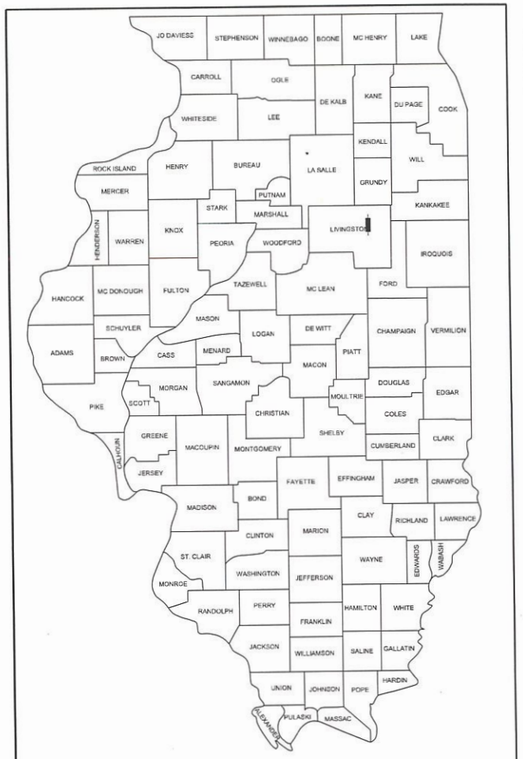
03/11/2022 Letting Item 149

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 244	18-29131 -00-BR	LIVINGSTON	25	1
FED. ROAD DIST. NO.		ILLINOIS	CONTRACT NO. 87774	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLANS FOR PROPOSED
SURFACE TRANSPORTATION PROGRAM – BRIDGE

PROJECT IROF (397)
SECTION 18–29131–00–BR
UNION ROAD DISTRICT
LIVINGSTON COUNTY
T.R. 244 / 2900 E. ROAD
PROPOSED STRUCTURE NO. 053–4229
WYLLIE BRIDGE
C–93–009–22



LOCATION OF SECTION INDICATED THUS: –

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1.	COVER SHEET
2.	SUMMARY OF QUANTITIES AND GENERAL NOTES
3.	SCHEDULE OF QUANTITIES
4.	TYPICAL CROSS SECTIONS
5.	PLAN AND PROFILE
6-16.	BRIDGE PLANS
17-25.	STATION CROSS SECTIONS

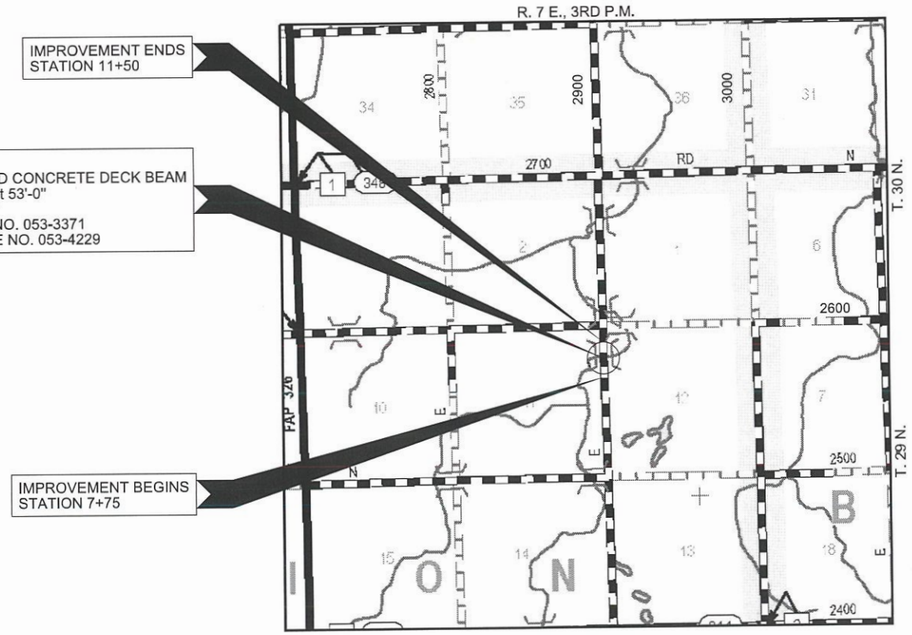
HIGHWAY STANDARDS:

280001-07	TEMPORARY EROSION CONTROL SYSTEMS
515001-04	NAME PLATE FOR BRIDGES
601101-02	CONCRETE HEADWALL FOR PIPE UNDERDRAINS
701901-08	TRAFFIC CONTROL DEVICES
725001-01	OBJECT AND TERMINAL MARKERS
BLR 21-9	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

UTILITIES

COMMONWEALTH EDISON
ONE LINCOLN CENTRE, SUITE 600
OAKBROOK TERRACE, IL 60181

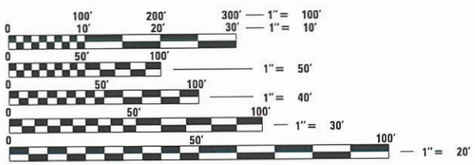
FRONTIER COMMUNICATIONS
109 E. MARKET STREET, 2ND FLOOR
BLOOMINGTON, IL 61701



LOCATION MAP

APPROXIMATE SCALE: 0 ½ MILE

NET LENGTH OF SECTION = 375 FEET = 0.071 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:	175 ADT

WARNING

CALL JULIE TOLL FREE 1-800-892-0123

CALL 811 BEFORE YOU DIG

DIG NO: X0300974

ILLINOIS DEPARTMENT OF TRANSPORTATION

APPROVED 12/22 20 21
Clay Metcalf
COUNTY ENGINEER

APPROVED 12/22 20 21
Daniel B Ebert
TOWNSHIP COMMISSIONER

PASSED 1.4 20 22
Steven Chung KV
DISTRICT THREE ENGINEER OF LOCAL ROADS & STREETS

Releasing For Bid Based on Limited Review 1.4 20 22
Manuel Chung KV
REGION TWO ENGINEER

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DATE: 12/09/2021
STEVEN W. MEGGINSON 062-5005 LICENSED PROFESSIONAL ENGINEER STATE OF ILLINOIS
EXPIRES: 11/30/2023

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: 19.0487.130 DATE: 12/09/2021

CONTRACT NO. 87774 PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

SUMMARY OF QUANTITIES

	CODE NO.	ITEM	CONSTRUCTION TYPE CODE 0010 UNIT	TOTAL
^	20200100	EARTH EXCAVATION	CU YD	340
	20300100	CHANNEL EXCAVATION	CU YD	110
	28000305	TEMPORARY DITCH CHECKS	FOOT	48
	28100107	STONE RIPRAP, CLASS A4	SQ YD	370
	28200200	FILTER FABRIC	SQ YD	370
	35100100	AGGREGATE BASE COURSE, TYPE A	TON	540
	40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	1,605
	40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	160
	40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	100
	40604050	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N50	TON	60
	48101200	AGGREGATE SHOULDERS, TYPE B	TON	90
^	50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
	50300225	CONCRETE STRUCTURES	CU YD	21.8
^	50400405	PRECAST PRESTRESSED CONCRETE DECK BEAMS (21" DEPTH)	SQ FT	1,431
	50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	3,000
*	50900205	STEEL RAILING, TYPE S1	FOOT	102
	51200957	FURNISHING METAL SHELL PILES 12" X 0.250"	FOOT	315
	51202305	DRIVING PILES	FOOT	315
	51203200	TEST PILE METAL SHELLS	EACH	1
	51500100	NAME PLATES	EACH	1
	60100060	CONCRETE HEADWALLS FOR PIPE DRAINS	EACH	4
	60146304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	104
	67100100	MOBILIZATION	L SUM	1
*	72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	4
^	X2070302	POROUS GRANULAR EMBANKMENT, SPECIAL	TON	100
^	X2501000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.3

^ 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 JANUARY 1, 2022", (HERE IN AFTER REFERRED TO AS THE STANDARD SPECIFICATIONS; THE LATEST EDITION OF THE "ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS"; THE DETAILS IN THE PLANS AND THE "SPECIAL PROVISIONS" INCLUDED IN THE DOCUMENTS.

2) 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.

3) 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.

4) ANY REFERENCE TO STANDARDS THROUGHOUT THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERPRETED TO BE THE LATEST STANDARD OF THE DEPARTMENT.

5) 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.

6) THE CONTRACTOR SHALL CONSULT THE ENGINEER IN REGARD TO THE EXACT LENGTH OF PIPE CULVERTS AND PIPE DRAINS BEFORE ORDERING THESE ITEMS.

7) THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN CALCULATING PLAN QUANTITIES

AGGREGATE BASE COURSE	2.05 TON/CU YD
HOT MIX ASPHALT	112 LBS/SQ YD/INCH THICKNESS
POROUS GRANULAR EMBANKMENT	2.0 TON/CU YD

BITUMINOUS MATERIALS RATES

SURFACE TYPE	RESIDUAL RATE
AGGREGATE BASE (PRIME COAT)	0.250 LB/SQ FT
MILLED HMA OR PCC (TACK COAT)	0.050 LB/SQ FT
EXISTING PAVEMENT (TACK COAT)	0.050 LB/SQ FT
TACK COAT (BETWEEN LIFTS)	0.025 LB/SQ FT

8) 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.

9) THE AREA TO BE SEEDED SHALL CONSIST OF ALL DISTURBED EARTH SURFACES WITHIN THE RIGHT OF WAY OR AS DIRECTED BY THE ENGINEER.

SEEDING, CLASS 2 (SPECIAL) = 0.3 ACRES

10) ALL WASTE MATERIAL FROM EXCAVATIONS SHALL BE DISPOSED OF BY THE CONTRACTOR. NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

11) COMMITMENTS:

1) THE BRIDGE/STRUCTURE ASSESSMENT WAS CONDUCTED ON 6/2/2020 AND IS VALID FOR TWO YEARS. AN EXPIRED ASSESSMENT WILL NEED TO BE UPDATED PRIOR TO CONSTRUCTION.

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
244	18-29131-00-BR	LIVINGSTON	25	2
UNION ROAD DISTRICT		CONTRACT NO. 87774		
	ILLINOIS FED. AID PROJECT IROF (397)			

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.
TR 244 / 2900 E ROAD							
STA. 7+75.00 TO STA. 9+70.84	229		25.00%	100.00%	172	116	56
STA. 9+70.84 TO STA. 10+25.16		110	25.00%	70.00%	58		58
STA. 10+25.16 TO STA. 11+50.00	113		25.00%	100.00%	85	47	38
ENTRANCE STA. 8+06.00						43	-43
TOTAL	342	110			315	206	109
USE	340	110					110
					WASTE 110 CU YDS		

ROADWAY SCHEDULE

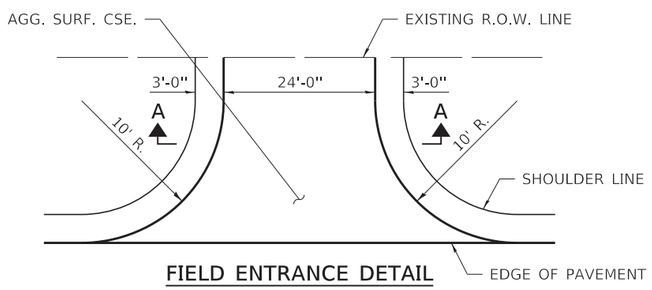
LOCATION	AGGREGATE BASE COURSE, TYPE A	BITUMINOUS MATERIALS (PRIME COAT)	BITUMINOUS MATERIALS (TACK COAT)	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N50	AGGREGATE SHOULDERS, TYPE B
	35100100	40600275	40600290	40603080	40604050	48101200
TR 244 / 2900 E ROAD	TON	POUND	POUND	TON	TON	TON
STA. 7+75.00 TO STA. 9+70.84	320	985	100	60	35	55
STA. 10+25.16 TO STA. 11+50.00	200	620	60	40	25	35
ENTRANCES STA. 8+06	20	-	-	-	-	-
TOTAL	540	1605	160	100	60	90

TEMPORARY DITCH CHECKS

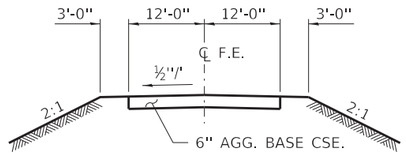
LOCATION	28000305
TR 70 / 1000 E	FOOT
LT. STA. 8+85	8
RT. STA 8+85	8
LT. STA. 9+25	8
RT. STA 9+25	8
LT. STA. 10+50	8
RT. STA. 10+50	8
TOTAL	48

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

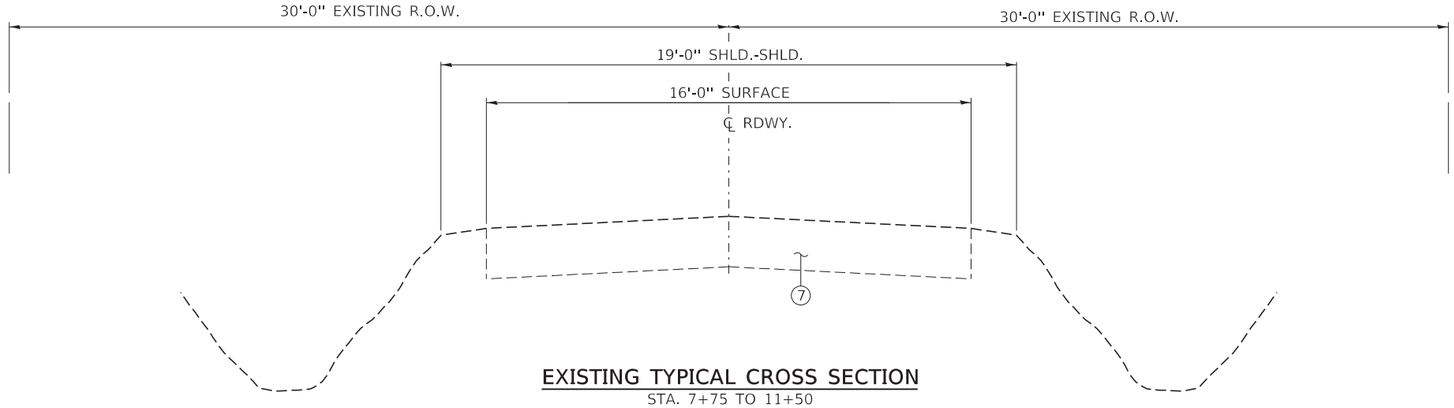
LOCATIONS(S)	TR 244 / 2900 E	TR 244 / 2900 E
MIXTURE USE(S):	HMA BINDER	HMA SURFACE
PG:	PG 64-22	PG 64-22
DESIGN AIR VOIDS:	4% @ 50 Gyr.	4% @ 50 Gyr.
MIXTURE COMPOSITION: (MIXTURE GRADATION)	IL 19.0	IL 9.5
FRICTION AGGREGATE:	NONE	MIXTURE C
MIXTURE WEIGHT:	112 LB/SY/IN	112 LB/SY/IN
QUALITY MANAGEMENT PROGRAM	QC/QA	QC/QA
SUBLOT SIZE	NA	NA
DENSITY TEST METHOD	CORES	CORES
MATERIAL TRANSFER DEVICE (REQUIRED)	NO	NO



FIELD ENTRANCE DETAIL



SECTION A-A



EXISTING TYPICAL CROSS SECTION
STA. 7+75 TO 11+50

LEGEND

1. HMA SURFACE COURSE, IL.-9.5, MIX C, N50 (1½" THICKNESS)
2. HMA BINDER COURSE, IL.-19.0, N50 (2½" THICKNESS)
3. BITUMINOUS MATERIALS (PRIME COAT)
4. BITUMINOUS MATERIALS (TACK COAT)
5. AGGREGATE BASE COURSE, TYPE A (12")
6. AGGREGATE SHOULDERS, TYPE B (6")
7. EXISTING OIL & CHIP SURFACE ON AGGREGATE BASE

SUGGESTED CUT SECTION
CONSTRUCT AS SHOWN IN
STATION CROSS SECTIONS

PROPOSED TYPICAL CROSS SECTION

STA. 7+75 TO 11+50

TRANSITIONS FROM THE PROPOSED ROADWAY TO THE EXISTING ROADWAY ARE TO BE CONSTRUCTED FROM STA. 7+75 TO 8+25 AND STA. 11+00 TO STA. 11+50. SEE SHEET 6 FOR TRANSITION AT BRIDGE.

