

06-16-2023 LETTING ITEM 201

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STANDARDS

000001-08	630001-12	701306-04
001001-02	630301-09	701311-03
001006	631011-10	701336-07
442101-09	701006-05	701501-06
482006-03	701011-04	701901-08
606001-08	701201-05	780001-05
606101-05	701206-05	781001-04
606106-05	701301-04	782006-01

UTILITIES

AMEREN IP (GAS & ELECTRIC)  
1050 WEST BLVD.  
BELLEVILLE, IL 62222  
(800) 892-7715

AT&T (TELEPHONE)  
203 GOETHE ST.  
COLLINSVILLE, IL 62234  
(618) 346-6400

CHARTER/SPECTRUM (COMMUNICATIONS)  
317 WEST MAIN STREET  
BELLEVILLE, IL 62220  
(618) 277-2288

ILLINOIS AMERICAN WATER (WATER)  
100 NORTH WATERWORKS DRIVE  
BELLEVILLE, IL 62223  
(618) 277-7450

CALL JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS (J.U.L.I.E.) BEFORE DIGGING: (800) 892-0123 or 811

ST. CLAIR TOWNSHIP W 1/2, SECTION 4, T.1N., R.8W.  
ST. CLAIR TOWNSHIP E 1/2, SECTION 5, T.1N., R.8W.  
ST. CLAIR TOWNSHIP E 1/2, SECTION 8, T.1N., R.8W.  
ST. CLAIR TOWNSHIP W 1/2, SECTION 9, T.1N., R.8W.

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 SCALES BELOW MAY BE USED.

10	0	10	20
DRAWING SCALE 1" = 10'			
20	0	20	40
DRAWING SCALE 1" = 20'			
40	0	40	80
DRAWING SCALE 1" = 40'			

STATION EQUATIONS  
STA 247+56.12 BK = STA 247+56.21 AH  
STA 277+05.38 BK = STA 277+05.79 AH  
STA 285+70.05 BK = STA 285+71.85 AH

# STATE of ILLINOIS

## DEPARTMENT OF TRANSPORTATION

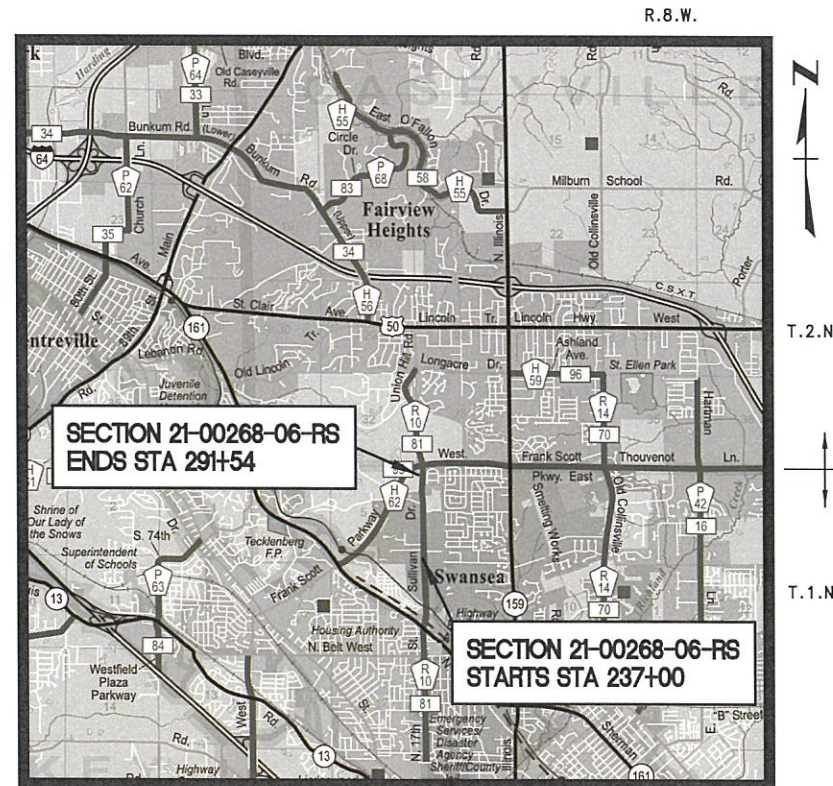
### PLANS FOR PROPOSED SURFACE TRANSPORTATION PROGRAM

#### SECTION 21-00268-06-RS

#### FAU 9167 - COUNTY HIGHWAY 81

#### SULLIVAN DRIVE

PROJECT NO.: JZJC(803)  
JOB NO.: C-98-022-25  
ST. CLAIR COUNTY



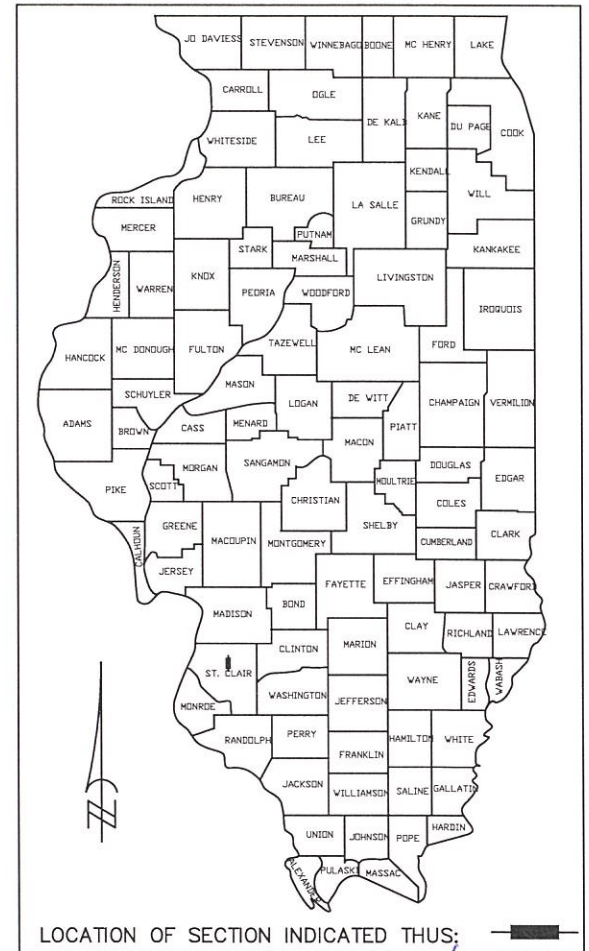
0 1 2  
SCALE: 1 INCH = 1 MILE

LOCATION MAP

GROSS LENGTH OF PROJECT = 5,454.00 FEET (1.033 MILES)  
OMISSIONS = 2.30 FEET (DUE TO STA EQUATIONS)  
NET LENGTH OF PROJECT = 5,451.70 FEET (1.033 MILES)  
ROADWAY DESIGNATION: MAJOR COLLECTOR  
DESIGN TRAFFIC (2022) = 9,365 ADT  
DESIGN YEAR (CURRENT) = 9,345 ADT  
DESIGN SPEED: 55 MPH (RURAL)  
POSTED SPEED: 45 MPH



FAU ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9167	21-00268-06-RS	ST. CLAIR	20	1
CONTRACT NO. 97813				



4/10/23  
These plans were prepared by me or by a full-time member of my staff working under my personal supervision.  
*Norman Etling*  
Norm Etling, P.E.  
County Engineer  
License Number 62-041820  
License Expiration Date: November 30, 2023

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

COUNTY OF ST. CLAIR  
DEPARTMENT OF ROADS AND BRIDGES

APPROVED 4/10/23  
*Norman Etling*  
NORMAN ETLING, P.E. COUNTY ENGINEER

PASSED 4/13/23  
*[Signature]*  
DISTRICT 8 ENGINEER OF LOCAL ROADS & STREETS

RELEASING FOR BID BASED ON LIMITED REVIEW 4/13/23  
*[Signature]*  
REGION 5 ENGINEER

**GENERAL NOTES**

1. THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT:

MIXTURE USE	HMA SURFACE	HMA SHOULDER	INCIDENTAL
AC/PG	PG 64-22	PG 64-22	PG 64-22
RAP % (MAX)	SEE SPEC.	SEE SPEC.	SEE SPEC.
DESIGN AIR VOIDS	4.0% @ Ndes=70	4.0% @ Ndes=70	4.0% @ Ndes=70
MIX COMPOSITION (GRADATION MIXTURE)	IL 9.5	IL 9.5	IL 9.5
FRICTION AGG	MIXTURE "D"		MIXTURE "C"
MATERIAL TRANSFER DEVICE (REQUIRED?)	YES	NO	NO

2. A QUANTITY FOR TEMPORARY PAVEMENT MARKING EQUAL TO THE AMOUNT OF PERMANENT PAVEMENT MARKING HAS BEEN INCLUDED IN THE PLANS.

3. THE LOCATION OF UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES HAS BEEN DETERMINED FROM SURFACE OBSERVATIONS, AVAILABLE SURVEYS AND RECORDS, AND MUST BE CONSIDERED APPROXIMATE. THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS NOT PRESENTLY SHOWN OR KNOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXISTENCE AND LOCATION OF ALL UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES, AND TO PROTECT THEM FROM DAMAGE DURING CONSTRUCTION. CONTACT J.U.L.I.E. BEFORE DIGGING AT 1-800-892-0123.

4. AN APPROXIMATE QUANTITY OF 2 TONS FOR PAY ITEM "MIXTURE FOR CRACKS, JOINTS, AND FLANGWAYS" IS INCLUDED IN THE "SUMMARY OF QUANTITIES" IN ORDER TO ESTABLISH A UNIT COST FOR WORK WHICH MAY BE REQUIRED TO CONSTRUCT THIS SECTION. THE ACTUAL QUANTITY OF THE ITEM SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

**FACTORS USED FOR QUANTITY CALCULATION**

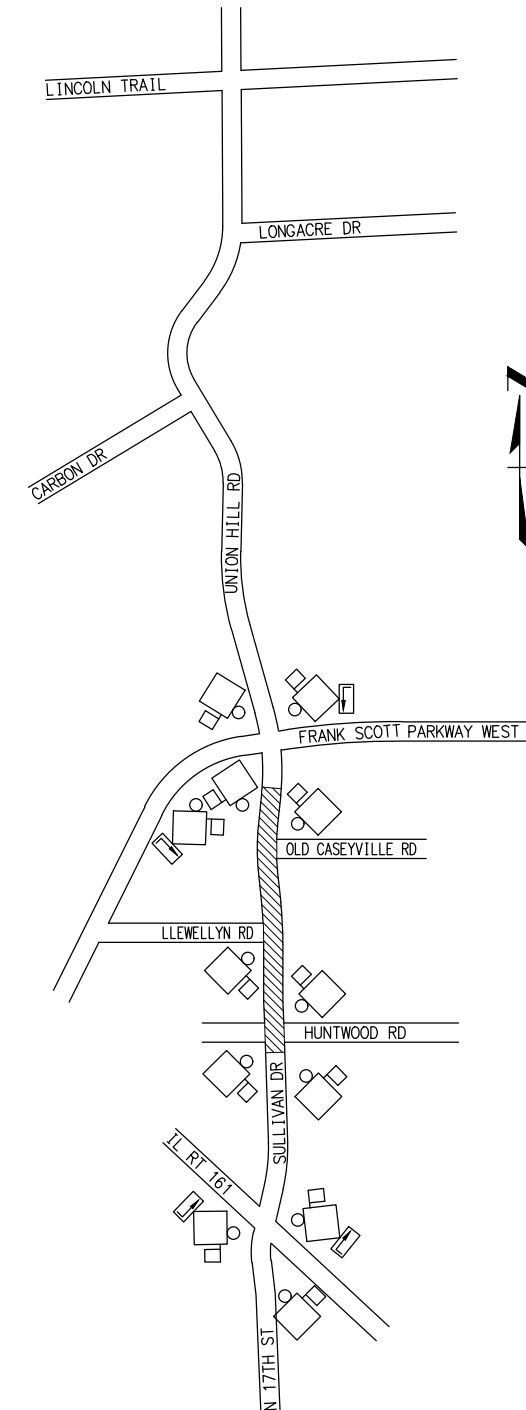
- AGGREGATE AND AGGREGATE WEDGE SHOULDER: 2.1 TON/CU YD
- AGGREGATE SURFACE COURSE: 2.1 TON/CU YD
- BITUMINOUS MATERIALS (TACK COAT): 0.05 LB/SQ FT (WHEN USED ON EXISTING PAVEMENT)  
0.025 LB/SQ FT (WHEN APPLIED ON PROPOSED HMA)
- HOT-MIX ASPHALT SURFACE COURSE, MIXTURE D, N70: 112 LB/SQ YD/INCH
- INCIDENTAL HOT-MIX ASPHALT SURFACING: 2.016 TON/CU YD
- NITROGEN FERTILIZER NUTRIENT: 90 LB/ACRE
- PHOSPORUS FERTILIZER NUTRIENT: 90 LB/ACRE
- POTASSIUM FERTILIZER NUTRIENT: 90 LB/ACRE
- A-2 SURFACE TREATMENT:
  - BITUMINOUS MATERIALS (COVER & SEAL COAT): 2.9 LB/SQ YD
  - SEAL COAT AGGREGATE: 20 LB/SQ YD
  - COVER COAT AGGREGATE: 20 LB/SQ YD
  - BITUMINOUS MATERIALS (PRIME COAT): 2.9 LB/SQ YD

**COMMITMENTS**

NONE

**TRAFFIC CONTROL PLAN**

1. NO OVERNIGHT LANE CLOSURES WILL BE ALLOWED—EXCEPT FOR PAVEMENT PATCHING. THE ROADWAY SHALL REMAIN OPEN TO TRAFFIC DURING CONSTRUCTION.
2. FLAGGERS SHALL BE PRESENT DURING ALL CLOSURE HOURS, INCLUDING LUNCH HOUR, AND NO ADDITIONAL COMPENSATION SHALL BE APPLIED.
3. ALL WARNING SIGNS SHALL BE A MINIMUM OF 48"x48" AND HAVE A BLACK LEGEND ON AN ORANGE REFLECTORIZED BACKGROUND.
4. TYPE A FLASHING LIGHTS SHALL BE USED ON EACH ADVANCED WARNING SIGN.



- LEGEND**
- ROAD CONSTRUCTION AHEAD W20-1103(0)-48
  - WORK AREA



ST. CLAIR COUNTY  
DEPARTMENT OF ROAD AND BRIDGES

GENERAL NOTES, COMMITMENTS, and TRAFFIC CONTROL PLAN

SHEET NO. 1 OF 1 SHEETS STA TO STA

FAU ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9167	21-00268-06-RS	ST. CLAIR	20	2
<b>CONTRACT NO. 97813</b>				

**SUMMARY OF QUANTITIES**

CODE NO.	ITEM	UNIT	QUANTITY
20200100	EARTH EXCAVATION	CU YD	80
25000200	SEEDING, CLASS 2	ACRE	0.25
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	23
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	23
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	23
25100115	MULCH, METHOD 2	ACRE	0.25
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	27
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	12191
40600370	LONGITUDINAL JOINT SEALANT	FOOT	7448
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	2
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	287
40600985	PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT	SQ YD	587
40600990	TEMPORARY RAMP	SQ YD	245
40604062	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70	TON	2999
40800029	BITUMINOUS MATERIALS (TACK COAT)	POUND	578
40800050	INCIDENTAL HOT-MIX ASPHALT SURFACING	TON	143
44000400	GUTTER REMOVAL	FOOT	303
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	40
44200934	CLASS B PATCHES, TYPE II, 8 INCH	SQ YD	488
44201298	DOWEL BARS 1 1/4"	EACH	1220
44213200	SAW CUTS	FOOT	3030
48101200	AGGREGATE SHOULDERS, TYPE B	TON	1105
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	323
48203100	HOT-MIX ASPHALT SHOULDERS	TON	705
50105220	PIPE CULVERT REMOVAL	FOOT	3
60403400	GRATES, TYPE A	EACH	1
60500050	REMOVING CATCH BASINS	EACH	1
60600095	CLASS SI CONCRETE (OUTLET)	CU YD	8.5
60602500	CONCRETE GUTTER, TYPE A	FOOT	237

\* : DENOTES SPECIALTY ITEM

CODE NO.	ITEM	UNIT	QUANTITY
60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	35
63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	1000
63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	2
63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	2
63200310	GUARDRAIL REMOVAL	FOOT	1106
67100100	MOBILIZATION	L SUM	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1
70100455	TRAFFIC CONTROL AND PROTECTION, STANDARD 701206	L SUM	1
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1
70100600	TRAFFIC CONTROL AND PROTECTION, STANDARD 701336	L SUM	1
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1
70300100	SHORT TERM PAVEMENT MARKING	FOOT	1816
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	605
70300211	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS - PAINT	SQ FT	203
70300221	TEMPORARY PAVEMENT MARKING - LINE 4" - PAINT	FOOT	20993
70300251	TEMPORARY PAVEMENT MARKING - LINE 6" - PAINT	FOOT	487
70300261	TEMPORARY PAVEMENT MARKING - LINE 12" - PAINT	FOOT	772
* 72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	2
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	203
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	20993
* 78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	487
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	772
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	186
* 78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	13
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	186
78300202	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	8291
LR403200	BITUMINOUS MATERIALS (PRIME COAT)	TON	9.2
LR403400	BITUMINOUS MATERIALS (COVER AND SEAL COATS)	TON	18.4
LR403500	COVER COAT AGGREGATE	TON	63

