

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 412A	09-05116-00-BR	WHITE	28	1
FED. ROAD DIST. NO.		ILLINOIS	CONTRACT NO. 99617	

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1.	COVER SHEET
2.	SUMMARY OF QUANTITIES AND GENERAL NOTES
3.	TYPICAL CROSS SECTIONS
4-5.	PLAN AND PROFILE
6-12.	BRIDGE PLANS
13.	BORINGS
14-28.	STATION CROSS SECTIONS

HIGHWAY STANDARDS:

000001-07	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
515001-03	NAME PLATE FOR BRIDGES
701901-08	TRAFFIC CONTROL DEVICES
BLR 21-9	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

PLANS FOR PROPOSED
SURFACE TRANSPORTATION PROGRAM
OFF SYSTEM BRIDGE

PROJECT YDVW(637)
SECTION 09-05116-00-BR
GRAY ROAD DISTRICT
WHITE COUNTY
T.R. 412A
PROPOSED STRUCTURE NO. 097-3276
C-99-516-10



UTILITIES

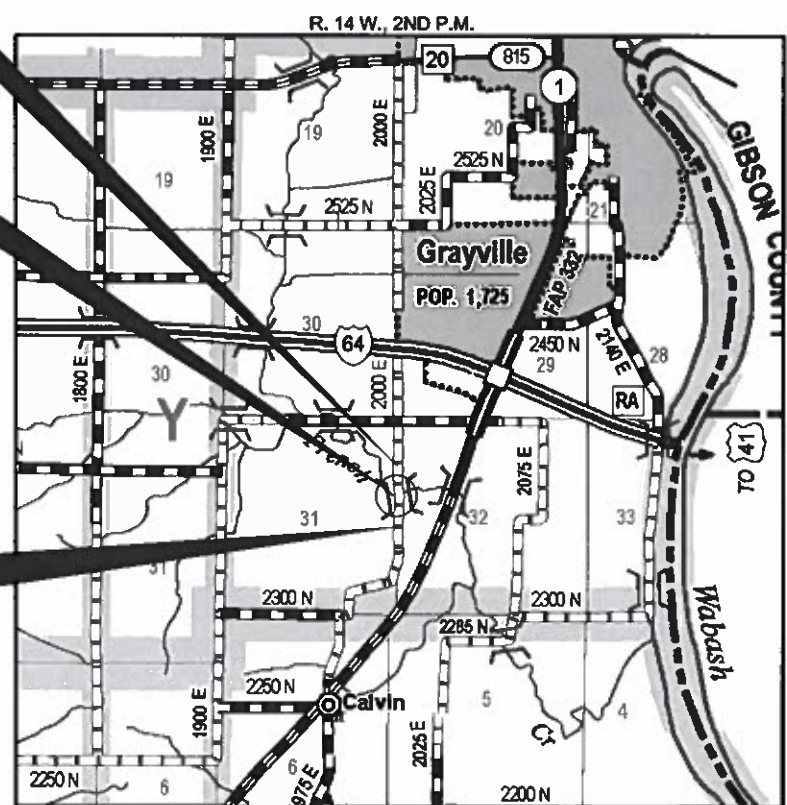
CROSSVILLE GAS (WATER)
107 W. MAIN STREET
CROSSVILLE, IL 62827

FRONTIER COMMUNICATIONS
208 W. UNION STREET
MARION, IL 62959

STA. 9+73
PRECAST PRESTRESSED CONCRETE DECK BEAM
BRIDGE. SINGLE SPAN @ 80'-0"
24'-0" RDWY.; SKEW = 0°
EXISTING STRUCTURE NO. 097-3144
PROPOSED STRUCTURE NO. 097-3276

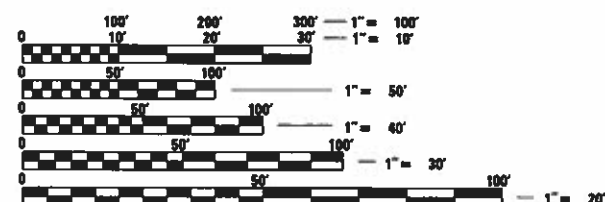
IMPROVEMENT ENDS
STATION 12+50

IMPROVEMENT BEGINS
STATION 7+00



LOCATION MAP

APPROXIMATE SCALE: 0 1/2 MILE
NET LENGTH OF SECTION = 550 FEET = 0.104 MILES



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: LOCAL ROAD
DESIGN SPEED: 30 MPH
DESIGN TRAFFIC: 10 ADT

WARNING

CALL 811
BEFORE YOU DIG
DIG NO: A2843442

ILLINOIS DEPARTMENT OF TRANSPORTATION

APPROVED *April 1st* 2019
[Signature]
COUNTY ENGINEER

APPROVED *4-1* 2019
[Signature]
TOWNSHIP COMMISSIONER

PASSED *05/28* 2019
[Signature]
DISTRICT NINE ENGINEER OF LOCAL ROADS & STREETS
05/28 2019
[Signature]
REGION FIVE ENGINEER

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DATE: 03/07/2019

EXPIRES: 11/30/2019

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

194.000959
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORPORATION

PROJECT NUMBER: 17.0596.130
DATE: 03/07/19

SUMMARY OF QUANTITIES			
ITEM NO.	ITEM	CONSTRUCTION TYPE CODE 0010	
		UNIT	TOTAL
20100500	TREE REMOVAL, ACRES	ACRE	0.1
20200100	EARTH EXCAVATION	CU YD	685
20300100	CHANNEL EXCAVATION	CU YD	115
20400800	FURNISHED EXCAVATION	CU YD	780
28100807	STONE DUMPED RIPRAP, CLASS A4	TON	490
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	450
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
50300225	CONCRETE STRUCTURES	CU YD	25.8
50400605	PRECAST PRESTRESSED CONCRETE DECK BEAMS (33" DEPTH)	SQ FT	1,920
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	2,920
50900205	STEEL RAILING, TYPE S1	FOOT	157
51201400	FURNISHING STEEL PILES HP10X42	FOOT	500
51202305	DRIVING PILES	FOOT	500
51204650	PILE SHOES	EACH	10
51500100	NAME PLATES	EACH	1
67100100	MOBILIZATION	L SUM	1
72501000	TERMINAL MARKER DIRECT APPLIED	EACH	4
X2501000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.6

^ SEE SPECIAL PROVISIONS

* SPECIALTY ITEMS

GENERAL NOTES

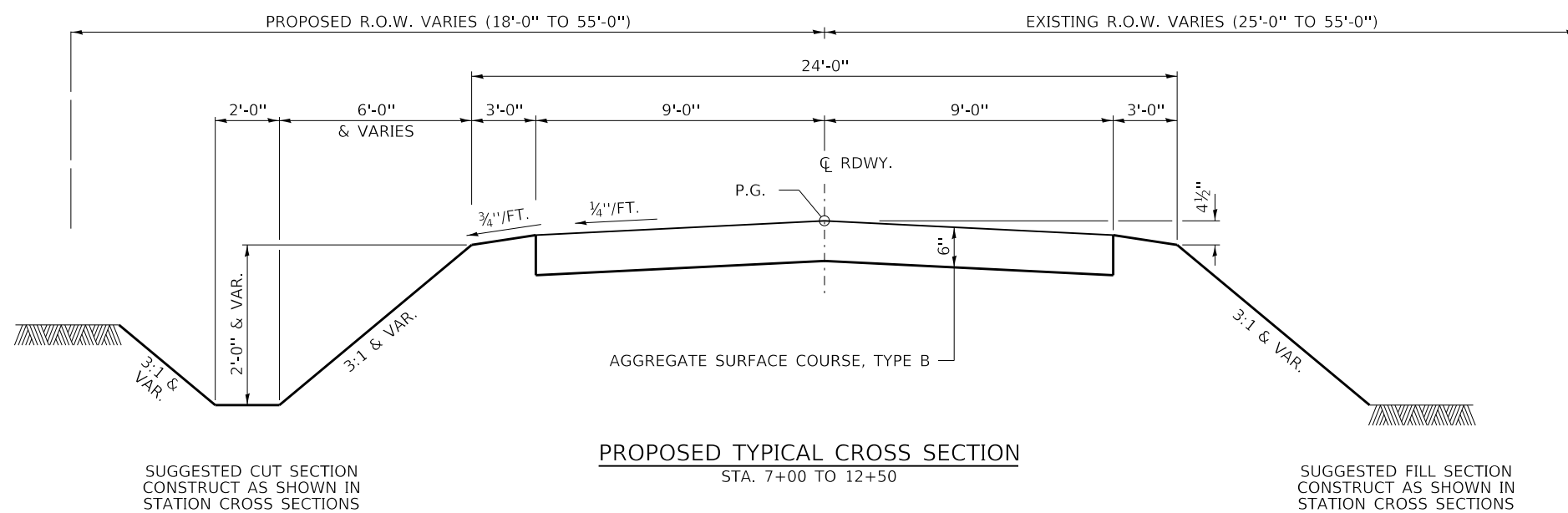
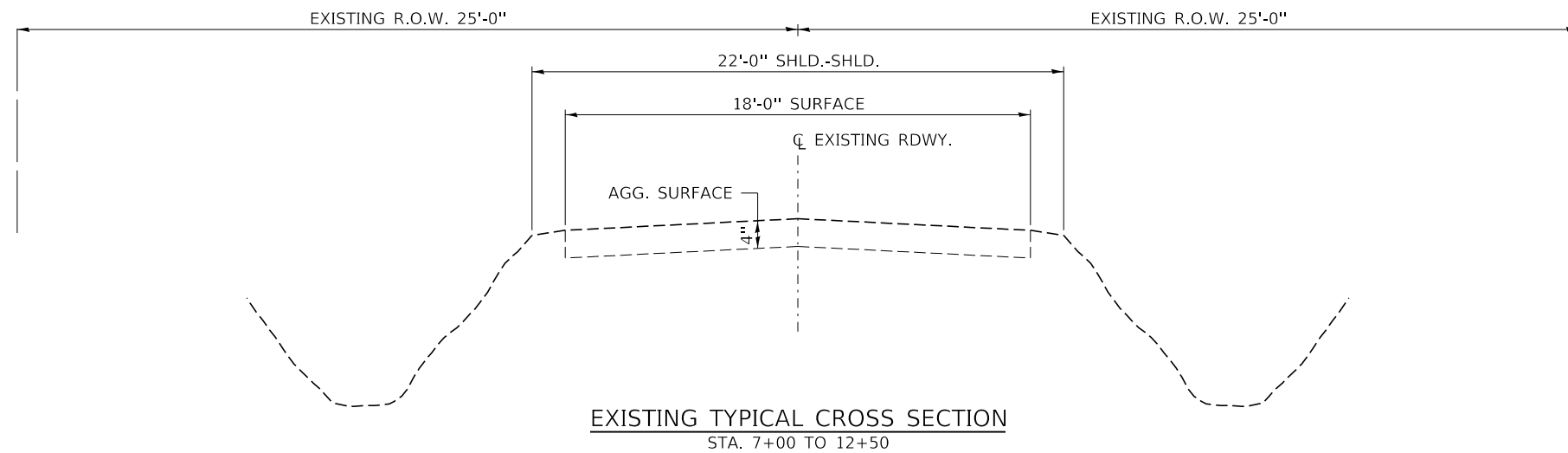
- ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ADOPTED APRIL 1, 2016", (HERE IN AFTER REFERRED TO AS THE STANDARD SPECIFICATIONS, THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS" ADOPTED JANUARY 1, 2019, 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.
- WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKS AND MONUMENTS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.
- ANY REFERENCE TO STANDARDS THROUGHOUT THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERPRETED TO BE THE LATEST STANDARD OF THE DEPARTMENT.
- THE LOCATION ON THE PLANS OF EXISTING DRAINAGE STRUCTURES, TELEPHONE LINES, ELECTRIC LINES, WATER SERVICE LINES, GAS MAINS, AND OTHER UTILITY FACILITIES AS SHOWN ON THE PLANS ARE BASED ON FIELD INVESTIGATIONS AND THE BEST INFORMATION AVAILABLE, BUT THE LOCATIONS ARE NOT GUARANTEED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN THEIR EXACT LOCATION FROM THE INDIVIDUAL UTILITY COMPANIES AND BY FIELD INSPECTION.
- THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN CALCULATING PLAN QUANTITIES
 AGGREGATE SURFACE COURSE 2.05 TON/CU YD
 STONE DUMPED RIPRAP 1.75 TON/CU YD
- 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) = 0.6 ACRES
- ANY SURPLUS EXCAVATION SHALL BE DISPOSED OF BY THE CONTRACTOR AS PER ARTICLE 202.03. NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- COMMITMENTS:
 - TREES SHALL NOT BE CLEARED BETWEEN APRIL 1 TO SEPTEMBER 30.
 - A BAT ASSESSMENT SHALL BE CONDUCTED IF WORK OCCURS TO EXISTING STRUCTURE AFTER AUGUST 15.

