01-21-2022 LETTING ITEM 045

STATE OF ILLINOIS

COUNTY SHEETS NO.

(15BY)BR LAWRENCE 38 1

FOR INDEX OF SHEETS, SEE SHEET NO. 2

DEPARTMENT OF TRANSPORTATION

ADT YEAR 2019 - 2200

STATION EQUATION

 \bigcirc

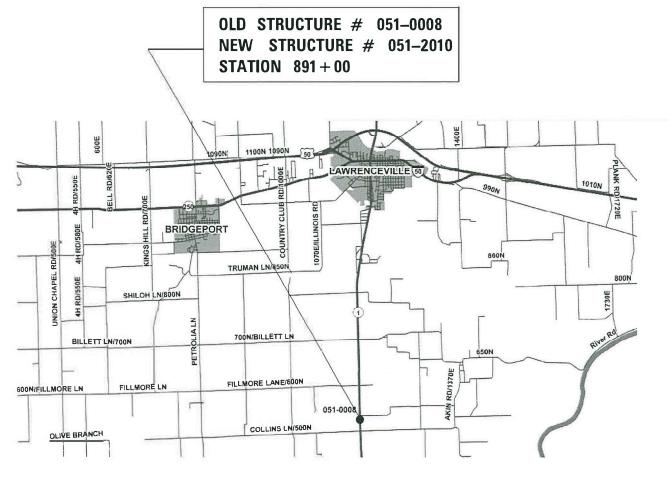
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STA. 889 + 67.2 BK = STA. 890 + 00 AH

PROPOSED HIGHWAY PLANS

F.A.P. 332 (IL ROUTE 1)
SECTION (15BY)BR
PROJECT NHPP-8JWU(669)
BRIDGE REPLACEMENT
LAWRENCE COUNTY
C-97-086-18



GROSS LENGTH = 800 FT. = 0.15 MILE NET LENGTH = 800 = 0.15 MILE

CONTRACT NO. 74860

1-800-892-0123 OR 811

ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS

ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS

PROJECT MANAGER: MYRA OLTMAN 217–342–8246

217-342-8360

PROJECT ENGINEER: BRIAN LEWIS

100 FT. = 0.15 MILE = 0.15 MILE TO DAVIESS STEPHENSON WONDERAGO BOONE MC HENRY LAKE

CANDOLL

OCLE

DE YALS

KANE

DL PACE

FORD

NUTLESDE

LEE

DE YALS

KANE

DL PACE

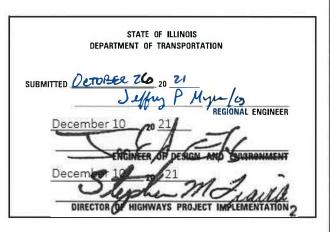
CANGULE

OCLE

NUTLESDE

NUTL

D-97-047-18



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REV. - MS

GENERAL NOTES

THE WORK INCLUDED IN THIS SECTION CONSISTS OF COMPLETE REMOVAL OF THE EXISTING STRUCTURE #051-0008, ON FAP ROUTE 332 (IL ROUTE 1) AND REPLACEMENT WITH A CAST IN PLACE TRIPLE 10'X10' BOX CULVERT STRUCTURE # 051-2010, PCC SHOULDER WIDENING, PCC PAVEMENT, GUARDRAIL REMOVAL AND REPLACEMENT, RELOCATION OF FIELD ENTRANCE, PIPE CULVERT REPLACEMENT INCLUDING FLARED END SECTIONS, PAINT PAVEMENT MARKING, SEEDING, EROSION CONTROL, AND ANY OTHER WORK NECESSARY TO COMPLETE THIS SECTION. STAGE CONSTRUCTION WILL BE UTILIZED.

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

PAINT PAVEMENT MARKING LINE - 4" SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARDS, AS SHOWN IN THE PLANS, AND AS DETERMINED BY THE ENGINEER. THE TOTAL QUANTITY CALCULATED CONSISTS OF 775 FEET OF YELLOW AND 1934 FEET OF WHITE.

INDEX OF SHEETS

SHEET NO.	TITLE
1	COVER SHEET
2	GENERAL NOTES, INDEX OF SHEETS
3-4	SUMMARY OF QUANTITIES
5	TYPICAL SECTION
6	GUARDRAIL DETAILS, SCHEDULE & SCHEDULE OF QUANTITIES
7	PLAN SHEET
8	SEQUENCE OF OPERATONS
9-10	STAGE CONSTRUCTION DETAILS
11	RURAL RECONSTRUCTION ENTRANCE DETAILS AND SCHEDULE
12-15	PAVEMENT MARKING DETAILS

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

16-25 STRUCTURE REPLACEMENT PLAN SHEETS

26-38 CROSS SECTION SHEETS

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
420101-07	24' JOINTED PCC PAVEMENT
515001-04	NAME PLATE FOR BRIDGES
542401-04	METAL FLARED END SECTION FOR PIPE CULVERTS
630001-12	STEEL PLATE BEAM GUARDRAIL
630101-10	STRONG POST GUARDRAIL ATTACHED TO CULVERTS
630201-07	PCC/HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
701001-02	OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY
701006-05	OFF-ROAD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
701201-05	LANE CLOSURE, 2L, 2W, DAY ONLY FOR SPEEDS \geq 45 MPH
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701321-18	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
701901-08	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
780001-05	TYPICAL PAVEMENT MARKINGS
782006-01	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS
406201-01	MAILBOX TURNOUT
630301-09	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY

REV. - MS

USER NAME = steffenmk	DESIGNED	REVISED =		GENERAL NOTES, INDEX OF SHEETS			F.A.P.	SECTION	COUNTY TOTAL SHEET		
	DRAWN	REVISED =	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	AND HIGHWAY STANDARDS				332	(15BY)BR	LAWRENCE 38 2	
PLOT SCALE = 40.0000 ' / in.	CHECKED	REVISED -		AND HIGHWAY STANDANDS			JS			CONTRACT NO.74860	
PLOT DATE = 10/21/2021	DATE	REVISED -		SCALE:	SHEET	OF	SHEETS STA.	TO STA.		ILLINOIS FED. A	D PROJECT

80% FED 20% STATE

80% FED 20% STATE

				CON	TRUCTION TYPE CODE					CONS	TRUCTION TYPE CODE
	SUMMARY OF QUANTITIES	l	TOTAL	0010		T	SUMMARY OF QUANTITIES	l	TOTAL	0010	
CODE NO	ITEM	UNIT	QUANTITIES			CODE NO	ITEM	UNIT	QUANTITIES		
20200100	EARTH EXCAVATION	CU YD	1098	1098		_		l			
						50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1	1	
20400800	FURNISHED EXCAVATION	CU YD	179	179							
						50105220	PIPE CULVERT REMOVAL	FOOT	66	66	
21101505	TOPSOIL EXCAVATION AND PLACEMENT	CU YD	518	518							
						50200450	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	260	260	
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	268	268			FOR STRUCTURES				
										İ	
28000305	TEMPORARY DITCH CHECKS	FOOT	176	176		50800105	REINFORCEMENT BARS	POUND	48700	48700	
28000500	INLET AND PIPE PROTECTION	EACH	3	3		50800515	BAR SPLICERS	EACH	216	216	
28100107	STONE RIPRAP, CLASS A4	SQ YD	286	286		51500100	NAME PLATES	EACH	1	1	
										-	
28100109	STONE RIPRAP, CLASS A5	SQ YD	165	165		52200020	TEMPORARY SOIL RETENTION SYSTEM	SQ FT	430	430	
20100100	Contain Page 18		1.00	100		1	TERM STATE REPEATED TO THE PERSON OF STATE OF ST				
28200200	 FILTER FABRIC	SO YD	451	451		54003000	CONCRETE BOX CULVERTS	CU YD	275.3	275.3	
	AGGREGATE BASE COURSE, TYPE B	TON	47	47							
35400300	PORTLAND CEMENT CONCRETE BASE COURSE WIDENING	SO YD	1262	1262		54262715	METAL FLARED END SECTIONS 15"	EACH	4	4	
	8"										
						54262748	METAL FLARED END SECTIONS 48"	EACH	2	2	
									_	_	
						54200220	PIPE CULVERTS, CLASS C, TYPE 1 15"	FOOT	138	138	
12000500	PORTLAND CEMENT CONCRETE PAVEMENT 10"	SQ YD	371	371		7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	THE COLUMNS, CEASO C, THE 1	1 001	130	130	
12000300	TONIEARD CEMENT CONCRETE PAYEMENT TO	30 10	311	3/1		F0100100	CEOCOMPOSITE WALL DRAIN	50 VD	224	224	
		50.40				39100100	GEOCOMPOSITE WALL DRAIN	SO YD	224	224	
14000100	PAVEMENT REMOVAL	SO YD	282	282							
						63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT	FOOT	100	100	
14004250	PAVED SHOULDER REMOVAL	SQ YD	455	455		_	POSTS				

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USER NAME = steffenmk

PLOT SCALE = 100.0000 ' / in.

PLOT DATE = 10/26/2021

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE:

SUMMARY OF QUANTITIES

F.A.P.
RTE.

332

SHEET OF SHEETS STA. TO STA.

