

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

\* 38 + 1 = 39 TOTAL SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	(119BR-1)B-1	MOULTRIE	38	1
		ILLINOIS	CONTRACT NO. 74436	

FOR INDEX OF SHEETS, SEE SHEET NO. 2

# PROPOSED HIGHWAY PLANS

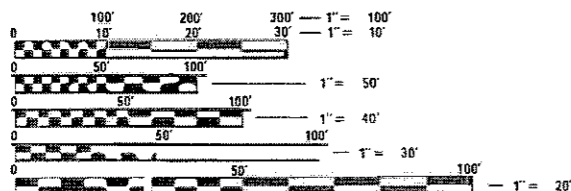
F.A.P. ROUTE 749 (IL. RTE 133)  
SECTION (119BR-1)B-1  
PROJECT STP-LPRY(820)  
BRIDGE REPLACEMENT  
MOULTRIE COUNTY

ADT = 1850 VEH PER DAY

F.A.P. 749 SECTION (119BR-1)B-1  
BEGINS STATION 138 + 24.00

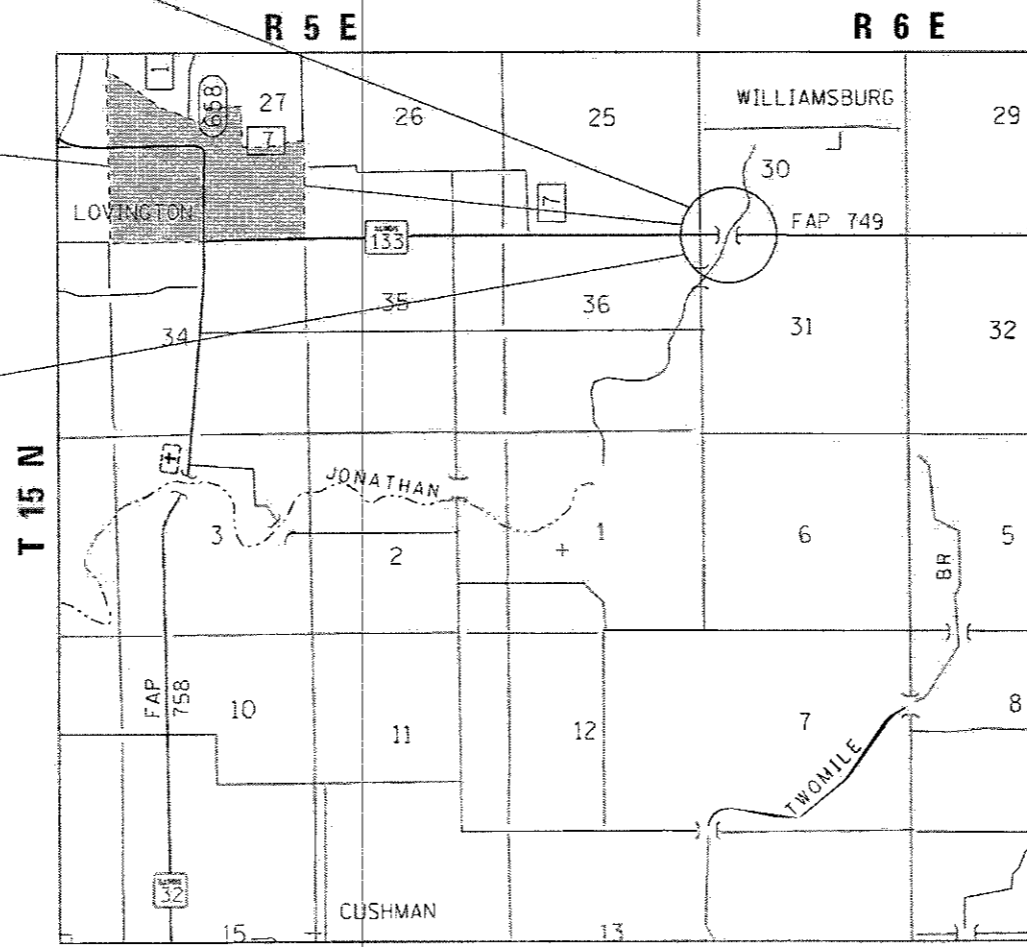
STRUCTURE REPLACEMENT  
EXISTING S.N. 070-0027 AT STA. 138 + 54.22  
18' - 8 1/4" SIMPLE SPAN SLAB ON CLOSED ABUTMENTS  
PROPOSED S.N. 070-2020 AT STA 138 + 54.22  
DOUBLE 9' X 8' CAST-IN-PLACE PCC BOX CULVERT  
WITH DRILLED SOLDIER PILE WING WALLS

F.A.P. 749 SECTION (119BR-1)B-1  
ENDS STATION 138 + 84.00



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



GROSS LENGTH = 60.00 FT. = 0.011 MILE  
NET LENGTH = 60.00 FT. = 0.011 MILE



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUBMITTED JANUARY 24 20 18  
Jeffrey M. South  
REGIONAL ENGINEER

Max 23 18  
as etc  
ENGINEER OF DESIGN AND ENVIRONMENT

Max 23 18  
Paul P. [Signature]  
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS

PROJECT ENGINEER: TOM RONAN  
PROJECT MANAGER: RYAN M. WEI  
PHONE: (217) 342-8320  
CONTRACT NO. 74436

## INDEX OF SHEETS

<u>SHEET NO.</u>	<u>ITEM</u>
1	COVER SHEET
2	INDEX OF SHEETS, GENERAL NOTES, & HIGHWAY STANDARDS
3-4	SUMMARY OF QUANTITIES
5	TYPICAL SECTIONS
6	SCHEDULE OF QUANTITIES
7	TIE POINTS AND BENCHMARKS
8-9	PLAN SHEETS
10	DETOUR PLAN
11	R. O. W. SHEETS
12-15	MISCELLANEOUS DETAILS
* 16-23	STRUCTURE PLAN SHEETS & DETAILS
24-26	EXISTING STRUCTURE PLANS
27-38	CROSS SECTIONS

\* INCLUDES SHEET 22A

THE FOLLOWING STANDARDS ARE A PART OF THESE PLANS AND ARE INCLUDED AFTER SHEET NO. 38

<u>STD. NO.</u>	<u>DESCRIPTION</u>
000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
442101-08	CLASS B PATCHES
515001-03	NAME PLATE FOR BRIDGES
630001-12	STEEL PLATE BEAM GUARDRAIL
630301-08	SHOULDER WIDENING FOR TYPE I (SPECIAL) GUARDRAIL TERMINALS
631032-09	TRAFFIC BARRIER TERMINAL, TYPE 6A
667101-02	PERMANENT SURVEY MARKERS
701901-07	TRAFFIC CONTROL DEVICES
725001-01	OBJECT AND TERMINAL MARKERS
780001-05	TYPICAL PAVEMENT MARKINGS
782006	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS
BLR 21-9	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

## GENERAL NOTES

THE WORK INCLUDED IN SECTION (119BR-1)B-1 CONSISTS OF THE COMPLETE REMOVAL AND REPLACEMENT OF EXISTING STRUCTURE NUMBER 070-0027 WITH A NEW STRUCTURE, CONCRETE PATCHING, RIP RAP, GUARDRAIL, PAVEMENT MARKING, AND ANY OTHER WORK NECESSARY TO COMPLETE THIS SECTION. THE WORK SHALL BE COMPLETED UTILIZING A ROAD CLOSURE AND STATE MARKED DETOUR ROUTE. THE EXISTING STRUCTURE NUMBER 070-0027, CARRIES ILLINOIS ROUTE 133 OVER JONATHAN BRANCH CREEK AND IS LOCATED APPROXIMATELY 2.5 MILES EAST OF LOVINGTON IN MOULTRIE COUNTY.

PLAN DIMENSIONS AND DETAILS RELATIVE TO THE EXISTING STRUCTURE HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY DIMENSIONS AND DETAILS IN THE FIELD AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIAL. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF THE WORK. THE CONTRACTOR WILL BE PAID FOR THE QUANTITY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.

EXISTING TRAFFIC BARRIER TERMINALS TO BE REMOVED SHALL BE PAID FOR AS GUARDRAIL REMOVAL.

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

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

FILE NAME =	USER NAME = steffenk	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>INDEX OF SHEETS, GENERAL NOTES &amp; HIGHWAY STANDARDS</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
						749	(119BR-1)B-1	MOULTRIE	38	2
						CONTRACT NO. 74436				
						ILLINOIS FED. AID PROJECT				
Default	PLOT DATE = 1/11/2018	DATE -	REVISED -	SCALE: N/A	SHEET 1 OF 1 SHEETS	STA.	TO STA.			

80% FED  
20% STATE

80% FED  
20% STATE

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE		
CODE NO	ITEM	UNIT		0004 SN 070-2020		
20200100	EARTH EXCAVATION	CU YD	930	930		
20400800	FURNISHED EXCAVATION	CU YD	50	50		
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	31	31		
28000305	TEMPORARY DITCH CHECKS	FOOT	60	60		
28000400	PERIMETER EROSION BARRIER	FOOT	879	879		
28100107	STONE RIPRAP, CLASS A4	SQ YD	308	308		
28200200	FILTER FABRIC	SQ YD	308	308		
44200050	WELDED WIRE REINFORCEMENT	SQ YD	267	267		
44201013	CLASS B PATCHES, TYPE IV, 13 INCH	SQ YD	267	267		
44201299	DOWEL BARS 1 1/2"	EACH	40	40		
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1	1		
50104400	CONCRETE HEADWALL REMOVAL	EACH	8	8		
50105220	PIPE CULVERT REMOVAL	FOOT	75	75		

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE		
CODE NO	ITEM	UNIT		0004 SN 070-2020		
50200450	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL FOR STRUCTURES	CU YD	85	85		
50500505	STUD SHEAR CONNECTORS	EACH	156	156		
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	22330	22330		
50900200	STEEL RAILING, TYPE 2399	FOOT	46	46		
51204650	PILE SHOES	EACH	14	14		
51500100	NAME PLATES	EACH	1	1		
52200100	FURNISHING SOLDIER PILES (HP SECTION)	FOOT	533	533		
52200150	DRIVING SOLDIER PILES	FOOT	533	533		
52200250	UNTREATED TIMBER LAGGING	SQ FT	640	640		
54003000	CONCRETE BOX CULVERTS	CU YD	132.4	132.4		
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	44	44		
* 63000003	STEEL PLATE BEAM GUARDRAIL, TYPE A, 9 FOOT POSTS	FOOT	125	125		
* 63100087	TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	4	4		

\* SPECIALTY ITEM

FILE NAME =	USER NAME = steffennk	DESIGNED -	REVISED -
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: N/A SHEET 1 OF 2 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	(119R-1)B-1	MOULTRIE	38	3
CONTRACT NO. 74436				
ILLINOIS FED. AID PROJECT				

80% FED  
20% STATE

80% FED  
20% STATE

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE	
CODE NO	ITEM	UNIT		0004 SN 070-2020	
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	4	
63200310	GUARDRAIL REMOVAL	FOOT	446	446	
66700205	PERMANENT SURVEY MARKERS, TYPE I	EACH	1	1	
67000500	ENGINEER'S FIELD OFFICE, TYPE B	CAL MO	4	4	
67100100	MOBILIZATION	L SUM	1	1	
70101830	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21	L SUM	1	1	
* 72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4	
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	140	140	
* 78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	8	8	
X0322128	MEMBRANE WATERPROOFING FOR BURIED STRUCTURES	SO YD	110	110	
X0426200	DEWATERING	LSUM	1	1	
X2501000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.5	0.5	
X7015005	CHANGEABLE MESSAGE SIGN	CAL DA	28	28	

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE	
CODE NO	ITEM	UNIT		0004 SN 070-2020	
Z0016702	DETOUR SIGNING	L SUM	1	1	
Z0023602	GRANULAR CULVERT BACKFILL	CU YD	467	467	
* Z0054517	ROCK FILL - FOUNDATION	TON	148	148	

\* SPECIALTY ITEM

FILE NAME =	USER NAME = steffernk	DESIGNED -	REVISED -
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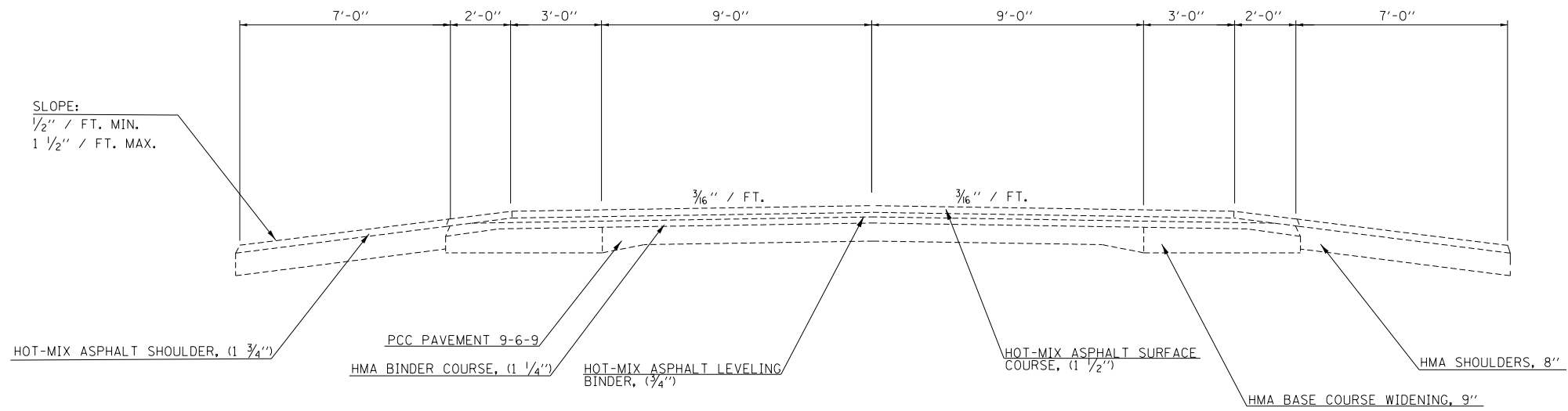
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

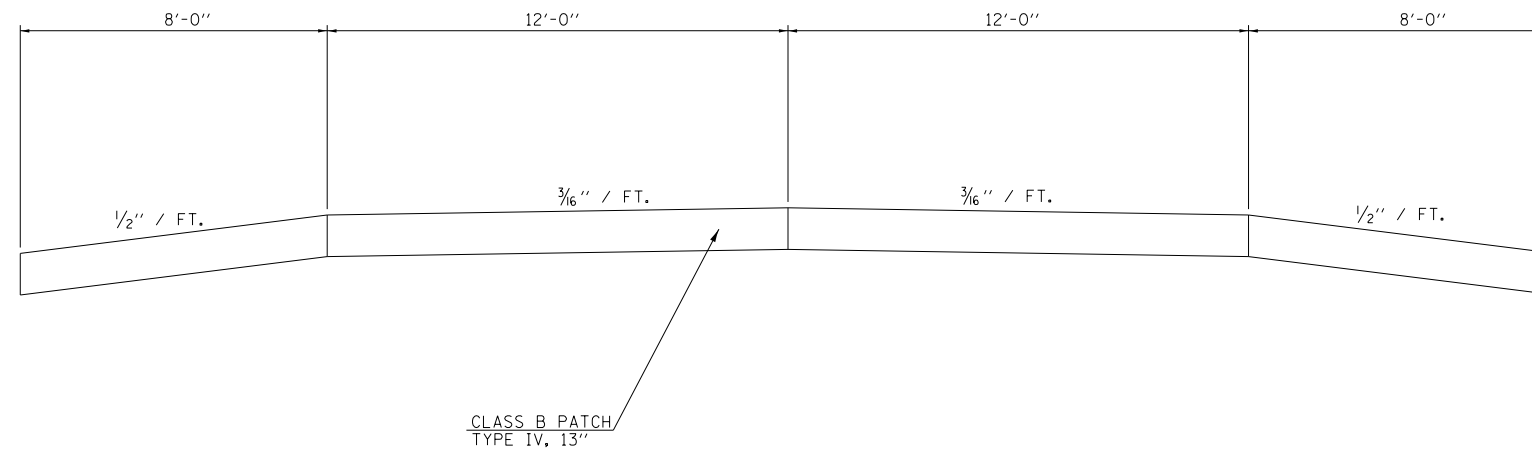
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	(119BR-1)B-1	MOULTRIE	38	4
CONTRACT NO. 74436			ILLINOIS FED. AID PROJECT	

EXISTING TYPICAL SECTION  
 STA. 138+24.00 TO 138+43.88  
 STA. 138+64.57 TO 138+84.00



PROPOSED TYPICAL SECTION  
 STA. 138+24.00 TO 138+84.00



FILE NAME =	USER NAME = steffenmk	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TYPICAL SECTIONS</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -		SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.			CONTRACT NO. 74436				
	PLOT DATE = 1/11/2018	DATE -	REVISED -		ILLINOIS FED. AID PROJECT							

GUARDRAIL SCHEDULE						
LOCATION	GUARDRAIL REMOVAL	TRAFFIC BARRIER TERMINAL TYPE 1 (SPECIAL) TANGENT	STEEL PLATE BEAM GUARD RAIL, TYPE A, 9 FOOT POSTS	TRAFFIC BARRIER TERMINAL, TYPE 6A	GUARDRAIL REFLECTORS, TYPE A	TERMINAL MARKERS - DIRECT APPLIED
	FOOT	EACH	FOOT	FOOT	EACH	EACH
NORTHEAST CORNER	117.0	1.0	62.5	1.0	2.0	1.0
SOUTHEAST CORNER	106.0	1.0	0.0	1.0	2.0	1.0
NORTHWEST CORNER	106.0	1.0	0.0	1.0	2.0	1.0
SOUTHWEST CORNER	117.0	1.0	62.5	1.0	2.0	1.0
TOTALS=	446.0	4.0	125.0	4.0	8.0	4.0

EROSION CONTROL SCHEDULE		
LOCATION	TEMPORARY DITCH CHECKS	PERIMETER EROSION BARRIER
	FOOT	FOOT
NORTHEAST CORNER	10.0	169.0
SOUTHEAST CORNER	10.0	135.0
NORTHWEST CORNER	20.0	279.0
SOUTHWEST CORNER	20.0	296.0
TOTALS=	60.0	879.0

EARTHWORK SCHEDULE					
LOCATION	EARTH EXCAVATION (CU YD)	EMBANKMENT (CU YD)	25% EARTH EXCAVATION SHRINKAGE	NEEDED BORROW (FOR INFO ONLY) (CU YD)	FURNISHED EXCAVATION (CU YD)
FAP 749 LEFT	50.7	46.1	38.0	8.1	8.1
FAP 749 RIGHT	43.6	66.1	32.7	33.4	33.4
STRUCTURE 070-2020	828.7	0.0	621.6	0.0	0.0
TOTAL =	923.0				41.5
ROUND TO:	930.0				50.0

NOTES:

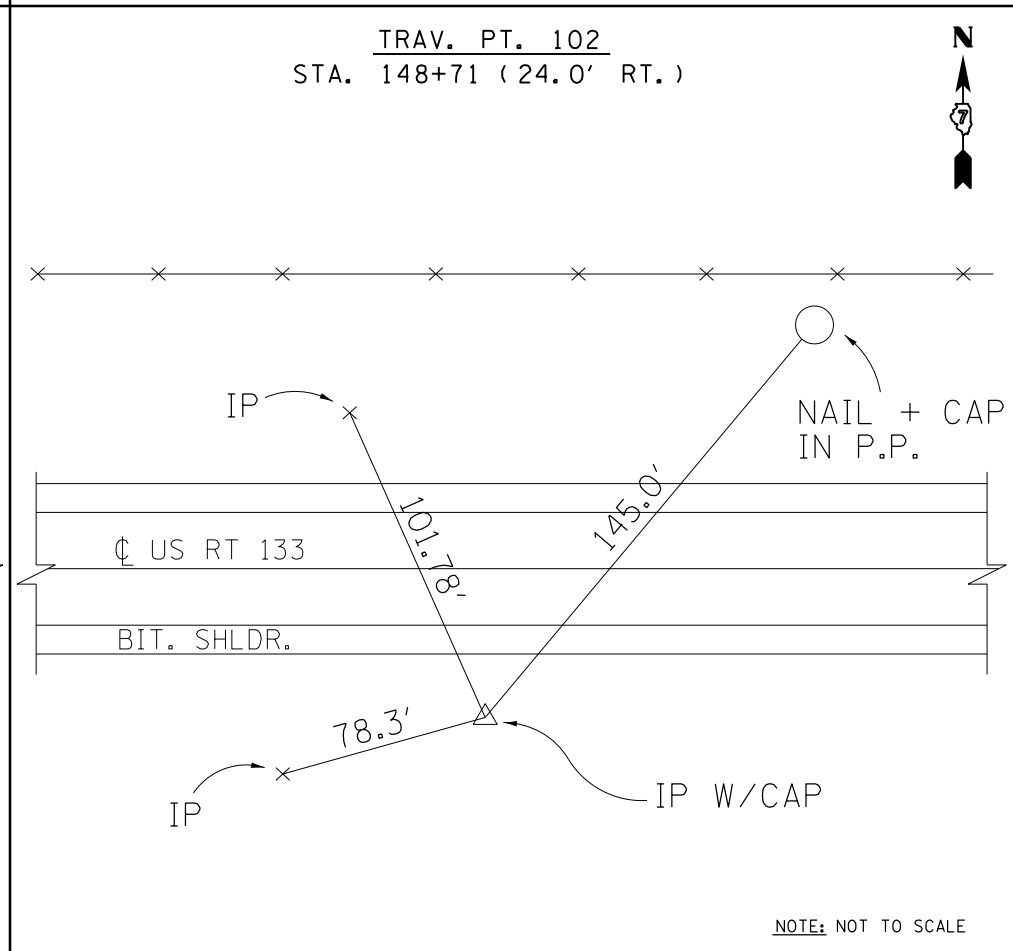
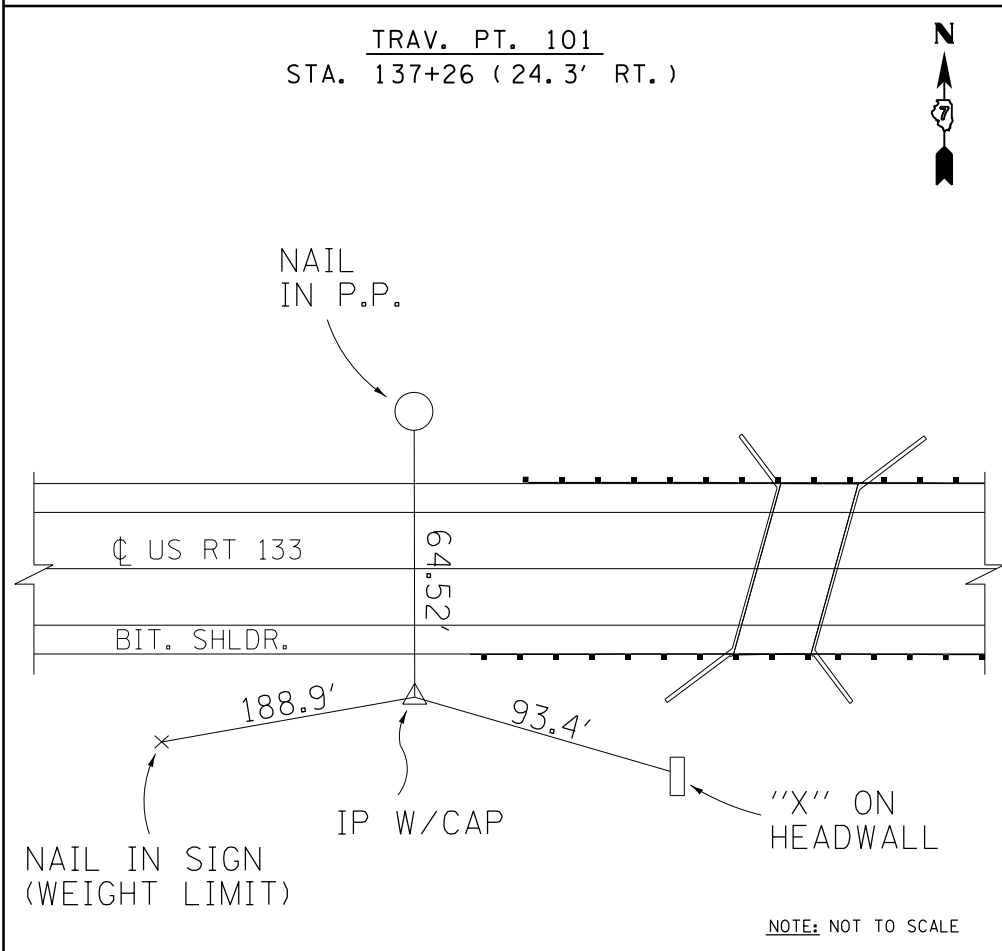
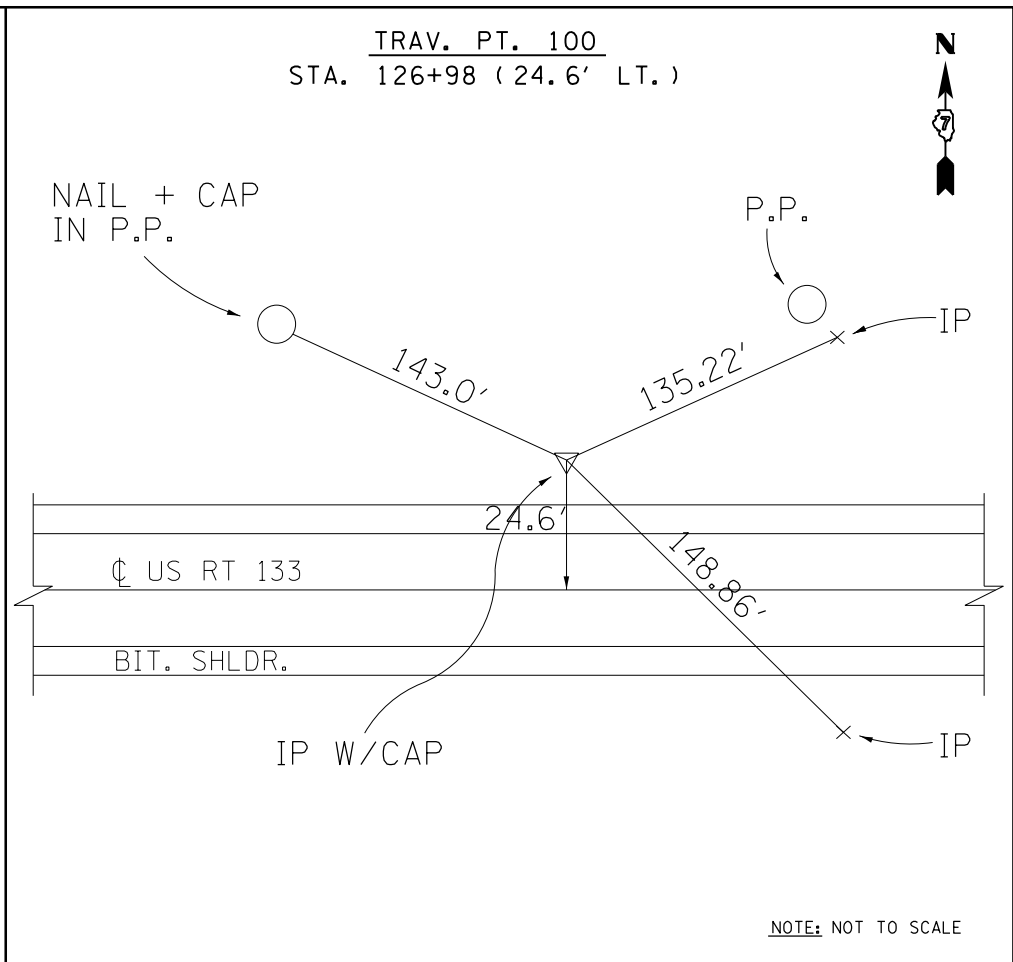
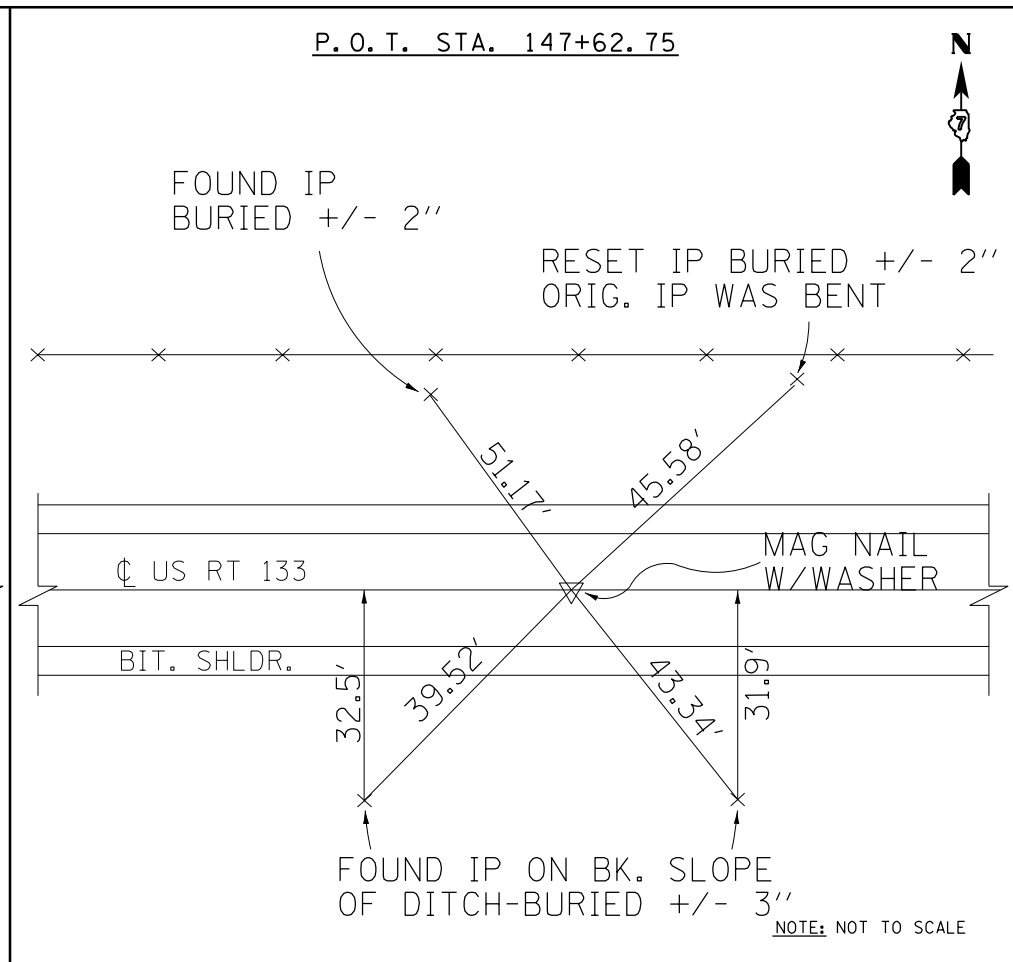
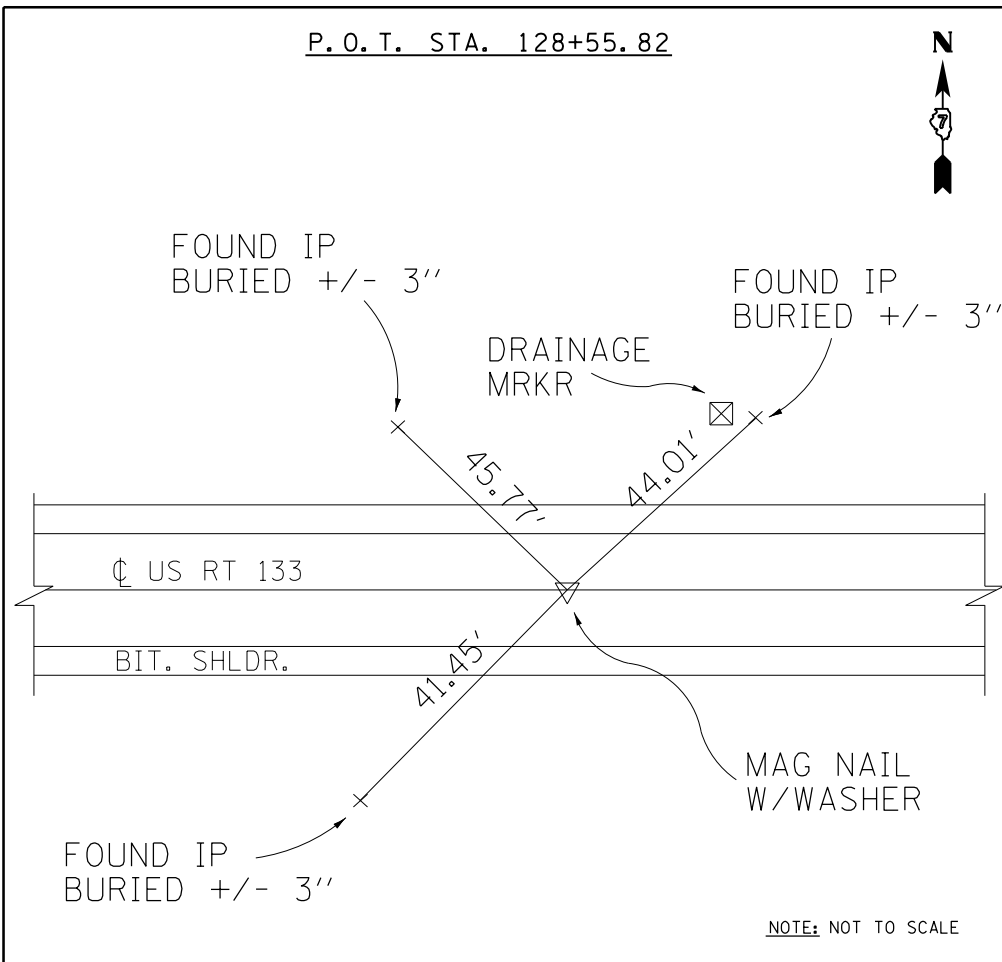
- 1- NO SHRINKAGE FACTOR APPLIED TO THE EMBANKMENT QUANTITY
- 2- A 25% SHIRNKAGE FACTOR WAS APPLIED TO THE EXCAVATION QUANTITY

PAVEMENT PATCHING SCHEDULE			
LOCATION	CLASS B PATCHES, TYPE IV, 13 INCH	WELDED WIRE REINFORCEMENT	DOWEL BARS 1.5"
	SO YD	SO YD	EACH
138+54	267.0	267.0	40.0
TOTALS	267.0	267.0	40.0

SEEDING & FERTILIZER SCHEDULE									
STATION	TO	STATION	SEEDING, CLASS 2 (SPECIAL)	TEMPORARY EROSION CONTROL SEEDING	NITROGEN FERTILIZER NURTIENT*	PHOSPHORUS FERTILIZER NURTIENT*	POTASSIUM FERTILIZER NURTIENT*	MULCH, METHOD 2*	AGRICULTURAL GROUND LIMESTONE *
			ACRE	POUND	POUND	POUND	POUND	ACRE	TON
135+00.0	TO	136+00.0	0.04	3.68	3.31	3.31	3.31	0.04	0.07
136+00.0	TO	137+00.0	0.08	7.66	6.90	6.90	6.90	0.08	0.15
137+00.0	TO	138+00.0	0.08	8.43	7.59	7.59	7.59	0.08	0.17
138+00.0	TO	138+23.0	0.01	1.32	1.18	1.18	1.18	0.01	0.03
138+23.0	TO	138+25.0	0.00	0.05	0.05	0.05	0.05	0.00	0.00
138+25.0	TO	138+40.0	0.00	0.19	0.17	0.17	0.17	0.00	0.00
138+40.0	TO	138+54.2	0.00	0.00	0.00	0.00	0.00	0.00	0.00
138+54.2	TO	138+68.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
138+68.0	TO	138+75.0	0.00	0.09	0.09	0.09	0.09	0.00	0.00
138+75.0	TO	138+86.0	0.00	0.30	0.27	0.27	0.27	0.00	0.01
138+86.0	TO	139+00.0	0.01	0.82	0.74	0.74	0.74	0.01	0.02
139+00.0	TO	140+00.0	0.06	6.40	5.76	5.76	5.76	0.06	0.13
140+00.0	TO	141+00.0	0.02	1.91	1.72	1.72	1.72	0.02	0.04
TOTAL =			0.31	30.85	27.77	27.77	27.77	0.31	0.62
ROUND TO			0.50	31.00	45.00	45.00	45.00	0.50	1.00

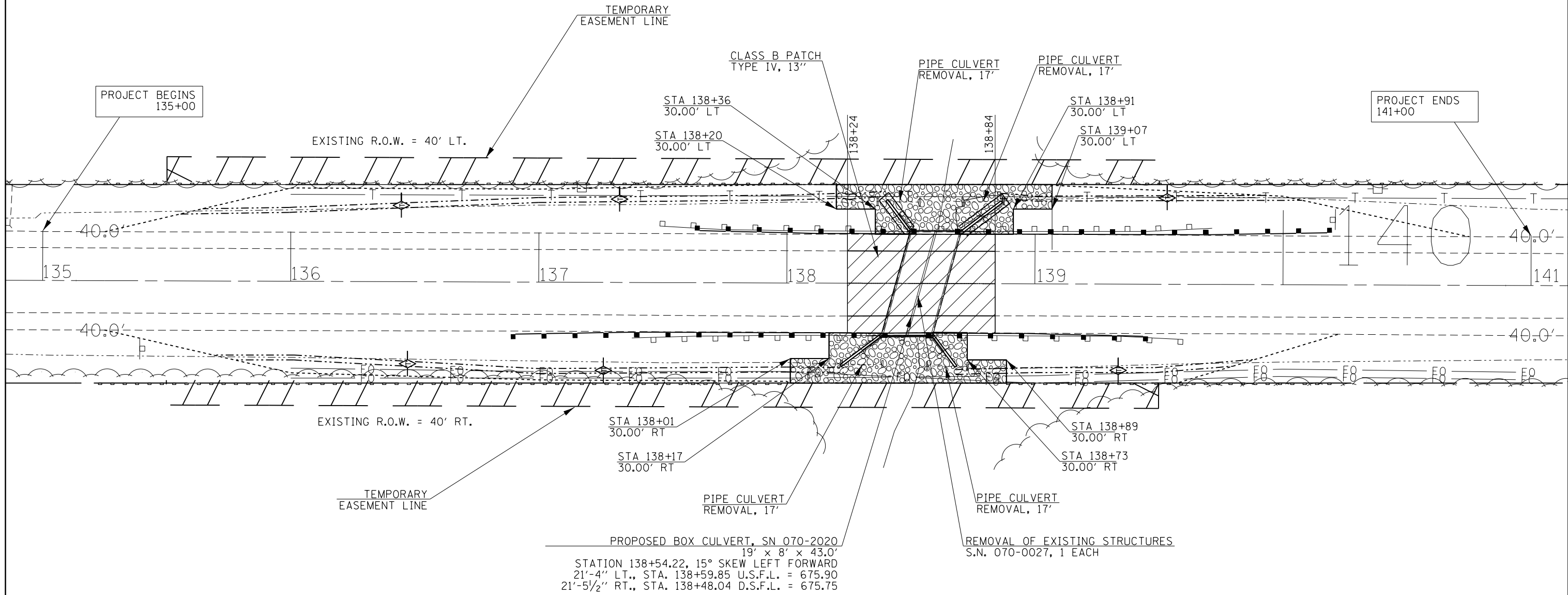
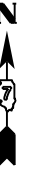
\* FOR INFORMATION ONLY, NOT A PAY ITEM

PAVEMENT MARKING SCHEDULE				
STATION TO STATION	LENGTH	PAINT PAVEMENT MARKING - LINE 4"	QTY. OF YELLOW	QTY. OF WHITE
	FOOT	FOOT	FOOT	FOOT
138+24.00 TO 138+84.00	60.0	140.0	20.0	120.0
TOTALS		140.0	20.0	120.0



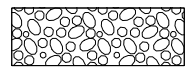
BENCH MARKS

BM	STATION	O/S	ELEV	DESCRIPTION
BM 201	138+36	22.3' RT.	686.9493	FOUND CUT SQ. ON SW WINGWALL OF JONATHON CREEK BRIDGE, SN #070-0027
BM 202	143+57	38.6' LT.	689.7391	RR SPIKE IN S. FACE OF PP, N. SIDE OF IL 133

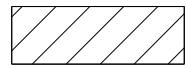


PROPOSED BOX CULVERT, SN 070-2020  
 19' x 8' x 43.0'  
 STATION 138+54.22, 15° SKEW LEFT FORWARD  
 21'-4" LT., STA. 138+59.85 U.S.F.L. = 675.90  
 21'-5 1/2" RT., STA. 138+48.04 D.S.F.L. = 675.75

REMOVAL OF EXISTING STRUCTURES  
 S.N. 070-0027, 1 EACH



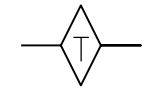
STONE RIPRAP, CLASS A4



PAVEMENT REMOVAL



PERIMETER EROSION BARRIER



TEMPORARY DITCH CHECK



BURIED FIBER OPTIC LINE

FILE NAME =	USER NAME = steffenmk	DESIGNED -	REVISED -
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	PLOT DATE = 1/11/2018	DATE -	REVISED -

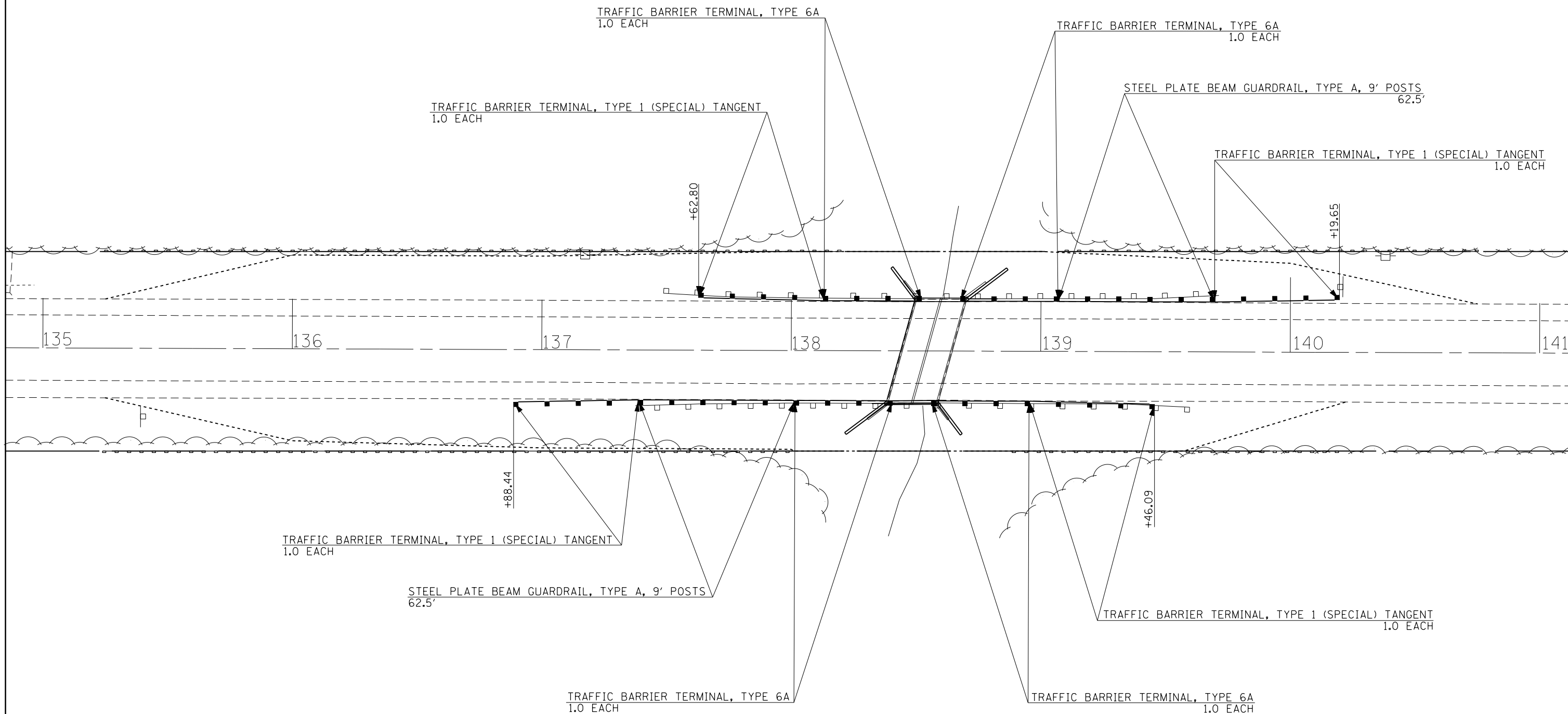
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

<b>PLAN SHEET</b>	
SCALE:	SHEET 1 OF 1 SHEETS STA. TO STA.