\* : DENOTES SPECIALTY ITEM

CODE NO.	ITEM	UNIT	QUANTITY
LR403600	SEAL COAT AGGREGATE	TON	63
Z0034105	MATERIAL TRANSFER DEVICE	TON	2999
Z0070100	SURVEY MONUMENT COVER ASSEMBLY	EACH	2
Δ Z0076600	TRAINEES	HOURL	500
Δ Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOURL	500

Δ = 0042



**ST. CLAIR COUNTY  
DEPARTMENT OF ROAD AND BRIDGES**

**SUMMARY OF QUANTITIES**

SHEET NO. 1 OF 1 SHEETS

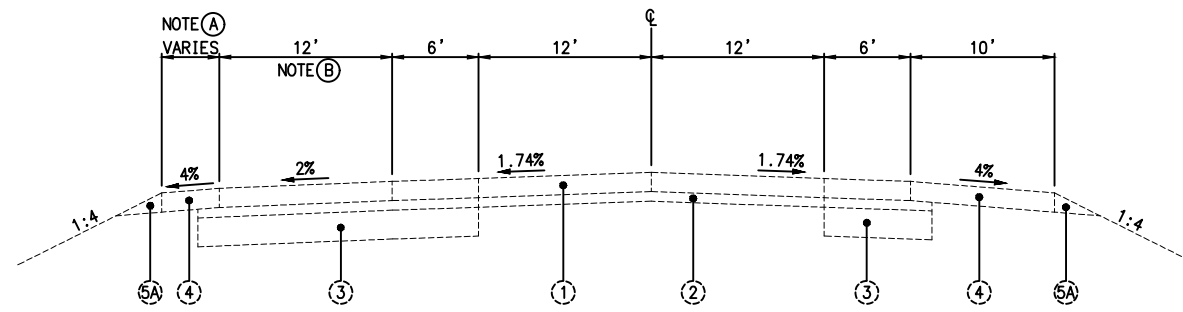
STA TO STA

FAU ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9167	21-00268-06-RS	ST. CLAIR	20	3

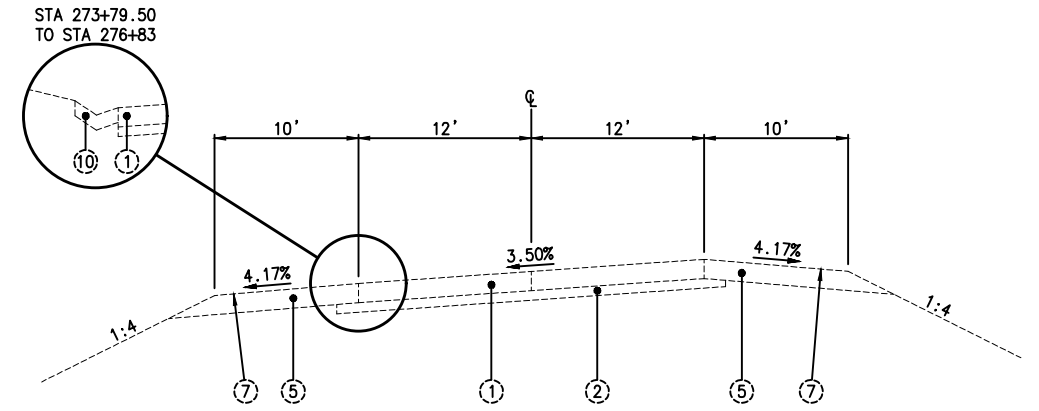
CONTRACT NO. 97813

**NOTES**

- (A) 4' FROM STA 240+05.23 TO STA 243+00  
VARIES 4' TO 4.47' STA 243+00 TO STA 243+15.02
- (B) 12' FROM STA 240+05.23 TO STA 242+10.71  
VARIES 12' TO 5.5' STA 242+10.71 TO STA 243+15.02
- (C) VARIES 4.47' TO 10' STA 243+15.02 TO STA 244+72.05
- (D) VARIES 5.5' TO 0' STA 243+15.02 TO STA 244+72.05



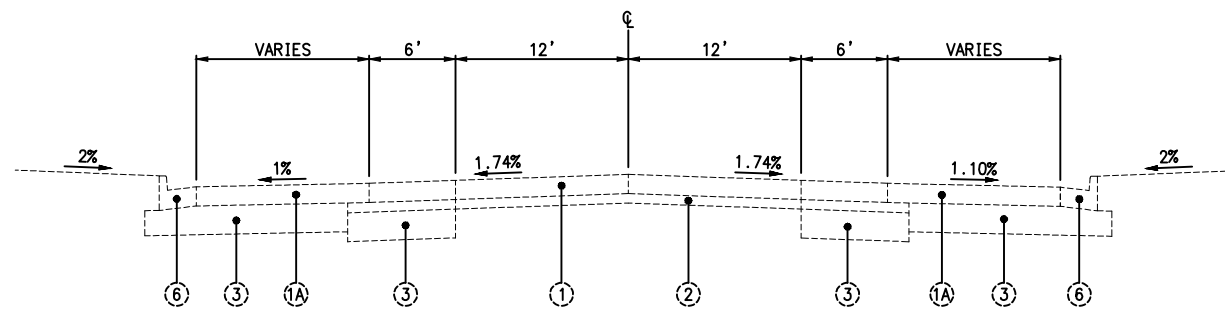
**STA 240+05.23 TO STA 243+15.02**



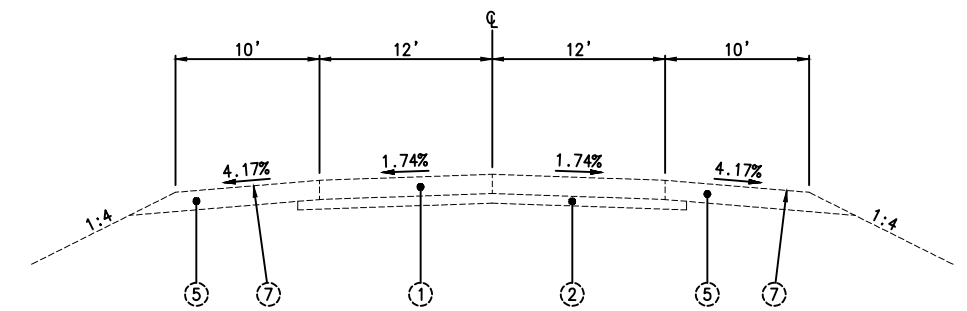
**STA 271+25 TO STA 276+47**

SUPER ELEVATION DATA (RECORD PLANS)	
SLOPE	STATION
TRANSITION (NORMAL CROWN TO 3.50%)	271+25 TO 273+00
FULL SUPER (3.50%)	273+00 TO 276+47
TRANSITION (3.50% TO NORMAL CROWN)	276+47 TO 278+23

NORMAL CROWN = 1.74%



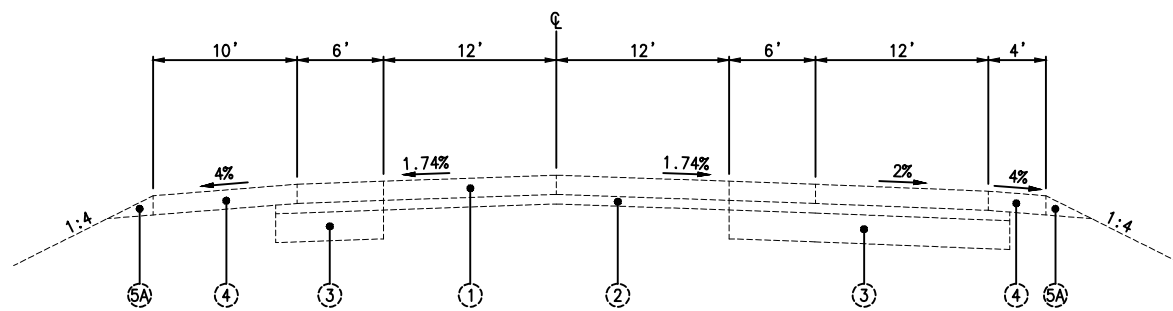
**STA 238+60.24 TO STA 240+05.23**



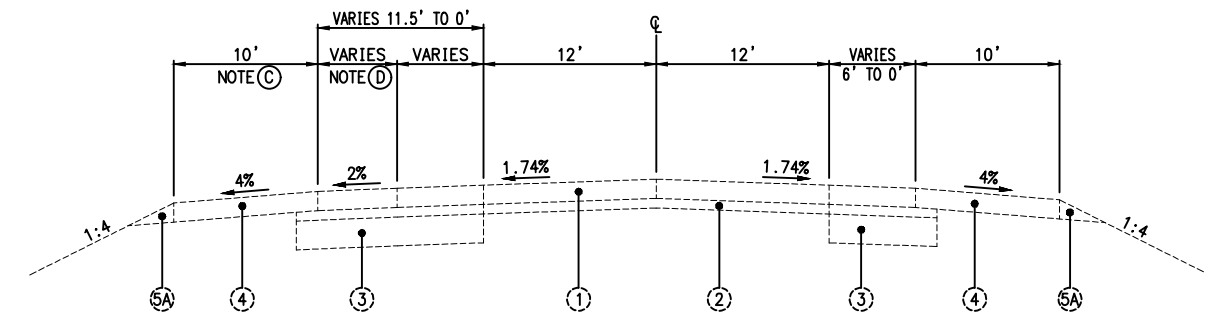
**STA 246+14.91 TO STA 271+25**

**LEGEND**

- ① EX PCC PAVEMENT, 8"
- ①A EX PCC PAVEMENT, 8" (NON-REINFORCED)
- ② EX STABILIZED SUB-BASE, 4"
- ③ EX PROCESS MODIFIED SOILS, 12"
- ④ EX HMA SHOULDERS, 8"
- ⑤ EX AGGREGATE SHOULDER, 8"
- ⑤A EX AGGREGATE WEDGE SHOULDER
- ⑥ EX COMB CONCRETE CURB AND GUTTER, TYPE B-6.24
- ⑦ EX BITUMINOUS SURFACE TREATMENT, CLASS A-2
- ⑧ EX AGGREGATE BASE COURSE, 8"
- ⑨ EX HMA SURFACE COURSE, MIX "D", N70, 1.5"
- ⑩ EX TYPE A GUTTER



**STA 237+00 TO STA 238+60.24**



**STA 243+15.02 TO STA 246+14.91**



**ST. CLAIR COUNTY  
DEPARTMENT OF ROAD AND BRIDGES**

**EXISTING TYPICAL SECTIONS**

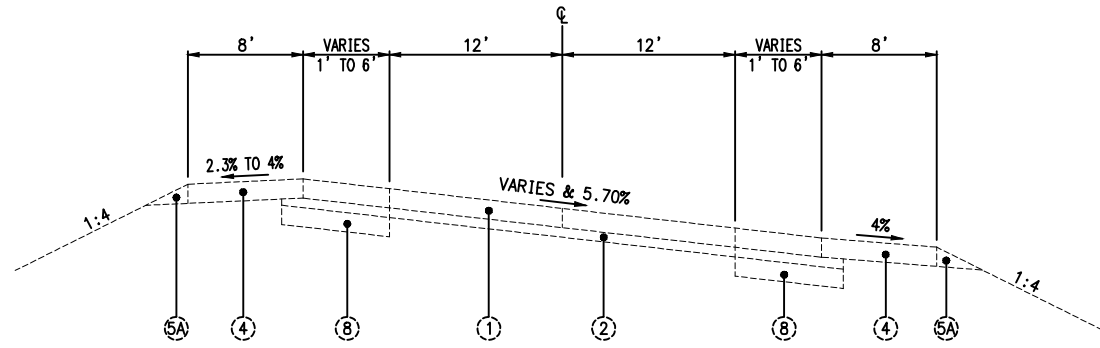
SHEET NO. 1 OF 2 SHEETS

STA 237+00 TO STA 276+47

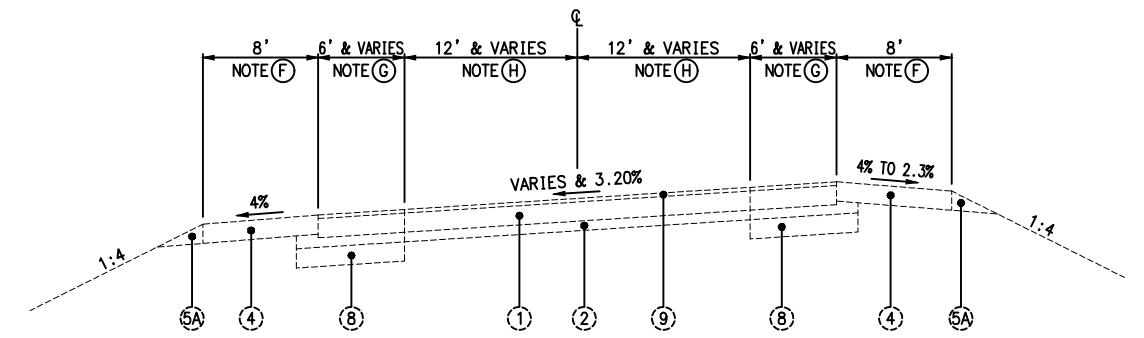
FAU ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9167	21-00268-06-RS	ST. CLAIR	20	4
CONTRACT NO. 97813				

**NOTES**

- (E) HMA SHOULDER ON LEFT SIDE FROM STA 279+70 TO STA 280+75  
HMA SHOULDER ON RIGHT SIDE FROM STA 279+72 TO STA 280+75
- (F) TRANSITION SHOULDER WIDTH FROM 8' TO 10'  
FROM STA 290+81 RT TO STA 291+74 RT AND  
FROM STA 291+34 LT TO STA 291+74 LT
- (G) VARIES FROM 6' TO 1' STA 288+78 TO STA 291+74
- (H) VARIES FROM 12' TO 18' STA 288+78 TO STA 291+74



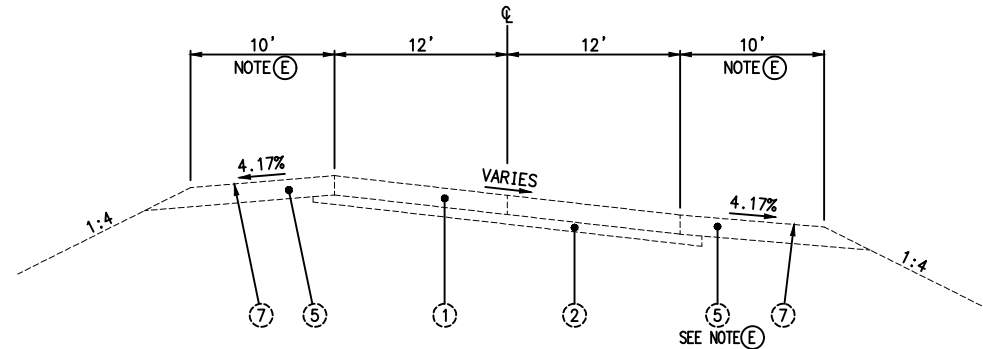
**STA 280+75 TO STA 283+75**



**STA 288+78 TO STA 291+54**

SUPER ELEVATION DATA (RECORD PLANS)	
SLOPE	STATION
TRANSITION (NORMAL CROWN TO 3.20%)	288+12 TO 289+87
FULL SUPER (3.20%)	289+87 TO 298+09
TRANSITION (3.20% TO NORMAL CROWN)	298+09 TO 299+96

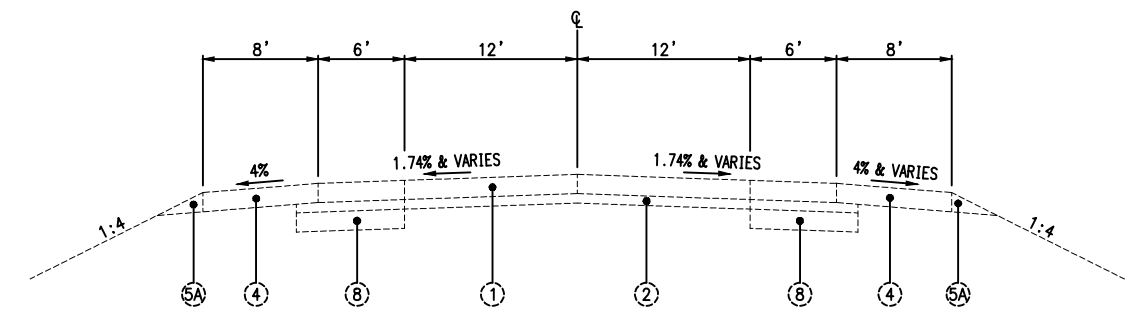
NORMAL CROWN = 1.74%



**STA 279+42 TO STA 280+75**

SUPER ELEVATION DATA (RECORD PLANS)	
SLOPE	STATION
TRANSITION (NORMAL CROWN TO 5.70%)	279+42 TO 281+17
FULL SUPER (5.70%)	281+17 TO 285+12
TRANSITION (5.70% TO NORMAL CROWN)	285+12 TO 286+89