80% FED 20% STATE

80% FED 20% STATE

SUMMARY OF QUANTITIES 1887 2887 2887 2888	1			ZU/U STATE	CON	STRUCTION TYPE CODE				T T	CONS	TRUCTION TYPE CODE
Macro Macr		SUMMARY OF QUANTITIES	_	TOTAL		THE CODE		SUMMARY OF QUANTITIES		TOTAL		NOCTION THE CODE
# 5000300 STRONG POST CLAMERS IL ATTACMS TO CLIVTET POOT 75 75 75 75 75 75 75 75 75 75 75 75 75	CODE NO	ITEM	UNIT	QUANTITIES	0010		CODE NO	ITEM	UNIT	QUANTITIES		
# \$100166 TRAFFIC BARRIER TERMINAL TYPE ISPECIALS EACH 2 2 TOMOSSO RELOCATE TEMPORARY COMMETE BARRIER FOOT \$25 325	3 63000005	STEEL PLATE BEAM GUARDRAIL, TYPE B	F00T	50	50		70400100	TEMPORARY CONCRETE BARRIER	FOOT	350	350	
TANCENT 10000250 IMPACT ATTENDATION, THAPOGRAPY INDO- EACH 2 2 2 3 3 3 3 3 3 3	* 63000030	STRONG POST GUARDRAIL ATTACHED TO CULVERT	FOOT	75	75		70400125	PINNING TEMPORARY CONCRETE BARRIER	EACH	54	54	
## S100199 TRAFFIC BARRIER TERMINAL TYPE LISPECIALI EACH 2 2	* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL)	EACH	2	2		70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	325	325	
## \$100100 TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) EACH 2 2 2 REDIRECTIVE, TEST LEVEL 3 REDIRECTIVE, MARROWI. TEST LEVEL 3 TEST LEVEL 3 REDIRECTIVE, MARROWI. TEST LEVEL 3 TE		TANGENT										
FLARED							70600250	IMPACT ATTENUATORS, TEMPORARY (NON-	EACH	2	2	
TOGODZE MARCHATTERLATORS, TEMPORARY (FULLY EACH 2 2	* 63100169		EACH	2	2			REDIRECTIVE), TEST LEVEL 3				
### CAL NO 5 5 5 TOGODOSO ENGINEER'S FIELD OFFICE, TYPE B CAL NO 5 5 5 TOGODOSO ENGINEER'S FIELD OFFICE, TYPE B CAL NO 5 5 5 TOGODOSO ENGINEER'S FIELD OFFICE, TYPE B CAL NO 5 5 5 TOGODOSO ENGINEER'S FIELD OFFICE, TYPE B CAL NO 5 5 5 TOGODOSO ENGINEER'S FIELD OFFICE, TYPE B CAL NO 5 5 5 TOGODOSO ENGINEER'S FIELD OFFICE, TEST LEVEL 3 TOGODOSO ENGINEER'S FIELD OFFICE, TEST LEVEL 3 TOGODOSO ENGINEER'S FIELD OFFICE, TYPE B CAL NO 5 5 5 TOGODOSO ENGINEER'S FIELD OFFICE, TYPE B CAL NO 5 5 5 TOGODOSO ENGINEER'S FIELD OFFICE, TYPE B CAL NO 4 4 4 4 TOGODOSO ENGINEER'S FORE TORON OF THE PROPERTY APPLIED OF THE PROPERTY OF THE P		FLARED					70600260	IMPACT ATTENUATORS, TEMPORARY (FULLY	EACH	2	2	
REDIRECTIVE), TEST LEVEL 3 REDIRECTIVE, TEST LEVEL 3 REDIRECTIVE AND REDIRECTION AND REDIRECTION AND R	63200310	GUARDRAIL REMOVAL	FOOT	455	455			REDIRECTIVE, NARROW), TEST LEVEL 3				
REDIRECTIVE), TEST LEVEL 3 REDIRECTIVE, TEST LEVEL 3 REDIRECTIVE AND REDIRECTION AND REDIRECTION AND R	67000500	ENCINEER'S FIELD OFFICE TYPE R	CAL MO	5	5		70600350	IMPACT ATTENUATORS RELOCATE (NON-	FACH	2	2	
ST100100 MOBILIZATION L SUM 1	1 01000300	ENGINEER STILLS OFFICE, THE S	CAL MO				10000330		LACII	-		
TO100405 TRAFFIC CONTROL AND PROTECTION, STANDARD EACH 1 1	67100100	MOBILIZATION	L SUM	1	1		72501000		EACH	4	4	
TO100450 TRAFFIC CONTROL AND PROTECTION, STANDARD L SUM 1 1 X0900064 MEMBRANE WATERPROOFING SYSTEM FOR BURIED SO YD 224							* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	2708	2708	
TO100450 TRAFFIC CONTROL AND PROTECTION, STANDARD L SUM 1 1 X0900064 MEMBRANE WATERPROOFING SYSTEM FOR BURIED SO YD 224	70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD	EACH	1	1							
TO106500 TEMPORARY BRIDGE TRAFFIC SIGNALS EACH 1 1	uß	701321					x0327301	RELOCATE EXISTING MAILBOX	EACH	1	1	
TO106500 TEMPORARY BRIDGE TRAFFIC SIGNALS EACH 1 1	70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD	L SUM	1	1		x0900064	MEMBRANE WATERPROOFING SYSTEM FOR BURIED	SQ YD	224	224	
TO107005 PAVEMENT MARKING BLACKOUT TAPE, 5" FOOT 2048 2048 X5000015 REMOVE AND RE-INSTALL PIPE CULVERTS FOOT 41 41 41 41 41 41 41 4	ADsheets/D774	701201						STRUCTURES				
TO107005 PAVEMENT MARKING BLACKOUT TAPE, 5" FOOT 2048 2048 X5000015 REMOVE AND RE-INSTALL PIPE CULVERTS FOOT 41 41 41 41 41 41 41 4	OVCADData\C											
TO107025 CHANGEABLE MESSAGE SIGN	\Projects\748\\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	IEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1		x2501000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.9	0.9	
	70107005	PAVEMENT MARKING BLACKOUT TAPE, 5"	FOOT	2048	2048		x5000015	REMOVE AND RE-INSTALL PIPE CULVERTS	FOOT	41	41	
70300150 SHORT TERM PAVEMENT MARKING REMOVAL SO FT 853 853	70107025	CHANGEABLE MESSAGE SIGN	CAL DA	28	28		Z0054505	ROCK FILL - REPLACEMENT	TON	467	467	
70300150 SHORT TERM PAVEMENT MARKING REMOVAL SO FT 853 853	JTOGIW4:											
AÎ.	70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	853	853							
* SPECIALTY ITEM	* SPECIA	LTY ITEM										REV MS

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PLOT DATE = 10/26/2021

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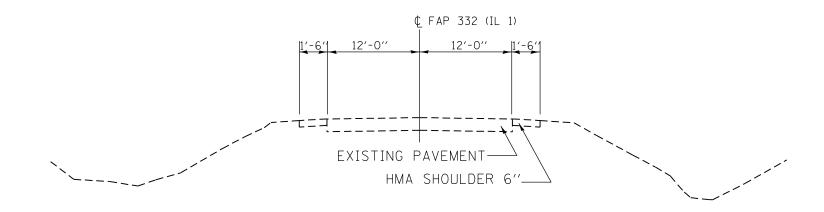
SUMMARY OF QUANTITIES SHEET OF SHEETS STA.

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SECTION (15BY)BR

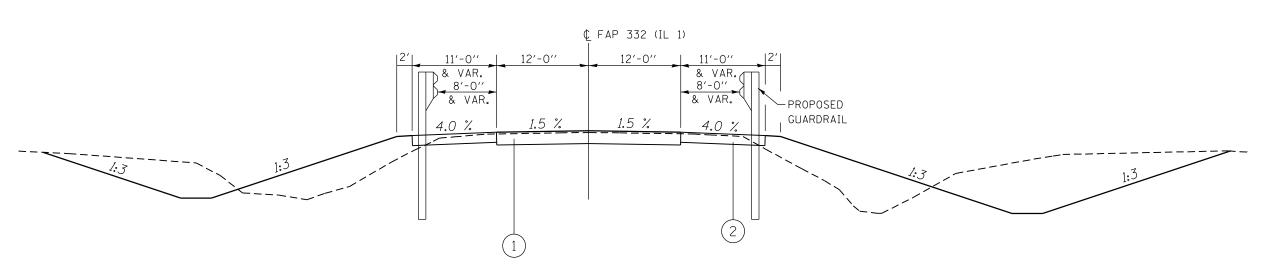
F.A. P. RTE.

TO STA.



EXISTING ADJACENT TYPICAL SECTION

STATION 887+00 TO STATION 897+00



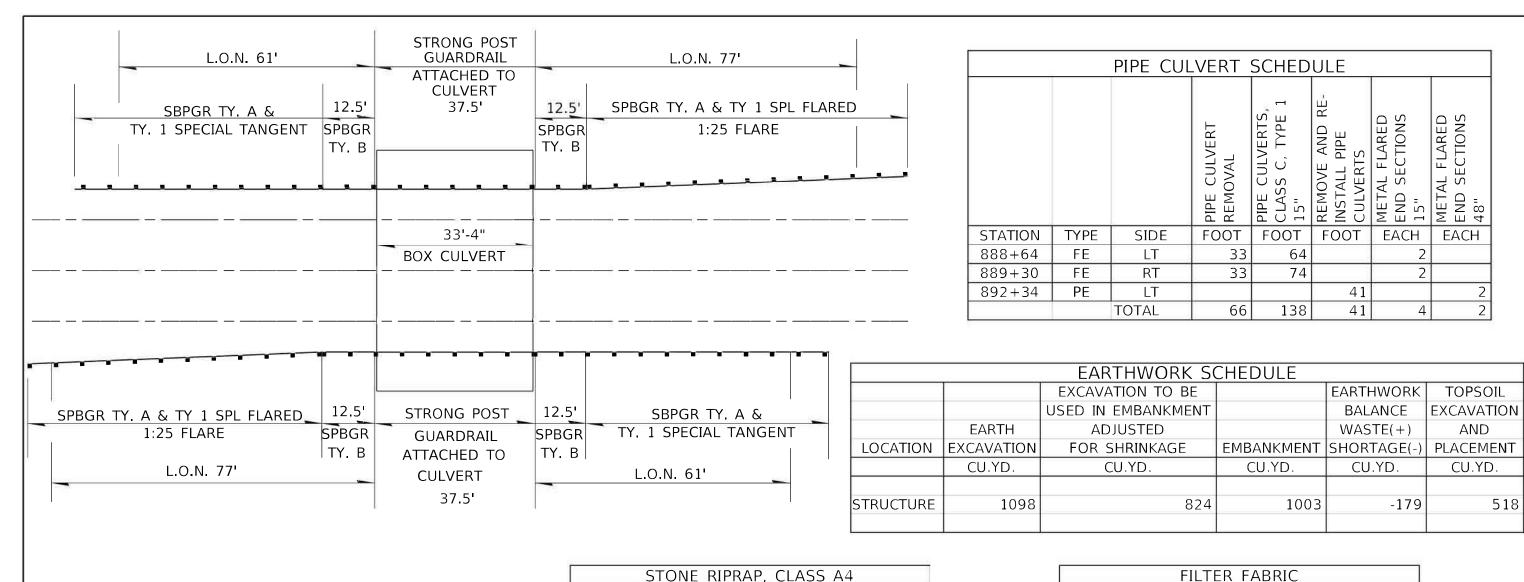
LEGEND

PROPOSED TYPICAL SECTION

STATION 888+12 TO STATION 893+35

- 1) PCC PAVEMENT 10"
- (2) PCC BASE COURSE WIDENING 8"

USER NAME = steffenmk	DESIGNED -	REVISED -				TYP	PICAL SECTIONS		F.A.P.	SECTION	COUNTY TOTAL SHEET
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PLOT DATE = 10/21/2021	DATE -	REVISED -		SCALE:	SHEET	OF	SHEETS STA.	TO STA.		ILLINOIS FED. A	ID PROJECT



STA

892+12.0

STA

891+20.0

TO

	GUARDRAIL SCHEDULE								
	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) FLARED	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	STRONG POST GUARDRAIL ATTACHED TO CULVERT	STEEL PLATE BEAM GUARDRAIL, TYPE B	STEEL PLATE BEAM GUARDRAIL, TYPE A 6' POSTS	GUARDRAIL REMOVAL			
	EACH	EACH	FOOT	FOOT	FOOT	FOOT			
NW CORNER	1			12.5	12.5	120			
NE CORNER		1		12.5	37.5	120			
CULVERT			75						
SW CORNER		1		12.5	37.5	120			
SE CORNER	1			12.5	12.5	95			
TOTAL	2	2	75	50	100	455			

FILTER FABRIC									
STA	TO	STA	FT	FT	SQ YD				
891+20		892+12	92	28	286				
				TOTAL	286				

	ERC	SIO	N CONT	ROL S	CHEDU	JLE	
				TEMPORARY EROSION CONTROL	SEEDING, CLASS 2 (SPECIAL)	TEMPORARY DITCH CHECKS	INLET AND PIPE PROTECTION
	STATION	TO	STATION	POUND	ACRES	FOOT	EACH
	890+75		893+75	135	0.45		
	890+75		893+75	133	0.45		
LT	889+00		890+75			56	
RT	889+00		890+75			40	
LT	891+25		893+75			48	
RT	891+25		893+75			32	
	<u> </u>	ГОТАІ	-	268	0.90	176	3

FT

TOTAL

28

FT

92

SQ YD

286

286

<u>#</u>								
P	PAVEMENT MARKING SCHEDULE							
			PAVEMENT MARKING BLACKOUT TAPE,5"	SHORT TERM PAVEMENT MARKING REMOVAL	PAINT PAVEMENT MARKING – LINE 4"			
STATION	ТО	STATION	FOOT	SQ FT	FOOT			
STAGE 1								
887+05		896+72	1,081	450				
STAGE 2								
887+05		896+72	967	403				
FINAL STAGE								
887+05		896+72			2708			
TOTALS			2048	853	2708			
3					DEV			