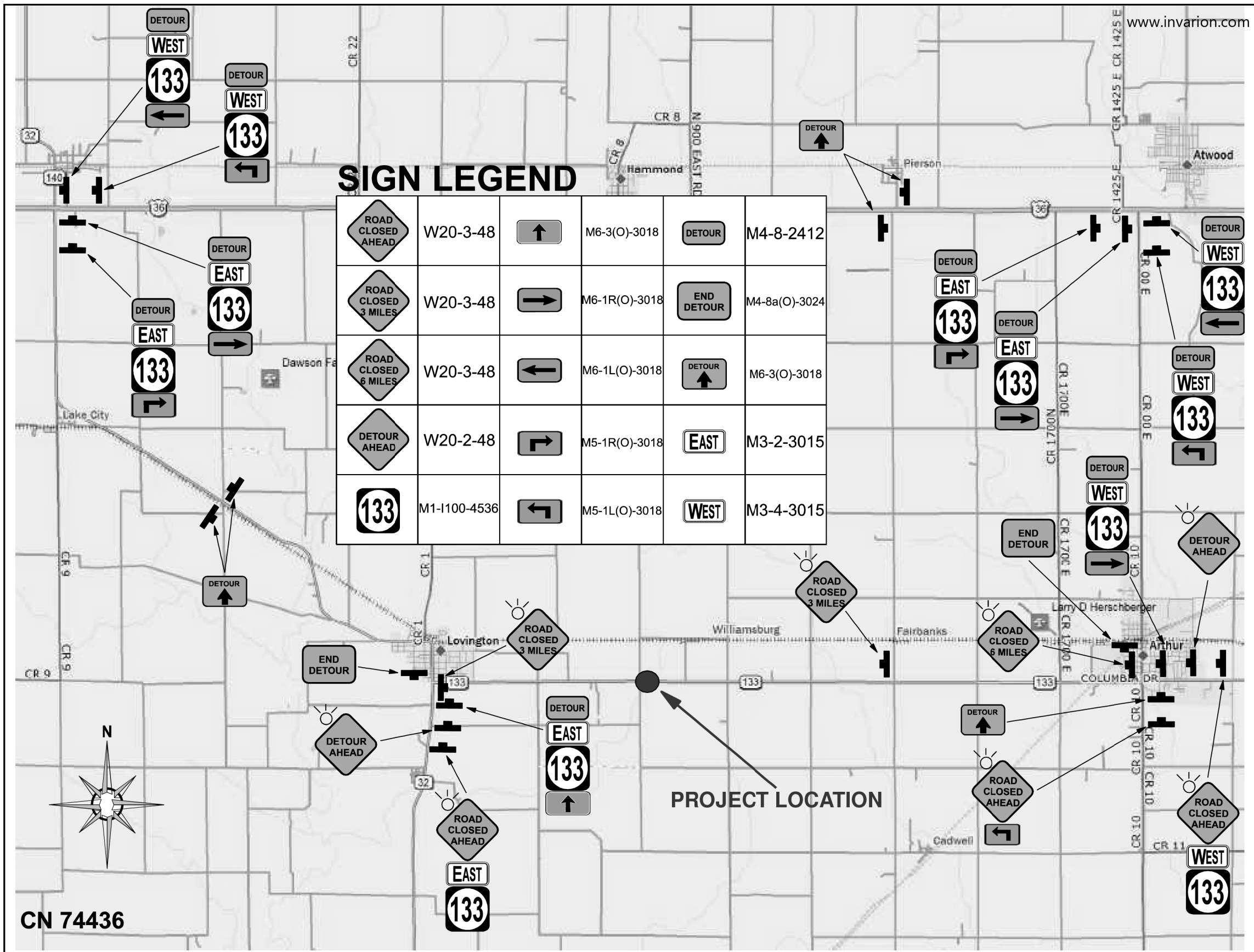
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	(119BR-1)B-1	MOULTRIE	38	8
CONTRACT NO. 74436				
ILLINOIS FED. AID PROJECT				



# GUARDRAIL PLAN SHEET



FILE NAME =	USER NAME = steffenmk	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>GUARDRAIL PLAN SHEET</b>		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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Default	PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -		SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.		CONTRACT NO. 74436				
	PLOT DATE = 1/11/2018	DATE -	REVISED -		ILLINOIS FED. AID PROJECT						



FILE NAME =	USER NAME = steffenk	DESIGNED -	REVISED -
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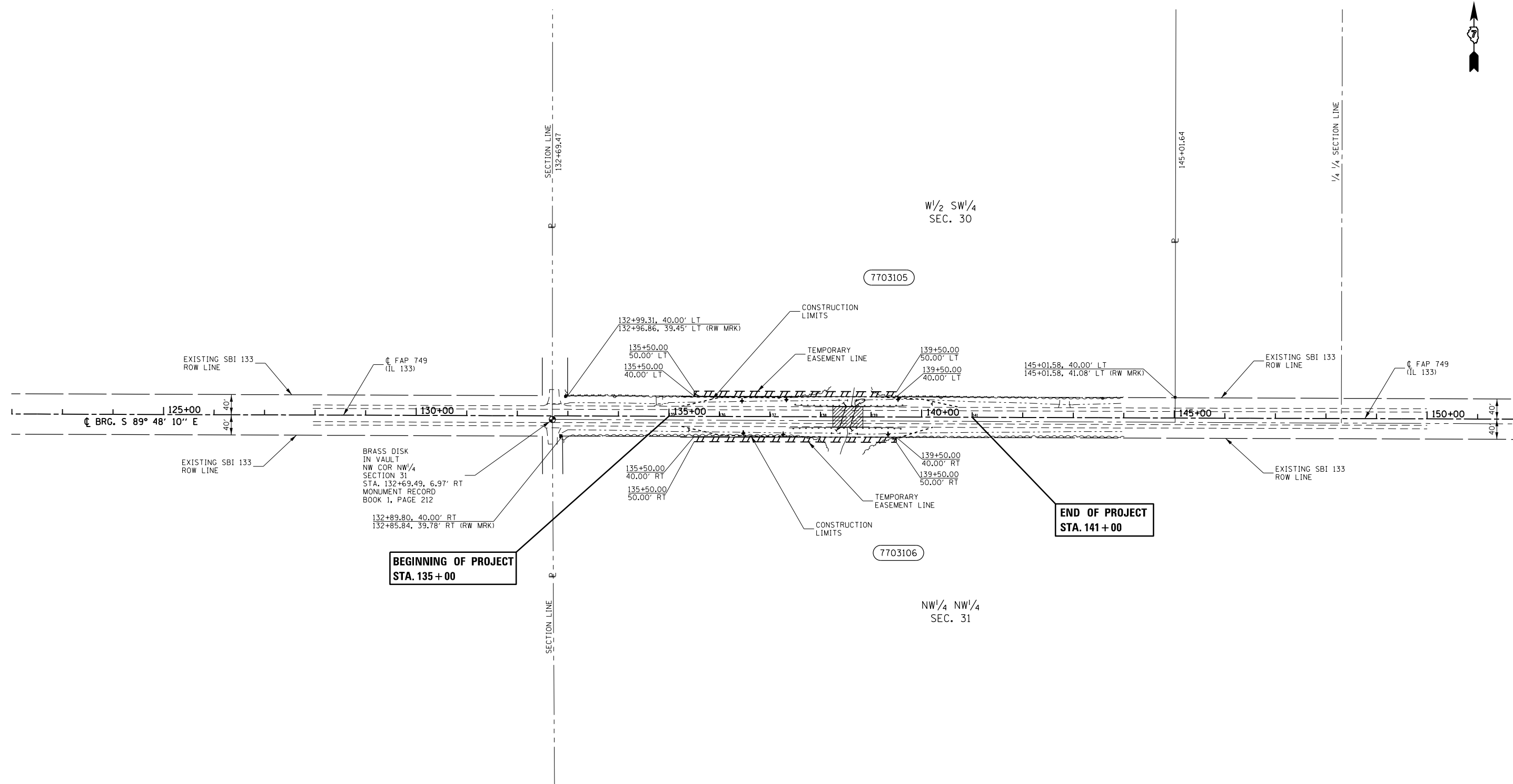
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DETOUR SHEET**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	(119BR-1)B-1	MOULTRIE	38	10
CONTRACT NO. 74436				
ILLINOIS FED. AID PROJECT				

# T.15N.-R.6E., 3rd P.M., LOWE TWP.



- - EXISTING IRON PIN
- - SET IRON PIN
- ⊙ - BRASS DISK
- ▲ - EXISTING STONE
- ⊠ - EXISTING ROW MARKER
- (R) RECORDED DISTANCE

NOTE:  
 BEARINGS ARE REFERENCED TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM EAST ZONE DATUM OF 1983(11)  
 TEMPORARY EASEMENTS NEEDED FOR A WORK AREA

PARCEL	OWNER	AREA TAKEN		EASEMENT	AREA REM	INST	RECORDED				EXCESS		
		ADD	EXIST				MICRO FILM NO	DATE	BOOK	PAGE	AREA	SOLD	
7703105	FLOYD M. & AMY L. WILLOUGHBY, TRUSTEES			0.092 AC.									
7703106	DORIS A. MALACARNE, TRUSTEE			0.092 AC.									

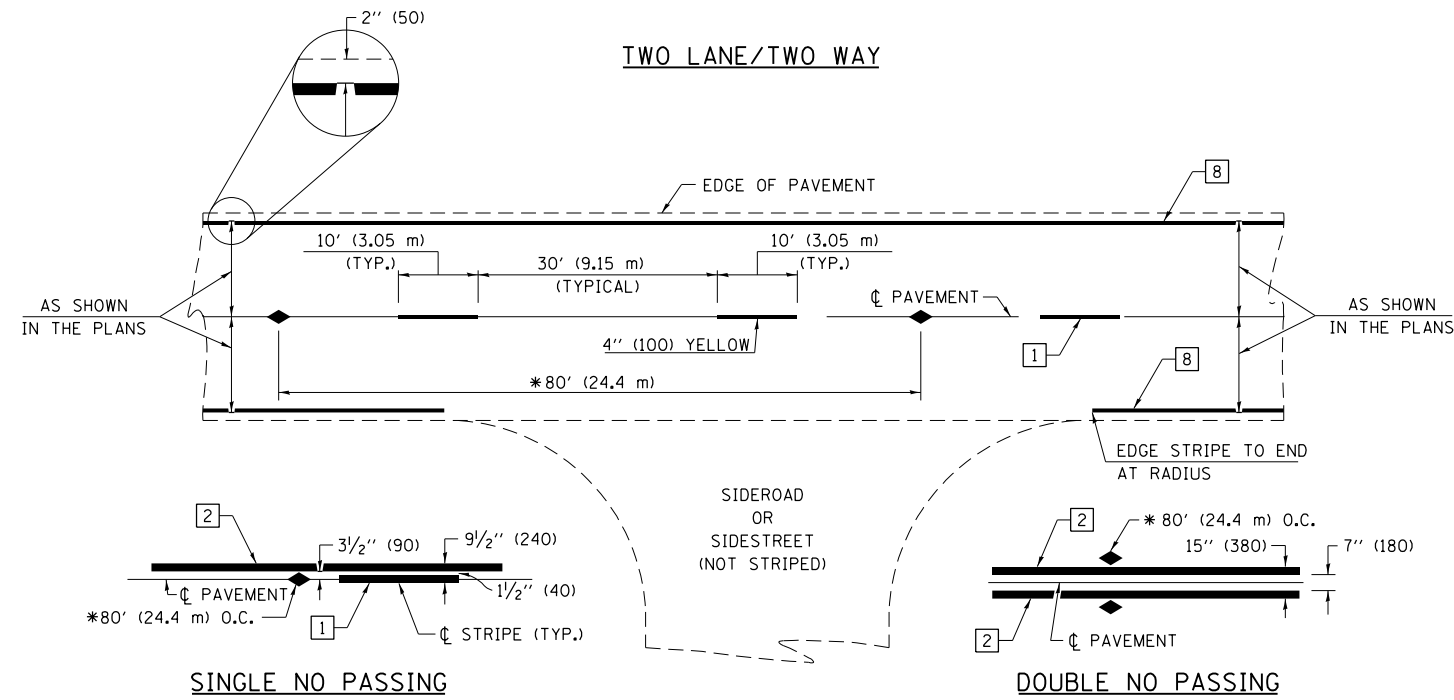
FILE NAME D774436-sht-rowplan.dgn	USER NAME = steffenmk	DESIGNED - JMD	REVISED -
		DRAWN - JMD	REVISED -
		CHECKED - JMD	REVISED -
		DATE - 03/14/17	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

SCALE: 1" = 100'	PROJECT	JOB NO. R-97-003-17
	SHEET NO. 2 OF 2 SHEET	STA. 125+00.00 TO STA. 150+00.00

F.A.P. RTE. 749	SECTION (119BR-1)B-1	COUNTY MOULTRIE	TOTAL SHEETS 38	SHEET NO. 11
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

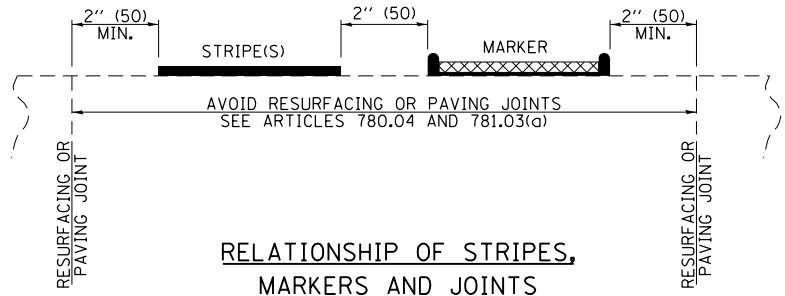
**CONTRACT NO. 74436**



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

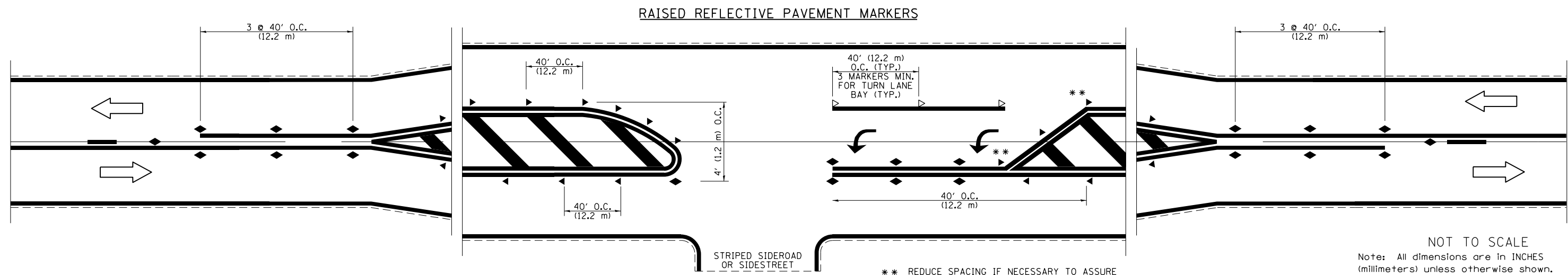
**PAVEMENT MARKING LEGEND**

- 1 4" (100) SKIP-DASH (YELLOW)
  - 2 4" (100) SOLID (YELLOW)
  - 3 12" (300) DIAGONAL (YELLOW)
  - 4 4" (100) DOUBLE YELLOW (NARROW)
  - 5 12" (300) SOLID WHITE
  - 6 RESERVED
  - 7 6" (150) SKIP-DASH (WHITE)
  - 8 4" (100) SOLID (WHITE)
  - 9 12" (300) DIAGONAL (WHITE)
  - 10 6" (150) SOLID (WHITE)
  - 11 24" (600) STOP BAR (WHITE)
  - 12 8" (200) SOLID (WHITE)
  - 13 4" (100) PARKING WHITE
- 



**TYPICAL PAVEMENT MARKERS LEGEND**

- ◆ TWO-WAY AMBER MARKER
- ▶ ONE-WAY AMBER MARKER
- ▷ ONE-WAY CRYSTAL MARKER



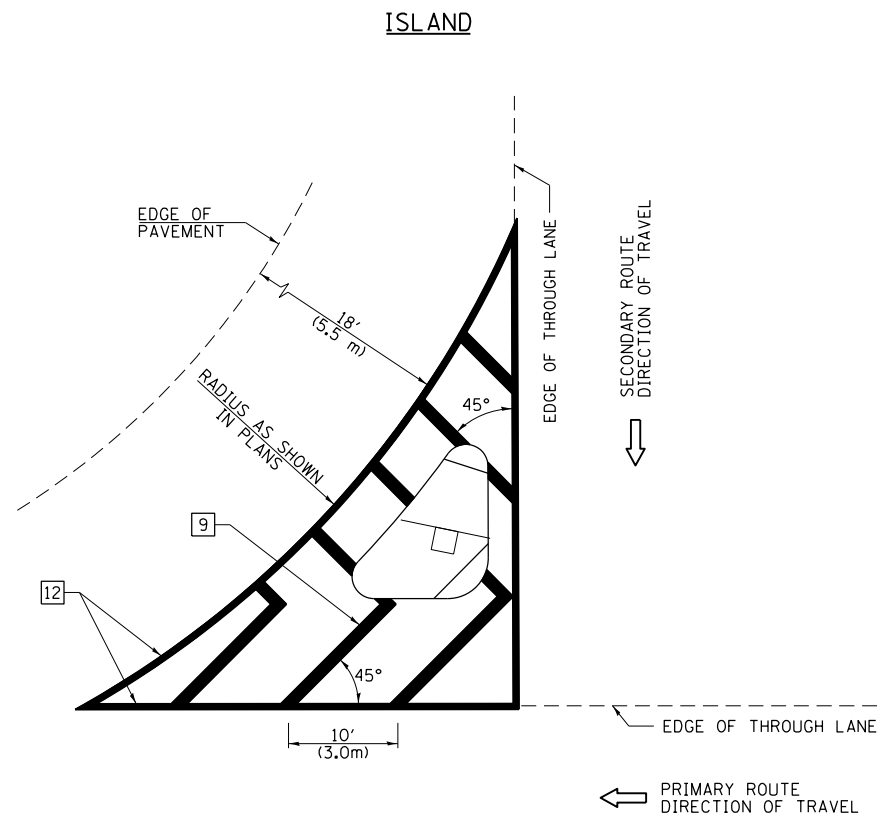
\*\* REDUCE SPACING IF NECESSARY TO ASSURE MARKERS AT CORNER POINTS.

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

FILE NAME =	USER NAME = steffenmk	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PAVEMENT MARKING AND RAISED REFLECTIVE PAVEMENT MARKERS (RURAL &amp; URBAN APPLICATIONS)</b>	F.A.P. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw:\1L084EBIDINTEG.illinois.gov\PIWIDOT\Documents\DOT Offices\District 7\Projects\74436\Drawings\CABsheets\0774436-shd-details.dwg	DATE = 1/11/2018	CHECKED -	REVISED -			749	(119BR-1)B-1	MOULTRIE	38	12
PLOT SCALE = 100.0000' / in.	DATE -	REVISOR -	REVISOR -			CONTRACT NO. 74436				
PLOT DATE = 1/11/2018	DATE -	REVISOR -	REVISOR -			ILLINOIS FED. AID PROJECT				
					SCALE:	SHEET NO. 1 OF 4 SHEETS		STA.		TO STA.

**DISTRICT 7 DETAIL NO. 7800001**



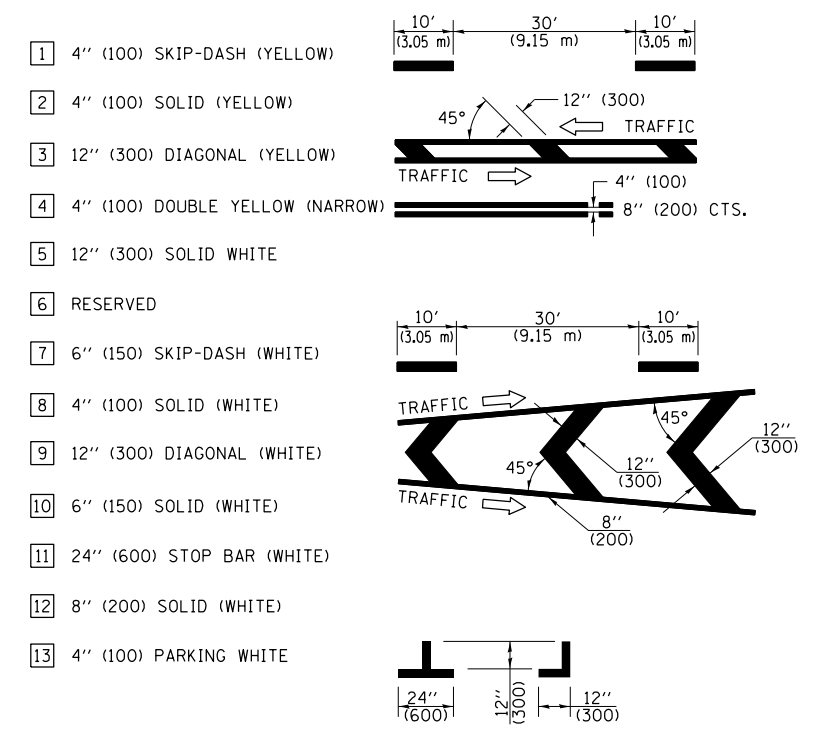


**GENERAL NOTES**

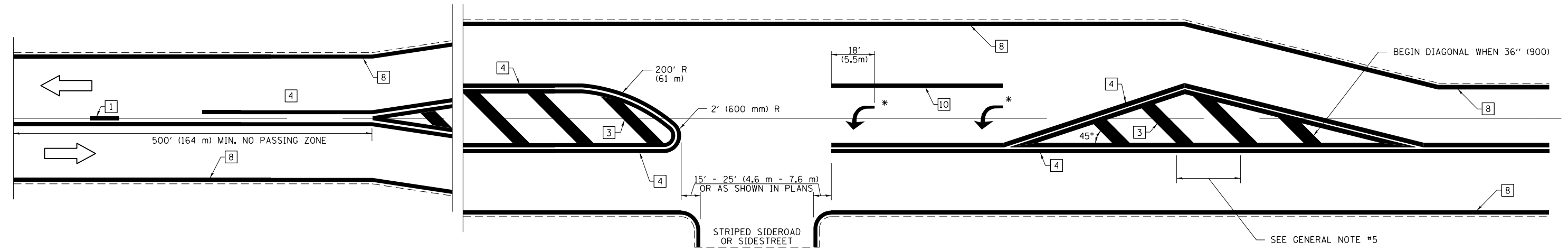
1. RAISED AND CORRUGATED MEDIANS SHALL BE OUTLINED WITH [2] IF PRESENT.
2. SOME OF THE INFORMATION INCLUDED WITH THIS DETAIL MAY NOT BE APPLICABLE TO THIS IMPROVEMENT.
3. PAVEMENT MARKINGS ARE TO BE EXTENDED THROUGH OMISSIONS WHEN APPLICABLE.
4. FINAL PAVEMENT MARKINGS SHALL BE IN PLACE PRIOR TO PLACING ANY RAISED REFLECTIVE PAVEMENT MARKERS.
5. THE FOLLOWING CRITERIA SHALL BE USED FOR SELECTING THE DIAGONAL PAVEMENT MARKING SPACING:
 

< 30 MPH (< 50 km/h)	15' (4.5 m)
30-45 MPH (50-75 km/h)	20' (6.0 m)
> 45 MPH (> 75 km/h)	30' (9.0 m)

**PAVEMENT MARKING LEGEND**



**RURAL LEFT TURN STRIPING**



\* PLACE AN ARROW 18' (5.5 m) BACK FROM STOP BAR. PLACE ANOTHER ARROW EVEN WITH THE BEGINNING OF THE SOLID WHITE LINE. SPACE ADDITIONAL ARROWS EVENLY UP TO 80' (24.4 m) MAXIMUM SPACING. USE MINIMUM OF 2 ARROWS.

