

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED
HIGHWAY BRIDGE PROGRAM
GRADE CROSSING PROTECTION FUND

PROJECT BROS-081(53)
SECTION 05-16113-00-BR
WEBBER ROAD DISTRICT
JEFFERSON COUNTY
DENKER ROAD / T.R. 165B
OVER C.N./I.C. RAILROAD AT M.P. 37.0
PROPOSED STRUCTURE NO. 041-9932
JOB NO. C-99-589-06

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 165B	05-16113-00-BR	JEFFERSON	34	1
FED. ROAD DIST. NO.		ILLINOIS	CONTRACT NO. 99440	

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1.	COVER SHEET
2.	SUMMARY OF QUANTITIES AND GENERAL NOTES
3.	SCHEDULE OF QUANTITIES
4.	TYPICAL SECTIONS AND ENTRANCE DETAILS
5.-8.	PLAN AND PROFILES
9.	EROSION CONTROL PLAN
10.-22.	STATION CROSS SECTIONS
23.-33.	BRIDGE PLANS
34.	BORINGS

HIGHWAY STANDARDS:

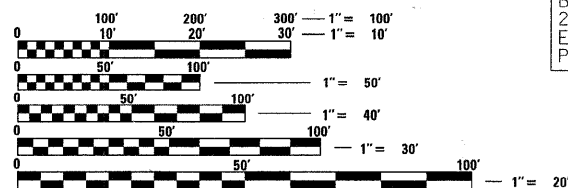
000001-06	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
515001-03	NAME PLATE FOR BRIDGES
630301-05	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
701901-01	TRAFFIC CONTROL DEVICES
BLR 21-8	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS
BLR 24-2	MAILBOX TURNOUT FOR LOCAL ROADS
BLR 27-1	TRAFFIC BARRIER TERMINAL, TYPE 5A

UTILITIES

ELECTRIC:
TRI-COUNTY ELECTRIC COOPERATIVE
3906 BROADWAY
MT. VERNON, IL 62864
ATTN: DENNIS IVERS

WATER:
WESTERN WAYNE WATER DISTRICT
102 SOUTH MAIN ST.
WAYNE CITY, IL 62895
ATTN: ROGER JOHNSON

TELEPHONE:
AT&T / DISTRIBUTION
529 S. SEVENTH ST.
SPRINGFIELD, IL 62703

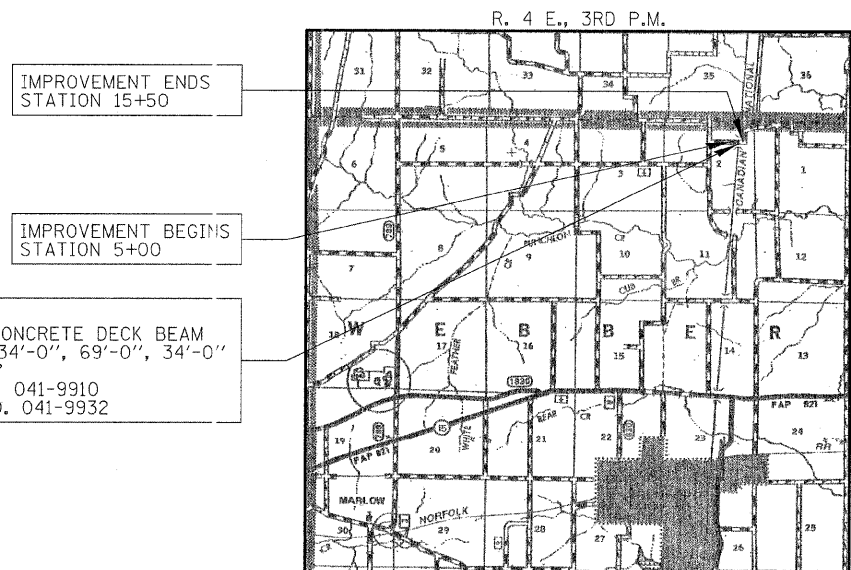


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

CONTRACT NO. 99440



FUNCTIONAL CLASSIFICATION: LOCAL ROAD (0-250 ADT)
DESIGN SPEED: 30 MPH
DESIGN TRAFFIC: 100 ADT (2023)



LOCATION MAP

APPROXIMATE SCALE: 0 1 MILE
NET LENGTH OF SECTION = 1,050 FEET = 0.199 MILES



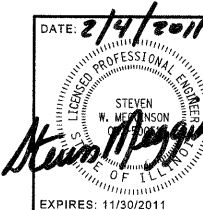
ILLINOIS DEPARTMENT OF TRANSPORTATION

APPROVED *Steve Schrade* 2-8 2011
COUNTY ENGINEER

APPROVED *Terry Madar* 2-8 2011
ROAD COMMISSIONER

PASSED *Devin W. Hill* FEBRUARY 23 2011
DISTRICT NINE ENGINEER OF LOCAL ROADS & STREETS

Releasing For Bid Based on Limited Review
Mary C. Lurie 2-23 2011
DEPUTY/DIRECTOR OF HIGHWAYS
REGION FIVE 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

