ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 70	18-17119 -02-BR	LIVINGSTON	29	1
FED. ROAD DIST NO.		ILLINOIS	CONTRACT NO 87773	

03/11/2022 Letting Item 148

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLANS FOR PROPOSED
SURFACE TRANSPORTATION PROGRAM – BRIDGE

PROJECT NQQE (685)
SECTION 18–17119–02–BR
NEWTOWN ROAD DISTRICT
LIVINGSTON COUNTY
T.R. 70 / 1000E ROAD
PROPOSED STRUCTURE NO. 053–4228
C–93–008–22
LUCAS BRIDGE

INDEX OF SHEETS

HIGHWAY STANDARDS:

000001-08	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
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
BLR 27-1	TRAFFIC BARRIER TERMINAL TYPE 5A

UTILITIES

COMED
PUBLIC RELOCATION DEPARTMENT
ONE LINCOLN CENTER, SUITE 600
OAKBROOK TERRACE, IL 60181

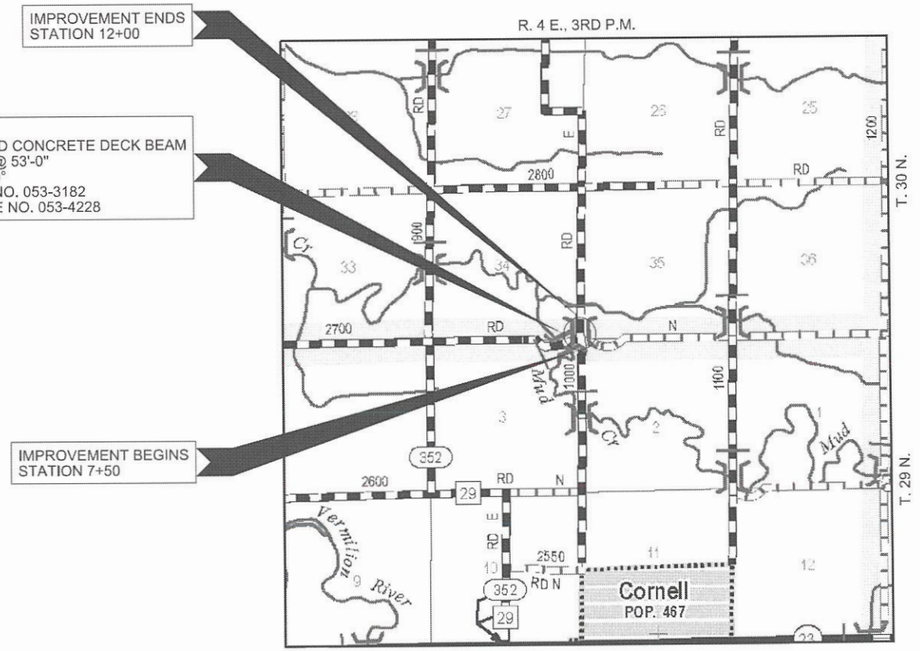
NICOR GAS
1305 MARTIN LUTHER KING DR.
BLOOMINGTON, IL 61701

CONSOLIDATED COMMUNINICATIONS
121 SOUTH 17TH ST.
MATTOON, IL 61938

IMPROVEMENT ENDS STATION 12+00

STA. 9+98
PRECAST PRESTRESSED CONCRETE DECK BEAM BRIDGE. SINGLE SPAN @ 53'-0"
28'-0" RDWY.; SKEW = 10°
EXISTING STRUCTURE NO. 053-3182
PROPOSED STRUCTURE NO. 053-4228

IMPROVEMENT BEGINS STATION 7+50



LOCATION MAP

APPROXIMATE SCALE: 0 ½ MILE

NET LENGTH OF SECTION = 450 FEET = 0.085 MILES

N

LOCATION OF SECTION INDICATED THUS: –

ILLINOIS DEPARTMENT OF TRANSPORTATION

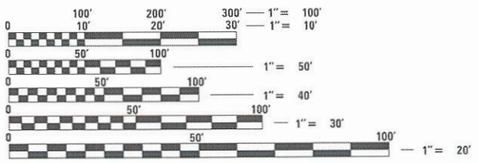
APPROVED 12/22 2021
Clay Metcalf
COUNTY ENGINEER

APPROVED 12/22 2021
TOWNSHIP COMMISSIONER

PASSED 1/4 2022
Steve Cheyney
DISTRICT THREE ENGINEER OF LOCAL ROADS & STREETS

Releasing For Bid Based on Limited Review 1/4 2022
REGION TWO ENGINEER

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



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:	200 ADT

WARNING

CALL JULIE TOLL FREE 1-800-892-0123

CALL 811 BEFORE YOU DIG

DIG NO: A2612945

DATE: 12/09/2021
ILLINOIS LICENSED PROFESSIONAL ENGINEER
062-060511
STATE OF ILLINOIS
EXPIRES: 11/30/2022

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: 19.0486.130 DATE: 12/09/2021

CONTRACT NO. 87773 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	360
	20300100	CHANNEL EXCAVATION	CU YD	115
^	20400800	FURNISHED EXCAVATION	CU YD	55
	28000305	TEMPORARY DITCH CHECKS	FOOT	8
	28000400	PERIMETER EROSION BARRIER	FOOT	415
	28100107	STONE RIPRAP, CLASS A4	SQ YD	320
	28200200	FILTER FABRIC	SQ YD	320
	35100100	AGGREGATE BASE COURSE, TYPE A	TON	663
	40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	2,025
	40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	200
	40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	125
	40604050	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N50	TON	70
	48101200	AGGREGATE SHOULDERS, TYPE B	TON	180
^	50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
	50300225	CONCRETE STRUCTURES	CU YD	26.2
^	50400405	PRECAST PRESTRESSED CONCRETE DECK BEAMS (21" DEPTH)	SQ FT	1,484
	50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	3,300
*	50900205	STEEL RAILING, TYPE S1	FOOT	112
	51201400	FURNISHING STEEL PILES HP10X42	FOOT	245
	51202305	DRIVING PILES	FOOT	245
	51203400	TEST PILE STEEL HP10X42	EACH	1
	51204650	PILE SHOES	EACH	8
	51500100	NAME PLATES	EACH	1
	60100060	CONCRETE HEADWALLS FOR PIPE DRAINS	EACH	4
	60146304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	118
*	63100075	TRAFFIC BARRIER TERMINAL, TYPE 5A	EACH	4
*	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4
	67100100	MOBILIZATION	L SUM	1
*	72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	4
^	X2070302	POROUS GRANULAR EMBANKMENT, SPECIAL	TON	130
^	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 APRIL 1, 2016", (HERE IN AFTER REFERRED TO AS THE STANDARD SPECIFICATIONS; THE LATEST EDITION OF THE "ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS"; THE DETAILS IN THE PLANS AND THE "SPECIAL PROVISIONS" INCLUDED IN THE DOCUMENTS.

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 WILL 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) TREES SHALL NOT BE CLEARED BETWEEN APRIL 1 AND SEPTEMBER 30. TREE PRUNING FOR SAFETY AND EQUIPMENT CLEARANCE MAY BE COMPLETED PER SECTION 201 OF THE STANDARD SPECIFICATIONS AND AS APPROVED BY THE ENGINEER. THE COST OF PRUNING WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE CONTRACT.

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 70 / 1000 E							
STA. 7+50.00 TO STA. 9+70.82	229		25.00%	100.00%	172	172	0
STA. 9+70.82 TO STA. 10+25.18		115	25.00%	70.00%	60		60
STA. 10+25.18 TO STA. 12+00.00	129		25.00%	100.00%	97	212	-115
TOTAL	358	115			329	384	-55
USE	360	115					55

FURNISHED EXCAVATION 55 CU YDS

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

LOCATIONS(S)	TR 70 / 1000 E	TR 70 / 1000 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

GUARDRAIL SCHEDULE

LOCATION	TRAFFIC BARRIER TERMINAL, TYPE 5A	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	TERMINAL MARKER - DIRECT APPLIED
TR 70 / 1000 E	63100075	63100167	72501000
SEE SHEET 6 FOR LAYOUT	EACH	EACH	EACH
LT. STA. 9+09.39 TO LT. STA. 10+91.55	2	2	2
RT. STA. 9+04.45 TO RT. STA. 10+86.61	2	2	2
TOTAL	4	4	4

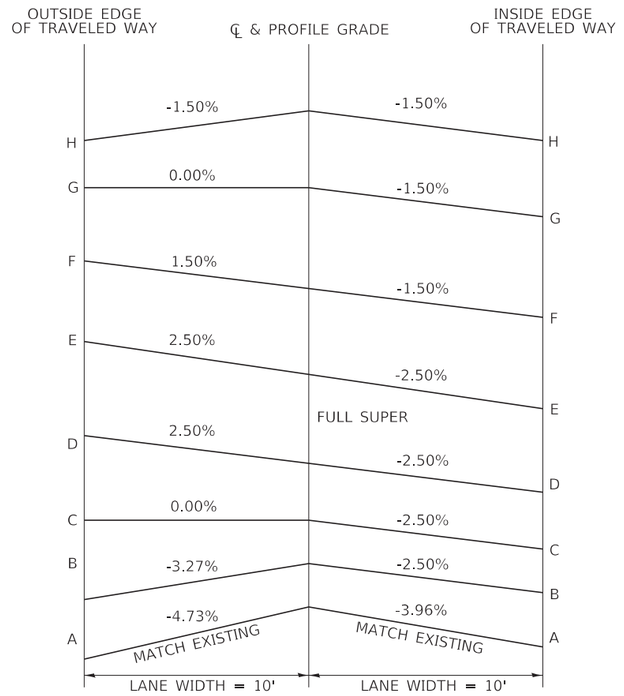
NOTE: SEE SHEET 6 FOR STATIONING AND LAYOUT

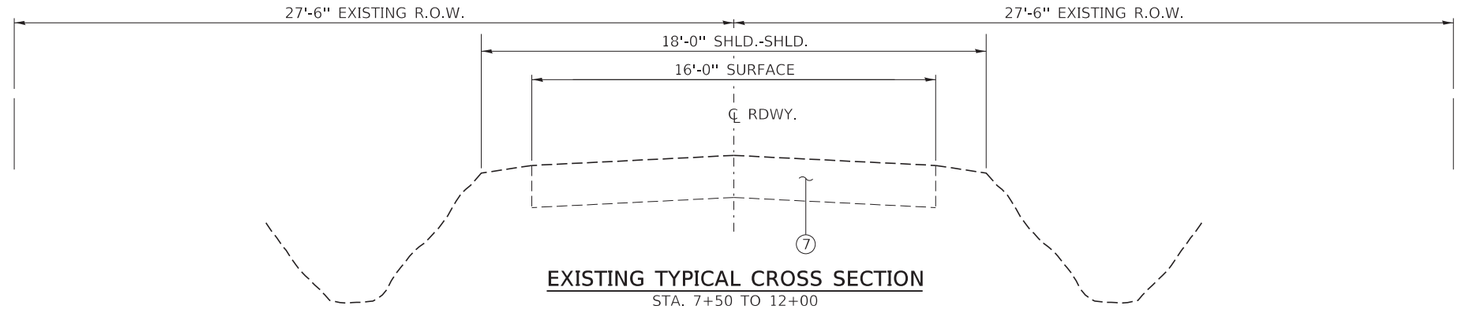
EROSION CONTROL SCHEDULE

LOCATION	TEMPORARY DITCH CHECKS	PERIMETER EROSION BARRIER
TR 70 / 1000 E	28000305	28000400
	FOOT	FOOT
LT.STA. 9+25	8	
RT. STA. 8+00 TO STA. 9+65		165
LT. STA. 10+30 TO STA. 11+50		120
RT. STA. 10+20 TO STA. 11+50		130
TOTAL	8	415

ROADWAY SCHEDULE

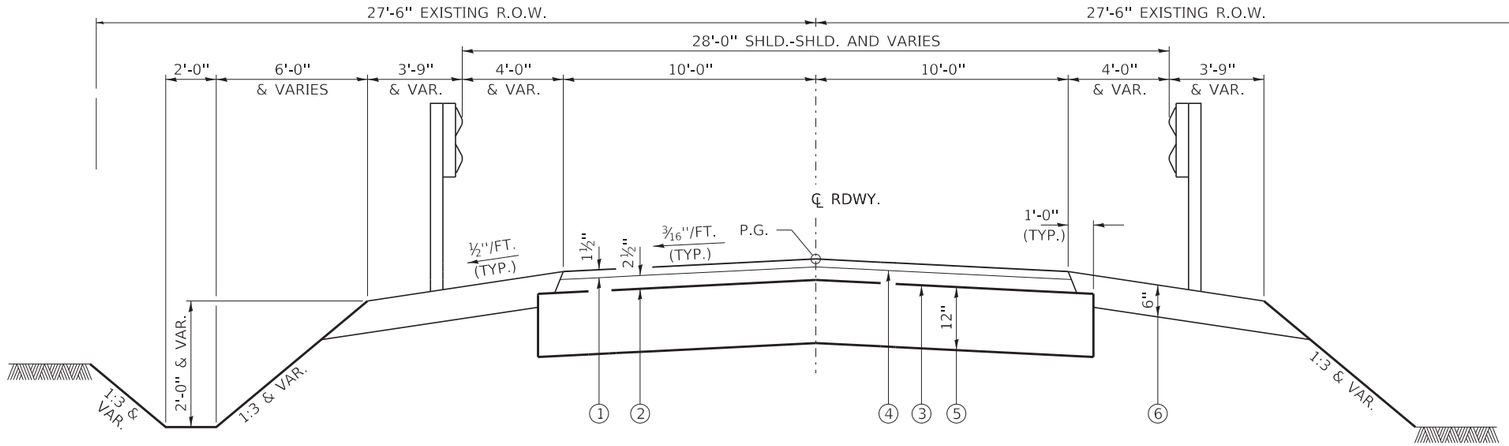
LOCATION	AGGREGATE BASE COURSE, TYPE B	BITUMINOUS MATERIALS (PRIME COAT)	BITUMINOUS MATERIALS (TACK COAT)	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N50	AGGREGATE SHOULDERS, TYPE B
	35101400	40600275	40600290	40603080	40604050	48101200
TR 70 / 1000 E	TON	POUND	POUND	TON	TON	TON
STA. 7+50.00 TO STA. 9+70.82	371	1,150	114	71	40	100
STA. 10+25.18 TO STA. 12+00.00	292	875	86	54	30	80
TOTAL	663	2025	200	125	70	180





EXISTING TYPICAL CROSS SECTION

STA. 7+50 TO 12+00



SUGGESTED CUT SECTION
CONSTRUCT AS SHOWN IN
STATION CROSS SECTIONS

PROPOSED TYPICAL CROSS SECTION

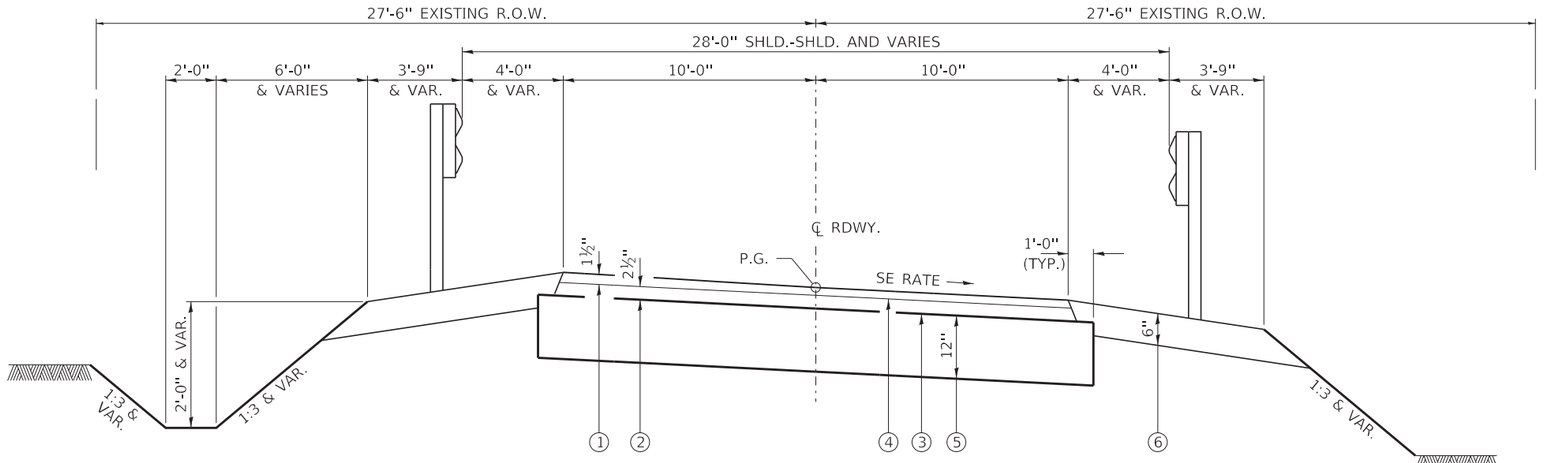
STA. 10+90.80 TO 12+00

SUGGESTED FILL SECTION
CONSTRUCT AS SHOWN IN
STATION CROSS SECTIONS

CURVE 1 SUPERELEVATION TRANSITION			
LOCATION	STATION	CROSS SLOPE	
		LEFT	RIGHT
A	7+50.00	-4.73%	-3.96%
B	7+70.19	-3.27%	-2.50%
C	8+15.42	0.00%	-2.50%
D	8+50.00	2.50%	-2.50%
FULL SUPER			
E	10+30.00	2.50%	-2.50%
F	10+45.20	1.50%	-1.50%
G	10+68.00	0.00%	1.50%
H	10+90.80	-1.50%	-1.50%

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+50 TO 10+90.80

SUGGESTED FILL SECTION
CONSTRUCT AS SHOWN IN
STATION CROSS SECTIONS

FILE NAME = 190486-sht-typsections.dgn	USER NAME = rhosick	DESIGNED - J.W.F.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC. 3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703		DRAWN - T.D.S.	REVISED -
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT SCALE = $SCALE$	CHECKED - S.W.M.	REVISED -
	PLOT DATE = 12/22/2021	DATE - 11/17/21	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.
70	18-17119-02-BR	LIVINGSTON	29	4
NEWTOWN ROAD DISTRICT		CONTRACT NO. 87773		
	ILLINOIS FED. AID PROJECT NQQE (685)			

CAROLYN L. LUCAS
SE¼, SEC 34, T. 30 N., R. 4 E., 3RD P.M.