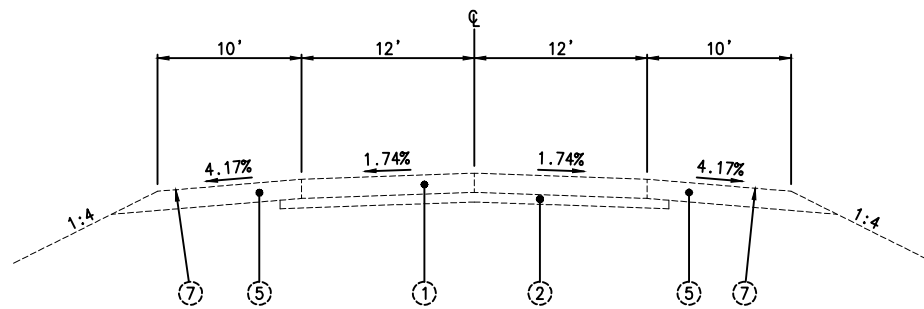
NORMAL CROWN = 1.74%



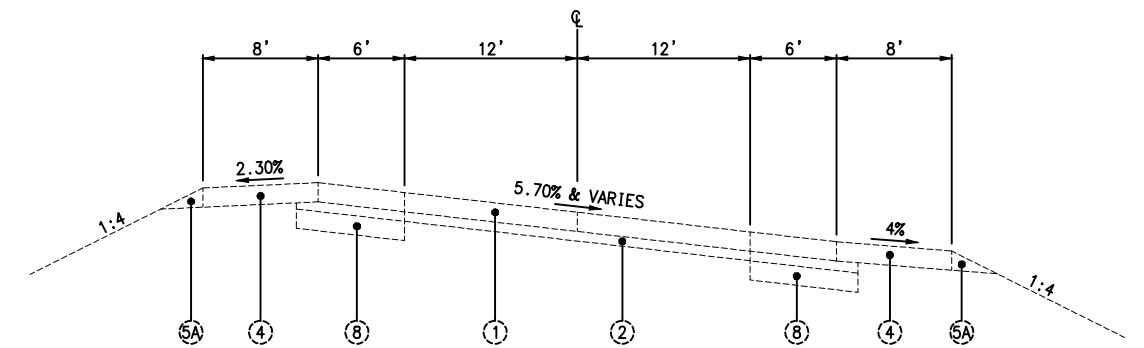
**STA 287+50 TO STA 288+78**

**LEGEND**

- ① EX PCC PAVEMENT, 8"
- ①A EX PCC PAVEMENT, 8" (NON-REINFORCED)
- ② EX STABILIZED SUB-BASE, 4"
- ③ EX PROCESS MODIFIED SOILS, 12"
- ④ EX HMA SHOULDERS, 8"
- ⑤ EX AGGREGATE SHOULDER, 8"
- ⑤A EX AGGREGATE WEDGE SHOULDER
- ⑥ EX COMB CONCRETE CURB AND GUTTER, TYPE B-6.24
- ⑦ EX BITUMINOUS SURFACE TREATMENT, CLASS A-2
- ⑧ EX AGGREGATE BASE COURSE, 8"
- ⑨ EX HMA SURFACE COURSE, MIX "D", N70, 1.5"
- ⑩ EX TYPE A GUTTER



**STA 276+47 TO STA 279+42**



**STA 283+75 TO STA 287+50**



ST. CLAIR COUNTY  
DEPARTMENT OF ROAD AND BRIDGES

**EXISTING TYPICAL SECTIONS**

SHEET NO. 2 OF 2 SHEETS

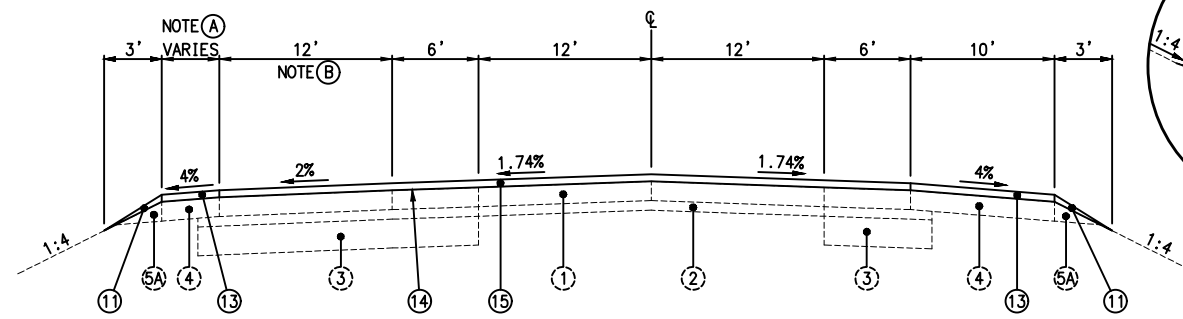
STA 276+47 TO STA 291+54

FAU ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9167	21-00268-06-RS	ST. CLAIR	20	5

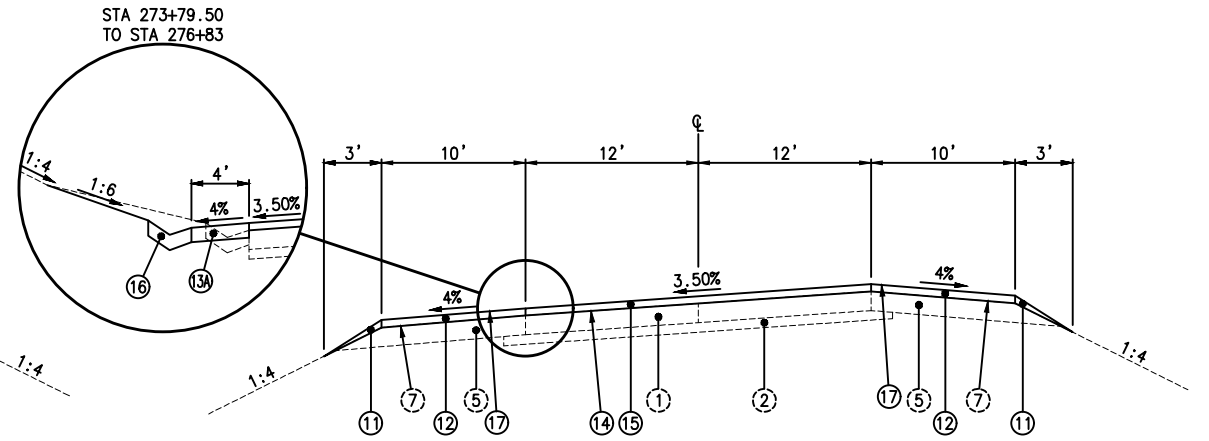
CONTRACT NO. 97813

**NOTES**

- (A) 4' FROM STA 240+05.23 TO STA 243+00  
VARIES 4' TO 4.47' STA 243+00 TO STA 243+15.02
- (B) 12' FROM STA 240+05.23 TO STA 242+10.71  
VARIES 12' TO 5.5' STA 242+10.71 TO STA 243+15.02
- (C) VARIES 4.47' TO 10' STA 243+15.02 TO STA 244+72.05
- (D) VARIES 5.5' TO 0' STA 243+15.02 TO STA 244+72.05



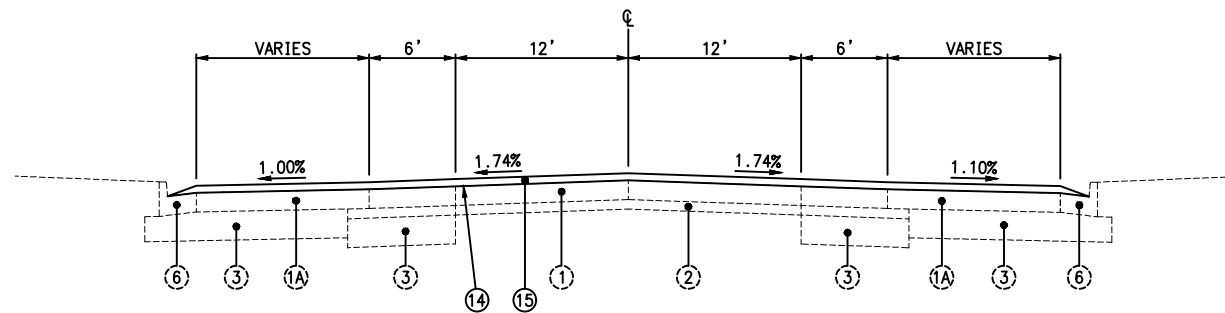
**STA 240+05.23 TO STA 243+15.02**



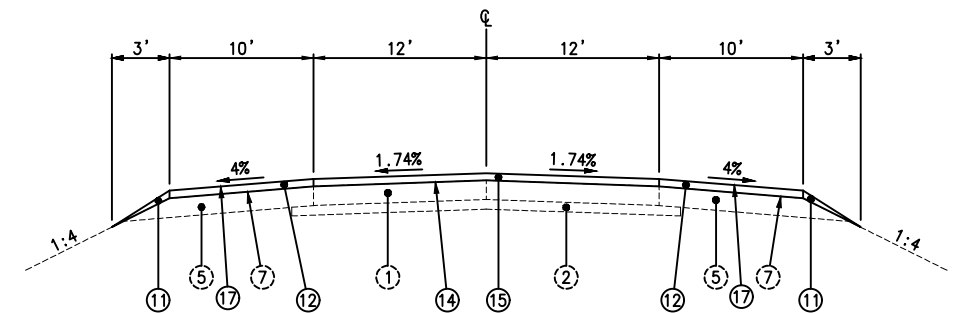
**STA 271+25 TO STA 276+47**

SUPER ELEVATION DATA (RECORD PLANS)	
SLOPE	STATION
TRANSITION (NORMAL CROWN TO 3.50%)	271+25 TO 273+00
FULL SUPER (3.50%)	273+00 TO 276+47
TRANSITION (3.50% TO NORMAL CROWN)	276+47 TO 278+23

NORMAL CROWN = 1.74%



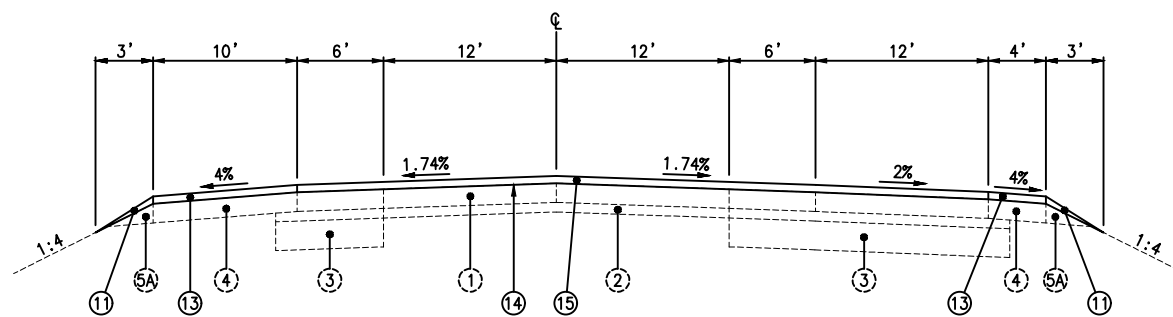
**STA 238+60.24 TO STA 240+05.23**



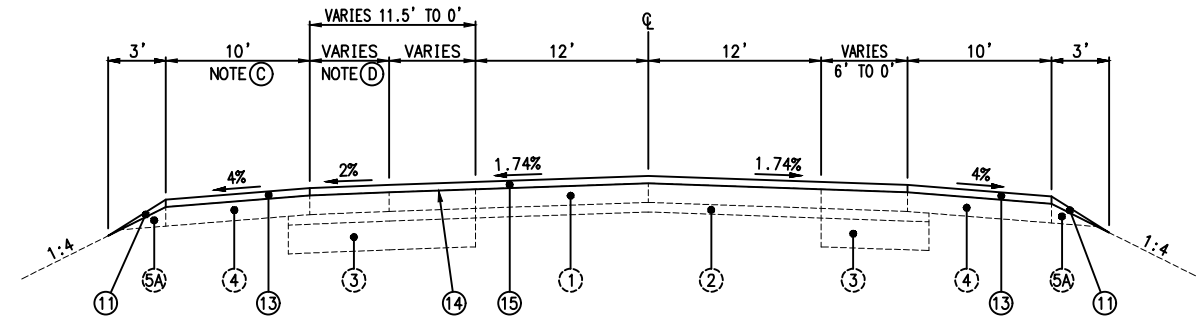
**STA 246+14.91 TO STA 271+25**

**LEGEND**

- (1) EX PCC PAVEMENT, 8"
- (1A) EX PCC PAVEMENT, 8" (NON-REINFORCED)
- (2) EX STABILIZED SUB-BASE, 4"
- (3) EX PROCESS MODIFIED SOILS, 12"
- (4) EX HMA SHOULDERS, 8"
- (5) EX AGGREGATE SHOULDER, 8"
- (5A) EX AGGREGATE WEDGE SHOULDER
- (6) EX COMB CONCRETE CURB AND GUTTER, TYPE B-6.24
- (7) EX BITUMINOUS SURFACE TREATMENT, CLASS A-2
- (8) EX AGGREGATE BASE COURSE, 8"
- (9) EX HMA SURFACE COURSE, MIX "D", N70, 1.5"
- (10) EX TYPE A GUTTER
- (11) PR AGG WEDGE SHOULDER, TYPE B
- (12) PR AGG SHOULDER, 3"
- (13) PR HMA SHOULDERS, 3"
- (13A) PR HMA SHOULDER, 6"
- (14) PR BITUMINOUS MATERIALS (TACK COAT)
- (15) PR HMA SURFACE COURSE, 3"
- (16) PR CONCRETE GUTTER, TYPE A
- (17) BITUMINOUS SURFACE TREATMENT, A2



**STA 237+00 TO STA 238+60.24**



**STA 243+15.02 TO STA 246+14.91**



**ST. CLAIR COUNTY  
DEPARTMENT OF ROAD AND BRIDGES**

**PROPOSED TYPICAL SECTIONS**

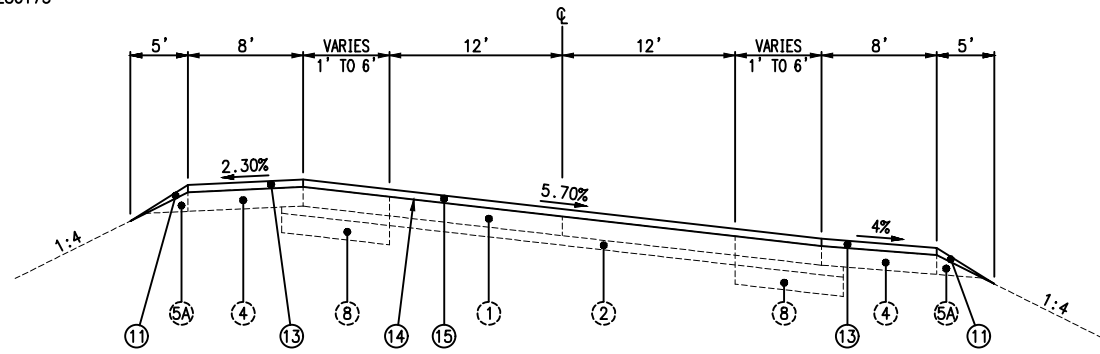
SHEET NO. 1 OF 2 SHEETS

STA 237+00 TO STA 276+47

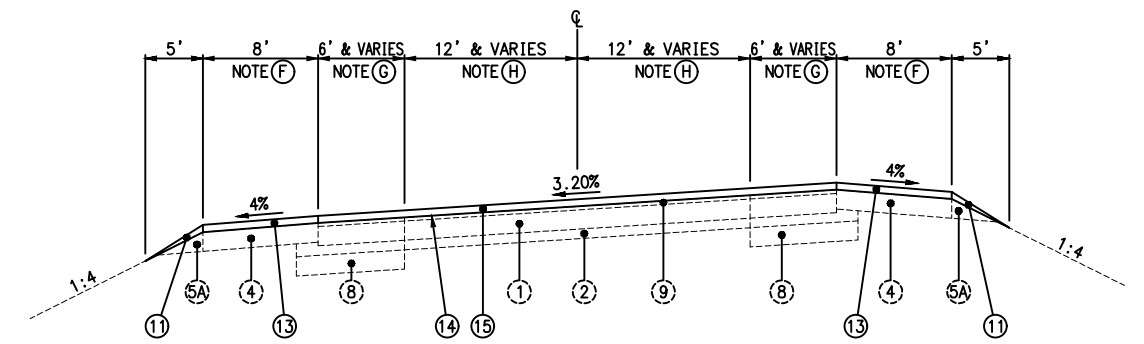
FAU ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9167	21-00268-06-RS	ST. CLAIR	20	6
CONTRACT NO. 97813				

**NOTES**

- (E) HMA SHOULDER ON LEFT SIDE FROM STA 279+70 TO STA 280+75  
HMA SHOULDER ON RIGHT SIDE FROM STA 279+72 TO STA 280+75
- (F) TRANSITION SHOULDER WIDTH FROM 8' TO 10'  
FROM STA 290+81 RT TO STA 291+74 RT AND  
FROM STA 291+34 LT TO STA 291+74 LT
- (G) VARIES FROM 6' TO 1' STA 288+78 TO STA 291+74
- (H) VARIES FROM 12' TO 18' STA 288+78 TO STA 291+74



