

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.S. 335	16-00132-00-BR	FORD	31	1
FED. ROAD DIST. NO.		ILLINOIS	CONTRACT NO. 87724	

INDEX OF SHEETS

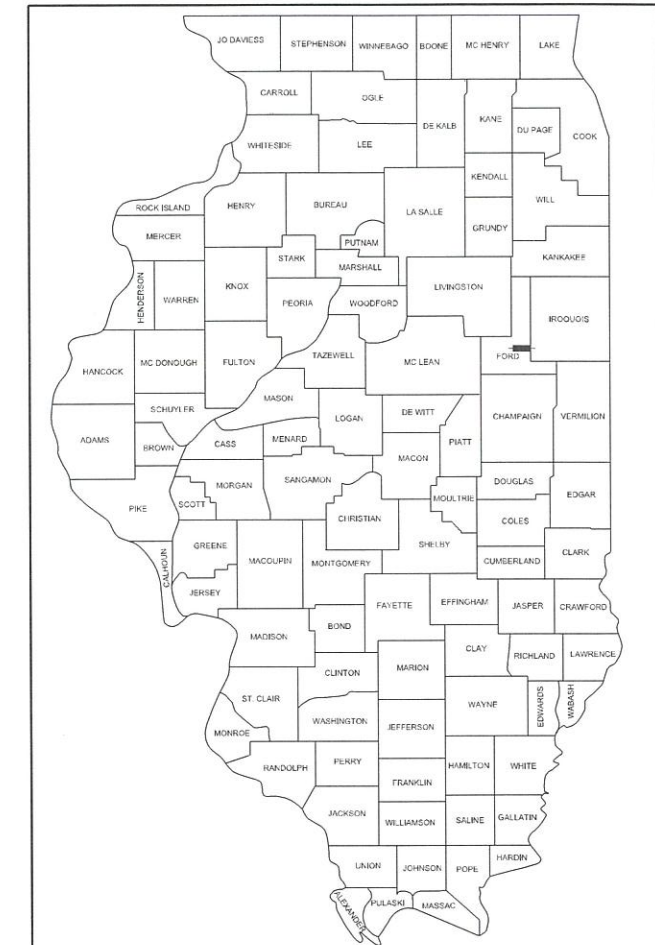
SHEET NO.	DESCRIPTION
1.	COVER SHEET
2.	SUMMARY OF QUANTITIES AND GENERAL NOTES
3.	TYPICAL CROSS SECTIONS
4.	GUARDRAIL AND SHOULDER LAYOUT
5.	PLAN AND PROFILE
6-14.	BRIDGE PLANS
15-16.	BORINGS
17-31.	STATION CROSS SECTIONS

HIGHWAY STANDARDS:

000001-07	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
515001-04	NAME PLATE FOR BRIDGES
630001-12	STEEL PLATE BEAM GUARDRAIL
630301-09	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
701901-08	TRAFFIC CONTROL DEVICES
BLR 21-9	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS
BLR 27-1	TRAFFIC BARRIER TERMINAL, TYPE 5A

PLANS FOR PROPOSED
SURFACE TRANSPORTATION PROGRAM – BRIDGE

PROJECT 65LK(956)
SECTION 16-00132-00-BR
FORD COUNTY
F.A.S. 335 / C.H. 2 / 800N ROAD / LODA LAKE ROAD
PROPOSED STRUCTURE NO. 027-3459
C-93-012-20

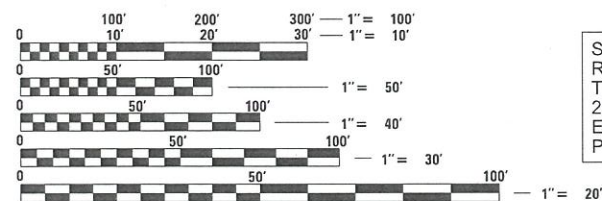


LOCATION OF SECTION INDICATED THIS: - ■ -

UTILITIES

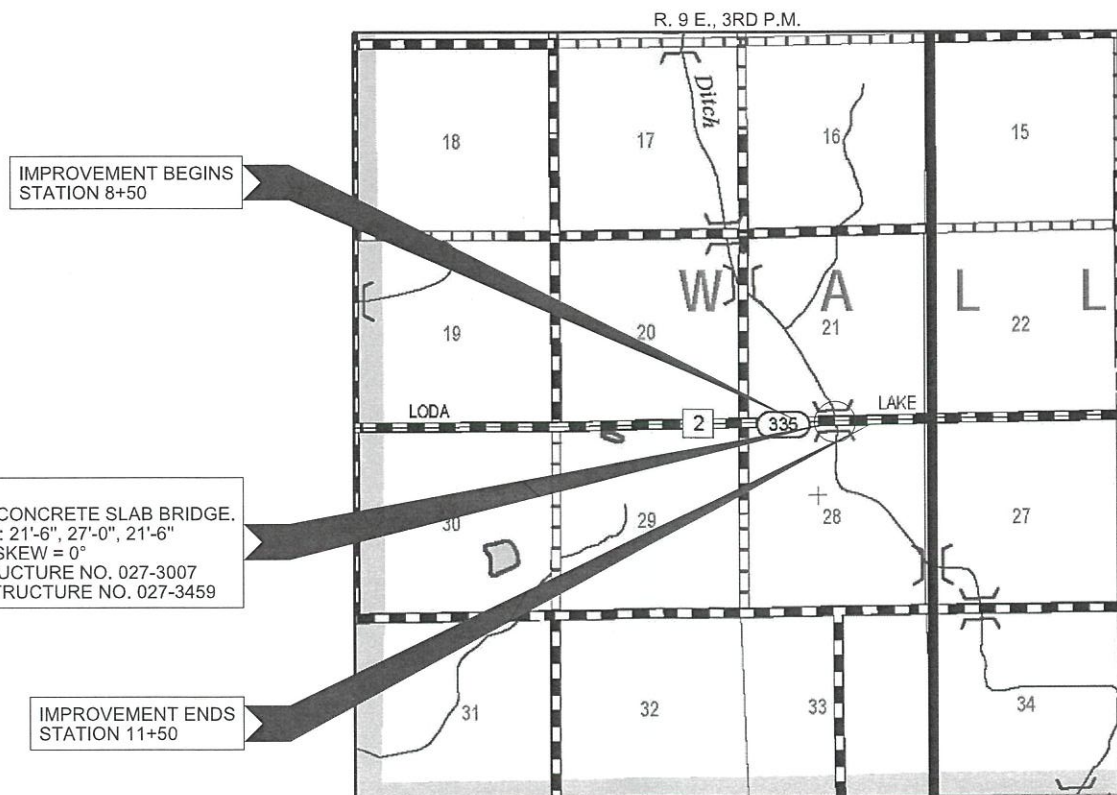
FRONTIER COMMUNICATIONS
109 E. MARKET STREET, 2ND FLOOR
BLOOMINGTON, IL 61701

EASTERN ILLINI ELECTRIC CO-OP
330 W. OTTAWA STREET
P.O. BOX 96
PAXTON, IL 60957



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

FUNCTIONAL CLASSIFICATION: MAJOR COLLECTOR (RURAL)
DESIGN SPEED: 40 MPH
DESIGN TRAFFIC: 250 ADT (2016)



STA. 10+00
REINFORCED CONCRETE SLAB BRIDGE.
THREE SPANS: 21'-6", 27'-0", 21'-6"
28'-0" RDWY.; SKEW = 0°
EXISTING STRUCTURE NO. 027-3007
PROPOSED STRUCTURE NO. 027-3459

IMPROVEMENT ENDS
STATION 11+50

IMPROVEMENT BEGINS
STATION 8+50

LOCATION MAP

APPROXIMATE SCALE: 0 1/2 MILE
NET LENGTH OF SECTION = 300 FEET = 0.057 MILES



WARNING

CALL 811
BEFORE YOU DIG
DIG NO: X2502497

ILLINOIS DEPARTMENT OF TRANSPORTATION

APPROVED FEBRUARY 4 2020

Joyce L. Perkins
FORD COUNTY ENGINEER

PASSED FEBRUARY 20TH 2020

David C. ...
DISTRICT THREE ENGINEER OF
LOCAL ROADS & STREETS
Releasing For Bid Based on Limited Review
FEBRUARY 20TH 2020
David ...
REGION TWO ENGINEER

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DATE: 02/03/2020



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

EXPIRES: 11/30/2021

PROJECT NUMBER: 16.0453.130

DATE: 02/03/2020

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	CONSTRUCTION TYPE CODE
			0014 TOTAL
20200100	EARTH EXCAVATION	CU YD	415
20300100	CHANNEL EXCAVATION	CU YD	180
20700110	POROUS GRANULAR EMBANKMENT	TON	88
28100807	STONE DUMPED RIPRAP, CLASS B4	TON	590
35100100	AGGREGATE BASE COURSE, TYPE A	TON	380
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	1,166
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	115
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	72
40604050	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N50	TON	42
48101200	AGGREGATE SHOULDERS, TYPE B	TON	126
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
50300225	CONCRETE STRUCTURES	CU YD	35.8
50300255	CONCRETE SUPERSTRUCTURE	CU YD	101.0
50300280	CONCRETE ENCASEMENT	CU YD	22.9
50300260	BRIDGE DECK GROOVING	SQ YD	210
50300300	PROTECTIVE COAT	SQ YD	270
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	49,330
50900205	STEEL RAILING, TYPE S1	FOOT	153
51200957	FURNISHING METAL SHELL PILES 12"X0.250"	FOOT	615
51202305	DRIVING PILES	FOOT	615
51203200	TEST PILE METAL SHELLS	EACH	2
51500100	NAME PLATES	EACH	1
542D0220	PIPE CULVERTS, CLASS D, TYPE 1 15"	FOOT	28
542A0229	PIPE CULVERTS, CLASS A, TYPE 1 24"	FOOT	76
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
X2501000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.3

^ SEE SPECIAL PROVISIONS

* SPECIALTY ITEMS

GENERAL NOTES

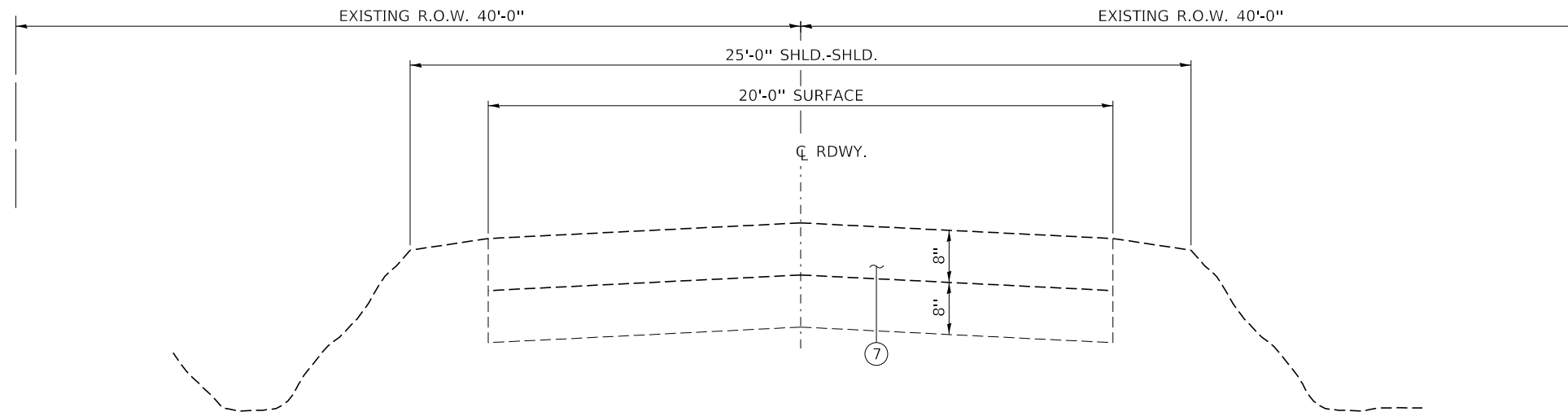
- ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED APRIL 1, 2016," THESE PLANS AND THE SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS.
- THE REVISION NUMBERS OF THE STANDARDS LISTED IN THE PLANS ARE TO BE USED FOR CONSTRUCTING OF THIS SECTION.
- ALL CLEARING AND GRUBBING, FENCE REMOVAL AND REMOVAL OF EXISTING DRAINAGE STRUCTURES SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION. THE REMOVAL OF THE EXISTING PAVEMENT WILL BE PAID FOR AS EARTH EXCAVATION. ALL BITUMINOUS MATERIAL SHALL BE PROPERLY DISPOSED OF BY THE CONTRACTOR IN A METHOD APPROVED BY THE ENGINEER. PROPER DISPOSAL OF BITUMINOUS MATERIAL SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- THE LOCATION OF EXISTING GAS MAINS, ELECTRIC POWER LINES, TELEPHONE LINES AND OTHER UTILITIES AS SHOWN ON THE PLANS ARE BASED ON CAREFUL FIELD INVESTIGATIONS AND THE BEST INFORMATION AVAILABLE, BUT THE LOCATIONS ARE NOT GUARANTEED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN THEIR EXACT LOCATION FROM THE INDIVIDUAL UTILITY COMPANIES AND BY FIELD INSPECTION.
- 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.
- THE CONTRACTOR SHALL CONSULT THE ENGINEER IN REGARD TO THE EXACT LENGTH OF PIPE CULVERTS AND PIPE DRAINS BEFORE ORDERING THESE ITEMS.
- THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN CALCULATING PLAN QUANTITIES:

AGGREGATE SURFACE & BASE COURSE, SHOULDERS	2.05 TON/CU YD
HOT-MIX ASPHALT	112 LBS/SQ YD/INCH THICKNESS
BITUMINOUS MATERIALS (PRIME COAT)	0.25 POUNDS/SQ YD
BITUMINOUS MATERIALS (TACK COAT)	0.025 POUNDS/SQ YD
STONE DUMPED RIPRAP	1.75 TON/CU YD
TEMPORARY EROSION CONTROL SEEDING	100 LBS / ACRE
POROUS GRANULAR EMBANKMENT	1.5 TON/CU YD
- THE AREA TO BE SEEDED SHALL CONSIST OF ALL DISTURBED EARTH SURFACES WITHIN THE RIGHT OF WAY AS DIRECTED BY THE ENGINEER. SEEDING, CLASS 2 (SPECIAL) - 0.3 ACRES
- COMMITMENTS: NONE

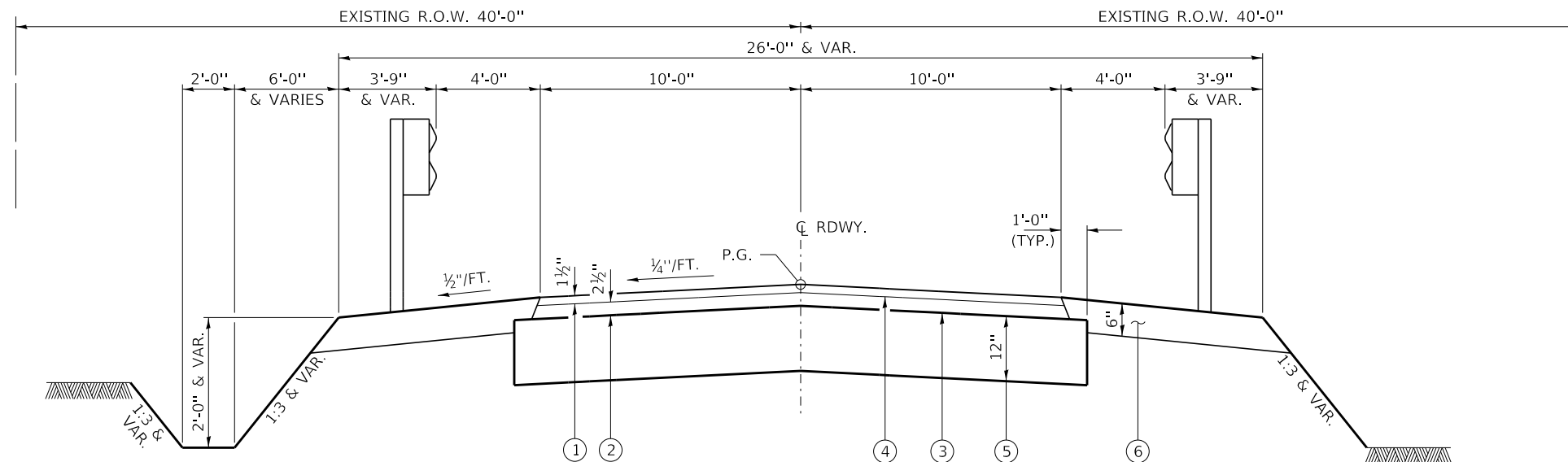
EARTHWORK SCHEDULE

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.
LODA LAKE ROAD / CH 2							
STA. 8+50 TO STA. 9+63.75	160		25.00%	100.00%	120	58	62
STA. 9+63.75 TO STA. 10+36.25		180	25.00%	70.00%	95		95
STA. 10+36.25 TO STA. 11+50	254		25.00%	100.00%	190	185	5
TOTAL	414	180			405	244	162
USE	415	180					160

WASTE 160 CU YDS



EXISTING TYPICAL CROSS SECTION
STA. 8+50 TO 11+50



PROPOSED TYPICAL CROSS SECTION
STA. 8+50 TO 11+50

SUGGESTED CUT SECTION
CONSTRUCT AS SHOWN IN
STATION CROSS SECTIONS

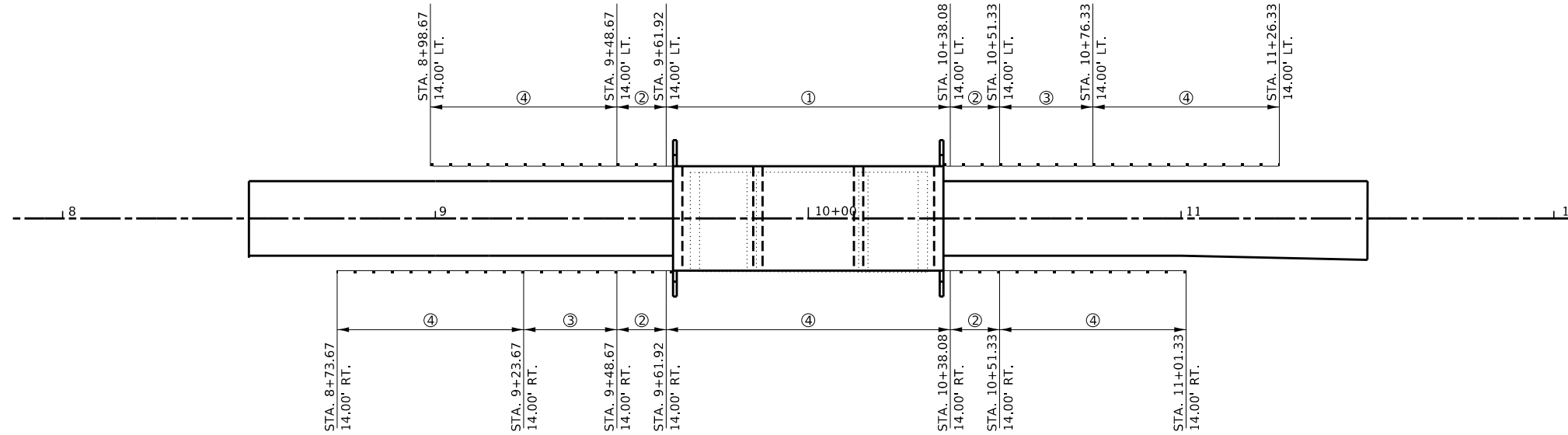
SUGGESTED FILL SECTION
CONSTRUCT AS SHOWN IN
STATION CROSS SECTIONS

LEGEND

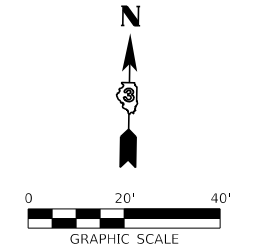
- ① HMA SURFACE COURSE, MIX C, IL-9.5, N50 (1½" THICKNESS)
- ② HMA BINDER COURSE, IL.-19.0, N50 (2½" THICKNESS)
- ③ BITUMINOUS MATERIALS (PRIME COAT)
- ④ BITUMINOUS MATERIALS (TACK COAT)
- ⑤ AGGREGATE BASE COURSE, TYPE A (12")
- ⑥ AGGREGATE SHOULDERS, TYPE B (6")
- ⑦ EXISTING HMA SURFACE (8") ON AGGREGATE BASE (8")

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

LOCATIONS(S)	LODA LAKE ROAD / CH 2	LODA LAKE ROAD / CH 2
MIXTURE USE(S):	HOT-MIX ASPHALT SURFACE COURSE	HOT-MIX ASPHALT BINDER COURSE
PG:	PG 64-22	PG 64-22
DESIGN AIR VOIDS:	4% @ 50 Gyr.	4% @ 50 Gyr.
MIXTURE COMPOSITION: (MIXTURE GRADATION)	IL 9.5	IL 19.0
FRICTION AGGREGATE:	MIXTURE C	NONE
DENSITY TEST METHOD	CORES	CORES
MIXTURE WEIGHT:	112 LBS \ SY \ INCH THICKNESS	112 LBS \ SY \ INCH THICKNESS
QUALITY MANAGEMENT PROGRAM	QC/QA	QC/QA

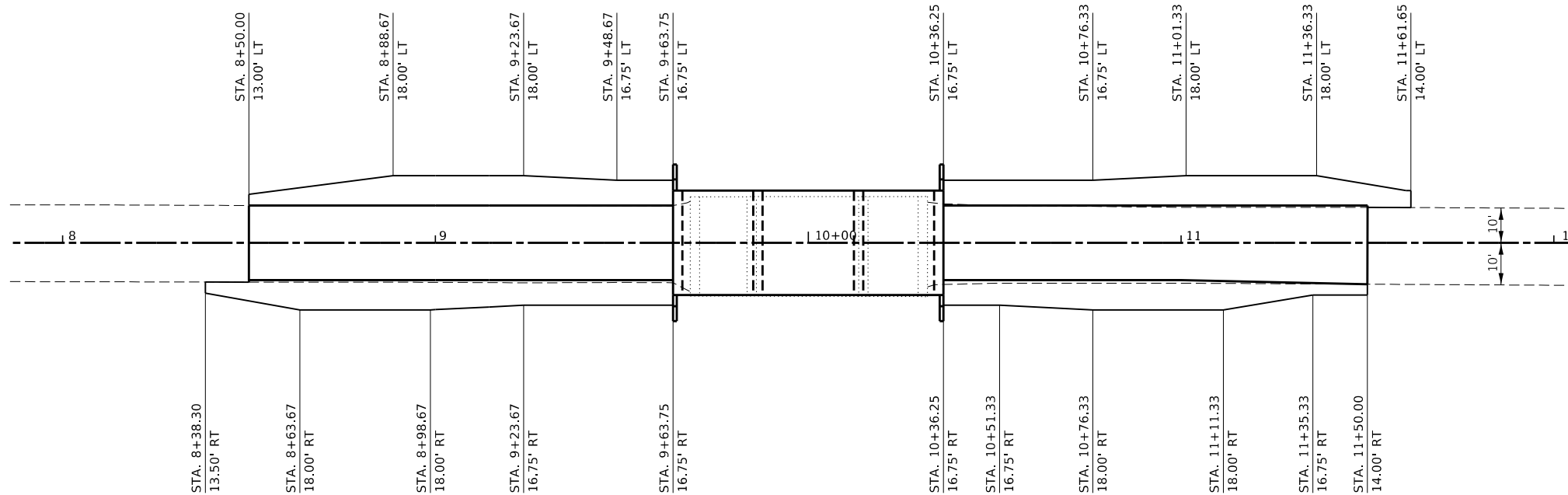


GUARDRAIL LAYOUT



NOTE:
CONSTRUCT VERTICAL TRANSITION
FOR GUARDRAIL HEIGHT FROM TBT 5A
TO TBT T1 SPL TAN IN 25 FT.

