

INDEX OF SHEETS

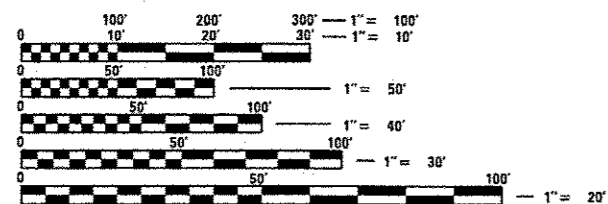
1. COVER SHEET
2. STATUS OF UTILITIES, COMMITMENTS AND GENERAL & JOB SPECIFIC NOTES
- 3-4. SUMMARY OF QUANTITIES
5. SCHEDULE OF QUANTITIES
6. LINE DIAGRAM, ALIGNMENTS & TIES & BENCHMARKS
7. EXSITING TYPICAL SECTION
8. REMOVAL ITEMS
9. PROPOSED PLAN SHEET
10. PROPOSED BACKFILL & EMBANKMENT DETAIL
- 11-13. CULVERT REPAIR DETAILS SN 090-1001
14. BORING LOGS SN 090-1001
- 15-23. PROPOSED CROSS-SECTIONS
- 24-25. CADD STANDARDS

HIGHWAY STANDARDS

000001-06	631006-08
001001-02	701006-05
001006	701201-04
280001-07	701901-06
542401-02	720011-01
602306-03	725001-01
604001-04	729001-01
630001-11	782006
630301-07	BLR21-9

IL-98 DESIGN DATA

MINOR ARTERIAL  
 ADT = 4,800 (2015)  
 MU = 2.5%  
 SU = 3.12%



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

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

PROJECT ENGINEER: RICH DOTSON (309)671-3455  
 PROJECT MANAGER: RON NOLTE (309)671-3470

CONTRACT NO. 68D40

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

PROPOSED  
 HIGHWAY PLANS

FAS ROUTE 2463 /IL ROUTE 98  
 SECTION (8)CLV

CULVERT REPAIR  
 TAZEWELL COUNTY

C-94-016-17



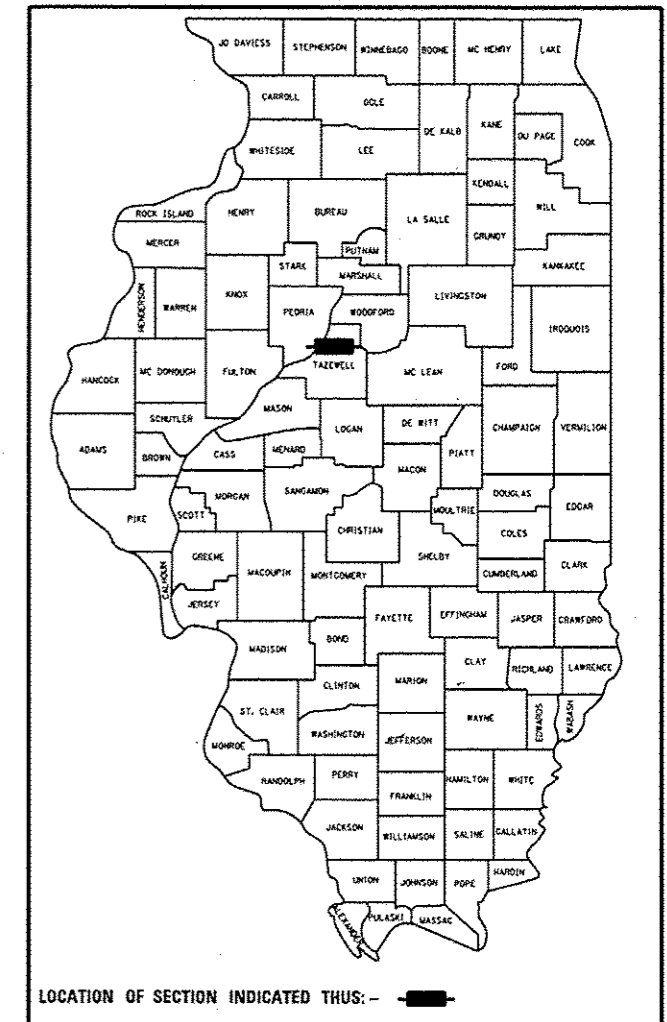
GROSS LENGTH = 300 FT. = 0.06 MILE  
 NET LENGTH = 300 FT. = 0.06 MILE

CULVERT REPAIR, 0.4 MILES EAST OF  
 PARKWAY DRIVE (S.N. 090-1001)

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2463	(8)CLV	TAZEWELL	25	1
		ILLINOIS	CONTRACT NO. 68D40	

25+1 = 26

D-94-006-17



PROJECT DESCRIPTION  
 THIS PROJECT CONSISTS OF CONSTRUCTING A TIED, SHEET PILE RETAINING WALL, GUARDRAIL REMOVAL AND REPLACEMENT, CULVERT REPAIRS, SLOPE IMPROVEMENTS, AND OTHER COLLATERAL WORK NEEDED TO COMPLETE THIS PROJECT.

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS

SUBMITTED 3/31 20 17  
*Kel A. Smith*  
 REGION THREE ENGINEER

May 12 20 17  
*Margaret M. Addis*  
 ENGINEER OF DESIGN AND ENVIRONMENT

May 12 20 17  
*Harold A. ...*  
 DIRECTOR OF PROGRAM DEVELOPMENT

PRINTED BY THE AUTHORITY  
 OF THE STATE OF ILLINOIS

REV

**105.06 AVAILABILITY OF ELECTRONIC FILES**

Micro Station and GEOPAK files of this project will be made available to the Contractor after contract award. If there is a conflict between the electronic files and the printed contract plans and documents, the printed contract plans and documents shall take precedence over the electronic files. The Contractor shall accept all risk associated with using the electronic files and shall hold the Department harmless for any errors or omissions in the electronic files and the data contained therein. Errors or delays resulting from the use of the electronic files by the Contractor shall not result in an extension of time for any interim or final completion date or shall not be considered cause for additional compensation. The Contractor shall not use, share, or distribute these electronic files except for the purpose of constructing this contract. Any claims by third parties due to use or errors shall be the 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.

**107.00 COMMITMENTS**

THERE ARE NO COMMITMENTS ON THIS JOB.

**108.02 CRITICAL PATH WORK SCHEDULE REQUIREMENT**

The Contractor will submit to the Engineer a satisfactory progress schedule and critical path schedule which shall show the proposed sequence of work at the time of the pre-construction conference.

**204.00 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:

- \* BDE Form 2289 (Environmental Survey Request)
- \* BDE Form 2290 (Waste/Use Area Review)
- \* A location map showing the size limits and location of the use area
- \* Color photographs depicting the use area
- \* Borrow Area Entry Agreement form-D4 PI0101

Please note that a minimum of four weeks shall be allowed for the District to obtain the required environmental clearances and six weeks for the required borrow site environmental clearances.

**542.00 ORDERING LENGTH CONFIRMATION - DRAINAGE ITEMS**

The Contractor shall consult with the Engineer in regard to the exact length of the box/pipe culverts, storm sewers, and/or pipe drains required prior to ordering these items.

**602.00 EXISTING DRAINAGE PIPES CONNECTED TO NEW STRUCTURES**

In accordance with Section 602 of the Standard Specifications, the connecting of existing drain tiles, pipe culverts, or storm sewers to the proposed drainage system structures will not be paid for separately but shall be considered as included in the pay items provided.

**JOB SPECIFIC NOTES**

EARTH EXCAVATION PAY ITEM IS PROVIDED FOR FULL DEPTH PLACEMENT OF GUARDRAIL AGGREGATE EROSION CONTROL

THE FUNCTION OF THE PROPOSED SHEET PILE RETAINING WALL SYSTEM IS DEPENDANT ON PROPER EMBEDMENT INTO THE SHALE LAYER. SPECIAL ATTENTION SHOULD BE GIVEN TO THIS PROCESS TO ASSURE EMBEDMENT IS ACHIEVED.

**STATUS OF UTILITIES**

COMPANY	ROUTE	OFFSET FROM E.O.P.	DEPTH	TYPE OF UTILITY	TYPE OF CONFLICT	DISPOSITION
AMEREN (ELECTRIC)	IL 98	UNKNOWN	UNKNOWN	BURIED ELECTRIC	PROPOSED SHEET PILING BEHIND HEADWALL	CAUTION
AMEREN (GAS)	IL 98	VARIES 15'-45' RT	10'-0"	2" PLASTIC GAS LINE	PROPOSED SHEET PILING BEHIND HEADWALL	CAUTION

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

STATUS OF UTILITIES, COMMITMENTS,  
GENERAL & JOB SPECIFIC NOTES

FILE NAME :	USER NAME : *USER*	DESIGNED -	REVISED -	SCALE: SHEET OF SHEETS STA. TO STA.	F.A.S. RTE. 2463	SECTION 181CLV	COUNTY TAZEWELL	TOTAL SHEETS 25	SHEET NO. 2	CONTRACT NO. 68040	ILLINOIS FED. AID PROJECT
*FILE#		DRAWN -	REVISED -								
*MODELNAME*		CHECKED -	REVISED -								
		DATE -	REVISED -								

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				100% STATE ✓	RURAL ✓
				0004	
				SPECIAL BRIDGE	
				TAZEWELL COUNTY	
20200100	EARTH EXCAVATION	CU YD	35	35	
28000305	TEMPORARY DITCH CHECKS	FOOT	12	12	
28000400	PERIMETER EROSION BARRIER	FOOT	712	712	
28100225	STONE RIPRAP, CLASS B3	TON	101	101	
28200200	FILTER FABRIC	SO YD	178	178	
48101200	AGGREGATE SHOULDERS, TYPE B	TON	36	36	
50102400	CONCRETE REMOVAL	CU YD	1.4	1.4	
50104400	CONCRETE HEADWALL REMOVAL	EACH	1	1	
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	6030	6030	
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	370	370	
52200015	PERMANENT SHEET PILING	SO FT	2128	2128	
54003000	CONCRETE BOX CULVERTS	CU YD	1.4	1.4	
54213873	STEEL END SECTIONS 18"	EACH	1	1	
54200223	PIPE CULVERTS, CLASS D, TYPE 1 18"	FOOT	35	35	

14

FILE NAME #	USER NAME # USER#	DESIGNED -	REVISED -
*FILE#		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

F.A.S. BTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2463	181CLV	TAZEWELL	25	3
ILLINOIS FED. AID PROJECT			CONTRACT NO. 68D40	

*RL*

702 63 H7A

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				100% STATE	RURAL
60240215	INLETS, TYPE B, TYPE 1 FRAME, CLOSED LID	EACH	1	1	
* 63000001	STEEL PLATE BEAM GUARD RAIL, TYPE A, 6 FOOT POSTS	FOOT	325.5	325.5	
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	3	3	
* 63100169	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) FLARED	EACH	1	1	
63200310	GUARDRAIL REMOVAL	FOOT	401	401	
67100100	MOBILIZATION	L SUM	1	1	
* 72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4	
* 78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	8	8	
X0322906	WEEP HOLES CORED	EACH	18	18	
X2090215	SELECT GRANULAR BACKFILL, SPECIAL	CU YD	15	15	
X2810230	STONE RIPRAP, CLASS B5 (SPECIAL)	TON	328	328	
X7010216	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L SUM	1	1	
X7015005	CHANGEABLE MESSAGE SIGN	CAL DA	120	120	
Z0001002	GUARDRAIL AGGREGATE EROSION CONTROL	TON	130	130	
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1	

14  
\* SPECIALTY ITEM

FILE NAME *	USER NAME * #USER*	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
#FILE#		DRAWN -	REVISED -			2463	IBICLV	TAZEWELL	25	4	
PLOT SCALE * #SCALE*		CHECKED -	REVISED -			CONTRACT NO. 68D40					
PLOT DATE * #DATE*		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					

REV

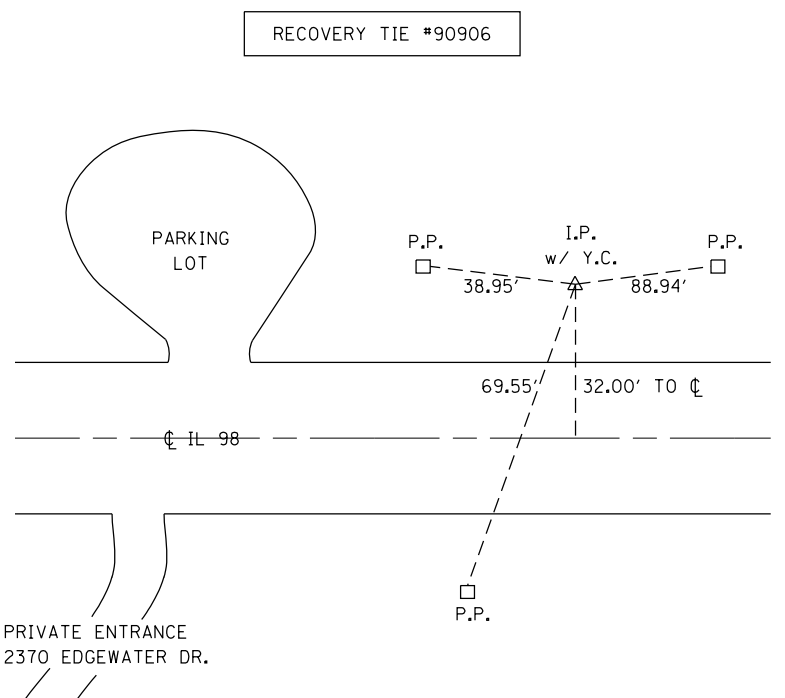
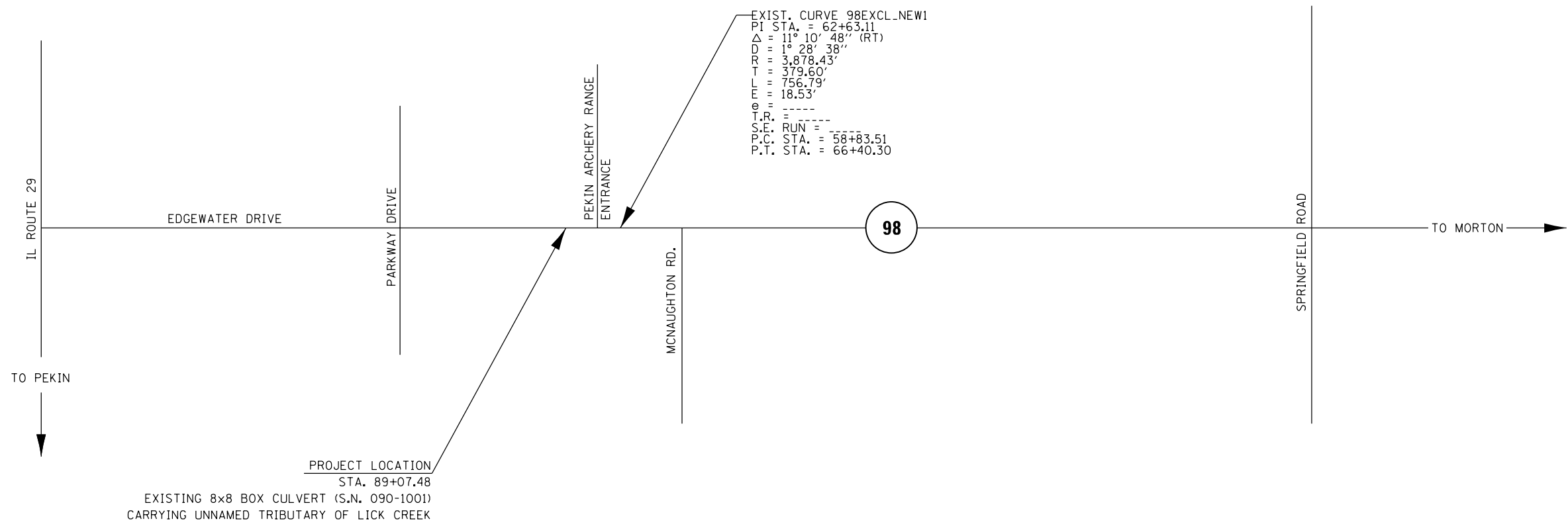
JOBSITE ITEMS		
ITEM	UNIT	QTY
MOBILIZATION	LSUM	1.0
TRAFFIC CONTROL AND PROTECTION, SPECIAL	LSUM	1.0
CONSTRUCTION LAYOUT	LSUM	1.0
•CHANGEABLE MESSAGE SIGN	CAL DA	120.0

