06-14-13 LETTING ITEM 064

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80*	1
		ILLINOIS	CONTRACT NO. 68757	

*80+2=82

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED HIGHWAY PLANS

F.A.P. ROUTE 693 (IL 9)
SECTION (119BR) BR
PROJECT F-0693(068)
STRUCTURE REPLACEMENT
TAZEWELL COUNTY

FOR INDEX OF SHEETS, SEE SHEET NO. 2

QC/QA CONCRETE

NPDES REQUIRED

HIGHWAY STANDARDS

- 001001-02
- 280001-07
- 420401-09
- 515001-03
- 630001-10
- 630301-06
- 631031-11
- 635006-03
- 635011-02
- 666001-01
- 701001-02
- 701006-04
- 701201-04
- 701301-04
- 701306-03
- 701311-03
- 701321-13
- 701326-04
- 701901-02
- 704001-07
- 780001-03
- 781001-03
- 601101-01

C-94-136-07

R03W

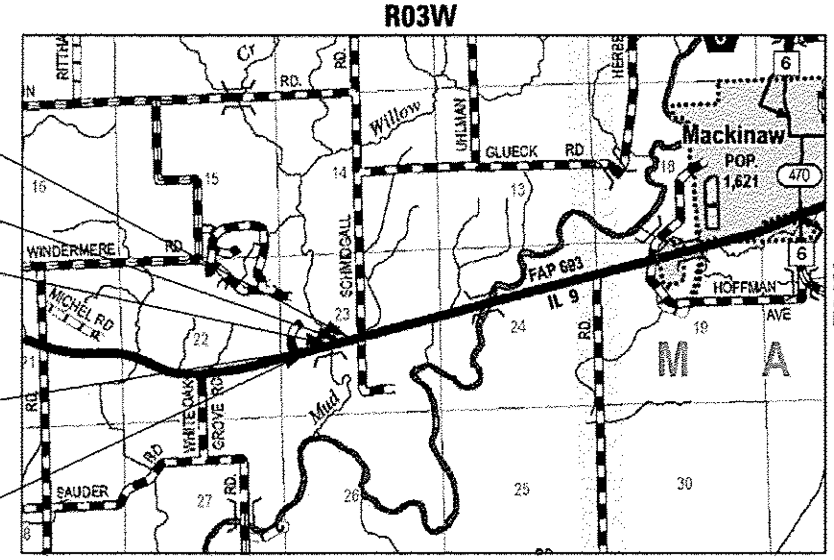
CONSTRUCTION ENDS STA 658+00

END IMPROVEMENT STA 657+00

BRIDGE REPLACEMENT
SN 090-0062 (EXISTING)
SN 090-0178 (PROPOSED)
STA 648+55.75 TO
STA 650+44.25

START IMPROVEMENT STA 643+00

CONSTRUCTION BEGINS STA 642+00



LOCATION MAP NOT TO SCALE

D-94-091-07

LOCATION OF SECTION INDICATED THUS: -

FUNCTIONAL CLASSIFICATION
MINOR ARTERIAL (NON-URBAN)
2011 ADT = 3,150
P.V=92% S.U.=3.2% M.U.=4.8%

1"= 100' / 1"= 10' / 1"= 50' / 1"= 40' / 1"= 30' / 1"= 20'

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

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

GEORGE A. GHAREEB 062-047473 REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS

GEORGE GHAREEB, P.E. DATE 3/21/2013
LICENSED PROFESSIONAL ENGINEER
ILLINOIS NO. 062-047473 EXPIRES 11-30-13

TERRA ENGINEERING LTD.
401 Main Street, Suite 1130
Peoria, IL 61602
(309)999-0123

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED March 22 2013
Joseph E Crowe
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

May 10 2013
John D. Baranzelli, P.E. for
acting ENGINEER OF DESIGN AND ENVIRONMENT

May 10 2013
Omer Osman, P.E. for
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PROJECT ENGINEER: RICHARD DOTSON, P.E.
PROJECT MANAGER: KEVIN HORST, P.E.

CATALOG NO. 033596-00D
CONTRACT NO. 68757

GROSS LENGTH = 1,600 FT. = 0.303 MILE
NET LENGTH = 1,400 FT. = 0.265 MILE

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

GENERAL NOTES

INDEX OF SHEETS

1	COVER SHEET
2	INDEX OF SHEETS AND GENERAL NOTES
3	STATUS OF UTILITIES
4-10	SUMMARY OF QUANTITIES
11-12	TYPICAL SECTIONS
13-18	SCHEDULE OF QUANTITIES
19	ALIGNMENT, TIES & BENCHMARKS
20	REMOVAL PLANS
21	PLAN & PROFILE
22	GENERAL STAGING NOTES AND SEQUENCE OF CONSTRUCTION
23-24	MAINTENANCE OF TRAFFIC TYPICAL SECTIONS
25-26	MAINTENANCE OF TRAFFIC PLAN
27	EROSION CONTROL PLAN
28	PROPOSED GRADING PLAN
29	SCOUR PROTECTION AND SEEDING PLAN
30	PAVEMENT MARKING PLAN
31-40	DISTRICT 4 STANDARDS
41-66	STRUCTURE PLANS (090-0178)
67-76	ROADWAY CROSS SECTIONS
77-80	MUD CREEK CROSS SECTIONS

1. SOIL REPORT AVAILABILITY

ALL SOILS DATA COLLECTED AND PROCESSED FOR THE SOILS REPORT MADE IN CONJUNCTION WITH THE DESIGN OF THIS IMPROVEMENT IS ON FILE AT THE DISTRICT OFFICE WHERE IT IS AVAILABLE FOR INSPECTION BY CONTRACTORS OR PROSPECTIVE BIDDERS. BY SUBMITTING A BID, THE CONTRACTOR ACKNOWLEDGES THAT THE SOILS REPORT HAS BEEN MADE AVAILABLE AND IS AWARE OF THE REPORT CONTENTS AND APPENDICES.

2. AVAILABILITY OF ELECTRONIC FILES

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

3. UTILITIES - LOCATIONS/INFORMATION ON PLANS

THE LOCATIONS OF EXISTING WATER MAINS, GAS MAINS, SEWERS, ELECTRIC POWER LINES, TELEPHONE LINES AND OTHER UTILITIES AS SHOWN ON THE PLANS ARE BASED ON CAREFUL FIELD INVESTIGATION AND THE BEST INFORMATION AVAILABLE, BUT THEY ARE NOT GUARANTEED. UNLESS ELEVATIONS ARE SHOWN, ALL UTILITY LOCATIONS SHOWN ON THE CROSS SECTIONS ARE BASED ON THE APPROXIMATE DEPTH SUPPLIED BY THE UTILITY COMPANY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN THEIR EXACT LOCATION FROM THE UTILITY COMPANIES AND BY FIELD INSPECTION.

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

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

5. COMMITMENTS

THERE ARE NO COMMITMENTS.

6. TREE REMOVAL

THE DISTRICT FOUR TREE COMMITTEE SHOULD BE CONTACTED AND PRIOR APPROVAL OBTAINED FOR ANY TREE REMOVAL BEYOND THE LIMITS/LOCATIONS INCLUDED IN THE PLANS.

7. ENVIRONMENTAL REVIEWS

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

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

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

THE REQUIRED ENVIRONMENTAL RESOURCE DOCUMENTATION SHALL INCLUDE THE FOLLOWING:
1. BDE FORM 2289 (ENVIRONMENTAL SURVEY REQUEST)
2. A LOCATION MAP SHOWING THE SIZE LIMITS AND LOCATION OF THE USE AREA
3. SIGNED PROPERTY OWNER AGREEMENT FORM D4 PI0100
4. COLOR PHOTOGRAPHS DEPICTING THE USE AREA
5. BORROW AREA ENTRY AGREEMENT FORM D4 PI0101

PLEASE NOTE THAT A MINIMUM OF TWO WEEKS SHALL BE ALLOWED FOR THE DISTRICT TO OBTAIN THE REQUIRED ENVIRONMENTAL CLEARANCES.

8. PAVEMENT STATION NUMBERS & PLACEMENT

THE CONTRACTOR SHALL PROVIDE LABOR AND MATERIALS REQUIRED TO IMPRINT PAVEMENT STATION NUMBERS IN THE FINISHED SURFACE OF THE PAVEMENT AND/OR OVERLAY. THE NUMBERS SHALL BE APPROXIMATELY 3/4 INCH (20 MM) WIDE, 5 INCHES (125 MM) HIGH AND 5/8 INCH (15 MM) DEEP.
THE PAVEMENT STATION NUMBERS SHALL BE INSTALLED AS SPECIFIED HEREIN:

INTERVAL - 200 FEET (ENGLISH STATIONING) OR 100 METERS (METRIC STATIONING)
BOTTOM OF NUMBERS - 6 INCHES (150 MM) FROM THE INSIDE EDGE OF THE PAVEMENT MARKING

LOCATION:

- 2, 3, & 5 LANE PAVEMENTS - RIGHT EDGE OF PAVEMENT IN DIRECTION OF INCREASING STATIONS

- MULTI-LANE DIVIDED ROADWAYS - OUTSIDE EDGE OF PAVEMENT IN BOTH DIRECTIONS

- RAMPS - ALONG BASELINE EDGE OF PAVEMENT

POSITION - STATIONS SHALL BE PLACED SO THEY CAN BE READ FROM THE ADJACENT SHOULDER
FORMAT - ENGLISH (METRIC) PAVEMENT STATIONS SHALL USE THIS FORMAT "XXX (XX+XOO)",
WHERE X REPRESENTS THE PAVEMENT STATION

THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE INCLUDED IN THE COST OF THE ASSOCIATED PAVEMENT AND/OR OVERLAY PAY ITEMS.

9. POLYMERIZED BITUMINOUS MATERIALS (PRIME COAT) RATES

SURFACE TYPE	ESTIMATED TRUCK APPLICATION	RATE RESIDUAL RATE
MILLED (HMA OR PCC)	0.10 GAL/SY (0.00044 TON/SY)	0.05 GAL/SY
EXISTING PAVEMENT	0.05 GAL/SY (0.00022 TON/SY)	0.025 GAL/SY
FOG COAT (BETWEEN LIFTS)	0.05 GAL/SY (0.00022 TON/SY)	0.025 GAL/SY

NOTE: ESTIMATED TRUCK APPLICATION RATE IS USED FOR ESTIMATING QUANTITIES.

10. RIGHT-OF-WAY MARKERS

WHEN INSTALLING RIGHT-OF-WAY MARKERS, CARE SHALL BE TAKEN TO NOT DISTURB ANY EXISTING PROPERTY/RIGHT-OF-WAY PINS. IF A PROPERTY/RIGHT-OF-WAY PIN IS FOUND AT THE LOCATION OF A PROPOSED RIGHT-OF-WAY MARKER, THE MARKER SHALL BE PLACED ONE (1) FOOT IN FRONT OF THE PIN.

11. ENGINEERS FIELD OFFICE

ADD THE FOLLOWING SENTENCE TO THE END OF PARAGRAPH 670.02 (I) AND 670.04 (E):
ALL OF THE TELEPHONE LINES PROVIDED SHALL HAVE UNPUBLISHED NUMBERS.

12. BUTT JOINT CUTTING TIME RESTRICTION

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

MIXTURE TABLE

MIXTURE USE(S):	SURFACE COURSE	BINDER COURSES	TEMP PAVEMENT	HMA SHOULDER (SURFACE LIFT)	HMA SHOULDER (LOWER LIFTS)
AC/PG:	PG 64-22	PG 64-22	PG 64-22	PG 64-22	PG 64-22
RAP% (MAX):**	15%	25%	25%	15%	25%
DESIGN AIR VOIDS:	4.0% @ N=50	4.0% @ N=50	4.0% @ N=50	3.0% @ N=50	4.0% @ N=50
MIXTURE COMPOSITION: (GRADATION MIXTURE)	IL 9.5 OR IL 12.5	IL 19.0	IL 19.0	IL 9.5 OR IL 12.5	IL 19.0
FRICTION AGGREGATE:	MIXTURE D (DOLOMITE ONLY)	N/A	MIXTURE C	MIXTURE C	N/A

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

POTENTIAL UTILITY CONFLICT LIST

OWNER	ROUTE	OFFSET	STATION	TYPE OF UTILITY	TYPE OF CONFLICT	DISPOSITION	REMARKS
FRONTIER NORTH, INC.	IL 9	22' RT	644+00 - 656+00	BURIED CABLE	SLOPE BENCHING	RELOCATE	
FRONTIER NORTH, INC.	IL 9	28' RT	646+50 - 652+00	BURIED CABLE	SLOPE BENCHING	RELOCATE	
CORN BELT ENERGY CORPORATION	IL 9	35' RT	650+25	POWER POLE	RIPRAP/NEW STRUCTURE	RELOCATE	

TERRA ENGINEERING LTD.

USER NAME = TERRA	DESIGNED - CL	REVISED -
	DRAWN - KJC	REVISED -
PLOT SCALE = N/A	CHECKED - LVA	REVISED -
PLOT DATE = 1/23/2013	DATE - 01/25/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STATUS OF UTILITIES
IL 9 OVER MUD CREEK

SCALE: N/A | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	3
		CONTRACT NO. 68757		
	ILLINOIS	FED. AID PROJECT		

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODES: 80% FED. 20% STATE — ROADWAY 0004 RURAL	CONSTRUCTION CODES: 80% FED. 20% STATE — BRIDGE 0011 SN 090-0178	CONSTRUCTION CODES: 100% STATE — MOWING 0004
20100500	TREE REMOVAL, ACRES	ACRE	1.00	1.00		
20200100	EARTH EXCAVATION	CU YD	4435	4435		
20200500	EARTH EXCAVATION (WIDENING)	CU YD	85	85		
20300100	CHANNEL EXCAVATION	CU YD	3730	3730		
20400800	FURNISHED EXCAVATION	CU YD	1440	1440		
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	15333	15333		
* 25000200	SEEDING, CLASS 2	ACRE	1.25	1.25		
* 25000210	SEEDING, CLASS 2A	ACRE	2.00	2.00		
* 25000400	NITROGEN FERTILIZER NUTRIENT	POUND	283	283		
* 25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	283	283		
* 25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	283	283		
* 25000750	MOWING	ACRE	1.50			1.50
* 25100115	MULCH, METHOD 2	ACRE	1.25	1.25		
* 25100630	EROSION CONTROL BLANKET	SQ YD	9679	9679		

* SPECIALTY ITEM

TERRA ENGINEERING LTD.	USER NAME : hl	DESIGNED - CL	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES IL 9 OVER MUD CREEK
	PLOT SCALE : N/A	DRAWN - KJC	REVISED -		SCALE: N/A
	PLOT DATE : 3/19/2013	CHECKED - LVA	REVISED -		SHEET NO. 1 OF 7 SHEETS
		DATE - 03/20/13	REVISED -		STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	4

CONTRACT NO. 68757

ILLINOIS FED. AID PROJECT

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODES: 80% FED. 20% STATE — ROADWAY 0004 RURAL	CONSTRUCTION CODES: 80% FED. 20% STATE — BRIDGE 0011 SN 090-0178	CONSTRUCTION CODES: 100% STATE — MOWING 0004
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	950	950		
28000305	TEMPORARY DITCH CHECKS	FOOT	90	90		
28000400	PERIMETER EROSION BARRIER	FOOT	2999	2999		
28100107	STONE RIPRAP, CLASS A4	SQ YD	3255		3255	
28200200	FILTER FABRIC	SQ YD	3255		3255	
31101000	SUBBASE GRANULAR MATERIAL, TYPE B	TON	795	795		
40600215	POLYMERIZED BITUMINOUS MATERIALS (PRIME COAT)	TON	3	3		
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	348	348		
40600990	TEMPORARY RAMP	SQ YD	457	457		
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	984	984		
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	255	255		
42001430	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SQ YD	57	57		
44000100	PAVEMENT REMOVAL	SQ YD	420	420		
48101200	AGGREGATE SHOULDERS, TYPE B	TON	178	178		

* SPECIALTY ITEM

TERRA ENGINEERING LTD.

USER NAME : hl	DESIGNED - CL	REVISED -
	DRAWN - KJC	REVISED -
PLOT SCALE = N/A	CHECKED - LVA	REVISED -
PLOT DATE = 3/19/2013	DATE - 03/20/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
IL 9 OVER MUD CREEK

SCALE: N/A | SHEET NO. 2 OF 7 SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	5

CONTRACT NO. 68757

ILLINOIS FED. AID PROJECT

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODES: 80% FED. 20% STATE — ROADWAY 0004 RURAL	CONSTRUCTION CODES: 80% FED. 20% STATE — BRIDGE 0011 SN 090-0178	CONSTRUCTION CODES: 100% STATE — MOWING 0004
48203100	HOT-MIX ASPHALT SHOULDERS	TON	441	441		
50100300	REMOVAL OF EXISTING STRUCTURES NO. 1	EACH	1		1	
50100400	REMOVAL OF EXISTING STRUCTURES NO. 2	EACH	1		1	
50200100	STRUCTURE EXCAVATION	CU YD	258		258	
50200300	COFFERDAM EXCAVATION	CU YD	353		353	
50201121	COFFERDAM (TYPE 2) (LOCATION - 1)	EACH	1		1	
50201122	COFFERDAM (TYPE 2) (LOCATION - 2)	EACH	1		1	
50300100	FLOOR DRAINS	EACH	6		6	
50300225	CONCRETE STRUCTURES	CU YD	170.0		170.0	
50300255	CONCRETE SUPERSTRUCTURE	CU YD	364.5		364.5	
50300260	BRIDGE DECK GROOVING	SQ YD	940		940	
50300265	SEAL COAT CONCRETE	CU YD	106.2		106.2	
50300280	CONCRETE ENCASEMENT	CU YD	4.2		4.2	
50300300	PROTECTIVE COAT	SQ YD	1177		1177	

* SPECIALTY ITEM

TERRA ENGINEERING LTD.

USER NAME : NI | PLOT SCALE : N/A | PLOT DATE : 3/19/2013

DESIGNED - CL | DRAWN - KJC | CHECKED - LVA | DATE - 03/20/13

REVISED - | REVISED - | REVISED - | REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
IL 9 OVER MUD CREEK

SCALE: N/A | SHEET NO. 3 OF 7 SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	6

CONTRACT NO. 68757

ILLINOIS FED. AID PROJECT

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODES: 80% FED. 20% STATE — ROADWAY 0004 RURAL	80% FED. 20% STATE — BRIDGE 0011 SN 090-0178	100% STATE — MOWING 0004
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1		1	
50500505	STUD SHEAR CONNECTORS	EACH	4824		4824	
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	111580		111580	
50800515	BAR SPLICERS	EACH	989		989	
51201600	FURNISHING STEEL PILES HP12X53	FOOT	600		600	
51201800	FURNISHING STEEL PILES HP14X73	FOOT	610		610	
51202305	DRIVING PILES	FOOT	1210		1210	
51203600	TEST PILE STEEL HP12X53	EACH	2		2	
51203800	TEST PILE STEEL HP14X73	EACH	2		2	
51500100	NAME PLATES	EACH	1		1	
52100520	ANCHOR BOLTS, 1"	EACH	24		24	
52100530	ANCHOR BOLTS, 1 1/4"	EACH	24		24	
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	79		79	
* 63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	650.0	650.0		

* SPECIALTY ITEM

TERRA ENGINEERING LTD.

USER NAME = hl | PLOT SCALE = N/A | PLOT DATE = 3/19/2013

DESIGNED - CL | DRAWN - KJC | CHECKED - LVA | DATE - 03/20/13

REVISED - | REVISED - | REVISED - | REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
IL 9 OVER MUD CREEK

SCALE: N/A | SHEET NO. 4 OF 7 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	7

CONTRACT NO. 68757

ILLINOIS FED. AID PROJECT

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODES: 80% FED. 20% STATE — ROADWAY 0004 RURAL	CONSTRUCTION CODES: 80% FED. 20% STATE — BRIDGE 0011 SN 090-0178	CONSTRUCTION CODES: 100% STATE — MOWING 0004
* 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4		
* 63100169	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) FLARED	EACH	4	4		
63200310	GUARDRAIL REMOVAL	FOOT	415	415		
66600105	FURNISHING AND ERECTING RIGHT OF WAY MARKERS	EACH	21	21		
66700205	PERMANENT SURVEY MARKERS, TYPE I	EACH	3	3		
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	12	12		
67000600	ENGINEER'S FIELD LABORATORY	CAL MO	12	12		
67100100	MOBILIZATION	L SUM	1	1		
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1		
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1		
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1	1		
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	12	12		
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1		
70106700	TEMPORARY RUMBLE STRIPS	EACH	6	6		

* SPECIALTY ITEM

TERRA ENGINEERING LTD.	USER NAME: NI	DESIGNED - CL	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES IL 9 OVER MUD CREEK	F.A.P. RTE. 693	SECTION (119BR) BR	COUNTY TAZEWELL	TOTAL SHEETS 80	SHEET NO. 8
	PLOT SCALE: N/A	DRAWN - KJC	REVISED -		SCALE: N/A	SHEET NO. 5 OF 7 SHEETS	STA. TO STA.	CONTRACT NO. 68757		
	PLOT DATE: 3/19/2013	CHECKED - LVA	REVISED -					ILLINOIS FED. AID PROJECT		
		DATE - 03/20/13	REVISED -							

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODES: 80% FED. 20% STATE — ROADWAY 0004 RURAL	80% FED. 20% STATE — BRIDGE 0011 SN 090-0178	100% STATE — MOWING 0004
	70106800	CHANGEABLE MESSAGE SIGN	CAL MO	1	1		
*	70300100	SHORT TERM PAVEMENT MARKING	FOOT	140	140		
*	70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	5145	5145		
*	70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	24	24		
	70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	1813	1813		
	70400100	TEMPORARY CONCRETE BARRIER	FOOT	1191	1191		
	70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	1191	1191		
*	70600250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2	2		
*	70600350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2	2		
*	78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	5202	5202		
*	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	17	17		
*	78200410	GUARDRAIL MARKERS, TYPE A	EACH	12	12		
*	78200530	BARRIER WALL MARKERS, TYPE C	EACH	48	48		
*	78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4		

* SPECIALTY ITEM

TERRA ENGINEERING LTD.

USER NAME : hl	DESIGNED - CL	REVISED -
PLOT SCALE : N/A	DRAWN - KJC	REVISED -
PLOT DATE : 3/19/2013	CHECKED - LVA	REVISED -
	DATE - 03/20/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
IL 9 OVER MUD CREEK

SCALE: N/A | SHEET NO. 6 OF 7 SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	9

CONTRACT NO. 68757

ILLINOIS FED. AID PROJECT

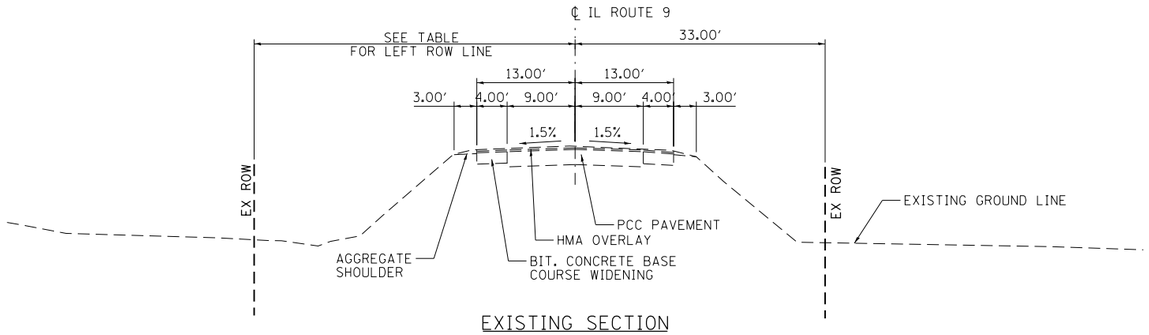
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODES 80% FED. 20% STATE ROADWAY 0004 RURAL	BRIDGE 0011 SN 090-0178	100% STATE MOWING 0004
78300100	PAVEMENT MARKING REMOVAL	SQ FT	684	684		
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	17	17		
X4400110	TEMPORARY PAVEMENT REMOVAL	SQ YD	28	28		
X4401198	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SQ YD	584	584		
X5860110	GRANULAR BACKFILL FOR STRUCTURES	CU YD	132		132	
Z0001002	GUARDRAIL AGGREGATE EROSION CONTROL	TON	193	193		
Z0004638	PAVEMENT BREAKING	SQ YD	932	932		
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1		
Z0026407	TEMPORARY SHEET PILING	SQ FT	2363		2363	
Z0034105	MATERIAL TRANSFER DEVICE	TON	255	255		
Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	158		158	
Z0062456	TEMPORARY PAVEMENT	SQ YD	376	376		

12

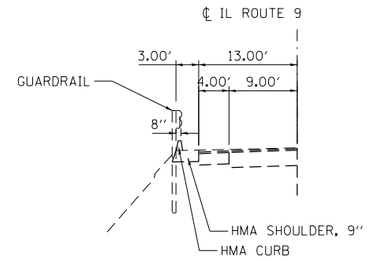
* SPECIALTY ITEM

LEFT ROW LINE OFFSET

643+00.00 - 647+09.71 42.4'
647+09.71 - 648+09.71 TRANSITION 42.4' TO 46.3'
648+09.71 - 650+09.76 TRANSITION 46.3' TO 44.0'
650+09.76 - 657+05.00 TRANSITION 44.0' TO 41.43'



EXISTING SECTION



EXISTING GUARDRAIL SECTION
(SEE PLAN VIEW FOR LOCATIONS)

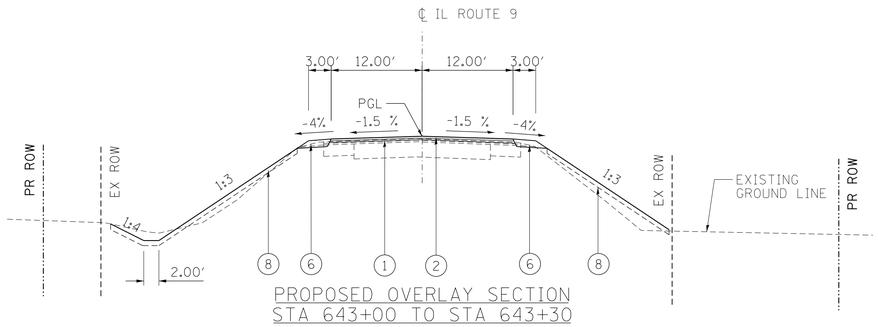
TERRA ENGINEERING LTD.	USER NAME = TERRA	DESIGNED - CL	REVISED -
		DRAWN - KJC	REVISED -
	PLOT SCALE = N/A	CHECKED - LVA	REVISED -
	PLOT DATE = 1/23/2013	DATE - 01/25/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

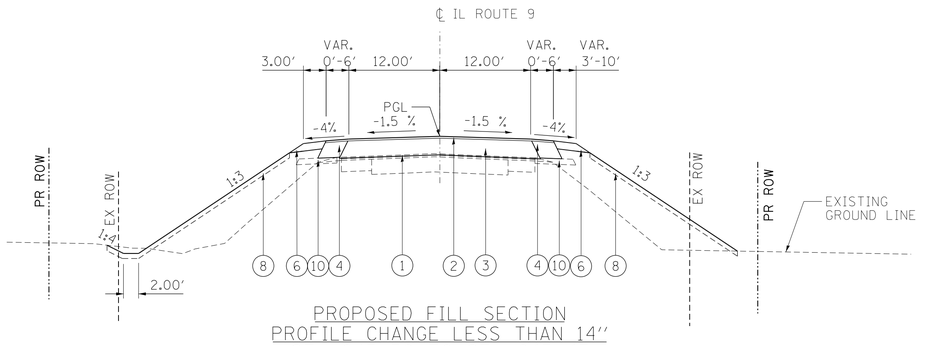
EXISTING TYPICAL SECTIONS
IL 9 OVER MUD CREEK

SCALE: N/A | SHEET NO. 1 OF 2 SHEETS | STA. | TO STA.

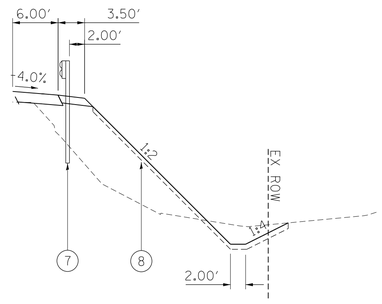
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	11
		CONTRACT NO. 68757		
	ILLINOIS	FED. AID PROJECT		



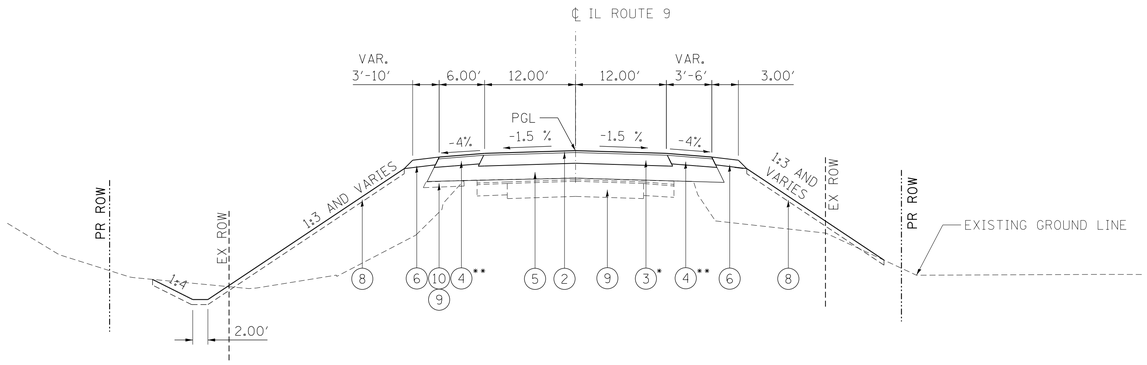
PROPOSED OVERLAY SECTION
STA 643+00 TO STA 643+30
STA 656+70 TO STA 657+00



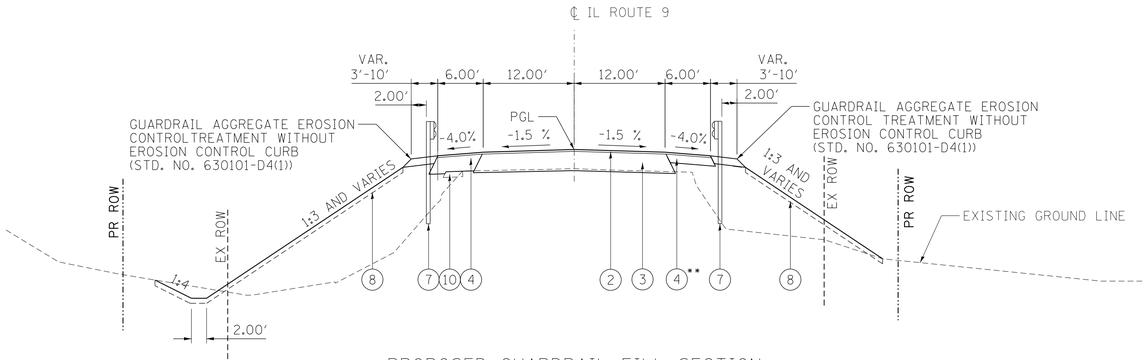
PROPOSED FILL SECTION
PROFILE CHANGE LESS THAN 14″
STA 643+30 TO STA 645+47
STA 653+97 TO 656+70



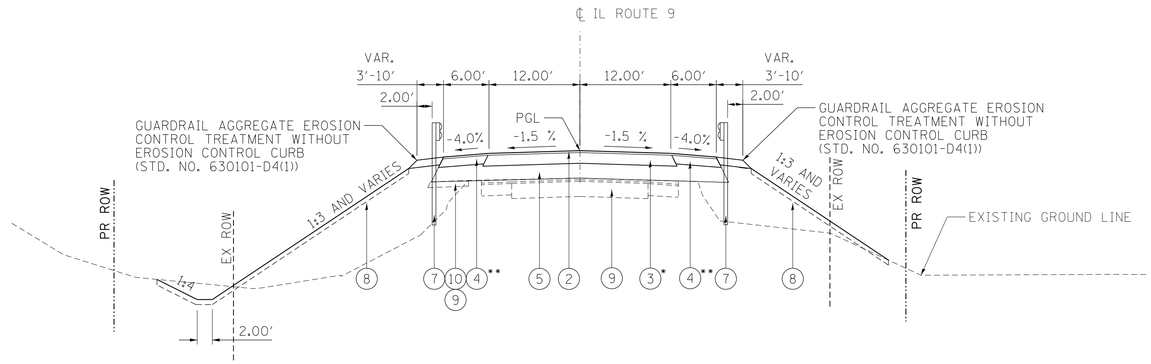
DITCH SECTION
STA. 648+00 TO STA. 649+26



PROPOSED FILL SECTION
PROFILE CHANGE GREATER THAN 14″
STA 653+53 TO STA 653+97



PROPOSED GUARDRAIL FILL SECTION
PROFILE CHANGE LESS THAN 14″
STA 645+47 TO 648+55.75
(BRIDGE OMISSION STA 648+55.75 TO STA 650+44.25)



PROPOSED GUARDRAIL FILL SECTION
PROFILE CHANGE GREATER THAN 14″
STA 650+44.25 TO STA 653+53

LEGEND

1. HMA SURFACE REMOVAL, VARIABLE DEPTH
2. HMA SURFACE COURSE, 1.5″
3. HMA BINDER COURSE (VARIABLE DEPTH)
4. HMA SHOULDERS
5. SUB-BASE GRANULAR MATERIAL, TYPE B (VARIABLE DEPTH)
6. AGGREGATE SHOULDER, TYPE B (6″)
7. STEEL PLATE BEAM GUARDRAIL, TYPE A
8. TOPSOIL AND SEEDING
9. PAVEMENT BREAKING
10. TEMPORARY PAVEMENT

* NOTE: IN AREAS WHERE THE HMA BINDER COURSE IS CONSTRUCTED ON TOP OF SUB-BASE GRANULAR MATERIAL, THE BINDER THICKNESS SHALL BE 9 1/2″.

** NOTE: TOTAL HMA SHOULDER THICKNESS IS 9″ IN THIS SECTION.

TERRA ENGINEERING LTD.

USER NAME = TERRA	DESIGNED - CL	REVISED -
	DRAWN - KJC	REVISED -
PLOT SCALE = N/A	CHECKED - LVA	REVISED -
PLOT DATE = 3/19/2013	DATE - 03/20/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED TYPICAL SECTIONS
IL 9 OVER MUD CREEK

SCALE: N/A | SHEET NO. 2 OF 2 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	12
		CONTRACT NO. 68757		
	ILLINOIS FED. AID PROJECT			

		TREE REMOVAL, ACRES	TOPSOIL FURNISH AND PLACE, 4"	SEEDING, CLASS 2	SEEDING, CLASS 2A	NITROGEN FERTILIZER NUTRIENT	PHOSPHORUS FERTILIZER NUTRIENT	POTASSIUM FERTILIZER NUTRIENT	MOWING	STONE RIPRAP, CLASS A4	FILTER FABRIC
STA	STA	ACRE	SQ YD	ACRE	ACRE	POUND	POUND	POUND	ACRE	SQ YD	SQ YD
641+00	642+00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
642+00	643+00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
643+00	644+00	0.00	739.88	0.04	0.11	13.76	13.76	13.76	0.14	0.00	0.00
644+00	645+00	0.00	787.59	0.05	0.12	14.65	14.65	14.65	0.14	0.00	0.00
645+00	646+00	0.00	792.61	0.04	0.12	14.74	14.74	14.74	0.14	0.00	0.00
646+00	647+00	0.00	779.98	0.04	0.12	15.34	15.34	15.34	0.14	0.00	0.00
647+00	648+00	0.02	1,167.97	0.10	0.14	21.72	21.72	21.72	0.14	0.00	0.00
648+00	649+00	0.26	1,940.04	0.38	0.02	35.30	35.30	35.30	0.01	939.01	939.01
649+00	650+00	0.54	1,293.52	0.04	0.23	22.27	22.27	22.27	0.00	1,543.42	1,543.42
650+00	651+00	0.21	2,149.84	0.19	0.25	40.05	40.05	40.05	0.06	772.16	772.16
651+00	652+00	0.01	1,488.16	0.17	0.13	27.67	27.67	27.67	0.14	0.00	0.00
652+00	653+00	0.00	936.11	0.05	0.14	17.43	17.43	17.43	0.14	0.00	0.00
653+00	654+00	0.00	959.54	0.03	0.17	17.84	17.84	17.84	0.14	0.00	0.00
654+00	655+00	0.00	931.52	0.02	0.17	17.32	17.32	17.32	0.14	0.00	0.00
655+00	656+00	0.00	726.24	0.00	0.15	13.50	13.50	13.50	0.14	0.00	0.00
656+00	657+00	0.00	639.75	0.00	0.13	11.90	11.90	11.90	0.14	0.00	0.00
657+00	658+00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
658+00	659+00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TOTAL	1.00	15,333	1.25	2.00	283	283	283	1.50	3,255	3,255

		SUBBASE GRANULAR MATERIAL, TYPE B	POLYMERIZED BITUMINOUS MATERIALS (PRIME COAT)	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	AGGREGATE SHOULDERS, TYPE B	HOT-MIX ASPHALT SHOULDERS	GUARDRAIL AGGREGATE EROSION CONTROL	MATERIAL TRANSFER DEVICE
STA	STA	TON	TON	TON	TON	TON	TON	TON	TON
641+00	642+00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
642+00	643+00	0.00	0.00	7.00	0.00	0.00	0.00	0.00	0.00
643+00	644+00	0.00	0.16	5.97	22.40	22.78	0.00	0.00	22.40
644+00	645+00	0.00	0.25	37.33	22.40	22.79	12.35	0.00	22.40
645+00	646+00	0.00	0.20	67.20	22.40	23.45	19.29	15.96	22.40
646+00	647+00	0.00	0.21	93.33	22.40	8.54	67.22	38.20	22.40
647+00	648+00	0.00	0.21	104.53	22.40	0.00	67.23	35.43	22.40
648+00	649+00	0.00	0.04	20.77	4.45	0.00	13.36	7.04	4.45
649+00	650+00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
650+00	651+00	70.42	0.07	28.02	4.42	0.00	13.27	7.00	4.42
651+00	652+00	301.81	0.34	141.86	22.40	0.00	67.21	35.43	22.40
652+00	653+00	296.11	0.34	141.86	22.40	8.54	67.20	38.20	22.40
653+00	654+00	126.70	0.32	141.86	22.40	23.30	57.88	16.05	22.40
654+00	655+00	0.00	0.19	126.93	22.40	22.79	37.05	0.00	22.40
655+00	656+00	0.00	0.24	44.80	22.40	22.78	18.67	0.00	22.40
656+00	657+00	0.00	0.16	5.97	22.40	22.78	0.00	0.00	22.40
657+00	658+00	0.00	0.00	16.33	0.00	0.00	0.00	0.00	0.00
658+00	659+00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TOTAL	795	3	984	255	178	441	193	255

BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)

ALIGNMENT:	IL RTE 9			LENGTH	WIDTH	AREA
STA		STA		FEET	FEET	SQ YD
650+74.25	TO	650+80.25		6.00	43.00	28.67
648+19.87	TO	648+25.87		6.00	43.00	28.67
					TOTAL	57

TERRA ENGINEERING LTD.

USER NAME = hl	DESIGNED - CL	REVISED -	
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PLOT DATE = 3/19/2013	DATE - 03/20/13	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES
IL 9 OVER MUD CREEK

SCALE: N/A | SHEET NO. 1 OF 6 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	13
		CONTRACT NO. 68757		
	ILLINOIS FED. AID PROJECT			

PAVEMENT REMOVAL

ALIGNMENT:	IL RTE 9			LENGTH	WIDTH	AREA
STA		STA		FEET	FEET	SQ YD
648+19.75	TO	648+72.48		52.73	28.18	165.10
649+94.37	TO	650+77.25		82.88	27.63	254.41
					TOTAL	420

PAVEMENT BREAKING

ALIGNMENT:	IL RTE 9			LENGTH	WIDTH	AREA
STA		STA		FEET	FEET	SQ YD
650+77.25	TO	653+97.00		319.75	26.22	931.50
					TOTAL	932

HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT

ALIGNMENT:	IL RTE 9			LENGTH	WIDTH	AREA
STA		STA		FEET	FEET	SQ YD
643+00.00	TO	643+60.00		60.00	26.03	173.52
656+39.99	TO	657+00.01		60.02	26.10	174.04
					TOTAL	348

HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH

ALIGNMENT:	IL RTE 9			LENGTH	WIDTH	AREA
STA		STA		FEET	FEET	SQ YD
655+44.02	TO	656+40.00		95.98	25.77	274.83
643+60.00	TO	644+66.46		106.46	26.16	309.48
					TOTAL	584

RAISED REFLECTIVE PAVEMENT MARKER REMOVAL

ALIGNMENT:	IL RTE 9		
STA	OFFSET		EACH
642+24.57	0.00		1
643+04.57	0.00		1
643+84.57	0.00		1
644+64.57	0.00		1
645+44.57	0.00		1
646+24.57	0.00		1
647+04.57	0.00		1
647+84.57	0.00		1
651+04.57	0.00		1
651+84.57	0.00		1
652+64.57	0.00		1
653+44.57	0.00		1
654+24.57	0.00		1
655+04.57	0.00		1
655+84.57	0.00		1
656+64.57	0.00		1
657+44.57	0.00		1
		TOTAL	17

PAVEMENT MARKING REMOVAL

(4" SKIP DASH)						
ALIGNMENT:	IL RTE 9			LENGTH	WIDTH	AREA
STA		STA		FEET	INCH	SQ FT
642+00.00	TO	643+00.00		100.00	4.00	8.33
657+00.01	TO	658+00.00		99.99	4.00	8.33
					SUB TOTAL	17
(4" SOLID)						
ALIGNMENT:	IL RTE 9		OFFSET	LENGTH	WIDTH	AREA
STA		STA	RT	FEET	INCH	SQ FT
642+00.00	TO	645+00.00	RT	300.00	4.00	100.00
657+00.00	TO	658+00.00	LT	100.00	4.00	33.33
642+00.00	TO	658+00.00		1,600.00	4.00	533.33
					SUB TOTAL	667
					TOTAL	684

RAISED REFLECTIVE PAVEMENT MARKER

ALIGNMENT:	IL RTE 9		
STA	OFFSET		EACH
647+85.00	0.00		1
647+05.00	0.03	RT	1
646+25.00	0.05	RT	1
645+45.00	0.07	RT	1
644+65.00	0.10	RT	1
643+85.00	0.12	RT	1
643+05.00	0.15	RT	1
642+25.00	0.17	RT	1
651+10.24	0.00		1
651+90.24	0.00		1
652+70.24	0.00		1
653+50.24	0.00		1
654+30.24	0.00		1
655+10.24	0.00		1
655+90.24	0.02	LT	1
656+70.24	0.04	LT	1
657+50.24	0.07	LT	1
		TOTAL	17

MODIFIED URETHANE PAVEMENT MARKING - LINE 4"

STA	STA	FOOT
641+00	642+00	0.00
642+00	643+00	425.00
643+00	644+00	325.00
644+00	645+00	325.00
645+00	646+00	325.00
646+00	647+00	325.00
647+00	648+00	325.00
648+00	649+00	318.90
649+00	650+00	325.00
650+00	651+00	307.67
651+00	652+00	300.00
652+00	653+00	300.00
653+00	654+00	300.00
654+00	655+00	300.00
655+00	656+00	300.00
656+00	657+00	300.00
657+00	658+00	400.00
658+00	659+00	0.00
	TOTAL	5,202

TERRA ENGINEERING LTD.

USER NAME = hl	DESIGNED - CL	REVISED -
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PLOT DATE = 3/19/2013	DATE - 03/20/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES
IL 9 OVER MUD CREEK

SCALE: N/A | SHEET NO. 2 OF 6 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	14
		CONTRACT NO. 68757		
	ILLINOIS	FED. AID PROJECT		

GUARDRAIL REMOVAL

ALIGNMENT:	IL RTE 9						LENGTH
STA	OFFSET			STA	OFFSET		FOOT
647+74.74	17.31	LT	TO	648+50.59	16.77	LT	75.85
647+49.51	18.82	LT	TO	647+74.74	17.31	LT	25.27
647+49.75	18.75	RT	TO	647+75.54	16.95	RT	25.84
647+75.54	16.95	RT	TO	648+54.88	16.59	RT	79.35
650+11.83	16.57	RT	TO	650+91.47	16.77	RT	79.64
650+91.47	16.77	RT	TO	651+15.84	18.47	RT	24.43
650+91.71	16.69	LT	TO	651+16.38	18.45	LT	24.73
650+11.84	16.66	LT	TO	650+91.71	16.69	LT	79.87
						TOTAL	415

GUARDRAIL MARKERS, TYPE A

ALIGNMENT:	IL RTE 9		
STA	OFFSET		EACH
646+29.51	18.06	RT	1
647+09.51	18.04	RT	1
647+89.51	18.01	RT	1
646+65.87	18.00	LT	1
647+45.87	18.00	LT	1
648+25.87	18.00	LT	1
650+74.25	18.00	RT	1
651+54.25	18.00	RT	1
652+34.25	18.00	RT	1
651+10.49	18.00	LT	1
651+90.49	18.00	LT	1
652+70.49	18.00	LT	1
		TOTAL	12

PERMANENT SURVEY MARKERS, TYPE I

ALIGNMENT:	IL RTE 9		
STA	OFFSET		EACH
644+50.00	0.00		1
654+50.00	0.00		1
649+50.00	0.00		1
		TOTAL	3

FURNISHING AND ERECTING RIGHT OF WAY MARKERS

ALIGNMENT:	IL RTE 9		
STA	OFFSET		EACH
643+00.00	42.40	LT	1
643+50.00	50.00	LT	1
645+00.00	50.00	LT	1
646+00.00	60.00	LT	1
647+25.00	60.00	LT	1
648+15.00	150.00	LT	1
650+70.00	150.00	LT	1
651+00.00	65.00	LT	1
654+00.00	65.00	LT	1
656+00.00	41.82	LT	1
657+00.00	50.00	RT	1
656+00.00	50.00	RT	1
654+00.00	65.00	RT	1
651+00.00	65.00	RT	1
650+65.00	101.00	RT	1
648+40.00	101.00	RT	1
648+00.00	60.00	RT	1
645+00.00	60.00	RT	1
643+00.00	50.00	RT	1
643+00.00	33.00	RT	1
657+00.00	33.00	RT	1
		TOTAL	21

ALIGNMENT:	IL RTE 9						STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	TRAFFIC BARRIER TERMINAL, TYPE 6	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) FLARED	TERMINAL MARKER - DIRECT APPLIED
STA	OFFSET			STA	OFFSET		LENGTH FOOT	EACH	EACH	EACH
645+47.00	21.21	RT								1
645+48.13	21.21	RT	TO	645+83.57	18.00	RT			1	
645+83.57	18.00	RT	TO	647+82.12	18.00	RT	198.55			
647+82.12	18.00	RT	TO	648+25.87	18.00	RT		1		
646+22.00	21.62	LT								1
646+23.13	20.78	LT	TO	646+59.51	18.00	LT			1	
646+59.51	18.00	LT	TO	647+82.12	18.00	LT	122.61			
647+82.12	18.00	LT	TO	648+25.87	18.00	LT		1		
650+74.25	18.00	RT	TO	651+18.00	18.00	RT		1		
651+18.00	18.00	RT	TO	652+40.50	18.00	RT	122.50			
652+40.50	18.00	RT	TO	652+76.87	20.78	RT			1	
652+78.00	20.37	RT								1
650+74.25	18.00	LT	TO	651+18.00	18.00	LT		1		
651+18.00	18.00	LT	TO	653+15.34	18.00	LT	197.34			
653+15.34	18.00	LT	TO	653+51.87	21.21	LT			1	
653+53.00	21.62	LT								1
						TOTAL	650.0	4	4	4

TERRA ENGINEERING LTD.

