

FOR INDEX OF SHEETS, SEE SHEET NO. 2
FOR SUMMARY OF QUANTITIES, SEE SHEETS 3 TO 8

DESIGN DESIGNATION: OTHER PRINCIPAL ARTERIAL

CURRENT TRAFFIC DATA
SPEED LIMIT: 55 MPH

ADT US 24:
2021: 3,300
2041: 3,650

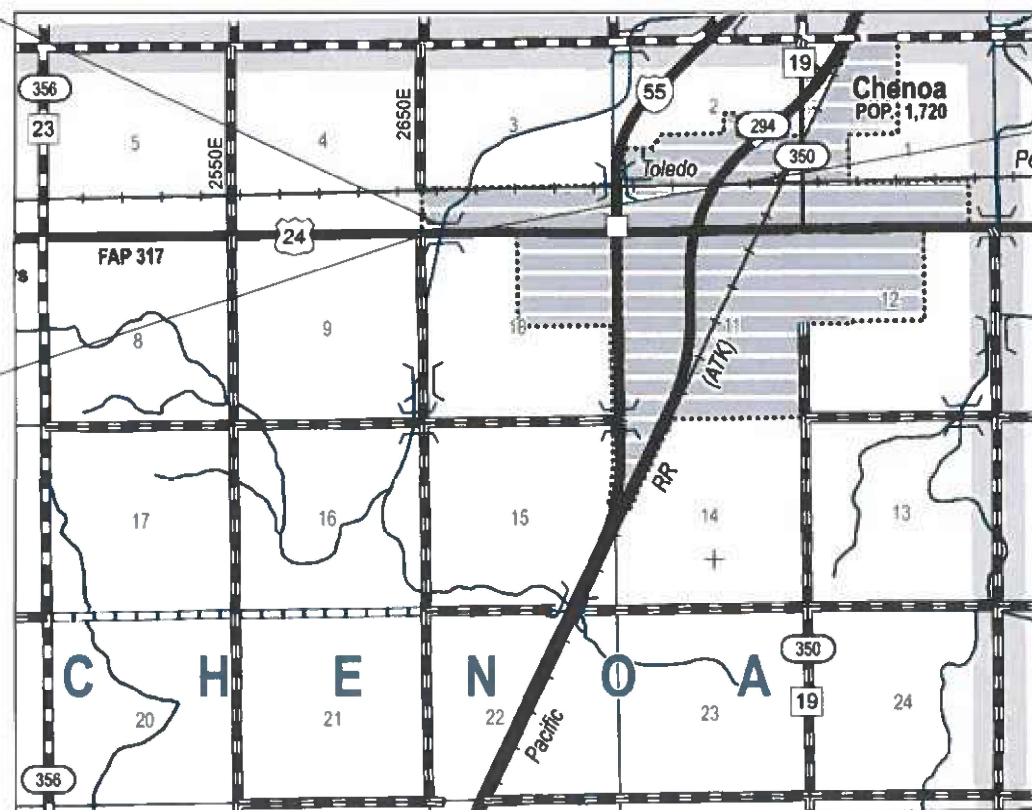
DHV US 24:
2041 AM: 260
2041 PM: 260

P.V.% = 69.7%
S.U.% = 8.3%
M.U.% = 22.0%

STRUCTURE
STA. 1494 + 00.00
S.N. 057-0070 (EX)
S.N. 057-0258 (PR)
SINGLE SPAN 27" PPC
IL-BEAM BRIDGE WITH
CONCRETE DECK ON
INTEGRAL ABUTMENTS,
70'-0" BK TO BK
SKEWED 12° (LF)

BEGIN IMPROVEMENT
STA 1493 + 65.00

C-95-028-11
AT INTERMITTENT STREAM 0.9 MILES W OF I-55 W OF CHENOA



LOCATION MAP

GROSS LENGTH = 445.00 FT. = 0.084 MILE
NET LENGTH = 70.00 FT. = 0.013 MILE

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	28BR-1	MCLEAN	61	1
		ILLINOIS	CONTRACT NO. 70571	

D-95-028-11



LOCATION OF SECTION INDICATED THUS: - [shaded box] -

END IMPROVEMENT
STA 1494 + 35.00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED October 11 20 24
Kamil A. Jharrett
REGIONAL ENGINEER

December 6, 2024
Scott A. Clark
ENGINEER OF DESIGN AND ENVIRONMENT

December 6, 2024
James J. ...
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION



Zachary D. Leach 10-10-2024
Signature Date

Zachary D. Leach
Printed or Typed Name License Number 062-065588
My license renewal date is November 30, 2025

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

PROJECT ENGINEER - RYAN T. CARROLL, P.E.
PHONE NUMBER: (217) 466-7225

CONTRACT NO. 70571

FILE NAME: I:\Jobs\2021\1173 2101 PTB 199-027 D5 Various Phase I\Work Order 8\Drawings\CAD_Sheets\0570571-sh1-cover.dgn

INDEX OF SHEETS

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HIGHWAY STANDARDS

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
420001-10	PAVEMENT JOINTS
420401-13	PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLAB
420701-03	PAVEMENT WELDED WIRE REINFORCEMENT
442201-03	CLASS C AND D PATCHES
515001-04	NAME PLATES FOR BRIDGES
630001-13	STEEL PLATE BEAM GUARDRAIL
630301-09	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631031-18	TRAFFIC BARRIER TERMINAL, TYPE 6
642006-01	SHOULDER RUMBLE STRIPS, 8 IN.
667101-02	PERMANENT SURVEY MARKERS
701001-02	OFF-RD OPERATIONS, 2L, 2W MORE THAN 15FT AWAY
701006-05	OFF-RD OPERATIONS, 2L, 2W, 15' (4.5 m) to 24" (600 mm) FROM PAVEMENT EDGE
701201-05	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS ≥ 45 MPH
701301-04	LANE CLOSURE, 2L, 2W, SHORT TERM OPERATIONS
701321-19	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
701901-10	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
725001-01	OBJECT AND TERMINAL MARKERS
782006-01	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

COMMITMENTS

NONE

GENERAL NOTES

G.N.-100B
 MICROSTATION AND GEOPAK FILES OF THIS PROJECT WILL BE MADE AVAILABLE TO THE CONTRACTOR AFTER CONTRACT AWARD. IF THERE IS A CONFLICT BETWEEN THE ELECTRONIC FILES AND THE PRINTED CONTRACT PLANS AND DOCUMENTS, THE PRINTED CONTRACT PLANS AND DOCUMENTS SHALL TAKE PRECEDENCE OVER THE ELECTRONIC FILES. THE CONTRACTOR SHALL ACCEPT ALL RISK ASSOCIATED WITH USING THE ELECTRONIC FILES AND SHALL HOLD THE DEPARTMENT HARMLESS FOR ANY ERRORS OR OMISSIONS IN THE ELECTRONIC FILES AND THE DATA CONTAINED THEREIN. ERRORS OR DELAYS RESULTING FROM THE USE OF THE ELECTRONIC FILES BY THE CONTRACTOR SHALL NOT RESULT IN AN EXTENSION OF TIME FOR ANY INTERIM OR FINAL COMPLETION DATE OR SHALL NOT BE CONSIDERED CAUSE FOR ADDITIONAL COMPENSATION. THE CONTRACTOR SHALL NOT USE, SHARE, OR DISTRIBUTE THESE ELECTRONIC FILES EXCEPT FOR THE PURPOSE OF CONSTRUCTING THIS CONTRACT. ANY CLAIMS BY THIRD PARTIES DUE TO USE OR ERRORS SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL INCLUDE THIS DISCLAIMER WITH THE TRANSFER OF THESE ELECTRONIC FILES TO ANY OTHER PARTIES AND SHALL INCLUDE APPROPRIATE LANGUAGE BINDING THEM TO SIMILAR RESPONSIBILITIES.

G.N.-105.09A
 ALL ELEVATIONS SHOWN IN THE PLANS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

G.N.-406H
 MIXTURE REQUIREMENTS: THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT

LOCATION	F.A.P. 317 (US 24)	F.A.P. 317 (US 24)
MIXTURE USE	SHOULDER/BASE COURSE SURFACE (TOP 1-1/2")	SHOULDER/BASE COURSE (BOTTOM 6")
AC/PG	PG 64-22	PG 64-22
DESIGN AIR VOIDS	4.0% @ NDES=70	4.0% @ NDES=50
MIX COMP (GRADATION)	IL 9.5	IL 19.0
FRICTION AGGREGATE	MIX C	N.A.
MIXTURE WEIGHT	112	112
QUALITY MANAGEMENT PROGRAM	QC/QA	QC/QA
SUBLOT SIZE	3000	3000
MATERIAL TRANSFER DEVICE (REQUIRED?)	NO	NO

G.N.-703A
 SHORT TERM PAVEMENT MARKING SHALL BE APPLIED TO THE PAVEMENT AFTER ANY OF THE FOLLOWING: COLD MILLING AND/OR PLACING BITUMINOUS MATERIALS (TACK COAT), LEVELING BINDER (MACHINE METHOD), BINDER AND SURFACE COURSES. SHORT TERM PAVEMENT MARKING PLACED ON THE SURFACE SHALL COINCIDE WITH THE FINAL PAVEMENT STRIPING. SHORT TERM PAVEMENT MARKING PLACED PRIOR TO THE SURFACE SHALL COINCIDE WITH THE EXISTING PAVEMENT MARKINGS. USE 4 FEET PER 40 FEET (OR 10% PER STATION).

**STATE OF ILLINOIS
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**INDEX OF SHEETS, HIGHWAY STANDARDS,
 GENERAL NOTES & COMMITMENTS**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	28BR-1	MCLEAN	61	2
CONTRACT NO. 70571				
ILLINOIS		FED. AID PROJECT		

MODEL: Can Notes
 FILE NAME: I:\bids\2021\1732101 DTB 199-027 D5 Various Phase III\Work Order 8\Drawings\CAD Sheets\0570571-dtb-remarks.dgn

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CONSTR. CODE
 F.A.P. 317 (US 24)
 STA 1491+75 TO STA 1496+25
 OTHER PRINCIPAL ARTERIAL
 McLEAN COUNTY
 80% FED / 20% STATE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE
				0010 S.N. 057-0258
20400800	FURNISHED EXCAVATION	CU YD	20	20
21301060	EXPLORATION TRENCH 60" DEPTH	FOOT	400	400
25000210	SEEDING, CLASS 2A	ACRE	0.75	0.75
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	68	68
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	68	68
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	68	68
25100115	MULCH, METHOD 2	ACRE	0.75	0.75
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	190	190
28000305	TEMPORARY DITCH CHECKS	FOOT	64	64
28000400	PERIMETER EROSION BARRIER	FOOT	797	797
28100109	STONE RIPRAP, CLASS A5	SQ YD	1453	1453
28200200	FILTER FABRIC	SQ YD	1453	1453
35100300	AGGREGATE BASE COURSE, TYPE A 4"	SQ YD	434	434
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	977	977

* DENOTES SPECIALTY ITEM

MODEL: S001
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES

SCALE: NONE SHEET 1 OF 6 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	28BR-1	MCLEAN	61	3
CONTRACT NO. 70571				
ILLINOIS FED. AID PROJECT				

CONSTR. CODE
 F.A.P. 317 (US 24)
 STA 1491+75 TO STA 1496+25
 OTHER PRINCIPAL ARTERIAL
 McLEAN COUNTY
 80% FED / 20% STATE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE
				0010 S.N. 057-0258
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	98	98
42000080	PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLAB	SQ YD	151	151
42001300	PROTECTIVE COAT	SQ YD	151	151
44000100	PAVEMENT REMOVAL	SQ YD	63	63
44004000	PAVED DITCH REMOVAL	FOOT	186	186
44004250	PAVED SHOULDER REMOVAL	SQ YD	286	286
44200050	WELDED WIRE REINFORCEMENT	SQ YD	199	199
44201419	CLASS C PATCHES, TYPE III, 15 INCH	SQ YD	48	48
44213200	SAW CUTS	FOOT	73	73
48101200	AGGREGATE SHOULDERS, TYPE B	TON	63	63
48203027	HOT-MIX ASPHALT SHOULDERS, 7 1/2"	SQ YD	434	434
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1	1
50200100	STRUCTURE EXCAVATION	CU YD	192	192
50300100	FLOOR DRAINS	EACH	8	8

* DENOTES SPECIALTY ITEM

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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES

SCALE: NONE SHEET 2 OF 6 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	28BR-1	MCLEAN	61	4
			CONTRACT NO. 70571	
		ILLINOIS FED. AID PROJECT		

CONSTR. CODE
 F.A.P. 317 (US 24)
 STA 1491+75 TO STA 1496+25
 OTHER PRINCIPAL ARTERIAL
 McLEAN COUNTY
 80% FED / 20% STATE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE
				0010 S.N. 057-0258
50300225	CONCRETE STRUCTURES	CU YD	73.7	73.7
50300255	CONCRETE SUPERSTRUCTURE	CU YD	120.5	120.5
50300300	PROTECTIVE COAT	SQ YD	606	606
50301350	CONCRETE SUPERSTRUCTURE (APPROACH SLAB)	CU YD	108.4	108.4
50401305	FURNISHING AND ERECTING PRECAST PRESTRESSED CONCRETE BEAMS, IL27N	FOOT	404	404
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	75010	76010
50800515	BAR SPLICERS	EACH	532	532
51200958	FURNISHING METAL SHELL PILES 14" X 0.250"	FOOT	330	330
51202305	DRIVING PILES	FOOT	330	330
51203200	TEST PILE METAL SHELLS	EACH	2	2
51204650	PILE SHOES	EACH	12	12
51500100	NAME PLATES	EACH	1	1
52200010	TEMPORARY SHEET PILING	SQ FT	251	251
58600101	GRANULAR BACKFILL FOR STRUCTURES	CU YD	100	100

* DENOTES SPECIALTY ITEM

MODEL: S003
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES

SCALE: NONE SHEET 3 OF 6 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	28BR-1	MCLEAN	61	5
CONTRACT NO. 70571				
ILLINOIS FED. AID PROJECT				

CONSTR. CODE
 F.A.P. 317 (US 24)
 STA 1491+75 TO STA 1496+25
 OTHER PRINCIPAL ARTERIAL
 McLEAN COUNTY
 80% FED / 20% STATE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE
				0010 S.N. 057-0258
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	57	57
60146304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	140	140
61101013	STORM SEWERS PROTECTED, CLASS A, 12"	FOOT	10	10
* 63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	100	100
* 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	4
64200108	SHOULDER RUMBLE STRIPS, 8 INCH	FOOT	859	859
67000500	ENGINEER'S FIELD OFFICE, TYPE B	CAL MO	12	12
67100100	MOBILIZATION	L SUM	1	1
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1
70300100	SHORT TERM PAVEMENT MARKING	FOOT	32	32
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	11	11

* DENOTES SPECIALTY ITEM

MODEL: S004
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES

SCALE: NONE	SHEET 4	OF 6	SHEETS	STA.	TO STA.
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	28BR-1	MCLEAN	61	6
CONTRACT NO. 70571			ILLINOIS FED. AID PROJECT	

CONSTR. CODE
 F.A.P. 317 (US 24)
 STA 1491+75 TO STA 1496+25
 OTHER PRINCIPAL ARTERIAL
 McLEAN COUNTY
 80% FED / 20% STATE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE 0010 S.N. 057-0258
70400100	TEMPORARY CONCRETE BARRIER	FOOT	400	400
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	800	800
70600250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2	2
70600350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	4	4
* 72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4
* 78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	8	8
X0328017	STREAM MITIGATION BANK CREDITS	EACH	700	700
X2020410	EARTH EXCAVATION (SPECIAL)	CU YD	85	85
X5030250	BRIDGE DECK GROOVING (LONGITUDINAL)	SQ YD	341	341
X5080530	BAR TERMINATORS	EACH	476	476
X6320100	GUARDRAIL REMOVAL (SPECIAL)	FOOT	711	711
X7200201	WIDTH RESTRICTION SIGNING	L SUM	1	1
Z0001800	APPROACH SLAB REPAIR (PARTIAL DEPTH)	SQ YD	12	12
Z0004552	APPROACH SLAB REMOVAL	SQ YD	319	319

* DENOTES SPECIALTY ITEM

MODEL: S008
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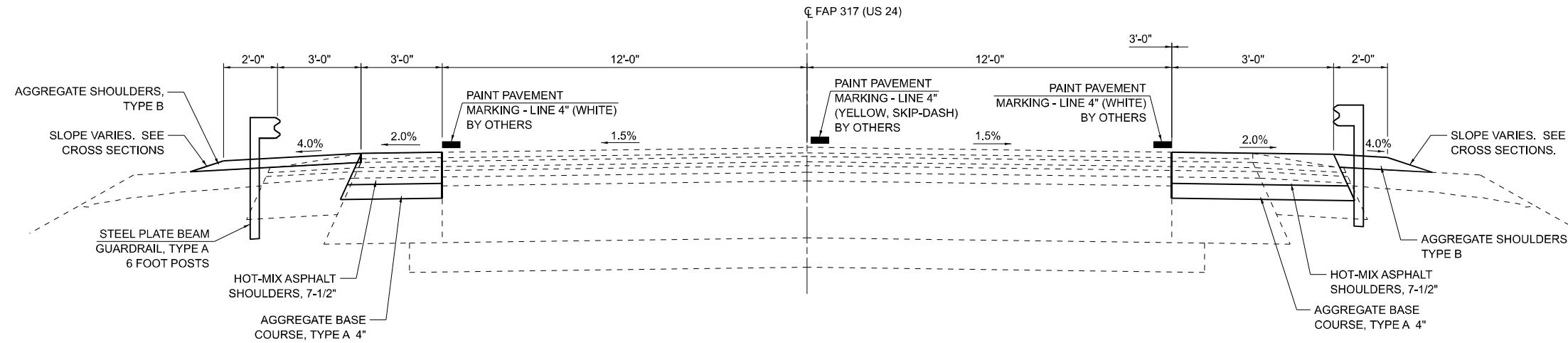
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES			
SCALE: NONE	SHEET 5	OF 6 SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	28BR-1	MCLEAN	61	7
CONTRACT NO. 70571			ILLINOIS FED. AID PROJECT	

(A) PROPOSED TYPICAL SECTION

STATION 1491+13.50 TO STATION 1493+10.17 (B)
 (B) STATION 1494+89.83 TO STATION 1496+88.50

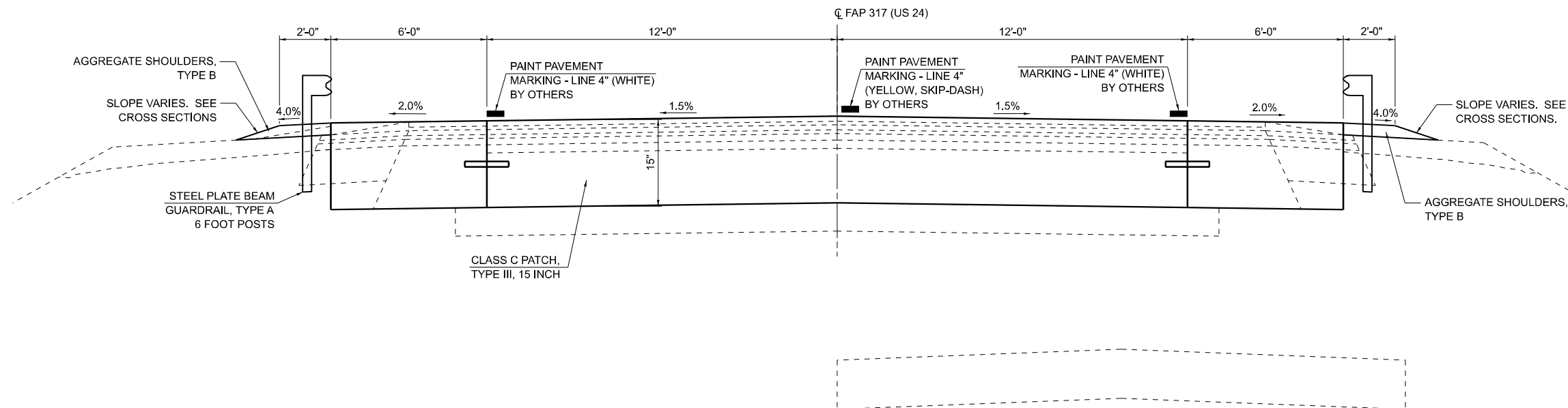


POTENTIAL CONFLICTS:

- EX BURIED PAVED SHOULDERS ARE PRESENT UNDER EASTBOUND & WESTBOUND SHOULDERS. COST FOR REMOVAL, WHEN REQUIRED BY RESIDENT ENGINEER, TO BE INCIDENTAL TO EARTH EXCAVATION (SPECIAL).
- BURIED P.C.C. PAVEMENT UNDER EASTBOUND LANE.
- EX CUT GUARDRAIL POSTS FROM STATION 1494+90± TO STATION 1496+35±, LT (NORTHEAST QUADRANT). COST FOR REMOVAL OF CUT GUARDRAIL POSTS TO BE INCIDENTAL TO GUARDRAIL REMOVAL (SPECIAL).

(B) PROPOSED TYPICAL SECTION

STATION 1493+10.17 TO STATION 1493+16.17*
 STATION 1494+83.83* TO STATION 1494+89.83



***PCC PAVEMENT CONNECTOR**

(B) STATION 1493+16.17 TO STATION 1493+35.00
 STATION 1494+65.00 TO STATION 1494+83.83 (B)

***APPROACH SLAB**

STATION 1493+35.00 TO STATION 1493+65.00
 STATION 1494+35.00 TO STATION 1494+65.00

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

TYPICAL SECTIONS

SCALE: NONE SHEET 2 OF 3 SHEETS STA. TO STA.

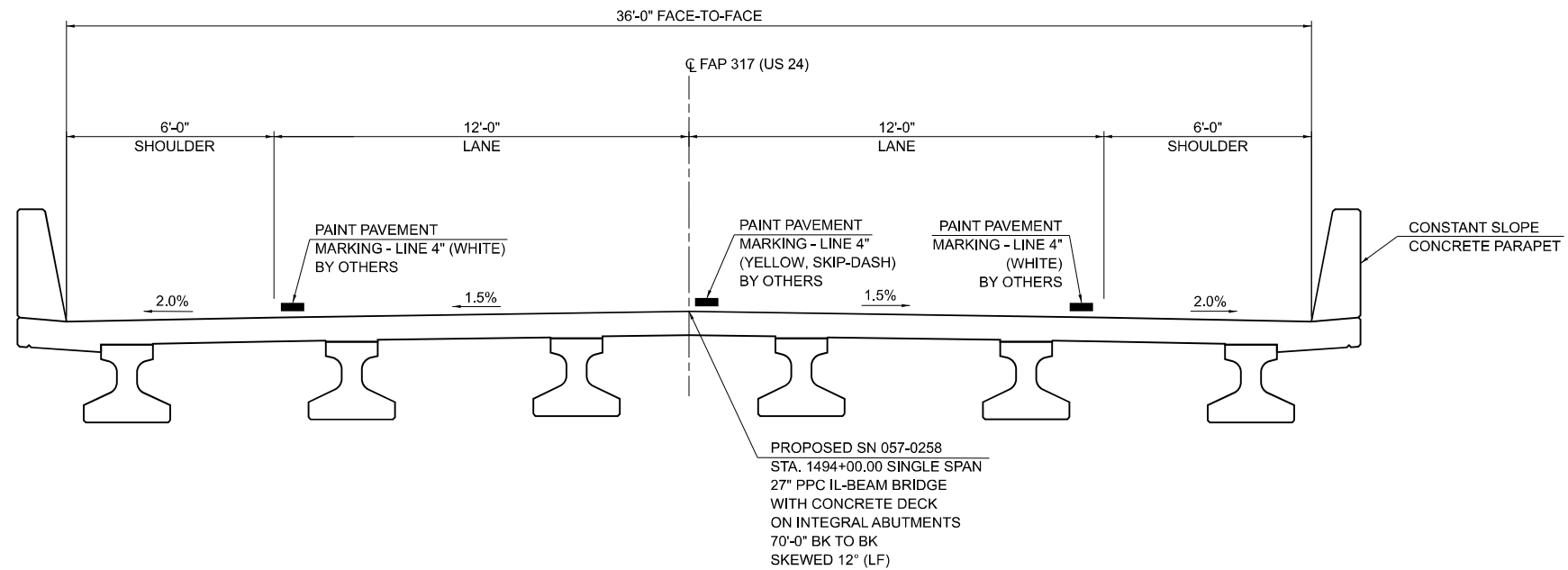
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	28BR-1	MCLEAN	61	10
CONTRACT NO. 70571				
ILLINOIS FED. AID PROJECT				

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C PROPOSED TYPICAL SECTION
STATION 1493+65.00 TO STATION 1494+35.00



**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TYPICAL SECTIONS

SCALE: NONE SHEET 3 OF 3 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	28BR-1	MCLEAN	61	11
CONTRACT NO. 70571				
ILLINOIS		FED. AID PROJECT		

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		DATE -	REVISED -

EROSION CONTROL SCHEDULE										
LOCATION	STATION	TO	STATION	OFFSET	REMARK	TEMPORARY EROSION CONTROL SEEDING 28000250 POUND	TEMPORARY DITCH CHECKS 28000305 FOOT	PERIMETER EROSION BARRIER 28000400 FOOT	STONE RIPRAP, CLASS A5 28100109 SQ YD	FILTER FABRIC 28200200 SQ YD
US 24	1491+27.50		1496+72.50	RT		102.3				
US 24	1491+27.50		1493+45.00	RT				217.8		
US 24	1491+95.00		1496+50.00	LT		87.9				
US 24	1492+12.00		1493+67.00	LT				155.1		
US 24	1492+98.00			55.1' RT			16.0			
US 24	1493+00.00			58.2' LT			16.0			
US 24	1493+00.20		1495+21.00	LT & RT					1453.1	1453.1
US 24	1494+33.60		1496+72.50	RI				238.9		
US 24	1494+55.00			LT				185.0		
US 24	1495+00.00			55.2' RT			16.0			
US 24	1495+22.00			55.5' LT			16.0			
TOTAL:						190.2	64.0	796.8	1453.1	1453.1
ROUND TO:						190	64	797	1453	1453

- NOTE:
- RIPRAP AND FILTER FABRIC QUANTITIES SHOWN IN THIS TABLE INCLUDE QUANTITIES (735 SY) SHOWN IN THE TOTAL BILL OF MATERIAL SHOWN ON THE STRUCTURE PLANS (SHEET NO. 24).
 - TEMPORARY EROSION CONTROL SEEDING ASSUMES 3 APPLICATIONS.

REMOVAL SCHEDULE											
LOCATION	STATION	OFFSET	STATION	OFFSET	REMARK	PAVEMENT REMOVAL 44000100 SQ YD	PAVED DITCH REMOVAL 440004000 FOOT	PAVED SHOULDER REMOVAL 44004250 SQ YD	APPROACH SLAB REPAIR (PARTIAL DEPTH) Z0001800 SQ YD	APPROACH SLAB REMOVAL Z0004552 SQ YD	DECK SLAB REPAIR (PARTIAL) Z0016200 SQ YD
US 24	1490+77.50	RT	1493+10.17	RT	STAGE 1			85.8			
US 24	1491+13.50	LT	1493+22.25	LT	PRESTAGE			56.3			
US 24	1493+00.87	RT	1493+55.41	RT			54.5				
US 24	1493+03.48	LT	1493+52.08	LT			48.6				
US 24	1493+10.17		1493+22.25			30.9					
US 24	1493+16.17	RT	1493+60.87	LT						157.5	
US 24	1493+19.61		1493+27.79	LT					8.0		
US 24	1493+59.47		1493+64.48	LT							3.0
US 24	1494+38.92	RT	1494+84.47	LT						161.5	
US 24	1494+40.83		1494+45.72	LT							3.0
US 24	1494+47.02	RT	1494+97.48	RT			50.5				
US 24	1494+77.10		1494+82.76	LT					4.0		
US 24	1494+77.25		1494+89.83			32.0					
US 24	1494+82.76	LT	1496+86.50	LT	PRESTAGE			67.6			
US 24	1494+88.29	LT	1495+20.84	LT				32.6			
US 24	1494+89.63	RT	1497+77.50	RT	STAGE 1			76.6			
TOTALS:						62.9	186.2	286.3	12.0	319.0	6.0
ROUND TO:						63	186	286	12	319	6

EARTHWORK SCHEDULE								
LOCATION	STATION	TO	STATION	REMARK	EARTH EXCAVATION (SPECIAL) X2020410 CU YD	CUT ADJUSTED FOR SHRINKAGE (25%) CU YD	FILL CU YD	EXCESS(+) SHORTAGE(-) CU YD
WEST OF BRIDGE								
US 24	1490+77.50		1493+65.00		42.3	31.7	39.7	-8.0
EAST OF BRIDGE								
US 24	1494+35.00		1497+22.50		42.6	32.0	42.0	-10.0
TOTALS:					84.9	63.7	81.7	-18
ROUND TO:					85	65	80	-20

- NOTE:
- INCLUDES ROADWAY EARTHWORK ONLY.
 - SHORTAGE = FURNISHED EXCAVATION.
 - REMOVAL OF BURIED, PAVED SHOULDER WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION (SPECIAL).

SEEDING SCHEDULE										
LOCATION	STATION	TO	STATION	OFFSET	REMARK	SEEDING, CLASS 2A 25000210 ACRE	NITROGEN FERTILIZER NUTRIENT 25000400 POUND	PHOSPHORUS FERTILIZER NUTRIENT 25000500 POUND	POTASSIUM FERTILIZER NUTRIENT 25000600 POUND	MULCH, METHOD 2 25100115 ACRE
US 24	1491+27.50		1496+72.50	RT		0.341	30.7	30.7	30.7	0.341
US 24	1491+95.00		1496+50.00	LT		0.293	26.4	26.4	26.4	0.293
TOTAL:						0.634	57.1	57.1	57.1	0.634
ROUND TO:						0.75	68	68	68	0.75

PAVING SCHEDULE																	
LOCATION	STATION	TO	STATION	OFFSET	REMARK	AGGREGATE BASE COURSE, TYPE A 4" 35100300 SQ YD	BITUMINOUS MATERIALS (PRIME COAT) 40600275 POUND	BITUMINOUS MATERIALS (TACK COAT) 40600290 POUND	PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLAB 42000080 SQ YD	PROTECTIVE COAT 42001300 SQ YD	WELDED WIRE REINFORCEMENT 44200050 SQ YD	CLASS C PATCHES, TYPE III, 15 INCH 44201419 SQ YD	SAW CUTS 44213200 FOOT	AGGREGATE SHOULDERS, TYPE B 48101200 TON	HOT-MIX ASPHALT SHOULDERS, 7 1/2" 48203027 SQ YD	SHOULDER RUMBLE STRIPS, 8 INCH 64200108 FOOT	
US 24	1490+77.50		1493+10.17	RT	STAGE 1	155.1	349.0	34.9							155.1		
US 24	1490+77.50		1493+10.17	RT	POST STAGE 2											232.7	
US 24	1491+13.50		1493+22.25	LT	PRESTAGE	56.3	126.6	12.7							56.3		
US 24	1491+13.50		1493+10.17	LT	POST STAGE 2											196.7	
US 24	1491+27.50		1493+65.00	RT										30.6			
US 24	1493+10.17			CL									36.8				
US 24	1493+10.17		1493+16.17	CL					24.0	24.0							
US 24	1493+16.17		1493+35.00	CL					75.3	75.3							
US 24	1494+35.00		1496+72.50	LT & RT										32.5			
US 24	1494+65.00		1494+83.83	CL					75.3	75.3							
US 24	1494+82.76		1496+86.50	LT	PRESTAGE	67.6	152.1	15.2							67.6		
US 24	1494+83.83		1494+89.83	CL													
US 24	1494+89.83		1497+22.50	RT	STAGE 1	155.1	349.0	34.9			24.0	24.0			155.1		
US 24	1494+89.83			CL									36.6				
US 24	1494+89.83		1496+86.50	LT	POST STAGE 2											196.7	
US 24	1494+89.83		1497+22.50	RT	POST STAGE 2											232.7	
TOTAL:						434.1	976.7	97.7	150.6	150.6	198.6	48.0	73.4	63.1	434.1	858.8	
ROUND TO:						434	977	98	151	151	199	48	73	63	434	859	

- APPLICATION RATES:
 PRIME COAT = 0.25 LB/SQFT ON AGGREGATE SURFACE
 TACK COAT = 0.025 LB/SQFT ON NEW HMA

MODEL: Schem-003
FILE NAME: I:\p3\3021173\2101_PFB_199-027_05_Various_Phase_111\Work_Order_8\Drawings\CAD_Sheets\0570271\erhschedule.dwg

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USER NAME =	bbrennan	DESIGNED -	ZDL	REVISED -	
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PLOT SCALE =	0.16666633 1/16"	CHECKED -	ZDL	REVISED -	
PLOT DATE =	10/10/2024	DATE -		REVISED -	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SCHEDULE OF QUANTITIES

SCALE: NONE SHEET 1 OF 2 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	28BR-1	MCLEAN	61	12
CONTRACT NO. 70571			ILLINOIS FED. AID PROJECT	

GUARDRAIL SCHEDULE											
LOCATION	STATION	OFFSET	STATION	OFFSET	REMARK	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS 63000001 FOOT	TRAFFIC BARRIER TERMINAL, TYPE 6 63100085 EACH	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT 63100167 EACH	TERMINAL MARKER - DIRECT APPLIED 72501000 EACH	GUARDRAIL REFLECTORS, TYPE A 78200005 EACH	GUARDRAIL REMOVAL (SPECIAL) X6320100 FOOT
US 24	1491+64.25	RT	1493+53.53	RT							189.3
US 24	1491+95.04	LT	1493+60.13	LT							165.1
US 24	1492+09.70	RT	1493+53.53	RT				1			
US 24	1492+09.70	RT	1492+59.70	RT			1				
US 24	1492+09.70	RT	1493+47.20	RT					2		
US 24	1492+67.35	LT	1493+53.53	LT				1			
US 24	1492+67.35	LT	1493+17.35	LT			1				
US 24	1492+67.35	LT	1493+54.85	LT					2		
US 24	1492+59.70	RT	1493+09.70	RT		50.0					
US 24	1493+09.70	RT	1493+47.20	RT			1				
US 24	1493+17.35	LT	1493+54.85	LT			1				
US 24	1494+39.90	RT	1496+03.62	RT						163.7	
US 24	1494+45.15	RT	1494+82.65	RT			1				
US 24	1494+45.15	RT	1495+32.65	RT					2		
US 24	1494+46.16	LT	1496+38.83	LT						192.7	
US 24	1494+52.80	LT	1494+90.30	LT			1				
US 24	1494+52.80	LT	1495+90.30	LT					2		
US 24	1494+82.65	RT	1495+32.65	RT			1				
US 24	1494+90.30	LT	1495+40.30	LT		50.0					
US 24	1495+32.65	RT						1			
US 24	1495+40.30	LT	1495+90.30	LT			1				
US 24	1495+90.30	LT						1			
TOTALS:						100.0	4	4	4	8	710.8
ROUND TO:						100	4	4	4	8	711

NOTE:
REMOVAL OF EXISTING CUT GUARDRAIL POSTS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF GUARDRAIL REMOVAL (SPECIAL).

SHORT TERM PAVEMENT MARKING SCHEDULE							
LOCATION	STATION	TO	STATION	OFFSET	REMARK	SHORT TERM PAVEMENT MARKING 70300100 FOOT	SHORT TERM PAVEMENT MARKING REMOVAL 70300150 SQ FT
US 24	1493+10.17		1494+89.83	CL	YELLOW	16.0	5.3
US 24	1493+10.17		1494+89.83	LT	WHITE	8.0	2.7
US 24	1493+10.17		1494+89.83	RT	WHITE	8.0	2.7
TOTAL:						32.0	10.7
ROUND TO:						32	11

PERMANENT BENCH MARKS					
LOCATION	STATION	TO	STATION	REMARK	PERMANENT BENCH MARKS Z0038700 EACH
US 24	1493+60.0	TO	1494+40.0	ON BRIDGE AS DIRECTED BY RESIDENT ENGINEER	1
TOTAL:					1

TEMPORARY CONCRETE BARRIER SCHEDULE									
LOCATION	STATION	TO	STATION	OFFSET	REMARK	TEMPORARY CONCRETE BARRIER 70400100 FOOT	RELOCATE TEMPORARY CONCRETE BARRIER 70400200 FOOT	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3 70600250 EACH	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3 70600350 EACH
PRE-STAGING									
US 24	1492+02.30			LT				1	
US 24	1492+02.30		1496+01.70	LT & RT		400.0			
US 24	1496+01.70			LT				1	
STAGE 1									
US 24	1492+00.30			RT					1
US 24	1492+00.30		1495+99.70	LT & RT			400.0		
US 24	1495+99.70			RT				1	
STAGE 2									
US 24	1492+00.30			LT					1
US 24	1492+00.30		1495+99.70	LT & RT			400.0		
US 24	1495+99.70			LT					1
TOTAL:						400.0	800.0	2	4
ROUND TO:						400.0	800.0	2	4

TEMPORARY PAVEMENT MARKING SCHEDULE								
LOCATION	STATION	TO	STATION	OFFSET	REMARK	TEMPORARY PAVEMENT MARKING - LINE 4" - PAINT 70300221 FOOT	TEMPORARY PAVEMENT MARKING - LINE 24" - PAINT 70300281 FOOT	TEMPORARY PAVEMENT MARKING REMOVAL - WATER BLASTING 78300202 SQ FT
US 24 PRE-STAGING	1490+32.25			RT	STOP BAR			24.0
US 24 PRE-STAGING	1490+92.25		1497+55.75		WHITE, NORTH LINE	665.0		221.7
US 24 PRE-STAGING	1492+16.25		1495+87.75		WHITE, SOUTH LINE	371.7		123.9
US 24 PRE-STAGING	1497+65.75			LT	STOP BAR		12.0	24.0
US 24 STAGE 1	1490+23.50			RT	STOP BAR		12.0	24.0
US 24 STAGE 1	1490+33.50		1497+22.50		WHITE, SOUTH LINE	690.6		230.2
US 24 STAGE 1	1492+13.50		1495+86.50		WHITE, NORTH LINE	373.2		124.4
US 24 STAGE 1	1497+82.50			LT	STOP BAR		12.0	24.0
US 24 STAGE 2	1490+17.50			RT	STOP BAR		12.0	24.0
US 24 STAGE 2	1490+77.50		1497+66.50		WHITE, NORTH LINE	690.6		230.2
US 24 STAGE 2	1491+77.50		1496+22.50		WHITE, SOUTH LINE	445.4		148.5
US 24 STAGE 2	1497+76.50			LT	STOP BAR		12.0	24.0
TOTAL:						3236.5	72.0	1222.9
ROUND TO:						3237	72	1223

NOTE:
TEMPORARY PAVEMENT MARKING AND TEMPORARY PAVEMENT MARKING REMOVAL IS FOR INFORMATIONAL PURPOSES ONLY. COSTS FOR THESE ITEMS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED WITH THE COST OF TRAFFIC CONTROL AND PROTECTION, STANDARD 701321.