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.
TR412A/2000E RD							
STA. 7+00 TO STA. 9+32.33	485		25.00%	100.00%	364	661	297
STA. 9+32.33 TO STA. 10+13.67		115	25.00%	70.00%	60		60
STA. 10+13.67 TO STA. 12+50	201		25.00%	100.00%	151	695	-544
TOTAL	687	115			575	1357	781
USE	685	115					780

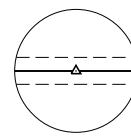
FURNISHED 780 CU YDS

FILE NAME * 170008-04-summary.dgn	USER NAME * rfozick	DESIGNED - J.W.P.	REVISED -	STATE OF ILLINOIS WHITE COUNTY HIGHWAY DEPARTMENT	SUMMARY OF QUANTITIES AND GENERAL NOTES	I.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HANPTON, LANKON AND RYENBERG, INC. 3004 STEVENSON DRIVE, SUITE 301 SPRINGFIELD, ILLINOIS 62761 ILLINOIS PROFESSIONAL DESIGN FIRM L.E./P.C./S.T. CORP. 134 000043	PLOT SCALE * 8/32000	DRAWN - M.M.P.	REVISED -			412A	08-05118-00-BR	WHITE	28	2
PLOT DATE * 3/7/2019	CHECKED - S.W.M.	REVISIED -				GRAY ROAD DISTRICT	CONTRACT NO. 99617			
	DATE * 03/07/19	REVISIED -				SCALE:	SHEET NO. 1 OF 1 SHEETS	STA.	TO	STA.



TRANSITIONS FROM THE PROPOSED ROADWAY TO THE EXISTING ROADWAY ARE TO BE CONSTRUCTED FROM STA. 7+00 TO 7+50 AND STA. 12+00 TO STA. 12+50. SEE SHEET 6 FOR TRANSITION AT BRIDGE.

FILE NAME = 170696-shit-typsections.dgn	USER NAME = rhosick	DESIGNED - J.W.F.	REVISED -	STATE OF ILLINOIS WHITE COUNTY HIGHWAY DEPARTMENT	TYPICAL CROSS SECTIONS			T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.												
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HAMPTON, LENZINI AND RENWICK, INC.	DRAWN - M.M.P.	CHECKED - S.W.M.	REVISED -																					
3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT SCALE = \$SCALE\$	DATE = 03/07/19	REVISED -																					
									GRAY ROAD DISTRICT			CONTRACT NO. 99617												
											ILLINOIS		FED. AID PROJECT YDWW(637)											



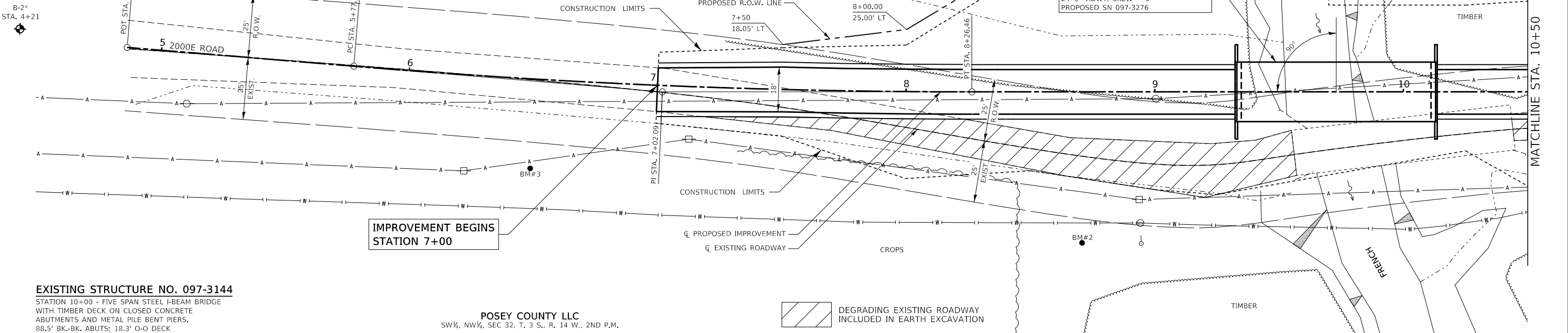
BEN ELY TRUST
NE 1/4, SEC 31, T. 3 S., R. 14 W., 2ND P.M.

CURVE DATA
PI Sta. 7+02.09
Δ = 4° 45' 12" (LT)
D = 1° 54' 35"
T = 124.51'
R = 3,000.00'
L = 248.88'
E = 2.58'
PC Sta. 5+77.58
PT Sta. 8+26.46
No S.E.

P.O.T. STA. 4+86.13
TO BE SET
N. 566993.605
E. 1076682.843

P.I. STA. 7+02.09
TO BE SET
N. 567209.284
E. 1076693.895

DATE	
BY	
REVIEWED	
PLANNED	
NOTED	
NO.	



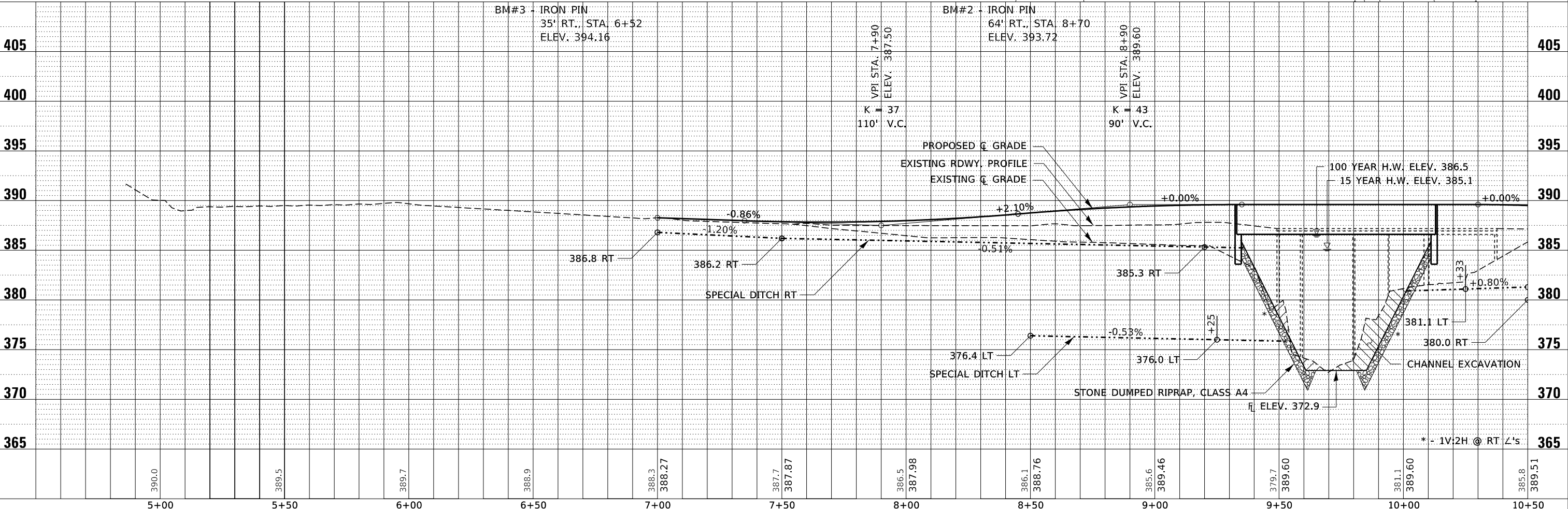
EXISTING STRUCTURE NO. 097-3144

STATION 10+00 - FIVE SPAN STEEL I-BEAM BRIDGE WITH TIMBER DECK ON CLOSED CONCRETE ABUTMENTS AND METAL PILE BENT PIERS. 88.5' BK.-BK. ABUTS; 18.3' O-O DECK

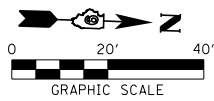
POSEY COUNTY LLC
SW 1/4, NW 1/4, SEC 32, T. 3 S., R. 14 W., 2ND P.M.

DEGRADING EXISTING ROADWAY INCLUDED IN EARTH EXCAVATION

DATE	
BY	
REVIEWED	
PLANNED	
NOTED	
NO.	

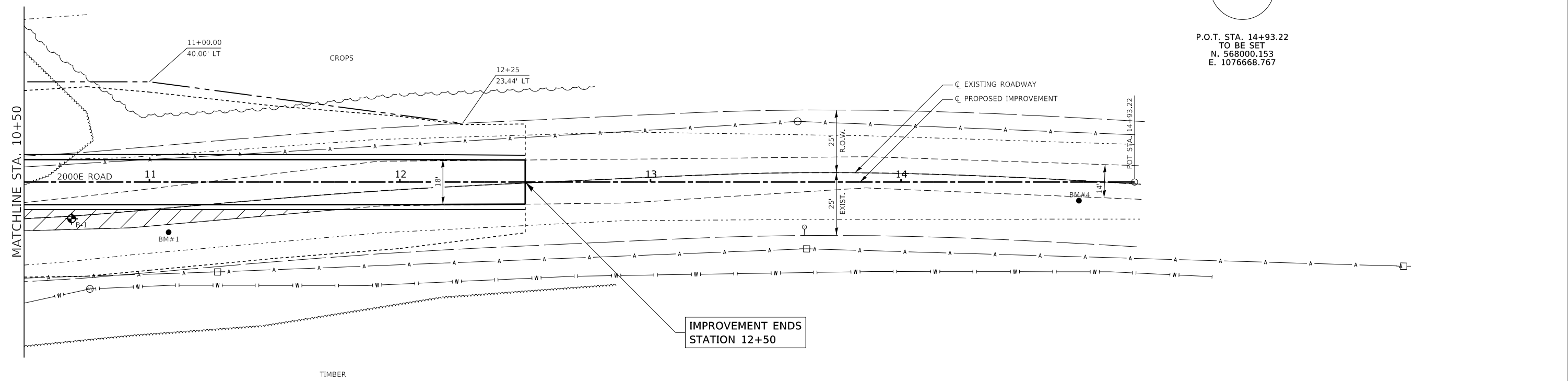


FILE NAME = 170696-sht-planprf.dgn	USER NAME = rmosick	DESIGNED - J.W.F.	REVISED -	<p align="center">STATE OF ILLINOIS WHITE COUNTY HIGHWAY DEPARTMENT</p> <p>SCALE: 20H:5V SHEET NO. 1 OF 2 SHEETS STA. 4+50 TO STA. 10+50</p>	T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HAMPTON, LENZINI AND RENWICK, INC.	PLOT SCALE = \$SCALE\$	DRAWN - M.M.P.	REVISED -		412A	09-05116-00-BR	WHITE	28	4
3065 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM L.S./P.E./S.E. CORP. 184.000959	CHECKED - S.W.M.	DATE - 03/07/19	REVISED -		GRAY ROAD DISTRICT	CONTRACT NO. 99617			
PLOT DATE = 3/7/2019	DATE - 03/07/19	REVISED -	REVISED -		ILLINOIS FED. AID PROJECT Y0WV(637)				



P.O.T. STA. 14+93.22
TO BE SET
N. 568000.153
E. 1076668.767

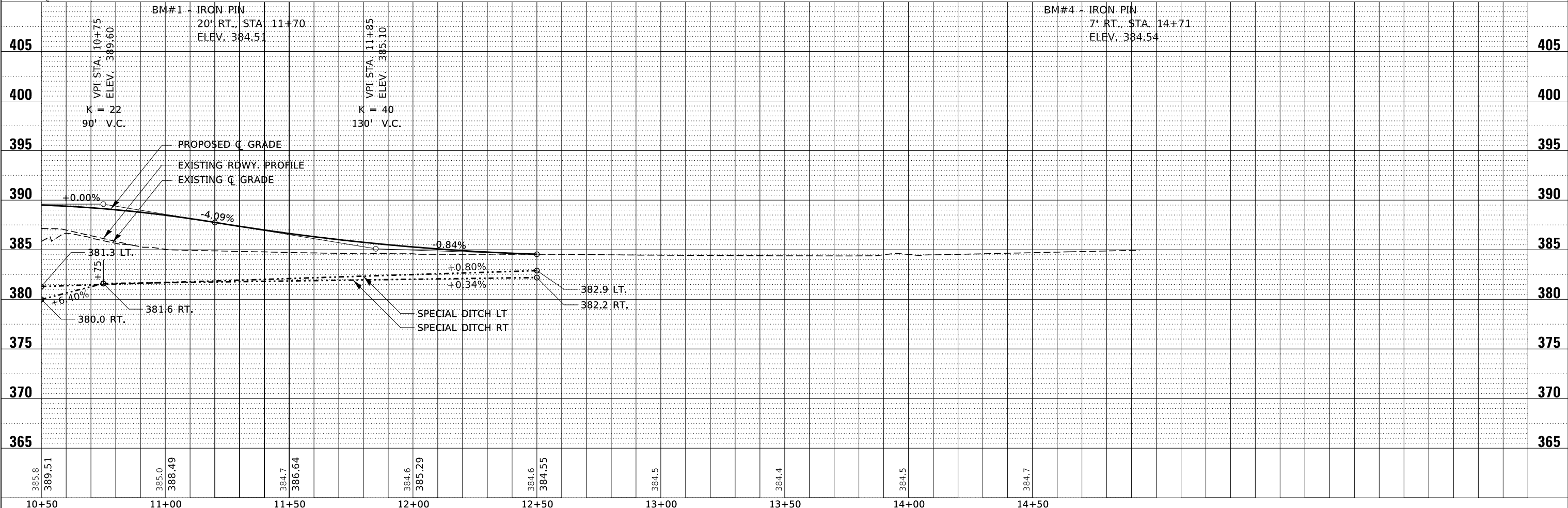
DATE	
BY	
REVIEWED	
PLANNED	
NOTED	
NO.	



ROBERT R. AND DOROTHY WARD
SW¼, NW¼, SEC 32, T. 3 S., R. 14 W., 2ND P.M.

