

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 78	09-14138-00-BR	VERMILION	27	1
FED. ROAD DIST. NO.		ILLINOIS CONTRACT NO. 91458		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED HIGHWAY BRIDGE PROGRAM

PROJECT BROS-0183(310)
SECTION 09-14138-00-BR
OAKWOOD ROAD DISTRICT
VERMILION COUNTY
T.R. 78 / 600E ROAD
PROPOSED STRUCTURE NO. 092-3517
JOB NO. C-95-320-11

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1.	COVER SHEET
2.	SUMMARY OF QUANTITIES AND GENERAL NOTES
3.-4.	TYPICAL CROSS SECTIONS
5.	INTERSECTION DETAIL
6.-8.	PLAN AND PROFILE - 600E ROAD
9.-15.	STATION CROSS SECTIONS - 600E ROAD
16.	PLAN AND PROFILE - 2000N ROAD
17.-18.	STATION CROSS SECTIONS - 2000N ROAD
19.-26.	BRIDGE PLANS
27.	BORINGS

HIGHWAY STANDARDS:

000001-06	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
515001-03	NAME PLATE FOR BRIDGES
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
701901-01	TRAFFIC CONTROL DEVICES
BLR 21-8	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

UTILITIES

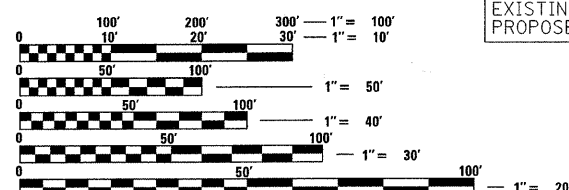
AT&T ENGINEERING
201 S. NEIL ST.
CHAMPAIGN, IL 61820
ATTN: MIKE MURPHY
217-398-7979

AMEREN ILLINOIS
1155 E. VORHEES
DANVILLE, IL 61832



LOCATION OF SECTION INDICATED THIS: - [Symbol] -

FUNCTIONAL CLASSIFICATION: LOCAL ROAD (NON-URBAN)
DESIGN SPEED: 30 MPH
DESIGN TRAFFIC: 75 ADT (2011)

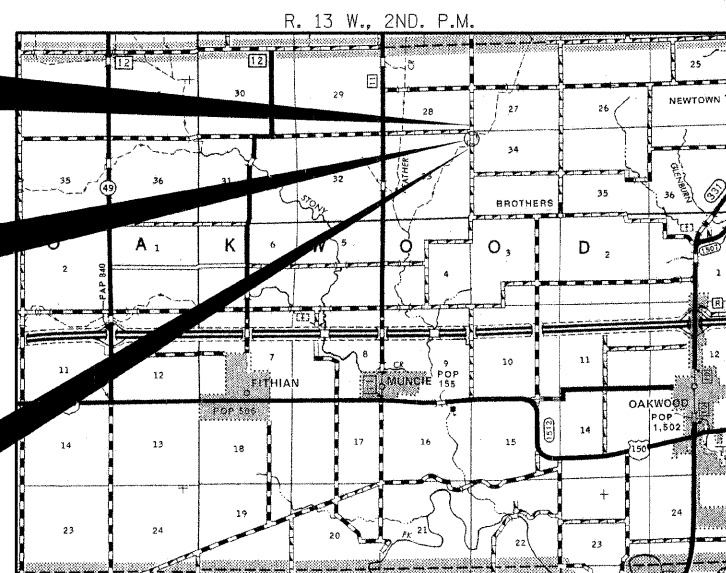


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

STA. 10+00
PRECAST PRESTRESSED CONCRETE DECK BEAM BRIDGE. SINGLE SPAN @ 46'-11"
30'-0" RDWY.; SKEW = 20° RT. FORWARD
EXISTING STRUCTURE NO. 092-3079
PROPOSED STRUCTURE NO. 092-3517

IMPROVEMENT ENDS
STATION 12+00

IMPROVEMENT BEGINS
STATION 8+00

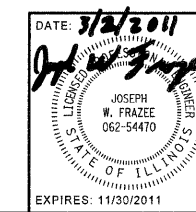


LOCATION MAP

APPROXIMATE SCALE: 0 1 MILE
NET LENGTH OF SECTION = 400 FEET = 0.076 MILES



ILLINOIS DEPARTMENT OF TRANSPORTATION	
APPROVED	<i>Douglas R. Hoke</i> 20 March 3, 2011 COUNTY ENGINEER
APPROVED	<i>Tom H. Hoke</i> 2011 MARCH 4 ROAD DISTRICT COMMISSIONER
PASSED	<i>Mark H.</i> 2011 MARCH 16 DISTRICT FIVE ENGINEER OF LOCAL ROADS & STREETS
Releasing For Bid Based on Limited Review	<i>Mark H.</i> 2011 MARCH 17 DEPUTY DIRECTOR OF HIGHWAYS REGION THREE ENGINEER STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION



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

CONTRACT NO. 91458

DATE: 3/2/2011
EXPIRES: 11/30/2011
PROJECT NUMBER: 10.0323.130
DATE: 02/18/11

SUMMARY OF QUANTITIES			
CODE NO.	ITEM	UNIT	TOTAL
			CONSTRUCTION TYPE CODE 0011
20200100	EARTH EXCAVATION	CU YD	160
20300100	CHANNEL EXCAVATION	CU YD	120
20400800	FURNISHED EXCAVATION	CU YD	60
28000305	TEMPORARY DITCH CHECKS	FOOT	20
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	381
^ 50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
50300225	CONCRETE STRUCTURES	CU YD	27.4
50400305	PRECAST PRESTRESSED CONCRETE DECK BEAMS (17" DEPTH)	SQ FT	1380
50800105	REINFORCEMENT BARS	POUND	2730
* 50900205	STEEL RAILING, TYPE S1	FOOT	88
51201400	FURNISHING STEEL PILES HP10X42	FOOT	240
51202305	DRIVING PILES	FOOT	240
51203400	TEST PILE STEEL HP10X42	EACH	2
51204650	PILE SHOES	EACH	10
51500100	NAME PLATES	EACH	1
59300100	CONTROLLED LOW-STRENGTH MATERIAL	CU YD	50
67100100	MOBILIZATION	L SUM	1
^ 70101830	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21	L SUM	1
* 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4
Z0013798	CONSTRUCTION LAYOUT	L SUM	1
^ X2501000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.3
^ X2810208	STONE RIPRAP, CLASS A4 (SPECIAL)	TON	250
^ XX004566	CONCRETE CUT-OFF WALL	CU YD	7.4

^ SEE SPECIAL PROVISIONS

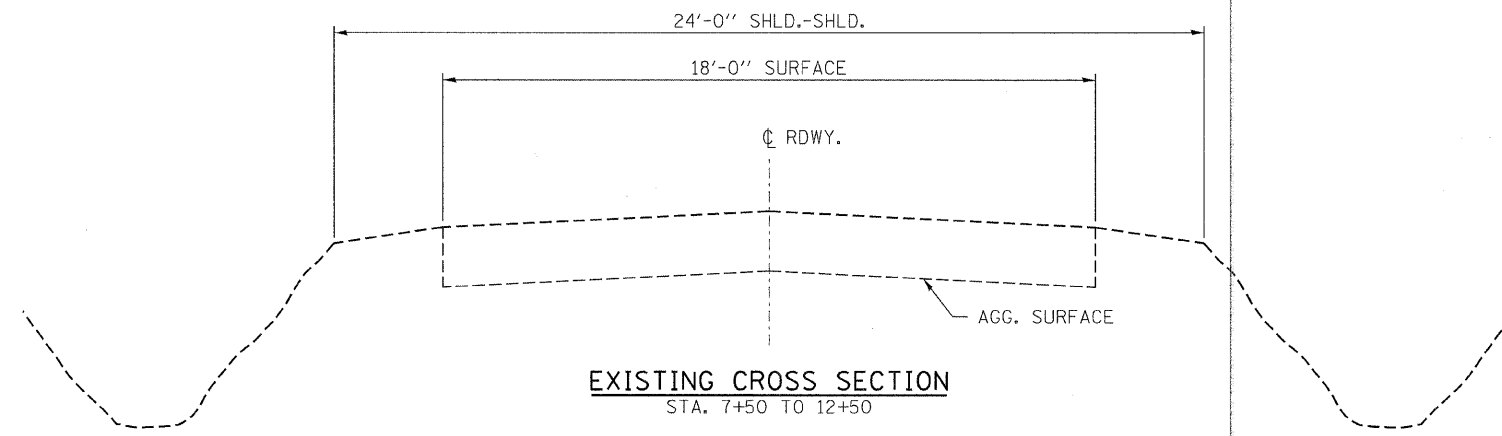
* SPECIALTY ITEMS

GENERAL NOTES

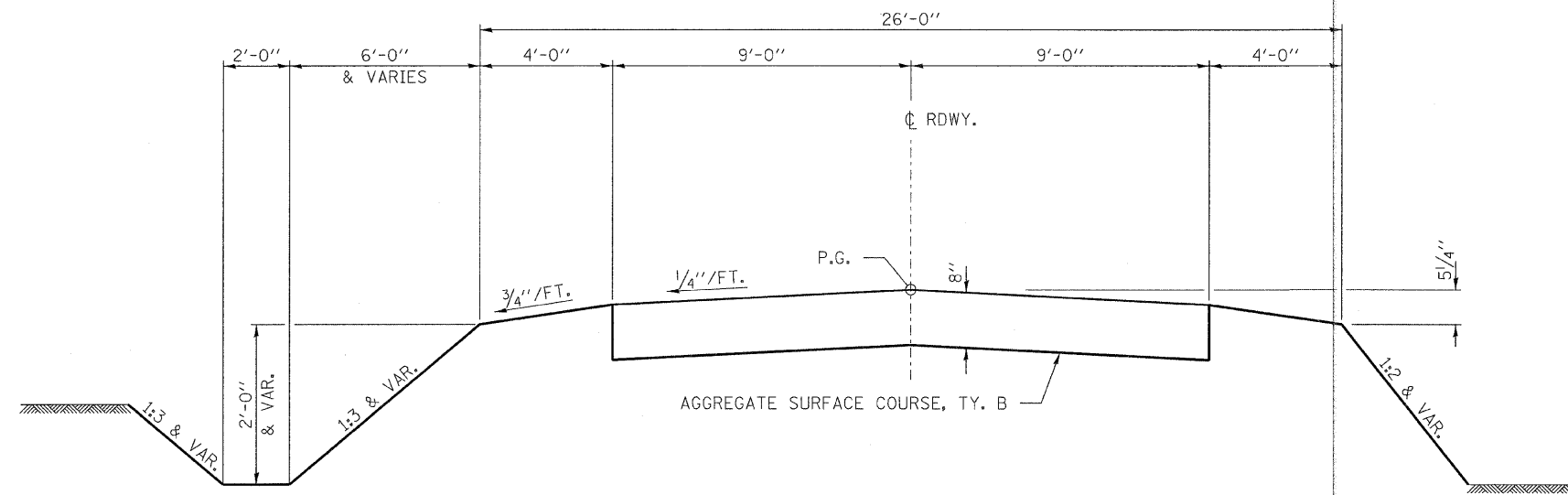
- ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED JANUARY 1, 2007," THESE PLANS AND THE SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS.
- THE REVISION NUMBERS OF THE STANDARDS LISTED IN THE PLANS ARE TO BE 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 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 FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN CALCULATING PLAN QUANTITIES:
 AGGREGATE SURFACE COURSE 1.80 TON/CU YD
 STONE RIPRAP 1.75 TON/CU YD
 STONE BEDDING 1.80 TON/CU YD
- THE AREA TO BE SEEDDED SHALL CONSIST OF ALL DISTURBED EARTH SURFACES WITHIN THE RIGHT OF WAY AS DIRECTED BY THE ENGINEER.
ESTIMATED QUANTITY: SEEDING, CLASS 2 (SPECIAL) = 0.3 ACRES

EARTHWORK SCHEDULE							
LOCATION	EARTH EXCAVATION	CHANNEL EXCAVATION	SHRINKAGE FACTOR	PERCENT USED	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE	EMBANKMENT REQUIRED	EARTHWORK BALANCE
	20200100 CU.YD.	20300100 CU.YD.			CU.YD.	CU.YD.	CU.YD.
TR 78 / 600 E							
STA 8+00 TO STA 9+76.29	26		25.00%	100.00%	20	77	-57
STA 9+76.29 TO STA 10+23.71	0		25.00%	100.00%	0	0	0
STA 10+23.71 TO STA 12+00	112		25.00%	100.00%	84	164	-80
2000 N							
STA 99+75 TO 100+50	23		25.00%	100.00%	17	4	13
CHANNEL EXCAVATION		120	25.00%	70.00%	63	0	63
TOTAL	161	120			184	245	-61
USE	160	120					-60

FURNISHED EXCAVATION 60 CU YDS



EXISTING CROSS SECTION
STA. 7+50 TO 12+50



PROPOSED TYPICAL CROSS SECTION

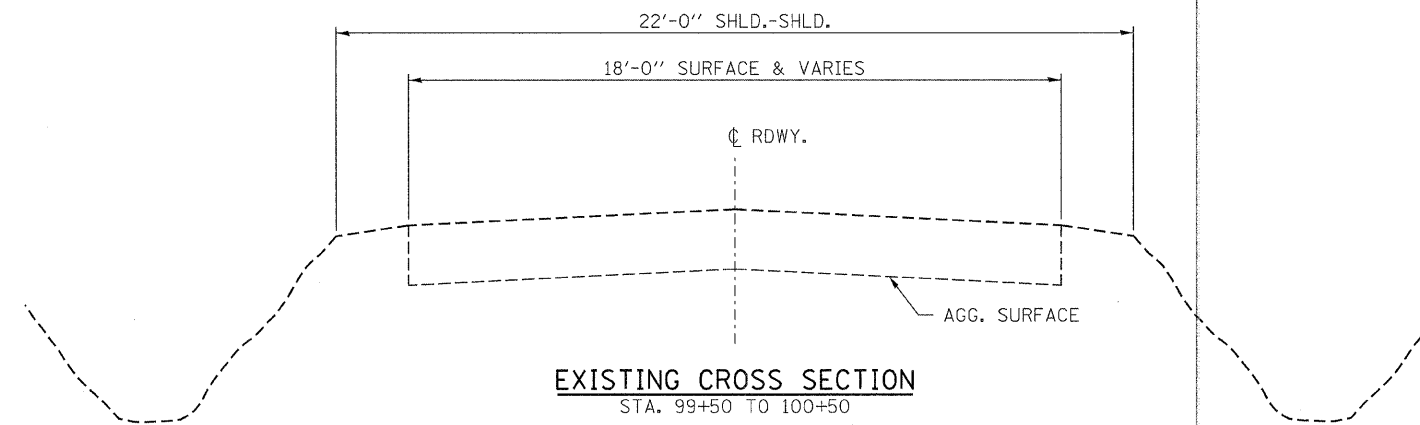
STA. 8+00.00 TO 9+76.29
STA. 10+23.71 TO 12+00.00

SUGGESTED CUT SECTION
CONSTRUCT AS SHOWN IN
STATION CROSS SECTIONS

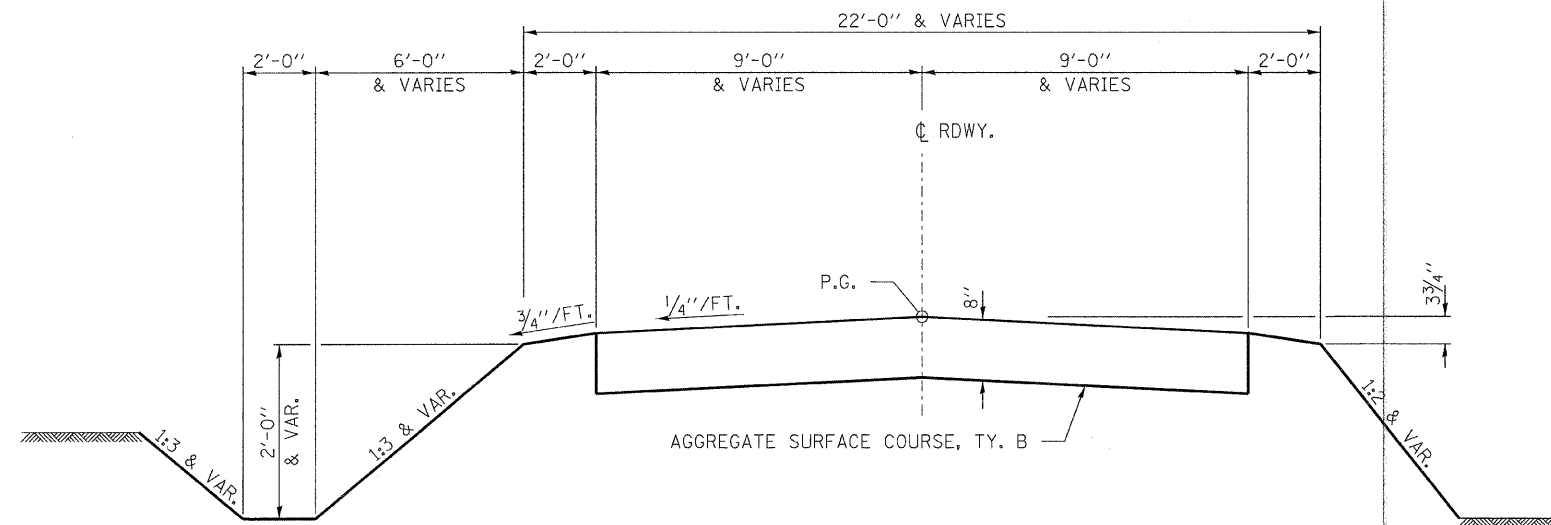
SUGGESTED FILL SECTION
CONSTRUCT AS SHOWN IN
STATION CROSS SECTIONS

TRANSITION FROM THE PROPOSED ROADWAY TO THE EXISTING ROADWAY IS TO BE CONSTRUCTED FROM STA. 8+00 TO 8+50 AND STA. 11+50 TO 12+00. SEE SHEET 19 FOR TRANSITION AT BRIDGE.