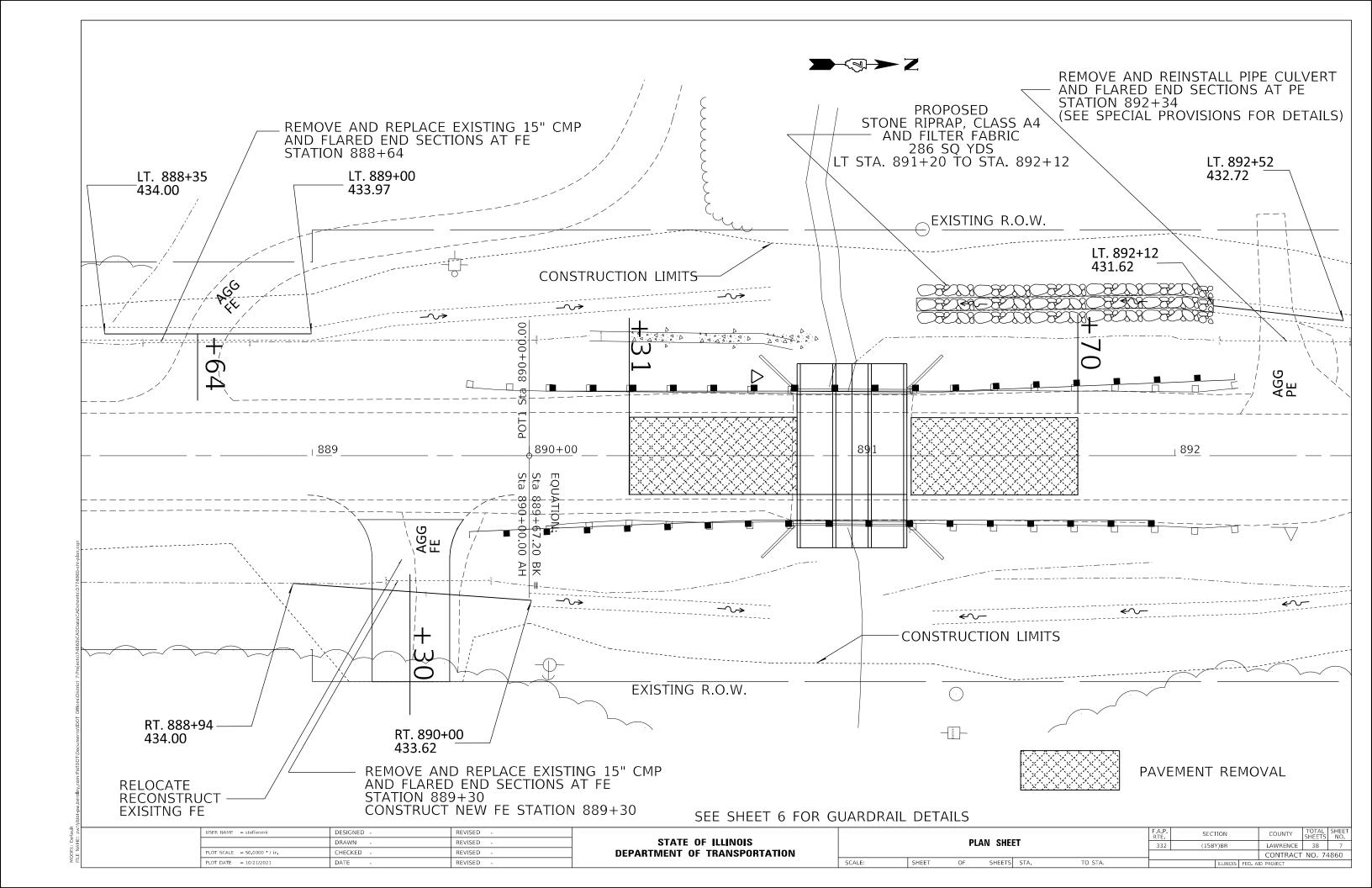
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STATI	E OF	: ILLINOIS
DEPARTMENT	OF	TRANSPORTATION

GU	ARDRAIL D	ETAIL	.S & SCHE	DULE /	EARTHWORK,
PIP	E CULVERT	& E	ROSION C	ONTROL	SCHEDULES
	SHEET	ΩE	SHEETS	STA	TO STA

	F.A.P. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHE
	332	(15BY)BR	LAWRENCE	38	ϵ	
L		S 5		CONTRACT	NO. 74	1860
		ILLINOIS	FED. AI	D PROJECT		



SUGGESTED SEQUENCE OF OPERATIONS

PRESTAGE

- 1. ERECT SIGNS, TRAFFIC SIGNALS, ETC. ACCORDING TO TRAFFIC CONTROL STANDARD 701321 AND THE DETAILS IN THE PLANS.
- 2. CONSTRUCT PCC BASE COURSE WIDENING 8" ON THE STAGE 1 TRAFFIC

STAGE 1

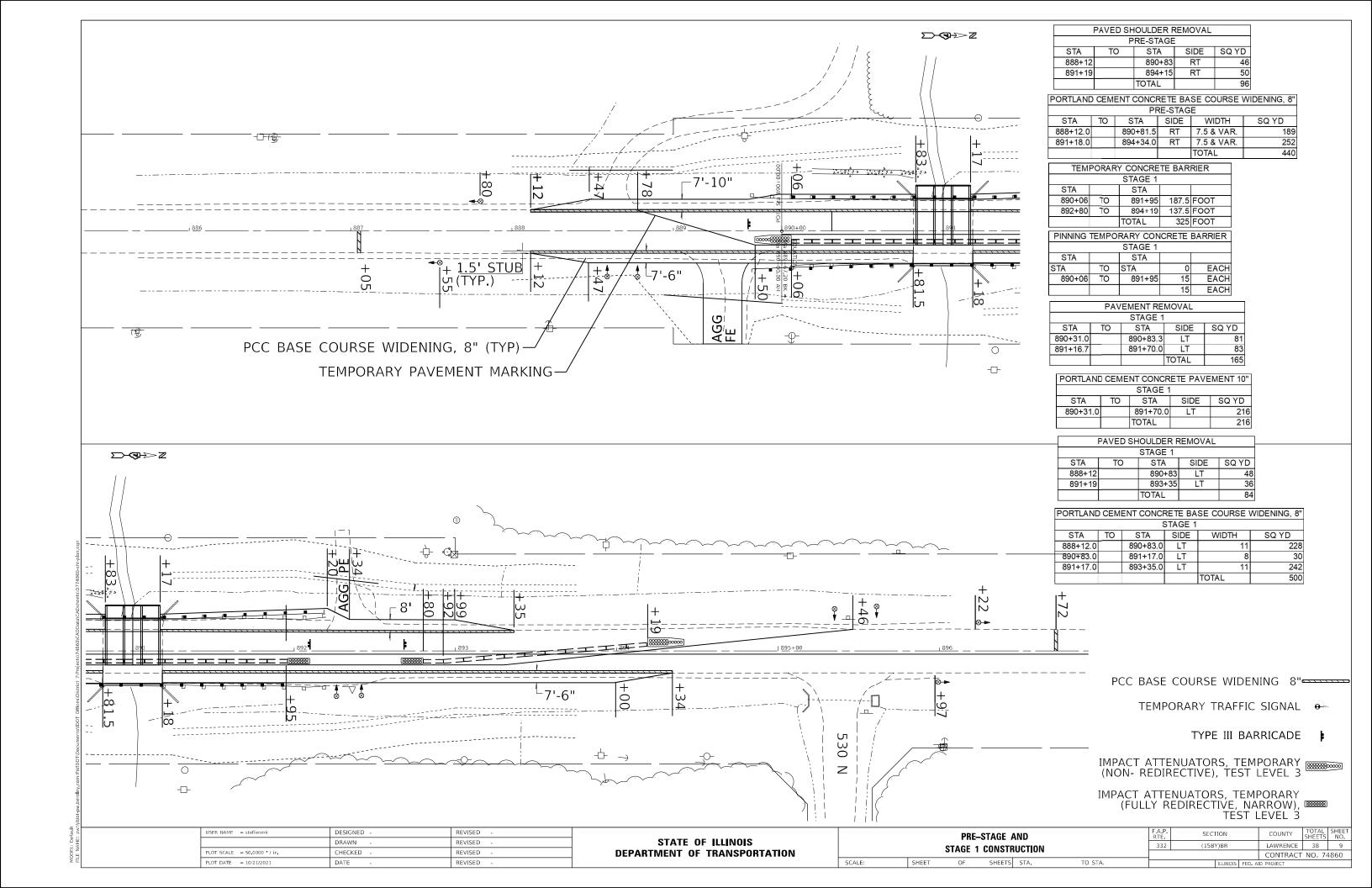
- 1. PLACE TEMPORARY CONCRETE BARRIER WALL ACCORDING TO TRAFFIC CONTROL STANDARD 701321.
- 2. CONSTRUCT TEMPORARY SOIL RETENTION SYSTEM
- 3. STRUCTURE REMOVAL
- 4. REMOVE EXISTING GUARDRAIL
- 5. CONSTRUCT BOX CULVERT
- 6. REMOVE EXISTING PAVEMENT & SHOULDER AND CONSTRUCT PCC PAVEMENT AND PCC BASE COURSE WIDENING 8".
- 7. CONSTRUCT GUARDRAIL

