

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.S. 806	18-00122-00-BR	LAWRENCE	29	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 95886		

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1.	COVER SHEET
2.	SUMMARY OF QUANTITIES AND GENERAL NOTES
3.	SCHEDULE OF QUANTITIES
4.	TYPICAL CROSS SECTIONS
5.	PLAN AND PROFILE
6.	GUARDRAIL AND SHOULDER LAYOUT
7-14.	BRIDGE PLANS
15.	BORINGS
16-29.	STATION CROSS SECTIONS

01-15-2021 LETTING ITEM 138

STATE OF ILLINOIS

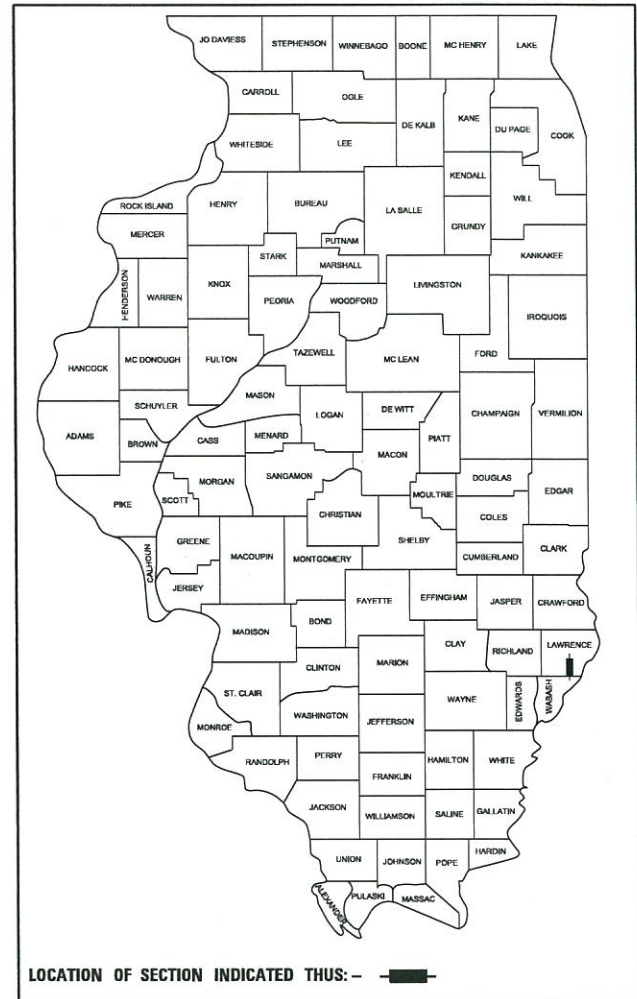
DEPARTMENT OF TRANSPORTATION

PLANS FOR PROPOSED SURFACE TRANSPORTATION PROGRAM – BRIDGE

**PROJECT VFL2(092)
SECTION 18-00122-00-BR
LAWRENCE COUNTY
F.A.S. 806 / C.H. 8
PROPOSED STRUCTURE NO. 051-3310
C-97-059-19**

HIGHWAY STANDARDS:

000001-08	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
515001-04	NAME PLATE FOR BRIDGES
630001-12	STEEL PLATE BEAM GUARDRAIL
630301-09	SHOULDER WIDENING FOR TYPE 1, (SPECIAL) GUARDRAIL TERMINALS
631032-09	TRAFFIC BARRIER TERMINAL, TYPE 6A
701901-08	TRAFFIC CONTROL DEVICES
725001-01	OBJECT AND TERMINAL MARKERS
782006-01	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS
BLR 21-9	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

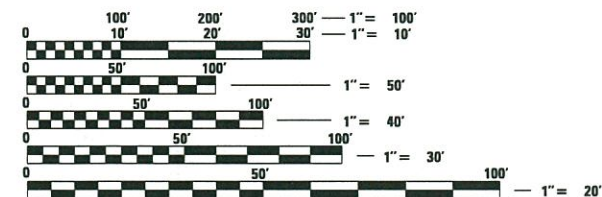


UTILITIES

FRONTIER COMMUNICATIONS
307 N. JEFFERSON STREET
ROBINSON, IL 62454

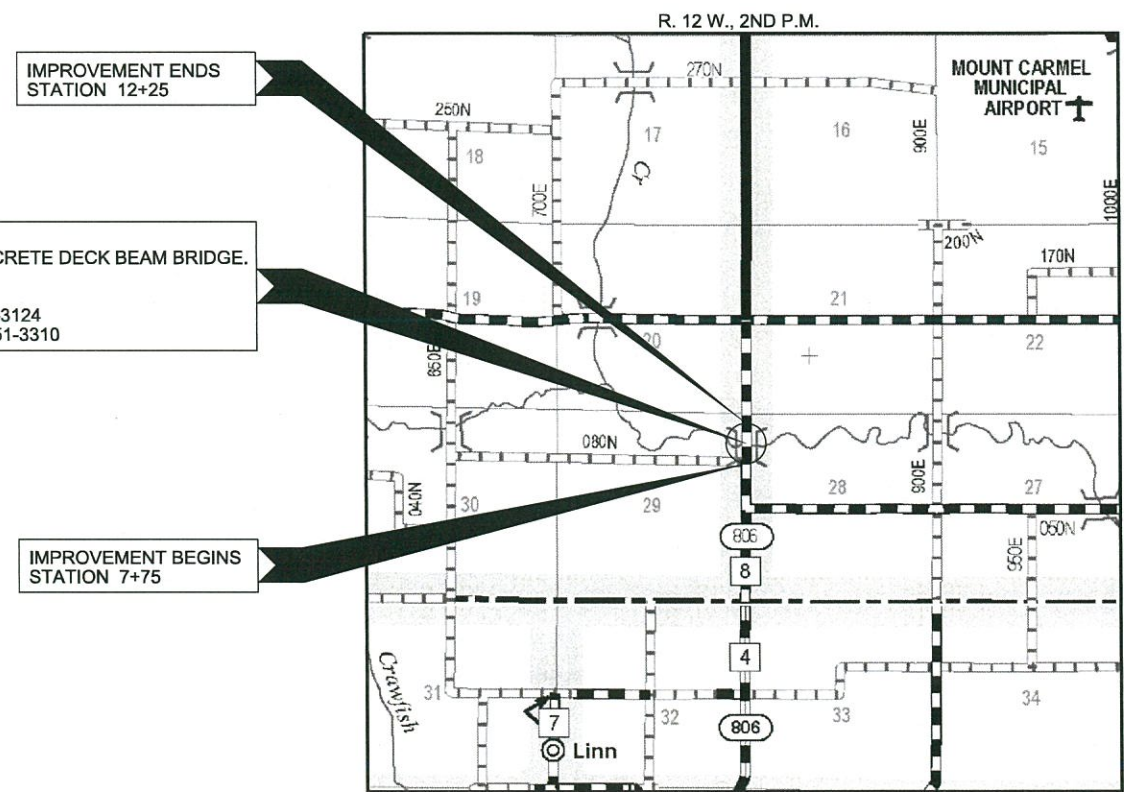
NORRIS ELECTRIC CO-OP
8543 NORTH STATE HIGHWAY 130
NEWTON, IL 62448

STA. 10+00
PRECAST PRESTRESSED CONCRETE DECK BEAM BRIDGE.
SINGLE SPAN @ 86'-0"
30'-0" RDWY.; SKEW = 0°
EXISTING STRUCTURE NO. 051-3124
PROPOSED STRUCTURE NO. 051-3310



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.

FUNCTIONAL CLASSIFICATION: MAJOR COLLECTOR
DESIGN SPEED: 50 MPH
DESIGN TRAFFIC: 700 ADT



LOCATION MAP

APPROXIMATE SCALE: 0 1/2 MILE
NET LENGTH OF SECTION = 450 FEET = 0.085 MILES



WARNING

CALL 811
BEFORE YOU DIG
DIG NO: A0501048

ILLINOIS DEPARTMENT OF TRANSPORTATION

APPROVED *October 26, 2020*
Adam M. [Signature]
COUNTY ENGINEER

PASSED *11-9-20*
Jim [Signature]
DISTRICT SEVEN ENGINEER OF LOCAL ROADS & STREETS

Releasing For Bid Based on Limited Review *11-9-20*
John P. [Signature]
REGION FOUR ENGINEER

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DATE: 11/03/2020

EXPIRES: 11/30/2021

HAMPTON, LENZINI AND RENWICK, INC.
CIVIL ENGINEERS - STRUCTURAL ENGINEERS - LAND SURVEYORS
3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
217.546.3400 www.hlrengineering.com

184.000959
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORPORATION

PROJECT NUMBER: 18.0572.130 DATE: 11/03/2020

SUMMARY OF QUANTITIES

CODE NO.	ITEM	CONSTRUCTION TYPE CODE 0010	
		UNIT	TOTAL
20200100	EARTH EXCAVATION	CU YD	60
20300100	CHANNEL EXCAVATION	CU YD	250
20400800	FURNISHED EXCAVATION	CU YD	175
28100809	STONE DUMPED RIPRAP, CLASS A5	TON	710
35101400	AGGREGATE BASE COURSE, TYPE B	TON	524
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	2,176
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	804
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	146
40603085	HOT-MIX ASPHALT BINDER COURSE, IL- 19.0, N70	TON	450
40604052	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N70	TON	300
48101500	AGGREGATE SHOULDERS, TYPE B 6"	SQ YD	516
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
50300225	CONCRETE STRUCTURES	CU YD	31.8
50400605	PRECAST PRESTRESSED CONCRETE DECK BEAMS (33" DEPTH)	SQ FT	2,580
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	3,920
50901050	STEEL RAILING, TYPE 5M	FOOT	171
51201400	FURNISHING STEEL PILES HP10X42	FOOT	825
51202305	DRIVING PILES	FOOT	825
51203400	TEST PILE STEEL HP10X42	EACH	1
51500100	NAME PLATES	EACH	1
542D0229	PIPE CULVERTS, CLASS D, TYPE 1 24"	FOOT	120
63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	50
63100087	TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	4
63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4
63200310	GUARDRAIL REMOVAL	FOOT	156
67100100	MOBILIZATION	L SUM	1
72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	4
78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	10
X2501000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.3

^ SEE SPECIAL PROVISIONS

* SPECIALTY ITEMS

GENERAL NOTES

- ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ADOPTED APRIL 1, 2016". (HERE IN AFTER REFERRED TO AS THE STANDARD SPECIFICATIONS; THE LATEST EDITION OF THE "ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS"; THE DETAILS IN THE PLANS AND THE "SPECIAL PROVISIONS" INCLUDED IN THE DOCUMENTS.
- ALL CLEARING, GRUBBING, FENCE REMOVAL, PAVEMENT REMOVAL, AND REMOVAL OF EXISTING DRAINAGE STRUCTURES SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION. ALL AGGREGATE AND BITUMINOUS PAVEMENT SHALL BE REMOVED AND PROPERLY DISPOSED OF BY THE CONTRACTOR IN A METHOD APPROVED BY THE ENGINEER. REMOVAL AND DISPOSAL OF PAVEMENT SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- ANY REFERENCE TO STANDARDS THROUGHOUT THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERPRETED TO BE THE LATEST STANDARD OF THE DEPARTMENT.
- THE CONTRACTOR SHALL CONSULT THE ENGINEER IN REGARD TO THE EXACT LENGTH OF PIPE CULVERTS AND PIPE DRAINS BEFORE ORDERING THESE ITEMS.
- THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN CALCULATING PLAN QUANTITIES

AGGREGATE BASE COURSE	2.05 TON/CU YD
HOT MIX ASPHALT	112 LBS/SQ YD/INCH THICKNESS
STONE DUMPED RIPRAP	1.75 TON/CU YD

BITUMINOUS MATERIALS RATES	
SURFACE TYPE	RESIDUAL RATE
AGGREGATE BASE (PRIME COAT)	0.250 LB/SQ FT
MILLED HMA OR PCC (TACK COAT)	0.050 LB/SQ FT
EXISTING PAVEMENT (TACK COAT)	0.050 LB/SQ FT
TACK COAT (BETWEEN LIFTS)	0.025 LB/SQ FT
- THE FINAL SURFACE OF ALL EMBANKMENT AREAS SHALL BE SEEDED. THE TOP 4 INCHES OF THE SEEDED AREAS SHALL BE TOPSOIL SUBJECT TO THE APPROVAL OF THE ENGINEER. THE COST OF SHAPING THE SLOPES AND PROVIDING TOP SOIL WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.
- THE AREA TO BE SEEDED SHALL CONSIST OF ALL DISTURBED EARTH SURFACES WITHIN THE RIGHT OF WAY OR AS DIRECTED BY THE ENGINEER.

SEEDING, CLASS 2 (SPECIAL) =	0.3 ACRES
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- ALL WASTE MATERIAL FROM EXCAVATIONS SHALL BE DISPOSED OF BY THE CONTRACTOR. NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- COMMITMENTS:
 - TREES SHALL NOT BE CLEARED BETWEEN APRIL 1 AND SEPTEMBER 30.