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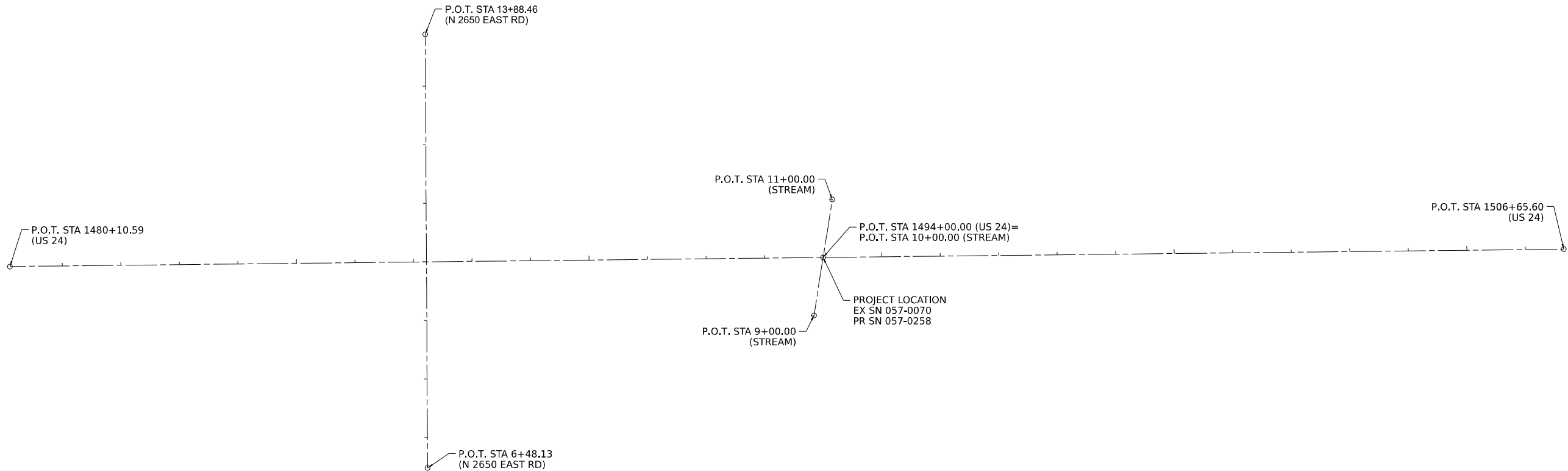
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PLOT SCALE =	0.16666633 1/16 in.	CHECKED -	ZDL	REVISED -	
PLOT DATE =	10/10/2024	DATE -		REVISED -	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SCHEDULE OF QUANTITIES			
SCALE:	SHEET	OF	SHEETS
NONE	2	2	
STA.			TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	28BR-1	MCLEAN	61	13
				CONTRACT NO. 70571
				ILLINOIS FED. AID PROJECT



CENTERLINE POINTS				
LOCATION	NORTHING	EASTING	STATION	DESCRIPTION
US 24	1484165.06	866075.01	1480+10.59	P.O.T US 24
	1484180.37	867464.33	1494+00.00	P.O.T US 24
	1484194.64	868729.86	1506+65.60	P.O.T US 24
N 2650 EAST RD	1483821.13	866788.45	6+48.13	P.O.T N 2650 E RD
	1484561.44	866784.44	13+88.46	P.O.T N 2650 E RD
STREAM	1484081.77	867448.72	9+00.00	P.O.T. STREAM
	1484279.31	867479.949	11+00.00	P.O.T. STREAM

BENCHMARK:
NORTHEAST WINGWALL OF SN 057-0070
STA. 1494+46.57, 18.45' LT
EL = 715.13

HORIZONTAL AND VERTICAL DATUMS

NAD83/2011 ILLINOIS STATE PLANES, EAST ZONE, US FOOT

BENCHMARKS

NAVD 88

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

ALIGNMENT, TIES, AND BENCHMARKS

SCALE: NONE SHEET 1 OF 1 SHEETS STA. 1480+10.59 TO STA. 1506+65.60

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	28BR-1	MCLEAN	61	14
CONTRACT NO. 70571				
ILLINOIS FED. AID PROJECT				

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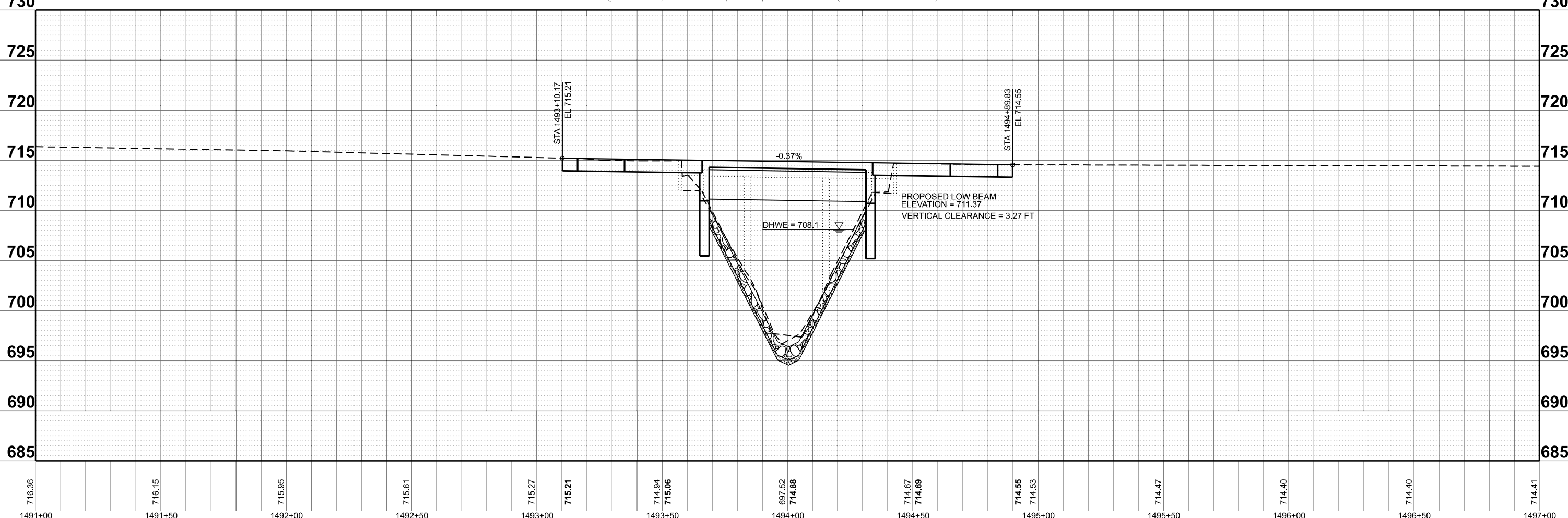
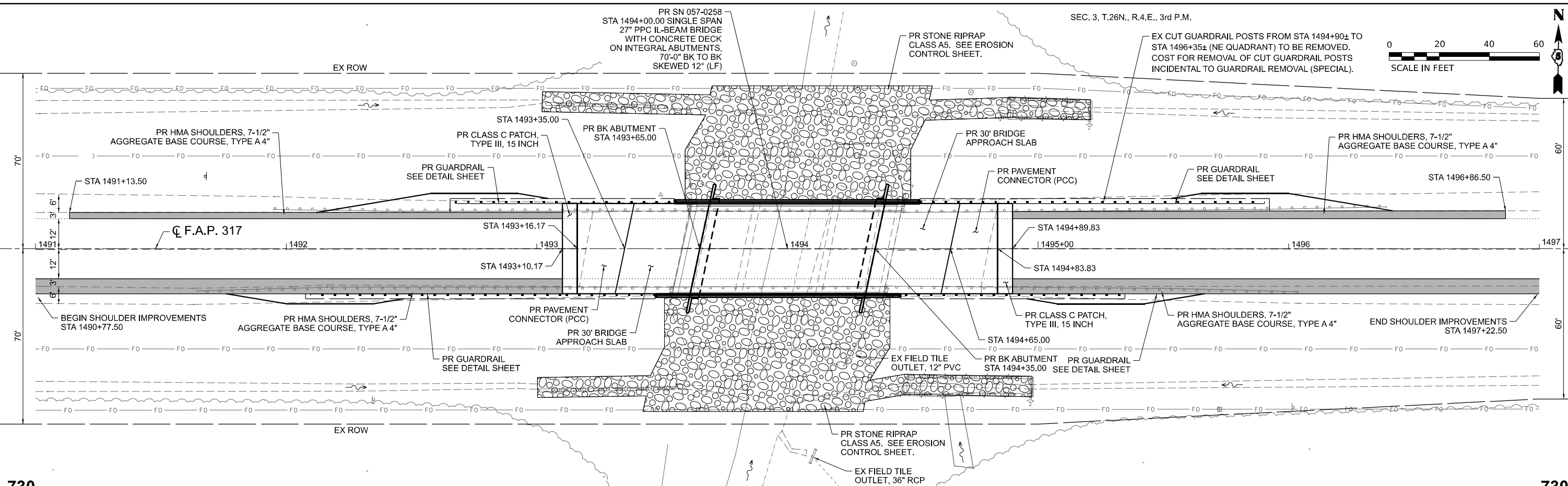
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PLOT SCALE =	200.00000000' / in.
PLOT DATE =	10/10/2024

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CHECKED -	ZDL
DATE -	

REVISED -	
REVISED -	
REVISED -	
REVISED -	

SEC. 3, T.26N., R.4.E., 3rd P.M.



1491+00	1491+50	1492+00	1492+50	1493+00	1493+50	1494+00	1494+50	1495+00	1495+50	1496+00	1496+50	1497+00
716.36	716.15	715.95	715.61	715.27	715.21	714.94 715.06	687.52 714.88	714.67 714.69	714.55 714.53	714.47	714.40	714.41

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

PLAN AND PROFILE

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DATE -		REVISED -			
PLOT SCALE =	0.16666633 1/16"				
PLOT DATE =	10/10/2024				

SCALE: 1"=20'	SHEET 1	OF 1	SHEETS	STA. 1491+00.00	TO STA. 1497+00.00
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	288R-1	MCLEAN	61	15
CONTRACT NO. 70571				
ILLINOIS FED. AID PROJECT				

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 FILE NAME: I:\317\2021\173\2101_PTB_199-027_D5_Various Phase MillWork Order 8\Drawings\CAD_Street\0570371-sheet1PlanProfile.dgn

PRE-STAGING OVERVIEW

US 24:

CLOSE THE US 24 WESTBOUND LANE TO TRAFFIC AT EX. SN 057-0070 (PR. SN 057-0258) DURING PRE-STAGE WORK. TRAFFIC LIGHTS WILL BE POSTED ON BOTH THE EAST AND WEST LIMITS OF THE TRAFFIC CONTROL TO MAINTAIN ONE LANE OF TRAFFIC FOR BOTH DIRECTIONS. INSTALL THE TEMPORARY CONCRETE BARRIER AT EX. SN 057-0070. PERFORM APPROACH SLAB REPAIR (PARTIAL DEPTH), DECK SLAB REPAIR (PARTIAL) AND SHOULDER IMPROVEMENTS.

STAGE I OVERVIEW

US 24:

CLOSE THE US 24 EASTBOUND LANE TO TRAFFIC AT EX. SN 057-0070 (PR. SN 057-0258) DURING STAGE I. TRAFFIC LIGHTS WILL REMAIN POSTED ON BOTH THE EAST AND WEST LIMITS OF THE TRAFFIC CONTROL TO MAINTAIN ONE LANE OF TRAFFIC FOR BOTH DIRECTIONS. RELOCATE AND INSTALL THE TEMPORARY CONCRETE BARRIER AT EX. SN 057-0070. PERFORM BRIDGE WORK, APPROACH PAVEMENT WORK, SHOULDER IMPROVEMENTS AND GUARDRAIL INSTALLATION ON THE EASTBOUND LANE.

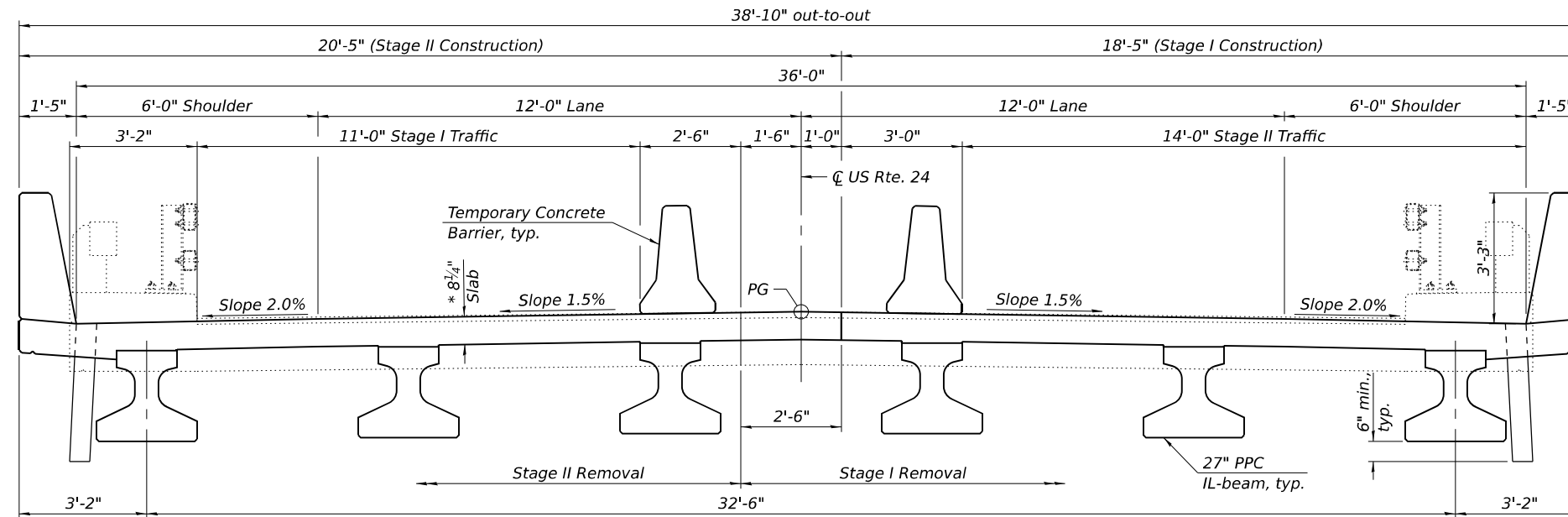
STAGE II OVERVIEW

US 24:

CLOSE THE US 24 WESTBOUND LANE TO TRAFFIC AT EX. SN 057-0070 (PR. SN 057-0258) DURING STAGE II. THE TRAFFIC LIGHTS WILL REMAIN POSTED ON BOTH THE EAST AND WEST LIMITS OF THE TRAFFIC CONTROL TO MAINTAIN ONE LANE OF TRAFFIC FOR BOTH DIRECTIONS. RELOCATE AND INSTALL THE TEMPORARY CONCRETE BARRIER AT EX. SN 057-0070. PERFORM BRIDGE WORK, APPROACH PAVEMENT WORK, AND GUARDRAIL INSTALLATION ON THE WESTBOUND LANE.

STAGING NOTES:

1. THIS IS A SUGGESTED STAGING PLAN. THE CONTRACTOR SHALL SUBMIT ANY PROPOSED CHANGES TO THIS PLAN TO THE ENGINEER. IN WRITING, FOR CONSIDERATION. NO CHANGES SHALL BE MADE TO THE PROPOSED STAGING WITHOUT WRITTEN APPROVAL FROM THE ENGINEER. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY ADDITIONAL COSTS ASSOCIATED WITH CHANGES TO STAGING REQUESTED BY THE CONTRACTOR.
2. TEMPORARY CONCRETE BARRIER SHALL BE SECURED TO THE PAVEMENT ACCORDING TO SAFETY ENGINEERING POLICY MEMORANDUM 4-21. ACROSS THE STRUCTURE, TEMPORARY CONCRETE BARRIER SHALL BE SECURED PER SHEET 5 OF 25 ON THE STRUCTURE PLANS.
3. FOR ADDITIONAL DETAILS ASSOCIATED WITH TEMPORARY CONCRETE BARRIER, SEE HIGHWAY STANDARD 704001.
4. ALL TEMPORARY AND PERMANENT SIGNAGE SHALL BE POSITIONED IN ACCORDANCE WITH THE GUIDELINES IN THE MOST RECENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL AND DEVICES UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
5. ALL STAGING DETAILS SHALL BE IN ACCORDANCE WITH TRAFFIC CONTROL AND PROTECTION STANDARD 701321 AND PAID FOR AT THE CONTRACT UNIT PRICE PER EACH LOCATION.
6. ALL WORK WITHOUT TEMPORARY CONCRETE BARRIER IN PLACE SHALL BE IN ACCORDANCE WITH TRAFFIC CONTROL AND PROTECTION STANDARDS 701201, 701301 AND 701311.
7. EXISTING OR TEMPORARY PAVEMENT MARKINGS SHALL BE ON BOTH SIDES OF THE OPEN LANE FROM STOP BAR TO STOP BAR. PAVEMENT MARKINGS THAT CONFLICT WITH STAGED TRAFFIC MARKINGS SHALL BE REMOVED. THIS WORK SHALL BE INCLUDED IN THE COST FOR TRAFFIC CONTROL AND PROTECTION STANDARD 701321.
8. REFLECTORS SHALL BE ATTACHED TO GUARDRAIL AND BARRIER WALL AT 25 FOOT CENTERS. COST INCLUDED WITH TRAFFIC CONTROL AND PROTECTION STANDARD 701321.



CROSS SECTION
(Looking East)

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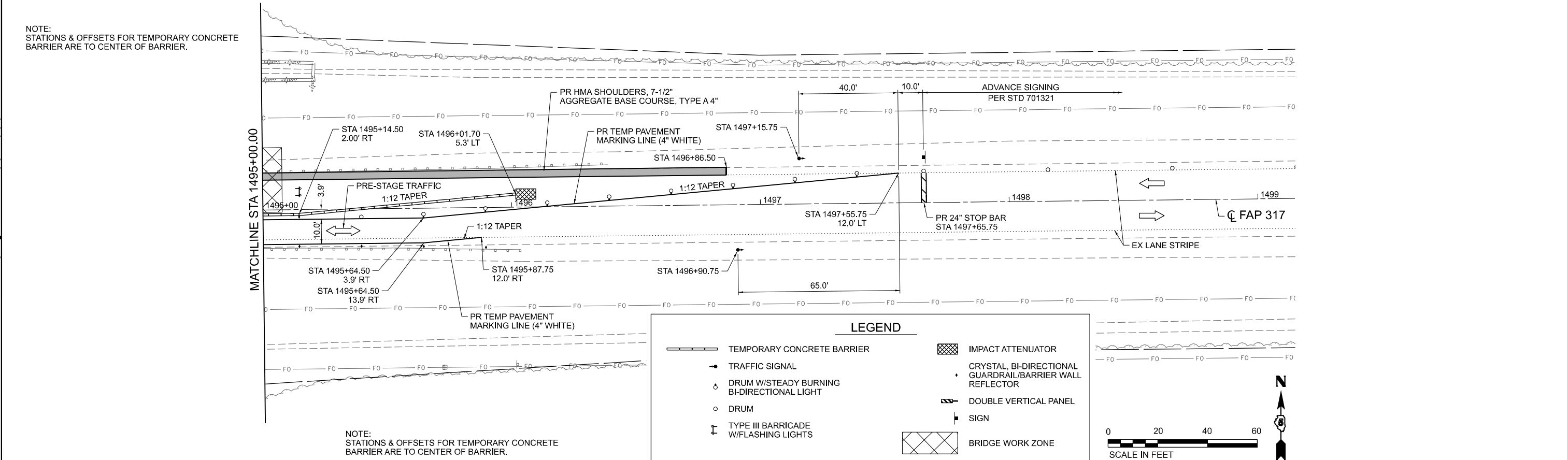
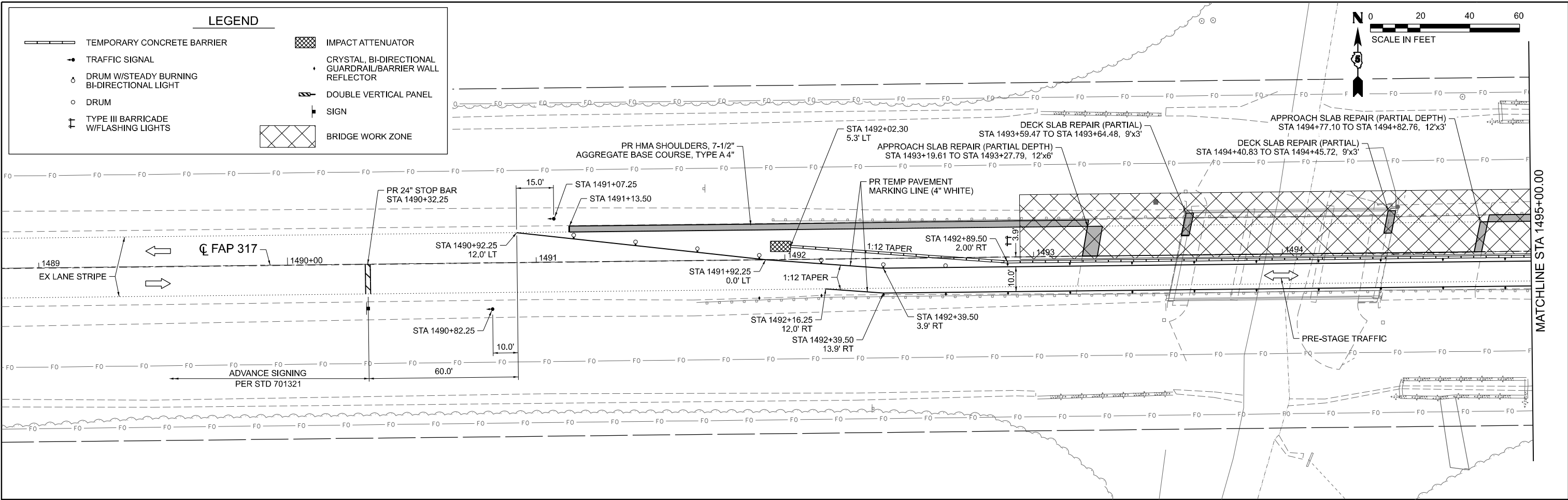
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USER NAME = bbrennan	DESIGNED - ZDL	REVISED -
PLOT SCALE = 0.16666633 1/ in.	DRAWN - BJB	REVISED -
PLOT DATE = 10/10/2024	CHECKED - ZDL	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

STAGE CONSTRUCTION NOTES			
SCALE: NONE	SHEET 1	OF 1 SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	28BR-1	MCLEAN	61	16
CONTRACT NO. 70571				
ILLINOIS FED. AID PROJECT				

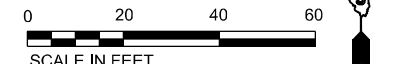


NOTE:
STATIONS & OFFSETS FOR TEMPORARY CONCRETE BARRIER ARE TO CENTER OF BARRIER.

NOTE:
STATIONS & OFFSETS FOR TEMPORARY CONCRETE BARRIER ARE TO CENTER OF BARRIER.

LEGEND

- TEMPORARY CONCRETE BARRIER
- ◻ IMPACT ATTENUATOR
- TRAFFIC SIGNAL
- CRYSTAL, BI-DIRECTIONAL GUARDRAIL/BARRIER WALL REFLECTOR
- ⊙ DRUM W/STEADY BURNING BI-DIRECTIONAL LIGHT
- ◌ DRUM
- ▬ DOUBLE VERTICAL PANEL
- ⊥ TYPE III BARRICADE W/FLASHING LIGHTS
- ⊥ SIGN
- ▨ BRIDGE WORK ZONE



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DATE -
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PLOT DATE = 10/10/2024

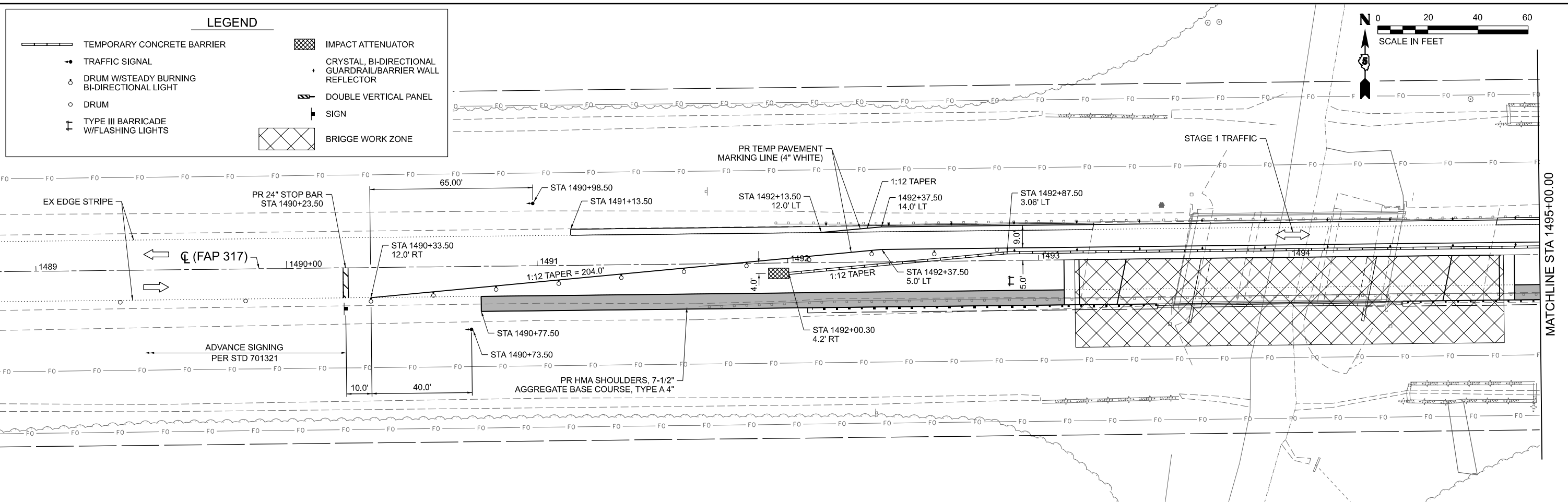
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REVISION -
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REVISION -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

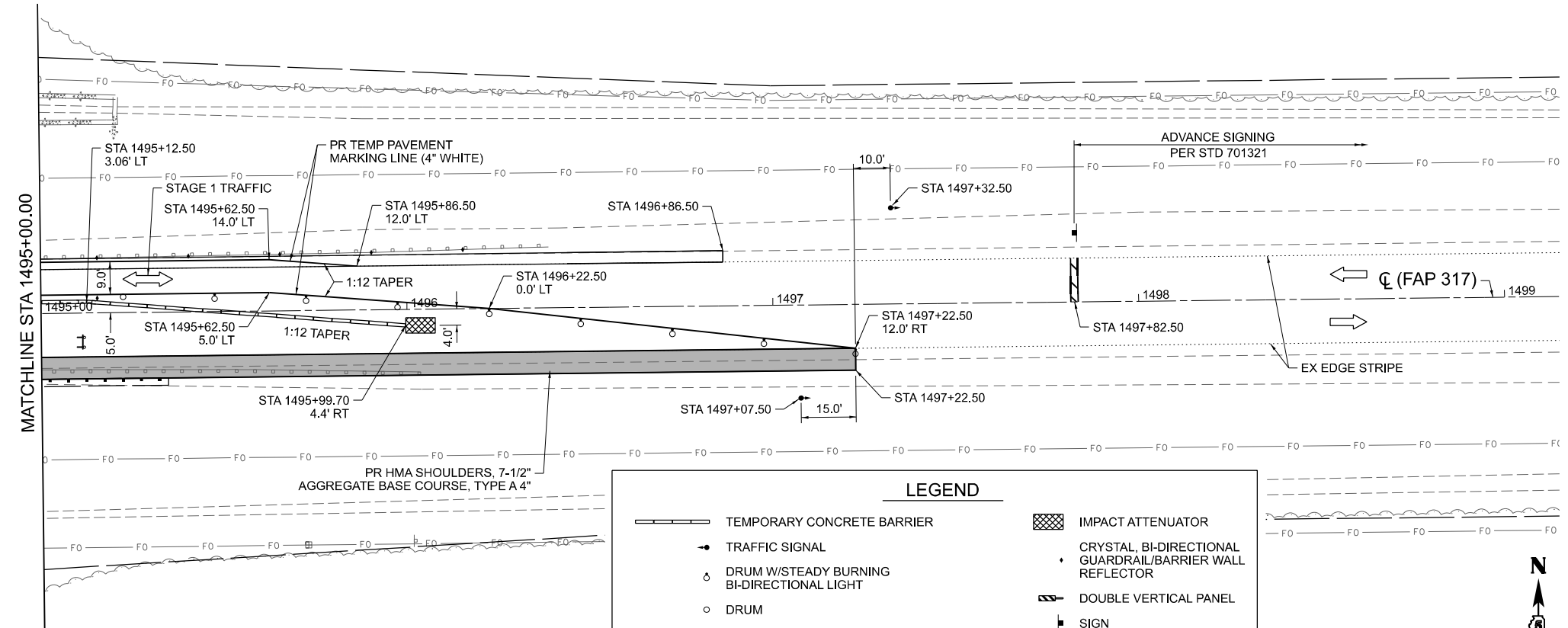
PRE-STAGING PLAN
SCALE: 1" = 20'
SHEET 1 OF 1 SHEETS
STA. 1490+00.00 TO STA. 1498+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	28BR-1	MCLEAN	60	17
CONTRACT NO. 70571				
ILLINOIS FED. AID PROJECT				

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NOTE:
STATIONS & OFFSETS FOR TEMPORARY CONCRETE BARRIER ARE TO CENTER OF BARRIER.



NOTE:
STATIONS & OFFSETS FOR TEMPORARY CONCRETE BARRIER ARE TO CENTER OF BARRIER.

LEGEND

- TEMPORARY CONCRETE BARRIER
- TRAFFIC SIGNAL
- DRUM W/STEADY BURNING BI-DIRECTIONAL LIGHT
- DRUM
- ⊥ TYPE III BARRICADE W/FLASHING LIGHTS
- ▣ IMPACT ATTENUATOR
- CRYSTAL, BI-DIRECTIONAL GUARDRAIL/BARRIER WALL REFLECTOR
- ▨ DOUBLE VERTICAL PANEL
- ⊥ SIGN
- ▤ BRIDGE WORK ZONE

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

STAGE 1 PLAN

SCALE: 1" = 20' SHEET 1 OF 1 SHEETS STA. 1490+00.00 TO STA. 1498+00.00

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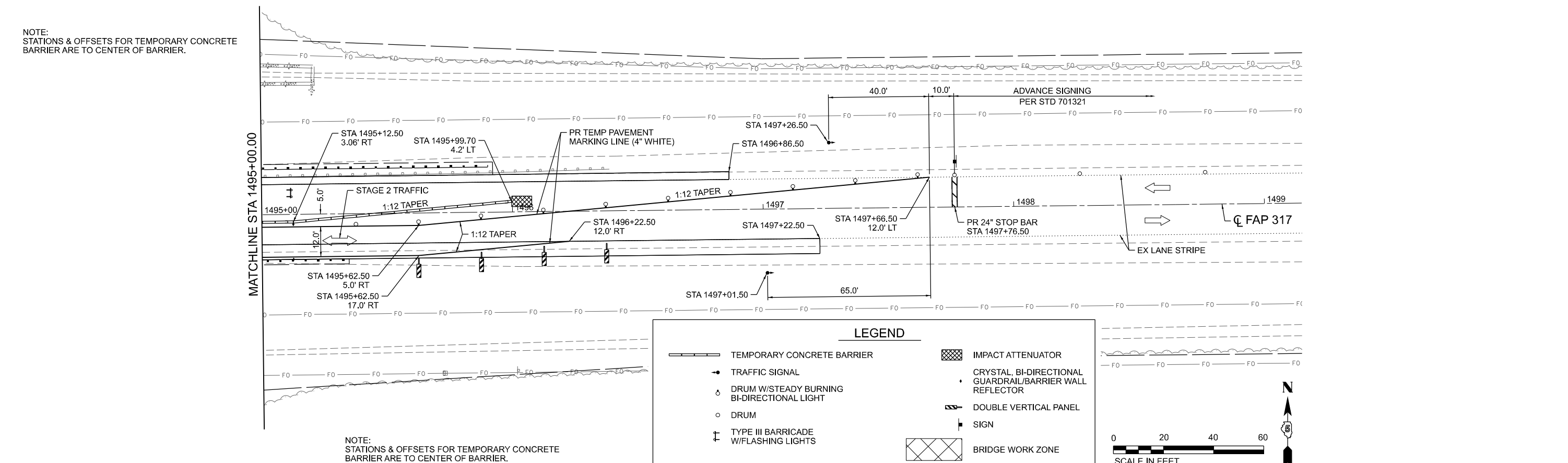
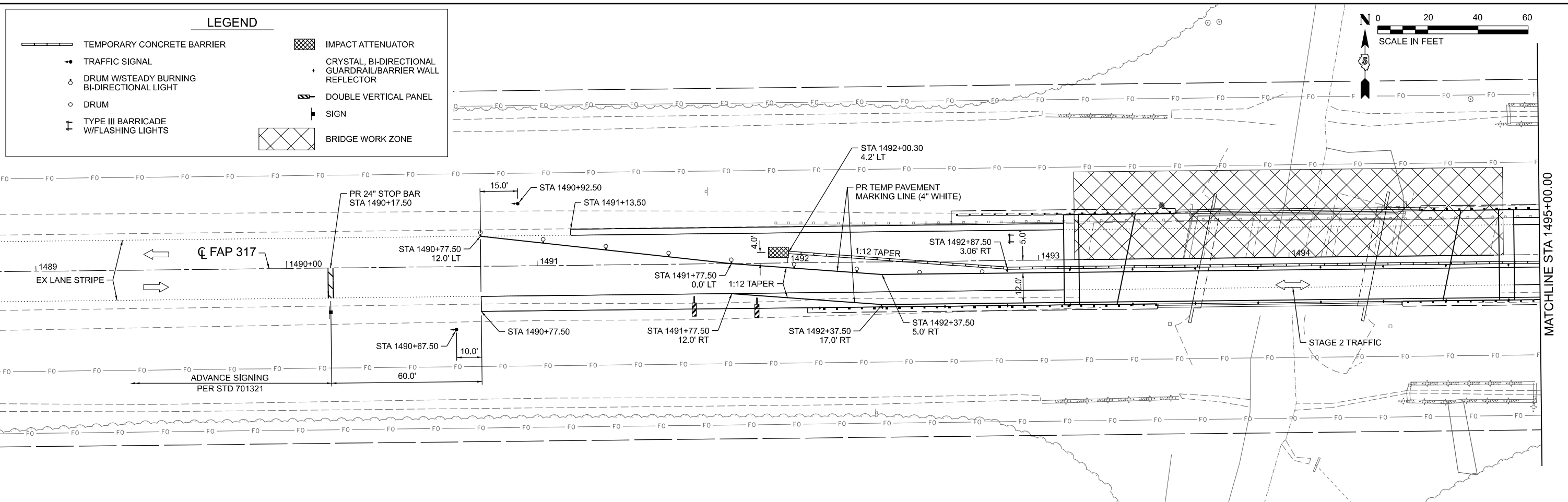
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DESIGNED -	ZDL
DRAWN -	B/B
CHECKED -	ZDL
DATE -	
PLOT SCALE =	40,000' / in.
PLOT DATE =	10/10/2024

REVISD -	
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	288R-1	MCLEAN	60	18
CONTRACT NO. 70571				
ILLINOIS FED. AID PROJECT				



NOTE:
STATIONS & OFFSETS FOR TEMPORARY CONCRETE BARRIER ARE TO CENTER OF BARRIER.

NOTE:
STATIONS & OFFSETS FOR TEMPORARY CONCRETE BARRIER ARE TO CENTER OF BARRIER.