•4 BOARDS @ 30 DAYS EACH

LOCATION		EROSION CONTROL AND RELATED ITEMS				
		PERIMETER EROSION BARRIER	TEMPORARY DITCH CHECKS	AGGGREGATE SHOULDERS, TYPE B	SELECT GRANULAR BACKFILL (SPECIAL)	STONE RIPRAP, CLASS B5 (SPECIAL)
		FOOT	FOOT	TON	CU YD	TON
LT. STA.	87+50.0 TO 90+03.0	257.0	12.0	12.0	11.0	
RT. STA.	87+50.0 TO 91+96.2	455.0		24.0	4.0	328.0
TOTAL		712.0	12.0	36.0	15.0	328.0

LOCATION		DRAINAGE ITEMS					
		INLETS, TYPE B, TYPE 1 FRAME, CLOSED LID	PIPE CULVERTS, CLASS D, TYPE 1 18"	STEEL END SECTIONS 18"	STONE RIPRAP, CLASS B3	FILTER FABRIC	CONCRETE HEADWALL REMOVAL
		EACH	FOOT	EACH	TON	SQ YD	EACH
LT. STA.	89+52.3 TO 89+86.7	1.0	35.0	1.0	96.0	164.0	
RT. STA.	88+74.0 TO 88+98.0				5.0	14.0	1.0
TOTAL		1.0	35.0	1.0	101.0	178.0	1.0

LOCATION		GUARDRAIL ITEMS							
		GUARDRAIL REMOVAL	STEEL PLATE BEAM GUARDRAIL, TYPE A 6 FOOT POSTS	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) FLARED	GUARDRAIL REFLECTORS, TYPE A	TERMINAL MARKER-DIRECT APPLIED	GUARDRAIL AGGREGATE EROSION CONTROL	EARTH EXCAVATION
		FOOT	FOOT	EACH	EACH	EACH	EACH	TON	CU YD
LT. STA.	88+35.0 TO 89+95.0	138.0	75.0	3.0		4.0	3.0	45.0	10.0
RT. STA.	88+74.5 TO 91+63.0	263.0	250.5		1.0	4.0	1.0	85.0	25.0
TOTAL		401.0	325.5	3.0	1.0	8.0	4.0	130.0	35.0

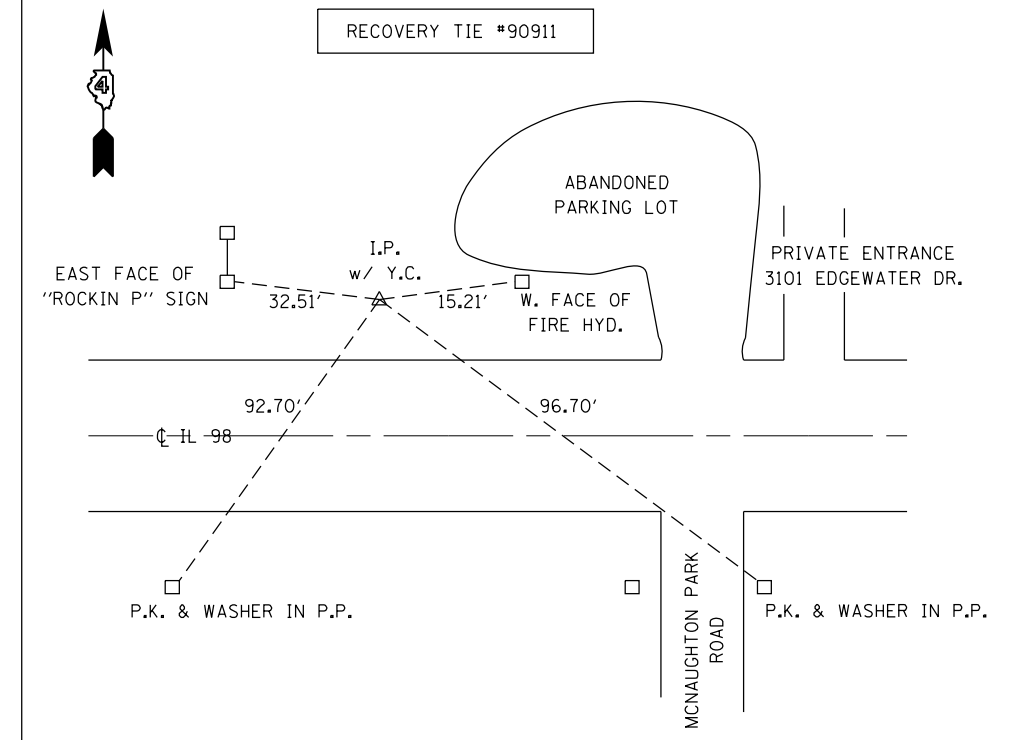


NOTE:  
P.P.'S HAVE P.K. & WASHERS FOR TIES

AERIAL CONTROL (1/14/2010)				
POINT NO.	ROAD	D-2257 STATIC		ELEVATION
		GROUND COORDINATES		
		NORTHING	EASTING	
90906	IL 98	1434520.6277	2450946.8205	505.2880
90911	IL 98	1434562.0297	2454294.9877	590.3720

BENCHMARK INFO.				
PT. I.D.	I.D. #	DATE	ADJ. ELEV.	DESCRIPTION
BM 902	2	8/21/2009	470.076	Chis. ' <input type="checkbox"/> ' on S. end of W. abut., S.N. 090-0146 (0.75 miles east of Junction IL 29 & 98)

\*INFORMATION TAKEN FROM SURVEY BOOK 2907A

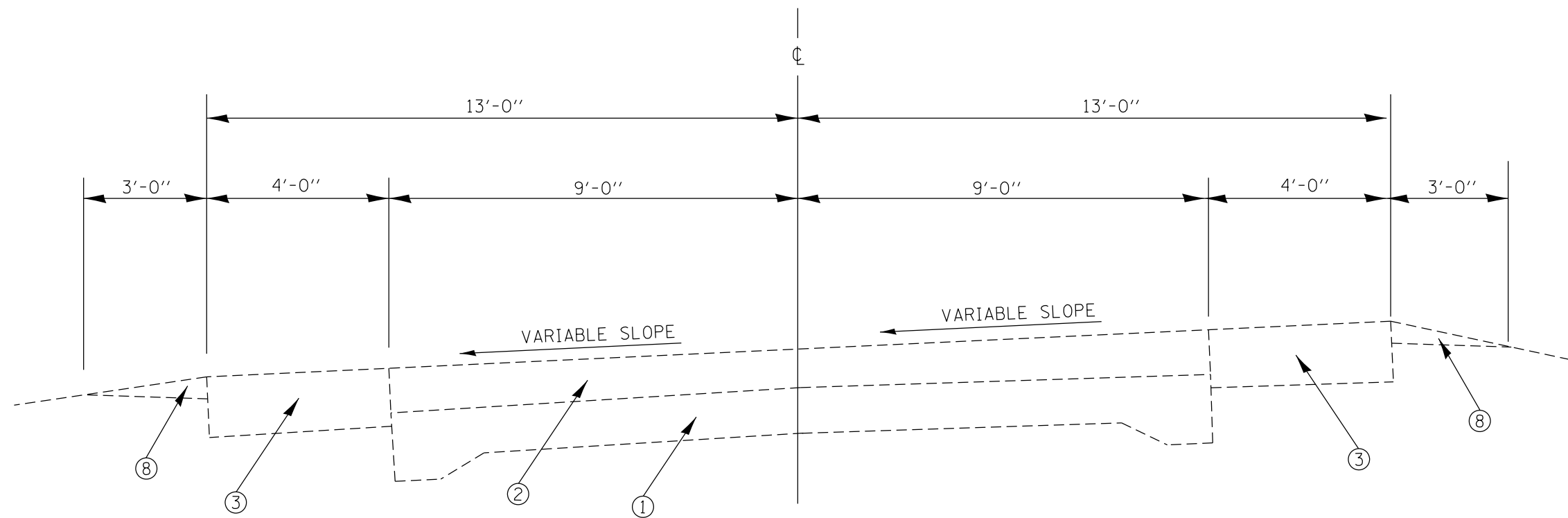


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	PLOT DATE = \$DATE*	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>LINE DIAGRAM, ALIGNMENT &amp; TIES AND BENCHMARKS</b>			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2463	(B)CLV	TAZEWELL	25	6
CONTRACT NO. 68D40				
ILLINOIS FED. AID PROJECT				

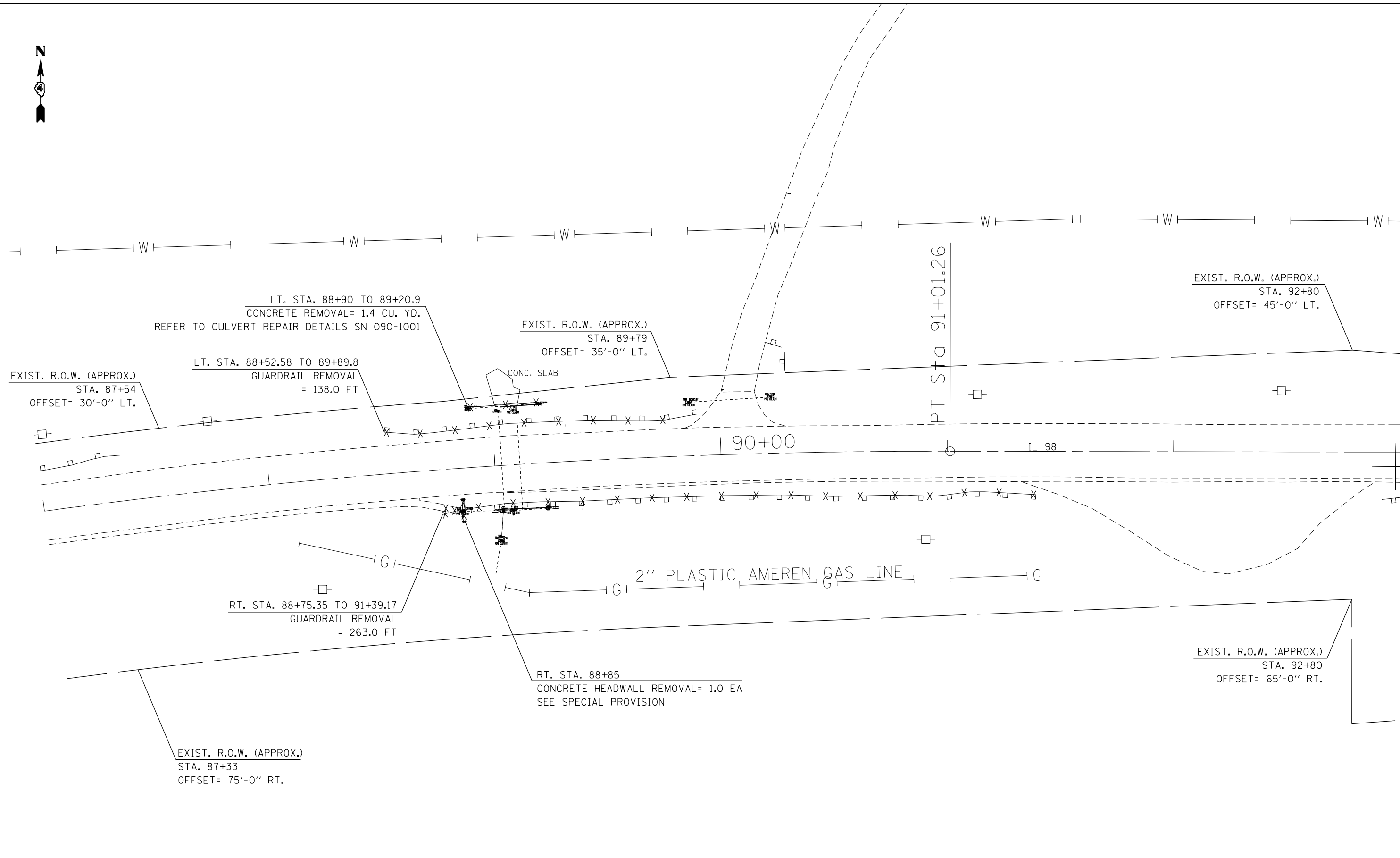


P.C. STA. 85+92.04 TO P.T. STA. 91+01.26

### LEGEND

- ① EXIST. CONCRETE PAVEMENT 9-6-9
- ② EXIST. HMA OVERLAY (6 1/4" TO 9 1/4")
- ③ EXIST. HMA BASE CSE. WIDE (8")
- ④ EXIST. CONC. GUTTER TYPE B MOD.
- ⑤ EXIST. SUB-BASE GRANULAR MATL
- ⑥ EXIST. HMA SHOULDERS, 8"
- ⑦ EXIST. PCC BASE COURSE
- ⑧ EXIST. AGGREGATE SHOULDER

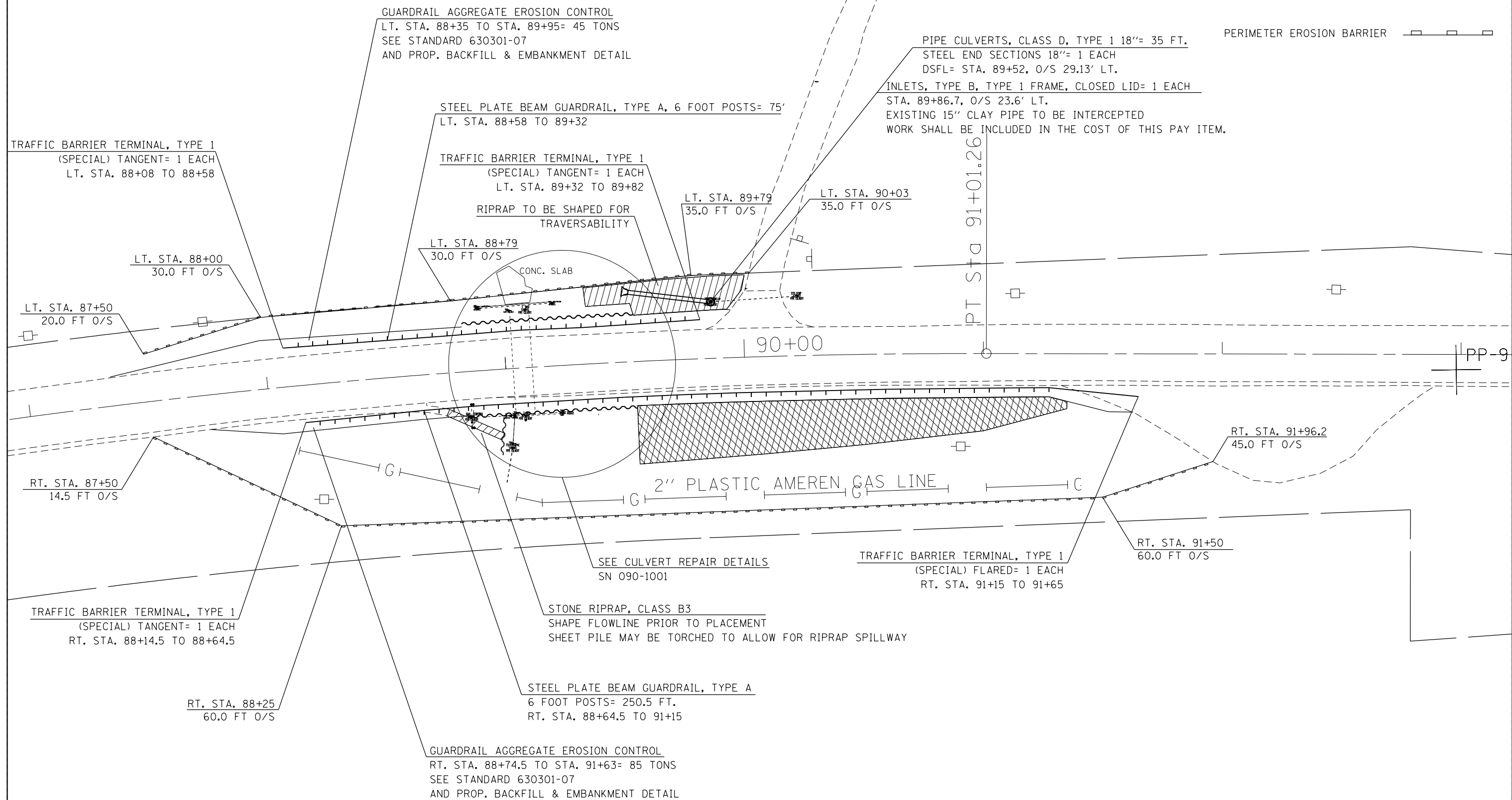
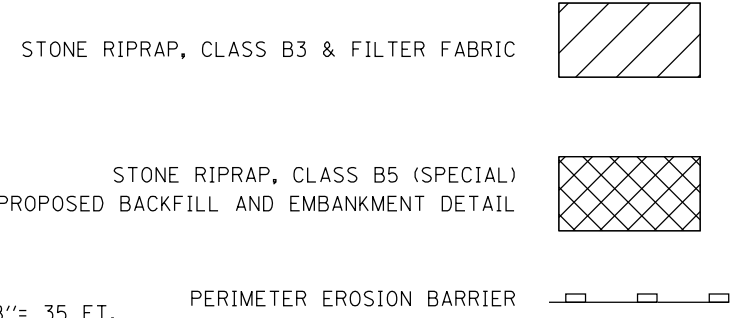
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*FILEL*		DRAWN -	REVISED -					2463	(B)CLV	TAZEWELL	25	7
*MODELNAME*		CHECKED -	REVISED -		SCALE:      SHEET    OF    SHEETS    STA.            TO STA.			CONTRACT NO. 68D40				
		DATE -	REVISED -		ILLINOIS FED. AID PROJECT							