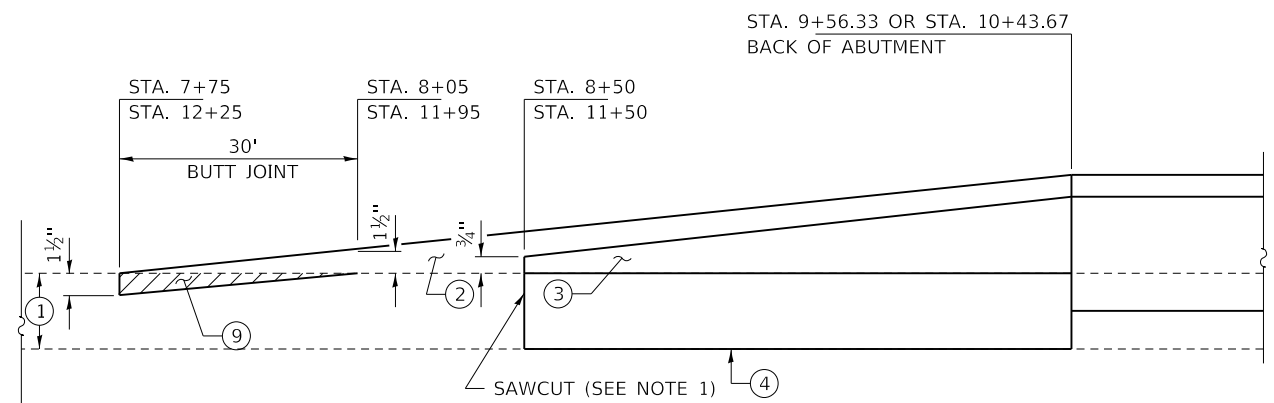
EARTHWORK SCHEDULE							
LOCATION	EARTH EXCAVATION	CHANNEL EXCAVATION	SHRINKAGE FACTOR	PERCENT USED	EXCAVATION ADJUSTED FOR SHRINKAGE	EMBANKMENT REQUIRED	EARTHWORK BALANCE
	CU.YD.	CU.YD.			CU.YD.	CU.YD.	CU.YD.
F.A.S. 806 / C.H. 8							
STA. 7+75.00 TO STA. 9+56.33	25		25.00%	100.00%	19	202	-183
STA. 9+56.33 TO STA. 10+43.67		250	25.00%	70.00%	131		131
STA. 10+43.67 TO STA. 12+25.00	34		25.00%	100.00%	25	146	-121
TOTAL	59	250			175	348	-173
USE	60	250					175

FURNISHED EXCAVATION 175 CU YDS

GUARDRAIL SCHEDULE						
LOCATION	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	TRAFFIC BARRIER TERMINAL, TYPE 6A	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	GUARDRAIL REMOVAL	TERMINAL MARKER - DIRECT APPLIED	GUARDRAIL REFLECTORS, TYPE A
F.A.S. 806 / C.H. 8						
SEE SHEET 6 FOR LAYOUT	FOOT	EACH	EACH	FOOT	EACH	EACH
LT. STA. 8+82.19 TO LT. STA. 11+42.81	25	2	2	78	2	5
RT. STA. 8+57.19 TO RT. STA. 11+17.81	25	2	2	78	2	5
TOTAL	50	4	4	156	4	10

NOTE: SEE SHEET 6 FOR STATIONING AND LAYOUT

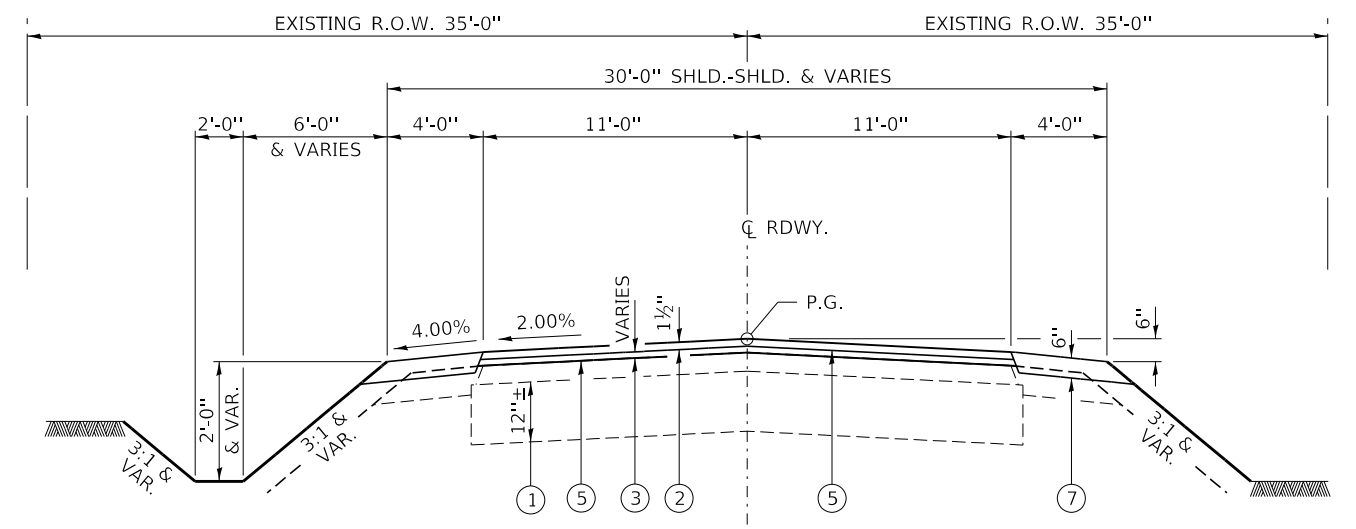
ROADWAY SCHEDULE							
LOCATION	AGGREGATE BASE COURSE, TYPE B	BITUMINOUS MATERIALS (PRIME COAT)	BITUMINOUS MATERIALS (TACK COAT)	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N70	AGGREGATE SHOULDERS, TYPE B 6"
F.A.S. 806 / C.H. 8							
	35101400	40600275	40600290	40600982	40603085	40604052	48101500
	TON	POUND	POUND	SQ YD	TON	TON	SQ YD
STA. 7+75.00 TO STA. 9+56.33	194	1,088	402	73	225	150	258
STA. 10+43.67 TO STA. 12+25.00	330	1,088	402	73	225	150	258
TOTAL	524	2176	804	146	450	300	516
USE	524	2176	804	146	450	300	516



PAVEMENT TRANSITION DETAIL
AS DIRECTED BY THE ENGINEER

NOTES

- 1) COST OF SAWCUT SHALL BE INCLUDED IN THE UNIT COST BID FOR EARTH EXCAVATION.

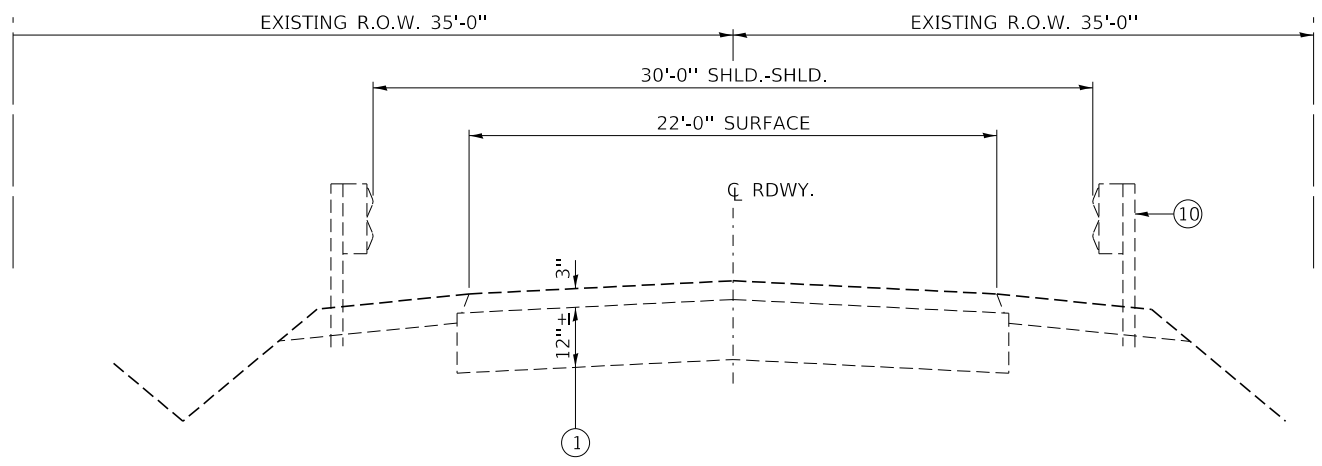


PROPOSED TYPICAL CROSS SECTION

STA. 7+75 TO STA. 8+50 AND
STA. 11+50 TO 12+25

SUGGESTED CUT SECTION
CONSTRUCT AS SHOWN IN
STATION CROSS SECTIONS

SUGGESTED FILL SECTION
CONSTRUCT AS SHOWN IN
STATION CROSS SECTIONS



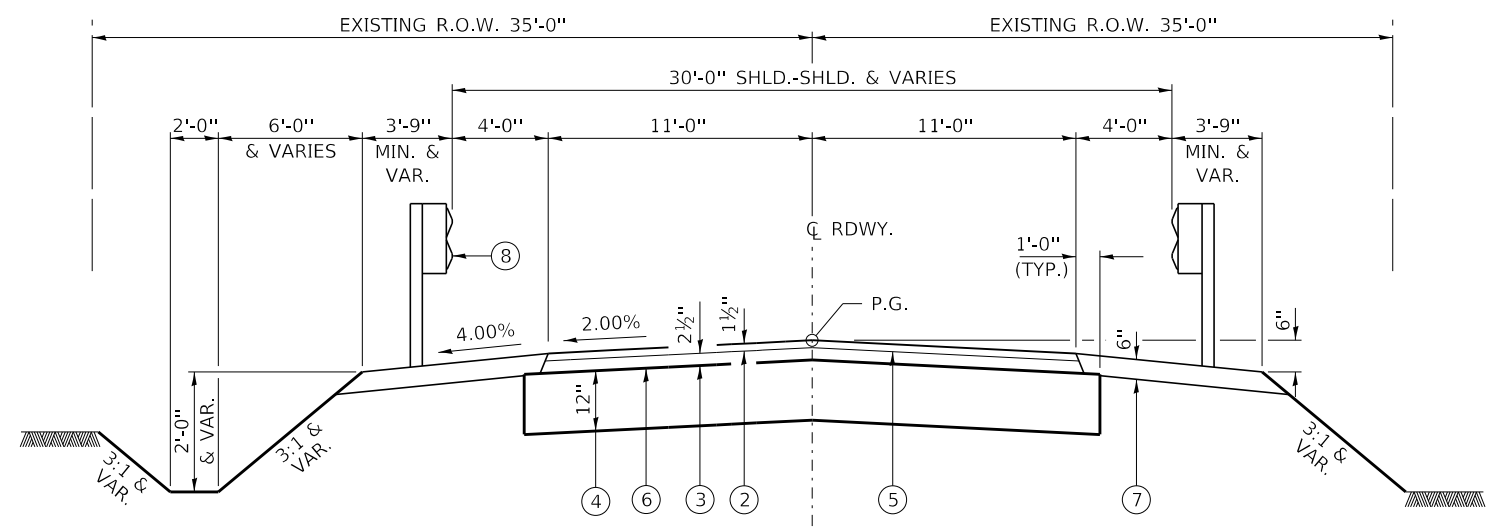
EXISTING TYPICAL CROSS SECTION

STA. 7+75 TO STA. 12+25

LEGEND

- ① EXISTING ASPHALT SURFACE ON AGGREGATE BASE
 - ② HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX C, N70 (1 1/2" THICKNESS).
 - ③ HMA BINDER COURSE, IL-19.0, N70 (2 1/2" THICKNESS)
 - ④ AGGREGATE BASE COURSE, TYPE B (12")
 - ⑤ BITUMINOUS MATERIALS (TACK COAT)
 - ⑥ BITUMINOUS MATERIALS (PRIME COAT)
 - ⑦ AGGREGATE SHOULDERS, TYPE B 6"
 - ⑧ TRAFFIC BARRIER TERMINAL, TYPE 6A / SPBGR
 - ⑨ HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT
 - ⑩ EXISTING GUARDRAIL & TERMINALS
- EARTH EXCAVATION

HOT-MIX ASPHALT MIXTURE REQUIREMENTS		
LOCATIONS(S)	F.A.S. 806 / C.H. 8	F.A.S. 806 / C.H. 8
MIXTURE USE(S):	HOT-MIX ASPHALT SURFACE COURSE	LEVELING BINDER COURSE
PG:	PG 64-22	PG 64-22
DESIGN AIR VOIDS:	4% @ 70 Gyr.	4% @ 70 Gyr.
MIXTURE COMPOSITION: (MIXTURE GRADATION)	IL 9.5	IL 19.0
FRICTION AGGREGATE:	MIXTURE C	NONE
DENSITY TEST METHOD	CORES	CORES
MIXTURE WEIGHT:	112 LBS \ SY \ INCH THICKNESS	112 LBS \ SY \ INCH THICKNESS
QUALITY MANAGEMENT PROGRAM	QC/QA	QC/QA



PROPOSED TYPICAL CROSS SECTION

STA. 8+50 TO STA. 9+56.33 AND
STA. 10+43.67 TO STA. 11+50

SUGGESTED CUT SECTION
CONSTRUCT AS SHOWN IN
STATION CROSS SECTIONS

SUGGESTED FILL SECTION
CONSTRUCT AS SHOWN IN
STATION CROSS SECTIONS

SEE SHEET 7 FOR TRANSITION AT BRIDGE.