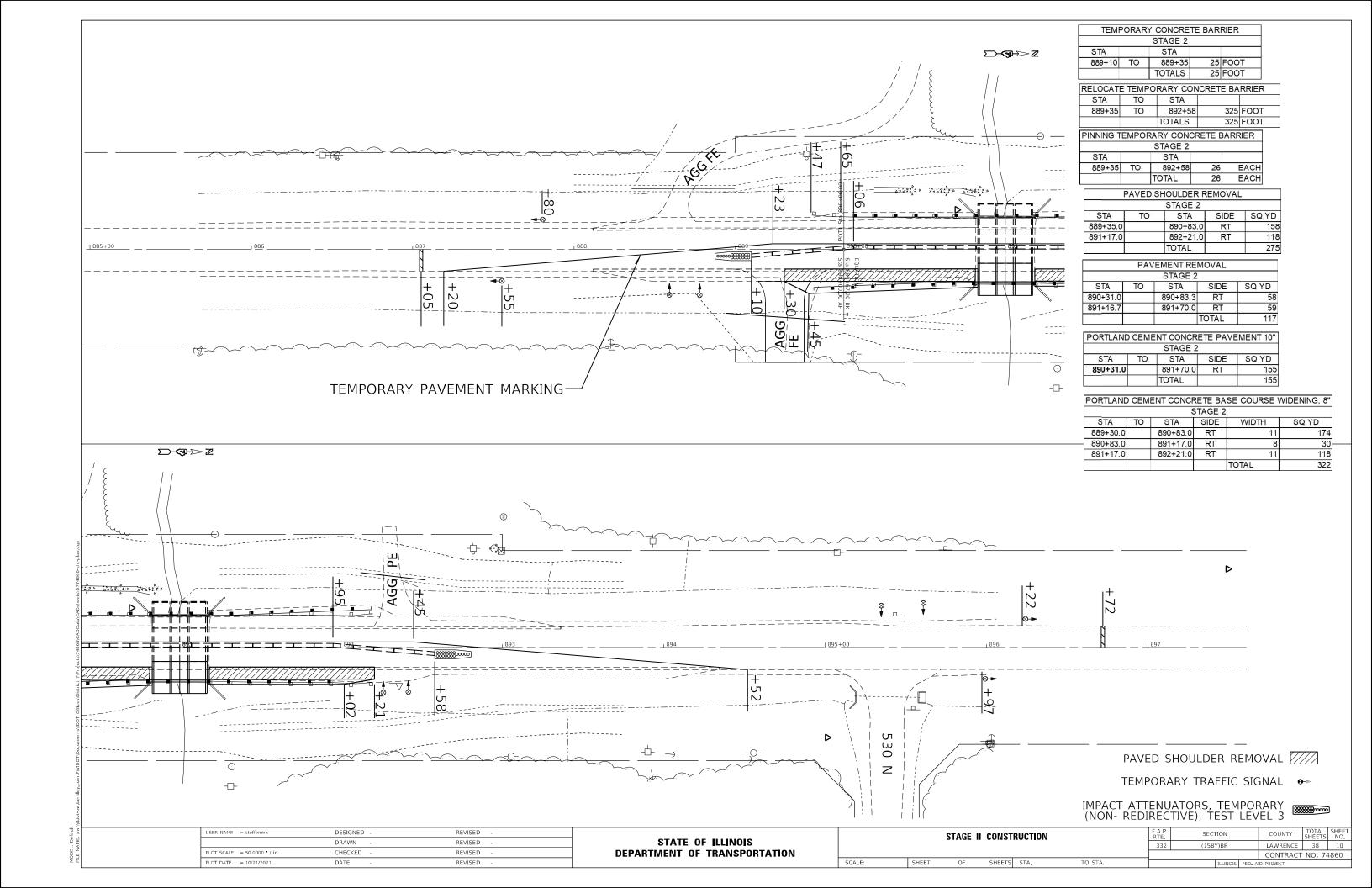
STAGE 2

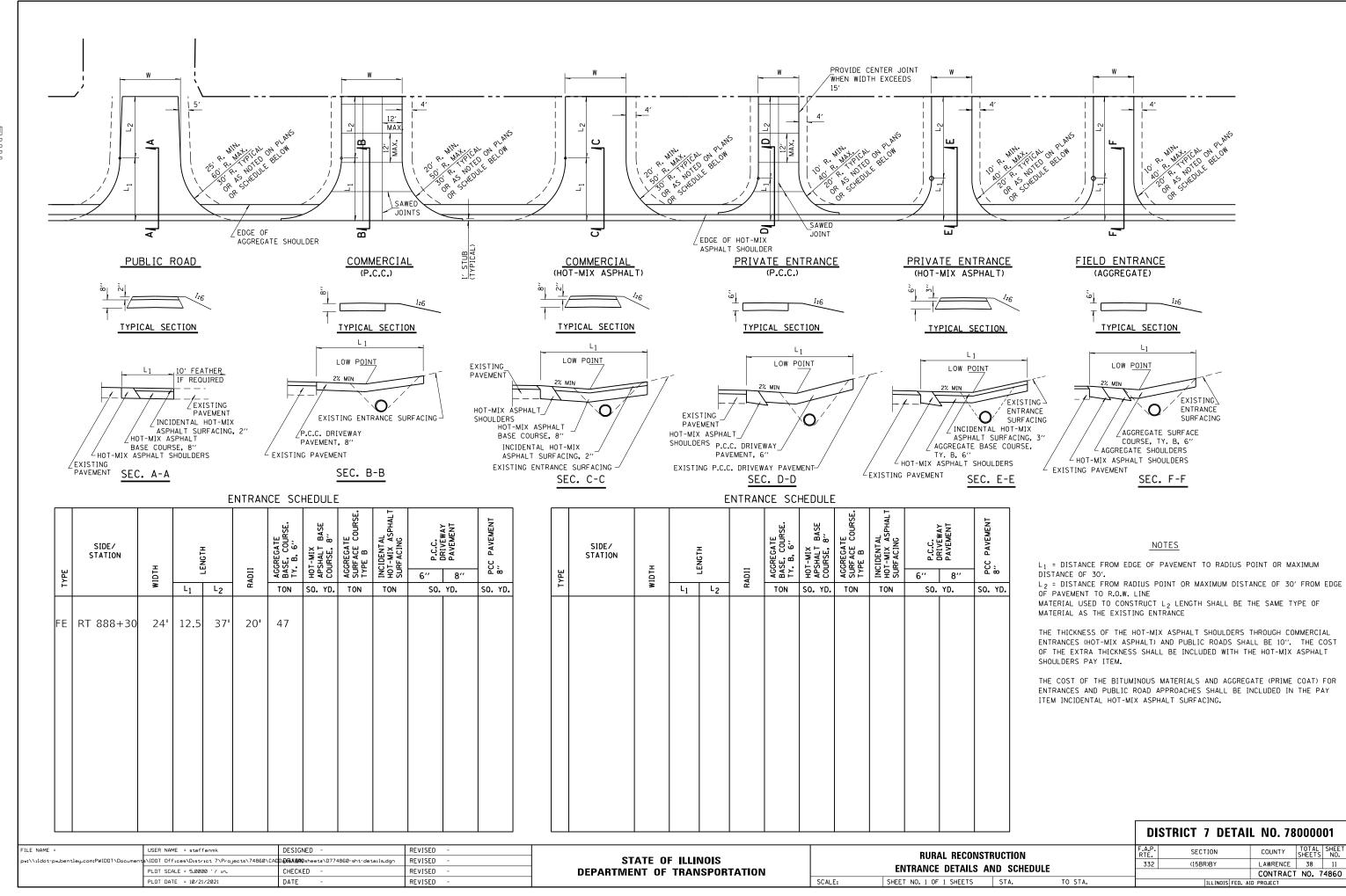
- 1. RELOCATE TEMPORARY CONCRETE BARRIER WALL ACCORDING TO TRAFFIC CONTROL STANDARD 701321.
- 2. STRUCTURE REMOVAL
- 3. REMOVE EXISTING GUARDRAIL
- 4. CONSTRUCT BOX CULVERT
- 5. REMOVE EXISTING PAVEMENT & SHOULDER AND CONSTRUCT PCC PAVEMENT AND PCC BASE COURSE WIDENING 8" AND GUARDRAIL.
- 6. REMOVE TRAFFIC CONTROL
- 7. CONSTRUCT PAINT PAVEMENT MARKING LINE

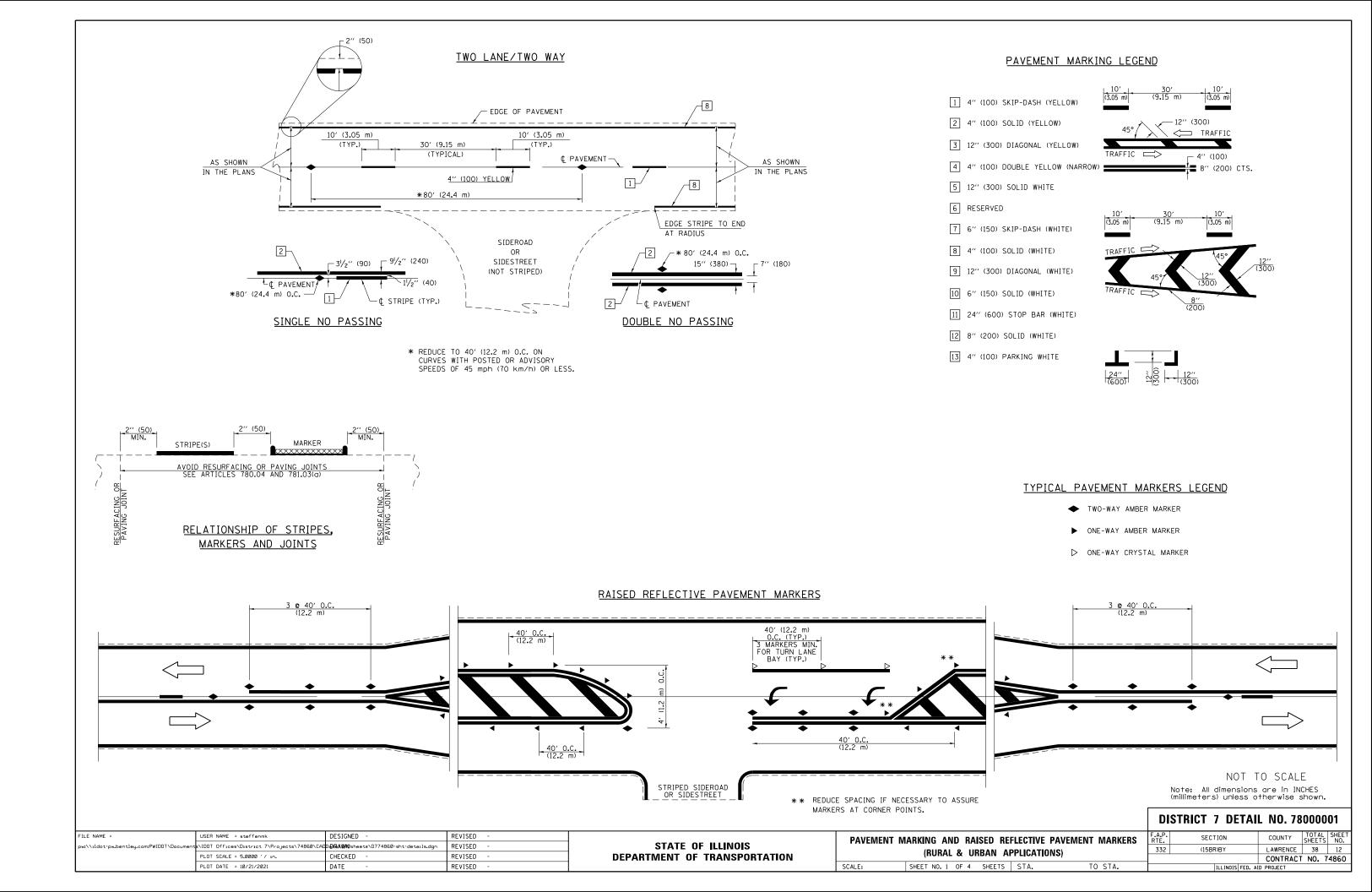
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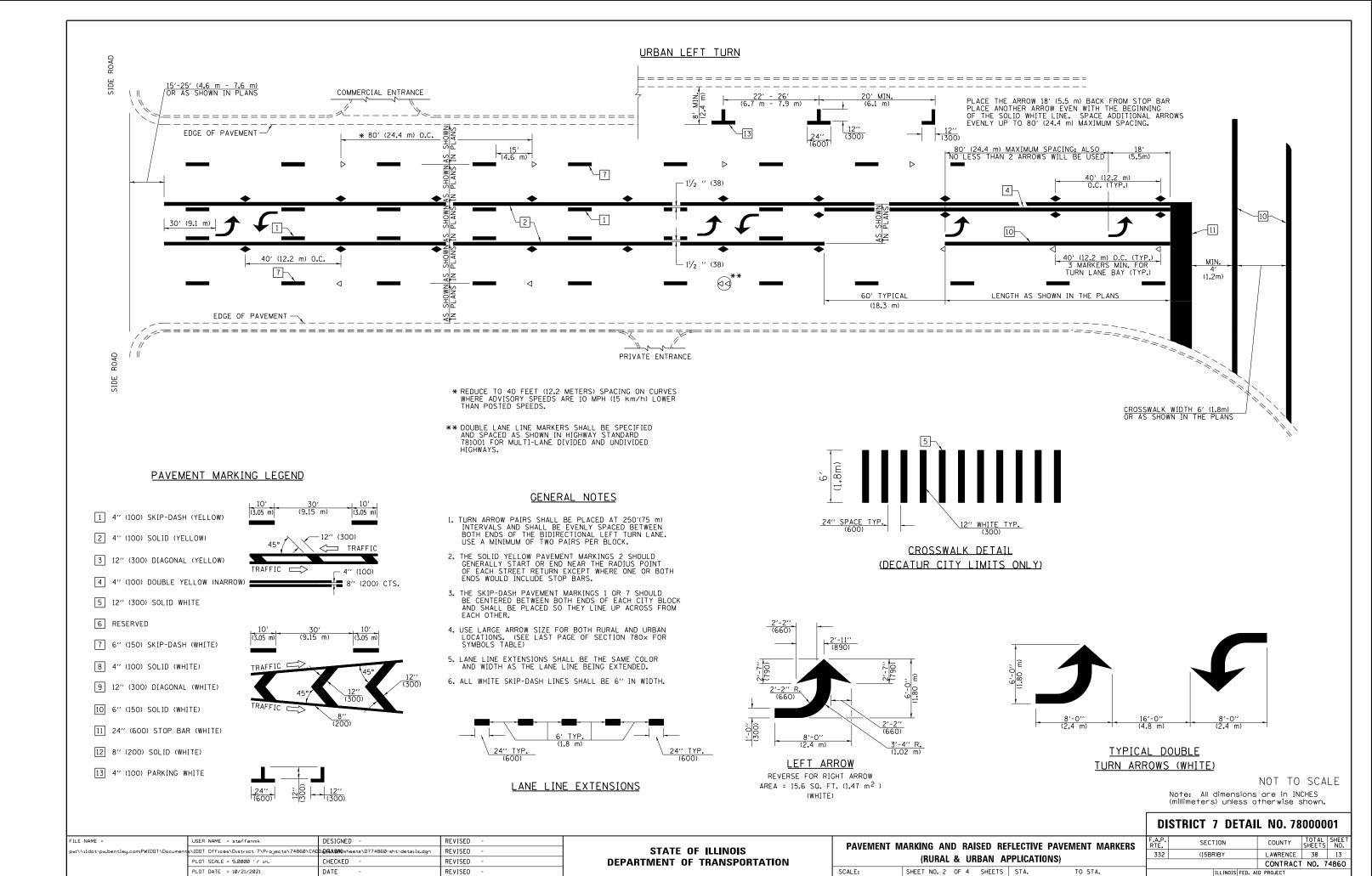
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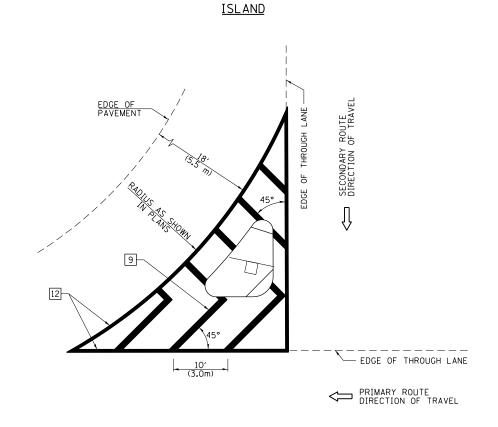