USER NAME = hl	DESIGNED - CL	REVISED -
	DRAWN - KJC	REVISED -
PLOT SCALE = N/A	CHECKED - LVA	REVISED -
PLOT DATE = 3/19/2013	DATE - 03/20/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES
IL 9 OVER MUD CREEK

SCALE: N/A | SHEET NO. 3 OF 6 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	15
		CONTRACT NO. 68757		
	ILLINOIS FED. AID PROJECT			

IL 9 LOCATION						FOR INFORMATION ONLY		
			LENGTH	EARTH EXCAVATION	EARTH EXCAVATION (WIDENING)	CHANNEL EXCAVATION	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE	EMBANKMENT	FURNISHED EXCAVATION
STA	TO	STA	FT	CU YD	CU YD	CU YD	CU YD	CU YD	CU YD
PRE STAGE									
642+50	TO	643+00	50	0.00	0.00	N/A	0.00	0.00	0.00
643+00	TO	643+50	50	0.00	0.00	N/A	0.00	0.00	0.00
643+50	TO	644+00	50	0.00	0.00	N/A	0.00	0.00	0.00
644+00	TO	644+50	50	8.50	1.84	N/A	7.76	21.35	13.59
644+50	TO	645+00	50	12.93	3.44	N/A	12.27	47.50	35.23
645+00	TO	645+50	50	14.01	3.22	N/A	12.92	59.09	46.17
645+50	TO	646+00	50	25.94	3.19	N/A	21.85	86.44	64.58
646+00	TO	646+50	50	28.86	3.19	N/A	24.03	107.79	83.75
646+50	TO	647+00	50	22.89	3.33	N/A	19.67	103.51	83.84
647+00	TO	647+50	50	10.39	3.51	N/A	10.42	49.21	38.79
647+50	TO	648+00	50	0.00	3.68	N/A	2.76	0.00	-2.76
648+00	TO	648+50	50	0.00	1.88	N/A	1.41	0.00	-1.41
648+50	TO	648+58	8	0.00	0.00	N/A	0.00	0.00	0.00
648+58	TO	650+42	184	0.00	7.17	N/A	5.38	0.00	-5.38
650+42	TO	650+50	8	0.00	0.64	N/A	0.48	0.00	-0.48
650+50	TO	651+00	50	0.00	3.91	N/A	2.93	0.00	-2.93
651+00	TO	651+50	50	0.21	4.02	N/A	3.17	48.34	45.17
651+50	TO	652+00	50	0.43	3.98	N/A	3.31	109.43	106.12
652+00	TO	652+50	50	1.12	3.93	N/A	3.78	122.85	119.07
652+50	TO	653+00	50	1.29	3.89	N/A	3.88	119.67	115.78
653+00	TO	653+50	50	0.70	3.88	N/A	3.44	134.81	131.37
653+50	TO	654+00	50	0.62	3.68	N/A	3.22	124.21	120.99
654+00	TO	654+50	50	0.56	3.35	N/A	2.93	95.24	92.31
654+50	TO	655+00	50	0.53	3.35	N/A	2.91	84.27	81.36
655+00	TO	655+50	50	0.27	1.71	N/A	1.49	36.33	34.85
655+50	TO	656+00	50	0.00	0.00	N/A	0.00	0.00	0.00
656+00	TO	656+50	50	0.00	0.00	N/A	0.00	0.00	0.00
656+50	TO	657+00	50	0.00	0.00	N/A	0.00	0.00	0.00
657+00	TO	657+50	50	0.00	0.00	N/A	0.00	0.00	0.00
SUBTOTALS			1500	129.24	70.78	N/A	150.02	1350.04	1200.02
STAGE 1									
642+50	TO	643+00	50	1.05	0.00	N/A	0.78	0.88	0.09
643+00	TO	643+50	50	1.75	0.00	N/A	1.31	4.97	3.66
643+50	TO	644+00	50	1.79	0.00	N/A	1.34	23.92	22.58
644+00	TO	644+50	50	1.31	1.83	N/A	2.35	44.31	41.96
644+50	TO	645+00	50	0.45	3.64	N/A	3.07	62.16	59.09
645+00	TO	645+50	50	0.87	1.81	N/A	2.01	126.60	124.59
645+50	TO	646+00	50	1.18	0.00	N/A	0.88	137.44	136.56
646+00	TO	646+50	50	1.13	0.00	N/A	0.85	87.43	86.58
646+50	TO	647+00	50	1.05	0.00	N/A	0.78	75.72	74.94
647+00	TO	647+50	50	1.30	0.00	N/A	0.97	73.44	72.47
647+50	TO	648+00	50	8.82	0.00	N/A	6.62	52.65	46.03
648+00	TO	648+50	50	71.38	0.00	N/A	53.53	28.67	-24.87
648+50	TO	648+58	8	22.89	0.00	N/A	17.17	7.02	-10.15
648+58	TO	650+42	184	421.88	0.00	N/A	316.41	182.14	-134.27
650+42	TO	650+50	8	11.63	0.00	N/A	8.72	5.92	-2.80
650+50	TO	651+00	50	31.07	0.00	N/A	23.31	93.27	69.96
651+00	TO	651+50	50	0.48	0.00	N/A	0.36	145.09	144.73
651+50	TO	652+00	50	0.47	0.00	N/A	0.35	136.41	136.05
652+00	TO	652+50	50	0.46	0.00	N/A	0.35	157.27	156.92
652+50	TO	653+00	50	0.46	0.00	N/A	0.35	175.81	175.46
653+00	TO	653+50	50	0.46	0.00	N/A	0.35	141.80	141.45
653+50	TO	654+00	50	0.53	0.00	N/A	0.40	101.77	101.37
654+00	TO	654+50	50	0.53	1.84	N/A	1.78	92.72	90.94
654+50	TO	655+00	50	0.45	3.63	N/A	3.06	81.31	78.25
655+00	TO	655+50	50	1.44	1.79	N/A	2.42	57.81	55.39
655+50	TO	656+00	50	2.68	0.00	N/A	2.01	37.56	35.55
656+00	TO	656+50	50	2.09	0.00	N/A	1.57	18.65	17.08
656+50	TO	657+00	50	2.12	0.00	N/A	1.59	4.15	2.56
657+00	TO	657+50	50	1.48	0.00	N/A	1.11	0.77	-0.34
SUBTOTALS			1500	593.20	14.54	N/A	455.80	2157.66	1701.85

IL 9 LOCATION							FOR INFORMATION ONLY		
				EARTH EXCAVATION	EARTH EXCAVATION (WIDENING)	CHANNEL EXCAVATION	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE	EMBANKMENT	FURNISHED EXCAVATION
SUBTOTALS				CU YD	CU YD	CU YD	CU YD	CU YD	CU YD
STAGE 2									
642+50	TO	643+00	50	16.86	N/A	N/A	12.65	0.00	-12.65
643+00	TO	643+50	50	29.13	N/A	N/A	21.85	0.00	-21.85
643+50	TO	644+00	50	23.99	N/A	N/A	17.99	14.47	-3.52
644+00	TO	644+50	50	12.14	N/A	N/A	9.10	14.47	5.37
644+50	TO	645+00	50	0.55	N/A	N/A	0.41	0.06	-0.34
645+00	TO	645+50	50	0.29	N/A	N/A	0.22	0.41	0.19
645+50	TO	646+00	50	0.47	N/A	N/A	0.35	2.37	2.02
646+00	TO	646+50	50	0.53	N/A	N/A	0.40	3.87	3.47
646+50	TO	647+00	50	0.32	N/A	N/A	0.24	3.12	2.88
647+00	TO	647+50	50	30.44	N/A	N/A	22.83	48.31	25.49
647+50	TO	648+00	50	120.19	N/A	N/A	90.14	89.74	-0.40
648+00	TO	648+50	50	268.64	N/A	N/A	201.48	87.53	-113.95
648+50	TO	648+58	8	61.51	N/A	N/A	46.13	16.32	-29.81
648+58	TO	650+42	184	2099.00	N/A	N/A	1574.25	416.07	-1158.18
650+42	TO	650+50	8	122.15	N/A	N/A	91.61	19.45	-72.16
650+50	TO	651+00	50	544.14	N/A	N/A	408.10	126.46	-281.64
651+00	TO	651+50	50	272.94	N/A	N/A	204.71	79.86	-124.85
651+50	TO	652+00	50	91.16	N/A	N/A	68.37	24.19	-44.18
652+00	TO	652+50	50	0.00	N/A	N/A	0.00	23.03	23.03
652+50	TO	653+00	50	0.00	N/A	N/A	0.00	19.25	19.25
653+00	TO	653+50	50	0.00	N/A	N/A	0.00	23.87	23.87
653+50	TO	654+00	50	0.00	N/A	N/A	0.00	19.24	19.24
654+00	TO	654+50	50	0.00	N/A	N/A	0.00	4.92	4.92
654+50	TO	655+00	50	0.04	N/A	N/A	0.03	1.34	1.31
655+00	TO	655+50	50	0.81	N/A	N/A	0.61	25.47	24.86
655+50	TO	656+00	50	1.75	N/A	N/A	1.31	36.53	35.22
656+00	TO	656+50	50	4.81	N/A	N/A	3.61	11.26	7.65
656+50	TO	657+00	50	6.23	N/A	N/A	4.67	0.01	-4.66
657+00	TO	657+50	50	2.39	N/A	N/A	1.79	0.00	-1.79
SUBTOTALS			1500	3710.47	0.00	N/A	2782.85	1111.63	-1671.23
MUD CREEK LOCATION									
38+82	TO	39+00	18	N/A	N/A	16.23	0.00	1.09	1.09
39+00	TO	39+25	25	N/A	N/A	120.19	0.00	1.50	1.50
39+25	TO	39+50	25	N/A	N/A	268.04	0.00	0.00	0.00
39+50	TO	39+75	25	N/A	N/A	354.26	0.00	1.62	1.62
39+75	TO	40+00	25	N/A	N/A	368.38	0.00	9.55	9.55
40+00	TO	40+25	25	N/A	N/A	321.22	0.00	24.12	24.12
40+25	TO	40+50	25	N/A	N/A	270.43	0.00	40.91	40.91
40+50	TO	40+75	25	N/A	N/A	323.03	0.00	48.91	48.91
40+75	TO	41+00	25	N/A	N/A	413.38	0.00	36.41	36.41
41+00	TO	41+25	25	N/A	N/A	452.22	0.00	12.30	12.30
41+25	TO	41+50	25	N/A	N/A	334.61	0.00	13.31	13.31
41+50	TO	41+75	25	N/A	N/A	168.13	0.00	15.25	15.25
41+75	TO	42+00	25	N/A	N/A	120.97	0.00	2.04	2.04
42+00	TO	42+25	25	N/A	N/A	110.93	0.00	0.02	0.02
42+25	TO	42+50	25	N/A	N/A	72.90	0.00	0.15	0.15
42+50	TO	42+65	15	N/A	N/A	14.19	0.00	0.09	0.09
SUBTOTALS			383	N/A	N/A	3729.10	0.00	207.25	207.25
GRAND TOTALS				4435	85	3730	3390	4825	1440

NOTE: THE MATERIAL FROM THE CHANNEL EXCAVATION IS ASSUMED TO BE UNSUITABLE MATERIAL FOR EMBANKMENT.

TERRA ENGINEERING LTD.

USER NAME = hl	DESIGNED - CL	REVISED -
	DRAWN - KJC	REVISED -
PLOT SCALE = N/A	CHECKED - LVA	REVISED -
PLOT DATE = 3/19/2013	DATE - 03/20/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES
IL 9 OVER MUD CREEK

SCALE: N/A | SHEET NO. 4 OF 6 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	16
		CONTRACT NO. 68757		
	ILLINOIS FED. AID PROJECT			

STA	STA	MULCH, METHOD 2 (ACRE)	EROSION CONTROL BLANKET (SQ YD)	TEMPORARY EROSION CONTROL SEEDING RATE (LBS/ACRE)	APPLICATIONS	(POUND)
641+00	642+00	0.00	0.00	100	3	0.00
642+00	643+00	0.00	0.00	100	3	0.00
643+00	644+00	0.04	530.06	100	3	45.86
644+00	645+00	0.05	563.06	100	3	48.82
645+00	646+00	0.04	578.25	100	3	49.13
646+00	647+00	0.04	580.03	100	3	48.35
647+00	648+00	0.10	665.77	100	3	72.39
648+00	649+00	0.38	83.09	100	3	120.25
649+00	650+00	0.04	1,106.97	100	3	80.18
650+00	651+00	0.19	1,216.53	100	3	133.25
651+00	652+00	0.17	642.76	100	3	92.24
652+00	653+00	0.05	695.21	100	3	58.02
653+00	654+00	0.03	808.67	100	3	59.48
654+00	655+00	0.02	844.80	100	3	57.74
655+00	656+00	0.00	724.28	100	3	45.02
656+00	657+00	0.00	639.75	100	3	39.65
657+00	658+00	0.00	0.00	100	3	0.00
658+00	659+00	0.00	0.00	100	3	0.00
	TOTAL	1.25	9,679			950

LOCATION		TEMPORARY DITCH CHECKS (FOOT)	PERIMETER EROSION BARRIER (FOOT)
STA. 643+20, 35' LT		30	
STA. 643+87, 39' LT		30	
STA. 646+50, 50' LT		30	
STA. 643+00 TO STA. 649.21, RT			640
STA. 649+21, RT TO STA. 649+61, LT			375
STA. 649+56, RT TO STA. 650+09, LT			370
STA. 649+56 TO STA. 657+00, RT			760
STA. 649+85 TO STA. 657+00, LT			764
STA. 649+88 TO STA. 650+77, LT			90
TOTAL		90	2,999

NOTE: QUANTITIES FOR TEMPORARY DITCH CHECKS ARE FOR 3 INSTALLATIONS AT EACH LOCATION.

TERRA ENGINEERING LTD.

USER NAME = hl	DESIGNED - CL	REVISED -
	DRAWN - KJC	REVISED -
PLOT SCALE = N/A	CHECKED - LVA	REVISED -
PLOT DATE = 3/19/2013	DATE - 03/20/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES
IL 9 OVER MUD CREEK

SCALE: N/A | SHEET NO. 5 OF 6 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	17
		CONTRACT NO. 68757		
	ILLINOIS FED. AID PROJECT			

LOCATION			TEMPORARY BRIDGE TRAFFIC SIGNALS	TEMPORARY RUMBLE STRIPS	TEMPORARY CONCRETE BARRIER	RELOCATE TEMPORARY CONCRETE BARRIER	BARRIER WALL MARKERS TYPE C	IMPACT ATTENUATORS, TEMP (NON-REDIRECTIVE), TEST LVL 3	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LVL 3
STA	STA	OFFSET	(EACH)	(EACH)	(FOOT)	(FOOT)	(EACH)	(EACH)	(EACH)
STAGE I									
625+26.00		RT		1					
630+26.00		RT		1					
635+26.00		RT		1					
642+76.00	646+73.00		1						
643+75.97		RT						1	
643+75.97	655+66.95				1190.98		48		
655+66.95		RT						1	
664+23.00		LT		1					
669+23.00		LT		1					
674+23.00		LT		1					
STAGE II									
643+75.97		LT							1
643+75.97	655+66.95					1190.98			
655+66.95		LT							1
TOTAL			1	6	1191	1191	48	2	2

LOCATION			PROPERTIES		TEMPORARY RAMP	TEMPORARY PAVEMENT	TEMPORARY PAVEMENT REMOVAL
STA	STA	OFFSET	LENGTH	WIDTH	(SQYD)	(SQYD)	(SQYD)
PRE-STAGE							
644+10.00	644+22.00	LT	12.00	1.00		2	
644+22.00	644+40.00	LT	18.00	2.00		4	
644+40.00	648+50.00	LT	410.00	3.00		137	
650+16.00	655+03.00	LT	487.00	3.00		163	
655+03.00	655+23.00	LT	20.00	2.00		5	
655+23.00	655+35.00	LT	12.00	1.00		2	
STAGE I							
644+10.00	644+22.00	RT	12.00	1.00		2	
644+22.00	644+40.00	RT	18.00	2.00		4	
644+40.00	645+15.00	RT	75.00	3.00		25	
645+00.00	645+15.00	RT	15.00	15.00	25		
645+10.00	645+15.00	RT	5.00	15.00	8		
647+89.87	648+19.87	RT	30.00	15.00	50		
648+14.87	648+19.87	RT	5.00	15.00	8		
650+80.25	651+17.25	RT	37.00	15.00	62		
650+80.25	650+85.25	RT	5.00	15.00	8		
654+28.00	654+63.00	RT	35.00	15.00	58		
654+28.00	654+33.00	RT	5.00	15.00	8		
654+28.00	655+03.00	RT	75.00	3.00		25	
655+03.00	655+22.00	RT	19.00	2.00		5	
655+22.00	655+35.00	RT	13.00	1.00		2	
STAGE II							
645+00.00	645+15.00	LT	15.00	15.00	25		
645+10.00	645+15.00	LT	5.00	15.00	8		
647+89.87	648+19.87	LT	30.00	15.00	50		
648+14.87	648+19.87	LT	5.00	15.00	8		
648+26.00	648+50.00	LT	24.00	3.00			8
650+16.00	650+74.00	LT	58.00	3.00			20
650+80.25	651+17.25	LT	37.00	15.00	62		
650+80.25	650+85.25	LT	5.00	15.00	8		
654+28.00	654+63.00	LT	35.00	15.00	58		
654+28.00	654+33.00	LT	5.00	15.00	8		
TOTAL					457	376	28

LOCATION			PROPERTIES		SHORT TERM PAVEMENT MARKING	TEMPORARY PAVEMENT MARKING - LINE 4"	TEMPORARY PAVEMENT MARKING - LINE 24"	WORK ZONE PAVEMENT MARKING - REMOVAL
			TYPE	COLOR				
STA	STA	OFFSET			(FOOT)	(FOOT)	(FOOT)	(SQ FT)
STAGE I								
642+26.00		RT	SOLID	WHITE			12	24
642+26.00	644+40.00	CL	SKIP-DASH	YELLOW				
642+36.00	656+63.00	RT	SOLID	WHITE		1,427		476
643+92.00	655+51.00	LT	SOLID	WHITE				
643+92.00	655+51.00	LT	SOLID	WHITE		1,159		387
655+00.00	657+00.00	CL	SKIP-DASH	YELLOW				
657+23.00		LT	SOLID	WHITE			12	24
STAGE II								
642+26.00		RT	SOLID	WHITE				24
642+86.00	657+13.00	LT	SOLID	WHITE		1,427		476
644+07.00	645+15.00	RT	SOLID	WHITE				
644+07.00	655+39.00	RT	SOLID	WHITE		1,132		378
654+28.00	655+39.00	RT	SOLID	WHITE				
657+23.00		LT	SOLID	WHITE				24
STAGE III								
643+00.00	657+00.00	CL	DOTTED	YELLOW	140			
TOTAL					140	5,145	24	1,813

TERRA ENGINEERING LTD.

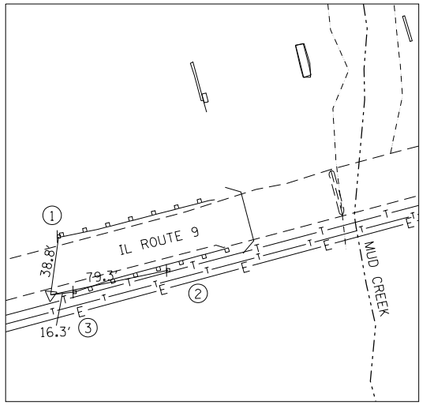
USER NAME = hl	DESIGNED - CL	REVISED -
	DRAWN - KJC	REVISED -
PLOT SCALE = N/A	CHECKED - LVA	REVISED -
PLOT DATE = 3/19/2013	DATE - 03/20/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES
IL 9 OVER MUD CREEK

SCALE: N/A | SHEET NO. 6 OF 6 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	18
		CONTRACT NO. 68757		
	ILLINOIS FED. AID PROJECT			

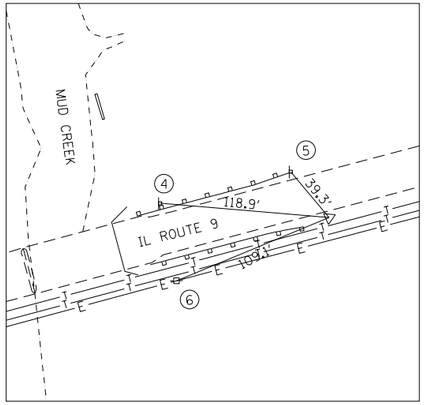


CONTROL POINT #1002

CONTROL POINT 1002 IS AN IRON ROD LOCATED ON THE SOUTH SHOULDER OF IL ROUTE 9 WEST OF THE MUD CREEK BRIDGE.

N = 1403543.27 STA. 647+33.64
E = 2505589.52 16.48' RT

1. SIGN BY NORTH GUARDRAIL
2. SIGN ON SOUTH SHOULDER OF IL 9
3. SIGN BY SOUTH GUARDRAIL

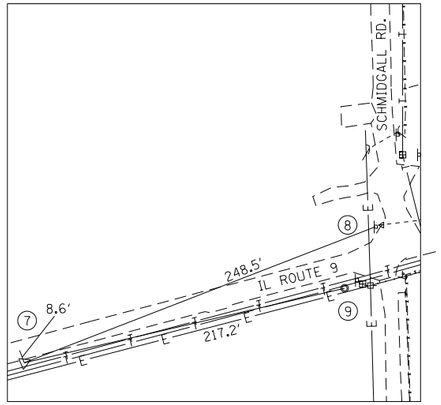


CONTROL POINT #1006

CONTROL POINT #1006 IS AN IRON ROD LOCATED ON THE SOUTH SHOULDER OF IL ROUTE 9 EAST OF THE MUD CREEK BRIDGE.

N = 1403644.25 STA. 651+34.17
E = 2505977.12 16.82' RT

4. SIGN ON NORTH SHOULDER
5. SIGN BY NORTH GUARDRAIL
6. ELECTRIC POWER POLE ON SOUTH SIDE OF IL 9

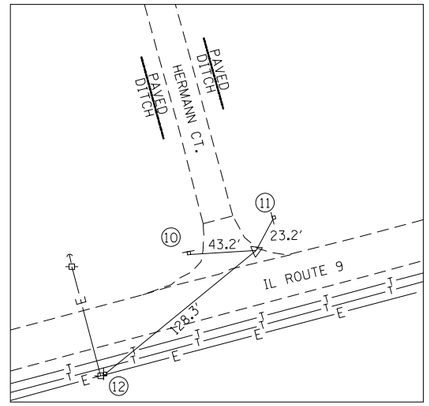


CONTROL POINT #1007

CONTROL POINT #1007 IS AN IRON ROD LOCATED ON THE SOUTH SHOULDER OF IL ROUTE 9 APPROXIMATELY 497' WEST OF THE CENTER LINE OF SCHMIDGALL ROAD.

N = 1403745.44 STA. 655+34.91
E = 2506364.87 16.93' RT

7. TO CENTERLINE OF IL 9
8. SIGN AT NW INT. OF SCHMIDGALL AND IL 9
9. MANHOLE NEAR SW INT. OF SCHIMDGALL AND IL 9



CONTROL POINT #1001

CONTROL POINT #1001 IS A MAG NAIL ON THE EAST CORNER OF THE INTERSECTION OF IL ROUTE 9 AND HERMANN CT.

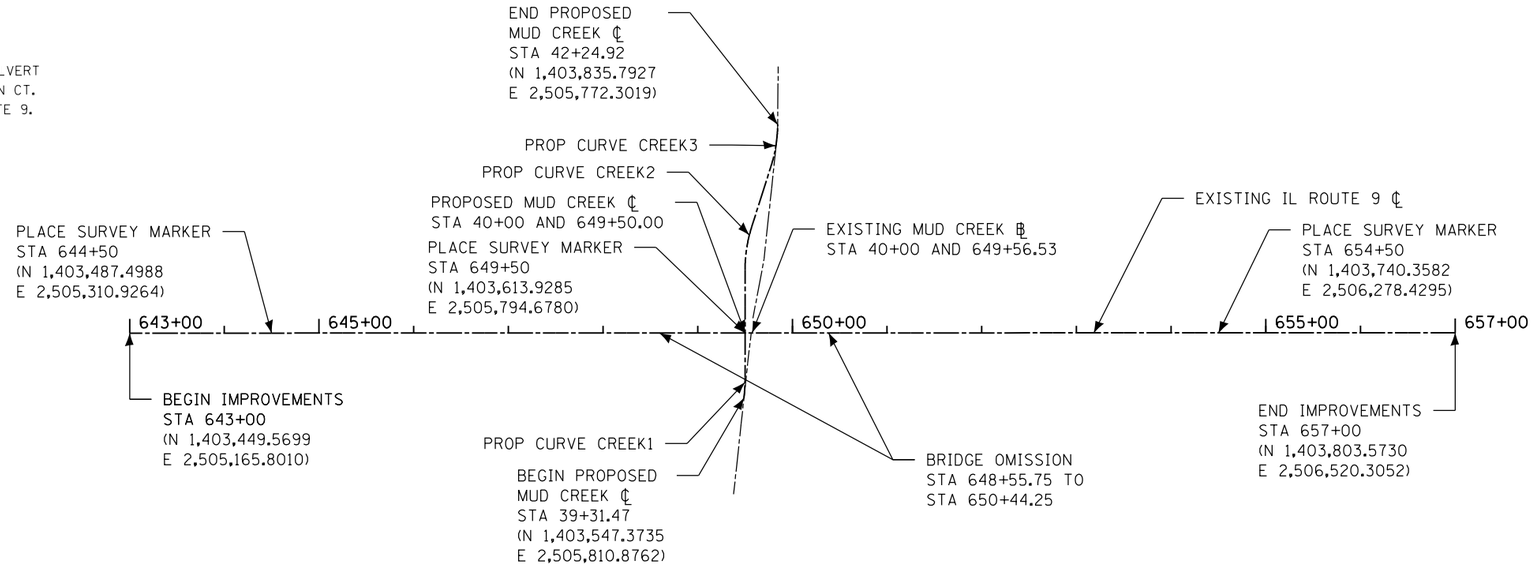
N = 1403334.91 STA. 637+61.94
E = 2504639.61 21.78' LT

10. SIGN AT WEST SIDE OF INT. OF HERMANN AND IL 9
11. SIGN ON EAST SIDE OF INT. OF HERMANN AND IL 9
12. SIGN NEXT TO POWER POLE WEST OF HERMANN ON SOUTH SIDE OF IL 9

N

BENCHMARK NUMBER 1
U.S. COAST AND GEODETIC SURVEY BRASS DISK SET IN TOP OF THE SOUTH WEST WING WALL OF THE STATE ROUTE 9 BRIDGE OVER MUD CREEK.
ELEVATION 578.58'

BENCHMARK NUMBER 2
CHISELED CROSS ON TOP OF THE 15' CULVERT LOCATED ON THE EAST SIDE OF HERMANN CT. 385' NORTH OF THE C.L. OF STATE ROUTE 9.
ELEVATION 580.43'



PROP. CURVE CREEK1
PI STA. = 39+42.24
Δ = 6° 09' 48" (LT)
D = 28° 38' 52"
R = 200.00'
T = 10.77'
L = 21.51'
E = 0.29'
e = N/A
T.R. = N/A
S.E. RUN = N/A
P.C. STA. = 39+31.47
P.T. STA. = 39+52.98

PROP. CURVE CREEK2
PI STA. = 40+90.00
Δ = 17° 37' 37" (RT)
D = 38° 11' 50"
R = 150.00'
T = 23.26'
L = 46.15'
E = 1.79'
e = N/A
T.R. = N/A
S.E. RUN = N/A
P.C. STA. = 40+66.74
P.T. STA. = 41+12.89

PROP. CURVE CREEK3
PI STA. = 42+02.71
Δ = 17° 05' 35" (LT)
D = 38° 11' 50"
R = 150.00'
T = 22.54'
L = 44.75'
E = 1.68'
e = N/A
T.R. = N/A
S.E. RUN = N/A
P.C. STA. = 41+80.17
P.T. STA. = 42+24.92

TERRA ENGINEERING LTD.	USER NAME = TERRA	DESIGNED - CL	REVISED -
		DRAWN - KJC	REVISED -
	PLOT SCALE = N/A	CHECKED - LVA	REVISED -
	PLOT DATE = 1/23/2013	DATE - 01/25/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SURVEY TIE SHEET
IL 9 OVER MUD CREEK

SCALE: N/A | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	19
		CONTRACT NO. 68757		
	ILLINOIS FED. AID PROJECT			

$PENTBL$
$PLTDRVS$
$SYSPRINTER_NAME$
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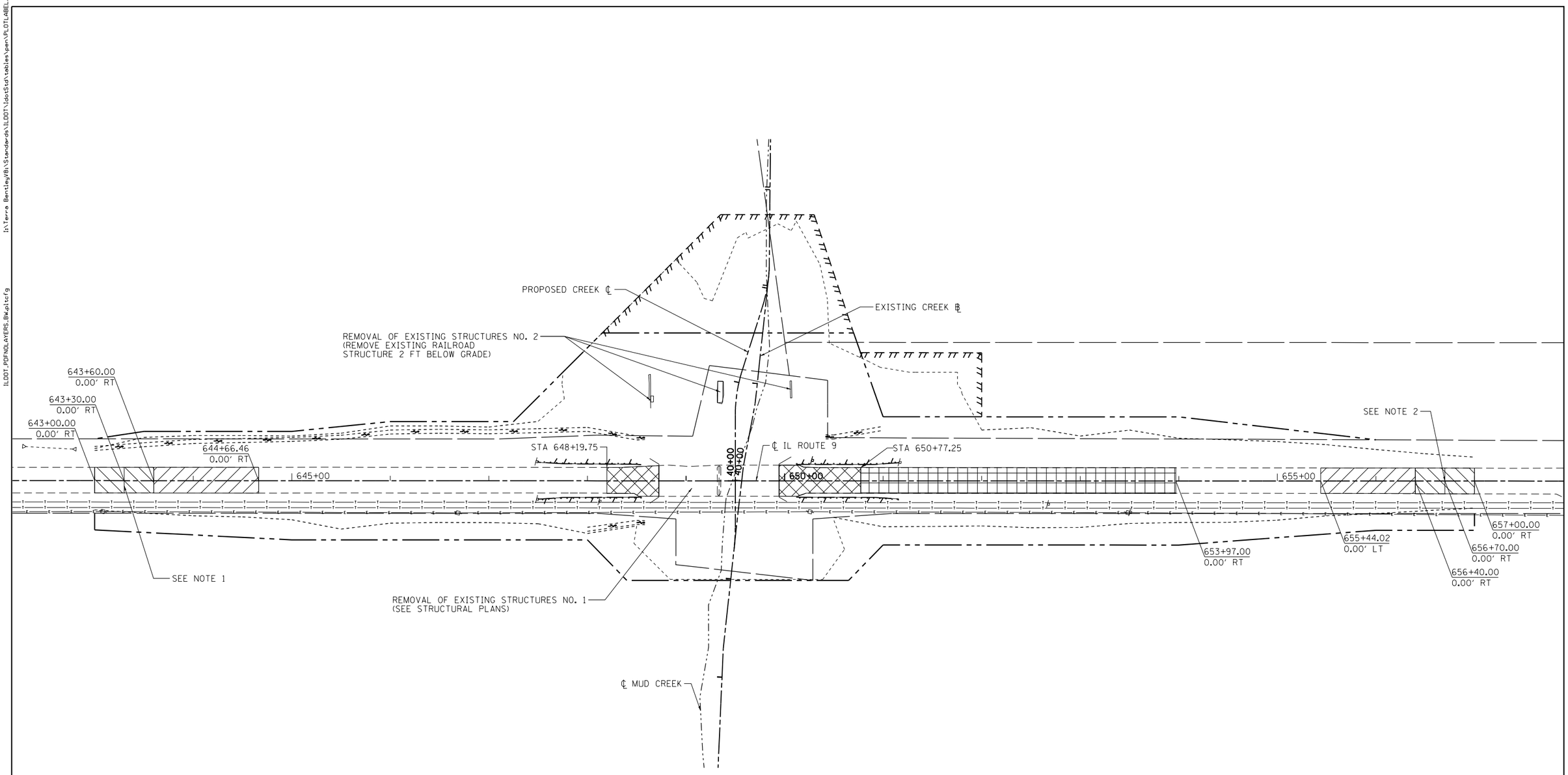

NOTES
1. A BUTT JOINT SHALL BE PLACED FOR THE BINDER COURSE FROM STATION 643+30 TO 643+60 AT A 2.25 INCH DEPTH BELOW THE PROPOSED SURFACE COURSE.
2. A BUTT JOINT SHALL BE PLACED FOR THE BINDER COURSE FROM STATION 656+40 TO 656+70 AT A 2.25 INCH DEPTH BELOW THE PROPOSED SURFACE COURSE.

LEGEND

- EX. EDGE OF TREES
- EX. AERIAL ELECTRIC LINE
- EX. UNDERGROUND PHONE
- EX. GUARDRAIL
- EX. FENCE LINE
- EX. MANHOLE
- EX. INLET
- EX. HEADWALL
- EX. TREE
- EX. ROW MARKER
- EX. SIGN
- EX. POLE
- EX. GUYWIRE
- EX. UTILITY BOX
- GUARDRAIL REMOVAL
- HMA SURFACE REMOVAL- BUTT JOINT
- HMA SURFACE REMOVAL, VARIABLE DEPTH
- PAVEMENT REMOVAL
- PAVEMENT BREAKING

N

50 0 50 100
FEET

TERRA ENGINEERING LTD.

USER NAME = hl	DESIGNED - CL	REVISED -
	DRAWN - KJC	REVISED -
PLOT SCALE = 1'=50'	CHECKED - LVA	REVISED -
PLOT DATE = 3/19/2013	DATE - 03/20/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REMOVAL PLAN
IL 9 OVER MUD CREEK

SCALE: 1"=50' | SHEET NO. 1 OF 1 SHEETS | STA. 643+00.00 TO STA. 657+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	20
		CONTRACT NO. 68757		
	ILLINOIS FED. AID PROJECT			

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PLAN	NOTE BOOK NO.	SURVEYED PLOTTED ALIGNMENT CHECKED R.T. OF WAY CHECKED CADD FILE NAME	BY	DATE

PROFILE	NOTE BOOK NO.	SURVEYED PLOTTED GRADES CHECKED B.M. NOTED STRUCTURE NOTAT'NS CH'KD	BY	DATE

TERRA ENGINEERING LTD.

USER NAME = hl	DESIGNED - CL	REVISED -
	DRAWN - KJC	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED - LVA	REVISED -
PLOT DATE = 3/19/2013 5:00:35 PM	DATE - 03/20/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN & PROFILE
IL 9 OVER MUD CREEK

SCALE: 100.00' / in. SHEET NO. 1 OF 1 SHEETS STA. 643+00.00 TO STA. 657+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	21
		CONTRACT NO. 68757		
		ILLINOIS FED. AID PROJECT		

GENERAL STAGING NOTES

1. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.
2. ACCESS TO ALL ENTRANCES IMPACTED BY THE CONSTRUCTION SHALL BE MAINTAINED AT ALL TIMES. TEMPORARY CLOSURE OF ACCESS MUST BE AGREED TO IN WRITING BY THE PROPERTY OWNER AND A COPY SUBMITTED TO THE ENGINEER.
3. USE AGGREGATE AT DRIVEWAYS AS REQUIRED TO MAINTAIN TEMPORARY ACCESS AND AT THE DIRECTION OF THE ENGINEER.
4. CONTRACTOR SHALL REMOVE EXISTING PAVEMENT MARKINGS WHERE REQUIRED TO AVOID CONFLICT WITH TEMPORARY PAVEMENT MARKINGS.
5. ALL REQUIRED SIGNS SHOWN IN STAGING PLANS SHALL BE INCLUDED IN THE COST OF THE TRAFFIC CONTROL PAY ITEMS.

SEQUENCE OF CONSTRUCTION

PRE-STAGE CONSTRUCTION

1. SET UP TRAFFIC CONTROL AND PROTECTION ACCORDING TO HIGHWAY STANDARD 701326. SEE HIGHWAY STANDARD FOR ADDITIONAL SIGNS AND DEVICES. TRAFFIC REMAINS ON EXISTING PAVEMENT.
2. REMOVE EXISTING AGGREGATE SHOULDER ON THE NORTH SIDE OF IL 9 FROM STA. 644+10 TO STA. 655+35.
3. CONSTRUCT TEMPORARY PAVEMENT AND EMBANKMENT ON THE NORTH EDGE OF PAVEMENT AT THE LOCATIONS SHOWN ON THE PLANS.
4. INSTALL EROSION CONTROL ITEMS AS SHOWN ON THE EROSION CONTROL PLANS.

STAGE I CONSTRUCTION

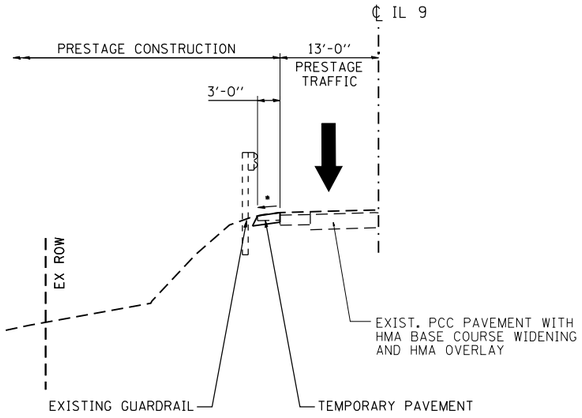
1. SET UP TRAFFIC CONTROL AND PROTECTION ACCORDING TO HIGHWAY STANDARD 701321. SEE HIGHWAY STANDARD FOR ADDITIONAL SIGNS AND DEVICES. MAINTAIN ONE LANE OF TRAFFIC ON THE NORTH LANE UTILIZING TEMPORARY TRAFFIC SIGNALS.
2. INSTALL TEMPORARY CONCRETE BARRIERS, TEMPORARY IMPACT ATTENUATORS AND TEMPORARY TRAFFIC SIGNALS AS SHOWN ON THE STAGING PLANS.
3. REMOVE THE SOUTH HALF OF EXISTING BRIDGE.
4. REMOVE GUARDRAIL AND AGGREGATE SHOULDERS ALONG THE SOUTH SIDE OF IL 9 AT THE LOCATIONS SHOWN ON THE PLANS.
5. CONSTRUCT THE SOUTH HALF OF THE PROPOSED BRIDGE (BRIDGE PLAN STAGE I), HMA PAVEMENT (FULL-DEPTH), HMA BINDER COURSE, AGGREGATE BASE COURSE, HMA BASE COURSE WIDENING, EMBANKMENT, GUARDRAIL, TEMPORARY RAMPS AND TEMPORARY PAVEMENT.
6. INSTALL EROSION CONTROL ITEMS AS SHOWN ON THE EROSION CONTROL PLANS.

STAGE II CONSTRUCTION

1. SET UP TRAFFIC CONTROL AND PROTECTION ACCORDING TO HIGHWAY STANDARD 701321. SEE HIGHWAY STANDARD FOR ADDITIONAL SIGNS AND DEVICES. MAINTAIN ONE LANE OF TRAFFIC ON THE SOUTH LANE UTILIZING TEMPORARY TRAFFIC SIGNALS.
2. INSTALL TEMPORARY CONCRETE BARRIERS, TEMPORARY IMPACT ATTENUATORS AND TEMPORARY TRAFFIC SIGNALS AS SHOWN ON THE STAGING PLANS.
3. REMOVE THE NORTH HALF OF EXISTING BRIDGE.
4. REMOVE GUARDRAIL AND TEMPORARY PAVEMENT ALONG THE NORTH SIDE OF IL 9.
5. CONSTRUCT THE NORTH HALF OF THE PROPOSED BRIDGE (BRIDGE PLAN STAGE II), HMA PAVEMENT (FULL-DEPTH), HMA BINDER COURSE, AGGREGATE BASE COURSE, HMA BASE COURSE WIDENING, GUARDRAIL, TEMPORARY RAMPS AND EMBANKMENT.
6. INSTALL EROSION CONTROL ITEMS AS SHOWN ON THE EROSION CONTROL PLANS.

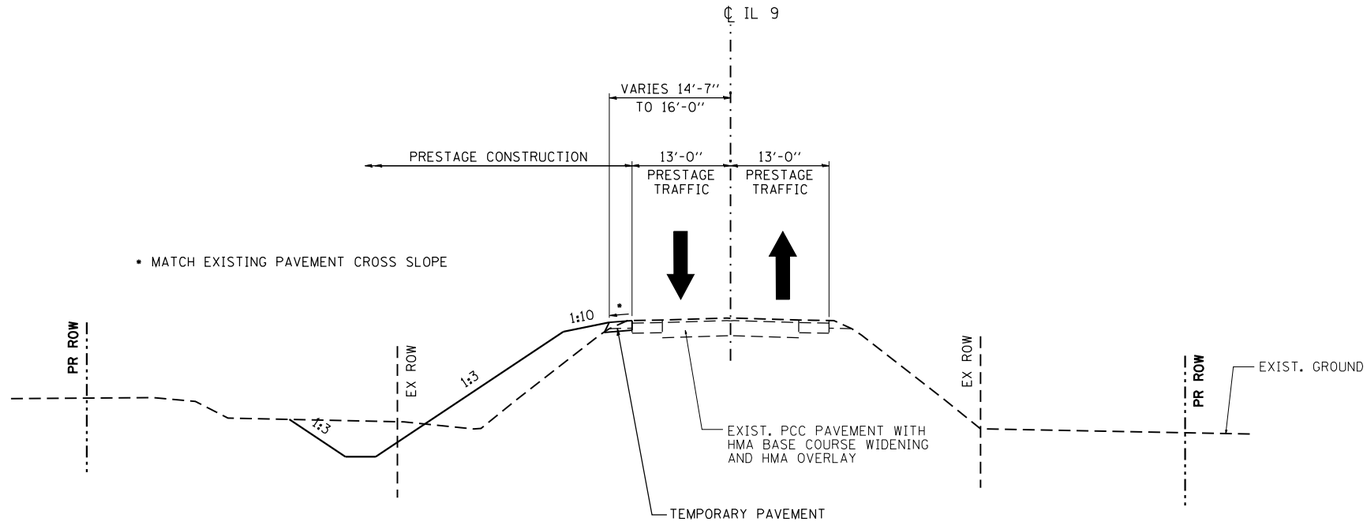
STAGE III CONSTRUCTION

1. SET UP TRAFFIC CONTROL AND PROTECTION ACCORDING TO HIGHWAY STANDARD 701201. SEE HIGHWAY STANDARD FOR ADDITIONAL SIGNS AND DEVICES. SHIFT TRAFFIC TO THE PROPOSED PAVEMENT.
2. REMOVE TEMPORARY PAVEMENT ALONG THE SOUTH SIDE OF IL 9.
3. CONSTRUCT BUTT JOINTS, AGGREGATE SHOULDERS AND REMAINING HMA BINDER COURSE.
4. CONSTRUCT FINAL 1 1/2 " HMA SURFACE COURSE LIFT.
5. PLACE FINAL STRIPING.



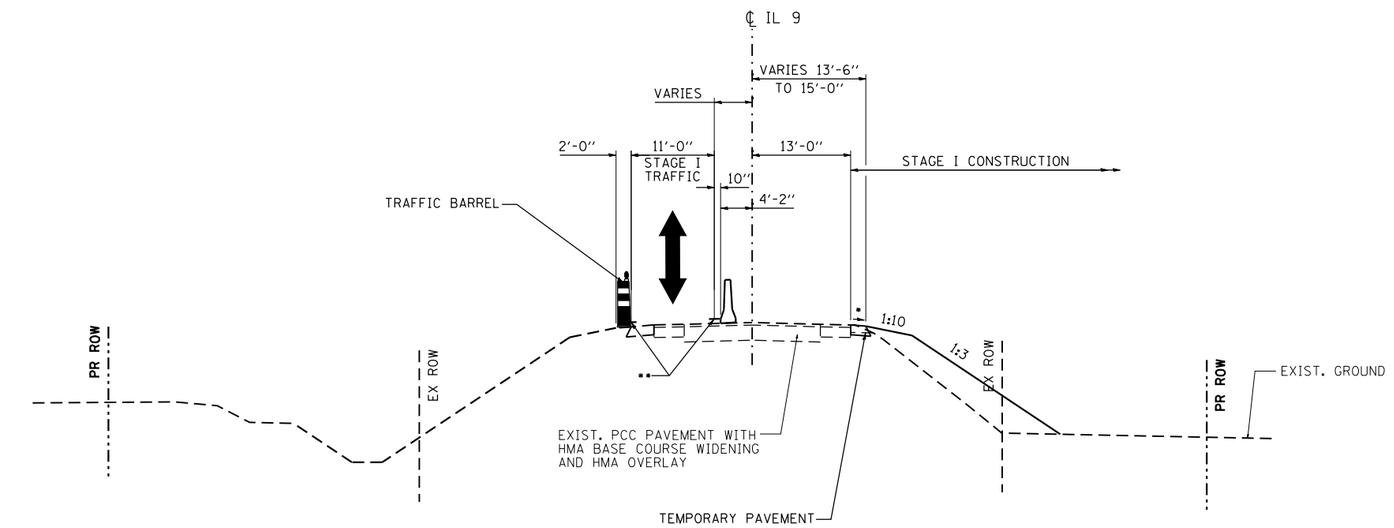
PRESTAGE CONSTRUCTION TYPICAL SECTION

STA 647+50 TO STA 648+50
STA 650+16 TO STA. 651+16



PRESTAGE CONSTRUCTION TYPICAL SECTION

STA 643+86 TO STA 647+50
STA 651+16 TO STA. 655+75



* MATCH EXISTING PAVEMENT CROSS SLOPE
** TEMPORARY PAVEMENT MARKING-LINE 4"

STAGE I CONSTRUCTION TEMPORARY PAVEMENT TYPICAL SECTION

STA. 643+95 TO STA. 645+15
STA. 654+28 TO STA. 655+57

design firm no. 184001036 — whks engineers + planners + land surveyors

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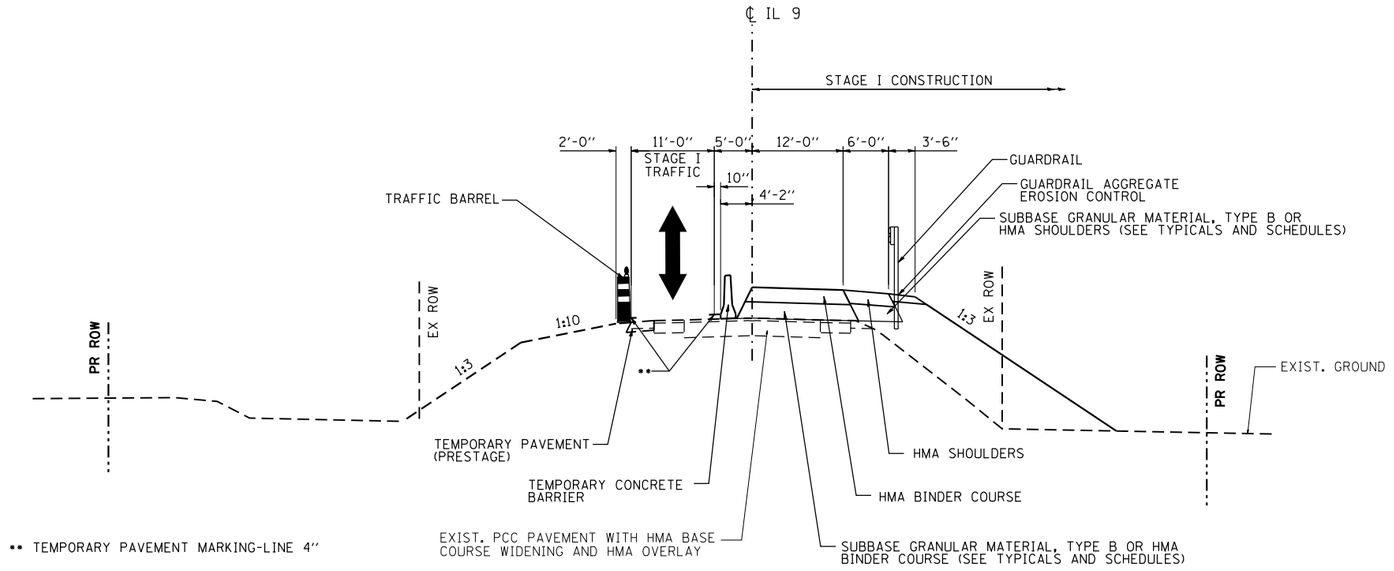
FILE NAME = D468757-sht-Staging Typ Sections Sequence.dgn	CHECKED -	REVISED
PLOT SCALE = 20.0000 ' / IN.	DRAWN -	REVISED
PLOT DATE = 1/22/2013	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 9 OVER MUD CREEK
MAINTENANCE OF TRAFFIC TYPICAL SECTIONS

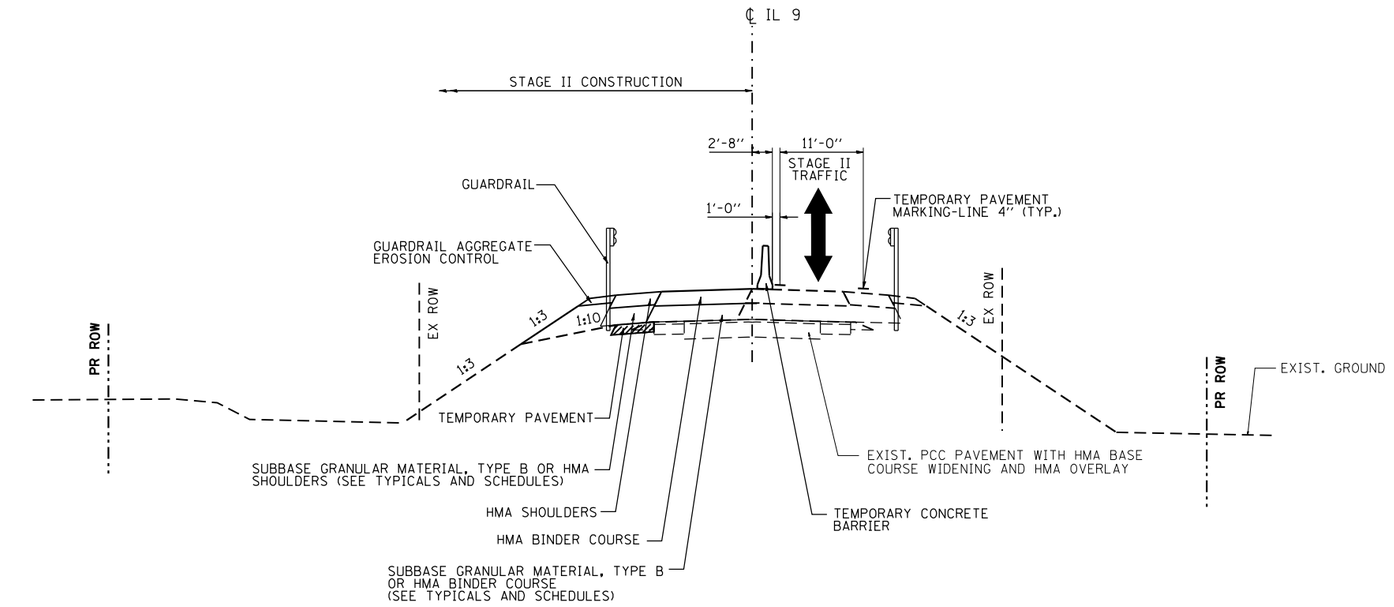
SCALE: 1" = 10' | SHEET NO. 1 OF 2 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR)BR	TAZEWELL	80	23
		CONTRACT NO. 68757		
	ILLINOIS	FED. AID PROJECT		



