

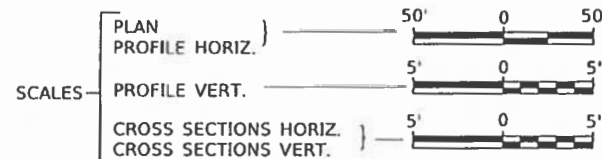
**INDEX OF SHEETS**

01-15-2021 LETTING ITEM 154

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	GENERAL NOTES, DETAILS, TIE POINTS
3-4	SUMMARY OF QUANTITIES
5	TYPICAL SECTIONS, PAVEMENT DESIGN INFORMATION
6-7	SCHEDULES OF QUANTITIES
8-10	PLAN AND PROFILE SHEETS - C.H. 20
11	PLAN AND PROFILE SHEET - N. CRUM RD.
12-13	REMOVAL PLAN SHEETS
14-15	DETOUR AND TRAFFIC CONTROL PLAN
16-17	STORM WATER POLLUTION PREVENTION PLAN
18-45	STRUCTURE PLANS
46-69	CROSS SECTIONS - C.H. 20
70-75	CROSS SECTIONS - N. CRUM RD.

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**  
**PLANS FOR PROPOSED**  
**SPECIAL BRIDGE FUNDS**  
**MASON COUNTY**  
**SECTION 07-00022-01-BR**  
**F.A.S. 567 (CH 20) OVER QUIVER CREEK**  
**PROJECT NO. ZMBM(399)**  
**JOB NUMBER C-96-001-21**

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	07-00022-01-BR	MASON	75	1
FED. ROAD DIST. NO. 7		ILLINOIS CONTRACT NO. 93753		



**HIGHWAY STANDARDS (INCLUDED IN PROPOSAL)**

- 000001-08 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
- 420406 PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH PAVEMENT
- 515001-04 NAME PLATE FOR BRIDGES
- 601101-02 CONCRETE HEADWALL FOR PIPE UNDERDRAINS
- 630301-09 SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
- 631031-17 TRAFFIC BARRIER TERMINAL, TYPE 6
- 701011-04 OFF-ROAD MOVING OPERATIONS, 2L, 2W, DAY ONLY
- 701901-08 TRAFFIC CONTROL DEVICES
- 725001-01 OBJECT AND TERMINAL MARKERS
- 780001-05 TYPICAL PAVEMENT MARKINGS
- BLR 21-9 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

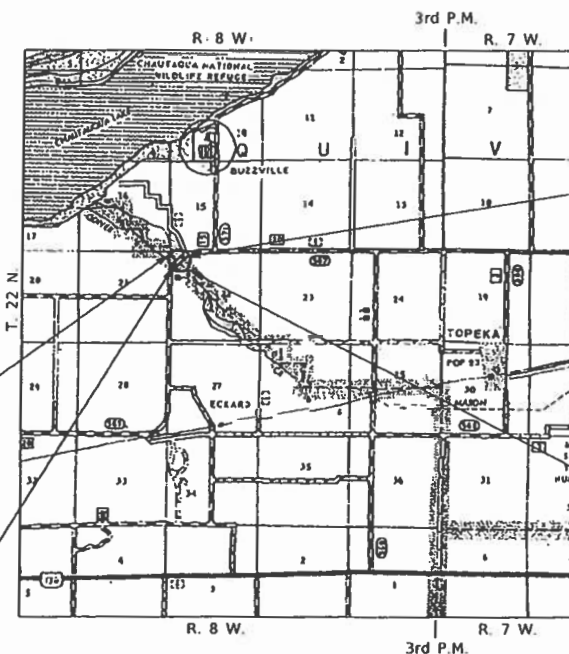
**UTILITY COMPANIES**

- CASS TELEPHONE & CABLE  
VIRGINIA, ILLINOIS
- MENARD ELECTRICAL COOPERATIVE  
PETERSBURG, ILLINOIS
- CENTURYLINK  
GALESBURG, ILLINOIS

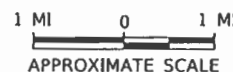
J.U.L.I.E.  
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
1-800-892-0123  
OR 811

PROPOSED STRUCTURE SN 063-3009  
THREE SPAN POURED DECK ON STEEL PLATE GIRDER  
SUPERSTRUCTURE ON CONCRETE ENCASED PILE  
BENT PIERS AND CONCRETE STUB ABUTMENTS  
195'-0" BK TO BK, AND 37'-2" O TO O DECK,  
30° LT. AH. SKEW

SECTION 07-00022-01-BR  
BEGINS  
STATION 111+00.00



**LOCATION MAP**



NET LENGTH OF PROJECT = 3,325.00 FEET = 0.630 MILES  
DESIGN CLASSIFICATION: MAJOR COLLECTOR (NON-URBAN)  
DESIGN ADT: 2,050 (42)  
DESIGN SPEED: 60 MPH

SECTION 07-00022-01-BR  
ENDS  
STATION 144+25.00

EXISTING STRUCTURE SN 063-3008  
THREE SPAN HAUNCHED T-BEAM WITH A  
CONCRETE DECK SUPERSTRUCTURE ON PILE  
BENT PIERS AND ABUTMENTS, 168'-10" BK  
TO BK, AND 28'-4" O TO O DECK,  
NO SKEW (TO BE REMOVED)

*Hutchison Engineering, Inc.*  
JACKSONVILLE-SHOREWOOD  
FLORIDA-QUAD CITIES

2020 JOB#4453

*BENJAMIN A. NEUBAUER*  
REGISTERED PROFESSIONAL ENGINEER  
STATE OF ILLINOIS  
1972/2020  
1972/2020  
1972/2020  
*Li*  
SIGNATURE  
ENGINEERS SEAL

APPROVED *October 22,* 2020  
*Michael R. Rudy*  
MASON COUNTY ENGINEER

PASSED *October 27,* 2020  
*Paul*  
DISTRICT SIX ENGINEER OF  
LOCAL ROADS & STREETS

Released For  
Bid Based on  
Limited Review *October 27,* 2020  
*Jeff P. Hyman*  
REGION FOUR ENGINEER

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**CONTRACT NO. 93753**

**GENERAL NOTES**

PLAN QUANTITIES FOR TREE REMOVAL HAVE BEEN BASED ON ALL TREES WITHIN THE EXISTING AND PROPOSED RIGHT OF WAY. THIS QUANTITY MAY BE REVISED DURING CONSTRUCTION, AT THE DIRECTION OF THE ENGINEER, BY DELETING FROM THE TREE REMOVAL QUANTITIES, SUCH TREES THAT DO NOT INTERFERE WITH THE PROPOSED CONSTRUCTION.

THE REMOVAL OF EXISTING HOT-MIX ASPHALT SURFACE AND GRAVEL OR CRUSHED STONE BASE COURSE WHICH MAY BE NECESSARY FOR THE CONSTRUCTION OF THE PROJECT SHALL BE REMOVED AS EARTH EXCAVATION AND NO COMPENSATION WILL BE ALLOWED FOR ADDITIONAL LABOR OR EQUIPMENT REQUIRED.

ALL WASTE OR UNDESIRABLE MATERIAL AS IDENTIFIED BY THE ENGINEER SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY AT THE CONTRACTOR'S EXPENSE.

ALL EXISTING PRIVATELY OWNED UTILITIES REQUIRING ADJUSTMENT WILL BE MADE BY THE UTILITY COMPANY INVOLVED. WHERE NO PROVISIONS HAVE BEEN MADE FOR ADJUSTMENTS ON THE PLANS, NO ADDITIONAL COMPENSATION WILL BE ALLOWED DUE TO DELAYS OR INCONVENIENCES CAUSED BY THE SAID UTILITY ADJUSTMENTS.

THE PROFILE GRADE ELEVATIONS SHOWN ON THE PLAN AND PROFILE SHEETS AND IN THE STATION CROSS SECTIONS ARE TO THE TOP OF THE FINISHED SURFACE.

ALL EXISTING DRAINAGE STRUCTURES NOT BEING REMOVED BY THE CONTRACTOR THAT ARE DAMAGED DURING CONSTRUCTION SHALL BE REPLACED OR REPAIRED AT THE CONTRACTOR'S EXPENSE.

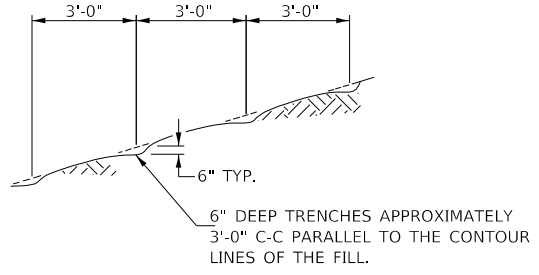
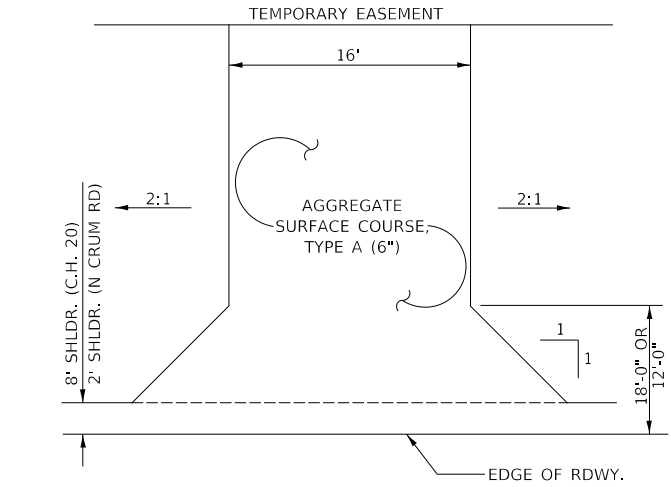
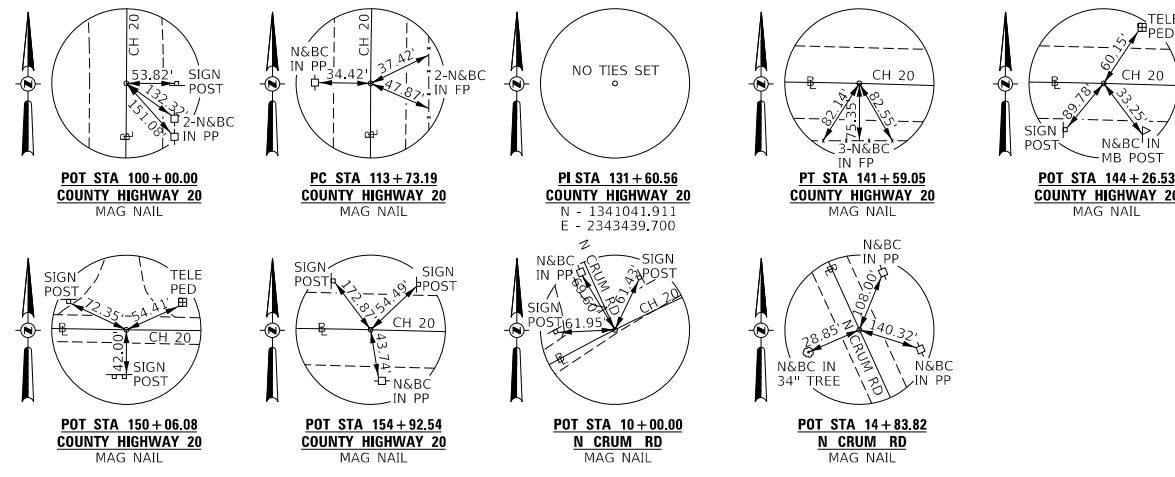
ANY REFERENCE TO STANDARDS THROUGHOUT THE PLANS SHALL BE INTERPRETED TO BE THE LATEST STANDARDS OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION.

THE LOCATION OF UNDERGROUND UTILITIES SHOWN ON THE PLANS REPRESENTS THE BEST KNOWLEDGE OF THE COUNTY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATIONS OF UNDERGROUND INSTALLATIONS BEFORE STARTING CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL INDEMNIFY THE COUNTY, ITS OFFICERS AND EMPLOYEES AGAINST ALL CLAIMS DUE TO DAMAGE TO CORPORATE OR PRIVATE PROPERTY RESULTING FROM HIS CONSTRUCTION OPERATIONS AS DESCRIBED IN ARTICLES 107.20 AND 107.26 OF THE STANDARD SPECIFICATIONS.

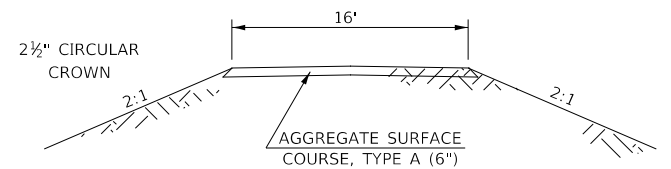
THE CONTRACTOR MAY BE REQUIRED TO CONDUCT SOME OF HIS GRADING AND TRENCHING OPERATIONS AROUND TRANSMISSION POLES AND UNDER TRANSMISSION LINES. THE ADDED COST OF SO DOING SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND PRESERVE PROPERTY MARKERS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR, OR AGENT, HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.

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

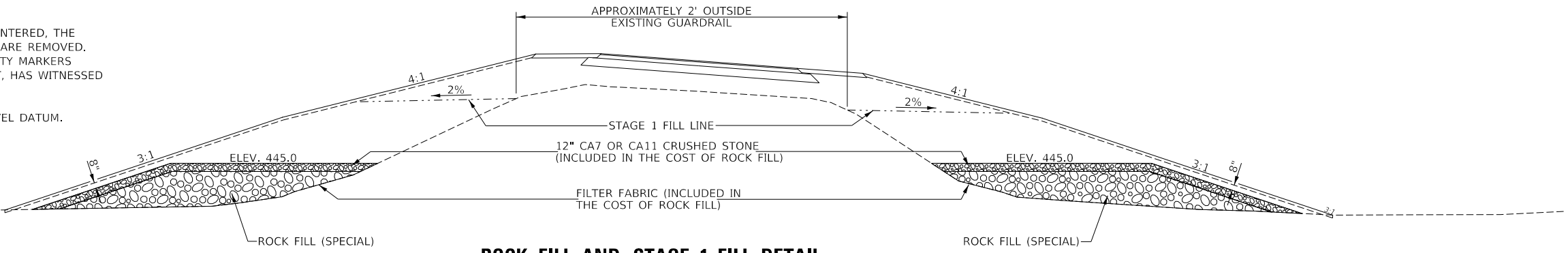


NOTE: ALL SLOPES 3:1 OR STEEPER AND GREATER THAN 5' IN HEIGHT SHALL BE CONTOUR PLOWED AS SHOWN IN DETAIL. COST SHALL BE INCLUDED WITH SEEDING, CLASS 2 (SPECIAL).

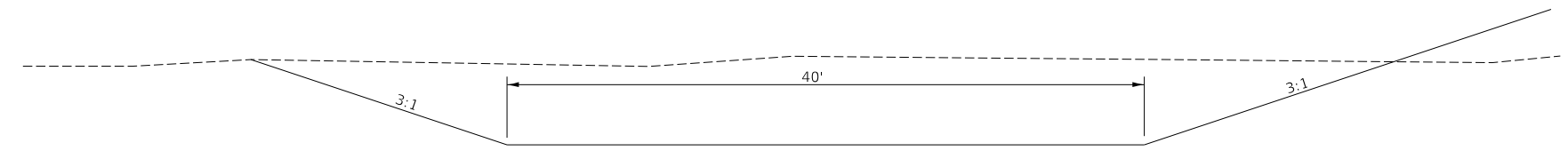


**FIELD ENTRANCE**  
C.H. 20  
STA 115+89 LT  
STA 116+00 RT  
STA 136+50 RT  
N CRUM RD  
STA 12+86 RT

**DETAIL OF CONTOUR PLOWING**



**ROCK FILL AND STAGE 1 FILL DETAIL**  
(SEE CROSS SECTIONS)



**SECONDARY CHANNEL DETAIL**

MODEL: s:\MODEL\MAME FILE NAME: 07-0022-01-20 over Quiver Creek - Ph. II (Mason)\CADD\CADD Sheets\14539001.dgn

USER NAME = BNebe1	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 2,000' / in.	CHECKED -	REVISED -
PLOT DATE = 9/23/2020	DATE -	REVISED -

**MASON COUNTY  
COUNTY HIGHWAY 20  
OVER QUIVER CREEK**

**GENERAL NOTES, DETAILS, TIE POINTS**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. 111+00.00 TO STA. 144+25.00

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	07-0022-01-BR	MASON	75	2
FED. ROAD DIST. NO. 7 ILLINOIS			CONTRACT NO. 93753	
			FED. AID PROJECT ZMBM(399)	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE		
				BRIDGE	SAFETY	STP
				0010 063-3009	0021	0004
Δ *	20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	14	7	7
Δ *	20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	44	22	22
Δ *	20100500	TREE REMOVAL, ACRES	ACRE	5.7	2.8	2.9
	20200100	EARTH EXCAVATION	CU YD	11385	5579	5806
	20300100	CHANNEL EXCAVATION	CU YD	1300	1300	
*	20400800	FURNISHED EXCAVATION	CU YD	32200	15278	16922
	21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	33555	16442	17113
	28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	3540	1735	1805
	28000305	TEMPORARY DITCH CHECKS	FOOT	354	173	181
	28000400	PERIMETER EROSION BARRIER	FOOT	5530	2710	2820
	28000500	INLET AND PIPE PROTECTION	EACH	3	1	2
	28200200	FILTER FABRIC	SQ YD	1750	1750	
	31100910	SUBBASE GRANULAR MATERIAL, TYPE A 12"	SQ YD	9571	4690	4881
	40200100	AGGREGATE SURFACE COURSE, TYPE A	TON	556	272	284
	40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	20535	10062	10473
	40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	7394	3623	3771

\* SEE SPECIAL PROVISIONS

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE		
				BRIDGE	SAFETY	STP
				0010 063-3009	0021	0004
	40603080	HOT-MIX ASPHALT BINDER COURSE, 1L- 19.0, N50	TON	2557	1253	1304
	40604050	HOT-MIX ASPHALT SURFACE COURSE, 1L-9.5, MIX "C", N50	TON	681	334	347
	42000070	PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB	SQ YD	163	163	
	48100100	AGGREGATE SHOULDERS, TYPE A	TON	1683	825	858
*	50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1	1	
	50105220	PIPE CULVERT REMOVAL	FOOT	114	56	58
	50200100	STRUCTURE EXCAVATION	CU YD	295	295	
	50200300	COFFERDAM EXCAVATION	CU YD	105	105	
	50201101	COFFERDAM (TYPE 1) (LOCATION - 1)	EACH	1	1	
	50201102	COFFERDAM (TYPE 1) (LOCATION - 2)	EACH	1	1	
	50300100	FLOOR DRAINS	EACH	11	11	
	50300225	CONCRETE STRUCTURES	CU YD	273.2	273.2	
*	50300255	CONCRETE SUPERSTRUCTURE	CU YD	241.5	241.5	
	50300260	BRIDGE DECK GROOVING	SQ YD	890	890	
	50300280	CONCRETE ENCASEMENT	CU YD	8.6	8.6	
	50300300	PROTECTIVE COAT	SQ YD	1150	1150	

\* SEE SPECIAL PROVISIONS Δ SPECIALTY ITEMS

MODEL: \$MODEL\$  
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PLOT SCALE = 100.0000' / in.	DRAWN -	REVISED -
PLOT DATE = 10/21/2020	CHECKED -	REVISED -
	DATE -	REVISED -

**MASON COUNTY  
COUNTY HIGHWAY 20  
OVER QUIVER CREEK**

**SUMMARY OF QUANTITIES**

SCALE: NONE SHEET 1 OF 2 SHEETS STA. 111+00.00 TO STA. 144+25.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	07-0022-01-BR	MASON	75	3
FED. ROAD DIST. NO. 7 ILLINOIS			CONTRACT NO. 93753	
FED. AID PROJECT ZMBM(399)				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE		
				BRIDGE	SAFETY	STP
				0010	0021	0004
				063-3009		
* 50301350	CONCRETE SUPERSTRUCTURE (APPROACH SLAB)	CU YD	97.8	97.8		
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1	1		
50500505	STUD SHEAR CONNECTORS	EACH	4542	4542		
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	123870	123870		
51200959	FURNISHING METAL SHELL PILES 14" X 0.312"	FOOT	702	702		
51200963	FURNISHING METAL SHELL PILES 16" X 0.375"	FOOT	565	565		
51202305	DRIVING PILES	FOOT	1267	1267		
51203200	TEST PILE METAL SHELLS	EACH	4	4		
51500100	NAME PLATES	EACH	1	1		
52000110	PREFORMED JOINT STRIP SEAL	FOOT	83	83		
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	12	12		
52100520	ANCHOR BOLTS, 1"	EACH	48	48		
542D0220	PIPE CULVERTS, CLASS D, TYPE 1 15"	FOOT	80		39	41
* 542D1921	PIPE CULVERTS, CLASS D, TYPE 3 36"	FOOT	120		59	61
* 58600101	GRANULAR BACKFILL FOR STRUCTURES	CU YD	120	120		
58700300	CONCRETE SEALER	SQ FT	851	851		
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	60	60		

\* SEE SPECIAL PROVISIONS

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE		
				BRIDGE	SAFETY	STP
				0010	0021	0004
				063-3009		
60801036	FLAP GATE 36"	EACH	1			1
Δ 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4		
Δ 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	4		
63200310	GUARDRAIL REMOVAL	FOOT	3441		1686	1755
67100100	MOBILIZATION	L SUM	1	0.4	0.3	0.3
* 70107025	CHANGEABLE MESSAGE SIGN	CAL DA	28		14	14
Δ 72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4		
Δ 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	13300		6517	6783
Δ * X2501000	SEEDING, CLASS 2 (SPECIAL)	ACRE	11.8		5.8	6
* X2810210	STONE RIPRAP, CLASS A5 (SPECIAL)	TON	1570	1570		
* X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	0.4	0.5	0.1
* Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1		
* Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	123	123		
* Z0054515	ROCK FILL - EMBANKMENT	TON	24609	2520	10854	11235
# * Z0076600	TRAINEES	hour	1500			
# * Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	hour	1500			
* XX008542	OBLITERATE EXISTING ROADBED	SQ YD	3770		1847	1923

\* SEE SPECIAL PROVISIONS Δ SPECIALTY ITEMS #0042

MODEL: \$MODELNAME\$  
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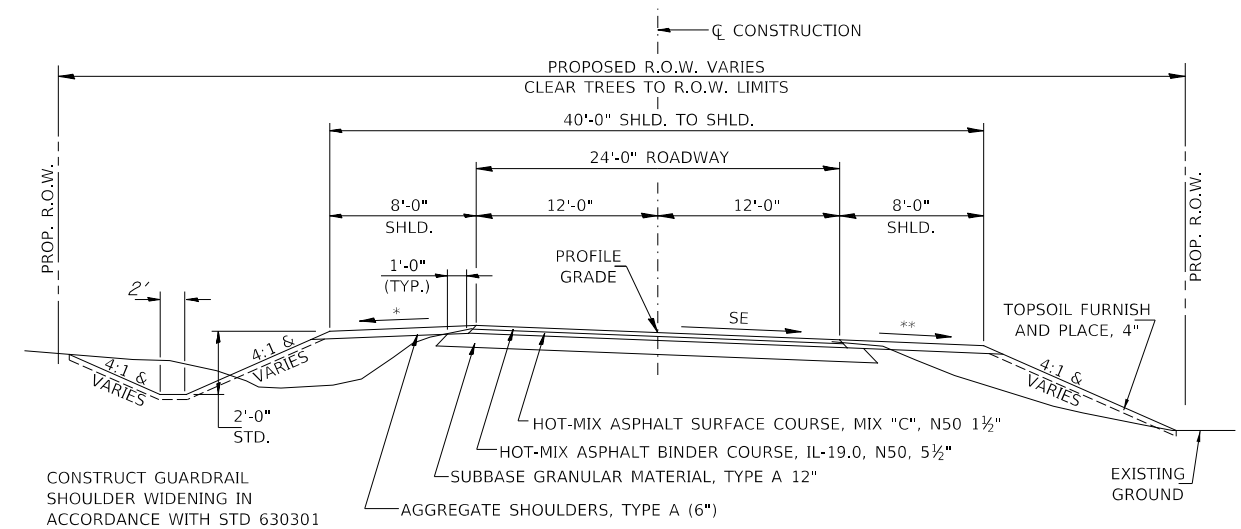
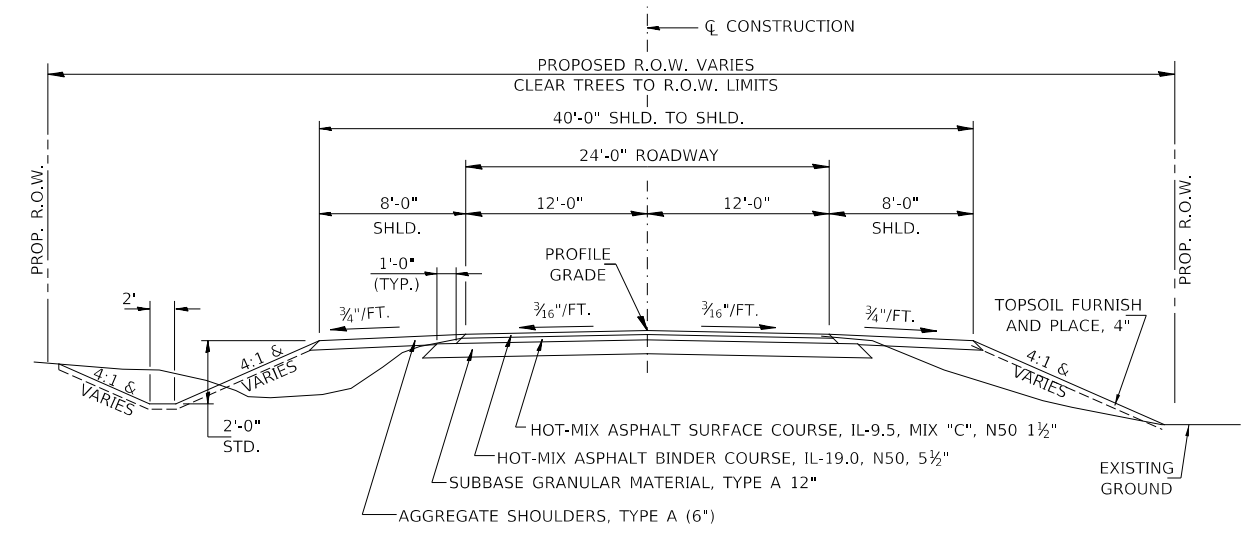
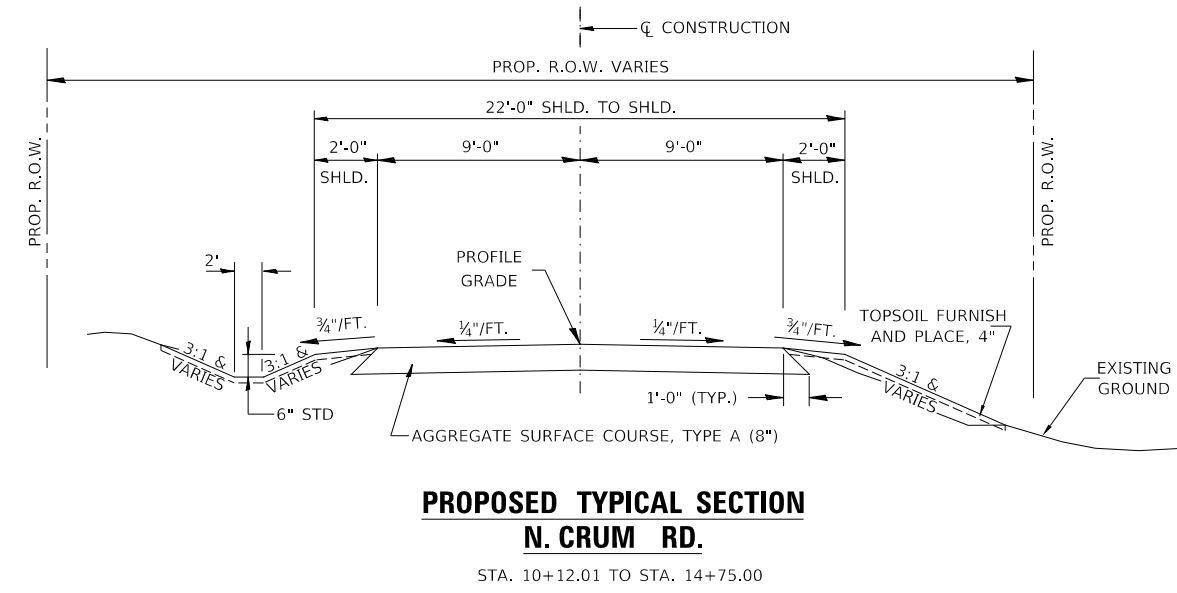
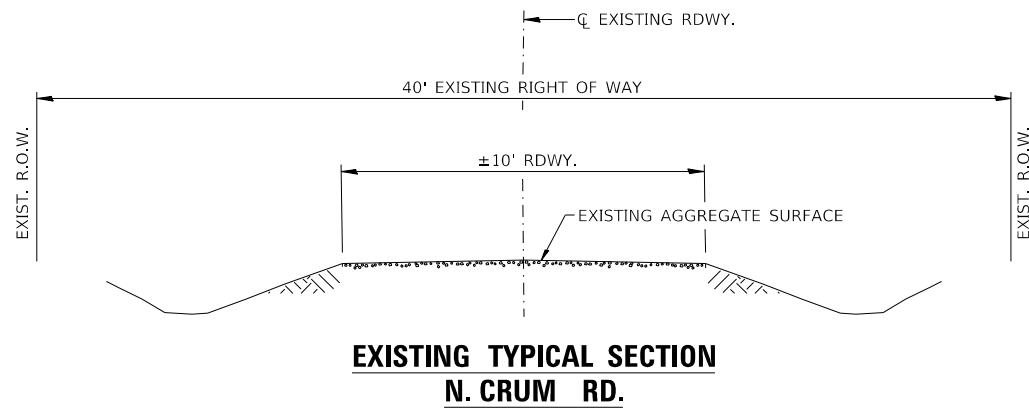
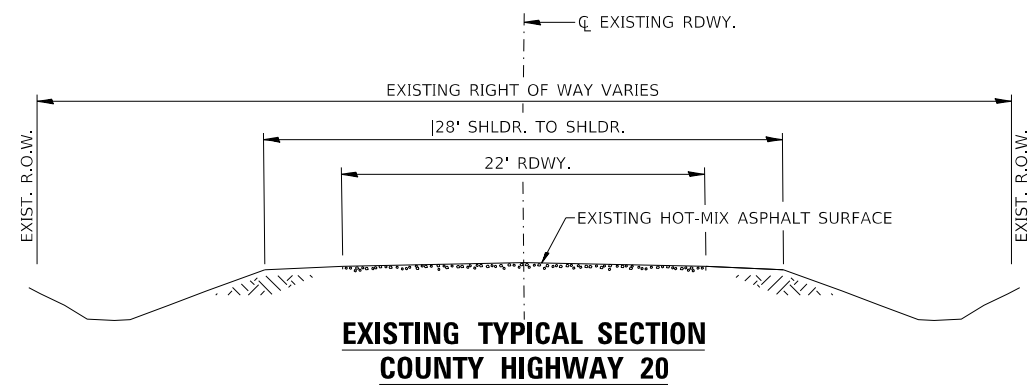
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	DRAWN -	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 10/21/2020	DATE -	REVISED -

**MASON COUNTY  
COUNTY HIGHWAY 20  
OVER QUIVER CREEK**

**SUMMARY OF QUANTITIES**

SCALE: NONE SHEET 2 OF 2 SHEETS STA. 111+00.00 TO STA. 144+25.00

F.A.S. RTE. 567	SECTION 07-00022-01-BR	COUNTY MASON	TOTAL SHEETS 75	SHEET NO. 4
FED. ROAD DIST. NO. 7 ILLINOIS			CONTRACT NO. 93753	
FED. AID PROJECT ZMBM399				



**HOT-MIX ASPHALT MIXTURE REQUIREMENTS**

MIXTURE USE	SURFACE (MIX "C")	BINDER
AC/PG	PG 64-22	PG 64-22
DESIGN AIR VOIDS	4% @ N50	4% @ N50
MIX COMPOSITION	IL-9.5	IL-19.0

**STRUCTURAL DESIGN INFORMATION  
COUNTY HIGHWAY 20**

ROAD CLASSIFICATION: CLASS III 80,000 lb./20 YEAR DESIGN  
 STRUCTURAL DESIGN TRAFFIC:  
 PV = 1,556 SU = 124 MU = 88  
 PERCENT OF STRUCTURAL DESIGN TRAFFIC IN DESIGN LANE:  
 P = 88% S = 7% M = 5%  
 DESIGN Erj: 3 ksi  
 ASPHALT PAVEMENT THICKNESS: 7"  
 SUBBASE GRANULAR MATERIAL, TYPE A 12"

**PROPOSED TYPICAL RECONSTRUCTION SUPERELEVATION SECTION  
COUNTY HIGHWAY 20**

STA. 111+95.00 TO STA. 114+35.00 (SE TRANSITION, NC TO 7.5%)  
 STA. 114+35.00 TO STA. 141+00.00 (FULL 7.5% SE)  
 STA. 141+00.00 TO STA. 143+40.00 (SE TRANSITION, 7.5% TO NC)

BRIDGE APPROACH PAVEMENT CONNECTOR  
 STA. 125+79.10 TO STA. 125+89.10  
 STA. 128+43.05 TO STA. 128+53.05

BRIDGE APPROACH PAVEMENT  
 STA. 125+89.10 TO STA. 126+19.10  
 STA. 128+13.05 TO STA. 128+43.05

BRIDGE OMISSION  
 STA. 126+19.10 TO STA. 128+13.05

\* HIGH SIDE: 8% MAX BREAKOVER  
 \*\* LOW SIDE: 4% OR SE, WHICHEVER IS GREATER

MODEL: 44001\MNAMES  
 FILE NAME: 071923 - CH 20 over Quiver Creek - Ph II (Mason)\CADD\CADD Sheets\4433001.dgn

USER NAME = BNebe1	DESIGNED -	REVISED -
PLOT SCALE = 2,0000' / in.	DRAWN -	REVISED -
PLOT DATE = 9/23/2020	CHECKED -	REVISED -
	DATE -	REVISED -

**MASON COUNTY  
COUNTY HIGHWAY 20  
OVER QUIVER CREEK**

**COUNTY HIGHWAY 20  
TYPICAL SECTIONS**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. 111+00.00 TO STA. 144+25.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	07-00022-01-BR	MASON	75	5
CONTRACT NO. 93753				
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT ZMBM(399)				

TREE REMOVAL					
STATION TO STATION	OFFSET	SIDE	20100110	20100210	20100500
			6 TO 15 UNITS	OVER 15 UNITS	ACRES
111+52	34'	RIGHT	14		
115+85	31'	RIGHT		22	
115+85	31'	RIGHT		22	
117+02	119+01	VARIES			0.2
117+51	120+96	VARIES			0.3
118+80	124+99	VARIES			0.5
122+39	127+62	VARIES			1.8
127+62	137+93	VARIES			1.0
127+82	132+95	VARIES			1.8
133+39	134+42	VARIES			0.1
<b>TOTAL</b>			<b>14</b>	<b>44</b>	<b>5.7</b>

EARTHWORK SUMMARY							
STATION TO STATION	20200100	20300100	21101615	50200100	50200300	FILL	WASTE (SHORTAGE)
	EARTH EXCAVATION	CHANNEL EXCAVATION	TOPSOIL FURNISH AND PLACE, 4"	STRUCTURE EXCAVATION	COFFERDAM EXCAVATION		
	CU YD	CU YD	SQ YD	CU YD	CU YD		
COUNTY HIGHWAY 20							
RDWY 111+00.00 - 126+18.5	6,637		15,943			18,233	(13,255)
RDWY 128+13.61 - 144+25.0	4,619		15,422			19,457	(15,993)
NORTH CRUM ROAD							
RDWY 10+50.00 - 14+75.00	125		2,190			3,042	(2,948)
CHANNEL		1,300					
STRUCTURE				295			
COFFERDAM					105		
<b>TOTAL</b>	<b>11,381</b>	<b>1,300</b>	<b>33,555</b>	<b>295</b>	<b>105</b>	<b>40,732</b>	<b>(32,196)</b>
<b>USE</b>	<b>11,385</b>	<b>1,300</b>	<b>33,555</b>	<b>295</b>	<b>105</b>	<b>-</b>	<b>(32,200)</b>

(@ 25% SHRINKAGE)

TEMPORARY DITCH CHECKS		
28000305		
STATION	SIDE	FOOT
COUNTY HIGHWAY 20		
112+70	LEFT	15
112+80	RIGHT	15
114+20	LEFT	15
114+30	RIGHT	15
116+50	LEFT	15
117+50	RIGHT	15
138+00	LEFT	15
138+50	RIGHT	15
138+60	LEFT	15
139+20	RIGHT	15
139+20	LEFT	15
139+80	LEFT	15
139+90	RIGHT	15
140+40	LEFT	15
140+60	RIGHT	15
141+00	LEFT	15
141+30	RIGHT	15
141+60	LEFT	15
142+00	RIGHT	15
142+20	LEFT	15
142+70	RIGHT	15
142+80	LEFT	15
NORTH CRUM ROAD		
13+75	RIGHT	12
14+50	RIGHT	12
<b>TOTAL</b>		<b>354</b>

PERIMETER EROSION BARRIER			
28000400			
STATION TO STATION	SIDE	FOOT	
111+00	111+50	LEFT	50
111+00	111+50	RIGHT	50
115+70	116+20	LEFT	65
115+80	116+20	RIGHT	45
116+50	127+70	LEFT	1405
117+50	126+48	RIGHT	895
127+65	138+50	RIGHT	1115
127+85	14+75 (N CURM RD)	LEFT	900
14+75 (N CRUM RD)	138+00	LEFT	840
143+50	144+25	LEFT	85
143+50	144+25	RIGHT	80
<b>TOTAL</b>			<b>5530</b>

INLET AND PIPE PROTECTION		
28000500		
STATION	SIDE	EACH
115+70	LEFT	1
115+80	RIGHT	1
11+00 (N CURM RD)	RIGHT	1
<b>TOTAL</b>		<b>3</b>

ROCK FILL (SPECIAL)		
Z0054515		
STATION TO STATION	TON	
COUNTY HIGHWAY 20		
118+00.00	126+18.50	13206
128+13.61	135+50.00	11195
NORTH CRUM ROAD		
11+25.00	13+00.00	208
<b>TOTAL</b>		<b>24609</b>

PIPE CULVERT REMOVAL			
50105220			
STATION	SIDE	SIZE	FOOT
115+89	LEFT	24"	34
116+00	RIGHT	24"	32
NORTH CRUM ROAD			
11+00	CL	24"	48
<b>TOTAL</b>			<b>114</b>

AGGREGATE SURFACE COURSE, TYPE A				
40200100				
STATION TO STATION	THICKNESS	WIDTH	LENGTH	TON
COUNTY HIGHWAY 20				
ENTRANCE - 115+89 LT	0.50'	16' & VARIES	66'	37
ENTRANCE - 116+00 RT	0.50'	16' & VARIES	40'	23
ENTRANCE - 137+50 RT	0.50'	16' & VARIES	52'	33
NORTH CRUM ROAD				
10+12.01	10+43.17	0.67'	VARIES	31.16'
10+43.17	14+25.00	0.67'	19'	381.83'
14+25.00	14+75.00	0.67'	14.59' AVG.	50.00'
ENTRANCE - 12+86 RT	0.50'	VARIES	62'	43
<b>TOTAL</b>				<b>556</b>

PIPE CULVERTS				
STATION	SIDE	CLASS D		FLAP GATE
		TYPE 1 15"	TYPE 3 36"	36"
		542D0220	542D1921	60801036
		FOOT	FOOT	EACH
115+89	LEFT	40		
116+00	RIGHT	40		
NORTH CRUM ROAD				
11+00	CL		120	1
<b>TOTAL</b>		<b>80</b>	<b>120</b>	<b>1</b>

TRAFFIC BARRIER TERMINALS					
STATION TO STATION	SIDE	63100085	63100167	72501000	TERMINAL MARKER - DIRECT APPLIED
		TYPE 6	TYPE 1, (SPECIAL) TANGENT		
125+08.77	125+59.27		1		1
125+29.86	125+79.37		1		1
125+59.27	125+97.15	1			
125+79.37	126+14.62	1			
128+15.17	128+53.05	1			
128+37.12	128+74.25	1			
128+53.05	129+03.55		1		1
128+74.25	129+23.72		1		1
<b>TOTAL</b>		<b>4</b>	<b>4</b>		<b>4</b>

MODEL: 14002ELNAMES  
FILE NAME: 071923 - CH 20 over Quiver Creek - Ph. II (Mason) (CADD) (CADD Sheets) 143302.dgn

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	DRAWN -	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 10/23/2020	DATE -	REVISED -

**MASON COUNTY  
COUNTY HIGHWAY 20  
OVER QUIVER CREEK**

**SCHEDULES OF QUANTITIES**

SCALE: NONE SHEET 1 OF 2 SHEETS STA. 111+00.00 TO STA. 144+25.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	07-00022-01-BR	MASON	75	6
FED. ROAD DIST. NO. 7 ILLINOIS			CONTRACT NO. 93753	
			FED. AID PROJECT ZMBM(399)	

PAVEMENT SCHEDULE							
STATION TO STATION		31100910	40600290	40600275	40603080	40604050	42000070
		SUBBASE GRANULAR MATERIAL, TYPE A 12"	BITUMINOUS MATERIALS (TACK COAT)	BITUMINOUS MATERIALS (PRIME COAT)	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N50	PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB
					5.50"	1.50"	
SQ YD	POUND	POUND	TON	TON		SQ YD	
111+00.00	112+00.00	304	237	659	82	22	
112+00.00	125+66.68		3343	9283	1156	308	
112+00.00	125+85.47	4337					
125+66.68	125+89.10						89
128+43.05	128+61.53						74
128+46.38	143+25.00	4629					
128+61.53	143+25.00		3580	9941	1238	330	
143+25.00	144+25.00	301	234	652	81	21	
<b>TOTAL</b>		<b>9571</b>	<b>7394</b>	<b>20535</b>	<b>2557</b>	<b>681</b>	<b>163</b>

AGGREGATE SHOULDERS, TYPE A					
48100100					
STATION TO STATION		SIDE	WIDTH	LENGTH	TON
111+00.00	112+00.00	LEFT	5.14' AVG.	100.00'	18
111+00.00	112+00.00	RIGHT	4.97' AVG.	100.00'	17
112+00.00	125+09.57	LEFT	8.00'	1309.57'	367
112+00.00	124+90.17	RIGHT	8.00'	1290.17'	361
124+90.17	125+96.54	RIGHT	VARIES	106.37'	30
125+09.57	126+14.04	LEFT	VARIES	104.47'	30
128+15.78	129+22.15	RIGHT	VARIES	104.46'	29
128+37.72	129+42.13	LEFT	VARIES	102.53'	31
129+22.15	143+25.00	RIGHT	8.00'	1402.85'	393
129+42.13	132+65.28	LEFT	8.00'	323.15'	90
133+21.48	143+25.00	LEFT	8.00'	1003.52'	281
143+25.00	144+25.00	RIGHT	5.13' AVG.	100.00'	18
143+25.00	144+25.00	LEFT	5.22' AVG.	100.00'	18
<b>TOTAL</b>					<b>1683</b>

PAINT PAVEMENT MARKING - LINE 4"				
78001110				
STATION TO STATION	SIDE	DESCRIPTION	FOOT	
111+00.00	144+25.00	LEFT	EDGE - WHITE	3325
111+00.00	144+25.00	CL	DOUBLE YELLOW	6650
111+00.00	144+25.00	RIGHT	EDGE - WHITE	3325
<b>TOTAL</b>				<b>13,300</b>

GUARDRAIL REMOVAL			
63200310			
STATION TO STATION	SIDE	FOOT	
COUNTY HIGHWAY 20			
117+35	126+10	LT & RT	887
118+29	126+08	LT & RT	775
127+83	132+44	LT & RT	463
127+83	135+51	LT & RT	762
132+98	137+75	LEFT	488
NORTH CRUM ROAD			
10+35	10+71	LEFT	39
10+39	10+65	LEFT	27
<b>TOTAL</b>			<b>3441</b>

OBLITERATE EXISTING ROADBED				
XX008542				
STATION TO STATION	SIDE	WIDTH	SQ YD	
114+50	119+00	LEFT & RIGHT	12'	1195
122+50	125+50	LEFT & RIGHT	12'	816
129+75	133+00	LEFT & RIGHT	12'	898
138+00	141+50	LEFT & RIGHT	12'	861
<b>TOTAL</b>				<b>3770</b>

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PLOT DATE = 9/23/2020	DATE -	REVISED -

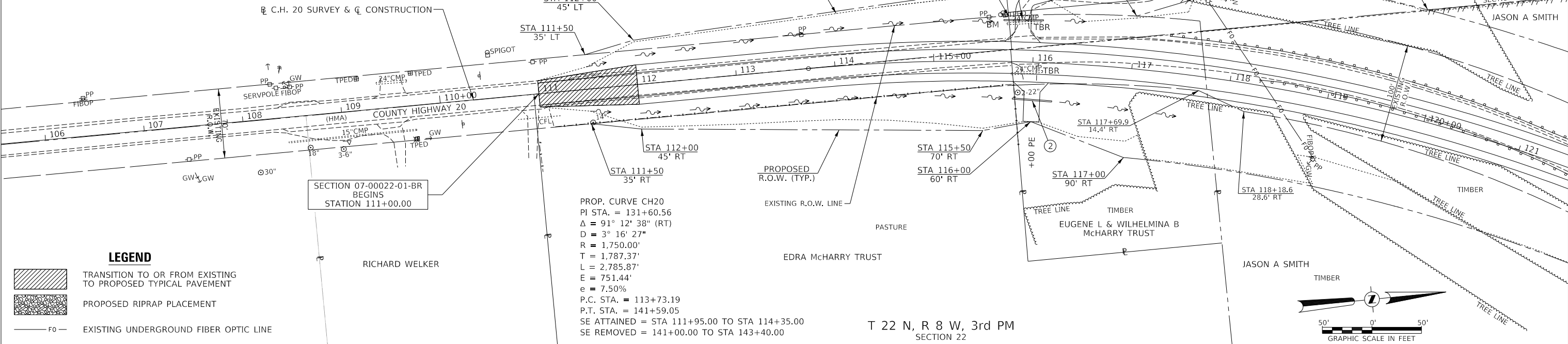
**MASON COUNTY  
 COUNTY HIGHWAY 20  
 OVER QUIVER CREEK**

**SCHEDULES OF QUANTITIES**

SCALE: NONE SHEET 2 OF 2 SHEETS STA. 111+00.00 TO STA. 144+25.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	07-00022-01-BR	MASON	75	7
FED. ROAD DIST. NO. 7 ILLINOIS			CONTRACT NO. 93753	
			FED. AID PROJECT ZMBM(399)	

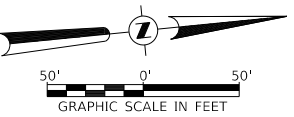
- ① STA 115+89 LT  
PROPOSED PIPE CULVERT,  
CLASS D, TYPE 1, 15"x40'  
USFL = 453.76, STA 115+69.82, 41.8' LT  
DSFL = 453.36, STA 116+08.87, 42.6' LT
- ② STA 116+00 RT  
PROPOSED PIPE CULVERT,  
CLASS D, TYPE 1, 15"x40'  
USFL = 452.47, STA 115+79.97, 37.3' RT  
DSFL = 452.07, STA 116+20.83, 38.7' RT



**LEGEND**

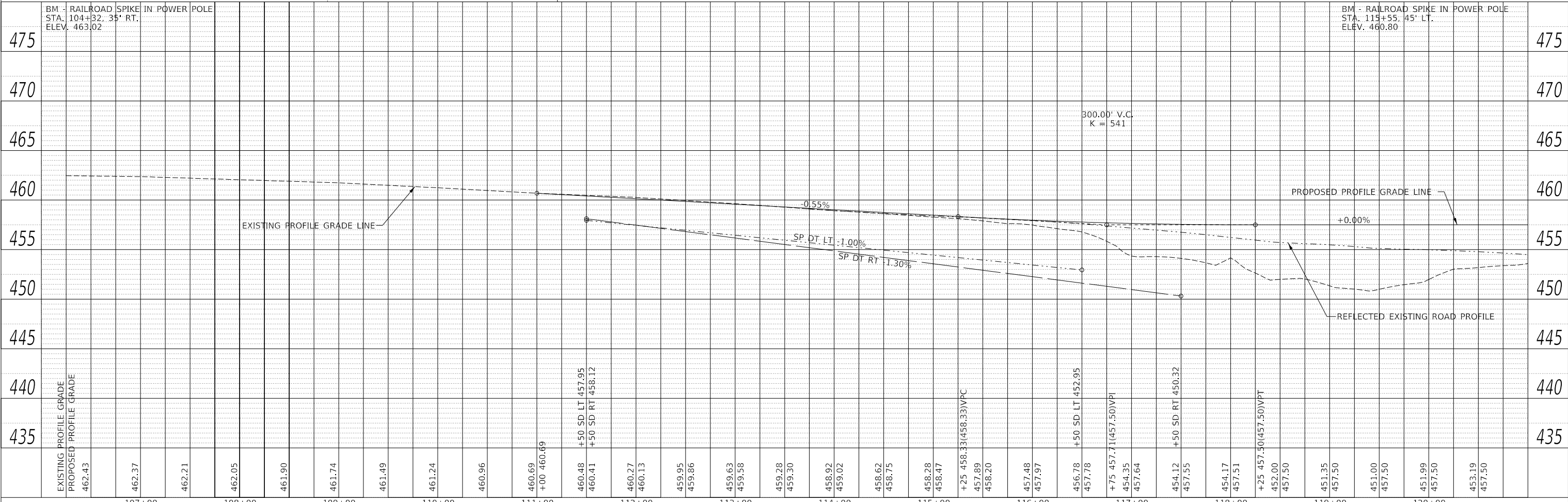
- TRANSITION TO OR FROM EXISTING TO PROPOSED TYPICAL PAVEMENT
- PROPOSED RIPRAP PLACEMENT
- EXISTING UNDERGROUND FIBER OPTIC LINE

PROP. CURVE CH20  
PI STA. = 131+60.56  
 $\Delta = 91^\circ 12' 38''$  (RT)  
 $D = 3^\circ 16' 27''$   
 $R = 1,750.00'$   
 $T = 1,787.37'$   
 $L = 2,785.87'$   
 $E = 751.44'$   
 $e = 7.50\%$   
P.C. STA. = 113+73.19  
P.T. STA. = 141+59.05  
SE ATTAINED = STA 111+95.00 TO STA 114+35.00  
SE REMOVED = 141+00.00 TO STA 143+40.00



PLAN	SURVEYED	DATE
	PLOTTED	
	ALIGNMENT CHECKED	
	NOTE BOOK	
	NO.	
	CADD FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	
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	NOTE BOOK	
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	STRUCTURE NOTATIONS SHOWN	



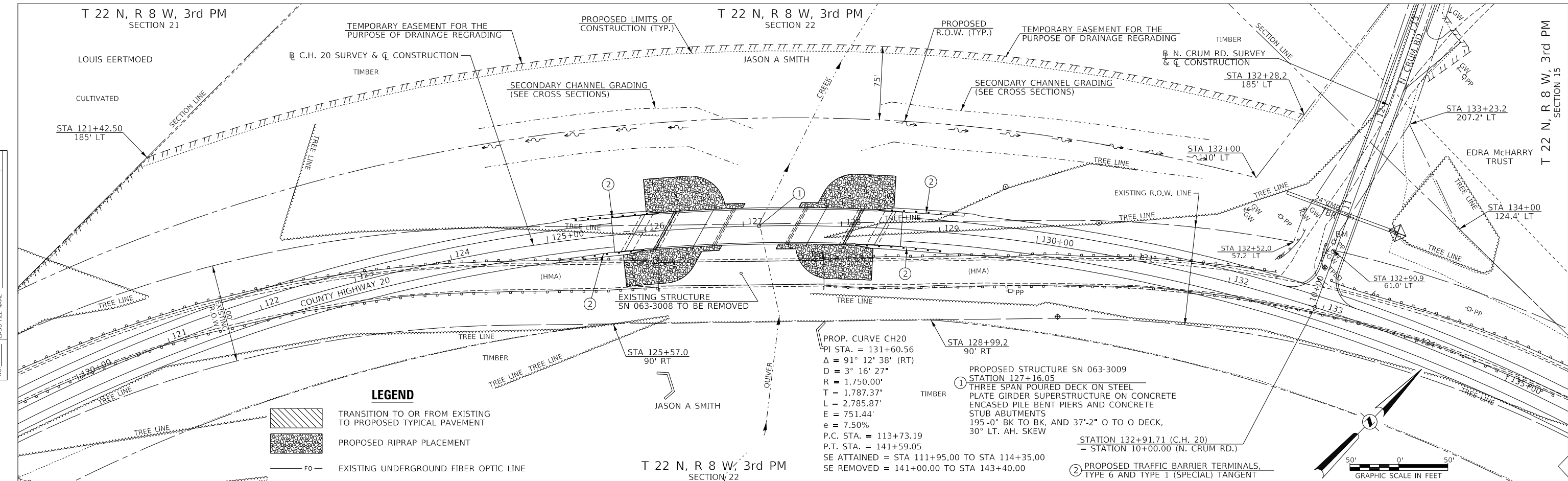
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PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -		SCALE: 1"=50'	SHEET 1	OF 3 SHEETS	CONTRACT NO. 93753				
PLOT DATE = 9/23/2020	DATE -	REVISED -		STA. 111+00.00	TO STA. 120+50.00		FED. ROAD, DIST. NO. 7		ILLINOIS		
								FED. AID PROJECT ZMBM13991			



DATE	
BY	
PLAN	
SURVEYED	
PLOTTED	
ALIGNMENT CHECKED	
NOTE BOOK NO.	
CADD FILE NAME	

DATE	
BY	
PROFILE	
SURVEYED	
PLOTTED	
GRADES CHECKED	
NOTE BOOK NO.	
STRUCTURE NOTATION SHEET NO.	



**PROP. CURVE CH20**  
 P.I. STA. = 131+60.56  
 $\Delta = 91^\circ 12' 38''$  (RT)  
 $D = 3^\circ 16' 27''$   
 $R = 1,750.00'$   
 $T = 1,787.37'$   
 $L = 2,785.87'$   
 $E = 751.44'$   
 $e = 7.50\%$   
 P.C. STA. = 113+73.19  
 P.T. STA. = 141+59.05  
 SE ATTAINED = STA 111+95.00 TO STA 114+35.00  
 SE REMOVED = 141+00.00 TO STA 143+40.00

**PROPOSED STRUCTURE SN 063-3009**  
 STATION 127+16.05  
 THREE SPAN POURED DECK ON STEEL PLATE GIRDER SUPERSTRUCTURE ON CONCRETE ENCASED PILE BENT PIERS AND CONCRETE STUB ABUTMENTS  
 195'-0" BK TO BK, AND 37'-2" O TO O DECK,  
 30° LT. AH. SKEW

**STATION 132+91.71 (C.H. 20)**  
 = STATION 10+00.00 (N. CRUM RD.)

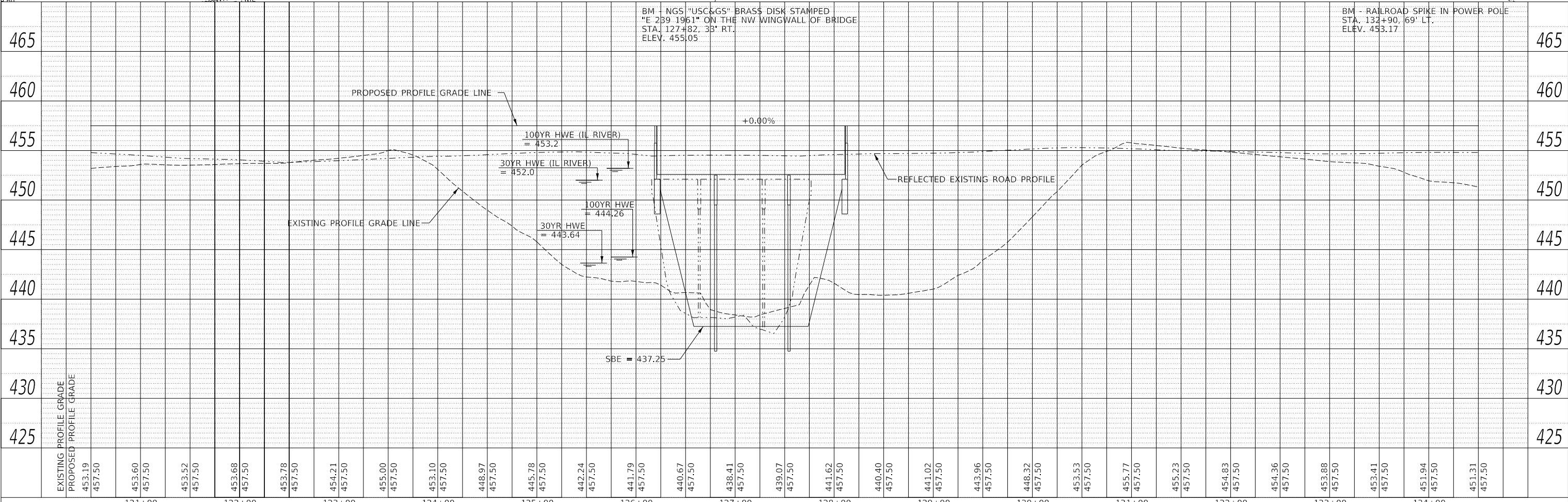
② PROPOSED TRAFFIC BARRIER TERMINALS, TYPE 6 AND TYPE 1 (SPECIAL) TANGENT

**LEGEND**

TRANSITION TO OR FROM EXISTING TO PROPOSED TYPICAL PAVEMENT

PROPOSED RIPRAP PLACEMENT




EXISTING UNDERGROUND FIBER OPTIC LINE



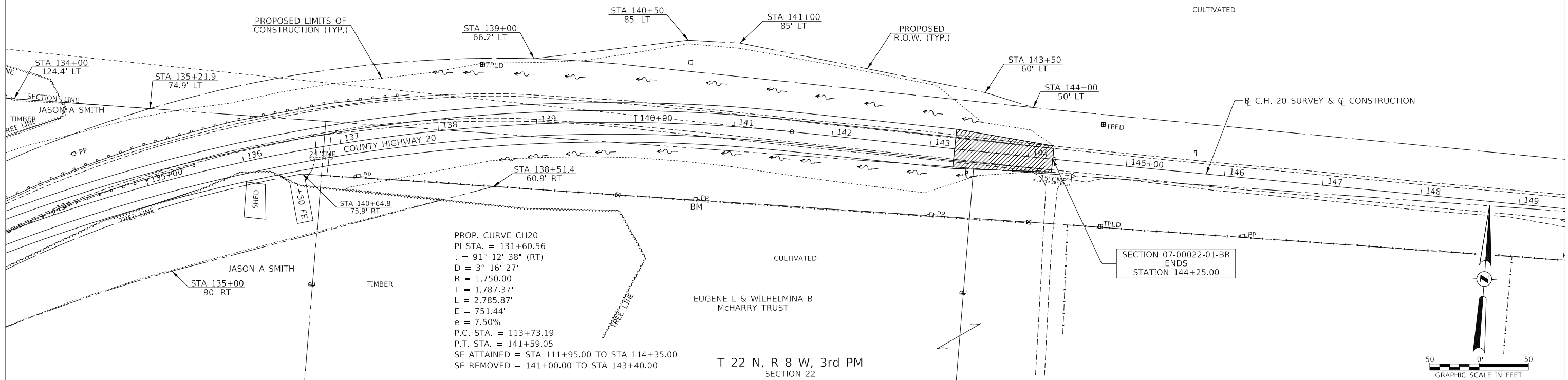
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PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -		SCALE: 1"=50'	SHEET 2	OF 3 SHEETS	CONTRACT NO. 93753		FED. ROAD DIST. NO. 7 ILLINOIS		
PLOT DATE = 9/23/2020	DATE -	REVISED -		STA. 121+50.00 TO STA. 134+50.00			FED. AID PROJECT ZMBM(399)				

**LEGEND**

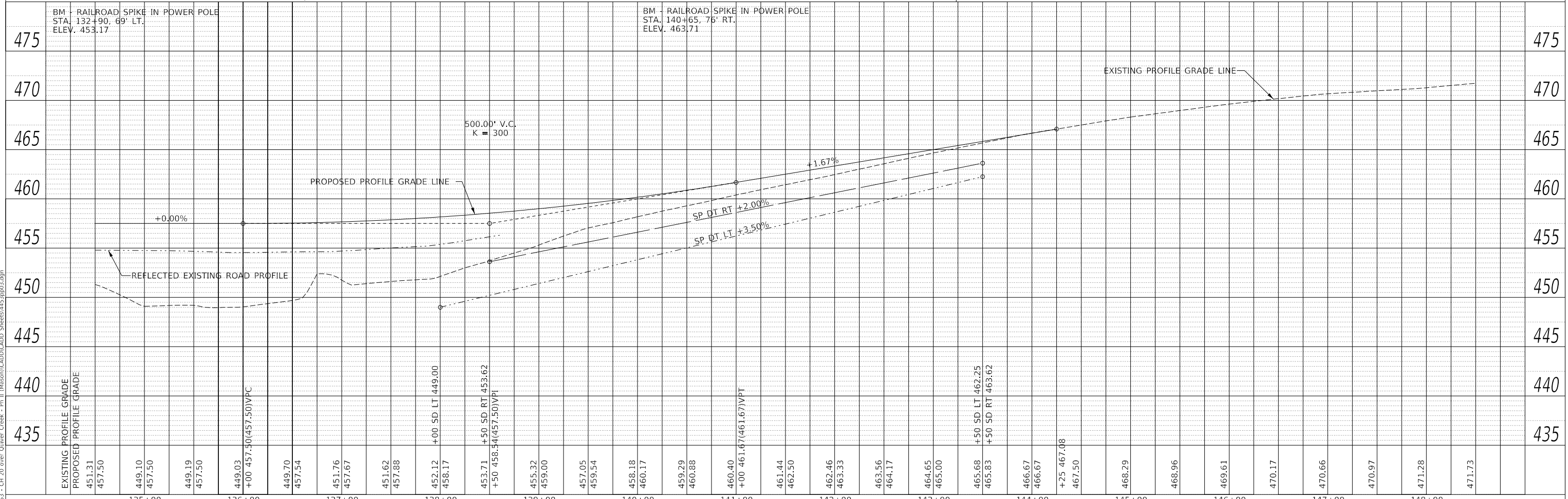
-  TRANSITION TO OR FROM EXISTING TO PROPOSED TYPICAL PAVEMENT
-  PROPOSED RIPRAP PLACEMENT
-  EXISTING UNDERGROUND FIBER OPTIC LINE

DATE	
BY	
PLAN	
NO.	
DATE	
BY	
PLAN	
NO.	
DATE	
BY	
PLAN	
NO.	



