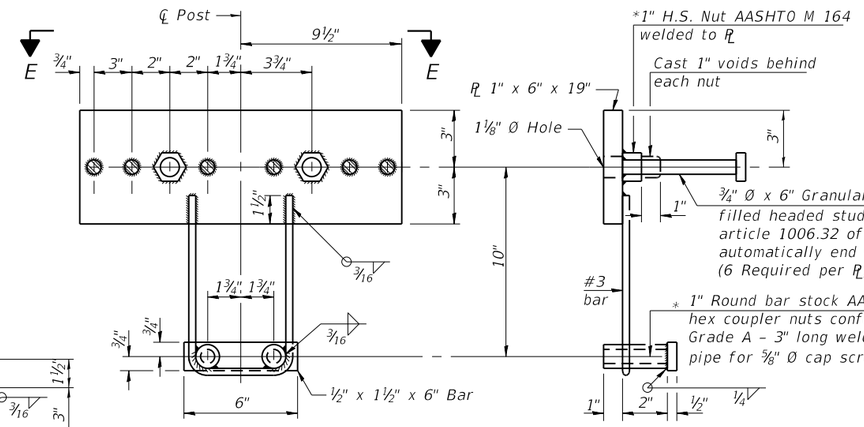
SECTION AT RAIL SPLICE



PLAN-BOTT. SPLICE PL TYPICAL

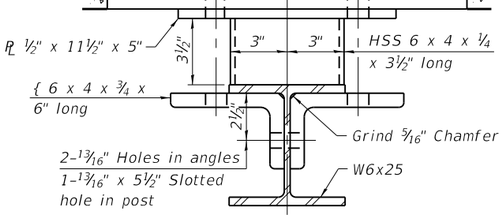


VIEW E-E

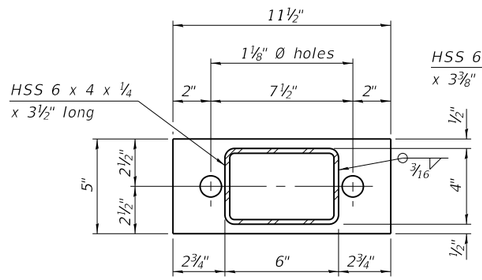


ANCHOR DEVICE

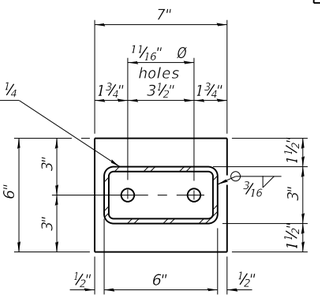
*Threaded areas shall be plugged or blocked off during casting of beam. Galvanized after fabrication.



SECTION B-B



PL ½" x 11½" x 5"



PL ½" x 7" x 6"

SPLICE DIMENSIONS

T	D	A	B	C	E
≤ 4"	2½"	1'-8"	2"	4"	2½"
> 4" ≤ 6½"	3¾"	2'-0"	2½"	5½"	3½"
> 6½" ≤ 9"	5"	2'-4"	3½"	6½"	9"
> 9" ≤ 13"	7"	2'-10"	4½"	8½"	11"
Rail Splice	¼"	1'-8"	2"	4"	———

T = Total movement at expansion joint as shown on the design plans.

Notes:

For multi-span bridges, sufficient ¼" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans.

Cost included with Steel Railing, Type SM.

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

** The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device.

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type SM	Foot	138

R-34CWS 8-11-2017 (6'-3" Maximum Post Spacing) (5" minimum to 7⅛" maximum CWS thickness)

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	CHECKED - PMH	REVISED -			
PLOT SCALE = ------	DRAWN - SI	REVISED -			
PLOT DATE = ------	CHECKED - DDB	REVISED -		SHEET 10 OF 12 SHEETS	

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	51	30
		CONTRACT NO. 68805		
	ILLINOIS FED. AID PROJECT			

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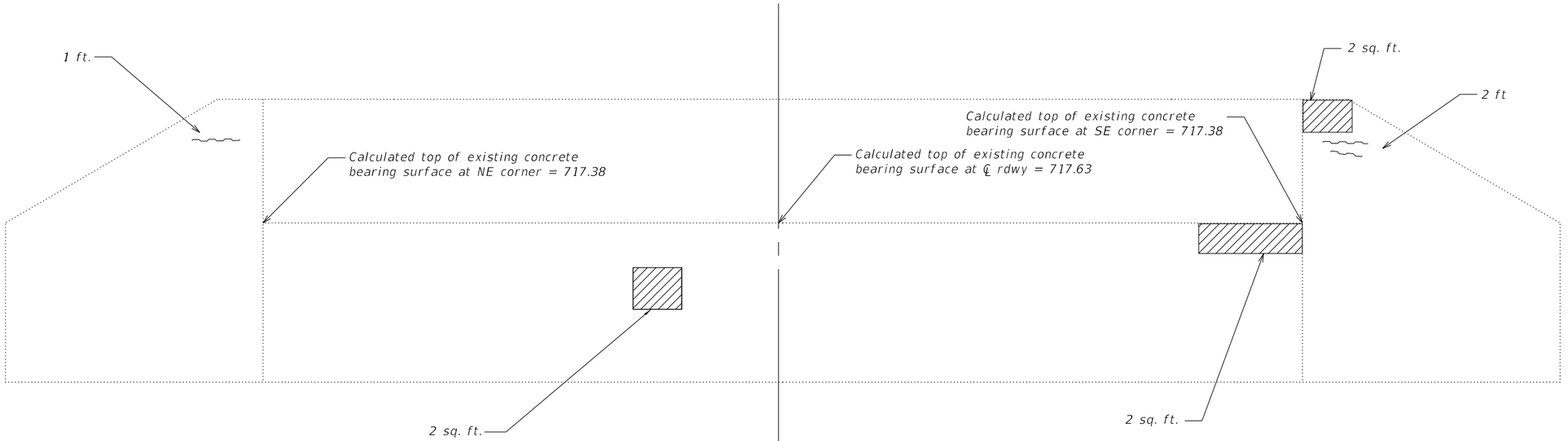


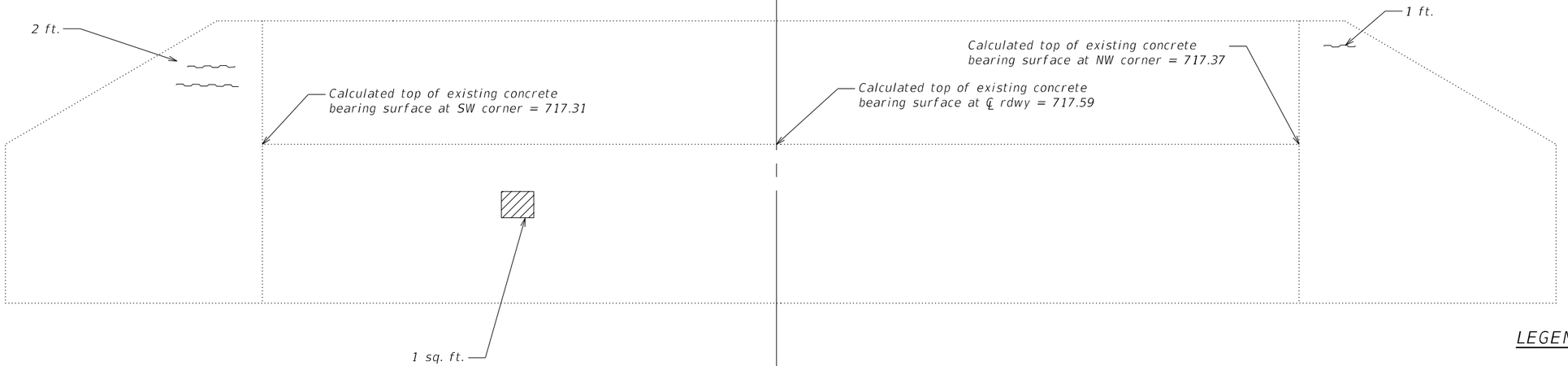
EAST ABUTMENT ELEVATION

looking east

NOTE:
Calculated top of existing concrete bearing surfaces shown are from survey shots of low concrete. Contractor shall verify elevations after removal of existing beams and make any necessary approved adjustments in elevations shown on bridge and roadway plans.

BILL OF MATERIAL

Item	Unit	Quantity
Epoxy Crack Injection	Foot	6
Structural Repair of Concrete (Depth Equal to or less Than 5 Inches)	Sq. Ft.	7



WEST ABUTMENT ELEVATION

looking west

LEGEND

Epoxy Crack Injection

Structural Repair of Concrete (Depth Equal to or less Than 5 Inches)

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ABUTMENT REPAIRS
STRUCTURE NO. 102-0042
SHEET 11 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	51	31
			CONTRACT NO. 68805	
		ILLINOIS	FED. AID PROJECT	

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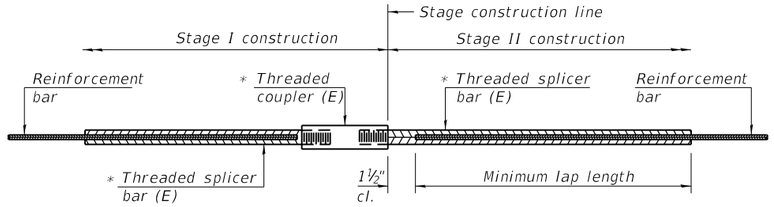
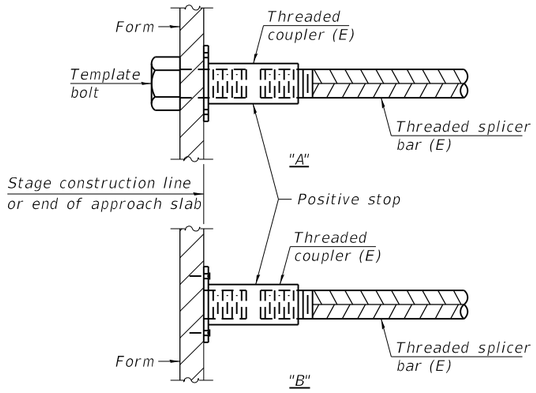


STANDARD BAR SPLICER ASSEMBLY

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

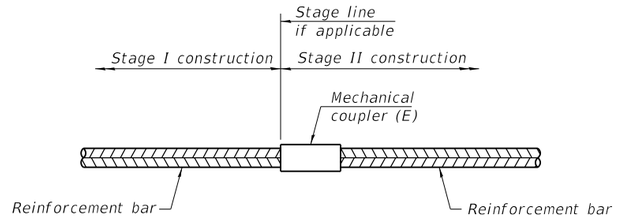
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
CWS	#4	69	2'-2"
Backwall	#5	6	3'-4"
Approach Slab	#5	92	3'-0"
Approach Slab	#8	122	4'-9"
Approach Footing	#5	80	3'-2"



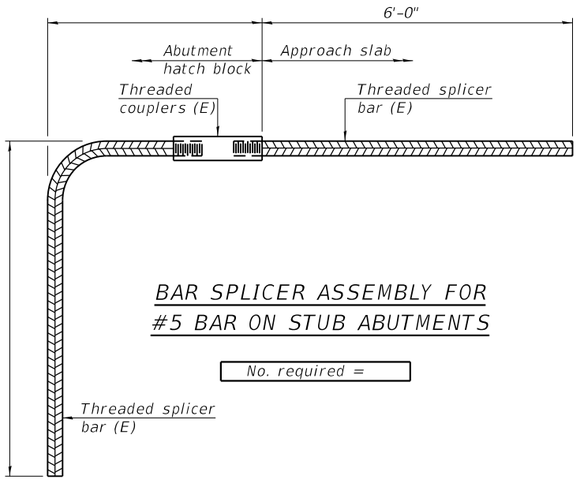
INSTALLATION AND SETTING METHODS

"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



NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.

All reinforcement shall be lapped and tied to the splicer bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.

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

BSD-1 2-17-2017

TERRA ENGINEERING LTD.

USER NAME = ------	DESIGNED - DDB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS STRUCTURE NO. 102-0042
	CHECKED - PMH	REVISED -		
PLOT SCALE = ------	DRAWN - SI	REVISED -		SHEET 12 OF 12 SHEETS
PLOT DATE = ------	CHECKED - DDB	REVISED -		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	51	32
		CONTRACT NO. 68805		
	ILLINOIS	FED. AID PROJECT		

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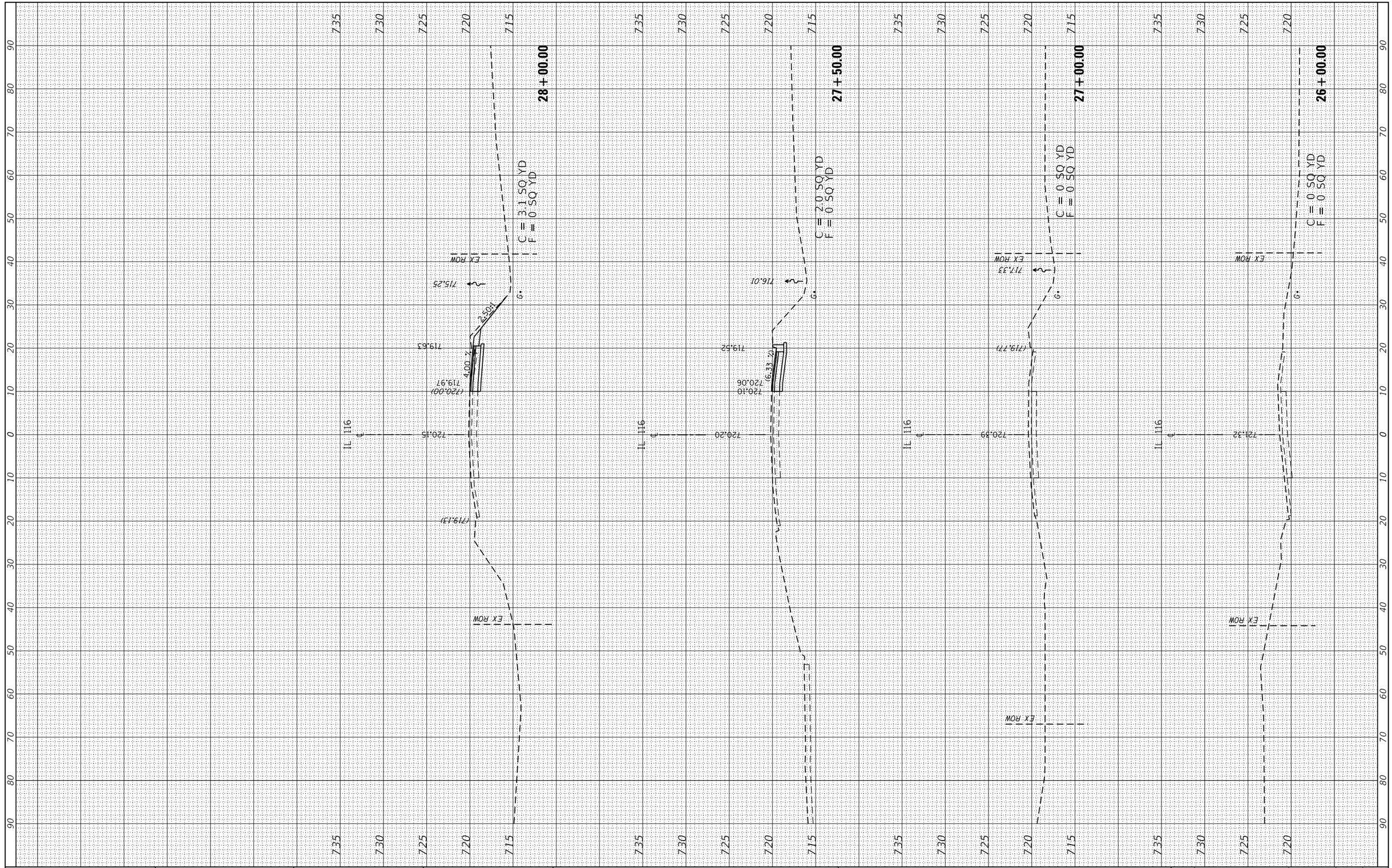
12/10/2019 10:31:27 AM

