11-17-2017 LETTING ITEM 057

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 274	09-03138 -00-BR	VERMILION	40	1
FED. ROAD DIST. NO.		ILLINOIS	CONTRACT NO. 91528	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLANS FOR PROPOSED
SURFACE TRANSPORTATION PROGRAM
OFF SYSTEM BRIDGE

PROJECT HVCN(463)
SECTION 09-03138-00-BR
CARROLL ROAD DISTRICT
VERMILION COUNTY
T.R. 274
PROPOSED STRUCTURE NO. 092-3521
C-95-315-15

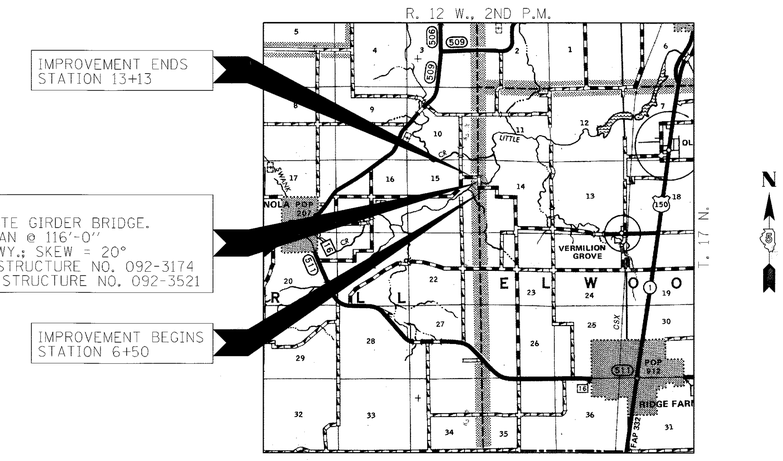
INDEX OF SHEETS

UTILITIES

MIDWESTERN GAS
PO BOX 388
POTOMAC, IL 61865

AT&T
201 S. NEIL STREET
CHAMPAIGN, ILLINOIS 61820

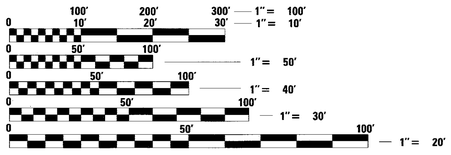
LOCATION OF SECTION INDICATED THUS: –



LOCATION MAP

APPROXIMATE SCALE: 0 — 1 MILE

NET LENGTH OF SECTION = 663 FEET = 0.13 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:	**150 ADT (2015)**

WARNING

CALL JULIE TOLL FREE 1-800-892-0123

CALL 811 BEFORE YOU DIG

DIG NO: A2941963

ILLINOIS DEPARTMENT OF TRANSPORTATION

APPROVED August 18 2017
Douglas R. Slade
COUNTY ENGINEER

APPROVED August 18 2017
Tim P. Dreman
TOWNSHIP COMMISSIONER

PASSED August 22 2017
DISTRICT FIVE ENGINEER OF LOCAL ROADS & STREETS

Releasing For Bid Based on Limited Review August 22 2017
REGION THREE ENGINEER

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DATE: 08/14/2017
LICENSED PROFESSIONAL ENGINEER — STEVEN W. HEGGEMEIER — 062-50051 — STATE OF ILLINOIS
EXPIRES: 11/30/2017

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: 14.0200.130 DATE: 08/14/17

CONTRACT NO. 91528 PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

SUMMARY OF QUANTITIES

	CODE NO.	ITEM	UNIT	CONSTRUCTION TYPE CODE 0011 TOTAL
	20200100	EARTH EXCAVATION	CU YD	615
	20300100	CHANNEL EXCAVATION	CU YD	540
	28000305	TEMPORARY DITCH CHECKS	FOOT	81
	28000400	PERIMETER EROSION BARRIER	FOOT	630
^	28100807	STONE DUMPED RIPRAP, CLASS A4	TON	760
^	40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	610
	50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
	50200100	STRUCTURE EXCAVATION	CU YD	204
	50300225	CONCRETE STRUCTURES	CU YD	36.0
	50300255	CONCRETE SUPERSTRUCTURE	CU YD	123.0
	50300300	PROTECTIVE COAT	SQ YD	444
	50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1
	50500505	STUD SHEAR CONNECTORS	EACH	885
^	50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	28,850
*	50900205	STEEL RAILING, TYPE S1	FOOT	235
	51201400	FURNISHING STEEL PILES HP10X42	FOOT	250
	51202305	DRIVING PILES	FOOT	250
	51203400	TEST PILE STEEL HP10X42	EACH	2
	51204650	PILE SHOES	EACH	12
	51500100	NAME PLATES	EACH	1
	52100520	ANCHOR BOLTS, 1"	EACH	20
	59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	71
	59300100	CONTROLLED LOW-STRENGTH MATERIAL	CU YD	148
	67100100	MOBILIZATION	L SUM	1
^	70101830	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21	L SUM	1
*	72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	4
^	X2501000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.75
^	Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	168
^	XX004566	CONCRETE CUT-OFF WALL	CU YD	6.8
^	Z0013798	CONSTRUCTION LAYOUT	L SUM	1

^ SEE SPECIAL PROVISIONS

* SPECIALTY ITEMS

GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED APRIL 1, 2016," THESE PLANS AND THE SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS.

2. THE REVISION NUMBERS OF THE STANDARDS LISTED IN THE PLANS ARE TO BE USED FOR CONSTRUCTING OF THIS SECTION.

3. ALL CLEARING AND GRUBBING, FENCE REMOVAL AND REMOVAL OF EXISTING DRAINAGE STRUCTURES SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION. THE REMOVAL OF THE EXISTING PAVEMENT WILL BE PAID FOR AS EARTH EXCAVATION. ALL BITUMINOUS MATERIAL SHALL BE PROPERLY DISPOSED OF BY THE CONTRACTOR IN A METHOD APPROVED BY THE ENGINEER. PROPER DISPOSAL OF BITUMINOUS MATERIAL SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

4. THE LOCATION OF EXISTING GAS MAINS, ELECTRIC POWER LINES, TELEPHONE LINES AND OTHER UTILITIES AS SHOWN ON THE PLANS ARE BASED ON CAREFUL 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.

5. 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.

6. THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN CALCULATING PLAN QUANTITIES:
   AGGREGATE SURFACE COURSE **1.80 TON/CU YD**
   STONE DUMPED RIPRAP **1.75 TON/CU YD**

7. THE AREA TO BE SEEDED SHALL CONSIST OF ALL DISTURBED EARTH SURFACES WITHIN THE RIGHT OF WAY AS DIRECTED BY THE ENGINEER.
   ESTIMATED QUANTITY: SEEDING, CLASS 2 (SPECIAL) = 0.75 ACRES

8. COMMITMENTS:
   1) AN INSPECTION OF THE BRIDGE SHALL BE CONDUCTED BY THE ENGINEER NO LESS THAN 7 DAYS PRIOR TO CONSTRUCTION FOR PRESENCE OF BATS.

EROSION CONTROL SCHEDULE

LOCATION	TEMPORARY DITCH CHECKS 28000305 FOOT	PERIMETER EROSION BARRIER 28000400 FOOT
TR 274		
RT. STA. 10+75	11	
RT. STA. 11+50	11	
LT. STA. 11+50	13	
RT. STA. 12+00	11	
LT. STA. 12+00	11	
RT. STA. 12+50	11	
LT. STA. 12+50	13	
RT. STA. 6+50 TO RT. STA. 9+31		281
LT. STA. 6+84 TO LT. STA. 9+47		263
LT. STA. 10+64 TO LT. STA. 11+50		86
TOTAL	81	630

EARTHWORK SCHEDULE

LOCATION	EARTH EXCAVATION 20200100 CU.YD.	CHANNEL EXCAVATION 20300100 CU.YD.	SHRINKAGE FACTOR	PERCENT USED	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE CU.YD.	EMBANKMENT REQUIRED CU.YD.	EARTHWORK BALANCE CU.YD.
TR 274							
STA 6+50 TO STA 9+38.22	185		25.00%	100.00%	139	499	-360
STA 9+38.22 TO STA 10+57.76		540	25.00%	70.00%	284		284
STA 10+57.76 TO STA 13+13	431		25.00%	100.00%	323	105	218
TOTAL	615	540			746		142
USE	615	540					145

WASTE 145 CU YDS

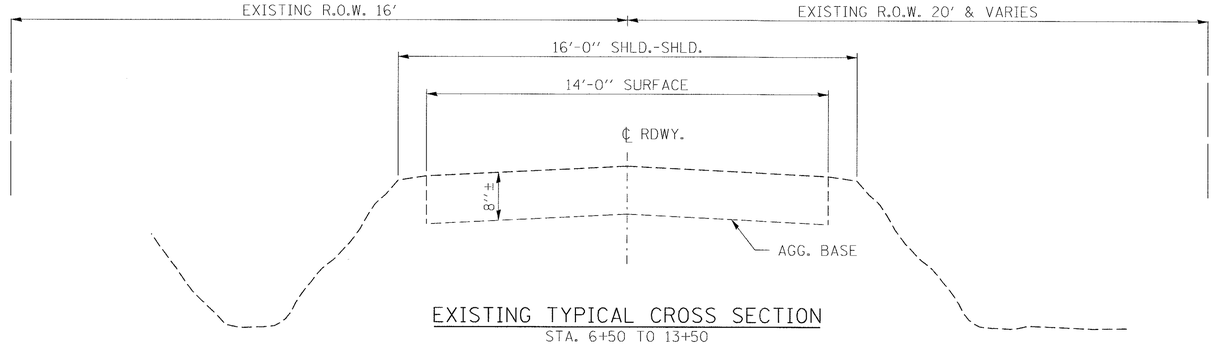
HAMPTON, LENZINI AND RENWICK, INC.
3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
ILLINOIS PROFESSIONAL DESIGN FIRM
LS / PE / SE CORP. 184.000999

STATE OF ILLINOIS
VERMILION COUNTY HIGHWAY DEPARTMENT

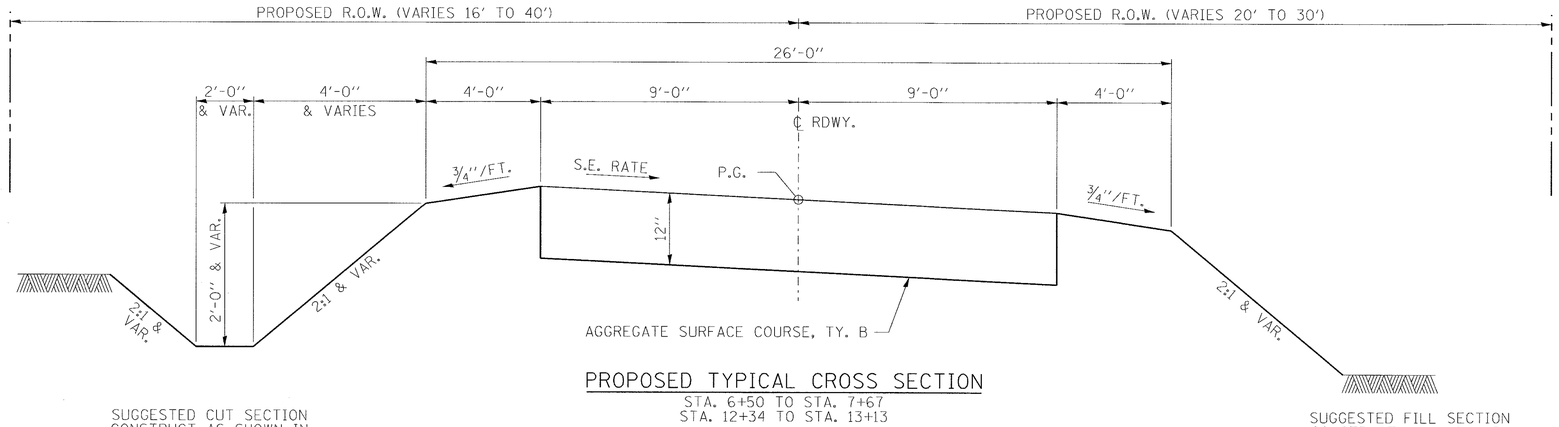
SUMMARY OF QUANTITIES AND GENERAL NOTES

SCALE: | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
274	09-03138-00-BR	VERMILION	40	2
CARROLL ROAD DISTRICT		CONTRACT NO. 91528		
ILLINOIS	FED. AID PROJECT HVCN(463)			



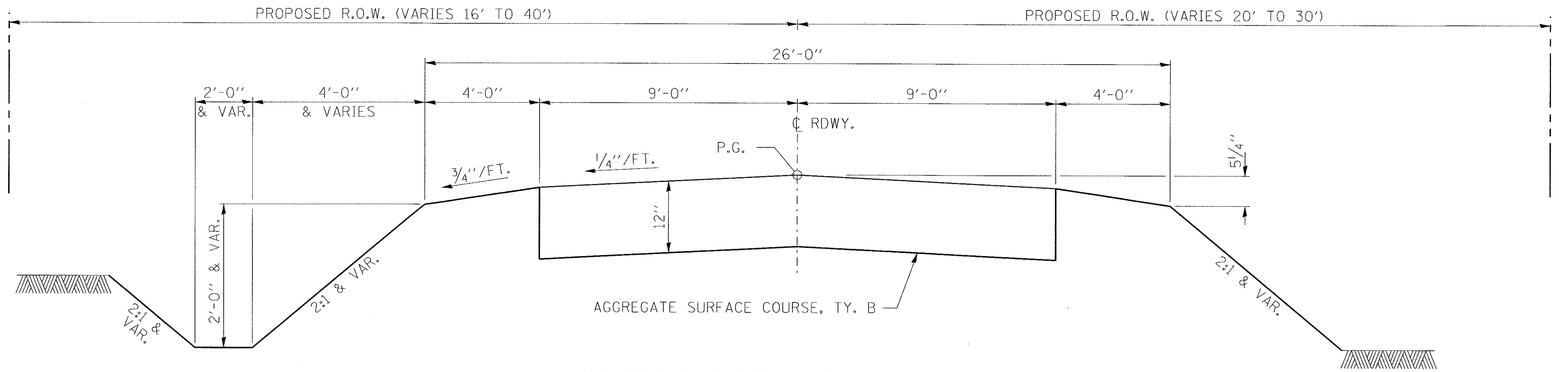
EXISTING TYPICAL CROSS SECTION
STA. 6+50 TO 13+50



PROPOSED TYPICAL CROSS SECTION
STA. 6+50 TO STA. 7+67
STA. 12+34 TO STA. 13+13

SUGGESTED CUT SECTION
CONSTRUCT AS SHOWN IN
STATION CROSS SECTIONS

SUGGESTED FILL SECTION
CONSTRUCT AS SHOWN IN
STATION CROSS SECTIONS



PROPOSED TYPICAL CROSS SECTION
STA. 7+67 TO STA. 12+34

SUGGESTED CUT SECTION
CONSTRUCT AS SHOWN IN
STATION CROSS SECTIONS

SUGGESTED FILL SECTION
CONSTRUCT AS SHOWN IN
STATION CROSS SECTIONS

BRIDGE OMISSION: STA. 9+38.23 TO STA. 10+57.77
TRANSITION PROPOSED RT. SURFACE & SHOULDER FROM
STA. 6+50 TO STA. 6+74. TRANSITION PROPOSED
SURFACE FROM STA. 12+00 TO STA. 13+00.
SEE SHEET 6 FOR TRANSITION AT BRIDGE.

FILE NAME = 140200-sht-typsections.dgn	USER NAME = $USER$	DESIGNED - L.A.P.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC. 3065 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000969		DRAWN - R.D.H.	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - S.W.M.	REVISED -
	PLOT DATE = 8/14/2017	DATE - 08/14/17	REVISED -

STATE OF ILLINOIS
VERMILION COUNTY HIGHWAY DEPARTMENT

TYPICAL CROSS SECTIONS

SCALE: | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
274	09-03138-00-BR	VERMILION	40	3
CARROLL ROAD DISTRICT		CONTRACT NO. 91528		
ILLINOIS	FED. AID PROJECT HVCN(463)			

CURVE DATA
PI STA. 6+65.86
Δ = 59° 44' 45" (RT)
D = 78° 38' 08"
T = 41.85'
R = 72.86'
L = 75.98'
E = 11.16'
PC STA. 6+24.01
PT STA. 6+99.99
S.E = 4.0%
S.E. TRANSITION:
STA. 6+80 TO STA. 7+67
CURVE DATA
PI STA. 5+97.34
Δ = 29° 53' 37" (RT)
D = 54° 43' 46"
T = 27.95'
R = 104.69'
L = 54.62'
E = 3.67'
PC STA. 5+69.39
PT STA. 6+24.01
S.E. = 4.0%
N.W. COR., SEC. 23
T. 17 N., R. 12 W., 2ND P.M.
1/2"Ø IRON PIPE (FOUND)
N. 1189950.65
E. 1163779.20
MAG NAIL IN 18" TREE
WEIGHT LIMIT SIGN
MAG NAIL IN 16" TREE
P.O.T. STA. 7+99.74
1/2"Ø MAG NAIL (SET)
N. 1190770.08
E. 1163742.74
MILTON & NANCY DALENBERG
SE¼, NE¼, SEC 15, T. 17 N., R. 12 W., 2ND P.M.
TIMBER
STATION 9+98
STEEL PLATE GIRDER BRIDGE
SINGLE SPAN @ 116'-0"
27'-0" RDWY.; SKEW = 20°
PROPOSED STRUCTURE NO. 092-3521
DENNIS JR & CHARTRUCE POWELL
SE¼, NE¼, SEC 15, T. 17 N., R. 12 W., 2ND P.M.
GRAPHIC SCALE
PERIMETER EROSION BARRIER
PAVEMENT BEGINS STATION 6+74
IMPROVEMENT BEGINS STATION 6+50
℄ PROPOSED IMPROVEMENT
TR 274
AGGREGATE SURFACE
CONSTRUCTION LIMITS
PROPOSED R.O.W. LINE
RIVER
LITTLE VERMILION
WEST LINE NW¼ SEC. 14-17-12
MATCHLINE STA 11+50
36' EXISTING R.O.W.
LEGEND
TEMPORARY DITCH CHECKS
PERIMETER EROSION BARRIER
TREE REMOVAL (ACRES)
MILTON & NANCY DALENBERG
SW¼, NW¼, SEC 14, T. 17 N., R. 12 W., 2ND P.M.
ROBERT PORTER
SW¼, NW¼, SEC 14, T. 17 N., R. 12 W., 2ND P.M.
EXISTING STRUCTURE NO. 092-3174
STATION 10+00 - 2 SPAN PRECAST PRESTRESSED CONCRETE DECK BEAM BRIDGE ON CLOSED CONCRETE ABUTS., HAMMERHEAD PIER, AND WINGWALLS.
79.0' BK.-BK. ABUTS; 18.0' o.-o. DECK
BM#3 - RR SPIKE IN POWER POLE 26' LT., STA. 6+45 ELEV. 641.87
BM#2 - CHISELED "□" ON S.W. CURB 5' LT., STA. 9+77 ELEV. 637.69
VPI STA. 8+50 ELEV. 635.10
K = 41
160' V.C.
VPI STA. 11+00 ELEV. 639.40
K = 39
100' V.C.
PROPOSED ℄ GRADE
EXISTING ℄ GRADE
-2.19%
+1.72%
+4.30%
+4.00%
+20.80%
100 YEAR H.W. ELEV. 630.7
15 YEAR H.W. ELEV. 628.3
637.60 RT.
SPECIAL DITCH RT.
632.40 RT.
CHANNEL EXCAVATION
STONE DUMPED RIPRAP, CL A4
* 1V:2H @ RT. ∠'S
℄ ELEV. 615.0
5+50 6+00 6+50 7+00 7+50 8+00 8+50 9+00 9+50 10+00 10+50 11+00 11+50

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HAMPTON, LENZINI AND RENWICK, INC. 3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM	PLOT SCALE = $SCALE$
	PLOT DATE = 8/14/2017

DESIGNED - J.W.F.	REVISED -	
DRAWN - L.G.C.	REVISED -	
CHECKED - S.W.M.	REVISED -	
DATE - 08/14/17	REVISED -	

STATE OF ILLINOIS
VERMILION COUNTY HIGHWAY DEPARTMENT

PLAN & PROFILE

SCALE: 20H:5V | SHEET NO. 1 OF 2 SHEETS | STA. 5+50.00 TO STA. 11+50.00

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
274	09-03138-00-BR	VERMILION	40	4
CARROLL ROAD DISTRICT		CONTRACT NO. 91528		
	ILLINOIS FED. AID PROJECT HVCN(463)			

DENNIS Jr. & CHARTRUCE POWELL
SE¼, NE¼, SEC 15, T. 17 N., R. 12 W., 2ND P.M.
MATCHLINE STA 11+50
11+50.00
30.00' LT
MAG NAIL IN 24" TREE
MAG NAIL IN 16" TREE
MAG NAIL IN 16" TREE
P.O.T. STA. 12+00.10
1/2"Ø MAG NAIL (SET)
N. 1191170.44
E. 1163740.28
N.W. COR., SEC. 14
T. 17 N., R. 12 W., 2ND P.M.
STONE (FOUND)
N. 1192617.71
E. 1163737.33
MAG IN POWER POLE
BENCH TIE IN POWER POLE (BM#1)
CP#1
IR/HLR CAP
P.I. STA. 13+42.17
IRON ROD (SET)
N. 1191325.77
E. 1163739.32
N
0 20' 40'
GRAPHIC SCALE
CURVE DATA
PI STA. 13+42.17
Δ = 91° 29' 30" (LT)
D = 98° 35' 11"
T = 59.65'
R = 58.12'
L = 92.80'
E = 25.16'
PC STA. 12+95.77
PT STA. 13+88.57
S.E. = 4.0%
S.E. TRANSITION:
STA. 12+34 TO STA. 13+16
PC STA. 12+95.77
13+04.43
29.68' LT
13+01.61
16.00' LT
12+98.55
30.10' RT
12+98.96
18.94' RT
PAVEMENT ENDS
STATION 13+00
IMPROVEMENT ENDS
STATION 13+13
PT STA. 13+88.57
℄ PROPOSED IMPROVEMENT
36' EXISTING R.O.W.
POT STA. 16+01.05
WEST LINE NW¼
SEC. 14-17-12
TR 274
AGGREGATE SURFACE
BM#1
MILTON & NANCY DALENBERG
NE¼, NE¼, SEC 15, T. 17 N., R. 12 W., 2ND P.M.
+45 P.E.
BM#1 - RR SPIKE IN POWER POLE
51' LT., STA. 13+71
ELEV. 649.08
VPI STA. 12+00
ELEV. 643.70
K = 83
100' V.C.
VPC
VPT
PROPOSED ℄ GRADE
+4.30%
+3.10%
+4.00%
+2.00%
+4.00%
645.60 RT.
644.60 LT.
643.60 RT. & LT.
EXISTING ℄ GRADE
639.60 RT. & LT.
SPECIAL DITCH RT. & LT.
655
650
645
640
635
630
641.5
641.55
643.7
643.55
645.3
645.25
646.8
646.80
648.0
649.4
650.0
650.6
651.5
652.1
11+50
12+00
12+50
13+00
13+50
14+00
14+50
15+00
15+50
16+00