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PLOT SCALE = 40,000' / in.	DRAWN - BJB	REVISED -
PLOT DATE = 10/10/2024	CHECKED - ZDL	REVISED -
	DATE -	REVISED -

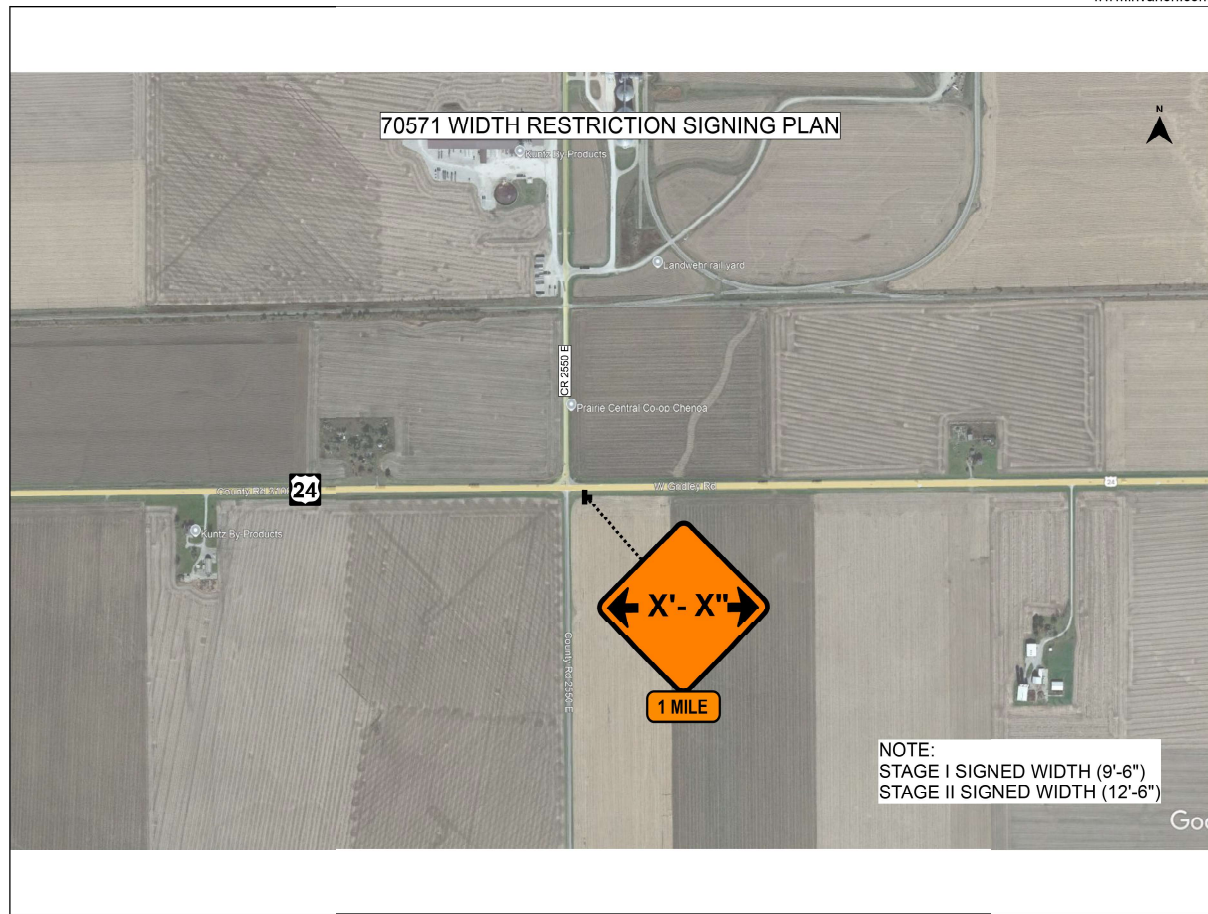
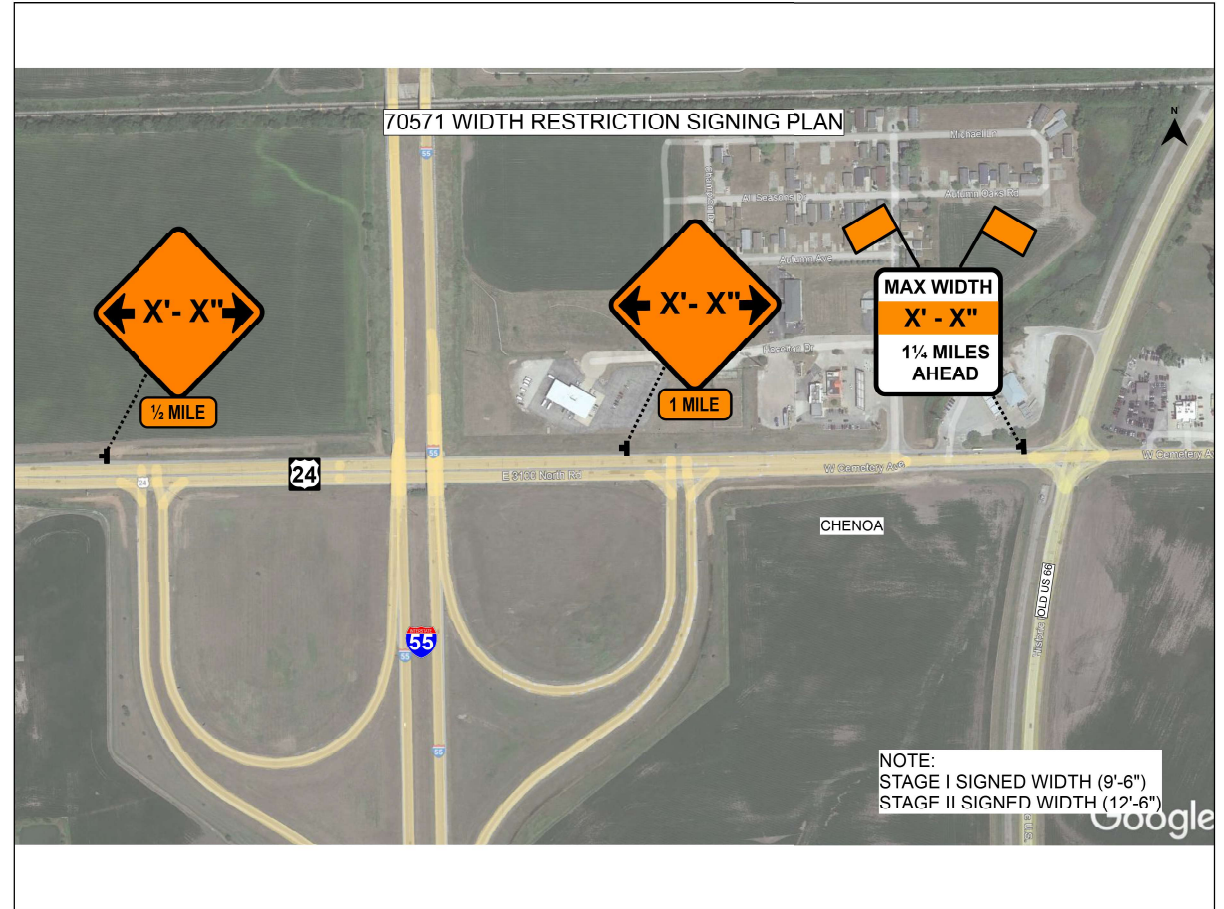
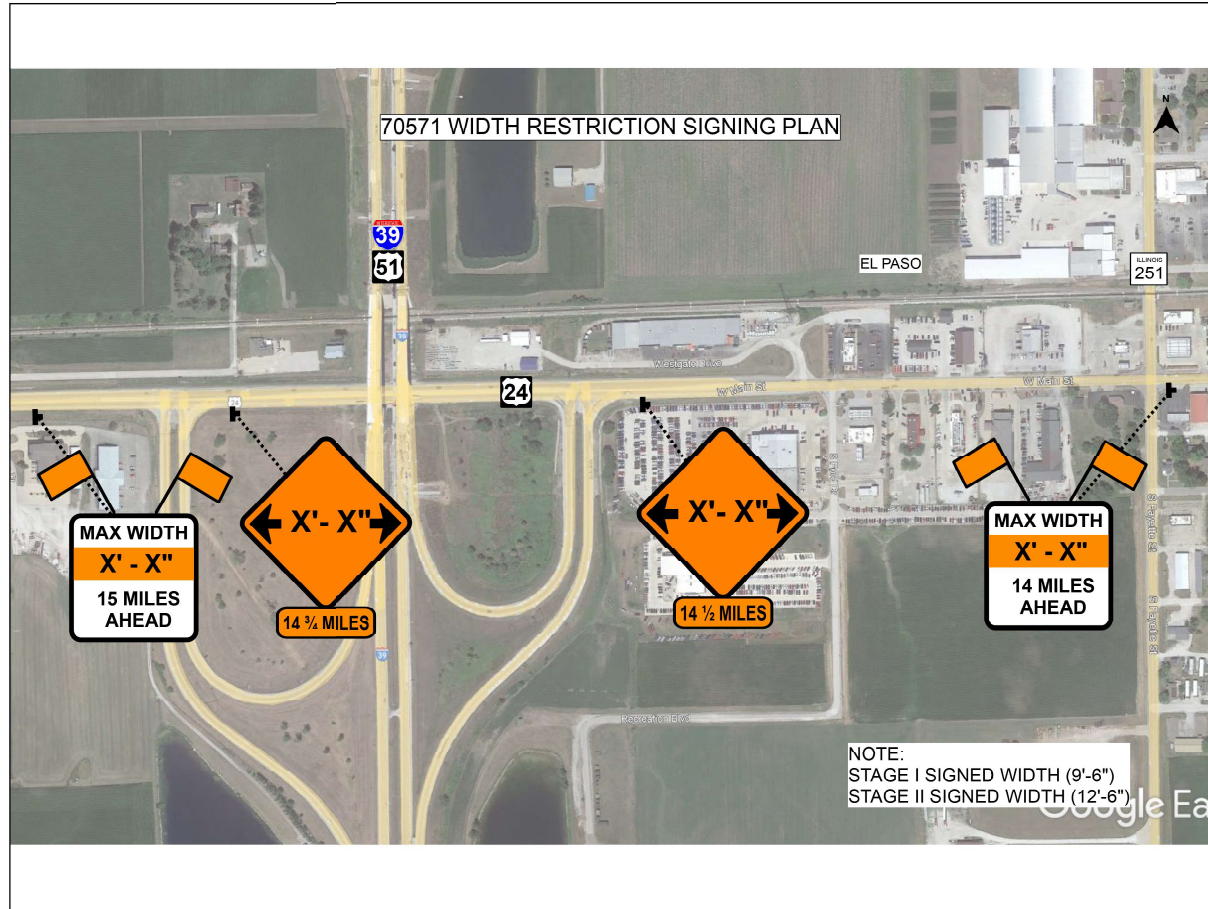
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

STAGE 2 PLAN

SCALE: 1" = 20' SHEET 1 OF 1 SHEETS STA. 1490+00.00 TO STA. 1498+00.00

F.A.P. RTE. 317	SECTION 288R-1	COUNTY MCLEAN	TOTAL SHEETS 60	SHEET NO. 19
CONTRACT NO. 70571				
ILLINOIS FED. AID PROJECT				

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WIDTH RESTRICTION SIGNING PLAN

SCALE: N.T.S. SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	28BR-1	MCLEAN	61	20
CONTRACT NO. 70571				
ILLINOIS FED. AID PROJECT				

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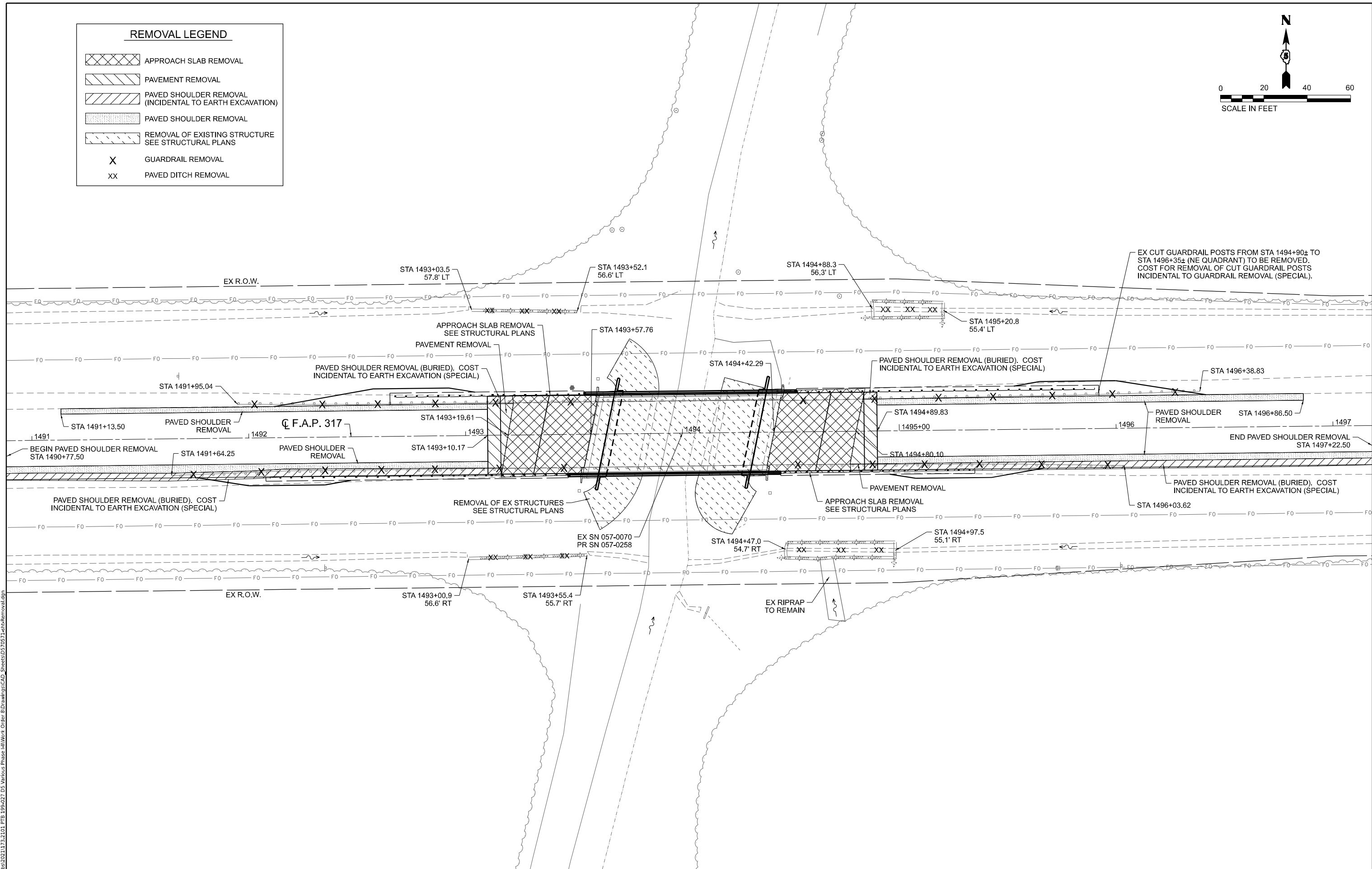
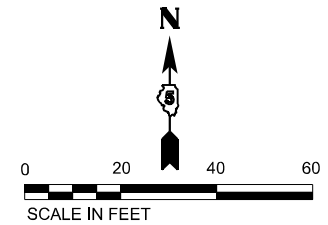
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DESIGNED	- ZDL
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DESIGNED	- ZDL
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PLOT SCALE = 40,000' / in.
PLOT DATE = 10/10/2024

REMOVAL LEGEND	
	APPROACH SLAB REMOVAL
	PAVEMENT REMOVAL
	PAVED SHOULDER REMOVAL (INCIDENTAL TO EARTH EXCAVATION)
	PAVED SHOULDER REMOVAL
	REMOVAL OF EXISTING STRUCTURE SEE STRUCTURAL PLANS
X	GUARDRAIL REMOVAL
XX	PAVED DITCH REMOVAL



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CHECKED -	ZDL	REVISIONS -		REVISIONS -	
DATE -		REVISIONS -		REVISIONS -	
PLOT SCALE =	40,000' / in.				
PLOT DATE =	10/10/2024				

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

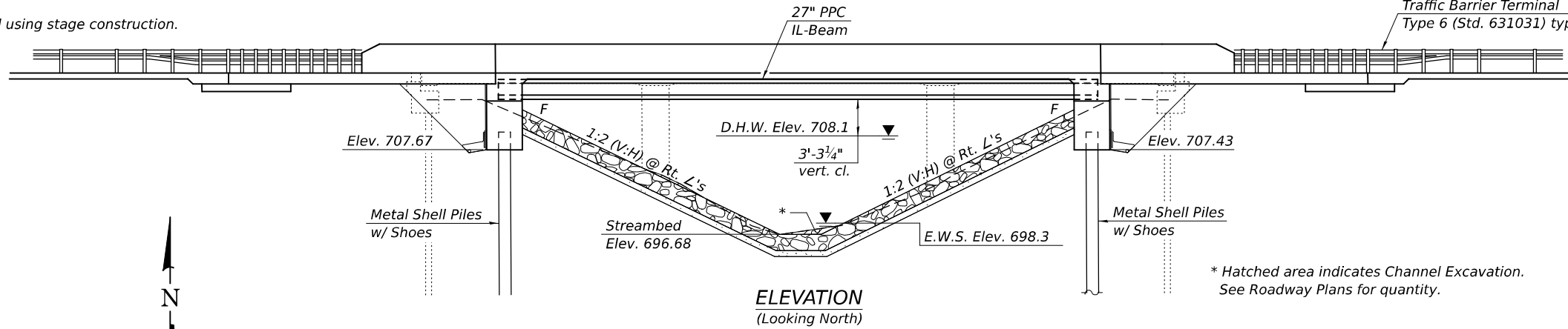
REMOVAL PLAN			
SCALE: 1"=20'	SHEET 1	OF 1	SHEETS
STA. 1491+00.00	TO STA. 1497+00.00		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	28BR-1	MCLEAN	61	22
CONTRACT NO. 70571				
ILLINOIS FED. AID PROJECT				

Benchmark: Northeast wingwall of SN 057-0070 at Sta. 1494+46.57 - 18.45' Lt., Elevation 715.13.

Existing Structure: SN 057-0070 was originally built in 1959 under Section 28-BR at Station 1494+00. The structure is a 3-span RC slab bridge measuring 86'-10" between back of abutments carrying F.A.P. 317 (US 24) over an unnamed tributary of Rooks Creek 0.9 miles West of F.A.I. 55 by Chenoa. The structure was repaired in 1996 under Section ((28,29,30)R)RS-1&28BR with deck patching, integral abutment conversion, new approach slabs, scarification with microsilica overlay and steel bridge rails. Deck patching was performed in 2021.

Traffic to be maintained using stage construction.



PROFILE GRADE
(Along C U.S. 24)

Up to 3/4 inch to be ground off the bridge deck and the bridge approach slabs. The Profile Grade shows the final grade elevations after grinding.

DESIGN SPECIFICATIONS
2020 AASHTO LRFD Bridge Design Specifications, 9th Edition

LOADING HL-93

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

DESIGN STRESSES
FIELD UNITS

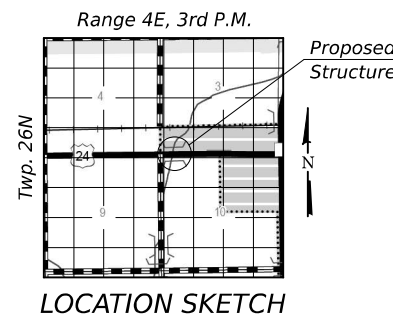
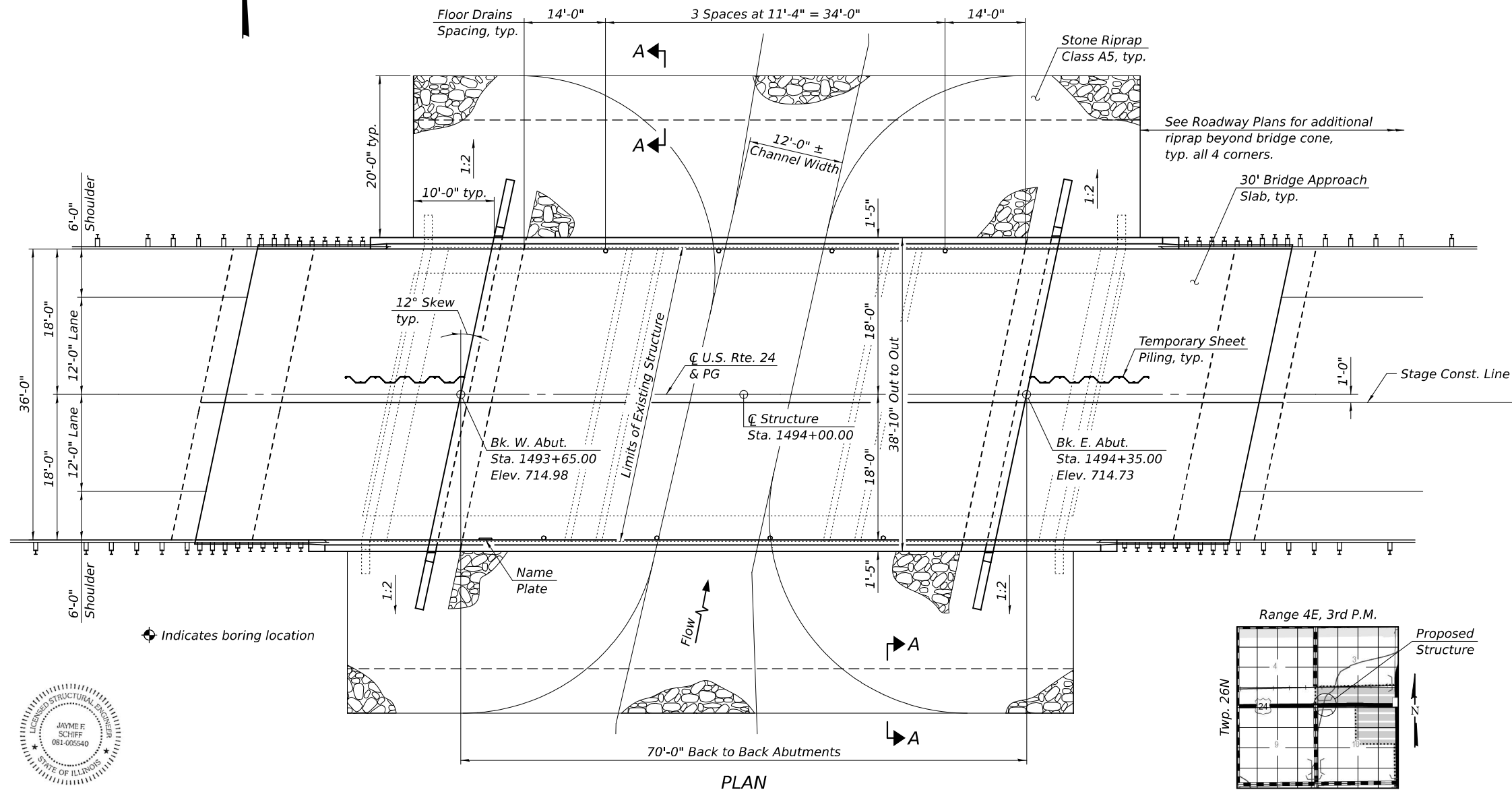
$f'c = 3,500$ psi
 $f'c = 4,000$ psi (Superstructure)
 $f_y = 60,000$ psi (Reinforcement)

PRECAST PRESTRESSED UNITS

$f'c = 8,500$ psi
 $f'ci = 6,500$ psi
 $f_{pu} = 270,000$ psi (0.6" Dia. low lax. Strands)
 $f_{pbt} = 202,300$ psi (0.6" Dia. low lax. Strands)

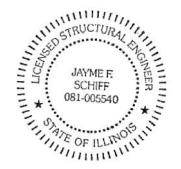
SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (SD1) = 0.080g
Design Spectral Acceleration at 0.2 sec. (SDS) = 0.138g
Soil Site Class = C



GENERAL PLAN & ELEVATION
U.S. RTE. 24 OVER UN-NAMED TRIBUTARY
TO ROOKS CREEK
F.A.P. RTE. 317 - SEC. 28BR-1
MCLEAN COUNTY
STATION 1494+00.00
STRUCTURE NO. 057-0258

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EXPIRES 11-30-2026

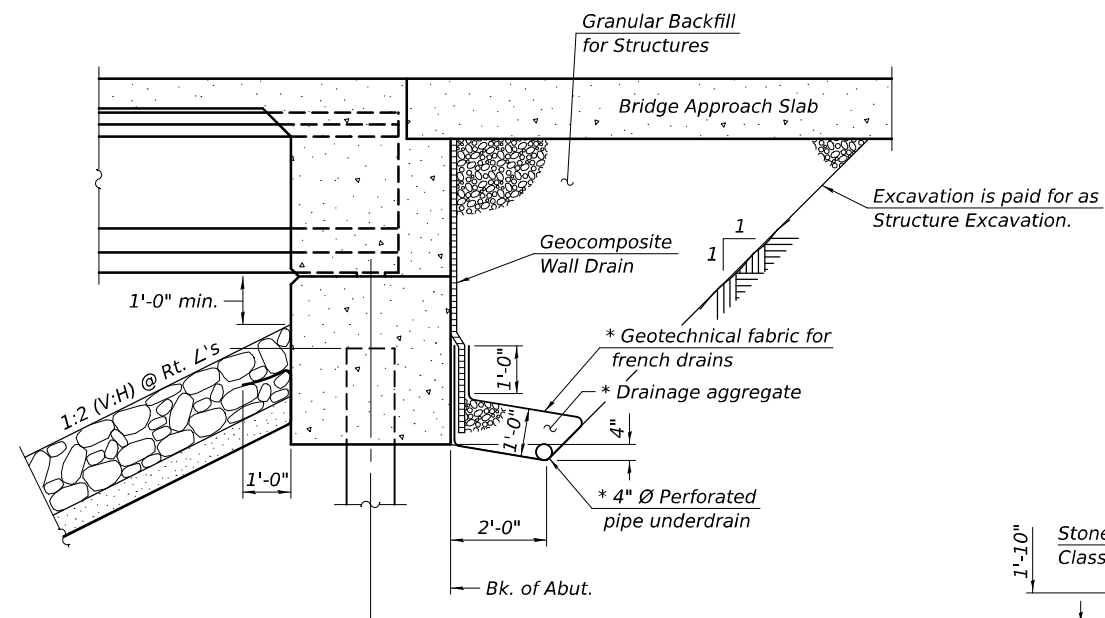
DESIGNED - RYAN P. NEGANGARD	EXAMINED - <i>Jayme E. Schuff</i>
CHECKED - TIFFANY L. ADAMS	PASSED - <i>Jayme E. Schuff</i>
DRAWN - DENNIS A. POP	
CHECKED - R.P.N. / T.L.A.	

DATE - 12/9/2024
ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET 1 OF 25 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	28BR-1	McLean	61	23
CONTRACT NO. 70571				
ILLINOIS FED. AID PROJECT				

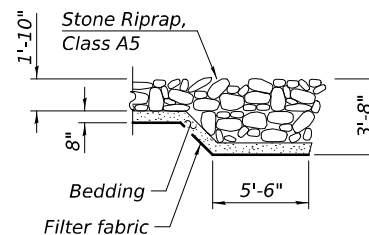


SECTION THRU INTEGRAL ABUTMENT
(Horiz. dim. at Rt. L's)

* Included in the cost of Pipe Underdrains for Structures.

Note:

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



SECTION A-A

DESIGN SCOUR ELEVATION TABLE

Event / Limit State	Design Scour Elevations (ft.)		Item 113
	W. Abut.	E. Abut.	
Q100	707.67	707.43	8
Q200	707.67	707.43	
Design	707.67	707.43	
Check	707.67	707.43	

WATERWAY INFORMATION

Drainage Area = 8.18 mi. ²		Existing Low Grade Elev. 714.40 @ Sta. 1496+00 Proposed Low Grade Elev. 714.40 @ Sta. 1496+00								
Flood	Freq. Yr.	Q C.F.S.	Opening Ft ²		Nat. H.W.E.		Head - Ft.		Headwater El.	
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.
Design	50	1850	305	321	708.1	0.7	0.6	708.8	708.7	
Base	100	2160	325	342	708.5	1.0	0.8	709.5	709.3	
Scour Design Check	200	2487	340	358	708.8	1.2	1.0	710.0	709.8	
Max. Calc.	500	2920	361	381	709.2	1.5	1.3	710.7	710.5	

10 Year velocity through existing bridge = 4.82 ft/s
10 Year velocity through proposed bridge = 4.54 ft/s

STA. 1494+00.00
BUILT BY
STATE OF ILLINOIS
F.A.P. RTE. 317 - SEC. 28BR-1
LOADING HL-93
STR. NO. 057-0258

NAME PLATE
See Std. 515001

GENERAL NOTES

Reinforcement bars designated (E) shall be epoxy coated.
The finishing machine rails shall be placed on the top of the top flange of the exterior beams within the deck pour. Beam blocks shall be placed between beams at all tie locations in each bay for the full width of the deck pour.
Slipforming of the parapets is not allowed.
Layout of the 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.
The Contractor is advised that the existing concrete superstructure is a continuous structure and removal must be done in a proper sequence, possibly with falsework support. The sequence of removal and the use of any required falsework is the responsibility of the Contractor.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Stone Riprap, Class A5	Sq. Yd.		735	735
Filter Fabric	Sq. Yd.		735	735
Removal of Existing Structures	Each	1		1
Structure Excavation	Cu. Yd.		192	192
Floor Drains	Each	8		8
Concrete Structures	Cu. Yd.		73.7	73.7
Concrete Superstructure	Cu. Yd.	120.5		120.5
Protective Coat	Sq. Yd.	606		606
Concrete Superstructure (Approach Slab)	Cu. Yd.	108.4		108.4
Furnishing and Erecting Precast Prestressed Concrete Beams, IL27N	Foot	404		404
Reinforcement Bars, Epoxy Coated	Pound	67,650	8,360	76,010
Bar Splicers	Each	428	104	532
Furnishing Metal Shell Piles 14" x 0.25"	Foot		330	330
Driving Piles	Foot		330	330
Test Pile Metal Shells	Each		2	2
Pile Shoes	Each		12	12
Name Plates	Each	1		1
Temporary Sheet Piling	Sq. Ft.		251	251
Granular Backfill for Structures	Cu. Yd.		100	100
Geocomposite Wall Drain	Sq. Yd.		57	57
Pipe Underdrains for Structures 4"	Foot		140	140
Bridge Deck Grooving (Longitudinal)	Sq. Yd.	341		341
Bar Terminators	Each	80	396	476
Diamond Grinding (Bridge Section)	Sq. Yd.	590		590

INDEX OF SHEETS

- General Plan & Elevation
- General Data
- Stage Construction Details
- Temporary Sheet Piling
- Temporary Concrete Barrier
- Top of Slab Elevations
- Top of Approach Slab Elevations
- Superstructure
- Superstructure Details
- Diaphragm Details
- Bridge Approach Slab Details
- Framing Plan
- Framing Details
- IL27N Beam
- IL27N Details
- West Abutment
- East Abutment
- Abutment Details
- Metal Shell Pile Details
- Bar Splicer Details
- Soil Boring Logs

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DESIGNED - RYAN P. NEGANGARD	EXAMINED	DATE - 12/9/2024
CHECKED - TIFFANY L. ADAMS	PASSED	REVISED -
DRAWN - DENNIS A. POP		REVISED -
CHECKED - R.P.N. / T.L.A.		

Mark Shuffler
ENGINEER OF BRIDGE DESIGN
Jayne F. [Signature]
ENGINEER OF BRIDGES AND STRUCTURES

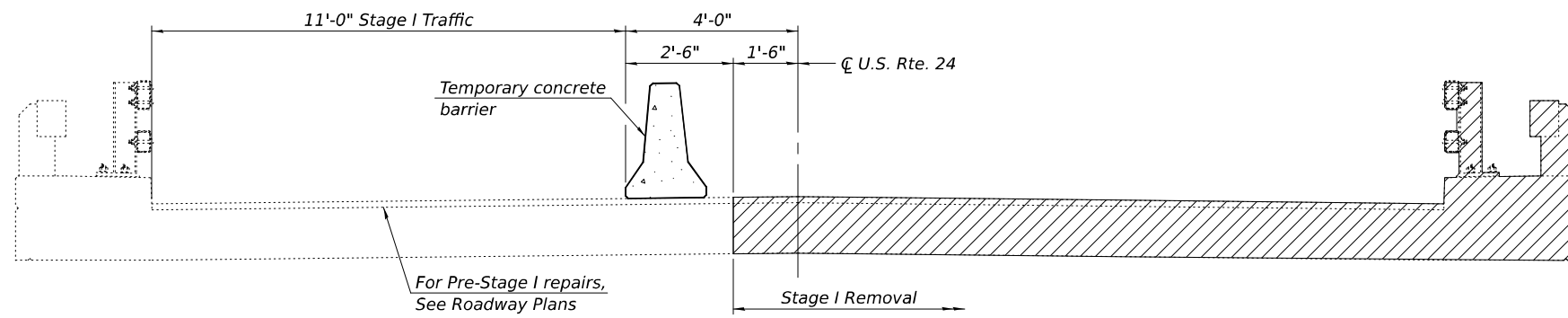
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DATA
STRUCTURE NO. 057-0258

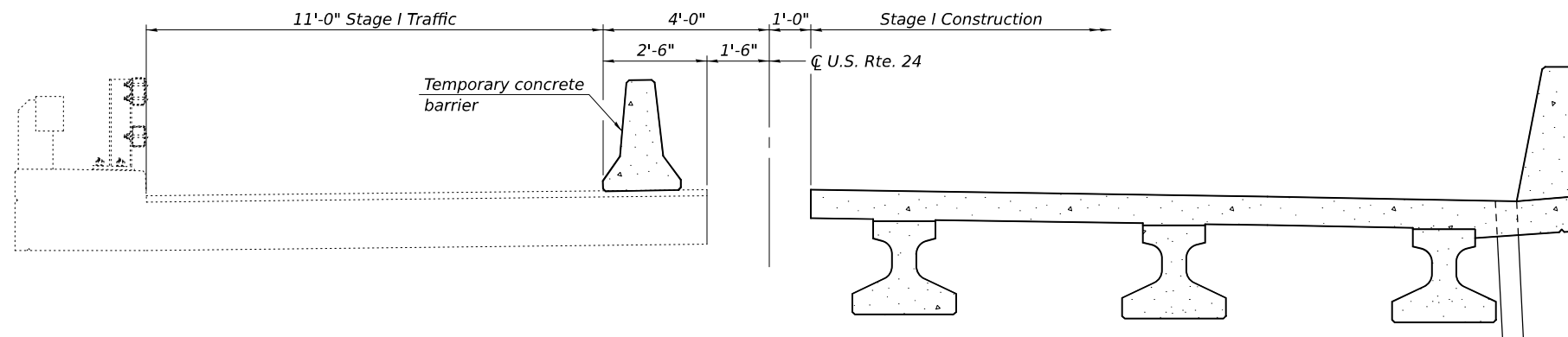
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CONTRACT NO. 70571				
ILLINOIS FED. AID PROJECT				

SHEET 2 OF 25 SHEETS

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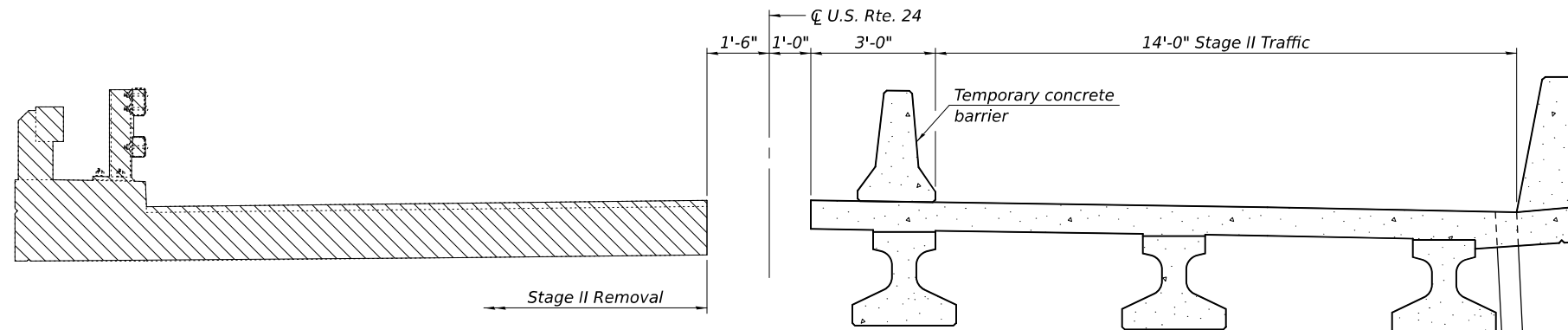


STAGE I REMOVAL
(Looking East)

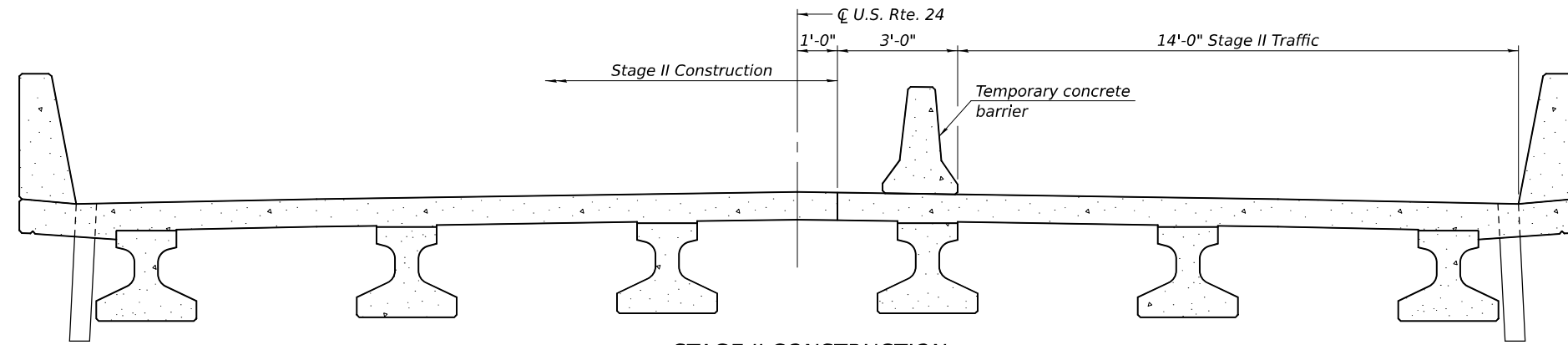


STAGE I CONSTRUCTION
(Looking East)

Notes:
 Hatched area indicates Removal of Existing Structures.
 For quantity of Temporary Concrete Barriers, see Roadway Plans. See sheet 5 of 25 for details.


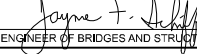


STAGE II REMOVAL
(Looking East)



STAGE II CONSTRUCTION
(Looking East)

DESIGNED - RYAN P. NEGANGARD	EXAMINED
CHECKED - TIFFANY L. ADAMS	PASSED
DRAWN - DENNIS A. POP	
CHECKED - R.P.N. / T.L.A.	


 ENGINEER OF BRIDGE DESIGN

 ENGINEER OF BRIDGES AND STRUCTURES

DATE - 12/9/2024
REVISED -
REVISED -

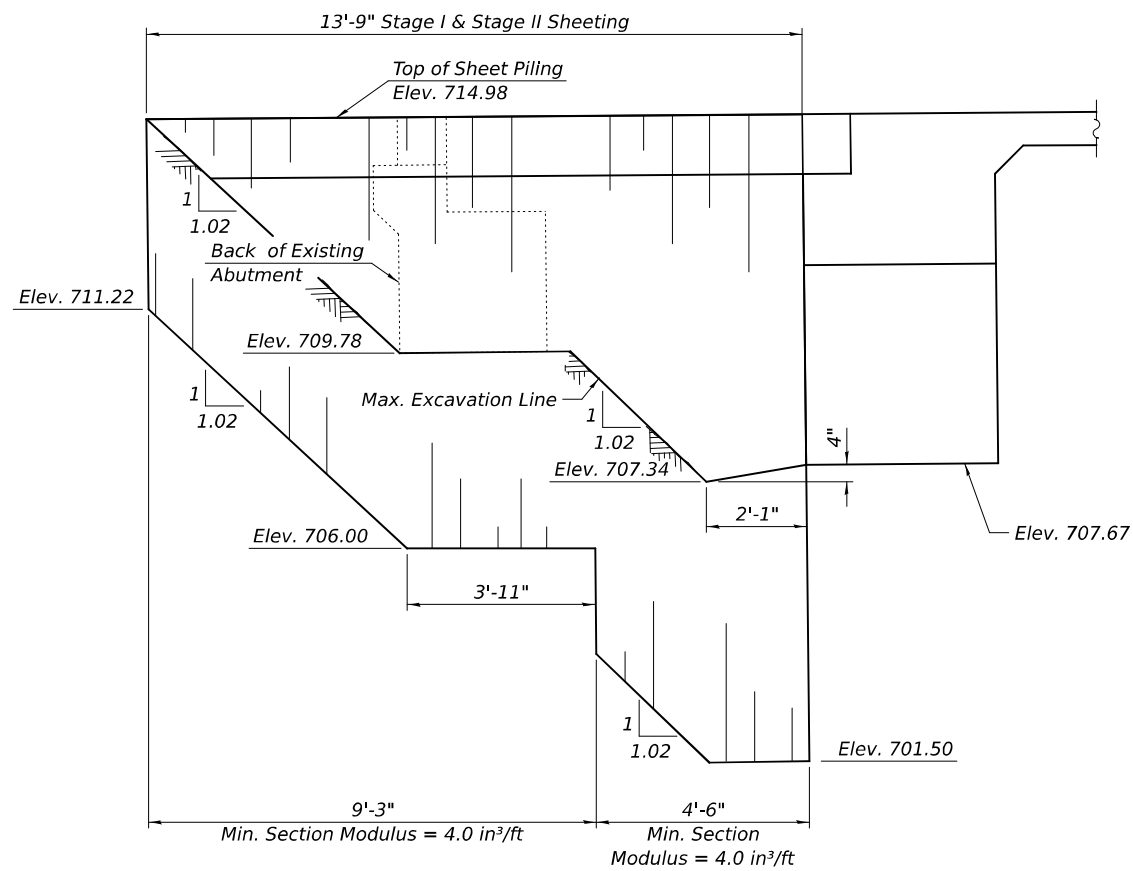
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DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION DETAILS
STRUCTURE NO. 057-0258

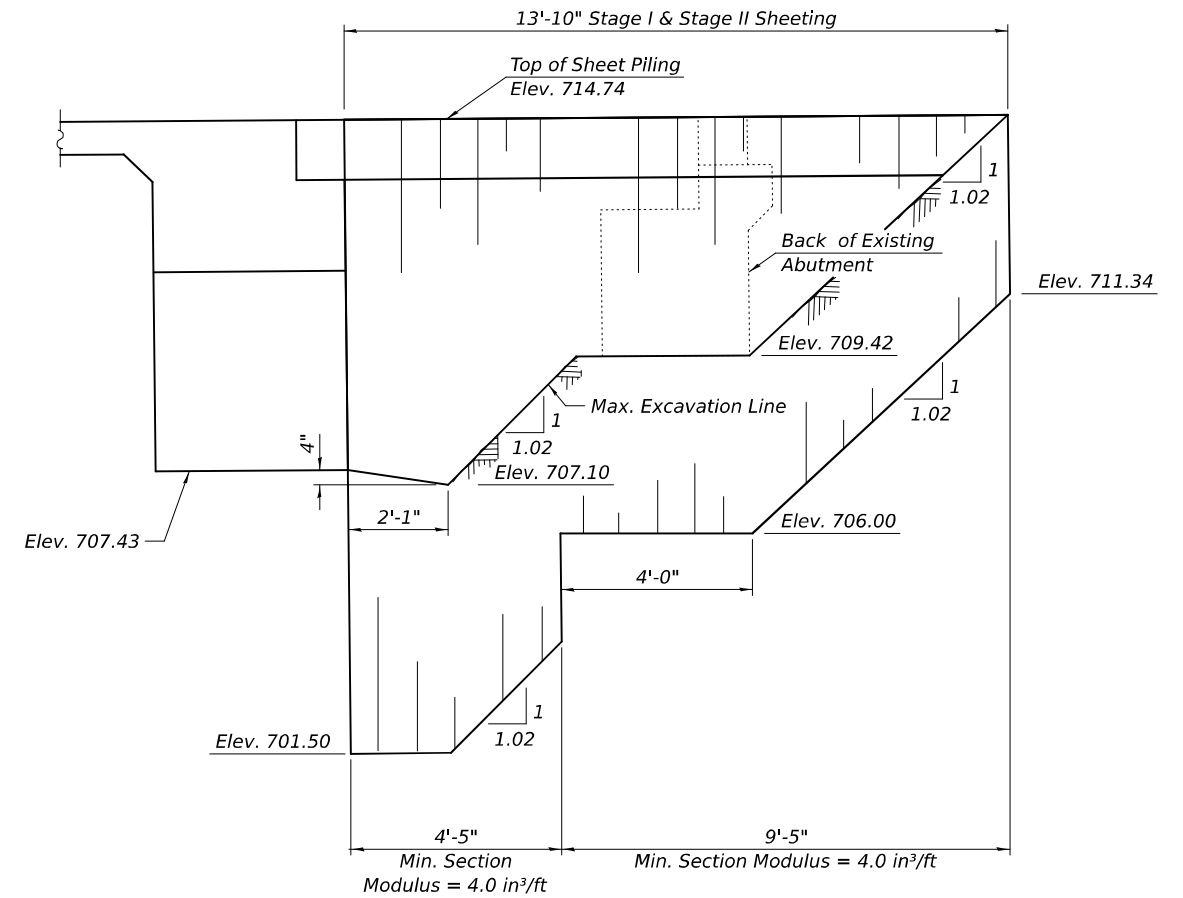
SHEET 3 OF 25 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	28BR-1	McLean	61	25
CONTRACT NO. 70571				
ILLINOIS FED. AID PROJECT				

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TEMPORARY SHEET PILING
 (West Abutment - Looking North)



TEMPORARY SHEET PILING
 (East Abutment - Looking North)

Notes:
 If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.
 The existing abutments shall be completely removed. Cost included in Removal of Existing Structures.

