

F.A.S. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
583	18-00080-00-BR	SCHUYLER	24	1
FED. ROAD DIST. NO. 7		ILLINOIS	CONTRACT NO. 93757	

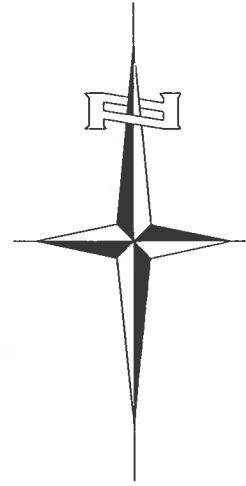
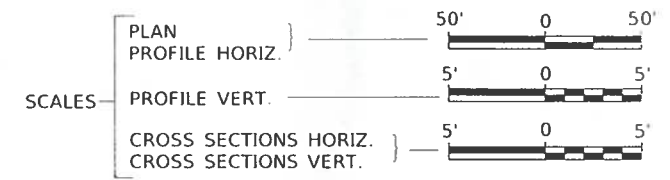
INDEX OF SHEETS 03-05-2021 LETTING ITEM 121

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	GENERAL NOTES, TYPICAL SECTIONS, PAVEMENT DESIGN INFORMATION, DETAILS
3	SUMMARY OF QUANTITIES, SCHEDULES OF QUANTITIES
4	TRAFFIC CONTROL PLAN
5	EROSION CONTROL PLAN
6	PLAN AND PROFILE
7-15	STRUCTURE PLANS
16-19	EXISTING STRUCTURE PLANS
20-24	CROSS SECTIONS

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION PLANS FOR PROPOSED SURFACE TRANSPORTATION PROGRAM-BRIDGE SCHUYLER COUNTY SECTION 18-00080-00-BR F.A.S. 583 (C.H. 5) OVER S. FORK CEDAR CREEK PROJECT NO. HVLM(959) JOB NUMBER C-96-050-18



- HIGHWAY STANDARDS (INCLUDED IN PROPOSAL)**
- 000001-08 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
 - 280001-07 TEMPORARY EROSION CONTROL SYSTEMS
 - 515001-04 NAME PLATE FOR BRIDGES
 - 630001-12 STEEL PLATE BEAM GUARDRAIL
 - 630301-09 SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
 - 631011-10 TRAFFIC BARRIER TERMINAL, TYPE 2
 - 631031-17 TRAFFIC BARRIER TERMINAL, TYPE 6
 - 701901-08 TRAFFIC CONTROL DEVICES
 - 725001-01 OBJECT AND TERMINAL MARKERS
 - BLR 21-9 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS
 - BLR 26-3 STEEL PLATE BEAM GUARDRAIL 29" (731mm) HEIGHT



PROPOSED STRUCTURE SN 085-3059
SINGLE SPAN 33" PPC DK BM SUPERSTRUCTURE WITH CONCRETE RAILING AND A HMA OVERLAY SUPPORTED ON CONCRETE SPILL-THRU ABUTMENTS. 80'-0" BK TO BK, AND 28'-0" O TO O DECK, NO SKEW.

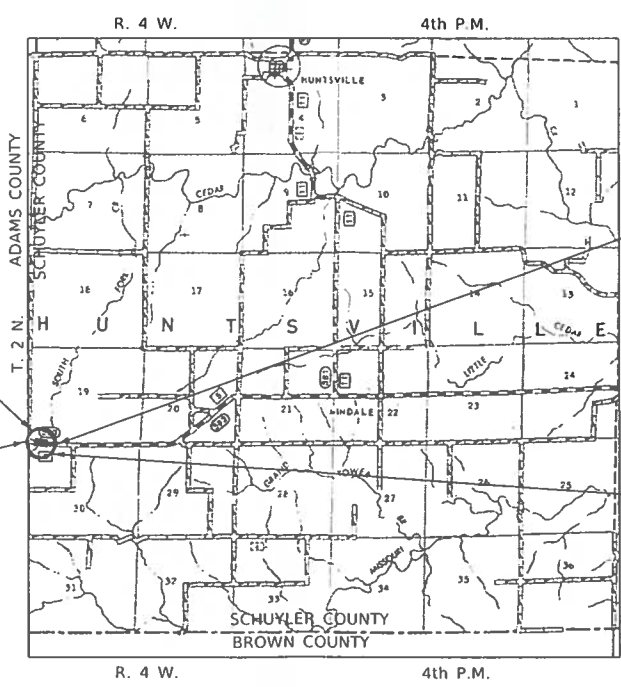
SECTION 18-00080-00-BR BEGINS STATION 17+50.00

SECTION 18-00080-00-BR ENDS STATION 21+75.00

EXISTING STRUCTURE SN 085-3051
SINGLE SPAN THREE SIDED REINFORCED CONCRETE ARCH SLAB ON CONCRETE CLOSED ABUTMENTS WITH CONCRETE WINGWALLS, 35'-0" BK TO BK, 33'-9" O TO O DECK, NO SKEW. (TO BE REMOVED)

- UTILITY COMPANIES**
- ABS WATER COOPERATIVE
CLAYTON, ILLINOIS
 - ADAMS TELEPHONE CO-OPERATIVE
GOLDEN, ILLINOIS
 - CAMDEN-LITTLETON WATER COMMISSION
CAMDEN, ILLINOIS

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



LOCATION MAP

1 MI 0 1 MI

APPROXIMATE SCALE

NET LENGTH OF PROJECT = 425.00 FEET = 0.081 MILES

DESIGN CLASSIFICATION: MAJOR COLLECTOR (NON-URBAN)
DESIGN ADT = 550 (2040)
50 MPH DESIGN SPEED

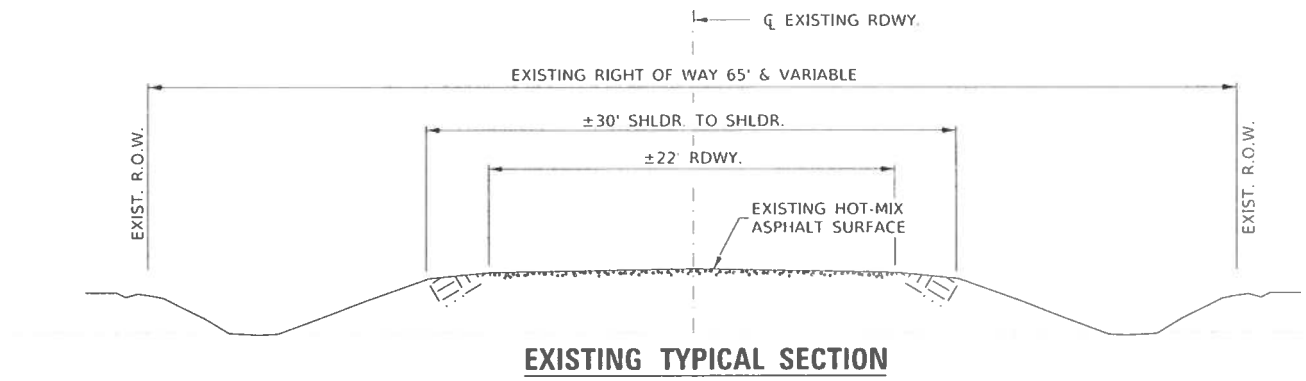
CONTRACT NO. 93757

Hutchison Engineering, Inc.
JACKSONVILLE-SHOREWOOD
PEORIA-QUAD CITIES

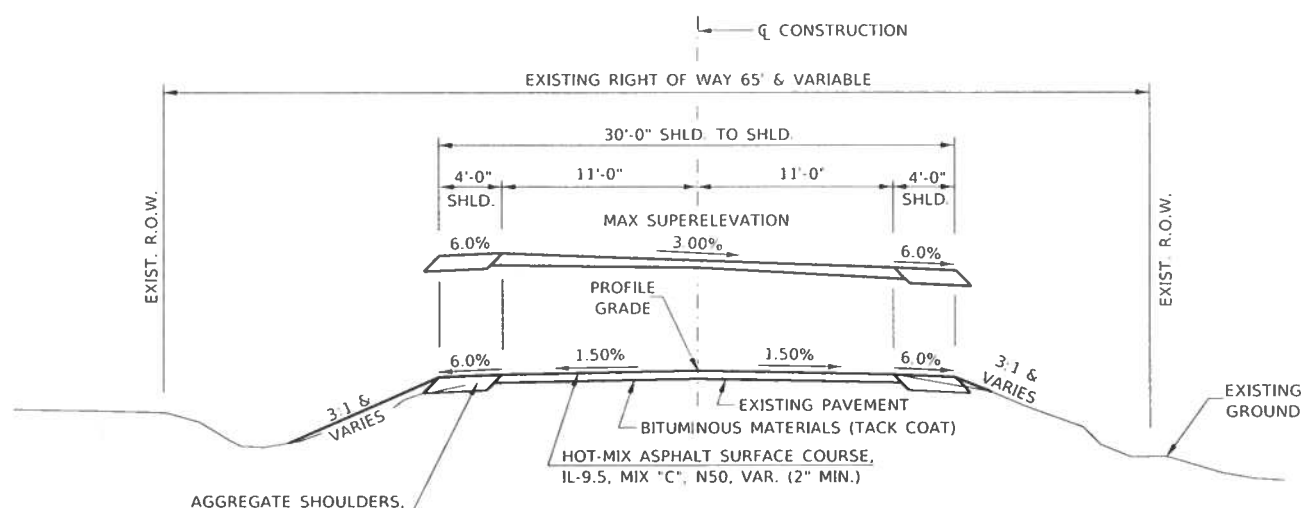
2020 JOB#4342



APPROVED	<i>David L. Schaefer</i>	2020
SCHUYLER COUNTY ENGINEER		
PASSED	<i>Jan 7 2021</i>	2020
DISTRICT SIX ENGINEER OF LOCAL ROADS & STREETS		
Released For Bid Based on Limited Review	<i>Jan 7 2021</i>	2020
REGION FOUR ENGINEER STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		



EXISTING TYPICAL SECTION



PROPOSED TYPICAL SECTION

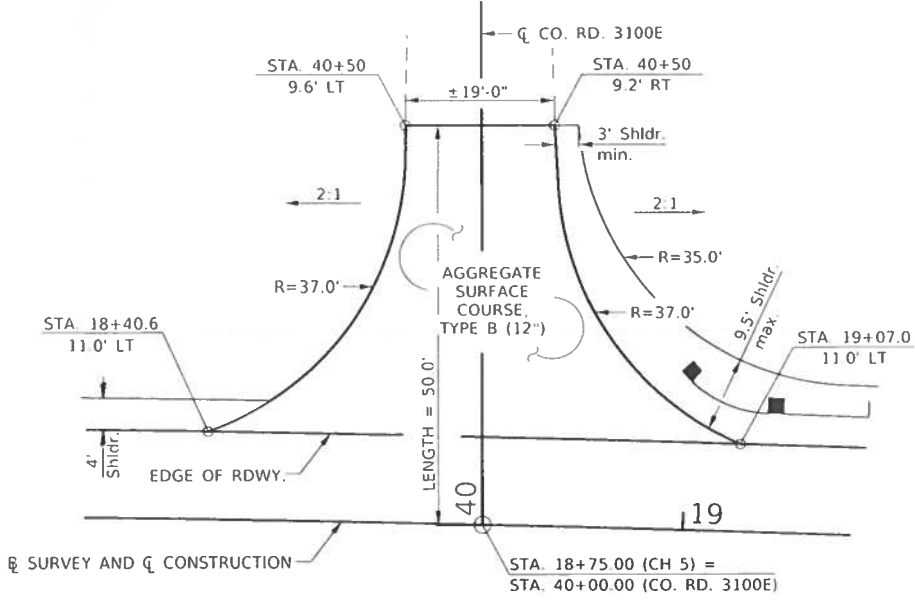
CONSTRUCT GUARDRAIL
SHOULDER WIDENING IN
ACCORDANCE WITH STD 630301

STA. 17+50.00 TO STA. 19+60.00
STA. 20+40.00 TO STA. 21+75.00

EXCEPT TRANSITIONS AND SUPERELEVATION

S.E. ATTAINED = STA. 17+75.00 TO STA. 18+74.00
S.E. REMOVED = TRANSITION PROPOSED SE TO EXISTING SE
STA. 21+00.00 TO 21+75.00

BRIDGE OMISSION
STA. 19+60.00 TO STA. 20+40.00



PROPOSED CO. RD. 3100E TRANSITION

STA. 18+75.00 (CH 5) = STA. 40+00.00 (CO. RD. 3100E)

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

	HMA SURFACE
PG GRADE:	PG 64-22
DESIGN AIR VOIDS:	4% @ N50
MIXTURE COMPOSITION:	IL-9.5
FRICTION AGGREGATE:	MIXTURE C
MIXTURE WEIGHT:	112#/SQ YD/IN
QUALITY MANAGEMENT PROGRAM:	QC/QA
SUBLOT SIZE:	N/A
LOCATION(S):	ENTIRE PROJECT

GENERAL NOTES

THE REMOVAL OF EXISTING HOT-MIX ASPHALT SURFACE AND GRAVEL OR CRUSHED STONE BASE COURSE WHICH MAY BE NECESSARY FOR THE CONSTRUCTION OF THE PROJECT SHALL BE REMOVED AS EARTH EXCAVATION AND NO COMPENSATION WILL BE ALLOWED FOR ADDITIONAL LABOR OR EQUIPMENT REQUIRED.

ALL WASTE OR UNDESIRABLE MATERIAL AS IDENTIFIED BY THE ENGINEER SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY AT THE CONTRACTOR'S EXPENSE.

ALL EXISTING PRIVATELY OWNED UTILITIES REQUIRING ADJUSTMENT WILL BE MADE BY THE UTILITY COMPANY INVOLVED. WHERE NO PROVISIONS HAVE BEEN MADE FOR ADJUSTMENTS ON THE PLANS, NO ADDITIONAL COMPENSATION WILL BE ALLOWED DUE TO DELAYS OR INCONVENIENCES CAUSED BY THE SAID UTILITY ADJUSTMENTS.

ALL EXISTING DRAINAGE STRUCTURES NOT BEING REMOVED BY THE CONTRACTOR THAT ARE DAMAGED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

THE PROFILE GRADE ELEVATIONS SHOWN ON THE PLAN AND PROFILE SHEETS AND IN THE STATION CROSS SECTIONS ARE TO THE TOP OF THE FINISHED SURFACE.

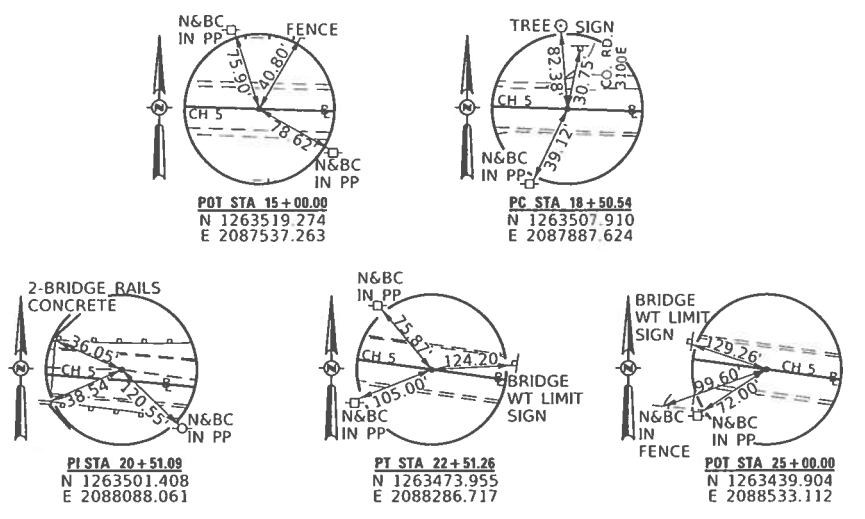
ANY REFERENCE TO STANDARDS THROUGHOUT THE PLANS SHALL BE INTERPRETED TO BE THE LATEST STANDARDS OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION.

THE LOCATION OF UNDERGROUND UTILITIES SHOWN ON THE PLANS REPRESENTS THE BEST KNOWLEDGE OF THE COUNTY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATIONS OF UNDERGROUND INSTALLATIONS BEFORE STARTING CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL INDEMNIFY THE COUNTY, ITS OFFICERS AND EMPLOYEES AGAINST ALL CLAIMS DUE TO DAMAGE TO CORPORATE OR PRIVATE PROPERTY RESULTING FROM HIS CONSTRUCTION OPERATIONS AS DESCRIBED IN ARTICLES 107.20 AND 107.26 OF THE STANDARD SPECIFICATIONS.

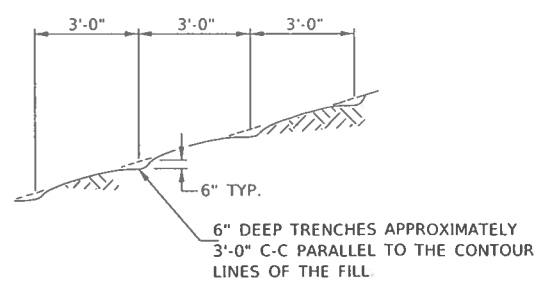
THE CONTRACTOR MAY BE REQUIRED TO CONDUCT SOME OF HIS GRADING AND TRENCHING OPERATIONS AROUND TRANSMISSION POLES AND UNDER TRANSMISSION LINES. THE ADDED COST OF SO DOING SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND PRESERVE PROPERTY MARKERS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR, OR AGENT, HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.

ALL ELEVATIONS SHOWN REFER TO U.S.G.S. MEAN SEA LEVEL DATUM.

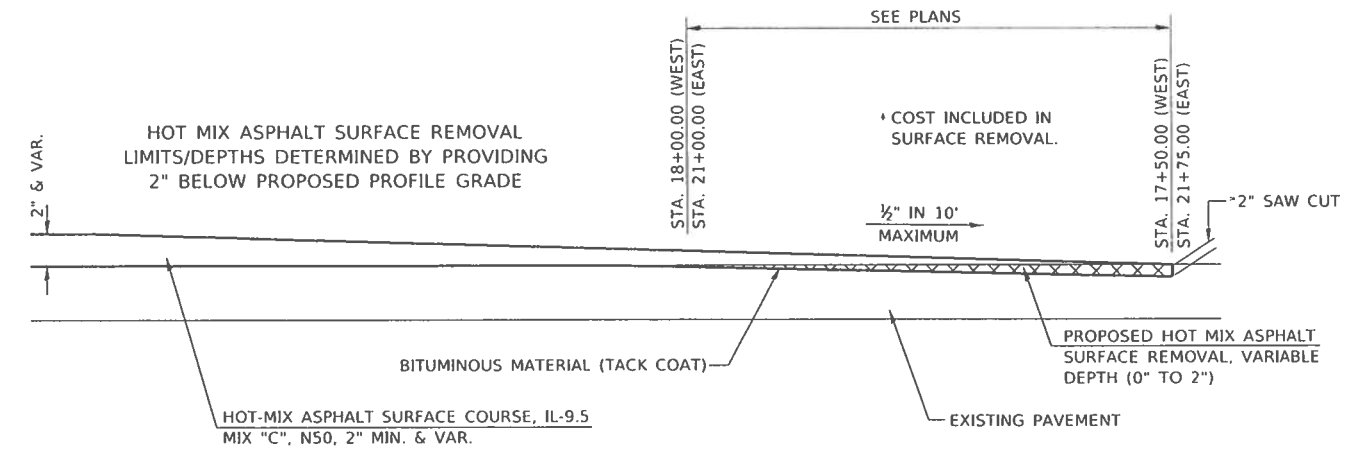


TIE POINTS



NOTE: ALL SLOPES 3:1 OR STEEPER AND GREATER THAN 5' IN HEIGHT SHALL BE CONTOUR PLOWED AS SHOWN IN DETAIL, COST SHALL BE INCLUDED WITH SEEDING, CLASS 2 (SPECIAL).