DEGRADING EXISTING ROADWAY
INCLUDED IN EARTH EXCAVATION

DATE	
BY	
REVIEWED	
PLANNED	
NOTED	
NO.	



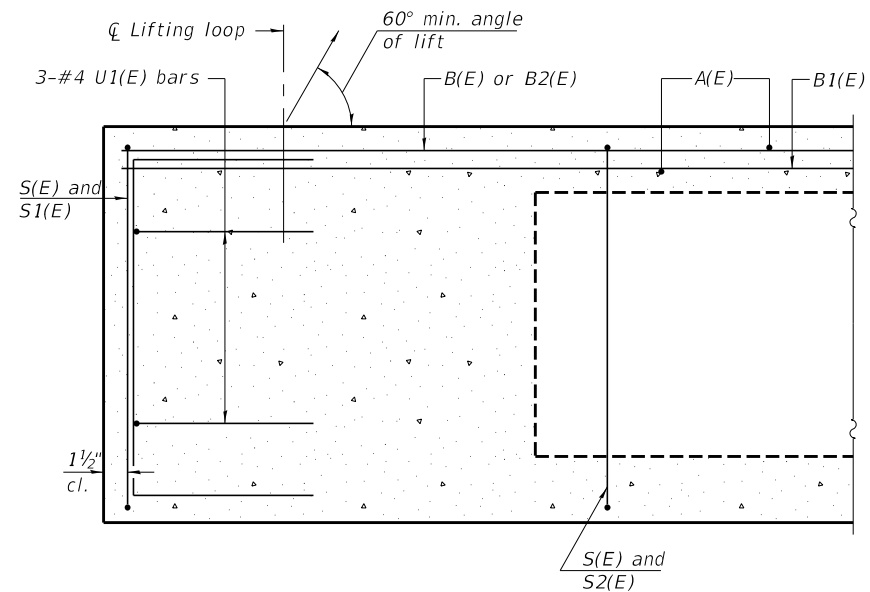
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PLOT SCALE = \$SCALE\$	CHECKED - S.W.M.	DATE - 03/07/19	REVISED -
PLOT DATE = 3/7/2019			

STATE OF ILLINOIS
WHITE COUNTY HIGHWAY DEPARTMENT

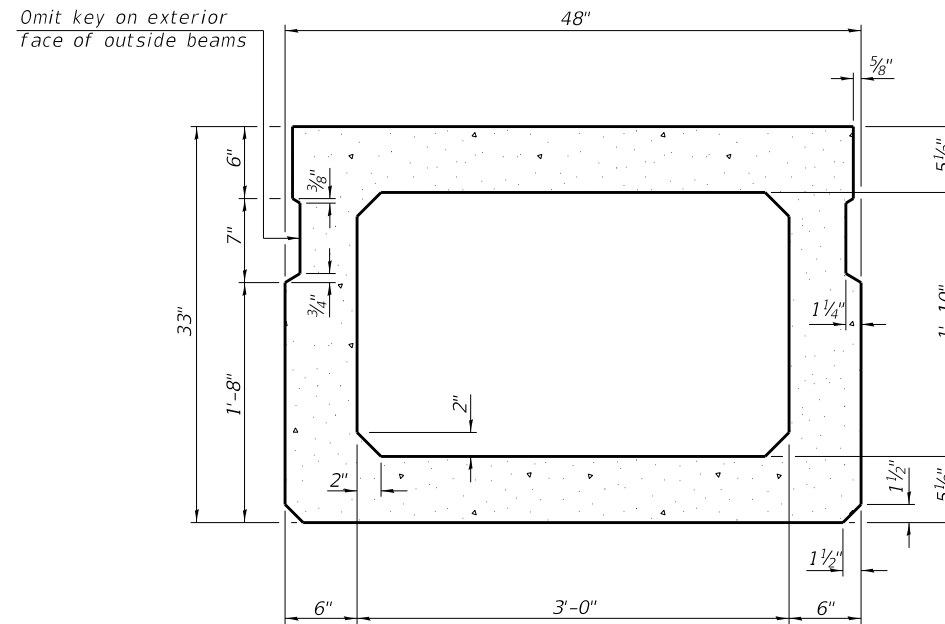
PLAN & PROFILE

SCALE: 20H:5V SHEET NO. 2 OF 2 SHEETS STA. 10+50 TO STA. 14+93

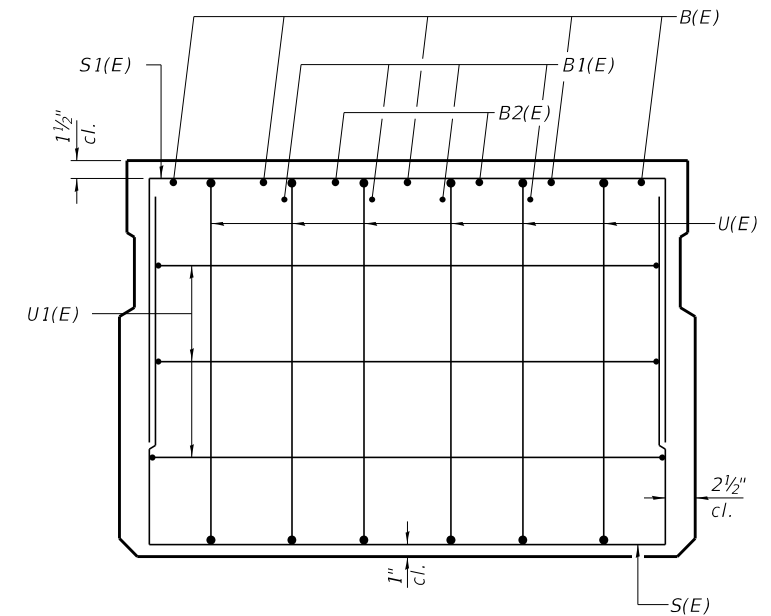
T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
412A	09-05116-00-BR	WHITE	28	5
GRAY ROAD DISTRICT		CONTRACT NO. 99617		
ILLINOIS FED. AID PROJECT YDWW(637)				



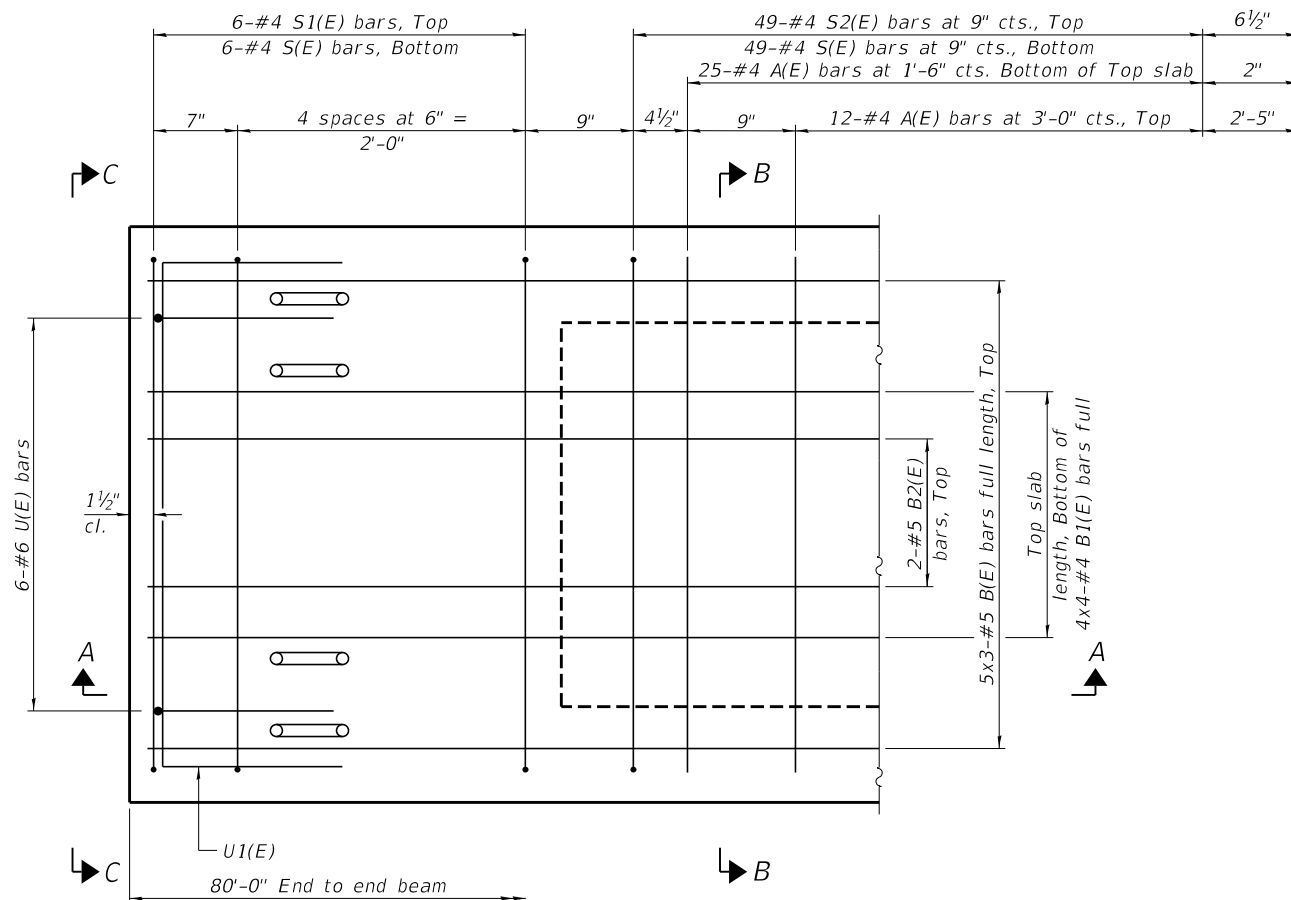
SECTION A-A



SECTION B-B
(Showing dimensions)

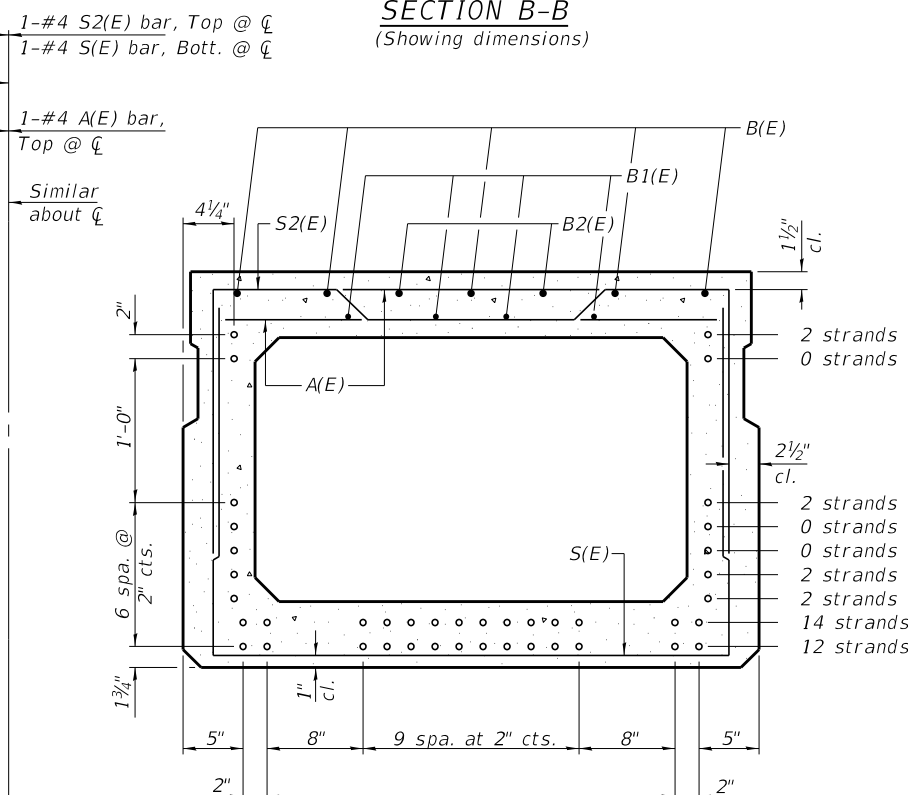


VIEW C-C



PLAN VIEW

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



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)	75	#4	3'-7"	—
B(E)	15	#5	28'-3"	—
B1(E)	16	#4	21'-5"	—
B2(E)	4	#5	10'-0"	—
S(E)	111	#4	8'-8"	U
S1(E)	12	#4	7'-5"	U
S2(E)	99	#4	7'-8"	U
U(E)	12	#6	5'-0"	U
U1(E)	6	#4	6'-0"	U

Note:
 See sheet 3 & 4 of 8 for additional details and Bill of Material.

