## STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

#### DEWITT L4 1 CM2023-5010

### D-95-018-23



## STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION March 24, 202

March 24, 2023 DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

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

#### TRAFFIC DATA

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ı	FAP RTE. 3	22 /	(US 51)					
ı			LEG "A"	LEG "B"	LEG "C"	LEG "D"	LEG "E"	LEG "F"
ı	2023 ADT	=	9,050	9,650	9,350	6,800	7,650	6,800
ı	PV %	=	83.10%	87.20%	88.20%	84.50%	84 30%	82.00%
ı	SU %	=	4.70%	2.80%	2.70%	3.70%	4.60%	5.10%
ı	MU %	=	12.20%	10.00%	9.10%	11.80%	11.10%	12.90%
п								

#### TRAFFIC DATA LOCATIONS

LEG "A" = MCLEAN COUNTY LINE TO FAS 547A (WAYNESVILLE RD)

LEG "B" = FAS 547A (WAYNESVILLE RD) TO THORPES RD IN WAPELLA

LEG "C" = THORPES RD IN WAPELLA TO US 51B

LEG "D" = US 51B TO TR 108 (WALNUT RD) LEG "E" = TR 108 (WALNUT RD) TO IL 10

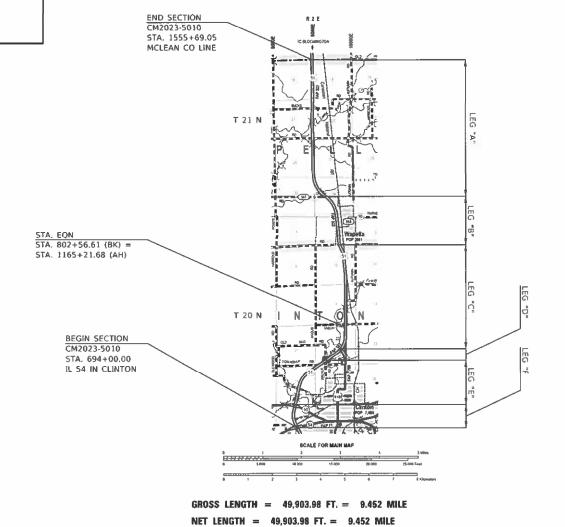
LEG "F" = IL 10 TO IL 54 (VAN BUREN ST)

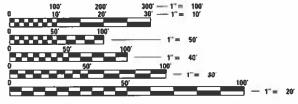
FUNCTIONAL CLASSIFICATION FREEWAY / EXPRESSWAY

# **PROPOSED HIGHWAY PLANS**

**FAP ROUTE 322 (US 51) SECTION CM2023-5010 PATCHING DEWITT COUNTY** 

C-95-030-23 US 51 FROM IL 54 IN CLINTON TO MCLEAN CO LINE





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 TOWNSHIPS OR 811 RANDOLPH

PROJECT ENGINEER: RYAN T. CARROLL **SQUAD LEADER: TYLER J. PIERSON DESIGNER: AARON FARNHAM** 

CONTRACT NO. 70G21

## **INDEX OF SHEETS**

DESCRIPTION	SHEET NO.
COVER	1
INDEX OF SHEETS, LIST OF HIGHWAY STANDARDS, & COMMITMENTS	2
SUMMARY OF QUANTITIES	3
SCHEDULE OF QUANTITIES	4
TYPICAL CROSS-SECTIONS	5 to 12
CLASS A PATCHING (SPECIAL)	13 to 14

### LIST OF STANDARDS

STANDARD NO.	DESCRIPTION
000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
420001-10	PAVEMENT JOINTS
701101-05	OFF-ROAD OPERATIONS, MULTILANE, 15' (4.5 M) TO 24" (600 MM) FROM PAVEMENT
701106-02	OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' (4.5 M) AWAY
701400-11	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
701401-13	LANE CLOSURE, FREEWAY/EXPRESSWAY
701411-09	LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP, FOR SPEEDS > 45 MPH
701422-10	LANE CLOSURE, MULTILANE, FOR SPEEDS > 45 MPH TO 55 MPH
701426-09	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATION, FOR SPEEDS > 45 MPH
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701901-08	TRAFFIC CONTROL DEVICES

## **GENERAL NOTES**

#### G N -100

ELECTRONIC FILES AND/OR ELECTRONIC SURVEY INFORMATION INCLUDING CADD FILES WILL NOT BE AVAILABLE TO THE CONTRACTOR.

#### G.N.-440I

THE EXISTING TIE BARS BETWEEN THE EXISTING PAVEMENT AND EXISTING MEDIANS, GUTTERS AND/OR COMBINATION CURB AND GUTTERS THAT ARE FOUND SUITABLE FOR REUSE SHALL BE CLEANED, STRAIGHTENED AND INCORPORATED INTO THE NEW CONSTRUCTION. ANY EXISTING TIE BARS THAT ARE FOUND UNSUITABLE TO BE INCORPORATED INTO THE PROPOSED CONSTRUCTION DUE TO EXCESSIVE RUSTING OR DISTRESS SHALL BE REMOVED FLUSH WITH THE FACE OF THE EXISTING CONCRETE AND DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT-OF-WAY IN ACCORDANCE WITH ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS.

THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCLUDED IN THE VARIOUS REMOVAL PAY ITEMS AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

#### G.N.-780 (SPL)

PAVEMENT MARKING FOR THIS PROJECT IS TO BE PERFORMED BY OTHERS, FIELD PERSONNEL SHALL NOTIFY GARY SIMS, DISTRICT 5 TRAFFIC OPERATIONS ENGINEER AT (217) 465-4181 WHEN THE PROJECT IS COMPLETE AND READY FOR PAVEMENT MARKINGS.

### **COMMITMENTS**

THERE ARE NO COMMITMENTS FOR THIS CONTRACT

USER NAME = Bradley.Farnham	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 40.0000 / in.	CHECKED -	REVISED -	
PLOT DATE = 1/25/2023	DATE -	REVISED -	

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SHEET	1	OF	1	SHEETS	STA.	TO S	ТΑ

A.P. RTE	SECT	COUNTY	TOTAL SHEETS	SHEET NO.		
322	CM2023	-5010		DEWITT	14	2
			CONTRACT	NO. 70	)G21	
		ILLINOIS	ID DROIECT			

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## SUMMARY OF QUANTITIES

LOCATION OF WORK:

FAP 322 (US 51) FREEWAY / EXPRESSWAY

RURAL STA. 694+00.00 STA. 1555+69.05 DEWITT 100% STATE 0006

FUNDING BREAKOUT:

CONSTRUCTION TYPE CODE:

