11-18-2022 LETTING ITEM 046

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	20B-1	CRAWFORD	24	1
	ILLINOIS	CONTRACT NO. 74755		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

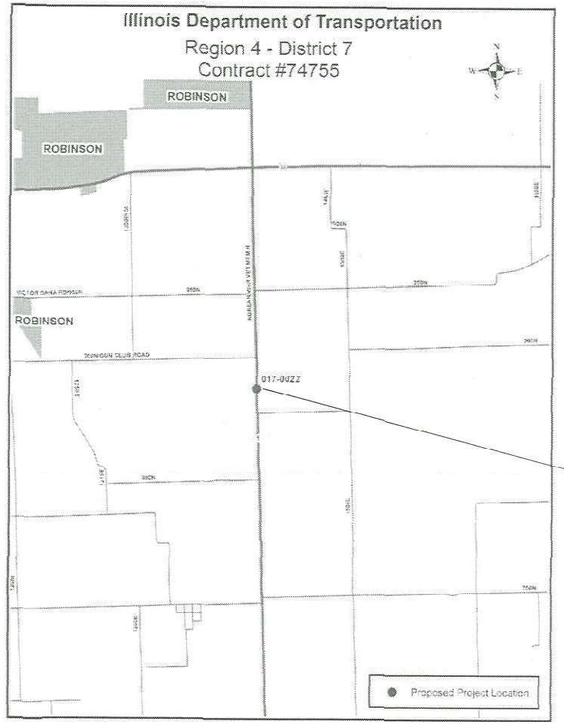
PROPOSED HIGHWAY PLANS

FAP ROUTE 332 (ILL 1)
SECTION 20B–1
PROJECT NHPP–ET41(896)
CULVERT (NEW)
CRAWFORD COUNTY

C–97–048–16

FOR INDEX OF SHEETS, SEE SHEET NO. 2

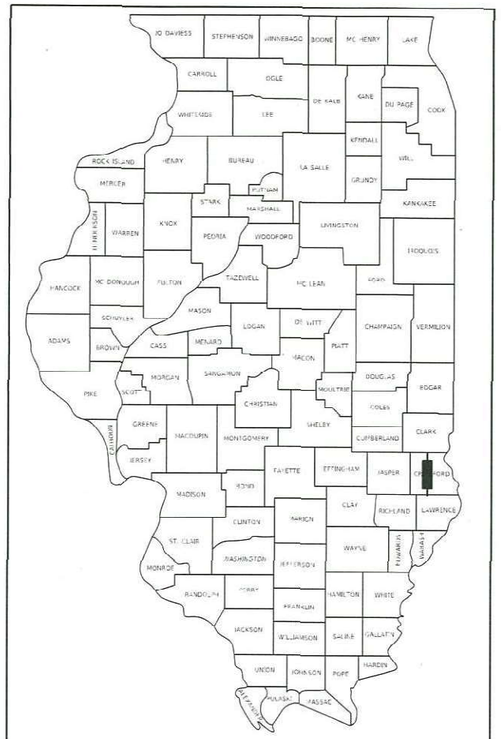
AADT = 4150 (2021)



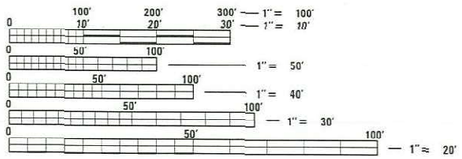
PROJECT LOCATION
STATION 912+23
FAP 332 (ILL 1)

LENGTH = 375.00 FT. = 0.071 MILE

D-97-018-16



LOCATION OF SECTION INDICATED THUS: –



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

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED August 31 20 22
Jeffrey P Myerholtz
REGIONAL ENGINEER

October 14, 2022
Scott A. Eckert
ENGINEER OF DESIGN AND ENVIRONMENT

October 14, 2022
Stephen McGrath
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PROJECT ENGINEER DEB BARRETT
PROJECT MANAGER KYLE PRICE

CONTRACT NO. 74755

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

INDEX OF SHEETS

GENERAL NOTES

THIS PROJECT IS LOCATED ON FAP ROUTE 332 (ILL 1) IN CRAWFORD COUNTY, APPROXIMATELY 1.8 MILES SOUTH FROM THE INTERSECTION OF ILL 1 AND ILL 33. THE WORK INCLUDED IN SECTION 20B-1 CONSISTS OF REPLACING THE EXISTING BRIDGE STRUCTURE (017-0022) WITH A CAST-IN-PLACE BOX CULVERT STRUCTURE (017-2015) INCLUDING REPLACEMENT OF GUARDRAIL AND ALL OTHER WORK NECESSARY TO COMPLETE THIS SECTION.

SHORT TERM PAVEMENT MARKING SHALL BE TAPE.

PCC BASE COURSE 11 INCH FOR EACH LANE SHALL INCLUDE ALL THE EXCAVATION FOR THE CONSTRUCTION OF THE BASE COURSE AND GRADING SOME EXCAVATED MATERIAL AS BACKFILL TO ELIMINATE DROP-OFF.

THE PRIVATE ENTRANCE LOCATED WITHIN THE LIMITS OF THE PROJECT SHALL REMAIN OPEN AT ALL TIMES.

STONE RIPRAP AREAS LISTED IN THE SCHEDULES OF QUANTITIES SHEET SHALL BE CONSTRUCTED AS SHOWN IN THE DETAILS ON THE STRUCTURAL SHEETS.

DUE TO GEOMETRIC CONSTRAINTS, THE TYPE 1 SPECIAL END SECTION ADJACENT TO THE PRIVATE DRIVE MUST BE LESS THAN 40 FEET IN TOTAL LENGTH. PLEASE CONSULT THE APPROVED MATERIALS LIST ON IDOT'S WEB SITE TO DETERMINE AN ACCEPTABLE PRODUCT.

THE FOLLOWING STANDARDS ARE A PART OF THESE PLANS AND ARE INCLUDED FOLOWING THE LAST NUMBERED SHEET OF THE PLANS.

000001 - 08	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
001001 - 02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
442001 - 04	CLASS A PATCHES
515001 - 04	NAME PLATE FOR BRIDGES
630001 - 12	STEEL PLATE BEAM GUARDRAIL
630101 - 10	STRONG POST GUARDRAIL ATTACHED TO CULVERT
630301 - 09	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631011 - 10	TRAFFIC BARRIER TERMINAL, TYPE 2
701001 - 02	OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5 M) AWAY
701006 - 05	OFF-ROAD 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 TIME OPERATIONS
701311 - 03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701316 - 13	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR, FOR SPEEDS > 45 MPH
701321 - 18	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
701901 - 08	TRAFFIC CONTROL DEVICES
704001 - 08	TEMPORARY CONCRETE BARRIER
725001 - 01	OBJECT AND TERMINAL MARKERS
780001 - 05	TYPICAL PAVEMENT MARKINGS
781001 - 04	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
782006 - 01	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS
420001 - 10	PAVEMENT JOINTS

REV. - MS

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS, GENERAL NOTES, AND HIGHWAY STANDARDS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	20B-1	CRAWFORD	24	2
		CONTRACT NO. 74755		
		ILLINOIS FED. AID PROJECT		

80% FED
20% STATE

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	TOTAL QUANTITIES	CONSTRUCTION TYPE CODE 0004		
25000305	SEEDING, CLASS 3A	ACRE	0.2	0.2		
28100109	STONE RIPRAP, CLASS A5	SQ YD	220	220		
28200200	FILTER FABRIC	SQ YD	220	220		
35300600	PORTLAND CEMENT CONCRETE BASE COURSE 11"	SQ YD	773	773		
40600990	TEMPORARY RAMP	SQ YD	62	62		
44200571	CLASS A PATCHES, TYPE IV, 11 INCH	SQ YD	231	231		
44213000	PATCHING REINFORCEMENT	SQ YD	231	231		
44213204	TIE BARS 3/4"	EACH	28	28		
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1	1		
50300255	CONCRETE SUPERSTRUCTURE	CU YD	11.2	11.2		
50800105	REINFORCEMENT BARS	POUND	27680	27680		
50800515	BAR SPLICERS	EACH	115	115		
51500100	NAME PLATES	EACH	1	1		
52200020	TEMPORARY SOIL RETENTION SYSTEM	SQ FT	227	227		

80% FED
20% STATE

SUMMARY OF QUANTITIES

	CODE NO	ITEM	UNIT	TOTAL QUANTITIES	CONSTRUCTION TYPE CODE 0004		
	54003000	CONCRETE BOX CULVERTS	CU YD	170.2	170.2		
	59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	155	155		
*	63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT	FOOT	75	75		
		POSTS					
*	63000007	STEEL PLATE BEAM GUARDRAIL, TYPE B, 6 FOOT	FOOT	50	50		
		POSTS					
*	63000030	STRONG POST GUARDRAIL ATTACHED TO CULVERT	FOOT	50	50		
*	63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	1	1		
*	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL)	EACH	2	2		
		TANGENT					
*	63100169	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL)	EACH	1	1		
		FLARED					
	63200310	GUARDRAIL REMOVAL	FOOT	351	351		
	67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6		
	67100100	MOBILIZATION	L SUM	1	1		
	70100100	TRAFFIC CONTROL AND PROTECTION, STANDARD	EACH	1	1		
		701316					

* SPECIALTY ITEM

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	20B-1	CRAWFORD	24	3
		CONTRACT NO. 74755		
	ILLINOIS	FED. AID PROJECT		

80% FED
20% STATE

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	TOTAL QUANTITIES	CONSTRUCTION TYPE CODE 0004		
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD	EACH	1	1		
	701321					
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD	L SUM	1	1		
	701201					
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	3	3		
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1		
70106700	TEMPORARY RUMBLE STRIPS	EACH	6	6		
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	28	28		
70300100	SHORT TERM PAVEMENT MARKING	FOOT	927	927		
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	309	309		
70400100	TEMPORARY CONCRETE BARRIER	FOOT	450	450		
70400125	PINNING TEMPORARY CONCRETE BARRIER	EACH	54	54		
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	362.5	362.5		
70600250	IMPACT ATTENUATORS, TEMPORARY (NON-	EACH	2	2		
	REDIRECTIVE), TEST LEVEL 3					

80% FED
20% STATE

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	TOTAL QUANTITIES	CONSTRUCTION TYPE CODE 0004		
70600260	IMPACT ATTENUATORS, TEMPORARY (FULLY	EACH	2	2		
	REDIRECTIVE, NARROW), TEST LEVEL 3					
70600332	IMPACT ATTENUATORS, RELOCATE (FULLY	EACH	2	2		
	REDIRECTIVE, NARROW), TEST LEVEL 3					
70600350	IMPACT ATTENUATORS, RELOCATE (NON-	EACH	2	2		
	REDIRECTIVE), TEST LEVEL 3					
* 72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	3	3		
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	1059	1059		
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	12	12		
78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	8	8		
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	12	12		
78300201	PAVEMENT MARKING REMOVAL - GRINDING	SQ FT	332	332		
X0900064	MEMBRANE WATERPROOFING SYSTEM FOR BURIED	SQ YD	155	155		
	STRUCTURES					
* X6330725	STEEL PLATE BEAM GUARDRAIL (SHORT RADIUS)	FOOT	25	25		

* SPECIALTY ITEM

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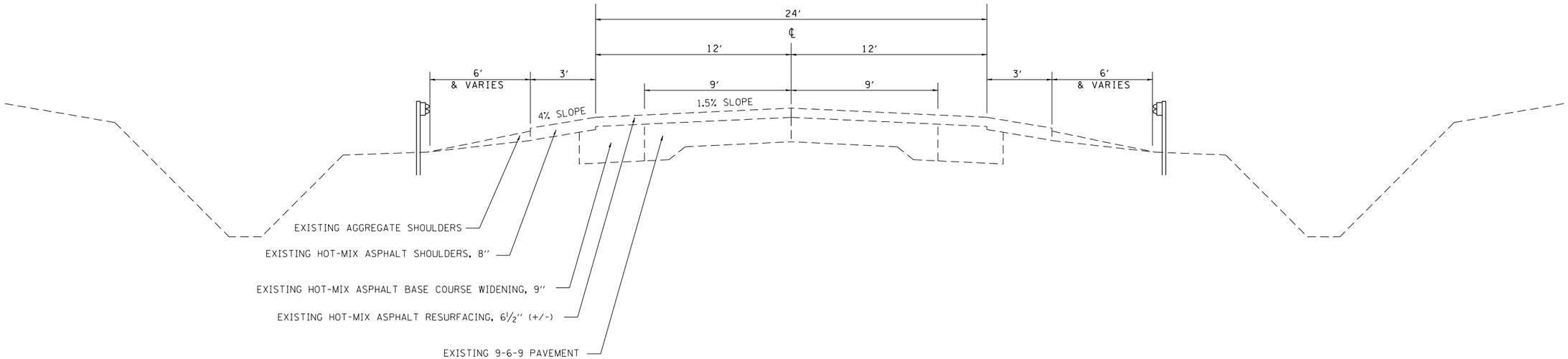
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	20B-1	CRAWFORD	24	4
		CONTRACT NO. 74755		
	ILLINOIS FED. AID PROJECT			

EXISTING SECTION



STA 910+39 TO STA 914+13

SECTION AT BRIDGE OMITTED FOR CLARITY

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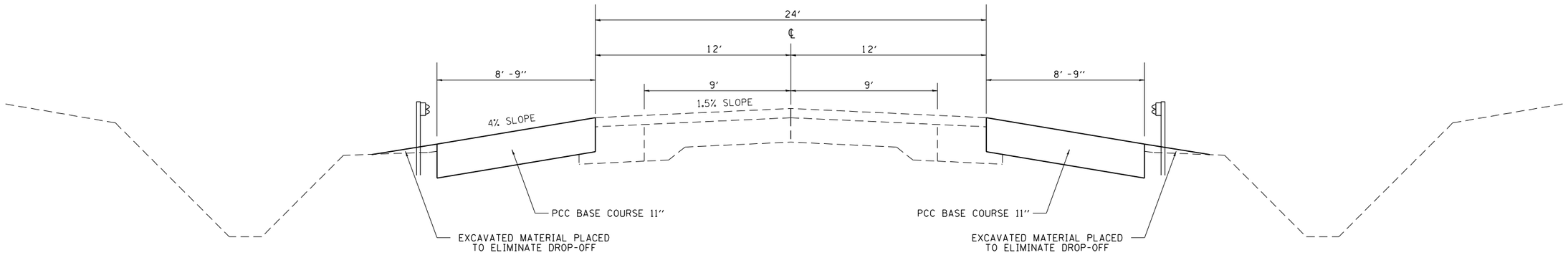
PLOT DATE = 9/1/2022	DATE -	REVISED -	