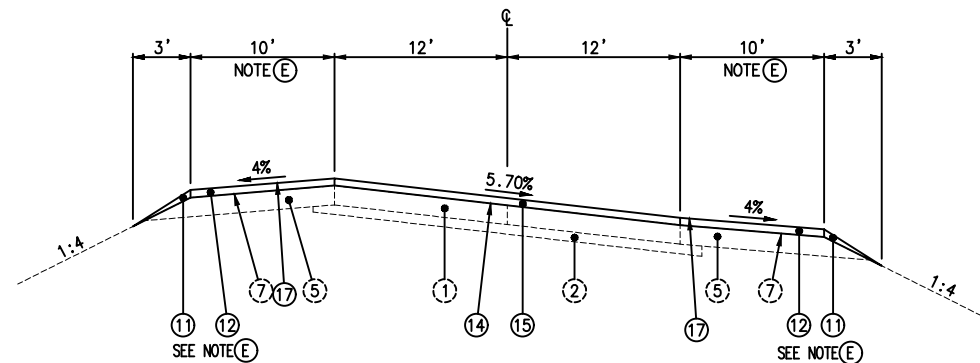
**STA 280+75 TO STA 283+75**



**STA 288+78 TO STA 291+54**

SUPER ELEVATION DATA (RECORD PLANS)	
SLOPE	STATION
TRANSITION (NORMAL CROWN TO 3.20%)	288+12 TO 289+87
FULL SUPER (3.20%)	289+87 TO 298+09
TRANSITION (3.20% TO NORMAL CROWN)	298+09 TO 299+96

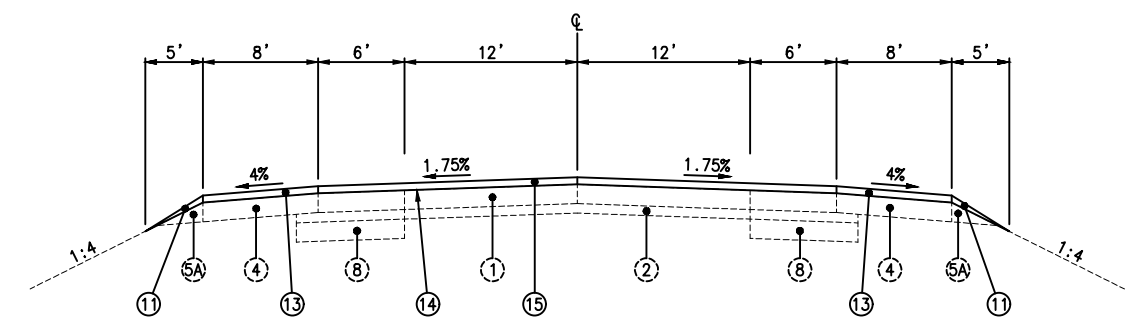
NORMAL CROWN = 1.74%



**STA 279+42 TO STA 280+75**

SUPER ELEVATION DATA (RECORD PLANS)	
SLOPE	STATION
TRANSITION (NORMAL CROWN TO 5.70%)	279+42 TO 281+17
FULL SUPER (5.70%)	281+17 TO 285+12
TRANSITION (5.70% TO NORMAL CROWN)	285+12 TO 286+89

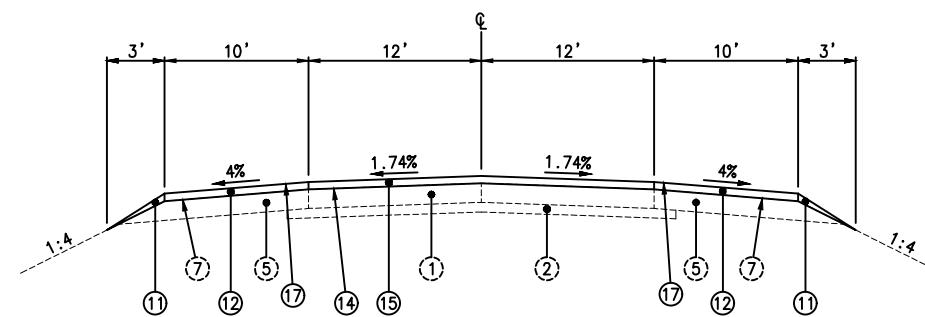
NORMAL CROWN = 1.74%



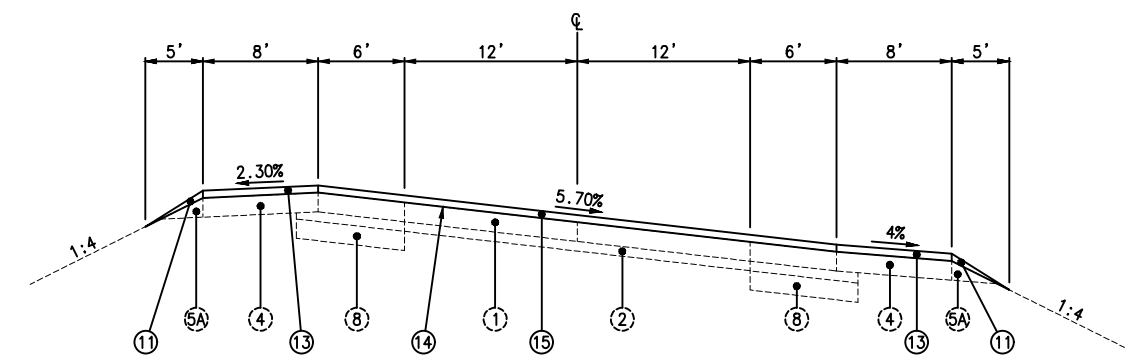
**STA 287+50 TO STA 288+78**

**LEGEND**

- (1) EX PCC PAVEMENT, 8"
- (1A) EX PCC PAVEMENT, 8" (NON-REINFORCED)
- (2) EX STABILIZED SUB-BASE, 4"
- (3) EX PROCESS MODIFIED SOILS, 12"
- (4) EX HMA SHOULDERS, 8"
- (5) EX AGGREGATE SHOULDER, 8"
- (5A) EX AGGREGATE WEDGE SHOULDER
- (6) EX COMB CONCRETE CURB AND GUTTER, TYPE B-6.24
- (7) EX BITUMINOUS SURFACE TREATMENT, CLASS A-2
- (8) EX AGGREGATE BASE COURSE, 8"
- (9) EX HMA SURFACE COURSE, MIX "D", N70, 1.5"
- (10) EX TYPE A GUTTER
- (11) PR AGG WEDGE SHOULDER, TYPE B
- (12) PR AGG SHOULDER, 3"
- (13) PR HMA SHOULDERS, 3"
- (13A) PR HMA SHOULDER, 6"
- (14) PR BITUMINOUS MATERIALS (TACK COAT)
- (15) PR HMA SURFACE COURSE, 3"
- (16) PR CONCRETE GUTTER, TYPE A
- (17) BITUMINOUS SURFACE TREATMENT, A2



**STA 276+47 TO STA 279+42**



**STA 283+75 TO STA 287+50**



ST. CLAIR COUNTY  
DEPARTMENT OF ROAD AND BRIDGES

**PROPOSED TYPICAL SECTIONS**

SHEET NO. 2 OF 2 SHEETS

STA 276+47 TO STA 291+54

FAU ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9167	21-00268-06-RS	ST. CLAIR	20	7
CONTRACT NO. 97813				

**SCHEDULE OF PATCHES**

LOCATION (STATION TO STATION)	SIDE	LENGTH (FOOT)	TRANSVERSE WIDTH (FOOT)	CLASS B PATCHES, TYPE II, 8 INCH (SQ YD)	DOWEL BARS 1 1/4" (EACH)	SAW CUTS (FOOT)	
237+28.0	237+34.0	LT	6	12	8.0	20	54
239+22.5	239+28.5	LT	6	12	8.0	20	48
245+23.0	245+29.0	LT	6	12	8.0	20	48
246+24.0	246+30.0	LT	6	12	8.0	20	48
251+27.0	251+33.0	LT	6	12	8.0	20	48
257+73.0	257+79.0	LT	6	12	8.0	20	48
258+66.0	258+72.0	LT	6	12	8.0	20	48
259+75.5	259+81.5	LT	6	12	8.0	20	48
261+19.0	261+25.0	LT	6	12	8.0	20	48
262+25.0	262+31.0	LT	6	12	8.0	20	48
262+69.0	262+75.0	LT	6	12	8.0	20	48
263+73.0	263+79.0	LT	6	12	8.0	20	48
264+25.5	264+31.5	LT	6	12	8.0	20	48
265+72.0	265+78.0	LT	6	12	8.0	20	48
271+27.0	271+33.0	LT	6	12	8.0	20	48
271+46.5	271+52.5	LT	6	12	8.0	20	48
271+97.0	272+03.0	LT	6	12	8.0	20	48
272+47.0	272+53.0	LT	6	12	8.0	20	48
279+67.0	279+73.0	LT	6	12	8.0	20	48
281+73.5	281+79.5	LT	6	12	8.0	20	54
285+15.5	285+21.5	LT	6	12	8.0	20	54
285+75.5	285+81.5	LT	6	12	8.0	20	54
286+43.0	286+49.0	LT	6	12	8.0	20	54
286+69.0	286+75.0	LT	6	12	8.0	20	54
287+44.0	287+50.0	LT	6	12	8.0	20	54
288+43.0	288+49.0	LT	6	12	8.0	20	54

**SCHEDULE OF PATCHES**

LOCATION (STATION TO STATION)	SIDE	LENGTH (FOOT)	TRANSVERSE WIDTH (FOOT)	CLASS B PATCHES, TYPE II, 8 INCH (SQ YD)	DOWEL BARS 1 1/4" (EACH)	SAW CUTS (FOOT)			
237+28.0	237+24.0	RT	6	12	8.0	20	54		
237+68.0	237+74.0	RT	6	12	8.0	20	54		
239+22.5	239+28.5	RT	6	12	8.0	20	48		
239+75.5	239+81.5	RT	6	12	8.0	20	48		
240+74.0	240+80.0	RT	6	12	8.0	20	48		
242+67.5	242+73.5	RT	6	12	8.0	20	48		
244+68.0	244+74.0	RT	6	12	8.0	20	48		
245+23.0	245+29.0	RT	6	12	8.0	20	48		
253+19.5	253+25.5	RT	6	12	8.0	20	48		
257+73.0	257+79.0	RT	6	12	8.0	20	48		
258+66.0	258+72.0	RT	6	12	8.0	20	48		
259+75.5	259+81.5	RT	6	12	8.0	20	48		
260+48.0	260+54.0	RT	6	12	8.0	20	48		
261+19.0	261+25.0	RT	6	12	8.0	20	48		
261+97.5	262+03.5	RT	6	12	8.0	20	48		
262+25.0	262+31.0	RT	6	12	8.0	20	48		
262+47.5	262+53.5	RT	6	12	8.0	20	48		
262+69.0	262+75.0	RT	6	12	8.0	20	48		
263+73.0	263+79.0	RT	6	12	8.0	20	48		
264+25.5	264+31.5	RT	6	12	8.0	20	48		
265+72.0	265+78.0	RT	6	12	8.0	20	48		
267+24.5	267+30.5	RT	6	12	8.0	20	48		
268+69.5	268+75.5	RT	6	12	8.0	20	48		
271+27.0	271+33.0	RT	6	12	8.0	20	48		
276+68.0	276+74.0	RT	6	12	8.0	20	48		
278+17.5	278+23.5	RT	6	12	8.0	20	48		
279+67.0	279+73.0	RT	6	12	8.0	20	48		
280+18.0	280+24.0	RT	6	12	8.0	20	48		
281+43.5	281+49.5	RT	6	12	8.0	20	54		
283+72.0	283+78.0	RT	6	12	8.0	20	54		
284+65.5	284+71.5	RT	6	12	8.0	20	54		
285+15.5	285+21.5	RT	6	12	8.0	20	54		
285+75.5	285+81.5	RT	6	12	8.0	20	54		
286+25.5	286+31.5	RT	6	12	8.0	20	54		
286+43.0	286+49.0	RT	6	12	8.0	20	54		
TOTAL							488	1220	3030

**GUTTER SCHEDULE**

LOCATION (STATION TO STATION)	SIDE	GUTTER REMOVAL (FOOT)	COMB CURB AND GUTTER REMOVAL (FOOT)	GRATES, TYPE A (EACH)	REMOVING CATCH BASINS (EACH)	CLASS SI CONCRETE (OUTLET) (CU YD)	CONCRETE GUTTER, TYPE A (FOOT)	COMB CONC CURB AND GUTTER, TY B-6.24 (FOOT)	
273+51.2	273+79	LT	40						
273+51.2	273+75.5	LT						35	
273+75.5	276+13.5	LT					237		
273+79	276+82.9	LT	303						
276+13.51	276+44.65	LT				5.2			
276+44.65	276+82.50	LT				3.3			
276+81		LT		1	1				
TOTAL			303	40	1	1	8.5	237	35

**GUARDRAIL SCHEDULE**

LOCATION (STATION TO STATION)	SIDE	GUARDRAIL REMOVAL (INCLUDING END TREATMENT) (FOOT)	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS (FOOT)	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT (EACH)	TRAFFIC BARRIER TERMINAL, TYPE 2 (EACH)	TERMINAL MARKER DIRECT APPLIED (EACH)	GUARDRAIL REFLECTORS, TYPE A (EACH)
276+00.0	276+49.7	RT		1			
276+00.0	281+76.0	RT					7
276+00		RT				1	
276+19.5	281+73.7	RT	553				
276+49.7	281+75.9	RT		512.5			
276+59		LT			1		
276+59.5	282+11.8	LT	553				
276+60.0	281+59.7	LT		487.5			
276+60.0	282+09.0	LT					6
281+77		RT			1		
281+59.7	282+09.2	LT		1			
282+09		LT				1	
TOTAL			1106	1000	2	2	13

**EARTHWORK AND SEEDING SCHEDULE**

LOCATION (STATION)	SIDE	EARTH EXCAVATION (CU YD)	EXCAVATION ADJUSTED FOR SHRINKAGE (25%) (CU YD)	EMBANKMENT (CU YD)	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-) (CU YD)	SEEDING, CLASS 2 (ACRE)	NITROGEN FERTILIZER NUTRIENT (POUND)	PHOSPHORUS FERTILIZER NUTRIENT (POUND)	POTASSIUM FERTILIZER NUTRIENT (POUND)	MULCH, METHOD 2 (ACRE)
273+80 TO 276+82.50	LT	78	59	10	+49	0.05	5	5	5	0.05
TOTAL		78	59	10	+50	0.05	5	5	5	0.05
USE		80	60	10	+50	0.25	23	23	23	0.25



**ST. CLAIR COUNTY  
DEPARTMENT OF ROAD AND BRIDGES**

**TABULATION OF QUANTITIES**

SHEET NO. 1 OF 3 SHEETS

STA TO STA

FAU ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9167	21-00268-06-RS	ST. CLAIR	20	8
CONTRACT NO. 07813				



**SHOULDER SCHEDULE**

LOCATION (STATION TO STATION)	SIDE	WIDTH (FOOT)	AGGREGATE SHOULDERS, TYPE B (TON)	AGGREGATE WEDGE SHOULDER, TYPE B (TON)	HOT-MIX ASPHALT SHOULDERS (TON)	BITUMINOUS MATERIALS (PRIME COAT) (TON)	BITUMINOUS MATERIALS (COVER AND SEAL COATS) (TON)	COVER COAT AGGREGATE (TON)	SEAL COAT AGGREGATE (TON)
237+00.00	237+93.00	LT	10			17.4			
237+00.00	238+31.16	LT	3			3.8			
240+07.27	246+14.91	LT	10			71.0			
240+07.27	250+53.24	LT	3			30.6			
246+14.91	250+48.53	LT	10	84.3		0.7	1.4	4.8	4.8
250+48.53	250+88.53	LT	10			7.5			
250+81.84	254+23.03	LT	3			10.0			
250+88.53	254+04.25	LT	10	61.4		0.5	1.0	3.5	3.5
254+04.25	255+00.47	LT	10			18.0			
254+82.23	264+51.17	LT	3			28.4			
255+00.47	264+33.60	LT	10	181.4		1.5	3.0	10.4	10.4
264+33.60	265+18.60	LT	10			15.9			
265+02.14	272+37.03	LT	3			21.6			
265+18.60	272+37.20	LT	10	140.2		1.2	2.4	8.0	8.0
273+80.00	276+82.50	LT	10			45			
276+82.50	279+70.30	LT	10	56.0		0.5	1.0	3.2	3.2
276+82.50	280+75.00	LT	3			11.5			
279+70.30	280+75.00	LT	10			19.6			
280+75.00	285+79.50	LT	5			24.7			
280+75.00	291+54.00	LT	8			161.3			
286+02.97	291+54.00	LT	5			26.7			

**SCHEDULE OF ENTRANCES**

LOCATION (STATION)	SIDE	LENGTH (FOOT)	WIDTH (FOOT)	HMA SURFACE REMOVAL - BUTT JOINT (SQ YD)	PCC SURFACE REMOVAL - BUTT JOINT (SQ YD)	AGGREGATE SURFACE COURSE, TYPE B (TON)	BITUMINOUS MATERIALS (TACK COAT) (POUND)	INCIDENTAL HMA SURFACING (TON)
239+35.06	LT	30	66.6		131.4		144	35.8
239+35.06	RT	30	67.4		132.9		145	36.1
246+91.40	RT	10	35		24.2		24	5.9
248+97.30	RT	10	35		23.8		24	5.8
250+70.50	LT	10	15			2.5		
252+98.60	RT	10	20			2.1		
254+52.70	LT	14	42	34.2			33	8.1
259+96.60	RT	10	19			1.9		
264+76.90	LT	10	27	19.3			20	4.7
267+00.00	RT	10	19			2.0		
272+53.80	RT	10	11	5.9			6	1.4
273+26.50	LT	30	45		56.8		123	30.5
276+29.00	LT	29	18			16.6		
284+26.20	RT	18	29		57.7		59	14.5
285+90.80	LT	10	24			2.3		
TOTAL				59.4	426.8	27.4	578	142.8
USE						27	578	143