DON E. & FRANCES V. SHEPARD
NE¼, SEC 29, T. 2 N., R. 12 W., 2ND P.M.

JAY C. & MARGRET A. THOMPSON
NE¼, SEC 29, T. 2 N., R. 12 W., 2ND P.M.

CURVE DATA
PI Sta. 10+50.38
Δ = 0° 45' 19" (LT)
D = 0° 47' 37"
T = 47.59'
R = 7,220.00'
L = 95.19'
E = 0.16'
PC Sta. 10+02.79
PT Sta. 10+97.98
NO S.E.

P.I. STA. 10+50.38
(TO BE SET)
N. 697464.445
E. 1148213.699

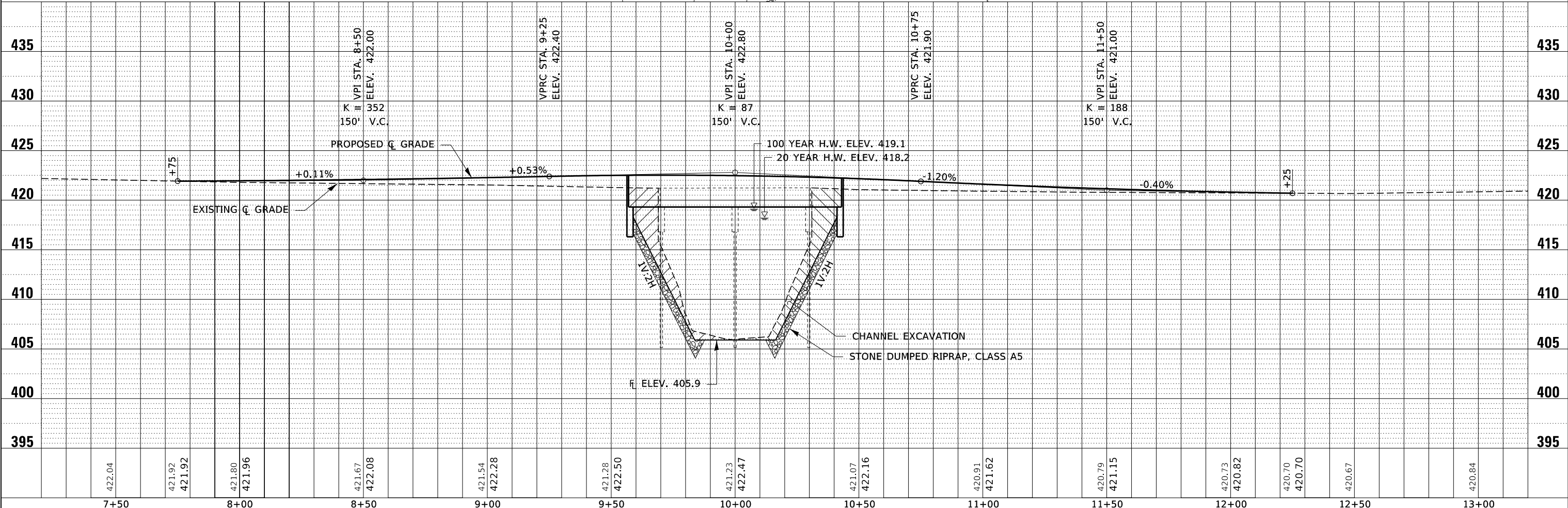
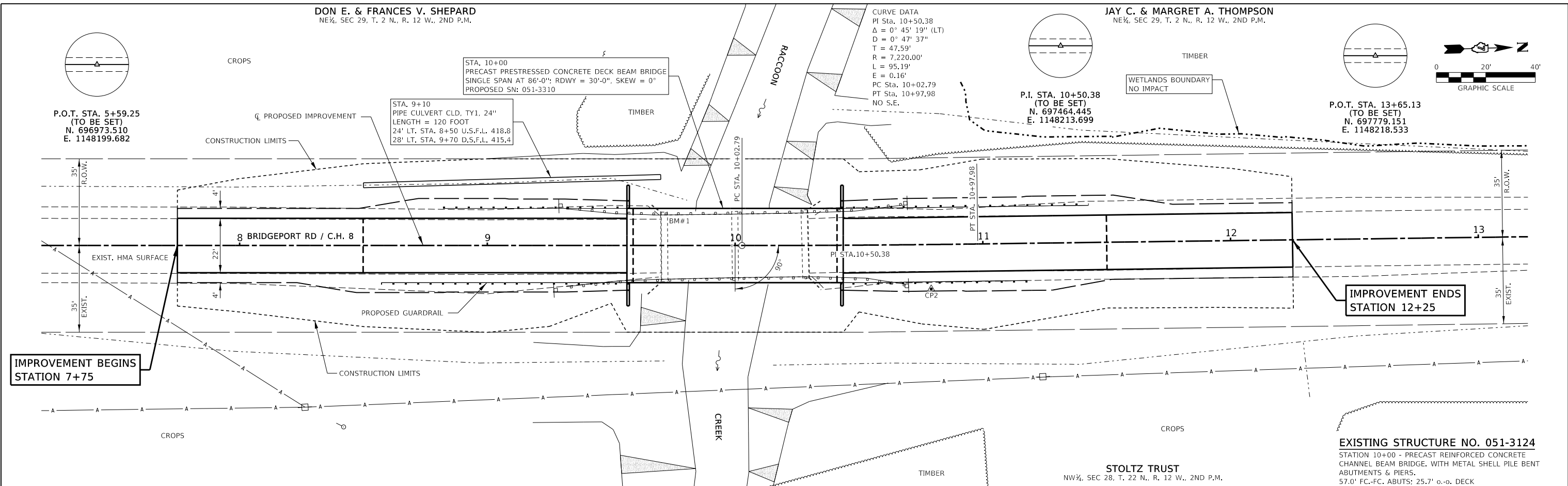
P.O.T. STA. 13+65.13
(TO BE SET)
N. 697779.151
E. 1148218.533

STOLTZ TRUST
NW¼, SEC 28, T. 22 N., R. 12 W., 2ND P.M.

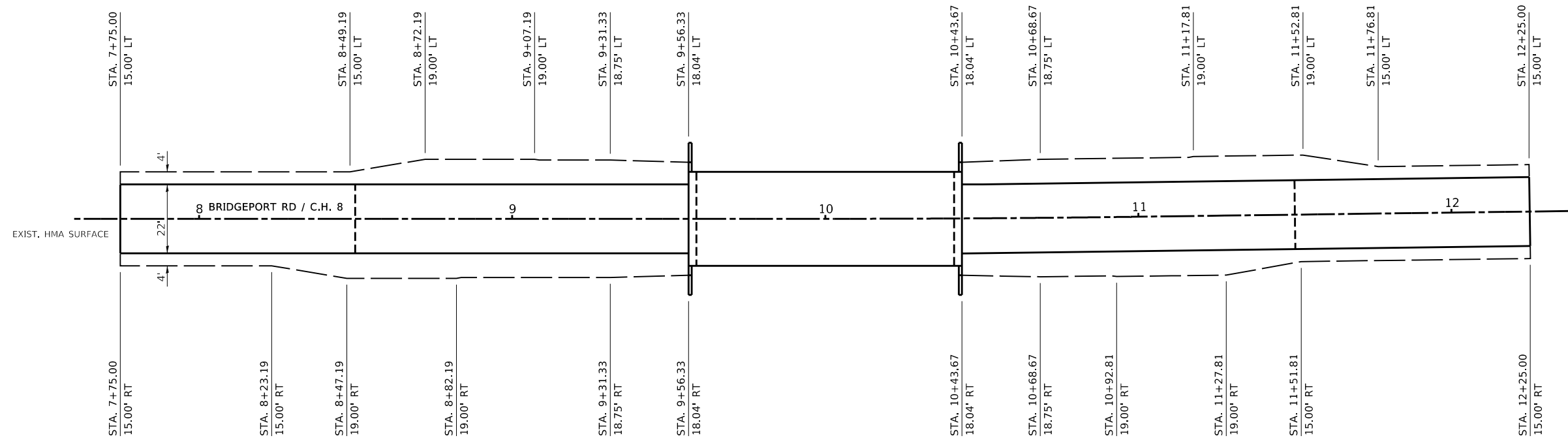
EXISTING STRUCTURE NO. 051-3124
STATION 10+00 - PRECAST REINFORCED CONCRETE CHANNEL BEAM BRIDGE WITH METAL SHELL PILE BENT ABUTMENTS & PIERS.
57.0' FC-FC. ABUTS: 25.7' o.-o. DECK

PLAN	DATE
BY	
REVIEWED	
PLOTTED	
ALIGNMENT CHECKED	
GRADES CHECKED	
NOTE BOOK NO.	
FILE NAME	

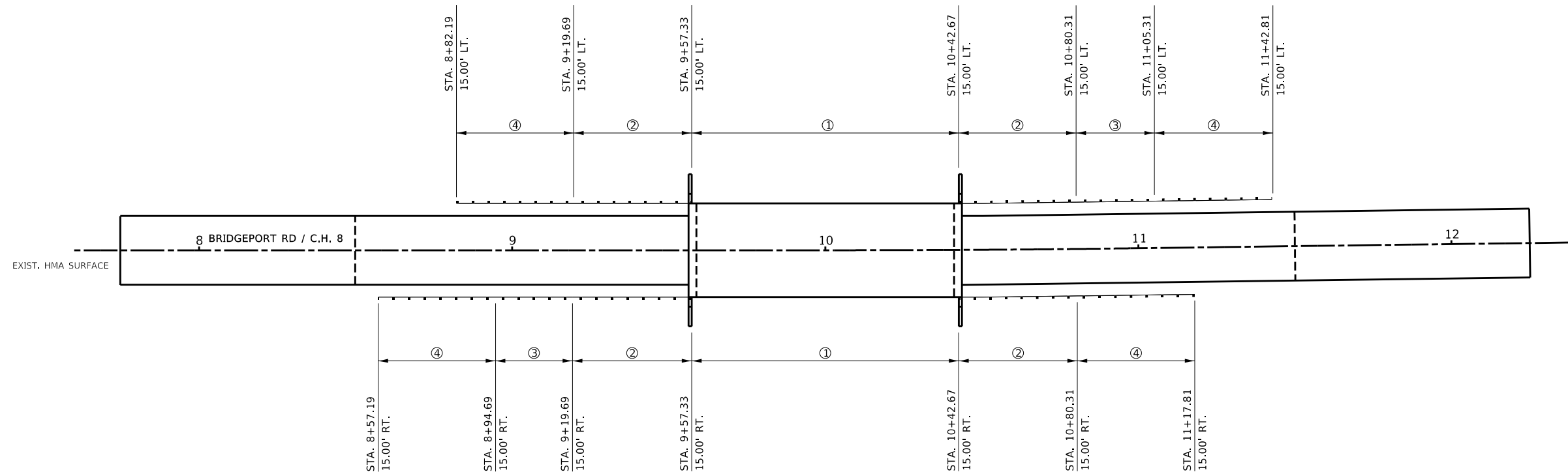
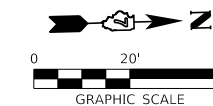
PROFILE	DATE
BY	
REVIEWED	
PLOTTED	
GRADES CHECKED	
STRUCTURE NOTATING CHECKED	
NOTE BOOK NO.	
FILE NAME	



FILE NAME = 180572-shl-planprf.dgn	USER NAME = rmosick	DESIGNED - S.A.A.	REVISED -	<p align="center">STATE OF ILLINOIS LAWRENCE COUNTY HIGHWAY DEPARTMENT</p> <p align="center">PLAN & PROFILE C.H. 8</p>	F.A.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
<p>HAMPTON, LENZINI AND RENWICK, INC. 3065 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62760 ILLINOIS PROFESSIONAL DESIGN FIRM L.S. / P.E. / S.E. CORP. 184.000959</p>		DRAWN - T.W.K.	REVISED -		806	18-00122-00-BR	LAWRENCE	29	5
<p>PLOT SCALE = \$\$\$CALE\$</p>		CHECKED - J.W.F.	REVISED -		<p>SCALE: 5V:20H</p>		<p>CONTRACT NO. 95866</p>		
<p>PLOT DATE = 11/3/2020</p>		DATE - 11/03/2020	REVISED -		<p>SHEET NO. 1 OF 1 SHEETS</p>		<p>STA. 7+00.00 TO STA. 13+00.00</p>		ILLINOIS FED. AID PROJECT VFL2(092)