MINIMUM BAR LAP

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

PD-3348-0

2-17-2017

FILE NAME = 170696-shl-bridge.dgn	USER NAME = rmosick	DESIGNED - J.W.F.	REvised -
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	PLOT SCALE =	CHECKED - S.W.M.	REvised -
	PLOT DATE = 3/7/2019	DRAWN - M.M.P.	REvised -
		CHECKED - S.W.M.	REvised -

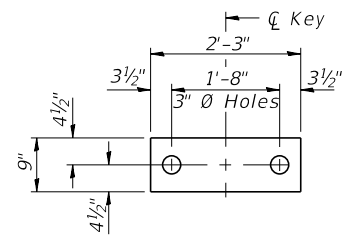
STATE OF ILLINOIS
 WHITE COUNTY HIGHWAY DEPARTMENT

33" x 48" PPC DECK BEAM
 STRUCTURE NO. 097-3276

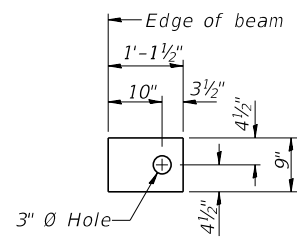
SHEET NO. 2 OF 8 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
412A	19-05116-00-BR	WHITE	28	7
GRAY ROAD DISTRICT		CONTRACT NO. 99617		

ILLINOIS FED. AID PROJECT YDWW(637)



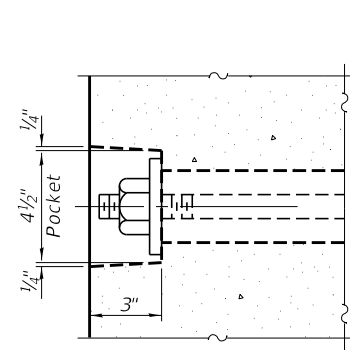
FABRIC BEARING PAD
(Interior - 10 Req'd)



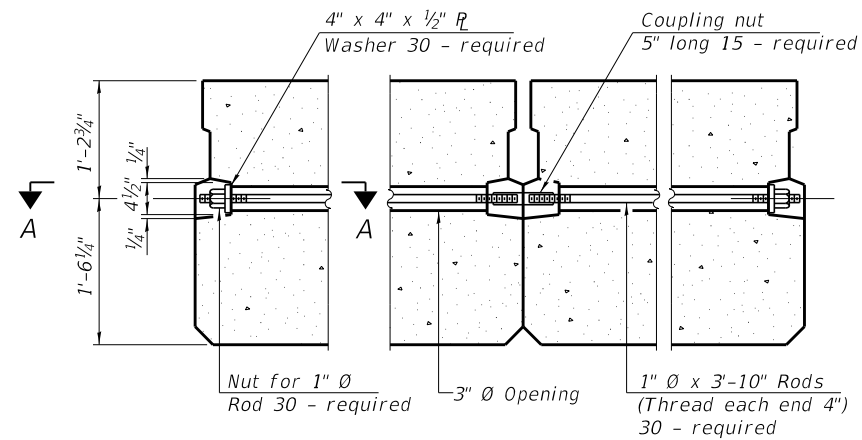
FABRIC BEARING PAD
(Exterior - 4 Req'd)

FIXED

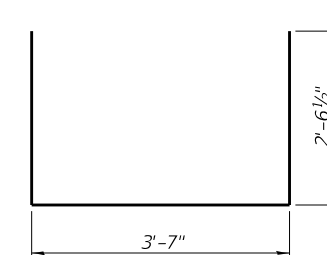
Notes:
All bearing pads shall be 1" thick.
Omit holes when using expansion bearings.
Expansion bearing pad shall be bonded to the substructure.



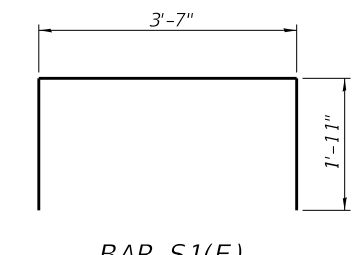
SECTION A-A



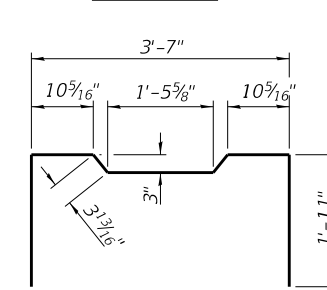
TYPICAL TRANSVERSE TIE ASSEMBLY



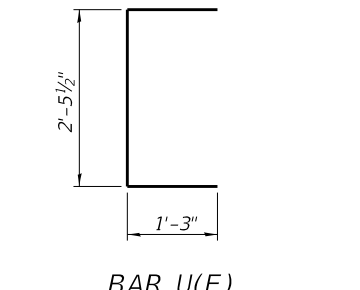
BAR S(E)



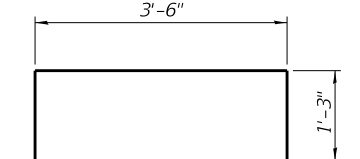
BAR S1(E)



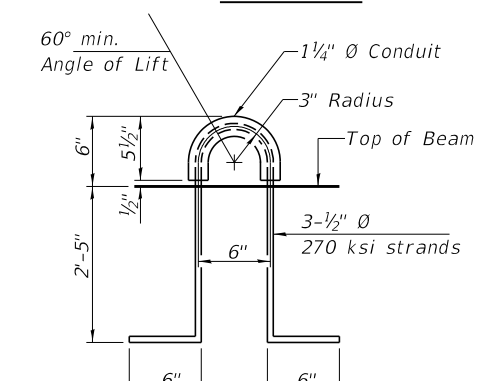
BAR S2(E)



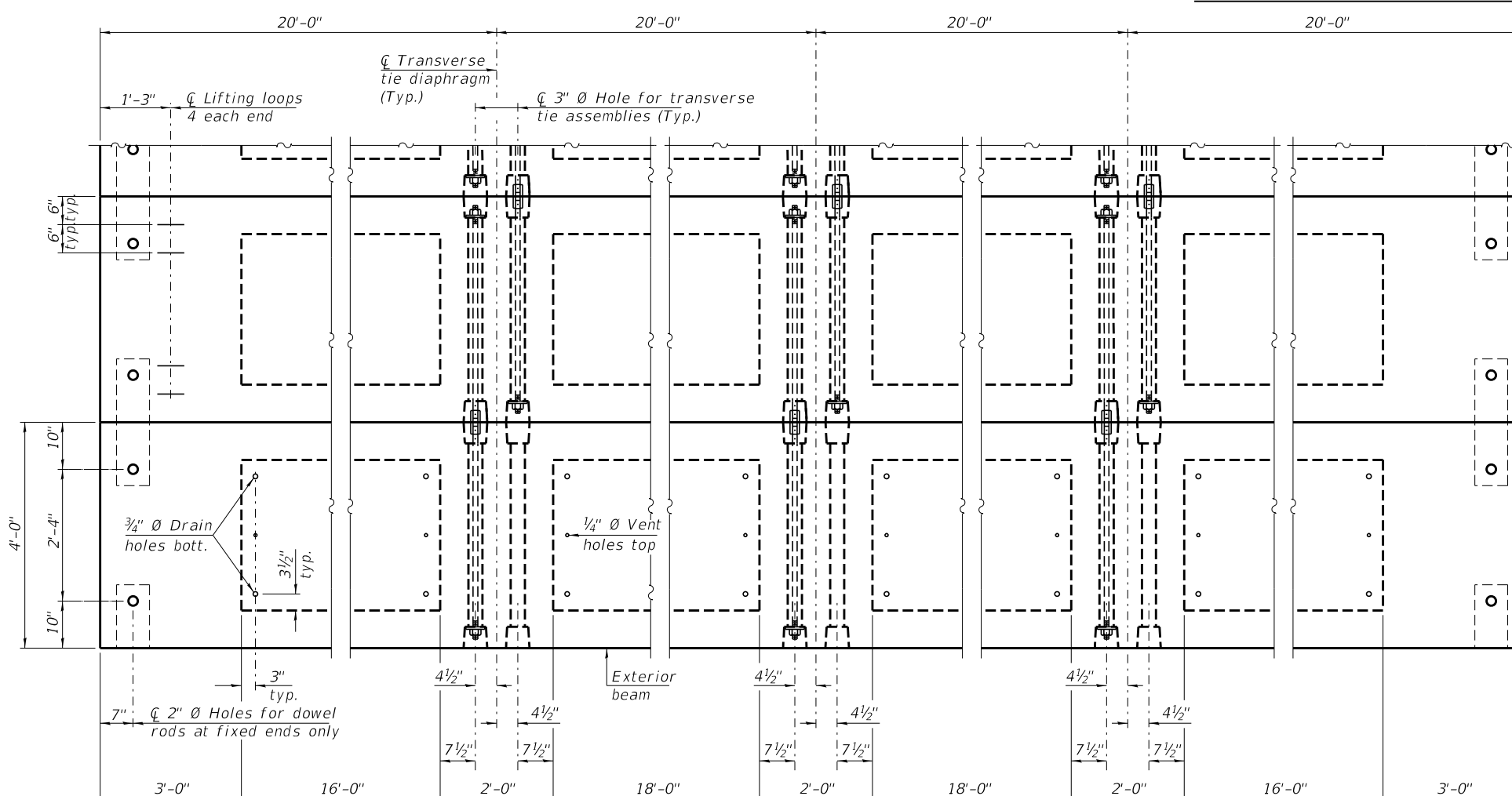
BAR U(E)



BAR U1(E)



LIFTING LOOP DETAIL



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" diameter rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place.
Two 1/8" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.
A minimum 2 1/2" diameter lifting pin shall be used to engage the lifting loops during handling.
Corrosion inhibitor, per Article 1020.05(b)(10) and 1021.07 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.
Compressive strength of prestressed concrete, f'c, shall be 6000 psi.
Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.
Reinforcement bars designated (E) shall be epoxy coated.

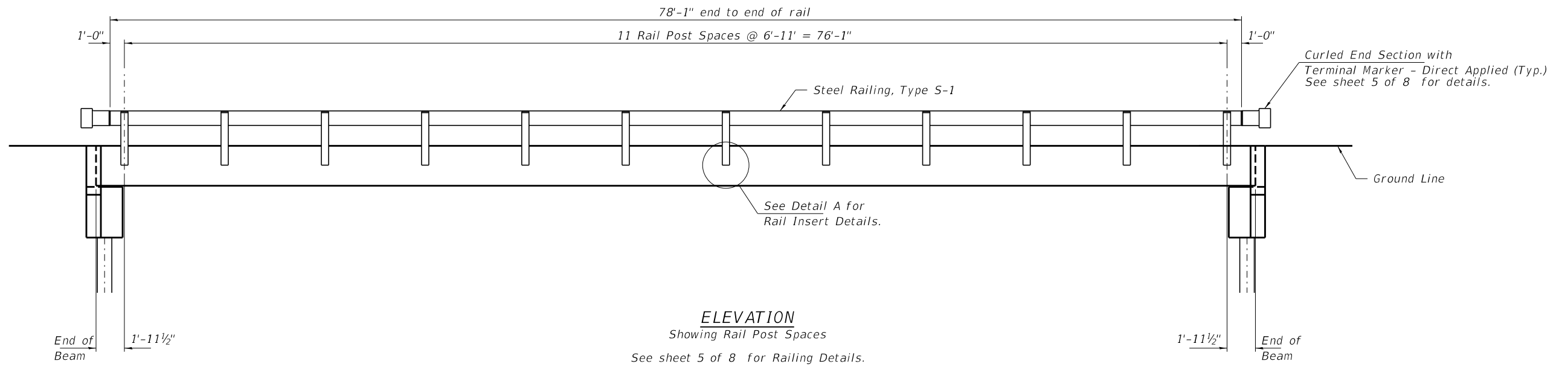
Note: Connect beams in pairs with the transverse tie configuration shown.

BILL OF MATERIAL

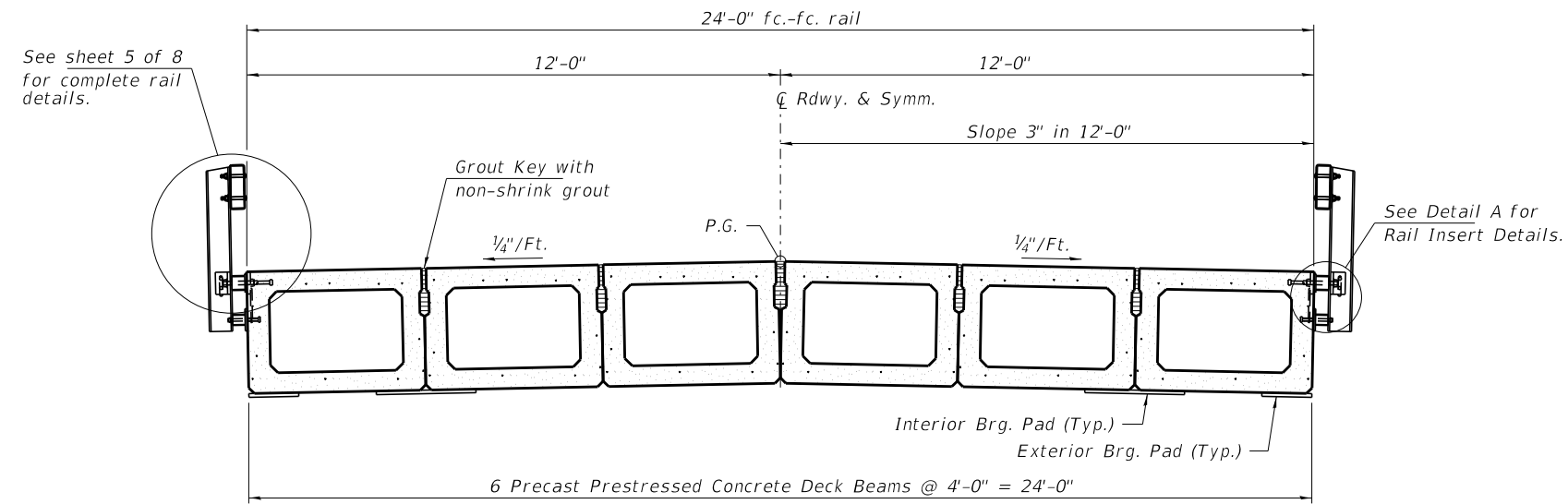
Precast Prestressed Conc. Deck Bms. (33" depth)	Sq. Ft.	1,920
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PD-3348-0D 2-17-2017