DESIGNED -	RYAN P. NEGANGARD
CHECKED -	TIFFANY L. ADAMS
DRAWN -	DENNIS A. POP
CHECKED -	R.P.N. / T.L.A.

EXAMINED	<i>Mark Shuffler</i> ENGINEER OF BRIDGE DESIGN	DATE -	12/9/2024
PASSED	<i>Jayne F. [Signature]</i> ENGINEER OF BRIDGES AND STRUCTURES	REVISED -	
		REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

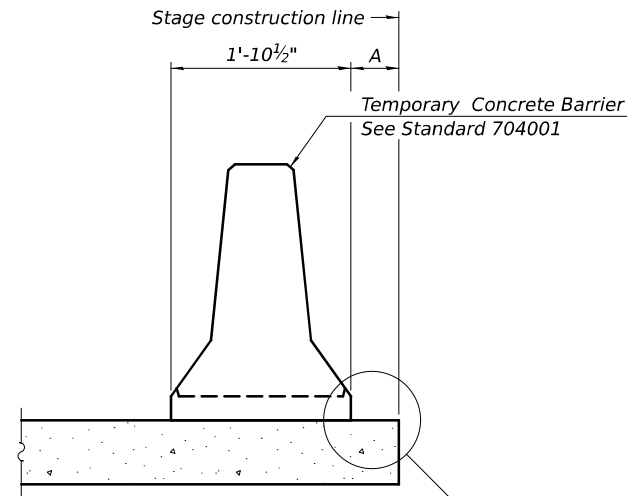
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STRUCTURE NO. 057-0258

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	28BR-1	McLean	61	26
CONTRACT NO. 70571				
ILLINOIS FED. AID PROJECT				

SHEET 4 OF 25 SHEETS

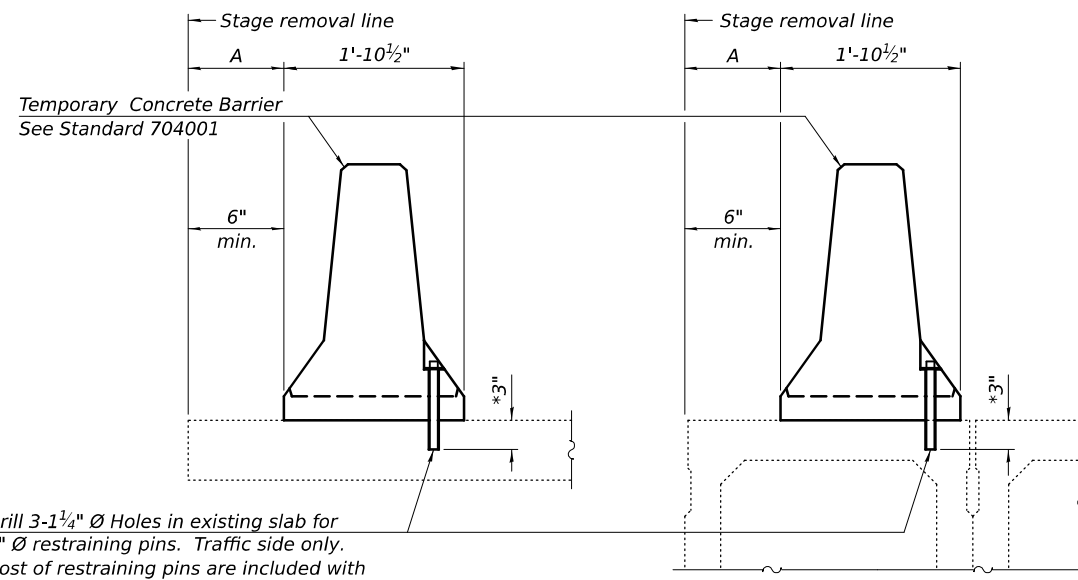
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When "A" is 3'-1" or less, the temporary concrete barrier shall be restrained to the new slab according to Detail I, II or III. No restraint is required when "A" is greater than 3'-1".

NEW SLAB OR NEW DECK BEAM

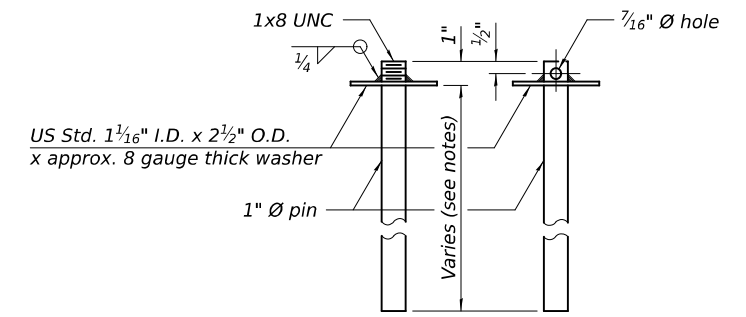


Drill 3-1/4" Ø Holes in existing slab for 1" Ø restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

EXISTING SLAB

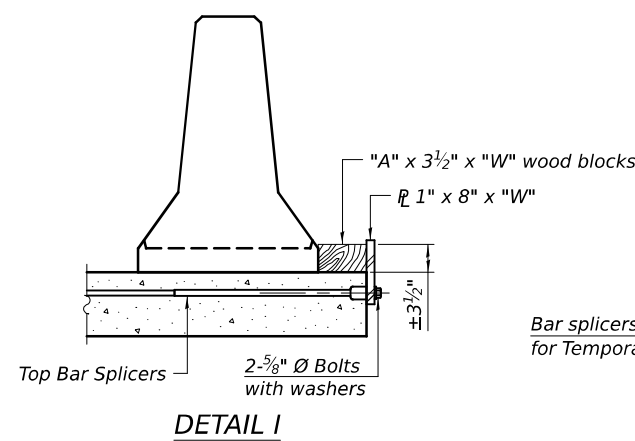
* When hot-mix asphalt wearing surface is present, embedment shall be 3" plus the wearing surface depth.

EXISTING DECK BEAM

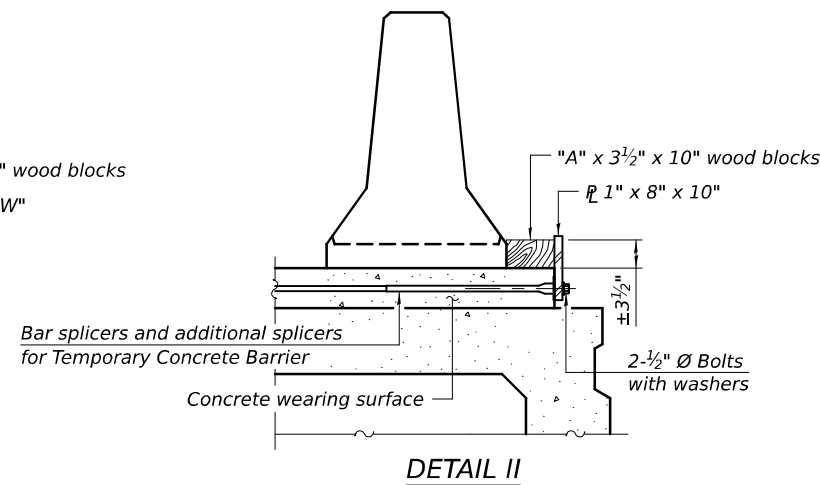


RESTRAINING PIN

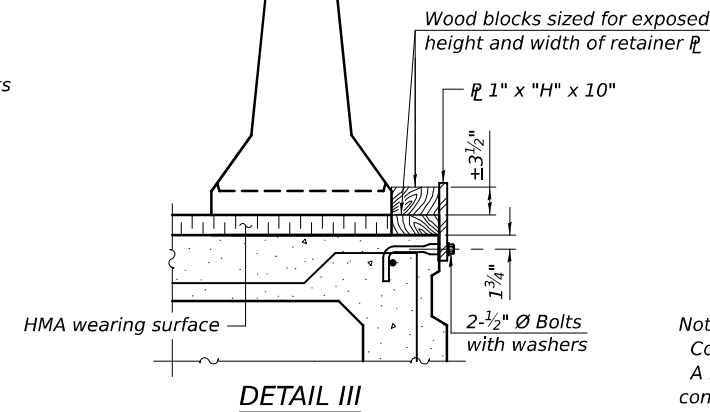
SECTIONS THRU SLAB OR DECK BEAM



DETAIL I



DETAIL II



DETAIL III

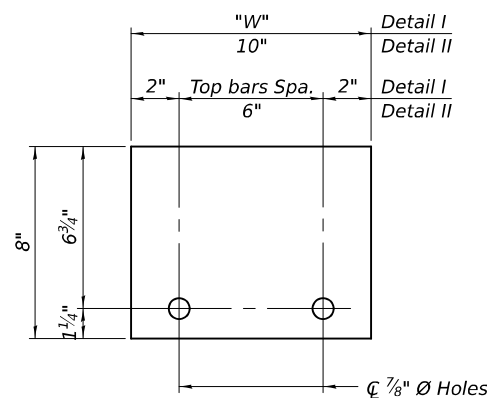
BAR SPLICER FOR #4 BAR - DETAIL III

Notes:
 Cost of retainer assembly is included with Temporary Concrete Barrier. A retainer assembly shall be located at the approximate center of each temporary concrete barrier. The retainer plate shall not be removed until the concrete on the adjacent stage is ready to be poured. For Detail III applications the retainer plate shall not be removed until just prior to placing the adjacent beam. When the 'A' dimension is less than 1 1/2", the wood block shall be omitted and the barrier shall be placed in direct contact with the steel retainer plate. For deck beam applications the minimum required 'A' distance is 6" to accommodate the shear key clamping device.

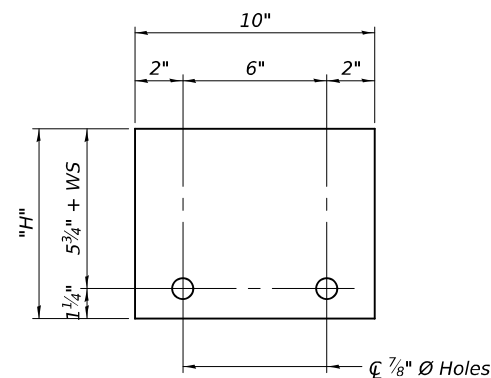
Detail I - Installation for a new bridge deck or bridge slab.

Detail II - Installation for a new deck beam with an initial concrete wearing surface. Additional bar splicers shall be provided at 6'-0" centers and paired with the bar splicers of the concrete wearing surface reinforcement to accommodate the installation of the retainer assemblies. The cost of the additional bar splicers is included with the concrete wearing surface.

Detail III - Installation for a new deck beam with no initial wearing surface or with an initial hot-mix asphalt (HMA) wearing surface present. The deck beam directly beneath the temporary concrete barrier shall be fabricated with bar splicer inserts in the side of the beam, as detailed, to accommodate the installation of the retainer assemblies. A pair of bar splicers, 6" apart, shall be placed at 6'-0" centers along the length of the beam. The cost of the bar splicers is included with the deck beam.



STEEL RETAINER 1" x 8" x "W"
(Detail I and II)



STEEL RETAINER 1" x "H" x 10"
(Detail III)

RAILING CRITERIA

NCHRP 350 Test Level	3
Railing Weight (plf)	440

R-27 5-15-2023

DESIGNED - RYAN P. NEGANGARD	EXAMINED
CHECKED - TIFFANY L. ADAMS	PASSED
DRAWN - DENNIS A. POP	
CHECKED - R.P.N. / T.L.A.	

DATE - 12/9/2024
 ENGINEER OF BRIDGE DESIGN
 ENGINEER OF BRIDGES AND STRUCTURES

REVISIONS	
REVISIONS	

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**TEMPORARY CONCRETE BARRIER
 STRUCTURE NO. 057-0258**

SHEET 5 OF 25 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	28BR-1	McLean	61	27
CONTRACT NO. 70571				
ILLINOIS FED. AID PROJECT				

BEAM 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. of W. Abut.	1493+68.45	-16.25	714.70	714.72
☉ Brg. W. Abut.	1493+70.46	-16.25	714.70	714.72
C	1493+80.46	-16.25	714.66	714.74
D	1493+90.46	-16.25	714.62	714.75
E	1494+00.46	-16.25	714.59	714.74
F	1494+10.46	-16.25	714.55	714.69
G	1494+20.46	-16.25	714.52	714.63
H	1494+30.46	-16.25	714.48	714.53
☉ Brg. E. Abut.	1494+36.45	-16.25	714.46	714.48
Bk. of E. Abut.	1494+38.45	-16.25	714.45	714.47

BEAM 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. of W. Abut.	1493+67.07	-9.75	714.83	714.85
☉ Brg. W. Abut.	1493+69.07	-9.75	714.82	714.84
C	1493+79.07	-9.75	714.78	714.86
D	1493+89.07	-9.75	714.75	714.87
E	1493+99.07	-9.75	714.71	714.86
F	1494+09.07	-9.75	714.68	714.81
G	1494+19.07	-9.75	714.64	714.75
H	1494+29.07	-9.75	714.60	714.66
☉ Brg. E. Abut.	1494+35.07	-9.75	714.58	714.60
Bk. of E. Abut.	1494+37.07	-9.75	714.57	714.59

BEAM 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. of W. Abut.	1493+65.69	-3.25	714.93	714.95
☉ Brg. W. Abut.	1493+67.69	-3.25	714.92	714.94
C	1493+77.69	-3.25	714.89	714.97
D	1493+87.69	-3.25	714.85	714.98
E	1493+97.69	-3.25	714.81	714.96
F	1494+07.69	-3.25	714.78	714.92
G	1494+17.69	-3.25	714.74	714.85
H	1494+27.69	-3.25	714.71	714.76
☉ Brg. E. Abut.	1494+33.69	-3.25	714.68	714.70
Bk. of E. Abut.	1494+35.69	-3.25	714.68	714.70

☉ ROADWAY & PG

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. of W. Abut.	1493+65.00	0.00	714.98	715.00
☉ Brg. W. Abut.	1493+67.00	0.00	714.98	715.00
C	1493+77.00	0.00	714.94	715.02
D	1493+87.00	0.00	714.90	715.03
E	1493+97.00	0.00	714.87	715.01
F	1494+07.00	0.00	714.83	714.97
G	1494+17.00	0.00	714.79	714.93
H	1494+27.00	0.00	714.76	714.81
☉ Brg. E. Abut.	1494+33.00	0.00	714.73	714.75
Bk. of E. Abut.	1494+35.00	0.00	714.73	714.75

STAGE CONSTRUCTION JOINT

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. of W. Abut.	1493+64.79	1.00	714.97	714.99
☉ Brg. W. Abut.	1493+66.79	1.00	714.96	714.98
C	1493+76.79	1.00	714.92	715.00
D	1493+86.79	1.00	714.89	715.01
E	1493+96.79	1.00	714.85	715.00
F	1494+06.79	1.00	714.82	714.95
G	1494+16.79	1.00	714.78	714.89
H	1494+26.79	1.00	714.74	714.80
☉ Brg. E. Abut.	1494+32.79	1.00	714.72	714.74
Bk. of E. Abut.	1494+34.79	1.00	714.71	714.73

BEAM 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. of W. Abut.	1493+64.31	3.25	714.94	714.96
☉ Brg. W. Abut.	1493+66.31	3.25	714.93	714.95
C	1493+76.31	3.25	714.89	714.97
D	1493+86.31	3.25	714.86	714.98
E	1493+96.31	3.25	714.82	714.97
F	1494+06.31	3.25	714.78	714.92
G	1494+16.31	3.25	714.75	714.86
H	1494+26.31	3.25	714.71	714.77
☉ Brg. E. Abut.	1494+32.31	3.25	714.69	714.71
Bk. of E. Abut.	1494+34.31	3.25	714.68	714.70

BEAM 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. of W. Abut.	1493+62.93	9.75	714.84	714.86
☉ Brg. W. Abut.	1493+64.93	9.75	714.84	714.86
C	1493+74.93	9.75	714.80	714.88
D	1493+84.93	9.75	714.76	714.89
E	1493+94.93	9.75	714.73	714.87
F	1494+04.93	9.75	714.69	714.83
G	1494+14.93	9.75	714.65	714.77
H	1494+24.93	9.75	714.62	714.67
☉ Brg. E. Abut.	1494+30.93	9.75	714.60	714.62
Bk. of E. Abut.	1494+32.93	9.75	714.59	714.61

BEAM 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. of W. Abut.	1493+61.55	16.25	714.73	714.75
☉ Brg. W. Abut.	1493+63.55	16.25	714.72	714.74
C	1493+73.55	16.25	714.69	714.76
D	1493+83.55	16.25	714.65	714.77
E	1493+93.55	16.25	714.61	714.76
F	1494+03.55	16.25	714.58	714.72
G	1494+13.55	16.25	714.54	714.65
H	1494+23.55	16.25	714.50	714.56
☉ Brg. E. Abut.	1494+29.54	16.25	714.48	714.50
Bk. of E. Abut.	1494+31.55	16.25	714.48	714.50

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DESIGNED - RYAN P. NEGANGARD	EXAMINED	DATE - 12/9/2024
CHECKED - TIFFANY L. ADAMS	PASSED	REVISED -
DRAWN - DENNIS A. POP		REVISED -
CHECKED - R.P.N. / T.L.A.		

Mark Shuffler
ENGINEER OF BRIDGE DESIGN

Jayne T. [Signature]
ENGINEER OF BRIDGES AND STRUCTURES

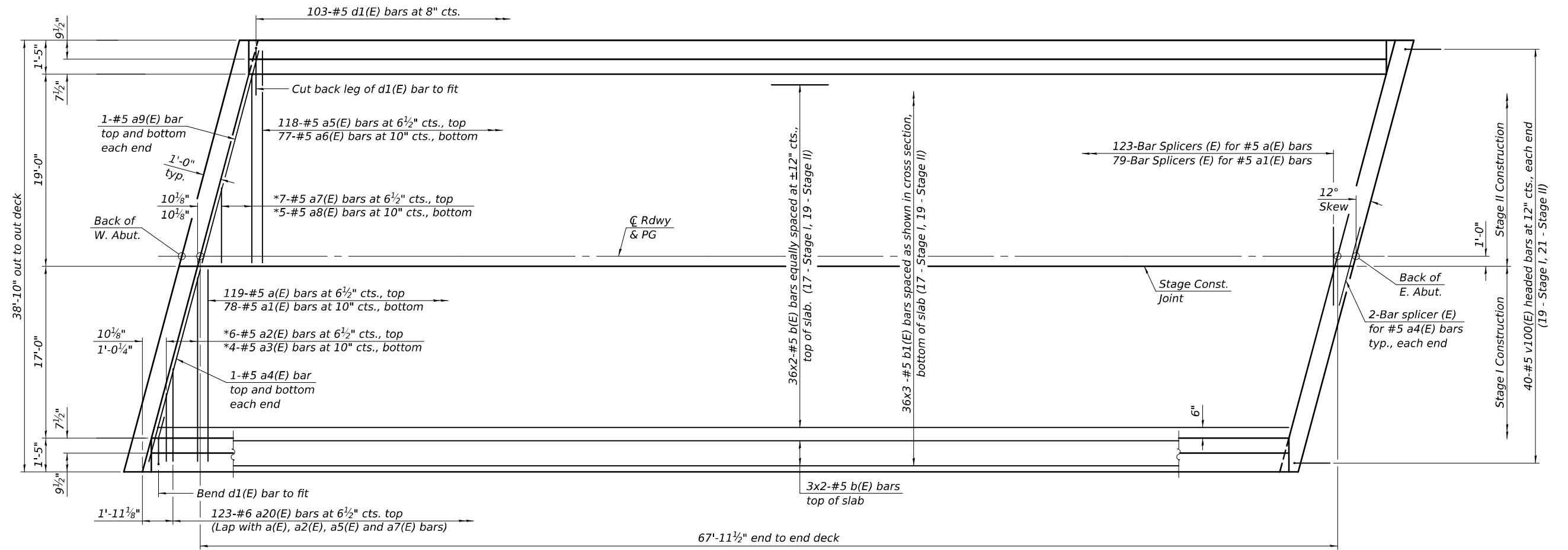
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATIONS
STRUCTURE NO. 057-0258**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	28BR-1	McLean	61	29
CONTRACT NO. 70571				
ILLINOIS FED. AID PROJECT				

SHEET 7 OF 25 SHEETS

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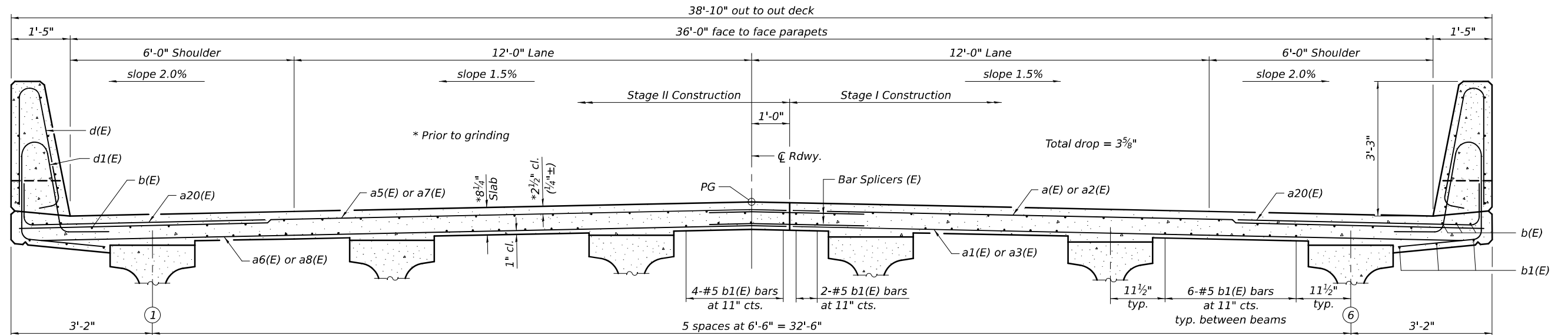
PLAN

MINIMUM BAR LAP

#5 bar = 3'-6"

* See Field Cutting Diagram on sheet 11 of 25.

Notes:
 See sheet 11 of 25 for superstructure details and Bill of Material.
 Bars indicated thus 36 x 3-#5 etc. indicates 36 lines of bars with 3 lengths per line.



CROSS SECTION

(Looking East)

DESIGNED - RYAN P. NEGANGARD	EXAMINED - <i>Mark Shuffler</i>	DATE - 12/9/2024
CHECKED - TIFFANY L. ADAMS	ENGINEER OF BRIDGE DESIGN	
DRAWN - DENNIS A. POP	PASSED - <i>James T. [Signature]</i>	REVISED -
CHECKED - R.P.N. / T.L.A.	ENGINEER OF BRIDGES AND STRUCTURES	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

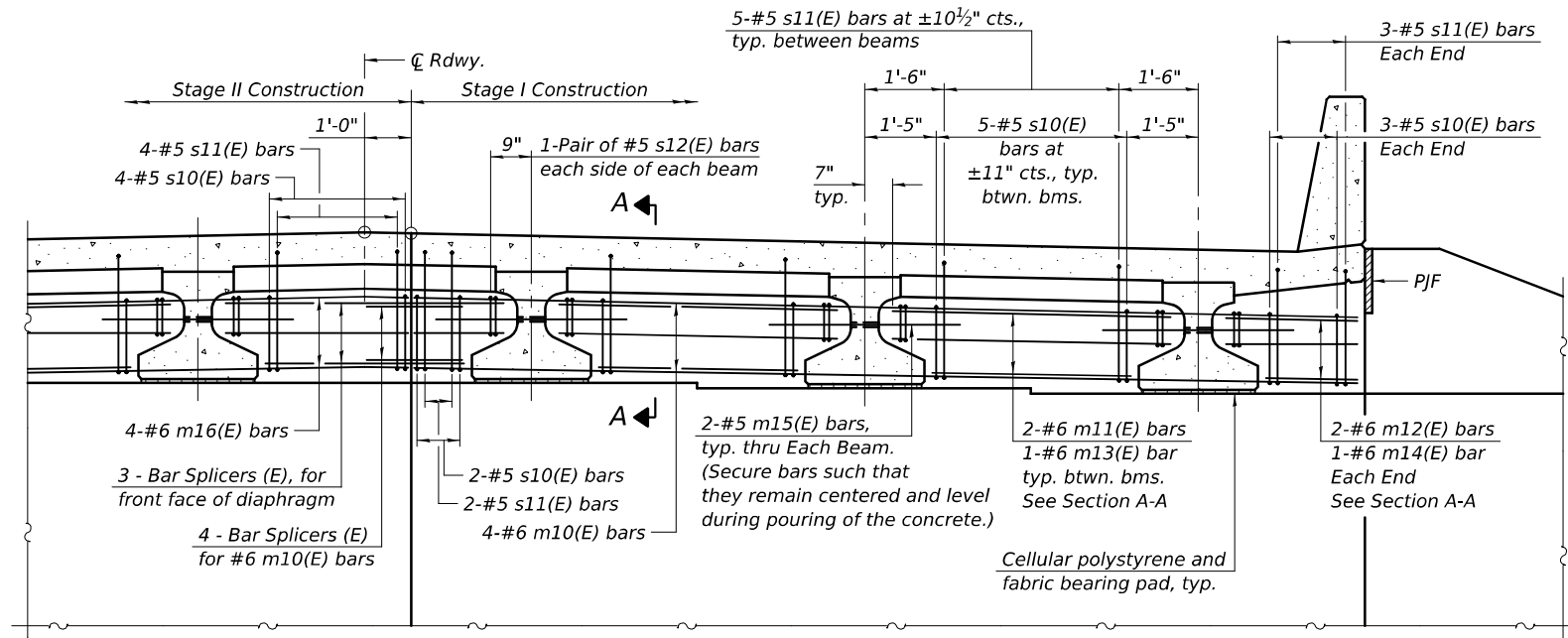
**SUPERSTRUCTURE
 STRUCTURE NO. 057-0258**

F.A.P. RTE. 317	SECTION 28BR-1	COUNTY McLean	TOTAL SHEETS 61	SHEET NO. 32
CONTRACT NO. 70571				

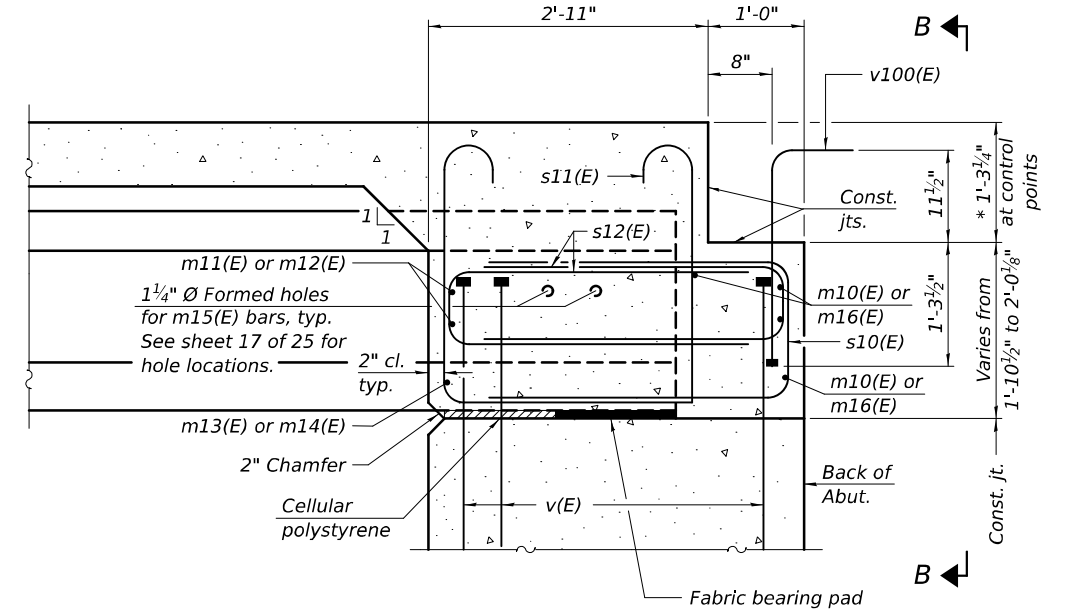
SHEET 10 OF 25 SHEETS

ILLINOIS FED. AID PROJECT

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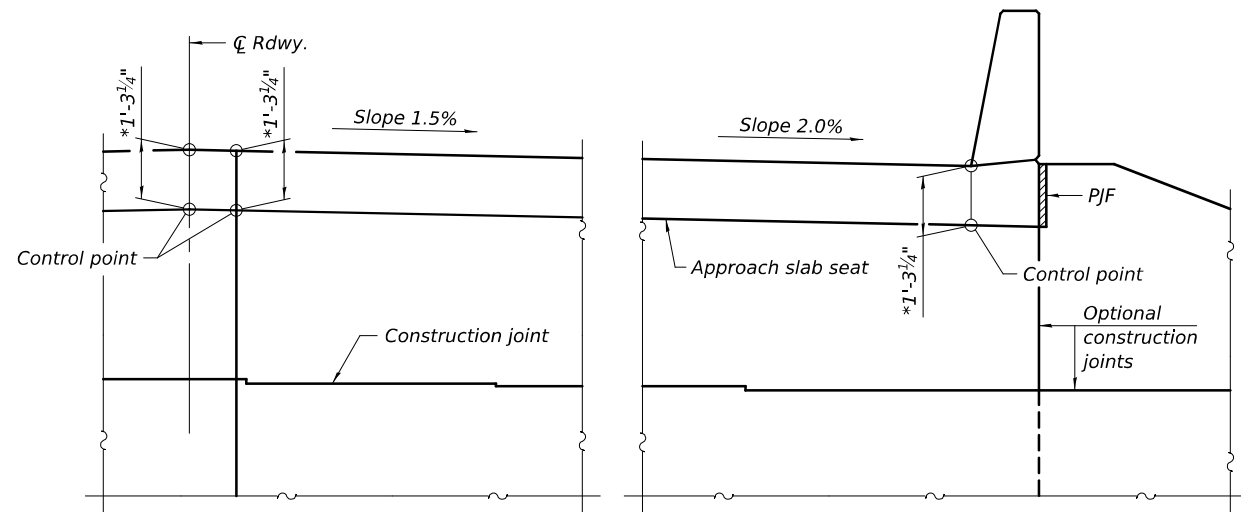
DIAPHRAGM AT ABUTMENT



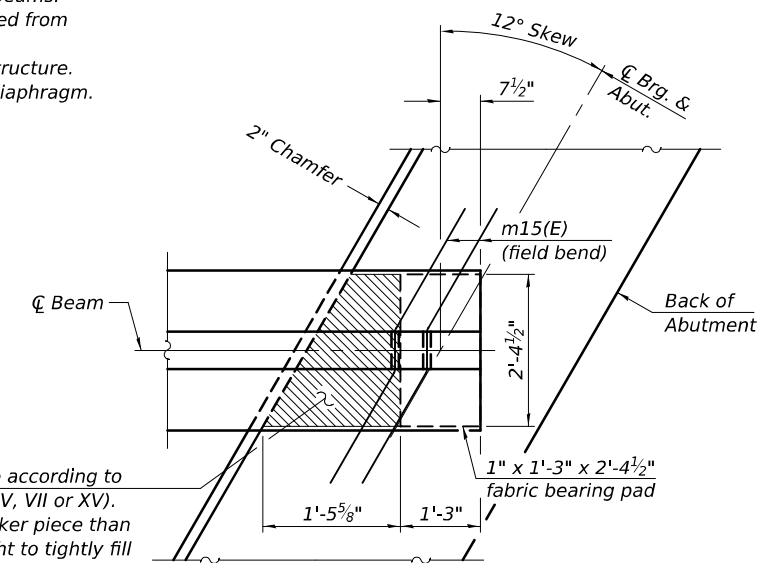
SECTION A-A
(at Rt. L's)

Notes:
 See sheet 11 of 25 for superstructure details and Bill of Material.
 See sheet 13 of 25 for PJF details.
 The s10(E), s11(E) and s12(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.
 The approach slab seat shall have a constant slope determined from the control points shown.
 Cost of cellular polystyrene is included with Concrete Superstructure.
 See sheet 23 of 25 for details of bar splicers in front face of diaphragm.

* Prior to grinding.



VIEW B-B



PLAN AT ABUTMENT
(Showing bottom flange of beam)

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DESIGNED - RYAN P. NEGANGARD	EXAMINED - <i>Mark Shuffler</i>	DATE - 12/9/2024
CHECKED - TIFFANY L. ADAMS	ENGINEER OF BRIDGE DESIGN	
DRAWN - DENNIS A. POP	PASSED - <i>Jayne F. [Signature]</i>	REVISED -
CHECKED - R.P.N. / T.L.A.	ENGINEER OF BRIDGES AND STRUCTURES	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

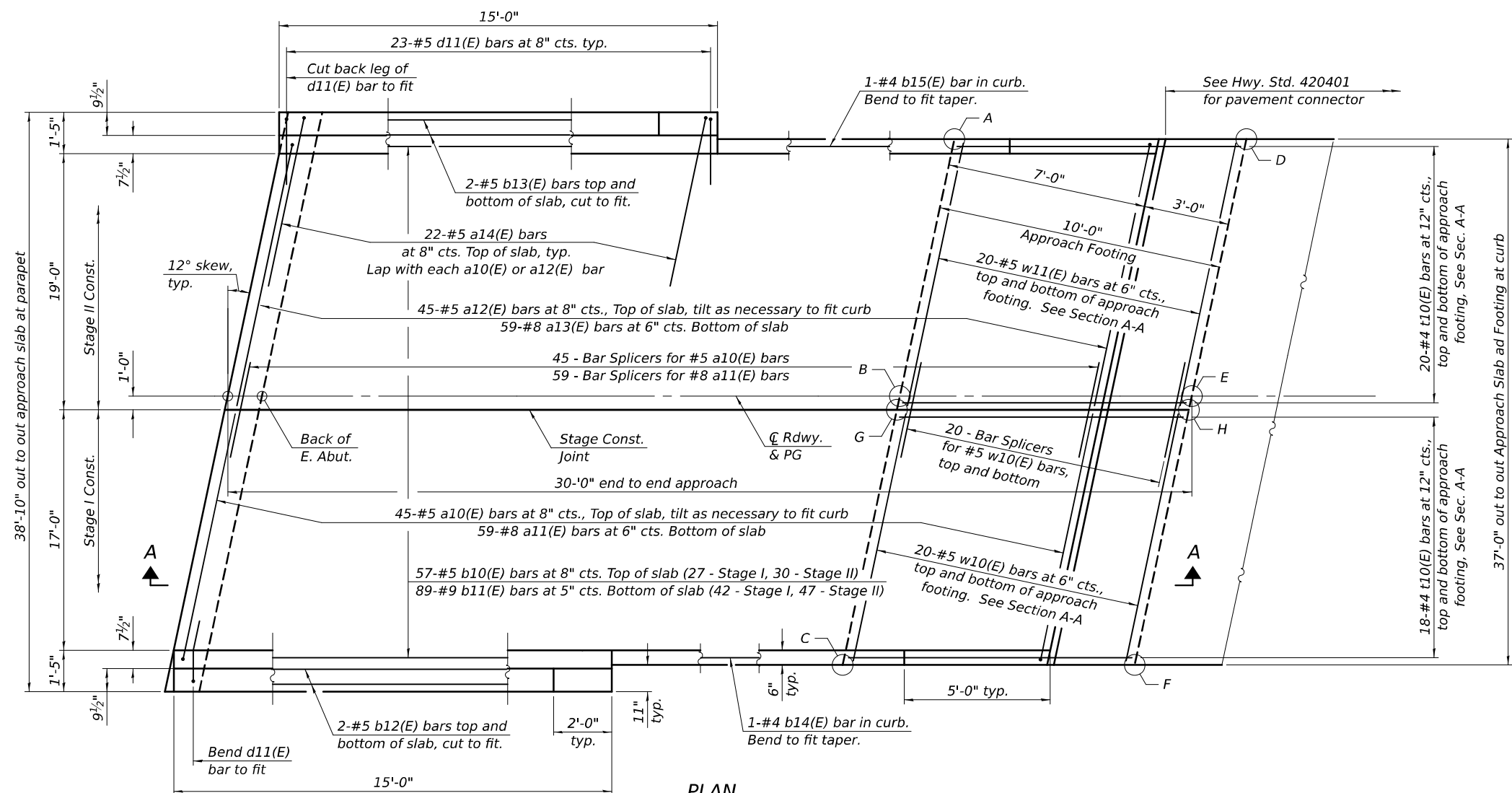
DIAPHRAGM DETAILS
STRUCTURE NO. 057-0258

SHEET 12 OF 25 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	28BR-1	McLean	61	34
CONTRACT NO. 70571				
ILLINOIS FED. AID PROJECT				

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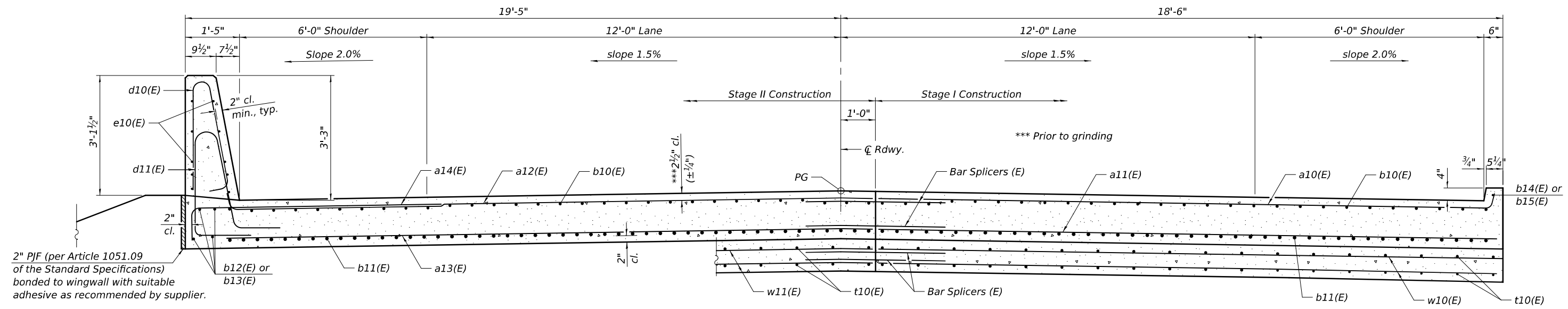
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PLAN
 (East approach slab shown; West approach slab similar by 180° rotation)

TOP AND BOTTOM ELEVATIONS FOR APPROACH FOOTING

Point/Location	West Approach		East Approach		
	Top	Bottom	Bottom	Top	
A - SE	713.52	712.69	A - NW	713.07	712.24
B - E C	713.81	712.98	B - W C	713.40	712.57
C - NE	713.49	712.66	C - SW	713.10	712.27
D - SW	713.55	712.72	D - NE	713.04	712.21
E - W C	713.85	713.02	E - E C	713.36	712.53
F - NW	713.52	712.69	F - SE	713.07	712.24
G - E SCJ	713.80	712.97	G - W SCJ	713.38	712.55
H - W SCJ	713.83	713.00	H - E SCJ	713.35	712.52



CROSS SECTION
 (Looking East)

(Sheet 1 of 2)

DESIGNED - RYAN P. NEGANGARD
 CHECKED - TIFFANY L. ADAMS
 DRAWN - DENNIS A. POP
 CHECKED - R.P.N. / T.L.A.