KATHY L. GRAGSON
SE¼, SEC 34, T. 30 N., R. 4 E., 3RD P.M.

EFREN G. OROZCO
SW¼, SEC 35, T. 30 N., R. 4 E., 3RD P.M.

CURVE DATA
PI Sta. 8+80.88
Δ = 9° 22' 36" (RT)
D = 3° 02' 52"
T = 154.18'
R = 1,880.00'
L = 307.67'
E = 6.31'
PC STA. 7+26.70
PT STA. 10+34.37
S.E. = 2.5%
S.E. TRANS:
STA. 7+50 TO STA. 8+50
STA. 10+30 TO STA. 10+90.80

STA. 9+98
PRECAST PRESTRESSED CONCRETE DECK BEAM BRIDGE
SINGLE SPAN @ 53'-0", 28'-0" ROADWAY; SKEW = 10°
S.E. = 2.5%
PROPOSED SN 053-4228

STA. 10+56
REMOVE F.E.
EXISTING RCP TO BE REMOVED.
COST INCLUDED IN EARTH EXCAVATION

CP2
SEC. COR ¼" IP
SEC. COR ¾" IP
36.58'
88.78'
89.54'

P.O.T. STA. 6+48.57
SET MAG NAIL
N. 1585219.248
E. 872434.418

CP3
MAG NAIL IN FENCE POST
IRON PIN W/CAP
0.78'
36.24'
38.37'
52.67'

P.O.T. STA. 13+50.10
SET MAG NAIL
N. 1585918.931
E. 872409.259

MAG NAIL IN FENCE POST
MAG NAIL IN PP
MAG NAIL IN PP
28.25'
31.75'
33.40'

WEST ¼ COR SEC 35
FOUND RR SPIKE
N. 1587963.189
E. 872446.353

0 20' 40
GRAPHIC SCALE

TIMBER
GRASS
TRIBUTARY
MUD CREEK
CONSTRUCTION LIMITS
℄ PROPOSED IMPROVEMENT
PERIMETER EROSION BARRIER
10" RCCP
+56 F.E.
+85 F.E.
BM#1
BM#2
BM#3
CP1
PI STA. 8+81
PT STA. 10+34.37
TR 70 / 1000E RD
OIL AND CHIP SURFACE
27.5' R.O.W.
27.5' EXIST.
20'
4'
80°
PC STA. 7+26.70
U.G. CABLE / RETIRED IN PLACE
WEST LINE 35-30-4
SOUTH LIINE 35-30-4
IMPROVEMENT BEGINS STATION 7+50
IMPROVEMENT ENDS STATION 12+00
12" CMP

T. 30 N. R. 4 E. 34 35 3 2

EXISTING STRUCTURE NO. 053-3182
STATION 10+00 - TWO SPAN STEEL BEAM BRIDGE.
WITH CONCRETE SLAB ON CLOSED CONCRETE ABUTMENTS AND WINGWALLS.
24.8' BK.-BK. ABUTS; 23.3' o.-o. DECK

PLAN
DATE / BY
SURVEYED
PLOTTED
DRAWN / CHECKED
B.M. NOTED
STRUCTURE NOTATNS CHKD
NOTE BOOK
NO.
CADD FILE NAME
RT. OF WAY CHECKED
ALIGNMENT CHECKED

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

BM#2 - BENCH TIE IN POWER POLE
27' RT., STA. 9+12
ELEV. 611.49

BM#1 - CROSS NOTCH IN "□" ON S.W. BRG. CURB
12' LT., STA. 9+87
ELEV. 613.00

BM#3 - BENCH TIE IN POWER POLE
27' RT., STA. 11+03
ELEV. 611.37

VPI STA. 8+00
ELEV. 615.69
K = 228
100' V.C.

VPI STA. 9+20
ELEV. 613.70
K = 54
90' V.C.

VPI STA. 11+55
ELEV. 613.70
K = 75
90' V.C.

PROPOSED ℄ GRADE
EXISTING ℄ GRADE
-1.22%
0.60%
-1.66%
-0.80%
-2.80%
+0.00%
+0.45%
+0.40%
+1.20%
+1.20%
614.40 LT.
SPECIAL DITCH LT.
613.80 LT.
613.40 LT.
612.00 LT.
610.35 RT.
610.0 LT.
610.20 LT.
610.80 RT. & LT.
SPECIAL DITCH LT.
SPECIAL DITCH RT.
100 YEAR H.W. ELEV. 612.2
15 YEAR H.W. ELEV. 610.7
CHANNEL EXCAVATION
STONE RIPRAP, CLASS A4
℄ ELEV. 602.2
* - 2H:1V @ RT. ∠'s

	7+00	7+50	8+00	8+50	9+00	9+50	10+00	10+50	11+00	11+50	12+00	12+50	13+00
	616.6	616.3 616.30	615.7 615.64	614.9 614.86	614.0 614.09	613.2 613.72	613.2 613.70	613.2 613.70	613.3 613.70	613.6 613.81	614.2 614.24	615.0	616.0

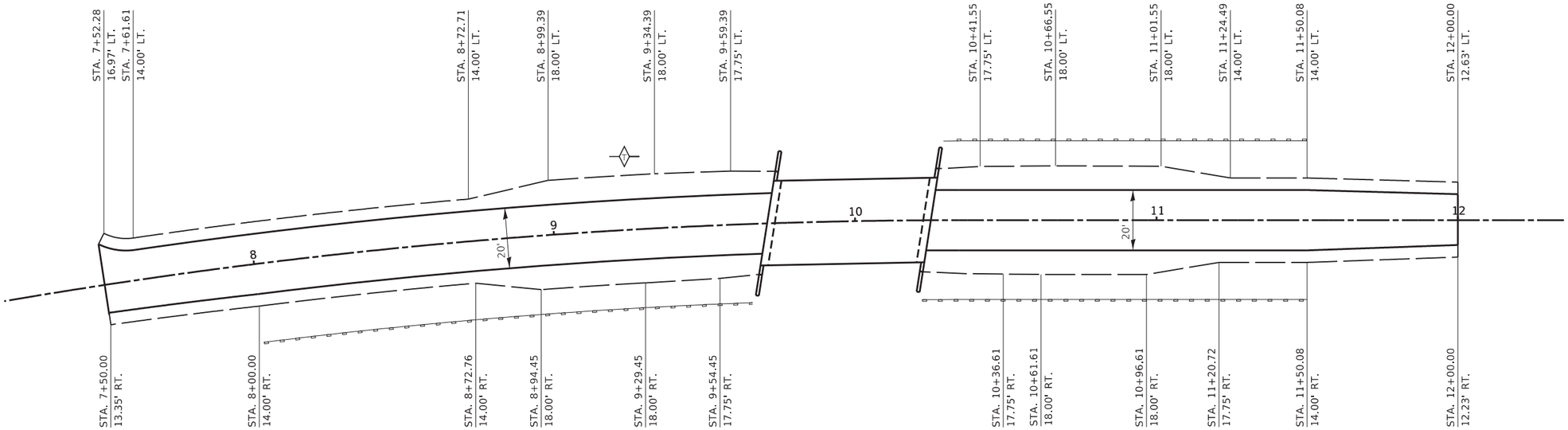
FILE NAME = 190486-sht-planprf.dgn	USER NAME = rhoslck	DESIGNED - S.A.A.	REVISED -	
HAMPTON, LENZINI AND RENWICK, INC.		DRAWN - T.W.K.	REVISED -	
3065 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703	PLOT SCALE = $SCALE$	CHECKED - J.W.F.	REVISED -	
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT DATE = 12/22/2021	DATE - 11/17/21	REVISED -	

STATE OF ILLINOIS
LIVINGSTON COUNTY HIGHWAY DEPARTMENT

PLAN & PROFILE
LUCAS BRIDGE

SCALE: 5V:20H | SHEET NO. 1 OF 1 SHEETS | STA. 7+00.00 TO STA. 13+00.00

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	18-17119-02-BR	LIVINGSTON	29	5
NEWTOWN ROAD DISTRICT		CONTRACT NO. 87773		
	ILLINOIS FED. AID PROJECT NQQE (685)			

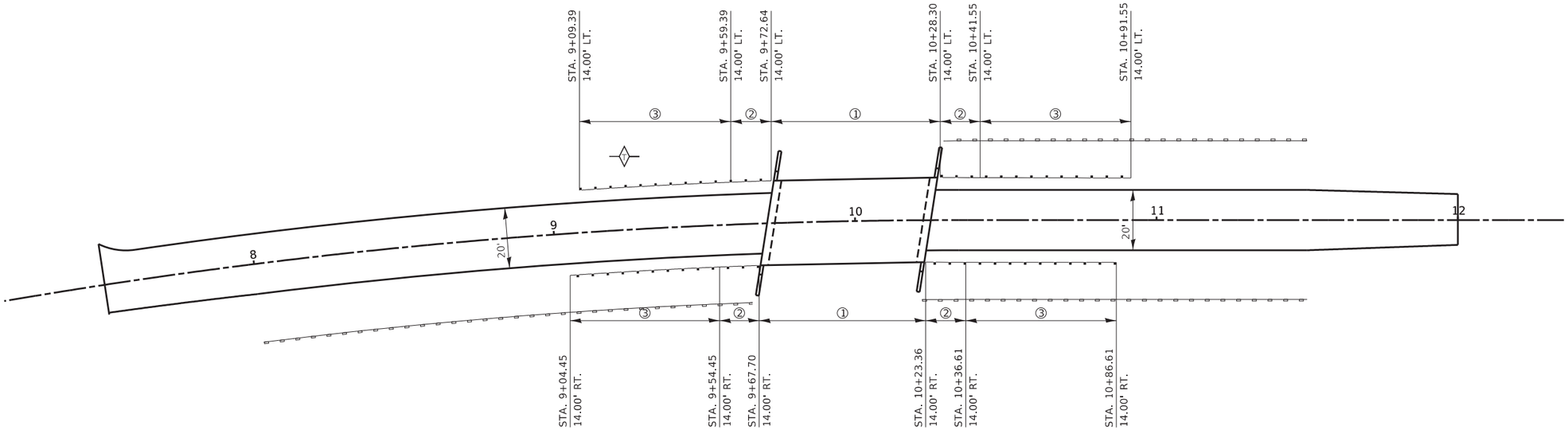


SHOULDER LAYOUT

N

0 20' 40'

GRAPHIC SCALE



GUARDRAIL LAYOUT

LEGEND

① STEEL RAILING, TYPE S-1
② TBT TY 5A
③ TBT TY 1, (SPECIAL) TANGENT

FILE NAME = 190486-sht-shdgrdrl.dgn	USER NAME = rhosick	DESIGNED - J.W.F.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC.		DRAWN - R.D.H.	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 = 12/22/2021	DATE - 11/17/21	REVISED -

STATE OF ILLINOIS
LIVINGSTON COUNTY HIGHWAY DEPARTMENT

SHOULDER AND GUARDRAIL LAYOUT

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

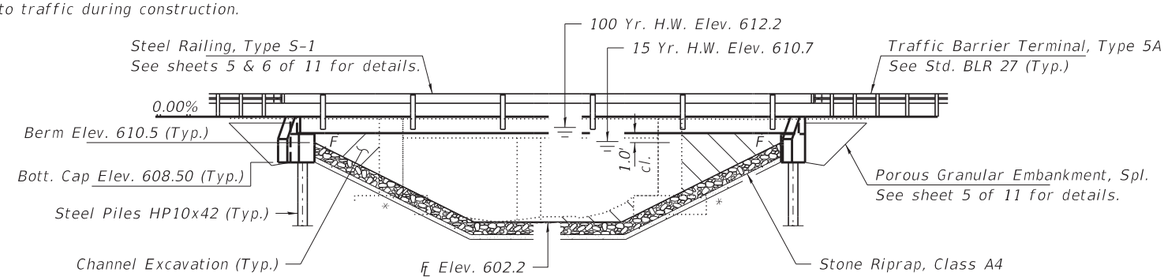
T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	18-17119-02-BR	LIVINGSTON	29	6
NEWTOWN ROAD DISTRICT		CONTRACT NO. 87773		
	ILLINOIS FED. AID PROJECT NQQE (685)			

BENCHMARK: Cross Notch in "□" on SW Brg. Curb, 12' Lt., Sta. 9+87, Elev. 613.00

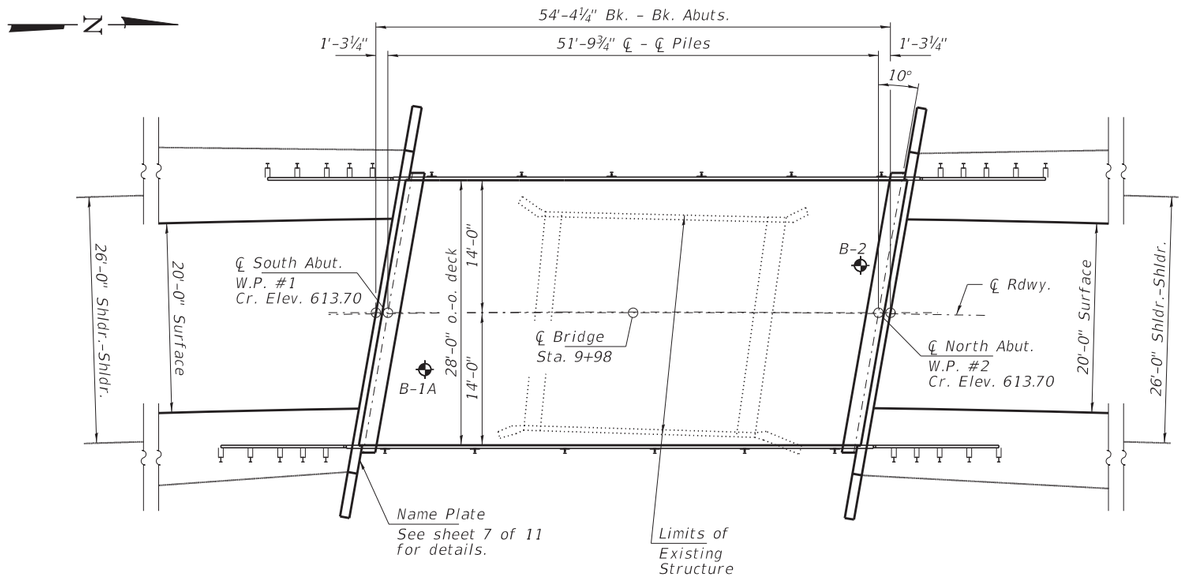
EXISTING STRUCTURE NO. 053-3182: Sta. 10+00 – Two span steel beam bridge with concrete slab on closed concrete abutments, and wingwalls.
24.8' bk.-bk. abuts.; 23.3' o.-o. deck

Structure closed to traffic during construction.

No Salvage.



ELEVATION



PLAN

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.

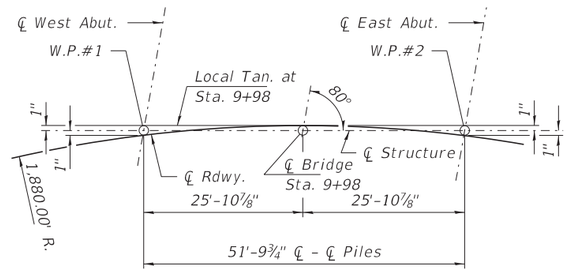
Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions.

All bars to be epoxy coated.

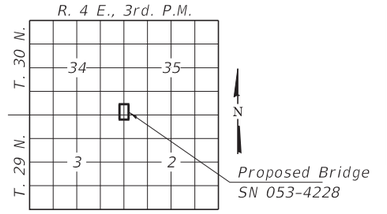
Excavation required to construct the Abutments shall be included in the cost of Concrete Structures. No additional compensation will be allowed for Structure Excavation.

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



OFFSET SKETCH



LOCATION SKETCH

BUILT 202_ BY
LIVINGSTON COUNTY
SEC. 18-17119-02-BR
NEWTOWN ROAD DISTRICT
STR. NO. 053-4228
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}) = 0.075g
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.13g
Soil Site Class = C

WATERWAY INFORMATION

Drainage Area = 3.2 Sq. Mi.
Existing Low Grade Elev. 613.2 at Sta. 9+50
Proposed Low Grade Elev. 613.7 at Sta. 9+50

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	676	170	240	610.3	0.7	0.1	611.0	610.4
Design	15	780	180	260	610.7	0.7	0.1	611.4	610.8
Base	100	1,290	190	310	612.2	1.2	0.1	613.4	612.3
Scour Check	200	1,490	190	310	612.7	1.2	0.2	613.9	612.9
Max. Calc.	500	1,760	190	310	613.2	1.0	0.6	614.2	613.8

10 Year Velocity through Existing Bridge = 4.0 fps
10 Year Velocity through Proposed Bridge = 2.8 fps

DESIGN SCOUR ELEVATION TABLE

Event/Limit State	Design Scour Elev. (ft.) S. Abut.	Design Scour Elev. (ft.) N. Abut.	Item 113
Q100	608.5	608.5	8
Q200	608.5	608.5	
Design	608.5	608.5	
Check	608.5	608.5	

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. Meggenson 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

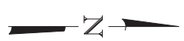
ITEM	UNIT	SUPER	SUB	TOTAL
Channel Excavation	Cu. Yd.			115
Stone Riprap, Class A4	Sq. Yd.			320
Filter Fabric	Sq. Yd.			320
Removal of Existing Structures	Each			1
Concrete Structures	Cu. Yd.		26.2	26.2
Precast Prestressed Conc. Deck Beams (21" Depth)	Sq. Ft.	1,484		1,484
Reinforcement Bars, Epoxy Coated	Pound		3,300	3,300
Steel Railing, Type S-1	Foot	112		112
Furnishing Steel Piles HP10x42	Foot		245	245
Driving Piles	Foot		245	245
Test Pile Steel HP10x42	Each		1	1
Pile Shoes	Each		8	8
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		130	130
Pipe Underdrains for Structures 4"	Foot		118	118