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

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



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Default	PLOT DATE = 12/13/2019	DATE - 6/8/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 116 OVER WEST BRANCH OF PANTHER CREEK
CROSS SECTIONS

SCALE: $SCALE1$ | SHEET 1 OF 6 SHEETS | STA. 26+00.00 | TO STA. 28+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	51	33
		CONTRACT NO. 68805		
	ILLINOIS	FED. AID PROJECT		

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

ORIGINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
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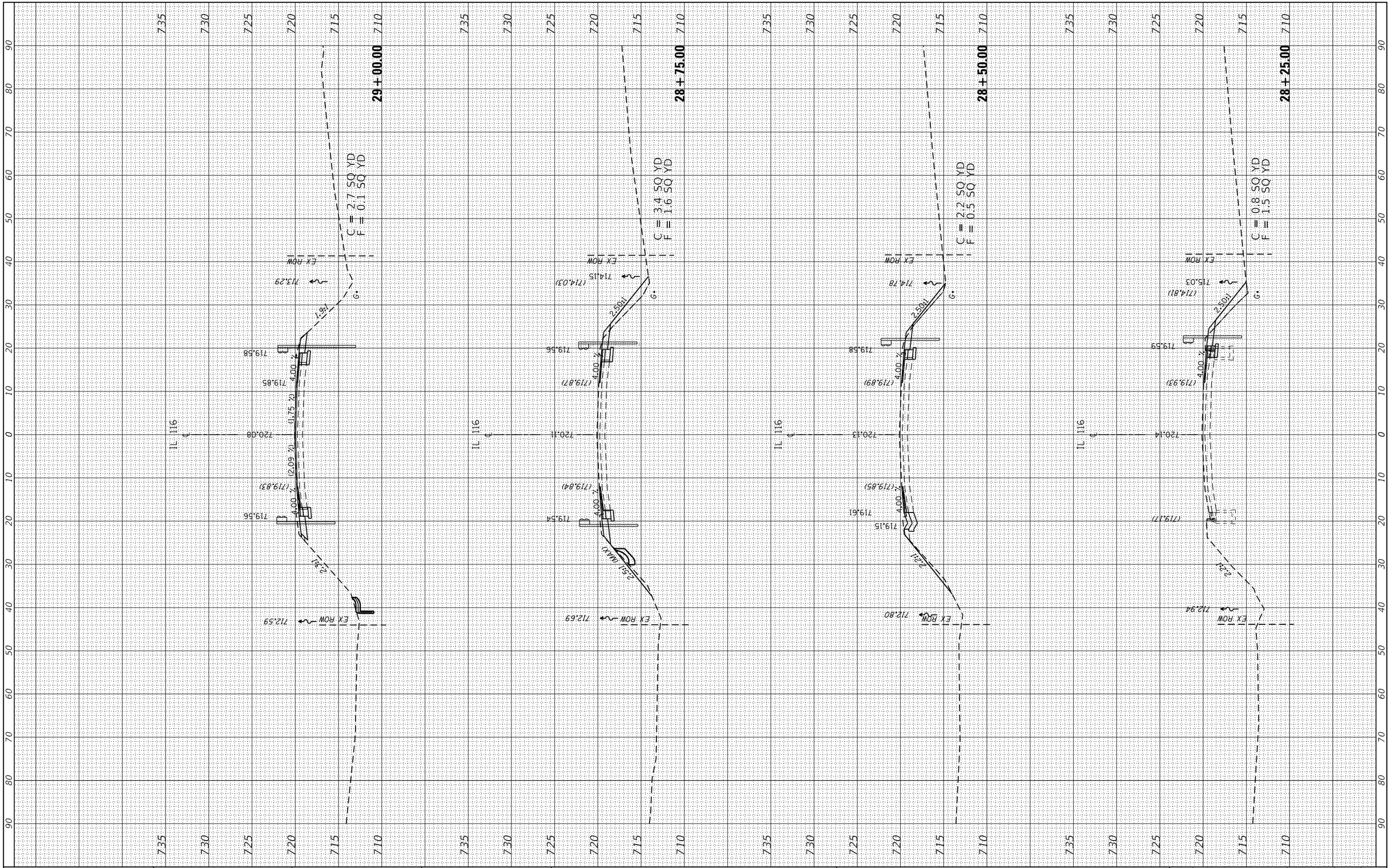

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Default	PLOT DATE = 12/13/2019	DATE - 6/8/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

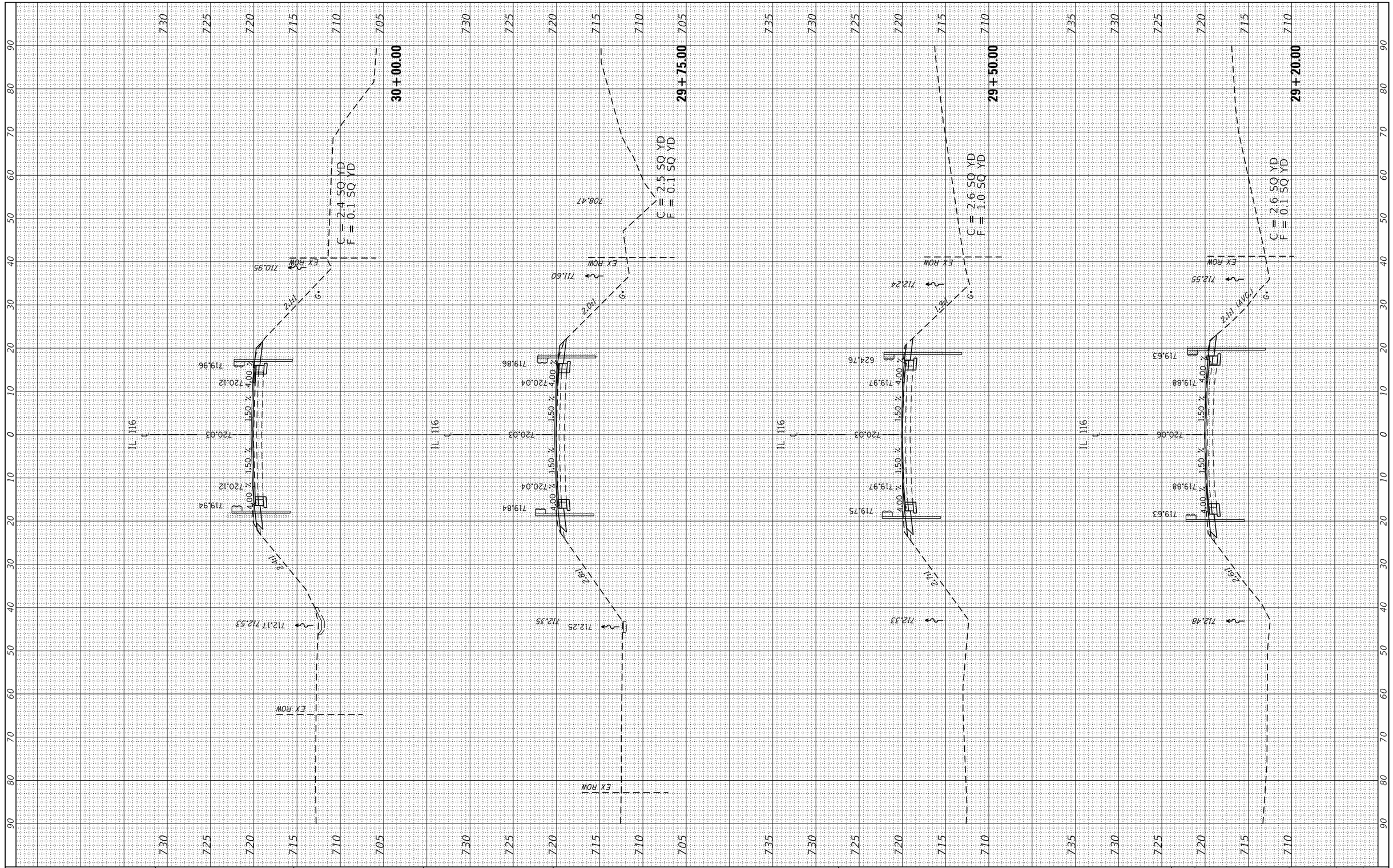
IL 116 OVER WEST BRANCH OF PANTHER CREEK
CROSS SECTIONS

SCALE: $SCALE1$ | SHEET 2 OF 6 SHEETS | STA. 28+25.00 | TO STA. 29+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	51	34
		CONTRACT NO. 68805		
	ILLINOIS	FED. AID PROJECT		

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

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



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	PLOT DATE = 12/13/2019	DATE - 6/8/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

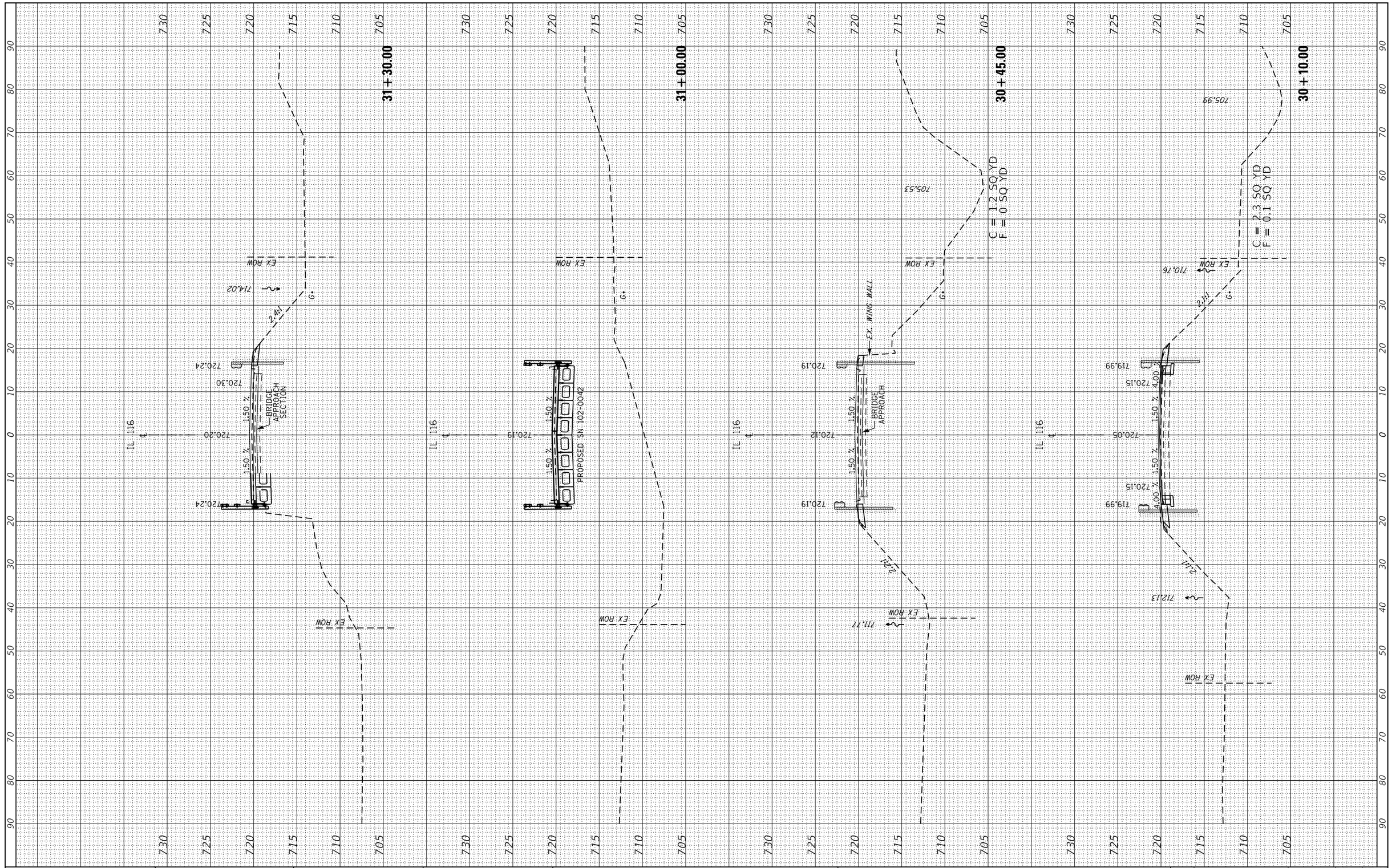
IL 116 OVER WEST BRANCH OF PANTHER CREEK
CROSS SECTIONS

SCALE: $SCALE1$ | SHEET 3 OF 6 SHEETS | STA. 29+20.00 | TO STA. 30+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	51	35
		CONTRACT NO. 68805		
	ILLINOIS	FED. AID PROJECT		