SUGGESTED FILL SECTION
CONSTRUCT AS SHOWN IN
STATION CROSS SECTIONS

FILE NAME = 190487-shl-typsections.dgn	USER NAME = jfrazee	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 - T.D.S.	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - S.W.M.	REVISED -
	PLOT DATE = 12/14/2021	DATE - 11/17/2021	REVISED -

STATE OF ILLINOIS
LIVINGSTON COUNTY HIGHWAY DEPARTMENT

TYPICAL CROSS SECTIONS

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

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
244	18-29131-00-BR	LIVINGSTON	25	4
UNION ROAD DISTRICT		CONTRACT NO. 87774		
	ILLINOIS FED. AID PROJECT IROF (397)			

MAG/BC
IN 12" CMP
N/BC
IN PP
MAG/BC
IN POST
24.96'
75°
32.67'

W¼ COR SEC 12
FOUND RR SPIKE
N. 1578350.641
E. 971749.501

BM#3
16.02'
21.52'
CP3

P.O.T. STA. 6+50.25
PK NAIL (SET)
N. 1579544.112
E. 971722.707

STA. 8+06
CONSTRUCT 24' F.E.
NO PIPE

STA. 9+98
PRECAST PRESTRESSED CONCRETE DECK BEAM BRIDGE
SINGLE SPAN @ 53'-0", 27'-0" ROADWAY; SKEW = 0°
PROPOSED SN 053-4229

JOHN M. & MARILYN J. WYLLIE
NE¼, SEC 11, T. 29 N., R. 7 E., 3RD P.M.

BM#2
MAG IN
36" STUMP
15.24'
37.20'
21.79'
CP2

P.O.T. STA. 13+49.61
PK NAIL (SET)
N. 1580243.297
E. 971706.857

N/BC
IN PP
N/BC
IN PP
14.75'
41.27'
36.90'
TEL SPLICE
BOX

NW COR SEC 12
FOUND RR SPIKE
N. 1580997.732
E. 971685.592

0 20' 40'
GRAPHIC SCALE

CROPS
+06 F.E.
GRASS
CREEK
CONSTRUCTION LIMITS
℄ PROPOSED IMPROVEMENT
WEST LINE 12-29-7
CP1
BM#1
BM#2
+25
+00
3%
20'
30'
R.O.W.
EXIST.
90°
N 2900E ROAD
OIL AND CHIP SURFACE
7 8 9 10 11 12 13
CONSTRUCTION LIMITS
IMPROVEMENT BEGINS
STATION 7+75
IMPROVEMENT ENDS
STATION 11+50
GOOSEBERRY
CROPS
GRASS
GRASS
CROPS

ESTHER I. FATHERINGHAM & LESTER G. HANSON
NW¼, SEC 12, T. 29 N., R. 7 E., 3RD P.M.

EXISTING STRUCTURE NO. 053-3371
STATION 10+00 - 3 SPAN STEEL I BEAM BRIDGE.
WITH CONCRETE DECK ON CLOSED
CONCRETE ABUTMENTS AND WINGWALLS.
32.0' BK.-BK. ABUTS; 26.0' o.-o. DECK

BM#3 - BENCH TIE IN POWER POLE
26' LT., STA. 6+88
ELEV. 663.18

BM#1 - SET ''X'' IN CHISLED SQUARE SE WW
13' RT., STA. 9+81
ELEV. 660.68

BM#2 - BENCH TIE IN POWER POLE
27' LT., STA. 12+00
ELEV. 659.18

VPI STA. 8+50
ELEV. 663.46
K = 71
90' V.C.

VPI STA. 11+00
ELEV. 660.30
K = 57
100' V.C.

680 675 670 665 660 655 650 645 640

PROPOSED ℄ GRADE
100 YEAR H.W. ELEV. 658.9
15 YEAR H.W. ELEV. 657.8
EXISTING ℄ GRADE
+0.00%
-4.53%
-3.20%
-1.26%
+0.50%
+0.60%
+0.80%
661.40 LT.
661.00 RT.
SPECIAL DITCH RT.
SPECIAL DITCH LT.
658.60 RT.
658.00 LT.
CHANNEL EXCAVATION
1V:2H
1V:2H
℄ ELEV. 649.0
STONE RIPRAP, CLASSS A4
656.80 RT.
656.40 LT.
SPECIAL DITCH RT.
657.10 RT.
656.80 LT.
SPECIAL DITCH LT.

+75 663.46
663.2
663.8 663.46
663.4 663.32
661.9 662.83
660.8 662.20
660.4 661.56
660.3 660.93
660.3 660.52
660.5 660.55
660.9
661.8

7+50 8+00 8+50 9+00 9+50 10+00 10+50 11+00 11+50 12+00 12+50

PLAN
SURVEYED
PLOTTED
CHANGES CHECKED
AS-BUILT CHECKED
RT. OF WAY CHECKED
CADD FILE NAME
NOTE BOOK
NO.
BY
DATE

PROFILE
SURVEYED
PLOTTED
CHANGES CHECKED
B.M. NOTED
STRUCTURE NOTATNS CHKD
NOTE BOOK
NO.
BY
DATE

FILE NAME = 190487-sht-planprf.dgn	USER NAME = jfrazee	DESIGNED - J.W.F.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC.		DRAWN - T.W.K.	REVISED -
3065 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703	PLOT SCALE = $SCALE$	CHECKED - S.W.M.	REVISED -
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT DATE = 12/14/2021	DATE - 11/17/2021	REVISED -

STATE OF ILLINOIS
LIVINGSTON COUNTY HIGHWAY DEPARTMENT

PLAN & PROFILE
WYLLIE BRIDGE
SCALE: 20H:5V | SHEET NO. 1 OF 1 SHEETS | STA. 7+00 TO STA. 13+00

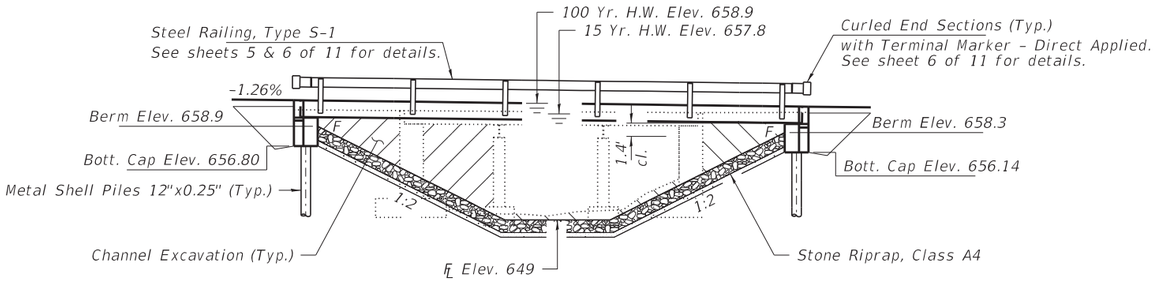
T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
244	18-29131-00-BR	LIVINGSTON	25	5
UNION ROAD DISTRICT		CONTRACT NO. 87774		
ILLINOIS FED. AID PROJECT ROF (397)				

BENCHMARK: Cross Notch in square on SE Wingwall, 13' Rt., Sta. 9+81, Elev. 660.68

EXISTING STRUCTURE NO. 053-3371: Sta. 10+00 – Three span steel I-beam bridge with concrete deck on closed concrete abutments and wingwalls.
32.0' bk.-bk. abuts.; 26.0' o.-o. deck

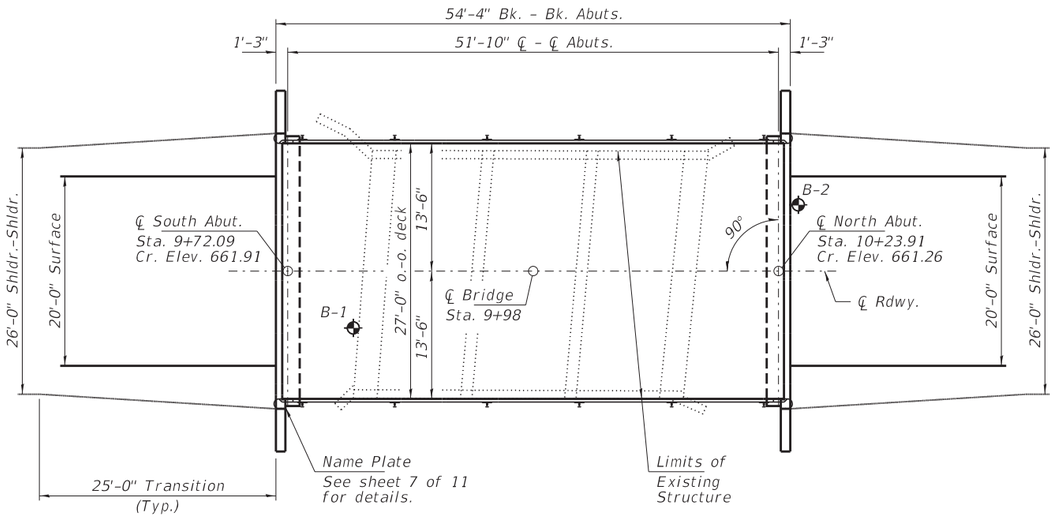
Structure closed to traffic during construction.

No Salvage.

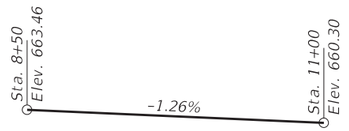


ELEVATION

N



PLAN



PROFILE GRADE

T.R. 244

GENERAL NOTES

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

The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at South Abutment or approved by the Engineer before ordering the remainder of piles.

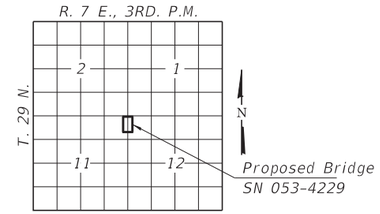
Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions.

All bars to be epoxy coated.

Excavation required to construct the Abutments shall be included in the cost of Concrete Structures. No additional compensation will be allowed for Structure Excavation.

All proposed construction activities shall be in accordance with Nationwide Permit number 14 of the Department of the Army authorized under Section 404 of the Clean Water Act.
The IEPA has issued Section 401 Water Quality Certification for this activity. See Special Provisions for conditions.

INDEX OF STRUCTURE SHEETS



LOCATION SKETCH

GOOSEBERRY CREEK
BUILT 202_ BY
LIVINGSTON COUNTY
SEC. 18-29131-00-BR
UNION ROAD DISTRICT
STR. NO. 053-4229
LOADING HL-93

NAME PLATE

See Std. 515001

DESIGN SPECIFICATIONS

2020 AASHTO LRFD Bridge Design Specifications, 9th Edition with all interims.

LOADING HL-93

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

DESIGN STRESSES

FIELD UNITS

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

PRECAST PRESTRESSED UNITS

f'c = 6,000 psi
f'ci = 5,000 psi
fpu = 270,000 psi (½"Ø low lax. strands)
fpbt = 201,960 psi (½"Ø low lax. strands)
fy = 60,000 psi (Reinf.)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.076g
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.131g
Soil Site Class = C

WATERWAY INFORMATION

Drainage Area = 9.1 Sq. Mi.
Existing Low Grade Elev. 660.3 at Sta. 11+00
Proposed Low Grade Elev. 660.5 at Sta. 11+00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head – Ft. Exist.	Head – Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
Exist Overtop	10	577	170	230	657.2	0.3	0.0	657.5	657.2
Design	15	650	180	250	657.8	0.3	0.0	658.1	657.8
Base	100	1,010	210	300	658.9	0.5	0.2	659.4	659.1
Scour Check	200	1,150	210	320	659.1	0.6	0.2	659.7	659.3
Max. Calc.	500	1,340	210	330	659.4	0.8	0.4	660.2	659.8

10 Year Velocity through Existing Bridge = 3.4 fps
10 Year Velocity through Proposed Bridge = 2.5 fps

DESIGN SCOUR ELEVATION TABLE

Event/Limit State	Design Scour Elev. (ft.) N. Abut.	Design Scour Elev. (ft.) S. Abut.	Item 113
Q100	656.4	655.7	8
Q200	656.4	655.7	
Design	656.4	655.7	
Check	656.4	655.7	

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 12/09/2021
ILLINOIS STRUCTURAL ENGINEER NO. 081-6064

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

Expires 11-30-2022

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Channel Excavation	Cu. Yd.			110
Stone Riprap, Class A4	Sq. Yd.			370
Filter Fabric	Sq. Yd.			370
Removal of Existing Structures	Each			1
Concrete Structures	Cu. Yd.		21.8	21.8
Precast Prestressed Conc. Deck Beams (21" Depth)	Sq. Ft.	1,431		1,431
Reinforcement Bars, Epoxy Coated	Pound		3,000	3,000
Steel Railing, Type S-1	Foot	102		102
Furnishing Metal Shell Piles 12"x0.250"	Foot		315	315
Driving Piles	Foot		315	315
Test Pile Metal Shells	Each		1	1
Name Plates	Each		1	1
Concrete Headwalls for Pipe Drains	Each	4		4
Terminal Marker – Direct Applied	Each	4		4
Porous Granular Embankment, Special	Ton		100	100
Pipe Underdrains for Structures 4"	Foot		104	104

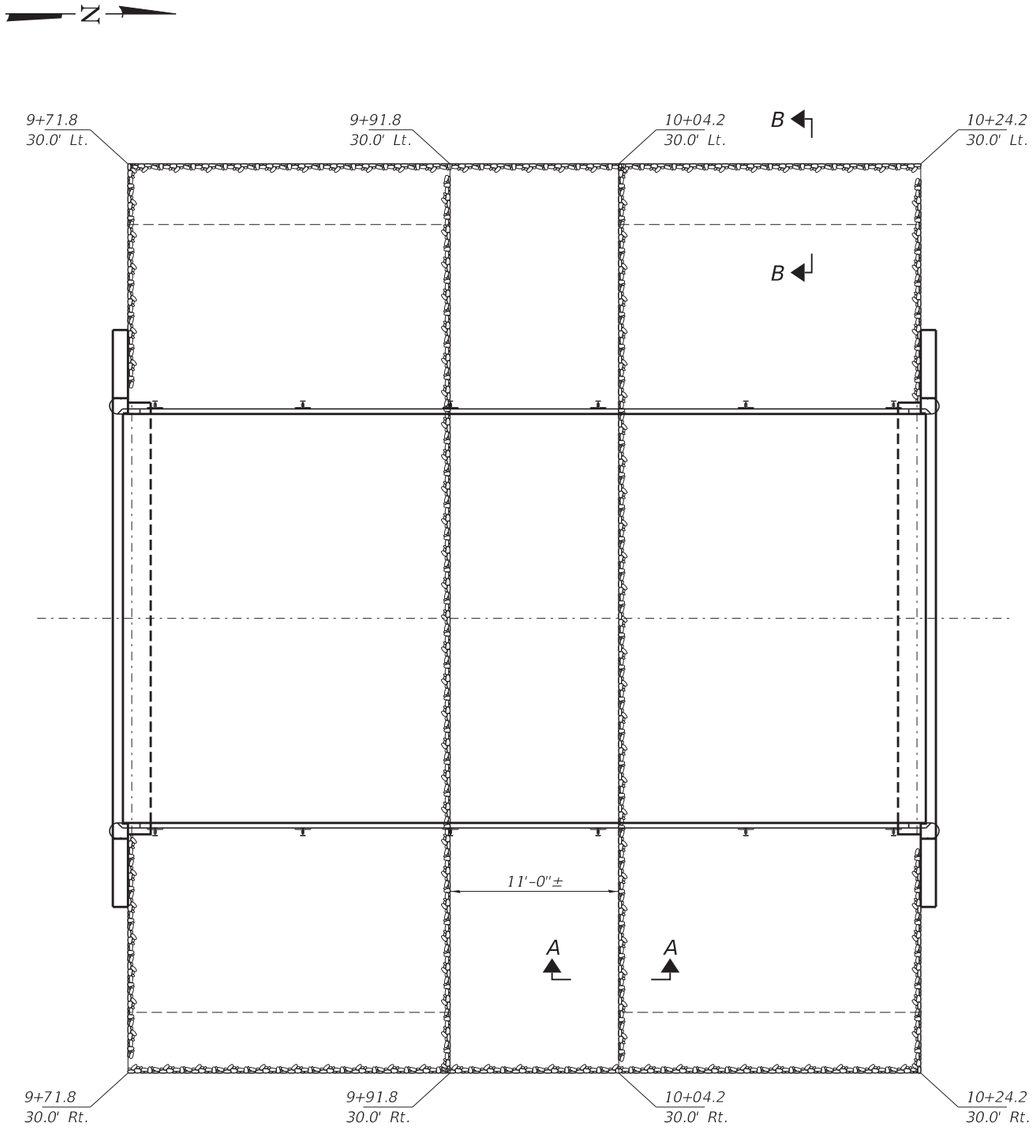
FILE NAME = 190487-shl-bridge.dgn	USER NAME = jfrazee	DESIGNED - J.W.F.	REVISED -
		CHECKED - S.W.M.	REVISED -
	PLOT SCALE = $SCALE$	DRAWN - T.D.S.	REVISED -
	PLOT DATE = 12/14/2021	CHECKED - S.W.M.	REVISED -