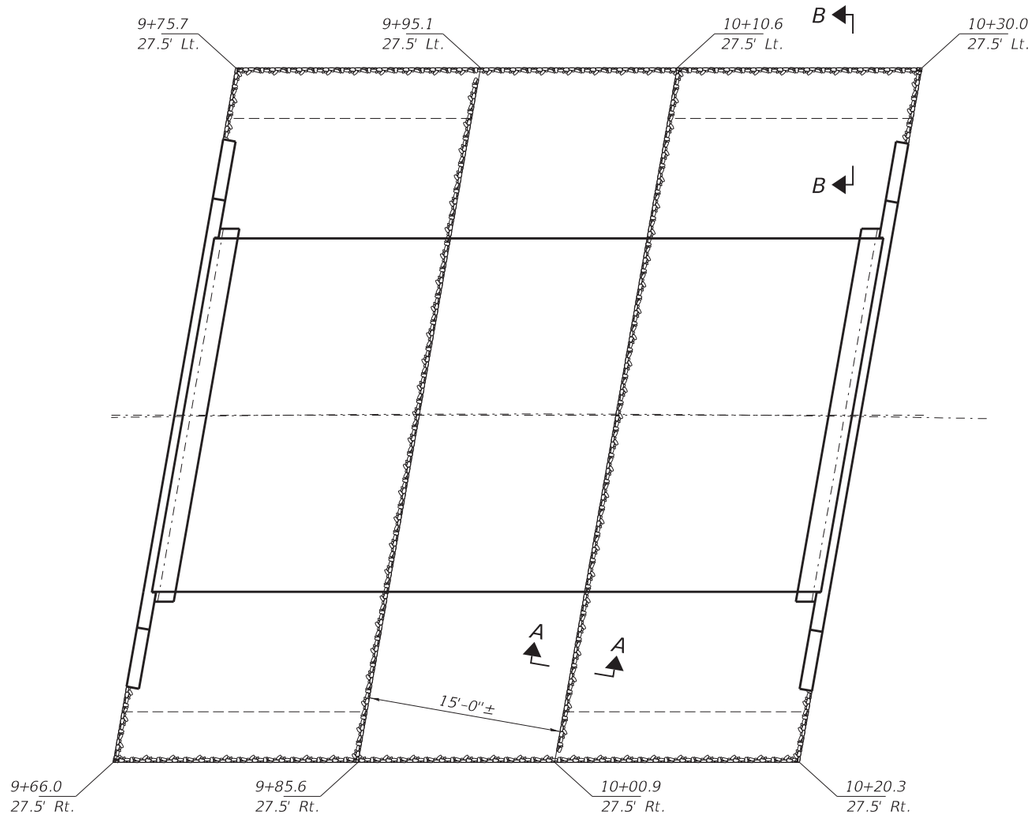
FILE NAME = 190486-shl-bridge.dgn	USER NAME = rhoslck	DESIGNED - J.W.F.	REVISED -	
HAMPTON, LENZINI AND RENWICK, INC. 3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959		CHECKED - S.W.M.	REVISED -	
	PLOT SCALE = $SCALE$	DRAWN - T.D.S.	REVISED -	
	PLOT DATE = 12/22/2021	CHECKED - S.W.M.	REVISED -	

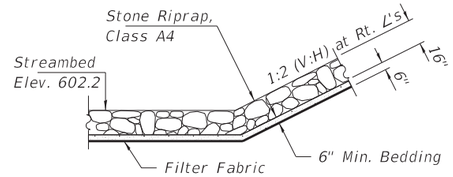
STATE OF ILLINOIS
LIVINGSTON COUNTY HIGHWAY DEPARTMENT

GENERAL PLAN & ELEVATION
STRUCTURE NO. 053-4228
SHEET NO. 1 OF 11 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	18-17119-02-BR	LIVINGSTON	29	7
NEWTOWN ROAD DISTRICT		CONTRACT NO. 87773		
	ILLINOIS FED. AID PROJECT NQQE (685)			

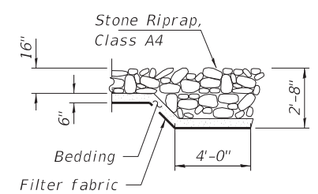






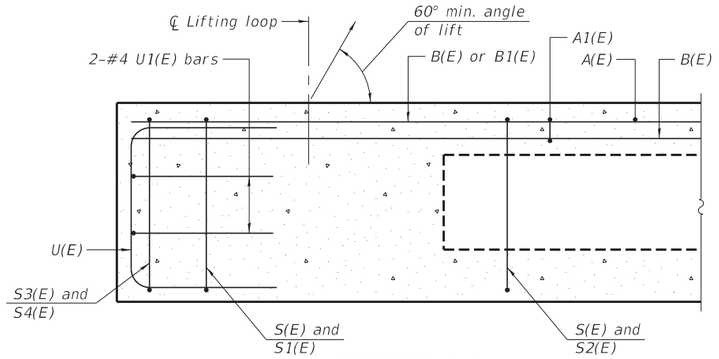
SECTION A-A

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

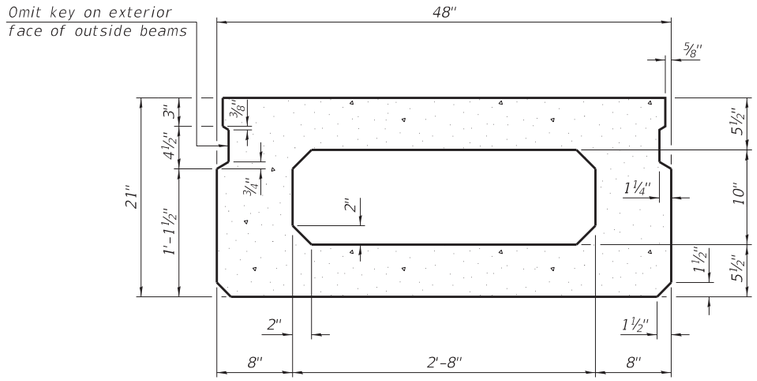


SECTION B-B

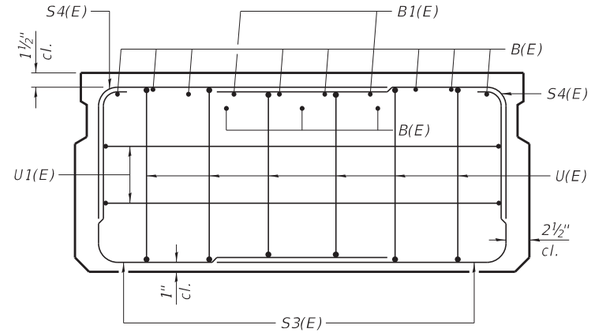
FILE NAME = 190486-shl-brldge.dgn	USER NAME = rhoslck	DESIGNED - J.W.F.	REVISED -	STATE OF ILLINOIS LIVINGSTON COUNTY HIGHWAY DEPARTMENT	RIPRAP LAYOUT STRUCTURE NO. 053-4228	T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HAMPTON, LENZINI AND RENWICK, INC. 3045 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP: 184.000959		CHECKED - S.W.M.	REVISED -			70	18-17119-02-BR	LIVINGSTON	29	8
	PLOT SCALE = $SCALE$	DRAWN - T.D.S.	REVISED -			NEWTOWN ROAD DISTRICT		CONTRACT NO. 87773		
	PLOT DATE = 12/22/2021	CHECKED - S.W.M.	REVISED -		SHEET NO. 2 OF 11 SHEETS		ILLINOIS	FED. AID PROJECT NQQE (685)		



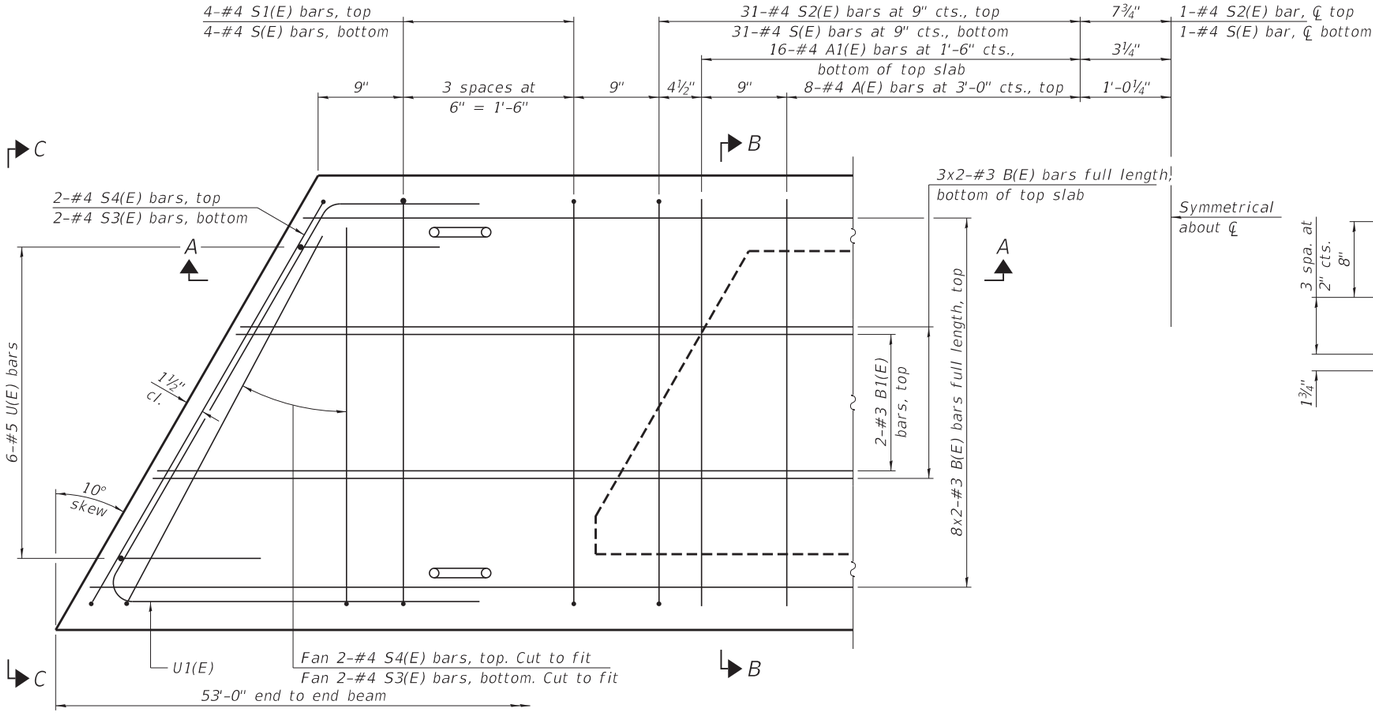
SECTION A-A



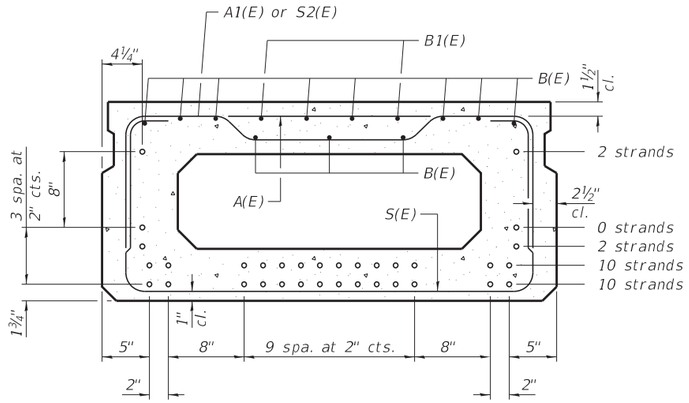
SECTION B-B
(Showing dimensions)



VIEW C-C



PLAN VIEW



SECTION B-B
(Showing reinforcement and permissible strand locations)

Note:
Place the number of strands specified in each row symmetrically about the centerline of beam in the permissible strand locations shown.

BAR LIST
ONE BEAM ONLY
(For information only)

Bar	No.	Size	Length	Shape
A(E)	16	#4	3'-7"	—
A1(E)	32	#4	3'-10"	⌒
B(E)	22	#3	27'-2"	—
B1(E)	4	#3	10'-0"	—
S(E)	71	#4	7'-5"	⊔
S1(E)	8	#4	5'-11"	⊓
S2(E)	63	#4	6'-2"	⊓
S3(E)	8	#4	4'-9"	⌋
S4(E)	8	#4	4'-0"	⌋
U(E)	12	#5	4'-0"	⊏
U1(E)	4	#4	6'-8"	⊏

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

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

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 8x2-#3 etc. indicates 8 lines of bars with 2 length per line.

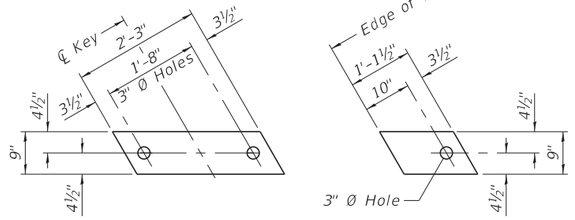
PD-2148-L 1-1-2020

FILE NAME = 190486-shl-brdge.dgn	USER NAME = rhoslck	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 = 12/22/2021	CHECKED - S.W.M.	REVISED -	

STATE OF ILLINOIS
LIVINGSTON COUNTY HIGHWAY DEPARTMENT

21" x 48" PPC DECK BEAM
STRUCTURE NO. 053-4228
SHEET NO. 3 OF 11 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	18-17119-02-BR	LIVINGSTON	29	9
NEWTOWN ROAD DISTRICT		CONTRACT NO. 87773		
	ILLINOIS	FED. AID PROJECT NQQE (685)		

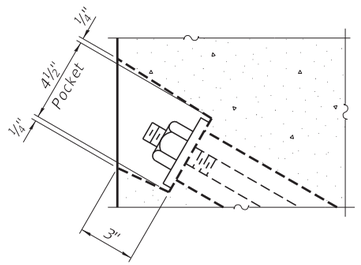


FABRIC BEARING PAD
(Interior – 12 req'd)

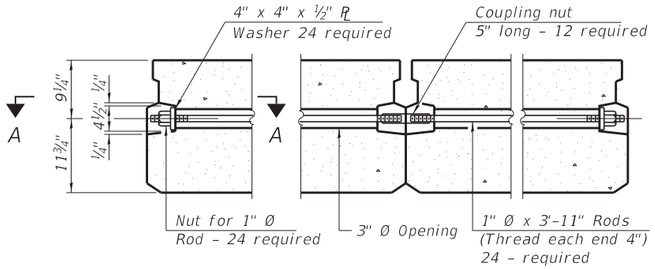
FABRIC BEARING PAD
(Exterior – 4 req'd)

FIXED

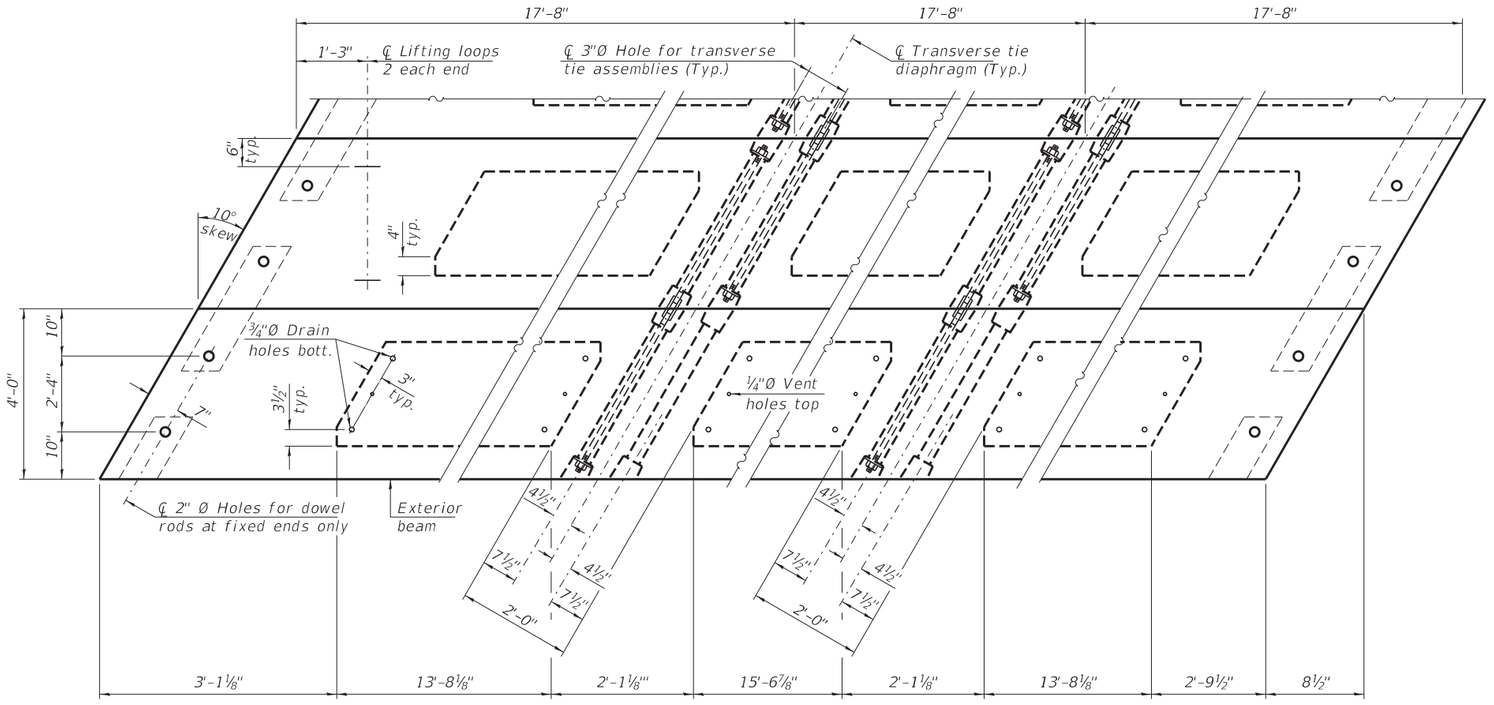
Notes:
All bearing pads shall be 1" thick.
Omit holes when using expansion bearings.
Expansion bearing pads shall be bonded to the substructure.



SECTION A-A

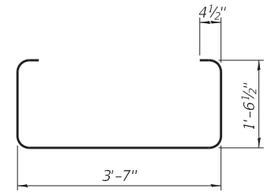


TYPICAL TRANSVERSE TIE ASSEMBLY

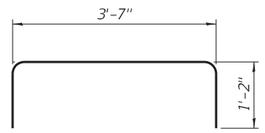


PLAN VIEW

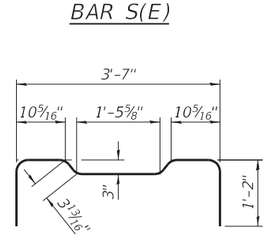
Note:
Connect beams in pairs with the transverse tie configuration shown.