PROP. CURVE CH20  
 PI STA. = 131+60.56  
 I = 91° 12' 38" (RT)  
 D = 3° 16' 27"  
 R = 1,750.00'  
 T = 1,787.37'  
 L = 2,785.87'  
 E = 751.44'  
 e = 7.50%  
 P.C. STA. = 113+73.19  
 P.T. STA. = 141+59.05  
 SE ATTAINED = STA 111+95.00 TO STA 114+35.00  
 SE REMOVED = 141+00.00 TO STA 143+40.00

DATE	
BY	
PROFILE	
NO.	
DATE	
BY	
PROFILE	
NO.	



BM - RAILROAD SPIKE IN POWER POLE STA. 132+90, 69' LT. ELEV. 453.17	BM - RAILROAD SPIKE IN POWER POLE STA. 140+65, 76' RT. ELEV. 463.71	475	475
470	470	470	470
465	465	465	465
460	460	460	460
455	455	455	455
450	450	450	450
445	445	445	445
440	440	440	440
435	435	435	435

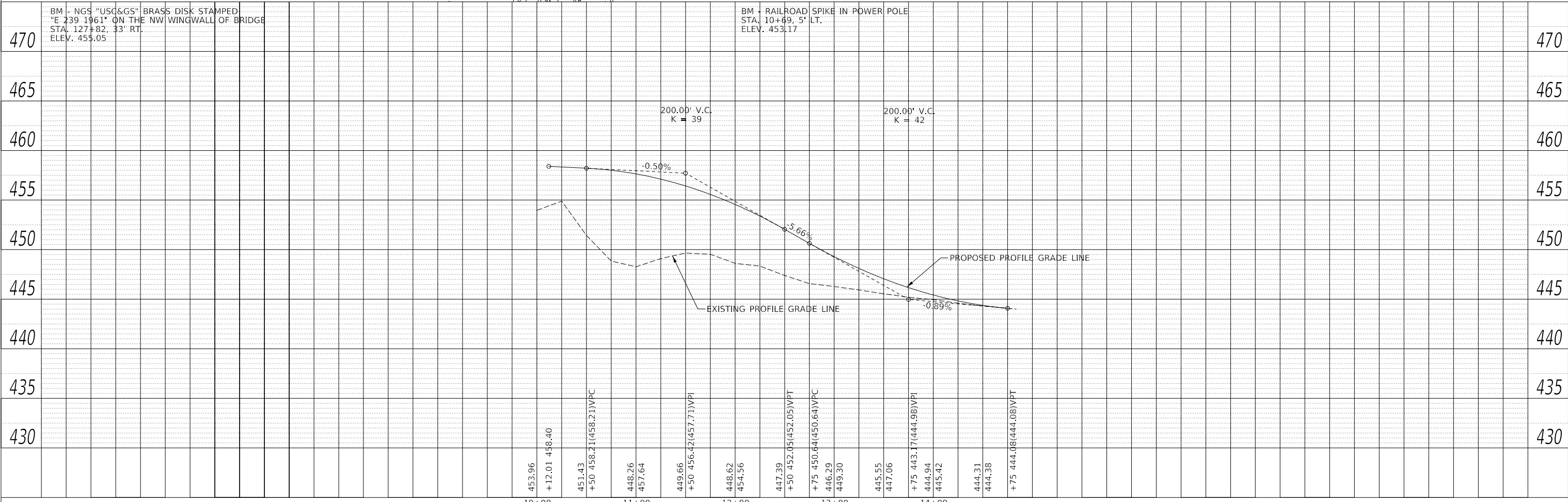
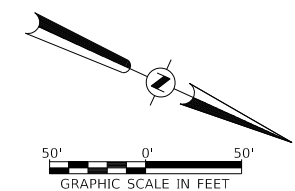
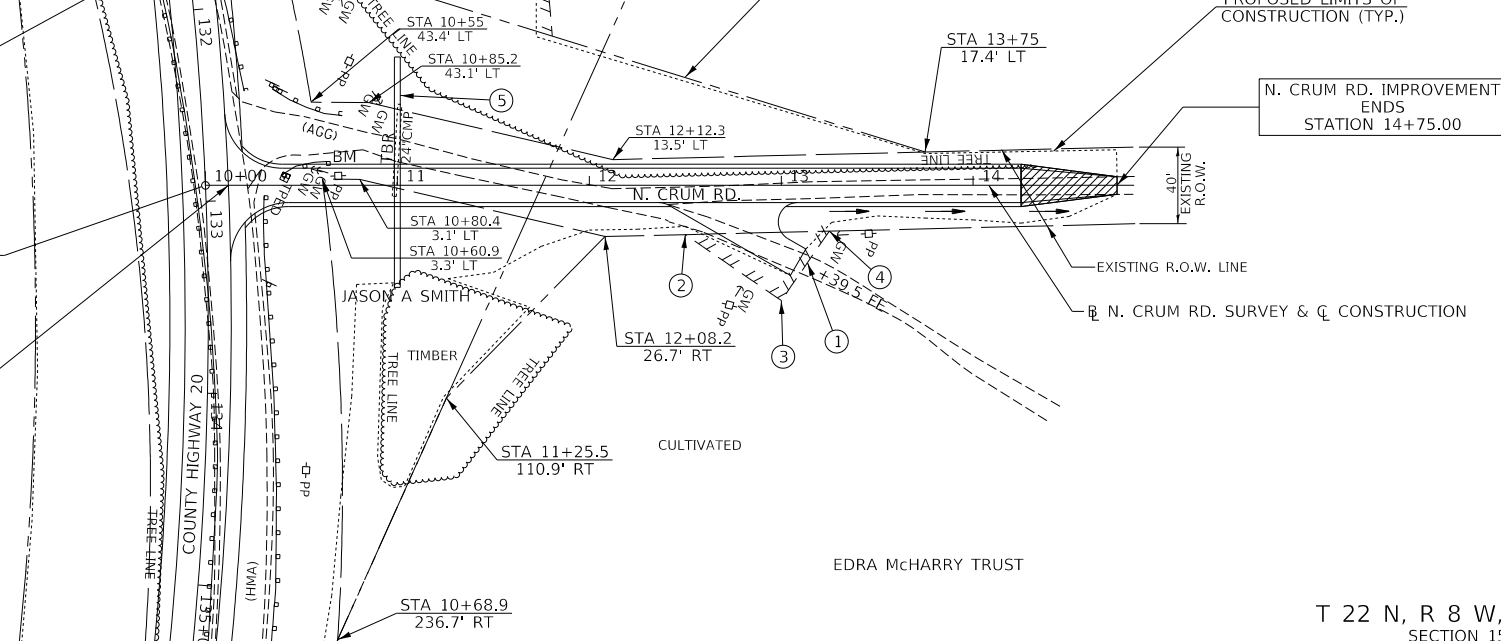
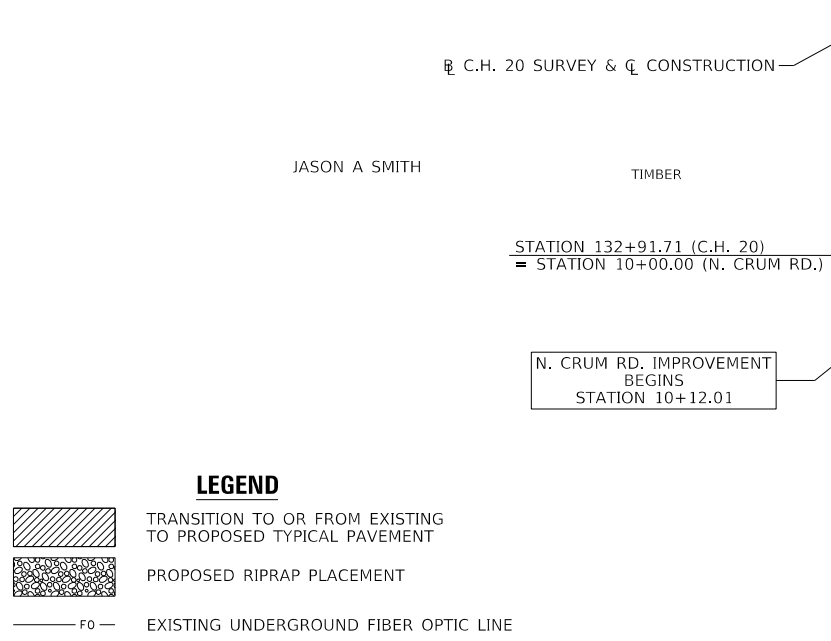
⑤ STA 11+00  
PROPOSED PIPE CULVERT W/ FLAP GATE,  
CLASS D, TYPE 3, 36"x120"  
USFL = 444.11, STA 11+00.00, 53.1' RT  
DSFL = 443.53, STA 11+00.00, 66.9' LT

- ① TEMPORARY EASEMENT FOR THE PURPOSE OF RECONSTRUCTING FIELD ENTRANCE
- ② STA 12+50  
25.7' RT
- ③ STA 13+00  
60' RT
- ④ STA 13+25  
23.8' RT

DATE	
BY	
SURVEYED	
PLOTTED	
ALIGNMENT CHECKED	
GRADES CHECKED	
STRUCTURE NOTATIONS CHECKED	
NOTE BOOK NO.	
CADD FILE NAME	

DATE	
BY	
SURVEYED	
PLOTTED	
GRADES CHECKED	
STRUCTURE NOTATIONS CHECKED	
NOTE BOOK NO.	
CADD FILE NAME	

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PLOT DATE = 9/23/2020	CHECKED -	REVISED -
	DATE -	REVISED -

**MASON COUNTY  
COUNTY HIGHWAY 20  
OVER QUIVER CREEK**

**NORTH CRUM ROAD  
PLAN AND PROFILE**

SCALE: 1"=50' SHEET 1 OF 1 SHEETS STA. 10+12.01 TO STA. 14+75.00

F.A.S. RTE. 567	SECTION 07-00022-01-BR	COUNTY MASON	TOTAL SHEETS 75	SHEET NO. 11
FED. ROAD DIST. NO. 7 ILLINOIS			CONTRACT NO. 93753	
FED. AID PROJECT ZMBM(399)				

T 22 N, R 8 W, 3rd PM  
SECTION 21

T 22 N, R 8 W, 3rd PM  
SECTION 22

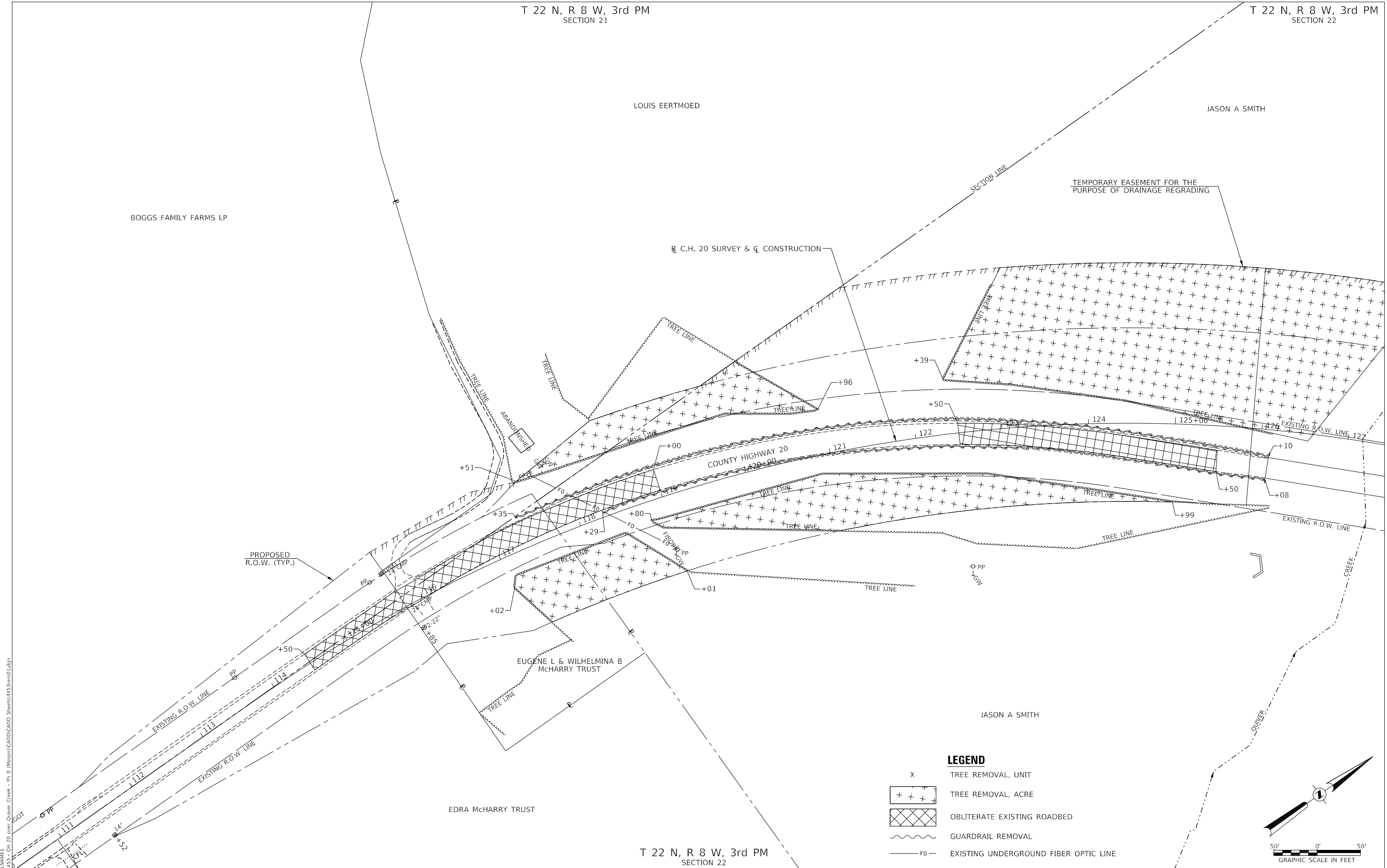
LOUIS EERTMOED

JASON A SMITH

BOGGS FAMILY FARMS LP

C.H. 20 SURVEY & C CONSTRUCTION

TEMPORARY EASEMENT FOR THE  
PURPOSE OF DRAINAGE REGRADING



PROPOSED  
R.O.W. (TYP.)

EUGENE L & WILHELMINA B  
McHARRY TRUST

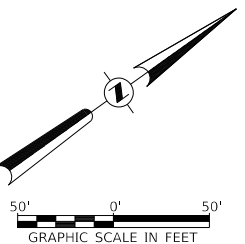
EDRA McHARRY TRUST

JASON A SMITH

T 22 N, R 8 W, 3rd PM  
SECTION 22

**LEGEND**

- X TREE REMOVAL, UNIT
- + + + TREE REMOVAL, ACRE
- [Cross-hatch] OBLITERATE EXISTING ROADBED
- [Wavy line] GUARDRAIL REMOVAL
- - - - - FO - EXISTING UNDERGROUND FIBER OPTIC LINE



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FILE NAME: V:\19353 - CH 20 over Quiver Creek - Ph II (Mason)\CADD\CADD Sheets\4453rem01.dgn

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	DRAWN -	REVISED -
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PLOT DATE = 9/23/2020	DATE -	REVISED -

**MASON COUNTY  
COUNTY HIGHWAY 20  
OVER QUIVER CREEK**

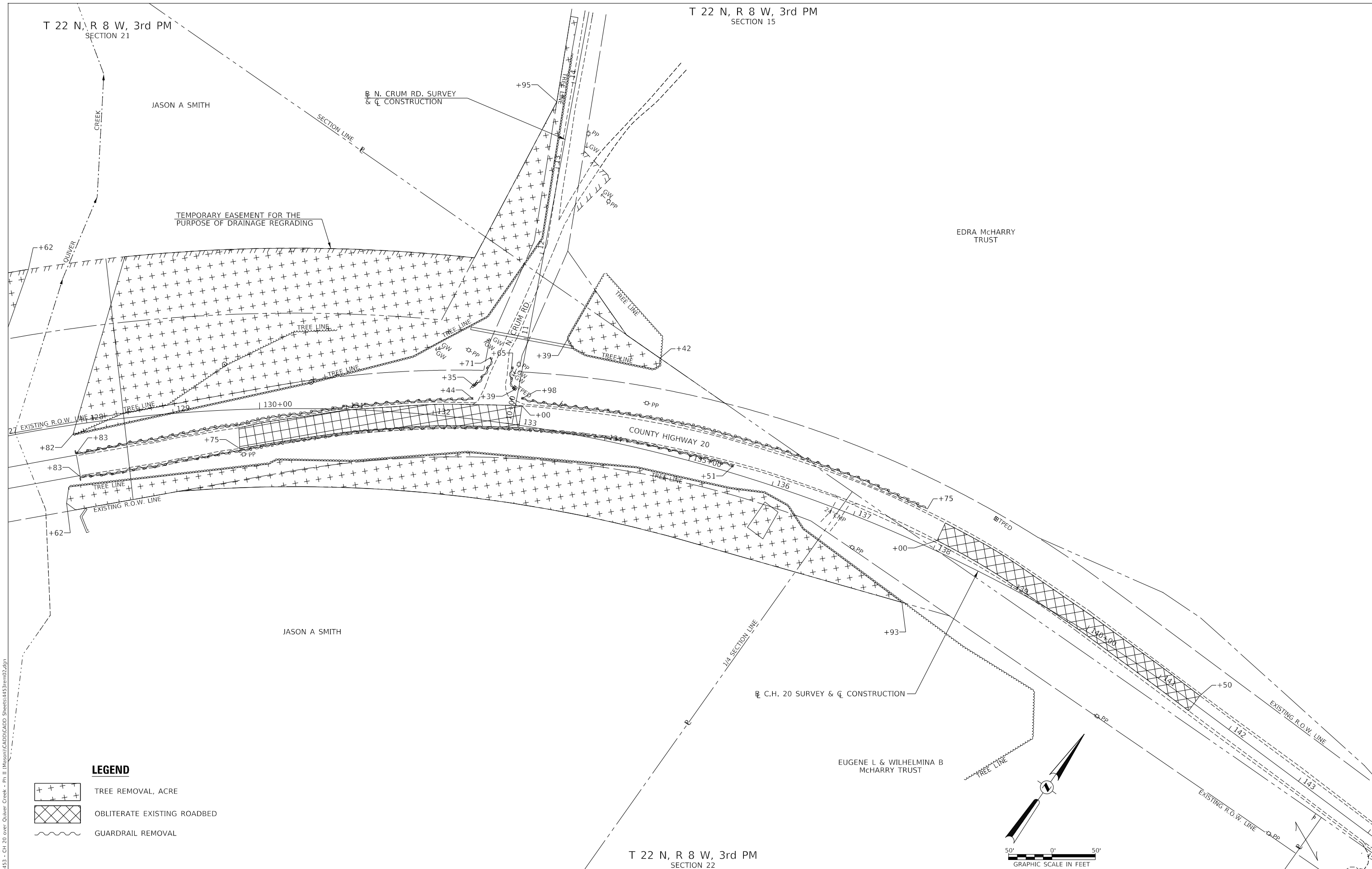
**REMOVAL PLAN**

SCALE: 1"=50' SHEET 1 OF 2 SHEETS STA. 111+00.00 TO STA. 127+45.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	07-00022-01-BR	MASON	75	12
CONTRACT NO. 93753				
FED. ROAD. DIST. NO. 7 ILLINOIS			FED. AID PROJECT ZMBM(399)	

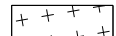


T 22 N, R 8 W, 3rd PM  
SECTION 21

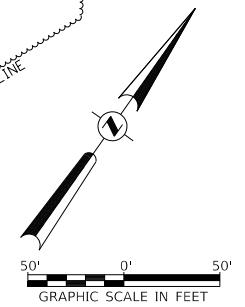
T 22 N, R 8 W, 3rd PM  
SECTION 15



TEMPORARY EASEMENT FOR THE PURPOSE OF DRAINAGE REGRADING

**LEGEND**

-  TREE REMOVAL, ACRE
-  OBLITERATE EXISTING ROADBED
-  GUARDRAIL REMOVAL



T 22 N, R 8 W, 3rd PM  
SECTION 22

**MASON COUNTY  
COUNTY HIGHWAY 20  
OVER QUIVER CREEK**

**REMOVAL PLAN**

SCALE: 1"=50' SHEET 2 OF 2 SHEETS STA. 127+45.00 TO STA. 144+25.00

USER NAME = BNebe1	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100,0000' / in.	CHECKED -	REVISED -
PLOT DATE = 9/23/2020	DATE -	REVISED -

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	07-00022-01-BR	MASON	75	13
CONTRACT NO. 93753				
FED. ROAD. DIST. NO. 7 ILLINOIS			FED. AID PROJECT ZMBM(399)	

MODEL: S:\MODEL\NAMES FILE NAME: V:\1453 - CH 20 over Quiver Creek - Ph II (Mason)\CADD\CADD Sheets\1453rem05.dgn

**DETOUR GENERAL NOTES**

1. ALL SIGNING SHALL BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED APRIL 1, 2016", "THE QUALITY STANDARD FOR WORK ZONE TRAFFIC CONTROL DEVICES ADOPTED 2010", AND THE LATEST EDITION OF THE STATE OF ILLINOIS "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES".
2. THE ENGINEER SHALL BE NOTIFIED IN WRITING AT LEAST THREE WEEKS PRIOR TO THE DAY THE DETOUR IS TO BE IN EFFECT. THE ENGINEER WILL CONTACT THE APPROPRIATE LOCAL AGENCIES AND INTERESTED PARTIES FOR APPROVAL OF SUCH DATE.
3. THE CONTRACTOR SHALL SUPPLY TO THE ENGINEER THE NAMES AND TELEPHONE NUMBERS OF HIS REPRESENTATIVES RESPONSIBLE FOR THE DETOUR SIGNING PRIOR TO THE START OF WORK.
4. IF REQUESTED BY THE CONTRACTOR IN WRITING AT LEAST THREE WEEKS PRIOR TO THE DAY THE DETOUR IS TO BE IN EFFECT, THE ENGINEER WILL FIELD LOCATE THE POSITION OF ANY SIGNS.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL BARRICADES, SIGNS, LIGHTS AND OTHER DEVICES INSTALLED BY HIM ARE IN PLACE AND OPERATING 24 HOURS EACH DAY INCLUDING SUNDAYS AND HOLIDAYS DURING THE TIME THE DETOUR IS IN EFFECT.
6. THE CONTRACTOR SHALL MAKE ALL CHANGES IN SIGNING THAT ARE DEEMED NECESSARY BY THE ENGINEER.
7. THE ENGINEER SHALL BE NOTIFIED AT LEAST TWO (2) HOURS BEFORE THE ROAD IS TO BE OPENED TO TRAFFIC. THE ENGINEER WILL CONTACT THE APPROPRIATE AGENCIES AND INTERESTED PARTIES.
8. IN ADDITION TO THE DETOUR SIGNING, THE CONTRACTOR SHALL PROVIDE ROAD CLOSURE SIGNING IN ACCORDANCE WITH BLR 21-9 AND AS DIRECTED BY THE ENGINEER.

**SIGN LEGEND**

①		M4-8 (23 REQ'D)	⑪		R11-4 (2 REQ'D)
②		M3-2 (18 REQ'D)	⑫		R11-2 (4 REQ'D)
③		M3-4 (13 REQ'D)			
④		M1-1100 (31 REQ'D)			
⑤		M5-1 L (2 REQ'D)			
⑥		M6-1 L (5 REQ'D)	⑬		W20-2, 48" x 48" WITH AMBER FLASHING LIGHT AND FLAG. (8 REQ'D)
⑦		M6-3 (10 REQ'D)	⑭		W20-3, 48" x 48" WITH AMBER FLASHING LIGHT AND FLAG. (2 REQ'D)
⑧		M5-1 R (2 REQ'D)			
⑨		M6-1 R (4 REQ'D)	⑮		W20-3, 48" x 48" WITH AMBER FLASHING LIGHT AND FLAG. (2 REQ'D)
⑩		M4-8A (2 REQ'D)	⑯		TYPE III BARRICADES (4 REQ'D)
			⑰		CHANGEABLE MESSAGE SIGN (2 REQ'D)

MODEL: s:\MODEL\NAME\ FILE NAME: 031923 - C11\_20 over Quiver Creek - Ph. II (Mason)\CADD\CADD\_Sheets\1453001.dgn

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	DRAWN -	REVISED -
PLOT SCALE = 2,0000' / in.	CHECKED -	REVISED -
PLOT DATE = 9/23/2020	DATE -	REVISED -

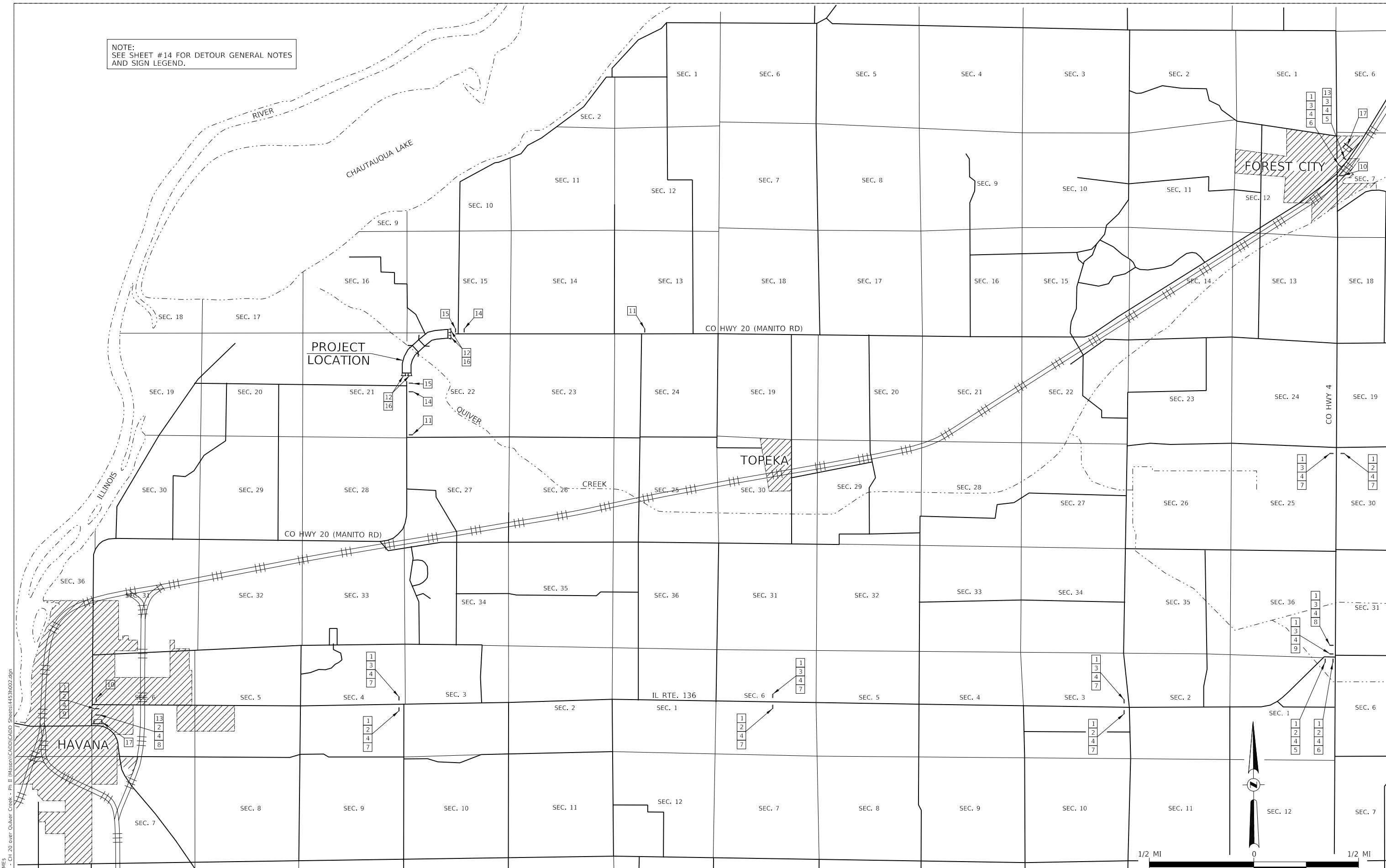
**MASON COUNTY  
COUNTY HIGHWAY 20  
OVER QUIVER CREEK**

**DETOUR AND TRAFFIC CONTROL PLAN**

SCALE: NONE SHEET 1 OF 2 SHEETS STA. 111+00.00 TO STA. 144+25.00

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	07-00022-01-BR	MASON	75	14
CONTRACT NO. 93753				
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT ZMBM(399)	

NOTE:  
SEE SHEET #14 FOR DETOUR GENERAL NOTES  
AND SIGN LEGEND.



MODEL: \\MORDEL\NAME\...  
 FILE NAME: 07-0022-01-01 - CH 20 over Quiver Creek - Ph. II (Mason) CAD\CADD Sheets\1453002.dgn

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	DRAWN -	REVISED -
PLOT SCALE = 2,000' / in.	CHECKED -	REVISED -
PLOT DATE = 9/23/2020	DATE -	REVISED -

**MASON COUNTY  
COUNTY HIGHWAY 20  
OVER QUIVER CREEK**

**DETOUR AND TRAFFIC CONTROL PLAN**

SCALE: NONE    SHEET 2 OF 2 SHEETS    STA. 111+00.00 TO STA. 144+25.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	07-0022-01-BR	MASON	75	15
CONTRACT NO. 93753				
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT ZMBM(399)	

NOTE: TEMPORARY EROSION CONTROL SEEDING SHALL BE DONE IN ACCORDANCE WITH ARTICLE 280.04 OF THE STANDARD SPECIFICATIONS.






ABANDONED DITCH

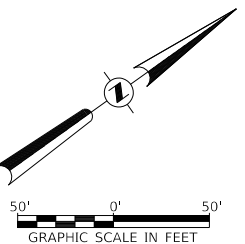
120+00  
121  
COUNTY HIGHWAY 20

PROPOSED STRUCTURE  
SN 063-3009

QUIVER CREEK

**LEGEND**

-  PERIMETER EROSION BARRIER
-  INLET AND PIPE PROTECTION
-  TEMPORARY DITCH CHECK
-  SPECIAL DITCH - FLOW LINE AND DIRECTION
-  PROPOSED RIPRAP/AGGREGATE DITCH PLACEMENT



**MASON COUNTY  
COUNTY HIGHWAY 20  
OVER QUIVER CREEK**

**STORMWATER POLLUTION PREVENTION PLAN**

USER NAME = BNebe1	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100,0000' / in.	CHECKED -	REVISED -
PLOT DATE = 9/23/2020	DATE -	REVISED -

SCALE: 1"=50'    SHEET 1 OF 2 SHEETS    STA. 111+00.00 TO STA. 127+45.00

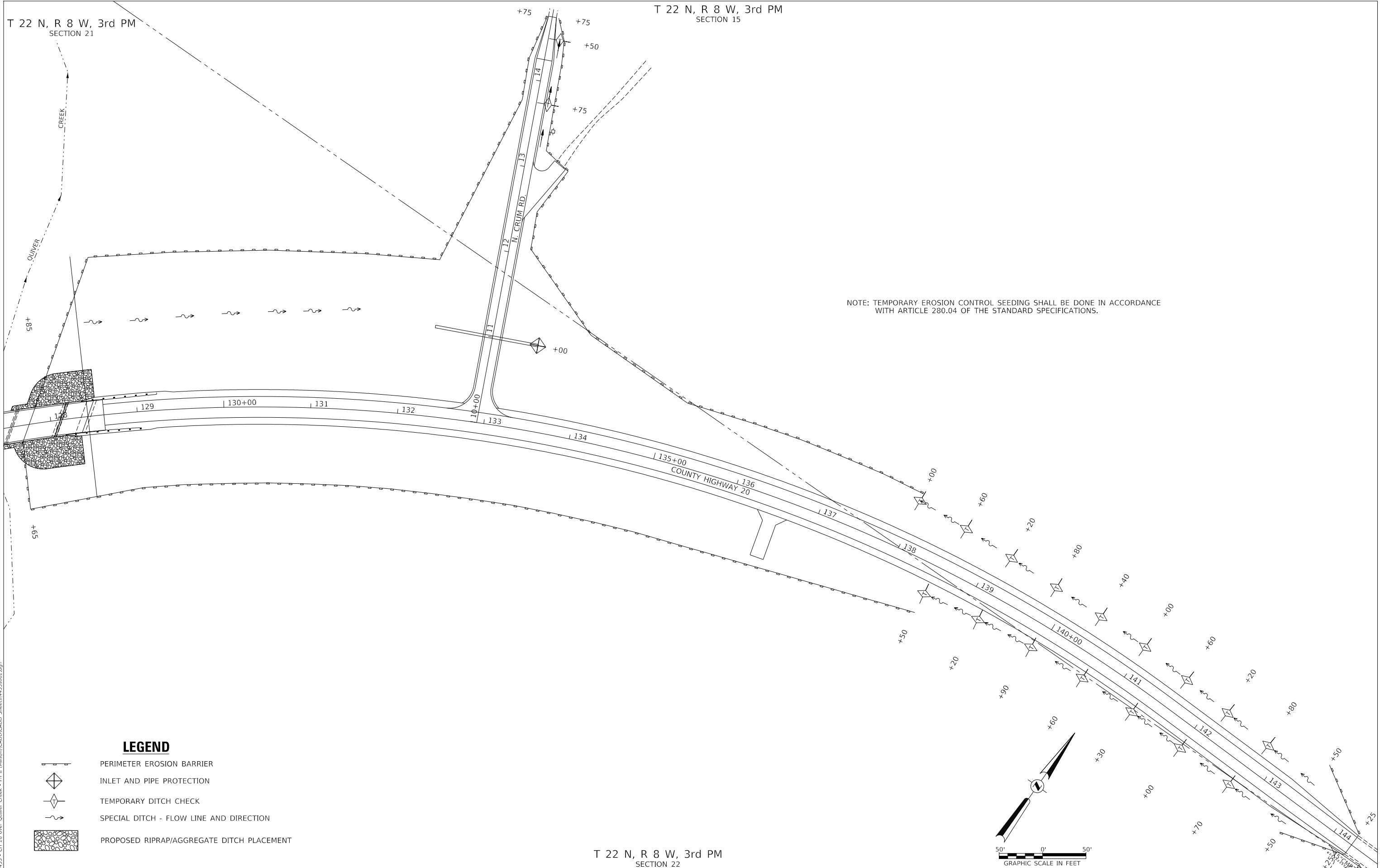
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567	07-00022-01-BR	MASON	75	16
FED. ROAD, DIST. NO. 7 ILLINOIS			CONTRACT NO. 93753	
FED. AID PROJECT ZMBM(399)				

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


T 22 N, R 8 W, 3rd PM  
SECTION 21

T 22 N, R 8 W, 3rd PM  
SECTION 15



NOTE: TEMPORARY EROSION CONTROL SEEDING SHALL BE DONE IN ACCORDANCE WITH ARTICLE 280.04 OF THE STANDARD SPECIFICATIONS.

**LEGEND**

-  PERIMETER EROSION BARRIER
-  INLET AND PIPE PROTECTION
-  TEMPORARY DITCH CHECK
-  SPECIAL DITCH - FLOW LINE AND DIRECTION
-  PROPOSED RIPRAP/AGGREGATE DITCH PLACEMENT

T 22 N, R 8 W, 3rd PM  
SECTION 22

**MASON COUNTY  
COUNTY HIGHWAY 20  
OVER QUIVER CREEK**

**STORMWATER POLLUTION PREVENTION PLAN**

SCALE: 1"=50' SHEET 2 OF 2 SHEETS STA. 127+45.00 TO STA. 144+25.00



USER NAME = BNebe1	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100,0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 9/23/2020	DATE -	REVISED -

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	07-00022-01-BR	MASON	75	17
CONTRACT NO. 93753				
FED. ROAD, DIST. NO. 7 ILLINOIS			FED. AID PROJECT ZMBM(399)	

MODEL: S:\MODEL\MAMES  
FILE NAME: V:\1453 - CH 20 over Quiver Creek - Ph II (Mason)\CADD\CADD Sheets\1453\002.dgn

B.M.: RR Spike in Power Pole  
Sta. 115+55, 45' Lt.  
Elev. 460.80

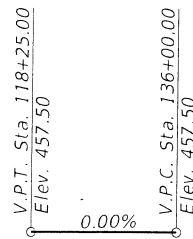
RR Spike in Power Pole  
Sta. 132+90, 69' Lt.  
Elev. 453.17

**Existing Structure:**

The existing bridge consists of a three span haunched concrete t-beam with concrete deck superstructure on pile bent piers and abutments. The structure is 168'-10" back to back of abutments, 28'-4" out to out of deck with a 24'-0" driving width, and is not skewed. The bridge was constructed in 1952. SN 063-3008.

Salvage: None

Road to be closed to traffic during construction.



**PROFILE GRADE**  
F.A.S. 567 (CH 20)

**CURVE DATA**

PI STA. = 131+60.56  
 $\Delta = 91^\circ 12' 38"$  (RT)  
 $D = 3' 16" 27"$   
 $R = 1,750.00'$   
 $T = 1,787.37'$   
 $L = 2,785.87'$   
 $E = 751.44'$   
 $e = 7.5\%$   
 P.C. STA. = 113+73.19  
 P.T. STA. = 141+59.05

**DESIGN STRESSES**  
(FIELD UNITS)

$f'_c = 3,500$  psi  
 $f'_c = 4,000$  psi (Superstructure Conc.)  
 $f_y = 60,000$  psi (Reinforcement)  
 $f_y = 50,000$  psi (Structural Steel)  
 (AASHTO M270 Grade 50W)

**DESIGN SCOUR ELEVATION TABLE**

Design Scour Elevations (ft.)					Item 113
	W. Abut.	Pier 1	Pier 2	E. Abut.	
Q100	448.7	426.1	426.1	550.9	5
Q200	448.7	425.3	425.3	550.9	
Design	448.7	426.1	426.1	550.9	
Check	448.7	425.3	425.3	550.9	

**WATERWAY INFORMATION**

Drainage Area=196.01 Sq. Mi. Low Grade Elev.= 457.50 @ Sta. 127+16.05

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.	Nat.	Head - Ft.		Headwater El		
			Exist.	Prop.	H.W.E.	Exist.	Prop.	Exist.	Prop.
Design	30	7,019	594	695	443.64	4.07	2.81	447.71	446.45
Base	100	9,120	665	768	444.26	5.07	3.40	449.33	447.66

Construction of this project complies with IDNR, Office of Water Resources Statewide Permit No. 2

**DESIGN SPECIFICATIONS**

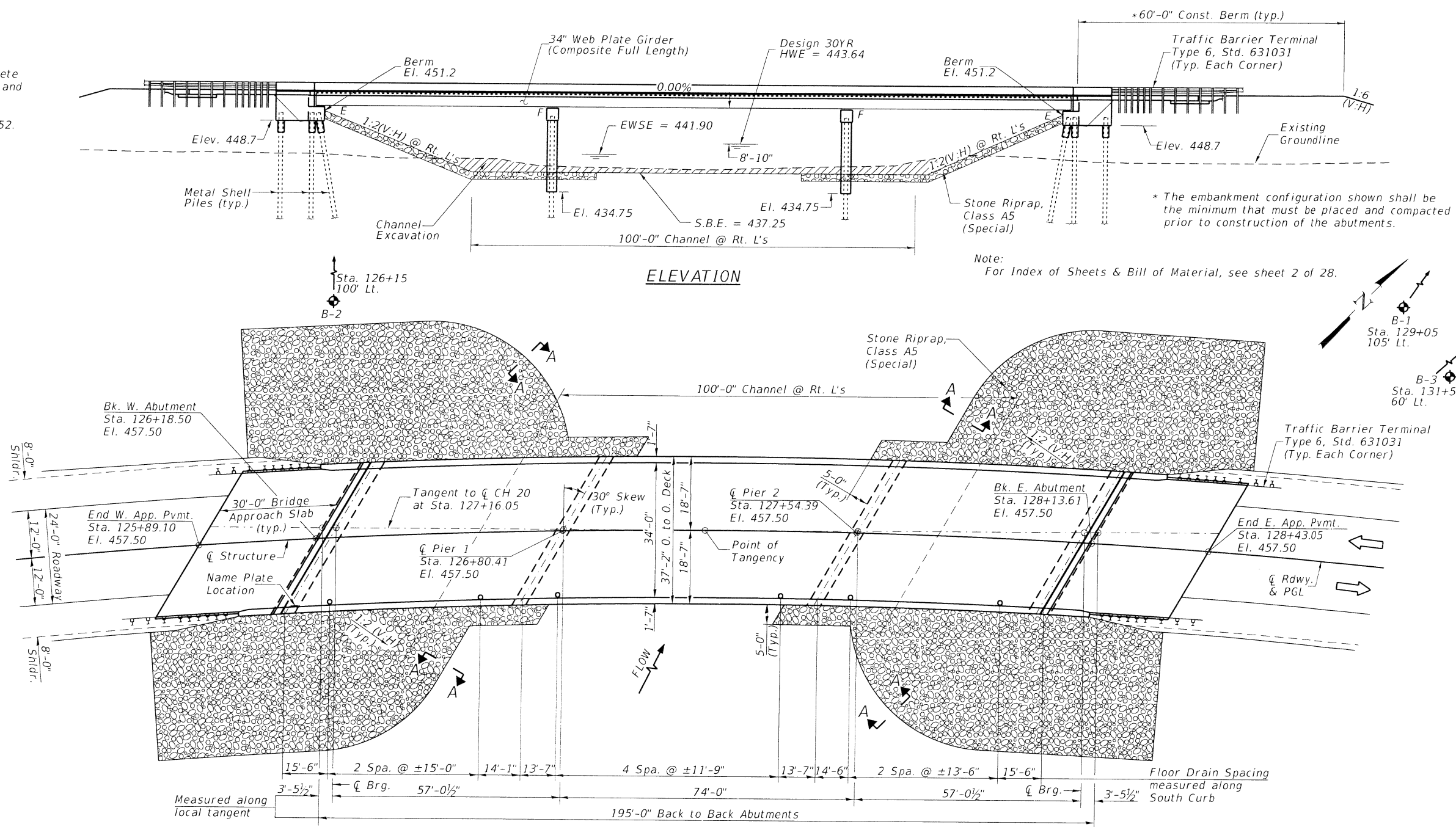
2017 AASHTO LRFD Bridge Design Specifications, 8th Edition

**SEISMIC DATA**

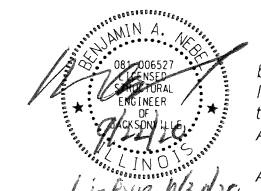
Seismic Performance Zone (SPZ) = 1  
 Design Spectral Acceleration at 1.0 sec. ( $S_D$ ) = 0.120g  
 Design Spectral Acceleration at 0.2 sec. ( $S_D$ ) = 0.192g  
 Soil Site Class = D

**LOADING HL-93**

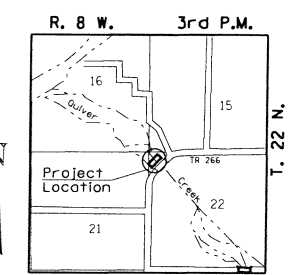
Allow 50#/sq. ft. for future wearing surface.



**PLAN**



I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current AASHTO LRFD Bridge Design Specifications. This design complies with all requirements of the current AASHTO Guide Specifications for Seismic Design of highway bridges.



**LOCATION SKETCH**

**GENERAL PLAN AND ELEVATION**  
 F.A.S. 567 (C.H. 20)  
 OVER QUIVER CREEK  
 SECTION 07-00022-01-BR  
 MASON COUNTY  
 STATION 127+16.05  
 STRUCTURE NO. 063-3009

Illinois Structural No. 6527  
 Expires 11/30/2020

SHEET NO. 1	F.A.S. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
28 SHEETS	567	07-00022-01-BR	MASON	75	18
S.N. 063-3009			CONTRACT NO. 93753		
FED. ROAD DIST. NO. 7   ILLINOIS   FED. AID PROJECT: ZMBM(399)					

**GENERAL NOTES**

Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts in painted areas and ASTM A325 type 3 in unpainted areas. Bolts 7/8" Ø, holes 1 1/16" Ø, unless otherwise noted.

Calculated weight of Structural Steel = 188,850 lb (AASHTO M270 Gr. 50W)

All structural steel shall be AASHTO M270 Gr. 50W except expansion joints which shall be AASHTO M270, Grade 50.

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

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

Concrete Sealer shall be applied to the bearings, backwall and front face of each abutment.

All structural steel and exposed surfaces of bearings within a distance of 9 feet from each way from the deck joints shall be painted as specified in Section 506 of the Standard Specifications.

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

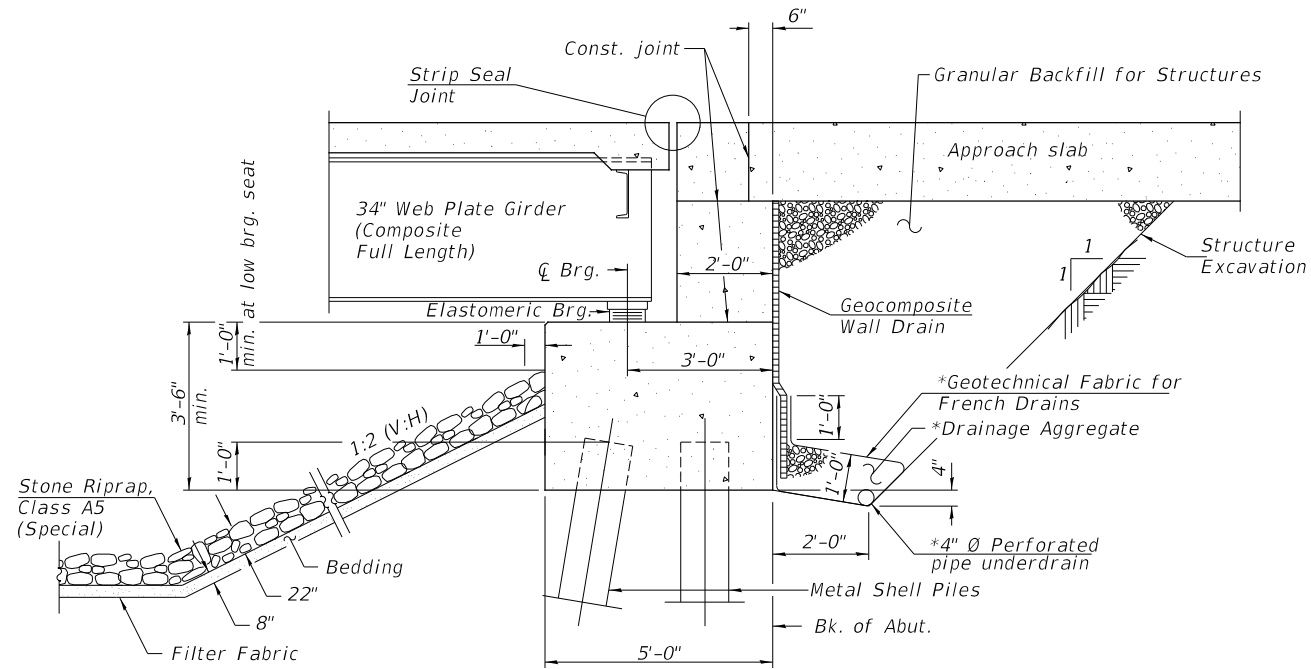
The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.

For Soil Boring Logs, See Special Provisions.

Bridge Deck Grooving is figured 1'-0" from the face of the parapets. It shall be applied to the bridge deck & approach slabs.

For Soil Boring Logs, See Special Provisions.

Bridge Deck Grooving is figured 1'-0" from the face of the parapets. It shall be applied to the bridge deck & approach slabs.



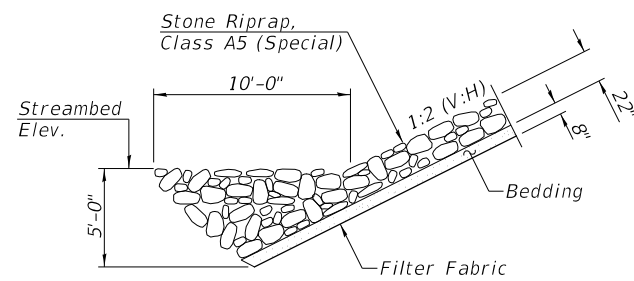
\*Included in the cost of Pipe Underdrains for Structures. (See Special Provisions)

**SECTION THRU PILE SUPPORTED STUB ABUTMENT**

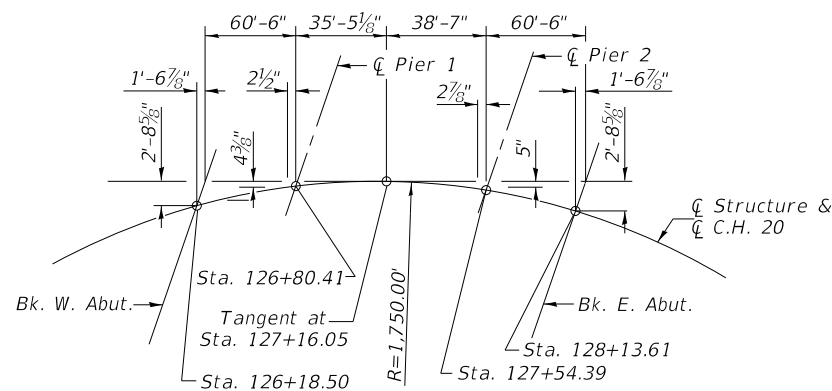
(Horiz. dim. @ Rt. L's)

Note:

All drainage system components shall extend parallel to the abutment back wall until they intersect the wingwalls or 2'-0" from the end of the wingwalls when the wings are parallel to the abutment. The pipe shall extend under the wingwall, if necessary, until intersecting the side slopes. The pipes shall drain into \*concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).