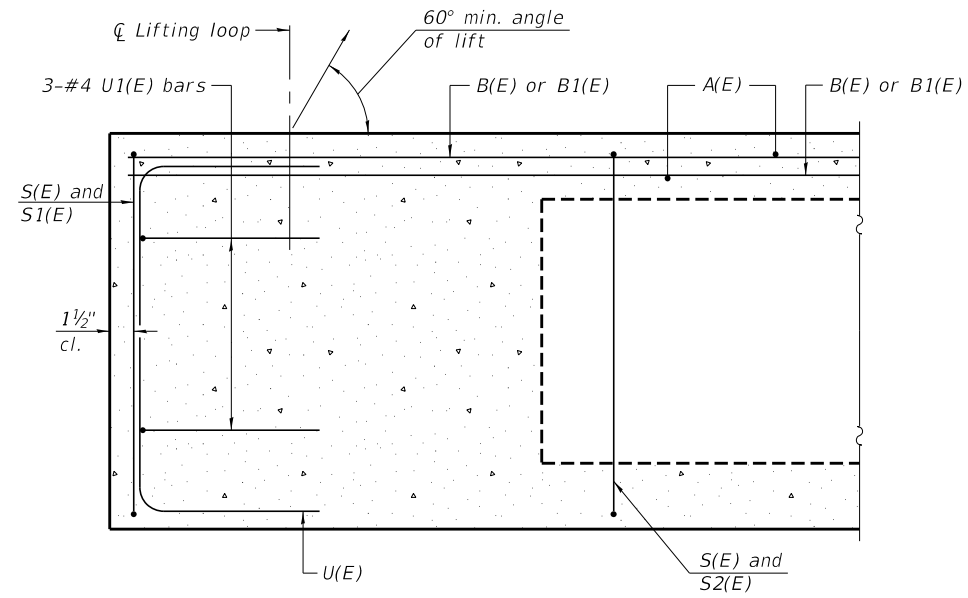
SHOULDER LAYOUT



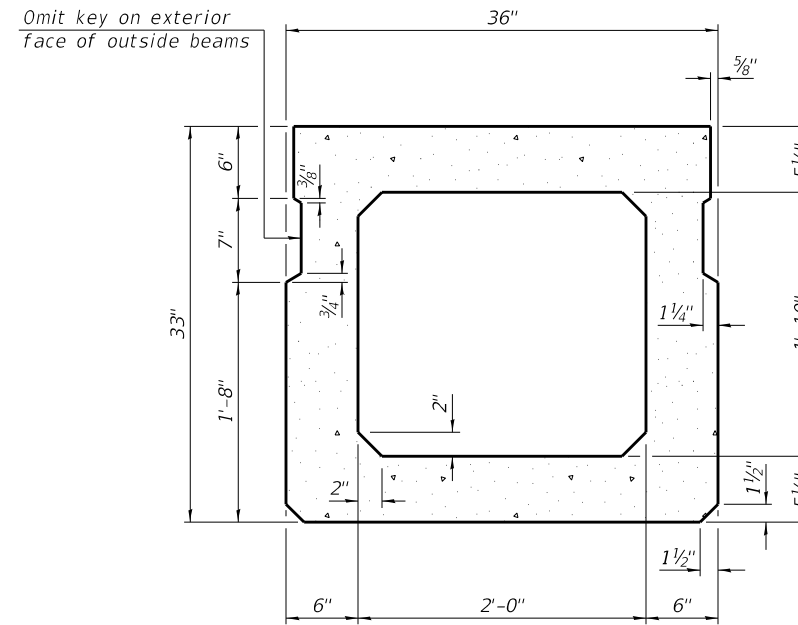
GUARDRAIL LAYOUT

- ① STEEL RAILING, TYPE SM
- ② TBT TY 6A
- ③ SPBGR, TY A, 6 FT POSTS
- ④ TBT TY 1, SPECIAL TANGENT

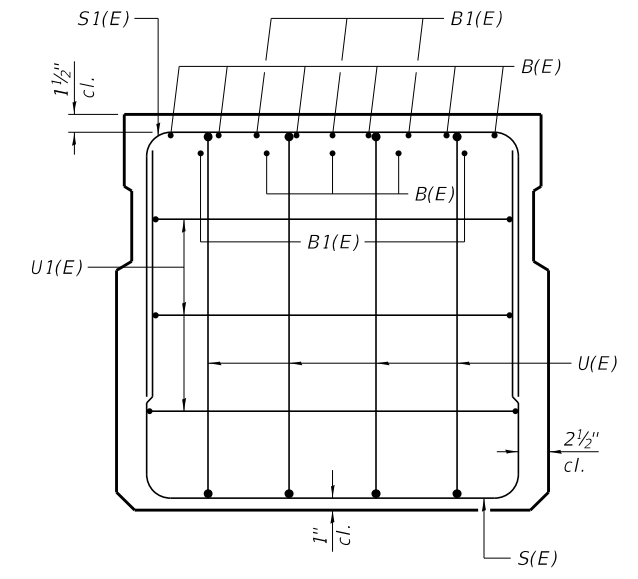
FILE NAME = 180572-shld-guardrail.dgn	USER NAME = rmosck	DESIGNED - J.W.F.	REVISED -	STATE OF ILLINOIS LAWRENCE COUNTY HIGHWAY DEPARTMENT	GUARDRAIL & SHOULDER LAYOUT		F.A.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
HAMPTON, LENZINI AND RENWICK, INC. 3065 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959		DRAWN - M.M.P.	REVISED -		SCALE:	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	806	18-00122-00-BR	LAWRENCE	29	6
		CHECKED - S.W.M.	REVISED -					CONTRACT NO. 95886				
		DATE - 11/03/2020	REVISED -									



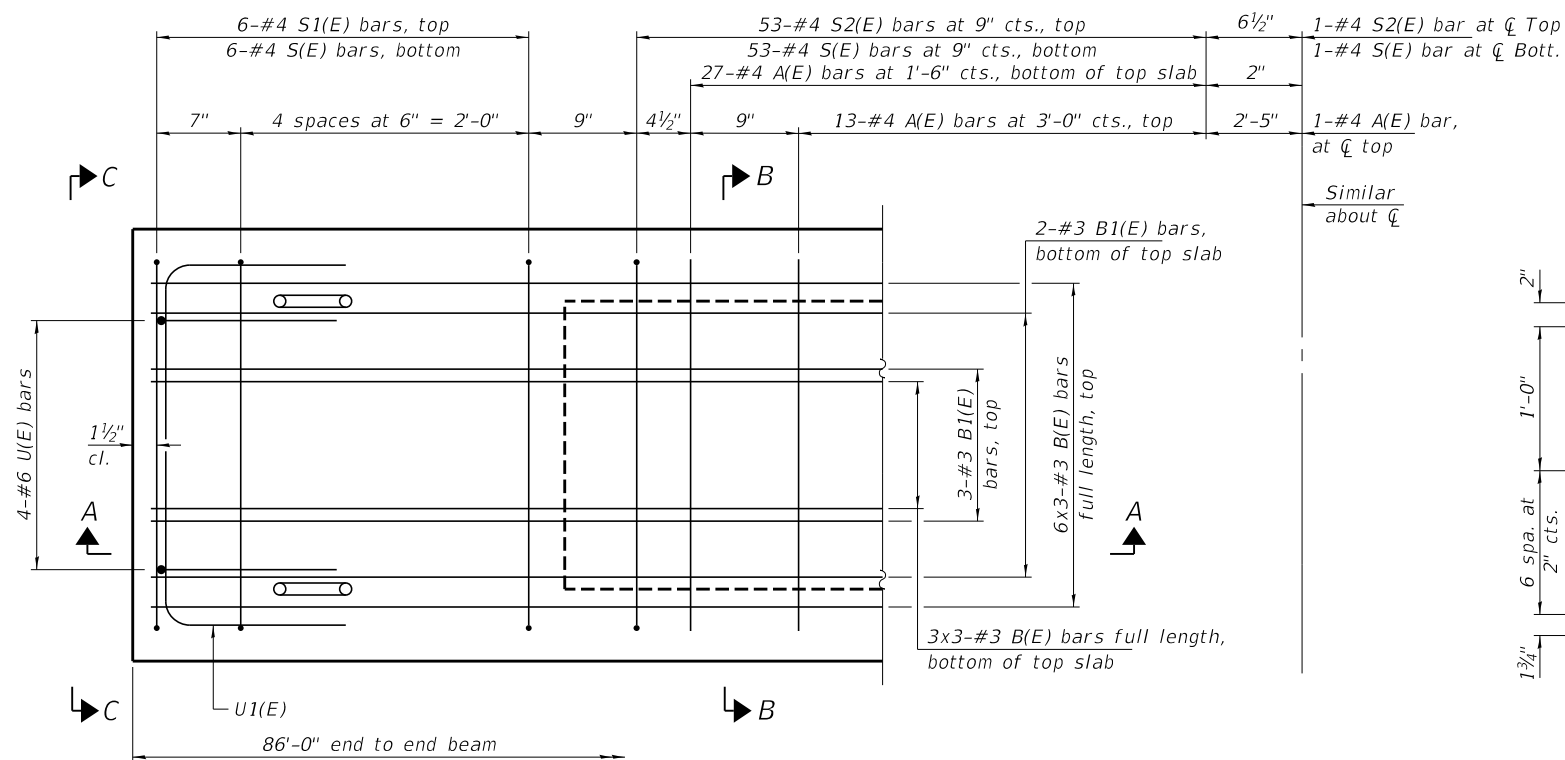
SECTION A-A



SECTION B-B
(Showing dimensions)



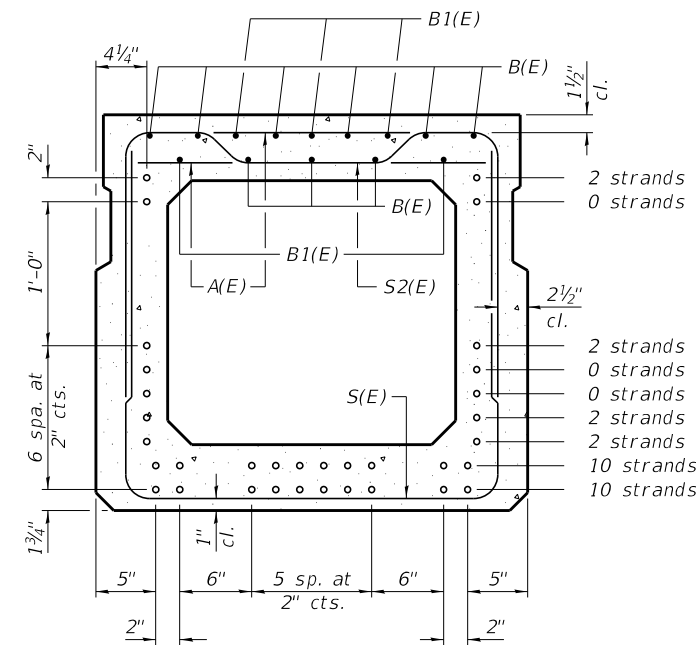
VIEW C-C



PLAN VIEW

Note: 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 6x3-#3 etc. indicates 6 lines of bars with 3 lengths per line.

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



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)	81	#4	2'-7"	—
B(E)	27	#3	29'-7"	—
B1(E)	10	#3	10'-0"	—
S(E)	119	#4	7'-8"	U
S1(E)	12	#4	6'-5"	U
S2(E)	107	#4	6'-8"	U
U(E)	8	#6	5'-0"	C
U1(E)	6	#4	5'-0"	C

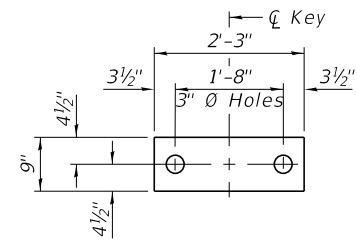
Note:
See sheet 3 & 4 of 9 for additional details and Bill of Material.

PD-3336-0

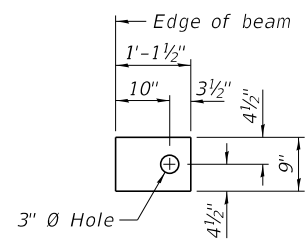
1-1-2020

FILE NAME = 180572-shl-bridge 33" beam.dgn	USER NAME = rmosick	DESIGNED - J.R.B.	REVISED -	STATE OF ILLINOIS LAWRENCE COUNTY HIGHWAY DEPARTMENT	33" x 36" PPC DECK BEAM STRUCTURE NO. 051-3310	F.A.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
HAMPTON, LENZINI AND RENWICK, INC. 3035 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.009959	PLOT SCALE =	CHECKED - S.W.M.	REVISED -			806	18-00122-00-BR	LAWRENCE	29	8	
	PLOT DATE = 11/3/2020	DRAWN - M.M.P.	REVISED -			CONTRACT NO. 95886					
		CHECKED - S.W.M.	REVISED -			SHEET NO. 2 OF 9 SHEETS					

ILLINOIS FED. AID PROJECT VFLV(092)



FABRIC BEARING PAD
(Interior - 18 Req'd.)