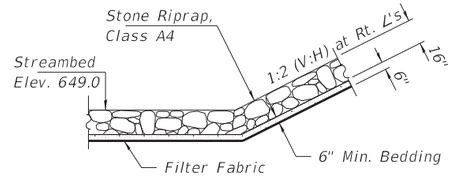
HAMPTON, LENZINI AND RENWICK, INC.
3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
ILLINOIS PROFESSIONAL DESIGN FIRM
LS / PE / SE CORP. 184.000959

STATE OF ILLINOIS
LIVINGSTON COUNTY HIGHWAY DEPARTMENT

GENERAL PLAN & ELEVATION
STRUCTURE NO. 053-4229
SHEET NO. 1 OF 11 SHEETS

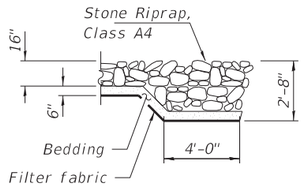
T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
244	18-29131-00-BR	LIVINGSTON	25	6
UNION ROAD DISTRICT		CONTRACT NO. 87774		
	ILLINOIS	FED. AID PROJECT IROF (397)		



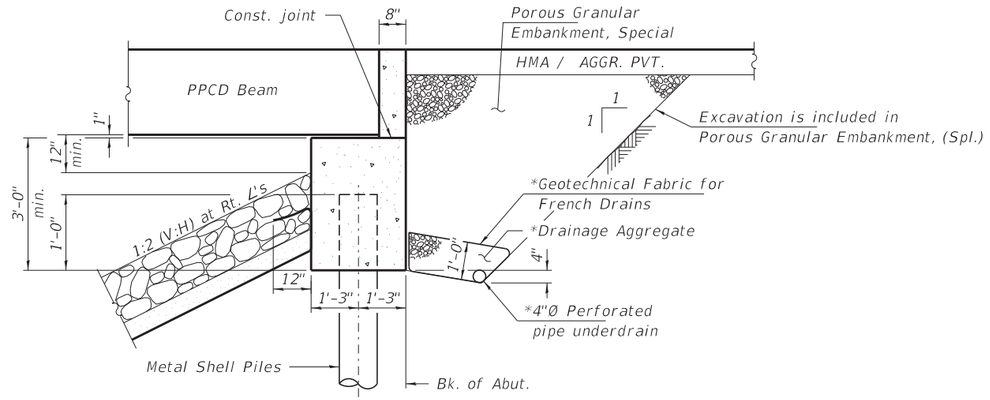


SECTION A-A

Note: See Special Provisions for Stone Riprap, Class A4.



SECTION B-B



SECTION THRU ABUTMENT

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

*Included in the cost of Pipe Underdrains for Structures.

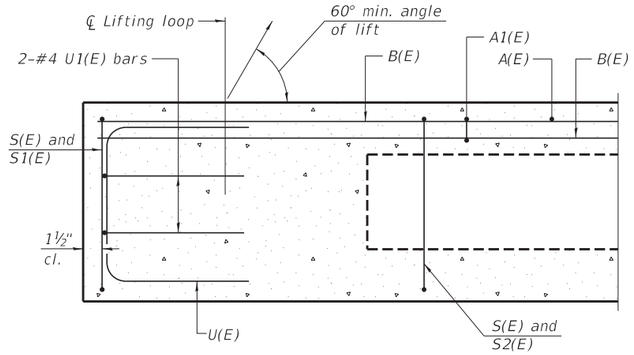
Note:
All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).

FILE NAME = 190487-shl-bridge.dgn	USER NAME = jfrazee	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		CHECKED - S.W.M.	REVISED -
	PLOT SCALE = $SCALE$	DRAWN - T.D.S.	REVISED -
	PLOT DATE = 12/14/2021	CHECKED - S.W.M.	REVISED -

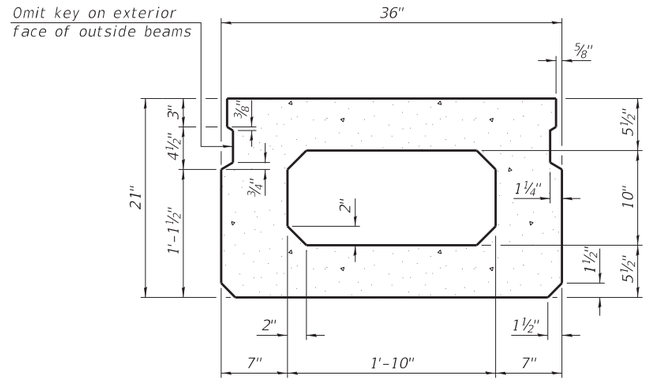
STATE OF ILLINOIS
LIVINGSTON COUNTY HIGHWAY DEPARTMENT

RIPRAP LAYOUT
STRUCTURE NO. 053-4229
SHEET NO. 2 OF 11 SHEETS

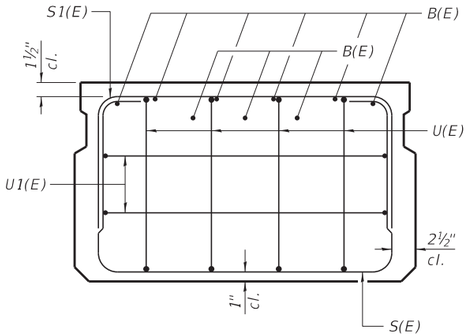
T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
244	18-29131-00-BR	LIVINGSTON	25	7
UNION ROAD DISTRICT		CONTRACT NO. 87774		
	ILLINOIS	FED. AID PROJECT IROF (397)		



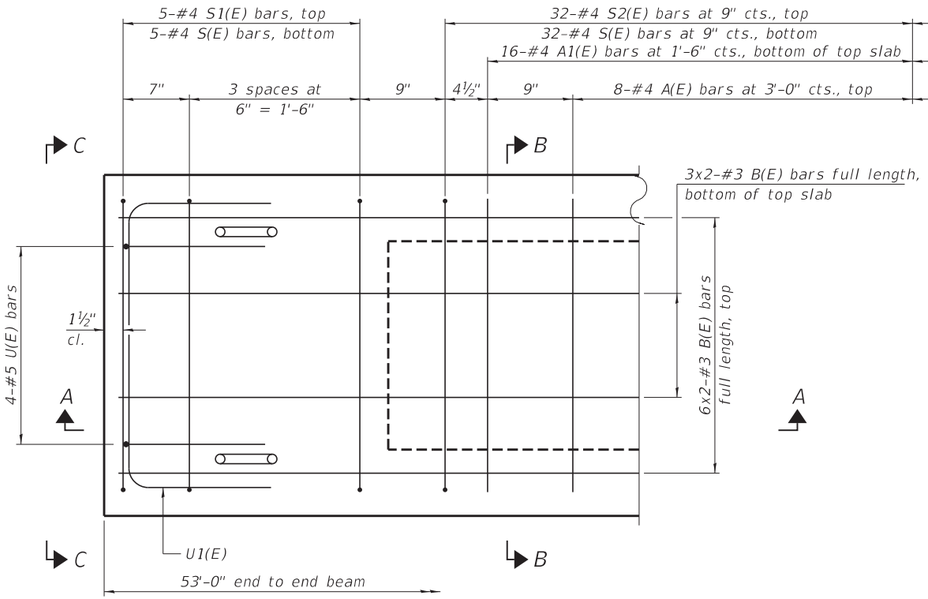
SECTION A-A



SECTION B-B
(Showing dimensions)



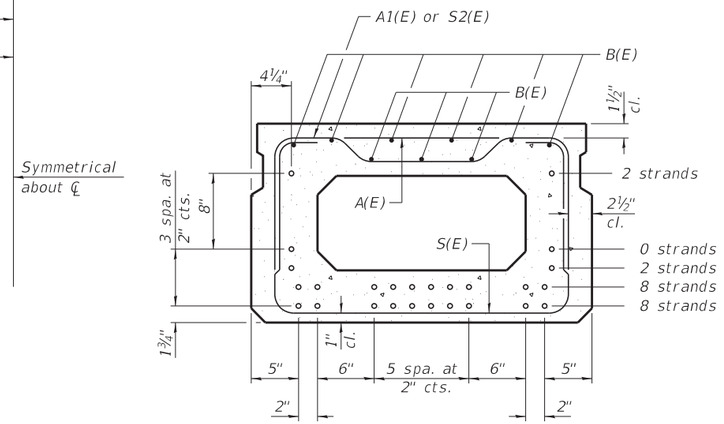
VIEW C-C



PLAN VIEW

Note:
Spacing of S(E) and S2(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.

Bars indicated thus 6x2-#3 etc. indicates 6 lines of bars with 2 length 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.

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

BAR LIST
ONE BEAM ONLY
(For information only)

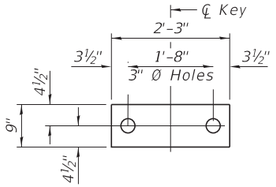
Bar	No.	Size	Length	Shape
A(E)	16	#4	2'-7"	—
A1(E)	32	#4	2'-10"	~
B(E)	18	#3	27'-2"	—
S(E)	74	#4	6'-5"	⌴
S1(E)	10	#4	4'-11"	⌐¬
S2(E)	64	#4	5'-2"	⌐¬
U(E)	8	#5	4'-0"	⊏
U1(E)	4	#4	5'-0"	⌐¬

Note:
See sheets 4 & 5 of 11 for additional details and Bill of Material.

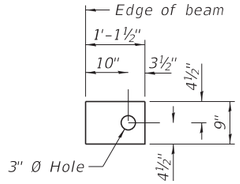
PD-2136-0 1-1-2020

FILE NAME = 190487-shl-brldge.dgn	USER NAME = jfrazee	DESIGNED - J.W.F.	REVISED -	STATE OF ILLINOIS LIVINGSTON COUNTY HIGHWAY DEPARTMENT	21" x 36" PPC DECK BEAM STRUCTURE NO. 053-4229
HAMPTON, LENZINI AND RENWICK, INC. 3045 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959		CHECKED - S.W.M.	REVISED -		
	PLOT SCALE = $SCALE$	DRAWN - T.D.S.	REVISED -		
	PLOT DATE = 12/14/2021	CHECKED - S.W.M.	REVISED -		SHEET NO. 3 OF 11 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
244	18-29131-00-BR	LIVINGSTON	25	8
UNION ROAD DISTRICT		CONTRACT NO. 87774		
	ILLINOIS FED. AID PROJECT IROF (397)			



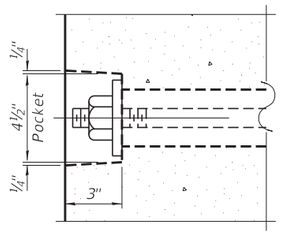
FABRIC BEARING PAD
(Interior - 16 req'd)



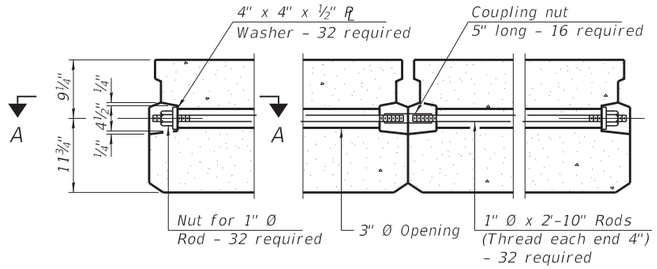
FABRIC BEARING PAD
(Exterior - 4 req'd)

FIXED

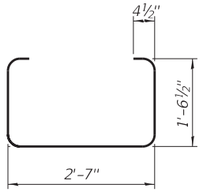
Notes:
All bearing pads shall be 1" thick.
Omit holes when using expansion bearings.
Expansion bearing pads shall be bonded to the substructure.



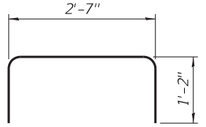
SECTION A-A



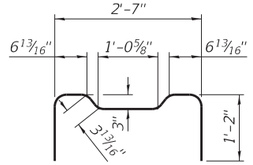
TYPICAL TRANSVERSE TIE ASSEMBLY



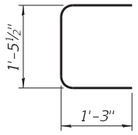
BAR S(E)



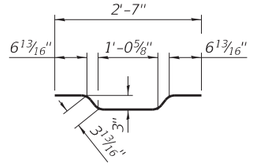
BAR S1(E)



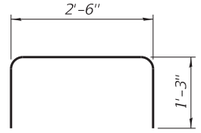
BAR S2(E)



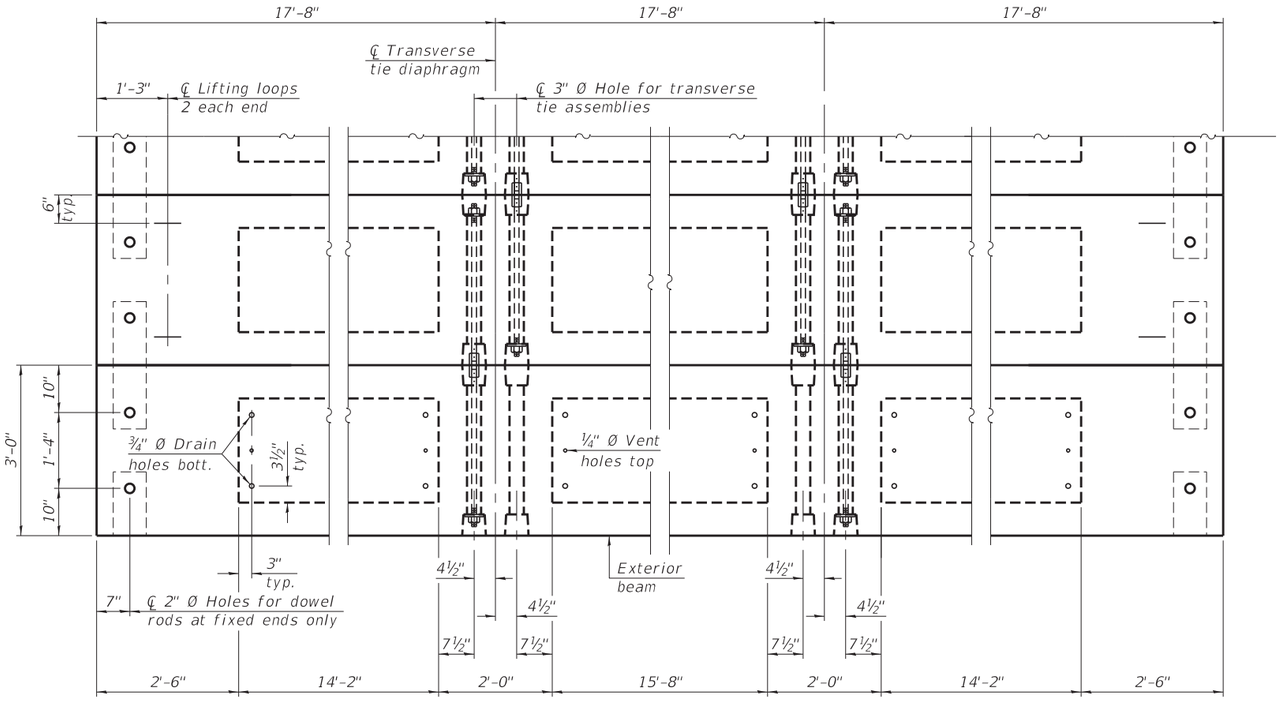
BAR U(E)



BAR A1(E)

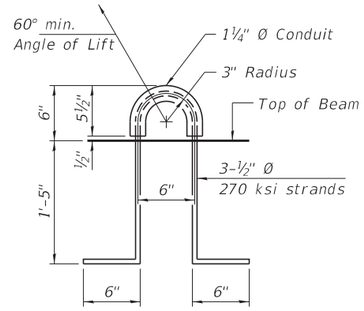


BAR U1(E)



PLAN VIEW

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



LIFTING LOOP DETAIL

NOTES

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be ½" and the nominal cross-sectional area shall be 0.153 sq. in.