	CODE NO.		ITEM	<u>UNIT</u>	TOTAL QUANTITY
	44213000		PATCHING REINFORCEMENT	SQ YD	461.00
	44213200		SAW CUTS	FOOT	1,478.00
	44213204		TIE BARS 3/4"	EACH	560.00
	67100100		MODIL IZATION	I CLIM	1.00
	67100100		MOBILIZATION	L SUM	1.00
	70100320		TRAFFIC CONTROL AND PROTECTION, STANDARD 701422	L SUM	1.00
	70100800		TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	L SUM	1.00
	70102635		TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1.00
	70107025		CHANGEABLE MESSAGE SIGN	CAL DA	6.00
	V4420542		CLASS A DATCUES TYPE I O INCH (SPECIAL)	CO VD	0.00
	X4420543		CLASS A PATCHES, TYPE I, 9 INCH (SPECIAL)	SQ YD	8.00
	X4420545		CLASS A PATCHES, TYPE II, 9 INCH (SPECIAL)	SQ YD	94.00
	X4420547		CLASS A PATCHES, TYPE III, 9 INCH (SPECIAL)	SQ YD	99.00
	X4420549		CLASS A PATCHES, TYPE IV, 9 INCH (SPECIAL)	SQ YD	260.00
	Z0013798		CONSTRUCTION LAYOUT	L SUM	1.00
* DF	NOTES SPECIA	AI TY	ITEM		

USER NAME = Bradley.Farnham	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 40.0000 / in.	CHECKED -	REVISED -
PLOT DATE = 1/25/2023	DATE -	REVISED -

	F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SUMMARY OF QUANTITIES	322	CM2023-5010	DEWITT	14	3
			CONTRAC	NO. 70	0G21
SHEET 1 OF 1 SHEETS STA. TO STA.		ILLINOIS F	FED. AID PROJECT		

## SCHEDULES OF QUANTITIES

	PATCHING SCHEDULE													
						_	X4420543	X4420545	X4420547	X4420549	44213200	44213204	44213204	44213000
							CLASS A	CLASS A	CLASS A	CLASS A				
							PATCHES,	PATCHES,	PATCHES,	PATCHES,		TIE	TIE	
							TYPE I,	TYPE II,	TYPE III,	TYPE IV,		BARS	BARS	
							9 INCH	9 INCH	9 INCH	9 INCH	SAW	(TRANSVERSE)	(LONGITUDINAL)	PATCHING
TYPICAL			LENGTH	WIDTH	AREA	AD J ACENT	(SPECIAL)	(SPECIAL)	(SPECIAL)	(SPECIAL)	CUTS	3/4"	3 / 4 "	REINFORCEMENT
NUMBER	STA	LANE	FT	FT	SQ YD	MATERIAL	SQ YD	SQ YD	SQ YD	SQ YD	FT	EACH	EACH	SQ YD
1	694+00.00	NBDL	6.00	6.00		HMA SHOULDER	4.00				24.00	10.00		4.00
1	699+45.98	NBPL_	40.00	6.00		HMA SHOULDER				26.67	92.00	10.00		26. <u>67</u>
1	727+63.98	SBDL	6.00	12.00		HMA SHOULDER		8.00		_	36.00	22.00		8.00
1	735+11.98	NBDL	40.00			HMA SHOULDER				53.33	104.00	22.00		53.33
1	776+53.98	SBDL	6.00	12.00		HMA SHOULDER		8.00		_	36.00	22.00		8.00
1	776+77.98	SBDL	14.00			HMA SHOULDER			18.67		52.00	22.00		18. <u></u> 67
1	797+52.98	SBDL	6.00	12.00		HMA SHOULDER		8.00			36.00	22.00		8.00
1	801+74.98	SBDL	6.00	12.00		HMA SHOULDER		8.00			36.00	22.00		8.00
1	801+74.98	SBPL	6.00	12.00		HMA SHOULDER		8.00		_	36.00	22.00		8.00
1	1189+66.05	SBPL	12.00			HMA SHOULDER			16.00	_	48.00	22.00		16.00
1	1211+04.05	NBDL	8.00	12.00		HMA SHOULDER		10.67			40.00	22.00		10.67
	1216+35.05	SBDL	8.00	12.00		HMA SHOULDER		10.67			40.00	22.00		10.67
	1219+53.05	SBDL	6.00	12.00		HMA SHOULDER		8.00			36.00	22.00		8.00
	1238+22.05	NBPL	10.00	6.00		HMA SHOULDER		6.67			32.00	10.00		6.67
	1244+35.05	NBDL	120.00			HMA SHOULDER				80.00	252.00	10.00		80.00
	1276+63.05	SBDL	50.00	6.00		HMA SHOULDER		_		33.33	112.00	10.00		33.33
	1317+02.05	CENTER	50.00		66.67	C&G		0.00		66.67	174.00	22.00		66.67
	1370+84.05	SBPL	6.00	12.00		HMA SHOULDER	4 00	8.00			36.00	22.00		8.00
	1437+95.05	NBDL	6.00	6.00		HMA SHOULDER	4.00		16.00	-	24.00	10.00		4.00
	1454+12.05	NBPL	12.00	12.00		HMA SHOULDER		_	16.00		48.00	22.00		16.00
	1464+07.05	NBDL_	12.00			HMA SHOULDER			16.00		48.00	22.00		16.00
	1464+07.05	NBPL	12.00			HMA SHOULDER			16.00	_	48.00	22.00		16.00
	1495+87.05	NBDL	12.00			HMA SHOULDER		0.33	16.00	-	48.00	22.00		16.00
12	1540+91.05	SBDL	14.00	6.00	9.33	HMA SHOULDER		9.33			40.00	10.00		9.33
						TOTALS =	8.00	93.34	98.67		1,478.00		0.00	460.01
					ROU	NDED TOTALS =	8.00	94.00	99.00	260.00	1,478.00	56	0.00	461.00

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USER NAME = Tyler.Pierson	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 40.0000 / in.	CHECKED -	REVISED -	
PLOT DATE = 1/31/2023	DATE -	REVISED -	

		F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SCHEDULE OF QUAN	VIIIES	322	322 CM2023-5010 DEWITT 14			4
				CONTRACT	NO. 70	)G21
HEET 1 OF 1 SHEETS S	STA. TO STA.		ILLINOIS FED. A	D PROJECT		

**EXISTING TYPICAL CROSS SECTION** (1)

ΤO

SHEET 1 OF 8 SHEETS STA.