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

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



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Default	PLOT DATE = 12/13/2019	DATE - 6/8/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

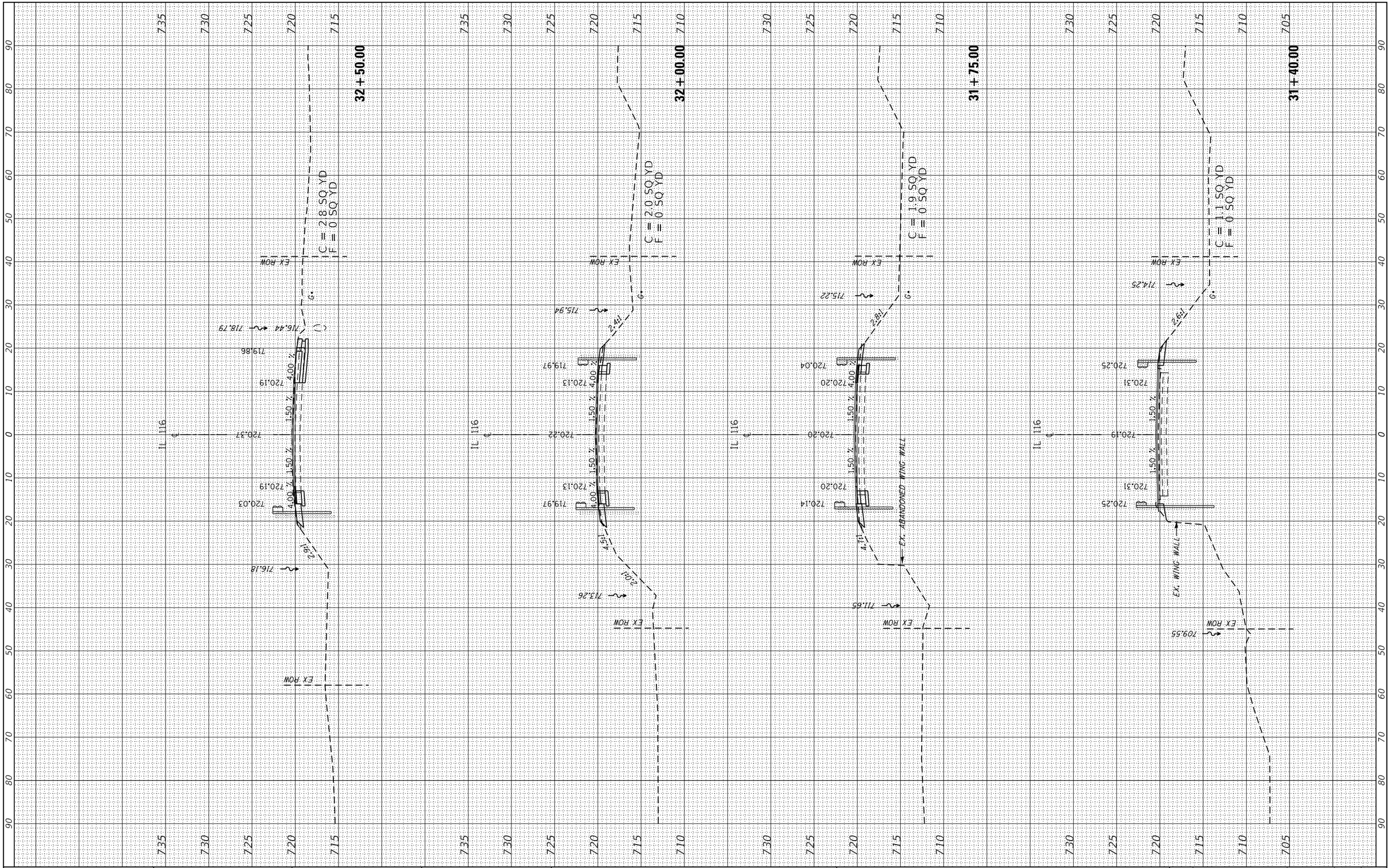
IL 116 OVER WEST BRANCH OF PANTHER CREEK
CROSS SECTIONS

SCALE: $SCALE1$ | SHEET 4 OF 6 SHEETS | STA. 30+10.00 | TO STA. 31+30.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	51	36
		CONTRACT NO. 68805		
	ILLINOIS	FED. AID PROJECT		

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

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



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Default	PLOT SCALE = 1:20	CHECKED - DPA	REVISED -
	PLOT DATE = 12/13/2019	DATE - 6/8/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

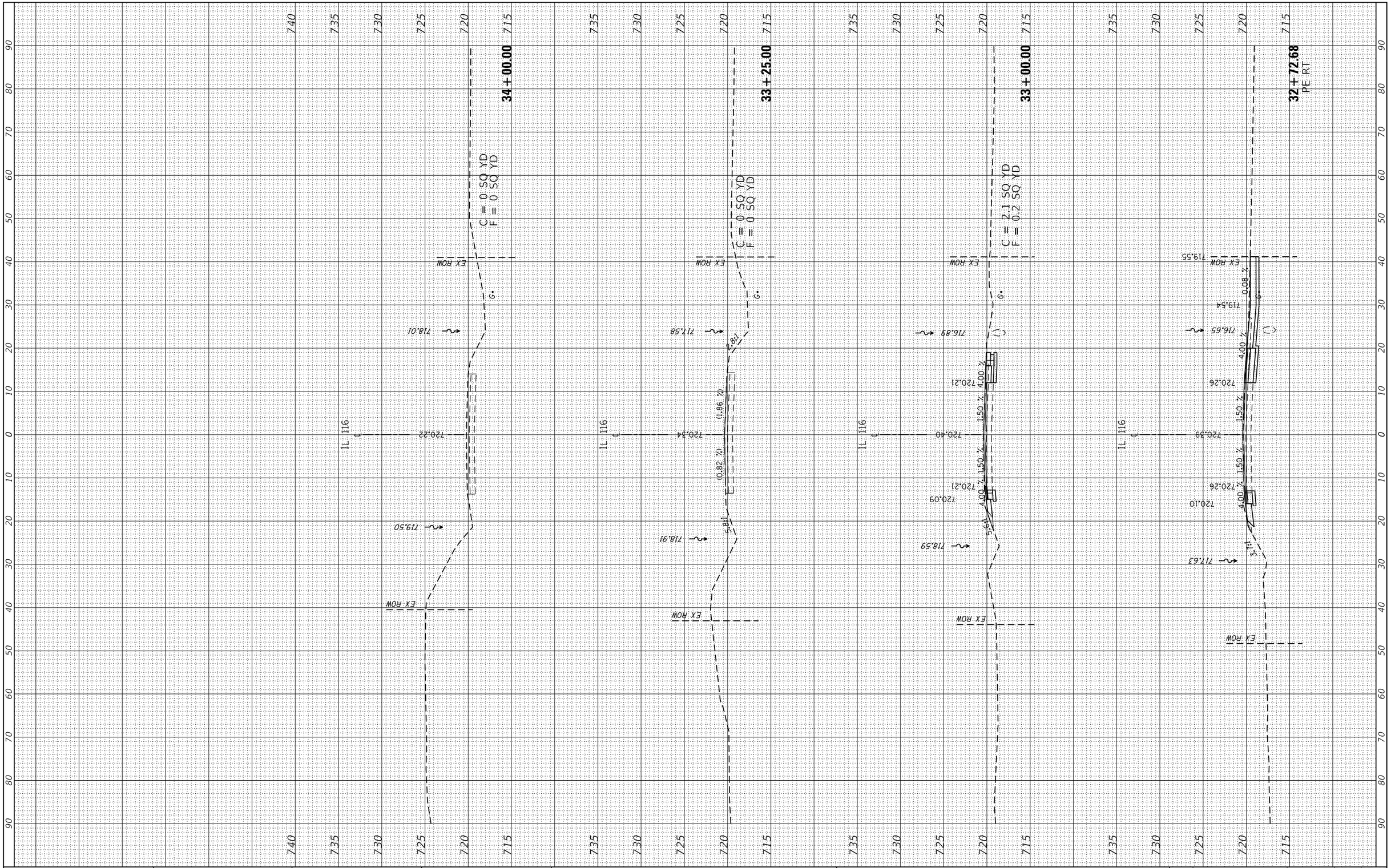
IL 116 OVER WEST BRANCH OF PANTHER CREEK
CROSS SECTIONS

SCALE: $SCALE1$ | SHEET 5 OF 6 SHEETS | STA. 31+40.00 | TO STA. 32+50.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	51	37
		CONTRACT NO. 68805		
	ILLINOIS FED. AID PROJECT			

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

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



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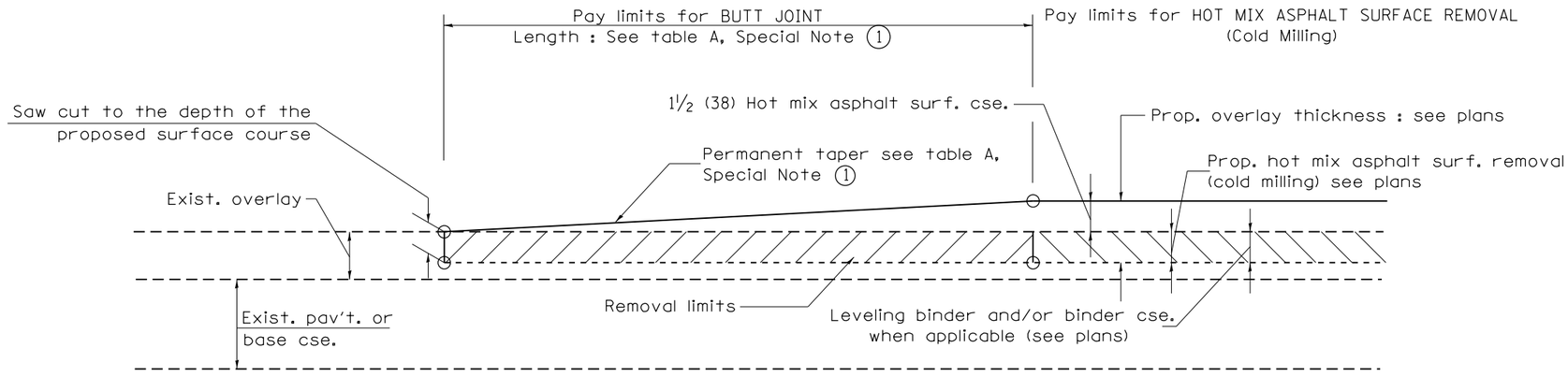
Default	PLOT DATE = 12/13/2019	DATE - 6/8/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 116 OVER WEST BRANCH OF PANTHER CREEK
CROSS SECTIONS

SCALE: $SCALE1$ | SHEET 6 OF 6 SHEETS | STA. 32+72.68 | TO STA. 34+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	51	38
		CONTRACT NO. 68805		
	ILLINOIS	FED. AID PROJECT		



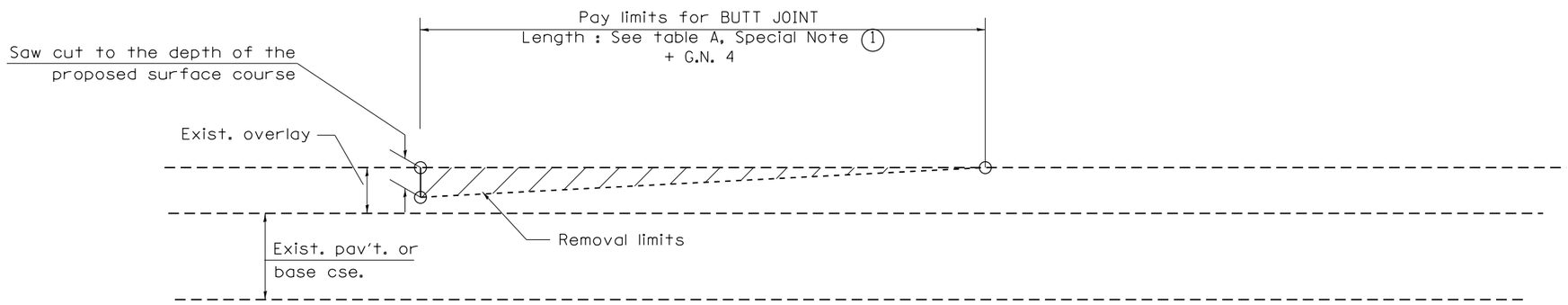
CASE 1 : WITH HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)

TABLE A
TAPER RATES

SPECIAL NOTE NUMBER	ELEMENT	MAINLINE INTERSTATES & 4-LANE EXPRESSWAYS	ALL OTHERS
(1)	BUTT JOINT TAPER RATE	1:480	1:240
(2)	TEMPORARY RAMP TAPER RATE	1:80	1:40

GENERAL NOTES

1. The work shall be done in accordance with Article 406.08 and the Special Provision for Butt Joints.
2. The pavement surface to be removed may be either bituminous or P.C. concrete. The work shall be performed in accordance with Article 440.04 and the Special Provisions for Butt Joints.
3. The saw cut joints shall be primed just prior to the placing of bituminous material. The work will be in accordance with the applicable portions of Article 406.05.
4. The length of butt joint is based on the taper rate times change in cold miling depth within the butt joint pay limits, unless otherwise indicated.
5. Temporary ramps are paid for separately and not included in the cost of the butt joints.



CASE 2 : NO HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)

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

01-01-97	RENUM. C-23.01, NEW REVISION BOX	T.P.	08-21-13	MAJOR MODIFICATIONS	R.D.
04-01-97	CORRECTION TO DEPTH	J.A.	02-29-16	MINOR CORRECTIONS	R.D.
09-15-05	REVISED DESIGNER NOTE	M.M.A.	04-12-16	MINOR CORRECTIONS	R.D.
10-16-06	REVISED TO 2007 SPEC.	M.A.	02-14-17	ADDED NOTE 5	R.D.