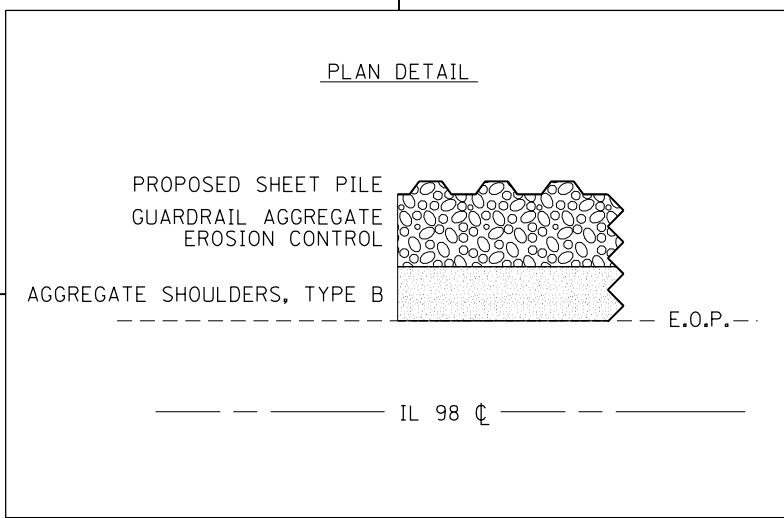
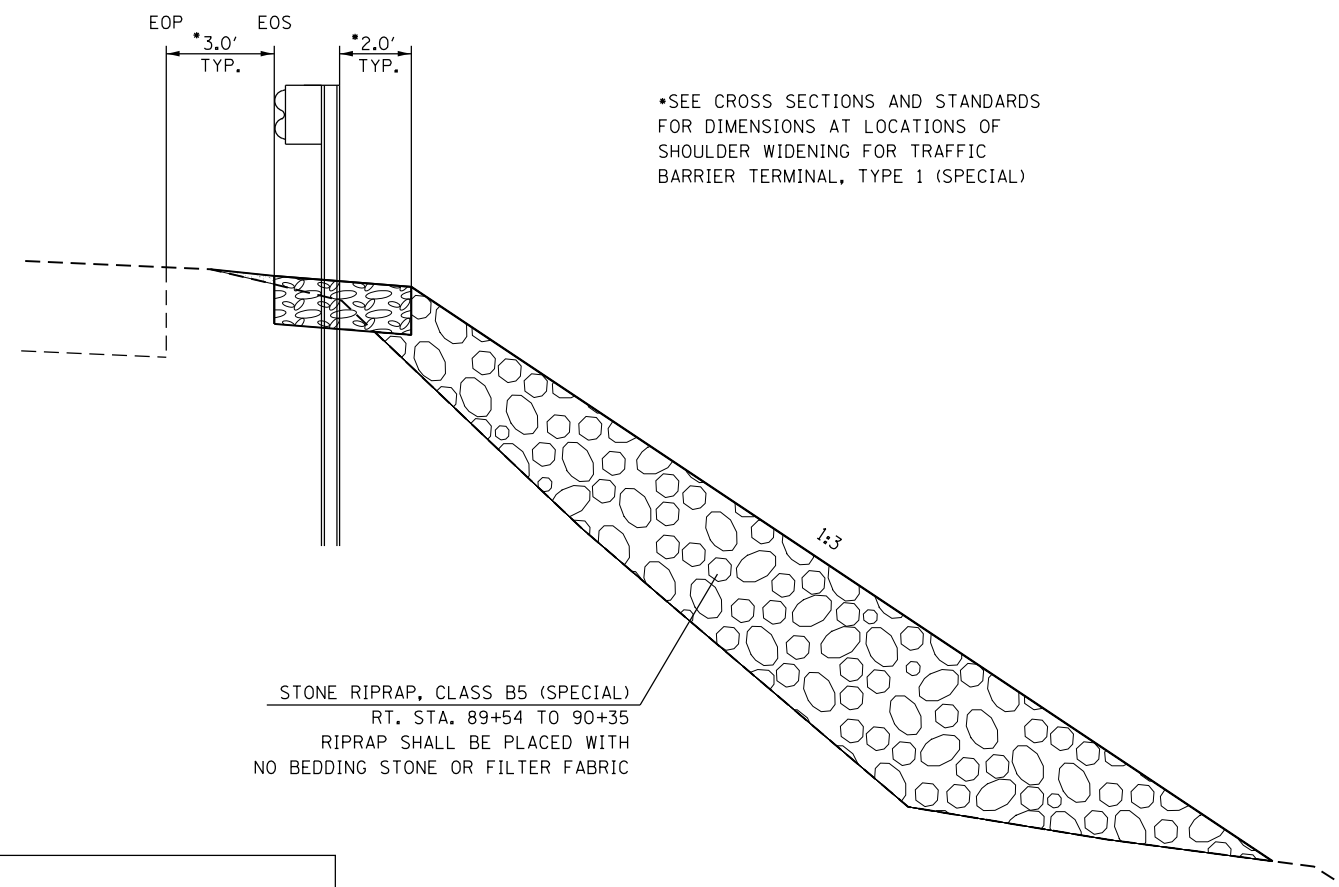
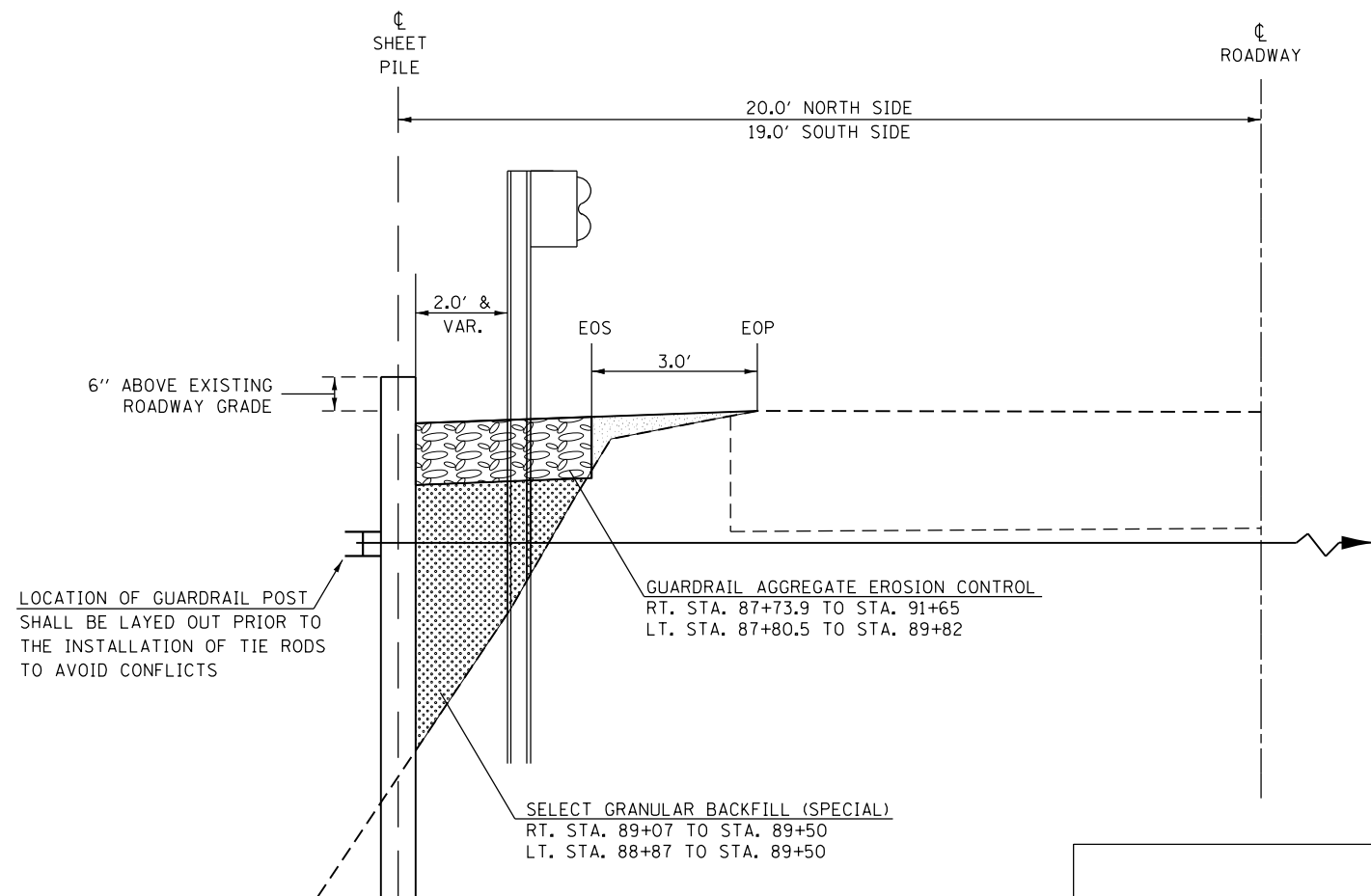
-X-X- REMOVAL ITEMS

FILE NAME =	USER NAME = \$USER*	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>REMOVAL ITEMS</b>			F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
\$FILEL\$		DRAWN -	REVISED -					2463	(8)CLV	TAZEWELL	25	8
\$MODELNAME\$	PLOT SCALE = \$SCALE*	CHECKED -	REVISED -		CONTRACT NO. 68D40			ILLINOIS FED. AID PROJECT				
	PLOT DATE = \$DATE*	DATE -	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.	





FILE NAME =	USER NAME = \$USER*	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PROPOSED PLAN SHEET</b>			F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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\$MODELNAME\$		CHECKED -	REVISED -		SCALE:      SHEET      OF      SHEETS      STA.      TO      STA.			CONTRACT NO. 68D40				
		DATE -	REVISED -		ILLINOIS FED. AID PROJECT							



PROPOSED WORK ADJACENT TO SHEET PILE RETENTION WALL

SLOPE STABILITY DETAIL SOUTH SIDE ONLY

X-SEC. STA.	AREA	
	SQ. FT.	
	RT.	LT.
87+80.50	0.00	0.00
88+00.00	1.88	1.99
88+50.00	1.86	2.32
88+87.00	2.72	0.54
89+07.00	0.73	0.01
89+25.00	0.71	0.09
89+50.00	0.87	0.38
89+68.00	1.08	0.49
89+86.75	1.20	0.84
90+08.00	1.09	0.00
90+50.00	1.15	
91+00.00	1.64	
91+35.00	3.15	
91+50.00	6.81	
91+75.00	0.00	

X-SEC. STA.	AREA	
	SQ. FT.	
	RT.	LT.
87+80.50	0.00	0.00
88+00.00	2.04	2.67
88+50.00	3.14	2.67
88+87.00	2.92	2.93
89+07.00	2.83	2.79
89+25.00	2.80	3.02
89+50.00	2.86	3.19
89+68.00	2.54	3.04
89+86.75	2.54	2.67
90+08.00	2.54	0.00
90+50.00	2.54	
91+00.00	2.54	
91+35.00	3.84	
91+50.00	8.03	

X-SEC. STA.	AREA	
	SQ. FT.	
	RT.	LT.
89+25.00	0.00	
89+50.00	40.52	
89+68.00	40.52	
89+86.75	35.01	
90+08.00	34.83	
90+50.00	38.80	
91+00.00	16.29	
91+35.00	0.26	
91+50.00	0.00	

X-SEC. STA.	AREA	
	SQ. FT.	
	RT.	LT.
88+50.00	0.00	0.00
88+87.00	0.00	0.65
89+07.00	1.68	6.62
89+25.00	3.05	4.57
89+50.00	0.61	2.34
89+68.00	0.00	0.00

- LEGEND
- SELECT GRANULAR BACKFILL (SPECIAL)
  - AGGREGATE SHOULDERS, TYPE B
  - GUARDRAIL AGGREGATE EROSION CONTROL
  - STONE RIPRAP, CLASS B5 (SPECIAL)

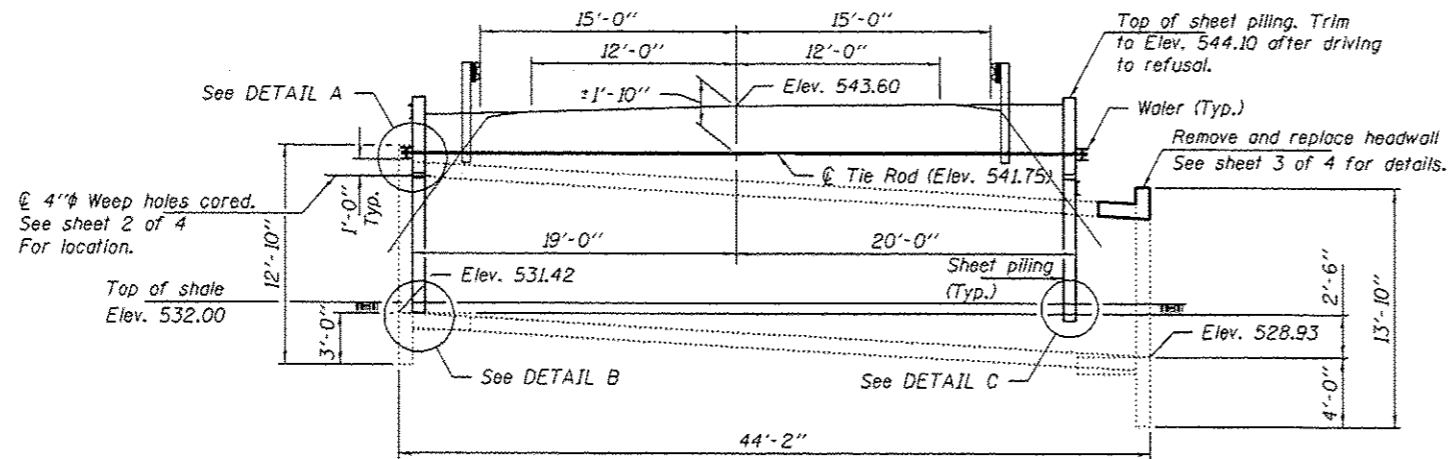
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