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

**DISTRICT 7 DETAIL NO. 7800001**

FILE NAME =	USER NAME = steffenmk	DESIGNED -	REVISED -
pw:\11\084EBIDINTEG\illinois.gov\PIDOT\Documents\IDOT Offices\District 7\Projects\74436\Drawings\CABsheets\0774436-sht-details.dwg		DRAWN -	REVISED -
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 1/11/2018	DATE -	REVISED -

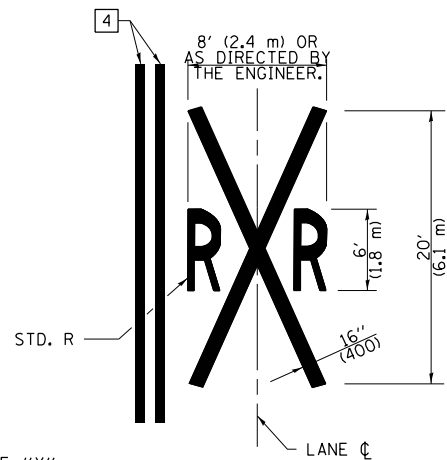
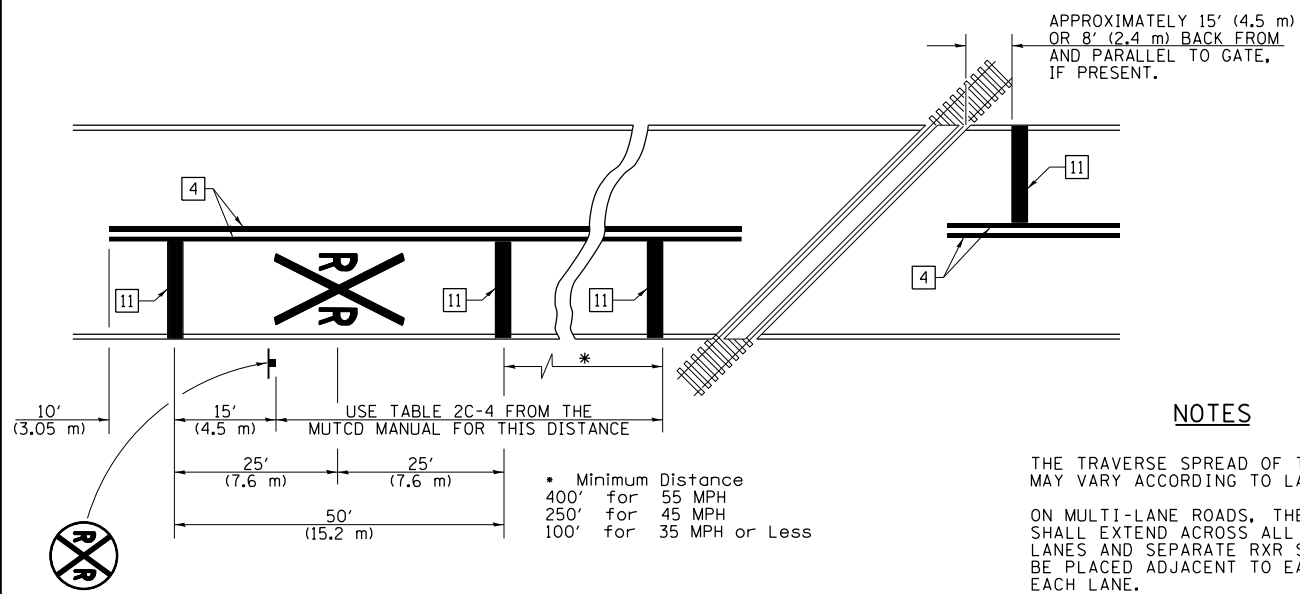
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**PAVEMENT MARKING AND RAISED REFLECTIVE PAVEMENT MARKERS  
 (RURAL & URBAN APPLICATIONS)**

SCALE: SHEET NO. 3 OF 4 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	(119BR-1)B-1	MOULTRIE	38	14
CONTRACT NO. 74436				
ILLINOIS FED. AID PROJECT				

PAVEMENT MARKINGS AT RAILROAD-HIGHWAY GRADE CROSSING



NOTES

THE TRAVERSE SPREAD OF THE "X" MAY VARY ACCORDING TO LANE WIDTH.

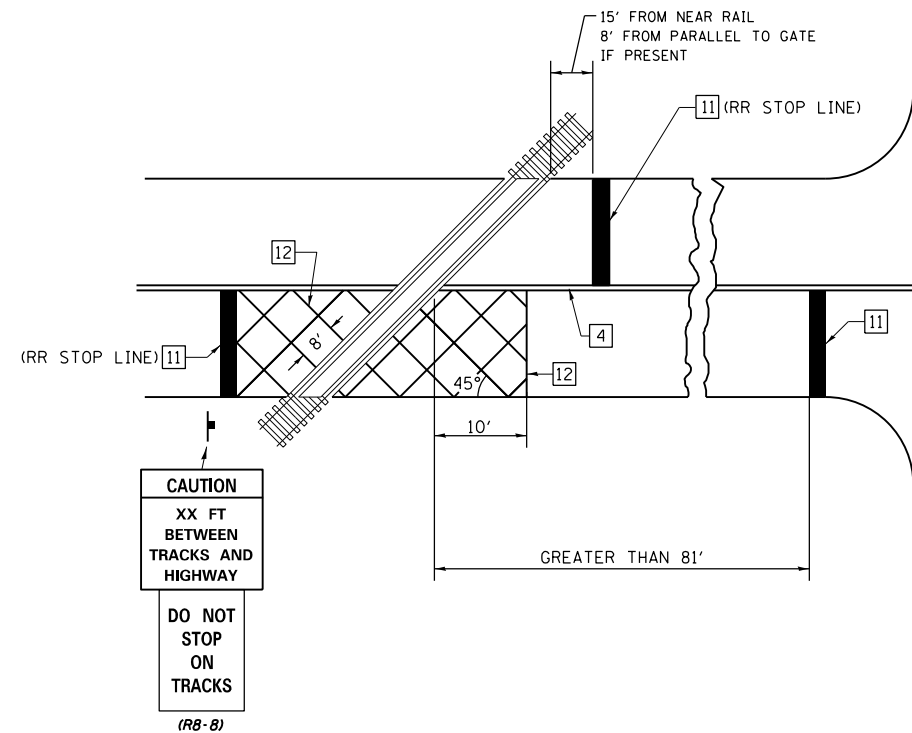
ON MULTI-LANE ROADS, THE STOP LINES SHALL EXTEND ACROSS ALL APPROACH LANES AND SEPARATE RXR SYMBOLS SHALL BE PLACED ADJACENT TO EACH OTHER IN EACH LANE.

WHEN THE PAVEMENT MARKING SYMBOL IS USED, A PORTION OF THE SYMBOL SHOULD BE LOCATED DIRECTLY ADJACENT TO THE ADVANCE WARNING SIGN (W10-1) AS PLACED BY TABLE II-1, CONDITION B OF THE MUTCD.

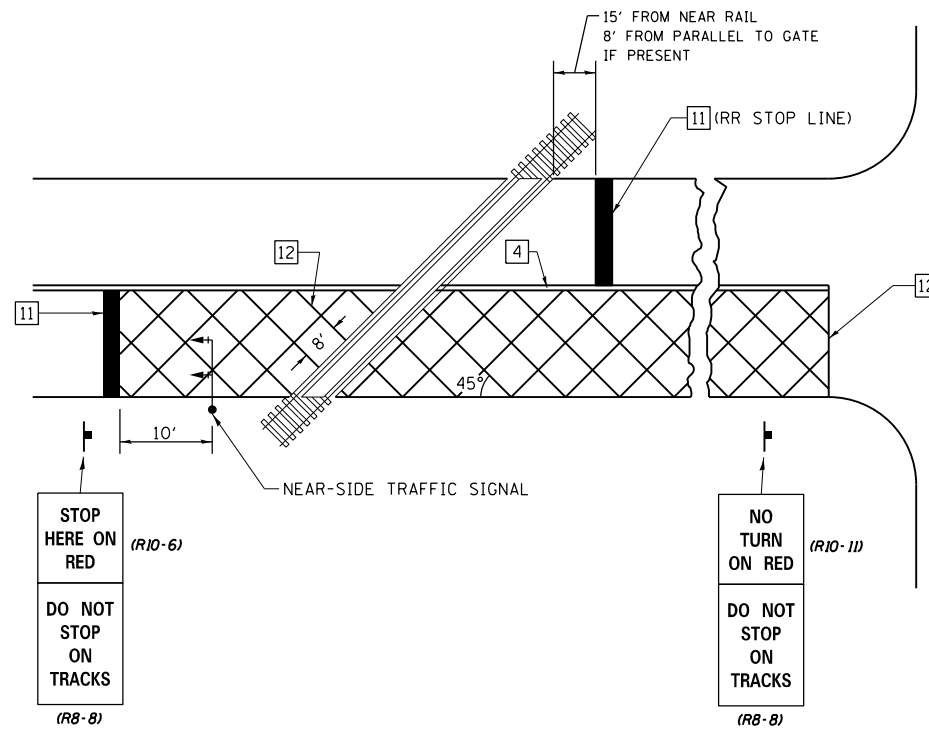
PAVEMENT MARKING LEGEND

- 1 4" (100) SKIP-DASH (YELLOW)
  - 2 4" (100) SOLID (YELLOW)
  - 3 12" (300) DIAGONAL (YELLOW)
  - 4 4" (100) DOUBLE YELLOW (NARROW)
  - 5 12" (300) SOLID WHITE
  - 6 RESERVED
  - 7 6" (150) SKIP-DASH (WHITE)
  - 8 4" (100) SOLID (WHITE)
  - 9 12" (300) DIAGONAL (WHITE)
  - 10 6" (150) SOLID (WHITE)
  - 11 24" (600) STOP BAR (WHITE)
  - 12 8" (200) SOLID (WHITE)
  - 13 4" (100) PARKING WHITE
- 

RAILROAD CROSSING WITH INTERCONNECT ONLY



RAILROAD CROSSING WITH INTERCONNECT AND PRE-SIGNALS



GENERAL NOTES

- SUPPLEMENTAL PAVEMENT MARKINGS TO BE INSTALLED ONLY ON APPROACHES TO INTERSECTIONS CONTROLLED BY TRAFFIC SIGNALS WHICH ARE INTERCONNECTED WITH THE RAILROAD WARNING SIGNALS.
- EXTEND PAVEMENT MARKINGS TO THE INTERSECTION ONLY WHERE NEAR-SIDE TRAFFIC SIGNALS ARE USED.

SUPPLEMENTAL PAVEMENT MARKING TREATMENT FOR RAILROAD-HIGHWAY GRADE CROSSING

NOT TO SCALE

Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

DISTRICT 7 DETAIL NO. 7800001

FILE NAME =	USER NAME = steffenmk	DESIGNED -	REVISED -
pw:\11\084EBIDINTEG.illinois.gov\PIWIDOT\Documents\IDOT Offices\District 7\Projects\74436\Drawings\CABsheets\0774436-sht-details.dwg		CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

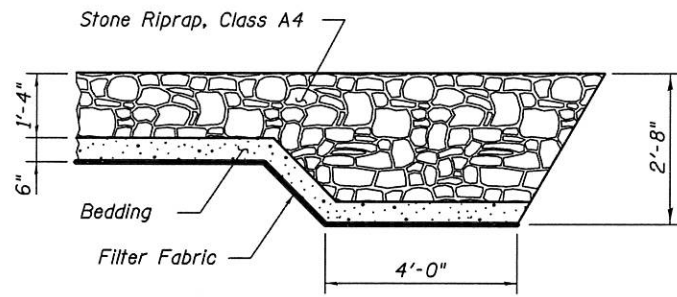
PAVEMENT MARKING AND RAISED REFLECTIVE PAVEMENT MARKERS  
(RURAL & URBAN APPLICATIONS)

SCALE: SHEET NO. 4 OF 4 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	(119BR-1)B-1	MOULTRIE	38	15
CONTRACT NO. 74436				
ILLINOIS FED. AID PROJECT				



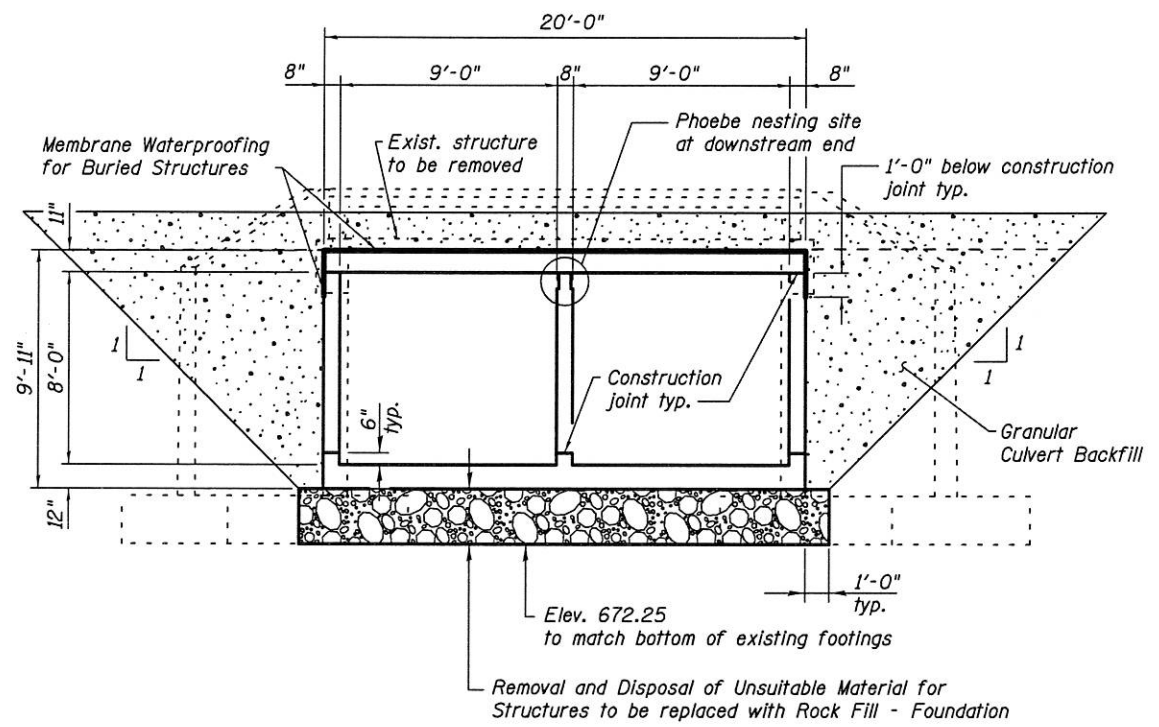




**SECTION THROUGH RIPRAP**

**GENERAL NOTES**

- 1) Reinforcement bars designated (E) shall be epoxy coated.
- 2) Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
- 3) Precast alternative is not allowed.
- 4) Modify the existing channel to match culvert at each end as directed by the Engineer, cost included in the pay item for Stone Riprap, Class A4.
- 5) Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure.
- 6) Excavation required for construction of the box culvert, including the excavation necessary to construct the granular backfill and the soldier pile supported wingwalls, is included in Earth Excavation, see roadway plans.
- 7) The limits and quantities of removal and replacement of unsuitable material shown are based on the boring data and may be modified by the District Geotechnical and Field Engineers for variable subsurface conditions encountered in the field.



**SECTION THROUGH BARREL**  
(Dimensions at right angle to barrel)

STATION 138+54.22  
BUILT 201 BY  
STATE OF ILLINOIS  
F.A.P. RTE. 749 SEC. (119BR-1)B-1  
LOADING HL-93  
STR. NO. 070-2020

**NAME PLATE**  
(See Std. 51500)

PRINTED AT: ESCA CONSULTANTS, INC. 1100 S. WASHINGTON ST. CHICAGO, IL 60607  
 FILE NAME: 1119BR-1)B-1 STR. NO. 070-2020.dgn  
 PLOT DATE: 9/1/2017 10:36:41 AM



USER NAME = kja	DESIGNED - KJA	03/16	REVISED -
ESCA PROJECT NO. 1078J4	CHECKED - RDP	11/16	REVISED -
PLOT SCALE = 0.2" = 1'-0"	DRAWN - KJA	04/16	REVISED -
PLOT DATE = 9/1/2017 10:36:41 AM	CHECKED - ELH	05/17	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**GENERAL DATA  
STRUCTURE NO. 070-2020**

SHEET NO. 2 OF 9 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	(119BR-1)B-1	MOULTRIE	38	17
CONTRACT NO. 74436				
ILLINOIS FED. AID PROJECT				

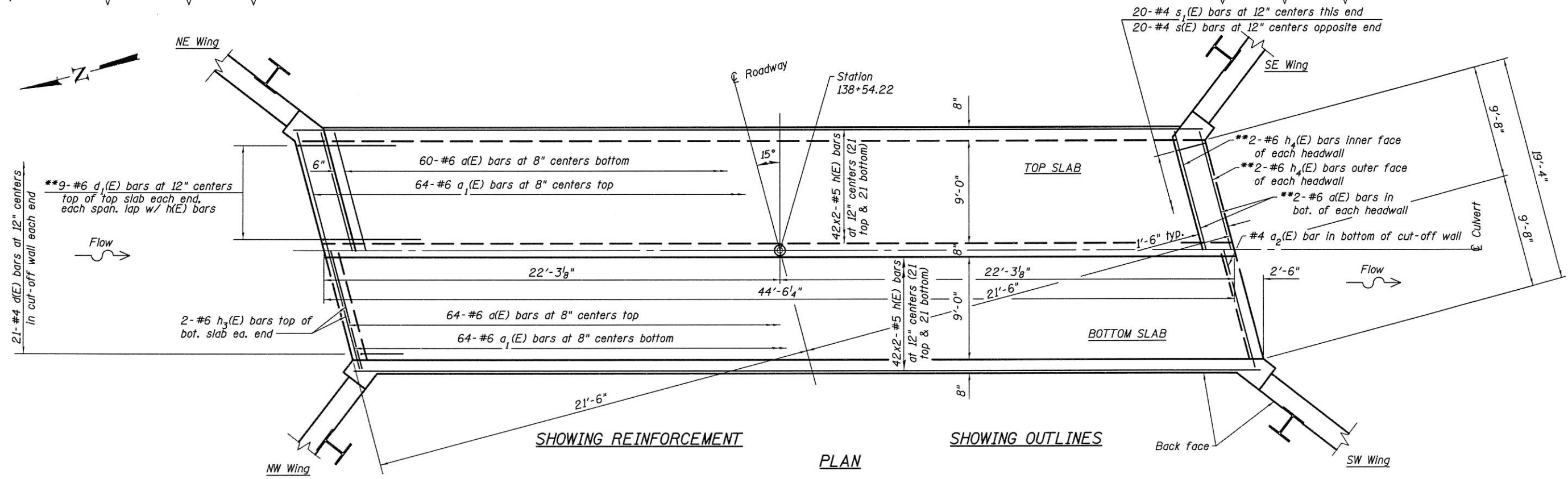
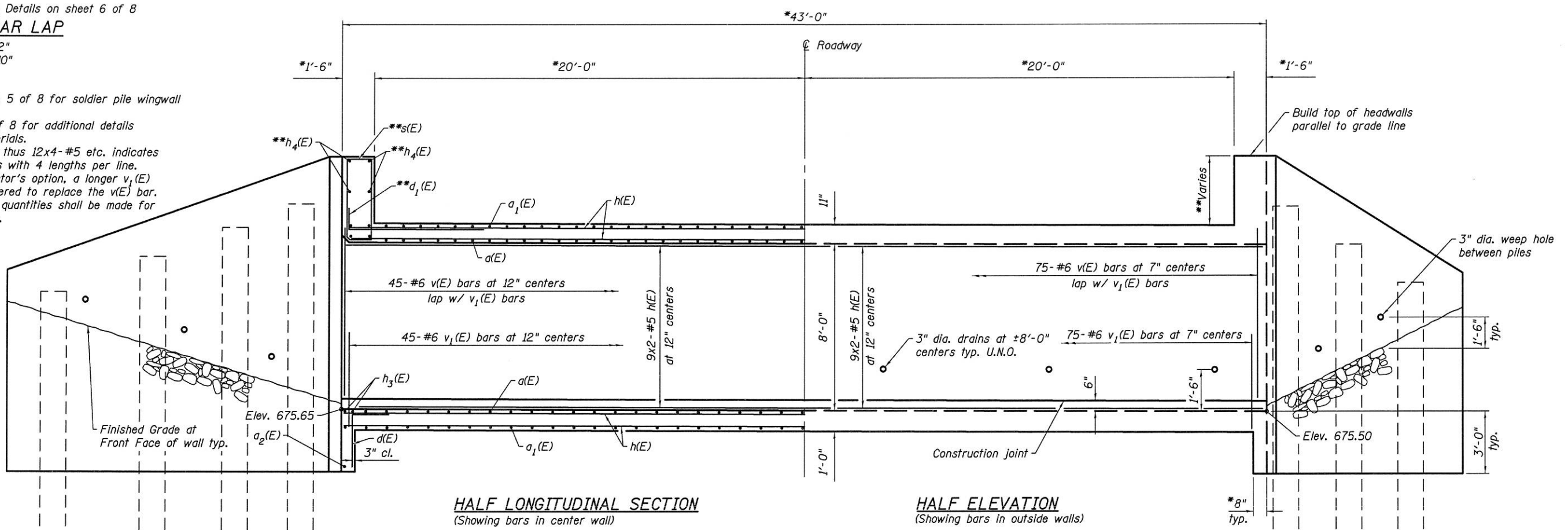
\*Dimensions shown are at right angle to  $\text{C Roadway}$   
 \*\*See Headwall Details on sheet 6 of 8

**MINIMUM BAR LAP**

#5 bars = 3'-2"  
 #6 bars = 3'-10"

**NOTES**

See sheet 4 & 5 of 8 for soldier pile wingwall details.  
 See sheet 6 of 8 for additional details and Bill of Materials.  
 Bars indicated thus 12x4-#5 etc. indicates 12 lines of bars with 4 lengths per line.  
 At the Contractor's option, a longer  $v_1(E)$  bar may be ordered to replace the  $v(E)$  bar. No reduction in quantities shall be made for this substitution.