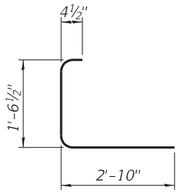
BAR S(E)



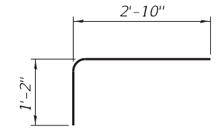
BAR S1(E)



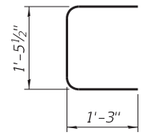
BAR S2(E)



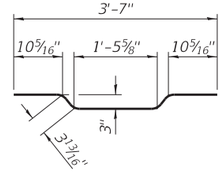
BAR S3(E)



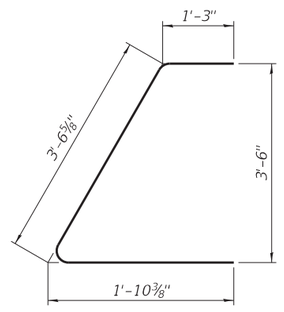
BAR S4(E)



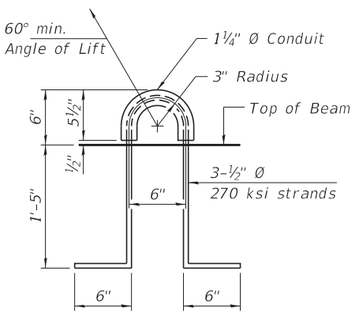
BAR U(E)



BAR A1(E)



BAR U1(E)



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.

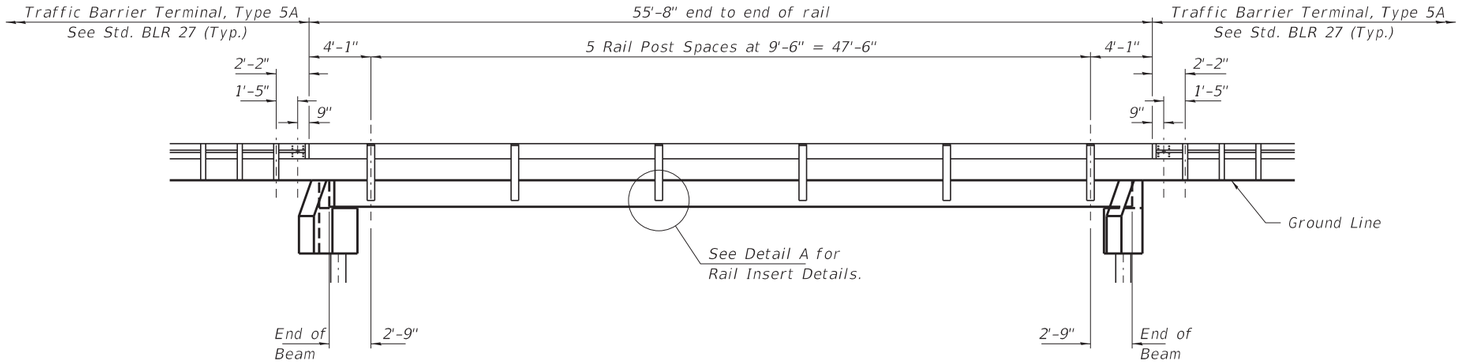
BILL OF MATERIAL

Precast Prestressed Conc. Deck Bms. (21" Depth)	Sq. Ft.	1,484

PDD-2148-L 1-1-2020

FILE NAME = 190486-shl-brldge.dgn	USER NAME = rhoslck	DESIGNED – J.W.F.	REVISED –	STATE OF ILLINOIS LIVINGSTON COUNTY HIGHWAY DEPARTMENT	21" x 48" PPC DECK BEAM DETAILS STRUCTURE NO. 053-4228
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 = 12/22/2021	CHECKED – S.W.M.	REVISED –		

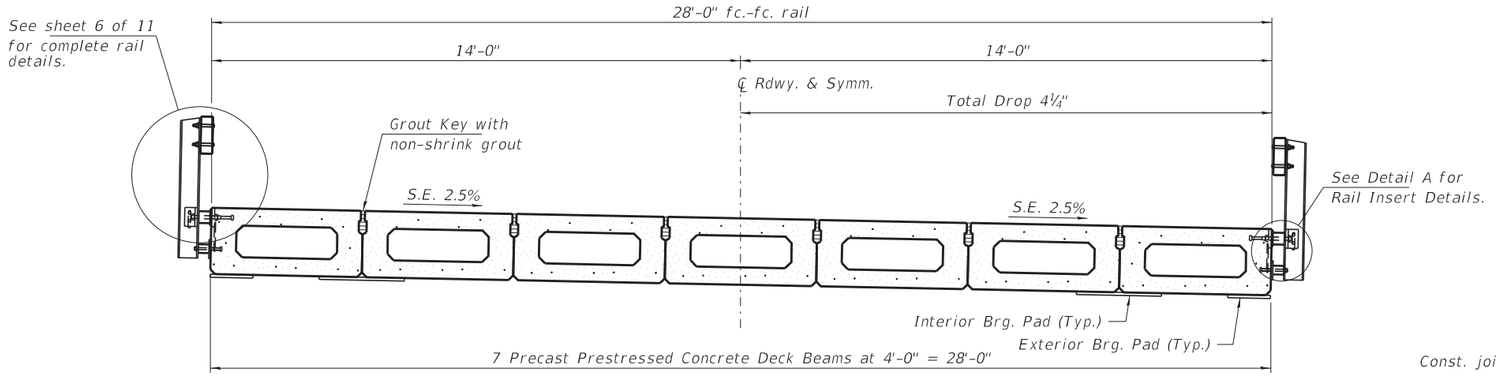
T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	18-17119-02-BR	LIVINGSTON	29	10
NEWTOWN ROAD DISTRICT		CONTRACT NO. 87773		
ILLINOIS	FED. AID PROJECT NQQE (685)			



ELEVATION

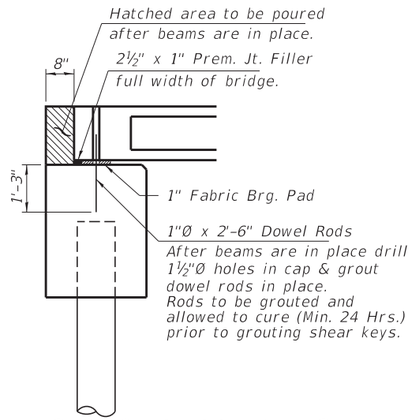
Showing Rail Post Spaces

See sheet 6 of 11 for Railing Details.



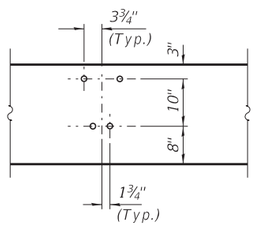
CROSS SECTION

See sheets 3 & 4 of 11 for Superstructure.

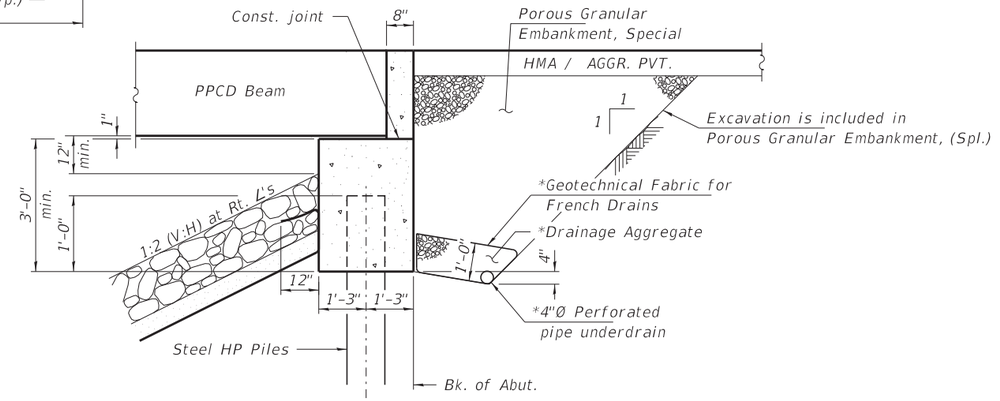


SECTION AT ABUTMENTS

at Rt. ℄'s



DETAIL A



SECTION THRU ABUTMENT

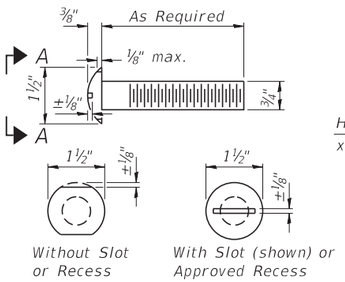
(Horiz. dim. at Rt. ℄'s)

*Included in the cost of Pipe Underdrains for Structures.

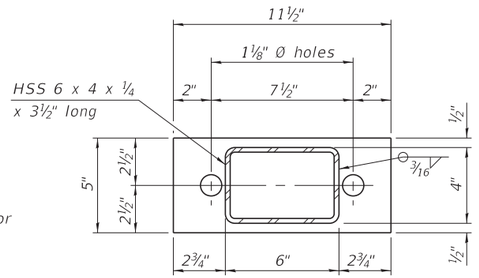
Note:
All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).

FILE NAME = 190486-shl-bridge.dgn	USER NAME = rhoslck	DESIGNED - J.W.F.	REVISED -	STATE OF ILLINOIS LIVINGSTON COUNTY HIGHWAY DEPARTMENT	SUPERSTRUCTURE DETAILS STRUCTURE NO. 053-4228
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 = 12/22/2021	CHECKED - S.W.M.	REVISED -		

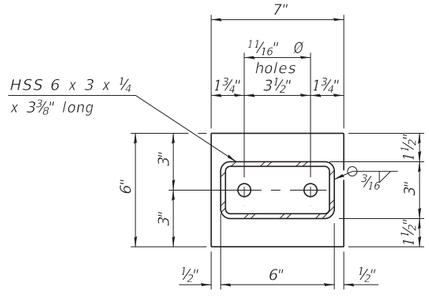
T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	18-17119-02-BR	LIVINGSTON	29	11
NEWTOWN ROAD DISTRICT		CONTRACT NO. 87773		
	ILLINOIS FED. AID PROJECT NQQE (685)			



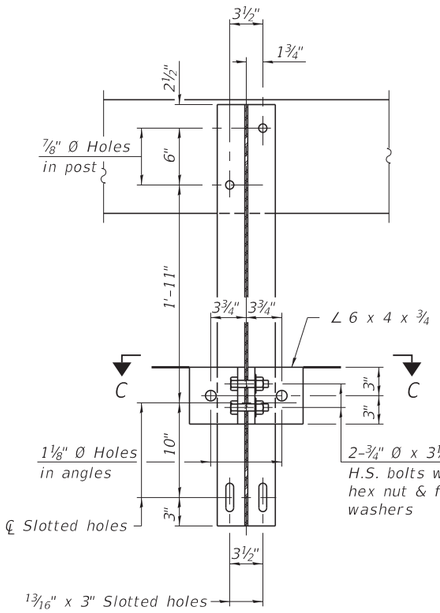
VIEW A–A
ROUND HEAD BOLT



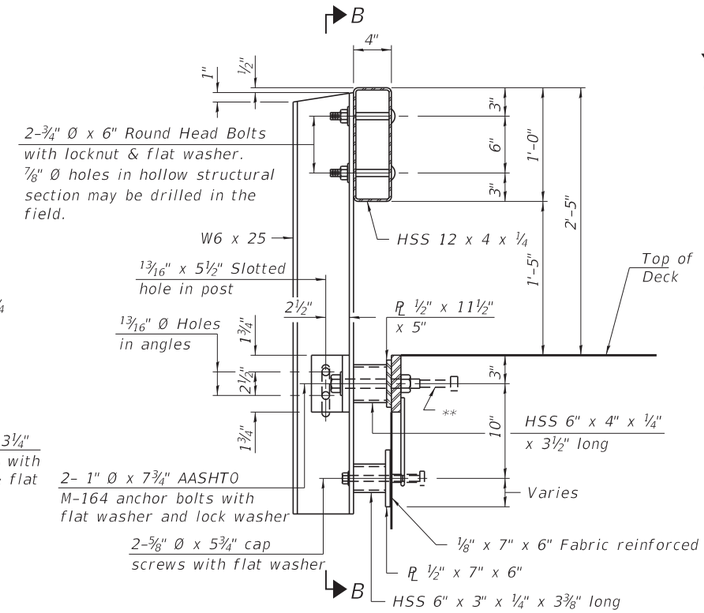
PL ½" x 11½" x 5"



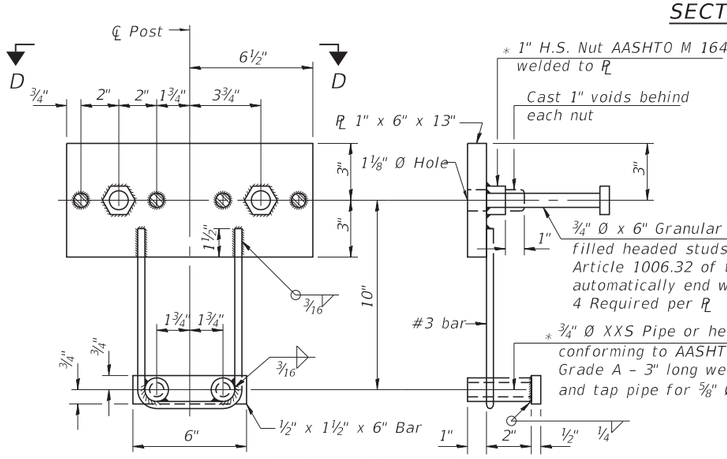
PL ½" x 7" x 6"



SECTION B–B



SECTION AT RAILING POST



ANCHOR DEVICE

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

SECTION E-E

CURLED END SECTION DETAILS

SPLICE DIMENSIONS

T	D	A	B	C	E
≤ 4"	2½"	1'-8"	2"	4"	2½"
> 4" ≤ 6½"	3¾"	2'-0"	2½"	5½"	3½"
> 6½" ≤ 9"	5"	2'-4"	3½"	6½"	9"
> 9" ≤ 13"	7"	2'-10"	4½"	8½"	11"
Rail Splice	¼"	1'-8"	2"	4"	——

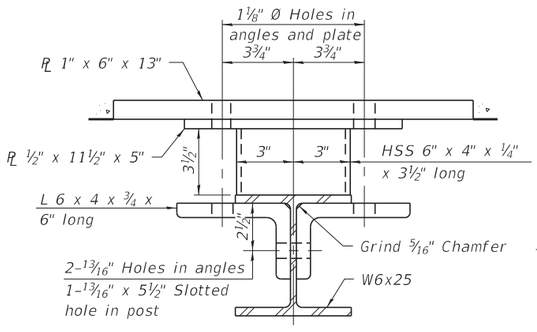
T = Total movement at expansion joint as shown on the design plans.

Notes:

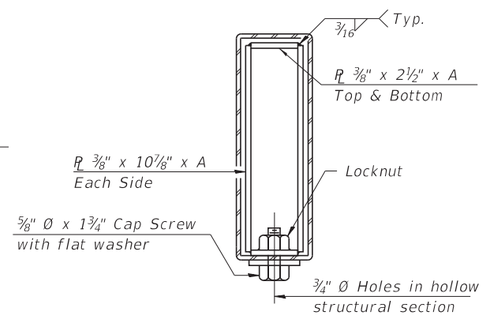
For multi-span bridges, sufficient ¼" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type S-1.

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

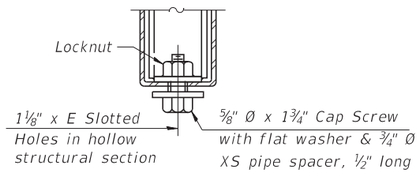
** The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device. The anchorage studs may be bent down ½" to accommodate the top reinforcement bar placement.



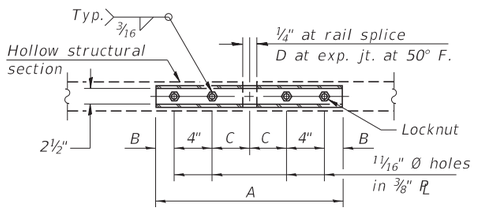
SECTION C–C



SECTIONS AT RAIL SPLICE

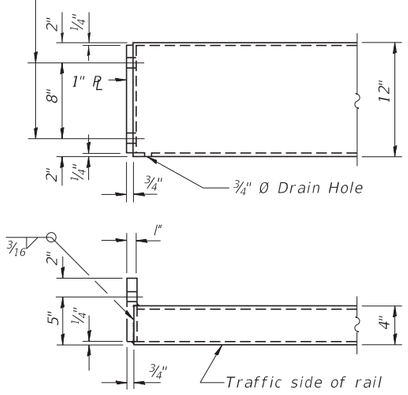


RAIL SPLICE CONNECTION
AT EXPANSION JT.