- ① STEEL RAILING, TYPE S-1
- ② TBT TY 5A
- ③ SPBGR TYPE A, 6 FT. POSTS
- ④ TBT TY 1, SPECIAL TANGENT



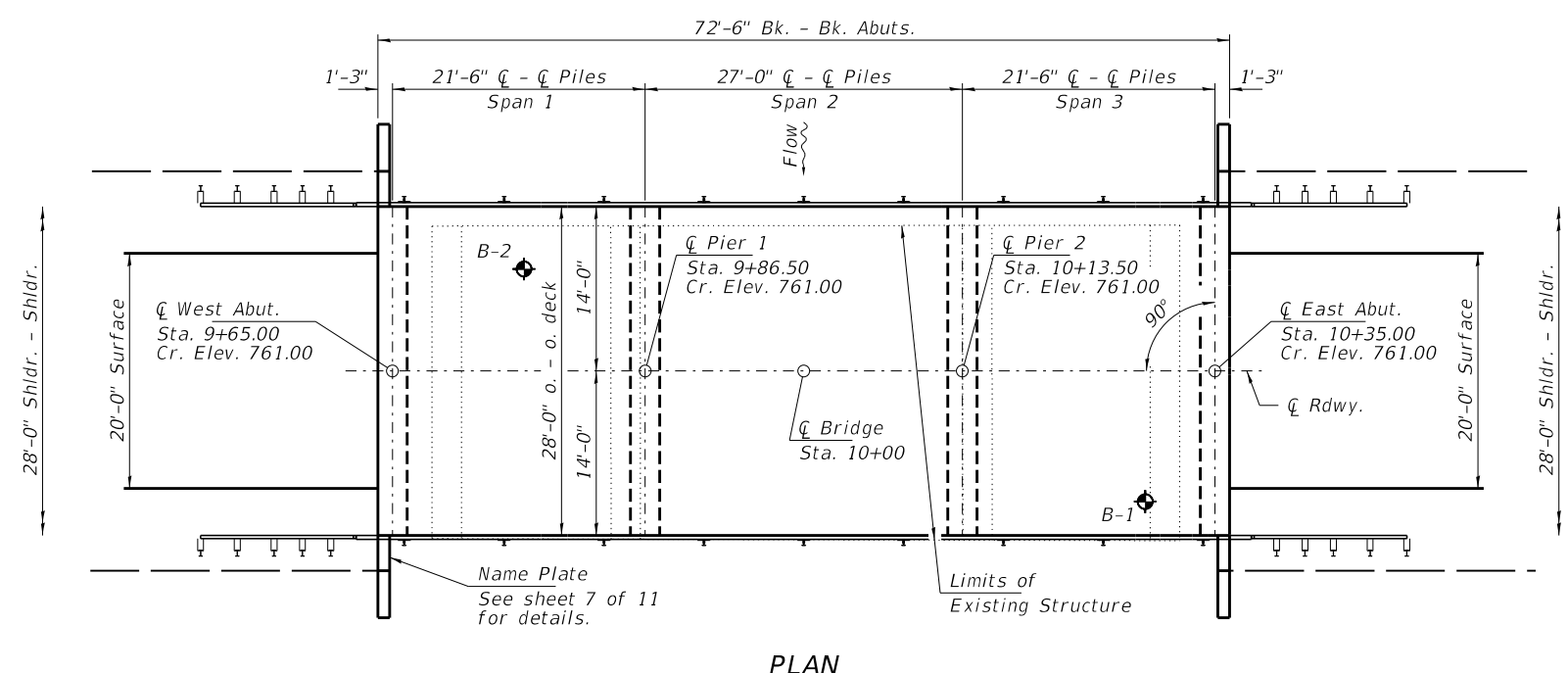
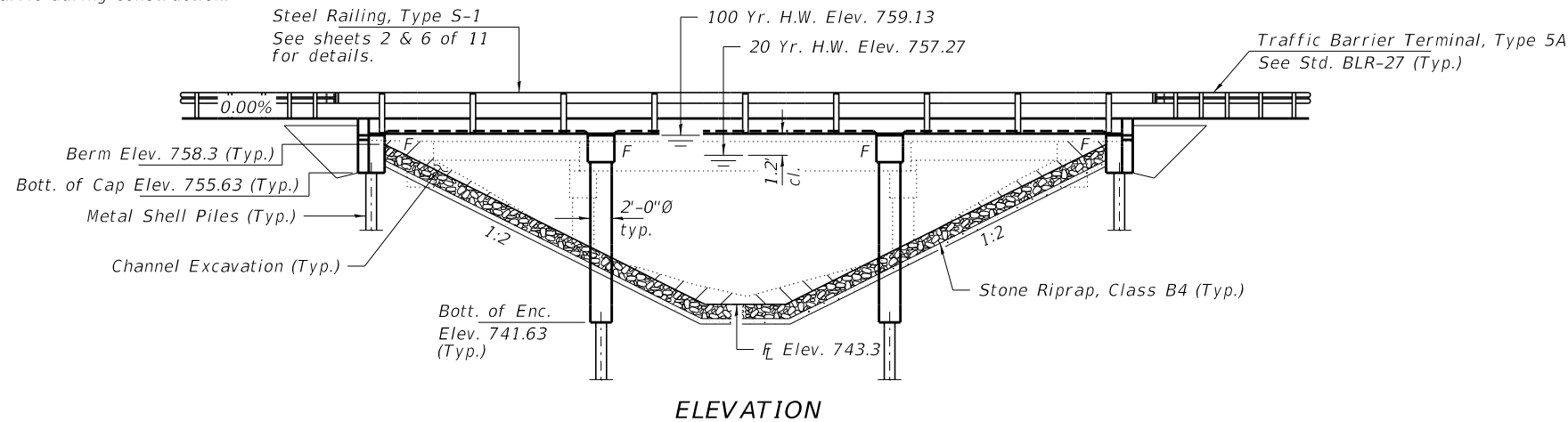
SHOULDER LAYOUT

BENCHMARK: Chiseled "X" on NW corner curb. 12' Lt., Sta. 9+66, Elev. 759.62

EXISTING STRUCTURE NO. 027-3007: Three span concrete deck bridge with a center span of steel WF beams with concrete approach spans on concrete encased timber piles and abutments. 63.55' bk.-bk. abuts.; 27.1' o.-o. deck.

Structure closed to traffic during construction.

No Salvage



DESIGN SCOUR ELEVATION TABLE

Event/Limit State	Design Scour Elevations (ft.)				Item 113
	W. Abut.	Pier 1	Pier 2	E. Abut.	
Q100	755.6	737.7	737.7	755.6	8
Q200	755.6	737.1	737.1	755.6	
Design	755.6	737.7	737.7	755.6	
Check	755.6	737.1	737.1	755.6	

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
 Design Spectral Acceleration at 1.0 sec. (SD1) = 0.084g
 Design Spectral Acceleration at 0.2 sec. (SDS) = 0.156g
 Soil Site Class = C

DESIGN SPECIFICATIONS

2017 AASHTO LRFD Bridge Design Specifications, 8th Edition with all interims.

LOADING HL-93

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

DESIGN STRESSES

FIELD UNITS

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

WATERWAY INFORMATION

Flood	Freq. Yr.	Q C.F.S.	Opening Ft ²		Nat. H.W.E.		Head - Ft.		Headwater El.	
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.
Design	10	1070	360	400	756.55	0.06	0.02	756.61	756.57	
Base	20	1300	370	440*	757.27	0.09	0.02	757.36	757.29	
Scour Check	100	1840	370	520	759.13	0.42	0.13	759.55	759.26	
Exist. Overtop	200	2050	370	520	759.56	0.47	0.21	760.03	759.77	
Max. Calc.	500	2360	370	520	760.11	0.44	0.35	760.55	760.46	

Existing Low Grade Elev. 450.50 @ Sta. 6+00
 Proposed Low Grade Elev. 452.16 @ Sta. 6+00

* Low water approach to remain

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 02/03/2020
 ILLINOIS STRUCTURAL ENGINEER NO. 081-6064



Expires 11-30-2020

GENERAL NOTES

Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
 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 Contractor shall make allowance for the deflection of forms, shrinkage, and settlement of falsework, in addition to allowance for dead load deflection. Forms for deck slab shall be removed prior to placement of bridge approach slab.
 Protective Coat shall be applied to the top surface and the sides of the concrete deck and wingwalls.
 Reinforcement bars designated (E) shall be epoxy coated.

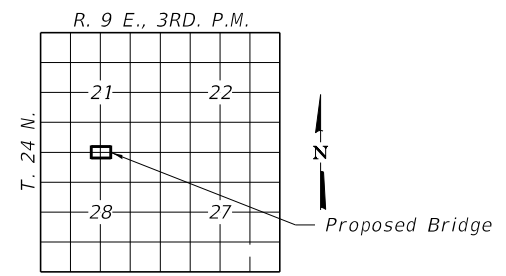
INDEX OF STRUCTURE SHEETS

1. General Plan & Elevation
2. General Details
3. Top of Slab Elevations
4. Superstructure
5. Superstructure Details
6. Steel Railing, Type S-1
7. Abutments
8. Piers
9. Metal Shell Pile Details
- 10-11. Borings

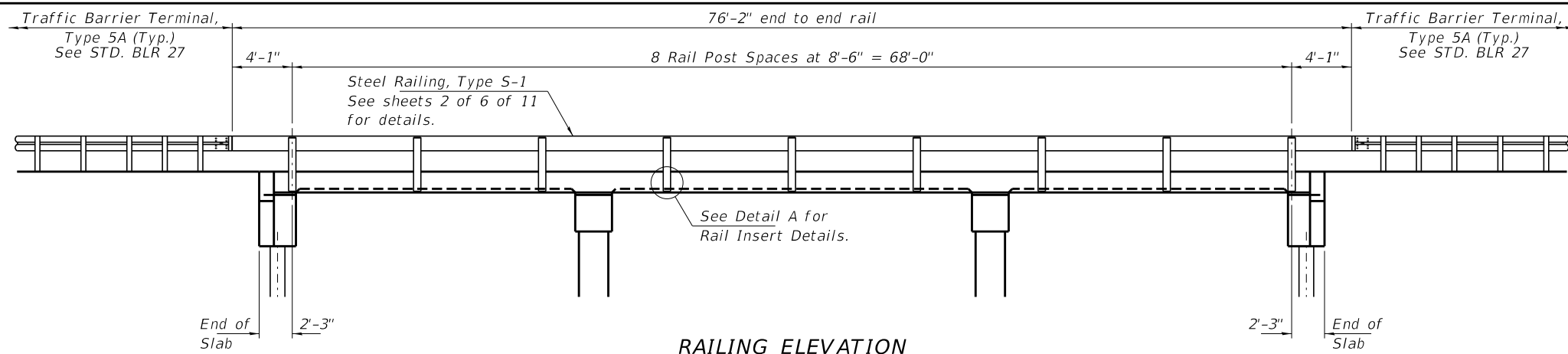
BUILT 202_ BY
 FORD COUNTY
 C.H. 2 / LODA LAKE ROAD
 SEC. 16-00132-00-BR
 STR. NO. 027-3459
 LOADING HL-93

NAME PLATE

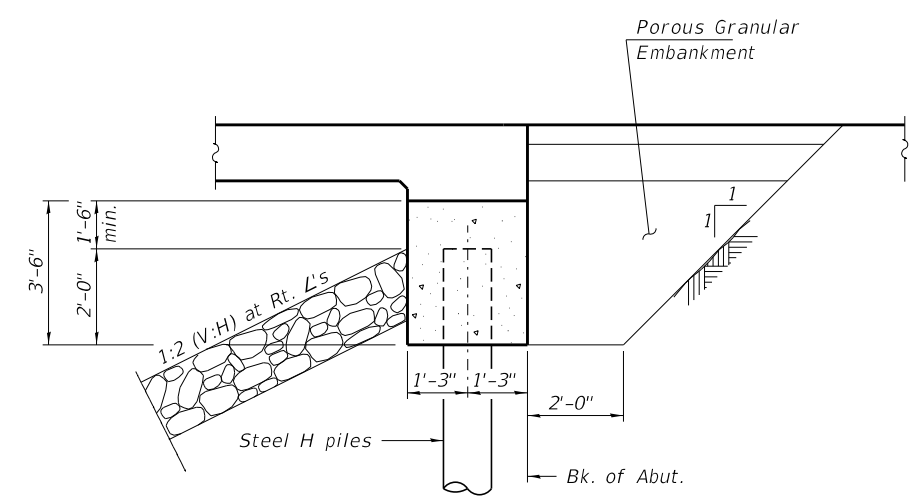
See Std. 515001



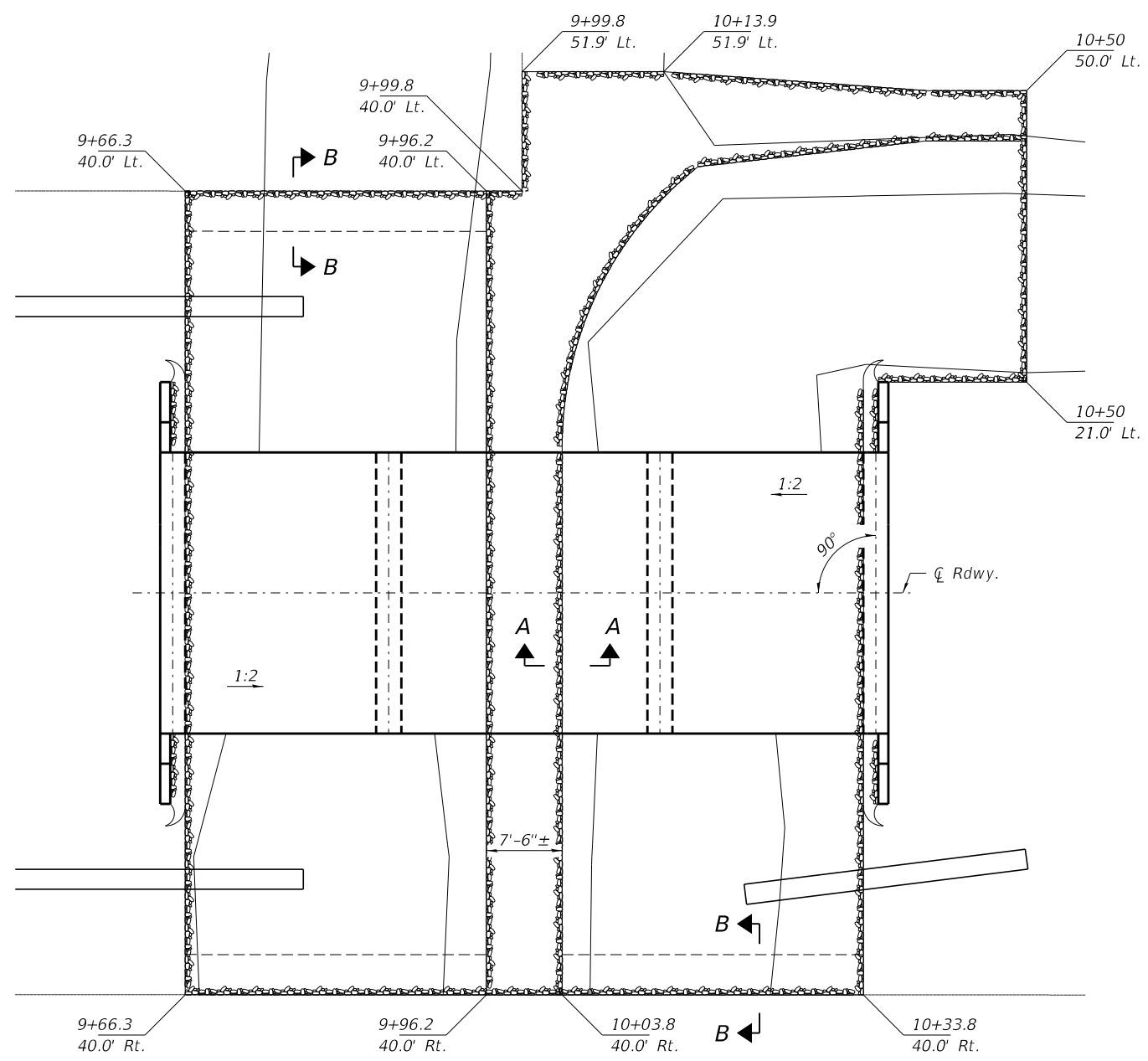
GENERAL PLAN & ELEVATION
C.H. 2 / LODA LAKE RD
OVER WALL TOWN DR. DITCH
SECTION 16-00132-00-BR
FORD COUNTY
STATION 10+00.00
STRUCTURE NO. 027-3459



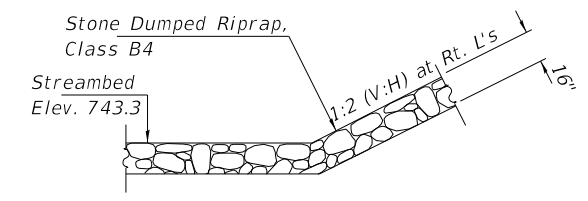
RAILING ELEVATION



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

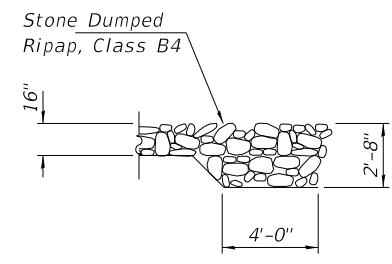


RIPRAP PLAN

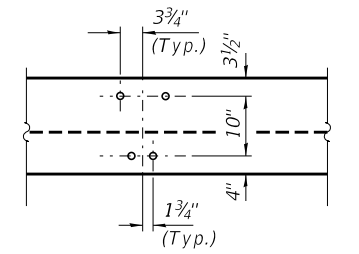


SECTION A-A

Note: See Special Provisions for Stone Dumped Riprap, Class B4.



SECTION B-B



DETAIL A

TOTAL BILL OF MATERIAL

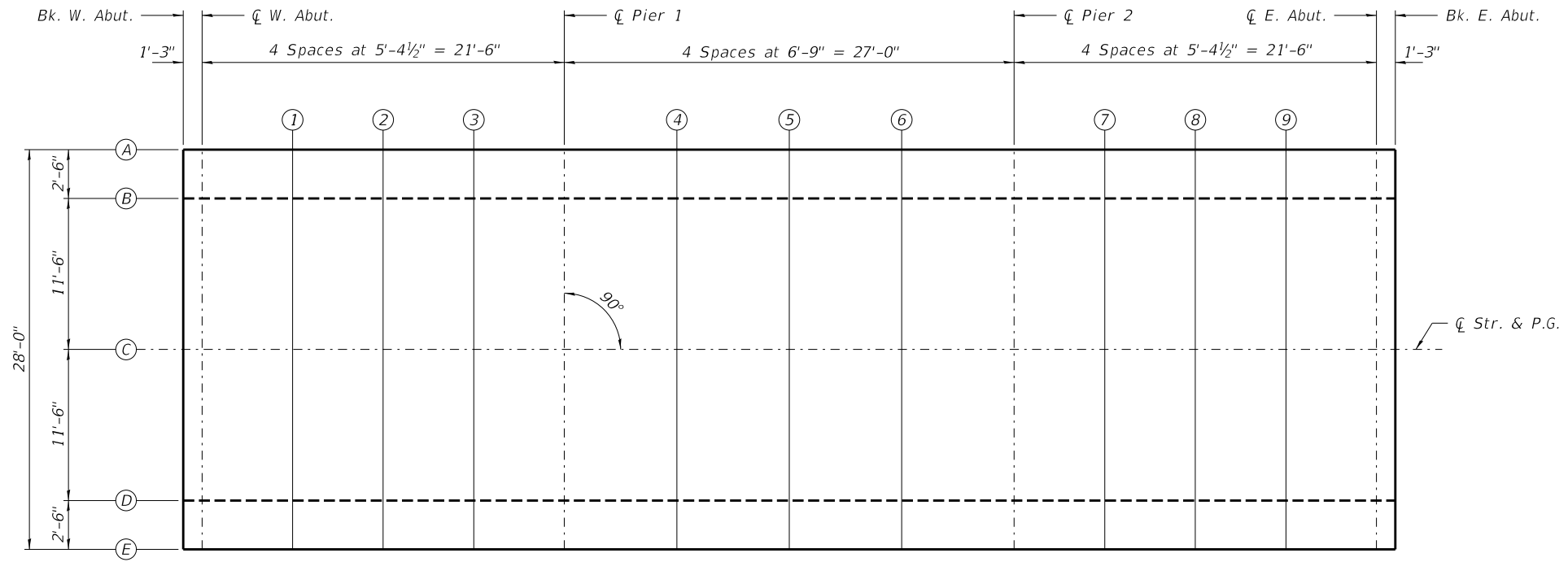
ITEM	UNIT	SUPER	SUB	TOTAL
Channel Excavation	Cu. Yd.			180
Porous Granular Embankment	Ton			88
Stone Dumped Riprap, Class B4	Ton			590
Removal of Existing Structures	Each			1
Concrete Structures	Cu. Yd.		35.8	35.8
Concrete Superstructure	Cu. Yd.	101.0		101.0
Concrete Encasement	Cu. Yd.		22.9	22.9
Bridge Deck Grooving	Sq. Yd.	210		210
Protective Coat	Sq. Yd.	250	20	270
Reinforcement Bars, Epoxy Coated	Pound	43,470	5,860	49,330
Steel Railing, Type S-1	Foot	153		153
Furnishing Metal Shell Piles 12"x0.250"	Foot		615	615
Driving Piles	Foot		615	615
Test Pile Metal Shells	Each		2	2
Name Plates	Each		1	1
Terminal Marker - Direct Applied	Each		4	4