FILE NAME = 100323-sht-typsections.dgn	USER NAME =	DESIGNED - J.W.F.	REVISED -	STATE OF ILLINOIS VERMILION COUNTY HIGHWAY DEPARTMENT	TYPICAL CROSS SECTIONS T.R. 78 / 600E ROAD	T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
HAMPTON, LENZINI AND RENWICK, INC. 3043 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62793 ILLINOIS PROFESSIONAL DESIGN FIRM L8 / PE / SE CORP. 184.000999		DRAWN - D.T.M.	REVISED -			78	09-14138-00-BR	VERMILION	27	3	
PLOT SCALE =		CHECKED - S.W.M.	REVISED -			OAKWOOD ROAD DISTRICT		CONTRACT NO. 91458		ILLINOIS FED. AID PROJECT	
PLOT DATE = 3/2/2011		DATE - 02/18/11	REVISED -			SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.



EXISTING CROSS SECTION
STA. 99+50 TO 100+50



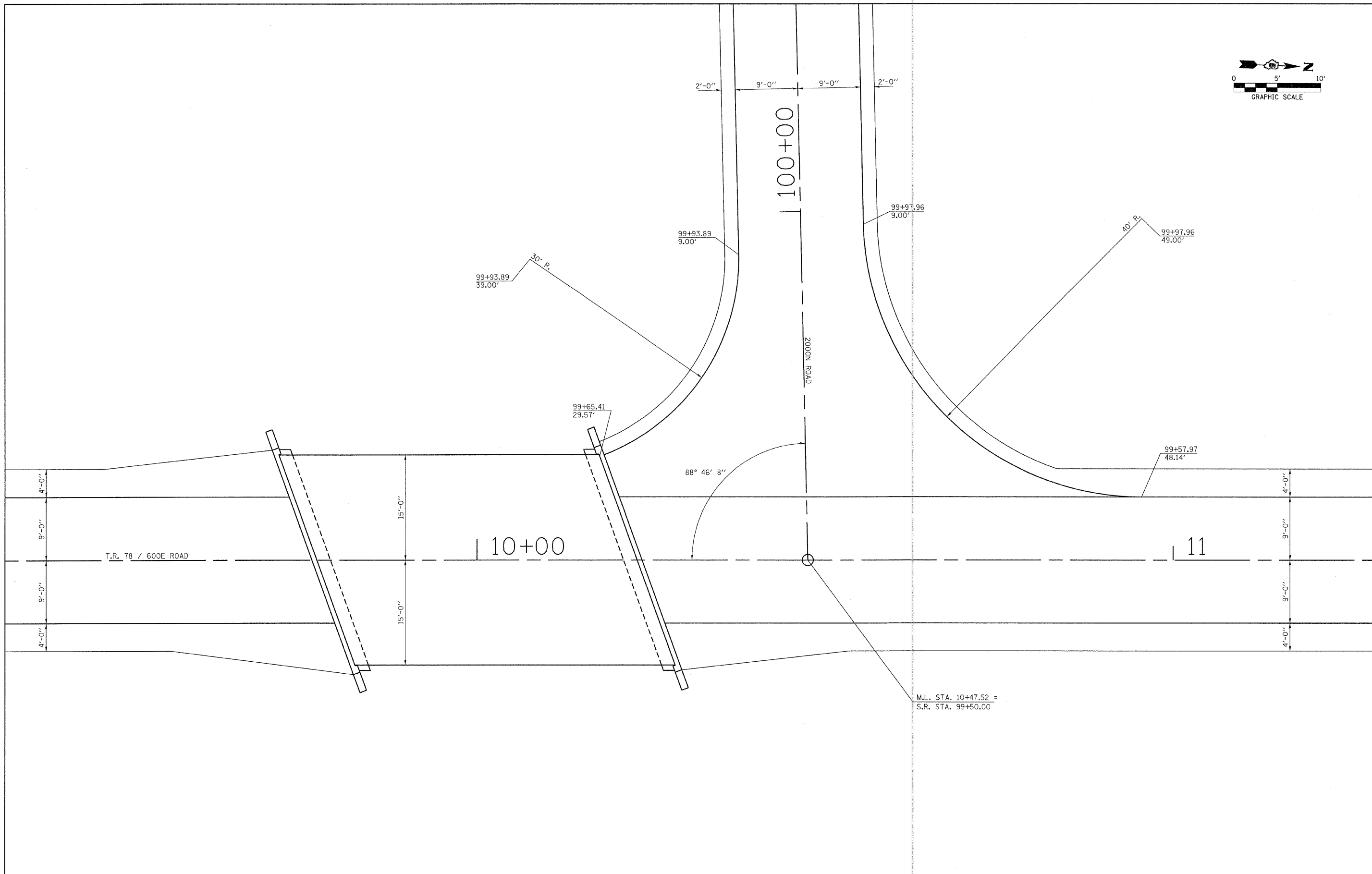
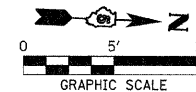
PROPOSED TYPICAL CROSS SECTION
STA. 99+59.00 TO STA. 100+50

SUGGESTED CUT SECTION
CONSTRUCT AS SHOWN IN
STATION CROSS SECTIONS

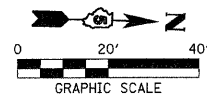
SUGGESTED FILL SECTION
CONSTRUCT AS SHOWN IN
STATION CROSS SECTIONS

TRANSITION FROM THE PROPOSED ROADWAY TO THE EXISTING
ROADWAY IS TO BE CONSTRUCTED FROM STA. 100+00 TO 100+50.

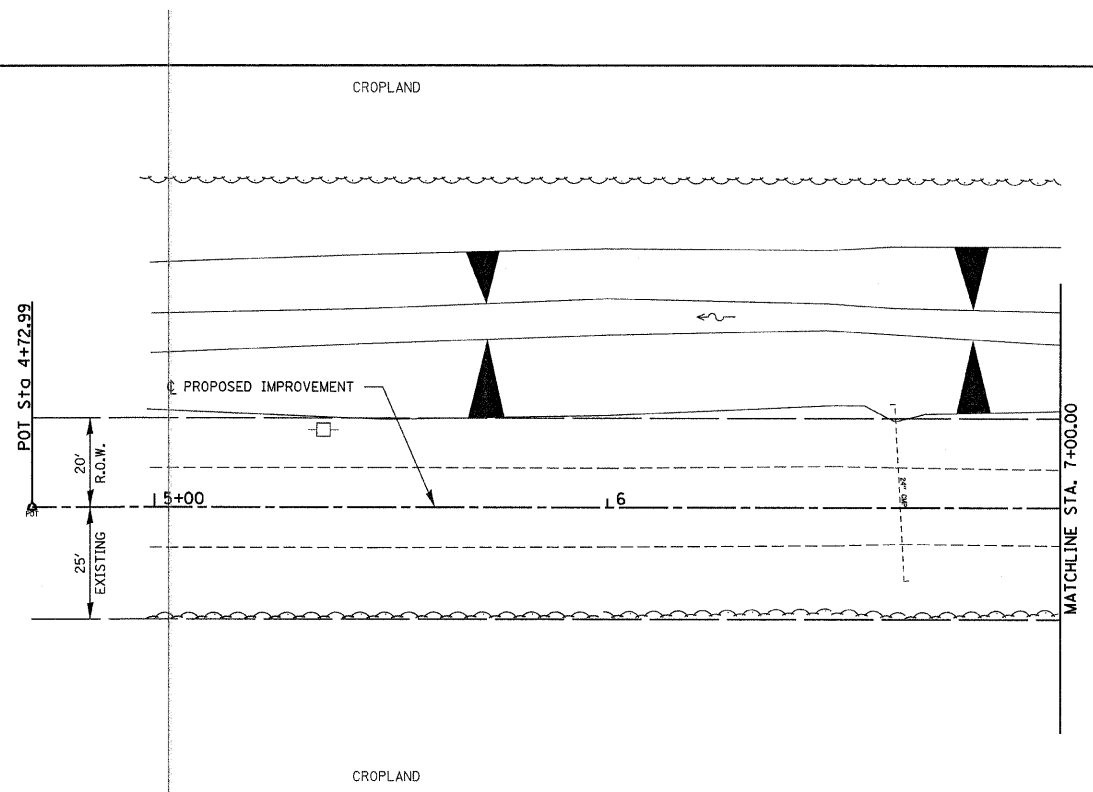
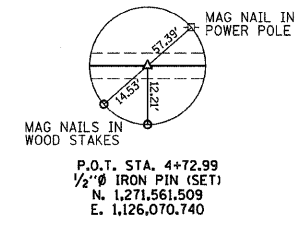
FILE NAME = 100323-sht-typsections.sxd	USER NAME =	DESIGNED - J.W.F.	REVISED -	STATE OF ILLINOIS VERMILION COUNTY HIGHWAY DEPARTMENT	TYPICAL CROSS SECTIONS 2000N ROAD	T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HAMPTON, LENZINI AND RENWICK, INC. 3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62795 ILLINOIS PROFESSIONAL DESIGN FIRM L3 / PE / SE CORP. 184-000989		DRAWN - D.T.M.	REVISED -			78	09-14138-00-BR	VERMILION	27	4
	PLOT SCALE =	CHECKED - S.W.M.	REVISED -			OAKWOOD ROAD DISTRICT		CONTRACT NO. 91458		
	PLOT DATE = 3/2/2011	DATE - 02/18/11	REVISED -			SCALE:	SHEET NO.	OF	SHEETS	STA.



FILE NAME = 100323-ah-intdetail.dgn	USER NAME =	DESIGNED - J.W.F.	REVISED -	STATE OF ILLINOIS VERMILION COUNTY HIGHWAY DEPARTMENT	INTERSECTION DETAIL T.R. 78 / 600E ROAD	T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HAMPTON, LENZINI AND RENWICK, INC. 2035 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62705 ILLINOIS PROFESSIONAL DESIGN FIRM L3 / PE / SE CORP. 184.000969	PLOT SCALE =	DRAWN - D.T.M.	REVISED -			78	09-14138-00-BR	VERMILION	27	5
	PLOT DATE = 3/2/2011	CHECKED - S.W.M.	REVISED -			OAKWOOD ROAD DISTRICT		CONTRACT NO. 91458		
		DATE - 02/18/11	REVISED -			ILLINOIS FED. AID PROJECT				
				SCALE: H5	SHEET NO. OF SHEETS	STA. TO STA.				



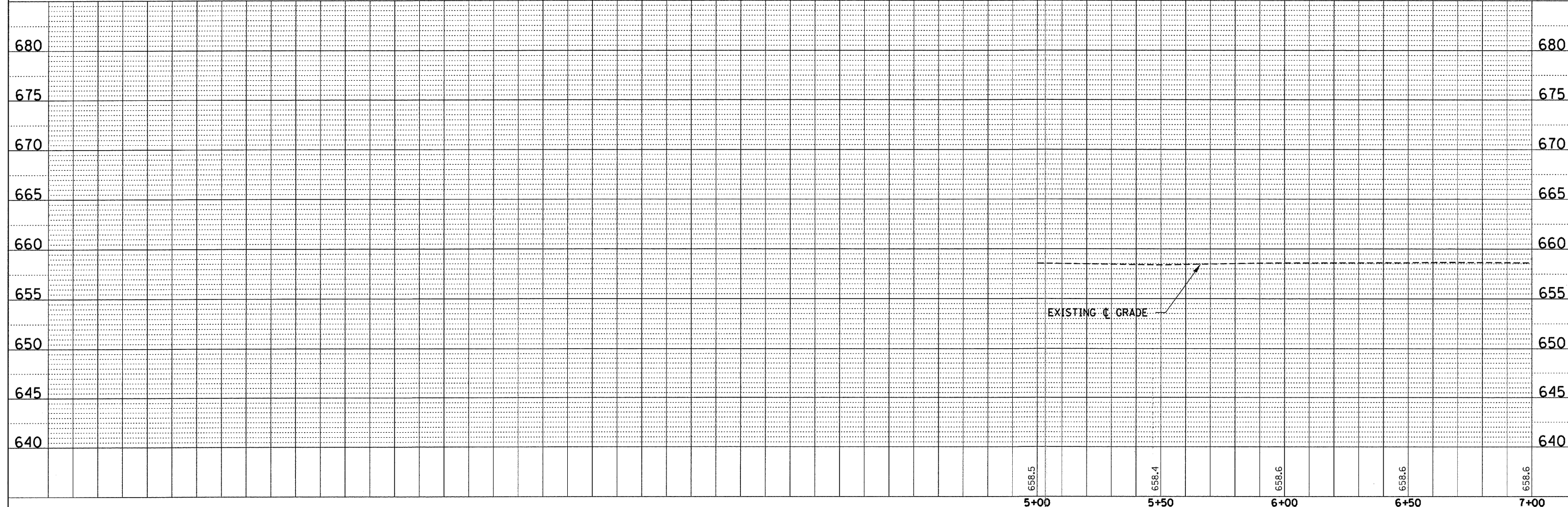
PATRICIA TRIMBLE
NE 1/4, NE 1/4, SEC 33, T. 20 N., R. 13 W., 2ND P.M.



MARK A. & TONI K. SHEPHERD
N 1/2, NW 1/4, SEC 34, T. 20 N., R. 13 W., 2ND P.M.

PLAN	DATE
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DATE	

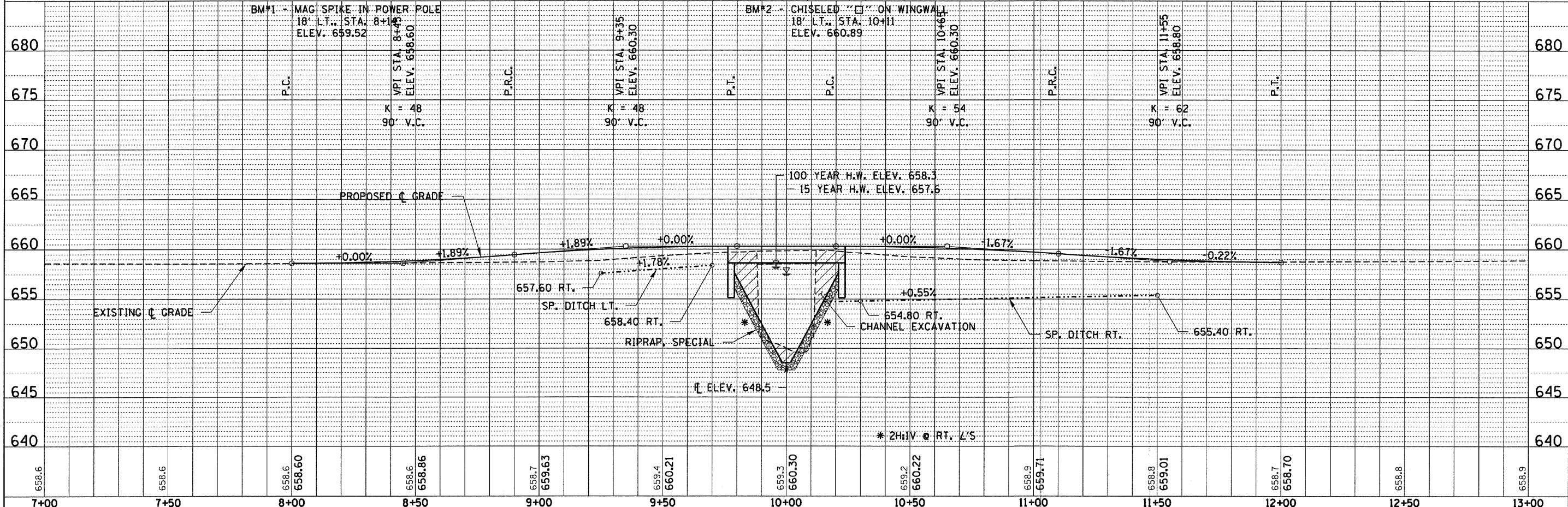
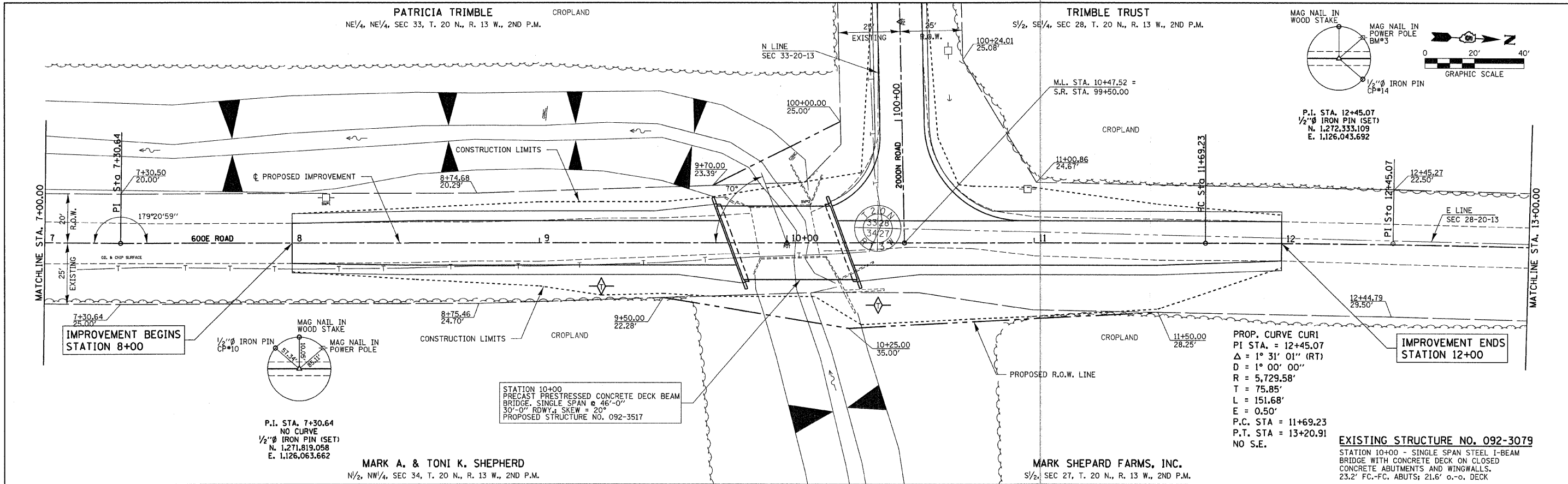
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FILE NAME = 100323-sht-pp1.dgn	USER NAME =	DESIGNED - J.W.F.	REVISED -	STATE OF ILLINOIS VERMILION COUNTY HIGHWAY DEPARTMENT	PLAN & PROFILE T.R. 78 / 600E ROAD	T.R.	SECTION	COUNTY	TOTAL SHEETS
HAMPTON, LENZINI AND RENWICK, INC. 3584 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703	PLOT SCALE =	DRAWN - D.T.M.	REVISED -			78	09-14138-00-BR	VERMILION	27
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184,000958	PLOT DATE = 3/2/2011	CHECKED - S.W.M.	REVISED -			OAKWOOD ROAD DISTRICT		CONTRACT NO. 91458	
		DATE - 11/23/10	REVISED -			ILLINOIS FED. AID PROJECT			