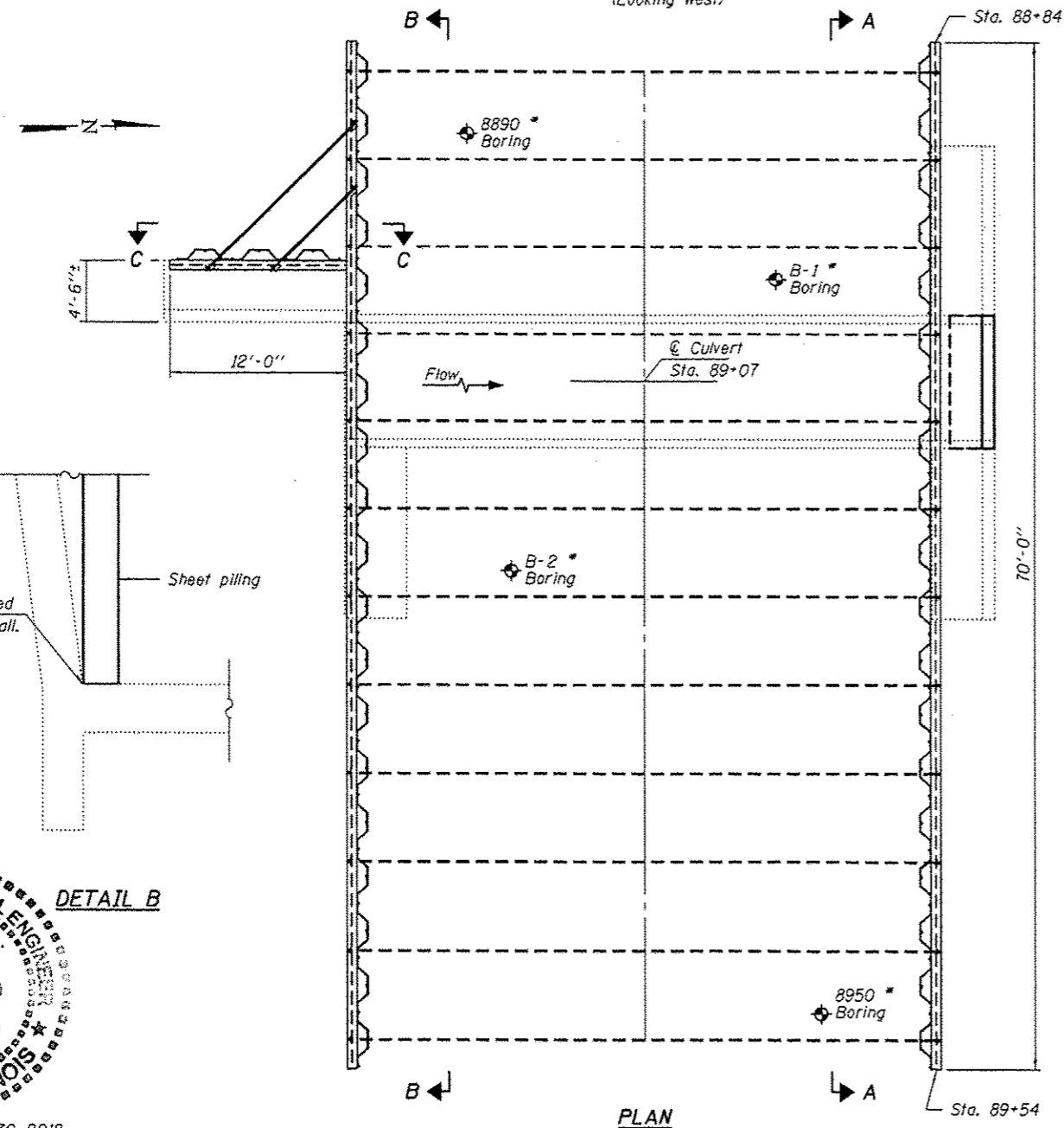
PROPOSED BACKFILL AND EMBANKMENT DETAIL

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2463	(8)CLV	TAZEWELL	25	10
CONTRACT NO. 68D40				
ILLINOIS FED. AID PROJECT				

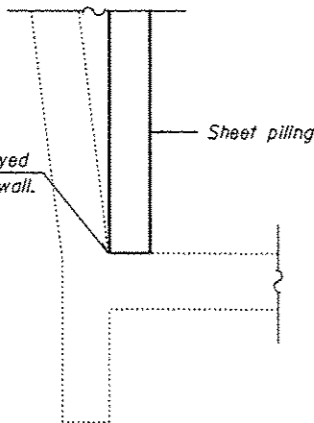


**ELEVATION**  
(Looking West)

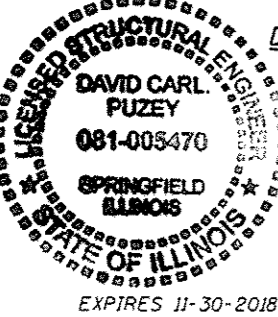


**PLAN**

**DETAIL B**

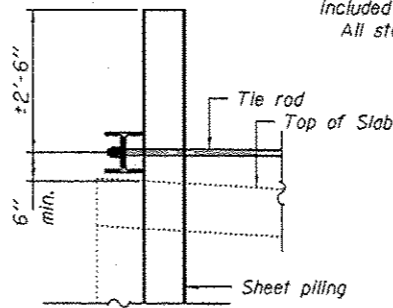


Sheet piling to be keyed against back of wingwall.

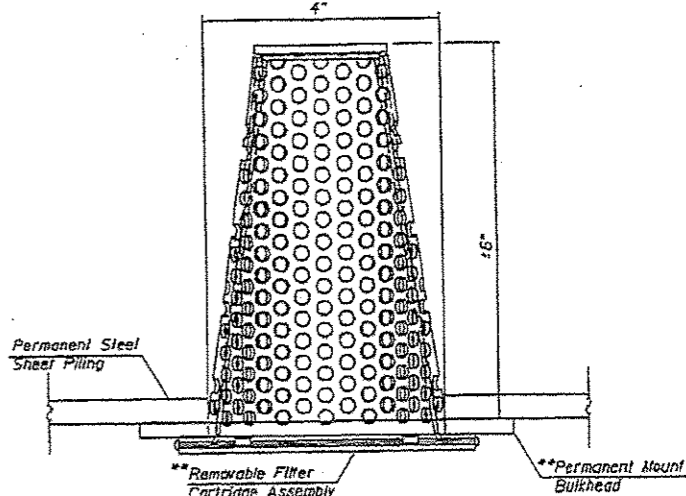


**GENERAL NOTES**

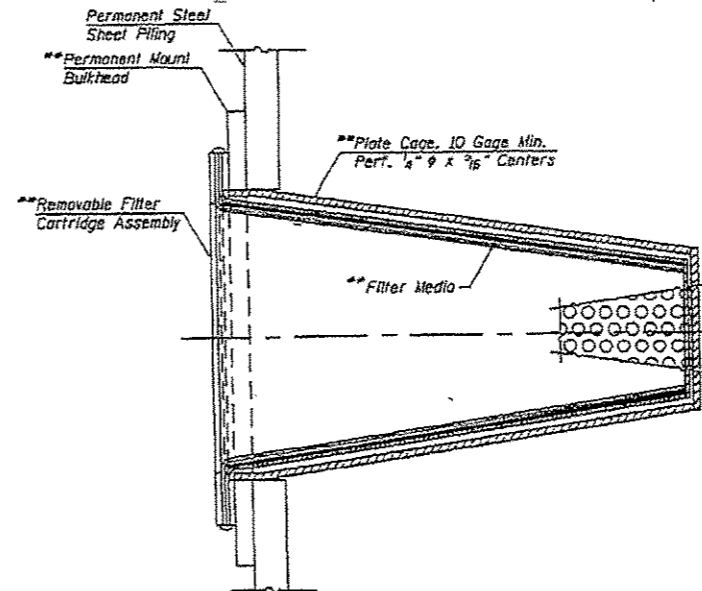
Permanent Steel Sheet Piling shall meet requirements of ASTM 328 Gr. 50. Permanent Steel Sheet Piling (exposed and anchor wall) shall have a required section modulus meeting or exceeding 25 in.<sup>3</sup>/ft.  
 If Contractor elects to use larger Permanent Steel Sheet Pile size, new size shall be approved by Engineer and provided at no additional cost to contract.  
 All steel and associated hardware required for the installation of the water and tie rods shall be included in the cost of Furnishing and Erecting Structural Steel. These items include, but are not limited to turn buckle, tie rods, plates, nuts, sections, spacer, wedge plates and washers.  
 All labor associated with the installation of the anchor rod and waters shall be included in the cost of Furnishing and Erecting Structural Steel.  
 All steel shall be non-painted.



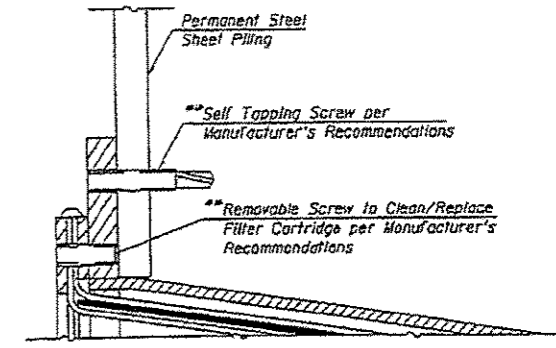
**DETAIL A**



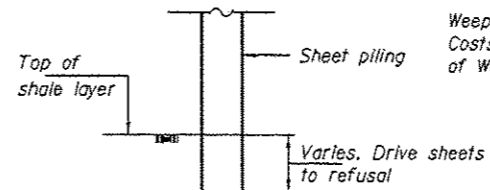
**WEEP HOLE ASSEMBLY PLAN VIEW**



**SECTION THRU WEEP HOLE ASSEMBLY**



**WEEP HOLE ASSEMBLY MOUNTING DETAIL**



**DETAIL C**

(Typ. at all locations not covered by DETAIL B)

For SECTION A-A, B-B and C-C see sheet 2 of 4.

\* For Boring Logs see sheets 4 & 4A of 4.

Weep holes shall be installed in accordance with special provision. Costs associated with creating hole shall be included in the cost of Weep Holes Cored.

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Concrete Removal	Cu Yd.	1.4
Furnishing and Erecting Structural Steel	Pound	6590
Reinforcement Bars, Epoxy Coated	Pound	370
Permanent Sheet Piling	Each	2380
Weep Holes Cored	Each	18
Concrete Box Culverts	Cu. Yd.	1.4

DESIGNED: [Signature] DATE: MAY 10, 2017  
 CHECKED: [Signature] PASSED: [Signature]  
 DRAWN: daburdell  
 CHECKED: [Signature] VHV

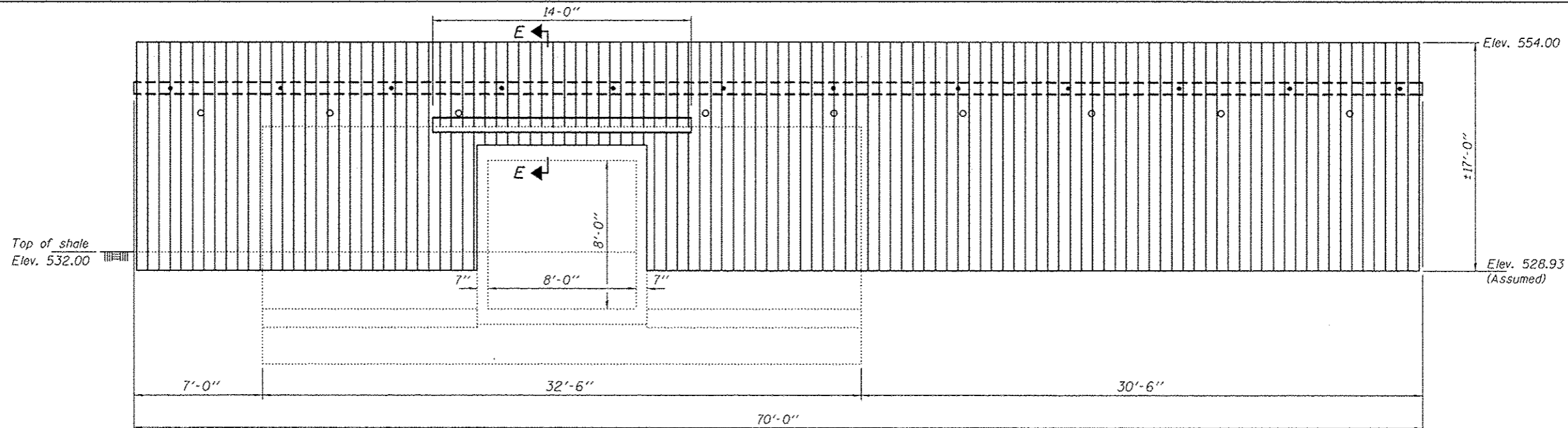
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CULVERT REPAIR DETAILS  
SN 090-1001

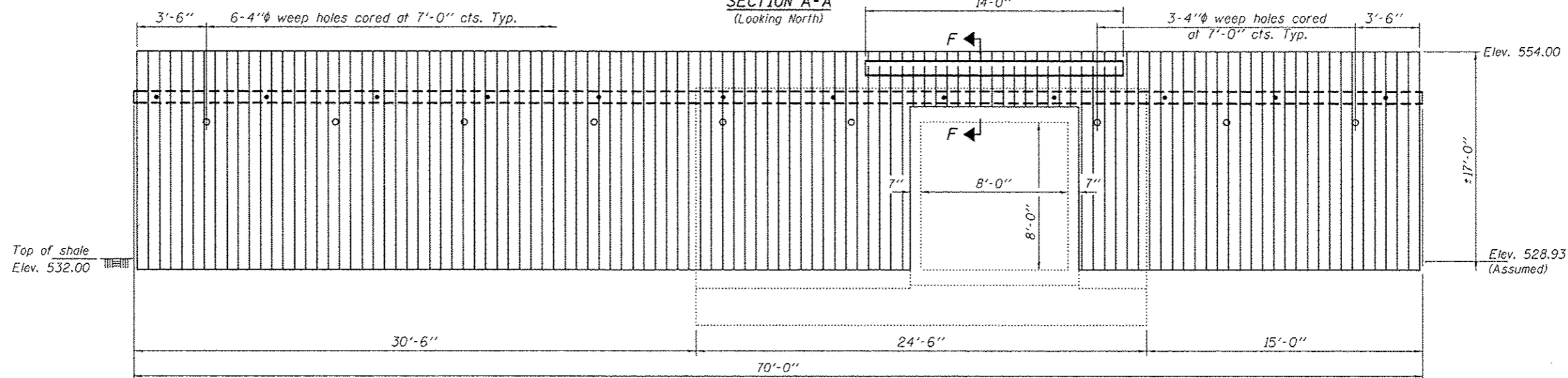
SHEET NO. 1 OF 4 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2463	18JCLV	TAZEWELL	25	11

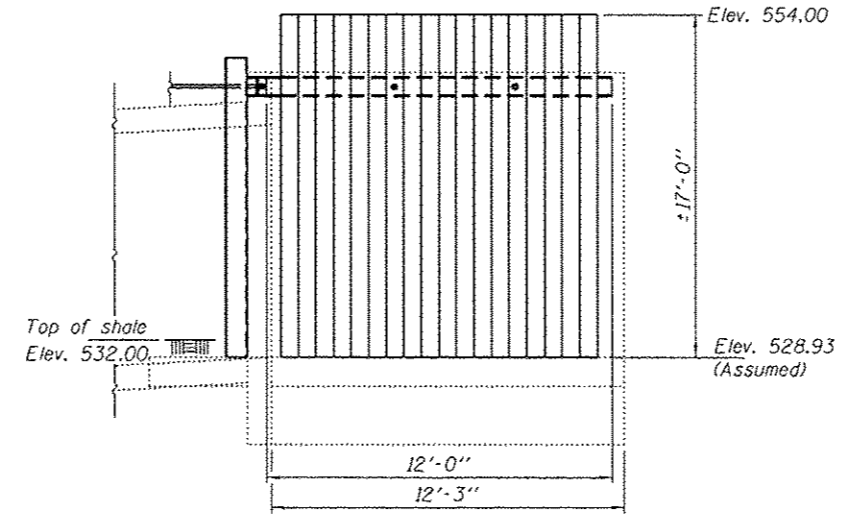
CONTRACT NO. 68D40  
ILLINOIS FED. AID PROJECT



**SECTION A-A**  
(Looking North)



**SECTION B-B**  
(Looking South)



**SECTION C-C**  
(Looking East)

For sheet piling wall tie back details see sheet 3 of 4.