STAGE I CONSTRUCTION TYPICAL SECTION

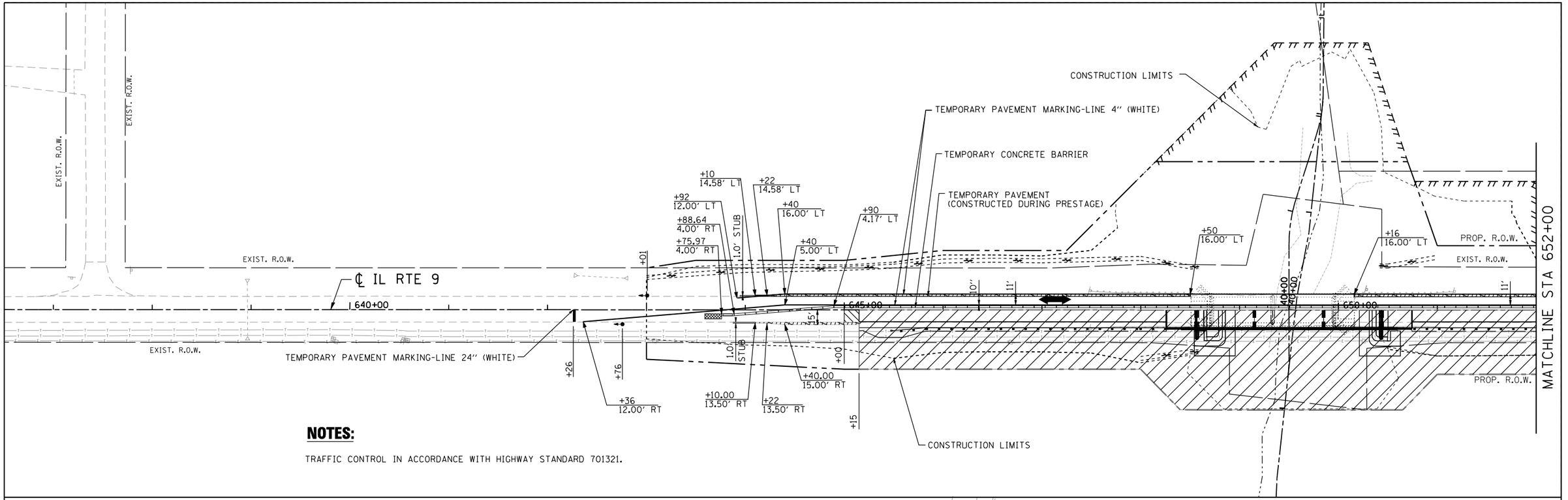
STA. 645+15 TO STA. 654+28



STAGE II CONSTRUCTION TYPICAL SECTION

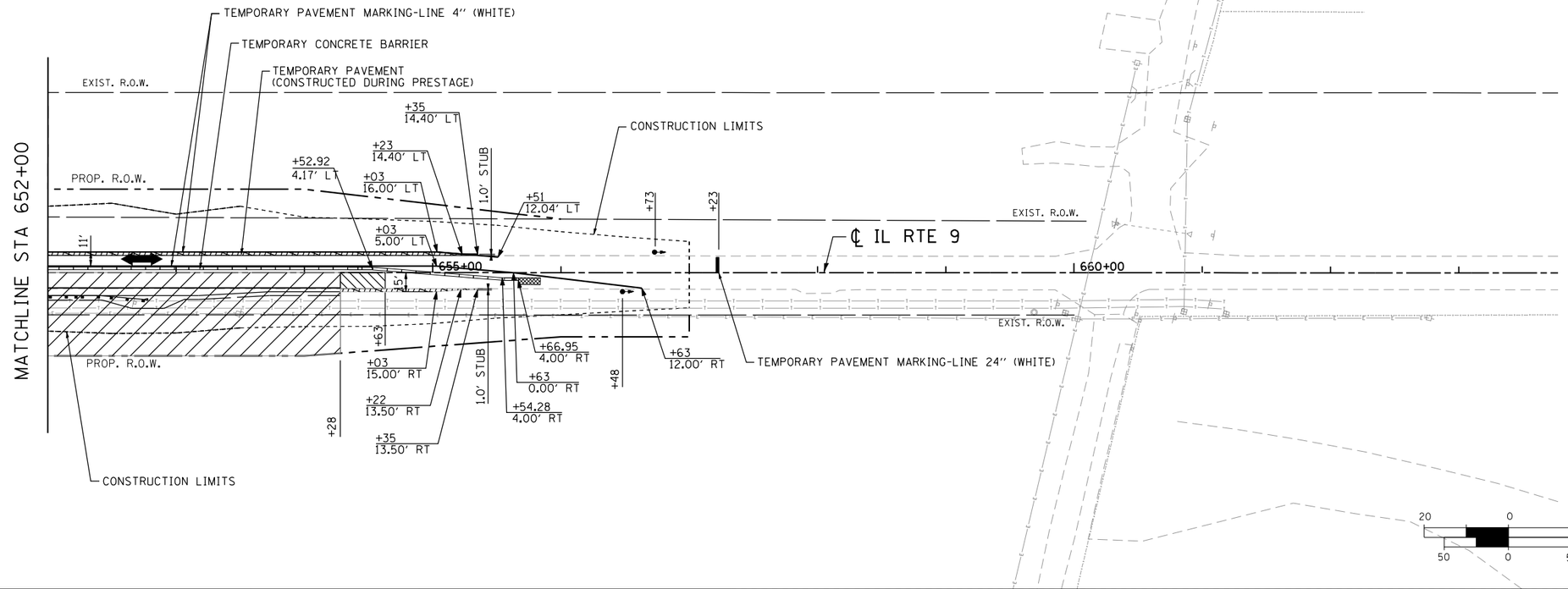
STA. 645+15 TO STA. 654+28

design firm no. 184001036 whks engineers + planners + land surveyors	USER NAME = gjameson	DESIGNED -	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	IL ROUTE 9 OVER MUD CREEK MAINTENANCE OF TRAFFIC TYPICAL SECTIONS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	FILE NAME = D468757-sht-Staging Typ Sections Sequence.dgn	CHECKED -	REVISED			693	(119BR)BR	TAZEWELL	80	24
	PLOT SCALE = 20.0000 ' / IN.	DRAWN -	REVISED						CONTRACT NO. 68757	
	PLOT DATE = 1/22/2013	CHECKED -	REVISED		SCALE: 1" = 10' SHEET NO. 2 OF 2 SHEETS STA. TO STA.			ILLINOIS	FED. AID PROJECT	



NOTES:

TRAFFIC CONTROL IN ACCORDANCE WITH HIGHWAY STANDARD 701321.



LEGEND

- TEMPORARY TRAFFIC SIGNAL
- AREA OF CONSTRUCTION
- DIRECTION OF TRAFFIC
- TEMPORARY PAVEMENT
- TEMPORARY CONCRETE BARRIER
- IMPACT ATTENUATOR
- TEMPORARY RAMP (CONSTRUCTED WITH AND PAID FOR AS HMA BINDER COURSE, IL-19.0, N50)

N

GRAPHIC SCALE

METERS: 20 0 20 40 60 80 100

FEET: 50 0 50 100 150 200 250

design firm no. 184001036

whks engineers + planners + land surveyors

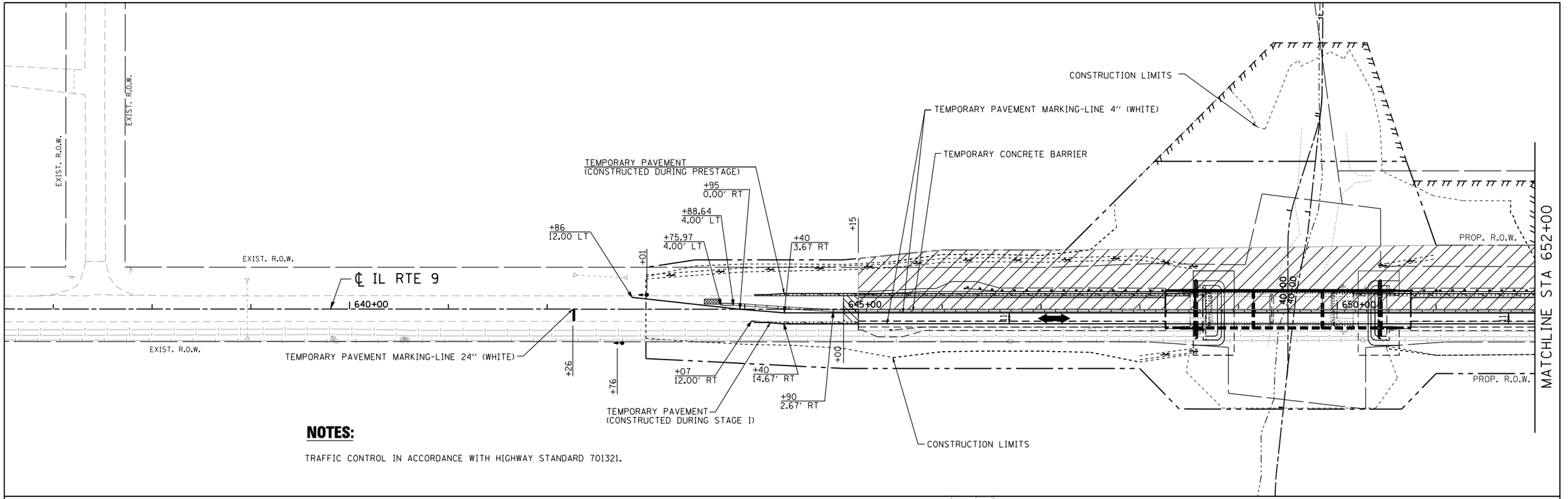
USER NAME = gjameson	DESIGNED -	REVISED
FILE NAME = D468757-sht-mot1.dgn	CHECKED -	REVISED
PLOT SCALE = 100.0000 ' / IN.	DRAWN -	REVISED
PLOT DATE = 1/22/2013	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 9 OVER MUD CREEK
MAINTENANCE OF TRAFFIC STAGE I

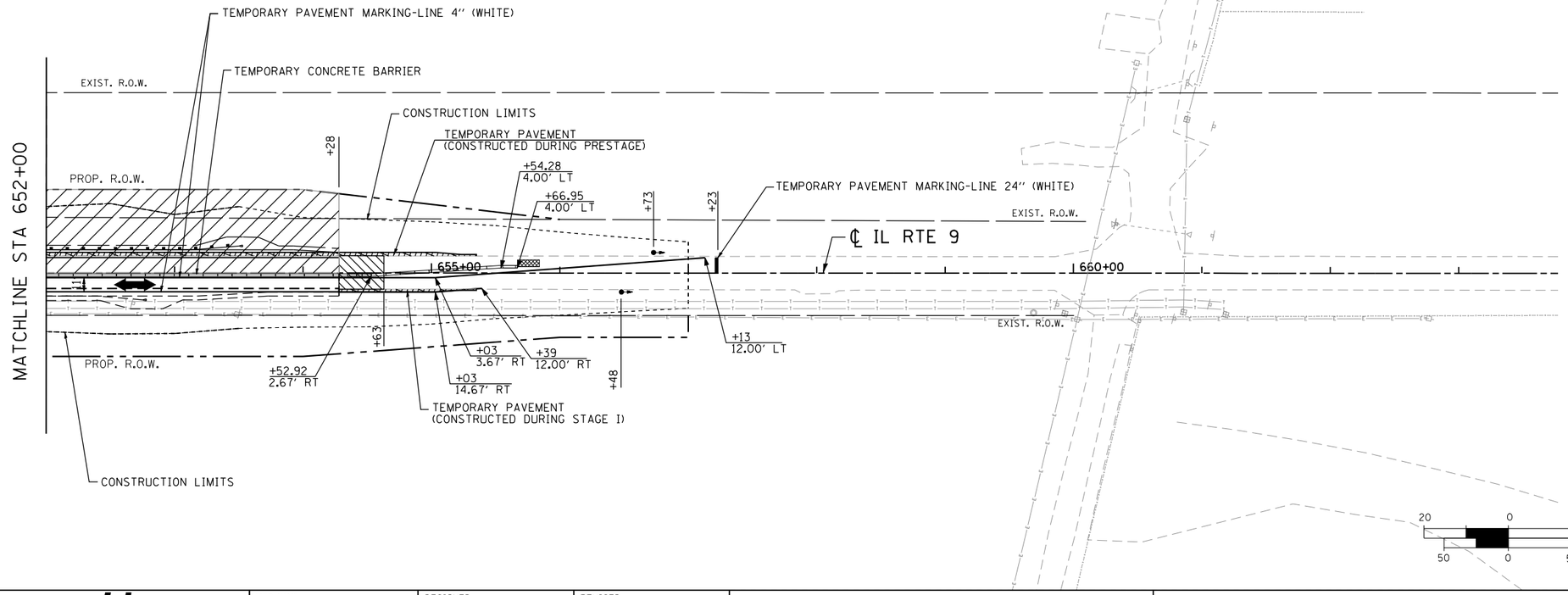
SCALE: 1" = 50' | SHEET NO. 1 OF 1 SHEETS | STA. 643+00.00 TO STA. 657+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR)BR	TAZEWELL	80	25
		CONTRACT NO. 68757		
	ILLINOIS FED. AID PROJECT			



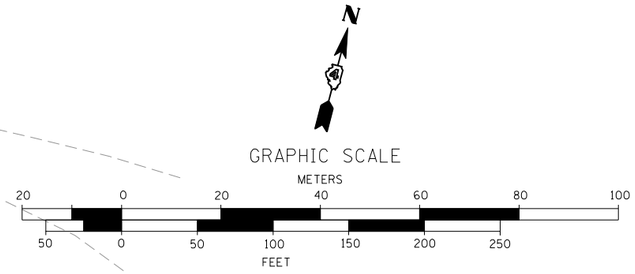
NOTES:

TRAFFIC CONTROL IN ACCORDANCE WITH HIGHWAY STANDARD 701321.



LEGEND

- TEMPORARY TRAFFIC SIGNAL
- AREA OF CONSTRUCTION
- DIRECTION OF TRAFFIC
- TEMPORARY PAVEMENT
- TEMPORARY CONCRETE BARRIER
- IMPACT ATTENUATOR
- TEMPORARY RAMP (CONSTRUCTED WITH AND PAID FOR AS HMA BINDER COURSE, IL-19.0, N50)



design firm no. 184001036

whks
engineers + planners + land surveyors

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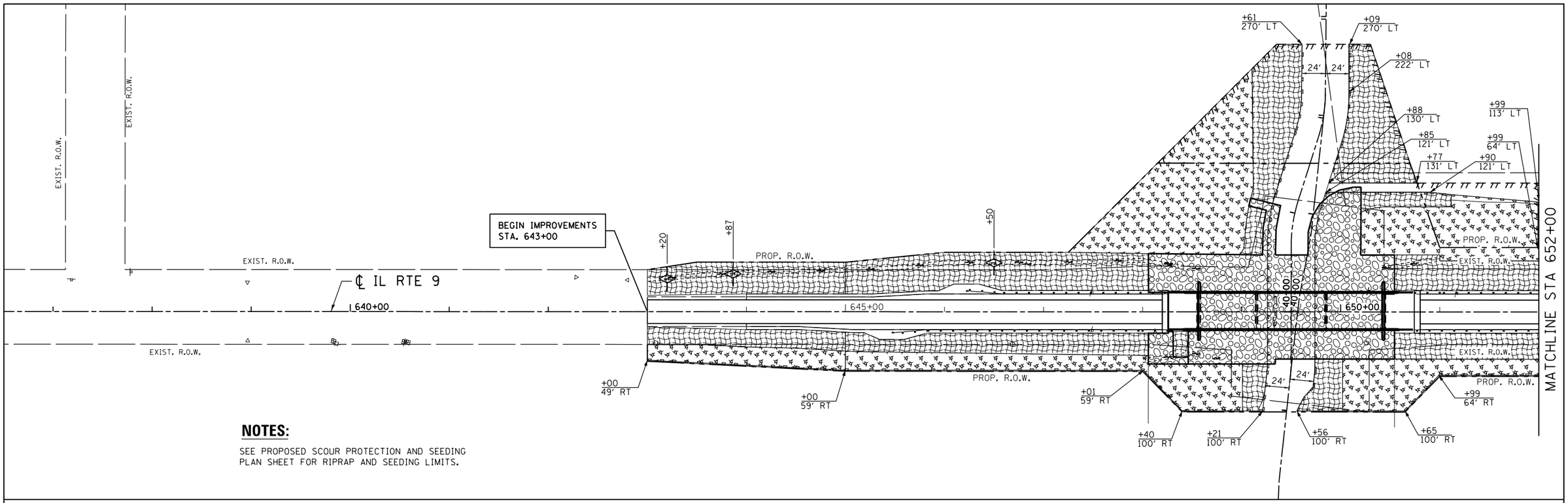
PLOT DATE = 1/22/2013	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 9 OVER MUD CREEK
MAINTENANCE OF TRAFFIC STAGE II

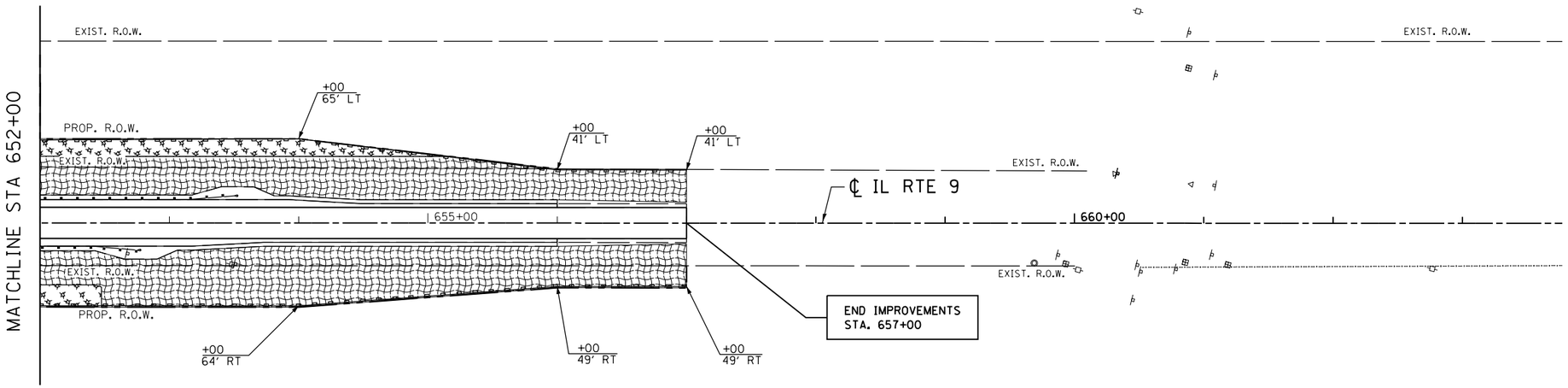
SCALE: 1" = 50' | SHEET NO. 1 OF 1 SHEETS | STA. 643+00.00 TO STA. 657+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR)BR	TAZEWELL	80	26
		CONTRACT NO. 68757		
	ILLINOIS FED. AID PROJECT			



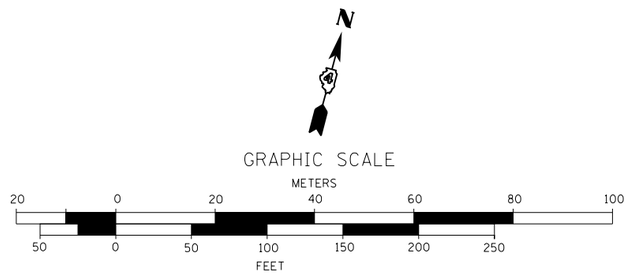
NOTES:

SEE PROPOSED SCOUR PROTECTION AND SEEDING PLAN SHEET FOR RIPRAP AND SEEDING LIMITS.



LEGEND

- EROSION CONTROL BLANKET
- MULCH METHOD 2
- TEMPORARY DITCH CHECK
- PERIMETER EROSION BARRIER
- RIP RAP



design firm no. 184001036

whks engineers + planners + land surveyors

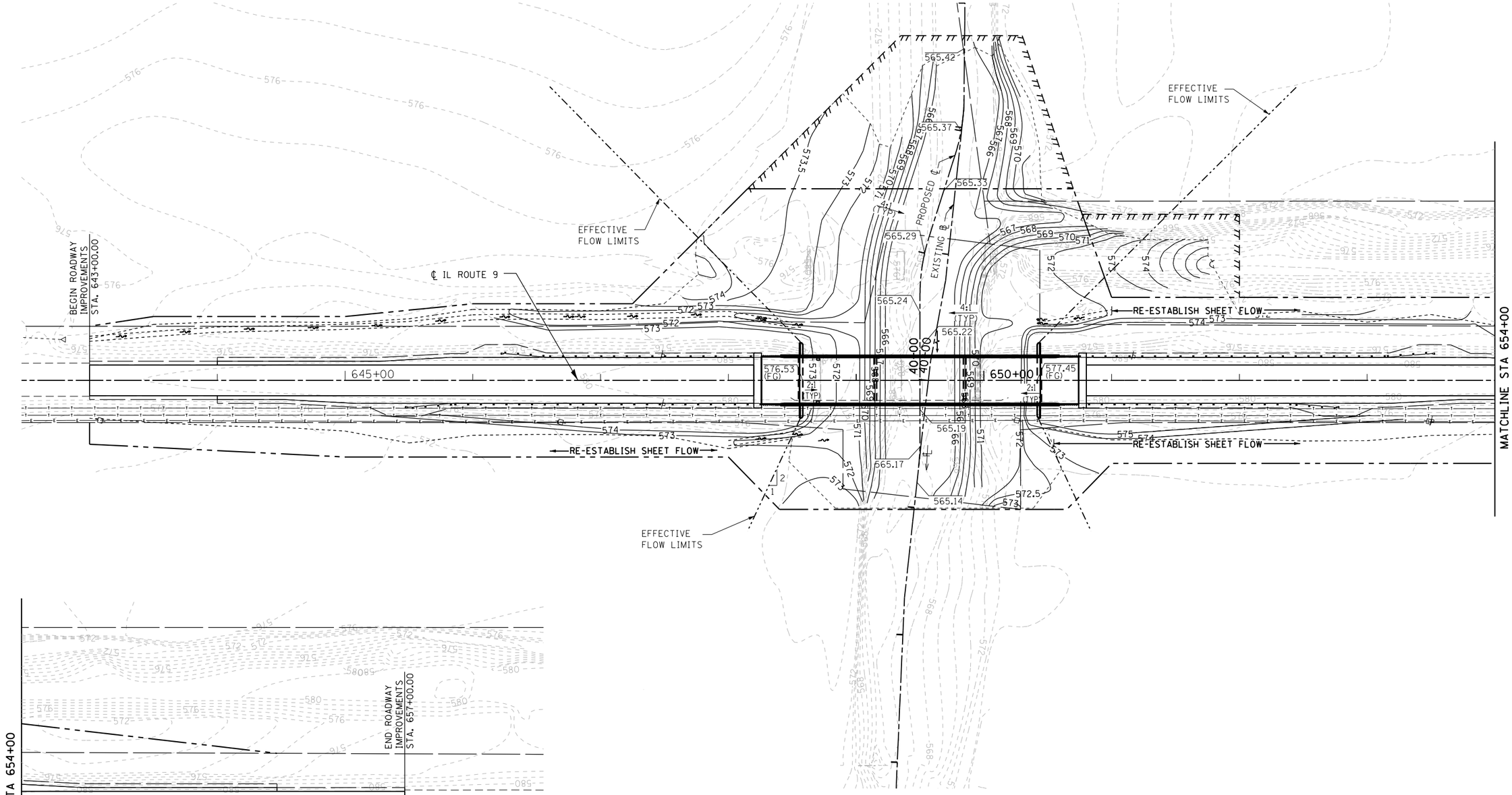
USER NAME = $OPERATOR$	DESIGNED -	REVISED
FILE NAME = $FILES$	CHECKED -	REVISED
PLOT SCALE =	DRAWN -	REVISED
PLOT DATE = 3/19/2013	CHECKED - 03/20/2013	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 9 OVER MUD CREEK
EROSION CONTROL PLAN

SCALE: 1" = 50' | SHEET NO. 1 OF 1 SHEETS | STA. 643+00.00 TO STA. 657+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR)BR	TAZEWELL	80	27
		CONTRACT NO. 68757		
	ILLINOIS	FED. AID PROJECT		



TERRA ENGINEERING LTD.	USER NAME = hl	DESIGNED - CL	REVISED -
		DRAWN - KJC	REVISED -
	PLOT SCALE = 1'=40'	CHECKED - LVA	REVISED -
	PLOT DATE = 3/19/2013	DATE - 03/20/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GRADING PLAN
IL 9 OVER MUD CREEK

SCALE: 1"=40' | SHEET NO. 1 OF 1 SHEETS | STA. 643+00.00 TO STA. 657+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	28
		CONTRACT NO. 68757		
	ILLINOIS	FED. AID PROJECT		

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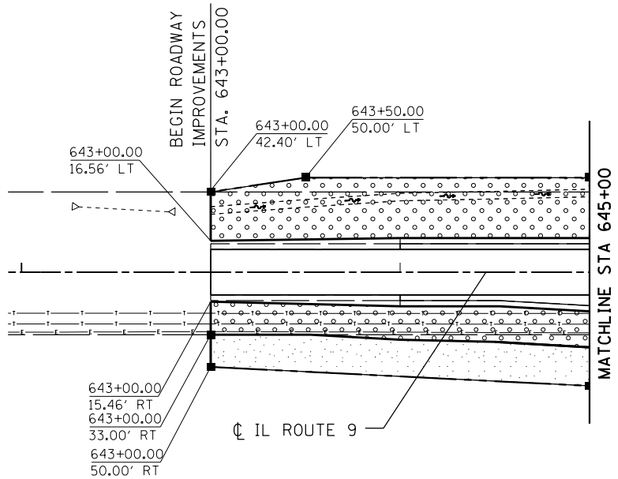

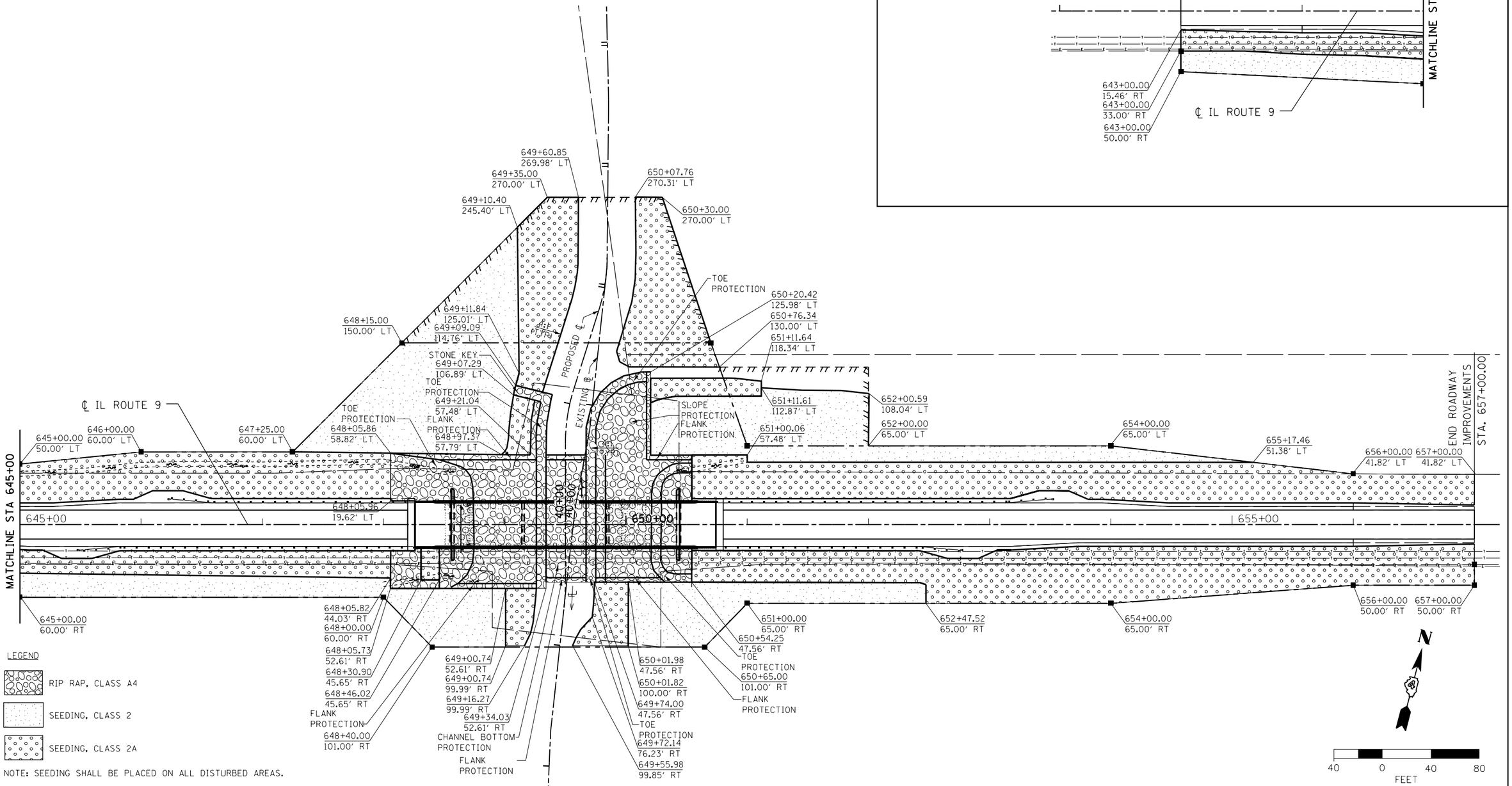

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		DRAWN - KJC	REVISED -
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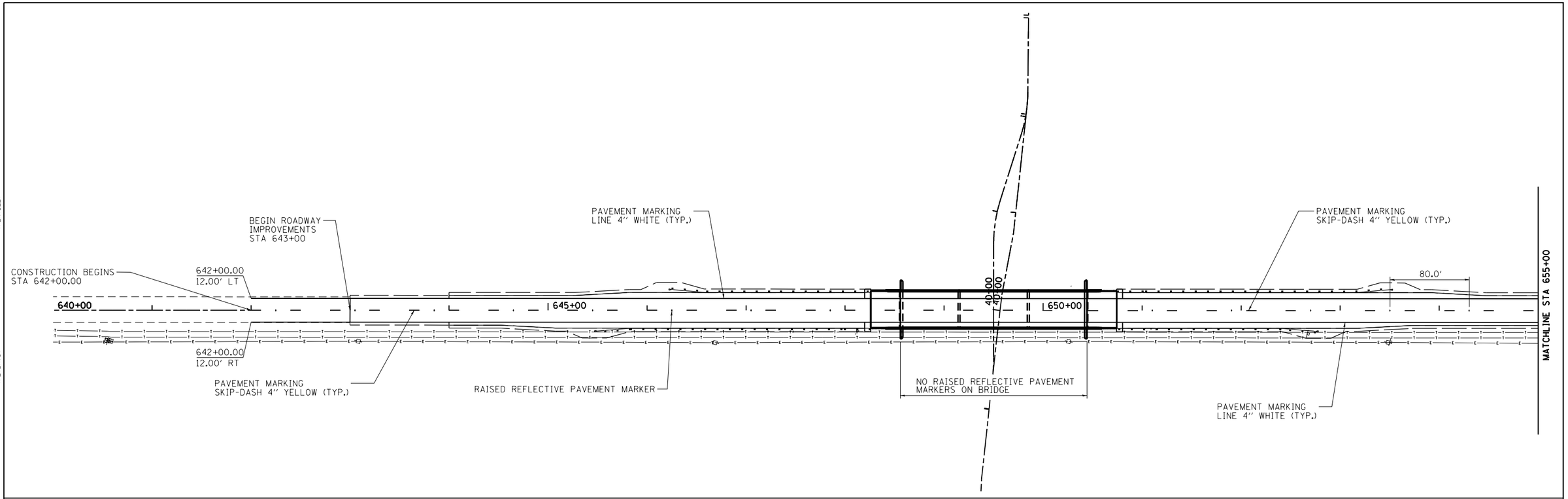
	PLOT DATE = 3/19/2013	DATE - 03/20/13	REVISED -

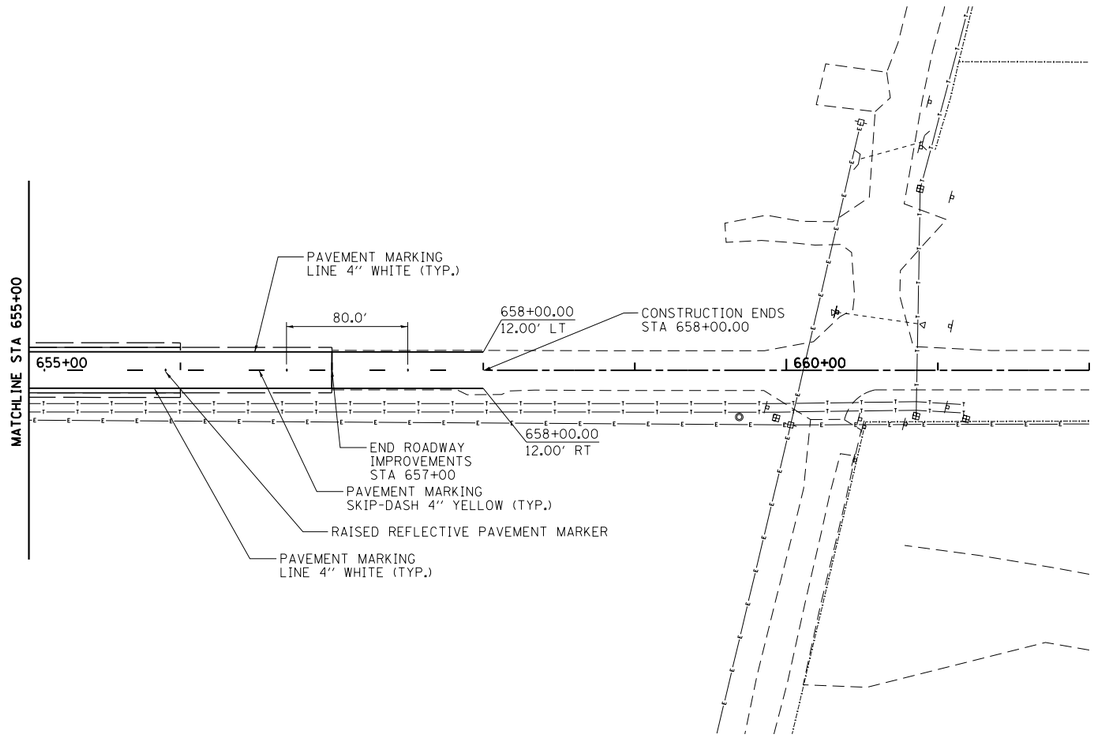
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

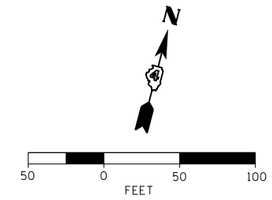
SCOUR PROTECTION AND SEEDING PLAN
IL 9 OVER MUD CREEK

SCALE: 1"=40' | SHEET NO. 1 OF 1 SHEETS | STA. 643+00.00 TO STA. 657+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	29
		CONTRACT NO. 68757		
	ILLINOIS FED. AID PROJECT			







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$SYSPRINTER_NAME$

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TERRA ENGINEERING LTD.

USER NAME = TERRA	DESIGNED - CL	REVISED -
	DRAWN - KJC	REVISED -
PLOT SCALE = 1'=50'	CHECKED - LVA	REVISED -
PLOT DATE = 1/23/2013	DATE - 01/25/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

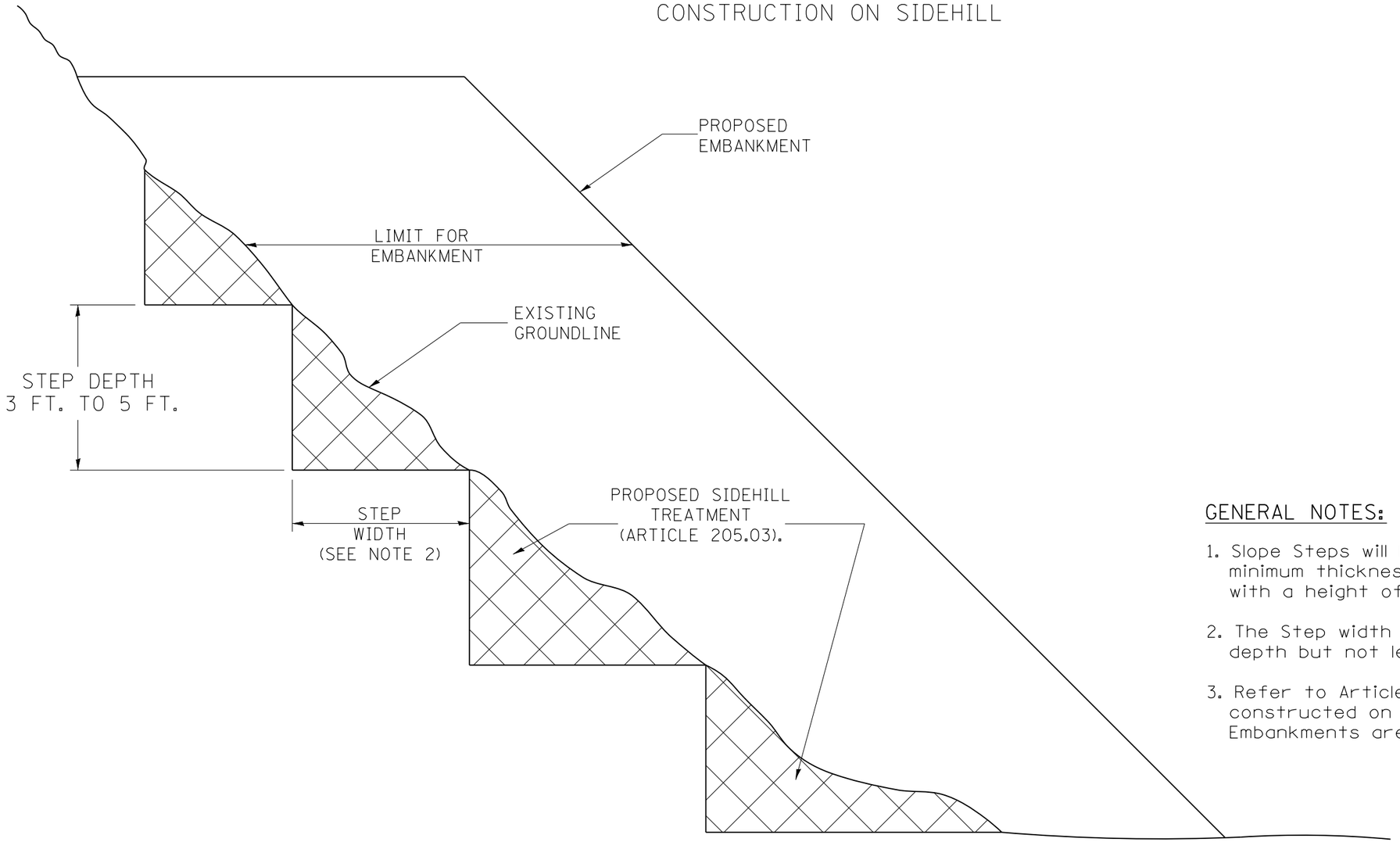
PAVEMENT MARKING PLAN
IL 9 OVER MUD CREEK

SCALE: 1"=50' | SHEET NO. 1 OF 1 SHEETS | STA. 643+00.00 TO STA. 657+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	30
		CONTRACT NO. 68757		
	ILLINOIS FED. AID PROJECT			

SLOPE STEPS DETAIL

TYPICAL CROSS-SECTION EMBANKMENT CONSTRUCTION ON SIDEHILL



GENERAL NOTES:

1. Slope Steps will be required for all 12(300) minimum thickness "silver fills" and on a fills with a height of 10'(3.0m).
2. The Step width shall be twice the Step depth but not less than 6 feet.
3. Refer to Article 205.03 for Embankment to be constructed on Hillside or Slopes, or if existing Embankments are to be widened.

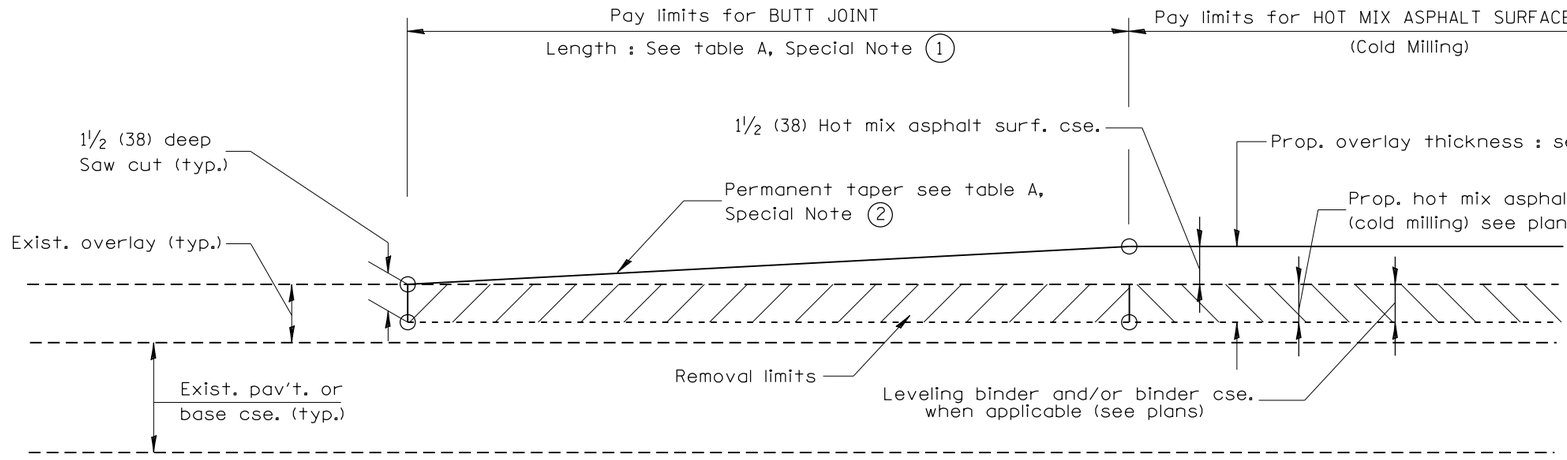
REPLACEMENT MATERIAL:

STANDARD EMBANKMENT (IN ACCORDANCE WITH 205 OF THE STANDARD SPECIFACATION).

DESIGNER NOTE:
1. EACH PROJECT SHOULD BE REVIEWED INDEPENDENTLY FOR TREATMENT REQUIRED.
2. REFER TO THIS DETAIL WITH NOTE ON APPLICABLE TYPICAL SECTIONS.

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

1-1-97	RENUM. L-5.03, NEW REVISION BOX, REVISED TITLE	T.P.				STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SLOPE STEPS DETAIL	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	BOX, REVISED GENERAL NOTES.							693	(119BR) BR	TAZEWELL	80	31
10-16-06	REVISED TO 2007 SPEC.	M.A.									CONTRACT NO. 68757	
							NOT TO SCALE	CADD STD. 205001-D4	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	



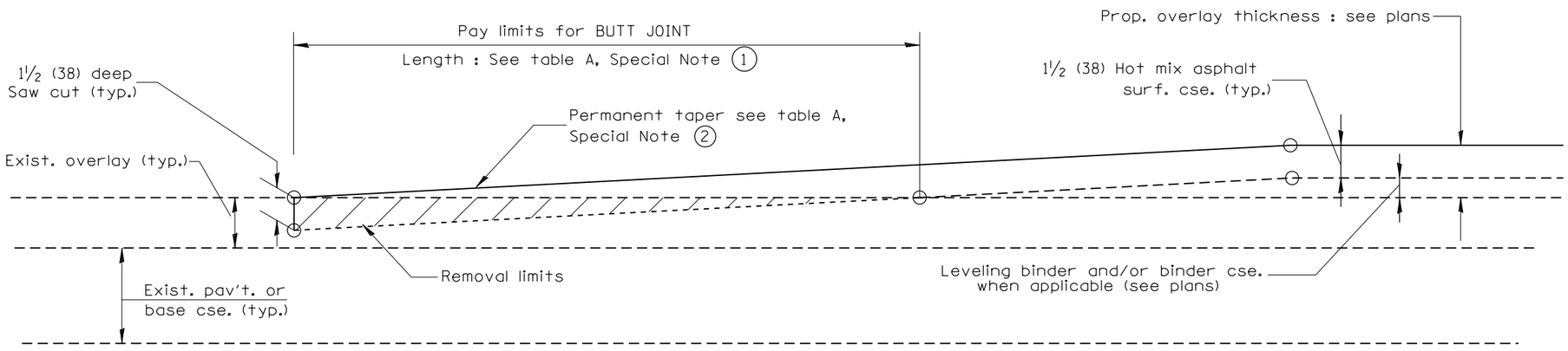
CASE 1 : WITH HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)

TABLE A
(LENGTHS AND TAPER RATES)

SPECIAL NOTE NUMBER	ELEMENT	MAINLINE INTERSTATES & 4-LANE EXPRESSWAYS	ALL OTHERS
(1)	LENGTH OF BUTT JOINT	60'(18.0 m)	30'(9.0 m)
(2)	PERMANENT TAPER RATE	1:480	1:240
(3)	TEMPORARY RAMP TAPER RATE	1:80	1:40
(4)	TEMPORARY RAMP LENGTH	10'(3.0 m)	5'(1.5 m)
(5)	LENGTH OF BUTT JOINT	10'(3.0 m)	10'(3.0 m)

GENERAL NOTES

1. The work shall be done in accordance with Article 406.08 and the Special Provision for Butt Joints.
2. The pavement surface to be removed may be either bituminous or P.C. concrete. The work shall be performed in accordance with Article 440.04 and the Special Provisions for Butt Joints.
3. The saw cut joints shall be primed just prior to the placing of bituminous material. The work will be in accordance with the applicable portions of Article 406.05.



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

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

DESIGNER NOTES:
1. Include District Special Provision for Butt Joints & for Hot Mix Asphalt Removal (Cold Milling).
2. The butt joints pay item includes the saw cut & temporary ramp. Payment for the Butt Joint applies whether or not the project features Hot Mix Asphalt Removal (Cold Milling).

01-01-97	RENUM. C-23.01, NEW REVISION BOX	T.P.									
04-01-97	CORRECTION TO DEPTH	J.A.									
09-15-05	REVISED DESIGNER NOTE	M.M.A.									
10-16-06	REVISED TO 2007 SPEC.	M.A.									