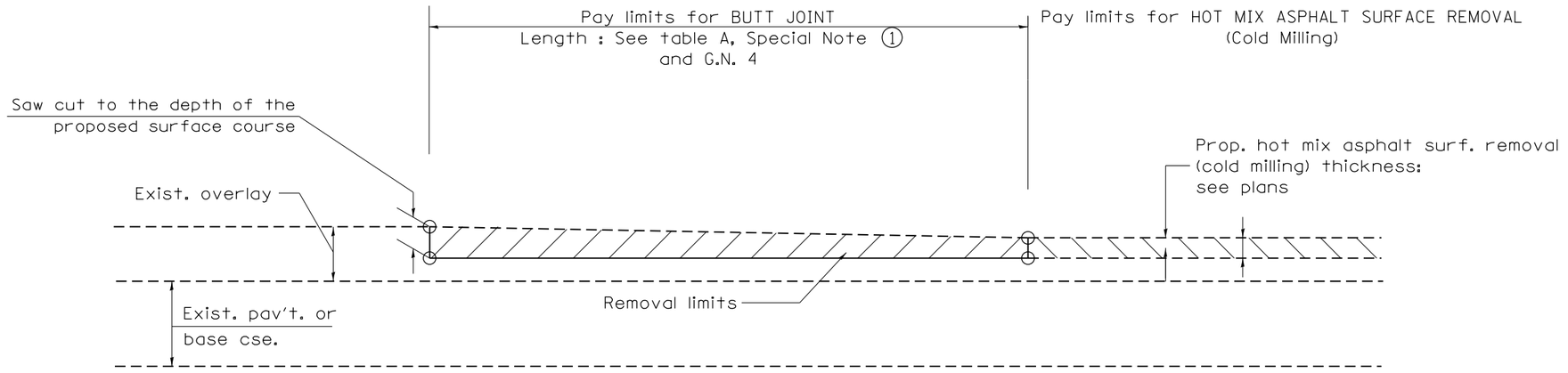
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BUTT JOINTS

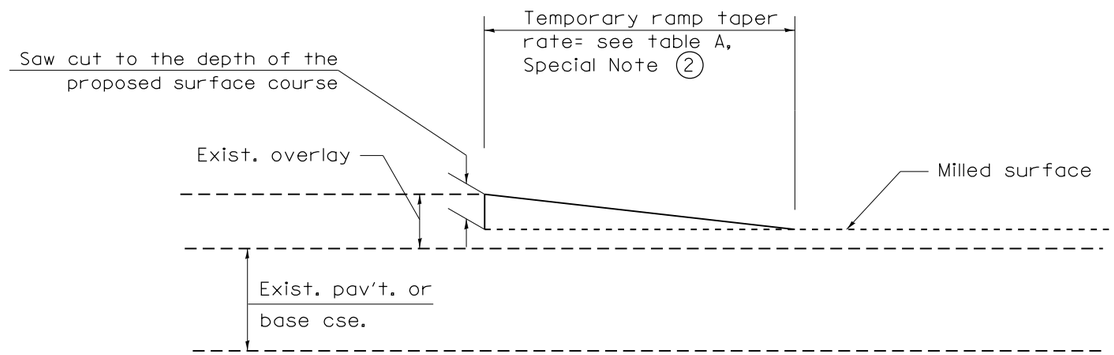
NOT TO SCALE

SHT. 1 OF 3
CADD STD. 406101-D4

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	51	39
		CONTRACT NO. 68805		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



CASE 3 : HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)
TIE-IN TO EXISTING BITUMINOUS TAPER



DETAIL TEMPORARY RAMP

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

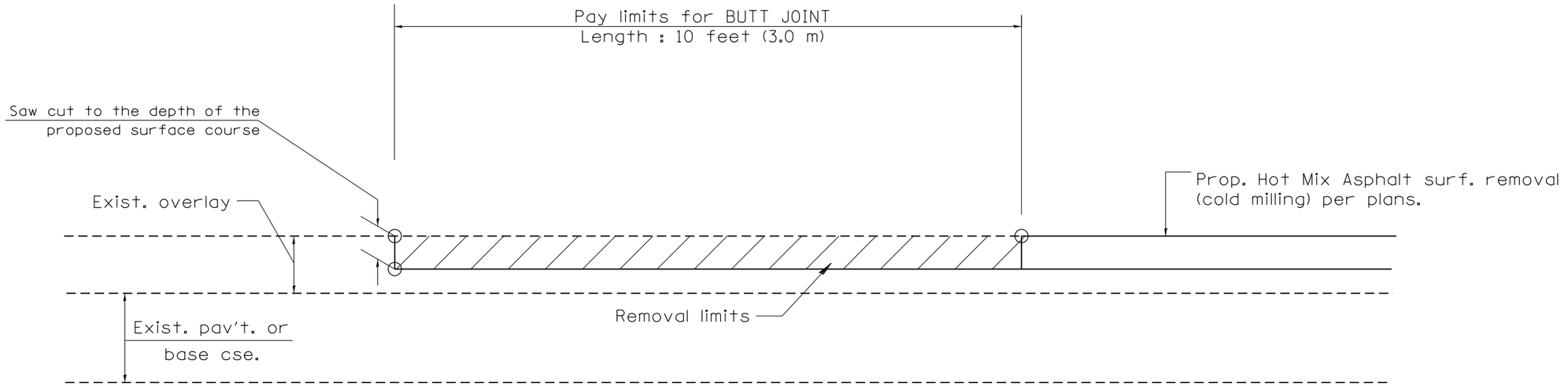
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BUTT JOINTS

NOT TO SCALE

SHT. 2 OF 3
CADD STD. 406101-D4

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	51	40
		CONTRACT NO. 68805		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



CASE 4 : SINGLE LIFT OVERLAY WITH EQUIVALENT DEPTH HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING) TIE-IN TO EXISTING BITUMINOUS TAPER

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BUTT JOINTS

NOT TO SCALE

SHT. 3 OF 3
CADD STD. 406101-D4

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	51	41
		CONTRACT NO. 68805		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

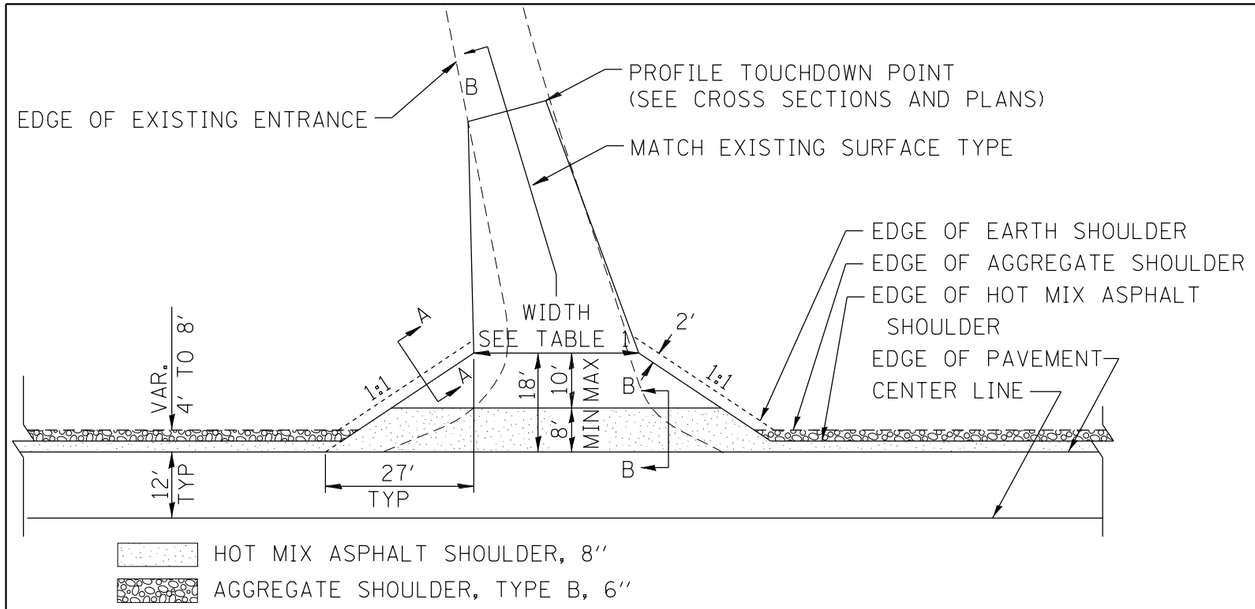


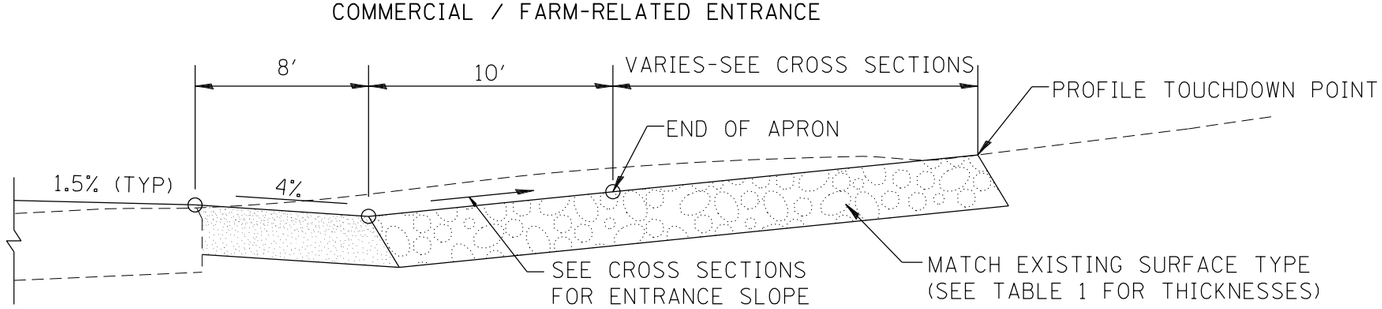
TABLE 1

RURAL ENTRANCE DESIGN

ELEMENT	NON-COMMERCIAL		NON-COMMERCIAL W/ LARGE FARM EQUIPMENT		COMMERCIAL			
					1-WAY OPERATION		2-WAY OPERATION	
WIDTH (W)	12'(3.6m) Min.	24'(7.2m) Max.	20' (6.1m)Min.	30'(9.0m)Max.	14'(4.3m) Min.	24'(7.2m) Max.	24'(7.2m) Min.	35'(10.7m) Max.
FLARE	1:1.5							
MAX. GRADE (G)	12%		12%		10%			
SURFACE TYPE								
INCIDENTAL HOT MIX ASPHALT SURFACING	6''		—		8''			
AGGREGATE SURFACE COURSE	6''		8''		—			
PCC DRIVEWAY PAVEMENT	6''		—		7''			

PLAN

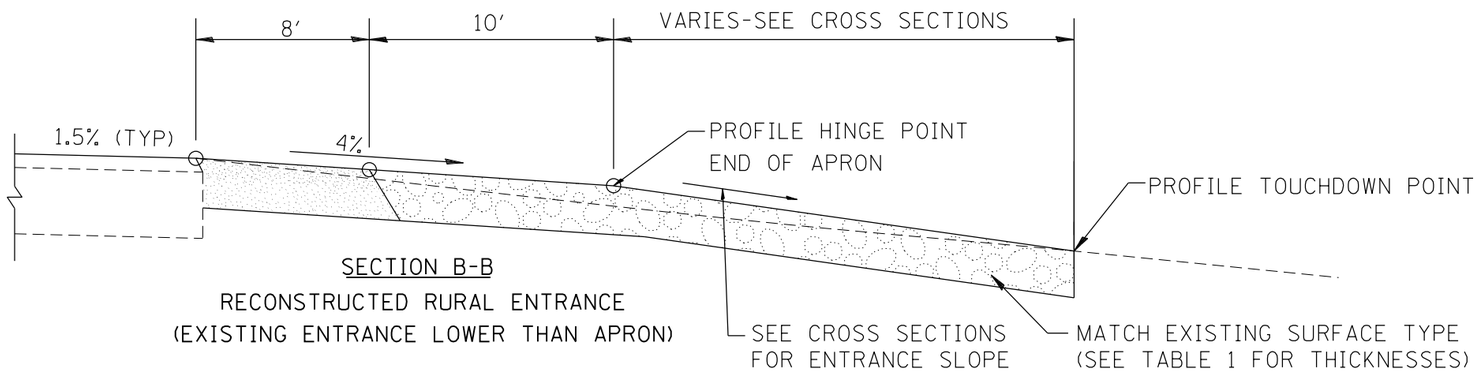
COMMERCIAL / FARM-RELATED ENTRANCE



SECTION B-B

RECONSTRUCTED RURAL ENTRANCE

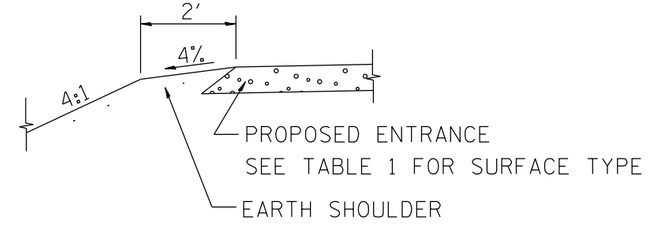
(EXISTING ENTRANCE HIGHER THAN APRON)



SECTION B-B

RECONSTRUCTED RURAL ENTRANCE

(EXISTING ENTRANCE LOWER THAN APRON)



SECTION A-A

SHOULDER TREATMENT FOR RURAL ENTRANCES

GENERAL NOTES

1. ENTRANCES SHALL SLOPE AWAY FROM THE PAVEMENT AT A RATE EQUAL TO THE SHOULDER SLOPE FOR A MINIMUM DISTANCE OF 8'.

2. A MINIMUM 8' PAVED SHOULDER SHALL BE CONSTRUCTED BETWEEN LOCATIONS WHERE THE RURAL ENTRANCE IS LESS THAN 50' FROM AN ADJACENT SIDEROAD, ENTRANCE OR MAILBOX TURNOUT.

3. A TAPER RATE OF 5:1 IS DESIRABLE WHEN TRANSITING FROM THE RURAL ENTRANCE WIDTH SHOWN IN TABLE 1, TO THE EXISTING ENTRANCE WIDTH.