DETAIL OF CONTOUR PLOWING



PAVEMENT REMOVAL DETAIL

MODEL: D:\n\h...
 FILE NAME: V:\2020...
 Ch 5 over Fork of Cedar Creek (Schuyler) (CD) (CAD) Sheets 18-0080-00.dwg

USER NAME = SMierzwa	DESIGNED - CET	REVISED -
PLOT SCALE = 24.0000' / in	DRAWN - JCW	REVISED -
PLOT DATE = 11/2/2020	CHECKED - STM	REVISED -
	DATE - 10/30/2020	REVISED -

**SCHUYLER COUNTY
COUNTY HIGHWAY 5 OVER
SOUTH FORK CEDAR CREEK**

**GENERAL NOTES, TYPICAL SECTIONS,
PAVEMENT DESIGN INFORMATION, DETAILS**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. 17+50.00 TO STA. 21+75.00

F.A.S. RTE. 583	SECTION 18-0080-00-BR	COUNTY SCHUYLER	TOTAL SHEETS 24	SHEET NO. 2
FED. ROAD DIST. NO. 7 ILLINOIS		CONTRACT NO. 93757		
FED. AID PROJECT NO. HVLMI9591				

SUMMARY OF QUANTITIES			
CODE NO.	ITEM	UNIT	QUANTITY
20200100	EARTH EXCAVATION	CU YD	40
20300100	CHANNEL EXCAVATION	CU YD	770
① 20400800	FURNISHED EXCAVATION	CU YD	190
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	300
① 28000400	PERIMETER EROSION BARRIER	FOOT	750
28100209	STONE RIPRAP, CLASS A5	TON	560
① 28200200	FILTER FABRIC	SQ YD	445
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	83
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	511
① 40604050	HOT-MIX ASPHALT SURFACE COURSE, 1L-9.5, MIX "C", N50	TON	222
48101200	AGGREGATE SHOULDERS, TYPE B	TON	102
① 50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
50200100	STRUCTURE EXCAVATION	CU YD	85
① 50300225	CONCRETE STRUCTURES	CU YD	31.7
① 50300280	CONCRETE ENCASMENT	CU YD	3.5
50300300	PROTECTIVE COAT	SQ YD	130
50400605	PRECAST PRESTRESSED CONCRETE DECK BEAMS (33" DEPTH)	SQ FT	2,501
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	3,750
51201600	FURNISHING STEEL PILES HP12X53	FOOT	448
51202305	DRIVING PILES	FOOT	448
51203600	TEST PILE STEEL HP12X53	EACH	2
51500100	NAME PLATES	EACH	1
58100200	WATERPROOFING MEMBRANE SYSTEM	SQ YD	264
58300100	PORTLAND CEMENT MORTAR FAIRING COURSE	FOOT	140
① 59300100	CONTROLLED LOW-STRENGTH MATERIAL	CU YD	23.4
① 63000005	STEEL PLATE BEAM GUARDRAIL, TYPE B	FOOT	37.5
① 63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	1
① 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4
① 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	3
① 63200310	GUARDRAIL REMOVAL	FOOT	308
① 67100100	MOBILIZATION	L SUM	1
① 72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	4
① X0325862	CONCRETE BRIDGE RAILING	FOOT	160
① X2501000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.4
① X4401198	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SQ YD	274
① X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1
① X7800825	HOT SPRAY THERMOPLASTIC PAVEMENT MARKING LINE - 5 INCH	FOOT	850
① 20013798	CONSTRUCTION LAYOUT	L SUM	1

① SEE SPECIAL PROVISIONS CONSTRUCTION CODE TYPE: 0010
 Δ SPECIALTY ITEMS BRIDGE CODE TYPE: X080

AGGREGATE SHOULDERS, TYPE B 140#/CF					
STATION TO STATION	SIDE	WIDTH	LENGTH	TON	
17+50.00	18+00.00	LEFT	3.20' AVG.	50.00'	4
17+50.00	18+00.00	RIGHT	4.08' AVG.	50.00'	5
18+00.00	18+44.42	LEFT	4.00'	44.42'	4
18+00.00	18+16.64	RIGHT	4.00'	16.64'	2
18+16.64	18+36.91	RIGHT	5.71' AVG.	20.27'	3
18+36.91	18+72.01	RIGHT	7.53' AVG.	35.10'	6
18+72.01	19+49.23	RIGHT	7.69' AVG.	77.22'	14
18+84.32	19+20.09	LEFT	VARIES	35.77'	9
19+20.09	19+49.76	LEFT	7.75'	29.67'	5
19+49.23	19+60.00	RIGHT	6.88' AVG.	10.77'	2
19+49.76	19+60.00	LEFT	6.88' AVG.	10.24'	2
20+40.00	20+50.24	LEFT	6.88' AVG.	10.24'	2
20+40.00	20+50.76	RIGHT	6.88' AVG.	10.76'	2
20+50.24	20+77.19	LEFT	7.75'	26.95'	5
20+50.76	21+02.87	RIGHT	7.88' AVG.	52.11'	10
20+77.19	21+02.10	LEFT	7.88' AVG.	24.91'	5
21+02.10	21+36.93	LEFT	7.80' AVG.	34.83'	6
21+02.87	21+38.04	RIGHT	8.20' AVG.	35.17'	7
21+36.93	21+75.00	LEFT	4.37' AVG.	38.07'	4
21+38.04	21+75.00	RIGHT	5.60' AVG.	36.96'	5
TOTAL					102

HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH				
STATION TO STATION	WIDTH	LENGTH	SQ YD	
17+50.00	17+98.51	20.84' & VAR	48.51'	90
21+00.00	21+75.00	22.00' AVG.	75.00'	184
TOTAL				274

TRAFFIC BARRIER TERMINAL, TYPE 6			
STATION TO STATION	SIDE	EACH	
19+22.20	19+59.84	RIGHT	1
19+22.80	19+60.15	LEFT	1
20+39.85	20+77.19	LEFT	1
20+40.16	20+77.80	RIGHT	1
TOTAL			4

TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT			
STATION TO STATION	SIDE	EACH	
18+46.92	18+97.10	RIGHT	1
20+77.19	21+26.98	LEFT	1
20+77.80	21+27.99	RIGHT	1
TOTAL			3

TRAFFIC BARRIER TERMINAL, TYPE 2			
STATION TO STATION	SIDE	EACH	
18+99.34	19+10.35	LEFT	1
TOTAL			1

HOT SPRAY THERMOPLASTIC PAVEMENT MARKING LINE - 5 INCH				
STATION TO STATION	SIDE	DESCRIPTION	FOOT	
17+50.00	21+75.00	CENTER	DOUBLE YELLOW	850
TOTAL				850

GUARDRAIL REMOVAL			
STATION TO STATION	SIDE	FOOT	
19+05	19+82	RT	77
19+06	19+82	LT	77
20+18	20+95	RT	77
20+18	20+95	LT	77
TOTAL			308

STEEL PLATE BEAM GUARDRAIL, TYPE B			
STATION TO STATION	SIDE	FOOT	
18+97.10	19+22.20	RIGHT	25
19+10.35	19+22.80	LEFT	12.5
TOTAL			37.5

EARTHWORK SUMMARY					
STATION TO STATION	EARTH EXCAVATION	CHANNEL EXCAVATION	STRUCTURE EXCAVATION	FILL	WASTE (SHORTAGE)
CU YD					
RDWY 17+50.00 - 19+60.00	34			172	(147)
RDWY 20+40.00 - 21+75.00	5			45	(41)
CHANNEL		770			
STRUCTURE			85		
TOTAL	39	770	85	217	(188)
USE	40	770	85		(190)'

* CHANNEL AND STRUCTURE EXCAVATION ARE NOT INCLUDED INTO FURNISHED EXCAVATION BUT SUITABLE MATERIAL FROM EXCAVATION FOR CONSTRUCTION OF THE STRUCTURE MAY BE USED AS EMBANKMENT (@ 25% SHRINKAGE)

PAVEMENT SCHEDULE					
STATION TO STATION	WIDTH	LENGTH	BITUMINOUS MATERIALS (TACK COAT)	HOT-MIX ASPHALT SURFACE COURSE	
			0.05 LBS/SQ FT	112#/SQ YD/IN	
			POUND	TON	
17+50.00	18+00.00	21.50' AVG.	50.00'	54	
18+00.00	19+60.00	23.00' AVG.	160.00'	184	
BRIDGE DECK			29.67'	80.00'	119
20+40.00	21+00.00	23.30' AVG.	60.00'	70	
21+00.00	21+75.00	22.50' AVG.	75.00'	84	
17+50.00	18+00.00	21.71' AVG.	50.00'		16
18+00.00	19+60.00	22.60' AVG.	160.00'		94
W. ABUT. BACKFILL - SEE SPECIAL PROVISIONS					9
BRIDGE DECK			29.67'	80.00'	31
E. ABUT. BACKFILL - SEE SPECIAL PROVISIONS					9
20+40.00	21+00.00	22.46' AVG.	60.00'		41
21+00.00	21+75.00	22.26' AVG.	75.00'		22
TOTAL				511	222

AGGREGATE SURFACE COURSE, TYPE B 140#/CF			
STATION	WIDTH	LENGTH	TON
CO. RD. 3100E - 18+75.00 LT	19' & VAR.	39.00'	83
TOTAL			83

PERIMETER EROSION BARRIER			
STATION TO STATION	SIDE	FOOT	
17+50	18+65	LEFT	125
17+50	19+60	RIGHT	230
18+85	19+60	LEFT	95
20+40	21+75	LEFT	150
20+40	21+75	RIGHT	150
TOTAL			750

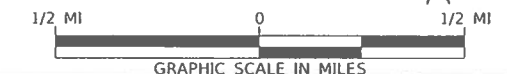
R 5 W | R 4 W 4th PM

R 3 W 4th PM



- 1 **ROAD CLOSED**
1 MILE AHEAD
LOCAL TRAFFIC ONLY
R11-3a
- 2 **ROAD CLOSED**
1 1/2 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3a
- 3 **ROAD CLOSED**
2 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3a
- 4 **ROAD CLOSED**
2 1/2 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3a
- 5 **ROAD CLOSED**
7 1/2 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3a
- 6 **ROAD CLOSED AHEAD**
W20-3
- 7 **ROAD CLOSED 500 FT**
W20-3
- 8 **TYPE III BARRICADES**

SEE STANDARD BLR 21 AND SPECIAL PROVISIONS



MODEL: D:\cadd\...
 FILE NAME: V:\3342 - CH 5 - South Fork of Cedar Creek (SchuylerCAD)\CADD_Sheets\3342\3001.dgn

USER NAME = SMierzwa	DESIGNED - MMO	REVISED -
PLOT SCALE = 2.0000" = 1'	DRAWN - MMO	REVISED -
PLOT DATE = 11/21/2020	CHECKED - STM	REVISED -
	DATE - 10/30/2020	REVISED -

**SCHUYLER COUNTY
COUNTY HIGHWAY 5 OVER
SOUTH FORK CEDAR CREEK**

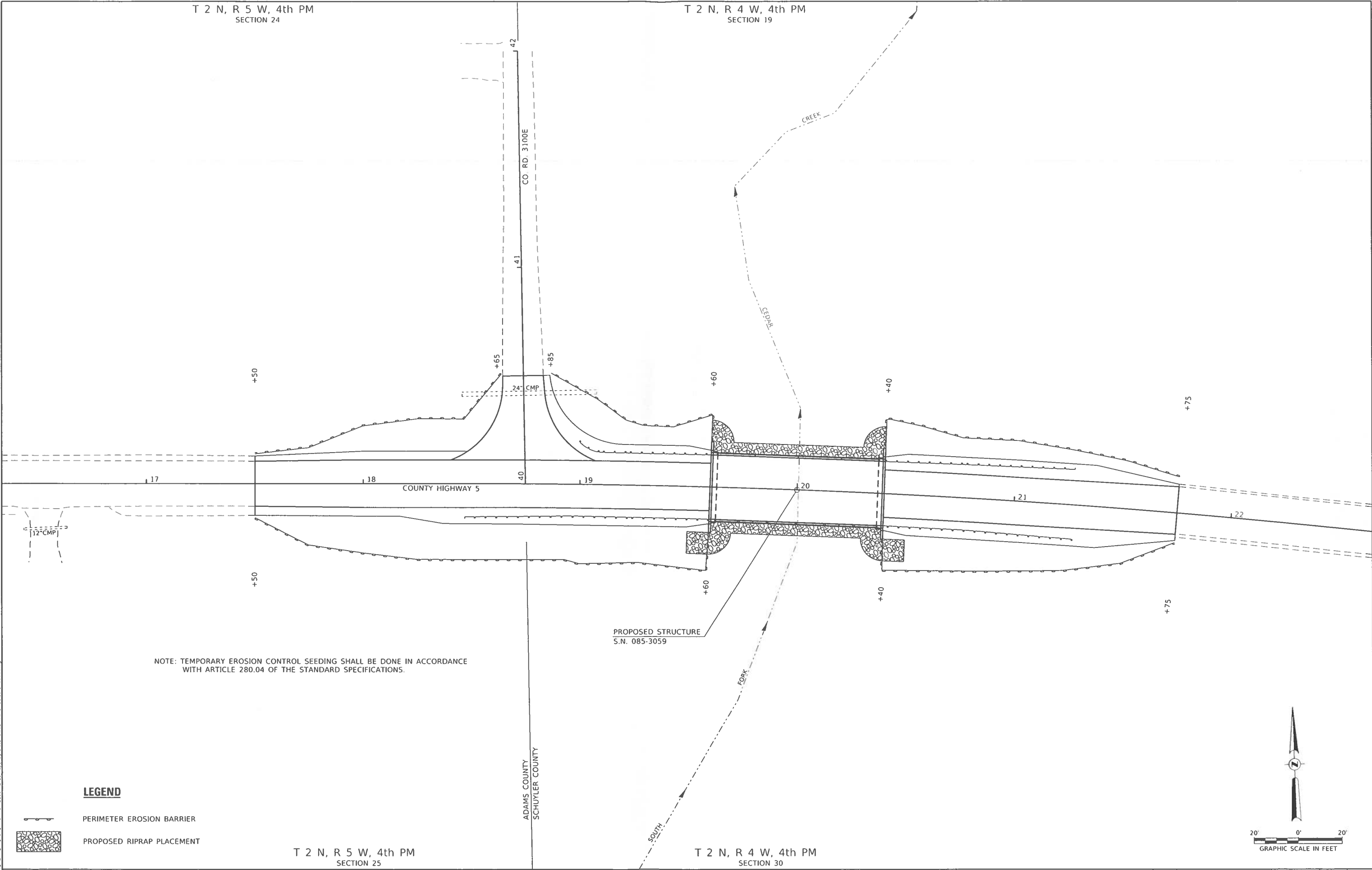
TRAFFIC CONTROL PLAN

SCALE: NONE SHEET 1 OF 1 SHEETS STA. 17+50.00 TO STA. 21+75.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
583	18-00080-00-BR	SCHUYLER	24	4
CONTRACT NO. 93757				
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT NO. HVL1M959J				



T 2 N, R 5 W, 4th PM
SECTION 24

T 2 N, R 4 W, 4th PM
SECTION 19



NOTE: TEMPORARY EROSION CONTROL SEEDING SHALL BE DONE IN ACCORDANCE WITH ARTICLE 280.04 OF THE STANDARD SPECIFICATIONS.

LEGEND

-  PERIMETER EROSION BARRIER
-  PROPOSED RIPRAP PLACEMENT

T 2 N, R 5 W, 4th PM
SECTION 25

T 2 N, R 4 W, 4th PM
SECTION 30

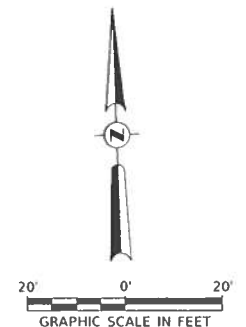
**SCHUYLER COUNTY
COUNTY HIGHWAY 5 OVER
SOUTH FORK CEDAR CREEK**

EROSION CONTROL PLAN

USER NAME = SMierzwa	DESIGNED - JCW	REVISED -
	DRAWN - JCW	REVISED -
PLOT SCALE = 40.0000' / in	CHECKED - STM	REVISED -
PLOT DATE = 11/2/2020	DATE - 10/30/2020	REVISED -

SCALE: 1"=20' SHEET 1 OF 1 SHEETS STA. 17+50.00 TO STA. 21+75.00

F.A.S. RIE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
583	18-00080-00-BR	SCHUYLER	24	5
CONTRACT NO. 93757				
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT NO. HVLM959	



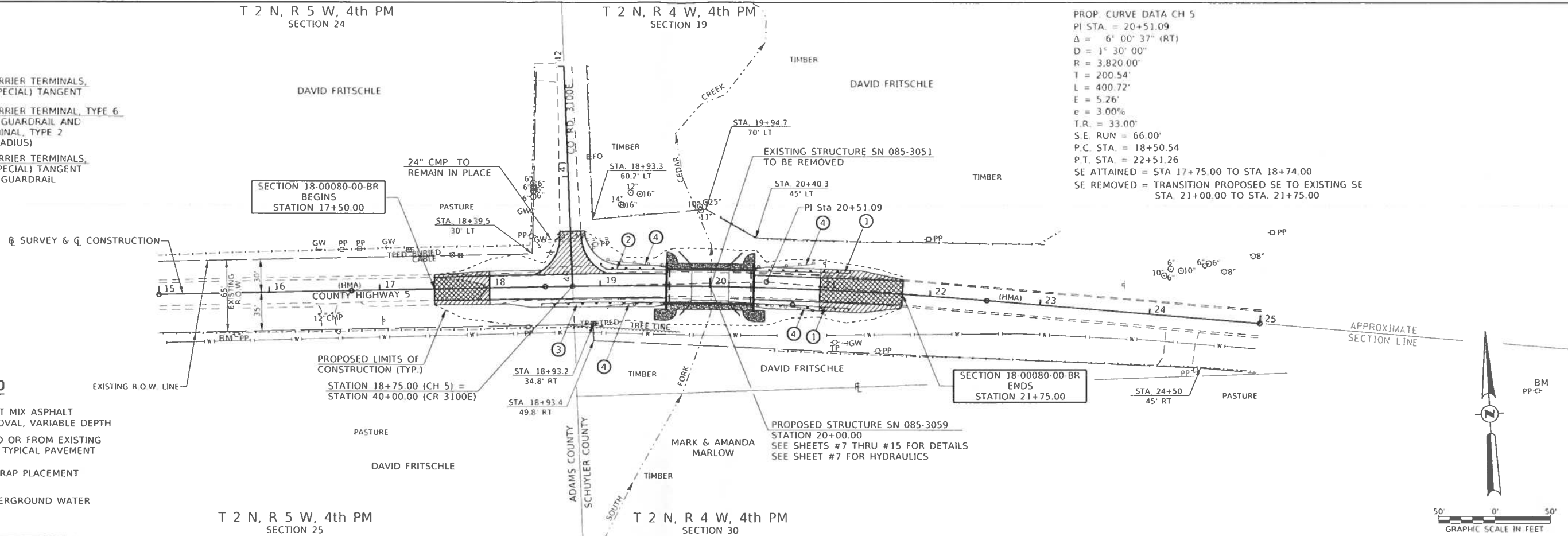
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T 2 N, R 5 W, 4th PM
SECTION 24

T 2 N, R 4 W, 4th PM
SECTION 19

PROP. CURVE DATA CH 5
 PI STA = 20+51.09
 $\Delta = 6^\circ 00' 37''$ (RT)
 $D = 1^\circ 30' 00''$
 $R = 3,820.00'$
 $T = 200.54'$
 $L = 400.72'$
 $E = 5.26'$
 $e = 3.00\%$
 $T.R. = 33.00'$
 $S.E. RUN = 66.00'$
 $P.C. STA. = 18+50.54$
 $P.T. STA. = 22+51.26$
 $SE \text{ ATTAINED} = STA 17+75.00 \text{ TO } STA 18+74.00$
 $SE \text{ REMOVED} = \text{TRANSITION PROPOSED SE TO EXISTING SE}$
 $STA 21+00.00 \text{ TO } STA 21+75.00$

- ① PROPOSED TRAFFIC BARRIER TERMINALS, TYPE 6 AND TYPE 1 (SPECIAL) TANGENT
- ② PROPOSED TRAFFIC BARRIER TERMINAL, TYPE 6 W/ STEEL PLATE BEAM GUARDRAIL AND TRAFFIC BARRIER TERMINAL, TYPE 2 (SHOP CURVE TO 15' RADIUS)
- ③ PROPOSED TRAFFIC BARRIER TERMINALS, TYPE 6 AND TYPE 1 (SPECIAL) TANGENT W/ STEEL PLATE BEAM GUARDRAIL
- ④ EXISTING GUARDRAIL TO BE REMOVED



LEGEND

- PROPOSED HOT MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH
- TRANSITION TO OR FROM EXISTING TO PROPOSED TYPICAL PAVEMENT
- PROPOSED RIPRAP PLACEMENT
- EXISTING UNDERGROUND WATER

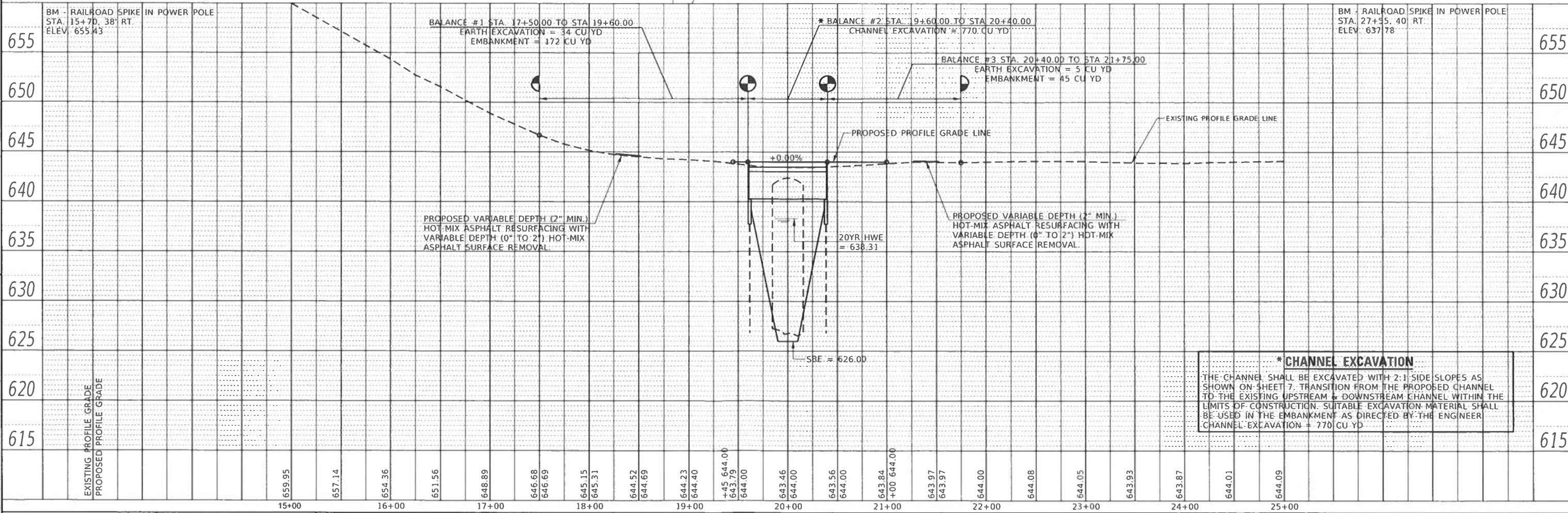
DATE	
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T 2 N, R 5 W, 4th PM
SECTION 25

T 2 N, R 4 W, 4th PM
SECTION 30



*** CHANNEL EXCAVATION**
 THE CHANNEL SHALL BE EXCAVATED WITH 2:1 SIDE SLOPES AS SHOWN ON SHEET 7. TRANSITION FROM THE PROPOSED CHANNEL TO THE EXISTING UPSTREAM & DOWNSTREAM CHANNEL WITHIN THE LIMITS OF CONSTRUCTION. SUITABLE EXCAVATION MATERIAL SHALL BE USED IN THE EMBANKMENT AS DIRECTED BY THE ENGINEER.
 * CHANNEL EXCAVATION = 770 CU YD

