

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
**PROPOSED  
 HIGHWAY PLANS**

FAP ROUTE 613 (US 6 /34)  
 SECTION (8D BR)BR  
 PROJECT: ACF-0613 (021)  
 SUPERSTRUCTURE REPLACEMENT  
 AT COAL CREEK  
 BUREAU COUNTY

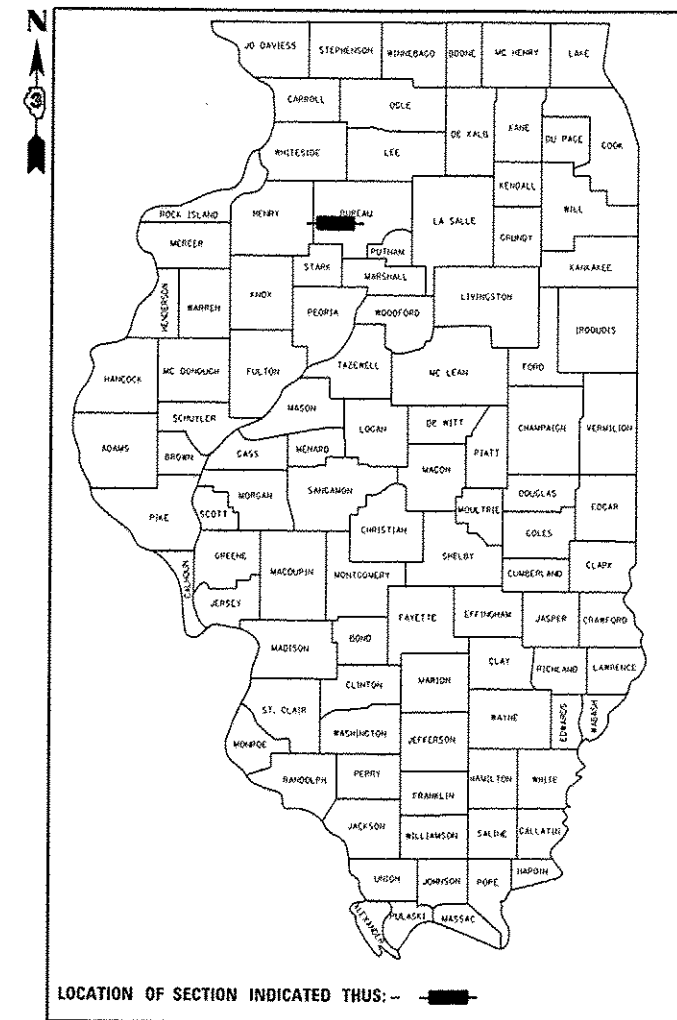
C-93-098-12

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
613	(8D BR)BR	BUREAU	63	1
		ILLINOIS	CONTRACT NO. 66A17	

**INDEX OF SHEETS**

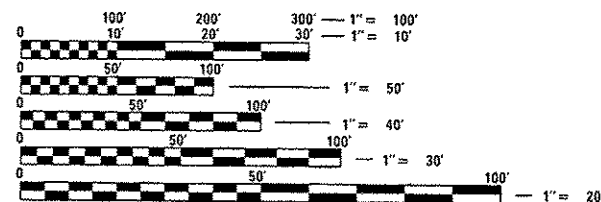
1	COVER SHEET
2	GENERAL NOTES
3-9	SUMMARY OF QUANTITIES
10	TYPICAL SECTIONS
11-13	SCHEDULES
14-15	SURVEY TIES
16	REMOVAL PLAN
17-19	PLAN & PROFILE
20-21	STAGING
22	RIGHT OF WAY
23-48	BRIDGE PLANS
49-54	EXISTING BRIDGE PLANS
55-57	DETAILS
58-63	CROSS SECTIONS

P-93-017-10  
 D-93-048-12



STA 967 + 60.05  
 SN 006-0140  
 SUPERSTRUCTURE REMOVAL  
 AND REPLACEMENT

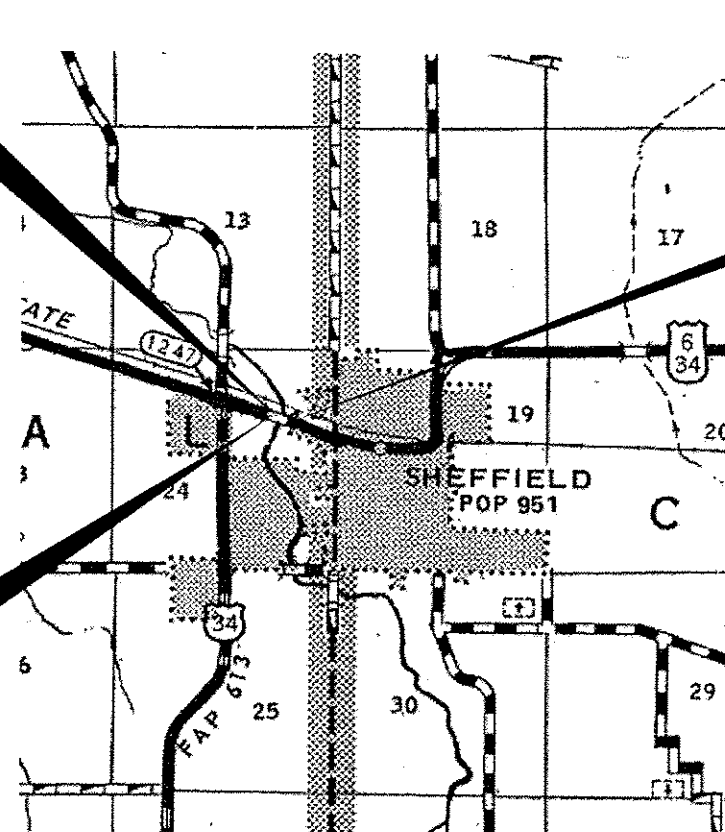
END IMPROVEMENT  
 STA 969 + 50.50



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

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

BEGIN IMPROVEMENT  
 STA 965 + 47.80



LOCATION MAP

NOT TO SCALE

GROSS LENGTH = 402.70 FT. = 0.076 MILES  
 NET LENGTH = 402.70 FT. = 0.076 MILES

RURAL MINOR ARTERIAL  
 2013 ADT = 2500  
 P.V. = 84%  
 S.U. = 6%  
 M.U. = 10%

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS

SUBMITTED Aug 14 2014  
Paul Coetzee, P.E.  
 DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

Oct 17 2014  
John D. Baranzelli, P.E.  
 acting ENGINEER OF DESIGN AND ENVIRONMENT

Oct 17 2014  
Omer Osman, P.E.  
 DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PROJECT ENGINEER: JOE KANNEL, PE  
 UNIT CHIEF: MICHELE LINDEMANN, PE

CONTRACT NO. 66A17

PRINTED BY THE AUTHORITY  
 OF THE STATE OF ILLINOIS

GENERAL NOTES

THE THICKNESS OF HMA SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE HMA IS PLACED.

THE HMA SURFACE OF ALL MAILBOX TURNOUTS, PRIVATE ENTRANCES, COMMERCIAL ENTRANCES, AND SIDE ROADS SHALL BE MADE NEATLY, IN A WORKMANLIKE MANNER, AND SHALL ACCURATELY CONFORM TO THE SHAPES AND DIMENSIONS SHOWN ON THE PLAN DETAILS. IF REQUIRED BY THE ENGINEER, THE CONTRACTOR SHALL SAW CUT THE HMA SURFACE TO CONFORM TO THE SHAPES AND DIMENSIONS SHOWN ON THE PLAN DETAILS. THIS WORK WILL BE INCLUDED IN THE COST OF THE HMA SURFACE.

EXCEPT AS NOTED ON THE PLANS, PAVEMENT GRADES SHOWN ARE AT THE TOP OF PAVEMENT SURFACES.

BEFORE ORDERING PIPE CULVERTS OR PIPE DRAINS, THE CONTRACTOR SHALL CONSULT THE ENGINEER FOR EXACT LENGTHS.

THE ENGINEER WILL BE THE SOLE JUDGE CONCERNING CURING TIME FOR THE VARIOUS HMA LIFTS.

FOR STABILIZATION, ALL TYPE III BARRICADES WILL REQUIRE A MINIMUM OF FOUR SAND BAGS PER BARRICADE.

SEEDING WILL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN, WET, OR IN AN UNTILLABLE CONDITION. LOCATIONS TO BE SEEDED WILL BE DETERMINED BY THE ENGINEER.

ONLY THOSE TREES DESIGNATED BY THE ENGINEER OR LISTED IN THE TREE REMOVAL SCHEDULE SHALL BE REMOVED. THE CONTRACTOR SHALL PROTECT ALL REMAINING TREES FROM DAMAGE DUE TO HIS OPERATIONS.

THE FINISHED EARTHWORK SHALL HAVE A VEGETATION SUSTAINING SOIL COVERING THE TOP FOUR INCHES (100 MILLIMETERS) IN AREAS TO BE SEEDED OR SODDED. THE VEGETATION SUSTAINING SOIL REQUIRED WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF FURNISHED EXCAVATION.

ON EXISTING PAVEMENT WHICH MAY BE SUPERELEVATED, THE NEW HMA PAVEMENT SHALL BE BUILT WITH THE SAME SUPERELEVATION UNLESS NEW SUPERELEVATION RATES ARE GIVEN ON THE PLANS.

ALL ELEVATIONS REFERRING TO U.S.G.S. MEAN SEA LEVEL DATUM.

ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER SHOWN IN THE LIST OF STANDARDS OR THE COPY INCLUDED IN THESE PLANS.

EXISTING WEIGHT LIMIT RESTRICTION SIGNS AND SUPPORT POSTS NEED TO BE RETURNED TO IDOT (PRINCETON MAINTENANCE YARD 815-875-2287).

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

GRANULAR MATERIALS	2.05	TONS / CU YD
HMA RESURFACING	.112	LBS / SQ YD / IN
SHORT TERM PAVEMENT MARKING	10	FT / 100 FT OF APPLICATION
MIX FOR CRACKS, JTS & FLGWYS	0.0003	TONS / SQ YD
LEVEL BINDER (HAND METHOD)	0.0005	TONS / SQ YD
SUPPLEMENTAL WATERING	3	GAL / SQ YD / APPLICATION
CALCIUM CHLORIDE	2	LB / SQ YD / APPLICATION
AGGREGATE DITCH CHECKS	5	TONS AGGREGATE

MEMBERS OF JULIE KNOWN TO BE WITHIN THE LIMITS OF THE IMPROVEMENT ARE:  
 MEDIACOM  
 VILLAGE OF SHEFFIELD  
 FRONTIER  
 AMEREN

COMMITMENTS

LIST OF ILLINOIS DOT HIGHWAY STANDARDS

000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
285001-02	FABRIC FORMED CONCRETE REVETMENT MATS
420001-07	PAVEMENT JOINTS
420401-10	BRIDGE APPROACH PAVEMENT CONNECTOR
482001-02	HMA SHOULDER ADJACENT TO FLEXIBLE PAVEMENT
515001-03	NAME PLATE FOR BRIDGES
542001-04	REINF CONC END SECTION WITH PARALLEL WINGWALLS FOR PIPE CULVERTS 12" (300 mm) THRU 48" (1200 mm) DIAMETER AT RIGHT ANGLES WITH ROADWAY
542401-01	METAL END SECTION FOR PIPE CULVERTS
601101-01	CONCRETE HEADWALL FOR PIPE DRAINS
630001-10	STEEL PLATE BEAM GUARDRAIL
630201-06	PCC/HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
630301-06	SHOULDER WIDENING FOR TYPE 1(SPECIAL) GUARDRAIL TERMINALS
631031-12	TRAFFIC BARRIER TERMINAL, TYPE 6
635011-02	REFLECTOR MARKER AND MOUNTING DETAILS
666001-01	RIGHT-OF-WAY MARKERS
701001-02	OFF-ROAD OPERATIONS 2L, 2W, MORE THAN 15' (4.5 m) AWAY
701006-05	OFF-ROAD OPERATIONS 2L, 2W, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701306-03	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS ≥ 45 MPH
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701321-13	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
701901-03	TRAFFIC CONTROL DEVICES
704001-07	TEMPORARY CONCRETE BARRIER
780001-04	TYPICAL PAVEMENT MARKINGS
781001-03	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 DISTRICT THREE

PREPARED BY: Don Benoit  
 DISTRICT STUDIES & PLANS ENGINEER

DATE: 8-13-14

EXAMINED BY: Shirley J. Phillips  
 DISTRICT CONSTRUCTION ENGINEER

Wayne L. Phillips  
 DISTRICT MATERIALS ENGINEER

Ben Mark  
 DISTRICT OPERATIONS ENGINEER

FILE NAME + c:\p\work\p\dot\carpenterj\d0103264\366a17-sh1-cover.dgn	USER NAME + carpenterj	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>GENERAL NOTES</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	PLOT SCALE + 100.0000' / in.	DRAWN -	REVISED -			613	(80 BRBR)	BUREAU	63	2	
	PLOT DATE + 8/5/2014	CHECKED -	REVISED -			CONTRACT NO. 66A17					
		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				ROADWAY RURAL	BRIDGE RURAL
				0004	0014
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	945	945	
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	117.5	117.5	
20200100	EARTH EXCAVATION	CU YD	323	323	
20400800	FURNISHED EXCAVATION	CU YD	986	986	
X2070304	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	99		99
25000300	SEEDING, CLASS 3	ACRE	0.5	0.5	
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	46	46	
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	46	46	
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	46	46	
25100630	EROSION CONTROL BLANKET	SQ YD	2497	2497	
28000305	TEMPORARY DITCH CHECKS	FOOT	40	40	
28000400	PERIMETER EROSION BARRIER	FOOT	800	800	
28100207	STONE RIPRAP, CLASS A4	TON	358	358	
28100209	STONE RIPRAP, CLASS A5	TON	88		88

14

\* SPECIALTY ITEMS

FILE NAME =	USER NAME =	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SUMMARY OF QUANTITIES</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\work\gisdot\carpentardj\0203254\2866417-shl-500.dgn	2866417-shl-500.dgn	DRAWN -	REVISED -					613	(80 BR/BR	BUREAU	63	3
PLOT SCALE = 1/8"=1'-0"	1/8"=1'-0"	CHECKED -	REVISED -		SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.	CONTRACT NO. 66A17		
PLOT DATE = 8/6/2014	8/6/2014	DATE -	REVISED -		ILLINOIS FED. AID PROJECT							

Rev.

80% FED. / 20% STATE  
CONSTRUCTION CODE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				ROADWAY 0004 RURAL	BRIDGE 0014 RURAL
28200200	FILTER FABRIC	SQ YD	862	806	56
28500100	FABRIC FORMED CONCRETE REVETMENT MAT	SQ YD	28		28
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	1	1	
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	933	933	
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	0.4	0.4	
40600527	LEVELING BINDER (HAND METHOD), IL-9.5FG, N50	TON	0.7	0.7	
40600627	LEVELING BINDER (MACHINE METHOD), IL-9.5FG, N50	TON	59	59	
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	427	427	
40600990	TEMPORARY RAMP	SQ YD	240	240	
40603082	HOT-MIX ASPHALT BINDER COURSE, IL-19.0 FG, N50	TON	170	170	
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	116	116	
42001430	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SQ YD	46.8	46.8	
44000100	PAVEMENT REMOVAL	SQ YD	44	44	
44004250	PAVED SHOULDER REMOVAL	SQ YD	18	18	

14

\* SPECIALTY ITEMS

FILE NAME =	USER NAME = carpende	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SUMMARY OF QUANTITIES</b>				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\work\p\dot\carpende\j\0102264\366A17-shr-S00.dgn		DRAWN -	REVISED -		613	(80 BR)BR	BUREAU	63	4				
PLOT SCALE = 1/2" = 100'-0"		CHECKED -	REVISED -		SCALE: SHEET NO. OF SHEETS STA. TO STA.				CONTRACT NO. 66A17				
PLOT DATE = 8/7/2014		DATE -	REVISED -		ILLINOIS FED. AID PROJECT								



80% FED. / 20% STATE  
CONSTRUCTION CODE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				ROADWAY 0004 RURAL	BRIDGE 0014 RURAL
50101500	REMOVAL OF EXISTING SUPERSTRUCTURES	EACH	1		1
50102400	CONCRETE REMOVAL	CU YD	27.2		27.2
50200100	STRUCTURE EXCAVATION	CU YD	96		96
50300225	CONCRETE STRUCTURES	CU YD	40.4		40.4
50300255	CONCRETE SUPERSTRUCTURE	CU YD	276		276
50300260	BRIDGE DECK GROOVING	SQ YD	628		628
50300300	PROTECTIVE COAT	SQ YD	837		837
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1		1
50500505	STUD SHEAR CONNECTORS	EACH	3276		3276
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	69840		69840
50800515	BAR SPLICERS	EACH	710		710
51500100	NAME PLATES	EACH	1		1
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	12		12
52100510	ANCHOR BOLTS, 3/4"	EACH	24		24

14  
\* SPECIALTY ITEMS

FILE NAME *	USER NAME = oarpenterdj	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SUMMARY OF QUANTITIES</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
cr:\pwork\ps\d01\carpenterdj\d0183264\366417-ehv-S00.dgn	DRAWN -	REVISED -	613					(BD BR)BR	BUREAU	63	5	
PLOT SCALE * 1/8" = 1'-0"	CHECKED -	REVISED -	SCALE: SHEET NO. OF SHEETS STA. TO STA.					CONTRACT NO. 66A17				
PLOT DATE * 8/6/2014	DATE -	REVISED -	ILLINOIS FED. AID PROJECT									

80% FED. / 20% STATE  
CONSTRUCTION CODE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				ROADWAY 0004 RURAL	BRIDGE 0014 RURAL
52100520	ANCHOR BOLTS, 1"	EACH	24		24
54201063	PIPE CULVERTS, CLASS D, TYPE 2 18"	FOOT	62	62	
54213453	END SECTIONS 18"	EACH	2	2	
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	56		56
* 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4	
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	1	1	
* 63100169	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) FLARED	EACH	3	3	
63200310	GUARDRAIL REMOVAL	FOOT	578	578	
66600105	FURNISHING AND ERECTING RIGHT OF WAY MARKERS	EACH	4	4	
* 66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	78	78	
* 66900450	SPECIAL WASTE PLANS AND REPORTS	L SUM	1	1	
* 66900530	SOIL DISPOSAL ANALYSIS	EACH	1	1	
67000100	<i>MOBILIZATION</i>	<i>L SUM</i>	<i>1</i>		<i>1</i>
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6	
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1	

14 \* SPECIALTY ITEMS

Rev.

FILE NAME =	USER NAME = carpenterd	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SUMMARY OF QUANTITIES</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
er:\p\work\oxidat\carpenterd\100182264\2366617-sht-500.dgn		DRAWN -	REVISED -					613	(00 BR)BR	BUREAU	63	6
PLOT SCALE = 100.0000 1/1 in.		CHECKED -	REVISED -		SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.	CONTRACT NO. 66A17		
PLOT DATE = 8/6/2014		DATE -	REVISED -		ILLINOIS FED. AID PROJECT							

80% FED. / 20% STATE  
CONSTRUCTION CODE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				ROADWAY 0004 RURAL	BRIDGE 0014 RURAL
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	1	
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1	
70300100	SHORT TERM PAVEMENT MARKING	FOOT	177	177	
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	1393	1393	
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	147	147	
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	50 FT	558	558	
70400100	TEMPORARY CONCRETE BARRIER	FOOT	532	532	
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	498	498	
70600250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2	2	
70600350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2	2	
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	2786	2786	
* 78001130	PAINT PAVEMENT MARKING - LINE 6"	FOOT	294	294	
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	7	7	
* 78200410	GUARDRAIL MARKERS, TYPE A	EACH	4	4	

\* SPECIALTY ITEMS

FILE NAME :	USER NAME = carpenterdj	DESIGNED -	REVISED -
ar\pw\work\pdxid\carpenterdj\40183264\366A17-shs-900.dgn		DRAWN -	REVISED -
	PLOT SCALS = 100.0000 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 8/6/2014	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES				
SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
613	(08 BR)BR	BUREAU	63	7
CONTRACT NO. 66A17			ILLINOIS FED. AID PROJECT	

80% FED. / 20% STATE  
CONSTRUCTION CODE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				ROADWAY 0004 RURAL	BRIDGE 0014 RURAL
* 78200530	BARRIER WALL MARKERS, TYPE C	EACH	8	8	
* 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4	
78300100	PAVEMENT MARKING REMOVAL	SQ FT	324	324	
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	7	7	
X0322194	POLYMER MODIFIED PORTLAND CEMENT MORTAR	SO FT	1		1
X0326649	LINEAR DELINEATOR PANELS, 6 INCH	EACH	6	6	
X2130010	EXPLORATION TRENCH, SPECIAL	FOOT	200	200	
X4401198	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SO YD	173	173	
X5420355	END SECTIONS 24" (SPECIAL)	EACH	1	1	
Z0001495	BRIDGE APPROACH SHOULDER REMOVAL	SO YD	76	76	
Z0001900	ASBESTOS BEARING PAD REMOVAL	EACH	36		36
Z0004552	APPROACH SLAB REMOVAL	SO YD	148	148	
Z0005216	HOT-MIX ASPHALT STABILIZATION 6" AT STEEL PLATE BEAM GUARD RAIL	SO YD	183	183	
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SO FT	636		636

\* SPECIALTY ITEMS

FILE NAME = c:\p-work\p1dotcarpenterd\j08183764	USER NAME = carpenterd 66A17-shr-500.dgn	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SUMMARY OF QUANTITIES</b>				F.A.P. RTE. 613	SECTION (80 BR)BR	COUNTY BUREAU	TOTAL SHEETS 63	SHEET NO. 8
	PLOT SCALE = 1/8" = 1'-0"	DRAWN -	REVISED -		SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.	CONTRACT NO. 66A17		
	PLOT DATE = 8/13/2014	CHECKED -	REVISED -		ILLINOIS FED. AID PROJECT								
		DATE -	REVISED -										

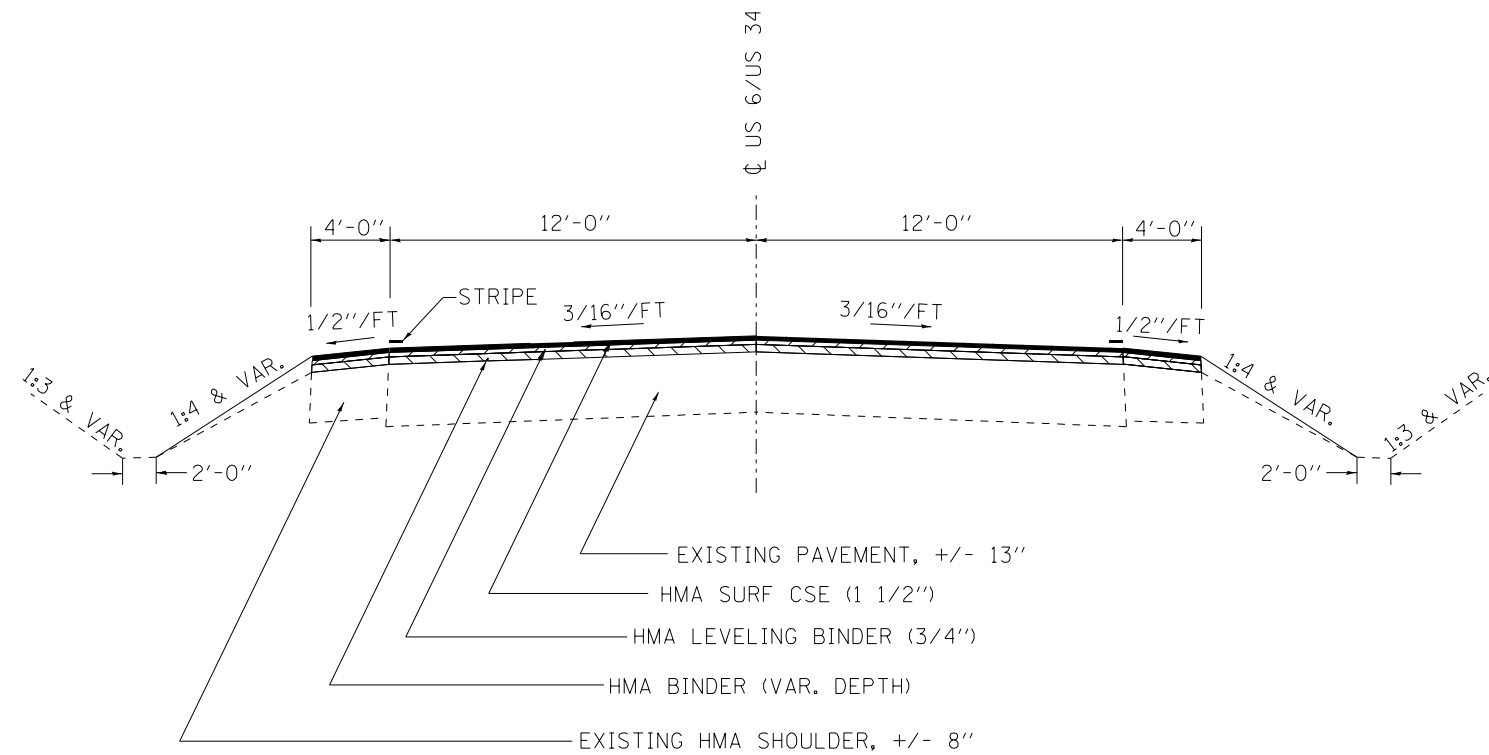
80% FED. / 20% STATE  
CONSTRUCTION CODE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				ROADWAY 0004 RURAL	BRIDGE 0014 RURAL
Z0012755	STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)	SQ FT	51		51
Z0015500	DEBRIS REMOVAL	L SUM	1		1
Z0026407	TEMPORARY SHEET PILING	SQ FT	296		296
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	42	42	
Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	88		88
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	1	

U

\* SPECIALTY ITEMS

FILE NAME =	USER NAME = carpentardj	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SUMMARY OF QUANTITIES</b>				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pr-work\p-1dot\carpentardj\d0103264	66617-shr-500.dgn	DRAWN -	REVISED -		613	(80 BR)BR	BUREAU	63	9	CONTRACT NO. 66617				
	PLOT SCALE = 1/8" = 1'-0"	CHECKED -	REVISED -		SCALE:	SHEET NO.	OF	SHEETS	STA.	TO	STA.	ILLINOIS FED. AID PROJECT		
	PLOT DATE = 8/13/2014	DATE -	REVISED -											



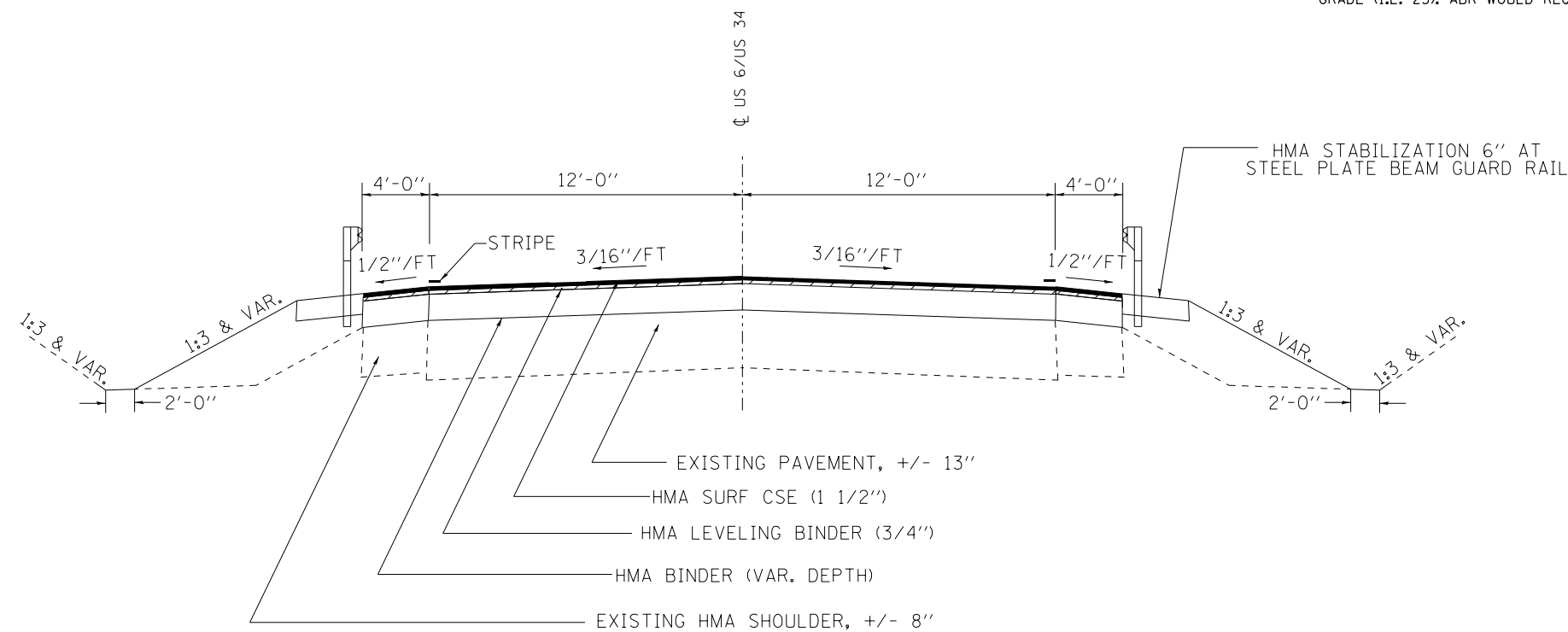
**PROPOSED ROADWAY TYPICAL SECTION**

STA 964+35 TO APPROX STA 965+85  
 APPROX STA 969+90 TO STA 970+24

MIX DESIGN					
MIX	PG GRADE **	DESIGN AIR VOIDS	MIX COMPOSITION	FRICTION AGG	DENSITY CONTROL
HMA SURFACE COURSE	PG 64-22	4.0% @N50	IL 9.5	MIXTURE C	CORES
HMA LEVEL BINDER	PG 64-22	4.0% @N50	IL 9.5FG		CORES
HMA BINDER	PG 64-22	4.0% @N50	IL 19.0FG		CORES
HMA STABILIZATION	PG 64-22	4.0% @N50	IL 19.0FG		SATISFACTION OF ENGINEER

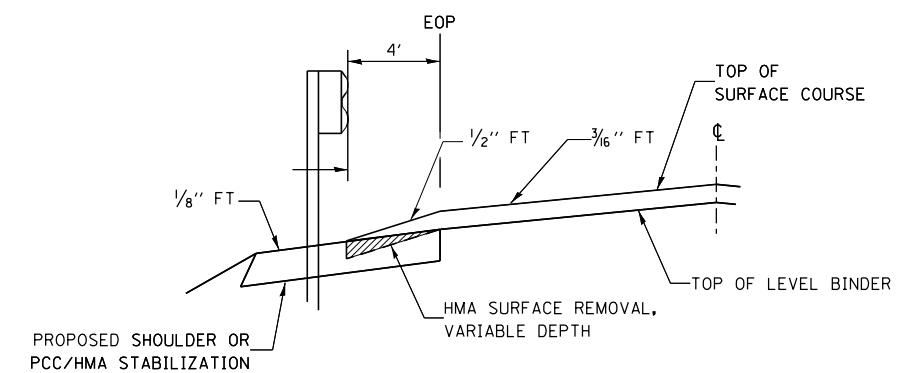
• MATERIAL SHALL BE COMPACTED TO 93.0 - 97.4 PERCENT OF THE MAXIMUM THEORETICAL DENSITY, EXCEPT THAT WHEN PLACED AS FIRST LIFT ON AN UNIMPROVED SUBGRADE THE MINIMUM PERCENT COMPACTION SHALL BE 92.0 PERCENT. THE MAXIMUM THEORETICAL DENSITY SHALL BE DETERMINED FROM THE MOVING AVERAGE AS SPECIFIED IN THE QC/OA SPECIFICATION.

\*\* WHEN RAP/RAS ABR EXCEEDS 20 PERCENT, THE HIGH AND LOW VIRGIN ASPHALT BINDER GRADES SHALL EACH BE REDUCED BY ONE GRADE (I.E. 25% ABR WOULD REQUIRE A VIRGIN ASPHALT BINDER GRADE OF PG 64-22 TO BE REDUCED TO PG 58-28).



**PROPOSED ROADWAY TYPICAL SECTION**

APPROX STA 965+85 TO STA 969+90



**SHOULDER DETAIL**

TREE REMOVAL			
STATION	OFFSET	6 TO 15 UNITS DIAMETER UNIT	OVER 15 UNITS DIAMETER UNIT
964+80	50' LT	6.0	
965+00	50' LT	6.0	
965+25	40' RT	6.0	
965+25	45' RT	6.0	
965+26	60' RT	9.5	
965+28	70' RT	7.0	
965+30	30' RT	8.5	
965+31	70' RT	9.5	
965+50	30' RT	6.0	
965+51	28' RT	8.5	
965+62	45' LT	6.0	
965+63	45' LT	9.0	
965+70	50' LT	6.0	
965+70	28' RT	6.0	
965+71	30' RT	8.5	
965+75	32' RT		16.5
965+75	40' RT	11.0	
965+80	65' LT	6.0	
965+88	35' LT	7.5	
965+90	55' LT	6.0	
965+98	50' LT	6.0	
966+00	55' RT	11.0	
966+10	45' RT	9.0	
966+10	55' LT	6.0	
966+11	56' LT	7.0	
966+12	50' RT	7.5	
966+15	55' RT	11.5	
966+15	40' RT	12.5	
966+20	57' RT	13.5	
966+20	35' LT	6.0	
966+21	35' LT	7.0	
966+22	36' LT	7.0	
966+25	30' RT	6.0	
966+25	35' RT	7.5	
966+25	52' RT	6.0	
966+28	60' RT	8.5	
966+30	30' RT	12.0	
966+31	45' LT	8.0	
966+35	30' RT	11.5	
966+45	28' RT	11.5	
966+46	26' RT	6.5	
966+46	50' RT	10.0	
966+50	30' RT	9.0	
966+55	28' RT	8.5	
966+74	27' RT	7.0	
966+75	28' RT	11.0	
966+78	26' RT	7.5	
966+80	29' RT	6.0	
966+80	30' RT	6.5	
966+87	55' LT		18.0
967+10	35' RT	7.0	
967+15	34' RT	6.0	
967+16	34' RT	9.0	
967+20	50' RT	11.5	
967+25	40' RT	6.0	
967+30	48' RT	8.5	
967+32	48' RT	8.5	
967+35	50' RT	10.0	
967+36	45' RT	14.0	
967+38	45' RT	13.0	
SUBTOTAL		479.5	34.5

TREE REMOVAL (CONTINUED)			
STATION	OFFSET	6 TO 15 UNITS DIAMETER UNIT	OVER 15 UNITS DIAMETER UNIT
967+48	45' RT	11.0	
967+48	52' RT	7.0	
967+50	50' RT	7.0	
967+54	45' RT	14.0	
967+55	45' RT	14.0	
967+56	46' RT	12.0	
967+57	46' RT	15.0	
967+62	40' RT	8.0	
967+70	48' RT		16.0
967+74	45' LT	6.0	
967+75	45' LT	8.0	
967+75	45' RT	8.0	
968+20	40' RT	10.5	
968+21	40' RT	6.0	
968+21	48' RT	6.0	
968+22	50' RT	7.0	
968+40	58' RT	12.5	
968+50	42' RT	6.0	
968+51	50' RT	9.0	
968+51	60' LT	6.0	
968+52	30' LT	7.0	
968+52	58' LT	8.5	
968+52	59' LT	10.0	
968+52	48' RT	10.5	
968+55	47' RT	15.0	
968+56	47' RT	6.0	
968+60	32' LT	8.0	
968+62	60' LT	6.0	
968+63	59' LT	8.0	
968+64	58' LT	6.5	
968+65	60' LT	8.0	
968+72	33' LT	8.0	
968+74	36' LT	9.0	
968+74	35' RT	6.0	
968+78	50' RT	9.0	
968+79	32' RT	8.0	
968+85	47' LT	8.0	
968+86	49' LT	10.0	
968+90	44' LT	6.0	
968+98	30' RT		16.5
968+99	30' RT	15.0	
968+99	31' RT		18.0
969+02	30' RT	9.0	
969+05	32' RT	8.0	
969+15	50' LT	6.0	
969+20	35' RT	7.5	
969+21	48' RT	6.0	
969+25	35' RT	7.5	
969+38	30' LT		16.0
969+47	35' LT	6.0	
969+48	35' RT	6.5	
969+52	50' RT	7.0	
969+68	55' LT	12.0	
969+72	50' RT		16.5
969+75	58' LT	7.0	
969+84	59' LT	11.0	
970+02	30' LT	9.5	
970+10	42' LT	6.0	
970+26	40' LT	11.0	
SUBTOTAL		465.5	83.0
PROJECT TOTAL		945.0	117.5

FILE NAME =	USER NAME = carpenterdj	DESIGNED -	REVISED -
c:\pwork\pwork\carpenterdj\d0183264\0366A17-sht-schedule.dgn		DRAWN -	REVISED -
	PLOT SCALE = 100.0000' / 1in.	CHECKED -	REVISED -
	PLOT DATE = 8/1/2014	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SCHEDULES**

SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
613	(8D BR)BR	BUREAU	63	11
CONTRACT NO. 66A17				
ILLINOIS FED. AID PROJECT				

GUARDRAIL SCHEDULE							
LOCATION	GUARD-RAIL REM	TBT TYPE 6	TBT TY I SPECIAL FLARED	TBT TY I SPECIAL TANGENT	BARRIER WALL MARK	GUARD-RAIL MARK	TERMINAL MARK DIR APPLIED
	FOOT	EACH	EACH	EACH	EACH	EACH	EACH
NW QUAD	117	1	1		2	1	1
SW QUAD	154	1	1		2	1	1
NE QUAD	191	1		1	2	1	1
SE QUAD	116	1	1		2	1	1
<b>TOTAL</b>	<b>578</b>	<b>4</b>	<b>3</b>	<b>1</b>	<b>8</b>	<b>4</b>	<b>4</b>

EARTHWORK SCHEDULE				
LOCATION	EARTH EXCAVATION (CUT)	EARTHWORK ADJUSTED FOR SHRINKAGE	FILL	FURNISHED EXCAVATION
	CU YD			CU YD
DITCH WORK	322.7	242	1228.2	986.2
<b>TOTAL</b>	<b>322.7</b>			<b>986.2</b>

ASSUME SHRINKAGE FACTOR - 25% EARTH EXCAVATION PAY ITEMS

PAVEMENT MARKING														
LOCATION	DESCRIPTION	LENGTH	PAINT PAVEMENT MARKING LINE			TEMPORARY PAVEMENT MARKING LINE			SHORT TERM PVMT MARK	WORK ZONE PVMT MARK REMOVAL	PAVEMENT MARKING REMOVAL	RAISED REFL PVMT MARKER REMOVAL	RAISED REFL PVMT MARKER	
			4 INCH		6 INCH	4 INCH		6 INCH						
			YELLOW	WHITE	YELLOW	YELLOW	WHITE	YELLOW						
STA		FOOT	FOOT	FOOT	FOOT	FOOT	FOOT	FOOT	FOOT	SQ FT	SQ FT	EACH	EACH	
964+35 TO 967+60	CENTER AND EDGE LINES	325		1300	162			650	81	98	268		4	4
967+60 TO 970+24	CENTER AND EDGE LINES	264		1056	132			528	66	79	218		3	3
964+35 TO 966+50	WB NO PASSING LINE	215	430				215				72			
STAGE CONSTRUCTION		532									324			
<b>TOTALS</b>			430	2356	294	215	1178	147	177	558	324	7	7	
				2786	294		1393	147	177	558	324	7	7	

NOTE: ADDITIONAL QUANTITY HAS BEEN INCLUDED TO ALLOW FOR TWO SEPARATE APPLICATIONS OF PAINT PAVEMENT MARKING LINE  
NO PASSING ZONES SHALL BE REPLACED IN THE SAME LOCATIONS AS EXISTING

STAGING SCHEDULE					
LOCATION	TEMP CONC BARRIER	RELOCATE TEMP CONC BARRIER	IMPACT ATTENUATORS TEMP, NON-REDIRECTIVE TEST LEVEL 3	IMPACT ATTENUATORS RELOCATE, NON-REDIRECTIVE TEST LEVEL 3	TEMP RAMP
	FOOT	FOOT	EACH	EACH	SQ YD
STAGE I	532.0		2.0		213
STAGE II		498.0		2.0	
<b>TOTAL</b>	<b>532</b>	<b>498</b>	<b>2</b>	<b>2</b>	<b>213</b>

DRAINAGE SCHEDULE						
LOCATION	STATION	OFFSET	PIPE CULV CL D, TY 2	END SECT	PROP U.S. INVERT ELEV	PROP D.S. INVERT ELEV
			18"	18"		
			FOOT	EACH		
964+89		31' RT	62	1	663.41	
965+49		46' RT		1		659.00
<b>TOTAL</b>			<b>62</b>	<b>2</b>		

ENTRANCE SCHEDULE						
STATION	SIDE		EXIST MAT	WIDTH	AREA	AGG SURF CSE TY B
				FOOT	SQ YD	TON
965+14	RT	PE	AGG/DIRT	12	109	1
<b>SUBTOTAL</b>						<b>1</b>

STORM SEWER EXPLORATION		
LOCATION	EXPLORATION TRENCH, SPECIAL	END SECTIONS 24" (SPECIAL)
	FOOT	EACH
SOUTHEAST QUADRANT	200	1
<b>TOTAL</b>	<b>200</b>	<b>1</b>

NOTE: THE END SECTION SHALL BE INSTALLED AT THE POINT WHERE THE EXISTING FLOW LINE OF THE STORM SEWER MEETS THAT OF THE PROPOSED DITCH.