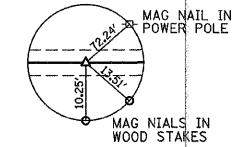
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REVISIONS	
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DESCRIPTION	

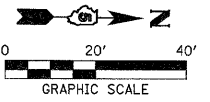


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HAMPTON, LENZINI AND RENWICK, INC.		DRAWN - D.T.M.	REVISED -			78	09-14138-00-BR	VERMILION	27	7
3305 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62769	PLOT SCALE =	CHECKED - S.W.M.	REVISED -			OAKWOOD ROAD DISTRICT			CONTRACT NO.	91458
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000699	PLOT DATE = 3/2/2011	DATE - 11/23/10	REVISED -			SCALE: H20xV5		SHEET NO. 2 OF 4 SHEETS		STA. 7+00.00 TO STA. 13+00.00

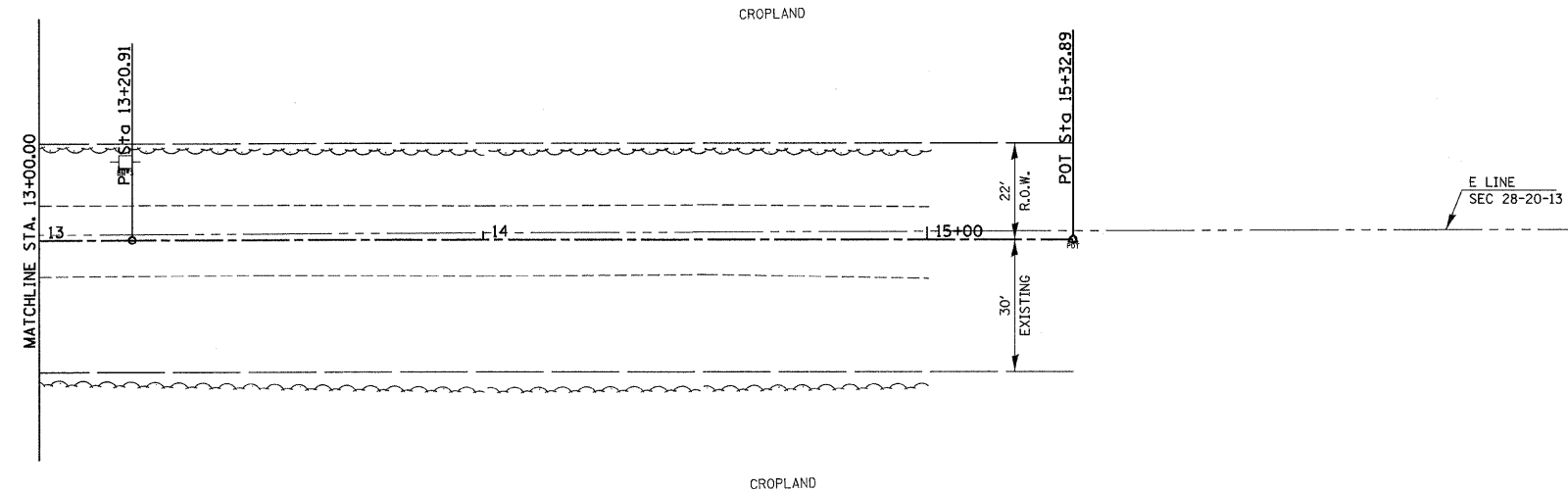
TRIMBLE TRUST
S 1/2, SE 1/4, SEC 28, T. 20 N., R. 13 W., 2ND P.M.



P.O.T. STA. 15+32.89
1/2" Ø IRON PIN (SET)
N. 1,272,620.906
E. 1,126,040.136

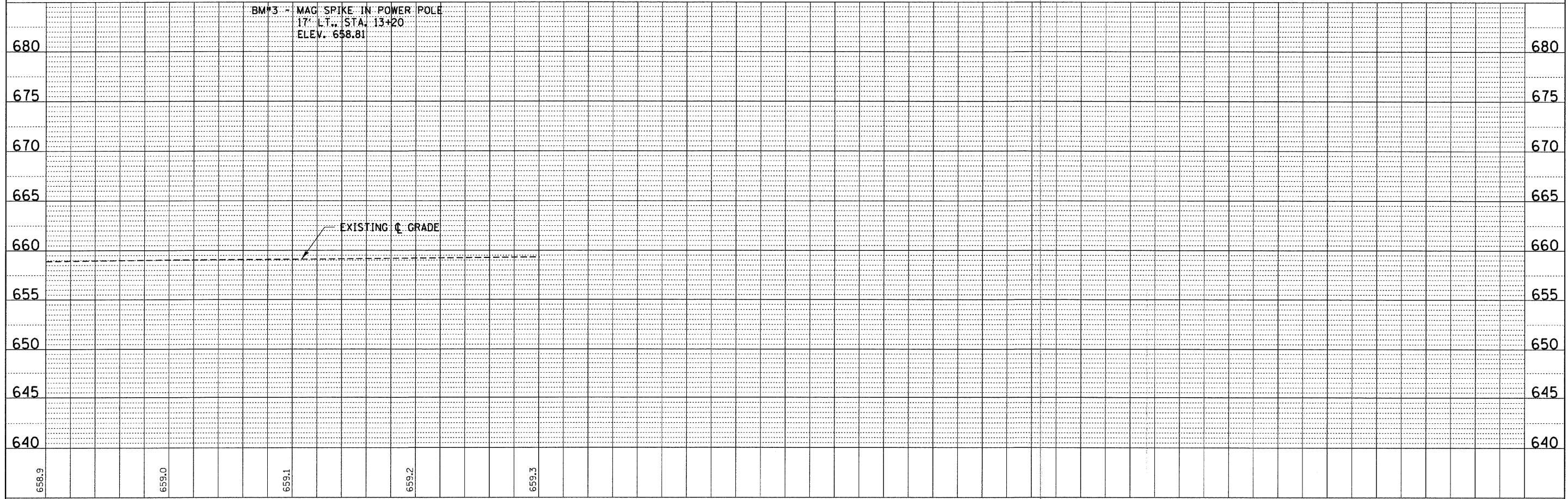


PLAN	SURVEYED	DATE
	PLOTTED	
	NOTE BOOK	
	NO.	
	BY	
	DATE	



MARK SHEPARD FARMS, INC.
S 1/2, SEC 27, T. 20 N., R. 13 W., 2ND P.M.

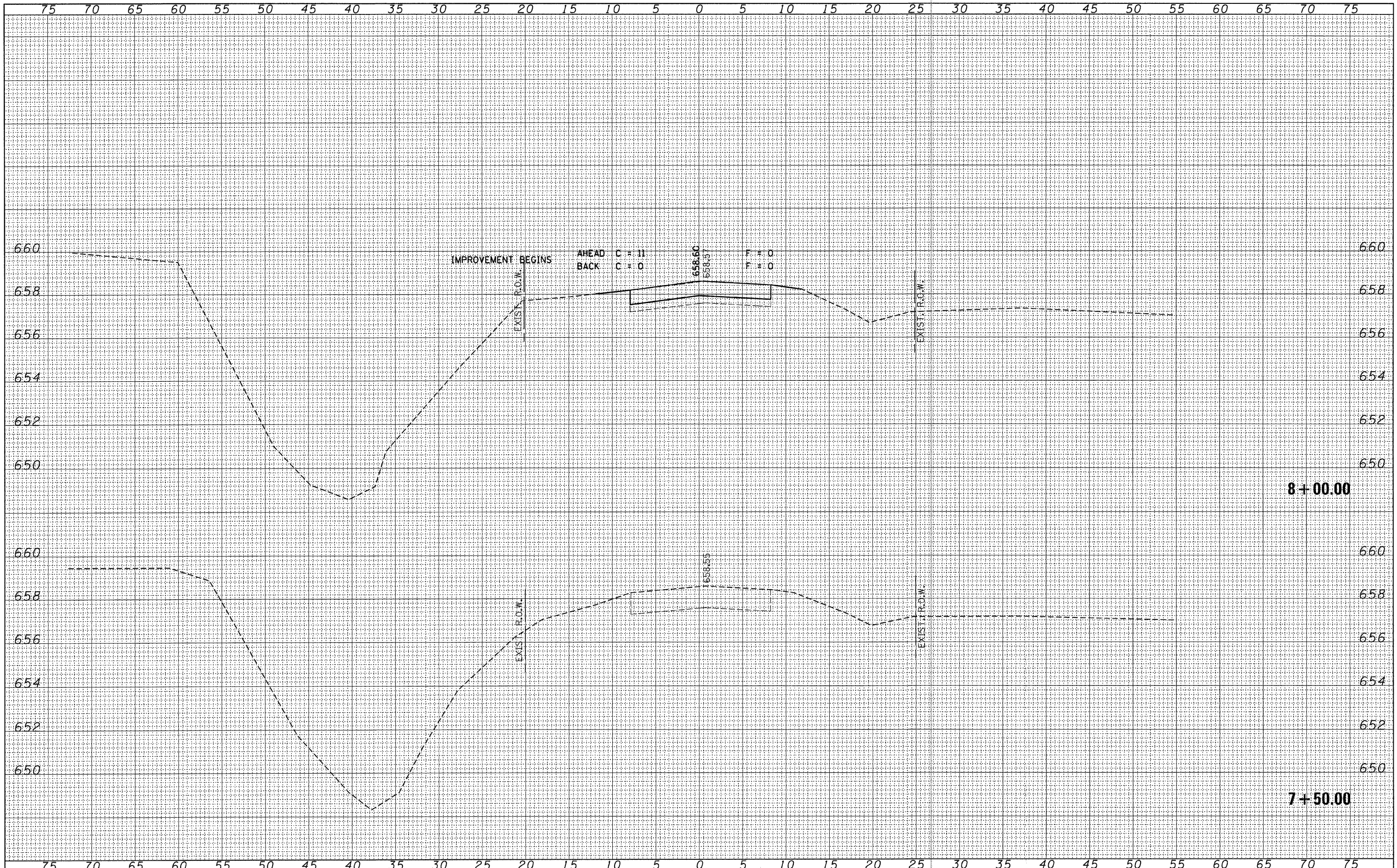
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	BY	
	DATE	



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HAMPTON, LENZINI AND RENWICK, INC. 3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62769		DRAWN - D.T.M.	REVISED -			78	09-14138-00-BR	VERMILION	27	8
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000899	PLOT SCALE =	CHECKED - S.W.M.	REVISED -			OAKWOOD ROAD DISTRICT		CONTRACT NO. 91458		
	PLOT DATE = 3/2/28:11	DATE - 11/23/10	REVISED -			ILLINOIS FED. AID PROJECT				

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

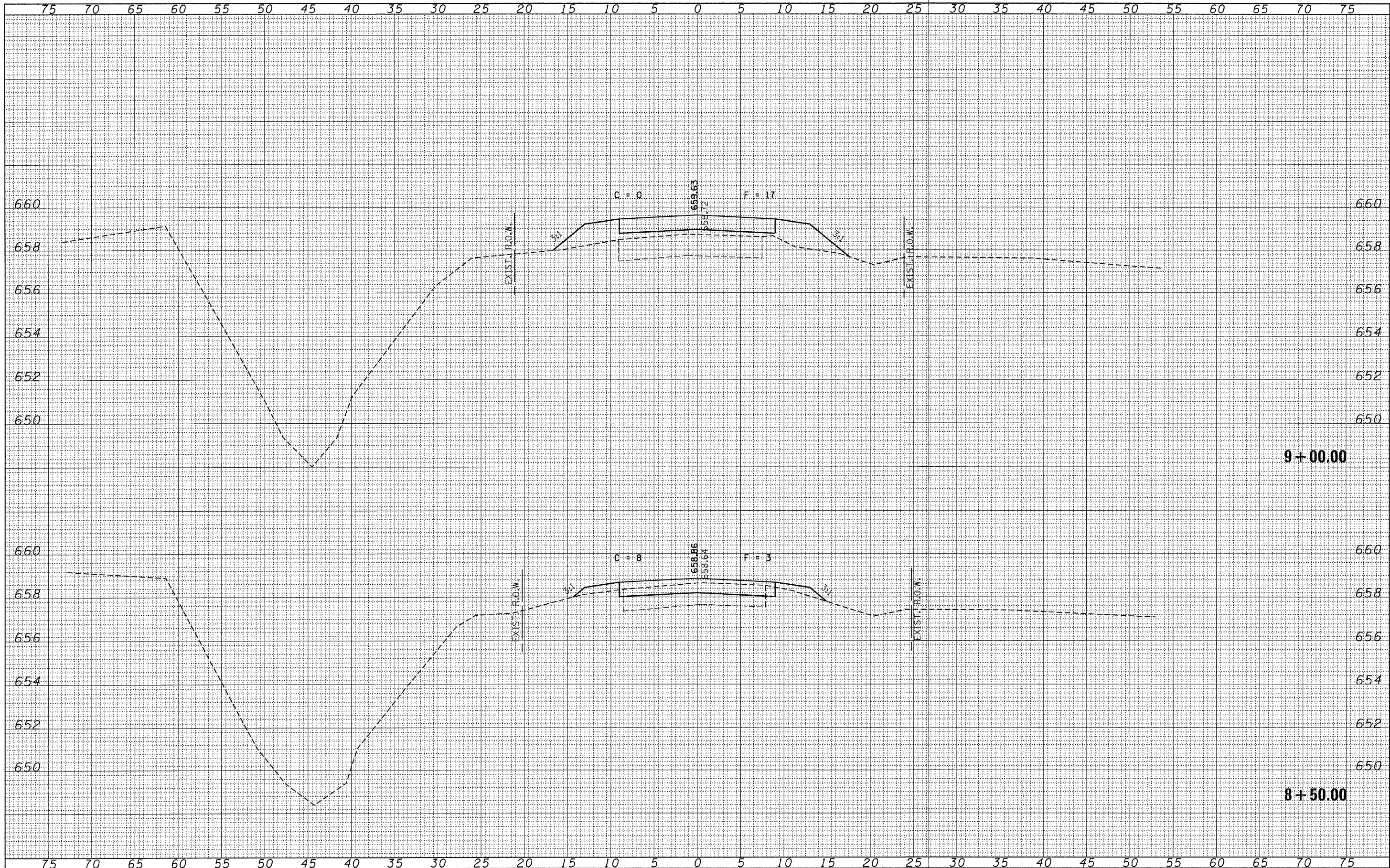
ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK NO.	PLOTTED		
	TEMPLATE		
	AREAS CHECKED		