TYPICAL SECTIONS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	20B-1	CRAWFORD	24	5
		CONTRACT NO. 74755		
	ILLINOIS FED. AID PROJECT			

PROPOSED SECTION



STA 910+39 TO STA 914+13

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SEE SCHEDULE OF QUANTITIES FOR BASE COURSE STATIONING

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PLOT DATE = 9/1/2022	DATE -	REVISED -	

TYPICAL SECTIONS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	20B-1	CRAWFORD	24	6
		CONTRACT NO. 74755		
	ILLINOIS	FED. AID PROJECT		

PVT MARKINGS

STATION	TO	STATION	LOCATION	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	RAISED REFLECTIVE PAVEMENT MARKER	PAVEMENT MARKING REMOVAL - GRINDING	SHORT TERM PAVEMENT MARKING (4")	SHORT TERM PAVEMENT MARKING REMOVAL	PAINT PAVEMENT MARKING - LINE 4"	
				78300200	78100100	78300201	70300100	70300150	78001110	
				EACH	EACH	SQ FT	FT	SQ FT	FT	
907+47.00		908+64.00	CENTERLINE	2	2	10	12	4	30	YELLOW
908+64.00		915+98.00	CENTERLINE	10	10	63	76	25	190	YELLOW
910+48.00		912+14.00	EOP RT			56				
912+32.00		913+98.00	EOP RT			56				
909+19.00		911+98.00	EOP LT			93				
912+48.00		914+08.00	EOP LT			54				
910+48.00		913+98.00	EOP RT				350	117	350	WHITE
909+19.00		914+08.00	EOP LT				489	163	489	WHITE
			TOTALS	12	12	332	927	309	1059	

CONCRETE

STATION	TO	STATION	LOCATION	PORTLAND CEMENT CONCRETE BASE COURSE 11"	CONCRETE SUPERSTRUCTURE	CLASS A PATCHES TYPE IV	PATCHING REINFORCEMENT	TIE BARS 3/4"	TEMPORARY RAMP	NOTES
				35300600	50300255	44200571	44213000	44213204	40600990	
				SQ YD	CU YD	SQ YD	SQ YD	EACH	SQ YD	
910+39.00		912+14.00	RT	170.1						
912+14.00		912+32.00	RT		11.2					TEMP SLAB
912+32.00		914+07.00	RT	170.1						
909+18.00		911+98.00	LT	272.2						
911+98.00		912+48.00	LT			93.1	93.1	14.0		
912+48.00		914+13.00	LT	160.4						
911+98.00		912+48.00	RT			137.5	137.5	14.0		
911+97.33		912+14.00	RT						31.0	AT TEMP SLAB
912+32.00		912+48.67	RT						31.0	AT TEMP SLAB
		TOTALS		772.9	11.2	230.6	230.6	28.0	62	

TEMP CONCRETE BARRIER

STATION	TO	STATION	LOCATION	TEMPORARY CONCRETE BARRIER	RELOCATE TEMPORARY CONCRETE BARRIER	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	PINNING TEMPORARY CONCRETE BARRIER	NOTES
				70400100	70400200	70600250	70600260	70600350	70600332	70400125	
				FT	FT	EACH	EACH	EACH	EACH	EACH	
910+40.00		914+06.00	CL	362.5		2					STAGE 1 (29 PCS)
911+85.00		912+73.50	RT EOP	87.5			2				STAGE 1 (7 PCS)
										36	STAGE 1
909+15.00		910+67.00	CL		150.0			1	1		STAGE 2 (12 PCS)
911+91.50		914+07.50	CL		212.5			1	1		STAGE 2 (17 PCS)
										18	STAGE 2
		TOTALS		450.0	362.5	2	2	2	2	54	

REV. - MS

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

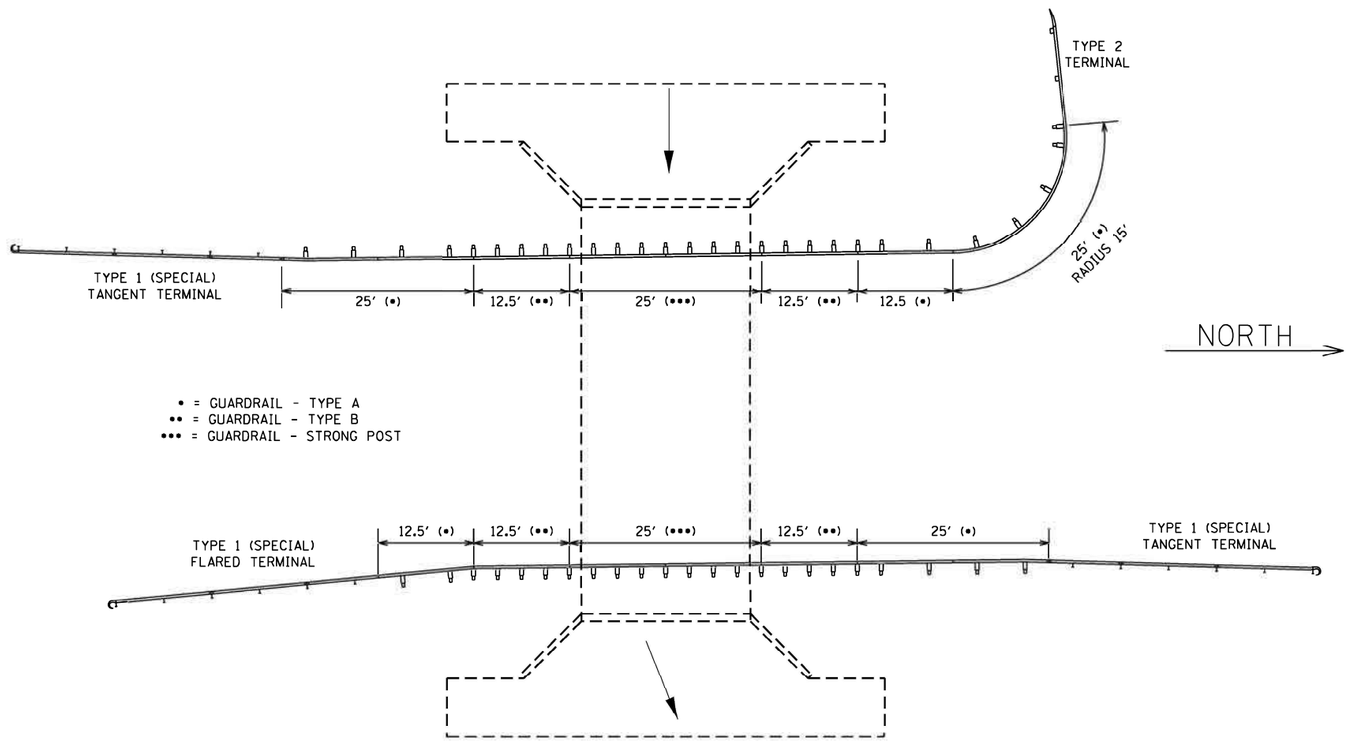
SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	20B-1	CRAWFORD	24	7
		CONTRACT NO. 74755		
	ILLINOIS FED. AID PROJECT			

GUARDRAIL

STATION	TO	STATION	LOCATION	GUARDRAIL REMOVAL	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	STEEL PLATE BEAM GUARDRAIL (SHORT RADIUS)	STEEL PLATE BEAM GUARDRAIL, TYPE B, 6 FOOT POSTS	STRONG POST GUARDRAIL ATTACHED TO CULVERT	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) FLARE	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	TRAFFIC BARRIER TERMINAL, TYPE 2	GUARDRAIL REFLECTORS, TYPE A	TERMINAL MARKER - DIRECT APPLIED
				63200310	63000001	X6330725	63000007	63000030	63100169	63100167	63100045	78200005	72501000
				FT	FT	FT	FT	FT	EACH	EACH	EACH	EACH	EACH
			LT	163.0									
			RT	188.0									
911+73.25		911+98.25	LT		25.0					1			1
911+98.25		912+10.75	LT				12.5						
912+10.75		912+35.75	LT					25.0					
912+35.75		912+48.25	LT				12.5						
912+48.25		912+60.75	LT		12.5								
912+60.75		912+75.68	LT			25.0**					1		
			LT									4	
911+85.75		911+98.25	RT		12.5				1				1
911+98.25		912+10.75	RT				12.5						
912+10.75		912+35.75	RT					25.00					
912+35.75		912+48.25	RT				12.5						
912+48.25		91273.25	RT		25.0					1			1
			RT									4	
		TOTALS		351.0	75.0	25.0	50.0	50.0	1.0	2.0	1.0	8.0	3.0

** RADIUS = 15 FT



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SCHEDULE OF QUANTITIES

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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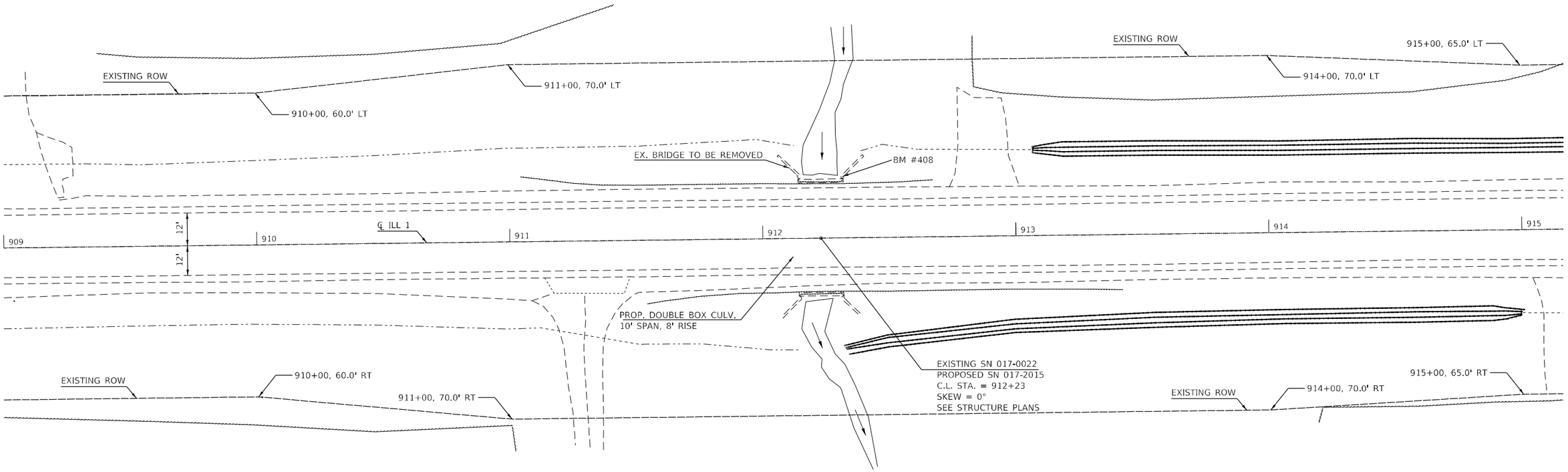
		CONTRACT NO. 74755		
		ILLINOIS FED. AID PROJECT		



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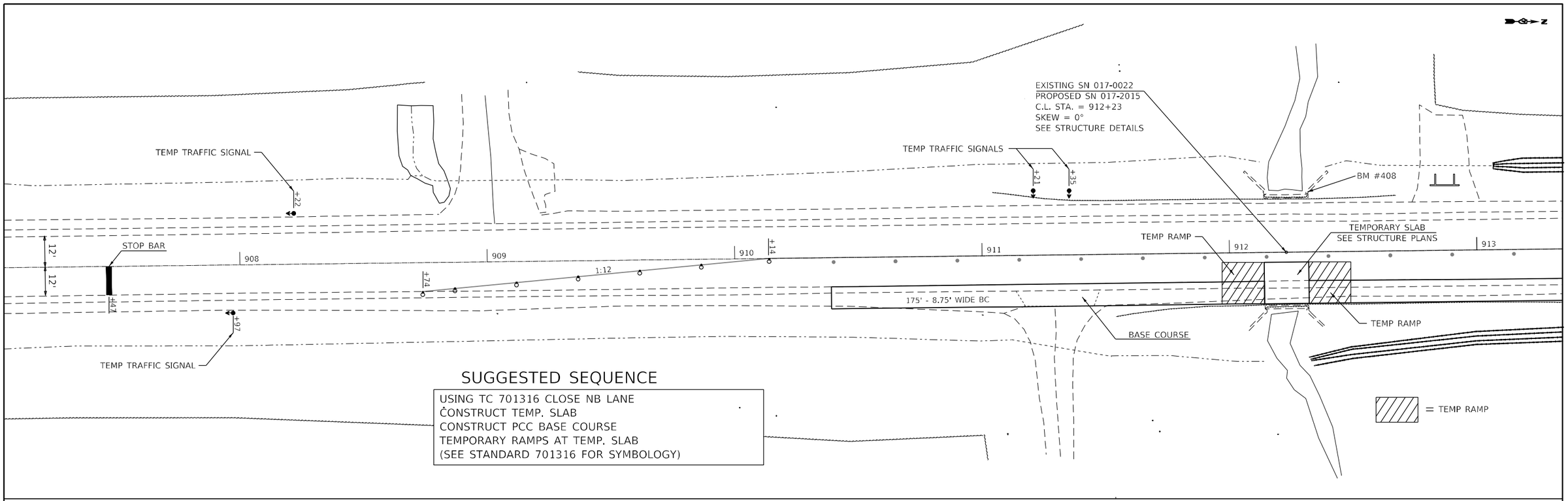
PLOT DATE = 9/1/2022	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLAN AND ROW LIMITS