**SECTION A-A**



**OFFSET SKETCH**

**INDEX OF SHEETS**

SH. #'s	DESCRIPTION
1	General Plan and Elevation
2	Bill of Material, Details and General Notes
3	Footing Layout
4-6	Top of Slab Elevations
7-8	Top of Approach Slab Elevations
9	Prefomed Joint Strip Seal
10	Superstructure
11-12	Superstructure Details
13	Diaphragm Details
14-17	Approach Slab Details
18	Framing Plan
19-20	Structural Steel Details
21	Bearing Details
22-23	West Abutment
24-25	East Abutment
26	Pier #1
27	Pier #2
28	Metal Shell Pile Details

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Channel Excavation	CU YD	—	1,300	1,300
Filter Fabric	SQ YD	—	1,750	1,750
Stone Riprap, Class A5 (Special)	TON	—	1,570	1,570
Granular Backfill for Structures	CU YD	—	120	120
Removal of Existing Structures	EACH	—	—	1
Structure Excavation	CU YD	—	295	295
Concrete Structures	CU YD	—	273.2	273.2
Concrete Superstructure	CU YD	241.5	—	241.5
Bridge Deck Grooving	SQ YD	890	—	890
Protective Coat	SQ YD	1,150	—	1,150
Prefomed Joint Strip Seal	FOOT	83	—	83
Furnishing and Erecting Structural Steel	L SUM	1	—	1
Reinforcement Bars, Epoxy Coated	POUND	99,300	24,570	123,870
Stud Shear Connectors	EACH	4,542	—	4,542
Anchor Bolts, 1"	EACH	—	48	48
Furnishing Metal Shell Piles 14"x0.312"	FOOT	—	702	702
Furnishing Metal Shell Piles 16"x0.375"	FOOT	—	565	565
Test Pile Metal Shells	EACH	—	4	4
Driving Piles	FOOT	—	1,267	1,267
Name Plates	EACH	1	—	1
Geocomposite Wall Drain	SQ YD	—	60	60
Pipe Underdrains For Structures 4"	FOOT	—	123	123
Concrete Superstructure (Approach Slab)	CU YD	97.8	—	97.8
Concrete Encasement	CU YD	—	8.6	8.6
Cofferdam Excavation	CU YD	—	105	105
Elastomeric Bearing Assembly Type I	EACH	12	—	12
Cofferdam (Type 1) (Location-1)	EACH	—	1	1
Cofferdam (Type 1) (Location-2)	EACH	—	1	1
Concrete Sealer	SQ FT	—	851	851
Floor Drains	EACH	11	—	11

① See Special Provisions

**INDEX OF SHEETS,**

**BILL OF MATERIAL, &**

**GENERAL PLAN DETAILS**

**F.A.S. 567 (C.H. 20)**

**OVER QUIVER CREEK**

**SECTION 07-00022-01-BR**

**MASON COUNTY**

**STATION 127+16.05**

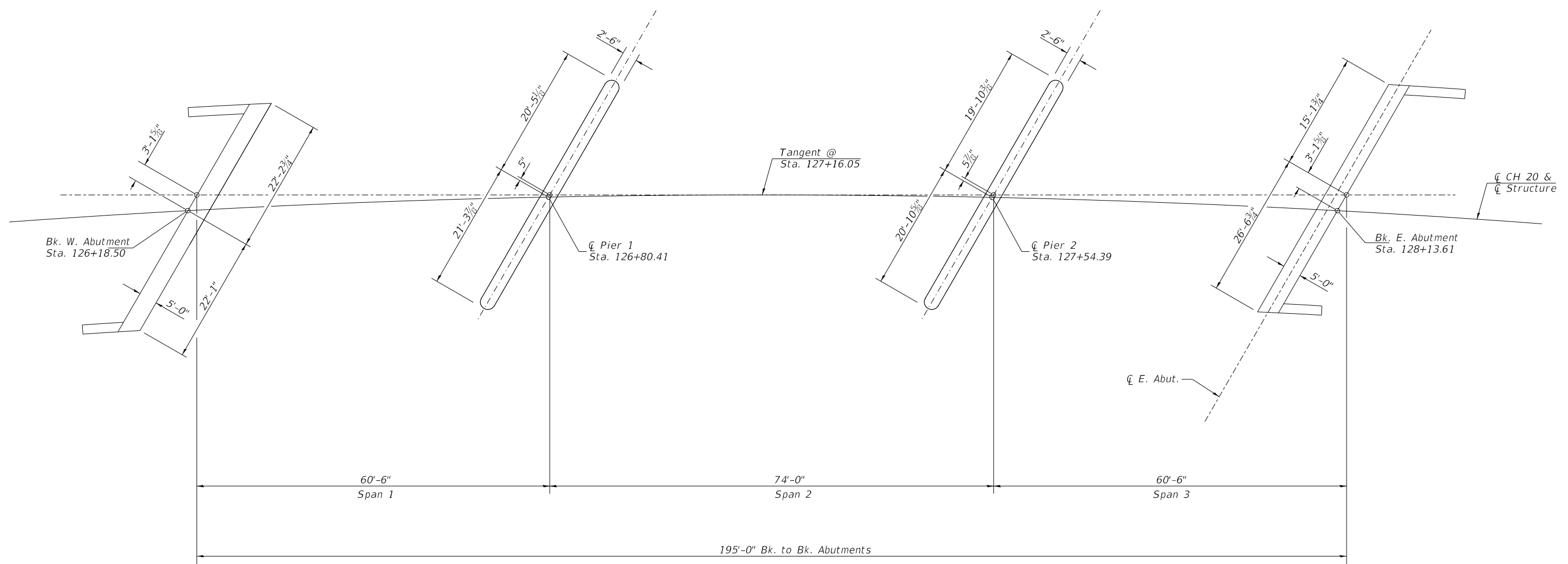
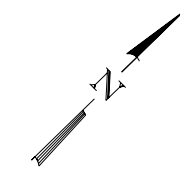
**STRUCTURE NO. 063-3009**

QUIVER CREEK  
BUILT 20 BY  
MASON COUNTY  
SEC. 07-00022-01-BR  
F.A.S. 567 STATION 127+16.05  
STR. NO. 063-3009 LOADING HL-93

**NAME PLATE**

Locate Name Plate on Wingwall  
S.W. Corner of Bridge (See Std. 515001)

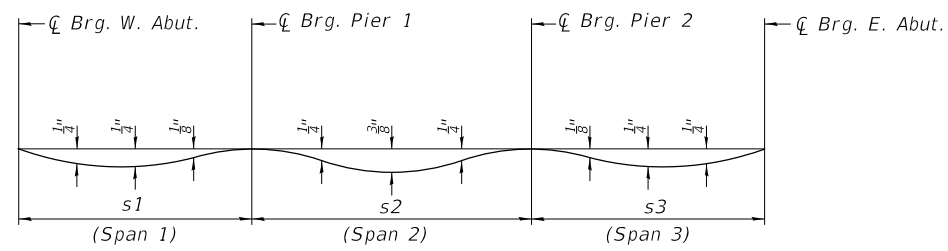
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28 SHEETS	567	07-00022-01-BR	MASON	75	19
S.N. 063-3009			CONTRACT NO. 93753		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT: ZMBM(399)		



FOOTING LAYOUT

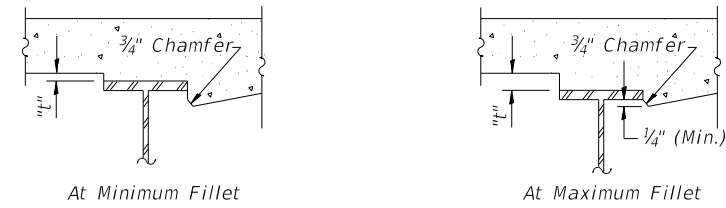
FOOTING LAYOUT  
F.A.S. 567 (C.H. 20)  
OVER QUIVER CREEK  
SECTION 07-00022-01-BR  
MASON COUNTY  
STATION 127+16.05  
STRUCTURE NO. 063-3009

SHEET NO. 3	F.A.S. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
28 SHEETS	567	07-00022-01-BR	MASON	75	20
S.N. 063-3009			CONTRACT NO. 93753		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT: ZMBM(399)		



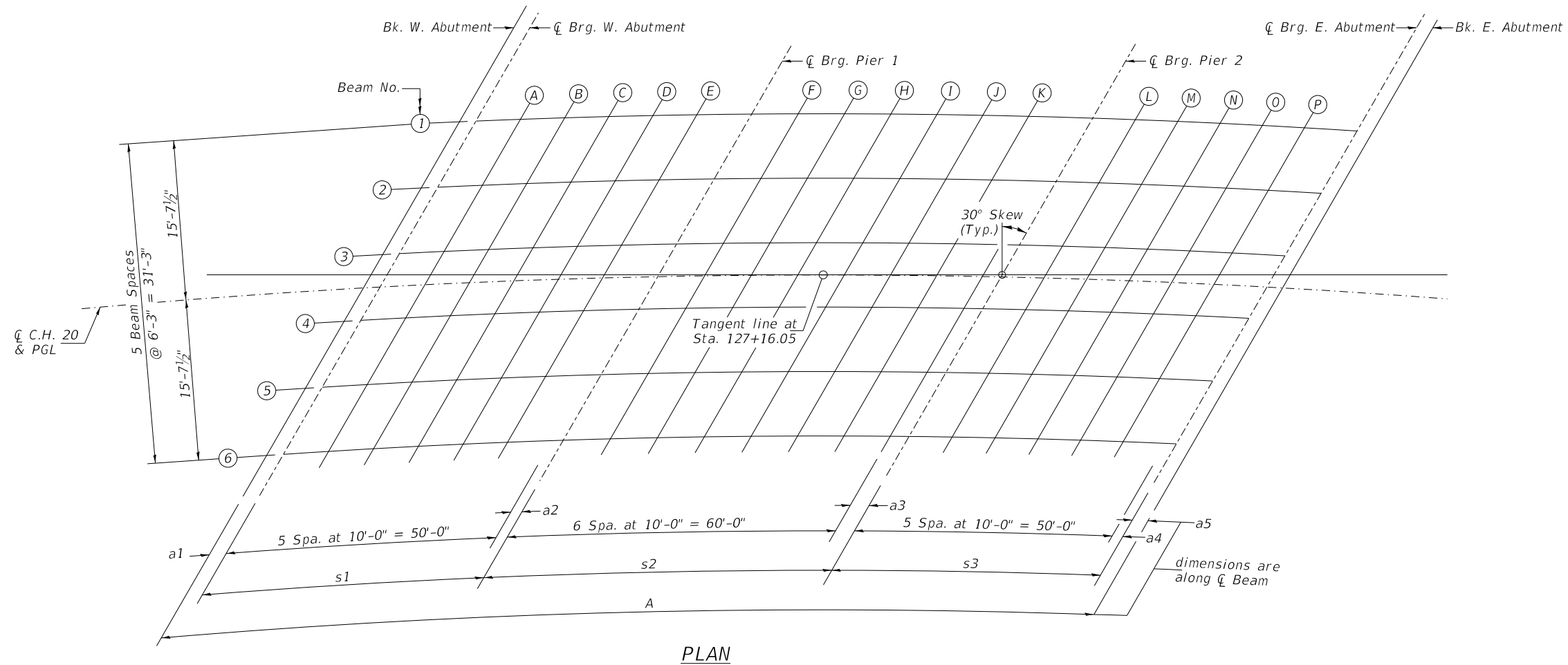
**DEAD LOAD DEFLECTION DIAGRAM**  
(Includes weight of concrete only.)

Note:  
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown in tables on Sheets 5 & 6 of 28 Sheets.



**FILLET HEIGHTS**

To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown in the tables on Sheet 5 & 6 of 28, minus slab thickness, equals the fillet height "t" above top flange of beams.



**PLAN**

**DIMENSION TABLE**

	BEAM 1	BEAM 2	BEAM 3	CL RDWY.	BEAM 4	BEAM 5	BEAM 6
a1	3'-6 <sup>7</sup> / <sub>8</sub> "	3'-6 <sup>7</sup> / <sub>8</sub> "	3'-7"	3'-7"	3'-7"	3'-7 <sup>1</sup> / <sub>8</sub> "	3'-7 <sup>1</sup> / <sub>8</sub> "
a2	8'-1 <sup>1</sup> / <sub>2</sub> "	8'-2 <sup>1</sup> / <sub>2</sub> "	8'-3 <sup>1</sup> / <sub>2</sub> "	8'-3 <sup>7</sup> / <sub>8</sub> "	8'-4 <sup>3</sup> / <sub>8</sub> "	8'-5 <sup>3</sup> / <sub>8</sub> "	8'-6 <sup>1</sup> / <sub>2</sub> "
a3	13'-9 <sup>9</sup> / <sub>8</sub> "	13'-10 <sup>1</sup> / <sub>4</sub> "	13'-11 <sup>1</sup> / <sub>4</sub> "	13'-11 <sup>3</sup> / <sub>4</sub> "	14'-0 <sup>1</sup> / <sub>4</sub> "	14'-1 <sup>3</sup> / <sub>8</sub> "	14'-2 <sup>1</sup> / <sub>2</sub> "
a4	5'-8 <sup>5</sup> / <sub>8</sub> "	5'-9 <sup>1</sup> / <sub>4</sub> "	5'-10"	5'-10 <sup>1</sup> / <sub>4</sub> "	5'-10 <sup>5</sup> / <sub>8</sub> "	5'-11 <sup>1</sup> / <sub>4</sub> "	6'-0"
a5	3'-4 <sup>1</sup> / <sub>4</sub> "	3'-4 <sup>1</sup> / <sub>4</sub> "	3'-4 <sup>3</sup> / <sub>8</sub> "	3'-4 <sup>3</sup> / <sub>8</sub> "	3'-4 <sup>3</sup> / <sub>8</sub> "	3'-4 <sup>3</sup> / <sub>8</sub> "	3'-4 <sup>1</sup> / <sub>2</sub> "
s1	58'-1 <sup>1</sup> / <sub>2</sub> "	58'-2 <sup>1</sup> / <sub>2</sub> "	58'-3 <sup>1</sup> / <sub>2</sub> "	58'-3 <sup>7</sup> / <sub>8</sub> "	58'-4 <sup>3</sup> / <sub>8</sub> "	58'-5 <sup>3</sup> / <sub>8</sub> "	58'-6 <sup>1</sup> / <sub>2</sub> "
s2	73'-9 <sup>9</sup> / <sub>8</sub> "	73'-10 <sup>1</sup> / <sub>4</sub> "	73'-11 <sup>1</sup> / <sub>4</sub> "	73'-11 <sup>3</sup> / <sub>4</sub> "	74'-0 <sup>1</sup> / <sub>4</sub> "	74'-1 <sup>3</sup> / <sub>8</sub> "	74'-2 <sup>1</sup> / <sub>2</sub> "
s3	55'-5 <sup>5</sup> / <sub>8</sub> "	55'-9 <sup>1</sup> / <sub>4</sub> "	55'-10"	55'-10 <sup>1</sup> / <sub>4</sub> "	55'-10 <sup>5</sup> / <sub>8</sub> "	55'-11 <sup>1</sup> / <sub>4</sub> "	56'-0"
A	194'-6 <sup>3</sup> / <sub>8</sub> "	194'-9 <sup>9</sup> / <sub>8</sub> "	194'-11 <sup>7</sup> / <sub>8</sub> "	195'-1 <sup>3</sup> / <sub>8</sub> "	195'-2 <sup>3</sup> / <sub>4</sub> "	195'-5 <sup>5</sup> / <sub>8</sub> "	195'-8 <sup>1</sup> / <sub>2</sub> "

**TOP OF SLAB ELEVATIONS**  
F.A.S. 567 (C.H. 20)  
OVER QUIVER CREEK  
SECTION 07-00022-01-BR  
MASON COUNTY  
STATION 127+16.05  
STRUCTURE NO. 063-3009

SHEET NO. 4  28 SHEETS	F.A.S. ROUTE 567	SECTION 07-00022-01-BR	COUNTY MASON	TOTAL SHEETS 75	SHEET NO. 21
	S.N. 063-3009		CONTRACT NO. 93753		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT: ZMBM(399)		

**BEAM #1**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk W. Abut.	12628.61	-15.63	458.67	458.67
CL Brg W. Abut.	12632.15	-15.63	458.67	458.67
A	12642.06	-15.63	458.67	458.69
B	12651.97	-15.63	458.67	458.69
C	12661.88	-15.63	458.67	458.69
D	12671.80	-15.63	458.67	458.68
E	12681.71	-15.63	458.67	458.68
Pier 1	12689.76	-15.63	458.67	458.67
F	12699.67	-15.63	458.67	458.68
G	12709.58	-15.63	458.67	458.69
H	12719.50	-15.63	458.67	458.70
I	12729.41	-15.63	458.67	458.71
J	12739.32	-15.63	458.67	458.70
K	12749.23	-15.63	458.67	458.69
Pier 2	12762.87	-15.63	458.67	458.67
L	12772.78	-15.63	458.67	458.68
M	12782.70	-15.63	458.67	458.68
N	12792.61	-15.63	458.67	458.69
O	12802.52	-15.63	458.67	458.69
P	12812.43	-15.63	458.67	458.68
CL Brg E. Abut.	12818.10	-15.63	458.67	458.67
Bk E. Abut.	12821.43	-15.63	458.67	458.67

**BEAM #2**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk W. Abut.	12624.59	-9.38	458.20	458.20
CL Brg W. Abut.	12628.15	-9.38	458.20	458.20
A	12638.10	-9.38	458.20	458.22
B	12648.04	-9.38	458.20	458.22
C	12657.99	-9.38	458.20	458.22
D	12667.94	-9.38	458.20	458.22
E	12677.88	-9.38	458.20	458.21
Pier 1	12686.04	-9.38	458.20	458.20
F	12695.99	-9.38	458.20	458.21
G	12705.94	-9.38	458.20	458.23
H	12715.88	-9.38	458.20	458.24
I	12725.83	-9.38	458.20	458.24
J	12735.78	-9.38	458.20	458.23
K	12745.72	-9.38	458.20	458.22
Pier 2	12759.50	-9.38	458.20	458.20
L	12769.45	-9.38	458.20	458.21
M	12779.39	-9.38	458.20	458.22
N	12789.34	-9.38	458.20	458.22
O	12799.29	-9.38	458.20	458.22
P	12809.23	-9.38	458.20	458.21
CL Brg E. Abut.	12814.98	-9.38	458.20	458.20
Bk E. Abut.	12818.32	-9.38	458.20	458.20

**BEAM #3**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk W. Abut.	12620.54	-3.13	457.73	457.73
CL Brg W. Abut.	12624.11	-3.13	457.73	457.73
A	12634.10	-3.13	457.73	457.75
B	12644.08	-3.13	457.73	457.76
C	12654.06	-3.13	457.73	457.76
D	12664.04	-3.13	457.73	457.75
E	12674.02	-3.13	457.73	457.74
Pier 1	12682.30	-3.13	457.73	457.73
F	12692.28	-3.13	457.73	457.74
G	12702.26	-3.13	457.73	457.76
H	12712.24	-3.13	457.73	457.77
I	12722.22	-3.13	457.73	457.77
J	12732.21	-3.13	457.73	457.76
K	12742.19	-3.13	457.73	457.75
Pier 2	12756.10	-3.13	457.73	457.73
L	12766.08	-3.13	457.73	457.74
M	12776.06	-3.13	457.73	457.75
N	12786.05	-3.13	457.73	457.75
O	12796.03	-3.13	457.73	457.75
P	12806.01	-3.13	457.73	457.74
CL Brg E. Abut.	12811.83	-3.13	457.73	457.73
Bk E. Abut.	12815.19	-3.13	457.73	457.73

**☐ ROADWAY, PROFILE GRADE**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk W. Abut.	12618.50	0.00	457.50	457.50
CL Brg W. Abut.	12622.08	0.00	457.50	457.50
A	12632.08	0.00	457.50	457.51
B	12642.08	0.00	457.50	457.52
C	12652.08	0.00	457.50	457.52
D	12662.08	0.00	457.50	457.51
E	12672.08	0.00	457.50	457.50
Pier 1	12680.41	0.00	457.50	457.50
F	12690.41	0.00	457.50	457.51
G	12700.41	0.00	457.50	457.52
H	12710.41	0.00	457.50	457.53
I	12720.41	0.00	457.50	457.53
J	12730.41	0.00	457.50	457.53
K	12740.41	0.00	457.50	457.51
Pier 2	12754.39	0.00	457.50	457.50
L	12764.39	0.00	457.50	457.50
M	12774.39	0.00	457.50	457.51
N	12784.39	0.00	457.50	457.52
O	12794.39	0.00	457.50	457.52
P	12804.39	0.00	457.50	457.51
CL Brg E. Abut.	12810.25	0.00	457.50	457.50
Bk E. Abut.	12813.61	0.00	457.50	457.50

**TOP OF SLAB ELEVATIONS**  
**F.A.S. 567 (C.H. 20)**  
**OVER QUIVER CREEK**  
**SECTION 07-00022-01-BR**  
**MASON COUNTY**  
**STATION 127+16.05**  
**STRUCTURE NO. 063-3009**

SHEET NO. 5	F.A.S. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	567	07-00022-01-BR	MASON	75	22
28 SHEETS	S.N. 063-3009		CONTRACT NO. 93753		
	FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT: ZMBM(399)		

BEAM #4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk W. Abut.	12616.45	3.13	457.27	457.27
CL Brg W. Abut.	12620.04	3.13	457.27	457.27
A	12630.06	3.13	457.27	457.28
B	12640.08	3.13	457.27	457.29
C	12650.10	3.13	457.27	457.29
D	12660.11	3.13	457.27	457.28
E	12670.13	3.13	457.27	457.27
Pier 1	12678.52	3.13	457.27	457.27
F	12688.53	3.13	457.27	457.27
G	12698.55	3.13	457.27	457.29
H	12708.57	3.13	457.27	457.30
I	12718.59	3.13	457.27	457.30
J	12728.61	3.13	457.27	457.29
K	12738.62	3.13	457.27	457.28
Pier 2	12752.67	3.13	457.27	457.27
L	12762.69	3.13	457.27	457.27
M	12772.71	3.13	457.27	457.28
N	12782.73	3.13	457.27	457.28
O	12792.74	3.13	457.27	457.28
P	12802.76	3.13	457.27	457.27
CL Brg E. Abut.	12808.66	3.13	457.27	457.27
Bk E. Abut.	12812.03	3.13	457.27	457.27

BEAM #5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk W. Abut.	12612.33	9.38	456.80	456.80
CL Brg W. Abut.	12615.94	9.38	456.80	456.80
A	12625.99	9.38	456.80	456.81
B	12636.04	9.38	456.80	456.82
C	12646.10	9.38	456.80	456.82
D	12656.15	9.38	456.80	456.81
E	12666.21	9.38	456.80	456.80
Pier 1	12674.70	9.38	456.80	456.80
F	12684.76	9.38	456.80	456.81
G	12694.81	9.38	456.80	456.82
H	12704.87	9.38	456.80	456.83
I	12714.92	9.38	456.80	456.83
J	12724.97	9.38	456.80	456.83
K	12735.03	9.38	456.80	456.81
Pier 2	12749.22	9.38	456.80	456.80
L	12759.27	9.38	456.80	456.80
M	12769.32	9.38	456.80	456.81
N	12779.38	9.38	456.80	456.81
O	12789.43	9.38	456.80	456.81
P	12799.49	9.38	456.80	456.80
CL Brg E. Abut.	12805.46	9.38	456.80	456.80
Bk E. Abut.	12808.84	9.38	456.80	456.80

BEAM #6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk W. Abut.	12608.17	15.63	456.33	456.33
CL Brg W. Abut.	12611.79	15.63	456.33	456.33
A	12621.88	15.63	456.33	456.34
B	12631.97	15.63	456.33	456.35
C	12642.06	15.63	456.33	456.35
D	12652.15	15.63	456.33	456.34
E	12662.24	15.63	456.33	456.33
Pier 1	12670.86	15.63	456.33	456.33
F	12680.95	15.63	456.33	456.34
G	12691.04	15.63	456.33	456.35
H	12701.13	15.63	456.33	456.36
I	12711.22	15.63	456.33	456.36
J	12721.31	15.63	456.33	456.36
K	12731.40	15.63	456.33	456.34
Pier 2	12745.73	15.63	456.33	456.33
L	12755.82	15.63	456.33	456.33
M	12765.91	15.63	456.33	456.34
N	12776.00	15.63	456.33	456.34
O	12786.09	15.63	456.33	456.34
P	12796.18	15.63	456.33	456.34
CL Brg E. Abut.	12802.23	15.63	456.33	456.33
Bk E. Abut.	12805.63	15.63	456.33	456.33

TOP OF SLAB ELEVATIONS  
F.A.S. 567 (C.H. 20)  
OVER QUIVER CREEK  
SECTION 07-00022-01-BR  
MASON COUNTY  
STATION 127+16.05  
STRUCTURE NO. 063-3009

SHEET NO. 6	F.A.S. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	567	07-00022-01-BR	MASON	75	23
28 SHEETS	S.N. 063-3009		CONTRACT NO. 93753		
	FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT: ZMBM(399)		

NORTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W End of W Appr	126+00.50	-17.00	458.78
A	126+10.36	-17.00	458.78
B	126+20.22	-17.00	458.78
E End of W Appr	126+30.08	-17.00	458.78

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W End of W Appr	125+97.17	-12.00	458.40
A	126+07.07	-12.00	458.40
B	126+16.97	-12.00	458.40
E End of W Appr	126+26.88	-12.00	458.40

CL ROADWAY & P.G. LINE

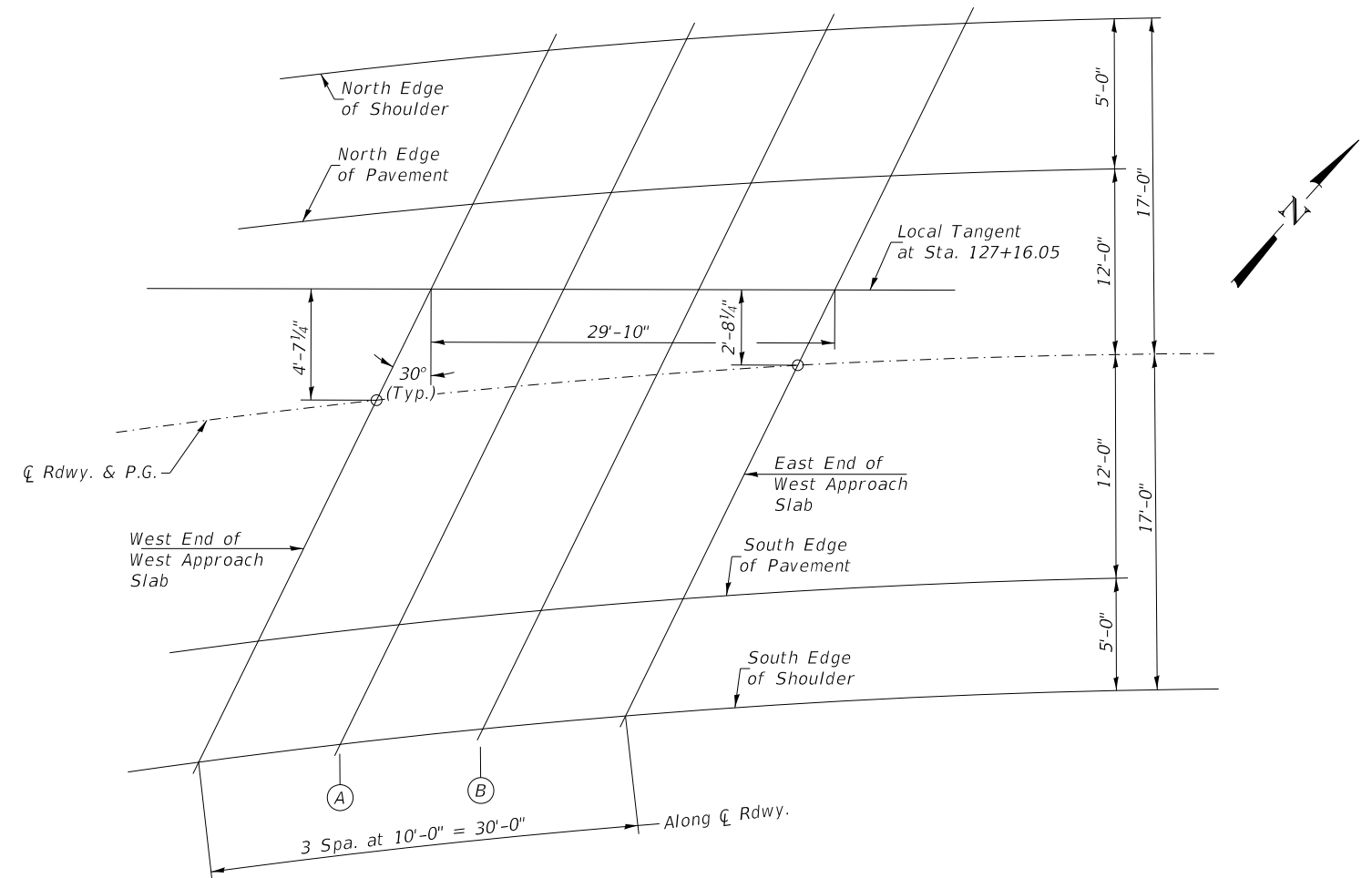
Location	Station	Offset	Theoretical Grade Elevations
W End of W Appr	125+89.10	0.00	457.50
A	125+99.10	0.00	457.50
B	126+09.10	0.00	457.50
E End of W Appr	126+19.10	0.00	457.50

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W End of W Appr	125+80.89	12.00	456.60
A	125+90.99	12.00	456.60
B	126+01.09	12.00	456.60
E End of W Appr	126+11.19	12.00	456.60

SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W End of W Appr	125+77.42	17.00	456.23
A	125+87.57	17.00	456.23
B	125+97.71	17.00	456.23
E End of W Appr	126+07.85	17.00	456.23



PLAN WEST APPROACH SLAB

TOP OF WEST APPROACH  
SLAB ELEVATIONS  
F.A.S. 567 (C.H. 20)  
OVER QUIVER CREEK  
SECTION 07-00022-01-BR  
MASON COUNTY  
STATION 127+16.05  
STRUCTURE NO. 063-3009

SHEET NO. 7 28 SHEETS	F.A.S. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	567	07-00022-01-BR	MASON	75	24
S.N. 063-3009			CONTRACT NO. 93753		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT: ZMBM(399)		



NORTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W End of E Appr	128+21.55	-17.00	458.78
A	128+31.43	-17.00	458.78
B	128+41.31	-17.00	458.78
E End of E Appr	128+51.19	-17.00	458.78

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W End of E Appr	128+19.07	-12.00	458.40
A	128+28.99	-12.00	458.40
B	128+38.90	-12.00	458.40
E End of E Appr	128+48.82	-12.00	458.40

CL ROADWAY & P.G. LINE

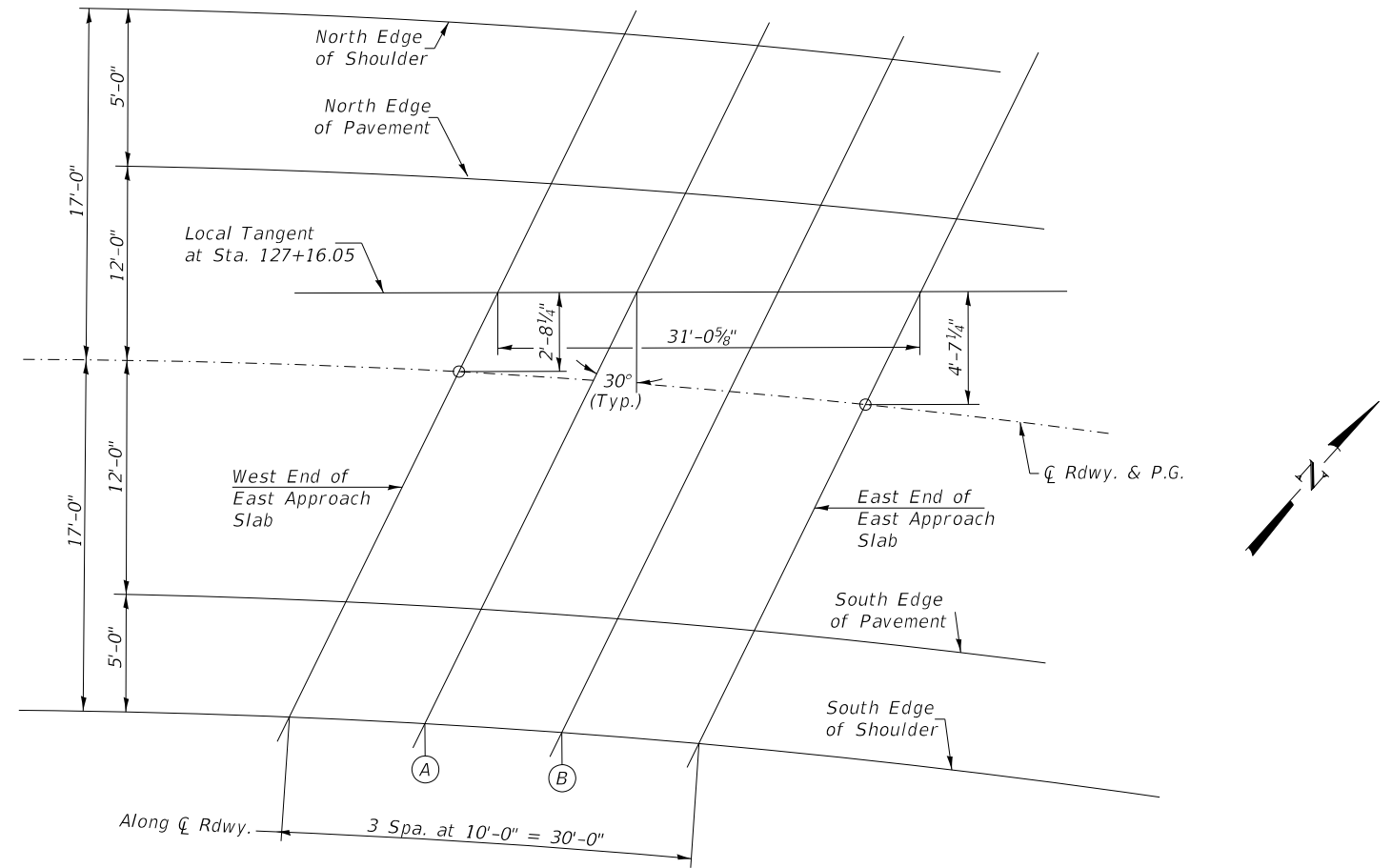
Location	Station	Offset	Theoretical Grade Elevations
W End of E Appr	128+13.05	0.00	457.50
A	128+23.05	0.00	457.50
B	128+33.05	0.00	457.50
E End of E Appr	128+43.05	0.00	457.50

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W End of E Appr	128+06.93	12.00	456.60
A	128+17.02	12.00	456.60
B	128+27.11	12.00	456.60
E End of E Appr	128+37.19	12.00	456.60

SOUTH EDGE OF SHOULDER

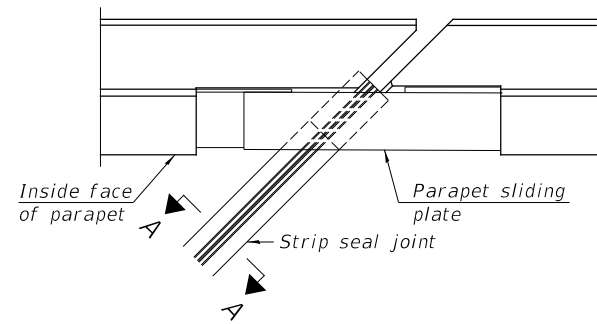
Location	Station	Offset	Theoretical Grade Elevations
W End of E Appr	128+04.36	17.00	456.23
A	128+14.48	17.00	456.23
B	128+24.60	17.00	456.23
E End of E Appr	128+34.73	17.00	456.23



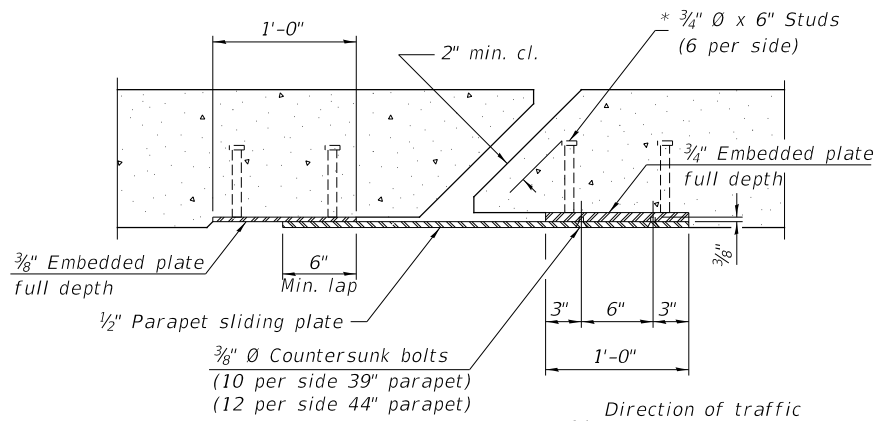
PLAN EAST APPROACH SLAB

TOP OF EAST APPROACH  
SLAB ELEVATIONS  
F.A.S. 567 (C.H. 20)  
OVER QUIVER CREEK  
SECTION 07-00022-01-BR  
MASON COUNTY  
STATION 127+16.05  
STRUCTURE NO. 063-3009

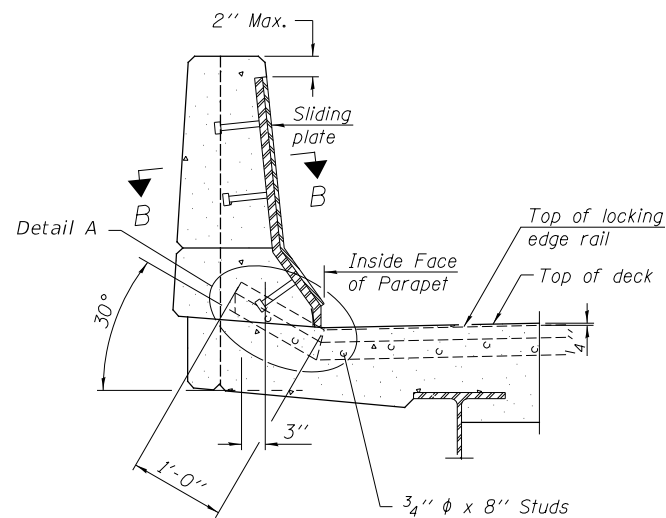
SHEET NO. 8	F.A.S. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
28 SHEETS	567	07-00022-01-BR	MASON	75	25
S.N. 063-3009			CONTRACT NO. 93753		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT: ZMBM(399)		



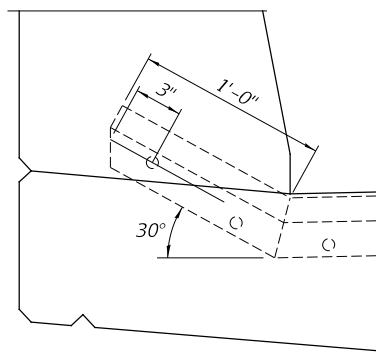
PLAN AT PARAPET



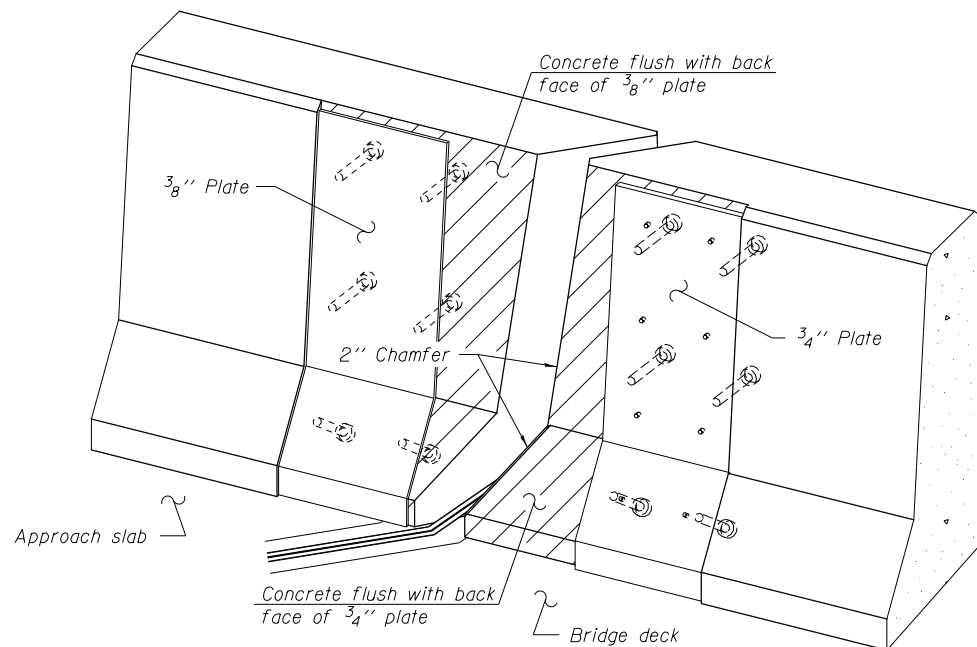
SECTION B-B



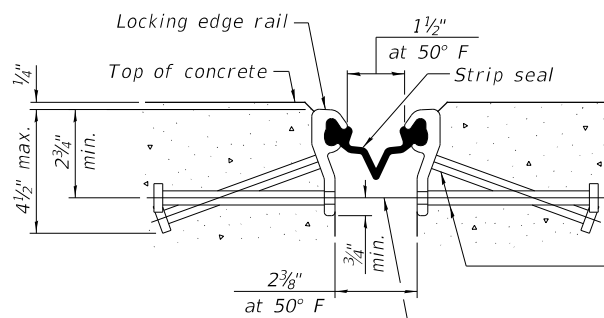
SECTION AT PARAPET



DETAIL A



TRIMETRIC VIEW  
(Showing embedded plates only)



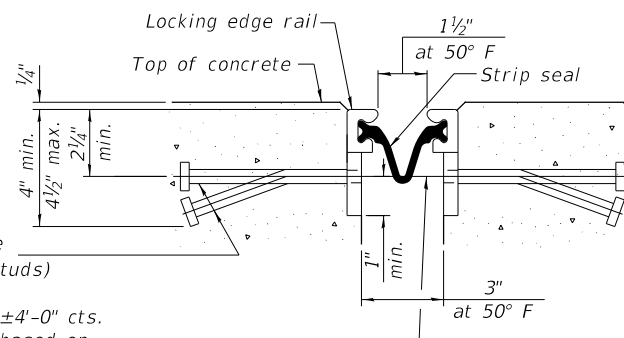
SHOWING ROLLED RAIL JOINT

\* 3/8" Ø x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

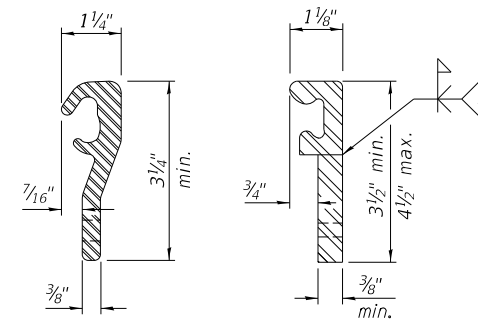
3/8" Ø threaded rods in 7/16" Ø holes at ±4'-0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

SECTION A-A

\* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



SHOWING WELDED RAIL JOINT



ROLLLED (EXTRUDED) RAIL

WELDED RAIL

LOCKING EDGE RAILS

\*\* Back gouge not required if complete joint penetration is verified by mock-up.

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the locking edge rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The locking edge rails depicted are configured for typical applications and are conceptual only. The actual configuration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they fit the application and meet the minimum anchorage shown. Flanged edge rails, however, will not be allowed. Locking edge rails may exceed the 4 1/2" maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.

The manufacturer's recommended installation methods shall be followed.

All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

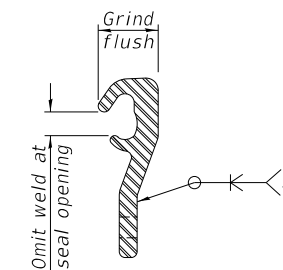
The Maximum space between locking edge rail segments shall be 3/16" and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.

Cost of parapet sliding plates, embedded plates, and anchorage studs included with Preformed Joint Strip Seal.

The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Deck and parapet lengths shown elsewhere in the plans are dimensioned to the concrete opening, not the joint opening, and are based on the rolled locking edge rail. If the Contractor elects to use a different locking edge rail, dimensional adjustments may be required. One exception to this would be the strip seal joint at the end of the precast bridge approach slab. For these cases the pavement connector length shall be adjusted, not the length of the bridge approach slab.

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Preformed Joint Strip Seal	Foot	83



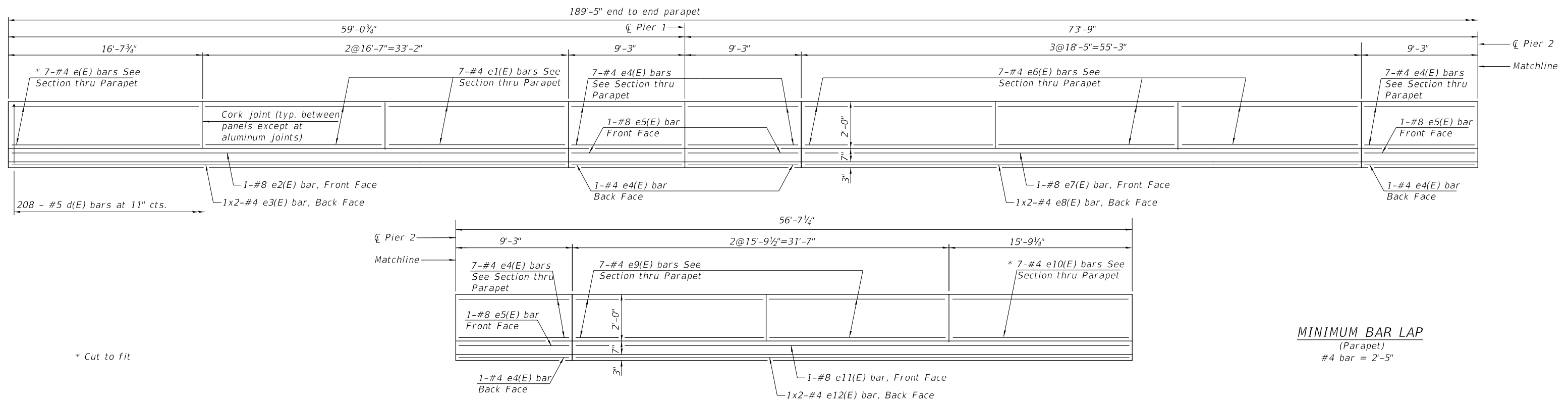
LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue. Rolled rail shown, welded rail similar.

PREFORMED JOINT STRIP SEAL  
F.A.S. 567 (C.H. 20)  
OVER QUIVER CREEK  
SECTION 07-00022-01-BR  
MASON COUNTY  
STATION 127+16.05  
STRUCTURE NO. 063-3009

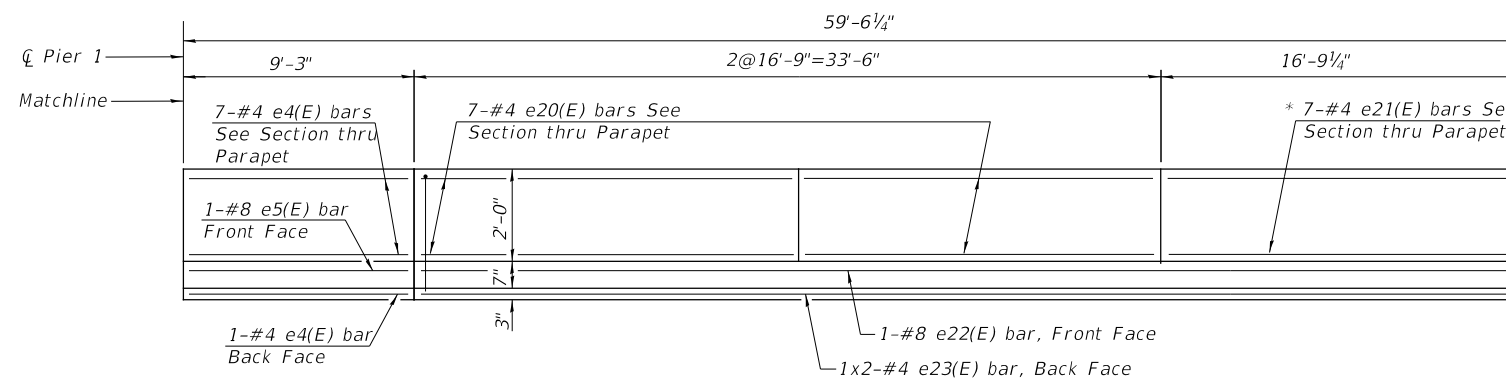
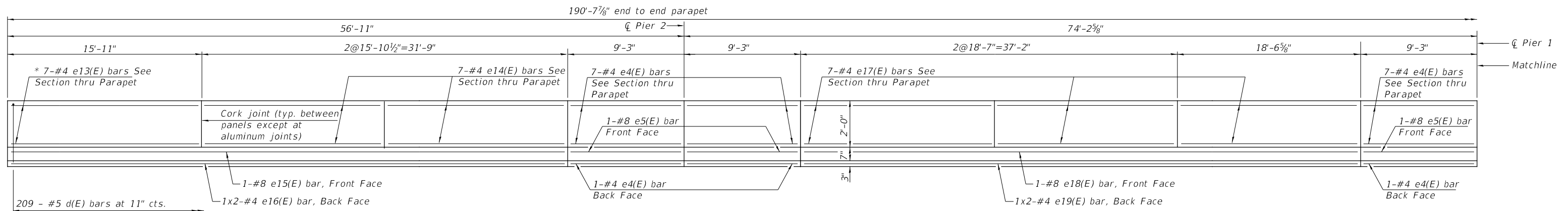
SHEET NO.	F.A.S. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
28 SHEETS	567	07-00022-01-BR	MASON	75	26
S.N. 063-3009			CONTRACT NO. 93753		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT: ZMBM(399)		





**MINIMUM BAR LAP**  
(Parapet)  
#4 bar = 2'-5"

**INSIDE ELEVATION OF NORTH PARAPET**  
(Looking North)  
(Measured Alongside Face of Parapet)



**INSIDE ELEVATION OF SOUTH PARAPET**  
(Looking South)  
(Measured Alongside Face of Parapet)

**SUPERSTRUCTURE DETAILS**  
F.A.S. 567 (C.H. 20)  
OVER QUIVER CREEK  
SECTION 07-00022-01-BR  
MASON COUNTY  
STATION 127+16.05  
STRUCTURE NO. 063-3009

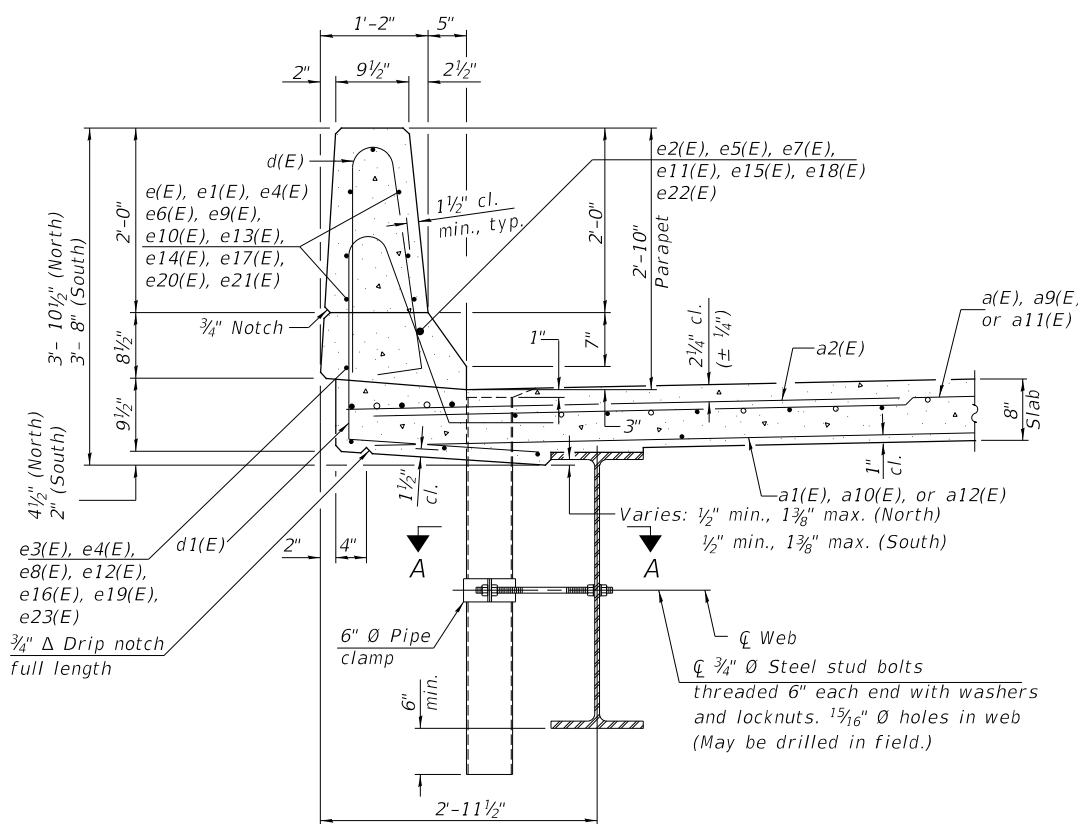
SHEET NO. 11 28 SHEETS	F.A.S. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	567	07-00022-01-BR	MASON	75	28
S.N. 063-3009			CONTRACT NO. 93753		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT: ZMBM(399)		

**SUPERSTRUCTURE  
BILL OF MATERIAL**

BAR	NO.	SIZE	LENGTH	SHAPE
a(E)	315	#5	36'-7"	—
a1(E)	205	#5	35'-7"	—
a2(E)	708	#6	6'-6"	—
a3(E)	20	#5	7'-2"	┌
a4(E)	4	#5	43'-8"	—
a5(E)	1	#5	42'-8"	—
a6(E)	20	#5	6'-9"	┌
a7(E)	4	#5	41'-0"	—
a8(E)	1	#5	40'-0"	—
a9(E)	22	#5	36'-6"	—
a10(E)	15	#5	36'-10"	—
a11(E)	17	#5	37'-0"	—
a12(E)	11	#5	36'-9"	—
b(E)	240	#5	34'-8"	—
b1(E)	252	#5	30'-3"	—
b2(E)	74	#6	38'-0"	—
d(E)	417	#5	5'-7"	┌
d1(E)	417	#5	7'-8"	┌
e(E)	7	#4	16'-0"	—
e1(E)	14	#4	16'-4"	—
e2(E)	1	#8	49'-2"	—
e3(E)	2	#4	25'-7"	—
e4(E)	64	#4	9'-0"	—
e5(E)	8	#8	9'-0"	—
e6(E)	21	#4	18'-2"	—
e7(E)	1	#8	55'-0"	—
e8(E)	2	#4	28'-9"	—
e9(E)	14	#4	15'-6"	—
e10(E)	7	#4	16'-2"	—
e11(E)	1	#8	47'-4"	—
e12(E)	2	#4	25'-1"	—
e13(E)	7	#4	15'-4"	—
e14(E)	14	#4	15'-7"	—
e15(E)	1	#8	47'-1"	—
e16(E)	2	#4	24'-7"	—
e17(E)	21	#4	18'-3"	—
e18(E)	1	#8	55'-5"	—
e19(E)	2	#4	28'-11"	—
e20(E)	14	#4	16'-6"	—
e21(E)	7	#4	17'-4"	—
e22(E)	1	#8	50'-4"	—
e23(E)	2	#4	26'-7"	—
x(E)	70	#5	6'-6"	┌
Reinforcement Bars, Epoxy Coated		POUND	59,870	
Concrete Superstructure		CU YD	241.5	

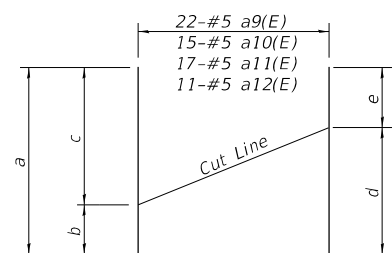
① See Special Provisions

**SUPERSTRUCTURE DETAILS  
F.A.S. 567 (C.H. 20)  
OVER QUIVER CREEK  
SECTION 07-00022-01-BR  
MASON COUNTY  
STATION 127+16.05  
STRUCTURE NO. 063-3009**



**SECTION THRU PARAPET**

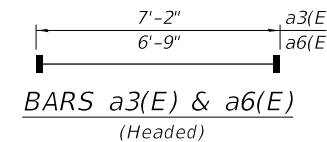
(South Parapet shown, North Parapet similar)



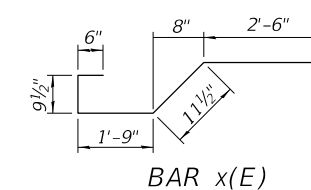
**FIELD CUTTING DIAGRAM**

Order a9(E) a10(E), a11(E) & a12(E) full length.  
Cut as shown and use remainder of bars.

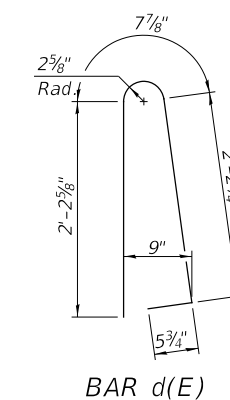
Bar	a	b	c	d	e
a9(E)	36'-6"	0'-7"	35'-11"	17'-10"	18'-8"
a10(E)	36'-10"	1'-4"	35'-6"	17'-10"	19'-0"
a11(E)	37'-0"	1'-0"	36'-0"	18'-0"	19'-0"
a12(E)	36'-9"	1'-3"	35'-6"	17'-7"	19'-2"



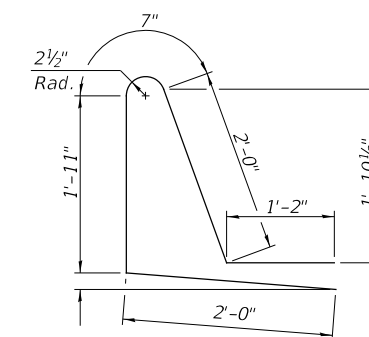
**BARS a3(E) & a6(E)**  
(Headed)



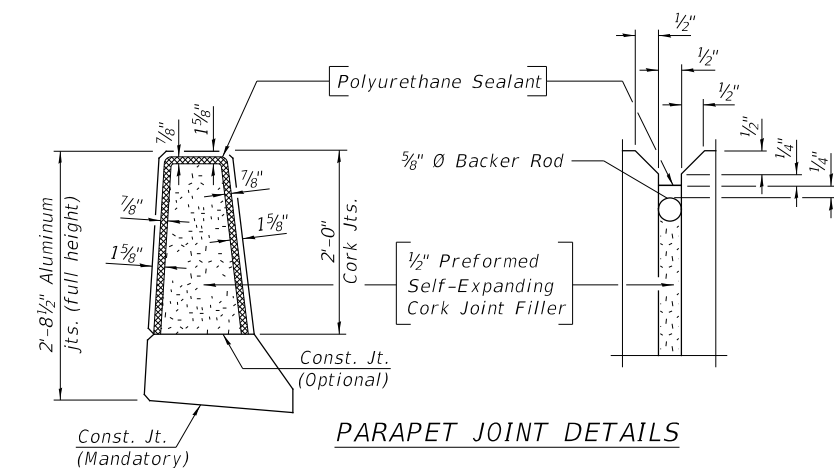
**BAR x(E)**



**BAR d(E)**



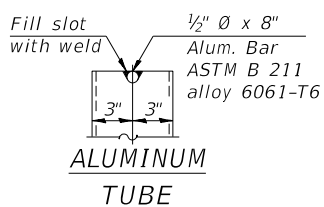
**BAR d1(E)**



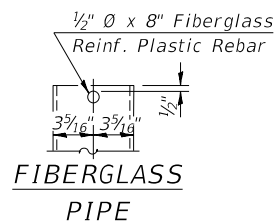
**PARAPET JOINT DETAILS**

**Notes:**

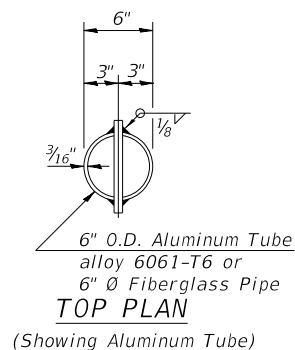
- Fiberglass pipe shall conform to ASTM D2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.
- The exterior surfaces of the floor drains shall be painted according to Article 506 with the finish coat as specified. The exterior surfaces of the drains shall be cleaned according to the Society of Protective Coating's Spec. SSPC-SP1 prior to painting.
- The top portion of aluminum floor drains shall be coated to minimize reaction with wet concrete.
- The clamping device shall be galvanized according to AASHTO M 232. Cost of clamping device included with Floor Drains.
- The 1/8" Aluminum sheet shall be ASTM B 209 alloy 3003-H14 and coated to minimize reaction with wet concrete. Cost included with Concrete Superstructure.
- The Polyurethane Sealant shall be according to Article 1050.04 of the Std. Spec. and the color shall be gray.
- Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.