FILE NAME = 108323-sh1-exs.dgn	USER NAME =	DESIGNED - J.W.F.	REVISED -	STATE OF ILLINOIS VERMILION COUNTY HIGHWAY DEPARTMENT	STATION CROSS SECTIONS T.R. 78 / 600 E. ROAD			T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HAMPTON, LENZINI AND RENWICK, INC.		DRAWN - D.T.M.	REVISED -		78	09-14138-00-BR	VERMILION	27	9			
108323 REVISION DRIVE SUITE 201 SPRINGFIELD, ILLINOIS 62703	PLOT SCALE =	CHECKED - S.W.M.	REVISED -		OAKWOOD ROAD DISTRICT			CONTRACT NO. 91458		ILLINOIS FED. AID PROJECT		
HLR ILLINOIS PROFESSIONAL DESIGN FIRM L8 / PE / SE CORP. 184-000889	PLOT DATE = 3/2/2011	DATE - 11/24/10	REVISED -		SCALE: H5:V2	SHEET NO.	OF SHEETS	STA. 7+50.00	TO STA. 8+00.00			

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

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



FILE NAME = 100323-sht-exs.dgn
 HAMPTON, LENZINI AND RENWICK, INC.
 3063 STEVENSON DRIVE, SUITE 201
 SPRINGFIELD, ILLINOIS 62703
 ILLINOIS PROFESSIONAL DESIGN FIRM
 LS / FE / SE CORP. 184-000959

USER NAME =
 DESIGNED - J.W.F.
 DRAWN - D.T.M.
 CHECKED - S.W.M.
 DATE - 11/24/10
 PLOT SCALE =
 PLOT DATE = 3/2/2011

REVISIONS:
 REVISED -
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 REVISED -

STATE OF ILLINOIS
 VERMILION COUNTY HIGHWAY DEPARTMENT

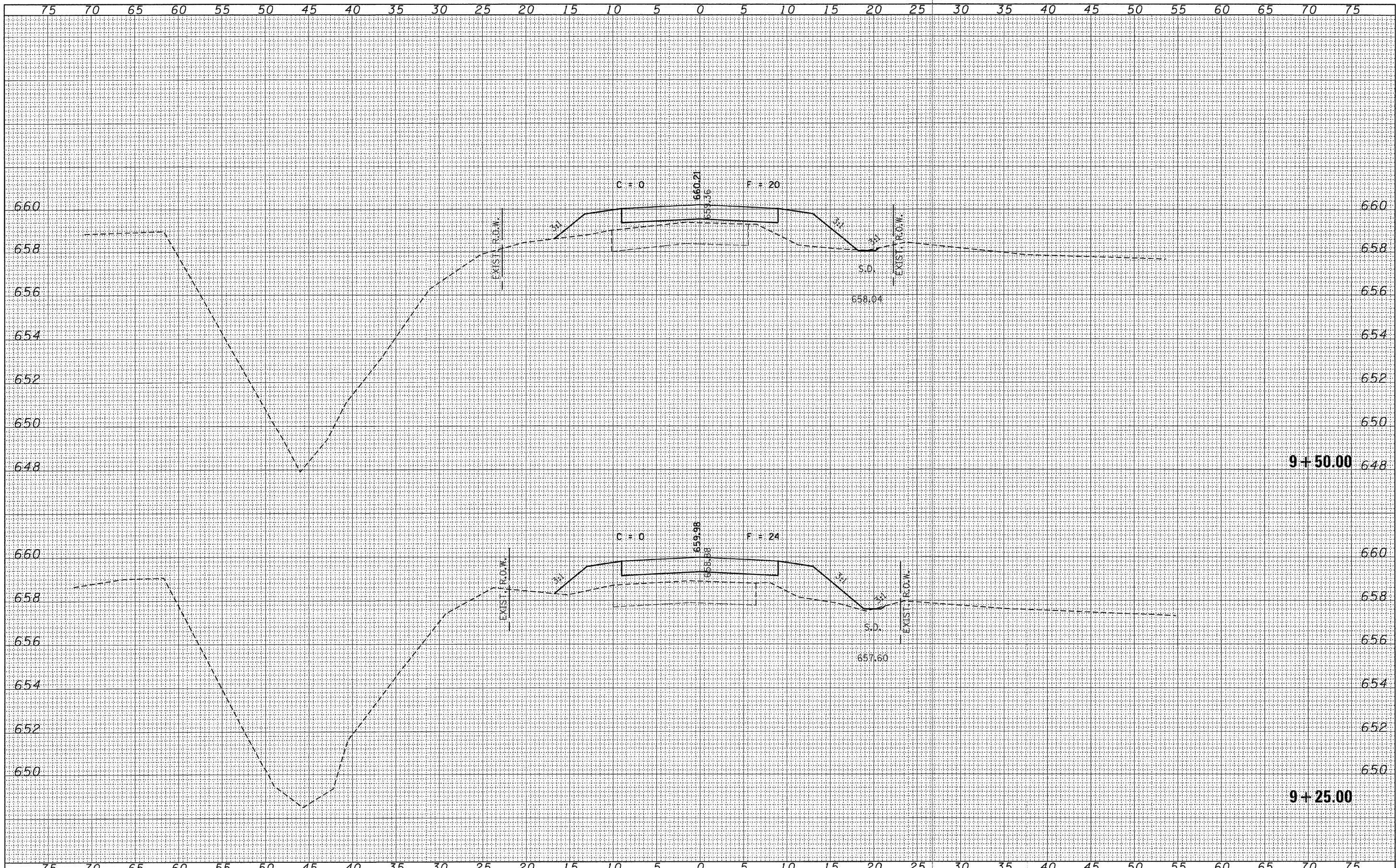
SCALE: H5:V2
 SHEET NO. OF SHEETS
 STA. 8+50.00 TO STA. 9+00.00

STATION CROSS SECTIONS
 T.R. 78 / 600 E. ROAD

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
78	09-14138-00-BR	VERMILION	27	10
OAKWOOD ROAD DISTRICT			CONTRACT NO. 91458	
ILLINOIS FED. AID PROJECT				

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

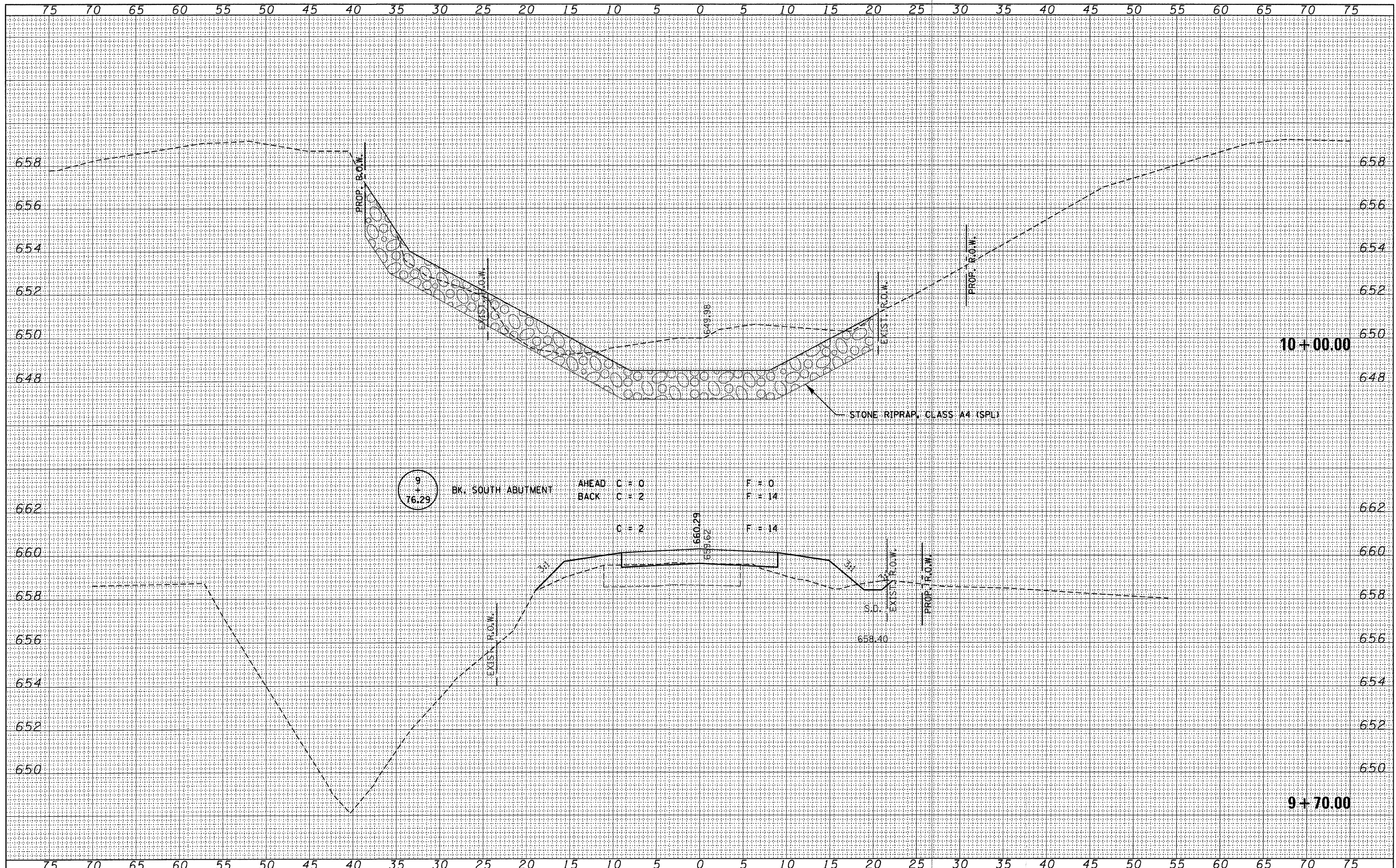
BY	DATE
ORIGINAL SURVEY	SURVEYED
NOTE BOOK NO.	PLOTTED
	TEMPLATE
	AREAS CHECKED



FILE NAME = 100323-sht-xxx.dgn	USER NAME =	DESIGNED - J.W.F.	REVISED -	STATE OF ILLINOIS VERMILION COUNTY HIGHWAY DEPARTMENT	STATION CROSS SECTIONS T.R. 78 / 600 E. ROAD		T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HAMPTON, LENZINI AND RENWICK, INC.		DRAWN - D.T.M.	REVISED -		78	09-14138-00-BR	VERMILION	27	11		
3360 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62702	PLLOT SCALE =	CHECKED - S.W.M.	REVISED -		OAKWOOD ROAD DISTRICT		CONTRACT NO. 91458				
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLLOT DATE = 3/2/2011	DATE - 11/24/10	REVISED -		SCALE: H5:V2	SHEET NO. OF SHEETS	STA. 9+25.00 TO STA. 9+50.00	ILLINOIS FED. AID PROJECT			

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

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



FILE NAME = 100323-sht-sss.dgn
 HAMPTON, LENZINI AND RENWICK, INC.
 3608 STEVENSON DRIVE, SUITE 201
 SPRINGFIELD, ILLINOIS 62703
 ILLINOIS PROFESSIONAL DESIGN FIRM
 LS / PE / SE CORP. 184.000859

USER NAME =
 PLOT SCALE =
 PLOT DATE = 3/2/2011

DESIGNED - J.W.F.
 DRAWN - D.T.M.
 CHECKED - S.W.M.
 DATE - 11/24/10

REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
 VERMILION COUNTY HIGHWAY DEPARTMENT

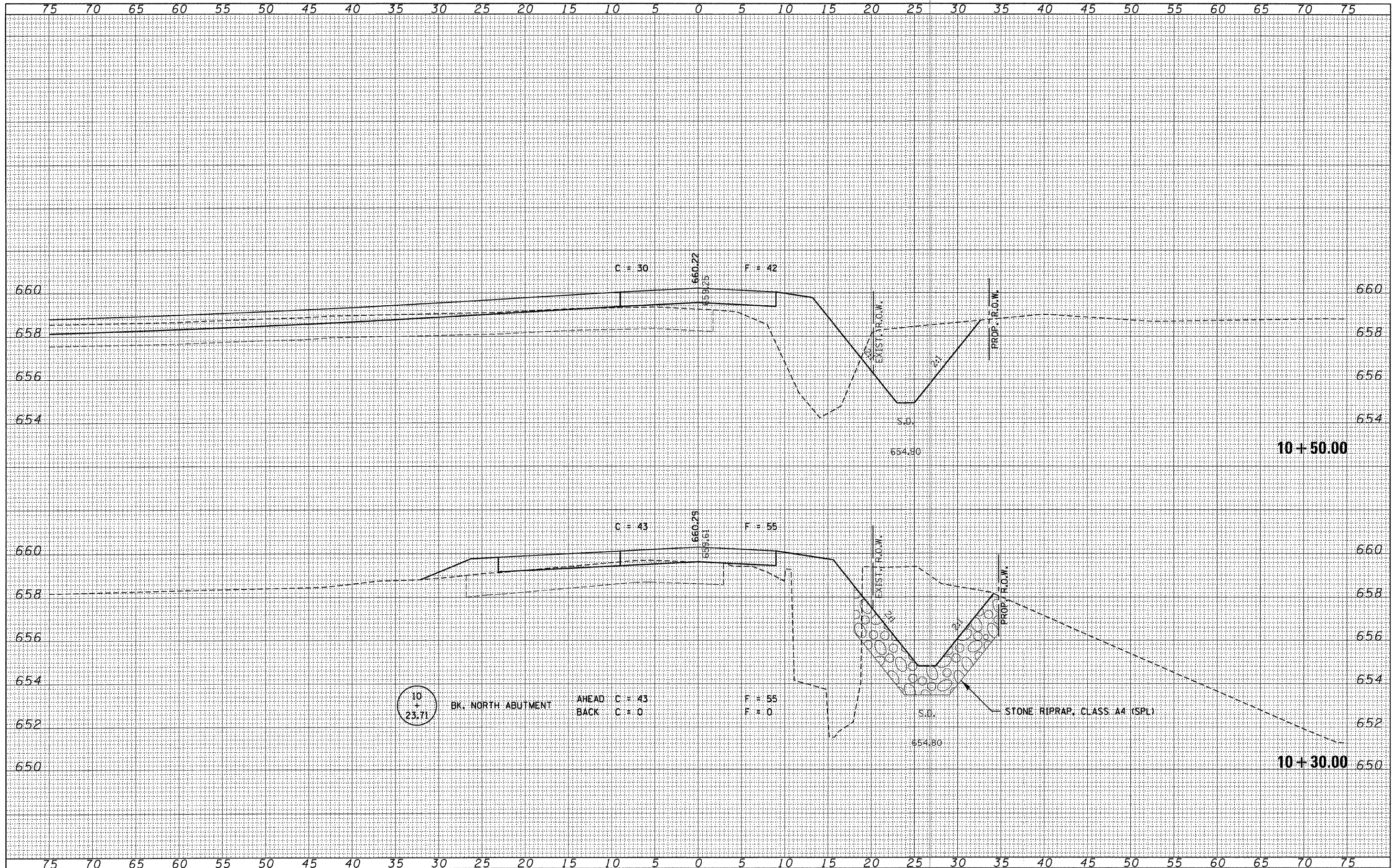
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STATION CROSS SECTIONS
 T.R. 78 / 600 E. ROAD

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
78	09-14138-00-BR	VERMILION	27	12
OAKWOOD ROAD DISTRICT		CONTRACT NO. 91458		
ILLINOIS FED. AID PROJECT				

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

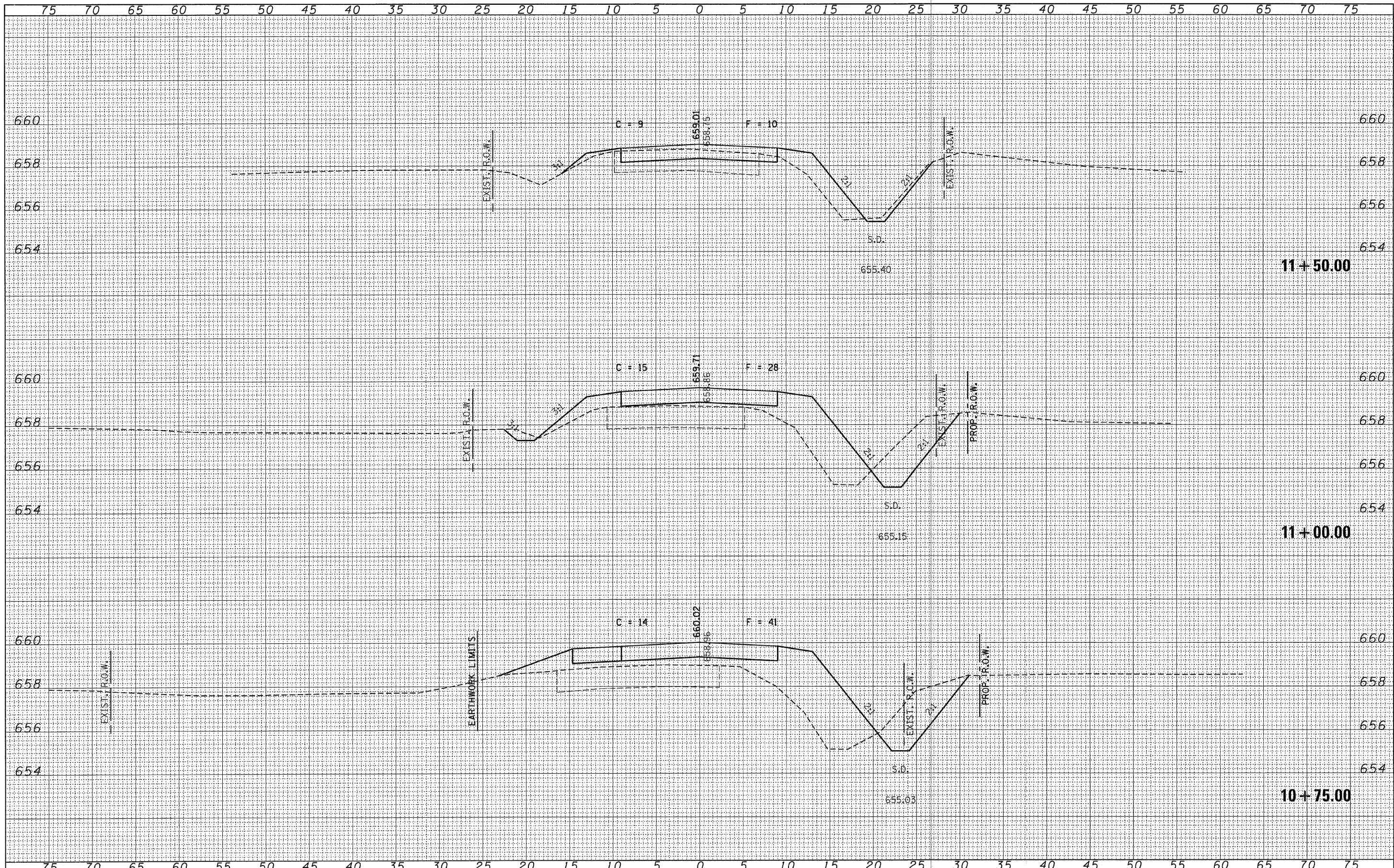
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NOTE BOOK NO.	PLOTTED
	TEMPLATE
	AREAS CHECKED