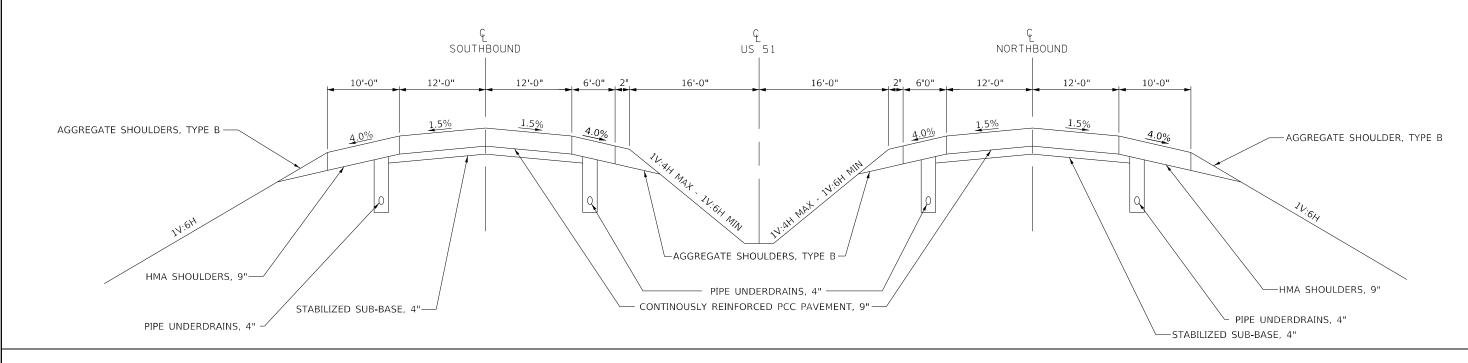
STATION EQUATION

802+56.61 BK = 1165+21.68 AH

CONTRACT NO. 70G21

STATION 694+00.00

STATION 1235+20.00(2)



## **EXISTING TYPICAL CROSS SECTION (2)**

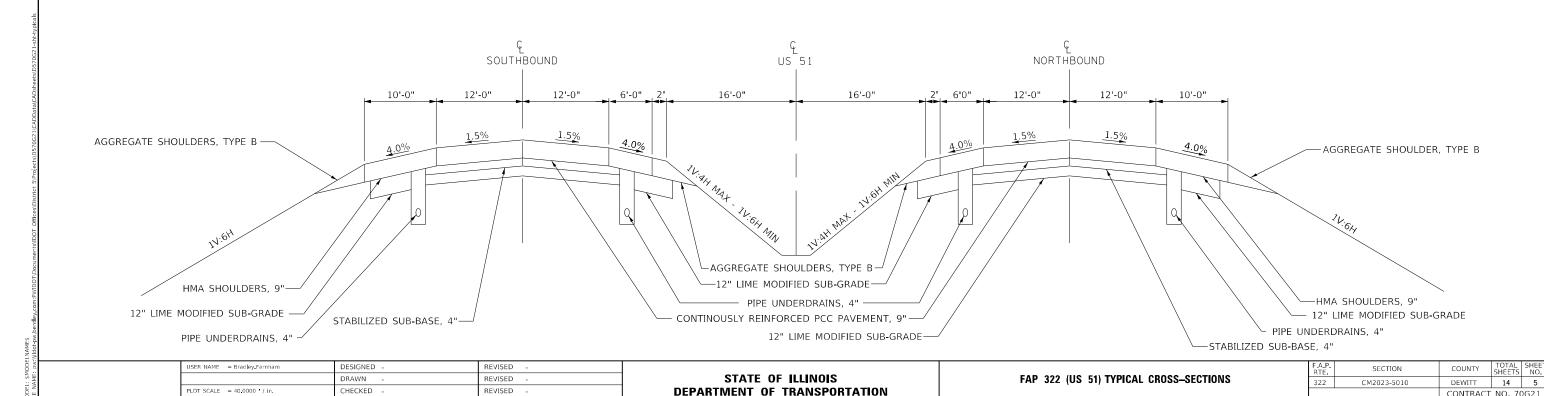
STATION

PLOT DATE = 1/25/2023

STATION

1 1235+20.00 3 1251+32.18

1244+62.56 **3** 1273+73.85 **3** 



#### **EXISTING TYPICAL CROSS SECTION (3)** STATION ΤO STATION 2 1244+62.562 1273+73.85 1251+32. 18**2** 1281+03. 77**4** գ US 51 SOUTHBOUND NORTHBOUND 12'-0" 16'-0" 12'-0" 6'-0" 2' 16'-0" 2' 6'-0" 12'-0" 12'-0" 10'-0" 4.4% SE RATE 4.4% SE RATE

## **EXISTING TYPICAL CROSS SECTION** (4)

AGGREGATE SHOULDER, TYPE B

CONTINUOUSLY REINFORCED PCC PAVEMENT, 9"

- HMA SHOULDERS, 9

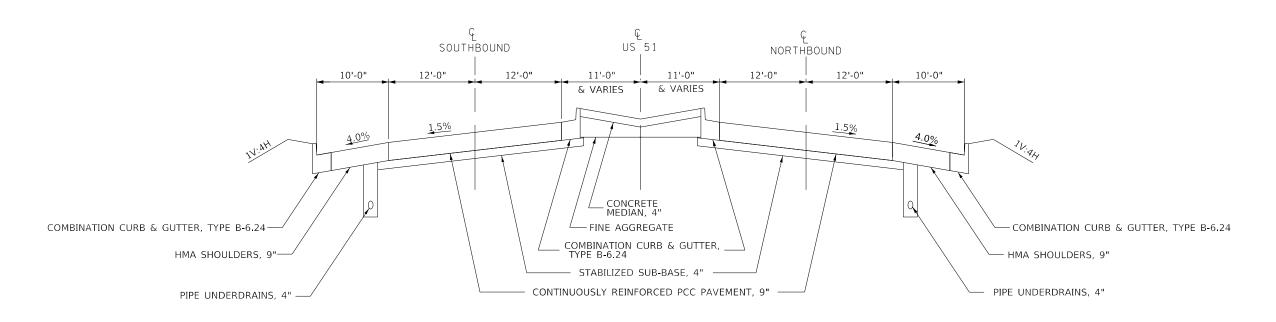
PIPE UNDERDRAINS, 4'

STATION STATION

**3** 1281+03.77 **5** 1293+36.05

1283+95.41**5** 1303+00.00**6** 

SCALE: N.T.S.



USER NAME = Bradley.Farnham	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 40.0000 / in.	CHECKED -	REVISED -
PLOT DATE = 1/25/2023	DATE -	REVISED -

AGGREGATE SHOULDERS, TYPE E

HMA SHOULDERS, 9"

PIPE UNDERDRAINS, 4"