USER NAME = SMerzwa	DESIGNED = CET	REVISED =	SCHUYLER COUNTY COUNTY HIGHWAY 5 OVER SOUTH FORK CEDAR CREEK	PLAN AND PROFILE	F.A.S. RTE. 583	SECTION 18-00080-00-BR	COUNTY SCHUYLER	TOTAL SHEETS 24	SHEET NO. 6
PLOT SCALE = 100.0000' / in.	CHECKED = STM	REVISED =			SCALE: 1"=50'	SHEET NO. 1 OF 1 SHEETS	STA. 17+50.00 TO STA. 21+75.00	CONTRACT NO. 93757	
PLOT DATE = 11/27/2020	DATE = 10/30/2020	REVISED =							

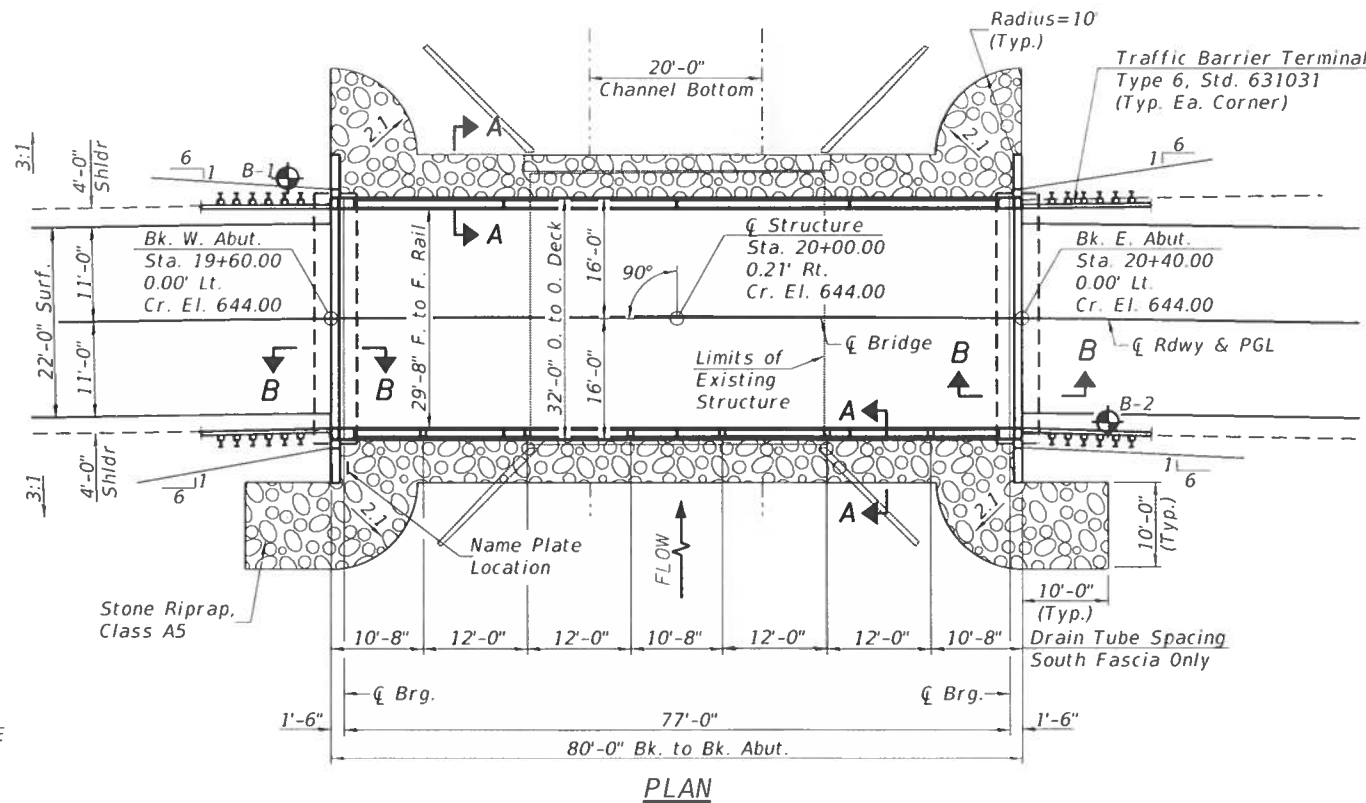
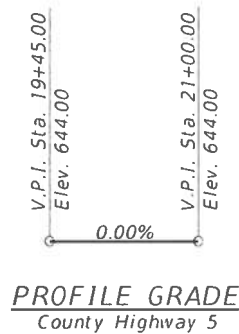
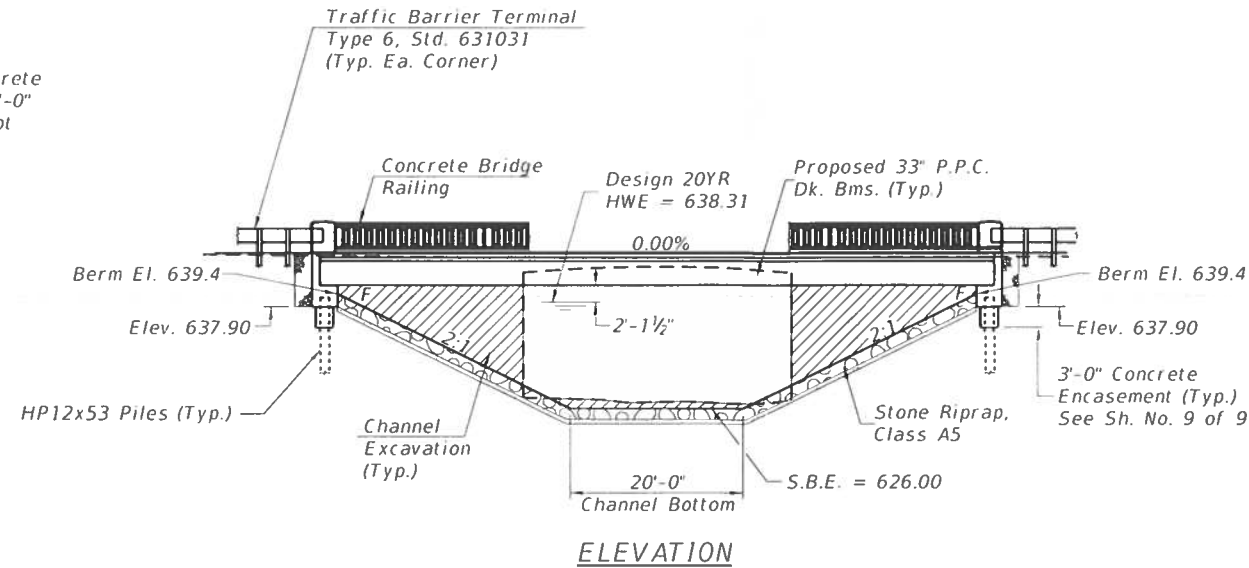
MODEL: Defaul
 FILE NAME: V:\d327 - CH 5 over fork of Cedar Creek (Schuyler\CADD\CADD) Sheets\327P001.dgn

B.M.: RR Spike in Power Pole Sta. 15+70, 38' Rt. Elev. 655.43
 RR Spike in Power Pole Sta. 27+55, 40' Rt. Elev. 637.78

Existing Structure:
 Single span three sided reinforced concrete arch slab on concrete closed abutments with concrete wingwalls. The structure is 35'-0" back to back of abutments, 33'-9" out to out of deck, and is not skewed. The structure was constructed in 1936. Str. No. 085-3051

Salvage: None
 Road to be closed to traffic during construction.

Note:
 See Sheet 2 of 9 for Section A-A, Section B-B, General Notes, and Total Bill of Materials.

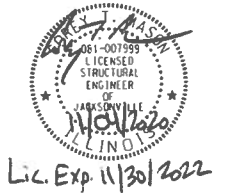


CURVE DATA

PI STA. = 20+51.09
 $\Delta = 6^\circ 00' 37''$ (RT)
 $D = 1^\circ 30' 00''$
 $R = 3,820.00'$
 $T = 200.54'$
 $L = 400.72'$
 $E = 5.26'$
 $e = 3.0%$
 P.C. STA. = 18+50.55
 P.T. STA. = 22+51.26
 S.E. ATTAINED = STA. 17+75.00 TO STA. 18+74.00
 S.E. REMOVED = TRANSITION PROPOSED SE TO EXISTING SE STA. 21+00.00 TO 21+75.00

INDEX OF SHEETS

SH. #'s	DESCRIPTION
1	General Plan & Elevation
2	General Notes, Details, & Bill of Material
3	Superstructure
4	Concrete Bridge Railing
5	Concrete Bridge Railing Details
6	33" x 48" PPC Deck Beam Details
7	33" x 48" PPC Deck Beam
8	Abutments
9	HP Pile Details



I certify that to the best of my 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 current AASHTO Standard Specification for Highway Bridges. This design complies with all requirements of the current AASHTO Guide Specifications for Seismic Design of highway bridges.

[Signature]
 Illinois Structural No. 7999
 Expires 11/30/2022

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevations (ft.)			Item 113
	W. Abut.	E. Abut.	
Q100	637.9	637.9	8
Q200	637.9	637.9	
Design	637.9	637.9	
Check	637.9	637.9	

WATERWAY INFORMATION

Drainage Area = 7.89 Sq. Mi. Low Grade Elev. = 643.87 @ Sta. 24+00.00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	20	1,960	355	555	638.31	0.78	0.34	639.09	638.65
Base	100	2,880	387	629	639.34	1.34	0.52	640.68	639.86

DESIGN SPECIFICATIONS

2020 AASHTO LRFD Bridge Design Specifications, 9th Edition

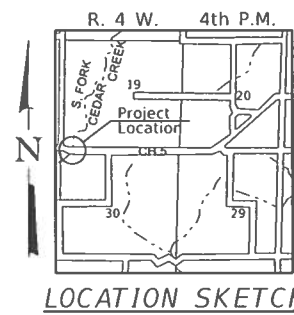
DESIGN STRESSES

(FIELD UNITS)
 $f'_c = 3,500$ p.s.i. (Substructure)
 $f'_c = 5,000$ p.s.i. (Superstructure)
 $f_y = 60,000$ p.s.i. (Rein.)

(PRECAST PRESTRESSED UNITS)
 $f'_c = 6,000$ p.s.i.
 $f'_ci = 5,000$ p.s.i.
 $f'_s = 270,000$ p.s.i. ($1/2$ " Strands)
 $f'_si = 201,960$ p.s.i. ($1/2$ " Strands)

LOADING HL-93

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



GENERAL PLAN & ELEVATION
 SCHUYLER COUNTY
 SECTION 18-00080-00-BR
 F.A.S. 583 (C.H. 5) OVER
 SOUTH FORK CEDAR CREEK

DESIGNED	S.T.M.
CHECKED	C.T.M.
DRAWN	S.T.M.
CHECKED	C.T.M.

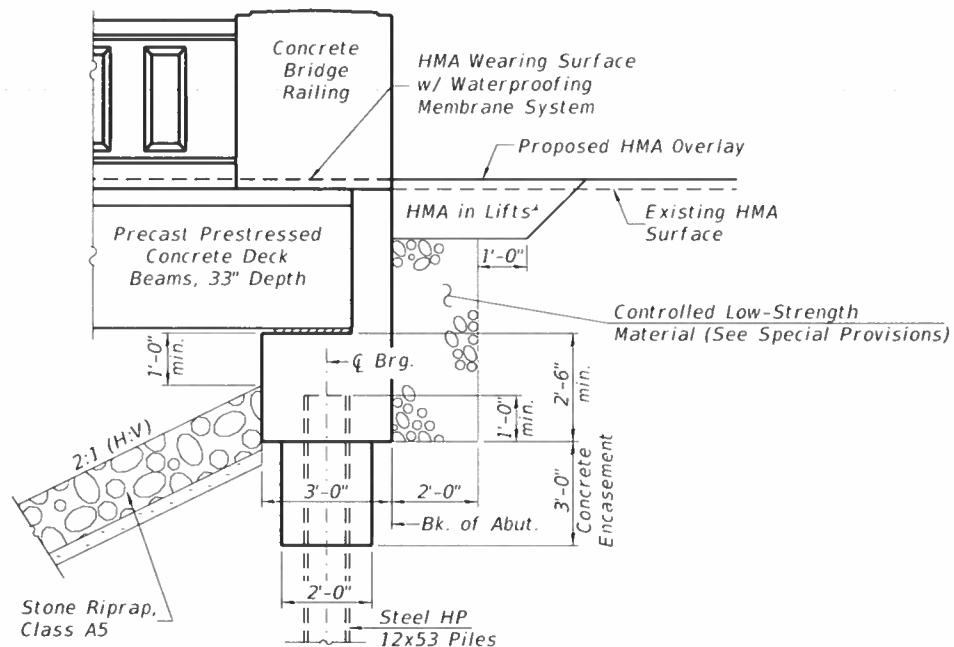
Hutchison Engineering, Inc.
 JACKSONVILLE-SHOREWOOD
 PEORIA-QUAD CITIES
 2020 JOB#4342

SHEET NO. 1
 9 SHEETS

F.A.S. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
583	18-00080-00-BR	SCHUYLER	24	7
S.N. 085-3059		CONTRACT NO. 93757		
FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT NO. HVLM(959)		

GENERAL NOTES

1. The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at the substructures specified or approved by the Engineer before ordering the remainder of the piles.
2. For Soil Boring Logs, See Special Provisions.
3. A Corrosion Inhibitor shall be used in the concrete for Precast Prestressed Concrete Deck Beams according to Article 1020.05(b)(10) of the Standard Specifications.
4. Reinforcement Bars designated (E) shall be epoxy coated.
5. Layout of the slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
6. The top surface of the beams shall be finished according to the IDOT Manual for Fabrication of Precast Prestressed Concrete Products.
7. Excavation behind existing closed abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure.
8. Protective Coat shall be applied to the top and sides of the concrete bridge railing.



SECTION B-B

*To be included with roadway plans (See Special Provisions)

SOUTH FORK CEDAR CREEK
 BUILT 202 BY
 SCHUYLER COUNTY
 SEC. 18-00080-00-BR
 C.H. 5 STATION 20+00.00
 F.A. PROJ. NO. HVLM(959)
 STR. NO. 085-3059 LOADING HL-93

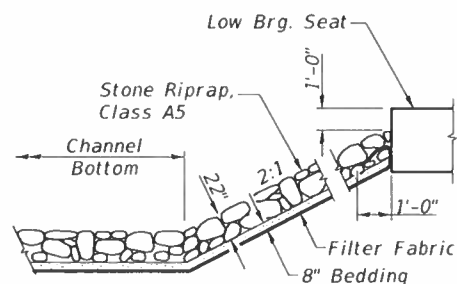
NAME PLATE

Locate Name Plate at S.W. Wingwall
 Corner of Bridge (See Std. 515001)

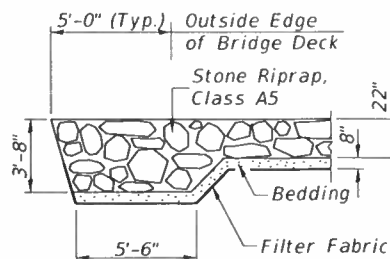
TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Channel Excavation	CU YD	---	770	770
Stone Riprap, Class A5	TON	---	560	560
Filter Fabric	SQ YD	---	445	445
Hot-Mix Asphalt Surface Course, IL-9.5, Mix "C", N50	TON	31	---	31
Removal of Existing Structures	EACH	---	---	1
Structure Excavation	CU YD	---	85	85
Concrete Structures	CU YD	---	31.7	31.7
Concrete Encasement	CU YD	---	3.5	3.5
Protective Coat	SQ YD	130	---	130
Precast Prestressed Concrete Deck Beams (33" Depth)	SQ FT	2,501	---	2,501
Reinforcement Bars, Epoxy Coated	POUND	---	3,750	3,750
Furnishing Steel Piles HP12x53	FOOT	---	448	448
Driving Piles	FOOT	---	448	448
Test Pile Steel HP12x53	EACH	---	2	2
Name Plates	EACH	---	1	1
Waterproofing Membrane System	SQ YD	264	---	264
Portland Cement Mortar Fairing Course	FOOT	140	---	140
Controlled Low-Strength Material	CU YD	---	23.4	23.4
Concrete Bridge Railing	FOOT	160	---	160

① See Special Provisions



STONE RIPRAP DETAIL

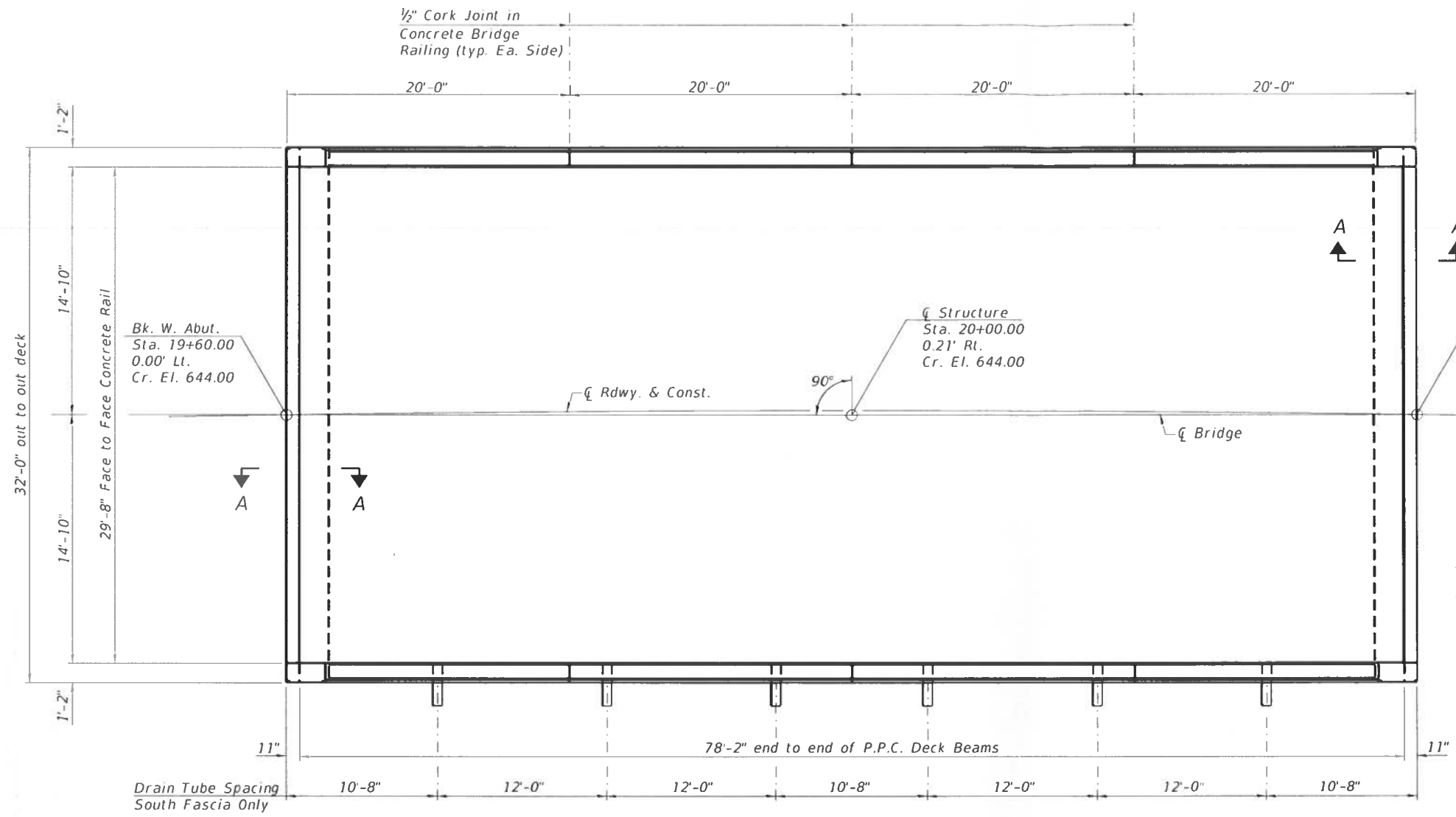


SECTION A-A

**GENERAL NOTES, DETAILS,
 & BILL OF MATERIAL
 SCHUYLER COUNTY
 SECTION 18-00080-00-BR
 F.A.S. 583 (C.H. 5) OVER
 SOUTH FORK CEDAR CREEK**

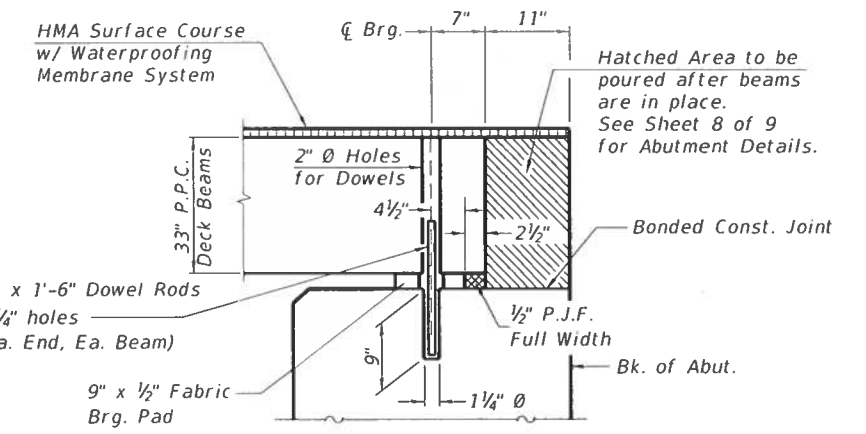
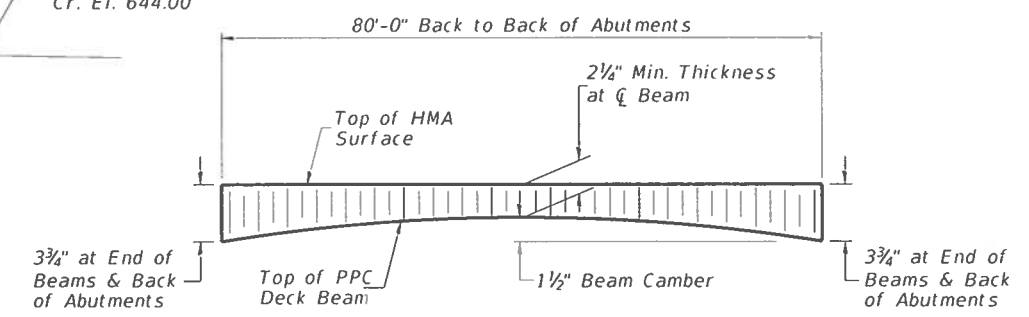
SHEET NO. 2 9 SHEETS	F.A.S. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	583	18-00080-00-BR	SCHUYLER	24	8
	S.N. 085-3059		CONTRACT NO. 93757		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT NO. HVLM(959)		

- Notes:
 1. See Sheet 4 & 5 of 9 for Concrete Bridge Railing Details and Bill of Material.
 2. See Sheet 6 of 9 for fabric bearing pad details.