EXAMINED
 PASSED
 ENGINEER OF BRIDGE DESIGN
 ENGINEER OF BRIDGES AND STRUCTURES

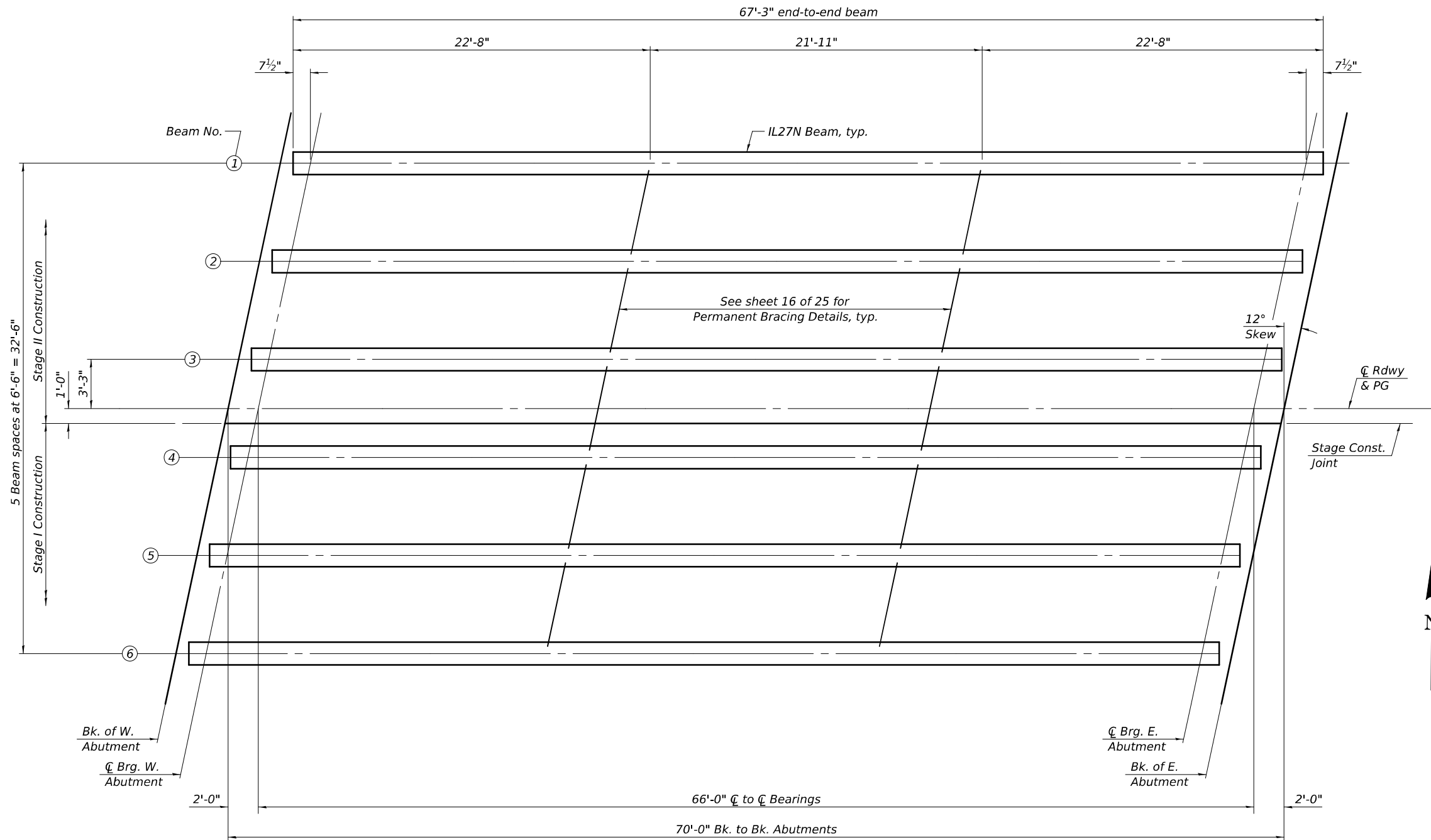
DATE - 12/9/2024
 REVISED -
 REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 057-0258

SHEET 13 OF 25 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	28BR-1	McLean	61	35
CONTRACT NO. 70571				
ILLINOIS FED. AID PROJECT				



FRAMING PLAN

MODEL: 0570258-70571-015.dgn
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DESIGNED - RYAN P. NEGANGARD
CHECKED - TIFFANY L. ADAMS
DRAWN - DENNIS A. POP
CHECKED - R.P.N. / T.L.A.

EXAMINED	<i>Mark Shuffen</i> ENGINEER OF BRIDGE DESIGN
PASSED	<i>Jayne F. [Signature]</i> ENGINEER OF BRIDGES AND STRUCTURES

DATE - 12/9/2024
REVISED -
REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

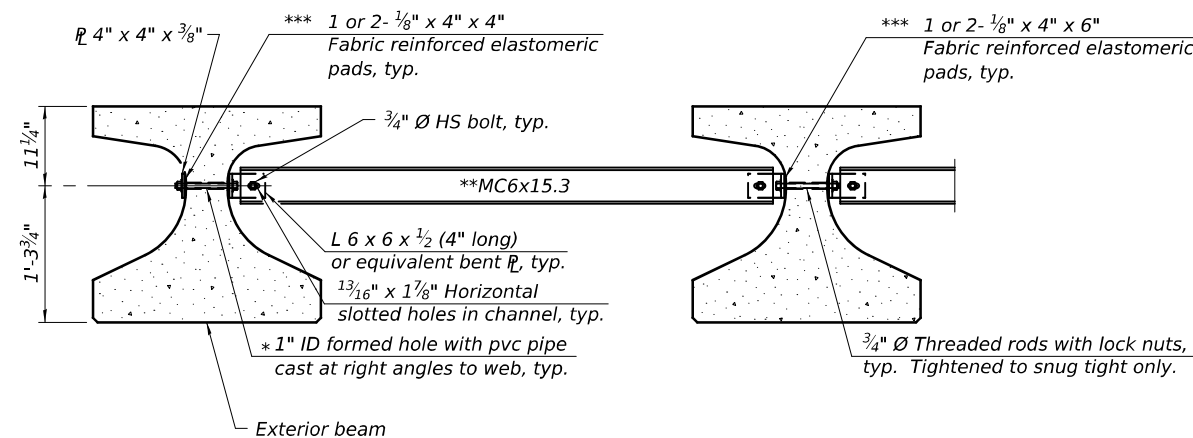
**FRAMING PLAN
 STRUCTURE NO. 057-0258**
 SHEET 15 OF 25 SHEETS

F.A.P. RTE. 317	SECTION 28BR-1	COUNTY McLean	TOTAL SHEETS 61	SHEET NO. 37
CONTRACT NO. 70571				
ILLINOIS FED. AID PROJECT				

INTERIOR BEAM MOMENT TABLE		
		0.5 Sp. 1
I	(in ⁴)	33,879
I'	(in ⁴)	146,912
S_b	(in ³)	3,060
S_b'	(in ³)	6,654
S_t	(in ³)	2,127
S_t'	(in ³)	29,860
$DC1$	(k/ft)	1.185
M_{DC1}	(k)	645.2
$DC2$	(k/ft)	0.175
M_{DC2}	(k)	95.3
DW	(k/ft)	0.325
M_{DW}	(k)	176.9
$LLDF$		0.567
$M_{\ell + IM}$	(k)	882.2

INTERIOR BEAM REACTION TABLE		
		Abutments
$LLDF$		0.707
OCF		1.045
R_{DC1}	(k)	39.1
R_{DC2}	(k)	5.8
R_{DW}	(k)	10.7
R_{ℓ}	(k)	61.3
R_{IM}	(k)	15
$R_{Total (Strength I)(Impact)}$	(k)	205.7
$R_{Total (Strength I)(No Impact)}$	(k)	179.5

- I : Non-composite moment of inertia of beam section (in⁴).
- I' : Composite moment of inertia of beam section (in⁴).
- S_b : Non-composite section modulus for the bottom fiber of the prestressed beam (in³).
- S_b' : Composite section modulus for the bottom fiber of the prestressed beam (in³).
- S_t : Non-composite section modulus for the top fiber of the prestressed beam (in³).
- S_t' : Composite section modulus for the top fiber of the prestressed beam (in³).
- $DC1$: Un-factored non-composite dead load (kips/ft.).
- M_{DC1} : Un-factored moment due to non-composite dead load (kip-ft.).
- $DC2$: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).
- M_{DC2} : Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).
- DW : Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).
- M_{DW} : Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).
- $LLDF$: Live Load Distribution Factor for moment and shear computed according to Article 4.6.2.2 and further IDOT provisions.
- $M_{\ell + IM}$: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).
- OCF : Obtuse Correction Factor computed according to Article 4.6.2.2.3c or as further simplified by IDOT provisions.
- R_{DC1} : Un-factored reaction due to non-composite dead load (kip).
- R_{DC2} : Un-factored reaction due to long-term composite (superimposed excluding future wearing surface) dead load (kip).
- R_{DW} : Un-factored reaction due to long-term composite (superimposed future wearing surface only) dead load (kip).
- R_{ℓ} : Un-factored live load reaction (kip).
- R_{IM} : Un-factored dynamic load allowance (impact) (kip).
- $R_{Total (Strength I)(Impact)}$: Total factored reaction including dynamic load allowance (impact) (kip).
- $R_{Total (Strength I)(No Impact)}$: Total factored reaction not including dynamic load allowance (impact) (kip).



Notes:

All material for bracing shall be hot dip galvanized according to AASHTO M111 unless otherwise noted.

Two hardened washers are required for each set of oversized holes.

All holes shall be 1 1/16 inch diameter unless otherwise noted. 5/16 inch x 3 inch x 3 inch plate washers are required over all slotted holes.

All bolts, threaded rods, and hardware shall be galvanized according to AASHTO M232.

Threaded rods shall be ASTM F 1554 Grade 55.

Bracing shall be installed as beams are erected and tightened as soon as possible during erection.

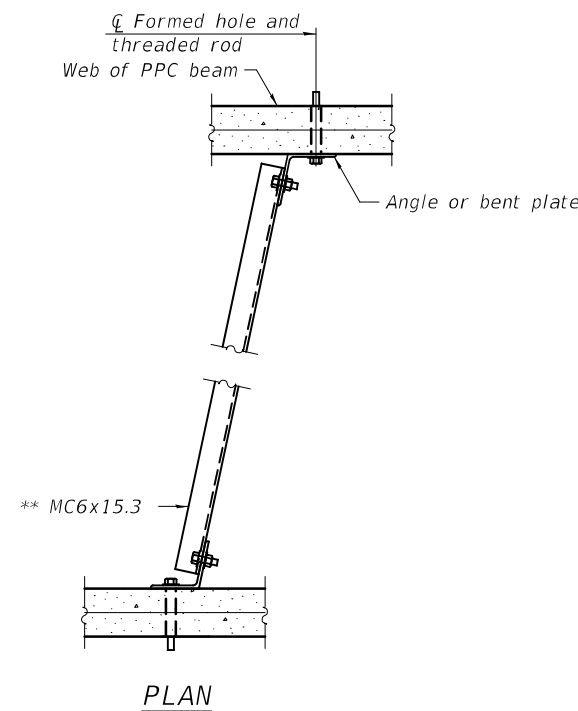
Permanent bracing shall not be paid for separately, but shall be included in the cost of Furnishing and Erecting Precast Prestressed Concrete Beams.

* Fabricator shall locate to miss strands within permissible tolerances.

** Alternate MC6x18 channels are permitted to facilitate material acquisition.

*** Place pads as necessary to provide a flat mounting surface between the steel and concrete.

PERMANENT BRACING DETAILS FOR IL27 BEAMS



MODEL: 0570258-70571-016.dgn
FILE NAME: p:\i\dot\p\w\benley.com\FWIDOT\Documents\IDOT_O ces\Bureau of Bridges and Structures\OBM Projects\0570258-70571-Design.dgn

DESIGNED - RYAN P. NEGANGARD	EXAMINED	DATE - 12/9/2024
CHECKED - TIFFANY L. ADAMS	PASSED	REVISOR -
DRAWN - DENNIS A. POP		REVISOR -
CHECKED - R.P.N. / T.L.A.		

Mark Shuffler
ENGINEER OF BRIDGE DESIGN

Raymond F. ...
ENGINEER OF BRIDGES AND STRUCTURES

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

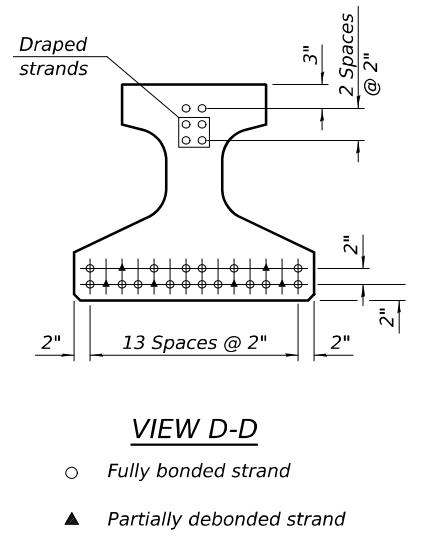
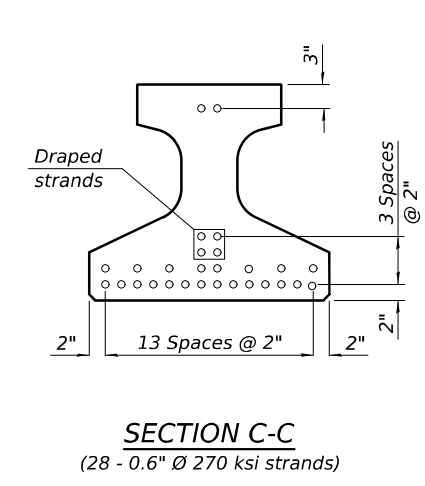
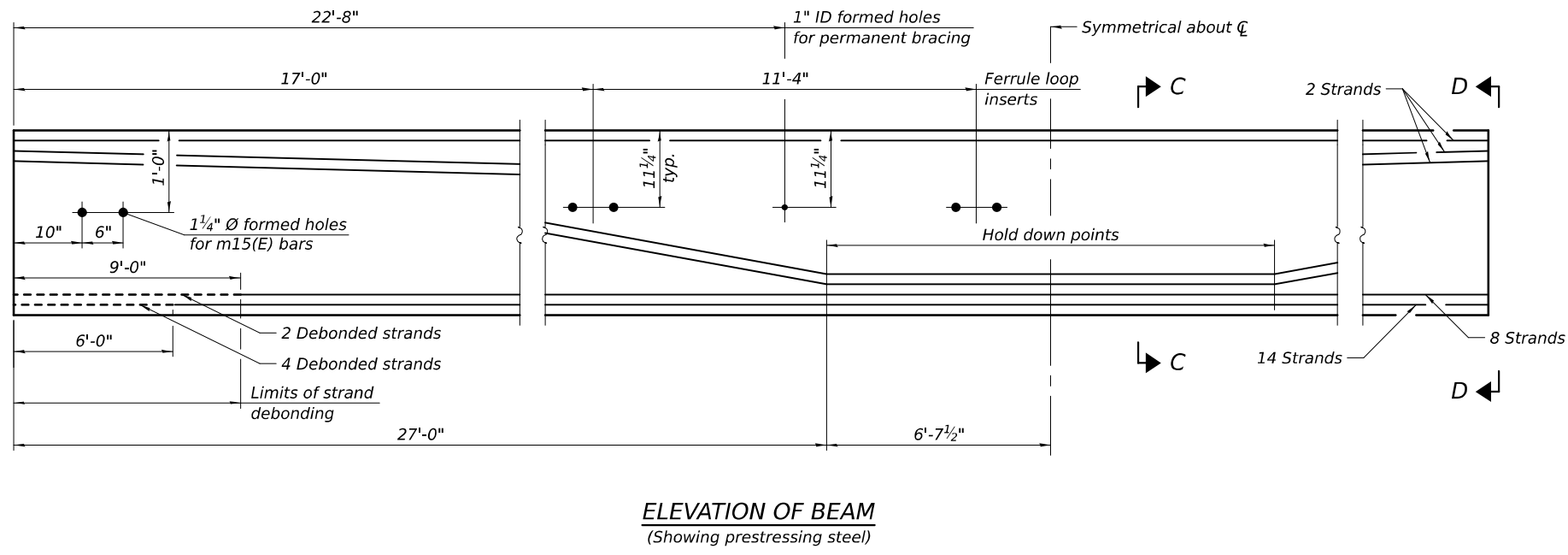
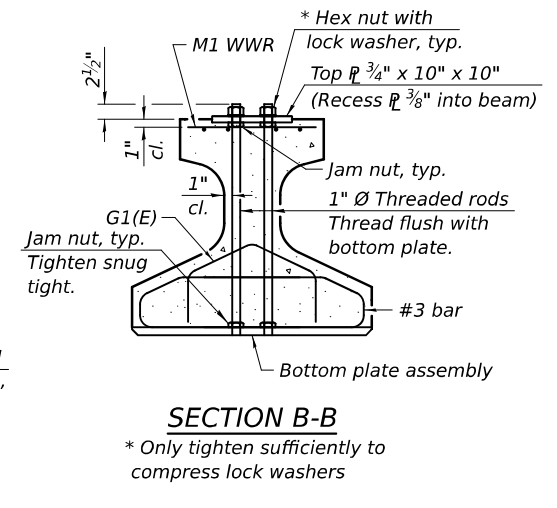
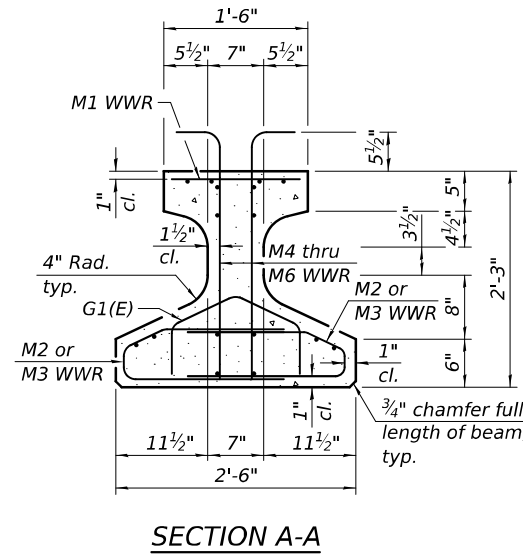
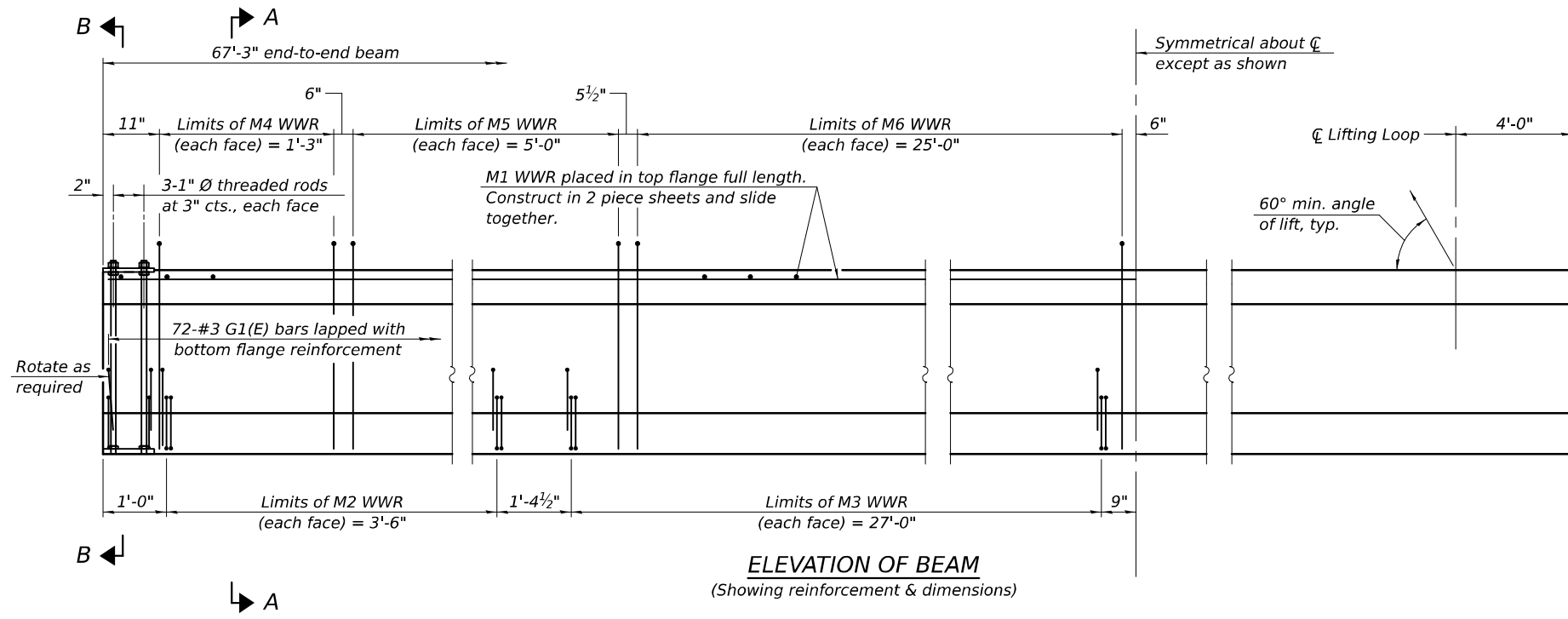
**FRAMING DETAILS
STRUCTURE NO. 057-0258**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	28BR-1	McLean	61	38
CONTRACT NO. 70571				
ILLINOIS FED. AID PROJECT				

SHEET 16 OF 25 SHEETS

12/10/2024 8:49:18 AM

MODEL: 0570258-70571-017.dgn
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Note:
See sheet 18 of 25 for additional details and Bill of Material.

DESIGNED - RYAN P. NEGANGARD	EXAMINED - <i>Mark Shuffler</i>	DATE - 12/9/2024
CHECKED - TIFFANY L. ADAMS	ENGINEER OF BRIDGE DESIGN	
DRAWN - DENNIS A. POP	PASSED - <i>James F. [Signature]</i>	REVISED -
CHECKED - R.P.N. / T.L.A.	ENGINEER OF BRIDGES AND STRUCTURES	REVISED -

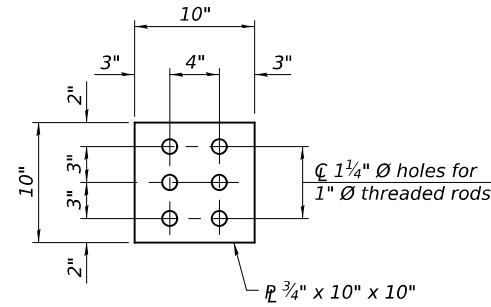
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL27N BEAM
STRUCTURE NO. 057-0258

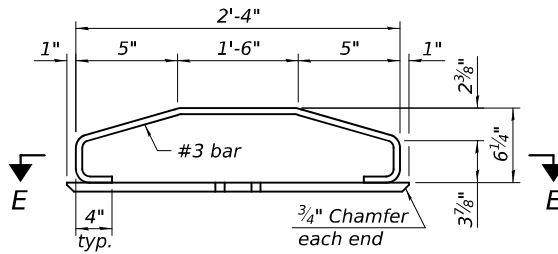
SHEET 17 OF 25 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	28BR-1	McLean	61	39
CONTRACT NO. 70571				
ILLINOIS FED. AID PROJECT				

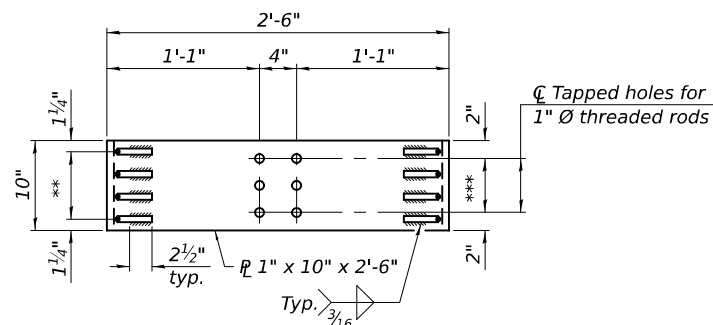
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PLAN - TOP PLATE



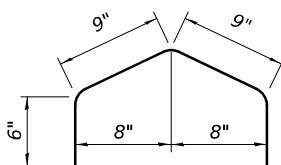
ELEVATION - BOTTOM PLATE ASSEMBLY



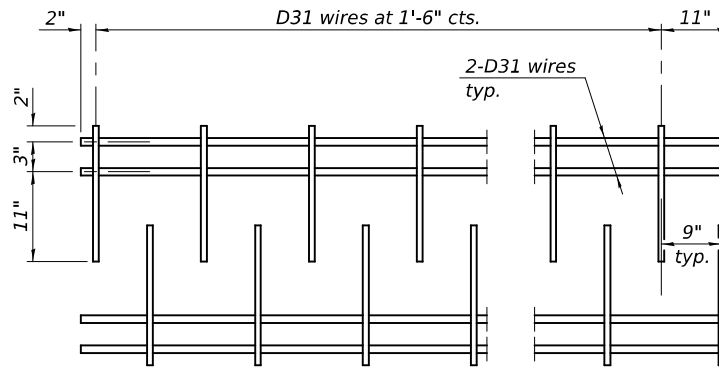
SECTION E-E

** 3 Spaces at 2 1/2" = 7 1/2"

*** 2 Spaces at 3" = 6"

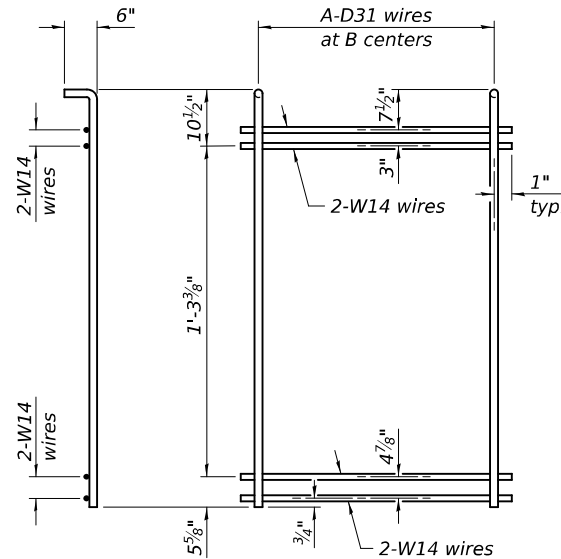


BAR G1(E)



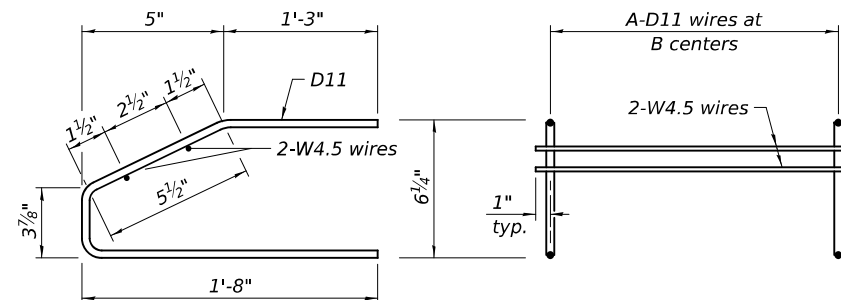
M1 WWR DETAIL

When multiple sheets of M1 WWR are required along the beam length, #5(E) bars (5'-0" long) shall be used to splice the longitudinal D31 wires together (Min. Lap 2'-2").



M4 THRU M6 WWR DETAIL

(See Table of Dimensions)



M2 AND M3 WWR DETAIL

(See Table of Dimensions)

TABLE OF DIMENSIONS

(The WWR designs assume grade 60. If necessary, this permits the fabricator to directly substitute grade 60 rebar as detailed in the Manual for Fabrication of Precast Prestressed Concrete Products.)

SPAN

WWR	A	B
M2	15	3"
M3	19	1'-6"
M4	6	3"
M5	11	6"
M6	26	1'-0"

NOTES

Inserts for 3/4" Ø threaded dowel rods, when specified, are to be two strut, ferrule type for interior beams and single ferrule, flared loop type for exterior beams. Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter for beam strands shall be 0.6" and the nominal cross-sectional area shall be 0.217 sq. in. The nominal diameter for lifting loops shall be 1/2" and the nominal cross sectional area shall be 0.153 sq. in.

The beams shall have a final concrete compressive strength, f'c, of 8500 psi and a release concrete compressive strength, f'ci, of 6500 psi.

A minimum 2 1/2" Ø lifting pin shall be used to engage the lifting loops during handling. Bend the extended strands inward on the fascia beams to maintain 1 1/2" clearance inside the pier diaphragm.

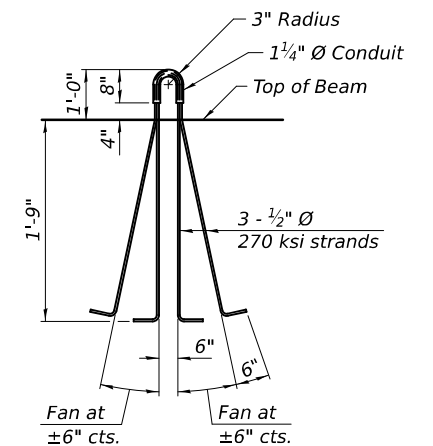
The top and bottom plates shall be AASHTO M270 Grade 50.

The top plates and bottom plate assemblies shall be galvanized according to AASHTO M111.

The threaded rods, nuts and washers shall be galvanized according to AASHTO M232.

Threaded rods shall be ASTM F 1554 Grade 55.

Welded Wire Reinforcement (WWR) shall conform to ASTM A884 with a Class A, Type 1 epoxy coating or ASTM A1060, Table 3 galvanized coating.



LIFTING LOOP DETAIL

BILL OF MATERIAL

Item	Unit	Total
Furnishing and Erecting Precast Prestressed Concrete Beams, IL27N	Foot	404

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DESIGNED - RYAN P. NEGANGARD	EXAMINED - <i>Mark Shuffler</i>	DATE - 12/9/2024
CHECKED - TIFFANY L. ADAMS	PASSED - <i>James T. ...</i>	REVISIONS -
DRAWN - DENNIS A. POP		
CHECKED - R.P.N. / T.L.A.		

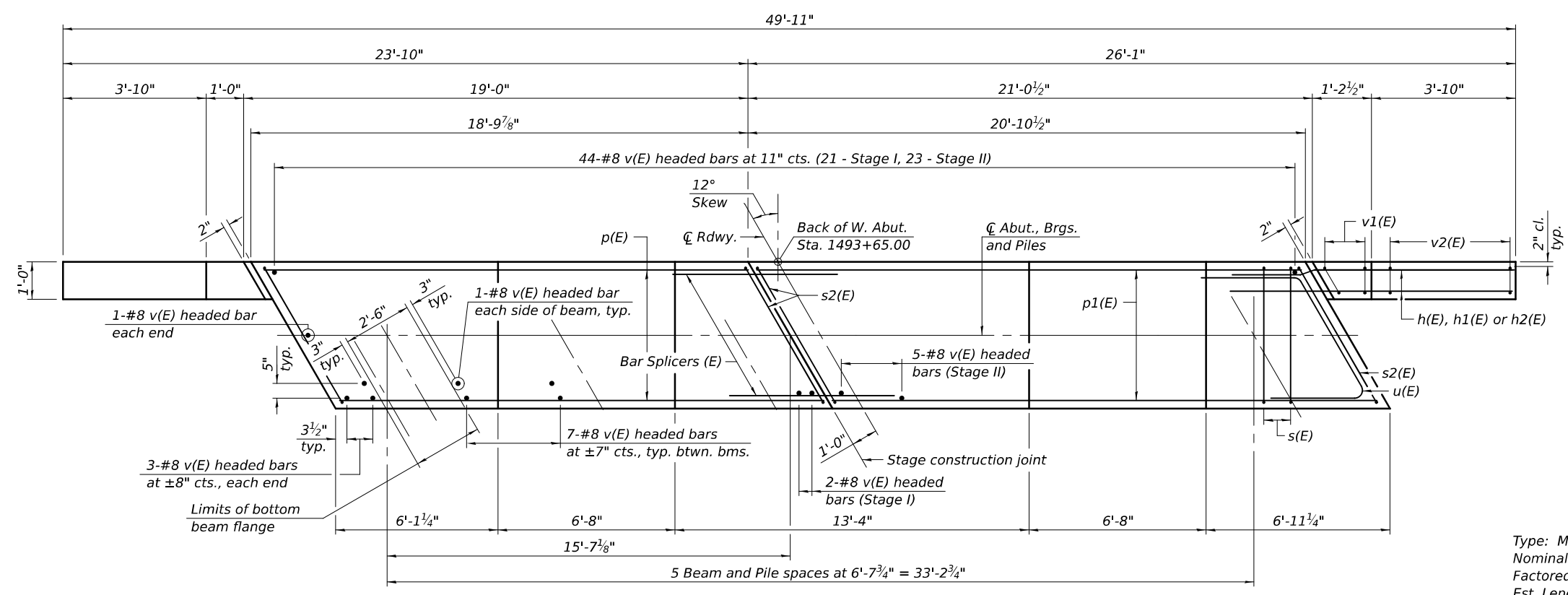
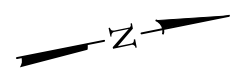
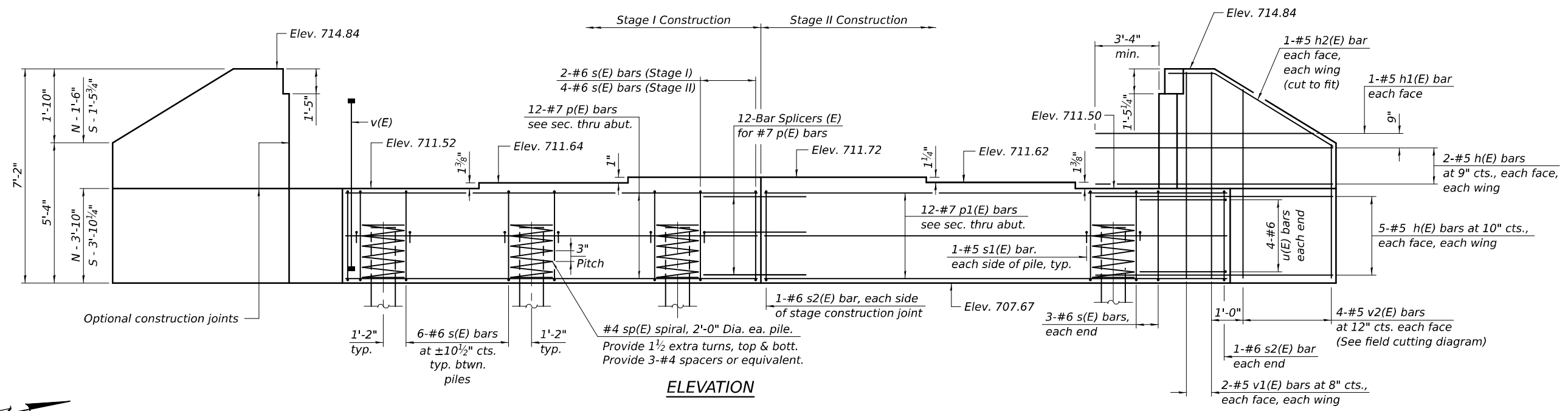
ENGINEER OF BRIDGE DESIGN
 ENGINEER OF BRIDGES AND STRUCTURES

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**IL27N BEAM DETAILS
 STRUCTURE NO. 057-0258**

SHEET 18 OF 25 SHEETS

F.A.P. RTE. 317	SECTION 28BR-1	COUNTY McLean	TOTAL SHEETS 61	SHEET NO. 40
CONTRACT NO. 70571				
ILLINOIS FED. AID PROJECT				



PILE DATA

Type: Metal Shell 14" x 0.25" w/ pile shoes
 Nominal Required Bearing: 410 kips
 Factored Resistance Available: 225 kips
 Est. Length: 35'
 No. Production Piles: 5
 No. Test Piles: 1

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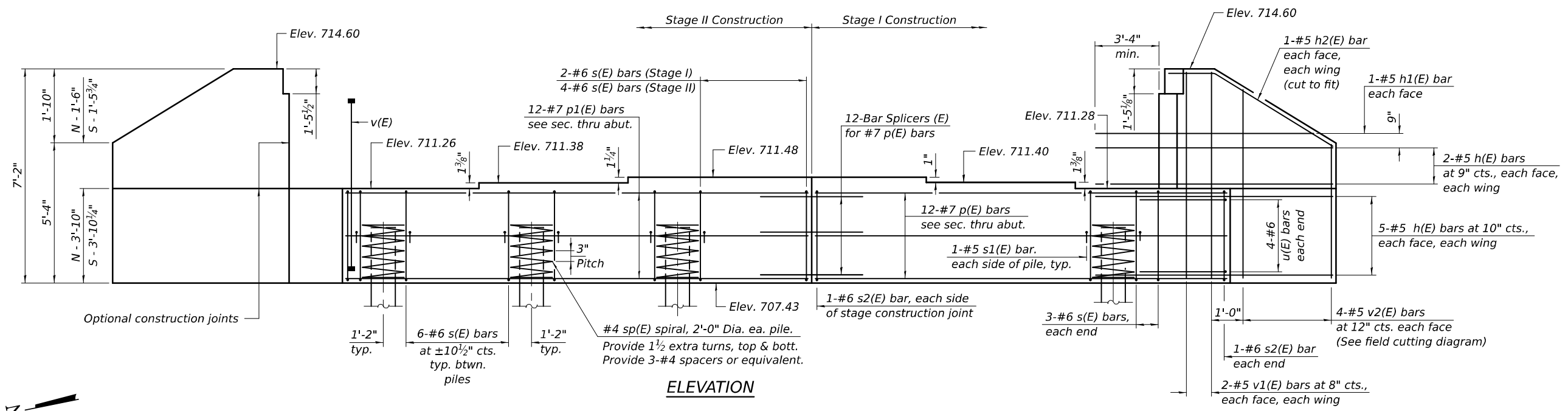
DESIGNED - RYAN P. NEGANGARD	EXAMINED - <i>Mark Shuffler</i>	DATE - 12/9/2024
CHECKED - TIFFANY L. ADAMS	ENGINEER OF BRIDGE DESIGN	
DRAWN - DENNIS A. POP	PASSED - <i>Raymond J. ...</i>	REVISED -
CHECKED - R.P.N. / T.L.A.	ENGINEER OF BRIDGES AND STRUCTURES	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

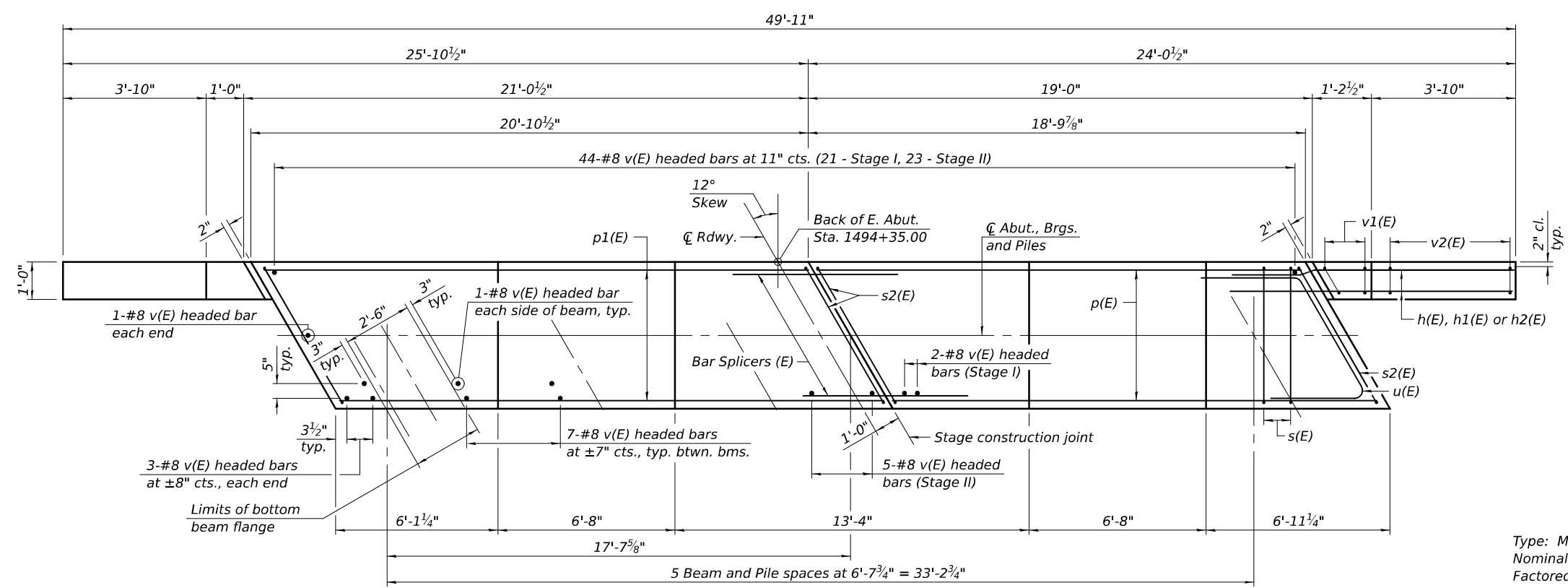
**WEST ABUTMENT
STRUCTURE NO. 057-0258**

SHEET 19 OF 25 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	28BR-1	McLean	61	41
CONTRACT NO. 70571				
ILLINOIS FED. AID PROJECT				



ELEVATION



PLAN

PILE DATA
 Type: Metal Shell 14" x 0.25" w/ pile shoes
 Nominal Required Bearing: 410 kips
 Factored Resistance Available: 225 kips
 Est. Length: 31'
 No. Production Piles: 5
 No. Test Piles: 1

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DESIGNED - RYAN P. NEGANGARD	EXAMINED - <i>Mark Shuffler</i>	DATE - 12/9/2024
CHECKED - TIFFANY L. ADAMS	ENGINEER OF BRIDGE DESIGN	
DRAWN - DENNIS A. POP	PASSED - <i>James F. [Signature]</i>	REVISED -
CHECKED - R.P.N. / T.L.A.	ENGINEER OF BRIDGES AND STRUCTURES	REVISED -

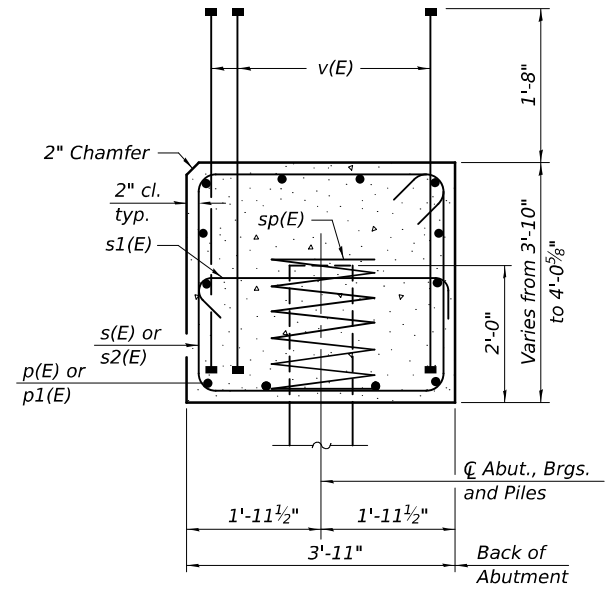
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**EAST ABUTMENT
 STRUCTURE NO. 057-0258**

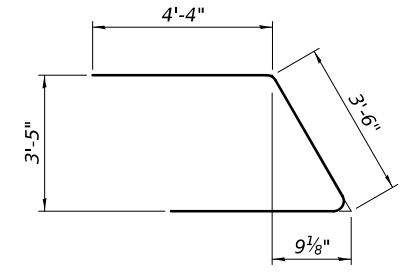
SHEET 20 OF 25 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	28BR-1	McLean	61	42
CONTRACT NO. 70571				
ILLINOIS FED. AID PROJECT				

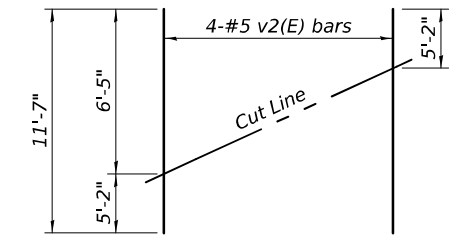
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 PROJECTS: 0570258-70571-021\0570258-70571-021.dgn



SEC. THRU ABUT.
Dimensions at right angles to abutment.