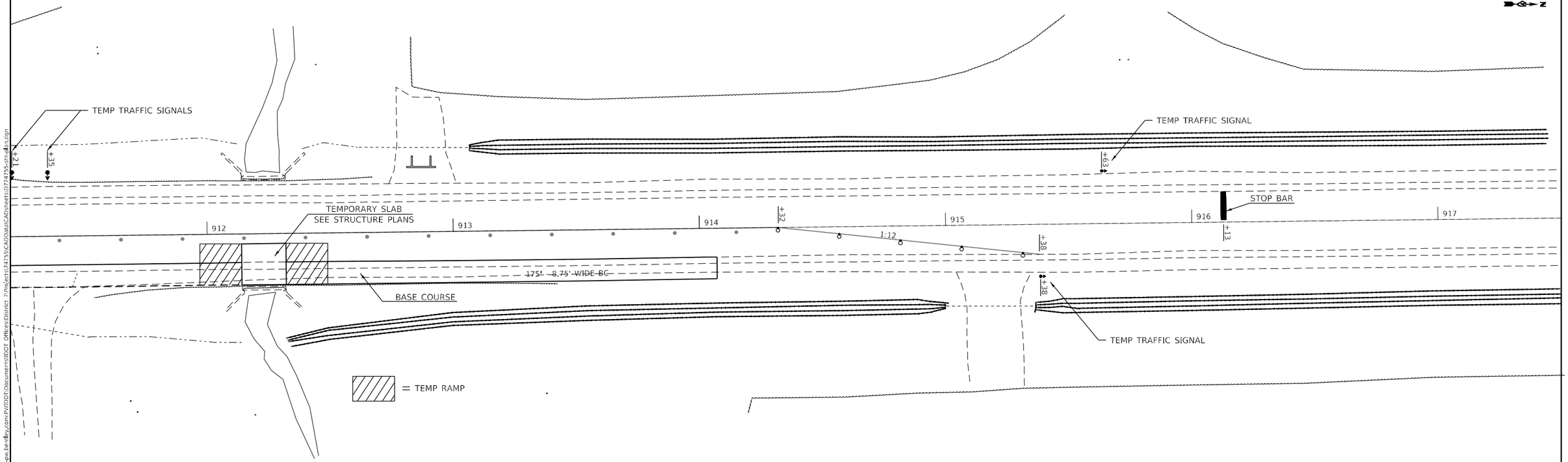
SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	208-1	CRAWFORD	24	9
		CONTRACT NO. 74755		
	ILLINOIS	FED. AID PROJECT		



SUGGESTED SEQUENCE

USING TC 701316 CLOSE NB LANE
CONSTRUCT TEMP. SLAB
CONSTRUCT PCC BASE COURSE
TEMPORARY RAMPS AT TEMP. SLAB
(SEE STANDARD 701316 FOR SYMBOLOGY)



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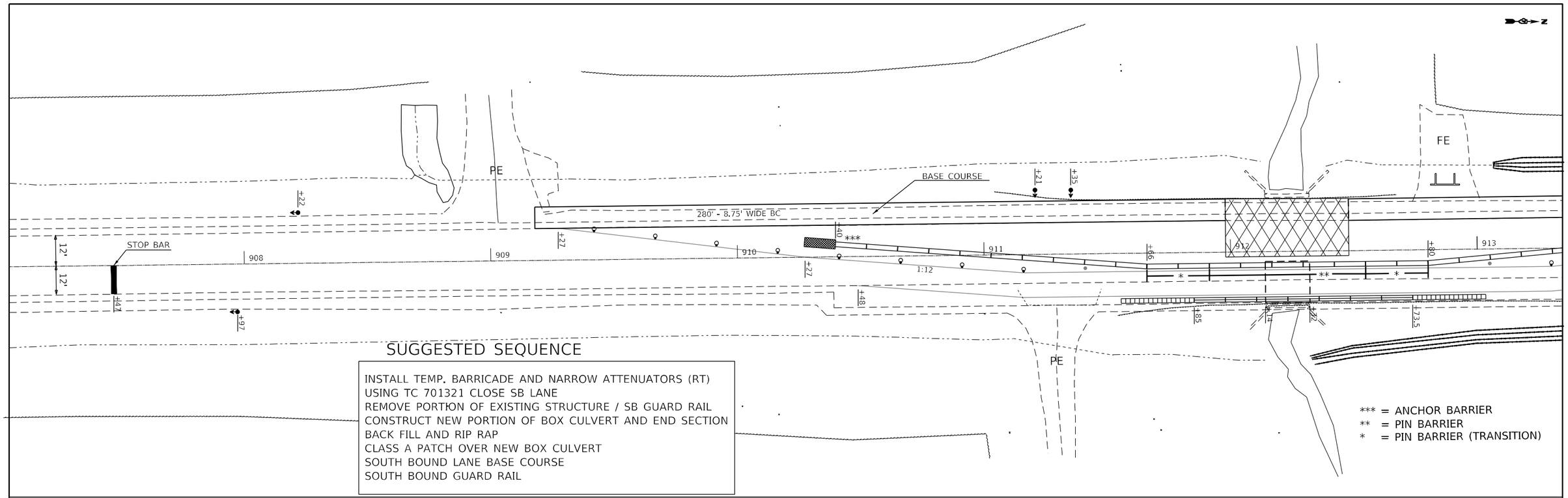
	DRAWN -	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 9/1/2022	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PRE-STAGE
PLAN VIEW

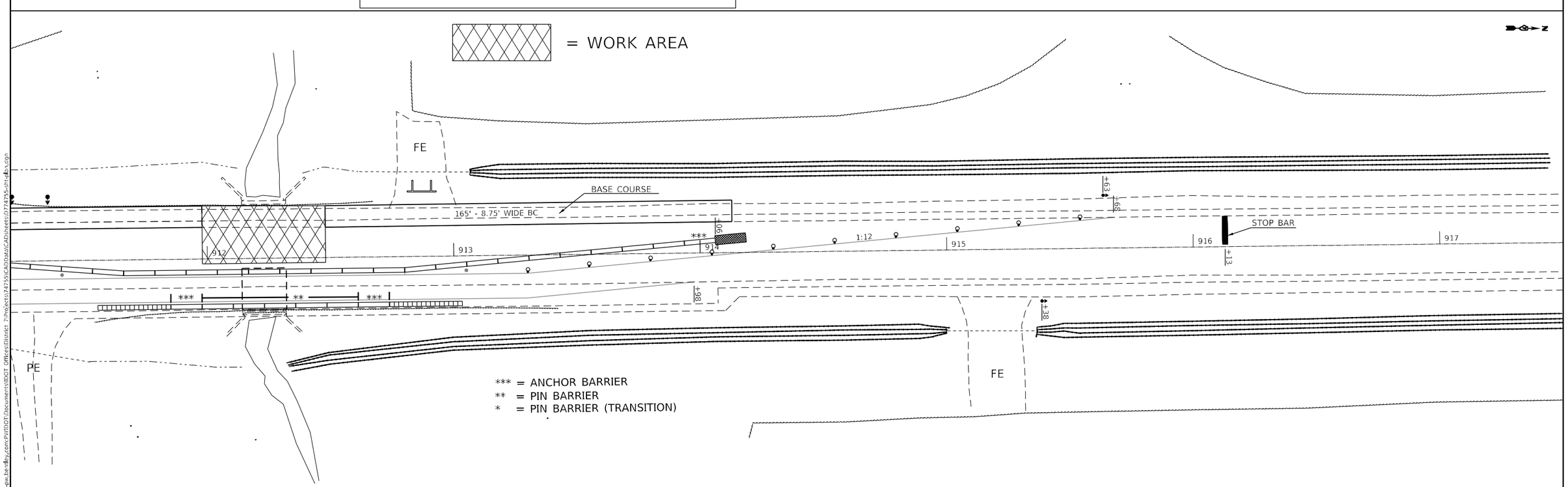
SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	20B-1	CRAWFORD	24	10
		CONTRACT NO. 74755		
	ILLINOIS	FED. AID PROJECT		



SUGGESTED SEQUENCE

INSTALL TEMP. BARRICADE AND NARROW ATTENUATORS (RT)
USING TC 701321 CLOSE SB LANE
REMOVE PORTION OF EXISTING STRUCTURE / SB GUARD RAIL
CONSTRUCT NEW PORTION OF BOX CULVERT AND END SECTION
BACK FILL AND RIP RAP
CLASS A PATCH OVER NEW BOX CULVERT
SOUTH BOUND LANE BASE COURSE
SOUTH BOUND GUARD RAIL



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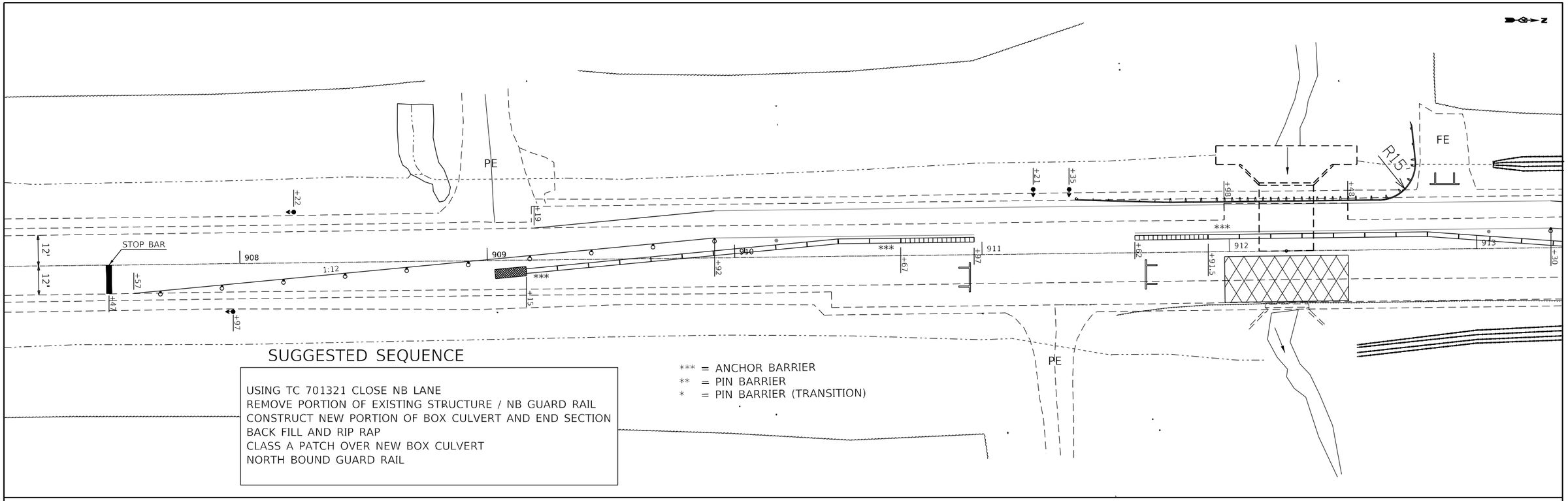
	DRAWN -	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 9/1/2022	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE 1
PLAN VIEW

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	20B-1	CRAWFORD	24	11
		CONTRACT NO. 74755		
	ILLINOIS	FED. AID PROJECT		

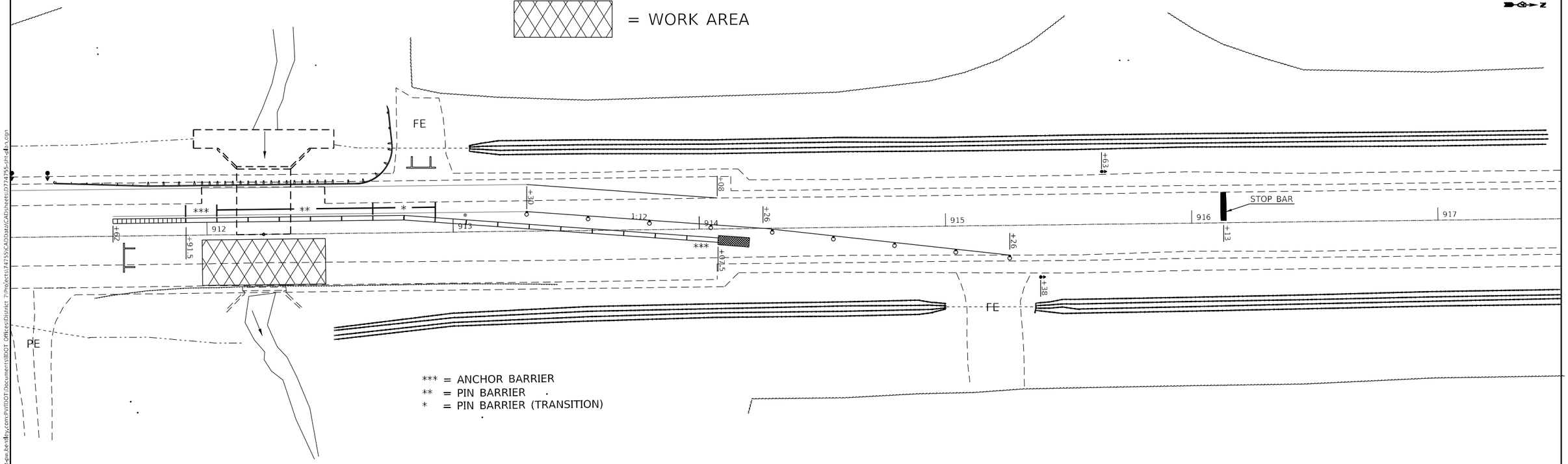


SUGGESTED SEQUENCE

USING TC 701321 CLOSE NB LANE
REMOVE PORTION OF EXISTING STRUCTURE / NB GUARD RAIL
CONSTRUCT NEW PORTION OF BOX CULVERT AND END SECTION
BACK FILL AND RIP RAP
CLASS A PATCH OVER NEW BOX CULVERT
NORTH BOUND GUARD RAIL