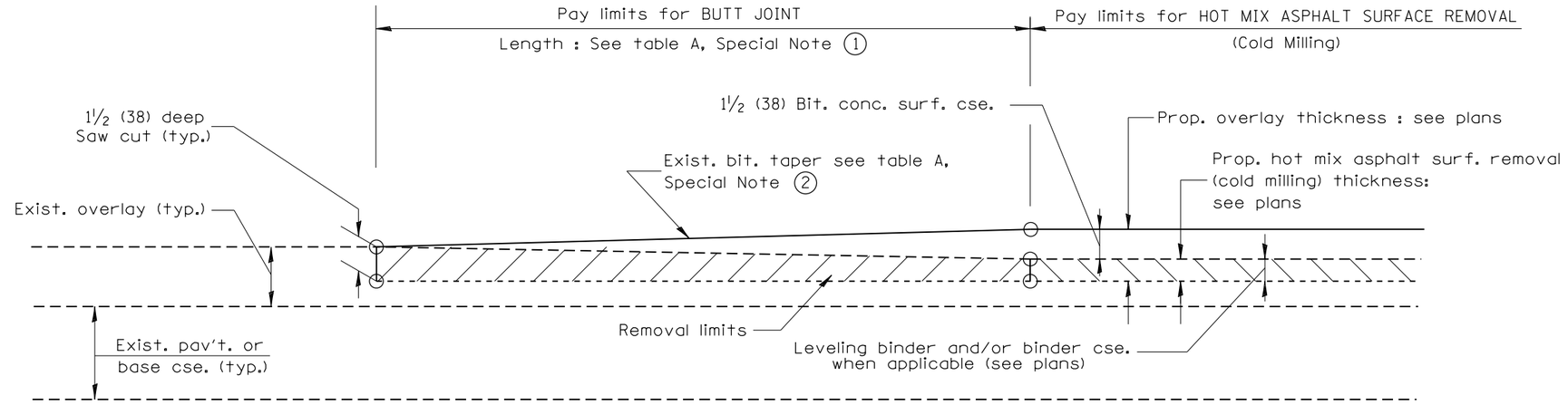
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BUTT JOINTS

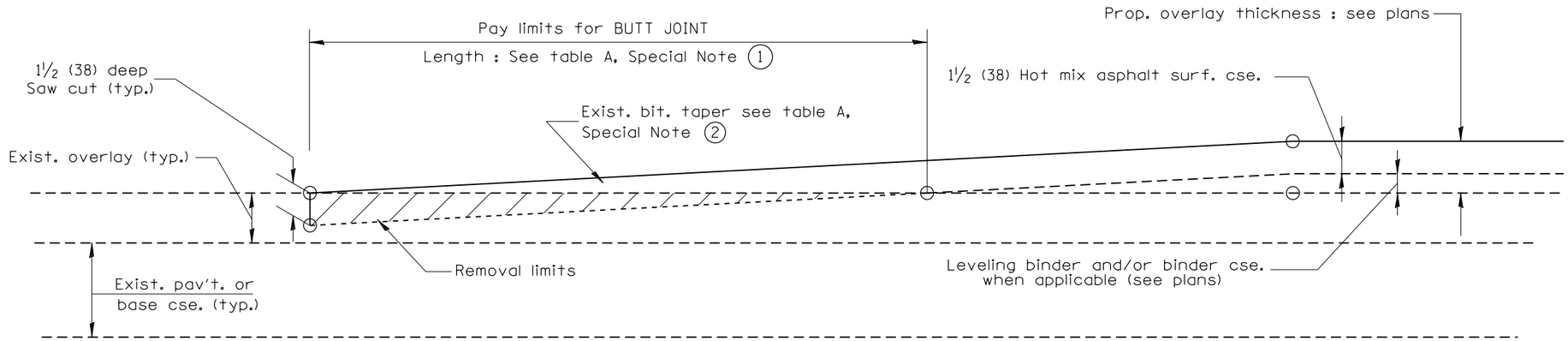
NOT TO SCALE

SHT. 1 OF 3
CADD STD. 406101-D4

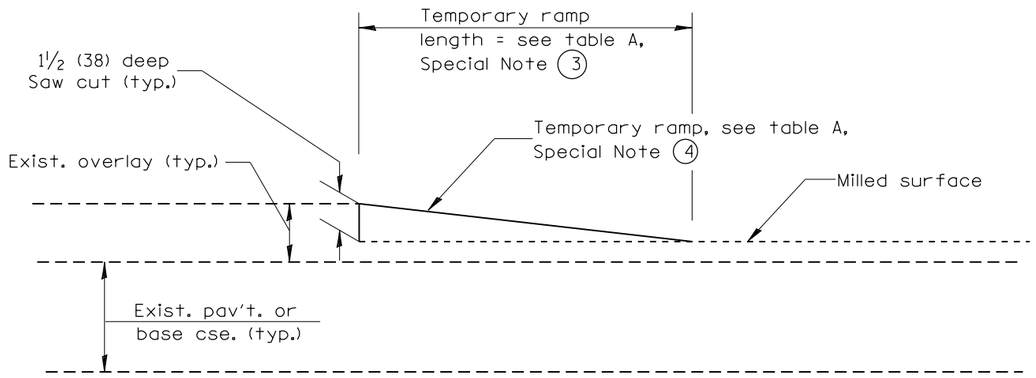
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	32
		CONTRACT NO. 68757		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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



CASE 4 : NO HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING) TIE-IN TO EXISTING BITUMINOUS TAPER



DETAIL TEMPORARY RAMP

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

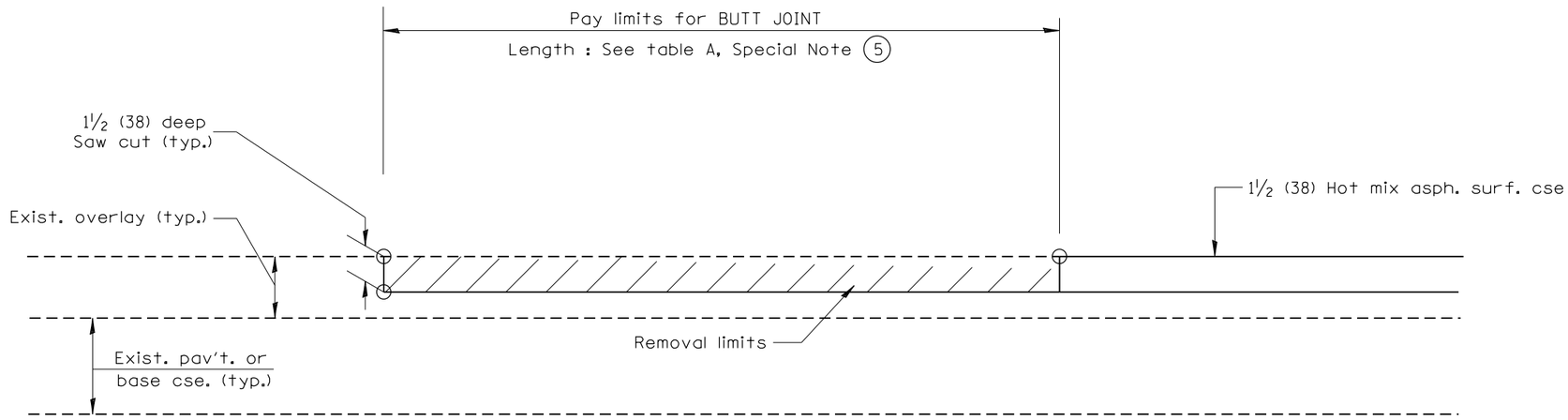
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BUTT JOINTS

NOT TO SCALE

SHT. 2 OF 3
CADD STD. 406101-D4

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	33
		CONTRACT NO. 68757		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



CASE 5 : WITH HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)
TIE-IN TO EXISTING BITUMINOUS TAPER

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

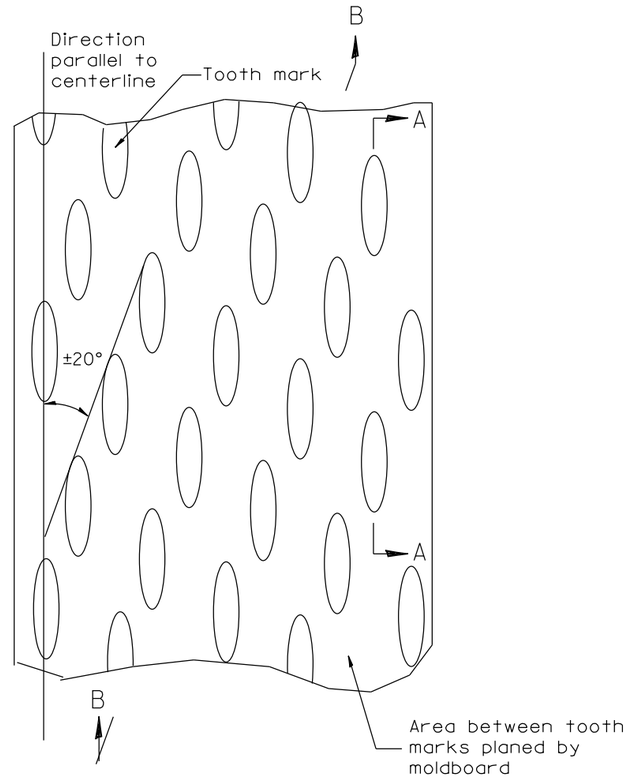
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BUTT JOINTS

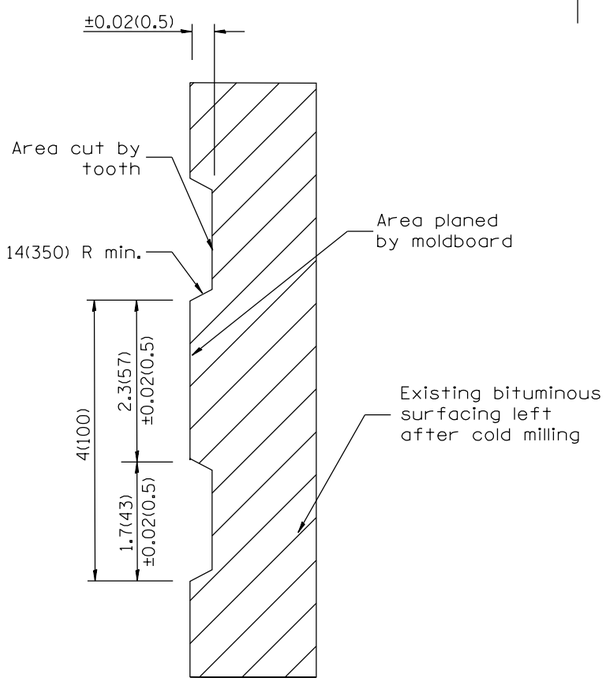
NOT TO SCALE

SHT. 3 OF 3
CADD STD. 406101-D4

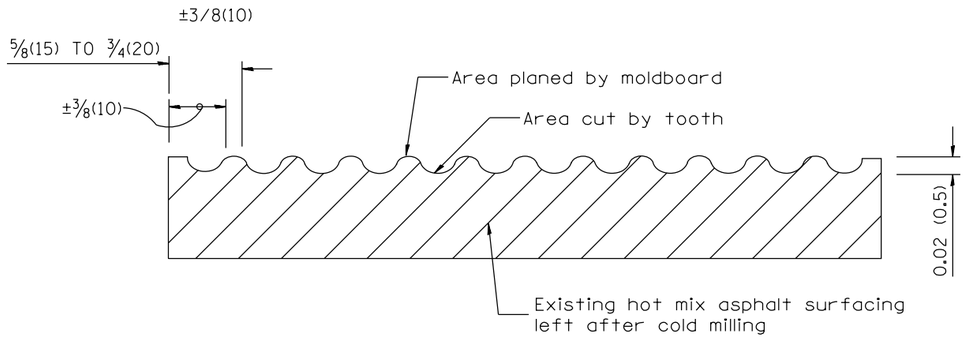
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	34
		CONTRACT NO. 68757		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



PLAN



SECTION A-A



SECTION B-B PROJECTED
PERPENDICULAR TO CENTERLINE

General notes:

1. Coldmilling shall consist of two processes: Cutting with carbide teeth mounted on a rotating drum, and planing with a moldboard mounted immediately behind the cutting drum.
2. Other similar patterns will be acceptable if they consist of a smooth, flat, planed surface interspersed with a pattern of discontinuous longitudinal striations.

DESIGNER NOTES:
1. INCLUDE DISTRICT SPECIAL PROVISION, IF APPLICABLE.

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

01-01-97	RENUM. C-104.01, NEW REVISION BOX	T.P.			
04-20-98	REMOVED MILLING DETAIL FROM STANDARD	J.A.			
09-08-98	CORRECT NOTE LEADER PLACEMENT	R.W.			
10-16-06	REVISED TO 2007 SPEC.	M.A.			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

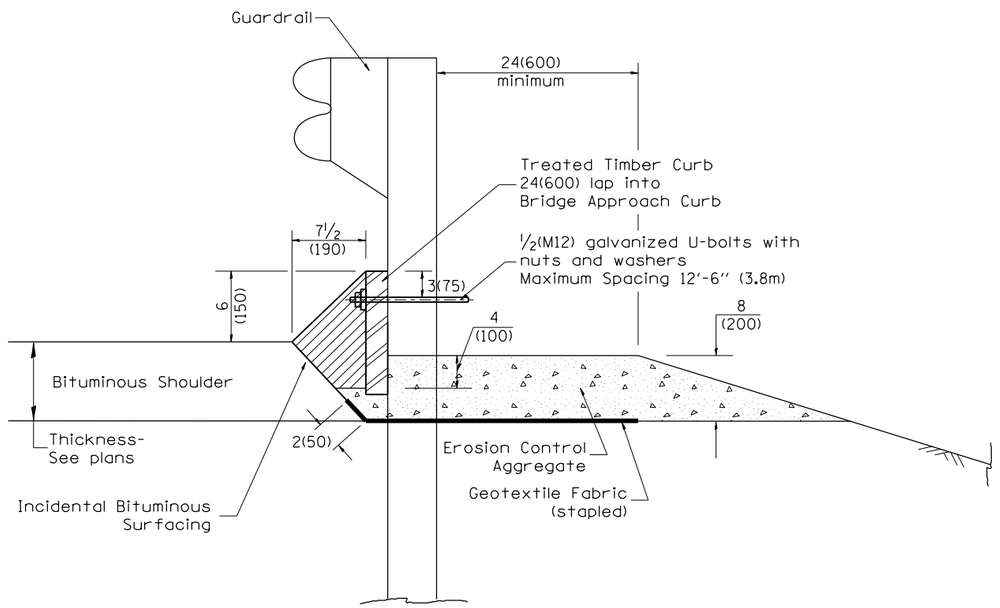
HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)

NOT TO SCALE — CADD STD. 440001-D4

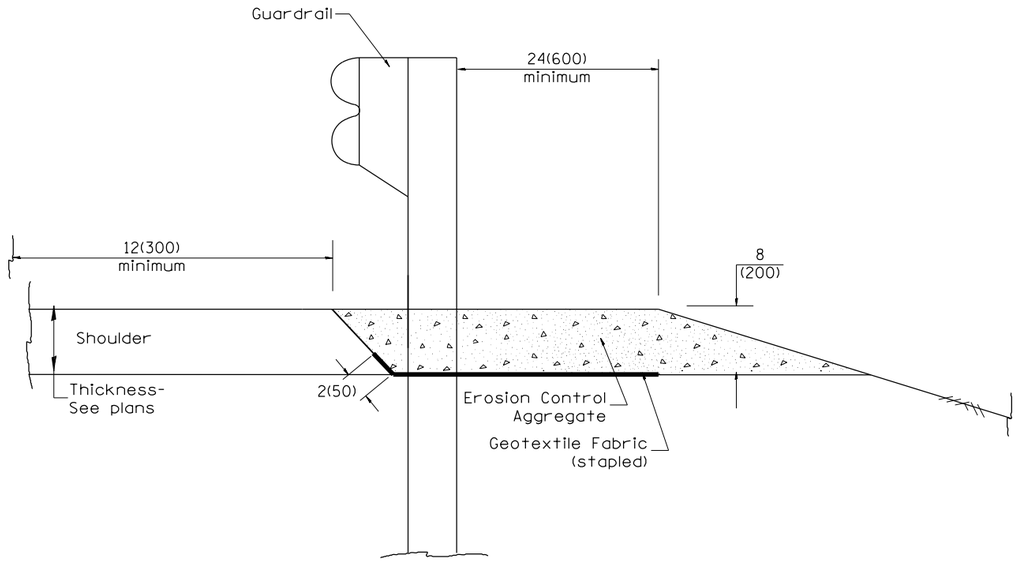
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	35
		CONTRACT NO. 68757		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

DESIGNER NOTES:

1. Use EROSION CONTROL CURB at guardrail installations where grades are equal to or greater than 1% and at inlets. [Include District Special Provision]
2. Use GUARDRAIL AGGREGATE EROSION CONTROL at guardrail installations where grades are less than 1% [Include District Special Provision]
3. Include State Standards 609001, 609006 or 610001 if applicable.
4. Include the following District Cadd Standards as needed: Slope Drains for Buried Pipes; Seepage Collars for Exposed Pipes; Slope Drains for Exposed Pipes; Concrete Thrust Blocks and Pipe Elbow.
5. Include District Special Provision -"Aggregate Quality" for projects located in the Western Area of the District - approx. dividing line is IL 97.



TYPICAL SECTION WITH EROSION CONTROL CURB



TYPICAL SECTION WITHOUT EROSION CONTROL CURB

GENERAL NOTES: EROSION CONTROL CURB

1. This work shall consist of grading as needed, installing hardware and treated timber boards, furnishing and placing mastic material and incidental bituminous surfacing in front of Steel Plate Beam Guardrail in accordance with Plan Details.

2. Timber shall be treated in accordance with Article 1007.12. All preservatives specified in the article will be allowed. Waterborne preservatives "asa" and "cca" shall have a minimum retention of 0.40 lbs./cu. ft. (6.4 kg/m³)

GENERAL NOTES: GUARDRAIL AGGREGATE EROSION CONTROL

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

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

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

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

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

6. Materials shall meet the following requirements:

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

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

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

01-01-97	RENUM. C-22.01, NEW REVISION BOX	T.P.			
03-01-97	CORRECT STD. NUMBERS IN NOTES PG. 2	J.A.			
11-03-00	CORRECTION TO NOTES	M.A.			
10-16-06	REVISED TO 2007 SPEC.	M.A.			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

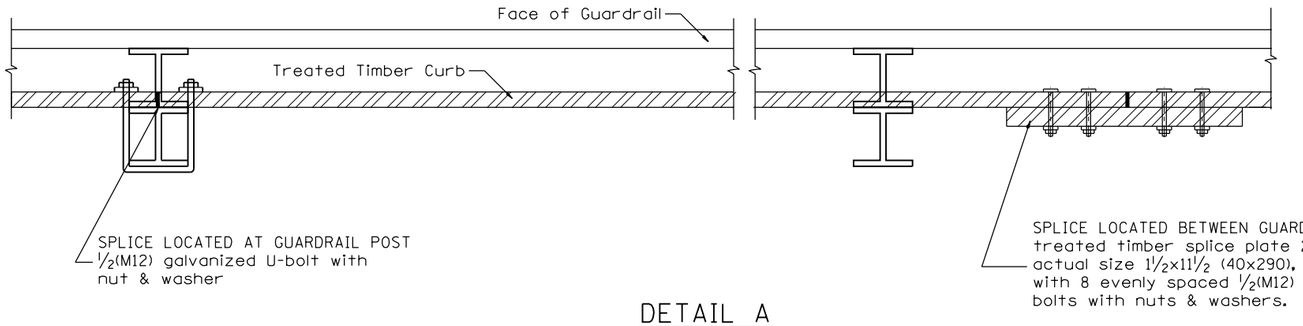
GUARDRAIL EROSION CONTROL TREATMENTS

SHT. 1 OF 2

NOT TO SCALE

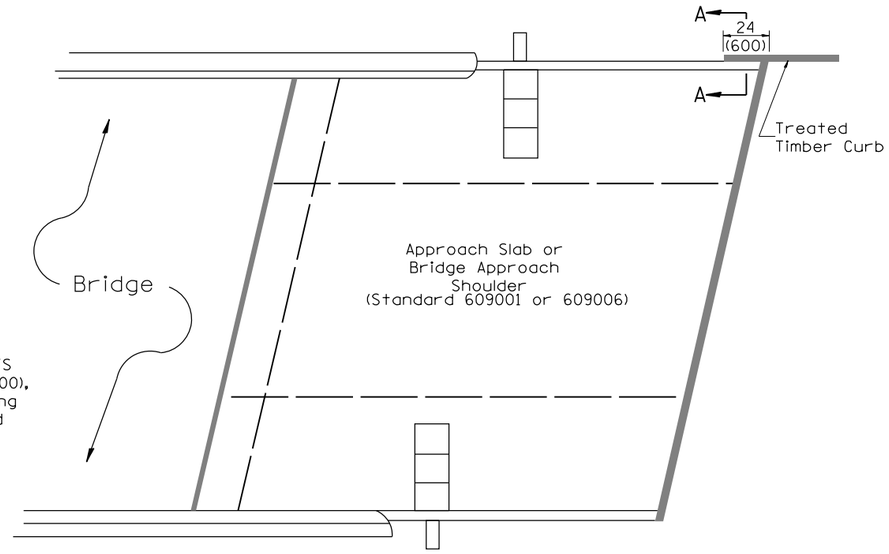
CADD STD. 630101-D4

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	36
		CONTRACT NO. 68757		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



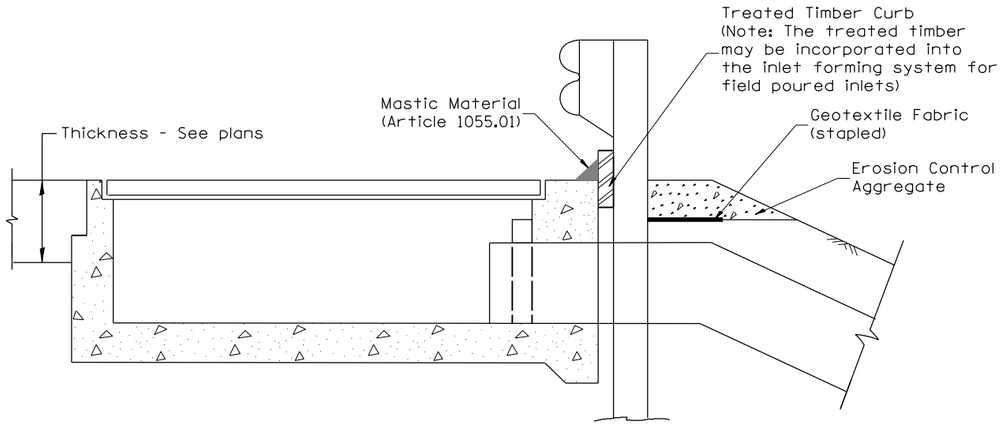
DETAIL A

(Typical Treated Timber Splices)

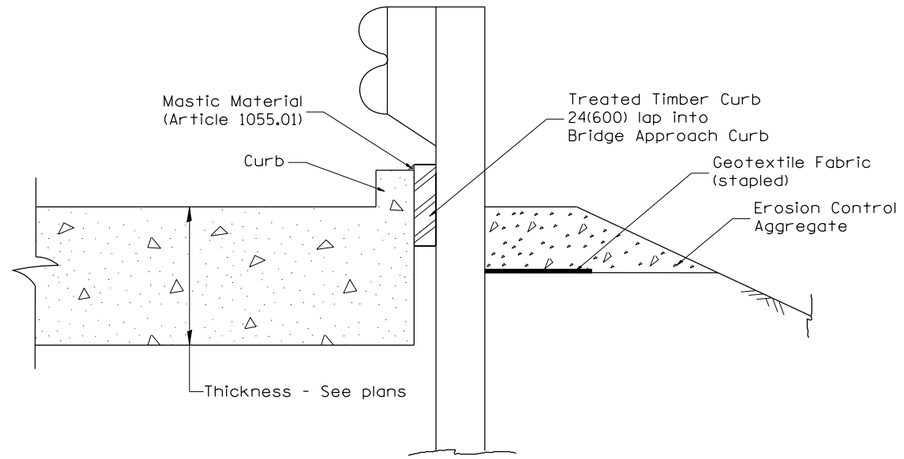


PLAN VIEW

APPROACH SLAB OR BRIDGE APPROACH SHOULDER
(STANDARD 609001 or 609006)



TYPICAL SECTION WITH EROSION CONTROL CURB AT INLETS TYPE E & F (STANDARD 610001)



SECTION A-A

TYPICAL SECTION WITH EROSION CONTROL CURB
AT BRIDGE APPROACH CURB
(STANDARD 609001 OR 609006)

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

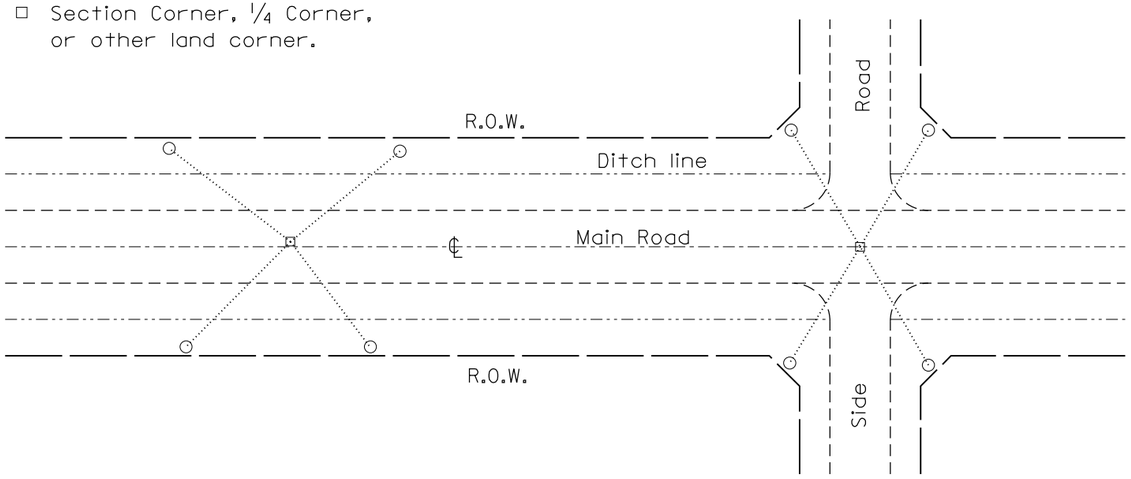
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GUARDRAIL EROSION CONTROL TREATMENTS SHT. 2 OF 2 NOT TO SCALE CADD STD. 630101-D4

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	37
		CONTRACT NO. 68757		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

DESIGNER NOTES:
1. ADD DISTRICT SPECIAL PROVISION IF PLACING A TYPE 1 MARKER ON A STRUCTURE.
2. MODIFIES STATE STD 667101. DON'T USE STATE STD IF USING CADD STANDARD
3. PERMANENT SURVEY MARKERS SHALL BE PLACED TO PERPETUATE THE SURVEY LINES OF DIVIDED HIGHWAYS AND THE CENTERLINE OF ALL OTHERS WHERE THESE LINES HAVE BEEN ESTABLISHED BY SURVEY.
4. PERMANENT SURVEY MARKERS SHALL BE PLACED AT ALL LAND SECTION CORNERS WITHIN THE STATE R.O.W. WHERE THE MONUMENTS HAVE BEEN FOUND OR RELOCATED BY SURVEY.

PERMANENT SURVEY TIES

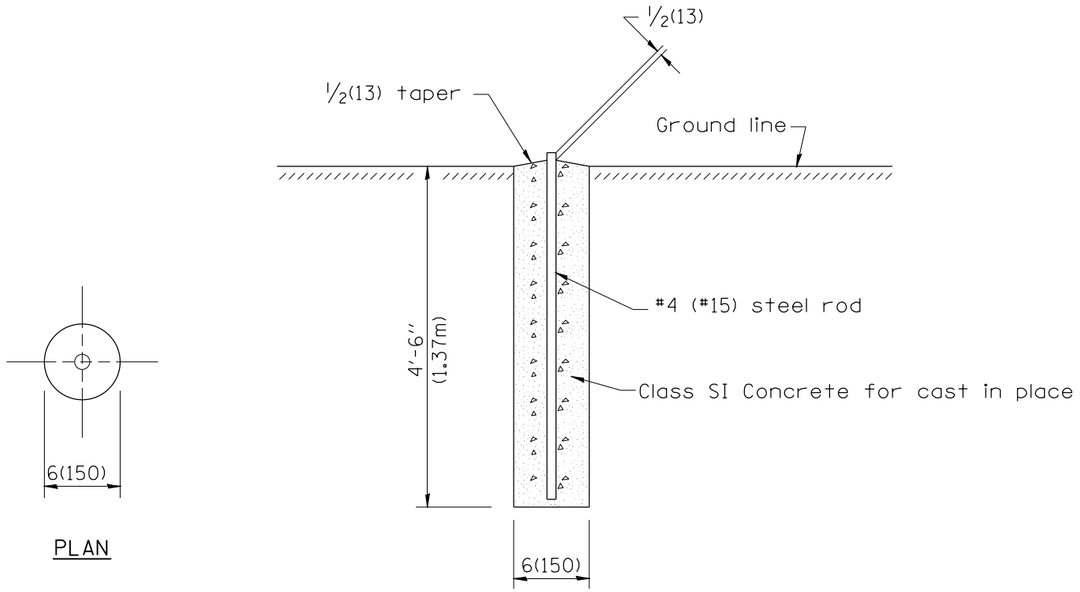
○ Permanent Survey Tie
□ Section Corner, 1/4 Corner, or other land corner.



TYPICAL APPLICATION

GENERAL NOTES

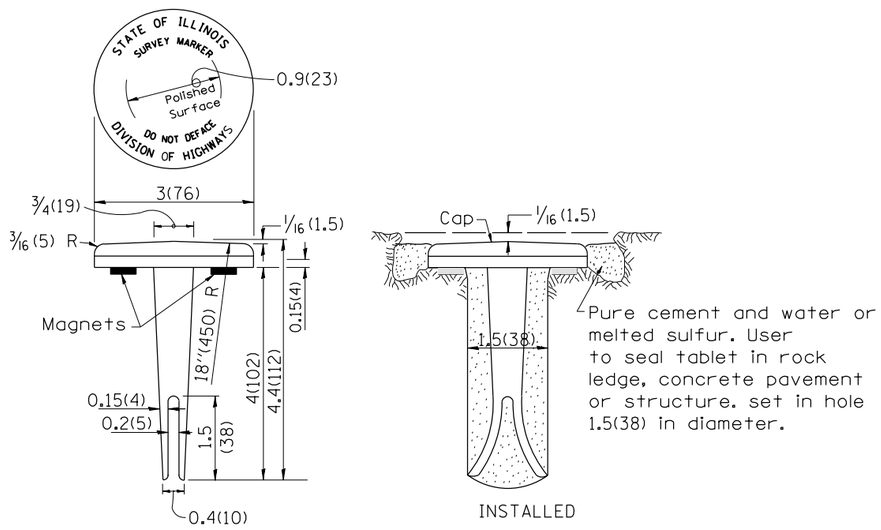
1. The marker shall be cast in place of Class SI Concrete.
2. Tie marker shall be installed after the final seeding has been completed unless otherwise specified by the Engineer.
3. The tie distances to the section corner shall be measured and recorded by the surveyor setting the PSM. All ties shall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



PLAN

SECTION

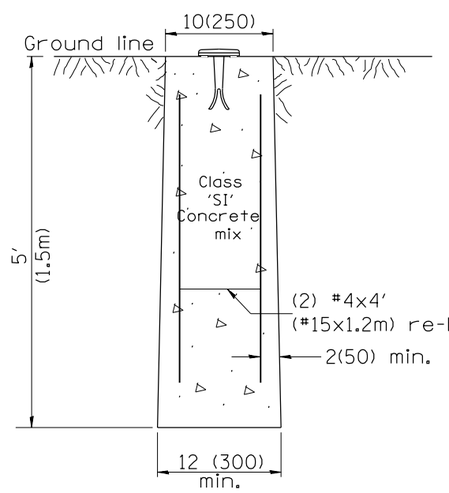
PERMANENT SURVEY MARKERS



TYPE I

GENERAL NOTES

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



MARKER CAST IN PLACE
TYPE II

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

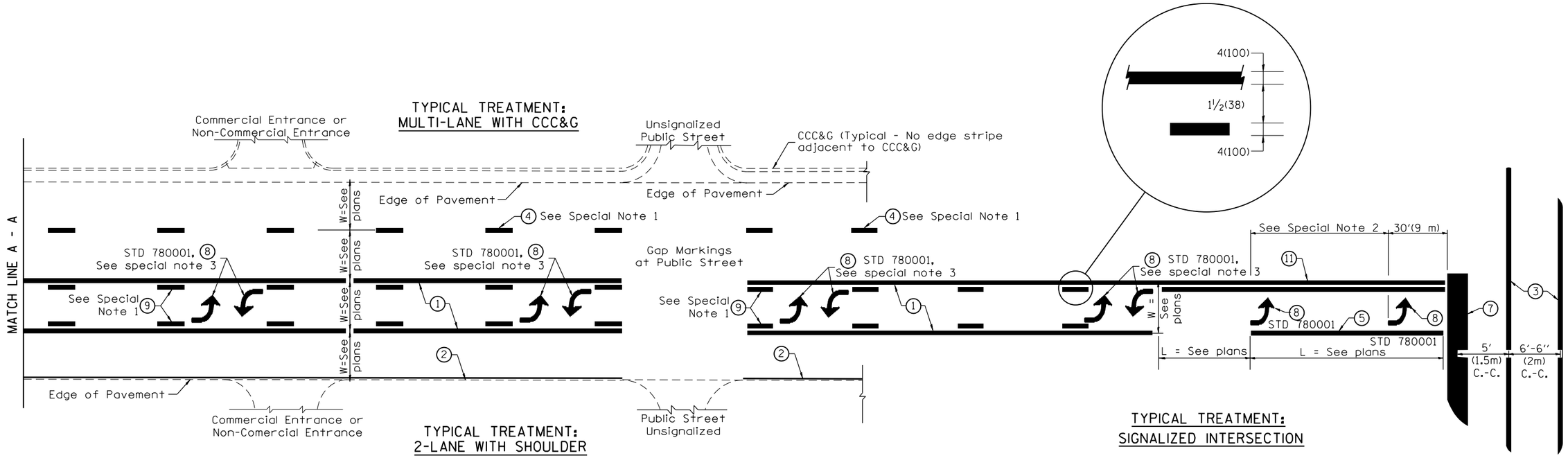
01-01-97	RENUM. D-3.01, NEW REVISION BOX, REVISED	T.P.	10-16-06	REVISED TO 2007 SPEC.	M.A.
	TITLE BOX, ADD DESIGNER NOTE		01-04-11	REVISED FOR CORRECTIONS	R.D.
07-07-98	ADD DESIGNER NOTE	J.A.			
05-24-06	REMOVED GEN. NOTE UNDER TIES	M.A.			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

NOT TO SCALE — CADD STD. 667101-D4

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	38
		CONTRACT NO. 68757		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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

TYPICAL PAVEMENT MARKING LEGEND

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

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

SPECIAL NOTES

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

GENERAL NOTES

1. Refer to State Standard 780001 for additional Pavement Markings including letters & arrows.
2. See Plans for Pavement Markings adjacent to curbed islands and medians, and through lane reductions.

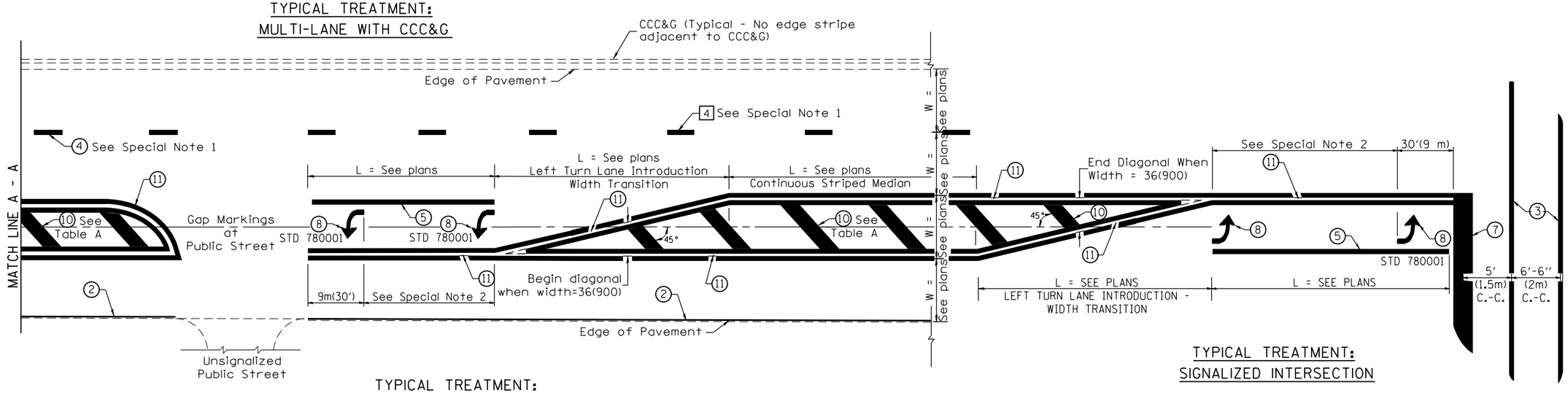
DESIGNER NOTES:
1. Include State Standard 780001 (Typical Pavement Markings)

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL PAVEMENT MARKINGS
NOT TO SCALE
SHT. 1 OF 2
CADD STD. 780001-D4

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	39
		CONTRACT NO. 68757		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

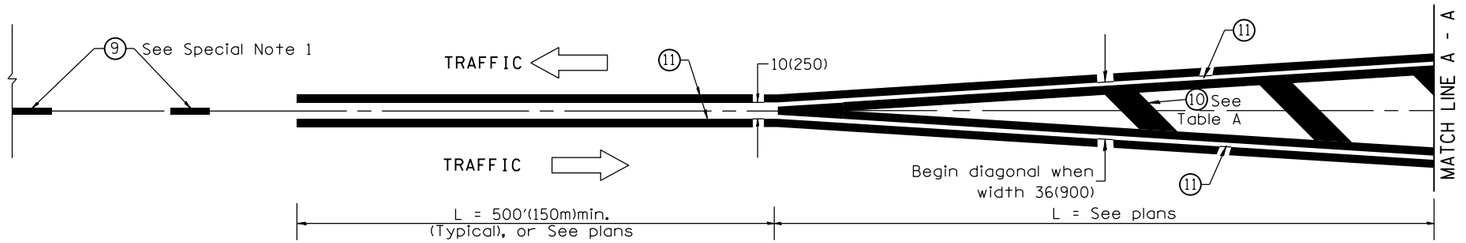


FLUSH PAVED MEDIAN: RESTRICTED LEFT TURN LANE

TABLE A

RECOMMENDED SPACING BETWEEN DIAGONAL LINES

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



MEDIAN INTRODUCTION - WIDTH TRANSITIONS

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL PAVEMENT MARKINGS

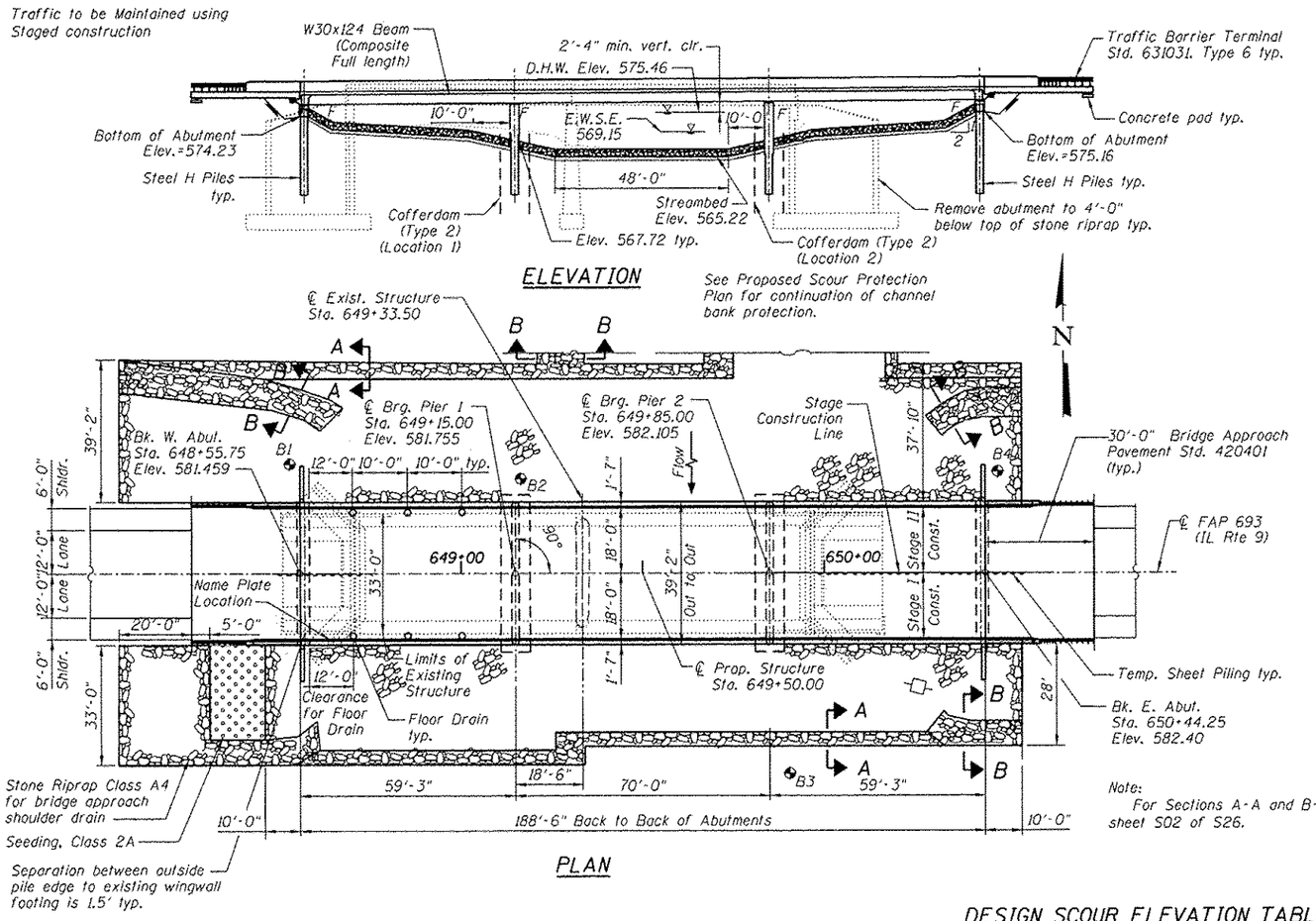
NOT TO SCALE

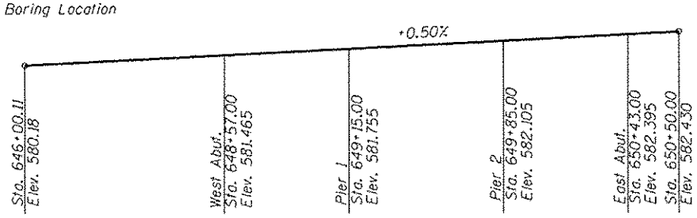
SHT. 2 OF 2
CADD STD. 780001-D4

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	40
		CONTRACT NO. 68757		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

Bench Mark: U.S. Coast and Geodetic Survey brass disk set in the top of the south west wingwall of the State Route 9 bridge over Mud Creek. Elevation = 578.580

Existing Structure 090-0062: This Structure is a two simple span, precast, prestressed concrete multi-box beam bridge on closed concrete abutments and a concrete pier. It carries IL Route 9 at 0 degree skew over Mud Creek in Tazewell County. The original structure was built in 1928 as S.B.I. Rt 164 Sec 119B. The total length of the Structure is 126.21 feet from back to back of abutments, and it has a width of 33 feet. In 1975, under construction Route SBI Rt. 164, Sec. 119 BR, the original superstructure was removed and replaced with PPC box beams and a bituminous wearing surface. In 2008 temporary support was added at the pier and abutments. Existing structure to be removed. No salvage. (Existing upstream abandoned railroad sub-structure also to be removed). Existing temporary steel beams and supports to be delivered to the E. Peoria IDOT Bridge Yard (call 309-699-3822 to arrange for IDOT to unload when delivered).





INDEX OF SHEETS

S01	General Plan and Elevation
S02	General Notes and Bill of Material
S03	Stage Construction Details
S04	Temporary Concrete Barrier for Stage Construction
S05	Top of Slab Elevation Location Plan
S06-S08	Top of Slab Elevations
S09	Top of West Approach Slab Elevations
S10	Top of East Approach Slab Elevations
S11	Superstructure-Plan and Cross Section
S12	Superstructure Details
S12a	Concrete Parapet Slipforming Option
S13	Integral Abutment Diaphragm Details
S14-S15	Bridge Approach Slab Details
S16	Framing Plan
S17-S18	Steel Details
S19	West Abutment Plan and Elevation
S20	East Abutment Plan and Elevation
S21-S22	Pier Plan and Details
S23	Bar Splicer Assembly Details
S24	Pile Details
S25-S26	Soil Borings

LOADING HL 93

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

DESIGN SPECIFICATIONS

2010 AASHTO LRFD Bridge Design Specifications, 5th Edition, with 2010 Interims

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50W)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (Sd1) = 0.084g
Design Spectral Acceleration at 0.2 sec. (Sds) = 0.143g
Soil Site Class = C

STATION 649+50.00
BUILT 20 BY
STATE OF ILLINOIS
F.A.P. RTE. 693
SECTION (119BR) BR
LOADING HL-93
STRUCTURE NO. 090-0178

NAME PLATE

See Std. 515001

Note:
For Sections A-A and B-B see sheet S02 of S26.

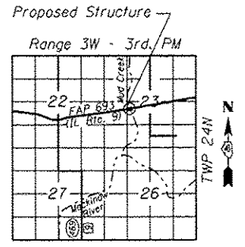
DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	W. Abut.	Pier 1	Pier 2	E. Abut.
	574.36	558.8	558.8	575.31

WATERWAY INFORMATION

Drainage Area = 46.226 Sq.Mi. Low Grade Elev. 577.81 @ Sta. 642+67

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	3700	730	965	574.8	1.3	0.2	576.1	575.0
Design	50	5940	809	1084	575.5	2.7	0.8	578.2	576.3
Base	100	6930	842	1133	575.7	3.2	1.1	579.0	576.9
Overtopping	-	-	-	-	-	-	-	-	-
Max. Calc.	500	9360	917	1247	576.4	4.7	2.0	581.1	578.4



LOCATION SKETCH

ORWIN P. YOUNGQUIST 081-004892 LICENSED STRUCTURAL ENGINEER STATE OF ILLINOIS
May 2013

Sheets: S01, S02, S03, S04, S05, S06, S07, S08, S09, S10, S11, S12, S12a, S13, S16, S17, S18, S19, S20, S23, S24, S25, S26

Expires: 11/30/2014

CORY W. CHAMBERLAIN 081-005682 LICENSED STRUCTURAL ENGINEER STATE OF ILLINOIS
1/21/2013

Sheets: S14, S15, S21, S22

Expires: 11/30/2014

APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures

GENERAL PLAN AND ELEVATION
ILLINOIS ROUTE 9 OVER MUD CREEK
F.A.P. RTE. 693 - SECTION (119BR) BR
TAZEWELL COUNTY
STATION 649+50.00
STRUCTURE NO. 090-0178

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 090 - 0178
SHEET NO. S01 OF S26 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	41
		CONTRACT NO. 68757		
	ILLINOIS FED. AID PROJECT			

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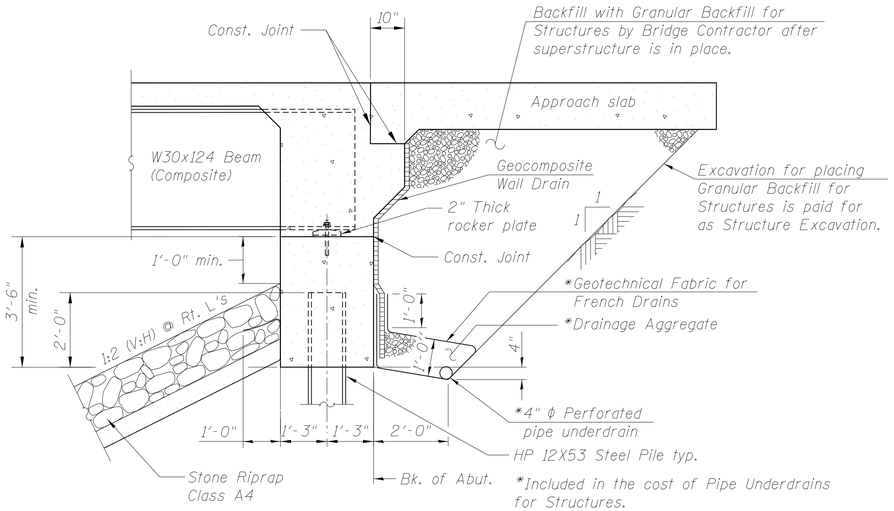
GENERAL NOTES

1. Fasteners shall be ASTM A325, Type 1, mechanically galvanized bolts in painted areas, ASTM A325 Type 3 in unpainted areas, Bolts $\frac{7}{8}$" ϕ, holes $\frac{15}{16}$" ϕ, unless otherwise noted.
2. Calculated weight of Structural Steel = 162,150 lbs
3. All structural steel shall be AASHTO M 270 Grade 50W.
4. No field welding is permitted except as specified in the contract documents.
5. Reinforcement bars designated (E) shall be epoxy coated.
6. Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of $\frac{1}{8}$ in. (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.
7. 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.
8. Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
9. The Contractor shall retain the services of an engineering firm, prequalified in the IDOT consultant selection category of Highway Bridges, for preparation of the Structural Assessment Report(s). Contractor's pre-approval shall not be applicable for this project. See Special Provision.
10. Current Ratings on File for Existing Structure
    Inventory: HS 6
    Operating: HS 10
    Live Load Restrictions: None
    Inventory and Operating Ratings and Live Load Restrictions are provided for information only. Inventory and Operating Ratings are based on HS Loading and configuration. Live Load Restrictions are based on Illinois legal loads and configurations. The Ratings and Live Load Restrictions are not necessarily representative of capacities to support the Contractor's equipment.
11. The Contractor is advised that the existing structure contains members with longitudinal cracks that are supported by temporary shoring that are in a deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the condition of the existing structure when developing construction procedures for the complete or partial removal, or replacement of the structure. An Existing Structure Information Package is available upon request as noted in the special provisions.