**ALUMINUM TUBE**

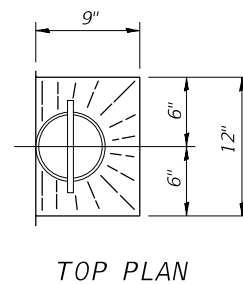


**FIBERGLASS PIPE**

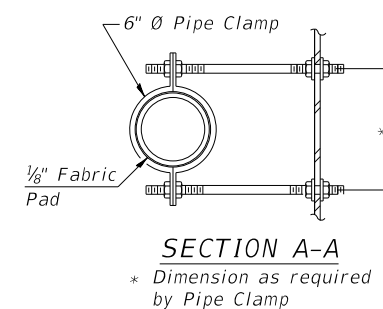


**TOP PLAN**

(Showing Aluminum Tube)



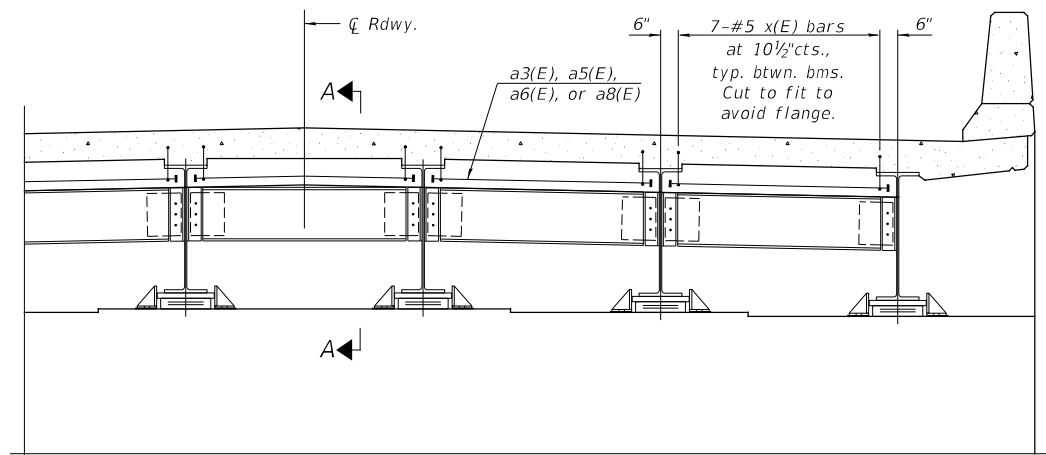
**TOP PLAN**



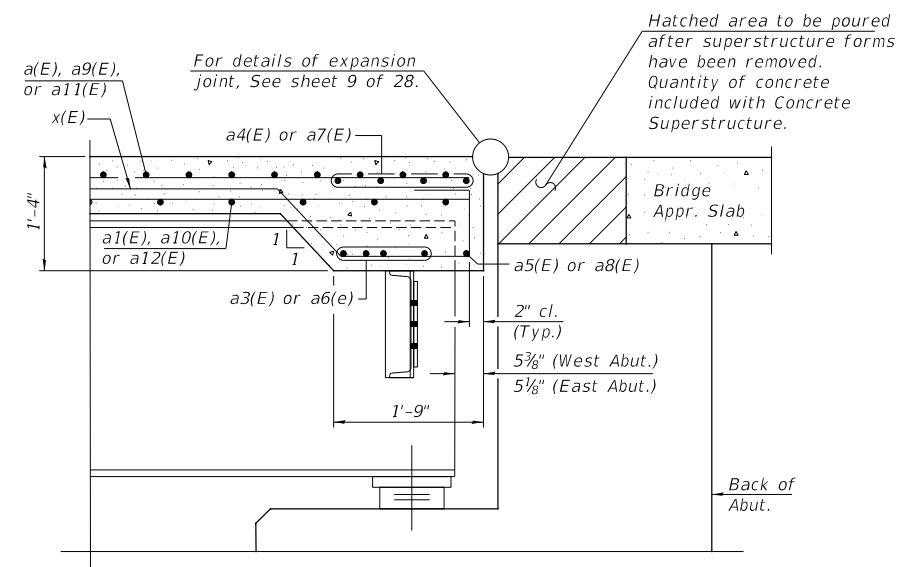
**SECTION A-A**

\* Dimension as required by Pipe Clamp

SHEET NO. 12	F.A.S. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
28 SHEETS	567	07-00022-01-BR	MASON	75	29
S.N. 063-3009			CONTRACT NO. 93753		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT: ZMBM(399)		



**DIAPHRAGM AT ABUTMENT**  
(at Rt. L's to  $\zeta$  Rdwy)

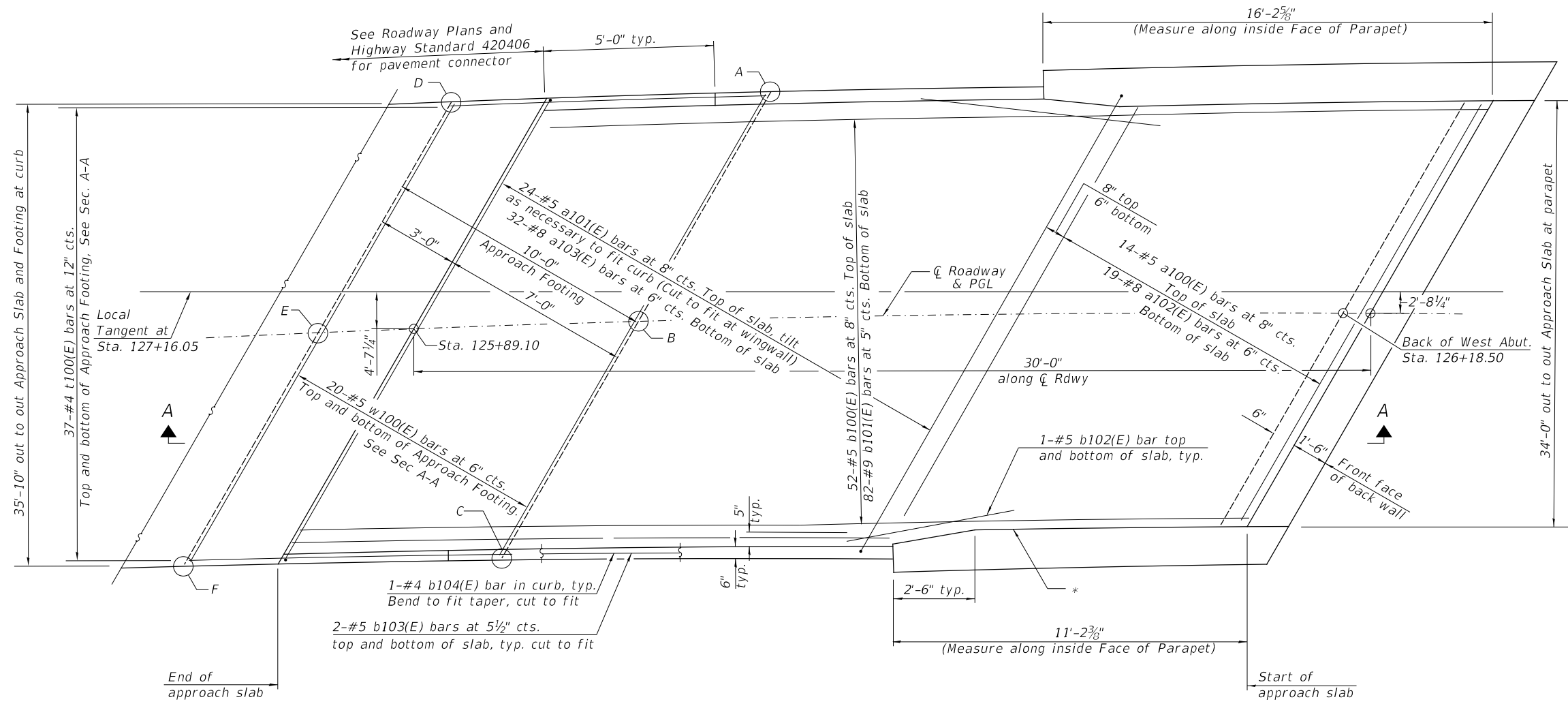


**SECTION A-A**  
(at Rt. L's to Abut.)

Notes:  
See sheet 12 of 28 for Superstructure Details and Bill of Material.  
The x(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.

**DIAPHRAGM DETAILS**  
**F.A.S. 567 (C.H. 20)**  
**OVER QUIVER CREEK**  
**SECTION 07-00022-01-BR**  
**MASON COUNTY**  
**STATION 127+16.05**  
**STRUCTURE NO. 063-3009**

SHEET NO. 13	F.A.S. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
28 SHEETS	567	07-00022-01-BR	MASON	75	30
S.N. 063-3009			CONTRACT NO. 93753		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT: ZMBM(399)		

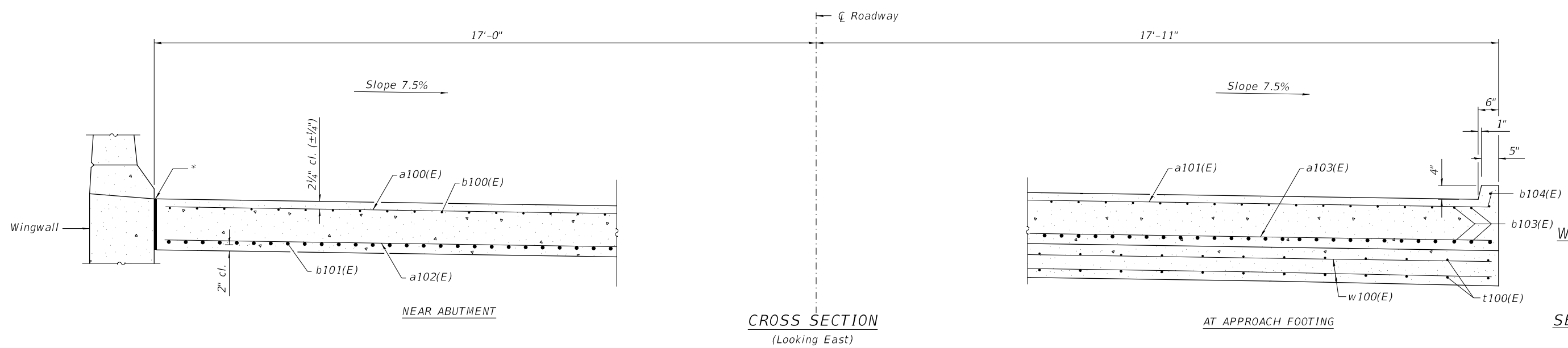


TOP AND BOTTOM ELEVATIONS FOR APPROACH FOOTING

POINT	APPROACH	
	TOP	BOTTOM
A	457.59	456.76
B	456.25	455.42
C	454.91	454.07
D	457.59	456.76
E	456.25	455.42
F	454.91	454.07

\* Preformed Expansion Joint Filler according to Article 1051.09 of the Standard Specifications; full depth of slab, full length of parapet. Typ. each parapet.

PLAN

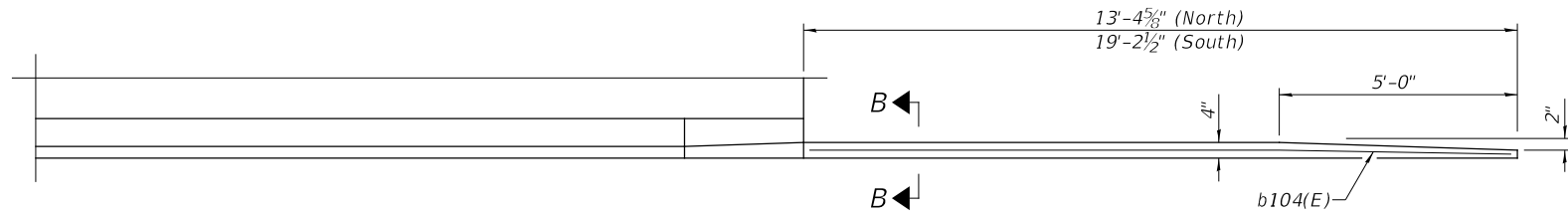


CROSS SECTION (Looking East)

WEST BRIDGE APPROACH  
SLAB DETAILS  
F.A.S. 567 (C.H. 20)  
OVER QUIVER CREEK  
SECTION 07-00022-01-BR  
MASON COUNTY  
STATION 127+16.05  
STRUCTURE NO. 063-3009

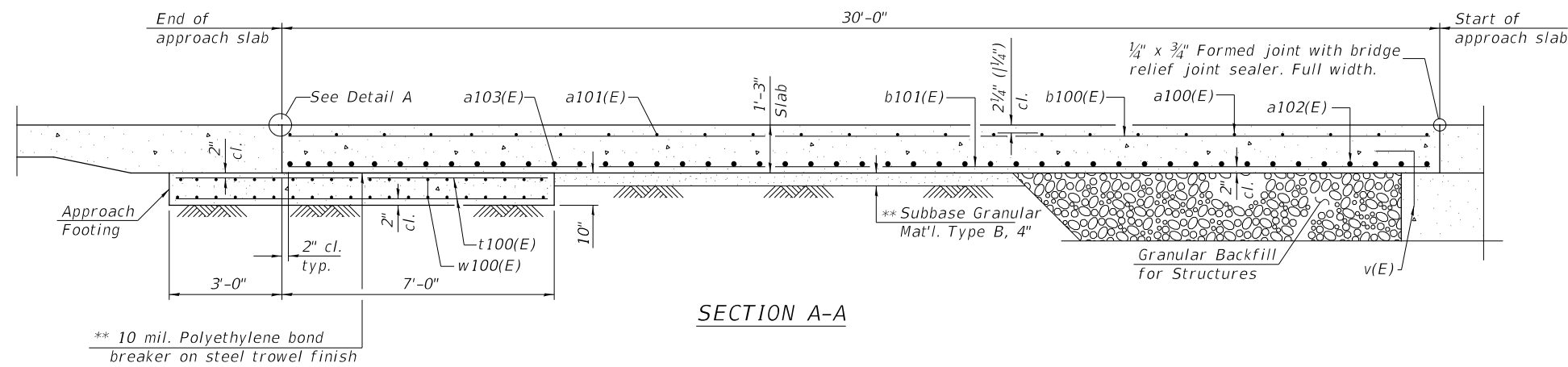
(Sheet 1 of 2)

SHEET NO. 14 28 SHEETS	F.A.S. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	567	07-00022-01-BR	MASON	75	31
S.N. 063-3009			CONTRACT NO. 93753		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT: ZMBM(399)		



INSIDE ELEVATION OF PARAPET AND CURB

Notes:  
 Approach slab shall be paid for as Concrete Superstructure (Approach Slab).  
 Approach footing concrete shall be paid for as Concrete Structures.  
 The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.  
 Cost of excavation for approach footing included with Concrete Structures.  
 For Granular Backfill for Structures and drainage treatment details, see sheet 2 of 28.

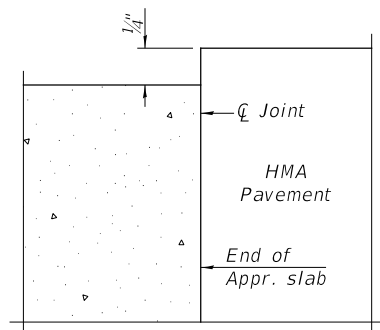


SECTION A-A

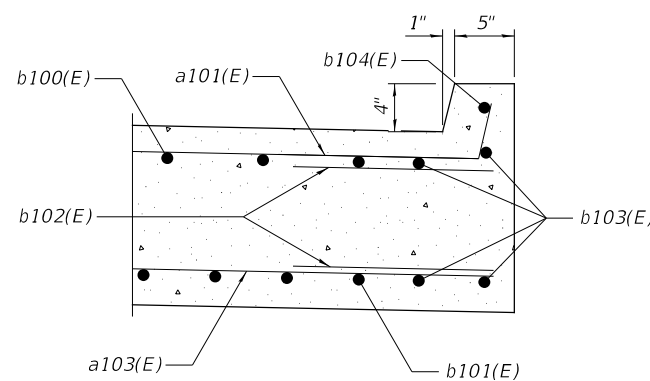
WEST APPROACH SLAB  
 BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
a100(E)	14	#5	40'-3"	—
a101(E)	24	#5	43'-6"	—
a102(E)	19	#8	40'-3"	—
a103(E)	32	#8	42'-9"	—
b100(E)	52	#5	29'-8"	—
b101(E)	82	#9	29'-8"	—
b102(E)	4	#5	8'-6"	—
b103(E)	4	#5	19'-0"	—
b104(E)	2	#4	19'-0"	—
t100(E)	74	#4	11'-8"	—
w100(E)	40	#5	42'-10"	—
Concrete Superstructure (Approach Slab)			CU YD	48.9
Concrete Structures			CU YD	13.4
Reinforcement Bars, Epoxy Coated			POUND	19,760

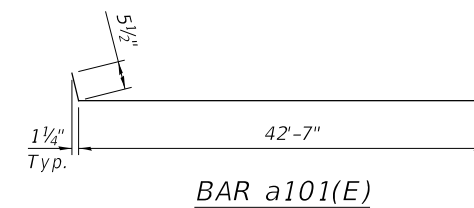
\*\* 10 mil. Polyethylene bond breaker on steel trowel finish



DETAIL A  
 (Highway Standard 420406)



SECTION B-B



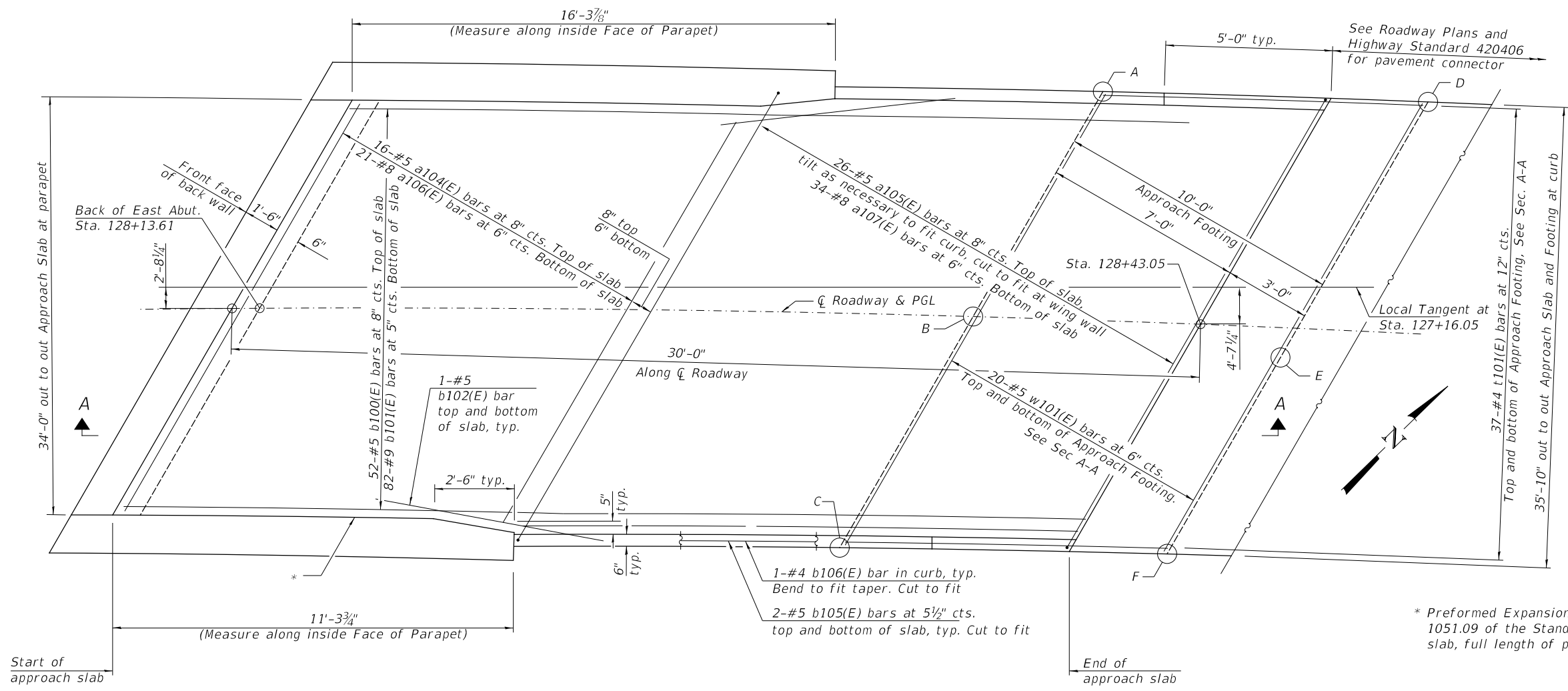
\*\* Cost included with Concrete Superstructure (Approach Slab).

WEST BRIDGE APPROACH  
 SLAB DETAILS  
 F.A.S. 567 (C.H. 20)  
 OVER QUIVER CREEK  
 SECTION 07-00022-01-BR  
 MASON COUNTY  
 STATION 127+16.05  
 STRUCTURE NO. 063-3009

(Sheet 2 of 2)

SHEET NO.	F.A.S. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
15	567	07-00022-01-BR	MASON	75	32
28 SHEETS			S.N. 063-3009 CONTRACT NO. 93753		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT: ZMBM(399)		

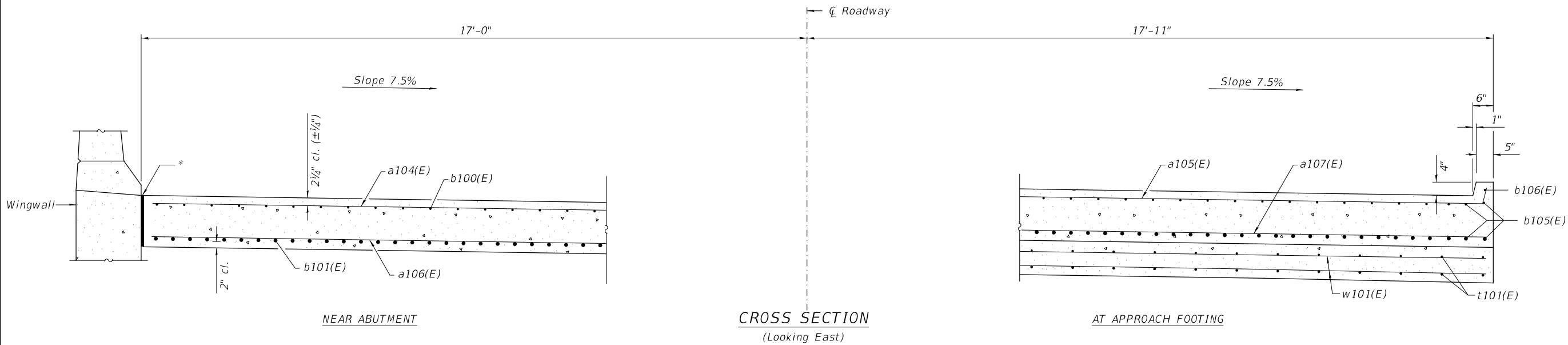




TOP AND BOTTOM ELEVATIONS  
FOR APPROACH FOOTING

POINT	APPROACH	
	TOP	BOTTOM
A	457.59	456.76
B	456.25	455.42
C	454.91	454.07
D	457.59	456.76
E	456.25	455.42
F	454.91	454.07

PLAN



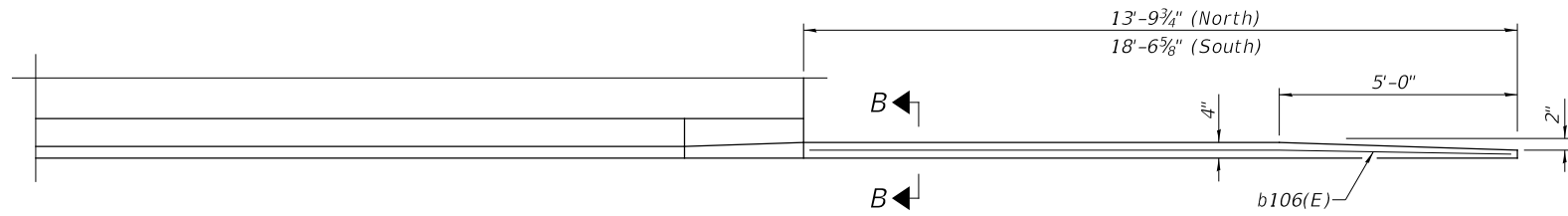
CROSS SECTION  
(Looking East)

EAST BRIDGE APPROACH  
SLAB DETAILS  
F.A.S. 567 (C.H. 20)  
OVER QUIVER CREEK  
SECTION 07-00022-01-BR  
MASON COUNTY  
STATION 127+16.05  
STRUCTURE NO. 063-3009

\* Preformed Expansion Joint Filler according to Article 1051.09 of the Standard Specifications; full depth of slab, full length of parapet. Typ. each parapet.

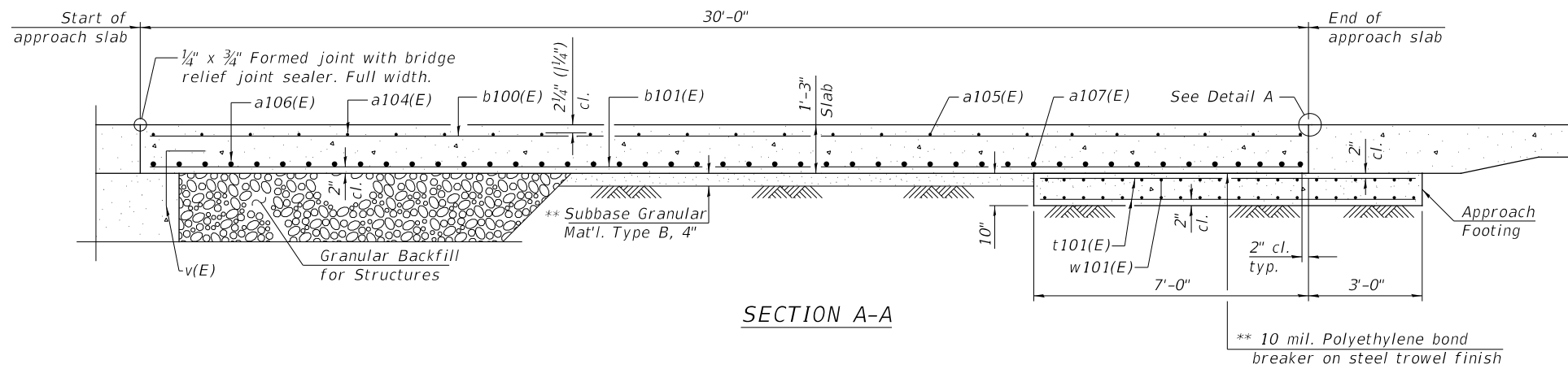
(Sheet 1 of 2)

SHEET NO. 16 28 SHEETS	F.A.S. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	567	07-00022-01-BR	MASON	75	33
S.N. 063-3009			CONTRACT NO. 93753		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT: ZMBM(399)		



Notes:  
 Approach slab shall be paid for as Concrete Superstructure (Approach Slab).  
 Approach footing concrete shall be paid for as Concrete Structures.  
 The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.  
 Cost of excavation for approach footing included with Concrete Structures.  
 For Granular Backfill for Structures and drainage treatment details, see sheet 2 of 28.

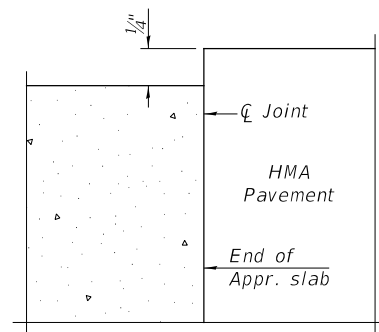
**INSIDE ELEVATION OF PARAPET AND CURB**



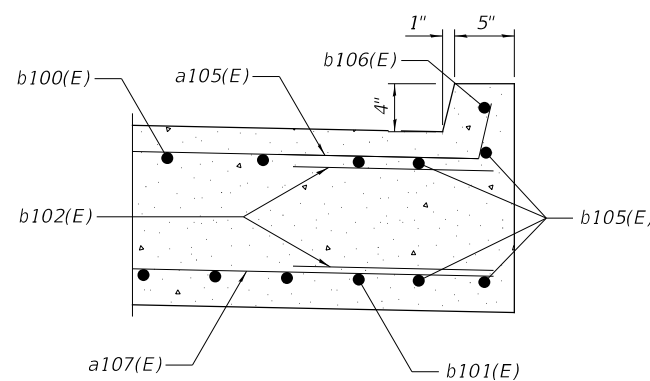
**SECTION A-A**

**EAST APPROACH SLAB  
BILL OF MATERIAL**

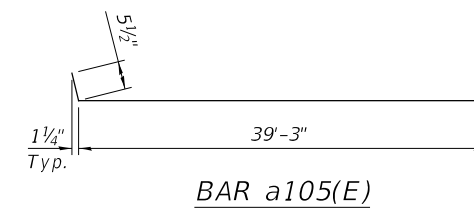
BAR	NO.	SIZE	LENGTH	SHAPE
a104(E)	16	#5	37'-8"	—
a105(E)	26	#5	40'-2"	—
a106(E)	21	#8	37'-8"	—
a107(E)	34	#8	40'-2"	—
b100(E)	52	#5	29'-8"	—
b101(E)	82	#9	29'-8"	—
b102(E)	4	#5	8'-6"	—
b105(E)	4	#5	18'-3"	—
b106(E)	2	#4	18'-0"	—
t101(E)	74	#4	10'-9"	—
w101(E)	40	#5	39'-6"	—
Concrete Superstructure (Approach Slab)				CU YD 48.9
Concrete Structures				CU YD 12.3
Reinforcement Bars, Epoxy Coated				POUND 19,670



**DETAIL A**  
(Highway Standard 420406)



**SECTION B-B**



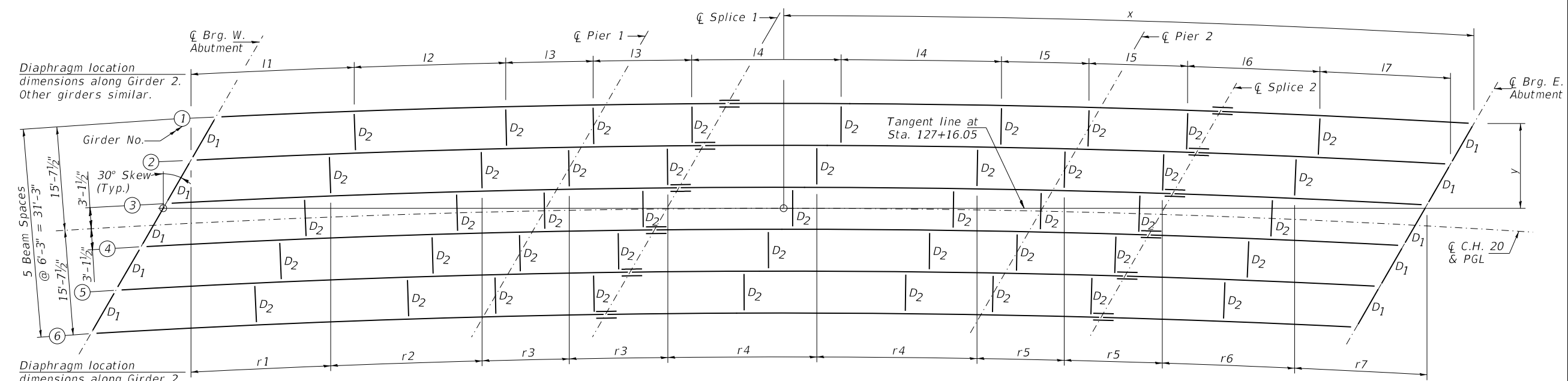
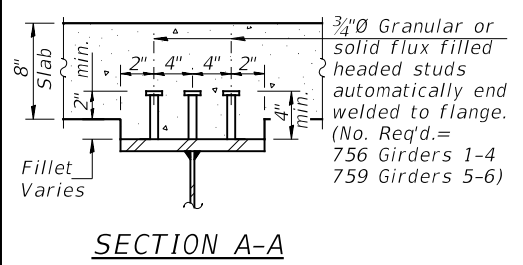
**BAR a105(E)**

\*\* Cost included with Concrete Superstructure (Approach Slab).

**EAST BRIDGE APPROACH  
SLAB DETAILS  
F.A.S. 567 (C.H. 20)  
OVER QUIVER CREEK  
SECTION 07-00022-01-BR  
MASON COUNTY  
STATION 127+16.05  
STRUCTURE NO. 063-3009**

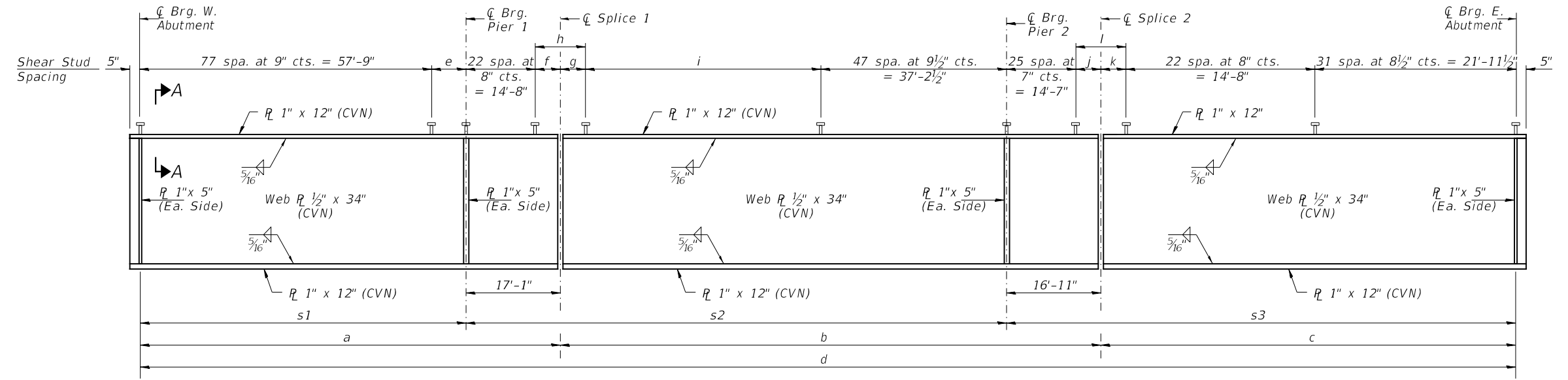
(Sheet 2 of 2)

SHEET NO.	F.A.S. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
17	567	07-00022-01-BR	MASON	75	34
28 SHEETS			S.N. 063-3009 CONTRACT NO. 93753		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT: ZMBM(399)		



FRAMING PLAN

Notes:  
 "CVN" denotes Charpy-V-Notch impact energy requirements, zone 2.  
 See Sheets 19, & 20 of 28 for Structural Steel Details.



GIRDER ELEVATION

GIRDER DIMENSIONS

Girder	a	b	c	d	s1	s2	s3	Radius
1	75'-2 1/2"	73'-7 1/4"	38'-9 5/8"	187'-7 3/8"	58'-1 1/2"	73'-9 1/4"	55'-8 3/8"	1,765.625'
2	75'-3 1/2"	73'-8 1/4"	38'-10 1/4"	187'-10"	58'-2 1/2"	73'-10 1/4"	55'-9 1/4"	1,759.375'
3	75'-4 3/8"	73'-9 1/4"	38'-11"	188'-0 5/8"	58'-3 3/8"	73'-11 1/4"	55'-10"	1,753.125'
4	75'-5 1/2"	73'-10 1/4"	38'-11 5/8"	188'-3 3/8"	58'-4 1/2"	74'-0 1/4"	55'-10 3/8"	1,746.875'
5	75'-6 1/2"	73'-11 3/8"	39'-0 1/4"	188'-6 1/8"	58'-5 1/2"	74'-1 3/8"	55'-11 1/4"	1,740.625'
6	75'-7 3/8"	74'-0 1/2"	39'-1"	188'-8 7/8"	58'-6 3/8"	74'-2 1/2"	56'-0"	1,734.375'

GIRDER OFFSETS

Girder	C Brg. W. Abut.		C Brg. Pier 1		C Brg. Splice 1		C Brg. Pier 2		C Brg. Splice 2		C Brg. E. Abut.	
	x	y	x	y	x	y	x	y	x	y	x	y
1	-84'-7 3/8"	13'-7 1/8"	-26'-6 1/4"	15'-5 1/8"	-9'-5 1/4"	15'-7 1/4"	47'-2 7/8"	14'-11 1/8"	64'-1 3/4"	14'-5 1/2"	102'-10 7/8"	12'-7 1/2"
2	-88'-4"	7'-1 1/8"	-30'-2"	9'-1 3/8"	-13'-1"	9'-3 3/8"	43'-8 1/8"	8'-10"	60'-7"	8'-4"	99'-4 7/8"	6'-6 3/4"
3	-92'-0 3/4"	0'-8 1/2"	-33'-9 3/4"	2'-9 5/8"	-16'-8 3/4"	3'-0 1/2"	40'-1 3/8"	2'-8"	57'-0 3/8"	2'-2 3/8"	95'-10 7/8"	0'-6"
4	-95'-9 1/2"	-5'-9"	-37'-5 5/8"	-3'-6 3/8"	-20'-4 5/8"	-3'-2 7/8"	36'-6 3/8"	-3'-6 1/8"	53'-5 3/8"	-3'-11 3/8"	92'-4 3/4"	-5'-6 7/8"
5	-99'-6 1/4"	-12'-2 5/8"	-41'-1 1/2"	-9'-10 3/8"	-24'-0 1/2"	-9'-6 1/2"	32'-11 1/8"	-9'-8 1/4"	49'-10 3/4"	-10'-1 1/8"	88'-10 3/4"	-11'-7 3/4"
6	-103'-3 1/8"	-18'-8 3/8"	-44'-9 3/8"	-16'-2 1/2"	-27'-8 1/2"	-15'-10 1/8"	29'-5"	-15'-10 1/2"	46'-3 3/8"	-16'-2 7/8"	85'-4 1/2"	-17'-8 3/4"

DIAPHRAGM LOCATION DIMENSIONS

Girder	l1	l2	l3	l4	l5	l6	l7	r1	r2	r3	r4	r5	r6	r7
1	-	-	-	-	-	-	-	20'-7 1/8"	22'-7 3/8"	13'-0 9/16"	23'-11 1/8"	13'-0 9/16"	21'-4 3/4"	22'-11 5/8"
2	24'-6 3/8"	22'-6 3/8"	13'-0"	23'-10 1/16"	13'-0"	21'-3 3/8"	19'-9"	20'-7 1/2"	22'-7 3/4"	13'-0 9/16"	23'-11 5/8"	13'-0 9/16"	21'-5 1/8"	23'-0 1/8"
3	24'-7 1/8"	22'-6 3/8"	13'-0"	23'-10 9/16"	13'-0"	21'-4 1/4"	19'-9 1/4"	20'-7 7/8"	22'-8 1/4"	13'-0 9/16"	24'-0 1/8"	13'-0 9/16"	21'-5 1/2"	23'-0 1/2"
4	24'-7 3/4"	22'-7 3/8"	13'-0"	23'-11 1/8"	13'-0"	21'-4 1/2"	19'-9 1/2"	20'-8 1/4"	22'-8 7/8"	13'-0 9/16"	24'-0 5/8"	13'-0 9/16"	21'-5 7/8"	23'-0 7/8"
5	24'-8 3/8"	22'-7 3/8"	13'-0"	23'-11 5/8"	13'-0"	21'-4 3/8"	19'-9 3/4"	20'-8 3/8"	22'-9 3/8"	13'-0 9/16"	24'-1 1/16"	13'-0 9/16"	21'-6 1/8"	23'-1 3/8"
6	24'-9"	22'-8 3/8"	13'-0"	24'-0 1/8"	13'-0"	21'-5 1/4"	19'-10"	-	-	-	-	-	-	-

SHEAR STUD DIMENSIONS

Girder	e	f	g	h	i	j	k	l
1	4 1/2"	2'-5"	2'-5 3/4"	4'-10 3/4"	24 spa. @ 8 1/2" = 17'-0"	2'-4"	2'-2 1/8"	4'-6 1/8"
2	5 1/2"	2'-5"	2'-6 3/4"	4'-11 3/4"	24 spa. @ 8 1/2" = 17'-0"	2'-4"	2'-2 3/4"	4'-6 3/4"
3	6 3/8"	2'-5"	2'-7 3/4"	5'-0 3/4"	24 spa. @ 8 1/2" = 17'-0"	2'-4"	2'-3 1/2"	4'-7 1/2"
4	7 1/2"	2'-5"	2'-8 3/4"	5'-1 3/4"	24 spa. @ 8 1/2" = 17'-0"	2'-4"	2'-4 1/8"	4'-8 1/8"
5	8 1/2"	2'-5"	2'-1 3/8"	4'-6 3/8"	25 spa. @ 8 1/2" = 17'-8 1/2"	2'-4"	2'-4 3/4"	4'-8 3/4"
6	9 3/8"	2'-5"	2'-2 1/2"	4'-7 1/2"	25 spa. @ 8 1/2" = 17'-8 1/2"	2'-4"	2'-5 1/2"	4'-9 1/2"

SHEET NO. 18	F.A.S. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	567	07-00022-01-BR	MASON	75	35
28 SHEETS	S.N. 063-3009		CONTRACT NO. 93753		
	FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT: ZMBM(399)		

FRAMING PLAN  
 F.A.S. 567 (C.H. 20)  
 OVER QUIVER CREEK  
 SECTION 07-00022-01-BR  
 MASON COUNTY  
 STATION 127+16.05  
 STRUCTURE NO. 063-3009

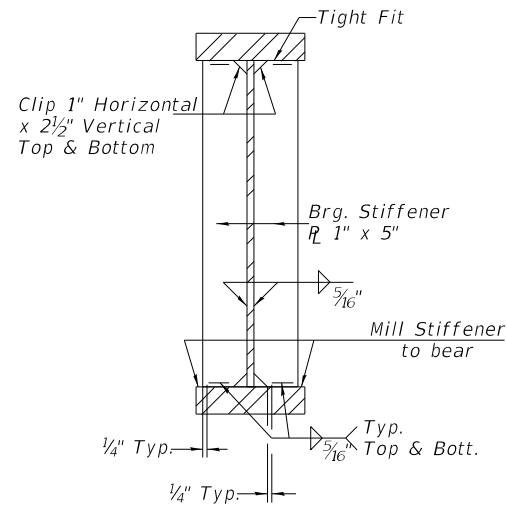
**\*TOP OF WEB ELEVATIONS**

LOCATION	GIRDER 1	GIRDER 2	GIRDER 3	GIRDER 4	GIRDER 5	GIRDER 6
⊘ Brg. at W. Abut.	457.85	457.39	456.92	456.45	455.98	455.51
⊘ Brg. at Pier 1	457.81	457.35	456.88	456.41	455.94	455.47
⊘ Splice 1	457.79	457.33	456.86	456.39	455.92	455.45
⊘ Brg. at Pier 2	457.81	457.35	456.88	456.41	455.94	455.47
⊘ Splice 2	457.81	457.35	456.88	456.41	455.94	455.47
⊘ Brg. at E. Abut.	457.85	457.39	456.92	456.45	455.98	455.51

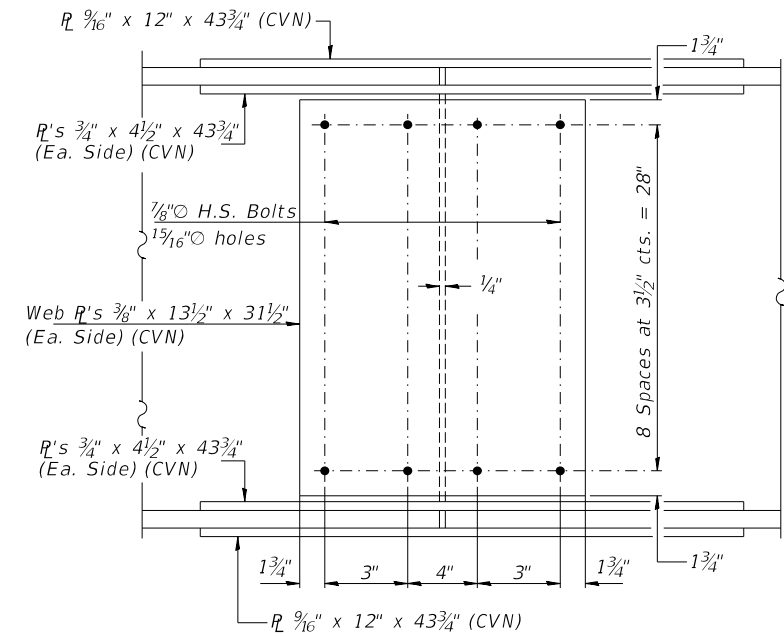
\* For fabrication only

**Notes:**

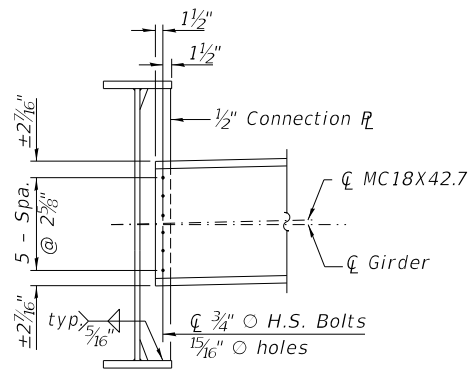
"CVN" denotes Charpy-V-Notch impact energy requirements, Zone 2.  
 All diaphragms between girders shall be installed with erection pins and bolts in accordance with the erection plan approved by the Engineer.  
 Individual diaphragms at supports may be temporarily disconnected to install bearing anchor rods.



**SECTION AT ABUTMENTS & PIERS**

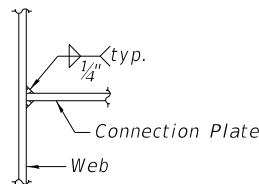


**ELEVATION FIELD SPLICE 1 & 2 DETAILS**  
 (12 req'd)  
 All plates shall be AASHTO M270, Grade 50W (CVN)



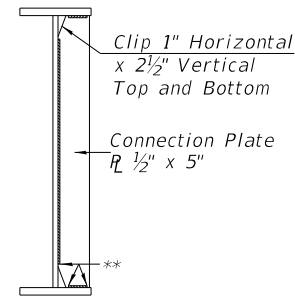
**DIAPHRAGM D2**

Note:  
 Two hardened washers required for each set of oversized holes.  
 Alternate channels of equal depth and larger weight are permitted to facilitate material acquisition.  
 Alternate channels, if utilized, shall be provided at no additional cost to the County.



**WEB WELD DETAIL**

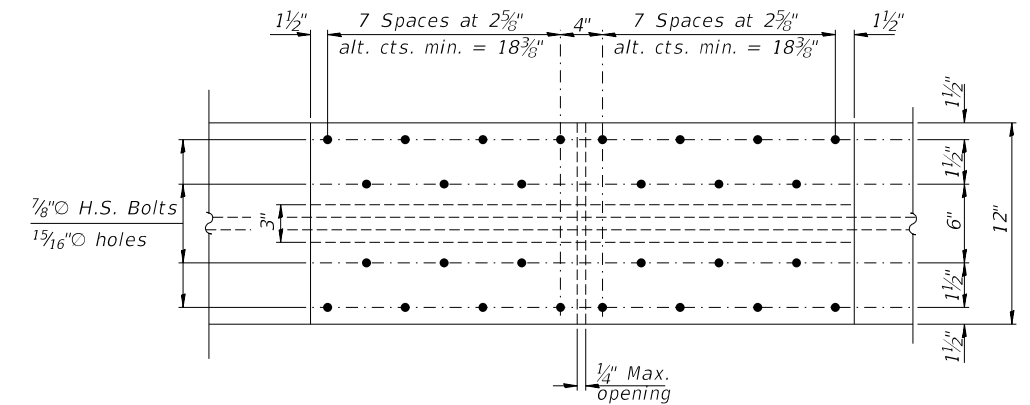
**DIAPHRAGM D2**  
 (45 Req'd)



**CONNECTION PLATE**

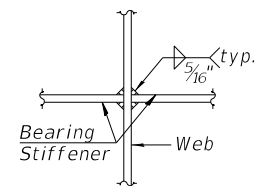
**WELD LIMITS AND CLIP DETAILS**

\*\* Stop welds 1/4" (±1/8") from edges as shown. Typical.



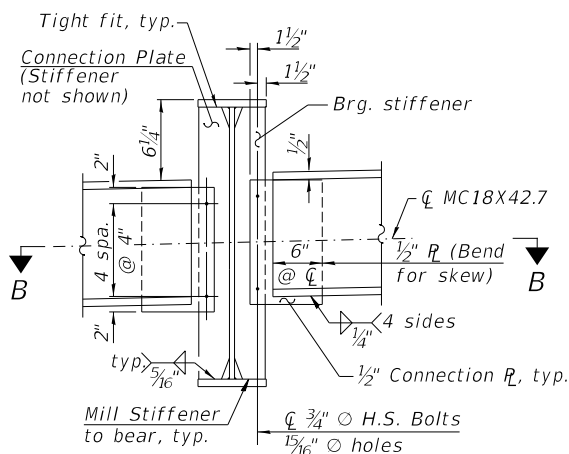
**FLANGE SPLICE PLATE**  
 (Top and Bottom flange splice 1 & 2)

Note:  
 Two hardened washers required for each set of oversized holes.  
 Alternate channels of equal depth and larger weight are permitted to facilitate material acquisition.  
 Alternate channels, if utilized, shall be provided at no additional cost to the County.  
 Clip channel as necessary for ease of installation of diaphragms on skews.

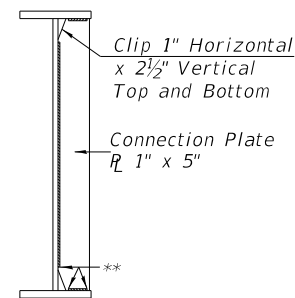


**WEB WELD DETAIL**

**DIAPHRAGM D1**  
 (10 Req'd)



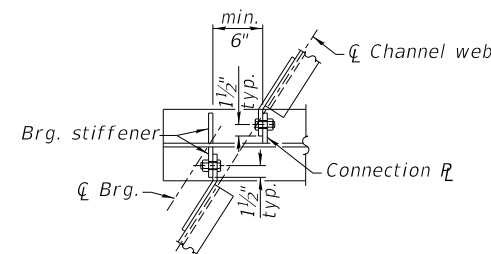
**DIAPHRAGM D1**



**CONNECTION PLATE**

**WELD LIMITS AND CLIP DETAILS**

\*\* Stop welds 1/4" (±1/8") from edges as shown. Typical.



**SECTION B-B**

**STRUCTURAL STEEL DETAILS**  
 F.A.S. 567 (C.H. 20)  
 OVER QUIVER CREEK  
 SECTION 07-00022-01-BR  
 MASON COUNTY  
 STATION 127+16.05  
 STRUCTURE NO. 063-3009

(Sheet 1 of 2)

SHEET NO. 19  28 SHEETS	F.A.S. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	567	07-00022-01-BR	MASON	75	36
S.N. 063-3009			CONTRACT NO. 93753		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT: ZMBM(399)		

INTERIOR GIRDER MOMENT TABLE						
		0.4 Sp. 1	Pier #1	0.5 Sp. 2	Pier #2	0.6 Sp. 3
<i>I<sub>s</sub></i>	(in <sup>4</sup> )	8,990	8,990	8,990	8,990	8,990
<i>I<sub>c</sub>(n)</i>	(in <sup>4</sup> )	22,707	-	22,707	-	22,707
<i>I<sub>c</sub>(3n)</i>	(in <sup>4</sup> )	17,124	-	17,124	-	17,124
<i>I<sub>c</sub>(cr)</i>	(in <sup>4</sup> )	-	11,718	-	11,718	-
<i>S<sub>s</sub></i>	(in <sup>3</sup> )	499	499	499	499	499
<i>S<sub>c</sub>(n)</i>	(in <sup>3</sup> )	694	-	694	-	694
<i>S<sub>c</sub>(3n)</i>	(in <sup>3</sup> )	638	-	638	-	638
<i>S<sub>c</sub>(cr)</i>	(in <sup>3</sup> )	-	558	-	558	-
<i>S<sub>xc</sub></i>	(in <sup>3</sup> )	670	545	668	546	672
<i>DC1</i>	(k/')	0.952	0.952	0.952	0.952	0.952
<i>MDC1</i>	(k)	182	363	195	348	164
<i>DC2</i>	(k/')	0.150	0.150	0.150	0.150	0.150
<i>MDC2</i>	(k)	35	68	37	65	31
<i>DW</i>	(k/')	0.283	0.283	0.283	0.283	0.283
<i>MDW</i>	(k)	65	127	69	122	58
<i>MLL + IM</i>	(k)	644	671	669	652	621
<i>f<sub>l</sub> (Strength I)</i>	(k)	5.75	1.58	6.56	1.52	5.12
<i>M<sub>u</sub> + 1/3 f<sub>l</sub> S<sub>xc</sub></i>	(k)	1,603	1,927	1,686	1,863	1,513
<i>∅fM<sub>n</sub></i>	(k)	-	-	-	-	-
<i>f<sub>s</sub> DC1</i>	(ksi)	4.38	8.73	4.69	8.37	3.94
<i>f<sub>s</sub> DC2</i>	(ksi)	0.66	1.46	0.70	1.40	0.58
<i>f<sub>s</sub> DW</i>	(ksi)	1.22	2.73	1.30	2.62	1.09
<i>f<sub>s</sub> (LL+IM)</i>	(ksi)	11.14	14.43	11.57	14.02	10.74
<i>f<sub>l</sub> (Service II)</i>	(ksi)	5.75	1.58	6.56	1.52	5.12
<i>f<sub>s</sub> + f<sub>l</sub>/2 (Service II)</i>	(ksi)	23.61	32.47	25.00	31.38	22.14
<i>0.95R<sub>h</sub>F<sub>yf</sub></i>	(ksi)	47.50	47.50	47.50	47.50	47.50
<i>f<sub>s</sub> + f<sub>l</sub>/3 (Total)(Strength I)</i>	(ksi)	29.53	42.62	31.11	41.19	27.79
<i>∅fF<sub>n</sub></i>	(ksi)	50.00	50.00	50.00	50.00	50.00
<i>V<sub>f</sub></i>	(k)	25.2	28.9	23.7	26.7	24.6

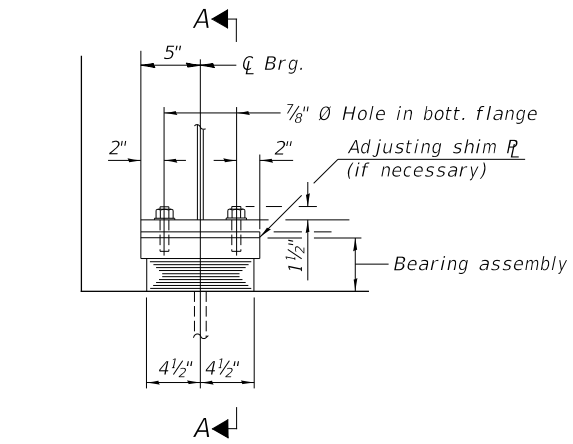
INTERIOR BEAM REACTION TABLE					
		WEST ABUTMENT	PIER 1	PIER 2	EAST ABUTMENT
<i>RDC1</i>	(k)	18.0	59.3	58.2	17.0
<i>RDC2</i>	(k)	3.3	11.2	10.9	3.0
<i>RDW</i>	(k)	6.2	21.1	20.6	5.7
<i>RLL + RIM</i>	(k)	66.8	107.4	106.7	65.5
<i>R(Total)</i>	(k)	94.3	199.0	196.4	91.2

- I<sub>s</sub>, S<sub>s</sub>*: Non-composite moment of inertia and section modulus of the steel section used for computing *f<sub>s</sub>*(Total-Strength I, and Service II) due to non-composite dead loads (in.<sup>4</sup> and in.<sup>3</sup>).
- I<sub>c</sub>(n), S<sub>c</sub>(n)*: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing *f<sub>s</sub>*(Total-Strength I, and Service II) in uncracked sections due to short term composite live loads (in.<sup>4</sup> and in.<sup>3</sup>).
- I<sub>c</sub>(3n), S<sub>c</sub>(3n)*: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing *f<sub>s</sub>*(Total-Strength I, and Service II) in uncracked sections due to long-term composite (superimposed) dead loads (in.<sup>4</sup> and in.<sup>3</sup>).
- I<sub>c</sub>(cr), S<sub>c</sub>(cr)*: Composite moment of inertia and section modulus of the steel and longitudinal deck reinforcement, used for computing *f<sub>s</sub>*(Total-Strength I and Service II) in cracked sections, due to both short-term composite live loads and long-term composite (superimposed) dead loads (in.<sup>4</sup> and in.<sup>3</sup>).
- S<sub>xc</sub>*: Section modulus about the major axis of section to the controlling flange, tension or compression, taken as yield moment with respect to the controlling flange over the yield strength of the controlling flange (in.<sup>3</sup>).
- DC1*: Un-factored non-composite dead load (kips/ft.).
- MDC1*: Un-factored moment due to non-composite dead load (kip-ft.).
- DC2*: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).
- MDC2*: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).
- DW*: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).
- MDW*: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).
- M<sub>l</sub> + IM*: Un-factored live load moment plus dynamic load allowance (impact)(kip-ft.).
- M<sub>u</sub> (Strength I)*: Factored design moment (kip-ft.).  
1.25 (MDC1+ MDC2) + 1.5 MDW + 1.75 M<sub>l</sub> + IM
- f<sub>l</sub>*: Factored calculated normal stress at edge of flange for controlling flange plate due to lateral bending, Strength I or Service II as applicable (kip-ft.).
- ∅f M<sub>n</sub>*: Compact composite positive moment capacity computed according to Article 6.10.7.1 or non-slender negative moment capacity according to Article A6.1.1 or A6.1.2 (kip-ft.).
- f<sub>s</sub> DC1*: Un-factored stress at edge of flange for controlling steel flange due to vertical non-composite dead loads as calculated below (ksi).  
MDC1 / S<sub>nc</sub>
- f<sub>s</sub> DC2*: Un-factored stress at edge of flange for controlling steel flange due to vertical composite dead loads as calculated below (ksi).  
MDC2 / S<sub>c</sub>(3n) or MDC2 / S<sub>c</sub>(cr) as applicable.
- f<sub>s</sub> DW*: Un-factored stress at edge of flange for controlling steel flange due to vertical composite future wearing surface loads as calculated below (ksi).  
MDW / S<sub>c</sub>(3n) or MDW / S<sub>c</sub>(cr) as applicable.
- f<sub>s</sub> (L+IM)*: Un-factored stress at edge of flange for controlling steel flange due to vertical composite live plus impact loads as calculated below (ksi).  
M<sub>l</sub> + IM / S<sub>c</sub>(n) or M<sub>l</sub> + IM / S<sub>c</sub>(cr) as applicable.
- f<sub>s</sub> + f<sub>l</sub>/2 (Service II)*: Sum of stresses as computed below (ksi).  
f<sub>s</sub>DC1 + f<sub>s</sub>DC2 + f<sub>s</sub>DW + 1.3 f<sub>s</sub>(L+IM) + f<sub>l</sub>/2
- 0.95R<sub>h</sub>F<sub>yf</sub>*: Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).
- f<sub>s</sub> + f<sub>l</sub>/3 (Total)(Strength I)*: Sum of stresses as computed below on non-compact section (ksi).  
1.25 (f<sub>s</sub>DC1 + f<sub>s</sub>DC2) + 1.5 f<sub>s</sub>DW + 1.75 f<sub>s</sub>(L+IM) + f<sub>l</sub>/3
- ∅f F<sub>n</sub>*: Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7 or 6.10.8 (ksi).
- V<sub>f</sub>*: Maximum factored shear range in span computed according to Article 6.10.10.
- Note:  
M<sub>l</sub> and R<sub>l</sub> include the effects of centrifugal force and superelevation.

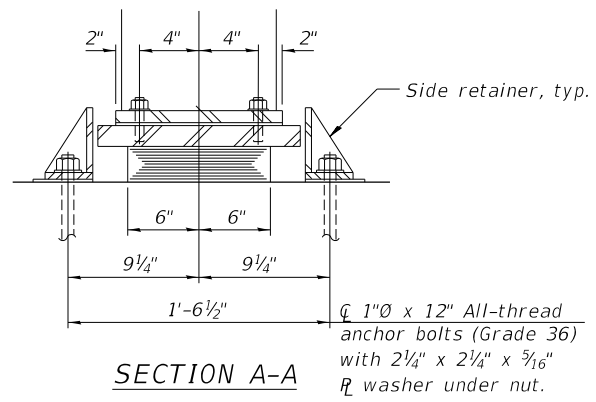
**STRUCTURAL STEEL DETAILS**  
**F.A.S. 567 (C.H. 20)**  
**OVER QUIVER CREEK**  
**SECTION 07-00022-01-BR**  
**MASON COUNTY**  
**STATION 127+16.05**  
**STRUCTURE NO. 063-3009**

(Sheet 2 of 2)

SHEET NO. 20	F.A.S. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	567	07-00022-01-BR	MASON	75	37
28 SHEETS	S.N. 063-3009		CONTRACT NO. 93753		
FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT: ZMBM(399)			

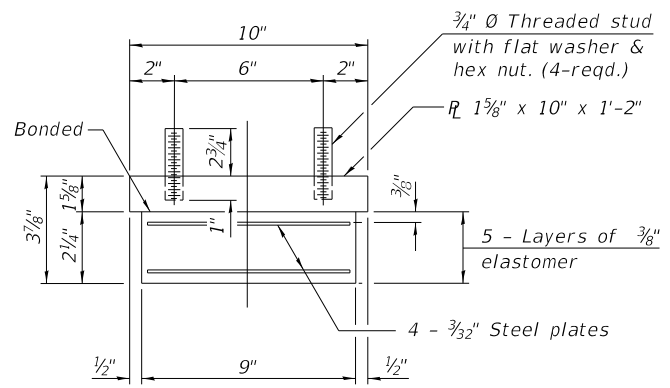


ELEVATION AT ABUTMENTS



SECTION A-A

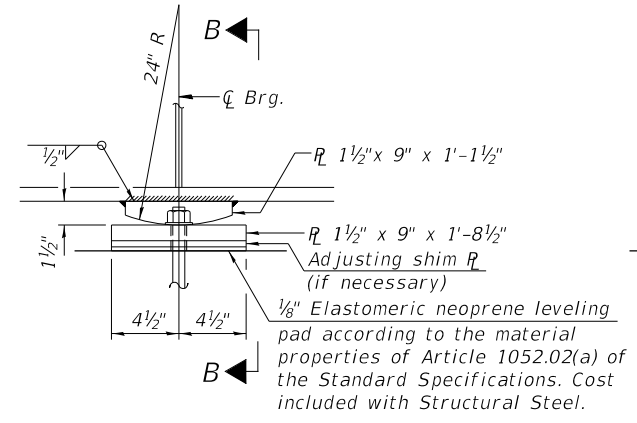
TYPE I ELASTOMERIC EXP. BRG.