STABILIZED SUB-BASE, 4"-

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

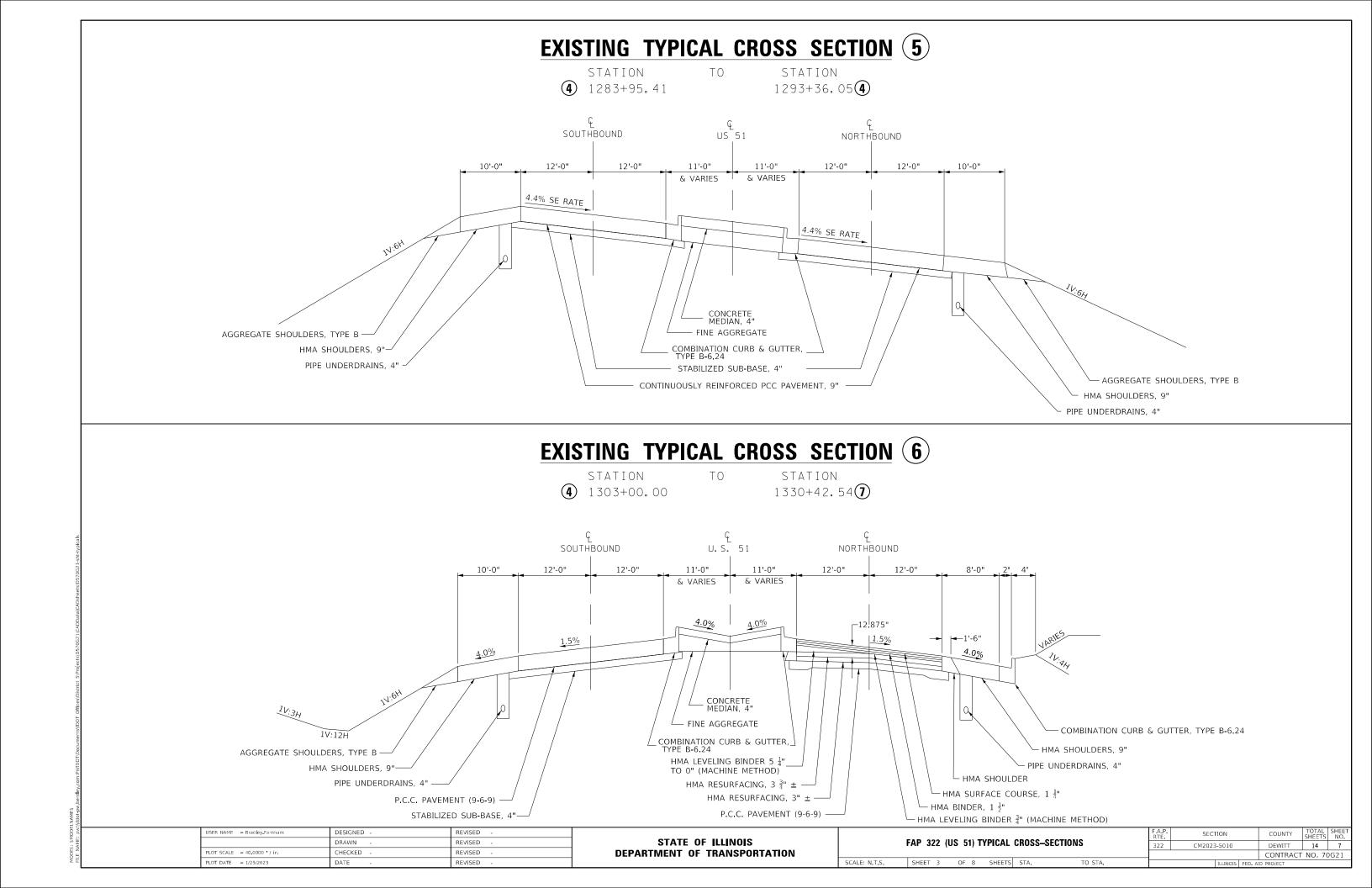
FAD 222 (HC F4) TVDICAL CDOCC CECTIONS				F.A.P. RTE	SECTION					
FAP 322 (US 51) TYPICAL CROSS—SECTIONS			322	CM2023-5010	DEWITT	14	6			
						CONTRACT NO. 70G21				
	SHEET 2	OF 8	SHEETS	STA.	TO STA.		ILLINOIS FED. AID PROJECT			

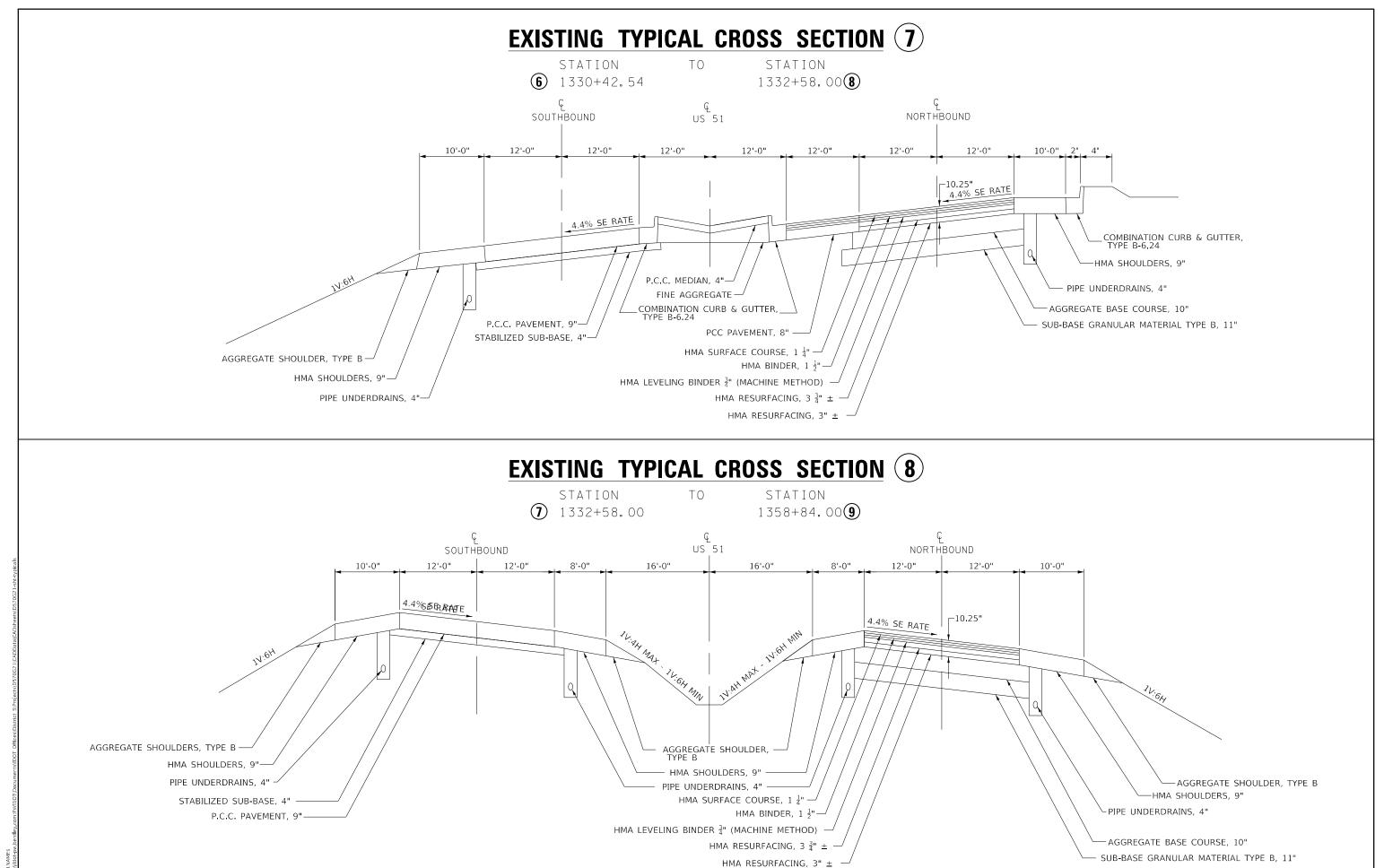
-AGGREGATE SHOULDER, TYPE B

-HMA SHOULDERS, 9"

PIPE UNDERDRAINS, 4"

∽ STABILIZED SUB-BASE, 4"





STATE OF ILLINOIS

**DEPARTMENT OF TRANSPORTATION** 

FAP 322 (US 51) TYPICAL CROSS-SECTIONS

SHEET 4 OF 8 SHEETS STA.