The 1" Ø rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place.

Two ⅛" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.

A minimum 2½" Ø lifting pin shall be used to engage the lifting loops during handling.

Corrosion Inhibitor, per Article 1020.05(b)(10) and 1021.07 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.

Compressive strength of prestressed concrete, f'c, shall be 6000 psi.

Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.

Reinforcement bars designated (E) shall be epoxy coated.

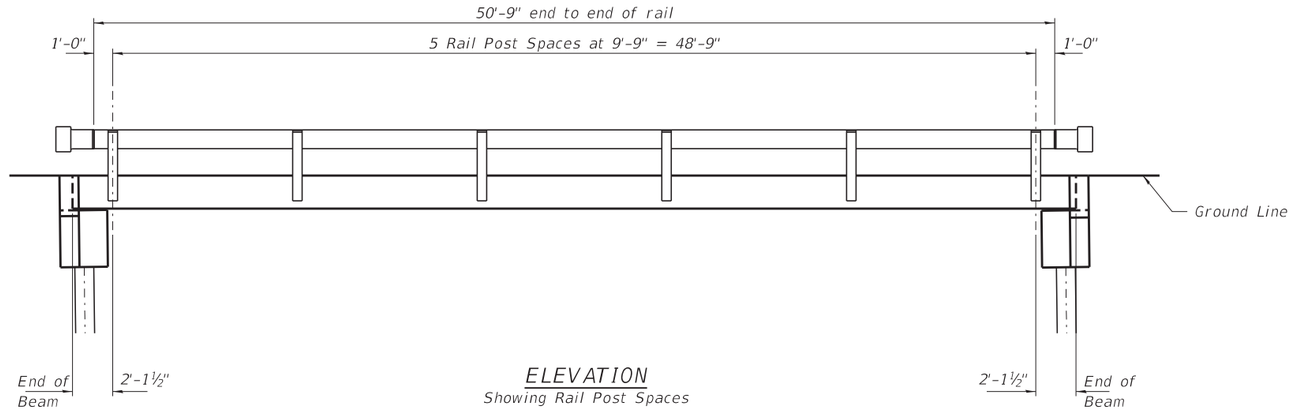
BILL OF MATERIAL

Precast Prestressed Conc. Deck Bms. (21" depth)	Sq. Ft.	1,431

PDD-2136-0 1-1-2020

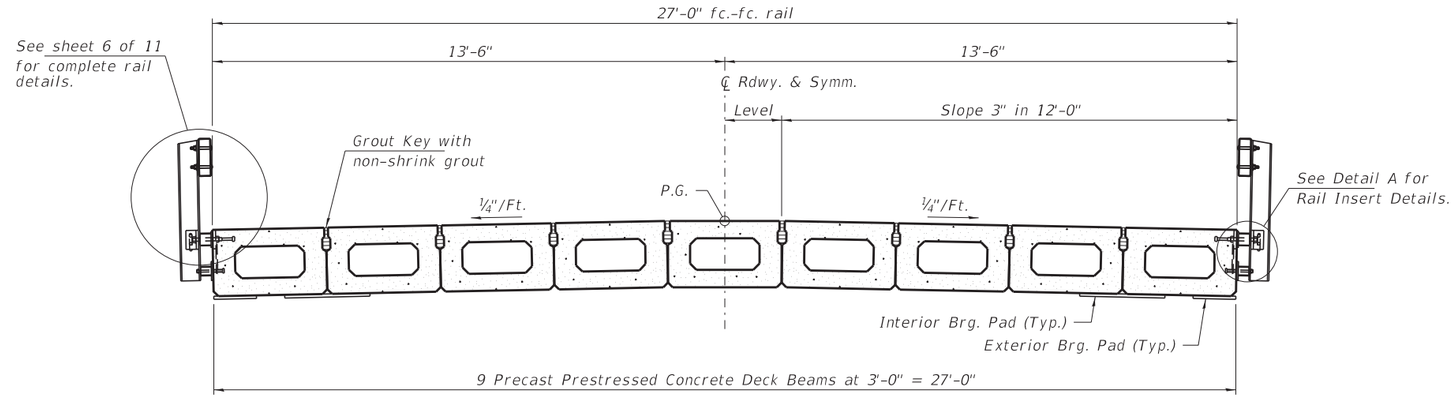
FILE NAME = 190487-shl-bridge.dgn	USER NAME = jfrazee	DESIGNED - J.W.F.	REVISED -	STATE OF ILLINOIS LIVINGSTON COUNTY HIGHWAY DEPARTMENT	21" x 36" PPC DECK BEAM DETAILS STRUCTURE NO. 053-4229
HAMPTON, LENZINI AND RENWICK, INC. 3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959		CHECKED - S.W.M.	REVISED -		SHEET NO. 4 OF 11 SHEETS
	PLOT SCALE = $SCALE$	DRAWN - T.D.S.	REVISED -		
	PLOT DATE = 12/14/2021	CHECKED - S.W.M.	REVISED -		

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
244	18-29131-00-BR	LIVINGSTON	25	9
UNION ROAD DISTRICT		CONTRACT NO. 87774		
	ILLINOIS FED. AID PROJECT IROF (397)			

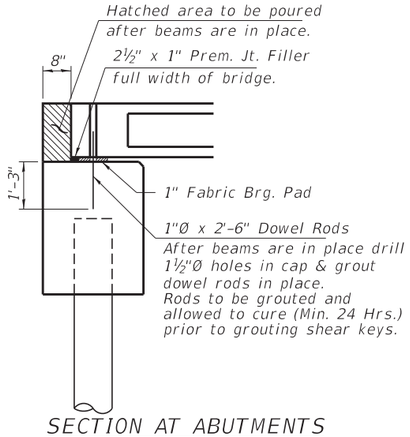


ELEVATION
Showing Rail Post Spaces

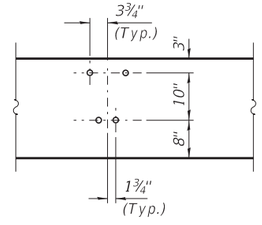
See sheet 6 of 11 for Railing Details.



CROSS SECTION
See sheets 3 & 4 of 11 for Superstructure.



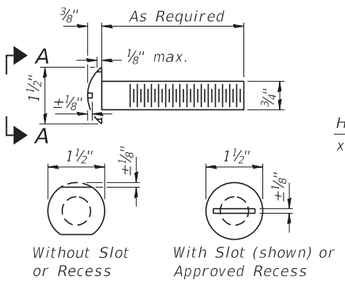
SECTION AT ABUTMENTS
at Rt. ℄'s



DETAIL A

FILE NAME = 190487-shl-bridge.dgn	USER NAME = jfrazee	DESIGNED - J.W.F.	REVISED -	STATE OF ILLINOIS LIVINGSTON COUNTY HIGHWAY DEPARTMENT	SUPERSTRUCTURE DETAILS STRUCTURE NO. 053-4229
HAMPTON, LENZINI AND RENWICK, INC. 3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959		CHECKED - S.W.M.	REVISED -		SHEET NO. 5 OF 11 SHEETS
	PLOT SCALE = $SCALE$	DRAWN - T.D.S.	REVISED -		
	PLOT DATE = 12/14/2021	CHECKED - S.W.M.	REVISED -		

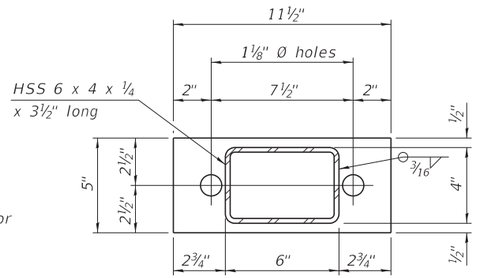
T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
244	18-29131-00-BR	LIVINGSTON	25	10
UNION ROAD DISTRICT		CONTRACT NO. 87774		
	ILLINOIS FED. AID PROJECT IROF (397)			



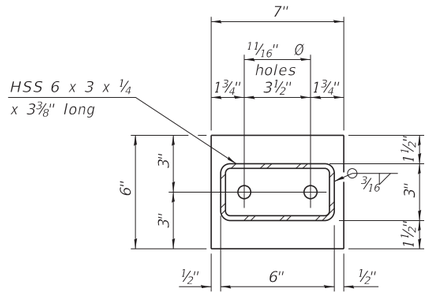
Without Slot or Recess

With Slot (shown) or Approved Recess

VIEW A-A
ROUND HEAD BOLT

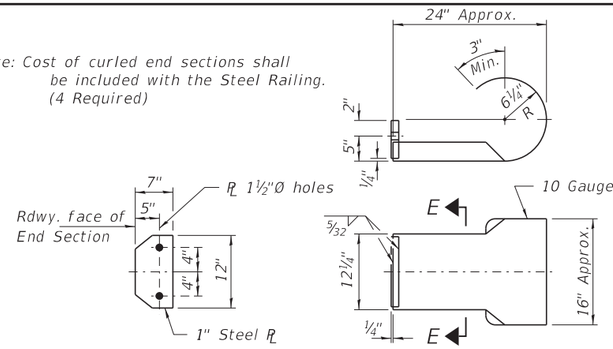


℄ 1/2" x 11 1/2" x 5"



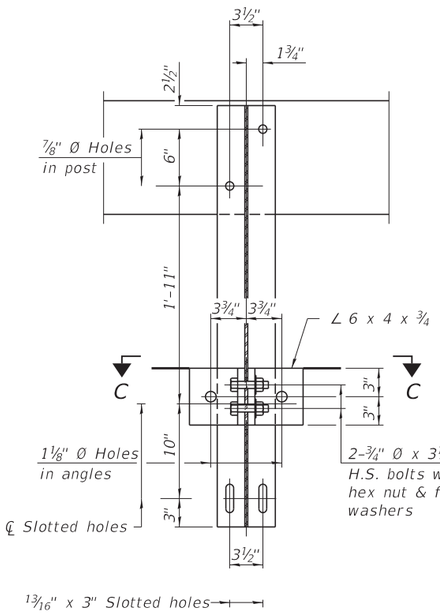
℄ 1/2" x 7" x 6"

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

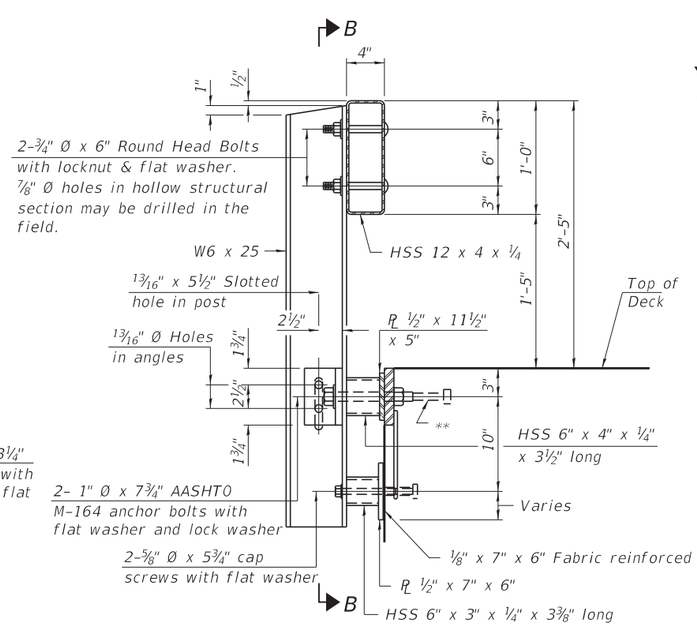


SECTION E-E

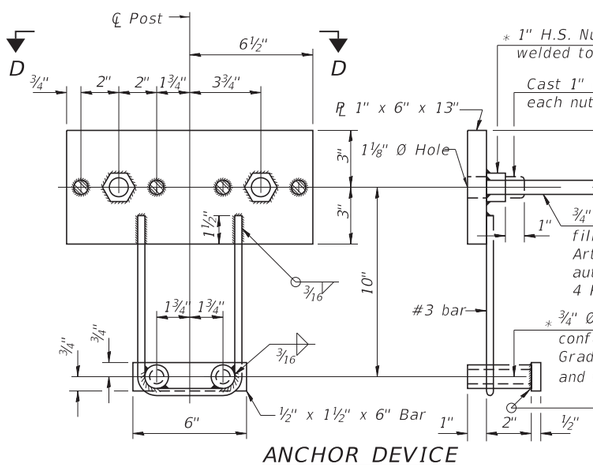
CURLED END SECTION DETAILS



SECTION B-B



SECTION AT RAILING POST



ANCHOR DEVICE

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

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"	——

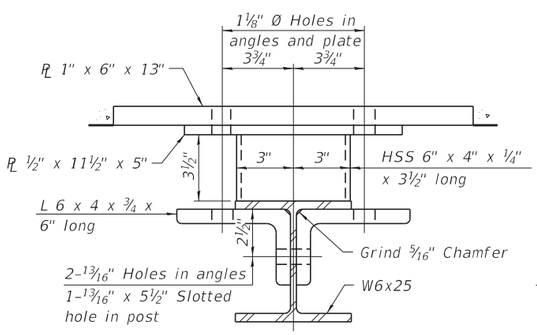
T = Total movement at expansion joint as shown on the design plans.

Notes:

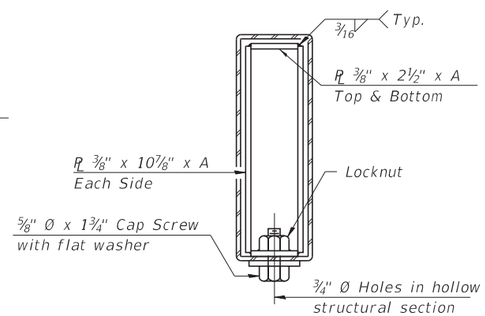
For multi-span bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type S-1.

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

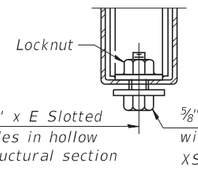
** The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device. The anchorage studs may be bent down 1/2" to accommodate the top reinforcement bar placement.



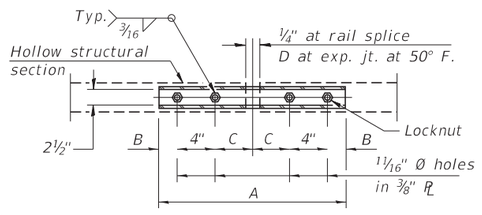
SECTION C-C



SECTIONS AT RAIL SPLICE

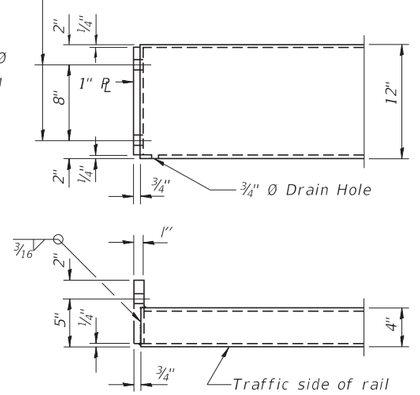


RAIL SPLICE CONNECTION AT EXPANSION JT.

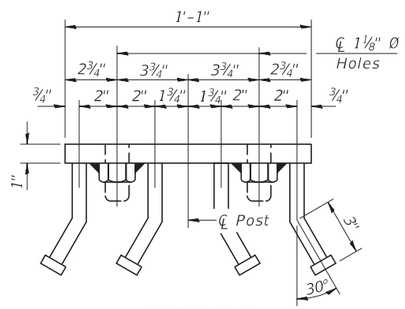


PLAN-BOTT. SPLICE ℄ TYPICAL

1 1/8" Ø Holes for 1" Ø x 4" Round head bolts. Provide 2 flat washers & locknuts for guard rail connection shown on Hwy Std. 631026 or BLR 27-1.



