

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	16-00102-00-BR	MADISON	27	1
ILLINOIS			CONTRACT NO. 97714	

11-08-2019 LETTING ITEM 092

INDEX OF SHEETS

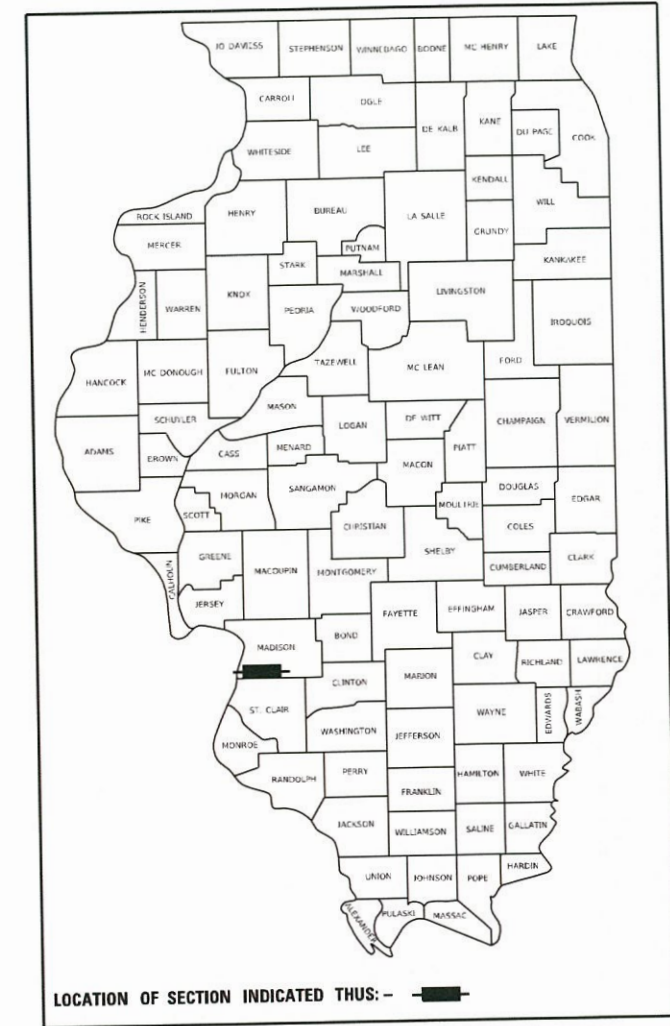
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STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

PLANS FOR PROPOSED FEDERAL AID PROJECT

STP-BR FUNDS
CITY OF COLLINSVILLE
FAIRMONT AVE. (MUN 42) OVER CANTEEN CREEK
SECTION 16-00102-00-BR
STRUCUTRE NO: 060-3208
PROJECT NO. XHLS(765)
MADISON COUNTY
C-98-350-16

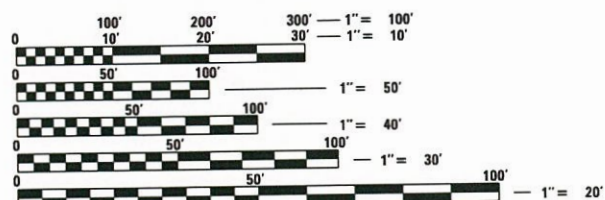


IDOT HIGHWAY STANDARDS

- 000001-07 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
- 515001-03 NAME PLATE FOR BRIDGES
- 542401-03 METAL FLARED END SECTION FOR PIPE CULVERTS
- 602301-04 INLET - TYPE A
- 604001-04 FRAME AND LIDS TYPE 1
- 604036-03 GRATE TYPE 8
- 630001-12 STEEL PLATE BEAM GUARDRAIL
- 631011-10 TRAFFIC BARRIER TERMINAL, TYPE 2
- 631032-09 TRAFFIC BARRIER TERMINAL, TYPE 6A
- 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 ≥ 45 MPH
- 701901-08 TRAFFIC CONTROL DEVICES
- 720001-01 SIGN PANEL MOUNTING DETAILS
- 720006-04 SIGN PANEL ERECTION DETAILS
- 725001-01 OBJECT AND TERMINAL MARKERS
- 728001-01 TELESCOPING STEEL SIGN SUPPORT
- 782006 GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS
- BLR21-9 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS
- BLR23-4 TRAFFIC BARRIER TERMINAL TYPE 1

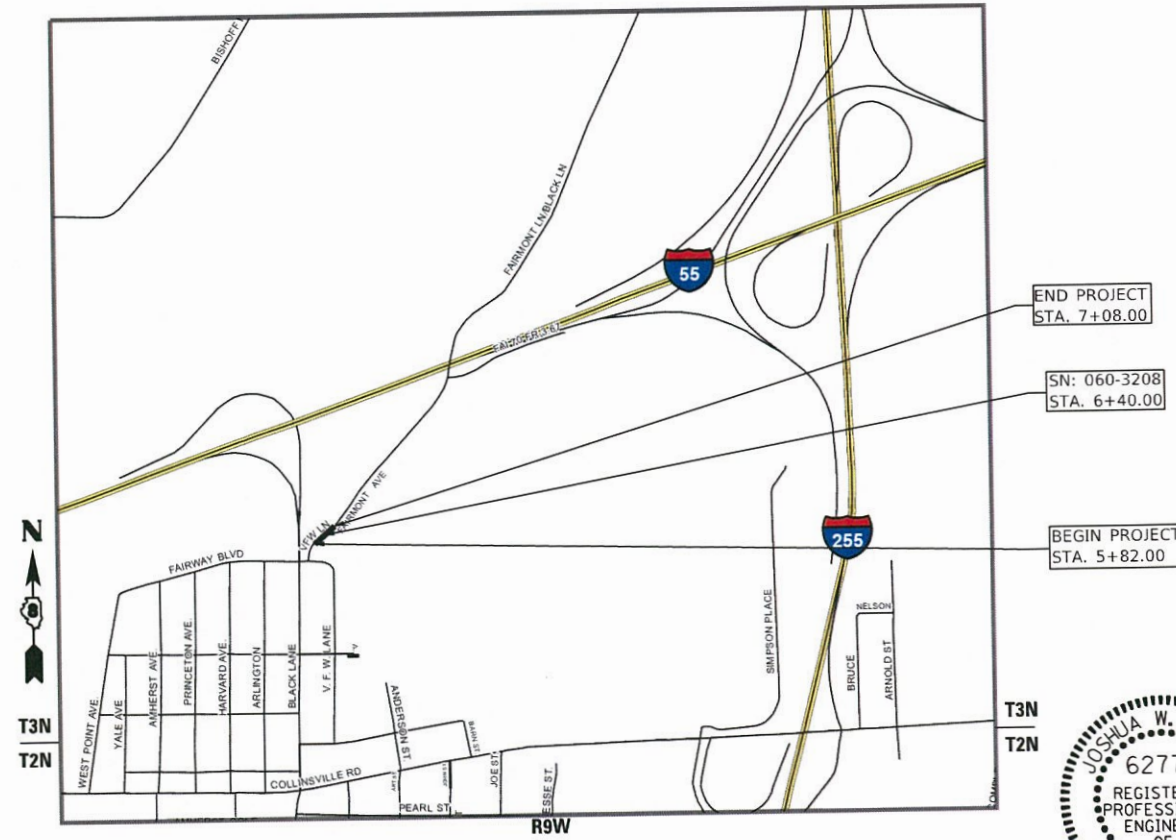
DESIGN DESIGNATION

ROADWAY CLASSIFICATION: URBAN 2-LANE LOCAL ROAD
DESIGN SPEED: 30 MPH
CURRENT ADT (2019): 900
DESIGN YEAR ADT (2020): 937



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

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



LOCATION MAP

SCALE: 1"=2400'
 GROSS LENGTH = 126 FT. = 0.024 MILE
 NET LENGTH = 126 FT. = 0.024 MILE



8-5-19
 JWS
 JOSHUA W. STEIN, P.E.
 LICENSE NO. 062-062775 EXPIRATION DATE 11-30-2019

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

APPROVED 8-14 2019

 MAYOR
 CITY OF COLLINSVILLE

PASSED August 27 2019

 DISTRICT 8 ENGINEER
 LOCAL ROADS & STREETS

RELEASED FOR BID BASED ON LIMITED REVIEW
August 27 2019

 REGION FIVE ENGINEER

**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**

PLANS PREPARED BY:

4940 Old Collinsville Road
 Swansea, Illinois 62226
 Tel: 618.624.4488
 www.twm-inc.com

Illinois Professional Design Firm
 No. 184-001220
 License Expires: 4/30/2021
ILLINOIS - MISSOURI - TENNESSEE

GENERAL NOTES

1. IT IS NOT WARRANTED THAT THIS DOCUMENT CONTAINS COMPLETE INFORMATION REGARDING EASEMENTS, RESERVATIONS, RESTRICTIONS, RIGHT-OF-WAYS, BUILDING LINE SETBACKS, AND OTHER ENCUMBRANCES. FOR COMPLETE INFORMATION, A TITLE OPINION OR COMMITMENT FOR TITLE INSURANCE SHOULD BE OBTAINED AND THOROUGHLY REVIEWED.
2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO ORDERING OF MATERIALS AND COMMENCING CONSTRUCTION.
3. THE CONTRACTOR SHALL STAGE ALL WORK IN SUCH A WAY AS TO MAINTAIN INGRESS AND EGRESS TO ALL ABUTTING PROPERTIES.
4. THE CONTRACTOR SHALL CONFINE ALL OPERATIONS TO THE CONSTRUCTION LIMITS LINE SHOWN ON THE PLANS. ANY AREA DISTURBED BEYOND THESE LIMITS SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.

DRAINAGE AND EROSION CONTROL

1. EXISTING DITCHES/SWALES MAY NEED TO BE REGRADED OR RESHAPED TO ENSURE ALL FLOWS ENTER THE PROPER DITCH, CULVERT OR OTHER DRAINAGE APPURTENANCES DURING AND AT THE COMPLETION OF THE PROJECT. COST FOR THIS WORK IS CONSIDERED INCLUDED IN THE COST OF EARTH EXCAVATION.
2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN POSITIVE DRAINAGE DURING VARIOUS STAGES OF CONSTRUCTION. THIS INCLUDES ALL LABOR, EQUIPMENT AND MATERIALS USED BEYOND WHAT IS SPECIFIED IN THE PLANS. NECESSARY ITEMS SUCH AS TEMPORARY DITCHES OR PIPES WILL NOT BE PAID FOR SEPERATELY AND SHALL BE CONSIDERED INCLUDED IN THE COST OF THE CONTRACT.
3. EROSION AND SEDIMENT CONTROL SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 280 OF THE STANDARD SPECIFICATIONS.
4. ALL TEMPORARY AND PERMANENT EROSION CONTROL DEVICES SHALL BE IMPLEMENTED AS SHOWN IN THE PLANS AND APPLICABLE HIGHWAY STANDARDS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSURE THAT ALL EROSION AND SEDIMENT DOES NOT MIGRATE OFF SITE. IF UNEXPECTED EROSION OR SEDIMENT DOES MIGRATE OFF SITE OR IF EROSION CONTROL DEVICES BECOME DAMAGED, THE CONTRACTOR SHALL PROVIDE SUFFICIENT MEASURES TO REPAIR OR REPLACE THE DEVICES.
5. CHANNEL EXCAVATION SHALL BE PERFORMED ONLY TO THE EXTENT NECESSARY TO PLACE THE PROPOSED STONE RIPRAP. THE TOP OF FINISH GRADE OF THE STONE RIPRAP SHALL MATCH THE EXISTING GROUND LINE PRIOR TO CHANNEL EXCAVATION BEING PERFORMED.
6. LAYOUT OF RIPRAP MAY BE VARIED TO SUIT EXISTING GROUND CONDITIONS, PER THE DIRECTION OF THE ENGINEER.

MIXTURE REQUIREMENTS

MIXTURE USE	SURFACE
AC/PG	PG 64-22
RAP % (MAX)	SEE SPECIAL PROVISION
DESIGN AIR VOIDS	4.0% @ Ndes=70
MIX COMPOSITION (GRADATION MIXTURE)	IL 9.5
FRICITION AGG	MIXTURE "C"

PLAN QUANTITIES FOR BITUMINOUS CONCRETE ITEMS ARE CALCULATED USING A UNIT WEIGHT OF 112 LB / SQ YD / INCH

UTILITIES

ILLINOIS STATE LAW REQUIRES A 48-HOUR NOTICE BE GIVEN TO ALL UTILITIES BEFORE DIGGING. FIELD MARKING OF FACILITIES MAY BE OBTAINED BY CONTACTING J.U.L.I.E. OR FOR NON-MEMBERS, THE UTILITY COMPANY DIRECTLY. AGENCIES KNOWN TO HAVE FACILITIES WITHIN THE PROJECT AREA ARE AS FOLLOWS:

*AMEREN IP - GAS & ELECTRIC
 *AT&T - TELEPHONE
 *CHARTER COMMUNICATIONS - CABLE TV
 *CITY OF COLLINSVILLE - WATER & SEWER

MEMBERS OF J.U.L.I.E. CALL TOLL FREE (800) 892-0123 OR 811 AND ARE INDICATED BY *
 NON-J.U.L.I.E. MEMBERS MUST BE NOTIFIED INDIVIDUALLY.

REFER TO THE "STATUS OF UTILITIES TO BE ADJUSTED" SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.

TRAFFIC CONTROL

1. FLOURESCENT ORANGE 'ROAD CONSTRUCTION AHEAD' SIGNS (48"X48") SHALL BE PLACED AT EACH END OF THE PROJECT PLUS THE INTERSECTING SIDE ROADS/STREETS AS DIRECTED BY THE ENGINEER. THESE SIGNS SHALL NOT BE MEASURED FOR PAYMENT. COST SHALL BE INCLUDED IN THE VARIOUS TRAFFIC CONTROL PAY ITEMS.
2. THERE WILL NOT BE A MARKED DETOUR ROUTE FOR THIS PROJECT.
3. CHANGEABLE MESSAGE SIGNS SHALL BE ERECTED 14 DAYS IN ADVANCE OF THE ROAD CLOSURE AND DURING THE CLOSURE. THE MESSAGE SHALL BE PER THE DIRECTION OF THE ENGINEER.
4. THE CONTRACTOR SHALL CONTACT THE FOLLOWING ENTITIES IN ADVANCE OF THE ROAD CLOSURE:
 CITY OF COLLINSVILLE - POLICE DEPT. - 618-344-2131
 CITY OF COLLINSVILLE - FIRE DEPT. - 618-346-5022
 UNITED STATES POSTAL SERVICE - 618-344-3787
 COLLINSVILLE COM. UNIT SCHOOL DISTRICT 10 - 618-346-3650

COMMITMENTS

NONE

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	DATE -	REVISED -



CITY OF COLLINSVILLE

GENERAL NOTES, COMMITMENTS

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

MUN	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	16-00102-00-BR	MADISON	27	2
CONTRACT NO. 97714				
ILLINOIS FED. AID PROJECT				

CODE NO.	PAY ITEM	UNIT	TOTAL QUANTITY
20200100	EARTH EXCAVATION	CU YD	35
20300100	CHANNEL EXCAVATION	CU YD	250
20400800	FURNISHED EXCAVATION	CU YD	25
20800150	TRENCH BACKFILL	CU YD	4
20900110	POROUS GRANULAR BACKFILL	CU YD	116
28000305	TEMPORARY DITCH CHECKS	FOOT	6
28000400	PERIMETER EROSION BARRIER	FOOT	174
28000500	INLET AND PIPE PROTECTION	EACH	2
28100107	STONE RIPRAP, CLASS A4	SQ YD	433
28200200	FILTER FABRIC	SQ YD	433
31101000	SUBBASE GRANULAR MATERIAL, TYPE B	TON	58
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	300
40603315	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N70	TON	64
48100500	AGGREGATE SHOULDERS, TYPE A 6"	SQ YD	324

CODE NO.	PAY ITEM	UNIT	TOTAL QUANTITY
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
50101500	REMOVAL OF EXISTING SUPERSTRUCTURES	EACH	1
50105220	PIPE CULVERT REMOVAL	FOOT	28
50200100	STRUCTURE EXCAVATION	CU YD	28
50300225	CONCRETE STRUCTURES	CU YD	9.3
50400605	PRECAST PRESTRESSED CONCRETE DECK BEAMS (33" DEPTH)	SQ FT	2508
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	340
Δ 50901050	STEEL RAILING, TYPE SM	FOOT	156
51500100	NAME PLATES	EACH	1
52200015	PERMANENT SHEET PILING	SQ FT	1997
54262715	METAL FLARED END SECTIONS 15"	EACH	2
58100200	WATERPROOFING MEMBRANE SYSTEM	SQ YD	279
58300100	PORTLAND CEMENT MORTAR FAIRING COURSE	FOOT	760
60235300	INLETS, TYPE A, TYPE 1 FRAME, CLOSED LID	EACH	2

Δ SPECIALTY ITEMS

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PLOT DATE = 8/2/2019		



CITY OF COLLINSVILLE

SUMMARY OF QUANTITIES

SCALE: NONE	SHEET 1	OF 2	SHEETS	STA.	TO STA.	MUN	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
						42	16-00102-00-BR	MADISON	27	3
						ILLINOIS FED. AID PROJECT				
						CONTRACT NO. 97714				

CODE NO.	PAY ITEM	UNIT	TOTAL QUANTITY
60236200	INLETS, TYPE A, TYPE 8 GRATE	EACH	1
61140400	STORM SEWERS (SPECIAL), 15"	FOOT	26
△ 63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	37.5
△ 63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	1
△ 63100087	TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	3
63200310	GUARDRAIL REMOVAL	FOOT	114
67100100	MOBILIZATION	L SUM	1
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	98
△ 72000100	SIGN PANEL - TYPE 1	SQ FT	17
△ 72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	3
△ 72800100	TELESCOPING STEEL SIGN SUPPORT	FOOT	33
△ 78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	8
△ 78200011	BARRIER WALL REFLECTORS, TYPE C	EACH	4
△ Z0001900	ASBESTOS BEARING PAD REMOVAL	EACH	22

CODE NO.	PAY ITEM	UNIT	TOTAL QUANTITY
Z0013798	CONSTRUCTION LAYOUT	L SUM	1
Z0056610	STORM SEWER (WATER MAIN REQUIREMENTS) 15 INCH	FOOT	24
△ LR631020	TRAFFIC BARRIER TERMINAL, TYPE 1	EACH	3
X0326440	SURFACE REMOVAL, VARIABLE DEPTH (SPECIAL)	SQ YD	133
X2501000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.25
△ X6310188	TRAFFIC BARRIER TERMINAL, TYPE 6A (MODIFIED)	EACH	1
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1

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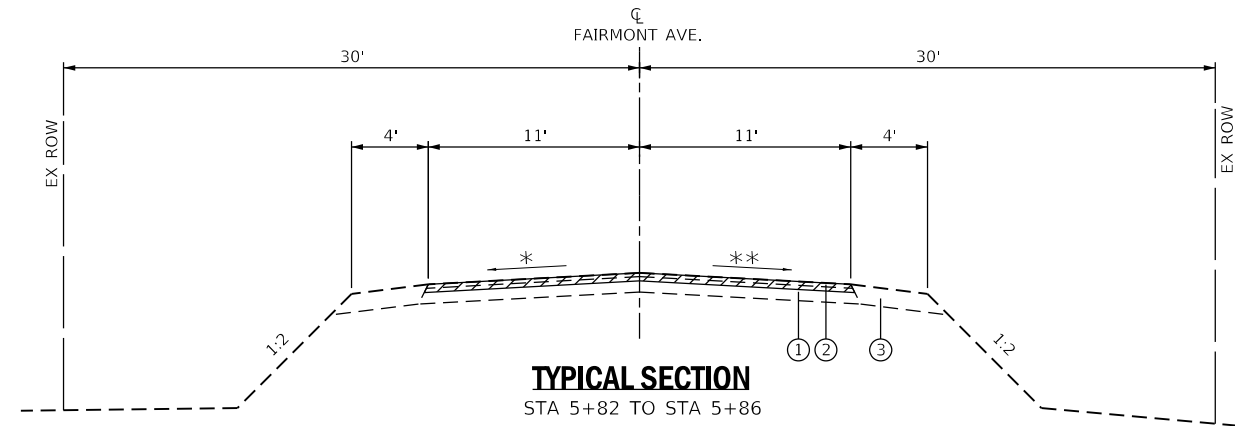