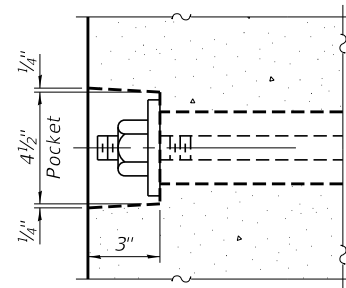


FABRIC BEARING PAD
(Exterior - 4 Req'd.)

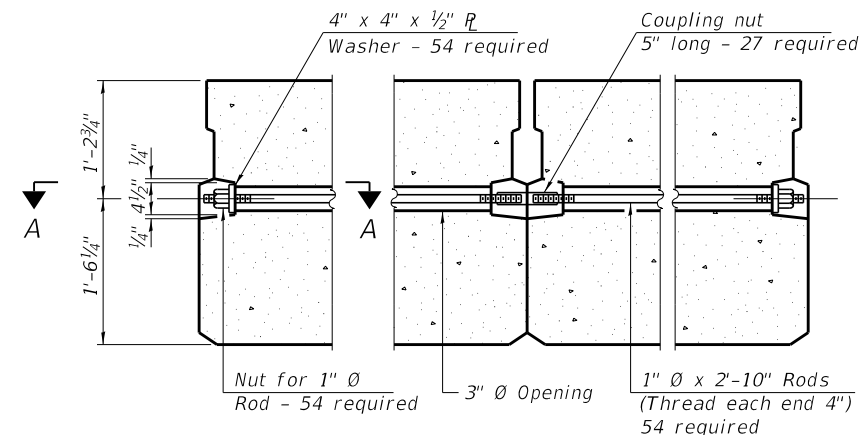
FIXED

Notes:

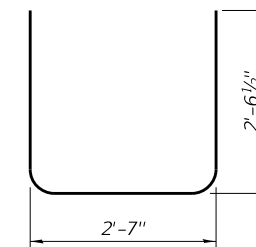
- All bearing pads shall be 1" thick.
- Omit holes when using expansion bearings.
- Expansion bearing pads shall be bonded to the substructure.



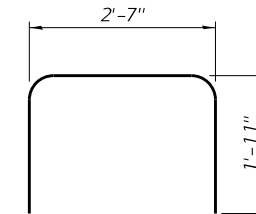
SECTION A-A



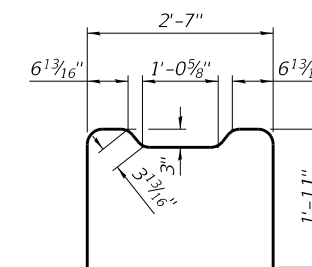
TYPICAL TRANSVERSE TIE ASSEMBLY



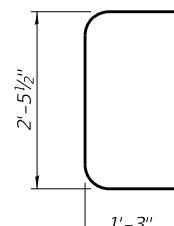
BAR S(E)



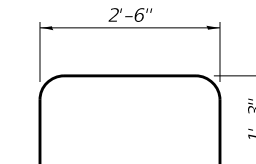
BAR S1(E)



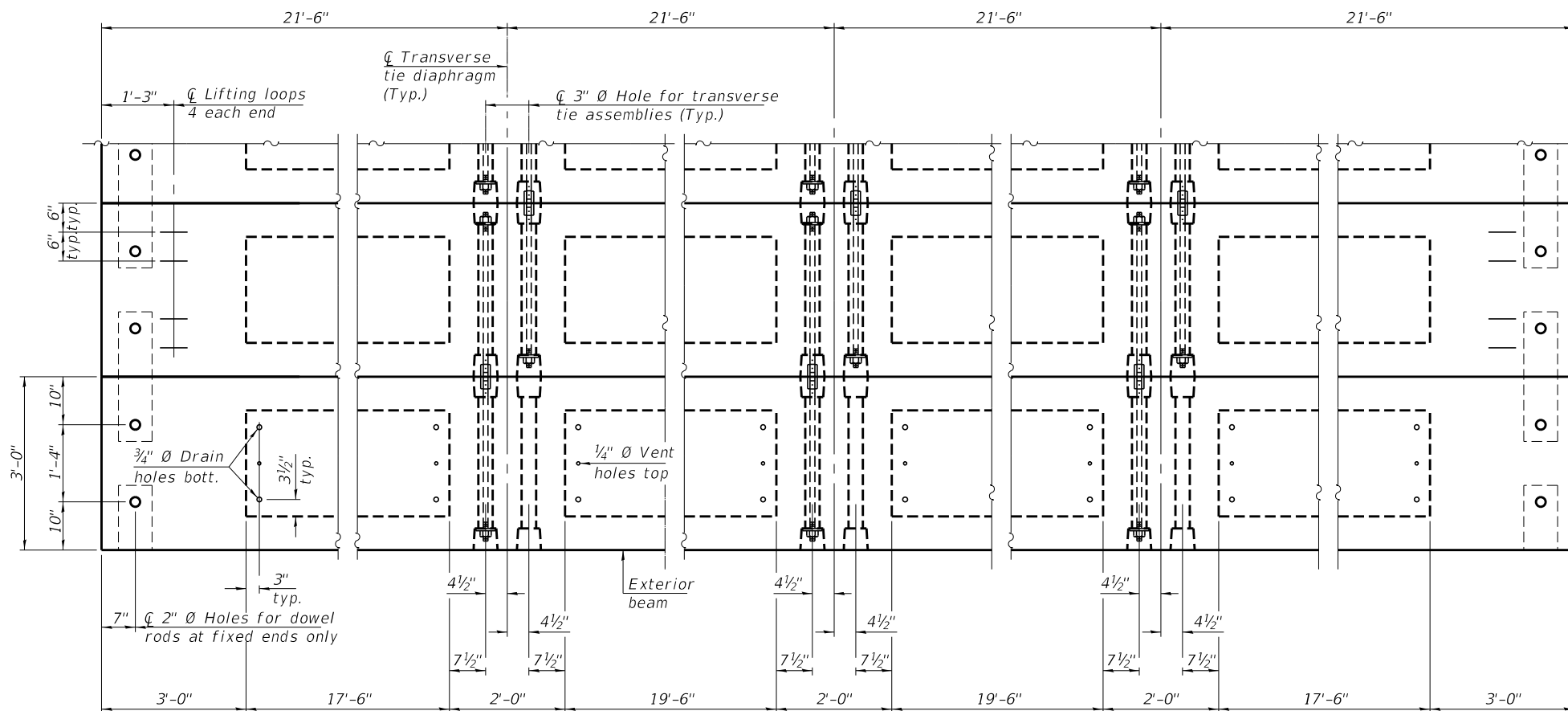
BAR S2(E)



BAR U(E)



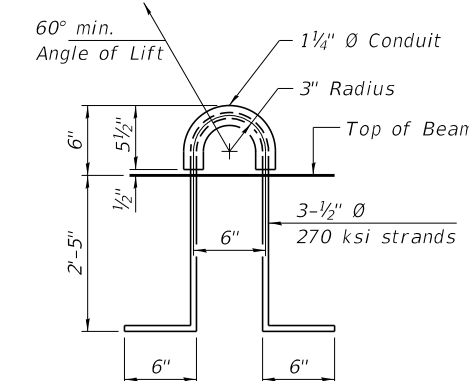
BAR U1(E)



PLAN VIEW

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" Ø 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" Ø 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.
- Reinforcement bars designated (E) shall be epoxy coated.



LIFTING LOOP DETAIL

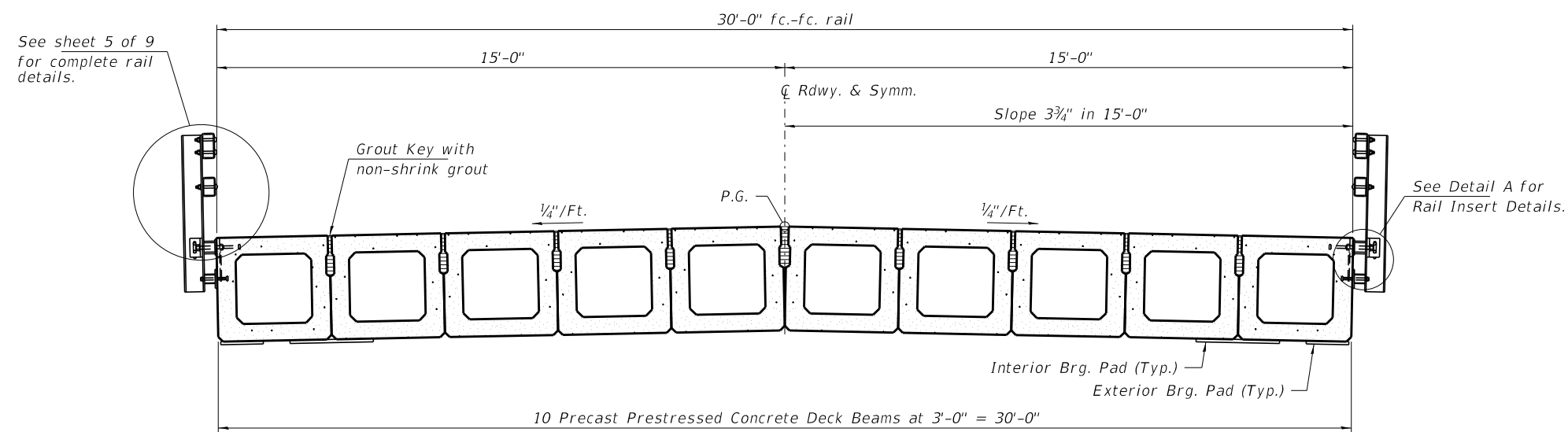
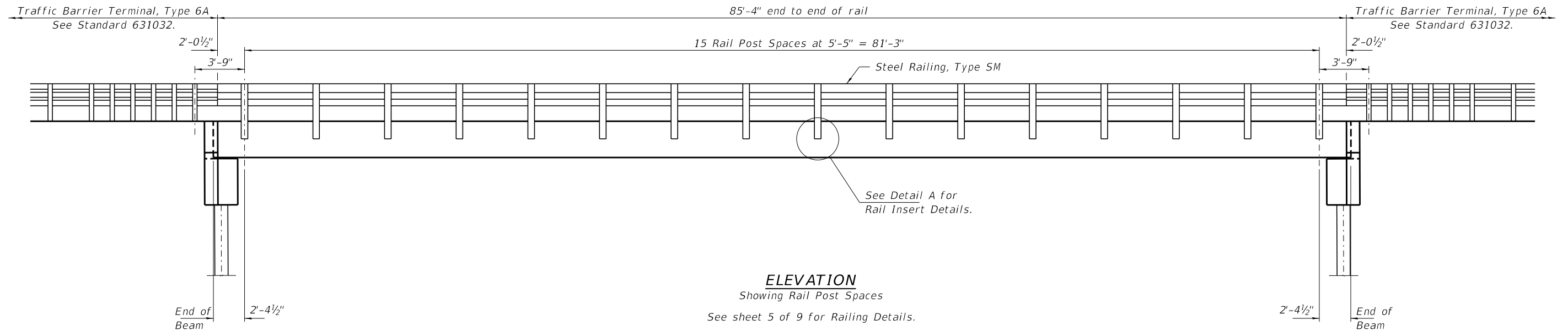
BILL OF MATERIAL

Precast Prestressed Conc. Deck Bms. (33" depth)	Sq. Ft.	2,580
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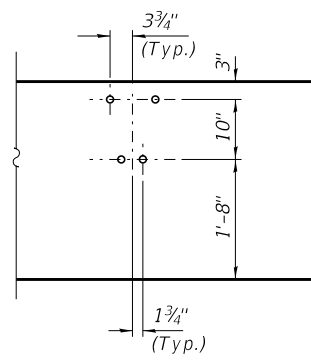
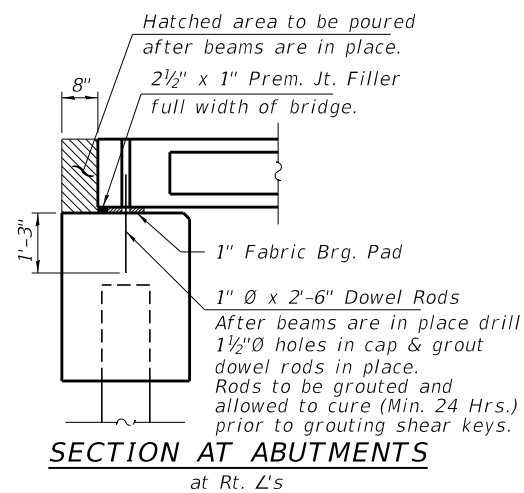
PDD-3336-0 1-1-2020