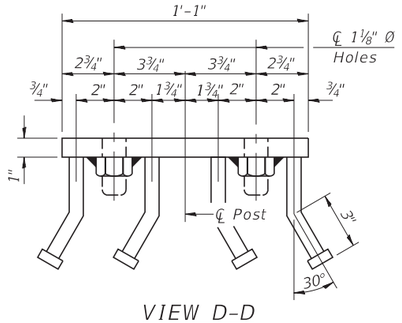


PLAN-BOTT. SPLICE PL
TYPICAL

1⅛" 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	112

R-23A

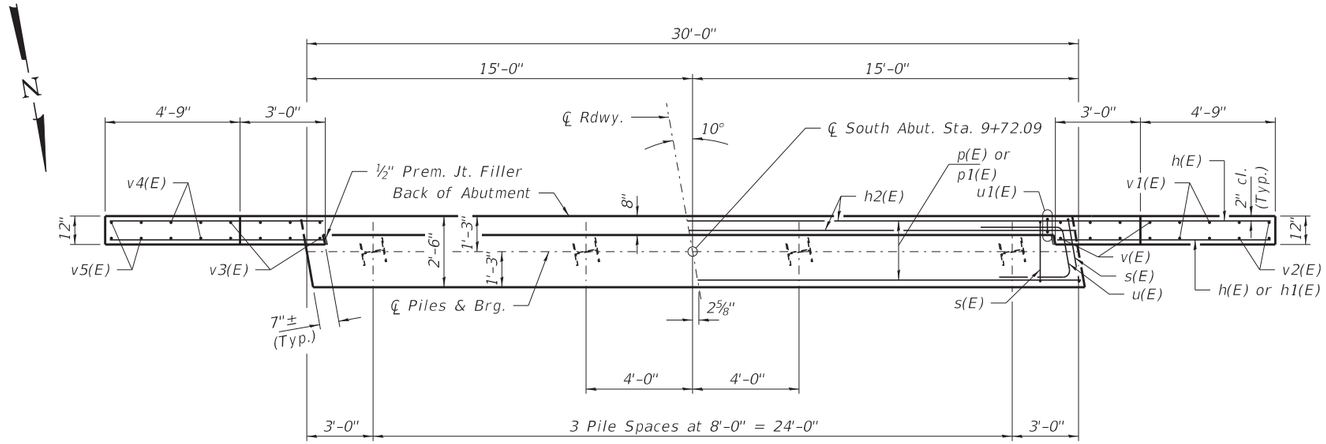
8-11-2017 (10'-9" Maximum Post Spacing)

FILE NAME = 190486-shl-bridge.dgn	USER NAME = rhoslck	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 = 12/22/2021	CHECKED - S.W.M.	REVISED -

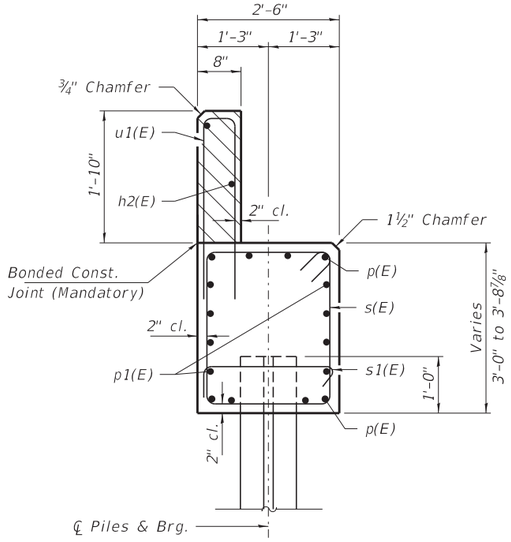
STATE OF ILLINOIS
LIVINGSTON COUNTY HIGHWAY DEPARTMENT

STEEL RAILING, TYPE S-1
STRUCTURE NO. 053-4228
SHEET NO. 6 OF 11 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	18-17119-02-BR	LIVINGSTON	29	12
NEWTOWN ROAD DISTRICT		CONTRACT NO. 87773		
		ILLINOIS	FED. AID PROJECT NQQE (685)	



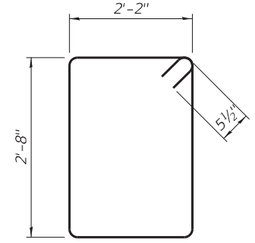
PLAN



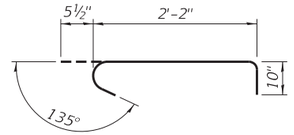
SECTION A-A

Hatched area to be poured after beams are in place.

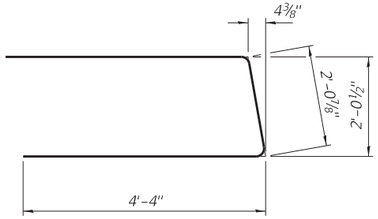
Cast top of wingwall flush with exterior beam face after beams have been erected.



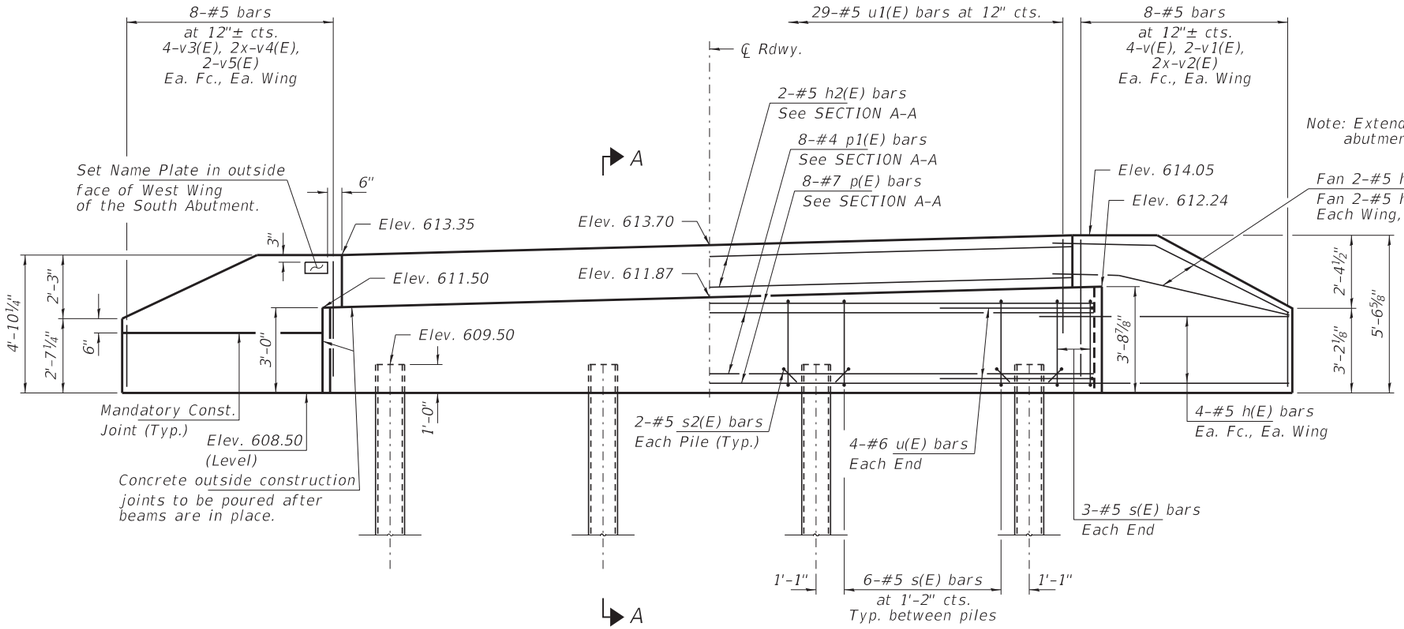
BARS s(E)



BAR s1(E)



BAR u(E)



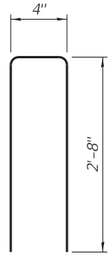
ELEVATION

(Looking South)

PILE DATA

Type: _____ *Steel HP10x42*
Nominal Required Bearing: _____ *335 Kips/Pile*
Factored Resistance Available: _____ *184 Kips/Pile*
Est. Length: _____ *35 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.*



BAR u1(E)

BILL OF MATERIAL - S. ABUT.

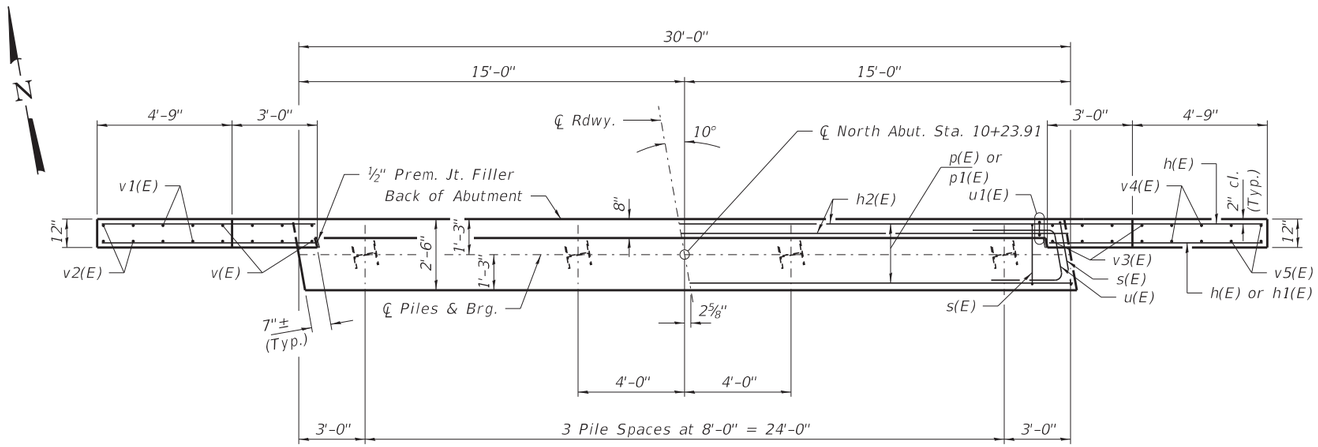
BAR	NO.	SIZE	LENGTH	SHAPE
h(E)	20	#5	9'-0"	
h1(E)	4	#5	7'-6"	
h2(E)	2	#5	29'-8"	
p(E)	8	#7	29'-8"	
p1(E)	8	#4	29'-8"	
s(E)	24	#5	10'-7"	
s1(E)	8	#5	3'-6"	
u(E)	8	#6	10'-9"	
u1(E)	29	#5	5'-8"	
v(E)	8	#5	5'-0"	
v1(E)	4	#5	3'-11"	
v2(E)	4	#5	2'-10"	
v3(E)	8	#5	4'-6"	
v4(E)	4	#5	3'-5"	
v5(E)	4	#5	2'-4"	
Concrete Structures			Cu. Yd.	13.1
Reinf. Bars, Epoxy Coated			Pound	1,650
Steel Piles HP10x42			Foot	105
Test Pile Steel HP10x42			Each	1
Pile Shoes			Each	4
Name Plates			Each	1

FILE NAME = 190486-shl-bridge.dgn	USER NAME = rhoslck	DESIGNED - J.W.F.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC. 3365 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 = 12/22/2021	CHECKED - S.W.M.	REVISED -

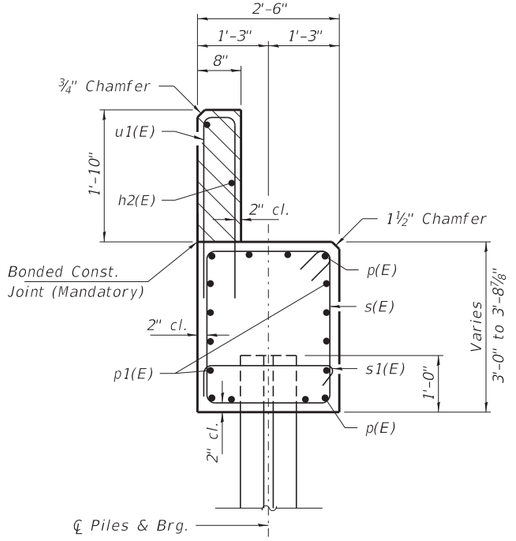
STATE OF ILLINOIS
LIVINGSTON COUNTY HIGHWAY DEPARTMENT

SOUTH ABUTMENT
STRUCTURE NO. 053-4228
SHEET NO. 7 OF 11 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	18-17119-02-BR	LIVINGSTON	29	13
NEWTOWN ROAD DISTRICT		CONTRACT NO. 87773		
	ILLINOIS FED. AID PROJECT NQQE (685)			



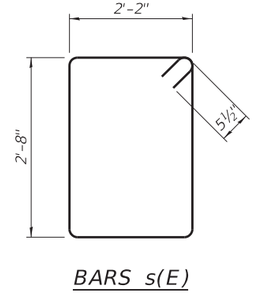
PLAN



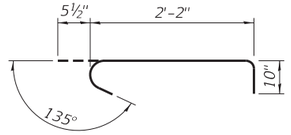
SECTION A-A

Hatched area to be poured after beams are in place.

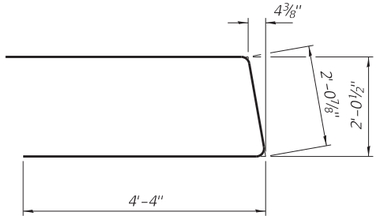
Cast top of wingwall flush with exterior beam face after beams have been erected.



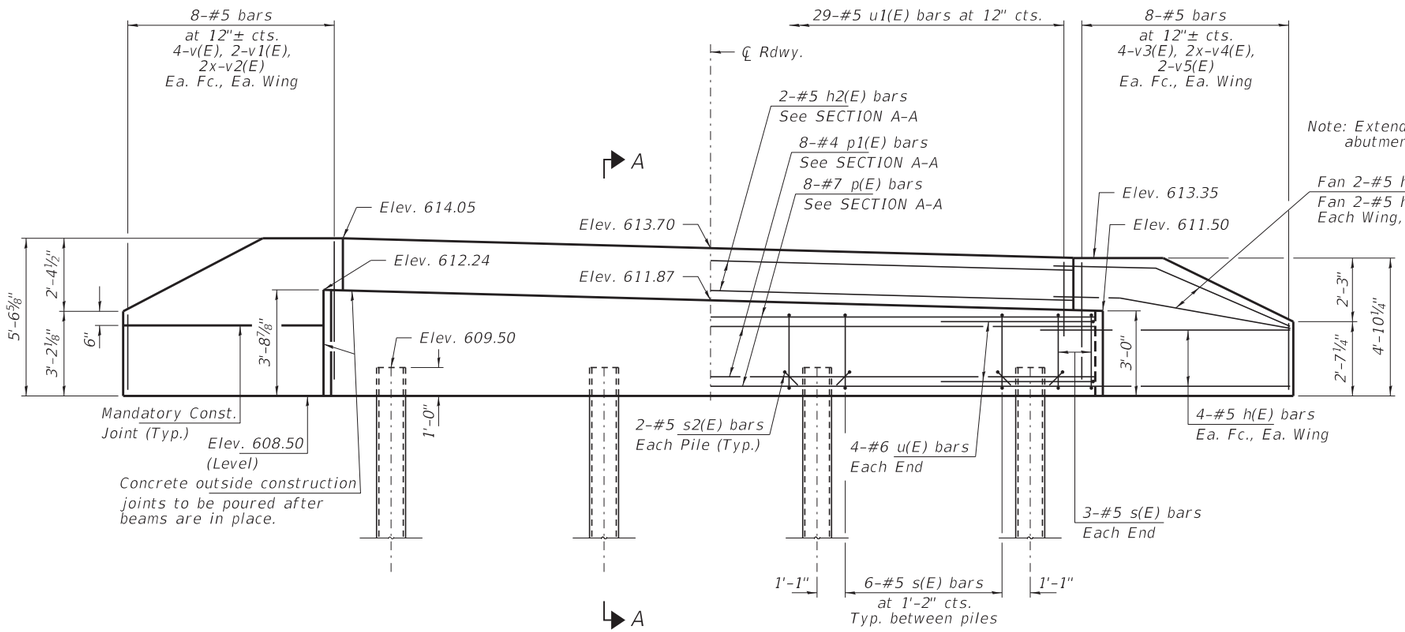
BARS s(E)



BAR s1(E)



BAR u(E)

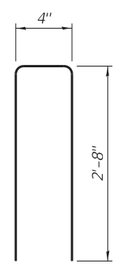


ELEVATION

(Looking North)

PILE DATA

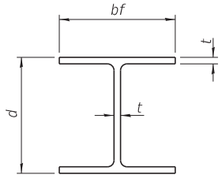
Type:	Steel HP10x42
Nominal Required Bearing:	335 Kips/Pile
Factored Resistance Available:	184 Kips/Pile
Est. Length:	35 Ft/Pile
No. Production Piles:	4
No. Test Piles:	0



BAR u1(E)

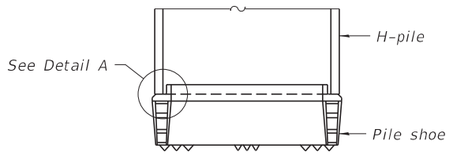
BILL OF MATERIAL - N. ABUT.

BAR	NO.	SIZE	LENGTH	SHAPE
h(E)	20	#5	9'-0"	
h1(E)	4	#5	7'-6"	
h2(E)	2	#5	29'-8"	
p(E)	8	#7	29'-8"	
p1(E)	8	#4	29'-8"	
s(E)	24	#5	10'-7"	
s1(E)	8	#5	3'-6"	
u(E)	8	#6	10'-9"	
u1(E)	29	#5	5'-8"	
v(E)	8	#5	5'-0"	
v1(E)	4	#5	3'-11"	
v2(E)	4	#5	2'-10"	
v3(E)	8	#5	4'-4"	
v4(E)	4	#5	3'-4"	
v5(E)	4	#5	2'-4"	
Concrete Structures			Cu. Yd.	13.1
Reinf. Bars, Epoxy Coated			Pound	1,650
Steel Piles HP10x42			Foot	140
Pile Shoes			Each	4

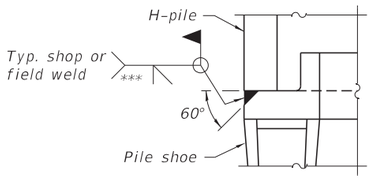


STEEL PILE TABLE

Designation	Depth d	Flange width bf	Web and Flange thickness t	Encasement diameter A
HP 14x117	14¼"	14⅞"	13/16"	30"
x102	14"	14¾"	1 1/16"	30"
x89	13⅞"	14¾"	⅝"	30"
x73	13⅝"	14⅝"	½"	30"
HP 12x84	12¼"	12¼"	1 1/16"	24"
x74	12⅛"	12¼"	⅝"	24"
x63	12"	12⅛"	½"	24"
x53	11¾"	12"	7/16"	24"
HP 10x57	10"	10¼"	9/16"	24"
x42	9¾"	10⅛"	7/16"	24"
HP 8x36	8"	8⅛"	7/16"	18"



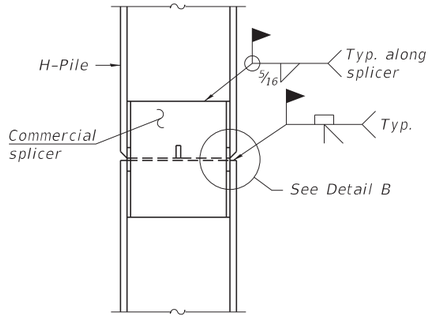
ELEVATION



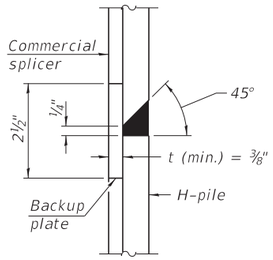
DETAIL A

SHOE ATTACHMENT

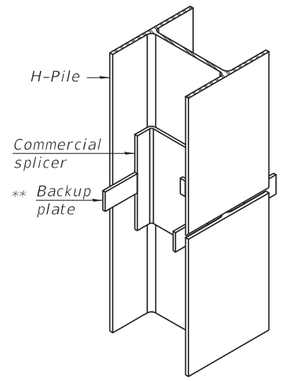
Note:
The steel H-piles shall be according to AASHTO M270 Grade 50.