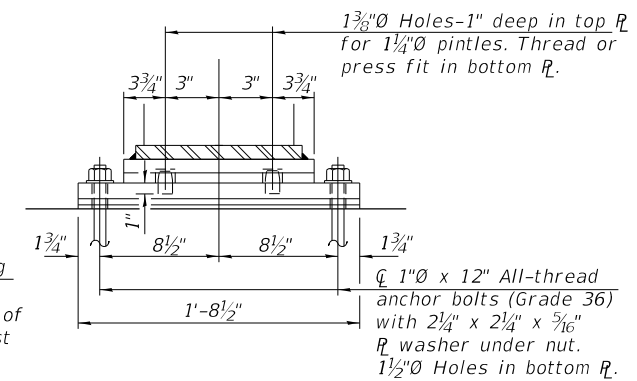
BEARING ASSEMBLY

Note:  
Shim plates shall not be placed under bearing assembly.

Notes:  
Side retainers and stainless steel plates shall be included in the cost of Elastomeric Bearing Assembly, Type I.  
Anchor bolts and side retainers at all supports shall be installed as each member is erected unless an equivalent temporary means of lateral restraint is used.  
The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M270 Gr 50W.  
Two 1/8" adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

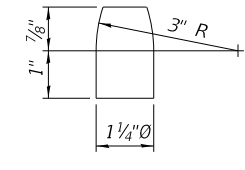


ELEVATION AT PIERS

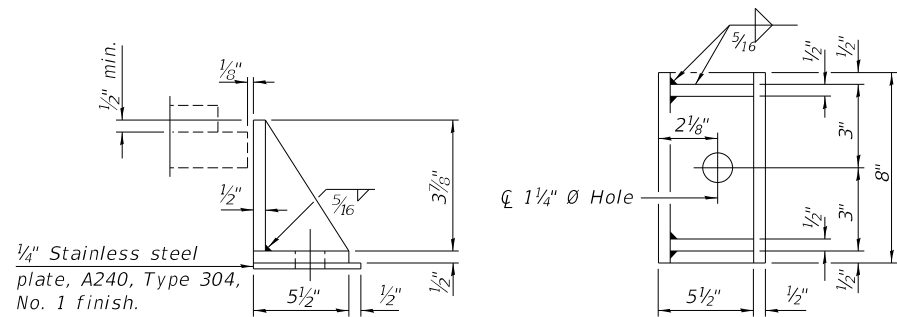


SECTION B-B

FIXED BEARING



PINTLE  
(Fy = 50 ksi)



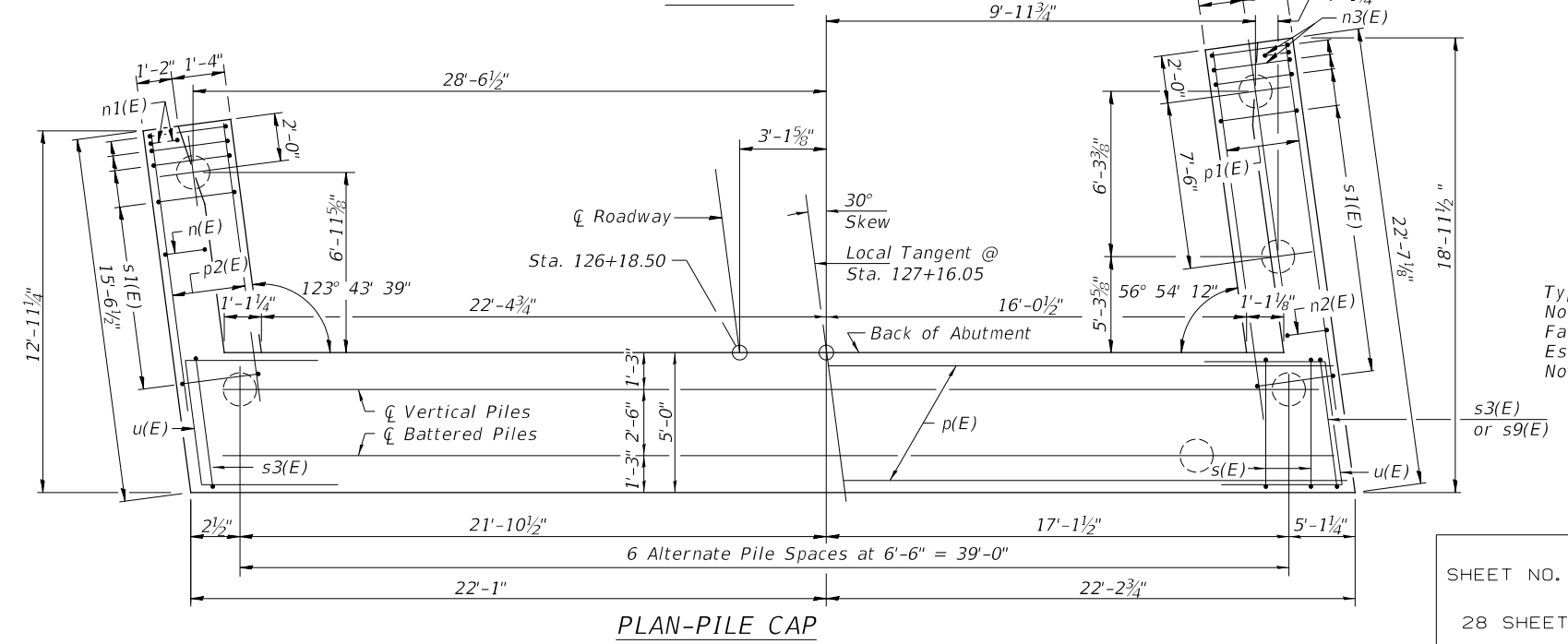
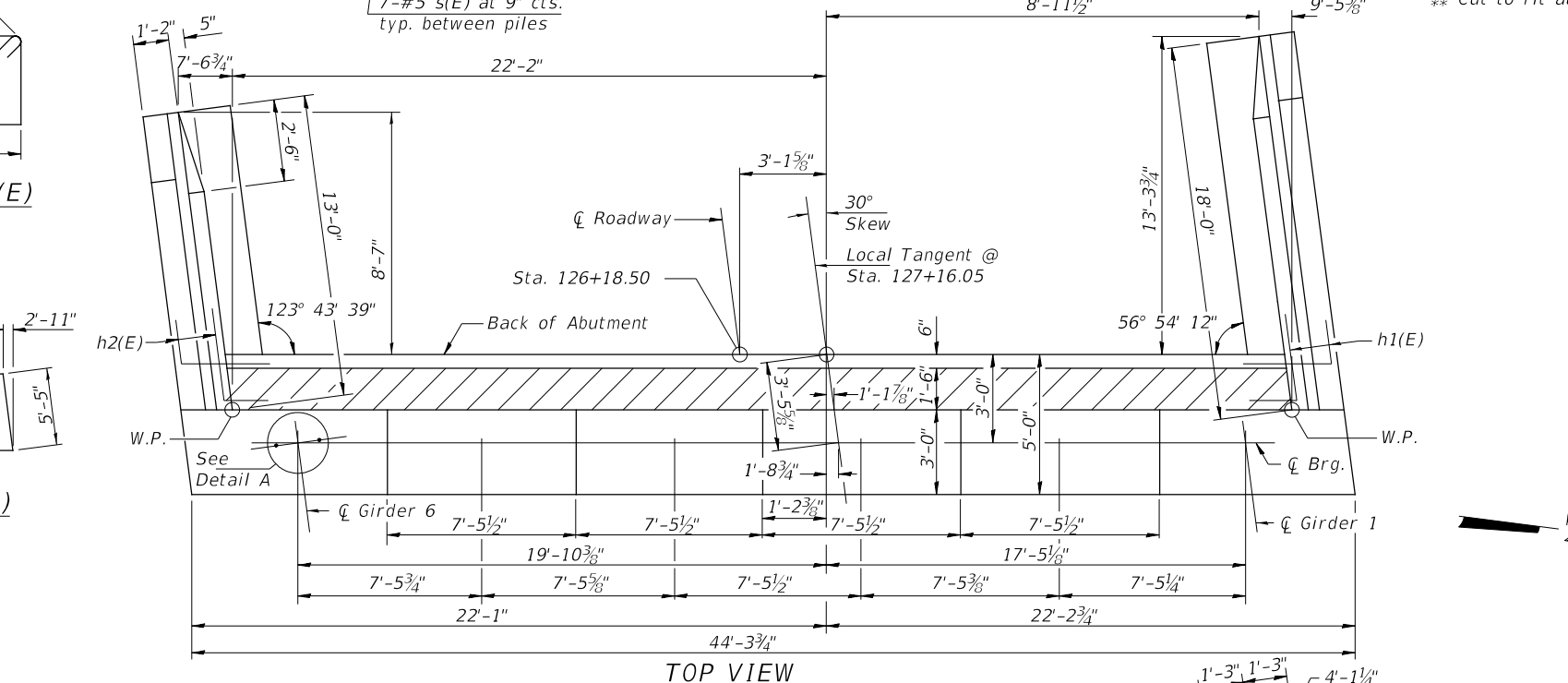
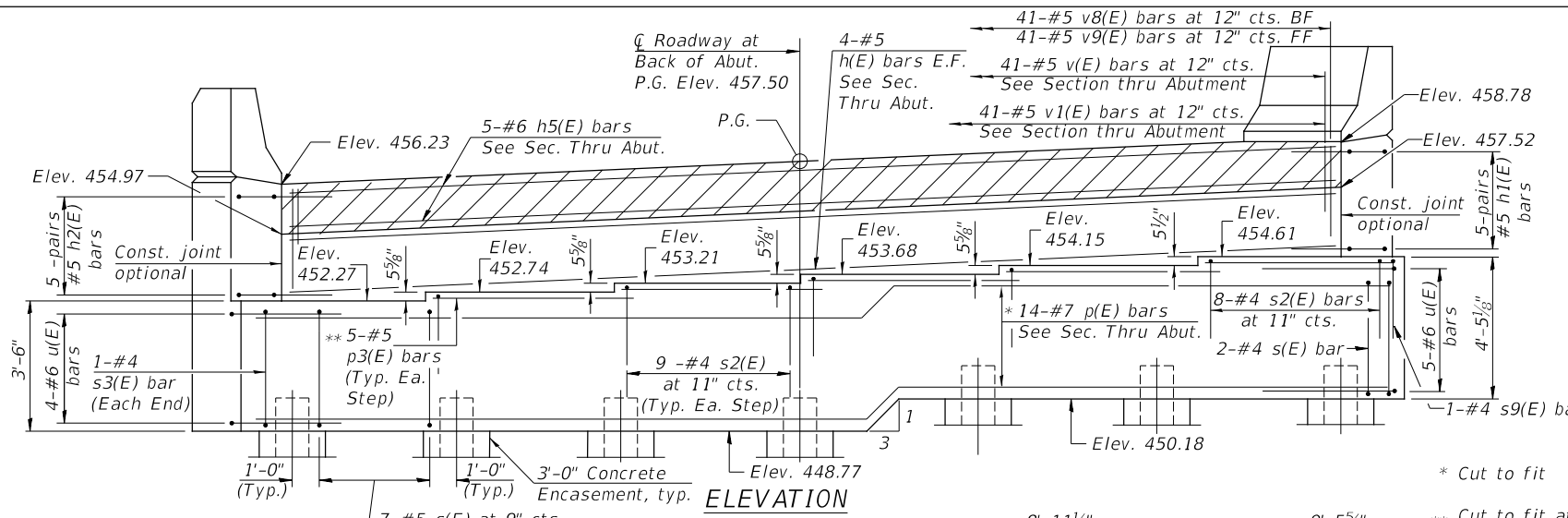
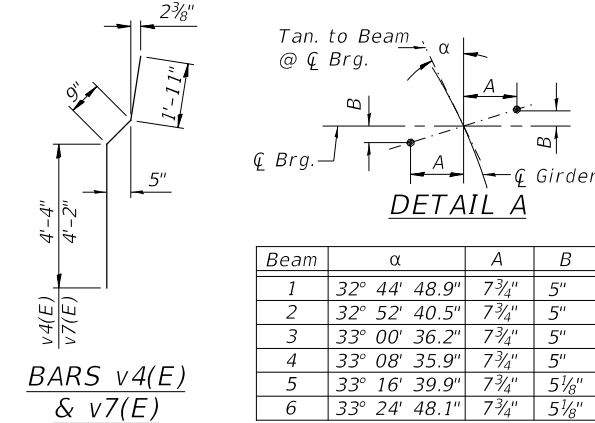
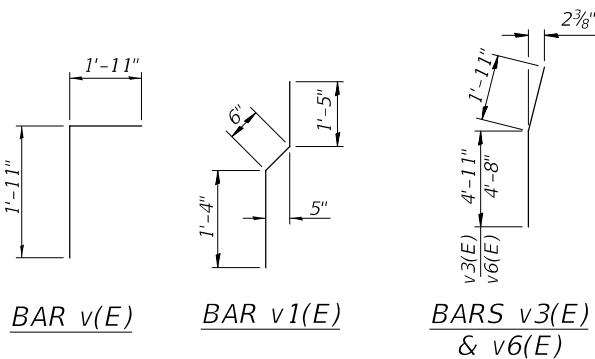
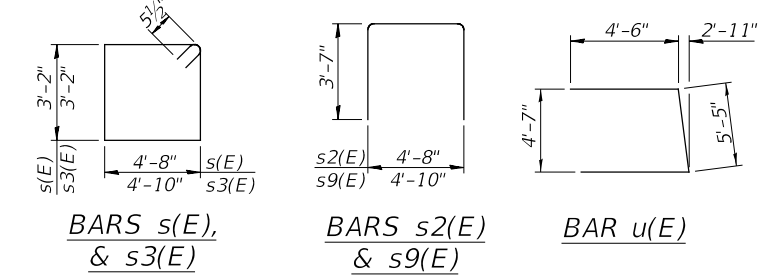
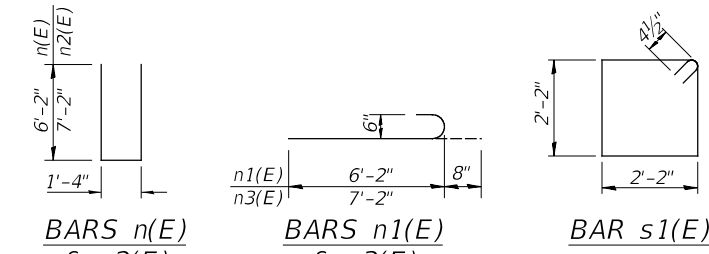
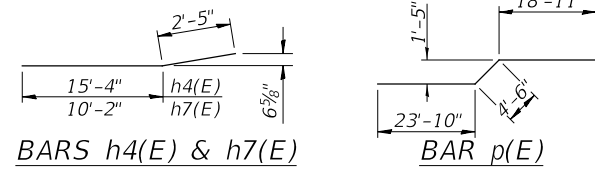
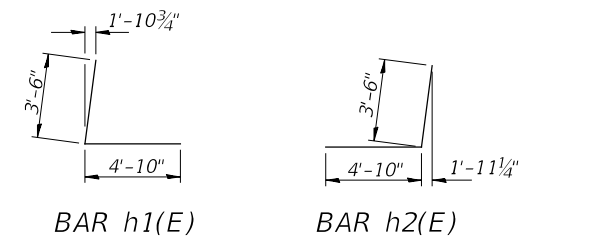
SIDE RETAINER  
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Elastomeric Bearing Assembly Type I	EACH	12
Anchor Bolts, 1"	EACH	48

BEARING DETAILS  
F.A.S. 567 (C.H. 20)  
OVER QUIVER CREEK  
SECTION 07-00022-01-BR  
MASON COUNTY  
STATION 127+16.05  
STRUCTURE NO. 063-3009

SHEET NO. 21	F.A.S. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	567	07-00022-01-BR	MASON	75	38
28 SHEETS	S.N. 063-3009		CONTRACT NO. 93753		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT: ZMBM(399)		



**Notes:**  
 Pour steps monolithically with cap.  
 All edges shall have standard 3/4" chamfer.  
 Space Reinforcement in cap to miss anchor bolts.  
 EF: Each Face  
 BF: Back Face  
 FF: Front Face  
 For details of piles and Concrete Encasement, see sheet 28 of 28.  
 Piles shall be driven through 24" diameter precored holes extending to elevation 441.0 according to Article 512.09(c) of the Standard Specifications. Cost included in Driving Piles.

**WEST ABUTMENT  
 BILL OF MATERIAL**

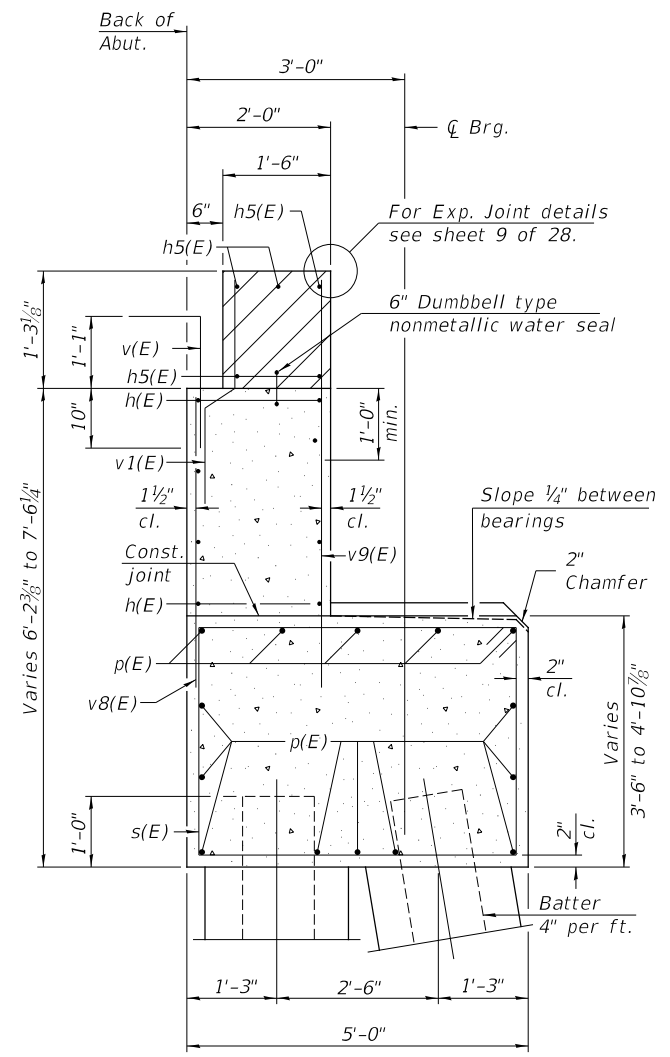
BAR	NO.	SIZE	LENGTH	SHAPE
h(E)	8	#5	40'-4"	—
h1(E)	10	#5	8'-4"	└
h2(E)	10	#5	8'-4"	└
h3(E)	12	#4	18'-6"	—
h4(E)	8	#4	17'-9"	—
h5(E)	5	#6	40'-4"	—
h6(E)	9	#4	11'-8"	—
h7(E)	7	#4	12'-7"	—
h8(E)	2	#4	12'-3"	—
n(E)	11	#6	13'-8"	└
n1(E)	6	#6	6'-10"	└
n2(E)	17	#6	15'-8"	└
n3(E)	6	#6	7'-10"	└
p(E)	14	#7	47'-3"	—
p1(E)	6	#7	20'-0"	—
p2(E)	6	#7	15'-0"	—
p3(E)	25	#5	11'-3"	—
s(E)	44	#5	16'-7"	└
s1(E)	29	#4	9'-5"	└
s2(E)	44	#4	11'-10"	└
s3(E)	2	#5	16'-11"	└
s9(E)	1	#4	12'-0"	└
u(E)	9	#6	14'-5"	└
v(E)	41	#5	3'-10"	└
v1(E)	41	#4	3'-3"	└
v2(E)	20	#6	6'-10"	└
v3(E)	3	#6	6'-10"	└
v4(E)	17	#6	7'-0"	└
v5(E)	13	#6	6'-7"	└
v6(E)	3	#6	6'-7"	└
v7(E)	11	#6	6'-10"	└
v8(E)	41	#5	5'-10"	└
v9(E)	41	#5	6'-11"	└
Structure Excavation	CU. YD.		150	
Concrete Structures	CU. YD.		57.4	
Reinforcement Bars, Epoxy Coated	POUND		7,050	
Furnishing Metal Shell Piles 14"x0.312"	FOOT		369	
Driving Piles	FOOT		369	
Test Pile Metal Shells	EACH		1	
Concrete Encasement	CU. YD.		4.3	
Concrete Sealer	SQ. FT.		438	

**PILE DATA**

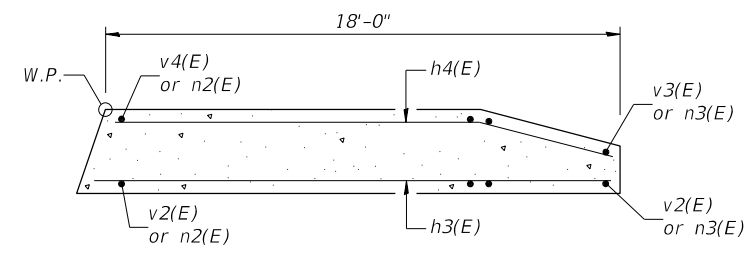
Type: Metal Shell 14" x 0.312"  
 Nominal Required Bearing: 409 kips  
 Factored Resistance Available: 210 kips  
 Est. Length: 41'  
 No. Req'd: 9 + 1 Test Pile

**WEST ABUTMENT  
 F.A.S. 567 (C.H. 20)  
 OVER QUIVER CREEK  
 SECTION 07-00022-01-BR  
 MASON COUNTY  
 STATION 127+16.05  
 STRUCTURE NO. 063-3009**

SHEET NO. 22 28 SHEETS	F.A.S. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	567	07-00022-01-BR	MASON	75	39
S.N. 063-3009			CONTRACT NO. 93753		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT: ZMBM(399)		

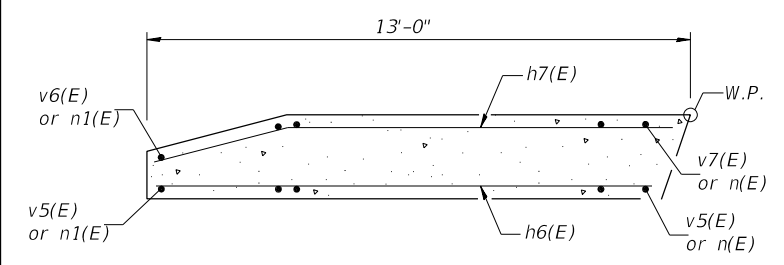


SEC. THRU ABUT.

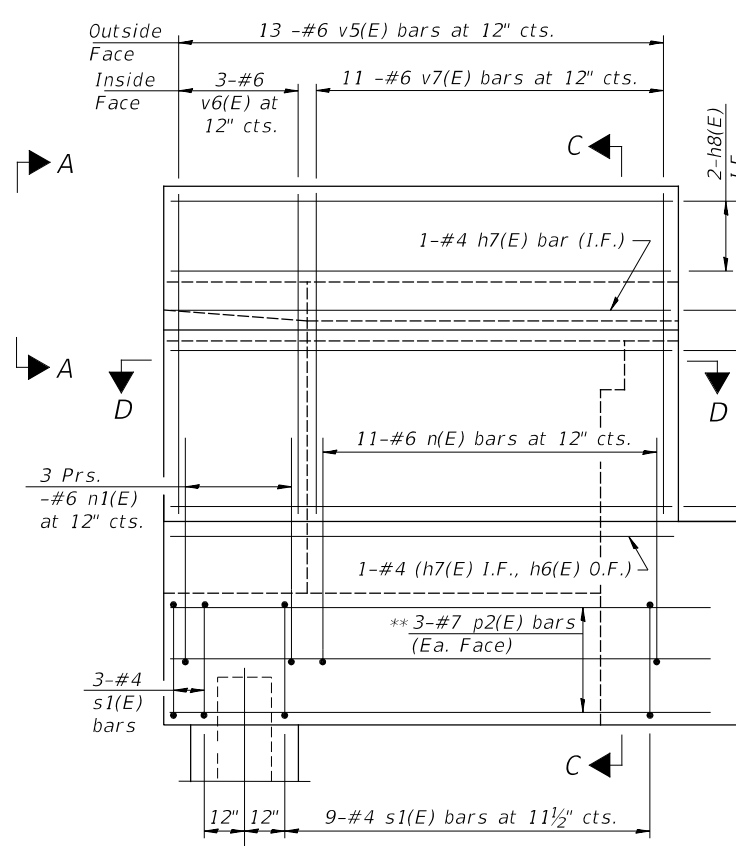


SECTION B-B

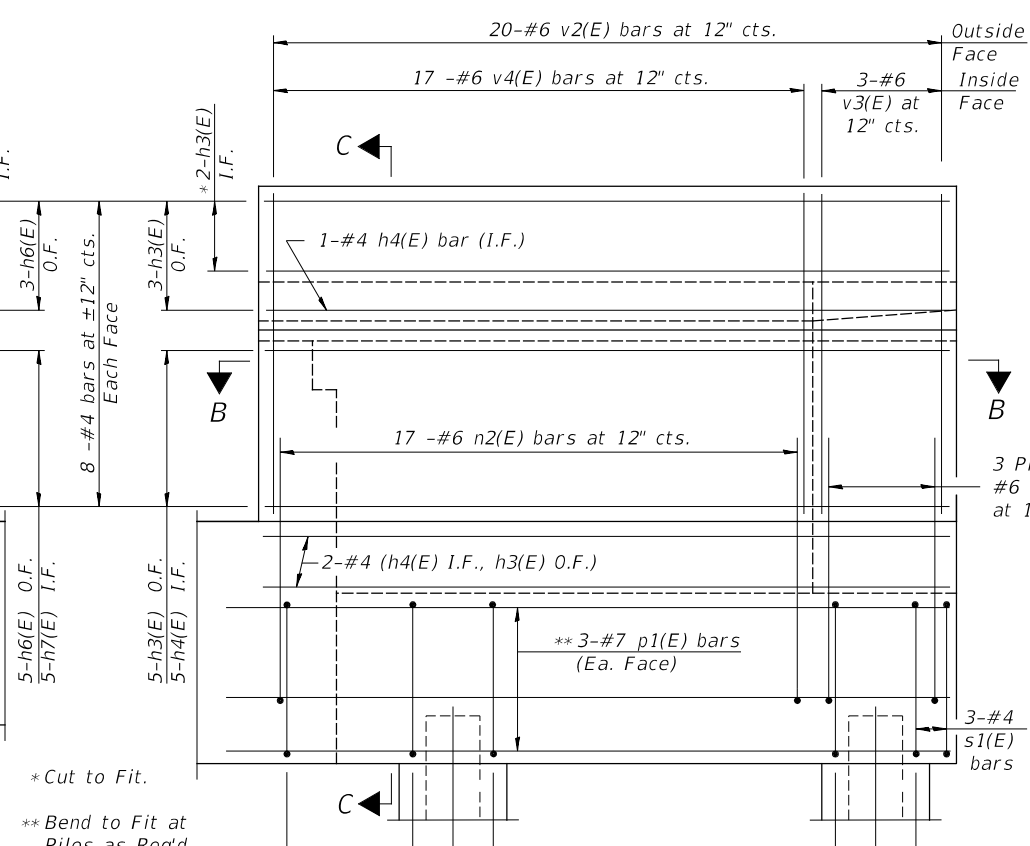
Notes:  
 Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure.  
 Space reinforcement in cap to miss anchor bolts.  
 Pour steps monolithically with cap.  
 Quantity of concrete in end post included with Concrete Superstructure on sheet 12 of 28.  
 For Concrete Encasement details, see sheet 28 of 28.



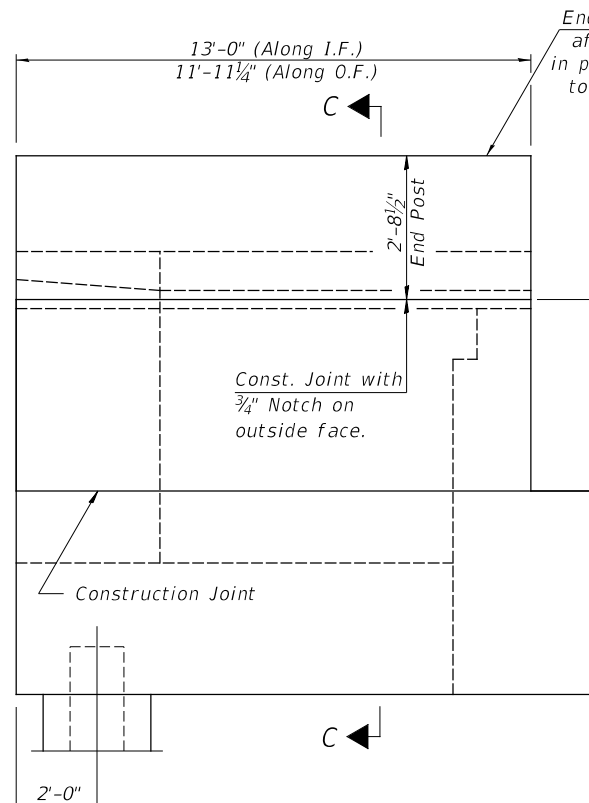
SECTION D-D



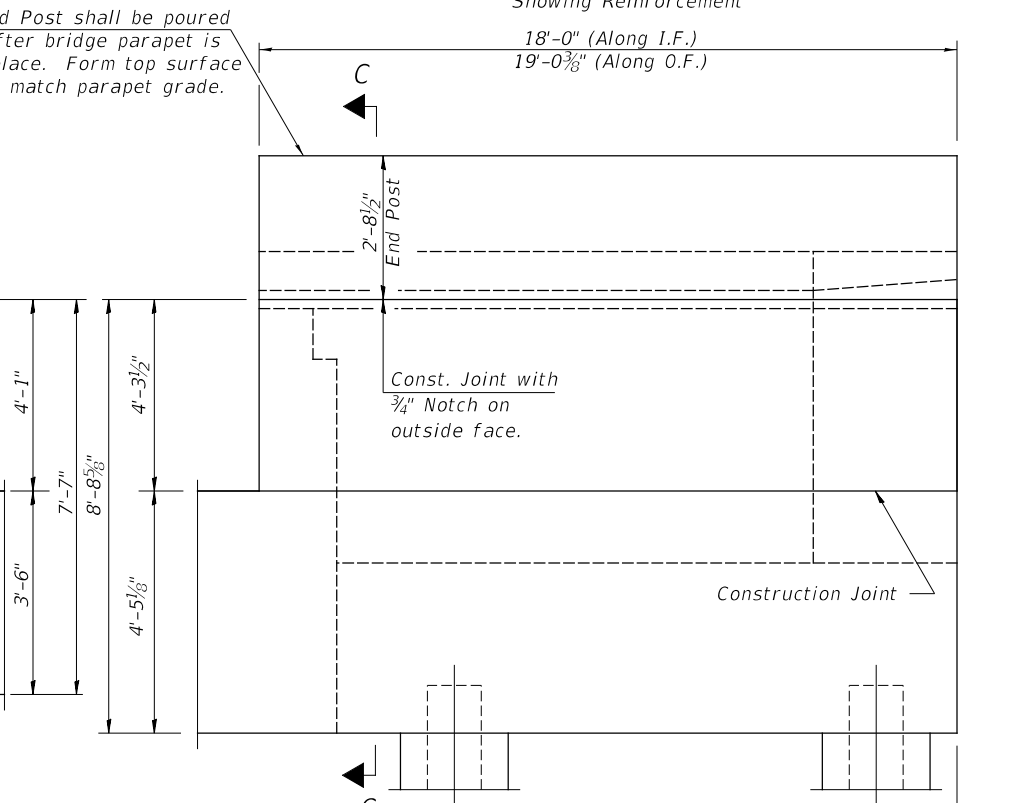
SOUTH WING WALL ELEVATION  
Showing Reinforcement



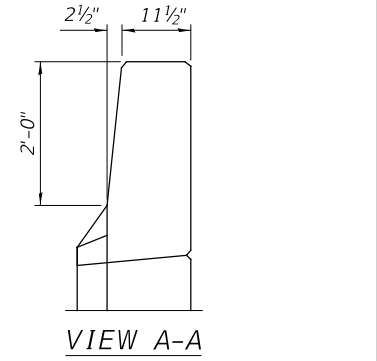
NORTH WING WALL ELEVATION  
Showing Reinforcement



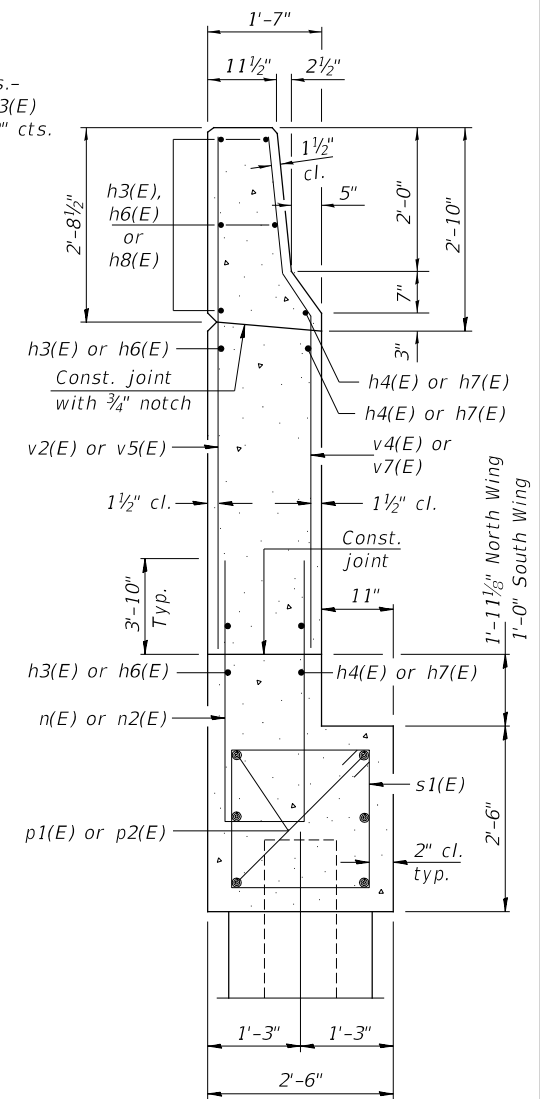
SOUTH WING WALL ELEVATION  
Showing Dimensions



NORTH WING WALL ELEVATION  
Showing Dimensions



VIEW A-A

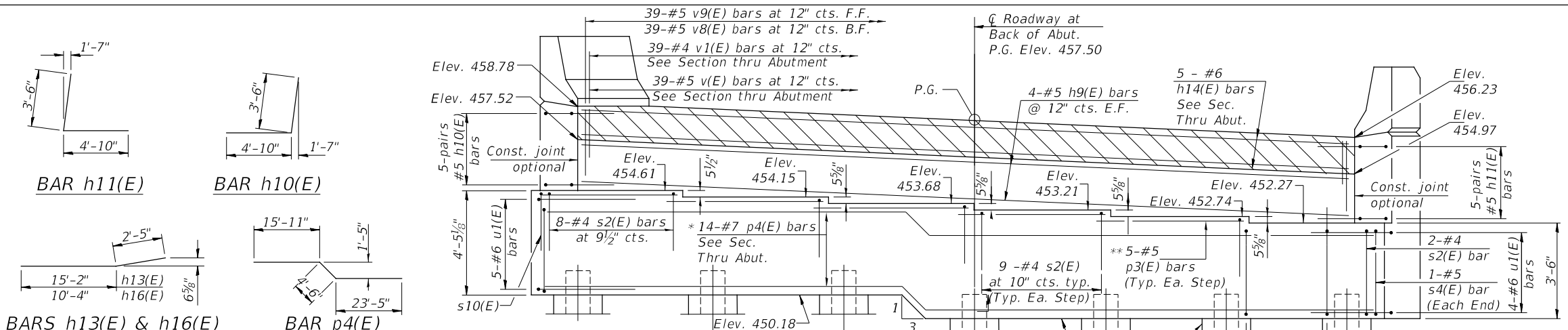


SECTION C-C

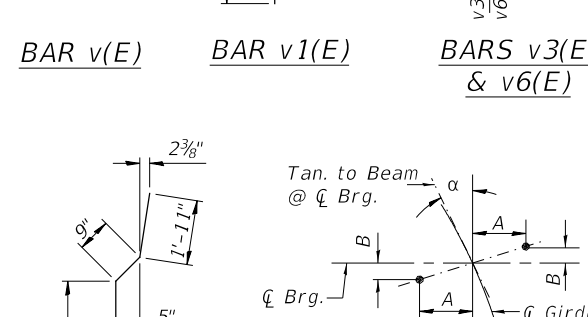
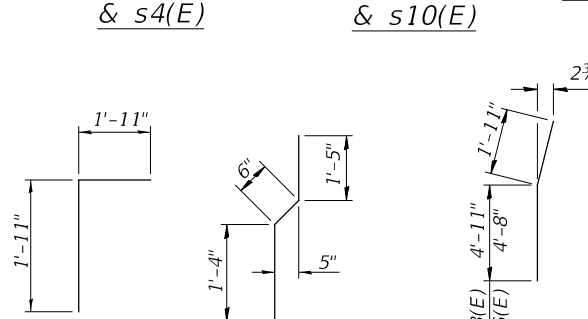
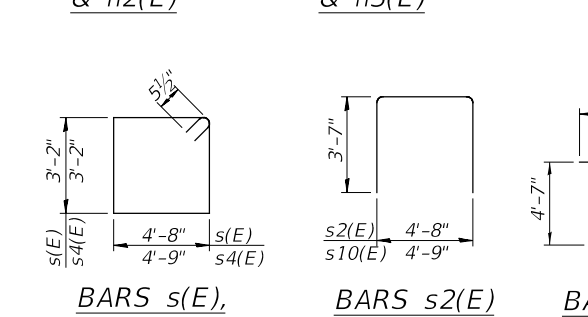
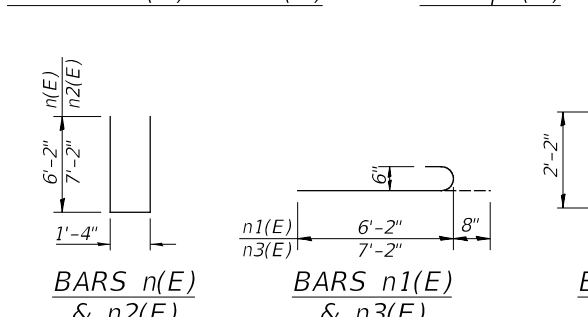
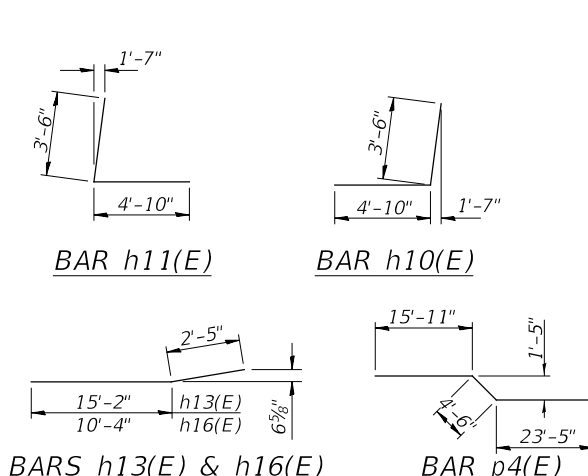
WEST ABUTMENT  
 F.A.S. 567 (C.H. 20)  
 OVER QUIVER CREEK  
 SECTION 07-00022-01-BR  
 MASON COUNTY  
 STATION 127+16.05  
 STRUCTURE NO. 063-3009

SHEET NO. 23 28 SHEETS	F.A.S. ROUTE 567	SECTION 07-00022-01-BR	COUNTY MASON	TOTAL SHEETS 75	SHEET NO. 40
	S.N. 063-3009		CONTRACT NO. 93753		
FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT: ZMBM(399)			



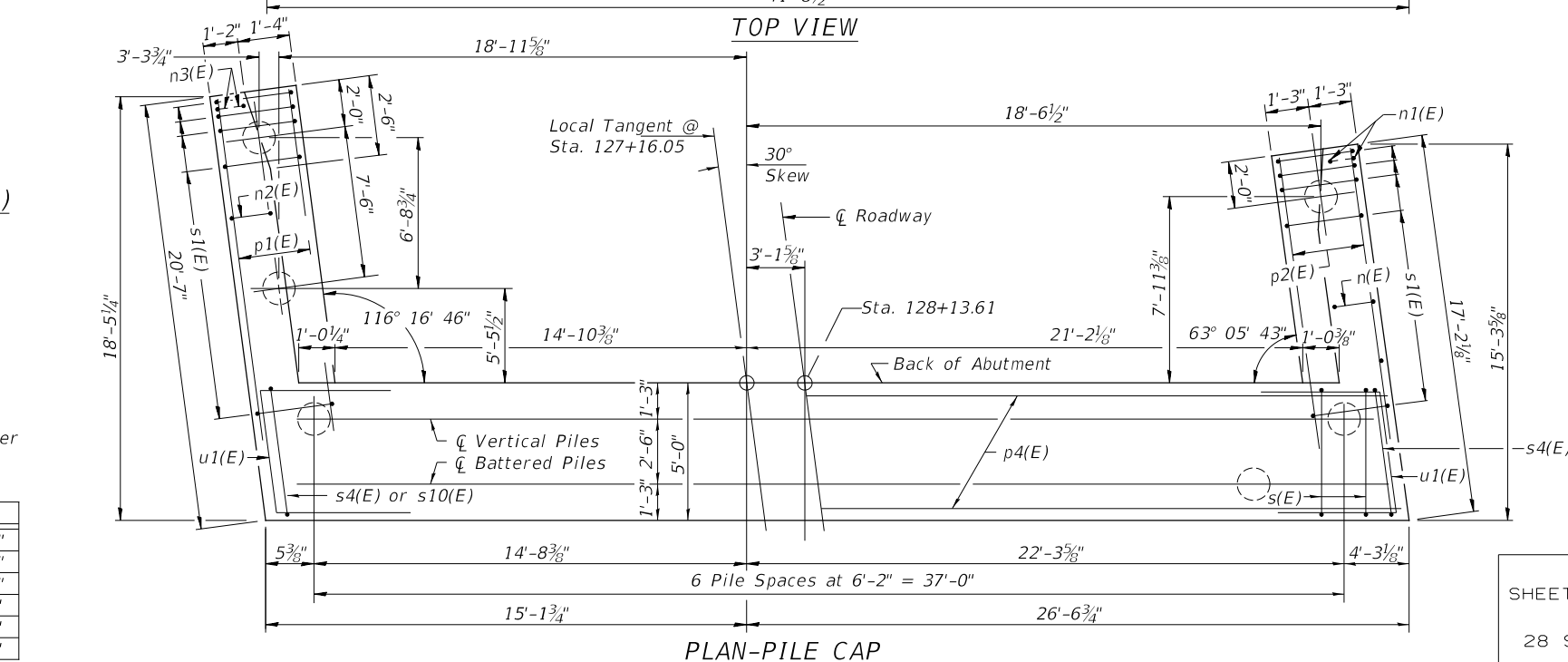
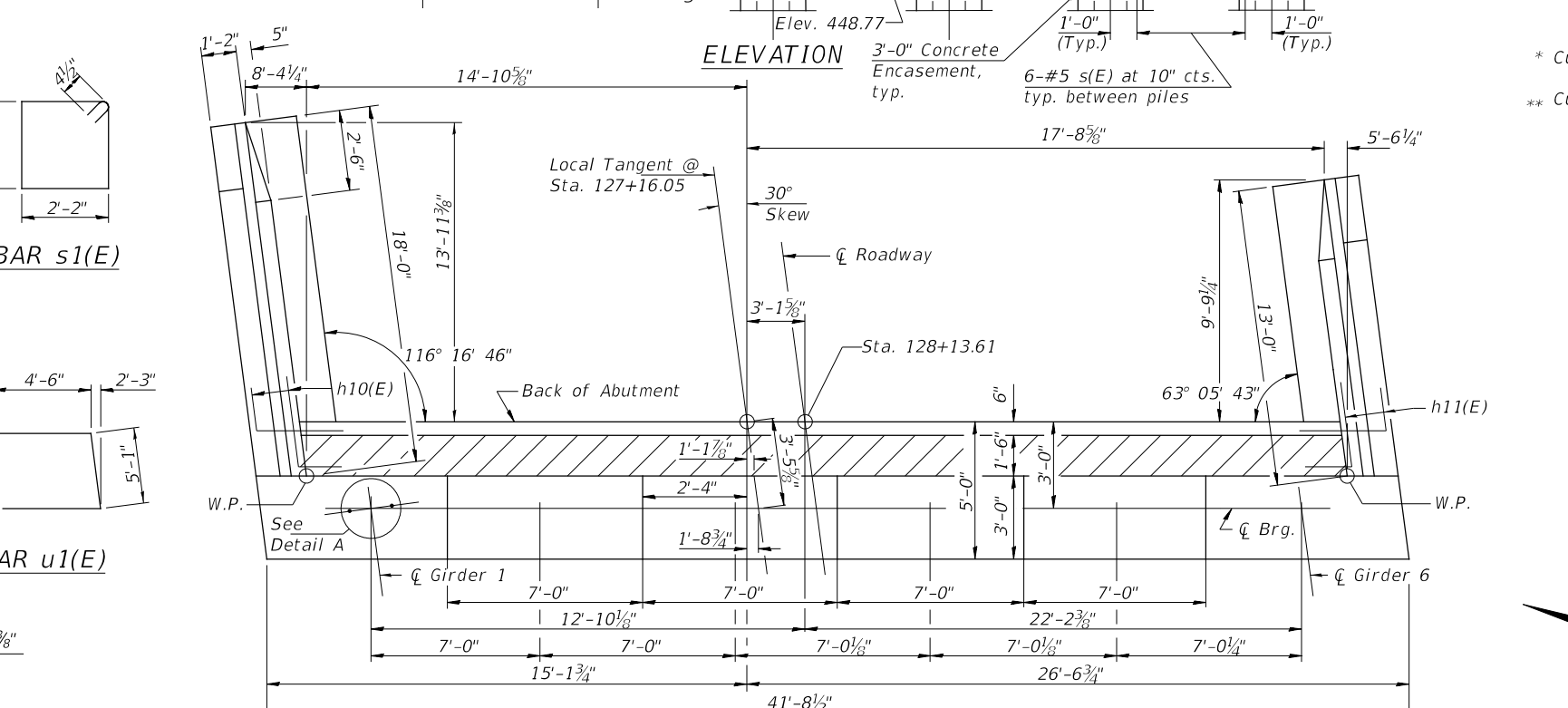


Notes:  
 Pour steps monolithically with cap.  
 All edges shall have standard 3/4\"/>



Beam	α	A	B
1	26° 39' 31.8\"/>		

4453b024.dgn



\* Cut to fit  
 \*\* Cut to fit at North Step

**EAST ABUTMENT  
 BILL OF MATERIAL**

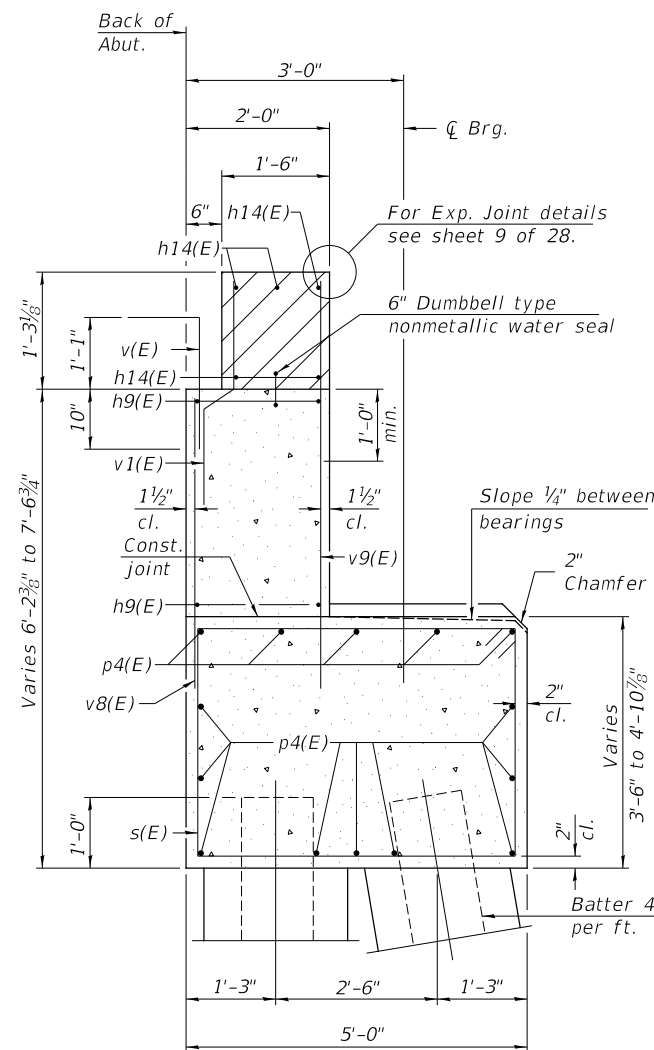
BAR	NO.	SIZE	LENGTH	SHAPE
h9(E)	8	#5	37'-9"	—
h10(E)	10	#5	8'-4"	└
h11(E)	10	#5	8'-4"	└
h12(E)	10	#4	16'-11"	—
h13(E)	8	#4	17'-7"	—
h14(E)	5	#6	37'-9"	—
h15(E)	11	#4	13'-4"	—
h16(E)	7	#4	12'-9"	—
h17(E)	2	#4	17'-3"	—
n(E)	11	#6	13'-8"	└
n1(E)	6	#6	6'-10"	└
n2(E)	16	#6	15'-8"	└
n3(E)	6	#6	7'-10"	└
p1(E)	6	#7	20'-0"	—
p2(E)	6	#7	15'-0"	—
p3(E)	25	#5	11'-3"	—
p4(E)	14	#7	43'-10"	—
s(E)	38	#5	16'-7"	└
s1(E)	29	#4	9'-5"	└
s2(E)	44	#4	11'-10"	└
s4(E)	2	#5	16'-9"	└
s10(E)	1	#4	11'-11"	└
u1(E)	9	#6	14'-1"	└
v(E)	39	#5	3'-10"	└
v1(E)	39	#4	3'-3"	└
v2(E)	19	#6	6'-10"	└
v3(E)	3	#6	6'-10"	└
v4(E)	16	#6	7'-0"	└
v5(E)	14	#6	6'-7"	└
v6(E)	3	#6	6'-7"	└
v7(E)	11	#6	6'-10"	└
v8(E)	39	#5	5'-10"	└
v9(E)	39	#5	6'-11"	└
Structure Excavation	CU. YD.		145	
Concrete Structures	CU. YD.		55.5	
Reinforcement Bars, Epoxy Coated	POUND		6,730	
Furnishing Metal Shell Piles 14"x0.312"	FOOT		333	
Driving Piles	FOOT		333	
Test Pile Metal Shells	EACH		1	
Concrete Encasement	CU. YD.		4.3	
Concrete Sealer	SQ. FT.		413	

**PILE DATA**

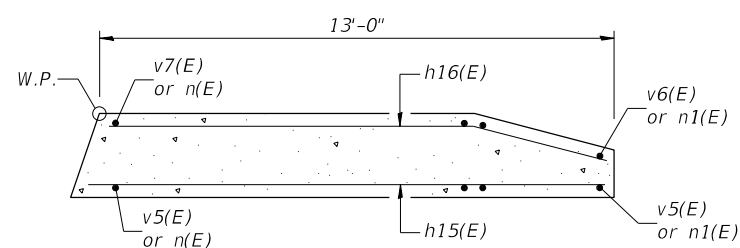
Type: Metal Shell 14" x 0.312"  
 Nominal Required Bearing: 399 kips  
 Factored Resistance Available: 209 kips  
 Est. Length: 37'  
 No. Req'd: 9 + 1 Test Pile

**EAST ABUTMENT  
 F.A.S. 567 (C.H. 20)  
 OVER QUIVER CREEK  
 SECTION 07-00022-01-BR  
 MASON COUNTY  
 STATION 127+16.05  
 STRUCTURE NO. 063-3009**

SHEET NO. 24 28 SHEETS	F.A.S. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	567	07-00022-01-BR	MASON	75	41
S.N. 063-3009		CONTRACT NO. 93753			
FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT: ZMBM(399)			

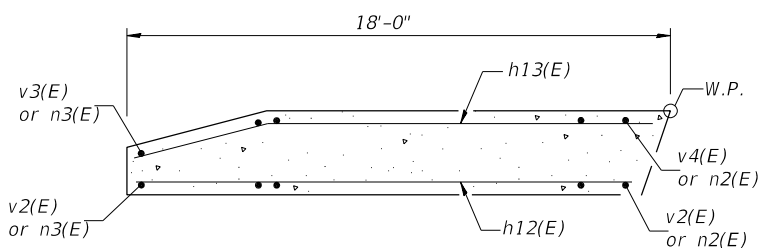


SEC. THRU ABUT.

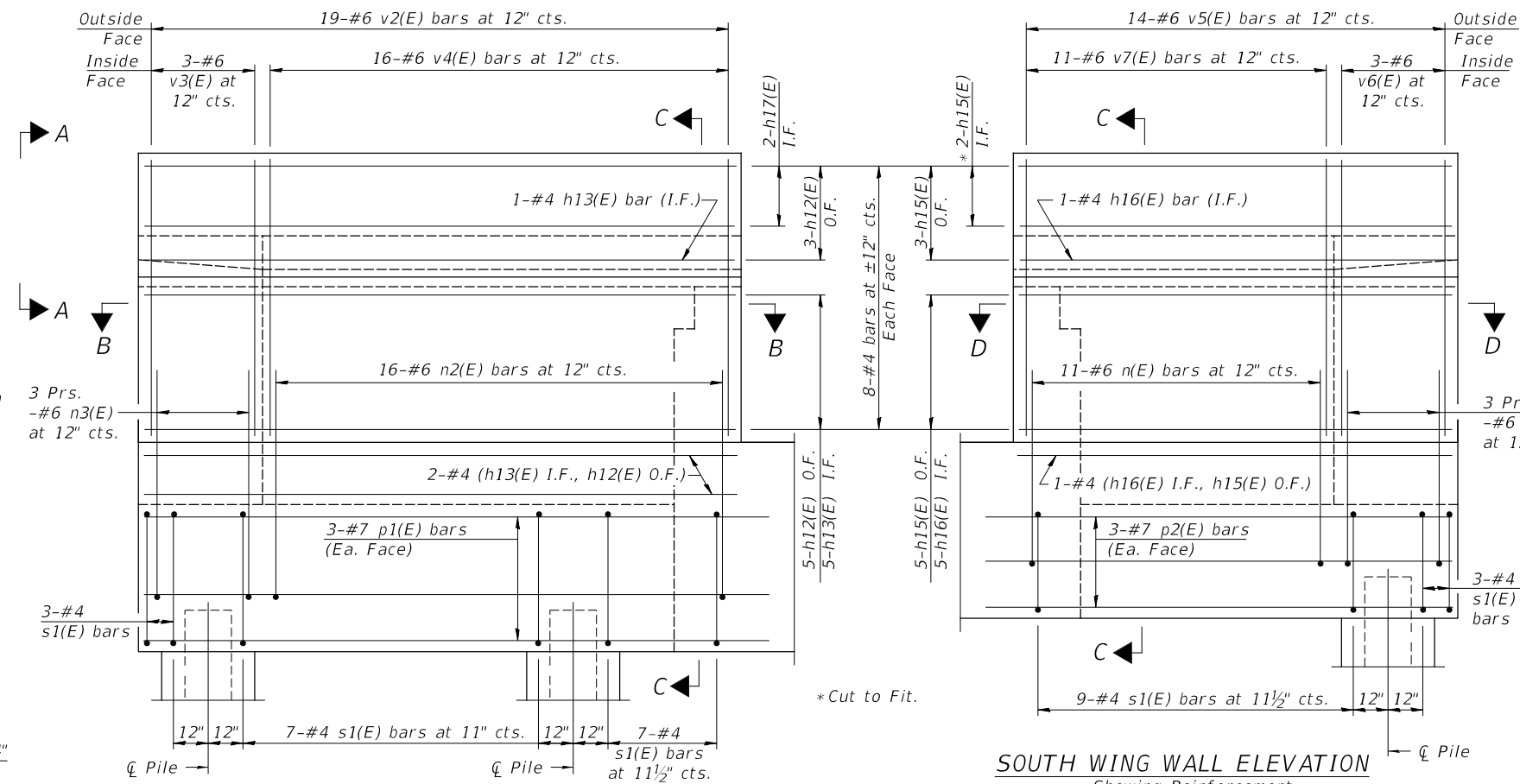


SECTION D-D

Notes:  
 Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure.  
 Space reinforcement in cap to miss anchor bolts.  
 Pour steps monolithically with cap.  
 Quantity of concrete in end post included with Concrete Superstructure on sheet 12 of 28.  
 For Concrete Encasement details, see sheet 28 of 28.