184.000959
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORPORATION

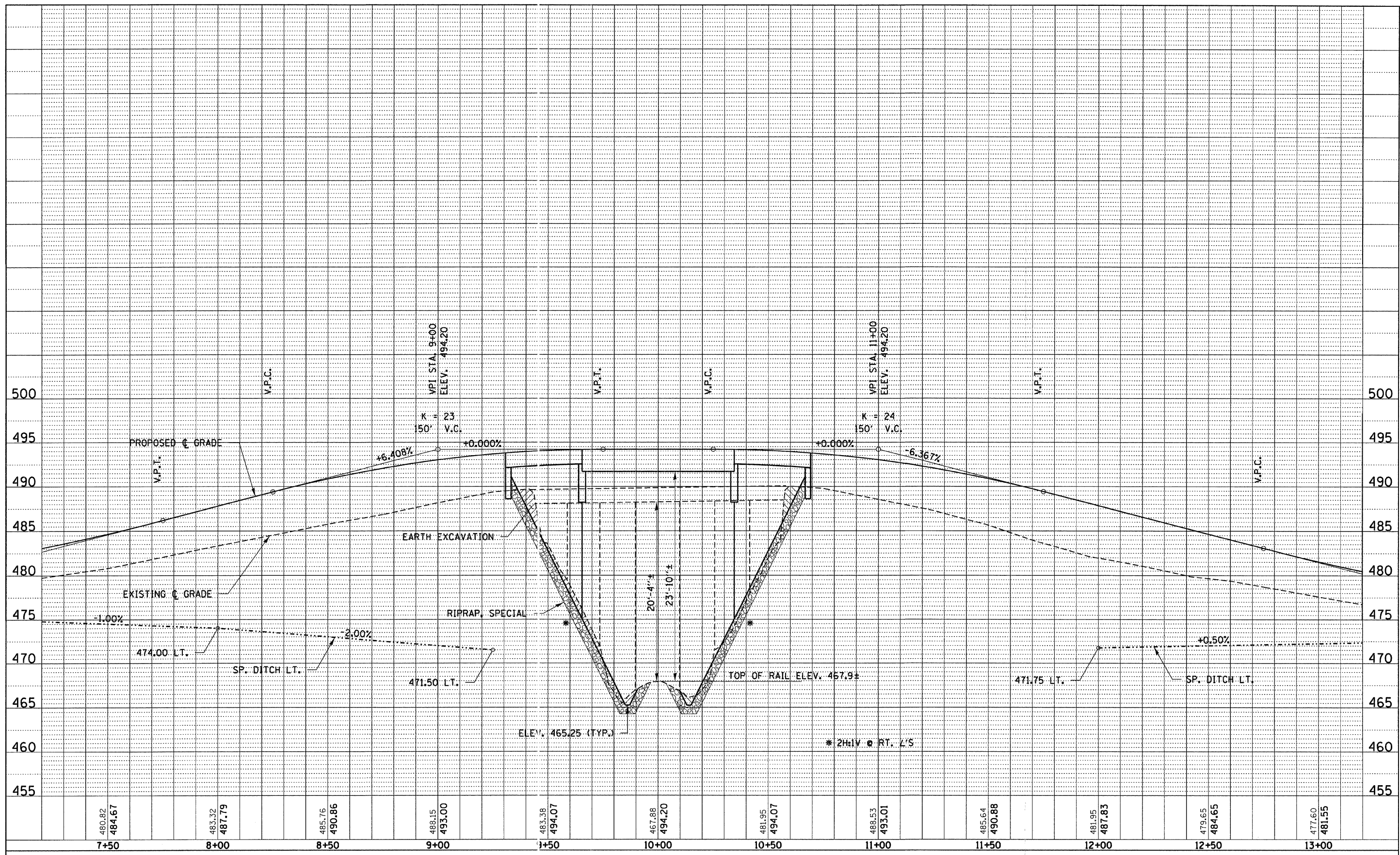
EXPIRES: 11/30/2011

PROJECT NUMBER: 09.0172.130

DATE: 02/03/11

PLAN	SURVEYED	BY	DATE
	ALIGNED		
	RT. OF WAY CHECKED		
	NO. _____		
	ADD. FILE NAME		

PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	BLK. NOTED		
	STRUCTURE NOTATIONS CRFD		
	NO. _____		



FILE NAME = 090172-sht:pp3.dgn	USER NAME =	DESIGNED - L.F.S.	REVISED -	STATE OF ILLINOIS JEFFERSON COUNTY HIGHWAY DEPARTMENT	PROFILE DENKER ROAD	T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HAMPTON, LENZINI AND RENWICK, INC.	DRAWN - D.T.M.	REVISED -	165B			05-16113-00-BR	JEFFERSON	34	7	
308 STEVENSON DRIVE, SUITE 501 SPRINGFIELD, ILLINOIS 62763	CHECKED - S.W.M.	REVISED -	WEBBER ROAD DISTRICT			CONTRACT NO. 99440				
ILLINOIS PROFESSIONAL DESIGN FIRM 15 / 14 / 98 CORP. 184.00059	DATE - 05/19/10	REVISED -	FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT				
PLT SCALE =	DATE = 2/4/2011		SCALE: H20xV5			SHEET NO. 3 OF 4 SHEETS	STA. 8+00.00 TO STA. 13+00.00			

GEORGE BYARS
NE 1/4, SEC 2, T. 2 S., R. 4 E., 3RD P.M.

PROP. CURVE DATA
 PI Sta. 12+48.94
 $\Delta = 89^\circ 39' 12''$ (LT)
 $D = 34^\circ 43' 29''$
 $T = 164.01'$
 $R = 165.00'$
 $L = 258.18'$
 $E = 67.64'$
 PC Sta. 10+84.94
 PT Sta. 13+43.12
 S.E. = 4.0%
 S.E. TRANSITIONS:
 STA. 10+69.00 TO STA. 11+54.86
 STA. 13+22.79 TO STA. 14+08.65

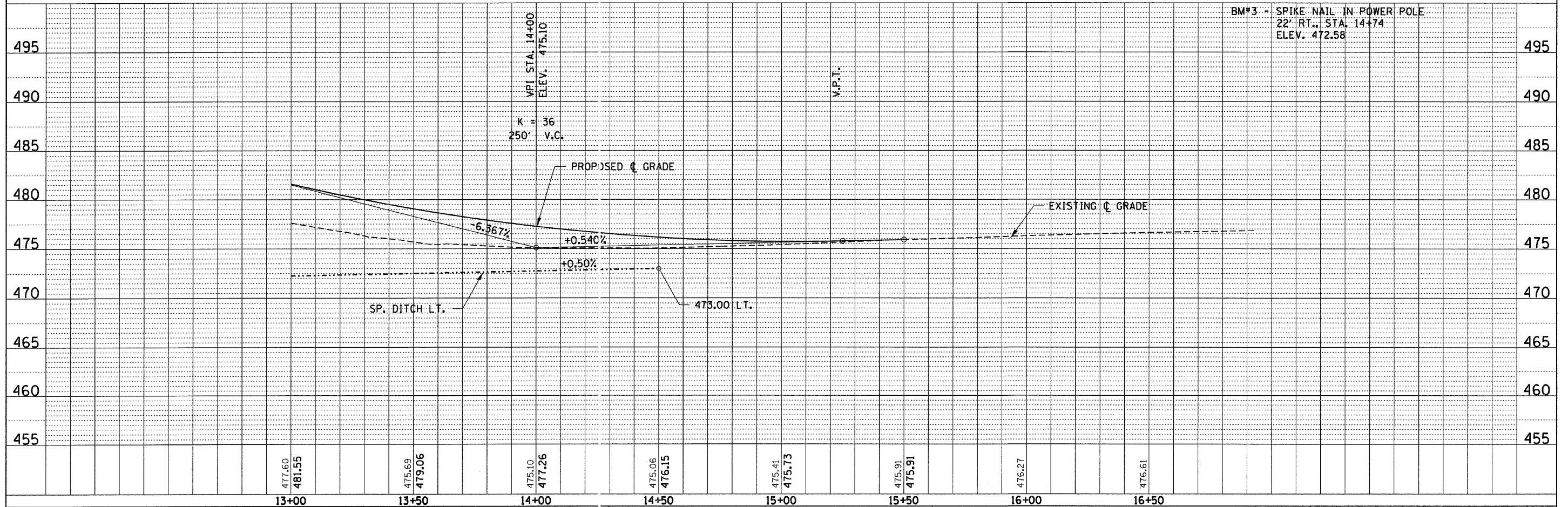
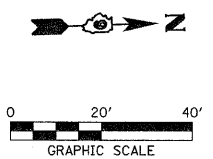
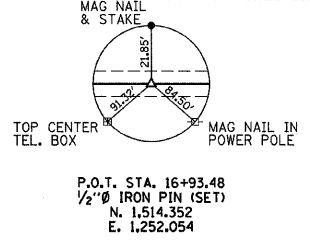
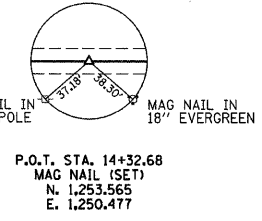
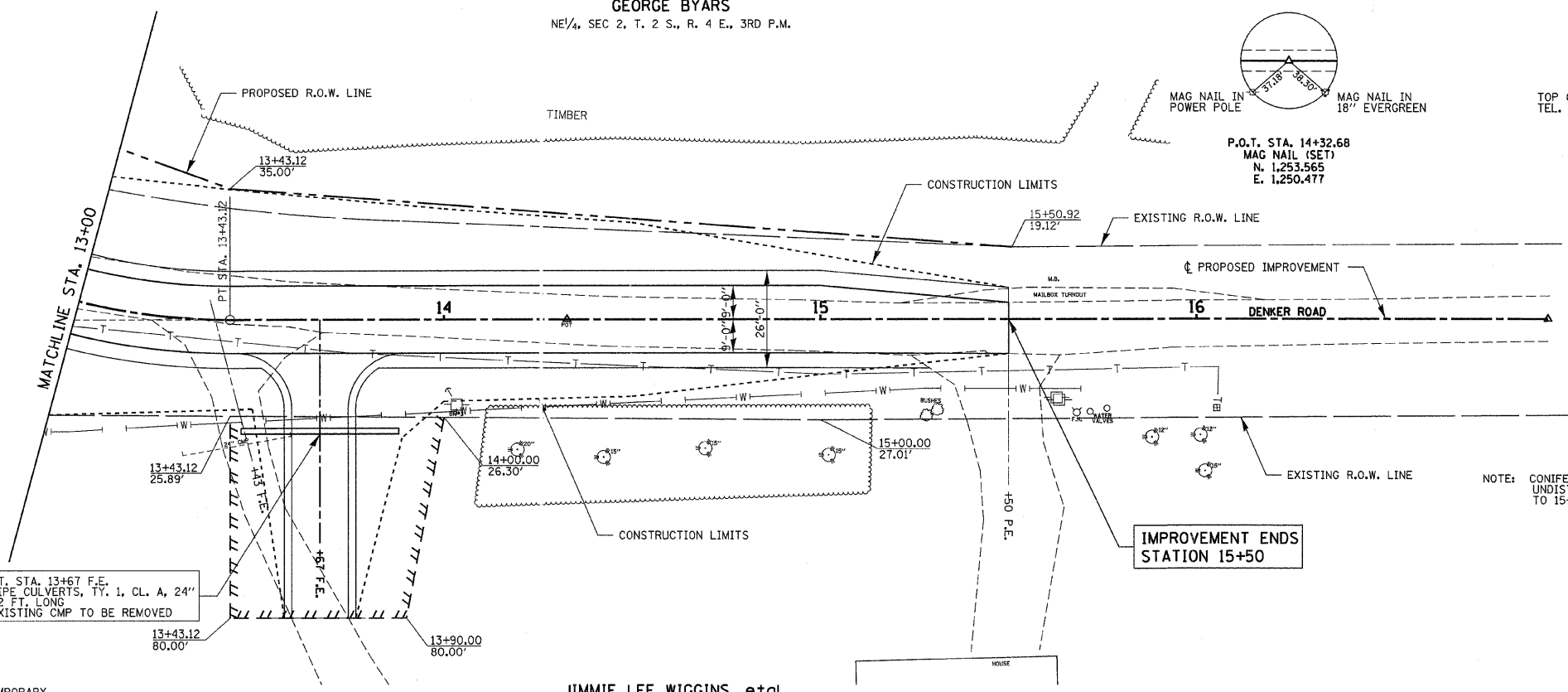
RT. STA. 13+67 F.E.
 PIPE CULVERTS, TY. 1, CL. A, 24"
 42' F.T. LONG
 EXISTING CMP TO BE REMOVED