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

01-01-97	RENUM. C-103.06, NEW REVISION BOX	T.P.	10-16-06	REVISED TO 2007 SPEC.	M.A.
07-01-97	REVISE DESIGNER NOTES	J.A.	9-15-15	UPDATED TABLE 1	R.D.
01-17-03	ADJUST DESIGN, CHANGE ENTRANCE	JATR	2-29-16	MINOR CORRECTIONS	R.D.
09-15-05	RADIUS FOR FLARE	M.M.A.	5-9-17	CHANGED TAPER RATE	R.D.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

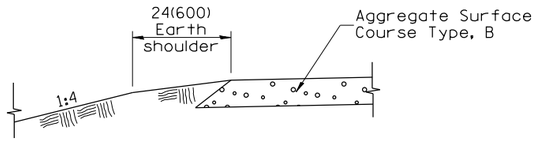
RURAL ENTRANCES FOR "3R" PROJECTS

NOT TO SCALE

SHT. 1 OF 2

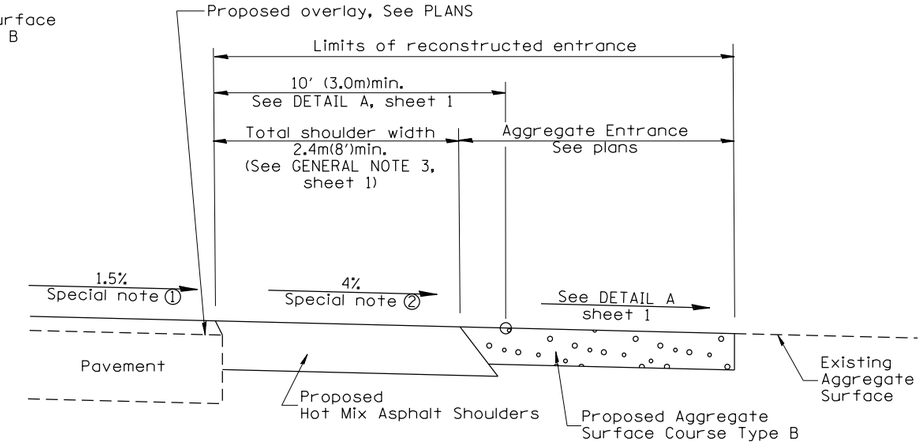
CADD STD. 406301-D4

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	51	42
		CONTRACT NO. 68805		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



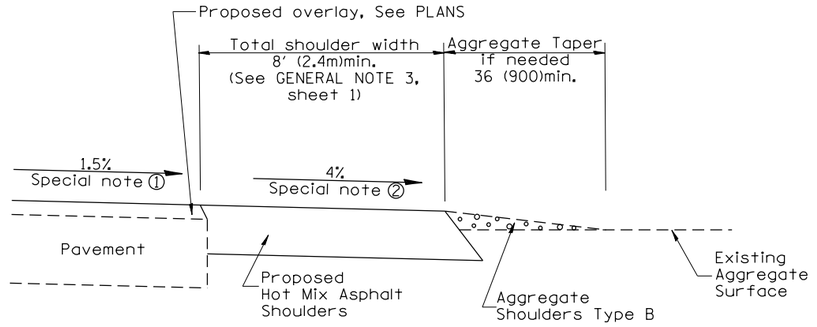
SECTION A-A

SHOULDER TREATMENT FOR AGGREGATE ENTRANCES



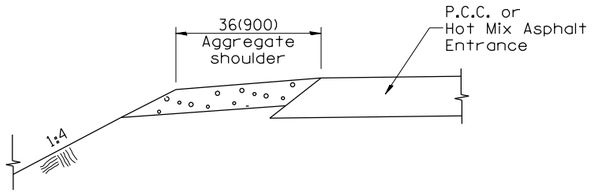
SECTION B-B

RECONSTRUCTED AGGREGATE ENTRANCE



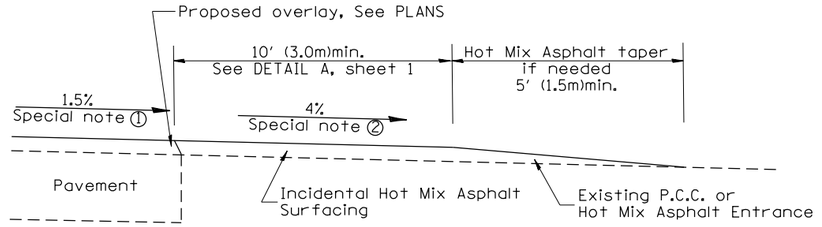
SECTION B-B

EXISTING AGGREGATE ENTRANCE



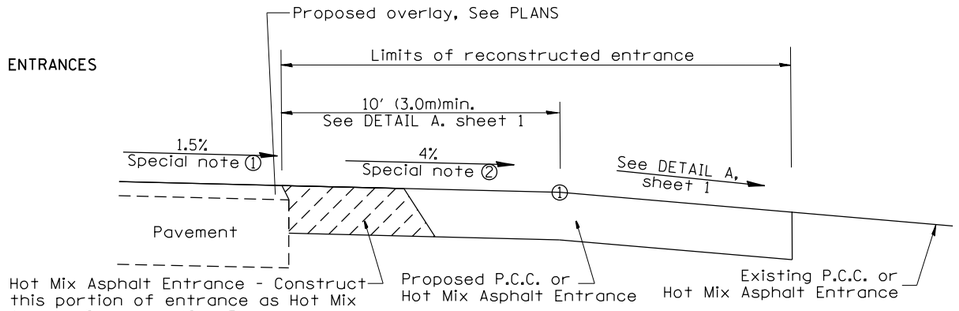
SECTION C-C

SHOULDER TREATMENT FOR P.C.C. OR HOT MIX ASPHALT ENTRANCES



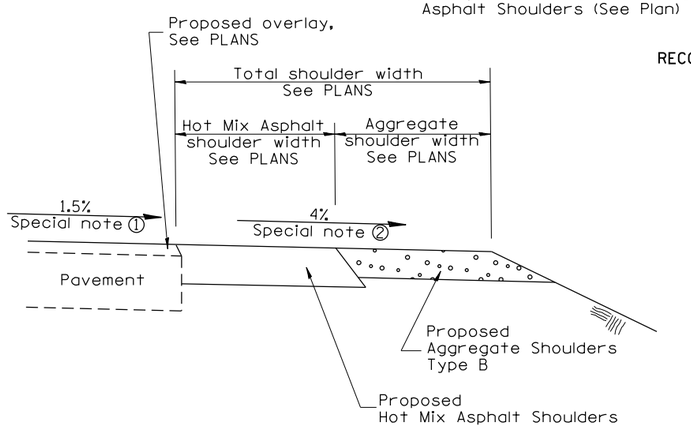
SECTION D-D

EXISTING P.C.C. OR HOT MIX ASPHALT ENTRANCE



SECTION D-D

RECONSTRUCTED P.C.C. OR HOT MIX ASPHALT ENTRANCE



SECTION E-E

MAINLINE SHOULDER TREATMENT

SPECIAL NOTES

(1) The mainline pavement cross-slope is 1.5% for tangent alignment. See PLANS for cross-slope on superelevated horizontal curves.

(2) The shoulder slope shall control the entrance profile for a distance of 10' (3.0m) minimum from the pavement edge. The shoulder cross-slope is 4% for tangent alignment. Through superelevated curves, the maximum pavement-shoulder breakover should not be greater than 10% for shoulders 6' (1.8m) and wider and 12% for shoulders 4' (1.2m) and less. Where 12' (366cm) paved shoulders are provided, the breakover should be at the edge of the paved shoulder rather than at the pavement edge.

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

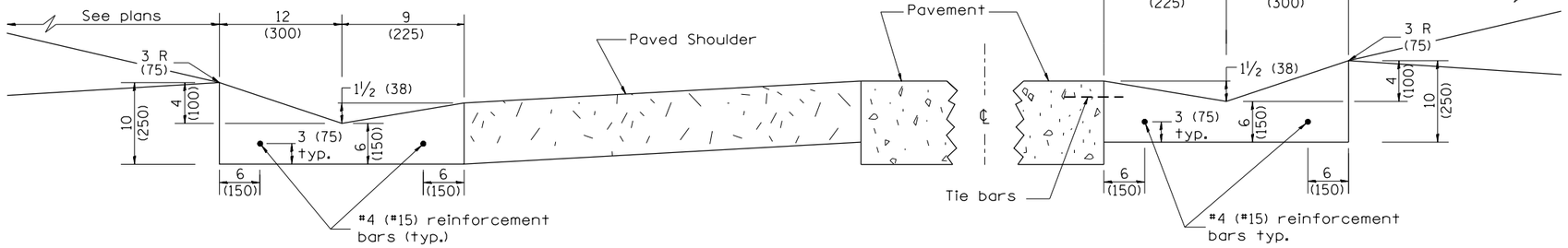
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RURAL ENTRANCES FOR "3R" PROJECTS

NOT TO SCALE

SHT. 2 OF 2
CADD STD. 406301-D4

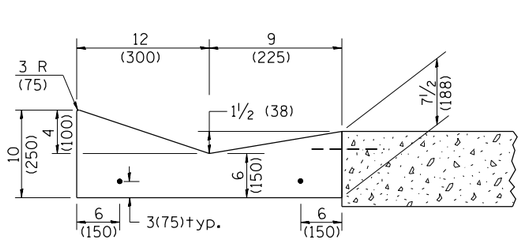
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	51	43
		CONTRACT NO. 68805		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



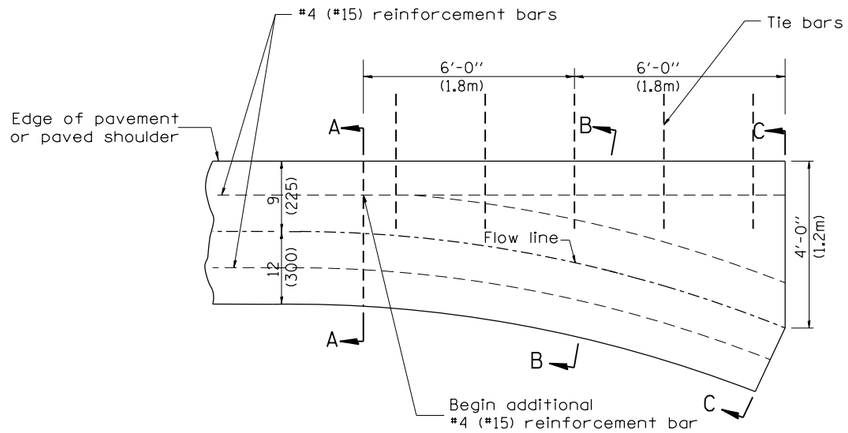
SHOULDER EDGE GUTTER

PAVEMENT EDGE GUTTER

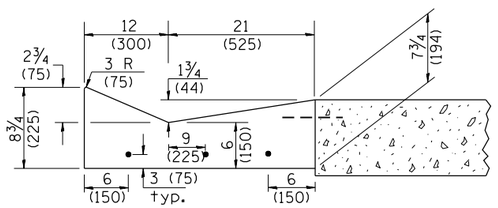
CONCRETE GUTTER, TYPE B, (SPECIAL)



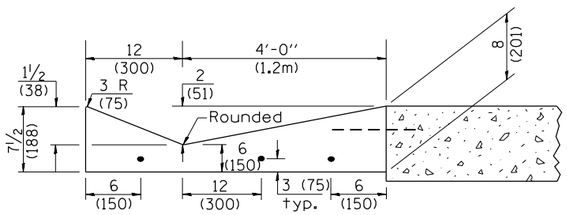
SECTION A-A



PLAN



SECTION B-B



SECTION C-C

QUANTITIES
CALC. BY: _____ DATE:
CHECKED BY: _____ DATE:
QUANTITY CALCULATIONS ARE ON FILE AT THE DISTRICT 4 OFFICE; BUREAU OF PROJECT IMPLEMENTATION; DOCUMENTATION SECTION

QUANTITY

Section C-C to A-A=
0.73 cu. yd. concrete.

GENERAL NOTES:

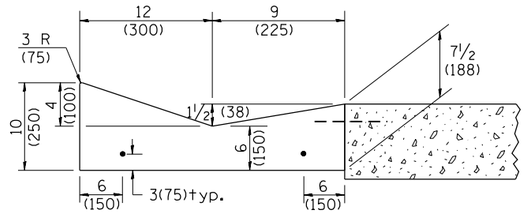
1. CONCRETE GUTTER, TYPE B (SPECIAL) shall conform to the the applicable portions of Section 606.
2. Tie bars shall be No. 6x24 (No. 19x600) at 36" (900mm) centers unless otherwise shown.
3. Gutter, gutter inlets, gutter outlets, and gutter entrances shall be tied to rigid pavement in accordance with details shown on Standard 420001.
4. Joints shall be constructed in accordance with Article 606.06.
5. Welded wire fabric shall conform to Article 1006.10(c)(1), and shall not be less than 58 lbs/100 sq.ft. (2.83 kg/m²).

INLET

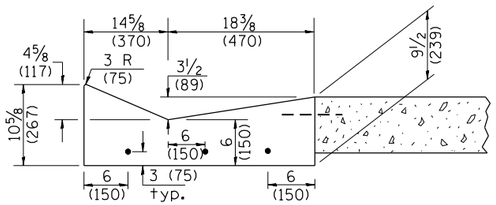
All dimensions are in inches (millimeters) unless otherwise noted.