RIPRAP SCHEDULE				
APPROXIMATE STATION	APPROXIMATE OFFSET	APPROXIMATE DIMENSIONS LENGTH x WIDTH	STONE RIPRAP, CL A4	FILTER FABRIC
			TON	SQ YD
965+50	46' RT	20' x 16'	32	73
968+20 TO 970+20	48' RT TO 28' RT	200' x 16'	326	733
TOTAL			358	806

REMOVAL SCHEDULE				
LOCATION	PAVEMENT REMOVAL	APPROACH SLAB REMOVAL	PAVED SHOULDER REMOVAL	BRIDGE APPROACH SHOULDER REMOVAL
STA TO STA	SQ YD	SQ YD	SQ YD	SQ YD
WEST OF STRUCTURE	22	74	9	38
EAST OF STRUCTURE	22	74	9	38
TOTAL	44	148	18	76

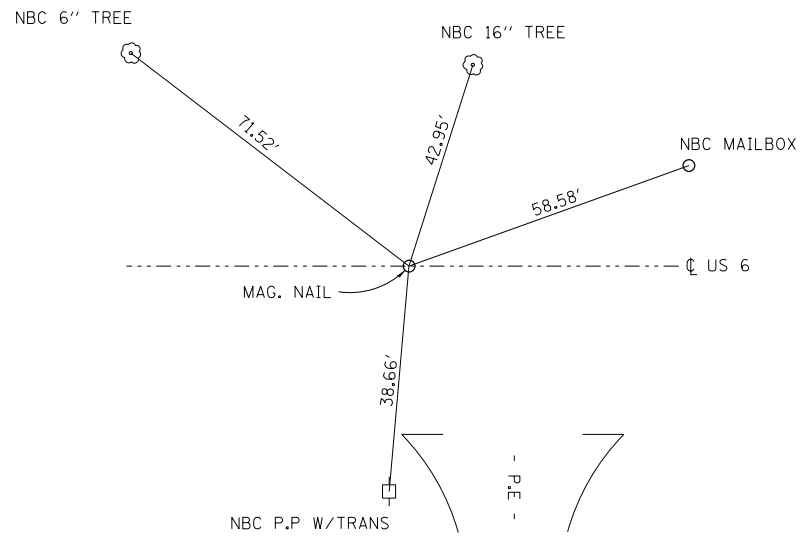
MAINLINE SCHEDULE												
LOCATION		LENGTH	PVMT AREA	HMA SURF CSE	LEVEL BINDER (MM)	HMA BINDER CSE	HMA SURF REM BUTT JT	HMA SURF REM VAR DEPTH	TEMP RAMP	BIT MAT (PR CT)	MIX FOR CRACKS, JOINTS & FLGWYS	LEVEL BINDER (HM)
STA TO STA		FOOT	SQ YD	TON	TON	TON	SQ YD	SQ YD	SQ YD	POUNDS	TON	TON
964+35 TO 965+47.8	BUTT JOINT	112.8	401.1	33.7	16.8		213.3		13.3	271	0.1	0.2
965+47.8 TO 966+59.86		112.06	398.4	33.5	17.3	95.8				269	0.1	0.2
	SN 006-0140											
968+60.24 TO 969+50.5		90.26	320.9	27.0	13.9	74.2				217	0.1	0.2
969+50.5 TO 970+24	BUTT JOINT	73.5	261.3	21.9	11.0		213.3		13.3	176	0.1	0.1
964+35 TO 966+59.86	LEFT SHOULDER*	224.86						99.9				
968+60.24 TO 970+24	LEFT SHOULDER*	163.76						72.8				
TOTAL			1381.7	116.1	59	170	426.6	172.7	26.6	933	0.4	0.7

\* SEE SHOULDER DETAIL

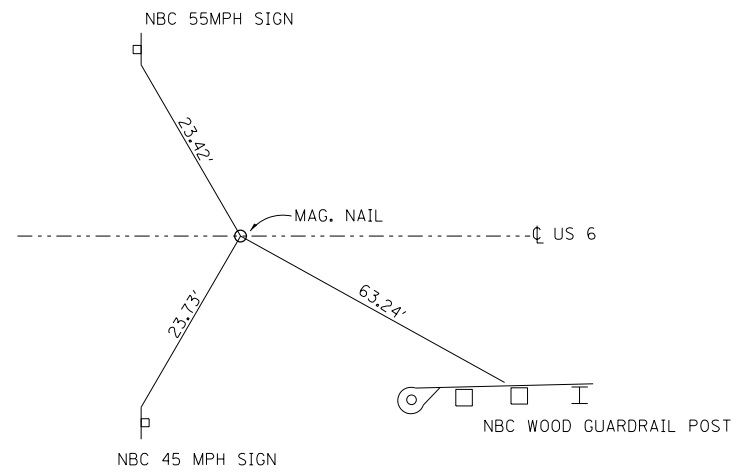
GUARDRAIL STABILIZATION	
LOCATION	HMA STABILIZATION 6" AT STEEL PLATE BEAM GUARDRAIL
STA TO STA	SQ YD
NW QUADRANT	47
SW QUADRANT	47
NE QUADRANT	43
SW QUADRANT	46
TOTAL	183

SEEDING SCHEDULE					
DESCRIPTION	SEEDING CL 3	EROSION CONTROL BLANKET	NIT FERT NUT	PHOS FERT NUT	POT FERT NUT
	ACRE	SQ YD	LB	LB	LB
SW QUADRANT	0.176	852.3	15.8	15.8	15.8
SE QUADRANT	0.106	511.1	9.5	9.5	9.5
NW QUADRANT	0.095	459.1	8.6	8.6	8.6
NE QUADRANT	0.139	674.0	12.5	12.5	12.5
TOTAL	0.516	2496.5	46.4	46.4	46.4

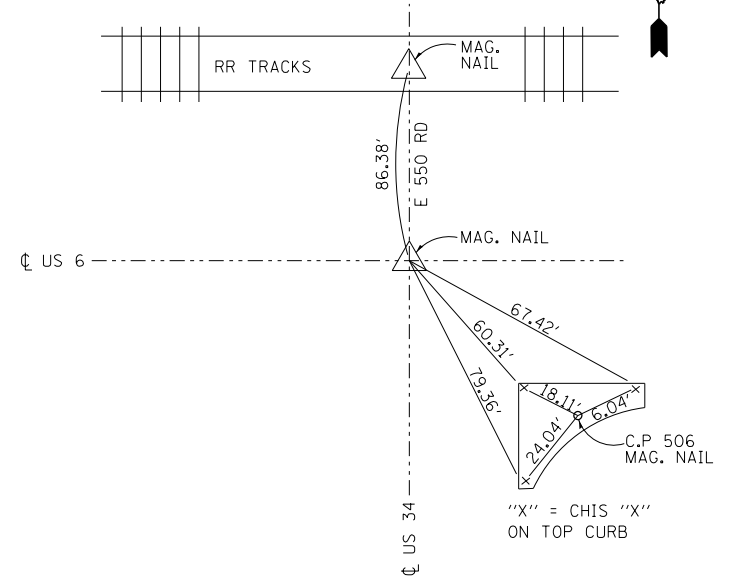
BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	
LOCATION	SQ YD
966+65.86 TO 966+95.86	23.4
968+24.24 TO 968+54.24	23.4
TOTAL	46.8



P.O.T STA. 937+72.33



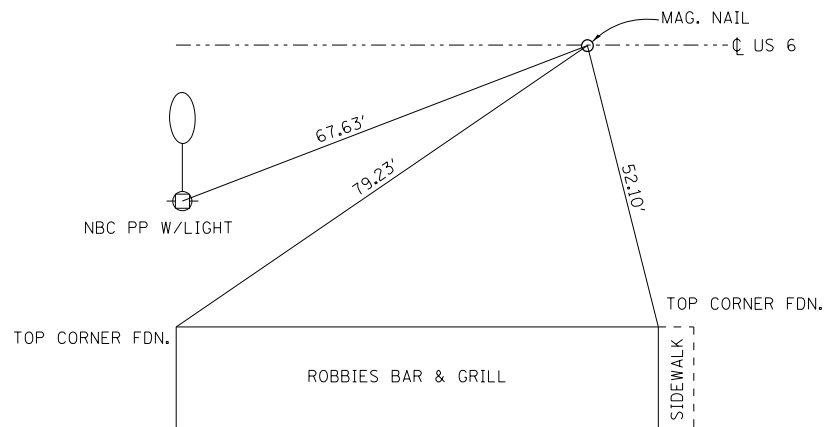
P.O.T STA. 965+0.00



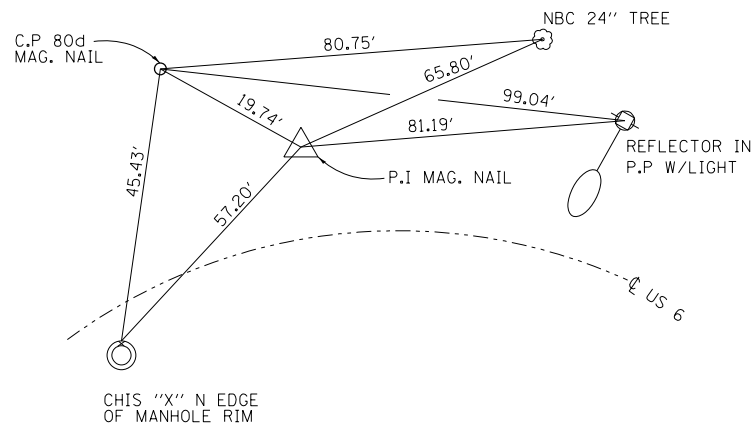
P.I STA. 951+68.58 US 6  
 =STA. 843+76.60 US 34  
 =STA. 10+00.00 E 550 RD

CL R.R P.I STA. 10+86.38 E 550 RD

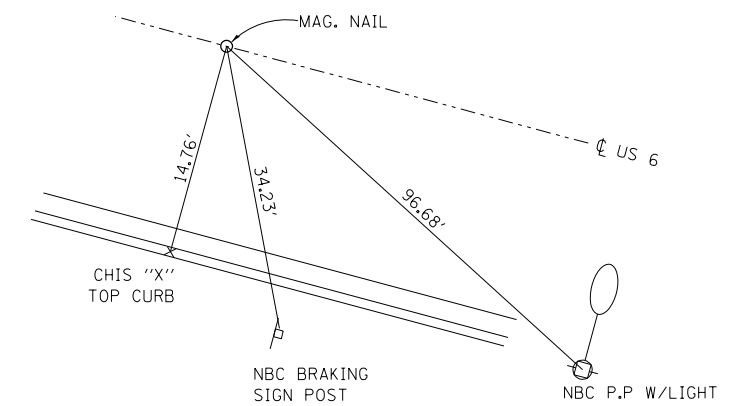
FOR INFORMATION ONLY



P.C STA. 971+65.45



P.I STA. 973+16.03 15.44'LT  
 C.P 505 STA. 972+95.06 19.28'LT



P.O.T STA. 976+03.52

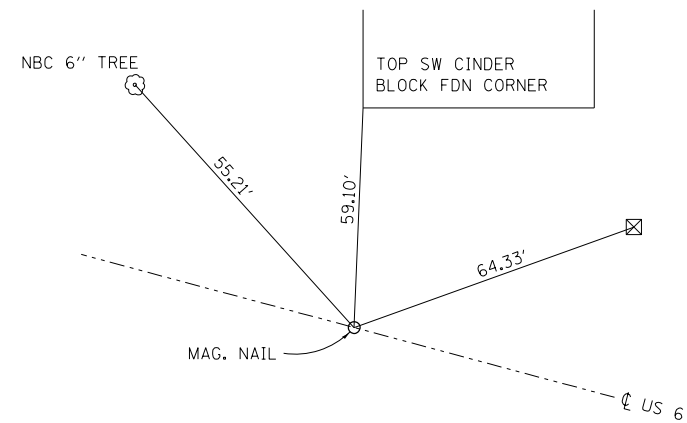
FILE NAME =	USER NAME = carpenterdj	DESIGNED -	REVISED -
c:\pwork\work\pwork\carpenterdj\d0183264\366A17-sht-ATB.dgn		DRAWN -	REVISED -
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 8/1/2014	DATE -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

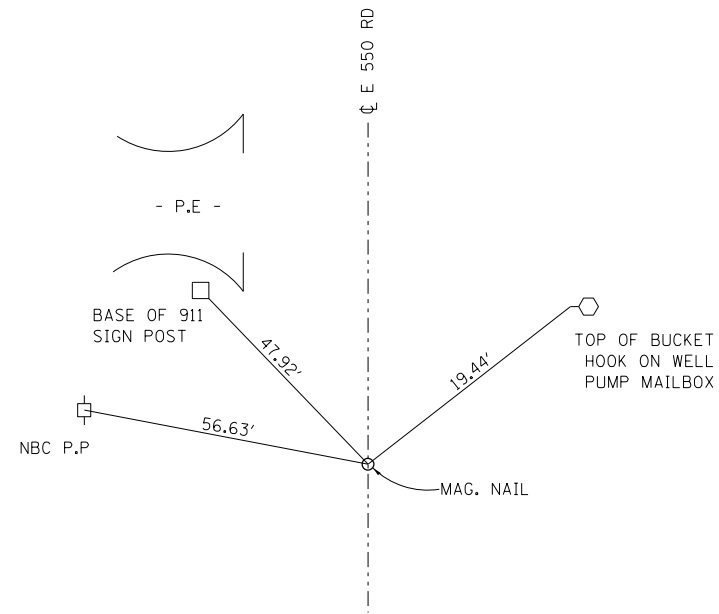
TIE POINTS

SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
613	(8D BR/BR)	BUREAU	63	14
			CONTRACT NO. 66A17	
ILLINOIS FED. AID PROJECT				



P.O.T STA. 974+62.41



P.O.T STA. 30+05.24

FOR INFORMATION ONLY

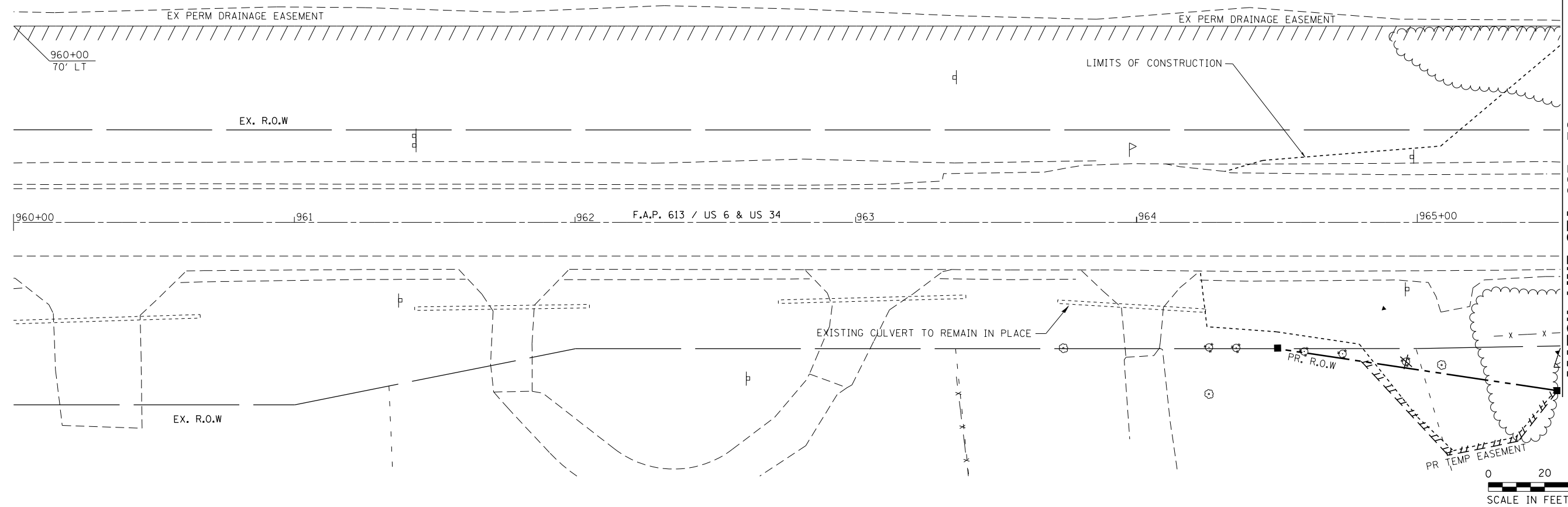
FILE NAME =	USER NAME = carpenterdj	DESIGNED -	REVISED -
ct:\pw\work\p\dot\carpenterdj\d0183264\0366A17-sht-ATB.dgn		DRAWN -	REVISED -
	PLOT SCALE = 100.0000' / 1in.	CHECKED -	REVISED -
	PLOT DATE = 8/1/2014	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

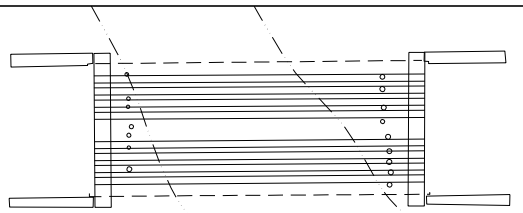
**TIE POINTS**

SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
613	(8D BR/BR	BUREAU	63	15
CONTRACT NO. 66A17			ILLINOIS FED. AID PROJECT	

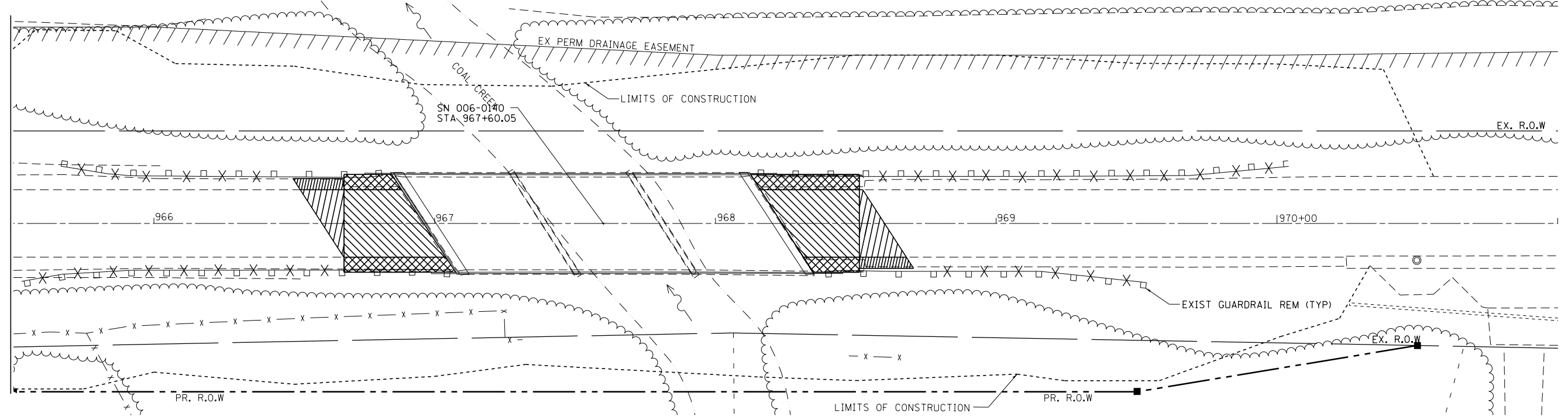


MATCH LINE STA. 965 + 50



- BRIDGE APPROACH SHOULDER REMOVAL
- PAVED SHOULDER REMOVAL
- PAVEMENT REMOVAL
- APPROACH SLAB REMOVAL
- GUARDRAIL REMOVAL

MATCH LINE STA. 965 + 50



FILE NAME =	USER NAME = carpenterdj	DESIGNED -	REVISED -
et:\pw\work\p1dot\carpenterdj\d0183264\0366A17-sht-plnpr.f.DGN		DRAWN -	REVISED -
	PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -
#MODELNAME#	PLOT DATE = 8/5/2014	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**REMOVAL PLAN**

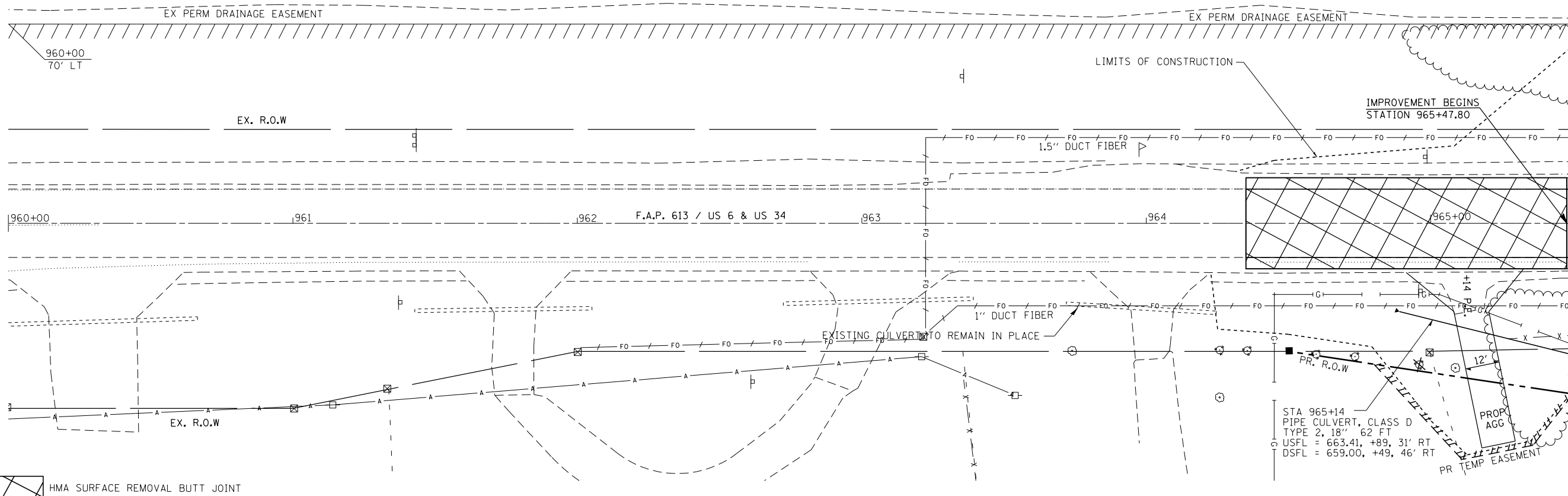
SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.
--------	-------	----	--------	------	----	------

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
613	(8D-BR)BR	BUREAU	63	16
CONTRACT NO. 66A17				
ILLINOIS FED. AID PROJECT				

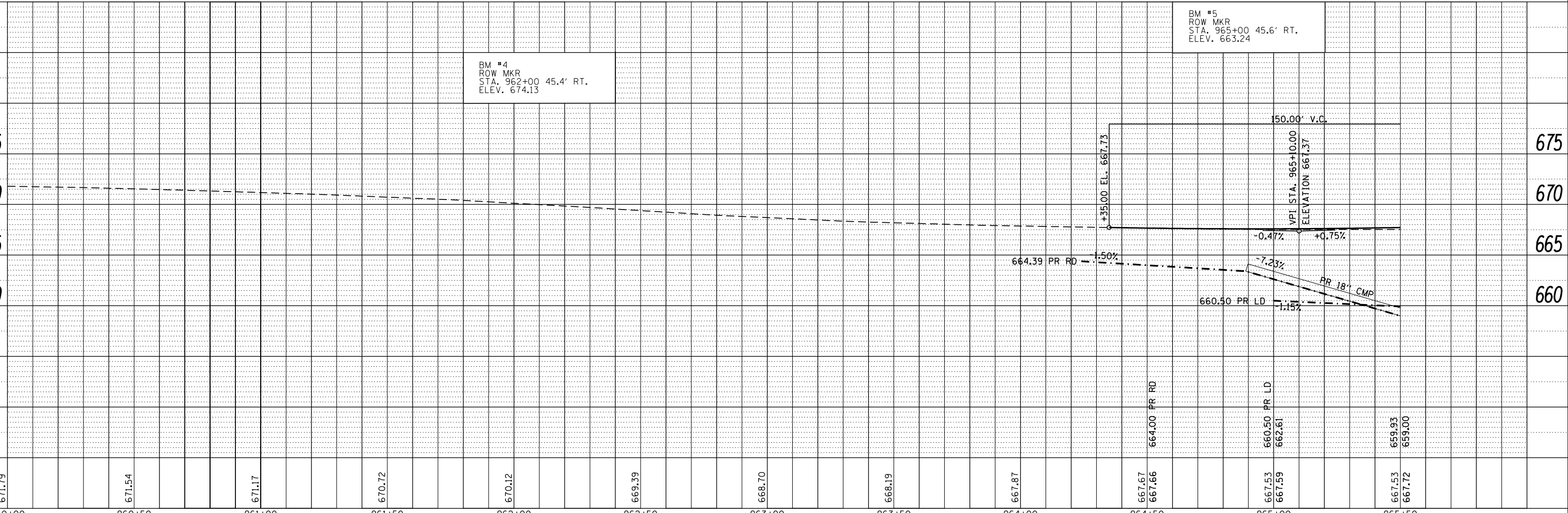


PLAN	SURVEYED	DATE
	PLOTTED	BY
	ALIGNED	
	CHECKED	
	FILED	
	NO.	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES	
	CHECKED	
	STRUCTURE	
	NOTATIONS	
	CHKD	
	NO.	



MATCH LINE STA. 965 + 50



FILE NAME =	USER NAME = carpenterdj	DESIGNED -	REVISED -
c:\pwork\pwork\carpenterdj\d0183264\0366A17-sht-plnpr.f.dgn		DRAWN -	REVISED -
	PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 8/6/2014	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

US 6 / US 34, SN 006-0140  
PLAN & PROFILE

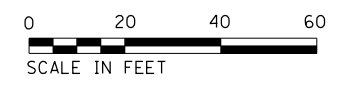
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
613	(8D-BR)BR	BUREAU	63	17
CONTRACT NO. 66A17				

SCALE: SHEET NO. OF SHEETS STA. TO STA.

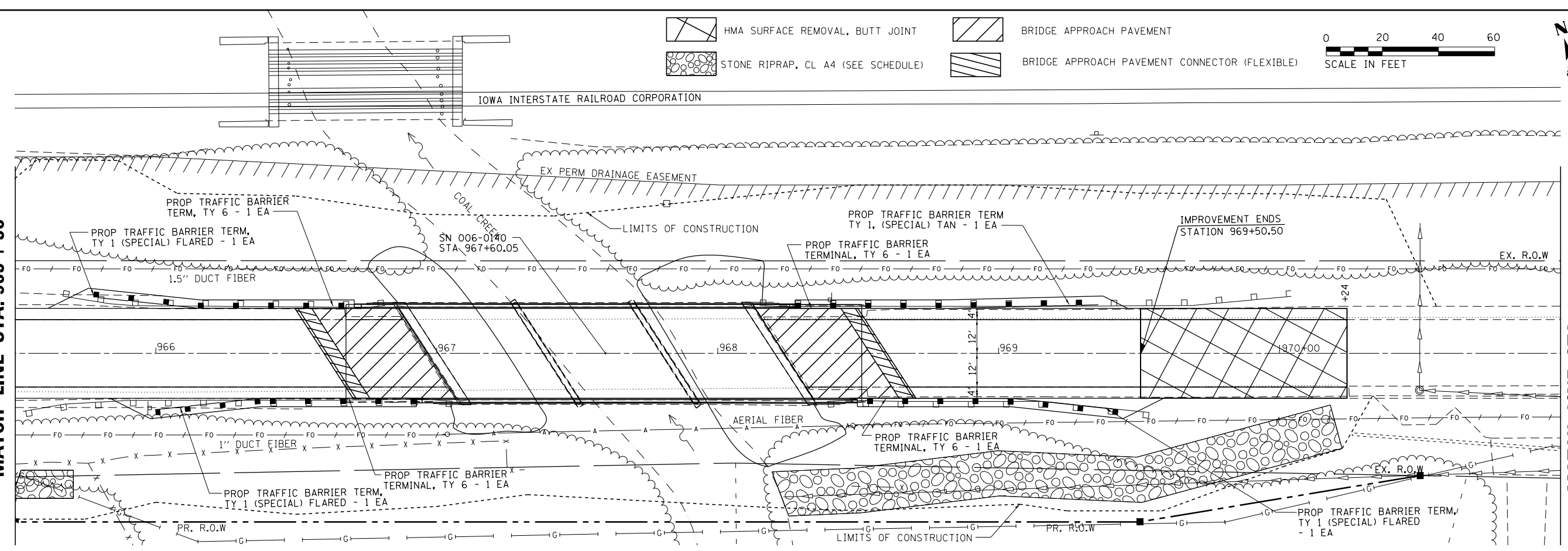
PLAN	SURVEYED	BY	DATE
	PLOTTED		
	ALIGNED		
	CHECKED		
	FILED		
	NO.		

PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	GRADES		
	CHECKED		
	STRUCTURE		
	NOTATIONS		
	CPWD		
	NO.		

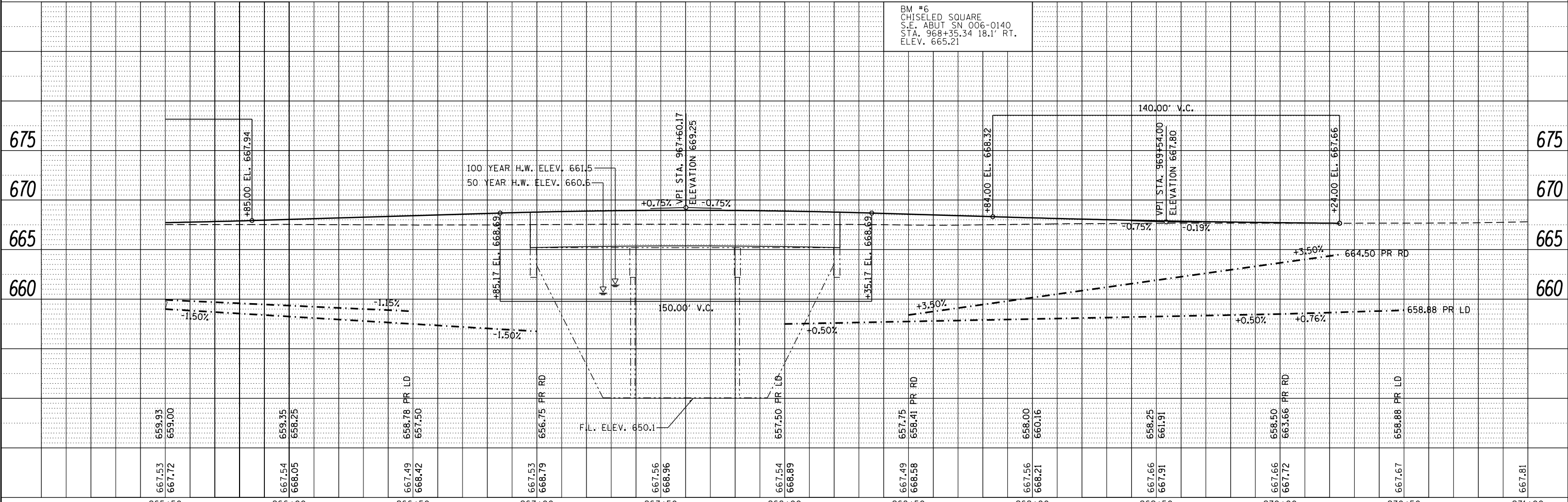
	HMA SURFACE REMOVAL, BUTT JOINT		BRIDGE APPROACH PAVEMENT
	STONE RIPRAP, CL A4 (SEE SCHEDULE)		BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)



MATCH LINE STA. 965 + 50



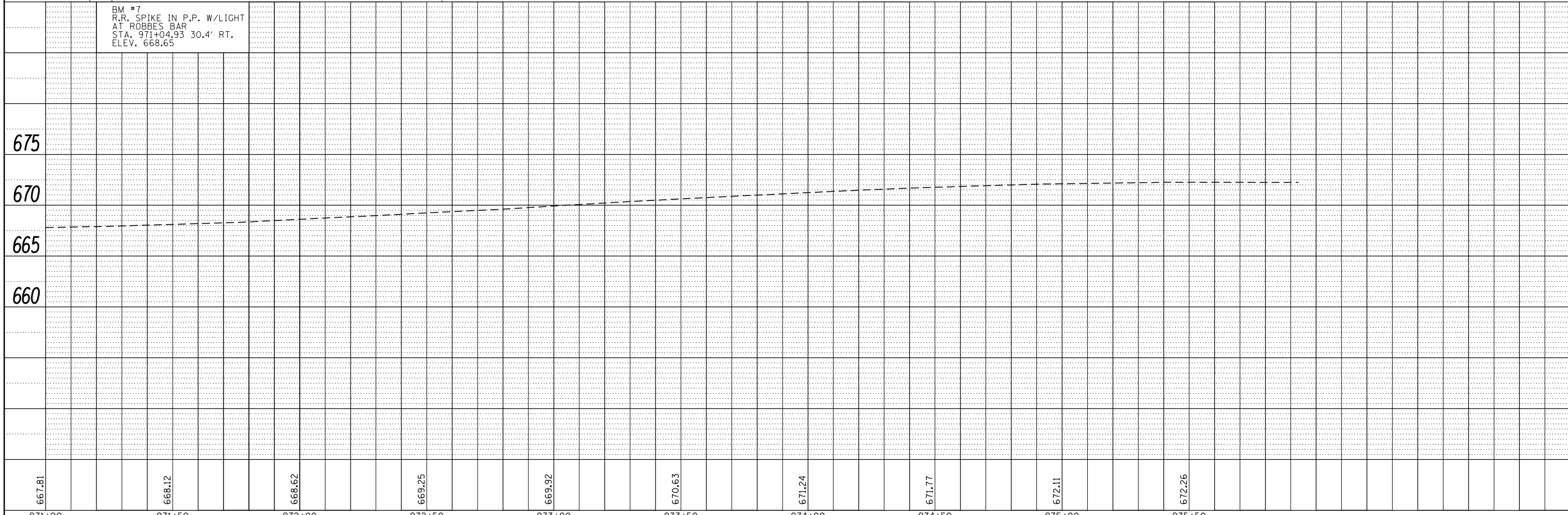
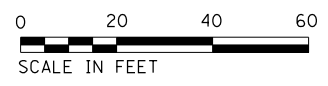
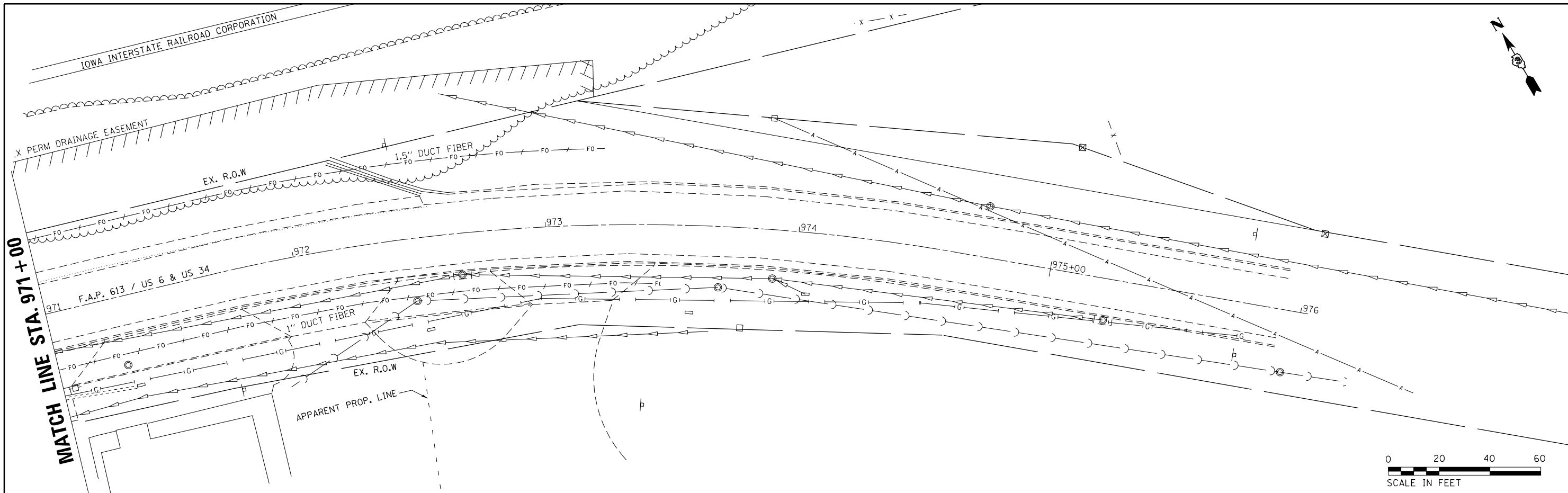
MATCH LINE STA. 971 + 00



FILE NAME =	USER NAME = carpenter_dj	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>				<b>US 6 / US 34, SN 006-0140</b> <b>PLAN &amp; PROFILE</b>				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwork\pwork\carpenter_dj\0183264\0366A17-shr-plnpr.f.dgn		DRAWN -	REVISED -									613	(8D-BR)BR	BUREAU	63	18
PLOT SCALE = 40.0000' / in.		CHECKED -	REVISED -									CONTRACT NO. 66A17				
PLOT DATE = 8/7/2014		DATE -	REVISED -									ILLINOIS FED. AID PROJECT				

PLAN	SURVEYED	DATE
	PLOTTED	BY
	ALIGNED	CHECKED
	FILED	FILED
	NO.	NO.
	NO.	NO.

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES	CHECKED
	STRUCTURE	NOTATIS
	NO.	NO.
	NO.	NO.



BM #7  
R.R. SPIKE IN P.P. W/LIGHT  
AT ROBBES BAR  
STA. 971+04.93 30.4' RT.  
ELEV. 668.65

FILE NAME =	USER NAME = carpenterdj	DESIGNED -	REVISED -
c:\pwork\pwork\carpenterdj\d0183264\0366A17-shr-plnpr.f.dgn		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

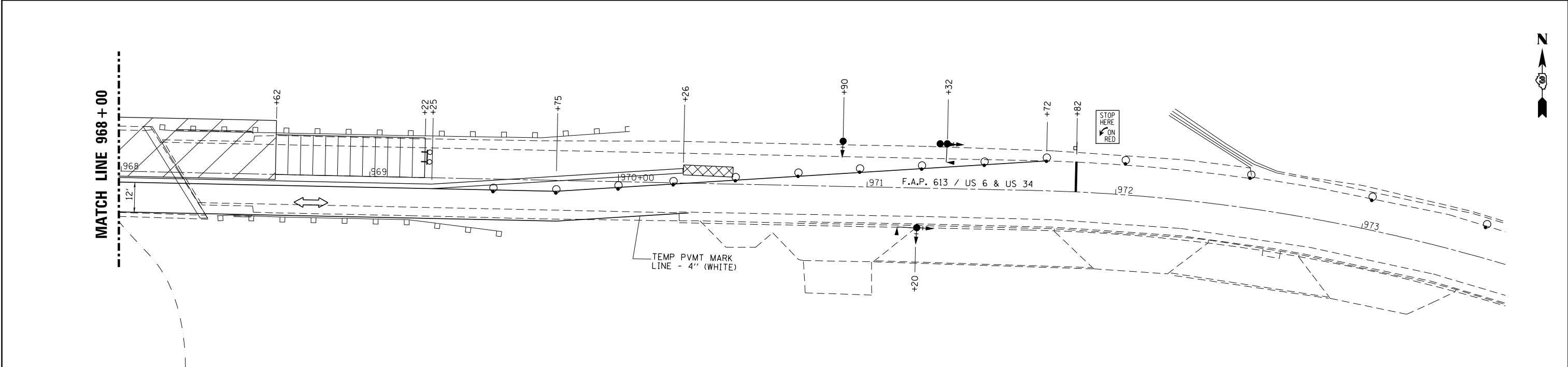
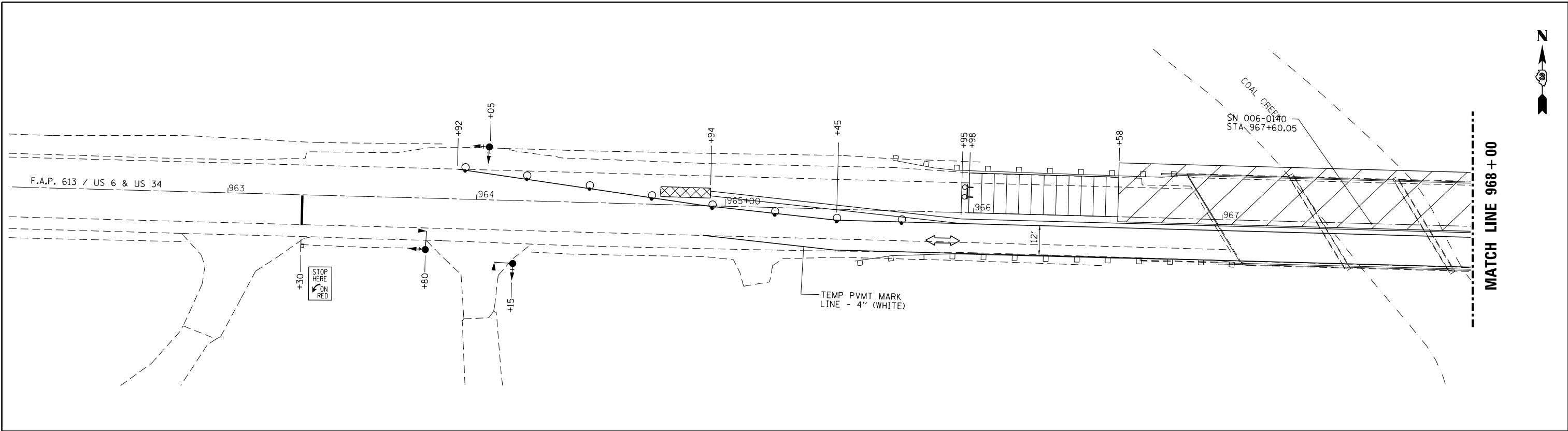
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

US 6 / US 34, SN 006-0140  
PLAN & PROFILE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
613	(8D-BR)BR	BUREAU	63	19
CONTRACT NO. 66A17				

SCALE: SHEET NO. OF SHEETS STA. TO STA.

ILLINOIS FED. AID PROJECT



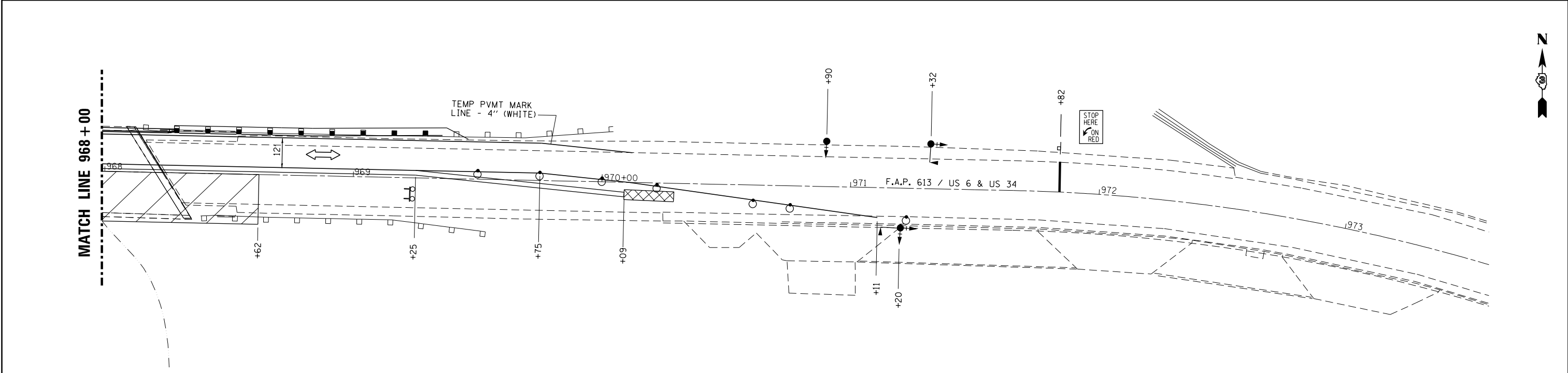
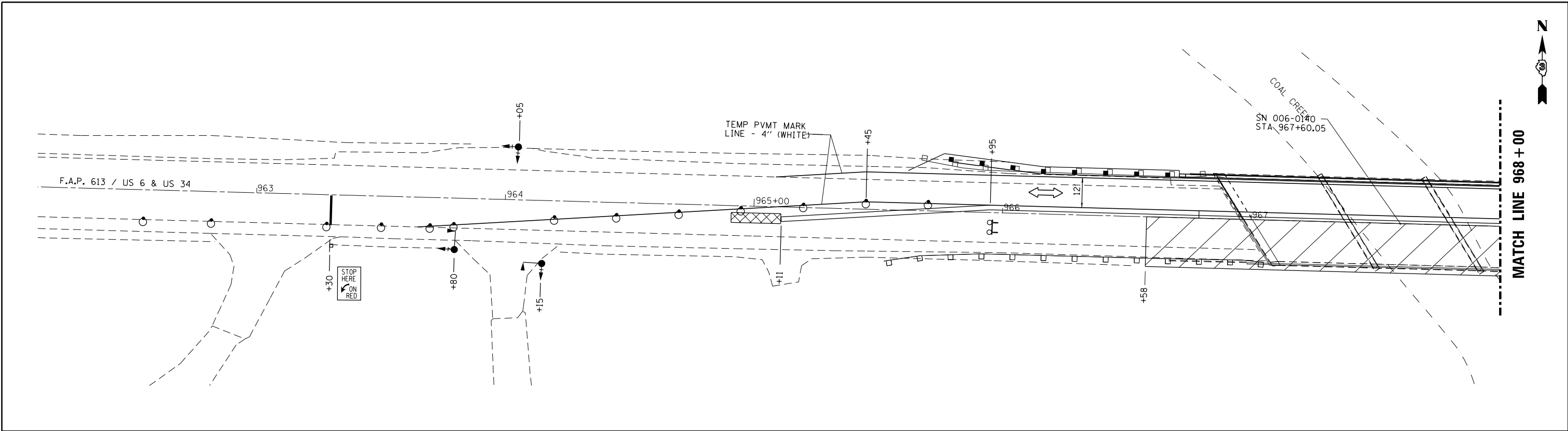
**LEGEND**

- WORK AREA
- TEMPORARY CONCRETE BARRIER
- DRUM WITH STEADY BURNING LIGHT
- TRAFFIC SIGNAL WITH BACKPLATE
- MICROWAVE DETECTOR
- SIGN
- TYPE III BARRICADE WITH FLASHING LIGHTS
- IMPACT ATTENUATOR, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3
- TEMPORARY RAMP

**NOTE: CONTRACTOR SHALL MAINTAIN ACCESS AT ALL ENTRANCES**

FILE NAME =	USER NAME = carpenterdj	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>MAINTENANCE OF TRAFFIC STAGE I</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	366A17-sht-staging.dgn	DRAWN -	REVISED -			613	(8D BR)BR	BUREAU	63	20	
	PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -			CONTRACT NO. 66A17					
#MODELNAME#	PLOT DATE = 8/1/2014	DATE -	REVISED -			ILLINOIS FED. AID PROJECT					





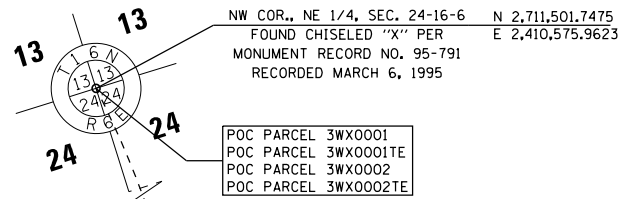
**LEGEND**

- WORK AREA
- TEMPORARY CONCRETE BARRIER
- DRUM WITH STEADY BURNING LIGHT
- TRAFFIC SIGNAL WITH BACKPLATE
- MICROWAVE DETECTOR
- SIGN
- TYPE III BARRICADE WITH FLASHING LIGHTS
- IMPACT ATTENUATOR, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3
- TEMPORARY RAMP

**NOTE: CONTRACTOR SHALL MAINTAIN ACCESS AT ALL ENTRANCES**

FILE NAME =	USER NAME = carpenterdj	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>MAINTENANCE OF TRAFFIC STAGE II</b>				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ei:\pw\work\p\idot\carpenterdj\d0183264\0366A17-sht-staging.dgn	PLOT SCALE = 40.0000' / in.	DRAWN -	REVISED -		613	(8D BR)BR	BUREAU	63	21				
*MODELNAME*	PLOT DATE = 8/1/2014	CHECKED -	REVISED -		SCALE:      SHEET      OF      SHEETS      STA.      TO      STA.				CONTRACT NO. 66A17				
		DATE -	REVISED -		ILLINOIS FED. AID PROJECT								

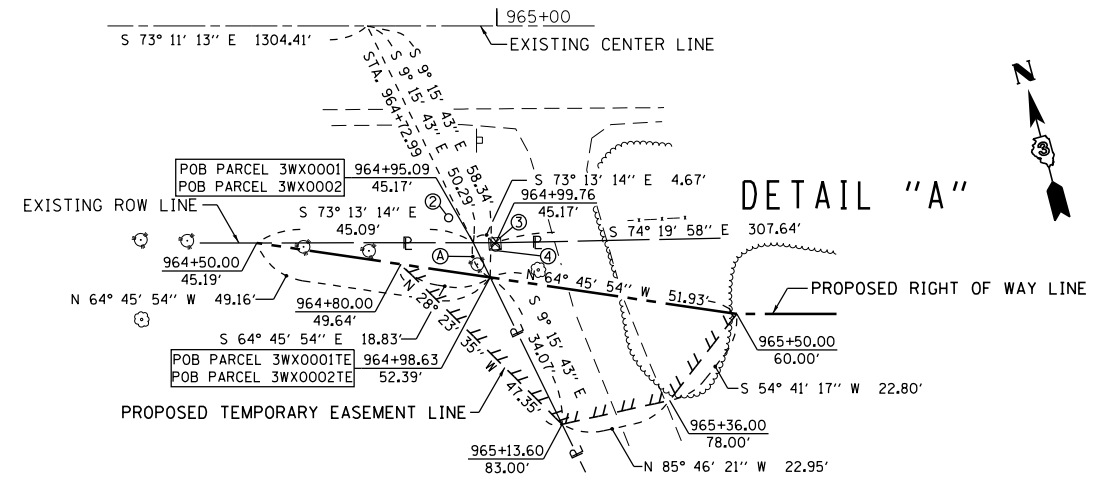
SEC. 24, T. 16 N., R. 6 E., 4TH P.M.