END OF RAIL DETAILS



VIEW D-D

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type S-1	Foot	102

R-23A

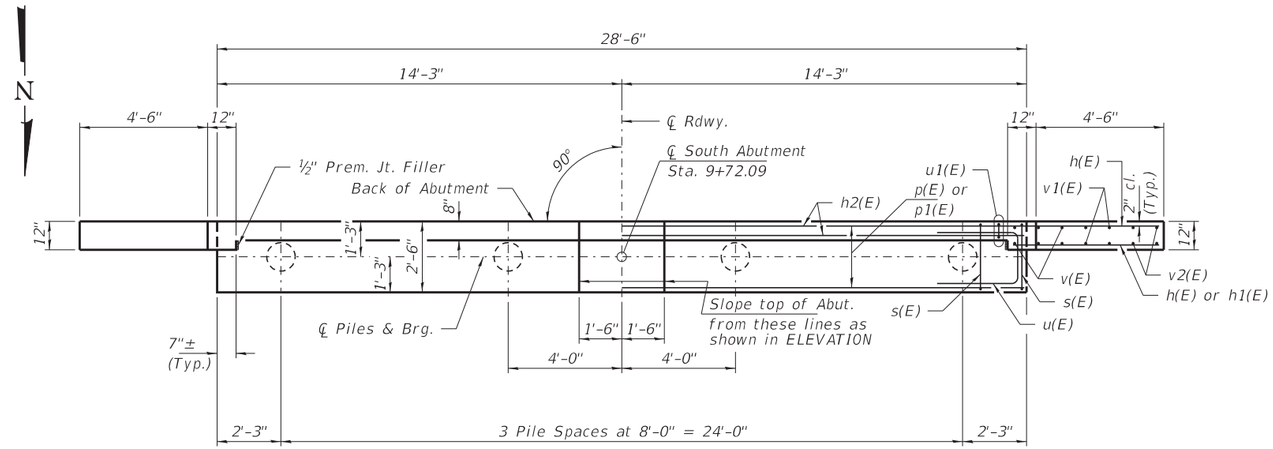
2-17-2017 (10'-9" Maximum Post Spacing)

FILE NAME = 190487-shl-bridge.dgn	USER NAME = jfrazee	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		CHECKED - S.W.M.	REVISED -
	PLOT SCALE = $SCALE$	DRAWN - T.D.S.	REVISED -
	PLOT DATE = 12/14/2021	CHECKED - S.W.M.	REVISED -

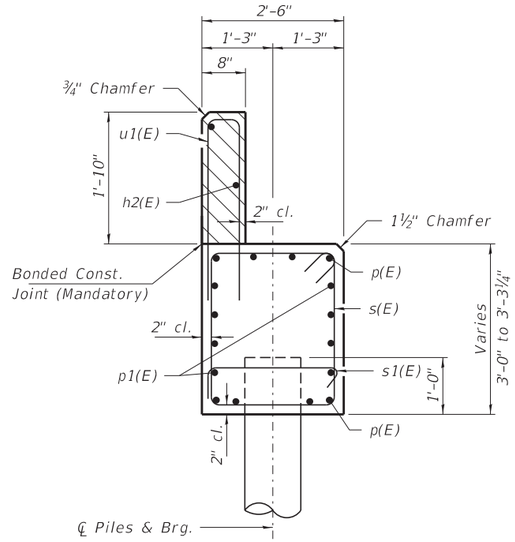
STATE OF ILLINOIS
LIVINGSTON COUNTY HIGHWAY DEPARTMENT

STEEL RAILING, TYPE S-1
STRUCTURE NO. 053-4229
SHEET NO. 6 OF 11 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
244	18-29131-00-BR	LIVINGSTON	25	11
UNION ROAD DISTRICT		CONTRACT NO. 87774		
		ILLINOIS	FED. AID PROJECT IROF (397)	



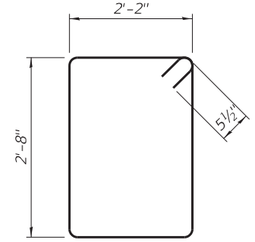
PLAN



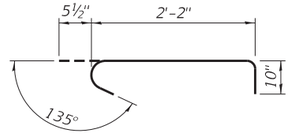
SECTION A-A

Hatched area to be poured after beams are in place.

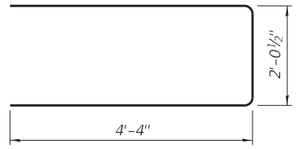
Cast top of wingwall flush with exterior beam face after beams have been erected.



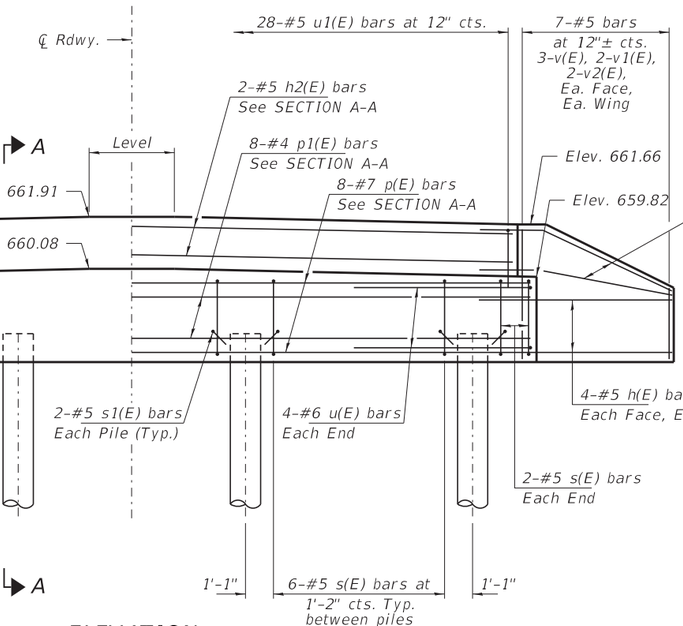
BARS s(E)



BAR s1(E)

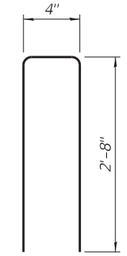


BAR u(E)



ELEVATION
(Looking South)

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



BAR u1(E)

PILE DATA

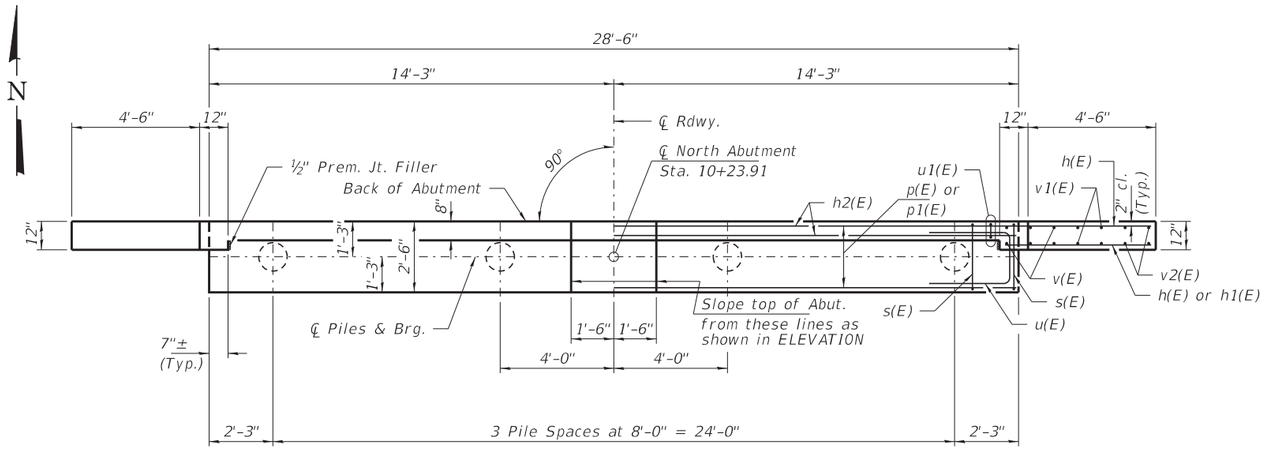
Type:_____ Metal Shell Piles 12"x0.25"
Nominal Required Bearing:_____ 300 Kips/Pile
Factored Resistance Available:_____ 165 Kips/Pile
Est. Length: _____ 45 Ft/Pile
No. Production Piles:_____ 3
No. Test Piles: _____ 1

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

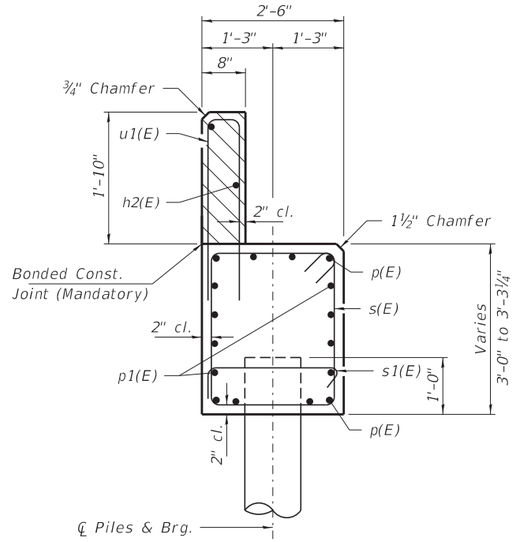
The test pile shall be driven to 110 percent of the Nominal Required Bearing indicated in the pile data information.

BILL OF MATERIAL - S. ABUT.

BAR	NO.	SIZE	LENGTH	SHAPE
h(E)	20	#5	6'-9"	
h1(E)	4	#5	5'-3"	
h2(E)	2	#5	28'-2"	
p(E)	8	#7	28'-2"	
p1(E)	8	#4	28'-2"	
s(E)	22	#5	10'-7"	
s1(E)	8	#5	3'-6"	
u(E)	8	#6	10'-9"	
u1(E)	28	#5	5'-8"	
v(E)	12	#5	4'-0"	
v1(E)	8	#5	3'-2"	
v2(E)	8	#5	2'-4"	
Concrete Structures			Cu. Yd.	10.9
Reinf. Bars, Epoxy Coated			Pound	1,500
Metal Shell Piles 12"x0.250"			Foot	135
Test Pile Metal Shells			Each	1
Name Plates			Each	1



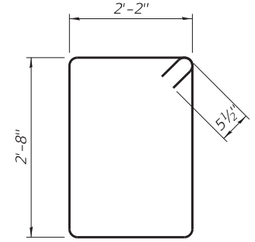
PLAN



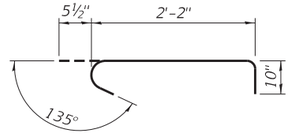
SECTION A-A

Hatched area to be poured after beams are in place.

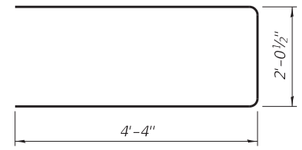
Cast top of wingwall flush with exterior beam face after beams have been erected.



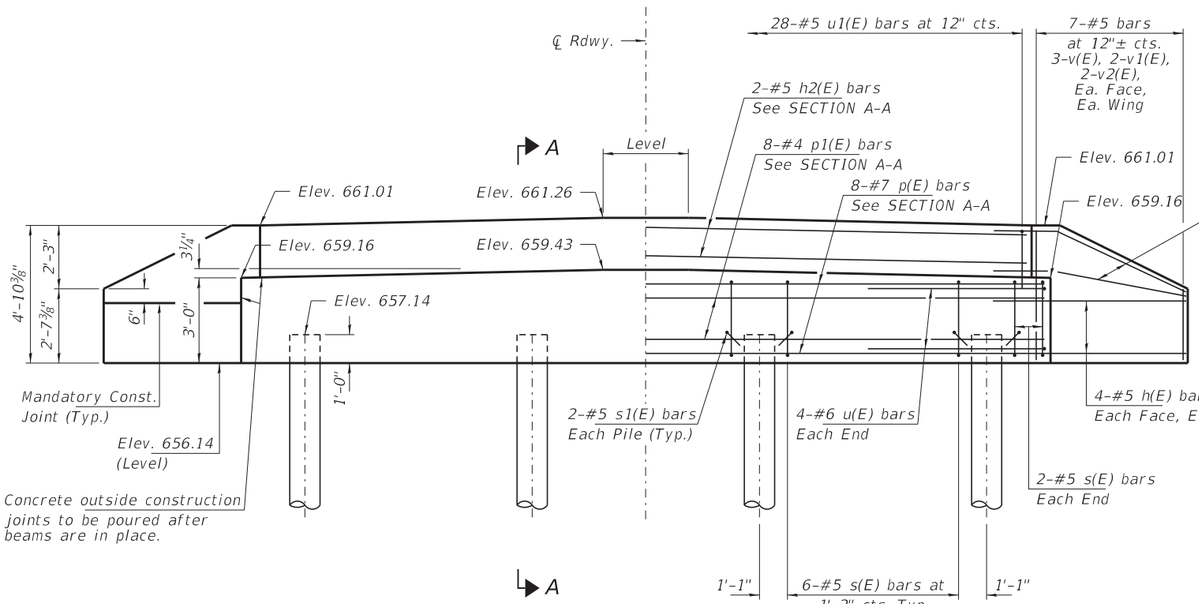
BARS s(E)



BAR s1(E)

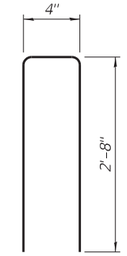


BAR u(E)



ELEVATION
(Looking North)

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



BAR u1(E)

BILL OF MATERIAL - N. ABUT.

BAR	NO.	SIZE	LENGTH	SHAPE
h(E)	20	#5	6'-9"	
h1(E)	4	#5	5'-3"	
h2(E)	2	#5	28'-2"	
p(E)	8	#7	28'-2"	
p1(E)	8	#4	28'-2"	
s(E)	22	#5	10'-7"	
s1(E)	8	#5	3'-6"	
u(E)	8	#6	10'-9"	
u1(E)	28	#5	5'-8"	
v(E)	12	#5	4'-0"	
v1(E)	8	#5	3'-2"	
v2(E)	8	#5	2'-4"	
Concrete Structures			Cu. Yd.	10.9
Reinf. Bars, Epoxy Coated			Pound	1,500
Metal Shell Piles 12"x0.250"			Foot	180

PILE DATA

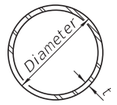
Type: _____ Metal Shell Piles 12"x0.25"
Nominal Required Bearing: _____ 300 Kips/Pile
Factored Resistance Available: _____ 165 Kips/Pile
Est. Length: _____ 45 Ft/Pile
No. Production Piles: _____ 4
No. Test Piles: _____ 0

FILE NAME = 190487-sht-brldge.dgn	USER NAME = jfrazee	DESIGNED - J.W.F.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC. 3345 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959		CHECKED - S.W.M.	REVISED -
	PLOT SCALE = $SCALE$	DRAWN - T.D.S.	REVISED -
	PLOT DATE = 12/14/2021	CHECKED - S.W.M.	REVISED -

STATE OF ILLINOIS
LIVINGSTON COUNTY HIGHWAY DEPARTMENT

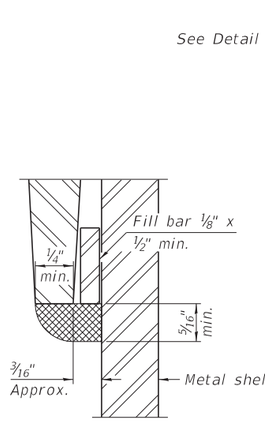
NORTH ABUTMENT
STRUCTURE NO. 053-4229
SHEET NO. 8 OF 11 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
244	18-29131-00-BR	LIVINGSTON	25	13
UNION ROAD DISTRICT		CONTRACT NO. 87774		
	ILLINOIS FED. AID PROJECT IROF (397)			

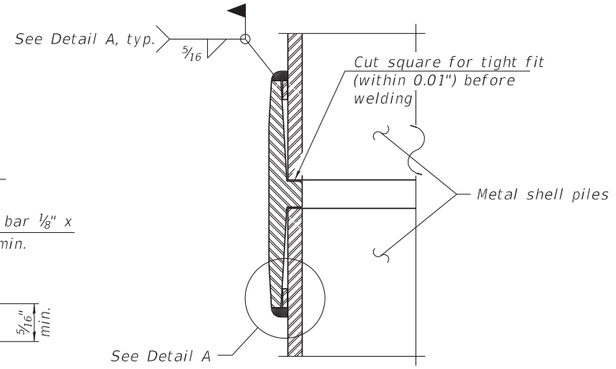


METAL SHELL PILE TABLE

Designation and outside diameter	Wall thickness t	Weight per foot (Lbs./ft.)	Inside volume (yd.³/ft.)
PP12	0.250"	31.37	0.0267
PP14	0.250"	36.71	0.0368
PP14	0.312"	45.61	0.0361
PP16	0.312"	52.32	0.0478
PP16	0.375"	62.64	0.0470

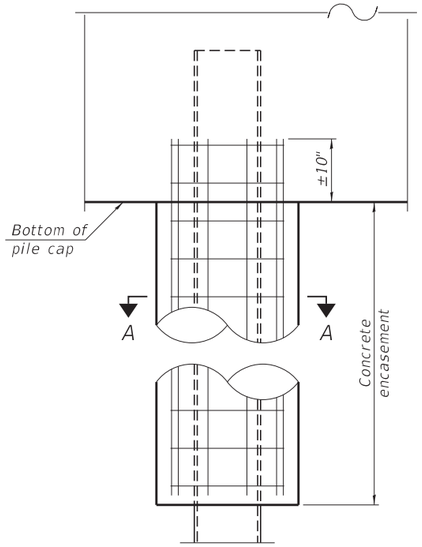


DETAIL A

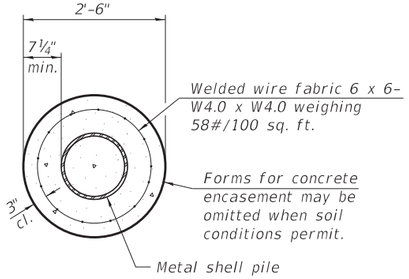


WELDED COMMERCIAL SPLICE

Notes:
The ⅛" x ½" min. fill bar may be constructed of 2 bars with a ⅛" max. gap between them.
Pile segments shall be driven to solid contact with splicer before welding.