*** = ANCHOR BARRIER
** = PIN BARRIER
* = PIN BARRIER (TRANSITION)

= WORK AREA



*** = ANCHOR BARRIER
** = PIN BARRIER
* = PIN BARRIER (TRANSITION)

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	DRAWN -	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 9/1/2022	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE 2
PLAN VIEW

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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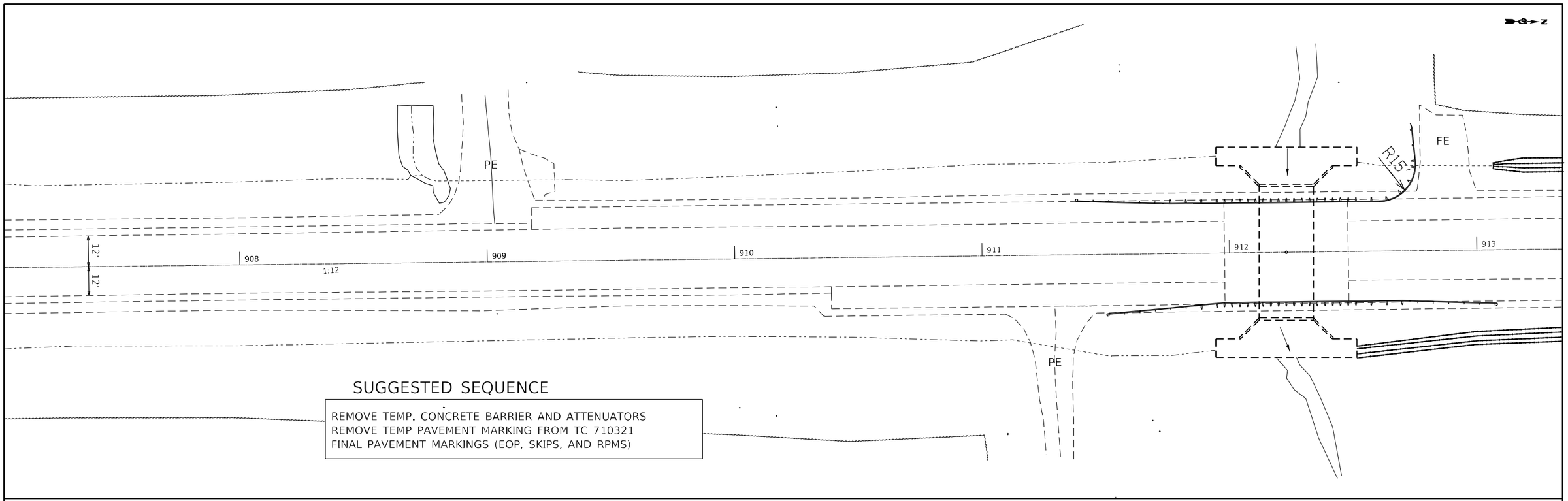
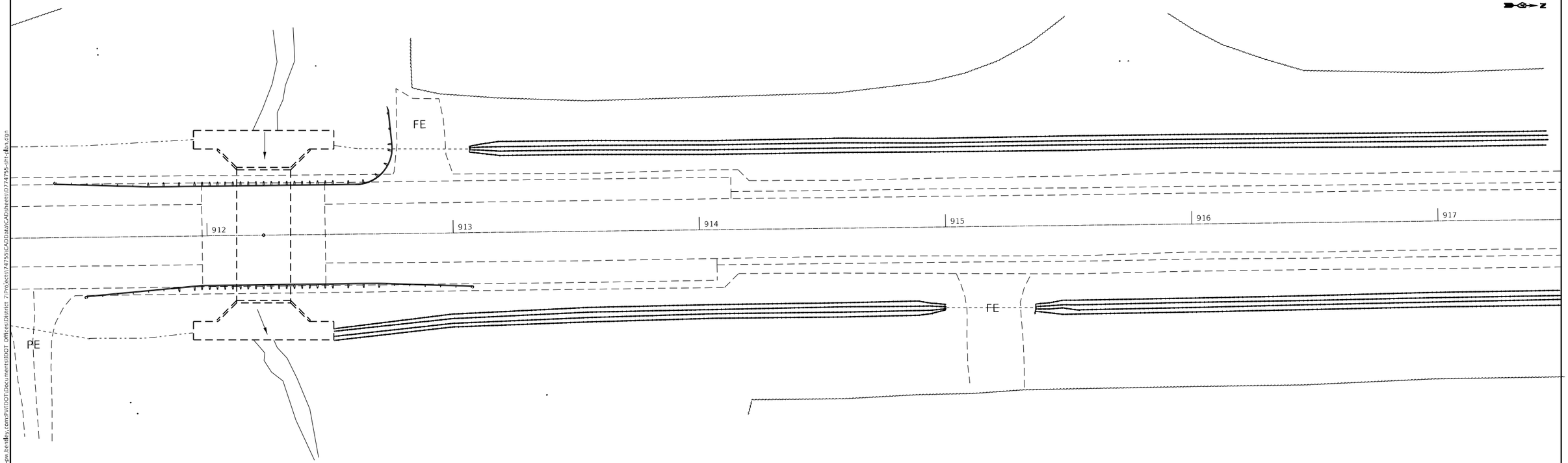
		CONTRACT NO. 74755		
	ILLINOIS	FED. AID PROJECT		



SUGGESTED SEQUENCE

REMOVE TEMP. CONCRETE BARRIER AND ATTENUATORS
REMOVE TEMP PAVEMENT MARKING FROM TC 710321
FINAL PAVEMENT MARKINGS (EOP, SKIPS, AND RPMS)



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USER NAME = Mona.Steffen	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 9/1/2022	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FINAL
PLAN VIEW

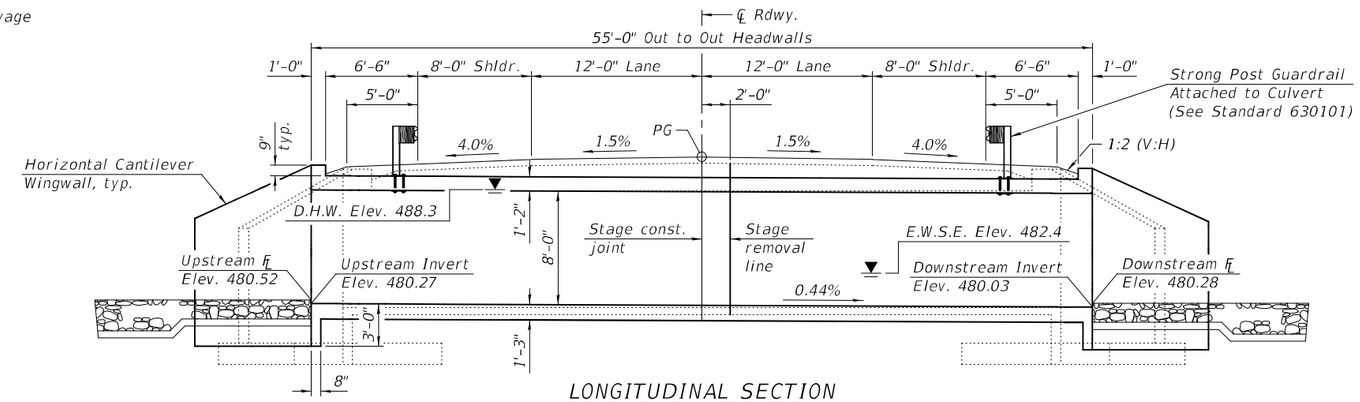
SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	20B-1	CRAWFORD	24	13
		CONTRACT NO. 74755		
	ILLINOIS	FED. AID PROJECT		

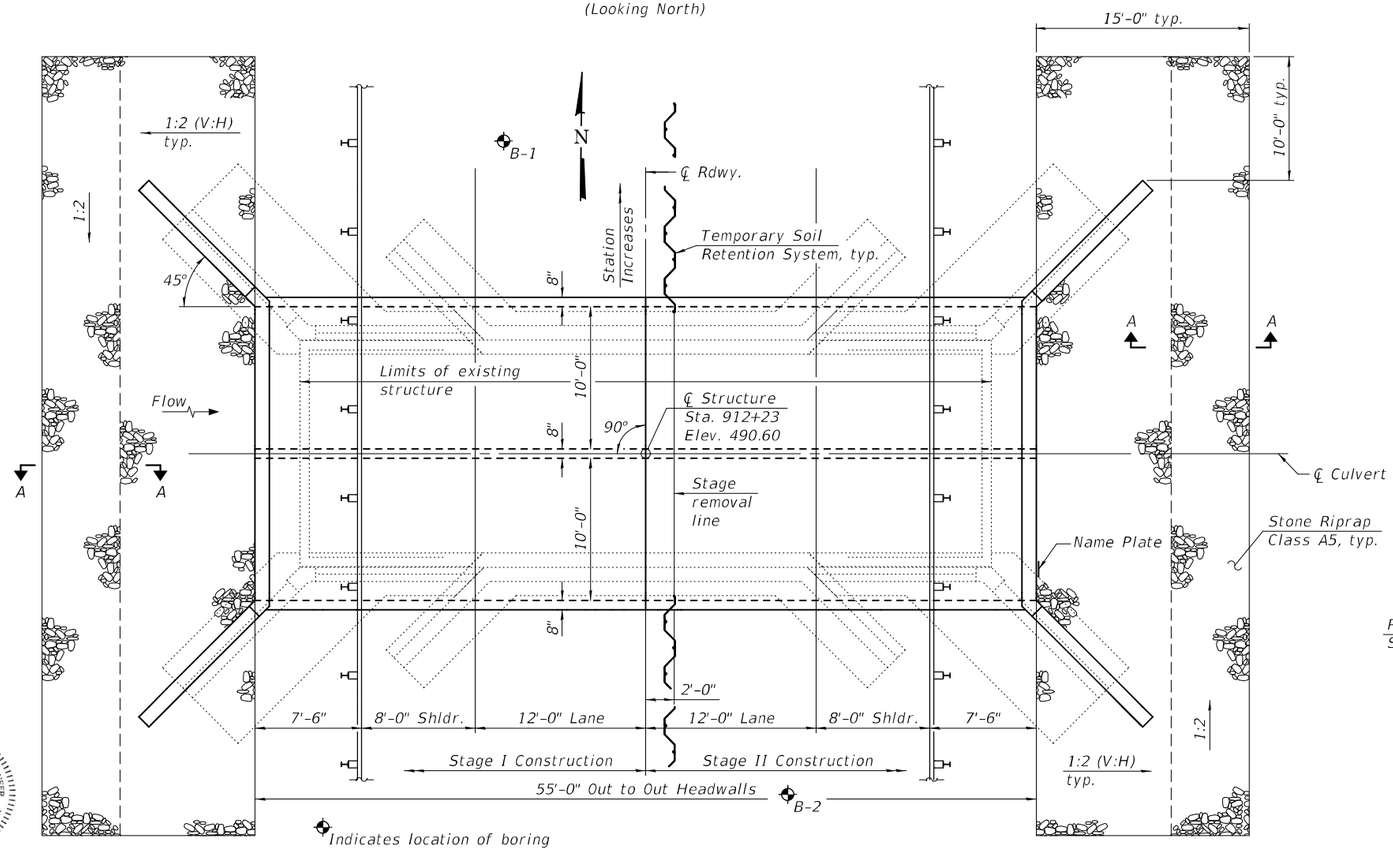
Bench Mark: BM 408 – Chiseled square on northwest wingwall of SN 017-0022
Station 912+31.8, Offset 24.3' Left, Elevation = 490.56.

Existing Structure: Structure No. 017-0022 was originally constructed in 1921 under S.B.I. Route 1, Section 20 at Station 912+23. The superstructure consists of a single span, 11½" thick reinforced concrete slab bridge with a 4" thick concrete wearing surface supported on closed abutments with wingwalls on spread footings at the north and south. In 1960 the structure was widened under S.B.I. Route 1, Section 20-BY-1. The structure was expanded from 20'-0" wide to 46'-4" wide and the wingwalls were removed and replaced. One lane of traffic will be maintained utilizing stage construction.

No Salvage



LONGITUDINAL SECTION
(Looking North)



PLAN

JAYME F. SCHIFF
081-005540
LICENSED STRUCTURAL ENGINEER
STATE OF ILLINOIS

EXPIRES 11-30-2022

DESIGN STRESSES

FIELD UNITS

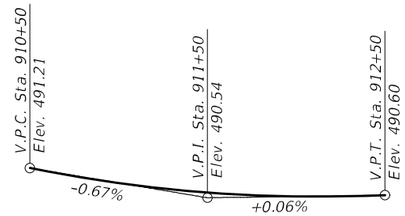
f'c = 3,500 psi (Concrete)
fy = 60,000 psi (Reinforcement)

LOADING HL-93

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

DESIGN SPECIFICATIONS

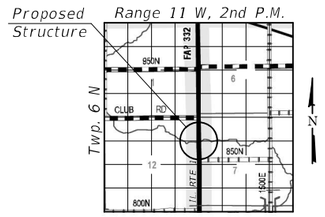
2020 AASHTO LRFD Bridge Design Specifications, 9th Edition



200' V.C.