DESIGNED VHV  
CHECKED DAB  
DRAWN daburdell  
CHECKED VHV DAB

PASSED

*Carl Perry*  
ENGINEER OF BRIDGES AND STRUCTURES

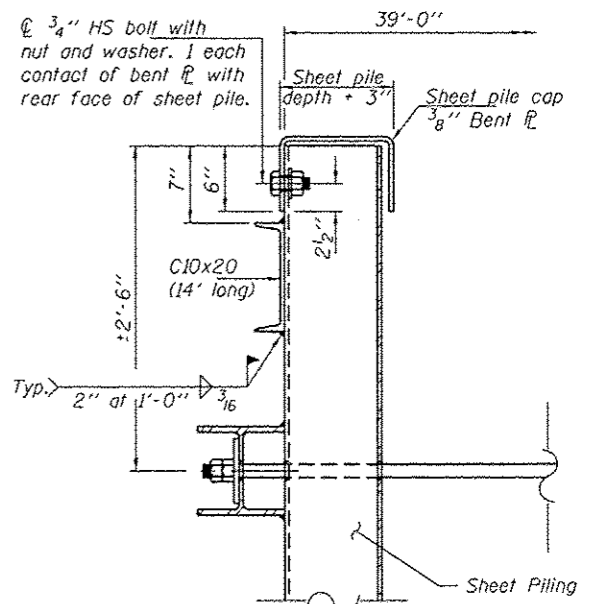
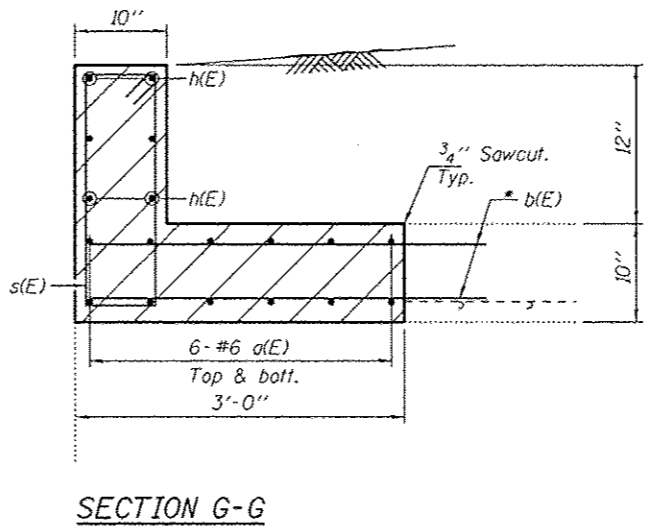
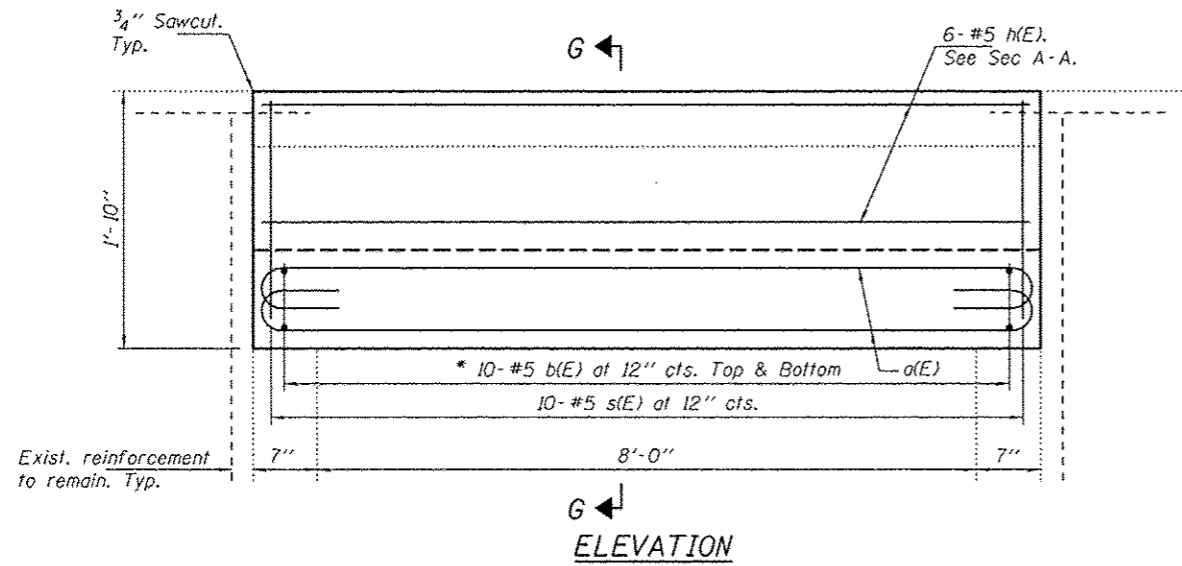
DATE MAY 10, 2017  
REVISED  
REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

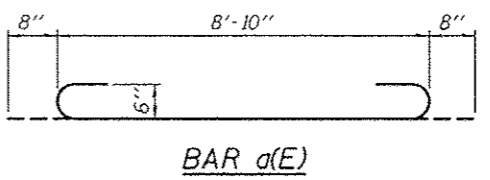
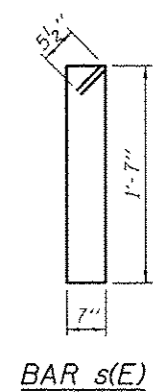
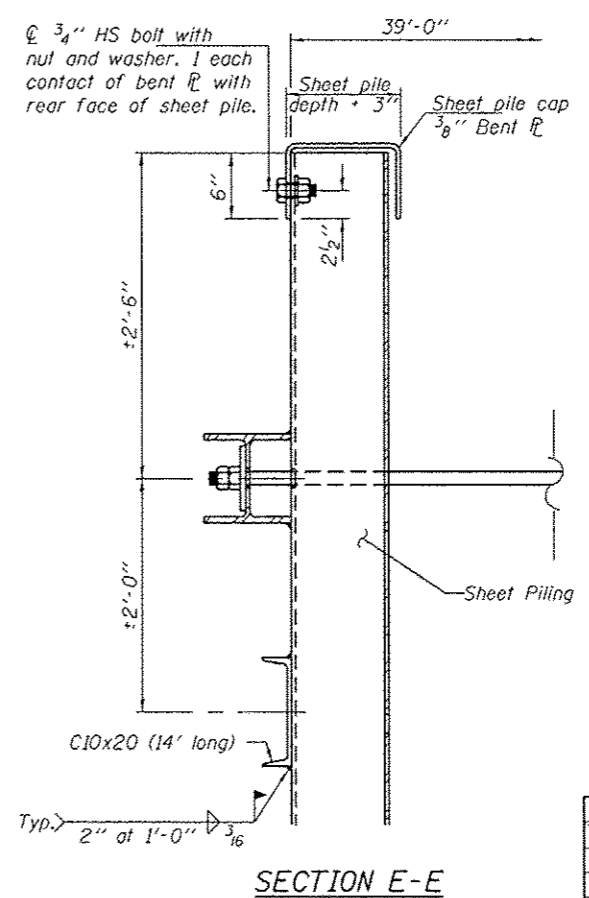
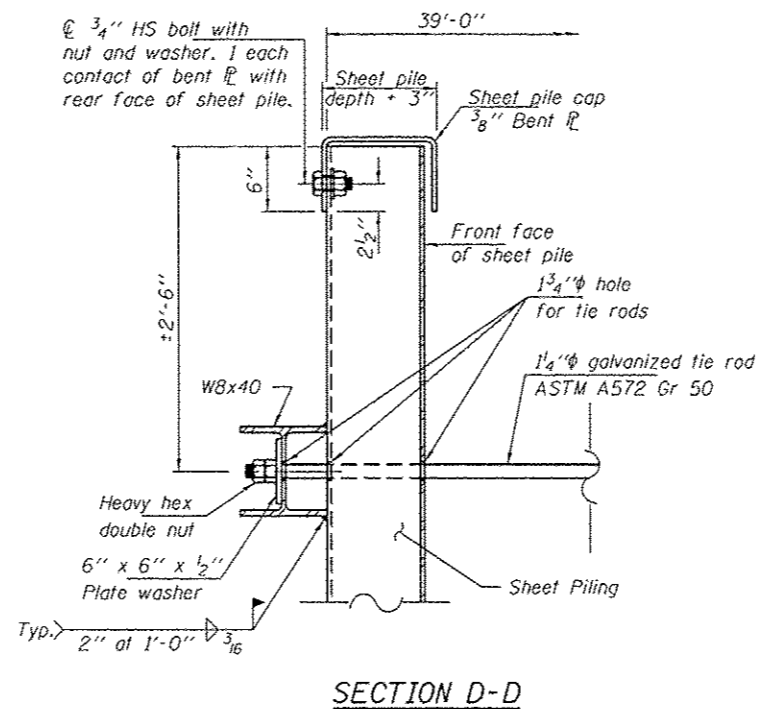
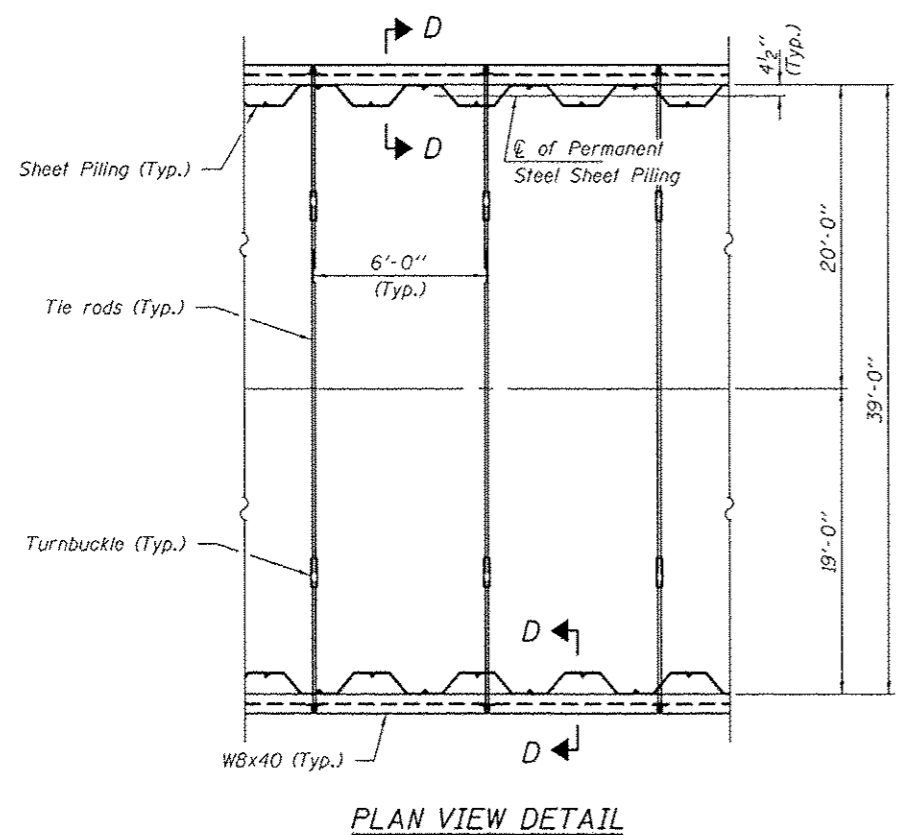
CULVERT REPAIR DETAILS  
SN 090-1001

SHEET NO. 2 OF 4 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2463	(B)CLV	TAZEWELL	25	12
CONTRACT NO. 68040			ILLINOIS FED. AID PROJECT	



\* Epoxy grout b(E) bars in 9" min. holes according to Article 584 of the Standard Specifications.



**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a(E)	12	#6	10'-2"	U
b(E)	20	#5	3'-7"	—
h(E)	6	#5	8'-10"	—
s(E)	10	#5	5'-1"	□
Concrete Removal			Cu. Yd.	1.4
Reinforcement Bars, Epoxy Coated			Lbs.	370
Concrete Box Culverts			Cu. Yd.	1.4

Reinforcement bars designated (E) shall be epoxy coated.

Note:  
Cost of Sheet pile cap is included in the cost of Steel Sheet Piling.

DESIGNED VHV  
CHECKED DAB  
DRAWN daburdell  
CHECKED VHV DAB

PASSED  
ENGINEER OF BRIDGES AND STRUCTURES  
*Carl Perry*

DATE MAY 10, 2017  
REVISED  
REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CULVERT REPAIR DETAILS  
SN 090-1001  
SHEET NO. 3 OF 4 SHEETS

F.A.S. RTE. 2463  
SECTION (BICLV)  
COUNTY TAZEWELL  
TOTAL SHEETS 25  
SHEET NO. 13  
CONTRACT NO. 68D40  
ILLINOIS FED. AID PROJECT





Illinois Department of Transportation  
Division of Highways  
TERRACON

SOIL BORING LOG

Page 1 of 1

Date 4/19/17

ROUTE FAS 2463 (IL 98) DESCRIPTION Structure Boring for Culvert Repair LOGGED BY DLR  
SECTION (7W&RS-2)(8W&RS-1) LOCATION EBL Shoulder, SEC. 20, TWP. 25N, RNG. 4W, 3<sup>rd</sup> PM, Latitude 40d 36' 17" N, Longitude 89d 36' 18" W  
COUNTY Tazewell DRILLING METHOD HSA HAMMER TYPE AUTO SPT Hammer

STRUCT. NO.	STATION	DEPTH	B	L	U	M	Surface Water Elev.	Stream Bed Elev.	Groundwater Elev.:	First Encounter	Upon Completion	After
090-1001	89+07	(ft)	(6")	(tsf)	(%)		ft	ft	ft	ft	ft	Hrs.
NOT SAMPLED 0-1'												
	542.60											
		2										
		3	1.1	18								
		3	S									
540.10												
		14										
		37		13								
		50@5'										
		10										
		17		11								
		27										
		18										
		24		10								
		50@5'										
532.60												
		18										
		26		9								
		39										
		20										
		50@5'		7								
		27										
		50@4'		8								
526.77												
End of Boring												

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



Illinois Department of Transportation  
Division of Highways  
TERRACON

SOIL BORING LOG

Page 1 of 1

Date 4/19/17

ROUTE FAS 2463 (IL 98) DESCRIPTION Structure Boring for Culvert Repair LOGGED BY DLR  
SECTION (7W&RS-2)(8W&RS-1) LOCATION WBL Shoulder, SEC. 20, TWP. 25N, RNG. 4W, 3<sup>rd</sup> PM, Latitude 40d 36' 17" N, Longitude 89d 36' 18" W  
COUNTY Tazewell DRILLING METHOD HSA HAMMER TYPE AUTO SPT Hammer

STRUCT. NO.	STATION	DEPTH	B	L	U	M	Surface Water Elev.	Stream Bed Elev.	Groundwater Elev.:	First Encounter	Upon Completion	After
090-1001	89+07	(ft)	(6")	(tsf)	(%)		ft	ft	ft	ft	ft	Hrs.
NOT SAMPLED 0-1'												
	542.70											
		2	.5P	14								
		2	2.0	15								
		3	P									
540.20												
		2										
		2	0.9	17								
		2	S									
537.70												
		1	.82B	20								
		1	0.5	26								
		2	P									
535.20												
		1										
		2	0.8	18								
		2	S									
532.70												
		18										
		50@5'		12								
528.70												
		12										
		27		8								
		52										
524.62												
		26										
		50@2'		7								
		30										
		50@1'		10								
End of Boring												