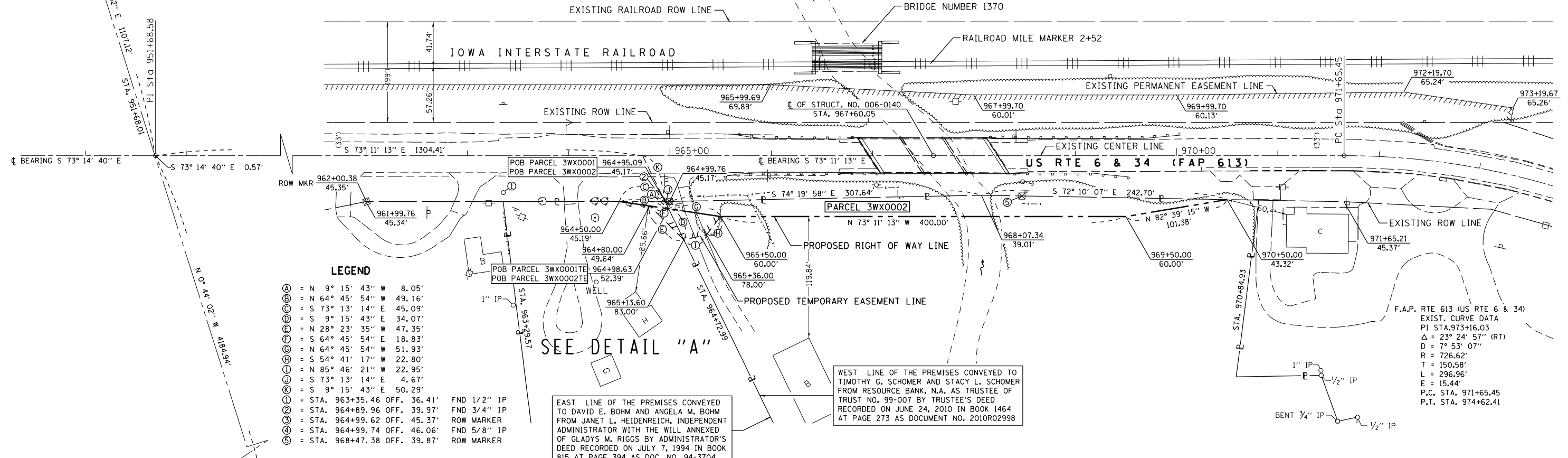
NW COR., NE 1/4, SEC. 24-16-6 N 2,711,501.7475  
 FOUND CHISELED "X" PER E 2,410,575.9623  
 MONUMENT RECORD NO. 95-791  
 RECORDED MARCH 6, 1995

POC PARCEL 3WX0001  
 POC PARCEL 3WX0001TE  
 POC PARCEL 3WX0002  
 POC PARCEL 3WX0002TE

NOTE:  
 EXISTING RAILROAD RIGHT OF WAY WIDTH AS SHOWN  
 ON PLAT SUPPLIED BY THE IOWA INTERSTATE RAILROAD.



DETAIL "A"



LEGEND

- (A) = N 9° 15' 43" W 8.05'
- (B) = N 64° 45' 54" W 49.16'
- (C) = S 73° 13' 14" E 45.09'
- (D) = S 9° 15' 43" E 34.07'
- (E) = N 28° 23' 35" W 47.35'
- (F) = S 64° 45' 54" E 18.83'
- (G) = N 64° 45' 54" W 51.93'
- (H) = S 54° 41' 17" W 22.80'
- (I) = N 85° 46' 21" W 22.95'
- (J) = S 73° 13' 14" E 4.67'
- (K) = S 9° 15' 43" E 50.29'
- (1) = STA. 963+35.46 OFF. 36.41' FND 1/2" IP
- (2) = STA. 964+89.96 OFF. 39.97' FND 3/4" IP
- (3) = STA. 964+99.62 OFF. 45.37' ROW MARKER
- (4) = STA. 964+99.74 OFF. 46.06' FND 5/8" IP
- (5) = STA. 968+47.38 OFF. 39.87' ROW MARKER

SEE DETAIL "A"

EAST LINE OF THE PREMISES CONVEYED TO DAVID E. BOHM AND ANGELA M. BOHM FROM JANET L. HEIDENREICH, INDEPENDENT ADMINISTRATOR WITH THE WILL ANNEXED OF GLADYS M. RIGGS BY ADMINISTRATOR'S DEED RECORDED ON JULY 7, 1994 IN BOOK 815 AT PAGE 394 AS DOC. NO. 94-3704

WEST LINE OF THE PREMISES CONVEYED TO TIMOTHY G. SCHOMER AND STACY L. SCHOMER FROM RESOURCE BANK, N.A. AS TRUSTEE OF TRUST NO. 99-007 BY TRUSTEE'S DEED RECORDED ON JUNE 24, 2010 IN BOOK 1464 AT PAGE 273 AS DOCUMENT NO. 2010R02998

F.A.P. RTE 613 (US RTE 6 & 34)  
 EXIST. CURVE DATA  
 PI STA. 973+16.03  
 Δ = 23° 24' 57" (RT)  
 D = 7° 53' 07"  
 R = 726.62'  
 T = 150.58'  
 L = 296.96'  
 E = 15.44'  
 P.C. STA. 971+65.45  
 P.T. STA. 974+62.41

PARCEL 3WX0001

DAVID E. BOHM, et al.

TOTAL HOLDING = 1.210 AC. ±  
 TOTAL R.O.W. REQUIRED = 0.004 AC. ± (163 SQ FT)  
 REMAINDER = 1.206 AC. ±  
 TEMP. EASEMENT AREA = 0.006 AC. ± (264 SQ FT)  
 PURPOSE: TO CONSTRUCT ENTRANCE

PARCEL 3WX0002

TIMOTHY SCHOMER, et al.

TOTAL HOLDING = 10.735 AC. ±  
 TOTAL R.O.W. REQUIRED = 0.208 AC. ±  
 REMAINDER = 10.527 AC. ±  
 TEMP. EASEMENT AREA = 0.021 AC. ±  
 PURPOSE: TO CONSTRUCT ENTRANCE

SURVEYOR'S STATEMENT

I, CURT A. BENDER, HEREBY CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR OF THE STATE OF ILLINOIS, THAT THE SURVEY OF F.A.P. 613 (US RTE 6 & 34) WAS MADE BY WILLETT HOFMANN & ASSOCIATES, INC. UNDER MY DIRECTION, AT THE REQUEST OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION, DISTRICT 3, AND THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT ALL MONUMENTS AND MARKS ARE OF THE CHARACTER AND OCCUPY THE POSITION SHOWN THEREON, AND ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED. THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.

CURT A. BENDER, ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 3688 (EXPIRES NOVEMBER 2012)



NOTE: FOR THE PURPOSE OF THIS PLAT, BEARINGS AND DISTANCES ARE BASED UPON THE ILLINOIS STATE PLANE COORDINATE SYSTEM, (GRID) WEST ZONE, (NAD-83, 2007 ADJ.). ALL AREAS ARE BASED ON GROUND MEASUREMENTS GRID TO GROUND COMBINED FACTOR = 1.00007549 (INVERSE OF COMBINED FACTOR)

S:\PROJECTS\2011\212011\212011.D00\3066.341\SURVEY\3666A17-SHT-ROWPLAN.DGN calculations by C.B. drawn by B.F.



DESIGNED -	REVISED - et al JJC 12-02-13
DRAWN -	REVISED -
CHECKED -	REVISED -
DATE -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

RIGHT OF WAY PLANS

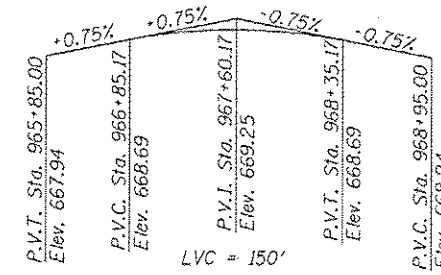
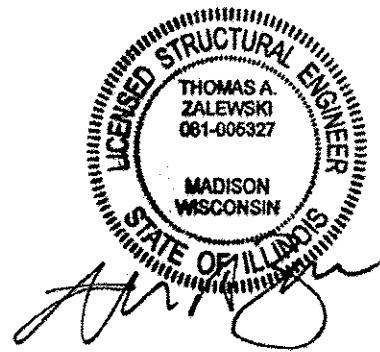
PROJECT	JOB NO. R-93-009-11
SCALE: 1" = 50'	SHEET NO. 1 OF 1 SHEET
STA. 964+50	TO STA. 970+50

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
613	(8D-BR)BR	BUREAU		
US ROUTE 6 & 34		CONTRACT NO. 66A17		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

Benchmark: BM#6 - Chiseled "□" top S.E. corner of east abutment, Sta 968+35.34, 18.11' Rt. Elev. 665.21  
 BM#5-R.O.W. Marker, south side of U.S. Rte. 6/34, House No. 5732, east edge of yard, Sta 965+00.00, 45.60' Rt. Elev. 663.24

Existing Structure:  
 S.N. 006-0140 Built in 1981 and rehabilitated in 1994 as F.A.S. Rte 2246, Section 8D-BR and Section 8D-BR-M at Station 30+93.5 as a 3-span P.P.C. deck beam (21" depth) bridge 130'-1 1/2" Bk. To Bk. of abutments with 33'-0" clear width and 36'-0" o.-o. The substructure consists of open pile bent abutments and piers supported on concrete piles. Existing PPC deck beam superstructure to be removed and replaced with cast in place concrete deck on steel wide flange beam superstructure. Traffic to be maintained under stage construction, subject to currently posted load limits. Temporary Steel Bracing Contract 66A53 installed in 2011. Steel wide flange beams anchored to existing substructure units to support PPC Deck beams. Temporary steel bracing to be removed with existing superstructure.

No Salvage



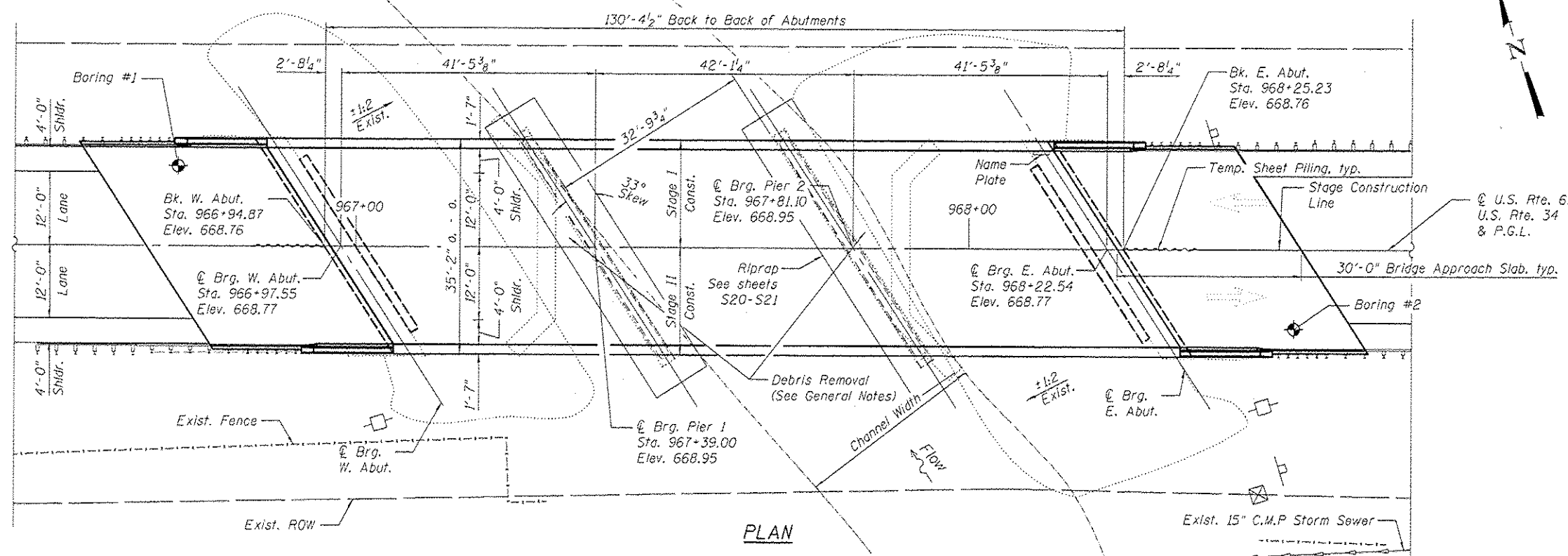
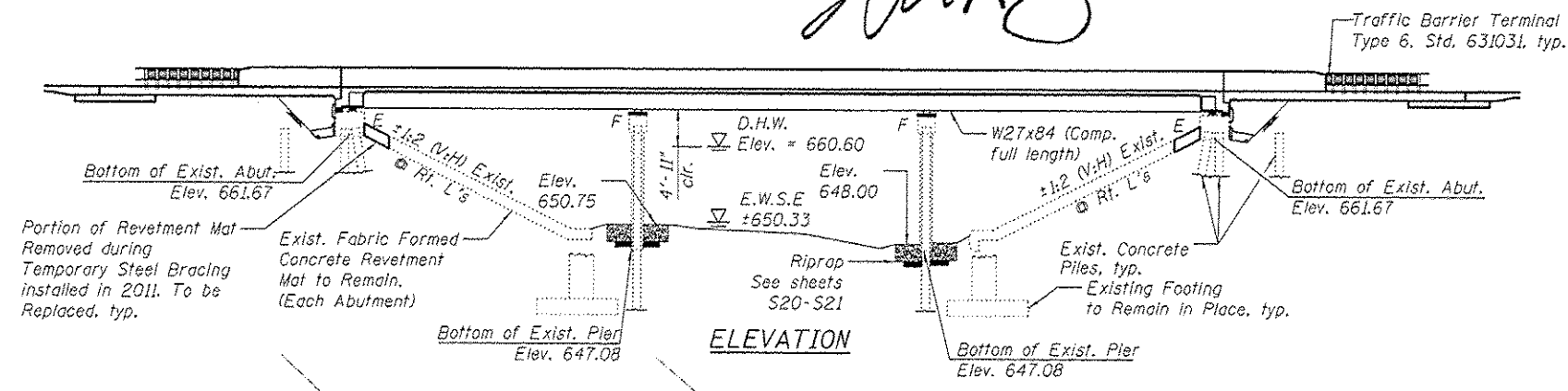
STATION 967+60.05  
 RE-BUILT 2014 BY  
 STATE OF ILLINOIS  
 F.A.P. RTE. 613 SEC. (8D-BR) BR  
 LOADING HL-93  
 STRUCTURE NO. 006-0140

**NAME PLATE**  
 See Std. 515001

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

**APPROVED**  
 For Structural Adequacy Only

*De Carl Krueger*  
 Engineer of Bridges & Structures



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

**DESIGN SPECIFICATIONS**  
 (NEW CONSTRUCTION)  
 2010 AASHTO LRFD Bridge Design Specifications with 2010 Interims

**DESIGN STRESSES**  
**FIELD UNITS (NEW CONSTRUCTION)**  
 f'c = 3,500 psi  
 fy = 60,000 psi (Reinforcement)  
 fy = 50,000 psi (AASHTO M270 Gr. 50W)

**FIELD UNITS (EXISTING CONSTRUCTION)**  
 f'c = 3,500 psi  
 fy = 60,000 psi (Reinforcement)

**SEISMIC DATA**  
 Seismic Performance Zone (SPZ) = 1  
 Design Spectral Acceleration at 1.0 sec. (S<sub>D1</sub>) = 0.094g  
 Design Spectral Acceleration at 0.2 sec. (S<sub>D5</sub>) = 0.150g  
 Soil Site Class = D

**WATERWAY INFORMATION**

Drainage Area = 24.5 sq. mi. Exist. Low Grade Elev. 667.20\*\* @ Sta. 968+63  
 Prop. Low Grade Elev. 667.24\*\* @ Sta. 965+00

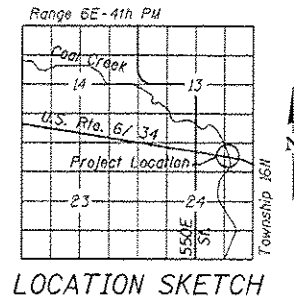
Flood	Freq. Yr.	Q	Opening Sq. Ft.		H.W.E.		Headwater El.		
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	
Design	50	4,520	679	679	660.6	0.5	0.5	661.1	661.1
Base	100	5,250	758	758	661.5	0.5	0.5	662.0	662.0
Max. Calc.	500	7,000	967	967	663.7	0.4	0.4	664.1	664.1

10 year velocity through existing bridge = 7.1 fps  
 10 year velocity through proposed bridge = 7.1 fps  
 \*\* At Edge of Pavement at Local Sag

**DESIGN SCOUR ELEVATION TABLE**

Design Scour Elevation (ft.)	W. Abut.	Pier 1	Pier 2	E. Abut.
	661.67*	646.45	646.45	661.67*

\* Bottom of Existing Abutments



**GENERAL PLAN AND ELEVATION**  
**U.S. ROUTE 6/ U.S. ROUTE 34 OVER**  
**COAL CREEK**  
 F.A.P. RTE. 613 SEC. (8D-BR) BR  
 BUREAU COUNTY  
 STATION 967+60.05  
 STRUCTURE NO. 006-0140

	USER NAME = bmettas	DESIGNED - BCM	REVISED	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>GENERAL PLAN &amp; ELEVATION</b> <b>STRUCTURE NO. 006-0140</b>	F.A.P. RTE. 613	SECTION (8D-BR) BR	COUNTY BUREAU	TOTAL SHEETS 63	SHEET NO. 23
	PLOT SCALE = N/A	DRAWN - BCM	REVISED			SHEET NO. 51 OF 526 SHEETS	CONTRACT NO. 66A17		ILLINOIS FED. AID PROJECT	
PLOT DATE = 9/11/2014	CHECKED - 7/24/2012	REVISED								

**GENERAL NOTES**

Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts in painted areas and ASTM A325 Type 3 in unpainted areas. Bolts 3/4 in.  $\phi$ , holes 7/8 in.  $\phi$ , unless otherwise noted.

Calculated weight of Structural Steel = 71420 lbs.

All structural steel shall be AASHTO M 270 Grade 50W

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

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.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 in. (0.01 ft). Adjustment shall be made by either grinding the surface or by shimming the bearings.

Structural steel shall only be painted for a distance equal to the depth of embedment into the concrete cap plus 3 inches. Painted areas shall be primed in the shop with a Department approved zinc rich primer. Field painting will not be required.

Current load posting of 10 tons axle and 40 tons gross to remain in effect with visible signs during construction.

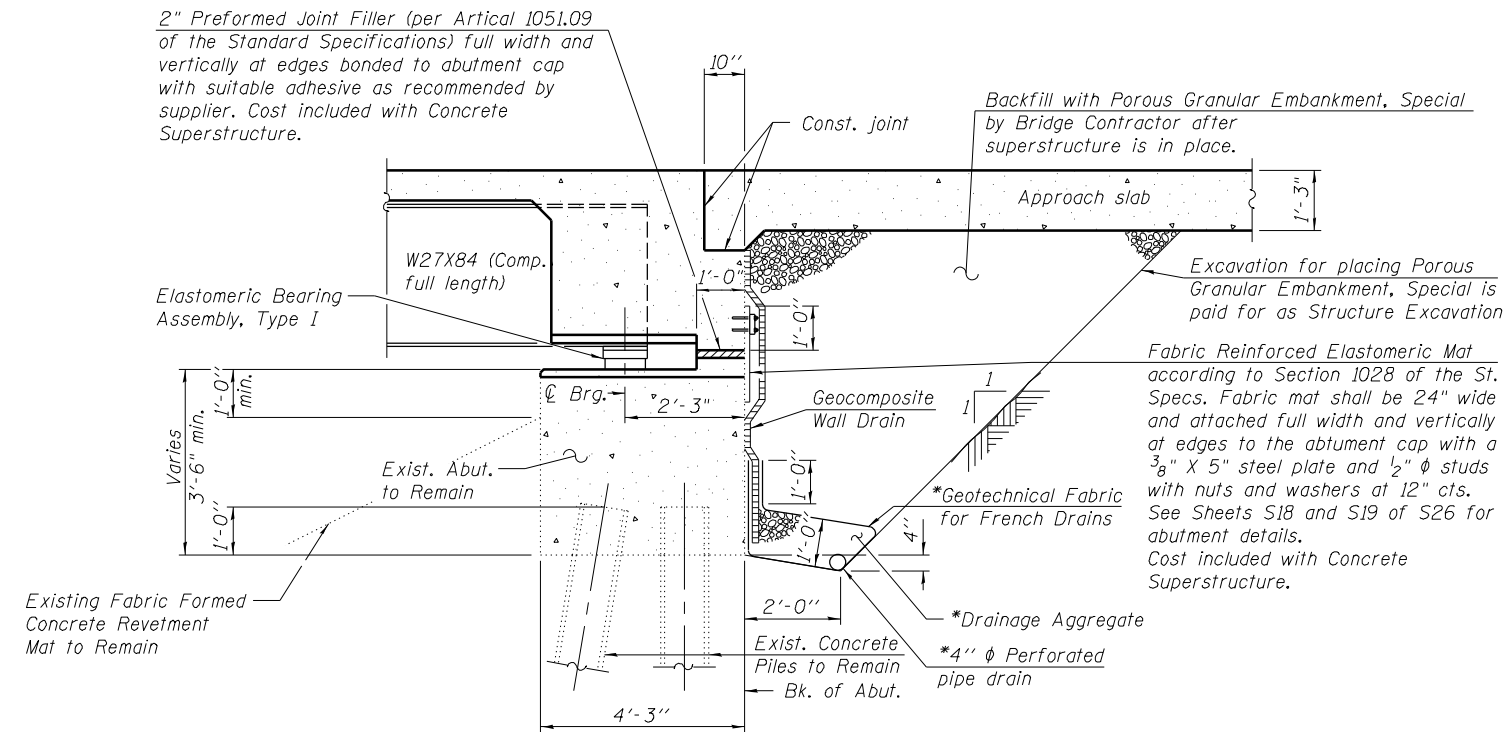
Portions of the revetment mat adjacent to the abutments were removed and deposited at the waterline near the piers during the installation of the Temporary Steel Bracing in 2011. Debris Removal is the removal and disposal of this material as specified in the Special Provisions.

**INDEX OF SHEETS**

- S1 General Plan & Elevation
- S2 General Notes, Index of Sheets, & Total Bill of Materials
- S3 Stage Construction Details
- S4 Temporary Barrier For Stage Construction
- S5 Top of Deck Elevations - I
- S6 Top of Deck Elevations - II
- S7 Top of West Approach Slab Elevations
- S8 Top of East Approach Slab Elevations
- S9 Superstructure
- S10 Diaphragm Details
- S11 Superstructure Details
- S12 Bridge Approach Slab Details - I
- S13 Bridge Approach Slab Details - II
- S14 Framing Plan
- S15 Structural Steel Details
- S16 Bearing Details
- S17 Concrete Removal for Abutments
- S18 Repair Details for West Abutment
- S19 Repair Details for East Abutment
- S20 Pier 1 Details
- S21 Pier 2 Details
- S22 Bar Splicer and Mechanical Splicer Details
- S23 Concrete Parapet Slipforming Option
- S24 Cantilever Forming Brackets for Superstructures with W27 Beams and Smaller
- S25 Boring Logs - I
- S26 Boring Logs - II

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Stone Riprap, Class A5	Ton		88	88
Filter Fabric	Sq. Yd.		56	56
Fabric Formed Concrete Revetment Mat	Sq. Yd.		28	28
Removal of Existing Superstructures	Each	1		1
Concrete Removal	Cu. Yd.		27.2	27.2
Structure Excavation	Cu. Yd.		96	96
Concrete Structures	Cu. Yd.		40.4	40.4
Concrete Superstructure	Cu. Yd.	275.9		275.9
Bridge Deck Grooving	Sq. Yd.	628		628
Protective Coat	Sq. Yd.	837		837
Furnishing And Erecting Structural Steel	L. Sum	1		1
Stud Shear Connectors	Each	3276		3276
Reinforcement Bars, Epoxy Coated	Pound	64490	5350	69840
Bar Splicers	Each	620	90	710
Name Plates	Each	1		1
Elastomeric Bearing Assembly, Type I	Each		12	12
Anchor Bolts, 3/4"	Each		24	24
Anchor Bolts, 1"	Each		24	24
Geocomposite Wall Drain	Sq. Yd.		56	56
Polymer Modified Portland Cement Mortar	Sq. Ft.		1	1
Porous Granular Embankment, Special	Cu. Yd.		99	99
Asbestos Bearing Pad Removal	Each		36	36
Structural Repair of Concrete (Depth Equal To Or Less Than 5 Inches)	Sq. Ft.		636	636
Structural Repair of Concrete (Depth Greater Than 5 Inches)	Sq. Ft.		51	51
Debris Removal	L. Sum		1	1
Temporary Sheet Piling	Sq. Ft.		296	296
Pipe Underdrains for Structures 4"	Foot		88	88

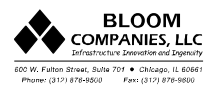


Note:  
All drainage system components shall extend between the existing wingwalls except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 60110).

\*Included in cost of Pipe Underdrains For Structures 4"

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

FILENAME: F:\3-1308\DDTD\st-3\3-1308B\US34C\Submittals\Comments\2014\_B9\_11\_BBS\_Comments\_Response\CAD\_Files\0060140-66A17-002-Ch.dgn



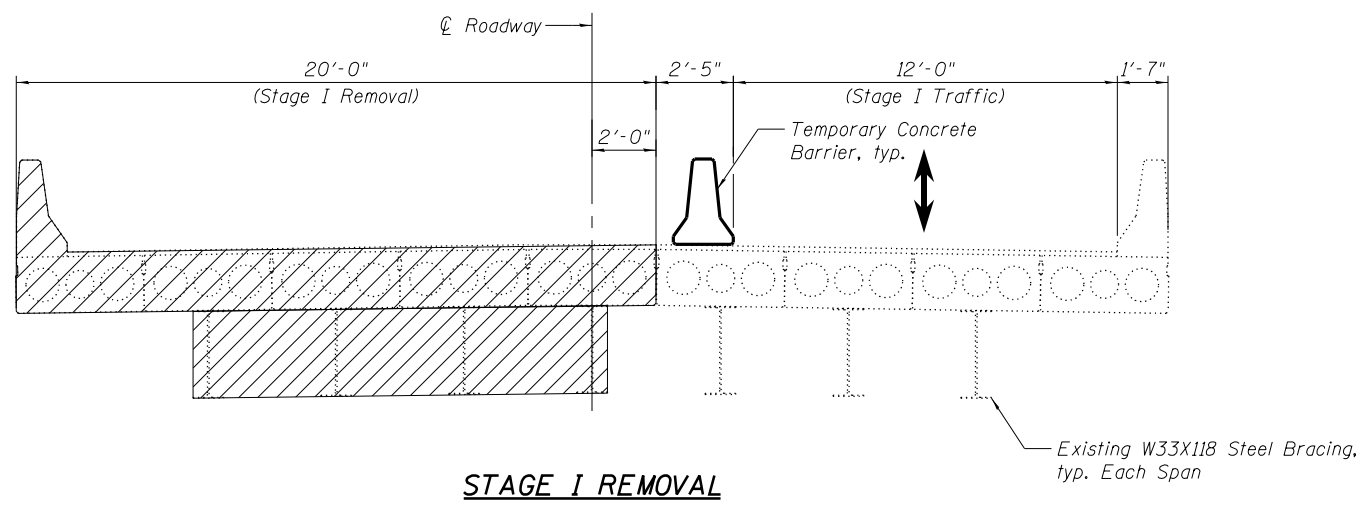
USER NAME = bmattas	DESIGNED - BCM	REVISED
	CHECKED - KO	REVISED
PLOT SCALE = N/A	DRAWN - BCM	REVISED
PLOT DATE = 9/11/2014	CHECKED - 7/27/2012	REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

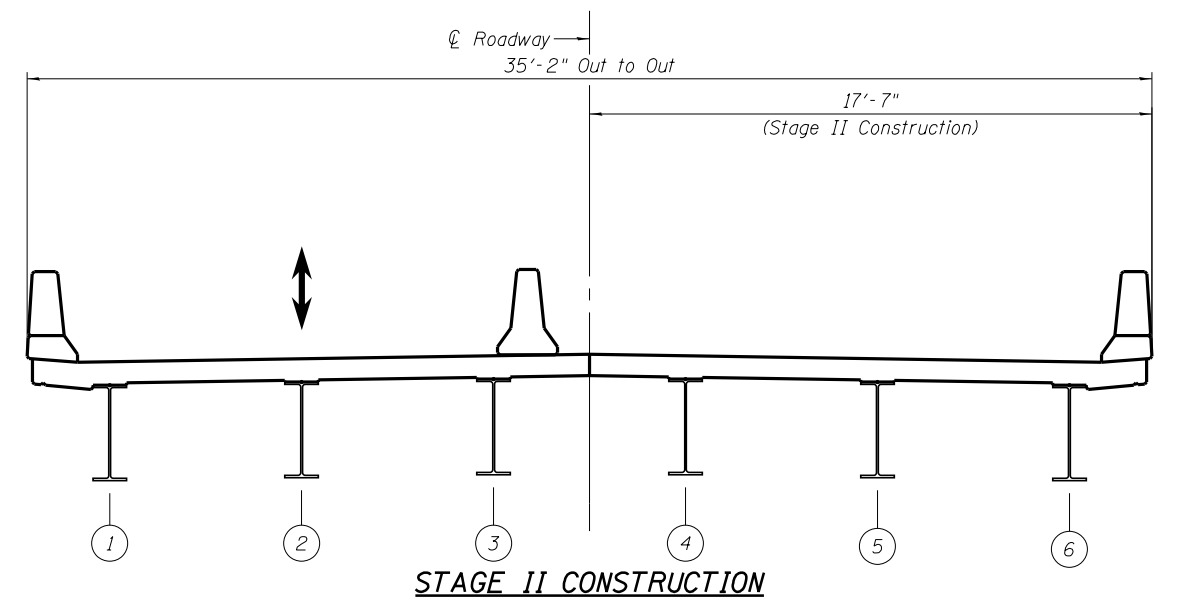
**GENERAL NOTES, INDEX OF SHEETS, & TOTAL BILL OF MATERIALS  
STRUCTURE NO. 006-0140**

SHEET NO. S2 OF S26 SHEETS

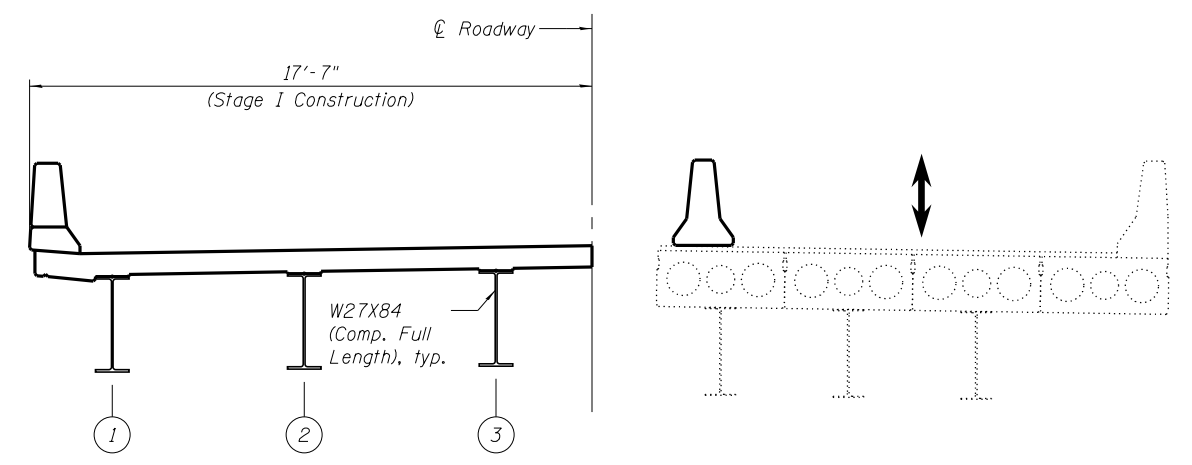
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
613	(8D-BR) BR	BUREAU	63	24
CONTRACT NO. 66A17				
ILLINOIS FED. AID PROJECT				



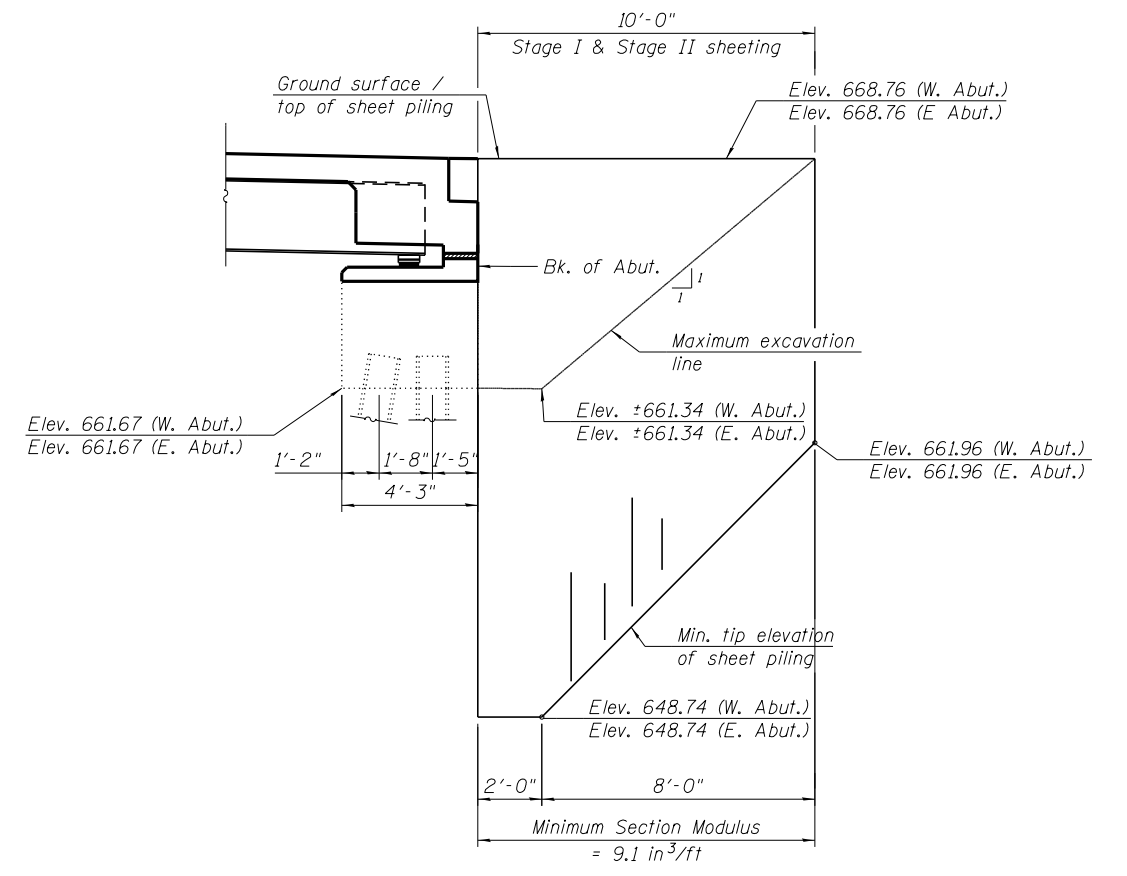
**STAGE I REMOVAL**



**STAGE II CONSTRUCTION**

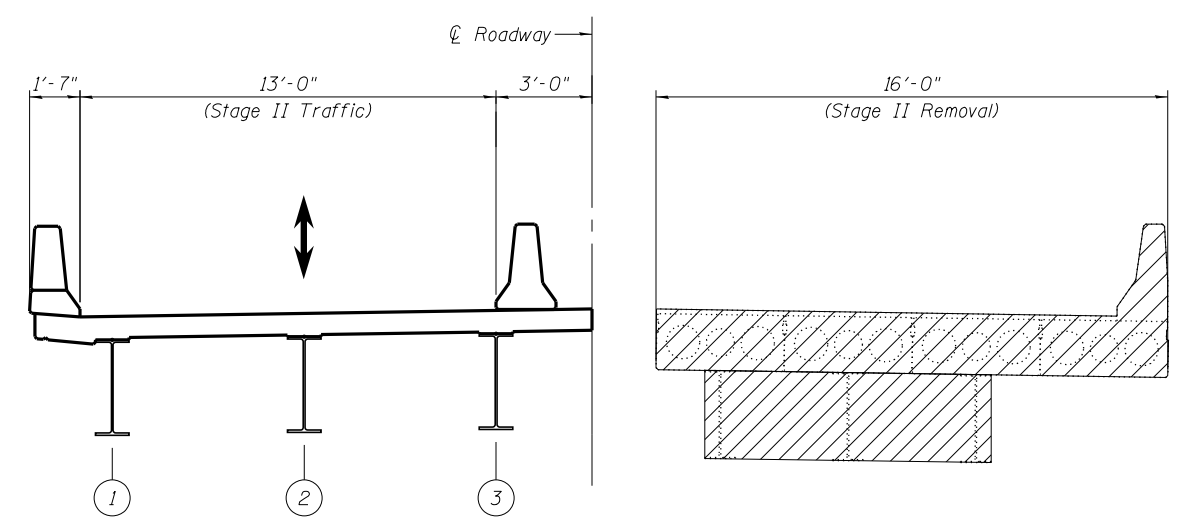


**STAGE I CONSTRUCTION**



**TEMPORARY SHEET PILING**

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



**STAGE II REMOVAL**

**Notes:**  
For quantity of Temporary Concrete Barrier, See roadway plans.  
Current load posting of 10 tons axle and 40 tons gross to remain in effect with visible sign during construction.  
All staging cross sections are looking East.

**LEGEND**

- Removal of Existing Superstructures

FILE NAME: c:\pwworkspace\carpenter\d\08660149\_66A17-2003-StageConst.dgn



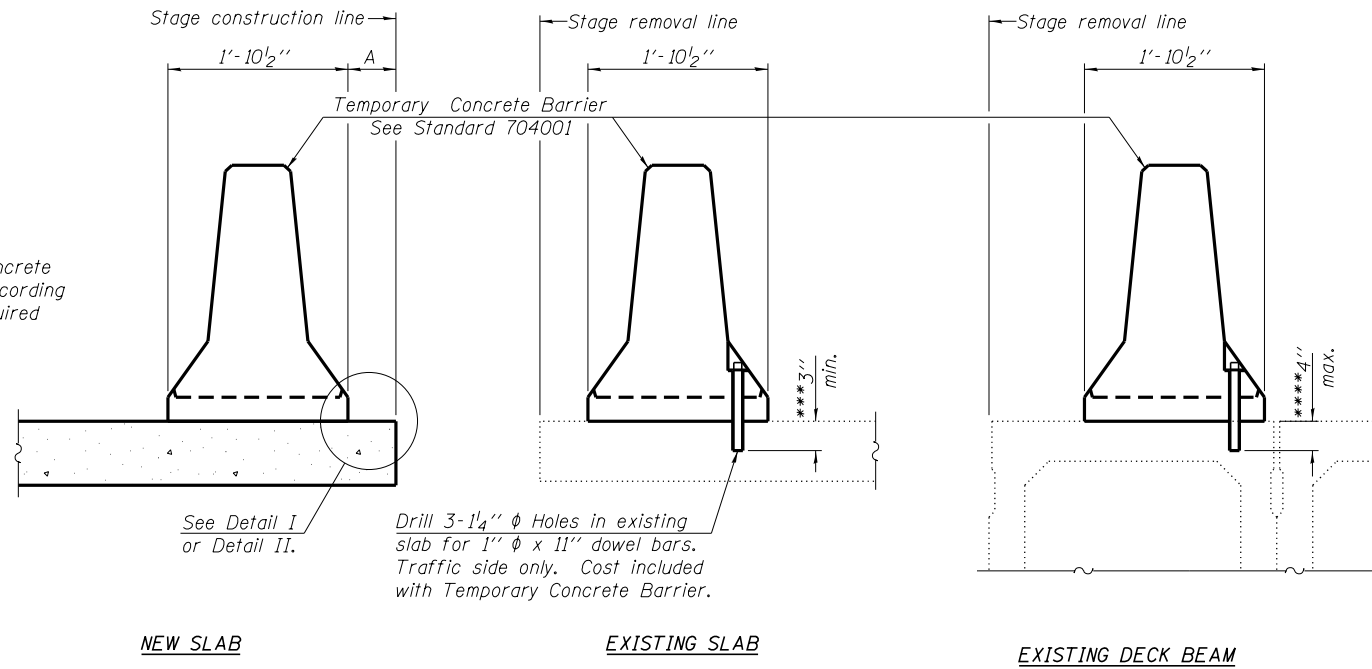
USER NAME = carpenter_dj	DESIGNED - BCM	REVISED
	CHECKED - BCM	REVISED
PLOT SCALE = N/A	DRAWN - KO	REVISED
PLOT DATE = 8/1/2014	CHECKED - 7/26/2012	REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**STAGE CONSTRUCTION DETAILS  
STRUCTURE NO. 006-0140**  
SHEET NO. S3 OF S26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
613	(8D-BR) BR	BUREAU	63	25
CONTRACT NO. 66A17				
ILLINOIS FED. AID PROJECT				

When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".



**SECTIONS THRU SLAB OR DECK BEAM**

**NOTES**

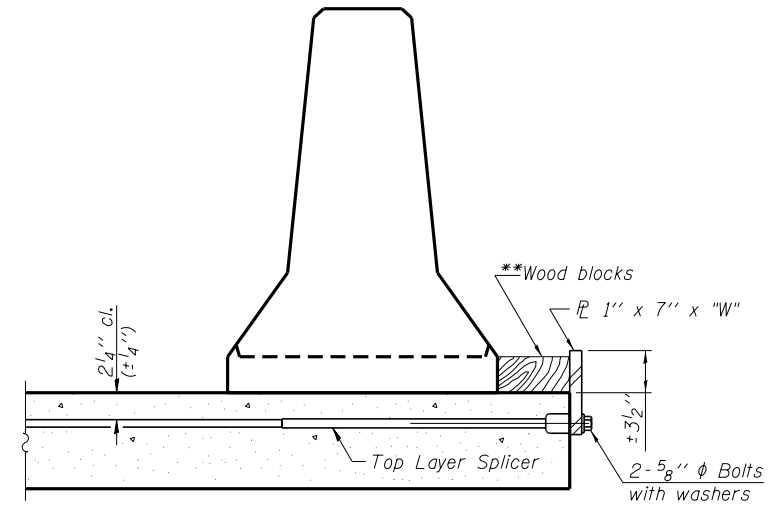
Detail I - With Bar Splicer or Couplers:  
Connect one (1) 1" x 7" x "W" steel PL to the top layer of couplers with 2-5/8" φ bolts screwed to coupler at approximate C of each barrier panel.

Detail II - With Extended Reinforcement Bars:  
Connect one (1) 1" x 7" x "W" steel PL to the concrete slab or concrete wearing surface with 2-5/8" φ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate C of each barrier panel.