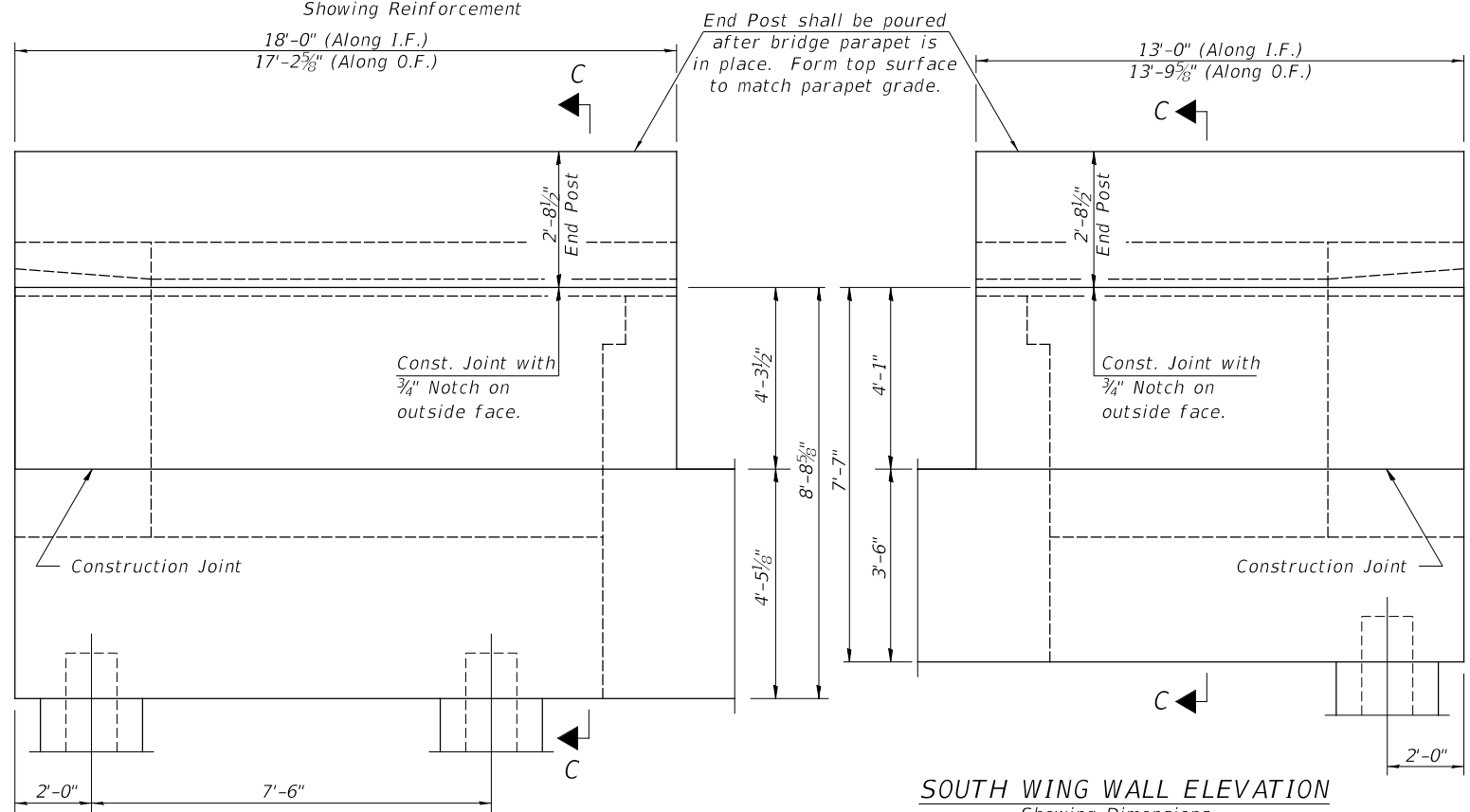


SECTION B-B



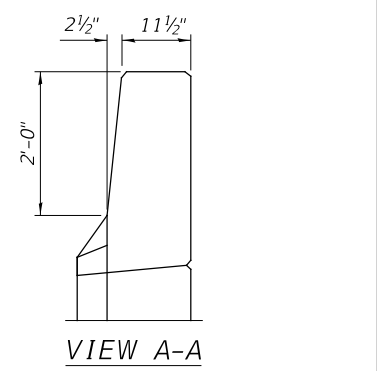
NORTH WING WALL ELEVATION  
Showing Reinforcement

SOUTH WING WALL ELEVATION  
Showing Reinforcement

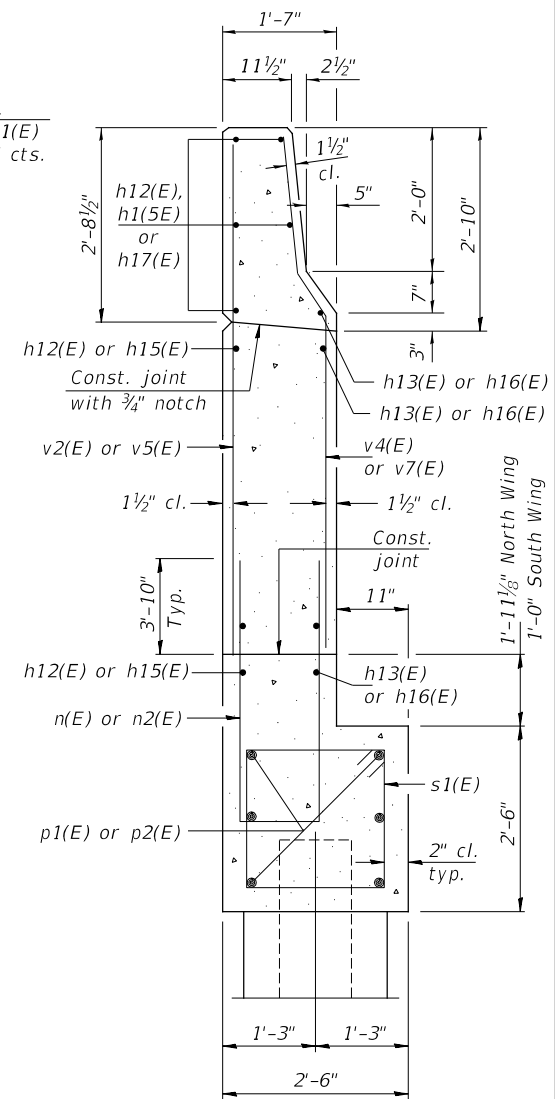


NORTH WING WALL ELEVATION  
Showing Dimensions

SOUTH WING WALL ELEVATION  
Showing Dimensions



VIEW A-A

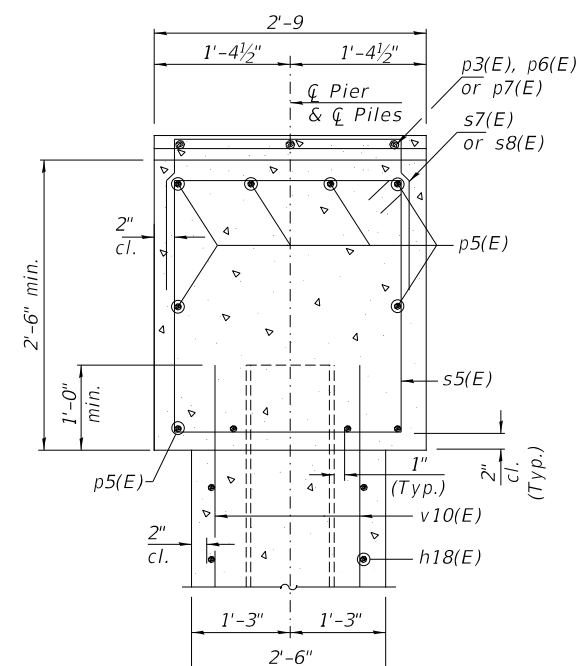
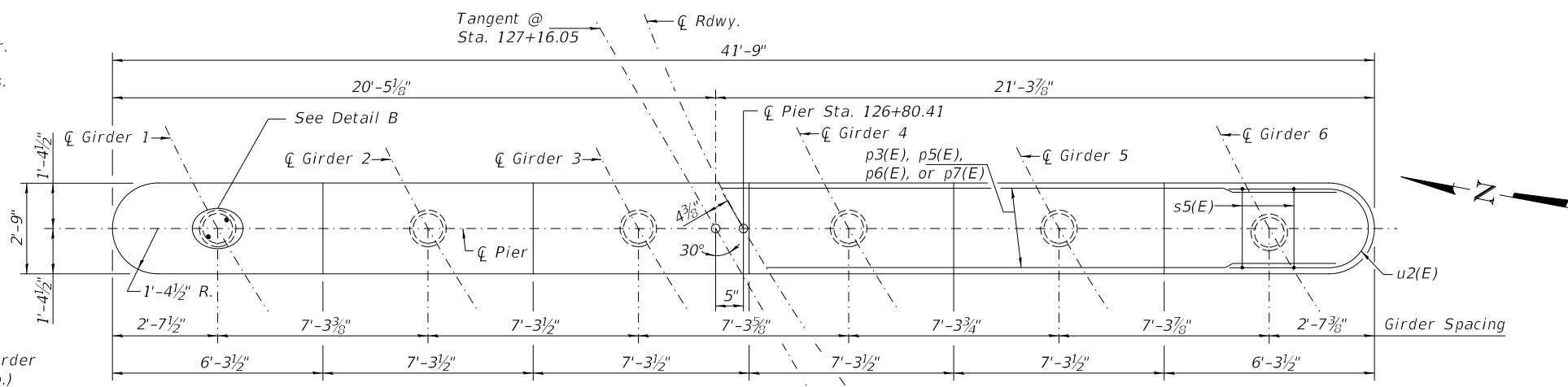
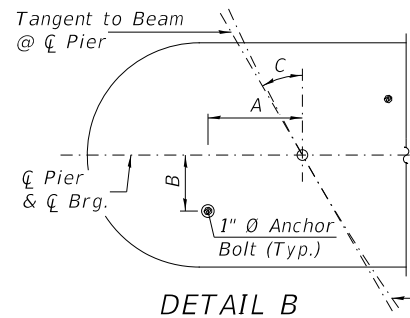


SECTION C-C

EAST ABUTMENT  
 F.A.S. 567 (C.H. 20)  
 OVER QUIVER CREEK  
 SECTION 07-00022-01-BR  
 MASON COUNTY  
 STATION 127+16.05  
 STRUCTURE NO. 063-3009

SHEET NO. 25 28 SHEETS	F.A.S. ROUTE 567	SECTION 07-00022-01-BR	COUNTY MASON	TOTAL SHEETS 75	SHEET NO. 42
	S.N. 063-3009		CONTRACT NO. 93753		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT: ZMBM(399)		

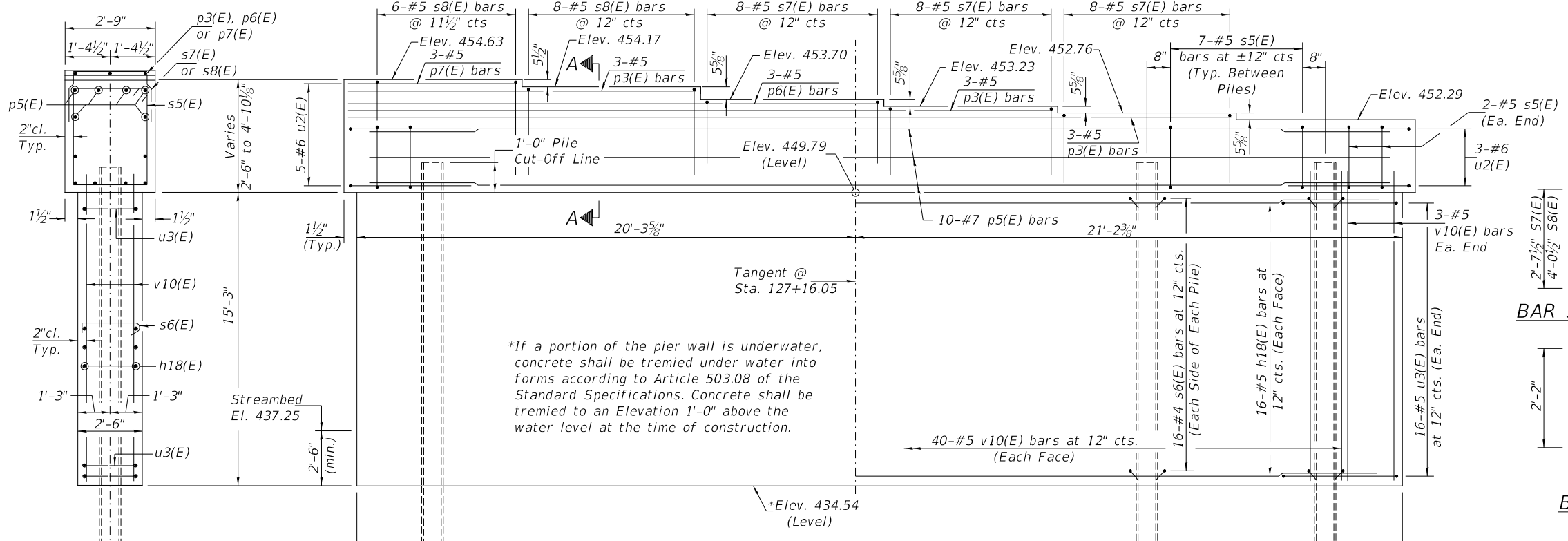
Notes:  
 All edges shall have standard  $\frac{3}{4}$ " chamfer.  
 Pour steps monolithically with cap.  
 Space reinforcement to miss anchor bolts.  
 See Sh. 28 of 28 for pile details.



DETAIL B  
 ANCHOR BOLT LOCATION

TOP PLAN

SECTION A-A



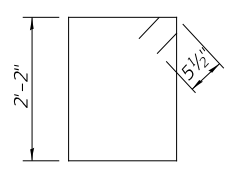
ELEVATION  
 (Looking East)

PIER 1  
 BILL OF MATERIAL

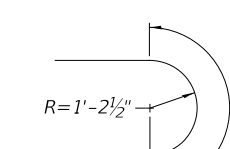
BAR	NO.	SIZE	LENGTH	SHAPE
h18(E)	32	#5	39'-0"	—
p3(E)	9	#5	11'-3"	—
p5(E)	10	#7	39'-0"	—
p6(E)	3	#5	19'-4"	—
p7(E)	3	#5	4'-9"	—
s5(E)	39	#5	10'-1"	□
s6(E)	192	#4	3'-3"	□
s7(E)	24	#5	7'-8"	□
s8(E)	14	#5	10'-6"	□
u2(E)	8	#6	10'-10"	U
u3(E)	32	#5	12'-1"	U
v10(E)	86	#5	16'-2"	—
Concrete Structures			CU YD	68.2
Cofferdam Excavation			CU YD	55
Reinforcement Bars, Epoxy Coated			POUND	5,440
Furnishing Metal Shell Piles HP16"x0.375"			FOOT	285
Driving Piles			FOOT	285
Cofferdam (Type 1) (Location-1)			EACH	1
Test Pile Metal Shells			EACH	1

END VIEW

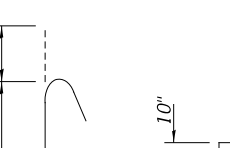
BAR s7(E) & s8(E)



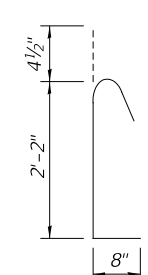
BAR s5(E)



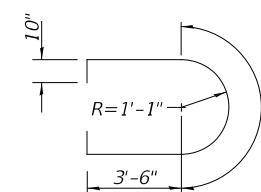
BAR u2(E)



BAR s6(E)



BAR u3(E)

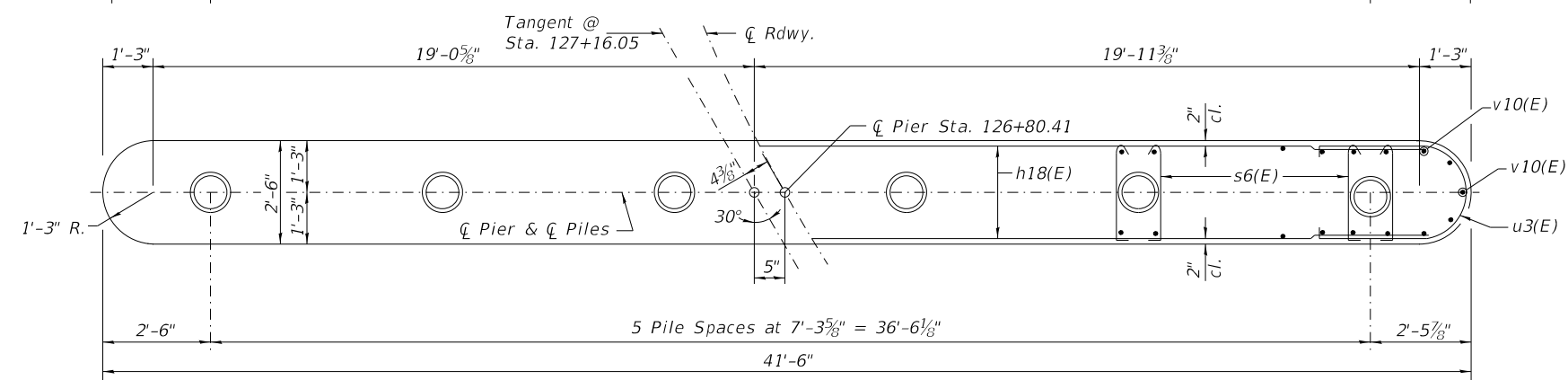


ANCHOR BOLT LAYOUT

BEAM	A	B	C
1	7 1/4"	4 3/8"	30°51'38.5"
2	7 1/4"	4 3/8"	30°58'56.6"
3	7 1/4"	4 3/8"	31°06'18.4"
4	7 1/4"	4 3/8"	31°13'44.0"
5	7 1/4"	4 3/8"	31°21'13.3"
6	7 1/4"	4 1/2"	31°28'46.5"

PILE DATA

Type & Size: Metal Shells  
 16"x0.375"  
 Nominal Required Bearing: 724 kips  
 Factored Resistance Available: 377 kips  
 Est. Length: 57'  
 No. Required: 5+1 Test Pile

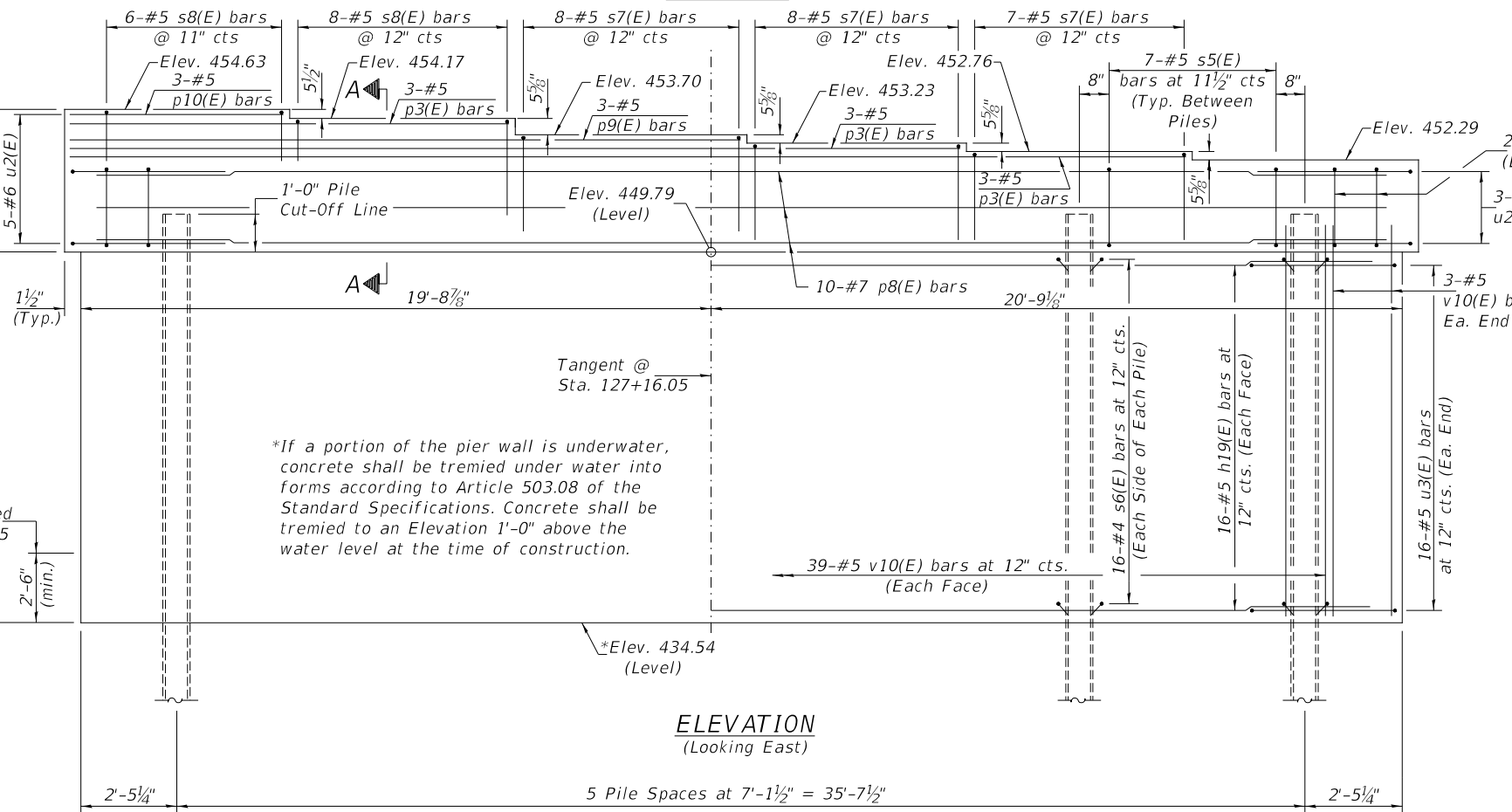
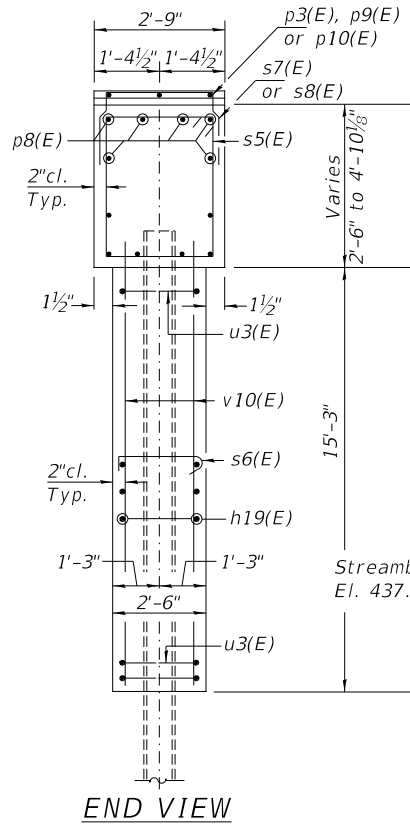
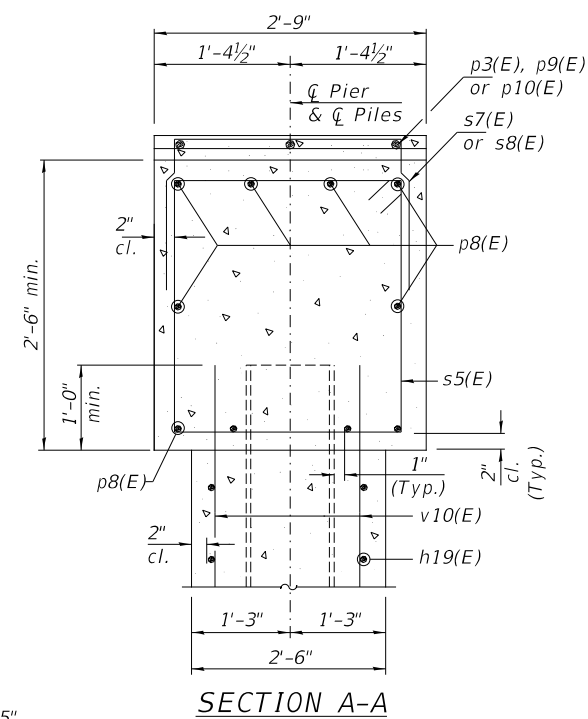
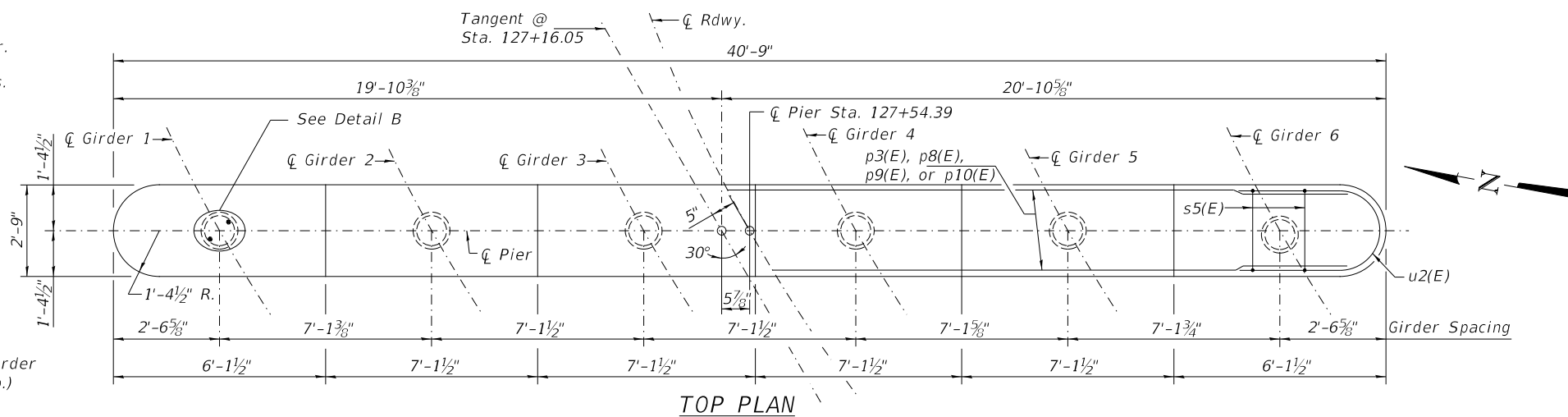
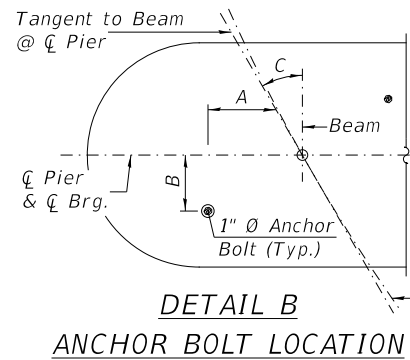


FOOTING PLAN

PIER 1  
 F.A.S. 567 (C.H. 20)  
 OVER QUIVER CREEK  
 SECTION 07-00022-01-BR  
 MASON COUNTY  
 STATION 127+16.05  
 STRUCTURE NO. 063-3009

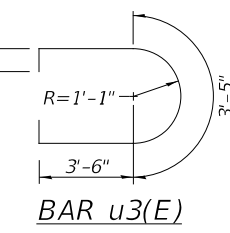
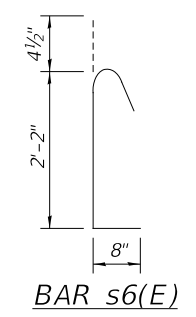
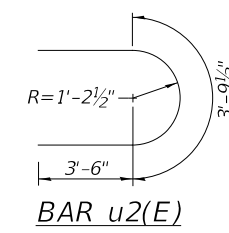
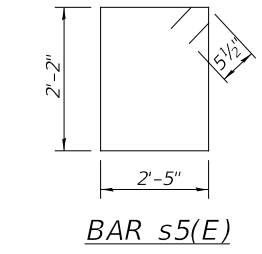
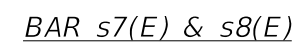
SHEET NO. 26	F.A.S. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
28 SHEETS	567	07-00022-01-BR	MASON	75	43
S.N. 063-3009			CONTRACT NO. 93753		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT: ZMBM(399)		

Notes:  
 All edges shall have standard  $\frac{3}{4}$ " chamfer.  
 Pour steps monolithically with cap.  
 Space reinforcement to miss anchor bolts.  
 See Sh. 28 of 28 for pile details.



PIER 2  
 BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
h19(E)	32	#5	38'-0"	—
p3(E)	9	#5	11'-3"	—
p8(E)	10	#7	38'-0"	—
p9(E)	3	#5	18'-10"	—
p10(E)	3	#5	4'-7"	—
s5(E)	39	#5	10'-1"	□
s6(E)	192	#4	3'-3"	□
s7(E)	24	#5	7'-8"	□
s8(E)	14	#5	10'-6"	□
u2(E)	8	#6	10'-10"	U
u3(E)	32	#5	12'-1"	U
v10(E)	84	#5	16'-2"	—
Concrete Structures			CU YD	66.4
Cofferdam Excavation			CU YD	50
Reinforcement Bars, Epoxy Coated			POUND	5,350
Furnishing Metal Shell Piles 16"x0.375"			FOOT	280
Driving Piles			FOOT	280
Cofferdam (Type 1) (Location-2)			EACH	1
Test Pile Metal Shells			EACH	1

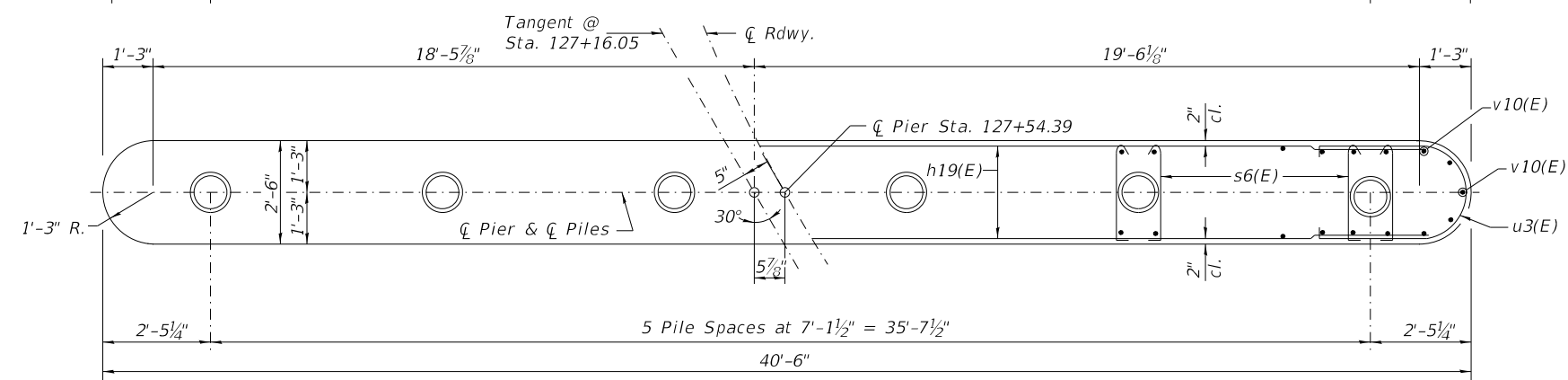


ANCHOR BOLT LAYOUT

BEAM	A	B	C
1	7 1/2"	4"	28°28'01.2"
2	7 1/2"	4 1/8"	28°34'38.7"
3	7 1/2"	4 1/8"	28°41'19.4"
4	7 1/2"	4 1/8"	28°48'03.5"
5	7 1/2"	4 1/8"	28°54'50.9"
6	7 3/8"	4 1/8"	29°01'41.7"

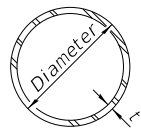
PILE DATA

Type & Size: Metal Shells  
 16"x0.375"  
 Nominal Required Bearing: 717 kips  
 Factored Resistance Available: 374 kips  
 Est. Length: 56'  
 No. Required: 5+1 Test Pile



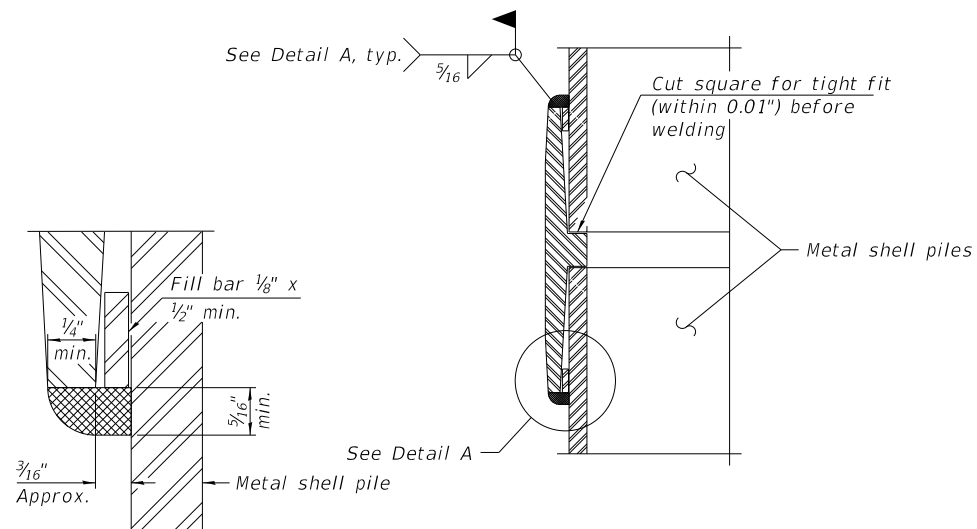
PIER 2  
 F.A.S. 567 (C.H. 20)  
 OVER QUIVER CREEK  
 SECTION 07-00022-01-BR  
 MASON COUNTY  
 STATION 127+16.05  
 STRUCTURE NO. 063-3009

SHEET NO. 27	F.A.S. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
28 SHEETS	567	07-00022-01-BR	MASON	75	44
S.N. 063-3009			CONTRACT NO. 93753		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT: ZMBM(399)		

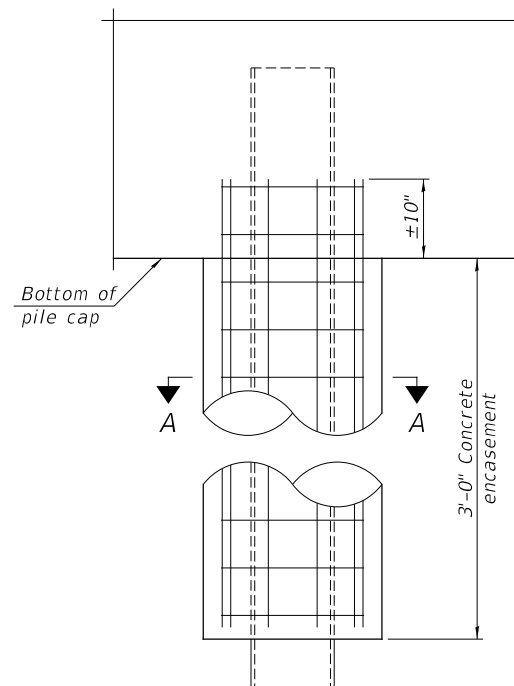


**METAL SHELL PILE TABLE**

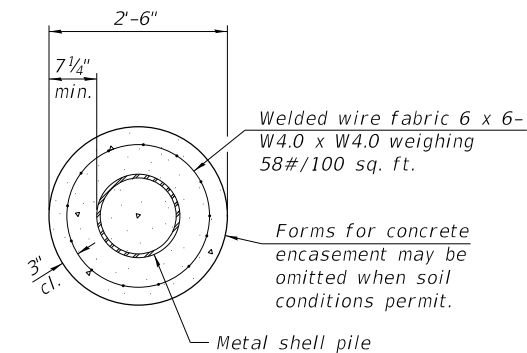
Designation and outside diameter	Wall thickness t	Weight per foot (Lbs./ft.)	Inside volume (yd. <sup>3</sup> /ft.)
PP12	0.250"	31.37	0.0267
PP14	0.250"	36.71	0.0368
PP14	0.312"	45.61	0.0361
PP16	0.312"	52.32	0.0478
PP16	0.375"	62.64	0.0470



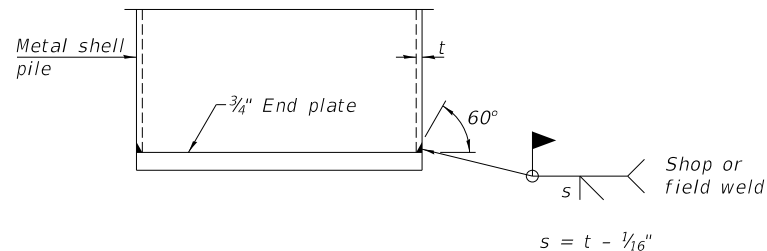
**DETAIL A**



**ELEVATION**



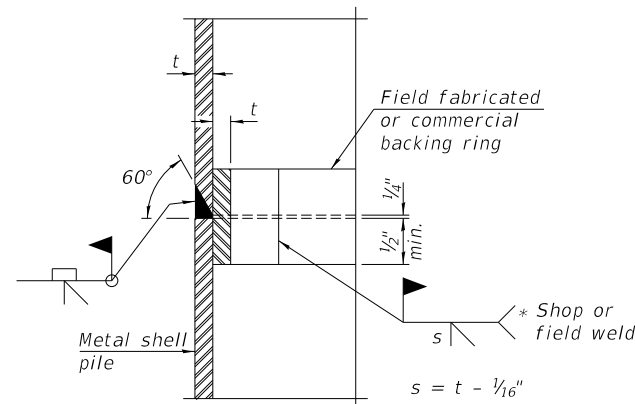
**SECTION A-A**



**END PLATE ATTACHMENT**

**WELDED COMMERCIAL SPLICE**

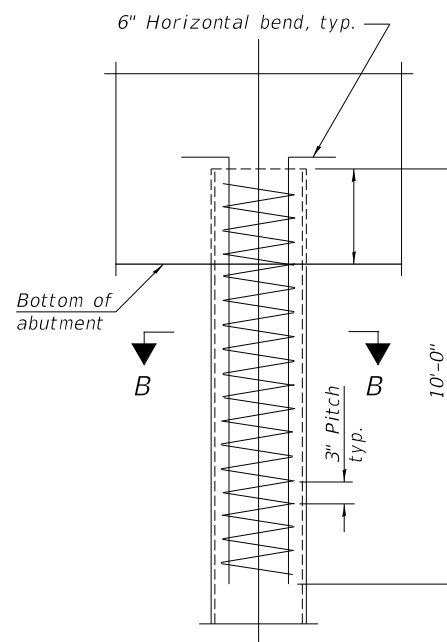
Notes:  
 The 1/8" x 1/2" min. fill bar may be constructed of 2 bars with a 1/8" max. gap between them.  
 Pile segments shall be driven to solid contact with splicer before welding.



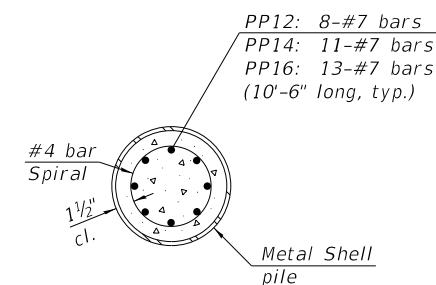
**COMPLETE PENETRATION WELD SPLICE**

\* Field fabricated backing ring may be made from pile shell by removing segment to allow reducing circumference and vertically rejoin with partial joint penetration weld.

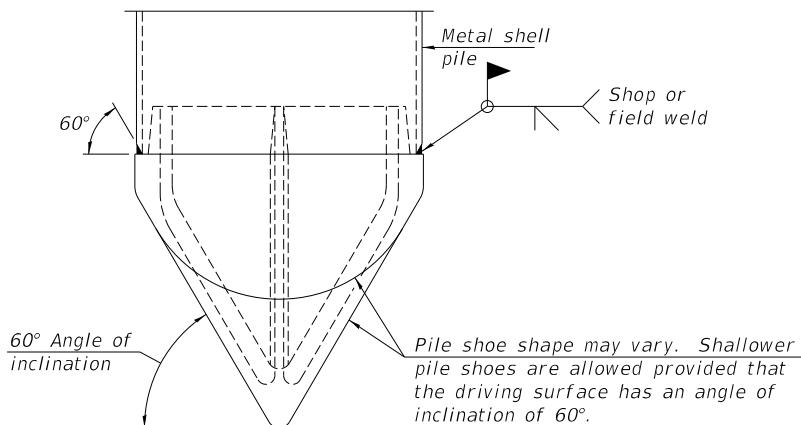
**INDIVIDUAL PILE CONCRETE ENCASEMENT**  
 (When specified)



**ELEVATION**



**SECTION B-B**



**PILE SHOE ATTACHMENT**

(When called for on the plans, the Contractor shall furnish metal shell pile shoes consisting of a single piece conical pile point as shown. The pile shoes shall be cast in one piece steel according to either ASTM A 148 Grade 80-50 or AASHTO M 103 Grade 65-35 and shall provide full bearing over the full circumference of the metal shell pile. The pile shoe shall have tapered leads to assure proper alignment and fitting and shall be secured to the pile with a circumferential weld).

**METAL SHELL PILE DETAILS**  
 F.A.S. 567 (C.H. 20)  
 OVER QUIVER CREEK  
 SECTION 07-00022-01-BR  
 MASON COUNTY  
 STATION 127+16.05  
 STRUCTURE NO. 063-3009

**REINFORCEMENT AT ABUTMENTS**  
 (Omit when concrete encasement is specified)

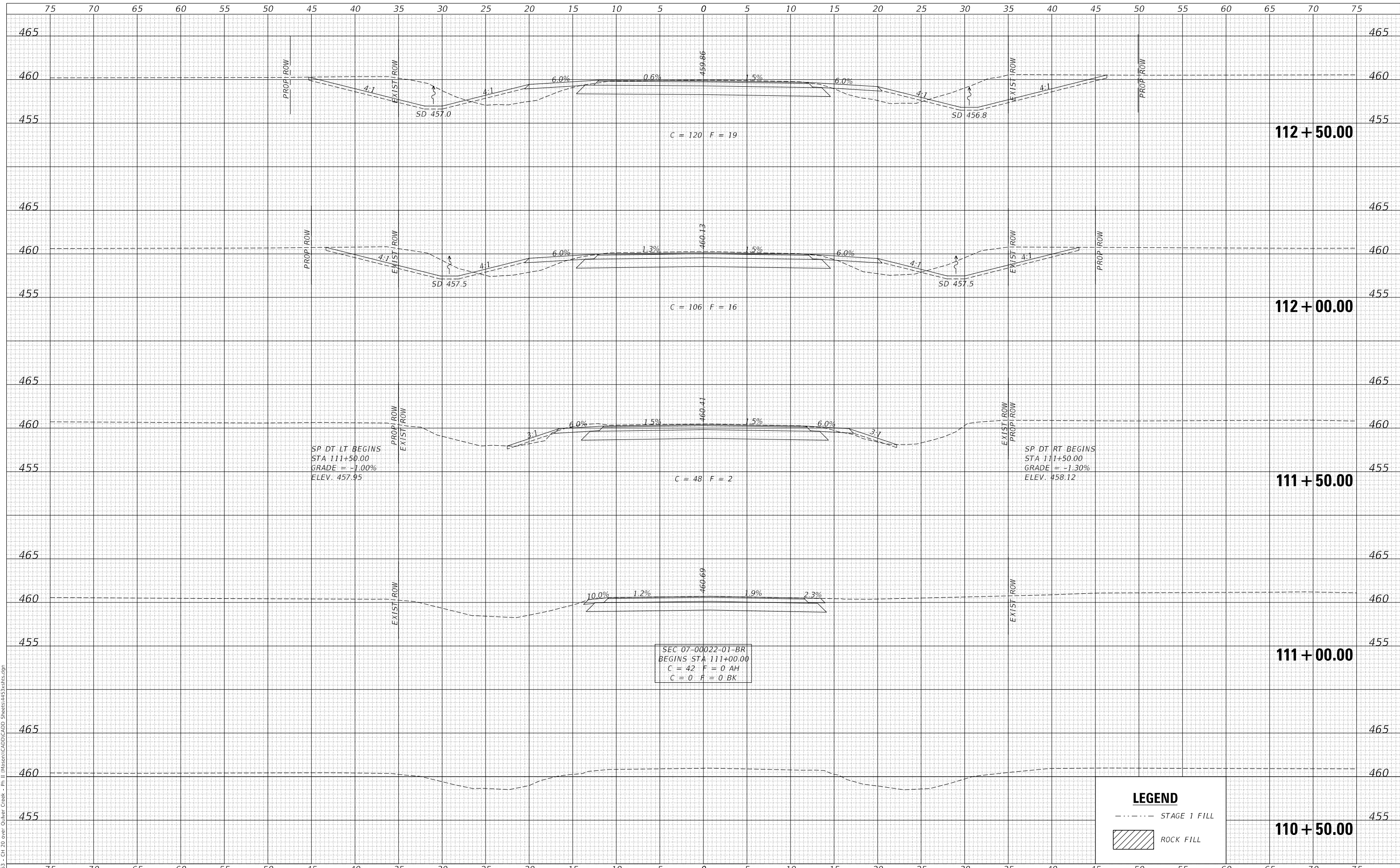
Note:  
 The metal shell piles shall be according to Article 1006.05 of the Standard Specifications.

SHEET NO. 28 28 SHEETS	F.A.S. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	567	07-00022-01-BR	MASON	75	45
S.N. 063-3009			CONTRACT NO. 93753		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT: ZMBM(399)		

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

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

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	DRAWN -	REVISED -
PLOT SCALE = 10.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 9/23/2020	DATE -	REVISED -

**MASON COUNTY  
COUNTY HIGHWAY 20  
OVER QUIVER CREEK**

**COUNTY HIGHWAY 20  
CROSS SECTIONS**

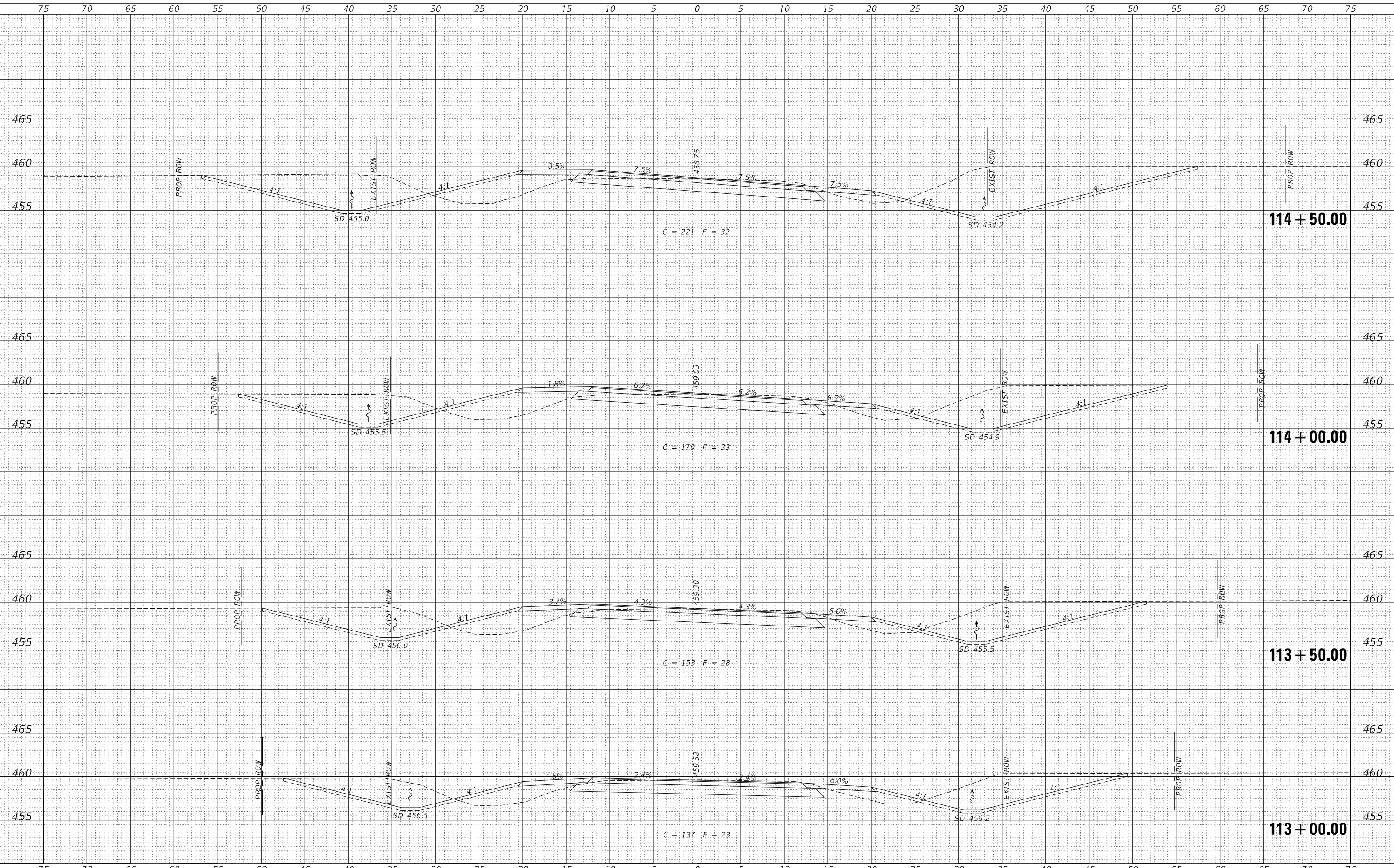
SCALE: 1"=5' SHEET 1 OF 24 SHEETS STA. 110+50.00 TO STA. 112+50.00

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567	07-00022-01-BR	MASON	75	46
FED. ROAD DIST. NO. 7 ILLINOIS			CONTRACT NO. 93753	
FED. AID PROJECT ZMBM(399)				

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

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

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USER NAME =	BNebe1	DESIGNED -	REVISD -
		DRAWN -	REVISD -
		CHECKED -	REVISD -
		DATE -	REVISD -
PLOT SCALE =	10.0000' / in.		
PLOT DATE =	9/23/2020		

**MASON COUNTY  
 COUNTY HIGHWAY 20  
 OVER QUIVER CREEK**

**COUNTY HIGHWAY 20  
 CROSS SECTIONS**

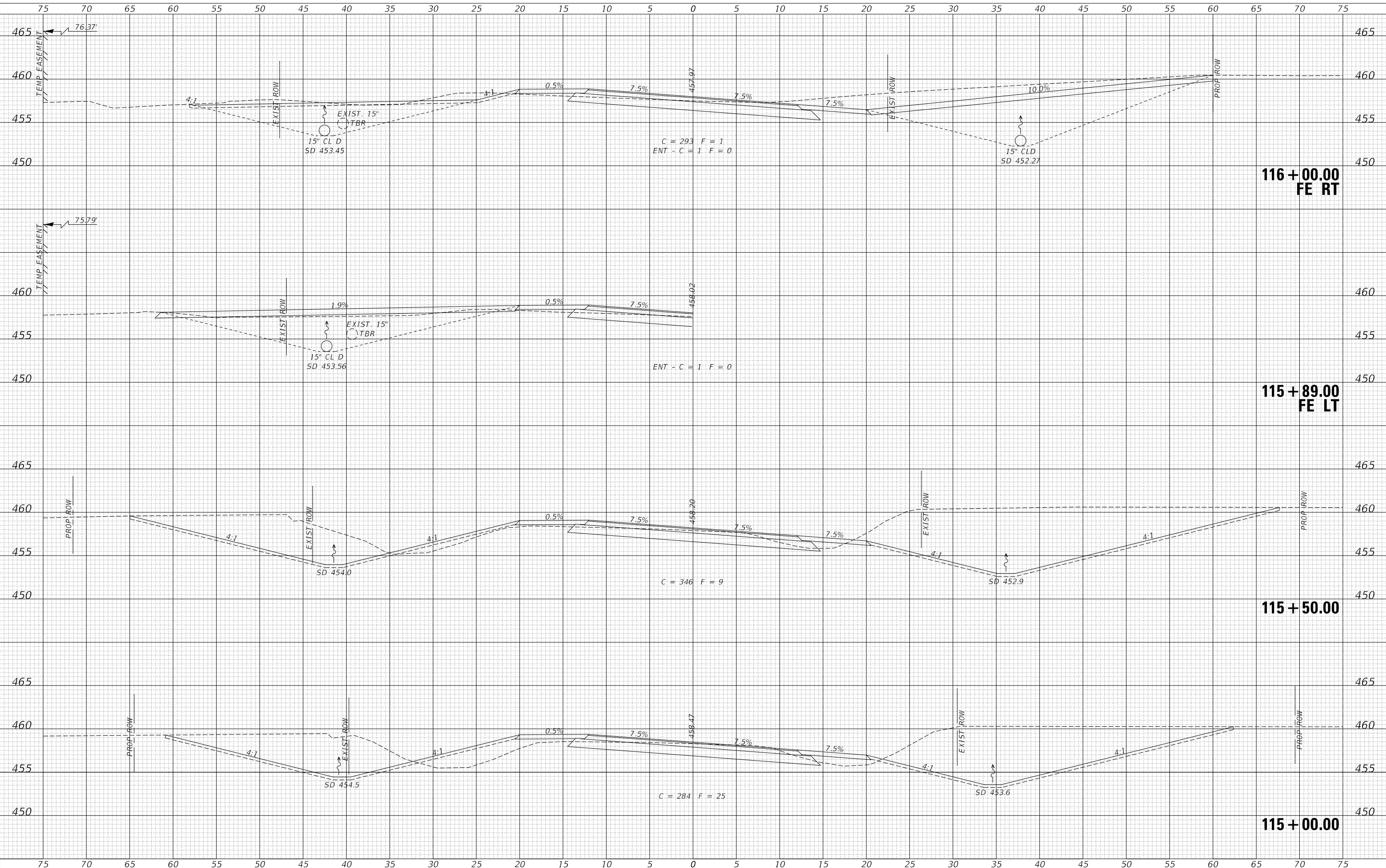
SCALE: 1"=5' SHEET 2 OF 24 SHEETS STA. 113+00.00 TO STA. 114+50.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	07-00022-01-BR	MASON	75	47
FED. ROAD DIST. NO. 7 ILLINOIS			CONTRACT NO. 93753	
FED. AID PROJECT ZMBM(399)				

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

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

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PLOT SCALE =	10.0000 ' / in.	CHECKED -	REVISD -
PLOT DATE =	9/23/2020	DATE -	REVISD -

**MASON COUNTY  
 COUNTY HIGHWAY 20  
 OVER QUIVER CREEK**

**COUNTY HIGHWAY 20  
 CROSS SECTIONS**

SCALE: 1"=5'      SHEET 3      OF 24 SHEETS      STA. 115+00.00      TO STA. 116+00.00

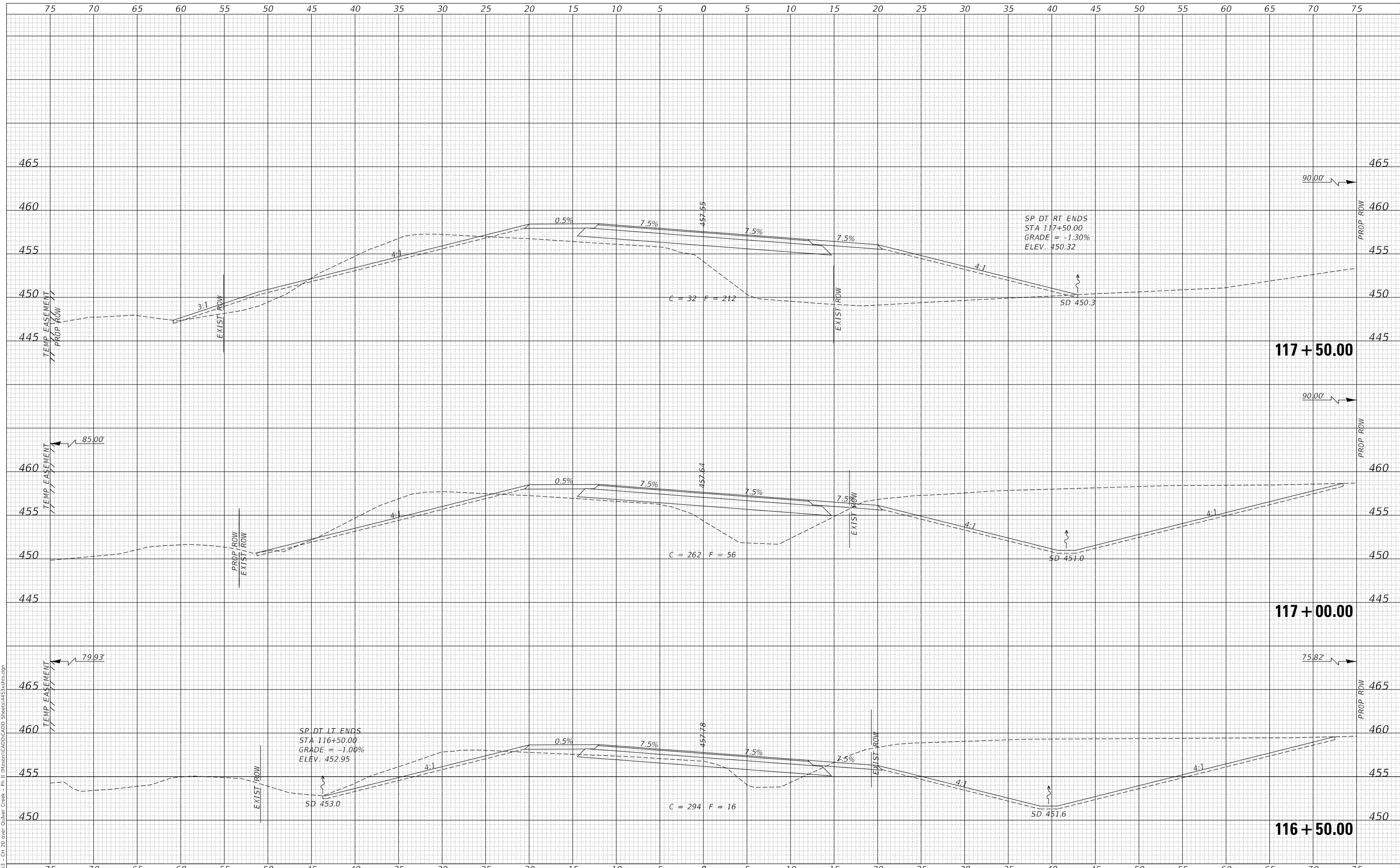
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	07-00022-01-BR	MASON	75	48
FED. ROAD DIST. NO. 7 ILLINOIS			CONTRACT NO. 93753	
FED. AID PROJECT ZMBM(399)				



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

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

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PLOT SCALE =	10.0000' / in.	CHECKED -	REVISIED -
PLOT DATE =	9/23/2020	DATE -	REVISIED -