FILE NAME = 180572-shl-bridge 33" beam.dgn	USER NAME = rmosick	DESIGNED - J.R.B.	REVISED -	STATE OF ILLINOIS LAWRENCE COUNTY HIGHWAY DEPARTMENT	33" x 36" PPC DECK BEAM DETAILS STRUCTURE NO. 051-3310	F.A.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
HAMPTON, LENZINI AND RENWICK, INC. 3035 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.009959	PLOT SCALE =	CHECKED - S.W.M.	REVISED -			806	18-00122-00-BR	LAWRENCE	29	9	
	PLOT DATE = 11/3/2020	DRAWN - M.M.P.	REVISED -			CONTRACT NO. 95886					
		CHECKED - S.W.M.	REVISED -			SHEET NO. 3 OF 9 SHEETS					

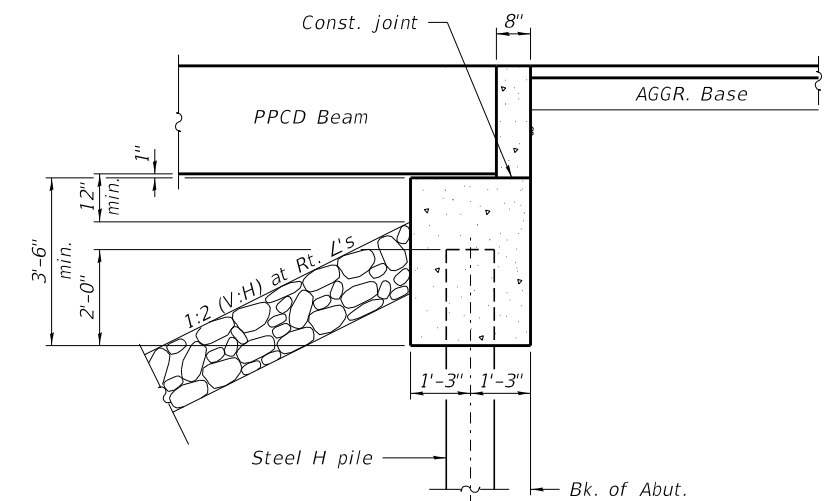
ILLINOIS FED. AID PROJECT VFLV(092)



CROSS SECTION
See sheets 2 & 3 of 9 for Superstructure.

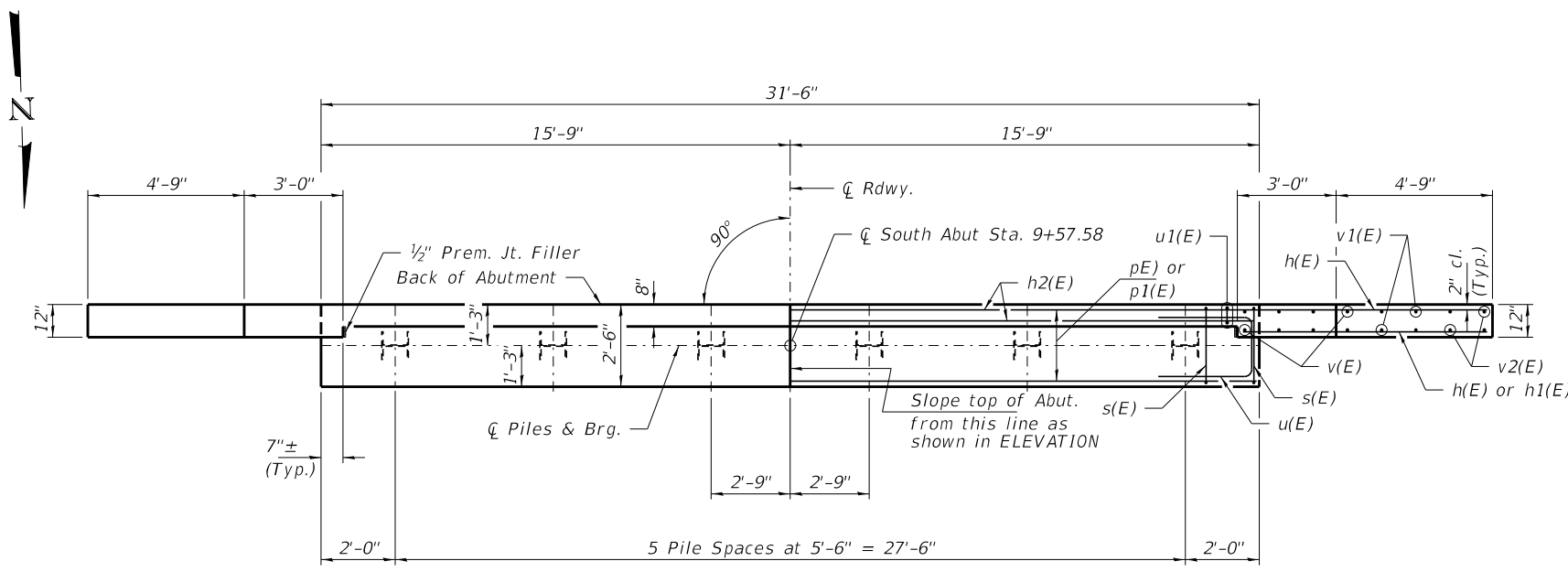


DETAIL A

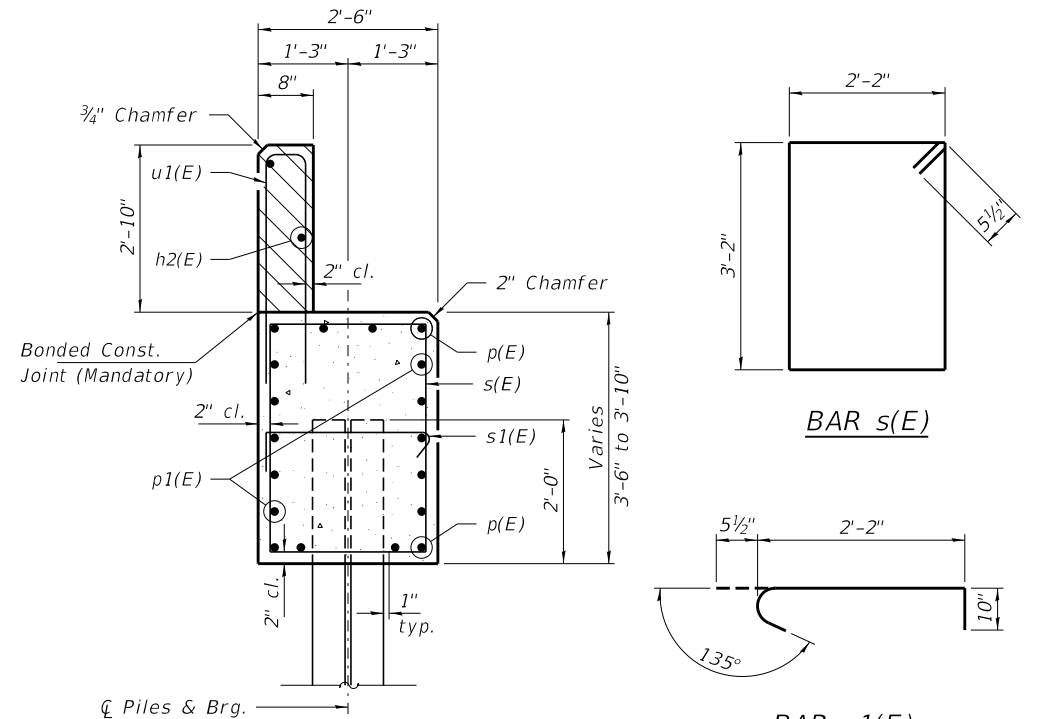


SECTION THRU ABUTMENT
(Horiz. dim. at Rt. L's)

FILE NAME = 180572-shl-bridge 33" beam.dgn	USER NAME = rmosck	DESIGNED - J.R.B.	REVISED -	STATE OF ILLINOIS LAWRENCE COUNTY HIGHWAY DEPARTMENT	SUPERSTRUCTURE DETAILS STRUCTURE NO. 051-3310	F.A.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
HAMPTON, LENZINI AND RENWICK, INC. 3035 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM L.S. / P.E. / S.E. CORP. 184.000959		CHECKED - S.W.M.	REVISED -			806	18-00122-00-BR	LAWRENCE	29	10	
	PLOT SCALE =	DRAWN - M.M.P.	REVISED -			CONTRACT NO. 95886					
	PLOT DATE = 11/3/2020	CHECKED - S.W.M.	REVISED -			SHEET NO. 4 OF 9 SHEETS					
						ILLINOIS FED. AID PROJECT VFLV(092)					



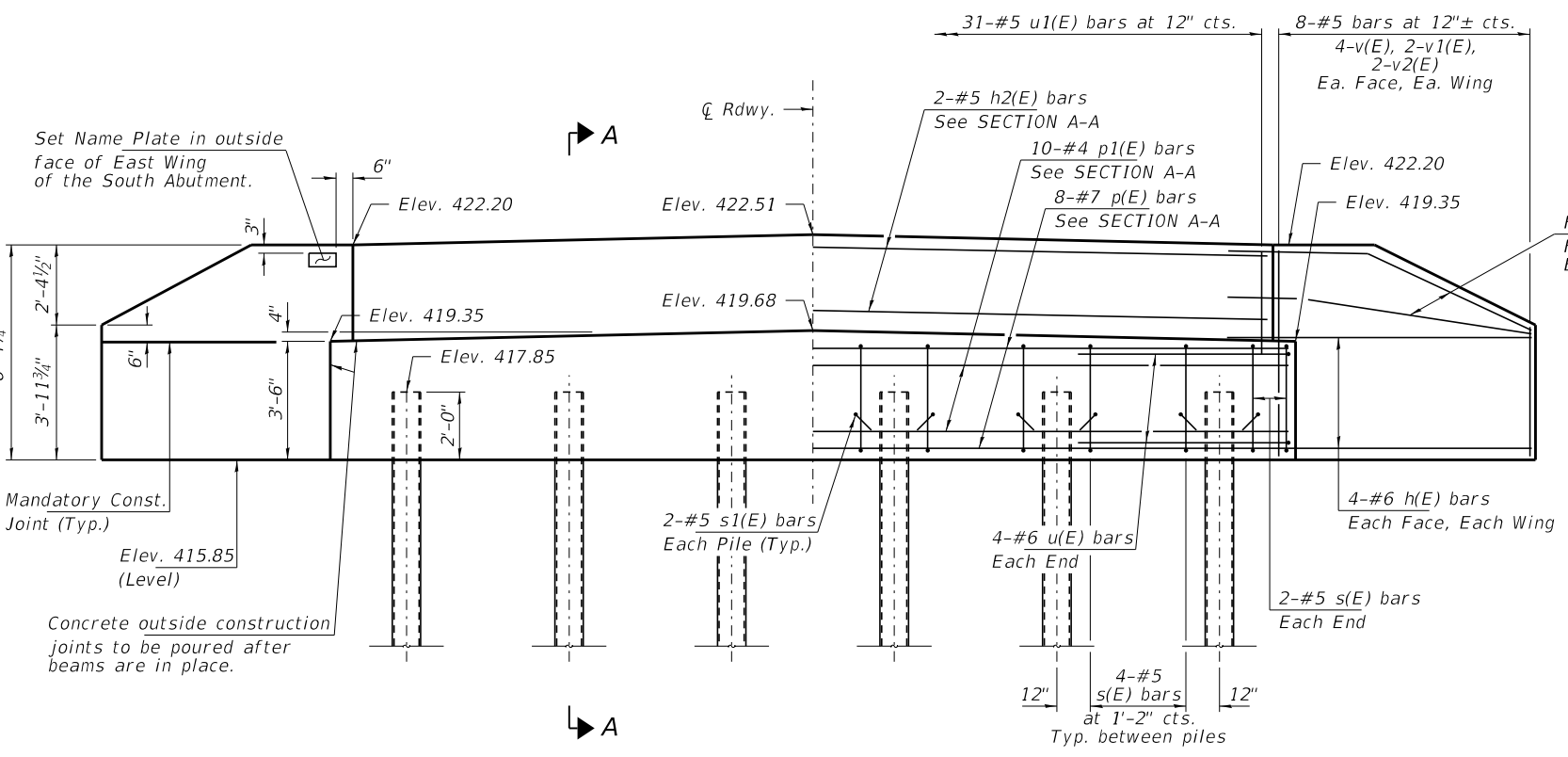
PLAN



SECTION A-A

Hatched area to be poured after beams are in place.
Cast top of wingwall flush with exterior beam face after beams have been erected.

Note: Extend h(E) bars into abutment cap.



ELEVATION

PILE DATA

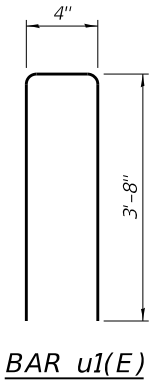
Type: Steel HP10x42
 Nominal Required Bearing: 335 Kips/Pile
 Factored Resistance Available: 184 Kips/Pile
 Est. Length: 75 Ft/Pile
 No. Production Piles: 5
 No. Test Piles: 1

Notes: One test pile shall be driven in a permanent location at the South Abutment.