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PLLOT DATE = 3/2/2011	DATE - 11/24/10	CHECKED - S.W.M.	REVISED -				OAKWOOD ROAD DISTRICT		CONTRACT NO. 91458		ILLINOIS FED. AID PROJECT
		DATE - 11/24/10	REVISED -				SCALE: H5:V2	SHEET NO. OF SHEETS	STA. 10+30.00 TO STA. 10+50.00		

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

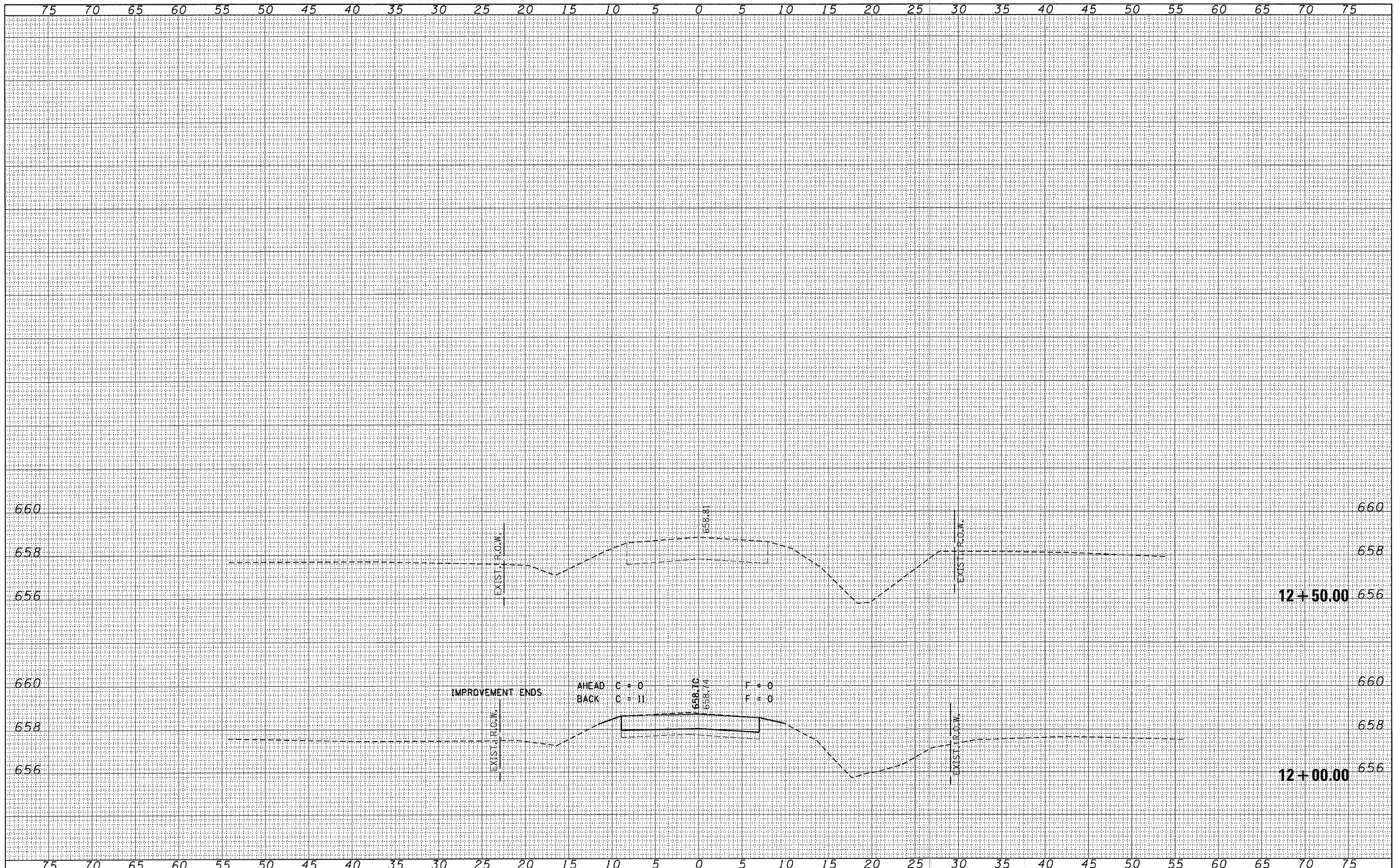
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NO.	TEMPLATE
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HAMPTON, LENZINI AND RENWICK, INC. 3535 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184-000859	PLOT SCALE =	DRAWN - D.T.M.	REVISED -		SCALE: H5:V2	SHEET NO.	OF	SHEETS	STA. 10+75.00	TO STA. 11+50.00	78	09-14138-00-BR	VERMILION	27	14
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		DATE = 11/24/10	REVISED -												ILLINOIS FED. AID PROJECT

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

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



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 DRAWN - D.T.M.
 CHECKED - S.W.M.
 DATE - 11/24/10

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 PLOT SCALE =
 PLOT DATE = 3/2/2011

DESIGNED - J.W.F. REVISED -
 DRAWN - D.T.M. REVISED -
 CHECKED - S.W.M. REVISED -
 DATE - 11/24/10 REVISED -

STATE OF ILLINOIS
 VERMILION COUNTY HIGHWAY DEPARTMENT

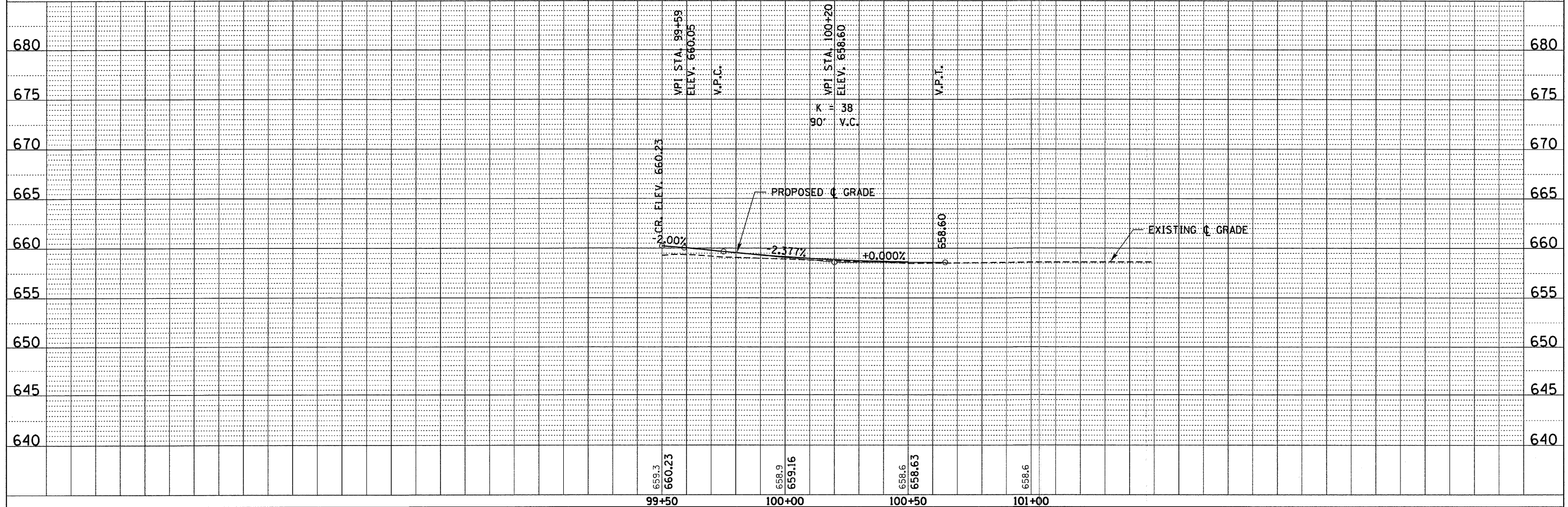
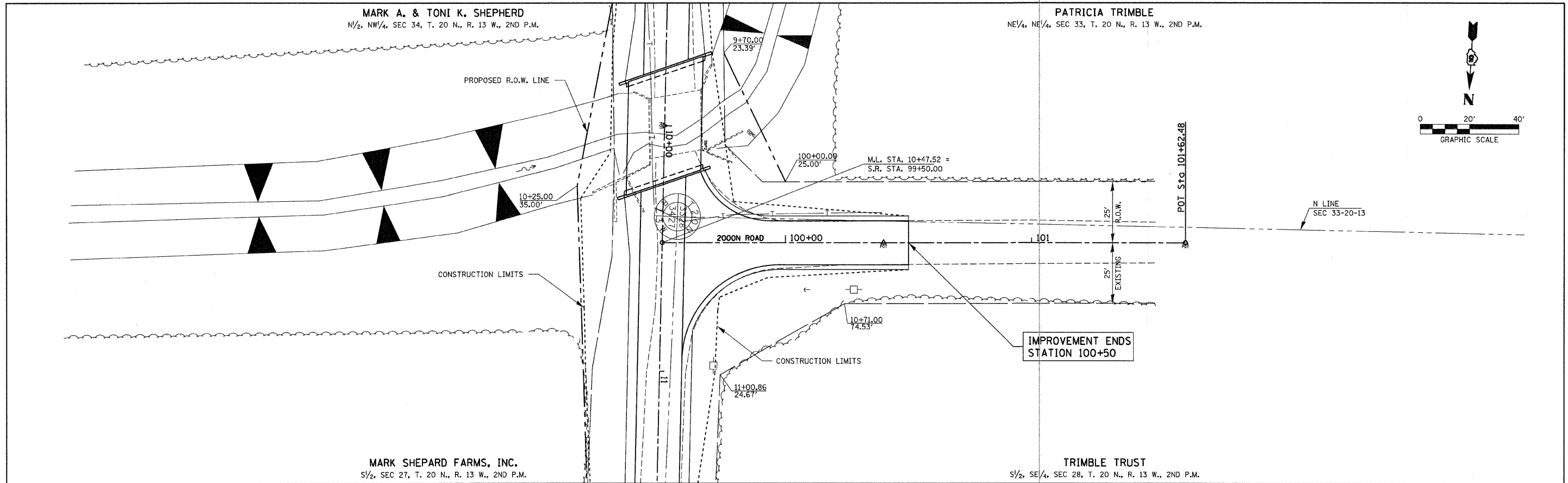
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 STA. 12+00.00 TO STA. 12+50.00

STATION CROSS SECTIONS
 T.R. 78 / 600 E. ROAD

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
78	09-14138-00-BR	VERMILION	27	15
OAKWOOD ROAD DISTRICT			CONTRACT NO. 91458	
ILLINOIS FED. AID PROJECT				

PLAN	SURVEYED	DATE
	PLOTTED	BY
	CHECKED	
	DATE	
	FILE NAME	

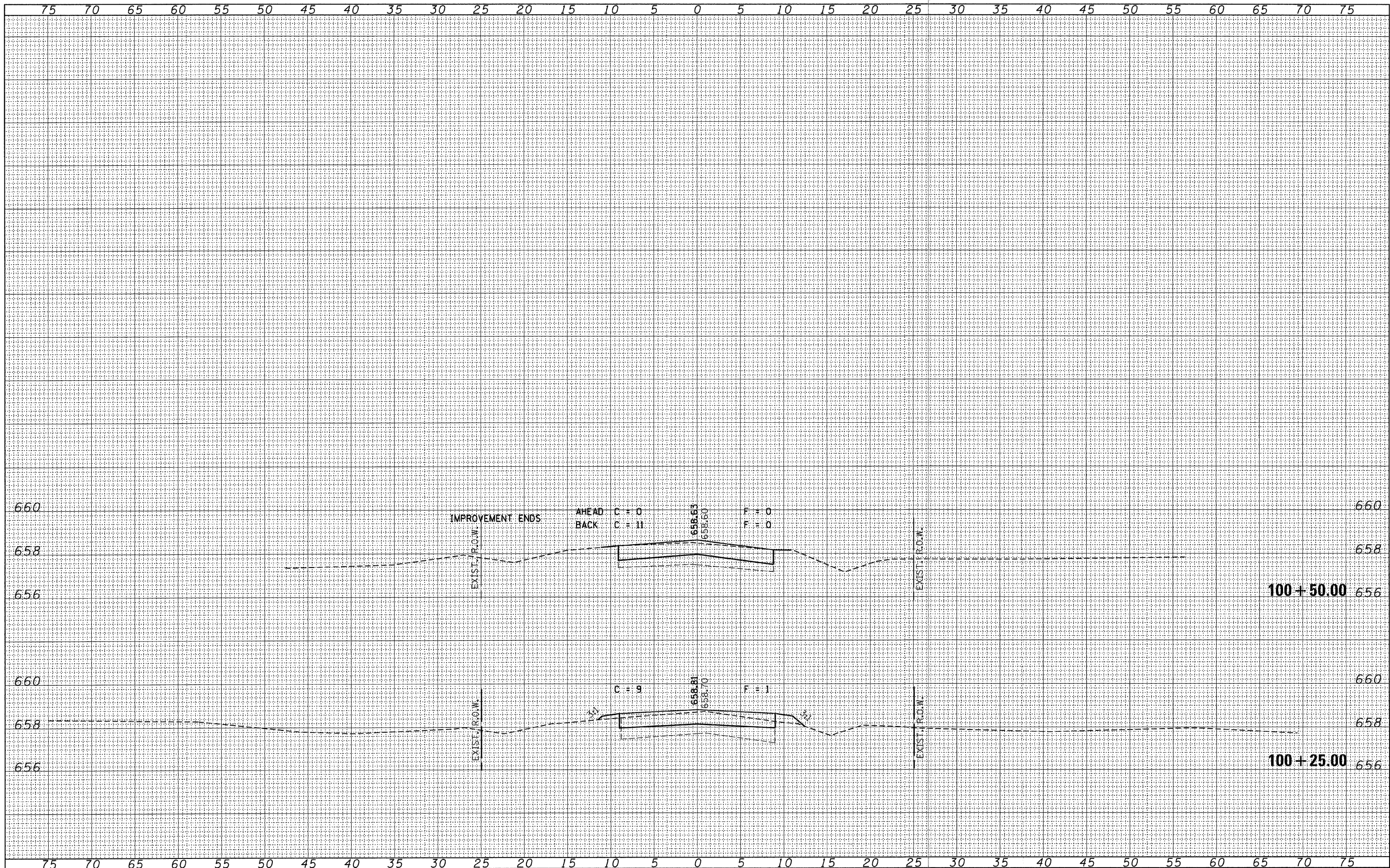
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HAMPTON, LENZINI AND RENWICK, INC. 366 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62761 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000950	PLOT SCALE =	DRAWN - D.T.M.	REVISED -			78	09-14138-00-BR	VERMILION	27	16	
PLOT DATE = 3/27/2011	DATE = 11/23/10	CHECKED - S.W.M.	REVISED -			OAKWOOD ROAD DISTRICT		CONTRACT NO. 91458		[ILLINOIS] FED. AID PROJECT	
		DATE = 11/23/10	REVISED -			SCALE: H20:V5	SHEET NO. 4 OF 4 SHEETS	STA. 99+50.00 TO STA. 101+62.48			

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

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



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 3545 STEVENSON DRIVE, SUITE 201
 SPRINGFIELD, ILLINOIS 62765
 ILLINOIS PROFESSIONAL DESIGN FIRM
 LS / PE / SE CORP. 184.000959

USER NAME =
 PLOT SCALE =
 PLOT DATE = 3/2/2011

DESIGNED - J.W.F.	REVISED -
DRAWN - D.T.M.	REVISED -
CHECKED - S.W.M.	REVISED -
DATE - 01/17/11	REVISED -

STATE OF ILLINOIS
 VERMILION COUNTY HIGHWAY DEPARTMENT

SCALE: H5:V2
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 STA. 100+25.00 TO STA. 100+50.00