INDICATES TEMPORARY
 CONSTRUCTION EASEMENT

JIMMIE LEE WIGGINS, et al
 NE 1/4, SEC 2, T. 2 S., R. 4 E., 3RD P.M.

DATE	
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REVISIONS	
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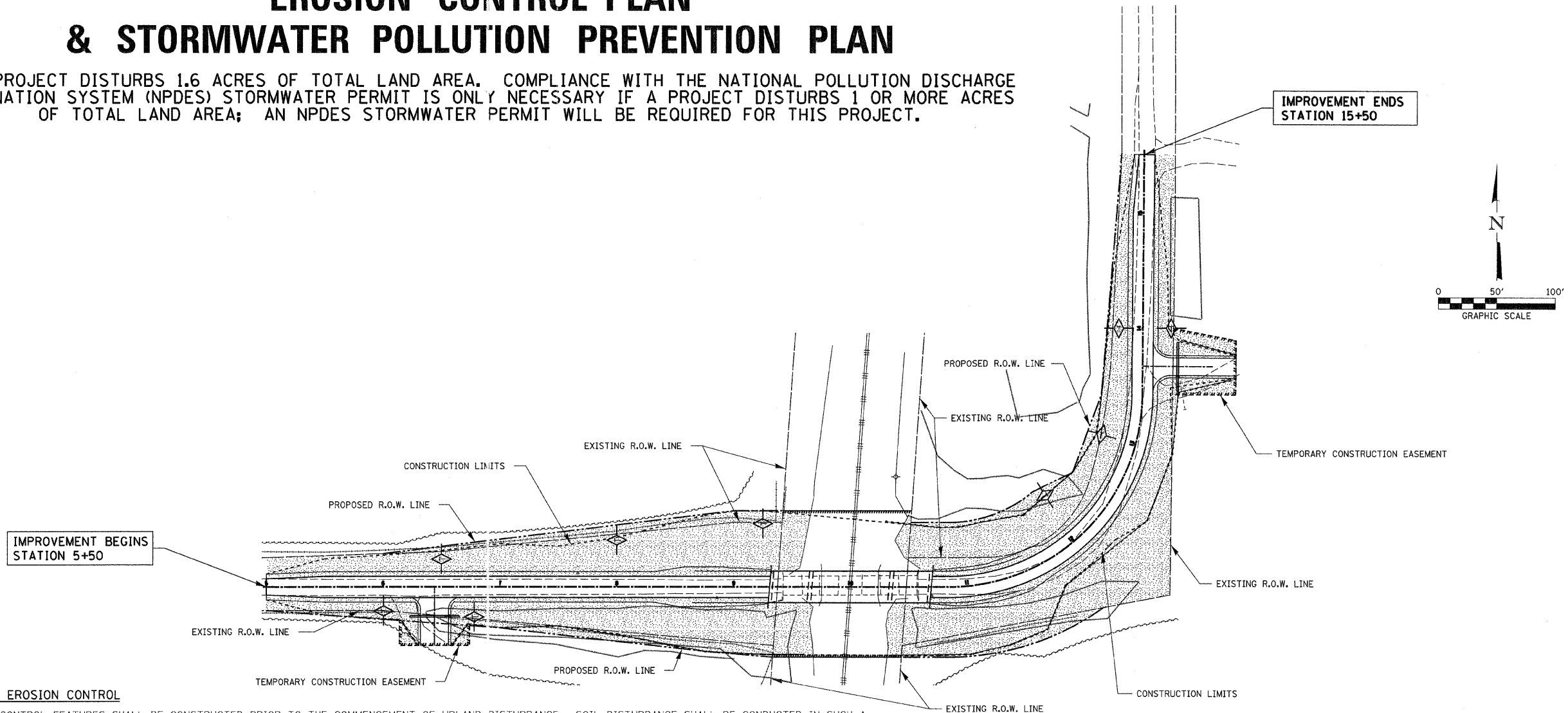
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FILE NAME = 898172-shr-pp4.dgn	USER NAME =	DESIGNED - L.F.S.	REVISED -	STATE OF ILLINOIS JEFFERSON COUNTY HIGHWAY DEPARTMENT	PLAN & PROFILE DENKER ROAD		T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HAMPTON, LENZINI AND RENWICK, INC. 3035 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62719		DRAWN - D.T.M.	REVISED -		165B	05-16113-00-BR	JEFFERSON	34	8		
ILLINOIS PROFESSIONAL DESIGN FIRM 15 / PE / SE CORP. 134.000369	PLOT SCALE =	CHECKED - S.W.M.	REVISED -		WEBBER ROAD DISTRICT		CONTRACT NO.				
	PLOT DATE = 2/4/2011	DATE - 05/19/10	REVISED -		SCALE: H20xV5	SHEET NO. 4 OF 4 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	

EROSION CONTROL PLAN & STORMWATER POLLUTION PREVENTION PLAN

THIS PROJECT DISTURBS 1.6 ACRES OF TOTAL LAND AREA. COMPLIANCE WITH THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) STORMWATER PERMIT IS ONLY NECESSARY IF A PROJECT DISTURBS 1 OR MORE ACRES OF TOTAL LAND AREA; AN NPDES STORMWATER PERMIT WILL BE REQUIRED FOR THIS PROJECT.