(Sheet 1 of 4)

ESCA CONSULTANTS, INC. 1501 W. 15th Street, Suite 100, Chicago, IL 60604  
 TEL: 773.291.1100 FAX: 773.291.1101  
 WWW.ESCA-CONSULTANTS.COM



USER NAME = kja	DESIGNED - KJA	03/16	REVISED -
ESCA PROJECT NO. 1070J14	CHECKED - RDP	11/16	REVISED -
PLOT SCALE = @ 2 1/4" = 1'	DRAWN - KJA	04/16	REVISED -
PLOT DATE = 9/1/2017 11:46:58 AM	CHECKED - ELH	09/17	REVISED -

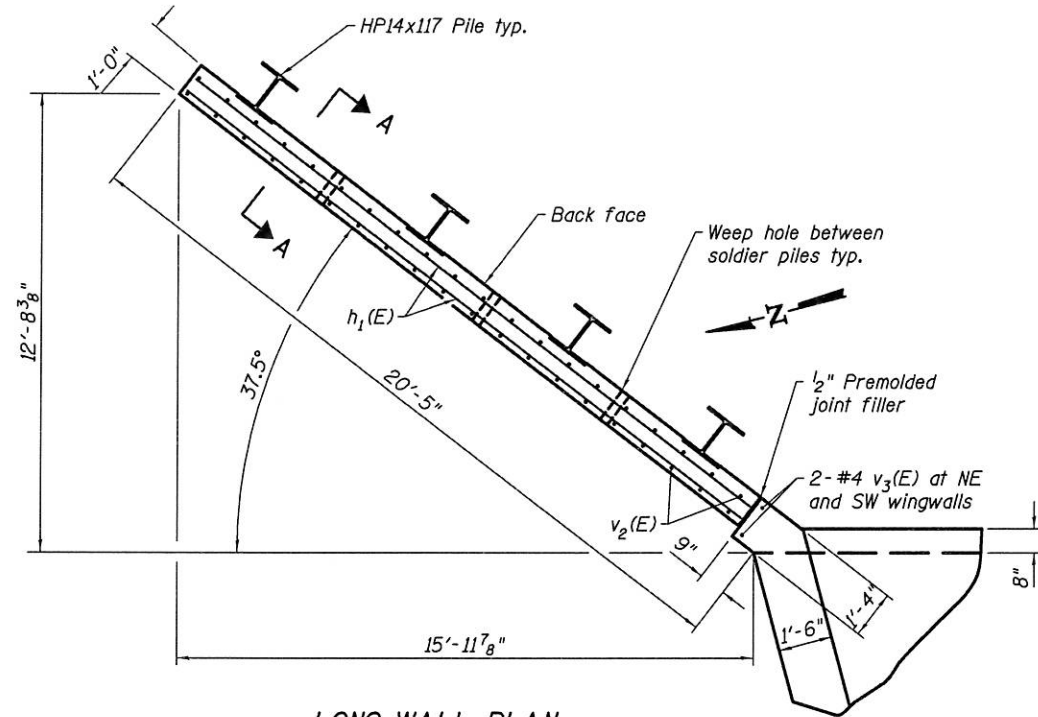
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

BOX CULVERT DETAILS  
 STRUCTURE NO. 070-2020

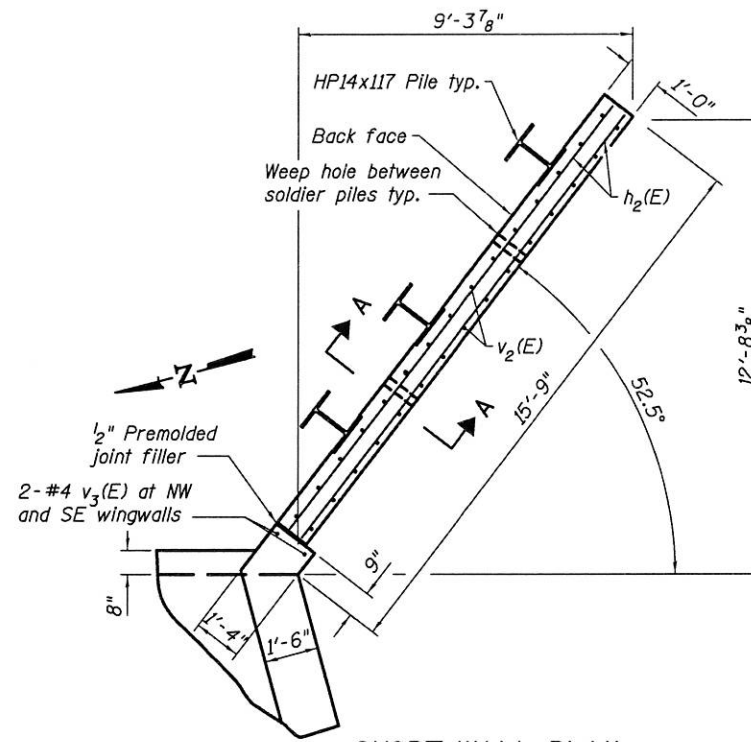
SHEET NO. 3 OF 9 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	(1198R-1)B-1	MOULTRIE	38	18
CONTRACT NO. 74436				

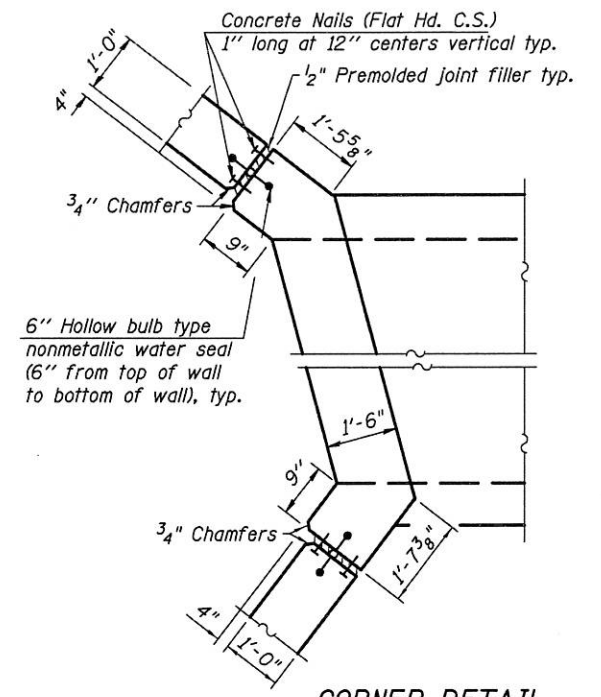
ILLINOIS FED. AID PROJECT



**LONG WALL PLAN**  
(NE Wing Shown, SW Wing Similar)

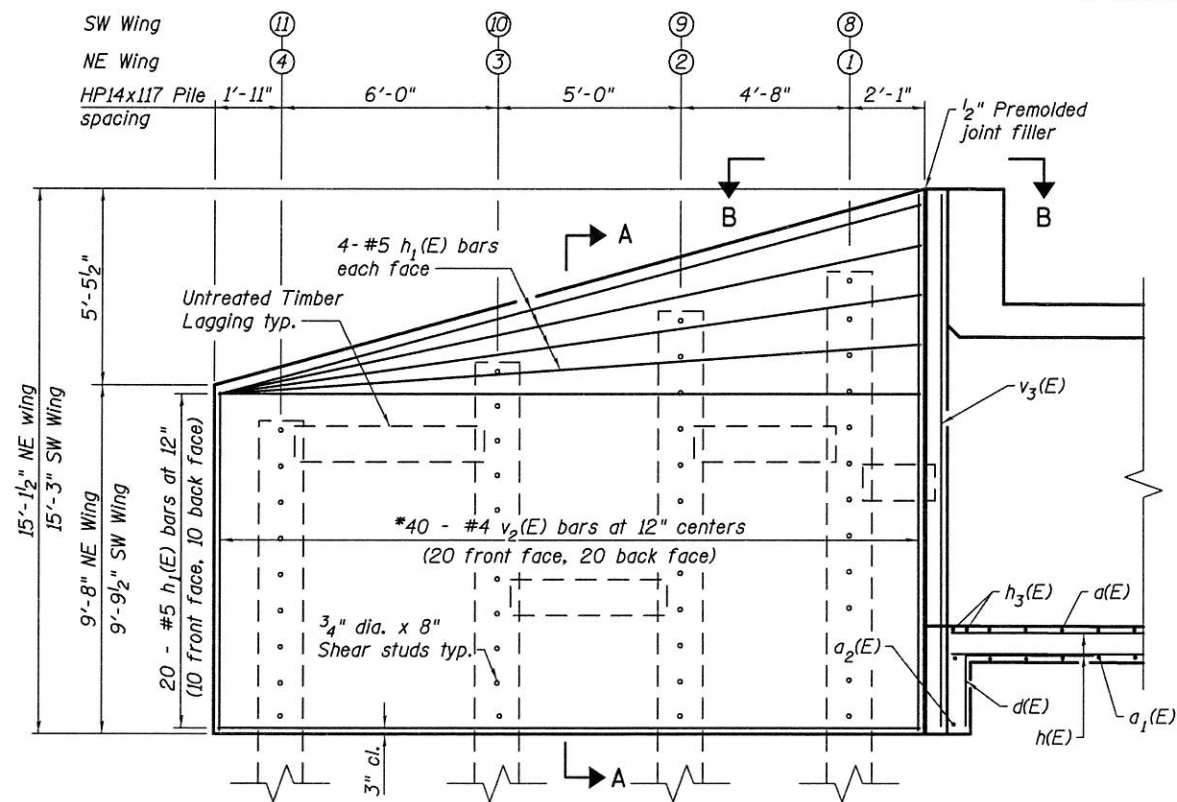


**SHORT WALL PLAN**  
(SE Wing Shown, NW Wing Similar)

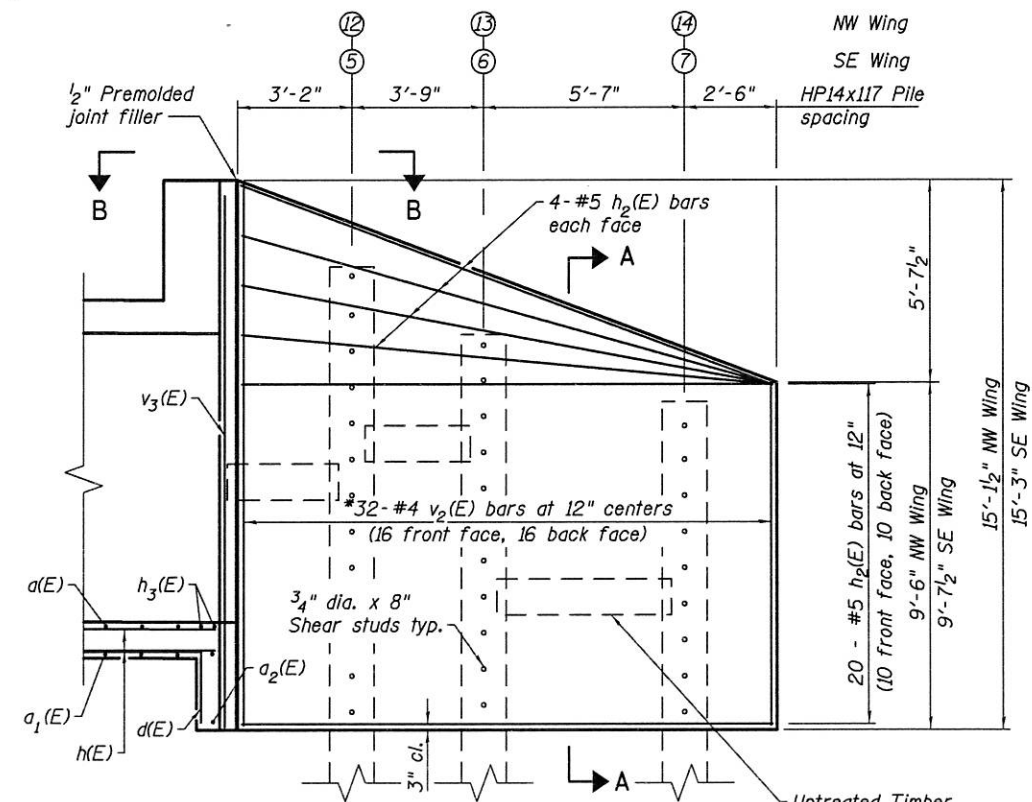


**CORNER DETAIL**

See sheet 5 of 8 for  
Sections A-A and B-B



**LONG WALL ELEVATION**  
(NE and SW wings)



**SHORT WALL ELEVATION**  
(SE and NW wings)

\*Order v2(E) full length, cut to fit  
and use remainder of bars in opposite  
face. See field cutting diagram on  
Sheet 6 of 8.

(Sheet 2 of 4)

PRINTED BY: ESCA CONSULTANTS, INC.  
 PLOT DATE: 9/11/2017 11:48:29 AM  
 PLOT SCALE: 1/8" = 1'-0"  
 PLOT: 11/16/17  
 USER: kja  
 PROJECT: 1878.14  
 SHEET: 4 OF 9



USER NAME = kja	DESIGNED - KJA	03/16	REVISED -
ESCA PROJECT NO. 1878.14	CHECKED - RDP	11/16	REVISED -
PLOT SCALE = 1/8" = 1'-0"	DRAWN - KJA	05/16	REVISED -
PLOT DATE = 9/11/2017 11:48:29 AM	CHECKED - ELH	09/17	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

BOX CULVERT DETAILS  
STRUCTURE NO. 070-2020

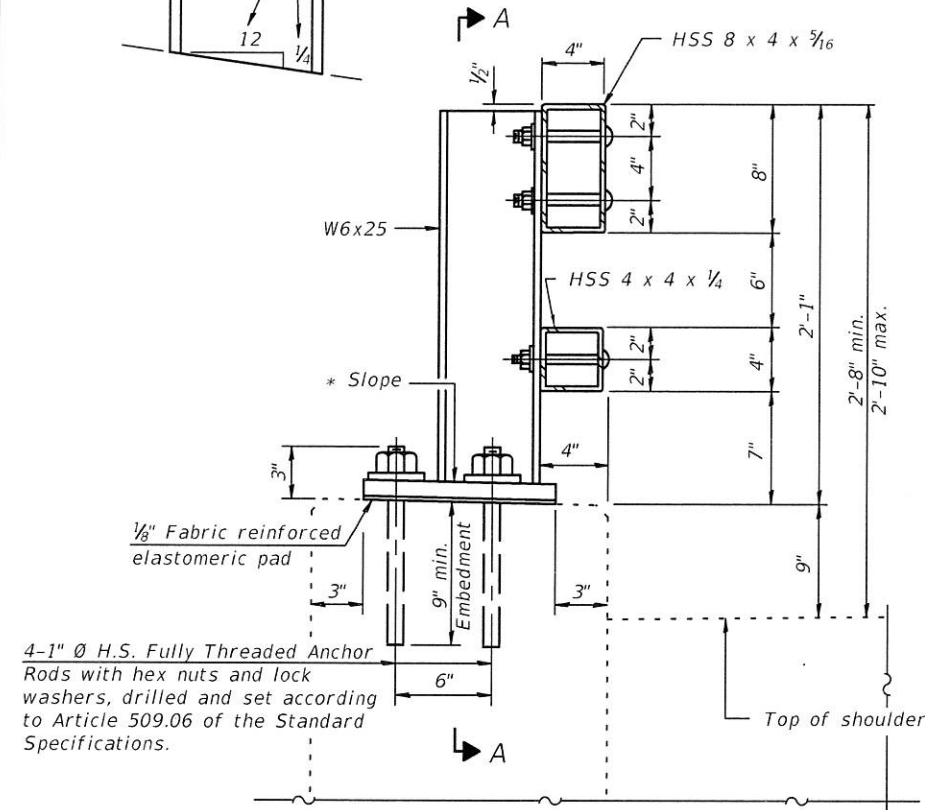
SHEET NO. 4 OF 9 SHEETS

F.A.P. RTE. 749	SECTION (119BR-1)B-1	COUNTY MOULTRIE	TOTAL SHEETS 38	SHEET NO. 19
CONTRACT NO. 74436				ILLINOIS FED. AID PROJECT

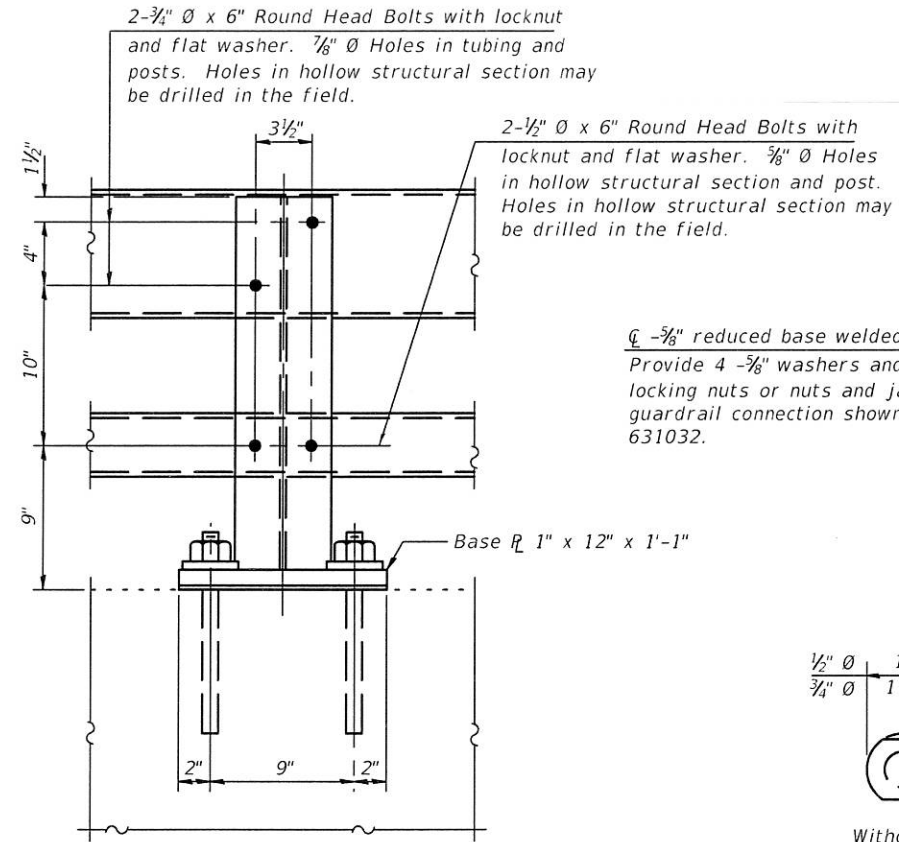




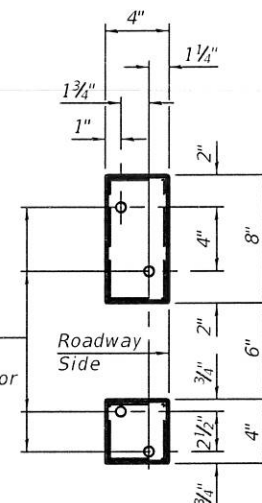
\* Cut bottom end of post to curb slope.



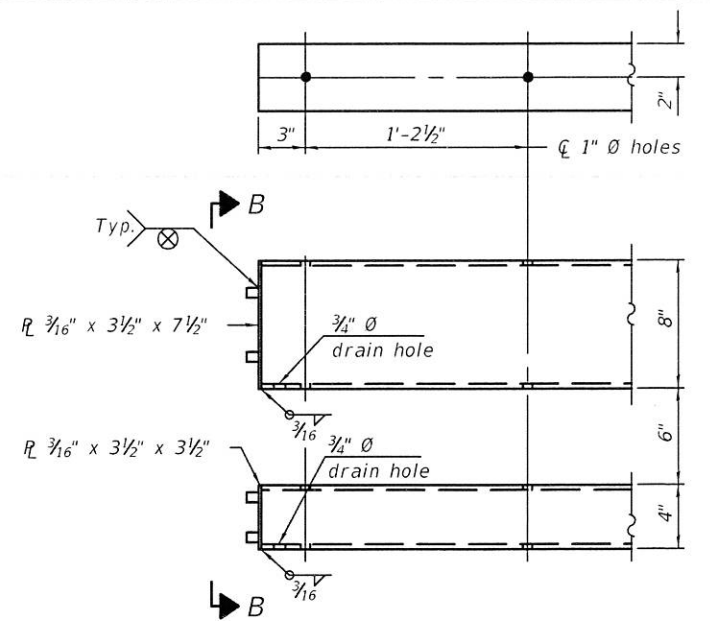
SECTION AT RAIL POST



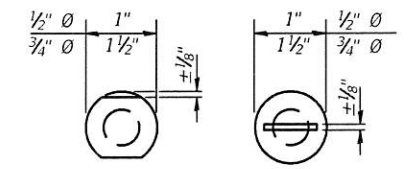
SECTION A-A



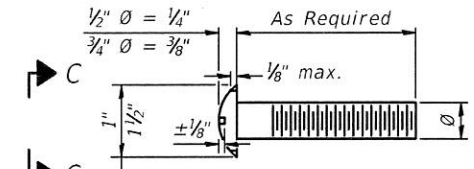
VIEW B-B



END OF RAIL DETAILS

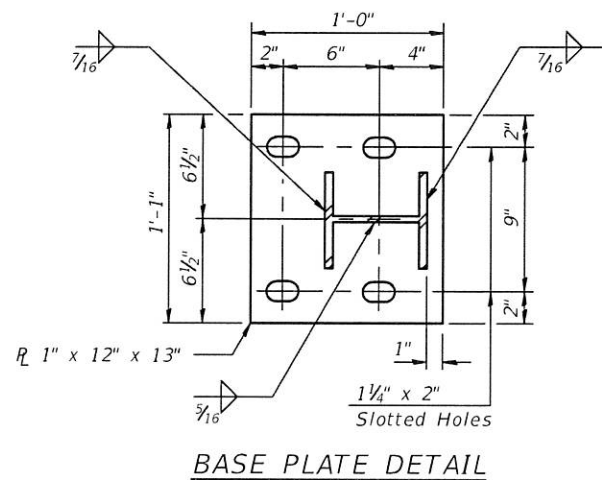


VIEW C-C

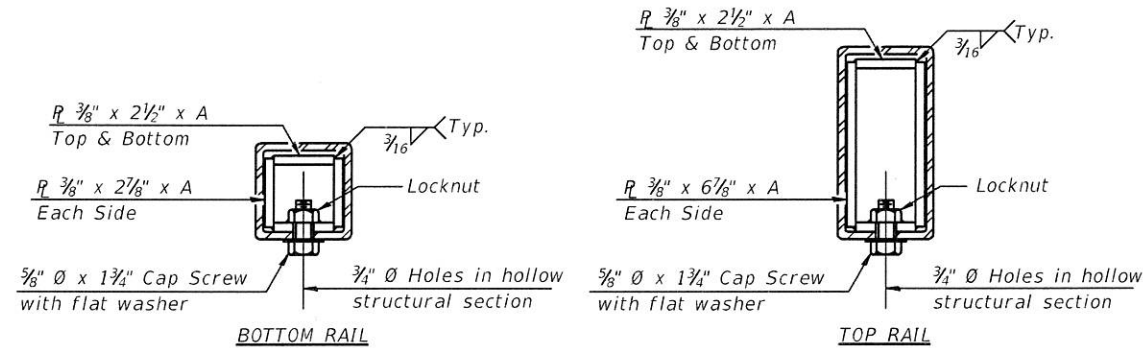


DETAIL OF 1/2" Ø & 3/4" Ø ROUND HEAD BOLTS

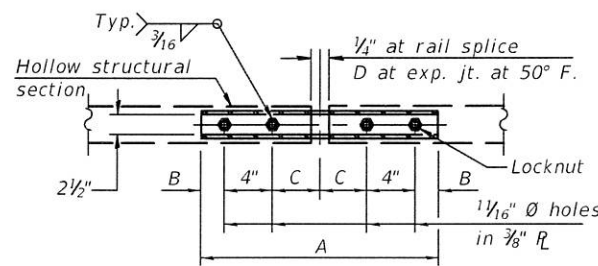
Notes:  
Provide one 1/8" and two 1/16" steel shims for 25% of the posts. Shims shall be similar to base plates in size and holes. All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications. See Sheet No. 6 of 8 for rail post spacing.



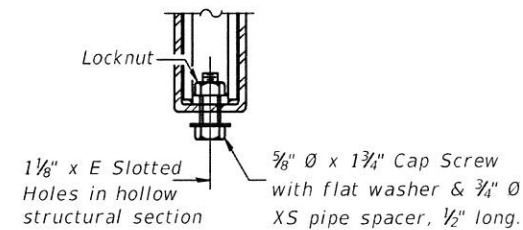
BASE PLATE DETAIL



SECTIONS AT RAIL SPLICE



PLAN-BOTT. SPLICE R TYPICAL



RAIL SPLICE CONNECTION AT EXPANSION JT.