FILE NAME = 140200-sht-p&p.dgn	USER NAME = $USER$	DESIGNED - J.W.F.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC. 3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703		DRAWN - L.G.C.	REVISED -
HLR ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT SCALE = $SCALE$	CHECKED - S.W.M.	REVISED -
	PLOT DATE = 8/14/2017	DATE - 08/14/17	REVISED -

STATE OF ILLINOIS
VERMILION COUNTY HIGHWAY DEPARTMENT

PLAN & PROFILE

SCALE: 20H:5V | SHEET NO. 2 OF 2 SHEETS | STA. 11+50.00 TO STA. 16+01.05

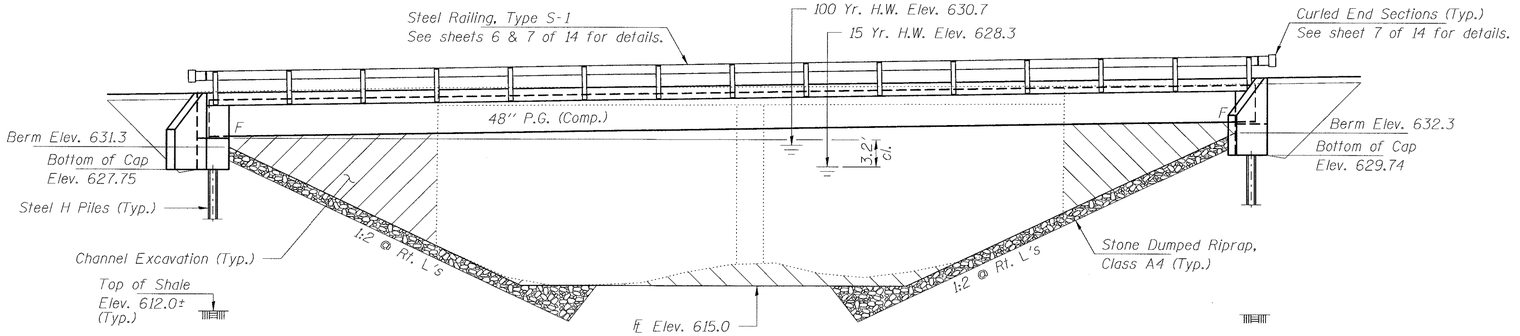
T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
274	09-03138-00-BR	VERMILION	40	5
CARROLL ROAD DISTRICT		CONTRACT NO. 91528		
		ILLINOIS FED. AID PROJECT HVCN(463)		

BENCHMARK: Chiseled "□" on SW bridge curb. 7.7' Rt., Sta. 10+39.68. Elev. 637.69

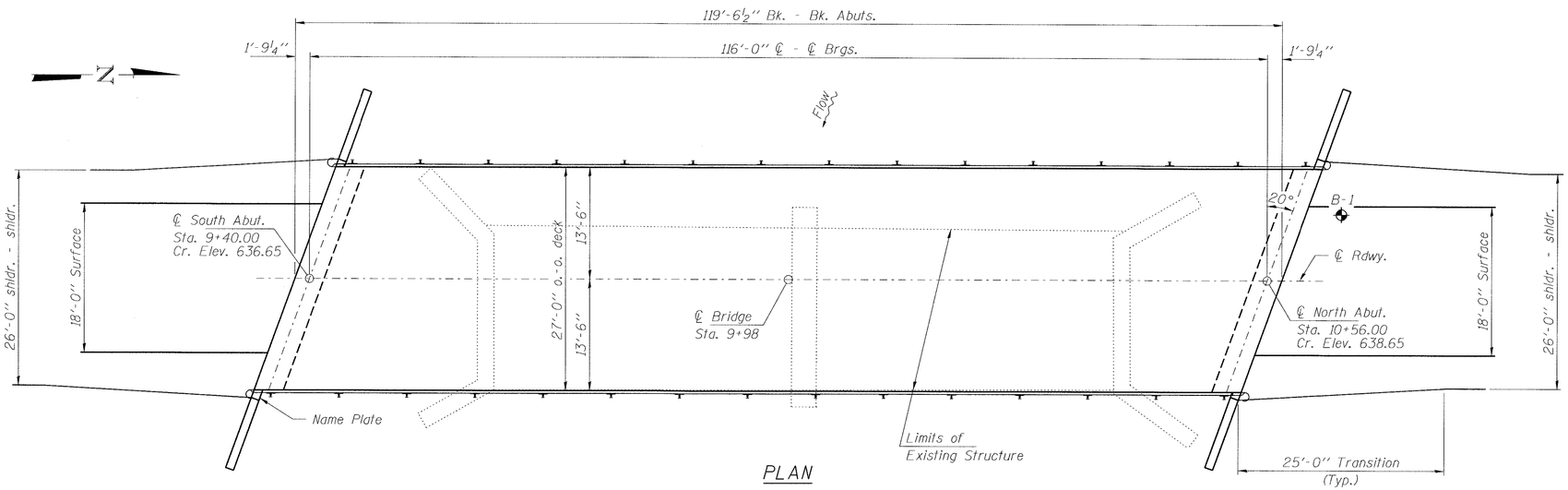
EXISTING STRUCTURE NO. 092-3174: Sta. 10+00 - Two span precast prestressed concrete deck beam bridge on closed concrete abutments, hammerhead pier and wingwalls. 79.0' bk.-bk. abuts.; 18.0' o.-o. deck.

Structure will be closed to traffic during construction.

No Salvage

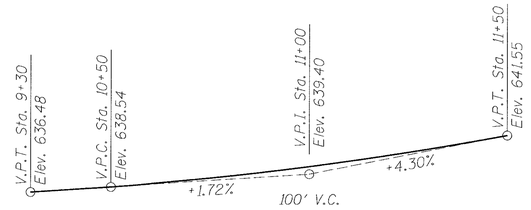


ELEVATION



PLAN

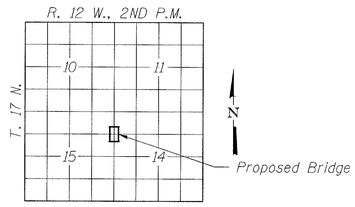
INDEX OF STRUCTURE SHEETS



PROFILE GRADE
(along ℄ roadway)

LITTLE VERMILION RIVER
BUILT 201_ BY
VERMILION COUNTY
CARROLL ROAD DISTRICT
SEC. 09-03138-00-BR
STR. NO. 092-3521
LOADING HL-93

NAME PLATE
See Std. 515001



LOCATION SKETCH

DESIGN SCOUR ELEVATION TABLE

Event / Limit State	Design Scour Elevations (ft.)		
	S. Abut.	N. Abut.	Item 113
Q100	627.8	629.8	8
Q200	627.8	629.8	
Design	627.8	629.8	
Check	627.8	629.8	

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.141g
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.252g
Soil Site Class = D

DESIGN SPECIFICATIONS

2014 AASHTO LRFD Bridge Design Specifications, 7th Edition with 2015 Interims

LOADING HL-93

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

DESIGN STRESSES

FIELD UNITS

f'c = 4,000 psi (Superstructure)
f'c = 3,500 psi (Substructure)
fy = 60,000 psi (Reinf.)
fy = 50,000 psi (Structural Steel) (M270 Gr. 50W)

WATERWAY INFORMATION

Drainage Area = 118 Sq. Mi.

Existing Low Grade Elev. 635.9 @ Sta. 8+50
Proposed Low Grade Elev. 635.8 @ Sta. 8+50

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Natural H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	3900	710	830	627.68	0.29	0.26	627.97	627.94
Design	15	4410	750	880	628.28	0.31	0.31	628.65	628.59
Base	100	6850	910	1120	630.70	0.54	0.54	631.43	631.24
Max. Calc.	200	7720	960	1200	631.42	0.61	0.61	632.28	632.03

10 Year Velocity through Existing Bridge = 5.5 fps
10 Year Velocity through Proposed Bridge = 4.7 fps

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 LRFD Specifications."

Steven W. Megginson 08/14/2017
ILLINOIS STRUCTURAL ENGINEER NO. 081-6064

LICENSED STRUCTURAL ENGINEER
STEVEN W. MEGGINSON
081-6064
SPRINGFIELD, IL
STATE OF ILLINOIS

Expires 11-30-2018

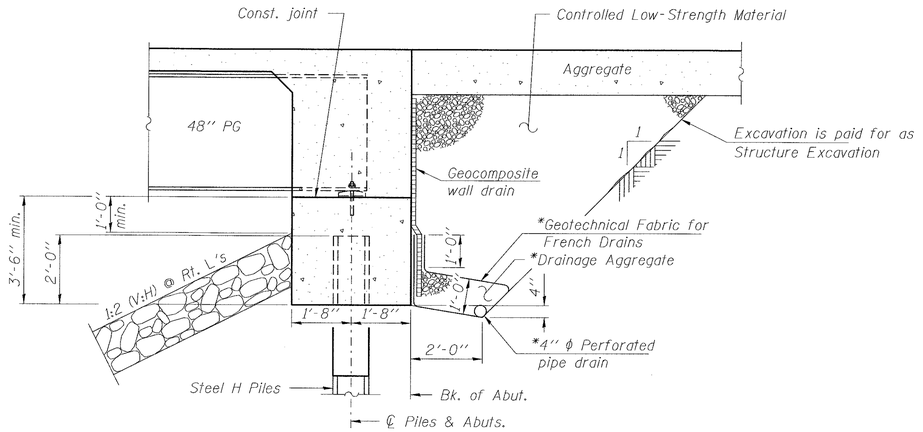
GENERAL PLAN & ELEVATION
T.R. 274
SECTION 09-03138-00-BR
VERMILION COUNTY
STATION 9+98
STRUCTURE NO. 092-3521

FILE NAME = 140208-sht-bridge.dgn
USER NAME =
PLOT SCALE =
PLOT DATE = 8/14/2017
3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
217.546.3400 www.hlrengineering.com
184.002956
ILLINOIS PROFESSIONAL DESIGN FIRM
LS / PE / SE CORPORATION
DESIGNED - D.W.T.
CHECKED - S.W.M.
DRAWN - D.A.B.
CHECKED - S.W.M.
REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
VERMILION COUNTY HIGHWAY DEPARTMENT

GENERAL PLAN
STRUCTURE NO. 092-3521
SHEET NO. 1 OF 14 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
274	09-03138-00-BR	VERMILION	40	6
CARROLL ROAD DISTRICT		CONTRACT NO. 91528		
ILLINOIS	FED. AID PROJECT HVCN(463)			

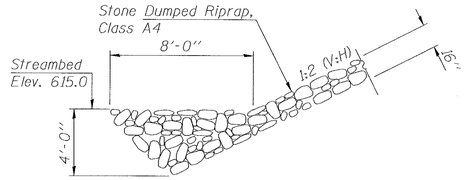


SECTION THRU INTEGRAL ABUTMENT

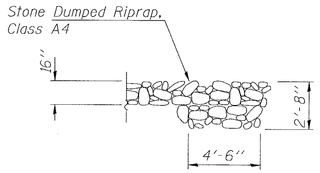
(Horiz. dim. @ Rt. L's)

*Included in the cost of Pipe Underdrains for Structures, 4"

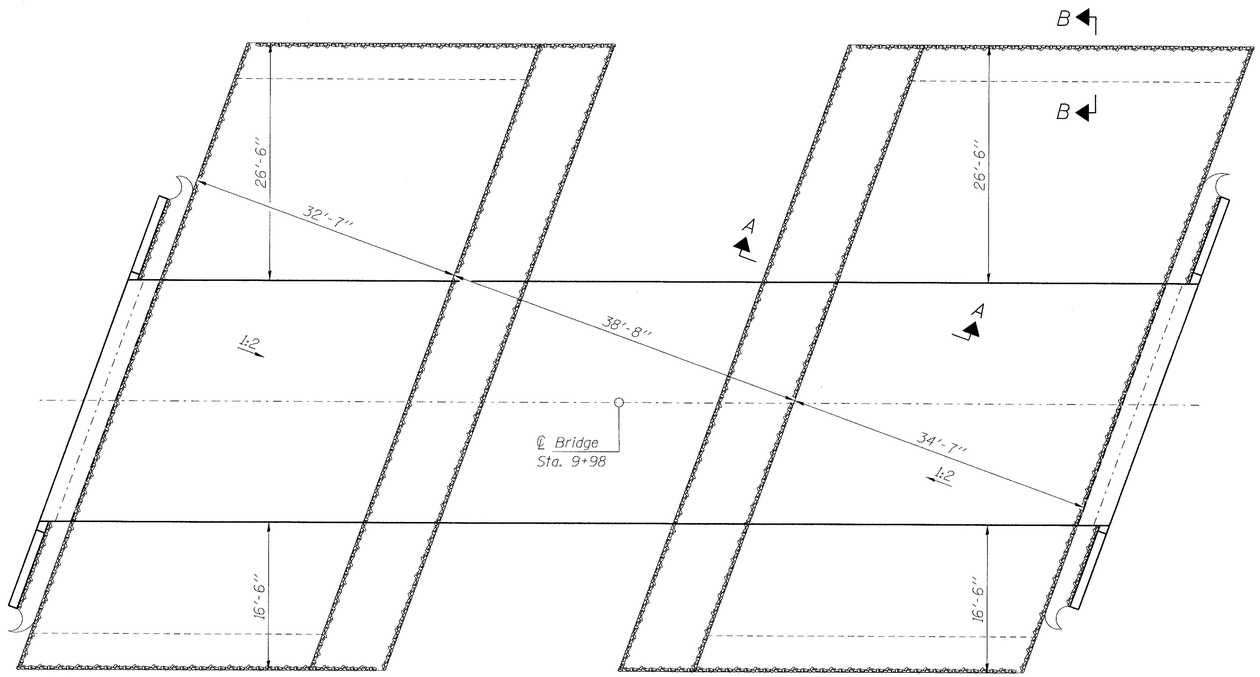
All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101). Concrete headwalls shall be included in the cost of Pipe Underdrains for Structures 4".



SECTION A-A



SECTION B-B



RIPRAP LAYOUT

GENERAL NOTES

Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts in painted areas and ASTM A325 Type 3 in unpainted areas. Bolts $\frac{7}{8}$"ϕ, holes $\frac{15}{16}$"ϕ, unless otherwise noted.

Calculated weight of Structural Steel = 117,334 lbs.

All structural steel shall be AASHTO M 270 Grade 50W.

No field welding is permitted except as specified in the contract documents.

Reinforcement bars designated (E) shall be epoxy coated.

Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.

Structural steel shall only be painted from distance equal to the depth of embedment into the concrete cap plus **18** inches. Painted areas shall be primed in the shop with a Department approved zinc rich primer. Field painting will not be required.

Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure.

The top surface of the deck shall be screeded with a straight edge. Further finishing shall be delayed until the water sheen appears, but not to the point of rendering further manipulation ineffective. The surface then shall be roughened with a suitable stiff-bristled broom or wire brush drawn in transverse direction removing any laitance present and breaking up the water sheen. The corrugations formed shall be uniform in appearance and in no case more than $\frac{1}{4}$" in depth.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Channel Excavation	Cu. Yd.			540
Stone Dumped Riprap, Class A4	Ton			760
Removal of Existing Structures	Each			1
Structure Excavation	Cu. Yd.		204	204
Concrete Structures	Cu. Yd.		36.0	36.0
Concrete Superstructure	Cu. Yd.	123.0		123.0
Protective Coat	Sq. Yd.	410	34	444
Furnishing and Erecting Structural Steel	L. Sum	1		1
Stud Shear Connectors	Each	885		885
Reinforcement Bars, Epoxy Coated	Pound	22,170	6,680	28,850
Steel Railing, Type S1	Foot	235		235
Furnishing Steel Piles HP10x42	Foot		250	250
Driving Piles	Foot		250	250
Test Pile Steel HP10x42	Each		2	2
Pile Shoes	Each		12	12
Name Plates	Each		1	1
Anchor Bolts, 1"	Each		20	20
Geocomposite Wall Drain	Sq. Yd.			71
Controlled Low-Strength Material	Cu. Yd.			148
Pipe Underdrains for Structures 4"	Foot			168
Concrete Cut-off Wall	Cu. Yd.		8.6	8.6

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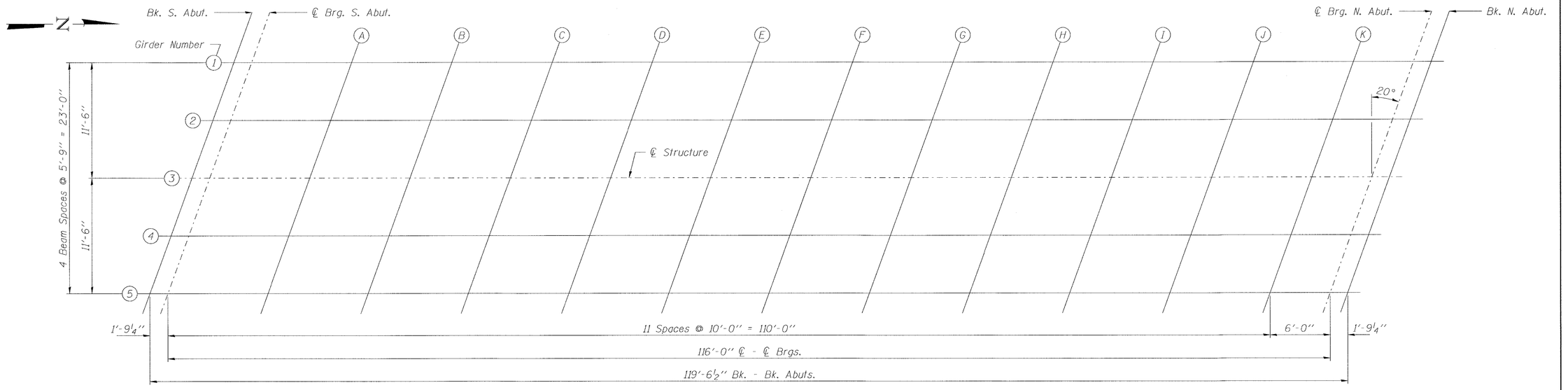
FILE NAME = 140200-sht-bridge.dgn	USER NAME =	DESIGNED - D.W.T.	REVISED -
		CHECKED - S.W.M.	REVISED -
	PLOT SCALE =	DRAWN - D.A.B.	REVISED -
	PLOT DATE = 8/14/2017	CHECKED - S.W.M.	REVISED -

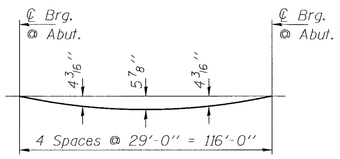
STATE OF ILLINOIS
VERMILION COUNTY HIGHWAY DEPARTMENT

GENERAL DATA
STRUCTURE NO. 092-3521
SHEET NO. 2 OF 14 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
274	09-03138-00-BR	VERMILION	40	7
CARROLL ROAD DISTRICT		CONTRACT NO. 91528		
ILLINOIS	FED. AID PROJECT HVCN(463)			



PLAN

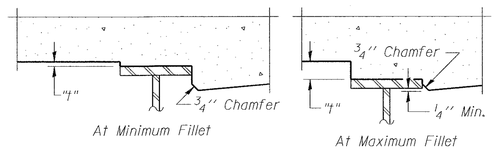


DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only.)

Note:

The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on sheet 4 of 14.



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown above. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on sheet 4 of 14, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS

FILE NAME = 142200-sht-bridge.dgn	USER NAME =	DESIGNED - D.W.T.	REVISED -	STATE OF ILLINOIS VERMILION COUNTY HIGHWAY DEPARTMENT	TOP OF SLAB ELEVATIONS STRUCTURE NO. 092-3521 SHEET NO. 3 OF 14 SHEETS
3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 217.546.3400 www.hlrengineering.com 184.000959 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORPORATION		CHECKED - S.W.M.	REVISED -		
	PLOT SCALE =	DRAWN - D.A.B.	REVISED -		
	PLOT DATE = 8/14/2017	CHECKED - S.W.M.	REVISED -		

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
274	09-03138-00-BR	VERMILION	40	8
CARROLL ROAD DISTRICT		CONTRACT NO. 91528		
ILLINOIS	FED. AID PROJECT HVCN(463)			

BEAM 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	9+42.41	-11.50	636.45	636.45
℄ Brg. S. Abut.	9+44.19	-11.50	636.48	636.48
A	9+54.19	-11.50	636.65	636.76
B	9+64.19	-11.50	636.82	637.03
C	9+74.19	-11.50	637.00	637.28
D	9+84.19	-11.50	637.17	637.51
E	9+94.19	-11.50	637.34	637.72
F	10+04.19	-11.50	637.51	637.90
G	10+14.19	-11.50	637.68	638.05
H	10+24.19	-11.50	637.86	638.18
I	10+34.19	-11.50	638.03	638.28
J	10+44.19	-11.50	638.20	638.37
K	10+54.19	-11.50	638.37	638.44
℄ Brg. N. Abut.	10+60.19	-11.50	638.49	638.49
Bk. N. Abut.	10+61.96	-11.50	638.52	638.52

BEAM 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	9+40.32	-5.75	636.53	636.53
℄ Brg. S. Abut.	9+42.09	-5.75	636.56	636.56
A	9+52.09	-5.75	636.74	636.84
B	9+62.09	-5.75	636.91	637.11
C	9+72.09	-5.75	637.08	637.36
D	9+82.09	-5.75	637.25	637.60
E	9+92.09	-5.75	637.42	637.80
F	10+02.09	-5.75	637.60	637.98
G	10+12.09	-5.75	637.77	638.14
H	10+22.09	-5.75	637.94	638.26
I	10+32.09	-5.75	638.11	638.37
J	10+42.09	-5.75	638.28	638.45
K	10+52.09	-5.75	638.46	638.52
℄ Brg. N. Abut.	10+58.09	-5.75	638.57	638.57
Bk. N. Abut.	10+59.87	-5.75	638.60	638.60

℄ STRUCTURE & BEAM 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	9+38.23	0.00	636.62	636.62
℄ Brg. S. Abut.	9+40.00	0.00	636.65	636.65
A	9+50.00	0.00	636.82	636.93
B	9+60.00	0.00	636.99	637.19
C	9+70.00	0.00	637.16	637.45
D	9+80.00	0.00	637.34	637.68
E	9+90.00	0.00	637.51	637.89
F	10+00.00	0.00	637.68	638.07
G	10+10.00	0.00	637.85	638.22
H	10+20.00	0.00	638.02	638.35
I	10+30.00	0.00	638.20	638.45
J	10+40.00	0.00	638.37	638.53
K	10+50.00	0.00	638.54	638.60
℄ Brg. N. Abut.	10+56.00	0.00	638.65	638.65
Bk. N. Abut.	10+57.77	0.00	638.68	638.68

BEAM 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	9+36.13	5.75	636.46	636.46
℄ Brg. S. Abut.	9+37.91	5.75	636.49	636.49
A	9+47.91	5.75	636.66	636.77
B	9+57.91	5.75	636.84	637.04
C	9+67.91	5.75	637.01	637.29
D	9+77.91	5.75	637.18	637.52
E	9+87.91	5.75	637.35	637.73
F	9+97.91	5.75	637.52	637.91
G	10+07.91	5.75	637.70	638.06
H	10+17.91	5.75	637.87	638.19
I	10+27.91	5.75	638.04	638.29
J	10+37.91	5.75	638.21	638.38
K	10+47.91	5.75	638.38	638.45
℄ Brg. N. Abut.	10+53.91	5.75	638.49	638.49
Bk. N. Abut.	10+55.68	5.75	638.52	638.52

BEAM 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	9+34.04	11.50	636.31	636.31
℄ Brg. S. Abut.	9+35.81	11.50	636.34	636.34
A	9+45.81	11.50	636.51	636.61
B	9+55.81	11.50	636.68	636.88
C	9+65.81	11.50	636.85	637.14
D	9+75.81	11.50	637.02	637.37
E	9+85.81	11.50	637.20	637.58
F	9+95.81	11.50	637.37	637.76
G	10+05.81	11.50	637.54	637.91
H	10+15.81	11.50	637.71	638.03
I	10+25.81	11.50	637.88	638.14
J	10+35.81	11.50	638.06	638.22
K	10+45.81	11.50	638.23	638.29
℄ Brg. N. Abut.	10+51.81	11.50	638.33	638.33
Bk. N. Abut.	10+53.59	11.50	638.36	638.36

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FILE NAME = 140200-sht-bridge.dgn | USER NAME = | PLOT SCALE = | PLOT DATE = 8/14/2017

DESIGNED - D.W.T. | CHECKED - S.W.M. | DRAWN - D.A.B. | CHECKED - S.W.M.