**MASON COUNTY  
COUNTY HIGHWAY 20  
OVER QUIVER CREEK**

**COUNTY HIGHWAY 20  
CROSS SECTIONS**

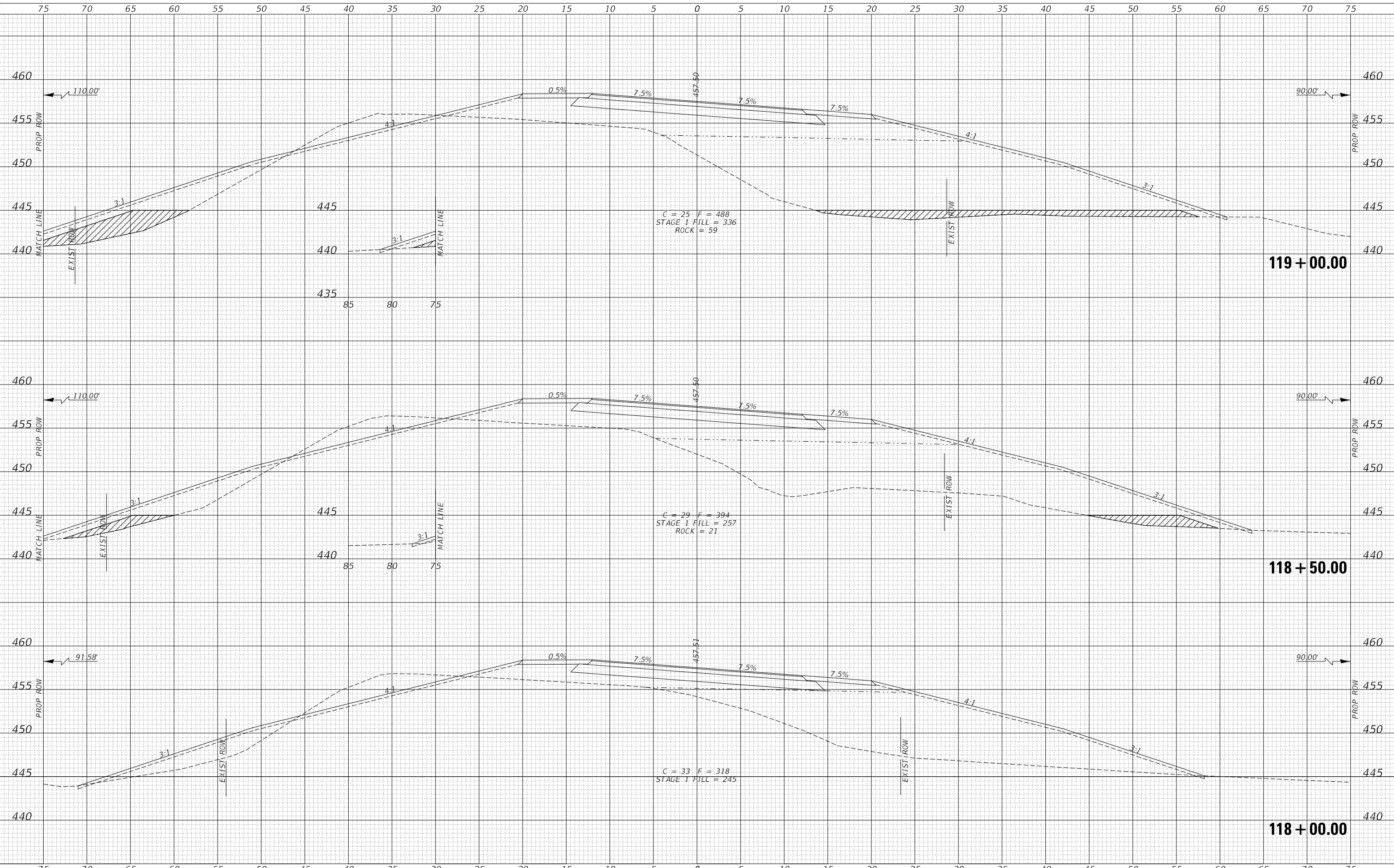
SCALE: 1"=5'      SHEET 4      OF 24 SHEETS      STA. 116+50.00      TO STA. 117+50.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	07-00022-01-BR	MASON	75	49
FED. ROAD DIST. NO. 7		ILLINOIS	CONTRACT NO. 93753	
			FED. AID PROJECT ZMBM(399)	

DATE	
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TEMPLATE	
AREAS CHECKED	
FINAL SURVEY	
NOTE BOOK	
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AREAS CHECKED	

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PLOTTED	
TEMPLATE	
AREAS CHECKED	
ORIGINAL SURVEY	
NOTE BOOK	
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		CHECKED -	REVISD -
		DATE -	REVISD -
PLOT SCALE =	10.0000' / in.		
PLOT DATE =	9/23/2020		

**MASON COUNTY  
 COUNTY HIGHWAY 20  
 OVER QUIVER CREEK**

**COUNTY HIGHWAY 20  
 CROSS SECTIONS**

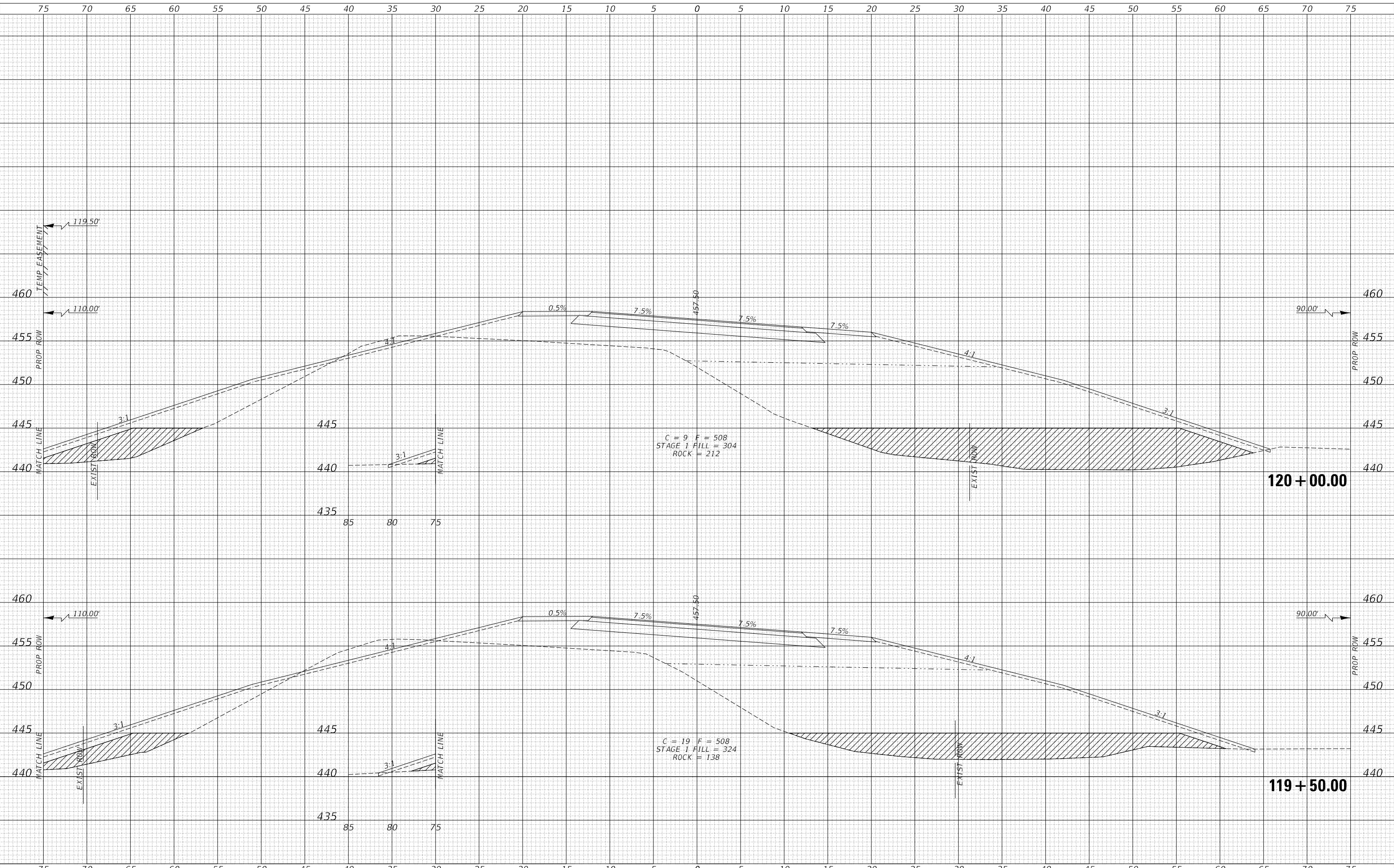
SCALE: 1"=5'    SHEET 5 OF 24 SHEETS    STA. 118+00.00 TO STA. 119+00.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	07-0022-01-BR	MASON	75	50
FED. ROAD DIST. NO. 7 ILLINOIS			CONTRACT NO. 93753	
FED. AID PROJECT ZMBM(399)				

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

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

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	DRAWN -	REVISED -
PLOT SCALE = 10.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 9/23/2020	DATE -	REVISED -

**MASON COUNTY  
 COUNTY HIGHWAY 20  
 OVER QUIVER CREEK**

**COUNTY HIGHWAY 20  
 CROSS SECTIONS**

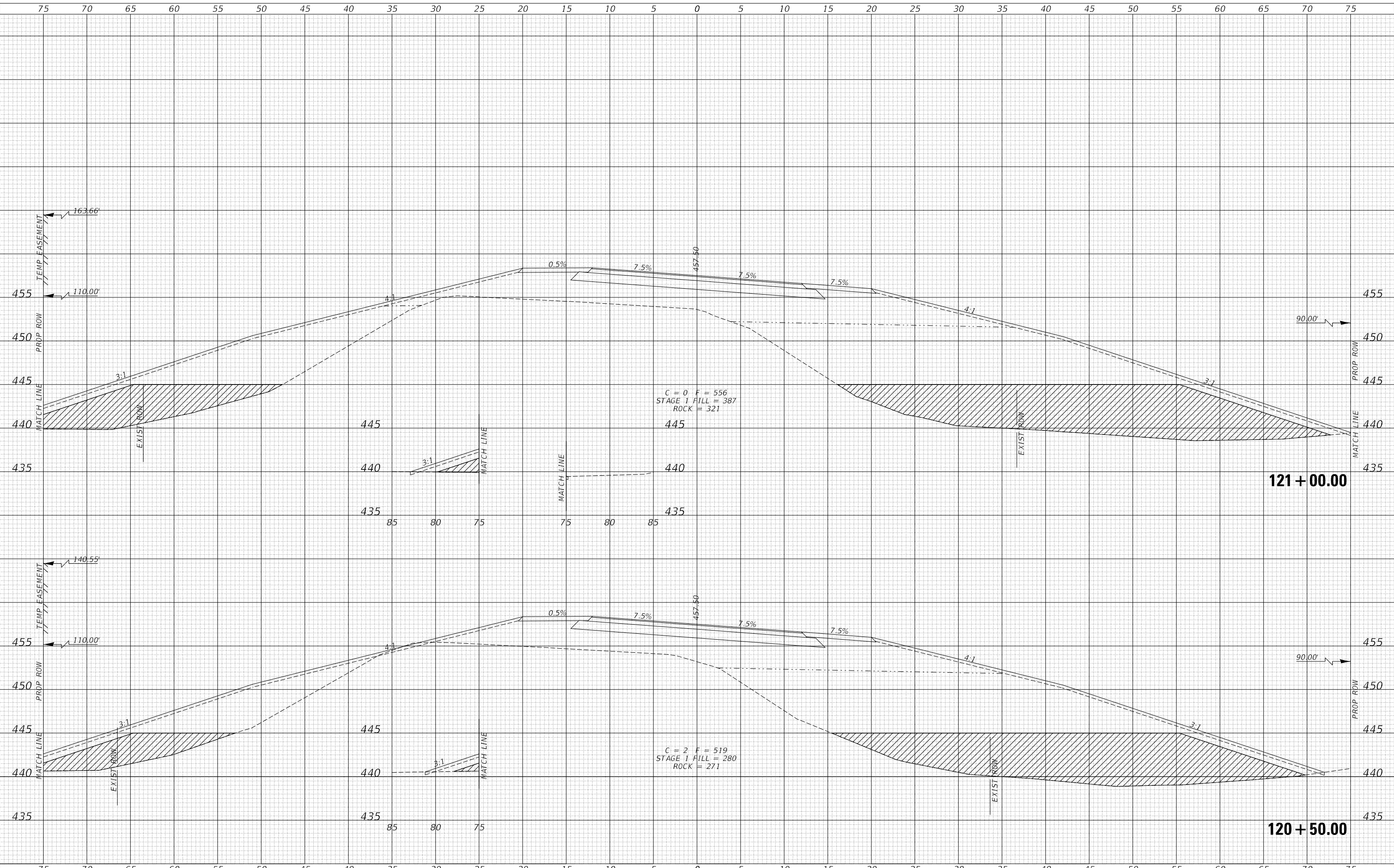
SCALE: 1"=5'    SHEET 6 OF 24 SHEETS    STA. 119+50.00 TO STA. 120+00.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	07-0022-01-BR	MASON	75	51
FED. ROAD DIST. NO. 7 ILLINOIS			CONTRACT NO. 93753	
FED. AID PROJECT ZMBM(399)				

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

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

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**MASON COUNTY  
 COUNTY HIGHWAY 20  
 OVER QUIVER CREEK**

**COUNTY HIGHWAY 20  
 CROSS SECTIONS**

USER NAME = BNebe1	DESIGNED -	REVISED -
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PLOT SCALE = 10.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 9/23/2020	DATE -	REVISED -

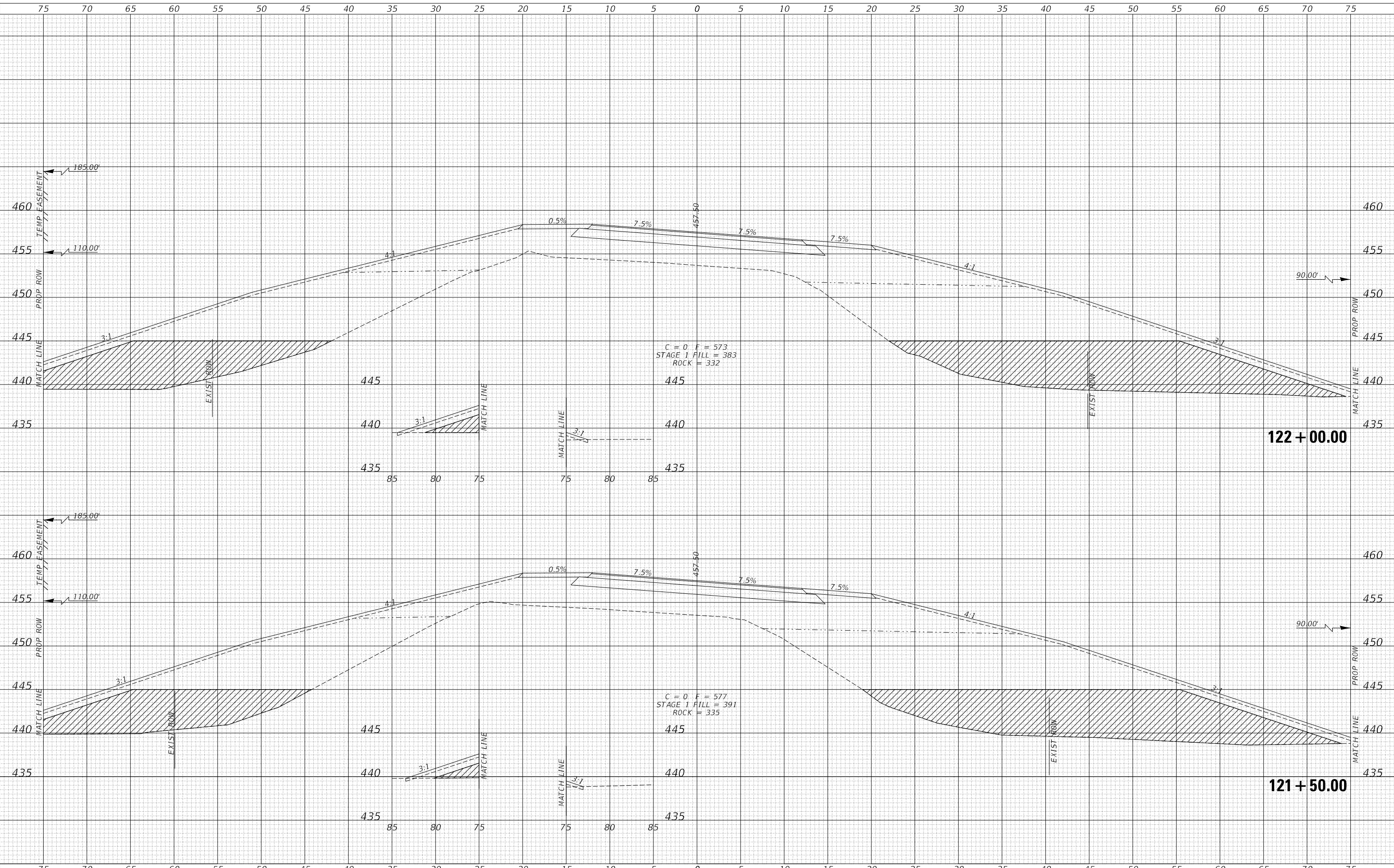
SCALE: 1"=5'    SHEET 7 OF 24 SHEETS    STA. 120+50.00 TO STA. 121+00.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	07-00022-01-BR	MASON	75	52
CONTRACT NO. 93753				
FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT ZMBM(399)		

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

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

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**MASON COUNTY  
 COUNTY HIGHWAY 20  
 OVER QUIVER CREEK**

**COUNTY HIGHWAY 20  
 CROSS SECTIONS**

USER NAME = BNebe1	DESIGNED -	REVISED -
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PLOT SCALE = 10.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 9/23/2020	DATE -	REVISED -

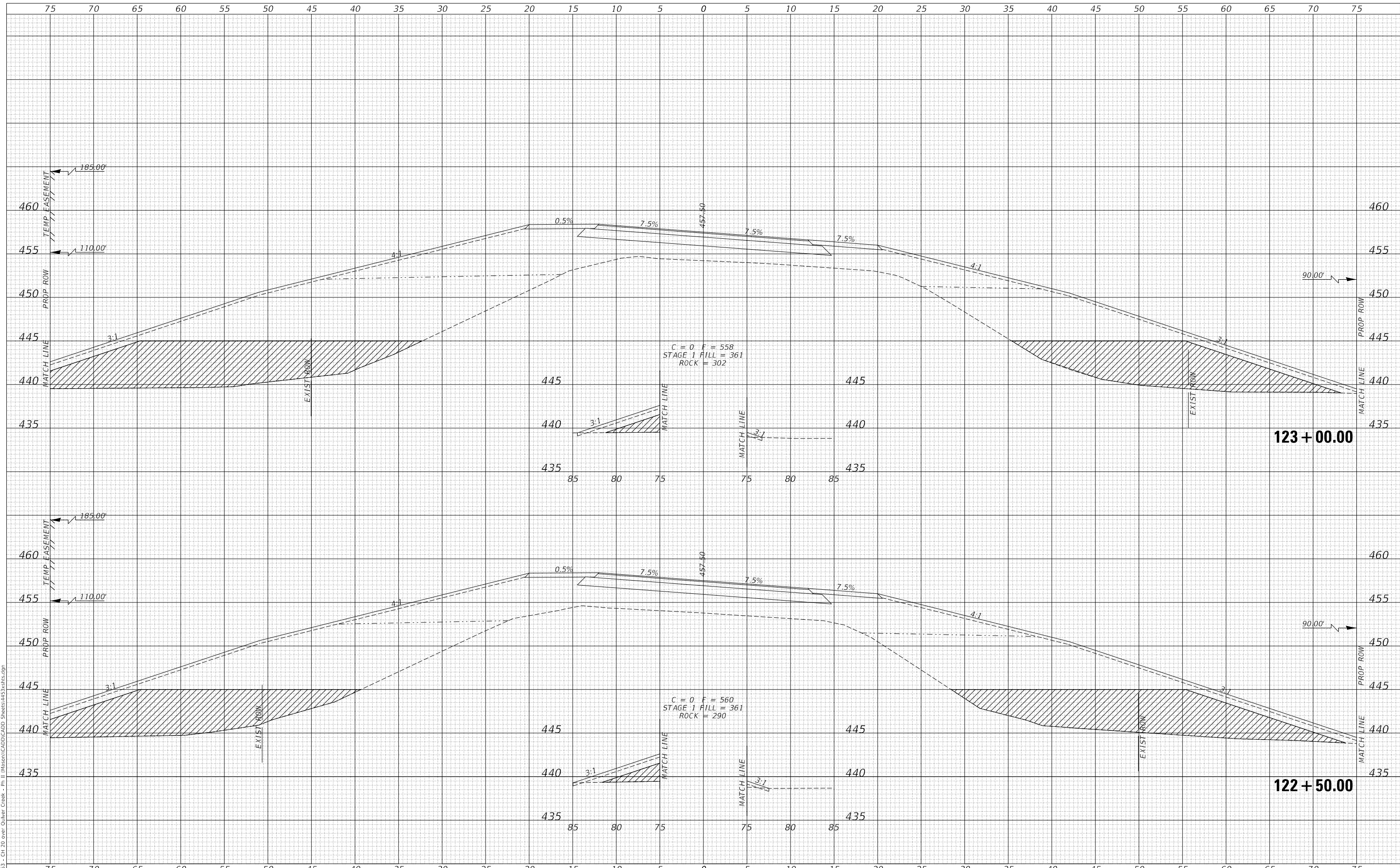
SCALE: 1"=5'      SHEET 8 OF 24 SHEETS      STA. 121+50.00 TO STA. 122+00.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	07-00022-01-BR	MASON	75	53
FED. ROAD DIST. NO. 7 ILLINOIS			CONTRACT NO. 93753	
FED. AID PROJECT ZMBM(399)				

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

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

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		DRAWN -	REVISD -
PLOT SCALE =	10.0000 ' / in.	CHECKED -	REVISD -
PLOT DATE =	9/23/2020	DATE -	REVISD -

**MASON COUNTY  
 COUNTY HIGHWAY 20  
 OVER QUIVER CREEK**

**COUNTY HIGHWAY 20  
 CROSS SECTIONS**

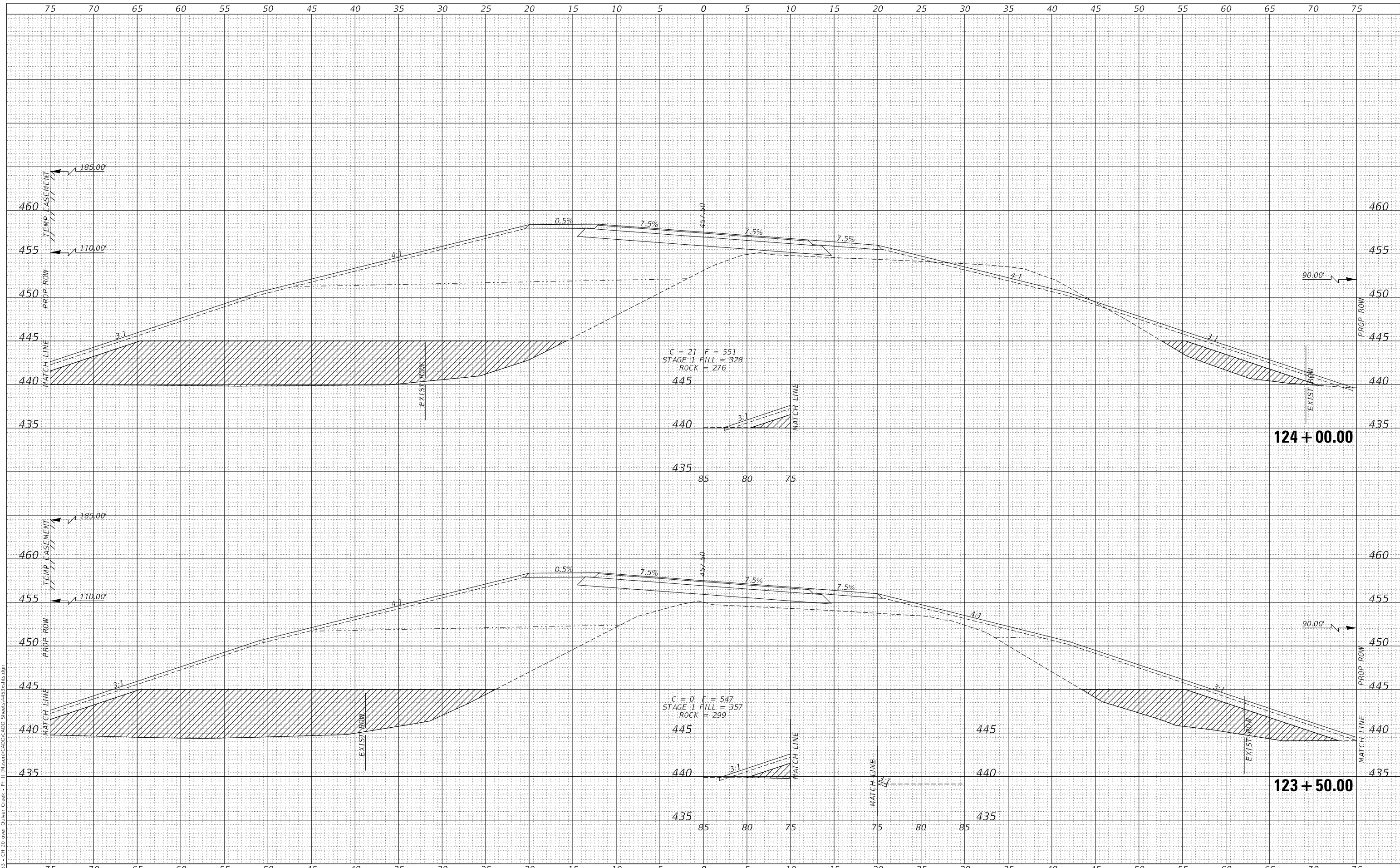
SCALE: 1"=5'      SHEET 9 OF 24 SHEETS      STA. 122+50.00 TO STA. 123+00.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	07-00022-01-BR	MASON	75	54
FED. ROAD DIST. NO. 7 ILLINOIS			CONTRACT NO. 93753	
FED. AID PROJECT ZMBM(399)				

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

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

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	DRAWN -	REVISED -
PLOT SCALE = 10.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 9/23/2020	DATE -	REVISED -

**MASON COUNTY  
 COUNTY HIGHWAY 20  
 OVER QUIVER CREEK**

**COUNTY HIGHWAY 20  
 CROSS SECTIONS**

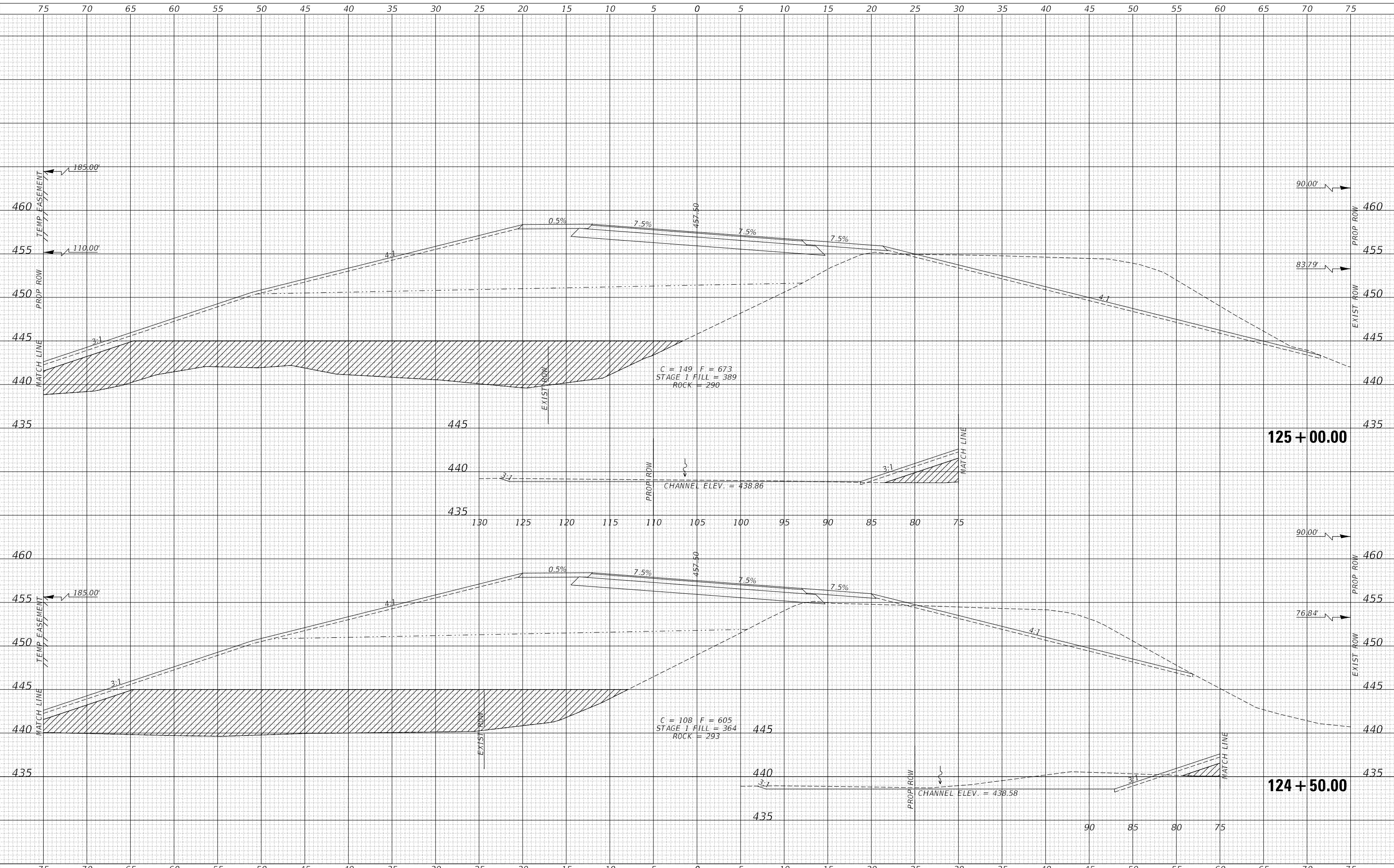
SCALE: 1"=5'      SHEET 10 OF 24 SHEETS      STA. 123+50.00 TO STA. 124+00.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	07-00022-01-BR	MASON	75	55
FED. ROAD DIST. NO. 7 ILLINOIS			CONTRACT NO. 93753	
FED. AID PROJECT ZMBM(399)				

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

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

MODEL: \$P0DELNAME\$  
 FILE NAME: V:\1515 - Ch 20 over Quiver Creek - Ph II (Hissom)\CAD\CADD Sheets\1453x815.dgn



USER NAME =	BNebe1
DESIGNED -	
DRAWN -	
CHECKED -	
DATE -	9/23/2020

REVISED -	
REVISED -	
REVISED -	
REVISED -	

**MASON COUNTY  
 COUNTY HIGHWAY 20  
 OVER QUIVER CREEK**

**COUNTY HIGHWAY 20  
 CROSS SECTIONS**

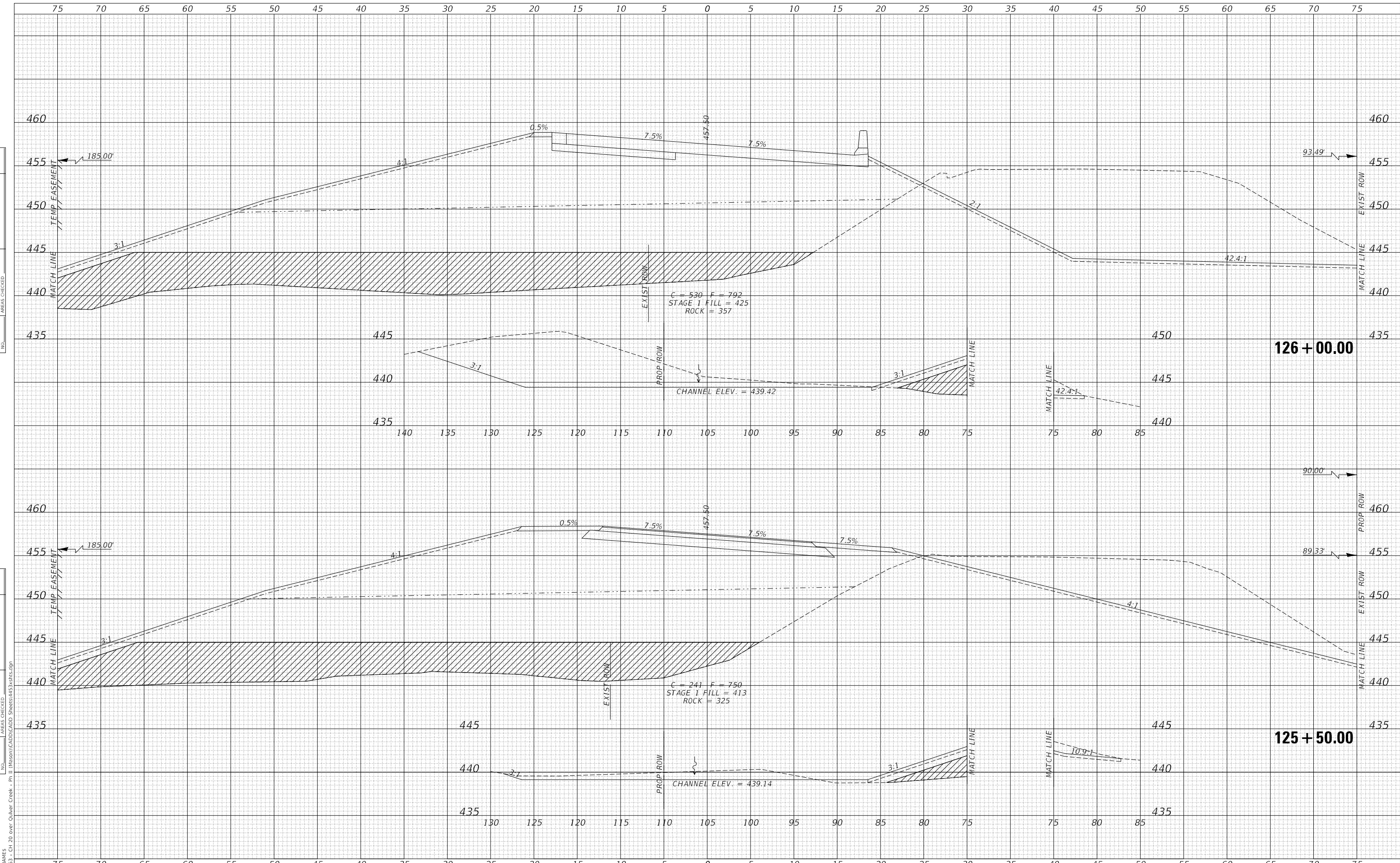
SCALE: 1"=5'      SHEET 11 OF 24 SHEETS      STA. 124+50.00 TO STA. 125+00.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	07-00022-01-BR	MASON	75	56
CONTRACT NO. 93753				
FED. ROAD DIST. NO. 7		ILLINOIS		
FED. AID PROJECT ZMBM(399)				



DATE	
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TEMPLATE	
AREAS CHECKED	
FINAL SURVEY	
NOTE BOOK	
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ORIGINAL SURVEY	
NOTE BOOK	
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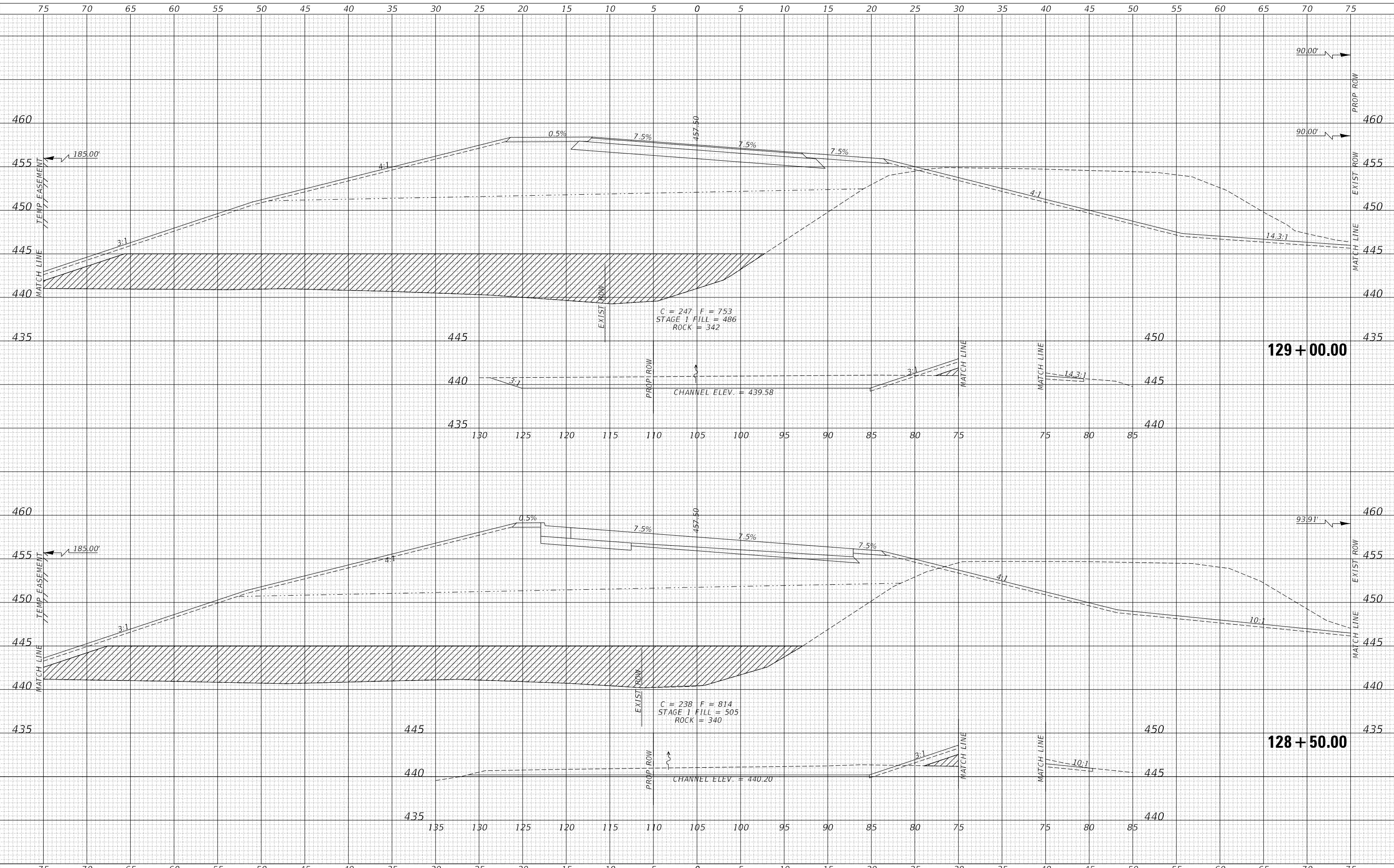


MODEL: \$P02ELNAME\$	USER NAME = BNebe1	DESIGNED -	REVISED -	<b>MASON COUNTY COUNTY HIGHWAY 20 OVER QUIVER CREEK</b>	<b>COUNTY HIGHWAY 20 CROSS SECTIONS</b>		F.A.S. RTE. 567	SECTION 07-00022-01-BR	COUNTY MASON	TOTAL SHEETS 75	SHEET NO. 57	
FILE NAME: V:\1515 - Ch 20 over Quiver Creek - Ph II (Hissom)\CAD\CADD Sheets\145\145x185.dgn	PLOT SCALE = 10.0000' / in.	CHECKED -	REVISED -		SCALE: 1"=5'	SHEET 12	OF 24 SHEETS	STA. 125+50.00	TO STA. 126+00.00	CONTRACT NO. 93753		
	PLOT DATE = 9/23/2020	DATE -	REVISED -		FED. ROAD DIST. NO. 7 ILLINOIS							
					FED. AID PROJECT ZMBM(399)							

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

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

MODEL: \$P0DELNAME\$  
 FILE NAME: V:\1515 - Ch 20 over Quiver Creek - Ph II (Hanson)CAD\CAD Sheets\145\145x185.dgn



USER NAME =	BNebe1
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CHECKED -	
DATE -	9/23/2020

REVISED -	
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REVISED -	

**MASON COUNTY  
 COUNTY HIGHWAY 20  
 OVER QUIVER CREEK**

**COUNTY HIGHWAY 20  
 CROSS SECTIONS**

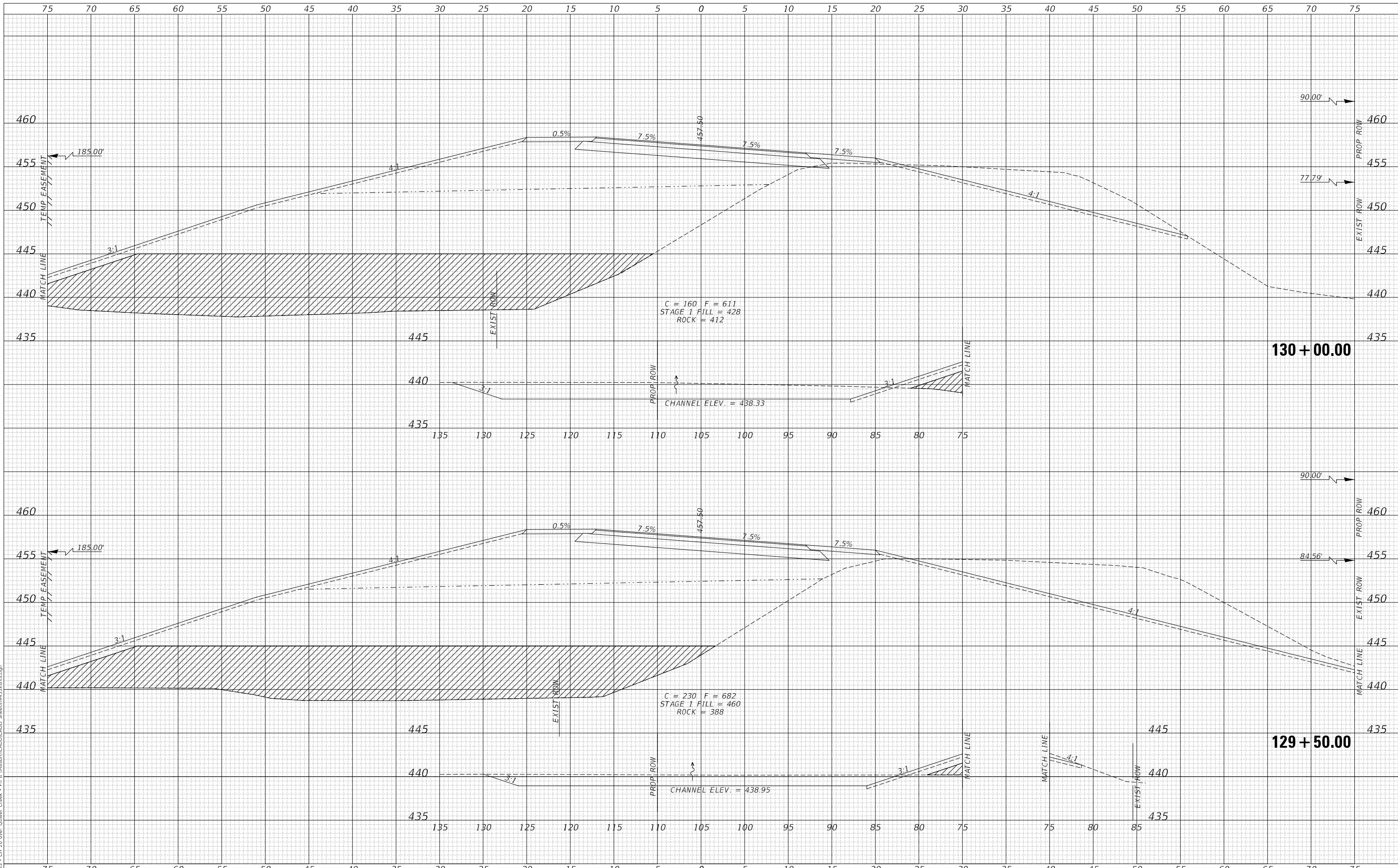
SCALE: 1"=5'      SHEET 13 OF 24 SHEETS      STA. 128+50.00 TO STA. 129+00.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	07-00022-01-BR	MASON	75	58
FED. ROAD DIST. NO. 7 ILLINOIS			CONTRACT NO. 93753	
FED. AID PROJECT ZMBM(399)				

DATE	
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TEMPLATE	
AREAS CHECKED	
FINAL SURVEY	
NOTE BOOK	
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AREAS CHECKED	

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PLOTTED	
TEMPLATE	
AREAS CHECKED	
ORIGINAL SURVEY	
NOTE BOOK	
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AREAS CHECKED	

MODEL: \$P0DELNAME\$  
 FILE NAME: V:\1515 - Ch 20 over Quiver Creek - Ph II (Hudson)\CAD\CADD Sheets\145\145.rvt.dgn



USER NAME =	BNebe1	DESIGNED -	REVISD -
		DRAWN -	REVISD -
		CHECKED -	REVISD -
		DATE -	REVISD -

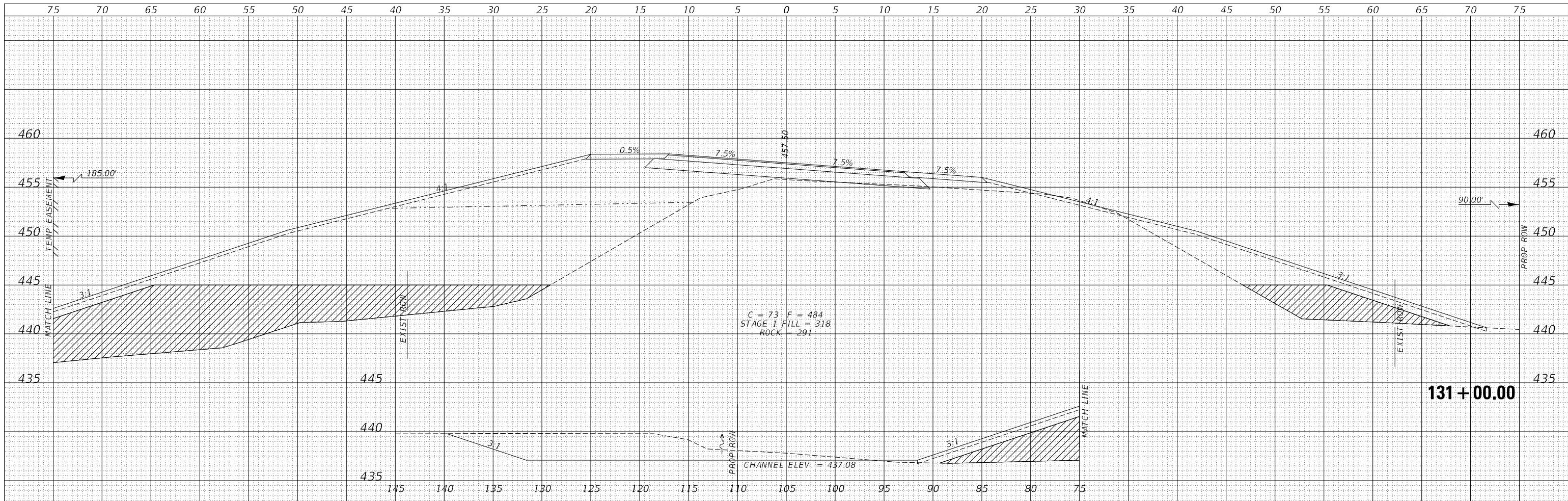
**MASON COUNTY  
 COUNTY HIGHWAY 20  
 OVER QUIVER CREEK**

**COUNTY HIGHWAY 20  
 CROSS SECTIONS**

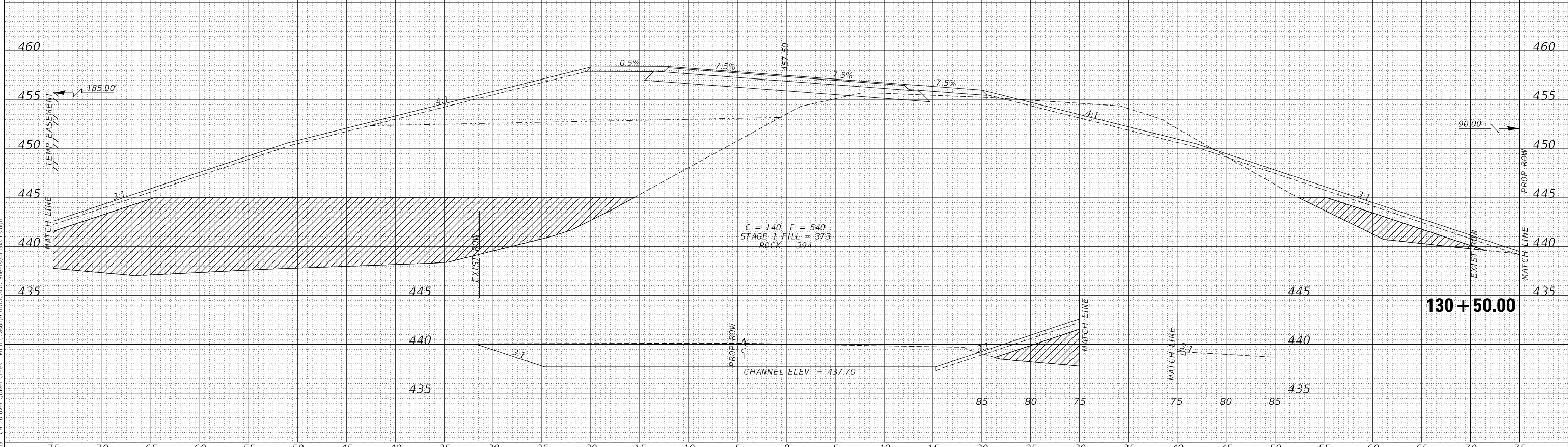
SCALE: 1"=5'      SHEET 14 OF 24 SHEETS      STA. 129+50.00 TO STA. 130+00.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	07-00022-01-BR	MASON	75	59
CONTRACT NO. 93753				
FED. ROAD DIST. NO. 7		ILLINOIS		
FED. AID PROJECT ZMBM(399)				

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



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



USER NAME = BNebe1	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 10.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 9/23/2020	DATE -	REVISED -

**MASON COUNTY  
 COUNTY HIGHWAY 20  
 OVER QUIVER CREEK**

**COUNTY HIGHWAY 20  
 CROSS SECTIONS**

SCALE: 1"=5' SHEET 15 OF 24 SHEETS STA. 130+50.00 TO STA. 131+00.00

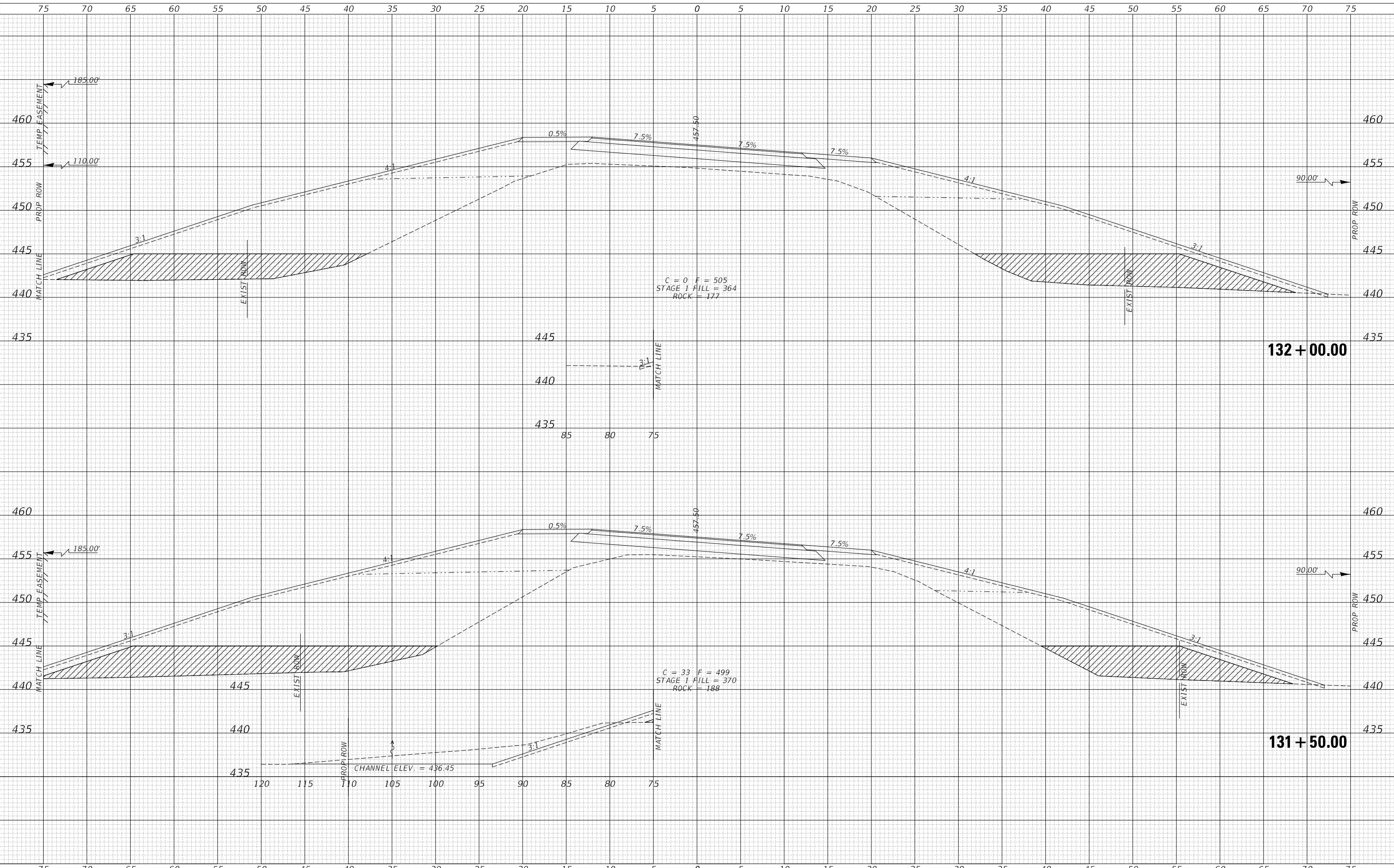
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	07-00022-01-BR	MASON	75	60
CONTRACT NO. 93753				
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT ZMBM(399)				

MODEL: \$P0DELNAME\$  
 FILE NAME: V:\1315 - Ch 20 over Quiver Creek - Ph II (InRoads)\CAD\CADD Sheets\1315\1315.rvt.dgn

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

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

MODEL: SPODE\MAMES  
 FILE NAME: V:\1315 - Ch 20 over Quiver Creek - Ph II\1315m\CADD\CADD Sheets\1315\1315.dgn



USER NAME = BNebe1	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 10.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 9/23/2020	DATE -	REVISED -

**MASON COUNTY  
 COUNTY HIGHWAY 20  
 OVER QUIVER CREEK**

**COUNTY HIGHWAY 20  
 CROSS SECTIONS**

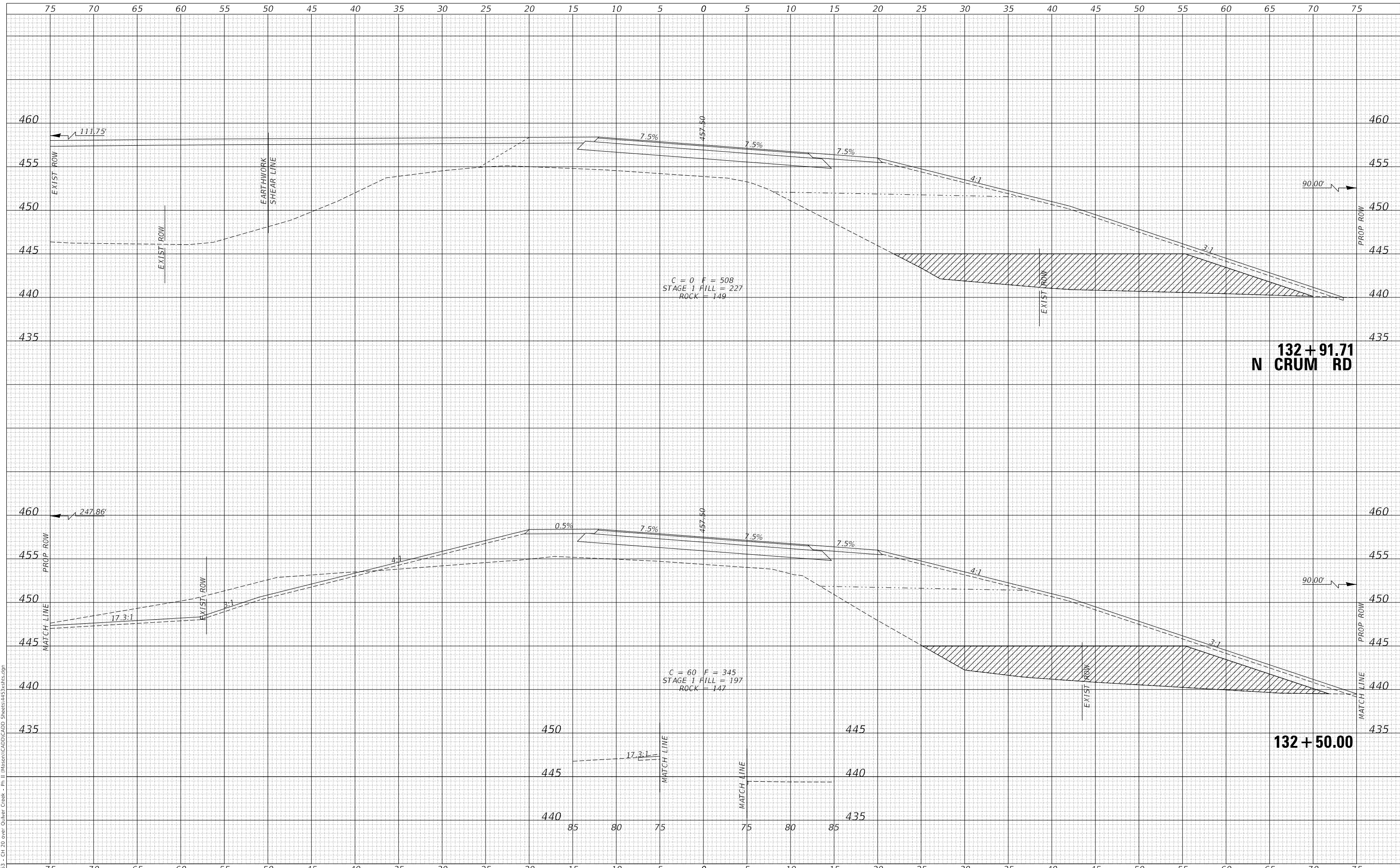
SCALE: 1"=5'      SHEET 16 OF 24 SHEETS      STA. 131+50.00 TO STA. 132+00.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	07-00022-01-BR	MASON	75	61
CONTRACT NO. 93753				
FED. ROAD DIST. NO. 7      ILLINOIS      FED. AID PROJECT ZMBM(399)				

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

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

MODEL: SPODELNAME1  
 FILE NAME: V:\135 - Ch 20 over Quiver Creek - Ph II (InRoads)\CAD\CADD Sheets\145\145.rvt.dgn



USER NAME = BNebe1	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 10.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 9/23/2020	DATE -	REVISED -