SPLICE DIMENSIONS

T	D	A	B	C	E
≤ 4"	2 1/2"	1'-8"	2"	4"	2 1/2"
> 4" ≤ 6 1/2"	3 3/4"	2'-0"	2 1/2"	5 1/2"	3 1/2"
> 6 1/2" ≤ 9"	5"	2'-4"	3 1/2"	6 1/2"	9"
> 9" ≤ 13"	7"	2'-10"	4 1/2"	8 1/2"	11"
Rail Splice	1/2"	1'-8"	2"	4"	—

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type 2399	Foot	46

(6'-3" Maximum Post Spacing)

PRINTED BY ESCA CONSULTANTS, INC. 10/17/2017 10:37:17 AM  
 PLOT NAME: 107014.DWG  
 PLOT DATE: 9/1/2017 10:37:17 AM



USER NAME = kja  
 ESCA PROJECT NO. 107014  
 PLOT SCALE = 3/8" = 1' / in.  
 PLOT DATE = 9/1/2017 10:37:17 AM

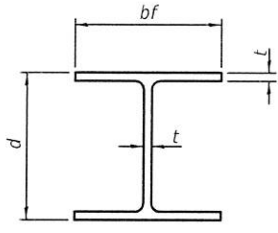
DESIGNED - KJA 07/17 REVISED -  
 CHECKED - RDP 07/17 REVISED -  
 DRAWN - KJA 07/17 REVISED -  
 CHECKED - ELH 07/17 REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

STEEL RAILING, TYPE 2399  
 STRUCTURE NO. 070-2020

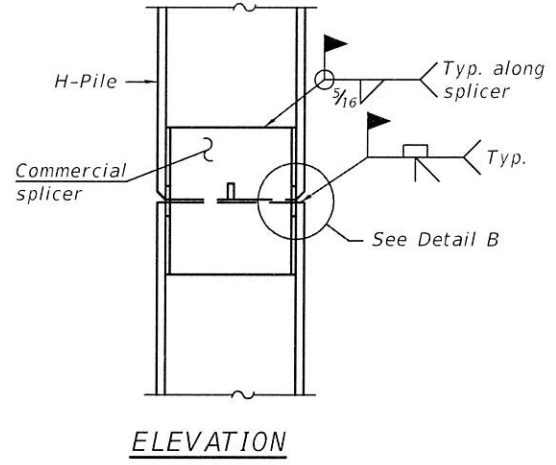
SHEET NO. 7 OF 9 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	(1198R-1)B-1	MOULTRIE	38	22
CONTRACT NO. 74436			ILLINOIS FED. AID PROJECT	

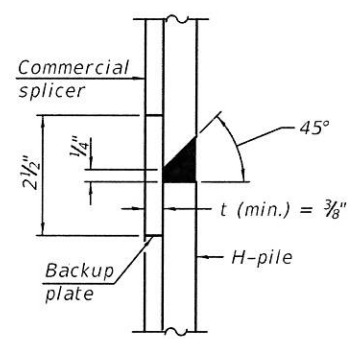


STEEL PILE TABLE

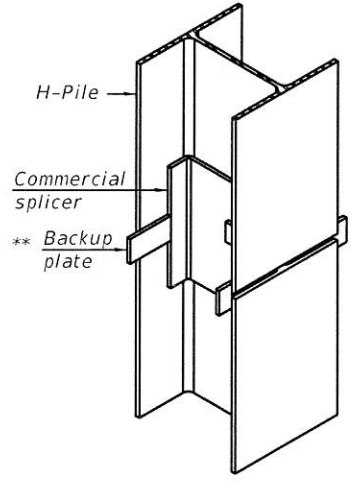
Designation	Depth d	Flange width bf	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 1/8"	1 3/16"	30"
x102	14"	14 3/4"	1 1/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1 1/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"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



ELEVATION

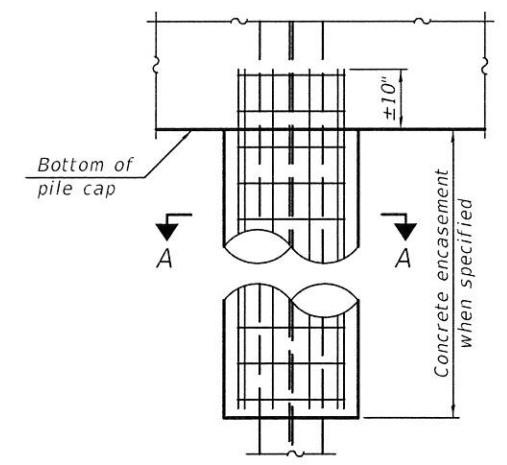


DETAIL "B"

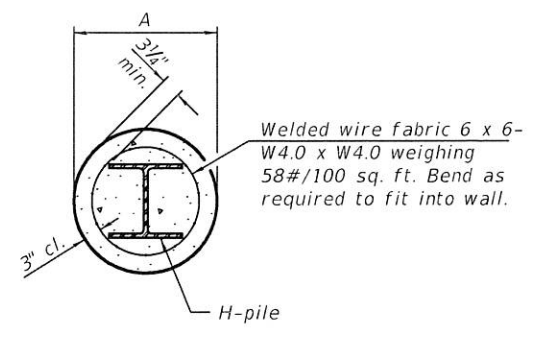


ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE

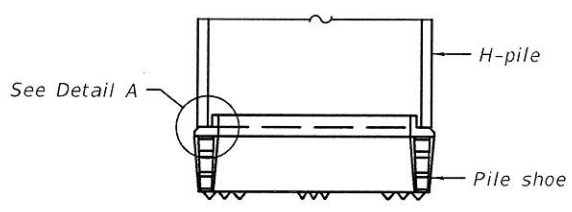


ELEVATION

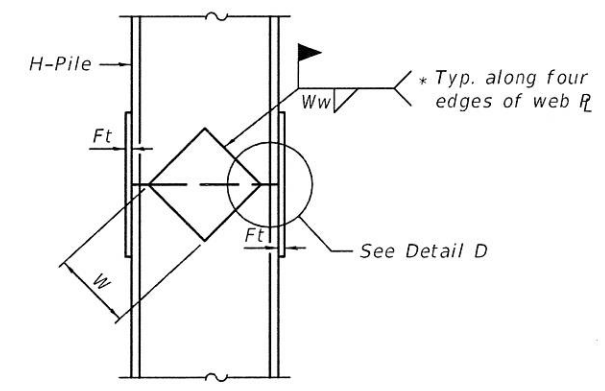


SECTION A-A

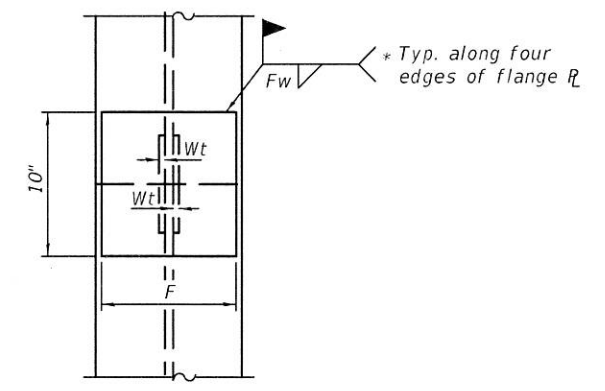
INDIVIDUAL PILE CONCRETE ENCASUREMENT  
(Forms for encasement may be omitted when soil conditions permit).



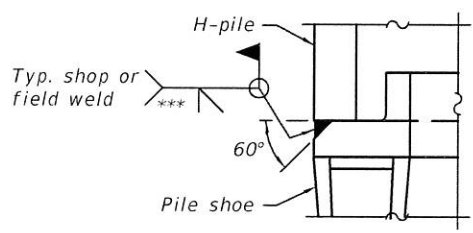
ELEVATION



ELEVATION

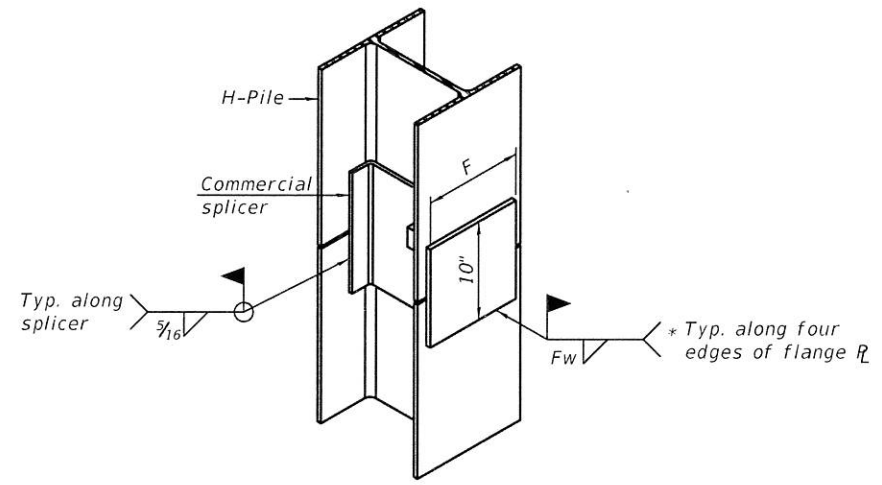


END VIEW



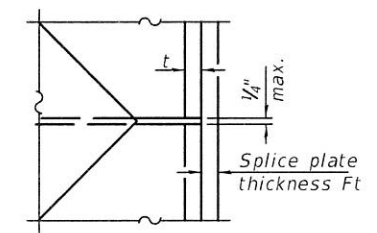
DETAIL A

SHOE ATTACHMENT



ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE



DETAIL D

WELDED PLATE FIELD SPLICE

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

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

- \* 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.).

PRINT CENTER: ESCA CONSULTANTS, INC. 1000 N. WILSON AVENUE, SUITE 100, DEERFIELD, IL 60015-4000  
 PLOT SCALE: 1/8" = 1'-0"  
 PLOT DATE: 9/1/2017 10:38:19 AM

F-HP

8-11-2017



USER NAME = kja  
 ESCA PROJECT NO. 1070.14  
 PLOT SCALE = 1/8" = 1'-0"  
 PLOT DATE = 9/1/2017 10:38:19 AM

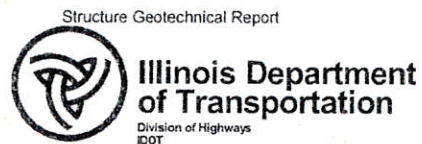
DESIGNED - KJA 09/17 REVISIONS -  
 CHECKED - RDP 09/17 REVISIONS -  
 DRAWN - KJA 09/17 REVISIONS -  
 CHECKED - ELH 09/17 REVISIONS -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

HP PILE DETAILS  
 STRUCTURE NO. 070-2020  
 SHEET NO. 8 OF 9 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	(119BR-1)B-1	MOULTRIE	38	22A

CONTRACT NO. 74436  
 ILLINOIS FED. AID PROJECT



# SOIL BORING LOG

IL 133 over Jonathan Branch  
SN 070-2020

Page 1 of 1

Date 7/15/14

ROUTE FAP 749 (IL 133) DESCRIPTION Jonathan Branch LOGGED BY E. Sandschafer

SECTION (119BR-1)B-1 LOCATION Sec 30 - SW 1/4, Sec 31 - NW 1/4, SEC. , TWP. 15 N, RNG. 6 E, 3 PM

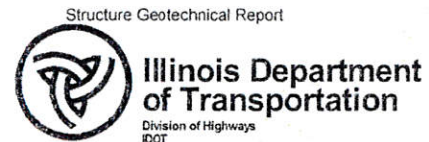
COUNTY Moultrie DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO. 070-2020	D	B	U	M	Surface Water Elev. 676.42 ft	D	B	U	M
Station 138+54.22	E	L	C	O	Stream Bed Elev. 676.16 ft	E	L	C	O
BORING NO. 1 East	P	O	S	I	Groundwater Elev.:	P	O	S	I
Station 138+76	H	S	Qu	T	First Encounter 675.1 ft	H	S	Qu	T
Offset 14.5ft N					Upon Completion 667.1 ft				
Ground Surface Elev. 687.10 ft	(ft)	/6"	(tsf)	(%)	After Hrs. Backfilled ft	(ft)	/6"	(tsf)	(%)

8.25" asphalt pavement on 4" gravel subbase. 686.10					Hard, damp, gray, CLAY LOAM TILL. (continued)	13	8.04	10	
Soft to Stiff, damp, gray, sticky, CLAY w/ Silt.						18	B		
	2					8			
	3	0.87	19			13	7.83	10	
	2	S				17	B		
	2					8			
	1	0.41	28			12	5.98	10	
	3	B				17	B		
	2					9			
	3	1.24	24			14	8.04	10	
	3	B				18	B		
	1					9			
	2	0.5	26			12	6.18	10	
	3	PP				16	B		
Very soft to medium, water bearing, gray, SANDY LOAM w/ Gravel. 675.10	6								
	13								
	7								
	7					7			
	7				Very stiff, damp, gray, SANDY CLAY TILL. 652.60	11	3.50	12	
	10					19	B		
Low recoveries due to gravel and cobbles.					Extent of exploration. 651.10				
	11								
	15	0.3	18						
	19	PP			Benchmark: BM 201 Cut square on SW wingwall of existing structure Sta 138+36 Rt 22.3' = 686.95'				
	12								

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Latitude: W 88 deg 35 min 05.3811 sec Longitude: N 38 deg 42 min 36.4634 sec Datum: Job Number

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated) Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Seating The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-99)  
Lin Engineering, Ltd. Page 9 of 12 Exhibit 4-Boring Logs



# SOIL BORING LOG

IL 133 over Jonathan Branch  
SN 070-2020

Page 1 of 1

Date 9/10/14

ROUTE FAP 749 (IL 133) DESCRIPTION Jonathan Branch LOGGED BY E. Sandschafer

SECTION (119BR-1)B-1 LOCATION Sec 30 - SW 1/4, Sec 31 - NW 1/4, SEC. , TWP. 15 N, RNG. 6 E, 3 PM

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

STRUCT. NO. 070-2020	D	B	U	M	Surface Water Elev. 676.42 ft	D	B	U	M
Station 138+54.22	E	L	C	O	Stream Bed Elev. 676.16 ft	E	L	C	O
BORING NO. 2 West	P	O	S	I	Groundwater Elev.:	P	O	S	I
Station 138+31	H	S	Qu	T	First Encounter 662.6 ft	H	S	Qu	T
Offset 15.5ft S					Upon Completion 667.1 ft				
Ground Surface Elev. 687.13 ft	(ft)	/6"	(tsf)	(%)	After Hrs. Backfilled ft	(ft)	/6"	(tsf)	(%)

12.25" asphalt pavement. 686.13					Hard to very stiff, damp, gray, CLAY LOAM TILL. Rock in sampler shoe, low recovery.	24	1.5	12	
Soft, damp, dark gray, sticky, SILTY CLAY.						25	PP		
	1					18			
	2	0.37	28			17	3.2	12	
	2	B			Rock in sampler shoe, low recovery.	19	PP		
	1					12			
	1	0.33	30			13	4.5	11	
	2	B			Rock in sampler shoe, low recovery.	15	PP		
	2					5			
Stiff to medium, damp, gray, CLAY. 680.13	2					7	4.12	11	
	3	1.65	24			9	B		
	1					5			
	2	0.62	25			7	2.68	12	
	3	B				8	B		
	9								
Very stiff, moist, brown, SANDY CLAY. Sample powdered. 675.13	15	2.89	4						
	13	B							
	9					7			
Very stiff, damp, gray, CLAY LOAM TILL. 672.63	8	2.89	12			7	1.65	13	
	7	B				8	B		
	15								
Very soft, wet, gray, SANDY LOAM and GRAVEL. 670.13	15								
	18								
	15								
	18								
	24								

File Name: S:\NEW GEOTECHNICAL\DATA\PROJECTS\MOULTRIE CO (070)070-2020 SOI, 2014.GPJ Data Template: D:\TEMPLT.GDT Date Printed: 9/16/14  
Latitude: W 88 deg 35 min 05.8734 sec Longitude: N 38 deg 42 min 36.2907 sec Datum: Job Number

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated) Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Seating The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-99)  
Lin Engineering, Ltd. Page 10 of 12 Exhibit 4-Boring Logs

ESCA CONSULTANTS, INC. 2014-09-10 10:38:31 AM



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ESCA PROJECT NO. 1070.14	CHECKED - RDP	11/16	REVISED -
PLOT SCALE = 8x2 1/2" / 11"	DRAWN - KJA	04/16	REVISED -
PLOT DATE = 9/1/2017	CHECKED - ELH	05/17	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

BORING LOGS  
STRUCTURE NO. 070-2020

SHEET NO. 9 OF 9 SHEETS

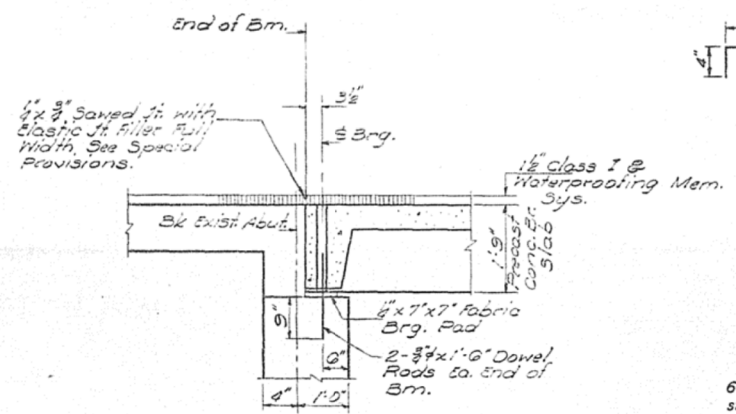
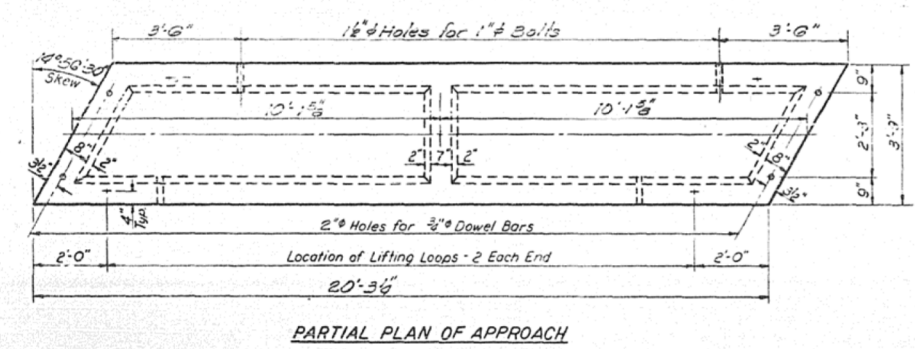
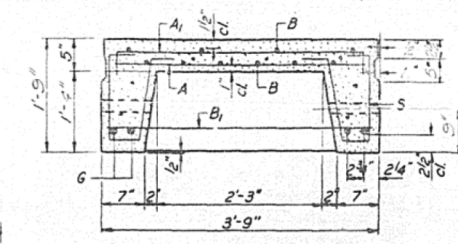
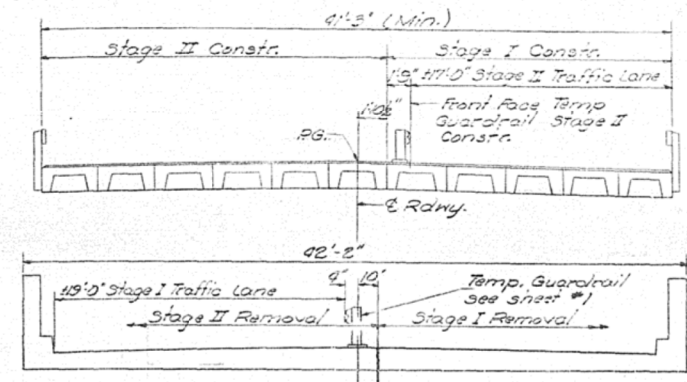
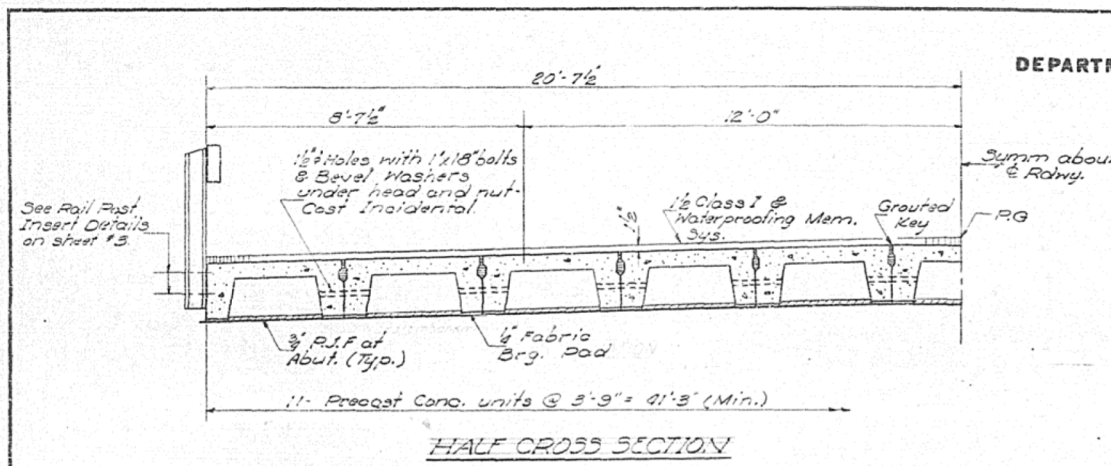
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CONTRACT NO. 74436				
ILLINOIS FED. AID PROJECT				





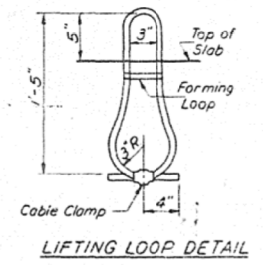
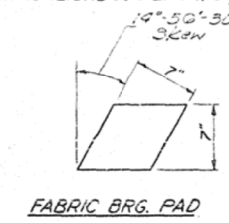
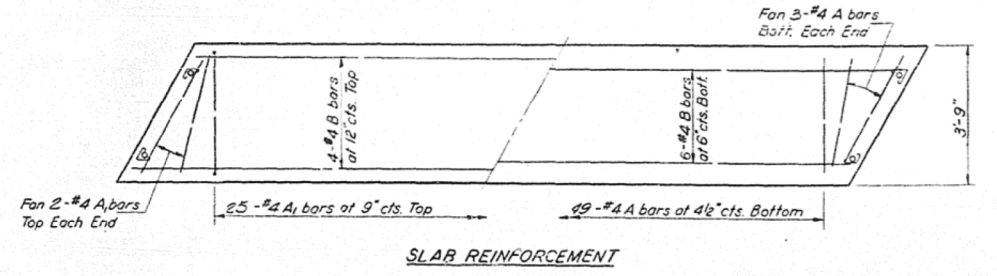
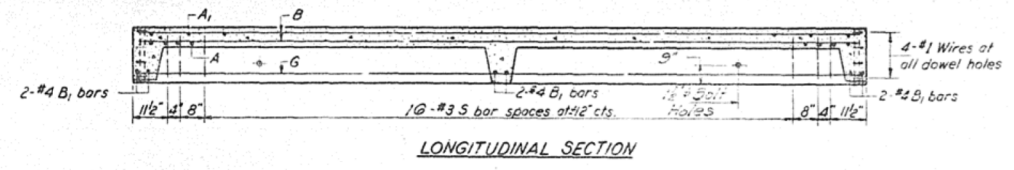
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SHEET NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
40	119B-1	MOULTRIE	40	24



BAR LIST - ONE UNIT  
Reinforcement to be cast into slab

Bar	No.	Size	Length	Shape
A	22	#4	3'-3"	
A1	29	#4	4'-0"	
B	10	#4	27'-0"	
B1	6	#4	3'-6"	
G	4	#10	20'-0"	
S	42	#3	3'-0"	[



NOTES

Unless otherwise approved by the Engineer, lifting loops shall be 1/2", 6x19 class wire rope with fiber core and shall have a minimum ultimate strength of 18,700 lbs. Loops shall be burned off after slab has been erected. Holes shall be drilled and anchor dowels grouted in place. Cost of reinforcement and accessories cast into the slab unit, bearing pads, furnishing, drilling for, placing and grouting anchor dowels is included in Unit bid price for "Precast Concrete Bridge Slab."