**SHOULDER SCHEDULE**

LOCATION (STATION TO STATION)	SIDE	WIDTH (FOOT)	AGGREGATE SHOULDERS, TYPE B (TON)	AGGREGATE WEDGE SHOULDER, TYPE B (TON)	HOT-MIX ASPHALT SHOULDERS (TON)	BITUMINOUS MATERIALS (PRIME COAT) (TON)	BITUMINOUS MATERIALS (COVER AND SEAL COATS) (TON)	COVER COAT AGGREGATE (TON)	SEAL COAT AGGREGATE (TON)
237+00.00	238+62.20	RT	3			4.7			
237+00.00	238+62.20	RT	10			12.1			
240+40.63	246+66.40	RT	3			18.2			
240+79.00	247+38.98	RT	10			123.2			
247+16.05	248+72.87	RT	3			4.5			
247+38.98	248+49.60	RT	10	21.5		0.2	0.4	1.2	1.2
248+49.60	249+44.66	RT	10			17.8			
249+21.63	252+87.94	RT	3			10.7			
249+44.66	252+77.62	RT	10	64.7		0.5	1.0	3.7	3.7
252+77.62	253+19.62	RT	10			7.9			
253+09.40	259+87.01	RT	3			19.9			
253+19.62	259+76.64	RT	10	127.8		1.1	2.2	7.3	7.3
259+76.64	260+16.64	RT	10			7.5			
260+06.60	266+90.18	RT	3			20.1			
260+16.64	266+80.09	RT	10	129.0		1.1	2.2	7.4	7.4
266+80.09	267+20.09	RT	10			7.5			
267+11.56	272+47.75	RT	3			15.7			
267+20.09	272+37.28	RT	10	100.9		0.8	1.6	5.7	5.7
272+37.28	272+68.21	RT	10			5.8			
272+58.73	280+75.00	RT	3			24.0			
272+68.21	279+72.27	RT	10	137.6		1.1	2.2	7.8	7.8
279+72.27	280+75.00	RT	10			19.2			
280+75.00	283+80.38	RT	5			14.7			
280+75.00	283+90.09	RT	8			45.4			
284+54.28	291+54.00	RT	8			103.2			
284+64.06	291+54.00	RT	5			33.5			
TOTAL			1104.8	323.3	705.3	9.2	18.4	63	63
USE			1105	323	705	9.2	18.4	63	63

**SCHEDULE OF TEMPORARY RAMPS**

LOCATION (STATION)	MAIN LINE, SIDE ROAD, AND ENTRANCE	LENGTH (FOOT)	WIDTH (FOOT)	TEMPORARY RAMP (SQ YD)
237+00	BEGINNING OF PROJECT	5	48	26.7
239+35 LT	WHISPERING WALK WAY	5	66	36.7
239+35 RT	HUNTWOOD ROAD	5	67	37.2
246+91 RT	COMMERCIAL ENTRANCE	5	35	19.4
248+97 RT	COMMERCIAL ENTRANCE	5	35	19.4
254+53 LT	OLD PARK LANE	5	42	23.3
264+77 LT	NAUGHTON WAY	5	27	15.0
273+27 LT	LLEWELLYN ROAD	5	44	24.4
284+26 RT	OLD CASEYVILLE ROAD	5	42	23.3
291+54	END OF PROJECT	5	36	20.0
TOTAL				245.4
USE				245

**SCHEDULE OF SURVEY MONUMENTS**

LOCATION (STATION)	OFFSET (FEET)	SURVEY MONUMENT COVER ASSEMBLY (EACH)
239+70.7	10.89 LT	1
269+68.4	0	1
TOTAL		2

**SHORT TERM PAVEMENT MARKING SCHEDULE**

LOCATION (STATION TO STATION)	SHORT TERM PAVEMENT MARKING YELLOW (FOOT)	SHORT TERM PAVEMENT MARKING WHITE (FOOT)	SHORT TERM PAVEMENT MARKING REMOVAL (SQ FT)
237+00	246+14.9	120	100
246+14.9	280+75	312	132
280+75	291+54	196	48
SUB-TOTAL		628	280
X 2 APPLICATIONS		1256	560
USE		1816	605

**PAVEMENT SCHEDULE**

LOCATION (STATION TO STATION)	HMA SURFACE REMOVAL - BUTT JOINT (SQ YD)	PCC SURFACE REMOVAL - BUTT JOINT (SQ YD)	BITUMINOUS MATERIALS (TACK COAT)		HMA SURFACE COURSE, IL-9.5, MIX "D", N70 (TON)
			1ST LIFT (POUND)	2ND LIFT (POUND)	
237+00	237+30	46.6	160		
237+00	246+14.91			2111	1056
246+14.91	280+75			4152	2076
280+75	291+54			1864	932
291+24	291+54	180.6			
TOTAL		227.2	160	8127	4064
USE					2999



ST. CLAIR COUNTY  
DEPARTMENT OF ROAD AND BRIDGES

**TABULATION OF QUANTITIES**

SHEET NO. 2 OF 3 SHEETS STA TO STA

FAU ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9167	21-00268-06-RS	ST. CLAIR	20	9
CONTRACT NO. 07813				

**PAVEMENT MARKING SCHEDULE**

LOCATION (STATION TO STATION)	SIDE	TEMPORARY	TEMPORARY	TEMPORARY	TEMPORARY	TEMPORARY
		LETTERS AND SYMBOLS WHITE (SQ FT)	LINE 4" WHITE (FOOT)	LINE 4" DOUBLE YELLOW (FOOT)	LINE 8" WHITE (FOOT)	LINE 12" WHITE (FOOT)
236+90.00		15.6				
237+00.00	237+93.00	LT	93			
237+00.00	239+03.00	LT		424.6		
237+00.00	238+62.00	RT	162			
237+00.00	238+87.51	RT	187.5			
237+23.00	239+03.00	RT	180			
237+48.00			15.6			
237+77.00			15.6			
238+63.00			15.6			
238+78.00			15.6			
238+68.55	239+16.93	LT			140.7	
238+68.55	239+16.93	LT				65
238+72.50	238+79.80	LT				18
238+87.51	239+16.74	RT			106.5	
238+87.51	239+16.74	RT				47
239+16.96	239+28.95	LT				12
239+28.72	239+40.60	RT				12
239+28.72		RT		19.7		
239+28.95		LT	31			
239+29.11	239+40.67	LT				12
239+35.06		RT	15.6			
239+40.58	239+53.10	RT				12.5
239+40.58		RT	29.3			
239+40.67		LT		16		
239+52.76	240+00.33	RT			138.6	
239+52.76	240+00.33	RT				68.5
239+52.91	239+81.59	LT			101.3	
239+52.91	239+81.59	LT				42
239+69.35	241+34.70	LT	165.4			
239+69.35	248+55.00	RT		2657.7		
239+81.59	242+10.71	LT	229.3			
239+85.93	239+94.38	RT				18

**PAVEMENT MARKING SCHEDULE**

LOCATION (STATION TO STATION)	SIDE	TEMPORARY	TEMPORARY	TEMPORARY	TEMPORARY	TEMPORARY		
		LETTERS AND SYMBOLS WHITE (SQ FT)	LINE 4" WHITE (FOOT)	LINE 4" DOUBLE YELLOW (FOOT)	LINE 8" WHITE (FOOT)	LINE 12" WHITE (FOOT)	LINE 12" YELLOW (FOOT)	
239+94.00		15.6						
240+06.00		15.6						
240+07.00	254+05.00	LT		1399				
240+79.00	283+71.00	RT		4291				
241+00.00			15.6					
241+10.00			15.6					
241+34.70	246+14.91	RT				113.5		
241+85.00			15.6					
242+10.71	244+26.57	LT		54				
248+55.00	265+93.00				430			
254+99.00	264+46.00	LT		947				
265+07.00	272+38.00	LT		731				
265+93.00	270+07.00				514			
270+07.00	280+75.00				2135.2			
273+26.50		LT				24		
273+79.00	291+54.00	LT		1774				
280+75.00	284+03.00				1274.2			
280+75.00	284+03.00					76		
284+24.00	284+46.29	RT				22		
284+67.00	286+19.00	LT		150.5				
284+67.00	291+54.00	RT			2413.2			
284+69.00	291+54.00	RT		684				
284+92.00			15.6					
285+94.00			15.6					
286+19.00	291+54.00					229.5		
SUB-TOTAL			202.8	11108	9884.6	487.1	353	419
TOTAL			203	20993	487		772	

**REFLECTIVE MARKER SCHEDULE**

LOCATION (STATION TO STATION)	SIDE	DISTANCE BETWEEN MARKERS (FOOT)	RAISED REFLECTIVE PAVEMENT MARKER TWO WAY AMBER	RAISED REFLECTIVE PAVEMENT MARKER ONE WAY AMBER	RAISED REFLECTIVE PAVEMENT MARKER ONE WAY CRYSTAL
			(EACH)	(EACH)	(EACH)
237+00	239+03	LT	12		
237+00	239+16.5	RT			11
238+69	239+17	LT			2
239+52.9	242+10.2	LT			12
239+52.9	240+00	RT			2
239+69.4	248+55		18	24	
248+55	280+75		45		
280+75	284+03			20	
284+67	286+19	LT			4
284+67	291+54		8	28	
SUB-TOTAL			83	72	31
TOTAL			186		

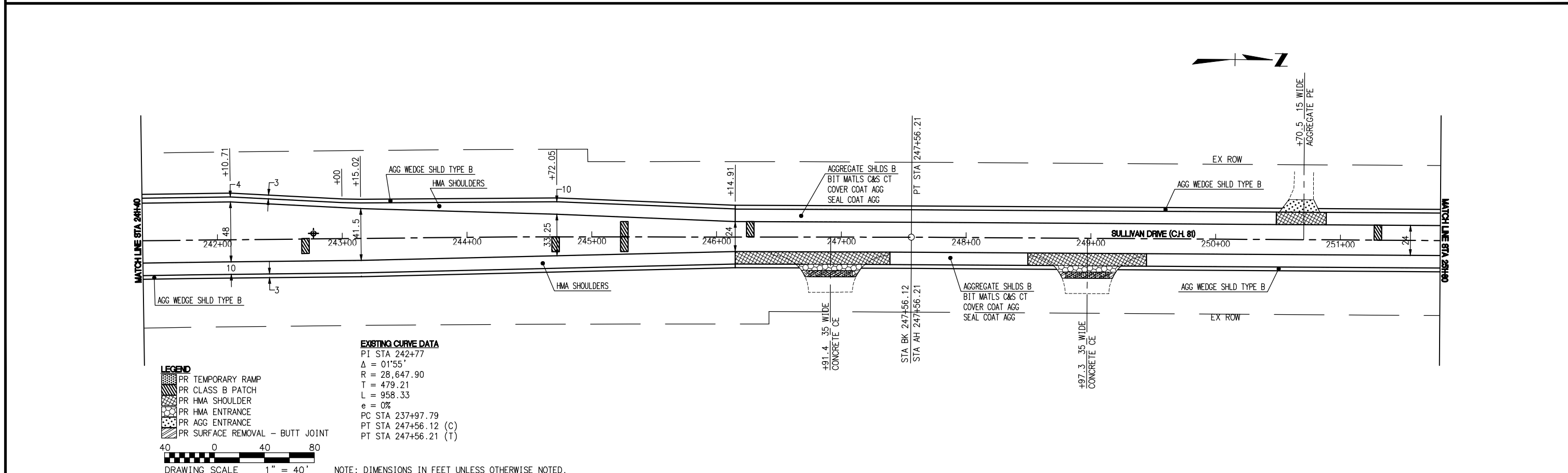
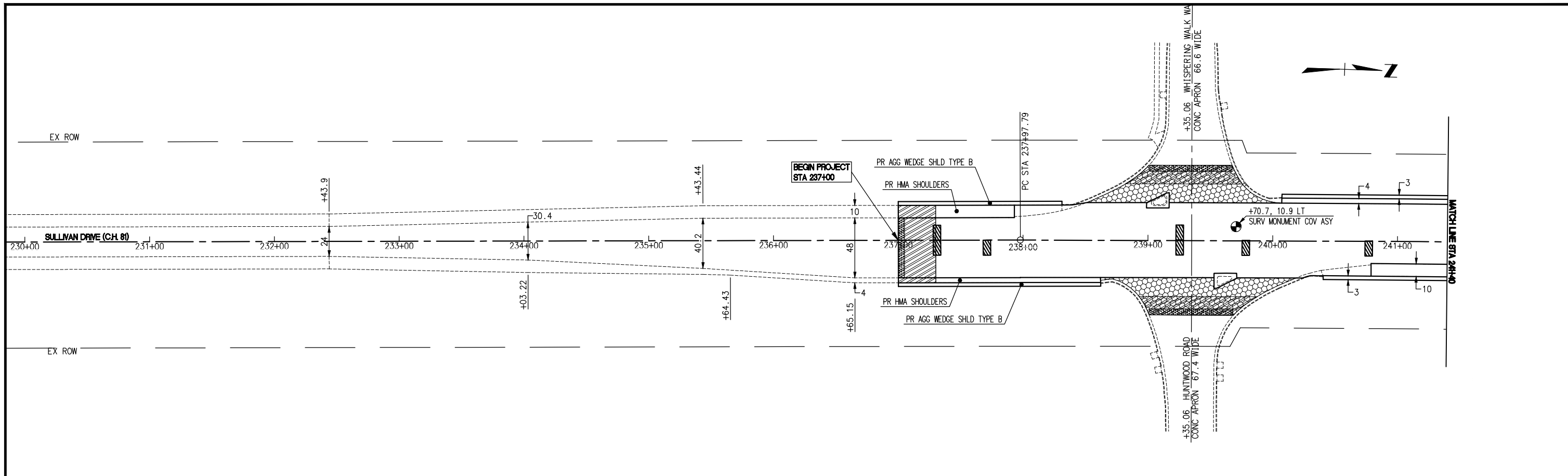


ST. CLAIR COUNTY  
DEPARTMENT OF ROAD AND BRIDGES

**TABULATION OF QUANTITIES**

SHEET NO. 3 OF 3 SHEETS      STA      TO STA

FAU ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9167	21-00268-06-RS	ST. CLAIR	20	10
CONTRACT NO. 07813				



**LEGEND**

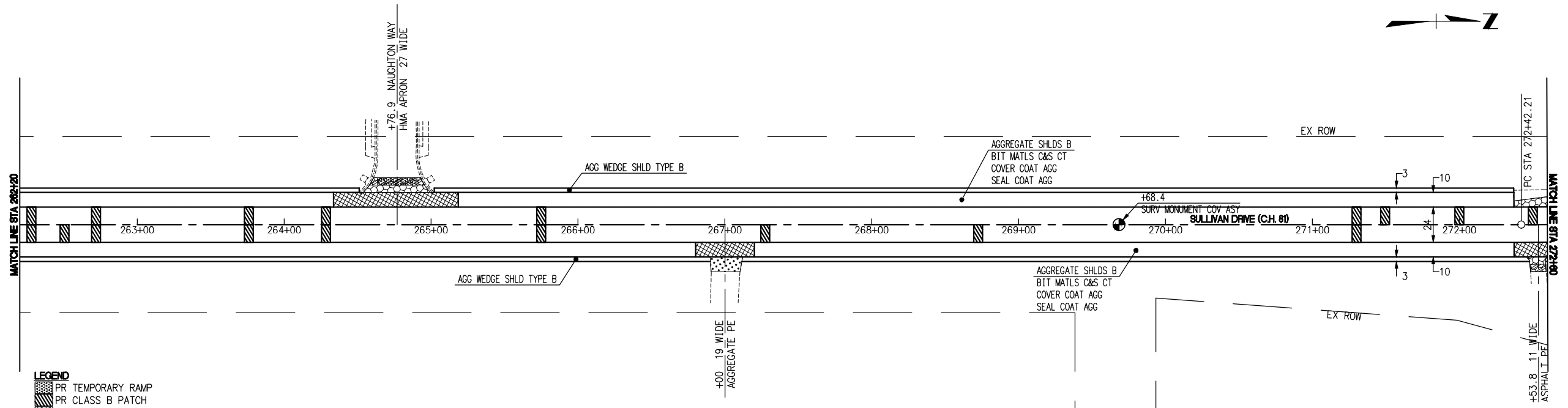
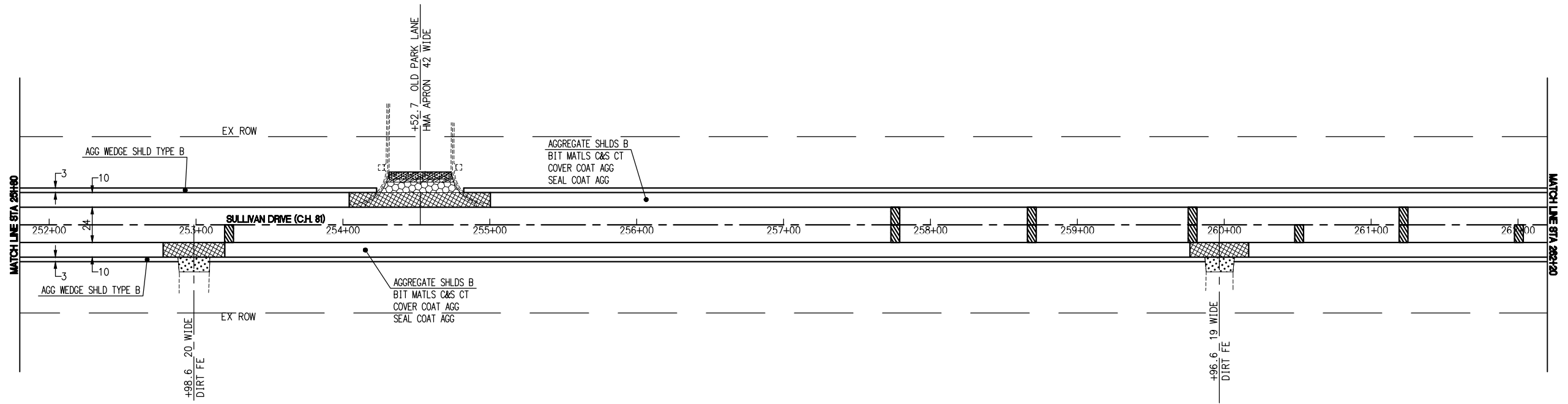
- PR TEMPORARY RAMP
- PR CLASS B PATCH
- PR HMA SHOULDER
- PR HMA ENTRANCE
- PR AGG ENTRANCE
- PR SURFACE REMOVAL - BUTT JOINT

**EXISTING CURVE DATA**  
 PI STA 242+77  
 $\Delta = 01^{\circ}55'$   
 $R = 28,647.90$   
 $T = 479.21$   
 $L = 958.33$   
 $e = 0\%$   
 PC STA 237+97.79  
 PT STA 247+56.12 (C)  
 PT STA 247+56.21 (T)



NOTE: DIMENSIONS IN FEET UNLESS OTHERWISE NOTED.