FILE NAME = 160453-shi-bridge.dgn	USER NAME = mpaul	DESIGNED - N.D.O.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC. 3035 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM L.S. / P.E. / S.E. CORP. 184.000959	PLOT SCALE = \$SCALE\$	CHECKED - S.W.M.	REVISED -
PLOT DATE = 2/3/2020		DRAWN - R.D.H.	REVISED -
		CHECKED - S.W.M.	REVISED -

STATE OF ILLINOIS
FORD COUNTY HIGHWAY DEPARTMENT

GENERAL DETAILS
STRUCTURE NO. 027-3459

F.A.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	16-00132-00-BR	FORD	31	7
LODA LAKE ROAD / C.H. 2		CONTRACT NO. 87724		
ILLINOIS / FED. AID PROJECT 65LK(956)				



LOCATION		BK. W.	CL. W.	SPAN 1			CL	SPAN 2			CL	SPAN 3			CL E.	BK. E.
LINE	T.	ABUT.	ABUT.	1	2	3	PIER 1	4	5	6	PIER 2	7	8	9	ABUT.	ABUT.
A	ADJ.	760.708	760.708	760.712	760.712	760.708	760.708	760.712	760.715	760.712	760.708	760.708	760.712	760.712	760.708	760.708
Bott. of Slab		759.292	759.292	759.295	759.295	759.292	759.292	759.295	759.298	759.295	759.292	759.292	759.295	759.295	759.292	759.292

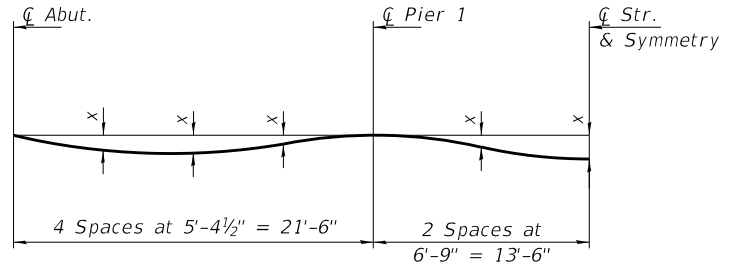
LOCATION		BK. W.	CL. W.	SPAN 1			CL	SPAN 2			CL	SPAN 3			CL E.	BK. E.
LINE	T.	ABUT.	ABUT.	1	2	3	PIER 1	4	5	6	PIER 2	7	8	9	ABUT.	ABUT.
B	ADJ.	760.760	760.760	760.764	760.764	760.760	760.760	760.764	760.767	760.764	760.760	760.760	760.764	760.764	760.760	760.760
Bott. of Slab		759.510	759.510	759.514	759.514	759.510	759.510	759.514	759.517	759.514	759.510	759.510	759.514	759.514	759.510	759.510

LOCATION		BK. W.	CL. W.	SPAN 1			CL	SPAN 2			CL	SPAN 3			CL E.	BK. E.
LINE	T.	ABUT.	ABUT.	1	2	3	PIER 1	4	5	6	PIER 2	7	8	9	ABUT.	ABUT.
C	ADJ.	761.000	761.000	761.003	761.003	761.000	761.000	761.003	761.007	761.003	761.000	761.000	761.003	761.003	761.000	761.000
Bott. of Slab		759.750	759.750	759.753	759.753	759.750	759.750	759.753	759.757	759.753	759.750	759.750	759.753	759.753	759.750	759.750

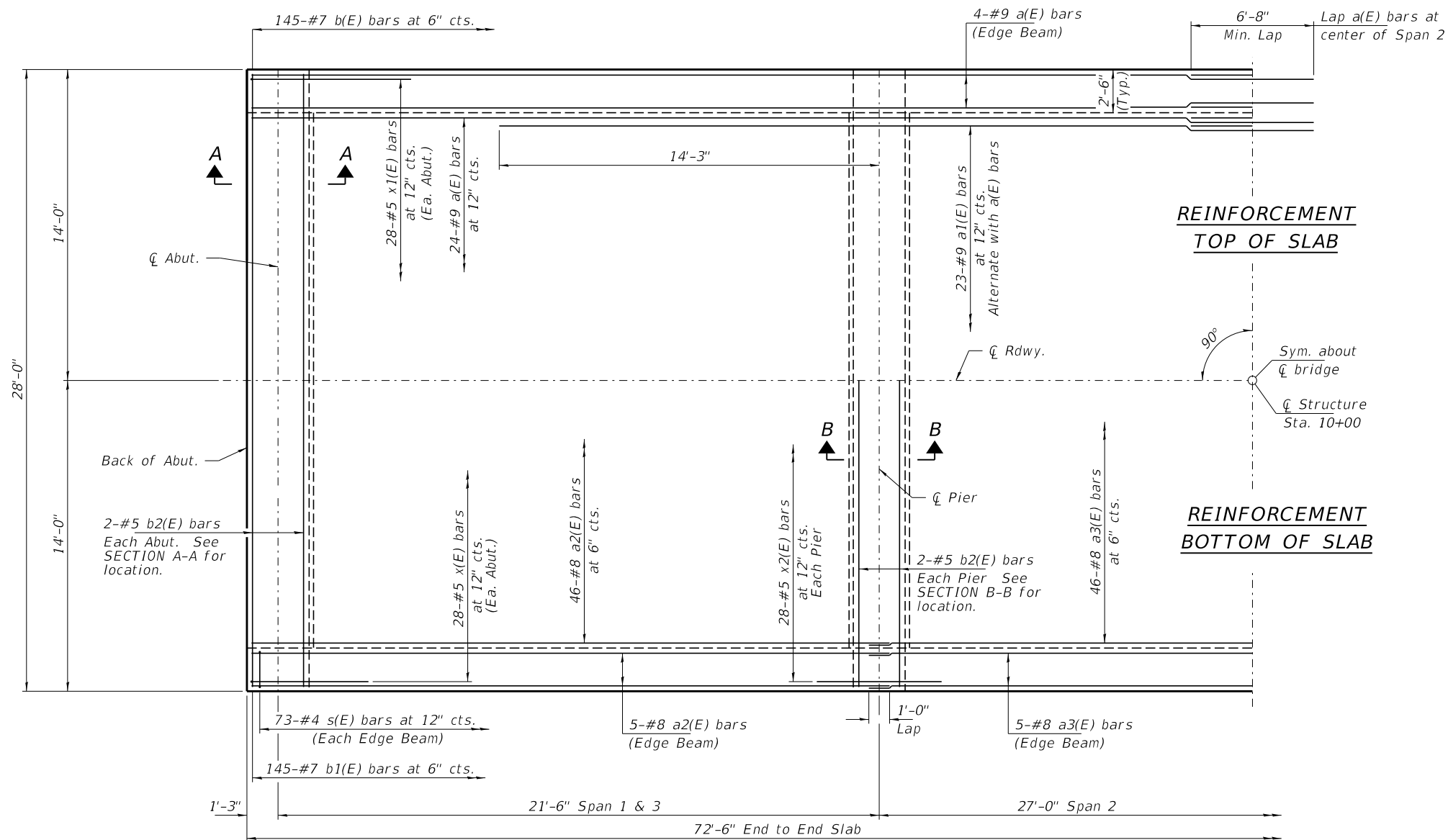
LOCATION		BK. W.	CL. W.	SPAN 1			CL	SPAN 2			CL	SPAN 3			CL E.	BK. E.
LINE	T.	ABUT.	ABUT.	1	2	3	PIER 1	4	5	6	PIER 2	7	8	9	ABUT.	ABUT.
D	ADJ.	760.760	760.760	760.764	760.764	760.760	760.760	760.764	760.767	760.764	760.760	760.760	760.764	760.764	760.760	760.760
Bott. of Slab		759.510	759.510	759.514	759.514	759.510	759.510	759.514	759.517	759.514	759.510	759.510	759.514	759.514	759.510	759.510

LOCATION		BK. W.	CL. W.	SPAN 1			CL	SPAN 2			CL	SPAN 3			CL E.	BK. E.
LINE	T.	ABUT.	ABUT.	1	2	3	PIER 1	4	5	6	PIER 2	7	8	9	ABUT.	ABUT.
E	ADJ.	760.708	760.708	760.712	760.712	760.708	760.708	760.712	760.715	760.712	760.708	760.708	760.712	760.712	760.708	760.708
Bott. of Slab		759.292	759.292	759.295	759.295	759.292	759.292	759.295	759.298	759.295	759.292	759.292	759.295	759.295	759.292	759.292

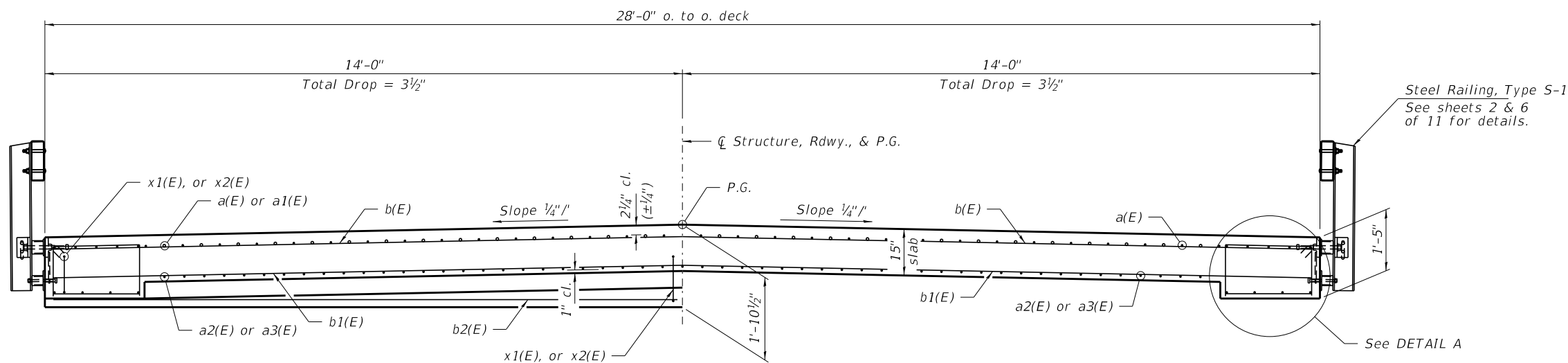
T. - Theoretical elevation at top of slab
 Adj. - T adjusted for dead load deflection
 * Bottom of slab elevation equals bottom of edge beam



Notes:
 The deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown.
 The Contractor shall make allowance for the deflection of forms, shrinkage and settlement of falsework in addition to allowance for dead load deflection.



PLAN

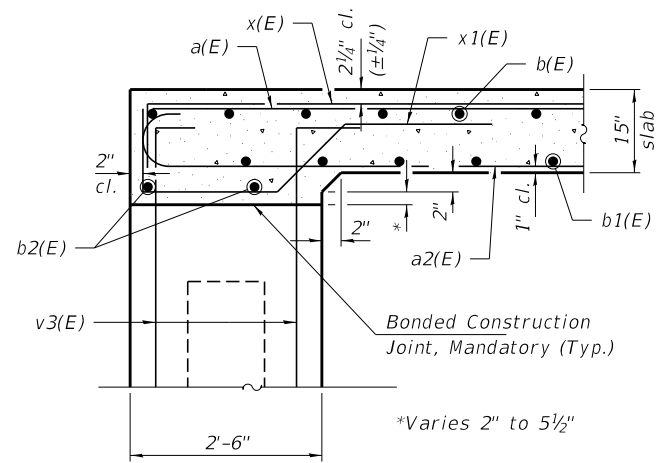


CROSS SECTION
(Looking East)

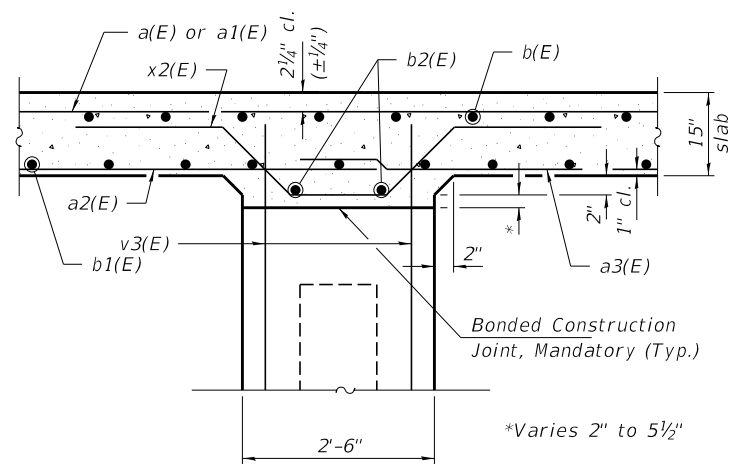
Notes:
See sheets 5 of 11 for Superstructure Details and Bill of Material.
See sheet 5 of 11 for SECTION A-A, SECTION B-B and DETAIL A.

MIN. BAR LAP
#5 = 4'-8"

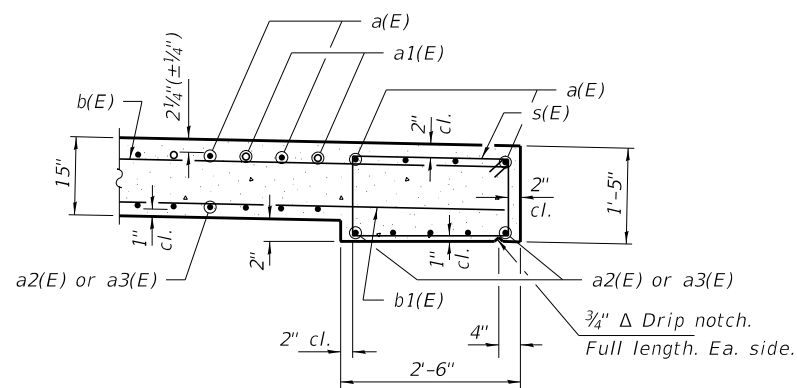
FILE NAME = 160453-shi-bridge.dgn	USER NAME = mpaul	DESIGNED - N.D.O.	REVISED -	STATE OF ILLINOIS FORD COUNTY HIGHWAY DEPARTMENT	SUPERSTRUCTURE STRUCTURE NO. 027-3459	F.A.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HAMPTON, LENZINI AND RENWICK, INC. 3035 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM L.S./P.E./S.E. CORP. 184.000959	PLOT SCALE = \$SCALE\$	CHECKED - S.W.M.	REVISED -			335	16-00132-00-BR	FORD	31	9
PLOT DATE = 2/3/2020	DRAWN - R.D.H.	CHECKED - S.W.M.	REVISED -			LODA LAKE ROAD / C.H. 2		CONTRACT NO. 87724		
						ILLINOIS		FED. AID PROJECT 65L(956)		



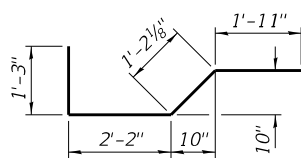
SECTION A-A



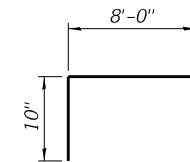
SECTION B-B



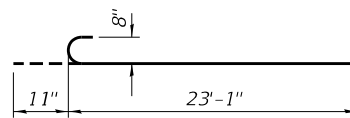
DETAIL A



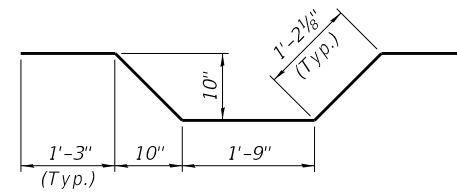
BAR x1(E)



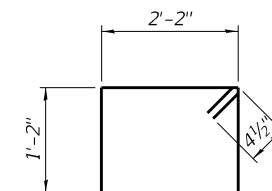
BAR x(E)



BAR a2(E)



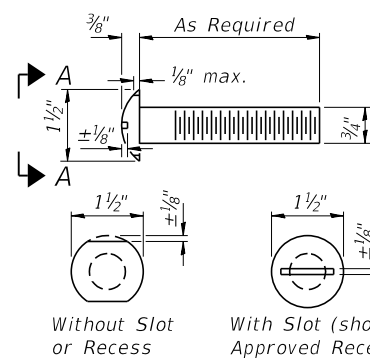
BAR x2(E)



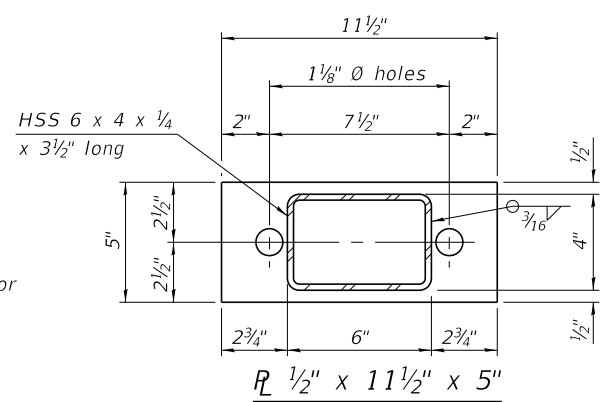
BAR s(E)

**SUPERSTRUCTURE
BILL OF MATERIAL**

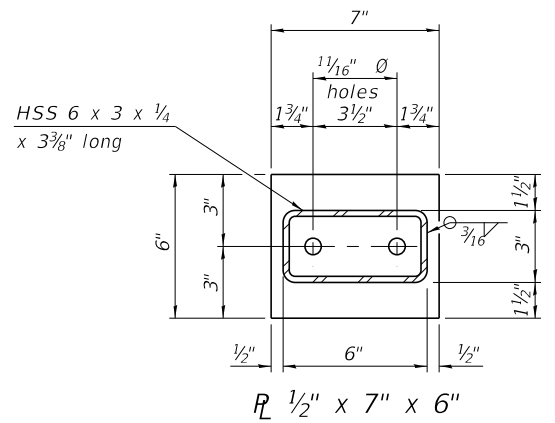
BAR	NO.	SIZE	LENGTH	SHAPE
a(E)	64	#9	39'-5"	—
a1(E)	46	#9	31'-1"	—
a2(E)	112	#8	24'-0"	C
a3(E)	56	#8	28'-0"	—
b(E)	145	#7	27'-8"	—
b1(E)	145	#7	27'-8"	—
b2(E)	8	#5	27'-8"	—
s(E)	146	#4	7'-5"	□
x(E)	56	#5	8'-10"	L
x1(E)	56	#5	6'-6"	L
x2(E)	56	#5	7'-1"	W
Concrete Superstructure			Cu. Yd.	101.0
Protective Coat			Sq. Yd.	250
Bridge Deck Grooving			Sq. Yd.	210
Reinforcement Bars, Epoxy Coated			Pound	43,470



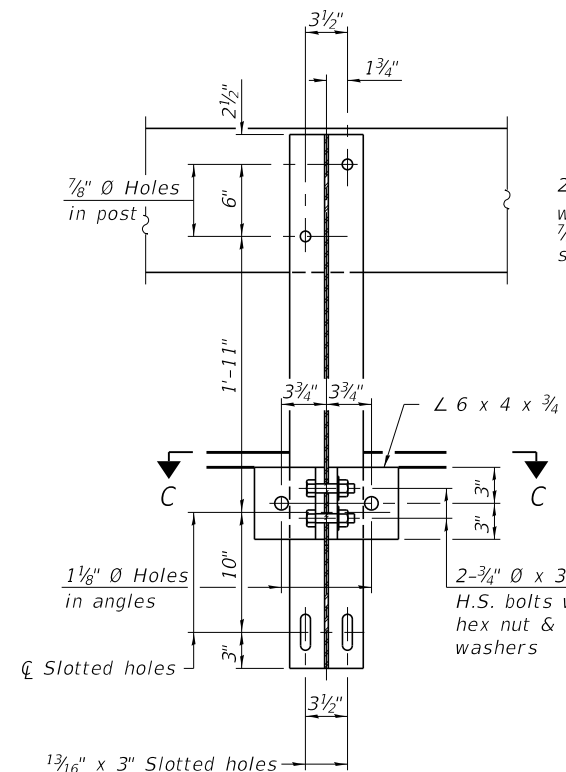
VIEW A-A
ROUND HEAD BOLT



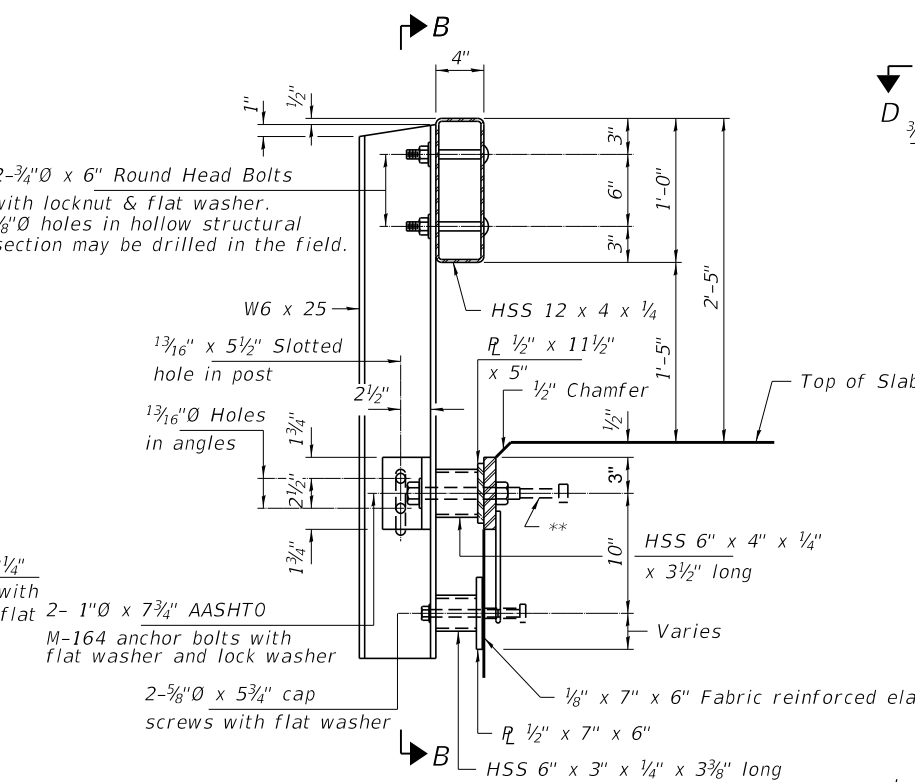
SECTION B-B
R 1/2" x 11 1/2" x 5"