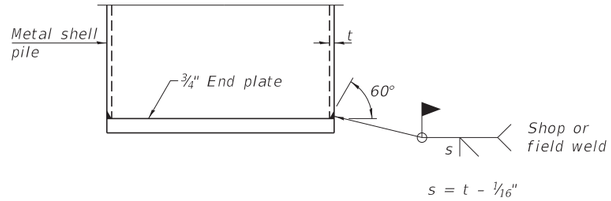
ELEVATION



SECTION A–A

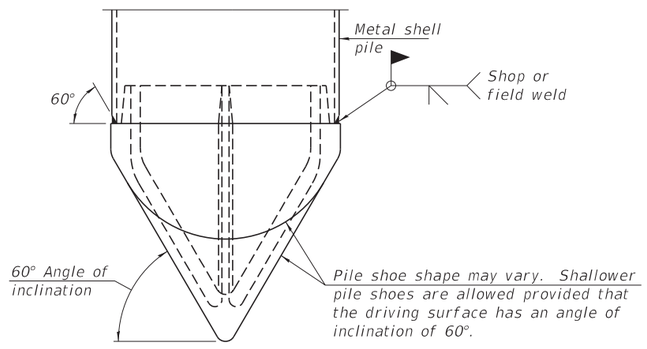
INDIVIDUAL PILE CONCRETE ENCASEMENT

(When specified)



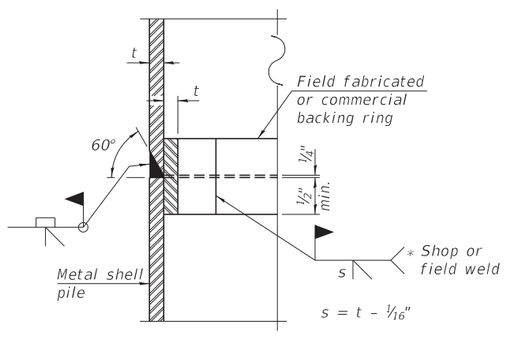
s = t – 1/16"

END PLATE ATTACHMENT



PILE SHOE ATTACHMENT

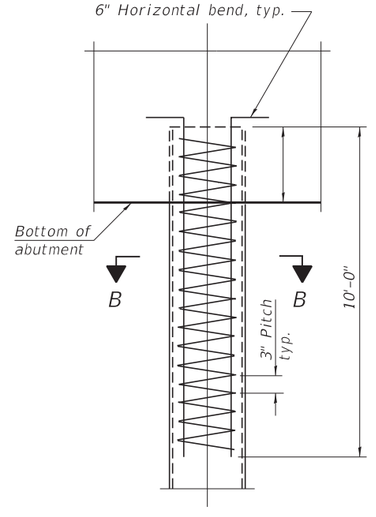
(When called for on the plans, the Contractor shall furnish metal shell pile shoes consisting of a single piece conical pile point as shown. The pile shoes shall be cast in one piece steel according to either ASTM A 148 Grade 80–50 or AASHTO M 103 Grade 65–35 and shall provide full bearing over the full circumference of the metal shell pile. The pile shoe shall have tapered leads to assure proper alignment and fitting and shall be secured to the pile with a circumferential weld).



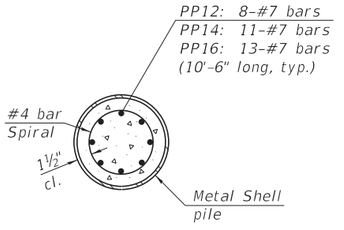
s = t – 1/16"

COMPLETE PENETRATION WELD SPLICE

* Field fabricated backing ring may be made from pile shell by removing segment to allow reducing circumference and vertically rejoin with partial joint penetration weld.



ELEVATION



SECTION B–B

REINFORCEMENT AT ABUTMENTS

(Omit when concrete encasement is specified)

Note:
The metal shell piles shall be according to Article 1006.05 of the Standard Specifications.

F–MS 1-1-2020

FILE NAME = 190487-shl-bridge.dgn	USER NAME = jfrazee	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		CHECKED – S.W.M.	REVISED –
	PLOT SCALE = $SCALE$	DRAWN – T.D.S.	REVISED –
	PLOT DATE = 12/14/2021	CHECKED – S.W.M.	REVISED –

STATE OF ILLINOIS
LIVINGSTON COUNTY HIGHWAY DEPARTMENT

METAL SHELL PILE DETAILS
STRUCTURE NO. 053-4229
SHEET NO. 9 OF 11 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
244	18-29131-00-BR	LIVINGSTON	25	14
UNION ROAD DISTRICT		CONTRACT NO. 87774		
ILLINOIS	FED. AID PROJECT IROF (397)			

Midwest Testing Services, Inc.
3705 Progress Blvd.
Peru, IL 61354
Phone: 815-223-6696
Fax: 815-223-6659
e-mail: mts37@comcast.net

BORING LOG

Sheet 1 of 3

Client: Hampton, Lenzini & Renwick, Inc.
Project Name: Section 18-29131-00-BR
Project Site: Union Twp. Livingston County, IL.
Wyllie Br. On N 2900 E. (TR 244) over Goosberry Cr.

Boring No. B-1
Surface Elev. 100.00 660.5
Auger Depth 61' Rotary Depth NA
Start Date 10/12/19 Finish Date 10/12/19

Location: Station: 9+79 6' RT
Proposed South Abutment

DRILLED BY: Randy Safranski, Diedrich D-120

(DEPTH) ELEV	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)	Dry Density (PCF)	REMARKS
100.00	660.5										
	Stiff Black And Brown Silty Clay To Clay (Fill)		1	1	SS	1.3	7	B	23		
			2	2	SS	1.3	6	B	23		
			3	3	SS	1.5	7	B	22		
			4	4	SS	1.7	7	B	23		
86.00	646.5		5	5	SS	1.4	6	B	24		
	Very Stiff Gray Clay Till		6	6	SS	2.1	11	B	18		
			7	7	SS	2.3	11	B	18		
			8	8	SS	2.7	13	B	17		

Groundwater Data: No groundwater encountered at time of investigation.
Comments: Assumed center of bridge to be elevation 100.0 and station 10 + 00.
660.5

Midwest Testing Services, Inc.
3705 Progress Blvd.
Peru, IL 61354
Phone: 815-223-6696
Fax: 815-223-6659
e-mail: mts37@comcast.net

BORING LOG

Sheet 2 of 3

Client: Hampton, Lenzini & Renwick, Inc.
Project Name: Section 18-29131-00-BR
Project Site: Union Twp. Livingston County, IL.
Wyllie Br. On N 2900 E. (TR 244) over Goosberry Cr.

Boring No. B-1
Surface Elev. 100.00 660.5
Auger Depth 61' Rotary Depth NA
Start Date 10/12/19 Finish Date 10/12/19

Location: Station: 9+79 6' RT
Proposed South Abutment

DRILLED BY: Randy Safranski, Diedrich D-120

(DEPTH) ELEV	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)	Dry Density (PCF)	REMARKS
79.00	639.5										
	Very Stiff Gray Clay Till		22	9	SS	2.4	12	B	17		
			25	10	SS	2.3	10	B	18		
			28	11	SS	2.6	12	B	17		
			31	12	SS	3.5	14	B	16		
			35	13	SS	3.6	16	B	16		
			40	14	SS	3.2	14	B	17		

Groundwater Data: No groundwater encountered at time of investigation.
Comments: Assumed center of bridge to be elevation 100.0 and station 10 + 00.
660.5

Midwest Testing Services, Inc.
3705 Progress Blvd.
Peru, IL 61354
Phone: 815-223-6696
Fax: 815-223-6659
e-mail: mts37@comcast.net

BORING LOG

Sheet 3 of 3

Client: Hampton, Lenzini & Renwick, Inc.
Project Name: Section 18-29131-00-BR
Project Site: Union Twp. Livingston County, IL.
Wyllie Br. On N 2900 E. (TR 244) over Goosberry Cr.

Boring No. B-1
Surface Elev. 100.00 660.5
Auger Depth 61' Rotary Depth NA
Start Date 10/12/19 Finish Date 10/12/19

Location: Station: 9+79 6' RT
Proposed South Abutment

DRILLED BY: Randy Safranski, Diedrich D-120

(DEPTH) ELEV	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)	Dry Density (PCF)	REMARKS
58.00	618.5										
	Very Stiff Gray Clay Till		45	14	SS	3.9	16	B	17		
52.00	612.5										
	Hard Gray Clay Till		50	15	SS	4.2	18	B	16		
			55	16	SS	4.1	19	B	16		
39.00	699.5		61	17	SS	4.3	19	B	16		
	Boring Terminated										

Groundwater Data: No groundwater encountered at time of investigation.
Comments: Assumed center of bridge to be elevation 100.0 and station 10 + 00.
660.5

BORING-1

FILE NAME = 190487-shl-bridge.dgn	USER NAME = jfrazee	DESIGNED - J.W.F.	REVISED -	
HAMPTON, LENZINI AND RENWICK, INC. 3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703		CHECKED - S.W.M.	REVISED -	
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT SCALE = $SCALE$	DRAWN - T.D.S.	REVISED -	
	PLOT DATE = 12/14/2021	CHECKED - S.W.M.	REVISED -	

STATE OF ILLINOIS
LIVINGSTON COUNTY HIGHWAY DEPARTMENT

BORINGS
STRUCTURE NO. 053-4229
SHEET NO. 10 OF 11 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
244	18-29131-00-BR	LIVINGSTON	25	15
UNION ROAD DISTRICT		CONTRACT NO. 87774		
	ILLINOIS	FED. AID PROJECT IROF (397)		

Midwest Testing Services, Inc.
3705 Progress Blvd.
Peru, IL 61354
Phone: 815-223-6696
Fax: 815-223-6659
e-mail: mts37@comcast.net

BORING LOG

Sheet 1 of 3

Client: Hampton, Lenzini & Renwick, Inc.
Project Name: Section 18-29131-00-BR
Project Site: Union Twp. Livingston County, IL.
Wyllie Br. On N 2900 E. (TR 244) over Goosberry Cr.

Boring No. B-2
Surface Elev. 99.70 660.2
Auger Depth 61' Rotary Depth NA
Start Date 10/12/19 Finish Date 10/12/19

Location: Station: 10+26 7' LT
Proposed North Abutment

DRILLED BY: Randy Safranski, Diedrich D-120

(DEPTH) ELEV	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)	Dry Density (PCF)	REMARKS
99.70 660.2											
98.70			1	1	SS	1.1	6	B	24		
97.70			2								
96.70			3	2	SS	1.3	8	S	16		
95.70			4								
94.70			5	3	SS	1.4	7	B	23		
93.70	Stiff Black And Brown Silty Clay To Clay (Fill)		6								
92.70			7	4	SS	1.5	7	B	20		
91.70			8								
90.70			9								
89.70			10								
88.70 648.7			11	5	SS	---	13	---	---		
87.70			12								
86.70	Medium Light Brown Medium Sand (Possible Fill)		13								
85.70 646.2			14								
84.70			15	6	SS	1.9	8	B	19		
83.70 643.7	Stiff Brownish Gray Clay Till		16								
82.70			17								
81.70			18	7	SS	2.0	10	B	18		
80.70	Very Stiff Gray Clay Till		19								
79.70			20	8	SS	3.1	16	B	16		

Groundwater Data: No groundwater encountered at time of investigation.
Comments:

Midwest Testing Services, Inc.
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Peru, IL 61354
Phone: 815-223-6696
Fax: 815-223-6659
e-mail: mts37@comcast.net

BORING LOG

Sheet 2 of 3

Client: Hampton, Lenzini & Renwick, Inc.
Project Name: Section 18-29131-00-BR
Project Site: Union Twp. Livingston County, IL.
Wyllie Br. On N 2900 E. (TR 244) over Goosberry Cr.

Boring No. B-2
Surface Elev. 99.70 660.2
Auger Depth 61' Rotary Depth NA
Start Date 10/12/19 Finish Date 10/12/19

Location: Station: 10+26 7' LT
Proposed North Abutment

DRILLED BY: Randy Safranski, Diedrich D-120

(DEPTH) ELEV	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)	Dry Density (PCF)	REMARKS
78.70 639.2											
77.70			22								
76.70			23	9	SS	2.5	13	B	17		
75.70			24								
74.70			25	10	SS	2.2	12	B	17		
73.70			26								
72.70			27								
71.70			28	11	SS	2.5	12	B	18		
70.70	Very Stiff Gray Clay Till		29								
69.70			30	12	SS	3.7	16	B	16		
68.70			31								
67.70			32								
66.70			33								
65.70			34								
64.70			35	13	SS	2.4	15	B	17		
63.70			36								
62.70			37								
61.70			38								
60.70			39								
59.70			40								
58.70			41	14	SS	3.7	17	B	16		

Groundwater Data: No groundwater encountered at time of investigation.
Comments:

Midwest Testing Services, Inc.
3705 Progress Blvd.
Peru, IL 61354
Phone: 815-223-6696
Fax: 815-223-6659
e-mail: mts37@comcast.net

BORING LOG

Sheet 3 of 3

Client: Hampton, Lenzini & Renwick, Inc.
Project Name: Section 18-29131-00-BR
Project Site: Union Twp. Livingston County, IL.
Wyllie Br. On N 2900 E. (TR 244) over Goosberry Cr.

Boring No. B-2
Surface Elev. 99.70 660.2
Auger Depth 61' Rotary Depth NA
Start Date 10/12/19 Finish Date 10/12/19

Location: Station: 10+26 7' LT
Proposed North Abutment

DRILLED BY: Randy Safranski, Diedrich D-120

(DEPTH) ELEV	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)	Dry Density (PCF)	REMARKS
57.70 618.2											
56.70			43								
55.70			44								
54.70			45	14	SS	3.0	14	B	17		
53.70			46								
52.70	Very Stiff Gray Clay		47								
51.70			48								
50.70			49								
49.70			50	15	SS	3.9	17	B	16		
48.70			51								
47.70			52								
46.70 607.2			53								
45.70			54								
44.70			55	16	SS	4.3	18	B	16		
43.70	Hard Gray Clay Till		56								
42.70			57								
41.70			58								
40.70			59								
39.70			60								
38.70 599.2			61	17	SS	4.4	20	B	16		
37.70	Boring Terminated		62								

Groundwater Data: No groundwater encountered at time of investigation.
Comments:

BORING-2

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

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

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

IMPROVEMENT BEGINS

AHEAD C = 31 F = 0
BACK C = 0 F = 0

666
664
662
660

EXIST. R.O.W.
663.46
663.46
EXIST. R.O.W.

7+75.00

EXIST. R.O.W.
663.19
EXIST. R.O.W.

7+50.00

EXIST. R.O.W.
662.90
EXIST. R.O.W.