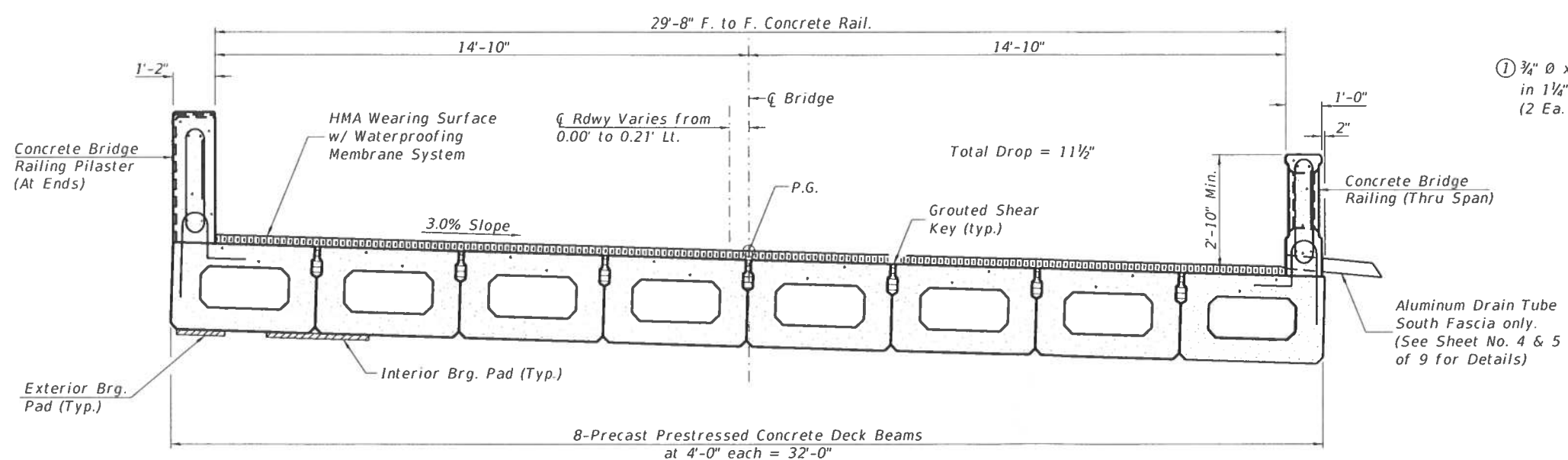


BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Hot-Mix Asphalt Surface Course, IL-9.5, Mix "C", N50	TON	31

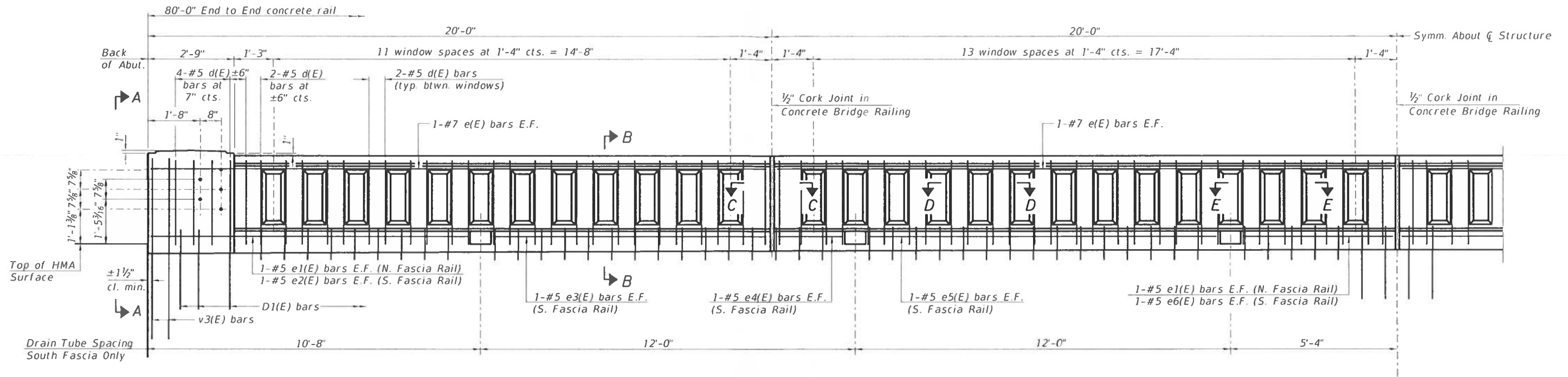


① Dowel Rods to be grouted after beams are in place and allowed to cure (Min. 24 hr.) prior to grouting the shear keys.



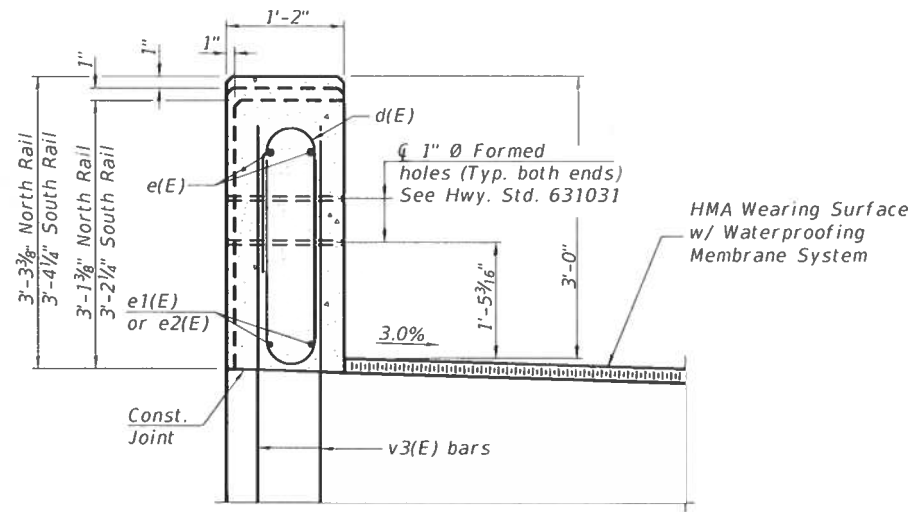
SUPERSTRUCTURE
SCHUYLER COUNTY
SECTION 18-00080-00-BR
F.A.S. 583 (C.H. 5) OVER
SOUTH FORK CEDAR CREEK

SHEET NO.	F.A.S. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SHEET NO. 3 9 SHEETS	583	18-00080-00-BR	SCHUYLER	24	9
S.N. 085-3059			CONTRACT NO. 93757		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT NO. HVLM(959)		

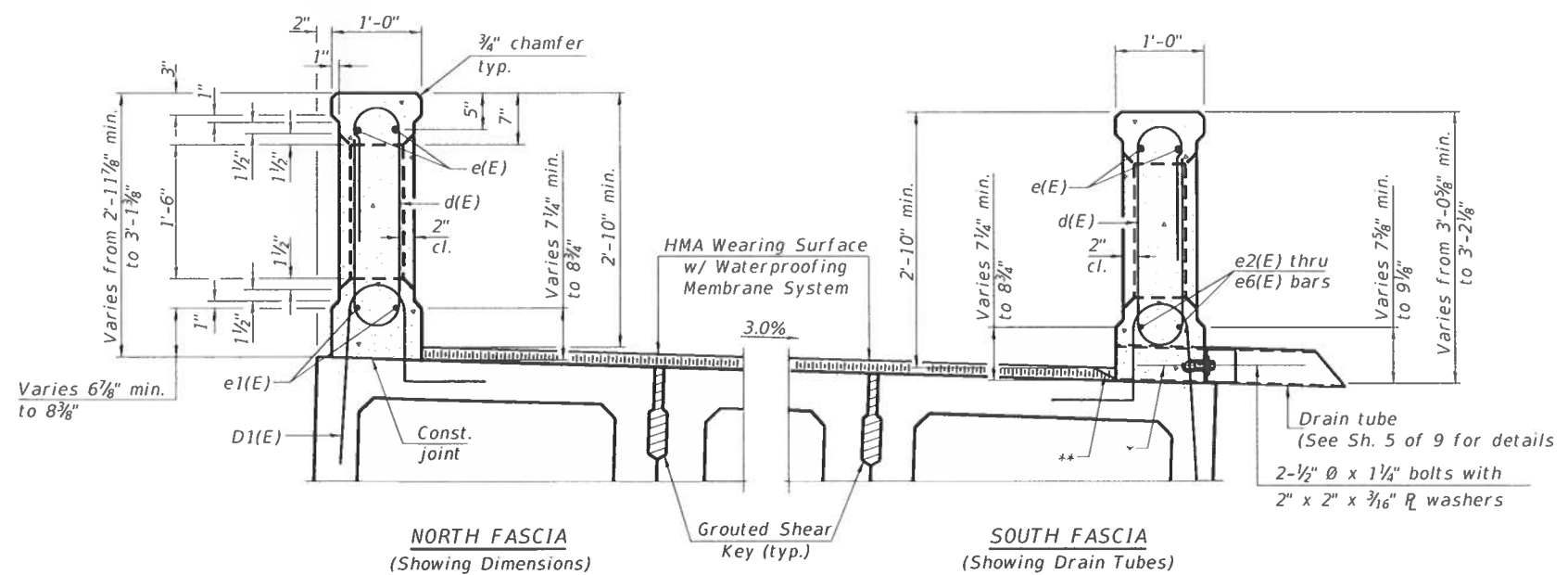


E.F. = Each Face

INSIDE ELEVATION OF CONCRETE RAILING
(South Fascia Concrete Rail Shown, North Fascia Similar.)



SECTION A-A
THRU PILASTER ON ABUTMENT BACKWALL
(North Fascia Concrete Rail Shown, South Fascia Mirrored.)



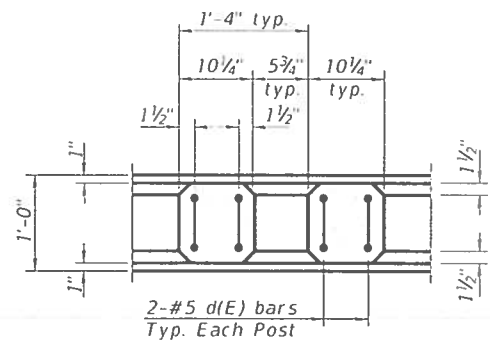
SECTION B-B
THRU WINDOW ON PPC DECK BEAM BRIDGE

- Notes:
- All concrete for bridge railing shall be Class BS according to Article 1020.04 of the Standard Specifications. Surface of railing shall receive a rubbed finish according to Article 503.15(b) of the Standard Specifications.
 - All parts of the railing including concrete, reinforcing, and drains will be paid for at the contract unit price per foot for Concrete Bridge Railing.
 - Holes and recesses must be formed or cored. Drilling is not permitted.
 - The average weight of the railing is 360 plf.
 - See Sheet 5 of 9 for Sections D-D, C-C, and E-E.
 - See Sheet 6 & 7 of 9 for D1(E) bar spacing and details.
 - See Sheet 8 of 9 for v3(E) bar details.
 - Cut D1(E) bars flush at the top of the PPC Deck Beam that interfere with the drainage tube.
 - Spacing of d(E) bars may be adjusted in the immediate area of the drainage tubes.
 - Drain tubes, bolts, and Loop Ferrule inserts are located on south fascia only.

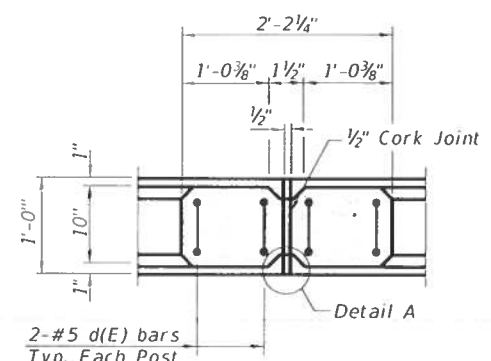
*C Loop Ferrule inserts for 1/2" Ø bolts. To be CIP with concrete rail.
**Slope HMA 1:2 (V:H) at drains (Extend deck waterproofing 2" inside drain)

CONCRETE BRIDGE RAILING
SCHUYLER COUNTY
SECTION 18-00080-00-BR
F.A.S. 583 (C.H. 5) OVER
SOUTH FORK CEDAR CREEK

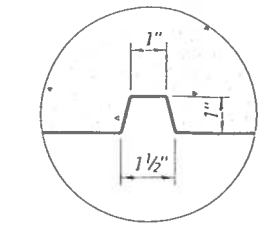
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	S.N. 085-3059		CONTRACT NO. 93757		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT NO. HVLM(959)		



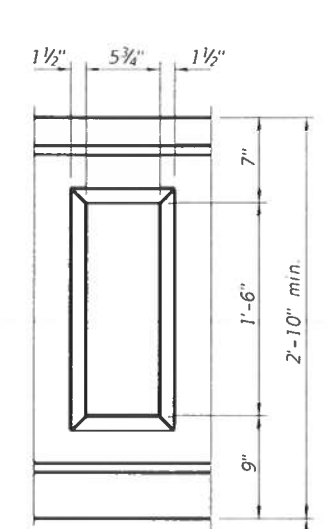
SECTION E-E



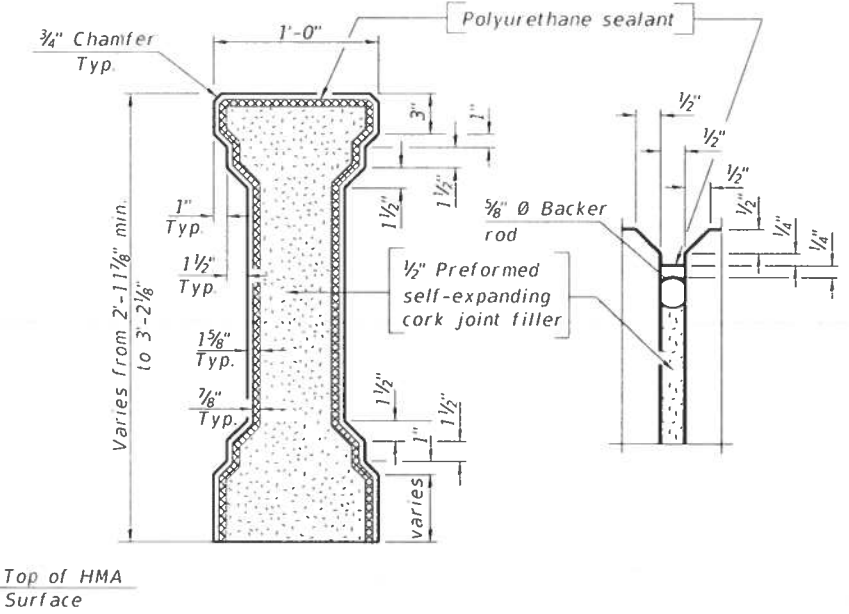
SECTION C-C



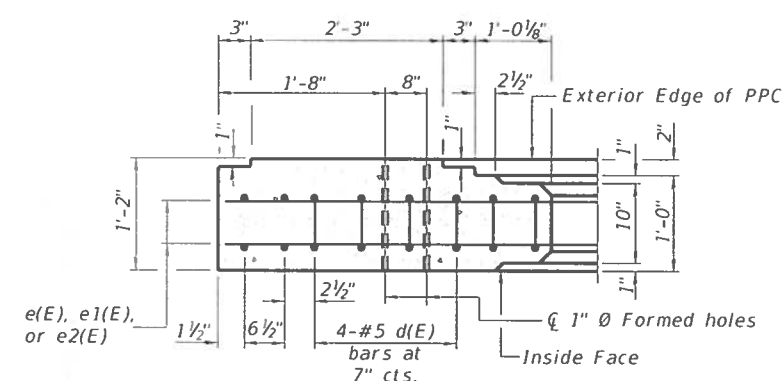
DETAIL A



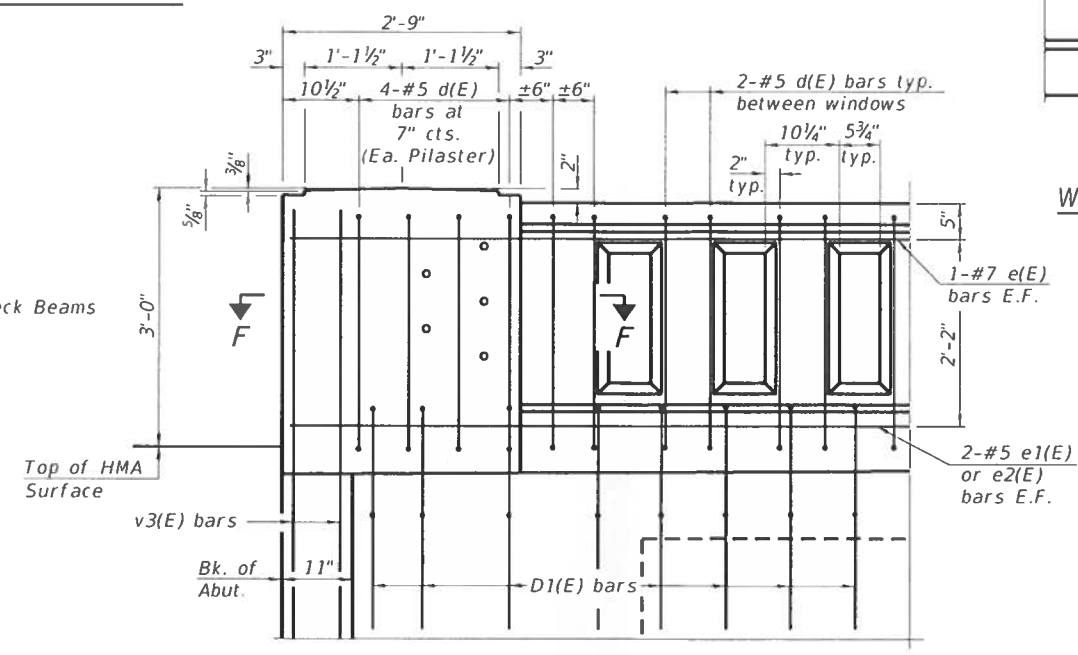
WINDOW DETAIL



CORK JOINT DETAILS

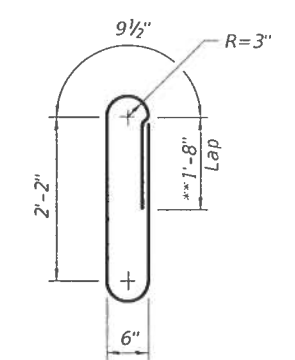


SECTION F-F



TYPICAL REINFORCEMENT PLACEMENT

Adjust d(E) reinforcement spacings as required to miss 1" formed holes.



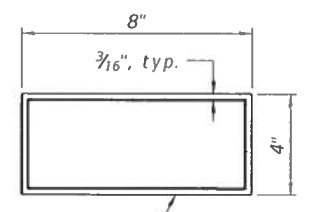
BAR d(E)

**Place lap on back side of railing.

BAR LIST
TWO RAILINGS
(For information only)

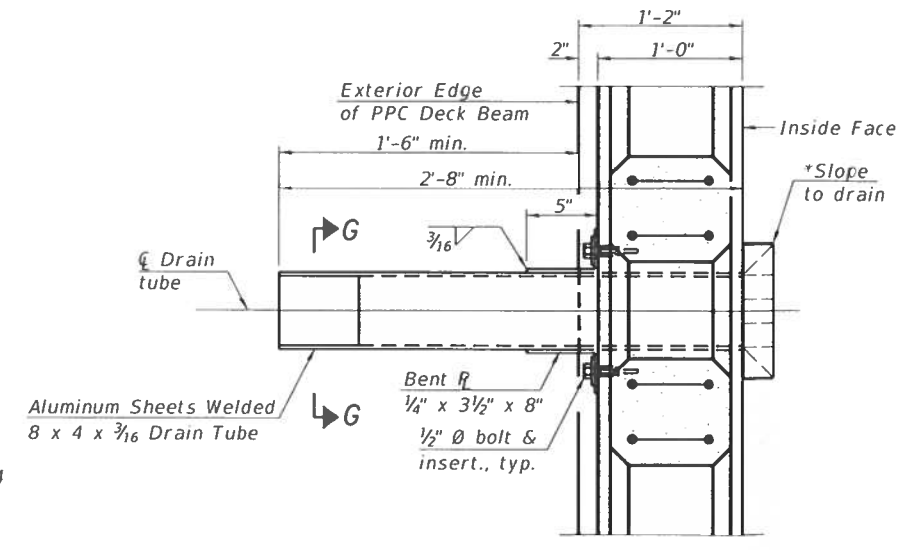
BAR	NO.	SIZE	LENGTH	SHAPE
d(E)	240	#5	7'-7"	
e(E)	16	#7	19'-7"	—
e1(E)	8	#5	19'-7"	—
e2(E)	4	#5	10'-1"	—
e3(E)	4	#5	8'-8"	—
e4(E)	4	#5	2'-0"	—
e5(E)	4	#5	11'-1"	—
e6(E)	4	#5	4'-8"	—
Concrete Superstructure		CU YD	17.0	
Reinforcement Bars, Epoxy Coated		POUND	2,850	

All parts of the railing including concrete, reinforcing, and drains will be paid for at the contract unit price per foot for Concrete Bridge Railing.