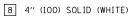


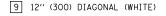
PAVEMENT MARKING LEGEND

- 1 4" (100) SKIP-DASH (YELLOW)
- 2 4" (100) SOLID (YELLOW) 3 12" (300) DIAGONAL (YELLOW)



- 4 4" (100) DOUBLE YELLOW (NARROW)
- 5 12" (300) SOLID WHITE
- 6 RESERVED
- 7 6" (150) SKIP-DASH (WHITE)



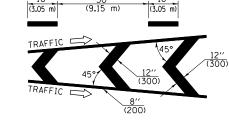


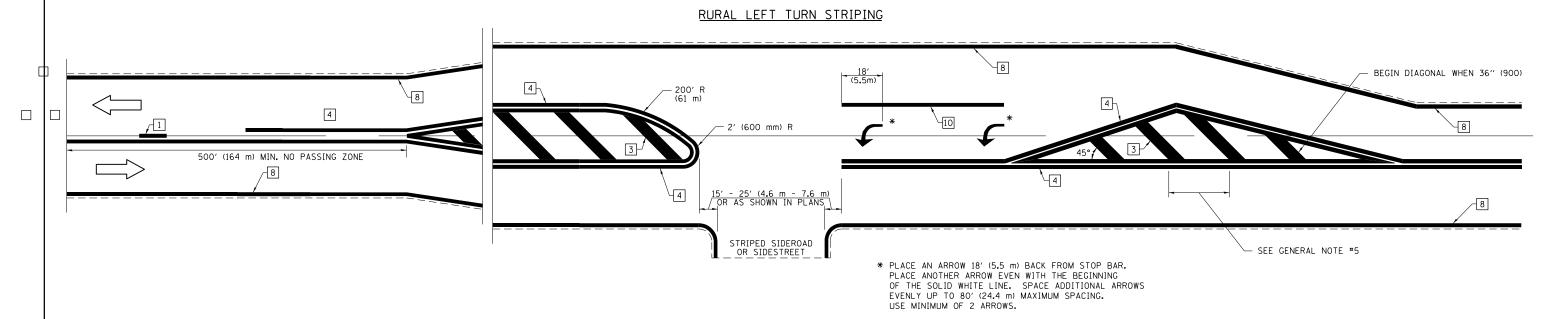
10 6" (150) SOLID (WHITE)

11 24" (600) STOP BAR (WHITE)

12 8" (200) SOLID (WHITE)

13 4" (100) PARKING WHITE





GENERAL NOTES

3. PAVEMENT MARKINGS ARE TO BE EXTENDED THROUGH OMISSIONS WHEN APPLICABLE.

THE DIAGONAL PAVEMENT MARKING SPACING:

<30 MPH (<50 km/h)

30-45 MPH (50-75 km/h >45 MPH (>75 km/h

1. RAISED AND CORRUGATED MEDIANS SHALL BE OUTLINED WITH 2 IF PRESENT.

2. SOME OF THE INFORMATION INCLUDED WITH THIS DETAIL MAY NOT BE APPLICABLE TO THIS IMPROVEMENT.

4. FINAL PAVEMENT MARKINGS SHALL BE IN PLACE PRIOR TO PLACING ANY RAISED REFLECTIVE PAVEMENT MARKERS.

5. THE FOLLOWING CRITERIA SHALL BE USED FOR SELECTING

15' (4.5 m)

20' (6.0 m) 30' (9.0 m)

NOT TO SCALE

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

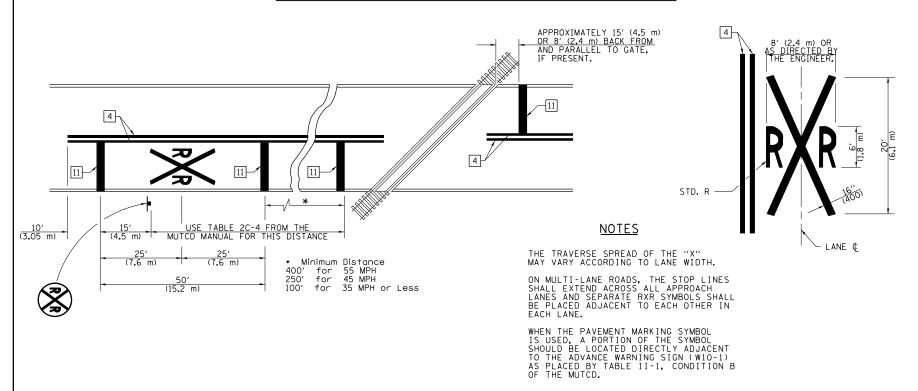
DI	STRICT	7	DETAI	L NO.	78	0000	01
F.A.P.	C.E.	CTIO	NI.	COLINIT	v	TOTAL	SHE

FILE NAME = DESIGNED REVISED USER NAME = steffenmk \IDOT Offices\District 7\Projects\74860\CADD&BAWMOsheets\D774860-sht-details.dgn REVISED CHECKED REVISED PLOT DATE = 10/21/2021 DATE REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** PAVEMENT MARKING AND RAISED REFLECTIVE PAVEMENT MARKERS (RURAL & URBAN APPLICATIONS) SHEET NO. 3 OF 4 SHEETS STA.

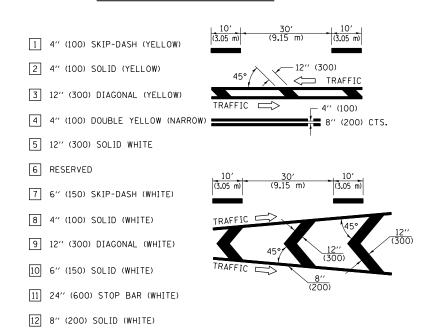
SHEETS NO. 332 (15BR)BY LAWRENCE 38 14 CONTRACT NO. 74860