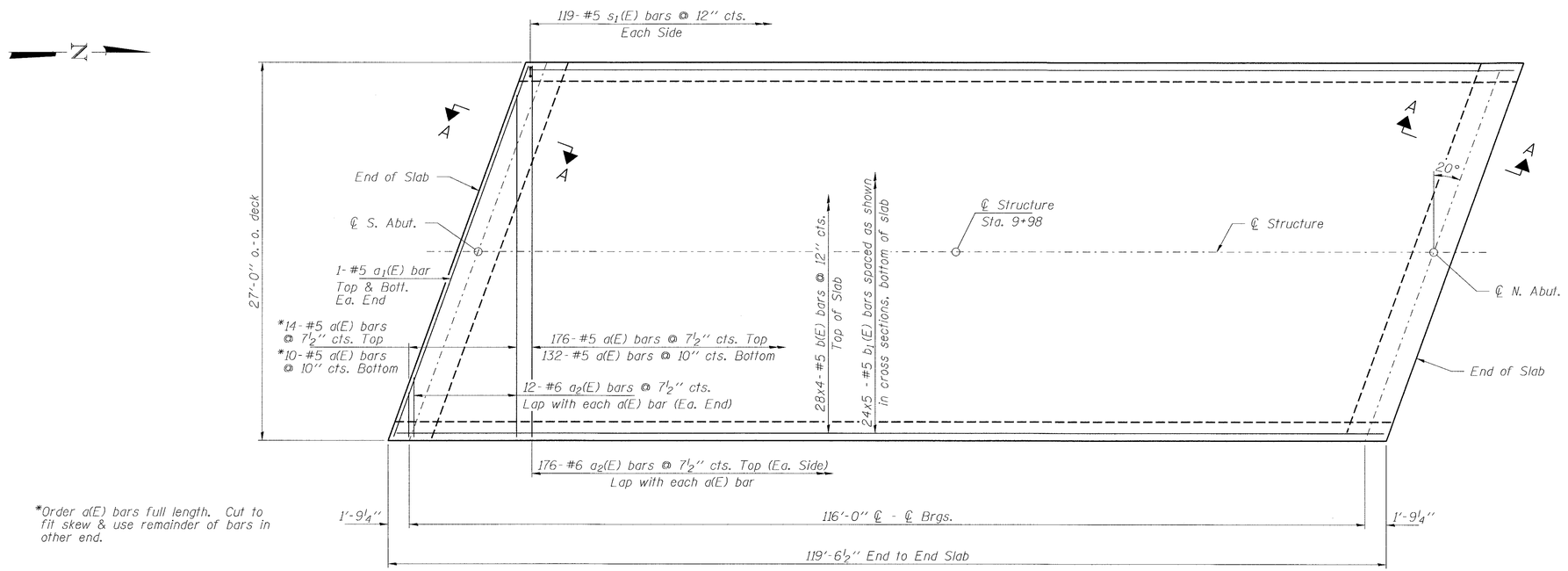
REVISED - | REVISED - | REVISED - | REVISED -

STATE OF ILLINOIS
VERMILION COUNTY HIGHWAY DEPARTMENT

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 092-3521

SHEET NO. 4 OF 14 SHEETS

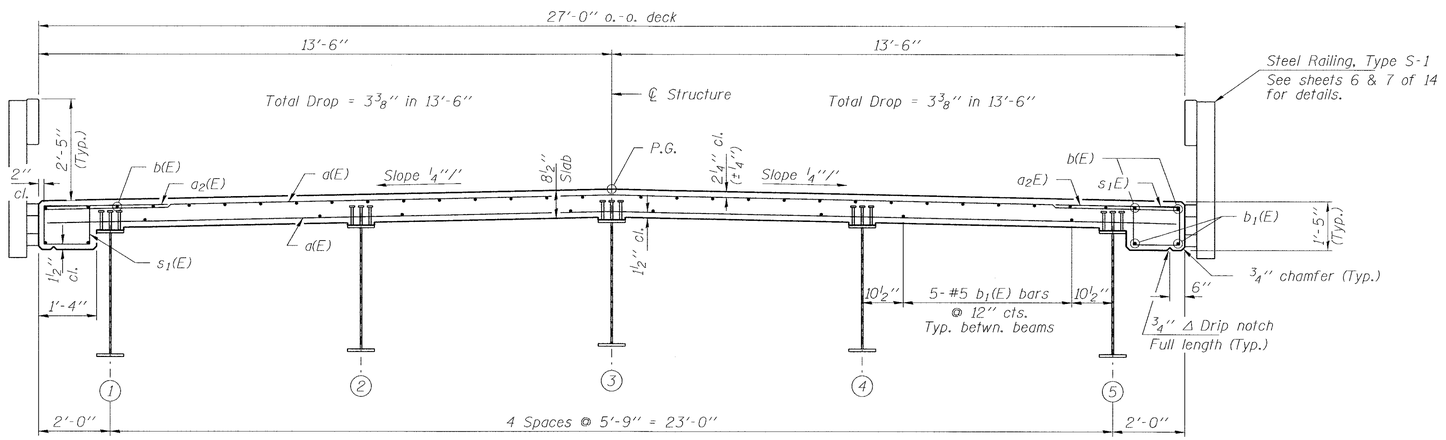
T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
274	09-03138-00-BR	VERMILION	40	9
CARROLL ROAD DISTRICT		CONTRACT NO. 91528		
ILLINOIS	FED. AID PROJECT HVCN(463)			



*Order a(E) bars full length. Cut to fit skew & use remainder of bars in other end.

PLAN

Notes:
See sheet 6 of 14 for superstructure details.
Bars indicated thus 24x5-#5 etc. indicates 24 lines of bars with 5 lengths per line.
See sheet 6 of 14 for Section A-A.



CROSS SECTION
(Looking North)

MIN. BAR LAP
#5 bars = 3'-6"

SUPERSTRUCTURE
BILL OF MATERIAL

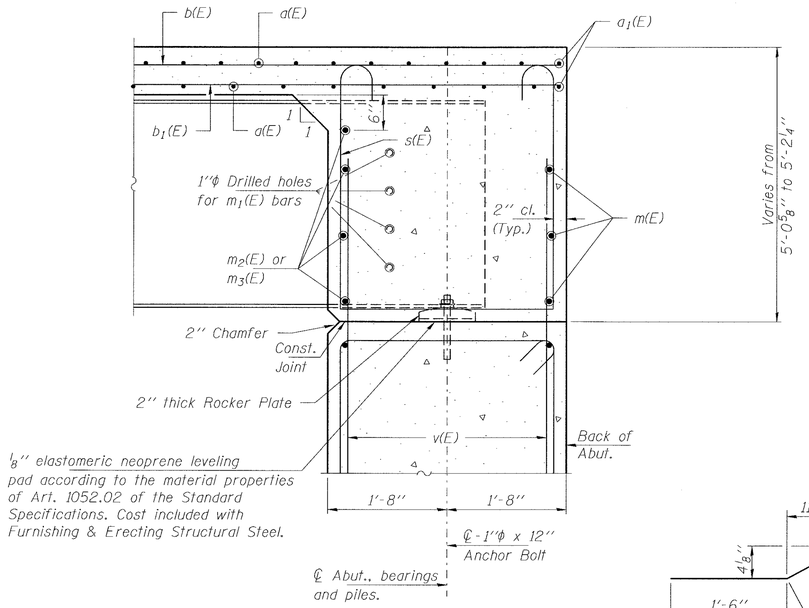
BAR	NO.	SIZE	LENGTH	SHAPE
a(E)	332	#5	26'-8"	
a1(E)	4	#5	28'-4"	
a2(E)	376	#6	5'-2"	
b(E)	112	#5	32'-6"	
b1(E)	120	#5	26'-8"	
m(E)	8	#6	28'-4"	
m1(E)	40	#5	4'-0"	
m2(E)	32	#6	5'-9"	
m3(E)	16	#6	1'-9"	
s(E)	52	#5	13'-4"	
s1E)	238	#5	4'-11"	
Concrete Superstructure			Cu. Yd.	123.0
Protective Coat			Sq. Yd.	410
Reinforcment Bars, Epoxy Coated			Pound	22,170

FILE NAME = 140200-sht-bridge.dgn	USER NAME =	DESIGNED - D.W.T.	REVISED -
3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 217.546.3400 www.hlrengineering.com 184.000959 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORPORATION		CHECKED - S.W.M.	REVISED -
	PLOT SCALE =	DRAWN - D.A.B.	REVISED -
	PLOT DATE = 8/14/2017	CHECKED - S.W.M.	REVISED -

STATE OF ILLINOIS
VERMILION COUNTY HIGHWAY DEPARTMENT

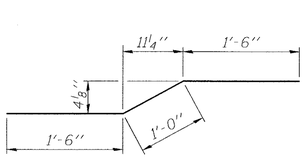
SUPERSTRUCTURE
STRUCTURE NO. 092-3521
SHEET NO. 5 OF 14 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
274	09-03138-00-BR	VERMILION	40	10
CARROLL ROAD DISTRICT		CONTRACT NO. 91528		
ILLINOIS FED. AID PROJECT HVCN(463)				

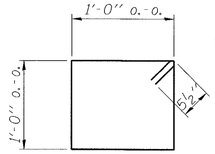


SECTION A-A

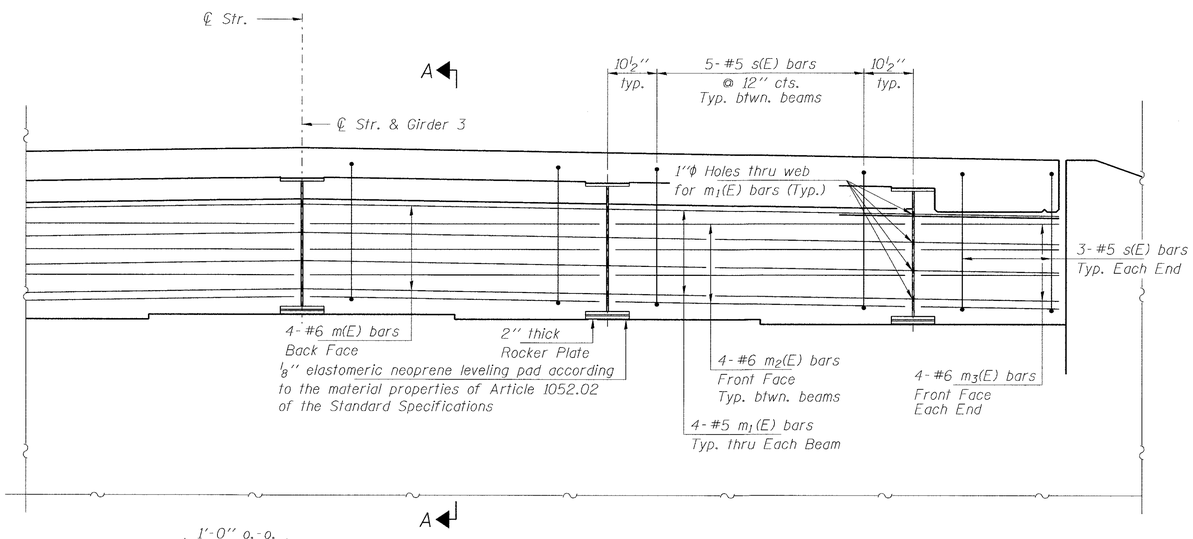
Dimensions at right angles to abutment, except as shown.



BAR m_1(E)

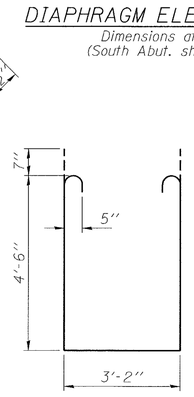


BAR s_1E)

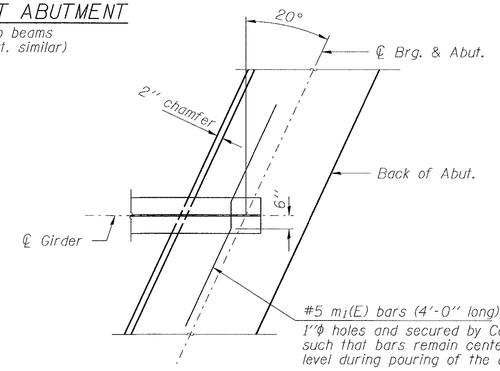


DIAPHRAGM ELEVATION AT ABUTMENT

Dimensions at right angles to beams (South Abut. shown, North Abut. similar)



BAR s(E)



PLAN

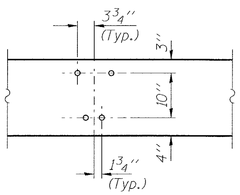
(Showing bottom flange of beam)

Notes:

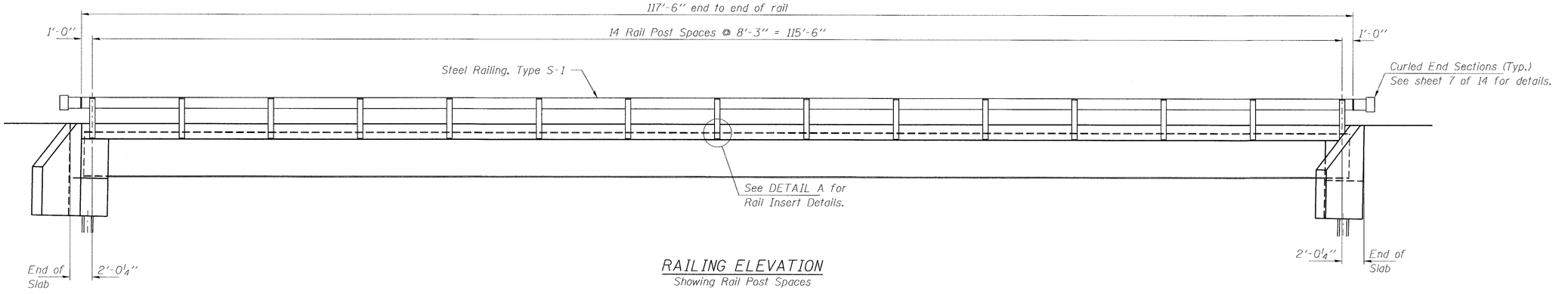
Reinforcement bars in diaphragm are billed with Superstructure on sheet 5 of 14.

Concrete in diaphragm is included with Concrete Superstructure on sheet 5 of 14.

The s(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.



DETAIL A

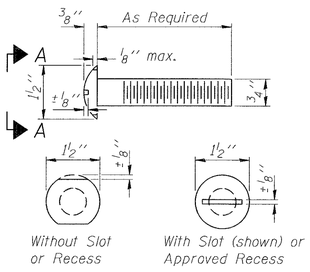


RAILING ELEVATION

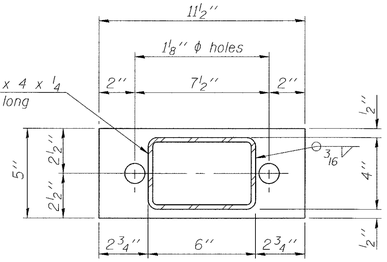
Showing Rail Post Spaces

See sheet 7 of 14 for Railing Details.

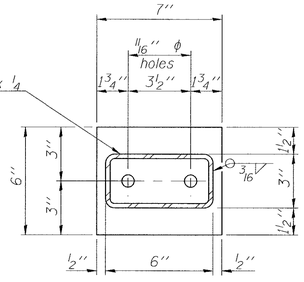
FILE NAME = 140200-sht-bridge.dgn	USER NAME =	DESIGNED - D.W.T.	REVISED -	**STATE OF ILLINOIS**	**SUPERSTRUCTURE DETAILS**	T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 217.546.3400 www.hlrengineering.com 184.000959 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORPORATION		CHECKED - S.W.M.	REVISED -	**VERMILION COUNTY HIGHWAY DEPARTMENT**	**STRUCTURE NO. 092-3521**	274	09-03138-00-BR	VERMILION	40	11
	PLOT SCALE =	DRAWN - D.A.B.	REVISED -			CARROLL ROAD DISTRICT		CONTRACT NO. 91528		
	PLOT DATE = 8/14/2017	CHECKED - S.W.M.	REVISED -		SHEET NO. 6 OF 14 SHEETS	ILLINOIS FED. AID PROJECT HVCN(463)				



VIEW A-A
ROUND HEAD BOLT

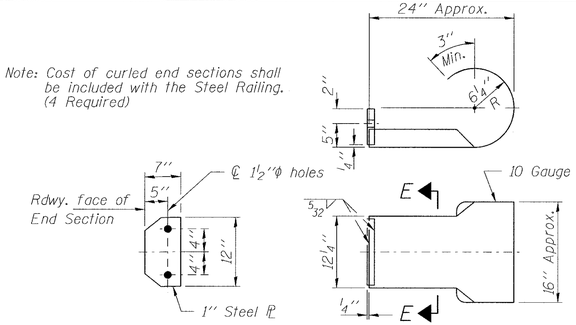


PL 1/2" x 11 1/2" x 5"



PL 1/2" x 7" x 6"

Note: Cost of curled end sections shall be included with the Steel Railing. (4 Required)



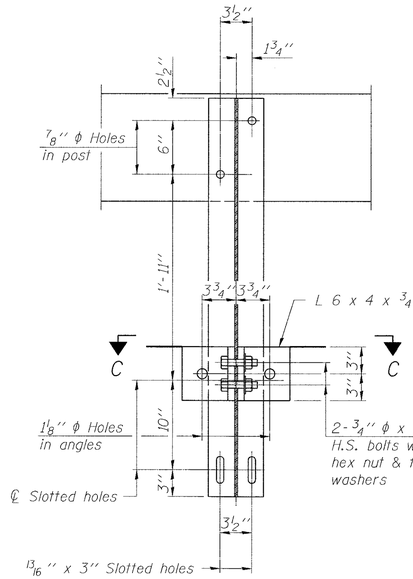
SECTION E-E

CURLED END SECTION DETAILS

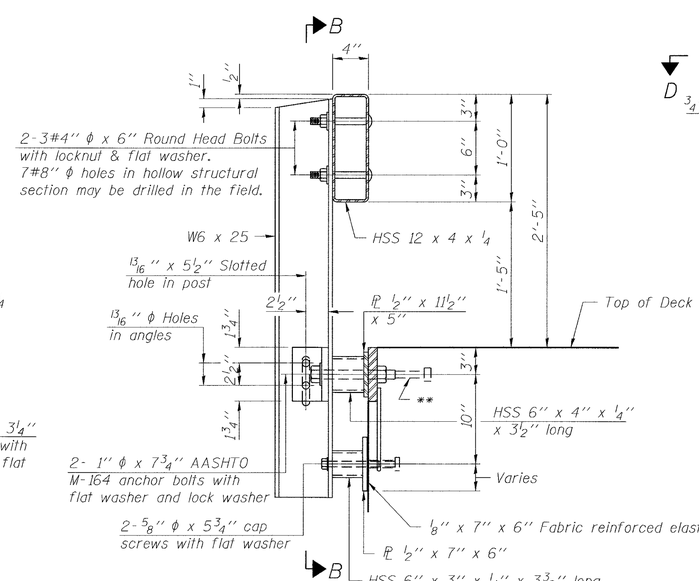
SPLICE DIMENSIONS

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

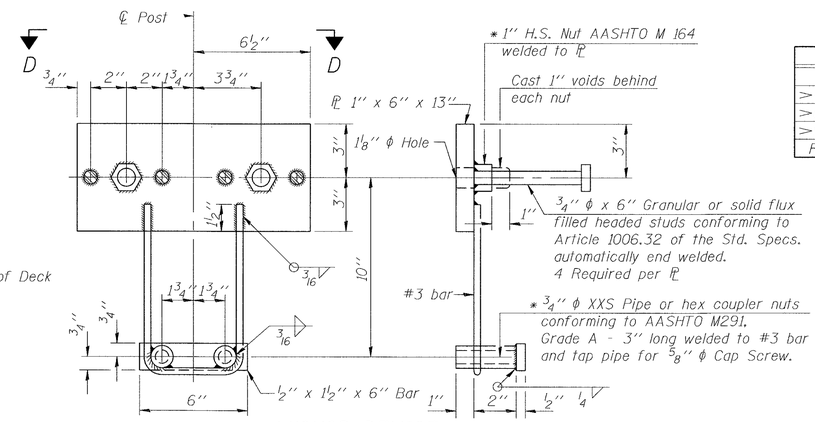
T = Total movement at expansion joint as shown on the design plans.



SECTION B-B



SECTION AT RAILING POST



ANCHOR DEVICE

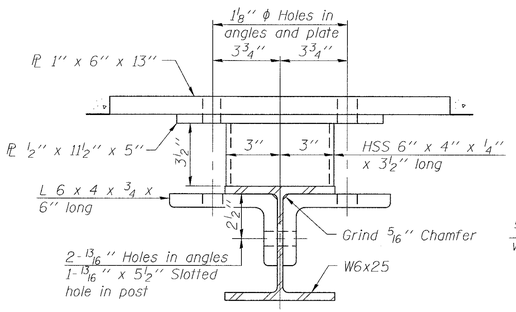
* Threaded areas shall be plugged or blocked off during casting of beam.