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

DESIGNED VHV  
CHECKED DAB  
DRAWN daburdell  
CHECKED VHV DAB

PASSED  
*A. Carl Long*  
ENGINEER OF BRIDGES AND STRUCTURES

DATE MAY 10, 2017  
REVISED  
REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

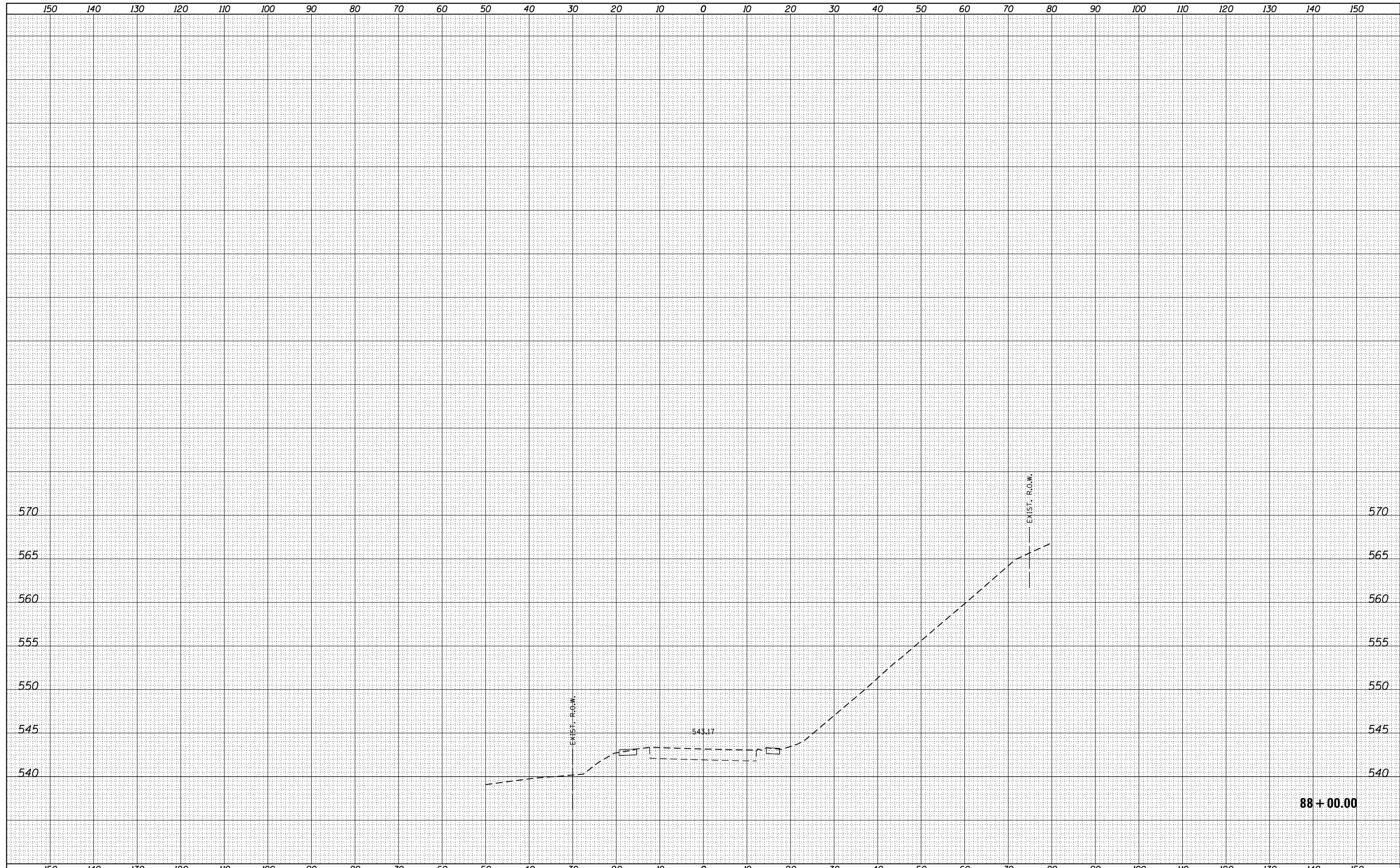
BORING LOGS  
SN 090-1001

SHEET NO. 4A OF 4 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2463	(8)CLV	TAZEWELL	25	14A
CONTRACT NO. 68040			ILLINOIS FED. AID PROJECT	

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

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



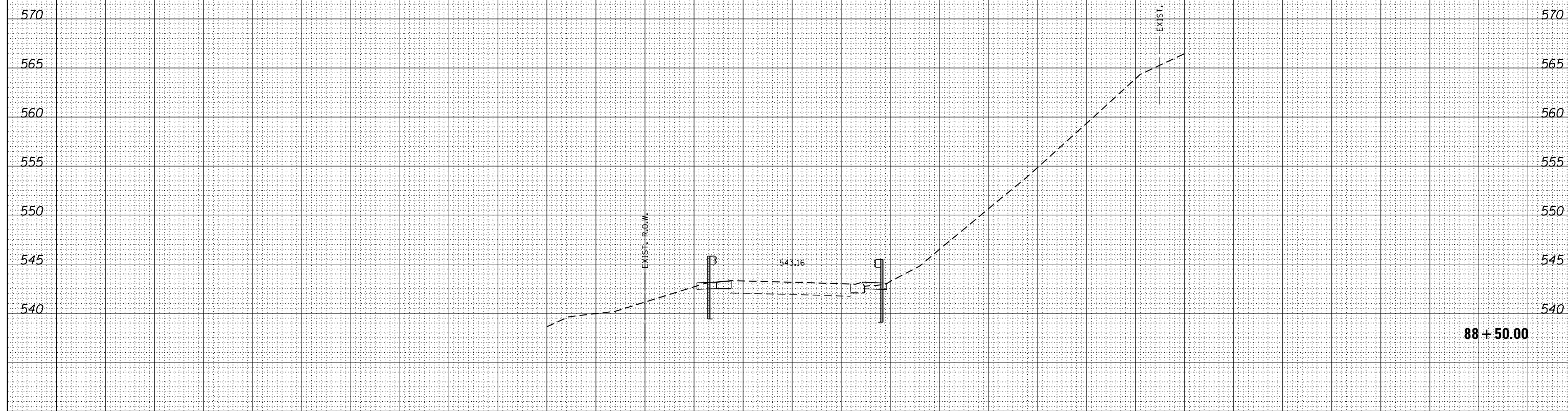
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		CHECKED	REVISIED		CONTRACT NO. 68D40							
*MODELNAME*		DATE	REVISIED		SCALE:	SHEET	OF	SHEETS	STA. 88+00.00	TO	STA. 88+00.00	ILLINOIS FED. AID PROJECT



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

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

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



88 + 50.00

FILE NAME =  
\*FILEL\*  
\*MODELNAME\*

USER NAME = *USER*	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = *SCALE*	CHECKED -	REVISED -
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

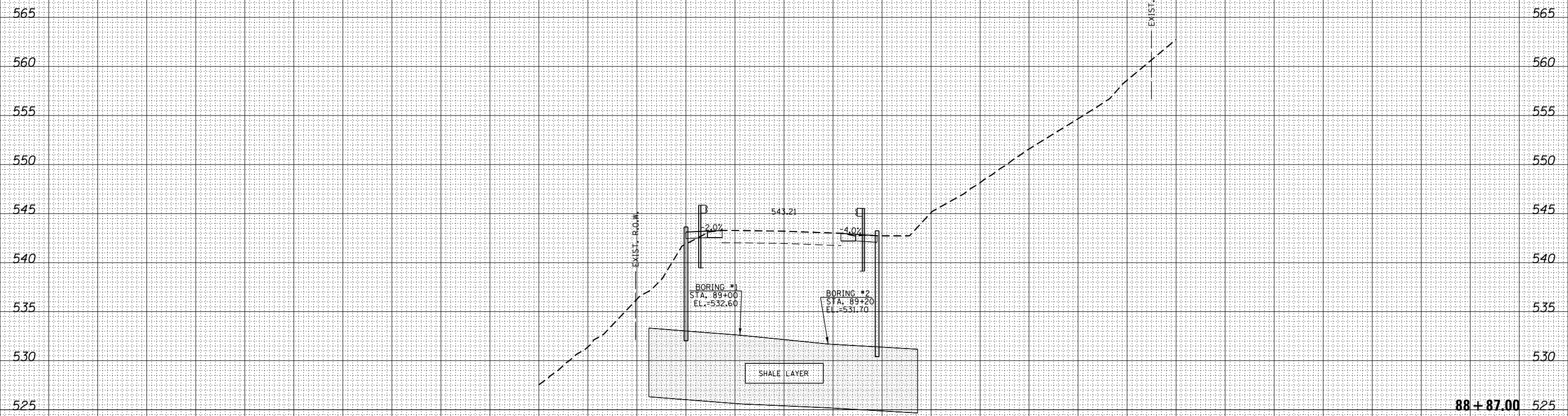
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SCALE: SHEET OF SHEETS STA. 88+50.00 TO STA. 88+50.00

F.A.S. RTE. 2463	SECTION (8)CLV.	COUNTY TAZEWELL	TOTAL SHEETS 25	SHEET NO. 16
CONTRACT NO. 68D40			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

BY	DATE
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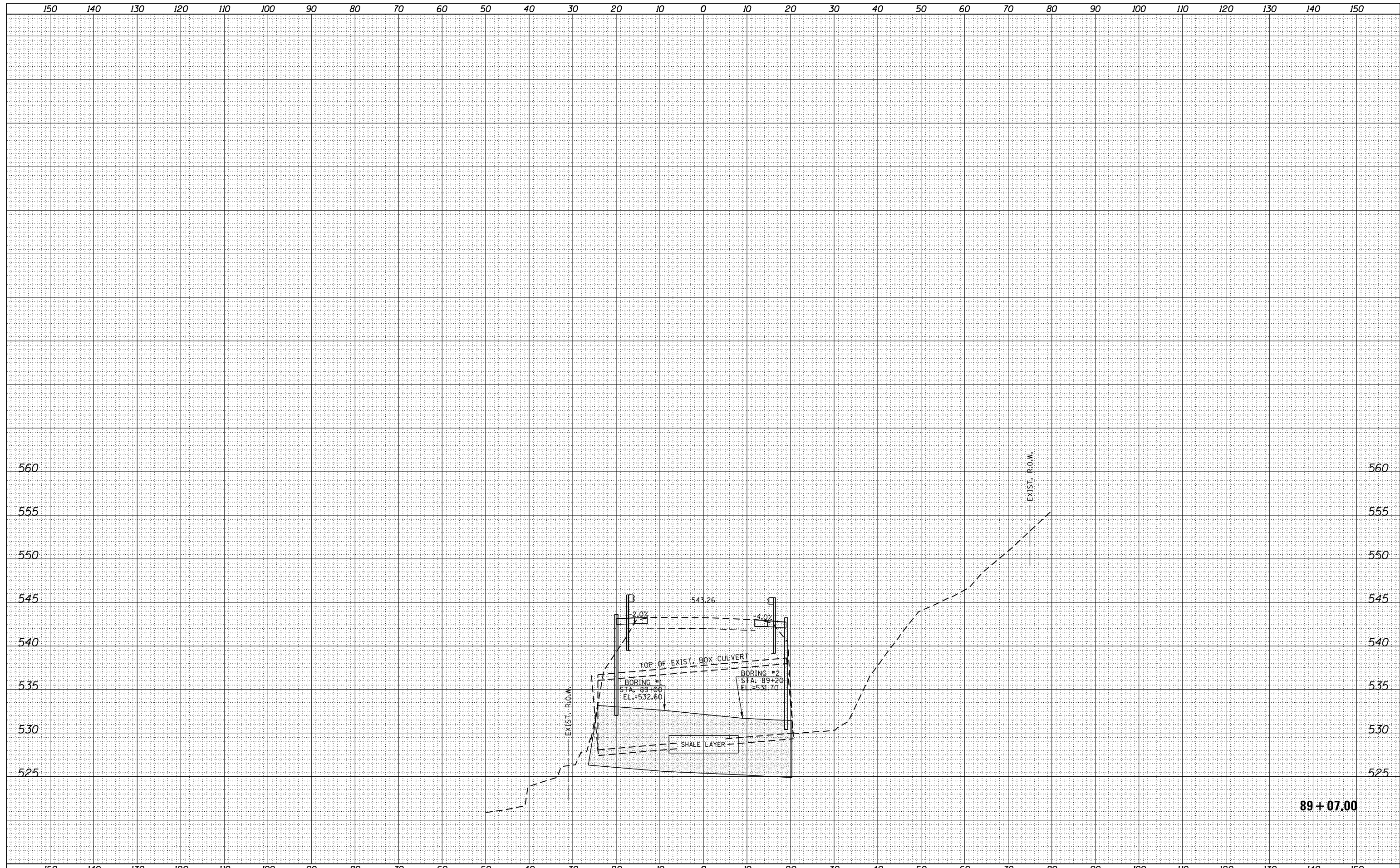
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*MODELNAME*		DATE -	REVISED -										ILLINOIS FED. AID PROJECT		

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
FINAL SURVEY	
NOTE BOOK	
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NOTE BOOK	
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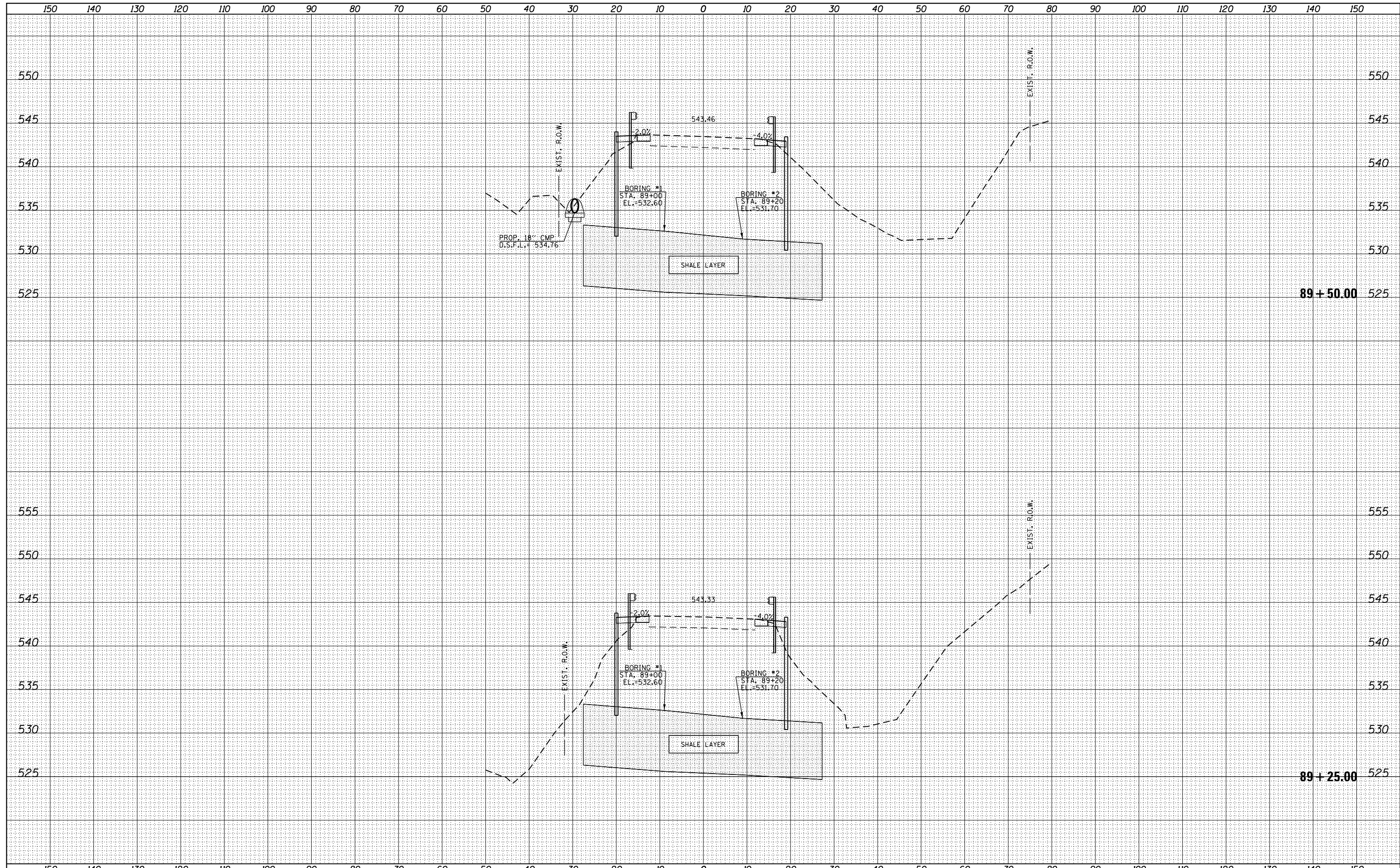