FAU ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9167	21-00268-06-RS	ST. CLAIR	20	11
CONTRACT NO. 97813				



- LEGEND**
- PR TEMPORARY RAMP
  - PR CLASS B PATCH
  - PR HMA SHOULDER
  - PR HMA ENTRANCE
  - PR AGG ENTRANCE
  - PR SURFACE REMOVAL - BUTT JOINT



NOTE: DIMENSIONS IN FEET UNLESS OTHERWISE NOTED.

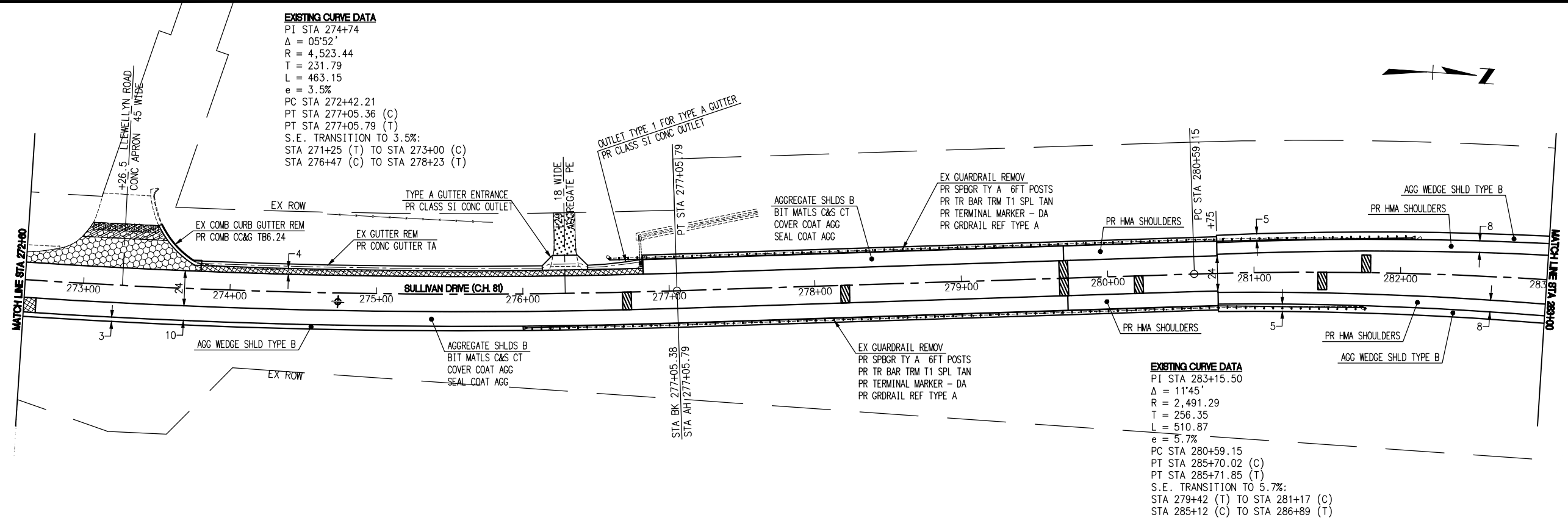
ST. CLAIR COUNTY  
DEPARTMENT OF ROAD AND BRIDGES

PLAN SHEET

SHEET NO. 2 OF 3 SHEETS

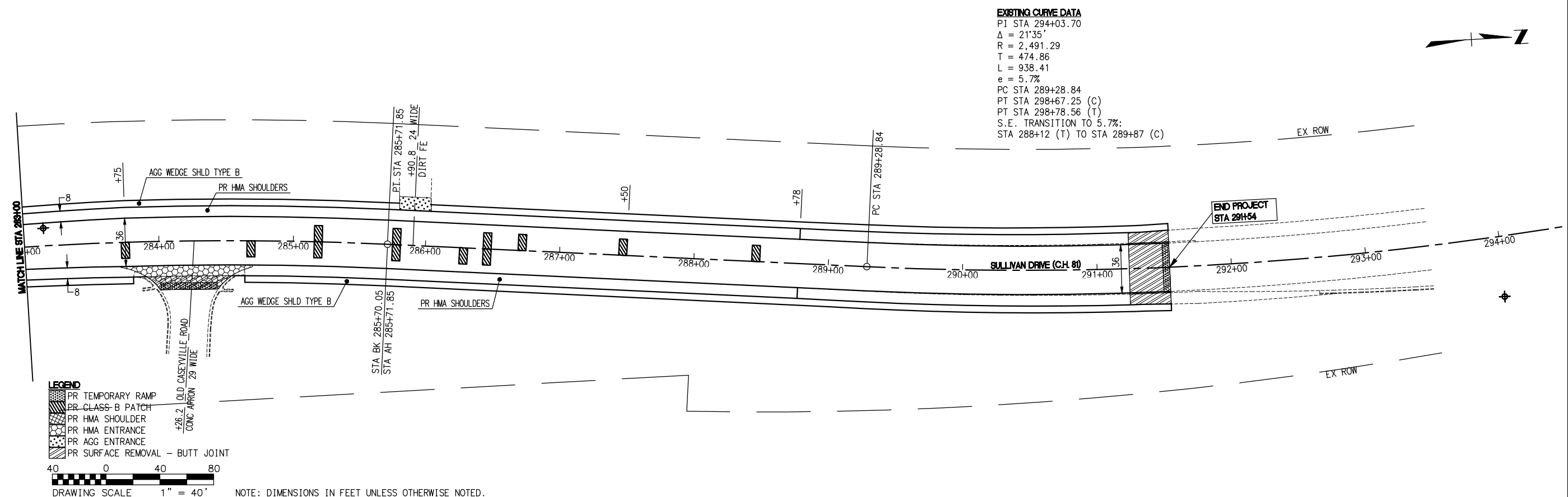
STA 251+80 TO STA 272+60

FAU SHEET NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9167	21-00268-06-RS	ST. CLAIR	20	12
CONTRACT NO. 97813				



**EXISTING CURVE DATA**  
 PI STA 274+74  
 $\Delta = 05^{\circ}52'$   
 $R = 4,523.44$   
 $T = 231.79$   
 $L = 463.15$   
 $e = 3.5\%$   
 PC STA 272+42.21  
 PT STA 277+05.36 (C)  
 PT STA 277+05.79 (T)  
 S.E. TRANSITION TO 3.5%:  
 STA 271+25 (T) TO STA 273+00 (C)  
 STA 276+47 (C) TO STA 278+23 (T)

**EXISTING CURVE DATA**  
 PI STA 283+15.50  
 $\Delta = 11^{\circ}45'$   
 $R = 2,491.29$   
 $T = 256.35$   
 $L = 510.87$   
 $e = 5.7\%$   
 PC STA 280+59.15  
 PT STA 285+70.02 (C)  
 PT STA 285+71.85 (T)  
 S.E. TRANSITION TO 5.7%:  
 STA 279+42 (T) TO STA 281+17 (C)  
 STA 285+12 (C) TO STA 286+89 (T)



**EXISTING CURVE DATA**  
 PI STA 294+03.70  
 $\Delta = 21^{\circ}35'$   
 $R = 2,491.29$   
 $T = 474.86$   
 $L = 938.41$   
 $e = 5.7\%$   
 PC STA 289+28.84  
 PT STA 298+67.25 (C)  
 PT STA 298+78.56 (T)  
 S.E. TRANSITION TO 5.7%:  
 STA 288+12 (T) TO STA 289+87 (C)

**LEGEND**

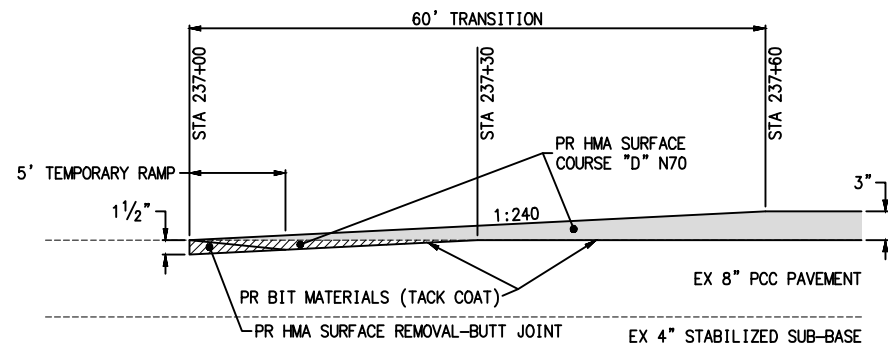
- PR TEMPORARY RAMP
- PR CLASS B PATCH
- PR HMA SHOULDER
- PR HMA ENTRANCE
- PR AGG ENTRANCE
- PR SURFACE REMOVAL - BUTT JOINT

40 0 40 80  
 DRAWING SCALE 1" = 40'  
 NOTE: DIMENSIONS IN FEET UNLESS OTHERWISE NOTED.

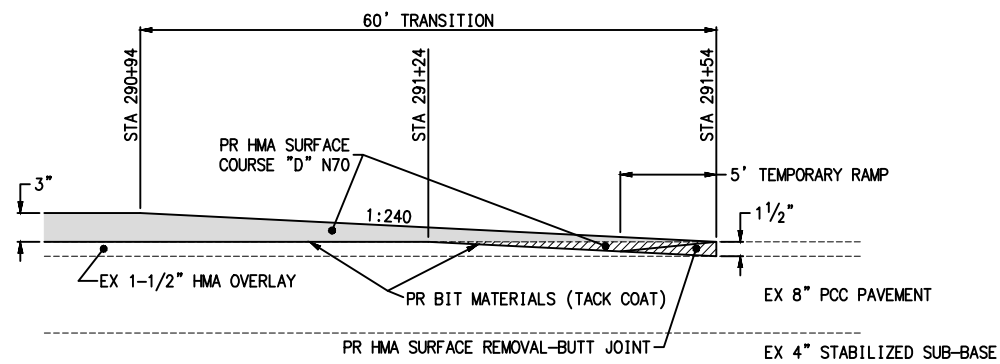
**ST. CLAIR COUNTY**  
**DEPARTMENT OF ROAD AND BRIDGES**

**PLAN SHEET**  
 SHEET NO. 3 OF 3 SHEETS  
 STA 272+60 TO STA 291+54

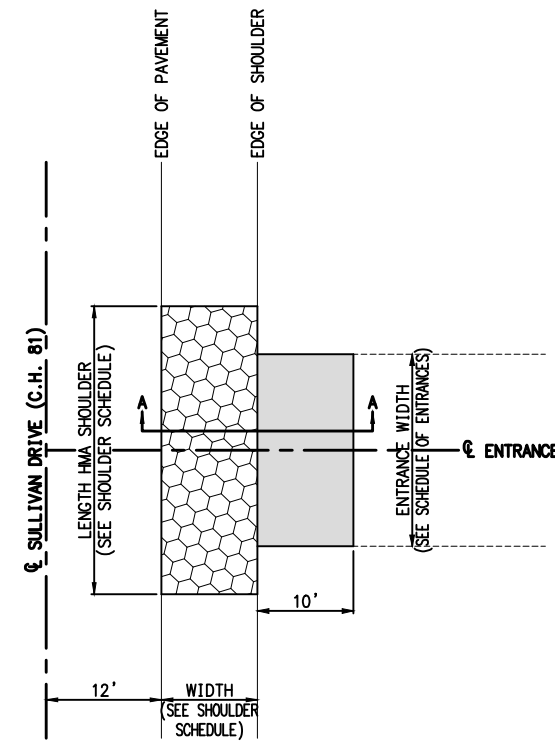
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9167	21-00268-06-RS	ST. CLAIR	20	13
CONTRACT NO. 97813				



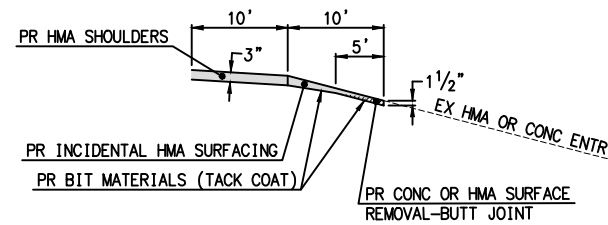
**DETAIL OF CONNECTION**  
**STA 237+00**  
 (NOT TO SCALE)



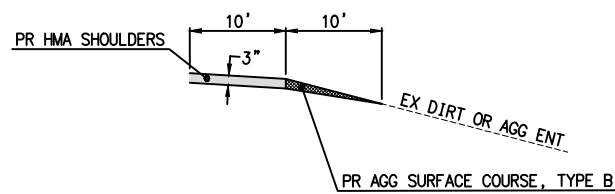
**DETAIL OF CONNECTION**  
**STA 291+54**  
 (NOT TO SCALE)



**PLAN VIEW**  
 (NOT TO SCALE)

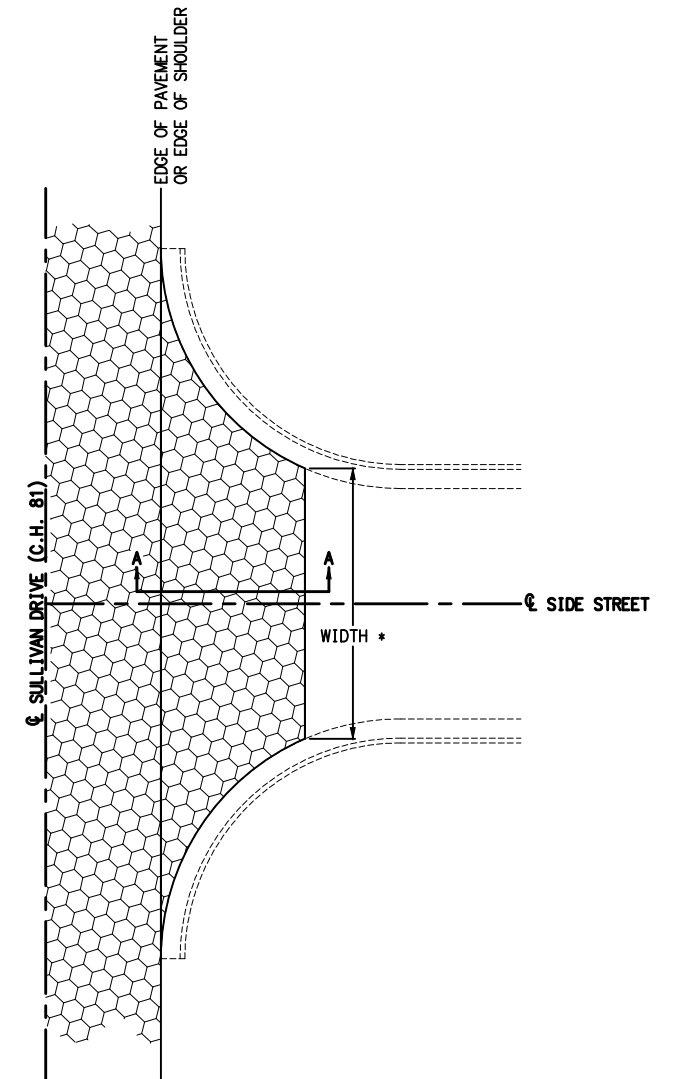


**SECTION A-A**  
**HOT MIX ASPHALT OR**  
**CONCRETE ENTRANCE**  
 (NOT TO SCALE)



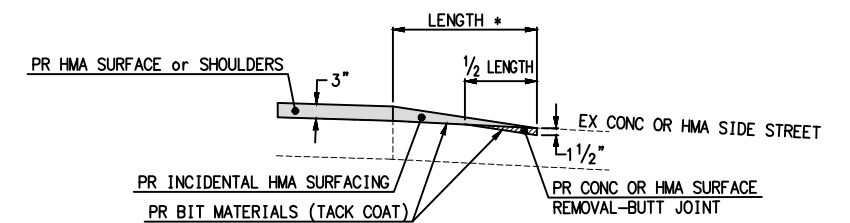
**SECTION A-A**  
**AGGREGATE OR**  
**DIRT ENTRANCE**  
 (NOT TO SCALE)