BAR u(E)



FIELD CUTTING DIAGRAM
Order v2(E) full length. Cut as shown and use remainder of bars in opposite wing.

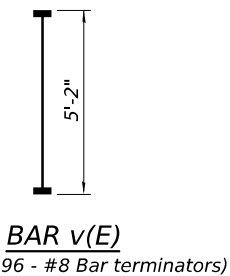
**WEST ABUTMENT
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	28	5	8'-4"	—
h1(E)	4	5	7'-8"	—
h2(E)	4	5	5'-1"	—
p(E)	12	7	18'-6"	—
p1(E)	12	7	20'-7"	—
s(E)	36	6	15'-6"	□
s1(E)	12	5	4'-7"	┌
s2(E)	4	6	15'-8"	□
* sp(E)	6	4	2'-0"	MMM
u(E)	8	6	12'-2"	└
v(E)	99	8	5'-2"	—
v1(E)	8	5	6'-10"	—
v2(E)	8	5	11'-7"	—
Structure Excavation		Cu. Yd.	96	
Concrete Structures		Cu. Yd.	25.2	
Reinforcement Bars, Epoxy Coated		Pound	4,180	
Furnishing Metal Shell Piles, 14"x0.25"		Foot	175	
Driving Piles		Foot	175	
Test Pile Metal Shells		Each	1	
Pile Shoes		Each	6	

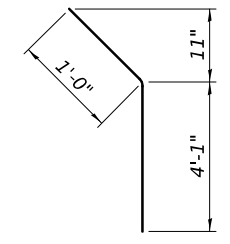
**EAST ABUTMENT
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	28	5	8'-4"	—
h1(E)	4	5	7'-8"	—
h2(E)	4	5	5'-1"	—
p(E)	12	7	18'-6"	—
p1(E)	12	7	20'-7"	—
s(E)	36	6	15'-6"	□
s1(E)	12	5	4'-7"	┌
s2(E)	4	6	15'-8"	□
* sp(E)	6	4	2'-0"	MMM
u(E)	8	6	12'-2"	└
v(E)	99	8	5'-2"	—
v1(E)	8	5	6'-10"	—
v2(E)	8	5	11'-7"	—
Structure Excavation		Cu. Yd.	96	
Concrete Structures		Cu. Yd.	25.2	
Reinforcement Bars, Epoxy Coated		Pound	4,180	
Furnishing Metal Shell Piles, 14"x0.25"		Foot	155	
Driving Piles		Foot	155	
Test Pile Metal Shells		Each	1	
Pile Shoes		Each	6	

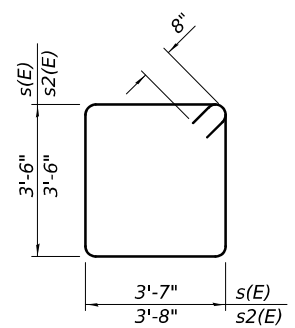
* Length is height of spiral.



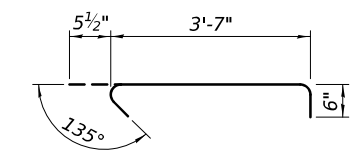
BAR v(E)
(Headed. 396 - #8 Bar terminators)



BAR h2(E)



BAR s(E) & s2(E)



BAR s1(E)

Notes:
 Pour steps monolithically with cap.
 Bar Terminators, paid for separately. See Total Bill of Material.
 For details of piles see sheet 22 of 25.

DESIGNED - RYAN P. NEGANGARD
CHECKED - TIFFANY L. ADAMS
DRAWN - DENNIS A. POP
CHECKED - R.P.N. / T.L.A.

EXAMINED	<i>Mark Shuff</i>
PASSED	<i>James F. [Signature]</i>

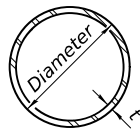
DATE - 12/9/2024
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ABUTMENT DETAILS
STRUCTURE NO. 057-0258**

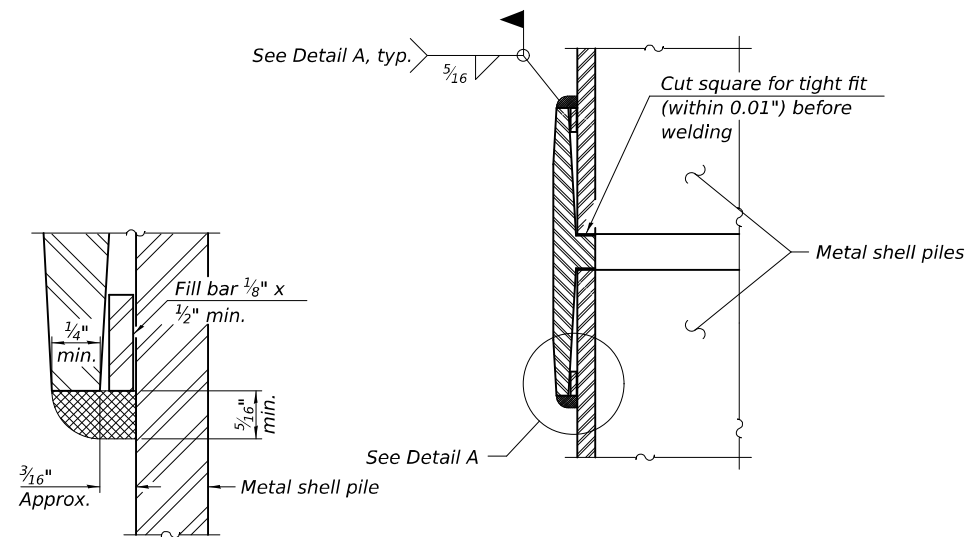
SHEET 21 OF 25 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	28BR-1	McLean	61	43
CONTRACT NO. 70571				
ILLINOIS FED. AID PROJECT				

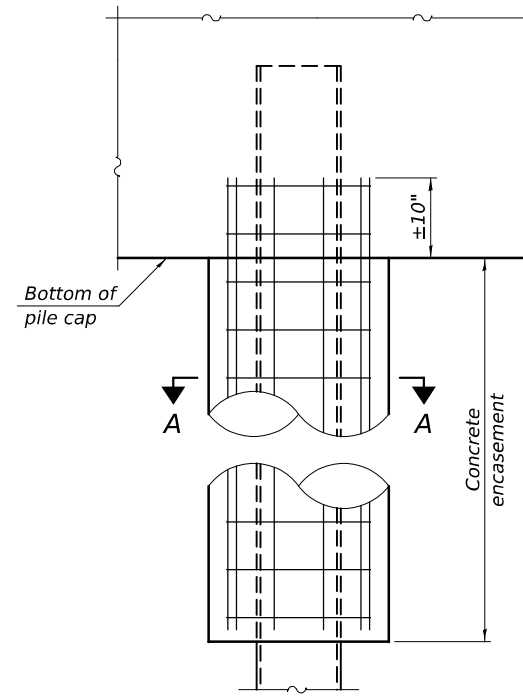


METAL SHELL PILE TABLE

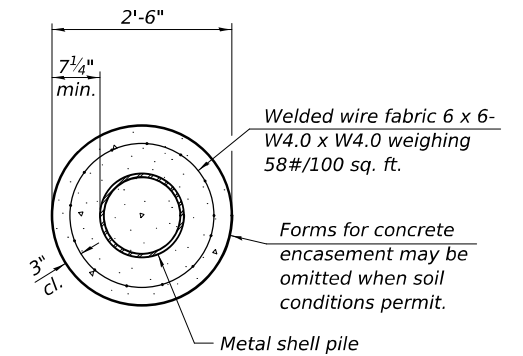
Designation and outside diameter	Wall thickness t	Weight per foot (Lbs./ft.)	Inside volume (yd. ³ /ft.)
PP12	0.250"	31.40	0.0267
PP14	0.250"	36.75	0.0368
PP14	0.312"	45.65	0.0361
PP16	0.312"	52.32	0.0478
PP16	0.375"	62.64	0.0470



DETAIL A

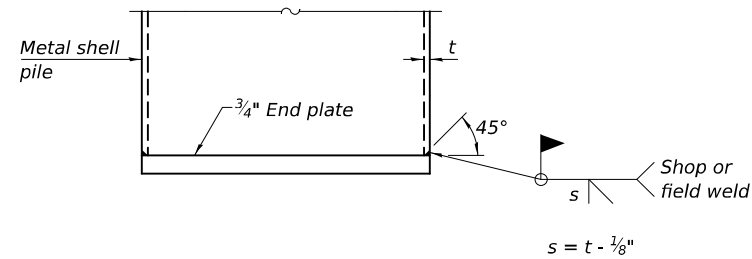


ELEVATION



SECTION A-A

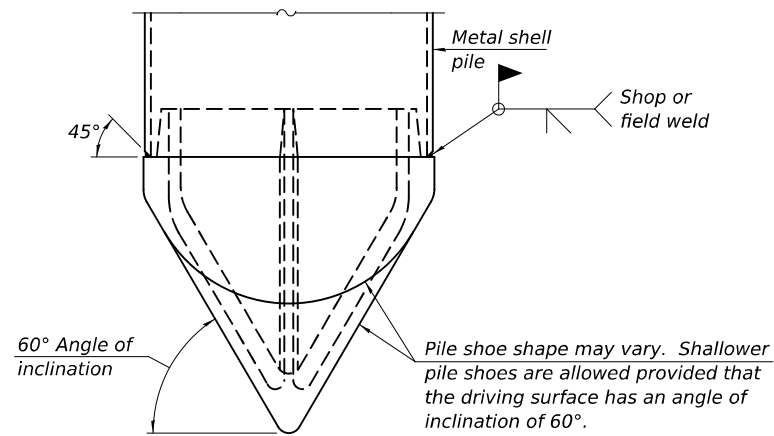
INDIVIDUAL PILE CONCRETE ENCASUREMENT
(When specified)



END PLATE ATTACHMENT

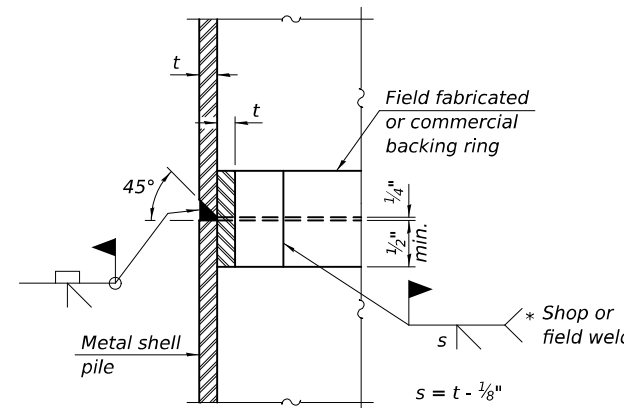
WELDED COMMERCIAL SPLICE

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.



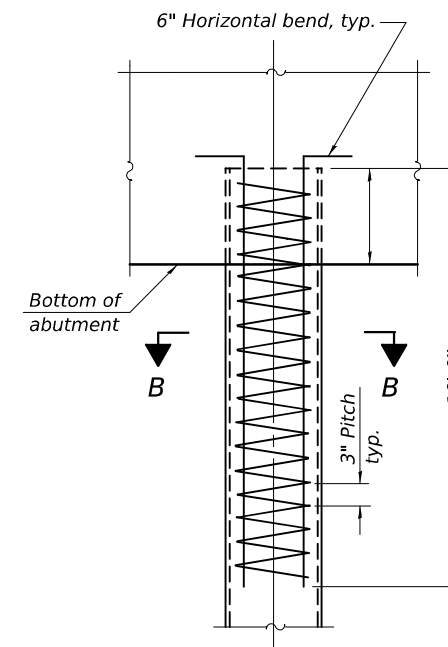
PILE SHOE ATTACHMENT

(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).

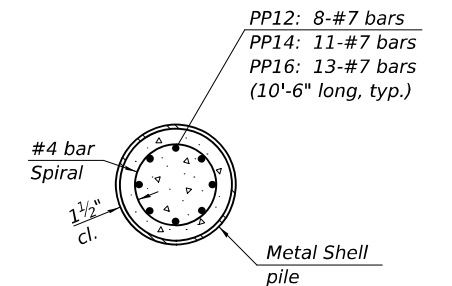


COMPLETE PENETRATION WELD SPLICE

* 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.



ELEVATION



SECTION B-B

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.

MODEL: 0570258-70571-022.dgn
FILE NAME: p:\p\110101-pw-bentley.com\FWIDOT\Documents\OBM Projects\0570258\CADD\Bridges\0570258-70571-Design.dgn

F-MS 15-15-2023

DESIGNED - RYAN P. NEGANGARD	EXAMINED
CHECKED - TIFFANY L. ADAMS	PASSED
DRAWN - DENNIS A. POP	
CHECKED - R.P.N. / T.L.A.	

DATE - 12/9/2024	Mark Shuffler ENGINEER OF BRIDGE DESIGN
REVISIONS	Jayne F. Kelly ENGINEER OF BRIDGES AND STRUCTURES

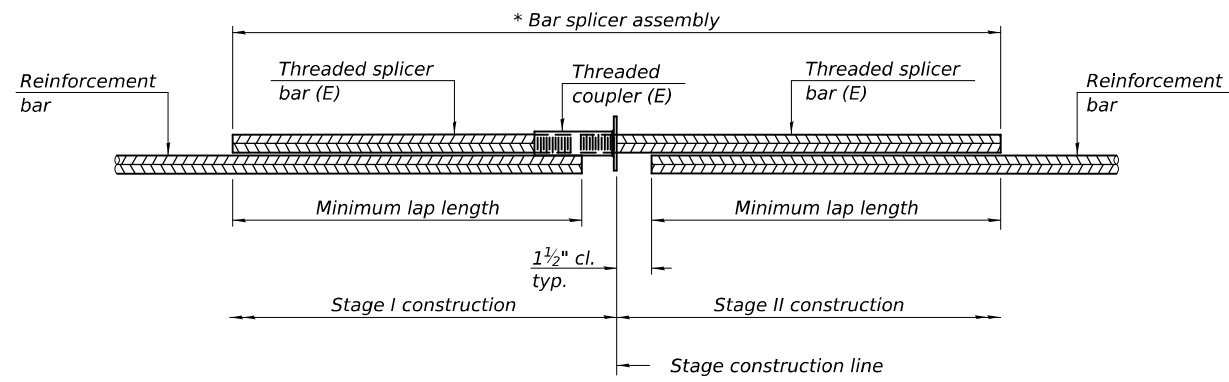
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**METAL SHELL PILE DETAILS
STRUCTURE NO. 057-0258**

SHEET 22 OF 25 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	28BR-1	McLean	61	44
CONTRACT NO. 70571				
ILLINOIS FED. AID PROJECT				

12/10/2024 8:49:20 AM



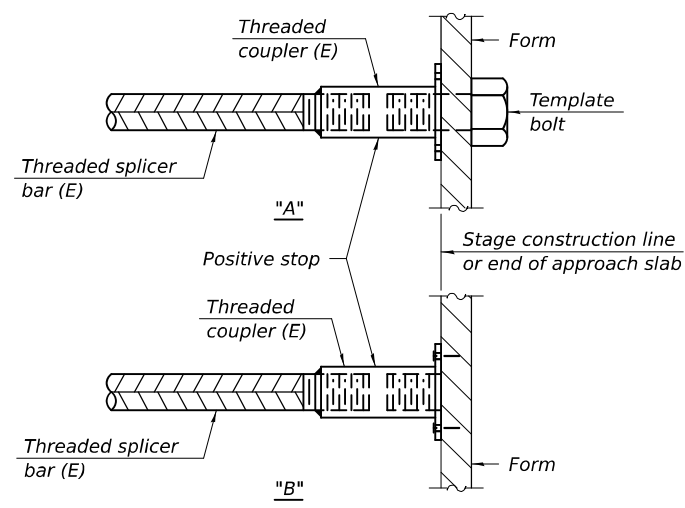
STANDARD BAR SPLICER ASSEMBLY PLAN

Only bar splicer assemblies as presented on the approved QPL list may be used.

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

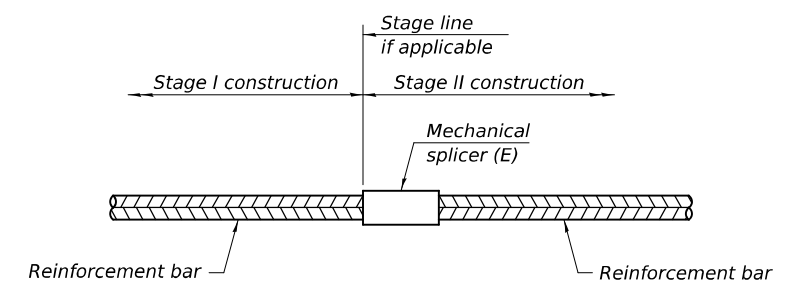
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Slab Top	5	123	3'-0"
Slab Bottom	5	79	3'-6"
Slab Ends	5	4	3'-4"
Abutment Diaphragm, Back Face	6	8	4'-0"
Abutment Diaphragm, Front Face, Top	6	4	See Diaphragm Bar Splicer Detail
Abutment Diaphragm, Front Face, Bottom	6	2	See Diaphragm Bar Splicer Detail
Approach Slab, Top	5	90	3'-4"
Approach Slab, Bottom	8	118	4'-9"
Approach Slab, Footing	5	80	3'-2"
Abutment Caps	7	24	5'-0"



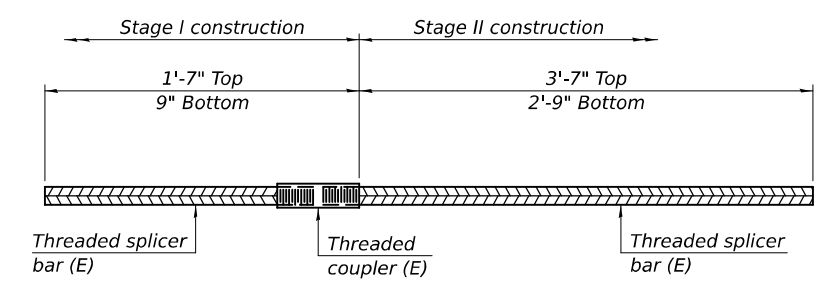
INSTALLATION AND SETTING METHODS

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



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



DIAPHRAGM BAR SPLICER DETAIL

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

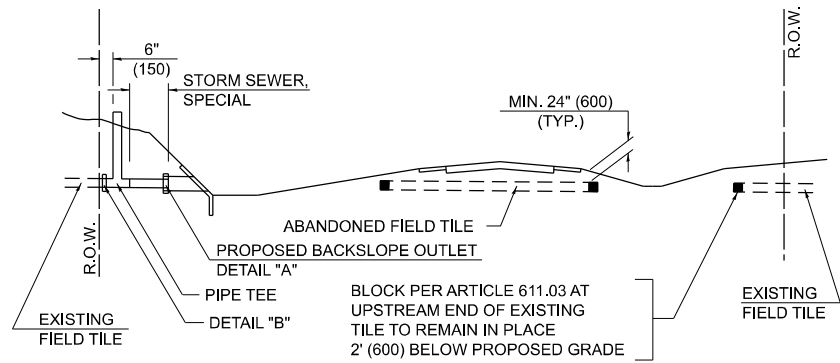
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 PROJECT: 0570258-70571-023\0570258-70571-023.dgn

DESIGNED - RYAN P. NEGANGARD	EXAMINED - <i>Mark Shuffler</i>	DATE - 12/9/2024
CHECKED - TIFFANY L. ADAMS	PASSED - <i>James F. [Signature]</i>	REVISOR -
DRAWN - DENNIS A. POP	ENGINEER OF BRIDGES AND STRUCTURES	REVISION -
CHECKED - R.P.N. / T.L.A.		

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

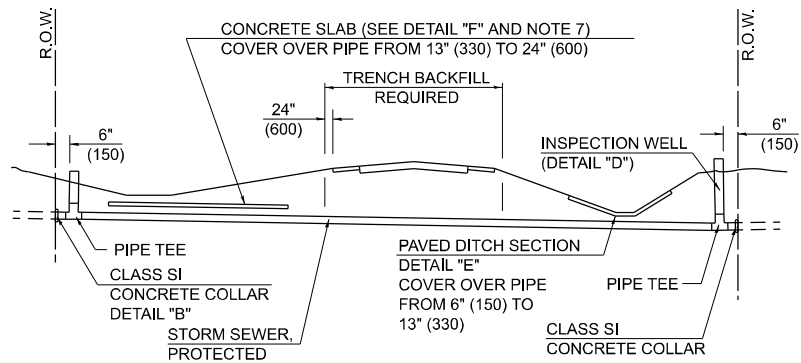
**BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
 STRUCTURE NO. 057-0258**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	28BR-1	McLean	61	45
CONTRACT NO. 70571				
ILLINOIS FED. AID PROJECT				



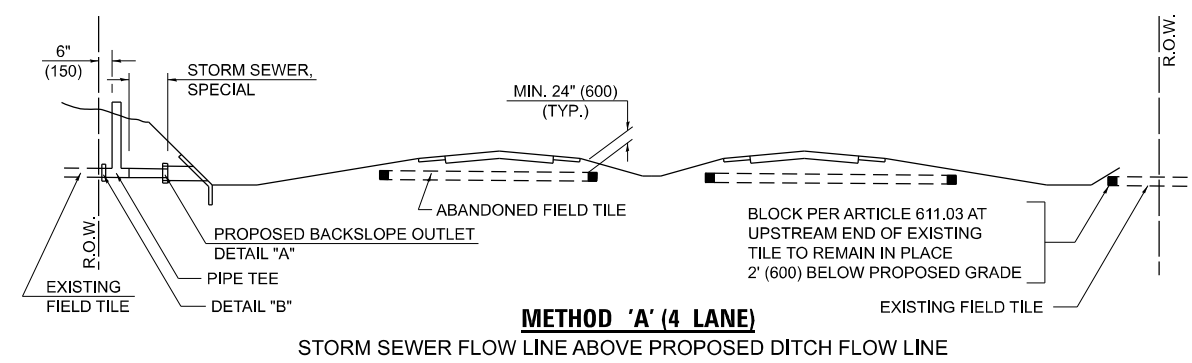
METHOD 'A' (2 LANE)

STORM SEWER FLOW LINE ABOVE PROPOSED DITCH FLOW LINE



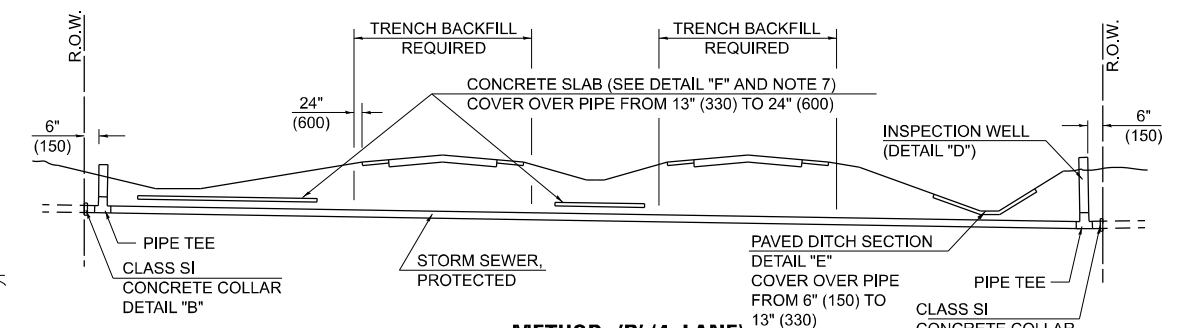
METHOD 'B' (2 LANE)

STORM SEWER LESS THAN 2' (600 mm) BELOW DITCH FLOW LINE AND STORM SEWERS CROSSING UNDER PAVEMENT AND PAVED DITCH



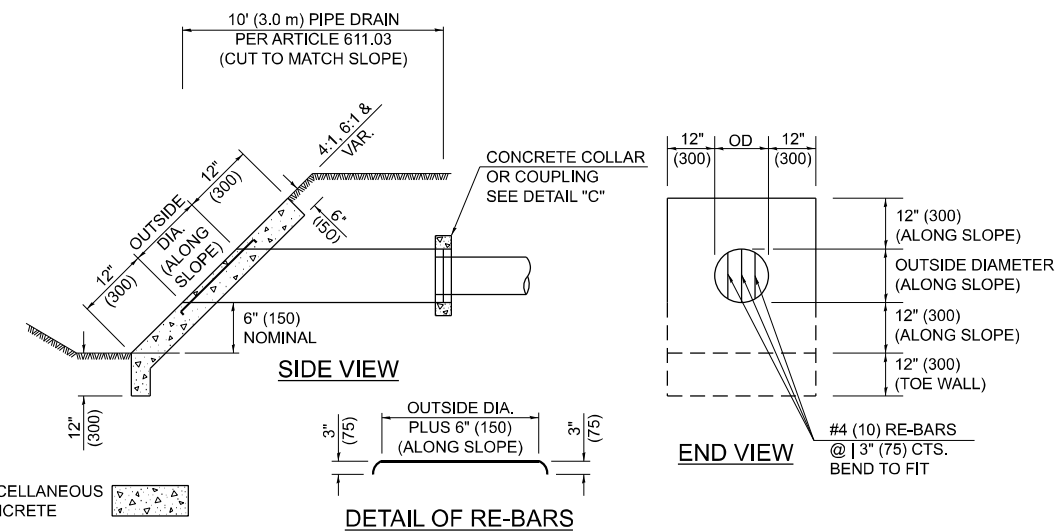
METHOD 'A' (4 LANE)

STORM SEWER FLOW LINE ABOVE PROPOSED DITCH FLOW LINE

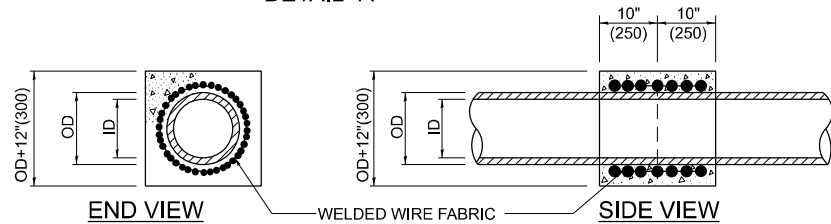


METHOD 'B' (4 LANE)

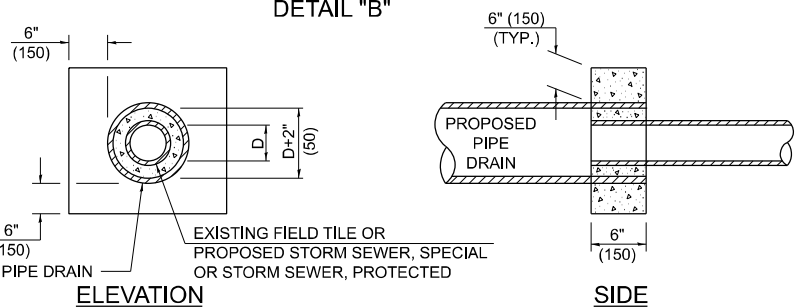
STORM SEWER LESS THAN 2' (600 mm) BELOW DITCH FLOW LINE AND STORM SEWERS CROSSING UNDER PAVEMENTS AND PAVED DITCHES



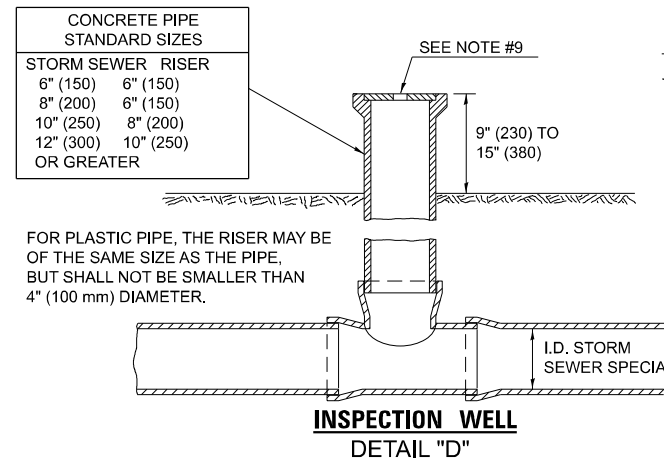
HEADWALL FOR BACKSLOPE OUTLET
DETAIL "A"



CONCRETE COLLAR
DETAIL "B"



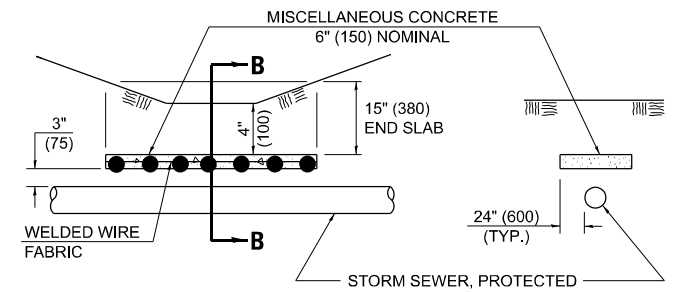
CLASS SI COLLAR
DETAIL "C"



INSPECTION WELL
DETAIL "D"

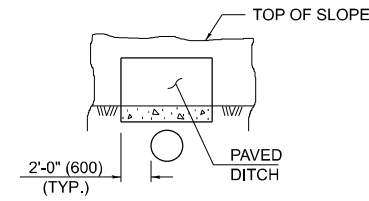
GENERAL NOTES

- EXISTING FIELD TILE ENCOUNTERED BY EXPLORATION TRENCH SHALL BE INSPECTED BY THE ENGINEER FOR UNOBSTRUCTED FLOW WITHIN THE LIMITS OF THE RIGHT-OF-WAY.
- ONLY FIELD TILE THAT DOES NOT HAVE SATISFACTORY FLOW AND OR HAS VISIBLE SIGNS OF DETERIORATION (SINK HOLES, ETC.) SHALL BE REPLACED WITHIN THE LIMITS OF THE RIGHT-OF-WAY IN ACCORDANCE WITH METHOD "B".
- INSPECTION WELLS SHALL BE CONSTRUCTED APPROXIMATELY 6" (150 mm) INSIDE OF BOTH RIGHT-OF-WAY LINES AT ALL FIELD TILE LOCATIONS.
- EXISTING FIELD TILE ABANDONED UNDER EXISTING PAVEMENTS OR PAVED SHOULDERS SHALL BE FILLED WITH FLOWABLE GROUT AS DIRECTED BY THE ENGINEER. THIS WORK WILL BE PAID FOR ACCORDING TO ARTICLE 109.04.
- NON-CIRCULAR FIELD TILE SHALL BE REPLACED WITH STORM SEWER, SPECIAL OF AT LEAST THE SAME CROSS SECTIONAL AREA. ALL EXISTING FIELD TILE SHALL BE REPLACED WITH STORM SEWER OF THE TYPE REQUIRED FOR THE MINIMUM DEPTH OF COVER.
- THE 6" (150 mm) CONCRETE SLAB OR DITCH LINING SHALL BE POURED THE LENGTH OF THE TRENCH AT ALL DITCH FLOW LINE LOCATIONS WITHIN THE RIGHT-OF-WAY WITH LESS THAN 2' (600 mm) OF EARTH COVER. MISCELLANEOUS CONCRETE SHALL BE USED ACCORDING TO SECTION 611.
- ALL MISCELLANEOUS SLABS, APRONS AND DITCH LININGS SHALL BE REINFORCED WITH WELDED WIRE FABRIC AS SHOWN FOR PAVED DITCH IN STANDARD 606401.
- HEADWALL FOR BACKSLOPE OUTLET MAY BE USED FOR PIPE DRAIN DIAMETERS UP TO 10" (250 mm). SPECIAL DESIGNS WILL BE REQUIRED FOR LARGER SIZES.
- THE INSPECTION WELL LID FOR P.C.C. PIPE SHALL BE CONSTRUCTED OF 3/8" (10 mm) CAST IRON AND PROVIDED WITH A 1" (25 mm) DIAMETER HOLE IN CENTER. THE LID FOR THE OTHER PIPE MATERIALS SHALL BE A GRATE ASSEMBLY PREFABRICATED FOR AND COMPATIBLE WITH THE PIPE SYSTEM.