BILL OF MATERIAL

Item	Unit	Quantity
Precast Concrete Bridge Slab	Sq. Ft.	530
Removal of EXIST. Superstructure	Each	1

STRESSES

f<sub>c</sub> = 4,500 psi.

f<sub>c</sub> = 1,800 psi.

f<sub>s</sub> = 20,000 psi.

n = 8

LOADING HS-20

SUPERSTRUCTURE  
FA. RT. 719 SEC. 119B-1  
MOULTRIE COUNTY  
STA. 138+34.22

DESIGNED: John Schuller

CHECKED: J. Schuller

DRAWN: J.L. Armstrong

EXAMINED: [Signature]

APPROVED: [Signature]

DATE: July 9, 1976

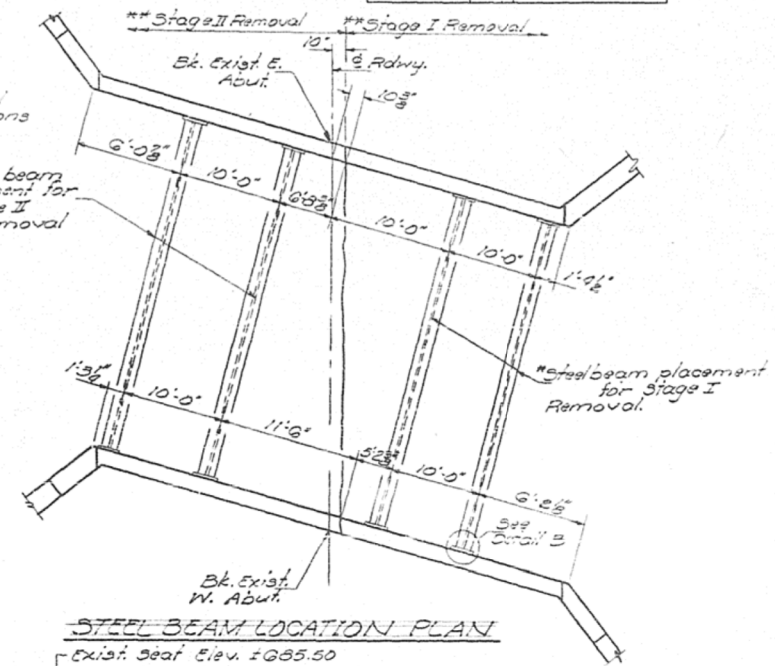
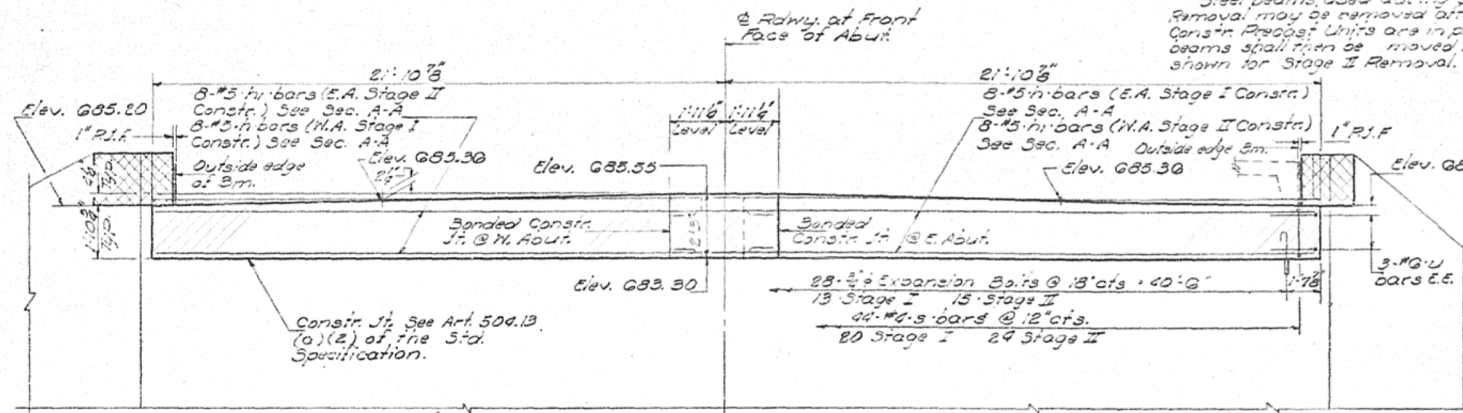
AP-3 20' Precast Appr Unit (Skewed L.F.) (15-15-77)

FOR INFORMATION ONLY

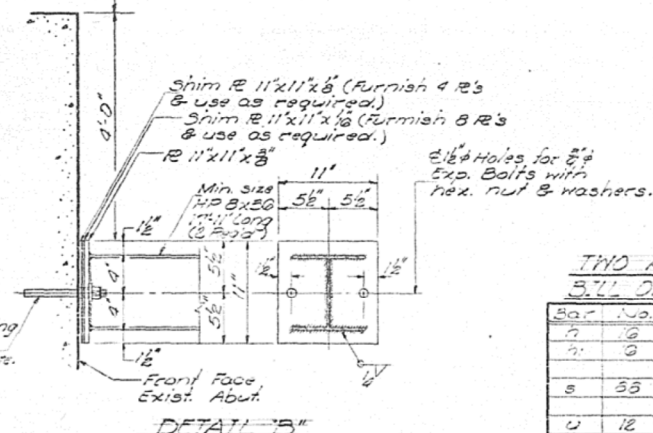
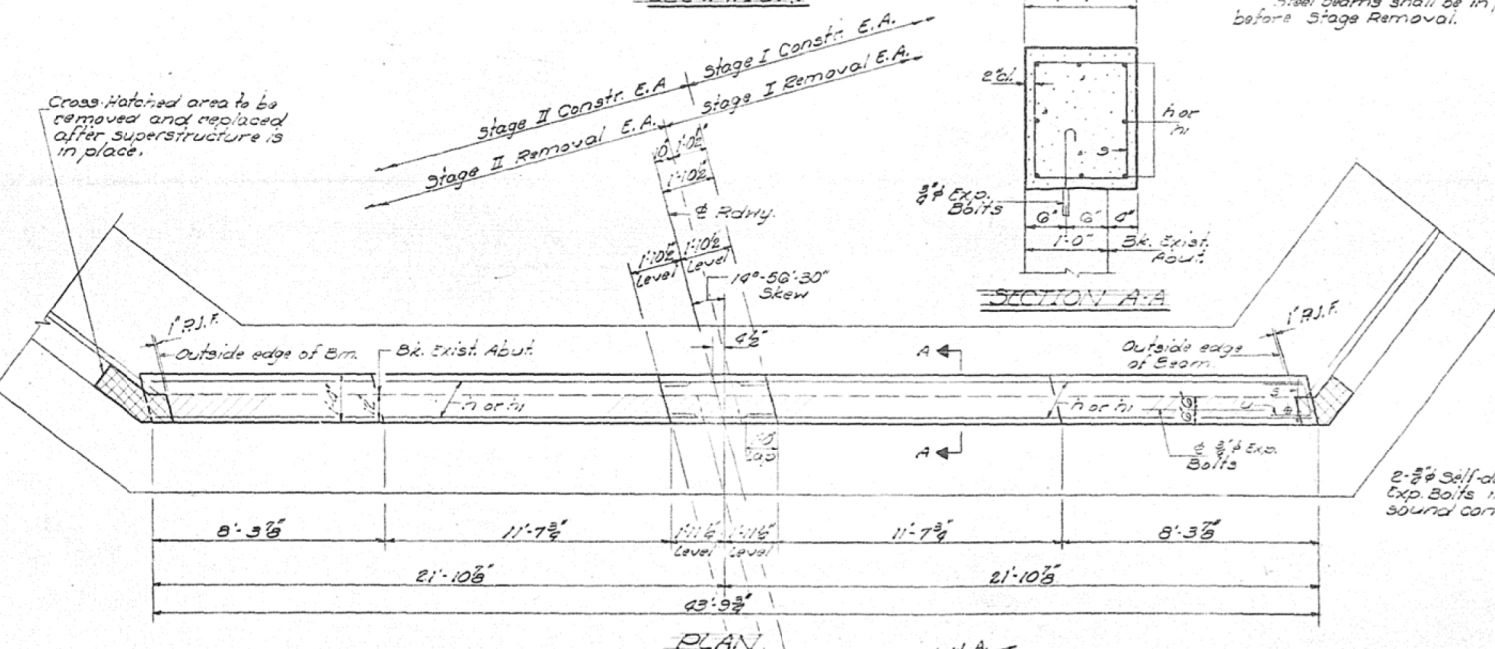
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	119BR-1	Moultrie	40	26
SHEETS				

\*NOTES:  
Cost of steel beams and accessories is incidental to Superstructure Removal. Steel beams used during Stage I Removal may be removed after Stage I. Construction Units are in place. The steel beams shall then be moved to the locations shown for Stage II Removal.



\*\* Note: Steel beams shall be in place before Stage Removal.



TWO ABUTMENTS  
BILL OF MATERIAL

Bar	No.	Size	Length	Vol.
1	16	#5	20'6"	
2	0	#3	13'3"	
3	66	#4	5'9"	
4	12	#6	4'0"	
Class X Concrete Cu/Ye 5.7				
Reinforcement Bars Cos. 11.50				
Concrete Removal Cu/Ye 8.0				
Expansion Bolts (#4) Ea 5.6				

ABUTMENTS  
F.A. RT 749 SEC. 119BR-1  
MOULTRIE COUNTY  
STA. 38758.22

DESIGNED	J. Schneller	EXAMINED	Jun 9 1976
CHECKED	J. A. Adams	PASSED	
DRAWN	J. SCHNELLER	APPROVED	
CHECKED	JAM		

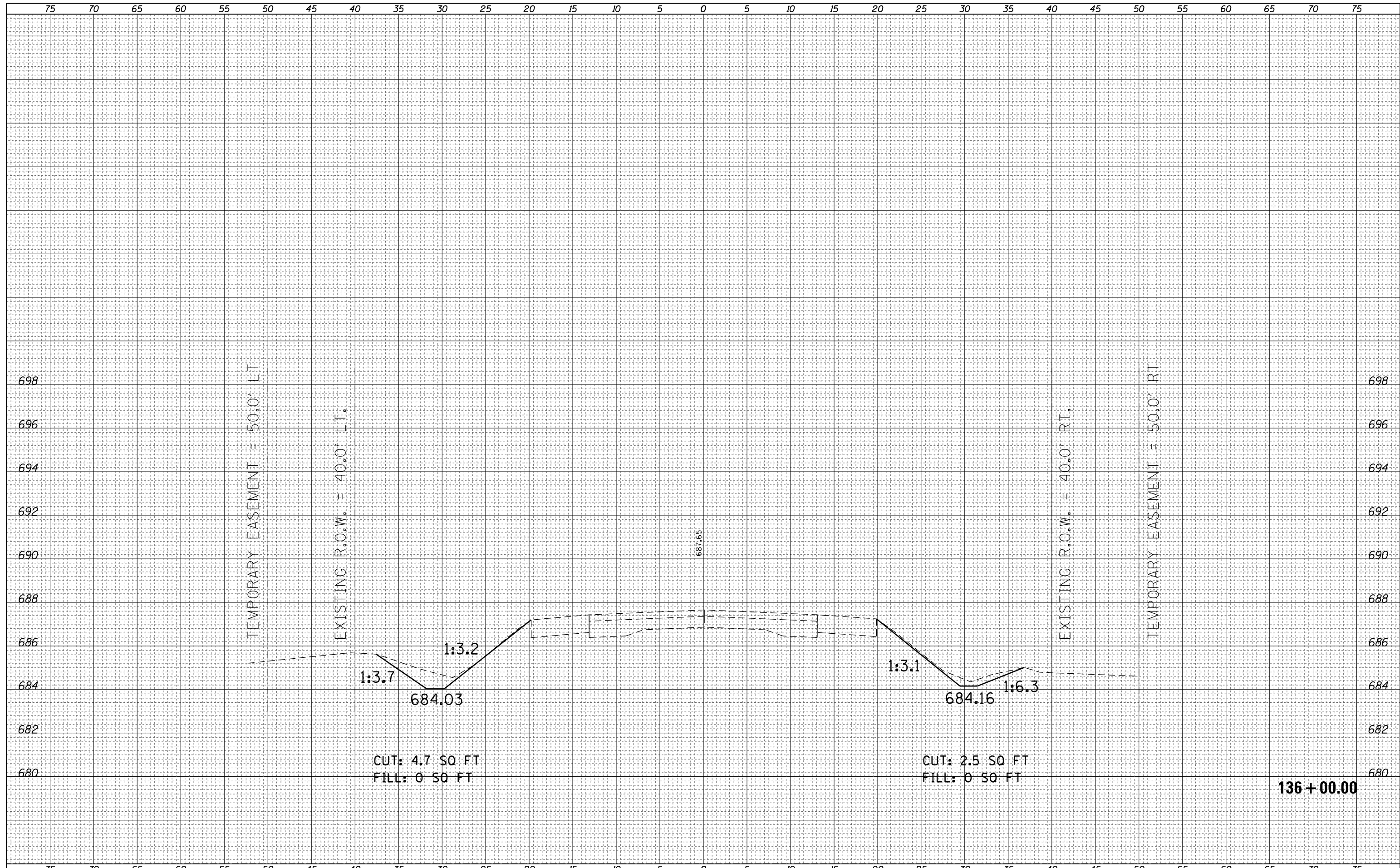
NOTES:  
Hatched area indicates concrete removal. Reinforcement extending into removed area shall be cleaned and incorporated into the new construction. Expansion bolts shall be anchored in sound concrete. All edges shall have standard 3/8" chamfers.

FOR INFORMATION ONLY



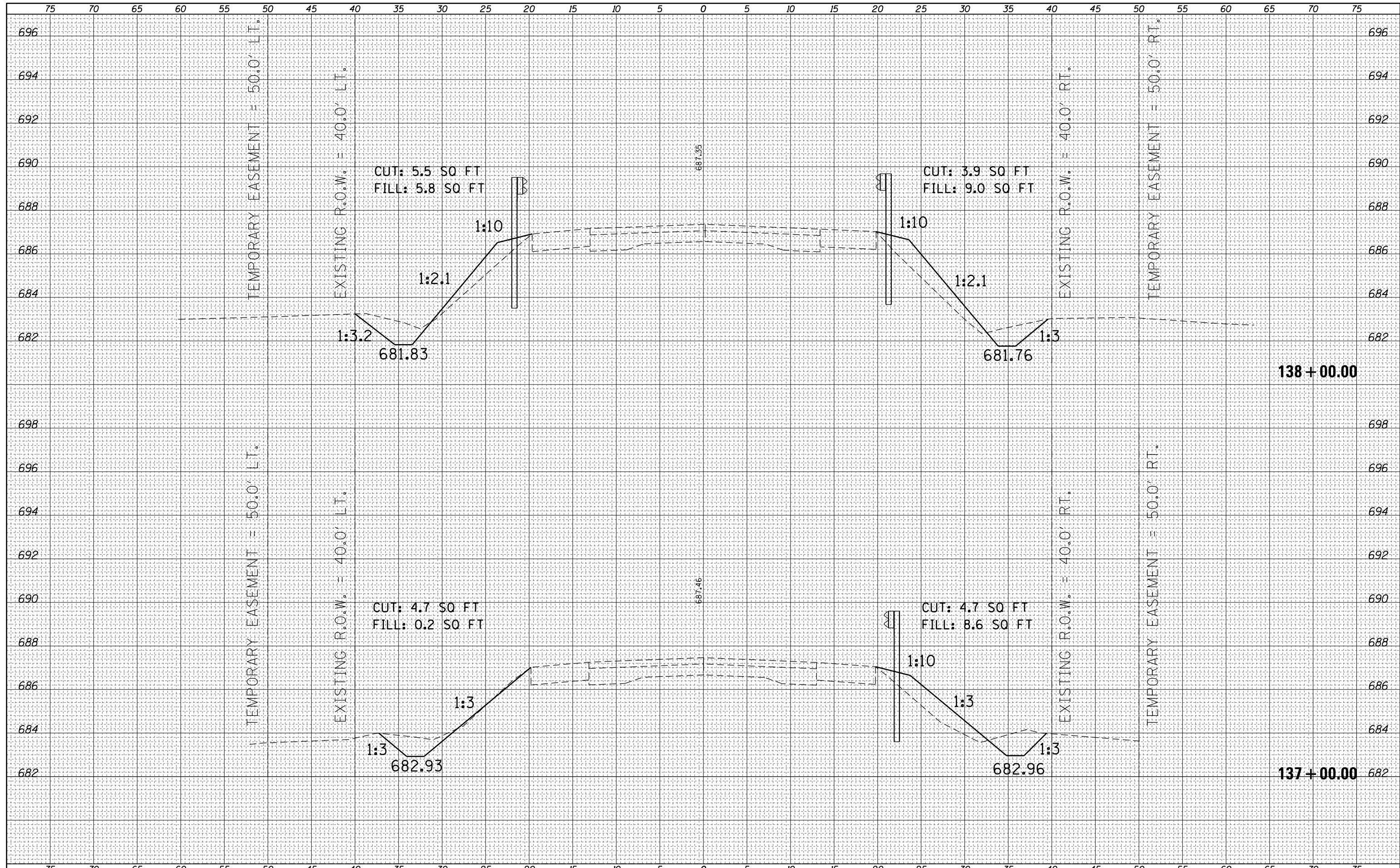
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BY	
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SURVEYED PLOTTED	
NOTE BOOK AREAS CHECKED	
TEMPLATE AREAS CHECKED	

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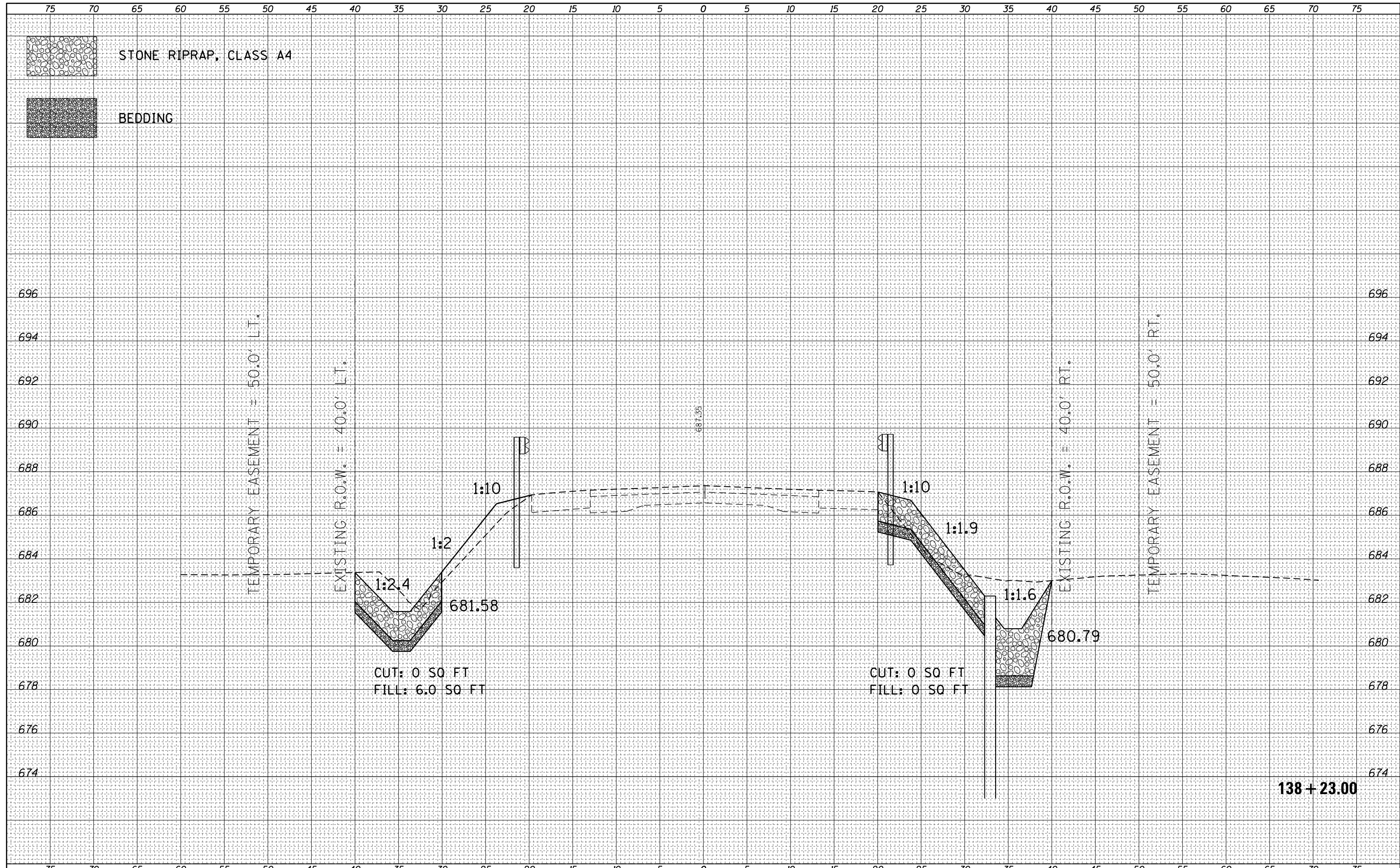
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NOTE BOOK	PLOTTED
NO.	TEMPLATE
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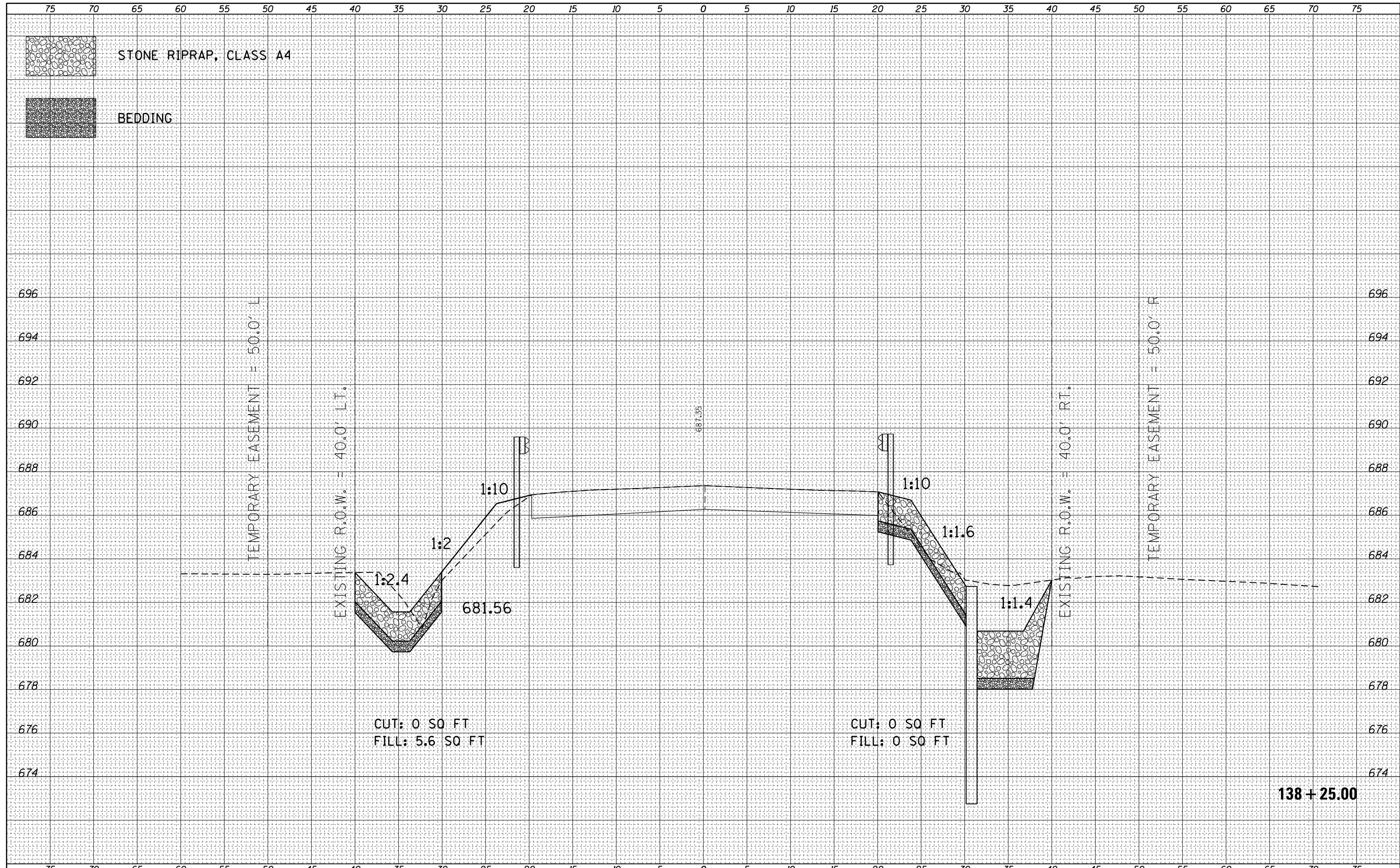
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	PLOT DATE = 1/11/2018							ILLINOIS FED. AID PROJECT				