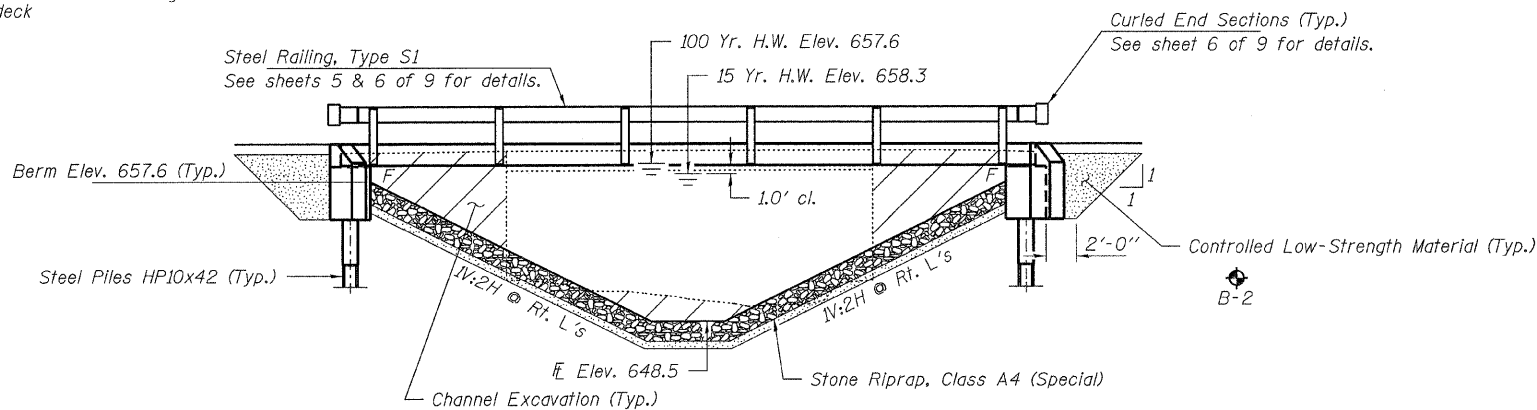
STATION CROSS SECTIONS
 2000 N. ROAD

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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OAKWOOD ROAD DISTRICT			CONTRACT NO. 91458	
[ILLINOIS] FED. AID PROJECT				

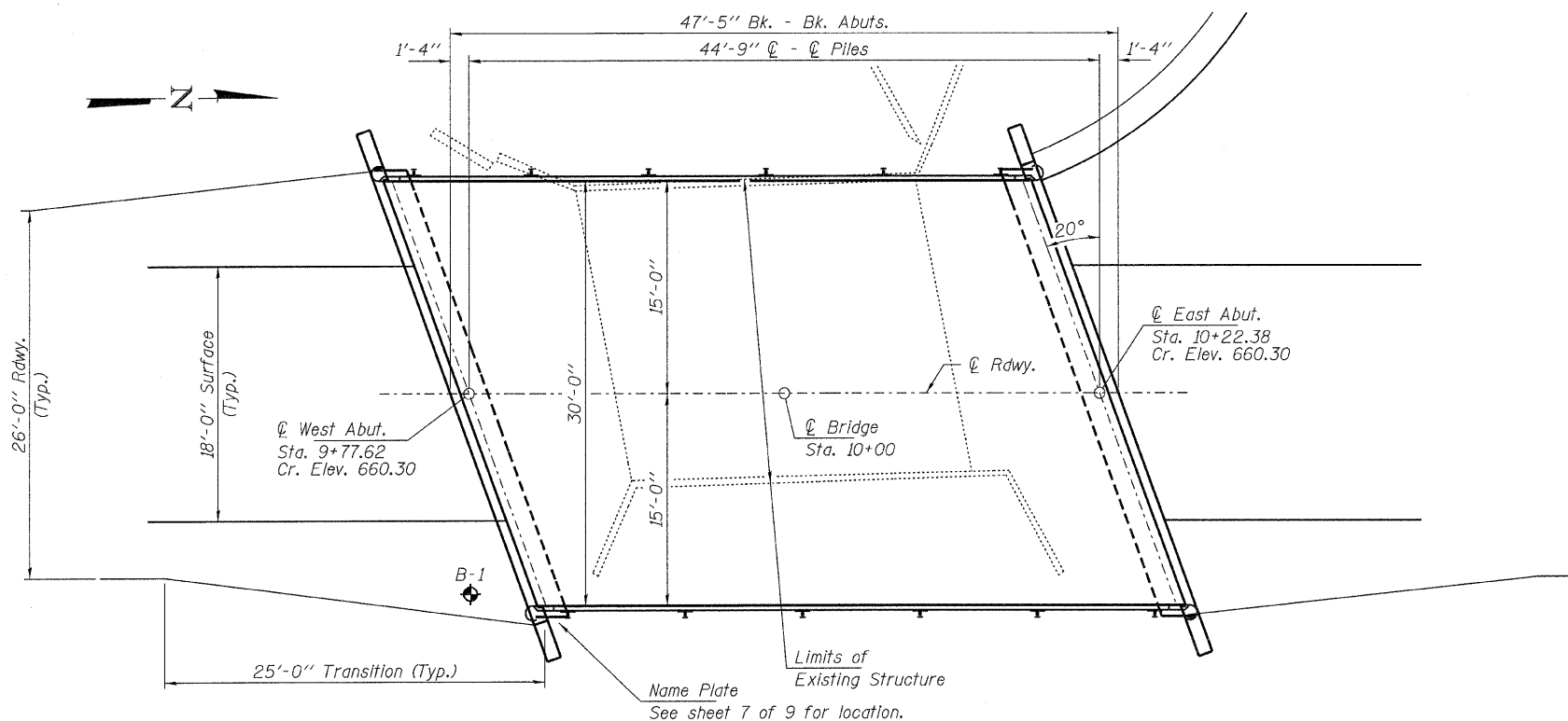
BENCHMARK: Chiseled "□" on wingwall; 18' Lt. Sta. 10+11; Elev. 660.89

EXISTING STRUCTURE NO. 092-3079: Sta. 10+00 - Single span steel I-beam bridge with concrete deck on closed concrete abutments and wingwalls. 23.2' fc.-fc. abutts.; 21.6' o.-o. deck Structure closed to traffic.

No Salvage



ELEVATION



PLAN

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 (1/2" low lax. strands)
fpbt = 201,960 psi (1/2" low lax. strands)
fy = 60,000 psi (Reinf.)

LOADING HL-93

Design Specifications: 2010 AASHTO LRFD with all applicable Interims. 50#/Sq. Ft. included in dead load for future wearing surface.

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (SD1) = 0.132g
Design Spectral Acceleration at 0.2 sec. (SDS) = 0.226g
Soil Site Class = D

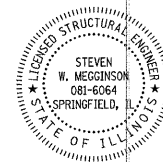
Flood	Frequency Year	Discharge (cfs)	Waterway Opening (sq. ft.)		Natural H.W.E	Head (ft.)		Headwater Elev.	
			Existing	Proposed		Existing	Proposed	Existing	Proposed
DESIGN	10	747	150	190	657.16	0.00	0.00	657.16	657.16
OVERTOP	15	860	160	210	657.55	0.00	0.02	657.55	657.57
BASE	50	1230	170	230	658.11	0.78	0.74	658.89	658.85
	100	1440	180	240	658.32	0.66	0.60	658.98	658.92

10 Year Velocity Through Existing Bridge (fps) = 5.0

10 Year Velocity Through Proposed Bridge (fps) = 3.9

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 3/2/2011
ILLINOIS STRUCTURAL ENGINEER NO. 081-6064



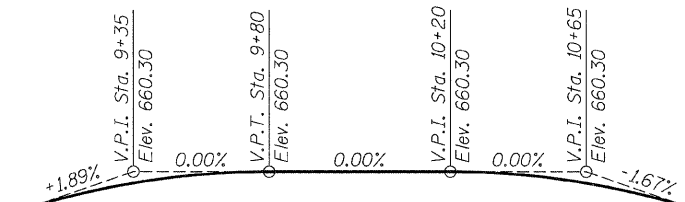
Expires 11-30-2012

GENERAL NOTES

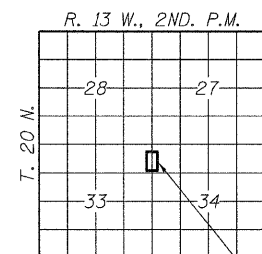
Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at each Abutment or approved by the Engineer before ordering the remainder of piles. Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.
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 3 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

1. General Plan & Elevation
2. Riprap Layout
3. 17" x 36" PPC Deck Beam
4. 17" x 36" PPC Deck Beam Details
5. Superstructure Details
6. Steel Railing, Type S-1
7. Abutments
8. Pile Details
9. Borings



PROFILE GRADE



LOCATION SKETCH

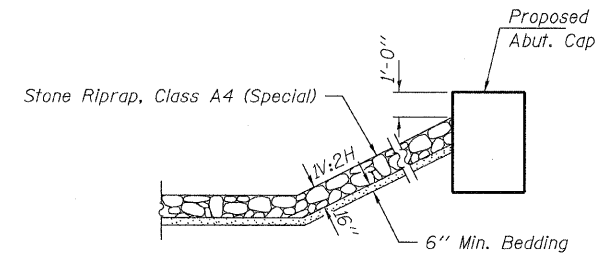
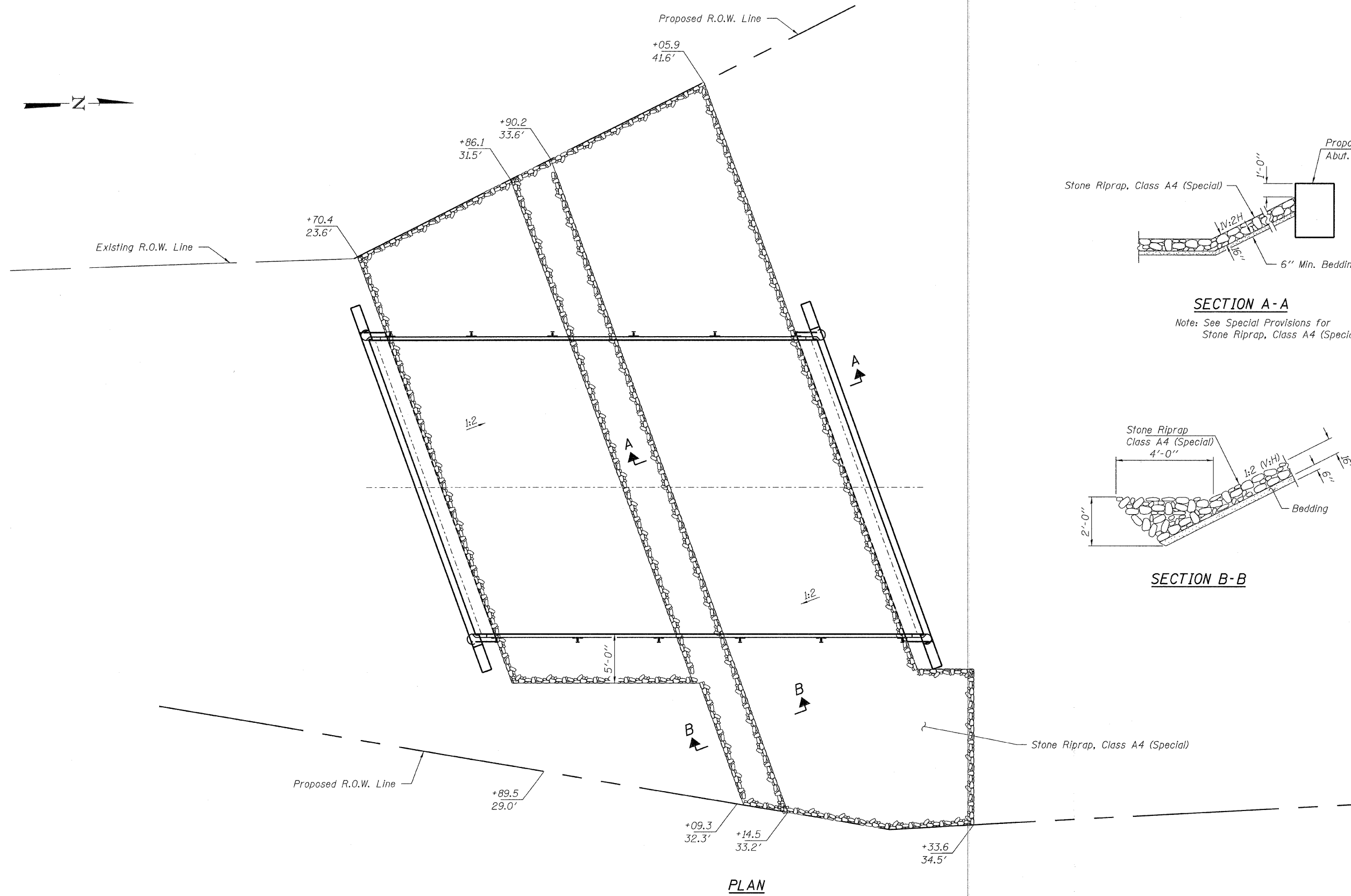
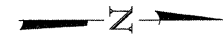
BUILT 201 BY
VERMILION COUNTY
SEC. 09-14138-00-BR
OAKWOOD ROAD DISTRICT
STR. NO. 092-3517
LOADING HL-93

NAME PLATE

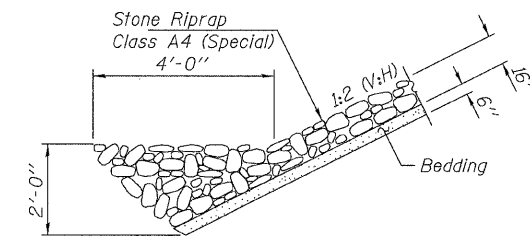
See Std. 515001

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Channel Excavation	Cu. Yd.			120
Controlled Low-Strength Material	Cu. Yd.			50
Stone Riprap, Class A4 (Special)	Ton			250
Removal of Existing Structures	Each			1
Concrete Structures	Cu. Yd.		27.4	27.4
Precast Prestressed Concrete Deck Beams (17" Depth)	Sq. Ft.	1,380		1,380
Reinforcement Bars	Pound		2,730	2,730
Steel Railing, Type S1	Foot	88		88
Furnishing Steel Piles HP10x42	Foot		240	240
Driving Piles	Foot		240	240
Test Pile Steel HP10x42	Each		2	2
Pile Shoes	Each		10	10
Name Plates	Each		1	1
Concrete Cut-Off Wall	Cu. Yd.		7.4	7.4



SECTION A-A
 Note: See Special Provisions for Stone Riprap, Class A4 (Special)



SECTION B-B

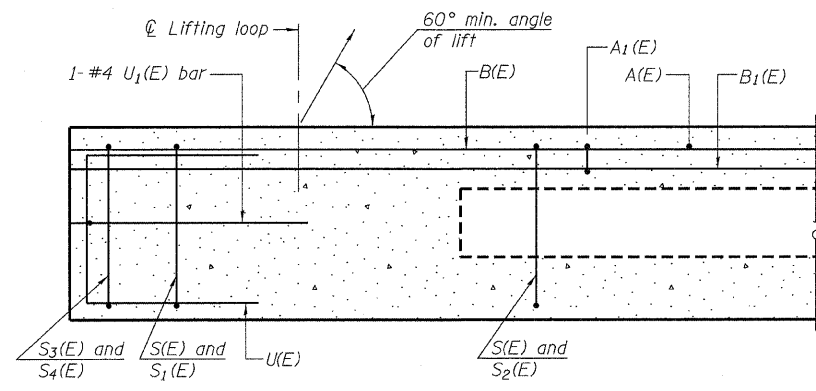
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ILINOIS PROFESSIONAL DESIGN FIRM L.S. / P.E. / S.E. CORP. 184-000959	PLOT DATE = 3/2/2011	DRAWN - D.A.B.	REVISED -
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**STATE OF ILLINOIS
 VERMILION COUNTY HIGHWAY DEPARTMENT**

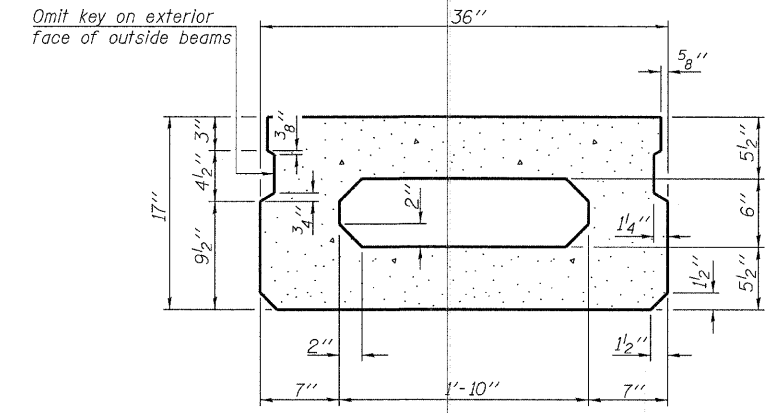
**RIPRAP LAYOUT
 STRUCTURE NO. 092-3517**

SHEET NO. 2 OF 9 SHEETS

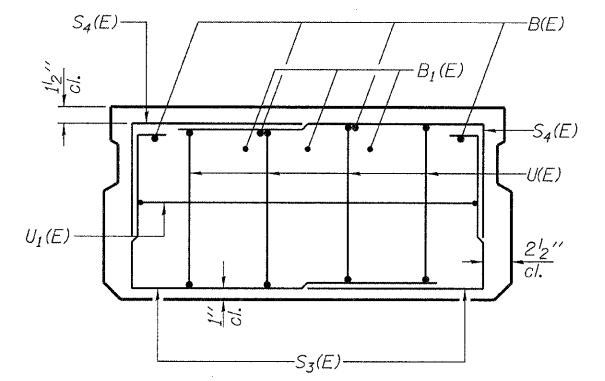
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OAKWOOD ROAD DISTRICT			CONTRACT NO. 91458	
ILLINOIS FED. AID PROJECT				