ELEVATION

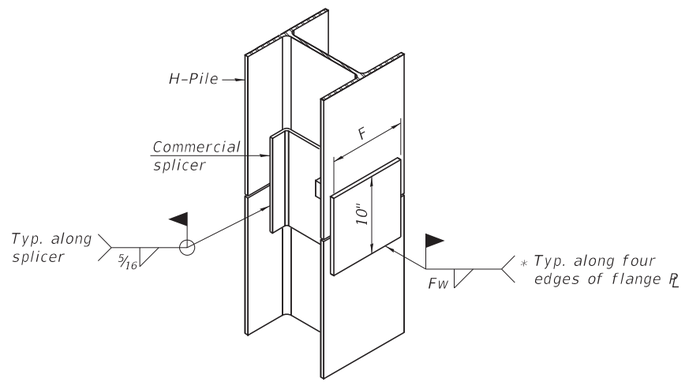


DETAIL "B"



ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE



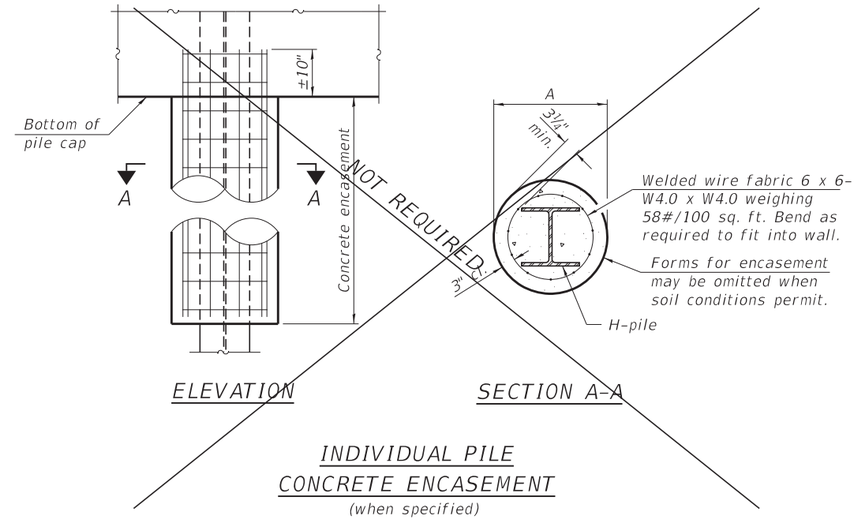
ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE

* Interrupt welds ¼" from end of web and/or each flange.

** Remove portions of backup plates that extend outside the flanges.

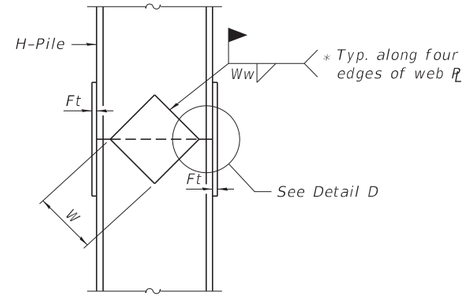
*** Weld size per pile shoe manufacturer (5/16" min.).



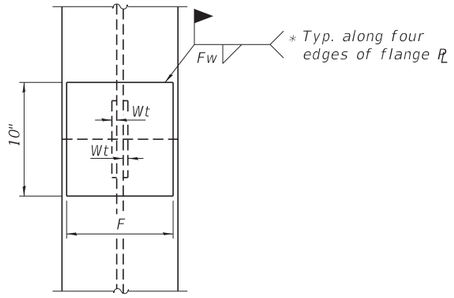
ELEVATION SECTION A-A

INDIVIDUAL PILE CONCRETE ENCASEMENT

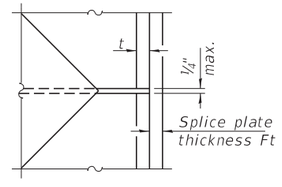
(when specified)



ELEVATION



END VIEW



DETAIL D

Designation	F	Ft	Fw	W	Wt	Ww
HP 14x117	12½"	1"	⅞"	7¾"	⅝"	½"
x102	12½"	⅞"	¾"	7¾"	⅝"	½"
x89	12½"	¾"	1 1/16"	7¾"	⅝"	½"
x73	12½"	⅝"	9/16"	7¾"	⅝"	½"
HP 12x84	10"	⅞"	1 1/16"	6½"	⅝"	½"
x74	10"	⅞"	1 1/16"	6½"	⅝"	½"
x63	10"	⅝"	½"	6½"	½"	⅜"
x53	10"	⅝"	½"	6½"	½"	⅜"
HP 10x57	8"	¾"	9/16"	5¼"	½"	⅜"
x42	8"	⅝"	9/16"	5¼"	½"	⅜"
HP 8x36	7"	⅝"	7/16"	4¼"	½"	⅜"

WELDED PLATE FIELD SPLICE

F-HP 1-1-2020

FILE NAME = 190486-shl-bridge.dgn	USER NAME = rhoslck	DESIGNED - J.W.F.	REVISED -	STATE OF ILLINOIS LIVINGSTON COUNTY HIGHWAY DEPARTMENT	HP PILE DETAILS STRUCTURE NO. 053-4228
HAMPTON, LENZINI AND RENWICK, INC. 3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703		CHECKED - S.W.M.	REVISED -		SHEET NO. 9 OF 11 SHEETS
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT SCALE = $SCALE$	DRAWN - T.D.S.	REVISED -		
	PLOT DATE = 12/22/2021	CHECKED - S.W.M.	REVISED -		

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	18-17119-02-BR	LIVINGSTON	29	15
NEWTOWN ROAD DISTRICT		CONTRACT NO. 87773		
	ILLINOIS FED. AID PROJECT NQQE (685)			

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 and Renwick, Inc.
Project Name: Section 18-17119-02-BR
Project Site: Newtown Township, Livingston County
Lucas Br. on 1000 E over trib. to Mud Creek

Boring No. B-1A
Surface Elev. 99.60 612.8
Auger Depth 46' Rotary Depth NA
Start Date 10/26/19 Finish Date 10/26/19

Location: Station: 9+76 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
99.60	612.8										
98.60			1								
97.60			2								
96.60			3	1	SS	1.0	6	B	23		
95.60			4								
94.60			5	2	SS	1.5	10	B	22		
93.60			6								
92.60	Stiff Black And Brown Clay And Silty Clay (Fill)		7								
91.60			8	3	SS	1.4	8	B	21		
90.60			9								
89.60			10	4	SS	1.3	8	B	22		
88.60			11								
87.60			12								
86.60			13	5	SS	1.8	10	B	20		
85.60	598.3		14								
84.60			15	6	SS	2.2	13	S	15		
83.60			16								
82.60	Very Stiff Brownish Gray Silty Clay Till		17								
81.60			18	7	SS	3.7	20	S	14		
80.60	593.3 Cobbles At 19.5' Depth		19								
79.60	Hard Gray Loam Till		20	8	SS	4.4	24	S	18		

Groundwater Data: No water encountered at time of subsurface investigation.
Comments: Assumed center of bridge to be elevation 100.0 and station 10 + 00.
613.2

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BORING LOG Sheet 2 of 3

Client: Hampton, Lenzini and Renwick, Inc.
Project Name: Section 18-17119-02-BR
Project Site: Newtown Township, Livingston County
Lucas Br. on 1000 E over trib. to Mud Creek

Boring No. B-1A
Surface Elev. 99.60 612.8
Auger Depth 46' Rotary Depth NA
Start Date 10/26/19 Finish Date 10/26/19

Location: Station: 9+79 8' 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
78.60	591.8										
77.60			22								
76.60			23	9	SS	5.1	35	S	12		
75.60			24								
74.60			25	10	SS	5.8	52	S	9		
73.60			26								
72.60	Hard Gray Loam Till		27								
71.60			28	11	SS	5.3	54	S	8		
70.60			29								
69.60			30	12	SS	6.1	63	S	8		
68.60			31								
67.60	580.8		32								
66.60			33								
65.60			34								
64.60			35	13	SS	---	100/10"	---	6		
63.60			36								
62.60	Very Dense Gray Shale		37								
61.60			38								
60.60			39								
59.60			40								
58.60			41	14	SS	---	100/3"	---	6		

Groundwater Data: No water encountered at time of subsurface investigation.
Comments: Assumed center of bridge to be elevation 100.0 and station 10 + 00.
613.2

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BORING LOG Sheet 3 of 3

Client: Hampton, Lenzini and Renwick, Inc.
Project Name: Section 18-17119-02-BR
Project Site: Newtown Township, Livingston County
Lucas Br. on 1000 E over trib. to Mud Creek

Boring No. B-1A
Surface Elev. 99.60 612.8
Auger Depth 46' Rotary Depth NA
Start Date 10/26/19 Finish Date 10/26/19

Location: Station: 9+76 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
57.60	570.8										
56.60	Very Dense Gray Shale		43								
55.60			44								
54.60			45								
53.60	566.8		46	15	SS	---	100/2"	---	5.0		
52.60	Boring Terminated		47								
51.60			48								
50.60			49								
49.60			50								
48.60			51								
47.60			52								
46.60			53								
45.60			54								
44.60			55								
43.60			56								
42.60			57								
41.60			58								
40.60			59								
39.60			60								
38.60			61								
37.60			62								

Groundwater Data: No water encountered at time of subsurface investigation.
Comments: Assumed center of bridge to be elevation 100.0 and station 10 + 00.
613.2

BORING-1A

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BORING LOG Sheet 1 of 3

Client: Hampton, Lenzini and Renwick, Inc.
Project Name: Section 18-17119-02-BR
Project Site: Newtown Township, Livingston County
Lucas Br. on 1000 E over trib. to Mud Creek

Boring No. B-2
Surface Elev. 99.80 613.0
Auger Depth 46' Rotary Depth NA
Start Date 10/26/19 Finish Date 10/26/19

Location: Station: 10+22 5' 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
99.80	613.0										
	Stiff Black And Brown Clay And Silty Clay (Fill)		1–3	1	SS	1.2	6	B	22		
				2	SS	1.0	6	B	23		
			4–8	3	SS	1.4	8	B	22		
				4	SS	1.1	6	B	24		
	599.5										
	Very Stiff Brownish Gray Silty Clay Till		9–13	5	SS	1.6	8	B	21		
				6	SS	2.5	15	S	15		
			14–18	7	SS	3.8	20	S	15		
	593.0 Cobbles At 20' Depth										
	Hard Gray Loam Till		19–20	8	SS	4.4	32	S	17		

Groundwater Data: No water encountered at time of subsurface investigation.
Comments: Assumed center of bridge to be elevation 100.0 and station 10 + 00.
613.2

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BORING LOG Sheet 2 of 3

Client: Hampton, Lenzini and Renwick, Inc.
Project Name: Section 18-17119-02-BR
Project Site: Newtown Township, Livingston County
Lucas Br. on 1000 E over trib. to Mud Creek

Boring No. B-2
Surface Elev. 99.80 613.0
Auger Depth 46' Rotary Depth NA
Start Date 10/26/19 Finish Date 10/26/19

Location: Station: 10+22 5' 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
78.80	592.0										
	Hard Gray Loam Till		22–23	9	SS	5.2	46	S	10		
	588.0										
	Very Dense Gray Loam Till With Limestone Fragments		24–26	10	SS	---	100/1"	---	---		
	587.0										
	Hard Gray Loam Till		27–28	11	SS	4.7	41	S	8		
			29–31	12	SS	6.5	48	S	8		
	581.0										
	Very Dense Gray Shale		32–35	13	SS	---	100/5"	---	6		
			36–40	14	SS	---	100/2"	---	6		

Groundwater Data: No water encountered at time of subsurface investigation.
Comments: Assumed center of bridge to be elevation 100.0 and station 10 + 00.
613.2

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BORING LOG Sheet 3 of 3

Client: Hampton, Lenzini and Renwick, Inc.
Project Name: Section 18-17119-02-BR
Project Site: Newtown Township, Livingston County
Lucas Br. on 1000 E over trib. to Mud Creek

Boring No. B-2
Surface Elev. 99.80 613.0
Auger Depth 46' Rotary Depth NA
Start Date 10/26/19 Finish Date 10/26/19

Location: Station: 10+22 5' 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
57.80	571.0										
	Very Dense Gray Shale		43–45	15	SS	---	100/2"	---	6.0		
	567.0										
	Boring Terminated		46–62								

Groundwater Data: No water encountered at time of subsurface investigation.
Comments: Assumed center of bridge to be elevation 100.0 and station 10 + 00.
613.2

BORING-2

FILE NAME = 190486-shl-bridge.dgn	USER NAME = rhoslck	DESIGNED - J.W.F.	REVISED -	**STATE OF ILLINOIS** **LIVINGSTON COUNTY HIGHWAY DEPARTMENT**
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 = $SCALES	DRAWN - T.D.S.	REVISED -	
	PLOT DATE = 12/22/2021	CHECKED - S.W.M.	REVISED -	

BORINGS
STRUCTURE NO. 053-4228
SHEET NO. 11 OF 11 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	18-17119-02-BR	LIVINGSTON	29	17
NEWTOWN ROAD DISTRICT		CONTRACT NO. 87773		
	ILLINOIS	FED. AID PROJECT NQQE (685)		

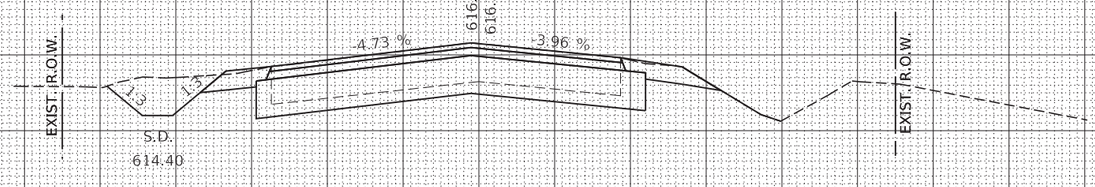
FINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

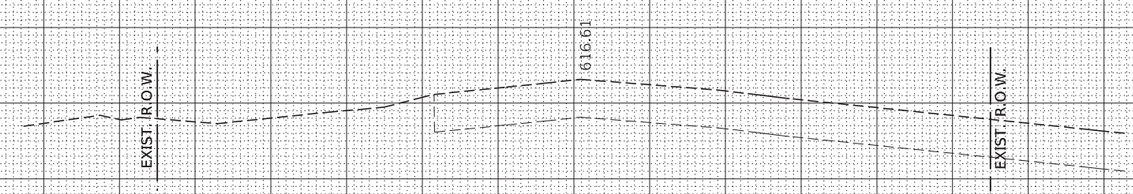
BY	DATE

IMPROVEMENT BEGINS

AHEAD C = 42 F = 0

BACK C = 0 F = 0





7+50.00

7+00.00

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

BY	DATE

FILE NAME = 190486-sht-xssheets.dgn	USER NAME = rhoslck	DESIGNED - S.A.A.	REVISED -
		DRAWN - T.W.K.	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - J.W.F.	REVISED -
	PLOT DATE = 12/22/2021	DATE - 11/17/21	REVISED -

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

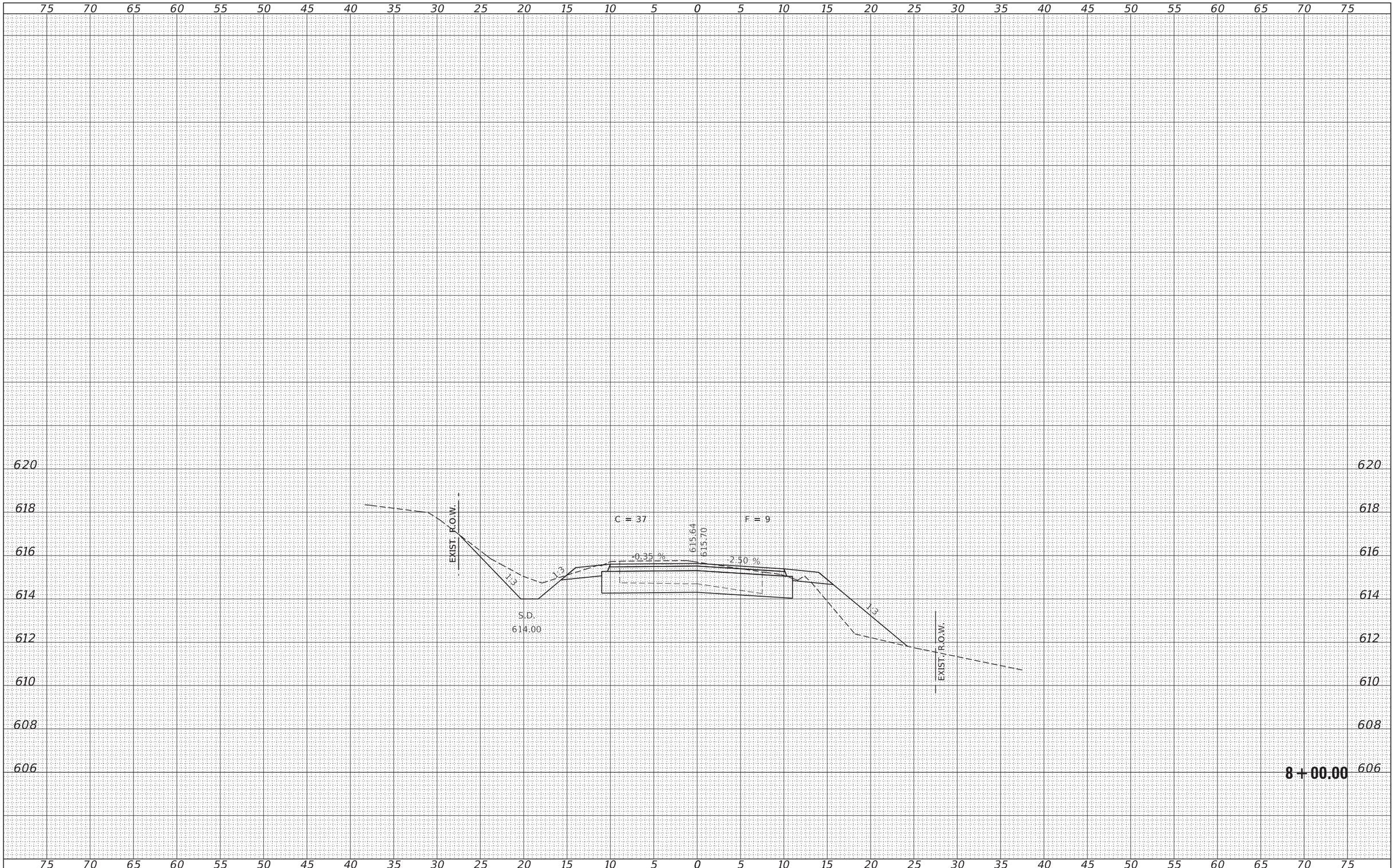
STATE OF ILLINOIS
LIVINGSTON COUNTY HIGHWAY DEPARTMENT

STATION CROSS SECTIONS

SCALE: 5H:2V | SHEET NO. 1 OF 12 SHEETS | STA. 7+00.00 TO STA. 7+50.00

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	18-17119-02-BR	LIVINGSTON	29	18
NEWTOWN ROAD DISTRICT		CONTRACT NO. 87773		
ILLINOIS	FED. AID PROJECT NQQE (685)			