89 + 07.00

FILE NAME :	USER NAME : *USER*	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>PROPOSED CROSS SECTIONS</b>			F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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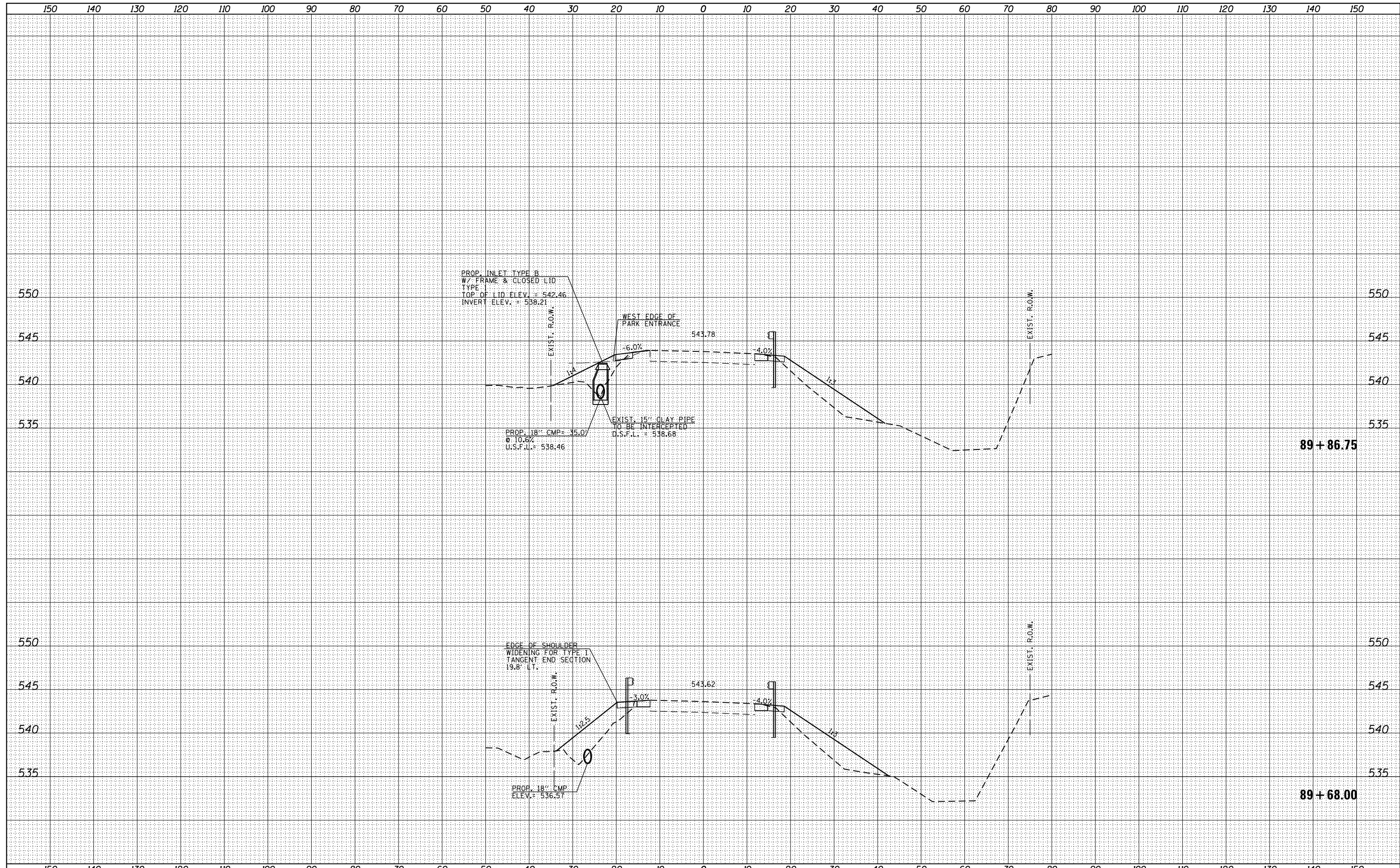
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DATE	
BY	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS
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DATE	
BY	
SURVEYED	
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TEMPLATE	
NOTE BOOK	
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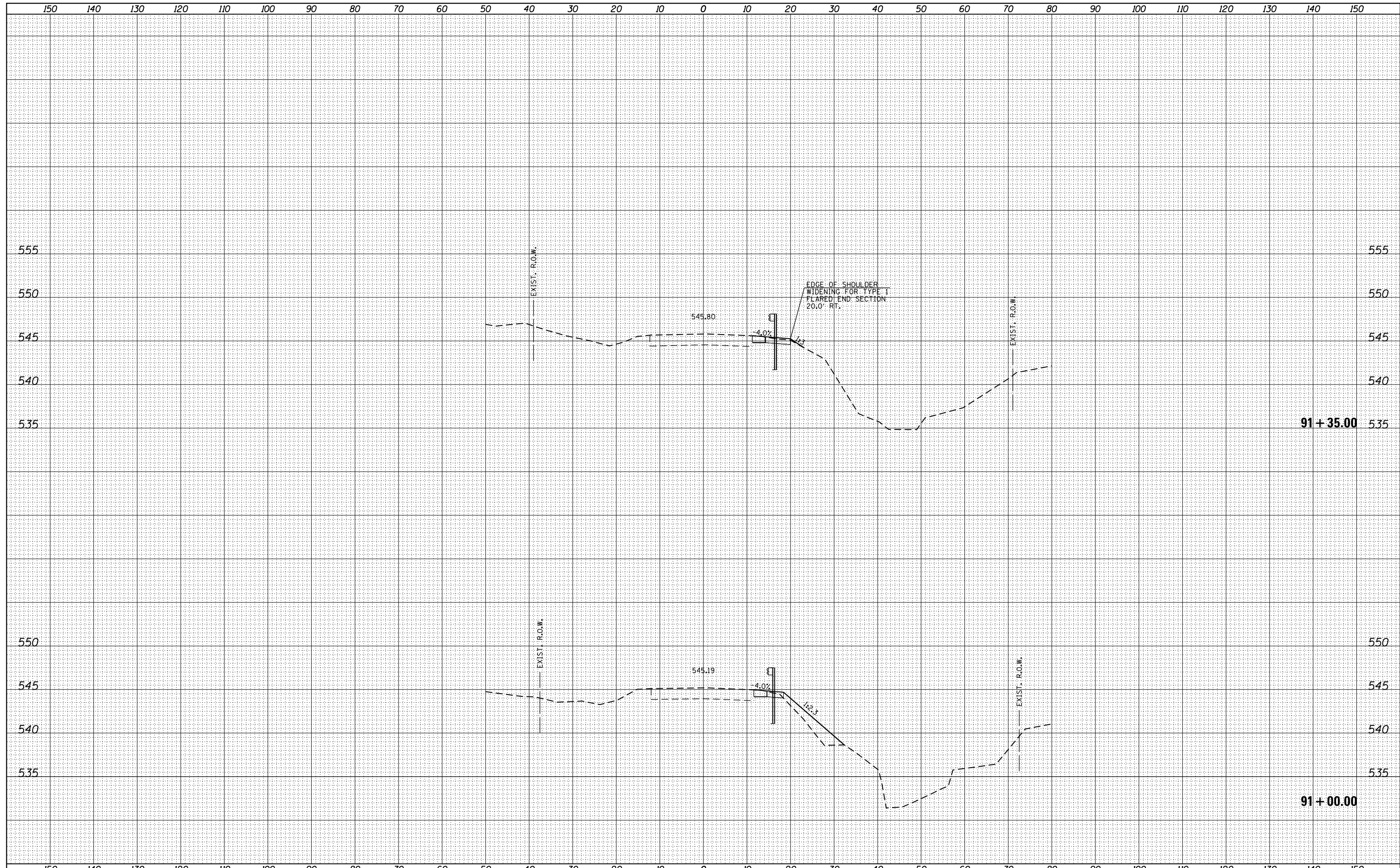


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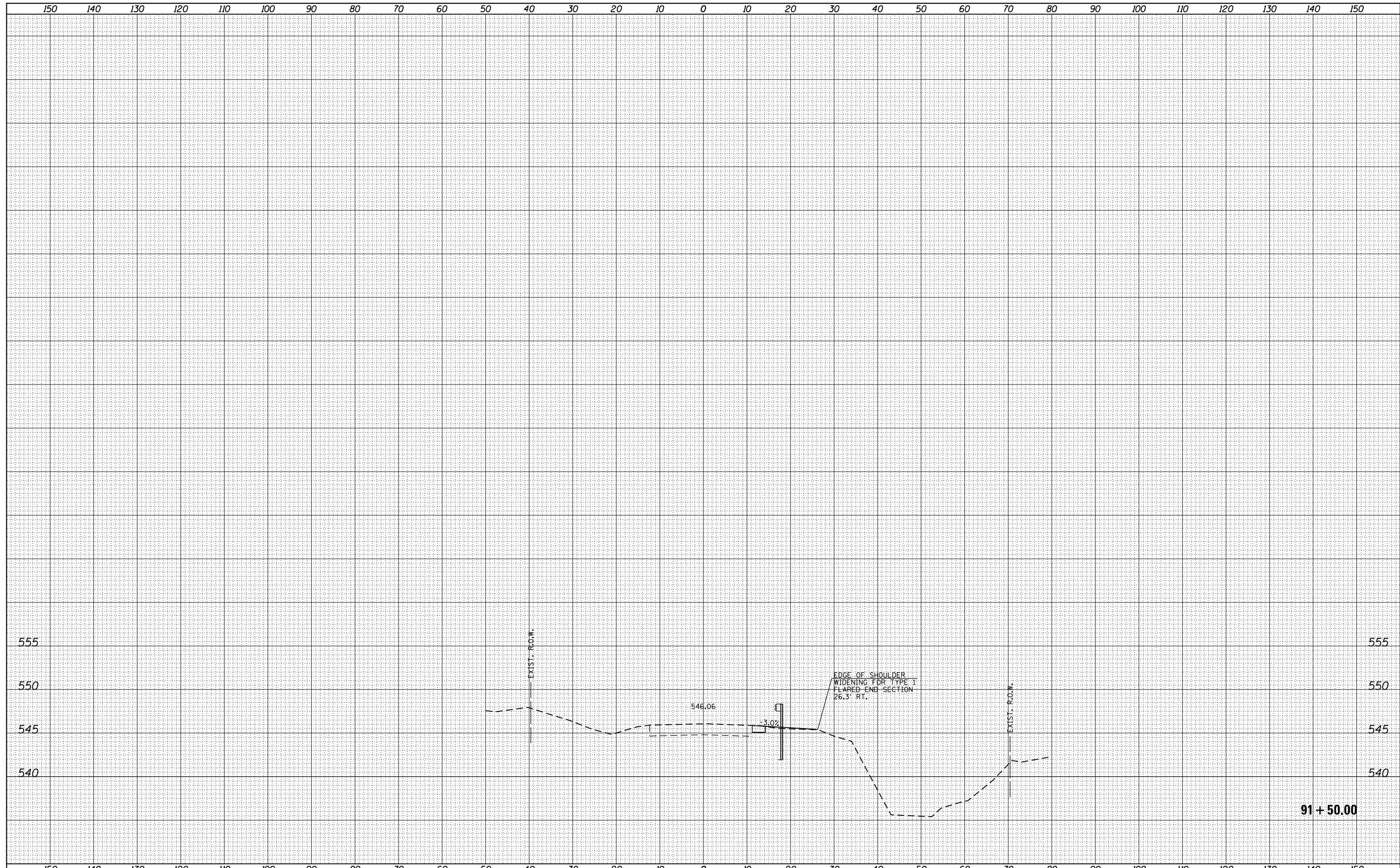
BY	DATE

BY	DATE



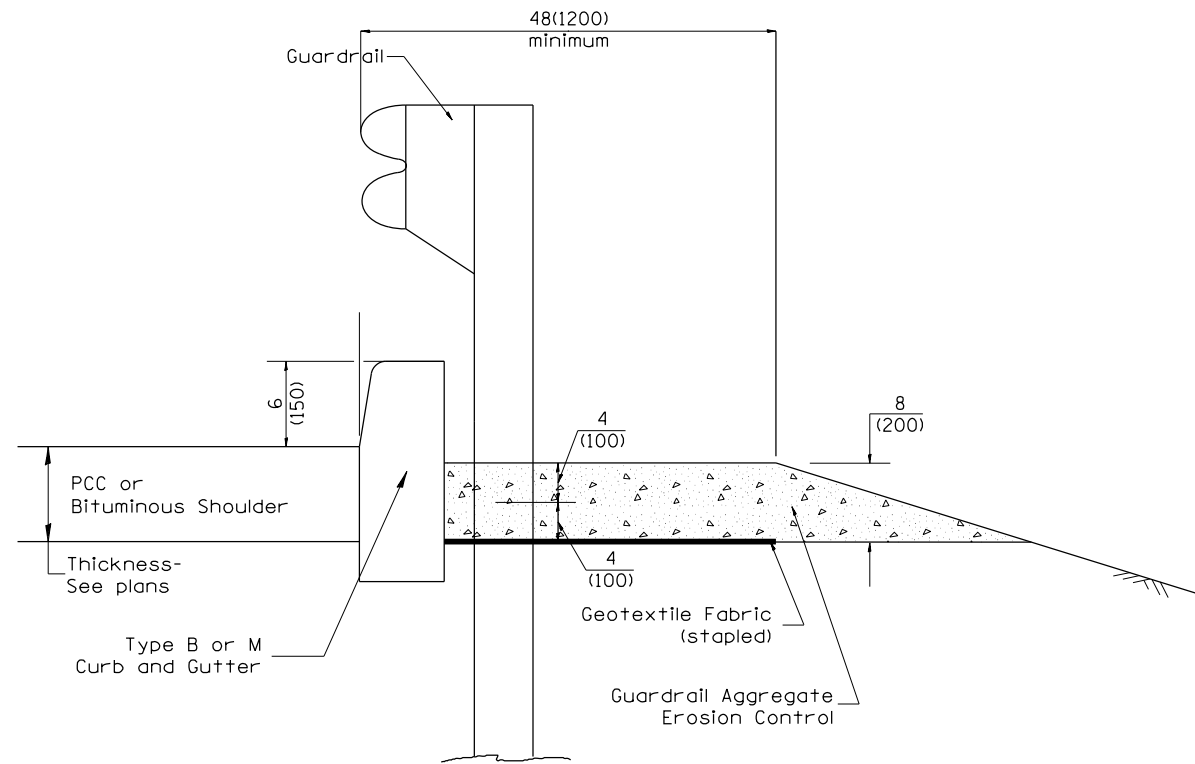
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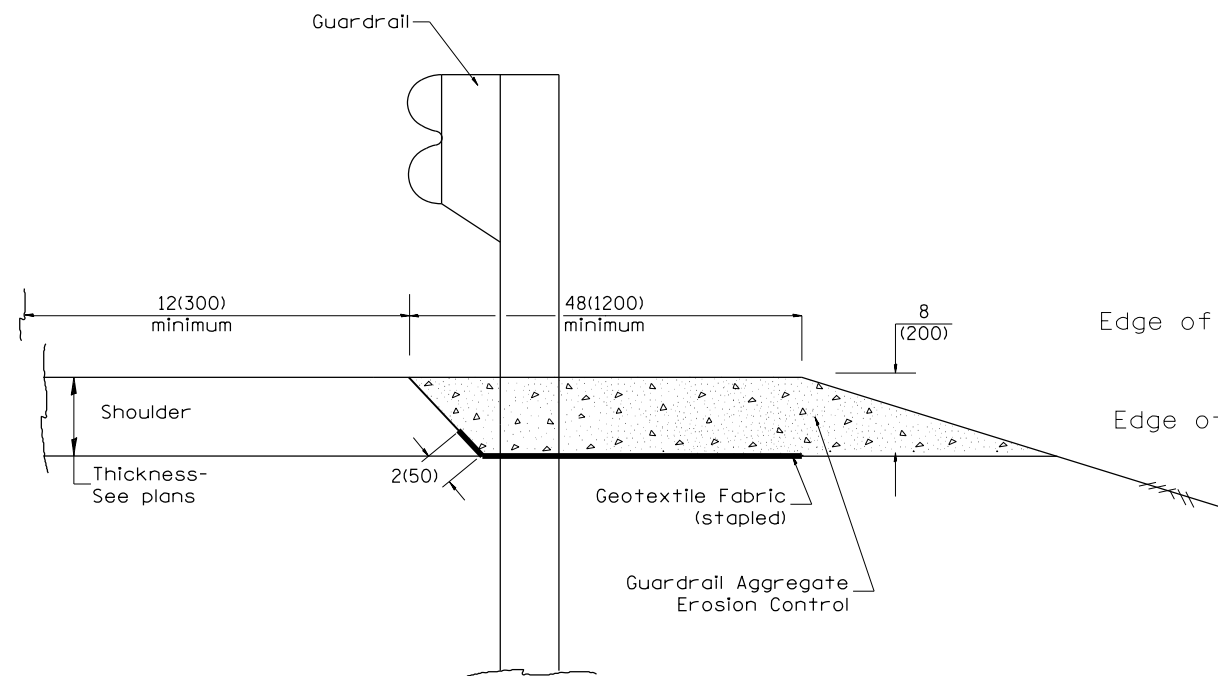