01-01-97	RENUM. A-1.01, NEW REVISION BOX, ELIMINATED	T.P.	10-16-06	REVISED TO 2007 SPEC.	M.A.	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**CONCRETE GUTTER, TYPE B, (SPECIAL) (INLET, OUTLET & ENTRANCE)**
	EXPANSION ANCHOR TIES		11-16-07	REVISED QUANTITY	M.A.		
03-06-98	CORRECT DIMENSIONING	J.A.	02-15-11	CHANGED MODIFIED TO SPECIAL	R.D.		
03-10-06	REVISED QUANTITY	M.A.	01-31-18	REVISED TIE BAR SIZE & SPACING	R.D.	NOT TO SCALE	SHT. 1 OF 3 CADD STD. 606201-D4

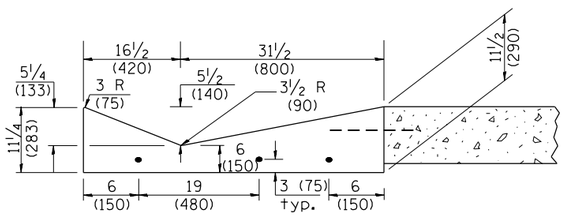
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	51	44
		CONTRACT NO. 68805		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



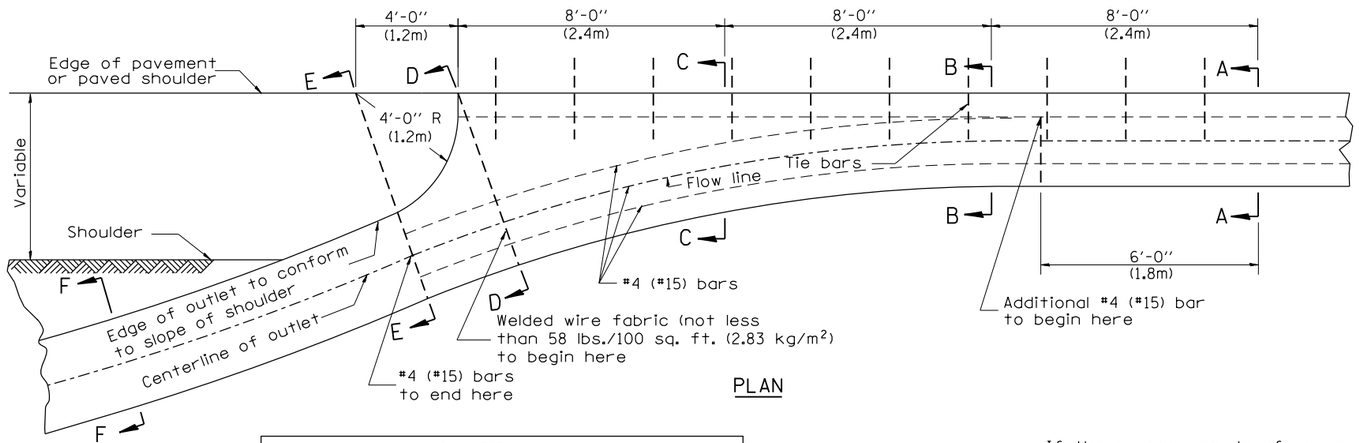
SECTION A-A



SECTION B-B



SECTION C-C

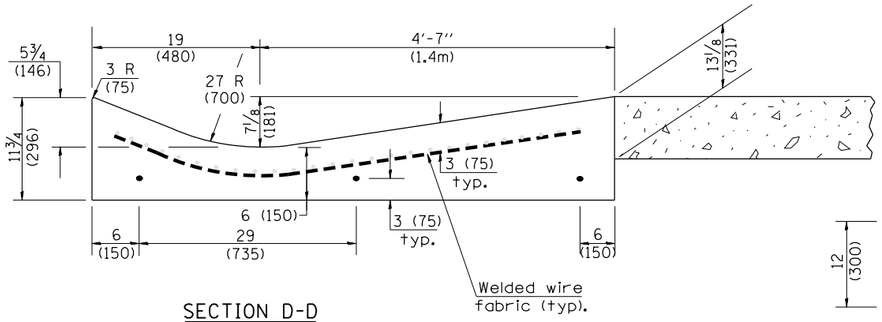


PLAN

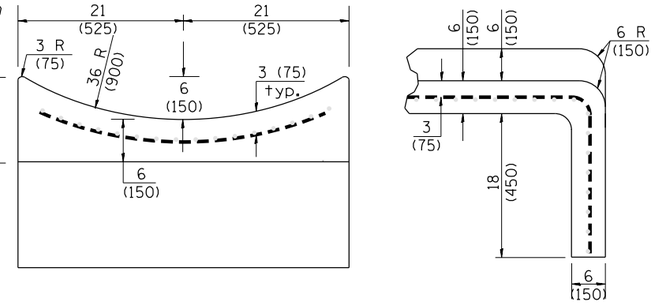
QUANTITY

Section A-A to E-E= 2.81 cu. yd. concrete.
Section E-E to F-F= 0.09 cu. yd./ft. concrete.

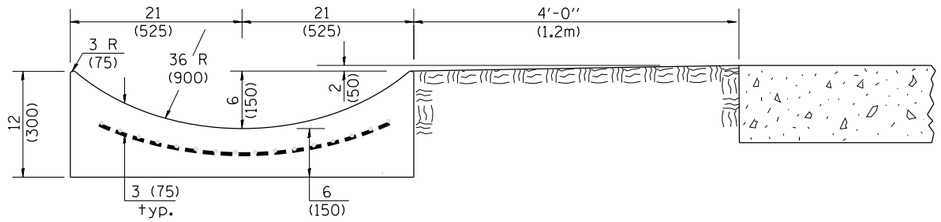
If the average grade of pavement for the distance from section A-A to section D-D exceeds 2%, this distance shall be increased 6 ft. (1.8m) for each 1% increase in grade. A quantity adjustment is required.



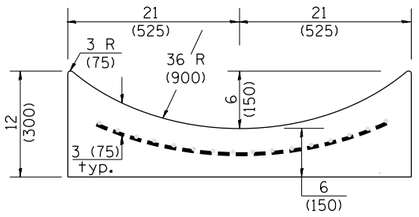
SECTION D-D



SECTIONS AT END OF OUTLET
(CURTAIN WALL)



SECTION E-E



SECTION F-F

QUANTITY

Curtain Wall =
0.1 cu. yd. concrete.

QUANTITIES
CALC. BY: _____ DATE:
CHECKED BY: _____ DATE:
QUANTITY CALCULATIONS ARE ON FILE AT THE DISTRICT 4 OFFICE; BUREAU OF PROJECT IMPLEMENTATION; DOCUMENTATION SECTION

OUTLET

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

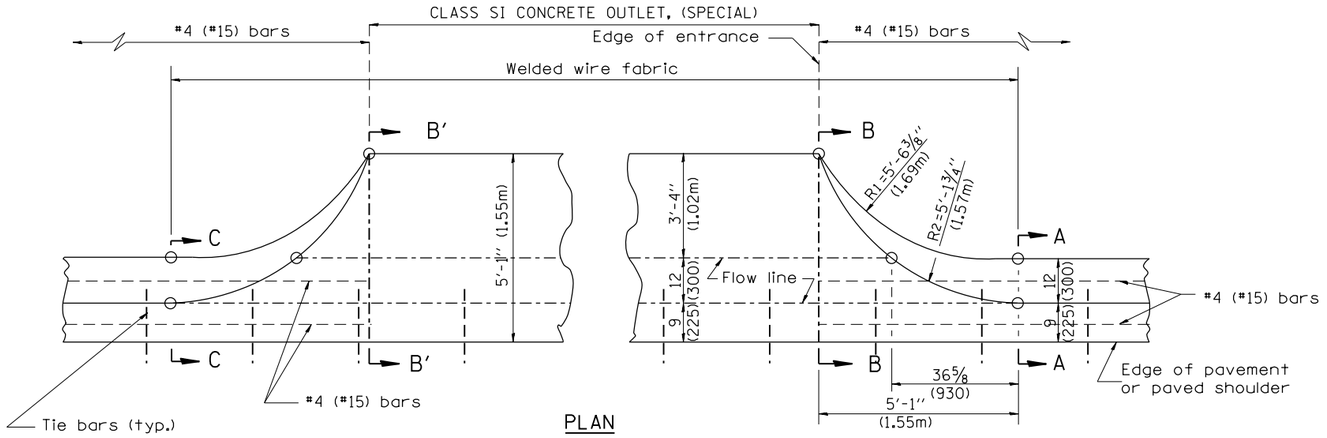
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONCRETE GUTTER, TYPE B, (SPECIAL)
(INLET, OUTLET & ENTRANCE)

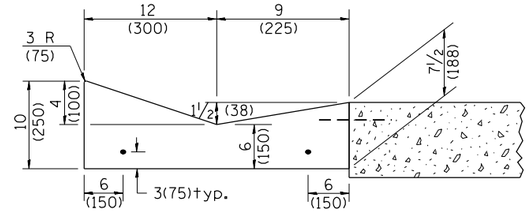
NOT TO SCALE

SHT. 2 OF 3
CADD STD. 606201-D4

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	51	45
		CONTRACT NO. 68805		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



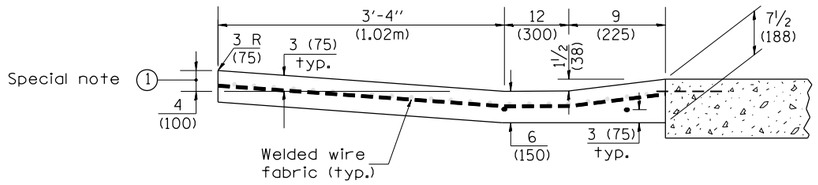
PLAN



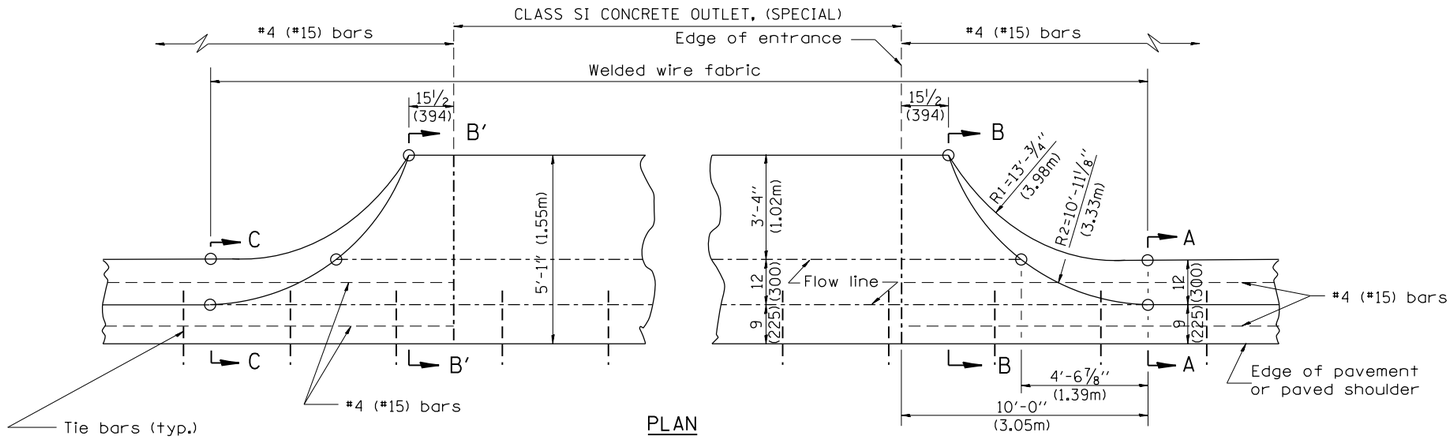
SECTION A-A & C-C

TYPICAL URBAN ENTRANCE

QUANTITY
URBAN ENTRANCE
Section B'-B' to B-B=
0.1 cu. yd./ft.
Section C-C to B'-B' + B-B to A-A=
0.69 cu. yd.



SECTION B-B & B'-B'



PLAN

SPECIAL NOTES:

(1) 4 (100) is the normal dimension. If specified in the plans, the following shall be used for improved entrance match-up: Minimum - 2 1/2 (65)
Maximum - 5 (125)

TYPICAL RURAL ENTRANCE

QUANTITY
RURAL ENTRANCE
Section B'-B' to B-B=
0.1 cu. yd./ft.
Section C-C to B'-B' + B-B to A-A=
1.19 cu. yd.

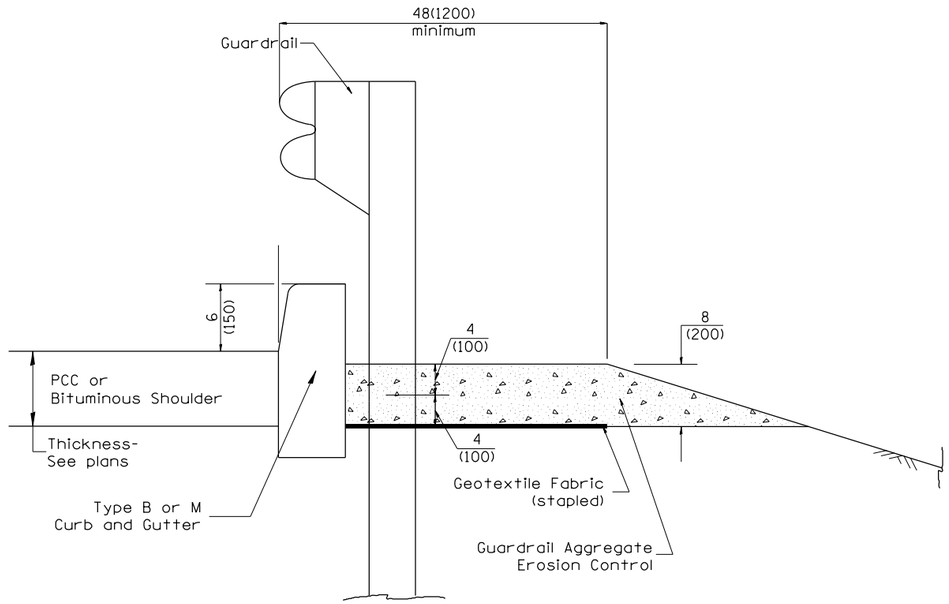
QUANTITIES
CALC. BY: _____ DATE:
CHECKED BY: _____ DATE:
QUANTITY CALCULATIONS ARE ON FILE AT THE DISTRICT 4 OFFICE; BUREAU OF PROJECT IMPLEMENTATION; DOCUMENTATION SECTION

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

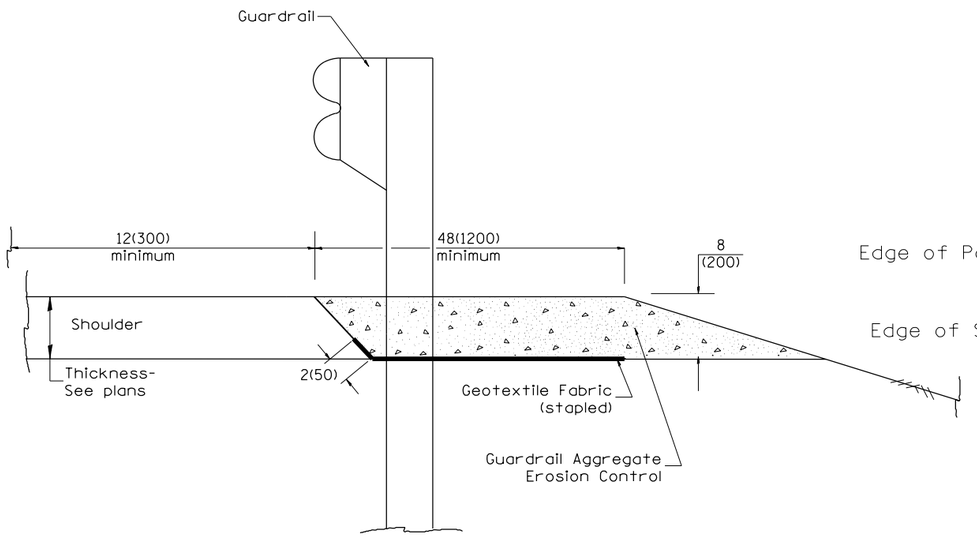
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONCRETE GUTTER, TYPE B, (SPECIAL)
(INLET, OUTLET & ENTRANCE)
SHT. 3 OF 3
NOT TO SCALE
CADD STD. 606201-D4

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	51	46
		CONTRACT NO. 68805		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



TYPICAL SECTION WITH EROSION CONTROL CURB



TYPICAL SECTION WITHOUT EROSION CONTROL CURB

GENERAL NOTES: GUARDRAIL AGGREGATE EROSION CONTROL

1. This work shall consist of grading as needed, furnishing and installing geotextile fabric and staples, and furnishing, placing and shaping crushed aggregate around and behind Steel Plate Beam Guardrail posts in accordance with Plan Details.