CITY OF COLLINSVILLE

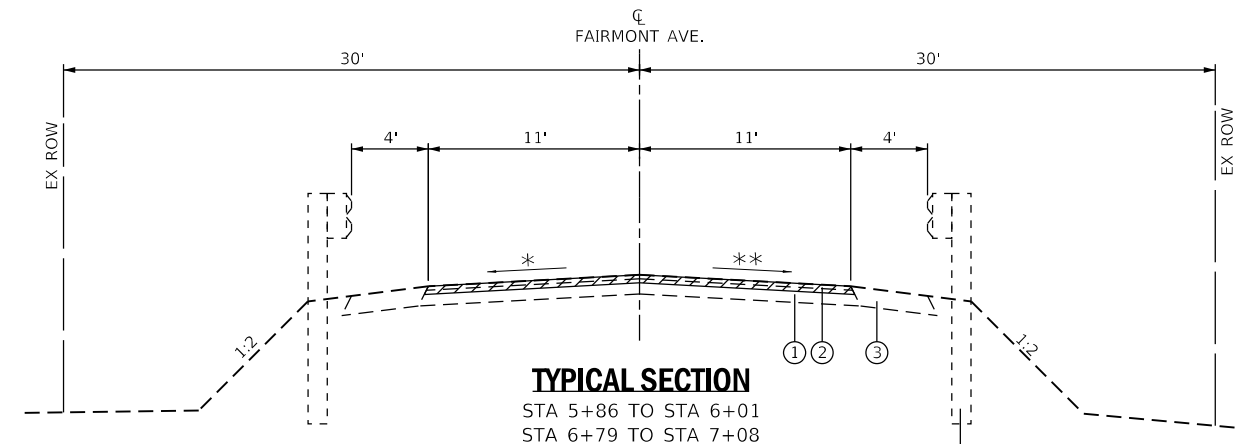
SUMMARY OF QUANTITIES

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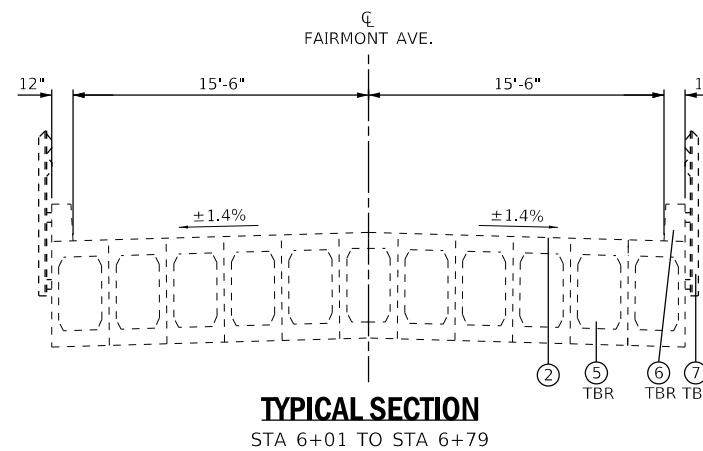
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42	16-00102-00-BR	MADISON	27	4
			CONTRACT NO. 97714	
ILLINOIS FED. AID PROJECT				



* VARIES 4.0% TO 3.0% FROM STA. 5+82 TO 5+86
 ** VARIES 4.5% TO 3.5% FROM STA. 5+82 TO 5+86



* VARIES 3.0% TO 1.4% FROM STA. 5+86 TO 6+01
 VARIES 1.4% TO 4.0% FROM STA. 6+79 TO 7+08
 ** VARIES 3.5% TO 1.4% FROM STA. 5+86 TO 6+01
 VARIES 1.4% TO 2.5% FROM STA. 6+79 TO 7+08



TYPICAL SECTION
 STA 6+01 TO STA 6+79

LEGEND

- ① EXISTING AGGREGATE BASE, 6"
- ② EXISTING BITUMINOUS SURFACE TREATMENT
- ③ EXISTING AGGREGATE/EARTH SHOULDER
- ④ EXISTING GUARDRAIL
- ⑤ EXISTING BRIDGE (PPC DECK BEAMS)
- ⑥ EXISTING CURB
- ⑦ EXISTING BRIDGE RAILING
- ⑧ PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "C" N70, 3"
- ⑨ PROPOSED AGGREGATE SHOULDER, TYPE A, 6"
- ⑩ PROPOSED STEEL PLATE BEAM GUARDRAIL (OR TBT)
- ⑪ PROPOSED PRECAST PRESTRESSED CONCRETE DECK BEAMS
- ⑫ PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "C" N70, VAR. DEPTH
- ⑬ PROPOSED STEEL RAILING, TYPE SM



PROPOSED SURFACE REMOVAL, VARIABLE DEPTH (SPECIAL)

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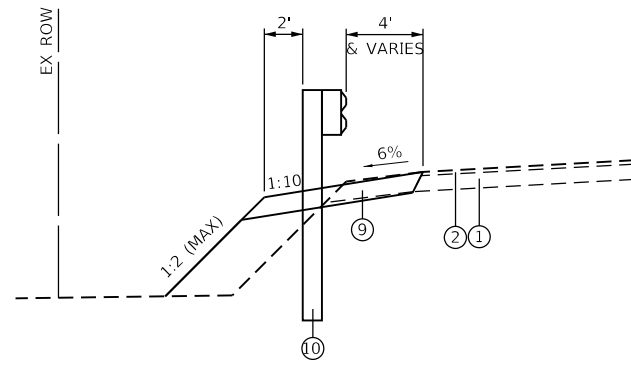
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CITY OF COLLINSVILLE

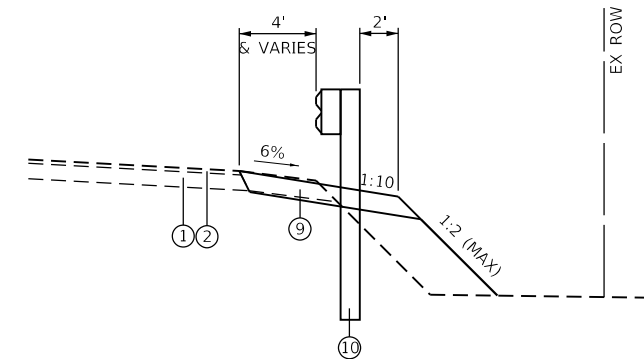
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STA. TO STA.		ILLINOIS FED. AID PROJECT				

MUN	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	16-00102-00-BR	MADISON	27	5
CONTRACT NO. 97714				



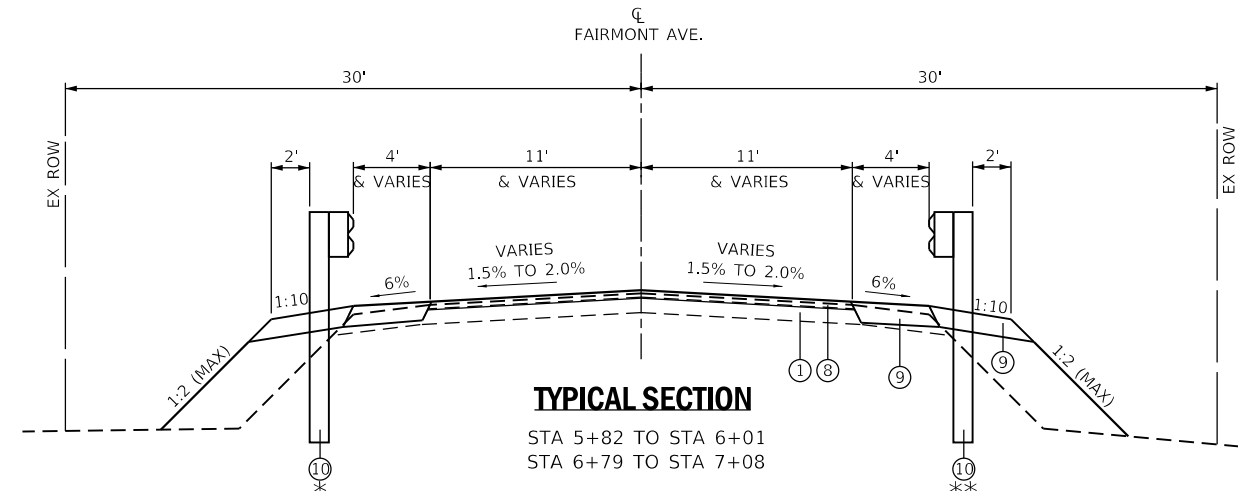
INSET A

STA 5+25 TO STA 5+82
STA. 7+08 TO STA. 7+24



INSET B

STA 5+34 TO STA 5+82
STA 7+08 TO STA 7+78

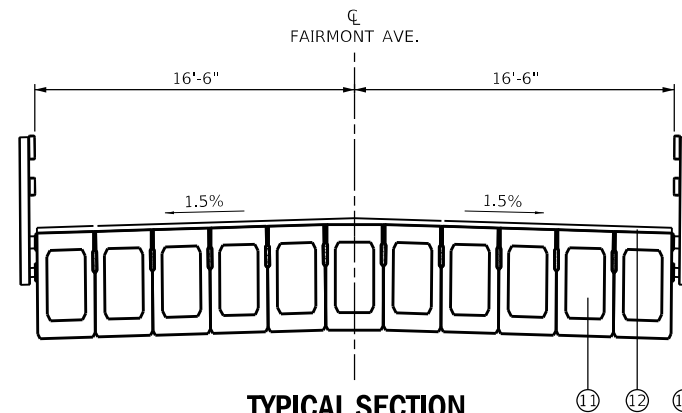


TYPICAL SECTION

STA 5+82 TO STA 6+01
STA 6+79 TO STA 7+08

* GUARDRAIL LEFT
STA. 5+58 TO 6+02
STA. 6+78 TO 7+24
(SEE INSET A)

** GUARDRAIL RIGHT
STA. 5+34 TO 6+02
STA. 6+78 TO 7+78
(SEE INSET B)



TYPICAL SECTION

STA 6+01 TO STA 6+79

LEGEND

- ① EXISTING AGGREGATE BASE, 6"
- ② EXISTING BITUMINOUS SURFACE TREATMENT
- ③ EXISTING AGGREGATE/EARTH SHOULDER
- ④ EXISTING GUARDRAIL
- ⑤ EXISTING BRIDGE (PPC DECK BEAMS)
- ⑥ EXISTING CURB
- ⑦ EXISTING BRIDGE RAILING
- ⑧ PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "C" N70, 3"
- ⑨ PROPOSED AGGREGATE SHOULDER, TYPE A, 6"
- ⑩ PROPOSED STEEL PLATE BEAM GUARDRAIL (OR TBT)
- ⑪ PROPOSED PRECAST PRESTRESSED CONCRETE DECK BEAMS
- ⑫ PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "C" N70, VAR. DEPTH
- ⑬ PROPOSED STEEL RAILING, TYPE SM



PROPOSED SURFACE REMOVAL, VARIABLE DEPTH (SPECIAL)

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CITY OF COLLINSVILLE

PROPOSED
TYPICAL SECTIONS

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

MUN	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	16-00102-00-BR	MADISON	27	6
CONTRACT NO. 97714				
ILLINOIS FED. AID PROJECT				

EARTHWORK SCHEDULE								
LOCATION				CHANNEL EXCAVATION	EARTH EXCAVATION	FOR INFORMATION ONLY		
						EARTH EXCAVATION ADJUSTED FOR 25% SHRINKAGE	EMBANKMENT	BALANCE WASTE (+) SHORTAGE (-)
ROUTE	STATION	TO	STATION	CU YD	CU YD	CU YD	CU YD	CU YD
FAIRMONT AVE.	5+00	TO	6+02		9	6.75	48	-41
SN 060-3208				250				
FAIRMONT AVE.	6+78	TO	8+00		26	19.50	5	15
TOTAL :				250	35	26	53	-27
PAY TOTAL :				250	35			25

SEEDING SCHEDULE								
LOCATION			SEEDING, CLASS 2 (SPECIAL)	* NITROGEN FERTILIZER NUTRIENT	* PHOSPHORUS FERTILIZER NUTRIENT	* POTASSIUM FERTILIZER NUTRIENT	* MULCH, METHOD 2	* TEMP. EROSION CONTROL SEEDING (POUND) (2 APPL.)
STATION	TO	STATION	ACRE	POUND	POUND	POUND	ACRE	POUND
0+50.00	TO	6+76.89	0.026	2.3	2.3	2.3	0.026	5.2
OMISSION	SN	060-3208						
50+35.01	TO	57+10.00	0.017	1.5	1.5	1.5	0.017	3.4
TOTAL :			0.043	3.9	3.9	3.9	0.043	8.6
PAY TOTAL :			0.25					

* ALL ITEMS ARE INCLUDED IN THE COST OF SEEDING CLASS 2 (SPECIAL) - SEE SPECIAL PROVISIONS.

DRAINAGE STRUCTURES SCHEDULE					
STATION		INLETS, TYPE A			
		TYPE 1 FRAME AND CLOSED LID		TYPE 8 GRATE	
		EACH		EACH	
FAIRMONT AVE.					
D	5+28.94	21.39	RT	1	
F	5+52.05	23.58	RT	1	
A	5+52.05	28.05	LT		1
TOTAL :				2	1

PAVING SCHEDULE						
LOCATION				AGGREGATE SHOULDERS, TY A, 6"	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N70	*BITUMINOUS MATERIALS (PRIME COAT)
STATION	TO	STATION	NOTES	SQ YD	TON	POUND
FAIRMONT AVE.						
5+25.00	TO	5+82.00		130.5	9.2	121.3
7+08.00	TO	8+25.00		193.9	13.5	178.5
FROM	SN	060-3208			41.6	
TOTAL :				324	64	300

* APPLICATION RATE: 0.25 LB/SF

REMOVAL SCHEDULE						
LOCATION				GUARDRAIL REMOVAL	PIPE CULVERT REMOVAL	SURFACE REMOVAL, VARIABLE DEPTH (SPECIAL)
STATION	TO	STATION	NOTES	FOOT	FOOT	SQ YD
FAIRMONT AVE.						
5+90.18	TO	6+02.00	LT	12		
5+86.50	TO	6+02.40	RT	15		
6+78.00	TO	6+88.31	LT	12		
6+78.00	TO	7+52.25	RT	75		
5+28.45	TO	5+56.37	LT		28	
5+82.00	TO	6+00.83				53.7
6+40.00	TO	7+08.00				79.7
TOTAL :				114	28	133

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 REVISED -
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CITY OF COLLINSVILLE

SCALE: SHEET OF SHEETS STA. TO STA.

SCHEDULE OF QUANTITIES

MUN	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	16-00102-00-BR	MADISON	27	7
CONTRACT NO. 97714				
ILLINOIS FED. AID PROJECT				

PERIMETER EROSION BARRIER SCHEDULE				
LOCATION				PERIMETER EROSION BARRIER
STATION	TO	STATION		FOOT
FAIRMONT AVE.				
5+61.00	TO	5+96.00	LT	46
5+26.00	TO	5+96.00	RT	59
6+85.00	TO	7+23.00	LT	42
6+84.00	TO	7+10.00	RT	27
TOTAL:				174

STORM SEWER SCHEDULE													
LOCATION										METAL FLARED END SECTION, 15"	STORM SEWERS		TRENCH BACKFILL
											WATER MAIN REQUIREMENTS	SPECIAL	
											15 INCH	15 INCH	
PIPE	STATION				TO	STATION				EACH	FOOT	FOOT	CU YD
FAIRMONT AVE.													
B	A	5+52.39	28.05	LT	TO	C	5+28.94	26.38	LT	1	24		1.7
EX PIPE TBR		5+52.39	23.00	LT	TO		5+28.94	22.00	LT				2.4
E	D	5+28.94	21.39	RT	TO	F	5+52.05	23.58	RT			23	
G	H	5+52.05	27.69	RT	TO	F	5+52.05	23.58	RT	1		3	
TOTAL:										2	24	26	4

INLET AND PIPE PROTECTION SCHEDULE				
STATION				INLET AND PIPE PROTECTION
				EACH
FAIRMONT AVE.				
A	5+52.05	28.05	LT	1
H	5+52.05	28.54	RT	1
TOTAL:				2

SIGNAGE SCHEDULE									
LOCATION		DESCRIPTION					SIGN PANEL - TYPE 1		TELESCOPING STEEL SIGN SUPPORT
STATION		SIGN		SHAPE	SIZE	SQ FT		FOOT	
FAIRMONT AVE.									
4+82.34	12.56	RT	W1-3 SHARP TURN	TRIANGLE	30	X	30	6.25	16.5
4+82.34	12.56	RT	W13-1P 20MPH	RECTANGLE	18	X	18	2.25	
8+82.85	23.09	LT	W1-3 SHARP TURN	TRIANGLE	30	X	30	6.25	16.5
8+82.85	23.09	LT	W13-1P 20MPH	RECTANGLE	18	X	18	2.25	
TOTAL:								17	33

TEMPORARY DITCH CHECK SCHEDULE				
LOCATION				TEMPORARY DITCH CHECKS
STATION	OFFSET	LT/RT	EA	FOOT
FAIRMONT AVE.				
5+19.81	25.85	LT	1	6
TOTAL:				6

GUARDRAIL SCHEDULE											
LOCATION				STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FT POSTS	TRAFFIC BARRIER TERMINAL, TYPE 1	TRAFFIC BARRIER TERMINAL, TYPE 2	TRAFFIC BARRIER TERMINAL, TYPE 6A	TRAFFIC BARRIER TERMINAL, TYPE 6A (MODIFIED)	TERMINAL MARKER, DIRECT APPLIED	GUARDRAIL REFLECTORS, TYPE A	BARRIER WALL REFLECTORS, TYPE C
STATION	TO	STATION	LT/RT	FOOT	EACH	EACH	EACH	EACH	EACH	EACH	EACH
FAIRMONT AVE.											
5+58.00	TO	6+02.00	LT		1			1	1	2	
5+34.00	TO	6+02.00	RT		1		1		1	2	
6+02.00		6+78.00	LT								2
6+02.00		6+78.00	RT								2
6+78.00	TO	7+24.00	LT			1	1			2	
6+78.00	TO	7+78.00	RT	37.5	1		1		1	2	
TOTAL:				37.5	3	1	3	1	3	8	4

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USER NAME = jstein
 PLOT SCALE = 2,000' / in.
 PLOT DATE = 8/2/2019

DESIGNED - JWS
 DRAWN - JWS
 CHECKED - SJK
 DATE -

REVISED -
 REVISED -
 REVISED -
 REVISED -



CITY OF COLLINSVILLE

SCHEDULE OF QUANTITIES

SCALE: SHEET OF SHEETS STA. TO STA.

MUN	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	16-00102-00-BR	MADISON	27	8
CONTRACT NO. 97714				
ILLINOIS FED. AID PROJECT				

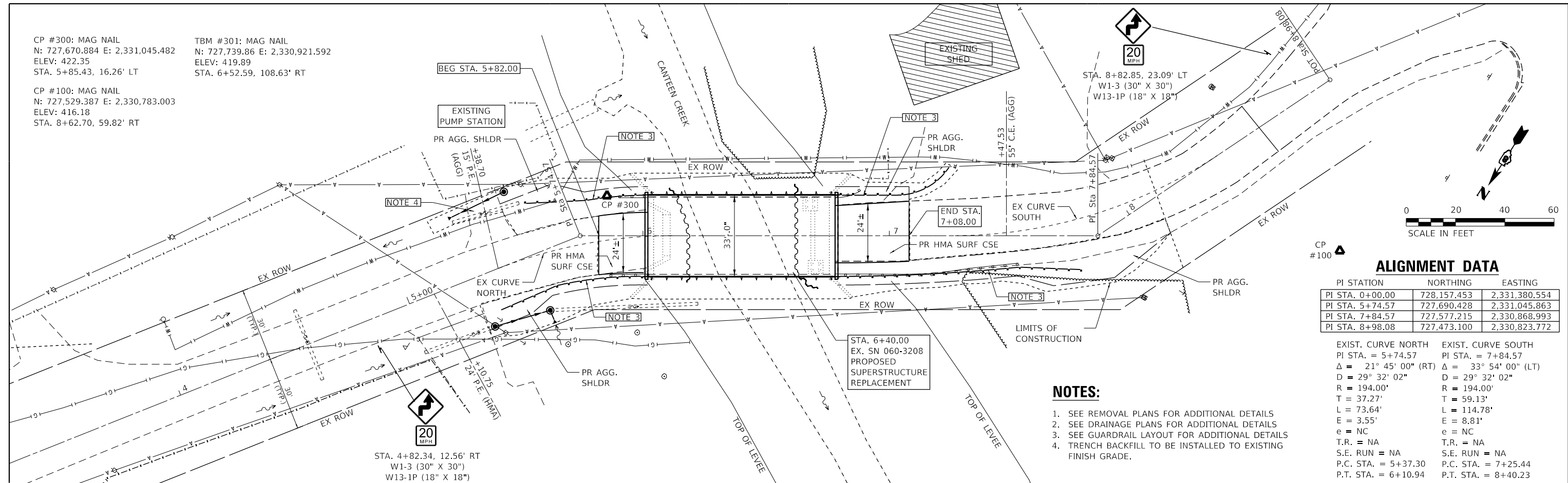
CP #300: MAG NAIL
 N: 727,670.884 E: 2,331,045.482
 ELEV: 422.35
 STA. 5+85.43, 16.26' LT

TBM #301: MAG NAIL
 N: 727,739.86 E: 2,330,921.592
 ELEV: 419.89
 STA. 6+52.59, 108.63' RT

CP #100: MAG NAIL
 N: 727,529.387 E: 2,330,783.003
 ELEV: 416.18
 STA. 8+62.70, 59.82' RT

PLAN
 SURVEYED
 PLOTTED
 ALIGNED
 CHECKED
 NO. _____
 DATE _____

PROFILE
 SURVEYED
 PLOTTED
 GRADES
 CHECKED
 STRUCTURE
 NOTARIS
 SWG
 NO. _____
 DATE _____



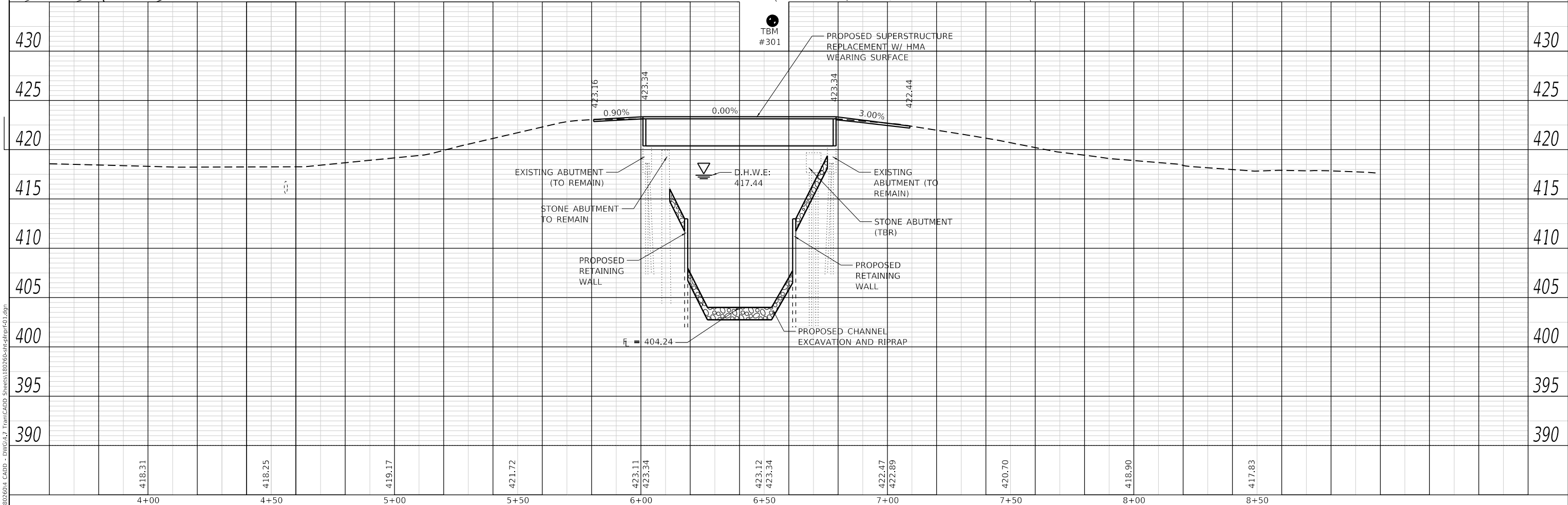
ALIGNMENT DATA

PI STATION	NORTHING	EASTING
PI STA. 0+00.00	728,157.453	2,331,380.554
PI STA. 5+74.57	727,690.428	2,331,045.863
PI STA. 7+84.57	727,577.215	2,330,868.993
PI STA. 8+98.08	727,473.100	2,330,823.772

NOTES:

- SEE REMOVAL PLANS FOR ADDITIONAL DETAILS
- SEE DRAINAGE PLANS FOR ADDITIONAL DETAILS
- SEE GUARDRAIL LAYOUT FOR ADDITIONAL DETAILS
- TRENCH BACKFILL TO BE INSTALLED TO EXISTING FINISH GRADE.