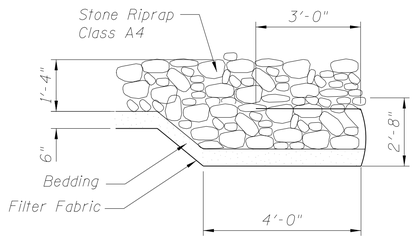
SECTION THRU INTEGRAL ABUTMENT

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

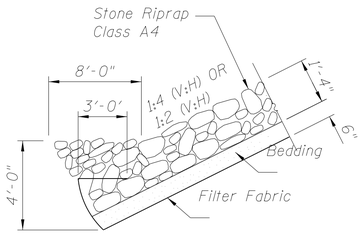
All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101)

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Stone Riprap, Class A4	Sq. Yd.	-	3255	3255
Filter Fabric	Sq. Yd.	-	3255	3255
Removal of Existing Structures No. 1	Each	-	-	1
Structure Excavation	Cu. Yd.	-	258	258
Cofferdam Excavation	Cu. Yd.	-	353	353
Cofferdam (Type 2) (Location-1)	Each	-	1	1
Cofferdam (Type 2) (Location-2)	Each	-	1	1
Floor Drains	Each	6	-	6
Concrete Structures	Cu. Yd.	-	170.0	170.0
Concrete Superstructure	Cu. Yd.	364.5	-	364.5
Bridge Deck Grooving	Sq. Yd.	940	-	940
Seal Coat Concrete	Cu. Yd.	-	106.2	106.2
Concrete Encasement	Cu. Yd.	-	4.2	4.2
Protective Coat	Sq. Yd.	1177	-	1177
Furnishing and Erecting Structural Steel	L.Sum	1	-	1
Stud Shear Connectors	Each	4824	-	4824
Reinforcement Bars, Epoxy Coated	Pound	90,830	20,750	111,580
Bar Splicers	Each	727	262	989
Furnishing Steel Piles HP 12X53	Foot	-	600	600
Furnishing Steel Piles HP 14X73	Foot	-	610	610
Driving Piles	Foot	-	1210	1210
Test Pile Steel HP 12X53	Each	-	2	2
Test Pile Steel HP 14X73	Each	-	2	2
Name Plates	Each	1	-	1
Anchor Bolts, 1''	Each	24	-	24
Anchor Bolts, $1\frac{1}{4}$''	Each	24	-	24
Geocomposite Wall Drain	Sq. Yd.	-	79	79
Granular Backfill for Structures	Cu. Yd.	-	132	132
Temporary Sheet Piling	Sq. Ft.	-	2363	2363
Pipe Underdrains for Structures 4''	Foot	-	158	158



SECTION A-A
ANCHOR WALL THRU FLANK



SECTION B-B
THRU TOE

See sheet S01 of S25 for Sections A-A and B-B.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES AND BILL OF MATERIAL
STRUCTURE NO. 090 – 0178
SHEET NO. S02 OF S26 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	42
		CONTRACT NO. 68757		
	ILLINOIS FED. AID PROJECT			

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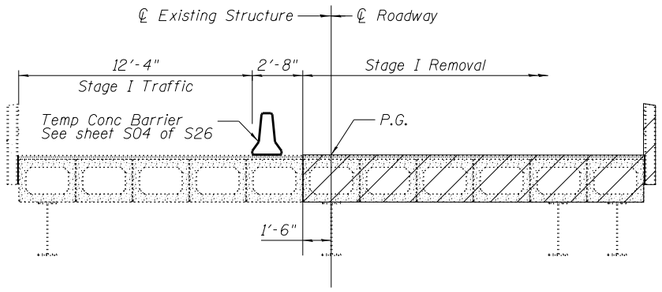
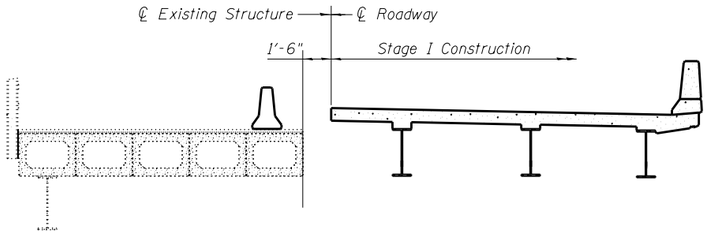
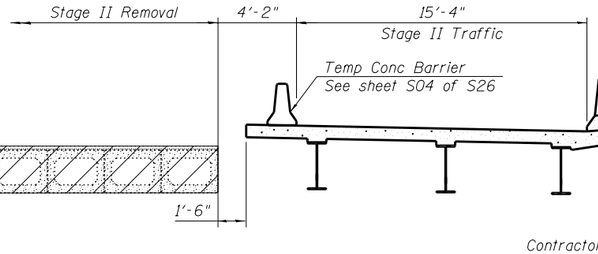


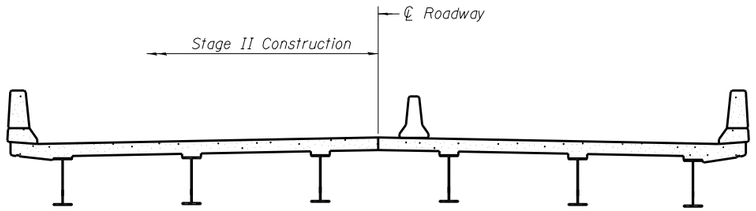
STAGE I REMOVAL



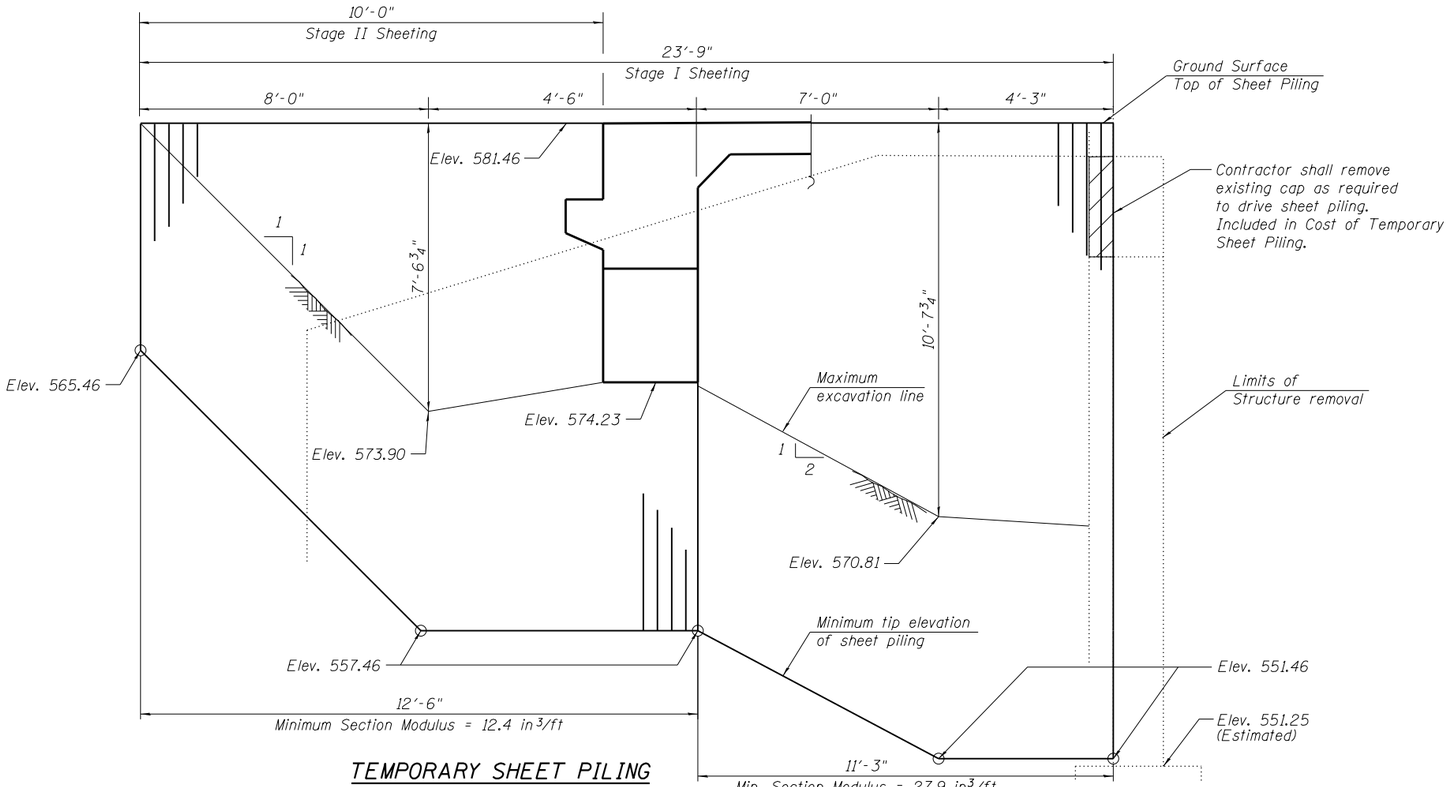
STAGE I CONSTRUCTION



STAGE II REMOVAL

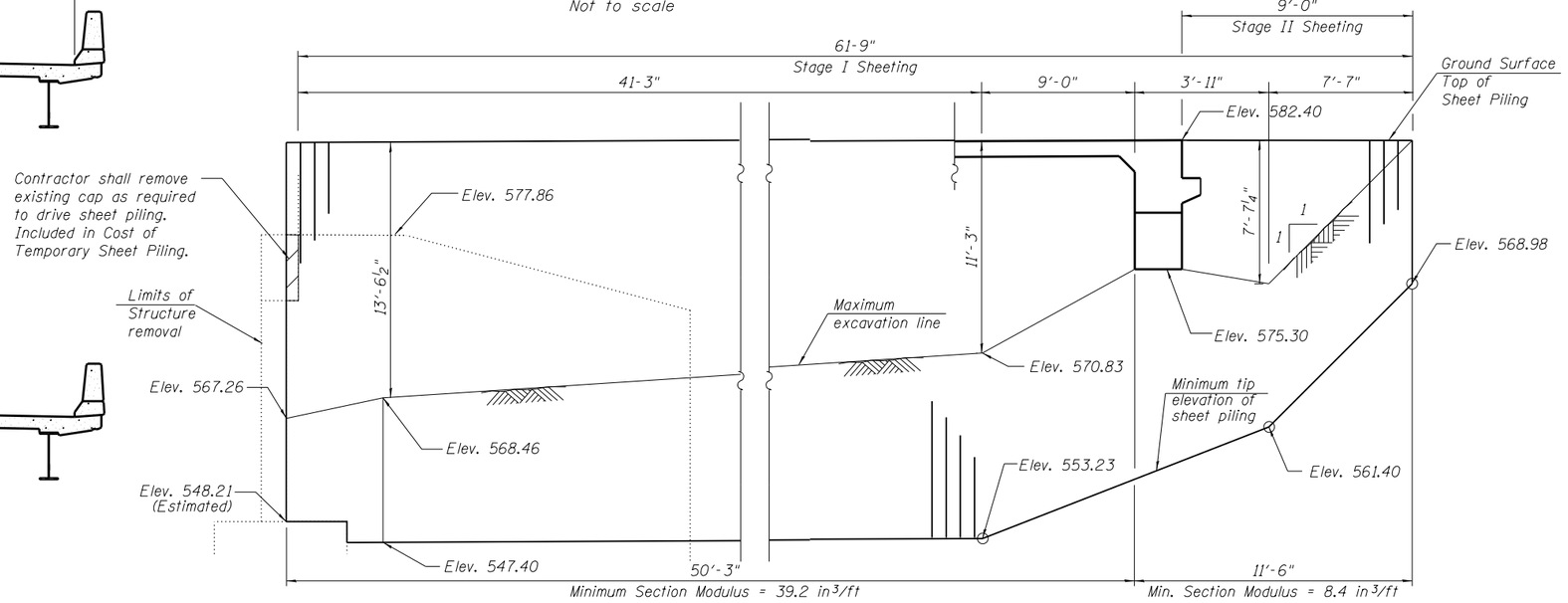


STAGE II CONSTRUCTION



TEMPORARY SHEET PILING

(at West Abutment)
Not to scale



TEMPORARY SHEET PILING

(at East Abutment)
Not to scale

Notes:

1. All staging cross sections are looking East.
2. For quantity of Temporary Concrete Barrier, see roadway plans.
3. Hatched area indicates Removal of Existing Structures.
4. Contractor shall support both temporary shoring beams on north side before removing deck beams and center shoring beam.
5. The Contractor shall connect the first sheet to the existing abutment wall to ensure stability of sheets driven to the top of the existing footing. This connection shall be reviewed and accepted by the Engineer and included in the cost for Temporary Sheet Piling.
6. 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.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION DETAILS
STRUCTURE NO. 090 – 0178
SHEET NO. S03 OF S26 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	43
		CONTRACT NO. 68757		
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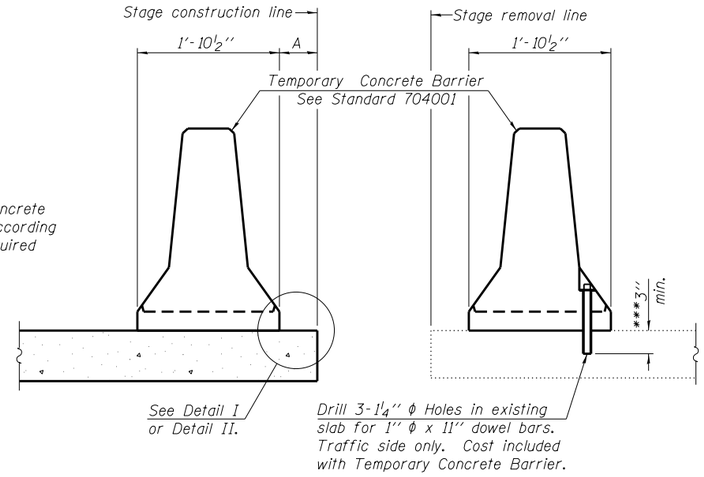
When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".



SECTIONS THRU SLAB OR DECK BEAM

NOTES

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

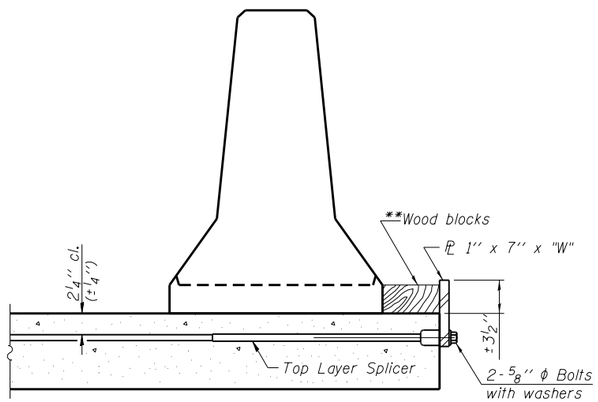
Detail II - With Extended Reinforcement Bars:
Connect one (1) 1'' x 7'' x ''W'' steel ℙ to the concrete slab or concrete wearing surface with 2-⅝'' ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate ℄ of each barrier panel.

Cost of anchorage is included with Temporary Concrete Barrier.

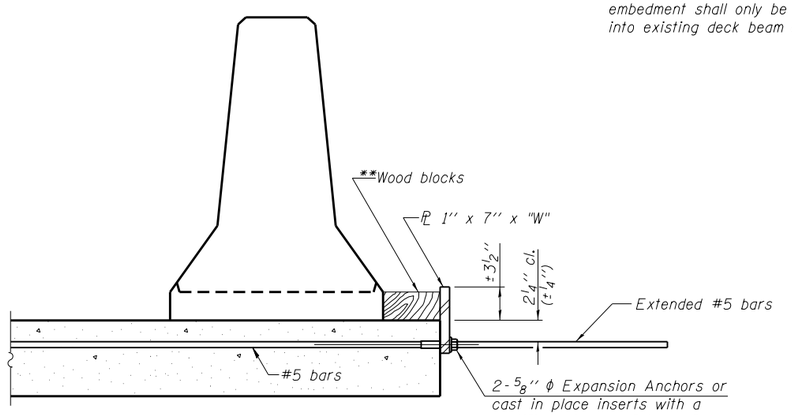
The 1'' x 7'' x ''W'' plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

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

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



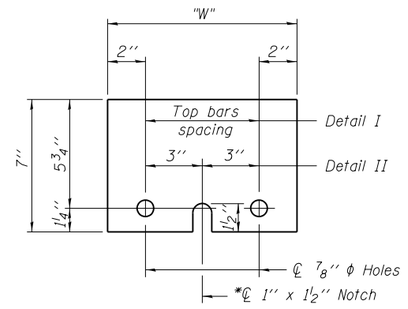
DETAIL I



DETAIL II

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

"W" = Top bars spacing + 4''



STEEL RETAINER ℙ 1'' x 7'' x ''W''

* Required only with Detail II

R-27

7-1-10

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
STRUCTURE NO. 090 - 0178
SHEET NO. 504 OF S26 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	44
		CONTRACT NO. 68757		
	ILLINOIS FED. AID PROJECT			

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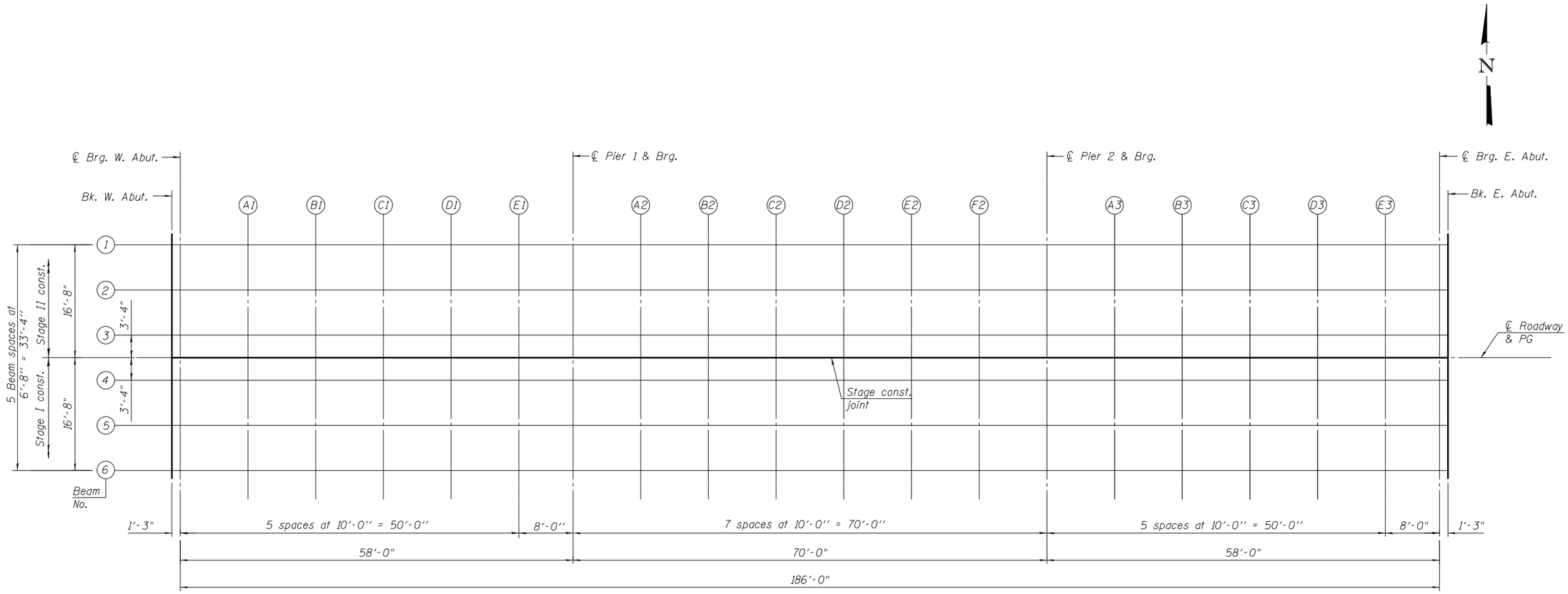
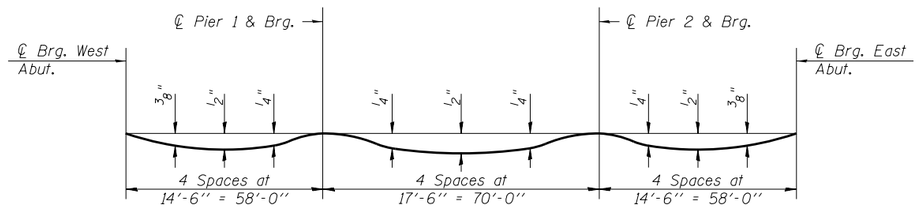


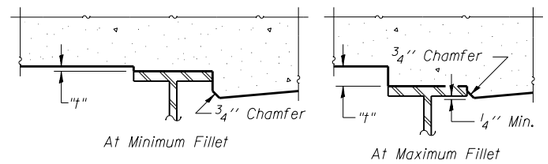
PLAN



DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only).

Note:
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on sheets S06 thru S08 of S26.



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown above. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on sheets S06 thru S08 of S26, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS

MAIL RT 9 OVER MUD CREEK\CIVIL\CADD Sheets\Structural\Final Plans\SHT\D468757-005-TOS_Loc_Plan.dgn

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DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATION LOCATION PLAN
STRUCTURE NO. 090 – 0178
SHEET NO. S05 OF S26 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	45
		CONTRACT NO. 68757		
	ILLINOIS	FED. AID PROJECT		

BEAM 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	648+55.75	-16.67	581.16	581.16
CL Brg. & W. Abut.	648+57.00	-16.67	581.17	581.17
A1	648+67.00	-16.67	581.22	581.24
B1	648+77.00	-16.67	581.27	581.30
C1	648+87.00	-16.67	581.32	581.36
D1	648+97.00	-16.67	581.37	581.40
E1	649+07.00	-16.67	581.42	581.43
CL Pier 1 & Brg.	649+15.00	-16.67	581.46	581.46
A2	649+25.00	-16.67	581.51	581.52
B2	649+35.00	-16.67	581.56	581.58
C2	649+45.00	-16.67	581.61	581.64
D2	649+55.00	-16.67	581.66	581.69
E2	649+65.00	-16.67	581.71	581.74
F2	649+75.00	-16.67	581.76	581.78
CL Pier 2 & Brg.	649+85.00	-16.67	581.81	581.81
A3	649+95.00	-16.67	581.86	581.87
B3	650+05.00	-16.67	581.91	581.94
C3	650+15.00	-16.67	581.96	582.00
D3	650+25.00	-16.67	582.01	582.05
E3	650+35.00	-16.67	582.06	582.08
CL Brg. & E. Abut.	650+43.00	-16.67	582.10	582.10
Bk. E. Abut.	650+44.25	-16.67	582.10	582.10

BEAM 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	648+55.75	-10.00	581.30	581.30
CL Brg. & W. Abut.	648+57.00	-10.00	581.31	581.31
A1	648+67.00	-10.00	581.36	581.38
B1	648+77.00	-10.00	581.41	581.44
C1	648+87.00	-10.00	581.46	581.50
D1	648+97.00	-10.00	581.51	581.54
E1	649+07.00	-10.00	581.56	581.57
CL Pier 1 & Brg.	649+15.00	-10.00	581.60	581.60
A2	649+25.00	-10.00	581.65	581.66
B2	649+35.00	-10.00	581.70	581.72
C2	649+45.00	-10.00	581.75	581.78
D2	649+55.00	-10.00	581.80	581.83
E2	649+65.00	-10.00	581.85	581.88
F2	649+75.00	-10.00	581.90	581.92
CL Pier 2 & Brg.	649+85.00	-10.00	581.95	581.95
A3	649+95.00	-10.00	582.00	582.01
B3	650+05.00	-10.00	582.05	582.08
C3	650+15.00	-10.00	582.10	582.14
D3	650+25.00	-10.00	582.15	582.19
E3	650+35.00	-10.00	582.20	582.22
CL Brg. & E. Abut.	650+43.00	-10.00	582.24	582.24
Bk. E. Abut.	650+44.25	-10.00	582.25	582.25

BEAM 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	648+55.75	-3.33	581.41	581.41
CL Brg. & W. Abut.	648+57.00	-3.33	581.41	581.41
A1	648+67.00	-3.33	581.46	581.48
B1	648+77.00	-3.33	581.51	581.54
C1	648+87.00	-3.33	581.56	581.60
D1	648+97.00	-3.33	581.61	581.64
E1	649+07.00	-3.33	581.66	581.67
CL Pier 1 & Brg.	649+15.00	-3.33	581.70	581.70
A2	649+25.00	-3.33	581.75	581.76
B2	649+35.00	-3.33	581.80	581.82
C2	649+45.00	-3.33	581.85	581.88
D2	649+55.00	-3.33	581.90	581.93
E2	649+65.00	-3.33	581.95	581.98
F2	649+75.00	-3.33	582.00	582.02
CL Pier 2 & Brg.	649+85.00	-3.33	582.05	582.05
A3	649+95.00	-3.33	582.10	582.11
B3	650+05.00	-3.33	582.15	582.18
C3	650+15.00	-3.33	582.20	582.24
D3	650+25.00	-3.33	582.25	582.29
E3	650+35.00	-3.33	582.30	582.32
CL Brg. & E. Abut.	650+43.00	-3.33	582.34	582.34
Bk. E. Abut.	650+44.25	-3.33	582.35	582.35

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DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 090 – 0178
SHEET NO. S06 OF S26 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	46
		CONTRACT NO. 68757		
	ILLINOIS FED. AID PROJECT			

CL ROADWAY & PG

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	648+55.75	0.00	581.46	581.46
CL Brg. & W. Abut.	648+57.00	0.00	581.47	581.47
A1	648+67.00	0.00	581.52	581.54
B1	648+77.00	0.00	581.57	581.60
C1	648+87.00	0.00	581.62	581.66
D1	648+97.00	0.00	581.67	581.70
E1	649+07.00	0.00	581.72	581.73
CL Pier 1 & Brg.	649+15.00	0.00	581.76	581.76
A2	649+25.00	0.00	581.81	581.82
B2	649+35.00	0.00	581.86	581.88
C2	649+45.00	0.00	581.91	581.94
D2	649+55.00	0.00	581.96	581.99
E2	649+65.00	0.00	582.01	582.04
F2	649+75.00	0.00	582.06	582.08
CL Pier 2 & Brg.	649+85.00	0.00	582.11	582.11
A3	649+95.00	0.00	582.16	582.17
B3	650+05.00	0.00	582.21	582.24
C3	650+15.00	0.00	582.26	582.30
D3	650+25.00	0.00	582.31	582.35
E3	650+35.00	0.00	582.36	582.38
CL Brg. & E. Abut.	650+43.00	0.00	582.40	582.40
Bk. E. Abut.	650+44.25	0.00	582.40	582.40

BEAM 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	648+55.75	3.33	581.41	581.41
CL Brg. & W. Abut.	648+57.00	3.33	581.41	581.41
A1	648+67.00	3.33	581.46	581.48
B1	648+77.00	3.33	581.51	581.54
C1	648+87.00	3.33	581.56	581.60
D1	648+97.00	3.33	581.61	581.64
E1	649+07.00	3.33	581.66	581.67
CL Pier 1 & Brg.	649+15.00	3.33	581.70	581.70
A2	649+25.00	3.33	581.75	581.76
B2	649+35.00	3.33	581.80	581.82
C2	649+45.00	3.33	581.85	581.88
D2	649+55.00	3.33	581.90	581.93
E2	649+65.00	3.33	581.95	581.98
F2	649+75.00	3.33	582.00	582.02
CL Pier 2 & Brg.	649+85.00	3.33	582.05	582.05
A3	649+95.00	3.33	582.10	582.11
B3	650+05.00	3.33	582.15	582.18
C3	650+15.00	3.33	582.20	582.24
D3	650+25.00	3.33	582.25	582.29
E3	650+35.00	3.33	582.30	582.32
CL Brg. & E. Abut.	650+43.00	3.33	582.34	582.34
Bk. E. Abut.	650+44.25	3.33	582.35	582.35

BEAM 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	648+55.75	10.00	581.30	581.30
CL Brg. & W. Abut.	648+57.00	10.00	581.31	581.31
A1	648+67.00	10.00	581.36	581.38
B1	648+77.00	10.00	581.41	581.44
C1	648+87.00	10.00	581.46	581.50
D1	648+97.00	10.00	581.51	581.54
E1	649+07.00	10.00	581.56	581.57
CL Pier 1 & Brg.	649+15.00	10.00	581.60	581.60
A2	649+25.00	10.00	581.65	581.66
B2	649+35.00	10.00	581.70	581.72
C2	649+45.00	10.00	581.75	581.78
D2	649+55.00	10.00	581.80	581.83
E2	649+65.00	10.00	581.85	581.88
F2	649+75.00	10.00	581.90	581.92
CL Pier 2 & Brg.	649+85.00	10.00	581.95	581.95
A3	649+95.00	10.00	582.00	582.01
B3	650+05.00	10.00	582.05	582.08
C3	650+15.00	10.00	582.10	582.14
D3	650+25.00	10.00	582.15	582.19
E3	650+35.00	10.00	582.20	582.22
CL Brg. & E. Abut.	650+43.00	10.00	582.24	582.24
Bk. E. Abut.	650+44.25	10.00	582.25	582.25

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TOP OF SLAB ELEVATIONS
STRUCTURE NO. 090 - 0178
SHEET NO. 507 OF S26 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	47
		CONTRACT NO. 68757		
	ILLINOIS FED. AID PROJECT			

BEAM 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	648+55.75	16.67	581.16	581.16
CL Brg. & W. Abut.	648+57.00	16.67	581.17	581.17
A1	648+67.00	16.67	581.22	581.24
B1	648+77.00	16.67	581.27	581.30
C1	648+87.00	16.67	581.32	581.36
D1	648+97.00	16.67	581.37	581.40
E1	649+07.00	16.67	581.42	581.43
CL Pier 1 & Brg.	649+15.00	16.67	581.46	581.46
A2	649+25.00	16.67	581.51	581.52
B2	649+35.00	16.67	581.56	581.58
C2	649+45.00	16.67	581.61	581.64
D2	649+55.00	16.67	581.66	581.69
E2	649+65.00	16.67	581.71	581.74
F2	649+75.00	16.67	581.76	581.78
CL Pier 2 & Brg.	649+85.00	16.67	581.81	581.81
A3	649+95.00	16.67	581.86	581.87
B3	650+05.00	16.67	581.91	581.94
C3	650+15.00	16.67	581.96	582.00
D3	650+25.00	16.67	582.01	582.05
E3	650+35.00	16.67	582.06	582.08
CL Brg. & E. Abut.	650+43.00	16.67	582.10	582.10
Bk. E. Abut.	650+44.25	16.67	582.10	582.10

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TOP OF SLAB ELEVATIONS
STRUCTURE NO. 090 - 0178
SHEET NO. 508 OF S26 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	48
		CONTRACT NO. 68757		
	ILLINOIS FED. AID PROJECT			

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NORTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appt. Pav't.	648+25.75	-18.00	581.00
A	648+35.75	-18.00	581.05
B	648+45.75	-18.00	581.10
Bk. of W. Abut.	648+55.75	-18.00	581.15

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appt. Pav't.	648+25.75	-12.00	581.12
A	648+35.75	-12.00	581.17
B	648+45.75	-12.00	581.22
Bk. of W. Abut.	648+55.75	-12.00	581.27

PROFILE GRADE & BASELINE

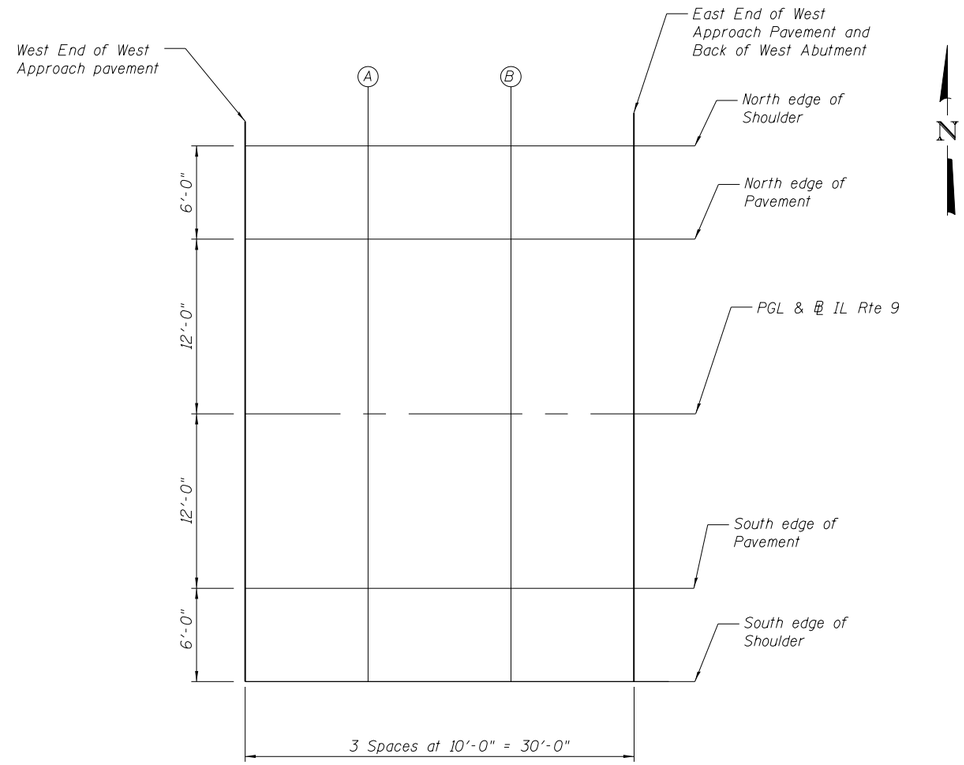
Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appt. Pav't.	648+25.75	0.00	581.31
A	648+35.75	0.00	581.36
B	648+45.75	0.00	581.41
Bk. of W. Abut.	648+55.75	0.00	581.46

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appt. Pav't.	648+25.75	12.00	581.12
A	648+35.75	12.00	581.17
B	648+45.75	12.00	581.22
Bk. of W. Abut.	648+55.75	12.00	581.27

SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appt. Pav't.	648+25.75	18.00	581.00
A	648+35.75	18.00	581.05
B	648+45.75	18.00	581.10
Bk. of W. Abut.	648+55.75	18.00	581.15



PLAN

West Approach

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TOP OF WEST APPROACH SLAB ELEVATIONS
STRUCTURE NO. 090 – 0178

SHEET NO. S09 OF S26 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	49
		CONTRACT NO. 68757		
	ILLINOIS FED. AID PROJECT			

NORTH EDGE OF SHOULDER

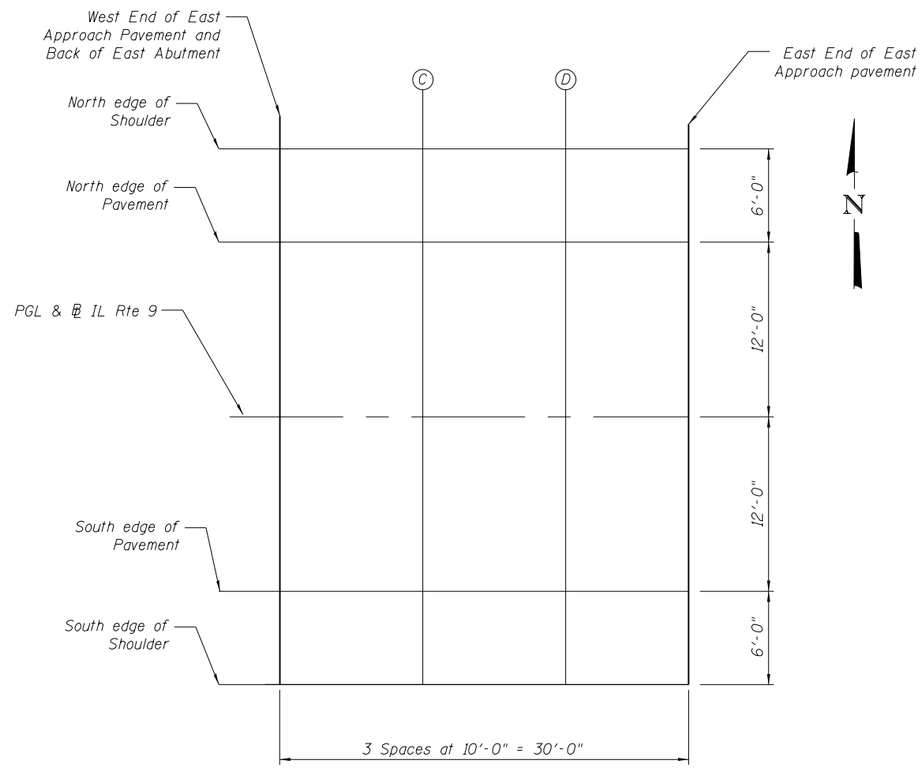
Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appt. Pav't.	650+44.25	-18.00	582.09
C	650+54.25	-18.00	582.14
D	650+64.25	-18.00	582.19
Bk. of E. Abut.	650+74.25	-18.00	582.24

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appt. Pav't.	650+44.25	-12.00	582.21
C	650+54.25	-12.00	582.26
D	650+64.25	-12.00	582.31
Bk. of E. Abut.	650+74.25	-12.00	582.36

PROFILE GRADE & BASELINE

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appt. Pav't.	650+44.25	0.00	582.40
C	650+54.25	0.00	582.45
D	650+64.25	0.00	582.50
Bk. of E. Abut.	650+74.25	0.00	582.55



PLAN

East Approach

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appt. Pav't.	650+44.25	12.00	582.21
C	650+54.25	12.00	582.26
D	650+64.25	12.00	582.31
Bk. of E. Abut.	650+74.25	12.00	582.36

SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appt. Pav't.	650+44.25	18.00	582.09
C	650+54.25	18.00	582.14
D	650+64.25	18.00	582.19
Bk. of E. Abut.	650+74.25	18.00	582.24

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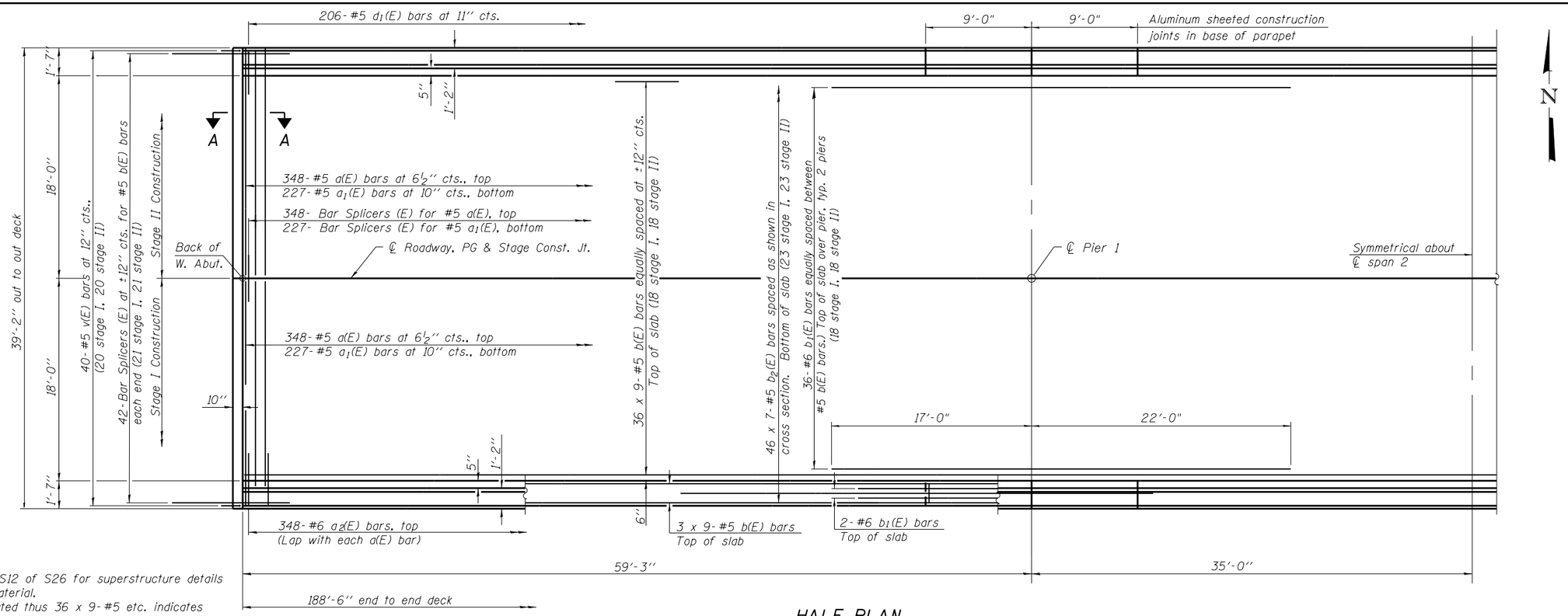
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF EAST APPROACH SLAB ELEVATIONS
STRUCTURE NO. 090 – 0178

SHEET NO. S10 OF S26 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	50
		CONTRACT NO. 68757		
	ILLINOIS FED. AID PROJECT			

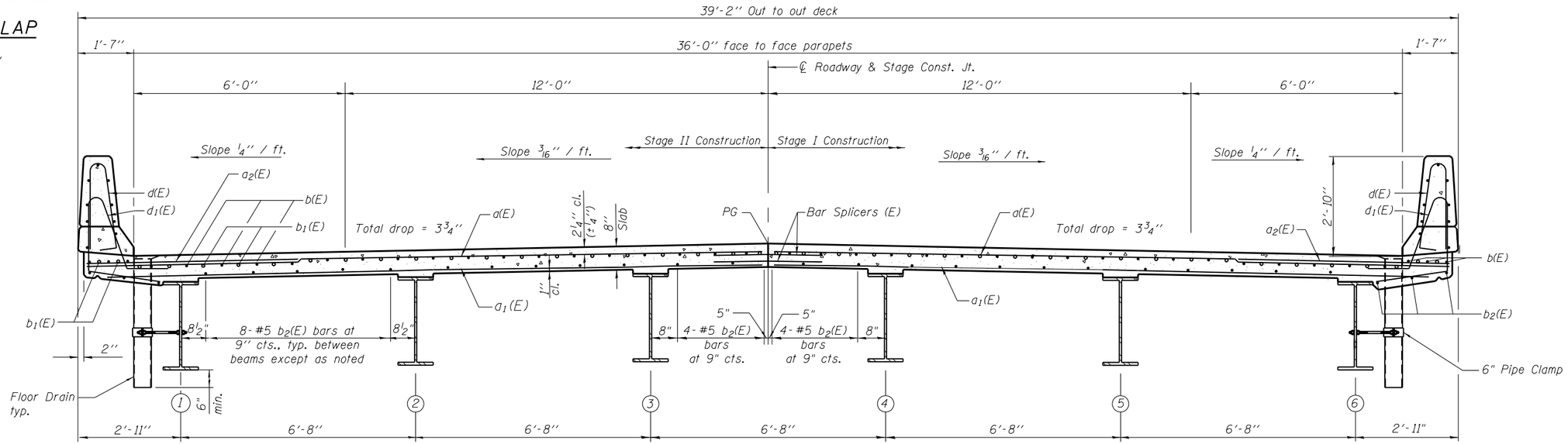


HALF PLAN

Notes:
See sheet S12 of S26 for superstructure details and Bill of Material.
Bars indicated thus 36 x 9- #5 etc. indicates 36 lines of bars with 9 lengths per line.
See sheet S12 of S26 for parapet reinforcement and see sheet S13 of S26 for Section A-A.

MINIMUM BAR LAP

(Slab)
#5 bar = 2'-7"



NEAR PIER — NEAR MIDSPAN

CROSS SECTION
(Looking East)

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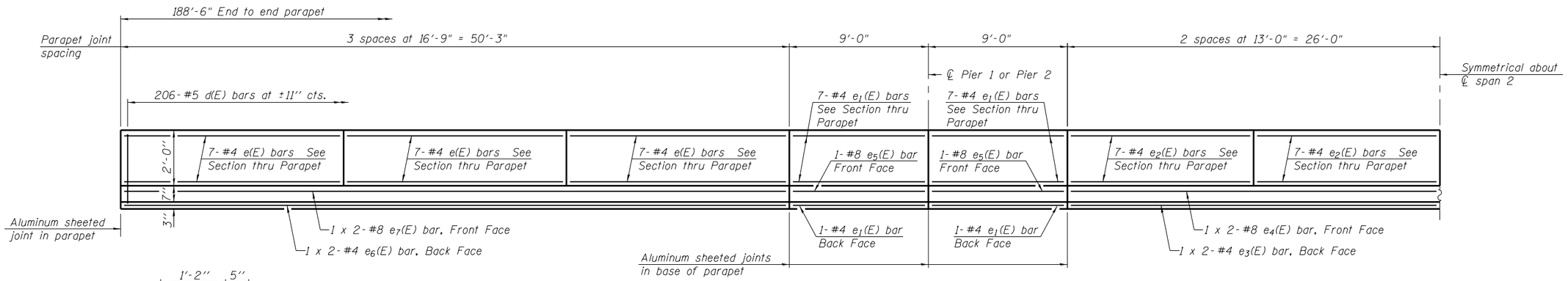
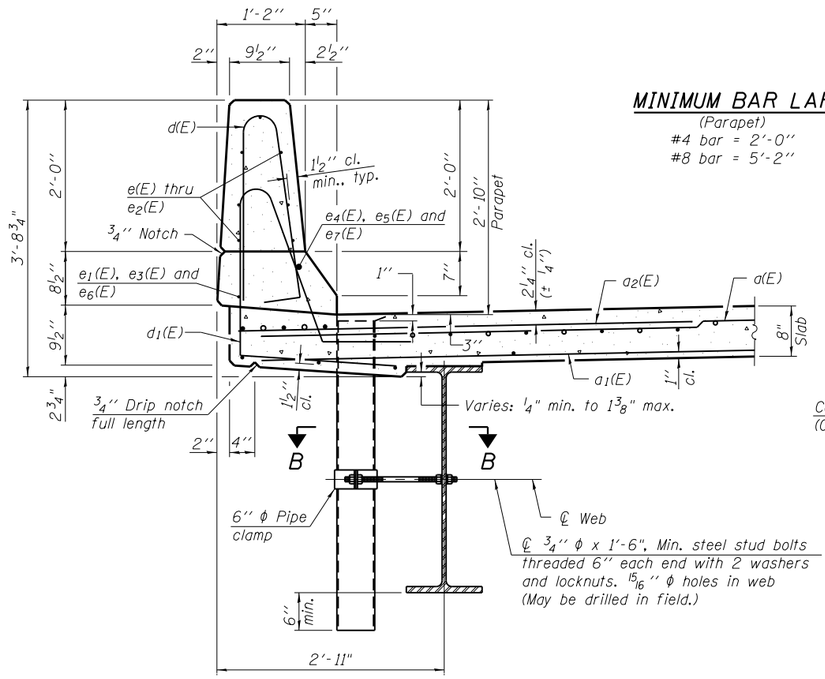
SUPERSTRUCTURE–PLAN AND CROSS SECTION
STRUCTURE NO. 090 – 0178
SHEET NO. S11 OF S26 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	51
		CONTRACT NO. 68757		
	ILLINOIS FED. AID PROJECT			



INSIDE ELEVATION OF PARAPET

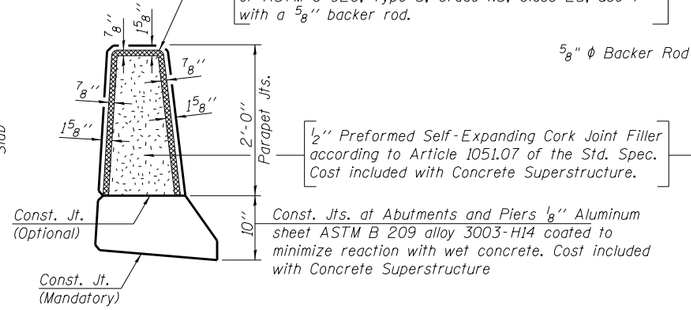
(Looking at North parapet - South parapet similar)



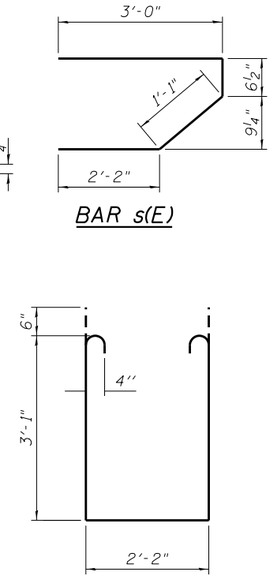
SECTION THRU PARAPET

MINIMUM BAR LAP

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



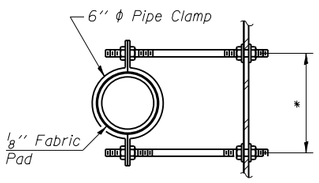
PARAPET JOINT DETAILS



BAR s(E)

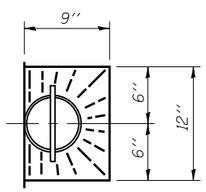
BAR s1(E)

Notes:
Floor drains need not be painted.
Fiberglass pipe shall conform to ASTM D 2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.
Galvanize clamping device according to AASHTO M232. Cost of clamping device and inserts is included with Floor Drains.