CM2023-5010

DEWITT 14 8

CONTRACT NO. 70G21

JSER NAME = Bradley Farnham

PLOT DATE = 1/25/2023

DESIGNED -

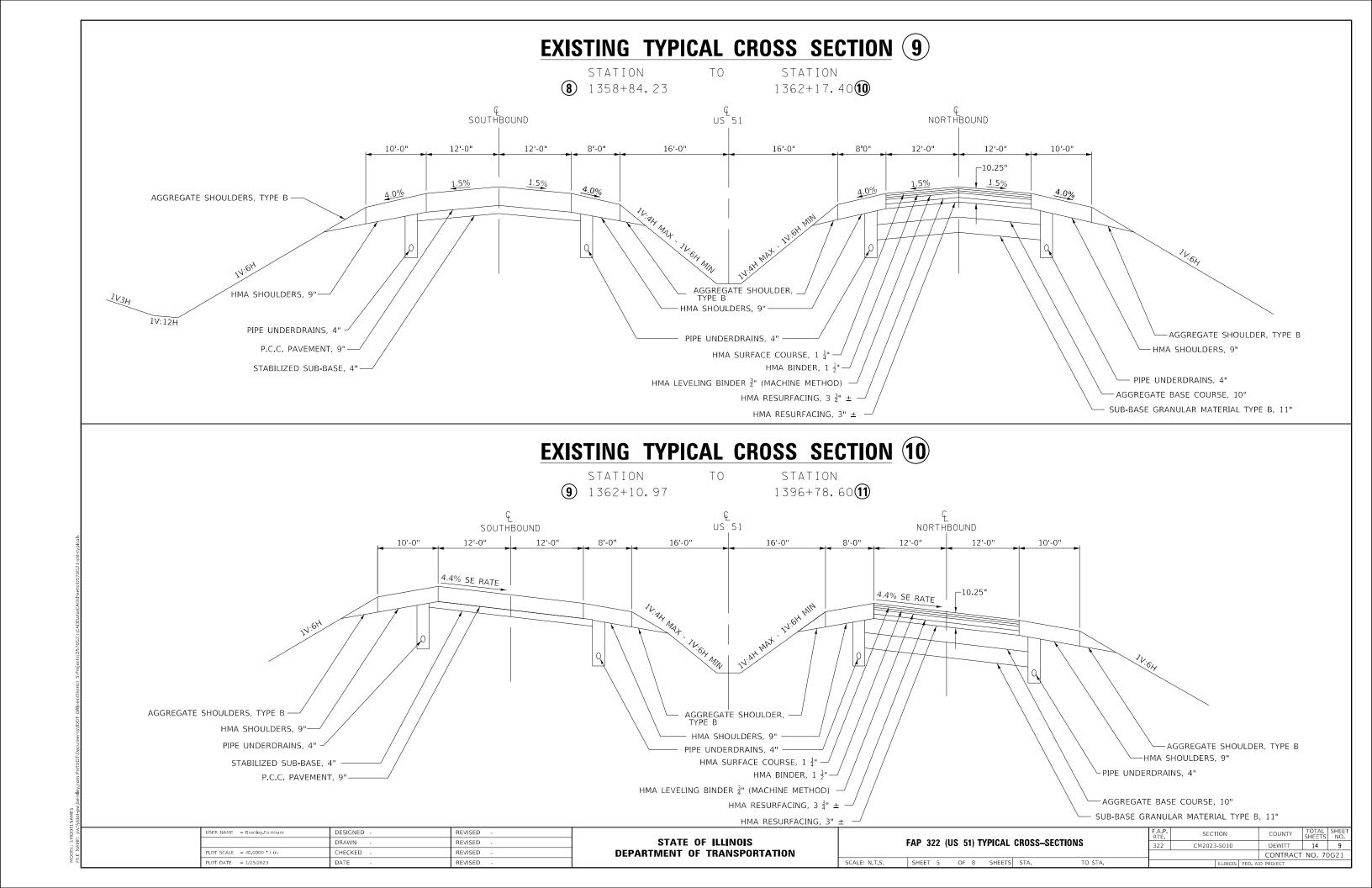
DRAWN

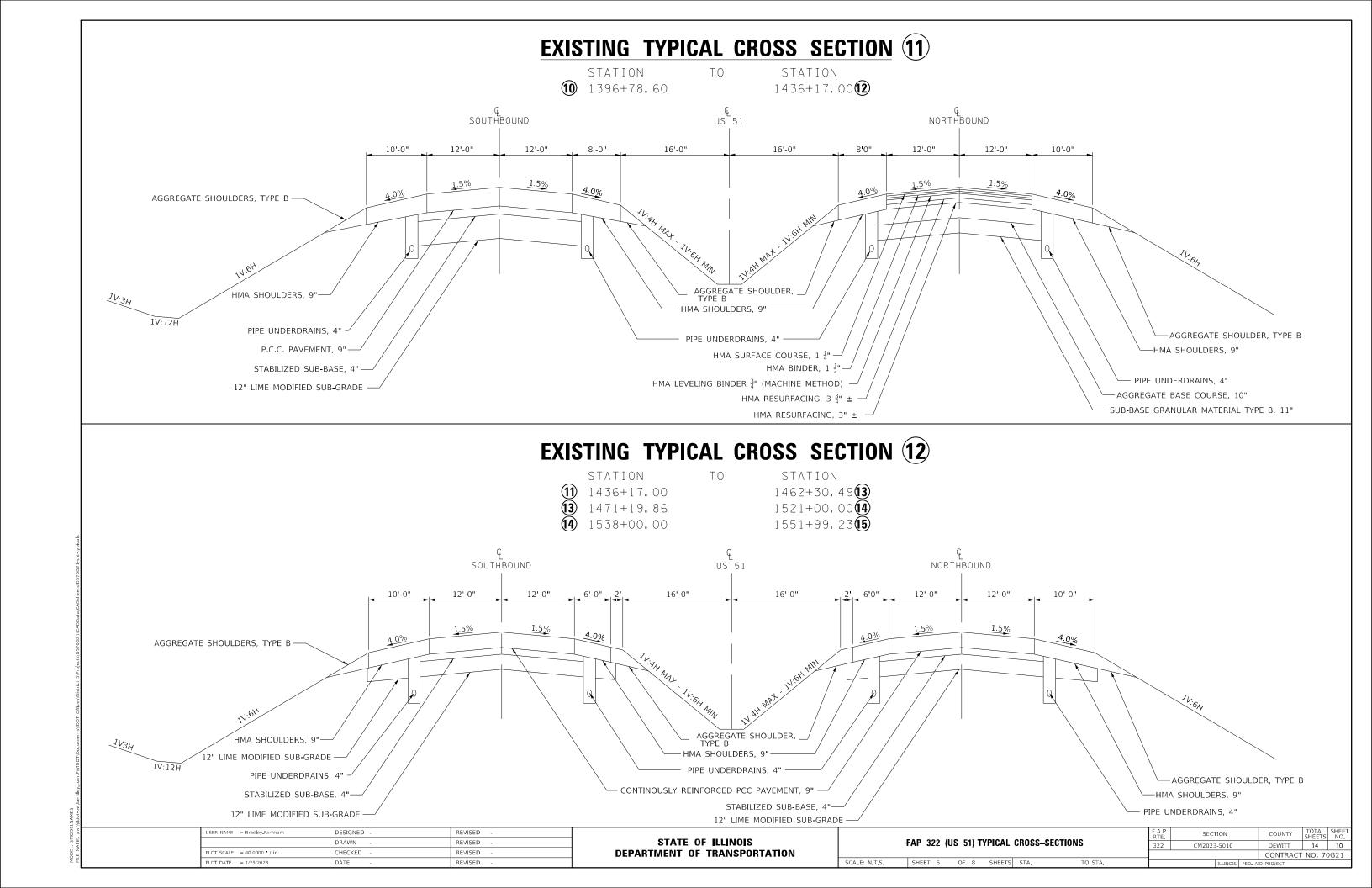
CHECKED

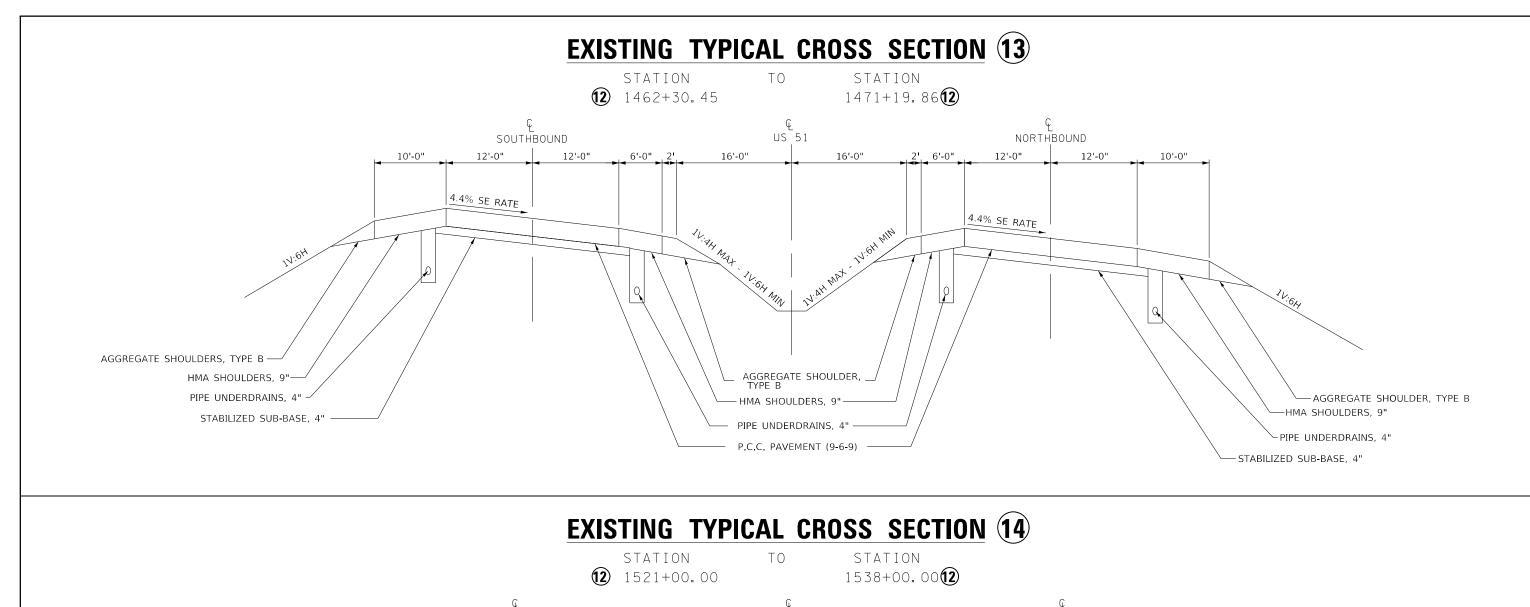
REVISED

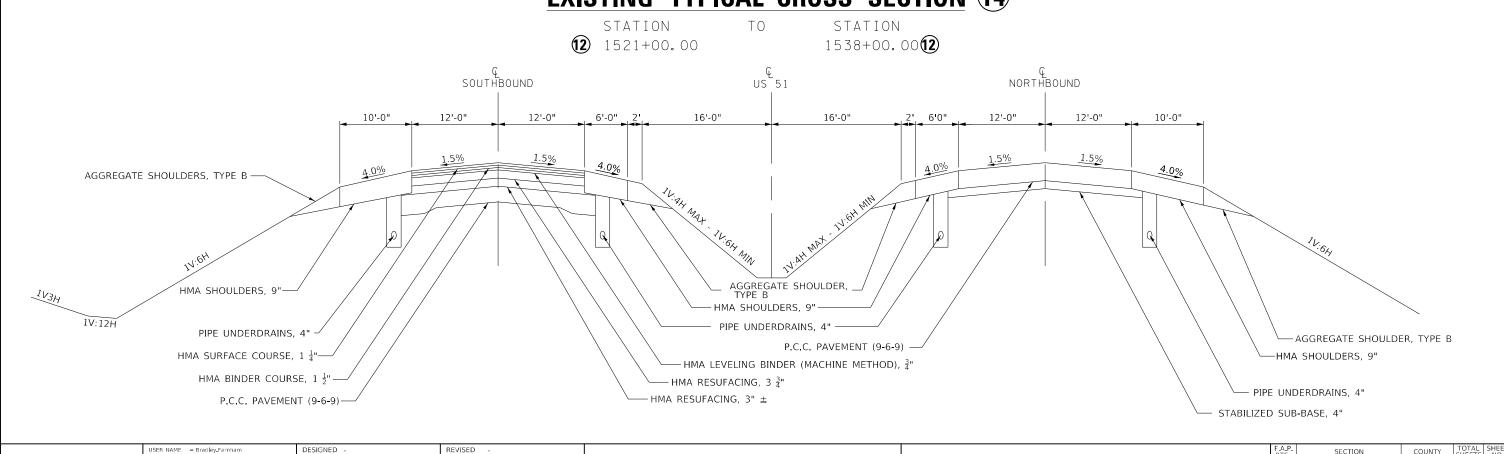
REVISED

REVISED









STATE OF ILLINOIS

**DEPARTMENT OF TRANSPORTATION** 

DRAWN

CHECKED

PLOT DATE = 1/25/2023

REVISED

REVISED

SECTION

CM2023-5010

DEWITT 14 11

CONTRACT NO. 70G21

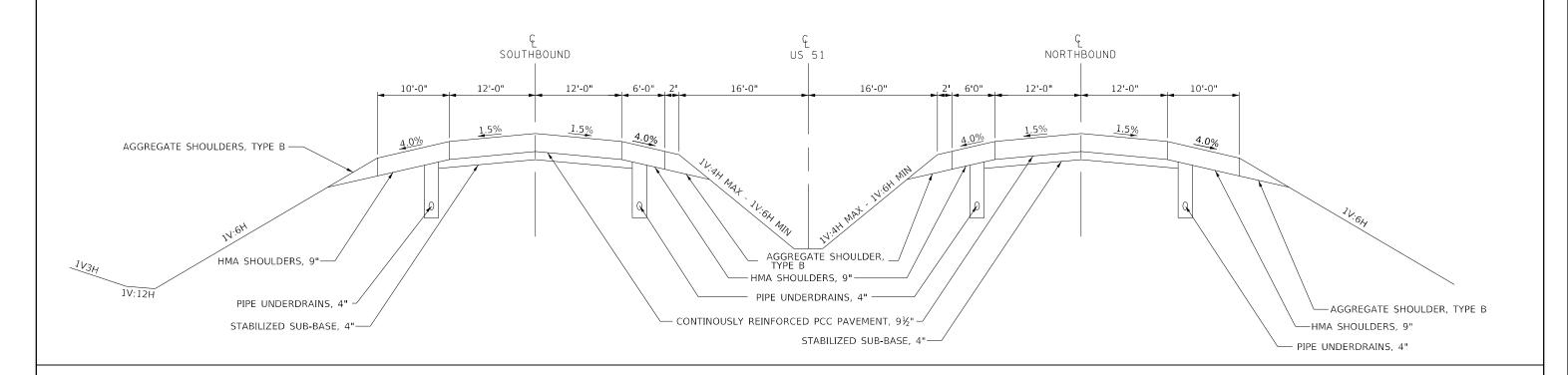
FAP 322 (US 51) TYPICAL CROSS-SECTIONS

SHEET 7 OF 8 SHEETS STA.

## **EXISTING TYPICAL CROSS SECTION 15**

ΤO

STATION 12 1551+99.23 STATION 1555+69.05



USER NAME = Brac	lley.Farnham	DESIGNED	-
		DRAWN	-
PLOT SCALE = 40.0	000 ¹ / in.	CHECKED	-
PLOT DATE = 1/25	/2023	DATE	-
•		•	

REVISED

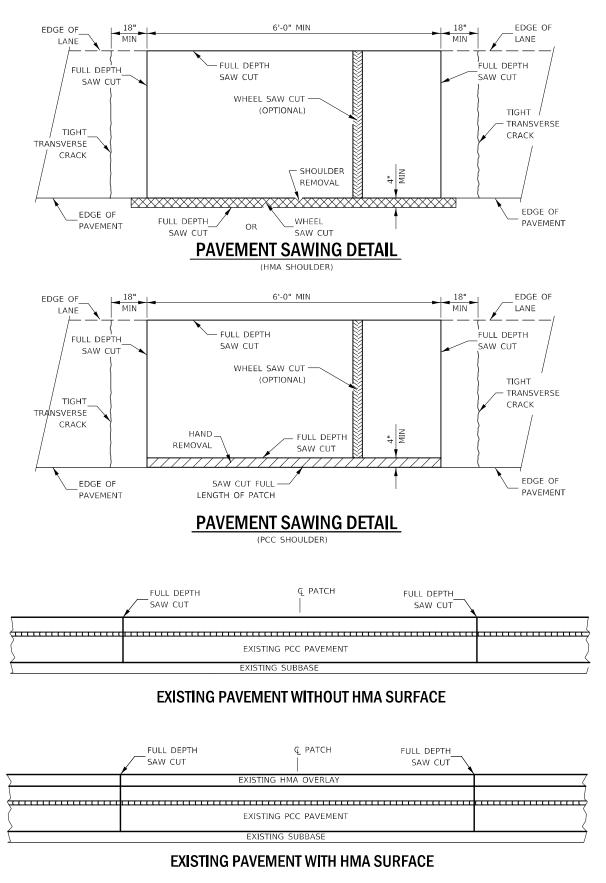