GENERAL NOTES FOR SOIL EROSION CONTROL

1. SOIL EROSION AND SEDIMENT CONTROL FEATURES SHALL BE CONSTRUCTED PRIOR TO THE COMMENCEMENT OF UPLAND DISTURBANCE. SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER TO MINIMIZE EROSION. SOIL STABILIZATION MEASURES SHALL CONSIDER THE TIME OF YEAR, SITE CONDITIONS AND THE USE OF TEMPORARY OR PERMANENT MEASURES.
2. THE EROSION CONTROL MEASURES INDICATED ON THE PLANS ARE THE MINIMUM REQUIREMENTS. THE CONTRACTOR SHALL ALSO TAKE SPECIAL NOTE TO THE CONTRACT SPECIAL PROVISION "EROSION CONTROL PLAN". ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER. ALL MEASURES SHALL BE IN PLACE WITHIN 4 DAYS OF DISTURBANCE.
3. ALL TEMPORARY EROSION CONTROL MEASURES MUST BE MAINTAINED AND IMMEDIATELY REPLACED AS NEEDED AND AS DIRECTED BY THE ENGINEER. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL INSPECTION AND REPAIR. THE CONTRACTOR SHALL INSPECT AND COMPLETE MAINTENANCE OF ALL ITEMS A MINIMUM OF EVERY 7 DAYS AND WITHIN 24 HOURS OF A ONE-HALF INCH RAINFALL. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SEEDING IS ACHIEVED.
4. PERIMETER EROSION BARRIER SHALL BE INSTALLED AT LOCATIONS SPECIFIED IN THE PLANS AT 5 FEET OUTSIDE THE TOE OF SLOPE OR INSIDE THE RIGHT-OF-WAY WHICHEVER IS CLOSER TO THE CENTERLINE, OR AS DIRECTED BY THE ENGINEER PRIOR TO THE START OF ANY EARTHWORK, CULVERT, OR STORM SEWER CONSTRUCTION. STAKES SHALL BE PLACED AT A MINIMUM OF 5 FOOT INTERVALS. SEE STD. 280001
5. THE PERIMETER EROSION BARRIER SHALL BE REMOVED WITHIN 30 DAYS AFTER ALL DISTURBED AREAS HAVE BEEN STABILIZED WITH VEGETATION. AFTER THE PERIMETER EROSION BARRIER IS REMOVED, ALL AREAS DAMAGED BY THE FENCE INSTALLATION SHALL BE RESTORED BY THE CONTRACTOR.
6. THE FENCE INSTALLATION, MAINTENANCE, REMOVAL AND THE RESTORATION OF THE AREA DISTURBED BY THE FENCE INSTALLATION IS INCLUDED IN COST OF THE PAY ITEM PERIMETER EROSION BARRIER.
7. TEMPORARY DITCH CHECKS SHALL BE CONSTRUCTED AS PER CONTRACT SPECIAL PROVISIONS ON 100 FEET CENTERS AS SHOWN HEREON OR AS DIRECTED BY THE ENGINEER. THE DITCH CHECKS SHALL BE INSTALLED IMMEDIATELY AS GRADING PROGRESSES THROUGH THE PROJECT. THE PAY ITEM FOR TEMPORARY DITCH CHECK SHALL INCLUDE THE COST OF INSTALLATION, MAINTENANCE AND REMOVAL. ONLY AGGREGATE DITCH CHECKS SHALL BE USED. SEE STD. 28001
8. REMOVAL OF TRAPPED SEDIMENT SHALL BE PAID FOR AS EARTH EXCAVATION. SEDIMENT SHALL BE REMOVED WHEN SILTATION REACHES 50% CAPACITY OF STRUCTURE. SEE APPLICABLE STANDARDS, SPECIFICATIONS, AND CONTRACT SPECIAL PROVISIONS.
9. THE CONTRACTOR SHALL CLEAN UP AND GRADE THE WORK AREA AS THE PROJECT PROGRESSES TO ELIMINATE THE CONCENTRATION OF RUNOFF. THE PAVEMENT SHALL BE CLEANED DAILY TO REMOVE EARTH MATERIAL TO THE SATISFACTION OF THE ENGINEER.
10. THE CONTRACTOR SHALL CONTACT THE COUNTY HIGHWAY DEPARTMENT AS SOON AS INITIAL EROSION CONTROL PRACTICES ARE INSTALLED.
11. TEMPORARY SEEDING SHALL BE COMPLETED ACCORDING TO THE ITEM TEMPORARY EROSION CONTROL SEEDING ON ALL AREAS THAT WILL NOT BE BROUGHT TO FINAL GRADE OR ON WHICH CONSTRUCTION WILL BE STOPPED FOR A PERIOD OF MORE THAN 15 WORKING DAYS.
12. THE COST OF ALL REQUIRED TEMPORARY SEEDING SHALL BE PAID FOR AS PER THE ITEM TEMPORARY EROSION CONTROL SEEDING.
13. ALL DISTURBED AREAS SHALL BE SEEDED AS DIRECTED BY THE ENGINEER. FINAL SEEDING SHALL CONFORM TO SEEDING CLASS 2 (SPECIAL) AS PER IDOT STANDARD SPECIFICATIONS AND CONTRACT SPECIAL PROVISIONS.
14. THE CONTRACTOR SHALL MAINTAIN AND PRESERVE ANY EXISTING SUB SURFACE DRAINAGE SYSTEMS (i.e. FIELD TILES) ACCORDING TO SECTION 611 OF THE IDOT STANDARD SPECIFICATIONS.

TEMPORARY DITCH CHECKS

- RT. STA. 6+00 = 10 FT.
- RT. STA. 6+75 = 10 FT.
- LT. STA. 6+50 = 10 FT.
- LT. STA. 8+00 = 10 FT.
- LT. STA. 9+25 = 10 FT.
- LT. STA. 12+00 = 10 FT.
- LT. STA. 13+00 = 10 FT.
- RT. STA. 14+00 = 10 FT.
- LT. STA. 14+00 = 10 FT.
- TOTAL = 90 FT.

SEEDING, CLASS 2 SPECIAL

THE AREA TO BE SEEDED SHALL CONSIST OF ALL EARTH SURFACES DISTURBED DURING CONSTRUCTION AS DIRECTED BY THE ENGINEER. EST. QUANTITY = 1.6 ACRES