Notes:

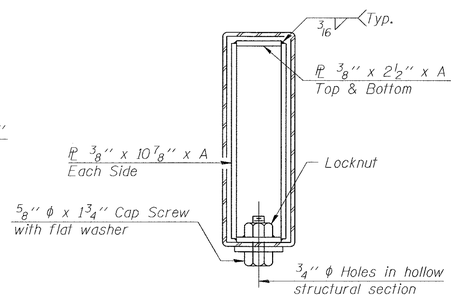
For multi-span bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type S-1.

All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.

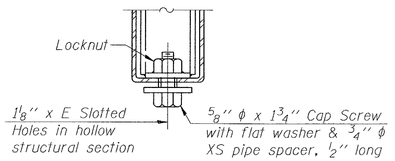
** The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device.



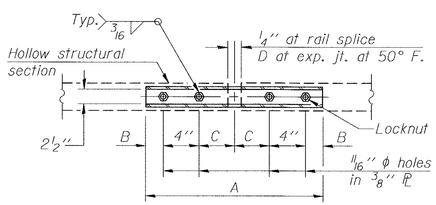
SECTION C-C



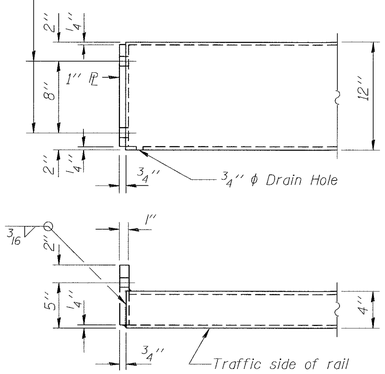
SECTIONS AT RAIL SPLICE



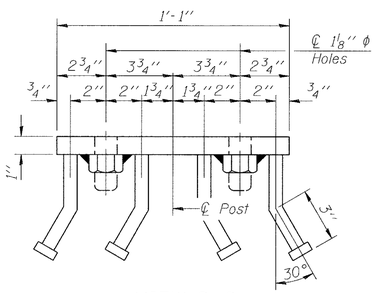
RAIL SPLICE CONNECTION AT EXPANSION JT.



PLAN-BOTT. SPLICE PL TYPICAL



END OF RAIL DETAILS



VIEW D-D

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type S-1	Foot	235

R-23A

1-12-15

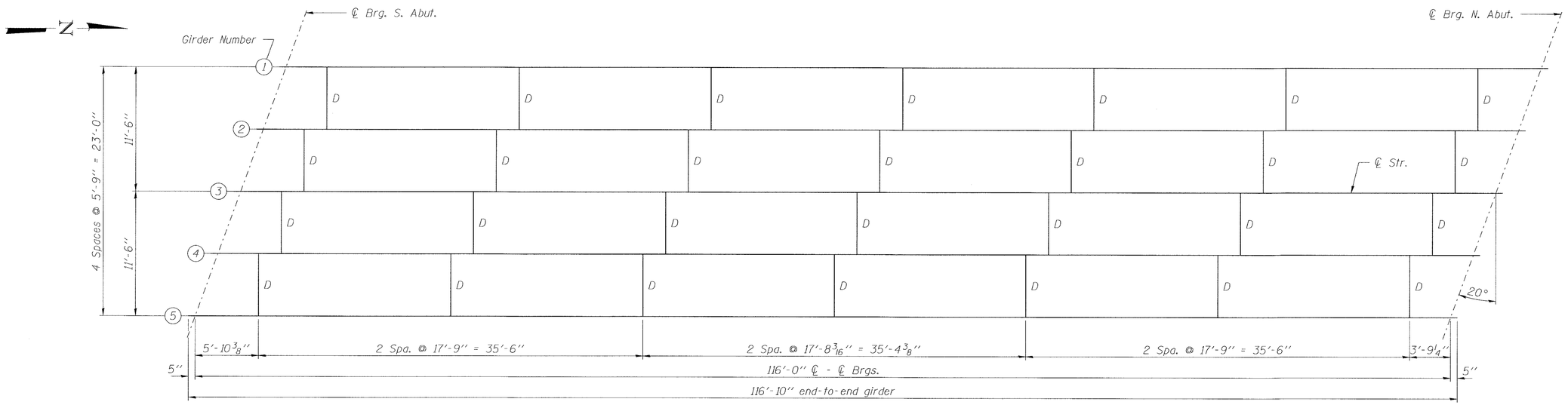
(10'-9" Maximum Post Spacing)

FILE NAME = 140202-sht-bridge.dgn
USER NAME =
PLOT SCALE =
PLOT DATE = 8/14/2017
3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
217.546.3400 www.hlrengineering.com
184.000950
ILLINOIS PROFESSIONAL DESIGN FIRM
LS / PE / SE CORPORATION
DESIGNED - D.W.T.
CHECKED - S.W.M.
DRAWN - D.A.B.
CHECKED - S.W.M.
REVISED -
REVISED -
REVISED -
REVISED -

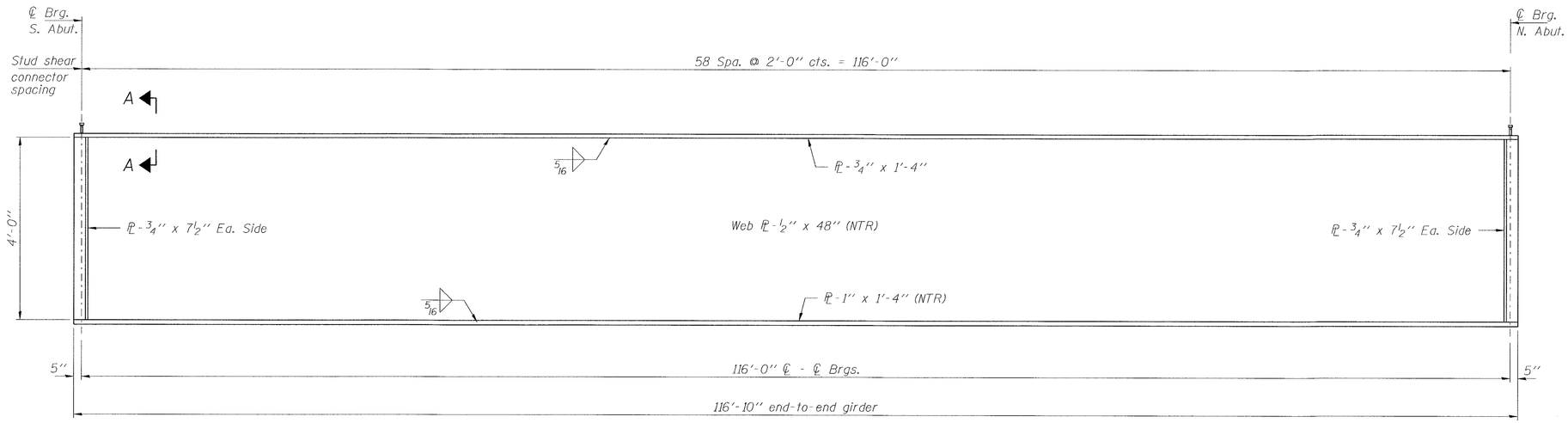
STATE OF ILLINOIS
VERMILION COUNTY HIGHWAY DEPARTMENT

STEEL RAILING, TYPE S-1
STRUCTURE NO. 092-3521
SHEET NO. 7 OF 14 SHEETS

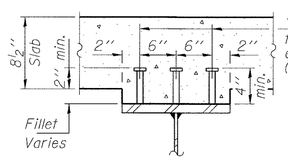
T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
274	09-03138-00-BR	VERMILION	40	12
CARROLL ROAD DISTRICT		CONTRACT NO. 91528		
ILLINOIS	FED. AID PROJECT HVCN(463)			



FRAMING PLAN



GIRDER ELEVATION



SECTION A-A

Notes:

Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.

All girders and splices, including bearing stiffeners and diaphragms shall be AASHTO M270, Grade 50W.

For additional structural steel details see sheets 9 & 10 of 14.

All cross frames and diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.

Location	℄ Brg. S. Abut.	℄ Brg. N. Abut.
BEAM 1	635.65	637.65
BEAM 2	635.73	637.73
BEAM 3	635.81	637.81
BEAM 4	635.65	637.65
BEAM 5	635.50	637.50

TOP OF WEB ELEVATIONS

(For fabrication only)
(Does not include Dead Load Deflections)

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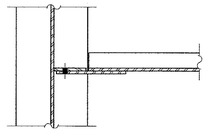
FILE NAME = 142220-sht-bridge.dgn	USER NAME =	DESIGNED - D.W.T.	REVISED -
		CHECKED - S.W.M.	REVISED -
	PLOT SCALE =	DRAWN - D.A.B.	REVISED -
	PLOT DATE = 8/14/2017	CHECKED - S.W.M.	REVISED -

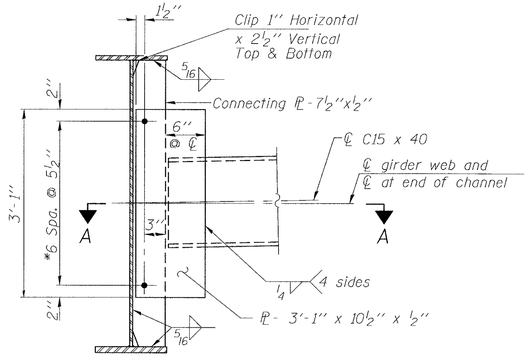
STATE OF ILLINOIS
VERMILION COUNTY HIGHWAY DEPARTMENT

STRUCTURAL STEEL
STRUCTURE NO. 092-3521
SHEET NO. 8 OF 14 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
274	09-03138-00-BR	VERMILION	40	13
CARROLL ROAD DISTRICT		CONTRACT NO. 91528		
ILLINOIS	FED. AID PROJECT HVCN(463)			



SECTION A-A



INTERIOR DIAPHRAGM D

(28 required)

Note:
Two hardened washers required for each set of oversized holes.
*$^{3}/_{4}$" ϕ HS bolts, $^{15}/_{16}$" ϕ holes

INTERIOR GIRDER MOMENT TABLE		
		0.5 Sp. 1
I_s	(in^4)	21,153
$I_c(n)$	(in^4)	53,213
$I_c(3n)$	(in^4)	38,970
$I_c(cr)$	(in^4)	23,958
S_s	(in^3)	916
$S_c(n)$	(in^3)	1,259
$S_c(3n)$	(in^3)	1,152
$S_c(cr)$	(in^3)	774
DC1	(k/')	0.89
M_{DC1}	('k)	1,492
DC2	(k/')	0.03
M_{DC2}	('k)	51
DW	(k/')	0.29
M_{DW}	('k)	484
LLDF		0.4888
M_{L+IM}	('k)	1,702
M_u (Strength I)	('k)	5,633
$\phi_f M_n$	('k)	6,306
f_s DC1	(ksi)	19.5
f_s DC2	(ksi)	0.5
f_s DW	(ksi)	5.0
f_s (L+IM)	(ksi)	16.2
f_s (Service II)	(ksi)	46.2
$0.95R_hF_{yf}$	(ksi)	47.5
f_s (Total)(Strength I)	(ksi)	-
$\phi_f F_n$	(ksi)	-
V_f	(k)	27.7

GIRDER REACTION TABLE			
		Abutment	
		Interior	Exterior
LLDF		0.6997	0.5642
OCF		-	1.08
R_{DC1}	(k)	51.5	46.2
R_{DC2}	(k)	1.8	1.8
R_{DW}	(k)	16.7	14.1
R_{L}	(k)	72.3	58.4
R_{Im}	(k)	15.3	12.3
R_{Total}	(k)	157.6	132.8

I_s, S_s: Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total-Strength I, and Service II) due to non-composite dead loads ($in.^4$ and $in.^3$).

$I_c(n)$, $S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total-Strength I, and Service II) in uncracked sections due to short-term composite live loads ($in.^4$ and $in.^3$).

$I_c(3n)$, $S_c(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s (Total-Strength I, and Service II) in uncracked sections, due to long-term composite (superimposed) dead loads ($in.^4$ and $in.^3$).

$I_c(cr)$, $S_c(cr)$: Composite moment of inertia and section modulus of the steel and longitudinal deck reinforcement, used for computing f_s (Total-Strength I and Service II) in cracked sections, due to both short-term composite live loads and long-term composite (superimposed) dead loads ($in.^4$ and $in.^3$).

DC1: Un-factored non-composite dead load (kips/ft.).

M_{DC1}: Un-factored moment due to non-composite dead load (kip-ft.).

DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).

M_{DC2}: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).

DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).

M_{DW}: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).

M_{L+IM}: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).

M_u (Strength I): Factored design moment (kip-ft.).
$1.25\ (M_{DC1} + M_{DC2}) + 1.5\ M_{DW} + 1.75\ M_{L+IM}$

$\phi_f M_n$: Compact composite positive moment capacity computed according to Article 6.10.7.1 or non-slender negative moment capacity according to Article A6.1.1 or A6.1.2 (kip-ft).

f_s DC1: Un-factored stress at edge of flange for controlling steel flange due to vertical non-composite dead loads as calculated below (ksi).
M_{DC1} / S_{nc}

f_s DC2: Un-factored stress at edge of flange for controlling steel flange due to vertical composite dead loads as calculated below (ksi).
$M_{DC2} / S_c(3n)$ or $M_{DC2} / S_c(cr)$ as applicable.

f_s DW: Un-factored stress at edge of flange for controlling steel flange due to vertical composite future wearing surface loads as calculated below (ksi).
$M_{DW} / S_c(3n)$ or $M_{DW} / S_c(cr)$ as applicable.

f_s (L+IM): Un-factored stress at edge of flange for controlling steel flange due to vertical composite live load plus impact loads as calculated below (ksi).
$M_{L+IM} / S_c(n)$ or $M_{DW} / S_c(cr)$ as applicable.

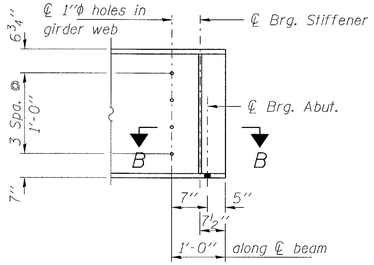
f_s (Service II): Sum of stresses as computed below (ksi).
$f_{sDC1} + f_{sDC2} + f_{sDW} + 1.3\ f_s(L+IM)$

$0.95R_hF_{yf}$: Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).

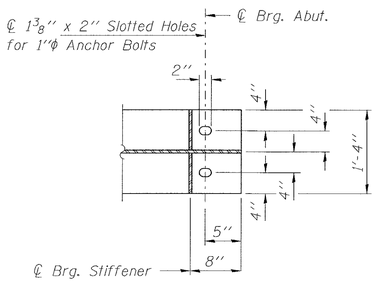
f_s (Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi).
$1.25\ (f_{sDC1} + f_{sDC2}) + 1.5\ f_{sDW} + 1.75\ f_s(L+IM)$

$\phi_f F_n$: Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7 or 6.10.8 (ksi).

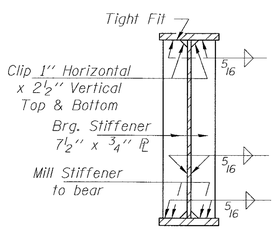
V_f: Maximum factored shear range in span computed according to Article 6.10.10.



TYP. END OF GIRDER ELEVATION



SECTION B-B



SECTION
AT ABUTMENT
BEARING STIFFNER ℄'S

Notes:
For additional structural steel details see sheets 8 & 10 of 14.
All splices and diaphragms, including stiffeners and diaphragms shall be AASHTO M270, Grade 50W.
Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.

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	PLOT DATE = 8/14/2017	CHECKED - S.W.M.	REVISED -

STATE OF ILLINOIS
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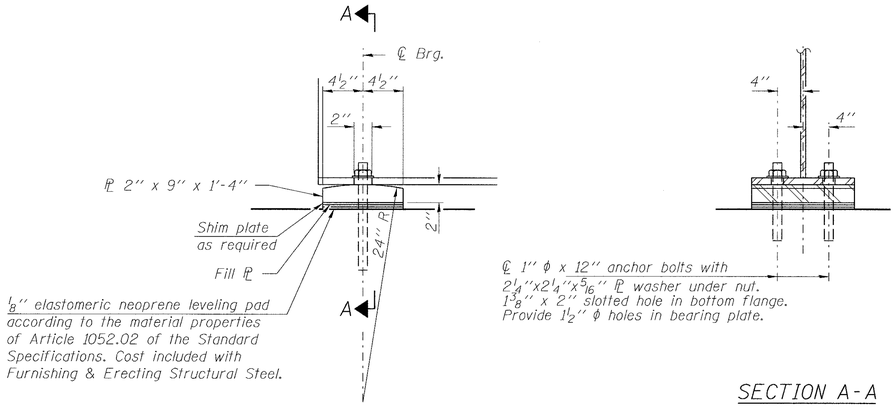
STRUCTURAL STEEL DETAILS
STRUCTURE NO. 092-3521
SHEET NO. 9 OF 14 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
274	09-03138-00-BR	VERMILION	40	14
CARROLL ROAD DISTRICT		CONTRACT NO. 91528		
ILLINOIS	FED. AID PROJECT HVCN(463)			

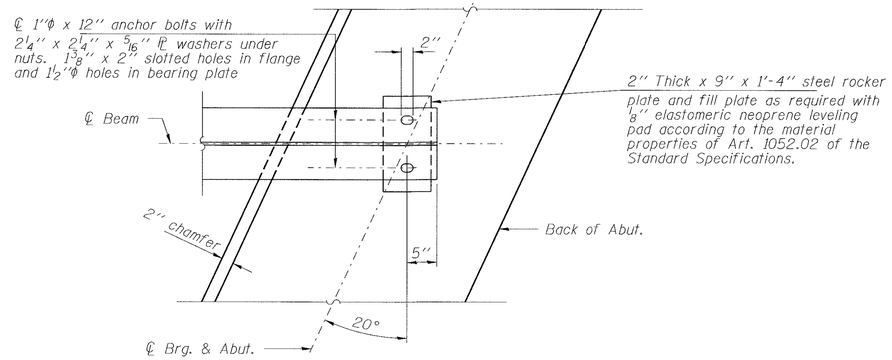


ELEVATION

SECTION A-A

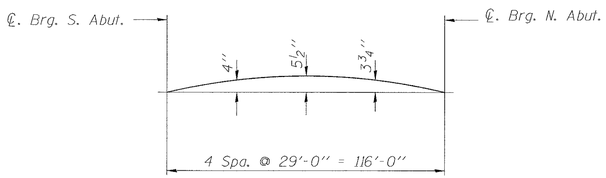
FIXED BEARING AT ABUTMENT

(10 required)



PLAN

(Showing bottom flange of steel beam at abutments)



CAMBER DIAGRAM

Notes:

Two ⅛" adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.

All steel plates of the bearing assembly shall be M270 Grade 50W.

BILL OF MATERIAL

Item	Unit	Quantity
Anchor bolts, 1"	Each	20

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217.546.3400 www.hlrengineering.com
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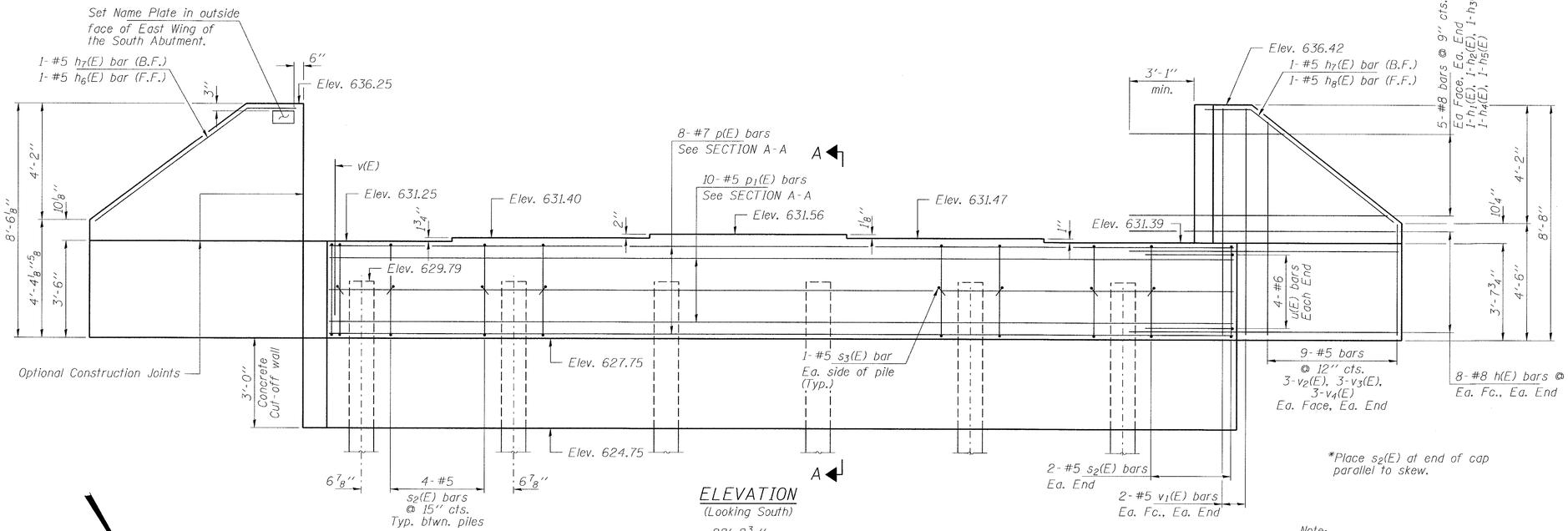
FILE NAME = 140200-sht-bridge.dgn	USER NAME =	DESIGNED - D.W.T.	REVISED -
		CHECKED - S.W.M.	REVISED -
	PLOT SCALE =	DRAWN - D.A.B.	REVISED -
	PLOT DATE = 8/14/2017	CHECKED - S.W.M.	REVISED -

STATE OF ILLINOIS
VERMILION COUNTY HIGHWAY DEPARTMENT

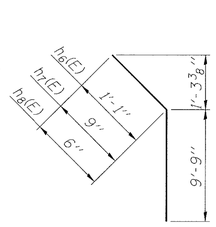
STRUCTURAL STEEL DETAILS
STRUCTURE NO. 092-3521
SHEET NO. 10 OF 14 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
274	09-03138-00-BR	VERMILION	40	15
CARROLL ROAD DISTRICT		CONTRACT NO. 91528		
ILLINOIS	FED. AID PROJECT HVCN(463)			

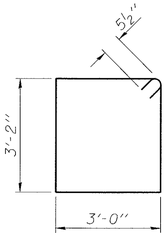


PILE DATA

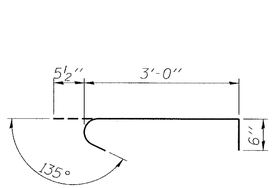
Type: Steel HP10x42
Nominal Required Bearing: 335 Kips/pile
Factored Resistance Available: 184 Kips/pile
Est. Length: 25'
No. Production Piles: 5
No. Test Piles: 1



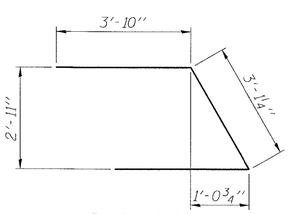
BARS $h_6(E)$, $h_7(E)$ & $h_8(E)$



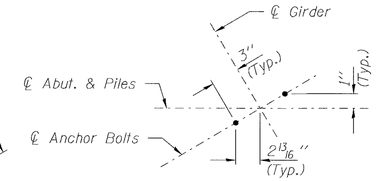
BARS $s_2(E)$



BAR $s_3(E)$



BAR u(E)



DETAIL A

BILL OF MATERIAL - S. ABUT.