REVISED

REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: N.T.S.

	F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
FAP 322 (US 51) TYPICAL CROSS—SECTIONS		CM2023-5010	DEWITT	14	12	
		CONTRACT NO. 70G21				
SHEET 8 OF 8 SHEETS STA. TO STA.	ILLINOIS FED. AID PROJECT					



## PAVEMENT SAWING DETAIL FOR CLASS A PATCHING (CRC PAVEMENT)

JSER NAME = Bradley.Farnham REVISED DESIGNED DRAWN REVISED HECKED REVISED

### STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

#### SECTION **CLASS A PATCHING (SPECIAL)** CM2023-5010 DEWITT 14 13 CONTRACT NO. 70G21 SHEET 1 OF 2 SHEETS STA. TO STA.

#### TRANSVERSE REBAR SHALL EXTEND TO OUTER LONGITUDINAL REBAR WHILE PROVIDING A MINIMUM 3" CLEARANCE FROM EXISTING PAVEMENT EDGE PAVEMENT REINFORCEMENT DETAIL

-SHOULDER REMOVAL

\* NO. 6 TRANSVERSE BAR SHALL BE

EDGE OF

#6X24" EPOXY COATED

TIE BARS DRILLED AND

PAVEMENT (TYPICAL)

— PATCH BOUNDARY

GROUTED INTO EXISTING

DRILLED HOLE

EXISTING PCC PVMT,

LONGITUDINAL CONSTRUCTION JOINT

ADJACENT PAVEMENT, PCC SHOULDERS OR PCC CURB

AND GUTTER WITH #6x24" EPOXY COATED TIE BARS

EXISTING TRANSVERSE REINFORCEMENT SPACING; ±6%"

SPACING OF NEW TRANSVERSE AND LONGITUDINAL REINFORCEMENT SHALL MATCH SPACING OF EXISTING

REINFORCEMENT, SPACING OF NEW TRANSVERSE TIE

REINFORCEMENT SHALL BE TIED TOGETHER WITH A

MINIMUM OF TWO TIES PER BAR, WHEN ALIGNED.

BARS SHALL BE SPACED AT 12" CENTERS, TIE BARS AND

SUPPORT CHAIRS SHALL BE REQUIRED WHENEVER PATCH

\* EVERY THIRD INTERSECTION MUST BE TIED. WHEN THE MINIMUM CLEARANCE CANNOT BE OBTAINED WITH THE

TRANSVERSE REBAR ON TOP, THEN THE TRANSVERSE REBAR SHALL BE TIED TO THE BOTTOM OF

\*\* VARIABLES WHERE S1 AND S2 ARE 21/2" MIN. AND 12" MAX.