TEMPORARY EROSION CONTROL SEEDING

2 APPLICATIONS 100LB/ACRE EST. QUANTITY = 320 POUNDS

PERIMETER EROSION BARRIER

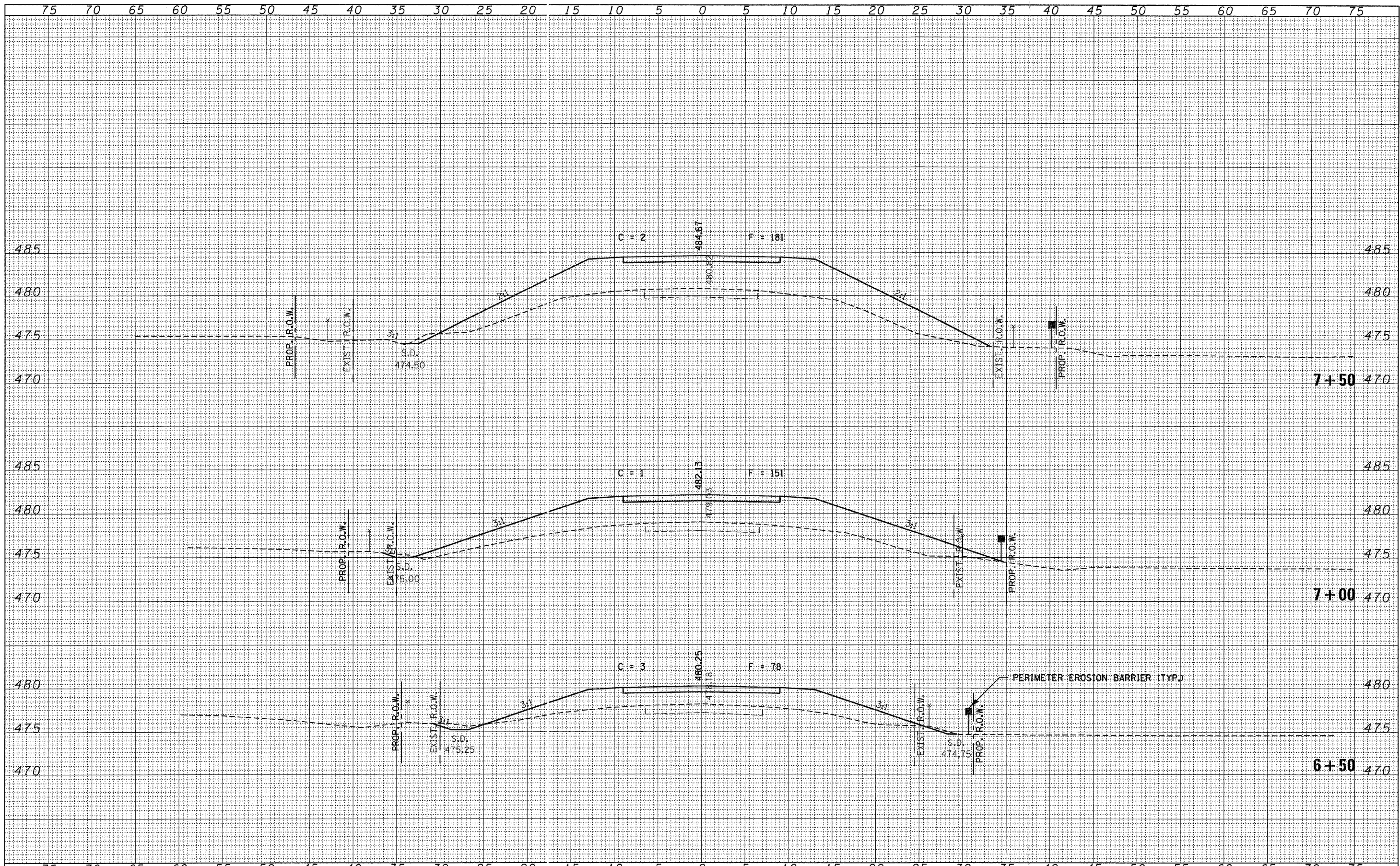
- RT. STA. 6+00 TO 9+60 = 500 FT
- LT. STA. 10+30 TO 14+50 = 450 FT
- RT. STA. 10+30 TO 14+50 = 450 FT
- USE = 1400 FT

- LEGEND**
- PERIMETER EROSION BARRIER
 - ◇ TEMPORARY DITCH CHECKS
 - SEEDING, CLASS 2 SPECIAL

FILE NAME = 090172-shr-erosion.dgn	USER NAME =	DESIGNED - A.S.L.	REVISED -	STATE OF ILLINOIS	EROSION CONTROL PLAN	T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.														
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HAMPTON, LENZINI AND RENWICK, INC.	DRAWN - D.A.B.	REVISED -																						
2005 STEVENSON DRIVE, SUITE 201	CHECKED - S.W.M.	REVISED -																						
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187 PE / SE CORP. 184-000989																								
				FED. ROAD DIST. NO.		ILLINOIS		FED. AID PROJECT																

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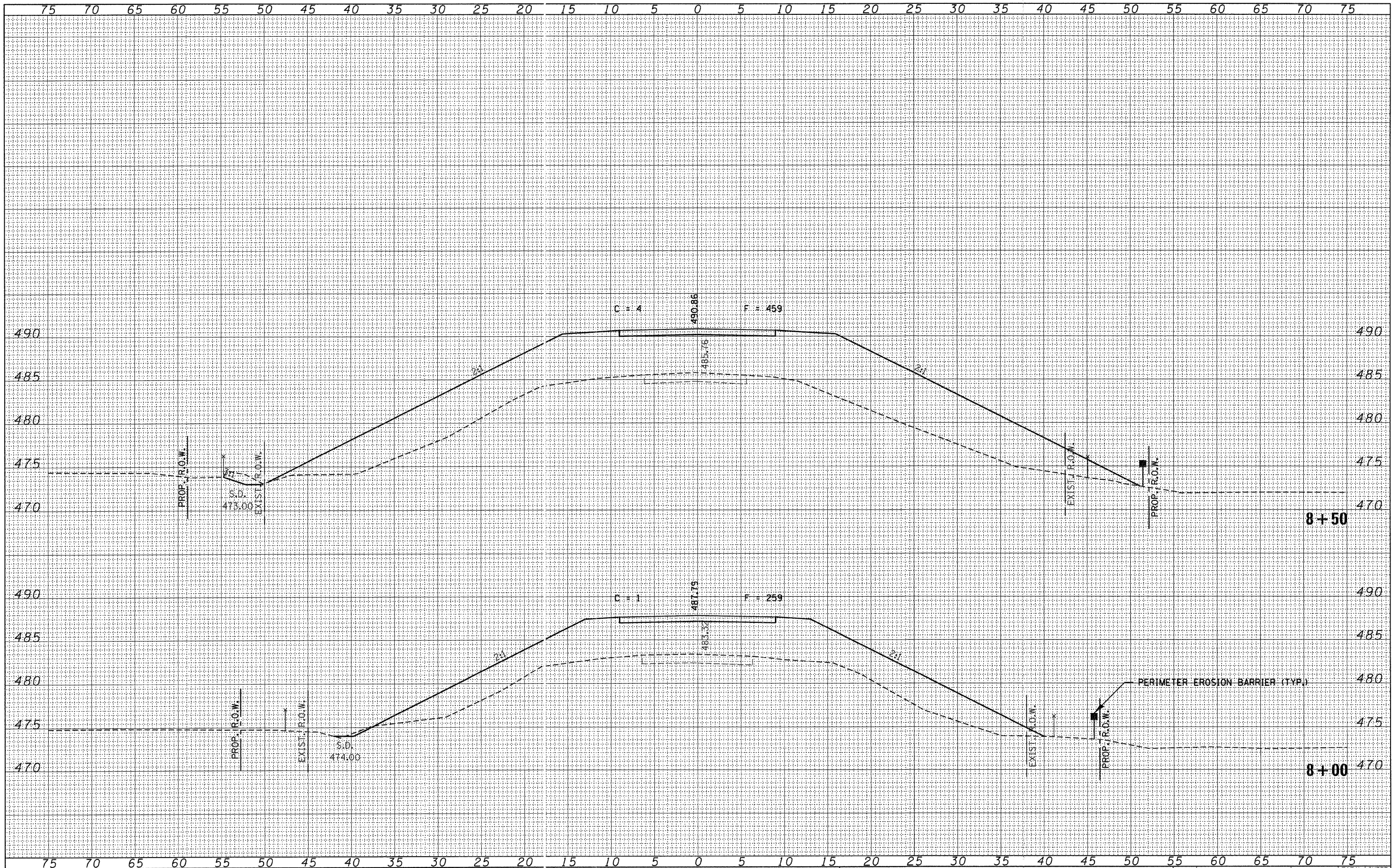


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ILR ILLINOIS PROFESSIONAL DESIGN FIRM 16 / PE / SE CORP. 184-66999	PLOT SCALE =	CHECKED - S.W.M.	REVISED -	WEBBER ROAD DISTRICT				CONTRACT NO. 99440
	PLOT DATE = 2/4/2011	DATE - 11/13/09	REVISED -	ILLINOIS FED. AID PROJECT				

STATE OF ILLINOIS
JEFFERSON COUNTY HIGHWAY DEPARTMENT

CROSS SECTIONS
DENKER ROAD

SCALE: 5H:5V SHEET NO. OF SHEETS STA. 6+50 TO STA. 7+50



DATE	
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FINAL SURVEY	
SAFETY	
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ORIGINAL SURVEY	
SAFETY	
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HAMPTON, LENZINI AND RENWICK, INC.
 3066 STEVENSON DRIVE, SUITE 201
 SPRINGFIELD, ILLINOIS 62763
 ILLINOIS PROFESSIONAL DESIGN FIRM
 LS / PE / SE CORP. 184.000599

USER NAME =
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 DRAWN - D.T.M.
 CHECKED - S.W.M.
 DATE - 11/13/09
 PLOT SCALE =
 PLOT DATE = 2/4/2011