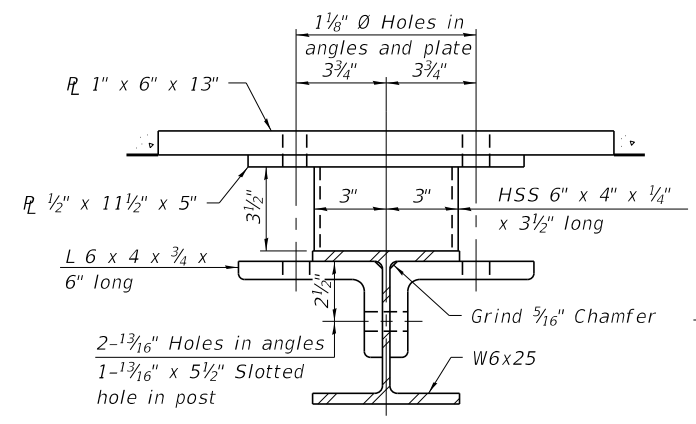
SECTION C-C
R 1/2" x 7" x 6"



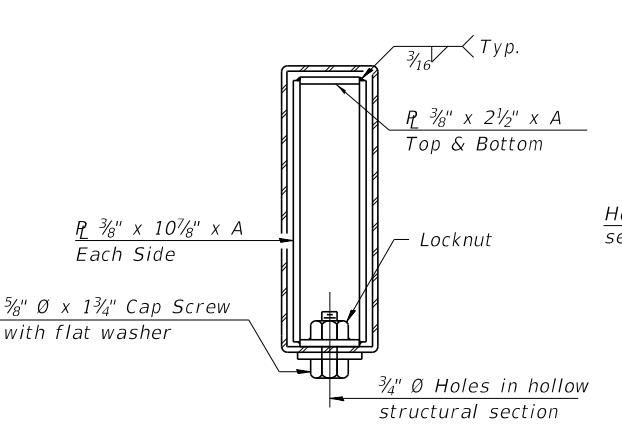
SECTION B-B



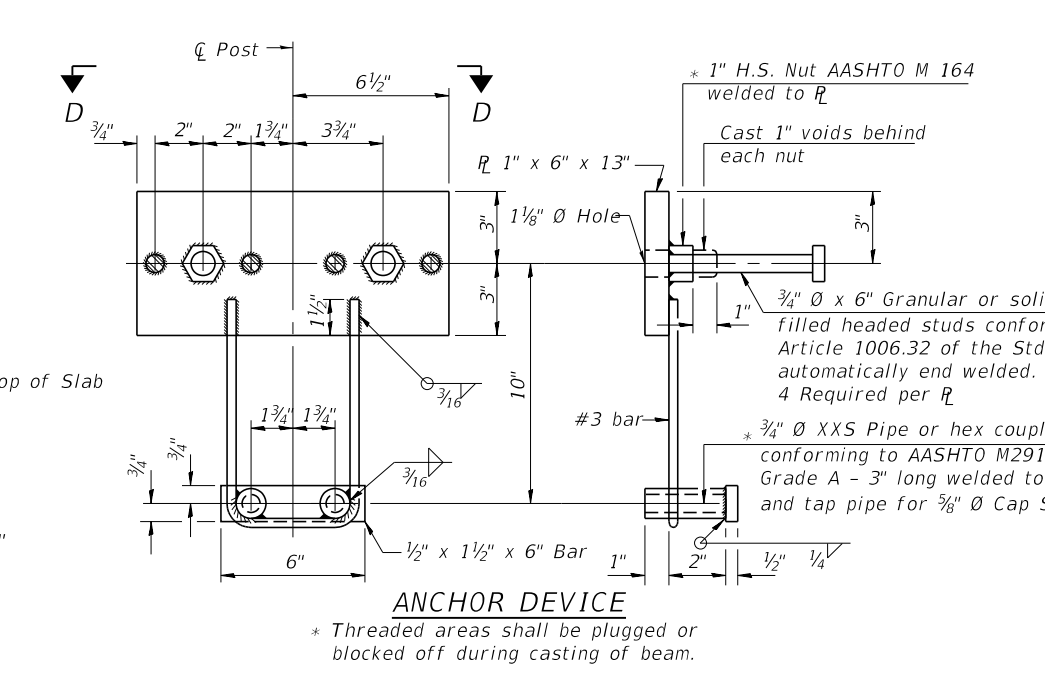
SECTION AT RAILING POST



SECTION C-C

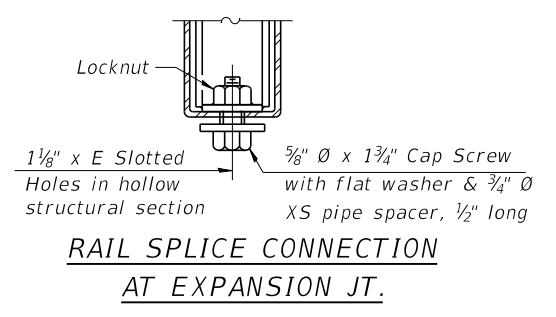


SECTIONS AT RAIL SPLICE

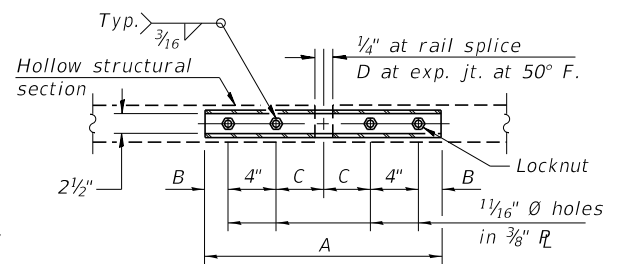


ANCHOR DEVICE

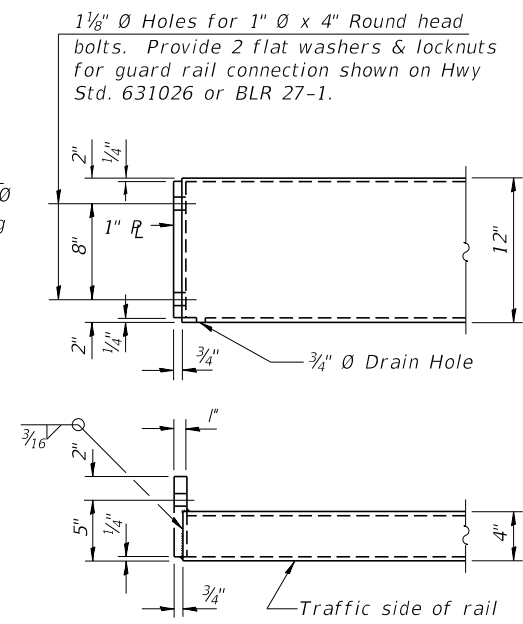
* Threaded areas shall be plugged or blocked off during casting of beam.



RAIL SPLICE CONNECTION AT EXPANSION JT.



PLAN-BOTT. SPLICE R TYPICAL



END OF RAIL DETAILS

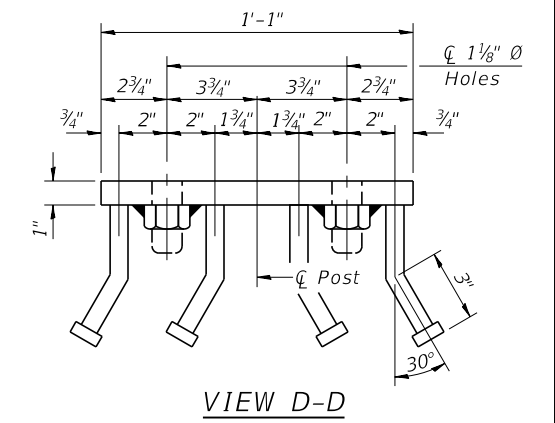
SPLICE DIMENSIONS

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

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

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.



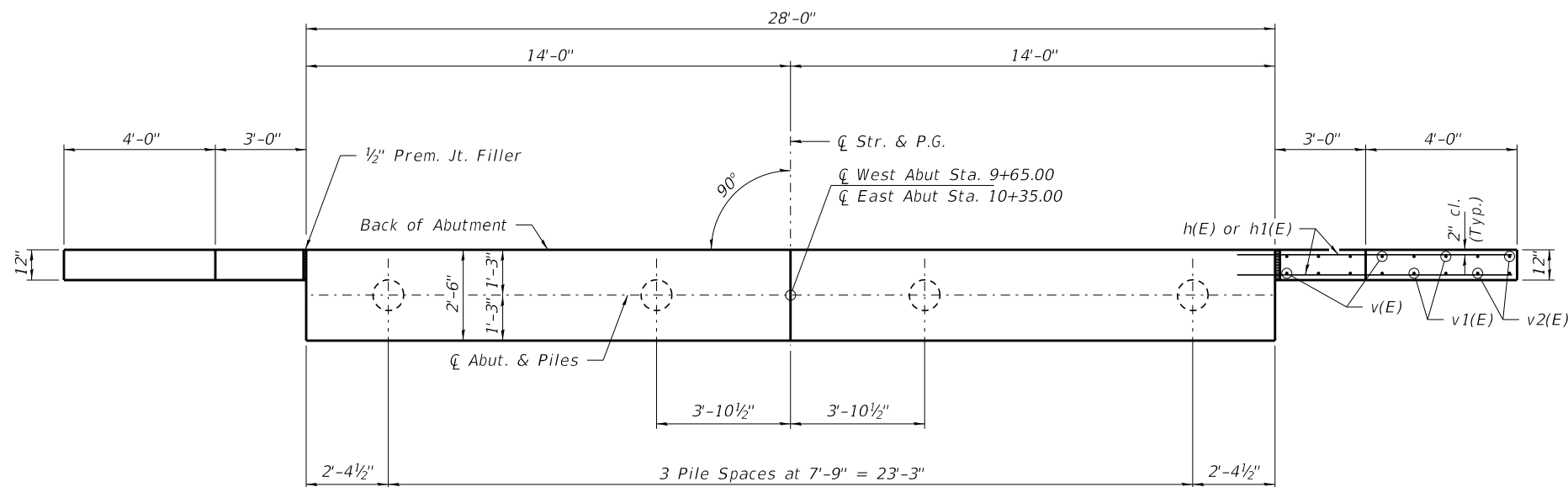
VIEW D-D

BILL OF MATERIAL

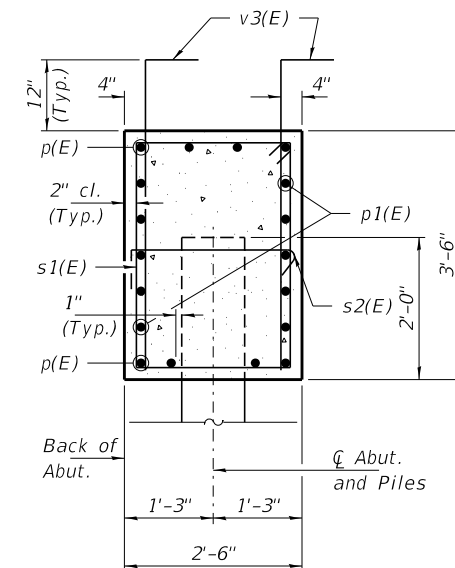
Item	Unit	Quantity
Steel Railing, Type S-1	Foot	153

R-23A 8-11-2017 (10'-9" Maximum Post Spacing)

FILE NAME = 160453-shi-bridge.dgn	USER NAME = mpaul	DESIGNED - N.D.O.	REVISED -	STATE OF ILLINOIS FORD COUNTY HIGHWAY DEPARTMENT	STEEL RAILING, TYPE S-1 STRUCTURE NO. 027-3459	F.A.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
HAMPTON, LENZINI AND RENWICK, INC. 3035 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM L5 / PE / SE CORP. 184.000959	PLOT SCALE = \$SCALE\$	CHECKED - S.W.M.	REVISED -			335	16-00132-00-BR	FORD	31	11	
	PLOT DATE = 2/3/2020	DRAWN - R.D.H.	REVISED -			LODA LAKE ROAD / C.H. 2 CONTRACT NO. 87724					
		CHECKED - S.W.M.	REVISED -			ILLINOIS FED. AID PROJECT 65L(056)					

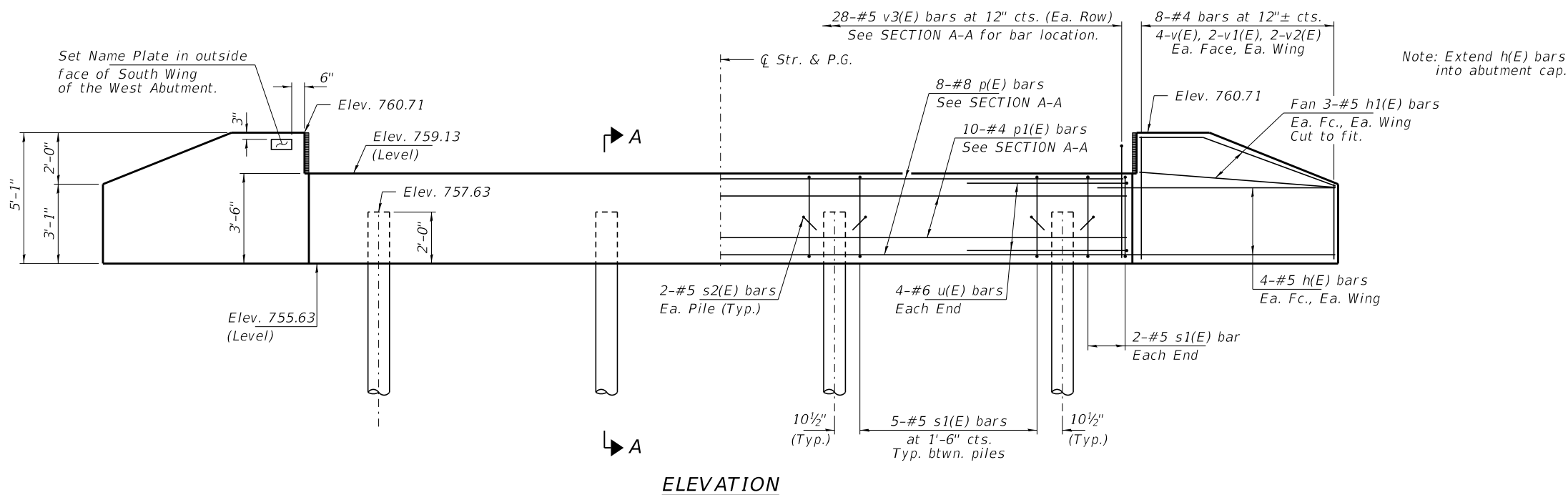


PLAN



SECTION A-A

Dimensions at right angles to abutment.



ELEVATION

BILL OF MATERIAL - 2 ABUTS.

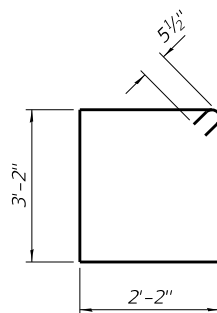
BAR	NO.	SIZE	LENGTH	SHAPE
h(E)	32	#5	8'-3"	—
h1(E)	24	#5	6'-9"	—
p(E)	16	#8	27'-8"	—
p1(E)	20	#4	27'-8"	—
s1(E)	38	#5	11'-7"	□
s2(E)	16	#5	3'-6"	┌
u(E)	16	#6	9'-9"	U
v(E)	16	#5	4'-8"	—
v1(E)	16	#5	3'-9"	—
v2(E)	16	#5	2'-9"	—
v3(E)	112	#5	4'-8"	—
Concrete Structures			Cu. Yd.	22.8
Protective Coat			Sq. Yd.	17.9
Reinf. Bars, Epoxy Coated			Pound	3,480
Metal Shell Piles 12"x0.250"			Foot	210
Driving Piles			Foot	210
Test Pile Metal Shells			Each	1
Name Plates			Each	1

PILE DATA

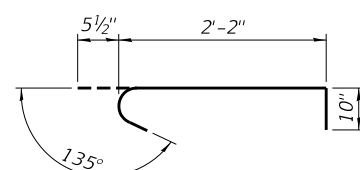
Type:----- Metal Shell Piles 12"x0.250"
 Nominal Required Bearing:----- 216 Kips/Pile
 Factored Resistance Available:----- 108 Kips/Pile
 Est. Length:----- 30 Ft/Pile
 No. Production Piles:----- 8
 No. Test Piles:----- 1

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

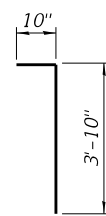
Notes:
 For details of piles, see sheet 9 of 11.
 Bottom of wing shall be poured monolithic with the abutment cap. Entire quantity included with Concrete Structures.
 Extend h(E) bars into abutment cap.



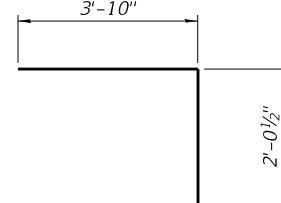
BAR s1(E)



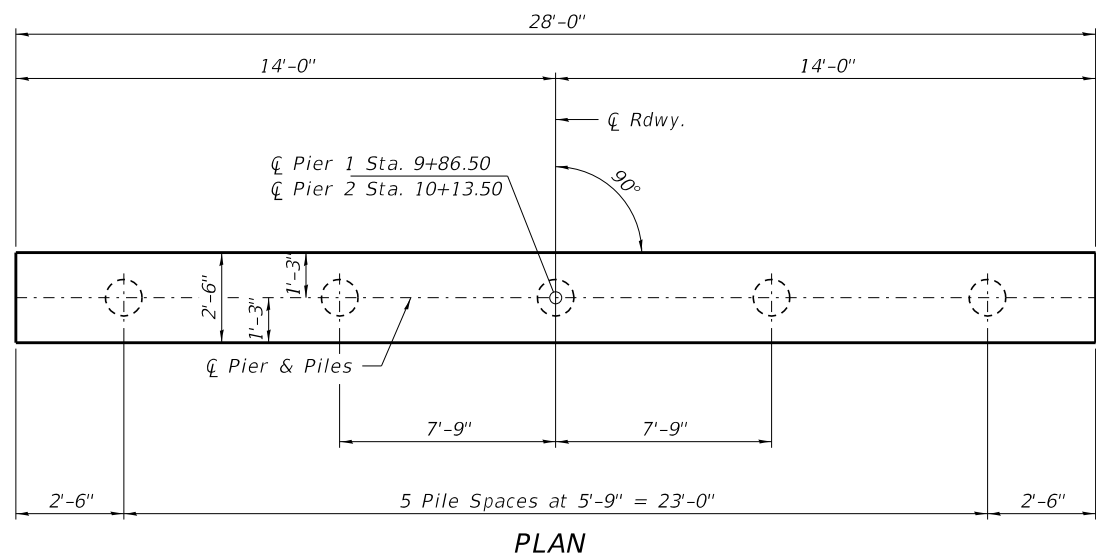
BAR s2(E)



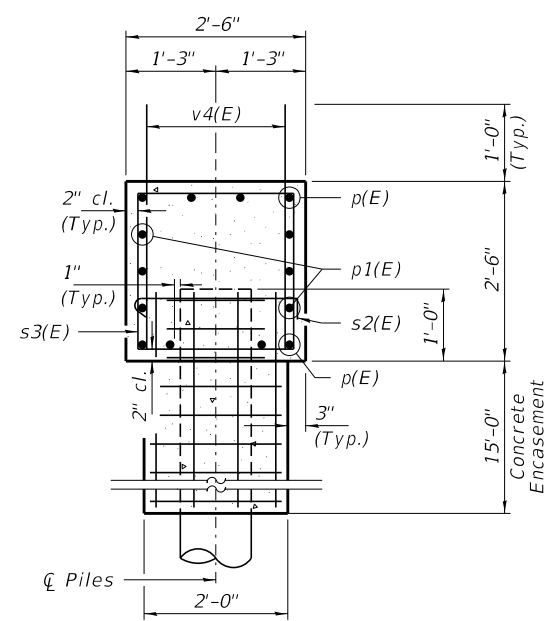
BAR v3(E)



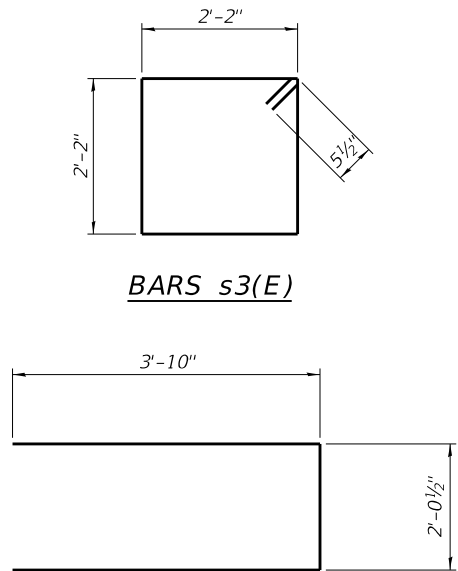
BAR u(E)



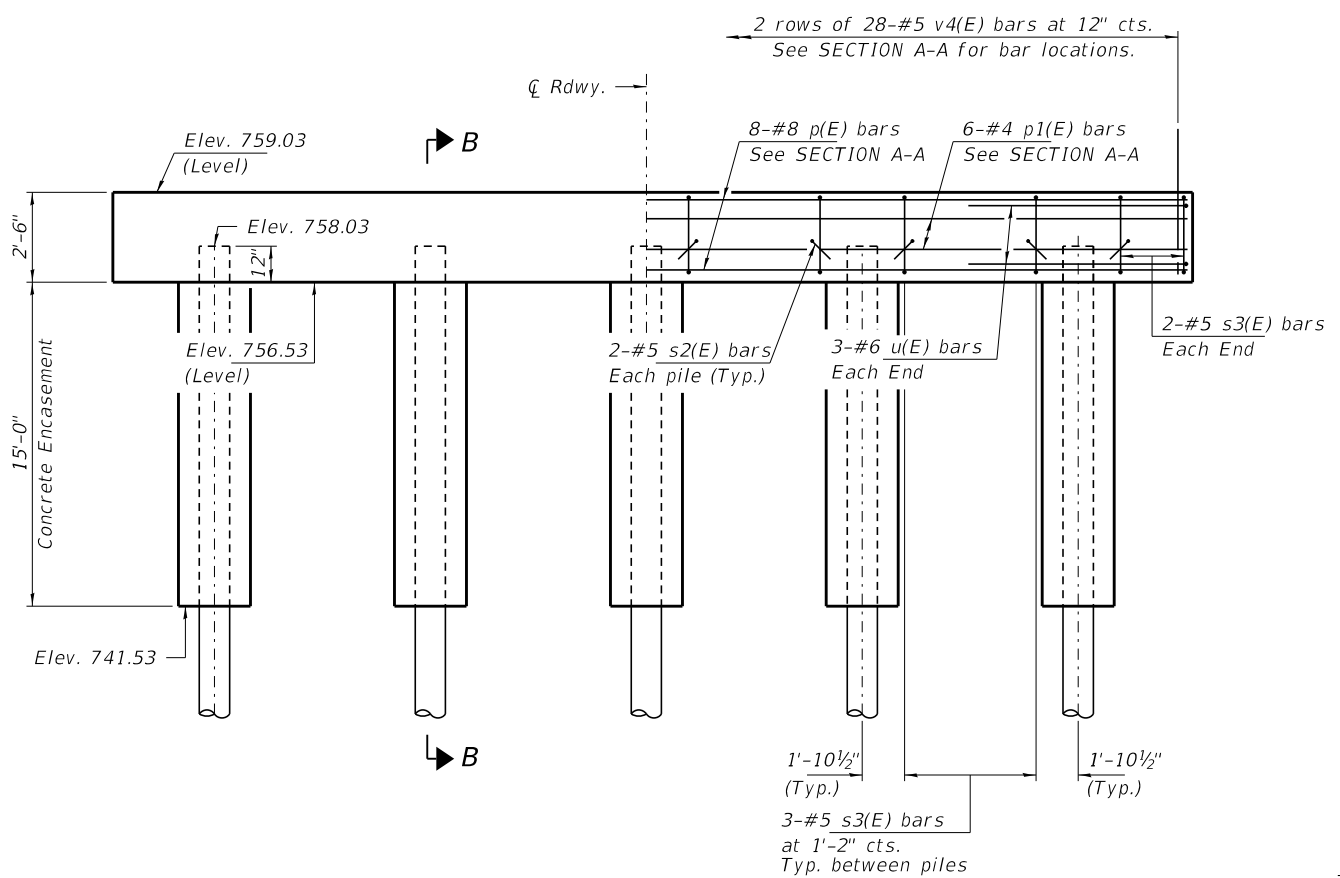
PLAN



SECTION B-B

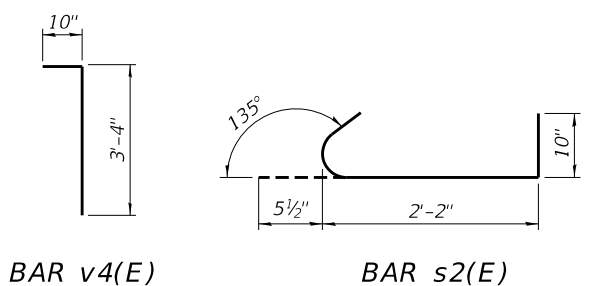


BAR u(E)



ELEVATION
(Looking East)

Note:
See sheet 9 of 11 for
Concrete Encasement
reinforcement.