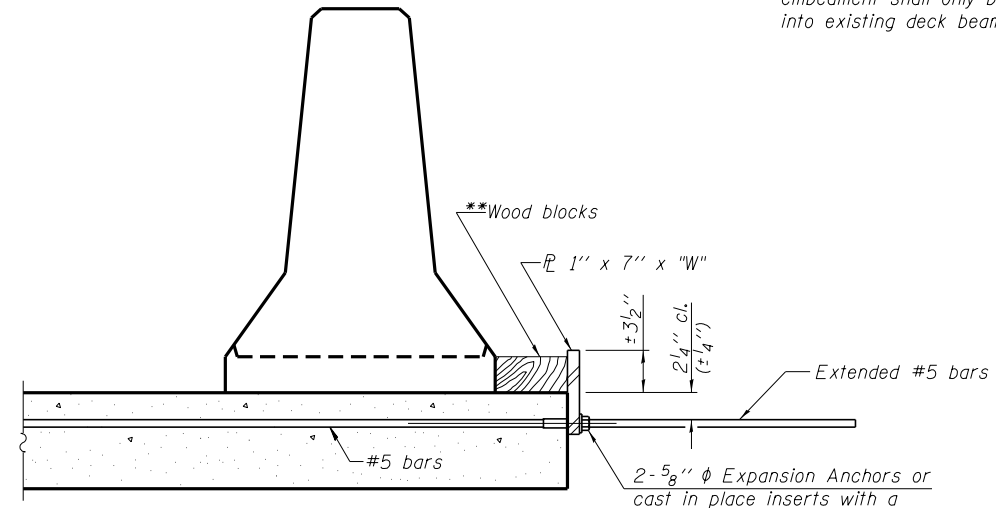
Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" x "W" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

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

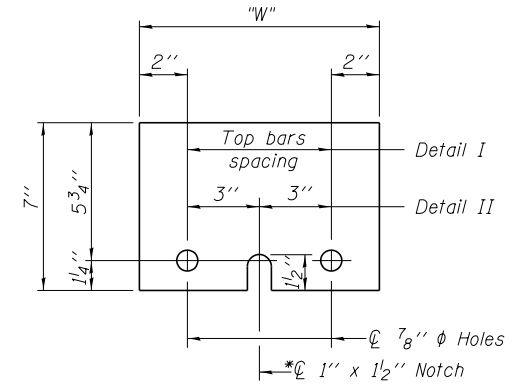
\*\*\*\* If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



**DETAIL I**



**DETAIL II**



**STEEL RETAINER PL 1" x 7" x "W"**  
\* Required only with Detail II

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

"W" = Top bars spacing + 4"

FILENAME = c:\pwworkspace\carpenter\d\08660149\_08660149\_56A17-2004-TempConcreteBarrier.dwg

R-27

7-1-10

**BLOOM COMPANIES, LLC**  
Infrastructure Division and Specialty  
600 W. Fulton Street, Suite 701 • Chicago, IL 60661  
Phone: (312) 876-9500 Fax: (312) 876-9800

USER NAME = carpenterdj	DESIGNED - BCM	REVISED
	CHECKED - KO	REVISED
PLOT SCALE = N/A	DRAWN - BCM	REVISED
PLOT DATE = 8/1/2014	CHECKED - 7/27/2012	REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY BARRIER FOR STAGE CONSTRUCTION  
STRUCTURE NO. 006-0140**

SHEET NO. S4 OF S26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
613	(8D-BR) BR	BUREAU	63	26
			CONTRACT NO. 66A17	
ILLINOIS FED. AID PROJECT				



**BEAM 1**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	966+85.13	-15.00	668.46	668.46
⊕ Brg. W. Abut.	966+87.81	-15.00	668.48	668.48
A	966+97.81	-15.00	668.54	668.56
B	967+07.81	-15.00	668.60	668.62
C	967+17.81	-15.00	668.65	668.66
⊕ Brg. Pier 1	967+29.26	-15.00	668.69	668.69
D	967+39.26	-15.00	668.71	668.72
E	967+49.26	-15.00	668.73	668.73
F	967+59.26	-15.00	668.74	668.74
⊕ Brg. Pier 2	967+71.36	-15.00	668.73	668.73
G	967+81.36	-15.00	668.71	668.73
H	967+91.36	-15.00	668.69	668.71
I	968+01.36	-15.00	668.65	668.67
⊕ Brg. E. Abut.	968+12.81	-15.00	668.60	668.60
Bk. E. Abut.	968+15.49	-15.00	668.58	668.58

**BEAM 2**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	966+89.03	-9.00	668.58	668.58
⊕ Brg. W. Abut.	966+91.71	-9.00	668.60	668.60
A	967+01.71	-9.00	668.66	668.68
B	967+11.71	-9.00	668.71	668.74
C	967+21.71	-9.00	668.76	668.77
⊕ Brg. Pier 1	967+33.16	-9.00	668.79	668.79
D	967+43.16	-9.00	668.81	668.82
E	967+53.16	-9.00	668.83	668.83
F	967+63.16	-9.00	668.83	668.83
⊕ Brg. Pier 2	967+75.26	-9.00	668.82	668.82
G	967+85.26	-9.00	668.80	668.81
H	967+95.26	-9.00	668.77	668.79
I	968+05.26	-9.00	668.73	668.75
⊕ Brg. E. Abut.	968+16.70	-9.00	668.67	668.67
Bk. E. Abut.	968+19.39	-9.00	668.65	668.65

**BEAM 3**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	966+92.92	-3.00	668.70	668.70
⊕ Brg. W. Abut.	966+95.60	-3.00	668.72	668.72
A	967+05.60	-3.00	668.77	668.80
B	967+15.60	-3.00	668.82	668.85
C	967+25.60	-3.00	668.86	668.88
⊕ Brg. Pier 1	967+37.05	-3.00	668.90	668.90
D	967+47.05	-3.00	668.91	668.92
E	967+57.05	-3.00	668.92	668.93
F	967+67.05	-3.00	668.92	668.92
⊕ Brg. Pier 2	967+79.16	-3.00	668.91	668.91
G	967+89.16	-3.00	668.88	668.89
H	967+99.16	-3.00	668.85	668.87
I	968+09.16	-3.00	668.80	668.82
⊕ Brg. E. Abut.	968+20.60	-3.00	668.74	668.74
Bk. E. Abut.	968+23.28	-3.00	668.72	668.72

**BEAM 4**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	966+96.82	3.00	668.72	668.72
⊕ Brg. W. Abut.	966+99.50	3.00	668.74	668.74
A	967+09.50	3.00	668.80	668.82
B	967+19.50	3.00	668.84	668.86
C	967+29.50	3.00	668.88	668.89
⊕ Brg. Pier 1	967+40.95	3.00	668.90	668.90
D	967+50.95	3.00	668.92	668.92
E	967+60.95	3.00	668.92	668.93
F	967+70.95	3.00	668.92	668.92
⊕ Brg. Pier 2	967+83.05	3.00	668.90	668.90
G	967+93.05	3.00	668.87	668.88
H	968+03.05	3.00	668.83	668.86
I	968+13.05	3.00	668.78	668.80
⊕ Brg. E. Abut.	968+24.50	3.00	668.72	668.72
Bk. E. Abut.	968+27.18	3.00	668.70	668.70

**BEAM 5**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	967+00.71	9.00	668.65	668.65
⊕ Brg. W. Abut.	967+03.40	9.00	668.67	668.67
A	967+13.40	9.00	668.72	668.74
B	967+23.40	9.00	668.76	668.79
C	967+33.40	9.00	668.79	668.81
⊕ Brg. Pier 1	967+44.85	9.00	668.82	668.82
D	967+54.85	9.00	668.83	668.83
E	967+64.85	9.00	668.83	668.83
F	967+74.85	9.00	668.82	668.82
⊕ Brg. Pier 2	967+86.95	9.00	668.79	668.79
G	967+96.95	9.00	668.76	668.78
H	968+06.95	9.00	668.72	668.74
I	968+16.95	9.00	668.67	668.69
⊕ Brg. E. Abut.	968+28.39	9.00	668.60	668.60
Bk. E. Abut.	968+31.07	9.00	668.58	668.58

**BEAM 6**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	967+04.61	15.00	668.58	668.58
⊕ Brg. W. Abut.	967+07.29	15.00	668.60	668.60
A	967+17.29	15.00	668.64	668.66
B	967+27.29	15.00	668.68	668.71
C	967+37.29	15.00	668.71	668.72
⊕ Brg. Pier 1	967+48.74	15.00	668.73	668.73
D	967+58.74	15.00	668.74	668.74
E	967+68.74	15.00	668.73	668.74
F	967+78.74	15.00	668.72	668.72
⊕ Brg. Pier 2	967+90.85	15.00	668.69	668.69
G	968+00.85	15.00	668.65	668.67
H	968+10.85	15.00	668.61	668.63
I	968+20.85	15.00	668.55	668.57
⊕ Brg. E. Abut.	968+32.29	15.00	668.48	668.48
Bk. E. Abut.	968+34.97	15.00	668.46	668.46

FILE NAME: c:\pawork\spudsa\carpenter\d\08660149\_66A17\_2006-100.dgn



USER NAME = carpenterdj	DESIGNED - BCM	REVISED
	CHECKED - KO	REVISED
PLOT SCALE = N/A	DRAWN - SD	REVISED
PLOT DATE = 8/1/2014	CHECKED - 7/20/2012	REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TOP OF DECK ELEVATIONS - II  
STRUCTURE NO. 006-0140**

F.A.P. RTE. 613	SECTION (8D-BR) BR	COUNTY BUREAU	TOTAL SHEETS 63	SHEET NO. 28
CONTRACT NO. 66A17				ILLINOIS FED. AID PROJECT



**NORTH EDGE OF SHOULDER**

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr. Pav't	966+55.47	-16.00	668.22
A1	966+65.47	-16.00	668.29
A2	966+75.47	-16.00	668.37
E. End W. Appr. Pav't	966+85.47	-16.00	668.44

**NORTH EDGE OF PAVEMENT**

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr. Pav't	966+58.07	-12.00	668.30
A1	966+68.07	-12.00	668.37
A2	966+78.07	-12.00	668.45
E. End W. Appr. Pav't	966+88.07	-12.00	668.52

**CL ROADWAY, P.G., & STAGE CONSTRUCTION LINE**

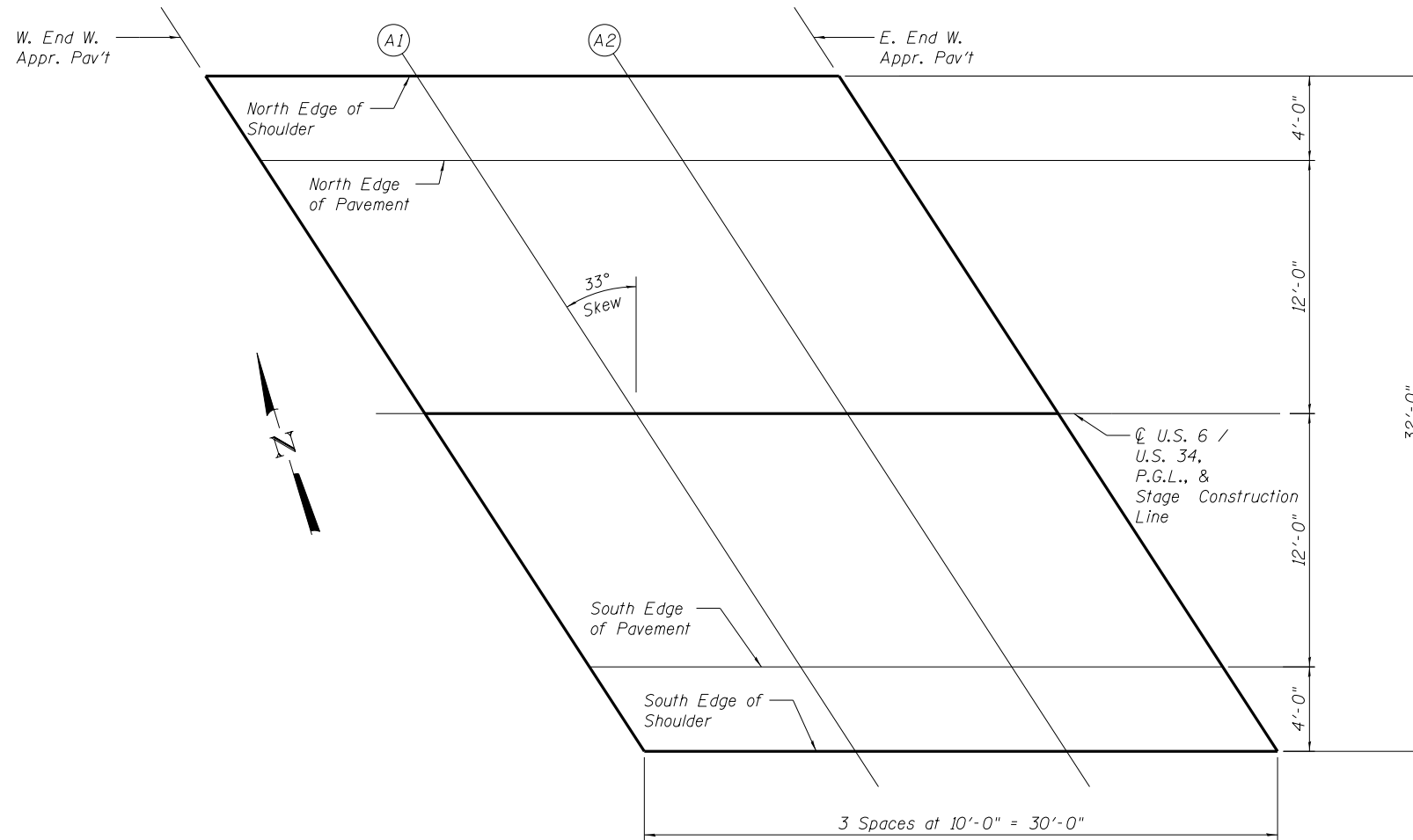
Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr. Pav't	966+65.86	0.00	668.55
A1	966+75.86	0.00	668.62
A2	966+85.86	0.00	668.70
E. End W. Appr. Pav't	966+95.86	0.00	668.76

**SOUTH EDGE OF PAVEMENT**

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr. Pav't	966+73.66	12.00	668.42
A1	966+83.66	12.00	668.49
A2	966+93.66	12.00	668.56
E. End W. Appr. Pav't	967+03.66	12.00	668.62

**SOUTH EDGE OF SHOULDER**

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr. Pav't	966+76.25	16.00	668.37
A1	966+86.25	16.00	668.45
A2	966+96.25	16.00	668.52
E. End W. Appr. Pav't	967+06.25	16.00	668.58



FILENAME = c:\pawork\spawork\carpenter\d\08660149\_56A17-207-T04\_Appr-Slab.dgn



USER NAME = carpenterdj	DESIGNED - BCM	REVISED
	CHECKED - KO	REVISED
PLOT SCALE = N/A	DRAWN - SD	REVISED
PLOT DATE = 8/7/2014	CHECKED - 7/20/2012	REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TOP OF WEST APPROACH SLAB ELEVATIONS  
STRUCTURE NO. 006-0140**

SHEET NO. 57 OF 526 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
613	(8D-BR) BR	BUREAU	63	29
CONTRACT NO. 66A17				
ILLINOIS FED. AID PROJECT				

**NORTH EDGE OF SHOULDER**

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr. Pav't	968+13.85	-16.00	668.58
A3	968+23.85	-16.00	668.52
A4	968+33.85	-16.00	668.45
E. End E. Appr. Pav't	968+43.85	-16.00	668.38

**NORTH EDGE OF PAVEMENT**

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr. Pav't	968+16.44	-12.00	668.62
A3	968+26.44	-12.00	668.56
A4	968+36.44	-12.00	668.49
E. End E. Appr. Pav't	968+46.44	-12.00	668.42

**CL ROADWAY, P.G., & STAGE CONSTRUCTION LINE**

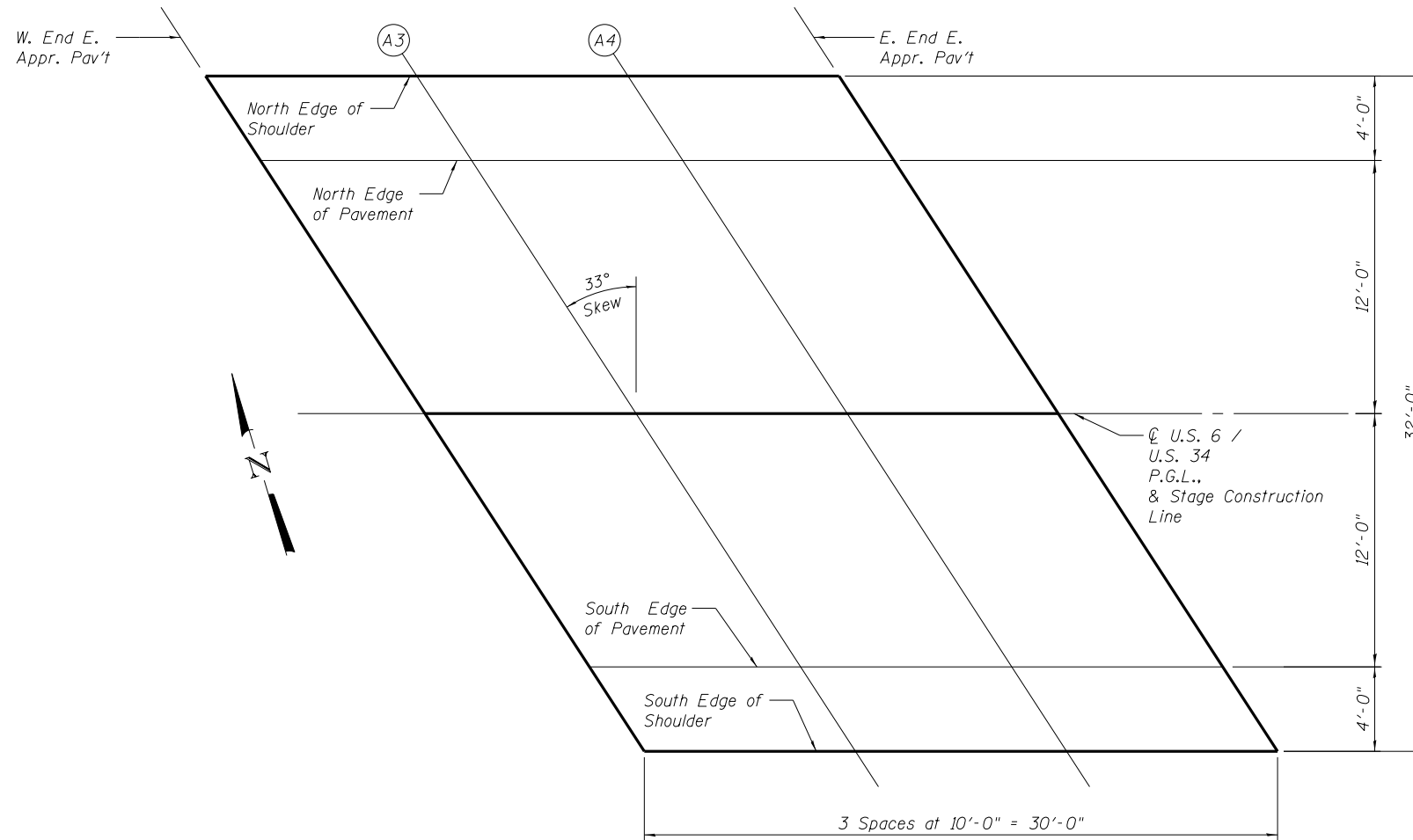
Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr. Pav't	968+24.24	0.00	668.77
A3	968+34.24	0.00	668.70
A4	968+44.24	0.00	668.62
E. End E. Appr. Pav't	968+54.24	0.00	668.55

**SOUTH EDGE OF PAVEMENT**

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr. Pav't	968+32.03	12.00	668.53
A3	968+42.03	12.00	668.45
A4	968+52.03	12.00	668.38
E. End E. Appr. Pav't	968+62.03	12.00	668.30

**SOUTH EDGE OF SHOULDER**

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr. Pav't	968+34.63	16.00	668.44
A3	968+44.63	16.00	668.37
A4	968+54.63	16.00	668.29
E. End E. Appr. Pav't	968+64.63	16.00	668.22



**PLAN**

FILENAME = c:\pawork\spudsa\carpenter\d\08660140\_56A17-2008-10E\_Appr-Slab.dgn



USER NAME = carpenterdj	DESIGNED - BCM	REVISED
	CHECKED - KO	REVISED
PLOT SCALE = N/A	DRAWN - SD	REVISED
PLOT DATE = 8/1/2014	CHECKED - 7/20/2012	REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

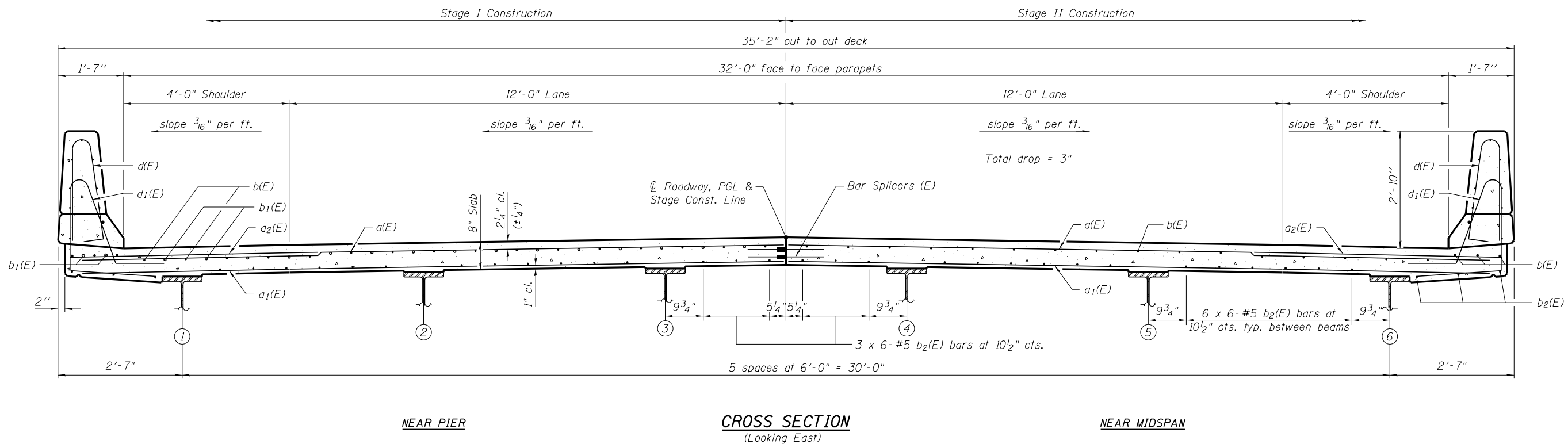
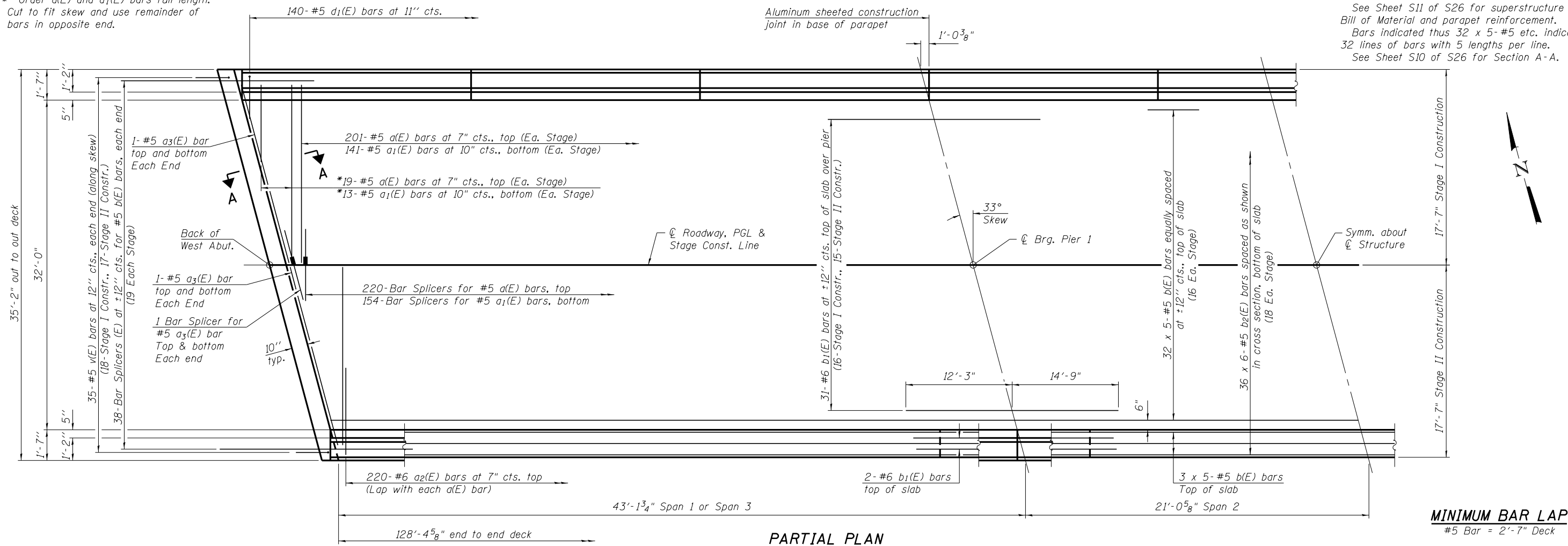
**TOP OF EAST APPROACH SLAB ELEVATIONS  
STRUCTURE NO. 006-0140**

SHEET NO. 58 OF 526 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
613	(8D-BR) BR	BUREAU	63	30
CONTRACT NO. 66A17				
ILLINOIS FED. AID PROJECT				

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

Notes:  
See Sheet S11 of S26 for superstructure details,  
Bill of Material and parapet reinforcement.  
Bars indicated thus 32 x 5-#5 etc. indicates  
32 lines of bars with 5 lengths per line.  
See Sheet S10 of S26 for Section A-A.



FILE NAME = \\p010101\cadd\carpenter\j\044442\0860140-66A17-009-super1.dgn  
CB PROJECT NO. 100652-2

**Coombe-Bloxdorf P.C.**  
CIVIL ENGINEERS-  
STRUCTURAL ENGINEERS-  
LAND SURVEYORS-  
Design Firm License No. 184-002703

USER NAME = carpenterdj	DESIGNED - AMC	REVISED -
PLOT SCALE = 0:2.0000 '1' / 1"	CHECKED - GJB	REVISED -
PLOT DATE = 8/1/2014	DRAWN - CFC	REVISED -
	CHECKED - MCB	REVISED -

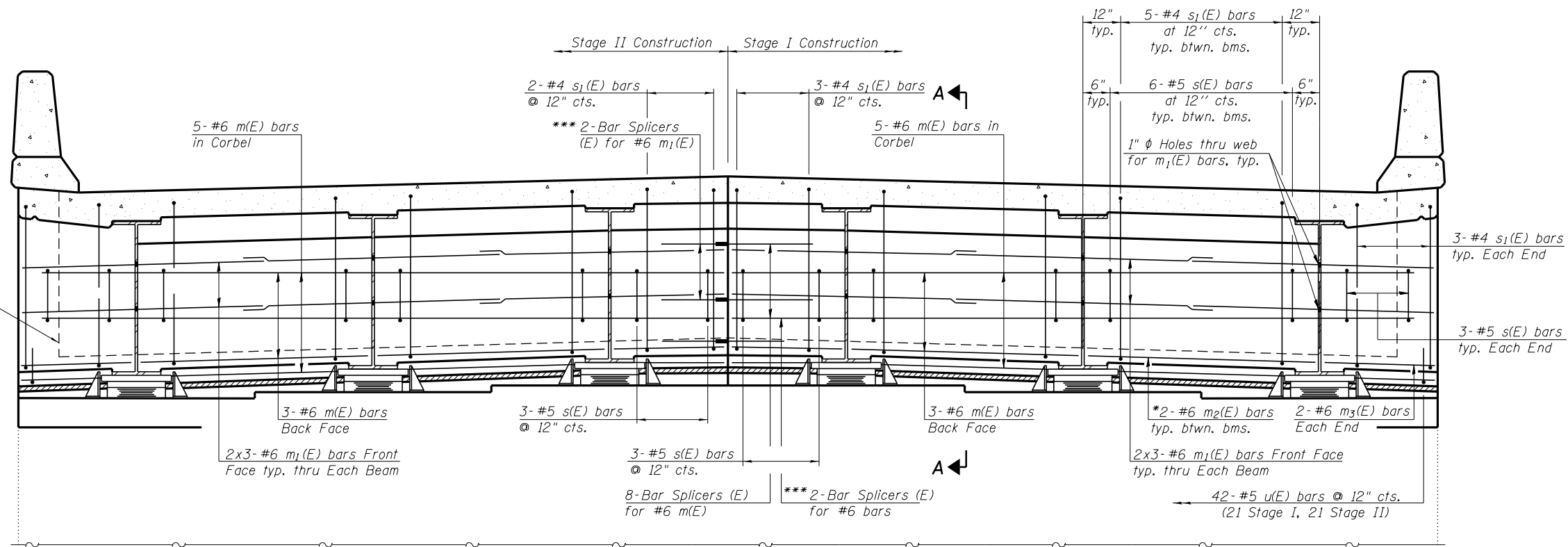
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**SUPERSTRUCTURE**  
**STRUCTURE NO. 006-0140**

F.A.P. RTE. 613	SECTION (8D-BR) BR	COUNTY BUREAU	TOTAL SHEETS 63	SHEET NO. 31
CONTRACT NO. 66A17				
ILLINOIS FED. AID PROJECT				

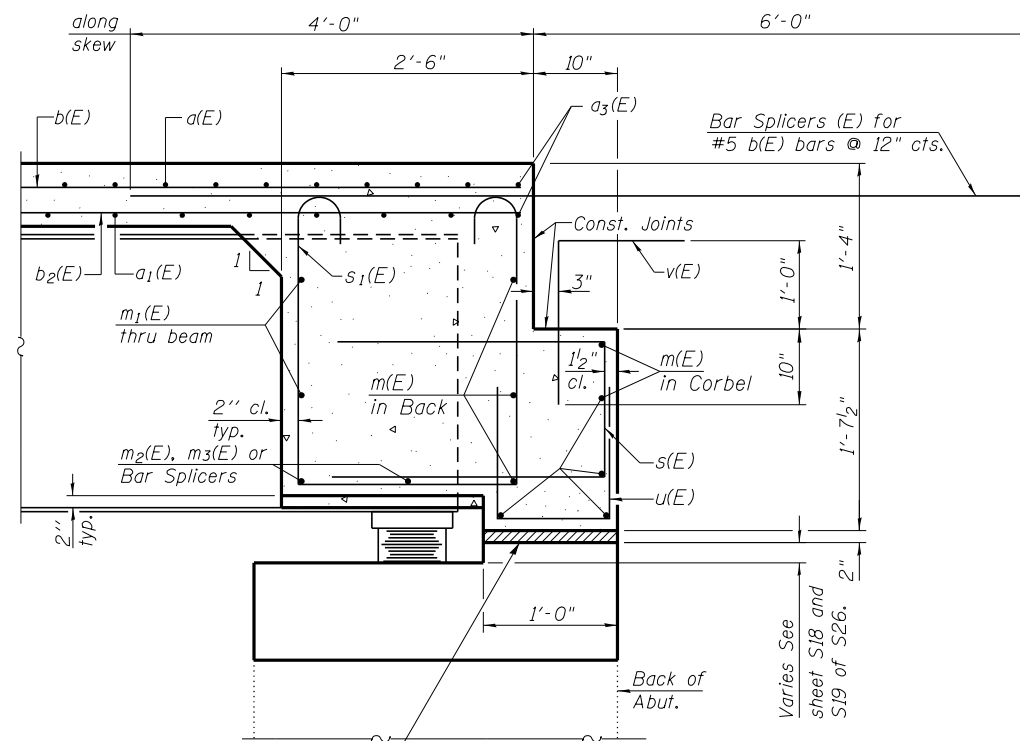
SHEET NO. S9 OF S26 SHEETS

Limits of fabric reinforced elastomeric mat see sheet S18 and S19 of S26.



**DIAPHRAGM ELEVATION AT ABUTMENT**  
(Looking West at West abutment)

- \* Except at Stage line.
- \*\* Cost included with Concrete Superstructure.
- \*\*\* Use special bar splicers 3'-5" long.



\*\*\*2" Preformed Joint Filler (Section 1051 of the Standard Specifications) Bonded to abutment cap with Approved adhesive full width cap.

**SECTION A-A**  
Dimensions at right angles to abutment, except as shown.

Notes:  
Reinforcement bars in diaphragm are billed with superstructure on sheet S11 of S26.  
Concrete in diaphragm is included with Concrete Superstructure on sheet S11 of S26.  
Concrete in backwall is included with Concrete Structures on sheet S17 and S18 of S26.  
For details of bars s(E), s1(E), v(E) & u(E), see sheet S11 of S26.  
The s(E) and s1(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.

**MIN. BAR LAP**  
#6 bar = 3'-4" (Diaphragm)

FILE NAME = c:\pds\cadd\carpenter\d\0404442\0060148-66017-018-diaphragm.dgn  
CB PROJECT NO. 108652-2

**Coombe-Bloxdorf P.C.**  
- CIVIL ENGINEERS -  
- STRUCTURAL ENGINEERS -  
- LAND SURVEYORS -  
Design Firm License No. 184-002703

USER NAME = carpenterdj  
PLOT SCALE = 0:2.0000 '1' / in.  
PLOT DATE = 8/1/2014

DESIGNED - AMC  
CHECKED - GJB  
DRAWN - CFC  
CHECKED - MCB

REVISED -  
REVISED -  
REVISED -  
REVISED -

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

**DIAPHRAGM DETAILS**  
**STRUCTURE NO. 006-0140**

SHEET NO. S10 OF S26 SHEETS

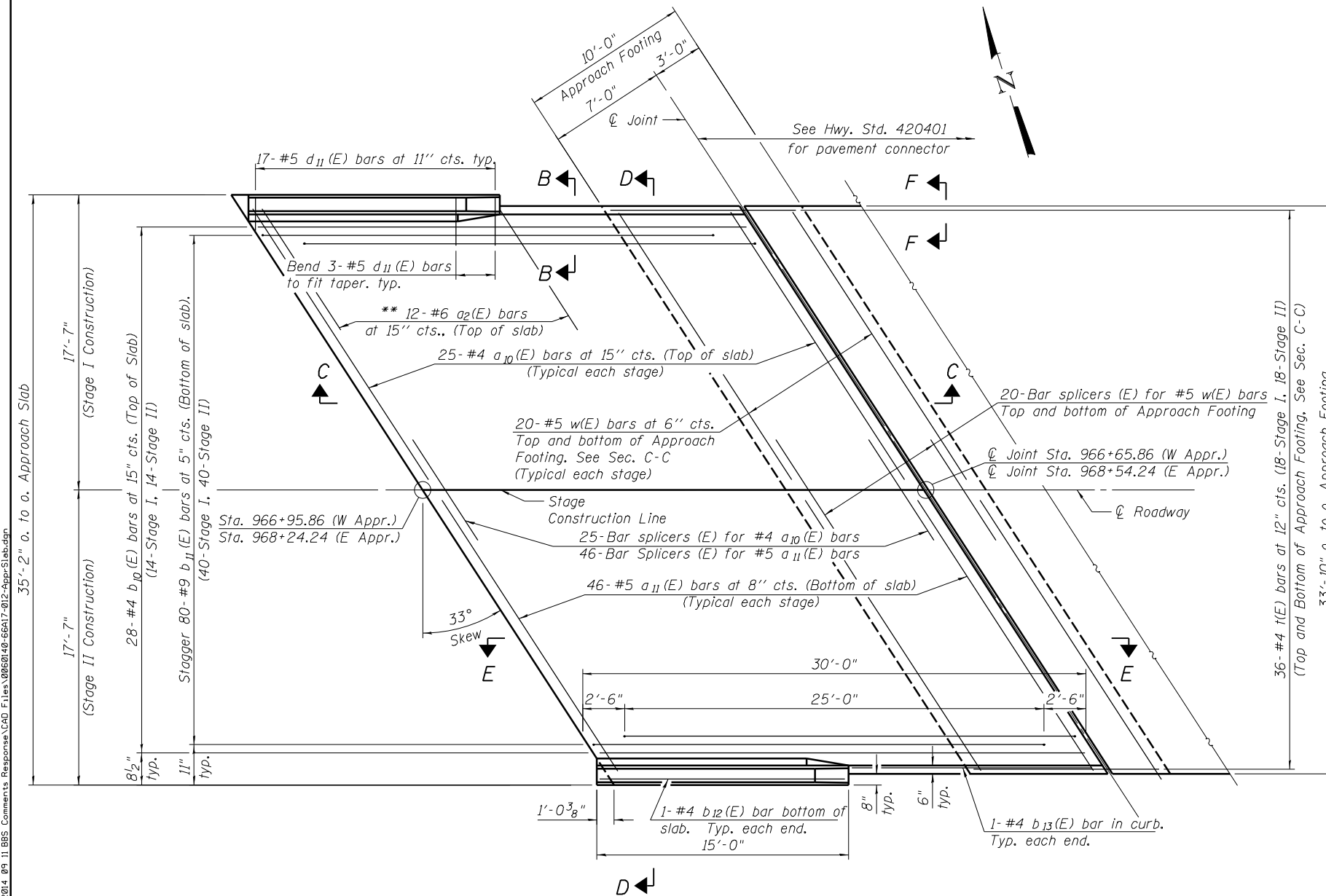
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
613	(8D-BR) BR	BUREAU	63	32
CONTRACT NO. 66A17				

ILLINOIS FED. AID PROJECT



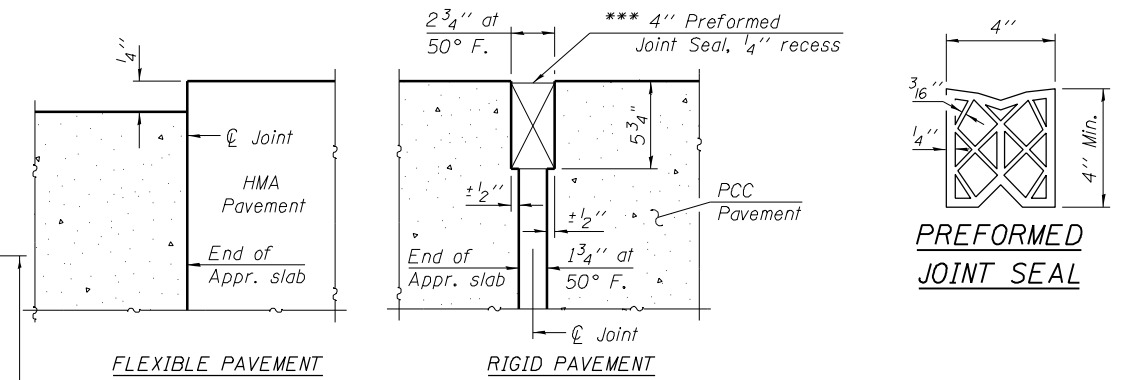
Notes:  
 See sheet S13 of S26 for Sections C-C & D-D and View E-E.  
 $a_{10}(E)$  and  $a_{11}(E)$  bar spacings measured along  $\varnothing$  Rdwy.  
 See sheet S13 of S26 for location of Detail A.

\*\*\* Cost included with Concrete Superstructure.

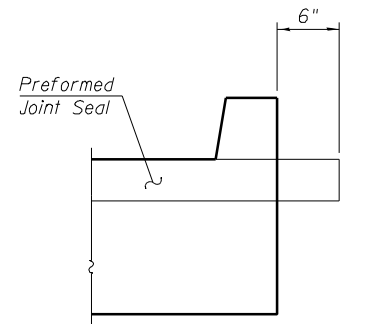
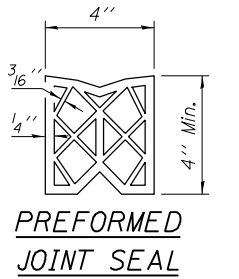


**PLAN**

(East Approach shown. West Approach similar, opposite hand.)  
 \* Tilt #9  $b_{11}(E)$  bars as required to maintain clearance.  
 \*\* Space between  $a_{10}(E)$  bars, typ. each parapet.

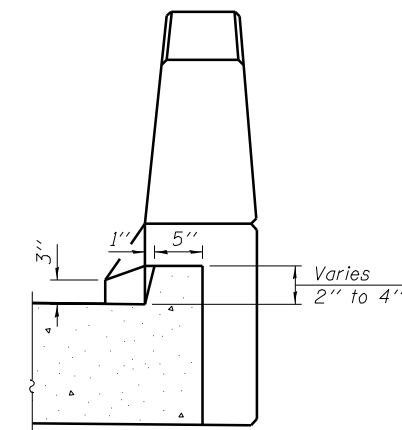


**DETAIL A**



**VIEW F-F**

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



**VIEW B-B**

FILENAME = F:\3-1308 IDDTDist\3-1308B-US34Coal\Submittals\Comments\2014\_B9\_11\_BBS\_Comments\_Response\CAD\_Files\006017-012-Appr-Slab.dgn



USER NAME = bmattas	DESIGNED - BCM	REVISED
PLOT SCALE = N/A	CHECKED - KO	REVISED
PLOT DATE = 9/11/2014	DRAWN - BCM	REVISED
	CHECKED - 7/25/2012	REVISED

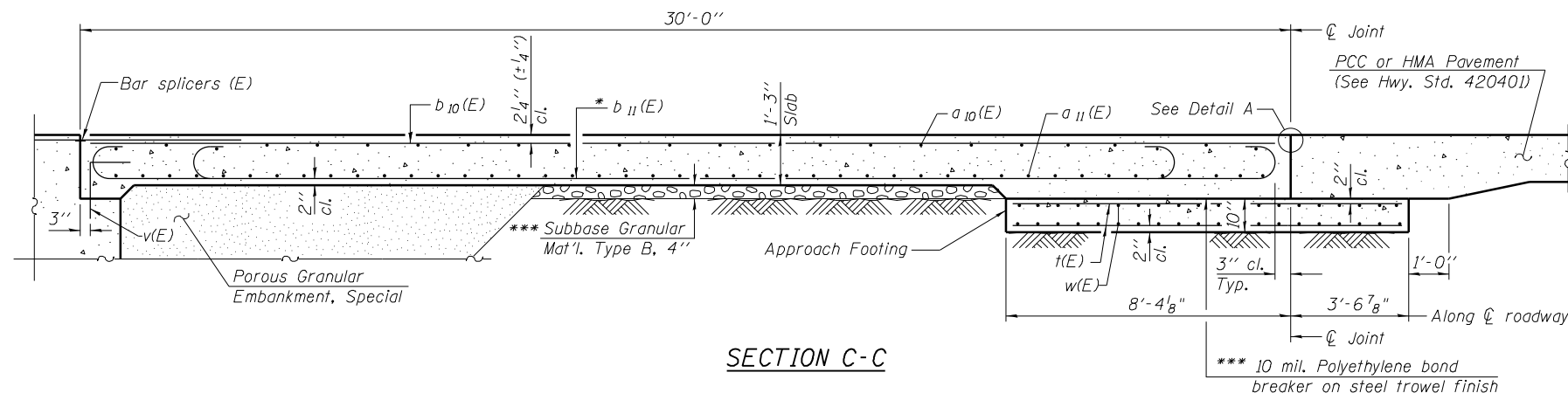
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**BRIDGE APPROACH SLAB DETAILS - I  
 STRUCTURE NO. 006-0140**

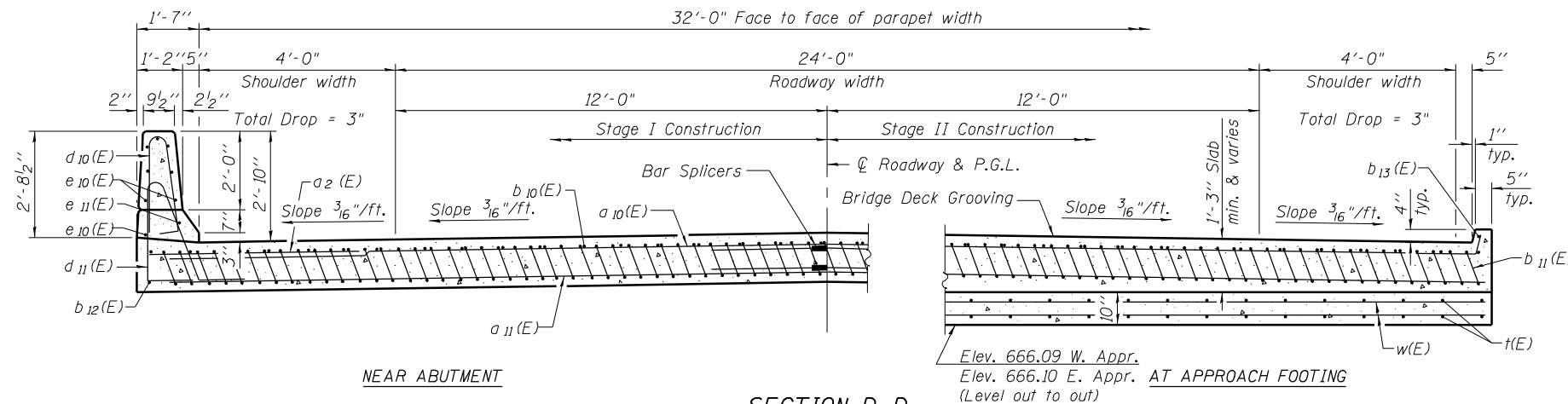
SHEET NO. S12 OF S26 SHEETS

F.A.P. RTE. 613	SECTION (8D-BR) BR	COUNTY BUREAU	TOTAL SHEETS 63	SHEET NO. 34
CONTRACT NO. 66A17				ILLINOIS FED. AID PROJECT

Notes:  
 See sheet S12 of S26 for Detail A.  
 Approach slab and parapet concrete shall be paid for as Concrete Superstructure.  
 Approach footing concrete shall be paid for as Concrete Structures.  
 Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.  
 For v(E) bar details, see sheet S9 and S10 of S26.  
 The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.  
 For bar splicer details, see sheet S22 of S26.  
 Cost of excavation for approach footing included with Concrete Structures.  
 For Porous Granular Embankment, Special and drainage treatment details, see sheet S2 of S26.  
 For additional parapet details, see sheet S11 of S26.