PAVEMENT MARKINGS AT RAILROAD-HIGHWAY GRADE CROSSING

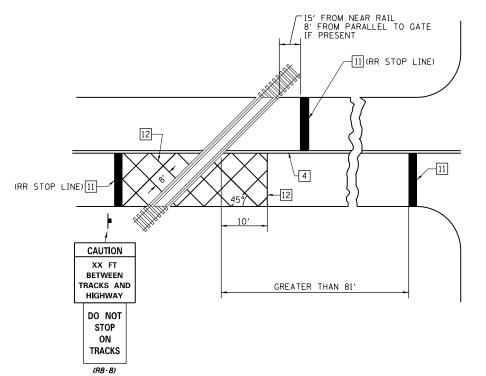


PAVEMENT MARKING LEGEND

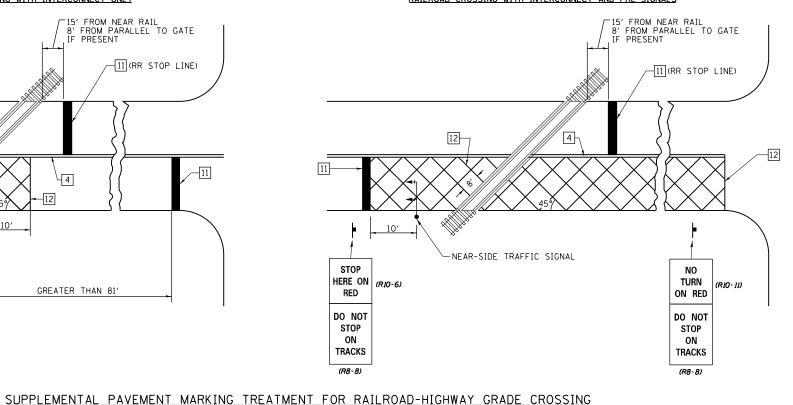
13 4" (100) PARKING WHITE



RAILROAD CROSSING WITH INTERCONNECT ONLY



RAILROAD CROSSING WITH INTERCONNECT AND PRE-SIGNALS



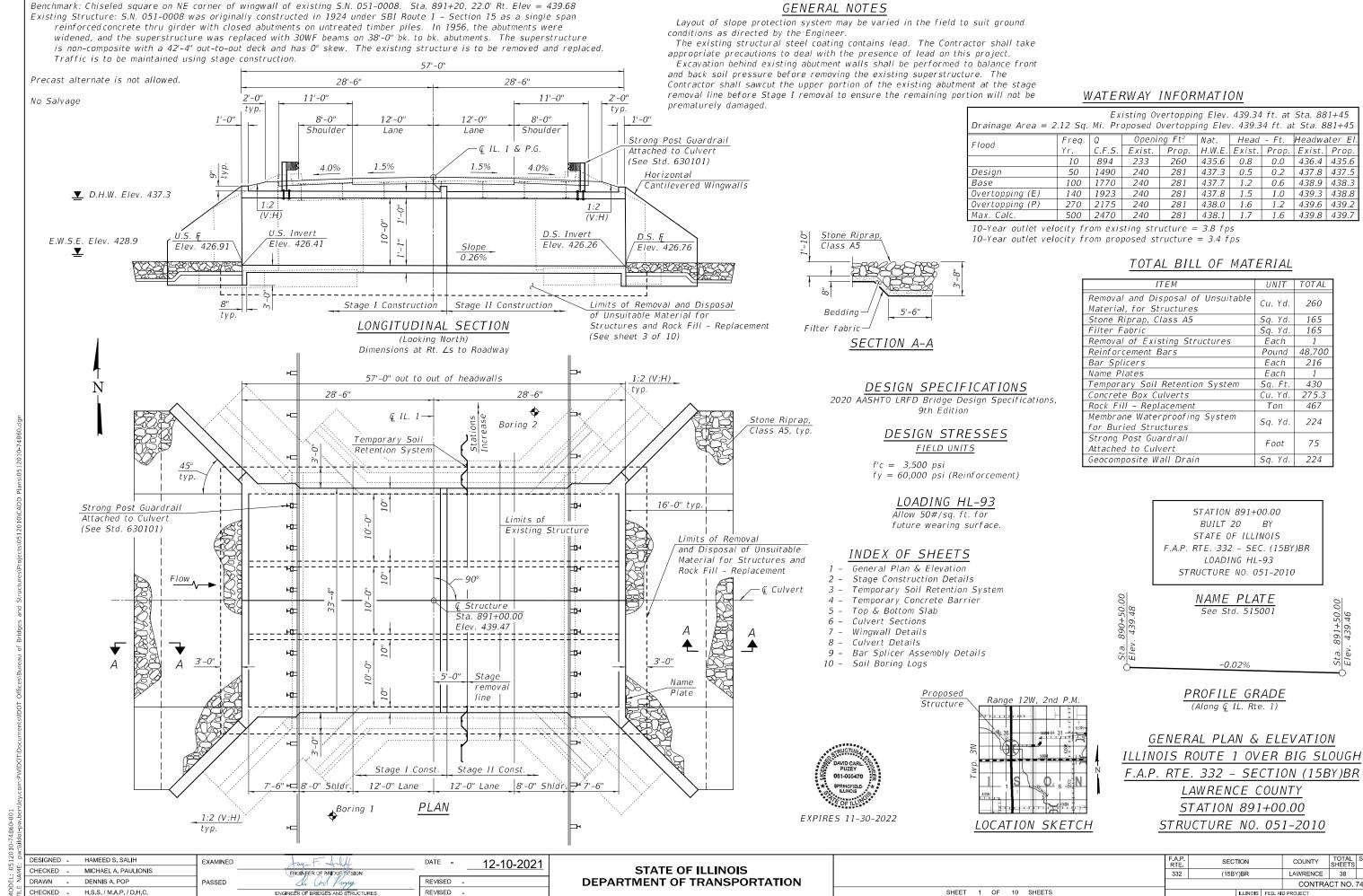
GENERAL NOTES

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

NOT TO SCALE

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

						DISTRICT 7 DETAI	IL NO. 78000001
FILE NAME =	USER NAME = steffenmk	DESIGNED -	REVISED -		PAVEMENT MARKING AND RAISED REFLECTIVE PAVEMENT MARKERS	F.A.P. SECTION	COUNTY TOTAL SHEET
pw:\\1ldot-pw.bentley.com:PWIDOT\Document	s\IDOT Offices\District 7\Projects\74860\CAE	D.D.R.A.WMDsheets\D774860-sht-details.dgn	REVISED -	STATE OF ILLINOIS		332 (15BR)BY	LAWRENCE 38 15
	PLOT SCALE = 5.0000 '/ in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION	(RURAL & URBAN APPLICATIONS)	'	CONTRACT NO. 74860
	PLOT DATE = 10/21/2021	DATE -	REVISED -		SCALE: SHEET NO. 4 OF 4 SHEETS STA. TO STA.	ILLINOIS FED. A	AID PROJECT



0.2 437.8 437.5

UNIT TOTAL

Pound 48,700

260

165

165

216

430

467

224

75

224

891+50.00 439.46

COUNTY

LAWRENCE 38 16

CONTRACT NO. 74860

Cu. Yd.

Sq. Yd.

Sq. Yd.

Each

Each

Each

Sq. Ft.

Cu. Yd.

Ton

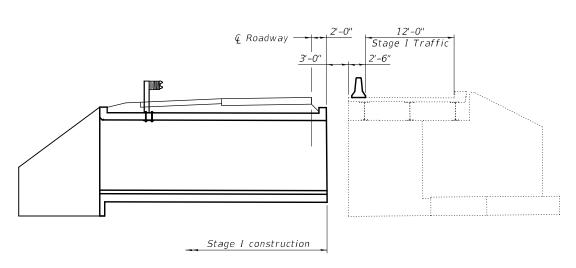
Sq. Yd.

Foot

Sq. Yd.

12/10/2021 8:11:10 AM

STAGE I REMOVAL



STAGE I CONSTRUCTION

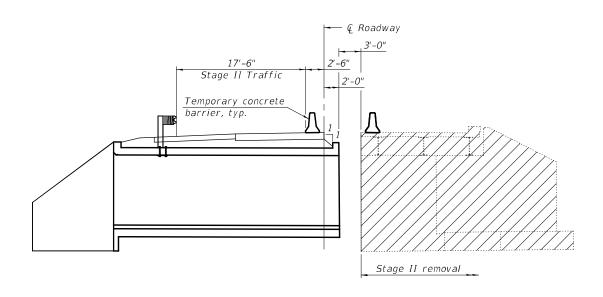
Notes:

Hatched areas indicate removal of existing structures.

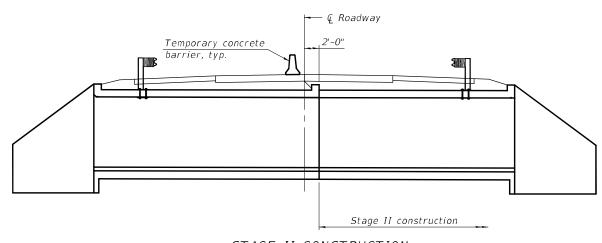
For quantity of temporary concrete barrier, see Roadway Plans. All cross sections are taken looking North.

For details of Temporary Concrete Barrier see sheet 4 of 10.

Removal of the substructure shall be according to Article 501.04 of the Standard Specifications.



STAGE II REMOVAL



STAGE II CONSTRUCTION

DESIGNED - HAMEED S. SALIH CHECKED - MICHAEL A. PAULIONIS DRAWN - DENNIS A. POP S H CHECKED - H.S.S./M.A.P./D.H.C.

EXAMINED

PASSED

DECEMBER 10, 2021 REVISED -REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** STAGE CONSTRUCTION DETAILS STRUCTURE NO. 051-2010 SHEET 2 OF 10 SHEETS

SECTION COUNTY 332 (15BY)BR LAWRENCE 38 17 CONTRACT NO. 74860

12/10/2021 7:31:11 AM

A canitlevered sheet piling design does not appear to be 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.

The Contractor shall connect the first sheet to the existing abutment wall to ensure stability of sheets driven to the top of the existing footing. This connection shall be reviewed and accepted by the Engineer and included in the cost for Temporary Sheet Piling.

(Looking East - Horizontal dimensions are looking East along (F.A.P. Rte. 332)

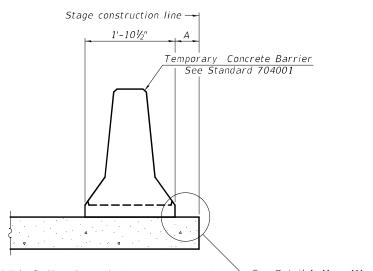
21'-8" Stage II Soil Retention 21'-8" Stage II Soil Retention Top of Temporary Soil Retention System Top of Temporary Soil — € Culvert Retention System Elev. 440.67 Elev. 440.67 - Max. excavation line Max. excavation line 3'-0" typ. Elev. 422.00 Elev. 422.00 └─ Elev. 423.00 18'-8" Limits of Removal and Disposal of 6'-0" 18'-8" Unsuitable Material for Structures typ. and Rock Fill - Replacement

STAGE II TEMPORARY SOIL RETENTION SYSTEM

(Looking East - Horizontal dimensions are looking East along (£ F.A.P. Rte. 332)

w:/\		1						
C d DESIGNED - HAMEED S. SALIF	EXAMINED	Journe F. J. H			TEMPORARY SOIL RETENTION SYSTEM	F.A.P.	SECTION	COUNTY TOTAL SHEET
CHECKED - MICHAEL A. PAUL	IONIS	ENGINEER OF BRIDGE DESIGN		STATE OF ILLINOIS	STRUCTURE NO. 051-2010	332	(15BY)BR	LAWRENCE 38 18
리 Z DRAWN - DENNIS A. POP	PASSED	d Carl Progress	REVISED -	DEPARTMENT OF TRANSPORTATION	21KUCTURE NO. 031-2010			CONTRACT NO. 74860
우류 CHECKED - H.S.S./M.A.P./D.	H.C.	ENGINEER OF BRIDGES AND STRUCTU	rures REVISED -		SHEET 3 OF 10 SHEETS		ILLINOIS FF	D. AID PROJECT

12/10/2021 7:31:12 AM



— See Detail I, II or III 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

→ Stage removal line ← Stage removal line 1'-101/2" 1'-101/2" Temporary Concrete Barrier See Standard 704001 6" min. min. Drill 3-11/4" 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

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

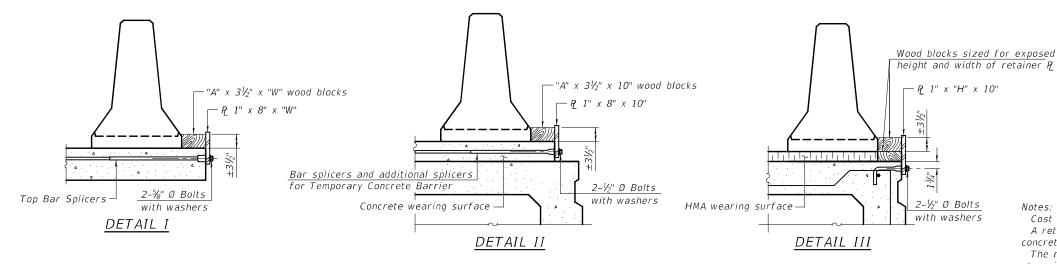
EXISTING DECK BEAM

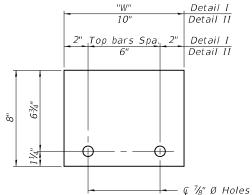
1x8 UNC US Std. $1\frac{1}{16}$ " I.D. x $2\frac{1}{2}$ " O.D. x approx. 8 gauge thick washer RESTRAINING PIN

EXISTING SLAB

SECTIONS THRU SLAB OR DECK BEAM

is required when "A" is greater than 3'-1".

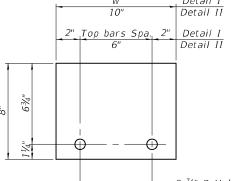




RAILING CRITERIA

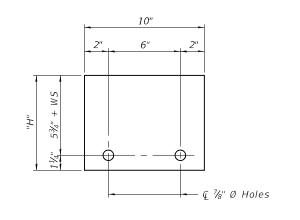
NCHRP 350 Test Level

2021



STEEL RETAINER P 1" x 8" x "W"

(Detail I and II)



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

BAR SPLICER FOR #4 BAR - DETAIL III

Cost of retainer assembly is included with Temporary Concrete Barrier. A retainer assembly shall be located at the approximate Q 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 $1\frac{1}{2}$ ", 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.