PCC SHOULDER

(BAR SIZE + ¾")

AT 36" CENTERS.

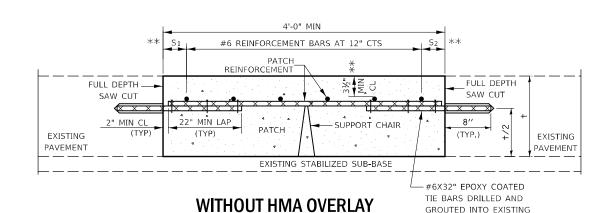
LENGTH EXCEEDS 6'-0"

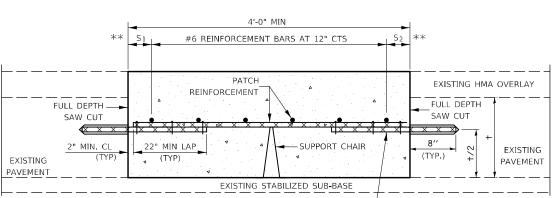
THE LONGITUDINAL REBAR.

NOTES:

LANE

TIED TO LONGITUDINAL BAR.





WITH HMA OVERLAY

#6X32" EPOXY COATED TIE BARS DRILLED AND GROUTED INTO EXISTING PAVEMENT (TYPICAL)

GROUTED INTO EXISTING

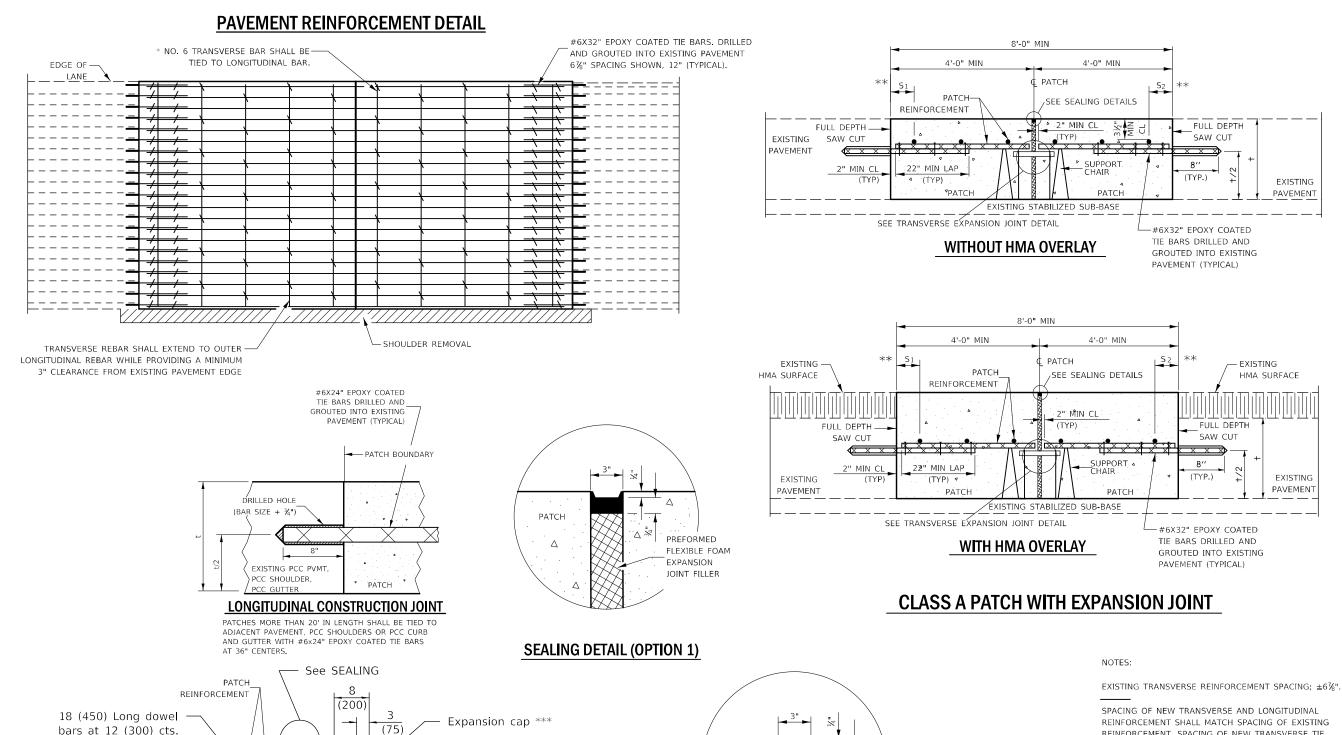
PAVEMENT (TYPICAL)

#6X32" EPOXY COATED TIE BARS. DRILLED

AND GROUTED INTO EXISTING PAVEMENT

6%" SPACING SHOWN, 12" (TYPICAL).

### **PATCHING DETAIL FOR CLASS A PATCHING** (CRC PAVEMENT)



SAND-2 (50) PATCH **PREFORMED** CLOSED CELL Dowel bar PLASTIC JOINT assembly FILLER (225) (225)

### TRANSVERSE EXPANSION JOINT

(FOR PAVEMENTS WITH EQUAL THICKNESS)

REINFORCEMENT SHALL MATCH SPACING OF EXISTING REINFORCEMENT. SPACING OF NEW TRANSVERSE TIE BARS SHALL BE SPACED AT 12" CENTERS. TIE BARS AND REINFORCEMETN SHALL BE TIED TOGETHER WITH A MINIMUM OF TWO TIES PER BAR, WHEN ALIGNED.

SUPPORT CHAIRS SHALL BE REQUIRED WHENEVER PATCH LENGTH EXCEEDS 6'-0"

- \* EVERY THIRD INTERSECTION MUST BE TIED. WHEN THE MINIMUM CLEARANCE CANNOT BE OBTAINED WITH THE TRANSVERSE REBAR ON TOP, THEN THE TRANSVERSE REBAR SHALL BE TIED TO THE BOTTOM OF THE LONGITUDINAL REBAR.
- \*\* VARIABLES WHERE S<sub>1</sub> AND S<sub>2</sub> ARE 2½" MIN. AND 12" MAX.
- \*\*\* EXPANSION CAPS SHALL BE INSTALLED ON THE EXPANSION SIDE OF PAVEMENT

USER NAME = Bradley.Farnham	DESIGNED -	REVISED -	STATE OF ILLINOIS	CLASS A PATCHING (SPECIAL)			F.A.P.	SECTION	COUNTY	TOTAL S	HEET
	DRAWN -	REVISED -					322	CM2023-5010	DEWITT	14	14
PLOT SCALE = 100.0000 / in	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION						CONTRAC	T NO. 700	G21
PLOT DATE = 1/25/2023	DATE -	REVISED -		SCALE: N.T.S.	SHEET 2 OF 2 SHEETS STA.	TO STA.		ILLINOIS FED. A	ID PROJECT		

**SEALING DETAIL (OPTION 2)** 

\* MCLEAN & DEWITT