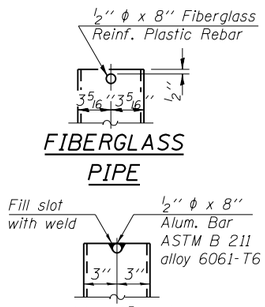


SECTION B-B

*Dimension as required by Pipe Clamp

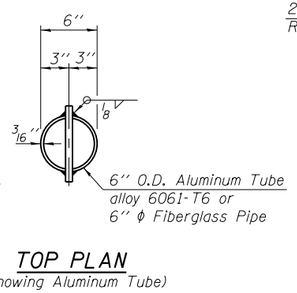


TOP PLAN



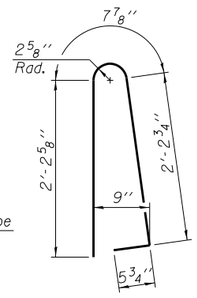
FIBERGLASS PIPE

ALUMINUM TUBE

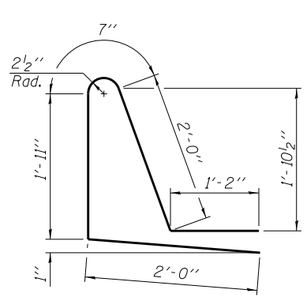


TOP PLAN

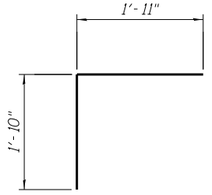
(Showing Aluminum Tube)



BAR d(E)



BAR d1(E)



BAR v(E)

SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d(E)	696	#5	19'-0"	
d1(E)	454	#5	19'-0"	
d2(E)	696	#6	6'-6"	
b(E)	378	#5	23'-3"	
b1(E)	80	#6	39'-0"	
b2(E)	322	#5	29'-6"	
d(E)	412	#5	5'-7"	
d1(E)	412	#5	7'-8"	
e(E)	84	#4	16'-6"	
e1(E)	64	#4	8'-9"	
e2(E)	56	#4	12'-9"	
e3(E)	4	#4	26'-11"	
e4(E)	4	#8	28'-6"	
e5(E)	8	#8	8'-9"	
e6(E)	8	#4	26'-0"	
e7(E)	8	#8	27'-7"	
m(E)	20	#6	19'-3"	
m1(E)	24	#6	8'-9"	
m2(E)	4	#6	2'-6"	
m3(E)	8	#6	6'-4"	
m4(E)	4	#6	3'-0"	
s(E)	84	#5	6'-10"	
s1(E)	84	#4	9'-4"	
v(E)	80	#5	3'-9"	
Reinforcement Bars, Epoxy Coated			Pound	64,540
Concrete Superstructure			Cu. Yds.	247.4
Floor Drains			Each	6

Bars indicated thus 1 x 2 - #5 etc. indicates 1 line of bars with 2 lengths per line.

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PLOT DATE = 1/21/2013	CHECKED - JB	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
STRUCTURE NO. 090 - 0178
SHEET NO. 512 OF S26 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	52
		CONTRACT NO. 68757		
		ILLINOIS FED. AID PROJECT		

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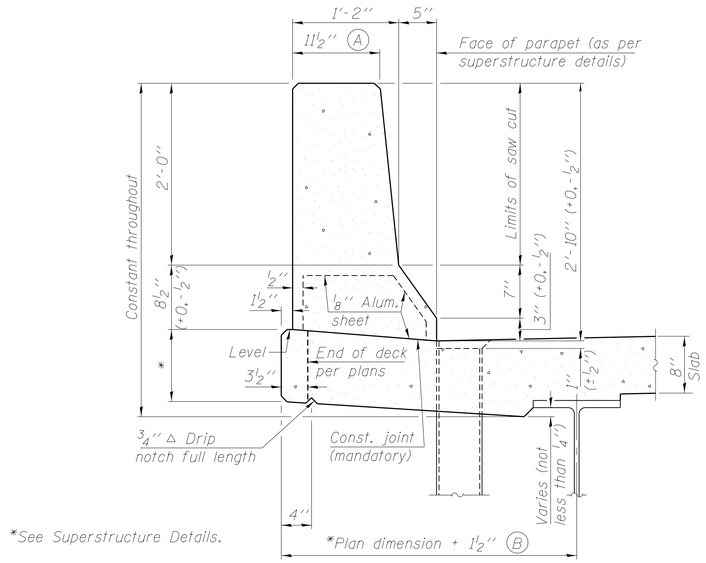
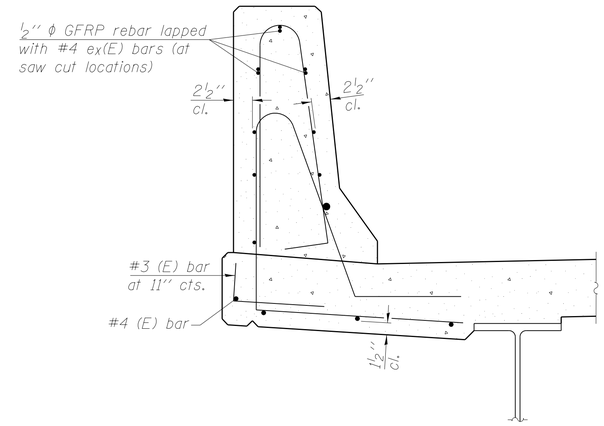


34" F SHAPE PARAPET SECTION

(Showing dimensions)



SECTION

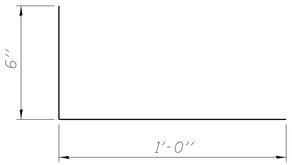
(34" parapet shown - 42" parapet similar)
(Showing reinforcement clearances for slip forming and additional reinforcement bars)

GENERAL NOTES

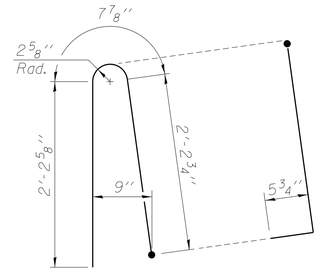
All dimensions shall remain the same as shown on superstructure details, except dimensions A and B which are to be revised as shown to provide additional clearance. Additional concrete needed to revise dimension A and B = 0.0165 cu. yds./ft. for 34" parapet or = 0.0223 cu. yds./ft. for 42" parapet.

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.

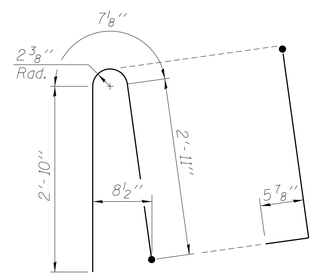


#3 (E) BAR



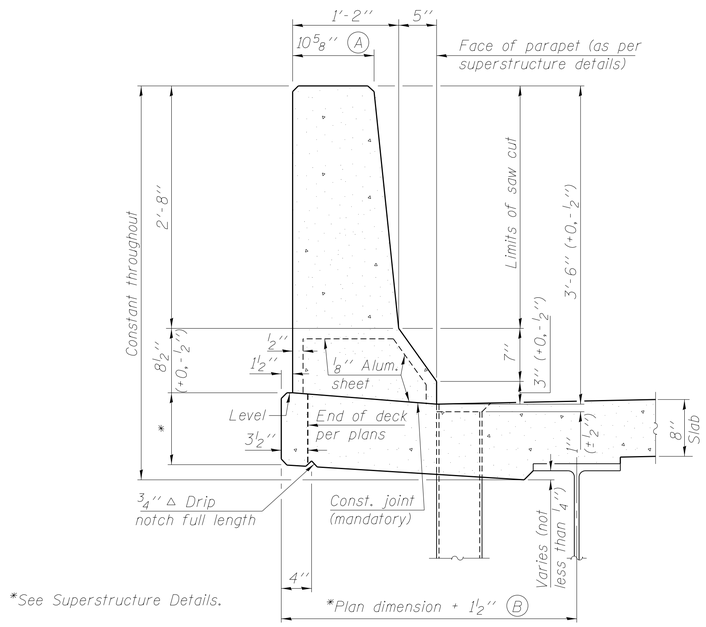
ALTERNATE BAR d(E)

(For 34" parapet when conduit is present)



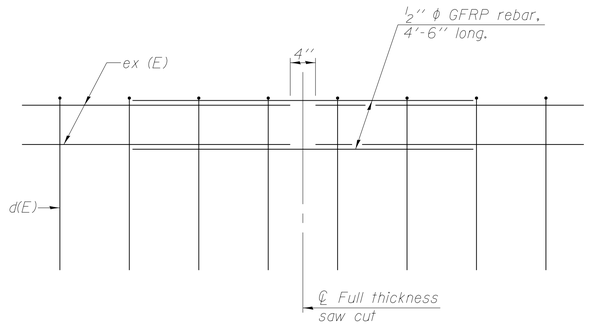
ALTERNATE BAR d(E)

(For 42" parapet when conduit is present)



42" F SHAPE PARAPET SECTION

(Showing dimensions)



GFRP REBAR STIFFENING DETAIL

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

SFP 34-42

8-16-12

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONCRETE PARAPET SLIPFORMING OPTION
STRUCTURE NO. 090 – 0178

SHEET NO. S12a OF S26 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	52a
		CONTRACT NO. 68757		
	ILLINOIS FED. AID PROJECT			

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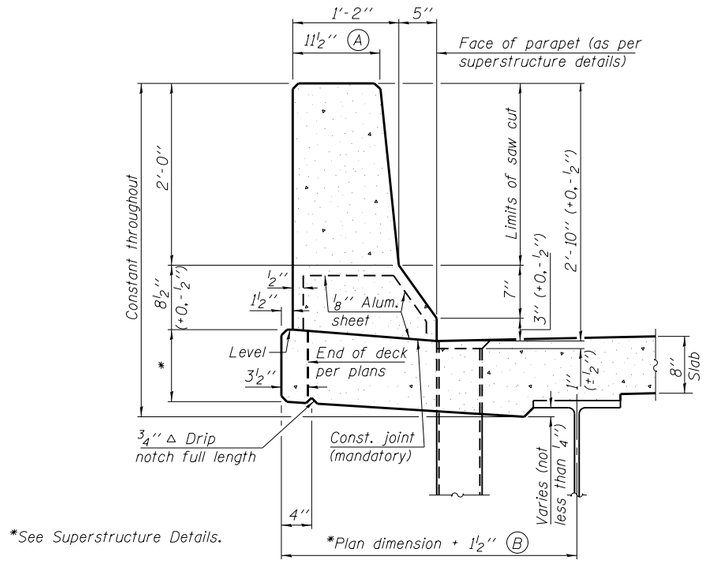
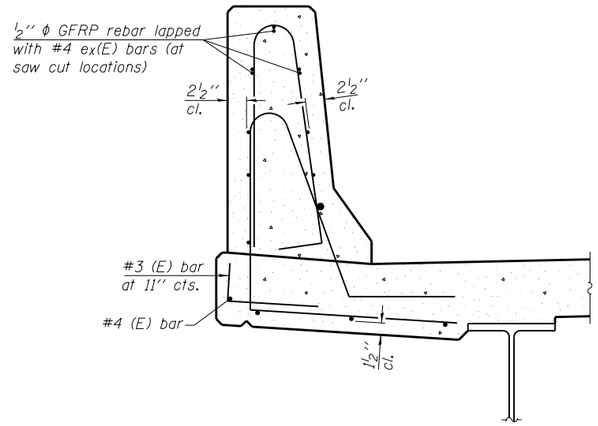


34" F SHAPE PARAPET SECTION

(Showing dimensions)



SECTION

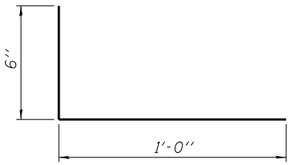
(34" parapet shown - 42" parapet similar)
(Showing reinforcement clearances for slip forming and additional reinforcement bars)

GENERAL NOTES

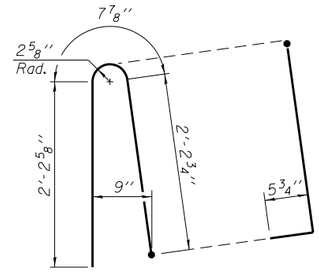
All dimensions shall remain the same as shown on superstructure details, except dimensions A and B which are to be revised as shown to provide additional clearance. Additional concrete needed to revise dimension A and B = 0.0165 cu. yds./ft. for 34" parapet or = 0.0223 cu. yds./ft. for 42" parapet.

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.

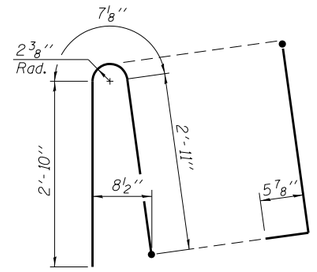


#3 (E) BAR



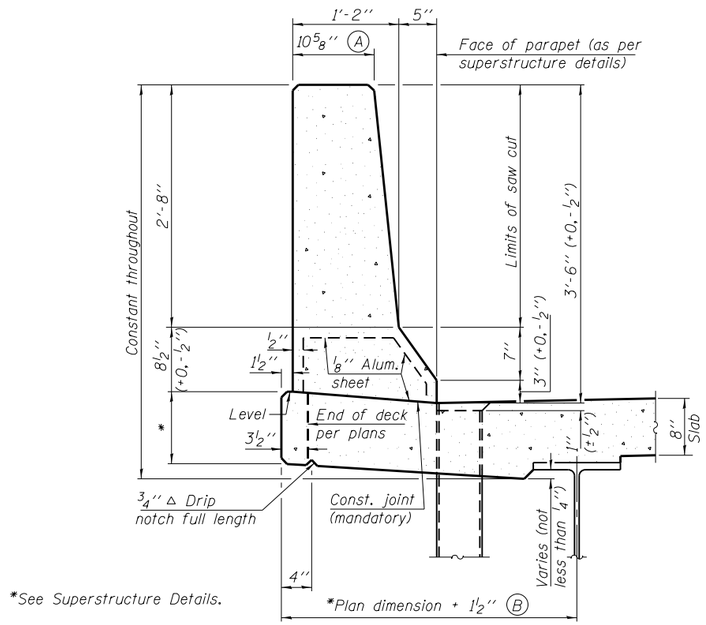
ALTERNATE BAR d(E)

(For 34" parapet when conduit is present)



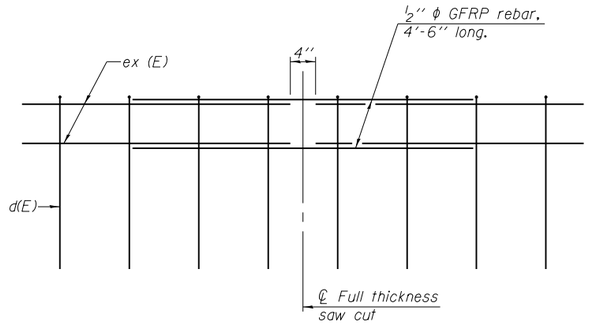
ALTERNATE BAR d(E)

(For 42" parapet when conduit is present)



42" F SHAPE PARAPET SECTION

(Showing dimensions)



GFRP REBAR STIFFENING DETAIL

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

SFP 34-42

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONCRETE PARAPET SLIPFORMING OPTION
STRUCTURE NO. 090 - 0178
SHEET NO. 12a OF S26 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	52a
		CONTRACT NO. 68757		
	ILLINOIS FED. AID PROJECT			

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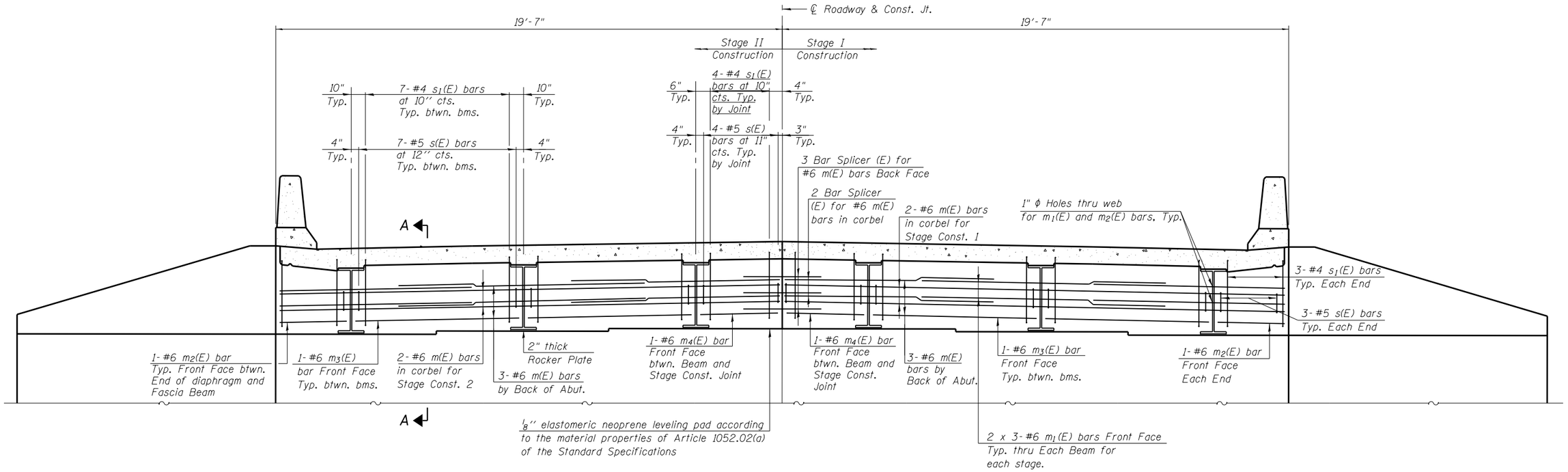
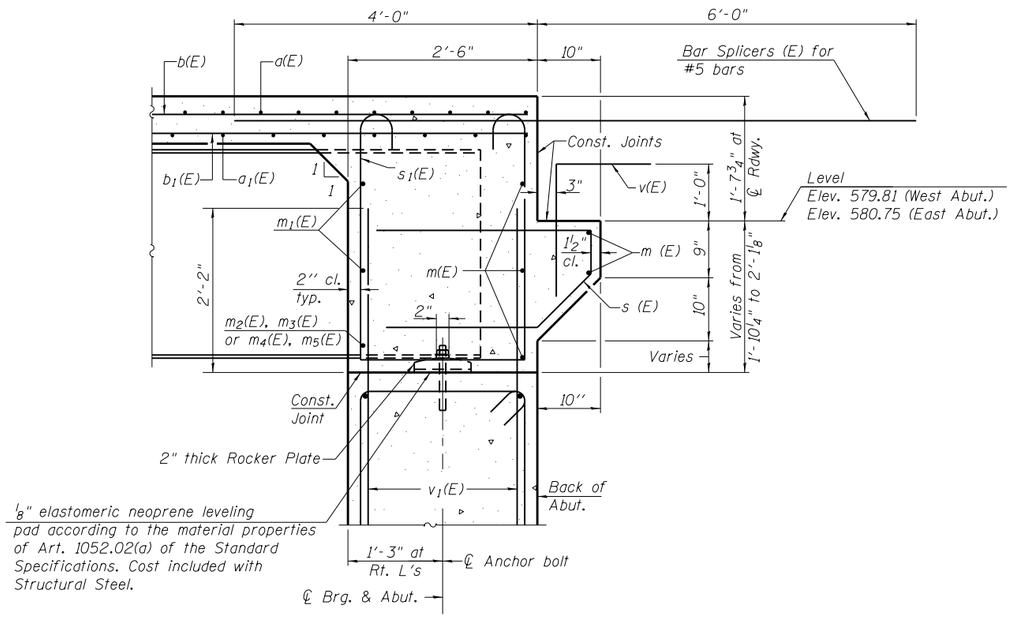


DIAPHRAGM ELEVATION AT ABUTMENT

(East Diaphragm shown, looking East, West diaphragm similar)



SECTION A-A

(Dimensions at right angles to abutment)

Notes:

Reinforcement bars in diaphragm are billed with superstructure on sheet S12 of S25.
Concrete in diaphragm is included with Concrete Superstructure on sheet S12 of S25.
For details of bars s(E) & s_1(E) see sheet S12 of S25.
The s(E) and s_1(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''

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PLOT DATE = 1/21/2013	CHECKED - JB	REVISED -

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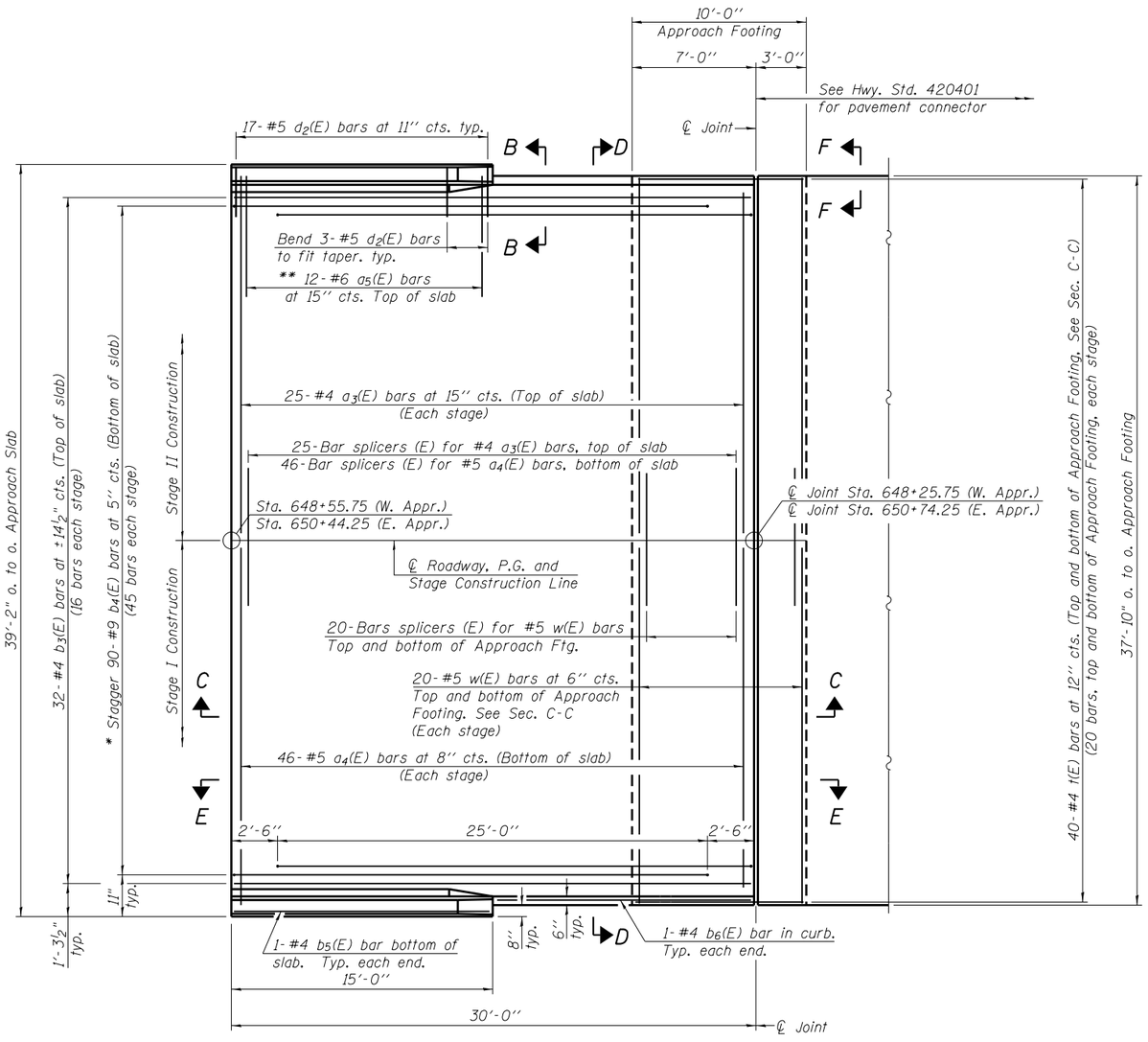
DEPARTMENT OF TRANSPORTATION

INTEGRAL ABUTMENT DIAPHRAGM DETAILS
STRUCTURE NO. 090 – 0178
SHEET NO. S13 OF S26 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	53
		CONTRACT NO. 68757		
	ILLINOIS FED. AID PROJECT			

Notes:
See sheet S15 of S26 for Sections C-C & D-D and View E-E.
a_3(E) and a_4(E) bar spacings measured along ℄ Rdwy.

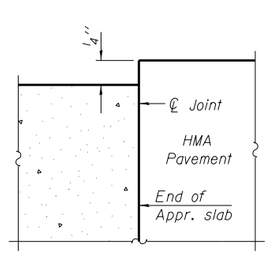


PLAN

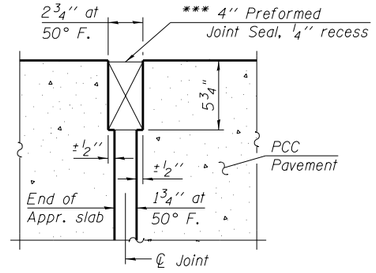
(East Abutment Shown - West Abutment similar by rotation)

* Tilt #9 b_4(E) bars as required to maintain clearance.
** Space between a_3(E) bars, typ. ea. parapet.

*** Cost included with Concrete Superstructure.

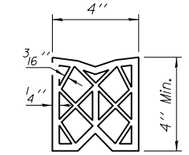


FLEXIBLE PAVEMENT

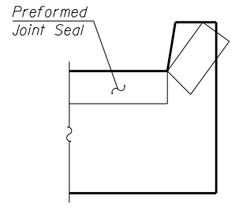


RIGID PAVEMENT

DETAIL A

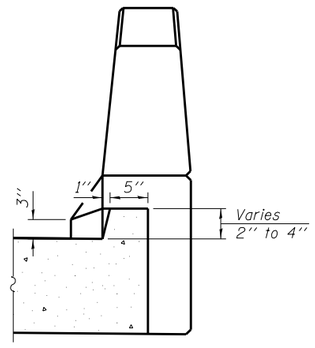


PREFORMED JOINT SEAL



VIEW F-F

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



VIEW B-B

design firm no. 184001036
whks engineers + planners + land surveyors

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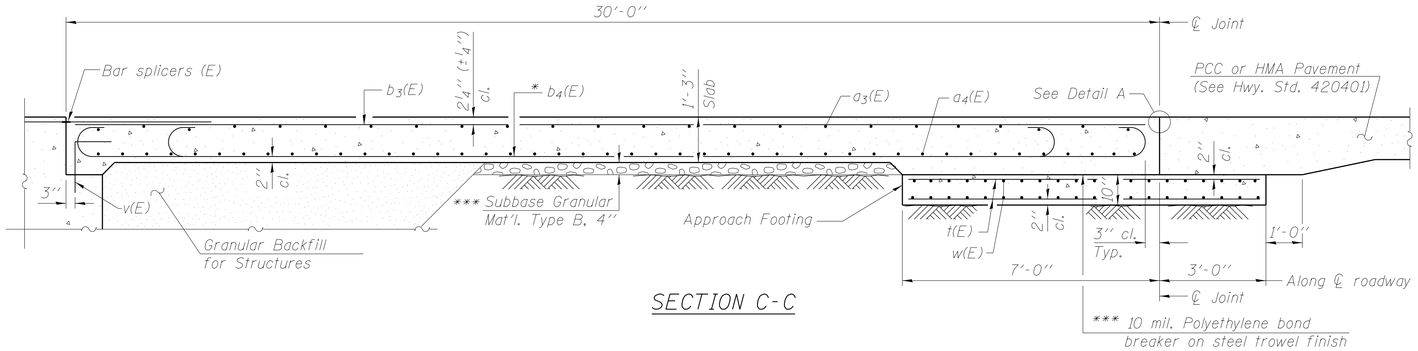
PLOT DATE = 1/17/2013	CHECKED - BRD/CWC	REVISED	

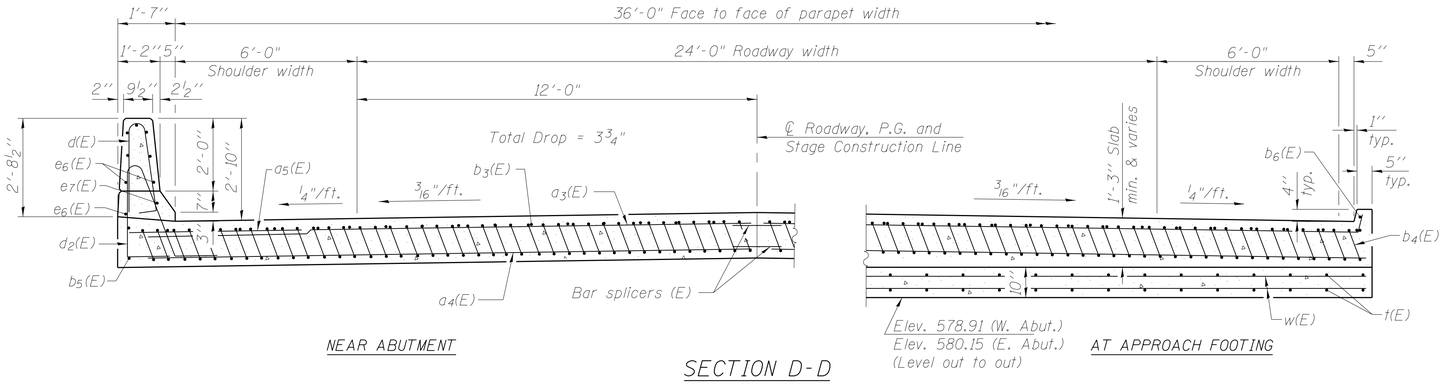
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 090-0178
SHEET NO. S14 OF S26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	54
		CONTRACT NO. 68757		
	ILLINOIS	FED. AID PROJECT		



SECTION C-C

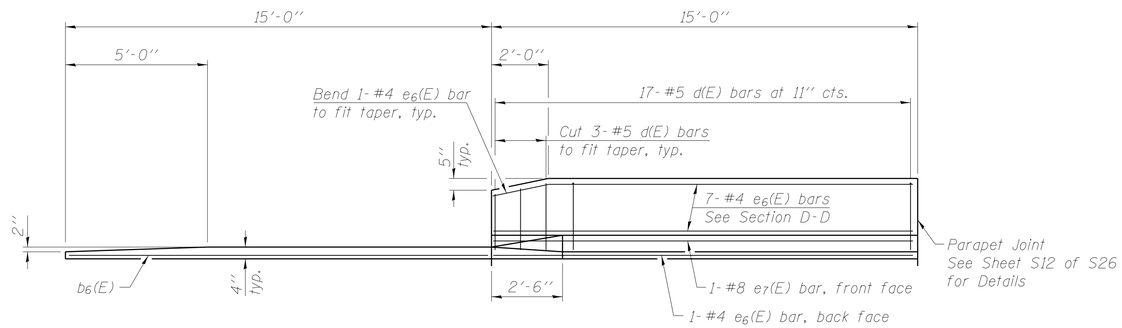


NEAR ABUTMENT

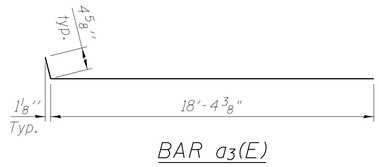
AT APPROACH FOOTING

SECTION D-D

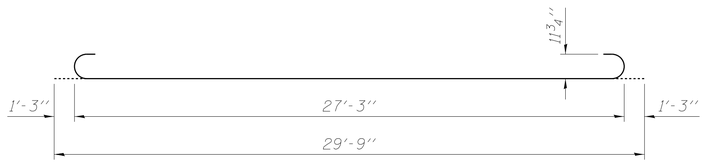
(See Plan for dimensions not shown)



VIEW E-E



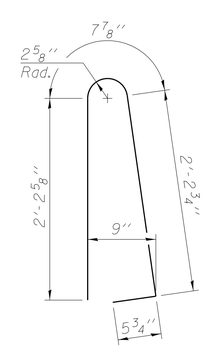
BAR a3(E)



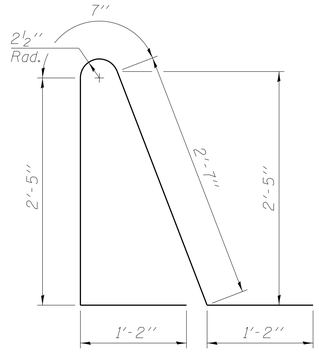
BAR b4(E)

Notes:

See sheet S14 of S26 for Detail A and View B-B.
Approach slab and parapet concrete shall be paid for as Concrete Superstructure.
Approach footing concrete shall be paid for as Concrete Structures.
Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
For v(E) bar details, see sheets S12 & S13 of S26.
The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
For bar splicer details, see sheet S23 of S26.
Cost of excavation for approach footing included with Concrete Structures.
For Granular Backfill for Structures and drainage treatment details, see sheet S02 of S26.
For additional parapet details, see sheet S12 of S26.



BAR d(E)



BAR d2(E)

* Tilt #9 b4(E) bars as required to maintain clearance.

*** Cost included with Concrete Superstructure.

TWO APPROACHES
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a3(E)	100	#4	18'-9"	
a4(E)	184	#5	18'-8"	
a5(E)	48	#6	6'-6"	
b3(E)	64	#4	29'-8"	
b4(E)	180	#9	29'-9"	
b5(E)	4	#4	14'-8"	
b6(E)	4	#4	14'-7"	
d(E)	68	#5	5'-7"	
d2(E)	68	#5	7'-11"	
e6(E)	32	#4	14'-8"	
e7(E)	4	#8	14'-8"	
t(E)	160	#4	9'-8"	
w(E)	160	#5	18'-8"	
Concrete Superstructure			Cu. Yd.	117.1
Concrete Structures			Cu. Yd.	23.4
Reinforcement Bars, Epoxy Coated			Pound	30,440

design firm no. 184001036
whks engineers + planners + land surveyors

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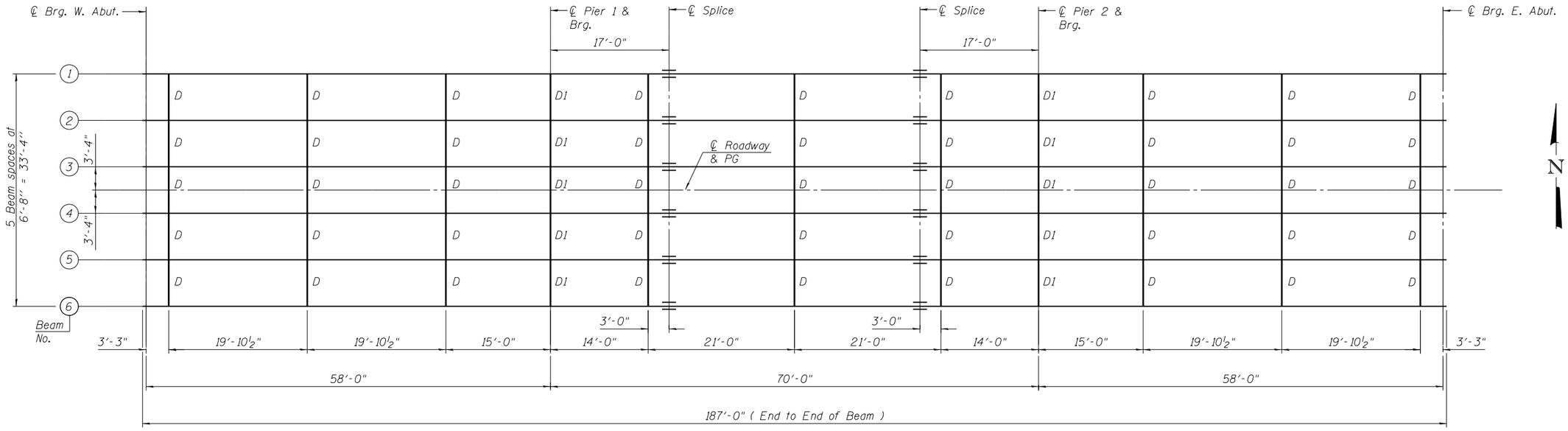
PLOT DATE = 5/7/2013	CHECKED - BRD/CWC	REVISED	

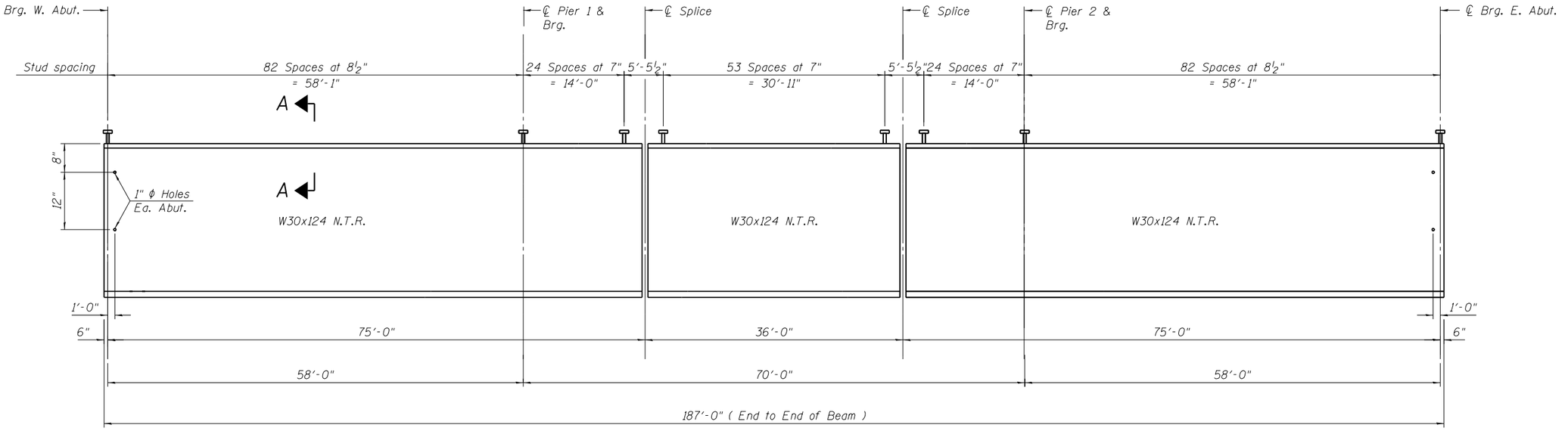
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 090-0178
SHEET NO. S15 OF S26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	55
		CONTRACT NO. 68757		
	ILLINOIS FED. AID PROJECT			



PLAN



BEAM ELEVATION

Notes:
1. All flange and web splice plates, except filler plates, shall be M270 Grade 50W and meet notch toughness requirements.
2. Load carrying components designated "NTR" shall conform to the Impact Testing Requirements, Zone 2.
3. All beams shall be M270 Grade 50W.
4. For Section A-A see sheet S17 of S26.
5. Work this sheet with sheet S17 of S26.
6. 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.

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PLOT DATE = 1/21/2013	CHECKED - JB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN
STRUCTURE NO. 090 – 0178
SHEET NO. S16 OF S26 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	56
		CONTRACT NO. 68757		
	ILLINOIS FED. AID PROJECT			

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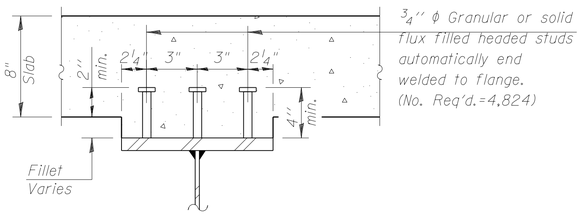
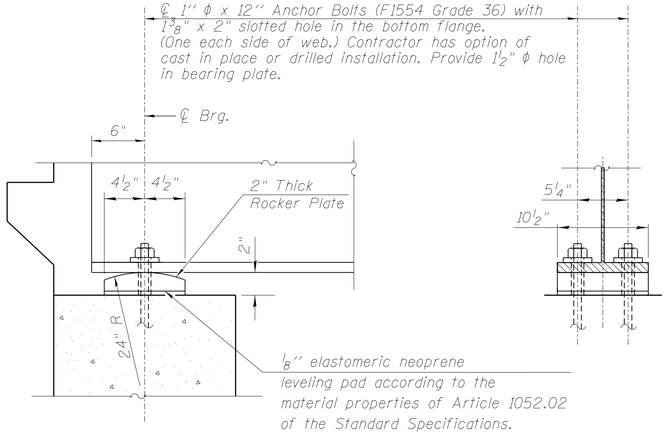
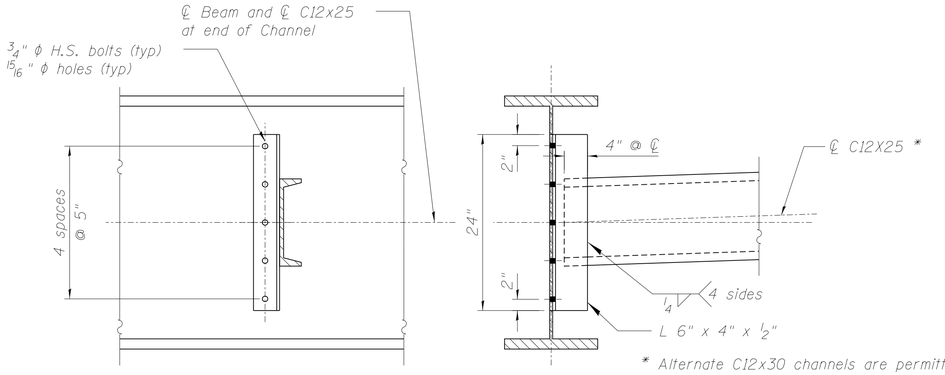


SECTION A-A



SECTION AT ABUTMENT

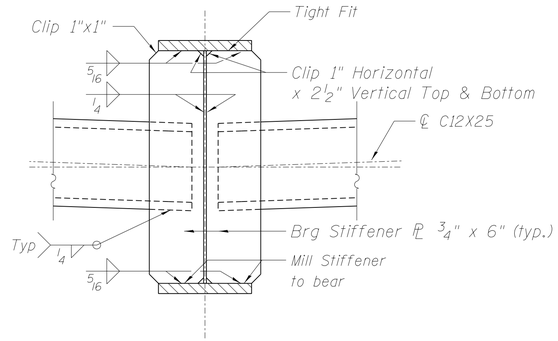


* Alternate C12x30 channels are permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section. The alternate, if utilized shall be provided at no extra cost to the Department.

DIAPHRAGM D

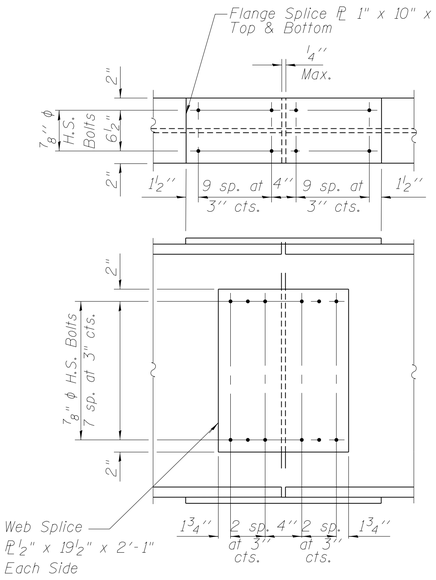
45 Required

Note:
Two hardened washers required for each set of oversized holes.



SECTION AT PIER
DIAPHRAGM D1

10 Required



DETAIL OF SPLICE

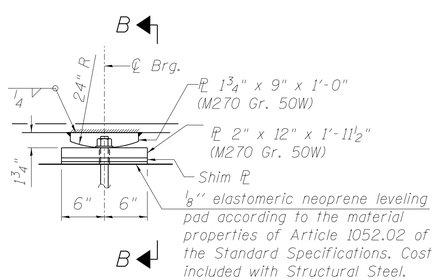
Notes:
Anchor bolts shall be ASTM F1554 (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified.
ASTM A 307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy-36 ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.

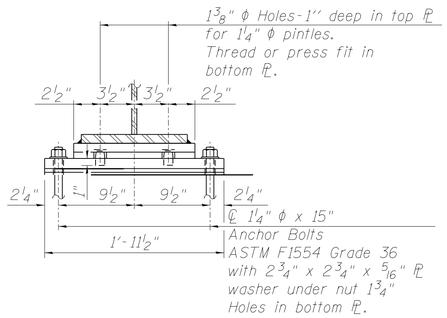
Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade 50W.

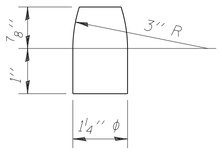
Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates of shims and placed as shown on bearing details.



ELEVATION AT PIER



SECTION B-B



DETAIL OF PINTLE

FIXED BEARING

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Anchor Bolts, 1"	EACH	24
Anchor Bolts, 1 1/4"	EACH	24
Stud Shear Connectors	EACH	4,824

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL DETAILS
STRUCTURE NO. 090 – 0178
SHEET NO. S17 OF S26 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	57
		CONTRACT NO. 68757		
	ILLINOIS FED. AID PROJECT			

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INTERIOR BEAM MOMENT TABLE				
		0.4 Sp. 1 & 0.6 Sp. 3	Pier	0.5 Sp. 2
I_s	(in^4)	5360	5360	5360
$I_c(n)$	(in^4)	15441		15441
$I_c(3n)$	(in^4)	11346		11346
$I_c(cr)$	(in^4)		7615	
S_s	(in^3)	355	355	355
$S_c(n)$	(in^3)	542		542
$S_c(3n)$	(in^3)	490		490
$S_c(cr)$	(in^3)		420	
DC1	(k/')	0.84	0.84	0.84
M_{DC1}	('k)	197	334	167
DC2	(k/')	0.15	0.15	0.15
M_{DC2}	('k)	35	60	29
DW	(k/')	0.33	0.33	0.33
M_{DW}	('k)	80	138	67
M_{L+IM}	('k)	587	554	555
M_u (Strength I)	('k)	1435	1668	1315
* $\phi_f M_n$	('k)	2747	2174	2776
f_s DC1	(ksi)	6.64	11.30	5.64
f_s DC2	(ksi)	0.85	1.71	0.80
f_s DW	(ksi)	1.95	3.93	1.54
f_s (L+IM)	(ksi)	12.98	15.83	12.27
f_s (Service II)	(ksi)	26.32	37.52	23.93
0.95RhFyf	(ksi)	47.5	47.5	47.5
f_s (Total)(Strength I)	(ksi)	-	-	-
ϕfFn	(ksi)	-	-	-
V_f	(k)	21.9	23.5	15.3

* Compact Section

INTERIOR BEAM REACTION TABLE			
		W. & E. Abut.	Pier
R_{DC1}	(k)	19	58
R_{DC2}	(k)	3	10
R_{DW}	(k)	7	24
R_{L+IM}	(k)	68	101
R_{Total}	(k)	97	193

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

$I_c(n)$, $S_c(n)$: 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.^{4} and in.^{3}).

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

$I_c(cr)$, $S_c(cr)$: 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 dead loads (in.^{4} and in.^{3}).

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

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

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

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

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

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

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

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

$\phi_f M_n$: Compact composite positive moment capacity computed according to Article 6.10.7.1 (kip-ft.) and appendix A criteria for negative moment.

f_s DC1: Un-factored stress at edge of flange for controlling steel flange due to vertical non-composite dead loads as calculated below (ksi).
M_{DC1} / S_{nc}

f_s DC2: Un-factored stress at edge of flange for controlling steel flange due to vertical composite dead loads as calculated below (ksi).
$M_{DC2} / S_c(3n)$ or $M_{DC2} / S_c(cr)$ as applicable.

f_s DW: Un-factored stress at edge of flange for controlling steel flange due to vertical composite future wearing surface loads as calculated below (ksi).
$M_{DW} / S_c(3n)$ or $M_{DW} / S_c(cr)$ as applicable.

f_s (L+IM): Un-factored stress at edge of flange for controlling steel flange due to vertical composite live plus impact loads as calculated below (ksi).
$M_{L+IM} / S_c(3n)$ or $M_{L+IM} / S_c(cr)$ as applicable.

f_s (Service II): Sum of stresses as computed below (ksi).
$f_{sDC1} + f_{sDC2} + f_{sDW} + 1.3\ f_{s(L+IM)}$

$0.95R_hF_yf$: Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).

f_s (Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi).
$1.25\ (f_{sDC1} + f_{sDC2}) + 1.5\ f_{sDW} + 1.75\ f_{s(L+IM)}$

$\phi_f F_n$: Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7.2 (ksi).

V_f: Maximum factored shear range in composite portion of span computed according to Article 6.10.10.