	JJO , CJC LCTC.		
Railing	Weight (plf)	440	
R-27		10-12	-2

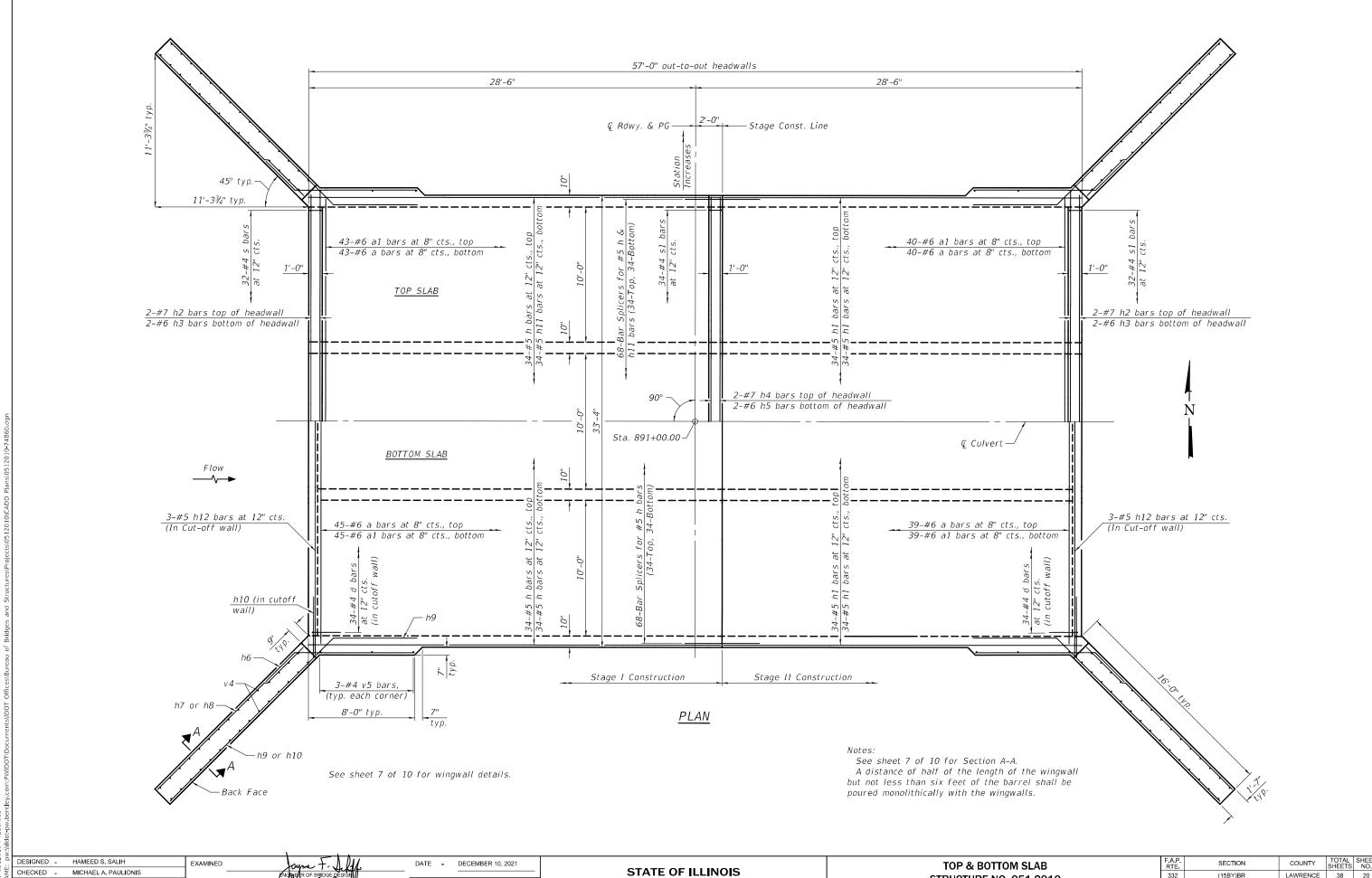
DESIGNED - HAMEED S. SALIH EXAMINED CHECKED - MICHAEL A. PAULIONIS DENNIS A. POP CHECKED - H.S.S./M.A.P./D.H.C.

DECEMBER 10, 2021 REVISED -REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** TEMPORARY CONCRETE BARRIER **STRUCTURE NO. 051-2010** SHEET 4 OF 10 SHEETS