**TYPICAL ENTRANCE DETAIL**  
 SEE ENTRANCE SCHEDULE FOR LOCATION AND TYPE



**PLAN VIEW**  
 (NOT TO SCALE)

\* SEE SCHEDULE OF ENTRANCES  
 FOR LENGTH AND WIDTH



**SECTION A-A**  
 (NOT TO SCALE)

**TYPICAL SIDE STREET RETURN DETAIL**  
 SEE ENTRANCE SCHEDULE FOR LOCATION



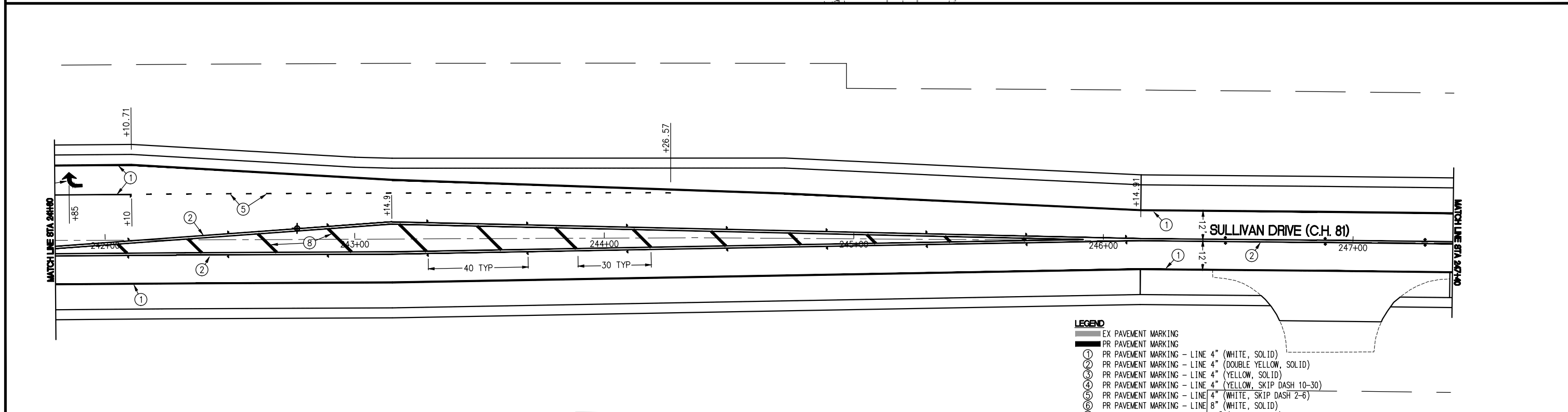
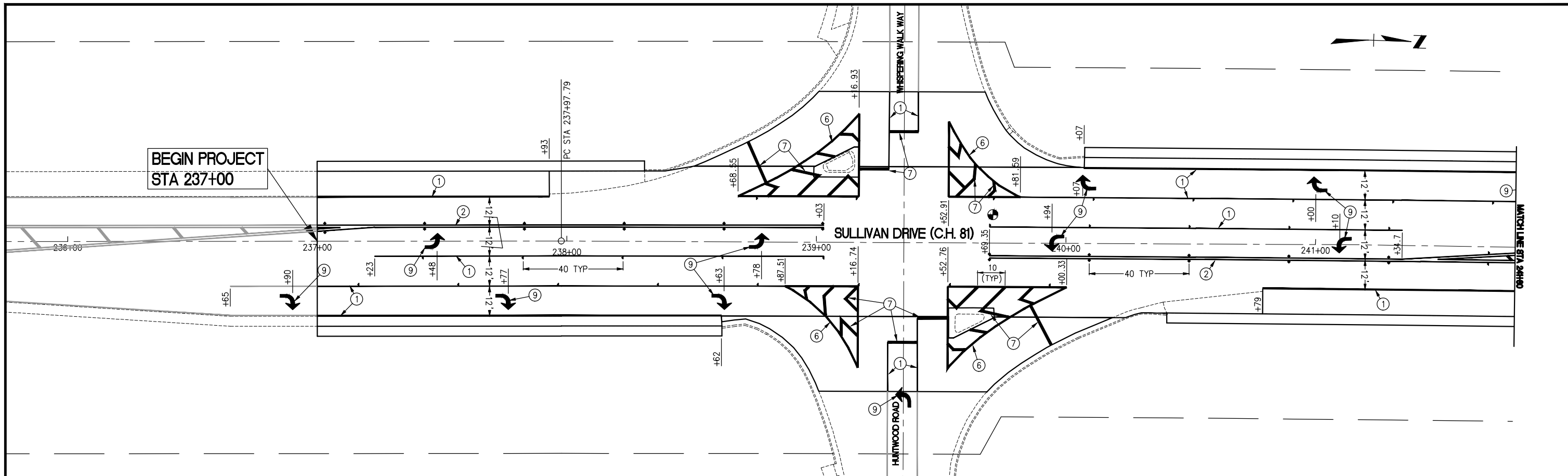
**ST. CLAIR COUNTY**  
**DEPARTMENT OF ROAD AND BRIDGES**

**DETAILS**

SHEET NO. 1 OF 1 SHEETS

STA TO STA

FAU ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9167	21-00268-06-RS	ST. CLAIR	20	14
CONTRACT NO. 97813				



BEGIN PROJECT  
STA 237+00

SULLIVAN DRIVE (C.H. 81)

SULLIVAN DRIVE (C.H. 81)

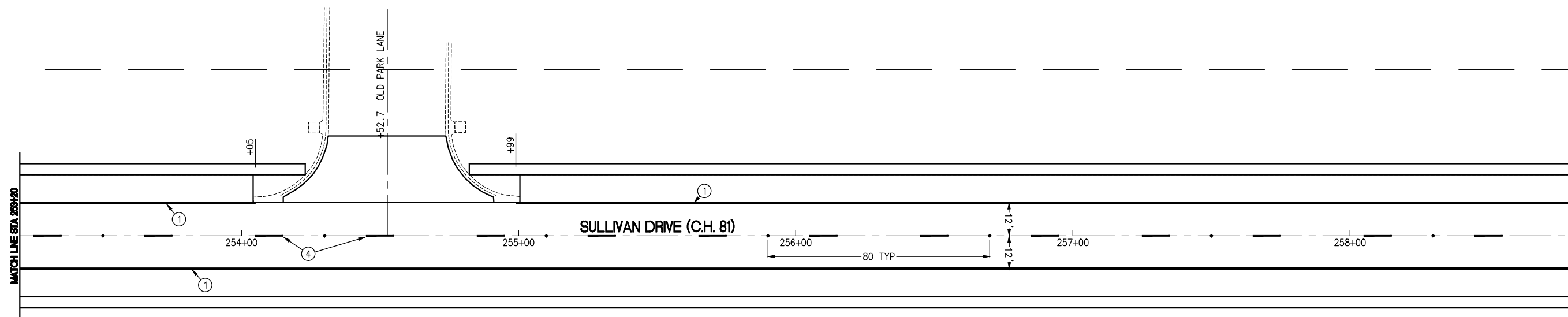
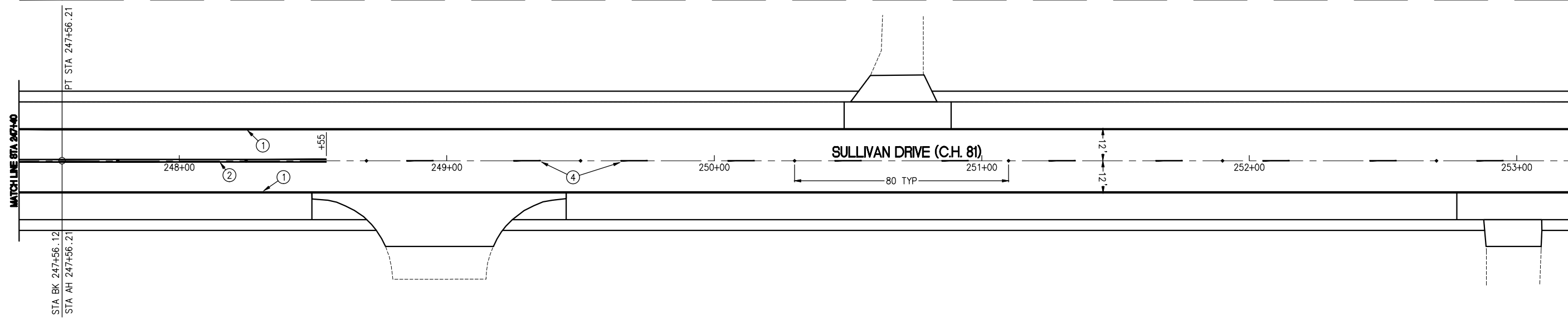
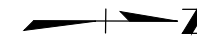
- LEGEND**
- █ EX PAVEMENT MARKING
  - █ PR PAVEMENT MARKING
  - ① PR PAVEMENT MARKING - LINE 4" (WHITE, SOLID)
  - ② PR PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW, SOLID)
  - ③ PR PAVEMENT MARKING - LINE 4" (YELLOW, SOLID)
  - ④ PR PAVEMENT MARKING - LINE 4" (YELLOW, SKIP DASH 10-30)
  - ⑤ PR PAVEMENT MARKING - LINE 4" (WHITE, SKIP DASH 2-6)
  - ⑥ PR PAVEMENT MARKING - LINE 8" (WHITE, SOLID)
  - ⑦ PR PAVEMENT MARKING - LINE 12" (WHITE, SOLID)
  - ⑧ PR PAVEMENT MARKING - LINE 12" (YELLOW, SOLID)
  - ⑨ PR PAVEMENT MARKING - LETTERS AND SYMBOLS
  - ◆ PR RAISED REFLECTIVE PAVEMENT MARKER - TWO WAY AMBER
  - ◄ PR RAISED REFLECTIVE PAVEMENT MARKER - ONE WAY AMBER
  - ◄ PR RAISED REFLECTIVE PAVEMENT MARKER - ONE WAY CRYSTAL



NOTE: DIMENSIONS IN FEET UNLESS OTHERWISE NOTED.

NOTE: ALL PROPOSED PERMANENT PAVEMENT MARKINGS SHALL BE THERMOPLASTIC PAVEMENT MARKING

FAU ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9167	21-00268-06-RS	ST. CLAIR	20	15
<b>CONTRACT NO. 97813</b>				



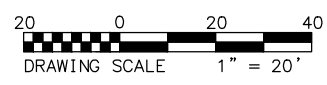
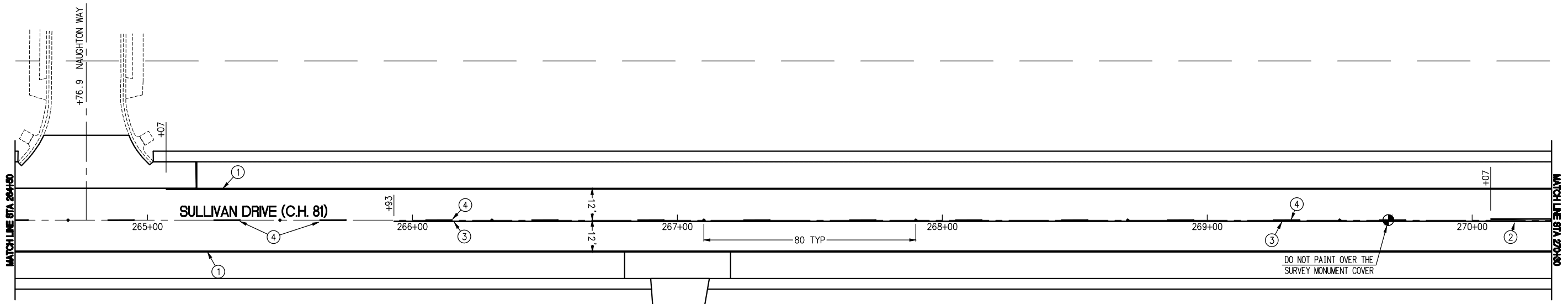
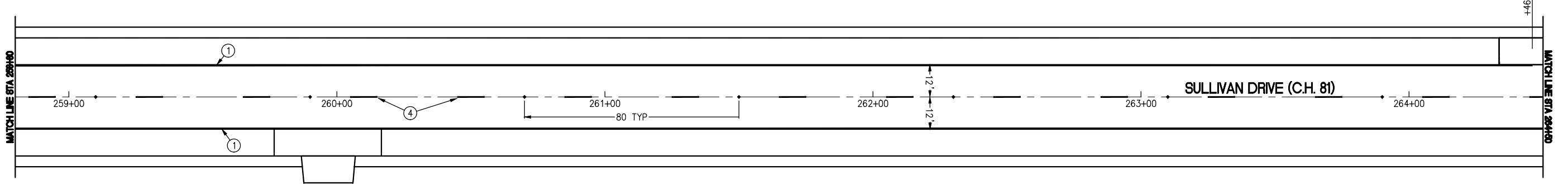
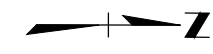
NOTE: DIMENSIONS IN FEET UNLESS OTHERWISE NOTED.

NOTE: ALL PROPOSED PERMANENT PAVEMENT MARKINGS SHALL BE THERMOPLASTIC PAVEMENT MARKING

- LEGEND**
- EX PAVEMENT MARKING
  - PR PAVEMENT MARKING
  - ① PR PAVEMENT MARKING - LINE 4" (WHITE, SOLID)
  - ② PR PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW, SOLID)
  - ③ PR PAVEMENT MARKING - LINE 4" (YELLOW, SOLID)
  - ④ PR PAVEMENT MARKING - LINE 4" (YELLOW, SKIP DASH 10-30)
  - ⑤ PR PAVEMENT MARKING - LINE 4" (WHITE, SKIP DASH 2-6)
  - ⑥ PR PAVEMENT MARKING - LINE 8" (WHITE, SOLID)
  - ⑦ PR PAVEMENT MARKING - LINE 12" (WHITE, SOLID)
  - ⑧ PR PAVEMENT MARKING - LINE 12" (YELLOW, SOLID)
  - ⑨ PR PAVEMENT MARKING - LETTERS AND SYMBOLS
  - ◆ PR RAISED REFLECTIVE PAVEMENT MARKER - TWO WAY AMBER
  - ◀ PR RAISED REFLECTIVE PAVEMENT MARKER - ONE WAY AMBER
  - ◄ PR RAISED REFLECTIVE PAVEMENT MARKER - ONE WAY CRYSTAL

FAU ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9167	21-00268-06-RS	ST. CLAIR	20	16
<b>CONTRACT NO. 97813</b>				





NOTE: DIMENSIONS IN FEET UNLESS OTHERWISE NOTED.