DESIGNED - L.F.S.
 DRAWN - D.T.M.
 CHECKED - S.W.M.
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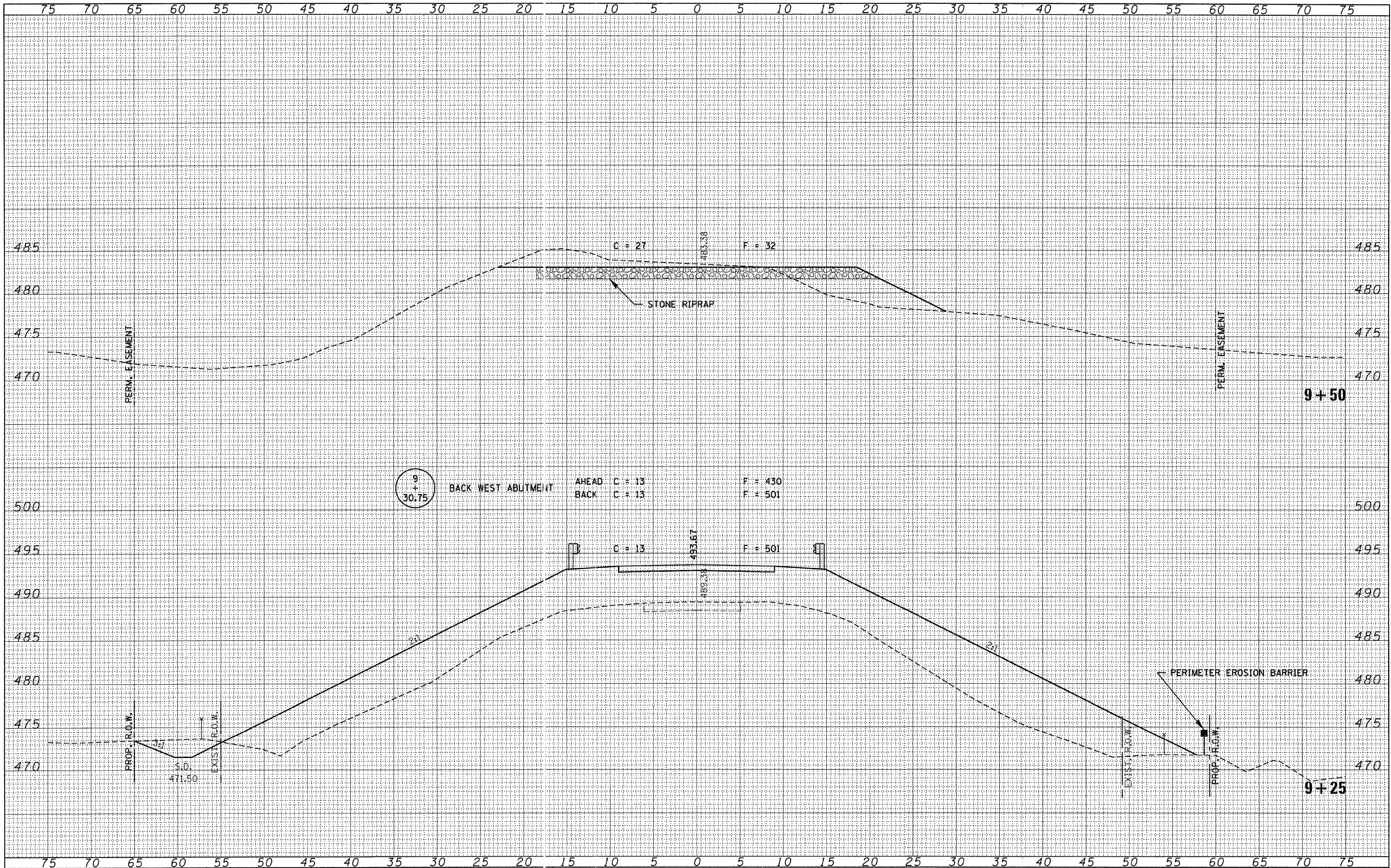
STATE OF ILLINOIS
JEFFERSON COUNTY HIGHWAY DEPARTMENT

CROSS SECTIONS
DENKER ROAD
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 SHEET NO. OF SHEETS STA. 8+00 TO STA. 8+50

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
165	05-16113-00-BR	JEFFERSON	33	12
WEBBER ROAD DISTRICT			CONTRACT NO. 99440	
ILLINOIS FED. AID PROJECT				

FINAL SURVEY	BY	DATE
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ORIGINAL SURVEY	BY	DATE
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 3088 STEVENSON DRIVE, SUITE 201
 SPRINGFIELD, ILLINOIS 62763
 ILLINOIS PROFESSIONAL DESIGN FIRM
 LS / PE / SE CORP. 184-000889

USER NAME =
 PLOT SCALE =
 PLOT DATE = 2/4/2011

DESIGNED - L.F.S.
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 CHECKED - S.W.M.
 DATE - 11/13/09

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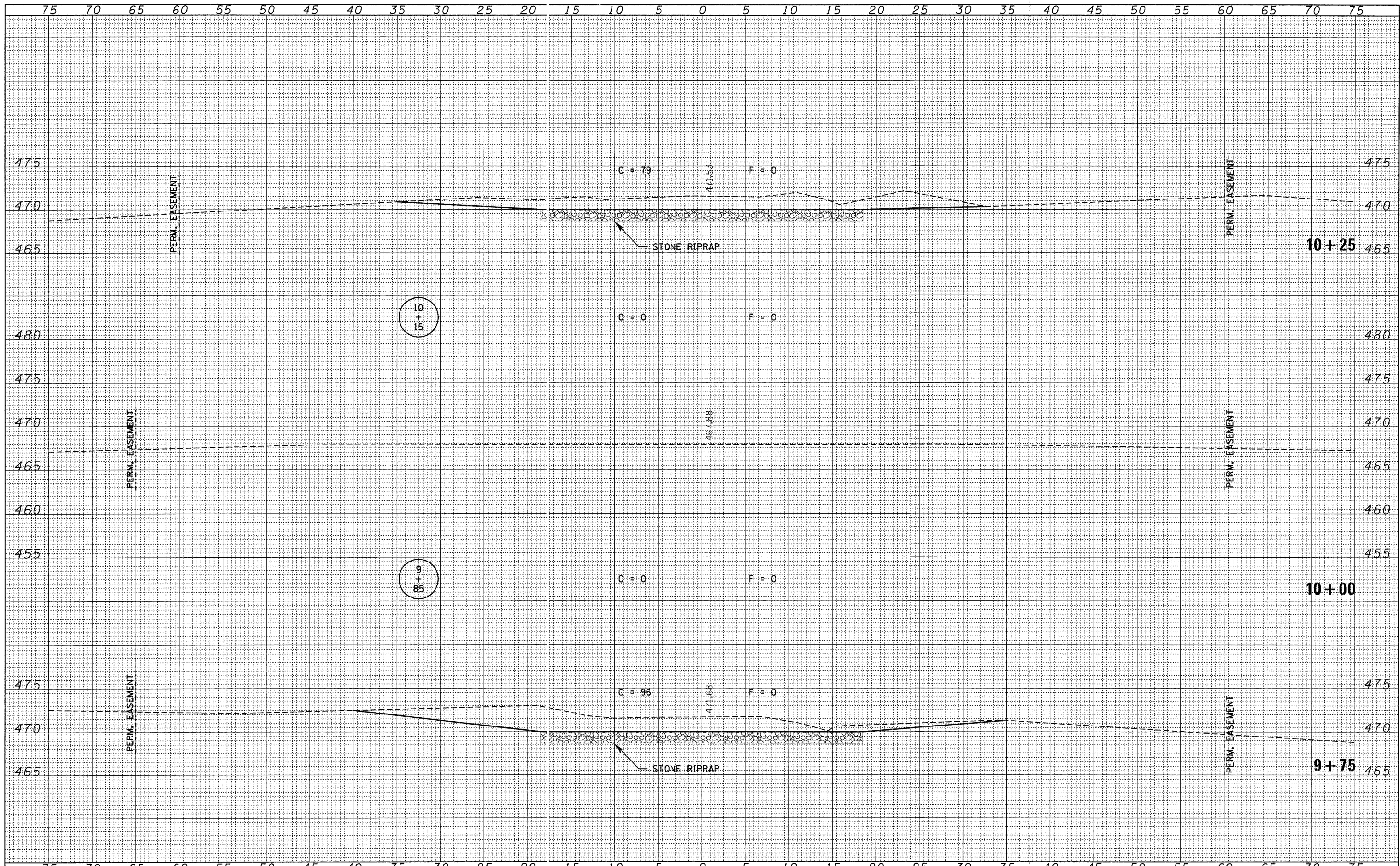
STATE OF ILLINOIS
 JEFFERSON COUNTY HIGHWAY DEPARTMENT