BAR v4(E)

BAR s2(E)

PILE DATA

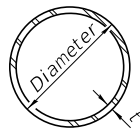
Type: Metal Shell Piles 12"x0.250"
Nominal Required Bearing: 238 Kips/Pile
Factored Resistance Available: 119 Kips/Pile
Est. Length: 45 Ft/Pile
No. Production Piles: 10
No. Test Piles: 1

Notes: One test pile shall be driven in a permanent location at Pier 1.

BILL OF MATERIAL - 2 PIERS

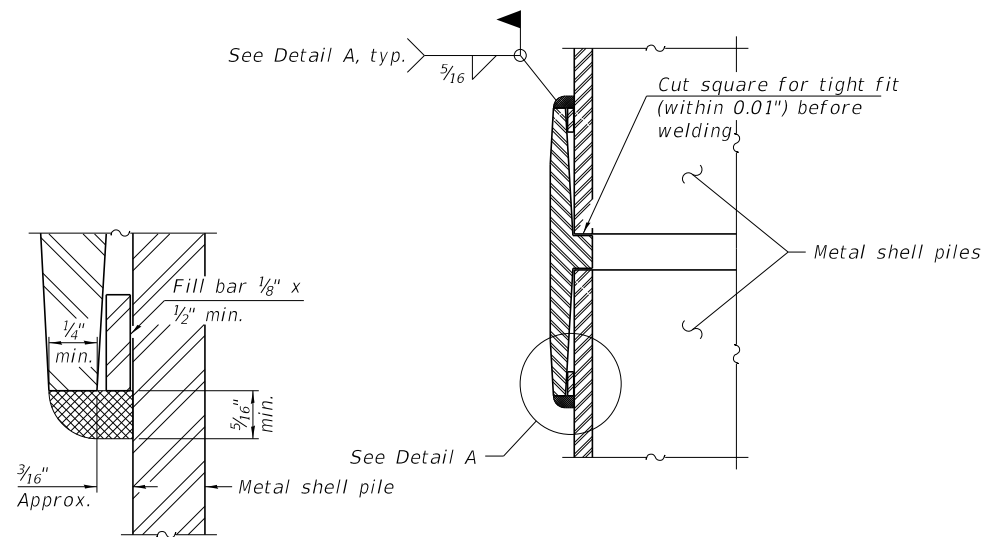
BAR	NO.	SIZE	LENGTH	SHAPE	
p(E)	16	#8	27'-8"	—	
p1(E)	12	#4	27'-8"	—	
s2(E)	32	#5	3'-6"	⌋	
s3(E)	20	#5	9'-7"	□	
u(E)	12	#6	9'-9"	—	
v4(E)	112	#5	4'-2"	⌋	
Concrete Structures				Cu. Yd.	13.0
Concrete Encasement				Cu. Yd.	22.9
Reinf. Bars, Epoxy Coated				Pound	2,380
Metal Shell Piles 12"x0.250"				Foot	405
Driving Piles				Foot	405
Test Pile Metal Shells				Each	1

Note: Pile spacing may be adjusted up to 1 foot to miss existing piling.

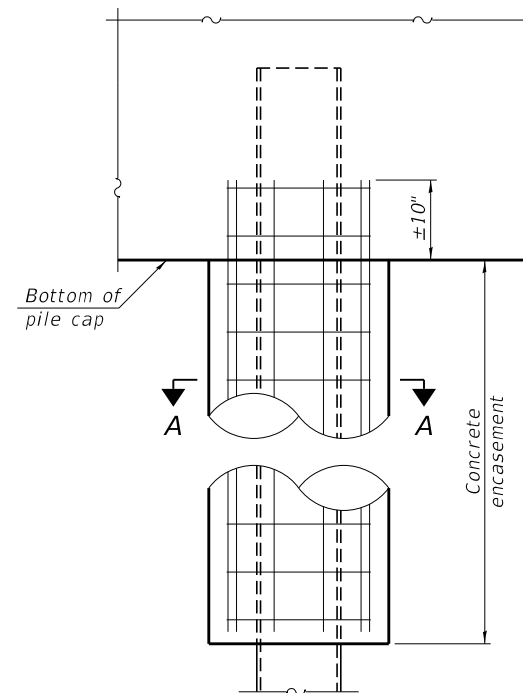


METAL SHELL PILE TABLE

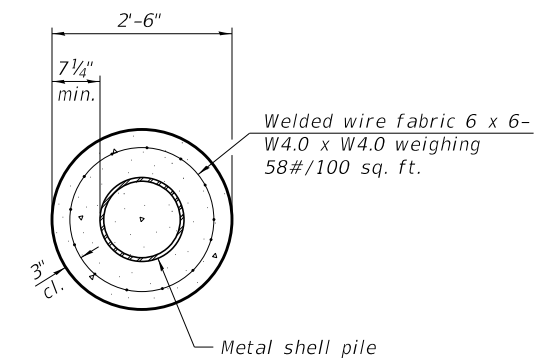
Designation and outside diameter	Wall thickness t	Weight per foot (Lbs./ft.)	Inside volume (yd. ³ /ft.)
PP12	0.250"	31.37	0.0267
PP14	0.250"	36.71	0.0368
PP14	0.312"	45.61	0.0361
PP16	0.312"	52.32	0.0478
PP16	0.375"	62.64	0.0470



DETAIL A

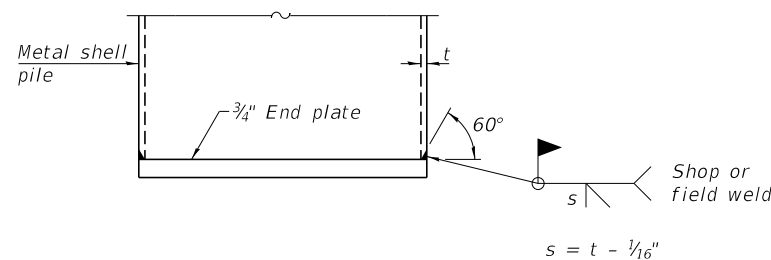


ELEVATION



SECTION A-A

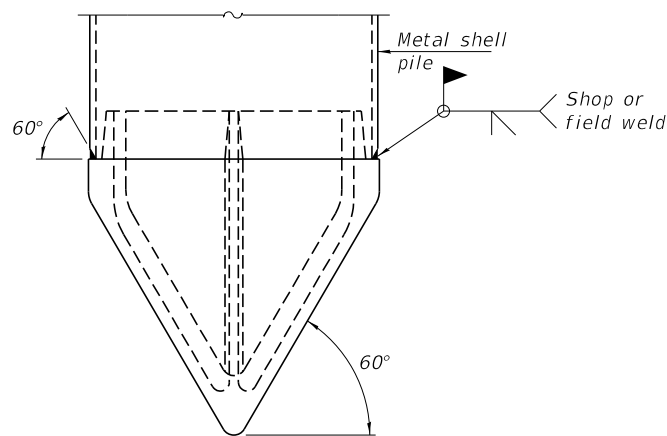
INDIVIDUAL PILE CONCRETE ENCASEMENT AT PIERS



END PLATE ATTACHMENT

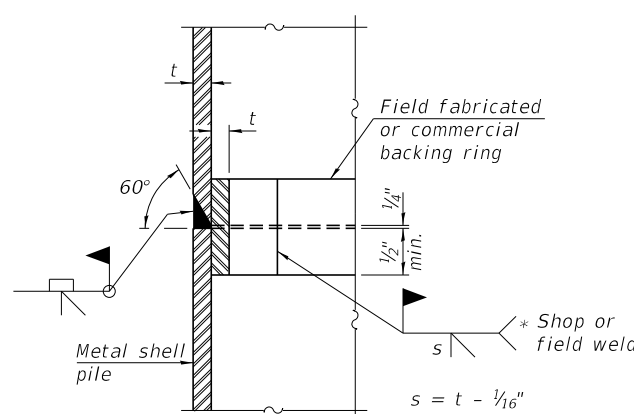
WELDED COMMERCIAL SPLICE

Notes:
 The 1/8" x 1/2" min. fill bar may be constructed of 2 bars with a 1/8" max. gap between them.
 Pile segments shall be driven to solid contact with splicer before welding.



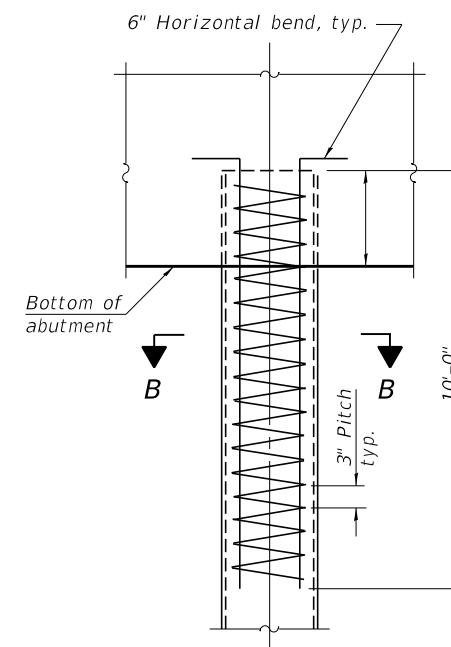
PILE SHOE ATTACHMENT

(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 90-60 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).



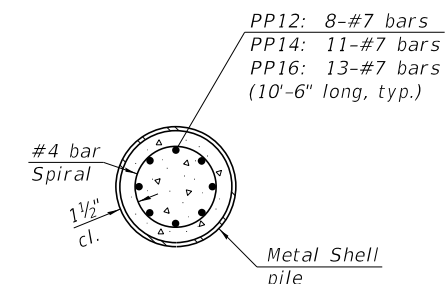
COMPLETE PENETRATION WELD SPLICE

* 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

REINFORCEMENT AT ABUTMENTS



SECTION B-B

PP12: 8-#7 bars
 PP14: 11-#7 bars
 PP16: 13-#7 bars
 (10'-6" long, typ.)

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

F-MS 8-11-2017

FILE NAME = 160453-shi-bridge.dgn	USER NAME = mpaul	DESIGNED - N.D.O.	REVISED -	STATE OF ILLINOIS FORD COUNTY HIGHWAY DEPARTMENT	METAL SHELL PILE DETAILS STRUCTURE NO. 027-3459	F.A.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HAMPTON, LENZINI AND RENWICK, INC. 3035 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT SCALE = \$SCALE\$	CHECKED - S.W.M.	REVISED -			335	16-00132-00-BR	FORD	31	14
	PLOT DATE = 2/3/2020	DRAWN - R.D.H.	REVISED -			LODA LAKE ROAD / C.H. 2		CONTRACT NO. 87724		
		CHECKED - S.W.M.	REVISED -			ILLINOIS		FED. AID PROJECT 65L(956)		



BORING NO. B-01
PAGE 1 OF 2

CLIENT Hampton Lenzini & Renwick PROJECT NAME Loda Lake Road
PROJECT NUMBER 17-G0448 PROJECT LOCATION Loda Lake Road, Wall Township
DATE COMPLETED 5/4/17 LOGGED BY DS/RR DRILLING METHOD 3.25 in. I.D. HSA

DEPTH (ft)	ELEVATION (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (Qp) (tsf)	UNC. STRENGTH (Qu) (tsf)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ORGANIC CONTENT (%)	ATTERBERG LIMITS					
												LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX			
0																	
0	99.3		0-8" ASPHALT PAVEMENT														
0	98.6		8-16" AGGREGATE BASE														
			mixed brown and black CLAY FILL with gravel medium stiff, moist	SS 1	78	5-4-3 (7)	1.25	1.0	30.6								
				SS 2	100	2-2-3 (5)	1.0	1.0	24.4								
	94.0		mottled brown and gray LEAN CLAY trace gravel soft to medium stiff, moist	SS 3	100	2-2-2 (4)	0.75	0.8	27.6								
				SS 4	100	2-3-5 (8)			15.3								
	88.5		gray LEAN CLAY trace gravel very stiff to hard, moist	SS 5	100	3-4-5 (9)	4.5		14.4								
				SS 6	100	4-5-7 (12)	3.0	2.8	15.5								
				SS 7	67	3-5-6 (11)	4.5	4.5	14.7								
				SS 8	56	3-4-5 (9)	4.0	4.4	13.9								
				SS 9	50	3-3-4 (7)	4.0	3.5	18.1								
				SS 10	89	5-3-3 (6)	4.0	4.5	13.9								
				SS 11	100	4-4-5 (9)	2.0	2.0	19.6								
				SS 12	100	5-6-8 (14)	2.5	2.2	16.4								
	66.0		gray SAND AND GRAVEL medium dense, wet	SS 13	100	6-6-9 (15)			16.2								

COMPLETION DEPTH 75 ft GROUND ELEVATION 99.96 ft
CAVE DEPTH 9 ft BACKFILL Soil Cuttings
GROUND WATER LEVELS:
AT TIME OF DRILLING 34.00 ft / Elev 65.96 ft
AT END OF DRILLING Dry at caved depth
AFTER DRILLING —

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

9370 W. Laraway Road, Suite D Frankfort, IL 60423 Phone 815-806-9986 Fax 815-464-8691



BORING NO. B-01
PAGE 2 OF 2

CLIENT Hampton Lenzini & Renwick PROJECT NAME Loda Lake Road
PROJECT NUMBER 17-G0448 PROJECT LOCATION Loda Lake Road, Wall Township
DATE COMPLETED 5/4/17 LOGGED BY DS/RR DRILLING METHOD 3.25 in. I.D. HSA

DEPTH (ft)	ELEVATION (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (Qp) (tsf)	UNC. STRENGTH (Qu) (tsf)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ORGANIC CONTENT (%)	ATTERBERG LIMITS					
												LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX			
40	61.5		gray LEAN CLAY trace gravel very stiff, moist	SS 14	72	3-4-6 (10)	2.25	2.4	20.6								
45				SS 15	100	6-6-6 (12)	2.0	2.0	23.6								
50	51.5		gray LEAN CLAY trace gravel hard, moist	SS 16	50	6-7-9 (15)	4.5	4.4	18.7								
55				SS 17	56	7-13-26 (39)	4.5	4.5	13.7								
60	41.0		brown SILTY CLAY with sand, with gravel hard, moist	SS 18	61	9-16-24 (40)			11.5								
65	36.0		brown SAND AND GRAVEL very dense, moist	SS 19	22	8-13-45 (58)			14.1								
70	32.0		gray SILT with limestone fragments very dense, moist	SS 20	200	50/3"			19.7								
75	25.0			SS 21	100	50/4"			15.9								

Bottom of borehole at 75.0 feet.
Lines of Demarcation represent an approximate boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes.

9370 W. Laraway Road, Suite D Frankfort, IL 60423 Phone 815-806-9986 Fax 815-464-8691

BORING-1

FILE NAME = 160453-shi-bri0ge.dgn	USER NAME = mpaul	DESIGNED - N.D.O.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC. 3035 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959		CHECKED - S.W.M.	REVISED -
	PLOT SCALE = \$SCALE\$	DRAWN - R.D.H.	REVISED -
	PLOT DATE = 2/3/2020	CHECKED - S.W.M.	REVISED -

STATE OF ILLINOIS
FORD COUNTY HIGHWAY DEPARTMENT

BORINGS
STRUCTURE NO. 027-3459
SHEET NO. 10 OF 11 SHEETS

F.A.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	16-00132-00-BR	FORD	31	15
LODA LAKE ROAD / C.H. 2		CONTRACT NO. 87724		
ILLINOIS FED. AID PROJECT 65L(956)				



BORING NO. B-02
PAGE 1 OF 2

CLIENT Hampton Lenzini & Renwick PROJECT NAME Loda Lake Road
 PROJECT NUMBER 17-G0448 PROJECT LOCATION Loda Lake Road, Wall Township
 DATE COMPLETED 5/4/17 LOGGED BY DS/RR DRILLING METHOD 3.25 in. I.D. HSA

DEPTH (ft)	ELEVATION (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (Qp) (tsf)	UNC. STRENGTH (Qu) (tsf)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ORGANIC CONTENT (%)	ATTERBERG LIMITS							
												LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX					
0																			
0-8"	99.4		0-8" ASPHALT PAVEMENT																
8-16"	98.7		8-16" AGGREGATE BASE brown SAND AND GRAVEL loose to dense, moist	SS 1	67	12-14-12 (26)			5.8										
				SS 2	33	10-14-11 (25)			4.2										
				SS 3	33	9-18-21 (39)			3.7										
				SS 4		2-2-2 (4)													
	88.1		gray LEAN CLAY trace gravel stiff to very stiff, moist	SS 5	100	5-11-10 (21)	3.75	3.3	14.9										
				SS 6	72	8-10-15 (25)	3.75	2.6	15.2										
				SS 7	100	7-9-11 (20)	3.0	2.8	14.4										
				SS 8	100	9-9-13 (22)	3.25	3.2	15.3										
				SS 9	100	8-9-10 (19)	2.5	3.1	14.0										
				SS 10	83	6-5-10 (15)	2.5	2.4	13.9										
				SS 11	100	5-5-5 (10)	2.5	3.0	18.4										
				SS 12	100	5-5-6 (11)	2.0	3.1	19.3										
				SS 13	100	4-5-5 (10)	1.75	2.1	21.4										

COMPLETION DEPTH 75 ft GROUND ELEVATION 100.05 ft

CAVE DEPTH 10 ft BACKFILL Soil Cuttings

GROUND WATER LEVELS:

AT TIME OF DRILLING None
 AT END OF DRILLING Dry upon completion
 AFTER DRILLING None

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

9370 W. Laraway Road, Suite D Frankfort, IL 60423 Phone 815-806-9986 Fax 815-464-8691

GPS STANDARD GEOTECH LOG - GPS STD DATA TEMPLATE.GDT - 5/17/17 10:45 - C:\USERS\JKOY\DOCUMENTS\GINT PROJECTS\17-G0448 LODA LAKE ROAD BRIDGE - HLR.GPJ



BORING NO. B-02
PAGE 2 OF 2

CLIENT Hampton Lenzini & Renwick PROJECT NAME Loda Lake Road
 PROJECT NUMBER 17-G0448 PROJECT LOCATION Loda Lake Road, Wall Township
 DATE COMPLETED 5/4/17 LOGGED BY DS/RR DRILLING METHOD 3.25 in. I.D. HSA

DEPTH (ft)	ELEVATION (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (Qp) (tsf)	UNC. STRENGTH (Qu) (tsf)	MOISTURE CONTENT (%)	DRY UNIT WT. (pcf)	ORGANIC CONTENT (%)	ATTERBERG LIMITS							
												LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX					
40			gray LEAN CLAY trace gravel stiff to very stiff, moist (continued)	SS 14	100	3-4-5 (9)	1.5	1.4	19.2										
45				SS 15	100	9-5-6 (12)	2.0	2.6	23.3										
50				SS 16	67	7-7-6 (13)	2.0	2.0	23.8										
55	46.1		gray LEAN CLAY trace gravel hard, moist	SS 17	83	7-15-29 (44)	4.5	4.5	12.8										
60	41.1		mottled brown and gray SILT with sand and gravel hard, moist	SS 18	44	7-6-31 (39)	4.25	4.0	12.9										
65	36.1		brown SAND AND GRAVEL very dense, moist	SS 19	17	15-19-41 (60)			10.7										
70	32.1		gray SILT with limestone fragments very dense, moist	SS 20	78	45-50/3"			17.3										
75	25.1			SS 21	86	49-50/1"			3.3										

Bottom of borehole at 75.0 feet.