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 = 190486-sht-xssheets.dgn	USER NAME = rhoslck	DESIGNED - S.A.A.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC.		DRAWN - T.W.K.	REVISED -
3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703	PLOT SCALE = $SCALE$	CHECKED - J.W.F.	REVISED -
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT DATE = 12/22/2021	DATE - 11/17/21	REVISED -

STATE OF ILLINOIS
LIVINGSTON COUNTY HIGHWAY DEPARTMENT

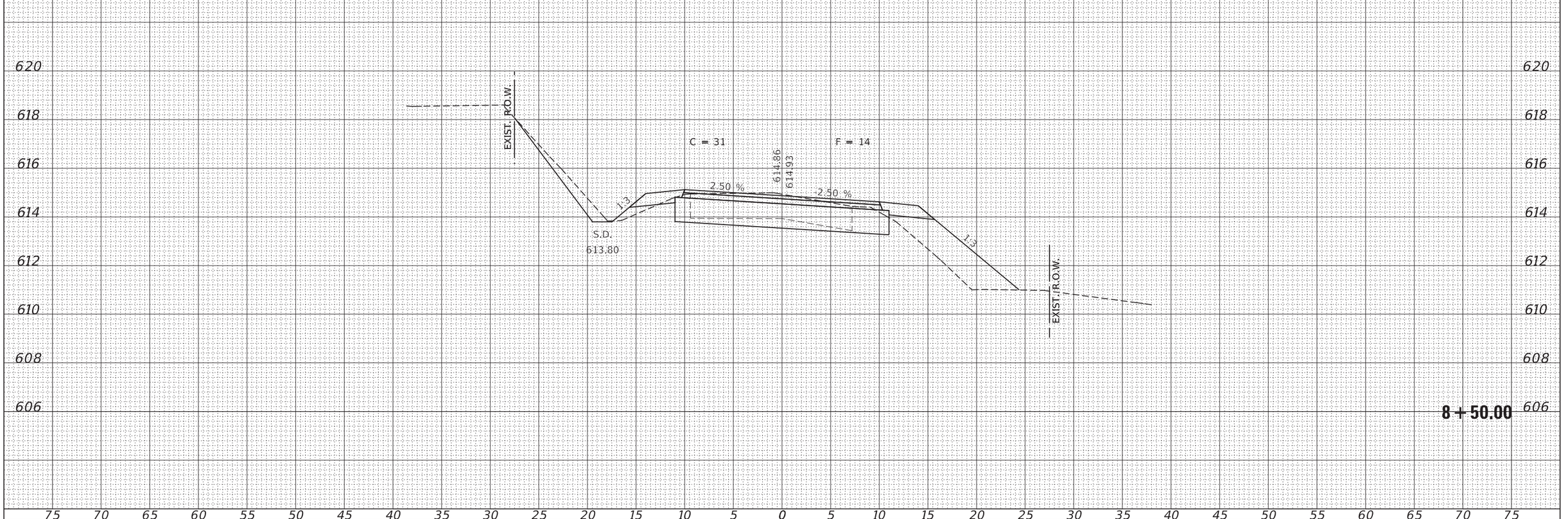
STATION CROSS SECTIONS

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

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	18-17119-02-BR	LIVINGSTON	29	19
NEWTOWN ROAD DISTRICT		CONTRACT NO. 87773		
	ILLINOIS FED. AID PROJECT NQQE (685)			

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 = 190486-sht-xssheets.dgn	USER NAME = rhoslck	DESIGNED - S.A.A.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC.		DRAWN - T.W.K.	REVISED -
3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703	PLOT SCALE = $SCALE$	CHECKED - J.W.F.	REVISED -
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT DATE = 12/22/2021	DATE - 11/17/21	REVISED -

STATE OF ILLINOIS
LIVINGSTON COUNTY HIGHWAY DEPARTMENT

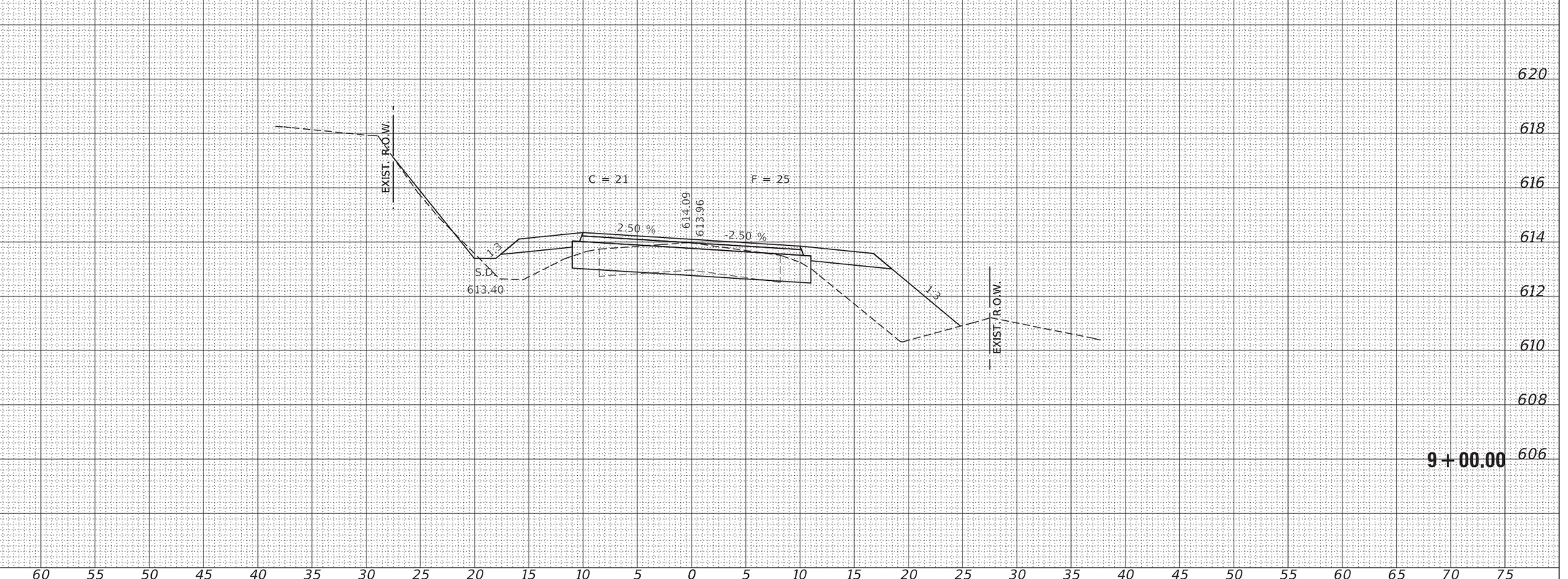
STATION CROSS SECTIONS

SCALE: 5H:2V | SHEET NO. 3 OF 12 SHEETS | STA. 8+50.00 | TO STA. 8+50.00

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	18-17119-02-BR	LIVINGSTON	29	20
NEWTOWN ROAD DISTRICT		CONTRACT NO. 87773		
	ILLINOIS FED. AID PROJECT NQQE (685)			

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 = 190486-sht-xssheets.dgn	USER NAME = rhoslck	DESIGNED - S.A.A.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC.		DRAWN - T.W.K.	REVISED -
3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703	PLOT SCALE = $SCALE$	CHECKED - J.W.F.	REVISED -
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT DATE = 12/22/2021	DATE - 11/17/21	REVISED -

STATE OF ILLINOIS
LIVINGSTON COUNTY HIGHWAY DEPARTMENT

STATION CROSS SECTIONS

SCALE: 5H:2V | SHEET NO. 4 OF 12 SHEETS | STA. 9+00.00 | TO STA. 9+00.00

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	18-17119-02-BR	LIVINGSTON	29	21
NEWTOWN ROAD DISTRICT		CONTRACT NO. 87773		
	ILLINOIS FED. AID PROJECT NQQE (685)			

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		

9 + 25.00

FILE NAME = 190486-sht-xssheets.dgn	USER NAME = rhoslck	DESIGNED - S.A.A.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC.		DRAWN - T.W.K.	REVISED -
3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703	PLOT SCALE = $SCALE$	CHECKED - J.W.F.	REVISED -
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT DATE = 12/22/2021	DATE - 11/17/21	REVISED -

STATE OF ILLINOIS
LIVINGSTON COUNTY HIGHWAY DEPARTMENT

STATION CROSS SECTIONS

SCALE: 5H:2V | SHEET NO. 5 OF 12 SHEETS | STA. 9+25.00 | TO STA. 9+25.00

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	18-17119-02-BR	LIVINGSTON	29	22
NEWTOWN ROAD DISTRICT		CONTRACT NO. 87773		
	ILLINOIS FED. AID PROJECT NQQE (685)			

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

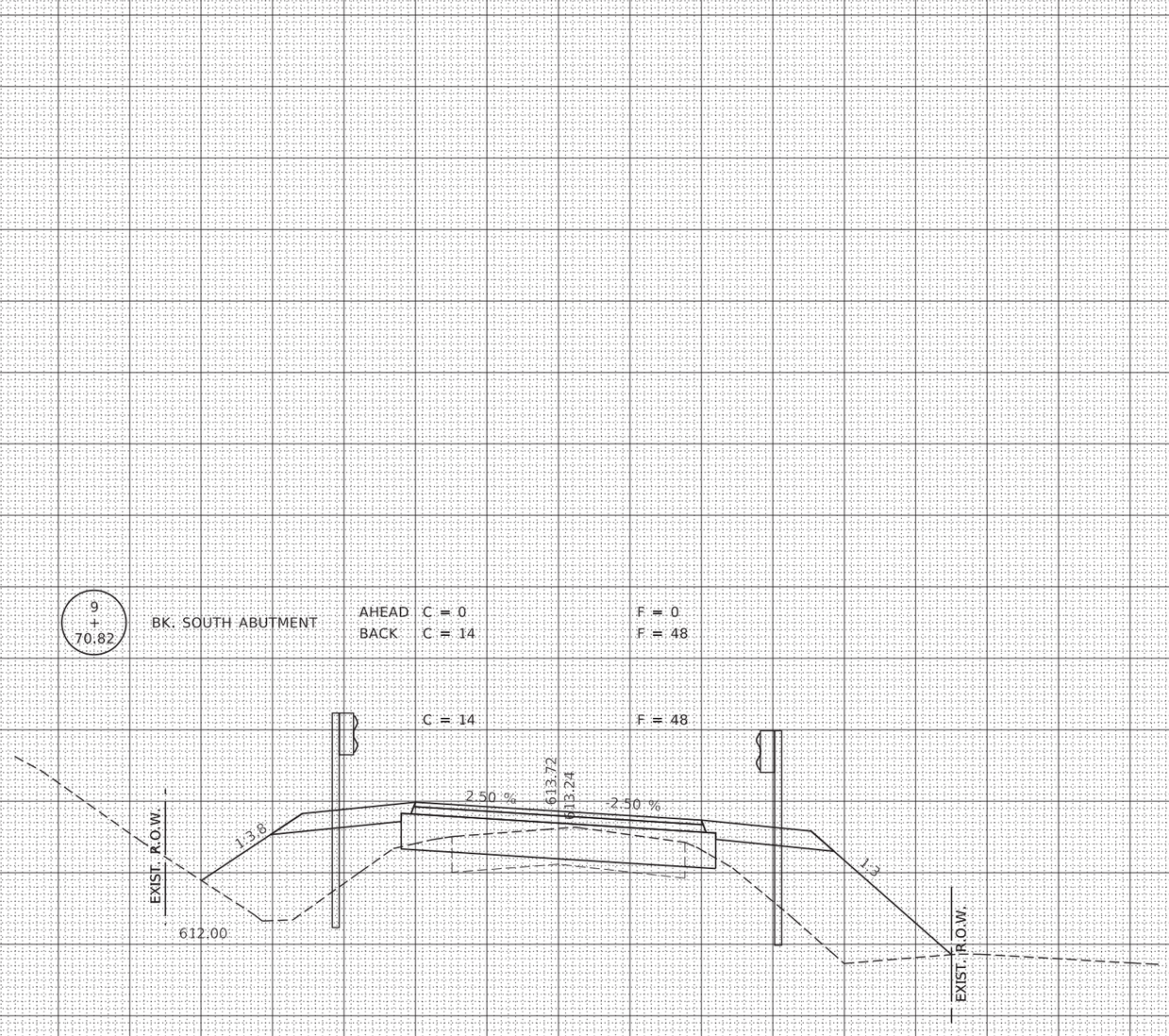
DATE

9
+
70.82

BK. SOUTH ABUTMENT

AHEAD C = 0 F = 0
BACK C = 14 F = 48

C = 14 F = 48



9+50.00

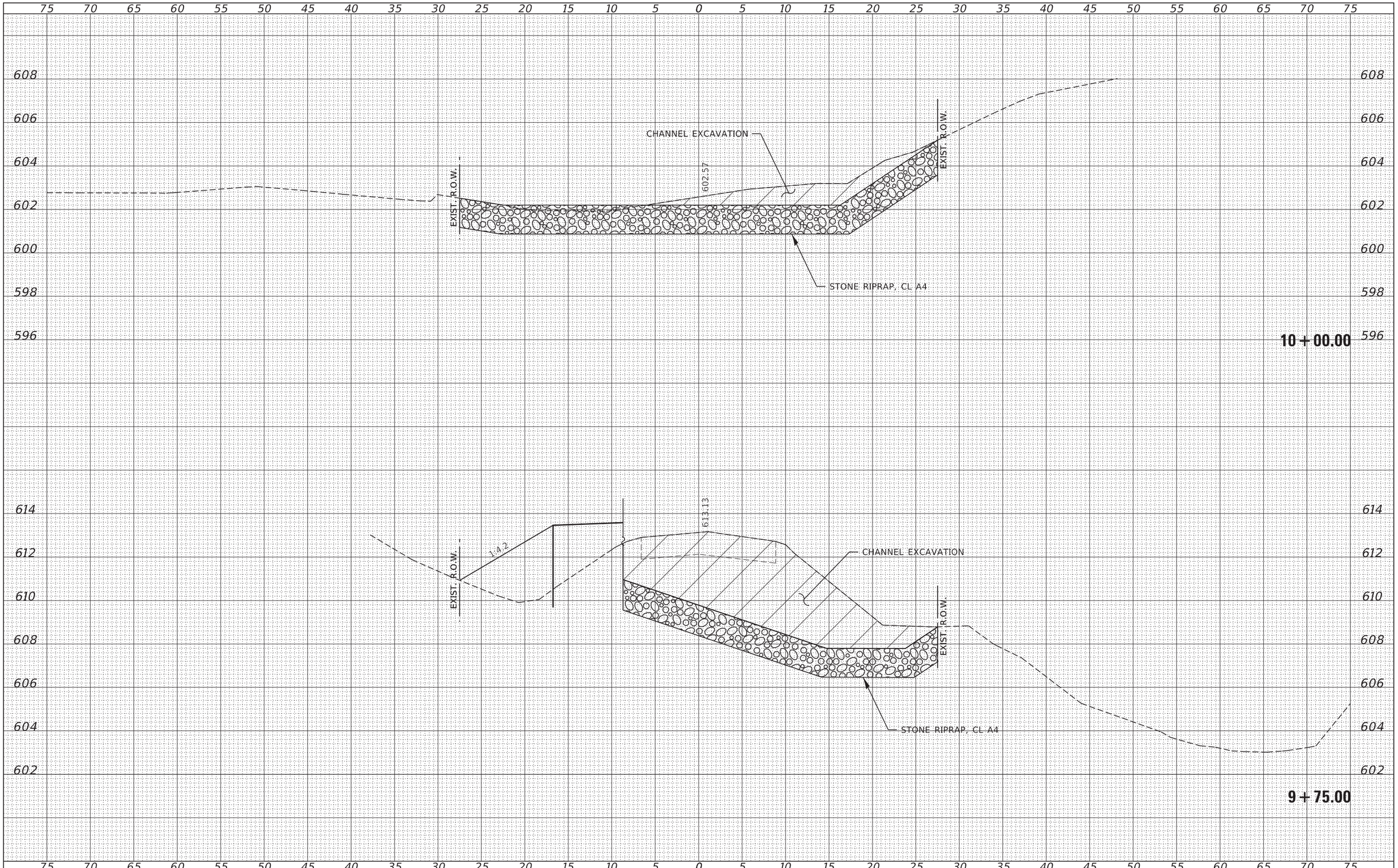
FILE NAME = 190486-sht-xssheets.dgn	USER NAME = rhoslck	DESIGNED - S.A.A.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC. 3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959		DRAWN - T.W.K.	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - J.W.F.	REVISED -
	PLOT DATE = 12/22/2021	DATE - 11/17/21	REVISED -

STATE OF ILLINOIS
LIVINGSTON COUNTY HIGHWAY DEPARTMENT

STATION CROSS SECTIONS

SCALE: 5H:2V | SHEET NO. 6 OF 12 SHEETS | STA. 9+50.00 | TO STA. 9+50.00

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	18-17119-02-BR	LIVINGSTON	29	23
NEWTOWN ROAD DISTRICT		CONTRACT NO. 87773		
	ILLINOIS	FED. AID PROJECT NQQE (685)		



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

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

FILE NAME = 190486-sht-xssheets.dgn	USER NAME = rhoslck	DESIGNED - S.A.A.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC.		DRAWN - T.W.K.	REVISED -
3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703	PLOT SCALE = $SCALE$	CHECKED - J.W.F.	REVISED -
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT DATE = 12/22/2021	DATE - 11/17/21	REVISED -