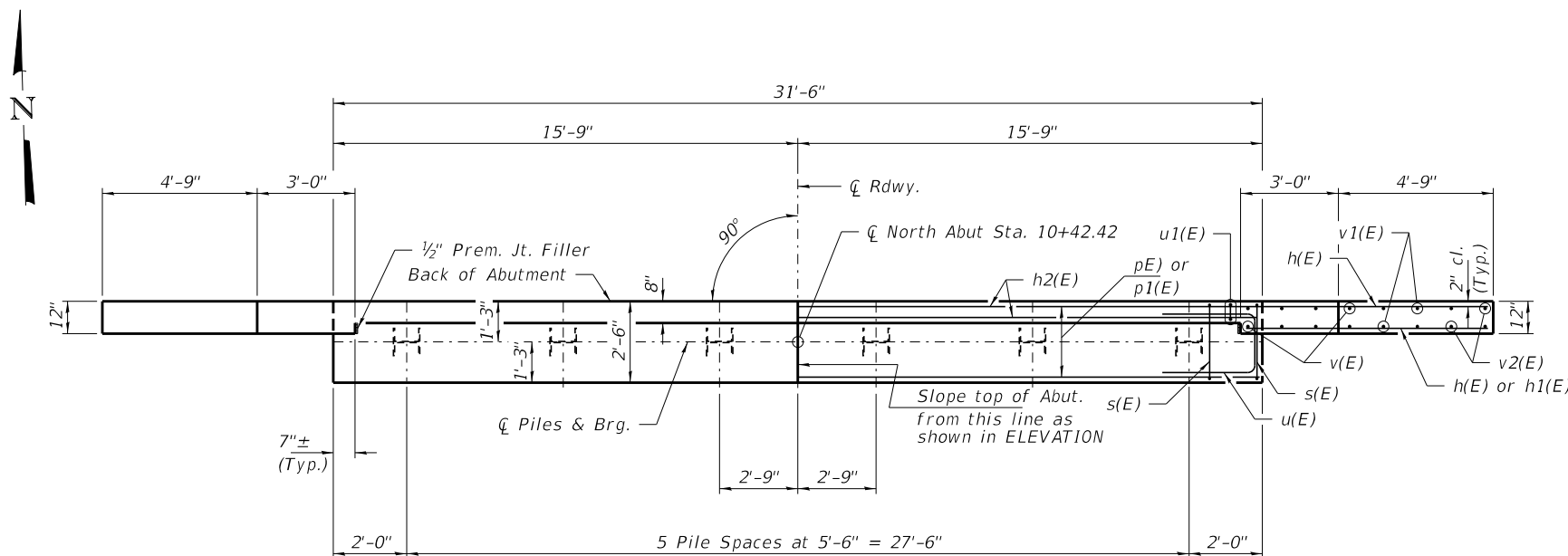
The test pile shall be driven to 110 percent of the Nominal Required Bearing indicated in the pile data information.

BILL OF MATERIAL - S. ABUT.

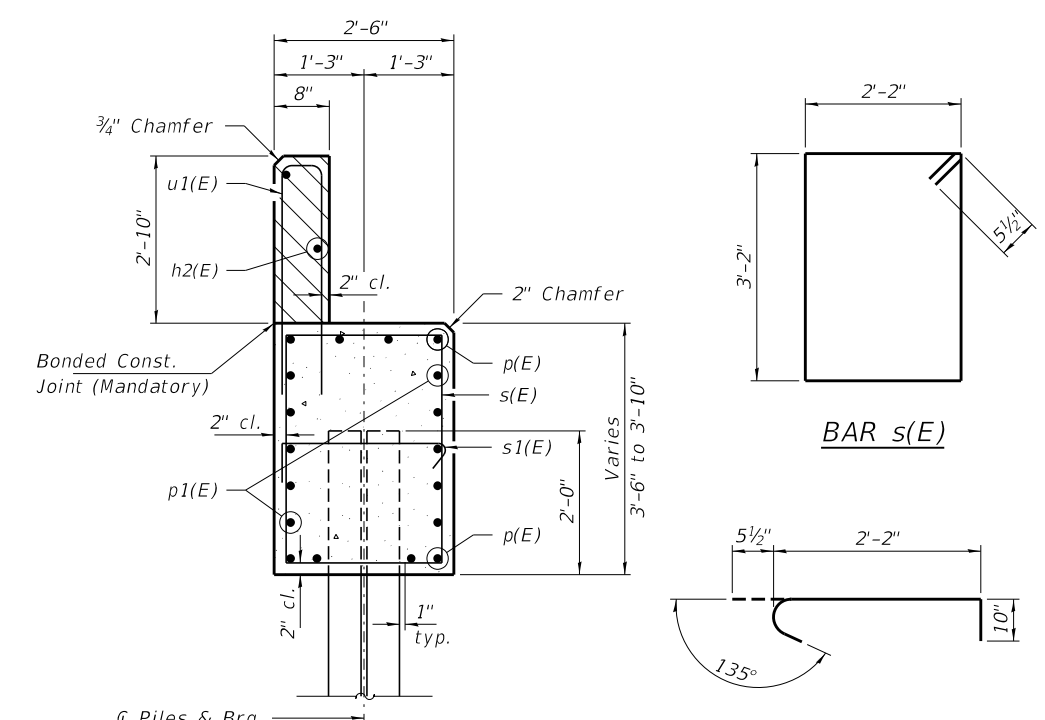
BAR	NO.	SIZE	LENGTH	SHAPE
h(E)	20	#6	9'-0"	—
h1(E)	4	#5	7'-6"	—
h2(E)	2	#5	31'-2"	—
p(E)	8	#7	31'-2"	—
p1(E)	10	#4	31'-2"	—
s(E)	24	#5	11'-7"	□
s1(E)	12	#5	3'-6"	J
u(E)	8	#6	10'-9"	U
u1(E)	31	#5	7'-8"	U
v(E)	16	#5	5'-9"	—
v1(E)	8	#5	4'-9"	—
v2(E)	8	#5	3'-8"	—
Concrete Structures			Cu. Yd.	15.9
Reinf. Bars, Epoxy Coated			Pound	1,960
Steel Piles HP10x42			Foot	375
Test Pile Steel HP10x42			Each	1
Name Plates			Each	1



BAR u1(E)

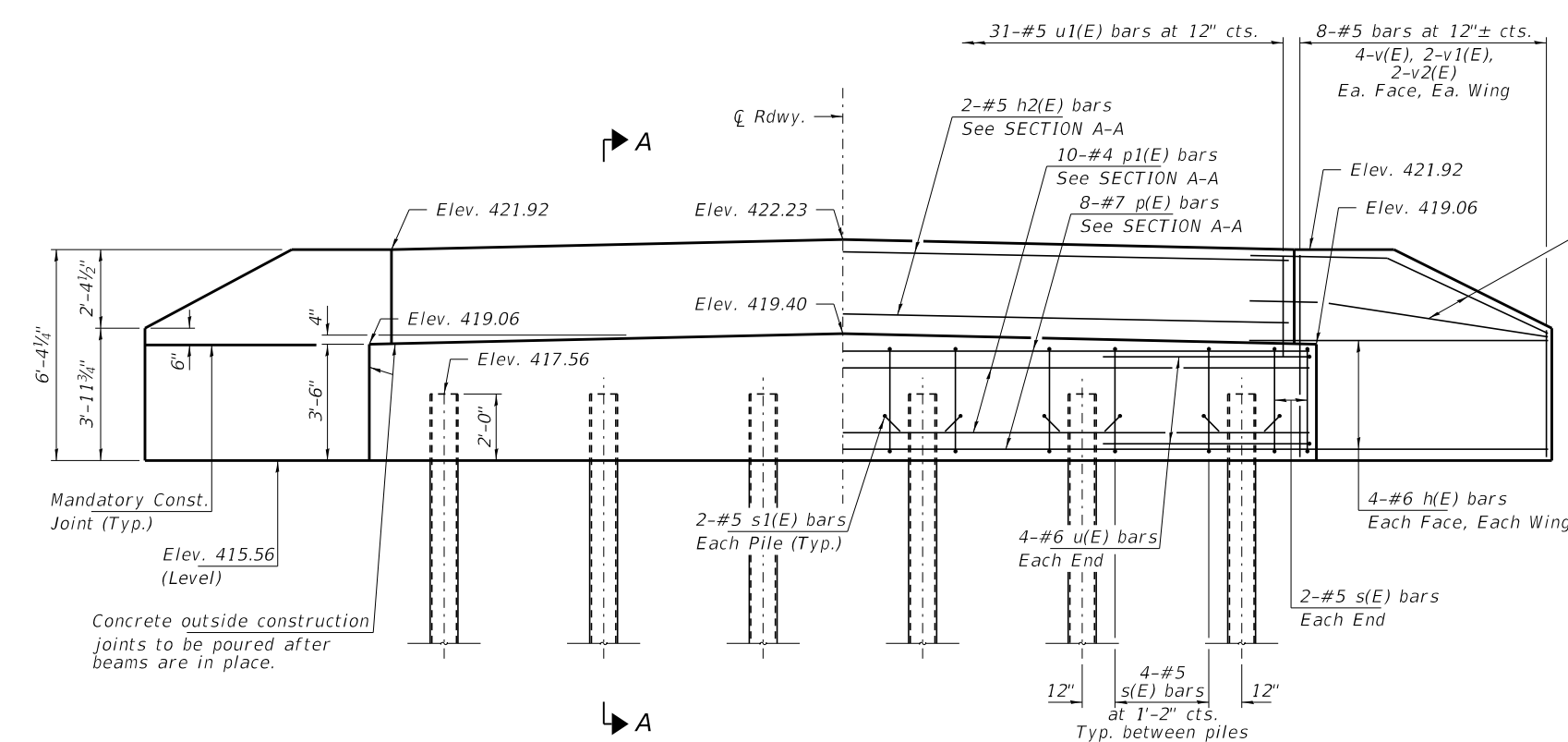


PLAN



SECTION A-A

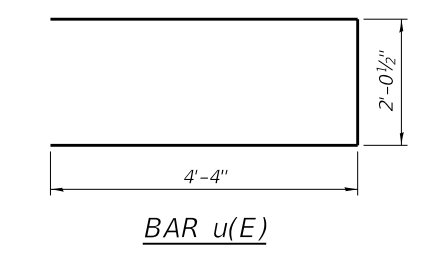
Hatched area to be poured after beams are in place.
Cast top of wingwall flush with exterior beam face after beams have been erected.



ELEVATION

PILE DATA
 Type: Steel HP10x42
 Nominal Required Bearing: 335 Kips/Pile
 Factored Resistance Available: 184 Kips/Pile
 Est. Length: 75 Ft/Pile
 No. Production Piles: 6
 No. Test Piles: 0

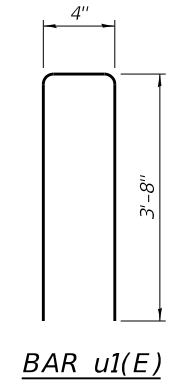
Note: Extend h(E) bars into abutment cap.
 Fan 2-#6 h(E) bars (B.F.)
 Fan 2-#5 h1(E) bars (F.F.)
 Each Wing, Bend in field.



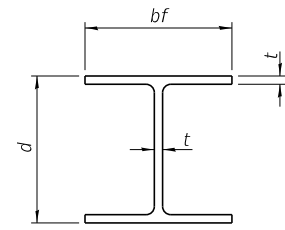
BAR u(E)

BILL OF MATERIAL - N. ABUT.