PROFILE GRADE
(Along ℄ IL. Rte. 1)

INDEX OF SHEETS



LOCATION SKETCH

GENERAL PLAN & ELEVATION
IL. RTE. 1 OVER UNNAMED CREEK
F.A.P. RTE. 332 - SECTION 20B-1
CRAWFORD COUNTY
STATION 912+23
STRUCTURE NO. 017-2015

DESIGNED -	RYAN P. NEGANGARD	EXAMINED	DATE - 10-6-2022
CHECKED -	TIFFANY L. MEIER		ENGINEER OF BRIDGE DESIGN
DRAWN -	ANDRO R. SAMANIEGO	PASSED	ENGINEER OF BRIDGES AND STRUCTURES
CHECKED -	R.P.N. / T.L.M. / G.R.A.	REVISED -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET 1 OF 11 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	20B-1	CRAWFORD	24	14
		CONTRACT NO. 74755		
		ILLINOIS	FED. AID PROJECT	

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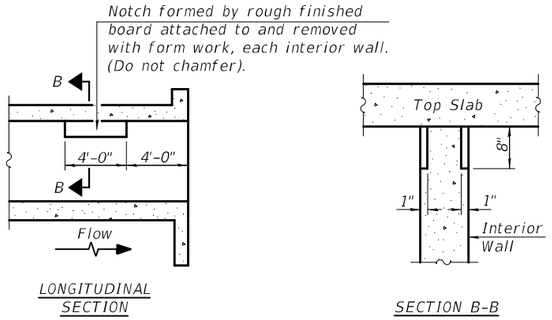


LONGITUDINAL SECTION

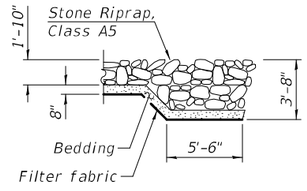
SECTION B-B

PHOEBE NESTING SITE DETAILS

(Downstream End Only)

STATION 912+23
BUILT 20 BY
STATE OF ILLINOIS
F.A.P. RTE. 332 SEC. 20B-1
LOADING HL-93
STRUCTURE NO. 017-2015

NAME PLATE
See Std. 515001



SECTION A-A

GENERAL NOTES

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

Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure. The Contractor shall sawcut the upper portion of the existing abutment at the stage removal line before Stage 1 removal to ensure the remaining portion will not be prematurely damaged.

Existing structure to be removed full depth within 2 feet of proposed culvert barrel and wingwall footing.

Precast alternate not allowed.

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Stone Riprap, Class A5	Sq. Yd.	220
Filter Fabric	Sq. Yd.	220
Removal of Existing Structures	Each	1
Concrete Superstructure	Cu. Yd.	11.2
Reinforcement Bars	Pound	27,680
Bar Splicers	Each	115
Name Plates	Each	1
Concrete Box Culverts	Cu. Yd.	170.2
Temporary Soil Retention System	Sq. Ft.	227
Geocomposite Wall Drain	Sq. Yd.	155
Strong Post Guardrail Attached to Culvert	Foot	50
Membrane Waterproofing System for Buried Structures	Sq. Yd.	155

WATERWAY INFORMATION

Drainage Area = 1.1 Sq. Mi.
Existing Overtopping Elev. 490.6 ft. at Sta. 912+50
Proposed Overtopping Elev. 490.6 ft. at Sta. 912+50

Flood	Freq. Yr.	Q C.F.S.	Opening Ft² Exist.	Opening Ft² Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	533	92	148	487.8	0.4	0.1	488.2	487.9
Design	50	893	102	160	488.3	1.2	0.5	489.5	488.8
Base	100	1060	102	160	488.5	1.6	0.8	490.1	489.3
Overtopping (Exist.)	120	1117	102	-	488.5	2.1	-	490.6	-
Scour Design Check	200	1234	102	160	488.6	2.2	1.3	490.8	489.9
Overtopping (Prop.)	310	1336	-	160	488.7	-	1.9	-	490.6
Max. Calc.	500	1480	102	160	489.0	2.1	1.9	491.1	490.9

10-Year outlet velocity from existing structure = 5.8 fps
10-Year outlet velocity from proposed structure = 3.6 fps

DESIGNED -	RYAN P. NEGANGARD	EXAMINED	
CHECKED -	TIFFANY L. MEIER		ENGINEER OF BRIDGE DESIGN
DRAWN -	ANDRO R. SAMANIEGO	PASSED	
CHECKED -	R.P.N. / T.L.M. / G.R.A.		ENGINEER OF BRIDGES AND STRUCTURES

DATE - OCTOBER 6, 2022
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DATA
STRUCTURE NO. 017-2015
SHEET 2 OF 11 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	20B-1	CRAWFORD	24	15
		CONTRACT NO. 74755		
		ILLINOIS	FED. AID PROJECT	

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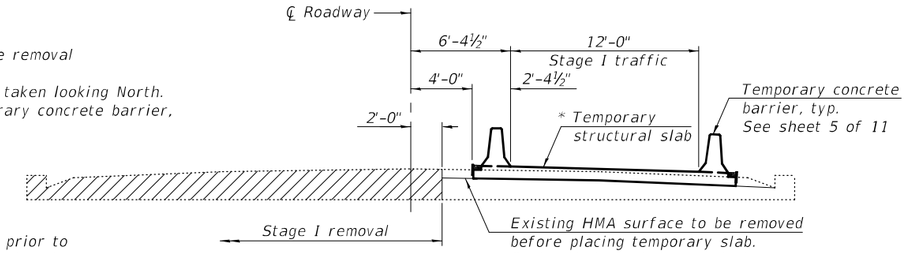
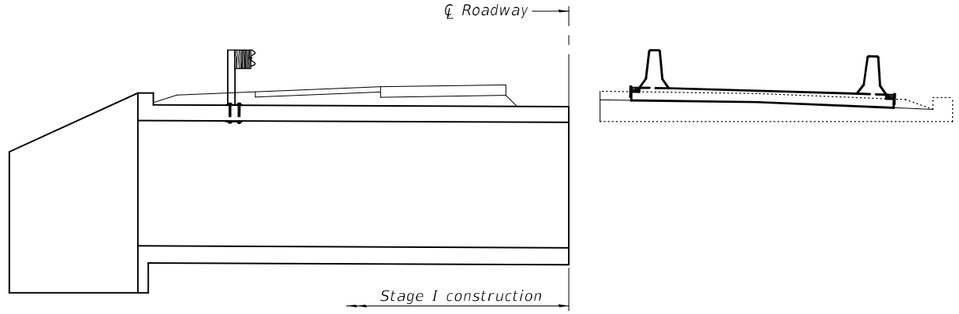
Notes:
Hatched areas indicate removal of existing structures.
All cross sections are taken looking North.
For quantity of temporary concrete barrier, see Roadway Plans.

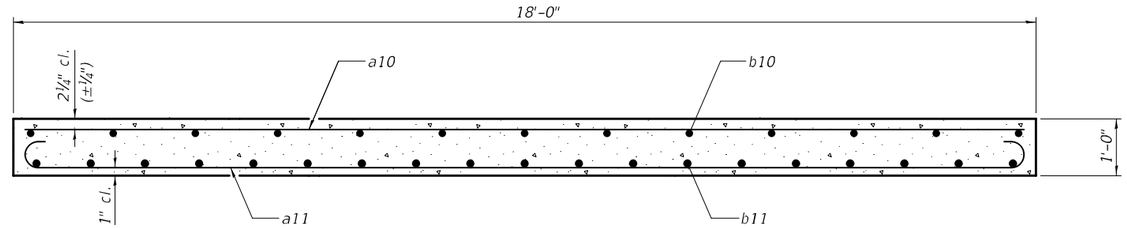


* Install temporary slab prior to saw cutting existing abutment at stage removal line.

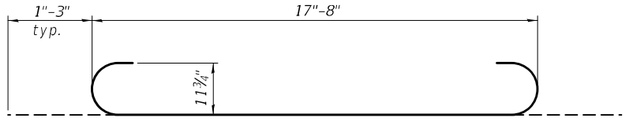
STAGE I REMOVAL



STAGE I CONSTRUCTION



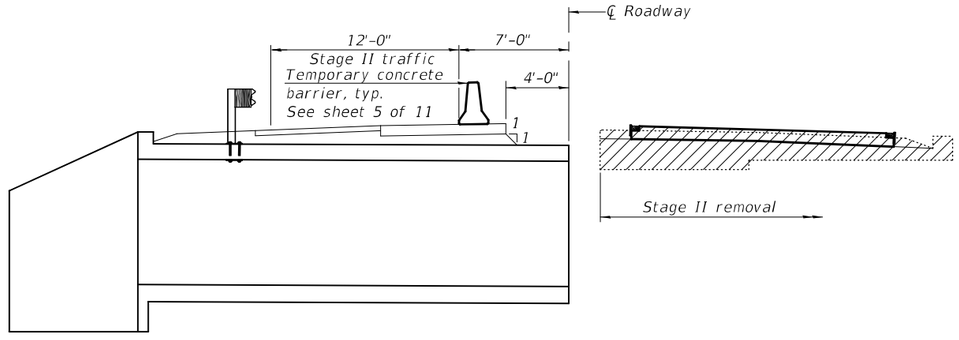
SECTION A-A



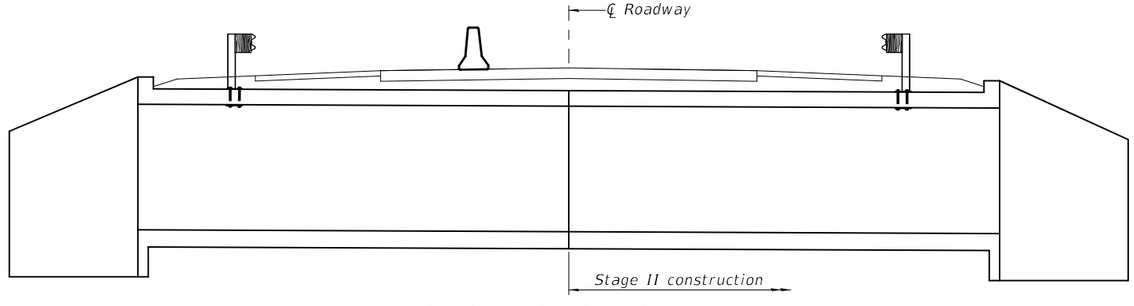
BAR a11

BILL OF MATERIAL

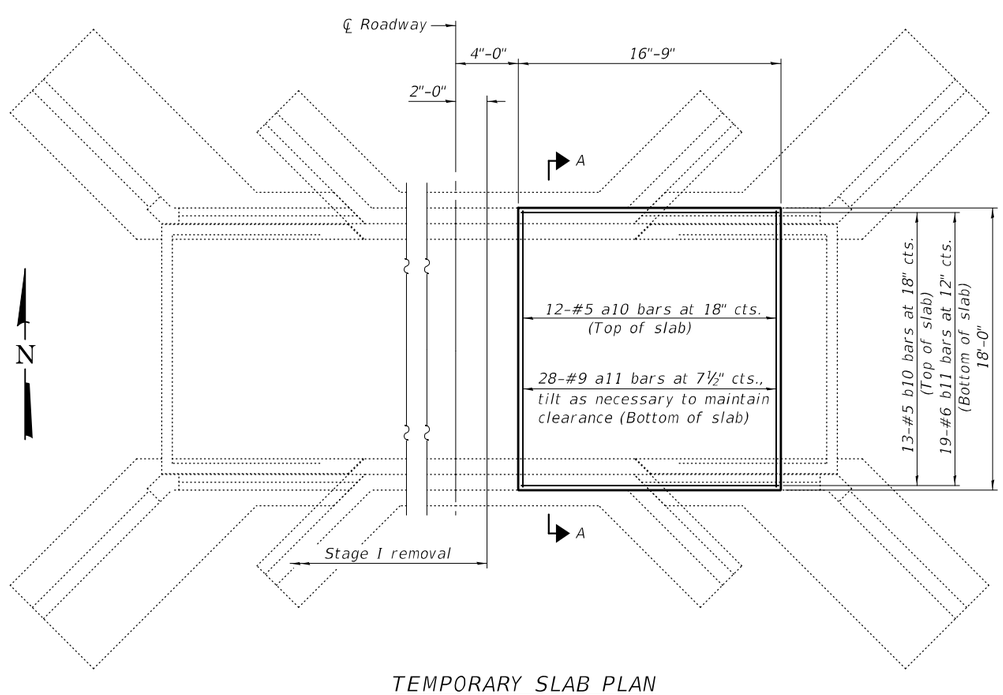
Bar	No.	Size	Length	Shape
a10	12	#5	17'-8"	
a11	28	#9	20'-2"	
b10	13	#5	16'-5"	
b11	19	#6	16'-5"	
Concrete Superstructure			Cu. Yd.	11.2
Reinforcement Bars			Pound	2,830



STAGE II REMOVAL



STAGE II CONSTRUCTION



TEMPORARY SLAB PLAN

DESIGNED	-	RYAN P. NEGANGARD	
CHECKED	-	TIFFANY L. MEIER	
DRAWN	-	ANDRO R. SAMANIEGO	
CHECKED	-	R.P.N. / T.L.M. / G.R.A.	