EXIST. CURVE NORTH PI STA. = 5+74.57 Δ = 21° 45' 00" (RT) D = 29° 32' 02" R = 194.00' T = 37.27' L = 73.64' E = 3.55' e = NC T.R. = NA S.E. RUN = NA P.C. STA. = 5+37.30 P.T. STA. = 6+10.94	EXIST. CURVE SOUTH PI STA. = 7+84.57 Δ = 33° 54' 00" (LT) D = 29° 32' 02" R = 194.00' T = 59.13' L = 114.78' E = 8.81' e = NC T.R. = NA S.E. RUN = NA P.C. STA. = 7+25.44 P.T. STA. = 8+40.23
--	---



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PLOT DATE = 8/2/2019	CHECKED - SJK	REVISED -
	DATE -	REVISED -



CITY OF COLLINSVILLE

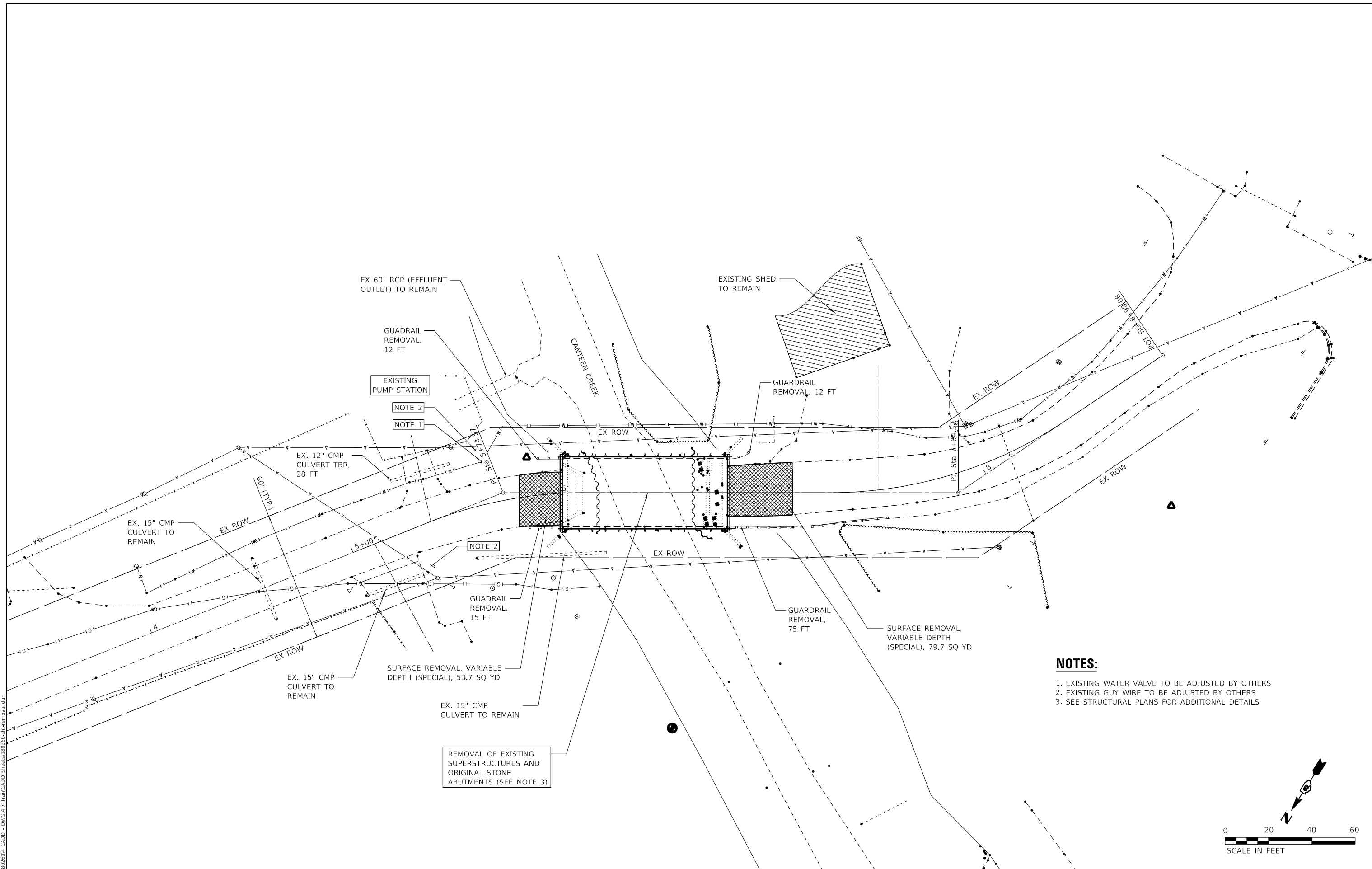
**PLAN AND PROFILE
 FAIRMONT AVE.**

SCALE: 1" = 20'

SHEET 1 OF 1 SHEETS

STA. TO STA.

MSS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	16-00102-00-BR	MADISON	27	9
CONTRACT NO. 97714			ILLINOIS FED. AID PROJECT	



- NOTES:**
1. EXISTING WATER VALVE TO BE ADJUSTED BY OTHERS
 2. EXISTING GUY WIRE TO BE ADJUSTED BY OTHERS
 3. SEE STRUCTURAL PLANS FOR ADDITIONAL DETAILS

MODEL: Dwg.dwg
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DRAWN - JWS	REVISIONS -	
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PLOT DATE = 8/2/2019	DATE -	REVISED -



CITY OF COLLINSVILLE

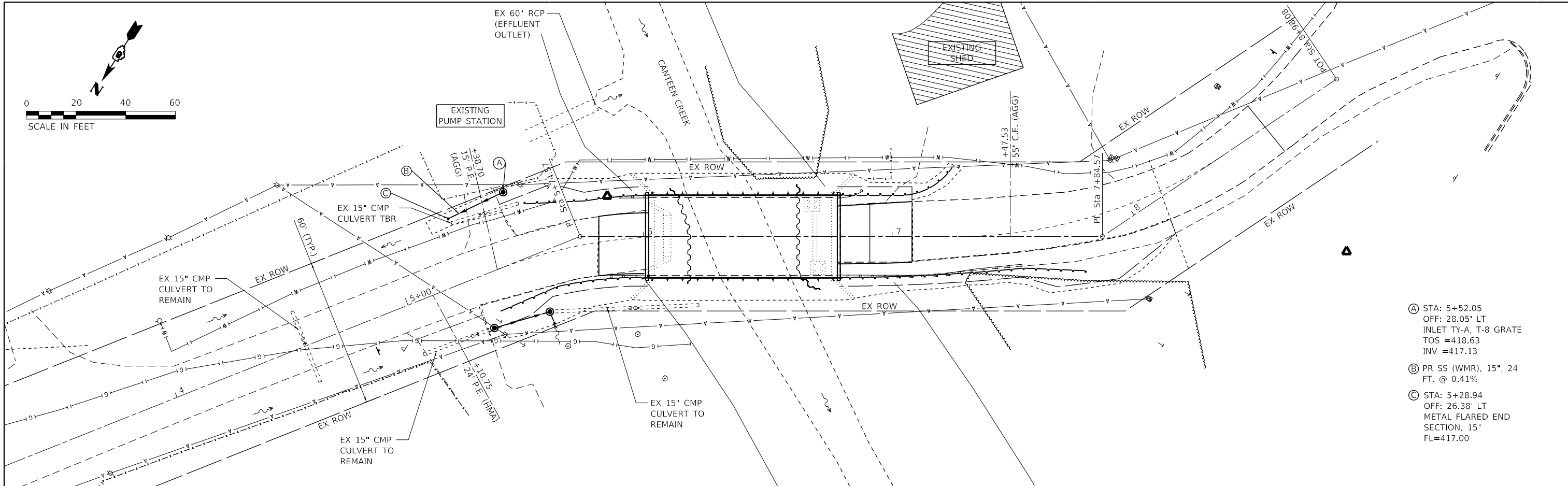
**REMOVAL PLAN
FAIRMONT AVE.**

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

MUN	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	16-00102-00-BR	MADISON	27	10
CONTRACT NO. 97714				
ILLINOIS FED. AID PROJECT				

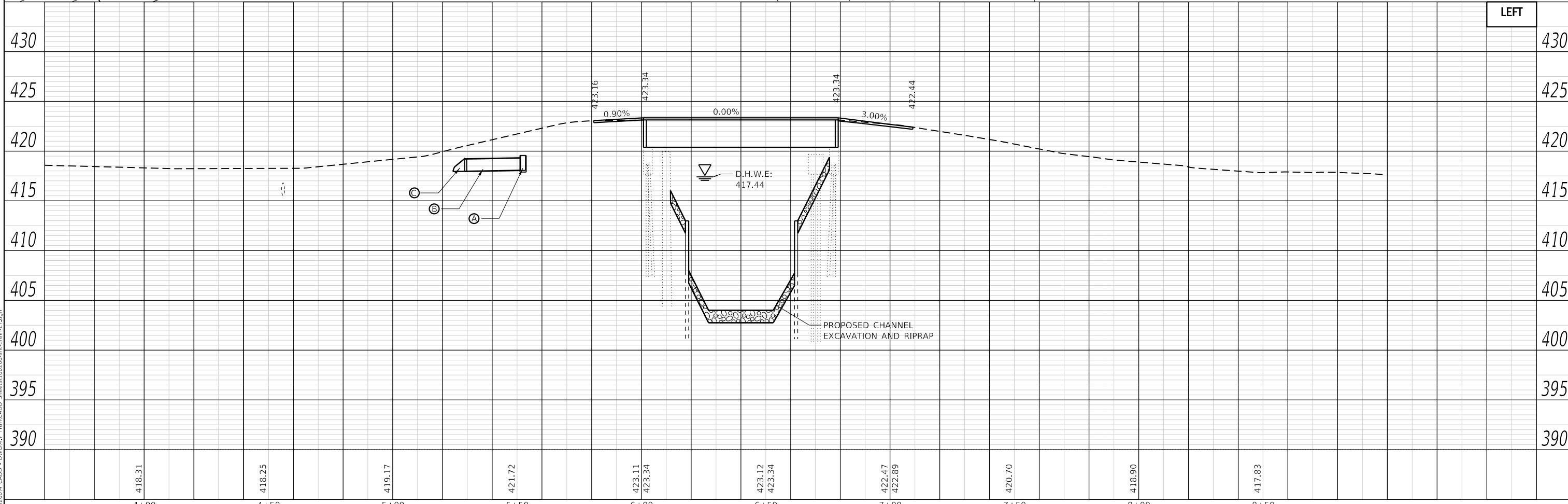


PLAN	SURVEYED	DATE
	PLOTTED	BY
	ALIGNED	CHECKED
	NOTE BOOK	NO.
	CADD FILE NAME	



- Ⓐ STA: 5+52.05
OFF: 28.05' LT
INLET TY-A, T-8 GRATE
TOS = 418.63
INV = 417.13
- Ⓑ PR SS (WMR), 15", 24 FT. @ 0.41%
- Ⓒ STA: 5+28.94
OFF: 26.38' LT
METAL FLARED END SECTION, 15"
FL=417.00

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	NOTE BOOK	NO.
	STRUCTURE NOTATIONS CHECKED	



CITY OF COLLINSVILLE

**DRAINAGE PLAN AND PROFILE - LEFT
FAIRMONT AVE.**



USER NAME = jstein
DESIGNED - JWS
DRAWN - JWS
CHECKED - SJK
DATE -
PLOT SCALE = 40,0000' / in.
PLOT DATE = 8/2/2019

DESIGNED - JWS
DRAWN - JWS
CHECKED - SJK
DATE -

REVISED -
REVISED -
REVISED -
REVISED -

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

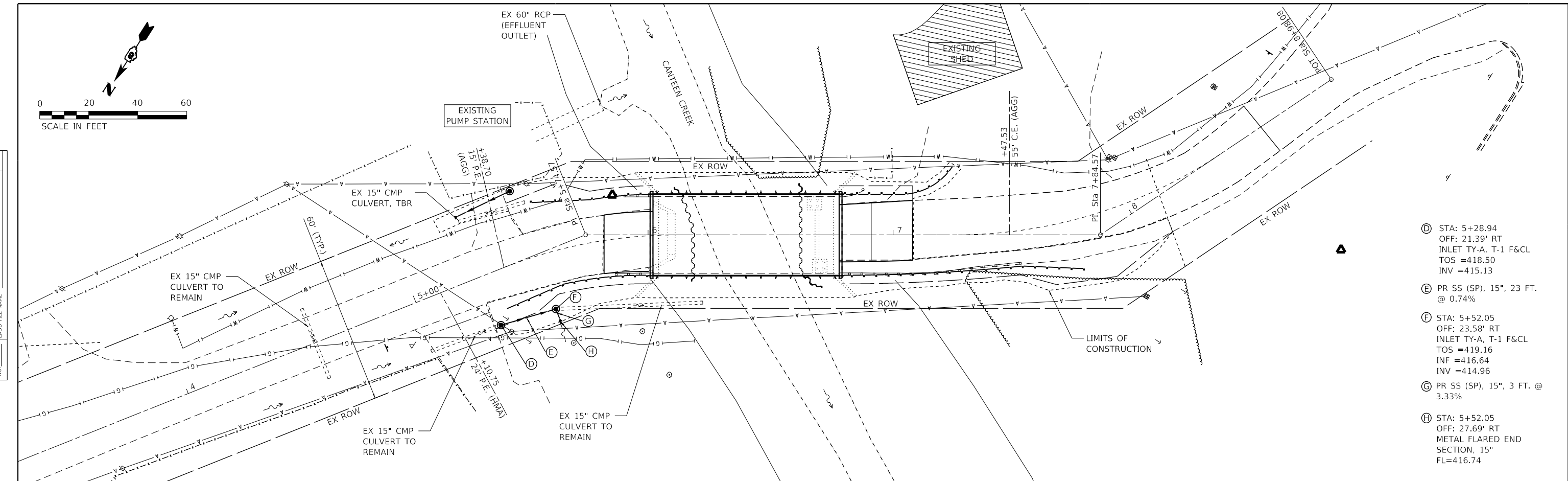
MSS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	16-00102-00-BR	MADISON	27	11
			CONTRACT NO. 97714	
		ILLINOIS FED. AID PROJECT		

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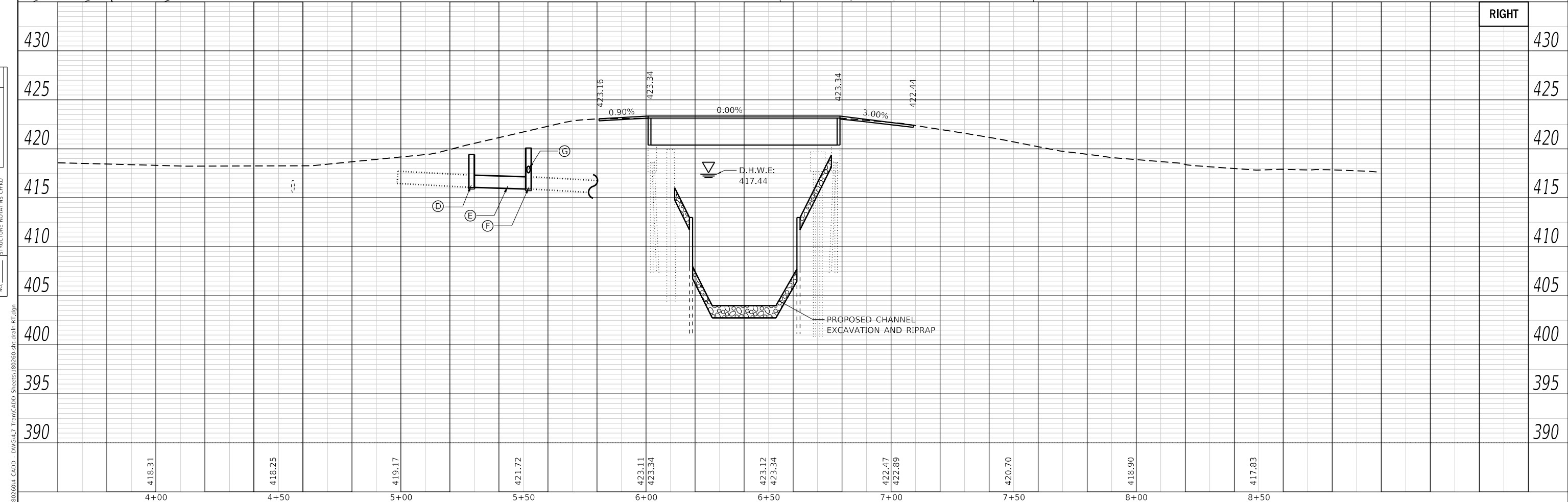


DATE	
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PLAN	
NO.	
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PROFILE	
NO.	


DATE	
BY	
PROFILE	
NO.	
DATE	
BY	
PLAN	
NO.	



- Ⓓ STA: 5+28.94
OFF: 21.39' RT
INLET TY-A, T-1 F&CL
TOS =418.50
INV =415.13
- Ⓔ PR SS (SP), 15", 23 FT.
@ 0.74%
- Ⓕ STA: 5+52.05
OFF: 23.58' RT
INLET TY-A, T-1 F&CL
TOS =419.16
INF =416.64
INV =414.96
- Ⓖ PR SS (SP), 15", 3 FT.
@ 3.33%
- Ⓗ STA: 5+52.05
OFF: 27.69' RT
METAL FLARED END
SECTION, 15"
FL=416.74



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PLOT DATE = 8/2/2019	CHECKED - SJK	REVISED -
	DATE -	REVISED -


CITY OF COLLINSVILLE

DRAINAGE PLAN AND PROFILE - RIGHT
FAIRMONT AVE.

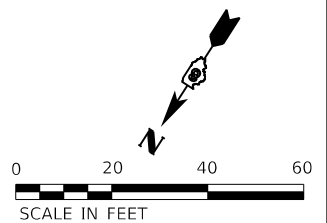
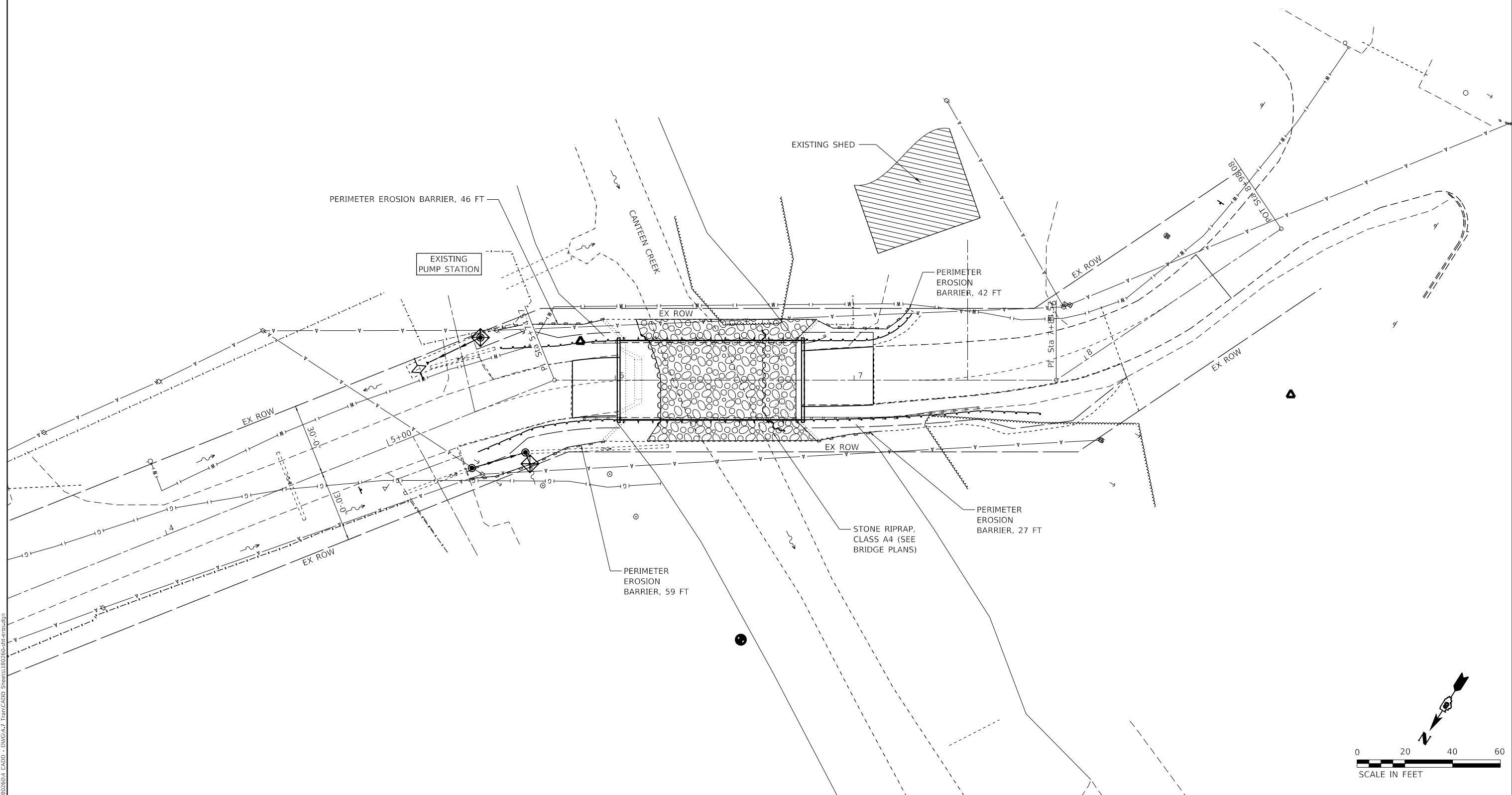
SCALE: 1" = 20'

SHEET OF SHEETS STA. TO STA.