STATE OF ILLINOIS
LIVINGSTON COUNTY HIGHWAY DEPARTMENT

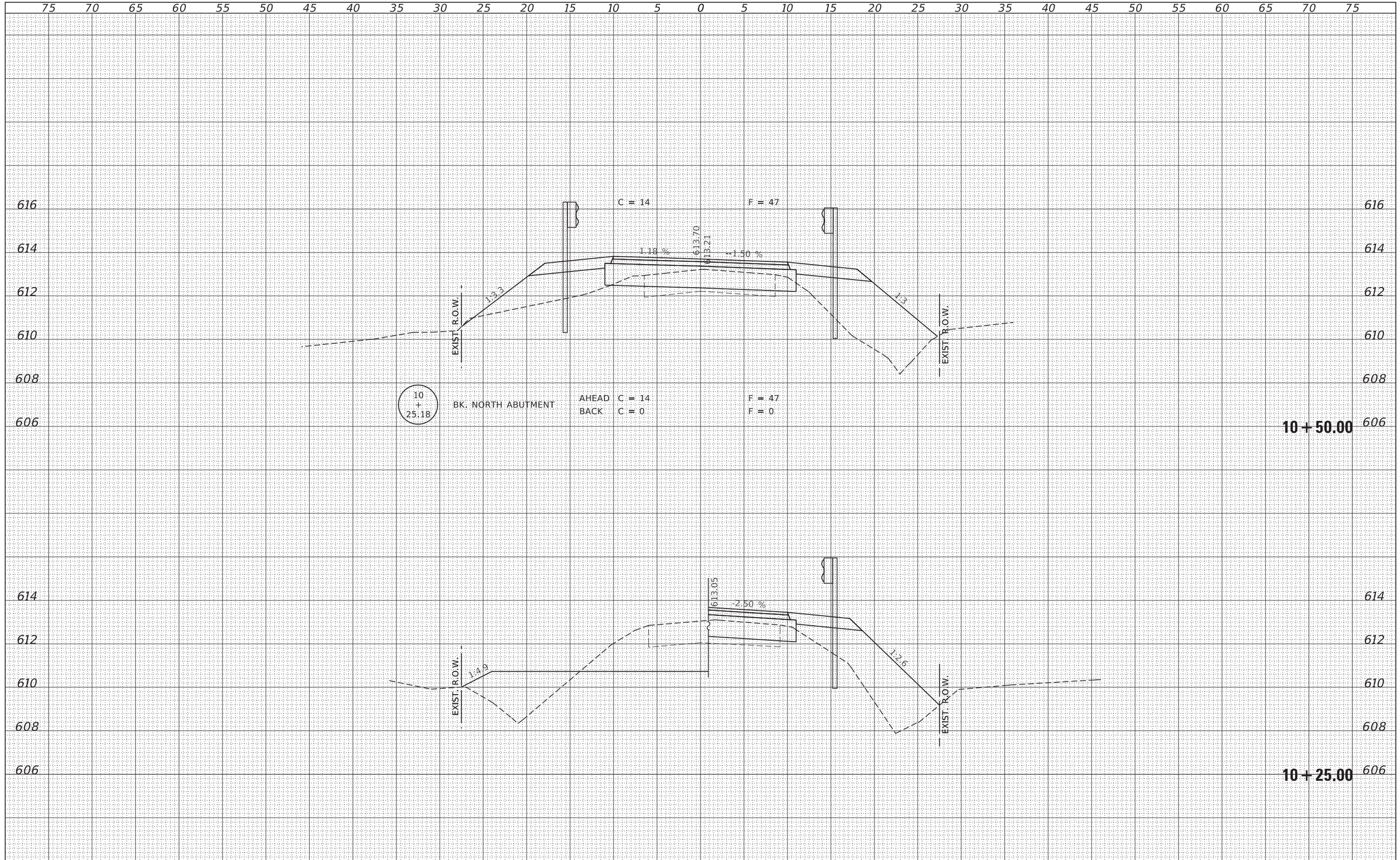
STATION CROSS SECTIONS

SCALE: 5H:2V | SHEET NO. 7 OF 12 SHEETS | STA. 9+75.00 TO STA. 10+00.00

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	18-17119-02-BR	LIVINGSTON	29	24
NEWTOWN ROAD DISTRICT		CONTRACT NO. 87773		
ILLINOIS	FED. AID PROJECT NQQE (685)			

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

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



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		DRAWN - T.W.K.	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - J.W.F.	REVISED -
	PLOT DATE = 12/22/2021	DATE - 11/17/21	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. 8 OF 12 SHEETS | STA. 10+25.00 TO STA. 10+50.00

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	18-17119-02-BR	LIVINGSTON	29	25
NEWTOWN ROAD DISTRICT		CONTRACT NO. 87773		
ILLINOIS	FED. AID PROJECT NQQE (685)			

ORIGINAL 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

614 612 610 608 606

C = 18 F = 41

613.70 613.32

-1.50 % -1.50 %

1:3 1:3

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

610.00 610.35

11 + 00.00

C = 16 F = 54

613.70 613.23

-0.46 % -1.50 %

1:3 1:3

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

10 + 75.00

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

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

FILE NAME = 190486-sht-xssheets.dgn	USER NAME = rhoslck	DESIGNED - S.A.A.	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.W.K.	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - J.W.F.	REVISED -
	PLOT DATE = 12/22/2021	DATE - 11/17/21	REVISED -

STATE OF ILLINOIS
LIVINGSTON COUNTY HIGHWAY DEPARTMENT

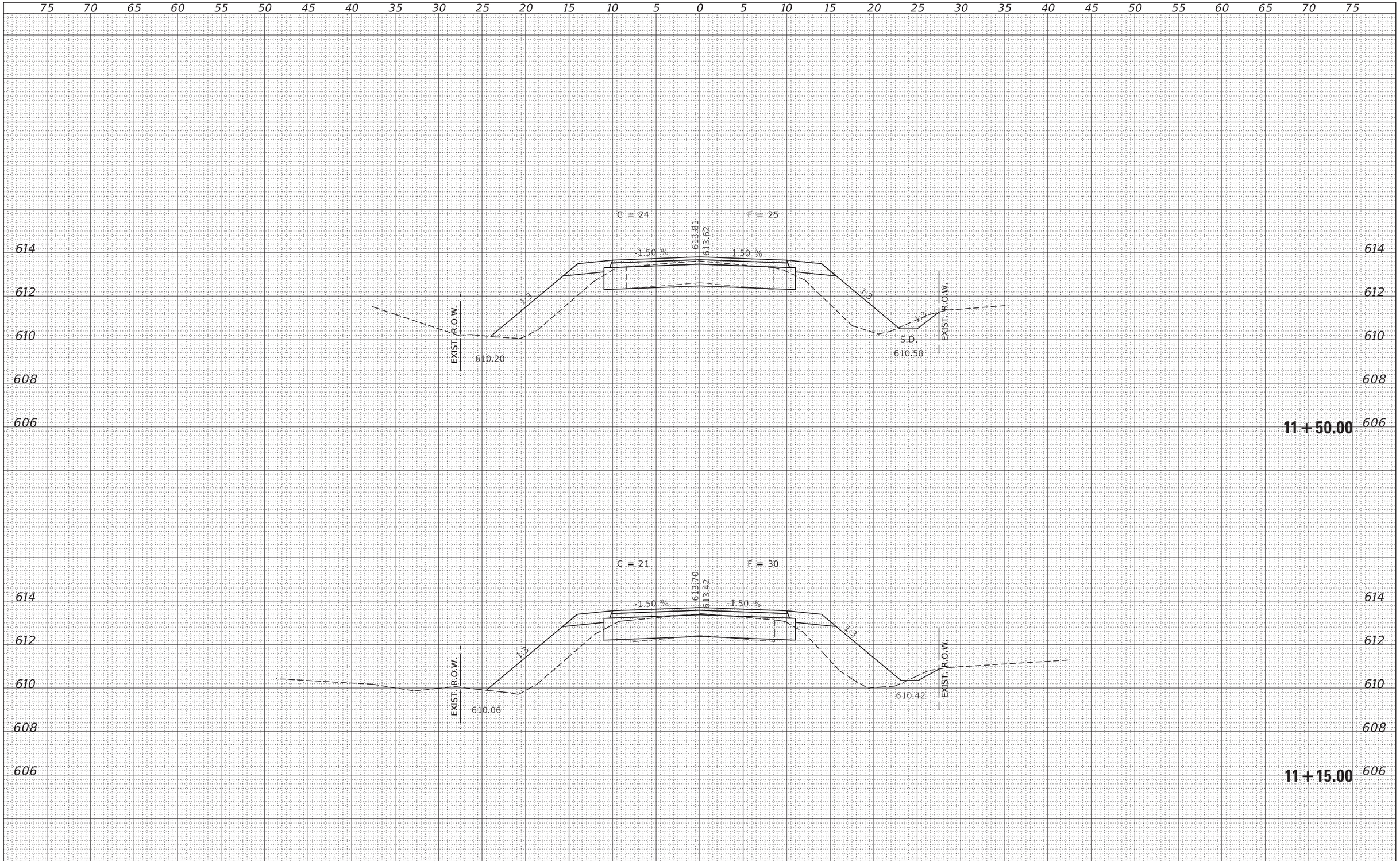
STATION CROSS SECTIONS

SCALE: 5H:2V | SHEET NO. 9 OF 12 SHEETS | STA. 10+75.00 TO STA. 11+00.00

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	18-17119-02-BR	LIVINGSTON	29	26
NEWTOWN ROAD DISTRICT		CONTRACT NO. 87773		
ILLINOIS	FED. AID PROJECT NQQE (685)			

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

ORIGINAL SURVEY	NOTE BOOK	NO.
	SURVEYED	BY
	PLOTTED	
	TEMPLATE	
	AREAS	DATE
	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 - J.W.F.	REVISED -
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT DATE = 12/22/2021	DATE - 11/17/21	REVISED -

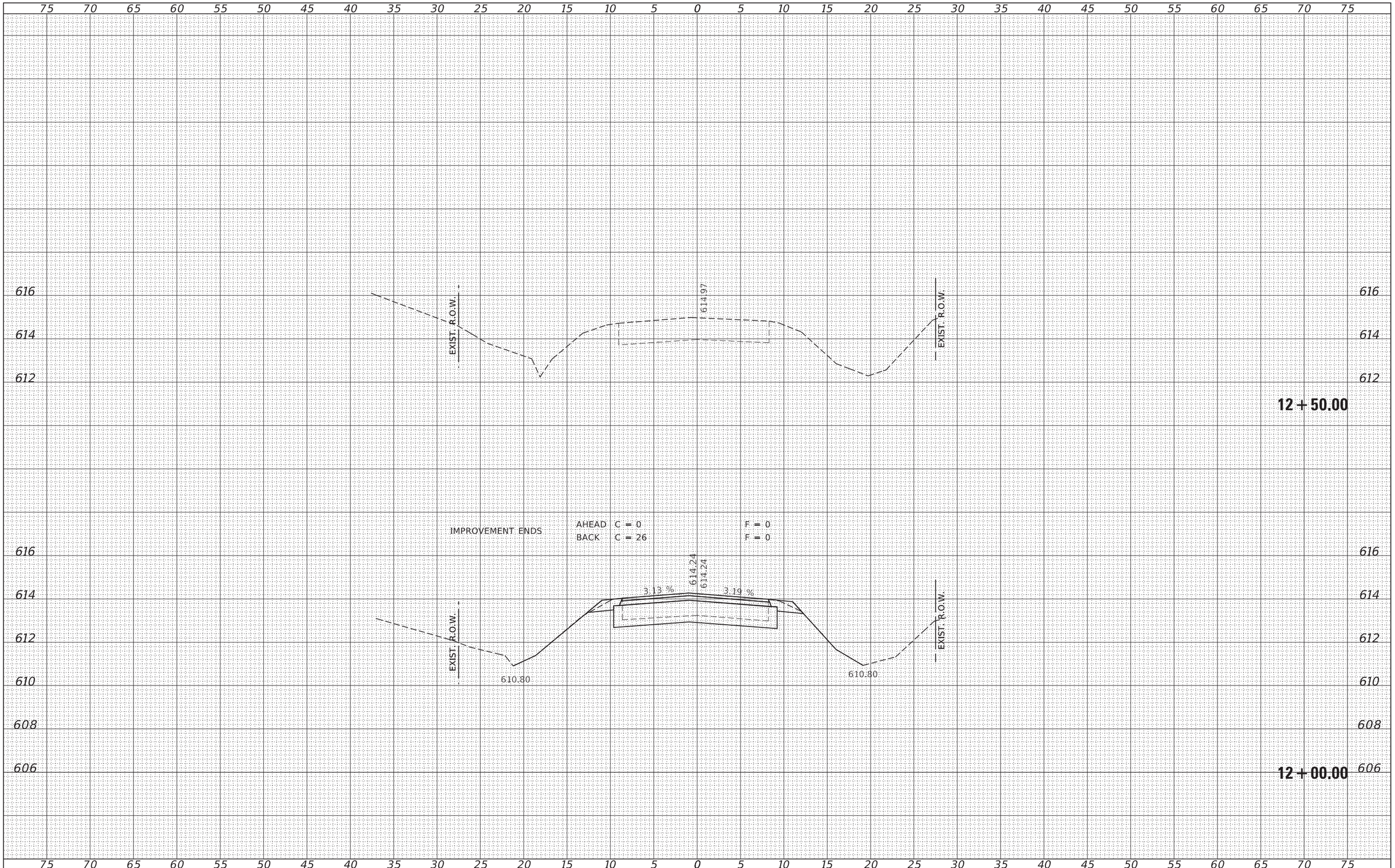
STATE OF ILLINOIS
LIVINGSTON COUNTY HIGHWAY DEPARTMENT

STATION CROSS SECTIONS

SCALE: 5H:2V | SHEET NO. 10 OF 12 SHEETS | STA. 11+15.00 TO STA. 11+50.00

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	18-17119-02-BR	LIVINGSTON	29	27
NEWTOWN ROAD DISTRICT		CONTRACT NO. 87773		
ILLINOIS	FED. AID PROJECT NQQE (685)			

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 - J.W.F.	REVISED -
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT DATE = 12/22/2021	DATE - 11/17/21	REVISED -

STATE OF ILLINOIS
LIVINGSTON COUNTY HIGHWAY DEPARTMENT

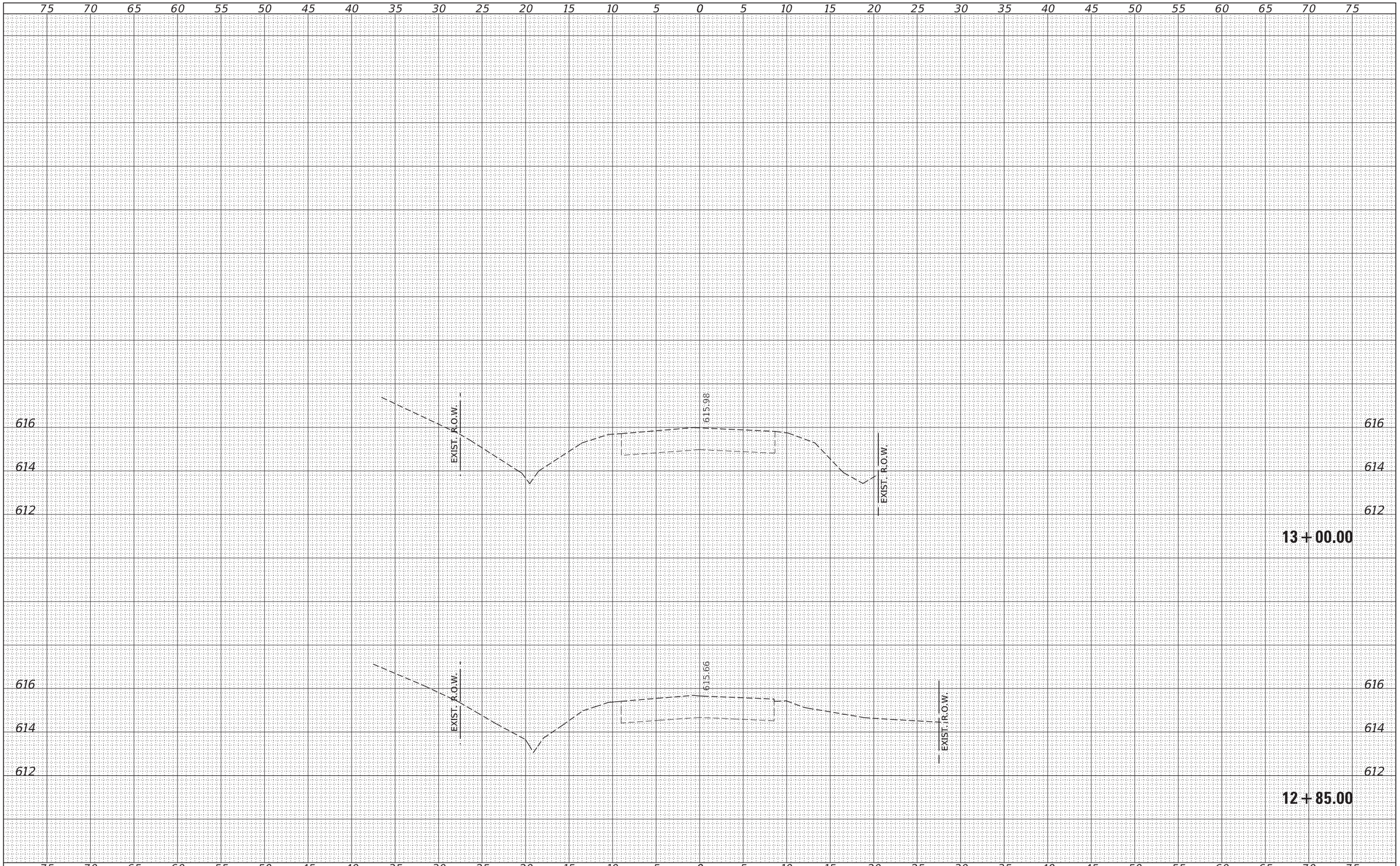
STATION CROSS SECTIONS

SCALE: 5H:2V | SHEET NO. 11 OF 12 SHEETS | STA. 12+00.00 TO STA. 12+50.00

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	18-17119-02-BR	LIVINGSTON	29	28
NEWTOWN ROAD DISTRICT		CONTRACT NO. 87773		
	ILLINOIS FED. AID PROJECT NQQE (685)			

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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	PLOT SCALE = $SCALE$	CHECKED - J.W.F.	REVISED -
	PLOT DATE = 12/22/2021	DATE - 11/17/21	REVISED -

HAMPTON, LENZINI AND RENWICK, INC.
1065 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. 12 OF 12 SHEETS | STA. 12+85.00 TO STA. 13+00.00

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	18-17119-02-BR	LIVINGSTON	29	29
NEWTOWN ROAD DISTRICT		CONTRACT NO. 87773		
	ILLINOIS FED. AID PROJECT NQQE (685)			