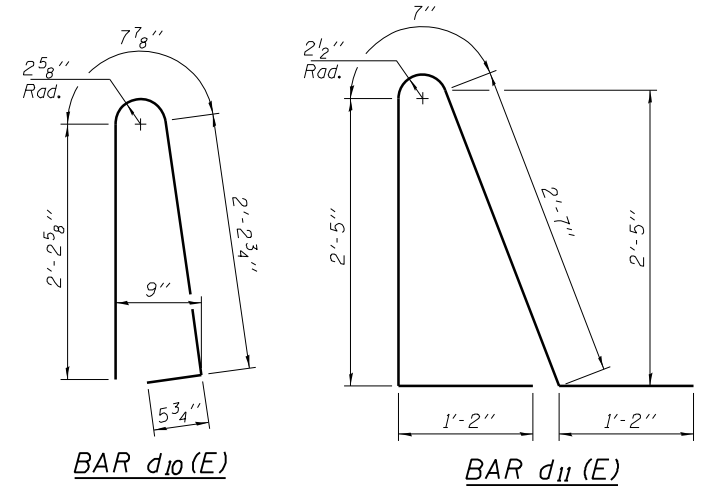


SECTION C-C



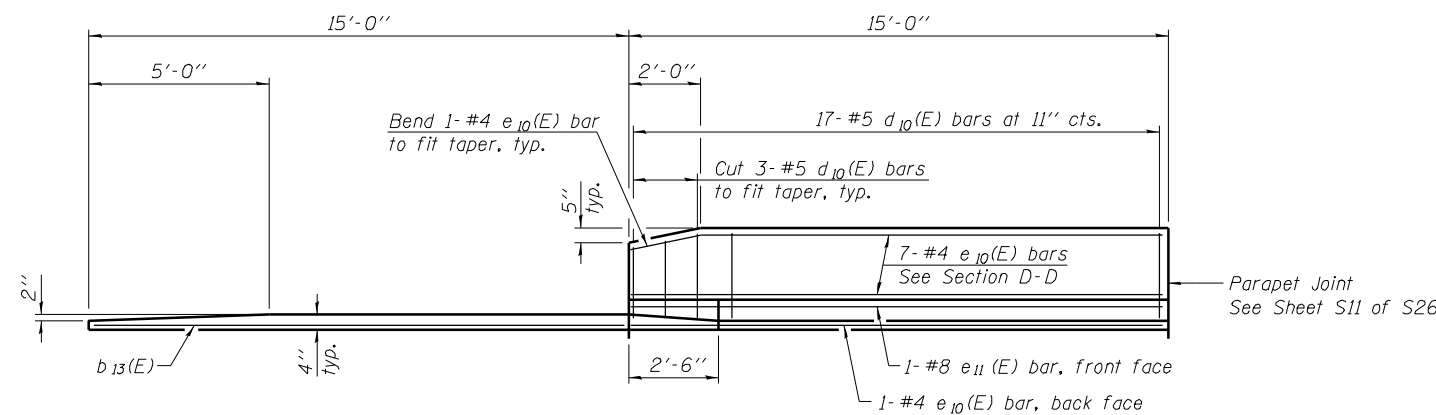
SECTION D-D

(See Plan for dimensions not shown)

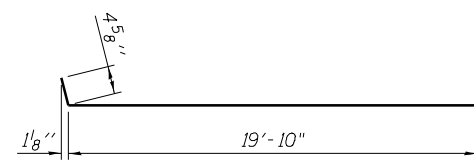


\* Tilt #9 b11(E) bars as required to maintain clearance.

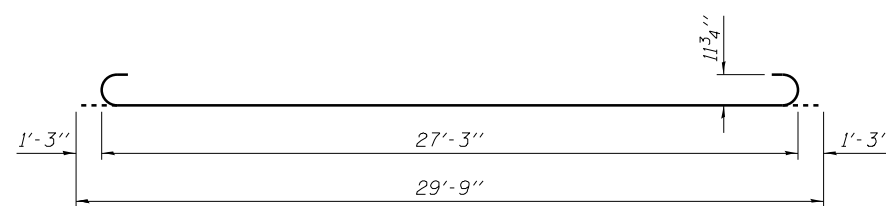
\*\*\* Cost included with Concrete Superstructure.



VIEW E-E



BAR a10(E)

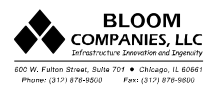


BAR b11(E)

TWO APPROACHES  
 BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a2(E)	48	#6	6'-6"	U
a10(E)	100	#4	20'-3"	—
a11(E)	184	#5	19'-10"	—
b10(E)	56	#4	29'-8"	—
b11(E)	160	#9	29'-9"	U
b12(E)	4	#4	14'-8"	—
b13(E)	4	#4	14'-6"	—
d10(E)	68	#5	5'-7"	U
d11(E)	68	#5	7'-11"	U
e10(E)	32	#4	14'-8"	—
e11(E)	4	#8	14'-8"	—
t(E)	144	#4	11'-7"	—
w(E)	160	#5	19'-10"	—
Concrete Superstructure		Cu. Yd.	108.6	
Concrete Structures		Cu. Yd.	25.0	
Reinforcement Bars, Epoxy Coated		Pound	28860	

FILENAME: F:\3-1308\DDTD\dist\3-1308\BBS\US34\coal\Submittals\Comments\2014\_B9\_11\BBS Comments Response\CAD Files\0052140-66A17-013-Appr-Slab.dgn



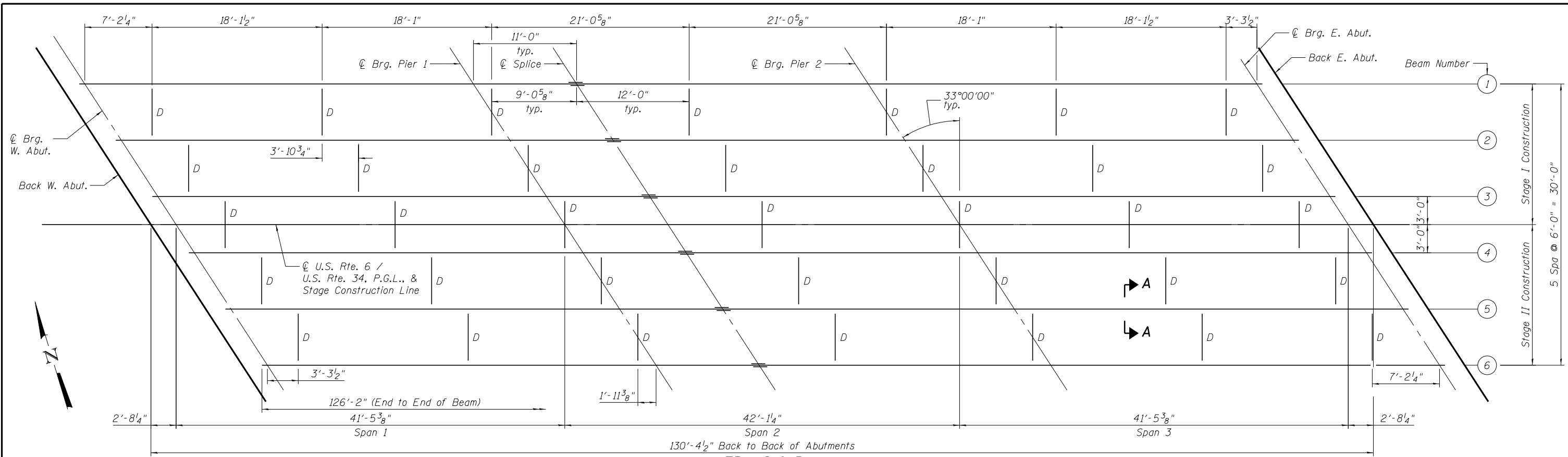
USER NAME = bmattas	DESIGNED - BCM	REVISED
	CHECKED - KO	REVISED
PLOT SCALE = N/A	DRAWN - BCM	REVISED
PLOT DATE = 9/11/2014	CHECKED - 7/25/2012	REVISED

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

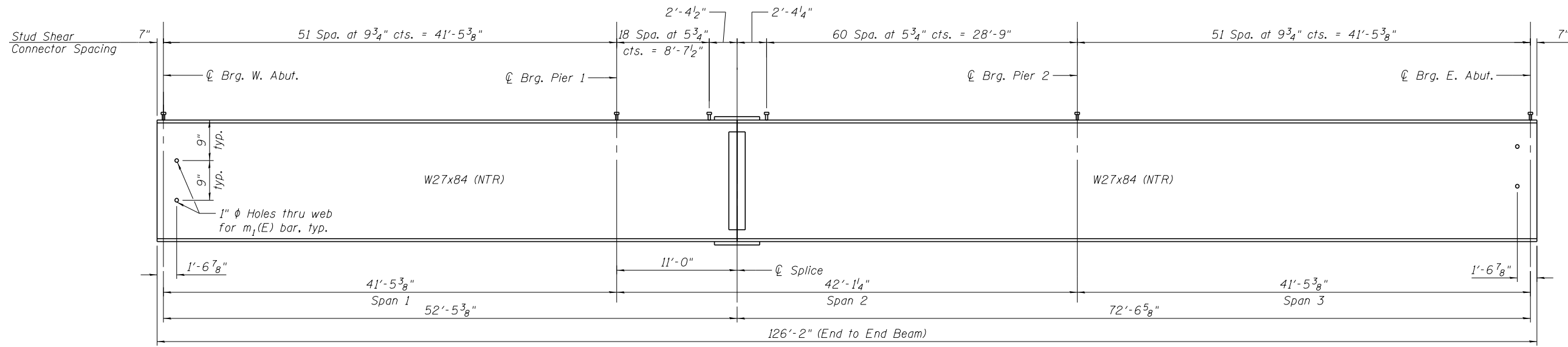
BRIDGE APPROACH SLAB DETAILS - II  
 STRUCTURE NO. 006-0140

SHEET NO. S13 OF S26 SHEETS

F.A.P. RTE. 613	SECTION (8D-BR) BR	COUNTY BUREAU	TOTAL SHEETS 63	SHEET NO. 35
CONTRACT NO. 66A17				
ILLINOIS FED. AID PROJECT				



**FRAMING PLAN**

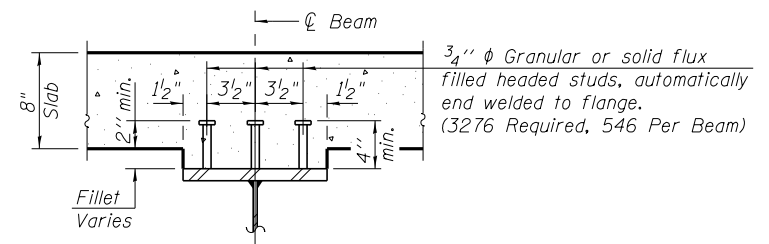


**BEAM ELEVATION**

**TOP OF BEAM ELEVATIONS**  
(For fabrication only)

Beam	℄ Brg. W. Abut.	℄ Pier 1	℄ Field Splice	℄ Pier 2	℄ Brg. E. Abut.
1	667.77	667.81	667.82	667.85	667.89
2	667.89	667.91	667.92	667.94	667.96
3	668.01	668.02	668.02	668.02	668.03
4	668.03	668.02	668.02	668.02	668.01
5	667.96	667.94	667.93	667.91	667.89
6	667.89	667.85	667.84	667.81	667.77

**Notes:**  
 All diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual diaphragms at supports may be temporarily disconnected to install bearing anchor rods.  
 Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.  
 All steel members including primary members, diaphragms, and connecting angles shall be AASHTO M270 Grade 50W.



**SECTION A-A**

FILENAME: c:\pwworkspace\carpenterj\job\044492\0660149\_66A17-014\_FramingPlan.dgn



USER NAME = carpenterj	DESIGNED - KO	REVISED
PLOT SCALE = N/A	CHECKED - BCM	REVISED
PLOT DATE = 8/1/2014	DRAWN - KO	REVISED
	CHECKED - 7/25/2012	REVISED

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

**FRAMING PLAN**  
**STRUCTURE NO. 006-0140**  
SHEET NO. S14 OF S26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
613	(8D-BR) BR	BUREAU	63	36
CONTRACT NO. 66A17				
ILLINOIS FED. AID PROJECT				



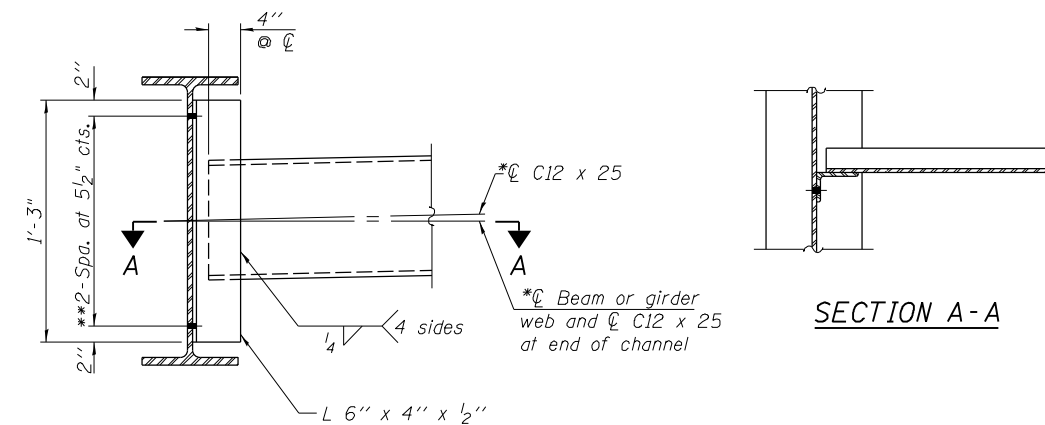
INTERIOR GIRDER MOMENT TABLE				
		0.4 Sp. 1 or 0.6 Sp. 3	0.5 Sp. 2	Pier 1 or Pier 2
$I_s$	(in <sup>4</sup> )	2850	2850	2850
$I_c(n)$	(in <sup>4</sup> )	8886	8886	8886
$I_c(3n)$	(in <sup>4</sup> )	6617	6617	6617
$I_c(cr)$	(in <sup>4</sup> )	-	-	4523
$S_s$	(in <sup>3</sup> )	213	213	213
$S_c(n)$	(in <sup>3</sup> )	339	339	339
$S_c(3n)$	(in <sup>3</sup> )	306	306	306
$S_c(cr)$	(in <sup>3</sup> )	-	-	265
DC1	(k/')	0.714	0.714	0.714
M <sub>DC1</sub>	(k)	98	34	125
DC2	(k/')	0.150	0.150	0.150
M <sub>DC2</sub>	(k)	20	7	26
DW	(k/')	0.267	0.267	0.267
M <sub>DW</sub>	(k)	36	13	47
M <sub>Σ + IM</sub>	(k)	370	294	287
M <sub>u</sub> (Strength I)	(k)	849	585	762
φ <sub>r</sub> M <sub>n</sub>	(k)	1731.3	1799.8	998.1
f <sub>s</sub> DC1	(ksi)	5.5	1.9	7.0
f <sub>s</sub> DC2	(ksi)	0.8	0.3	1.2
f <sub>s</sub> DW	(ksi)	1.3	0.5	2.1
f <sub>s</sub> (Σ + IM)	(ksi)	13.1	10.4	13.0
f <sub>s</sub> (Service II)	(ksi)	24.6	16.2	27.2
0.95R <sub>n</sub> F <sub>yf</sub>	(ksi)	47.5	47.5	47.5
f <sub>s</sub> (Total)(Strength I)	(ksi)			
φ <sub>r</sub> F <sub>n</sub>	(ksi)			
V <sub>r</sub>	(k)	16.8	18.7	

INTERIOR GIRDER REACTION TABLE		
	Abutments	Piers
R <sub>DC1</sub>	(k) 18.4*	32.9
R <sub>DC2</sub>	(k) 20.6*	6.9
R <sub>DW</sub>	(k) 7.8*	12.3
R <sub>Σ + IM</sub>	(k) 65.1	80.9
R <sub>Total</sub>	(k) 111.9	133.0

\* Dead Load reaction includes concrete diaphragm and approach slab.

- $I_s, S_s$ : Non-composite moment of inertia and section modulus of the steel section used for computing  $f_s$  (Total-Strength I, and Service II) due to non-composite dead loads (in.<sup>4</sup> and in.<sup>3</sup>).
- $I_c(n), S_c(n)$ : Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing  $f_s$  (Total-Strength I, and Service II) in uncracked sections due to short-term composite live loads (in.<sup>4</sup> and in.<sup>3</sup>).
- $I_c(3n), S_c(3n)$ : Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing  $f_s$  (Total-Strength I, and Service II) in uncracked sections, due to long-term composite (superimposed) dead loads (in.<sup>4</sup> and in.<sup>3</sup>).
- $I_c(cr), S_c(cr)$ : Composite moment of inertia and section modulus of the steel and longitudinal deck reinforcement, used for computing  $f_s$  (Total-Strength I and Service II) in cracked sections, due to both short-term composite live loads and long-term composite (superimposed) dead loads (in.<sup>4</sup> and in.<sup>3</sup>).
- DC1: Un-factored non-composite dead load (kips/ft.).
- M<sub>DC1</sub>: Un-factored moment due to non-composite dead load (kip-ft.).
- DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).
- M<sub>DC2</sub>: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).
- DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).
- M<sub>DW</sub>: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).
- M<sub>Σ + IM</sub>: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).
- M<sub>u</sub> (Strength I): Factored design moment (kip-ft.).  
1.25 (M<sub>DC1</sub> + M<sub>DC2</sub>) + 1.5 M<sub>DW</sub> + 1.75 M<sub>Σ + IM</sub>
- φ<sub>r</sub>M<sub>n</sub>: Compact composite positive moment capacity computed according to Article 6.10.7.1 or non-slender negative moment capacity according to Article A6.1.1 or A6.1.2 (kip-ft.).
- f<sub>s</sub> DC1: Un-factored stress at edge of flange for controlling steel flange due to vertical non-composite dead loads as calculated below (ksi).  
M<sub>DC1</sub> / S<sub>nc</sub>
- f<sub>s</sub> DC2: Un-factored stress at edge of flange for controlling steel flange due to vertical composite dead loads as calculated below (ksi).  
M<sub>DC2</sub> / S<sub>c(3n)</sub> or M<sub>DC2</sub> / S<sub>c(cr)</sub> as applicable.
- f<sub>s</sub> DW: Un-factored stress at edge of flange for controlling steel flange due to vertical composite future wearing surface loads as calculated below (ksi).  
M<sub>DW</sub> / S<sub>c(3n)</sub> or M<sub>DW</sub> / S<sub>c(cr)</sub> as applicable.
- f<sub>s</sub> (Σ + IM): Un-factored stress at edge of flange for controlling steel flange due to vertical composite live load plus impact loads as calculated below (ksi).  
M<sub>Σ + IM</sub> / S<sub>c(n)</sub> or M<sub>DW</sub> / S<sub>c(cr)</sub> as applicable.
- f<sub>s</sub> (Service II): Sum of stresses as computed below (ksi).  
f<sub>sDC1</sub> + f<sub>sDC2</sub> + f<sub>sDW</sub> + 1.3 f<sub>s</sub> (Σ + IM)
- 0.95R<sub>n</sub>F<sub>yf</sub>: Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).
- f<sub>s</sub> (Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi).  
1.25 (f<sub>sDC1</sub> + f<sub>sDC2</sub>) + 1.5 f<sub>sDW</sub> + 1.75 f<sub>s</sub> (Σ + IM)
- φ<sub>r</sub>F<sub>n</sub>: Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7 or 6.10.8 (ksi).
- V<sub>r</sub>: Maximum factored shear range in span computed according to Article 6.10.10.

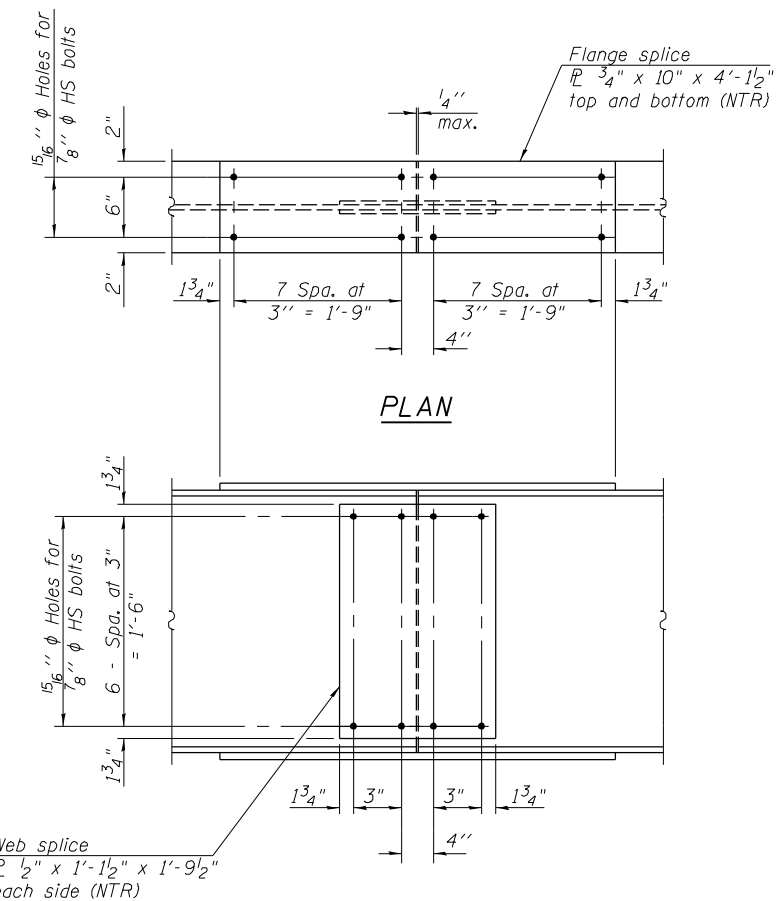
Note:  
Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.  
All steel required for Diaphragms and Splice to be AASHTO M270 Grade 50W.



**DIAPHRAGM D**  
(25 Required)

Note:

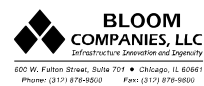
Two hardened washers required for each set of oversized holes.  
\*C12 x 30 channels are permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section. The alternate, if utilized, shall be provided at no additional cost to the Department.  
\*\*3/4" φ HS bolts. 1 5/16" φ holes except at Beam Number 3-4 diaphragm connection to Beam Number 4 use 1 3/8" vertical slotted holes in L6x4x1/2" and 1 5/16" φ hole in Beam. Provide 5/16" plate washers for slotted holes.  
Bolts in 1 3/8" x 1 7/8" holes shall be finger tight until the second stage pour is complete.



**ELEVATION**

**SPLICE DETAIL**  
(6 Required)

FILENAME: F:\3-1308 IDDTDist\3-1308B\US34C\Submittals\Comments\2014 BP 11 BBS Comments Response\CAD Files\0052140-66A17-015-StrSteelDetail.dwg



USER NAME = bmattas	DESIGNED - KO	REVISED
	CHECKED - BCM	REVISED
PLOT SCALE = N/A	DRAWN - KO	REVISED
PLOT DATE = 9/11/2014	CHECKED - 7/27/2012	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

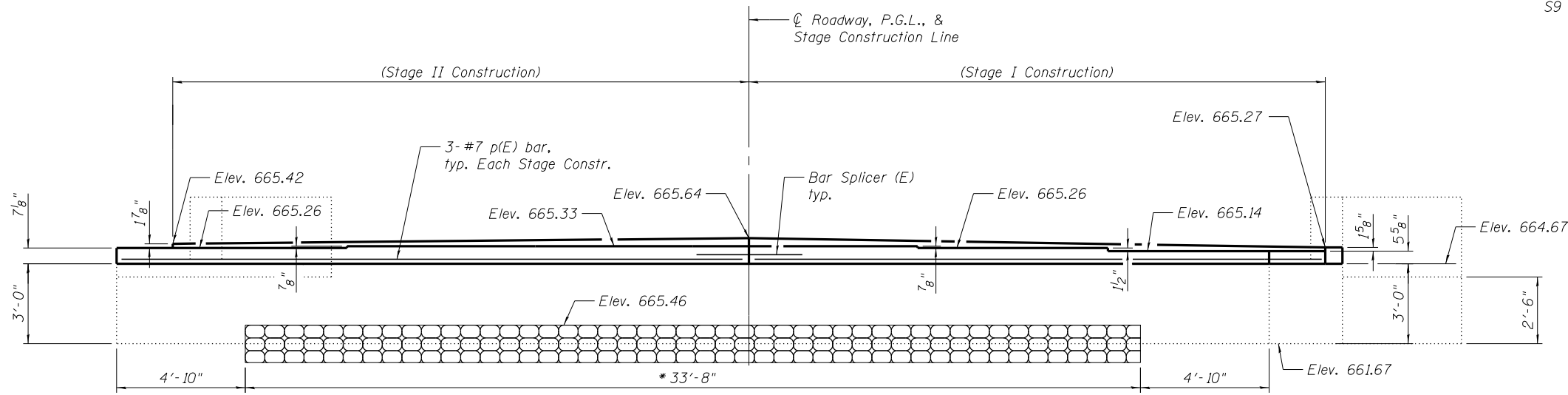
STRUCTURAL STEEL DETAILS  
STRUCTURE NO. 006-0140

SHEET NO. S15 OF S26 SHEETS

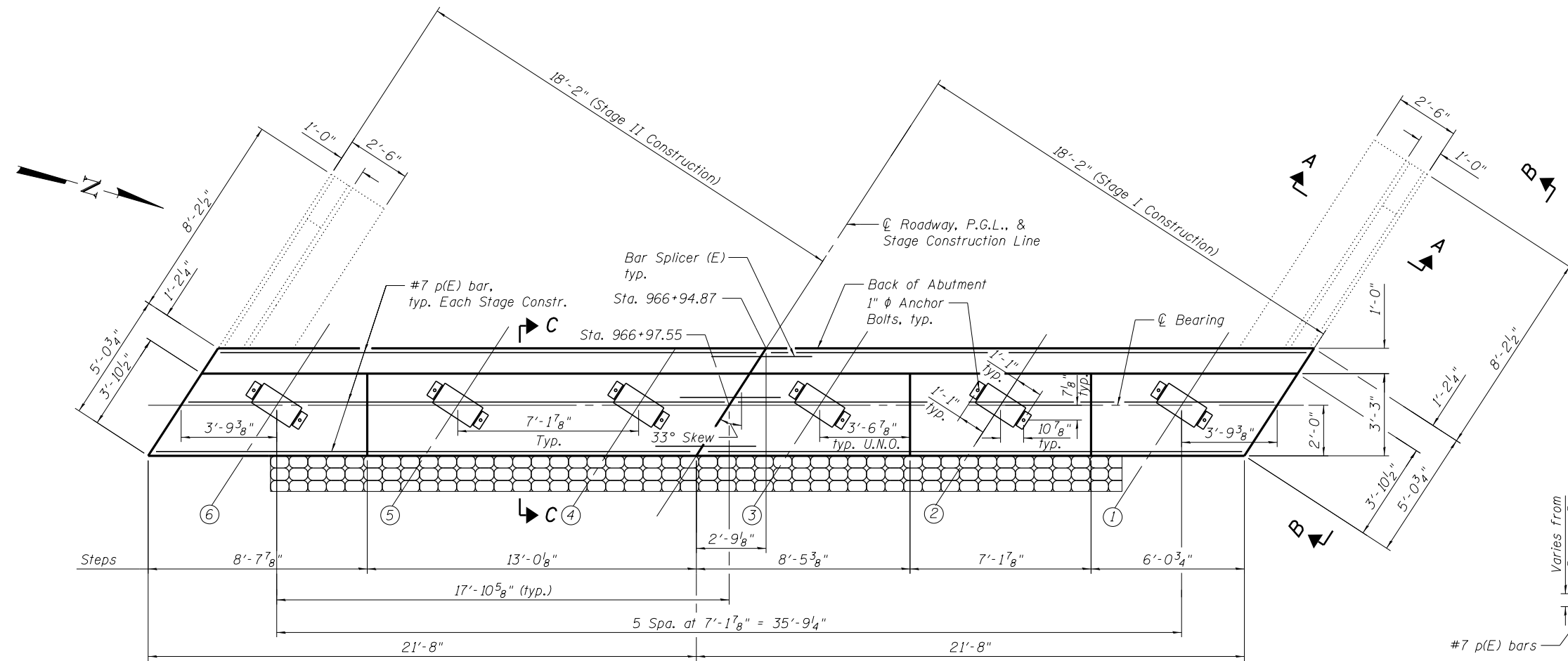
F.A.P. RTE. 613	SECTION (8D-BR) BR	COUNTY BUREAU	TOTAL SHEETS 63	SHEET NO. 37
CONTRACT NO. 66A17				ILLINOIS FED. AID PROJECT







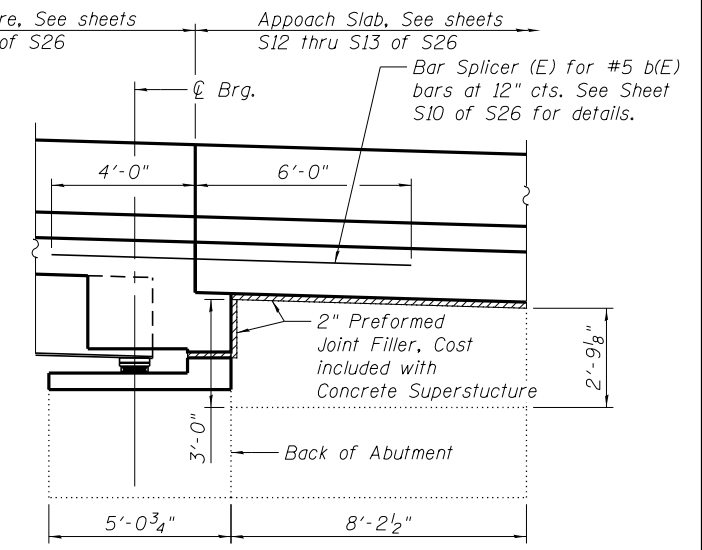
**ELEVATION**



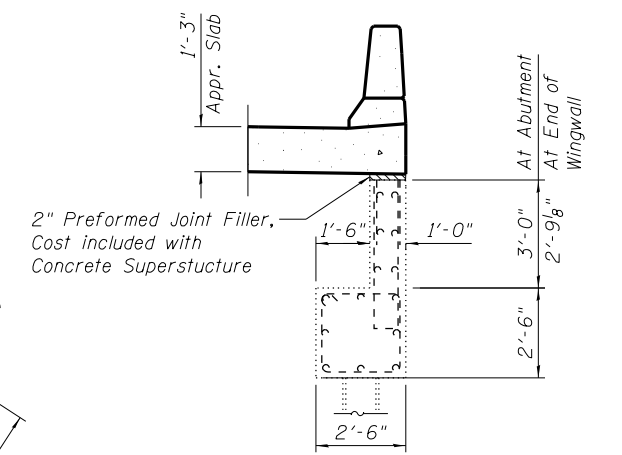
**PLAN**

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
p(E)	6	#7	21'-4"	
Concrete Structures			Cu. Yd.	4.5
Structure Excavation			Cu. Yd.	48
Fabric Formed Concrete Revetment Mat			Sq. Yd.	14
Reinforcement Bars, Epoxy Coated			Pound	270

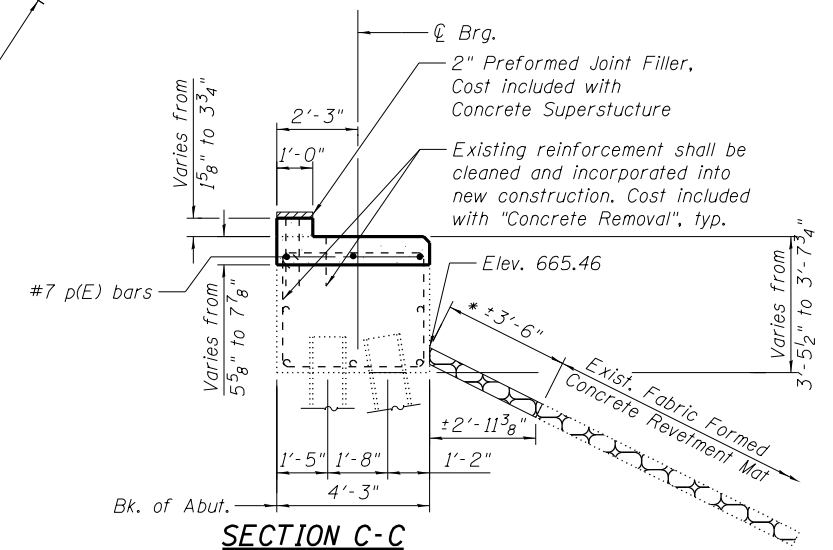


**VIEW B-B**



**SECTION A-A**

(Horiz. dim. @ Rt. L's)



**SECTION C-C**

(Horiz. dim. @ Rt. L's)

\* New Fabric Formed Concrete Revetment Mat shall be placed against Existing Fabric Formed Concrete Revetment Mat. Prior to placing New Revetment Mat, Existing Revetment Mat surface shall be cleaned of debris and soil build up. Cost included with Fabric Formed Concrete Revetment Mat.

FILE NAME: c:\pwworkspace\carpenter\d\08660148\_66A17-01B-Abutment.dwg



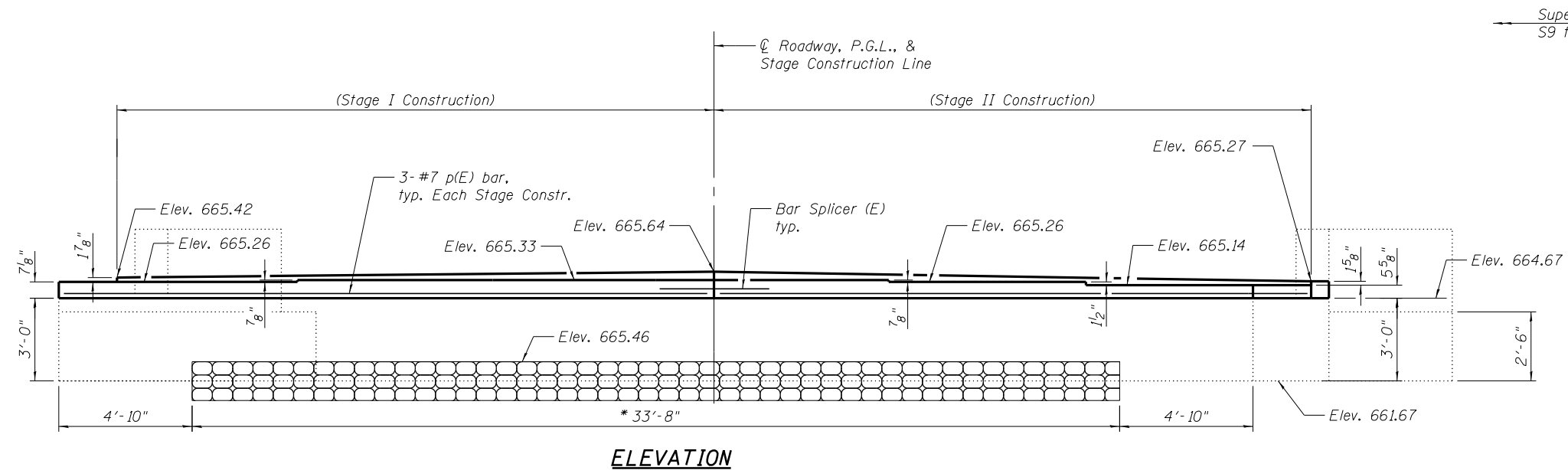
USER NAME = carpenter_dj	DESIGNED - KO	REVISED
	CHECKED - BCM	REVISED
PLOT SCALE = N/A	DRAWN - KO	REVISED
PLOT DATE = 8/1/2014	CHECKED - 7/31/2012	REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

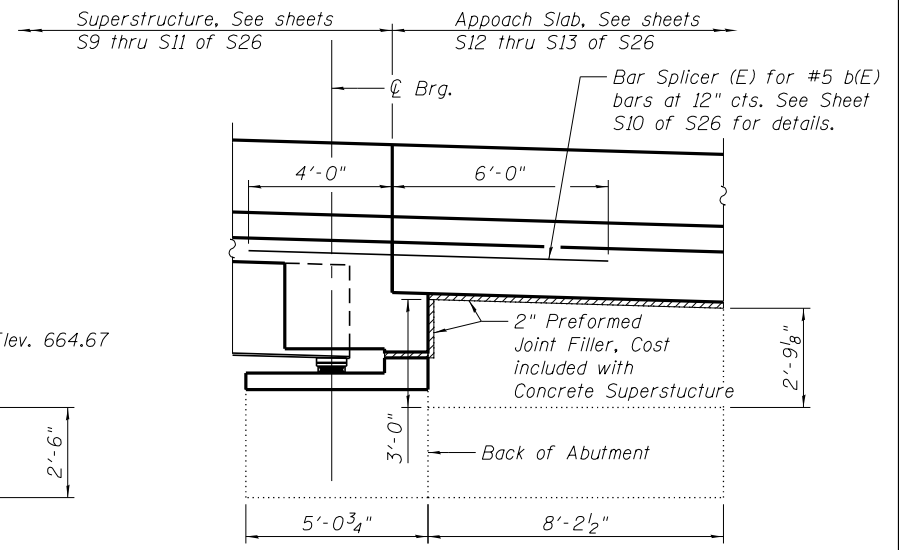
**REPAIR DETAILS FOR WEST ABUTMENT  
STRUCTURE NO. 006-0140**

SHEET NO. S18 OF S26 SHEETS

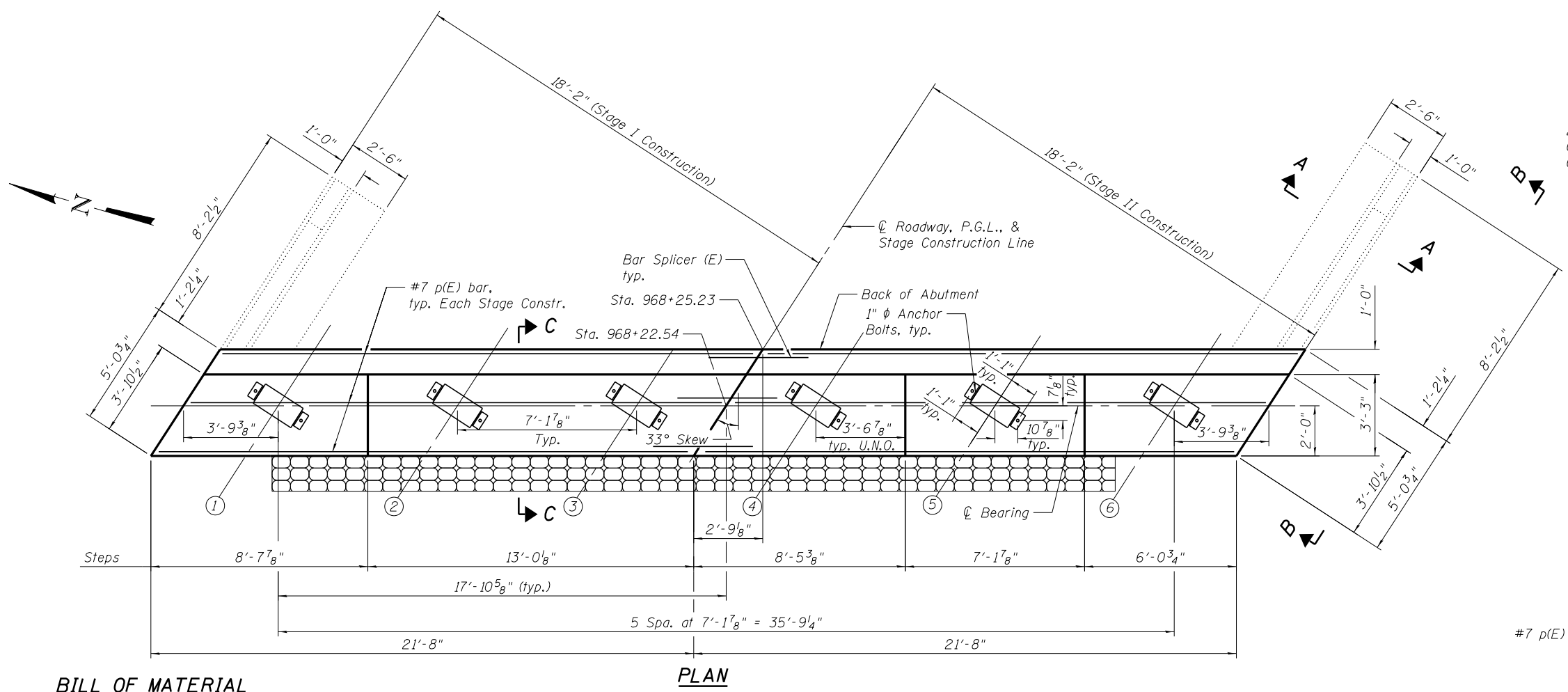
F.A.P. RTE. 613	SECTION (8D-BR) BR	COUNTY BUREAU	TOTAL SHEETS 63	SHEET NO. 40
CONTRACT NO. 66A17			ILLINOIS FED. AID PROJECT	



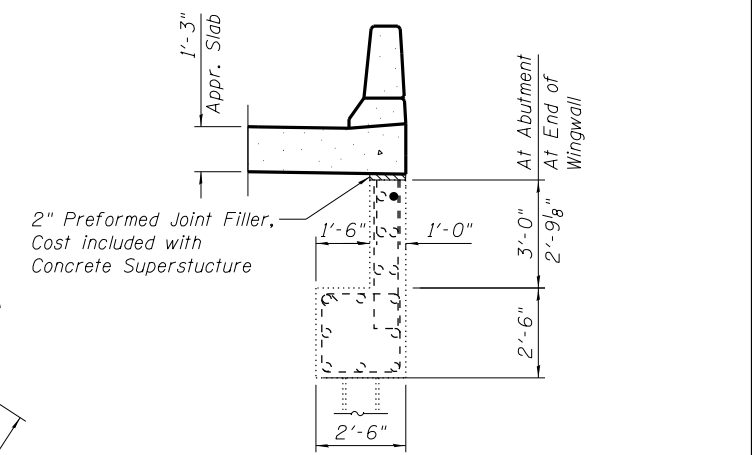
**ELEVATION**



**VIEW B-B**

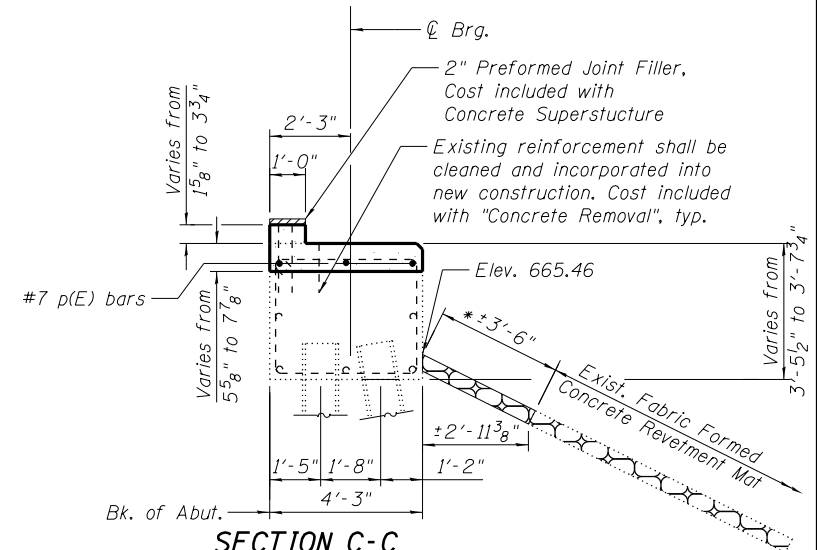


**PLAN**



**SECTION A-A**

(Horiz. dim. @ Rt. L's)



**SECTION C-C**

(Horiz. dim. @ Rt. L's)

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
p(E)	6	#7	21'-4"	
Concrete Structures			Cu. Yd.	4.5
Structure Excavation			Cu. Yd.	48
Fabric Formed Concrete Revetment Mat			Sq. Yd.	14
Reinforcement Bars, Epoxy Coated			Pound	270

\* New Fabric Formed Concrete Revetment Mat shall be placed against Existing Fabric Formed Concrete Revetment Mat. Prior to placing New Revetment Mat, Existing Revetment Mat surface shall be cleaned of debris and soil build up. Cost included with Fabric Formed Concrete Revetment Mat.