2. Before placing the aggregate and the Geotextile Fabric, weeds and grass shall be removed from the area to be covered.

3. After the area has been prepared, and in a dry condition, the Geotextile fabric shall be placed with a 12(300) minimum overlap. A knife cut for guardrail post installation is necessary.

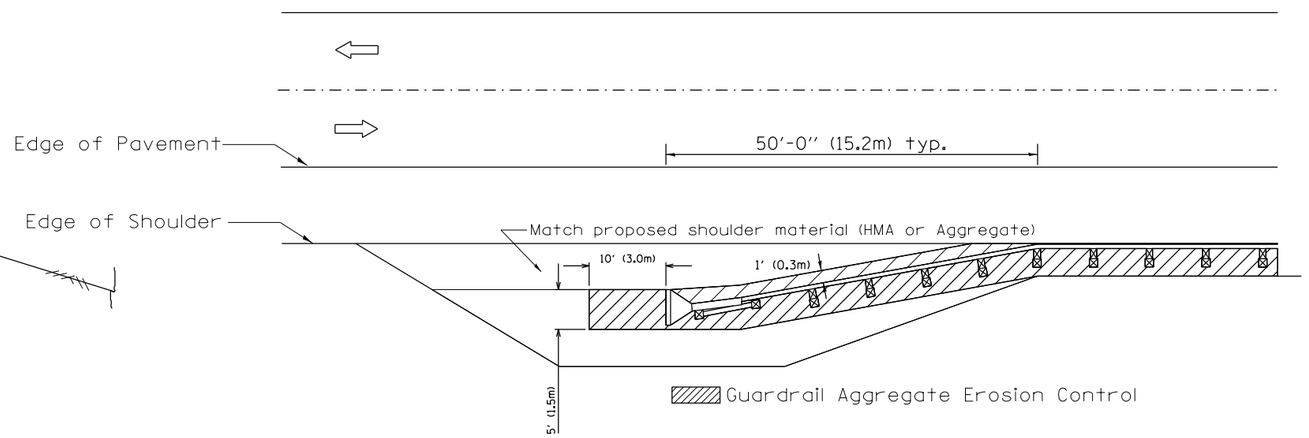
4. The aggregate shall be deposited, compacted and shaped by either mechanical or hand methods, in a manner reasonably true to line and grade.

5. The Contractor shall have the option of placing the guardrail before or after the Geotextile Fabric and Aggregate are in place. If the guardrail is placed after the Geotextile Fabric and Aggregate, then any voids must be filled and the aggregate returned to line and grade.

6. Materials shall meet the following requirements:

   A. The crushed aggregate shall be CA1 gradation in accordance with Article 1004.01(c) of the Standard Specifications.

   B. The Geotextile Fabric shall be nonwoven fabric in accordance with Article 1080.02 of the Standard Specifications.

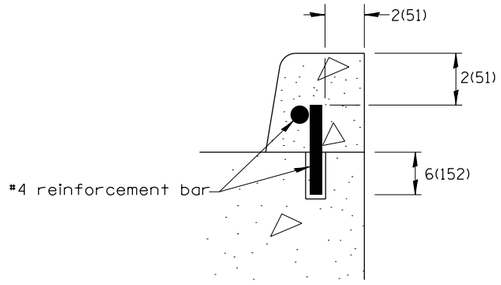


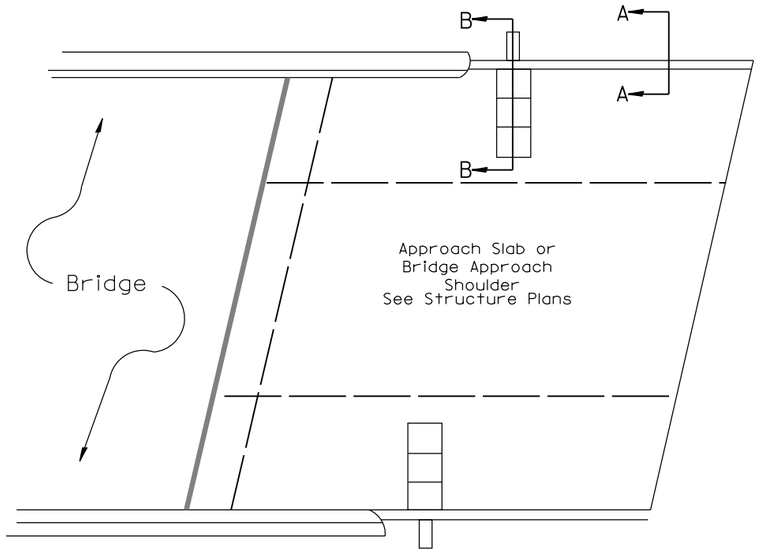
All dimensions are in inches (millimeters) unless otherwise noted.

01-01-97	RENUM. C-22.01, NEW REVISION BOX	T.P.	03-07-11	ADDED DETAIL SHOWING PLAN VIEW	R.D.	**STATE OF ILLINOIS**	**GUARDRAIL EROSION CONTROL TREATMENTS**		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
03-01-97	CORRECT STD. NUMBERS IN NOTES PG. 2	J.A.	08-10-12	REVISED CURB "B" AND AGGREGATE	R.D.	**DEPARTMENT OF TRANSPORTATION**		SHT. 1 OF 2	673	(108-BR)BRR	WOODFORD	51	47
11-03-00	CORRECTION TO NOTES	M.A.	07-15-15	ADDRESSED SHOULDER INLET CURB	R.D.		NOT TO SCALE	CADD STD. 630101-D4			CONTRACT NO. 68805		
10-16-06	REVISED TO 2007 SPEC.	M.A.	01-26-17	REVISED	R.D.				FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

DETAIL ''A''

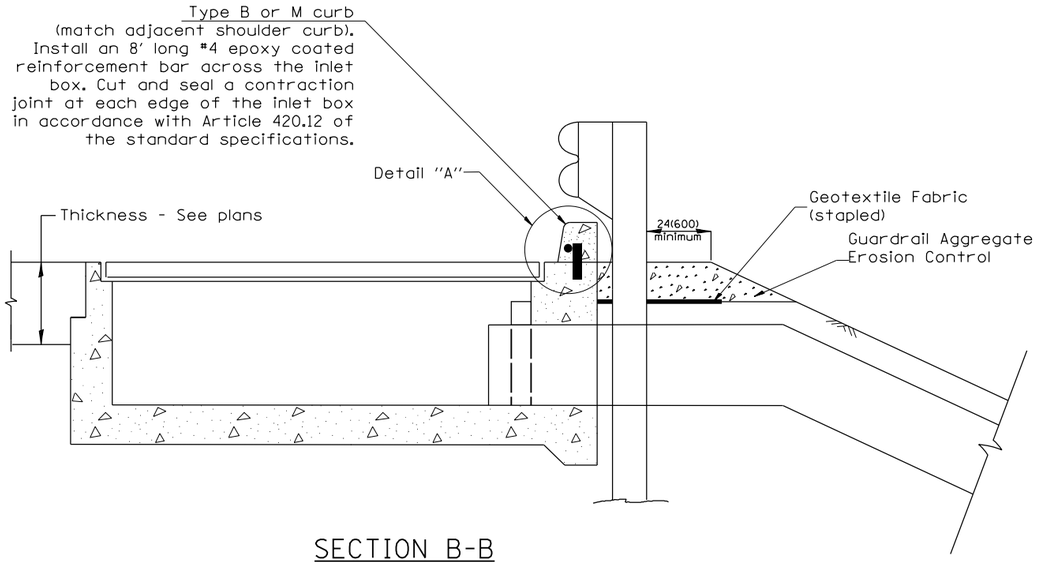
#4 reinforcement bars may be cast in PCC apron and precast inlet box or drilled and anchored with an apporoved chemical adhesive at 2' spacing. Cost of curb and reinforcement are included in the cost of shoulder inlet.





PLAN VIEW

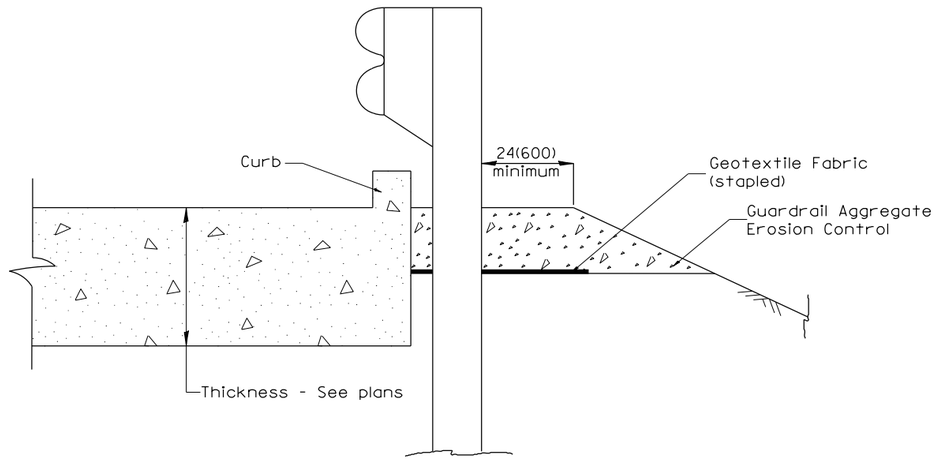
APPROACH SLAB OR SHOULDER PLACEMENT



SECTION B-B

TYPICAL SECTION AT INLETS

TYPE E, F & G (HIGHWAY STANDARD 610001)



SECTION A-A

TYPICAL SECTION WITH BRIDGE APPROACH CURB

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GUARDRAIL EROSION CONTROL TREATMENTS

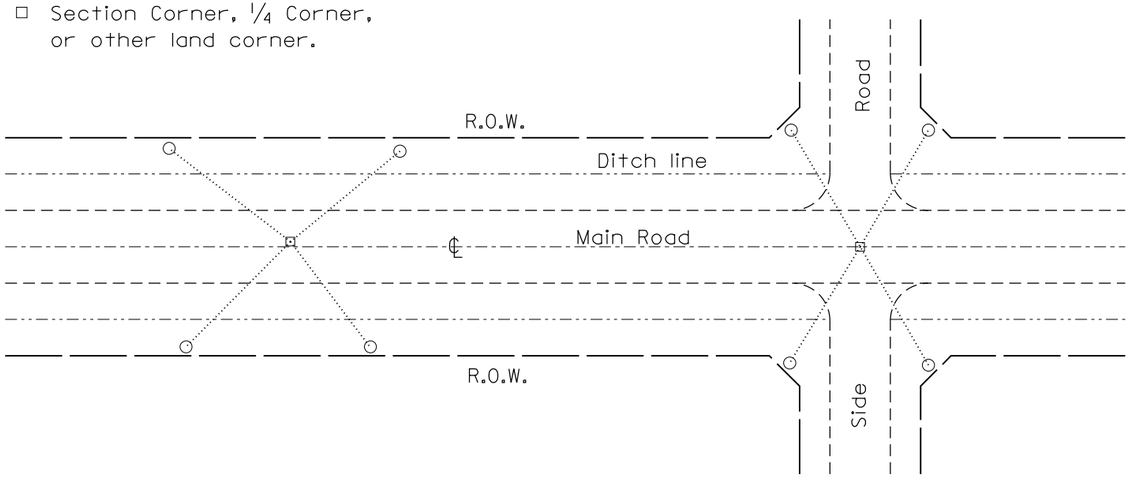
NOT TO SCALE

SHT. 2 OF 2
CADD STD. 630101-D4

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	51	48
		CONTRACT NO. 68805		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PERMANENT SURVEY TIES

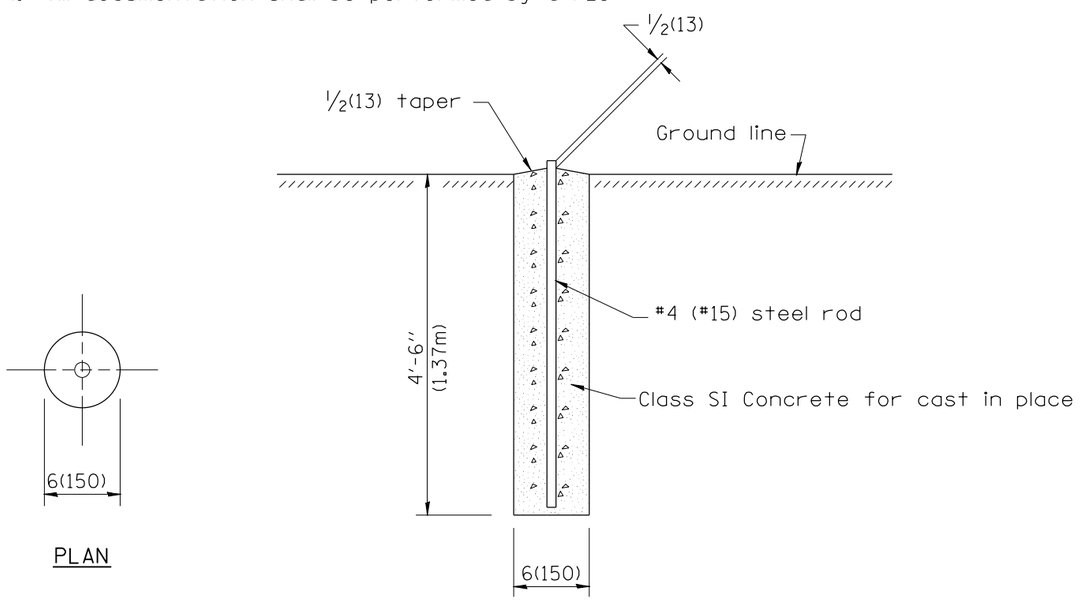
○ Permanent Survey Tie
□ Section Corner, 1/4 Corner, or other land corner.