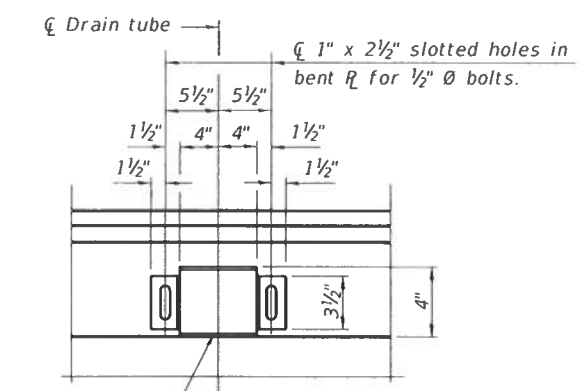
DRAIN DETAIL

Aluminum Sheets Welded
ASTM: B209 alloy 6061-T6



SECTION D-D

*Slope HMA 1:2 (V:H) at drains
(Extend deck waterproofing 2" inside drain)



VIEW G-G

Aluminum Sheets Welded
8 x 4 x 3/16" Drain Tube

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Concrete Bridge Railing	FOOT	160

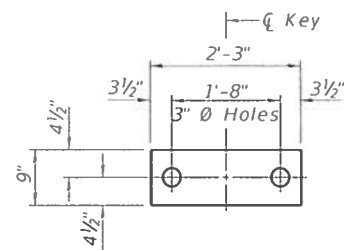
① See Special Provisions

CONCRETE BRIDGE RAILING DETAILS
SCHUYLER COUNTY
SECTION 18-00080-00-BR
F.A.S. 583 (C.H. 5) OVER
SOUTH FORK CEDAR CREEK

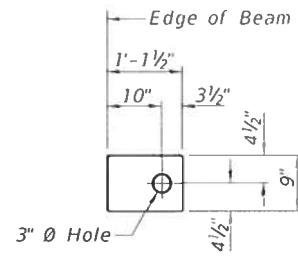
SHEET NO.	F.A.S. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5	583	18-00080-00-BR	SCHUYLER	24	11
9 SHEETS		S.N. 085-3059	CONTRACT NO. 93757		
		FED. ROAD DIST. NO. 7 ILLINOIS	FED. AID PROJECT NO. HVLN(959)		

4342-b005-dgdl1/2/2020 10:15:41 AM

- Notes:
- The Polyurethane Sealant shall be according to Article 1050.04 of the Std. Spec. and the color shall be gray. Cost included with Concrete Bridge Railing.
 - Drain accessories shall be galvanized according to AASHTO M111 or M232, (as applicable).
 - The cost of the drain tube assemblies and everything necessary for their installation is included with Concrete Bridge Railing.
 - See Sheet 6 & 7 of 9 for D1(E) bar spacing and details.
 - See Sheet 8 of 9 for v3(E) bar details.

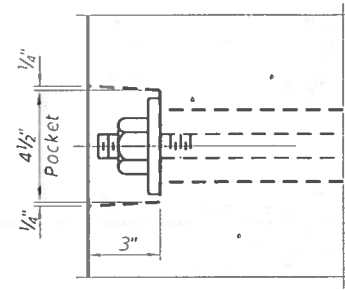


1/2" FABRIC BEARING PAD
(Interior) 14 Required

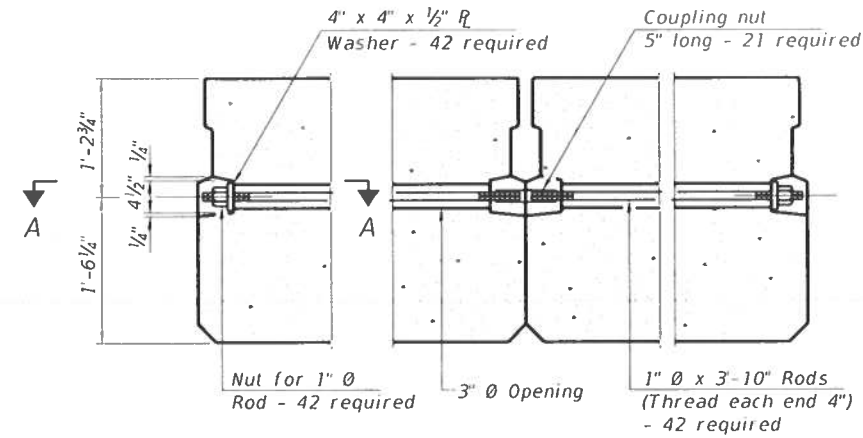


1/2" FABRIC BEARING PAD
(Exterior) 4 Required

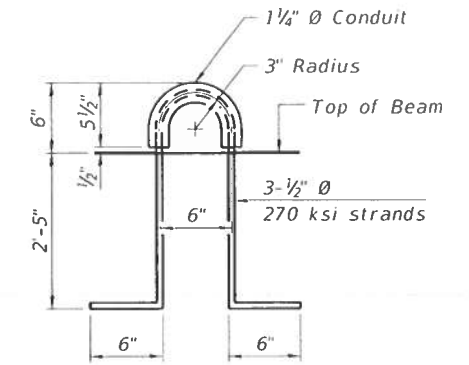
FIXED



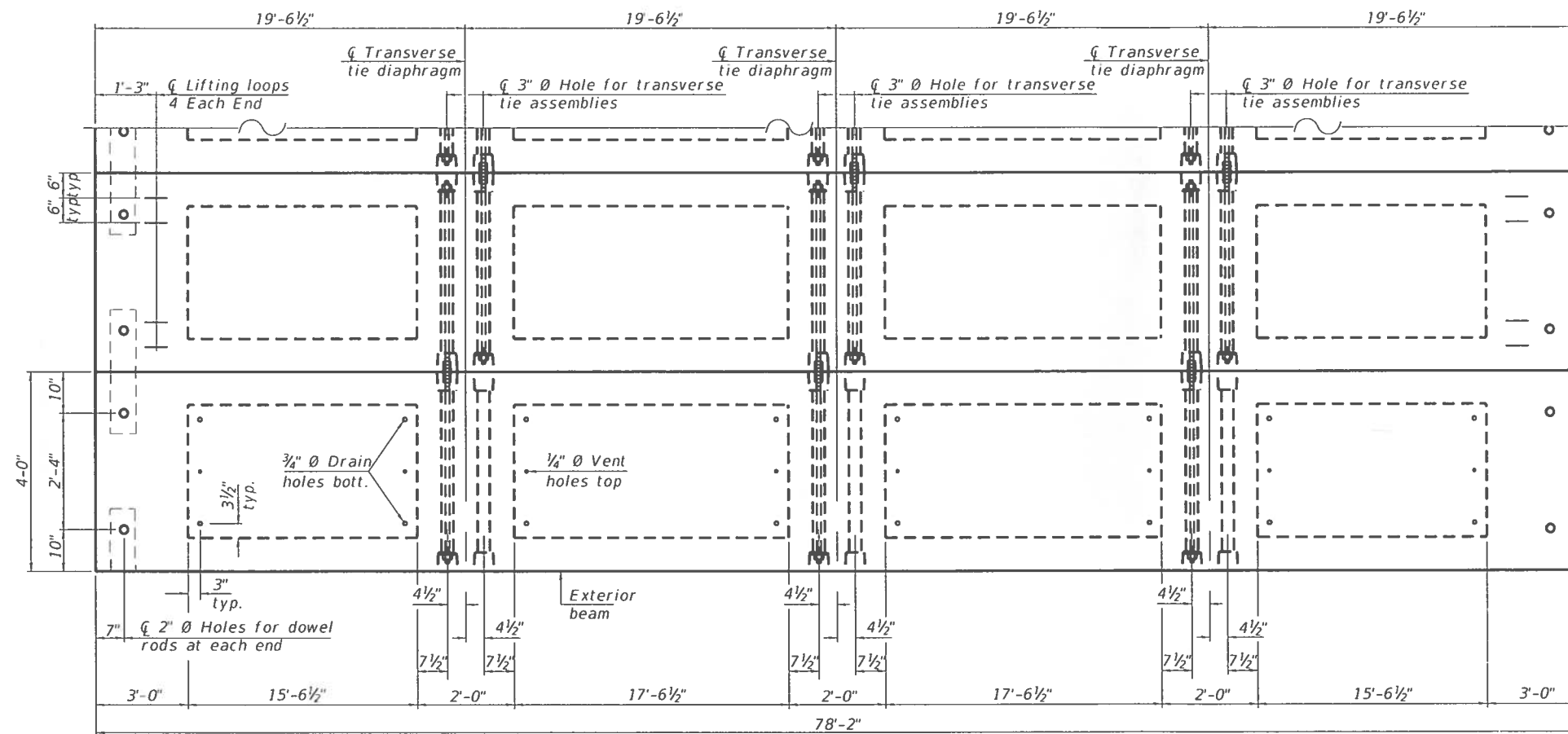
SECTION A-A



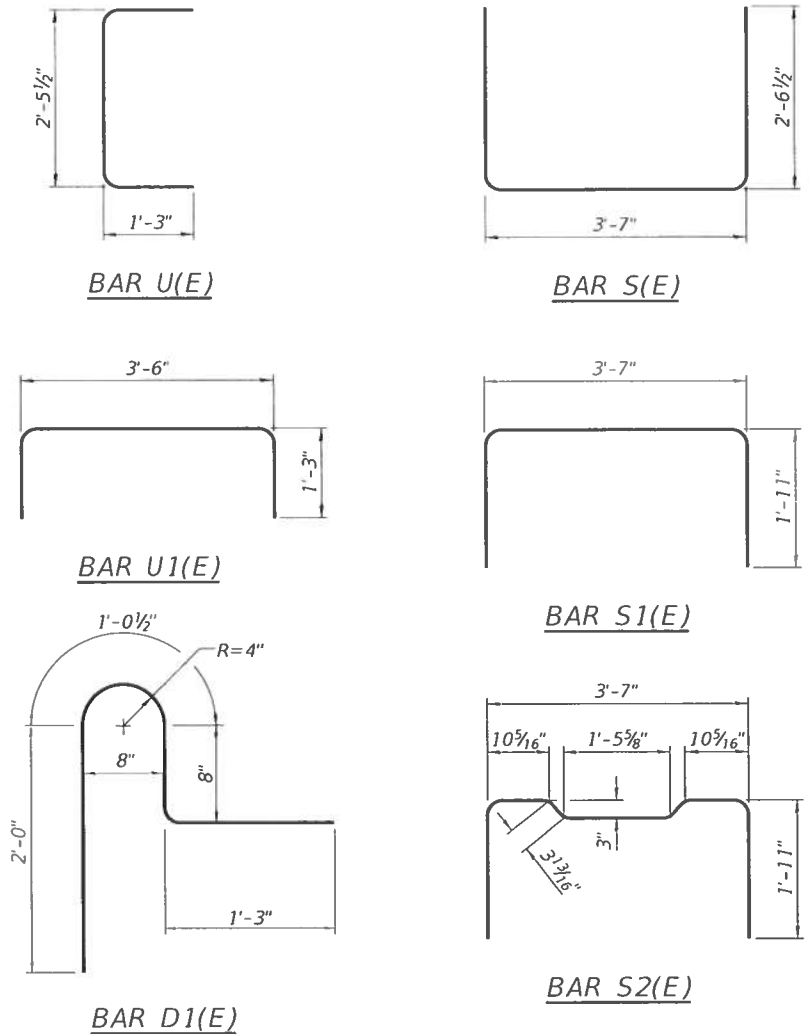
TYPICAL TRANSVERSE TIE ASSEMBLY



LIFTING LOOP DETAIL



PLAN VIEW



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

NOTES

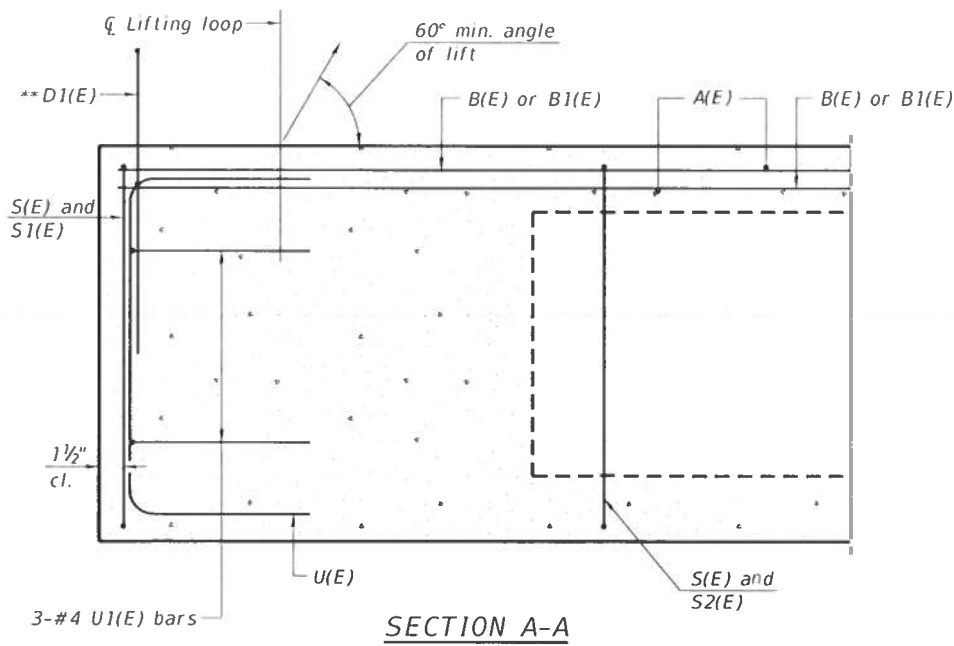
1. Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in.
2. The 1" rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place.
3. Two 1/8" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.
4. A minimum 2 1/2" diameter lifting pin shall be used to engage the lifting loops during handling.
5. 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.
6. Compressive strength of prestressed concrete, f'c, shall be 6000 psi.
7. Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.

BILL OF MATERIAL

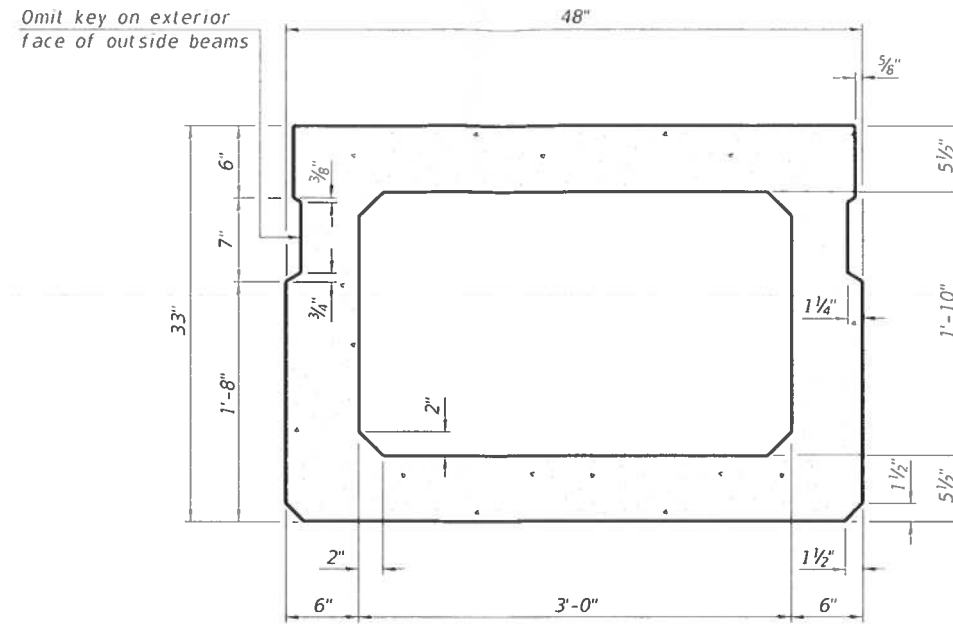
ITEM	UNIT	QUANTITY
Precast Prestressed Concrete Deck Beams (33" Depth)	SQ FT	2,501

33" x 48" PPC DECK BEAM DETAILS
SCHUYLER COUNTY
SECTION 18-00080-00-BR
F.A.S. 583 (C.H. 5) OVER
SOUTH FORK CEDAR CREEK

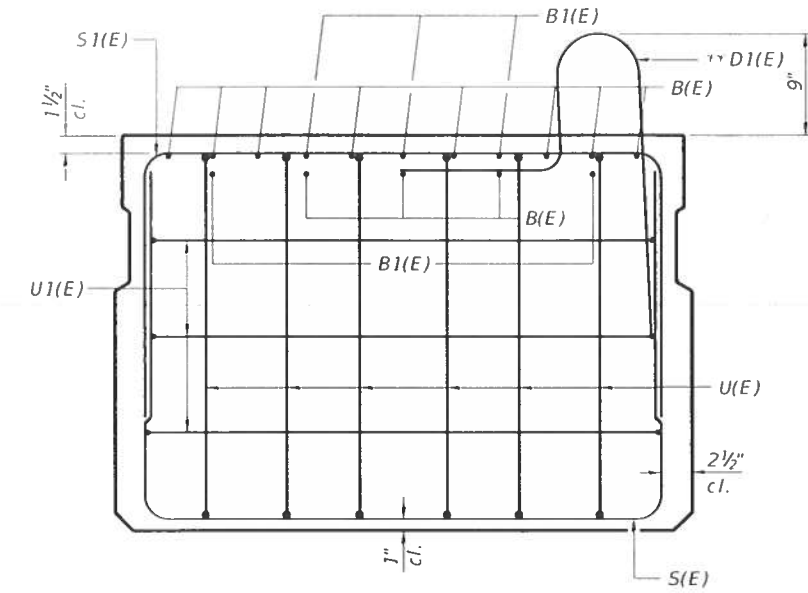
SHEET NO.	F.A.S. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6	583	18-00080-00-BR	SCHUYLER	24	12
9 SHEETS	S.N. 085-3059		CONTRACT NO. 93757		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT NO. HVLM(959)		



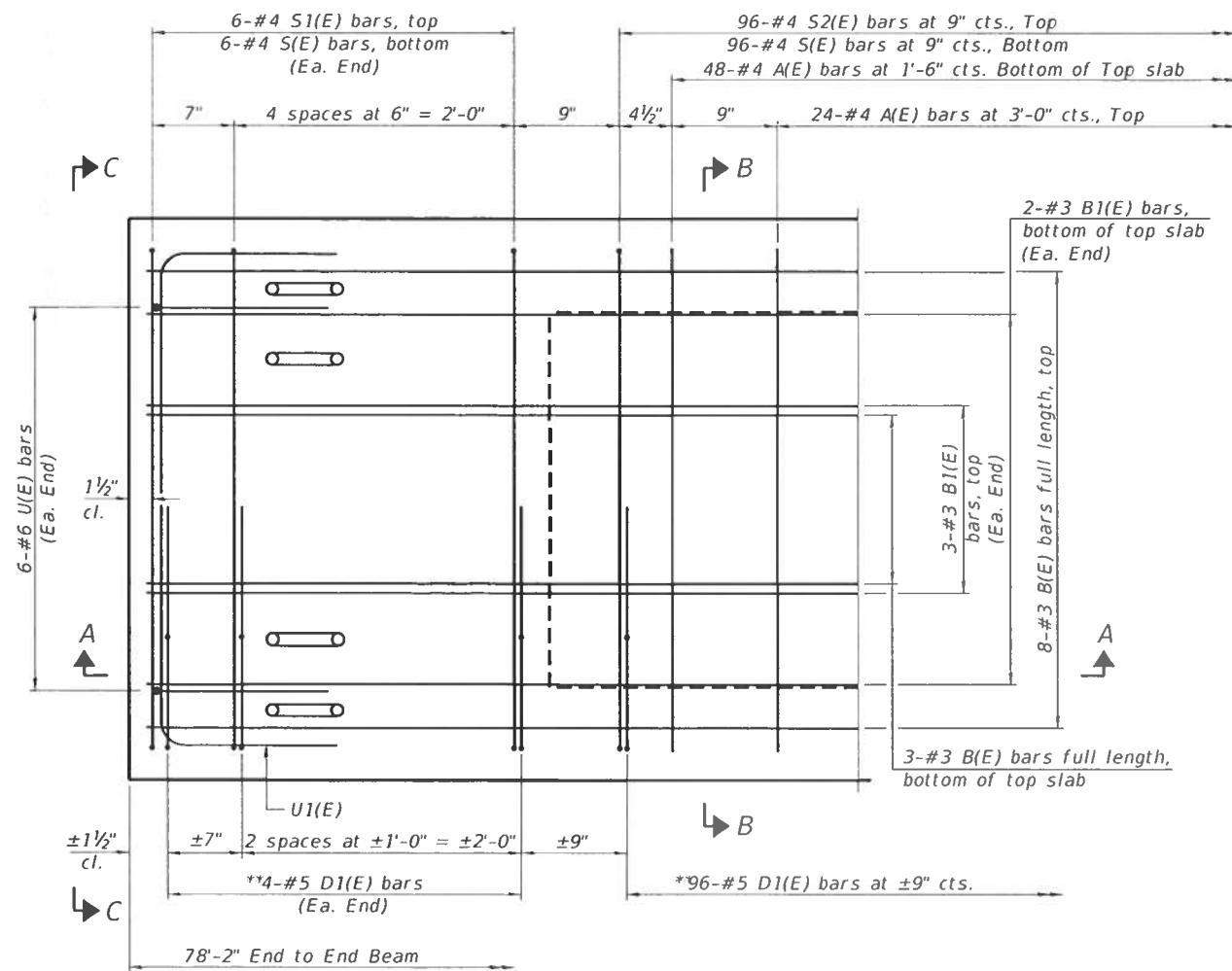
SECTION A-A



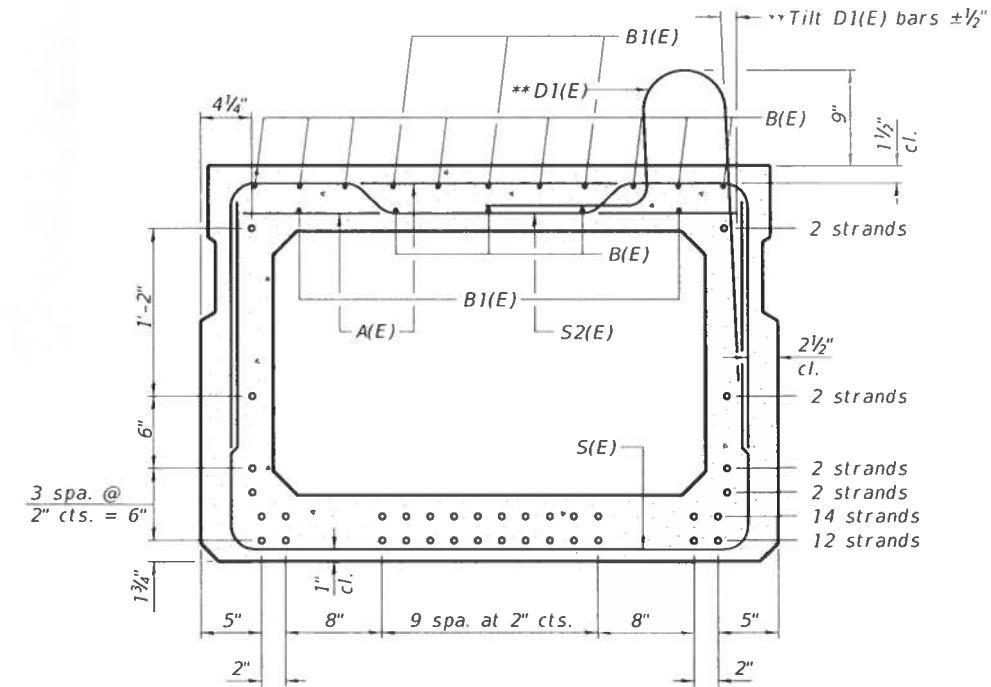
SECTION B-B
(Showing dimensions)



VIEW C-C



PLAN VIEW



SECTION B-B

(Showing reinforcement and permissible strand locations)
 34-1/2" Ø Strands Each Strand Stressed to 30,900 Lbs.
 12-Strands 1 3/4" up, 14-Strands 3 3/4" up, 2-Strands 5 3/4" up,
 2-Strands 7 3/4" up, 2-Strands 13 3/4" up, 2-Strands 27 3/4" up
 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)	72	#4	3'-7"	—
B(E)	11	#3	~77'-11"	—
B1(E)	10	#3	10'-0"	—
**D1(E)	104	#5	5'-0"	└
S(E)	108	#4	8'-8"	└
S1(E)	12	#4	7'-5"	└
S2(E)	96	#4	7'-8"	└
U(E)	12	#6	5'-0"	└
U1(E)	6	#4	6'-0"	└

Note:
See Sheet 6 of 9 for additional details and Bill of Material.
The cost of D1(E) bars is included in the cost of beams.