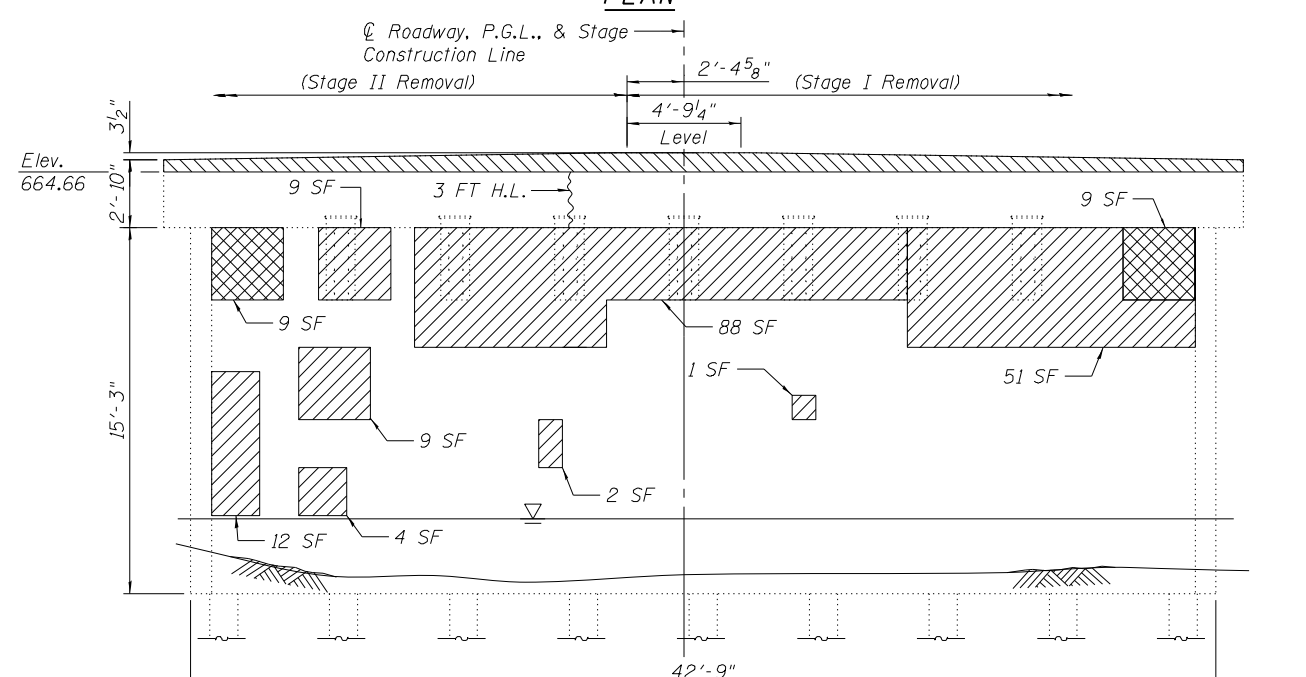
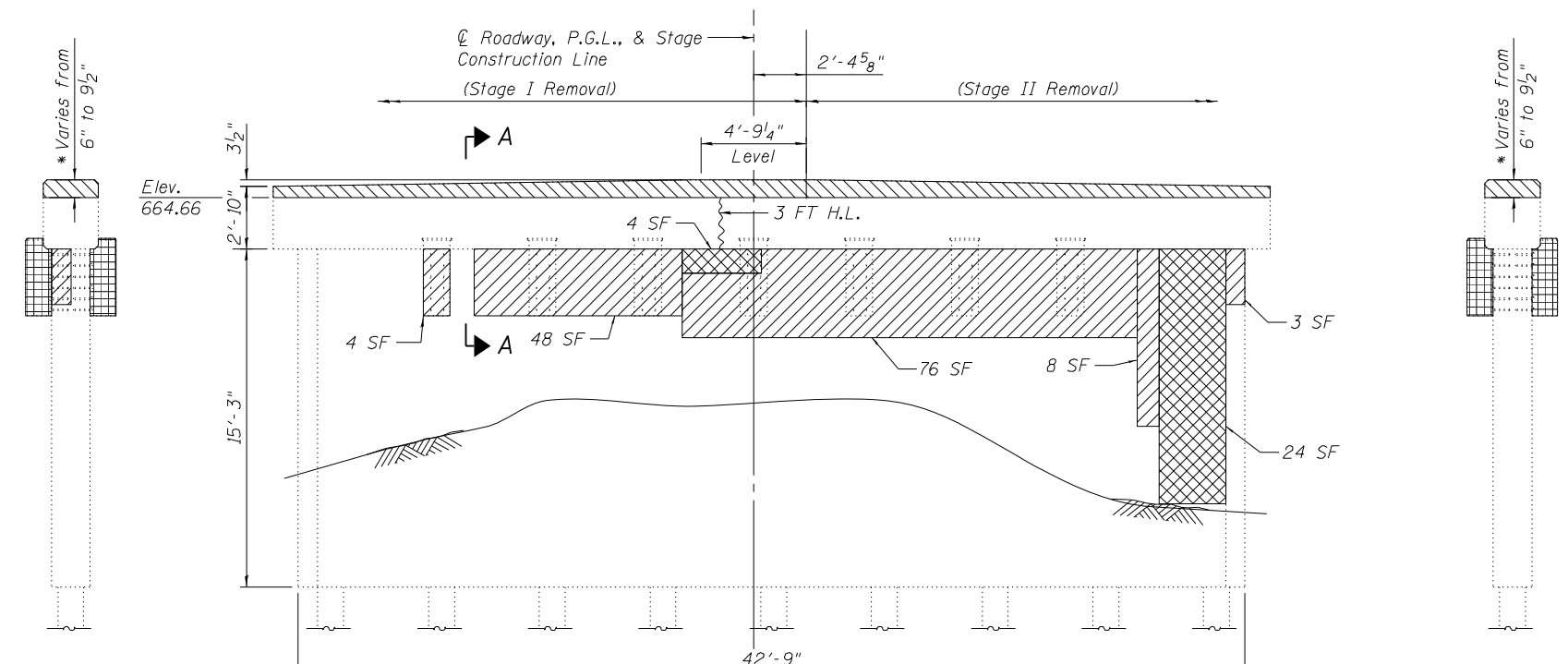
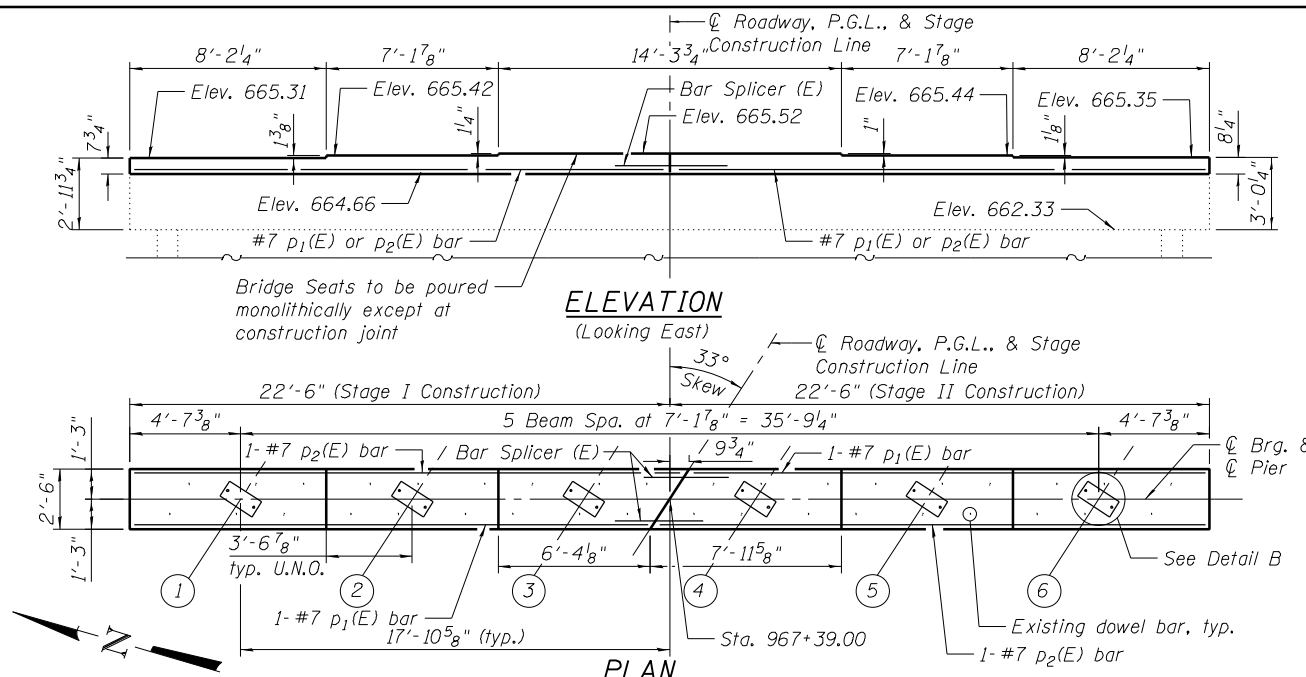
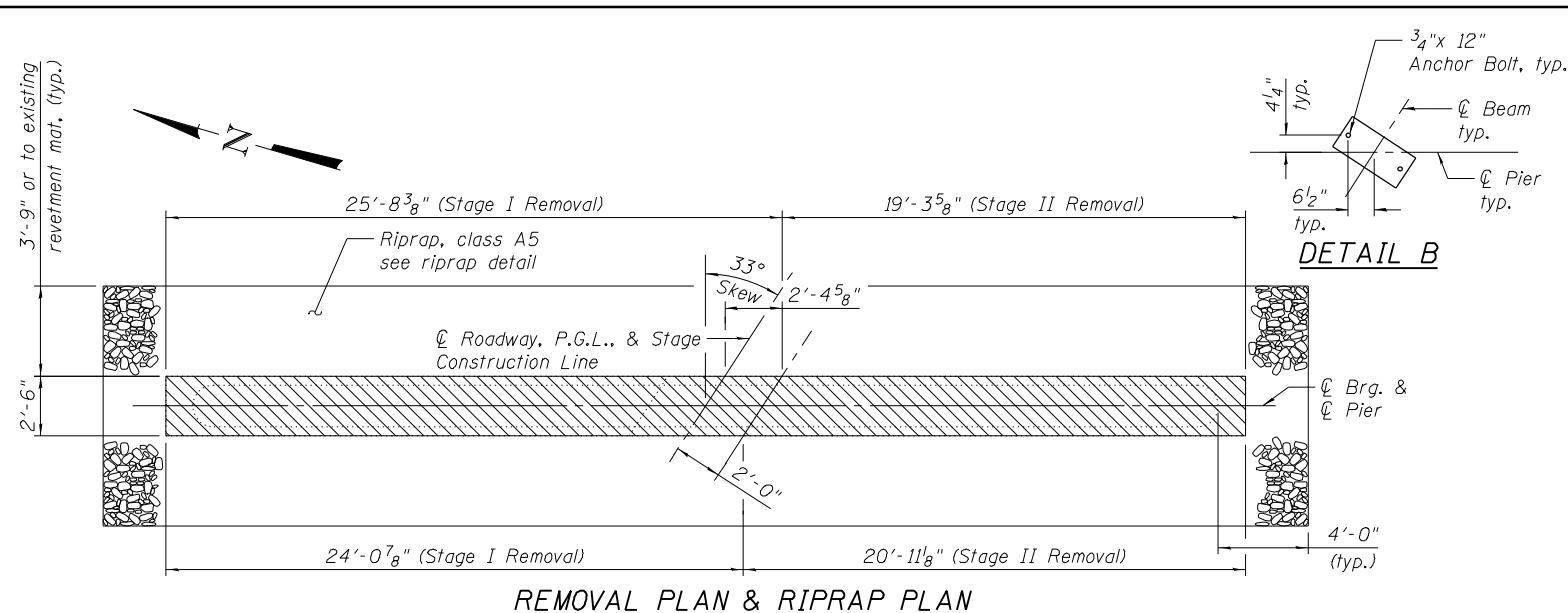
USER NAME = carpenter_dj	DESIGNED - KO	REVISED
	CHECKED - BCM	REVISED
PLOT SCALE = N/A	DRAWN - KO	REVISED
PLOT DATE = 8/1/2014	CHECKED - 7/31/2012	REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**REPAIR DETAILS FOR EAST ABUTMENT  
STRUCTURE NO. 006-0140**

SHEET NO. S19 OF S26 SHEETS

F.A.P. RTE. 613	SECTION (8D-BR) BR	COUNTY BUREAU	TOTAL SHEETS 63	SHEET NO. 41
CONTRACT NO. 66A17			ILLINOIS FED. AID PROJECT	



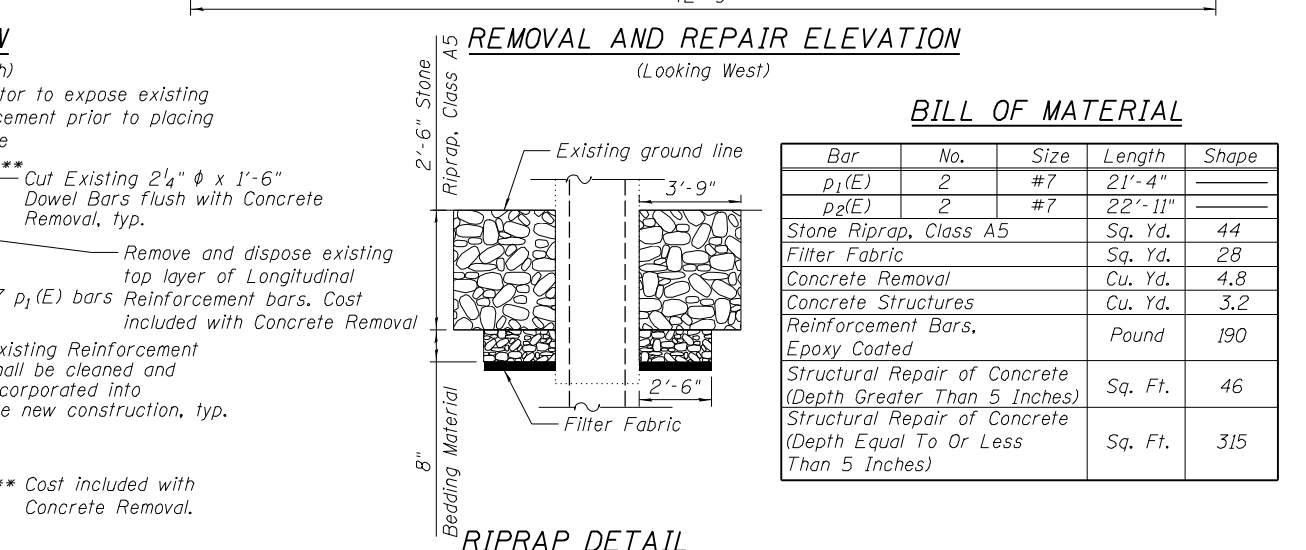
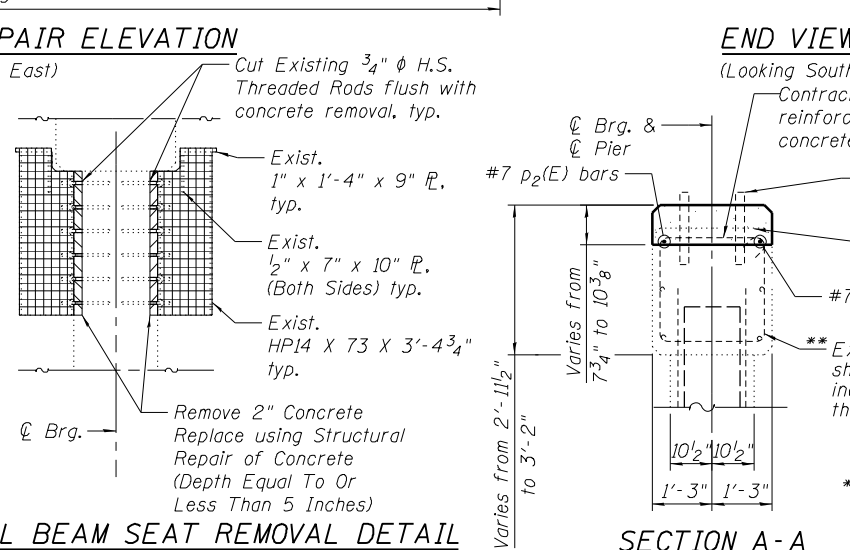
**LEGEND**

- Concrete Removal
- Structural Repair of Concrete (Depth Greater Than 5 Inches)
- Structural Repair of Concrete (Depth Equal To Or Less Than 5 Inches)
- Steel Beam Seat Removal \*\*\*
- H.L. - Hairline Crack - Not to be sealed

\* Cost of existing bearing removal is included in Concrete Removal cost.

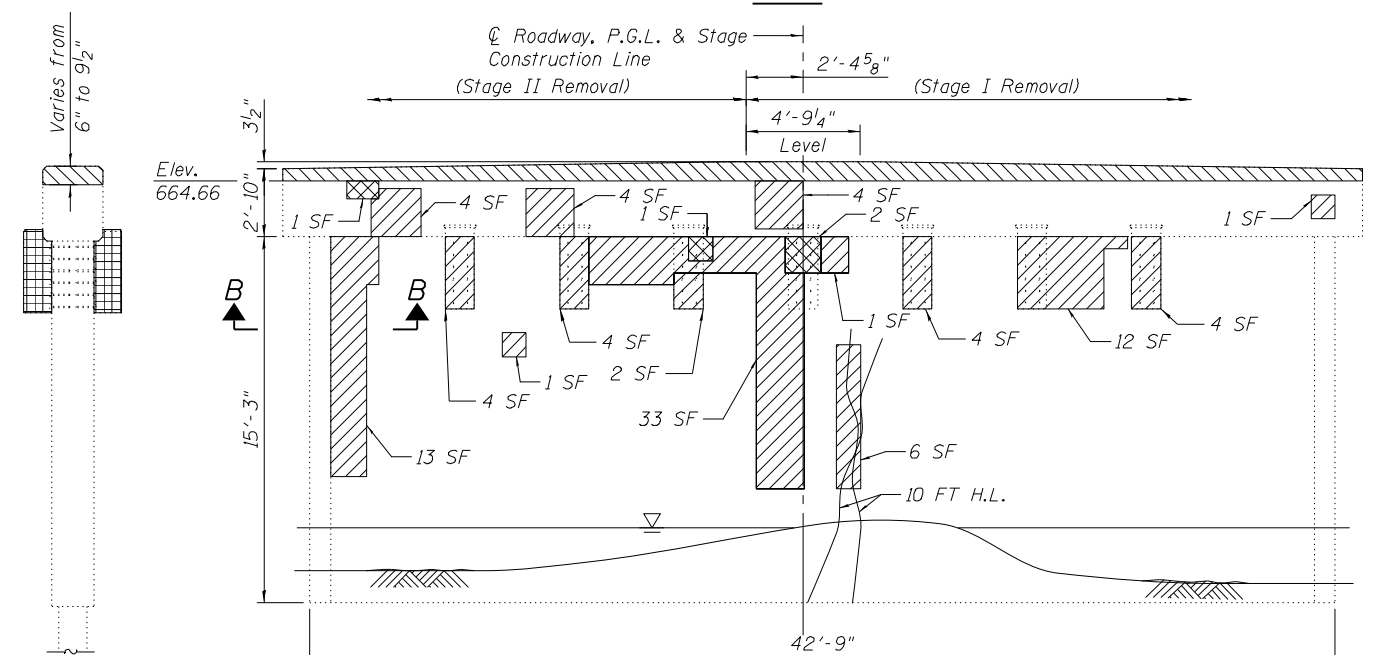
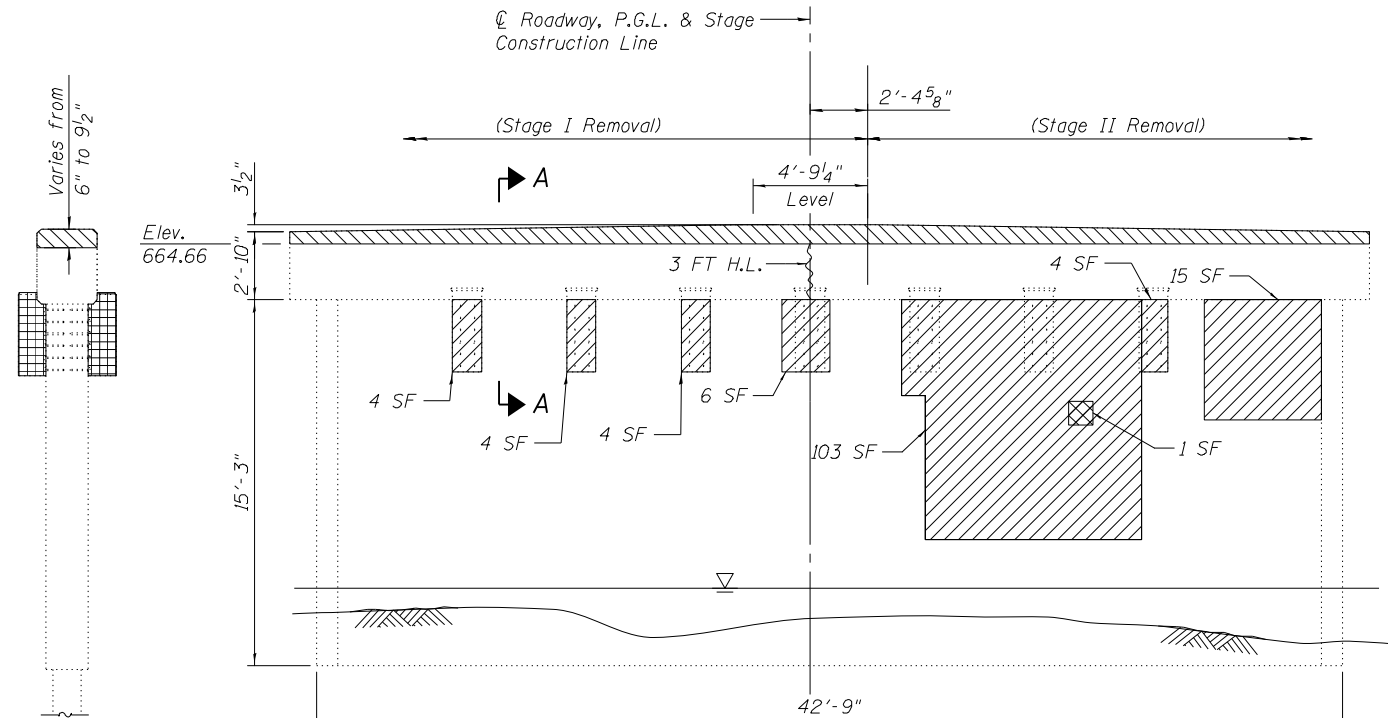
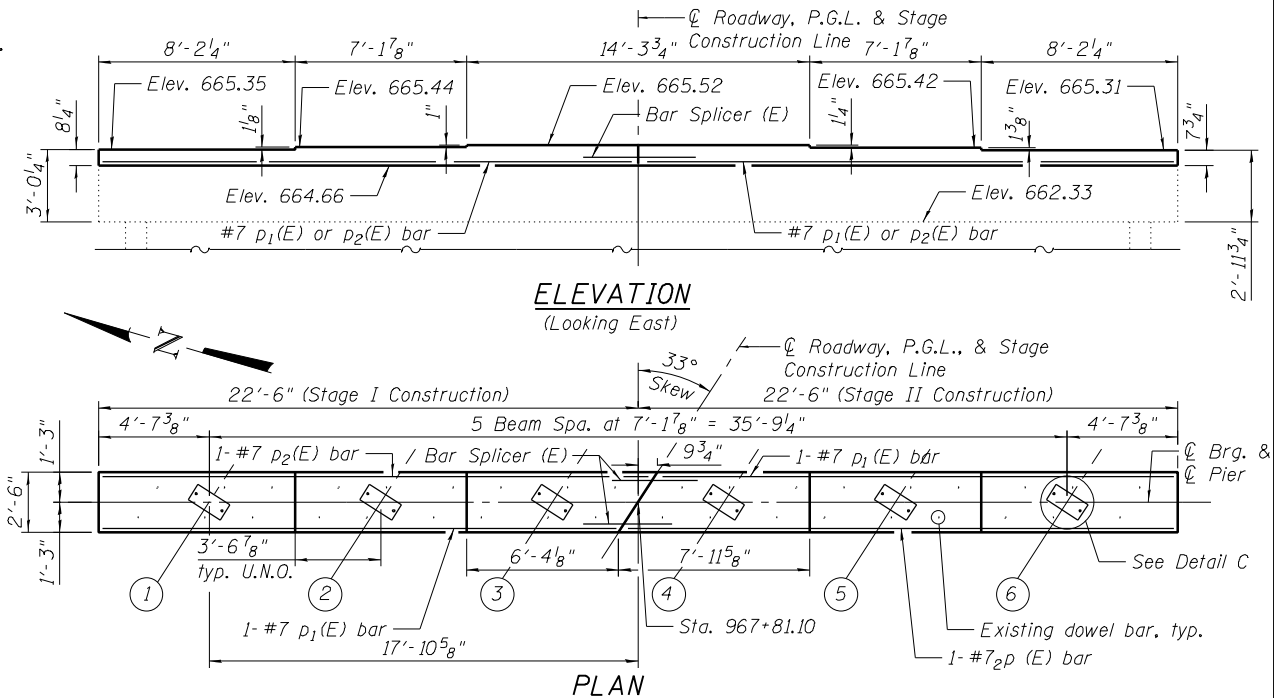
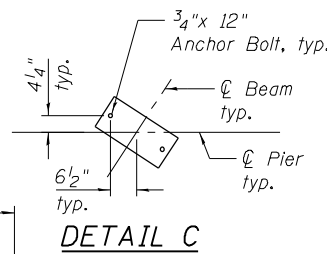
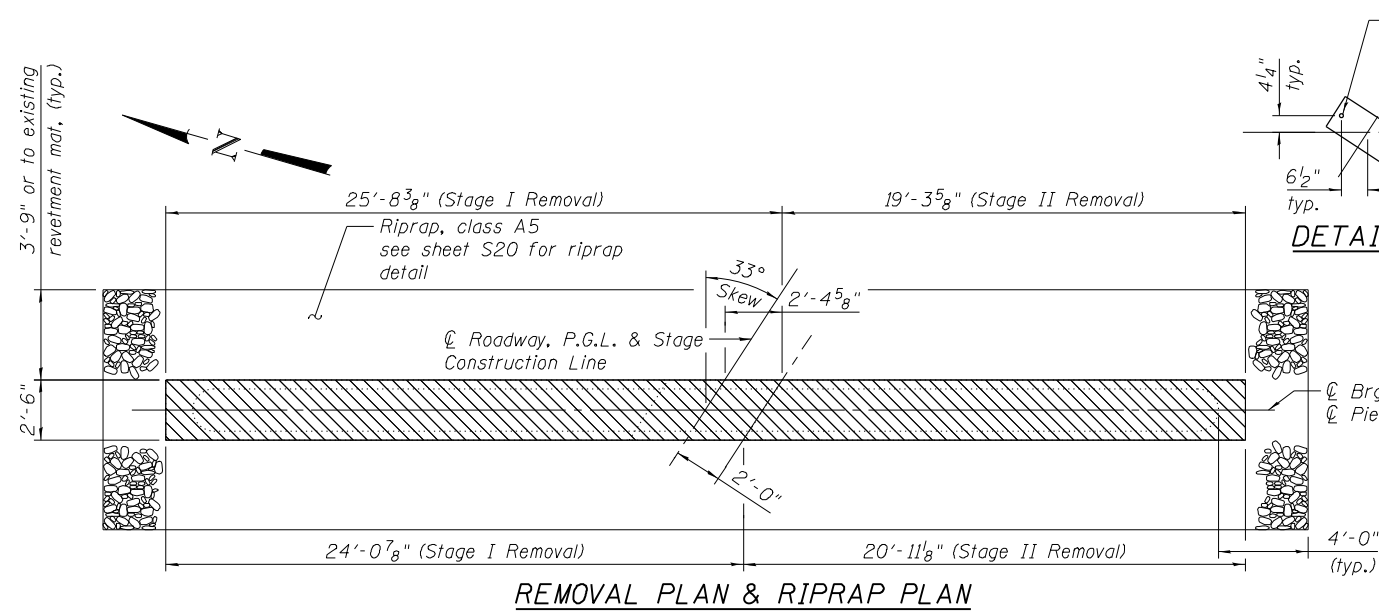
\*\*\* Cost of Steel Beam Seat Removal is included in Removal of Existing Superstructures, typ.

Note: Structural Repair of Concrete includes both existing damage to substructure and repair due to Steel Beam Seat Removal.



**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
p <sub>1</sub> (E)	2	#7	21'-4"	
p <sub>2</sub> (E)	2	#7	22'-11"	
Stone Riprap, Class A5		Sq. Yd.	44	
Filter Fabric		Sq. Yd.	28	
Concrete Removal		Cu. Yd.	4.8	
Concrete Structures		Cu. Yd.	3.2	
Reinforcement Bars, Epoxy Coated		Pound	190	
Structural Repair of Concrete (Depth Greater Than 5 Inches)		Sq. Ft.	46	
Structural Repair of Concrete (Depth Equal To Or Less Than 5 Inches)		Sq. Ft.	315	



**END VIEW**  
(Looking North)

**END VIEW**  
(Looking South)

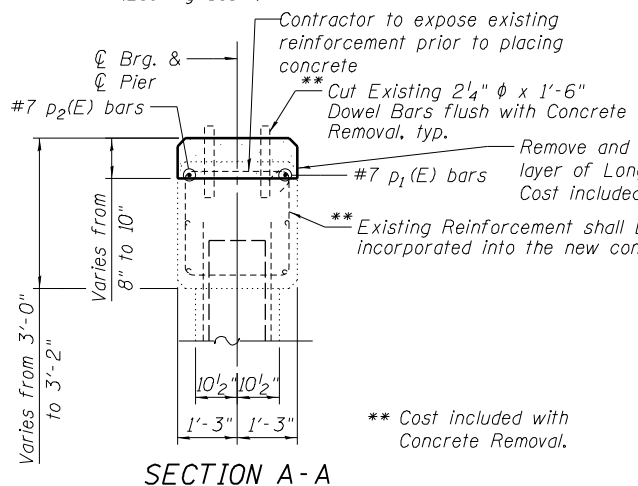
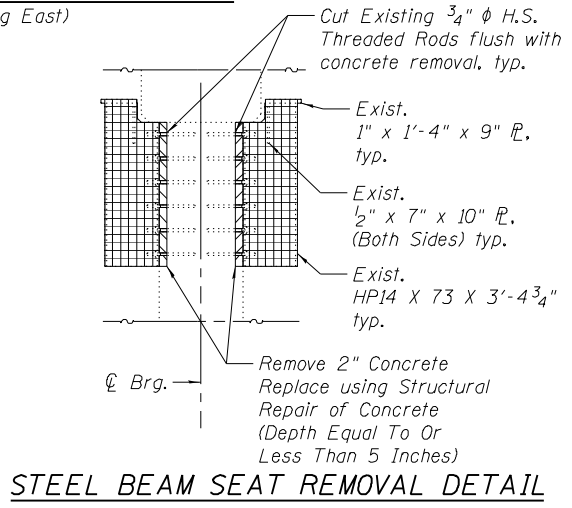
**LEGEND**

- Concrete Removal
- Structural Repair of Concrete (Depth Equal To Or Less Than 5 Inches)
- Structural Repair of Concrete (Depth Greater Than 5 Inches)
- Steel Beam Seat Removal \*\*\*
- Polymer Modified Portland Cement Mortar
- H.L. - Hairline Crack - Not to be sealed

\* Cost of existing bearing removal is included in Concrete Removal cost.

\*\*\* Removal cost of existing Steel beam seats is included with Removal of Existing Superstructures cost, typ.

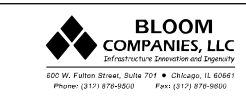
Note:  
Structural Repair of Concrete includes both existing damage to substructure and repair due to Steel Beam Seat Removal.



**VIEW B-B**

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
p <sub>1</sub> (E)	2	#7	21'-4"	
p <sub>2</sub> (E)	2	#7	22'-11"	
Stone Riprap, Class A5			Sq. Yd.	44
Filter Fabric			Sq. Yd.	28
Concrete Removal			Cu. Yd.	4.8
Concrete Structures			Cu. Yd.	3.2
Reinforcement Bars, Epoxy Coated			Pound	190
Structural Repair of Concrete (Depth Greater Than 5 Inches)			Sq. Ft.	5
Structural Repair of Concrete (Depth Equal To Or Less Than 5 Inches)			Sq. Ft.	237
Polymer Modified Portland Cement Mortar			Sq. Ft.	1



USER NAME = bmattas	DESIGNED - KO	REVISED
PLOT SCALE = N/A	CHECKED - BCM	REVISED
PLOT DATE = 9/11/2014	DRAWN - KO	REVISED
	CHECKED - 7/31/2012	REVISED

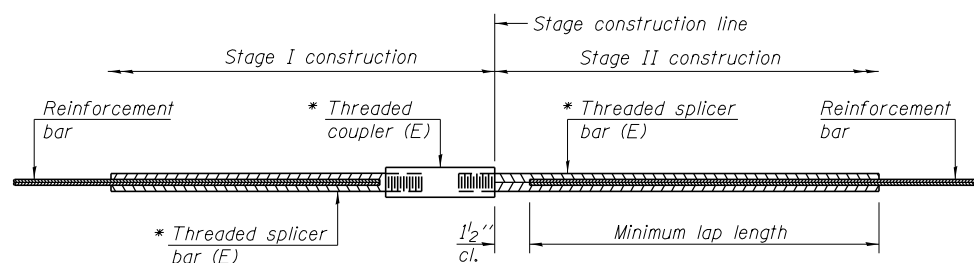
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**PIER 2 DETAILS**  
**STRUCTURE NO. 006-0140**

SHEET NO. S21 OF S26 SHEETS

F.A.P. RTE. 613	SECTION (8D-BR) BR	COUNTY BUREAU	TOTAL SHEETS 63	SHEET NO. 43
CONTRACT NO. 66A17				
ILLINOIS FED. AID PROJECT				

FILENAME = F:\3-1308 IDDT\dwt\313-1308B-US34\coal\Submittals\Comments\2014 BP 11 BBS Comments Responses\CAD Files\0060140-66A17-021-Pier2.dgn



**STANDARD BAR SPLICER ASSEMBLY**

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

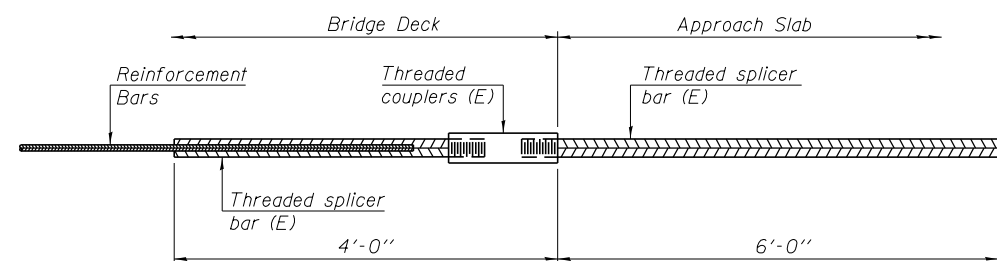
- Table 1: Black bar, 0.8 Class C
- Table 2: Black bar, Top bar lap, 0.8 Class C
- Table 3: Epoxy bar, 0.8 Class C
- Table 4: Epoxy bar, Top bar lap, 0.8 Class C
- Table 5: Epoxy bar, Class C
- Table 6: Epoxy bar, Top bar top, Class C

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

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

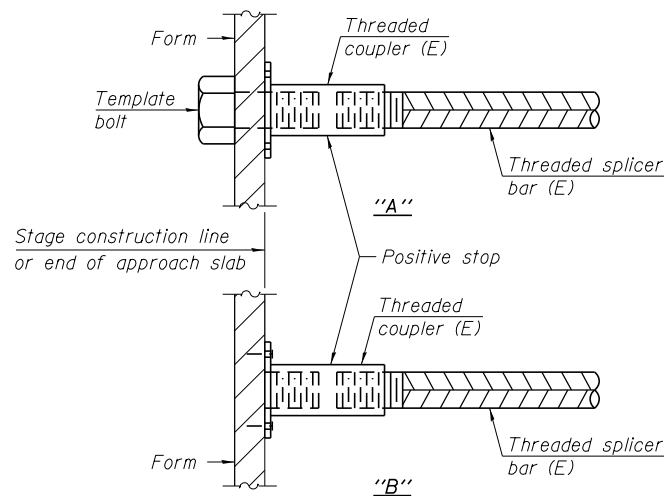
Location	Bar size	No. assemblies required	Table for minimum lap length
Deck	5	378	5
** West Abutment Diaphragm	6	12	4
West Approach Slab	4	25	4
West Approach Slab	5	46	3
West Approach Footing	5	40	5
** East Abutment Diaphragm	6	12	4
East Approach Slab	4	25	4
East Approach Slab	5	46	3
East Approach Footing	5	40	5
Piers	7	4	3
Abutments	7	6	3

\*\* 2 Bar Splicers in the West Abutment Diaphragm and 2 Splicers in the East Abutment Diaphragm to be special bar splicers 3'-5" total length (no lap). See Sheets S10 of S26.



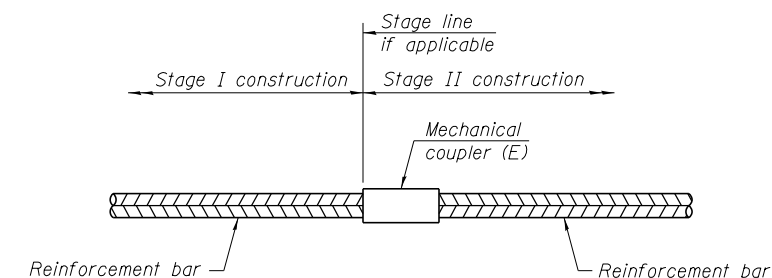
**BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS**

No. required = 76



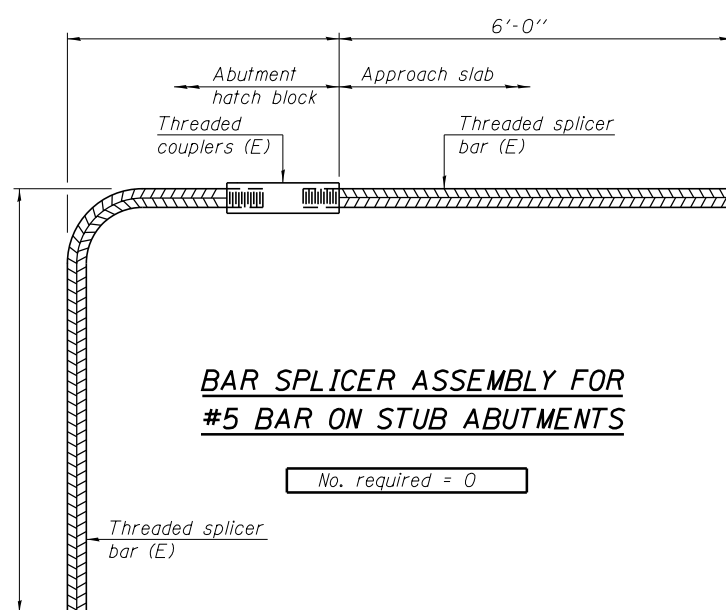
**INSTALLATION AND SETTING METHODS**

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



**STANDARD MECHANICAL SPLICER**

Location	Bar size	No. assemblies required



**BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS**

No. required = 0

**NOTES**

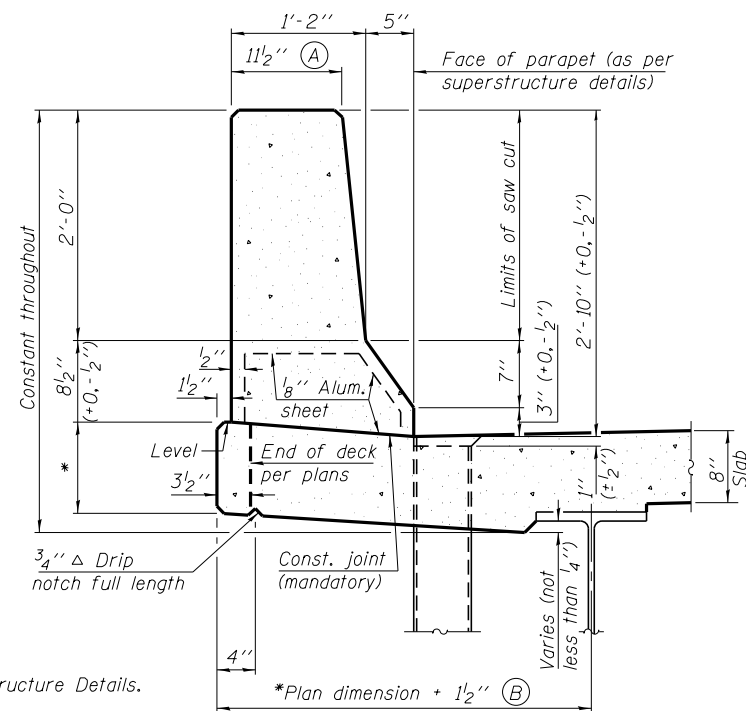
- Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.
- All reinforcement shall be lapped and tied to the splicer bars.
- Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.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

FILE NAME = c:\pawork\splicers\carpenter.dwg 08/01/12 08:50:14 66A17-022-Splicer.dwg

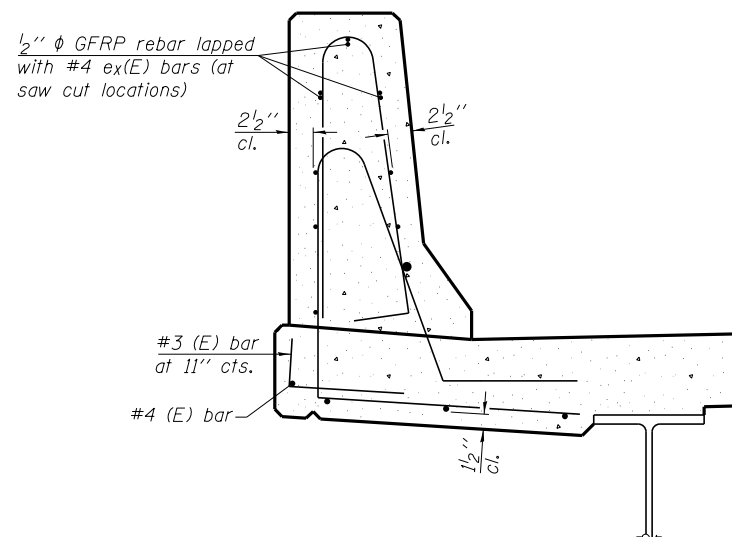


**GENERAL NOTES**

All dimensions shall remain the same as shown on superstructure details, except dimensions A and B which are to be revised as shown to provide additional clearance. Additional concrete needed to revise dimension A and B = 0.0165 cu. yds./ft. for 34" parapet or = 0.0223 cu. yds./ft. for 42" parapet. Place aluminum sheet in curb portion at and near piers. Full thickness saw cut at all joint locations in lieu of cork joint filler. Steel superstructure shown. Other superstructure types similar. For superstructure details see sheets S9 through S11 of S26.

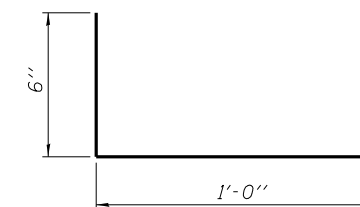


**34" F SHAPE PARAPET SECTION**  
(Showing dimensions)

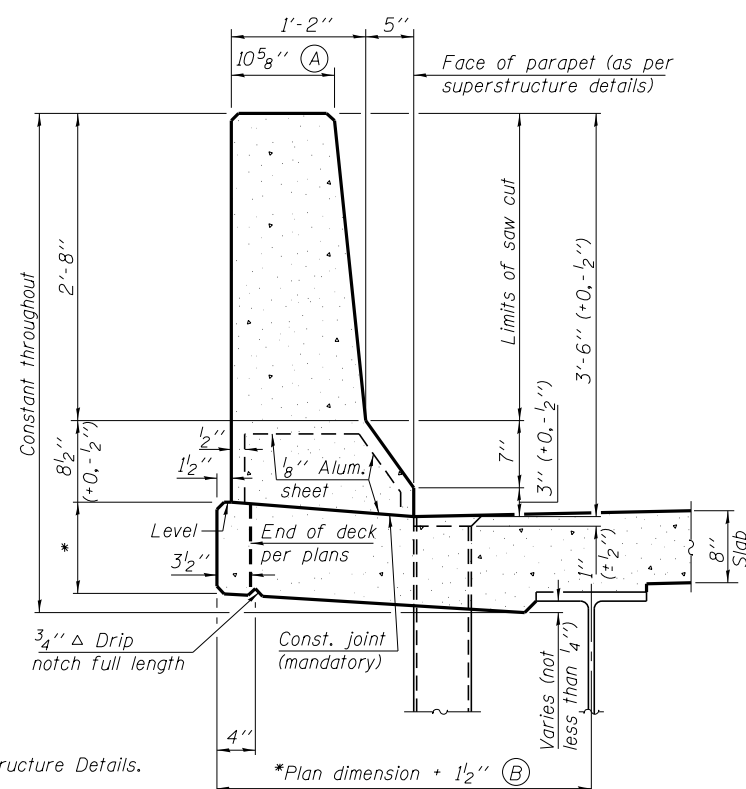


**SECTION**

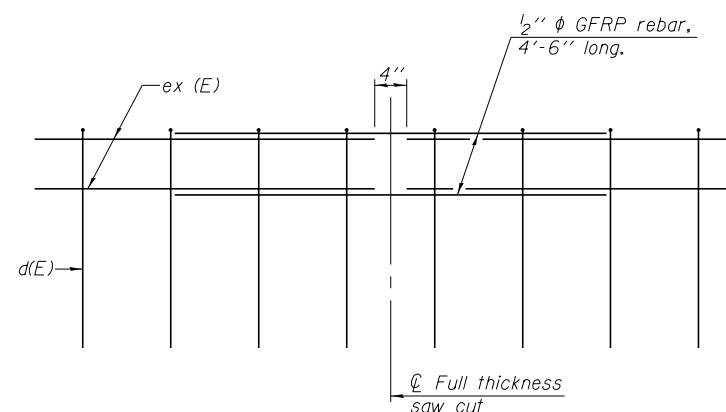
(34" parapet shown - 42" parapet similar)  
(Showing reinforcement clearances for slip forming and additional reinforcement bars)



**#3 (E) BAR**

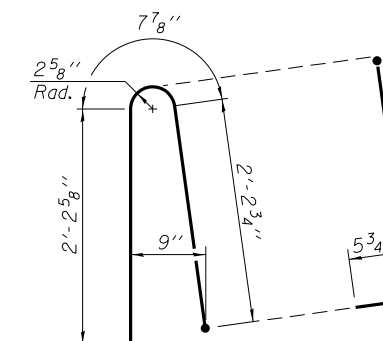


**42" F SHAPE PARAPET SECTION**  
(Showing dimensions)

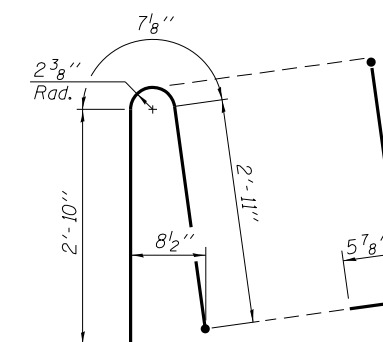


**GFRP REBAR STIFFENING DETAIL**

(Place as shown in parapet section at each parapet joint location.)