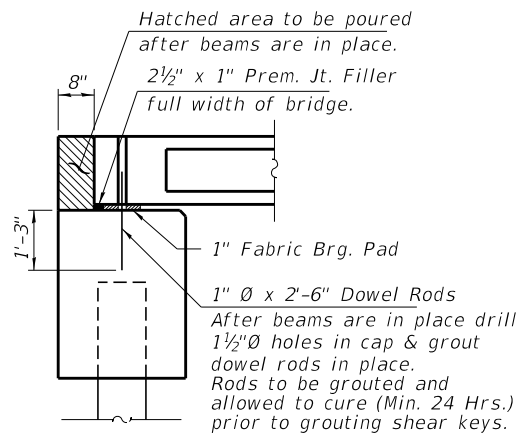
FILE NAME = 170696-shl-bridge.dgn	USER NAME = rmosick	DESIGNED - J.W.F.	REVISED -	STATE OF ILLINOIS WHITE COUNTY HIGHWAY DEPARTMENT	33" x 48" PPC DECK BEAM DETAILS STRUCTURE NO. 097-3276	T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
HAMPTON, LENZINI AND RENWICK, INC. 3035 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT SCALE =	CHECKED - S.W.M.	REVISED -			412A	19-05116-00-BR	WHITE	28	8	
	PLOT DATE = 3/7/2019	DRAWN - M.M.P.	REVISED -			GRAY ROAD DISTRICT		CONTRACT NO. 99617			
		CHECKED - S.W.M.	REVISED -			SHEET NO. 3 OF 8 SHEETS		ILLINOIS FED. AID PROJECT YDWW(637)			



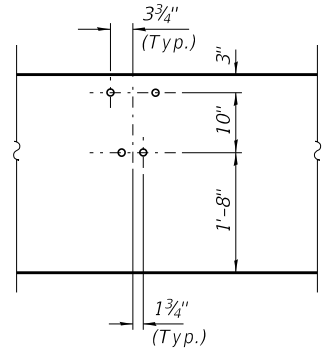
ELEVATION
Showing Rail Post Spacing
See sheet 5 of 8 for Railing Details.



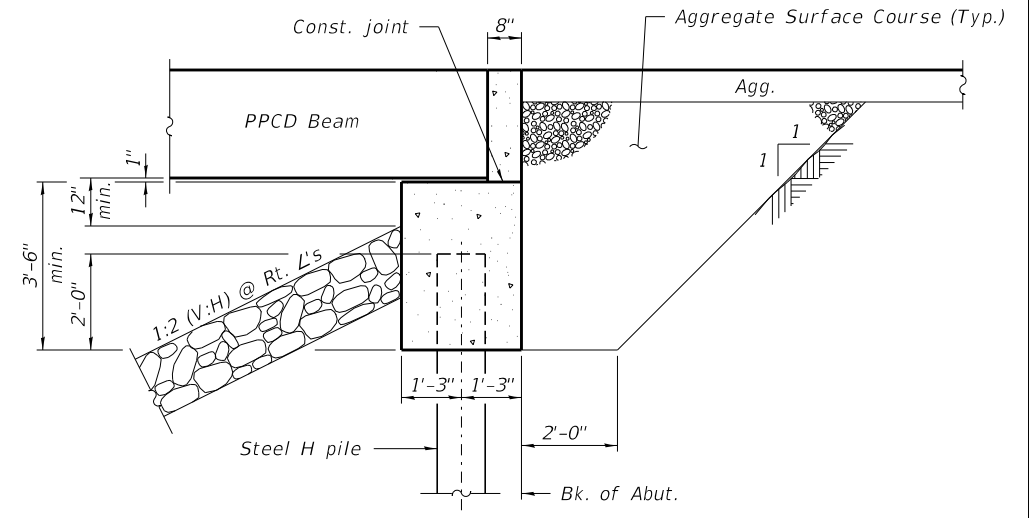
CROSS SECTION
See sheets 2 & 3 of 8 for Superstructure.



SECTION AT ABUTMENTS
@ Rt. L's

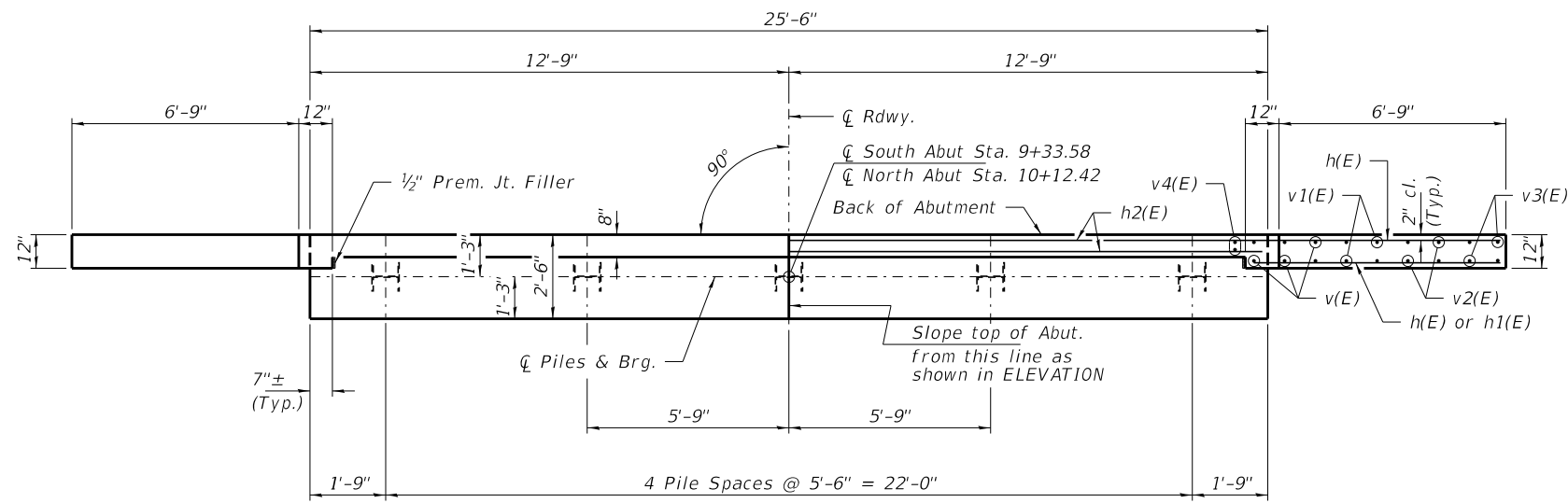


DETAIL A

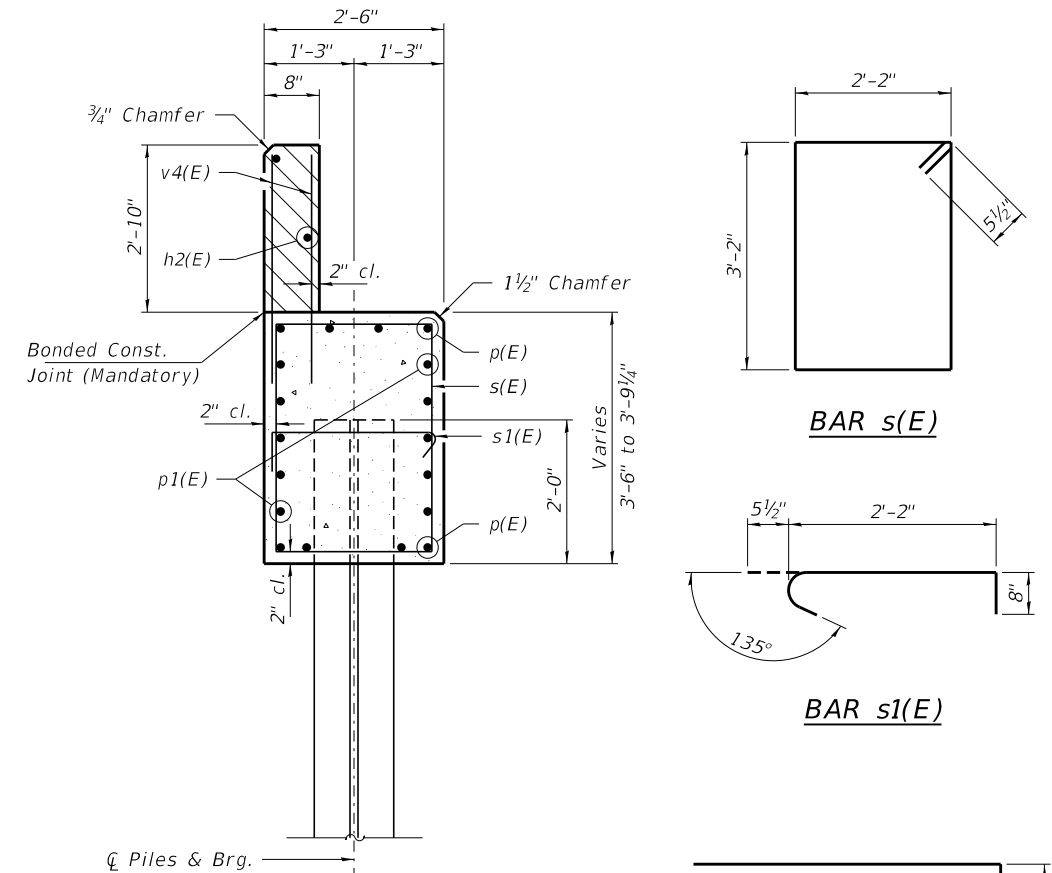


SECTION THRU ABUTMENT
(Horiz. dim. @ Rt. L's)

FILE NAME = 170696-shl-bridge.dgn	USER NAME = rmosck	DESIGNED - J.W.F.	REVISED -	STATE OF ILLINOIS WHITE COUNTY HIGHWAY DEPARTMENT	SUPERSTRUCTURE DETAILS STRUCTURE NO. 097-3276	T.R.	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. 184.000959		CHECKED - S.W.M.	REVISED -			412A	19-05116-00-BR	WHITE	28	9	
	PLOT SCALE =	DRAWN - M.M.P.	REVISED -			GRAY ROAD DISTRICT	CONTRACT NO. 99617				
	PLOT DATE = 3/7/2019	CHECKED - S.W.M.	REVISED -			SHEET NO. 4 OF 8 SHEETS		ILLINOIS FED. AID PROJECT YDWW(637)			



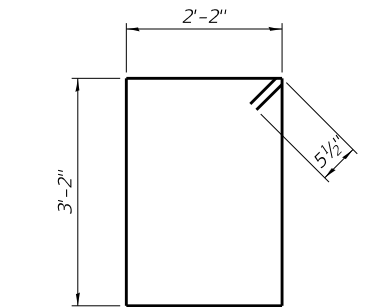
PLAN



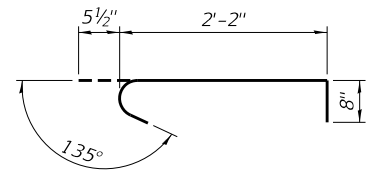
SECTION A-A

Hatched area to be poured after beams are in place.

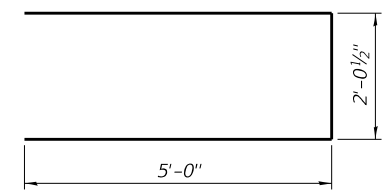
Cast top of wingwall flush with exterior beam face after beams have been erected.