7+05.00

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

FILE NAME = 190487-sht-xssheets.dgn	USER NAME = jfrazee	DESIGNED - J.W.F.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC.		DRAWN - T.W.K.	REVISED -
3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703	PLOT SCALE = $SCALE$	CHECKED - S.W.M.	REVISED -
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT DATE = 12/14/2021	DATE - 11/17/2021	REVISED -

STATE OF ILLINOIS
LIVINGSTON COUNTY HIGHWAY DEPARTMENT

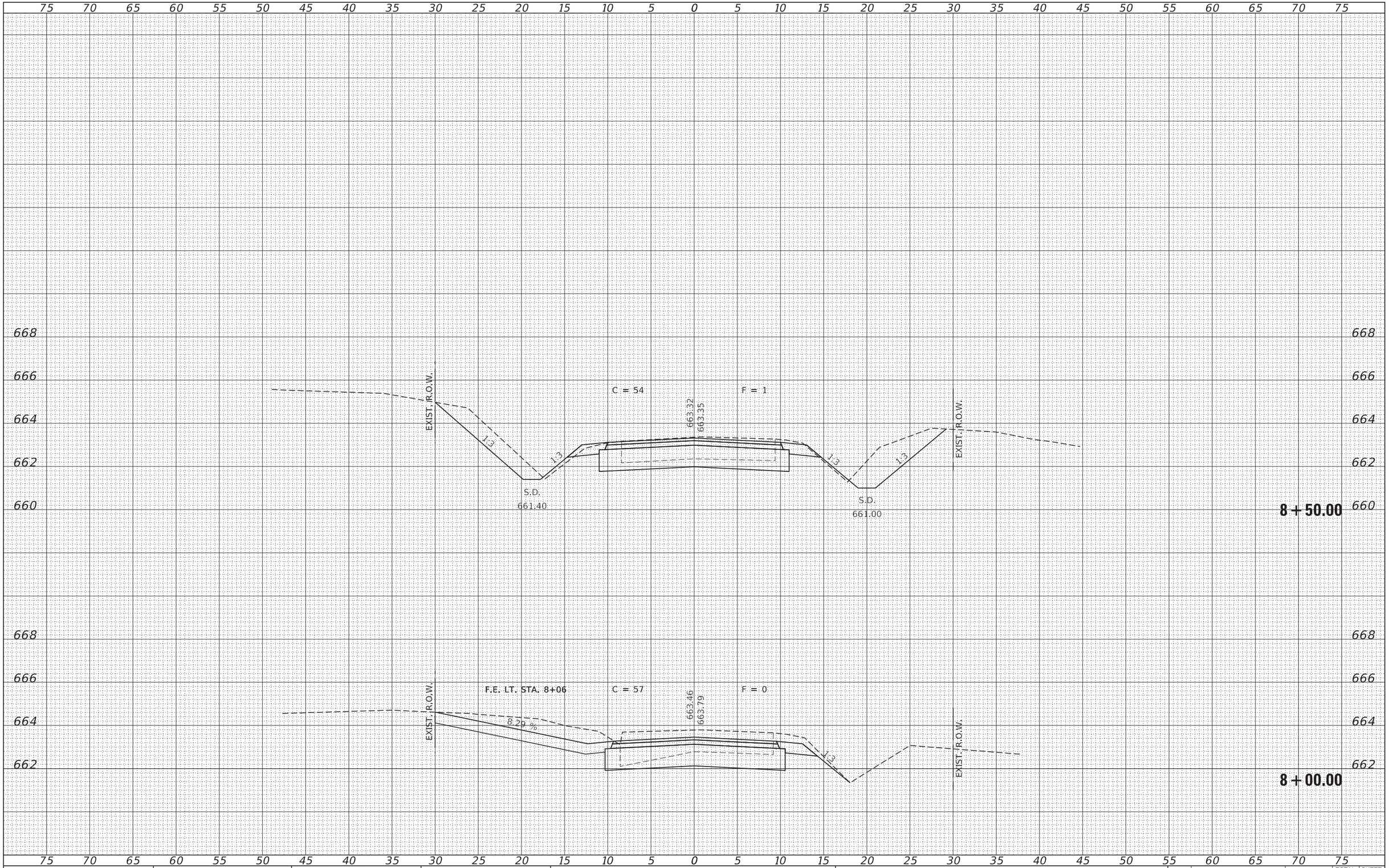
STATION CROSS SECTIONS

SCALE: 5H:2V | SHEET NO. 1 OF 9 SHEETS | STA. 7+05.00 | TO STA. 7+75.00

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
244	18-29131-00-BR	LIVINGSTON	25	17
UNION ROAD DISTRICT		CONTRACT NO. 87774		
ILLINOIS	FED. AID PROJECT IROF (397)			

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 = 190487-shl-xssheets.dgn	USER NAME = jfrazee	DESIGNED - J.W.F.	REVISED -
		DRAWN - T.W.K.	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - S.W.M.	REVISED -
	PLOT DATE = 12/14/2021	DATE - 11/17/2021	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
LIVINGSTON COUNTY HIGHWAY DEPARTMENT

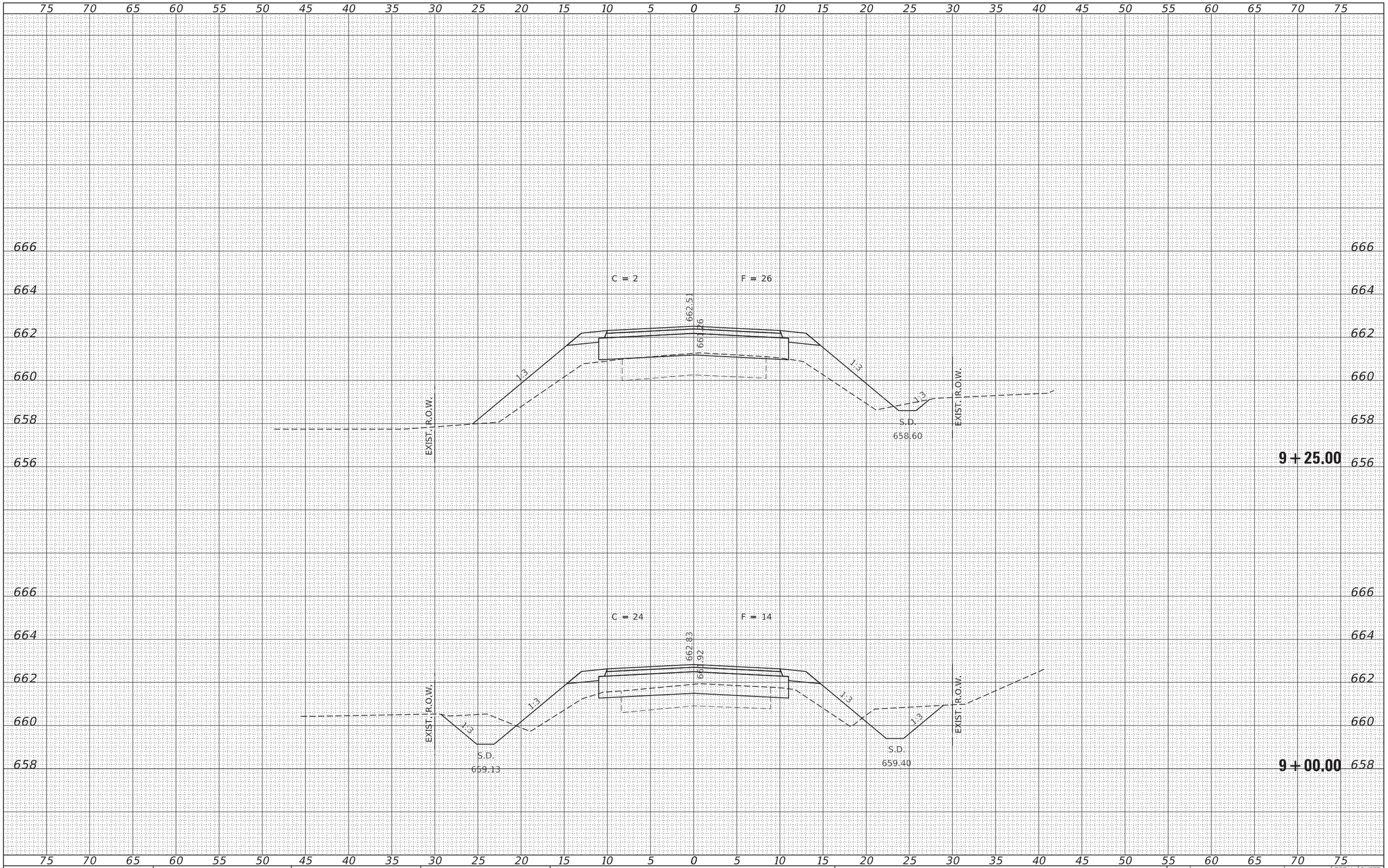
STATION CROSS SECTIONS

SCALE: 5H:2V | SHEET NO. 2 OF 9 SHEETS | STA. 8+00.00 TO STA. 8+50.00

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
244	18-29131-00-BR	LIVINGSTON	25	18
UNION ROAD DISTRICT		CONTRACT NO. 87774		
	ILLINOIS	FED. AID PROJECT IROF (397)		

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 = 190487-shl-xssheets.dgn	USER NAME = jfrazee	DESIGNED - J.W.F.	REVISED -
		DRAWN - T.W.K.	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - S.W.M.	REVISED -
	PLOT DATE = 12/14/2021	DATE - 11/17/2021	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
LIVINGSTON COUNTY HIGHWAY DEPARTMENT

STATION CROSS SECTIONS

SCALE: 5H:2V | SHEET NO. 3 OF 9 SHEETS | STA. 9+00.00 TO STA. 9+25.00

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
244	18-29131-00-BR	LIVINGSTON	25	19
UNION ROAD DISTRICT		CONTRACT NO. 87774		
	ILLINOIS	FED. AID PROJECT IROF (397)		

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

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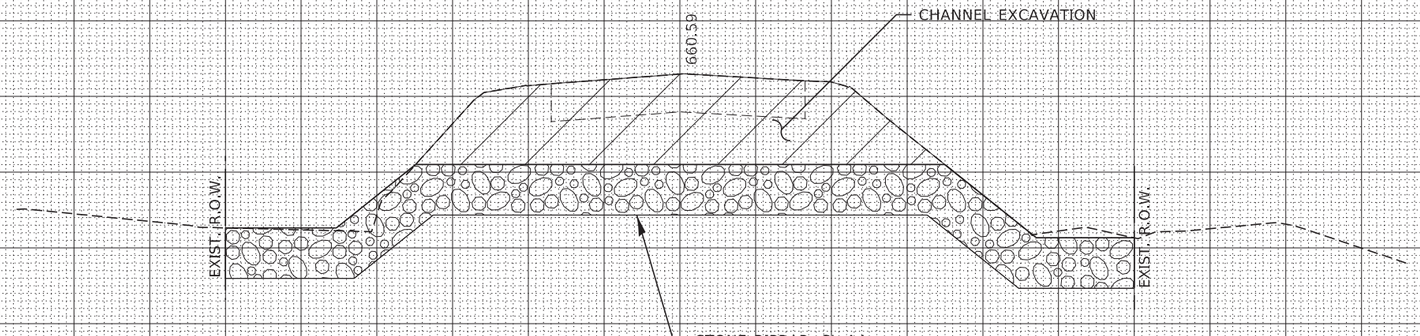
664 662 660 658 656



9 + 75.00

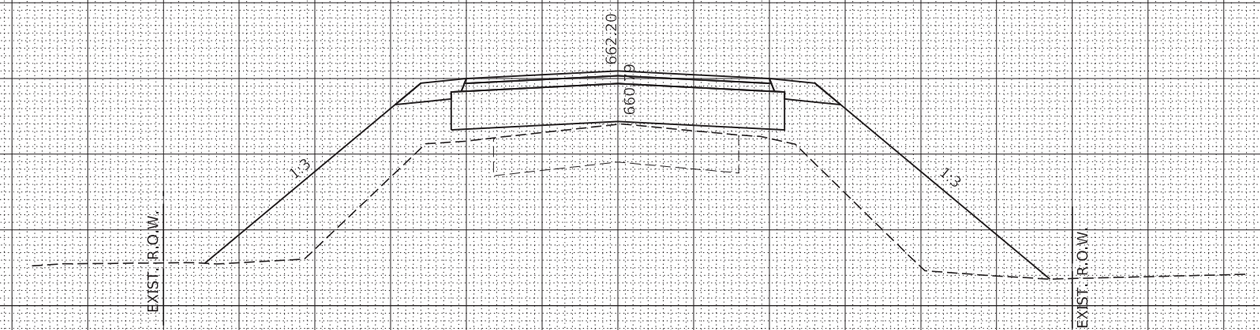
9 + 70.84

BK. SOUTH ABUTMENT

AHEAD C = 0 F = 0

BACK C = 0 F = 57

C = 0 F = 57



9 + 50.00

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

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

FILE NAME = 190487-sht-xssheets.dgn	USER NAME = jfrazee	DESIGNED - J.W.F.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC.		DRAWN - T.W.K.	REVISED -
3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703	PLOT SCALE = $SCALE$	CHECKED - S.W.M.	REVISED -
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT DATE = 12/14/2021	DATE - 11/17/2021	REVISED -

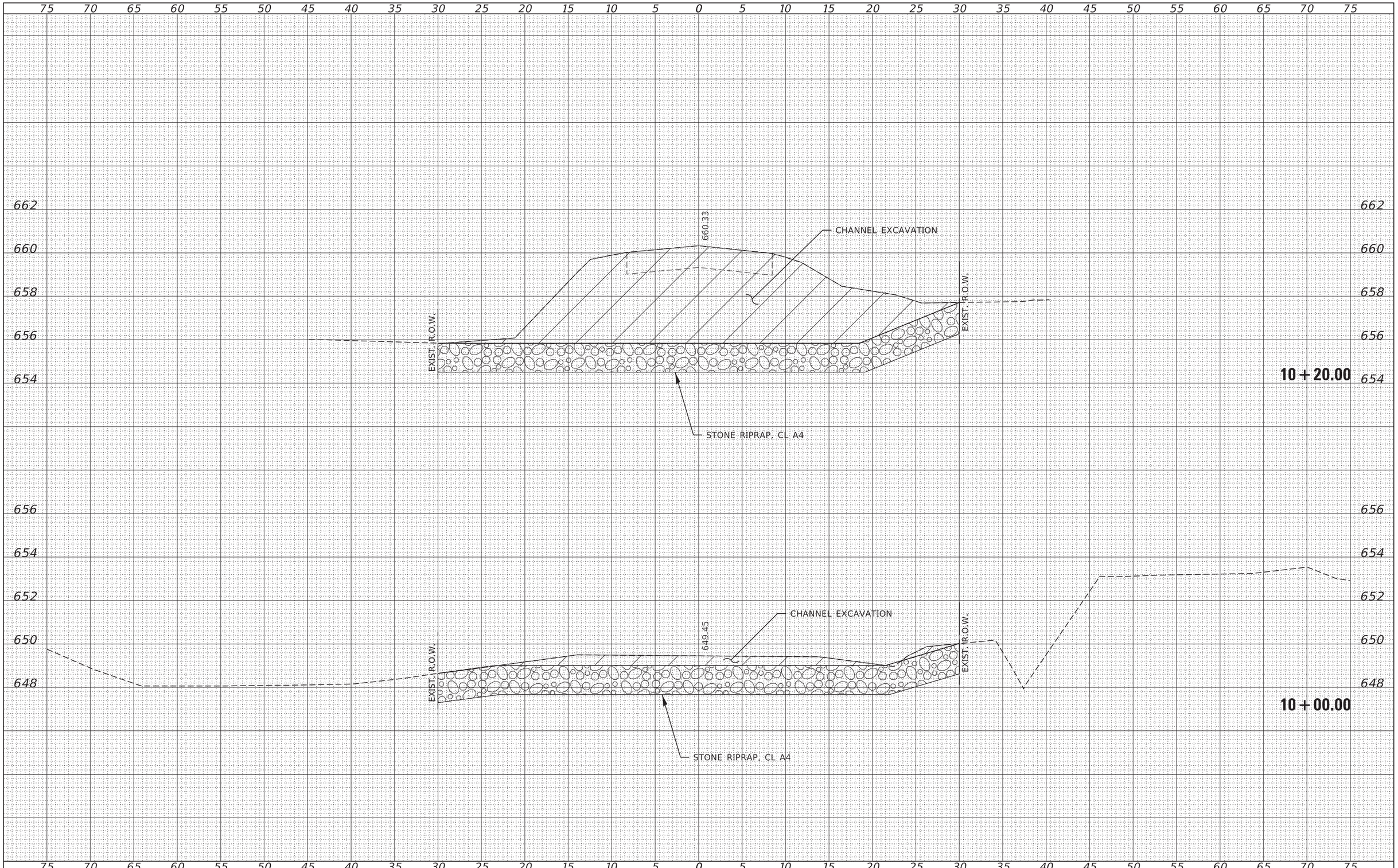
STATE OF ILLINOIS
LIVINGSTON COUNTY HIGHWAY DEPARTMENT

STATION CROSS SECTIONS

SCALE: 5H:2V | SHEET NO. 4 OF 9 SHEETS | STA. 9+50.00 TO STA. 9+75.00

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
244	18-29131-00-BR	LIVINGSTON	25	20
UNION ROAD DISTRICT		CONTRACT NO. 87774		
	ILLINOIS	FED. AID PROJECT IROF (397)		

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 = 190487-sht-xssheets.dgn	USER NAME = jfrazee	DESIGNED - J.W.F.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC.		DRAWN - T.W.K.	REVISED -
3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703	PLOT SCALE = $SCALE$	CHECKED - S.W.M.	REVISED -
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT DATE = 12/14/2021	DATE - 11/17/2021	REVISED -

STATE OF ILLINOIS
LIVINGSTON COUNTY HIGHWAY DEPARTMENT

STATION CROSS SECTIONS

SCALE: 5H:2V | SHEET NO. 5 OF 9 SHEETS | STA. 10+00.00 TO STA. 10+25.00

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
244	18-29131-00-BR	LIVINGSTON	25	21
UNION ROAD DISTRICT		CONTRACT NO. 87774		
ILLINOIS	FED. AID PROJECT IROF (397)			

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

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

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664 662 660 658 656

C = 24 F = 12

660.67
660.28

1:3 1:3

EXIST. R.O.W. EXIST. R.O.W.