CROSS SECTIONS
 DENKER ROAD
 SCALE: 5H:5V
 SHEET NO. OF SHEETS STA. 9+25 TO STA. 9+50

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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WEBBER ROAD DISTRICT		CONTRACT NO. 99440		
ILLINOIS FED. AID PROJECT				

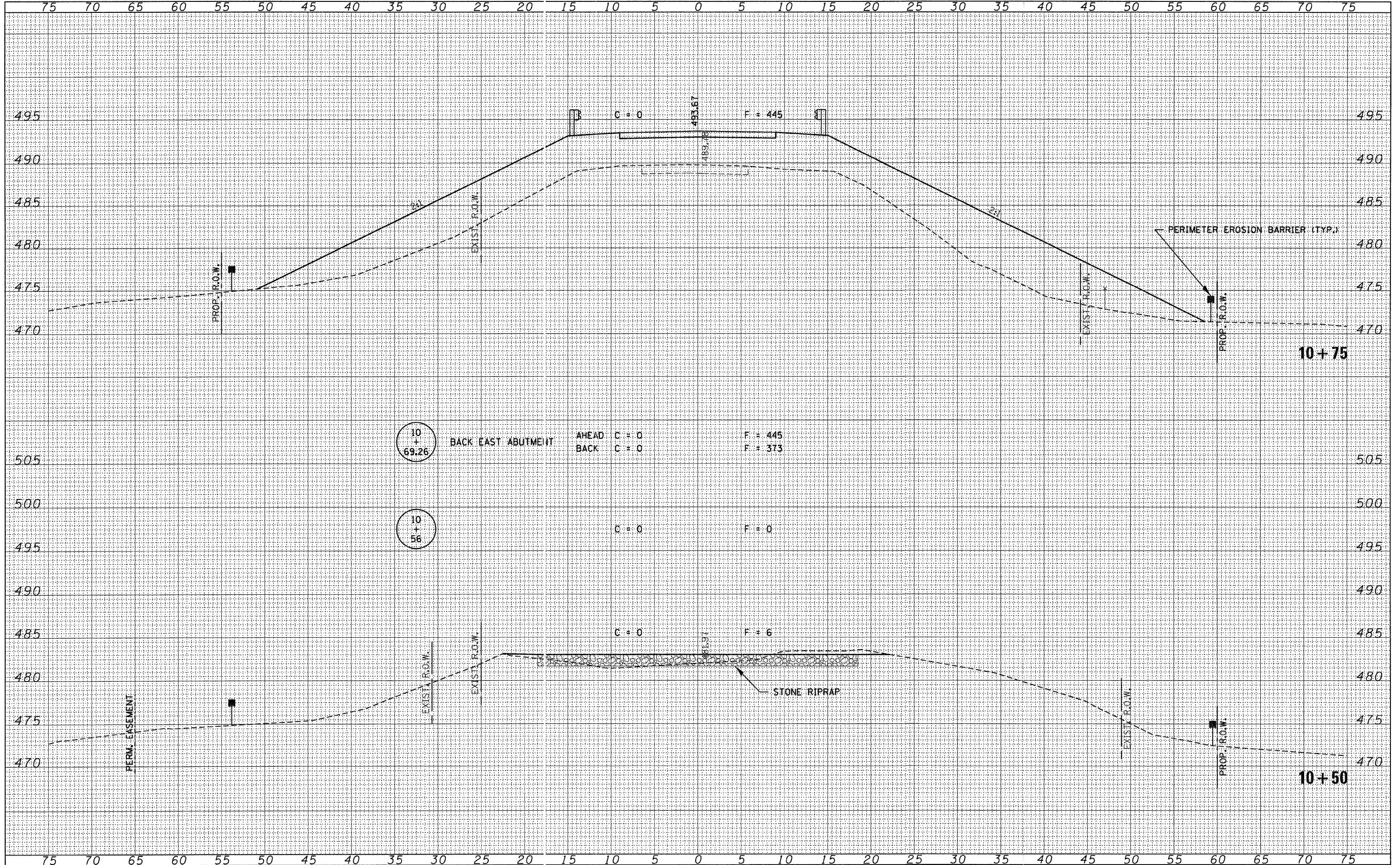
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308 STEVENSON DRIVE SUITE 201 SPRINGFIELD, ILLINOIS 62763	PLLOT SCALE =	CHECKED - S.W.M.	REVISED -					WEBBER ROAD DISTRICT				CONTRACT NO. 99440
ILLINOIS PROFESSIONAL DESIGN FIRM 16 / 19 / 08 CORP. 184-00069	PLLOT DATE = 2/4/2011	DATE - 11/13/09	REVISED -					ILLINOIS FED. AID PROJECT				
								SCALE: 5H:5V	SHEET NO.	OF SHEETS	STA. 9+75	TO STA. 10+25

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NOTE BOOK
REVISIONS
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ORIGINAL SURVEY
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NOTE BOOK
REVISIONS
AREAS CHECKED

FILE NAME = 090172-sh1t-sxs.dgn
HAMPSON, LENZINI AND RENWICK, INC.
3083 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62769
ILLINOIS PROFESSIONAL DESIGN FIRM
LS / PE / SE CORP 194,000569