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

9370 W. Laraway Road, Suite D Frankfort, IL 60423 Phone 815-806-9986 Fax 815-464-8691

GPS STANDARD GEOTECH LOG - GPS STD DATA TEMPLATE.GDT - 5/17/17 10:45 - C:\USERS\JKOY\DOCUMENTS\GINT PROJECTS\17-G0448 LODA LAKE ROAD BRIDGE - HLR.GPJ

BORING-2

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HAMPTON, LENZINI AND RENWICK, INC. 3035 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT SCALE = \$SCALE\$	CHECKED - S.W.M.	REVISED -
PLOT DATE = 2/3/2020		DRAWN - R.D.H.	REVISED -
		CHECKED - S.W.M.	REVISED -

STATE OF ILLINOIS
FORD COUNTY HIGHWAY DEPARTMENT

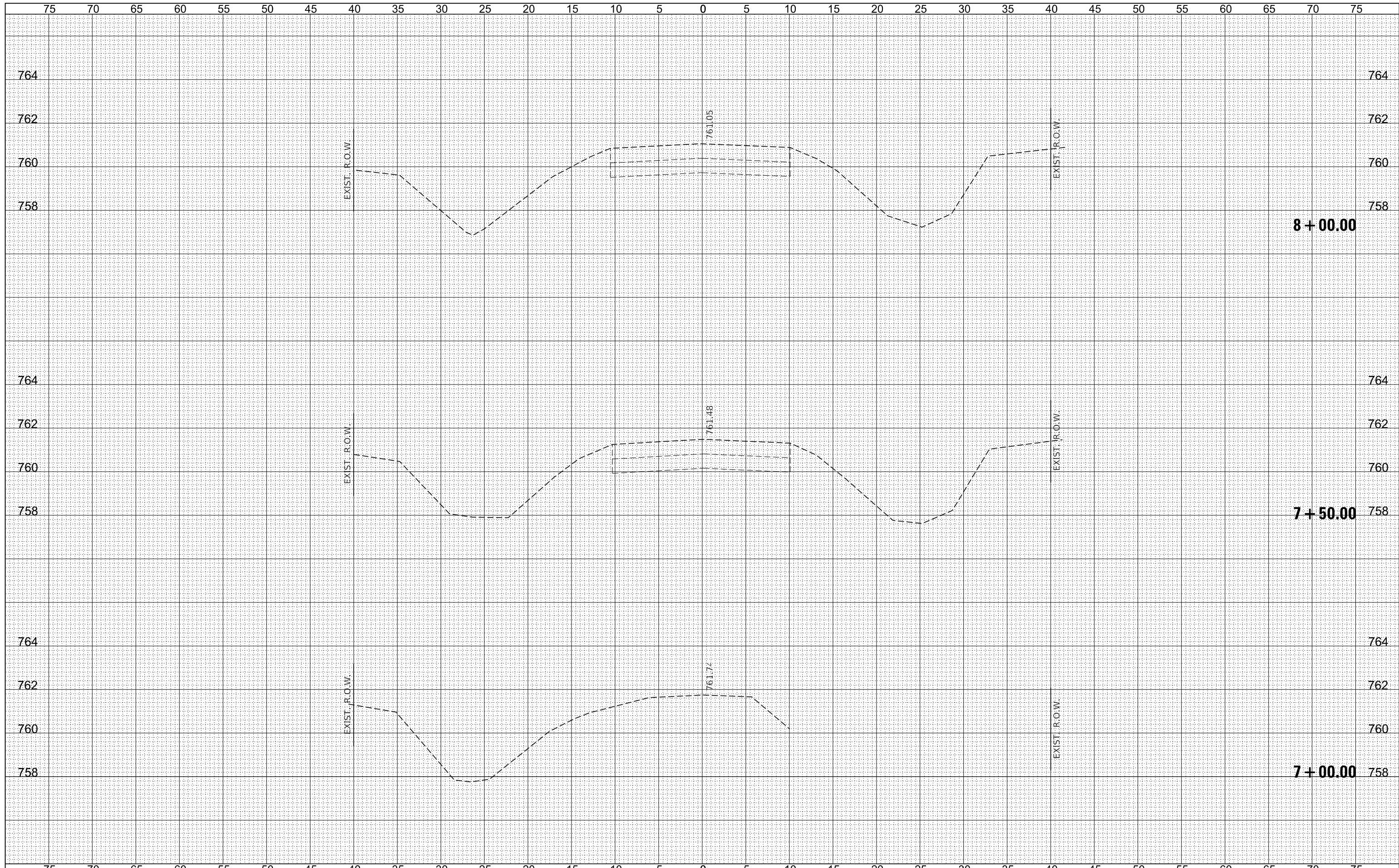
BORINGS
STRUCTURE NO. 027-3459

SHEET NO. 11 OF 11 SHEETS

F.A.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	16-00132-00-BR	FORD	31	16
LODA LAKE ROAD / C.H. 2		CONTRACT NO. 87724		
ILLINOIS		FED. AID PROJECT 65L(956)		

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BY	
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NOTE BOOK	PLOTTED
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	AREAS
	CHECKED

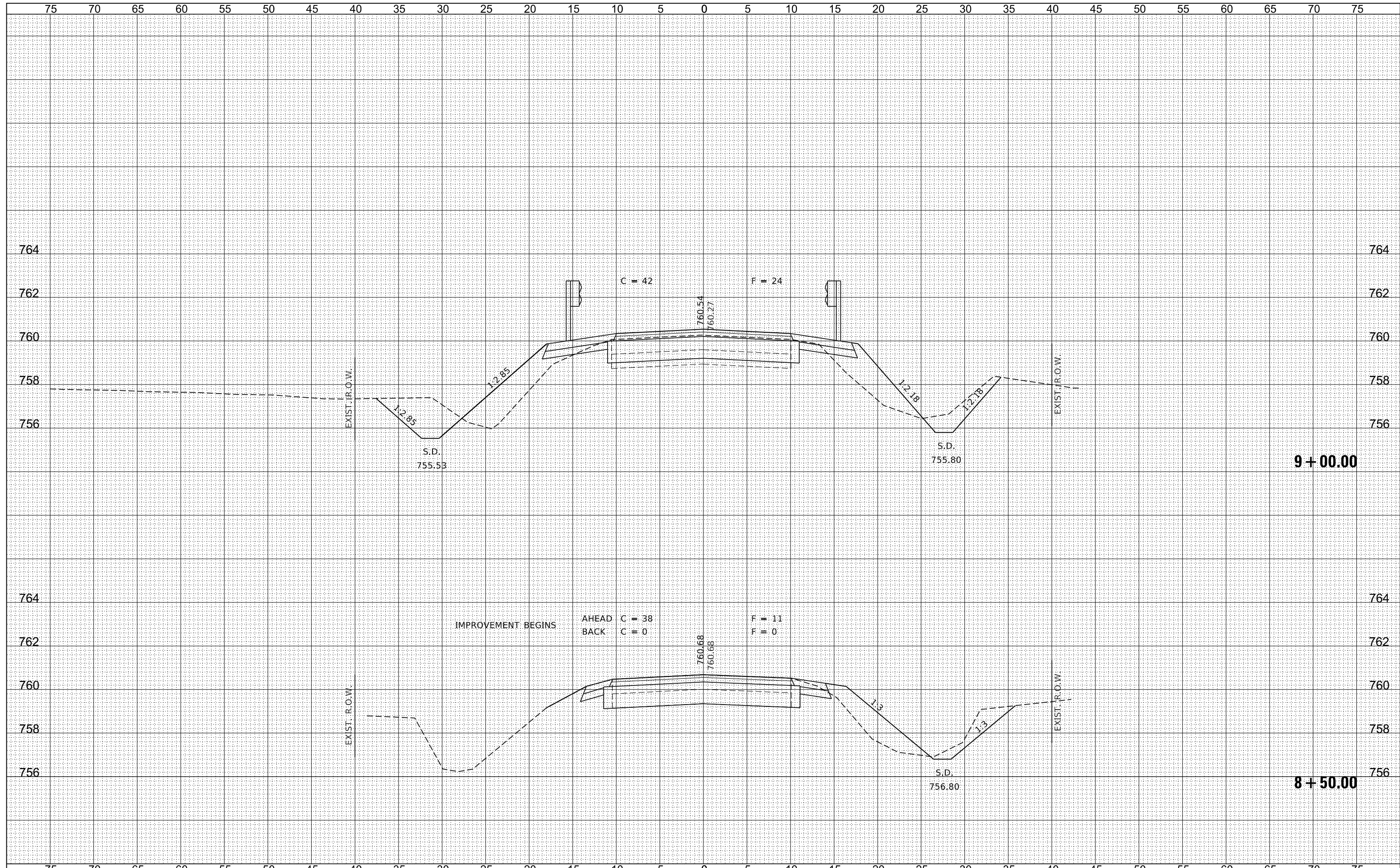
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ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS
	CHECKED



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HAMPTON, LENZINI AND RENWICK, INC. 3885 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM L/S / PE / SE CORP. 184.000958		DRAWN - T.W.K.	REVISED -		335	16-00132-00-BR	FORD	31	17			
PLOT SCALE = \$SCALES		CHECKED - S.W.M.	REVISED -		LODA LAKE ROAD / C.H. 2			CONTRACT NO. 87724				
PLOT DATE = 2/3/2020		DATE - 02/03/2020	REVISED -	SCALE: 5H:2V	SHEET NO. 1 OF 15 SHEETS	STA. 7+00.00 TO STA. 8+00.00	ILLINOIS FED. AID PROJECT 65LK(956)					

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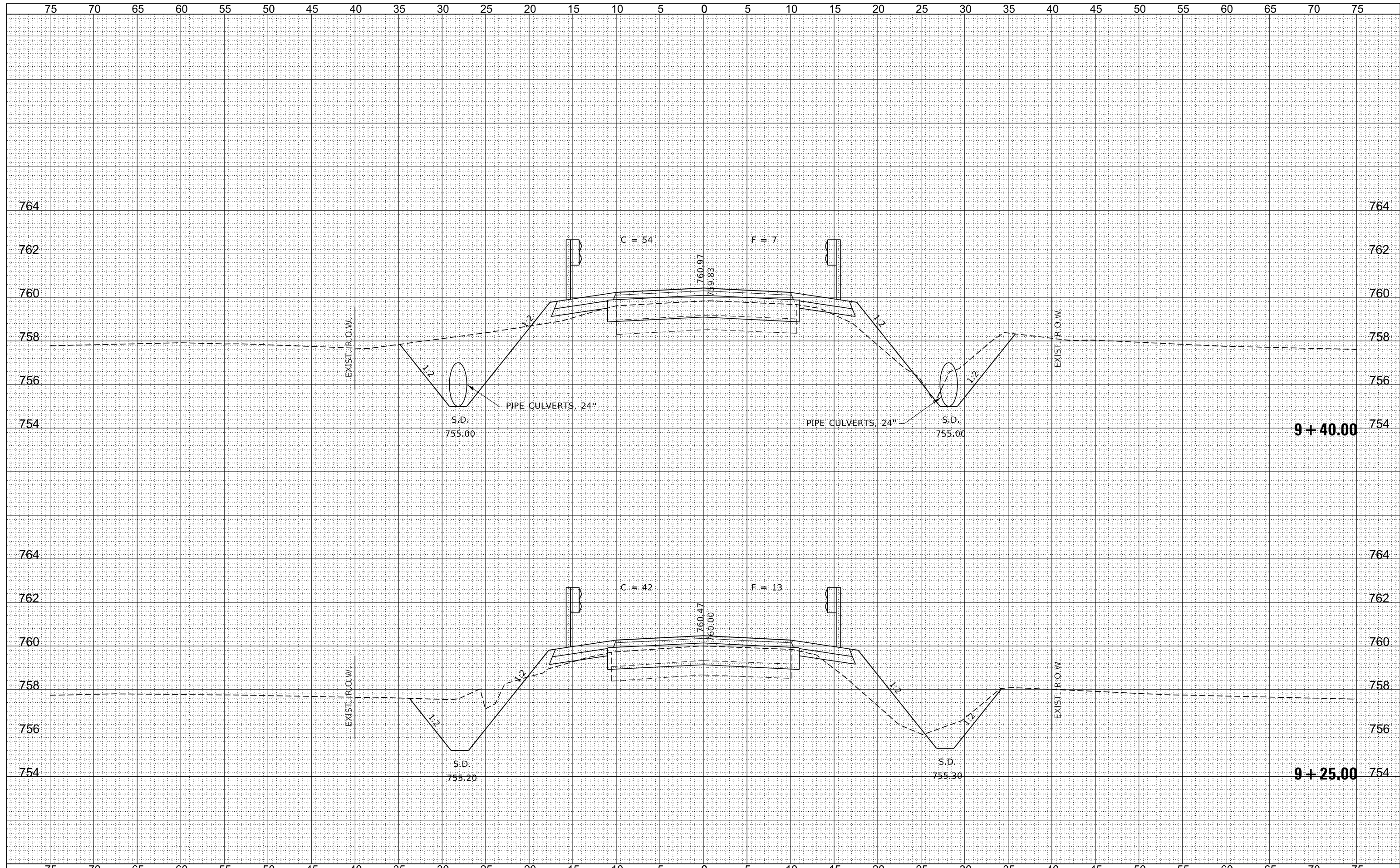
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HAMPTON, LENZINI AND RENWICK, INC.		DRAWN - T.W.K.	REVISED -		335	16-00132-00-BR	FORD	31	18			
3885 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM L.S. / P.E. / S.E. CORP. 184.000958		CHECKED - S.W.M.	REVISED -		LODA LAKE ROAD / C.H. 2			CONTRACT NO. 87724				
		DATE - 02/03/2020	REVISED -		SCALE: 5H:2V	SHEET NO. 2 OF 15 SHEETS	STA. 8+50.00 TO STA. 9+00.00	ILLINOIS FED. AID PROJECT 65LK(956)				

BY	DATE

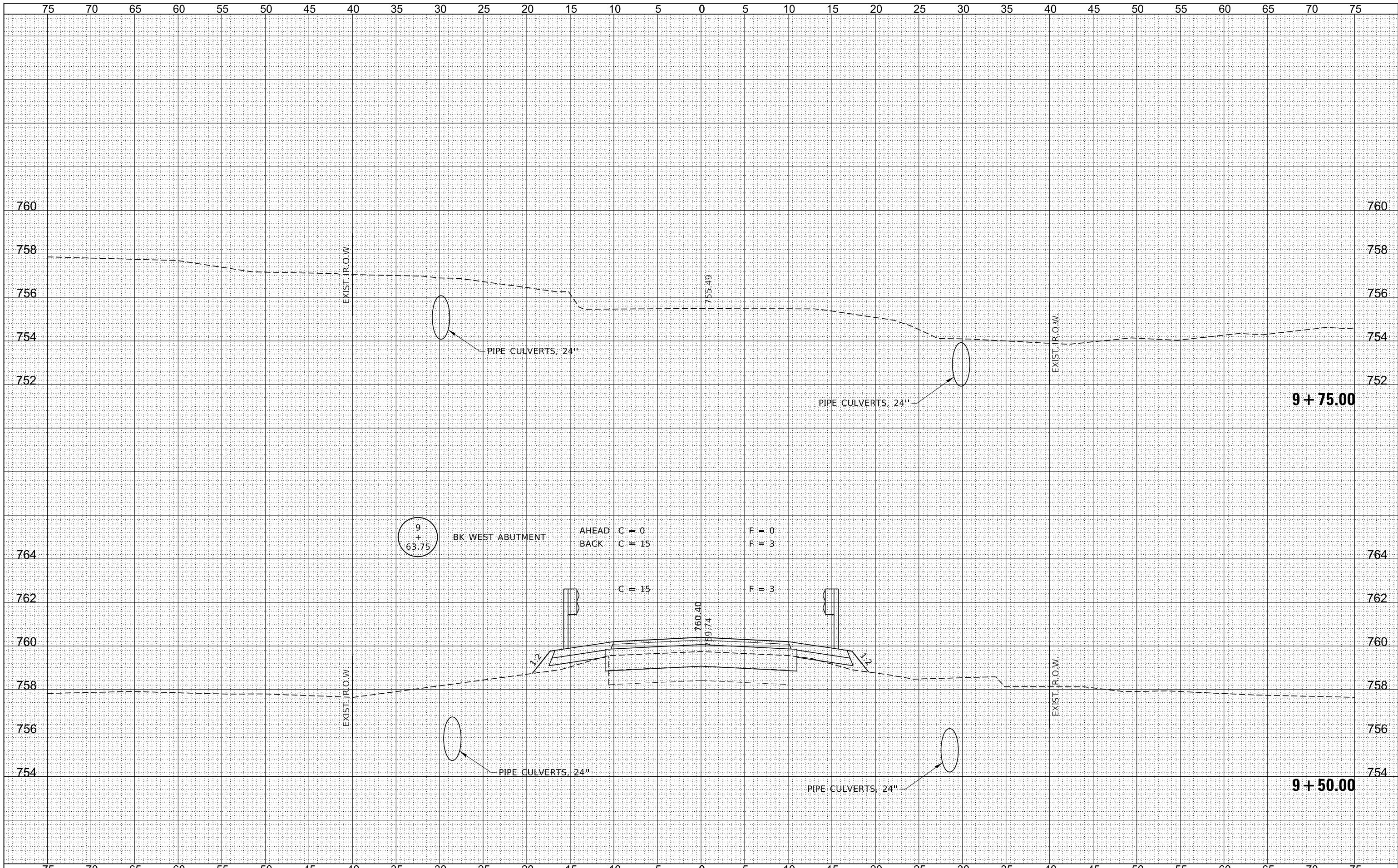
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HAMPTON, LENZINI AND RENWICK, INC. 3885 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM L.S. / P.E. / S.E. CORP. 184.000958		DRAWN - T.W.K.	REVISD -		335	16-00132-00-BR	FORD	31	19			
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PLOT DATE = 2/3/2020		DATE - 02/03/2020	REVISD -		SCALE: 5H:2V	SHEET NO. 3 OF 15 SHEETS	STA. 9+25.00 TO STA. 9+40.00	ILLINOIS FED. AID PROJECT 65LK(956)				

BY	DATE

BY	DATE



FILE NAME = 160453-shl-vssst.dgn
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 DESIGNED - L.A.P.
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 CHECKED - S.W.M.
 DATE - 02/03/2020
 PLOT SCALE = \$SCALES
 PLOT DATE = 2/3/2020

DESIGNED - L.A.P.
 DRAWN - T.W.K.
 CHECKED - S.W.M.
 DATE - 02/03/2020
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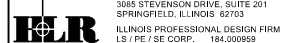
**STATE OF ILLINOIS
 FORD COUNTY HIGHWAY DEPARTMENT**

STATION CROSS SECTIONS

SCALE: 5H:2V SHEET NO. 4 OF 15 SHEETS STA. 9+50.00 TO STA. 9+75.00

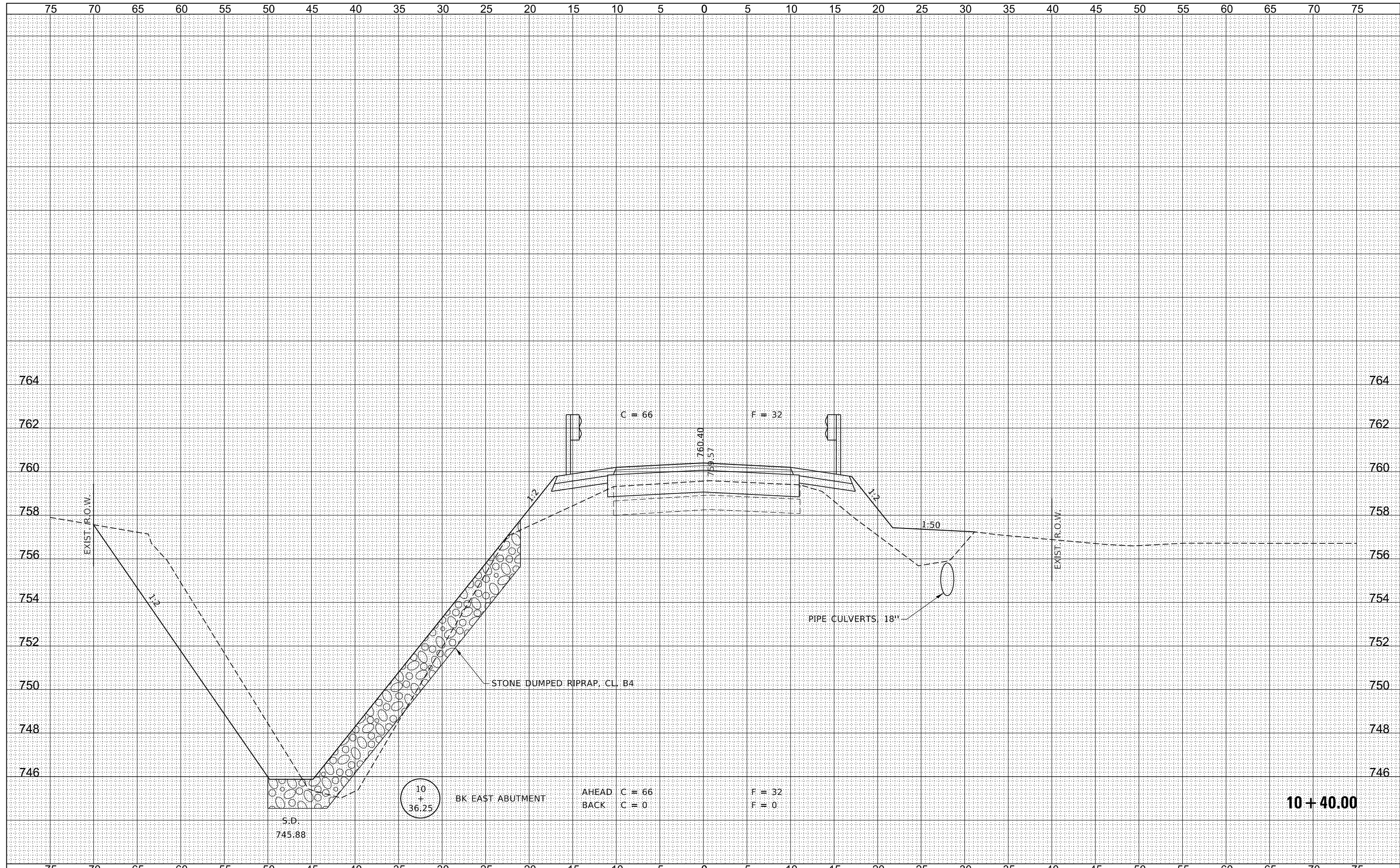
F.A.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	16-00132-00-BR	FORD	31	20
LODA LAKE ROAD / C.H. 2			CONTRACT NO. 87724	

ILLINOIS FED. AID PROJECT 6SLK(956)