MSS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	16-00102-00-BR	MADISON	27	12
				CONTRACT NO. 97714
		ILLINOIS	FED. AID PROJECT	

MODEL: Default
 FILE NAME: P:\1802604 CAD - DWG\4.7 Trim\CADD_Sheets\160260-16-00102-00-BR-RT.dwg

LEGEND	
	INLET AND PIPE PROTECTION
	TEMPORARY DITCH CHECK
	PERIMETER EROSION BARRIER
	STONE RIPRAP, CL A4



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PLOT DATE = 8/2/2019	DATE -	REVISED -

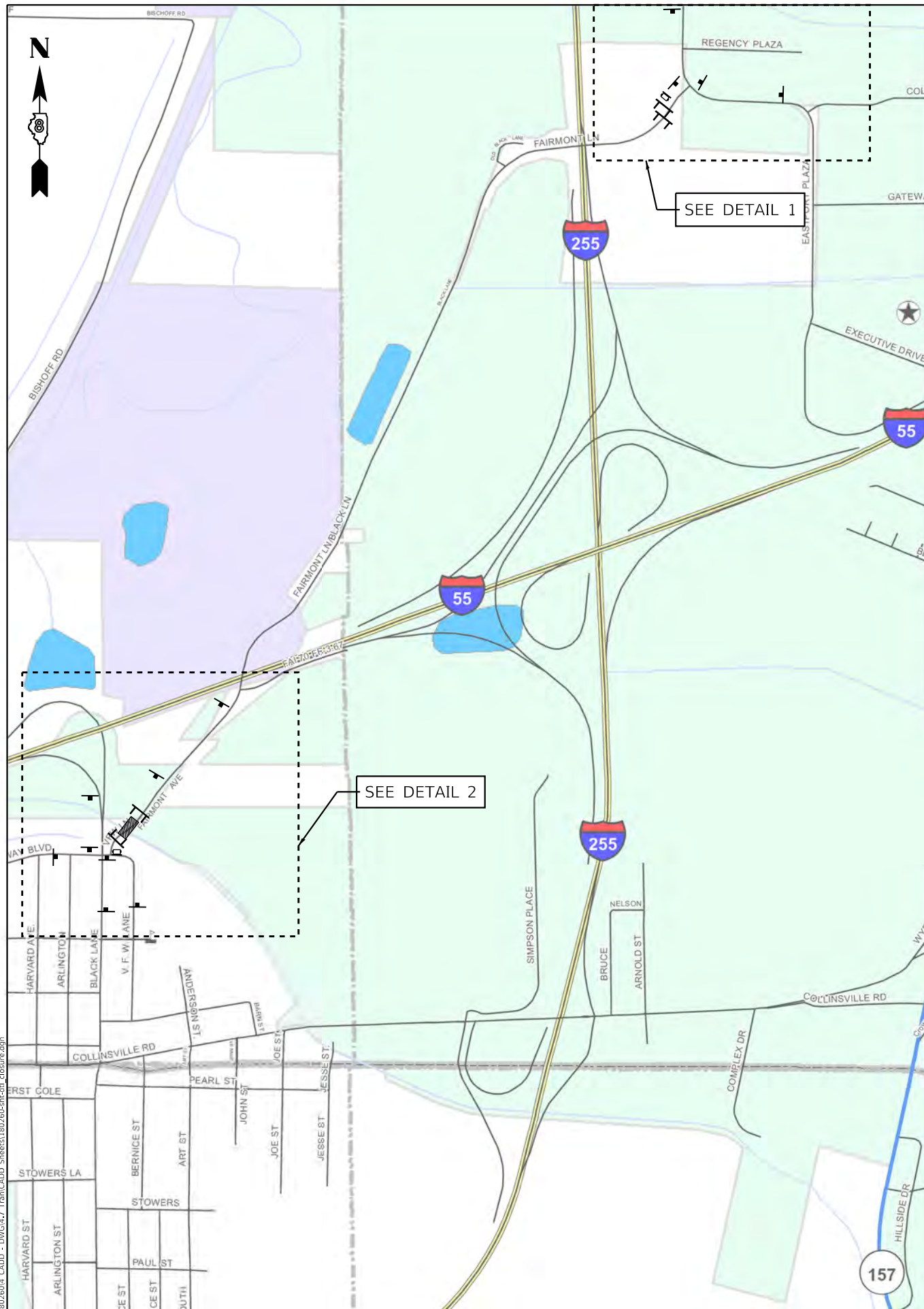


CITY OF COLLINSVILLE

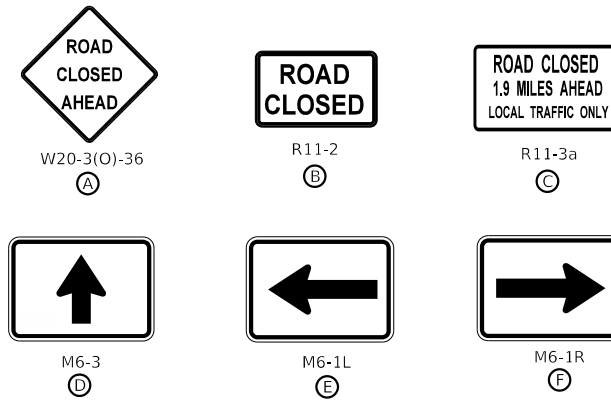
**EROSION CONTROL PLAN
FAIRMONT AVE.**

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

MUN	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	16-00102-00-BR	MADISON	27	13
CONTRACT NO. 97714				
ILLINOIS FED. AID PROJECT				



PROPOSED SIGNAGE LEGEND



CHANGEABLE MESSAGE SIGN SUGGESTED TEXT

① FAIRMONT AVE. CLOSED XX-XX-20 TO XX-XX-20 (FOR 14 DAYS PRIOR TO CLOSURE)
 FAIRMONT AVE. CLOSED UNTIL XX-XX-20 (DURING CLOSURE)

LEGEND



NOTES

1. THE CONTRACTOR SHALL USE TYPE III BARRICADES WITH FLASHING LIGHTS AND "ROAD CLOSED" SIGNS (R11-2) AT ALL CLOSURE POINTS. "ROAD CLOSED AHEAD" (W20-3) WARNING SIGNS WITH FLASHING LIGHTS SHALL BE PLACED IN CONFORMANCE WITH HIGHWAY STANDARD BLR 21-9 AND AS DIRECTED BY THE ENGINEER TO ACCOMMODATE FIELD CONDITIONS. INITIAL WARNING SIGNS ON ALL APPROACHES SHALL HAVE FLASHING LIGHTS.
2. ALL CHANGEABLE MESSAGE SIGNS TO BE PLACED AS SHOWN ON THE PLAN OR AT THE DIRECTION OF THE ENGINEER. MESSAGES POSTED ON THE CHANGEABLE MESSAGE SIGNS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. COST INCLUDED IN THE COST OF CHANGEABLE MESSAGE SIGNS.
3. SEE APPLICABLE HIGHWAY STANDARDS FOR DETAILS NOT SHOWN.



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	DATE -	REVISED -



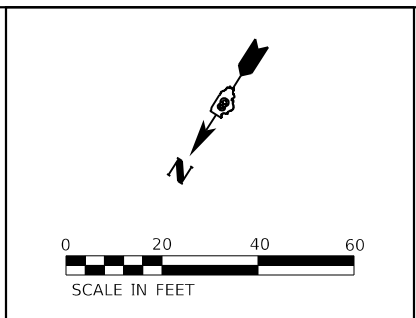
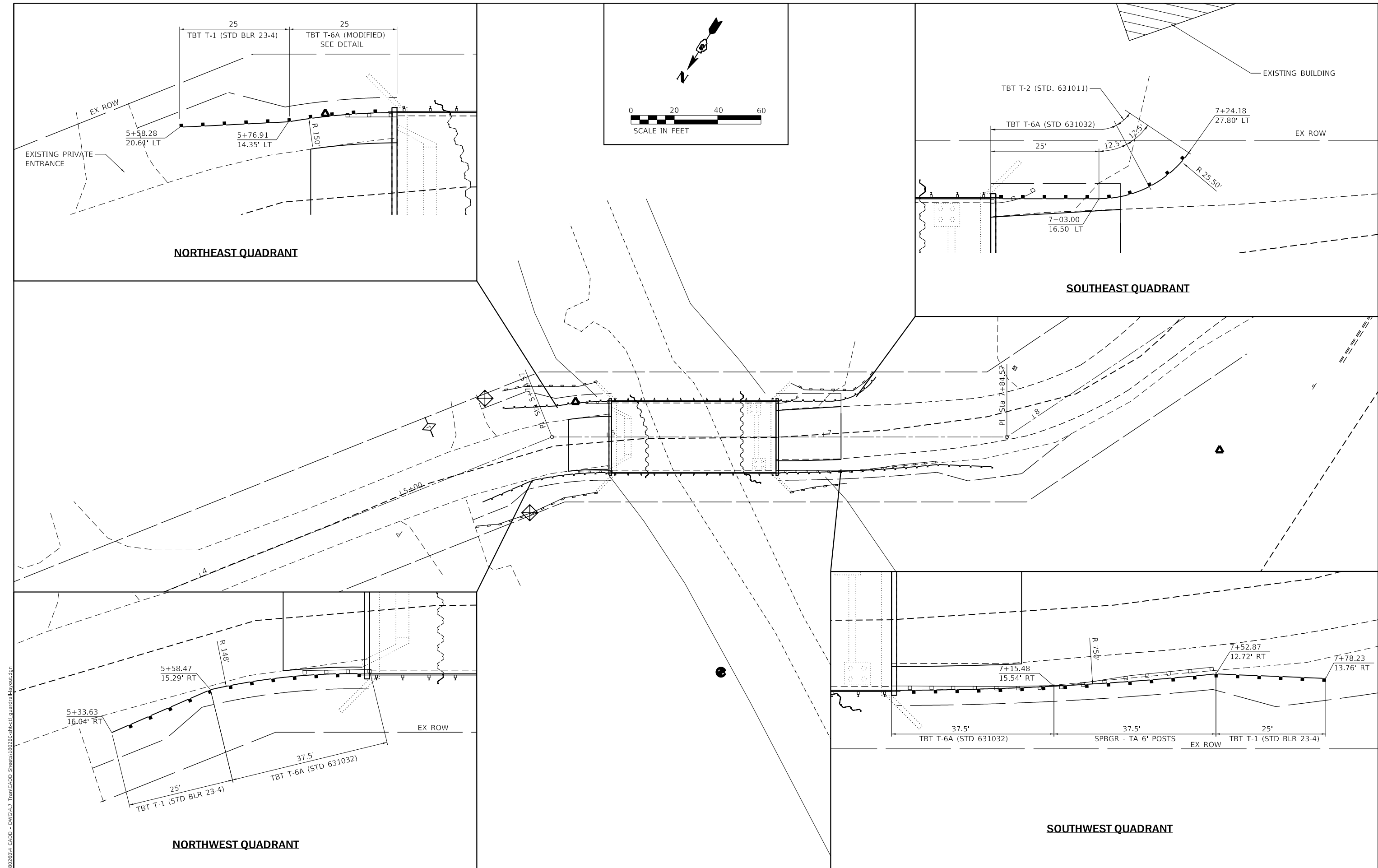
CITY OF COLLINSVILLE

ROAD CLOSURE DETAIL

SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

MUN	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	16-00102-00-BR	MADISON	27	14
CONTRACT NO. 97714				

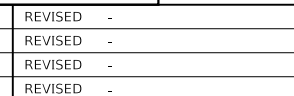
ILLINOIS FED. AID PROJECT



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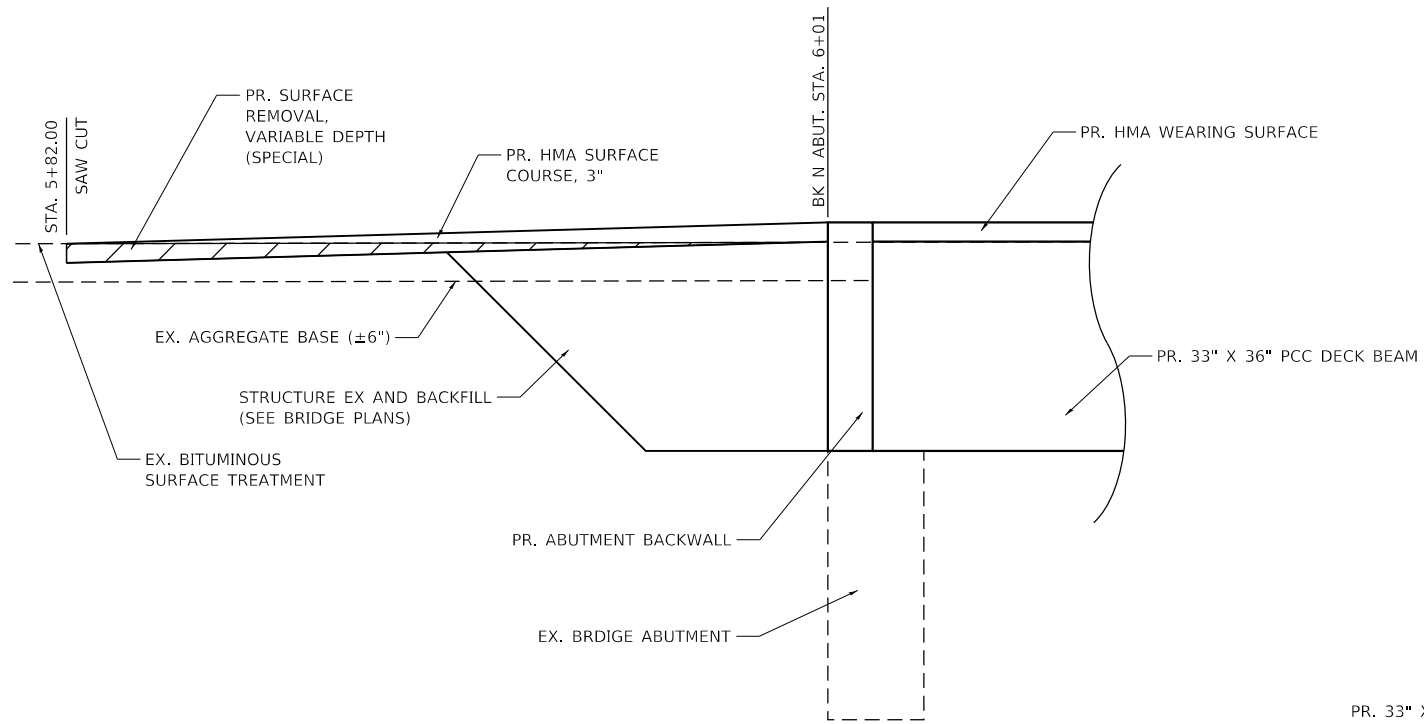


CITY OF COLLINSVILLE

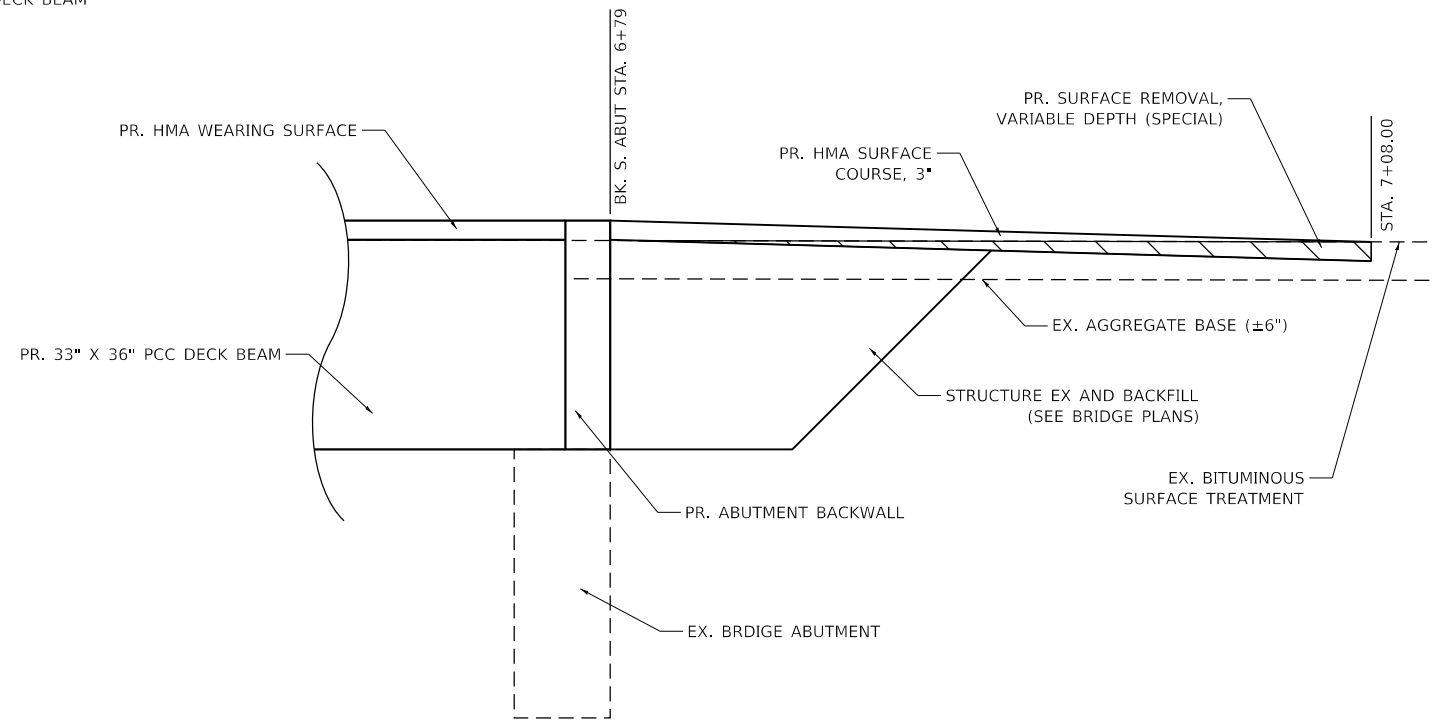
**GUARDRAIL LAYOUT
FAIRMONT AVE. OVER CANTEEN CREEK**

MUN	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	16-00102-00-BR	MADISON	27	15
CONTRACT NO. 97714				
ILLINOIS FED. AID PROJECT				

SCALE: SHEET OF SHEETS STA. TO STA.