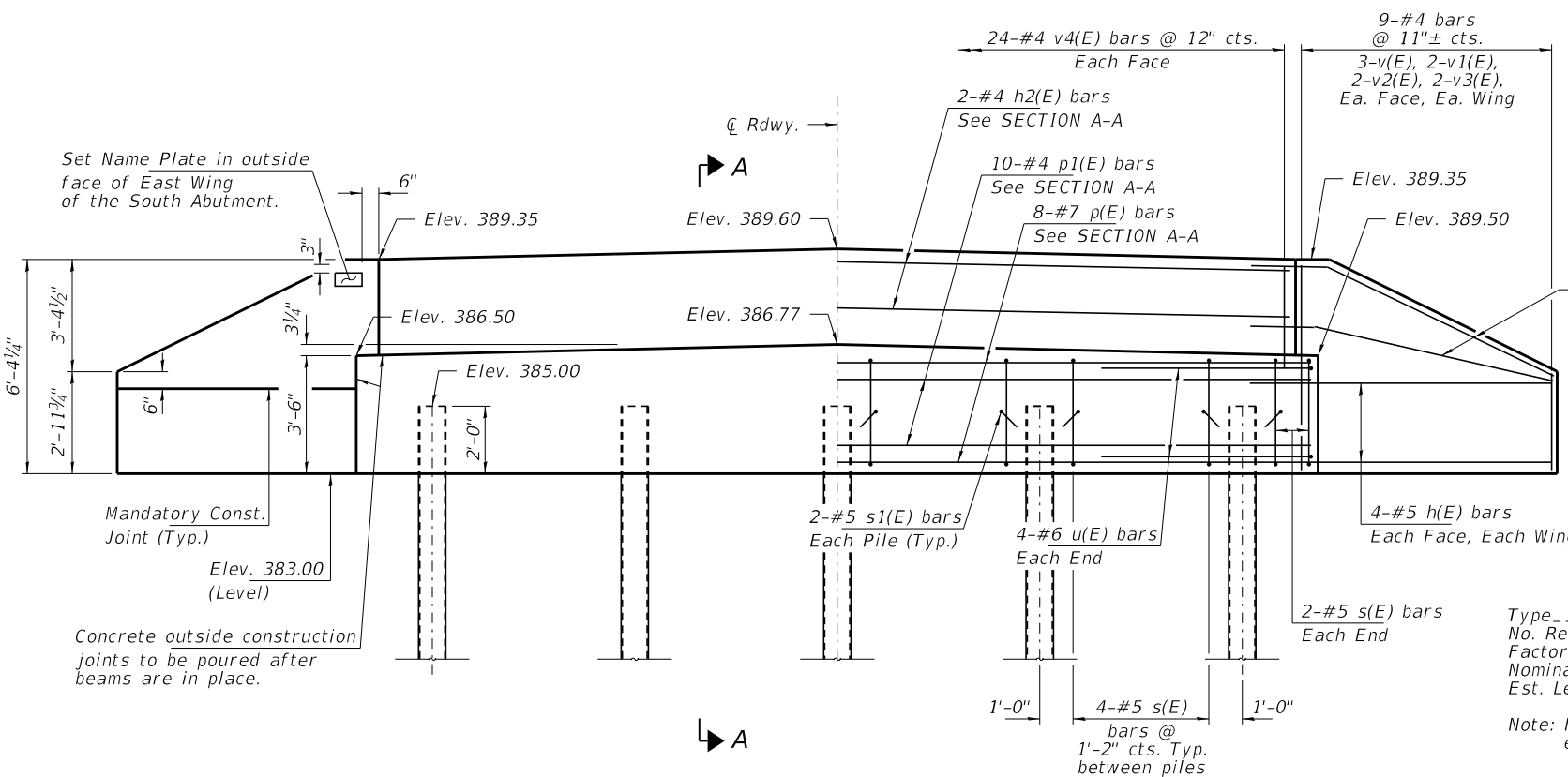
BAR s(E)



BAR s1(E)



BAR u(E)



ELEVATION

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

Fan 2-#5 h(E) bars (B.F.)
Fan 2-#4 h1(E) bars (F.F.)
Each Wing
Bend in field.

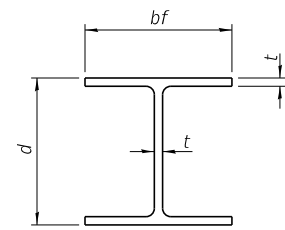
PILE DATA

Type Steel HP10x42 w/ Pile Shoes
No. Req'd. (2 Abuts.) 10
Factored Resistance Available (Rf) 184 Kips/Pile
Nominal Required Bearing (Rn) 335 Kips/Pile
Est. Length 50 Ft/Pile

Note: Pile shall be driven to a minimum tip elevation of 365.0

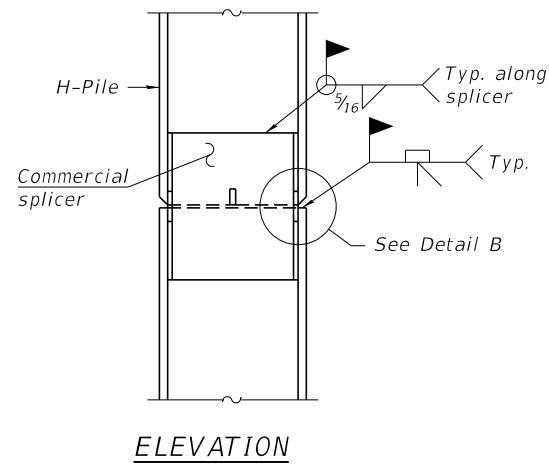
BILL OF MATERIAL - 2 ABUTS.

BAR	NO.	SIZE	LENGTH	SHAPE
h(E)	40	#5	9'-0"	—
h1(E)	8	#4	7'-6"	—
h2(E)	4	#4	25'-2"	—
p(E)	16	#7	25'-2"	—
p1(E)	20	#4	25'-2"	—
s(E)	40	#5	11'-7"	□
s1(E)	20	#5	3'-4"	┌
u(E)	16	#6	12'-1"	U
v(E)	24	#4	5'-5"	—
v1(E)	16	#4	4'-6"	—
v2(E)	16	#4	3'-6"	—
v3(E)	16	#4	2'-8"	—
v4(E)	96	#4	3'-8"	—
Concrete Structures			Cu. Yd.	25.8
Reinf. Bars, Epoxy Coated			Pound	2,920
Steel Piles HP10x42			Foot	500
Pile Shoes			Each	10
Name Plates			Each	1

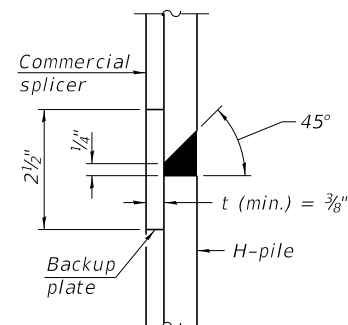


STEEL PILE TABLE

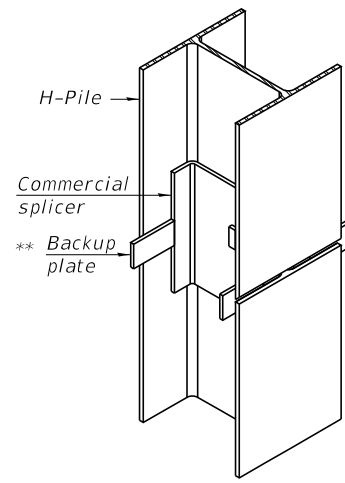
Designation	Depth d	Flange width bf	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	1 3/16"	30"
x102	14"	14 3/4"	1 1/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 3/8"	14 3/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1 1/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"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

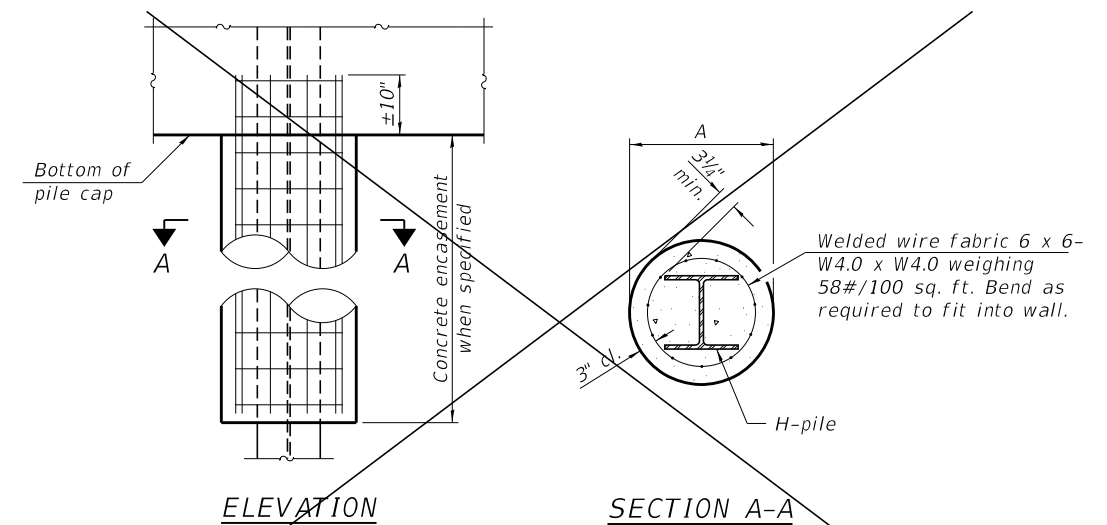


DETAIL "B"



ISOMETRIC VIEW

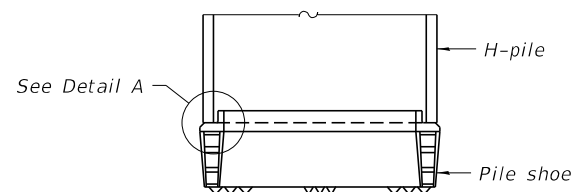
WELDED COMMERCIAL SPLICE



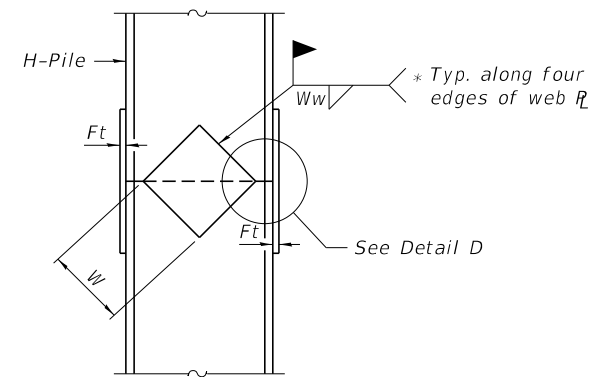
ELEVATION

SECTION A-A

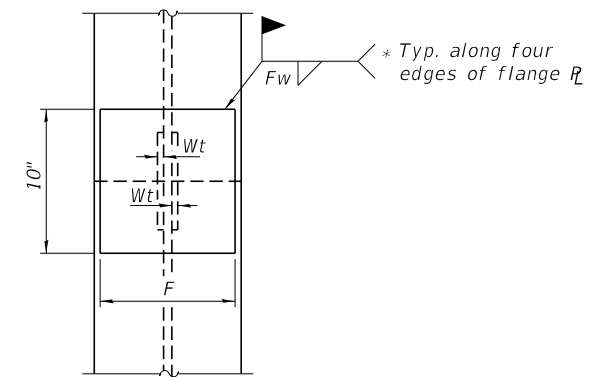
INDIVIDUAL PILE CONCRETE ENCASUREMENT
(Forms for encasement may be omitted when soil conditions permit).
(Not Required)



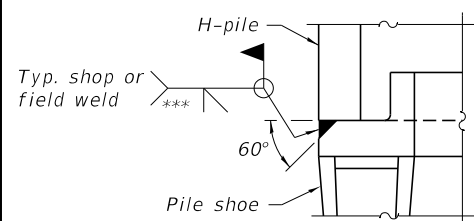
ELEVATION



ELEVATION

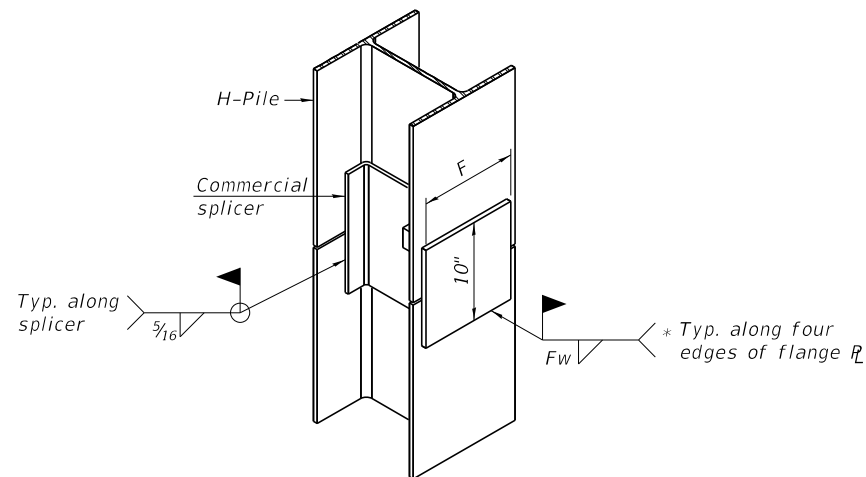


END VIEW



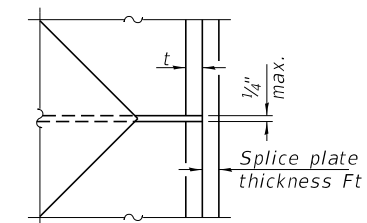
DETAIL A

SHOE ATTACHMENT



ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE



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"

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

* 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.).