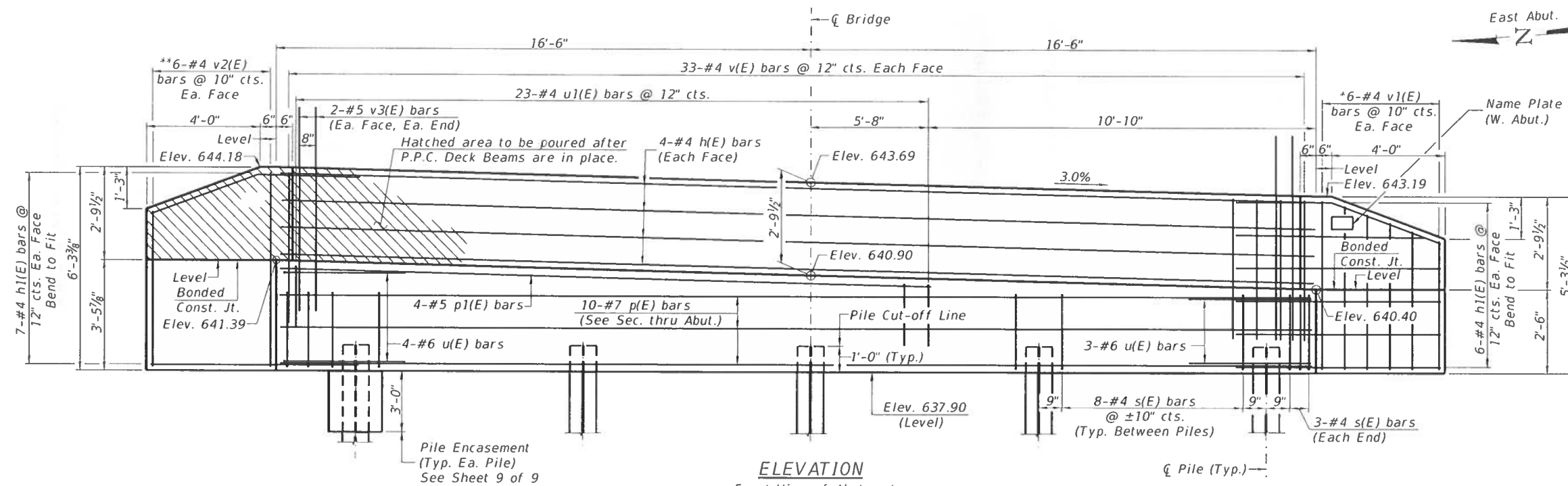
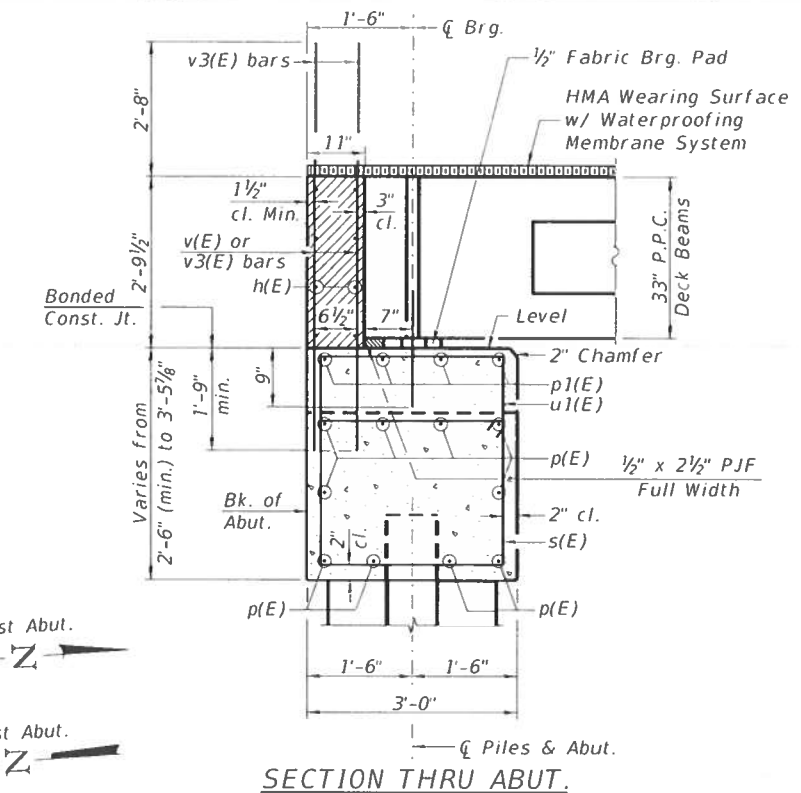
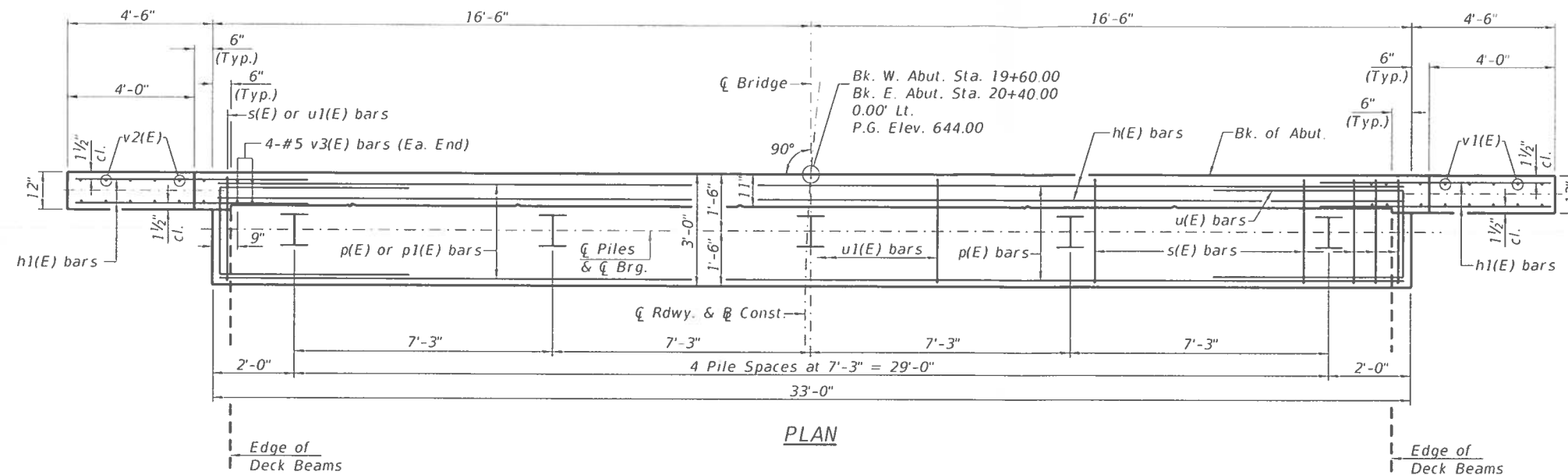
*Total length, lap as necessary.
**Exterior Beams only.

MINIMUM BAR LAP
#3 bar = 1'-6"

33" x 48" PPC DECK BEAM
SCHUYLER COUNTY
SECTION 18-00080-00-BR
F.A.S. 583 (C.H. 5) OVER
SOUTH FORK CEDAR CREEK

SHEET NO.	F.A.S. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7	583	18-00080-00-BR	SCHUYLER	24	13
9	S.N. 085-3059		CONTRACT NO. 93757		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT NO. HVLM(959)		

Note: Spacing of D1(E), 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.



TWO ABUTMENTS - BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
h(E)	16	#4	32'-9"	—
h1(E)	52	#4	6'-6"	—
p(E)	20	#7	32'-9"	—
p1(E)	8	#5	22'-0"	—
s(E)	76	#4	10'-5"	□
u(E)	14	#6	11'-7"	□
u1(E)	46	#4	6'-8"	□
v(E)	132	#4	4'-6"	—
v1(E)	12	#4	8'-9"	—
v2(E)	12	#4	10'-9"	—
v3(E)	16	#5	7'-3"	—

Structure Excavation	CU YD	85
① Concrete Structures	CU YD	31.7
① Concrete Encasement	CU YD	3.5
Reinforcement Bars, Epoxy Coated	POUND	3,750
Furnishing Steel Piles HP12x53	FOOT	448
Driving Piles	FOOT	448
Test Pile Steel HP12x53	EACH	2
Name Plates	EACH	1

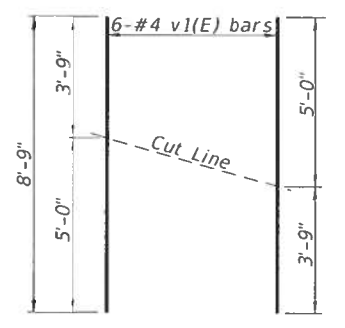
① See Special Provisions

ABUTMENTS
SCHUYLER COUNTY
SECTION 18-00080-00-BR
F.A.S. 583 (C.H. 5) OVER
SOUTH FORK CEDAR CREEK

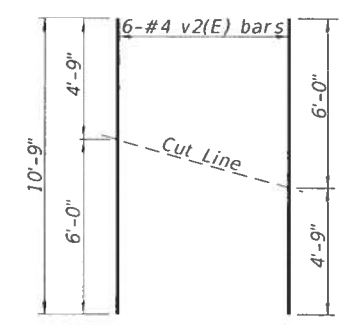
PILE DATA
 Type & Size: Steel HP12x53
 Nominal Required Bearing: 419 kips
 Factored Resistance Available: 230 kips
 Est. Length: 56' W. Abut.
 56' E. Abut.
 No. Req'd.: 10 (Includes 1 Test Pile at Each Abut.)

NOTES

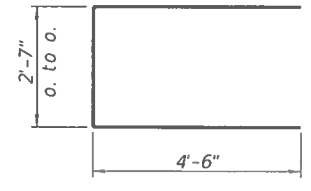
1. The backwall and the portion of the wingwalls above the bonded construction joint shall be cast against the in-place beam.
2. All edges shall have standard 3/4" chamfer.
3. Reinforcement Bars, Epoxy Coated shall conform to ASTM A706 Grade 60.



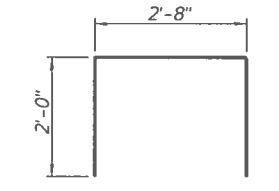
BAR CUTTING DIAGRAM
 *Order v1(E) bars full length. Cut as shown and use remainder of bars in opposite face.



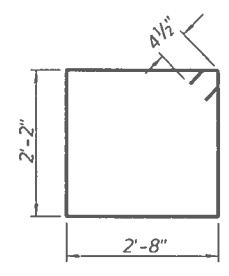
BAR CUTTING DIAGRAM
 **Order v2(E) bars full length. Cut as shown and use remainder of bars in opposite face.



BAR u(E)

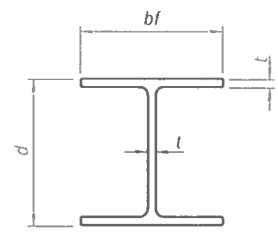


BAR u1(E)



BAR s(E)

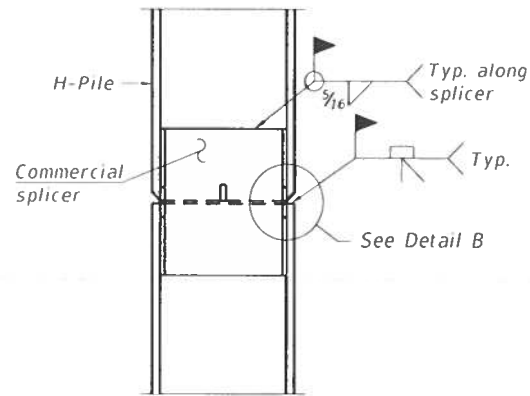
SHEET NO. 8 9 SHEETS	F.A.S. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	583	18-00080-00-BR	SCHUYLER	24	14
	S.N. 085-3059		CONTRACT NO. 93757		
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT NO. HVLM(959)		



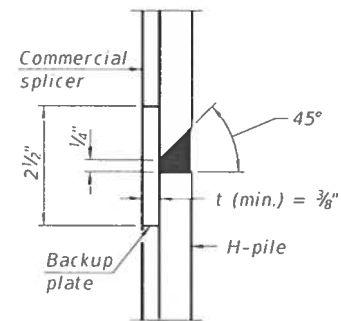
STEEL PILE TABLE

Designation	Depth d	Flange width bf	Web and Flange thickness t	Encasement diameter
HP 14x117	14 1/4"	14 7/8"	1 3/16"	30"
x102	14"	14 3/4"	1 1/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 3/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1 1/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"
x53	11 3/4"	12"	7/16"	24"
HP 10x57	10"	10 1/4"	9/16"	24"
x42	9 3/4"	10 1/8"	7/16"	24"
HP 8x36	8"	8 1/8"	7/16"	18"

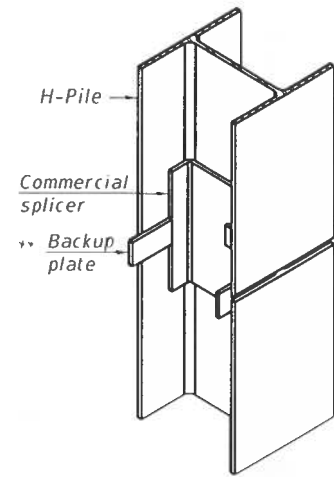
Note:
The steel H-piles shall be according to AASHTO M270 Grade 50.



ELEVATION

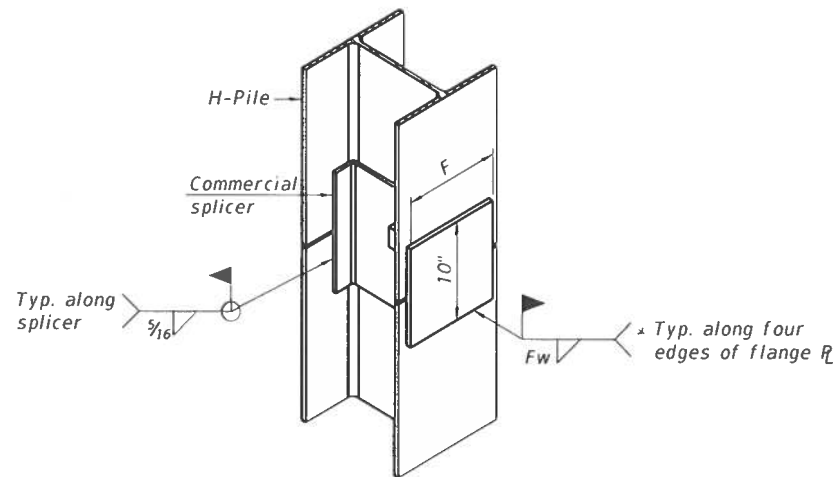


DETAIL "B"



ISOMETRIC VIEW

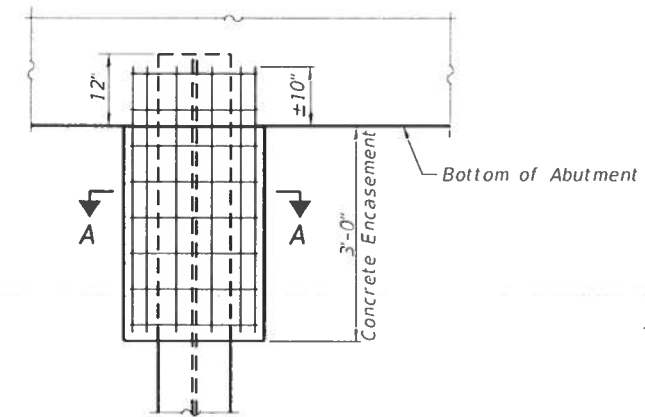
WELDED COMMERCIAL SPLICE



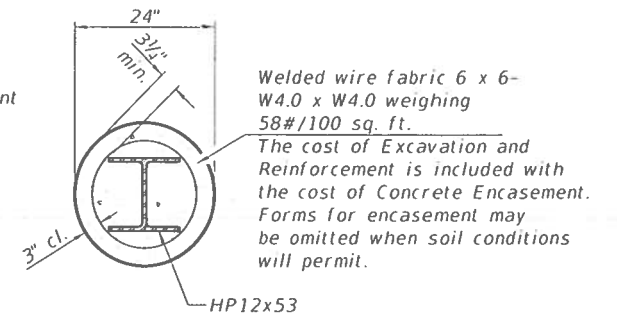
ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE

* Interrupt welds 1/4" from end of web and/or each flange.
** Remove portions of backup plates that extend outside the flanges.

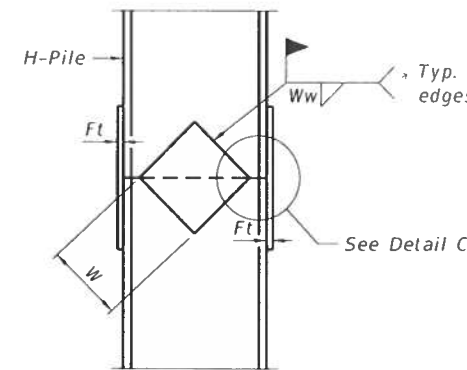


ABUTMENT ELEVATION

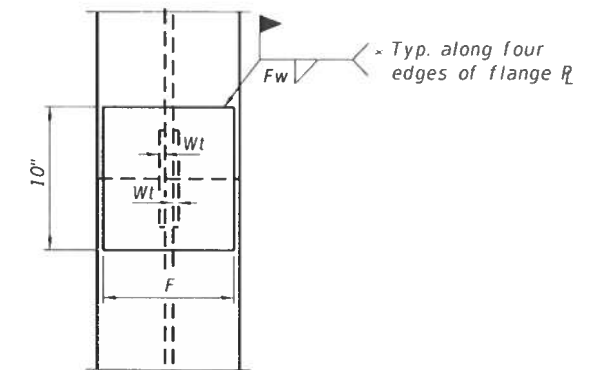


SECTION A-A

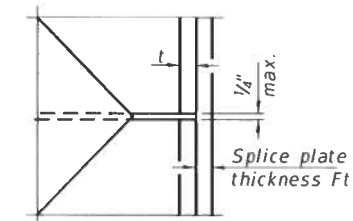
PILE ENCASEMENT



ELEVATION



END VIEW



DETAIL C

Designation	F	Ft	Fw	W	Wt	Ww
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5/8"	1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5/8"	1/2"
x89	12 1/2"	3/4"	1 1/16"	7 3/4"	5/8"	1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5/8"	1/2"
HP 12x84	10"	7/8"	1 1/16"	6 1/2"	5/8"	1/2"
x74	10"	7/8"	1 1/16"	6 1/2"	5/8"	1/2"
x63	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
x53	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
HP 10x57	8"	3/4"	9/16"	5 1/4"	1/2"	3/8"
x42	8"	5/8"	9/16"	5 1/4"	1/2"	3/8"
HP 8x36	7"	5/8"	7/16"	4 1/4"	1/2"	3/8"

WELDED PLATE FIELD SPLICE

**HP PILE DETAILS
SCHUYLER COUNTY
SECTION 18-00080-00-BR
F.A.S. 583 (C.H. 5) OVER
SOUTH FORK CEDAR CREEK**

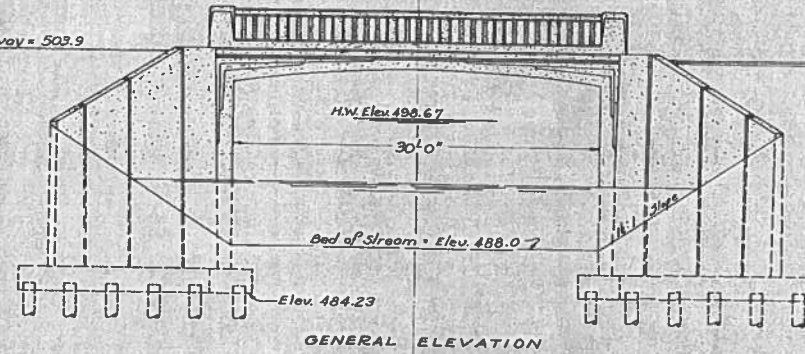
SHEET NO. 9 9 SHEETS	F.A.S. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	583	18-00080-00-BR	SCHUYLER	24	15
	S.N. 085-3059		CONTRACT NO. 93757		
	FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT NO. HVLM(959)		

B.M. #1 "a" cut in Northend of East Headwall of
S.R. Culvert - 35 ft. Sp. 21' - Elev. 500.00
Existing Structure - 1' Beam - 30' Span - 14' Rdwy.
to be removed by Bridge Contractor.