BUTT JOINT DETAIL
STA. 5+82 TO STA. 6+01



BUTT JOINT DETAIL
STA. 6+79 TO STA. 7+08

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CHECKED - SJK
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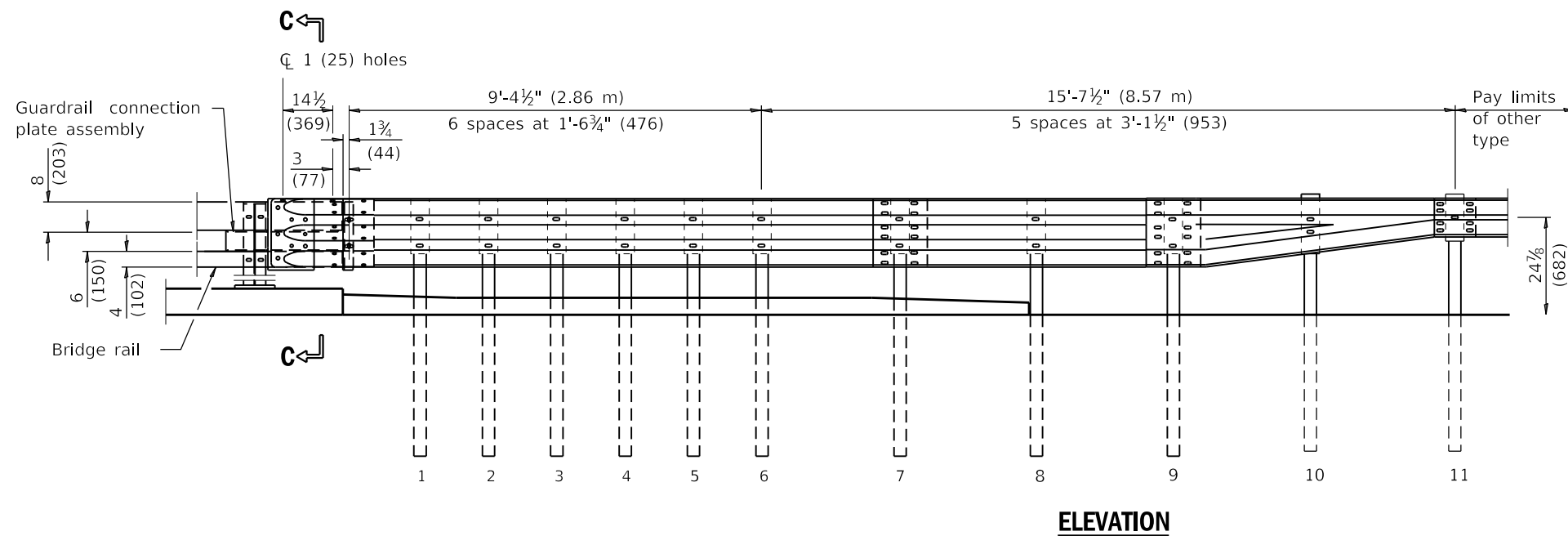
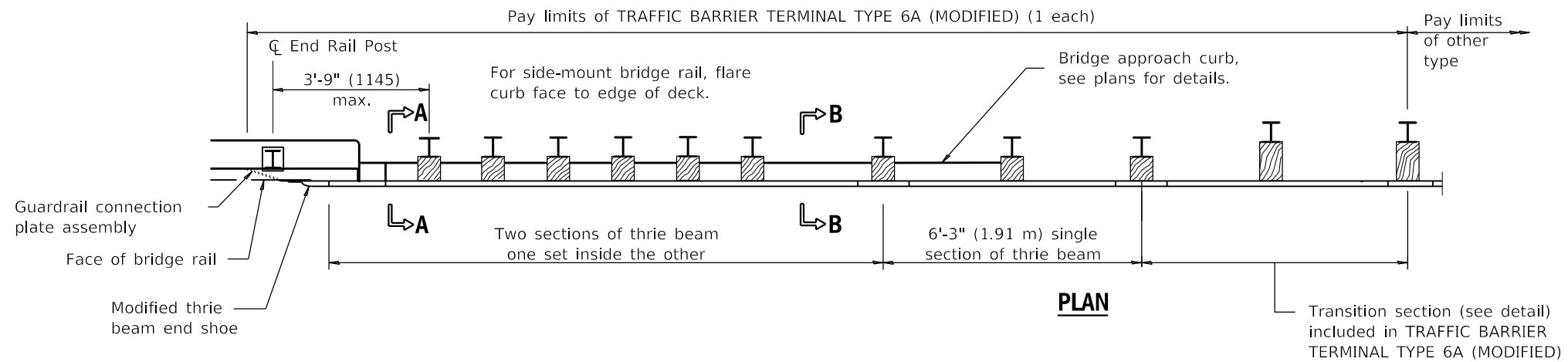


CITY OF COLLINSVILLE

BUTT JOINT DETAILS

SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

MUN	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	16-00102-00-BR	MADISON	27	16
CONTRACT NO. 97714				
ILLINOIS FED. AID PROJECT				



GENERAL NOTES

This detail is the modification of Highway Standard 631032. See Standard 631032 for details not shown, including Section A-A, B-B, and C-C.

This standard shows attachment to curb mounted bridge rail. Attachment to side mounted bridge rail is similar.

See Standard 630001 for details of guardrail not shown.

Thrie beam rail shall be bolted to block-out at all posts.

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

All dimensions are in inches (millimeters) unless otherwise shown.

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PLOT DATE = 8/2/2019	CHECKED - SJK	REVISED -
	DATE -	REVISED -



CITY OF COLLINSVILLE

TRAFFIC BARRIER TERMINAL,
TYPE 6A (MODIFIED)

SCALE: NONE SHEET OF SHEETS STA. TO STA.

MUN	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	16-00102-00-BR	MADISON	27	17
CONTRACT NO. 97714				
ILLINOIS		FED. AID PROJECT		

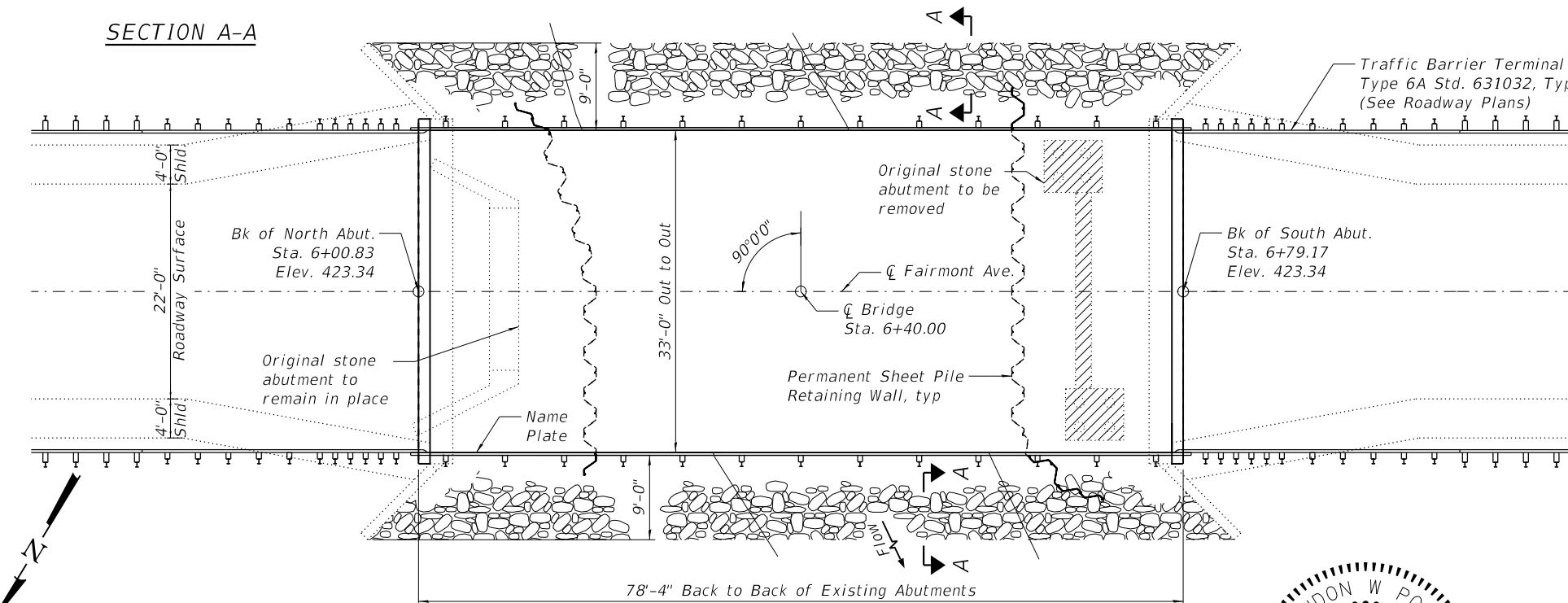
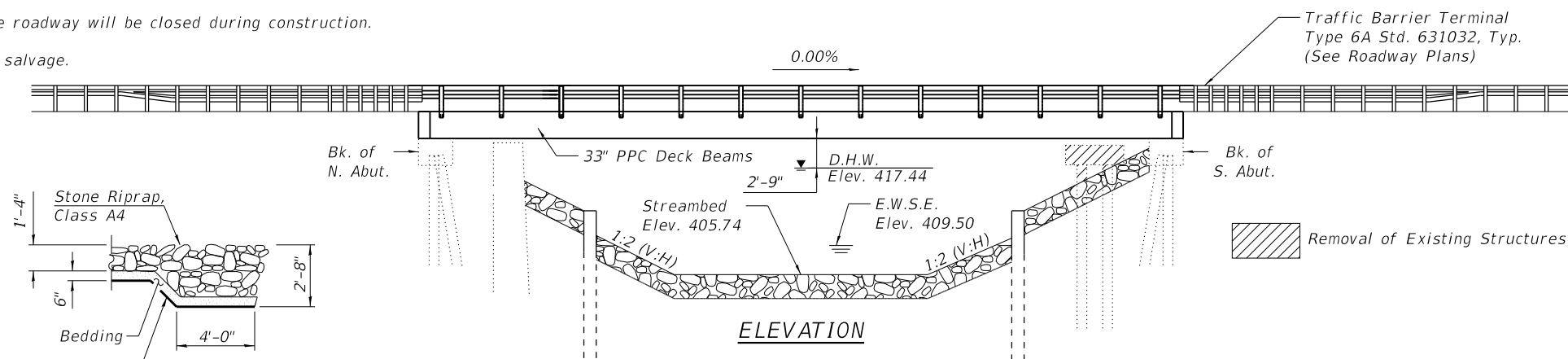
Benchmark: Permanent benchmarks to be set by the Engineer prior to construction.

Existing Structure:

S.N. 060-3208 was built in 1973. The superstructure is a single 74'-10" span of 33"x36" PPC deck beams. The existing substructure consists of two reinforced concrete stub abutments on 12" diameter metal shell piles. The existing superstructure will be removed and replaced. The existing abutments from the 1973 construction will be reused. North abutment from original construction to remain in place. South abutment from original construction to be removed.

The roadway will be closed during construction.

No salvage.



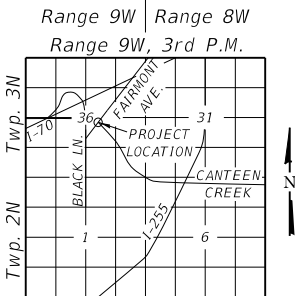
DESIGN SCOUR ELEVATION TABLE

Event / Limit State	Design Scour Elevations (ft.)			Item 113
	N. Abut.	S. Abut.		
Q100	417.57	417.57		8
Q200	417.57	417.57		8
Design	417.57	417.57		8
Check	417.57	417.57		8

WATERWAY INFORMATION

Drainage Area = 22.6 Sq. Mi.		Existing Low Grade Elev. 423.18 @ Sta. 6+40.00								
Flood	Freq. Yr.	Q C.F.S.	Opening Ft ²		Nat. H.W.E.		Head - Ft.		Headwater El.	
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.
Design	4.5	2,900	455.45	460.19	417.44	0.03	0.11	417.47	417.55	
Base										
Scour Design Check	4.5	2,900	455.45	460.19	417.44	0.03	0.11	417.47	417.55	
Overtop Existing										
Overtop Proposed										
Max. Calc.	4.5	2,900	455.45	460.19	417.44	0.03	0.11	417.47	417.55	

PLAN



LOCATION SKETCH

INDEX OF SHEETS

1. General Plan & Elevation
2. Superstructure Details
3. Steel Railing, Type SM
- 4-5. PPC Deck Beam Details

LOADING HL-93
Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS

PROPOSED STRUCTURE
2017 AASHTO LRFD Bridge Design Specifications, 8th Edition

DESIGN STRESSES

PRECAST PRESTRESSED UNITS
f'c = 6,000 psi
f'ci = 5,000 psi
fpu = 270,000 psi (1/2"Ø low-lax strands)
fpbt = 201,960 psi (1/2"Ø low-lax strands)

NAME PLATE

See Std. 515001

SEISMIC DATA

Seismic Performance Category (SPC) = B
Bedrock Acceleration Coefficient (A) = 0.11g
Site Coefficient = 1.5

FIELD UNITS (NEW CONSTRUCTION)

f'c = 3,500 psi
fy = 60,000 psi (Reinf.)
fy = 50,000 psi (Sheet Piling)

FIELD UNITS (EXIST. CONSTRUCTION)

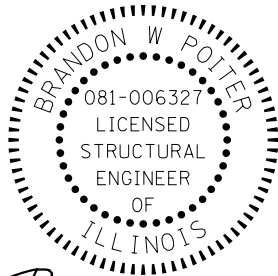
f'c = 3,500 psi
fy = 40,000 psi (Reinf.)

GENERAL NOTES

Reinforcement bars designated (E) shall be epoxy coated.
Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Backfill	Cu. Yd.		116	116
Stone Riprap, Class A4	Sq. Yd.		433	433
Filter Fabric	Sq. Yd.		433	433
Subbase Granular Material, Type B	Ton		58	58
HMA Surface Course, Mix "C", N70	Ton	41.6		41.6
Removal of Existing Structures	Each		1	1
Removal of Existing Superstructures	Each	1		1
Structure Excavation	Cu. Yd.		28	28
Concrete Structures	Cu. Yd.		9.3	9.3
Precast Prestressed Concrete Deck Beams (33" Depth)	Sq. Ft.	2,508		2,508
Reinforcement Bars, Epoxy Coated	Lb.		340	340
Steel Railing, Type SM	Ft.	156		156
Name Plates	Each	1		1
Permanent Sheet Piling	Sq. Ft.		1,997	1,997
Waterproofing Membrane System	Sq. Yd.	279		279
Portland Cement Mortar	Ft.	760		760
Fairing Course				
Asbestos Bearing Pad Removal	Each	22		22



Brandon W. Poiter
DATE: 07-05-2019

EXPIRES 11/30/2020

I certify that to the best of knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the AASHTO Design Specifications shown on the plans.

CITY OF COLLINSVILLE

**GENERAL PLAN
STRUCTURE NO. 060-3208**

SHEET NO. 1 OF 6 SHEETS

**GENERAL PLAN & ELEVATION
FAIRMONT AVE. OVER CANTEEN CANAL
SECTION 16-00102-00-BR
MADISON COUNTY
STATION 6+40.00
STRUCTURE NO. 060-3208**

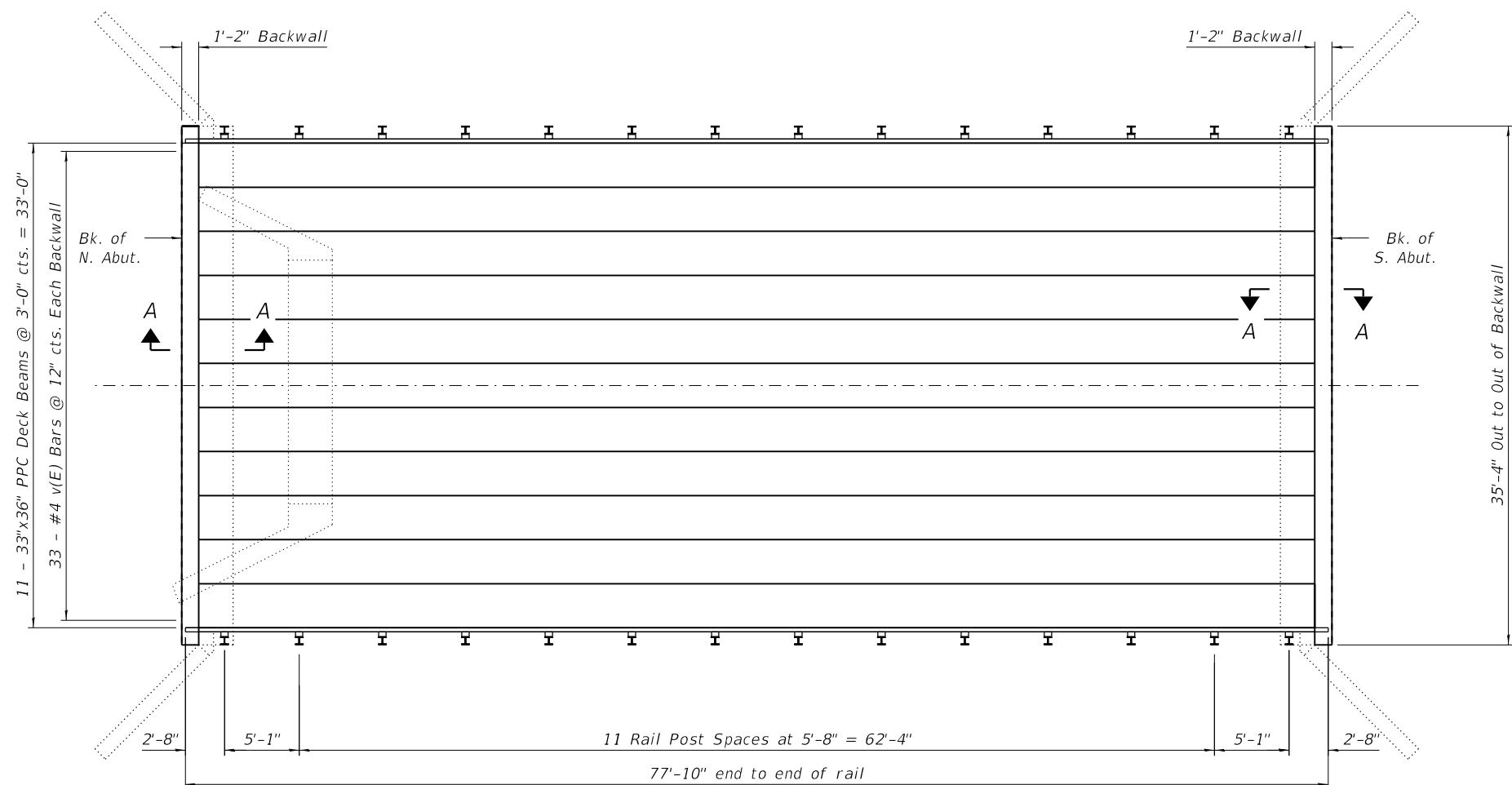
PROJECT	COUNTY	TOTAL SHEETS	SHEET NO.
16-00102-00BR	MADISON	27	18
CONTRACT NO. 97714			

ILLINOIS FED. AID PROJECT

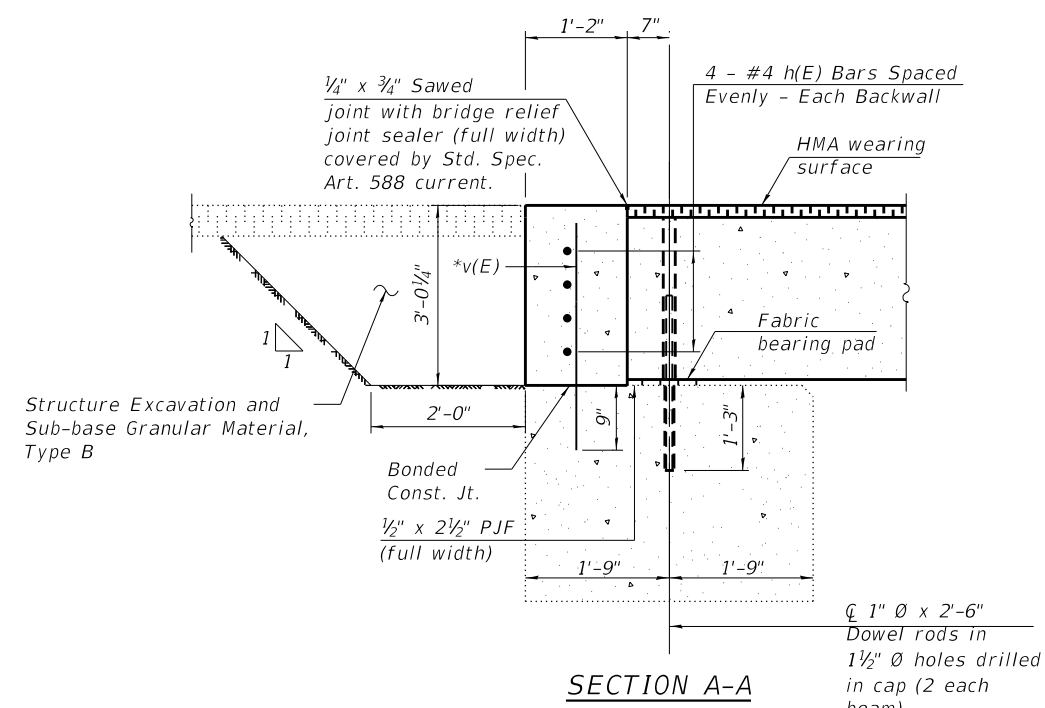
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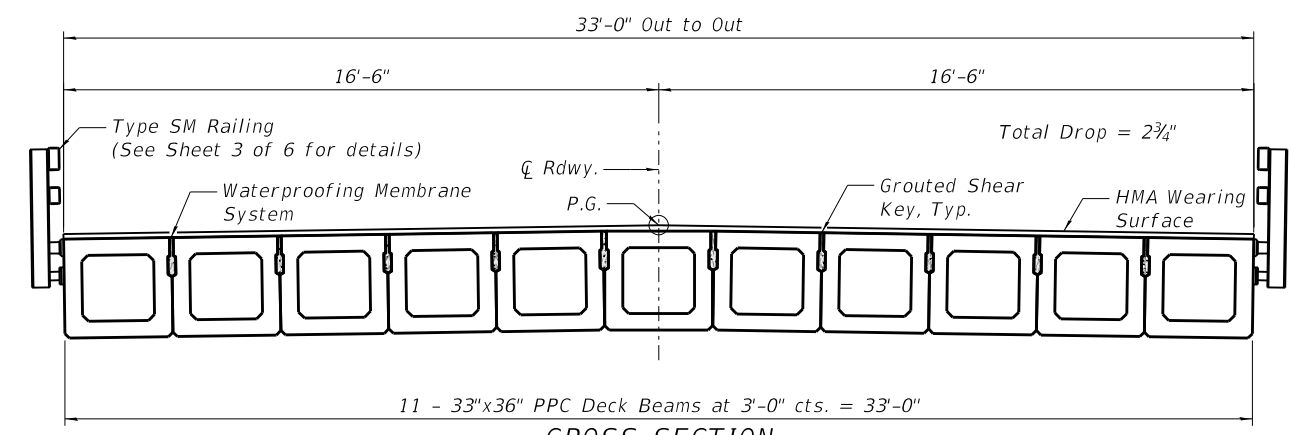
PLAN



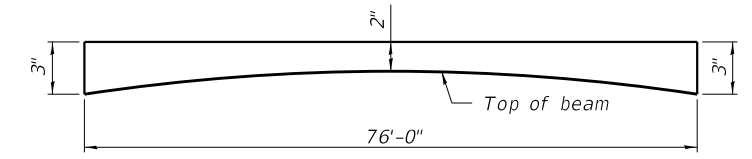
SECTION A-A

2" P.J.F. (per Article 1051.09 of the Standard Specification) bonded to wingwall with suitable adhesive as recommended by supplier.