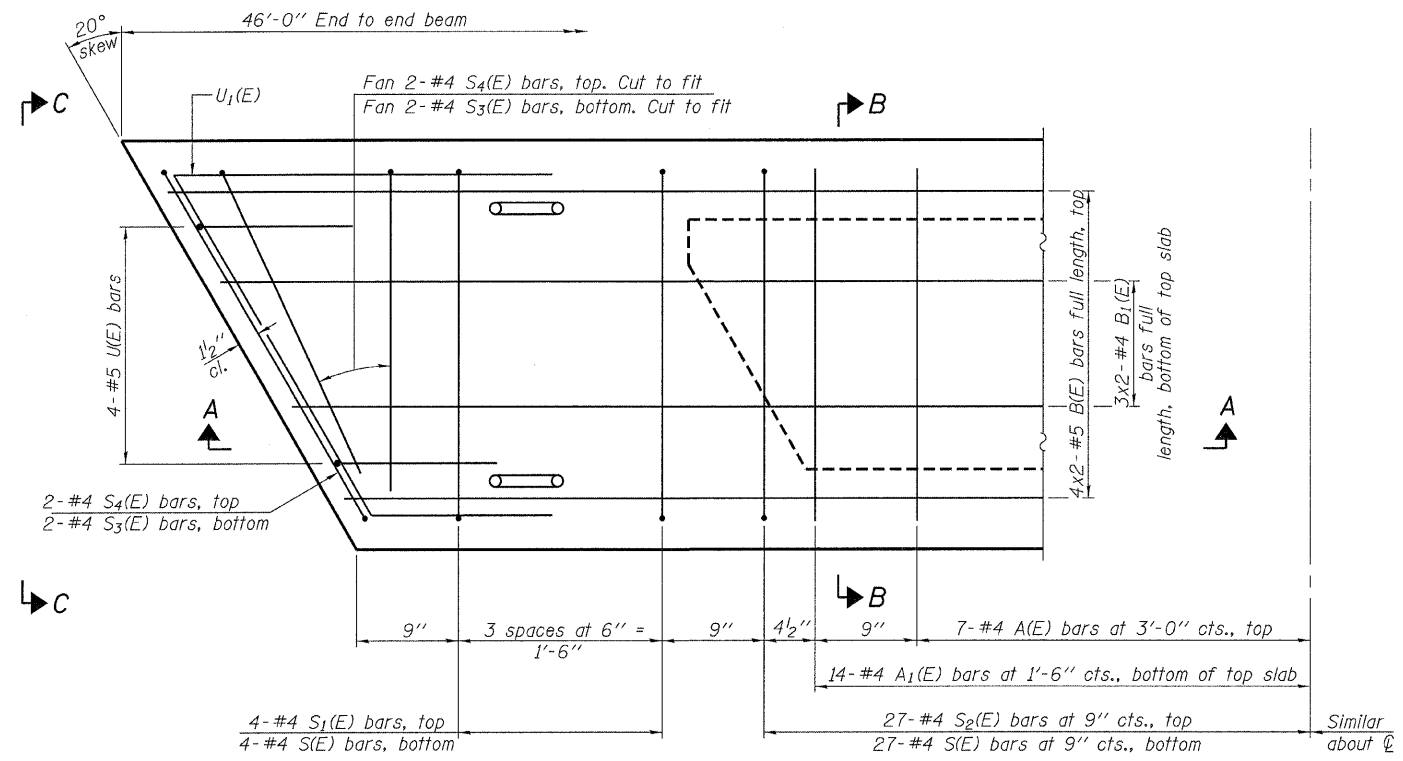
SECTION A-A



SECTION B-B
(Showing dimensions)

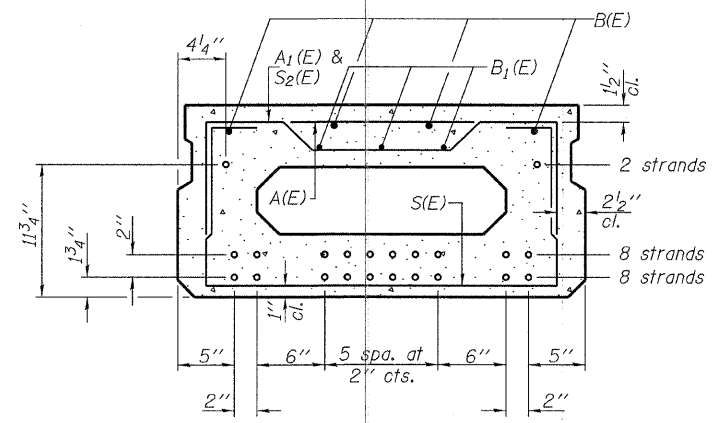


VIEW C-C



PLAN VIEW

Notes:
Spacing of S(E) and S₂(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.
Bars indicated thus 4x2-#5 etc. indicates 4 lines of bars with 2 lengths per line.



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

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

MINIMUM BAR LAP
#4 bar = 2'-0"
#5 bar = 2'-6"

BAR LIST
ONE BEAM ONLY
(For information only)

Bar	No.	Size	Length	Shape
A(E)	14	#4	2'-7"	—
A ₁ (E)	28	#4	2'-10"	—
B(E)	8	#5	24'-1"	—
B ₁ (E)	6	#4	23'-10"	—
S(E)	62	#4	5'-9"	□
S ₁ (E)	8	#4	4'-3"	□
S ₂ (E)	54	#4	4'-6"	□
S ₃ (E)	8	#4	3'-11"	□
S ₄ (E)	8	#4	3'-2"	□
U(E)	8	#5	3'-8"	□
U ₁ (E)	2	#4	7'-6"	□

Note: See sheets 4 & 5 of 9 for additional details and Bill of Material.

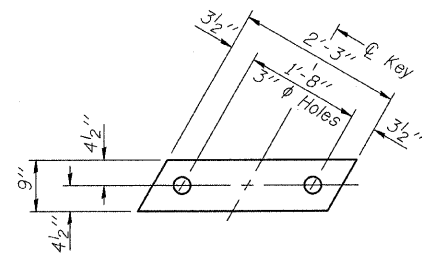
PD-1736-R 7-1-10

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2005 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62781	PLOT SCALE =	DRAWN - D.A.B.	REVISED -
ILLINOIS PROFESSIONAL DESIGN FIRM L.S. / P.E. / S.E. CORP. 184.000559	PLOT DATE = 3/2/2011	CHECKED - S.W.M.	REVISED -

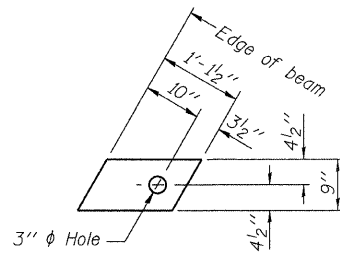
STATE OF ILLINOIS
VERMILION COUNTY HIGHWAY DEPARTMENT

17" x 36" PPC DECK BEAM
STRUCTURE NO. 092-3517
SHEET NO. 3 OF 9 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
78	09-14138-00-BR	VERMILION	27	21
OAKWOOD ROAD DISTRICT		CONTRACT NO. 91458		
ILLINOIS FED. AID PROJECT				



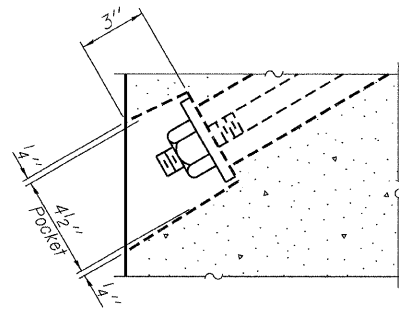
FABRIC BEARING PAD
(Interior - 18 Req'd.)



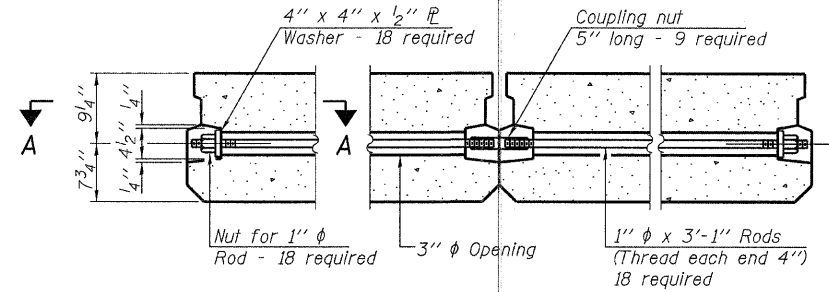
FABRIC BEARING PAD
(Exterior - 4 Req'd.)

FIXED

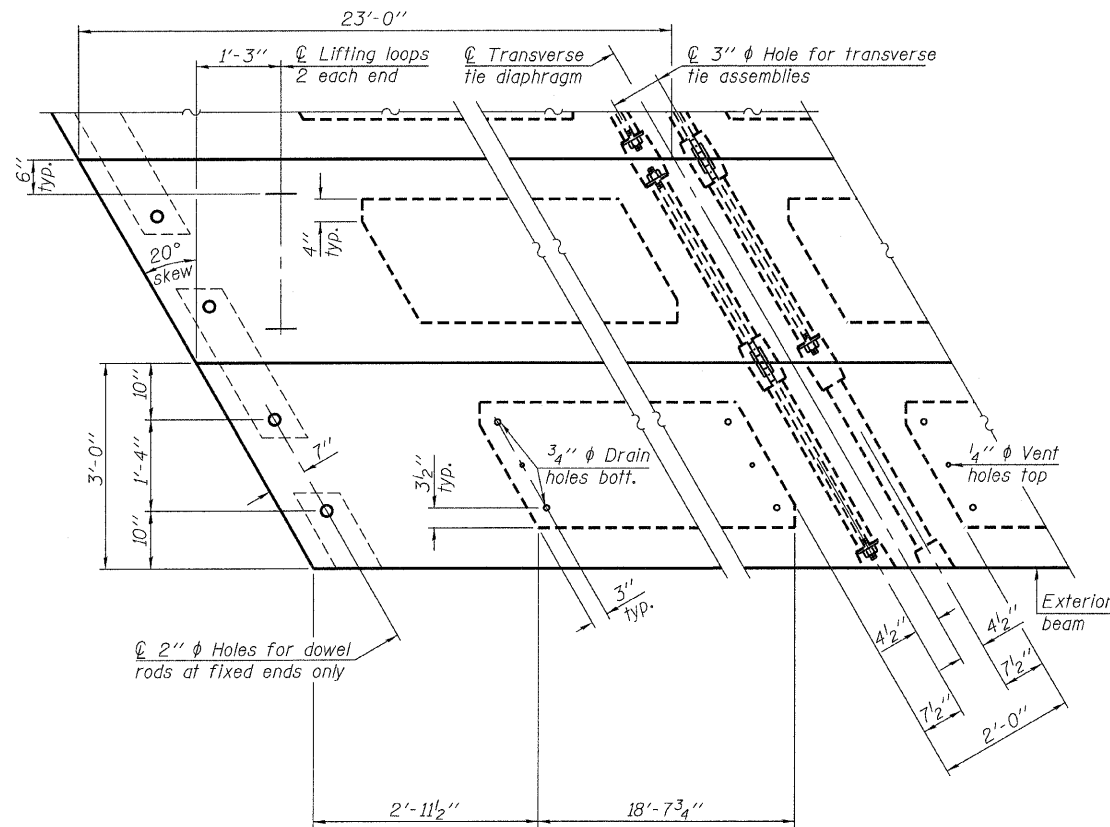
Notes:
All bearing pads shall be 1" thick.
Omit holes when using expansion bearings.
Expansion bearing pad shall be bonded to the substructure.



SECTION A-A

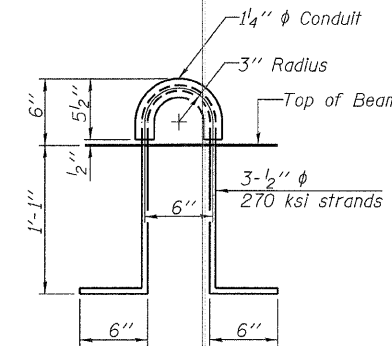


TYPICAL TRANSVERSE TIE ASSEMBLY



PLAN VIEW

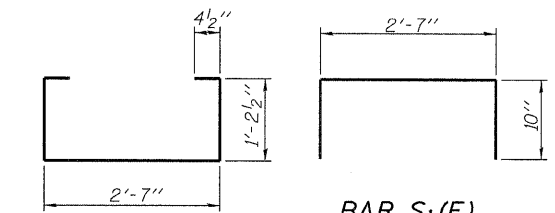
Note: Connect beams in pairs with the transverse tie configuration shown.



LIFTING LOOP DETAIL

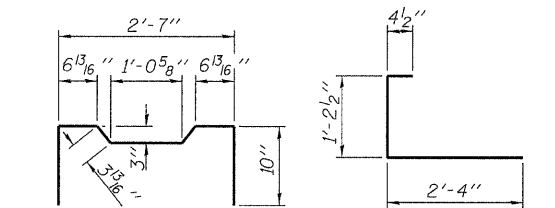
NOTES

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in.
The 1" 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.
Reinforcement bars shall conform to ASTM A 706, Grade 60. (See Special Provisions).
Two 1/8" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.
A minimum 2 1/2" diameter lifting pin shall be used to engage the lifting loops during handling.
Corrosion Inhibitor, per Article 1020.05(b)(12) and 1021.06 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.
All bars shall be epoxy coated.



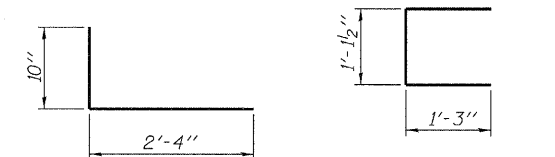
BAR S1(E)

BAR S(E)



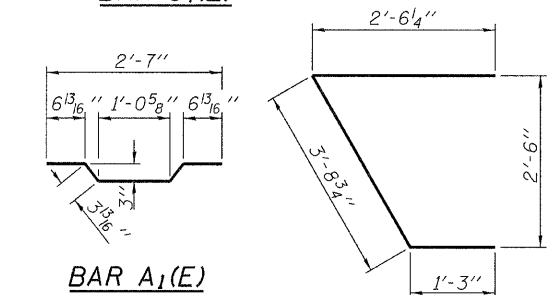
BAR S2(E)

BAR S3(E)



BAR S4(E)

BAR U(E)



BAR A1(E)

BAR U1(E)

BILL OF MATERIAL

Precast Prestressed Conc. Deck Bms. (17" depth)	Sq. Ft.	1,380
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PD-1736-RD

7-1-10

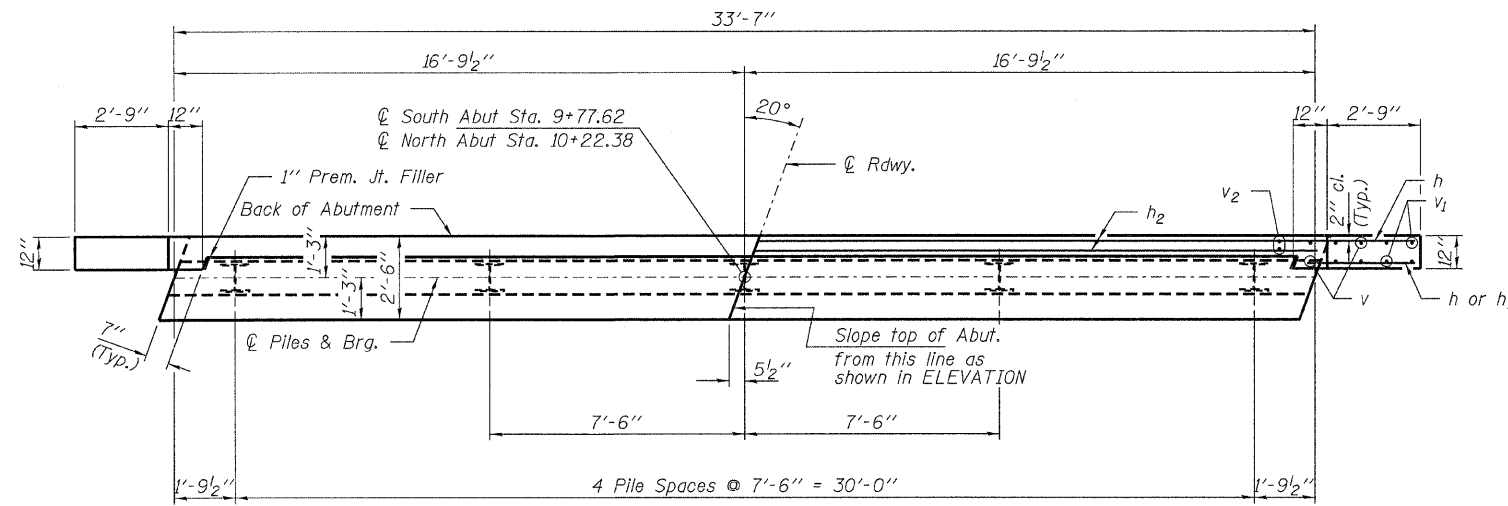
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HAMPTON, LENZINI AND RENWICK, INC.		CHECKED - S.W.M.	REVISED -
2335 STEVENSON DRIVE, SUITE 201		DRAWN - D.A.B.	REVISED -
SPRINGFIELD, ILLINOIS 62761	PLOT SCALE =	CHECKED - S.W.M.	REVISED -
ILLINOIS PROFESSIONAL DESIGN FIRM	PLOT DATE = 3/2/2011		
LS / PE / SE CORP. 184.000989			