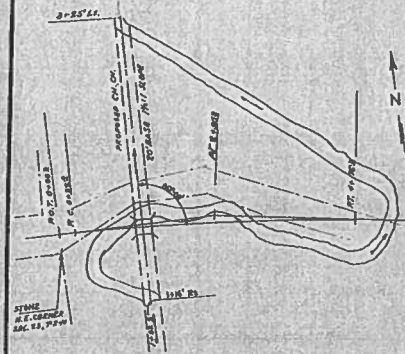
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

PROJECT NO.	SEC.	COUNTY	SECTION	SHEET NO.
SA 5	18	Schuyler	00 BR	1
SHEET NO. 1 OF SHEETS 4				

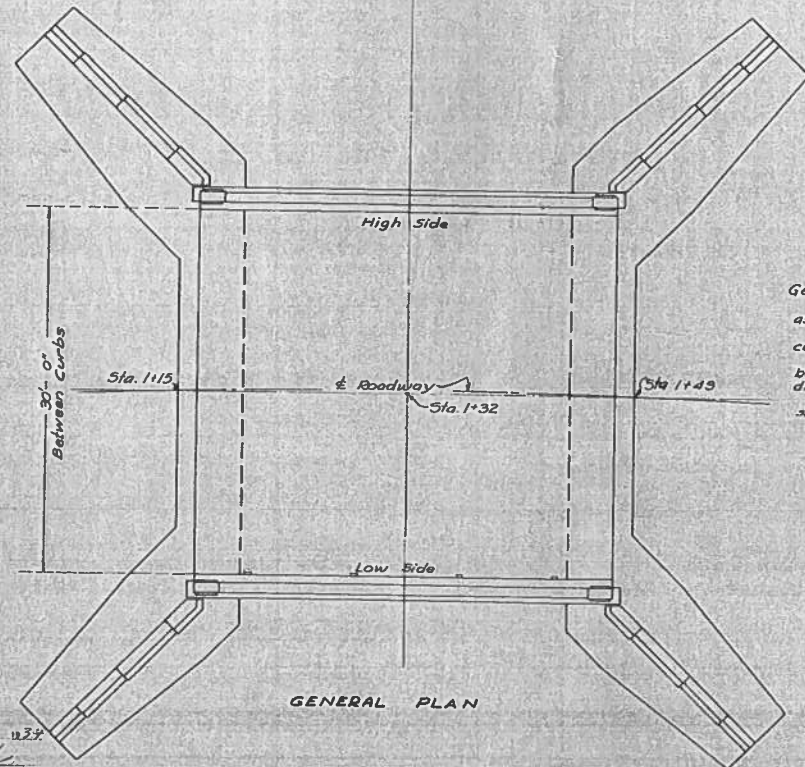
Crown Elev. of Roadway = 503.9



GENERAL ELEVATION



Horizontal Curve Data
P.L. Sta. 2+50
S = 9° 04'
D = 2° 00'
T = 227.1'
L = 453.3'
R = 2065.33'
S.E. = 0.029 1/4 ft.



GENERAL PLAN

General Notes
Two Test Piles shall be driven by the Contractor, as directed by the Engineer before ordering Piles. Do not place backfill until entire structure is completed and the falsework removed. Backfill shall be carried up simultaneously at both abutments. At no time shall there be a greater difference in height of backfill than two (2) ft. No construction joints other than those shown on plans will be permitted.

TOTAL BILL OF MATERIAL

ITEM	QUANTITY	UNIT
Class X Concrete	222.6	Cu. Yds.
Monorail Concrete	6.2	Cu. Yds.
Reinforcing Steel	21,410	Lbs.
Removal of Existing Structure	1	Each
Untreated Piling Up to 50 ft.	1800	Lb. Ft.
Test Piles	2	Each

COMPUTED	TA Broderick	DATE	12-24 1934
CHECKED	T.A.B. L.B.	DESIGNED	J.F. Burel
DRAWN	H.G. G.	PASSED	[Signature]
CHECKED	T.A.B. L.B.	APPROVED	E. Lieberman
SPECIAL	ASSEMBLED		

BRIDGE ON
E3-Q

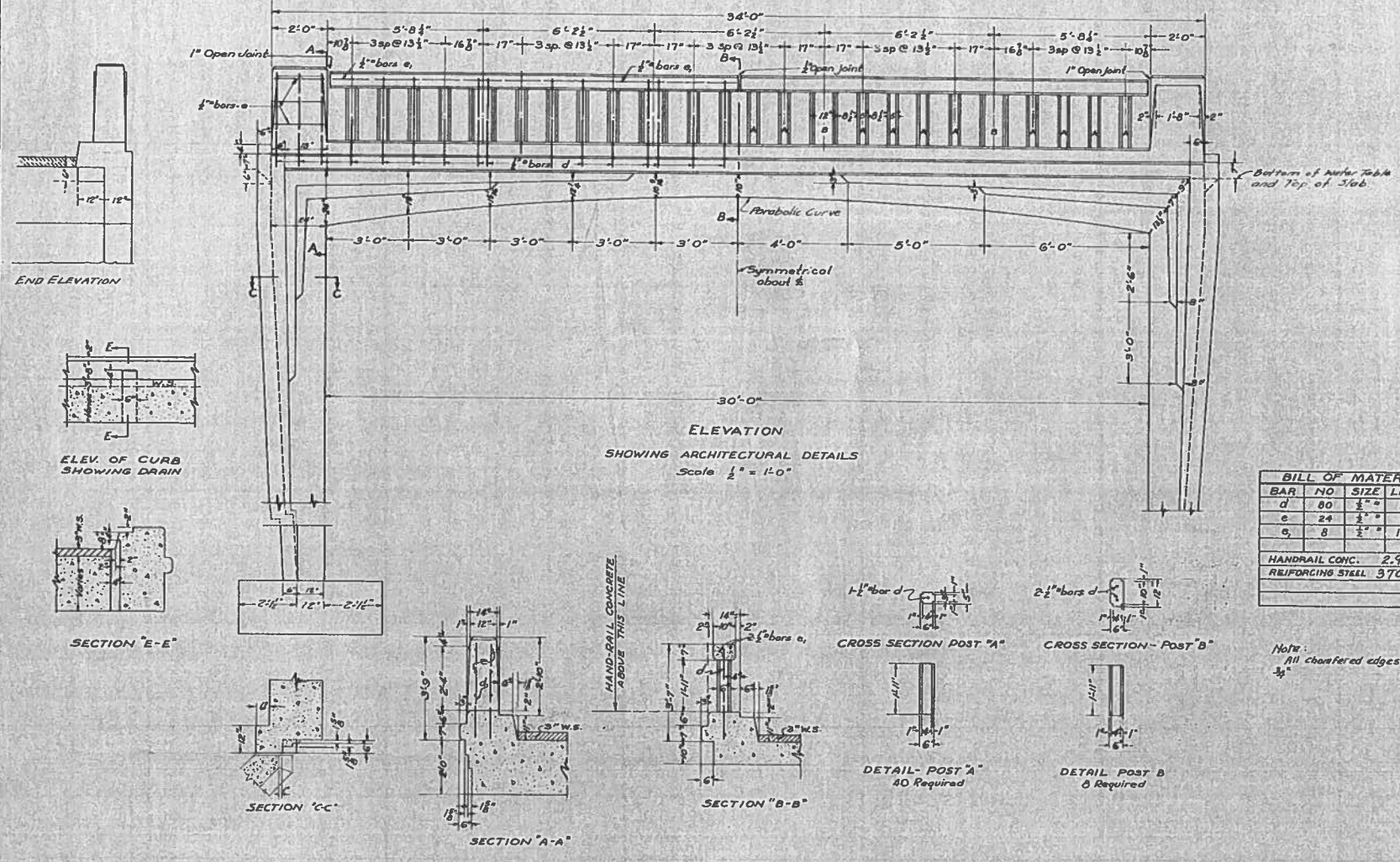
N.R.S. PROJECT NO. 343-B
S.A. Rte. 5 - Sec. 9 G - NRS
SCHUYLER-ADAMS COUNTIES
STA. 1+32

EXISTING STRUCTURE PLANS
SN 085-3051
SCHUYLER COUNTY
SECTION 18-00080-00-BR
F.A.S. 583 (C.H. 5) OVER
SOUTH FORK CEDAR CREEK

SHEET NO. 1 4 SHEETS	F.A.S. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	583	18-00080-00-BR	SCHUYLER	24	16
	S.N. 085-3059		CONTRACT NO. 93757		
	FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT NO. HVLM(959)		

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

PROJECT NO.	SEC.	COUNTY	SHEET NO.	TOTAL SHEETS
5A-5	583	Schuyler	93	177
SHEET NO. 2				



BILL OF MATERIAL

BAR NO	SIZE	LENGTH
d	1/2"	3'-6"
e	1/2"	7'-9"
g	1/2"	14'-6"

HANDRAIL CONC. 2.9 CU YDS
REINFORCING STEEL 370 LBS.

Note:
All chamfered edges to be 3/8"

COMPUTED	T.A.B.	EXAMINED	P.T. Busch	1958
CHECKED	[Signature]	PASSED	[Signature]	
DRAWN	G.H.W. - H.S.B., Jr.	APPROVED	[Signature]	
CHECKED	[Signature]			
ASSEMBLED	[Signature]			
CHECKED	[Signature]			

N.R.S. PROJECT NO. 343-B
S.A. RTE. 5 SEC. 9B-NRS.
SCHUYLER-ADAMS COUNTIES
STA. 11+32.

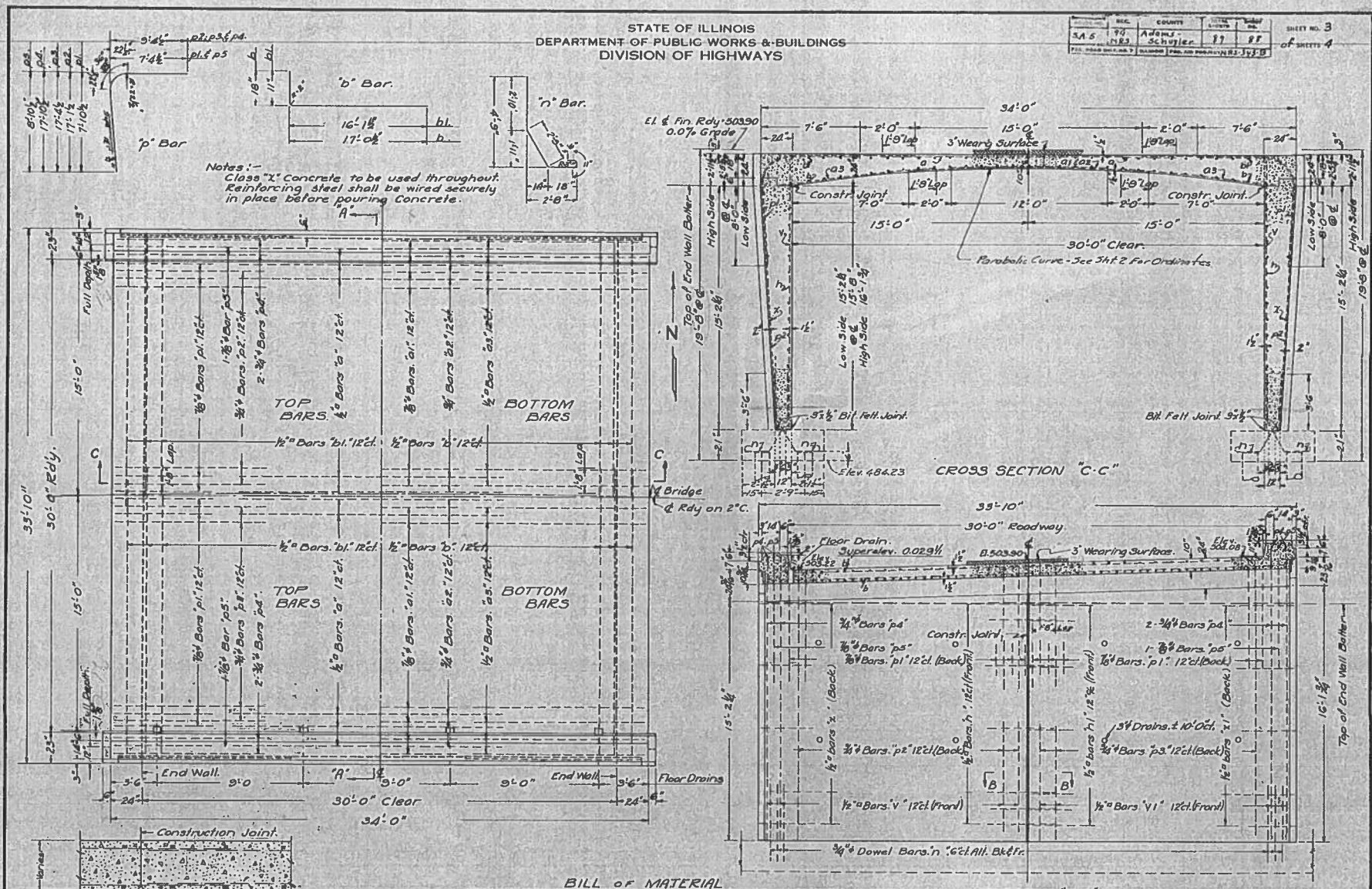
Revised (Reel B) 1-17-35 (1935)

EXISTING STRUCTURE PLANS
SN 085-3051
SCHUYLER COUNTY
SECTION 18-00080-00-BR
F.A.S. 583 (C.H. 5) OVER
SOUTH FORK CEDAR CREEK

SHEET NO. 2 4 SHEETS	F.A.S. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	583	18-00080-00-BR	SCHUYLER	24	17
	S.N. 085-3059		CONTRACT NO. 93757		
	FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT NO. HVLM(959)		

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

NO.	DATE	BY	REVISION
1	11/21/17	AS	AS
2	11/21/17	AS	AS
3	11/21/17	AS	AS
4	11/21/17	AS	AS



Notes:-
Class "X" Concrete to be used throughout.
Reinforcing steel shall be wired securely
in place before pouring concrete.

SECTION "B-B"

COMPUTED: T.A. Broderick
CHECKED: S. Bennett
DRAWN: T.A. Broderick
SPECIAL: S. Bennett
EXAMINED: J.C. Z...
PASSED: J.C. Z...
APPROVED: E. Schuyler

BILL OF MATERIAL

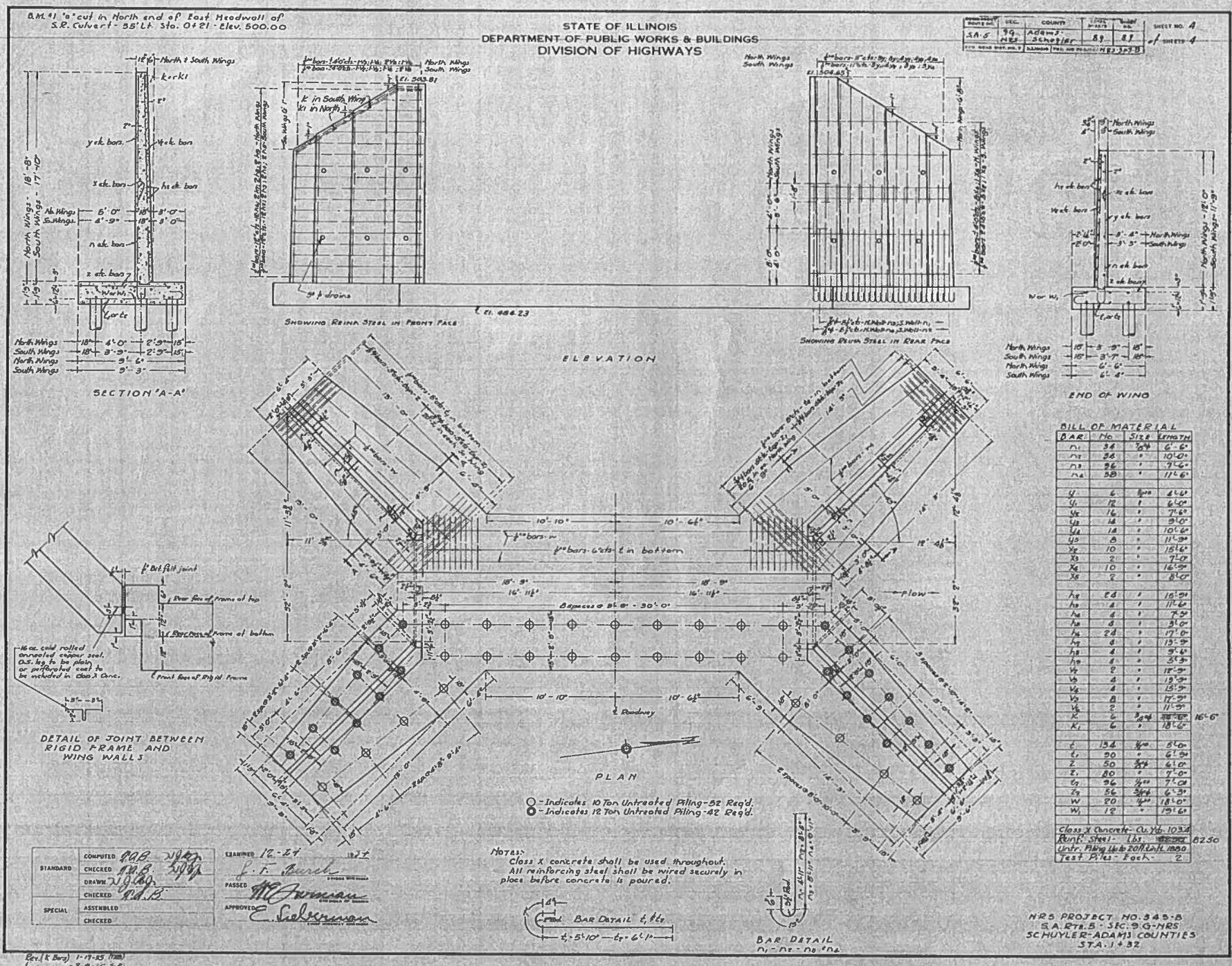
BAR No.	SIZE	LENGTH	BAR No.	SIZE	LENGTH
a	3/4"	18'-6"	v	3/4"	17'-9"
a1	3/4"	12'-0"	vi	3/4"	17'-6"
a2	3/4"	16'-0"	h	3/4"	18'-0"
a3	3/4"	9'-6"	h1	3/4"	16'-3"
b	1/2"	18'-6"	x	1/2"	18'-6"
b1	1/2"	17'-0"	xi	1/2"	16'-9"
p1	1/2"	13'-0" @ 4'-6"			
p2	3/4"	24'-0" @ 25'-9"			
p3	3/4"	26'-0"			
p4	8	26'-0" Class "X" Concrete			
p5	4	15'-6" Reinforcing Steel			

SECTION "A-A"

NRS PROJECT No. 343-B
S.A. R. 5 - SEC. 96-NRS.
SCHUYLER - ADAMS COUNTIES
S.T.A. 1+32

EXISTING STRUCTURE PLANS
SN 085-3051
SCHUYLER COUNTY
SECTION 18-00080-00-BR
F.A.S. 583 (C.H. 5) OVER
SOUTH FORK CEDAR CREEK

SHEET NO. 3 4 SHEETS	F.A.S. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	583	18-00080-00-BR	SCHUYLER	24	18
	S.N. 085-3059		CONTRACT NO. 93757		
	FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT NO. HVLM(959)		