SECTION AT EXISTING WINGWALL



CROSS SECTION



ANTICIPATED HMA WEARING SURFACE PROFILE
(For information only)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	8	#4	35'-0"	—
v(E)	66	#4	3'-6"	—
Subbase Granular Material, Type B			Ton	58
HMA Surface Course, Mix C, N70			Ton	41.6
Structure Excavation			Cu. Yd.	28
Concrete Structures			Cu. Yd.	9.3
Reinforcement Bars, Epoxy Coated			Lb.	340

Notes:
 The backwall above the existing abutment seat shall be cast against the in-place beams.
 *v(E) bars shall be drilled and grouted into the existing concrete cap. This work shall be according to Section 584 of the Standard Specifications.
 Burn existing dowel rods flush with existing abutment. Grind existing dowel rods smooth and seal with epoxy. Cost included with Removal of Existing Superstructures.

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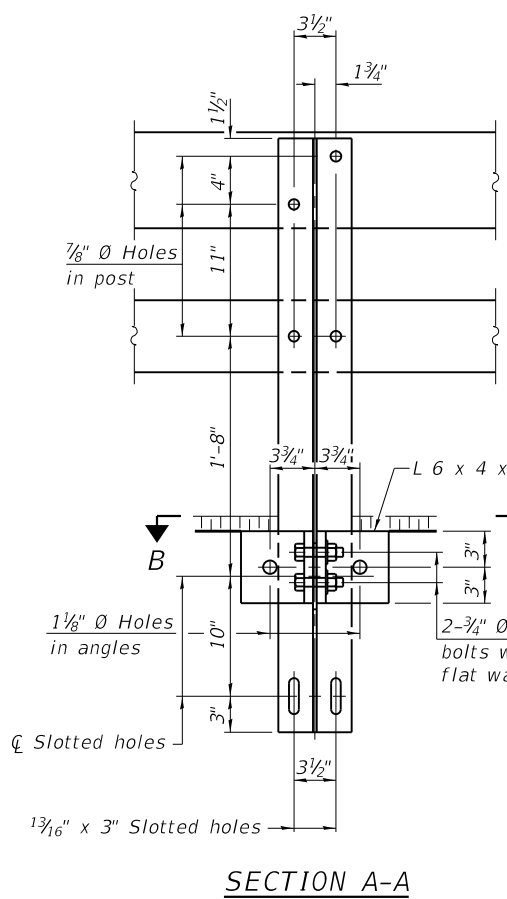
CITY OF COLLINSVILLE

SUPERSTRUCTURE
 STRUCTURE NO. 060-3208

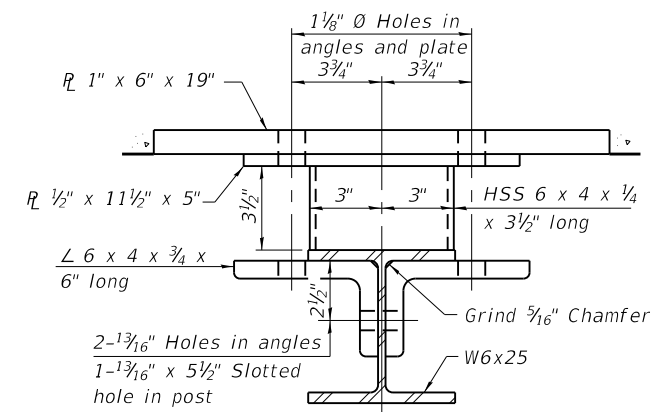
SHEET NO. 2 OF 6 SHEETS

PROJECT	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 97714			
ILLINOIS FED. AID PROJECT			

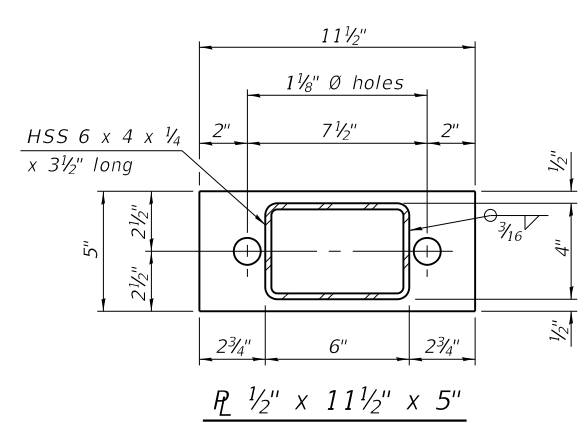
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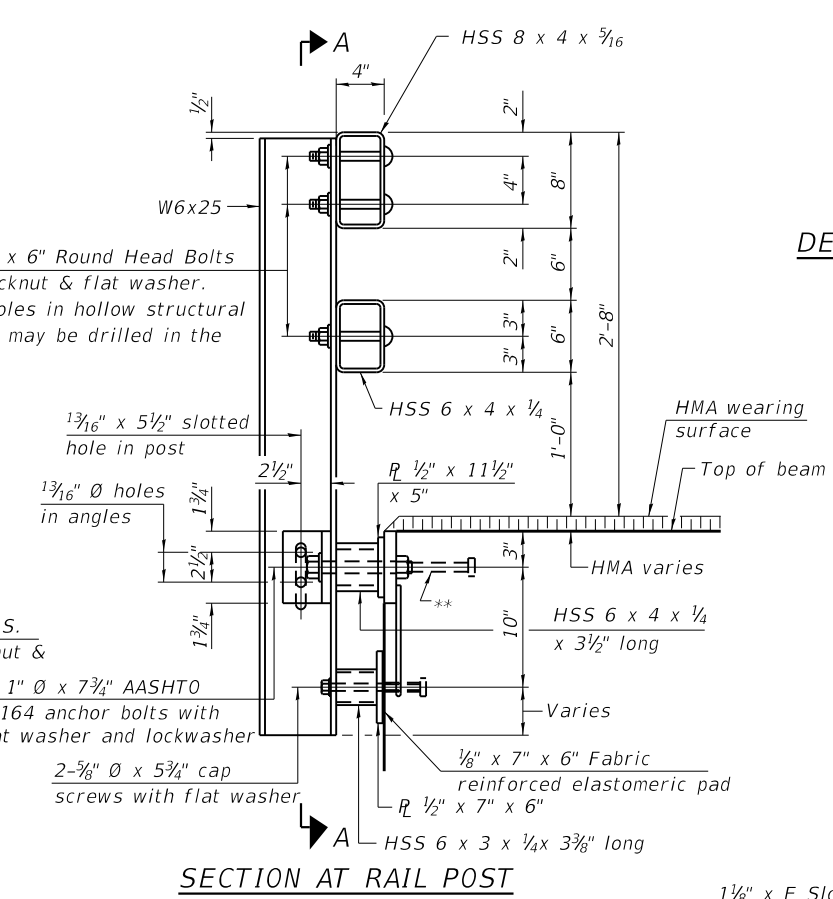
SECTION A-A



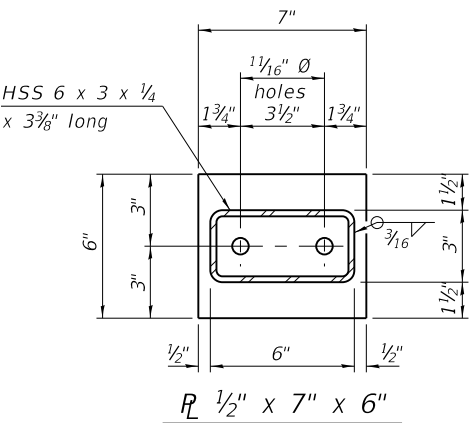
SECTION B-B



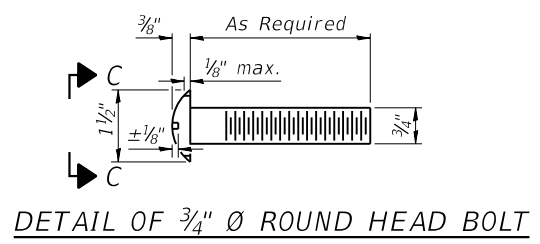
R 1 1/2" x 11 1/2" x 5"



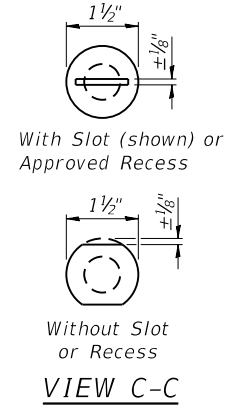
SECTION AT RAIL POST



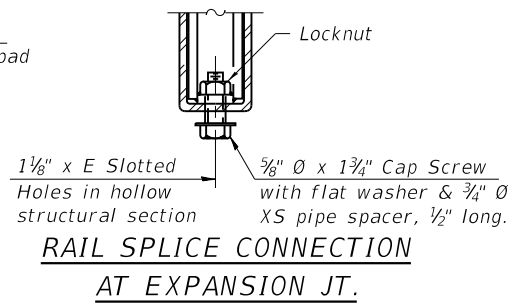
R 1 1/2" x 7" x 6"



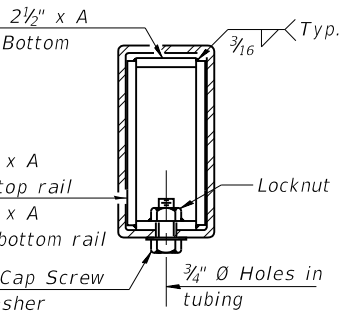
DETAIL OF 3/4" Ø ROUND HEAD BOLT



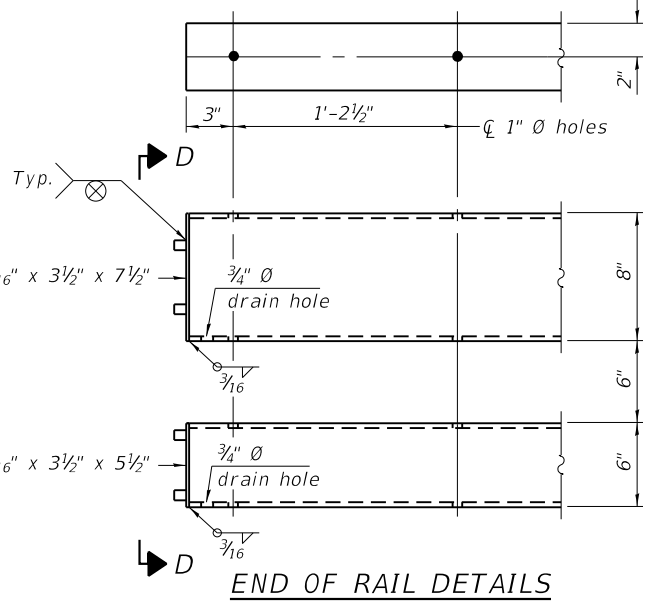
VIEW C-C



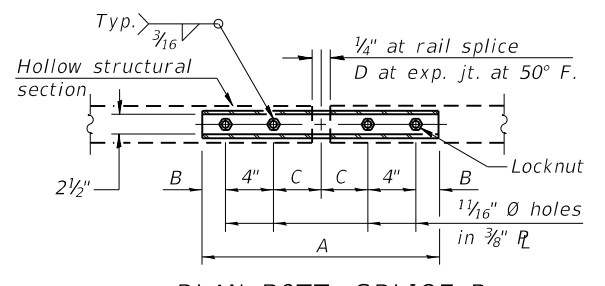
RAIL SPLICE CONNECTION AT EXPANSION JT.



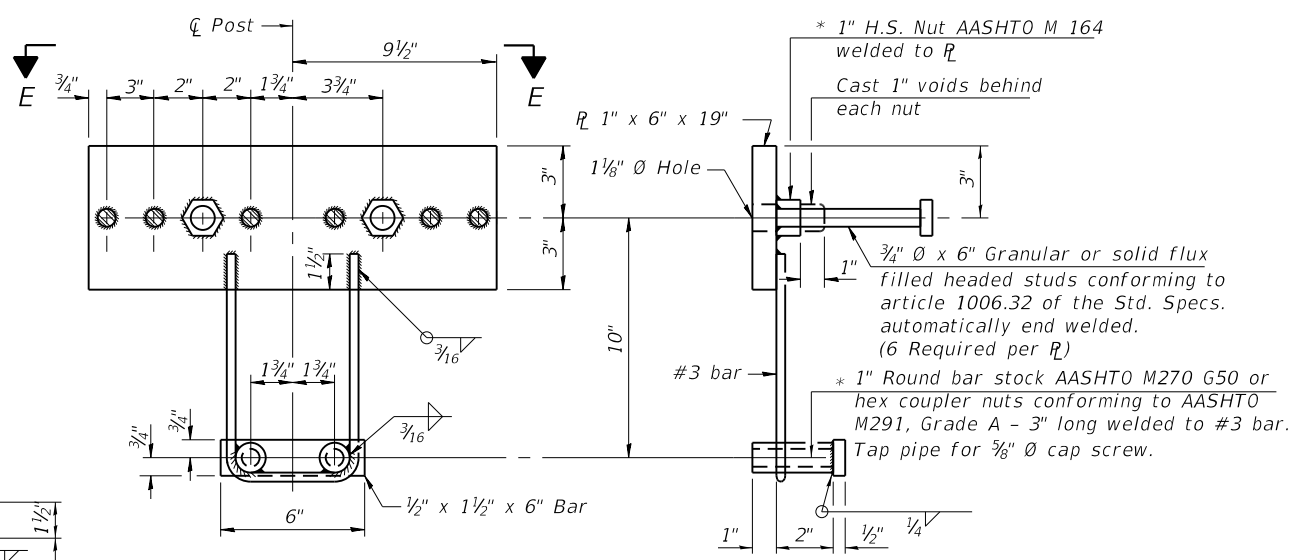
SECTION AT RAIL SPLICE



END OF RAIL DETAILS



PLAN-BOTT. SPLICE R TYPICAL



ANCHOR DEVICE

SPLICE DIMENSIONS

T	D	A	B	C	E
≤ 4"	2 1/2"	1'-8"	2"	4"	2 1/2"
> 4" ≤ 6 1/2"	3 3/4"	2'-0"	2 1/2"	5 1/2"	3 1/2"
> 6 1/2" ≤ 9"	5"	2'-4"	3 1/2"	6 1/2"	9"
> 9" ≤ 13"	7"	2'-10"	4 1/2"	8 1/2"	11"
Rail Splice	1/4"	1'-8"	2"	4"	

*Threaded areas shall be plugged or blocked off during casting of beam. Galvanized after fabrication.

T = Total movement at expansion joint as shown on the design plans.

Notes:
 For multi-span bridges, sufficient 1/4 inch x 6 inch x 1'-2 inch galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type SM.
 All steel rail members shall be galvanized according to Article 509.05 of the Standard Specifications.
 ** The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device. The anchorage studs may be bent down 1/2 inch to accommodate the top reinforcement bar placement.

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type SM	Foot	156

R-34HMAWS

8-11-2017 (6'-3" Maximum Post Spacing) (1 1/4" minimum to 3 1/8" maximum HMA thickness)



USER NAME =	DESIGNED -	REVISIONS -
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	BWP	
	DSO	
	BWP	

CITY OF COLLINSVILLE

STEEL RAILING, TYPE SM WITH HMA WEARING SURFACE
 STRUCTURE NO. 060-3208

SHEET NO. 3 OF 6 SHEETS

PROJECT	COUNTY	TOTAL SHEETS	SHEET NO.
16-00102-00BR	MADISON	27	20
CONTRACT NO. 97714			

ILLINOIS FED. AID PROJECT

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PD-3336-0

2-17-2017



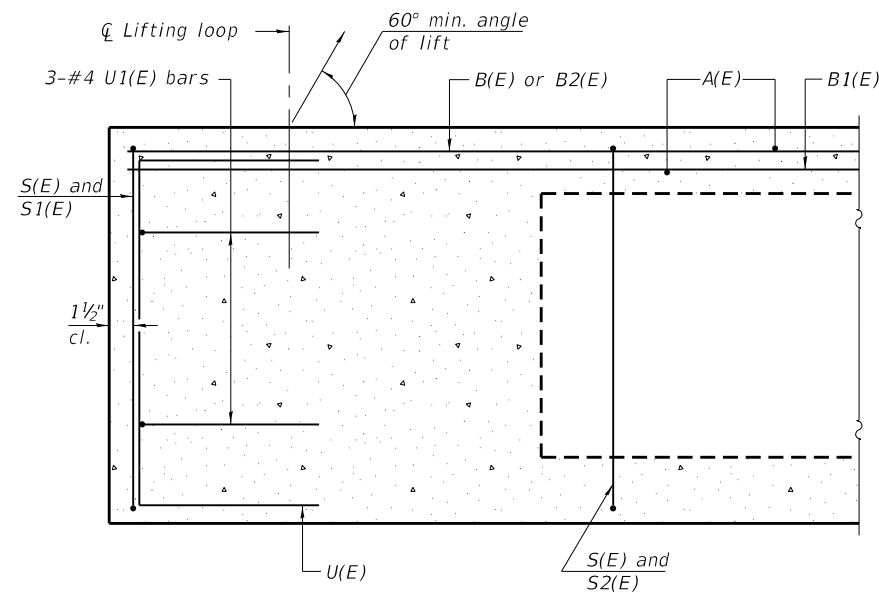
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CITY OF COLLINSVILLE

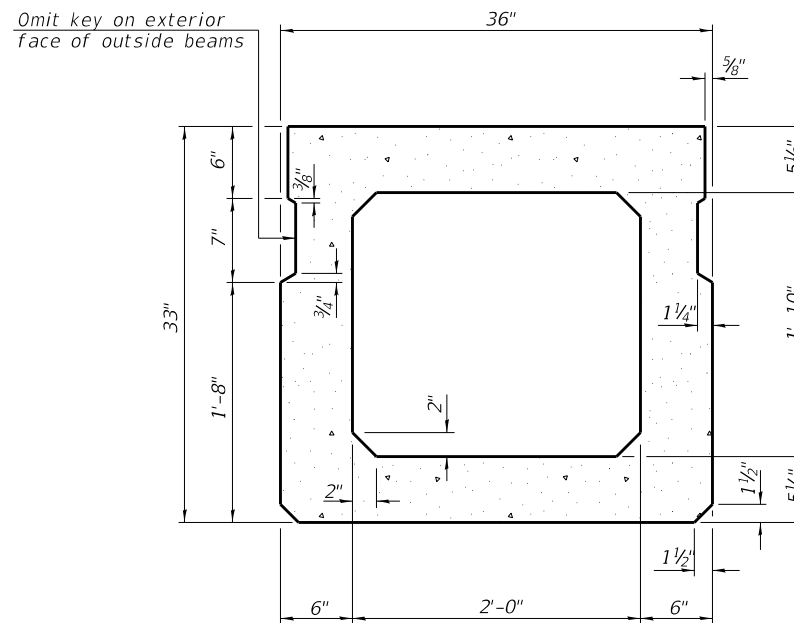
33" x 36" PPC DECK BEAM
 STRUCTURE NO. 060-3208

SHEET NO. 4 OF 6 SHEETS

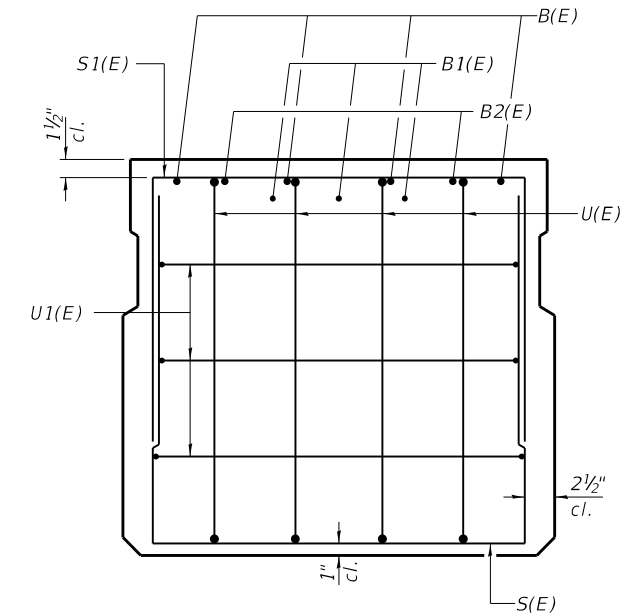
PROJECT	COUNTY	TOTAL SHEETS	SHEET NO.
16-00102-00BR	MADISON	27	21
CONTRACT NO. 97714			
ILLINOIS FED. AID PROJECT			