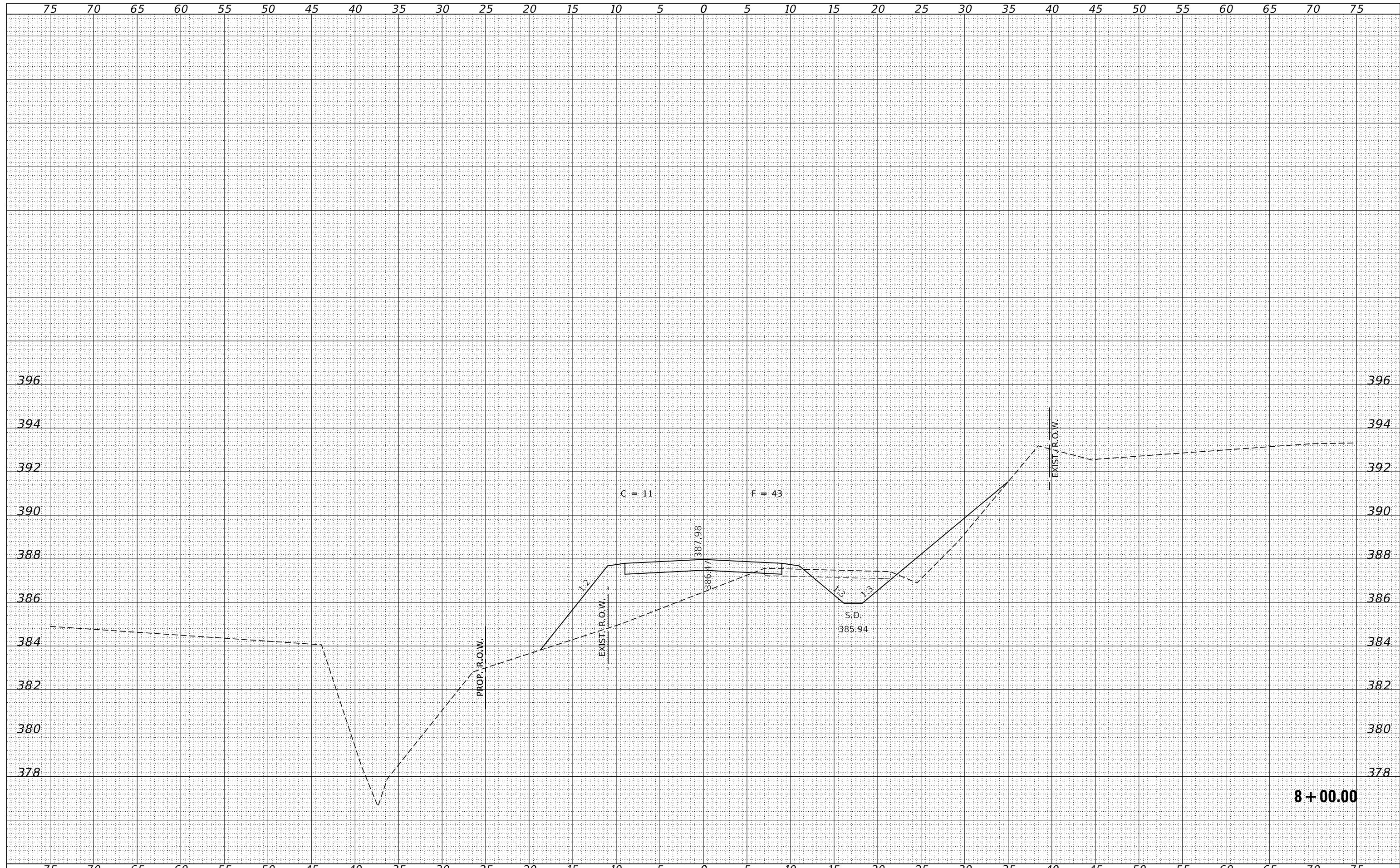
F-HP 8-11-2017

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HAMPTON, LENZINI AND RENWICK, INC. 3035 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT SCALE =	CHECKED - S.W.M.	REVISED -			412A	19-05116-00-BR	WHITE	28	12	
	PLOT DATE = 3/7/2019	DRAWN - M.M.P.	REVISED -			GRAY ROAD DISTRICT		CONTRACT NO. 99617			
		CHECKED - S.W.M.	REVISED -			ILLINOIS		FED. AID PROJECT YDWW(637)			

SHEET NO. 7 OF 8 SHEETS

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

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

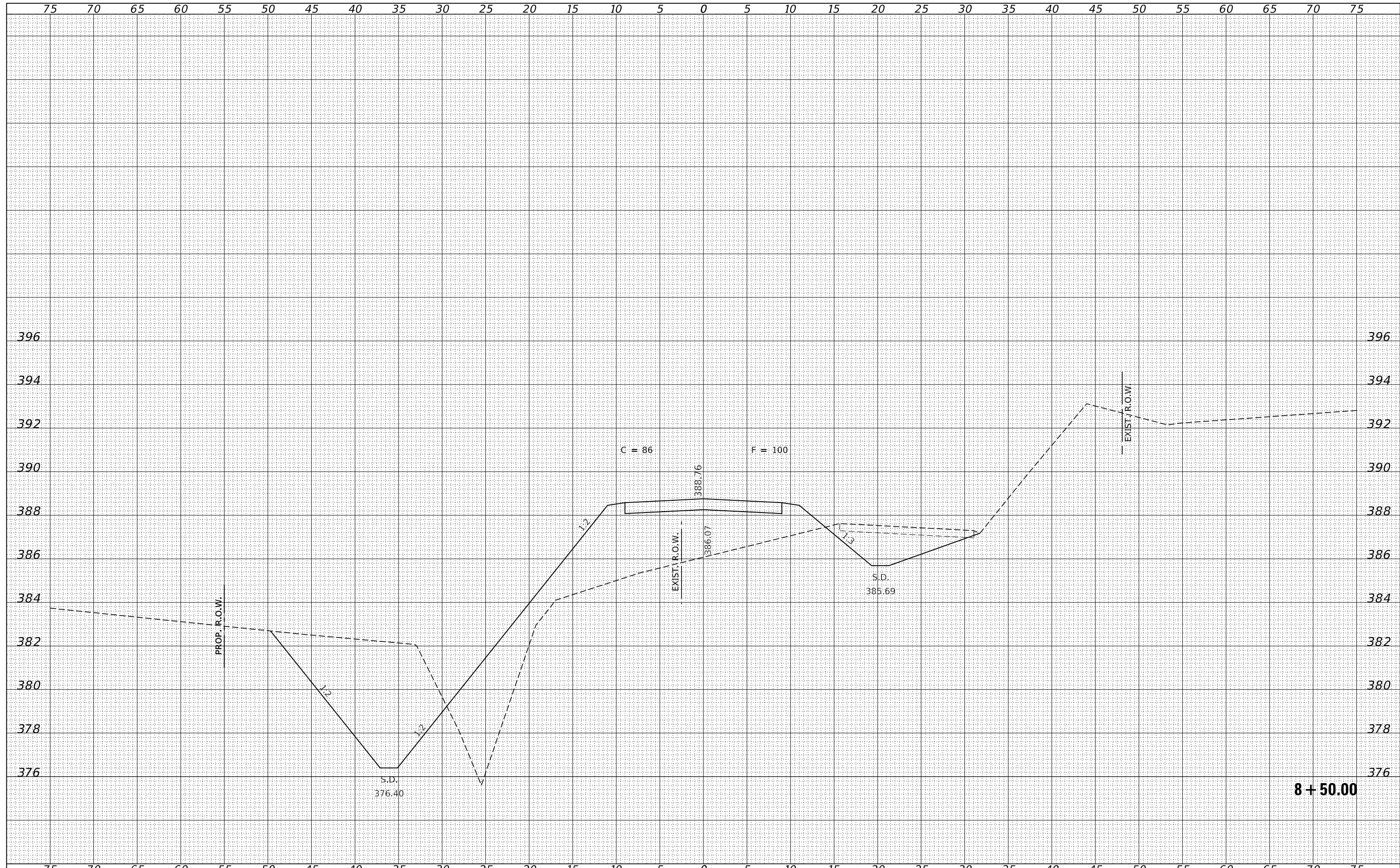


8 + 00.00

FILE NAME = 170696-cht-xssheets.dgn	USER NAME = rmosck	DESIGNED - J.W.F.	REVISD -	STATE OF ILLINOIS WHITE COUNTY HIGHWAY DEPARTMENT	STATION CROSS SECTIONS			T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
HAMPTON, LENZINI AND RENWICK, INC.		DRAWN - M.M.P.	REVISD -					412A	09-05116-00-BR	WHITE	28	17	
3885 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM L.S. / P.E. / S.E. CORP. 184.009958		CHECKED - S.W.M.	REVISD -					GRAY ROAD DISTRICT					CONTRACT NO. 99617
		DATE - 03/07/19	REVISD -					SCALE: 5H:2V	SHEET NO. 4 OF 15 SHEETS	STA. 8+00.00 TO STA. 8+00.00	ILLINOIS FED. AID PROJECT YDWW(637)		

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

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

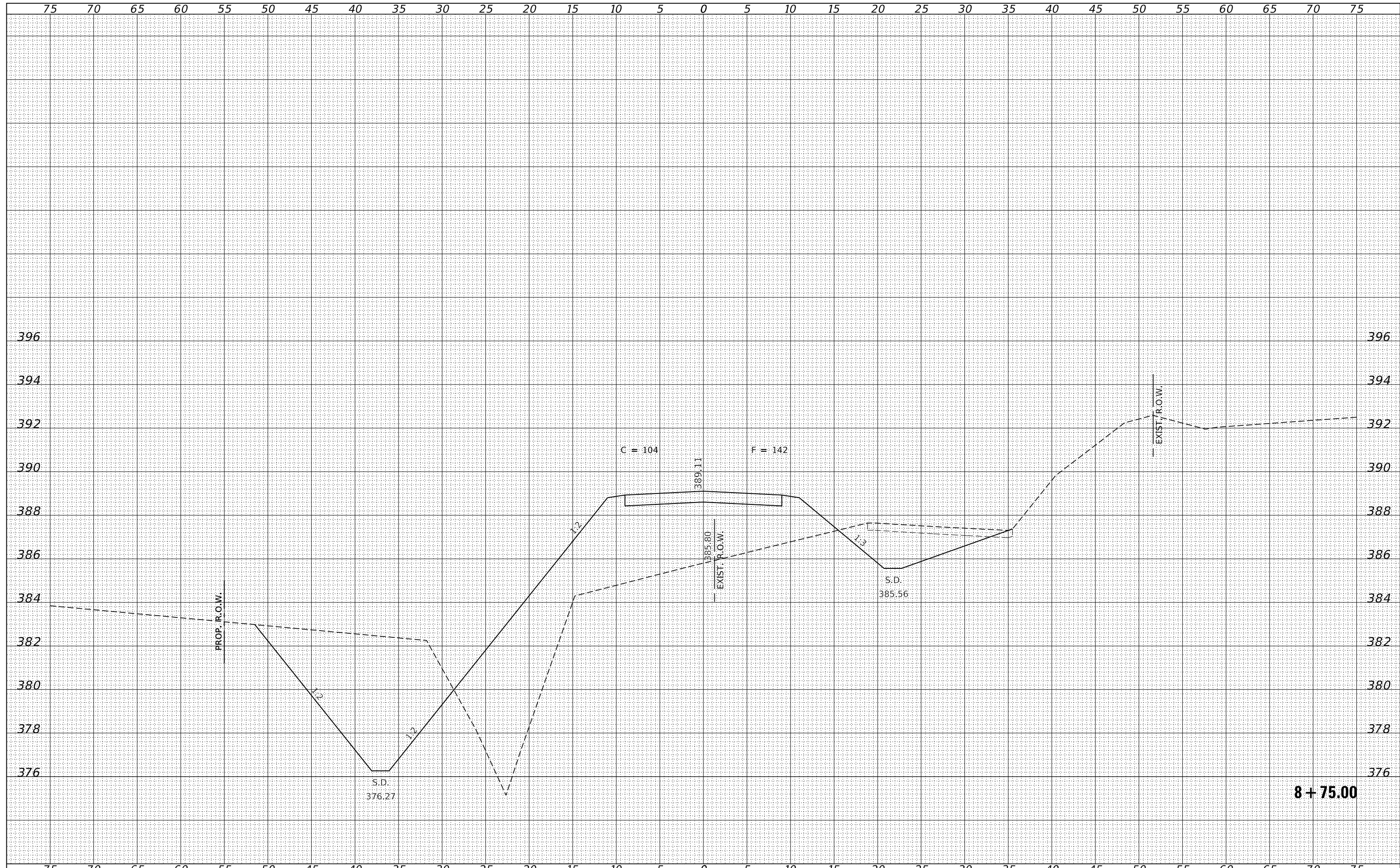


8 + 50.00

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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		DRAWN - M.M.P.	REVISED -		412A	09-05116-00-BR	WHITE	28	18			
PLOT SCALE = \$Scales		CHECKED - S.W.M.	REVISED -		GRAY ROAD DISTRICT	CONTRACT NO. 99617						
PLOT DATE = 3/7/2019		DATE - 03/07/19	REVISED -		SCALE: 5H:2V	SHEET NO. 5 OF 15 SHEETS	STA. 8+50.00 TO STA. 8+50.00	ILLINOIS FED. AID PROJECT YDWW(637)				

DATE	
BY	
FINISHED SURVEY	
PLOTTED TEMPLATE	
NOTE BOOK	
AREAS CHECKED	
AREAS CHECKED	

DATE	
BY	
ORIGINAL SURVEY	
PLOTTED TEMPLATE	
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AREAS CHECKED	
AREAS CHECKED	