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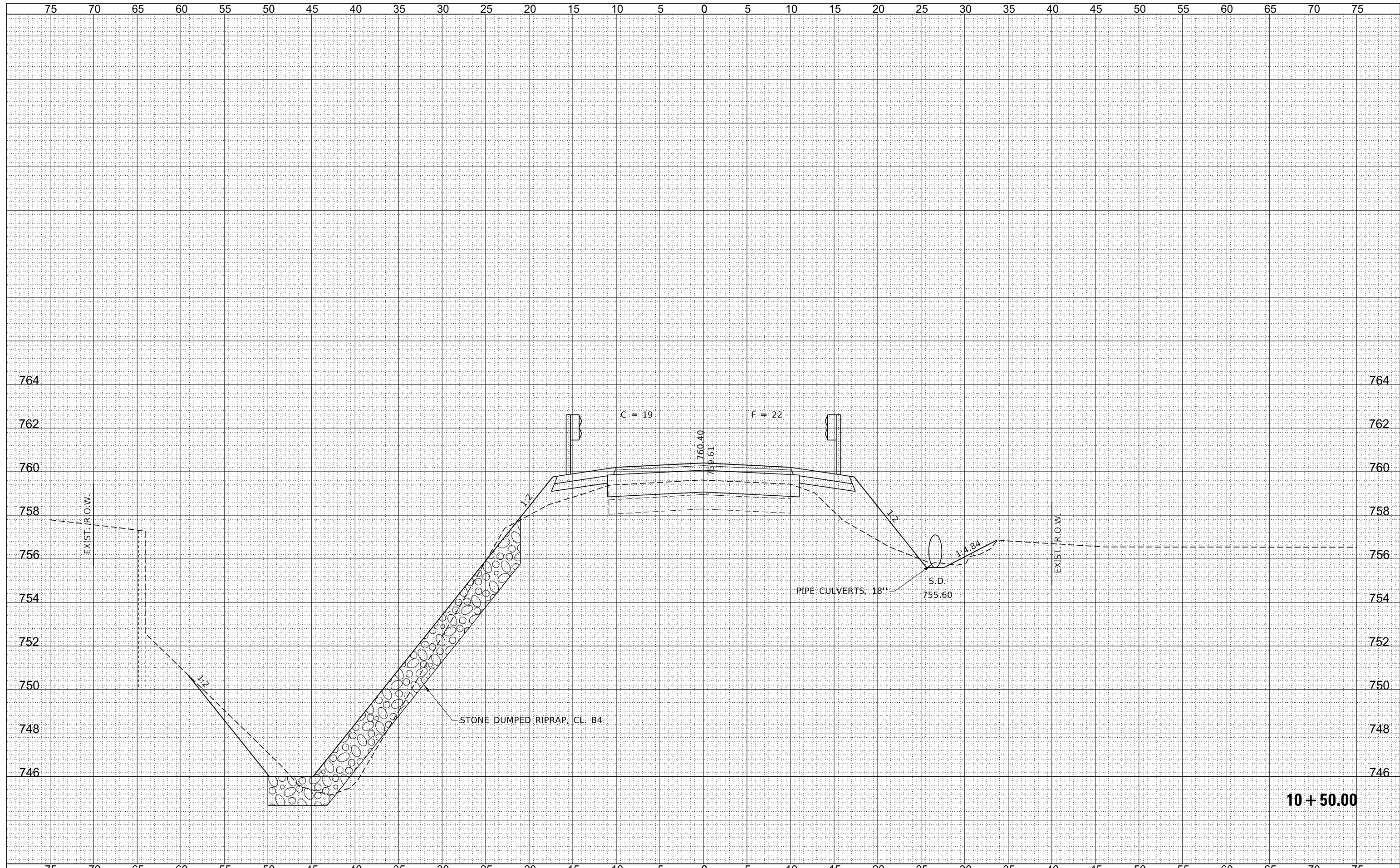
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HAMPTON, LENZINI AND RENWICK, INC.		DRAWN - T.W.K.	REVISED -					335	16-00132-00-BR	FORD	31	21	
3885 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703		CHECKED - S.W.M.	REVISED -					LODA LAKE ROAD / C.H. 2				CONTRACT NO. 87724	
ILLINOIS PROFESSIONAL DESIGN FIRM L.S. / P.E. / S.E. CORP. 184.000958		DATE - 02/03/2020	REVISED -					SCALE: 5H:2V	SHEET NO. 5 OF 15 SHEETS	STA. 10+40.00 TO STA. 10+40.00	ILLINOIS FED. AID PROJECT 65LK(956)		

DATE	
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FINAL SURVEY	
NOTE BOOK	
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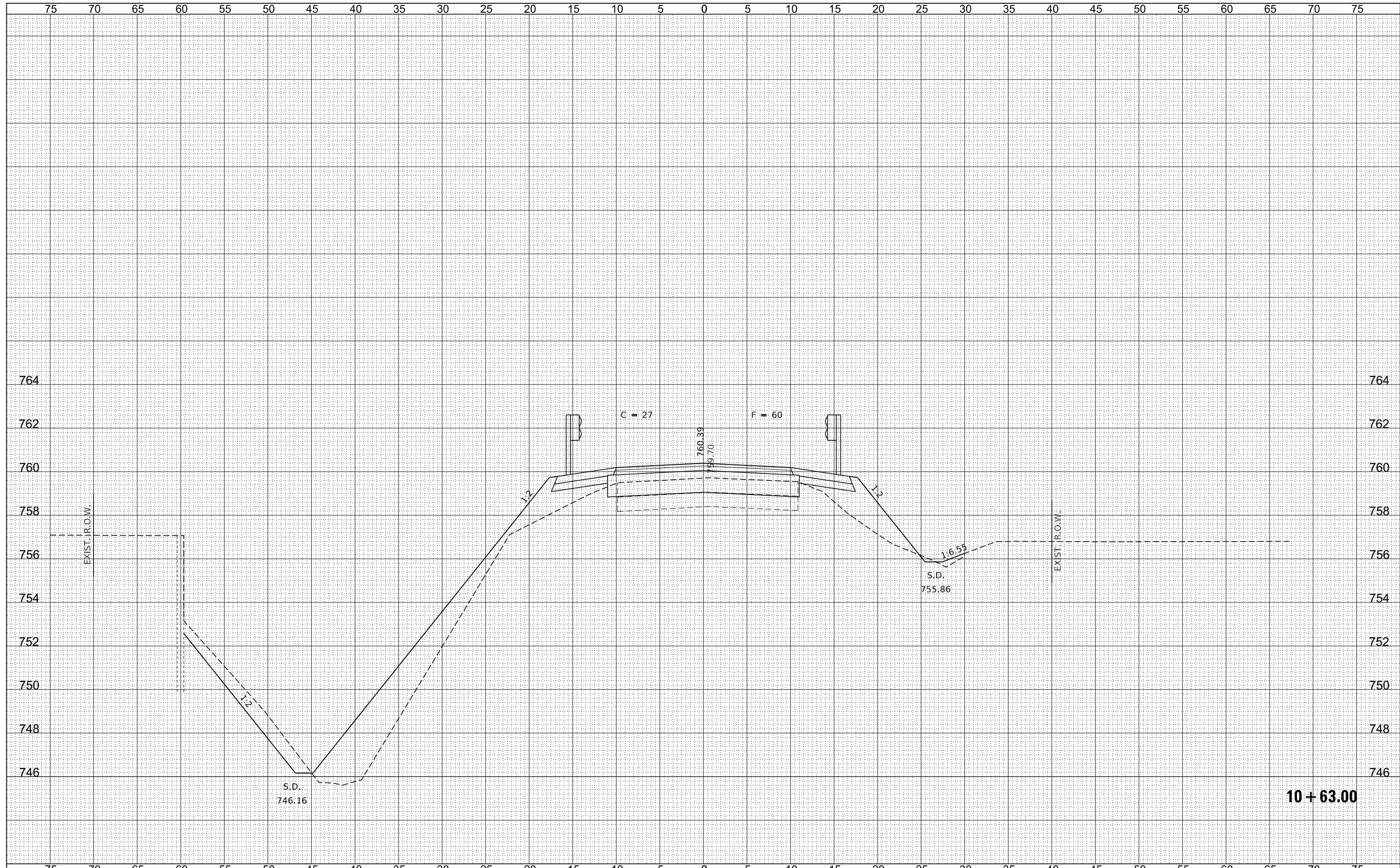


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HAMPTON, LENZINI AND RENWICK, INC. <small>3885 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM L.S. / P.E. / S.E. CORP. 184.009958</small>		DRAWN - T.W.K.	REVISD -		335	16-00132-00-BR	FORD	31	22			
PLOT SCALE = \$SCALES		CHECKED - S.W.M.	REVISD -		LODA LAKE ROAD / C.H. 2				CONTRACT NO. 87724			
PLOT DATE = 2/3/2020		DATE - 02/03/2020	REVISD -		SCALE: 5H:2V	SHEET NO. 6 OF 15 SHEETS	STA. 10+50.00	TO STA. 10+50.00	ILLINOIS FED. AID PROJECT 65LK(956)			

DATE	
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FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
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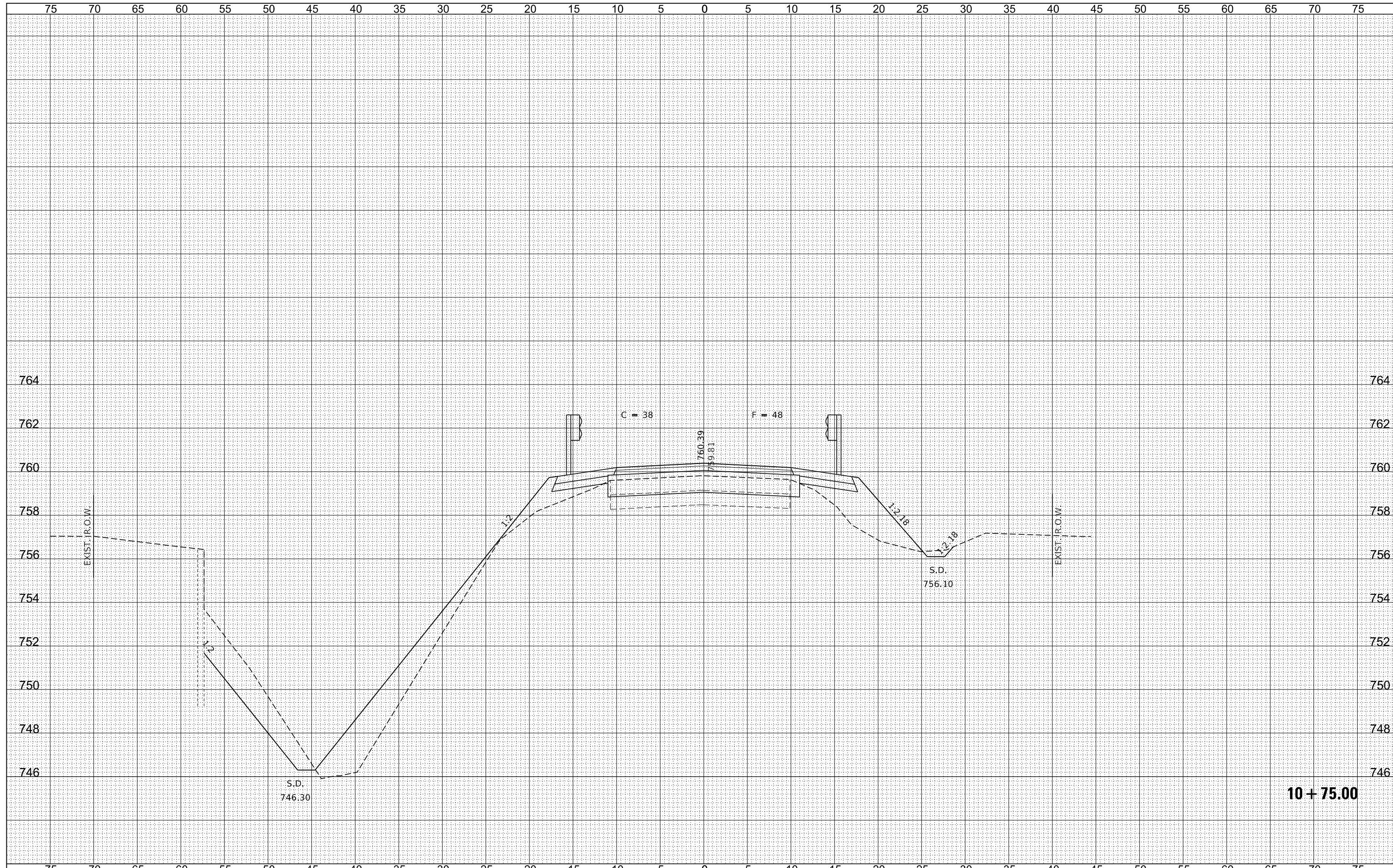


10 + 63.00

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HAMPTON, LENZINI AND RENWICK, INC. 3885 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM L/S / PE / SE CORP. 184.009958	PLOT SCALE = \$SCALES	DRAWN - T.W.K.	REVISD -		335	16-00132-00-BR	FORD	31	23
PLOT DATE = 2/3/2020	CHECKED - S.W.M.	REVISD -	SCALE: 5H:2V		LODA LAKE ROAD / C.H. 2		CONTRACT NO. 87724		
	DATE - 02/03/2020	REVISD -	SHEET NO. 7 OF 15 SHEETS		STA. 10+63.00	TO STA. 10+63.00	ILLINOIS FED. AID PROJECT 65LK(956)		

DATE	
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FINAL SURVEY	
NOTE BOOK	
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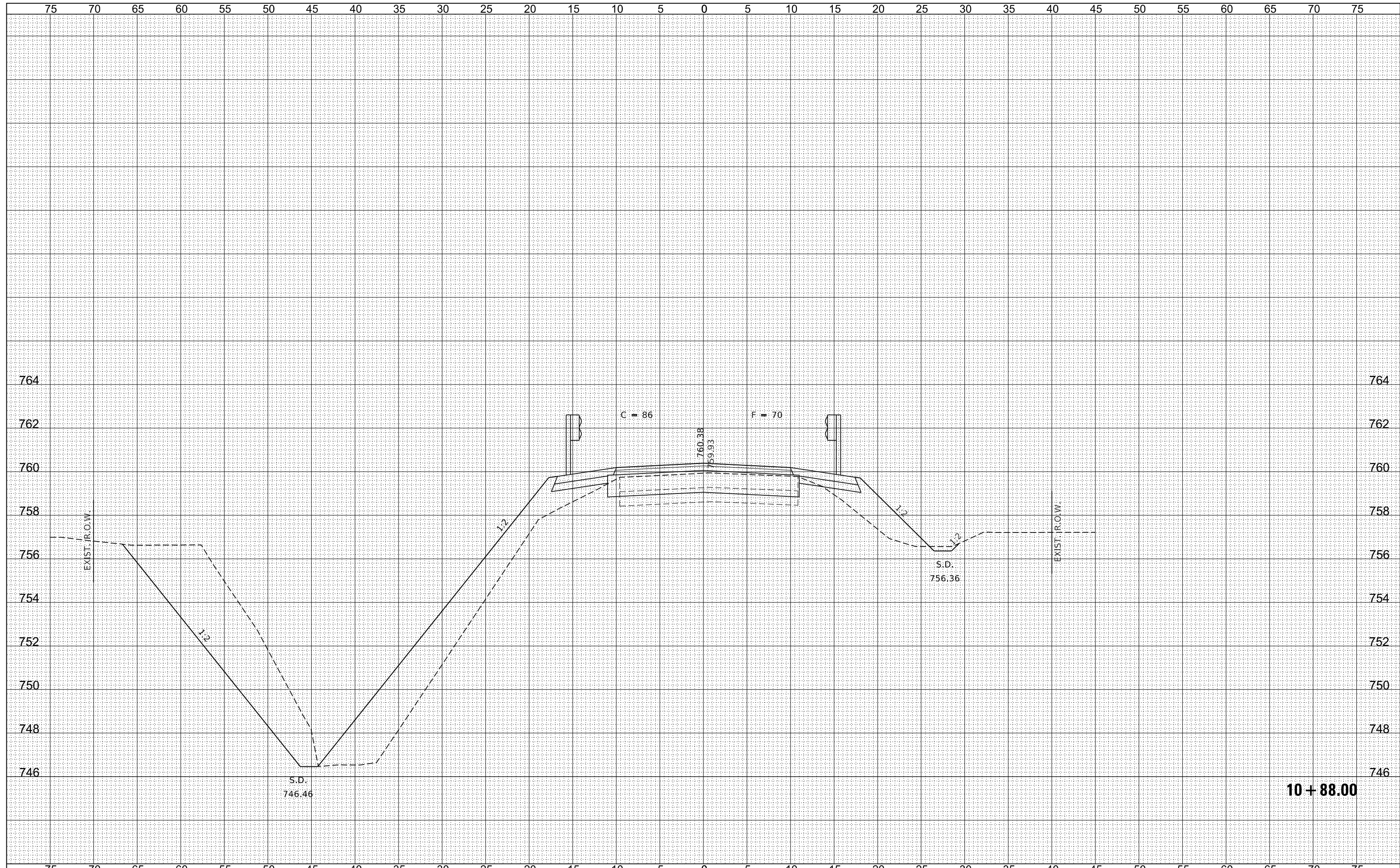


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HAMPTON, LENZINI AND RENWICK, INC. <small>3885 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM L/S / PE / SE CORP. 184-000959</small>		DRAWN - T.W.K.	REVISED -		335	16-00132-00-BR	FORD	31	24		
PLOT SCALE = \$S\$CALES		CHECKED - S.W.M.	REVISED -		LODA LAKE ROAD / C.H. 2			CONTRACT NO. 87724			
PLOT DATE = 2/3/2020		DATE - 02/03/2020	REVISED -		SCALE: 5H:2V	SHEET NO. 8 OF 15 SHEETS	STA. 10+75.00 TO STA. 10+75.00	ILLINOIS FED. AID PROJECT 65LK(956)			

DATE	
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FINAL SURVEY	
NOTE BOOK	
NO.	

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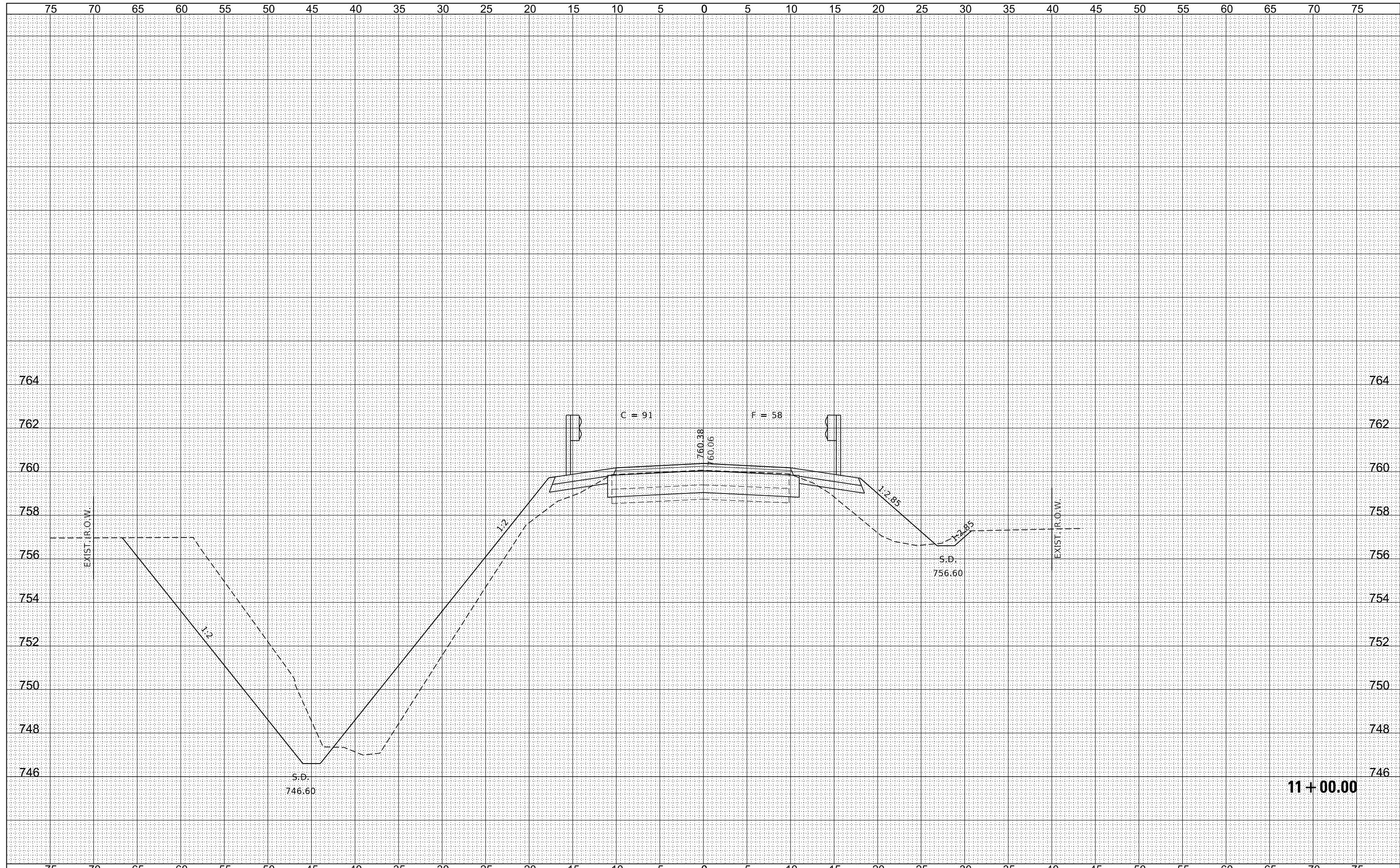


10 + 88.00

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HAMPTON, LENZINI AND RENWICK, INC. 3885 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM L.S. / P.E. / S.E. CORP. 184.000958		DRAWN - T.W.K.	REVISD -		335	16-00132-00-BR	FORD	31	25			
PLOT SCALE = \$S\$CALES		CHECKED - S.W.M.	REVISD -		LODA LAKE ROAD / C.H. 2				CONTRACT NO. 87724			
PLOT DATE = 2/3/2020		DATE - 02/03/2020	REVISD -		SCALE: 5H:2V	SHEET NO. 9 OF 15 SHEETS	STA. 10+88.00 TO STA. 10+88.00	ILLINOIS FED. AID PROJECT 65LK(956)				