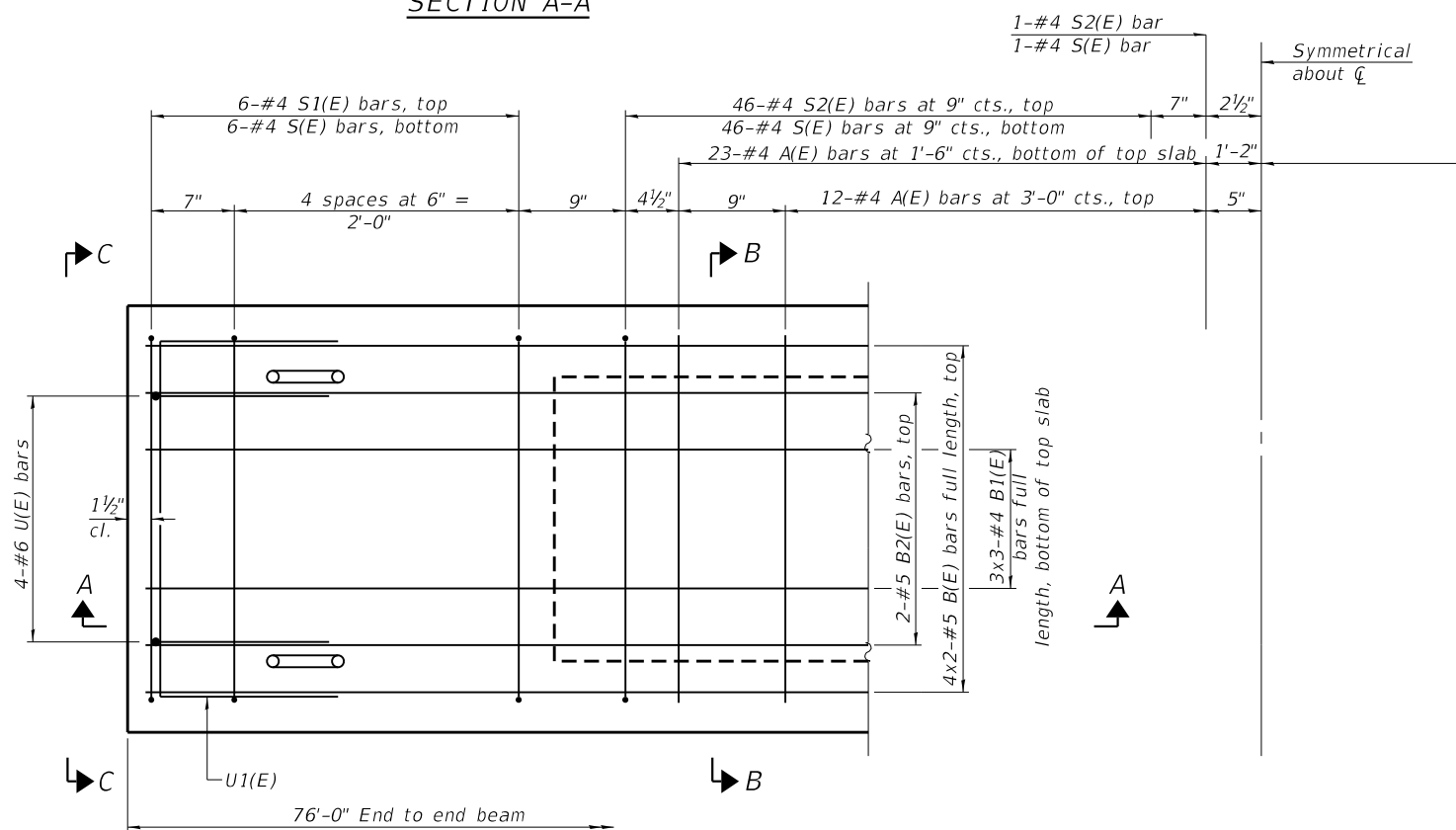
SECTION A-A



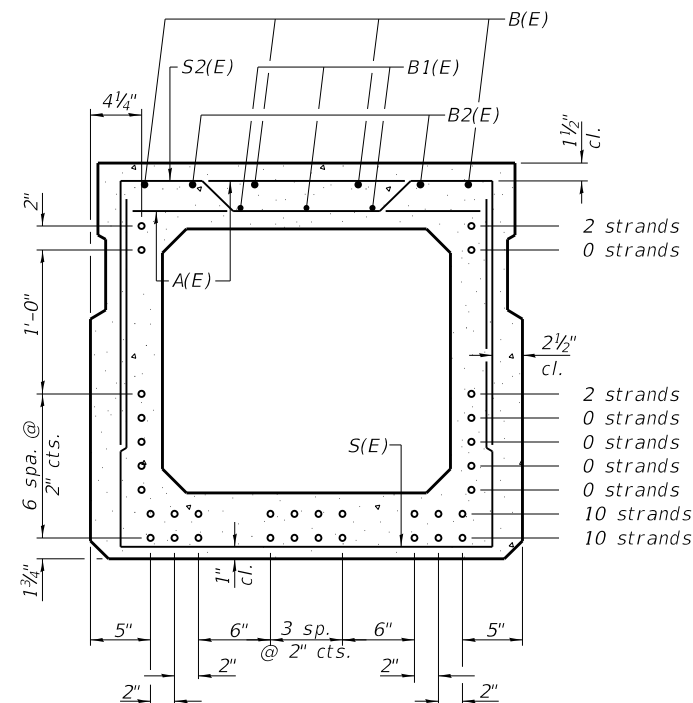
SECTION B-B
 (Showing dimensions)



VIEW C-C



PLAN VIEW



SECTION B-B

(Showing reinforcement and permissible strand locations)

Note: Place the number of strands specified in each row symmetrically about the centerline of beam in the permissible strand locations shown.

BAR LIST
 ONE BEAM ONLY
 (For information only)

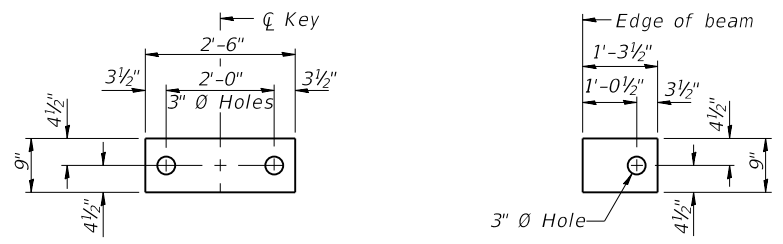
Bar	No.	Size	Length	Shape
A(E)	71	#4	2'-7"	—
B(E)	8	#5	39'-2"	—
B1(E)	9	#4	26'-7"	—
B2(E)	4	#5	10'-0"	—
S(E)	106	#4	7'-8"	U
S1(E)	12	#4	6'-5"	U
S2(E)	94	#4	6'-8"	U
U(E)	8	#6	5'-0"	C
U1(E)	6	#4	5'-0"	U

Note:
 See sheet 5 of 6 for additional details and Bill of Material.

Notes:
 Spacing of S(E) and S2(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.
 Bars indicated thus 4x3-#5 etc. indicates 4 lines of bars with 3 lengths per line.

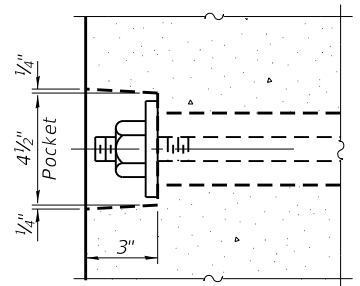
MINIMUM BAR LAP

#4 bar = 1'-11"
 #5 bar = 2'-6"

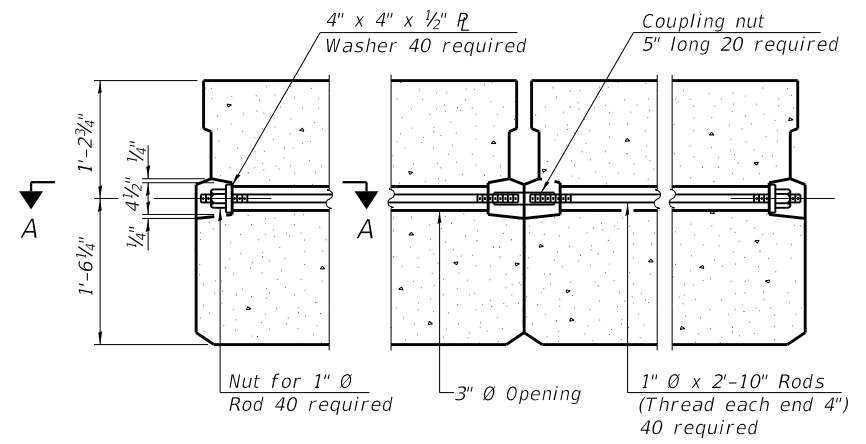


FABRIC BEARING PAD (Interior)
FABRIC BEARING PAD (Exterior)
FIXED

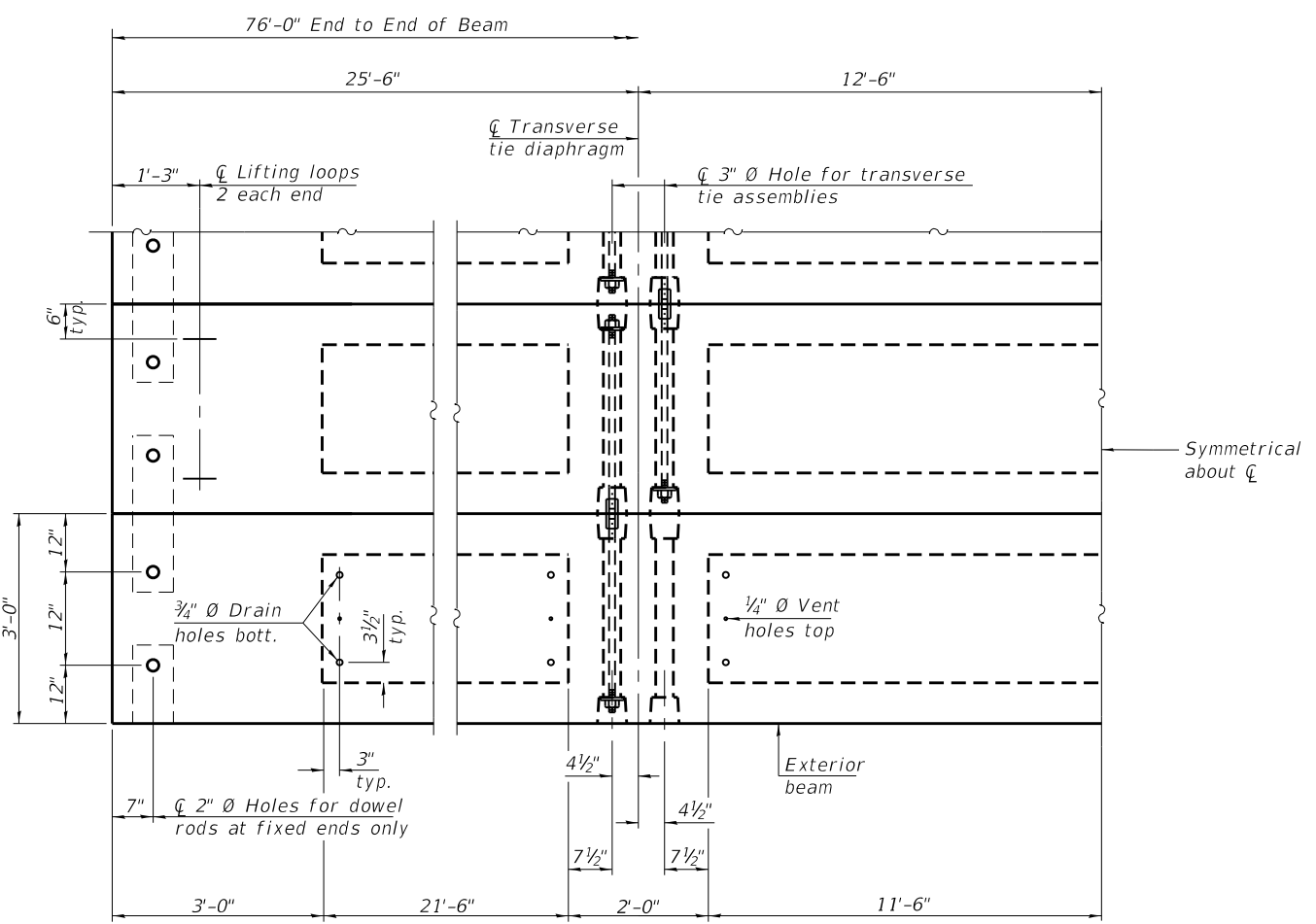
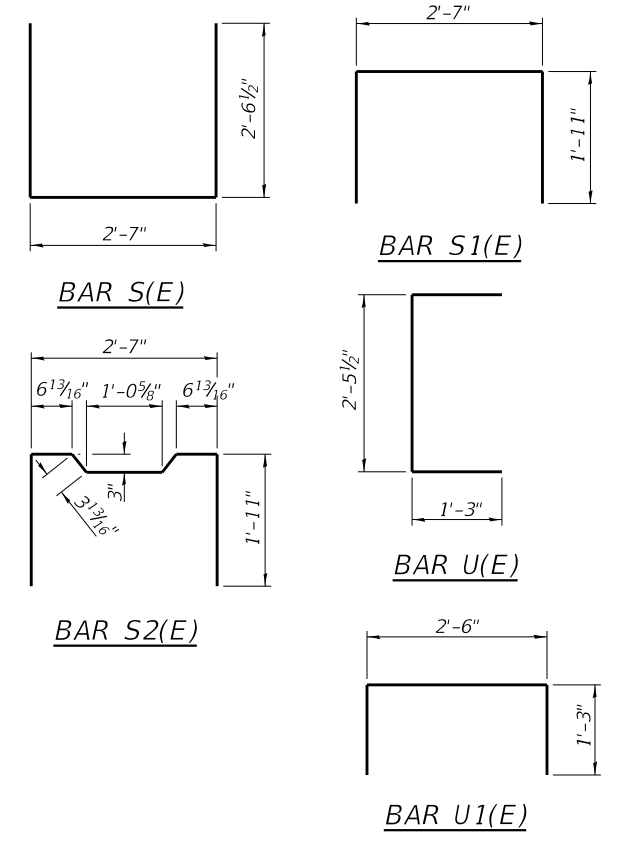
Note:
 All bearing pads shall be 1/2" thick.



SECTION A-A



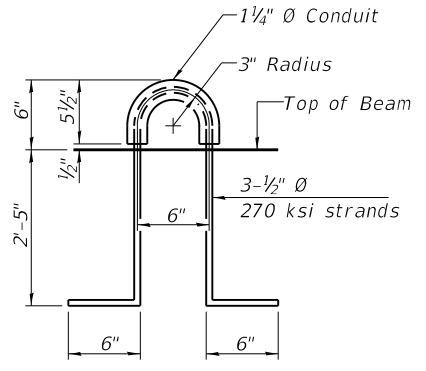
TYPICAL TRANSVERSE TIE ASSEMBLY



PLAN VIEW

Note: Connect beams in pairs with the transverse tie configuration shown.

Symmetrical about \bar{C}



LIFTING LOOP DETAIL

NOTES

- Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in.
- The 1" diameter rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place.
- Two 1/8" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.
- A minimum 2 1/2" diameter lifting pin shall be used to engage the lifting loops during handling.
- Corrosion Inhibitor, per Article 1020.05(b)(10) and 1021.07 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.
- Compressive strength of prestressed concrete, f'c, shall be 6000 psi.
- Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.

BILL OF MATERIAL

Precast Prestressed Conc. Deck Bms. (33" depth)	Sq. Ft.	2508
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PD-3336-0D 2-17-2017



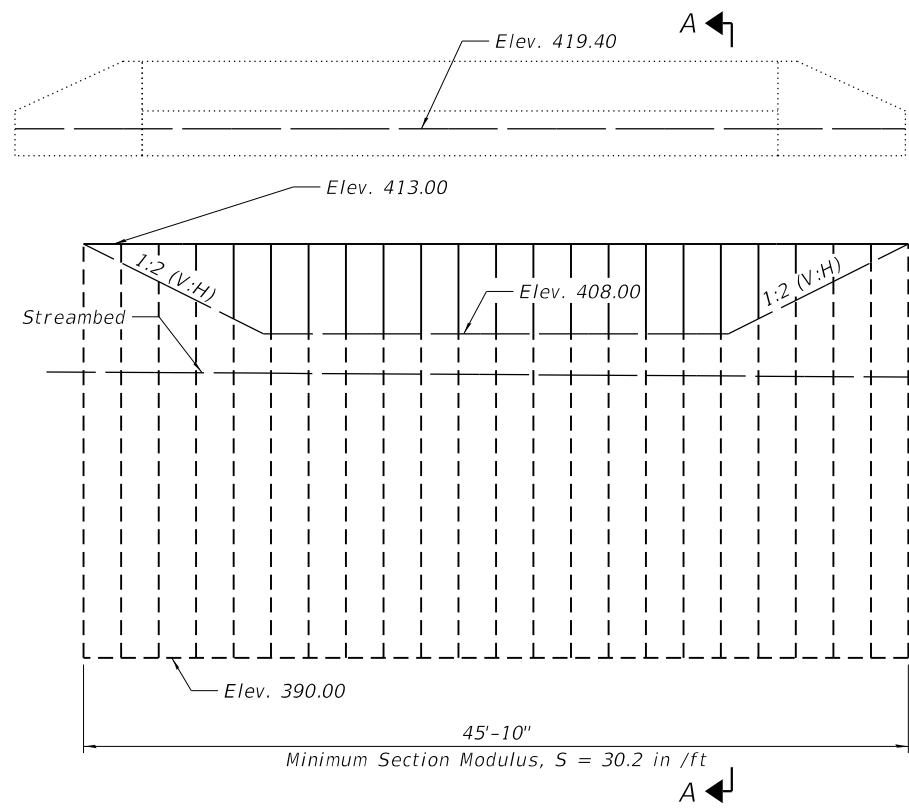
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CITY OF COLLINSVILLE

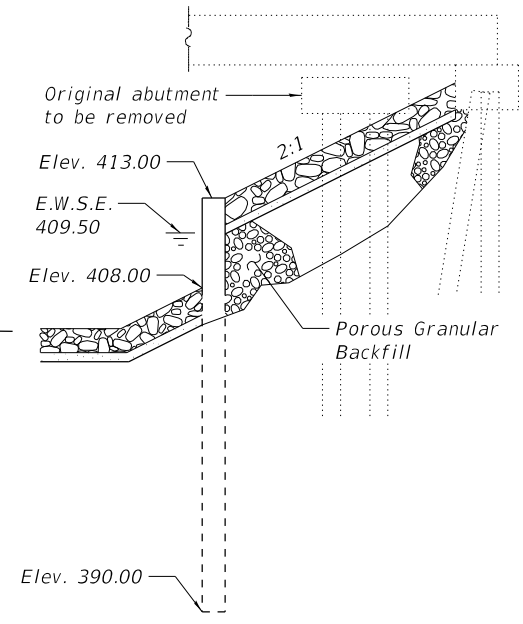
33" x 36" PPC DECK BEAM DETAILS
STRUCTURE NO. 060-3208

SHEET NO. 5 OF 6 SHEETS

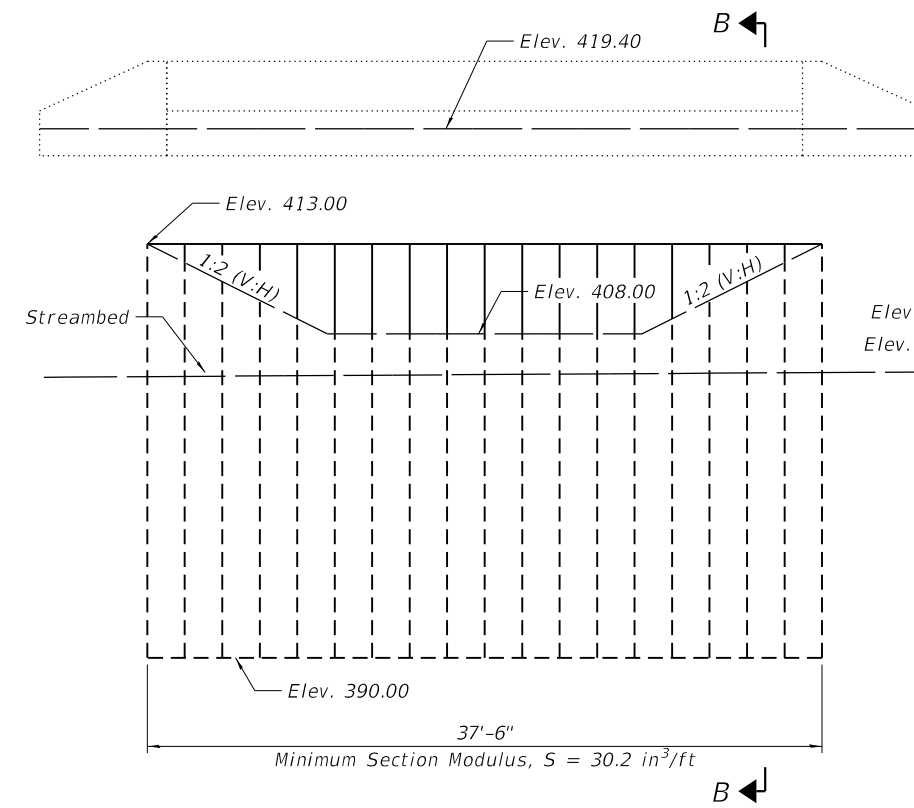
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16-00102-00BR	MADISON	27	22
CONTRACT NO. 97714			
ILLINOIS FED. AID PROJECT			



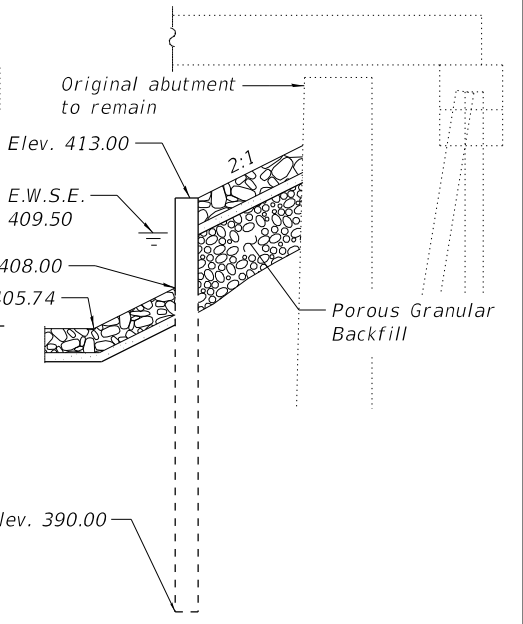
SOUTH ELEVATION
(Looking South)