EXAMINED — ENGINEER OF BRIDGE DESIGN
PASSED — ENGINEER OF BRIDGES AND STRUCTURES
DATE - OCTOBER 6, 2022
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION DETAILS
STRUCTURE NO. 017-2015
SHEET 3 OF 11 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	20B-1	CRAWFORD	24	16
		CONTRACT NO. 74755		
	ILLINOIS	FED. AID PROJECT		

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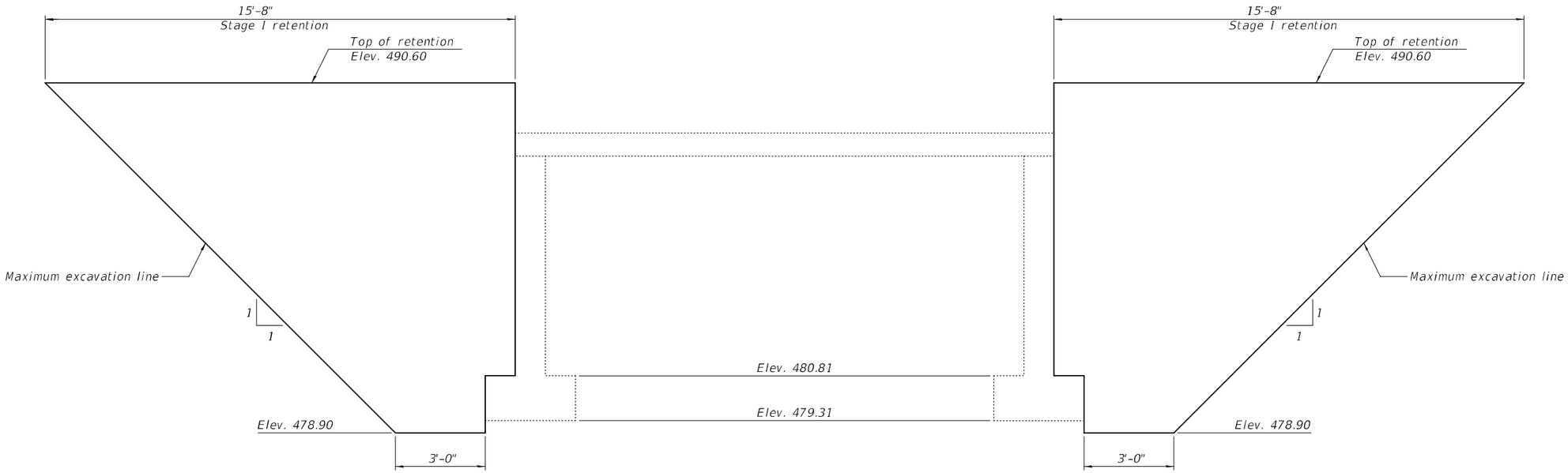
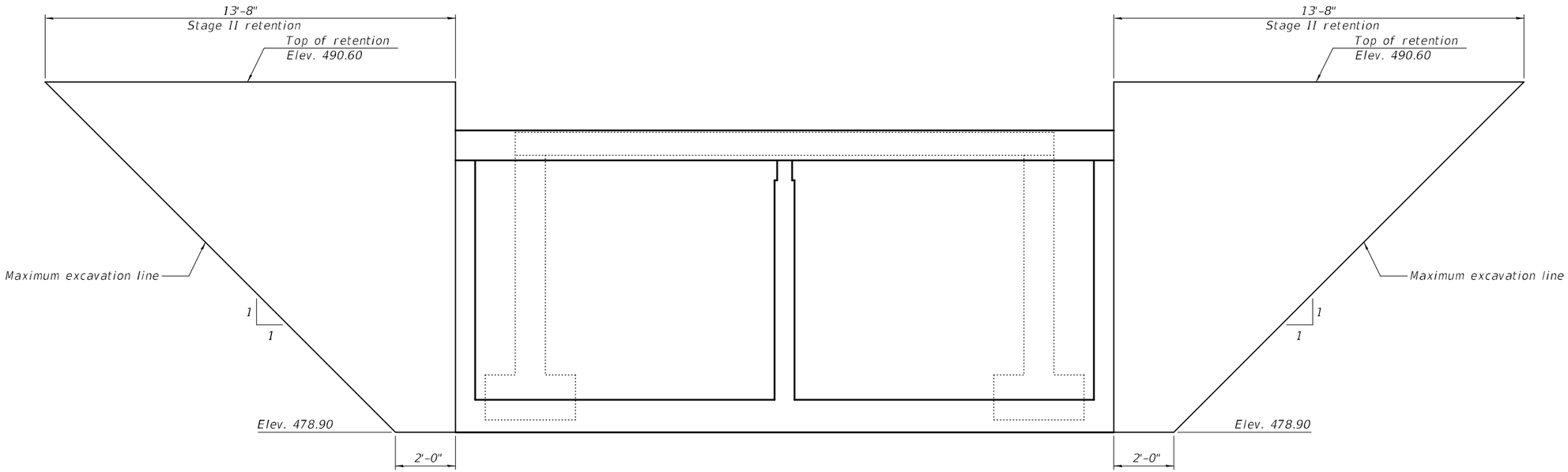


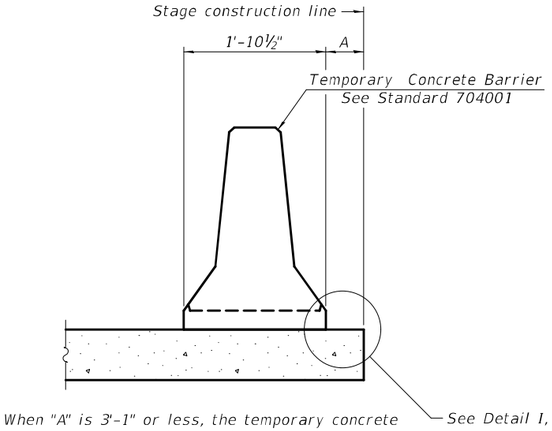
STAGE I SOIL RETENTION SYSTEM



STAGE II SOIL RETENTION SYSTEM

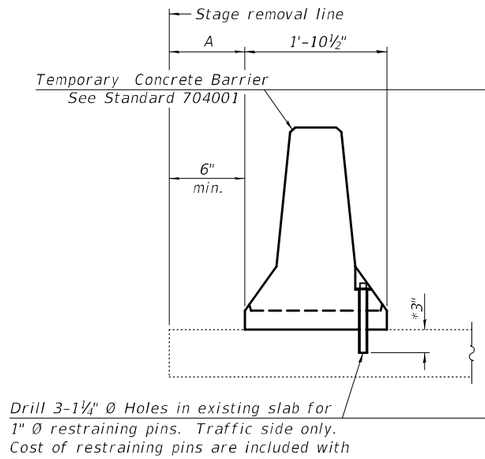
Note:
A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.

DESIGNED - RYAN P. NEGANGARD	EXAMINED	DATE - OCTOBER 6, 2022	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**TEMPORARY SOIL RETENTION SYSTEM STRUCTURE NO. 017-2015**	F.A.P. RTE. 332 · SECTION 20B-1 · COUNTY CRAWFORD · TOTAL SHEETS 24 · SHEET NO. 17
CHECKED - TIFFANY L. MEIER					CONTRACT NO. 74755
DRAWN - ANDRO R. SAMANIEGO	PASSED	REVISED -		SHEET 4 OF 11 SHEETS	ILLINOIS · FED. AID PROJECT
CHECKED - R.P.N. / T.L.M. / G.R.A.	Jayne F. Jaffe ENGINEER OF BRIDGE DESIGN	REVISED -			
10/7/2022 8:07:43 AM	Jayne F. Jaffe ENGINEER OF BRIDGES AND STRUCTURES				



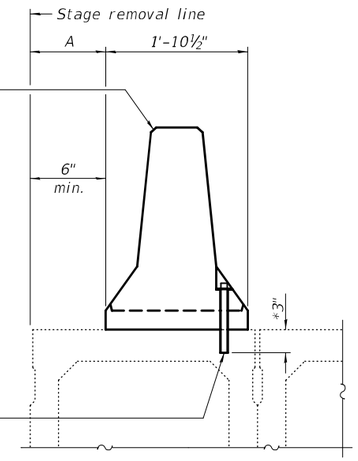
When "A" is 3'-1" or less, the temporary concrete barrier shall be restrained to the new slab according to Detail I, II or III. No restraint is required when "A" is greater than 3'-1".

NEW SLAB OR NEW DECK BEAM



Drill 3-1¼" 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".

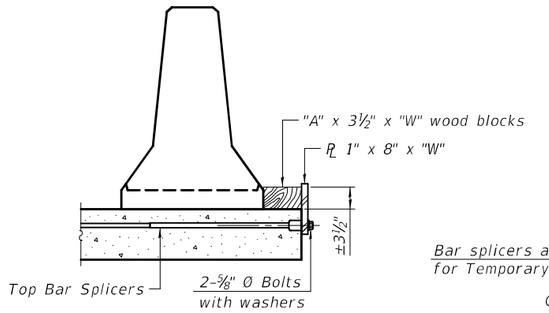
EXISTING SLAB



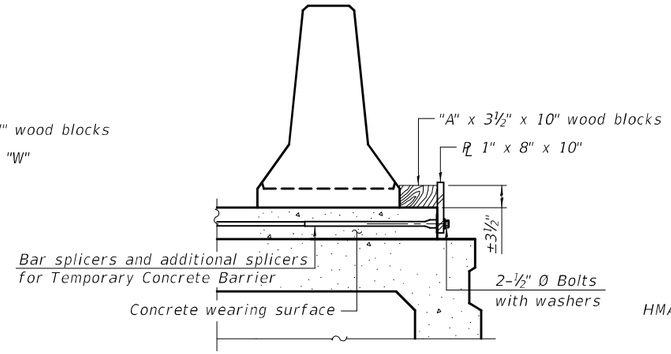
* When hot-mix asphalt wearing surface is present, embedment shall be 3" plus the wearing surface depth.

EXISTING DECK BEAM

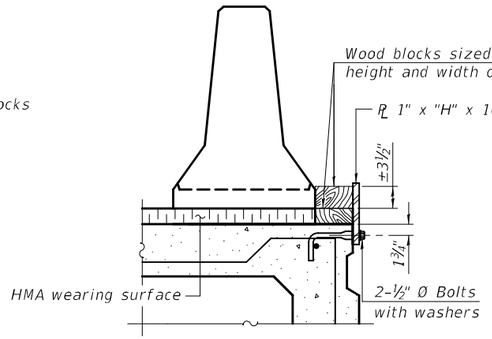
SECTIONS THRU SLAB OR DECK BEAM



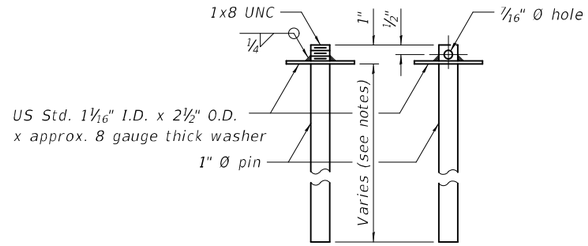
DETAIL I



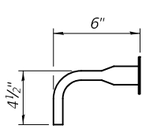
DETAIL II



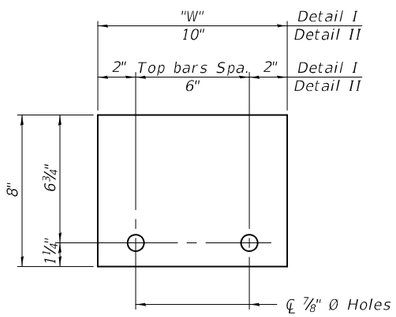
DETAIL III



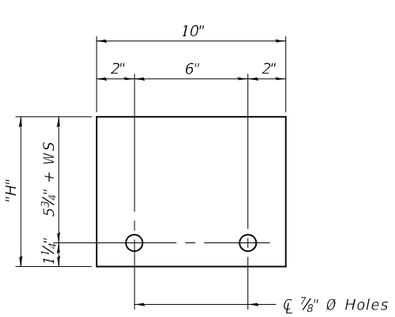
RESTRAINING PIN



BAR SPLICER FOR #4 BAR - DETAIL III



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



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

Notes:

Cost of retainer assembly is included with Temporary Concrete Barrier.

A retainer assembly shall be located at the approximate ℄ 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 1½", 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.

RAILING CRITERIA

NCHRP 350 Test Level	3
Railing Weight (plf)	440

R-27

10-12-2021

DESIGNED -	RYAN P. NEGANGARD	EXAMINED		DATE -	OCTOBER 6, 2022
CHECKED -	TIFFANY L. MEIER	PASSED	ENGINEER OF BRIDGE DESIGN ENGINEER OF BRIDGES AND STRUCTURES	REVISED -	
DRAWN -	ANDRO R. SAMANIEGO			REVISED -	
CHECKED -	R.P.N. / T.L.M. / G.R.A.				

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE BARRIER
STRUCTURE NO. 017-2015

SHEET 5 OF 11 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	20B-1	CRAWFORD	24	18
		CONTRACT NO. 74755		
		ILLINOIS	FED. AID PROJECT	

MODEL: 0172015-74755-005
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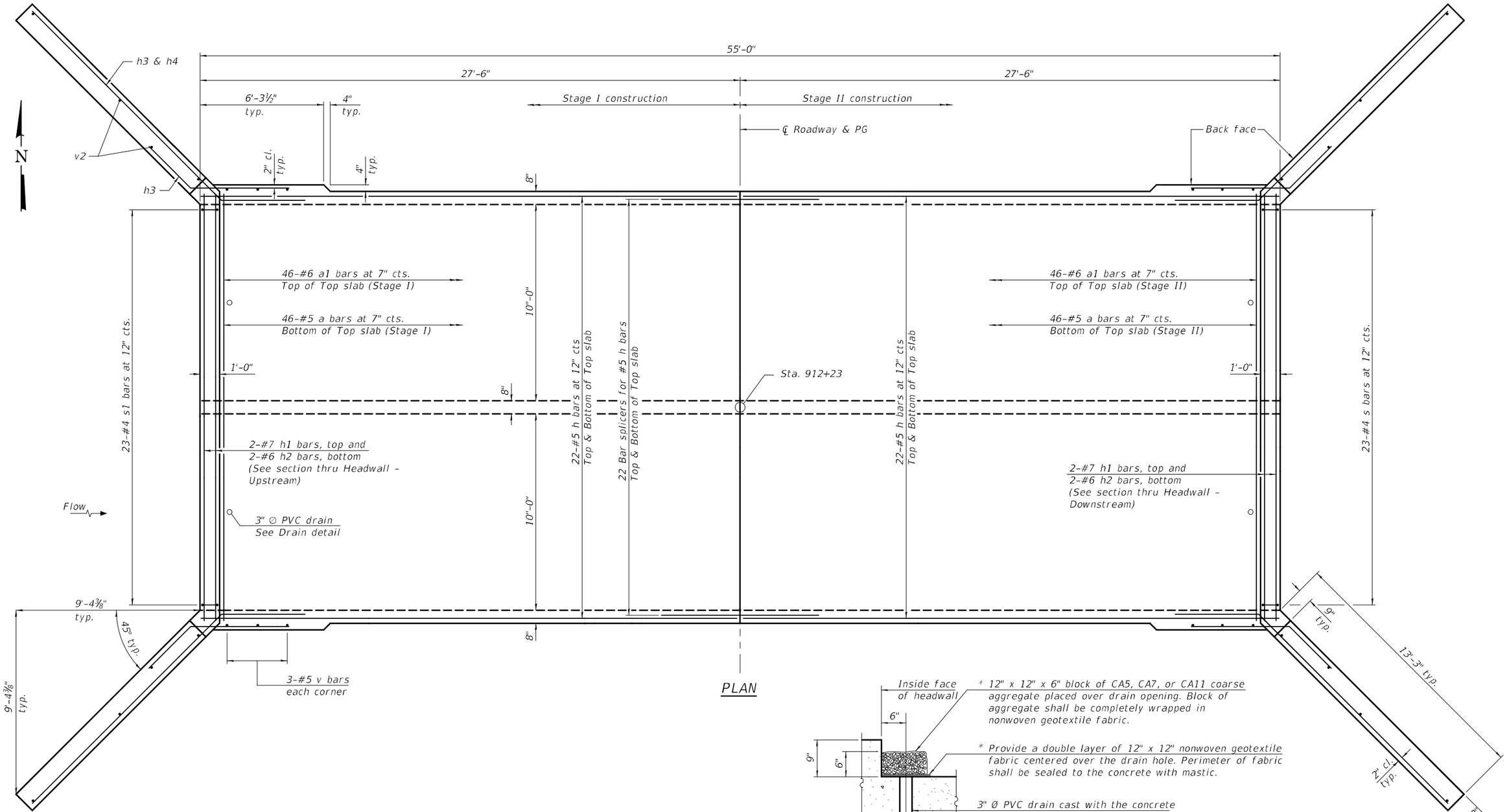

PLAN

Note:
See sheet 8 of 11 for Sections thru headwalls.