SECTION COUNTY 332 (15BY)BR LAWRENCE 38 19 CONTRACT NO. 74860

12/10/2021 7:31:12 AM



CHECKED - H.S.S./M.A.P./D.H.C. 12/10/2021 7:31:13 AM

DENNIS A. POP

PASSED

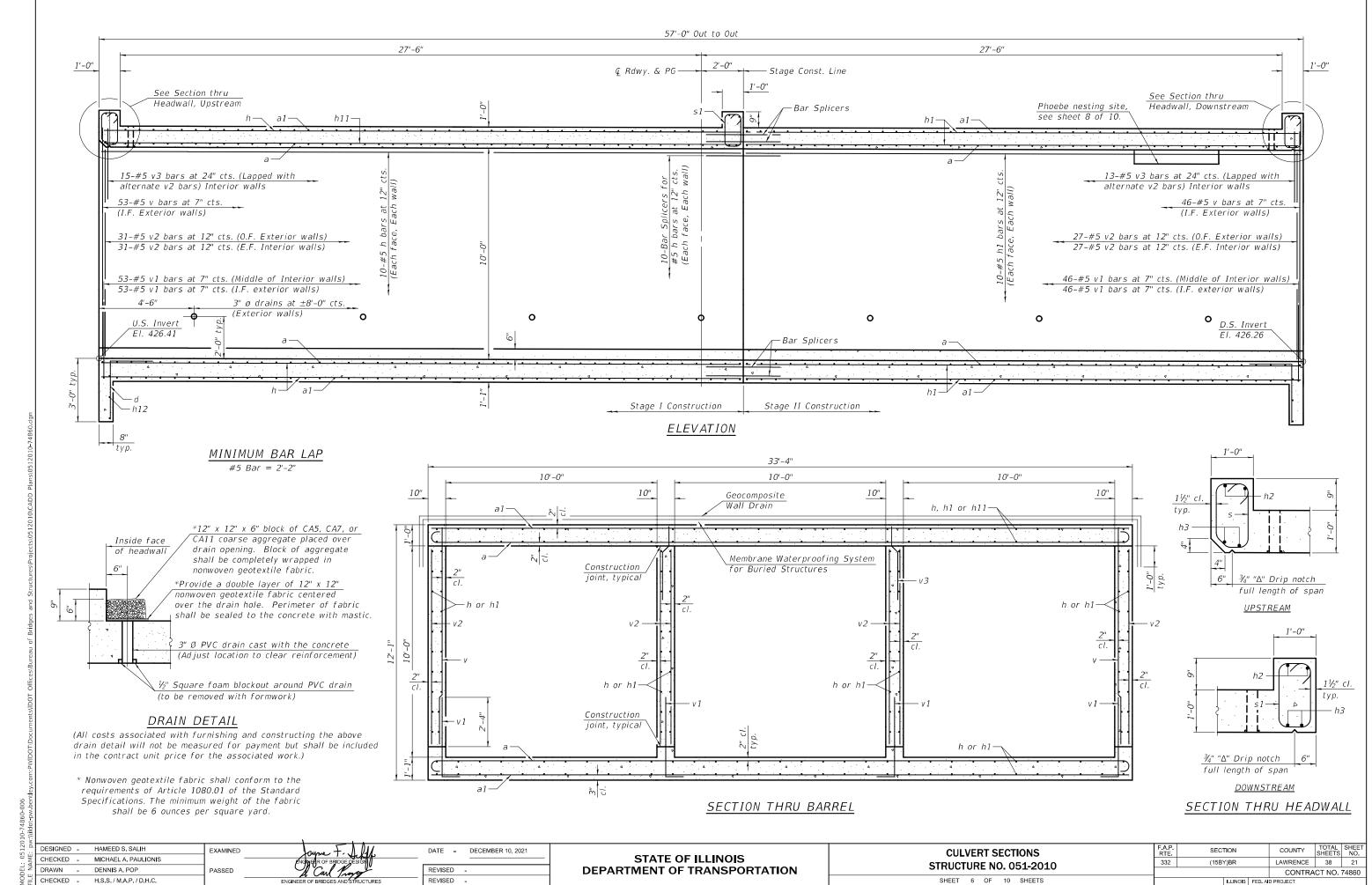
REVISED -

REVISED

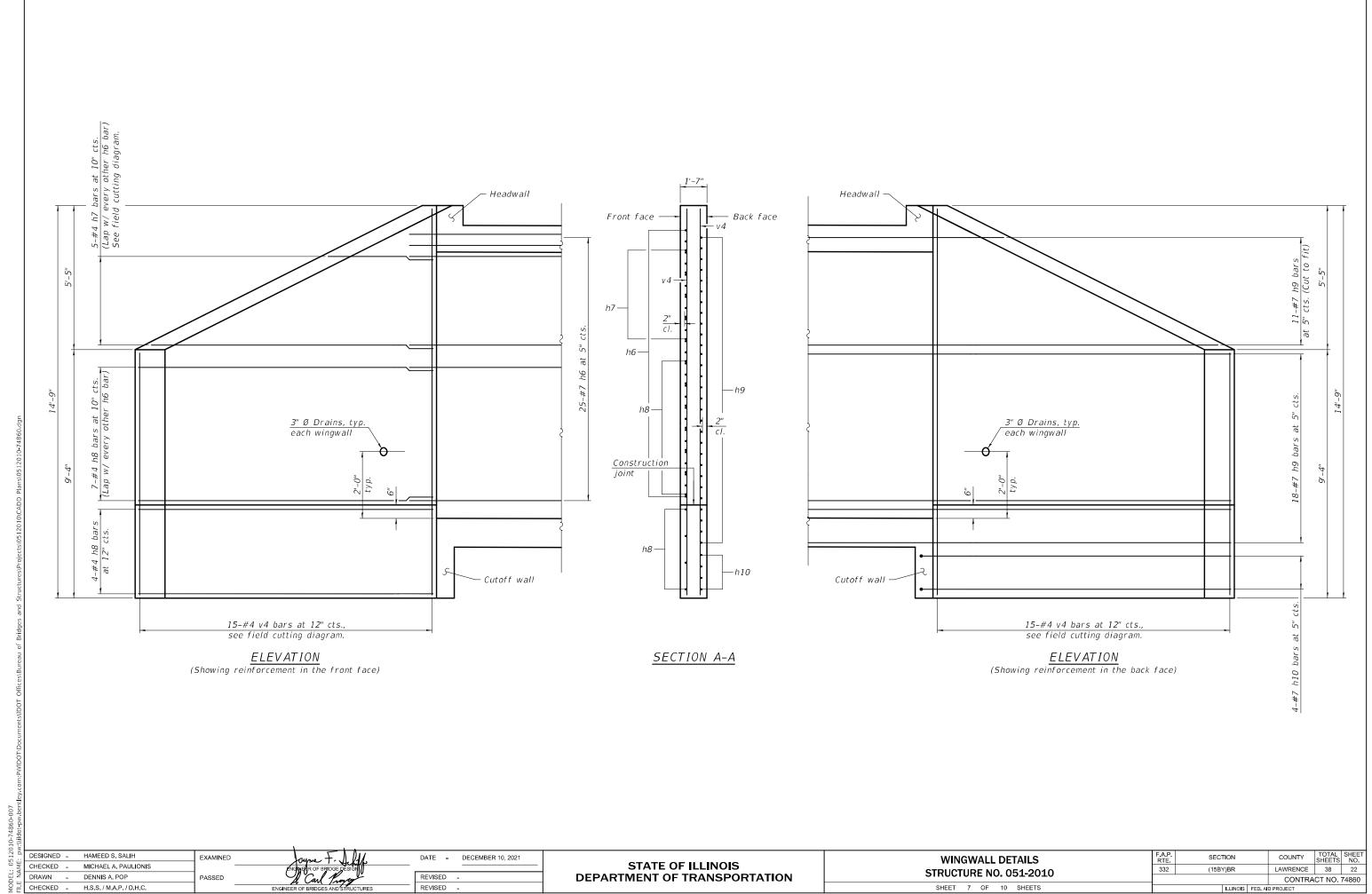
DEPARTMENT OF TRANSPORTATION

STRUCTURE NO. 051-2010 SHEET 5 OF 10 SHEETS

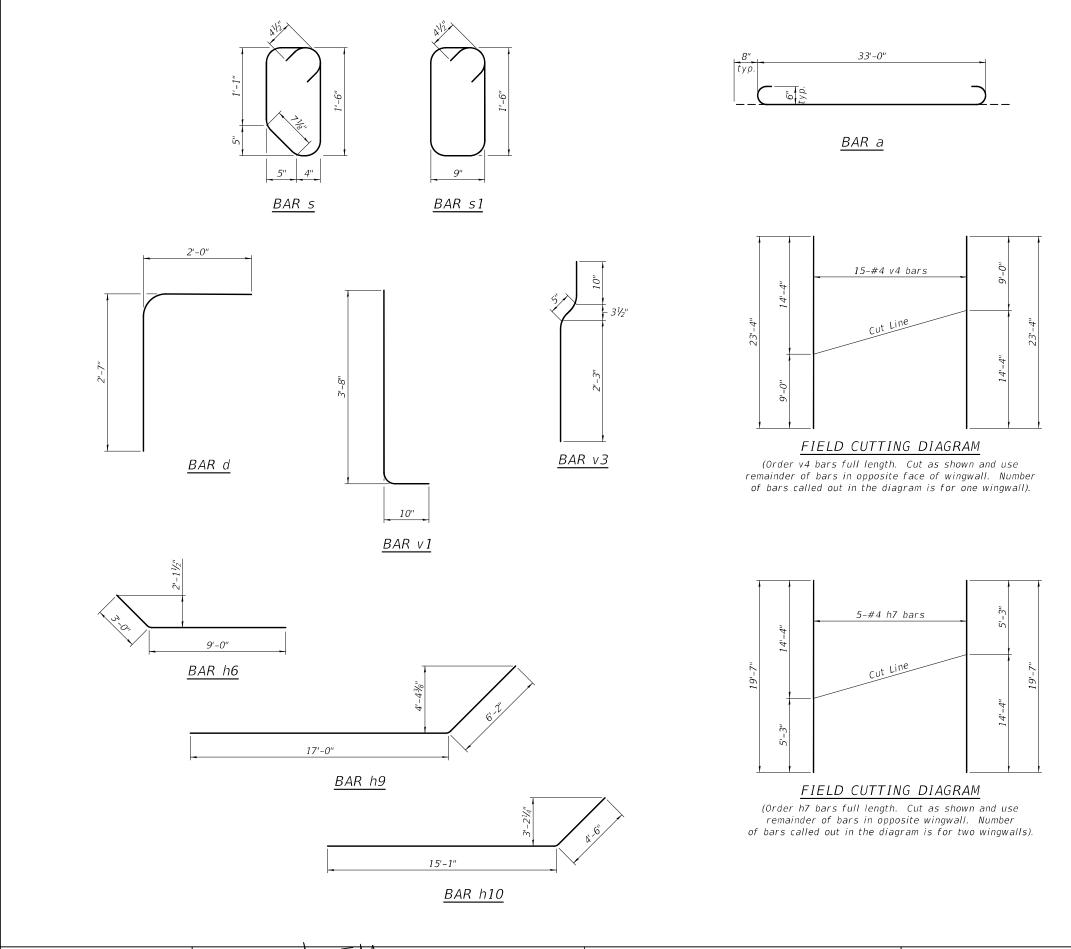
LAWRENCE 38 20 (15BY)BR CONTRACT NO. 74860



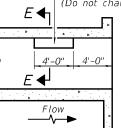
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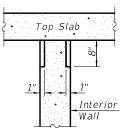
12/10/2021 7:31:14 AM



Notch formed by rough finished board attached to and removed with form work, each interior wall. (Do not chamfer).



LONGITUDINAL SECTION



SECTION E-E

PHOEBE NESTING SITE DETAILS (Downstream End Only)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
а	167	#6	34'-4"	٦
a1	167	#6	33'-0"	
d	68	#4	4'-7"	
h	182	#5	30'-2"	
h1	216	#5	26'-2"	
h2	4	#7	33'-9"	
h3	4	#6	33'-9"	
h4	2 2	#7	33'-0"	
h5	2	#6	33'-0"	
h6	100	#7	12'-0"	
h7	10	#4	19'-7"	
h8	44	#4	14'-11"	
h9	116	#7	23'-2"	
h10	16	#7	19'-7"	
h11	34	#5	29'-11"	
h12	6	#5	33'-0"	
5	32	#4	5'-0"	
51	66	#4	5'-3"	G
V	198	#5	10'-2"	
v 1	396	#5	4'-6"	
v2	348	#5	9'-2"	
v3	56	#5	3'-6"	
v 4	60	#4	23'-4"	
v 5	12	#4	10'-8"	
Concre	te Box	Culverts	Cu. Yd.	275.3
Reinfo	rcemen	t Bars	Pound	48,700

DESIGNED - HAMEED S. SALIH EXAMINED CHECKED - MICHAEL A. PAULIONIS DENNIS A. POP PASSED S H CHECKED - H.S.S./M.A.P./D.H.C.

DECEMBER 10, 2021 REVISED -REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

CULVERT DETAILS STRUCTURE NO. 051-2010 SHEET 8 OF 10 SHEETS

COUNTY TOTAL SHEETS NO.

LAWRENCE 38 23 SECTION 332 (15BY)BR CONTRACT NO. 74860

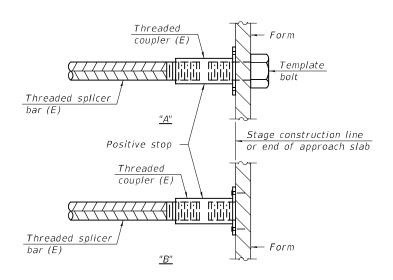
STANDARD BAR SPLICER ASSEMBLY PLAN

(All components shall be provided from one supplier)

Threaded splicer bar length = min. lap length + $1\frac{1}{2}$ " + thread length

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

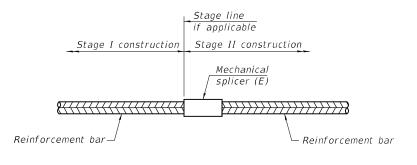
Location	Bar size	No. assemblies required	Minimum lap length
Top slab	#5	68	2'-2"
Walls	#5	80	2'-9"
Bottom slab	#5	68	2'-2"



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

٠.	DESIGNED -	HAMEED S. SALIH	EXAMINED	June F. A. H.
I N	CHECKED -	MICHAEL A. PAULIONIS		PNGINERR OF BRIDGE DESIGN
Ż	DRAWN -	DENNIS A. POP	PASSED	A Carl Program
ij	CHECKED -	H.S.S. / M.A.P. / D.H.C.		ENGINEER OF BRIDGES AND STRUCTURES

DATE -DECEMBER 10, 2021 REVISED REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** **BAR SPLICER ASSEMBLY DETAILS STRUCTURE NO. 051-2010** SHEET 9 OF 10 SHEETS

SECTION COUNTY 332 (15BY)BR LAWRENCE 38 24 CONTRACT NO. 74860

12/10/2021 7:31:15 AM

SECTION (15BY)BR	LOO	CATIO	N _	Big Sl	ough,	SEC. 36, TWP. 3N, RNG. 36W, 2 PM				
COUNTY Lawrence E	RILLING	мет	HOD	Holl	ow ste	em auger & split spoon HAMMER TYPE		Auto	140#	
STRUCT. NO. Station 051-0008 (E) 051-2010 (P) 891+00 BORING NO. B-1		D E P T	B L O W	U C S	M 0 I S	Surface Water Elev. 427.89 ft Stream Bed Elev. 427.54 ft Groundwater Elev.:	D E P T	B L O W	U C S	M 0 I S
Station 890+68 Offset 15.0ft West Ground Surface Elev. 439.2	 4 ft	H (ft)	S /6"	Qu (tsf)	(%)	\[\begin{align*} \text{First Encounter} & 414.7 & ft \\ \text{y Upon Completion} & 431.2 & ft \\ \text{V After 144 Hrs.} & 433.7 & ft \end{align*}	H (ft)	S /6"	Qu (tsf)	(%)
10" Aggregate Shoulder	420.44					Stiff, moist, brown & grey marbled, CLAY		3	1.8	26
Brown, CLAY with Aggregate Brown, CLAY	438.41 438.24					CLAY	_	5	В	
Stiff, moist, brown, CLAY		3	2	1.2	24	Medium, grey mottled, brown 416.24	Ξ	1	0.8	23
		_	3	В		Soft, moist, grey, SANDY LOAM	=	2	В	
	Ţ	<u>-5</u>	2	1.0	26	∇ Very soft, wet, brown	-25	5	0.2	17
		\dashv	3	В		Extent of Exploration. 413.24		6	S	
Brown & grey marbled	Ā	=	2 2 4	1.1 B	25	Benchmark: BM 917 Chiseled square on the SW corner of Wingwall of Structure #051-0008, Sta. 890+80, 22' LT.	_			
Very soft, moist, brownish tan, S	<u>429.74</u> ILT	<u>-10</u>	1 1 2	0.2 B	24		-30			
Medium, moist, tan SILTY CLAY LOAM	<u>427.24</u>	_	2 3 4	0.8 B	19		_			
Stiff, brown & grey marbled		-15	2 3 3	1.2 B	20		-35			
Very soft, moist, grey, SILT	422.24 421.04 ed,		1 2 3	1.7 B	19		-			
CLAY		-	3				-40			

Illinois Department of Transportation Division of Highways IDOT

ROUTE FAP 332 (IL 1) DESCRIPTION

Page $\underline{\mathbf{1}}$ of $\underline{\mathbf{1}}$

Date <u>4/29/19</u>

LOGGED BY E. Sandschafer

SOIL BORING LOG

South Abutment

Illinois Depa of Transport	atio	on		S	OIL BORING LOG			
Division of Highways IDOT							4/2	Ī
ROUTE FAP 332 (IL 1) DESCRIPTION	N			No	orth Abutment LOGGED B	Y <u>E.S</u>	Sands	c
SECTION(15BY)BR LC	CATIO	ON _	Big Sl	ough,	SEC. 36, TWP. 3N, RNG. 12W, 2 PM			-
COUNTY Lawrence DRILLIN	G ME	THOD	Holl	ow ste	m auger & split spoon HAMMER TYPE	Auto	140#	ŧ
STRUCT. NO. 051-2010 (P) Station 891+00 BORING NO. B-2 Station 891+28 Offset 15.0ft East	D E P T H	B L O W S /6"	U C S Qu (tsf)	M O I S T	Surface Water Elev.	L O W S	U C S Qu	
Ground Surface Elev. 439.20 ft 10" Aggregate Shoulder	(11)	/6	(tSI)	(%)	▼ After <u>144</u> Hrs <u>433.8</u> ft (ft	5	(tsf)	
438.37 Brown, SILTY CLAY with 438.26 Aggregate Dark brown, SILTY CLAY	<u>7</u> –					8	В	
Stiff, moist, with wood fragments	_	2	1.5	21		2	0.3	-
· · · ·	Ξ	3	В		with 3/4" gravel	2	В	
Medium ▼	5	2	0.7	26	<u>-2</u> :	3	0.2	
Mediaiii —————————————————————————————————	_	3	В		Very soft, with 1/2" gravel 413.20	6	В	
	_	3	NT	NT	Extent of Exploration. Benchmark: BM 916 Chiseled			
0% return, old timber fragments <u>y</u>	=	3	NI	NI	square on the NE corner of Wingwall of Structure #051-0008, Sta. 891+20, 22' RT.			
Dark grey	-10	1	0.7	23	<u>-3</u>	힉		
		1	В					
Grey	=	1 2	0.6 B	19	<u>-</u>			
424.20	15	0	1.0	23		5		
Stiff, moist, brown & grey marbled, CLAY	_	3 4	1.0 B	23	_ 			
Very stiff, brown	=	3 5 7	3.3 B	19				
	_							

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

DESIGNED - HAMEED S. SALIH EXAMINED CHECKED - MICHAEL A. PAULIONIS DRAWN - DENNIS A. POP PASSED ON H.S.S./M.A.P./D.H.C.

DECEMBER 10, 2021 REVISED -REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

F.A.P. RTE. 332 **SOIL BORING LOGS STRUCTURE NO. 051-2010** SHEET 10 OF 10 SHEETS

COUNTY TOTAL SHEET NO.

LAWRENCE 38 25 SECTION (15BY)BR CONTRACT NO. 74860