**ALTERNATE BAR d(E)**  
(For 34" parapet when conduit is present)



**ALTERNATE BAR d(E)**  
(For 42" parapet when conduit is present)

SFP 34-42

8-16-12



USER NAME = carpenter_dj	DESIGNED - BCM	REVISED
PLOT SCALE = N/A	CHECKED - KO	REVISED
PLOT DATE = 8/1/2014	DRAWN - BCM	REVISED
	CHECKED - 7/26/2012	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CONCRETE PARAPET SLIPFORMING OPTION  
STRUCTURE NO. 006-0140

SHEET NO. S23 OF S26 SHEETS

F.A.P. RTE. 613	SECTION (8D-BR) BR	COUNTY BUREAU	TOTAL SHEETS 63	SHEET NO. 45
CONTRACT NO. 66A17				

ILLINOIS FED. AID PROJECT

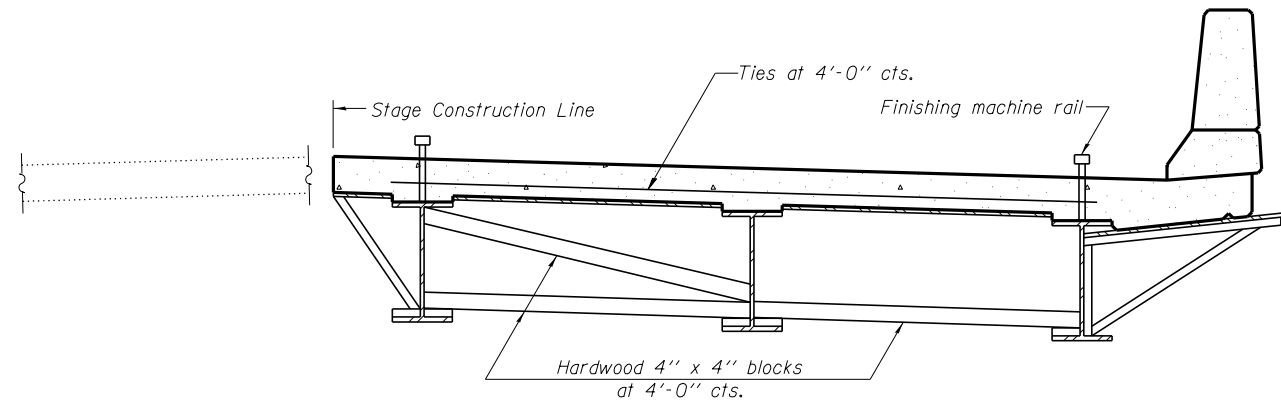
FILE NAME = c:\pawork\spindas\carpenter\_dj\80860140\_66A17\_823-ConcParapet.dgn

When cantilever forming brackets are used, the work shall be done according to Article 503.06(b) of the Standard Specifications, except as modified below and in the details shown on this sheet.

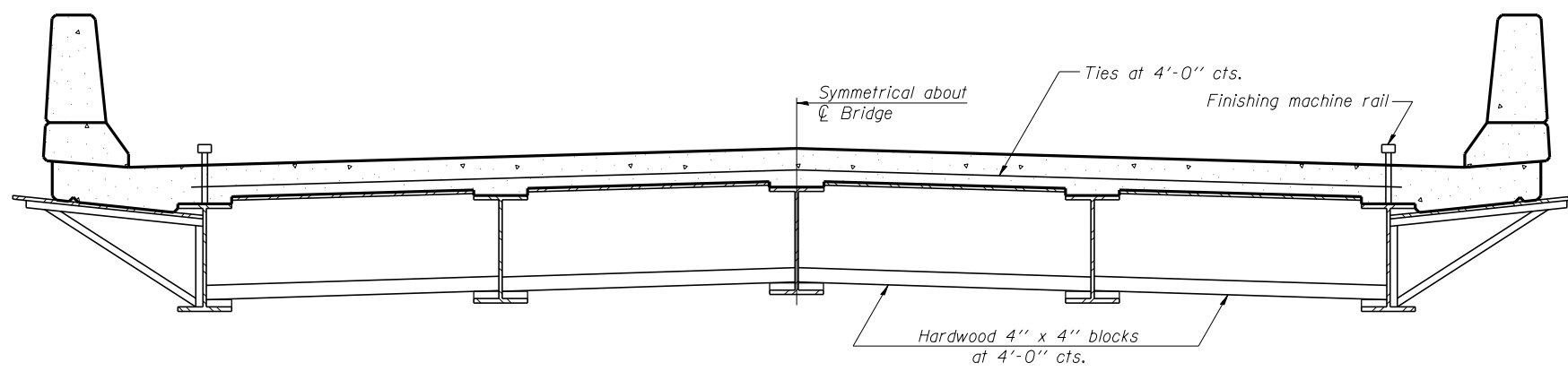
The finishing machine rails shall be placed on the top flange of the exterior beams.

The beams or girders, supporting cantilever forming brackets, shall be tied together at 4 foot intervals.

For Standard construction, or Stage Construction the Hardwood bracing materials shall be placed as shown between webs of beams in each bay.



**FORM BRACES FOR  
STAGE CONSTRUCTION**



**FORM BRACES FOR  
STANDARD CONSTRUCTION**

FILENAME: c:\pawork\spudsa\carpenter\d\8044492\08660140\_66A17-824-FormBrackets.dgn

SB-1

7-1-10

**BLOOM COMPANIES, LLC**  
Infrastructure Division and Specialty  
600 W. Fulton Street, Suite 701 • Chicago, IL 60661  
Phone: (312) 876-9500 Fax: (312) 876-9800

USER NAME = carpenterdj	DESIGNED - BCM	REVISED
	CHECKED - KO	REVISED
PLOT SCALE = N/A	DRAWN - BCM	REVISED
PLOT DATE = 8/1/2014	CHECKED - 7/26/2012	REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CANTILEVER FORMING BRACKETS FOR SUPERSTRUCTURES WITH  
W27 BEAMS AND SMALLER**

**STRUCTURE NO. 006-0140**

SHEET NO. S24 OF S26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
613	(8D-BR) BR	BUREAU	63	46
CONTRACT NO. 66A17				
ILLINOIS FED. AID PROJECT				



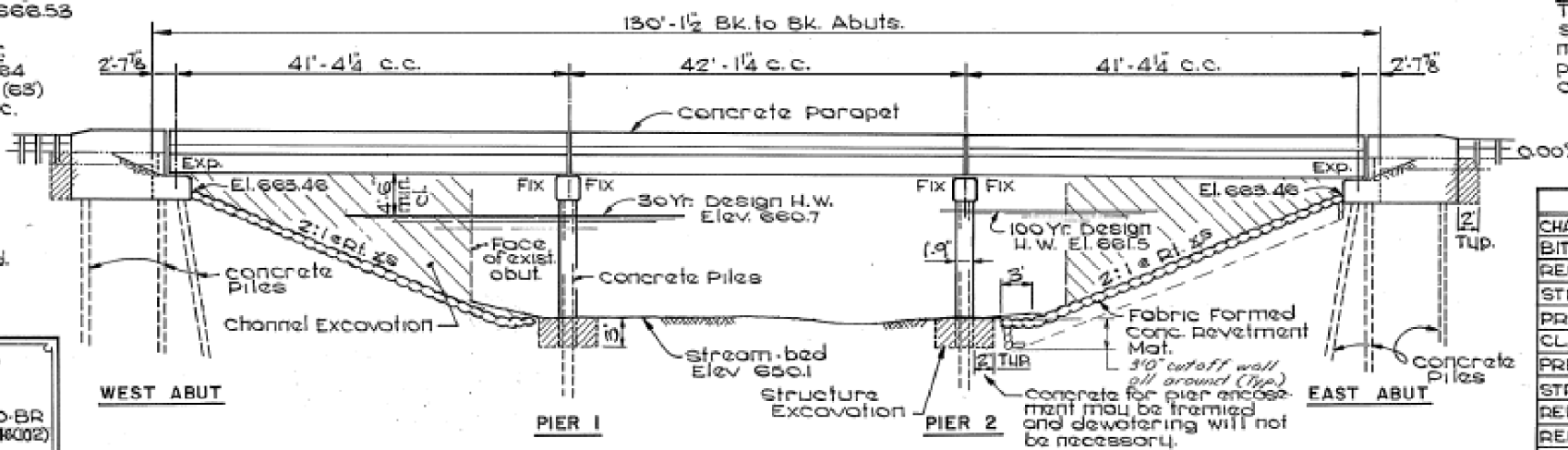


BENCH MARK: S. E. wing of existing bridge Elev. 666.53

EXISTING STRUCTURE:  
structure No. 006-0084  
A one span steel truss (63)  
21' wide on closed conc.  
abutments. Built 1925  
as section 8-D.  
Contractor shall  
remove the existing  
structure before  
construction of new  
bridge. No salvage.  
Traffic to be detoured.

STATION 30193.5  
COAL CREEK  
BUILT 1980  
F.A.S. RT. 2246 SEC. 8D-BR  
F.A. PROJ. BR-5-2246(002)  
LOADING HS-20  
STR. NO. 006

NAME PLATE LETTERING  
see Std. 2113  
structure No. to be supplied  
by the District



ELEVATION

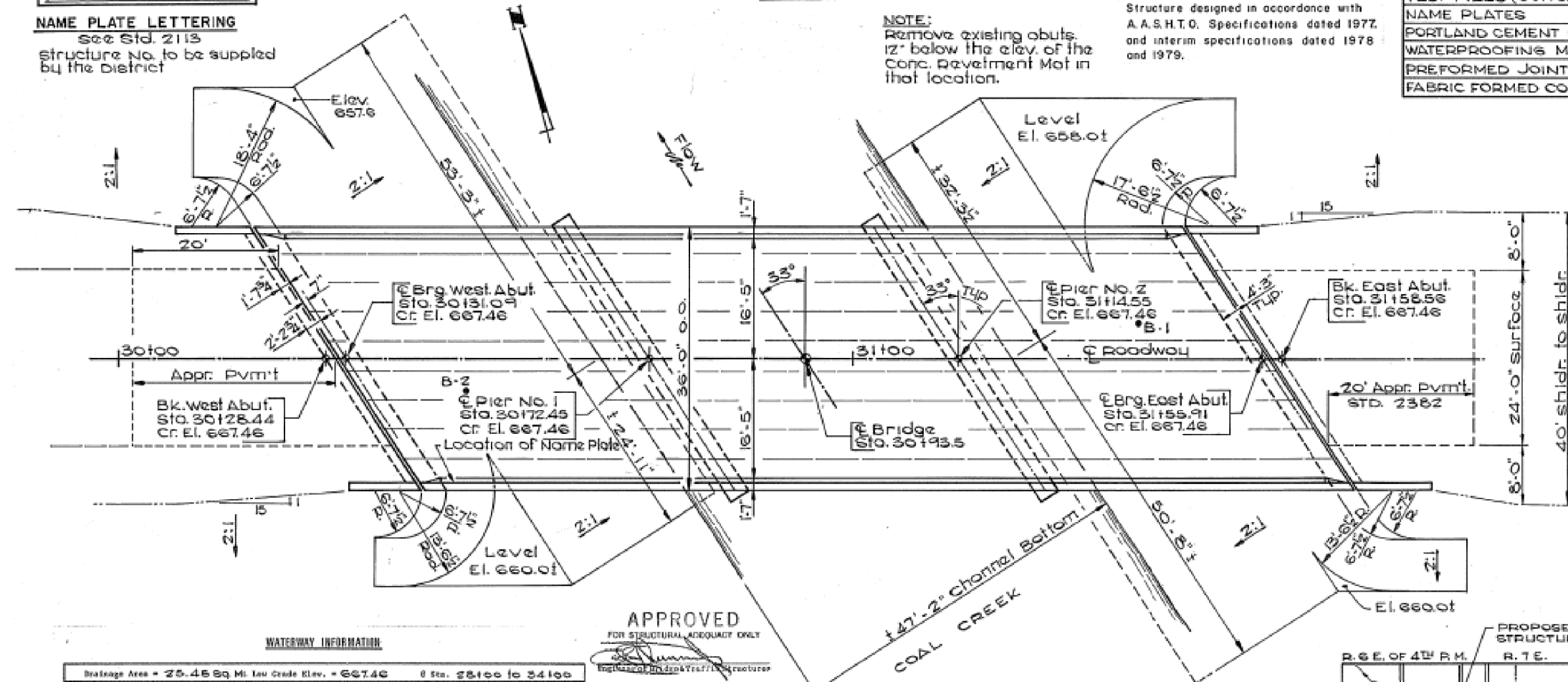
NOTE:  
The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the abutments.

BILL OF MATERIAL - BRIDGE

ITEM	UNIT	SUB.	SUPER.	TOTAL
CHANNEL EXCAVATION	CU.YD.			700
BITUMINOUS CONC. SURF. COURSE, MIX. D, CL. I	TON		36	36
REMOVAL OF EXISTING STRUCTURES	EACH			1
STRUCTURE EXCAVATION	CU.YD.	200		200
PROTECTIVE COAT	SQ.YD.		121	121
CLASS X CONCRETE	CU.YD.	163.9	34.1	198.0
PRECAST PRESTRESSED CONC. DECK BMS. (2' DEPTH)	SQ.FT.		4538	4538
STRUCTURAL STEEL	LBS.		5678	5678
REINFORCEMENT BARS	LBS.	12970	3080	16050
REINFORCEMENT BARS (EPOXY COATED)	LBS.		280	280
CONCRETE PILES	LIN.FT.	1665		1665
TEST PILES (CONCRETE)	EACH	2		2
NAME PLATES	EACH		1	1
PORTLAND CEMENT MORTAR FAIRING COURSE	LIN.FT.		1008	1008
WATERPROOFING MEMBRANE SYSTEM	SQ.YD.		460	460
PREFORMED JOINT SEAL - 2 1/2"	LIN.FT.		85	85
FABRIC FORMED CONCRETE REVETMENT MAT	SQ.YD.			815

NOTE:  
Remove existing abutts.  
12" below the elev. of the  
conc. revetment Mat in  
that location.

NOTE  
Structure designed in accordance with  
A.A.S.H.T.O. Specifications dated 1977  
and interim specifications dated 1978  
and 1979.



DESIGN STRESSES PLAN VIEW

APPROVED  
FOR STRUCTURAL ADEQUACY ONLY

FIELD  
f<sub>s</sub> = 24,000 psi  
f<sub>c</sub> = 1,400 psi  
v = 56 psi  
n = 9

SHOP - PRESTR. BEAMS  
f<sub>b</sub> = 5,000 psi  
f<sub>cl</sub> = 4,000 psi  
f<sub>s</sub> = 270,000 psi  
f<sub>sl</sub> = 189,000 psi

LOADING HS 20-44  
Includes allowance for 25 p.s.f.  
future wearing surface

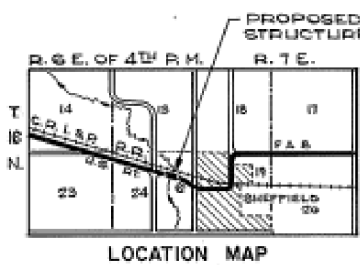
GENERAL NOTES

See special Provisions for Boring Data.  
A Calcium Nitrite Corrosion Inhibitor, as  
covered in the Special Provisions, shall  
be used in the concrete for precast  
prestressed conc. deck bms. & CL. X Conc. for parapets.  
All structural steel shall be shop painted  
with two coats of basic lead silico  
chromate paint.  
Layout of Fabric Formed concrete  
revetment Mat may be varied in the  
field to suit ground conditions as  
directed by the Engineer.  
The contractor shall drive one (1) conc.  
test pile at west Abutment and Pier 2  
in permanent locations as directed by the  
Engineer before ordering the remainder of piles.  
The top surface of the beams shall be  
finished in accordance with 505.06 of  
the standard specifications except  
that the surface shall not be roughened  
by brooming. The finished surface shall  
be free of depressions or high spots  
with sharp corners.  
Protective coat shall not be applied to  
surfaces to which waterproofing  
membrane is applied.  
Reinforcement bars shall conform to  
the requirements of AASHTO M-31 or  
M-53 grade 60.

WATERWAY INFORMATION

Drainage Area = 25.46 Sq. Mi. Low Grade Elev. = 667.46 @ Sta. 33100 to 34100

Flood	Freq. Tr.	Q C.F.S.	Opening Sq. Ft.	Hat. E.N.E.	Head-Ft. Below Prop.	Headwater El.	
Design	30	4000	562	700	660.7	0.40	661.1
Base	100	5140	607	758	661.5	0.87	662.37
Overtopping							
Max. Calc.	500						



SECTION 8D BR  
F.A.S. RT. 2246 U.S. RT. 6  
BUREAU COUNTY

GENERAL PLAN AND ELEVATION

DESIGNED BY: DEL L. THOMPSON  
DATE: MAY 1980

DRAWN BY: C. F. HOGAN  
DATE: MAY 1980

CHECKED BY: DE. HUFFMAN  
DATE: MAY 1980

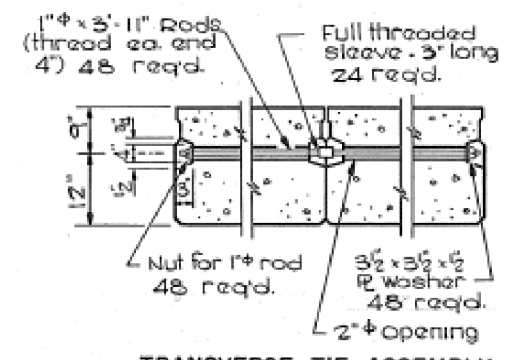
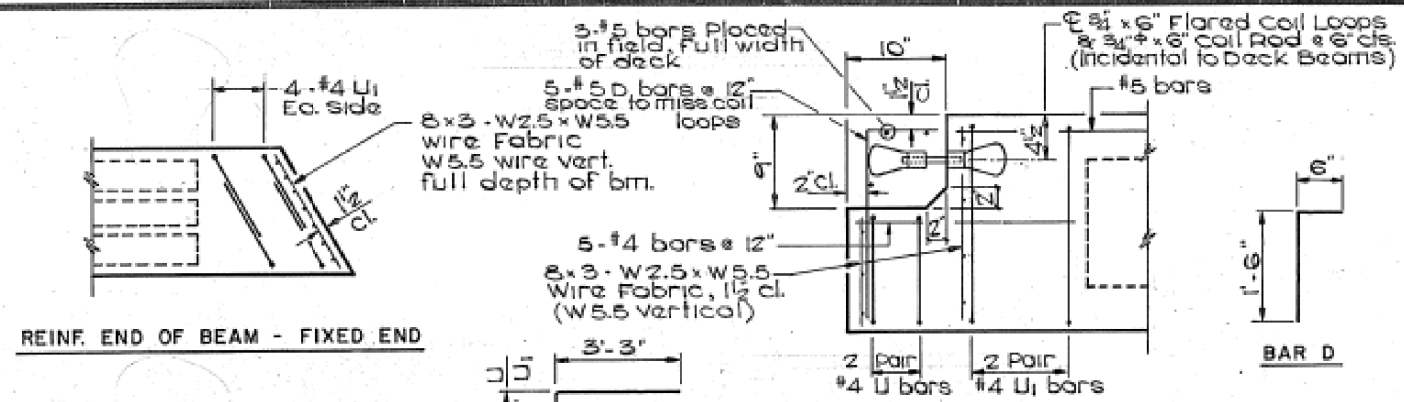
APPROVED BY: [Signature]

WILLET  
HOFMANN &  
ASSOCIATES, Inc.  
Consulting Engineers

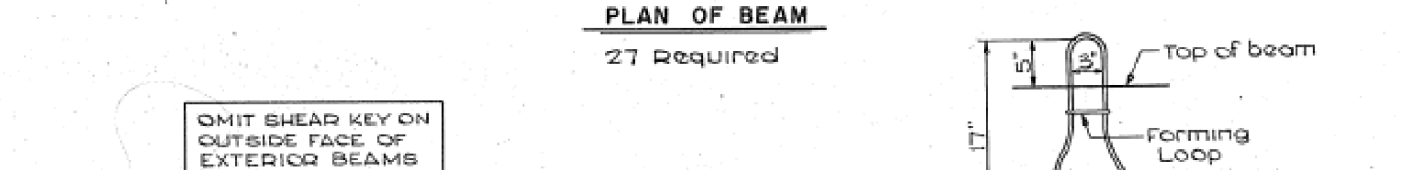
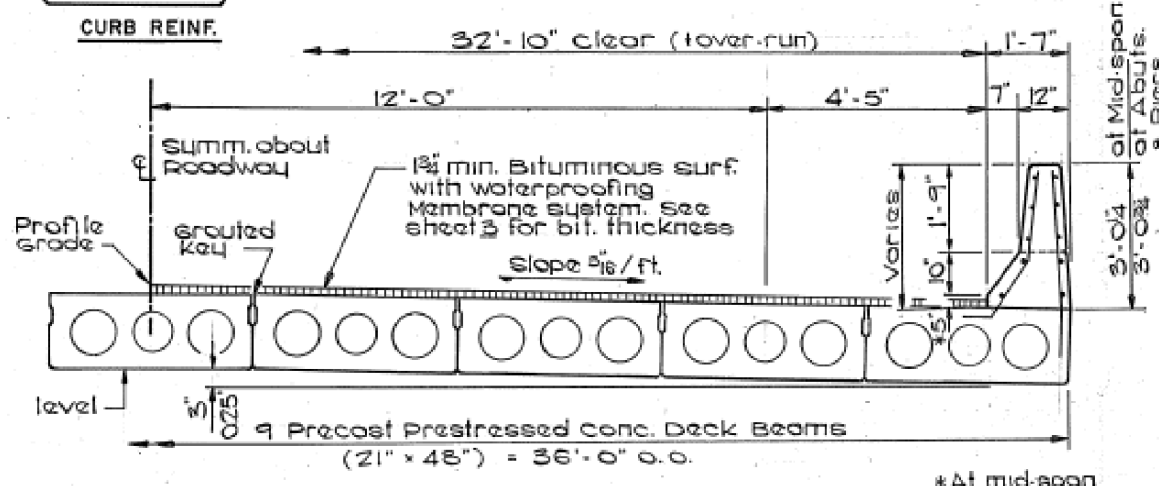
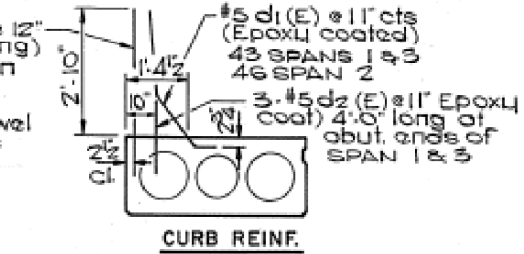
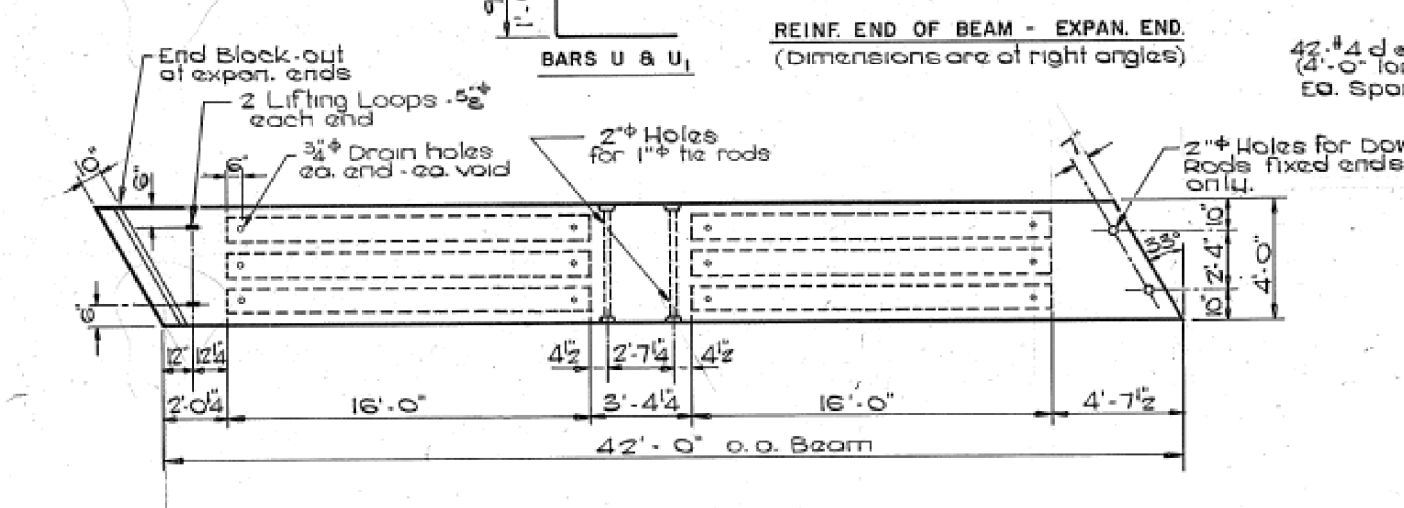
ILLINOIS PROFESSIONAL ENGINEER  
STATE OF ILLINOIS  
NO. 001234567  
EXPIRES 12/31/2014

NO.	REV.	DATE	TOTAL SHEETS	SHEET NO.
1	0		9	5

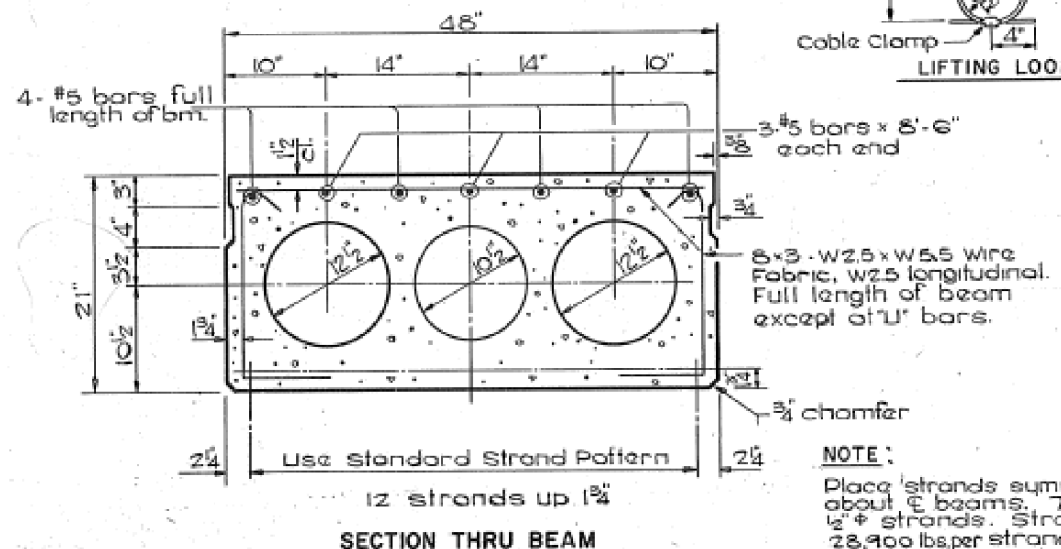
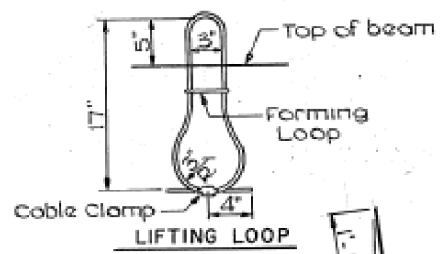
\* FAS-2246



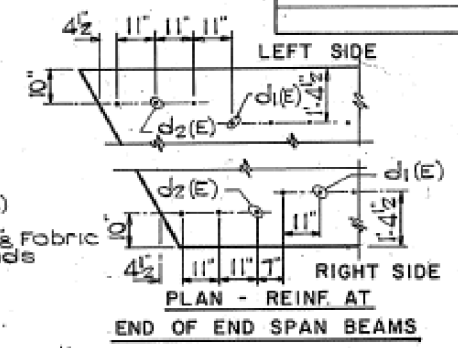
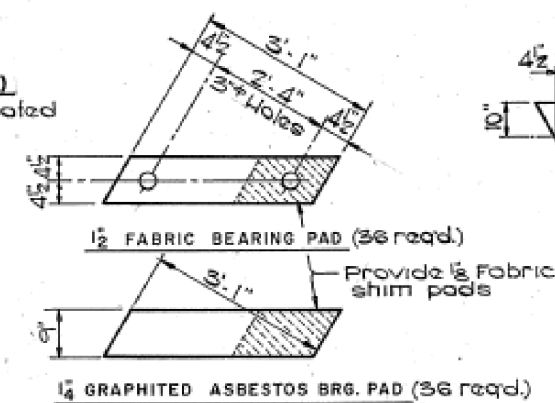
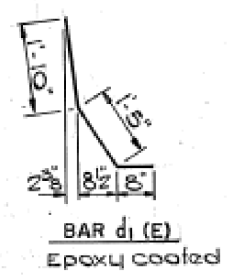
**GENERAL NOTES:**  
 Prestressing steel shall be non-galvanized high strength stress-relieved 7-wire strand, Grade 270. The nominal dia. shall be 1/2" and the nominal cross-sectional area shall be 0.158 Sq. inch. Reinforcement bars shall conform to AASHTO: M-31 or M-53, Grade 60. The 1" dia. rods in the transverse tie assembly shall be tightened to a snug fit and set threads.  
 Pockets that receive transverse tie bar on outside beam shall be filled with grout after transverse tie assembly is in place. Cost of reinforcement and accessories cast into beams, of bearing pads, shim pads and of grouting longitudinal shear keys is included in unit price bid for "Precast Prestressed Concrete Deck Beams."  
 Lifting loops shall be 5/8" diameter, 6x25 class wire rope with fiber core and shall have a minimum ultimate tensile strength of 33,000 lbs.



OMIT SHEAR KEY ON OUTSIDE FACE OF EXTERIOR BEAMS



**NOTE:**  
 Place strands symmetrically about E beams. 7 wire 1/2" strands. Stress to 28,900 lbs. per strand



**BILL OF MATERIAL - DECK**

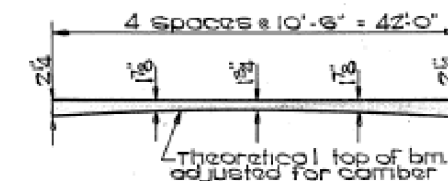
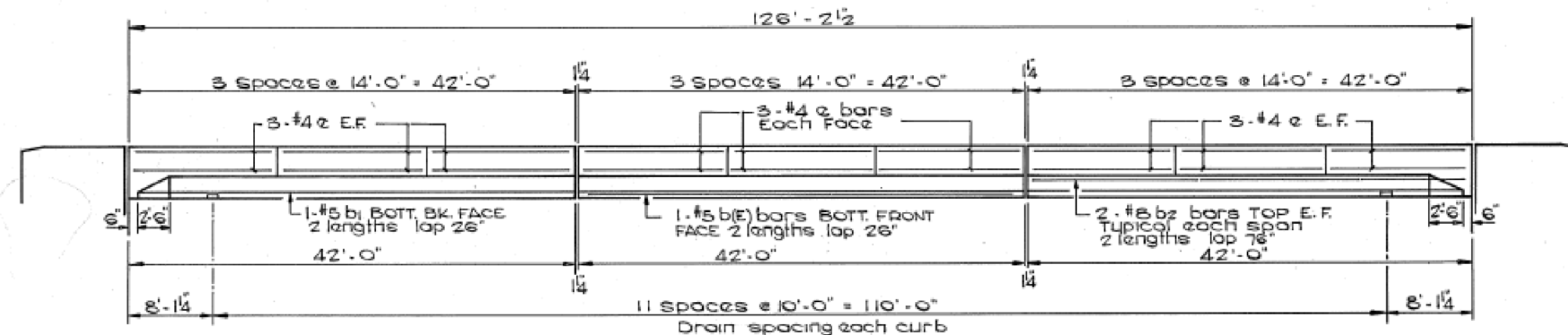
ITEM	UNIT	QUANT.
Precast Prestressed Conc. Deck Beams (21" x 48")	Sq. Ft.	4536

**DECK DETAILS**  
 SECTION 8D - BR  
 US RT 6 FAS RT 2246  
 BUREAU COUNTY



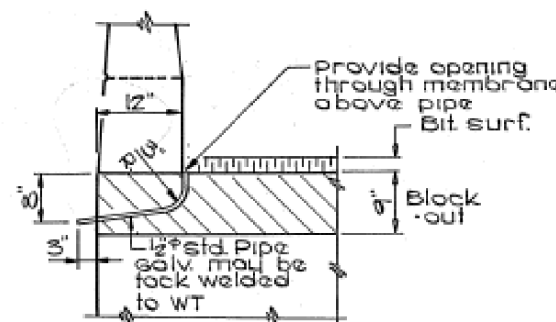
PROJECT NO.	SECTION	SHEET NO.	TOTAL SHEETS
4	8D BR BUREAU	9	6

\*FAS 2246



**VARIABLE THICKNESS BITUMINOUS**  
TYPICAL EACH SPAN  
Dimensions include 1/2" for water proofing and sand seal.

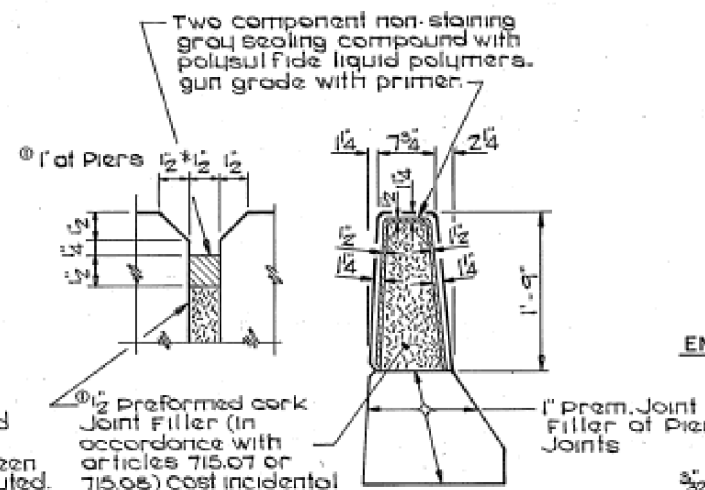
**INSIDE ELEVATION PARAPET-SHOWING JOINT & DRAIN SPACING**



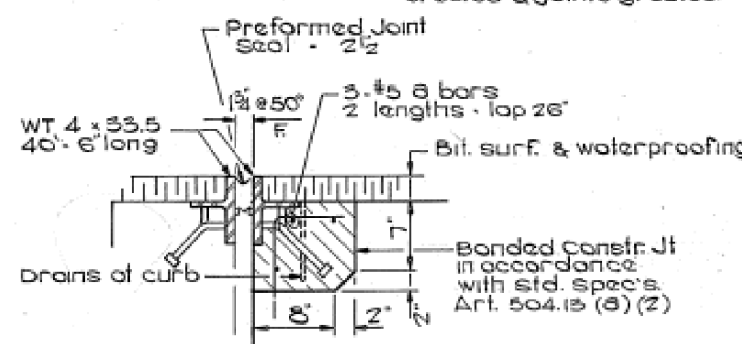
**DRAIN HOLES AT ABUTMENT**

Provide drain holes at low points of expansion ends. Typical 4 places.

**NOTE**  
Dimensions are at right angles. Hatched areas to be poured after beams have been erected & joints grouted.

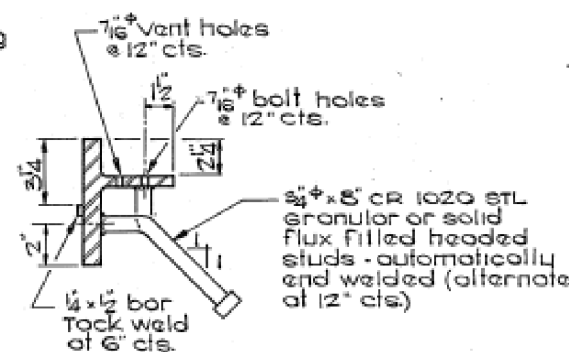


**DETAIL OF PARAPET JOINT**



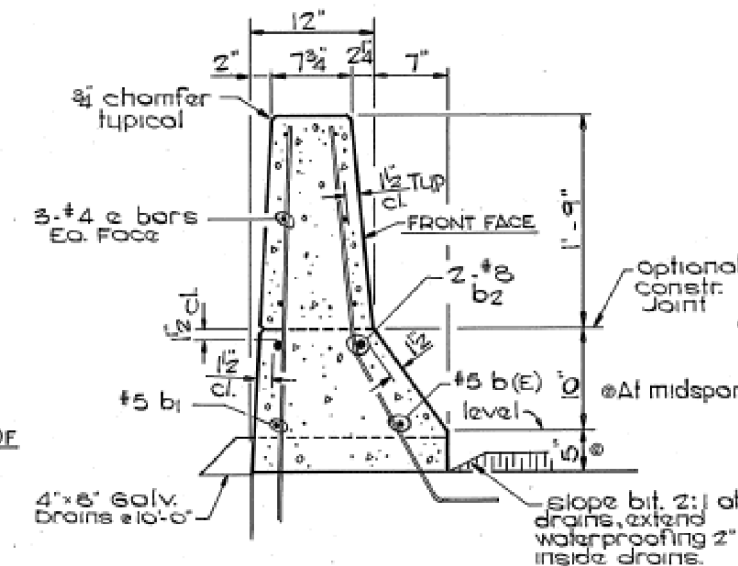
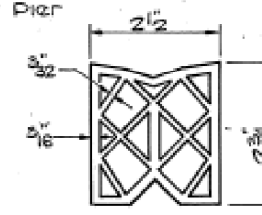
**DETAIL END OF BEAMS AT ABUTMENTS**

Ends of beams shall be aligned at ends of bridge. Any linear variation in beam lengths shall be placed at pier joints. Concrete in block-out shall be paid for as Class X concrete.

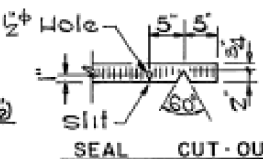


**DETAIL OF EXPANSION DAM**  
Fabricate to fit crown  
4 Required

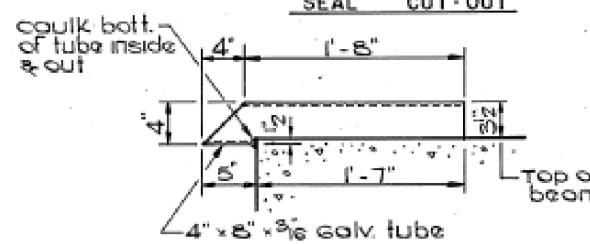
**END TREATMENT OF SEAL**



**CURB SECTION**



**SEAL CUT-OUT**



**DRAIN DETAIL**  
Cost incidental

**BILL OF MATERIAL-PARAPETS**

BAR NO.	SIZE	LENGTH	SHAPE
3	12 #5	22'-4"	—
b(E)	12 #5	22'-0"	—
b1	12 #5	22'-0"	—
b2	24 #8	24'-0"	—
e	108 #4	13'-8"	—
Class X concrete cu.yds. 51.1			
Reinforcement Bars Lbs. 3080			
Reinforcement Bars (Epoxy coated) Lbs. 280			
Structural steel Lbs. 5676			
Bit. Conc. surface Course, class I Tons 49			
Waterproofing Membrane system sq.yds. 460			
Portland Cement Mortar Facing Course Lin. Ft. 1008			
Protective Coat sq.yds. 121			
Preformed Joint Seal - 2 1/2 Lin. Ft. 85			

\*Includes 1.9 cu.yds. for box-out at end of deck

**PARAPET DETAILS**  
SECTION 8D - BR  
US RT 6 FAS RT 2246  
BUREAU COUNTY

FILE NAME =	USER NAME = carpenterdj	DESIGNED -	REVISED -
ct:\pk_work\p\midot\carpenterdj\d0183264\0366A17-sht-exbrbridge.dgn		DRAWN -	REVISED -
PLOT SCALE = 100.0000 / 1 in.		CHECKED -	REVISED -
PLOT DATE = 8/1/2014		DATE -	REVISED -

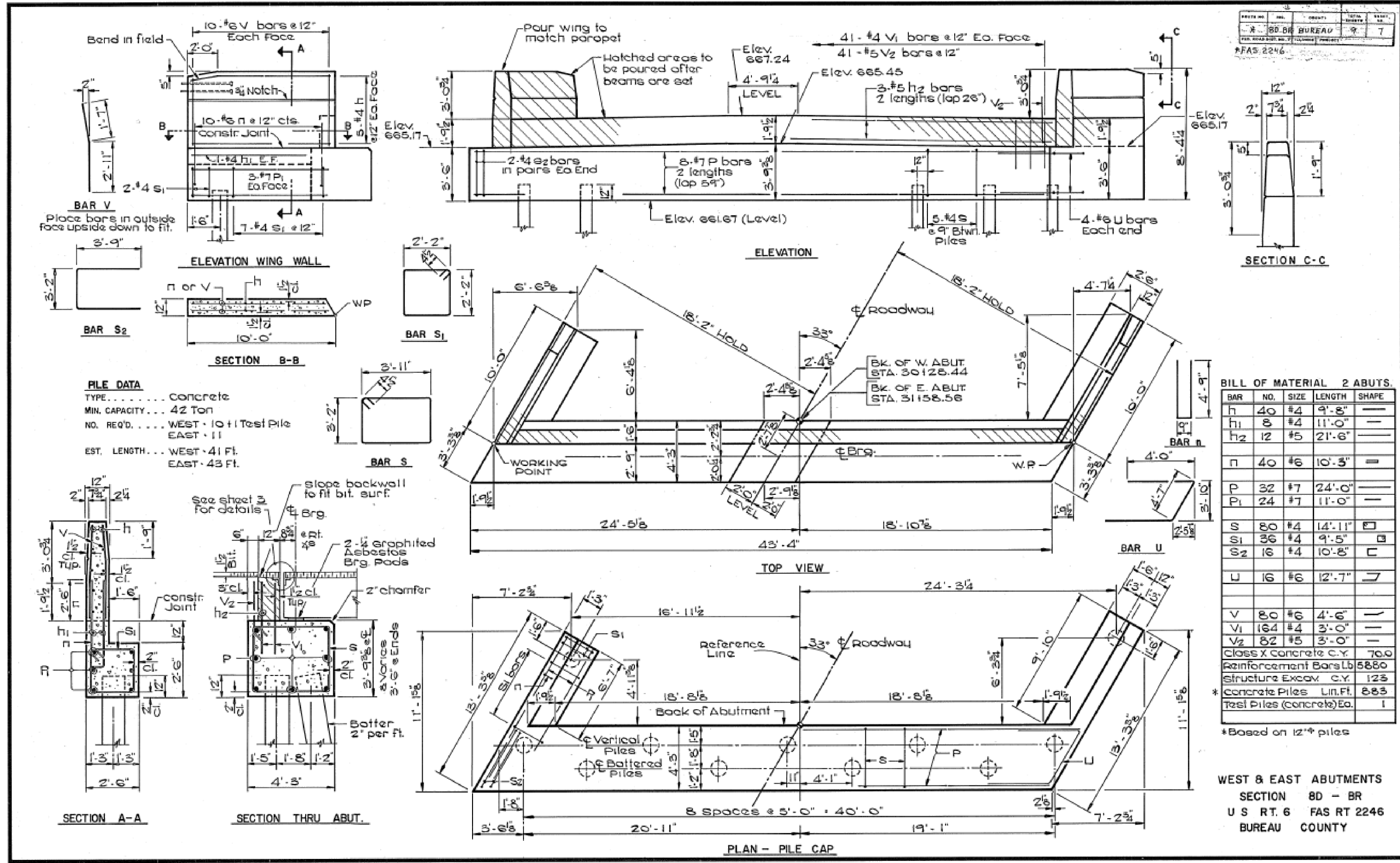
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS FOR INFORMATION ONLY	
SCALE: _____	SHEET _____ OF _____ SHEETS STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
613	(8D BR)BUREAU	BUREAU	63	51
CONTRACT NO. 66A17				
ILLINOIS FED. AID PROJECT				

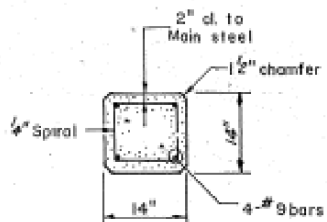
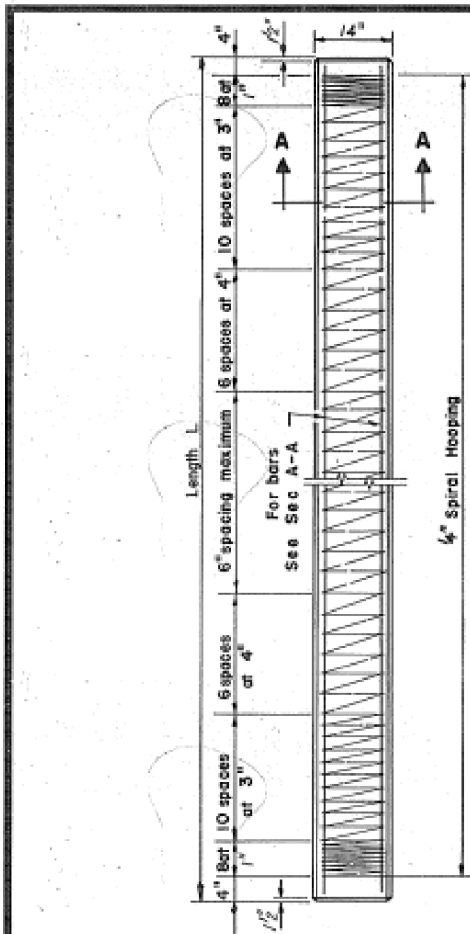
PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80 BR	BUREAU	9	7	

\*FAS 2246

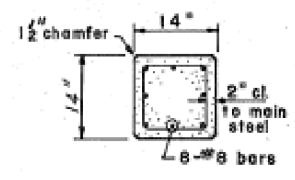








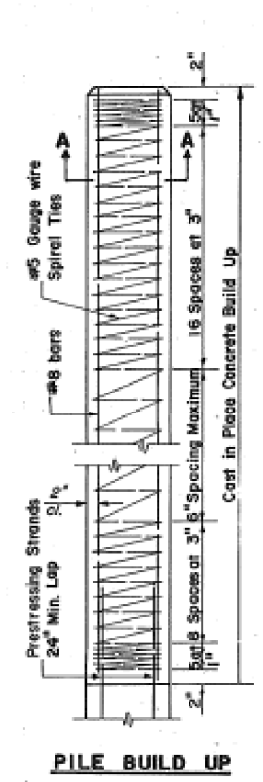
**SECTION A-A  
FOR PILES UNDER  
45' LONG**



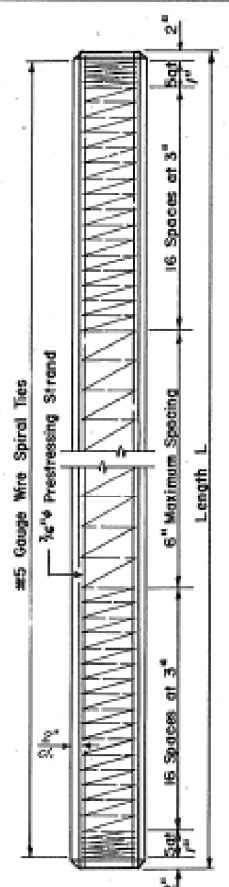
**SECTION A-A  
FOR PILES 45'  
OR MORE**

**HANDLING:** For Pile lengths up to 45' use two slings placed at a distance of 0.21 L from each end. For Piles longer than 45' use three slings placed at a distance of 0.12 L from each end and at mid point of pile.