Bar	No.	Size	Length	Shape
h(E)	32	#8	13'-3"	
h_1(E)	4	#8	13'-0"	
h_2(E)	4	#5	11'-5"	
h_3(E)	4	#5	9'-9"	
h_4(E)	4	#5	8'-2"	
h_5(E)	4	#5	6'-6"	
h_6(E)	1	#5	10'-10"	
h_7(E)	2	#5	10'-6"	
h_8(E)	1	#5	10'-3"	
p(E)	8	#7	28'-4"	
p_1(E)	10	#5	28'-4"	
s_2(E)	24	#5	13'-3"	
s_3(E)	12	#5	4'-0"	
u(E)	8	#6	10'-10"	
v(E)	53	#5	5'-11"	
v_1(E)	8	#5	8'-3"	
v_2(E)	12	#5	6'-11"	
v_3(E)	12	#5	5'-6"	
v_4(E)	12	#5	4'-2"	
Protective Coat			Sq. Yd.	17
Structure Excavation			Cu. Yd.	102
Concrete Structures			Cu. Yd.	18.0
Concrete Cut-Off Wall			Cu. Yd.	3.4
Reinforcement Bars, Epoxy Coated			Pound	3,340
Furnishing Steel Piles HP10x42			Foot	125
Driving Piles			Foot	125
Test Pile Steel HP10x42			Each	1
Pile Shoes			Each	6
Name Plates			Each	1

For details of piles see sheet 13 of 14.

AI->40-L 8-31-12

FILE NAME = 140200-sht-bridge.dgn	USER NAME =	DESIGNED - D.W.T.	REVISED -
		CHECKED - S.W.M.	REVISED -
	PLOT SCALE =	DRAWN - D.A.B.	REVISED -
	PLOT DATE = 8/14/2017	CHECKED - S.W.M.	REVISED -

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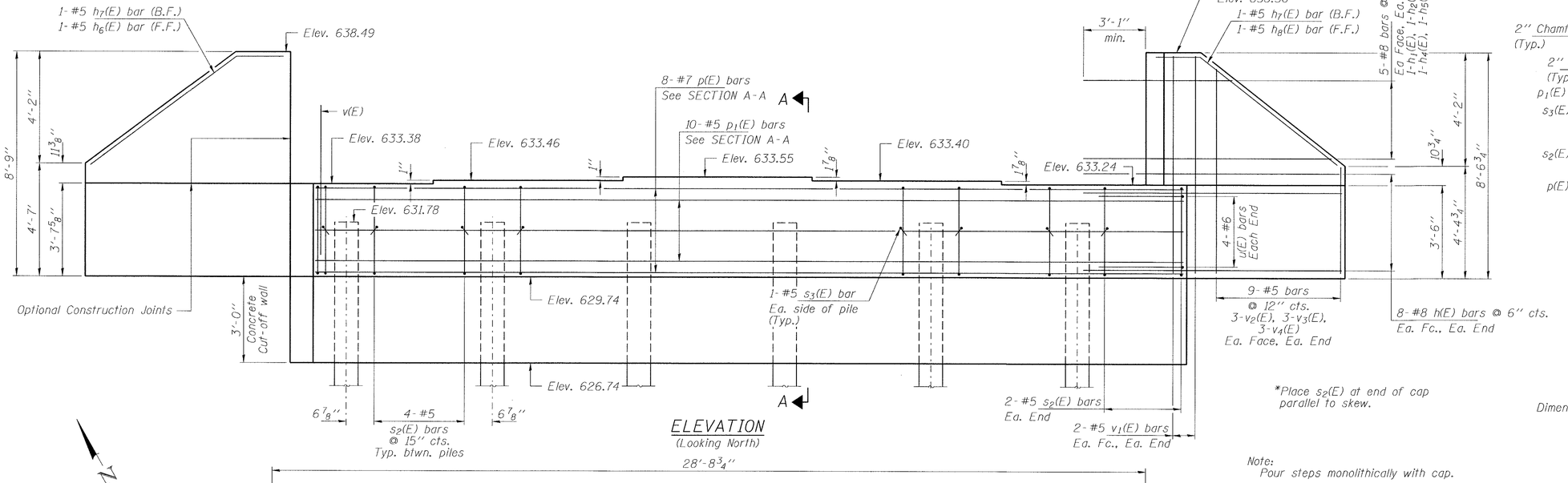
STATE OF ILLINOIS
VERMILION COUNTY HIGHWAY DEPARTMENT

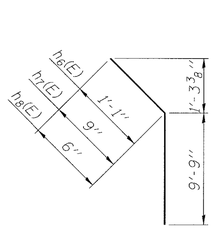
SOUTH ABUTMENT
STRUCTURE NO. 092-3521
SHEET NO. 11 OF 14 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
274	09-03138-00-BR	VERMILION	40	16
CARROLL ROAD DISTRICT		CONTRACT NO. 91528		
		ILLINOIS FED. AID PROJECT HVCN(463)		

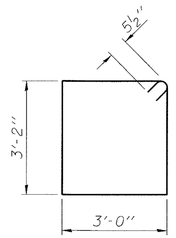


PILE DATA

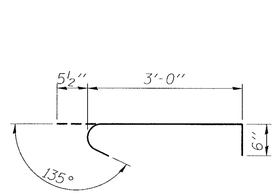
Type: Steel HP10x42
Nominal Required Bearing: 335 Kips/pile
Factored Resistance Available: 184 Kips/pile
Est. Length: 25'
No. Production Piles: 5
No. of Test Piles: 1



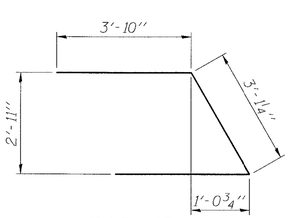
BARS $h_6(E)$, $h_7(E)$ & $h_8(E)$



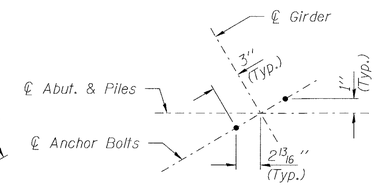
BARS $s_2(E)$



BAR $s_3(E)$



BAR u(E)



DETAIL A

BILL OF MATERIAL - N. ABUT.

Bar	No.	Size	Length	Shape
h(E)	32	#8	13'-3"	
h_1(E)	4	#8	13'-0"	
h_2(E)	4	#5	11'-5"	
h_3(E)	4	#5	9'-9"	
h_4(E)	4	#5	8'-2"	
h_5(E)	4	#5	6'-6"	
h_6(E)	1	#5	10'-10"	
h_7(E)	2	#5	10'-6"	
h_8(E)	1	#5	10'-3"	
p(E)	8	#7	28'-4"	
p_1(E)	10	#5	28'-4"	
s_2(E)	24	#5	13'-3"	
s_3(E)	12	#5	4'-0"	
u(E)	8	#6	10'-10"	
v(E)	53	#5	5'-11"	
v_1(E)	8	#5	8'-3"	
v_2(E)	12	#5	6'-11"	
v_3(E)	12	#5	5'-6"	
v_4(E)	12	#5	4'-2"	
Protective Coat			Sq. Yd.	17
Structure Excavation			Cu. Yd.	102
Concrete Structures			Cu. Yd.	18.0
Concrete Cut-Off Wall			Cu. Yd.	3.4
Reinforcement Bars, Epoxy Coated			Pound	3,340
Furnishing Steel Piles HP10x42			Foot	125
Driving Piles			Foot	125
Test Pile Steel HP10x42			Each	1
Pile Shoes			Each	6

For details of piles see sheet 13 of 14.

AI->40-L 8-31-12

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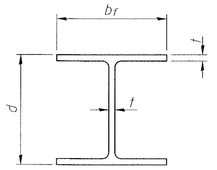
FILE NAME = 140200-sht-bridge.dgn	USER NAME =	DESIGNED - D.W.T.	REVISED -
		CHECKED - S.W.M.	REVISED -
	PLOT SCALE =	DRAWN - D.A.B.	REVISED -
	PLOT DATE = 8/14/2017	CHECKED - S.W.M.	REVISED -

STATE OF ILLINOIS
VERMILION COUNTY HIGHWAY DEPARTMENT

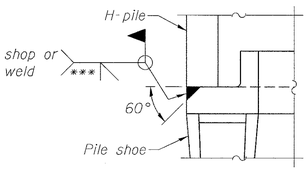
NORTH ABUTMENT
STRUCTURE NO. 092-3521
SHEET NO. 12 OF 14 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
274	09-03138-00-BR	VERMILION	40	17
CARROLL ROAD DISTRICT		CONTRACT NO. 91528		
ILLINOIS	FED. AID PROJECT HVCN(463)			



STEEL PILE TABLE

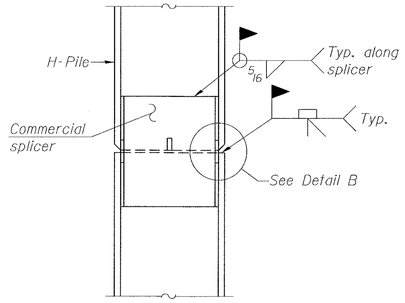
Designation	Depth d	Flange width b_f	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	13/16"	30"
x102	14"	14 3/4"	11/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	11/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"
x53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



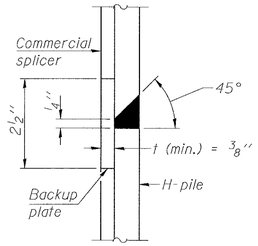
DETAIL A

ELEVATION

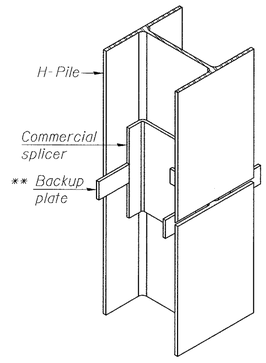
H-PILE SHOE ATTACHMENT



ELEVATION

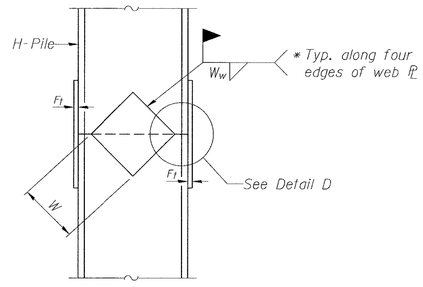


DETAIL "B"

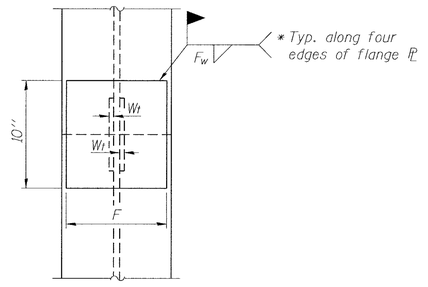


ISOMETRIC VIEW

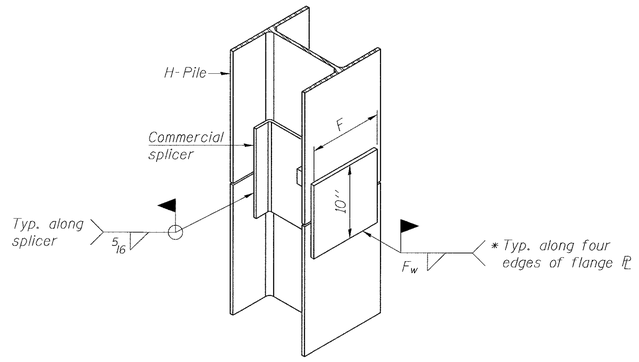
WELDED COMMERCIAL SPLICE



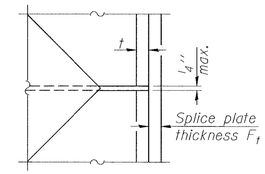
ELEVATION



END VIEW



ISOMETRIC VIEW



DETAIL D

Designation	F	F_t	F_w	W	W_t	W_w
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"	11/16"	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"	11/16"	6 1/2"	5/8"	1/2"
x74	10"	7/8"	11/16"	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

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.).

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

F-HP 1-27-12

3085 STEVENSON DRIVE, SUITE 201
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FILE NAME = 140200-sht-bridge.dgn	USER NAME =	DESIGNED - D.W.T.	REVISED -
		CHECKED - S.W.M.	REVISED -
	PLOT SCALE =	DRAWN - D.A.B.	REVISED -
	PLOT DATE = 8/14/2017	CHECKED - S.W.M.	REVISED -

STATE OF ILLINOIS
VERMILION COUNTY HIGHWAY DEPARTMENT

HP PILE DETAILS
STRUCTURE NO. 092-3521
SHEET NO. 13 OF 14 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
274	09-03138-00-BR	VERMILION	40	18
CARROLL ROAD DISTRICT		CONTRACT NO. 91528		
ILLINOIS	FED. AID PROJECT HVCN(463)			

GEOCON
PROFESSIONAL SERVICES

BORING NO. B-1

CLIENT Hampton, Lenzini and Renwick **PROJECT NAME** Section 09-03138-00-BR: N 1300 E Road
PROJECT NUMBER 14-G420 **PROJECT LOCATION** Carrol Twp, Vermilion Co, IL
DATE COMPLETED 7/23/14 **LOGGED BY** NJ/JB **DRILLING METHOD** 3.25 in. I.D. HSA

DEPTH (ft)	ELEVATION (ft.)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (Qp) (tsf)	UNC. STRENGTH (Qu) (tsf)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ORGANIC CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX
0	640.2		Topsoil (0-4")											
			Brown sandy clay, medium stiff to stiff, moist	SS 1	22	5-3-2 (5)	1.5		15.1					
				SS 2	44	3-2-2 (4)	1.7		18.1					
				SS 3	56	4-4-4 (8)	1.7	0.9	17.6					
10				SS 4	56	2-3-2 (5)	1.5		15.8					
				SS 5	89	4-4-10 (14)	2.0	0.9	14.0					
	624.5		Brown silty clay, with gravel and cobbles, Very stiff to hard, moist											
20	621.0		Gray shale, hard, slightly moist	SS 6	22	7-11-15 (26)	4.5+		10.7					
				SS 7	39	11-13-13 (26)	4.5+		10.1					
30				SS 8	100	50/2"			7.1					
	606.8		Refusal at 33.8 feet. Bottom of borehole at 33.8 feet.	SS 9	100	50/3"			6.8					

COMPLETION DEPTH 33.75 ft **GROUND ELEVATION** 640.5 ft
CAVE DEPTH 16 ft **BACKFILL** Soil Cuttings
GROUND WATER LEVELS:
AT TIME OF DRILLING -- none
AT END OF DRILLING -- none above caved depth
AFTER DRILLING --

NOTES
From the center of the bridge, boring is located 65 feet north along centerline and 8 feet west from centerline in south bound lane.

Lines of Demarcation represent an **approximate** boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes.

9370 W. Laraway Rd, Suite D Frankfort, Illinois Phone (815) 806-9986 Fax (815) 464-8691

BORING B-1

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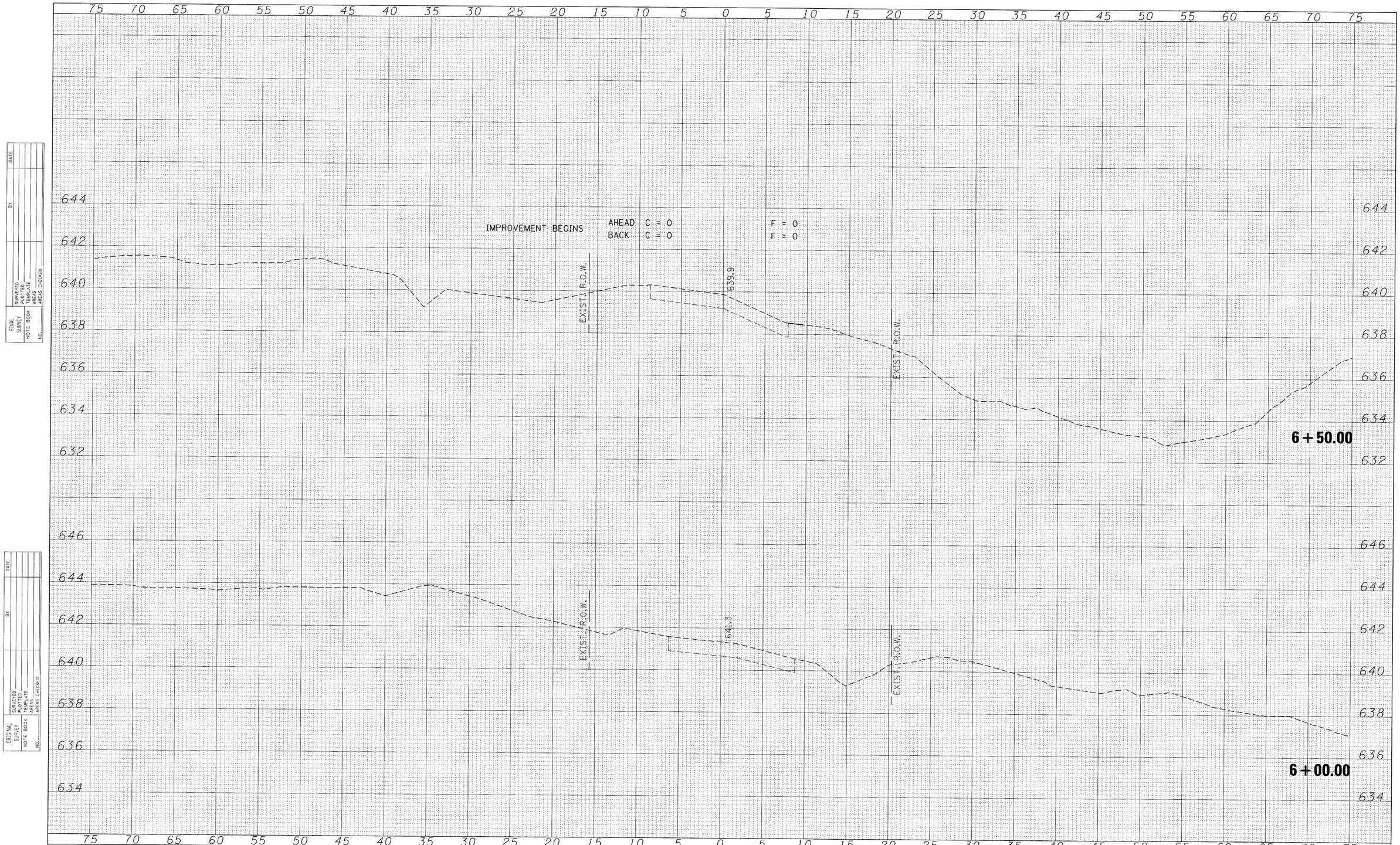
FILE NAME = 140200-sht-bridge.dgn | USER NAME = | PLOT SCALE = | PLOT DATE = 8/14/2017
DESIGNED - D.W.T. | CHECKED - S.W.M. | DRAWN - D.A.B. | CHECKED - S.W.M.
REVISED - | REVISED - | REVISED - | REVISED -

STATE OF ILLINOIS
VERMILION COUNTY HIGHWAY DEPARTMENT

BORING
STRUCTURE NO. 092-3521
SHEET NO. 14 OF 14 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
274	09-03138-00-BR	VERMILION	40	19
CARROLL ROAD DISTRICT		CONTRACT NO. 91528		
ILLINOIS	FED. AID PROJECT HVCN(463)			



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

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

FILE NAME = 140200-sht-sxs.dgn	USER NAME = $USER$	DESIGNED - J.W.F.	REVISED -
		DRAWN - L.G.C.	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - S.W.M.	REVISED -
	PLOT DATE = 8/14/2017	DATE - 08/14/17	REVISED -

HAMPTON, LENZINI AND RENWICK, INC.
3065 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
ILLINOIS PROFESSIONAL DESIGN FIRM
LS / PE / SE CORP. 184.005959

STATE OF ILLINOIS
VERMILION COUNTY HIGHWAY DEPARTMENT

STATION CROSS SECTIONS

SCALE: 5H:2V | SHEET NO. 1 OF 21 SHEETS | STA. 6+00.00 TO STA. 6+50.00

TR	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
274	09-03138-00-BR	VERMILION	40	20
CARROLL ROAD DISTRICT		CONTRACT NO. 91528		
ILLINOIS	FED. AID PROJECT HVCN(463)			

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

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
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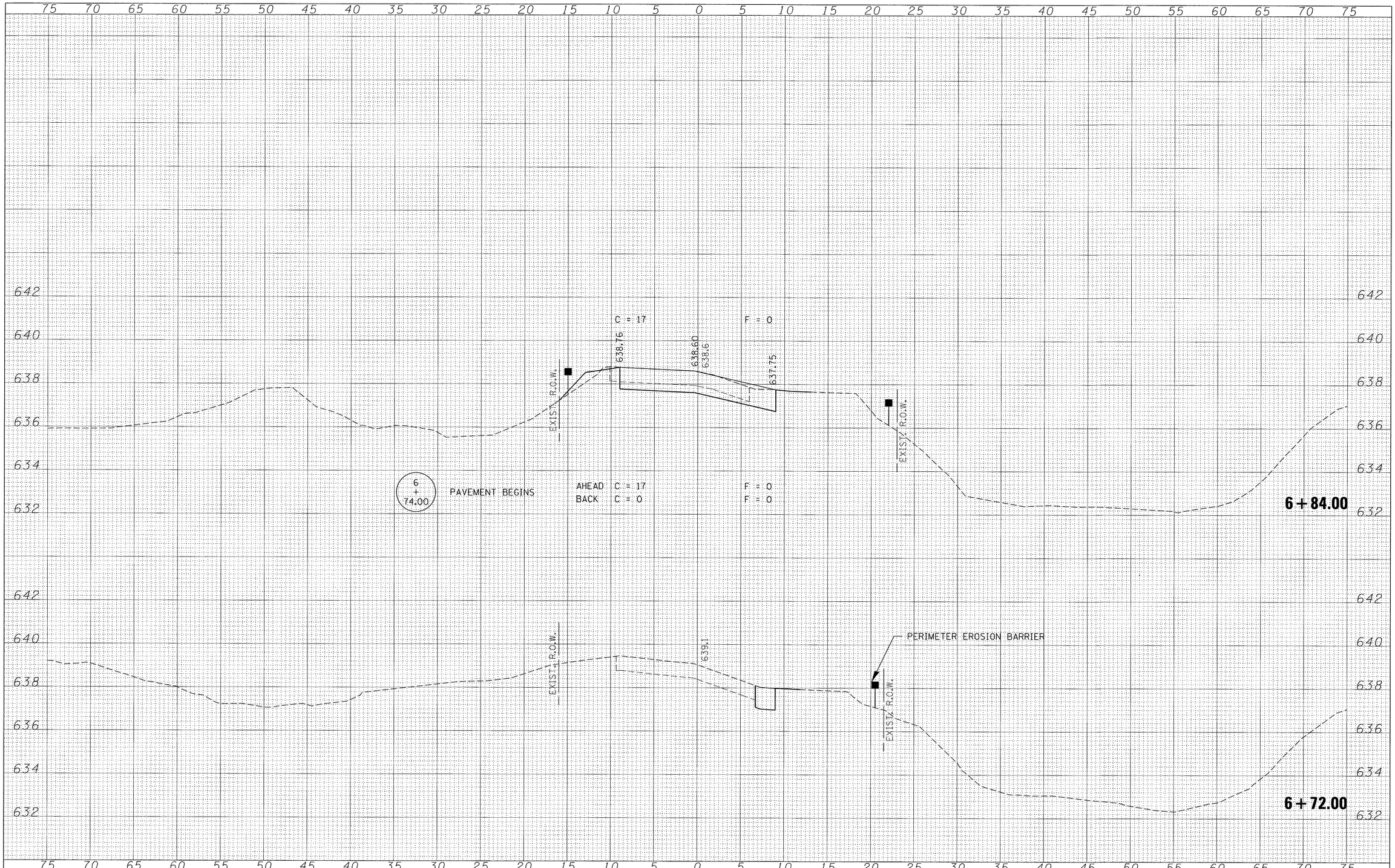

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	PLOT DATE = 8/14/2017	DATE - 08/14/17	REVISED -

HAMPTON, LENZINI AND RENWICK, INC.
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LS / PE / SE CORP. 184.000869

STATE OF ILLINOIS
VERMILION COUNTY HIGHWAY DEPARTMENT

STATION CROSS SECTIONS

SCALE: 5H:2V | SHEET NO. 2 OF 21 SHEETS | STA. 6+72.00 TO STA. 6+84.00

TR	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
274	09-03138-00-BR	VERMILION	40	21
CARROLL ROAD DISTRICT		CONTRACT NO. 91528		
ILLINOIS	FED. AID PROJECT HVCN(463)			

FINAL SURVEY

NOTE BOOK NO.

SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED

BY

DATE

ORIGINAL SURVEY

NOTE BOOK NO.

SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED

BY

DATE

FILE NAME = 140200-sht-sxs.dgn	USER NAME = $USER$	DESIGNED - J.W.F.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC. 3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703		DRAWN - L.G.C.	REVISED -
HLR ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT SCALE = $SCALE$	CHECKED - S.W.M.	REVISED -
	PLOT DATE = 8/14/2017	DATE - 08/14/17	REVISED -

STATE OF ILLINOIS
VERMILION COUNTY HIGHWAY DEPARTMENT

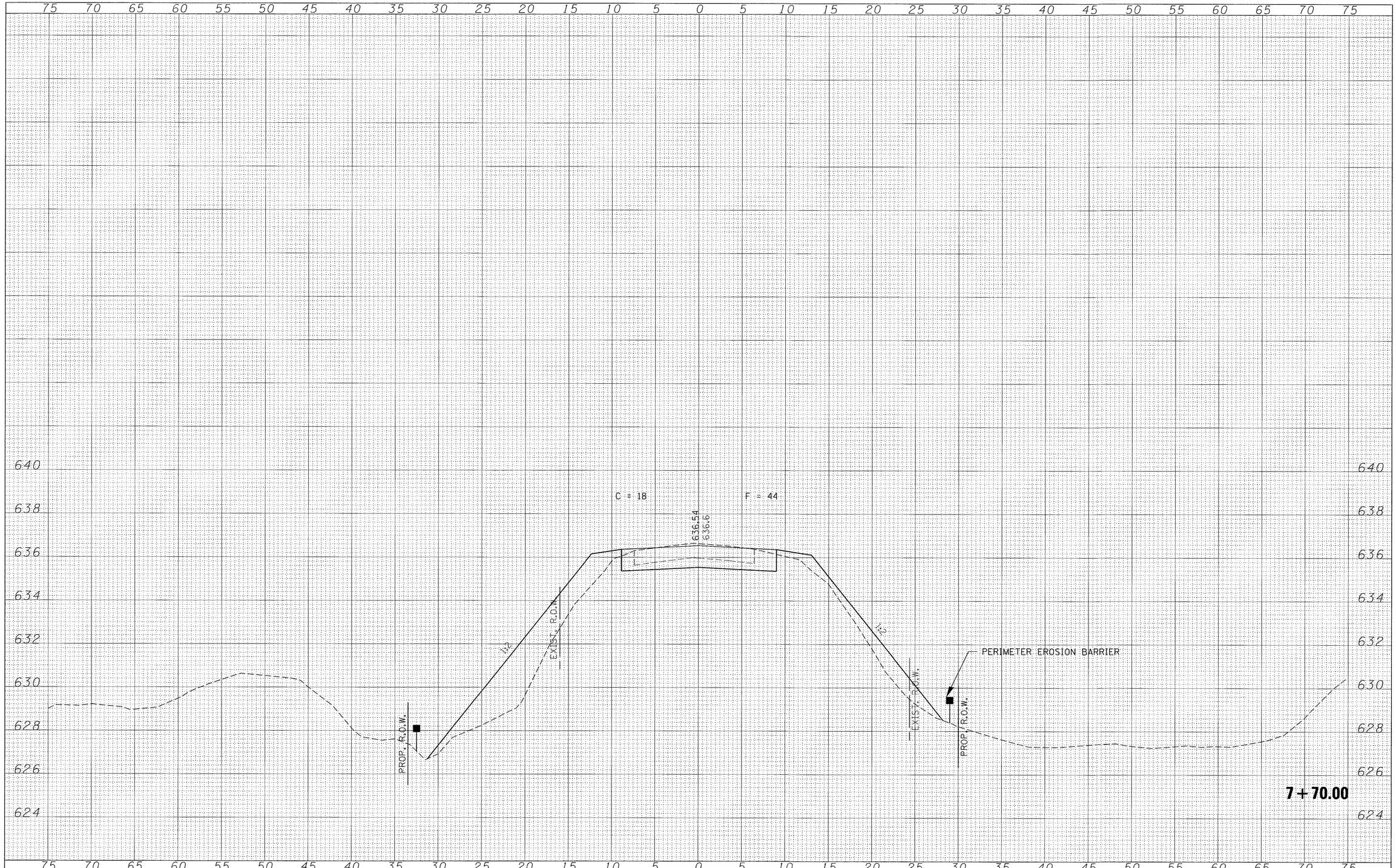
STATION CROSS SECTIONS

SCALE: 5H:2V | SHEET NO. 3 OF 21 SHEETS | STA. 7+00.00 TO STA. 7+50.00

TR	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
274	09-03138-00-BR	VERMILION	40	22
CARROLL ROAD DISTRICT		CONTRACT NO. 91528		
	ILLINOIS	FED. AID PROJECT HVCN(463)		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	DRAWN AS BUILT		
	AREAS		
	AREAS CHECKED		

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	DRAWN AS BUILT		
	AREAS		
	AREAS CHECKED		



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	PLOT DATE = 8/14/2017	DATE - 08/14/17	REVISED -

HAMPTON, LENZINI AND RENWICK, INC.
3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
ILLINOIS PROFESSIONAL DESIGN FIRM
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STATE OF ILLINOIS
VERMILION COUNTY HIGHWAY DEPARTMENT

STATION CROSS SECTIONS

SCALE: 5H:2V | SHEET NO. 4 OF 21 SHEETS | STA. 7+70.00 | TO STA. 7+70.00

TR	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
274	09-03138-00-BR	VERMILION	40	23
CARROLL ROAD DISTRICT		CONTRACT NO. 91528		
ILLINOIS	FED. AID PROJECT HVCN(463)			

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

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

FILE NAME = 140200-sht-sxs.dgn	USER NAME = $USER$	DESIGNED - J.W.F.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC. 3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703		DRAWN - L.G.C.	REVISED -
HLR ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT SCALE = $SCALE$	CHECKED - S.W.M.	REVISED -
	PLOT DATE = 8/14/2017	DATE - 08/14/17	REVISED -

STATE OF ILLINOIS
VERMILION COUNTY HIGHWAY DEPARTMENT

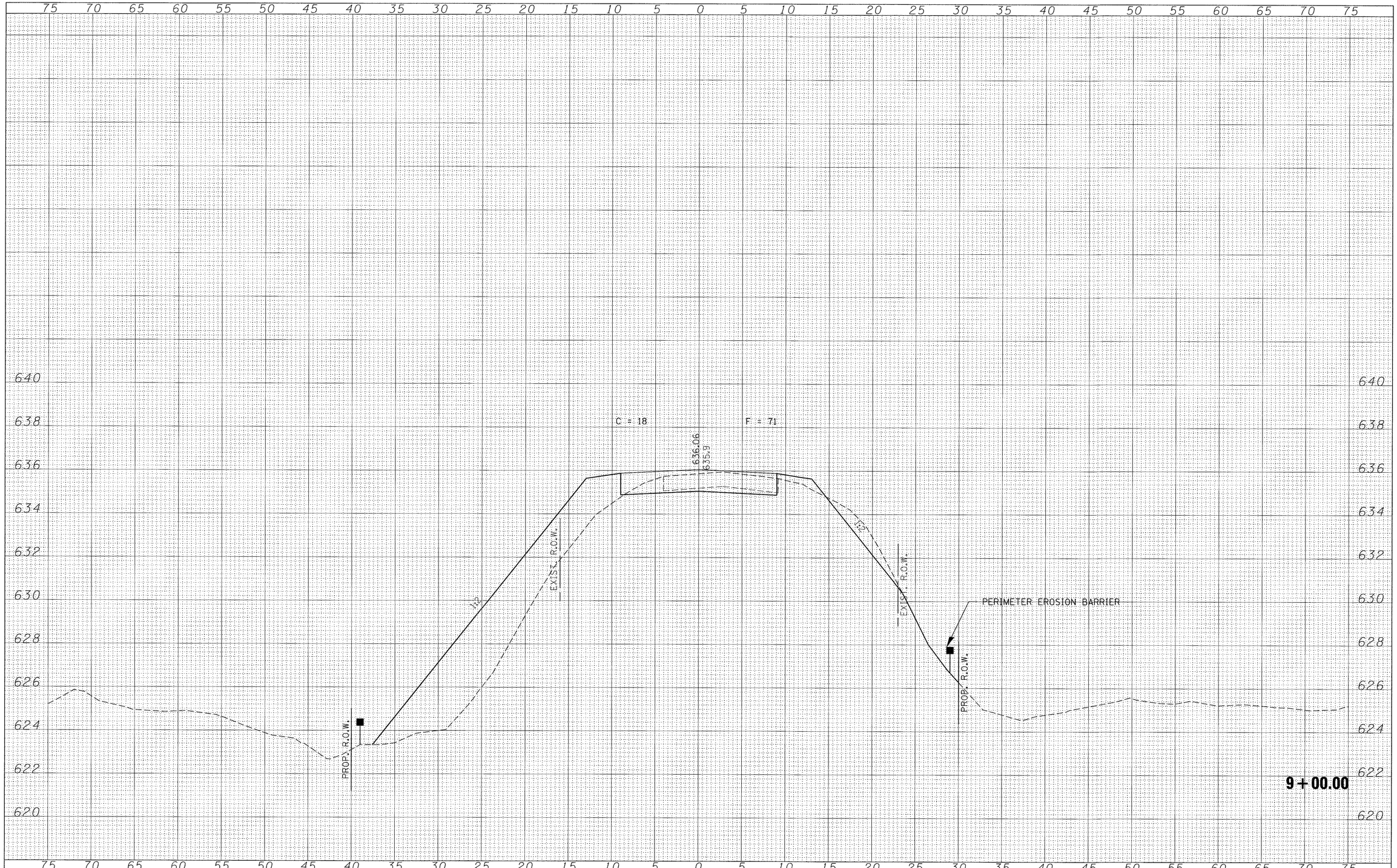
STATION CROSS SECTIONS

SCALE: 5H:2V | SHEET NO. 5 OF 21 SHEETS | STA. 8+00.00 TO STA. 8+50.00

TR	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
274	09-03138-00-BR	VERMILION	40	24
CARROLL ROAD DISTRICT		CONTRACT NO. 91528		
	ILLINOIS	FED. AID PROJECT HVCN(463)		

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

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



FILE NAME = 140200-sht-sxs.dgn	USER NAME = $USER$	DESIGNED - J.W.F.	REVISED -
		DRAWN - L.G.C.	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - S.W.M.	REVISED -
	PLOT DATE = 8/14/2017	DATE - 08/14/17	REVISED -

HAMPTON, LENZINI AND RENWICK, INC.
3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
ILLINOIS PROFESSIONAL DESIGN FIRM
LS / PE / SE CORP. 184.000959

STATE OF ILLINOIS
VERMILION COUNTY HIGHWAY DEPARTMENT

STATION CROSS SECTIONS

SCALE: 5H:2V | SHEET NO. 6 OF 21 SHEETS | STA. 9+00.00 | TO STA. 9+00.00

TR	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
274	09-03138-00-BR	VERMILION	40	25
CARROLL ROAD DISTRICT		CONTRACT NO. 91528		
ILLINOIS	FED. AID PROJECT HVCN(463)			

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

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

9 + 38.22 BK SOUTH ABUT.

AHEAD C = 0 F = 0
BACK C = 12 F = 132

C = 12 F = 132

636.39
636.2

1:2

EXIST. R.O.W.

PROP. R.O.W.

PERIMETER EROSION BARRIER

9 + 25.00

FILE NAME = 140200-sht-sxs.dgn	USER NAME = $USER$	DESIGNED - J.W.F.	REVISED -
		DRAWN - L.G.C.	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - S.W.M.	REVISED -
	PLOT DATE = 8/14/2017	DATE - 08/14/17	REVISED -

HAMPTON, LENZINI AND RENWICK, INC.
3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
ILLINOIS PROFESSIONAL DESIGN FIRM
LS / PE / SE CORP. 184.000959

STATE OF ILLINOIS
VERMILION COUNTY HIGHWAY DEPARTMENT

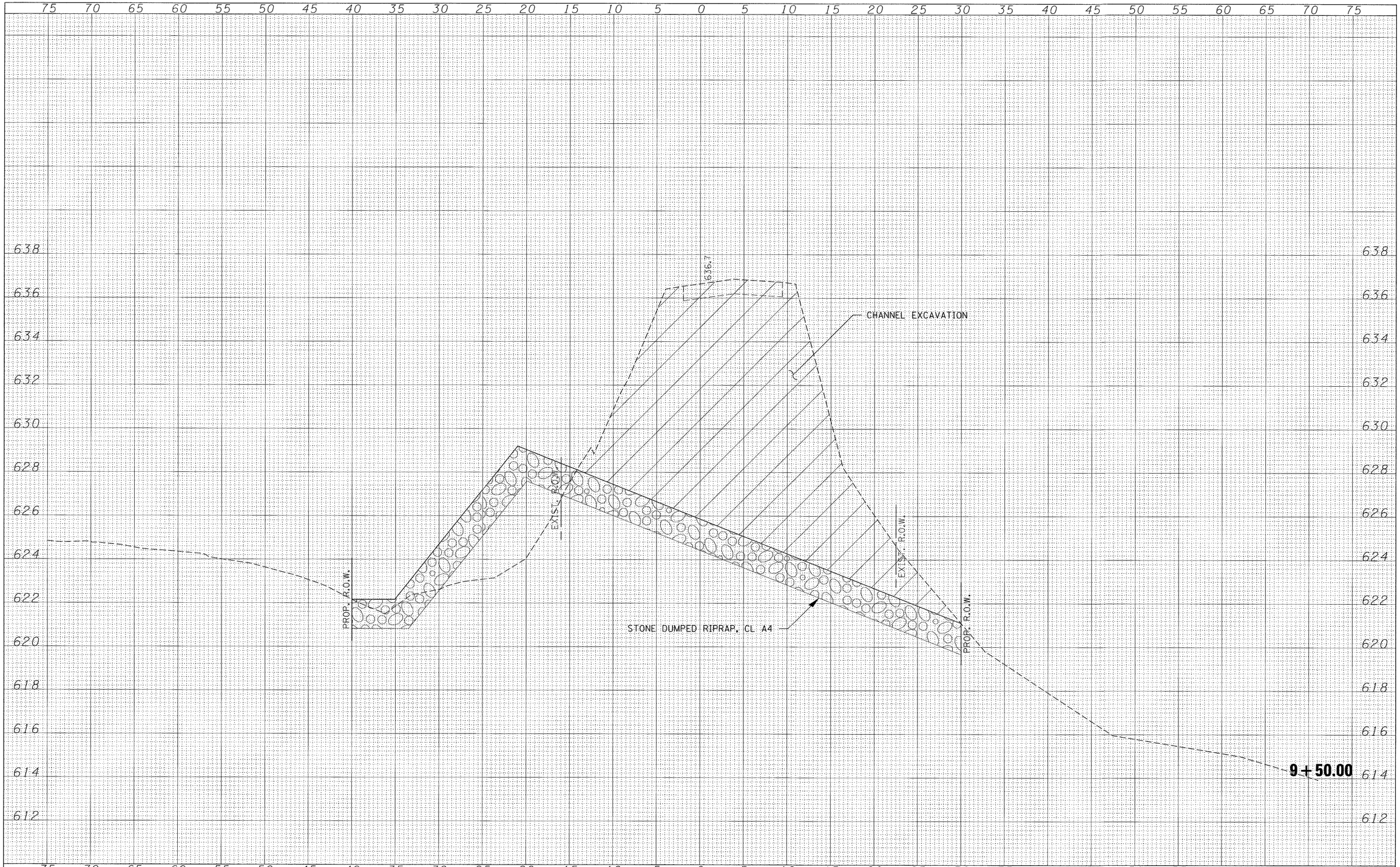
STATION CROSS SECTIONS

SCALE: 5H:2V | SHEET NO. 7 OF 21 SHEETS | STA. 9+25.00 | TO STA. 9+25.00

TR	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
274	09-03138-00-BR	VERMILION	40	26
CARROLL ROAD DISTRICT		CONTRACT NO. 91528		
ILLINOIS	FED. AID PROJECT HVCN(463)			

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

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



FILE NAME = 140200-sht-sxs.dgn	USER NAME = $USER$	DESIGNED - J.W.F.	REVISED -
		DRAWN - L.G.C.	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - S.W.M.	REVISED -
	PLOT DATE = 8/14/2017	DATE - 08/14/17	REVISED -

HAMPTON, LENZINI AND RENWICK, INC.
3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
ILLINOIS PROFESSIONAL DESIGN FIRM
LS / PE / SE CORP. 184.000959

STATE OF ILLINOIS
VERMILION COUNTY HIGHWAY DEPARTMENT

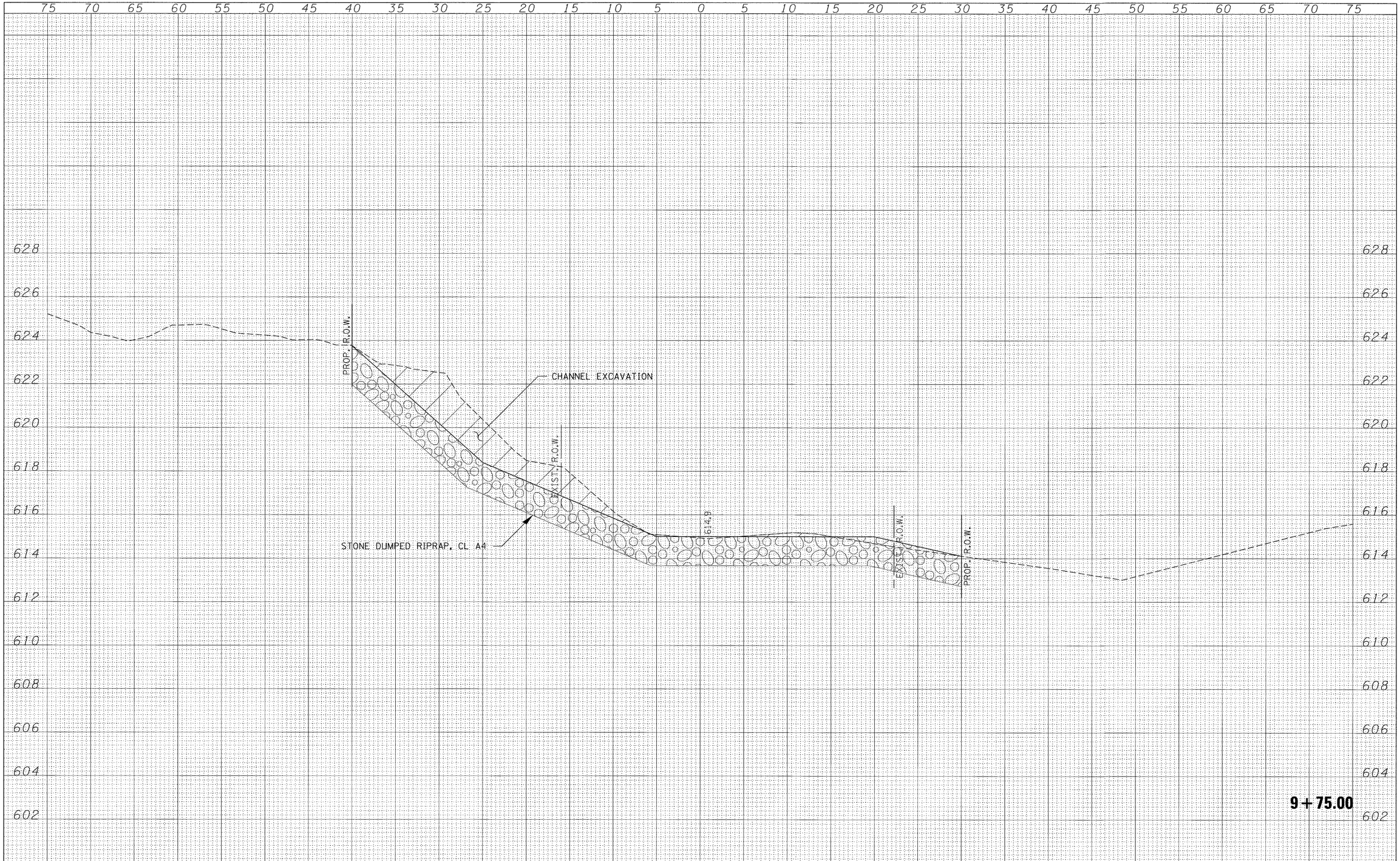
STATION CROSS SECTIONS

SCALE: 5H:2V | SHEET NO. 8 OF 21 SHEETS | STA. 9+50.00 | TO STA. 9+50.00

TR	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
274	09-03138-00-BR	VERMILION	40	27
CARROLL ROAD DISTRICT		CONTRACT NO. 91528		
ILLINOIS	FED. AID PROJECT HVCN(463)			