TYPICAL APPLICATION

GENERAL NOTES

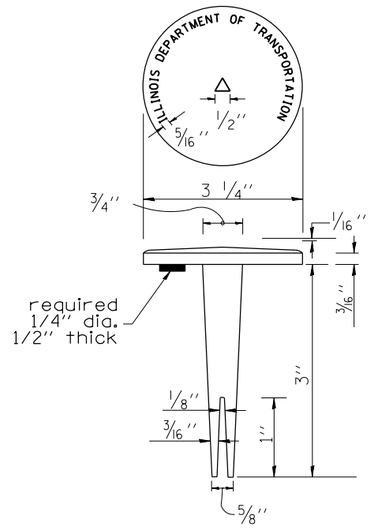
1. The marker shall be cast in place of Class SI Concrete.
2. Tie marker shall be installed after the final seeding has been completed unless otherwise specified by the Engineer.
3. The tie distances to the section corner shall be measured and recorded by the surveyor setting the PSM. All ties shall be turned over to the IDOT Chief of Surveys or Chief of Plats for recordation.
4. All documentation shall be performed by a PLS



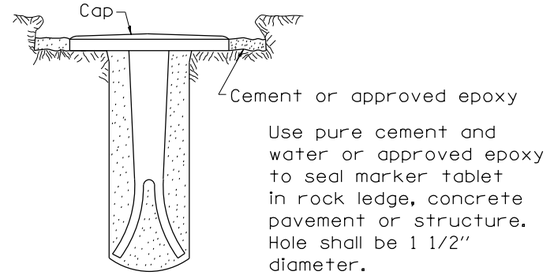
PLAN

SECTION

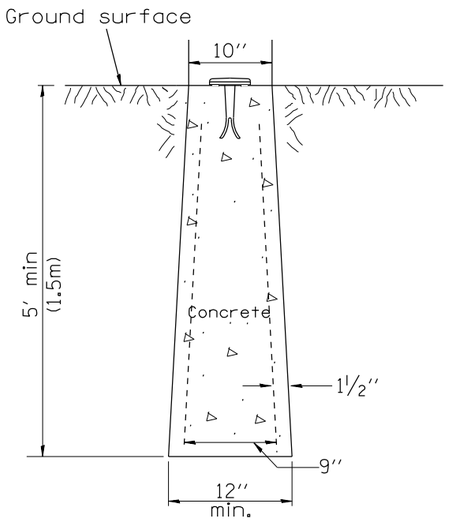
PERMANENT SURVEY MARKERS



BRASS TABLET



TYPE I



TYPE II
CAST-IN-PLACE MARKER

GENERAL NOTES

1. All type II markers shall be cast in place, and precast markers will not be allowed.
2. Two permanent magnets, each having a diameter of 3/4 (19) and a thickness of 1/4 (6), or equivalent, shall be attached to the underside of the tablet with an approved epoxy bonding agent.
3. The location of the markers shall be in accordance with the plans in general, the markers will be placed at the P.T.'s, P.C.'s, and P.I.'s llocated within the R.O.W. of horizontal curves and spaces along the tangents in a way that a minimum of two markers are always inter-visible, and not to exceed 1000' (300m).
4. The markers shall be placed under the direction of the Engineer and shall be installed in a workmanlike manner in order that there will be no further settlement or horizontal shifting. The monuments shall be placed in a way that the survey point will fall within the portion of the plaque provided for that purpose.
5. The project designation, the centerline station, the survey point, and the elevation shall be permanently marked by the use of metal dies after marker has been installed.

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

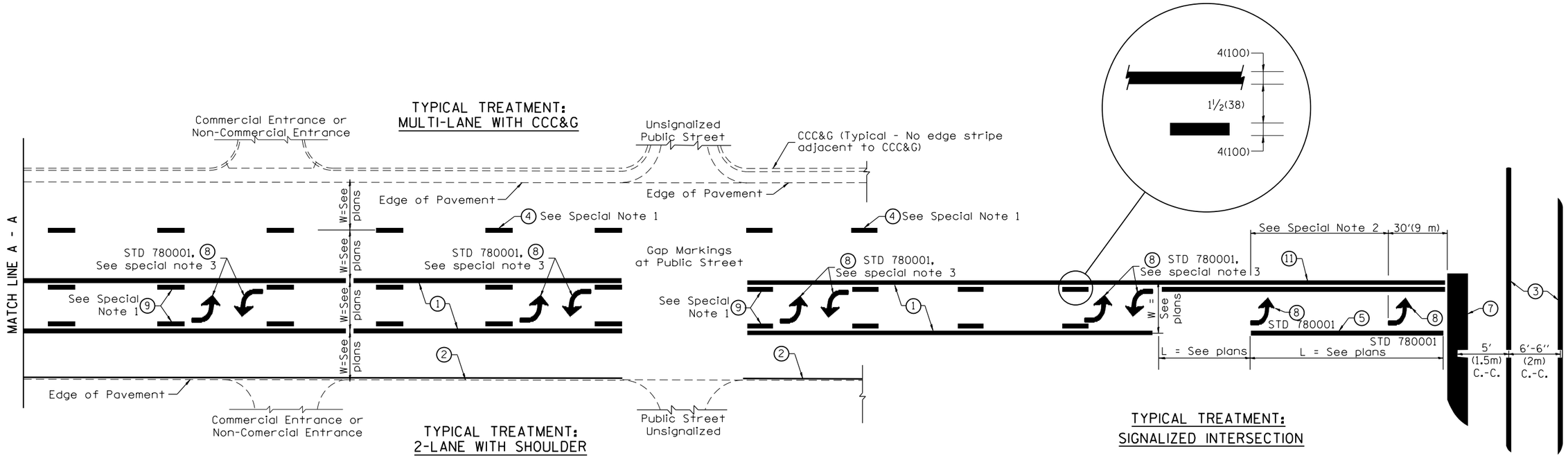
01-01-97	RENUM. D-3.01, NEW REVISION BOX, REVISED	T.P.	10-16-06	REVISED TO 2007 SPEC.	M.A.
	TITLE BOX, ADD DESIGNER NOTE		01-04-11	REVISED FOR CORRECTIONS	R.D.
07-07-98	ADD DESIGNER NOTE	J.A.	08-21-13	CHANGED MIN. DIAMETER	R.D.
05-24-06	REMOVED GEN. NOTE UNDER TIES	M.A.	08-25-15	REVISED MATERIAL	R.D.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PERMANENT SURVEY TIE &
PERMANENT SURVEY MARKERS TY.I – TY.II

NOT TO SCALE — CADD STD. 667101-D4

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	51	49
		CONTRACT NO. 68805		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



FLUSH PAVED MEDIAN: TWO-WAY LEFT TURN LANE WITH ONE-WAY LEFT TURN LANE AT SIGNALIZED INTERSECTION

TYPICAL PAVEMENT MARKING LEGEND

(Note: This is a District Standard Legend.
Some elements may not apply to specific project.)

1. 4(100) Solid (Yellow)
2. 4(100) Solid (White)
3. 2-6(150) Crosswalk @ 6'-6" (2m)min C.-C. (White)
   2-8(200) Crosswalk @ 6'-6" (2m)min C.-C. (White) (When traffic signals are present.)
4. 6(150) Skip-Dash (White) — 10' (3.05m) / 30' (9.14m) / 10' (3.05m) (See Special Note 1)
5. 8(200) Solid (White)
6. 12(300) Diagonal (White) (Item 6 is shown on Std. 780001)
7. 24(600) Stop Bar (White)
8. Letters & Arrows — 33' (10m) (See Std. 780001 and Special Notes 2 & 3)
9. 4(100) Skip-Dash (Yellow) — 10' (3.05m) / 30' (9.14m) / 10' (3.05m) (See Special Note 1)
10. 12(300) Diagonal (Yellow) (See Table A) — 45°
11. 4(100) Double Solid (Yellow) — 11(280) C.-C. — See Table A

SPECIAL NOTES

1. Skip-Dash markings will be centered between both ends of city blocks and shall be placed in alignment transversly across the pavement.
2. The following shall apply to arrows located in one-way left turn lanes:
   A. A minimum of two (2) arrows is required.
   B. The maximum spacing between arrows is 80' (24 m).
   C. Arrows shall be evenly spaced if three (3) or more are required.
3. The following shall apply to arrow pairs located in two-way left turn lanes:
   A. A minimum of two (2) arrow pairs is required.
   B. The maximum spacing between arrow pairs is 200' (61 m).
   C. Arrow pairs shall be evenly spaced if three (3) or more are required.
   D. The spacing between Bi Directional Left Turn Arrows is 33' (10 m).

GENERAL NOTES

1. Refer to State Standard 780001 for additional Pavement Markings including letters & arrows.
2. See Plans for Pavement Markings adjacent to curbed islands and medians, and through lane reductions.
3. Refer to Article 780.13 for letter, number and symbol areas (sq. ft.)
4. Areas are grooved 1" beyond each edge for the following symbols:
   Through Arrow= 14.8 sq. ft.
   Large Left or Right Arrow= 21.9 sq. ft.
   2 Arrow Combination Left (or Right) and Through= 34.9 sq. ft.
   Wrong Way Arrow= 29.5 sq. ft.
   Railroad Crossing Symbol= 69.8 sq. ft.
   (For further information, refer to BDE Special Provision: Grooving for Recessed Pavement Markings)

01-01-97	RENUM. F-8.03, NEW REVISION BOX	T.P.	10-16-06	REVISED TO 2007 SPEC.		
02-07-97	ADD BI DIRECTIONAL DIMENSION	J.A.	2/29/16	ADDED GROOVING AREAS	R.D.	
10-97	CORRECT BI DIRECTIONAL DIMENSION	J.A.				
08-02	ADD CROSSWALK DMNS. WITH T.S.	M.A.				

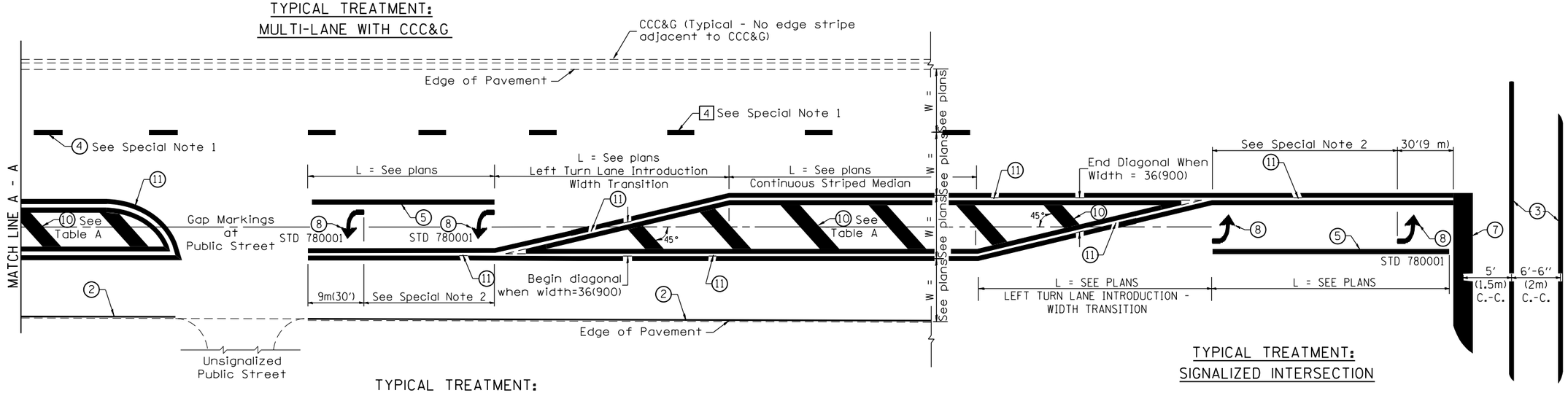
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL PAVEMENT MARKINGS

NOT TO SCALE

SHT. 1 OF 2
CADD STD. 780001-D4

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	51	50
		CONTRACT NO. 68805		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



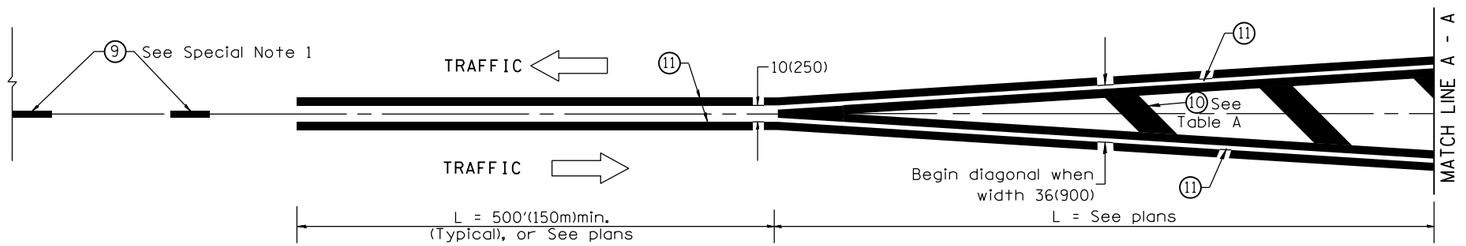
TYPICAL MEDIAN TRANSITIONS

FLUSH PAVED MEDIAN: RESTRICTED LEFT TURN LANE

TABLE A

RECOMMENDED SPACING BETWEEN DIAGONAL LINES

SPEED LIMIT RANGE	CONTINUOUS	INTERSECTION CHANNELIZATION (Includes Width Transitions for Median and Left Turn Lane Introductions)
Less Than 30 mph (50 km/h)	50' (15m)	15' (5m)
30 - 45 mph (50 - 70 km/h)	75' (23m)	20' (6m)
Over 45 mph (70 km/h)	150' (46m)	30' (9m)



MEDIAN INTRODUCTION - WIDTH TRANSITIONS

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL PAVEMENT MARKINGS

NOT TO SCALE

SHT. 2 OF 2
CADD STD. 780001-D4

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	(108-BR)BRR	WOODFORD	51	51
		CONTRACT NO. 68805		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		