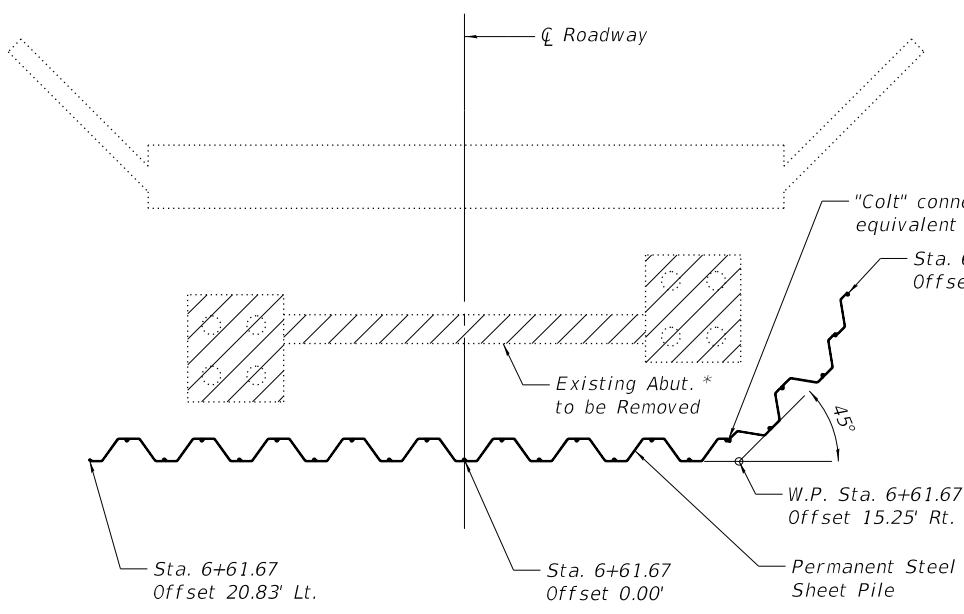
SECTION A-A



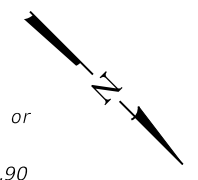
NORTH ELEVATION
(Looking North)



SECTION B-B

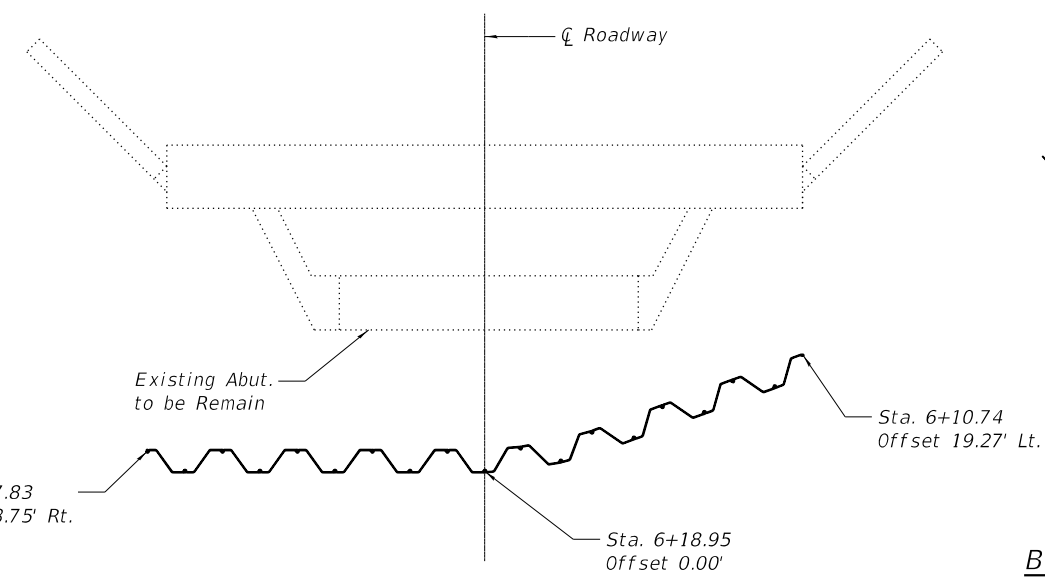


SOUTH PLAN

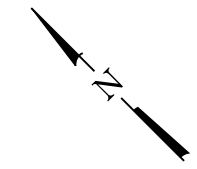


* Remove existing abutment prior to driving sheets.

Notes:
Sheeting horizontal dimensions are based on PZC 18 sections.
The Permanent Sheet Piling shall be according to Article 1006.05(c) of the Standard Specifications.



NORTH PLAN



BILL OF MATERIAL

ITEM	UNIT	TOTAL
Porous Granular Backfill	Cu. Yd.	116
Permanent Sheet Piling	Sq. Ft.	1,997

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CITY OF COLLINSVILLE

PERMANENT SHEET PILING DETAILS
STRUCTURE NO. 060-3208

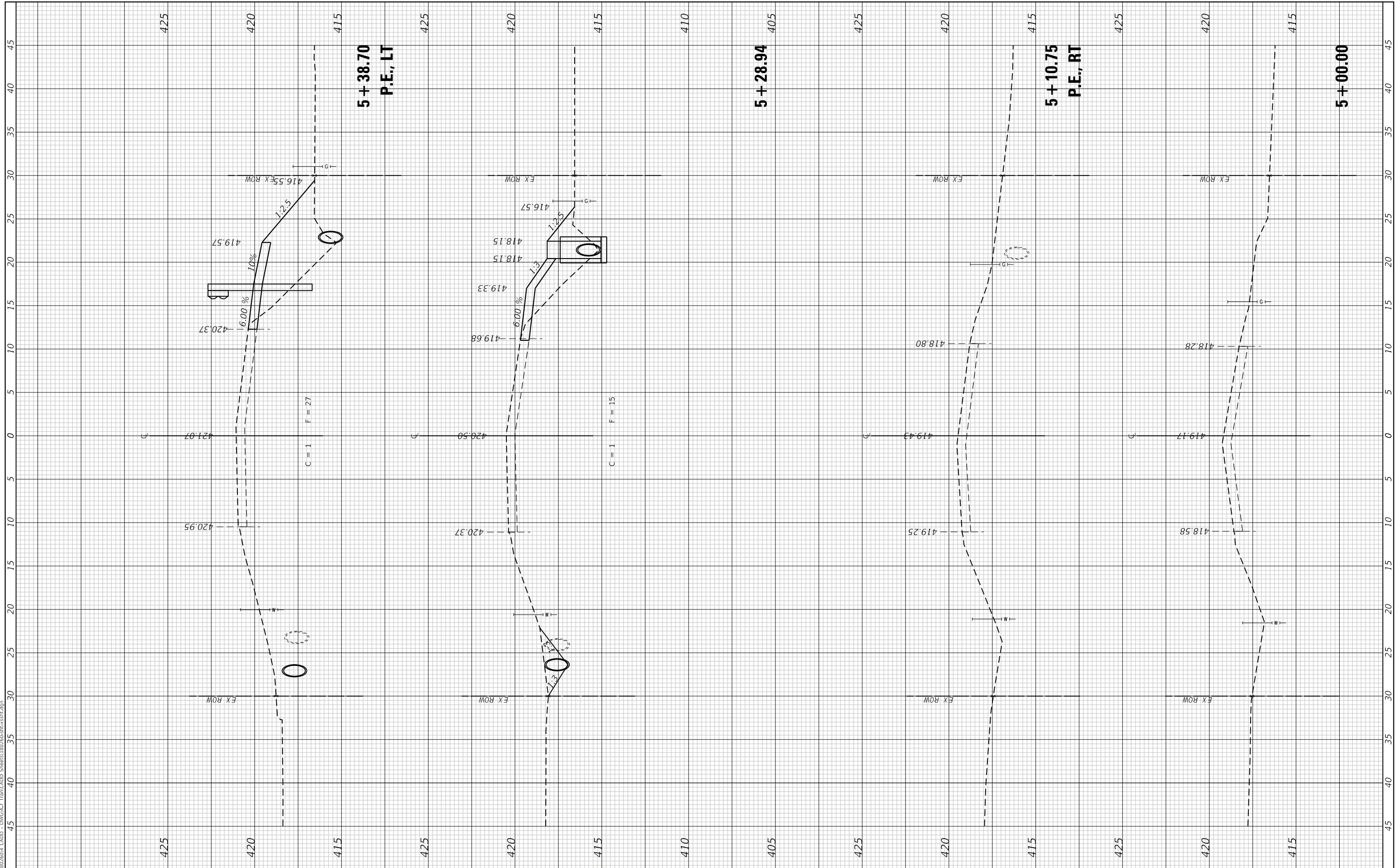
SHEET NO. 6 OF 6 SHEETS

PROJECT	COUNTY	TOTAL SHEETS	SHEET NO.
16-00102-00BR	MADISON	27	23
CONTRACT NO. 97714			
ILLINOIS FED. AID PROJECT			

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CITY OF COLLINSVILLE

CROSS SECTIONS

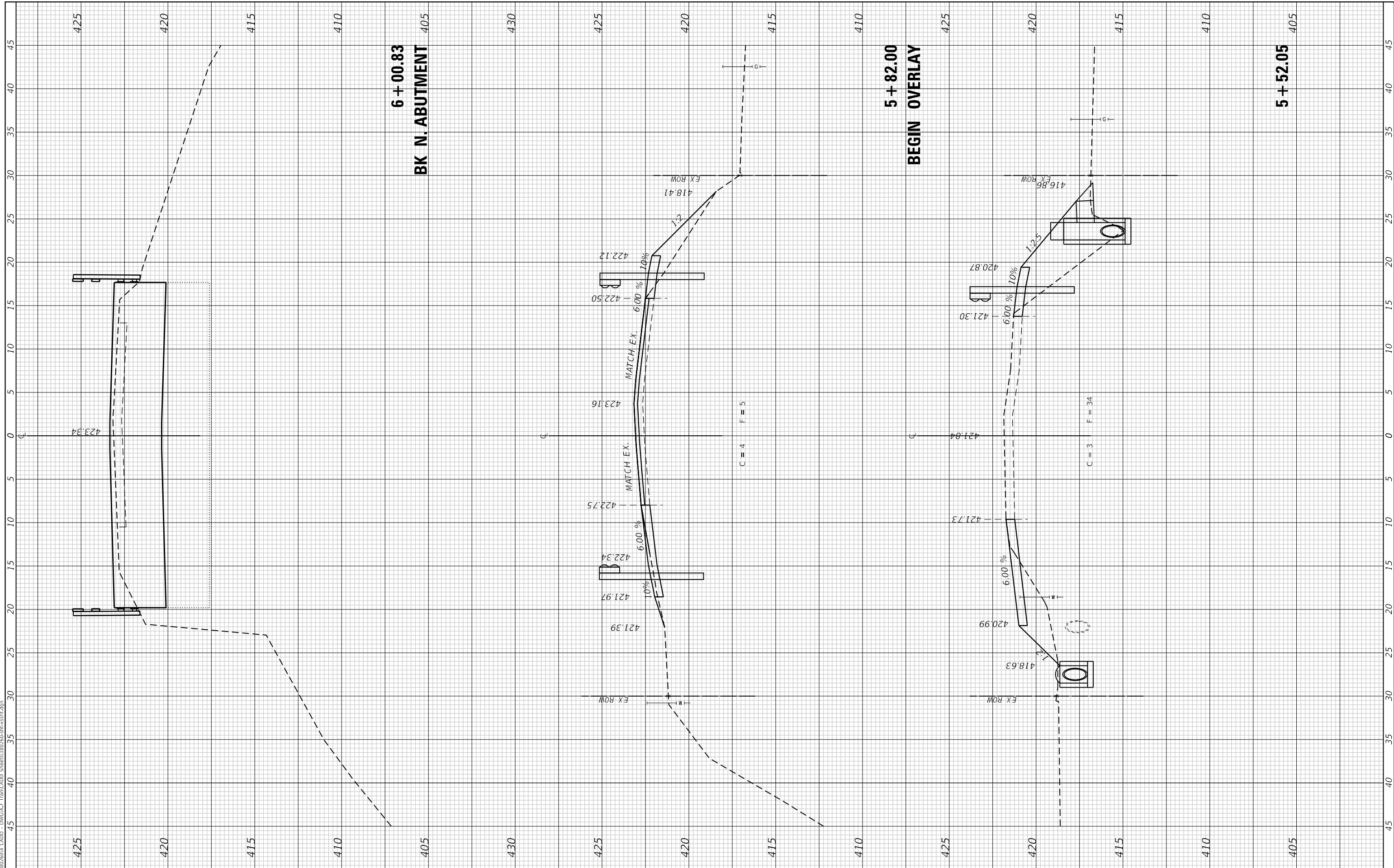
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42	16-00102-00-BR	MADISON	27	24
CONTRACT NO. 97714				
ILLINOIS			FED. AID PROJECT	

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NOTE BOOK	PLOTTED		
AREAS CHECKED	TEMPLATE		
	AREAS CHECKED		

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	PLOTTED		
	TEMPLATE		
	AREAS CHECKED		

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DRAWN -
CHECKED -
DATE -
PLOT SCALE = 10,0000 ' / in.
PLOT DATE = 8/6/2019

REVISIED -
REVISIED -
REVISIED -
REVISIED -



CITY OF COLLINSVILLE

SCALE: 1"=10'
SHEET OF SHEETS
STA. 5+52.05 TO STA. 6+02.00

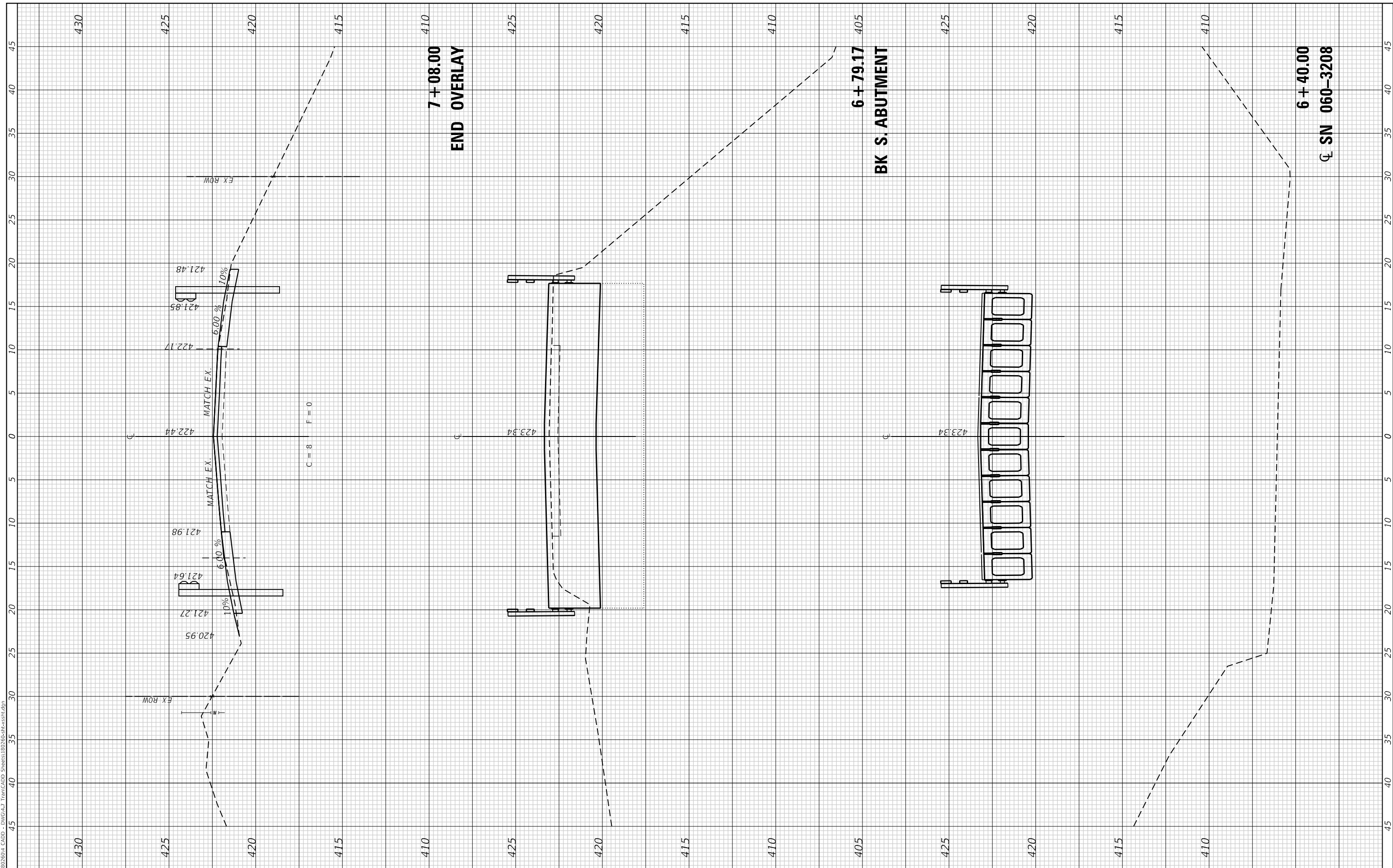
CROSS SECTIONS

MUN	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	16-00102-00-BR	MADISON	27	25
CONTRACT NO. 97714				
ILLINOIS FED. AID PROJECT				

FINAL SURVEY NO.	SURVEYED PLOTTED AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NO.	SURVEYED PLOTTED AREAS CHECKED	BY	DATE

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PLOT DATE = 8/6/2019

DESIGNED -
DRAWN -
CHECKED -
DATE -

REVISED -
REVISED -
REVISED -
REVISED -



CITY OF COLLINSVILLE

CROSS SECTIONS

SCALE: 1"=10' SHEET OF SHEETS STA. 6+40.00 TO STA. 7+08.00

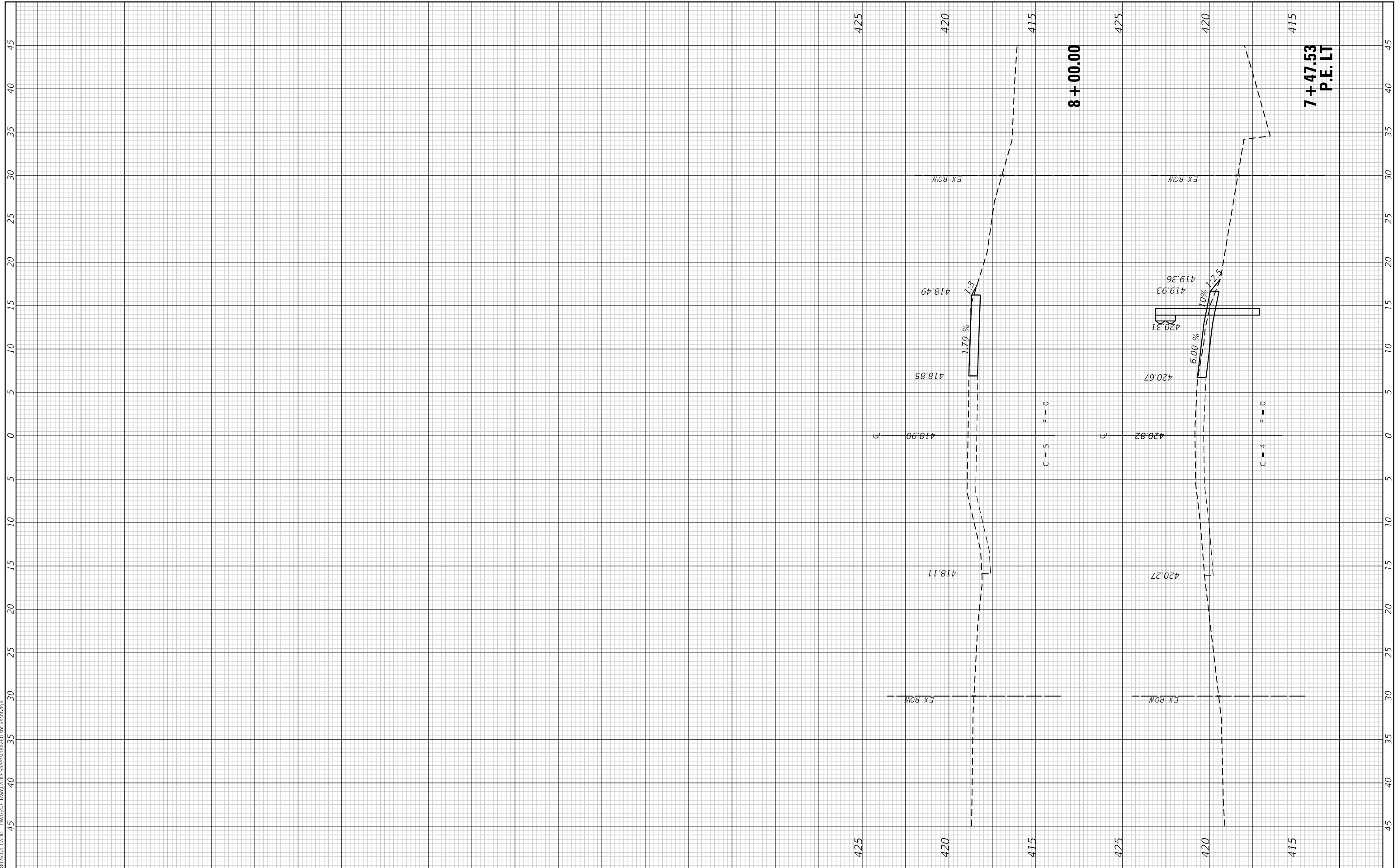
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42	16-00102-00-BR	MADISON	27	26
CONTRACT NO. 97714				

ILLINOIS FED. AID PROJECT

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

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

MODEL: Defn.rvt
FILE NAME: P:\1803604 CADD - DWG\4.7 Tran\CADD Streets\1803604-Str\1803604.dwg



USER NAME = jstein
PLOT SCALE = 10.0000 ' / in.
PLOT DATE = 8/6/2019

DESIGNED -
DRAWN -
CHECKED -
DATE -

REVISED -
REVISED -
REVISED -
REVISED -



CITY OF COLLINSVILLE

CROSS SECTIONS

SCALE: 1"=10' SHEET OF SHEETS STA. 7+47.53 TO STA. 8+00.00

MUN	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	16-00102-00-BR	MADISON	27	27
CONTRACT NO. 97714				

ILLINOIS FED. AID PROJECT