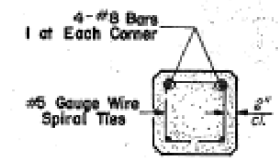
**DETAIL OF PRECAST  
CONCRETE PILES**



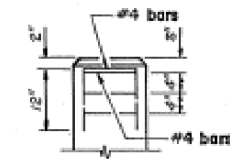
**PILE BUILD UP**



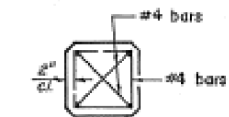
**PILE PLAN**



**SECTION A-A**

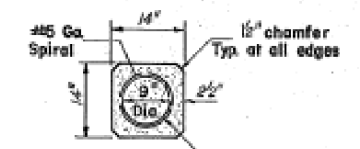


**ELEVATION  
(End Reinforcement)**



**PLAN  
(End Reinforcement)**

NO. IN SET	NO.	PROJECT	TOTAL SHEETS	SHEET NO.
1	8D BR	BUREAU	9	9



**SECTION  
THRU PILE**

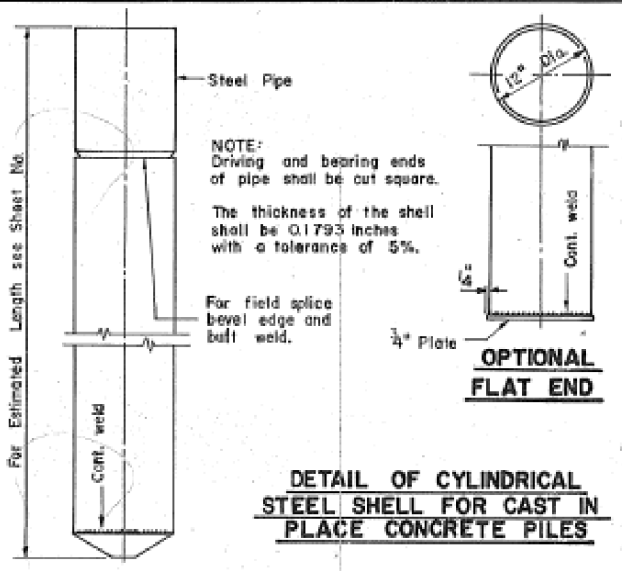
**DESIGN STRESSES**

- $f_c' = 5,000 \text{ psi}$
- $f_c' = 4,000 \text{ psi}$
- $f_s' = 270,000 \text{ psi (31,000 lbs.)}$
- $f_s' = 189,000 \text{ psi (21,700 lbs. } 1/2 \text{ or } 29,900 \text{ lbs. } 3/4 \text{)}$

**NOTES**

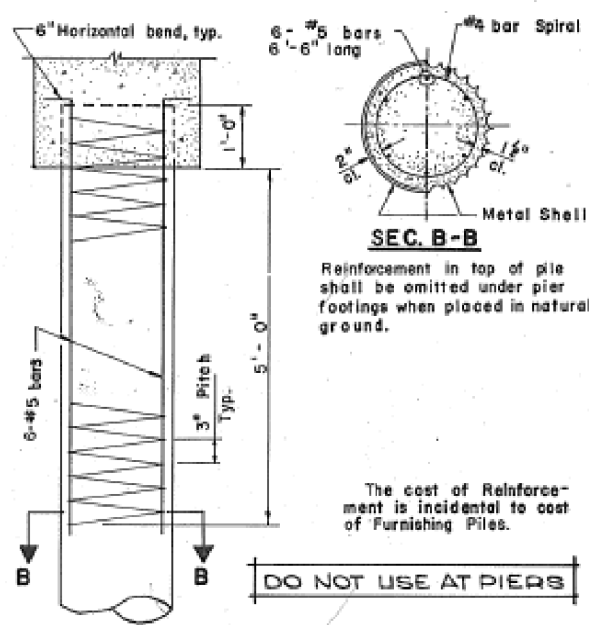
Prestressing steel shall be non-galvanized extra high strength stress-relieved 7-wire strand. The nominal diameter shall be 7/16 and the minimum nominal cross-sectional area shall be 0.115 sq. in. or the equivalent 6 #5 strands with a cross-sectional area of 0.153 sq. in. may be used. For Pile lengths up to 65', use two slings placed at a distance of 0.21 L from each end. For Piles longer than 65' use three slings placed at a distance of 0.12 L from each end or a mid-point of pile. L = Over all length of pile to be handled.

**PRECAST PRESTRESSED CONCRETE PILE**



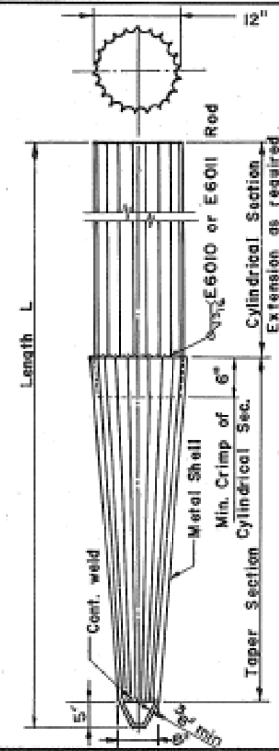
**DETAIL OF CYLINDRICAL  
STEEL SHELL FOR CAST IN  
PLACE CONCRETE PILES**

**DO NOT USE AT PIERS**



**DETAIL OF REINFORCEMENT  
FOR METAL SHELLS**

**DO NOT USE AT PIERS**

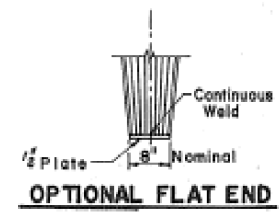
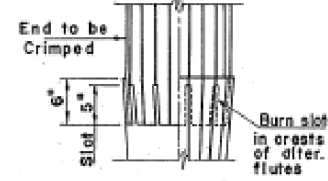


**DETAIL OF TAPERED METAL SHELLS  
FOR CAST IN PLACE CONCRETE PILES**

**NOTE:** The thickness of the shell shall be 0.1498 inches with a tolerance of 5%. The shell shall be in accordance with Article 710.05 (a) of the standard Specifications except that min. yield strength for the steel after cold working shall be 50,000 p.s.i.

**FIELD CRIMP DETAIL**

**NOTE:** 6" Crimp shall either be supplied on the cylindrical section or made in the field as detailed.



**OPTIONAL FLAT END**

**DO NOT USE AT PIERS**

**ALLOWABLE TAPERS**

- 10' Length - Taper 1" in 2'-6"
- 17' Length - Taper 1" in 4'-0"
- 25' Length - Taper 1" in 7'-0"
- 30' Length - Taper 1" in 7'-0"

**PILE DETAILS  
SECTION 8D - BR  
U S RT. 6 FAS RT. 2246  
BUREAU COUNTY**

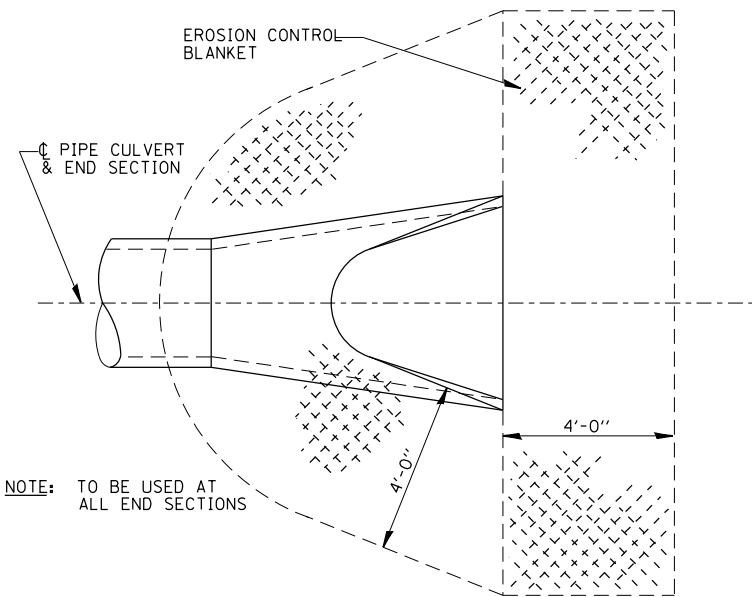
FILE NAME =	USER NAME = carpenterdj	DESIGNED -	REVISOR -
ci:\pw\work\p\idot\carpenterdj\d0183264\0366A17-sht-exbrIDGE.dgn		DRAWN -	REVISOR -
PLOT SCALE = 100.0000 / 1 in.		CHECKED -	REVISOR -
PLOT DATE = 8/1/2014		DATE -	REVISOR -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**EXISTING BRIDGE PLANS  
FOR INFORMATION ONLY**

SCALE: \_\_\_\_\_ SHEET \_\_\_\_\_ OF \_\_\_\_\_ SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

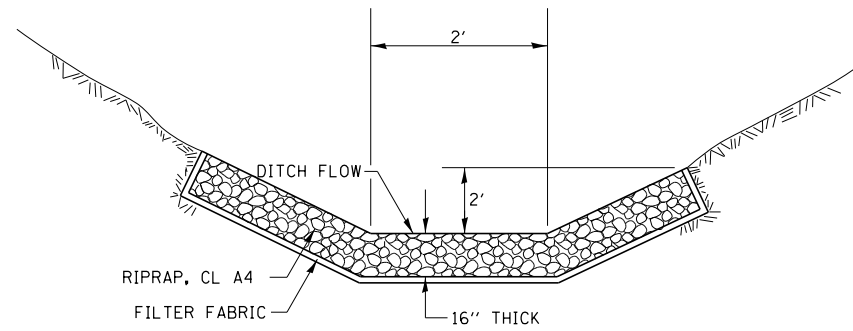
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
613	(8D BR)BR	BUREAU	63	54
			CONTRACT NO. 66A17	



NOTE: TO BE USED AT ALL END SECTIONS

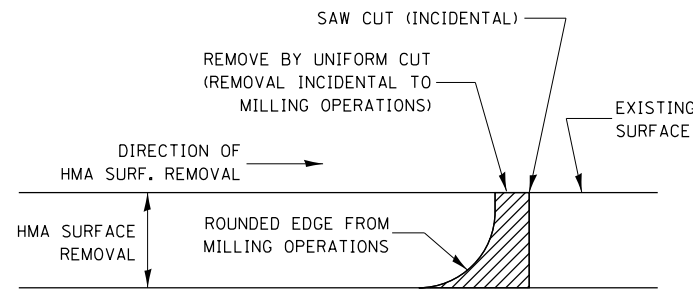
NOTE: PRC FLARED END SECTION SHOWN. TREATMENT SAME FOR OTHER END SECTIONS.

**DETAIL OF EROSION CONTROL BLANKET LINING AROUND END SECTION**



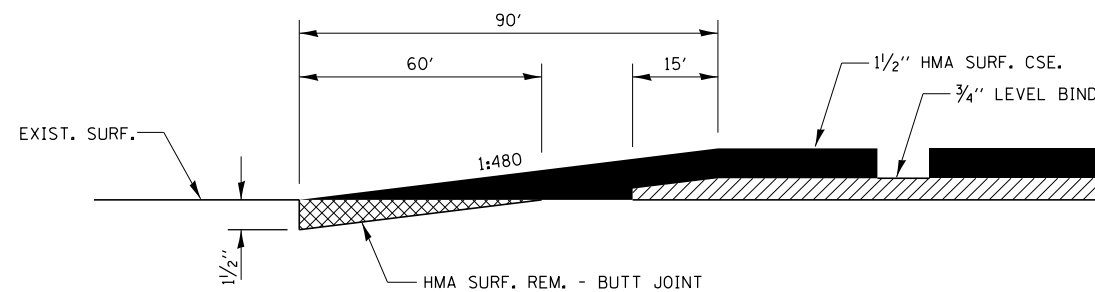
THIS WORK SHALL BE DONE ACCORDING TO SECTION 283 OF THE STANDARD SPECIFICATION.

**RIPRAP DETAIL  
SW & SE QUADRANTS**

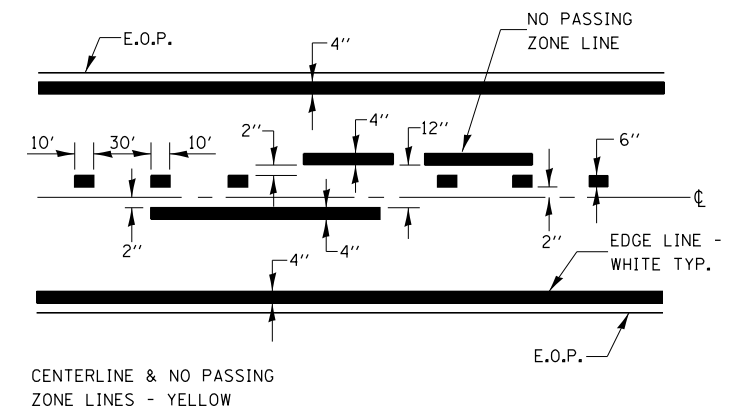


NOTE: WHEN MILLING OPERATIONS PRODUCE A ROUNDED EDGE, THEN A SAW CUT SHALL BE USED TO MANUFACTURE A PERPENDICULAR EDGE AS SHOWN IN THE DETAIL. THE ENGINEER SHALL BE THE SOLE JUDGE CONCERNING THE USE OF THIS DETAIL

**HMA DETAIL AT BUTT JOINTS**

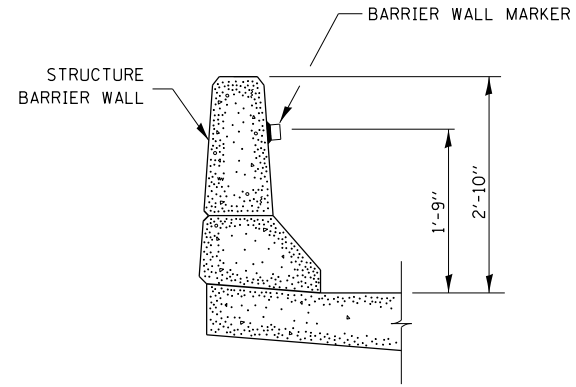
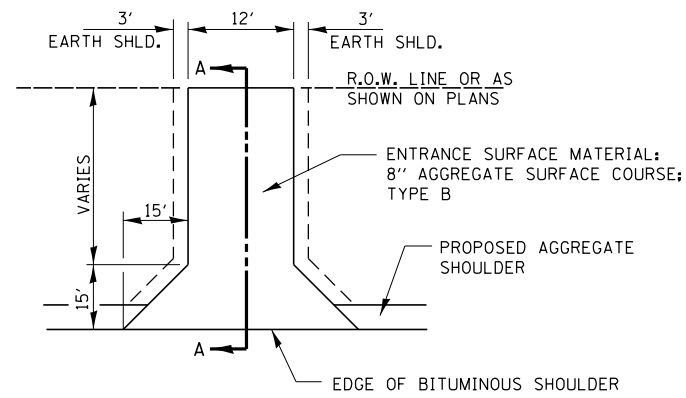


**BUTT JOINT DETAIL**

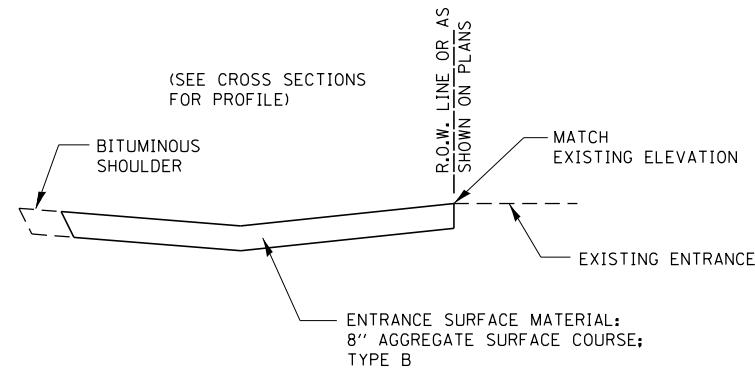


**PAVEMENT MARKING**

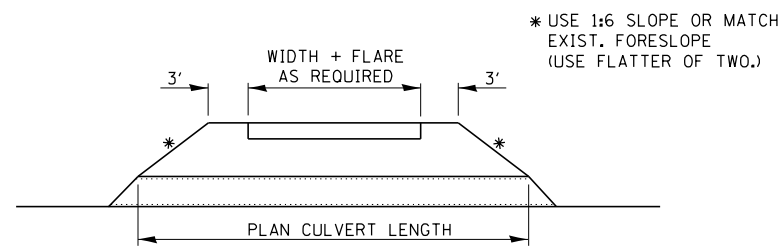
FILE NAME =	USER NAME = carpenterdj	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DETAILS</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ei:\pw\work\p\idot\carpenterdj\d0183264\0366A17-sht-details.dgn	PLOT SCALE = 100.0000' / in.	DRAWN -	REVISED -					613	(8D BR)BR	BUREAU	63	55
	PLOT DATE = 8/7/2014	CHECKED -	REVISED -		CONTRACT NO. 66A17							
		DATE -	REVISED -		ILLINOIS FED. AID PROJECT							



**BARRIER WALL MARKER**

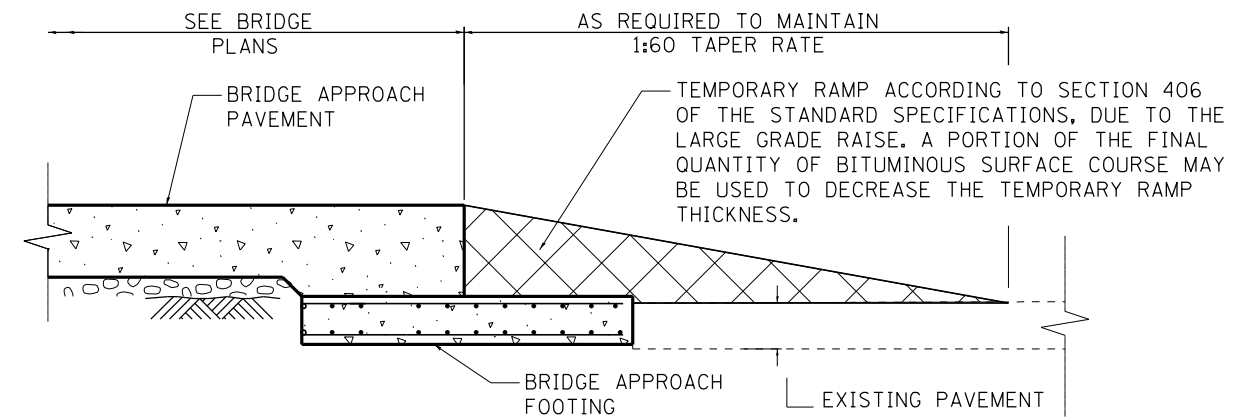


**SECTION A-A**



**ENTRANCE DETAIL**

STA 965+14



**TEMPORARY RAMP TAPER DETAIL**

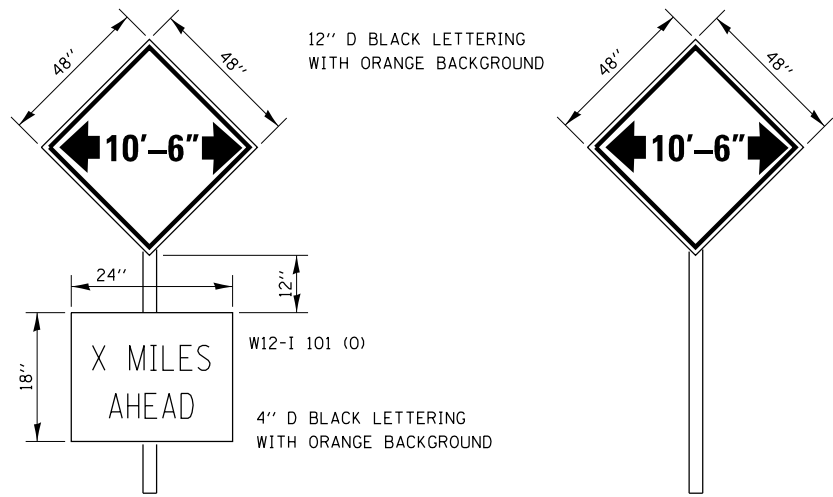
(NOT TO SCALE)

FILE NAME =	USER NAME = carpenterdj	DESIGNED -	REVISED -
ct:\pw\work\p\dot\carpenterdj\d0183264\0366A17-sht-details.dgn		DRAWN -	REVISED -
	PLOT SCALE = 100.0000' / 1in.	CHECKED -	REVISED -
	PLOT DATE = 8/1/2014	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>DETAILS</b>				
SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
613	(8D BR)BR	BUREAU	63	56
CONTRACT NO. 66A17				
ILLINOIS FED. AID PROJECT				



TO BE POST MOUNTED AT THE FOLLOWING LOCATIONS:

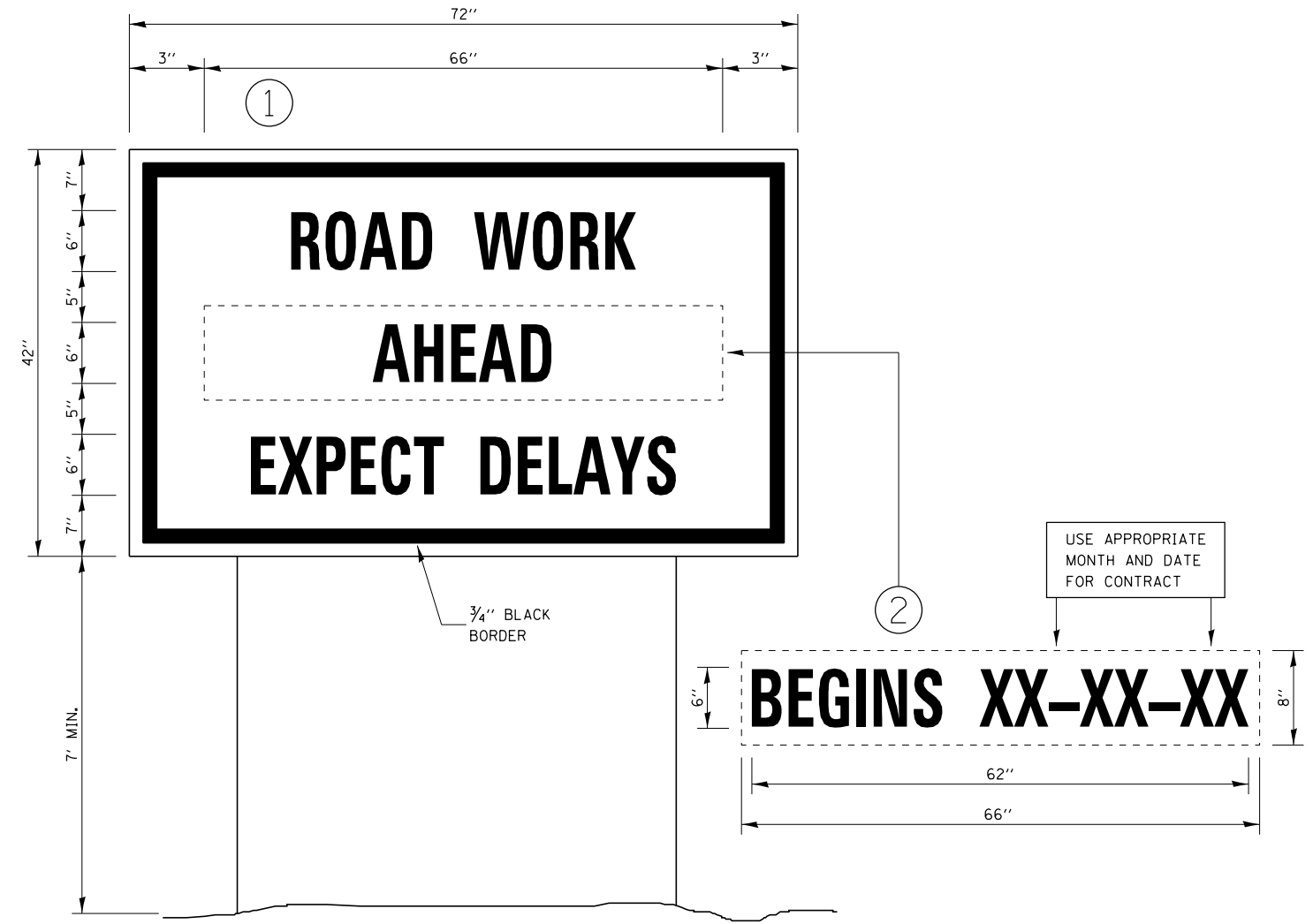
- EB AT THE EAST LEG OF US 6 AND IL 78 AT ANNAPAN (8.6 MILES AHEAD)
- EB AT THE EAST LEG OF US 6 AND US 34 (550E ST) WEST OF SHEFFIELD (0.3 MILES AHEAD)
- WB AT THE WEST LEG OF US 6 / US 34 AND IL 40 EAST OF SHEFFIELD (3.5 MILES AHEAD)

THE ENGINEER WILL NOTIFY DISTRICT 3 BUREAU OF OPERATIONS 14 CALENDAR DAYS PRIOR TO INSTALLING ANY TRAFFIC CONTROL DEVICES THAT WILL RESTRICT THE PAVEMENT WIDTH.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE ENGINEER TO MEET THIS REQUIREMENT.

COST OF SUPPLYING, INSTALLING, MAINTAINING AND REMOVING WIDTH RESTRICTION SIGNS SHALL BE INCLUDED IN THE COST OF THE TRAFFIC CONTROL AND PROTECTION PAY ITEMS.

**WIDTH RESTRICTION SIGNING DETAILS**



**TEMPORARY INFORMATION SIGNING**

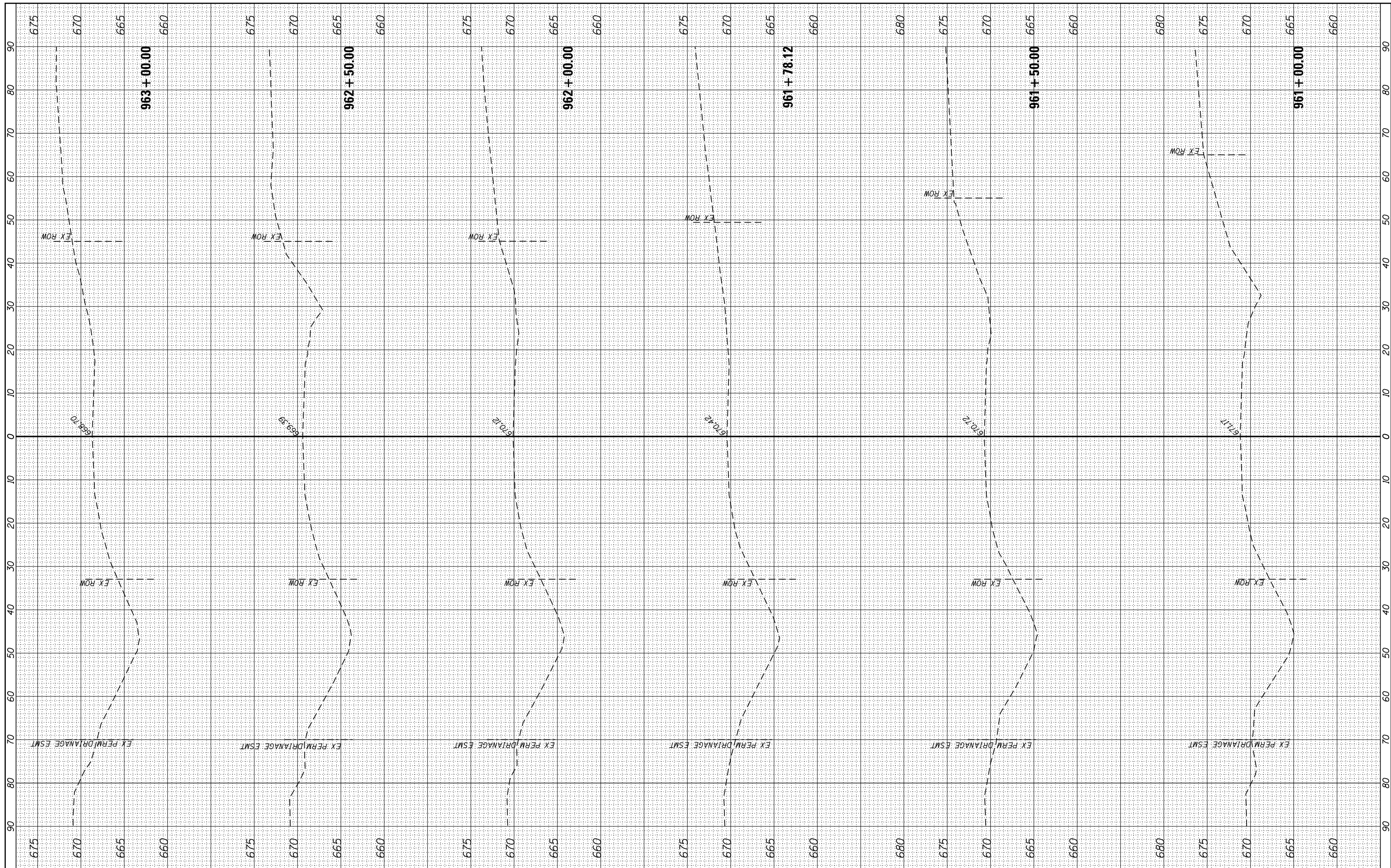
**NOTES:**

- USE 6" D BLACK LETTERING ON FLOURESENT ORANGE BACKGROUND.
- ERECT SIGNS AT LOCATIONS IN ADVANCE OF THE "ROAD CONSTRUCTION AHEAD" SIGNS AS DIRECTED BY THE ENGINEER.
- ERECT SIGN ① WITH INSTALLED PANEL ② A MINIMUM OF ONE WEEK PRIOR TO THE START OF THE LANE CLOSURE.
- REMOVE PANEL ② ON THAT DATE.
- SEE SPECIAL PROVISION "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
- WILL BE PAID FOR PER SQ FT AS "TEMPORARY INFORMATION SIGNING". EACH SIGN = 21 SQ FT AND THE DATE PANEL ② WILL NOT BE MEASURED SEPARATELY FOR PAYMENT.

FILE NAME =	USER NAME = carpenterdj	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DETAILS</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ci:\pw_work\p1dot\carpenterdj\d0183264\0366A17-sht-details.dgn	PLOT SCALE = 100.0000' / 1in.	DRAWN -	REVISED -					613	(8D BR)BR	BUREAU	63	57
*MODELNAME*	PLOT DATE = 8/1/2014	CHECKED -	REVISED -		CONTRACT NO. 66A17			ILLINOIS FED. AID PROJECT				
		DATE -	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.	

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

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



FILE NAME = c:\pw\_work\pwidot\carpenterd\0183264\0366A17

USER NAME = carpenterdj  
 DRAWN -  
 CHECKED -  
 DATE -

DESIGNED -  
 REVISIONS:  
 REVISIONS:  
 REVISIONS:

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

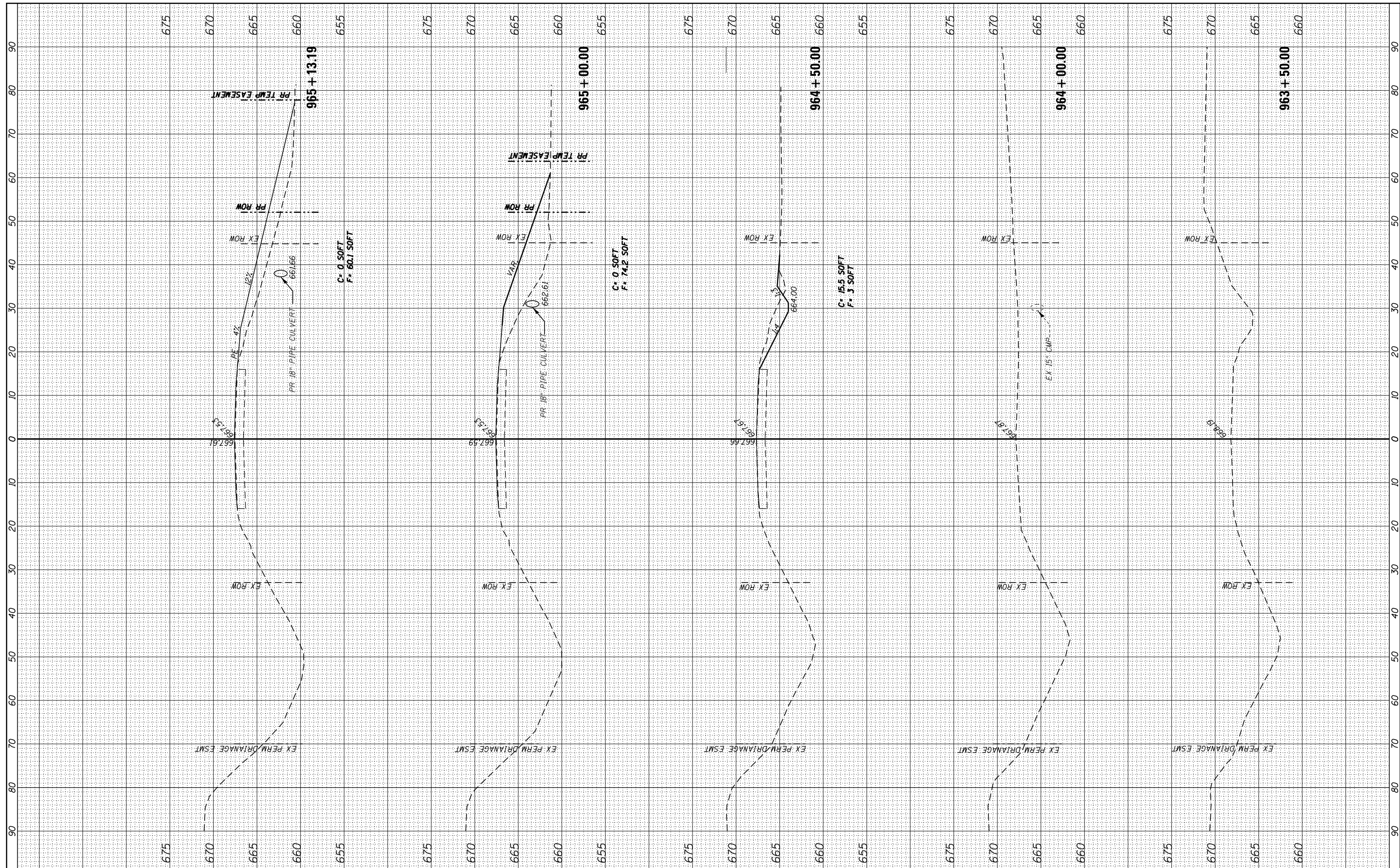
**U.S. ROUTE 6 / U.S. ROUTE 34  
 OVER COAL CREEK**

SCALE: SHEET NO. OF SHEETS STA. 961+00.00 TO STA. 963+00.00

F.A.P. RTE. 613	SECTION (8D-BR)BR	COUNTY BUREAU	TOTAL SHEETS 63	SHEET NO. 58
CONTRACT NO. 66A17			ILLINOIS FED. AID PROJECT	

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

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



FILE NAME = c:\pw\_work\p1dot\carpenterd\0183264\0366A17

USER NAME = carpenterdj  
 DRAWN -  
 CHECKED -  
 DATE -

DESIGNED -  
 DRAWN -  
 CHECKED -  
 DATE -

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**U.S. ROUTE 6 / U.S. ROUTE 34  
 OVER COAL CREEK**

SCALE: SHEET NO. OF SHEETS STA. 963+50.00 TO STA. 965+13.19

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
613	(8D-BR)BR	BUREAU	63	59
CONTRACT NO. 66A17			ILLINOIS FED. AID PROJECT	

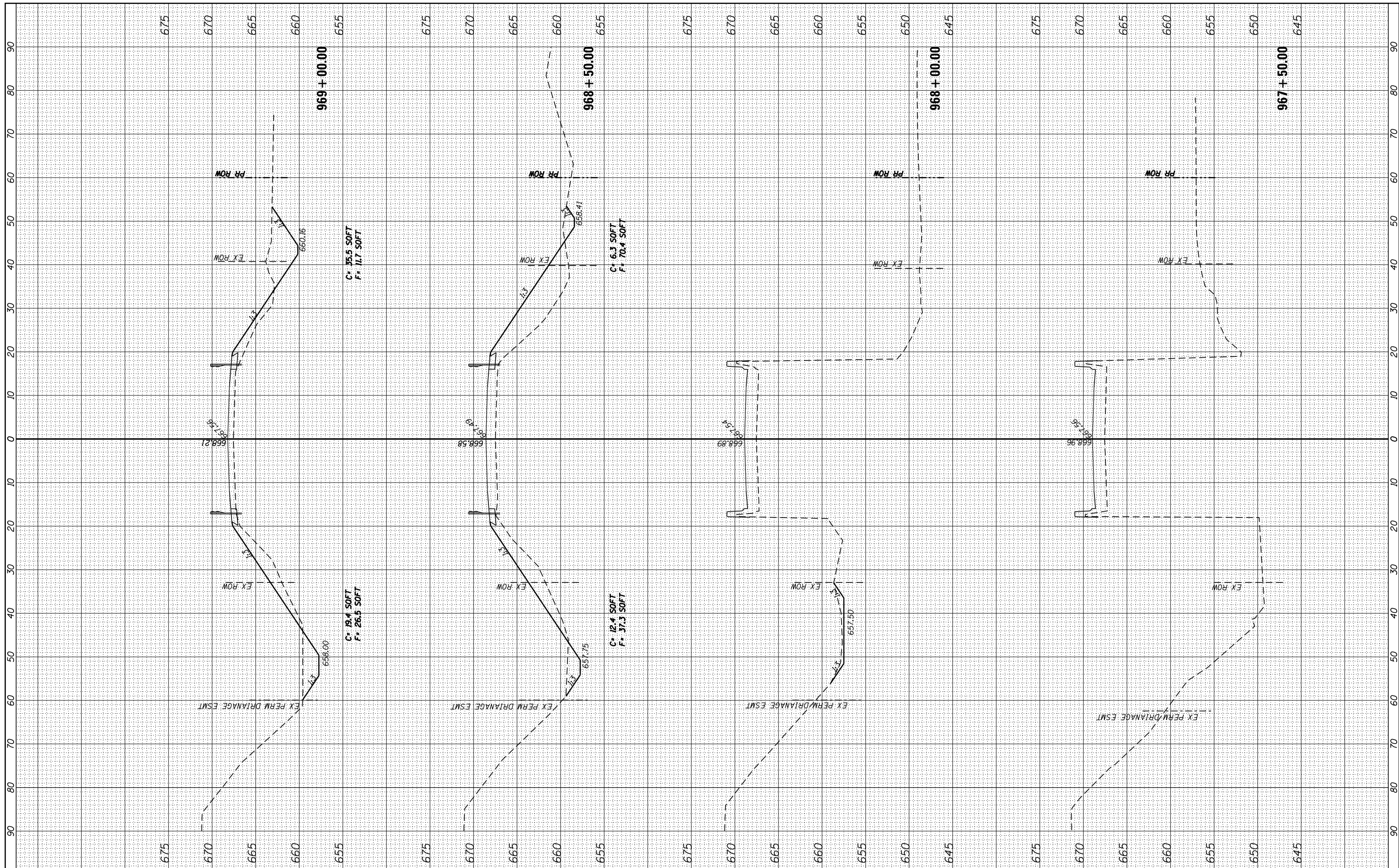






FINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE



FILE NAME = c:\pw\_work\pwidot\carpenterd\0183264\0366A17

USER NAME = carpenterdj  
 DESIGNED -  
 DRAWN -  
 CHECKED -  
 DATE -

REVISIED -  
 REVISIED -  
 REVISIED -  
 REVISIED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**U.S. ROUTE 6 /U.S. ROUTE 34  
 OVER COAL CREEK**

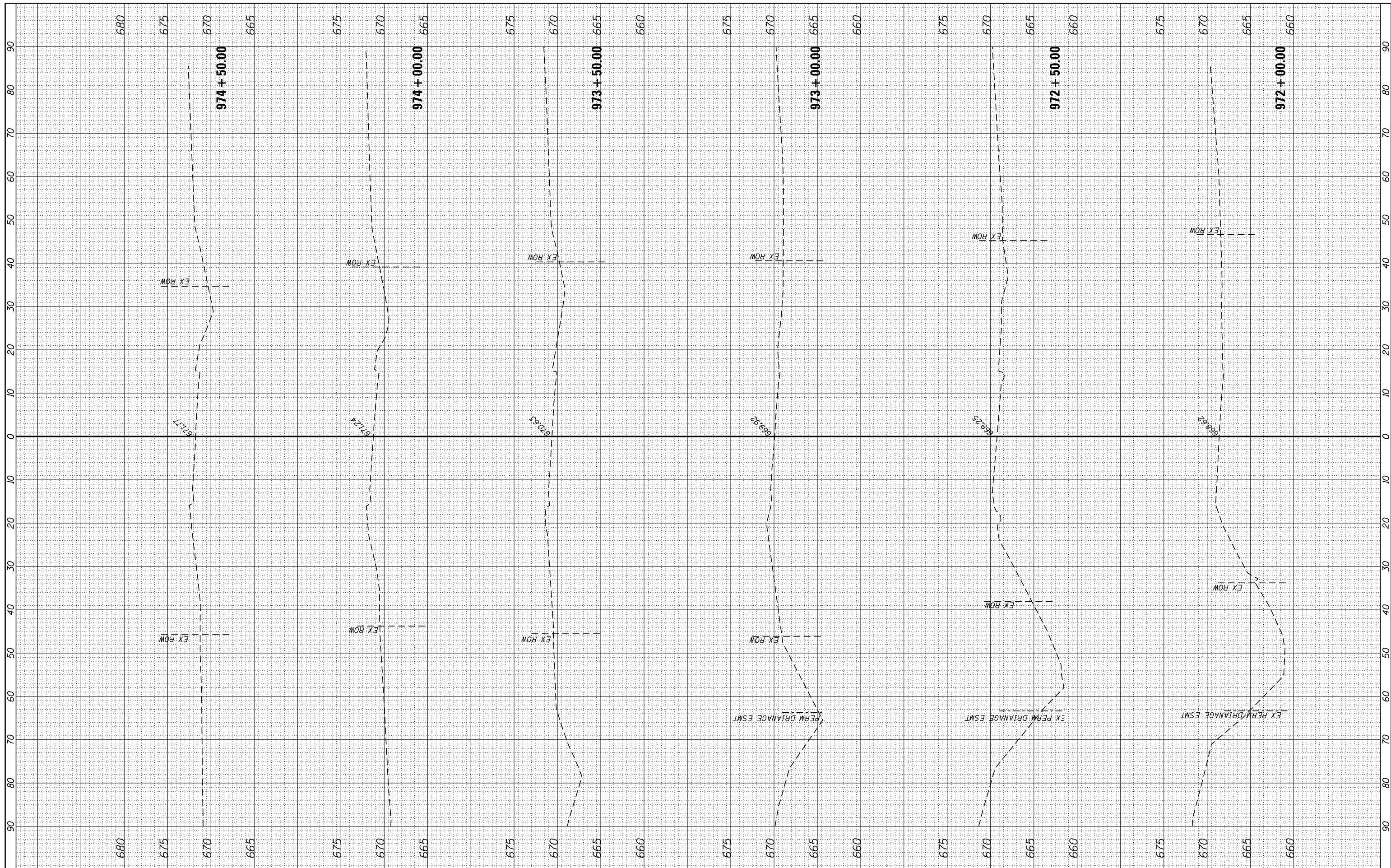
SCALE: SHEET NO. OF SHEETS STA. 967+50.00 TO STA. 969+00.00

F.A.P. RTE. 613	SECTION (8D-BR)BR	COUNTY BUREAU	TOTAL SHEETS 63	SHEET NO. 61
CONTRACT NO. 66A17			ILLINOIS FED. AID PROJECT	



FINAL SURVEY NO.	SURVEYED	DATE
	PLOTTED	
	TEMPLATE	
	AREAS CHECKED	

ORIGINAL SURVEY NO.	SURVEYED	DATE
	PLOTTED	
	TEMPLATE	
	AREAS CHECKED	



FILE NAME = c:\pw\_work\pwidth\carpenterd\0183264\0366A17

USER NAME = carpenterd  
 sh-t-xsc.dgn  
 PLOT SCALE = 20.0000' / in.  
 PLOT DATE = 8/1/2014

DESIGNED -  
 DRAWN -  
 CHECKED -  
 DATE -

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**U.S. ROUTE 6 /U.S. ROUTE 34  
 OVER COAL CREEK**

SCALE: SHEET NO. OF SHEETS STA. 972+00.00 TO STA. 974+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
613	(8D-BR)BR	BUREAU	63	63
CONTRACT NO. 66A17			ILLINOIS FED. AID PROJECT	