NOTE: ALL PROPOSED PERMANENT PAVEMENT MARKINGS SHALL BE THERMOPLASTIC PAVEMENT MARKING

- LEGEND**
- EX PAVEMENT MARKING
  - PR PAVEMENT MARKING
  - ① PR PAVEMENT MARKING - LINE 4" (WHITE, SOLID)
  - ② PR PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW, SOLID)
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  - ◆ PR RAISED REFLECTIVE PAVEMENT MARKER - TWO WAY AMBER
  - ◀ PR RAISED REFLECTIVE PAVEMENT MARKER - ONE WAY AMBER
  - ◁ PR RAISED REFLECTIVE PAVEMENT MARKER - ONE WAY CRYSTAL



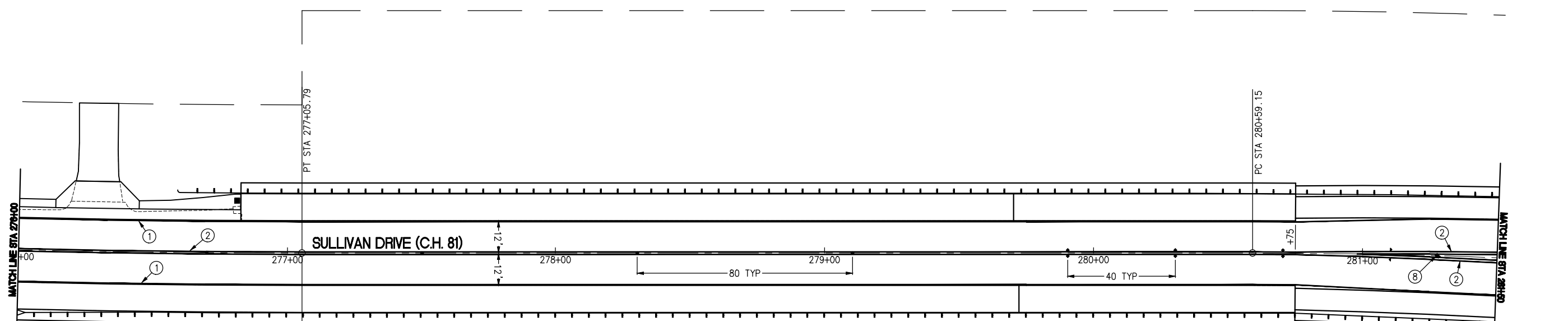
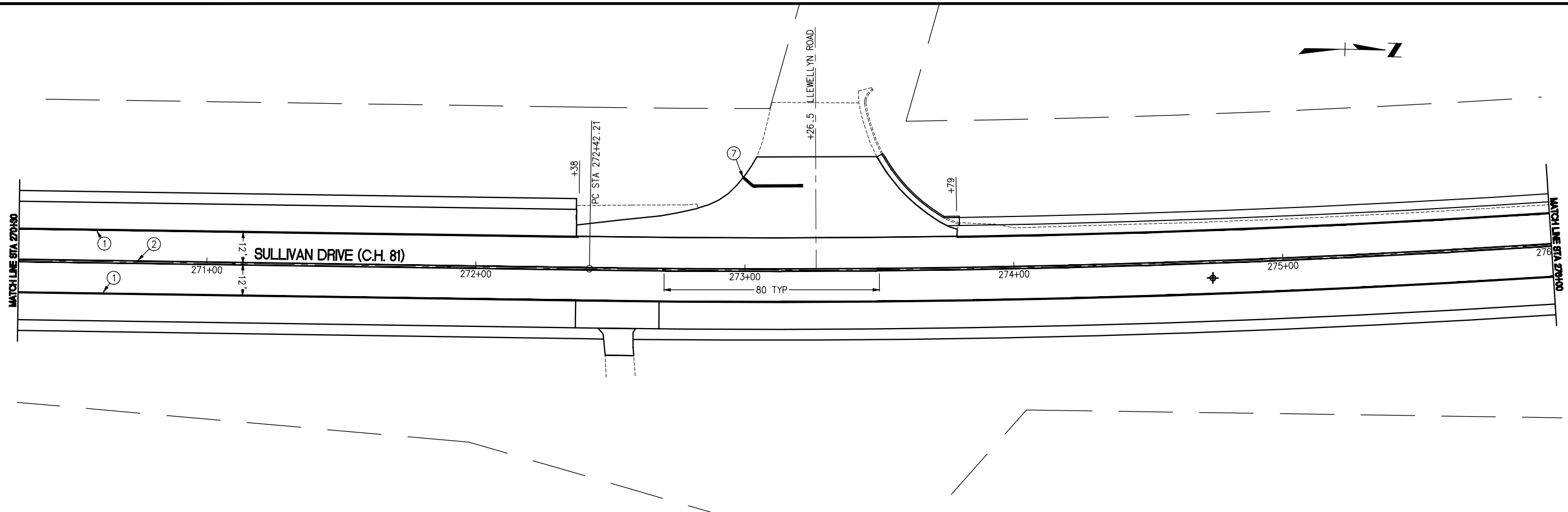
ST. CLAIR COUNTY  
DEPARTMENT OF ROAD AND BRIDGES

PAVEMENT MARKING DETAILS

SHEET NO. 3 OF 5 SHEETS

STA 258+80 TO STA 270+30

FAU ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9167	21-00268-06-RS	ST. CLAIR	20	17
CONTRACT NO. 97813				

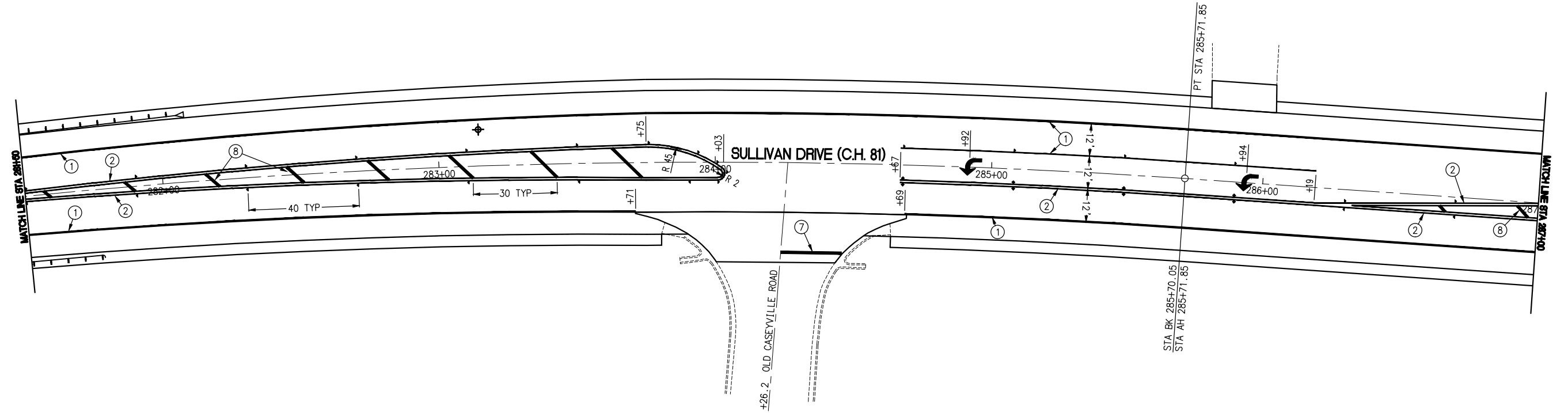
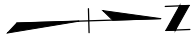


NOTE: DIMENSIONS IN FEET UNLESS OTHERWISE NOTED.

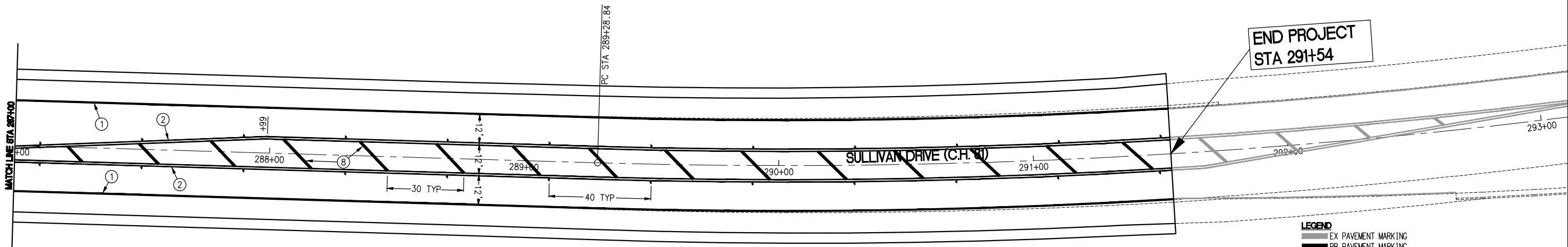
NOTE: ALL PROPOSED PERMANENT PAVEMENT MARKINGS SHALL BE THERMOPLASTIC PAVEMENT MARKING

- LEGEND**
- EX PAVEMENT MARKING
  - PR PAVEMENT MARKING
  - ① PR PAVEMENT MARKING - LINE 4" (WHITE, SOLID)
  - ② PR PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW, SOLID)
  - ③ PR PAVEMENT MARKING - LINE 4" (YELLOW, SOLID)
  - ④ PR PAVEMENT MARKING - LINE 4" (YELLOW, SKIP DASH 10-30)
  - ⑤ PR PAVEMENT MARKING - LINE 4" (WHITE, SKIP DASH 2-6)
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  - ⑨ PR PAVEMENT MARKING - LETTERS AND SYMBOLS
  - ◆ PR RAISED REFLECTIVE PAVEMENT MARKER - TWO WAY AMBER
  - ▲ PR RAISED REFLECTIVE PAVEMENT MARKER - ONE WAY AMBER
  - ◊ PR RAISED REFLECTIVE PAVEMENT MARKER - ONE WAY CRYSTAL

FAU ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9167	21-00268-06-RS	ST. CLAIR	20	18
<b>CONTRACT NO. 97813</b>				



PT STA 285+71.85  
 STA BK 285+70.05  
 STA AH 285+71.85



END PROJECT  
 STA 291+54



NOTE: DIMENSIONS IN FEET UNLESS OTHERWISE NOTED.

NOTE: ALL PROPOSED PERMANENT PAVEMENT MARKINGS SHALL BE THERMOPLASTIC PAVEMENT MARKING

- LEGEND**
- EX PAVEMENT MARKING
  - PR PAVEMENT MARKING
  - ① PR PAVEMENT MARKING - LINE 4" (WHITE, SOLID)
  - ② PR PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW, SOLID)
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  - ⑨ PR PAVEMENT MARKING - LETTERS AND SYMBOLS
  - ◆ PR RAISED REFLECTIVE PAVEMENT MARKER - TWO WAY AMBER
  - ▲ PR RAISED REFLECTIVE PAVEMENT MARKER - ONE WAY AMBER
  - ◀ PR RAISED REFLECTIVE PAVEMENT MARKER - ONE WAY CRYSTAL



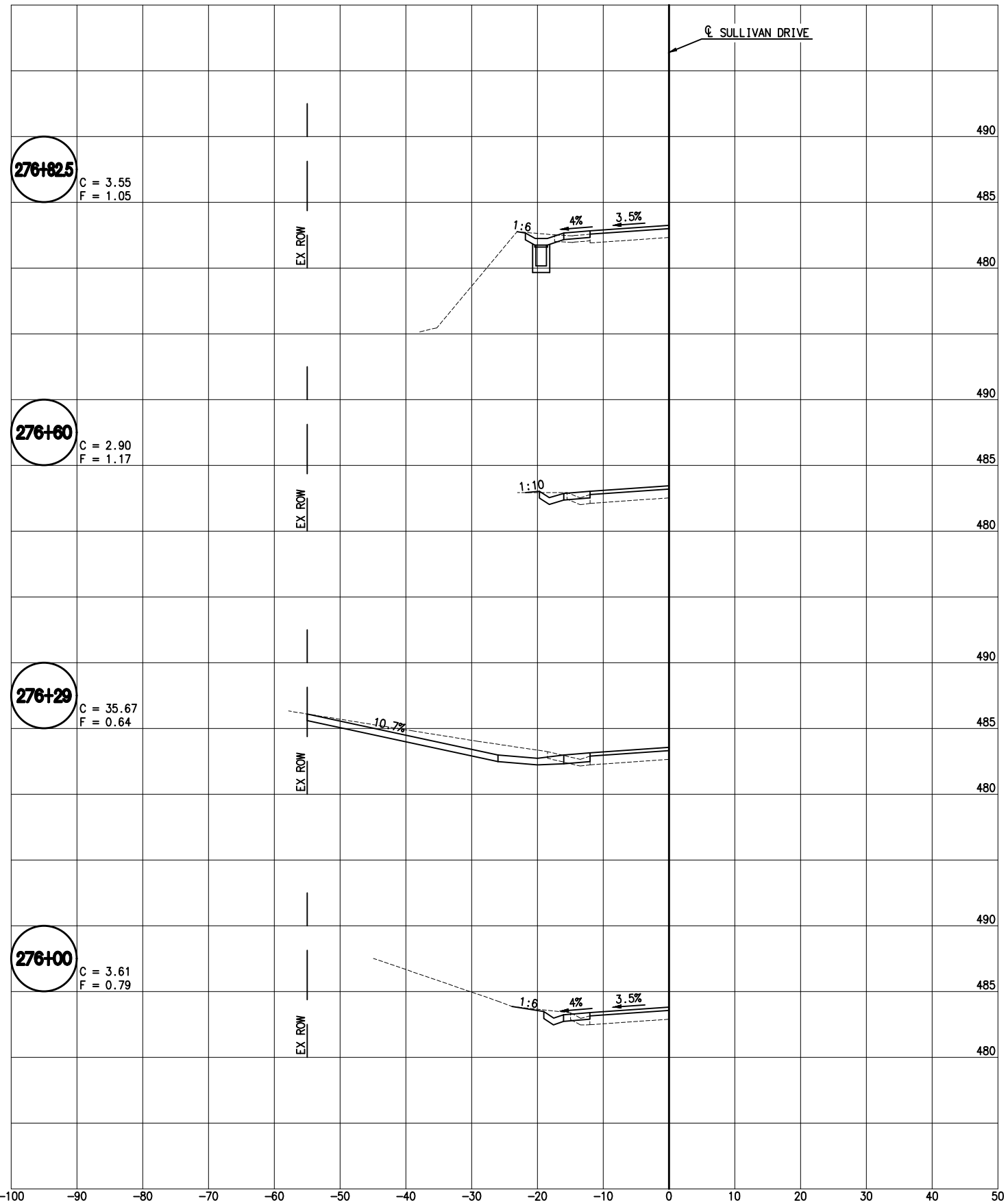
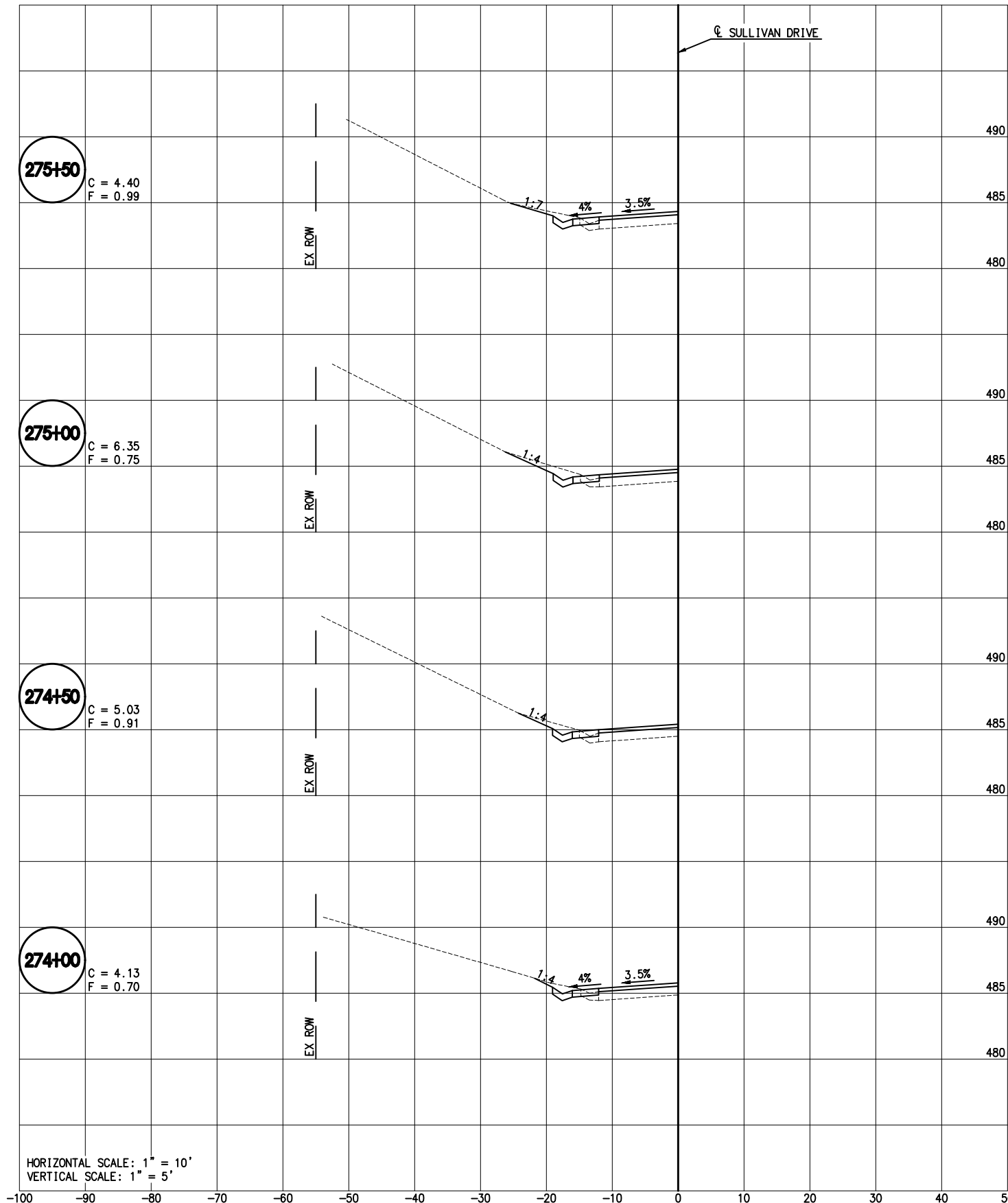
ST. CLAIR COUNTY  
 DEPARTMENT OF ROAD AND BRIDGES

PAVEMENT MARKING DETAILS

SHEET NO. 5 OF 5 SHEETS

STA 281+50 TO STA 291+54

FAU ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9167	21-00268-06-RS	ST. CLAIR	20	19
CONTRACT NO. 97813				



HORIZONTAL SCALE: 1" = 10'  
 VERTICAL SCALE: 1" = 5'



ST. CLAIR COUNTY  
 DEPARTMENT OF ROAD AND BRIDGES

CROSS SECTIONS

SHEET NO. 1 OF 1 SHEETS

STA 274+00 TO STA 276+82.5

FAU ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9167	21-00268-06-RS	ST. CLAIR	20	20
CONTRACT NO. 97813				