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

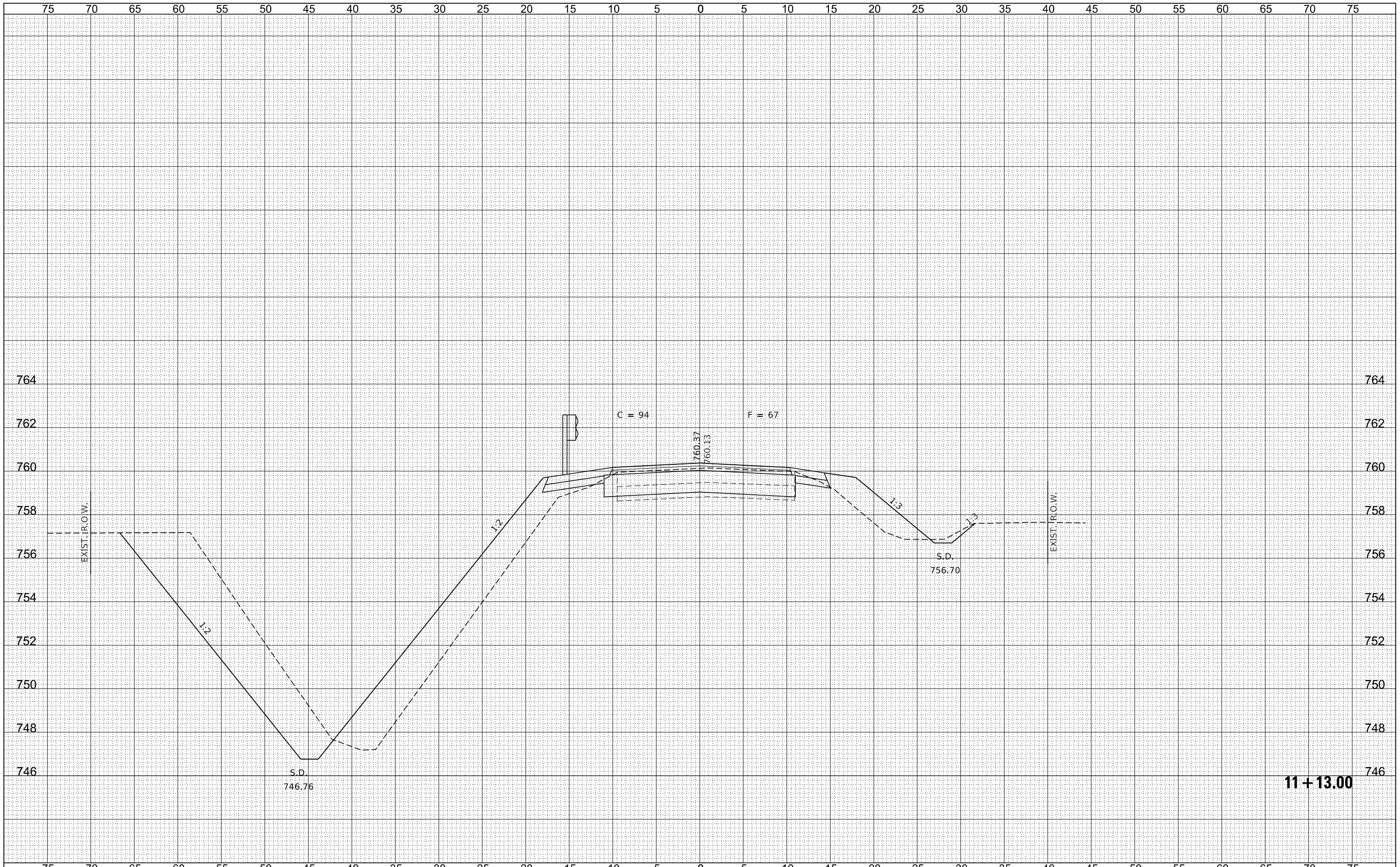
DATE	
BY	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED
	AREAS CHECKED



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HAMPTON, LENZINI AND RENWICK, INC. 3885 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM L/S / PE / SE CORP. 184.000958		DRAWN - T.W.K.	REVISD -		335	16-00132-00-BR	FORD	31	26			
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PLOT DATE = 2/3/2020		DATE - 02/03/2020	REVISD -		SCALE: 5H:2V	SHEET NO. 10 OF 15 SHEETS	STA. 11+00.00 TO STA. 11+00.00	ILLINOIS FED. AID PROJECT 65LK(956)				

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

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

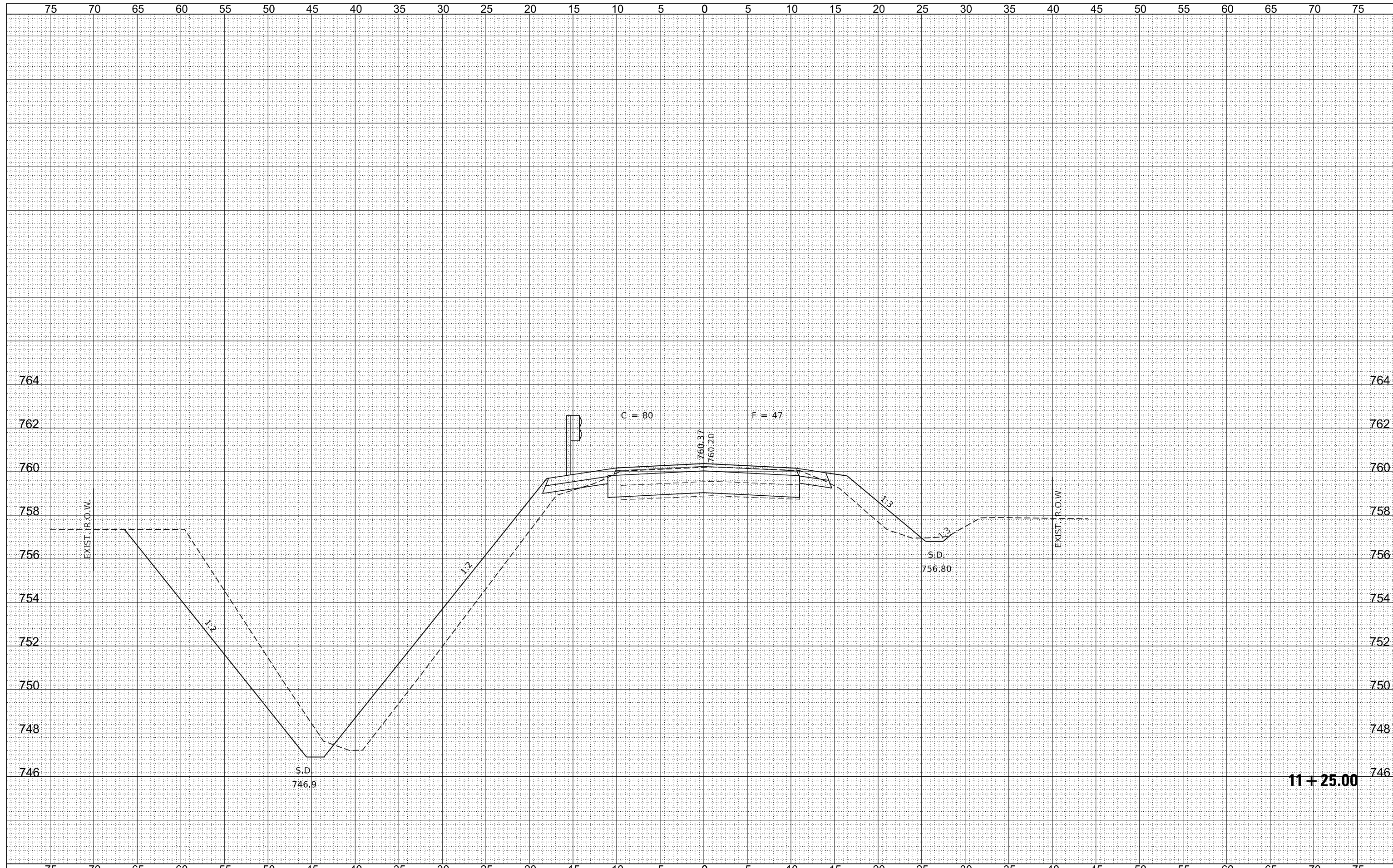


11 + 13.00

FILE NAME = 160453-shl-vssht.dgn	USER NAME = mpaul	DESIGNED - L.A.P.	REVISSED -	<p align="center">STATE OF ILLINOIS FORD COUNTY HIGHWAY DEPARTMENT</p> <p align="center">STATION CROSS SECTIONS</p>	F.A.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HAMPTON, LENZINI AND RENWICK, INC. 3885 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.009958	PLOT SCALE = \$\$SCALE\$	DRAWN - T.W.K.	REVISSED -		335	16-00132-00-BR	FORD	31	27
PLOT DATE = 2/3/2020	DATE - 02/03/2020	CHECKED - S.W.M.	REVISSED -		LODA LAKE ROAD / C.H. 2		CONTRACT NO. 87724		
				SCALE: 5H:2V	SHEET NO. 11	OF 15 SHEETS	STA. 11+13.00	TO STA. 11+13.00	ILLINOIS FED. AID PROJECT 65LK(956)

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

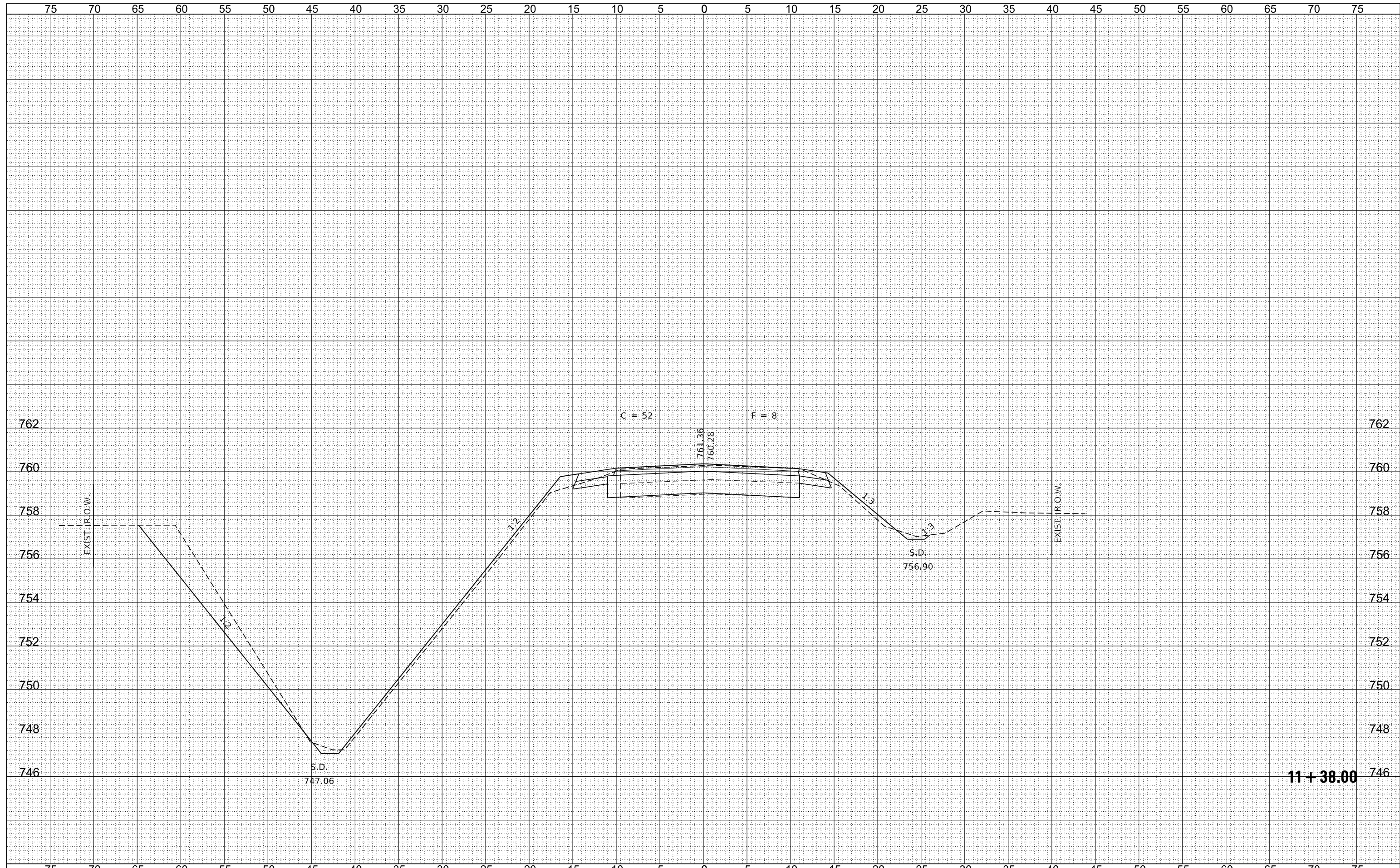
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	PLOTTED	
	TEMPLATE AREAS CHECKED	
FINAL SURVEY	NOTE BOOK	
	NO.	



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HAMP顿, LENZINI AND RENWICK, INC.		DRAWN - T.W.K.	REVISD -	FORD COUNTY HIGHWAY DEPARTMENT		SCALE: 5H:2V		335	16-00132-00-BR	FORD	31	28	
3888 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM L/S / PE / SE CORP. 184.000958		CHECKED - S.W.M.	REVISD -					LODA LAKE ROAD / C.H. 2		CONTRACT NO. 87724		ILLINOIS FED. AID PROJECT 6SLK(956)	
		DATE - 02/03/2020	REVISD -					STA. 11+25.00 TO STA. 11+25.00					

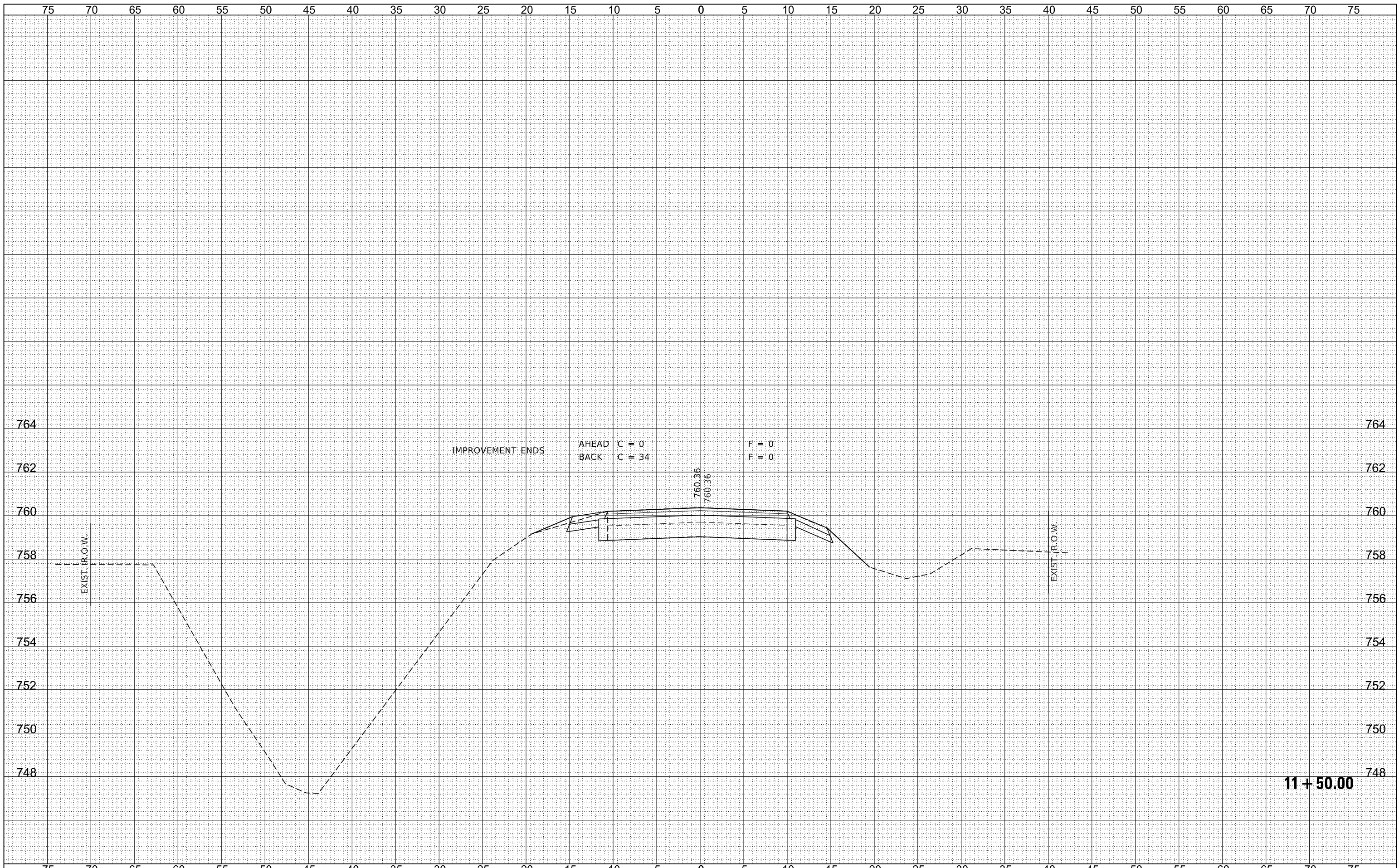
FINAL SURVEY	SURVEYED	DATE
NOTE BOOK	PLOTTED	
NO.	TEMPLATE	
	AREAS	
	CHECKED	

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



11 + 38.00

FILE NAME = 160453-shl-vssht.dgn	USER NAME = mpaul	DESIGNED - L.A.P.	REVISIED -	<p align="center">STATE OF ILLINOIS FORD COUNTY HIGHWAY DEPARTMENT</p> <p align="center">STATION CROSS SECTIONS</p> <p>SCALE: 5H:2V SHEET NO. 13 OF 15 SHEETS STA. 11+38.00 TO STA. 11+38.00</p>	F.A.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HAMPTON, LENZINI AND RENWICK, INC. 3885 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.009958	PLOT SCALE = \$SCALES	DRAWN - T.W.K.	REVISIED -		335	16-00132-00-BR	FORD	31	29
PLOT DATE = 2/3/2020	CHECKED - S.W.M.	REVISIED -	CONTRACT NO. 87724		ILLINOIS FED. AID PROJECT 65LK(956)				
DATE - 02/03/2020	REVISIED -								



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

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

FILE NAME = 160453-shl-vssht.dgn
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 DRAWN - T.W.K.
 CHECKED - S.W.M.
 DATE - 02/03/2020
 PLOT SCALE = \$SCALE\$
 PLOT DATE = 2/3/2020
HAMPTON, LENZINI AND RENWICK, INC.
 3885 STEVENSON DRIVE, SUITE 201
 SPRINGFIELD, ILLINOIS 62703
 ILLINOIS PROFESSIONAL DESIGN FIRM
 LS / PE / SE CORP. 184-009959

USER NAME = mpaul
 DESIGNED - L.A.P.
 DRAWN - T.W.K.
 CHECKED - S.W.M.
 DATE - 02/03/2020

REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
FORD COUNTY HIGHWAY DEPARTMENT

STATION CROSS SECTIONS

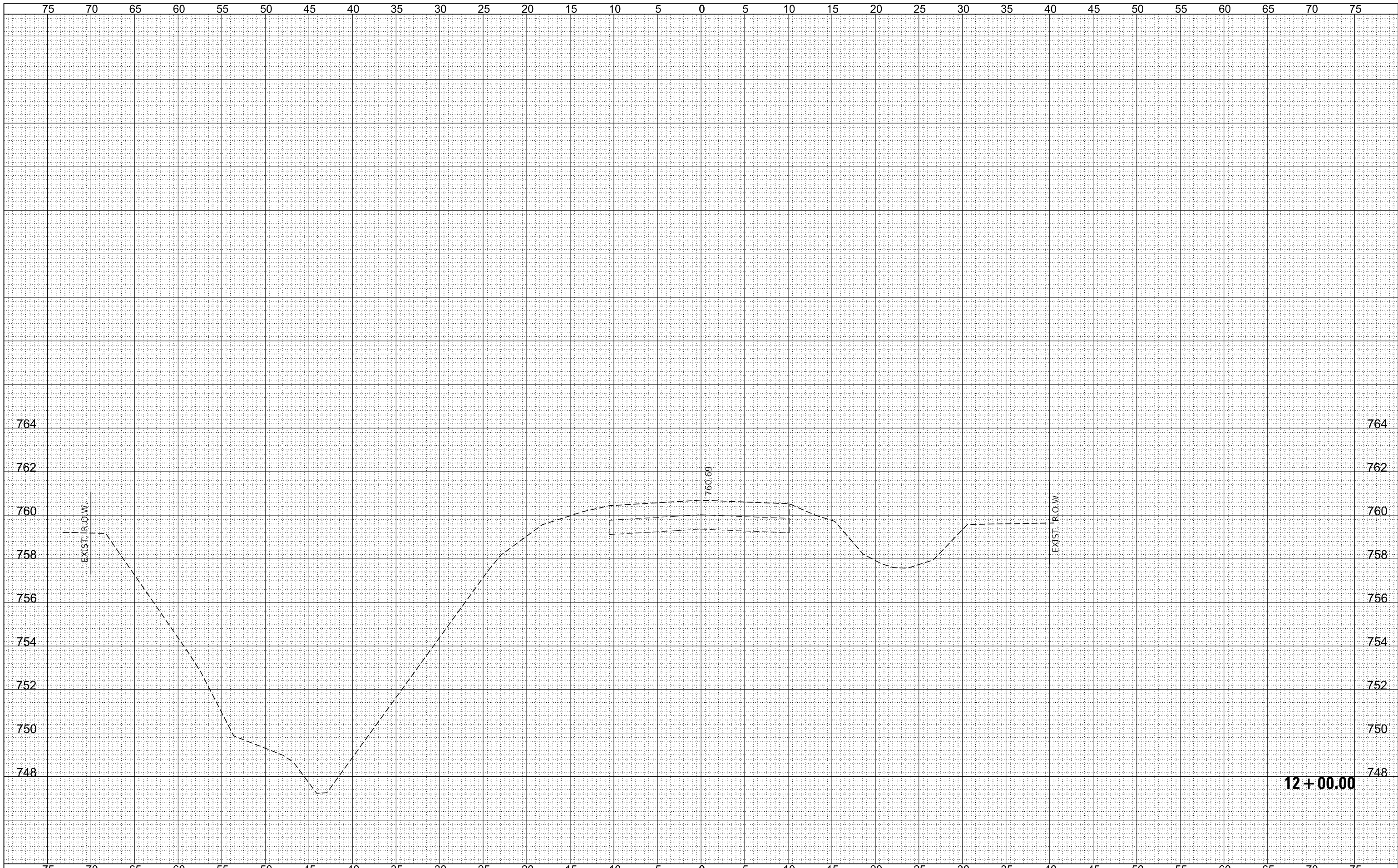
SCALE: 5H:2V SHEET NO. 14 OF 15 SHEETS STA. 11+50.00 TO STA. 11+50.00

F.A.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	16-00132-00-BR	FORD	31	30
LODA LAKE ROAD / C.H. 2		CONTRACT NO. 87724		
ILLINOIS FED. AID PROJECT 65LK(956)				

11+50.00

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

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



12 + 00.00