STATE OF ILLINOIS
VERMILION COUNTY HIGHWAY DEPARTMENT

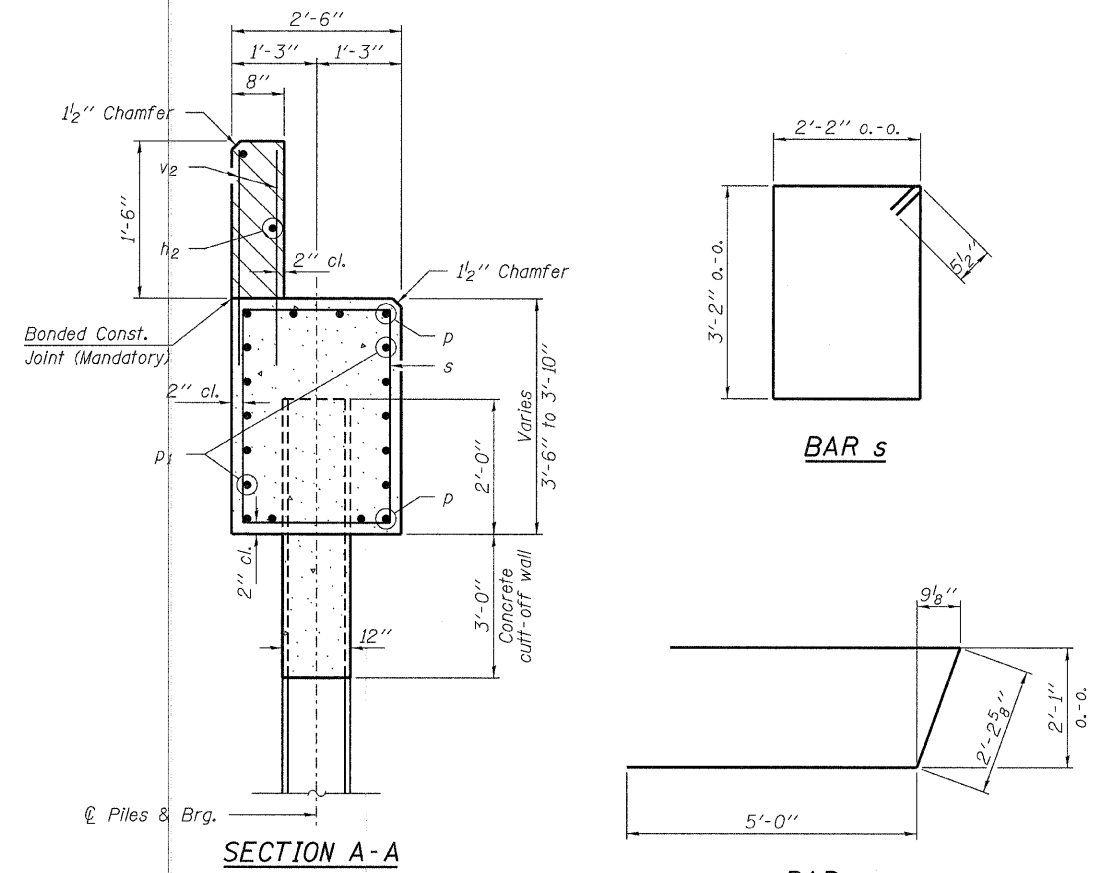
17" x 36" PPC DECK BEAM DETAILS
STRUCTURE NO. 092-3517

SHEET NO. 4 OF 9 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
78	09-14138-00-BR	VERMILION	27	22
OAKWOOD ROAD DISTRICT		CONTRACT NO. 91458		
ILLINOIS FED. AID PROJECT				

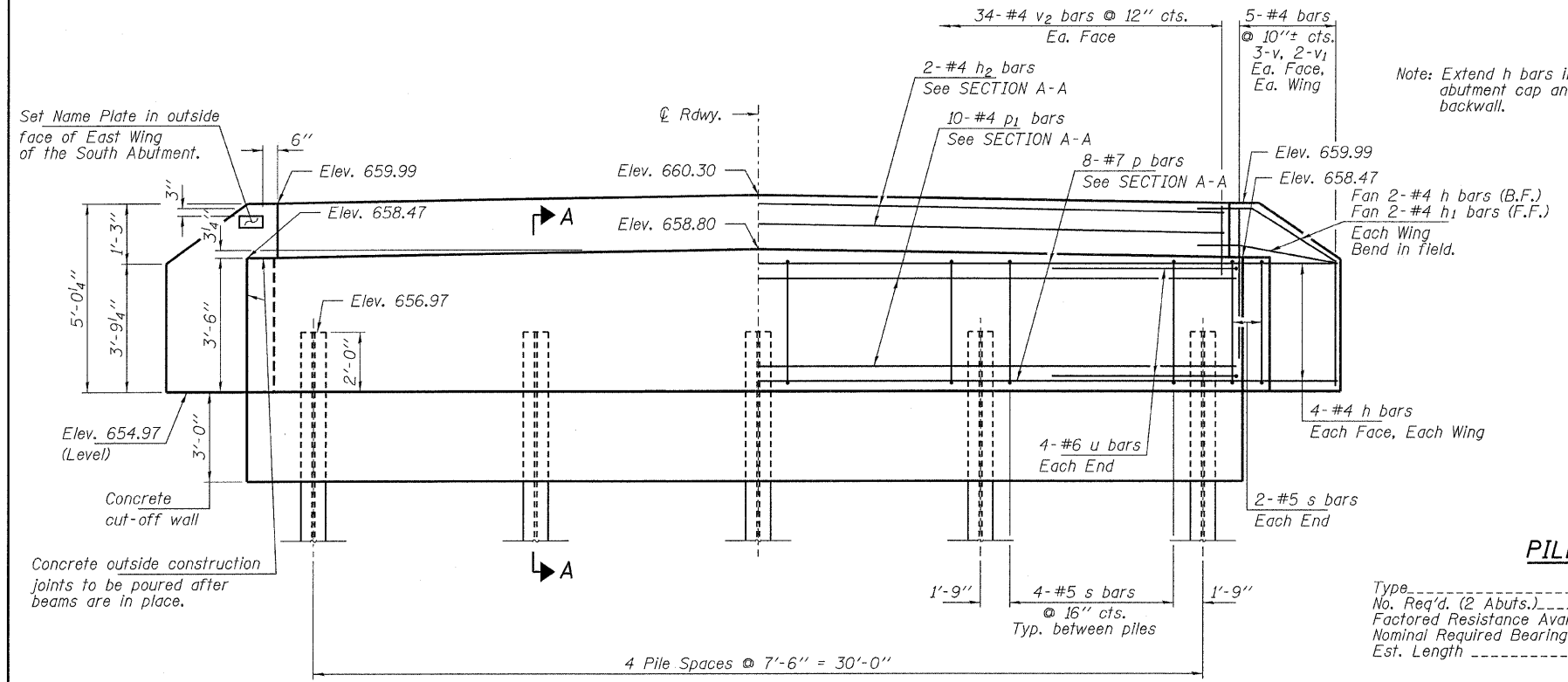


PLAN



SECTION A-A

Set Name Plate in outside face of East Wing of the South Abutment.



ELEVATION

Note: Extend h bars into abutment cap and backwall.

PILE DATA

Type	Steel Piles HP10x42
No. Req'd. (2 Abuts.)	*10
Factored Resistance Available (Rf)	184 Kips/Pile
Nominal Required Bearing (Rn)	335 Kips/Pile
Est. Length	30 Ft/Pile

Notes: * Includes two test piles to be driven in permanent locations, one at the South Abutment & one at the North Abutment.

The Steel H-Piles shall be according to AASHTO M270 Grade 50.

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

BILL OF MATERIAL - 2 ABUTS.

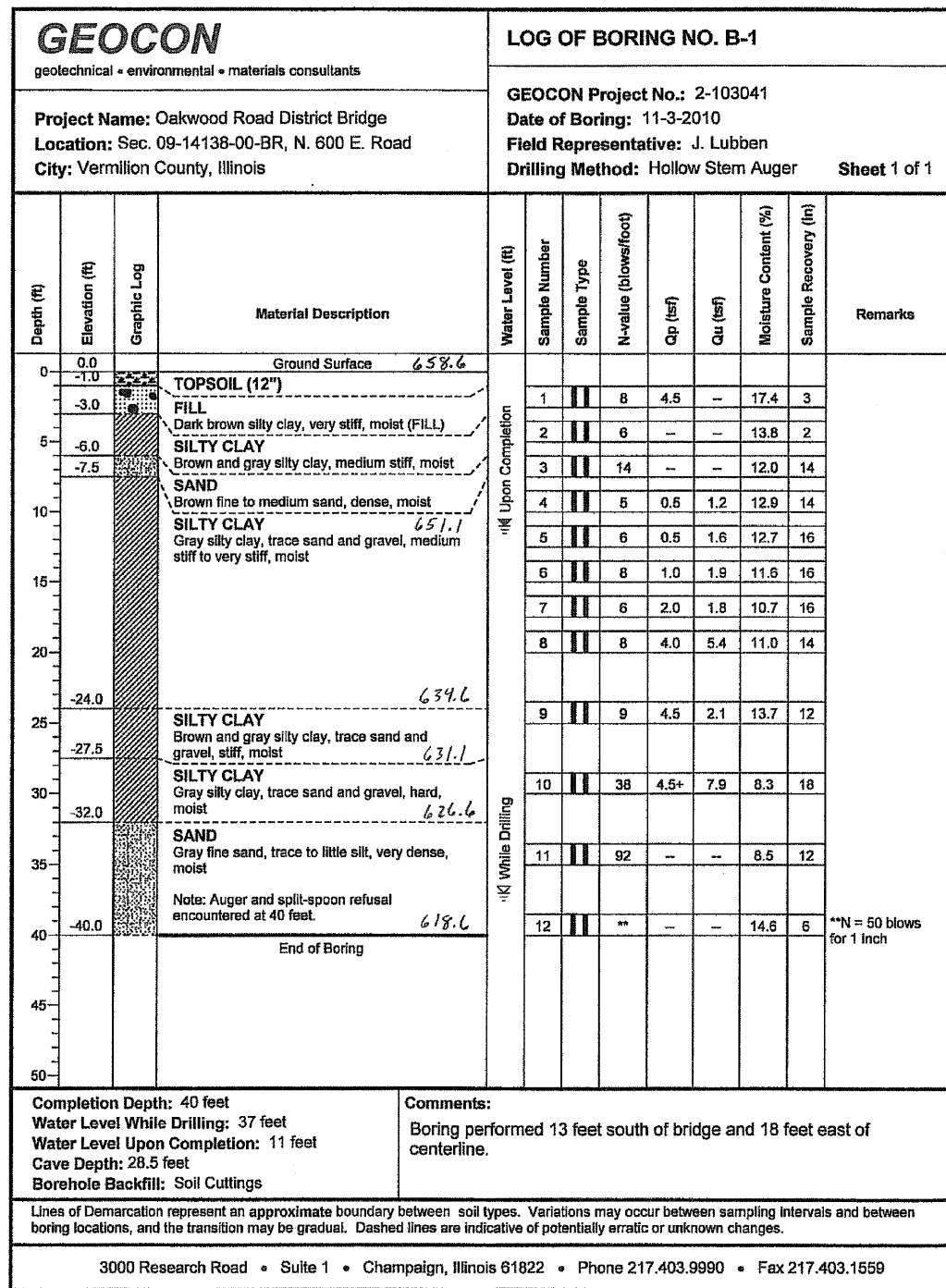
BAR	NO.	SIZE	LENGTH	SHAPE
h	40	#4	3'-10"	—
h1	8	#4	3'-5"	—
h2	4	#4	33'-3"	—
p	16	#7	33'-3"	—
p1	20	#4	33'-3"	—
s	40	#5	11'-7"	□
u	16	#6	12'-3"	—
v	24	#4	4'-3"	—
v1	16	#4	3'-6"	—
v2	68	#4	2'-4"	—
Concrete Structures			Cu. Yd.	27.4
Concrete Cut-Off Wall			Cu. Yd.	7.4
Reinforcement Bars			Pound	2,730
Steel Piles HP10x42			Foot	240
Test Pile Steel HP10x42			Each	2
Pile Shoes			Each	10
Name Plates			Each	1

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HAMPTON, LENZINI AND RENWICK, INC.		CHECKED - S.W.M.	REVISED -
2085 STEVENSON DRIVE, SUITE 201		DRAWN - D.A.B.	REVISED -
SPRINGFIELD, ILLINOIS 62708		CHECKED - S.W.M.	REVISED -
ILLINOIS PROFESSIONAL DESIGN FIRM			
LS / PE / SE CORP. 184.000989			

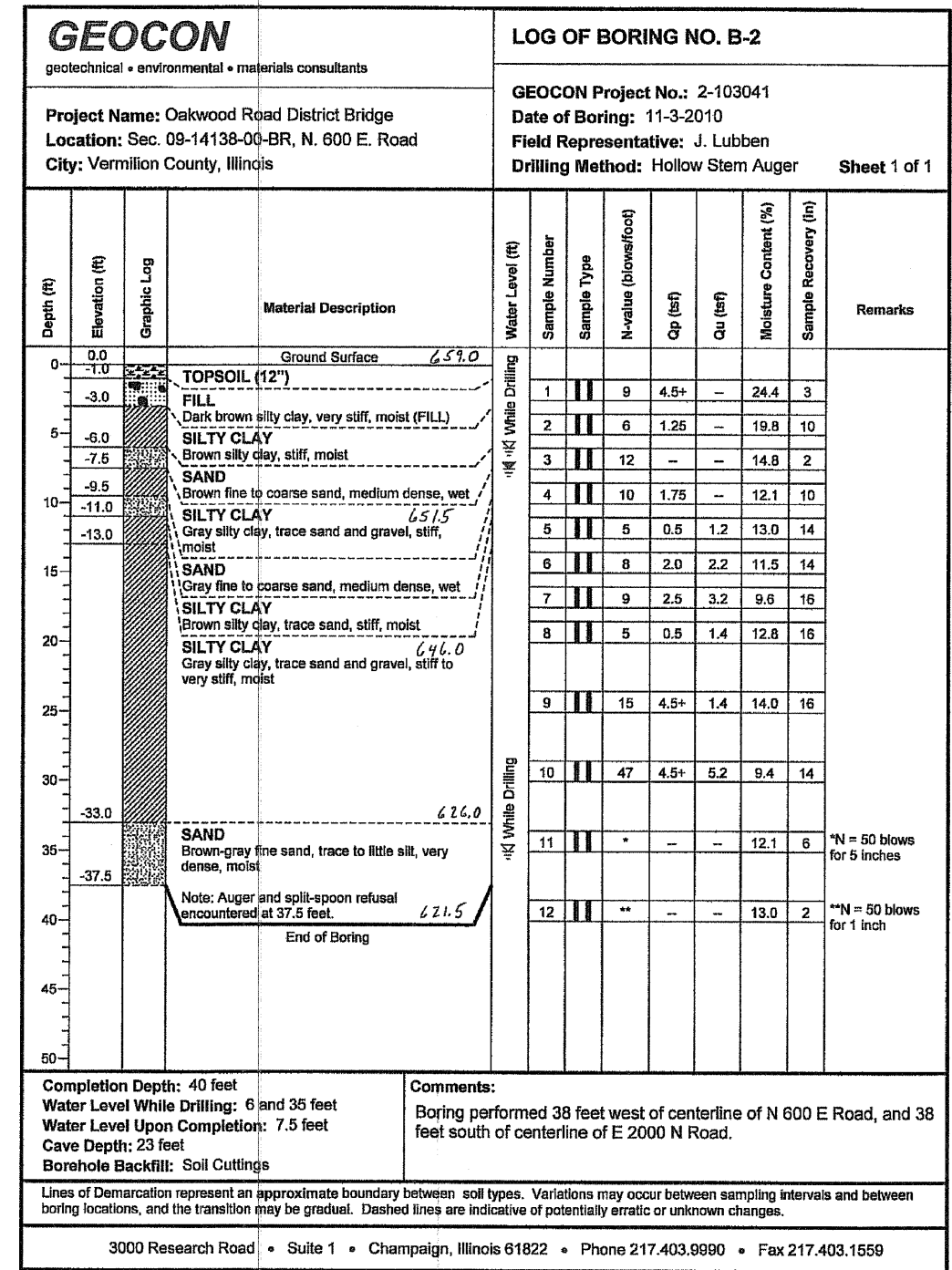
STATE OF ILLINOIS
VERMILION COUNTY HIGHWAY DEPARTMENT

ABUTMENTS
STRUCTURE NO. 092-3517
SHEET NO. 7 OF 9 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
78	09-14138-00-BR	VERMILION	27	25
OAKWOOD ROAD DISTRICT			CONTRACT NO. 91458	
ILLINOIS FED. AID PROJECT				



BORING 1



BORING 2