**MASON COUNTY  
 COUNTY HIGHWAY 20  
 OVER QUIVER CREEK**

**COUNTY HIGHWAY 20  
 CROSS SECTIONS**

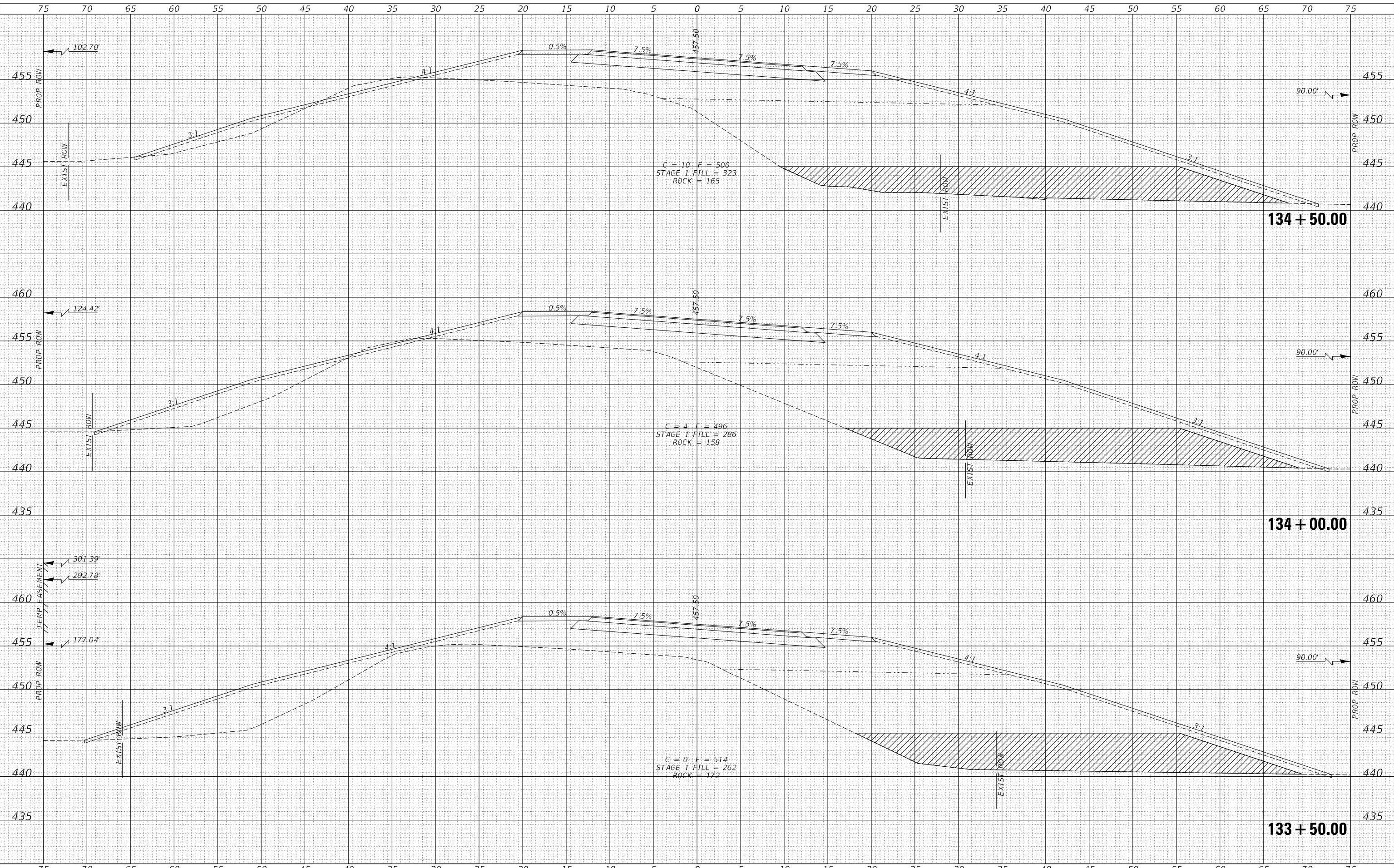
SCALE: 1"=5'    SHEET 17 OF 24 SHEETS    STA. 132+50.00 TO STA. 133+00.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	07-00022-01-BR	MASON	75	62
FED. ROAD DIST. NO. 7 ILLINOIS			CONTRACT NO. 93753	
FED. AID PROJECT ZMBM(399)				

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

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

MODEL: SPODEMAMES  
 FILE NAME: V:\1515 - Ch 20 over Quiver Creek - Ph II\InRoads\CADD\CADD Sheets\1453x18s.dgn



USER NAME = BNebe1	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 10.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 9/23/2020	DATE -	REVISED -

**MASON COUNTY  
 COUNTY HIGHWAY 20  
 OVER QUIVER CREEK**

**COUNTY HIGHWAY 20  
 CROSS SECTIONS**

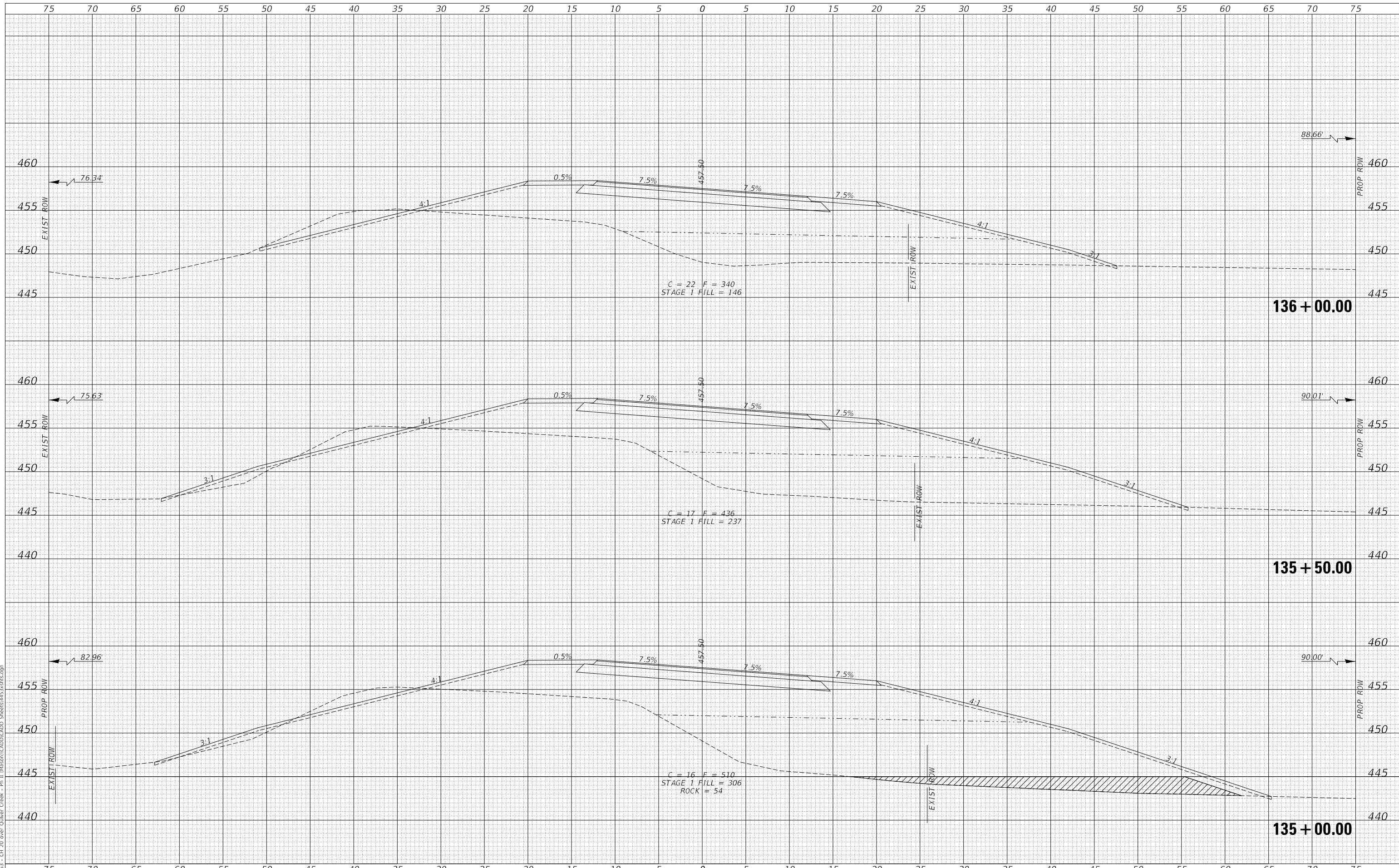
SCALE: 1"=5'      SHEET 18 OF 24 SHEETS      STA. 133+50.00 TO STA. 134+50.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	07-00022-01-BR	MASON	75	63
FED. ROAD DIST. NO. 7		ILLINOIS	CONTRACT NO. 93753	
			FED. AID PROJECT ZMBM(399)	

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS CHECKED	
FINAL SURVEY	
NOTE BOOK	
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DATE	
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SURVEYED	
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TEMPLATE	
AREAS CHECKED	
ORIGINAL SURVEY	
NOTE BOOK	
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MODEL: SPODEMAMES  
 FILE NAME: V:\1515 - Ch 20 over Quiver Creek - Ph II (InRoads)\CAD\CADD Sheets\145\145x18.rvt



USER NAME =	BNebe1	DESIGNED -	REVISD -
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PLOT SCALE =	10.0000' / in.	CHECKED -	REVISD -
PLOT DATE =	9/23/2020	DATE -	REVISD -

**MASON COUNTY  
 COUNTY HIGHWAY 20  
 OVER QUIVER CREEK**

**COUNTY HIGHWAY 20  
 CROSS SECTIONS**

SCALE: 1"=5'      SHEET 19 OF 24 SHEETS      STA. 135+00.00 TO STA. 136+00.00

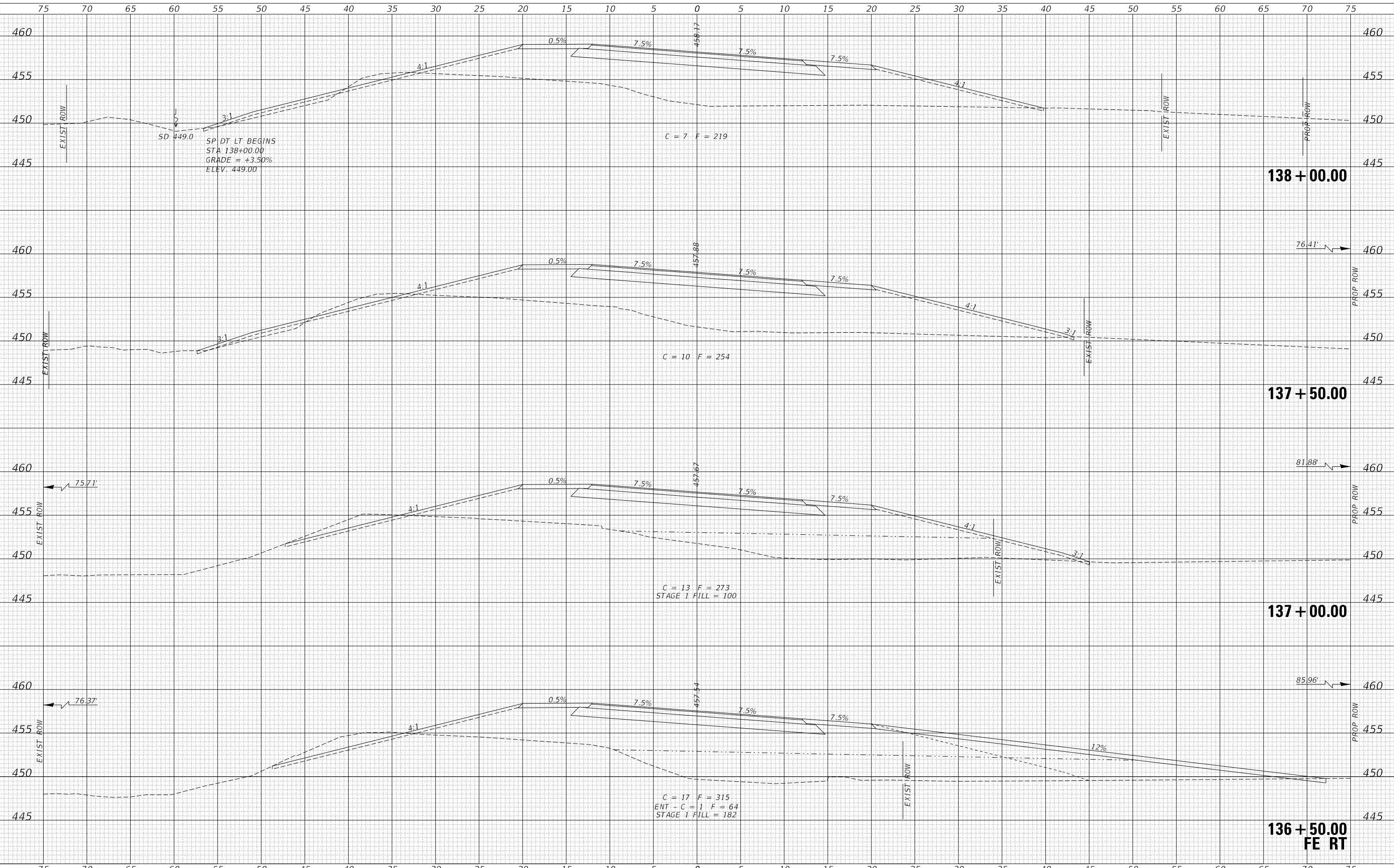
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	07-00022-01-BR	MASON	75	64
FED. ROAD DIST. NO. 7		ILLINOIS	CONTRACT NO. 93753	
			FED. AID PROJECT ZMBM(399)	



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

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

MODEL: \$P0DELNAME\$  
 FILE NAME: V:\1515 - Ch 20 over Quiver Creek - Ph II (InRoads)\CAD\CADD Sheets\145\145x18s.dgn



USER NAME =	BNebe1	DESIGNED -	REVISIED -
		DRAWN -	REVISIED -
PLOT SCALE =	10.0000 ' / in.	CHECKED -	REVISIED -
PLOT DATE =	9/23/2020	DATE -	REVISIED -

**MASON COUNTY  
 COUNTY HIGHWAY 20  
 OVER QUIVER CREEK**

**COUNTY HIGHWAY 20  
 CROSS SECTIONS**

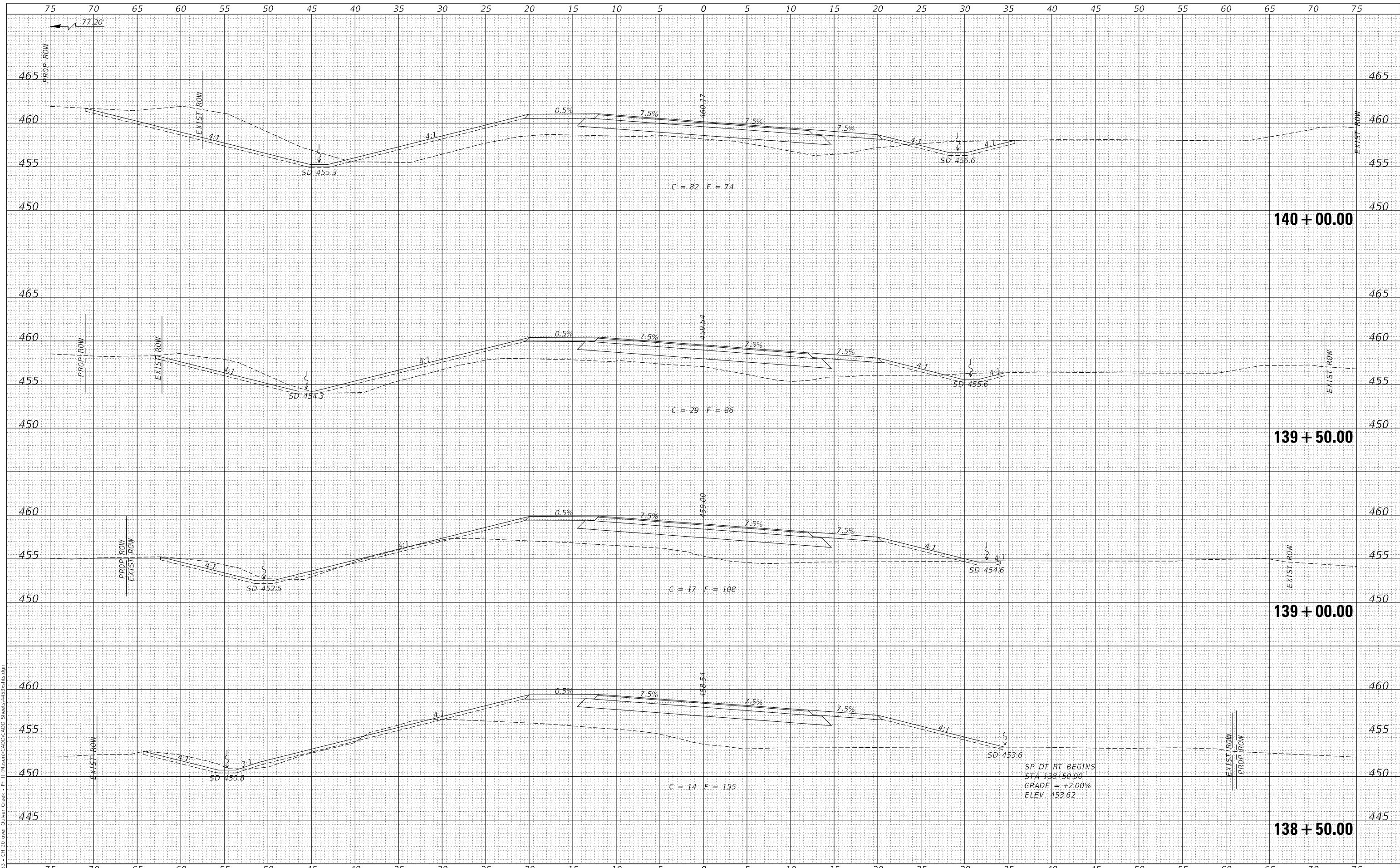
SCALE: 1"=5' SHEET 20 OF 24 SHEETS STA. 136+50.00 TO STA. 138+00.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	07-00022-01-BR	MASON	75	65
CONTRACT NO. 93753				
FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT ZMBM(399)		

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

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

MODEL: \$P06\NAME\$  
 FILE NAME: V:\1515 - Ch 20 over Quiver Creek - Ph II\InRoads\CADD\CADD Sheets\145\145x18.rvt.dgn



USER NAME =	BNebe1	DESIGNED -	REVISD -
		DRAWN -	REVISD -
		CHECKED -	REVISD -
		DATE -	REVISD -
PLOT SCALE =	10.0000 ' / in.		
PLOT DATE =	9/23/2020		

**MASON COUNTY  
 COUNTY HIGHWAY 20  
 OVER QUIVER CREEK**

**COUNTY HIGHWAY 20  
 CROSS SECTIONS**

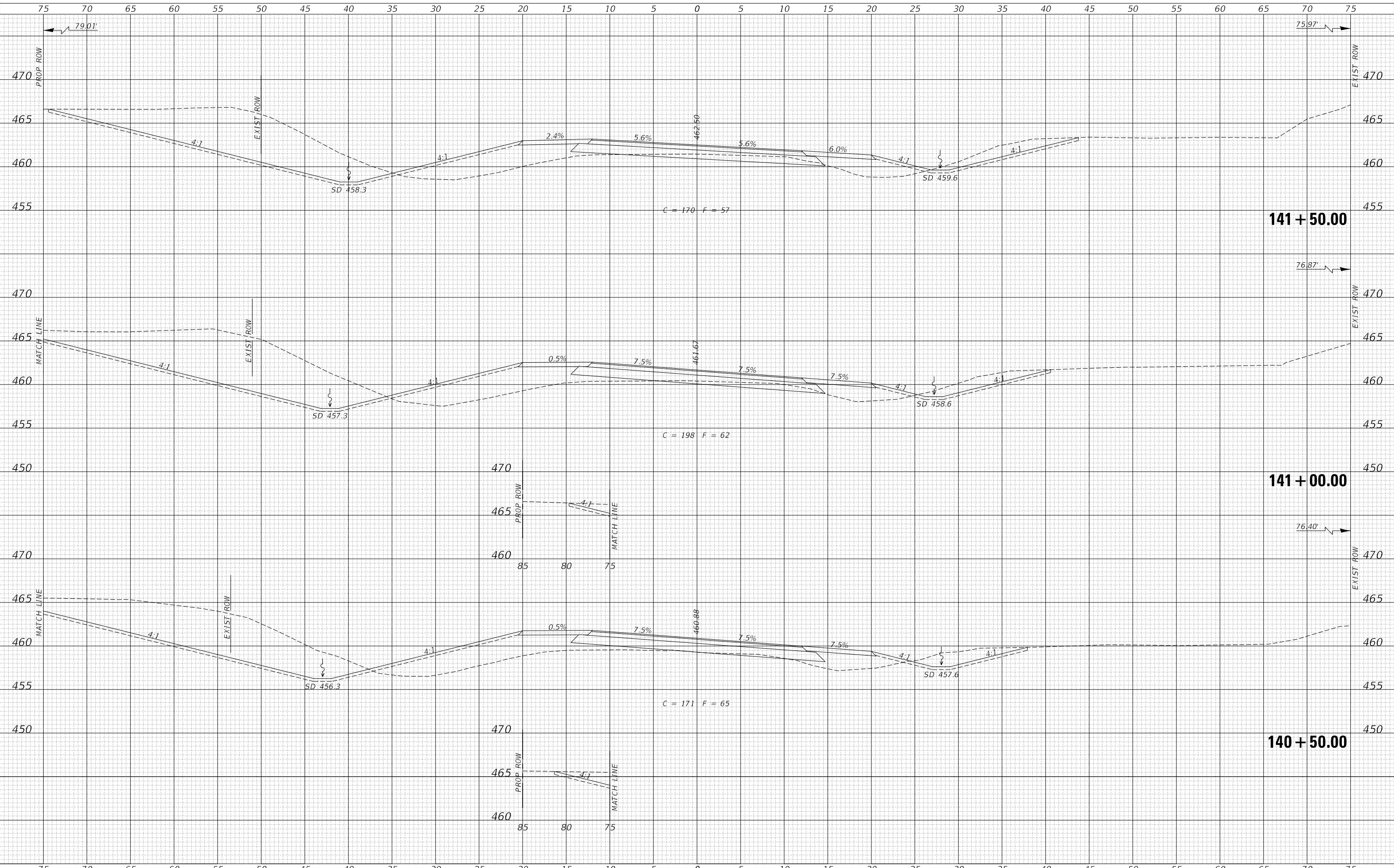
SCALE: 1"=5'      SHEET 21 OF 24 SHEETS      STA. 138+50.00 TO STA. 140+00.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	07-00022-01-BR	MASON	75	66
FED. ROAD DIST. NO. 7 ILLINOIS			CONTRACT NO. 93753	
FED. AID PROJECT ZMBM(399)				

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

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

MODEL: \$P0ELNAME\$  
 FILE NAME: V:\1515 - Ch 20 over Quiver Creek - Ph II\1515m\CADD\CADD Sheets\1415x815.rvt.dgn



USER NAME =	BNebe1	DESIGNED -	REVISD -
		DRAWN -	REVISD -
PLOT SCALE =	10.0000 ' / in.	CHECKED -	REVISD -
PLOT DATE =	9/23/2020	DATE -	REVISD -

**MASON COUNTY  
 COUNTY HIGHWAY 20  
 OVER QUIVER CREEK**

**COUNTY HIGHWAY 20  
 CROSS SECTIONS**

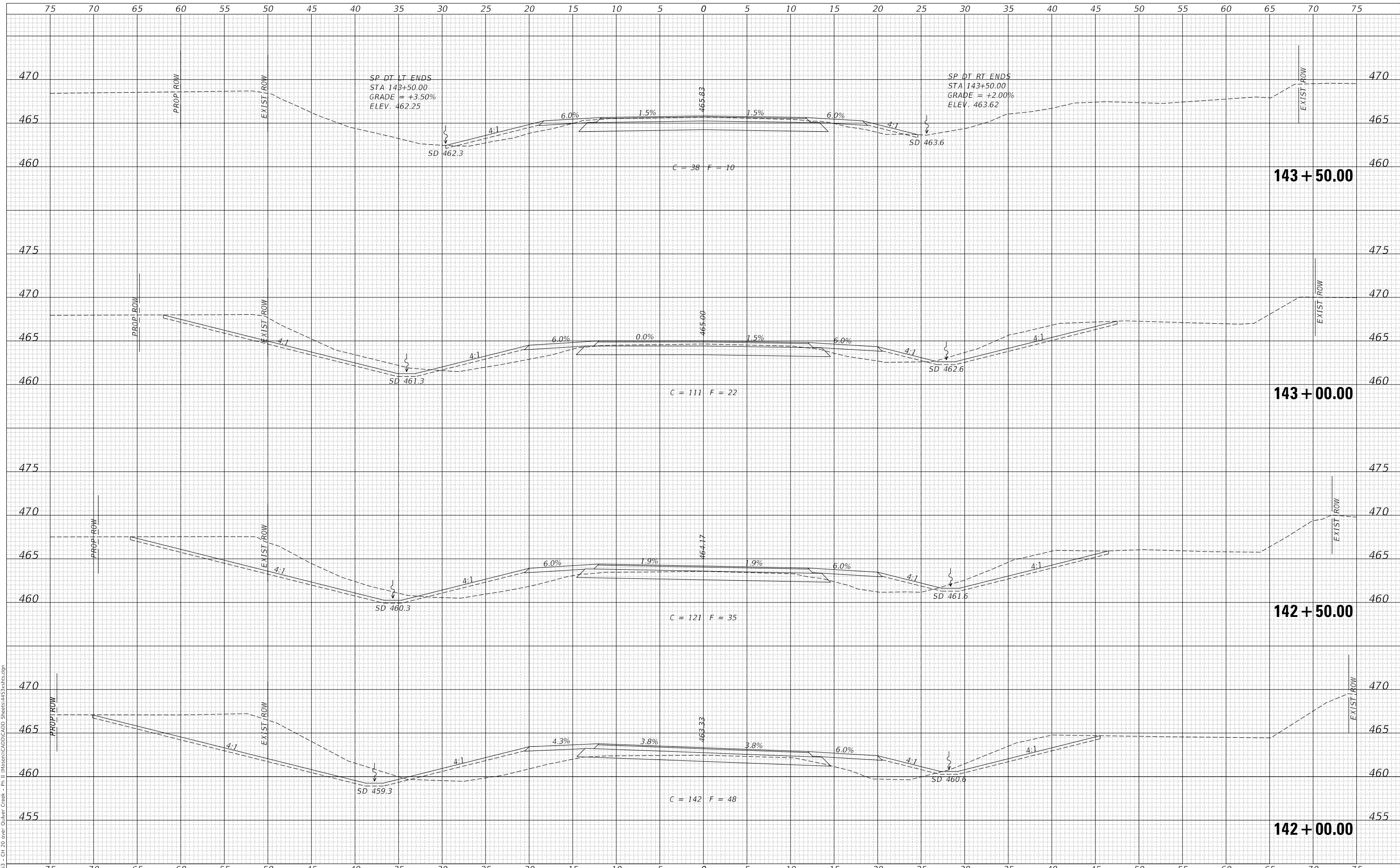
SCALE: 1"=5'      SHEET 22 OF 24 SHEETS      STA. 140+50.00 TO STA. 141+50.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	07-00022-01-BR	MASON	75	67
				CONTRACT NO. 93753
FED. ROAD DIST. NO. 7		ILLINOIS		FED. AID PROJECT ZMBM(399)

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

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

MODEL: \$P0DELNAME\$  
 FILE NAME: V:\1515 - Ch 20 over Quiver Creek - Ph II (Hessm)CAD\CAD Sheets\143\143xhts.dgn



USER NAME = BNebe1	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 10.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 9/23/2020	DATE -	REVISED -

**MASON COUNTY  
 COUNTY HIGHWAY 20  
 OVER QUIVER CREEK**

**COUNTY HIGHWAY 20  
 CROSS SECTIONS**

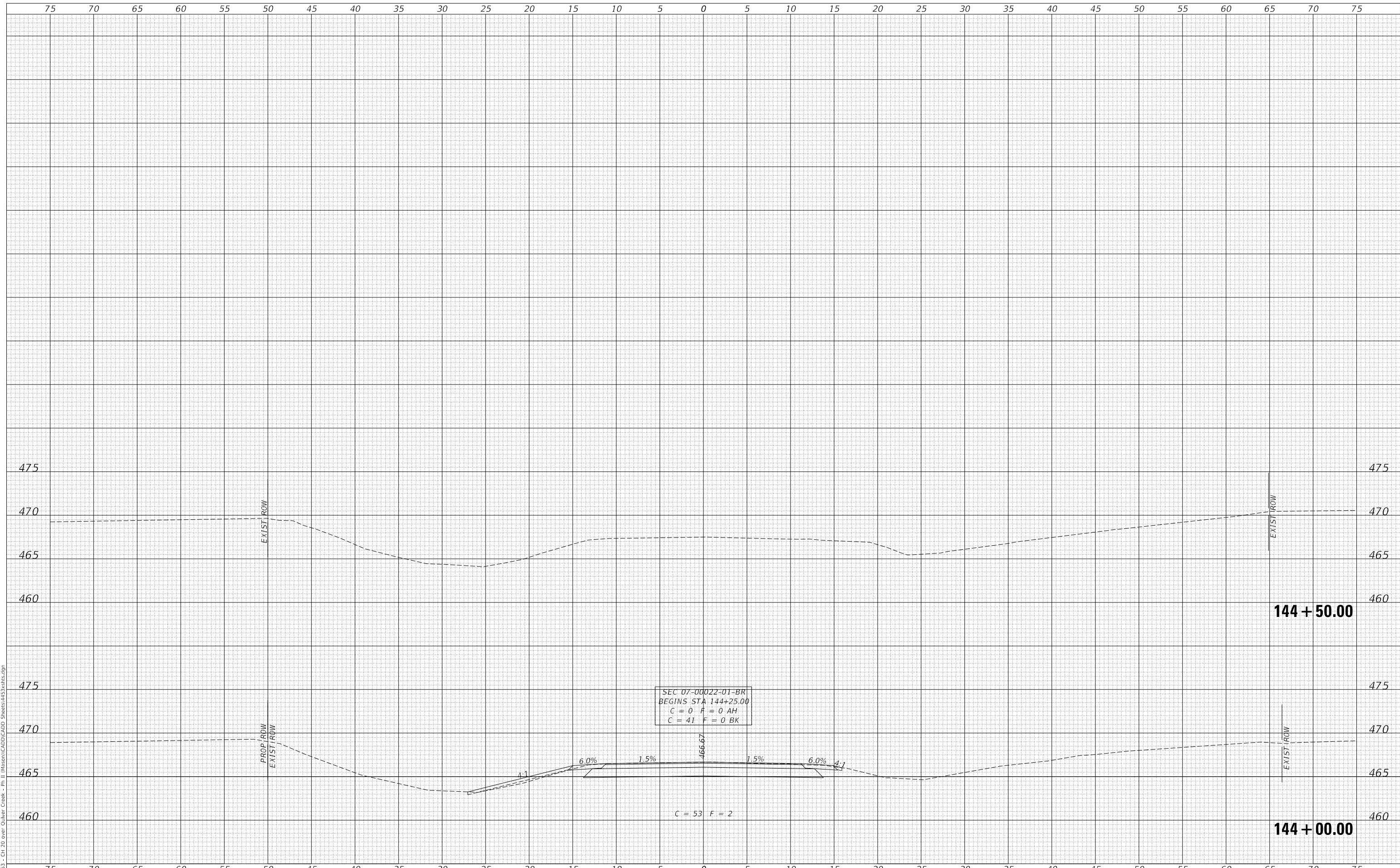
SCALE: 1"=5' SHEET 23 OF 24 SHEETS STA. 142+00.00 TO STA. 143+50.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	07-00022-01-BR	MASON	75	68
CONTRACT NO. 93753				
FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT ZMBM(399)		

FINAL SURVEY NO.	SURVEYED PLOTTED AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NO.	SURVEYED PLOTTED AREAS CHECKED	BY	DATE

MODEL: \$MODELNAME\$  
FILE NAME: V:\1515 - CH 20 over Quiver Creek - Ph II\1515m\CADD\CADD Sheets\1445x815s.dgn



USER NAME = BNebe1	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 10.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 9/23/2020	DATE -	REVISED -

**MASON COUNTY  
COUNTY HIGHWAY 20  
OVER QUIVER CREEK**

**COUNTY HIGHWAY 20  
CROSS SECTIONS**

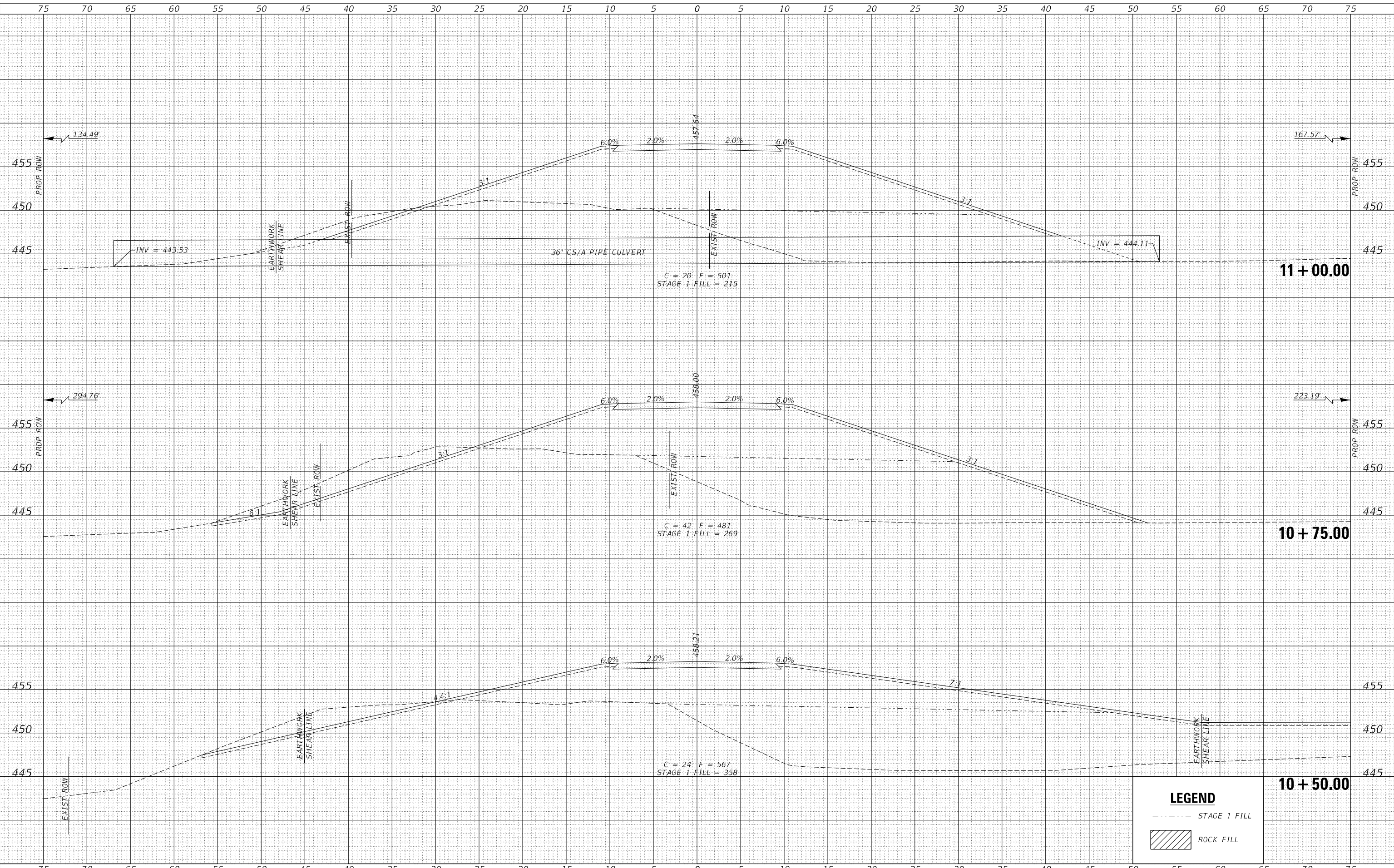
SCALE: 1"=5'      SHEET 24 OF 24 SHEETS      STA. 144+00.00 TO STA. 144+50.00

F.A.S. RTE. 567	SECTION 07-00022-01-BR	COUNTY MASON	TOTAL SHEETS 75	SHEET NO. 69
FED. ROAD DIST. NO. 7 ILLINOIS			CONTRACT NO. 93753	
FED. AID PROJECT ZMBM(399)				

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

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

MODEL: S:\MODEL\NAMES  
 FILE NAME: V:\1515 - Ch 20 over Quiver Creek - Ph II (1185m)\CAD\CADD Sheets\1145\1145x1145.dwg



USER NAME =	BNebe1	DESIGNED -	REVISIED -
		DRAWN -	REVISIED -
		CHECKED -	REVISIED -
		DATE -	REVISIED -

**MASON COUNTY  
 COUNTY HIGHWAY 20  
 OVER QUIVER CREEK**

**NORTH CRUM ROAD  
 CROSS SECTIONS**

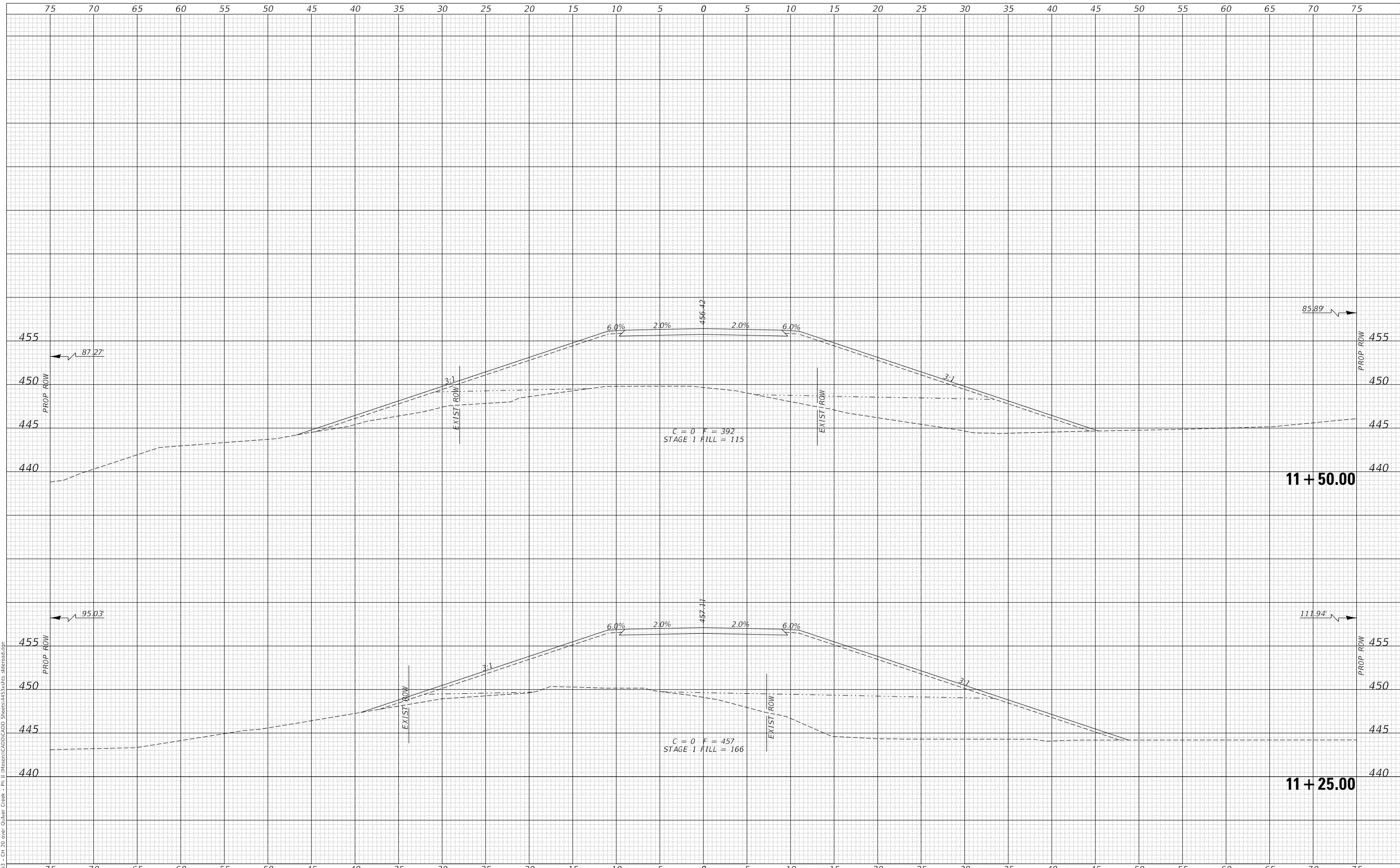
SCALE: 1"=5' SHEET 1 OF 6 SHEETS STA. 10+50.00 TO STA. 11+00.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	07-0022-01-BR	MASON	75	70
FED. ROAD DIST. NO. 7 ILLINOIS			CONTRACT NO. 93753	
FED. AID PROJECT ZMBM(399)				

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

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

MODEL: s:\MODEL\NAME\...  
 FILE NAME: V:\1515 - Ch 20 over Quiver Creek - Ph II\1150m\CADD\CADD Sheets\115x115\115s115.dgn



USER NAME = BNebe1	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 10.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 9/23/2020	DATE -	REVISED -

**MASON COUNTY  
 COUNTY HIGHWAY 20  
 OVER QUIVER CREEK**

**NORTH CRUM ROAD  
 CROSS SECTIONS**

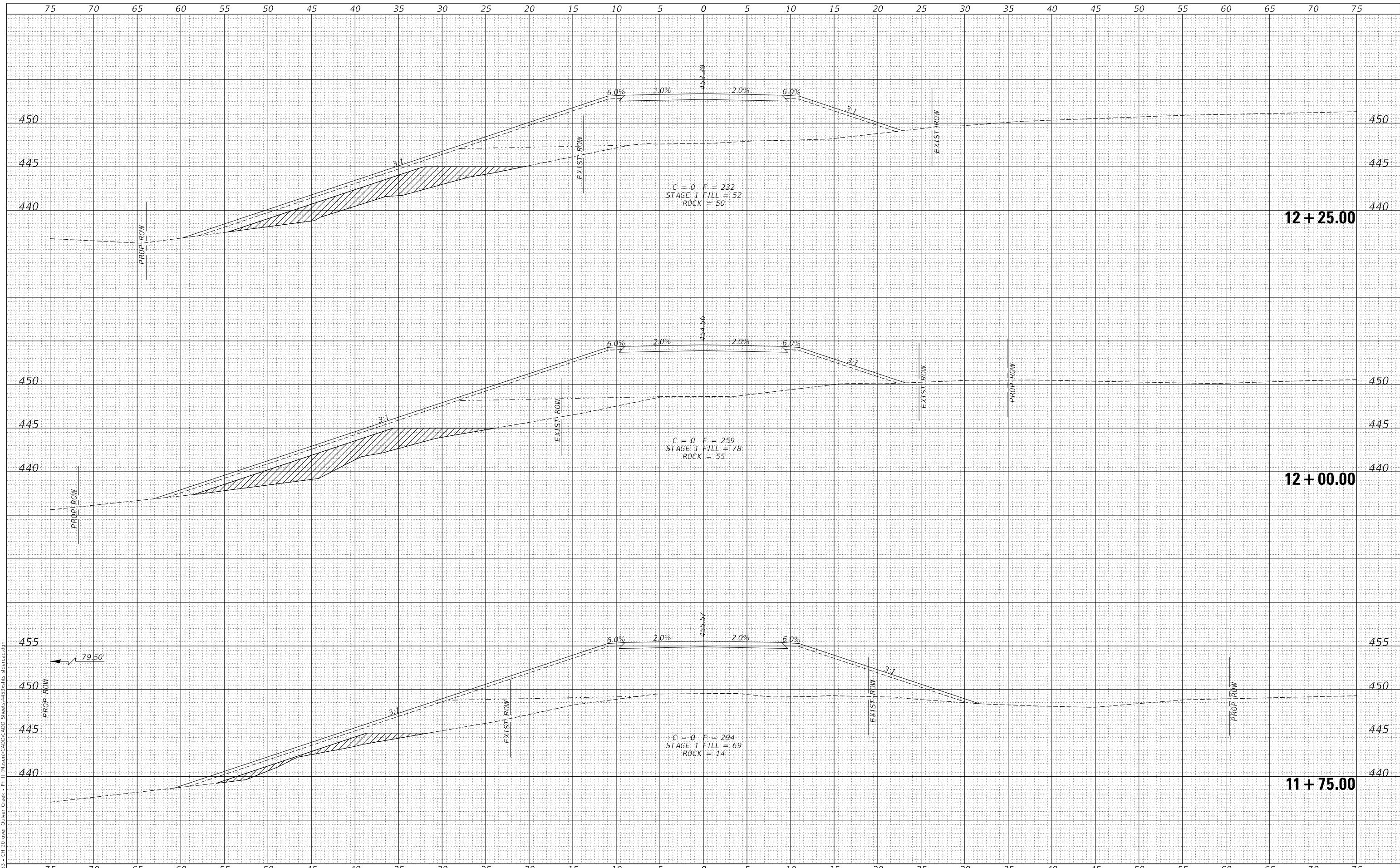
SCALE: 1"=5' SHEET 2 OF 6 SHEETS STA. 11+25.00 TO STA. 11+50.00

F.A.S. RTE. 567	SECTION 07-00022-01-BR	COUNTY MASON	TOTAL SHEETS 75	SHEET NO. 71
FED. ROAD DIST. NO. 7 ILLINOIS		CONTRACT NO. 93753		
FED. AID PROJECT ZMBM(399)				

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

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

MODEL: \$P0DELNAME\$  
 FILE NAME: V:\1151 - Ch 20 over Quiver Creek - Ph II\1151sm\CADD\CADD Sheets\1151x18s 3d\crumad.dgn



USER NAME =	BNebe1	DESIGNED -	REVISIED -
		DRAWN -	REVISIED -
PLOT SCALE =	10.0000' / in.	CHECKED -	REVISIED -
PLOT DATE =	9/23/2020	DATE -	REVISIED -

**MASON COUNTY  
 COUNTY HIGHWAY 20  
 OVER QUIVER CREEK**

**NORTH CRUM ROAD  
 CROSS SECTIONS**

SCALE: 1"=5'      SHEET 3      OF 6 SHEETS      STA. 11+75.00      TO STA. 12+25.00

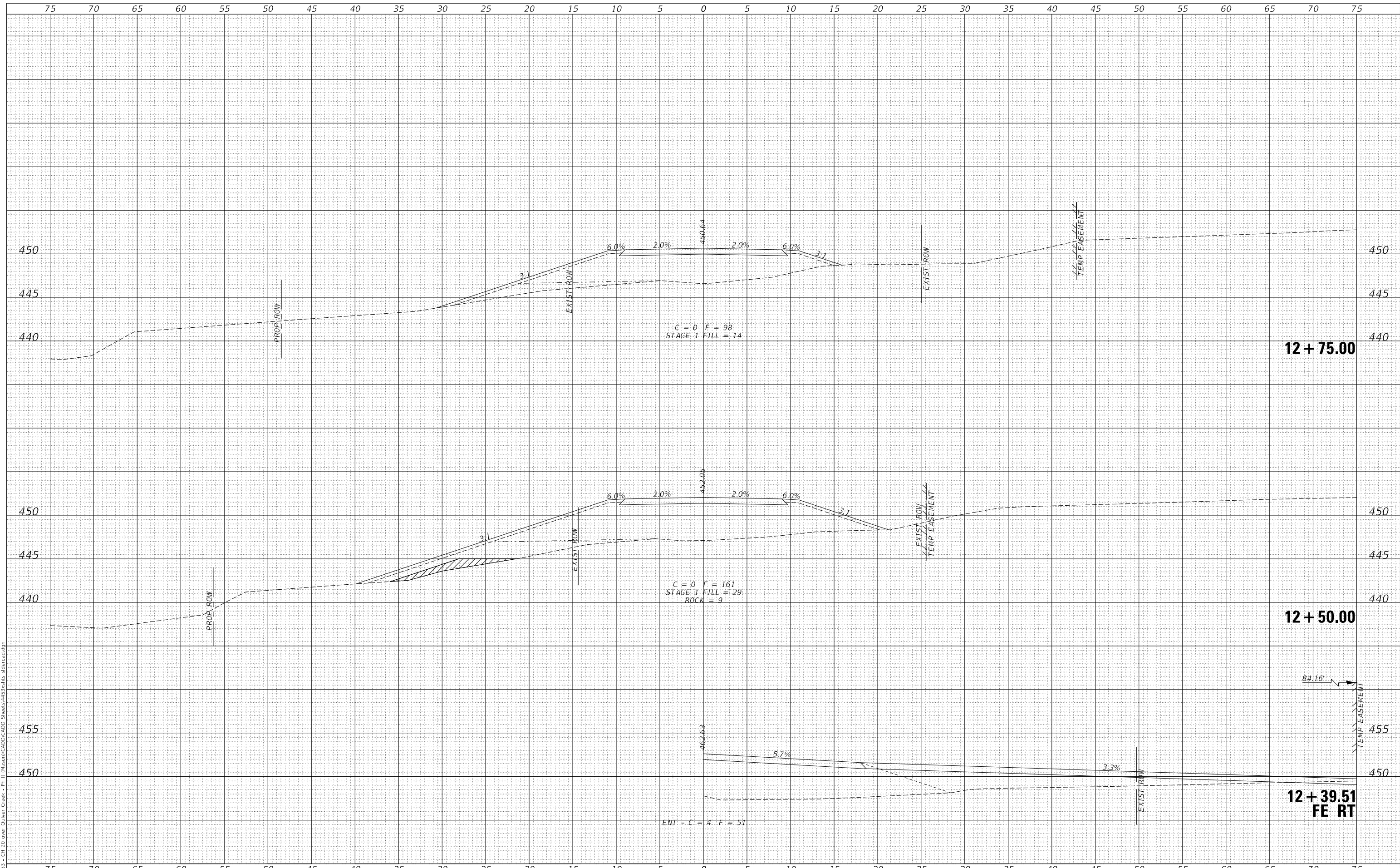
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	07-00022-01-BR	MASON	75	72
FED. ROAD DIST. NO. 7 ILLINOIS			CONTRACT NO. 93753	
FED. AID PROJECT ZMBM(399)				



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

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

MODEL: S:\MODEL\NAME\ - Ch 20 over Quiver Creek - Ph II (InRoads)\CAD\CADD Sheets\1445\Xsthis 3d\road.dgn  
 FILE NAME: V:\1451 - Ch 20 over Quiver Creek - Ph II (InRoads)\CAD\CADD Sheets\1445\Xsthis 3d\road.dgn



USER NAME = BNebe1	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 10.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 9/23/2020	DATE -	REVISED -

**MASON COUNTY  
 COUNTY HIGHWAY 20  
 OVER QUIVER CREEK**

**NORTH CRUM ROAD  
 CROSS SECTIONS**

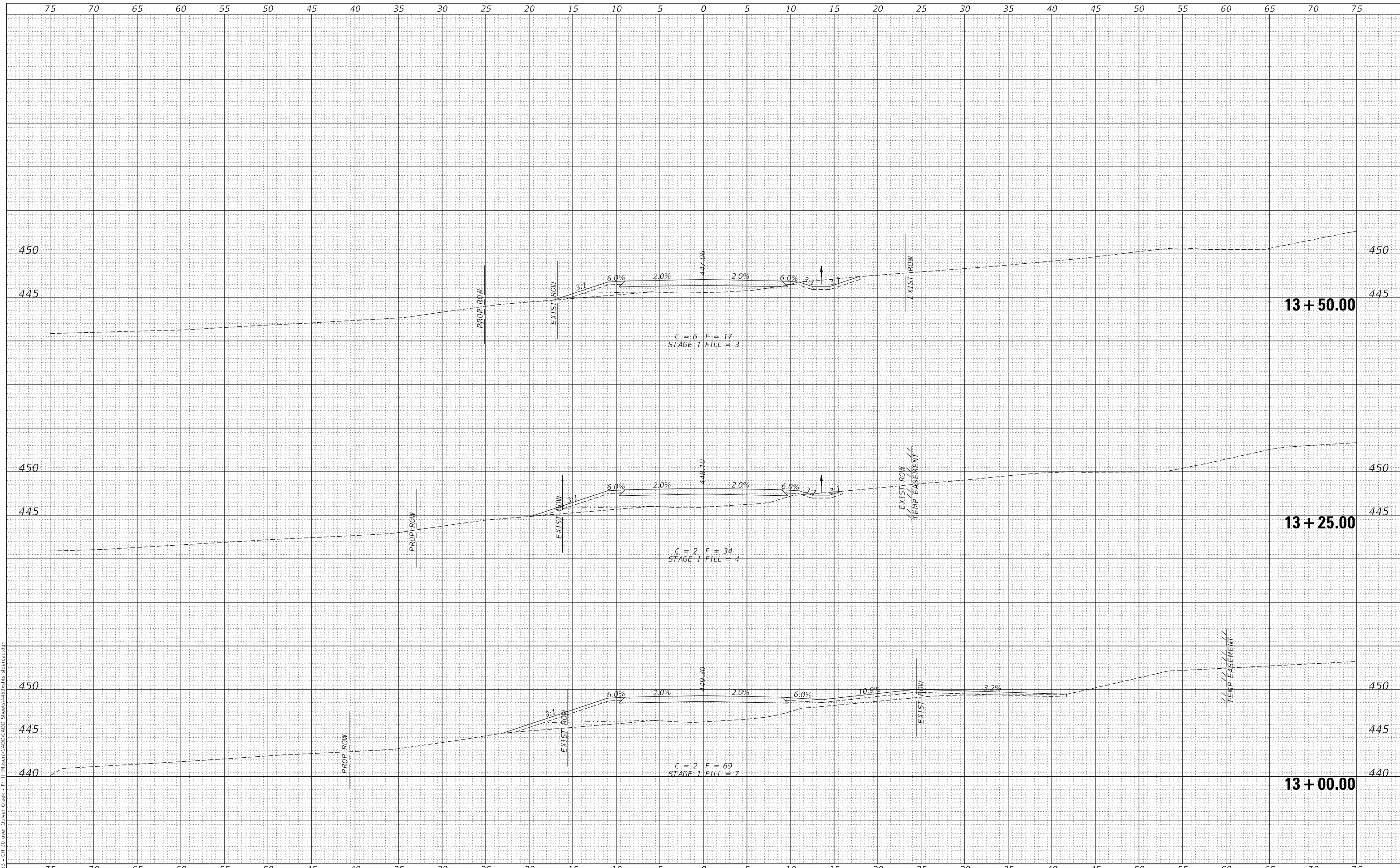
SCALE: 1"=5' SHEET 4 OF 6 SHEETS STA. 12+39.51 TO STA. 12+75.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	07-00022-01-BR	MASON	75	73
FED. ROAD DIST. NO. 7 ILLINOIS			CONTRACT NO. 93753	
FED. AID PROJECT ZMBM(399)				

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

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

MODEL: \$PLOTNAME\$  
 FILE NAME: V:\135 - Ch 20 over Quiver Creek - Ph II\135m\CAD\CADD Sheets\135\135shts\3droad.dgn



USER NAME = BNebe1	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 10.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 9/23/2020	DATE -	REVISED -

**MASON COUNTY  
 COUNTY HIGHWAY 20  
 OVER QUIVER CREEK**

**NORTH CRUM ROAD  
 CROSS SECTIONS**

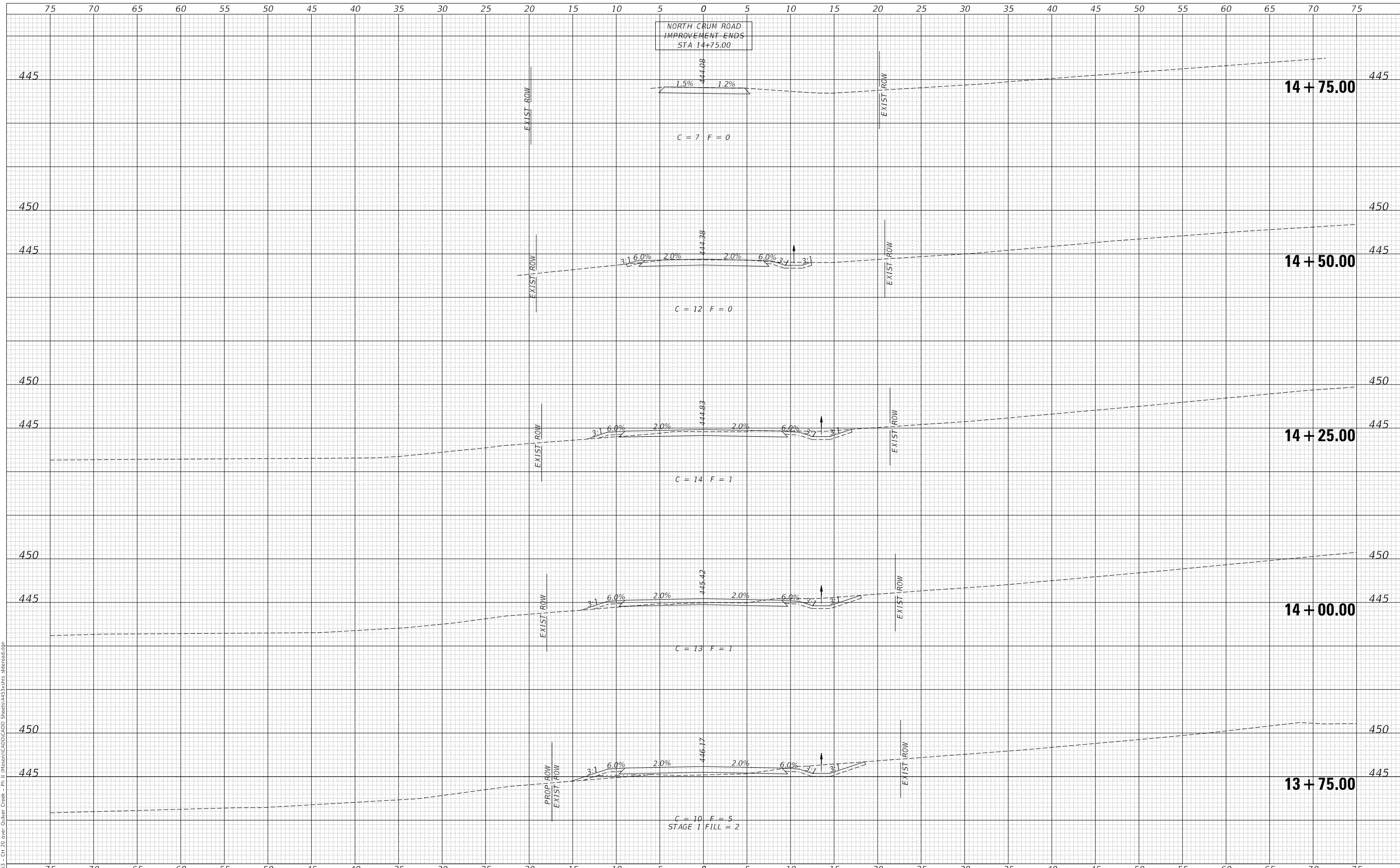
SCALE: 1"=5'      SHEET 5 OF 6 SHEETS      STA. 13+00.00 TO STA. 13+50.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	07-00022-01-BR	MASON	75	74
CONTRACT NO. 93753				
FED. ROAD DIST. NO. 7		ILLINOIS		FED. AID PROJECT ZMBM(399)

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

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

MODEL: \$P0DELNAME\$  
 FILE NAME: V:\1515 - Ch 20 over Quiver Creek - Ph II\InRoads\CADD\CADD Sheets\145\145x15.rvt



USER NAME = BNebe1	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 10.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 9/23/2020	DATE -	REVISED -

**MASON COUNTY  
 COUNTY HIGHWAY 20  
 OVER QUIVER CREEK**

**NORTH CRUM ROAD  
 CROSS SECTIONS**

SCALE: 1"=5' SHEET 6 OF 6 SHEETS STA. 13+75.00 TO STA. 14+75.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	07-00022-01-BR	MASON	75	75
FED. ROAD DIST. NO. 7 ILLINOIS			CONTRACT NO. 93753	
FED. AID PROJECT ZMBM(399)				