* TOP OF BEAM ELEVATIONS

Location	Beam 1	Beam 2	Beam 3	Beam 4	Beam 5	Beam 6
℄ Brg. W. Abut.	580.43	580.56	580.67	580.67	580.56	580.43
℄ Brg. Pier 1	580.70	580.83	580.94	580.94	580.83	580.70
Splice 1	580.78	580.91	581.02	581.02	580.91	580.78
Splice 2	580.96	581.09	581.20	581.20	581.09	580.96
℄ Brg. Pier 2	581.05	581.18	581.29	581.29	581.18	581.05
℄ Brg. E. Abut.	581.36	581.49	581.60	581.60	581.49	581.36

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL DETAILS
STRUCTURE NO. 090 - 0178
SHEET NO. S18 OF S26 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	58
		CONTRACT NO. 68757		
	ILLINOIS FED. AID PROJECT			

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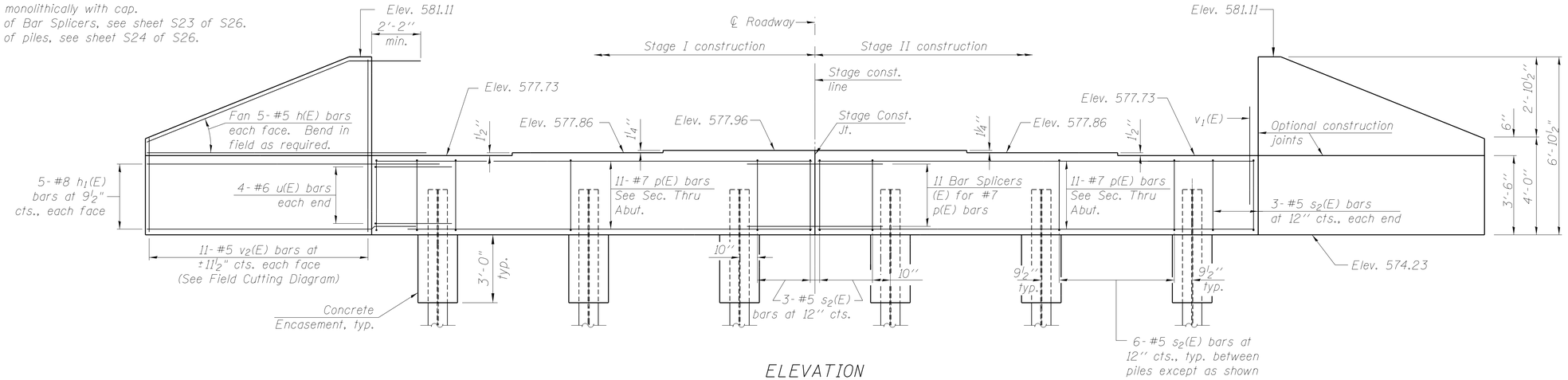
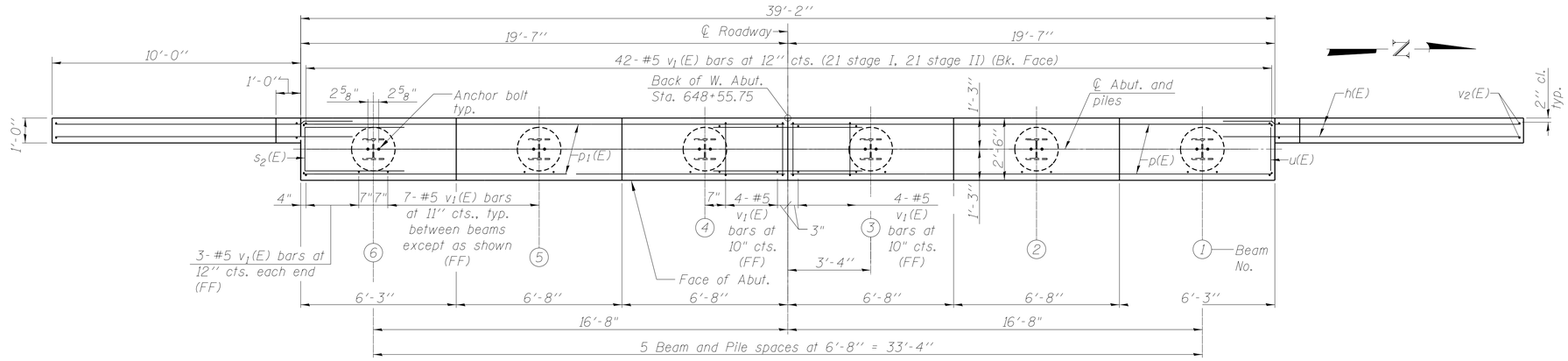
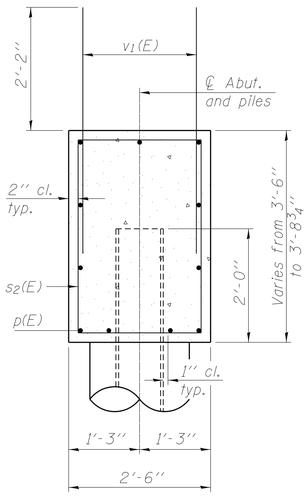
Notes:
Pour steps monolithically with cap.
For details of Bar Splicers, see sheet S23 of S26.
For details of piles, see sheet S24 of S26.



ELEVATION
(Looking west)



PLAN



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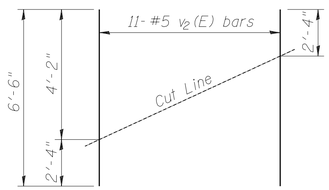
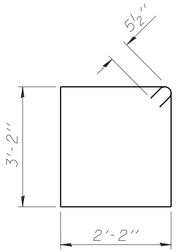
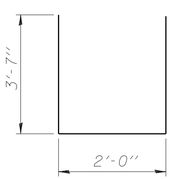


FIELD CUTTING DIAGRAM
Order $v_2(E)$ full length. Cut as shown and use remainder of bars in opposite face.



BAR $s_2(E)$



BAR u(E)

PILE DATA

Type:	Steel HP 12x53
Nominal Required Bearing:	180 kips
Allowable Resistance Available:	210 kips
Est. Length:	60 ft.
No. Production Piles:	5
No. Test Piles:	1

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	20	#5	12'-5"	
$h_1(E)$	20	#8	14'-3"	
p(E)	22	#7	19'-3"	
$s_2(E)$	36	#5	11'-7"	
u(E)	8	#6	9'-2"	
$v_1(E)$	84	#5	4'-4"	
$v_2(E)$	22	#5	6'-6"	
Structure Excavation		Cu. Yd.	126	
Concrete Structures		Cu. Yd.	17.7	
Reinforcement Bars, Epoxy Coated		Pound	2960	
Furnishing Steel Piles HP 12x53		Foot	300	
Driving Piles		Foot	300	
Test Pile Steel HP 12x53		Each	1	
Concrete Encasement		Cu. Yd.	2.1	

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DEPARTMENT OF TRANSPORTATION

WEST ABUTMENT PLAN AND ELEVATION
STRUCTURE NO. 090 – 0178
SHEET NO. S19 OF S26 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	59
		CONTRACT NO. 68757		
	ILLINOIS FED. AID PROJECT			

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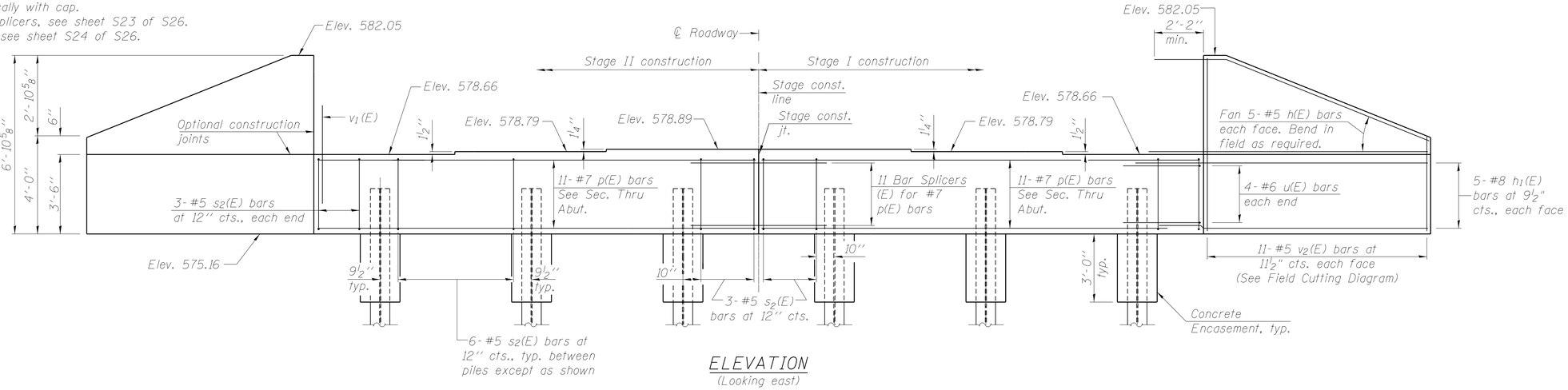
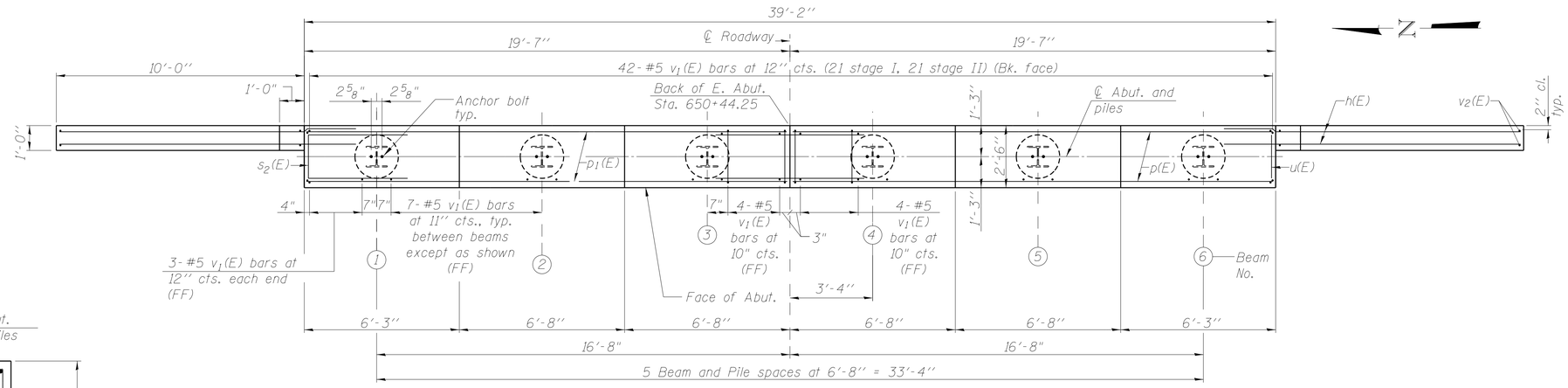
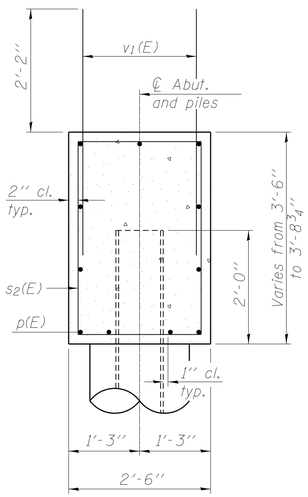
Notes:
Pour steps monolithically with cap.
For details of Bar Splicers, see sheet S23 of S26.
For details of piles, see sheet S24 of S26.



ELEVATION
(Looking east)



PLAN



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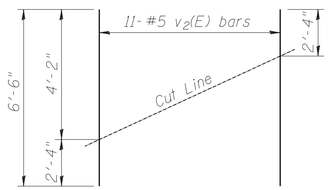
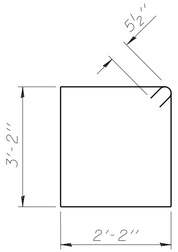
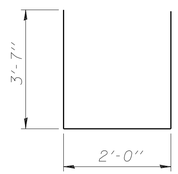


FIELD CUTTING DIAGRAM
Order v_2(E) full length. Cut as shown and use remainder of bars in opposite face.



BAR s_2(E)



BAR u(E)

PILE DATA

Type:	Steel HP 12x53
Nominal Required Bearing:	210 kips
Allowable Resistance Available:	151 kips
Est. Length:	60 ft.
No. Production Piles:	5
No. Test Piles:	1

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	20	#5	12'-5"	
h_1(E)	20	#8	14'-3"	
p(E)	22	#7	19'-3"	
s_2(E)	36	#5	11'-7"	
u(E)	8	#6	9'-2"	
v_1(E)	84	#5	4'-4"	
v_2(E)	22	#5	6'-6"	
Structure Excavation		Cu. Yd.	132	
Concrete Structures		Cu. Yd.	17.7	
Reinforcement Bars, Epoxy Coated		Pound	2960	
Furnishing Steel Piles HP 12x53		Foot	300	
Driving Piles		Foot	300	
Test Pile Steel HP 12x53		Each	1	
Concrete Encasement		Cu. Yd.	2.1	

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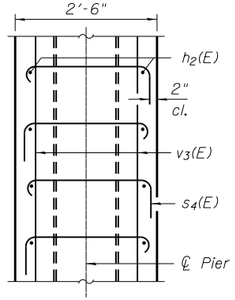
FILE NAME = D468757-020-East_Abutment.dgn	CHECKED - DA	REVISED -	
PLOT SCALE = 2:8.0000 '' / in.	DRAWN - CM	REVISED -	
PLOT DATE = 5/7/2013	CHECKED - JB	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST ABUTMENT PLAN AND ELEVATION
STRUCTURE NO. 090 – 0178
SHEET NO. S20 OF S26 SHEETS

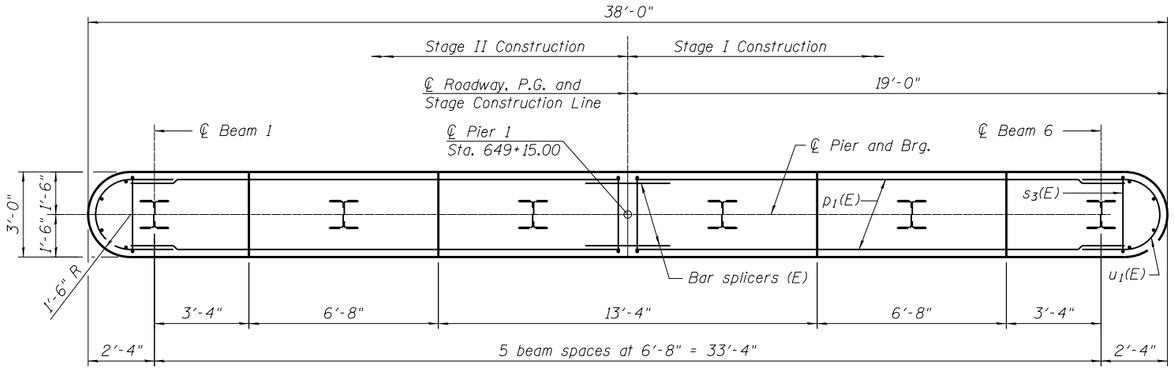
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	60
		CONTRACT NO. 68757		
	ILLINOIS FED. AID PROJECT			

M:\IL RT 9 OVER MUD CREEK\CIVIL\CADD Sheets\Structural\Final Plans\SHT\D468757-020-East_Abutment.dgn

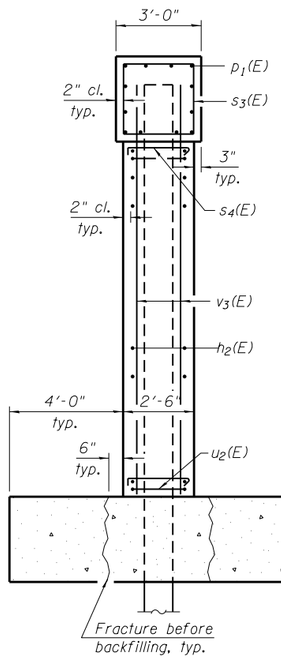


SECTION THRU WALL AT PILE LOCATION

Alternate placement of 90° hooked end of $s_4(E)$ tie bars between vertical layers of tie bars.



TOP PLAN

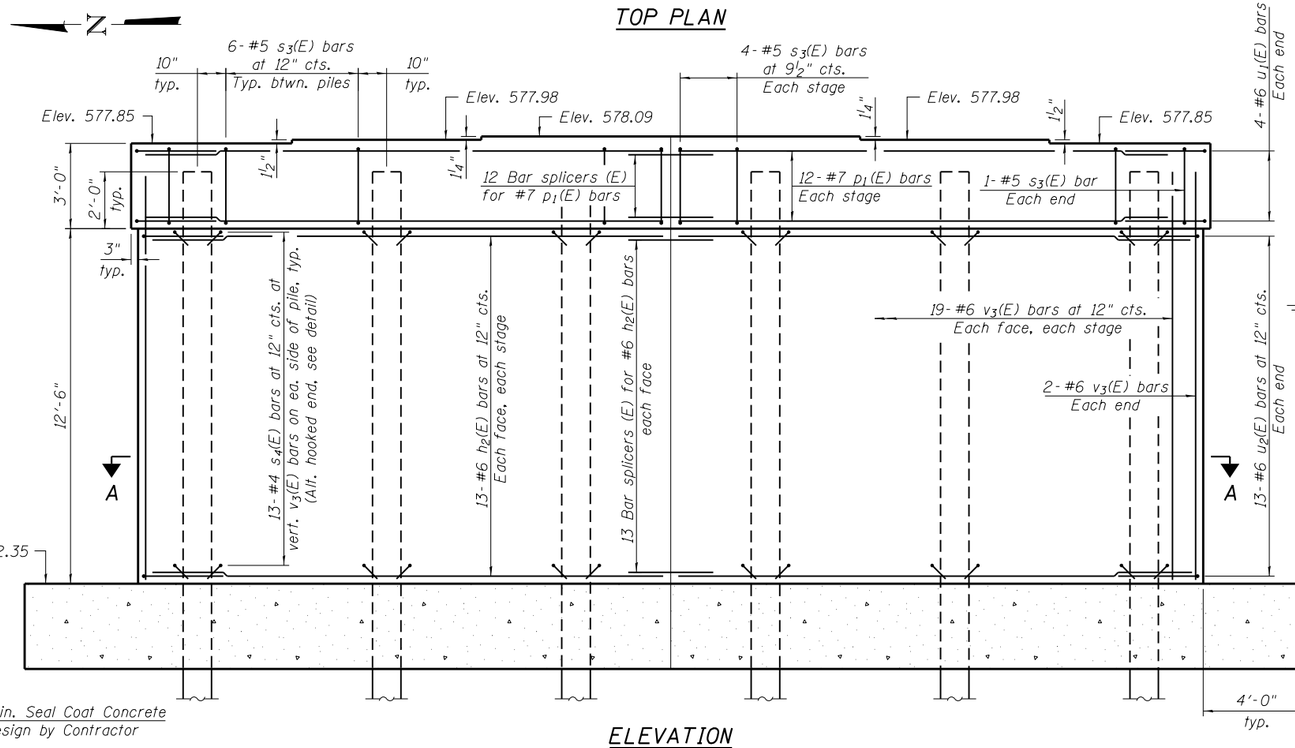


END VIEW

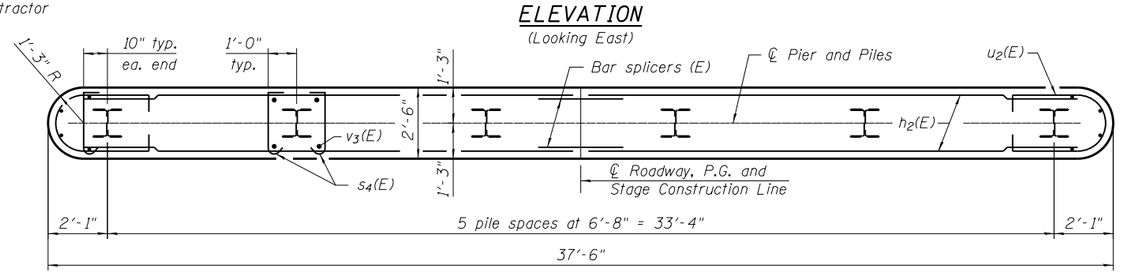
Contractor shall fracture seal coat (full depth) approximatley 6" from each side of stem wall prior to backfilling. Care shall be taken to avoid damage to new construction. Cost included with Cofferdam (Type 2) (Location 1).

PILE DATA

Type: HP 14x73
Nominal Required Bearing: 578 k
Factored Resistance Available: 289 k
Est. Length: 59'
No. Production Piles: 5
No. Test Piles: 1

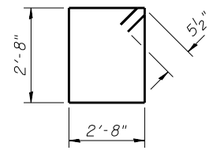


SECTION A-A

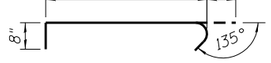


ELEVATION

(Looking East)



BAR $s_3(E)$



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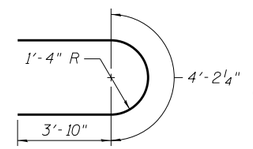
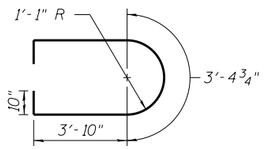
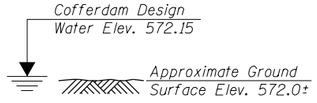


BAR $u_1(E)$



BAR $u_2(E)$



PIER 1 BILL OF MATERIAL

Bar	No.	Size	Length	Shape
$h_2(E)$	52	#6	17'-4"	
$p_1(E)$	24	#7	17'-4"	
$s_3(E)$	34	#5	11'-7"	
$s_4(E)$	156	#4	3'-3"	
$u_1(E)$	8	#6	11'-11"	
$u_2(E)$	26	#6	12'-9"	
$v_3(E)$	80	#6	14'-6"	
Cofferdam Excavation		Cu. Yd.	224	
Cofferdam (Type 2) (Location 1)		Each	1	
Concrete Structures		Cu. Yd.	55.6	
Seal Coat Concrete		Cu. Yd.	53.1	
Reinforcement Bars, Epoxy Coated		Pound	5,340	
Furnishing Steel Piles HP 14x73		Foot	295	
Driving Piles		Foot	295	
Test Pile Steel HP 14x73		Each	1	

Notes:
Pour steps monolithically with cap.
For pile details, see sheet S24 of S26.
Space reinforcement in cap to miss anchor bolts.
See sheet S17 of S26 for anchor bolt details.
For details of Bar Splicers, see sheet S23 of S26.
Seal coat thickness design is based on the Cofferdam Design Water Elevation (CDWE). Cofferdam design details and proposed changes in seal coat thickness shall be submitted to the Engineer for approval with the cofferdam design.

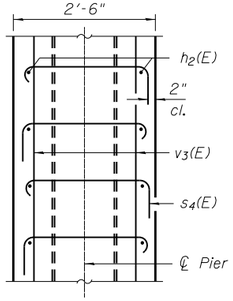
design firm no. 184001036
whks engineers + planners + land surveyors

USER NAME = $OPERATOR$	DESIGNED - BRD	REVISED	
FILE NAME = 090178-68757.dgn	CHECKED - TJZ	REVISED	
PLOT SCALE = 02 '1' / in.	DRAWN - DLH	REVISED	
PLOT DATE = 1/17/2013	CHECKED - BRD/TJZ	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

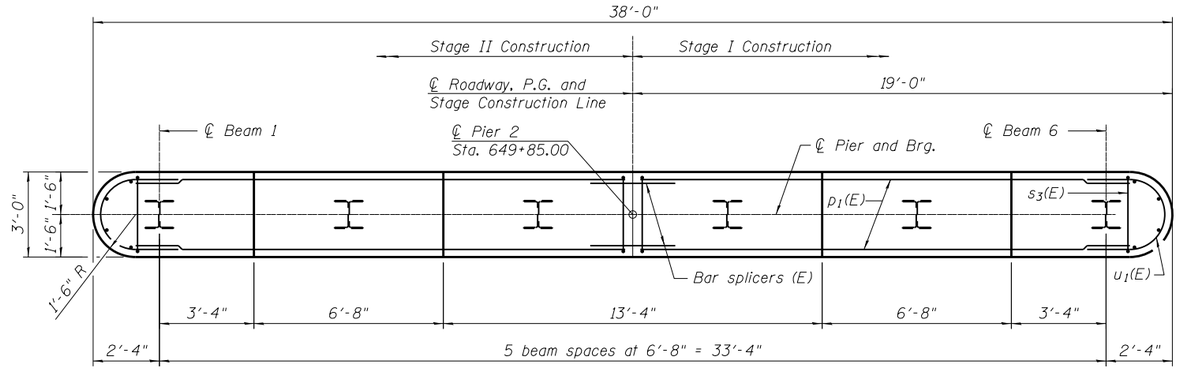
PIER 1
STRUCTURE NO. 090-0178
SHEET NO. S21 OF S26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	61
		CONTRACT NO. 68757		
	ILLINOIS	FED. AID PROJECT		

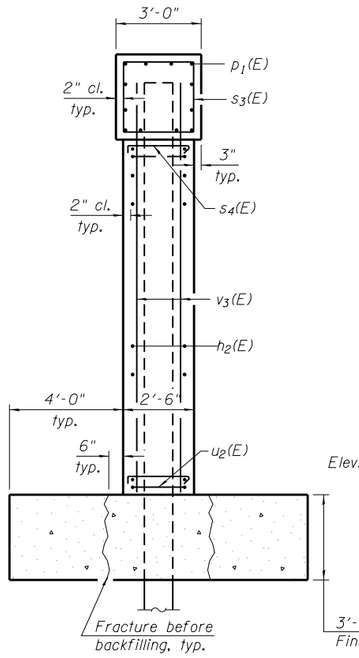


SECTION THRU WALL AT PILE LOCATION

Alternate placement of 90° hooked end of s_4(E) tie bars between vertical layers of tie bars.



TOP PLAN

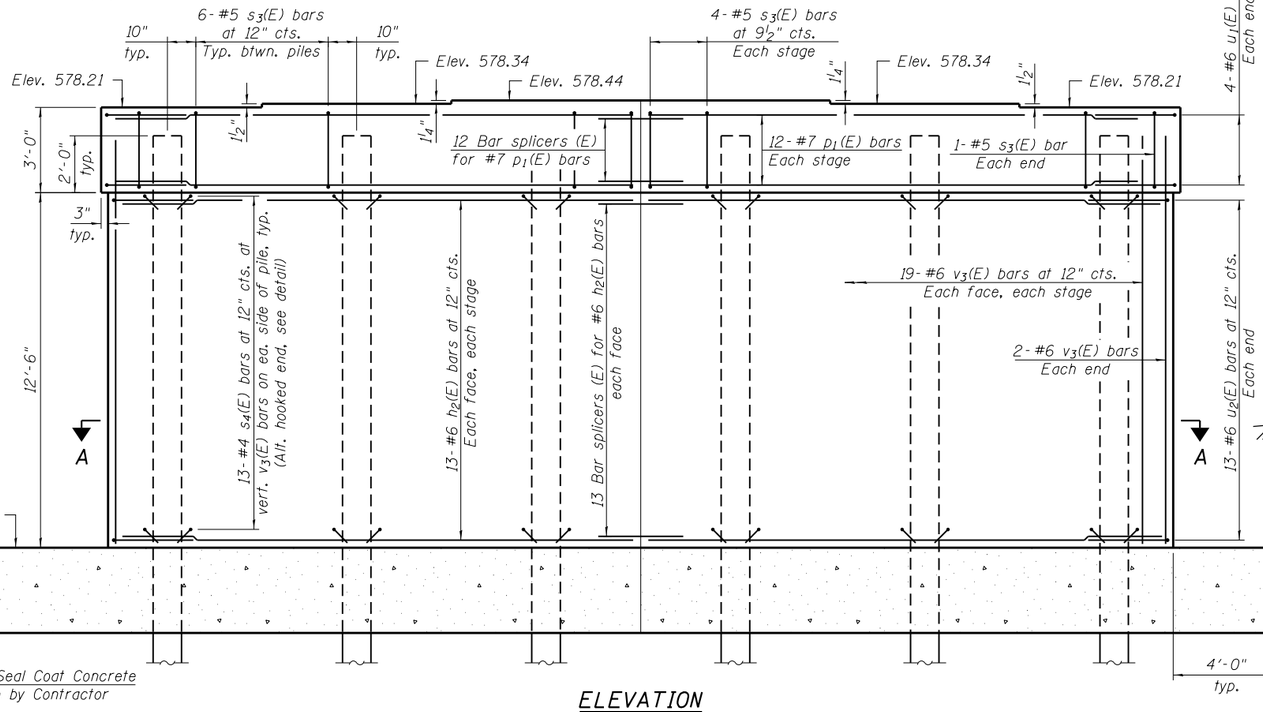


END VIEW

Contractor shall fracture seal coat (full depth) approximatley 6" from each side of stem wall prior to backfilling. Care shall be taken to avoid damage to new construction. Cost included with Cofferdam (Type 2) (Location 2).

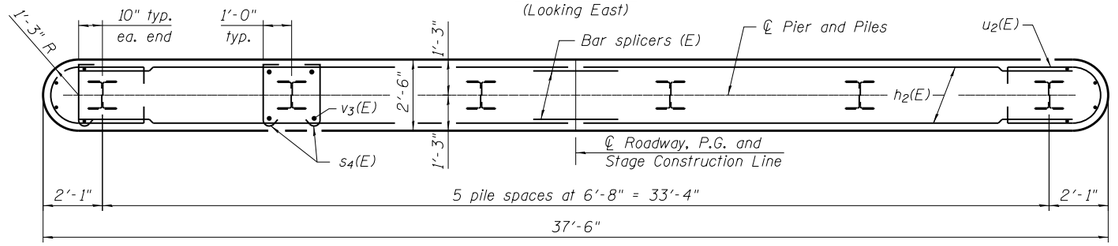
PILE DATA

Type: HP 14x73
Nominal Required Bearing: 578 k
Factored Resistance Available: 289 k
Est. Length: 63'
No. Production Piles: 5
No. Test Piles: 1

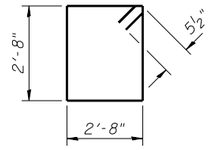


ELEVATION

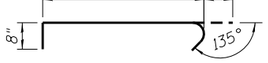
(Looking East)



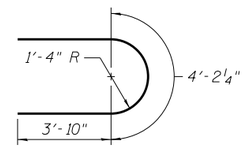
SECTION A-A



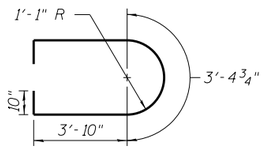
BAR s_3(E)



BAR s_4(E)



BAR u_1(E)



BAR u_2(E)

Cofferdam Design Water Elev. 572.15

Approximate Ground Surface Elev. 567.0±

PIER 2 BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h_2(E)	52	#6	17'-4"	
p_1(E)	24	#7	17'-4"	
s_3(E)	34	#5	11'-7"	
s_4(E)	156	#4	3'-3"	
u_1(E)	8	#6	11'-11"	
u_2(E)	26	#6	12'-9"	
v_3(E)	80	#6	14'-6"	
Cofferdam Excavation		Cu. Yd.	129	
Cofferdam (Type 2) (Location 2)		Each	1	
Concrete Structures		Cu. Yd.	55.6	
Seal Coat Concrete		Cu. Yd.	53.1	
Reinforcement Bars, Epoxy Coated		Pound	5,340	
Furnishing Steel Piles HP 14x73		Foot	315	
Driving Piles		Foot	315	
Test Pile Steel HP 14x73		Each	1	

Notes:

Pour steps monolithically with cap.
For pile details, see sheet S24 of S26.
Space reinforcement in cap to miss anchor bolts.
See sheet S17 of S26 for anchor bolt details.
For details of Bar Splicers, see sheet S23 of S26.
Seal coat thickness design is based on the Cofferdam Design Water Elevation (CDWE). Cofferdam design details and proposed changes in seal coat thickness shall be submitted to the Engineer for approval with the cofferdam design.

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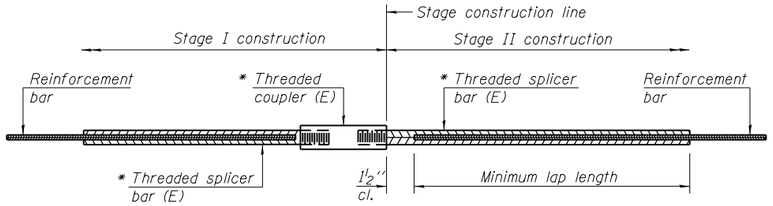
whks engineers + planners + land surveyors

USER NAME = $OPERATOR$	DESIGNED - BRD	REVISED	
FILE NAME = 090178-68757.dgn	CHECKED - TJZ	REVISED	
PLOT SCALE = 02 '1' / in.	DRAWN - DLH	REVISED	
PLOT DATE = 1/17/2013	CHECKED - BRD/TJZ	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 2
STRUCTURE NO. 090-0178
SHEET NO. S22 OF S26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	62
		CONTRACT NO. 68757		
	ILLINOIS FED. AID PROJECT			



STANDARD BAR SPLICER ASSEMBLY

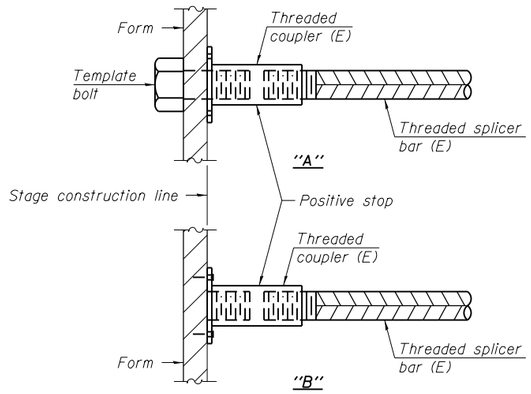
Minimum Lap Lengths					
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-3"
5	1'-9"	2'-5"	2'-7"	2'-11"	2'-10"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-4"
7	2'-9"	3'-10"	4'-2"	4'-8"	4'-6"
8	3'-8"	5'-1"	5'-5"	6'-2"	5'-10"
9	4'-7"	6'-5"	6'-10"	7'-9"	7'-5"

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

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

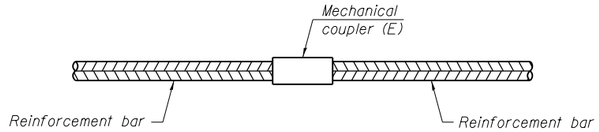
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
Deck	#5	575	3
Diaphragms	#6	10	3
Appr. Slab	#4	50	3
Appr. Slab	#5	92	3
Appr. Slab Ftg.	#5	80	3
Abutments	#7	22	3
Piers	#7	24	3
Piers	#6	52	3



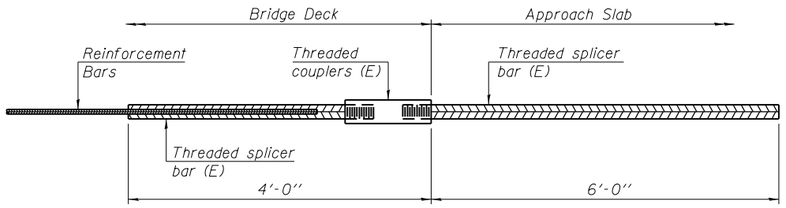
INSTALLATION AND SETTING METHODS

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



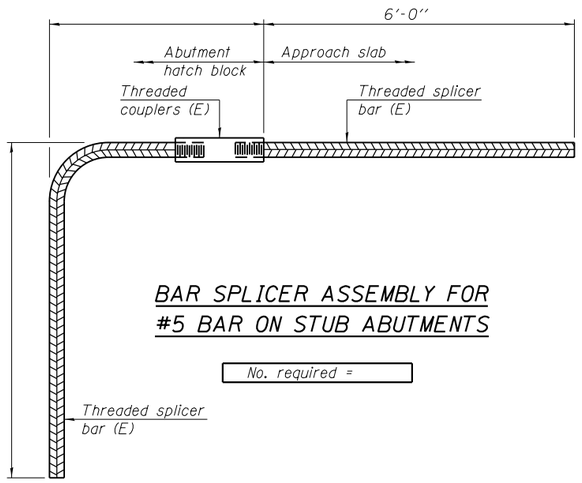
STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



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

No. required = 84



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required =

NOTES

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

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

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

See special provision for Mechanical Splicers.

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

BSD-1

7-1-10

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND DETAILS
STRUCTURE NO.090 - 0178
SHEET NO. S23 OF S26 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	63
		CONTRACT NO. 68757		
	ILLINOIS FED. AID PROJECT			

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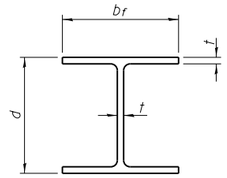
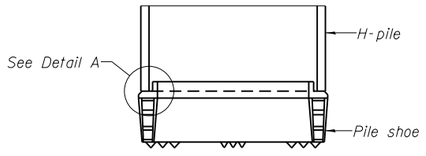


STEEL PILE TABLE

Designation	Depth d	Flange width b_f	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4''	14 7/8''	13/16''	30''
x102	14''	14 3/4''	11/16''	30''
x89	13 7/8''	14 3/4''	5/8''	30''
x73	13 5/8''	14 5/8''	1/2''	30''
HP 12x84	12 1/4''	12 1/4''	11/16''	24''
x74	12 1/8''	12 1/4''	5/8''	24''
x63	12''	12 1/8''	1/2''	24''
x53	11 3/4''	12''	7/16''	24''
HP 10x57	10''	10 1/4''	9/16''	24''
x42	9 3/4''	10 1/8''	7/16''	24''
HP 8x36	8''	8 1/8''	7/16''	18''



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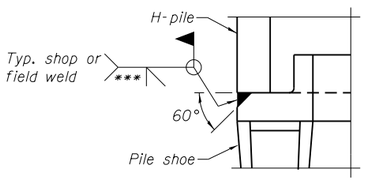
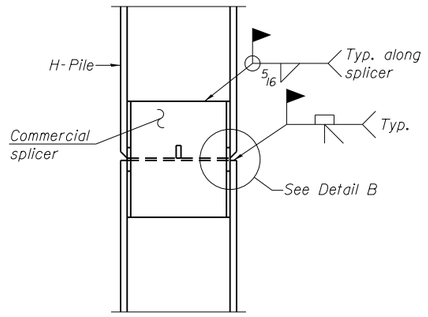


DETAIL A

H-PILE SHOE ATTACHMENT



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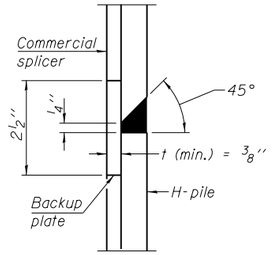
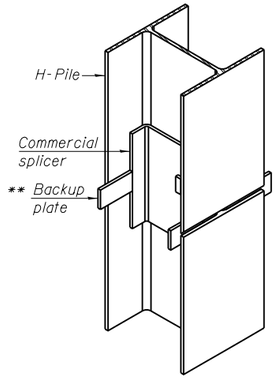
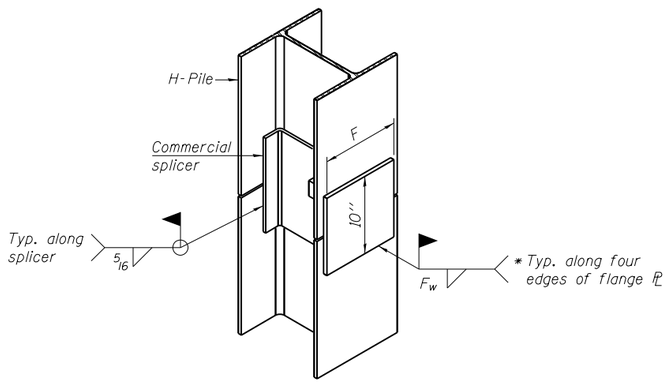


DETAIL "B"

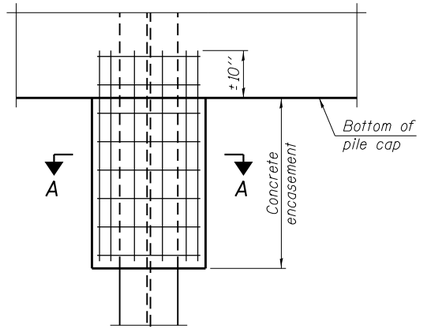


ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE



ISOMETRIC VIEW



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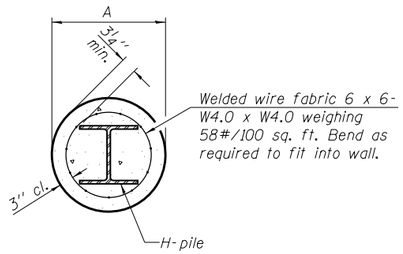
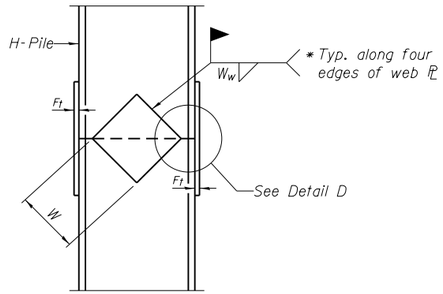


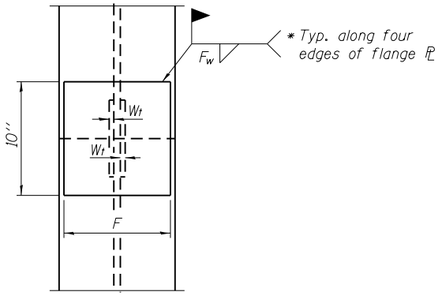
Note:
Forms for encasement may be omitted when soil conditions permit.

SECTION A-A

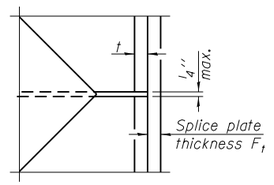
PILE ENCASEMENT



ELEVATION



END VIEW



DETAIL D

Designation	F	F_t	F_w	W	W_t	W_w
HP 14x117	12 1/2''	1''	7/8''	7 3/4''	5/8''	1/2''
x102	12 1/2''	7/8''	3/4''	7 3/4''	5/8''	1/2''
x89	12 1/2''	3/4''	11/16''	7 3/4''	5/8''	1/2''
x73	12 1/2''	5/8''	9/16''	7 3/4''	5/8''	1/2''
HP 12x84	10''	7/8''	11/16''	6 1/2''	5/8''	1/2''
x74	10''	7/8''	11/16''	6 1/2''	5/8''	1/2''
x63	10''	5/8''	1/2''	6 1/2''	1/2''	3/8''
x53	10''	5/8''	1/2''	6 1/2''	1/2''	3/8''
HP 10x57	8''	3/4''	9/16''	5 1/4''	1/2''	3/8''
x42	8''	5/8''	9/16''	5 1/4''	1/2''	3/8''
HP 8x36	7''	5/8''	7/16''	4 1/4''	1/2''	3/8''

WELDED PLATE FIELD SPLICE

WELDED COMMERCIAL SPLICE ALTERNATE

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

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

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

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

F-HP 1-27-12

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CHICAGO, IL 60654
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USER NAME = cvm	DESIGNED - OY	REVISED -	
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PLOT DATE = 1/21/2013	CHECKED - JB	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PILE DETAILS
STRUCTURE NO. 090 - 0178
SHEET NO. S24 OF S26 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	64
		CONTRACT NO. 68757		
	ILLINOIS FED. AID PROJECT			

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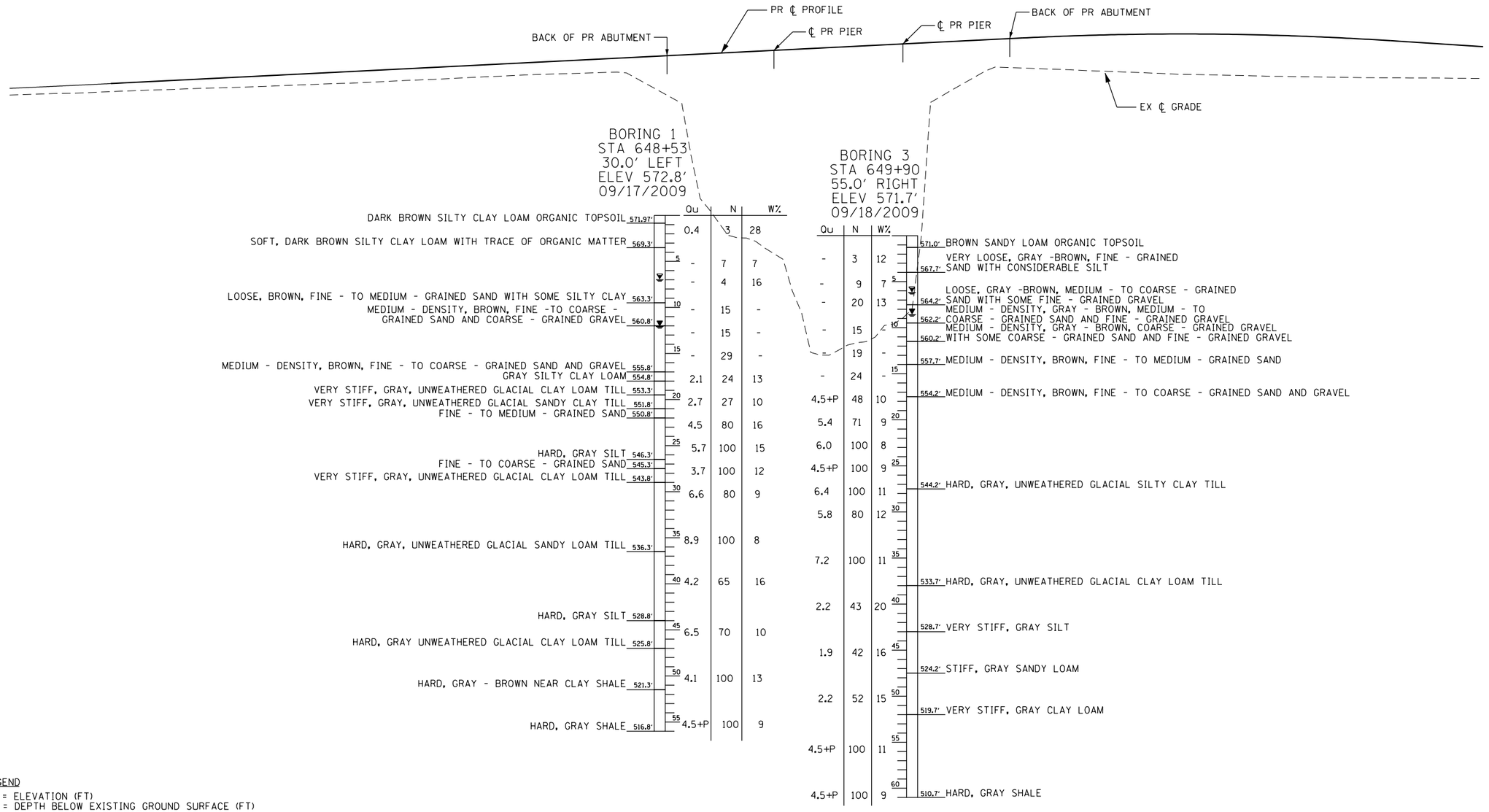

LEGEND

EL = ELEVATION (FT)
D = DEPTH BELOW EXISTING GROUND SURFACE (FT)
N = SPT N-VALUE (AASHTO T206)
Qu = UNCONFINED COMPRESSIVE STRENGTH IN TONS PER SQ. FT. (TSF)
w% = MOISTURE CONTENT PERCENTAGE

▼ = GROUNDWATER LEVEL FIRST ENCOUNTER

▼ = GROUNDWATER LEVEL UPON COMPLETION

▼ = GROUNDWATER LEVEL AFTER 24 HOURS

1" = 30' (H)
1" = 3' (V)

M:\IL RT 9 OVER MUD CREEK\CIVIL\CADD Sheets\Structural\Final Plans\SHT\D468757-025-soil borings.dgn

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USER NAME = cvm	DESIGNED - OY	REVISED -
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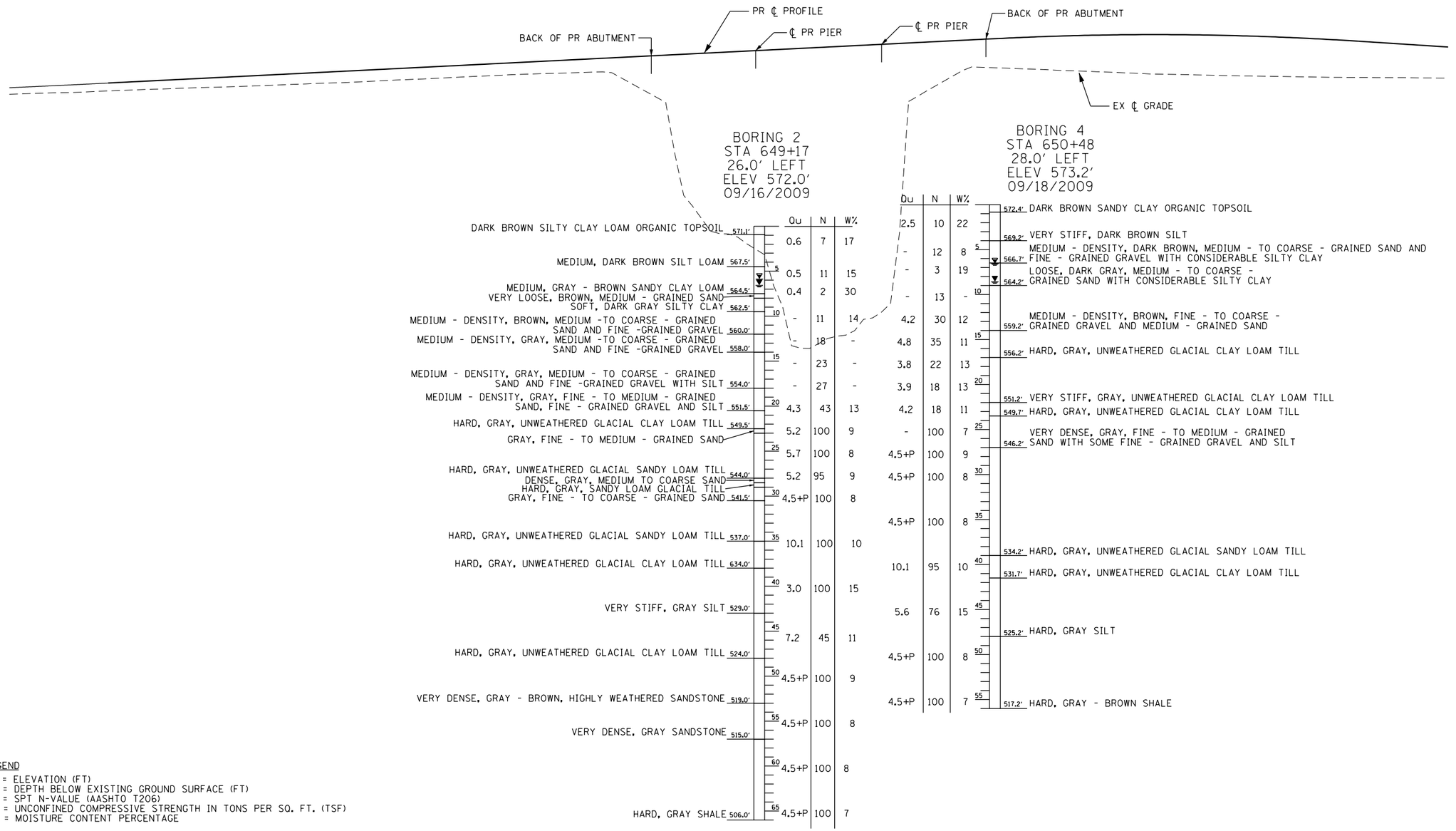
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORINGS
STRUCTURE NO. 090 – 0178
SHEET NO. S25 OF S26 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	65
		CONTRACT NO. 68757		
	ILLINOIS FED. AID PROJECT			