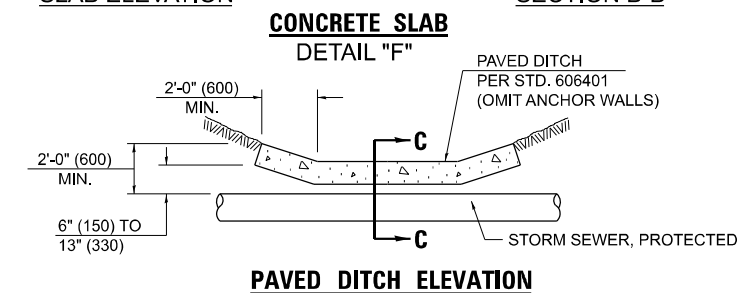


SLAB ELEVATION

SECTION B-B



SECTION C-C
PAVED DITCH
DETAIL "E"



PAVED DITCH ELEVATION

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

DISTRICT 5 DETAIL NO. 61101011A

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIELD TILE SYSTEMS (TREATMENT OF EXISTING)

SCALE: 1"=20' SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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				CONTRACT NO. 70571
ILLINOIS FED. AID PROJECT				

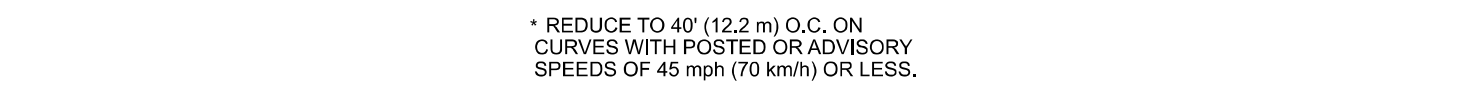
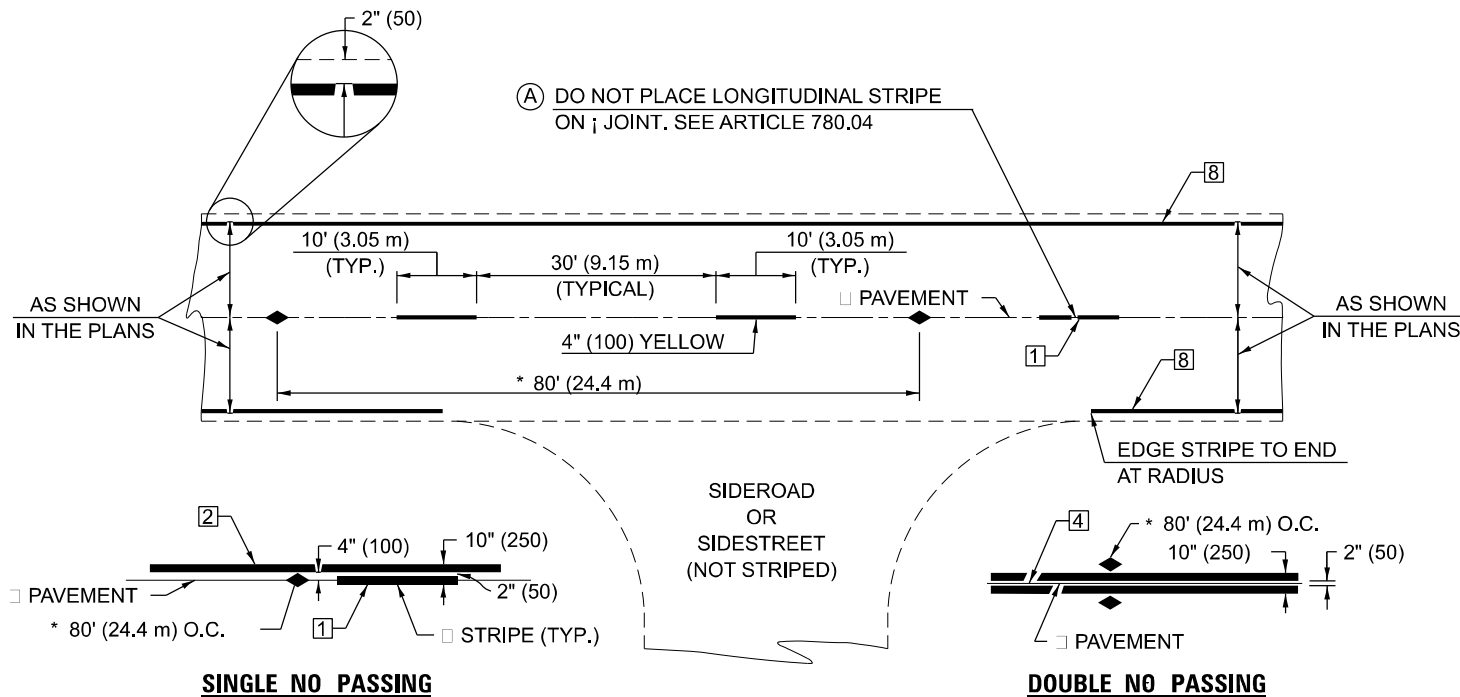
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PROJECT: Phase II/Work Order 810/Drawings/CAD Streets/0570571-tech-detail.dwg

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REVISED -



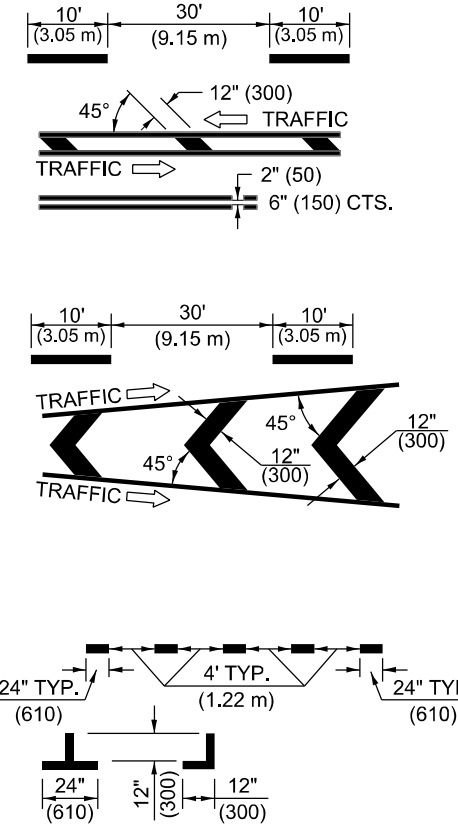
TWO LANE/TWO WAY

TYPICAL PAVEMENT MARKING LEGEND

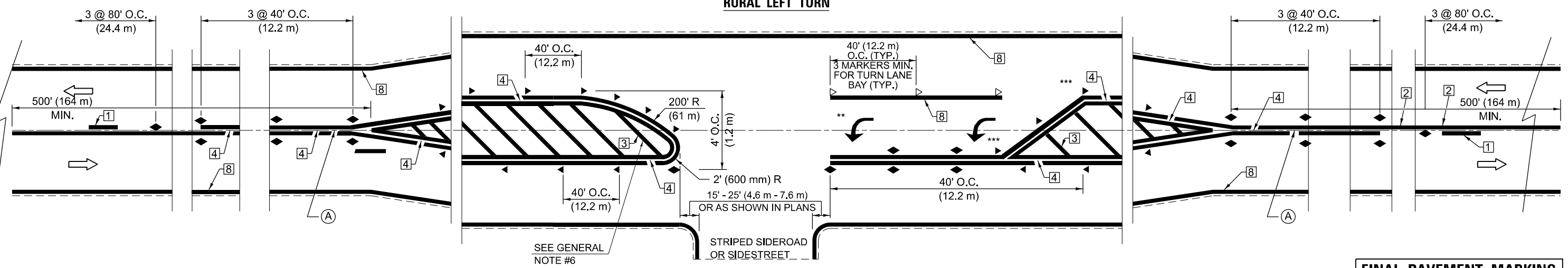
- 1 4" (100) SKIP-DASH (YELLOW)
- 2 4" (100) SOLID (YELLOW)
- 3 12" (300) DIAGONAL (YELLOW)
- 4 4" (100) DOUBLE YELLOW (NARROW)
- 5 RESERVED
- 6 RESERVED
- 7 4" (100) SKIP-DASH (WHITE)
- 8 4" (100) SOLID (WHITE)
- 9 12" (300) DIAGONAL (WHITE)
- 10 6" (150) SOLID (WHITE)
- 11 24" (600) STOP BAR (WHITE)
- 12 8" (200) SOLID (WHITE)
- 13 4" (100) LANE LINE EXTENSIONS (WHITE)
- 14 4" (100) PARKING WHITE

TYPICAL PAVEMENT MARKERS LEGEND

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



RURAL LEFT TURN



*** REDUCE SPACING IF NECESSARY TO ASSURE MARKERS AT CORNER POINTS.
 ** TURN ARROWS SHALL BE PLACED AS SHOWN ON SHEET #2.

FINAL PAVEMENT MARKING TO BE COMPLETED BY DISTRICT OPERATIONS

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

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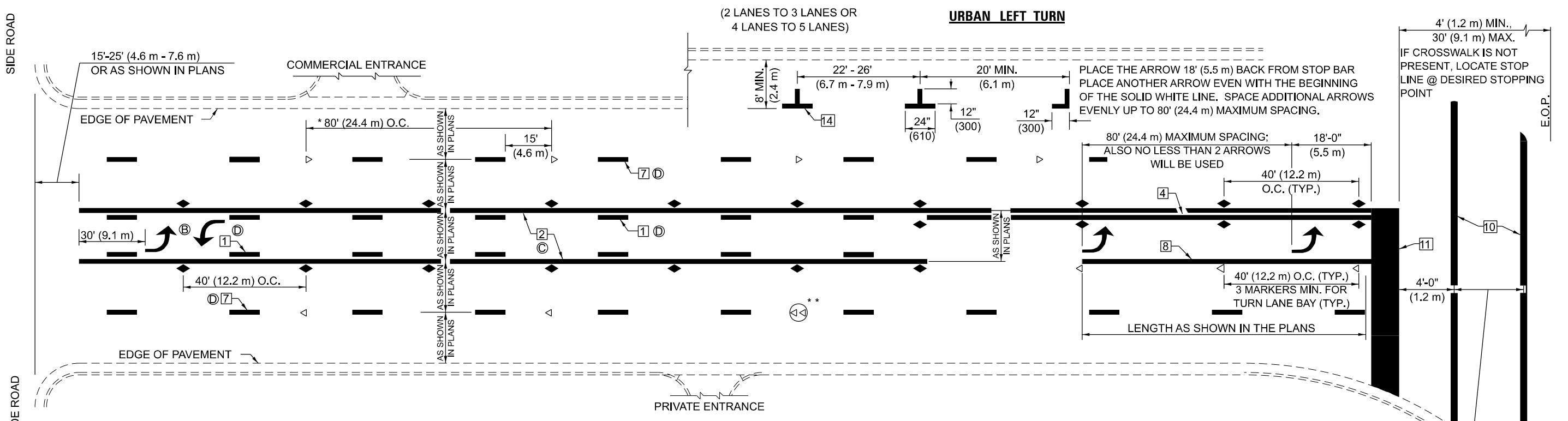
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**PAVEMENT MARKING AND MARKERS
 (RURAL & URBAN APPLICATIONS)**
 SCALE: NONE SHEET 1 OF 4 SHEETS STA. TO STA.

DISTRICT 5 DETAIL NO. 7800AAAA

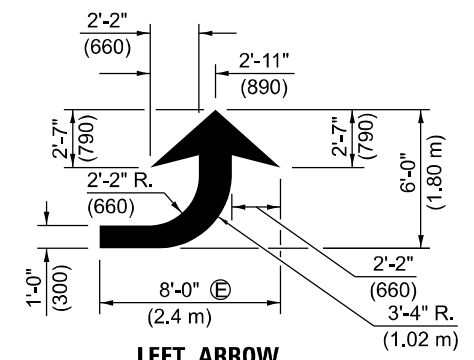
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 70571				
ILLINOIS FED. AID PROJECT				



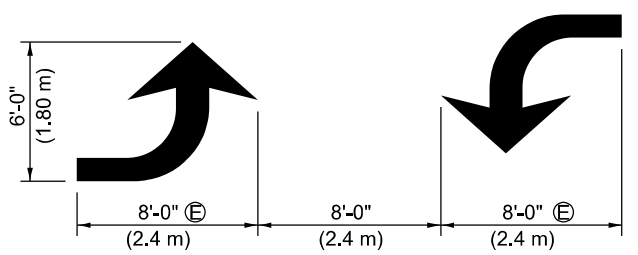
- * REDUCE TO 40 FEET (12.2 METERS) ON CENTER ON CURVES WHERE ADVISORY SPEEDS ARE 10 MPH (15 km/h) LOWER THAN POSTED SPEEDS.
- ** DOUBLE LANE LINE MARKERS SHALL BE SPECIFIED AND SPACED AS SHOWN IN HIGHWAY STANDARD 781001 FOR MULTI-LANE DIVIDED AND UNDIVIDED HIGHWAYS.

GENERAL NOTES:

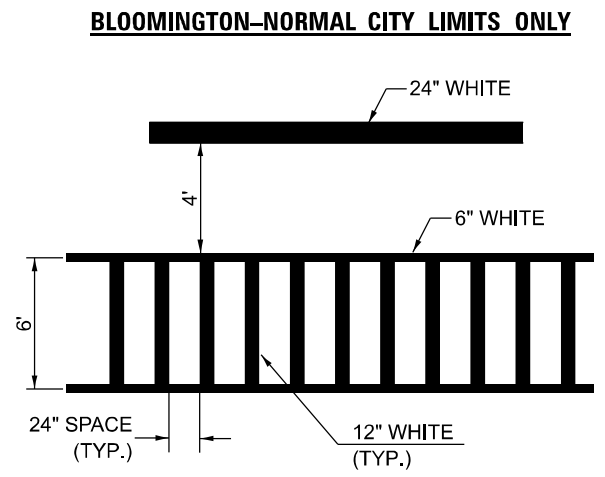
- (B) TURN ARROW PAIRS SHALL BE PLACED AT 250' (75 m) INTERVALS AND SHALL BE EVENLY SPACED BETWEEN BOTH ENDS OF THE BIDIRECTIONAL LEFT TURN LANE.
- (C) THE SOLID YELLOW PAVEMENT MARKINGS 2 □ SHOULD GENERALLY START OR END NEAR THE RADIUS POINT OF EACH STREET RETURN EXCEPT WHERE ONE OR BOTH ENDS WOULD INCLUDE STOP BARS.
- (D) THE SKIP-DASH PAVEMENT MARKINGS 1 □ OR 7 □ SHOULD BE CENTERED BETWEEN BOTH ENDS OF EACH CITY BLOCK AND SHALL BE PLACED SO THEY LINE UP ACROSS FROM EACH OTHER. SEE EXAMPLE ON SHEET 2 OF 3.
- (E) USE LARGE ARROW SIZE FOR BOTH RURAL AND URBAN LOCATIONS. (SEE LAST PAGE OF SECTION 780x FOR SYMBOLS TABLE)



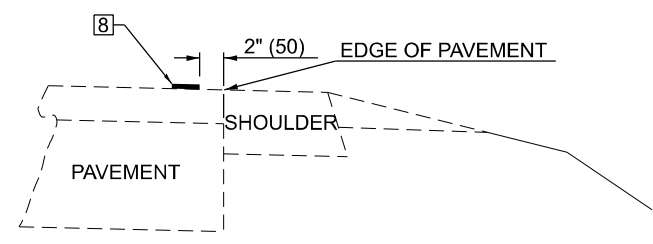
LEFT ARROW
REVERSE FOR RIGHT ARROW
AREA = 15.6 SQ. FT. (1.47 m)²
(WHITE)



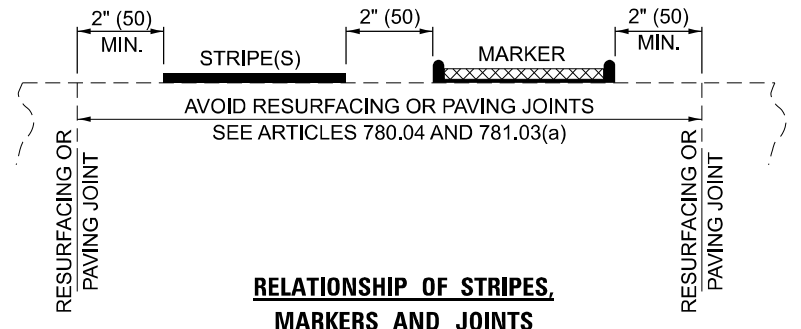
TYPICAL DOUBLE TURN ARROWS (WHITE)



TYPICAL SPACING FOR CROSSWALKS & STOP BARS



RELATIONSHIP OF EDGE LINE TO EDGE OF PAVEMENT
(SAFETY SHOULDER OR PAVED SURFACE)
SEE ARTICLE 780.04



RELATIONSHIP OF STRIPES, MARKERS AND JOINTS

FINAL PAVEMENT MARKING TO BE COMPLETED BY DISTRICT OPERATIONS

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

MODEL: 04_05_Pave_Mark_2
FILE NAME: I:\3221173\2101 DTB 199-027 05_Various Phase MillWork_Order_8\Drawings\CAD_Street\0570571-tech-detail.dwg

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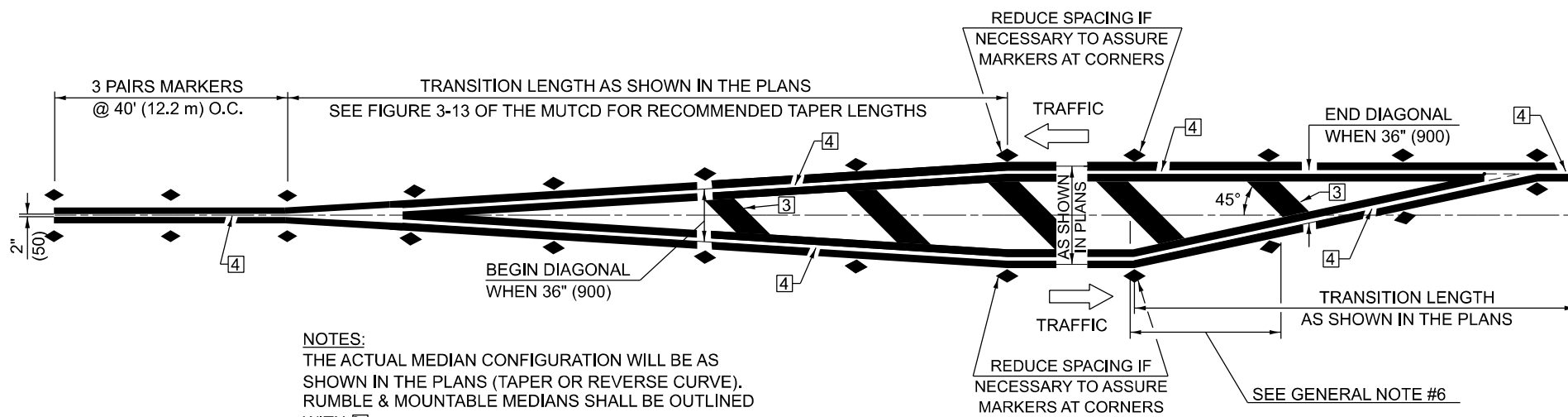
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REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PAVEMENT MARKING AND MARKERS
(RURAL & URBAN APPLICATIONS)**
SCALE: NONE SHEET 2 OF 4 SHEETS STA. TO STA.

DISTRICT 5 DETAIL NO. 7800AAAA				
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	28BR-1	MCLEAN	61	51
			CONTRACT NO. 70571	
		ILLINOIS FED. AID PROJECT		

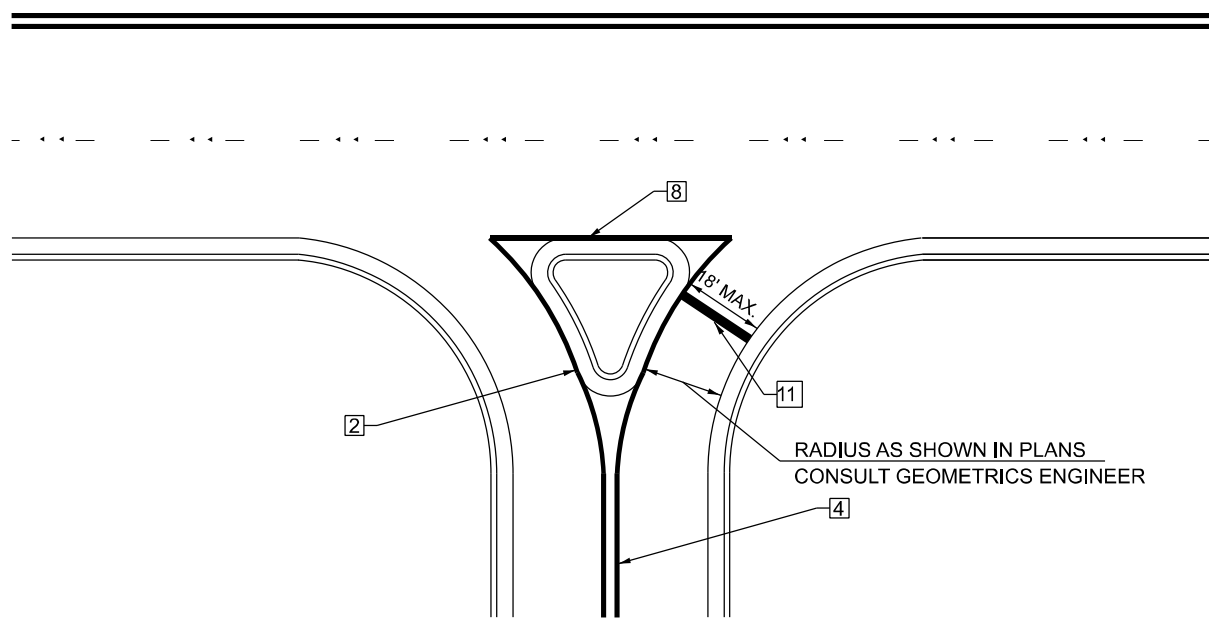


NOTES:
 THE ACTUAL MEDIAN CONFIGURATION WILL BE AS SHOWN IN THE PLANS (TAPER OR REVERSE CURVE).
 RUMBLE & MOUNTABLE MEDIANS SHALL BE OUTLINED WITH

TYPICAL MEDIAN TRANSITIONS

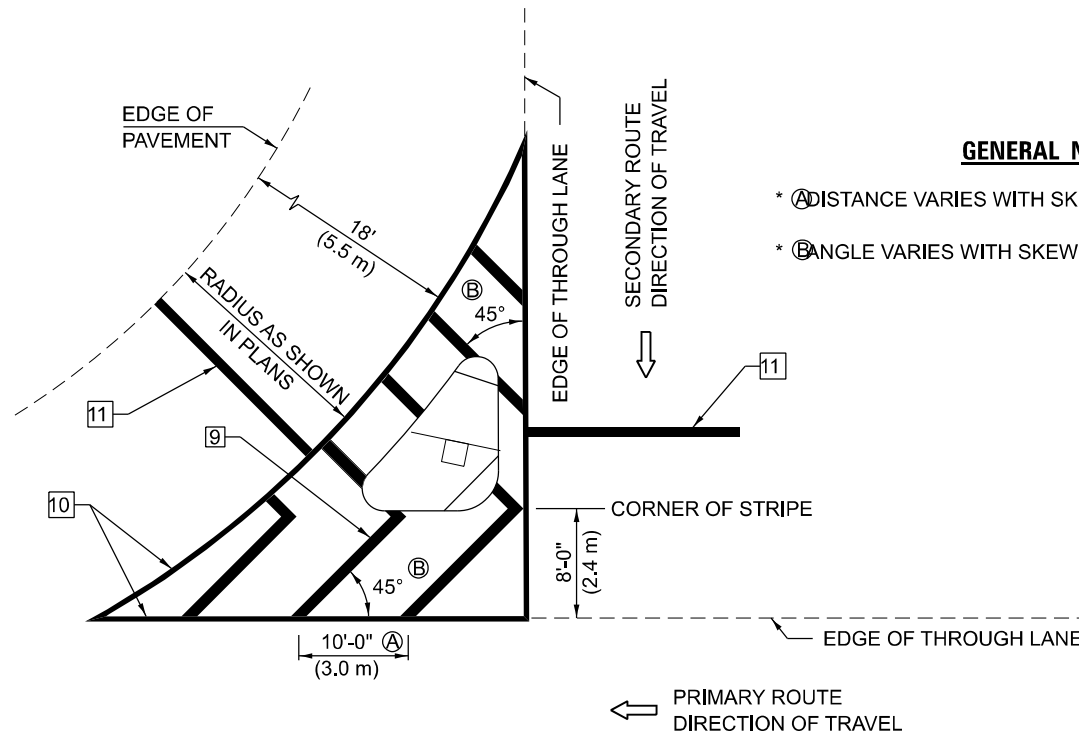
GENERAL NOTES

1. WHEN MEDIANS ARE PRESENT, PAVEMENT MARKINGS ARE TO BE PLACED ADJACENT TO MEDIANS.
2. SOME OF THE INFORMATION INCLUDED WITH THIS DETAIL MAY NOT BE APPLICABLE TO THIS IMPROVEMENT.
3. PAVEMENT MARKINGS ARE TO BE EXTENDED THROUGH OMISSIONS WHEN APPLICABLE.
4. A STRIPING KEY IS AVAILABLE ELSEWHERE AND SHALL BE SHOWN WHERE THE QUANTITIES ARE LISTED.
5. FINAL PAVEMENT MARKINGS SHALL BE IN PLACE PRIOR TO PLACING ANY RAISED REFLECTIVE PAVEMENT MARKERS.
6. THE FOLLOWING CRITERIA SHALL BE USED FOR SELECTING THE DIAGONAL PAVEMENT MARKING SPACING,
 <30 MPH USE 15' (<50 km/h USE 4.5 m)
 30-45 MPH USE 20' (50-75 km/h USE 6.0 m)
 >45 MPH USE 30' (>75 km/h USE 9.0 m)



RIGHT IN - RIGHT OUT ACCESS

RADIUS AS SHOWN IN PLANS
 CONSULT GEOMETRICS ENGINEER



ISLAND

* FOR RIGHT TURN LANE AND ISLAND STRIPING CONSULT GEOMETRICS ENGINEER.

GENERAL NOTES

- * A DISTANCE VARIES WITH SKEW OF INTERSECTION.
- * B ANGLE VARIES WITH SKEW OF INTERSECTION.

FINAL PAVEMENT MARKING TO BE COMPLETED BY DISTRICT OPERATIONS

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

DISTRICT 5 DETAIL NO. 7800AAAA

MODEL OF D5 Revs: Mark 3
 FILE NAME: I:\303\3021173\2101 DTB 199-027 D5 Various Phase 1\Work Order 8\Drawings\CAD Streets\0570571-eth-detail.dwg

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PLOT DATE =	10/10/2024

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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

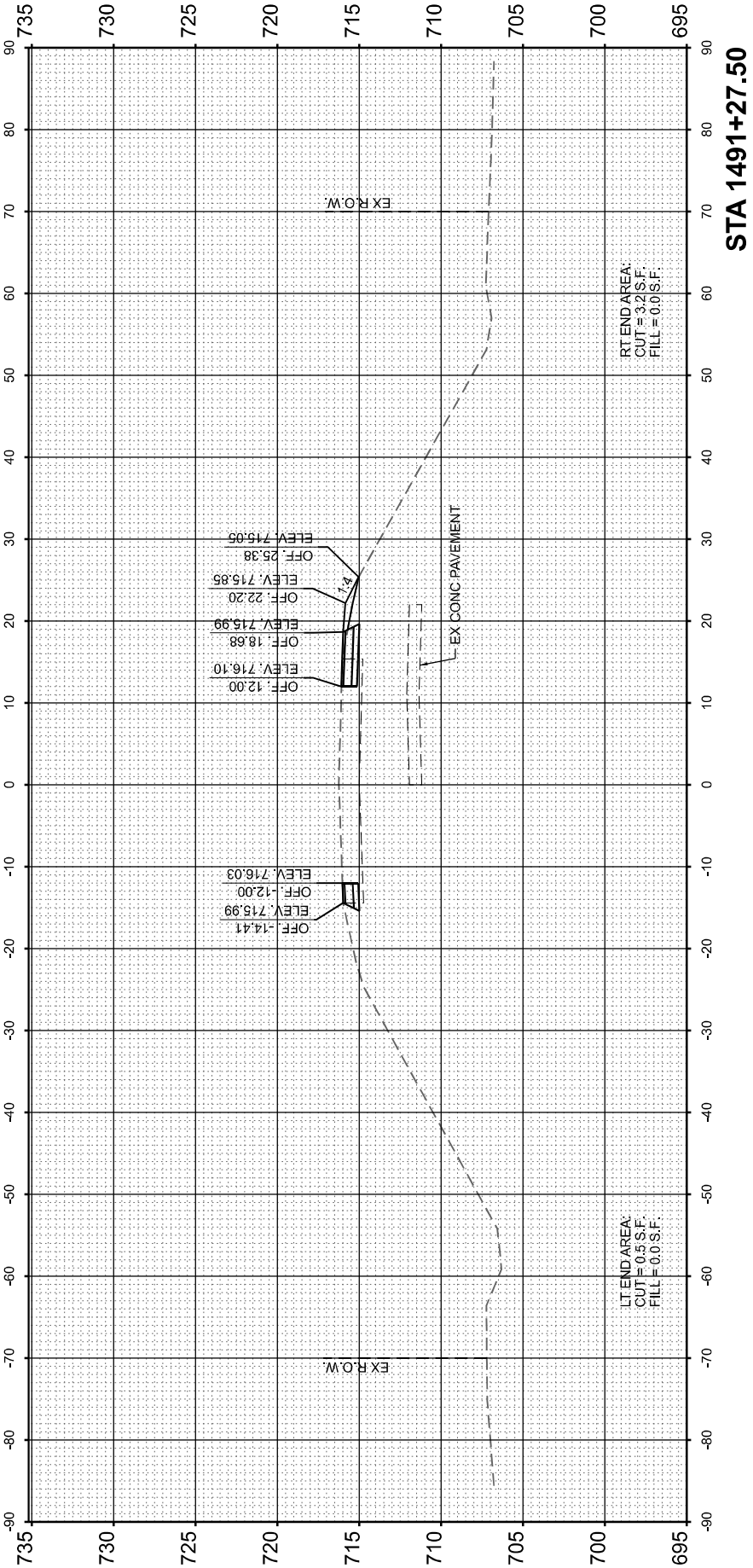
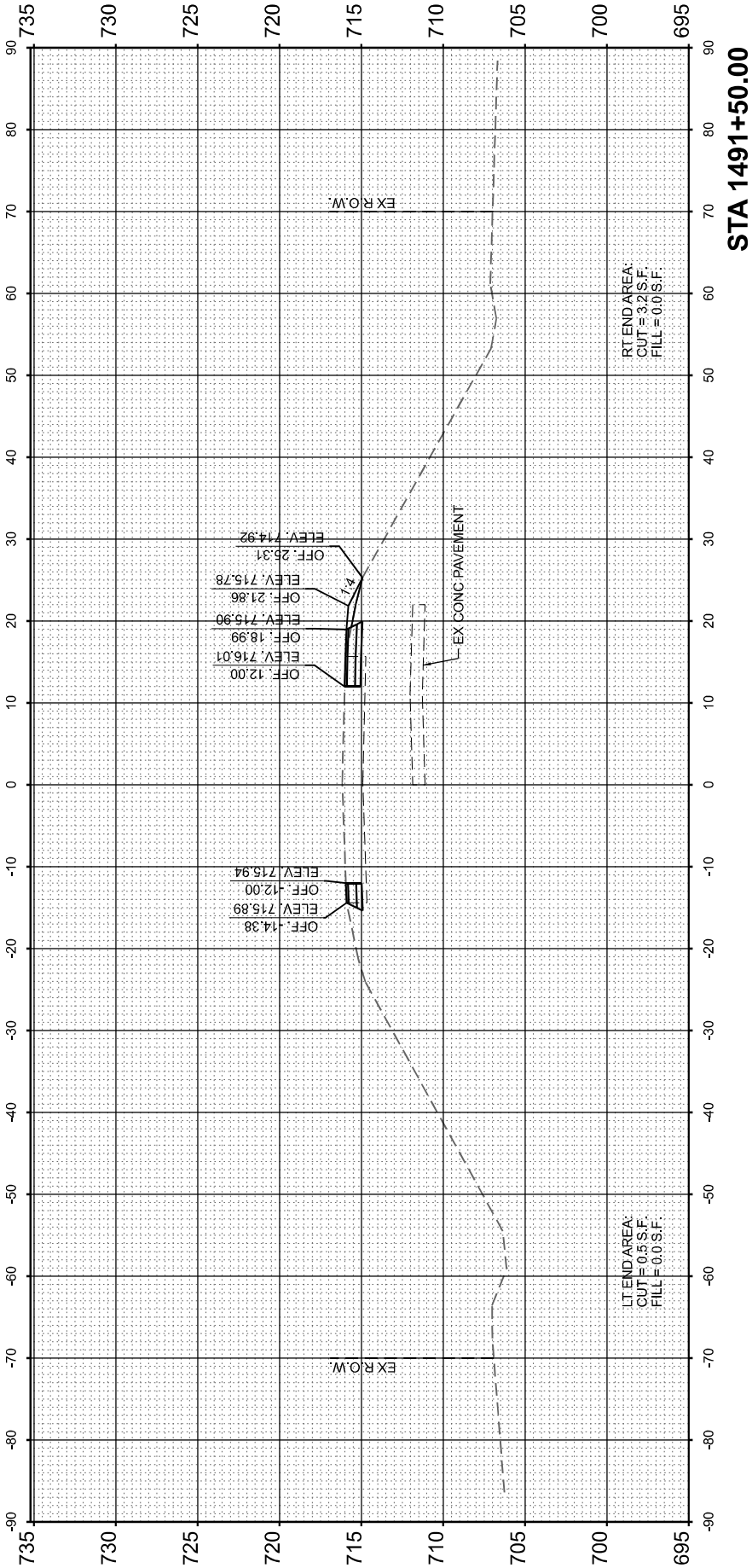
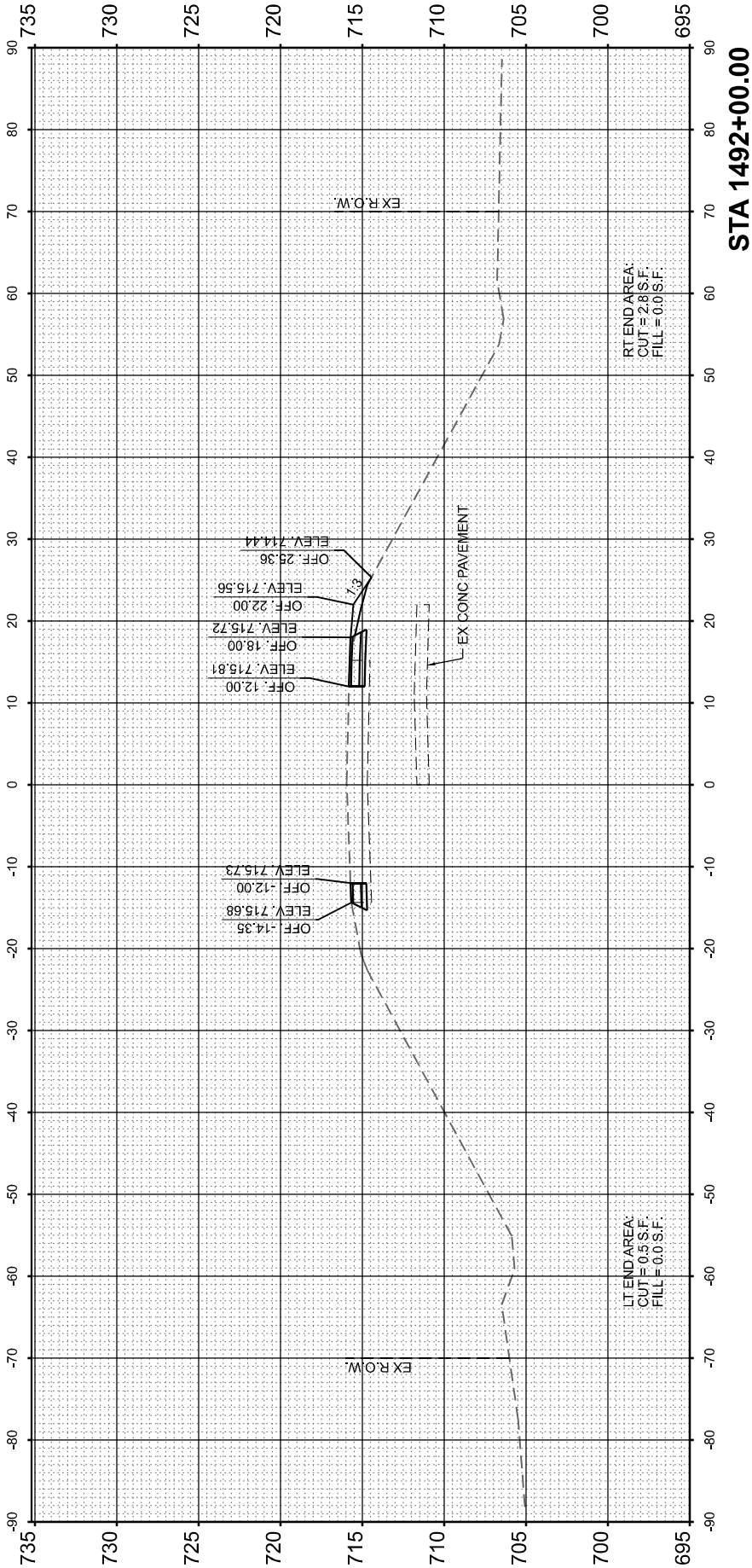
PAVEMENT MARKING AND MARKERS (RURAL & URBAN APPLICATIONS)			
SCALE: NONE	SHEET 3	OF 4 SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	28BR-1	MCLEAN	61	52
				CONTRACT NO. 70571
ILLINOIS FED. AID PROJECT				

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NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS CHECKED		
	AREAS CHECKED		

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NO.	TEMPLATE		
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