DATE	
BY	
FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
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DATE	
BY	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
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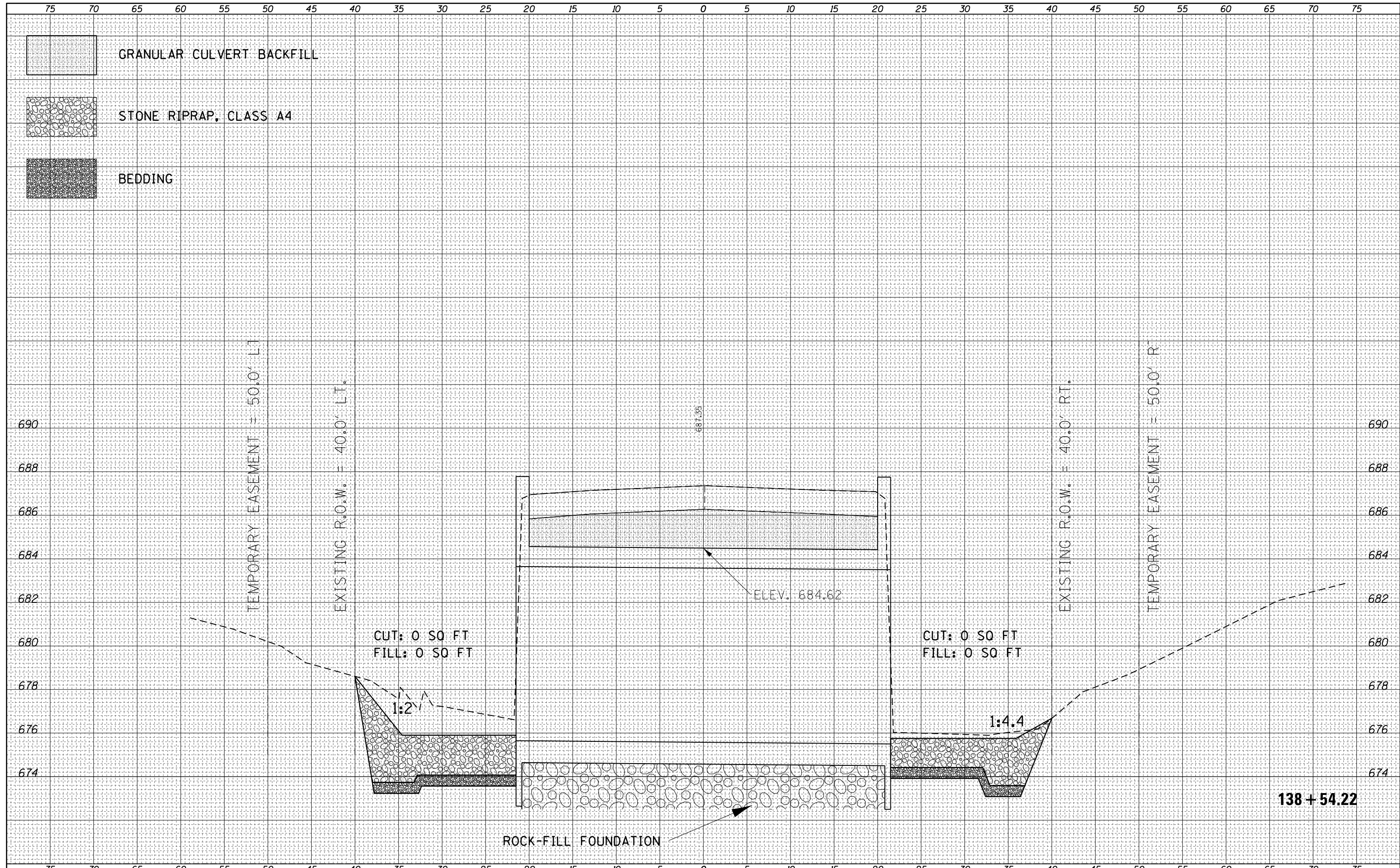
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	PLOT DATE = 1/11/2018				ILLINOIS FED. AID PROJECT							





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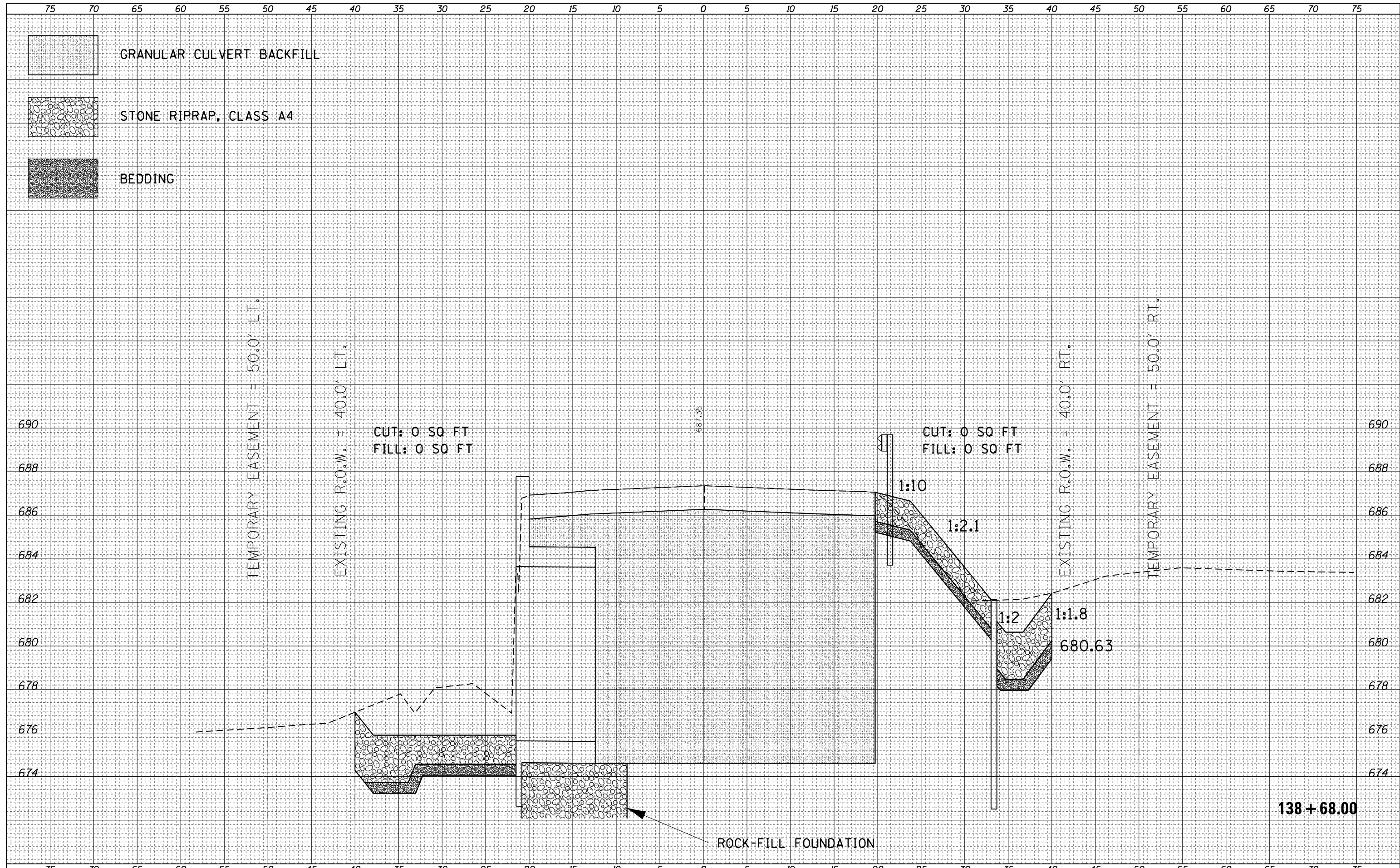
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	PLOT DATE = 1/11/2018				ILLINOIS FED. AID PROJECT							

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

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



FILE NAME =	USER NAME = steffennk	DESIGNED -	REVISIED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>CROSS SECTION SHEETS</b>			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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PLOT SCALE = 10.0000' / in.	CHECKED -	REVISIED -	REVISIED -		CONTRACT NO. 74436							
Default	DATE - 1/11/2018	REVISIED -	REVISIED -		ILLINOIS FED. AID PROJECT							

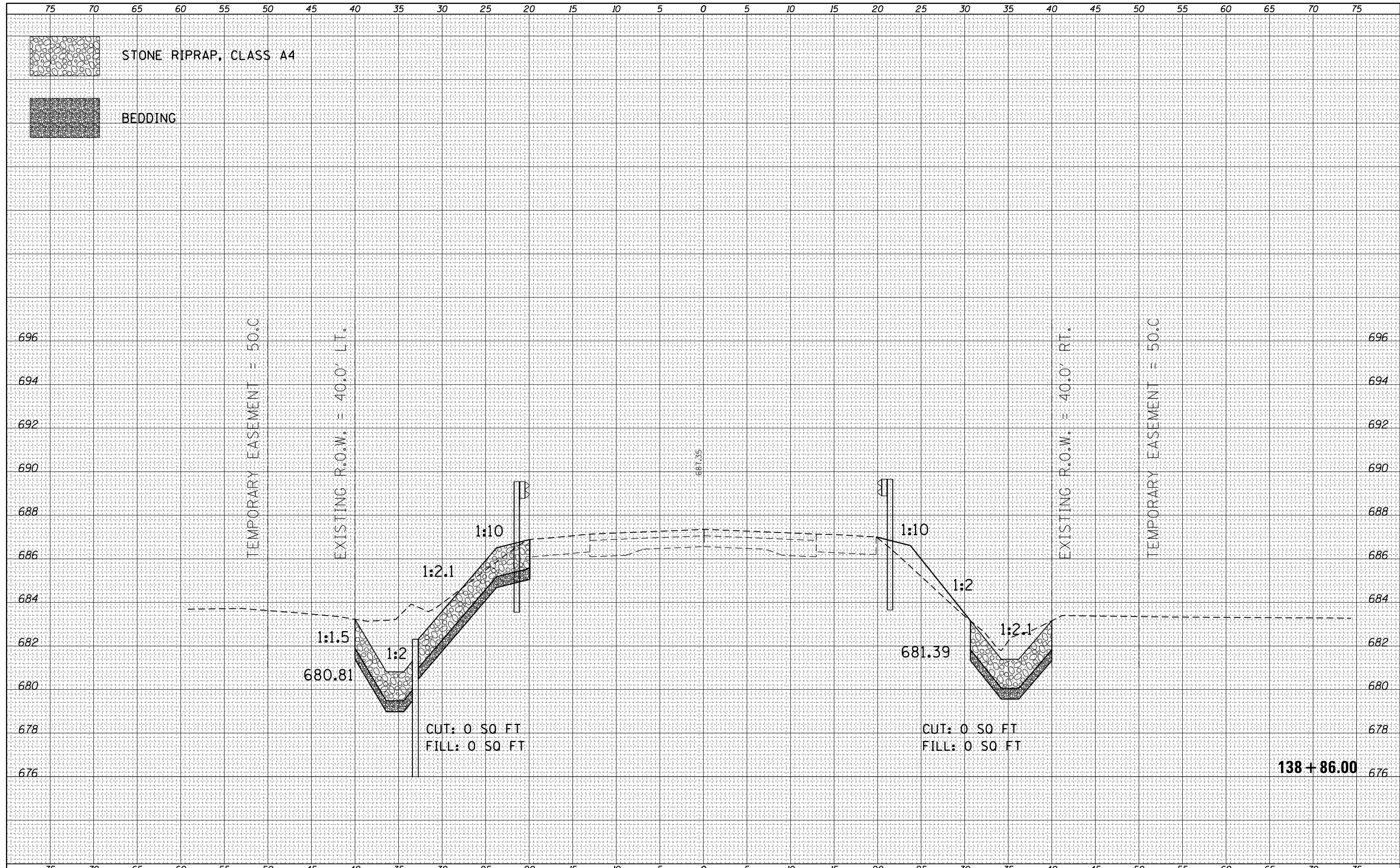
SCALE: SHEET 8 OF 12 SHEETS STA. 138+68.00 TO STA. 138+68.00

138 + 68.00



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

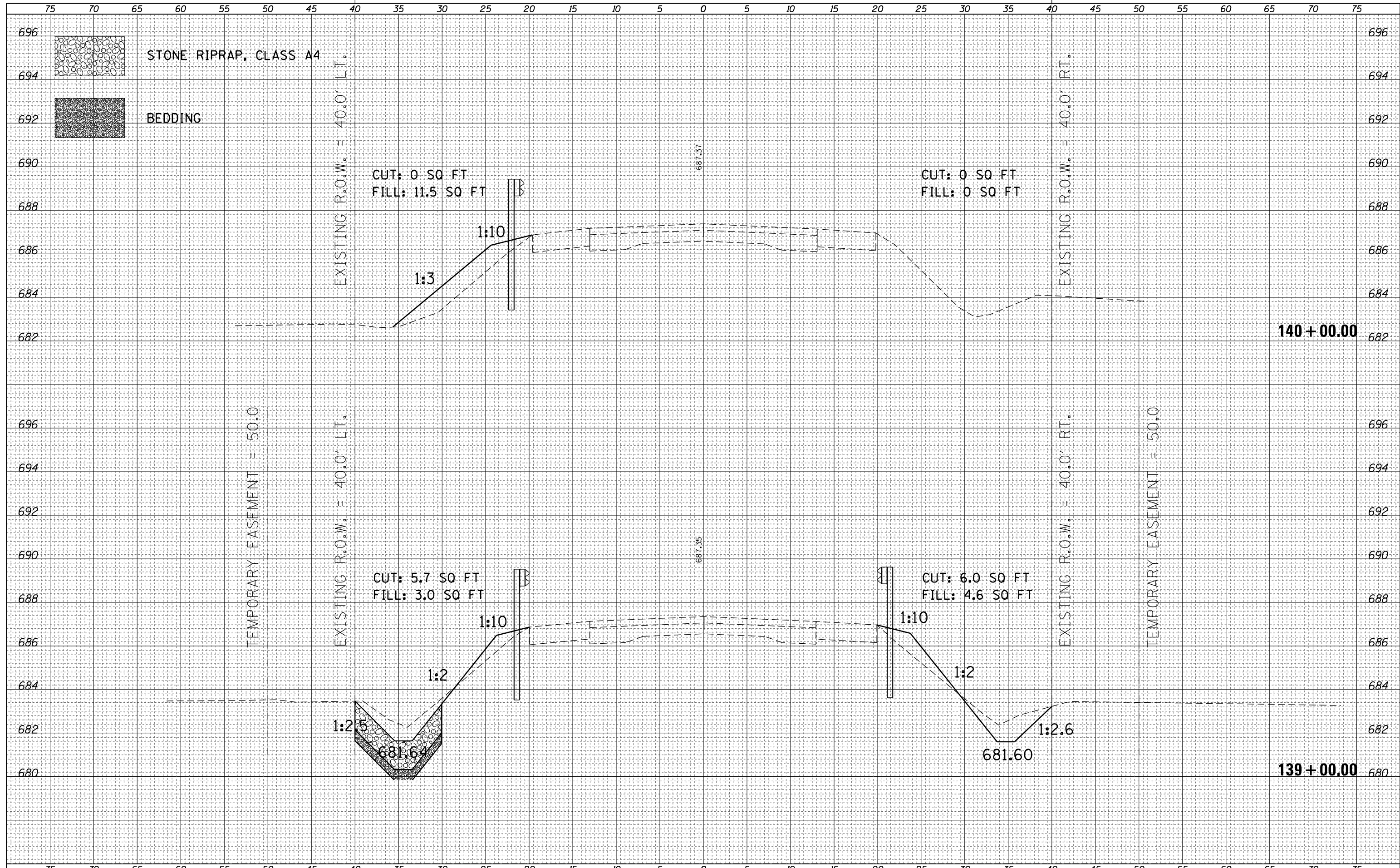
DATE	
BY	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED



FILE NAME =	USER NAME = steffennk	DESIGNED -	REVISIED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>CROSS SECTION SHEETS</b>			F.A. RTÉ.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Default	1/11/2018	DATE -	REVISIED -					749	(119BR-1)B-1	MOULTRIE	38	36
					SCALE:	SHEET 10 OF 12 SHEETS	STA. 138+86.00	TO STA. 138+86.00	CONTRACT NO. 74436			
					ILLINOIS FED. AID PROJECT							

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

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



FILE NAME =	USER NAME = steffennk	DESIGNED -	REVISIED -
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Default	PLOT SCALE = 10.0000' / in.	CHECKED -	REVISIED -
	PLOT DATE = 1/11/2018	DATE -	REVISIED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

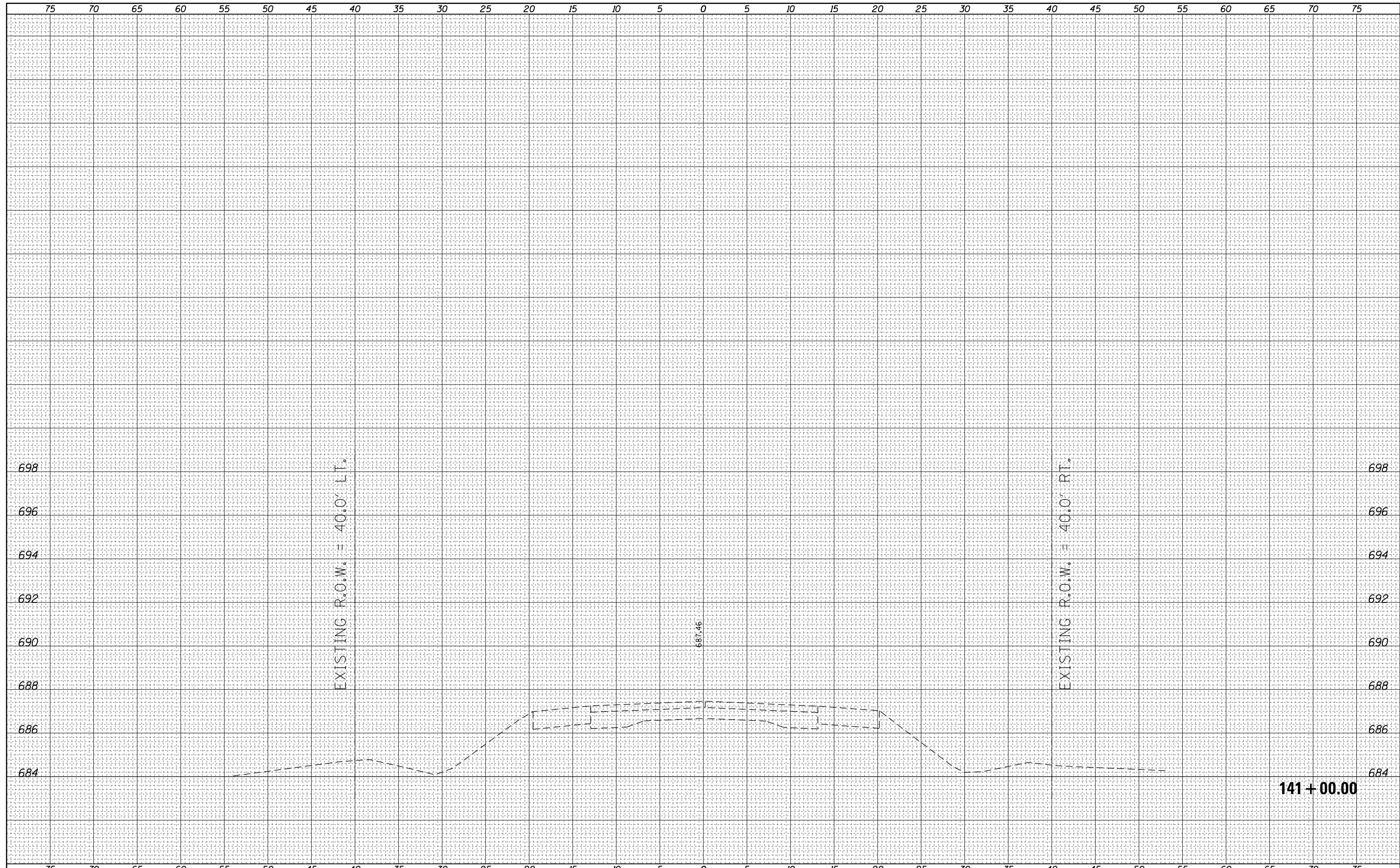
**CROSS SECTION SHEETS**

SCALE: SHEET 11 OF 12 SHEETS STA. 139+00.00 TO STA. 140+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
749	(119BR-1)B-1	MOULTRIE	38	37
CONTRACT NO. 74436			ILLINOIS FED. AID PROJECT	

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

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



FILE NAME =	USER NAME = steffenk	DESIGNED -	REVISIED -	F.A. RTÉ.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
p:\11084EBIDINTEG\Illinois.gov\PIDOT\Documents\IDOT Offices\District 7\Projects\74436\CADD\Drawings\Drawings\74436-sht-XS.dgn		DRAWN	REVISIED -	749	(119BR-1)B-1	MOULTRIE	38	38
PLOT SCALE = 10.0000' / in.	CHECKED -	REVISIED -	REVISIED -	CONTRACT NO. 74436				
Default	DATE -	REVISIED -	REVISIED -	ILLINOIS FED. AID PROJECT				

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CROSS SECTION SHEETS**

SCALE: SHEET 12 OF 12 SHEETS STA. 141+00.00 TO STA. 141+00.00