DRAIN DETAIL

(All costs associated with furnishing and constructing the above drain detail will not be measured for payment but shall be included in the contract unit price for the associated work.)

* Nonwoven geotextile fabric shall conform to the requirements of Article 1080.01 of the Standard Specifications. The minimum weight of the fabric shall be 6 ounces per square yard.

DESIGNED - RYAN P. NEGANGARD	EXAMINED	DATE - OCTOBER 6, 2022	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**CULVERT DETAILS - TOP SLAB STRUCTURE NO. 017-2015**	F.A.P. RTE. 332 / SECTION 20B-1 / COUNTY CRAWFORD / TOTAL SHEETS 24 / SHEET NO. 19
CHECKED - TIFFANY L. MEIER					CONTRACT NO. 74755
DRAWN - ANDRO R. SAMANIEGO	PASSED	REVISED -		SHEET 6 OF 11 SHEETS	ILLINOIS / FED. AID PROJECT
CHECKED - R.P.N. / T.L.M. / G.R.A.	ENGINEER OF BRIDGE DESIGN	REVISED -			
10/7/2022 8:07:44 AM	ENGINEER OF BRIDGES AND STRUCTURES				

MODEL: 017201S-74755-006
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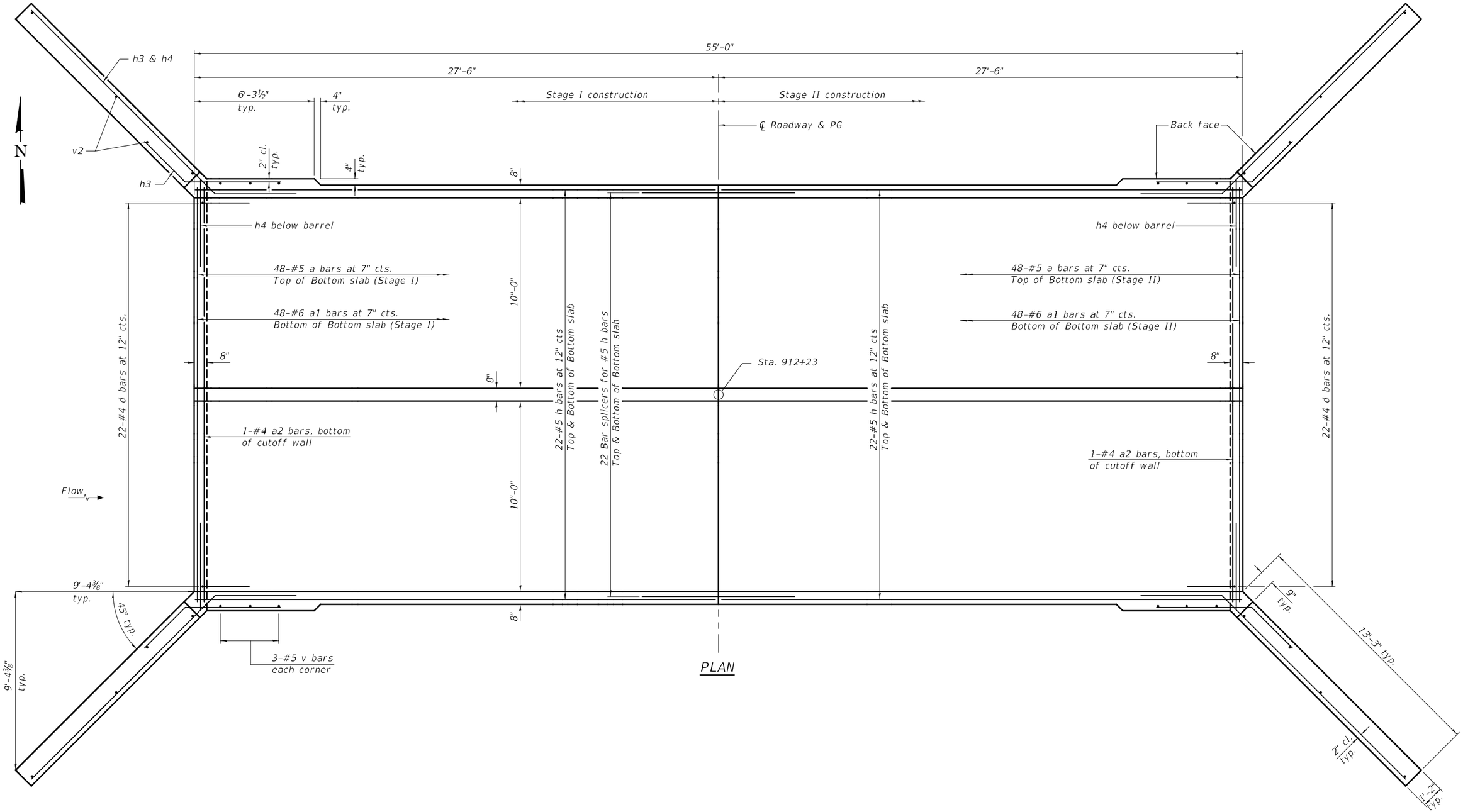

PLAN

DESIGNED - RYAN P. NEGANGARD	EXAMINED	DATE - OCTOBER 6, 2022	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**CULVERT DETAILS - BOTTOM SLAB STRUCTURE NO. 017-2015**	F.A.P. RTE.	SECTION	COUNTY / TOTAL SHEETS / SHEET NO.
CHECKED - TIFFANY L. MEIER		REVISED -			332	20B-1	CRAWFORD / 24 / 20
DRAWN - ANDRO R. SAMANIEGO	PASSED	REVISED -		SHEET 7 OF 11 SHEETS			CONTRACT NO. 74755
CHECKED - R.P.N. / T.L.M. / G.R.A.							ILLINOIS / FED. AID PROJECT

Jayne F. Schaff
ENGINEER OF BRIDGE DESIGN
Jayne F. Schaff
ENGINEER OF BRIDGES AND STRUCTURES

MODEL: 0172015-74755-007
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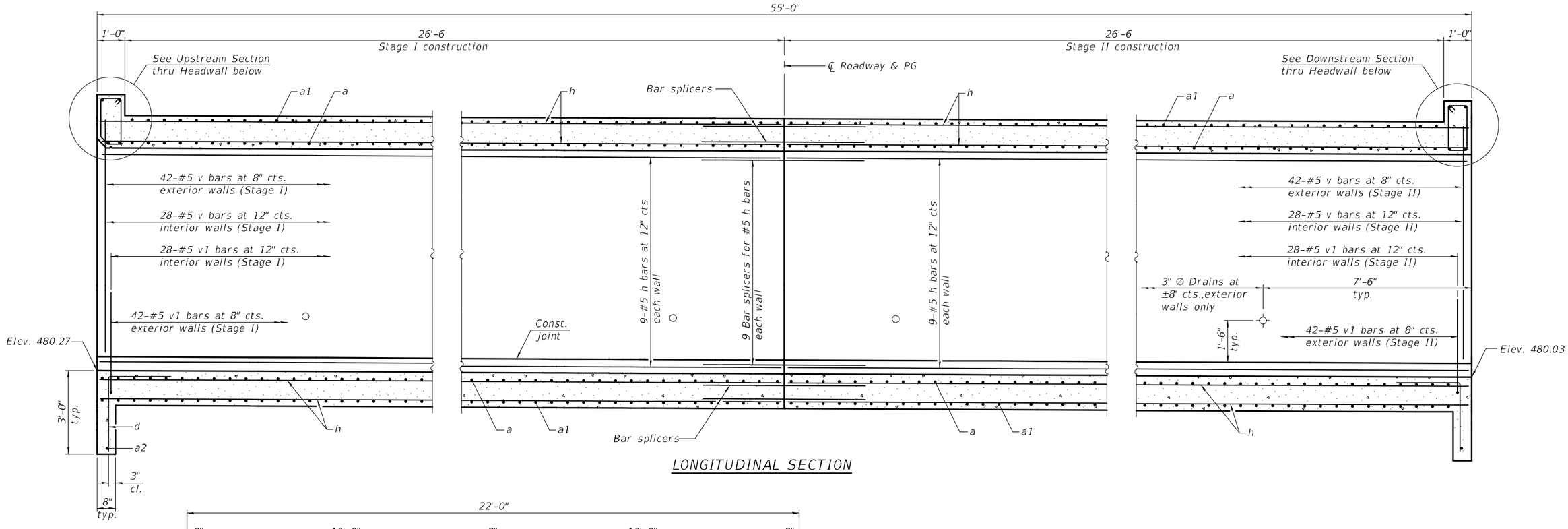
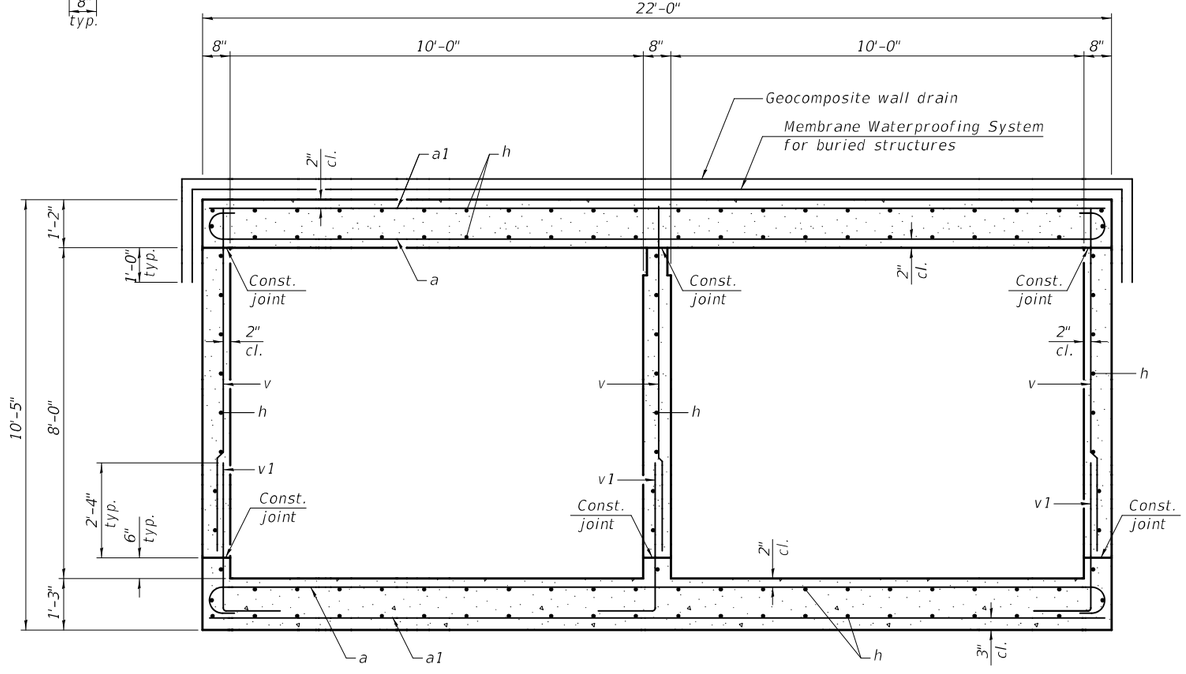
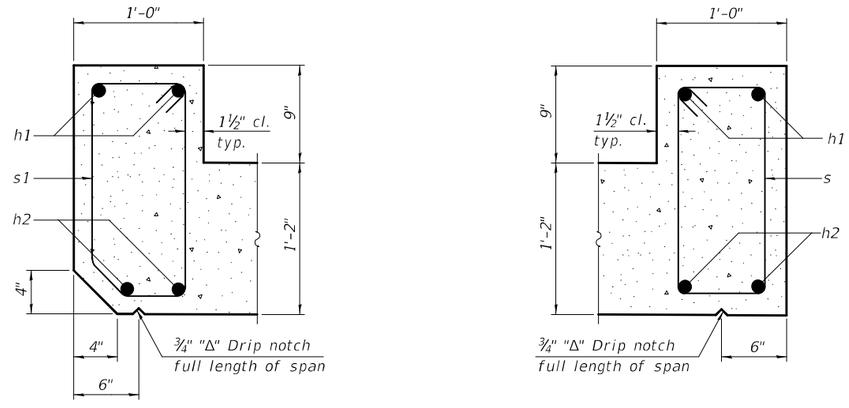


LONGITUDINAL SECTION



SECTION THRU BARREL



SECTION THRU HEADWALL

Note:
At the contractors option, a longer v1 bar may be ordered to replace the v bar. No reduction in quantities shall be made for this substitution.