CROSS SECTIONS - US 24

SCALE: 1"=10'H; 1"=5'V SHEET 1 OF 6 SHEETS STA. 1491+27.50 TO STA. 1492+00.00

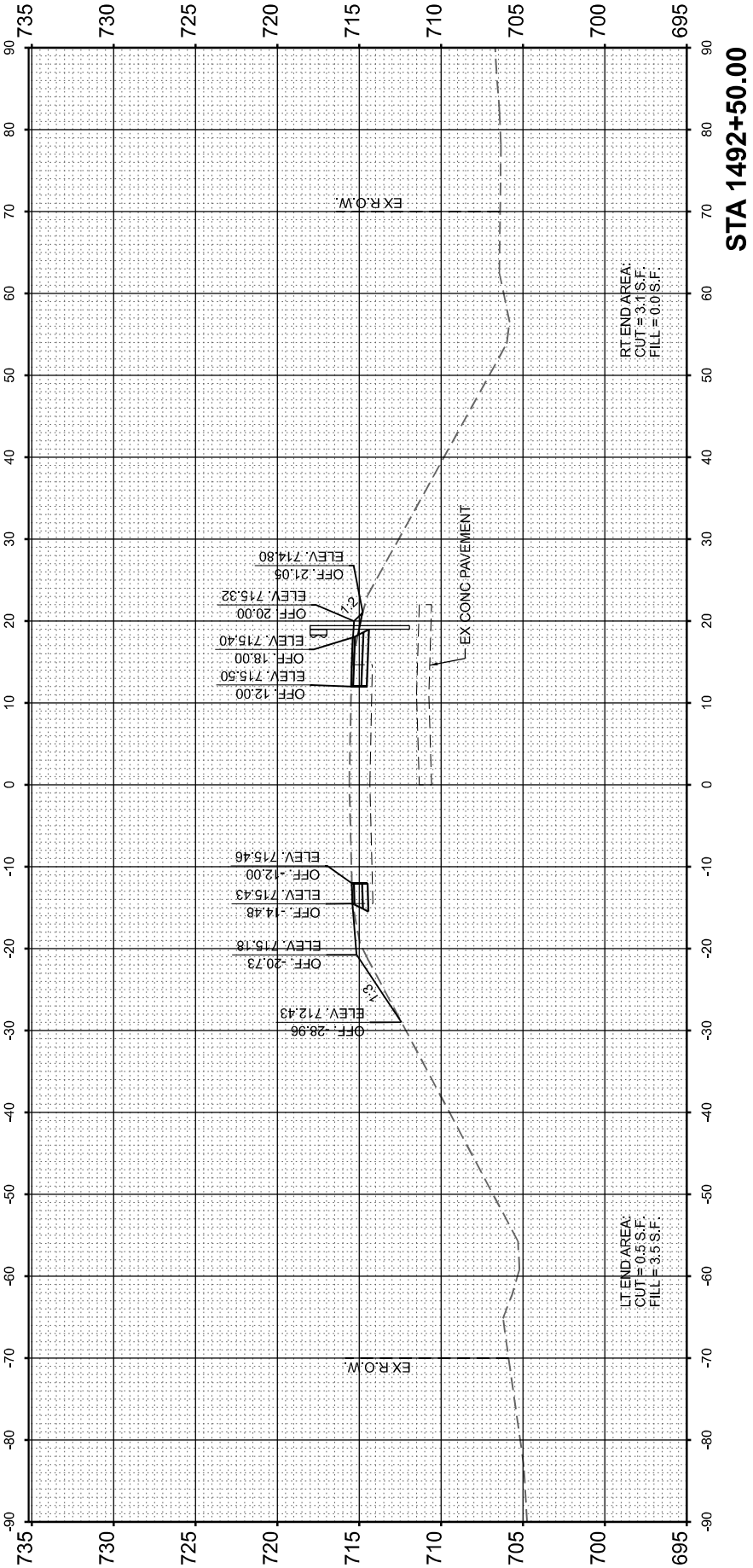
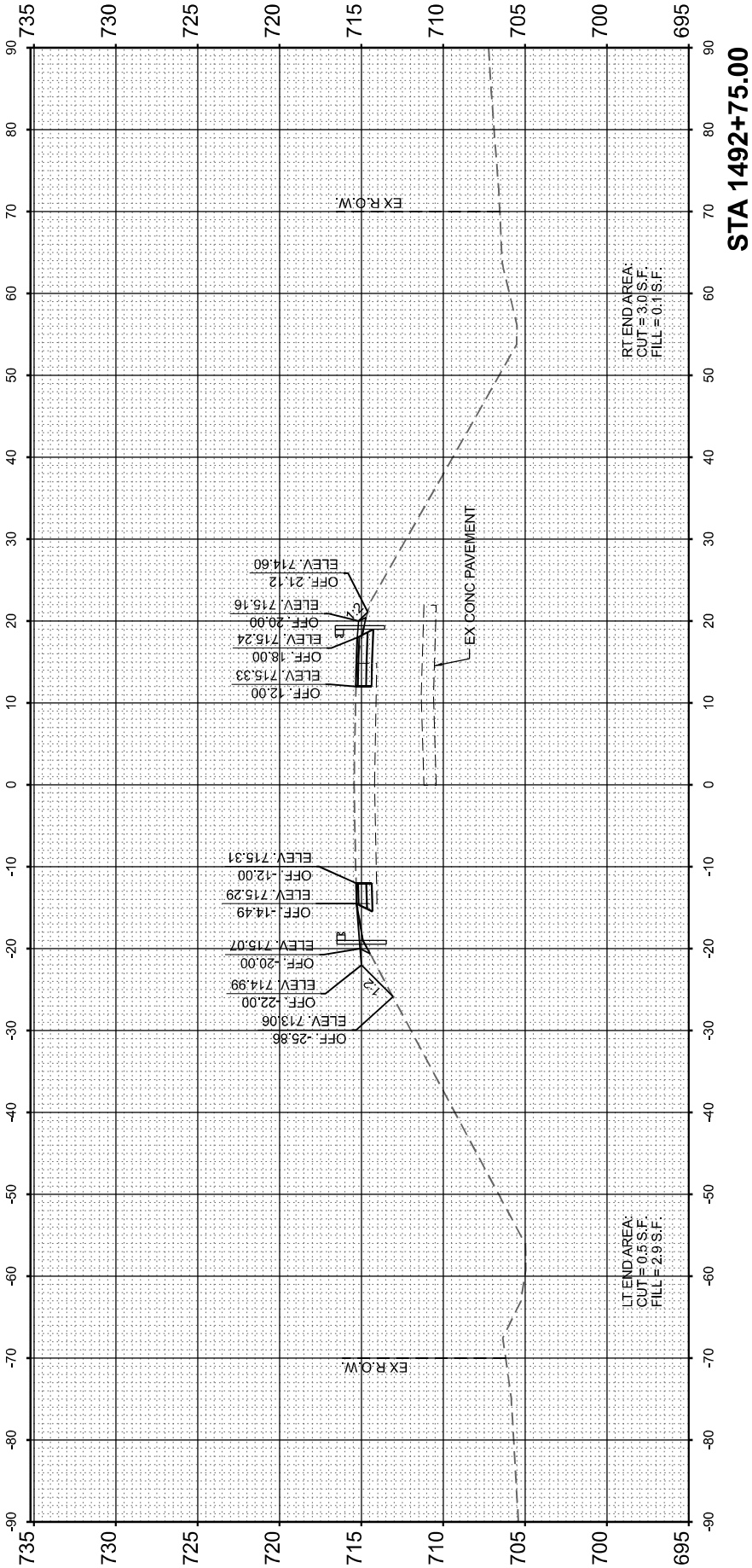
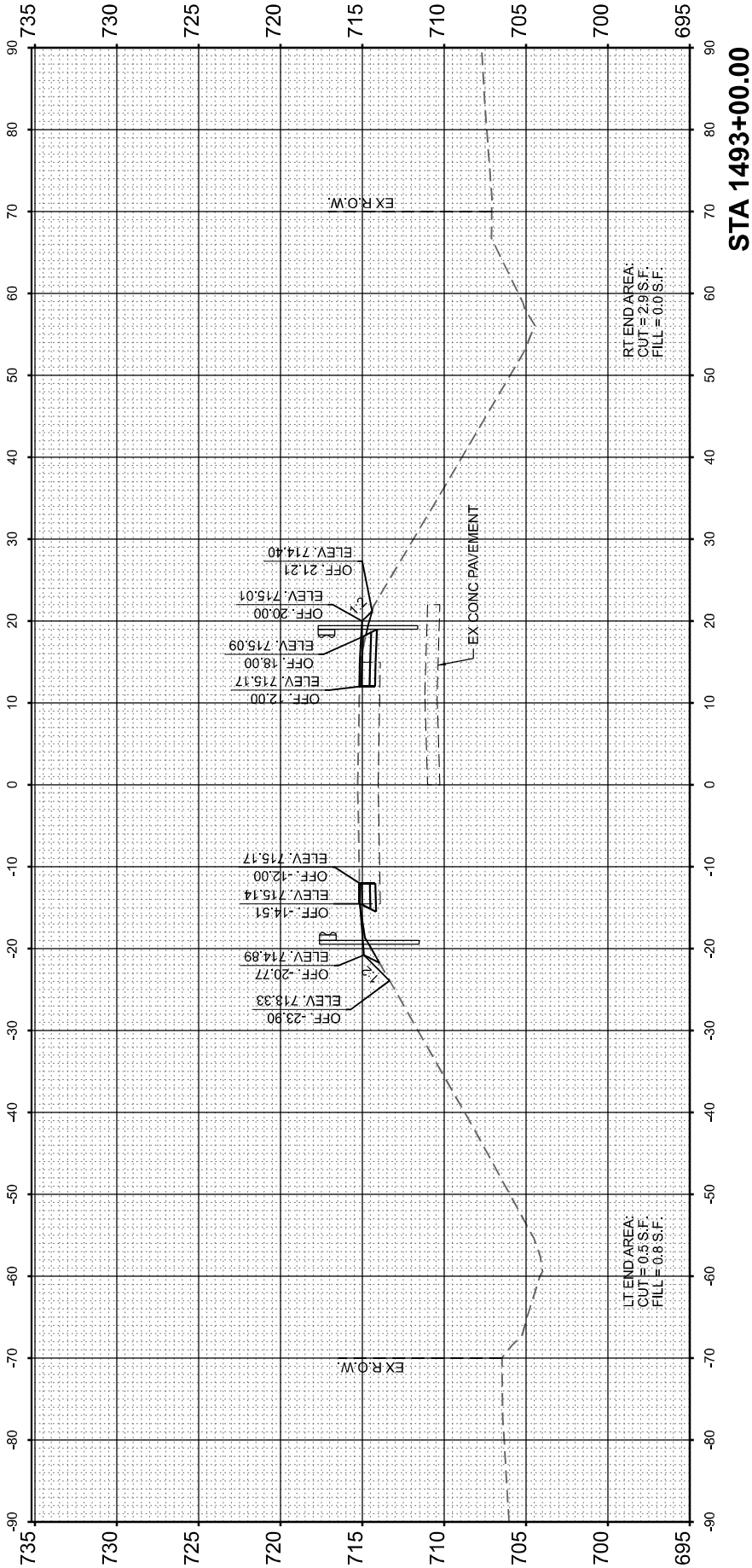
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	288R-1	MCLEAN	61	54
CONTRACT NO. 70571				
ILLINOIS FED. AID PROJECT				

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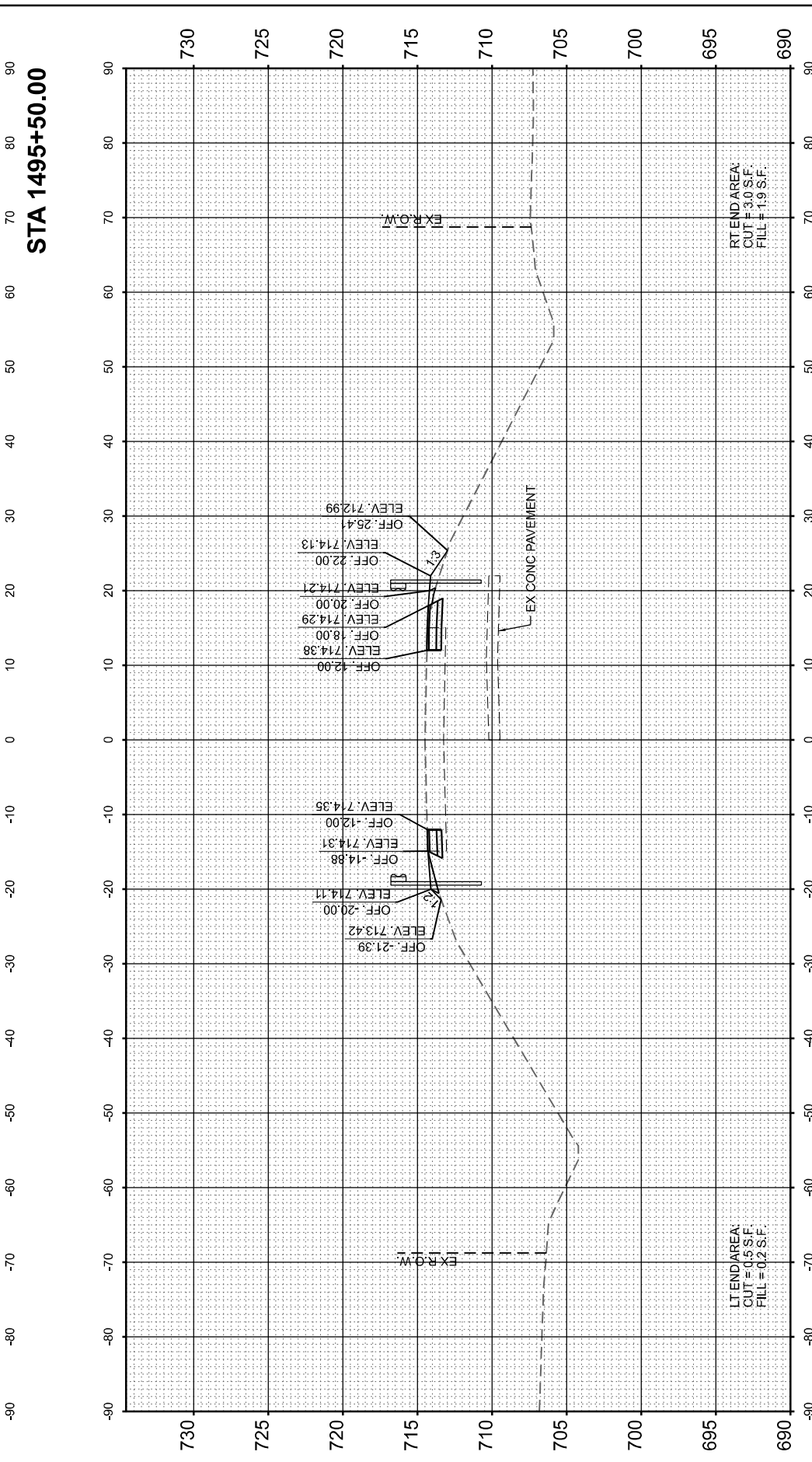
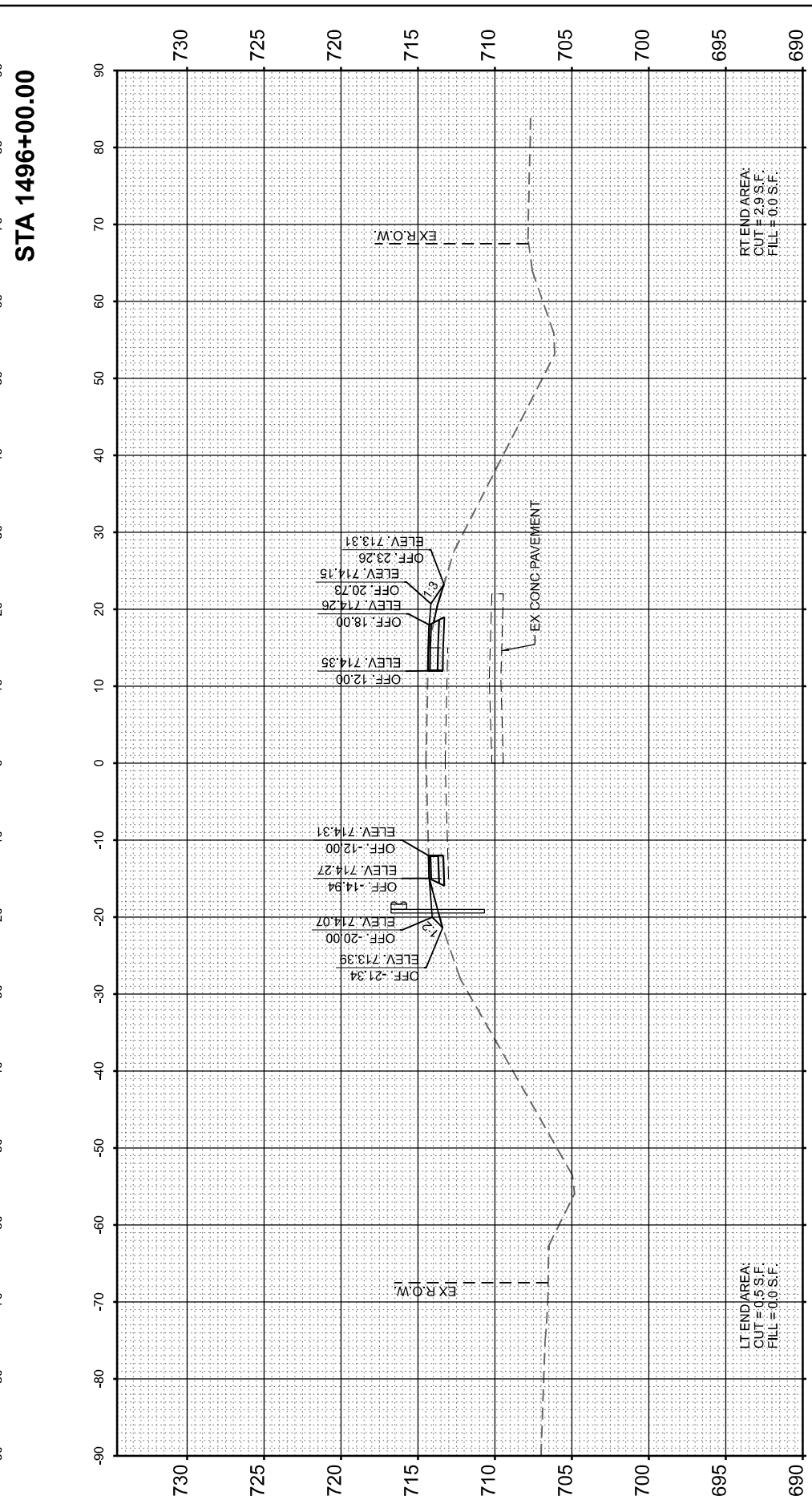
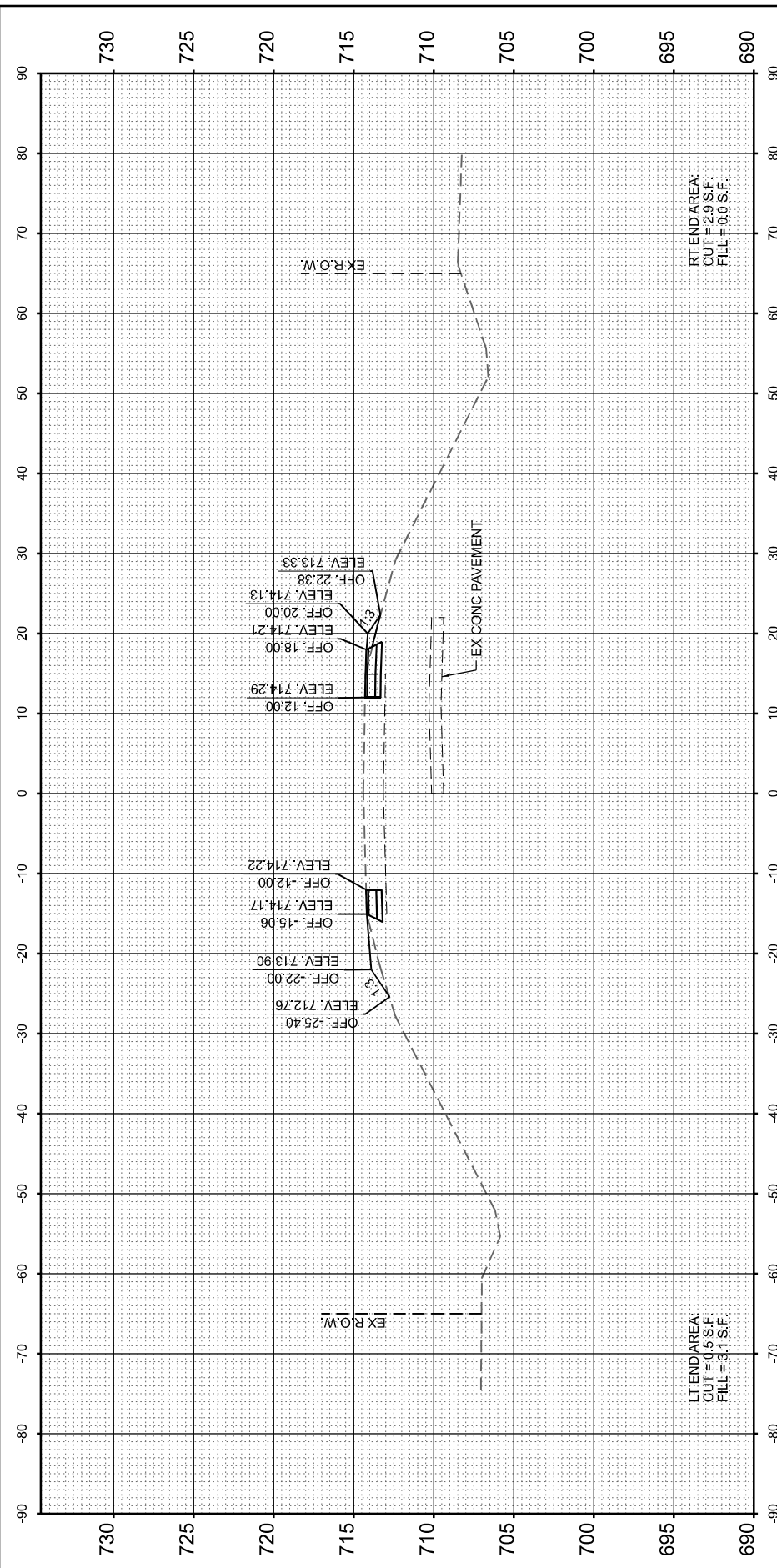


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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

CROSS SECTIONS - US 24

SCALE: 1"=10'H; 1"=5'V SHEET 5 OF 6 SHEETS STA. 1495+25.00 TO STA. 1496+00.00

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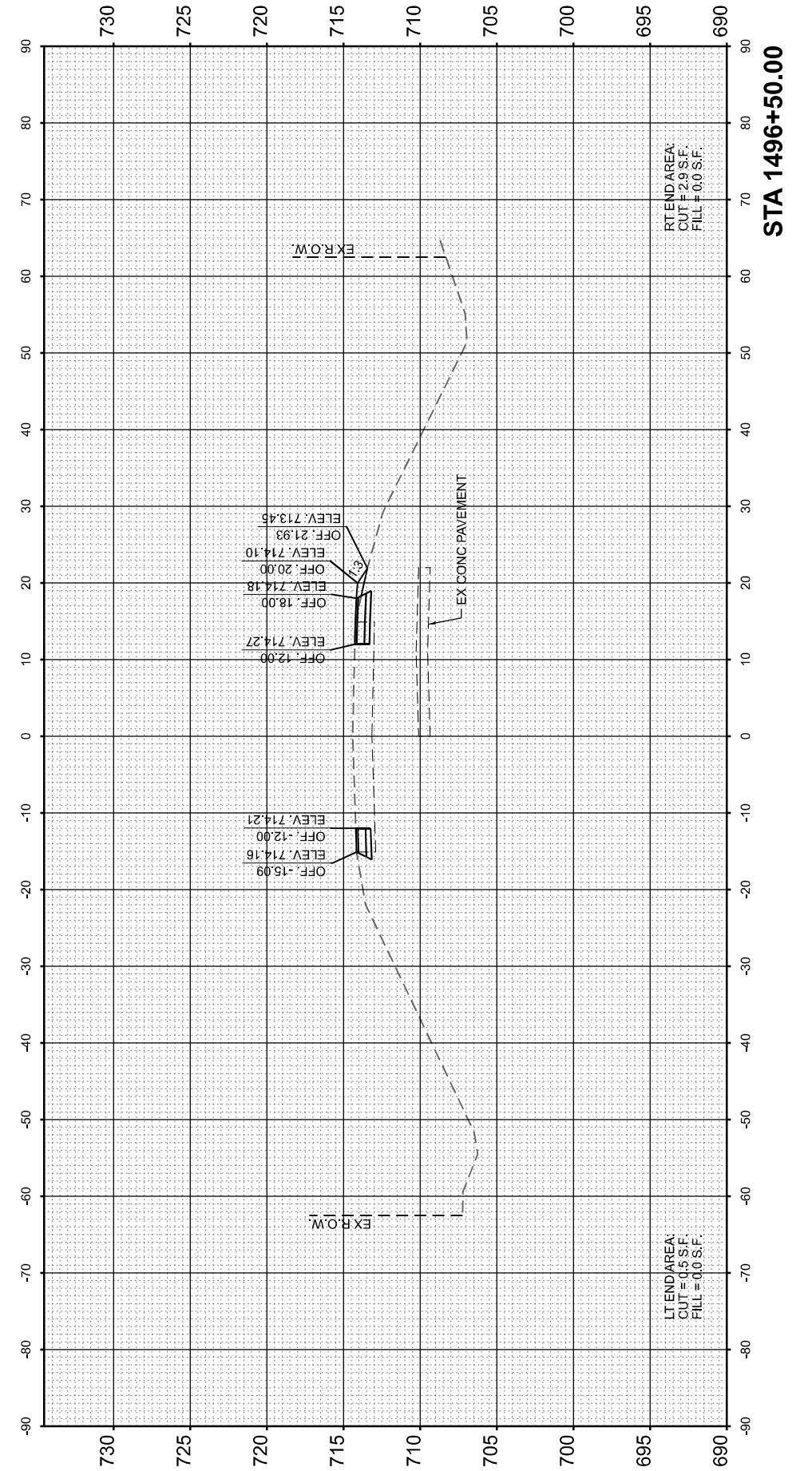
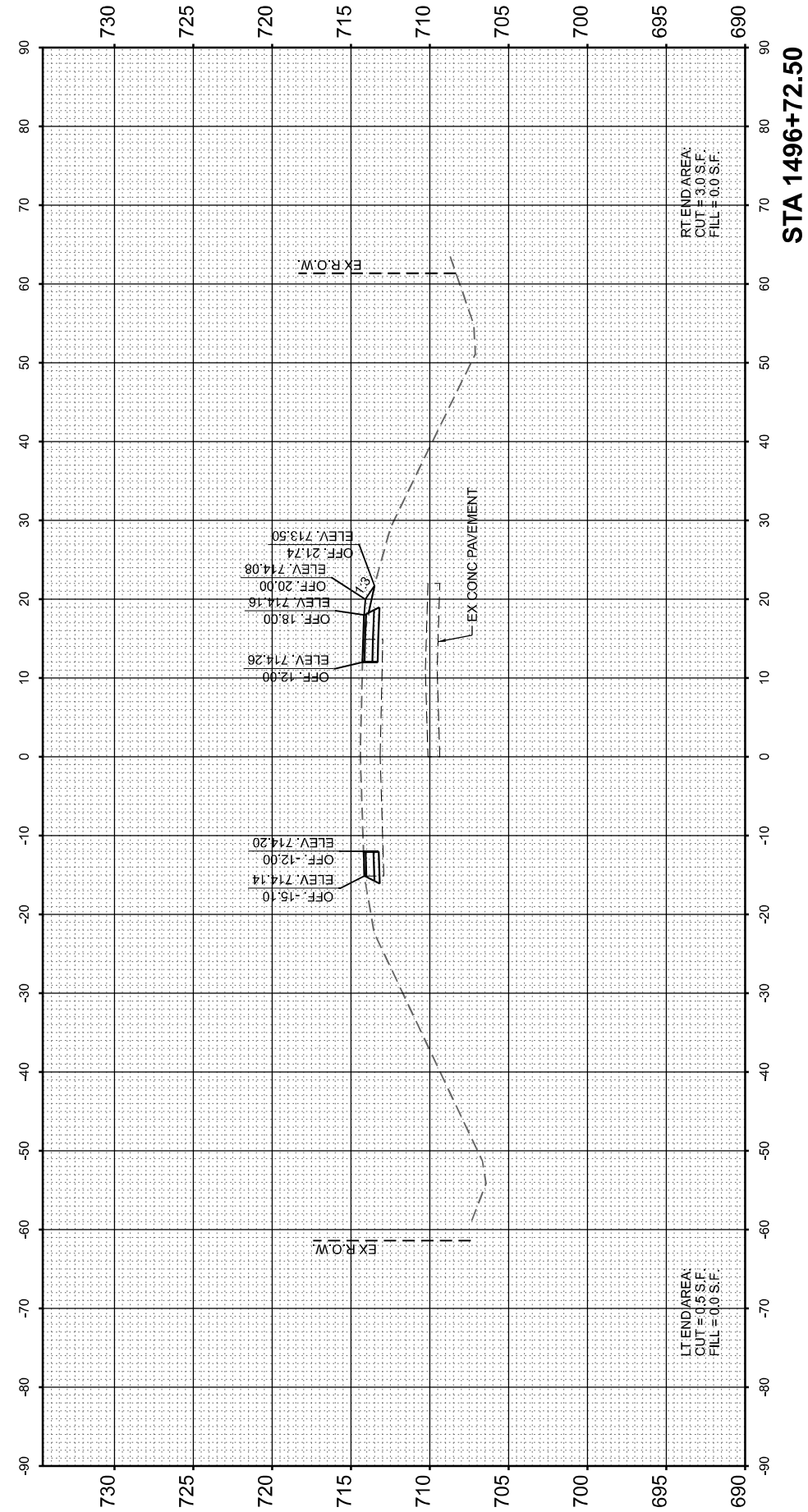
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	288R-1	MCLEAN	61	58
CONTRACT NO. 70571			ILLINOIS FED. AID PROJECT	

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FINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE

MODEL: US24 - 1496+50.00+2 (Sheet)
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**STATE OF ILLINOIS
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CROSS SECTIONS - US 24

SCALE: 1"=10'H; 1"=5'V SHEET 6 OF 6 SHEETS STA. 1496+50.00 TO STA. 1496+72.50

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	28BR-1	MCLEAN	61	59
CONTRACT NO. 70571				

ILLINOIS FED. AID PROJECT

Prairie Engineers, P.C.

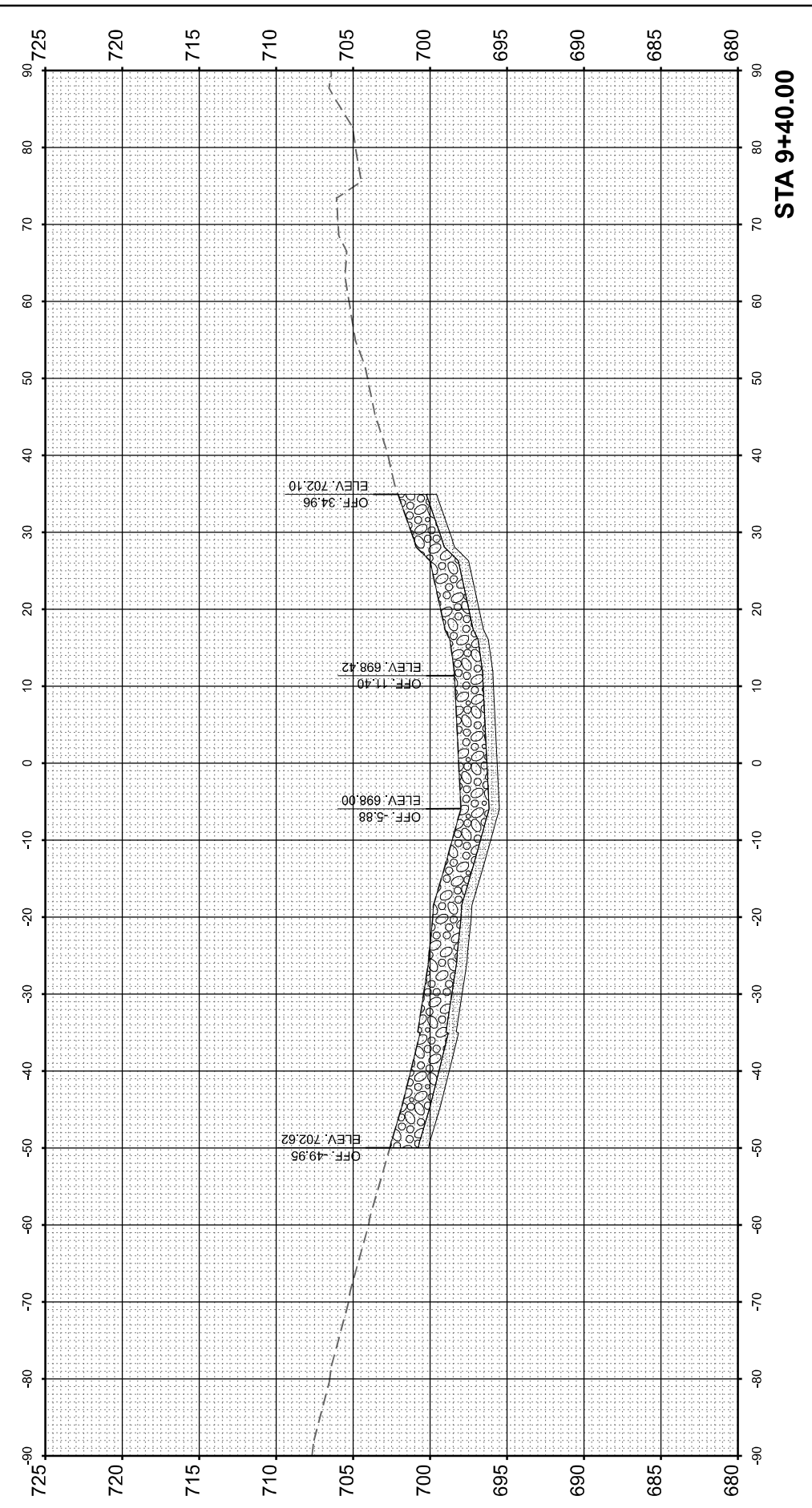
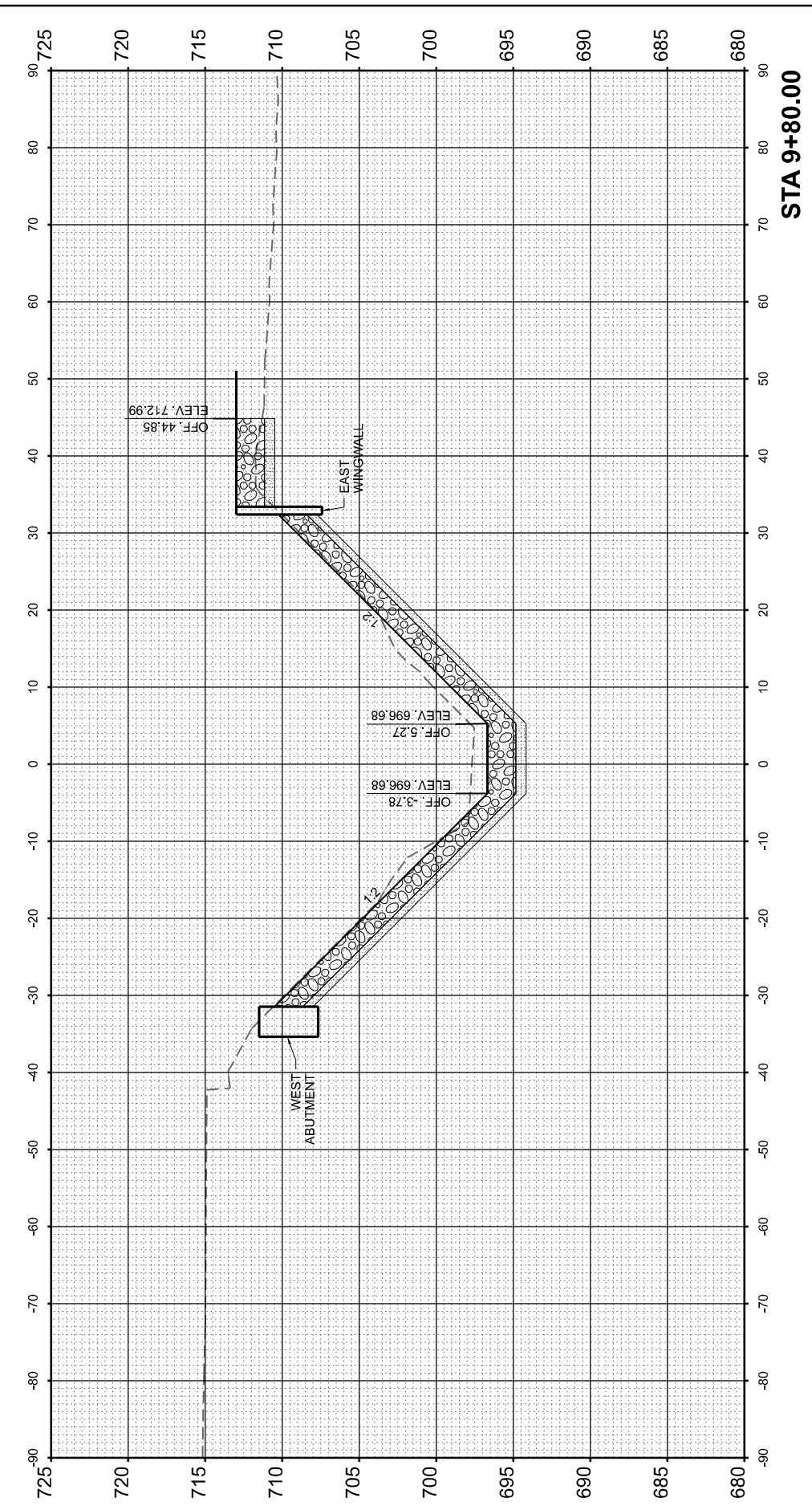
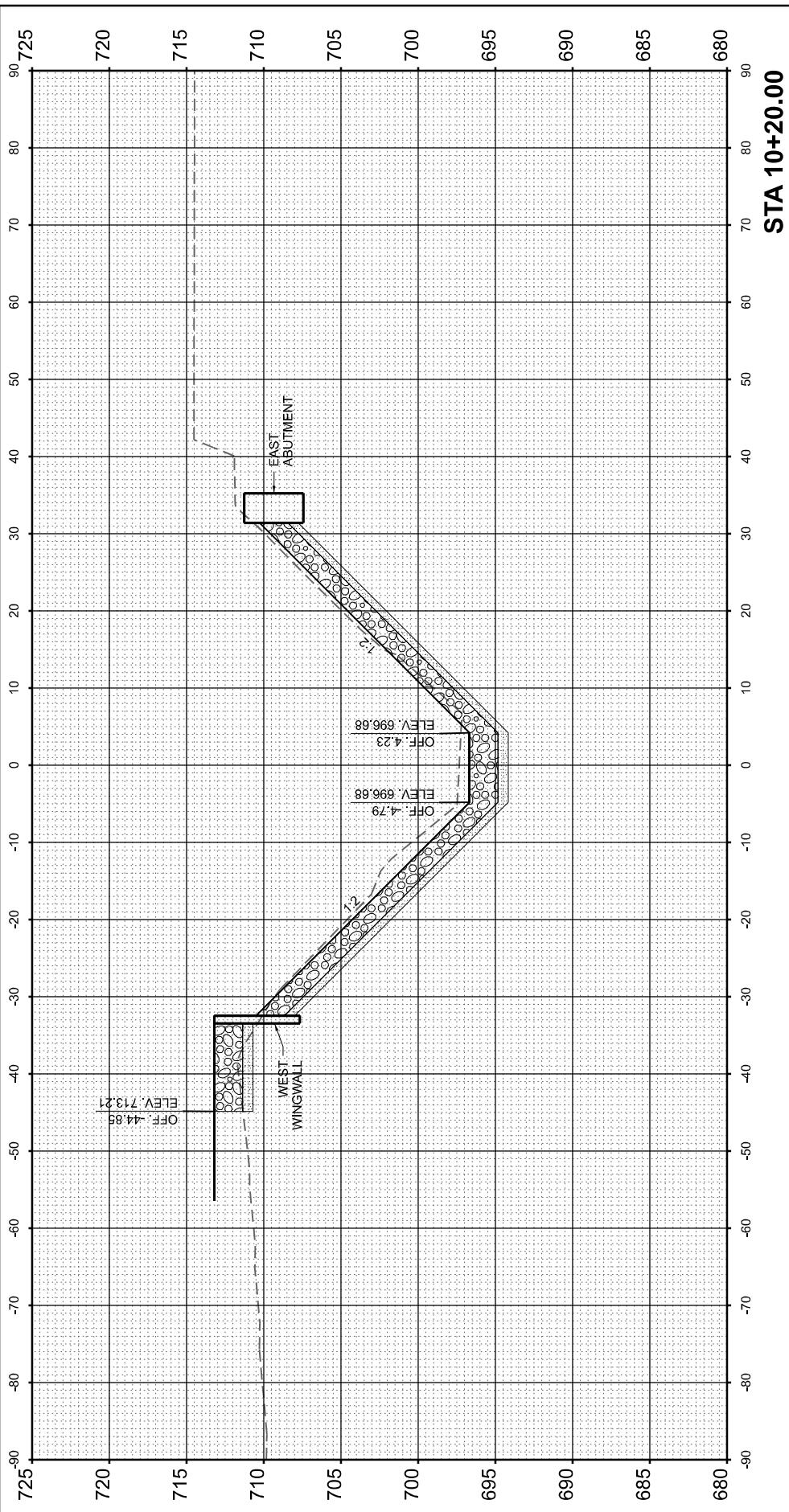
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USER NAME =	bbrennan	DESIGNED -	ZDL	REVISED -	
DRAWN -	BJB	REVISIED -		REVISIED -	
PLOT SCALE =	0.16666633 1/ in.	CHECKED -	ZDL	REVISIED -	
PLOT DATE =	10/10/2024	DATE -		REVISIED -	

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

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

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USER NAME	= bbrennan
PLOT SCALE	= 0.16666633 1/ in.
PLOT DATE	= 10/10/2024

DESIGNED	- ZDL
DRAWN	- BJB
CHECKED	- ZDL
DATE	-

REVISED	-
REVISED	-
REVISED	-
REVISED	-

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

SCALE: 1"=10'H; 1"=5'V SHEET 1 OF 2 SHEETS STA. 9+40.00 TO STA. 10+20.00

CROSS SECTIONS - STREAM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	28BR-1	MCLEAN	61	60
CONTRACT NO. 70571				
ILLINOIS FED. AID PROJECT				

FINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE

MODEL: E:\CL-Stream - 10+60.00 (Sheet)
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USER NAME =	bbrennan
PLOT SCALE =	0.16666633 1/ in.
PLOT DATE =	10/10/2024

DESIGNED -	ZDL
DRAWN -	BJB
CHECKED -	ZDL
DATE -	

REVISED -	
REVISED -	
REVISED -	
REVISED -	

**STATE OF ILLINOIS
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CROSS SECTIONS - STREAM	
SCALE: 1"=10'H; 1"=5'V	SHEET 2 OF 2 SHEETS STA. 10+60.00 TO STA. 10+60.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	288R-1	MCLEAN	61	61
ILLINOIS FED. AID PROJECT			CONTRACT NO. 70571	