BAR	NO.	SIZE	LENGTH	SHAPE
h(E)	20	#6	9'-0"	—
h1(E)	4	#5	7'-6"	—
h2(E)	2	#5	31'-2"	—
p(E)	8	#7	31'-2"	—
p1(E)	10	#4	31'-2"	—
s(E)	24	#5	11'-7"	□
s1(E)	12	#5	3'-6"	┌
u(E)	8	#6	10'-9"	U
u1(E)	31	#5	7'-8"	U
v(E)	16	#5	5'-9"	—
v1(E)	8	#5	4'-9"	—
v2(E)	8	#5	3'-8"	—
Concrete Structures			Cu. Yd.	15.9
Reinf. Bars, Epoxy Coated			Pound	1,960
Steel Piles HP10x42			Foot	450

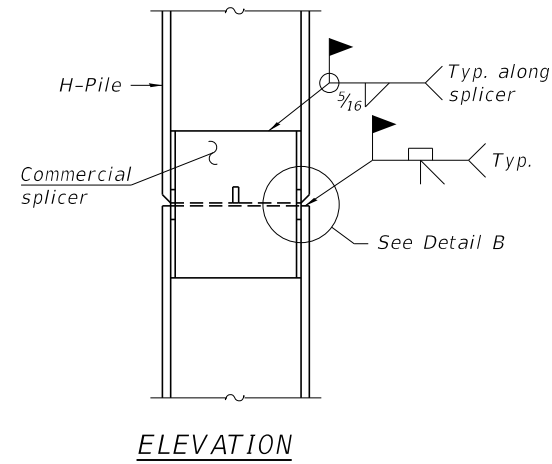


BAR u1(E)

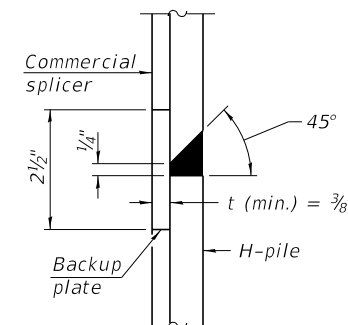


STEEL PILE TABLE

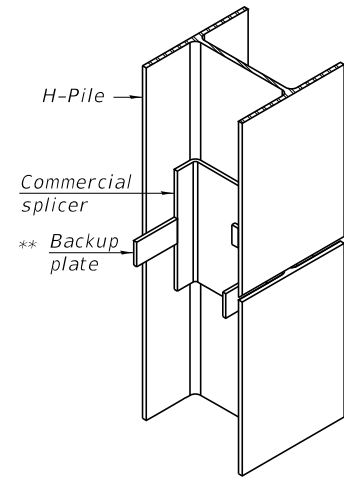
Designation	Depth d	Flange width bf	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	1 3/16"	30"
x102	14"	14 3/4"	1 1/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 3/8"	14 3/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1 1/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"
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"



ELEVATION

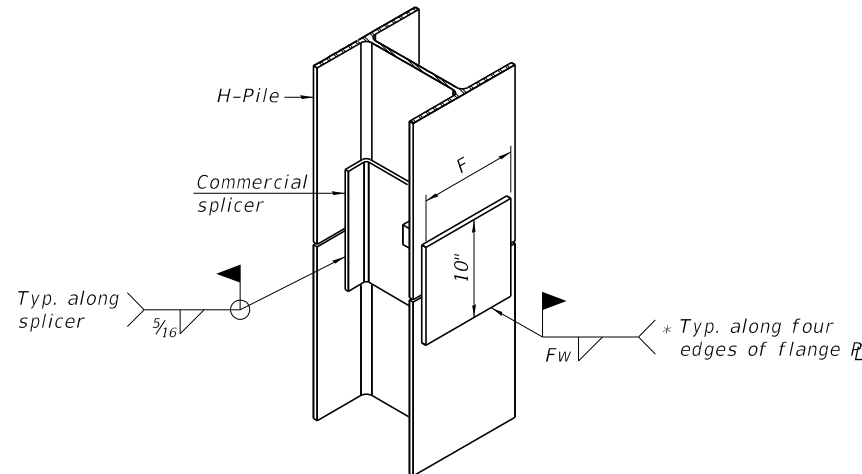


DETAIL "B"



ISOMETRIC VIEW

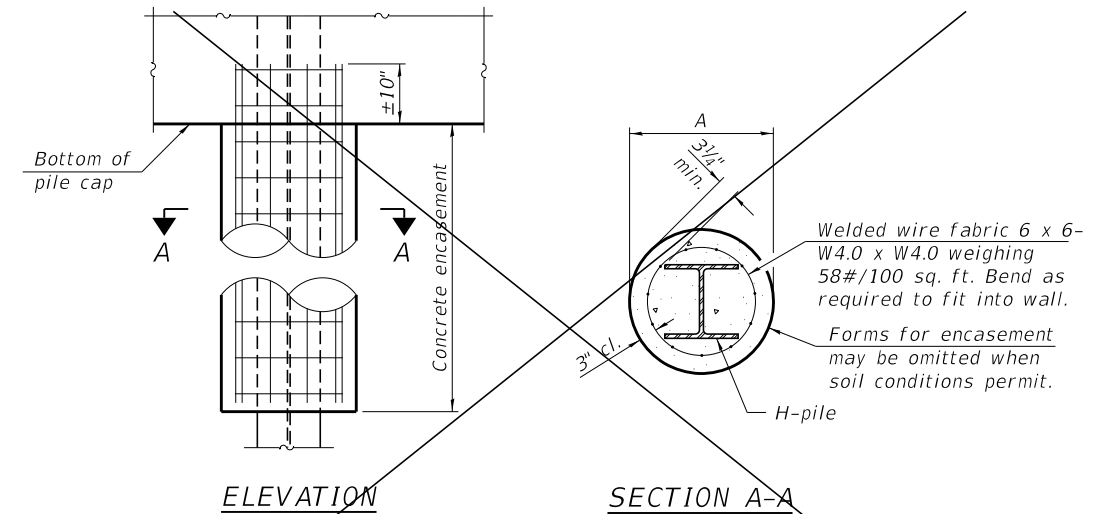
WELDED COMMERCIAL SPLICE



ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE

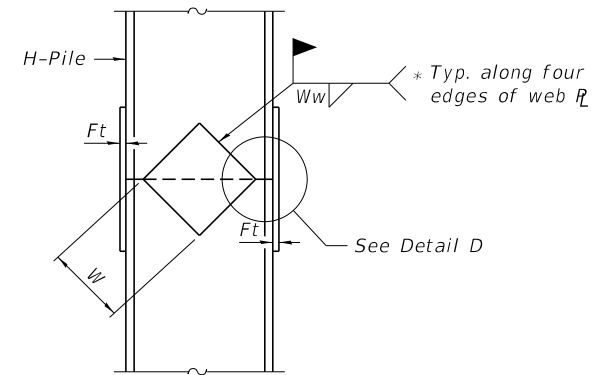
- * Interrupt welds 1/4" from end of web and/or each flange.
- ** Remove portions of backup plates that extend outside the flanges.
- *** Weld size per pile shoe manufacturer (5/16" min.).



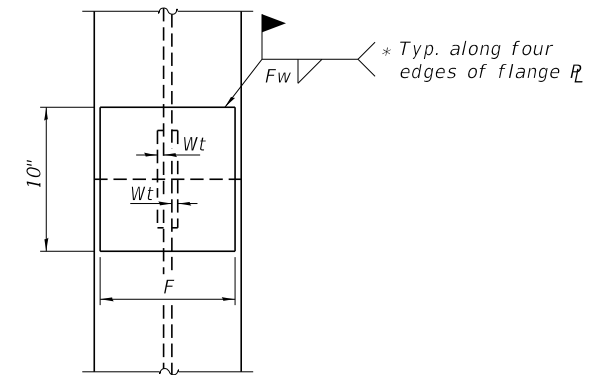
ELEVATION

SECTION A-A

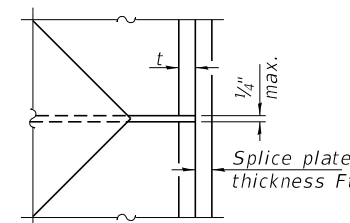
INDIVIDUAL PILE CONCRETE ENCASEMENT - (NOT REQUIRED)



ELEVATION



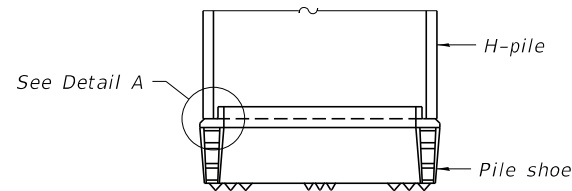
END VIEW



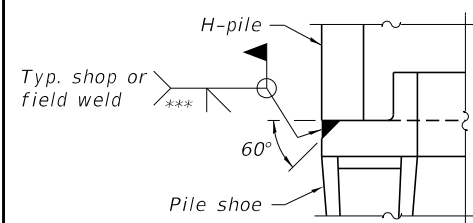
DETAIL D

WELDED PLATE FIELD SPLICE

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"



ELEVATION



DETAIL A

SHOE ATTACHMENT

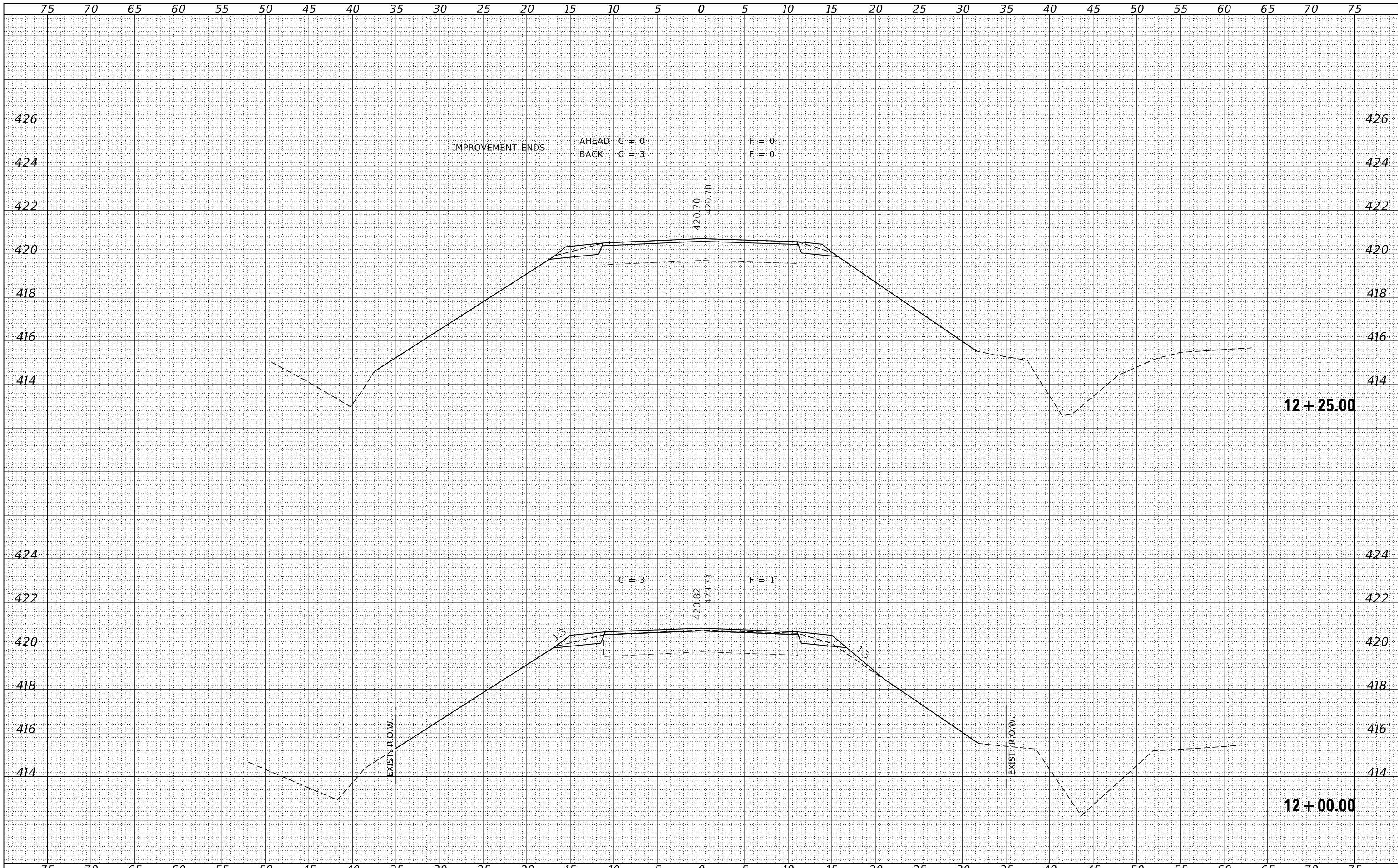
Note:
The steel H-piles shall be according to AASHTO M270 Grade 50.

F-HP 1-1-2020

FILE NAME = 180572-shl-brldge 33" beam.dgn	USER NAME = rmosick	DESIGNED - J.R.B.	REVISED -	STATE OF ILLINOIS LAWRENCE COUNTY HIGHWAY DEPARTMENT	HP PILE DETAILS STRUCTURE NO. 051-3310	F.A.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
HAMPTON, LENZINI AND RENWICK, INC. 3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM L.S./P.E./S.E. CORP. 184.000959	PLOT SCALE =	CHECKED - S.W.M.	REVISED -			806	18-00122-00-BR	LAWRENCE	29	14	
	PLOT DATE = 11/3/2020	DRAWN - M.M.P.	REVISED -			CONTRACT NO. 95886					
		CHECKED - S.W.M.	REVISED -			SHEET NO. 8 OF 9 SHEETS					

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

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



FILE NAME = 180572-shl-xssheets.dgn	USER NAME = rmosck	DESIGNED - J.V.F.	REvised -	STATE OF ILLINOIS LAWRENCE COUNTY HIGHWAY DEPARTMENT	STATION CROSS SECTIONS			F.A.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HAMPTON, LENZINI AND RENWICK, INC. 3885 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM L.S. / P.E. / S.E. CORP. 184.000958	PLOT SCALE = \$\$SCALE\$	DRAWN - T.W.K.	REvised -		806	18-00122-00-BR	LAWRENCE	29	28			
PLOT DATE = 11/03/2020	DATE - 11/03/2020	CHECKED - S.W.M.	REvised -		CONTRACT NO. 95886			ILLINOIS FED. AID PROJECT VFL2(092)				
		DATE - 11/03/2020	REvised -		SCALE: 5H:2V	SHEET NO. 13 OF 14 SHEETS	STA. 12+00.00 TO STA. 12+25.00					