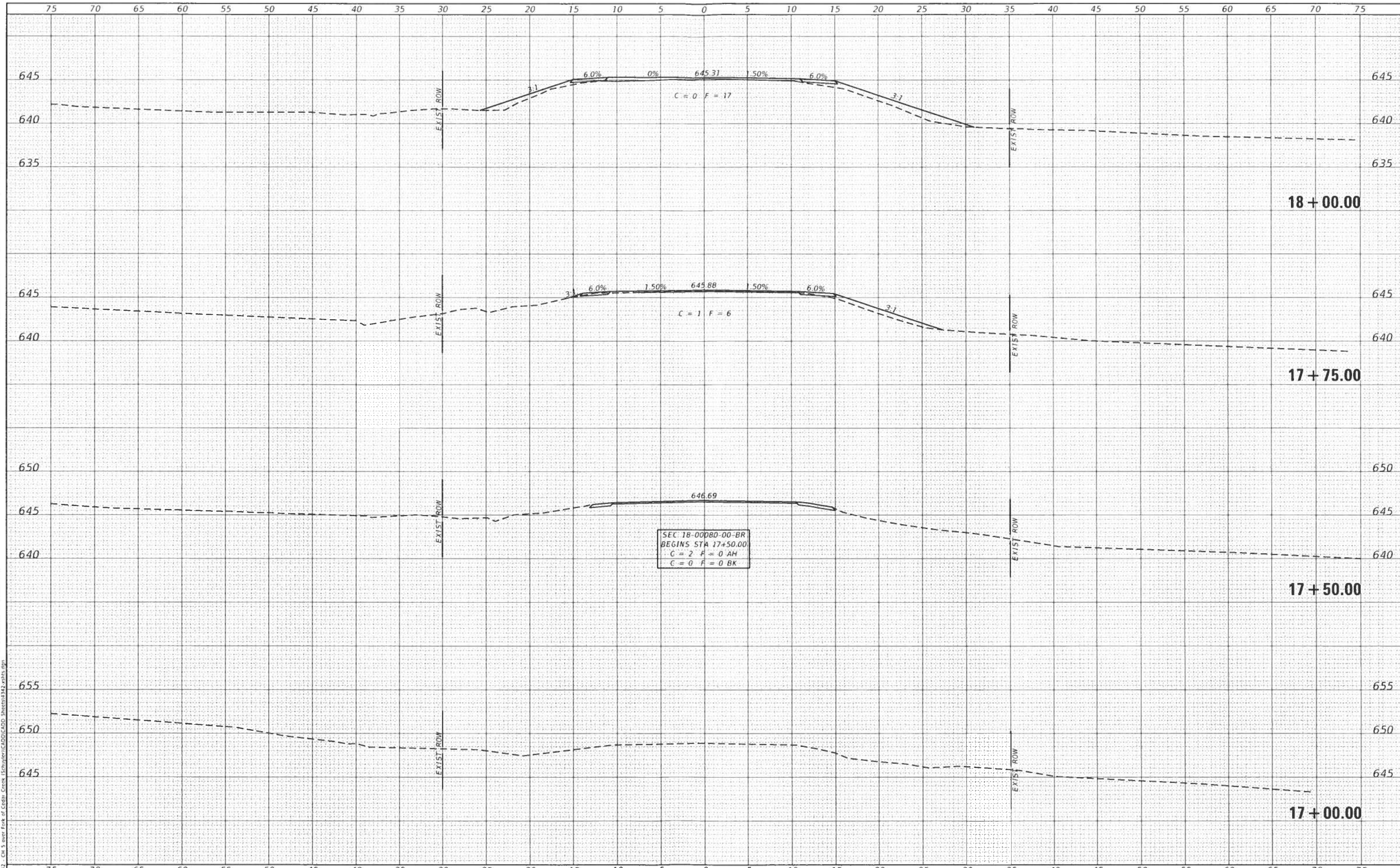
EXISTING STRUCTURE PLANS
SN 085-3051
SCHUYLER COUNTY
SECTION 18-00080-00-BR
F.A.S. 583 (C.H. 5) OVER
SOUTH FORK CEDAR CREEK

SHEET NO. 4 4 SHEETS	F.A.S. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	583	18-00080-00-BR	SCHUYLER	24	19
	S.N. 085-3059		CONTRACT NO. 93757		
FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT NO. HVLM(959)			

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

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

MODEL: Default
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SEC 18-00080-00-BR
 BEGINS STA 17+50.00
 C = 2 F = 0 AH
 C = 0 F = 0 BK

USER NAME	= SMerzwa	DESIGNED	- STM	REVISED	-
		DRAWN	- STM	REVISED	-
		CHECKED	- MMD	REVISED	-
		DATE	- 9/18/2020	REVISED	-

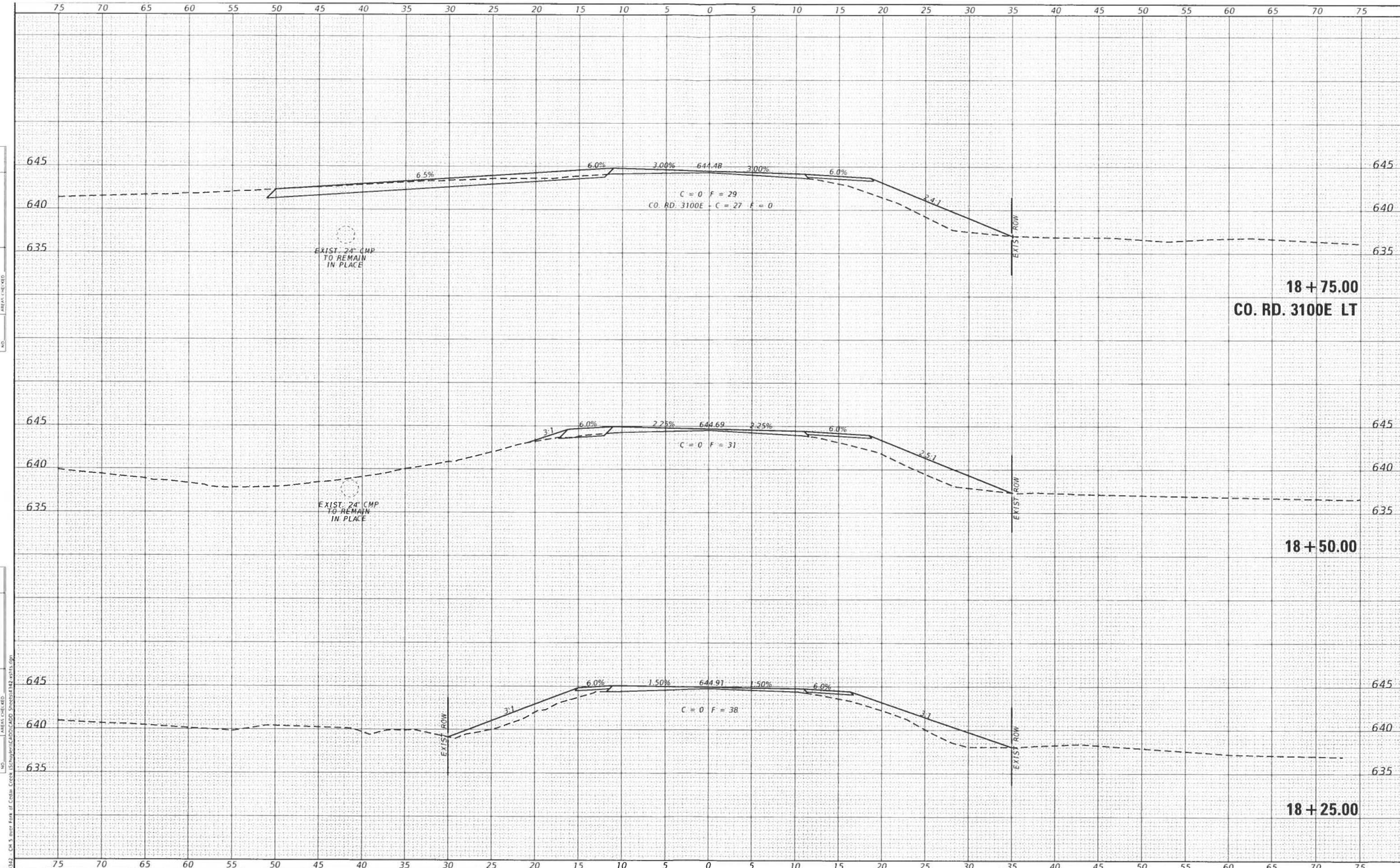
**SCHUYLER COUNTY
 COUNTY HIGHWAY 5 OVER
 SOUTH FORK CEDAR CREEK**

CROSS SECTIONS	
SCALE: 1"=5'	SHEET 1 OF 5 SHEETS
STA 17+00.00	TO STA. 18+00.00

F.A.S. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
583	18-00080-00-BR	SCHUYLER	24	20
CONTRACT NO. 93757				
FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT NO. HVLH9591		

DATE	
BY	
ORIGINAL SURVEY	
PLOTTED	
NOTE BOOK	
AREAS CHECKED	
NO.	

DATE	
BY	
ORIGINAL SURVEY	
PLOTTED	
NOTE BOOK	
AREAS CHECKED	
NO.	

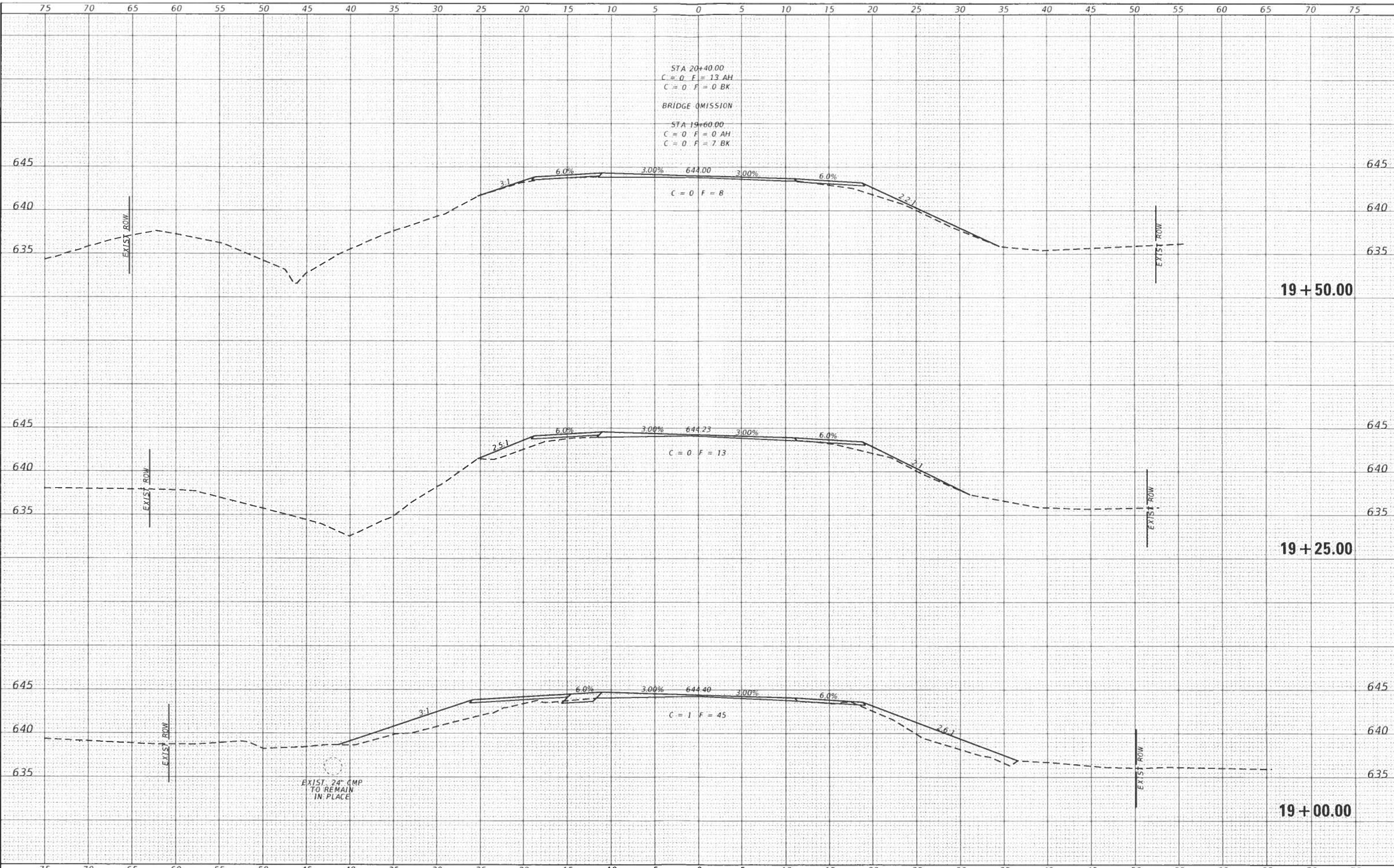


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FILE NAME V:\3132_C&S over Fork of Cedar Creek (Schuyler)\CAD\CADD_Sheets\182_xaxis.dgn	DESIGNED - STM	REVISED -			583	18-00080-00-BR	SCHUYLER	24	21			
	PLOT SCALE = 10.0000' / in	CHECKED - MMO	REVISED -		SCALE: 1"=5'			SHEET 2 OF 5 SHEETS			STA. 18+25.00 TO STA. 18+75.00	
	PLOT DATE = 11/2/2020	DATE - 9/18/2020	REVISED -		FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT NO. HVL19591			CONTRACT NO. 93757	

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

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

MODEL: Default
FILE NAME: V:\342 - CH 5 over Fork of Cedar Creek\Schuyler\CADD\CADD_Sheets\342_vstns.dgn



**SCHUYLER COUNTY
COUNTY HIGHWAY 5 OVER
SOUTH FORK CEDAR CREEK**

CROSS SECTIONS

USER NAME	- Smerzwa	DESIGNED	- STM	REVISED	-
PLOT SCALE	= 10.0000' / in	DRAWN	- STM	REVISED	-
PLOT DATE	= 11/2/2020	CHECKED	- MMO	REVISED	-
		DATE	- 9/18/2020	REVISED	-

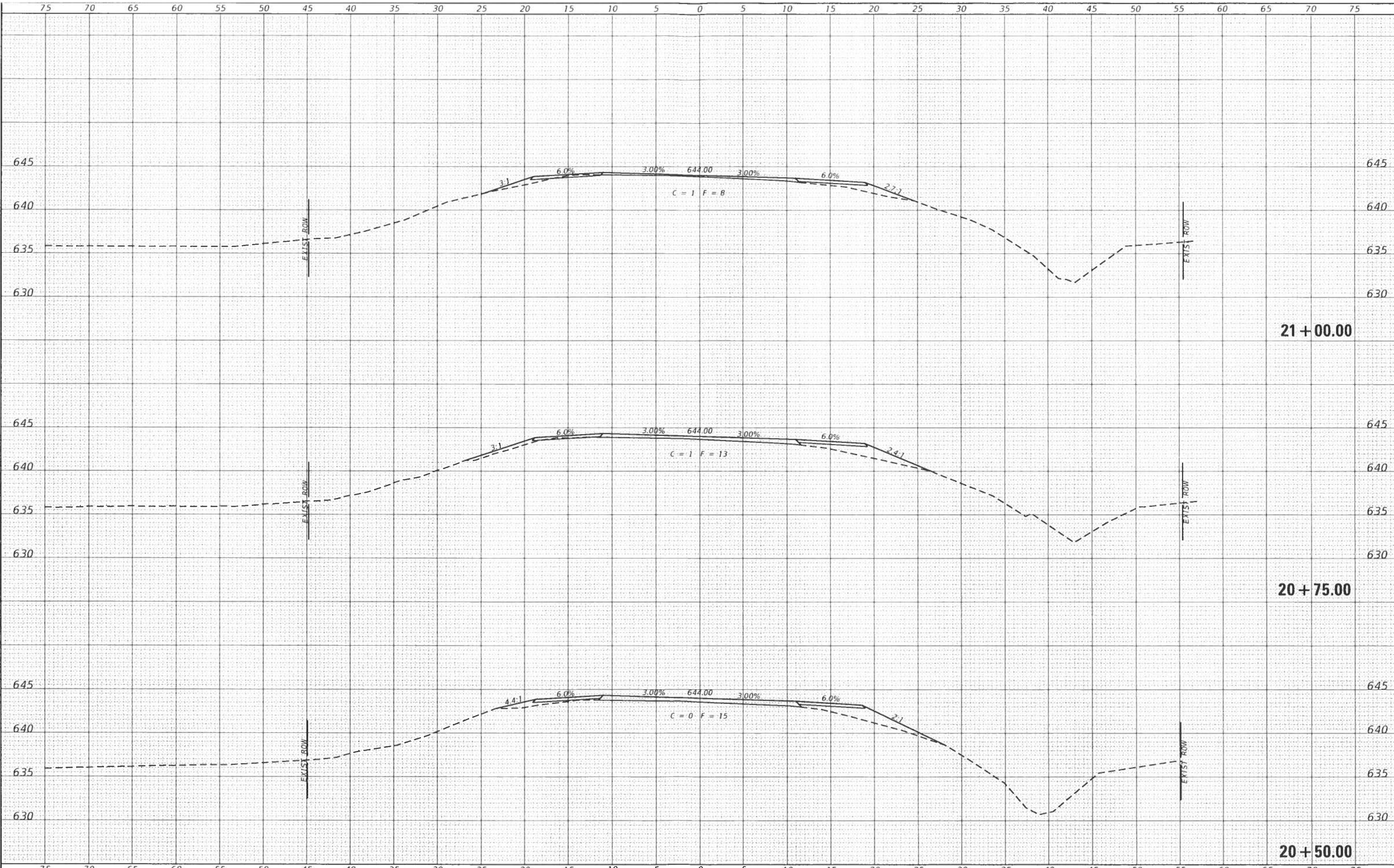
SCALE: 1"=5'
SHEET 3 OF 5 SHEETS
STA. 19+00.00 TO STA. 19+50.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
583	18-00080-00-BR	SCHUYLER	24	22
CONTRACT NO. 93757				
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT NO. HVLMI9591	

DATE	
BY	
FINAL SURVEY	
SURVEYED	
PLOTTED	
TYPED	
NOTED	
AREAS CHECKED	
NO.	

DATE	
BY	
ORIGINAL SURVEY	
SURVEYED	
PLOTTED	
TYPED	
NOTED	
AREAS CHECKED	
NO.	

MODEL: Default
FILE NAME: V:\142 - CH 5 over Fork of Cedar Creek (Schuyler)\CAD\CADD Sheets\142.vstn.dgn



USER NAME	= Smerzwa
DESIGNED	- STM
DRAWN	- STM
CHECKED	- MMO
DATE	- 9/18/2020
REVISIONS	
REVISED	-
REVISED	-
REVISED	-
REVISED	-

**SCHUYLER COUNTY
COUNTY HIGHWAY 5 OVER
SOUTH FORK CEDAR CREEK**

CROSS SECTIONS

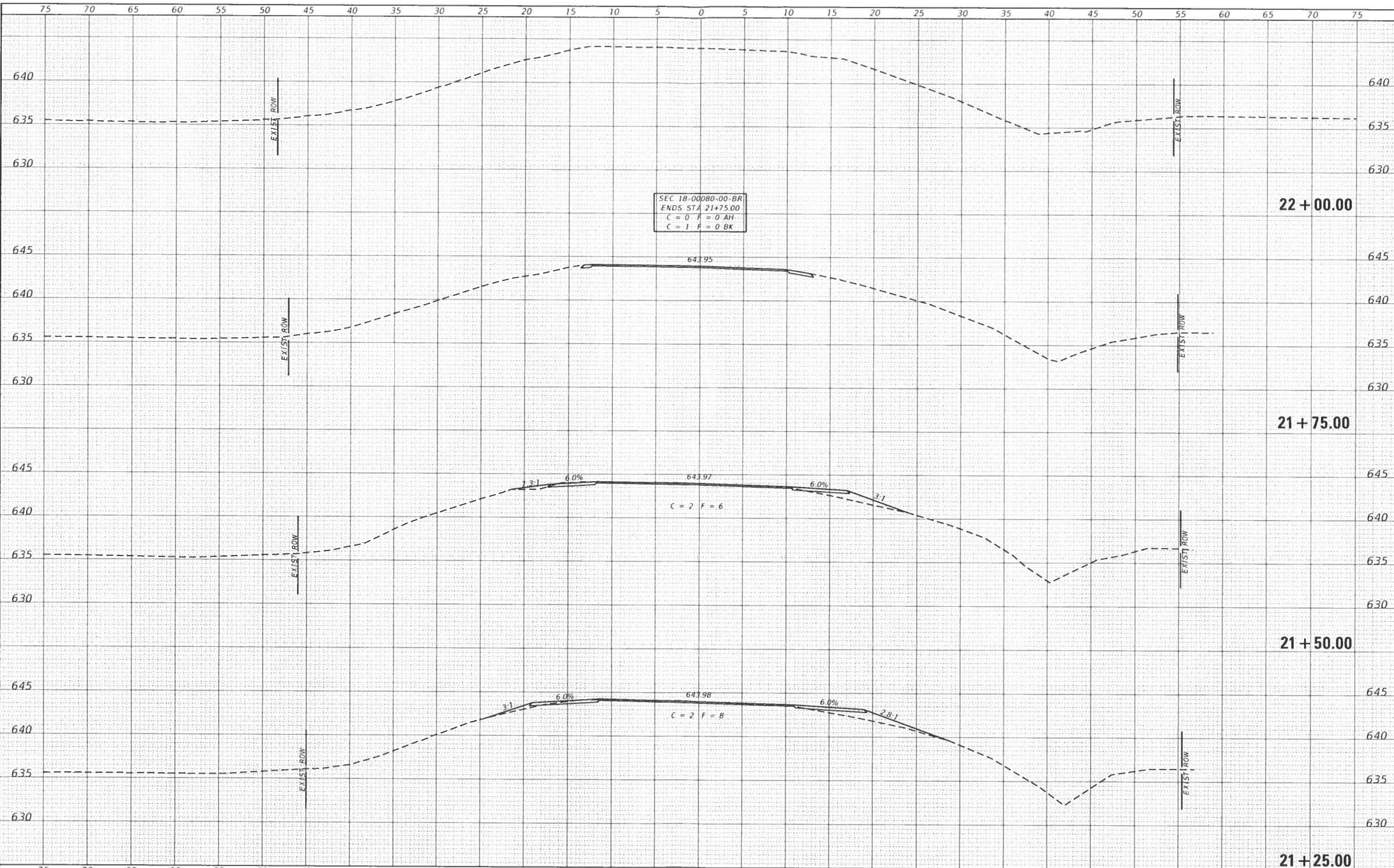
SCALE: 1"=5' SHEET 4 OF 5 SHEETS STA 20+50.00 TO STA 21+00.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
583	18-00080-00-BR	SCHUYLER	24	23
FED. ROAD DIST. NO. 7		ILLINOIS	CONTRACT NO. 93757	
			FED. AID PROJECT NO. HVLH9591	

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

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

MODEL: Default
FILE NAME: C:\312 - Ch 5 over Fork of Cedar Creek (Schuyler)\CAD\CADD Sheets\312 sheets.dgn



USER NAME	= SM41298
DESIGNED	- STM
DRAWN	- STM
CHECKED	- MMO
DATE	- 9/18/2020
REVISIONS	
REVISIONS	
REVISIONS	
REVISIONS	

**SCHUYLER COUNTY
COUNTY HIGHWAY 5 OVER
SOUTH FORK CEDAR CREEK**

CROSS SECTIONS

SCALE: 1"=5' SHEET 5 OF 5 SHEETS STA. 21+25.00 TO STA. 22+00.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
583	18-00080-00-BR	SCHUYLER	24	24
CONTRACT NO. 93757				
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT NO. HVL149591		