DESIGNED - RYAN P. NEGANGARD	EXAMINED		DATE - OCTOBER 6, 2022	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**CULVERT DETAILS STRUCTURE NO. 017-2015**	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - TIFFANY L. MEIER						332	20B-1	CRAWFORD	24	21
DRAWN - ANDRO R. SAMANIEGO	PASSED	Jayne F. Schaff ENGINEER OF BRIDGE DESIGN	REVISED -		SHEET 8 OF 11 SHEETS			CONTRACT NO. 74755		
CHECKED - R.P.N. / T.L.M. / G.R.A.		Jayne F. Schaff ENGINEER OF BRIDGES AND STRUCTURES	REVISED -					ILLINOIS	FED. AID PROJECT	

MODEL: 017-2015-74755-008
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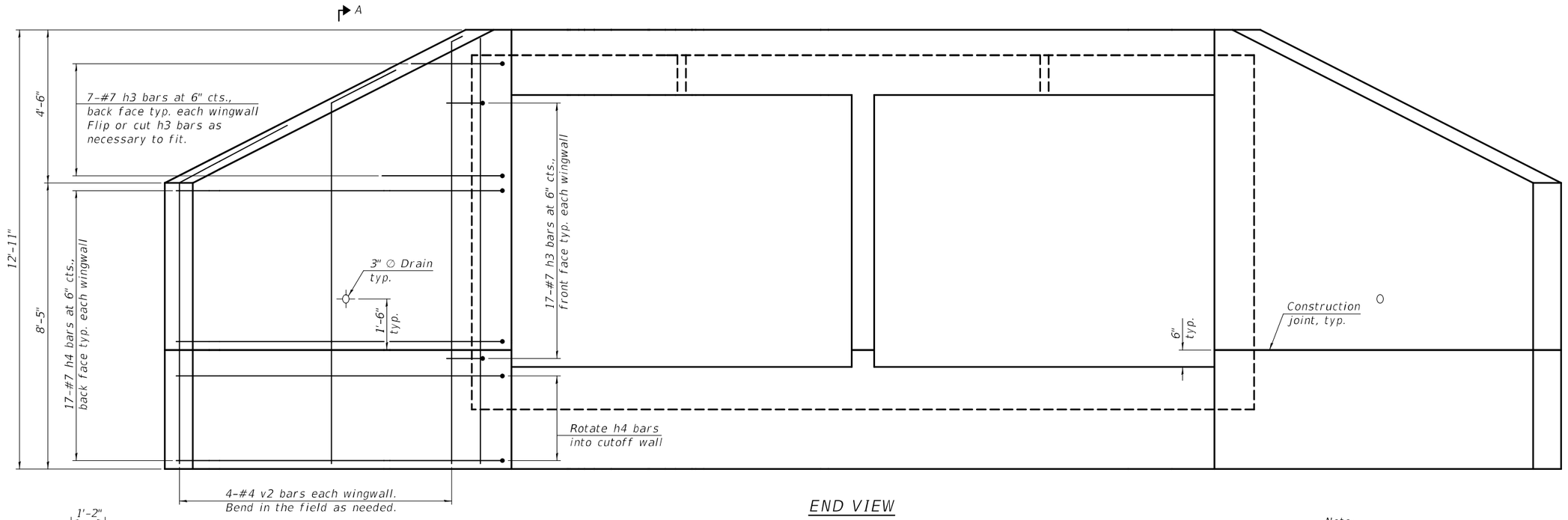
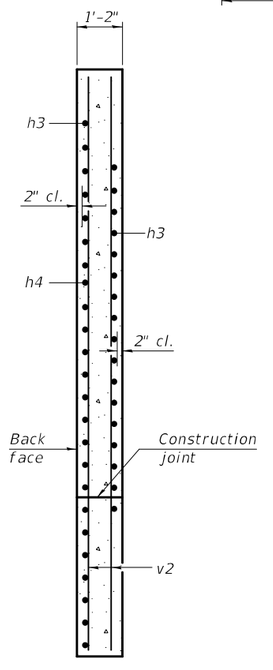
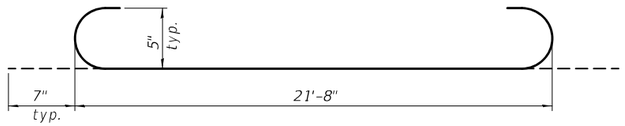


END VIEW

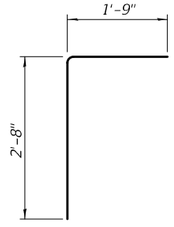
Note:
A distance of half the length of the wingwall, but not less than six feet of the barrel, shall be poured monolithically with the wingwalls.



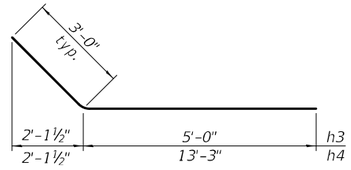
SECTION A-A



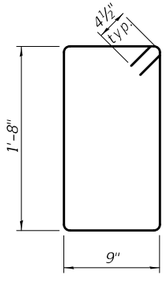
BAR a



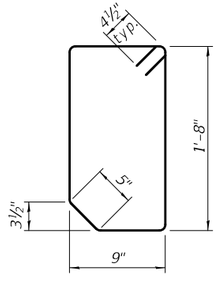
BAR d



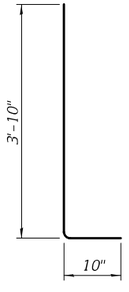
BARS h3 & h4



BAR s



BAR s1



BAR v1

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a	188	#5	22'-10"	
a1	188	#6	21'-8"	
a2	2	#4	21'-8"	
d	44	#4	4'-5"	
h	230	#5	27'-2"	
h1	4	#7	21'-8"	
h2	4	#6	21'-8"	
h3	96	#7	8'-0"	
h4	68	#7	16'-3"	
s	23	#4	5'-7"	
s1	23	#4	5'-5"	
v	236	#5	8'-4"	
v1	224	#5	4'-8"	
v2	16	#4	12'-7"	
Concrete Box Culverts			Cu. Yds.	170.2
Reinforcement Bars			Pound	24,850

DESIGNED -	RYAN P. NEGANGARD	EXAMINED		DATE -	OCTOBER 6, 2022	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CULVERT DETAILS STRUCTURE NO. 017-2015	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED -	TIFFANY L. MEIER	PASSED		REVISED -			SHEET 9 OF 11 SHEETS	332	20B-1	CRAWFORD	24	22
DRAWN -	ANDRO R. SAMANIEGO			REVISED -						CONTRACT NO. 74755		
CHECKED -	R.P.N. / T.L.M. / G.R.A.									ILLINOIS	FED. AID PROJECT	

ENGINEER OF BRIDGE DESIGN

ENGINEER OF BRIDGES AND STRUCTURES

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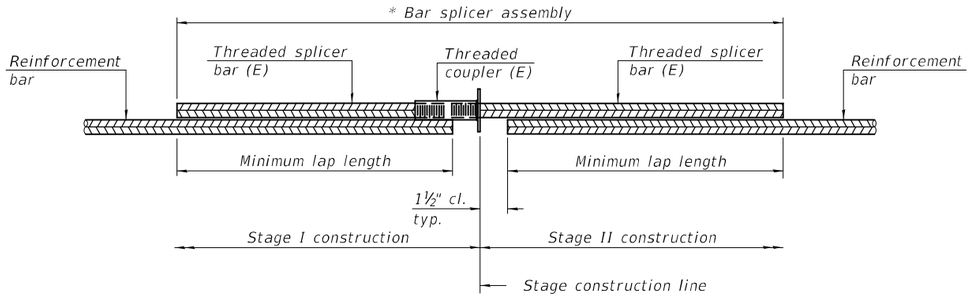


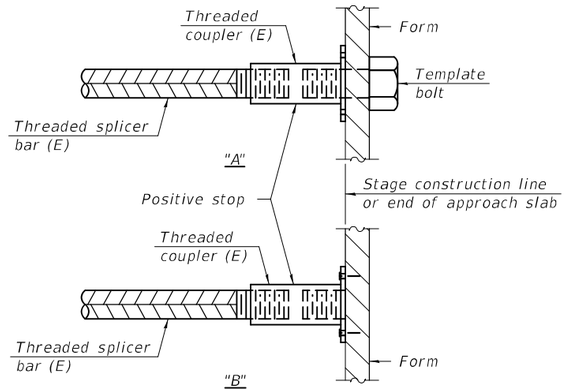
STANDARD BAR SPLICER ASSEMBLY PLAN

(All components shall be provided from one supplier)

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

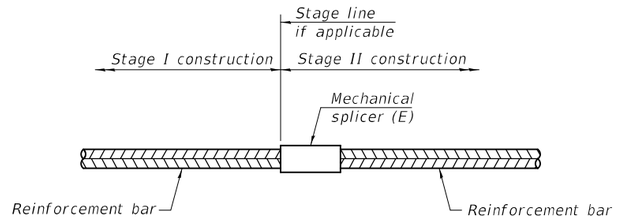
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Top of slab	5	44	2'-2"
Walls	5	27	2'-9"
Bottom of slab	5	44	2'-2"



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

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.

BSD-1 1-1-2020

DESIGNED - RYAN P. NEGANGARD	EXAMINED	DATE - OCTOBER 6, 2022	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
CHECKED - TIFFANY L. MEIER		REVISED -	
DRAWN - ANDRO R. SAMANIEGO	PASSED	REVISED -	
CHECKED - R.P.N. / T.L.M. / G.R.A.	ENGINEER OF BRIDGE DESIGN / ENGINEER OF BRIDGES AND STRUCTURES		

BAR SPLICER ASSEMBLY & MECHANICAL SPLICER DETAILS
STRUCTURE NO. 017-2015
SHEET 10 OF 11 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	20B-1	CRAWFORD	24	23
		CONTRACT NO. 74755		
	ILLINOIS	FED. AID PROJECT		

MODEL: 017-2015-74755-010
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Illinois Department of Transportation
Division of Highways
IDOT D7

SOIL BORING LOG

Page 1 of 1

Date 7/15/19

ROUTE FAP 332 (IL 1) DESCRIPTION Abutment LOGGED BYE. Sandschafer

SECTION 20B-1 LOCATION IL 1 over Unnamed Stream, SEC. 12, TWP. 6N, RNG. 12W, 2nd PM, Latitude N 38.981448, Longitude W 87.684773

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

STRUCT. NO. 017-0022 (E) 017-2015 (P)
Station 912+23

BORING NO. 1 (North)
Station 912+45
Offset 10,0 ft West
Ground Surface Elev. 490.45 ft

Surface Water Elev. 481.68 ft
Stream Bed Elev. 481.66 ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion 472.5 ft
After 24 Hrs. 483.0 ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
9-½" Asphalt over 10-¼" Concrete			
488.85			
Medium, moist, brown, SILTY CLAY	2		
	2	0.7	24
	3	B	
485.95			
-5 Soft, moist, grey, SILTY LOAM	1		
	2	0.5	26
	2	B	
483.45			
Soft, moist, brown, SANDY LOAM ▽	1		
	0	0.3	19
	1	B	
480.95			
-10 Stiff, moist, brown with black streaks, CLAY	2		
	2	1.2	18
	3	B	
Brown marbled with black specks	2		
	3	1.3	16
	3	B	
475.95			
-15 Very stiff, moist, brown, SANDY CLAY Till	11		
	21	3.2	8
	26	S	
473.45			
Hard, moist, grey poker chipped, CLAY LOAM Till ▽	16		
	21	4.5	8
	24	P	
470.45-20	12		

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
469.45	14	7.4	9
	18	B	
Benchmark: BM 408 Cut square on top of NW wingwall of Structure No. 017-0022, Sta. 912+35, 24' LT. End of Boring			
-25			
-30			
-35			
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206), WH-Weight of Hammer, NT-Not Tested.

BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
IDOT D7

SOIL BORING LOG

Page 1 of 1

Date 7/15/19

ROUTE FAP 332 (IL 1) DESCRIPTION Abutment LOGGED BYE. Sandschafer

SECTION 20B-1 LOCATION IL 1 over Unnamed Stream, SEC. 12, TWP. 6N, RNG. 12W, 2nd PM, Latitude N 38.981280, Longitude W 87.684715

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

STRUCT. NO. 017-0022 (E) 017-2015 (P)
Station 912+23

BORING NO. 2 (South)
Station 911+99
Offset 10,0 ft East
Ground Surface Elev. 490.46 ft

Surface Water Elev. 481.68 ft
Stream Bed Elev. 481.66 ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion 480.5 ft
After 24 Hrs. 483.0 ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
6-1/8" Asphalt over 9-1/2" Concrete			
489.16			
Grey, SILTY LOAM			
Stiff, moist	3		
	3	1.9	19
	3	B	
-5	3		
	3	1.2	19
	6	S	
483.26			
Medium, moist, grey, SANDY LOAM ▽	5		
	4	0.5	15
	3	S	
480.96			
-10 Stiff, moist, brown, CLAY ▽	2		
	3	1.4	18
	4	B	
477.96	2		
Very soft, moist, brown, SILTY LOAM 477.16	2	4.5	10
	10	P	
Hard, moist, brown, CLAY LOAM Till			
-15	13		
	18	5.7	9
	24	S	
	12		
	22	5.9	9
	30	S	
470.46-20	15		

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Grey 469.46	19	7.2	7
	20	B	
Benchmark: BM 408 Cut square on top of NW wingwall of Structure No. 017-0022, Sta. 912+35, 24' LT. End of Boring			
-25			
-30			
-35			
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206), WH-Weight of Hammer, NT-Not Tested.

BBS, form 137 (Rev. 8-99)

DESIGNED - RYAN P. NEGANGARD	EXAMINED		DATE - OCTOBER 6, 2022	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SOIL BORING LOGS STRUCTURE NO. 017-2015	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - TIFFANY L. MEIER						332	20B-1	CRAWFORD	24	24
DRAWN - ANDRO R. SAMANIEGO	PASSED	ENGINEER OF BRIDGE DESIGN	REVISED -		SHEET 11 OF 11 SHEETS			CONTRACT NO. 74755		
CHECKED - R.P.N. / T.L.M. / G.R.A.		ENGINEER OF BRIDGES AND STRUCTURES	REVISED -					ILLINOIS	FED. AID PROJECT	

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