LEGEND

EL = ELEVATION (FT)
D = DEPTH BELOW EXISTING GROUND SURFACE (FT)
N = SPT N-VALUE (AASHTO T206)
Qu = UNCONFINED COMPRESSIVE STRENGTH IN TONS PER SQ. FT. (TSF)
w% = MOISTURE CONTENT PERCENTAGE

▼ = GROUNDWATER LEVEL FIRST ENCOUNTER

▽ = GROUNDWATER LEVEL UPON COMPLETION

▼ = GROUNDWATER LEVEL AFTER 24 HOURS

1" = 30' (H)
1" = 3' (V)

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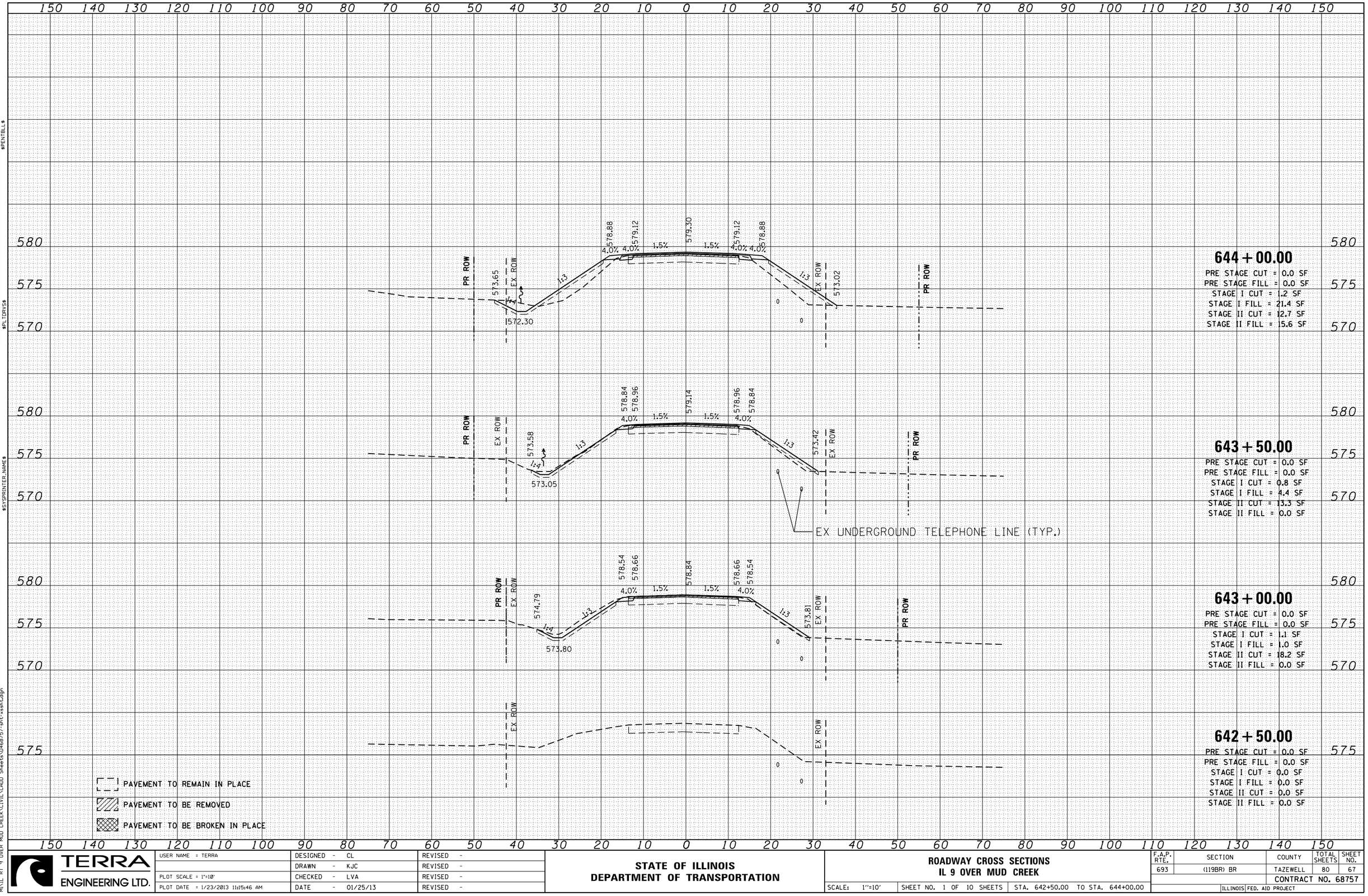
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORINGS
STRUCTURE NO. 090 – 0178
SHEET NO. S26 OF S26 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	66
		CONTRACT NO. 68757		
	ILLINOIS	FED. AID PROJECT		



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

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

$SYSPRINTER_NAME$
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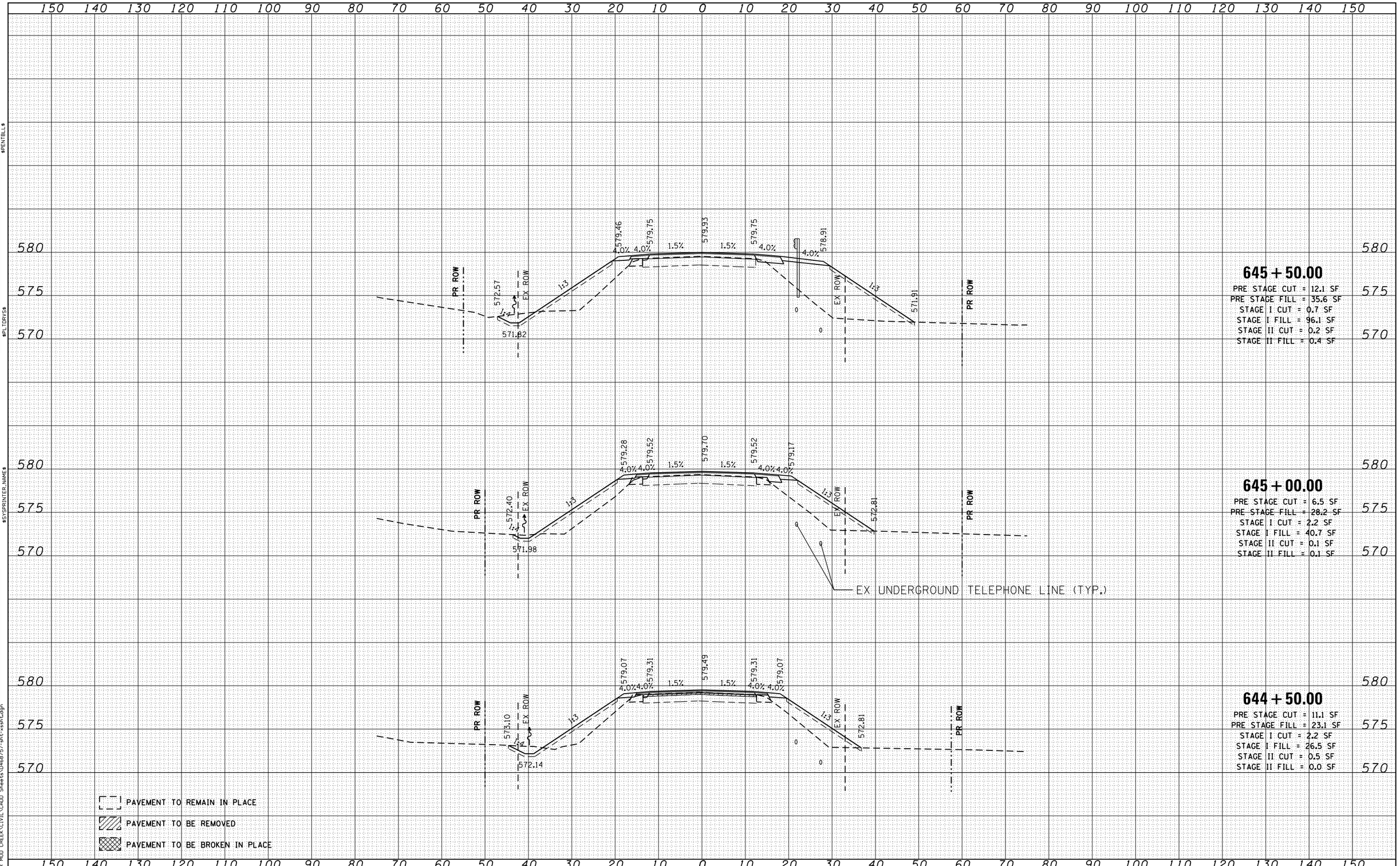
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY CROSS SECTIONS
IL 9 OVER MUD CREEK

SCALE: 1"=10' | SHEET NO. 1 OF 10 SHEETS | STA. 642+50.00 TO STA. 644+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	67
		CONTRACT NO. 68757		
	ILLINOIS FED. AID PROJECT			



FINAL SURVEY — NOTE BOOK — NO. — $PLTDRVS$

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AREAS		
AREAS CHECKED		

$PENTBLL$

ORIGINAL SURVEY — NOTE BOOK — NO. — $SYSPRINTER_NAME$

	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

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	DRAWN - KJC	REVISED -
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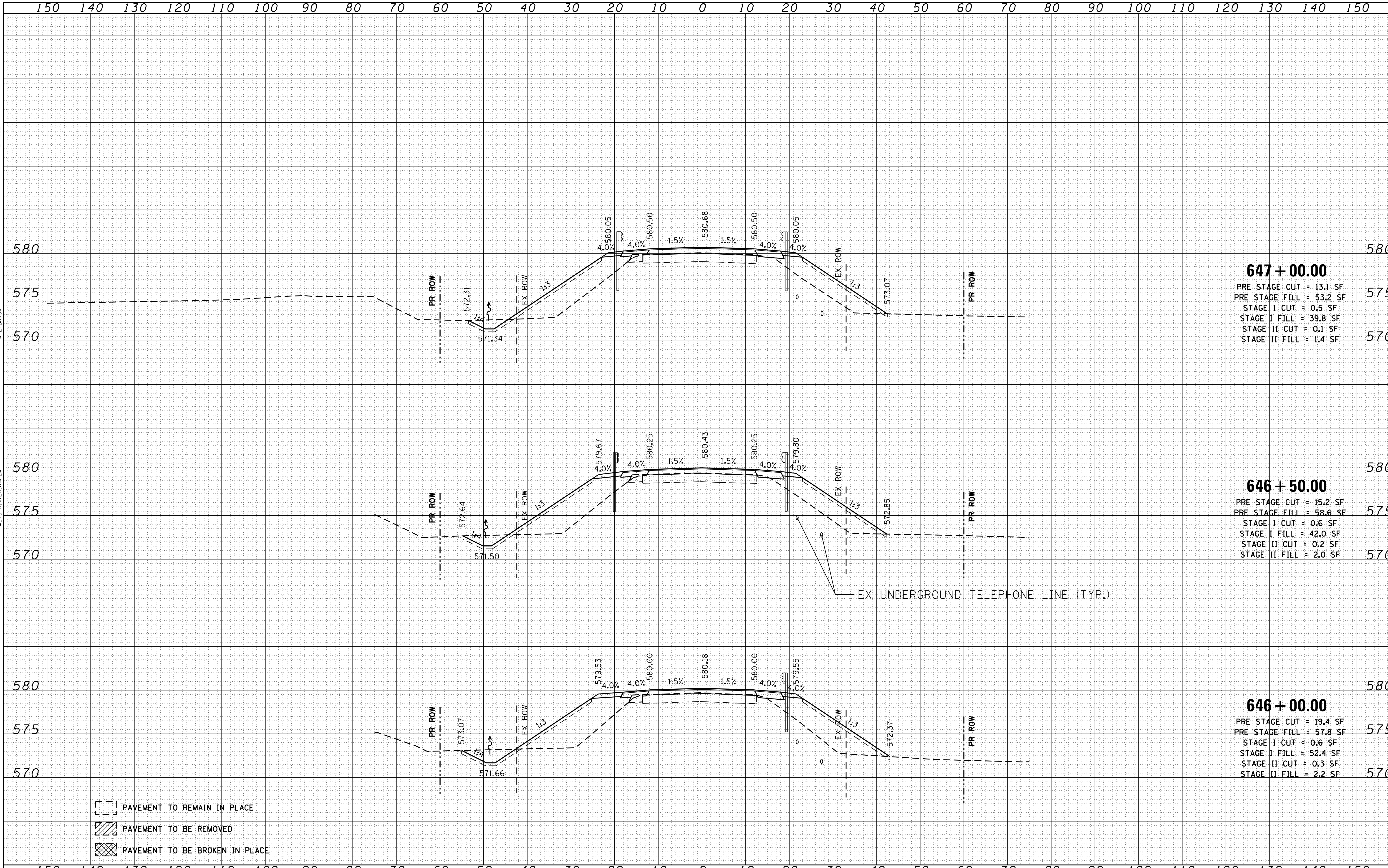
PLOT DATE = 1/23/2013 11:16:30 AM	DATE - 01/25/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY CROSS SECTIONS
IL 9 OVER MUD CREEK

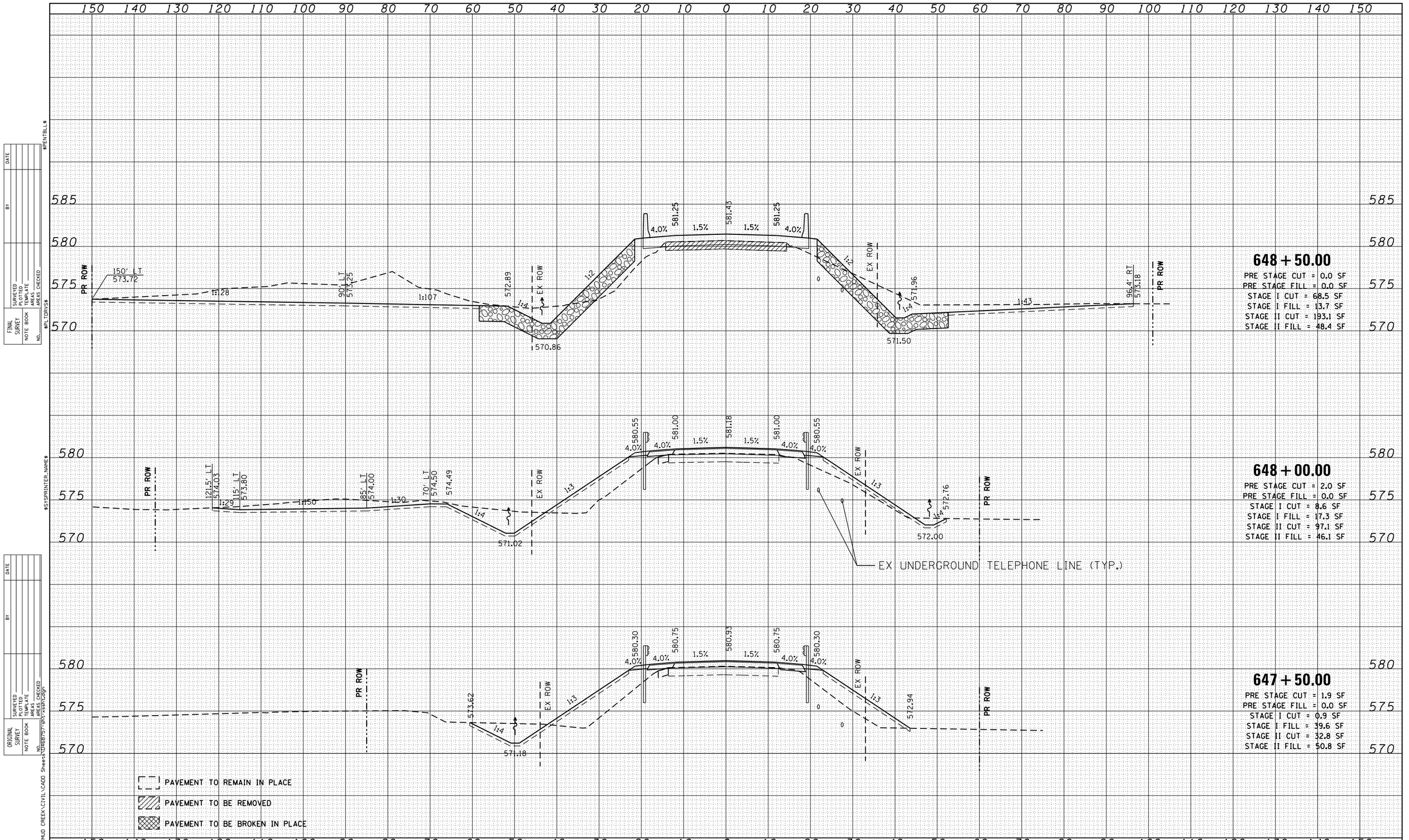
SCALE: 1"=10' | SHEET NO. 2 OF 10 SHEETS | STA. 644+50.00 TO STA. 645+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	68
		CONTRACT NO. 68757		
	ILLINOIS FED. AID PROJECT			



TERRA ENGINEERING LTD.	USER NAME = TERRA	DESIGNED - CL	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ROADWAY CROSS SECTIONS IL 9 OVER MUD CREEK
		DRAWN - KJC	REVISED -		
	PLOT SCALE = 1"=10'	CHECKED - LVA	REVISED -		
	PLOT DATE = 1/23/2013 11:17:02 AM	DATE - 01/25/13	REVISED -		SCALE: 1"=10' SHEET NO. 3 OF 10 SHEETS STA. 646+00.00 TO STA. 647+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	69
		CONTRACT NO. 68757		
		ILLINOIS FED. AID PROJECT		



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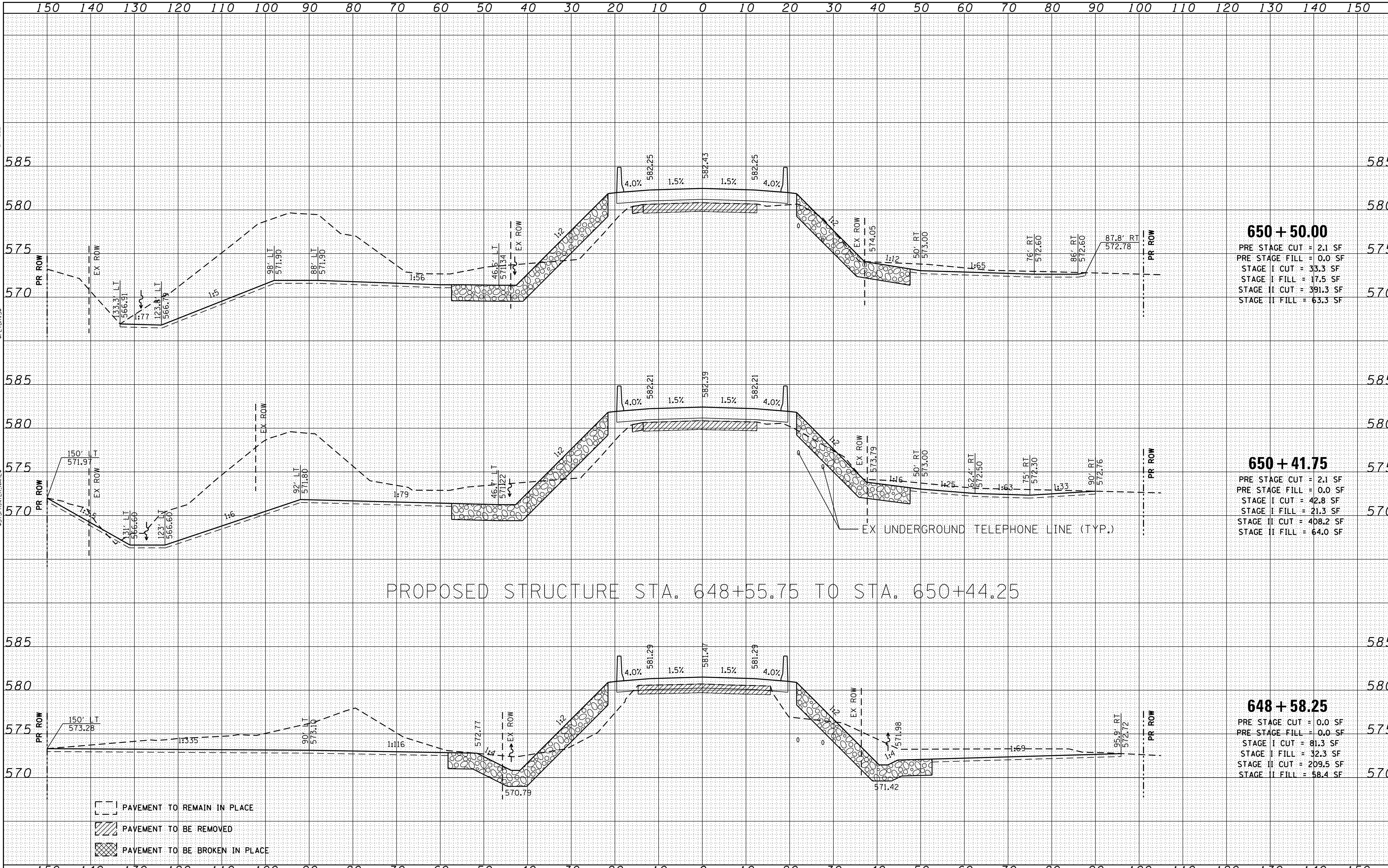
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY CROSS SECTIONS
IL 9 OVER MUD CREEK

SCALE: 1"=10' | SHEET NO. 4 OF 10 SHEETS | STA. 647+50.00 TO STA. 648+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	70
		CONTRACT NO. 68757		
	ILLINOIS FED. AID PROJECT			



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY CROSS SECTIONS
IL 9 OVER MUD CREEK

SCALE: 1"=10' | SHEET NO. 5 OF 10 SHEETS | STA. 648+58.25 TO STA. 650+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	71
		CONTRACT NO. 68757		
		ILLINOIS FED. AID PROJECT		

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

BY	DATE

$PLTDRVS$

$PENTBLL$

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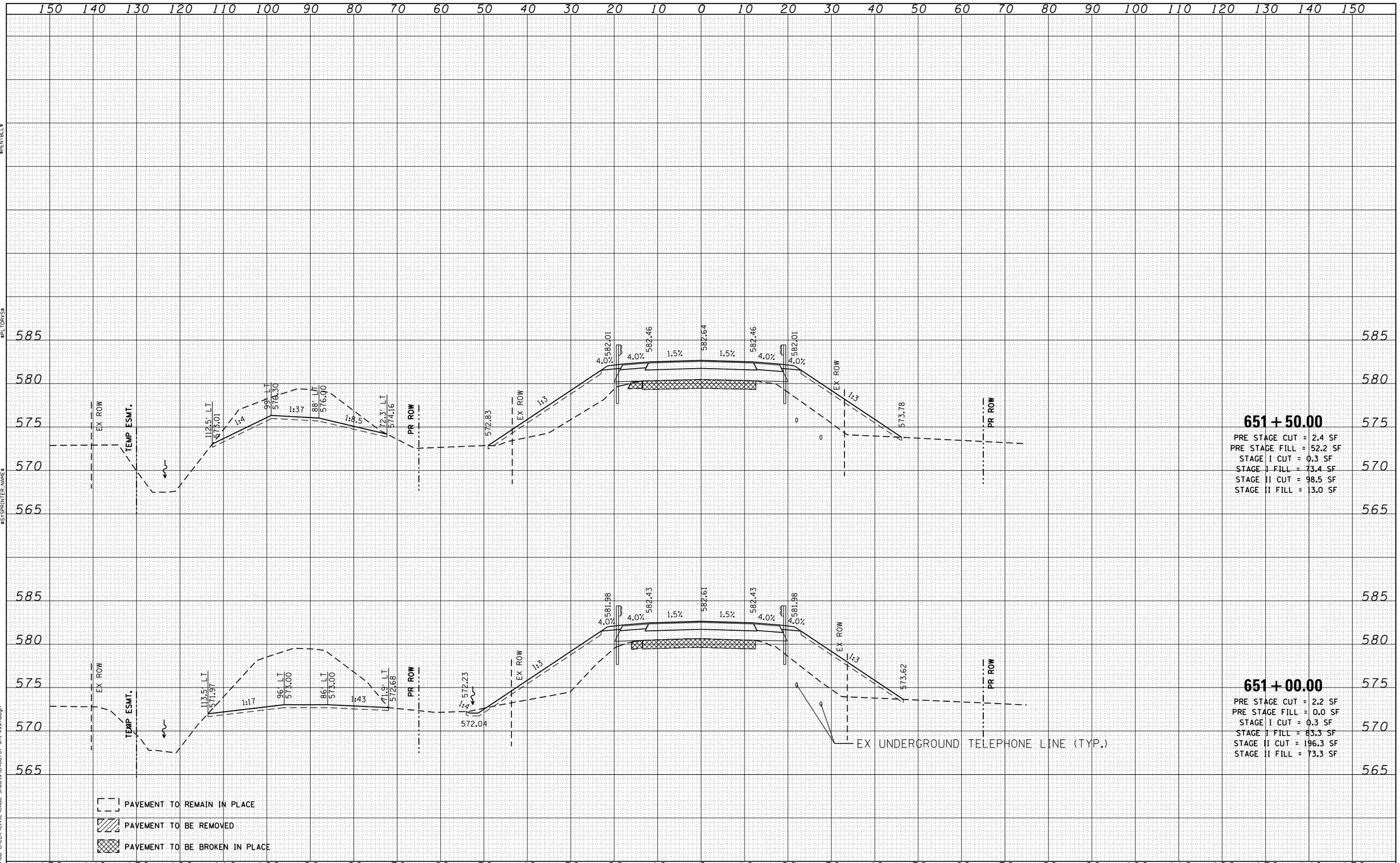

ORIGINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

TERRA ENGINEERING LTD.

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PLOT SCALE = 1'=10'	CHECKED - LVA	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY CROSS SECTIONS
IL 9 OVER MUD CREEK

SCALE: 1"=10' | SHEET NO. 6 OF 10 SHEETS | STA. 651+00.00 TO STA. 651+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	72
		CONTRACT NO. 68757		
	ILLINOIS FED. AID PROJECT			

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

585 580 575 570

EX ROW — PR ROW — EX ROW — EX ROW — PR ROW

4.0% 4.0% 1.5% 1.5% 4.0% 4.0% 1:3 1:3

581.32 581.77 581.95 581.78 581.30 573.31 573.49

0 0

653+00.00

PRE STAGE CUT = 2.5 SF
PRE STAGE FILL = 62.5 SF
STAGE I CUT = 0.3 SF
STAGE I FILL = 93.9 SF
STAGE II CUT = 0.0 SF
STAGE II FILL = 9.1 SF

EX ROW — PR ROW — EX ROW — EX ROW — PR ROW

4.0% 4.0% 1.5% 1.5% 4.0% 4.0% 1:3 1:3

581.65 582.10 582.28 582.10 581.52 570.82 573.60

0 0

EX UNDERGROUND TELEPHONE LINE (TYP.)

652+50.00

PRE STAGE CUT = 3.1 SF
PRE STAGE FILL = 66.7 SF
STAGE I CUT = 0.3 SF
STAGE I FILL = 96.0 SF
STAGE II CUT = 0.0 SF
STAGE II FILL = 11.7 SF

EX ROW — TEMP ESMT. — PR ROW — EX ROW — EX ROW — PR ROW

4.0% 4.0% 1.5% 1.5% 4.0% 4.0% 1:3 1:3

581.90 582.35 582.53 582.35 581.90 571.88 573.84

0 0

652+00.00

PRE STAGE CUT = 2.3 SF
PRE STAGE FILL = 66.0 SF
STAGE I CUT = 0.3 SF
STAGE I FILL = 73.9 SF
STAGE II CUT = 0.0 SF
STAGE II FILL = 13.2 SF

PAVEMENT TO REMAIN IN PLACE
PAVEMENT TO BE REMOVED
PAVEMENT TO BE BROKEN IN PLACE

565

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

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

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

$PENTBLL$ $PLTDRVS$ $SYSPRINTER_NAME$ $PLTSTMP$

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY CROSS SECTIONS
IL 9 OVER MUD CREEK

SCALE: 1"=10' | SHEET NO. 7 OF 10 SHEETS | STA. 652+00.00 TO STA. 653+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	73
		CONTRACT NO. 68757		
	ILLINOIS FED. AID PROJECT			

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

580 575 570 585

EX ROW — PR ROW — EX ROW — 1:3 — 4.0% — 4.0% — 1.5% — 1.5% — 4.0% — 4.0% — 1:3 — EX ROW — PR ROW

572.64 — 580.56 — 580.80 — 580.98 — 580.80 — 580.56 — 572.58

654 + 50.00

PRE STAGE CUT = 2.1 SF
PRE STAGE FILL = 51.8 SF
STAGE I CUT = 2.2 SF
STAGE I FILL = 49.5 SF
STAGE II CUT = 0.0 SF
STAGE II FILL = 1.2 SF

573.21 — 580.78 — 581.12 — 581.30 — 581.12 — 580.88 — 572.82

654 + 00.00

PRE STAGE CUT = 2.2 SF
PRE STAGE FILL = 51.1 SF
STAGE I CUT = 0.3 SF
STAGE I FILL = 50.7 SF
STAGE II CUT = 0.0 SF
STAGE II FILL = 4.1 SF

EX UNDERGROUND TELEPHONE LINE (TYP.)

572.73 — 580.61 — 581.45 — 581.63 — 581.45 — 581.16 — 573.20

653 + 50.00

PRE STAGE CUT = 2.5 SF
PRE STAGE FILL = 83.1 SF
STAGE I CUT = 0.3 SF
STAGE I FILL = 59.2 SF
STAGE II CUT = 0.0 SF
STAGE II FILL = 6.7 SF

PAVEMENT TO REMAIN IN PLACE
PAVEMENT TO BE REMOVED
PAVEMENT TO BE BROKEN IN PLACE

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

$PENTBLL$

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

$PLTDRVS$

$SYSPRINTER_NAME$

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USER NAME = TERRA	DESIGNED - CL	REVISED -
	DRAWN - KJC	REVISED -
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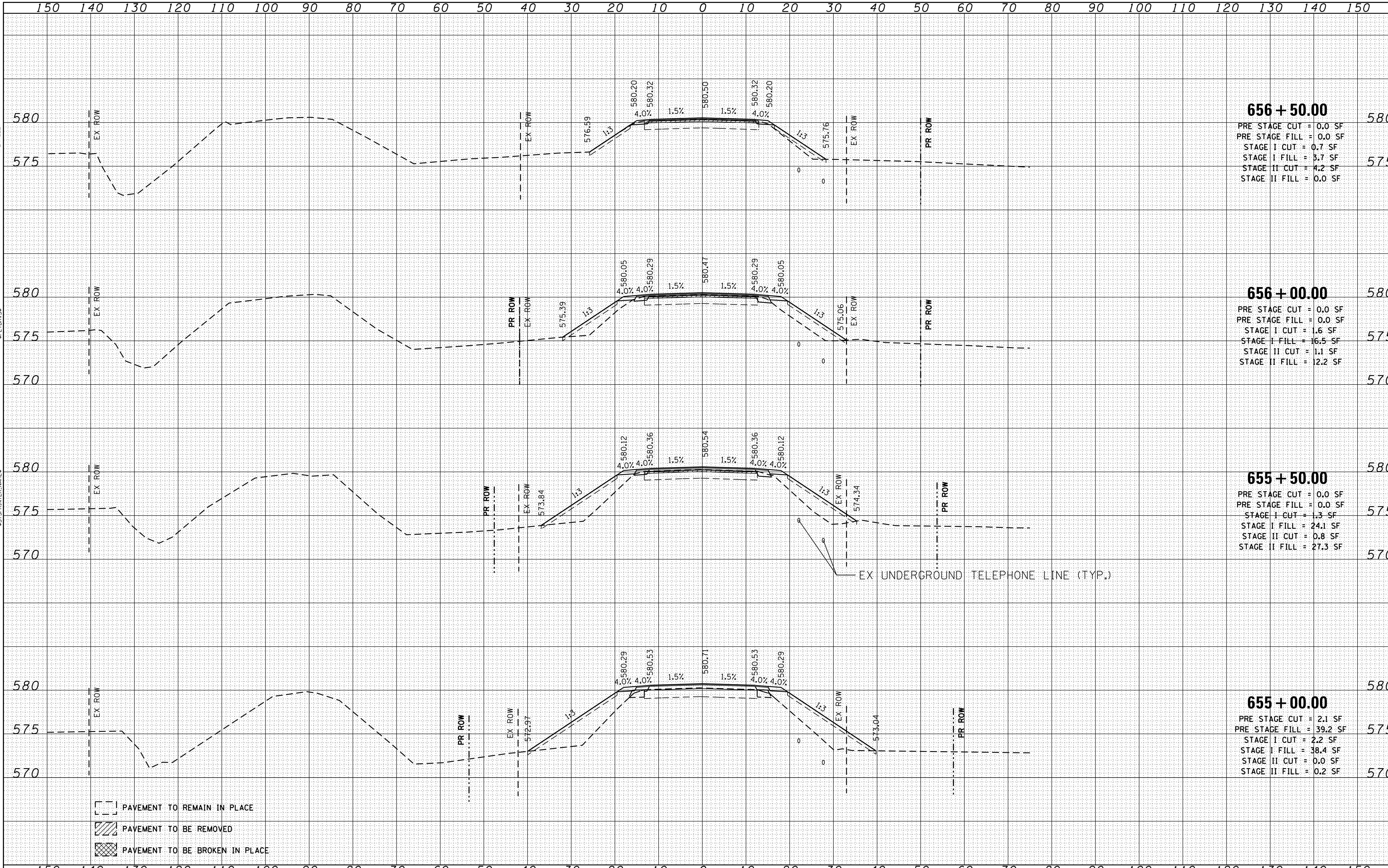
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY CROSS SECTIONS
IL 9 OVER MUD CREEK

SCALE: 1"=10' | SHEET NO. 8 OF 10 SHEETS | STA. 653+50.00 TO STA. 654+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	74
		CONTRACT NO. 68757		
	ILLINOIS FED. AID PROJECT			



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY CROSS SECTIONS
IL 9 OVER MUD CREEK

SCALE: 1"=10' | SHEET NO. 9 OF 10 SHEETS | STA. 655+00.00 TO STA. 656+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	75

CONTRACT NO. 68757

ILLINOIS FED. AID PROJECT

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

BY	DATE

$PENTBL$

$PLTDRVS$

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

580

575

EX ROW

EX ROW

0 0

657+50.00

PRE STAGE CUT = 0.0 SF
PRE STAGE FILL = 0.0 SF
STAGE I CUT = 0.0 SF
STAGE I FILL = 0.0 SF
STAGE II CUT = 0.0 SF
STAGE II FILL = 0.0 SF

580

575

$SYSPRINTER_NAME$

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

BY	DATE

580

575

EX ROW

EX ROW

578.99

1:4

580.18

580.30

4.0%

1.5%

580.48

1.5%

580.30

4.0%

580.18

1:3

576.33

EX ROW

PR ROW

EX UNDERGROUND TELEPHONE LINE (TYP.)

657+00.00

PRE STAGE CUT = 0.0 SF
PRE STAGE FILL = 0.0 SF
STAGE I CUT = 1.6 SF
STAGE I FILL = 0.8 SF
STAGE II CUT = 2.6 SF
STAGE II FILL = 0.0 SF

580

575

PAVEMENT TO REMAIN IN PLACE

PAVEMENT TO BE REMOVED

PAVEMENT TO BE BROKEN IN PLACE

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

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TERRA ENGINEERING LTD.

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	DRAWN - KJC	REVISED -	
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY CROSS SECTIONS
IL 9 OVER MUD CREEK

SCALE: 1"=10' | SHEET NO. 10 OF 10 SHEETS | STA. 657+00.00 TO STA. 657+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	76
		CONTRACT NO. 68757		
	ILLINOIS	FED. AID PROJECT		

MATCHLINE IL 9 XS STA 648+58.25

MATCHLINE IL 9 XS STA 650+41.75

EX UNDERGROUND TELEPHONE LINE
INTERSECTS CREEK ℄ @ STA 39+77.90

EX UNDERGROUND TELEPHONE LINE
INTERSECTS CREEK ℄ @ STA 39+72.24

RIPRAP, CLASS A4, 22" (TYP.)

39 + 75.00
CUT = 397 SQ FT
FILL = 3 SQ FT

MATCHLINE IL 9 XS STA 648+58.25

MATCHLINE IL 9 XS STA 650+41.75

39 + 50.00
CUT = 368 SQ FT
FILL = 0 SQ FT

MATCHLINE IL 9 XS STA 648+58.25

39 + 25.00
CUT = 211 SQ FT
FILL = 0 SQ FT

39 + 00.00
CUT = 48 SQ FT
FILL = 3 SQ FT

38 + 81.90

FINISH GRADE

BOTTOM OF 4" TOP SOIL

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

575 570 565

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

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

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TERRA ENGINEERING LTD.

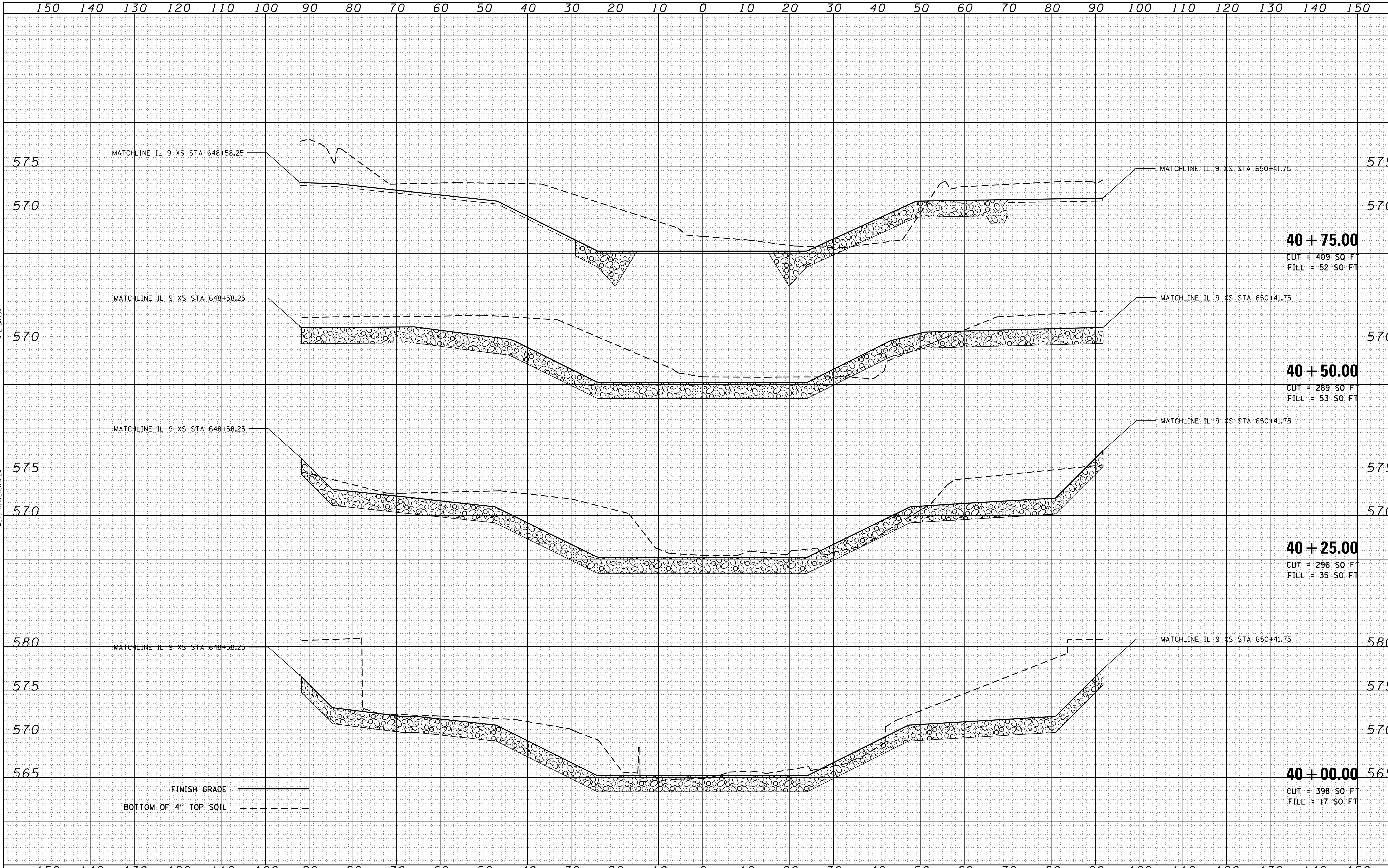
USER NAME = TERRA	DESIGNED - CL	REVISED -
	DRAWN - KJC	REVISED -
PLOT SCALE = 1'=10'	CHECKED - LVA	REVISED -
PLOT DATE = 1/23/2013 11:22:11 AM	DATE - 01/25/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MUD CREEK CROSS SECTIONS
IL 9 OVER MUD CREEK

SCALE: 1"=10' | SHEET NO. 1 OF 4 SHEETS | STA. 38+81.90 TO STA. 39+75.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	77
		CONTRACT NO. 68757		
	ILLINOIS FED. AID PROJECT			



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

$PENTBLL$ $PLTDRV$ $SYSPRINTER_NAME$

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TERRA ENGINEERING LTD.

USER NAME = TERRA	DESIGNED - CL	REVISED -	
	DRAWN - KJC	REVISED -	
PLOT SCALE = 1"=10'	CHECKED - LVA	REVISED -	
PLOT DATE = 1/23/2013 11:22:39 AM	DATE - 01/25/13	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MUD CREEK CROSS SECTIONS
IL 9 OVER MUD CREEK

SCALE: 1"=10' | SHEET NO. 2 OF 4 SHEETS | STA. 40+00.00 TO STA. 40+75.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	78

CONTRACT NO. 68757

ILLINOIS FED. AID PROJECT

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

570 565

42 + 00.00
CUT = 128 SQ FT
FILL = 0 SQ FT

570 565

41 + 75.00
CUT = 134 SQ FT
FILL = 4 SQ FT

570 565

MATCHLINE IL 9 XS STA 650+41.75

41 + 50.00
CUT = 230 SQ FT
FILL = 29 SQ FT

575 570 565

MATCHLINE IL 9 XS STA 650+41.75

41 + 25.00
CUT = 493 SQ FT
FILL = 0 SQ FT

575 570 565

MATCHLINE IL 9 XS STA 648+58.25

TYPICAL (TO SOUTH), EXCEPT AT KEY

MATCHLINE IL 9 XS STA 650+41.75

FINISH GRADE

BOTTOM OF 4" TOP SOIL

STONE KEY

41 + 00.00
CUT = 484 SQ FT
FILL = 26 SQ FT

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

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

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

$PENTBLL$
$PLTDRVS$
$SYSPRINTER_NAME$
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TERRA ENGINEERING LTD.

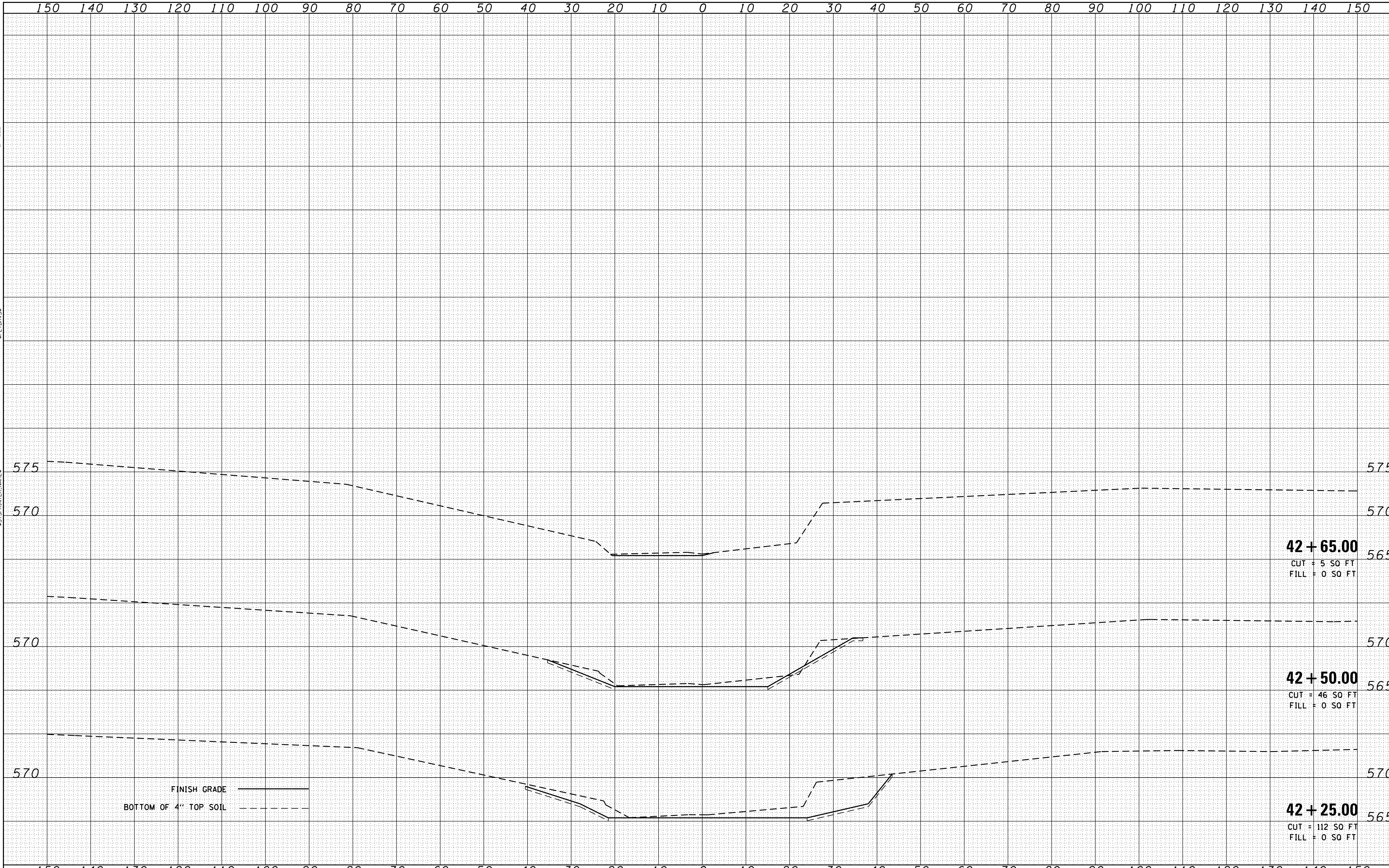
USER NAME = TERRA	DESIGNED - CL	REVISED -
	DRAWN - KJC	REVISED -
PLOT SCALE = 1'=10'	CHECKED - LVA	REVISED -
PLOT DATE = 1/23/2013 11:23:35 AM	DATE - 01/25/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MUD CREEK CROSS SECTIONS
IL 9 OVER MUD CREEK

SCALE: 1"=10' | SHEET NO. 3 OF 4 SHEETS | STA. 41+00.00 TO STA. 42+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	79
		CONTRACT NO. 68757		
	ILLINOIS FED. AID PROJECT			



TERRA ENGINEERING LTD.	USER NAME = TERRA	DESIGNED - CL	REVISED -
		DRAWN - KJC	REVISED -
	PLOT SCALE = 1"=10'	CHECKED - LVA	REVISED -
	PLOT DATE = 1/23/2013 11:24:11 AM	DATE - 01/25/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MUD CREEK CROSS SECTIONS
IL 9 OVER MUD CREEK

SCALE: 1"=10' | SHEET NO. 4 OF 4 SHEETS | STA. 42+25.00 TO STA. 42+65.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119BR) BR	TAZEWELL	80	80

CONTRACT NO. 68757

ILLINOIS | FED. AID PROJECT