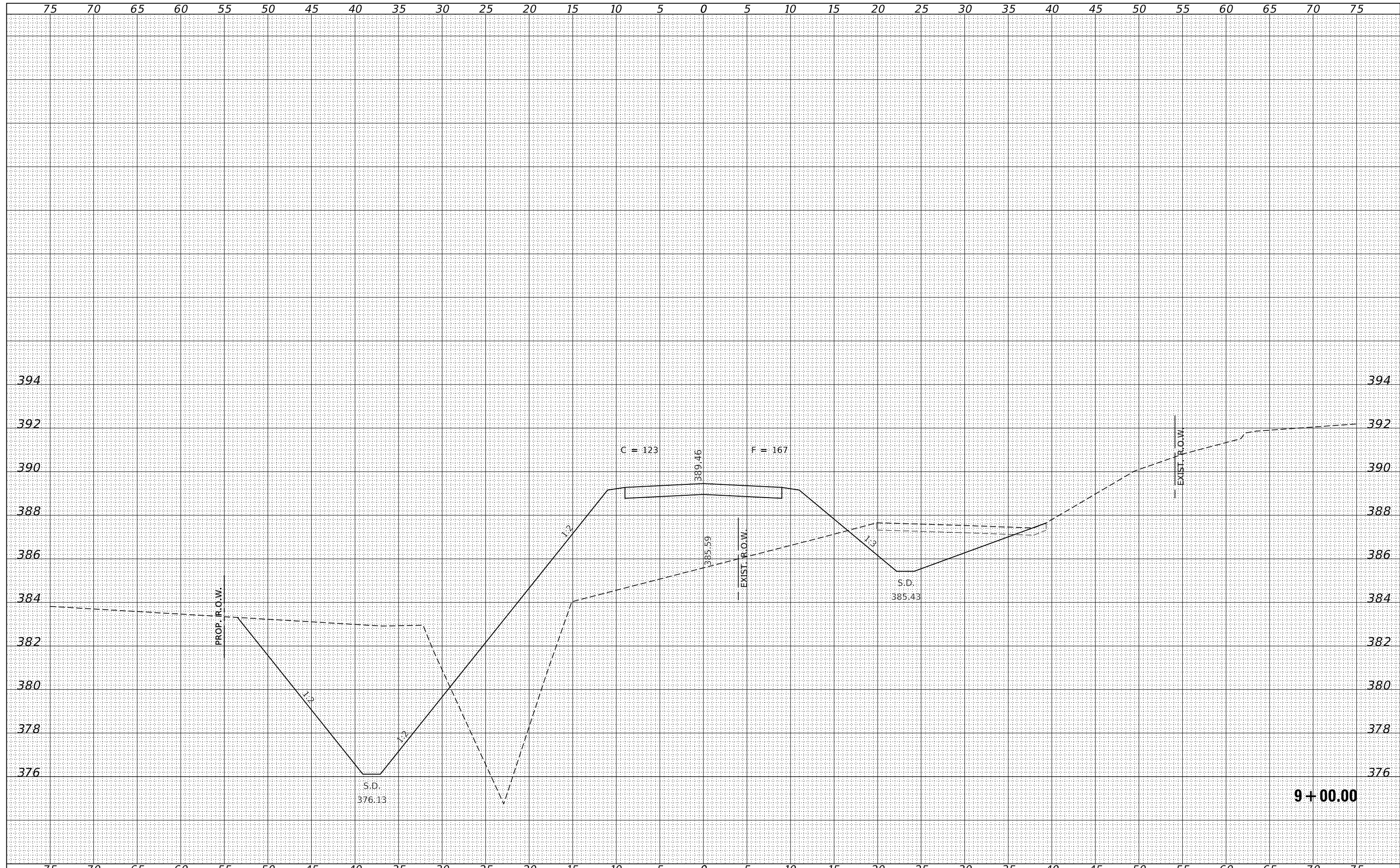


8 + 75.00

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HAMPTON, LENZINI AND RENWICK, INC. 3885 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM L.S. / P.E. / S.E. CORP. 184-009958	PLOT SCALE = \$Scales	DRAWN - M.M.P.	REVISED -		412A	09-05116-00-BR	WHITE	28	19
PLOT DATE = 3/7/2019	DATE = 03/07/19	CHECKED - S.W.M.	REVISED -		GRAY ROAD DISTRICT		CONTRACT NO. 99617		
		REVISOR -	REVISED -		SCALE: 5H:2V	SHEET NO. 6 OF 15 SHEETS	STA. 8+75.00	TO STA. 8+75.00	ILLINOIS FED. AID PROJECT YDWW(637)

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

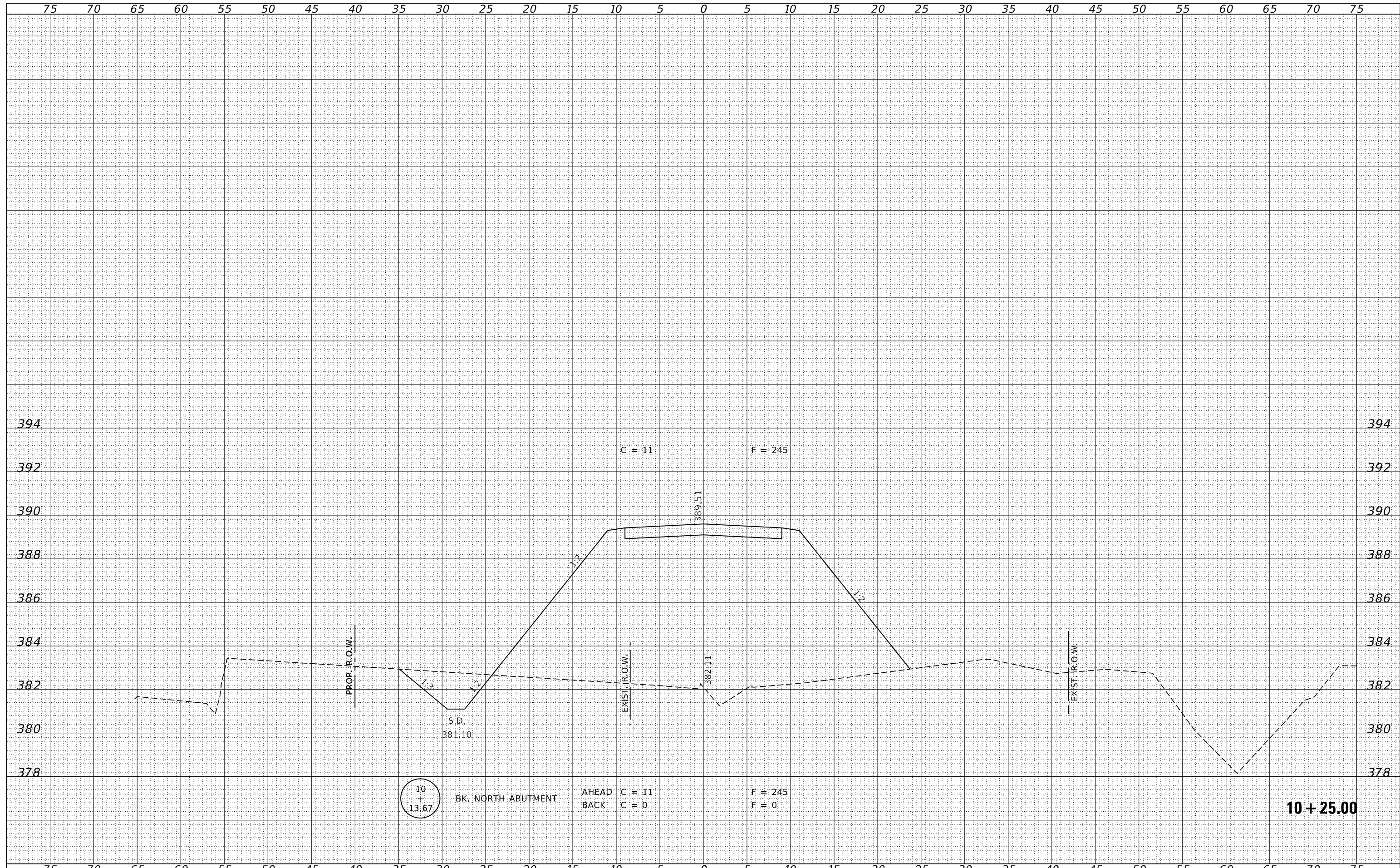
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BY	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS
	CHECKED



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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		DRAWN - M.M.P.	REVISD -		412A	09-05116-00-BR	WHITE	28	20			
PLOT SCALE = \$Scales		CHECKED - S.W.M.	REVISD -		GRAY ROAD DISTRICT			CONTRACT NO. 99617				
PLOT DATE = 3/7/2019		DATE - 03/07/19	REVISD -		SCALE: 5H:2V	SHEET NO. 7 OF 15 SHEETS	STA. 9+00.00 TO STA. 9+00.00	ILLINOIS FED. AID PROJECT YDWW(637)				

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

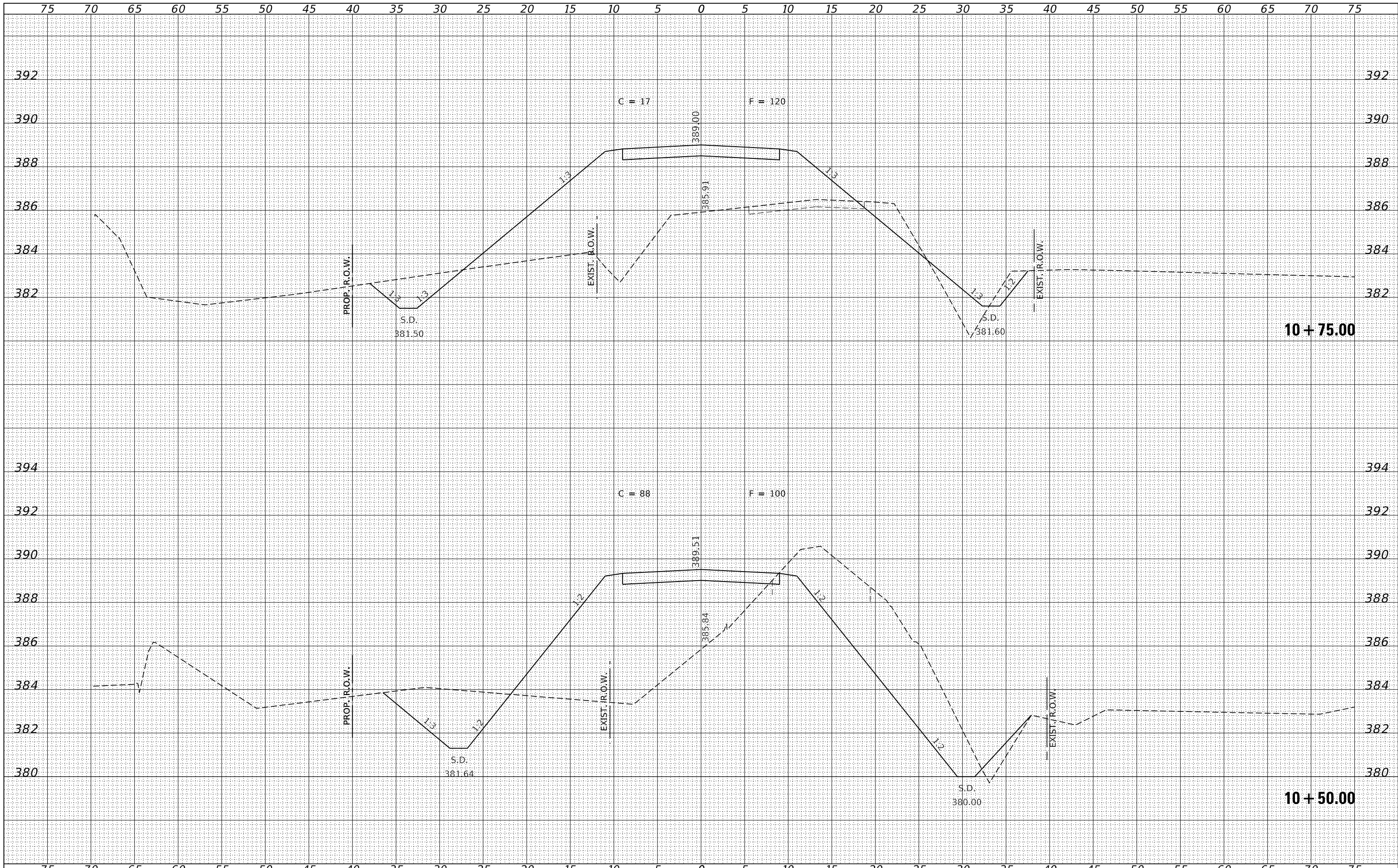
DATE	
BY	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS
	CHECKED



FILE NAME = 170696-ohi-xssheets.dgn	USER NAME = rmosck	DESIGNED - J.V.F.	REVISED -	STATE OF ILLINOIS WHITE COUNTY HIGHWAY DEPARTMENT	STATION CROSS SECTIONS			T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HAMPTON, LENZINI AND RENWICK, INC.		DRAWN - M.M.P.	REVISED -		412A	09-05116-00-BR	WHITE	28	24			
3885 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM L.S. / P.E. / S.E. CORP. 184.000958		CHECKED - S.W.M.	REVISED -		GRAY ROAD DISTRICT			CONTRACT NO. 99617				
		DATE - 03/07/19	REVISED -		SCALE: 5H:2V	SHEET NO. 11 OF 15 SHEETS	STA. 10+25.00 TO STA. 10+25.00	ILLINOIS FED. AID PROJECT YDWW(637)				

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

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



FILE NAME = 170696-ohi-vssheets.dgn
 DESIGNED - J.V.F.
 DRAWN - M.M.P.
 CHECKED - S.W.M.
 DATE - 03/07/19
 PLOT SCALE = \$SCALE\$
 PLOT DATE = 3/7/2019

USER NAME = rmosck
 REVISIONS:
 REVISIONS:
 REVISIONS:
 REVISIONS:

DESIGNED - J.V.F.
 DRAWN - M.M.P.
 CHECKED - S.W.M.
 DATE - 03/07/19

REVISIONS:
 REVISIONS:
 REVISIONS:
 REVISIONS:

STATE OF ILLINOIS
 WHITE COUNTY HIGHWAY DEPARTMENT

STATION CROSS SECTIONS

SCALE: 5H:2V SHEET NO. 12 OF 15 SHEETS STA. 10+50.00 TO STA. 10+75.00

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
412A	09-05116-00-BR	WHITE	28	25
GRAY ROAD DISTRICT			CONTRACT NO. 99617	
ILLINOIS FED. AID PROJECT YDWW(637)				