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

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



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		DRAWN - L.G.C.	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - S.W.M.	REVISED -
	PLOT DATE = 8/14/2017	DATE - 08/14/17	REVISED -

HAMPTON, LENZINI AND RENWICK, INC.
3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
ILLINOIS PROFESSIONAL DESIGN FIRM
LS / PE / SE CORP. 184.000959

STATE OF ILLINOIS
VERMILION COUNTY HIGHWAY DEPARTMENT

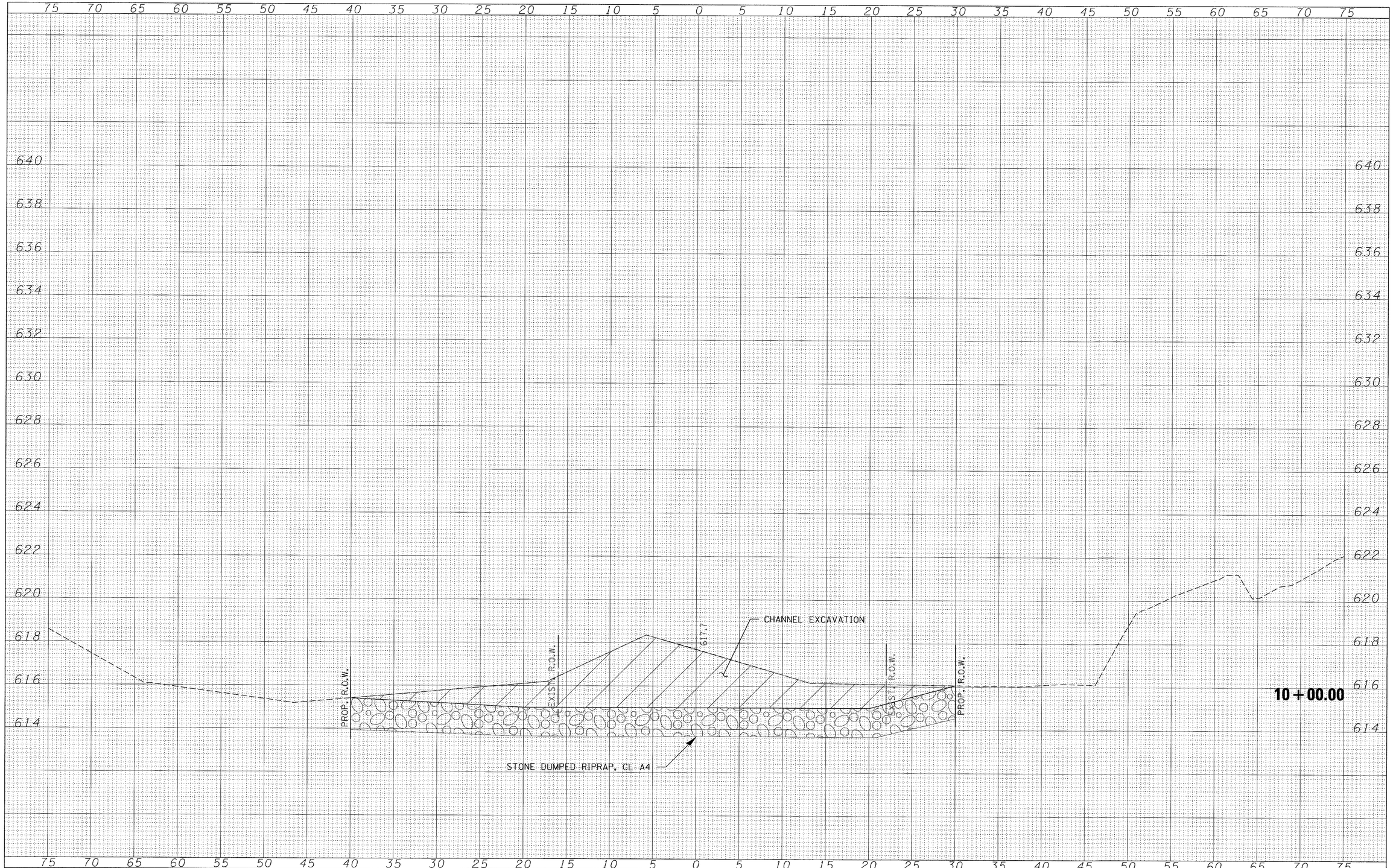
STATION CROSS SECTIONS

SCALE: 5H:2V | SHEET NO. 9 OF 21 SHEETS | STA. 9+75.00 TO STA. 9+75.00

TR	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
274	09-03138-00-BR	VERMILION	40	28
CARROLL ROAD DISTRICT		CONTRACT NO. 91528		
ILLINOIS	FED. AID PROJECT HVCN(463)			

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

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



FILE NAME = 140200-sht-sxs.dgn	USER NAME = $USER$	DESIGNED - J.W.F.	REVISED -
		DRAWN - L.G.C.	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - S.W.M.	REVISED -
	PLOT DATE = 8/14/2017	DATE - 08/14/17	REVISED -

HAMPTON, LENZINI AND RENWICK, INC.
3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
ILLINOIS PROFESSIONAL DESIGN FIRM
LS / PE / SE CORP. 184.000959

STATE OF ILLINOIS
VERMILION COUNTY HIGHWAY DEPARTMENT

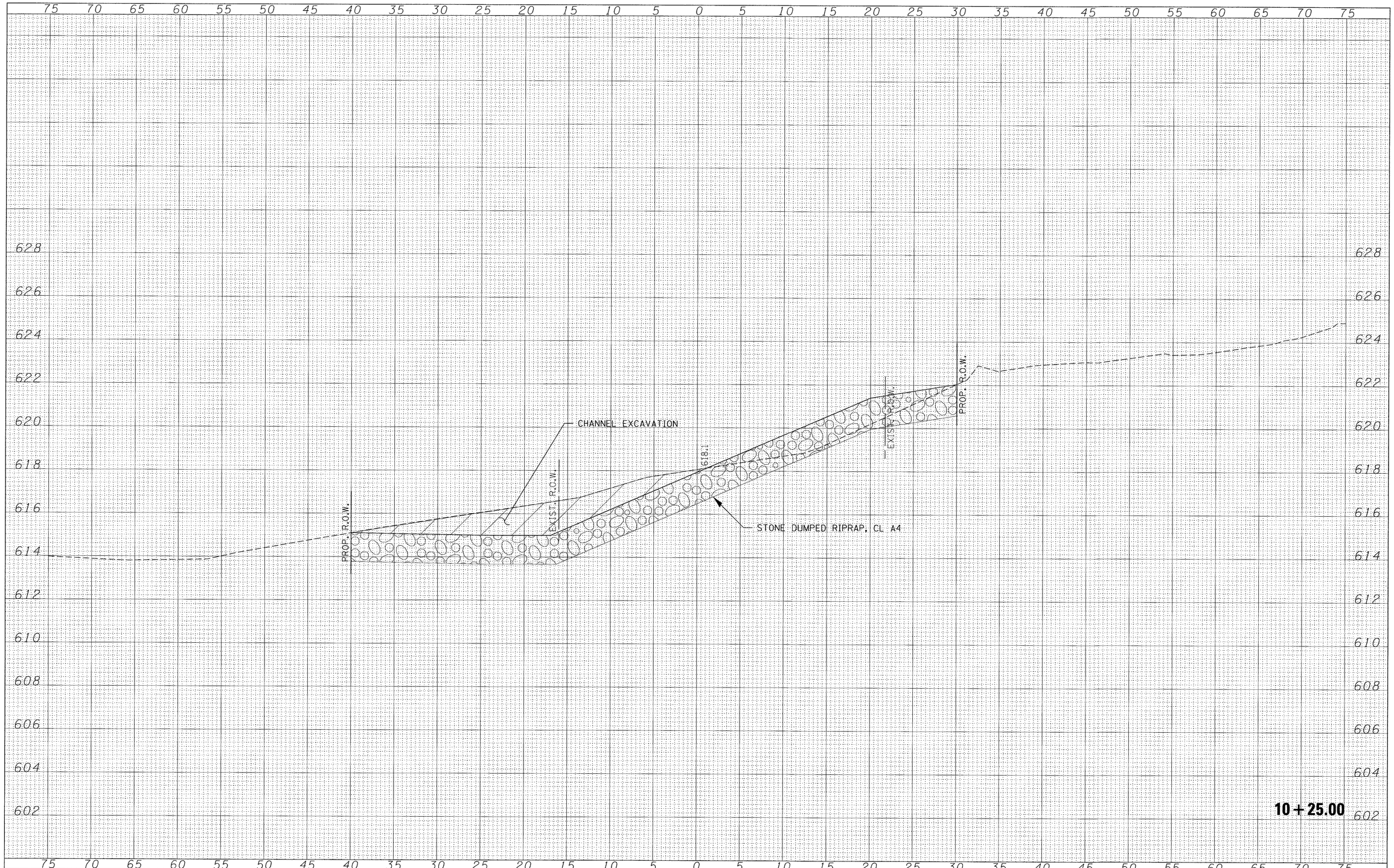
STATION CROSS SECTIONS

SCALE: 5H:2V | SHEET NO. 10 OF 21 SHEETS | STA. 10+00.00 TO STA. 10+00.00

TR	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
274	09-03138-00-BR	VERMILION	40	29
CARROLL ROAD DISTRICT		CONTRACT NO. 91528		
ILLINOIS	FED. AID PROJECT HVCN(463)			

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

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



FILE NAME = 140200-sht-sxs.dgn	USER NAME = $USER$	DESIGNED - J.W.F.	REVISED -
		DRAWN - L.G.C.	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - S.W.M.	REVISED -
	PLOT DATE = 8/14/2017	DATE - 08/14/17	REVISED -

HAMPTON, LENZINI AND RENWICK, INC.
3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
ILLINOIS PROFESSIONAL DESIGN FIRM
LS / PE / SE CORP. 184.000959

STATE OF ILLINOIS
VERMILION COUNTY HIGHWAY DEPARTMENT

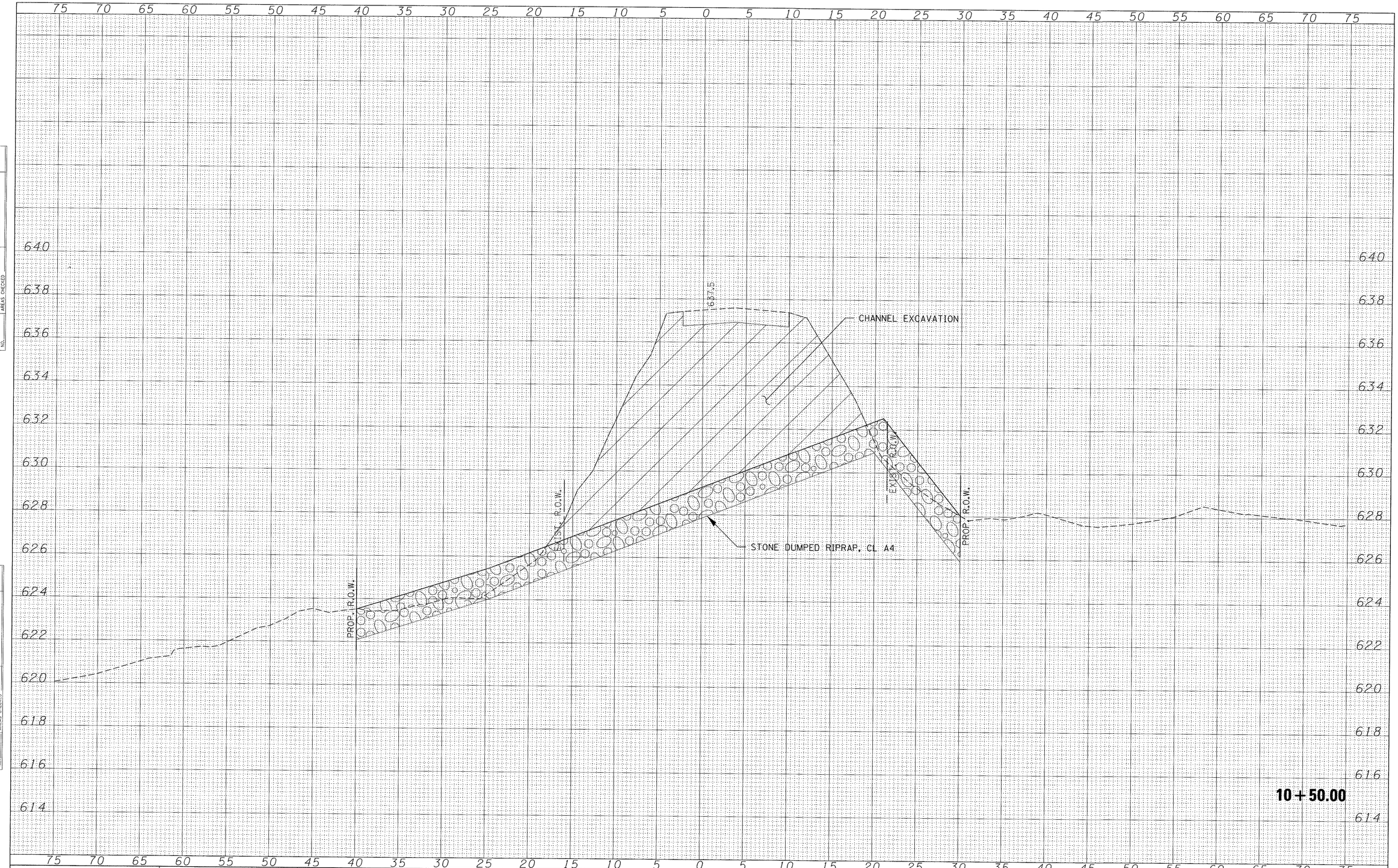
STATION CROSS SECTIONS

SCALE: 5H:2V | SHEET NO. 11 OF 21 SHEETS | STA. 10+25.00 | TO STA. 10+25.00

TR	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
274	09-03138-00-BR	VERMILION	40	30
CARROLL ROAD DISTRICT		CONTRACT NO. 91528		
ILLINOIS	FED. AID PROJECT HVCN(463)			

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

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

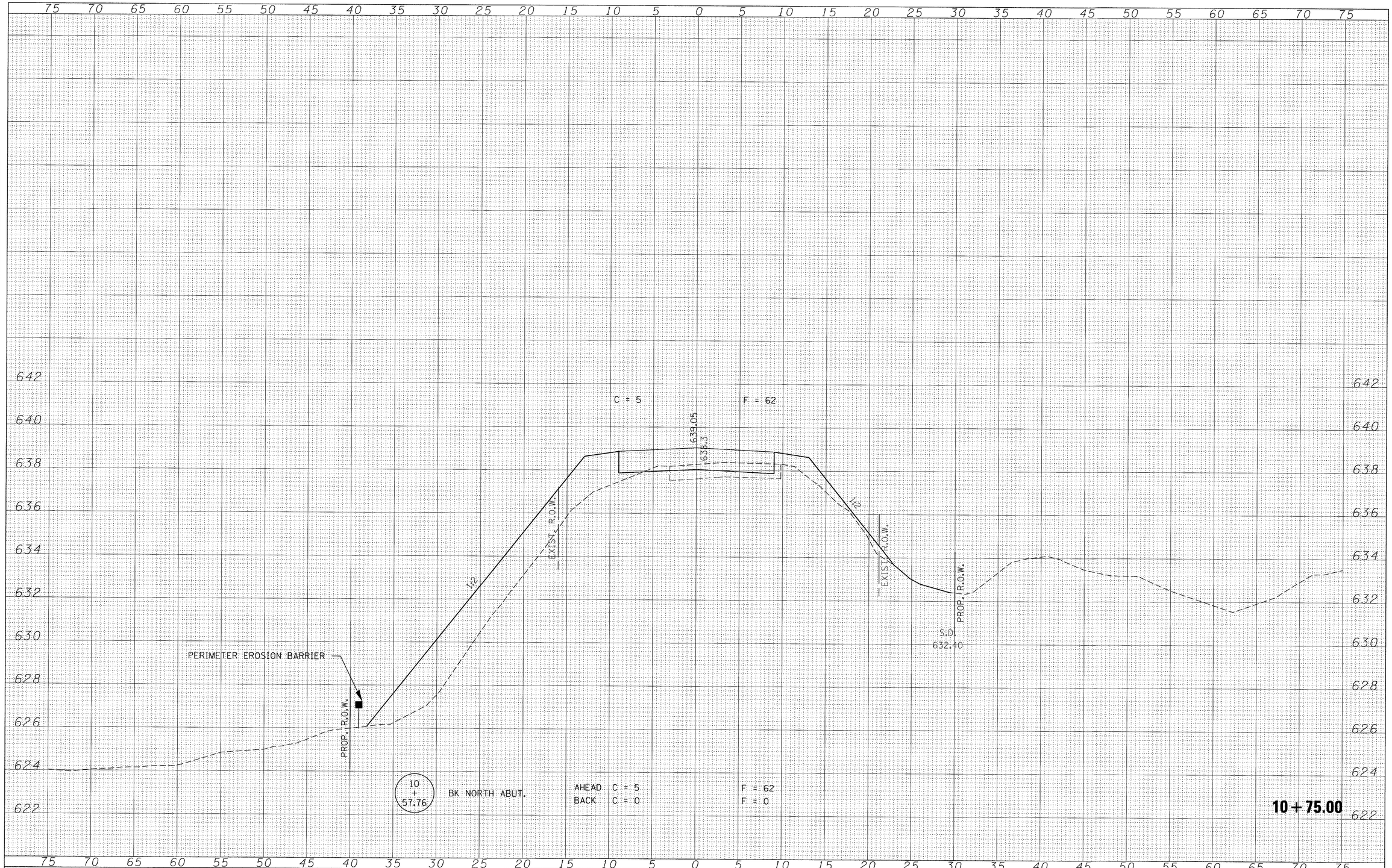


FILE NAME = 140208-sht-sxs.dgn	USER NAME = $USER$	DESIGNED - J.W.F.	REVISED -	**STATE OF ILLINOIS**	**STATION CROSS SECTIONS**
HAMPTON, LENZINI AND RENWICK, INC. 3005 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703		DRAWN - L.G.C.	REVISED -	**VERMILION COUNTY HIGHWAY DEPARTMENT**	
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000059	PLOT SCALE = $SCALE$	CHECKED - S.W.M.	REVISED -		SCALE: 5H:2V | SHEET NO. 12 OF 21 SHEETS | STA. 10+50.00 TO STA. 10+50.00
	PLOT DATE = 8/14/2017	DATE - 08/14/17	REVISED -		

TR	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
274	09-03138-00-BR	VERMILION	40	31
CARROLL ROAD DISTRICT		CONTRACT NO. 91528		
ILLINOIS	FED. AID PROJECT HVCN(463)			

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

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



FILE NAME = 140200-sht-sxs.dgn	USER NAME = $USER$	DESIGNED - J.W.F.	REVISED -
		DRAWN - L.C.C.	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - S.W.M.	REVISED -
	PLOT DATE = 8/14/2017	DATE - 08/14/17	REVISED -

HAMPTON, LENZINI AND RENWICK, INC.
3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
ILLINOIS PROFESSIONAL DESIGN FIRM
LS / PE / SE CORP. 184.000959

STATE OF ILLINOIS
VERMILION COUNTY HIGHWAY DEPARTMENT

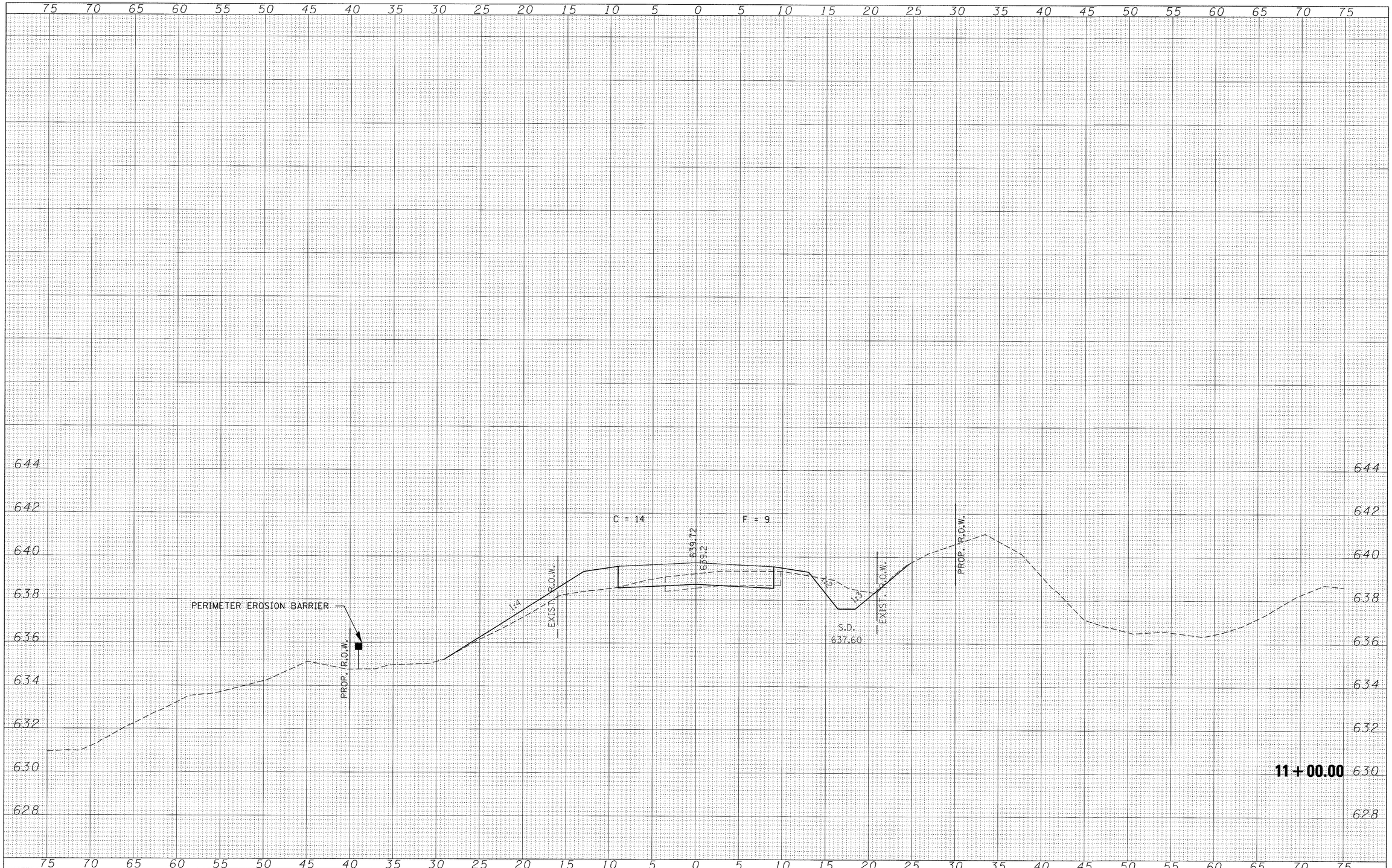
STATION CROSS SECTIONS

SCALE: 5H:2V | SHEET NO. 13 OF 21 SHEETS | STA. 10+75.00 | TO STA. 10+75.00

TR	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
274	09-03138-00-BR	VERMILION	40	32
CARROLL ROAD DISTRICT		CONTRACT NO. 91528		
ILLINOIS	FED. AID PROJECT HVCN(463)			

FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
NOTE BOOK		
TEMPLATE		
AREAS		
AREAS CHECKED		

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
NOTE BOOK		
TEMPLATE		
AREAS		
AREAS CHECKED		



FILE NAME = 140200-sht-sxs.dgn	USER NAME = $USER$	DESIGNED - J.W.F.	REVISED -
		DRAWN - L.G.C.	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - S.W.M.	REVISED -
	PLOT DATE = 8/14/2017	DATE - 08/14/17	REVISED -

HAMPTON, LENZINI AND RENWICK, INC.
3065 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
ILLINOIS PROFESSIONAL DESIGN FIRM
LS / PE / SE CORP. 184.005959

STATE OF ILLINOIS
VERMILION COUNTY HIGHWAY DEPARTMENT

STATION CROSS SECTIONS

SCALE: 5H:2V | SHEET NO. 14 OF 21 SHEETS | STA. 11+00.00 TO STA. 11+00.00

TR	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
274	09-03138-00-BR	VERMILION	40	33
CARROLL ROAD DISTRICT		CONTRACT NO. 91528		
ILLINOIS	FED. AID PROJECT HVCN(463)			

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

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

FILE NAME = 140200-sht-sxs.dgn	USER NAME = $USER$	DESIGNED - J.W.F.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC. 3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959		DRAWN - L.G.C.	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - S.W.M.	REVISED -
	PLOT DATE = 8/14/2017	DATE - 08/14/17	REVISED -

STATE OF ILLINOIS
VERMILION COUNTY HIGHWAY DEPARTMENT

STATION CROSS SECTIONS

SCALE: 5H:2V | SHEET NO. 15 OF 21 SHEETS | STA. 11+50.00 | TO STA. 11+50.00

TR	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
274	09-03138-00-BR	VERMILION	40	34
CARROLL ROAD DISTRICT		CONTRACT NO. 91528		
	ILLINOIS	FED. AID PROJECT HVCN(463)		

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

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

FILE NAME = 140200-sht-sxs.dgn

HAMPTON, LENZINI AND RENWICK, INC.
3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
HLR ILLINOIS PROFESSIONAL DESIGN FIRM
LS / PE / SE CORP. 184.000959

USER NAME = $USER$
PLOT SCALE = $SCALE$
PLOT DATE = 8/14/2017

DESIGNED	- J.W.F.	REVISED	-
DRAWN	- L.G.C.	REVISED	-
CHECKED	- S.W.M.	REVISED	-
DATE	- 08/14/17	REVISED	-

STATE OF ILLINOIS
VERMILION COUNTY HIGHWAY DEPARTMENT

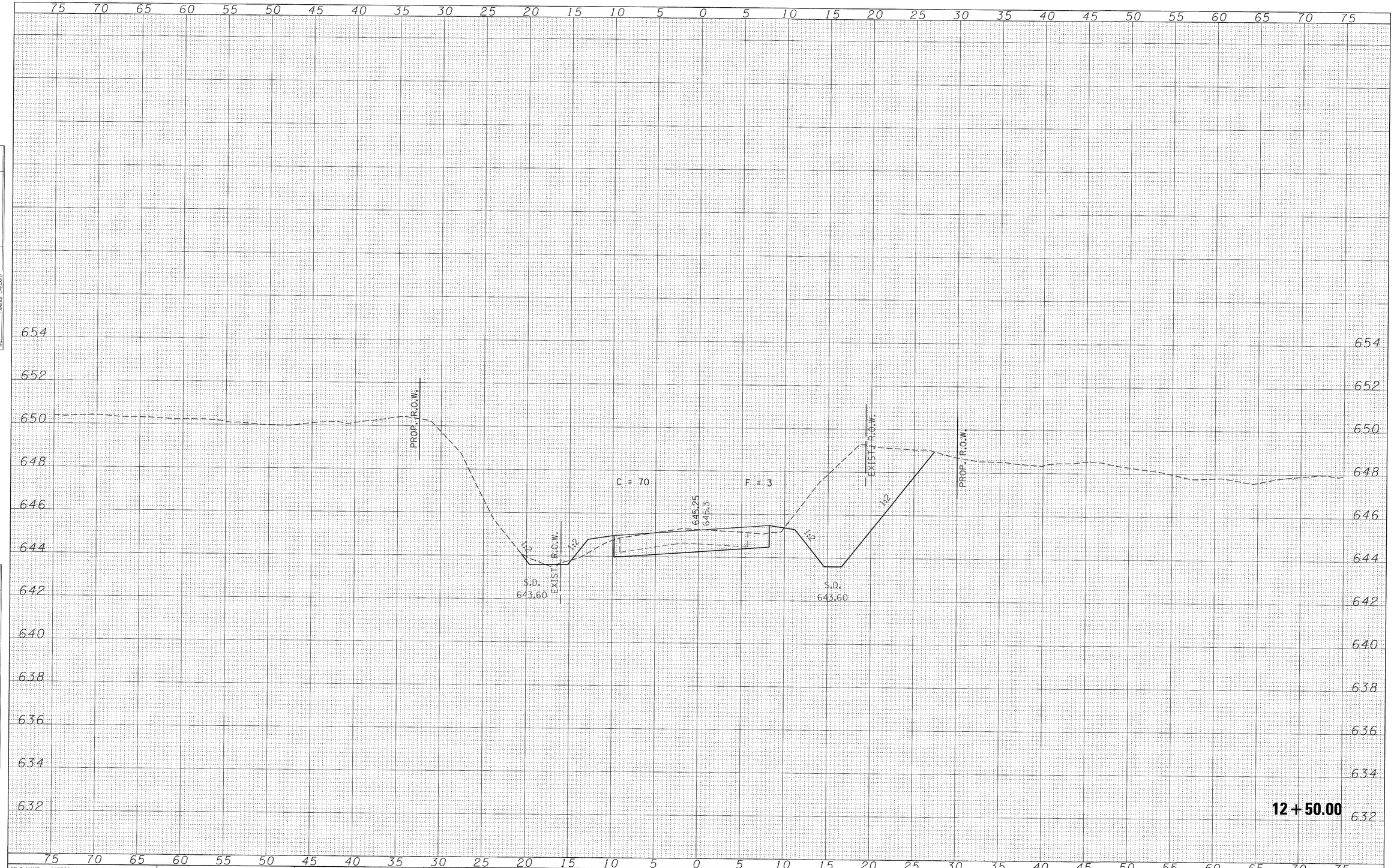
STATION CROSS SECTIONS

SCALE: 5H:2V | SHEET NO. 16 OF 21 SHEETS | STA. 12+00.00 TO STA. 12+00.00

TR	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
274	09-03138-00-BR	VERMILION	40	35
CARROLL ROAD DISTRICT		CONTRACT NO. 91528		
	ILLINOIS	FED. AID PROJECT HVCN(463)		

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

ORIGINAL SURVEY	NOTE BOOK	NO.
	SURVEYED	8"
	PLOTTED	
	TEMPLATE	
	AREAS	
	AREAS CHECKED	DATE



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		DRAWN - L.G.C.	REVISED -	
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	PLOT DATE = 8/14/2017	DATE - 08/14/17	REVISED -	

HAMPTON, LENZINI AND RENWICK, INC.
3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
ILLINOIS PROFESSIONAL DESIGN FIRM
LS / PE / SE CORP. 184.000959

STATE OF ILLINOIS
VERMILION COUNTY HIGHWAY DEPARTMENT

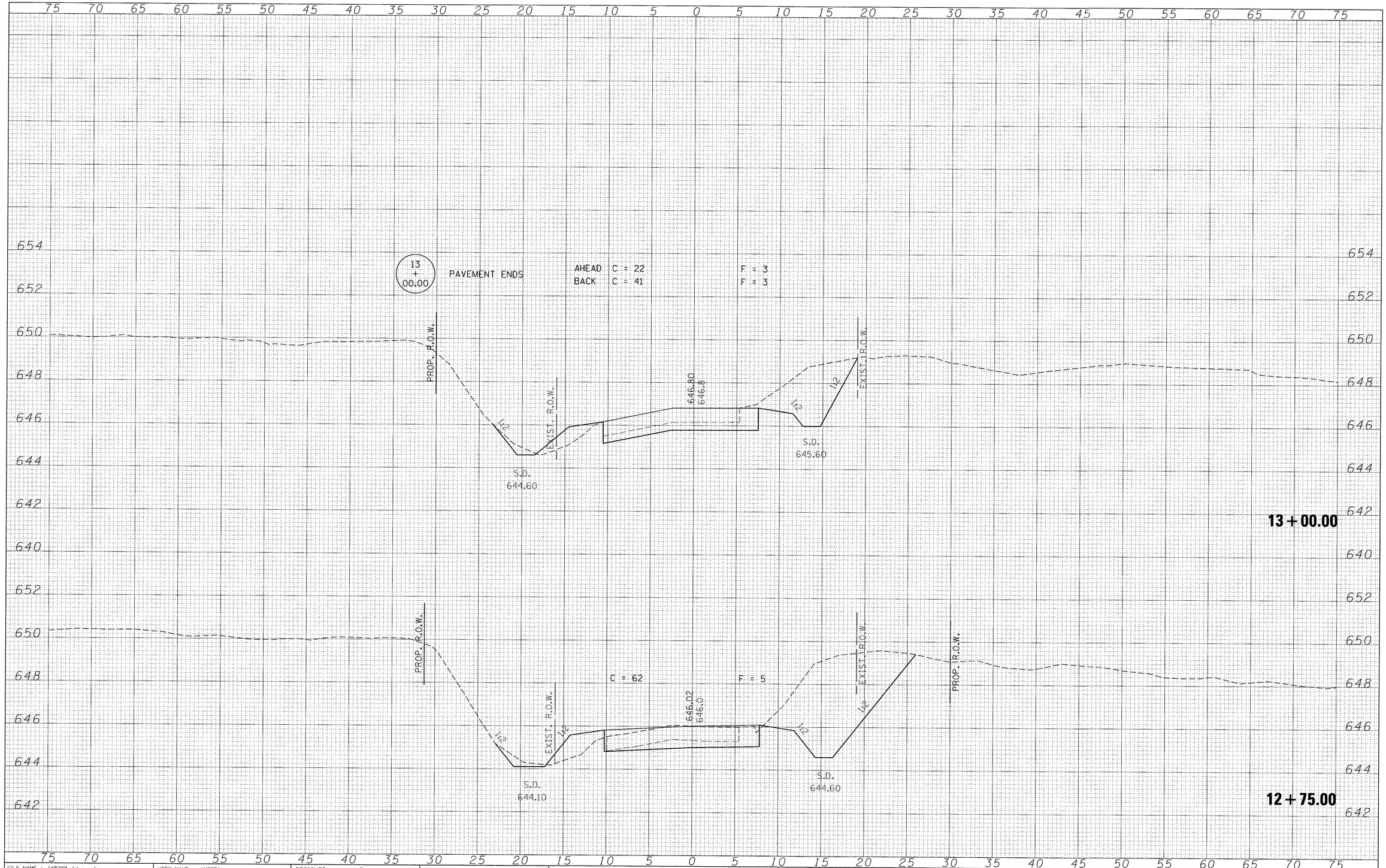
STATION CROSS SECTIONS

SCALE: 5H:2V | SHEET NO. 17 OF 21 SHEETS | STA. 12+50.00 TO STA. 12+50.00

TR	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
274	09-03138-00-BR	VERMILION	40	36
CARROLL ROAD DISTRICT		CONTRACT NO. 91528		
ILLINOIS	FED. AID PROJECT HVCN(463)			

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

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



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		DRAWN - L.G.C.	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - S.W.M.	REVISED -
	PLOT DATE = 8/14/2017	DATE - 08/14/17	REVISED -

HAMPTON, LENZINI AND RENWICK, INC.
3565 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
ILLINOIS PROFESSIONAL DESIGN FIRM
LS / PE / SE CORP. 184.000959

STATE OF ILLINOIS
VERMILION COUNTY HIGHWAY DEPARTMENT

STATION CROSS SECTIONS

SCALE: 5H:2V | SHEET NO. 18 OF 21 SHEETS | STA. 12+75.00 TO STA. 13+00.00

TR	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
274	09-03138-00-BR	VERMILION	40	37
CARROLL ROAD DISTRICT		CONTRACT NO. 91528		
ILLINOIS	FED. AID PROJECT HVCN(463)			

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

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

FILE NAME = 140200-sht-sxs.dgn

HAMPTON, LENZINI AND RENWICK, INC.
3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
HLR ILLINOIS PROFESSIONAL DESIGN FIRM
LS / PE / SE CORP. 184.000959

USER NAME = $USER$	DESIGNED - J.W.F.	REVISED -
	DRAWN - L.G.C.	REVISED -
PLOT SCALE = $SCALE$	CHECKED - S.W.M.	REVISED -
PLOT DATE = 8/14/2017	DATE - 08/14/17	REVISED -

STATE OF ILLINOIS
VERMILION COUNTY HIGHWAY DEPARTMENT

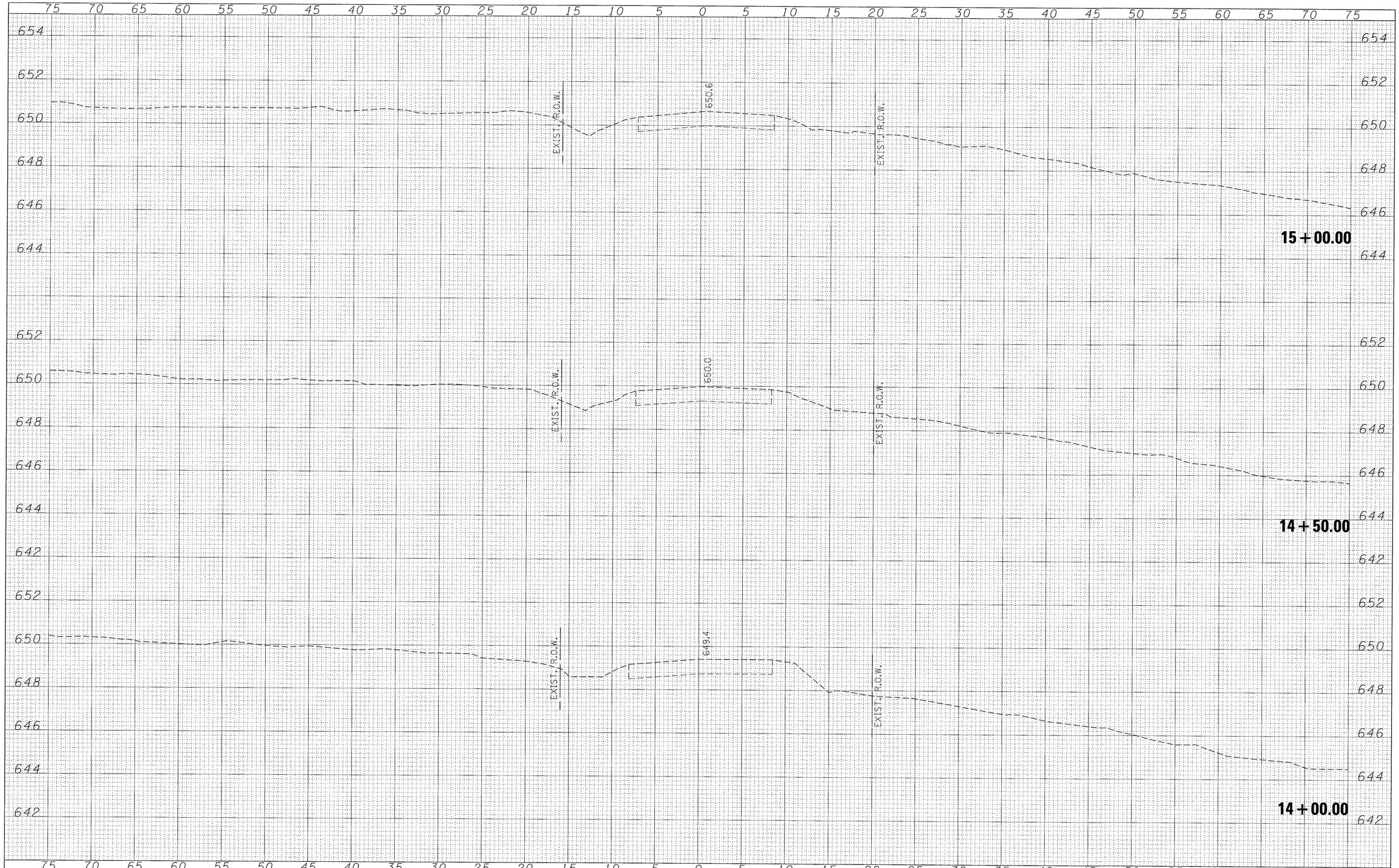
STATION CROSS SECTIONS

SCALE: 5H:2V | SHEET NO. 19 OF 21 SHEETS | STA. 13+13.00 TO STA. 13+50.00

TR	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
274	09-03138-00-BR	VERMILION	40	38
CARROLL ROAD DISTRICT		CONTRACT NO. 91528		
	ILLINOIS FED. AID PROJECT HVCN(463)			

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

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



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DRAWN - L.G.C. | REVISED -
PLOT SCALE = $SCALE$ | CHECKED - S.W.M. | REVISED -
PLOT DATE = 8/14/2017 | DATE - 08/14/17 | REVISED -

HAMPTON, LENZINI AND RENWICK, INC.
3065 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
ILLINOIS PROFESSIONAL DESIGN FIRM
LS / PE / SE CORP. 184.000959

STATE OF ILLINOIS
VERMILION COUNTY HIGHWAY DEPARTMENT

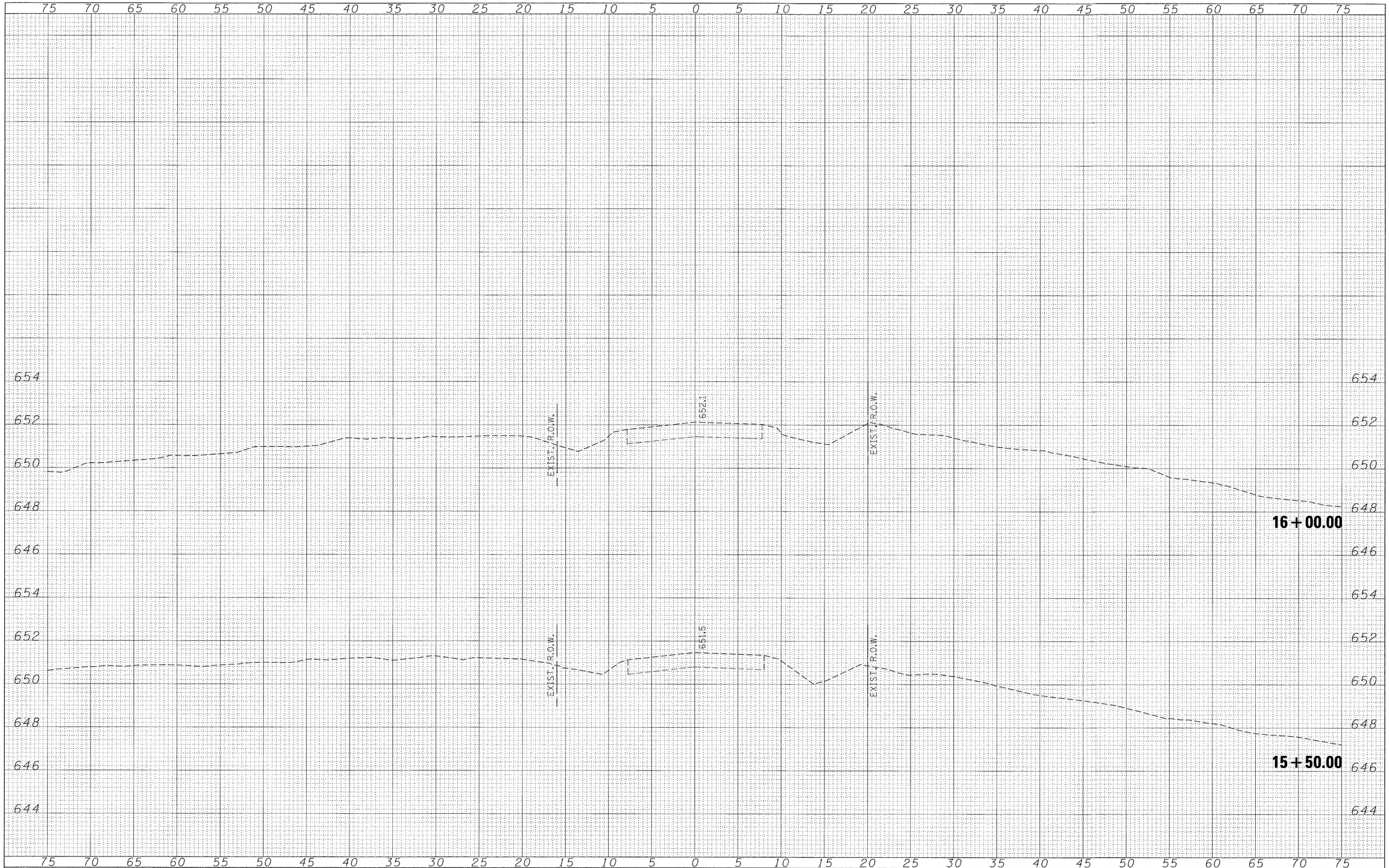
STATION CROSS SECTIONS

SCALE: 5H:2V | SHEET NO. 20 OF 21 SHEETS | STA. 14+00.00 TO STA. 15+00.00

TR	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
274	09-03138-00-BR	VERMILION	40	39
CARROLL ROAD DISTRICT		CONTRACT NO. 91528		
ILLINOIS FED. AID PROJECT HVCN(463)				

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

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



FILE NAME = 140200-sht-sxs.dgn	USER NAME = $USER$	DESIGNED - J.W.F.	REVISED -
		DRAWN - L.G.C.	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - S.W.M.	REVISED -
	PLOT DATE = 8/14/2017	DATE - 08/14/17	REVISED -

HAMPTON, LENZINI AND RENWICK, INC.
3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
ILLINOIS PROFESSIONAL DESIGN FIRM
LS / PE / SE CORP. 184.000959

STATE OF ILLINOIS
VERMILION COUNTY HIGHWAY DEPARTMENT

STATION CROSS SECTIONS

SCALE: 5H:2V | SHEET NO. 21 OF 21 SHEETS | STA. 15+50.00 TO STA. 16+00.00

TR	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
274	09-03138-00-BR	VERMILION	40	40
CARROLL ROAD DISTRICT		CONTRACT NO. 91528		
ILLINOIS FED. AID PROJECT HVCN(463)				