2.0

S.D. 656.60

S.D. 656.95

10 + 75.00

C = 19 F = 14

660.93
660.30

1:3 1:3

EXIST. R.O.W. EXIST. R.O.W.

2.0

S.D. 656.40

10 + 50.00

10 + 25.16 BK. NORTH ABUTMENT

AHEAD C = 19 F = 14
BACK C = 0 F = 0

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	PLOT DATE = 12/14/2021	DATE - 11/17/2021	REVISED -

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

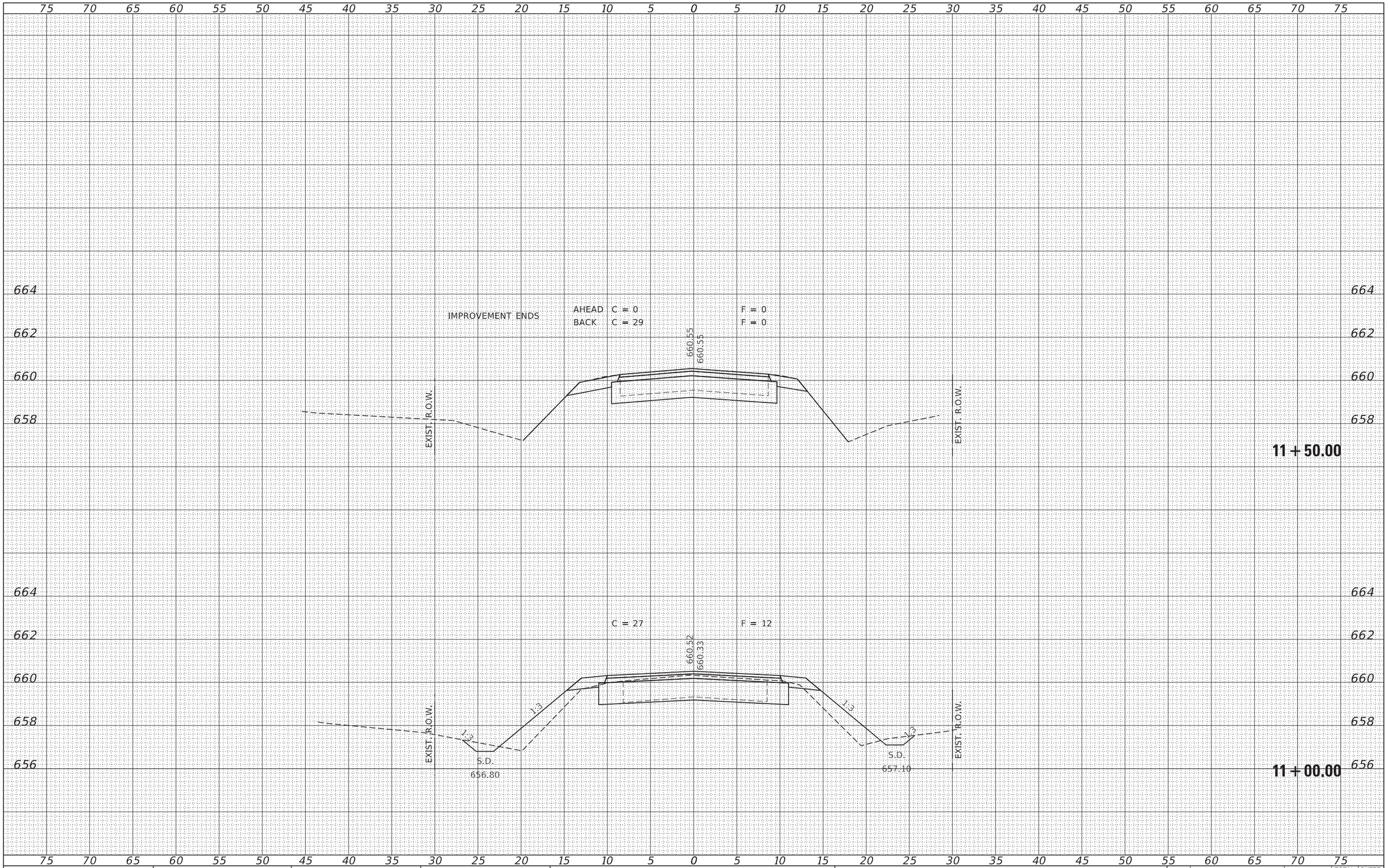
STATE OF ILLINOIS
LIVINGSTON COUNTY HIGHWAY DEPARTMENT

STATION CROSS SECTIONS

SCALE: 5H:2V | SHEET NO. 6 OF 9 SHEETS | STA. 10+50.00 TO STA. 10+75.00

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
244	18-29131-00-BR	LIVINGSTON	25	22
UNION ROAD DISTRICT		CONTRACT NO. 87774		
ILLINOIS	FED. AID PROJECT IROF (397)			

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



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

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		DRAWN - T.W.K.	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - S.W.M.	REVISED -
	PLOT DATE = 12/14/2021	DATE - 11/17/2021	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
LIVINGSTON COUNTY HIGHWAY DEPARTMENT

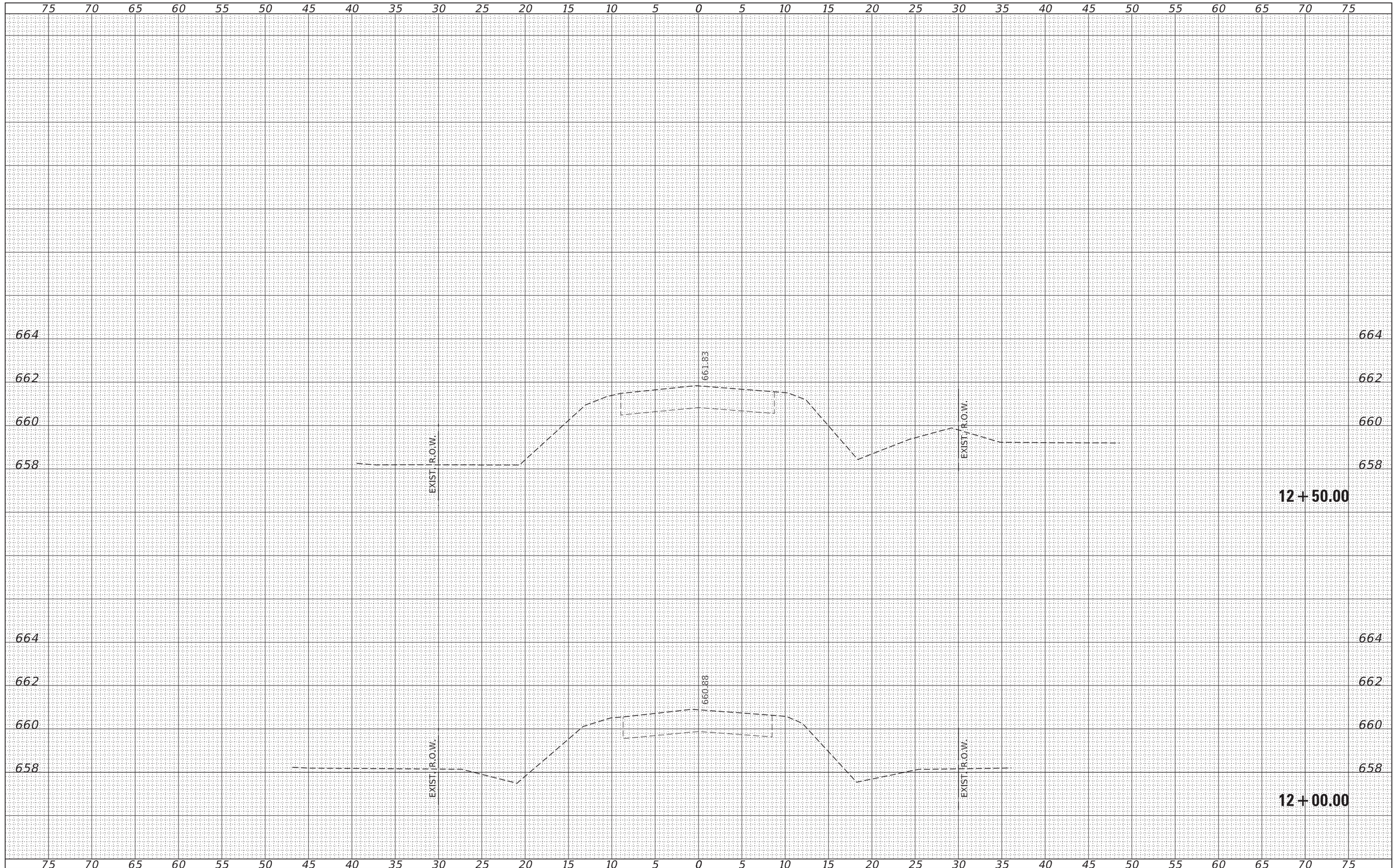
STATION CROSS SECTIONS

SCALE: 5H:2V | SHEET NO. 7 OF 9 SHEETS | STA. 11+00.00 TO STA. 11+50.00

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
244	18-29131-00-BR	LIVINGSTON	25	23
UNION ROAD DISTRICT		CONTRACT NO. 87774		
	ILLINOIS	FED. AID PROJECT IROF (397)		

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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HAMPTON, LENZINI AND RENWICK, INC.		DRAWN - T.W.K.	REVISED -
3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703	PLOT SCALE = $SCALE$	CHECKED - S.W.M.	REVISED -
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT DATE = 12/14/2021	DATE - 11/17/2021	REVISED -

STATE OF ILLINOIS
LIVINGSTON COUNTY HIGHWAY DEPARTMENT

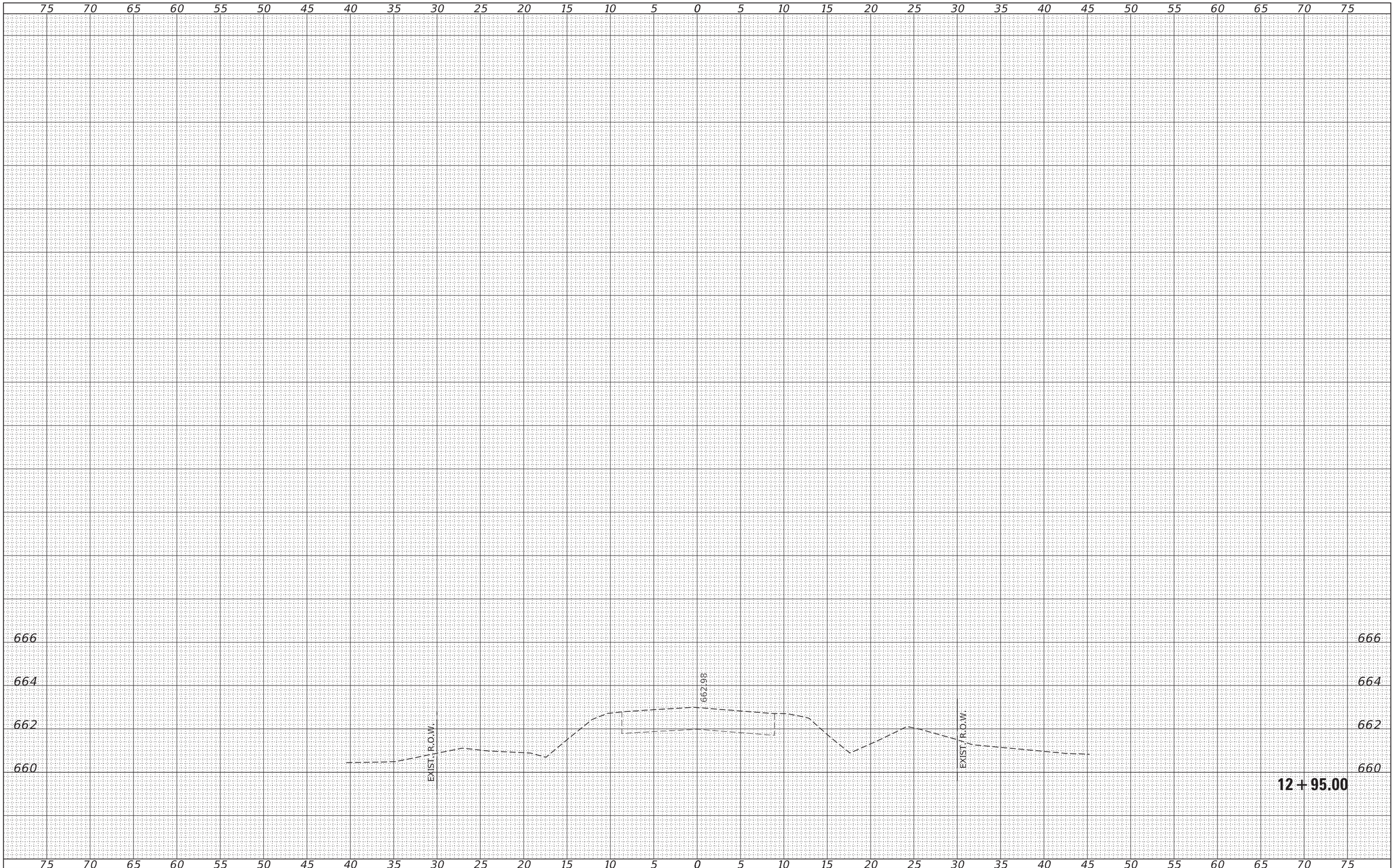
STATION CROSS SECTIONS

SCALE: 5H:2V | SHEET NO. 8 OF 9 SHEETS | STA. 12+00.00 TO STA. 12+50.00

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
244	18-29131-00-BR	LIVINGSTON	25	24
UNION ROAD DISTRICT		CONTRACT NO. 87774		
ILLINOIS	FED. AID PROJECT IROF (397)			

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 = 190487-sht-xssheets.dgn	USER NAME = jfrazee	DESIGNED - J.W.F.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC.		DRAWN - T.W.K.	REVISED -
3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703	PLOT SCALE = $SCALE$	CHECKED - S.W.M.	REVISED -
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT DATE = 12/14/2021	DATE - 11/17/2021	REVISED -

STATE OF ILLINOIS
LIVINGSTON COUNTY HIGHWAY DEPARTMENT

STATION CROSS SECTIONS

SCALE: 5H:2V | SHEET NO. 9 OF 9 SHEETS | STA. 12+95.00 TO STA. 12+95.00

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
244	18-29131-00-BR	LIVINGSTON	25	25
UNION ROAD DISTRICT		CONTRACT NO. 87774		
	ILLINOIS	FED. AID PROJECT IROF (397)		