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*MODELNAME*		DATE -	REVISED -		ILLINOIS FED. AID PROJECT										





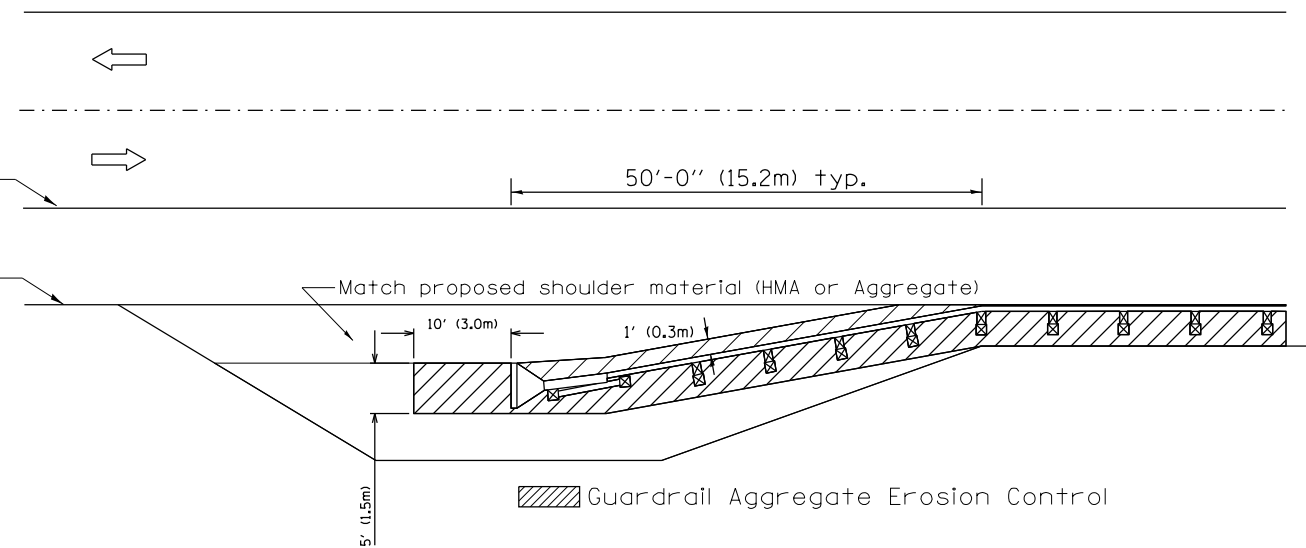
TYPICAL SECTION WITH EROSION CONTROL CURB



TYPICAL SECTION WITHOUT EROSION CONTROL CURB

**GENERAL NOTES: GUARDRAIL AGGREGATE EROSION CONTROL**

1. This work shall consist of grading as needed, furnishing and installing geotextile fabric and staples, and furnishing, placing and shaping crushed aggregate around and behind Steel Plate Beam Guardrail posts in accordance with Plan Details.
2. Before placing the aggregate and the Geotextile Fabric, weeds and grass shall be removed from the area to be covered.
3. After the area has been prepared, and in a dry condition, the Geotextile fabric shall be placed with a 12(300) minimum overlap. A knife cut for guardrail post installation is necessary.
4. The aggregate shall be deposited, compacted and shaped by either mechanical or hand methods, in a manner reasonably true to line and grade.
5. The Contractor shall have the option of placing the guardrail before or after the Geotextile Fabric and Aggregate are in place. If the guardrail is placed after the Geotextile Fabric and Aggregate, then any voids must be filled and the aggregate returned to line and grade.
6. Materials shall meet the following requirements:
  - A. The crushed aggregate shall be CA1 gradation in accordance with Article 1004.01(c) of the Standard Specifications.
  - B. The Geotextile Fabric shall be nonwoven fabric in accordance with Article 1080.02 of the Standard Specifications.



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

01-01-97	RENUM. C-22.01, NEW REVISION BOX	T.P.	3-7-11	Added Detail showing plan view	R.D.
03-01-97	CORRECT STD. NUMBERS IN NOTES PG. 2	J.A.	8-10-12	Revised curb "B" and aggregate	R.D.
11-03-00	CORRECTION TO NOTES	M.A.	7-15-15	Addressed shoulder inlet curb	R.D.
10-16-06	REVISED TO 2007 SPEC.	M.A.	1-26-17	REVISED	R.D.

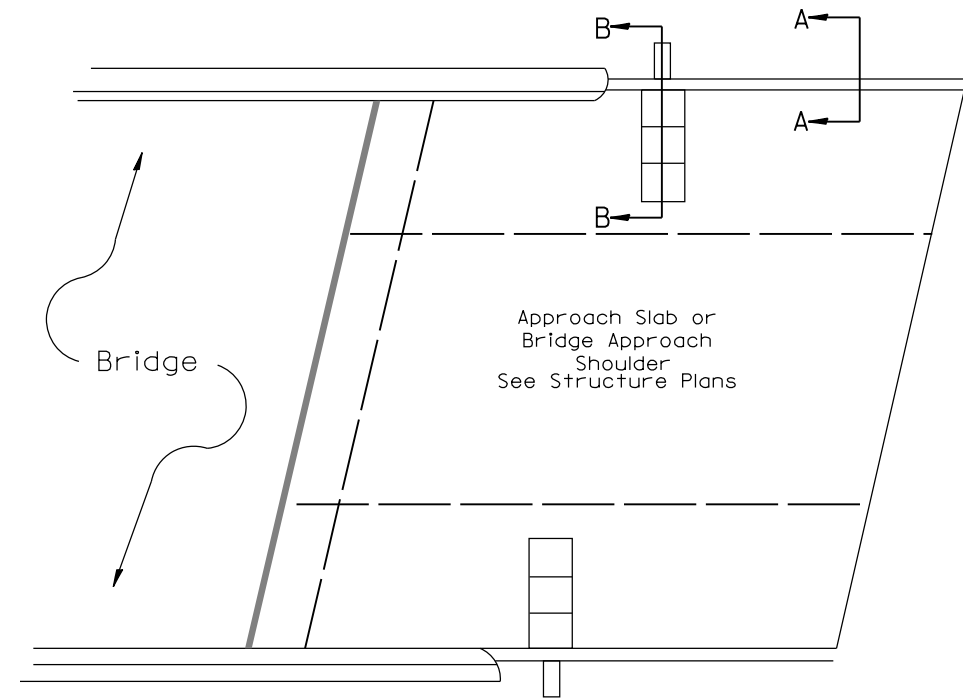
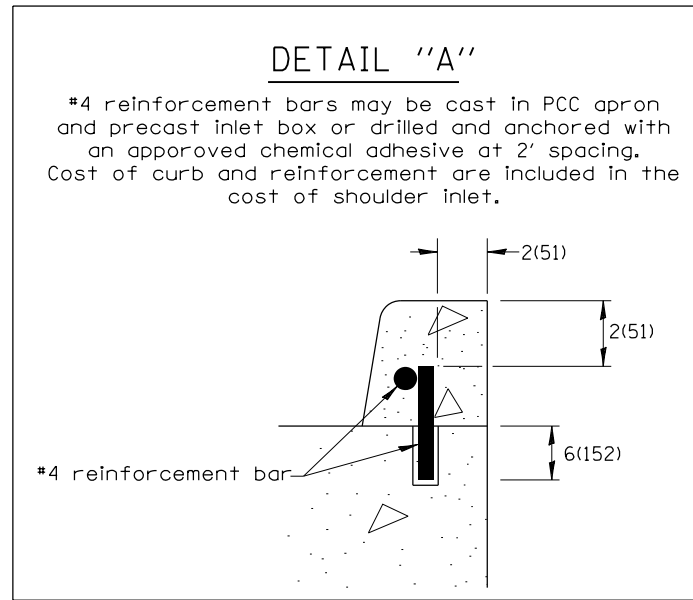
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

GUARDRAIL EROSION CONTROL TREATMENTS

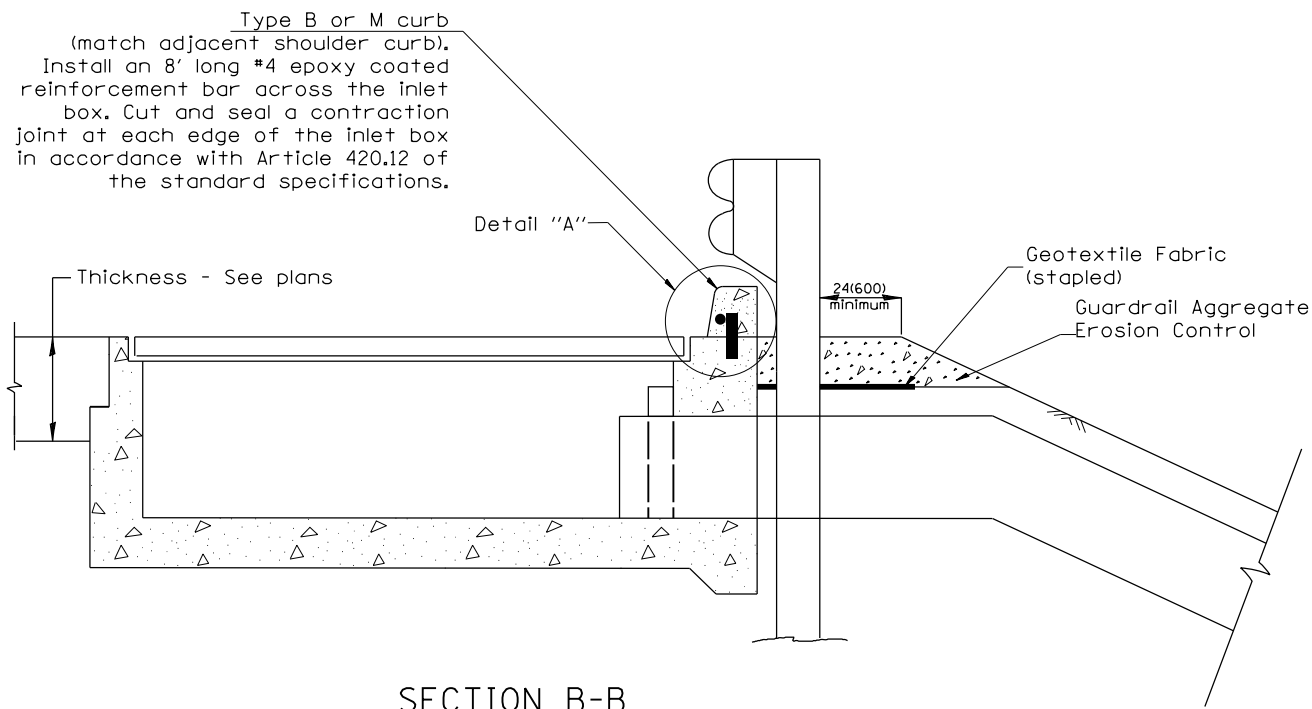
NOT TO SCALE

SHT. 1 OF 2  
CADD STD. 630101-D4

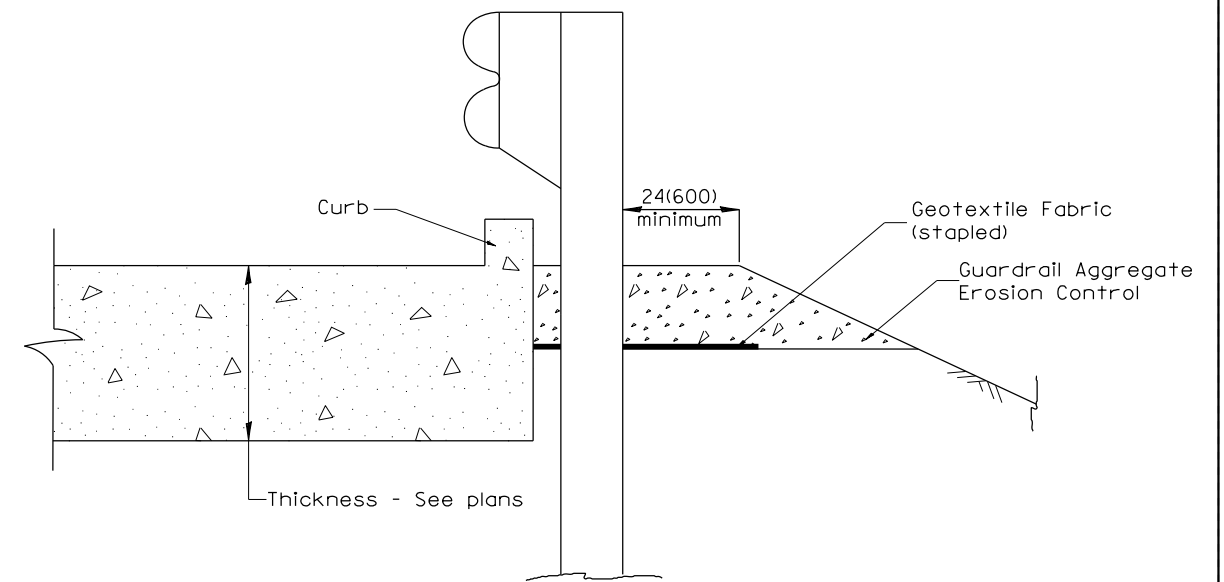
F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2463	(B)CLV	TAZEWELL	25	24
FED. ROAD DIST. NO.   ILLINOIS FED. AID PROJECT			CONTRACT NO. 68D40	



**PLAN VIEW**  
**APPROACH SLAB OR SHOULDER PLACEMENT**



**SECTION B-B**  
**TYPICAL SECTION AT INLETS**  
**TYPE E, F & G (HIGHWAY STANDARD 610001)**



**SECTION A-A**  
**TYPICAL SECTION WITH BRIDGE APPROACH CURB**

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

FILE NAME =	USER NAME = \$USER*	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>GUARDRAIL EROSION CONTROL TREATMENTS</b>	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
#FILE#		DRAWN -	REVISED -			2463	(B)CLV	TAZEWELL	25	25	
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					FED. ROAD DIST. NO.		ILLINOIS		FED. AID PROJECT		