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DESIGNED - L.F.S.
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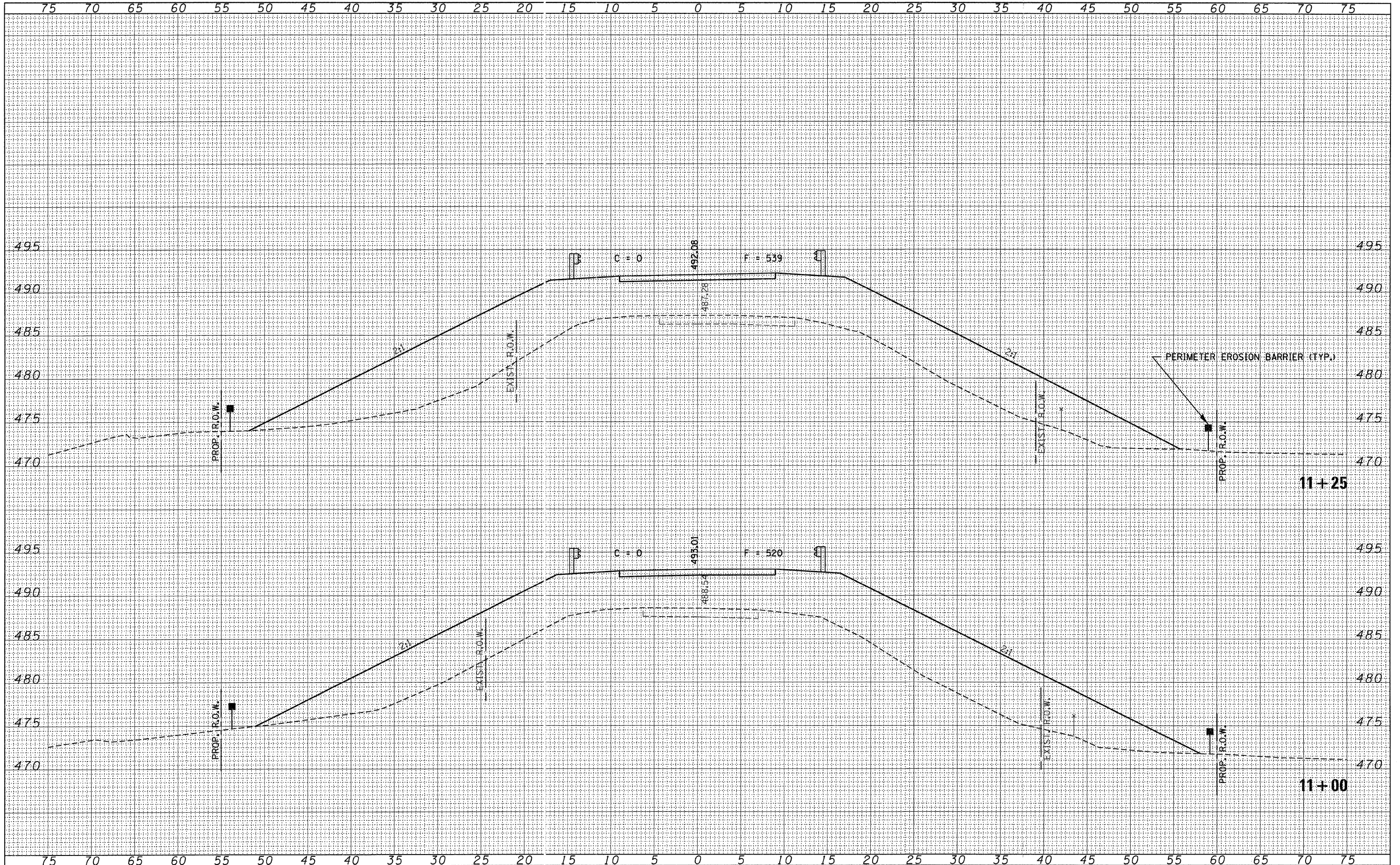
STATE OF ILLINOIS
JEFFERSON COUNTY HIGHWAY DEPARTMENT

CROSS SECTIONS
DENKER ROAD
SCALE: 5H:5V SHEET NO. OF SHEETS STA. 10+50 TO STA. 10+75

T.R. SECTION COUNTY TOTAL SHEETS SHEET NO.
165 05-16113-00-BR JEFFERSON 33 16
WEBBER ROAD DISTRICT CONTRACT NO. 99440
ILLINOIS FED. AID PROJECT

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



FILE NAME = 090172-shr-sss.dgn
 HAMPTON, LENZINI AND RENWICK, INC.
 3088 STEVENSON DRIVE, SUITE 201
 SPRINGFIELD, ILLINOIS 62761
 ILLINOIS PROFESSIONAL DESIGN FIRM
 LS / PE / SE CORP. 154.000369

USER NAME =
 PLOT SCALE =
 PLOT DATE = 2/4/2011

DESIGNED - L.F.S.
 DRAWN - D.T.M.
 CHECKED - S.W.M.
 DATE - 11/13/09

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 JEFFERSON COUNTY HIGHWAY DEPARTMENT**

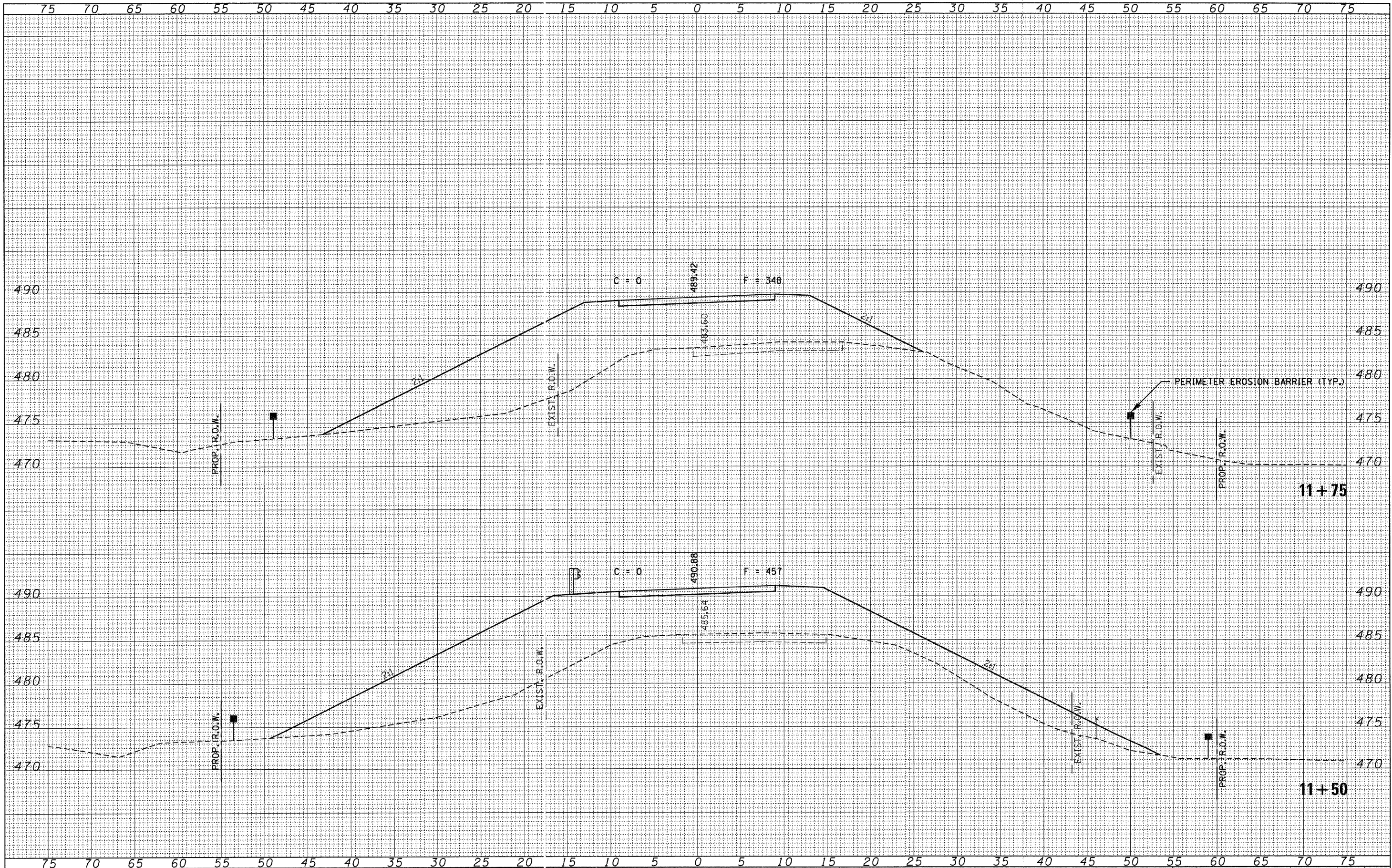
**CROSS SECTIONS
 DENKER ROAD**

SCALE: 5H:5V SHEET NO. OF SHEETS STA. 11+00 TO STA. 11+25

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
165	05-16113-00-BR	JEFFERSON	33	17
WEBBER ROAD DISTRICT			CONTRACT NO. 99440	
ILLINOIS FED. AID PROJECT				

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

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



FILE NAME = 090172-ahf-sss.dgn
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 3048 STEVENSON DRIVE, SUITE 201
 SPRINGFIELD, ILLINOIS 62763
 ILLINOIS PROFESSIONAL DESIGN FIRM
 LS / PE / SE CORP. 194.007069

USER NAME =
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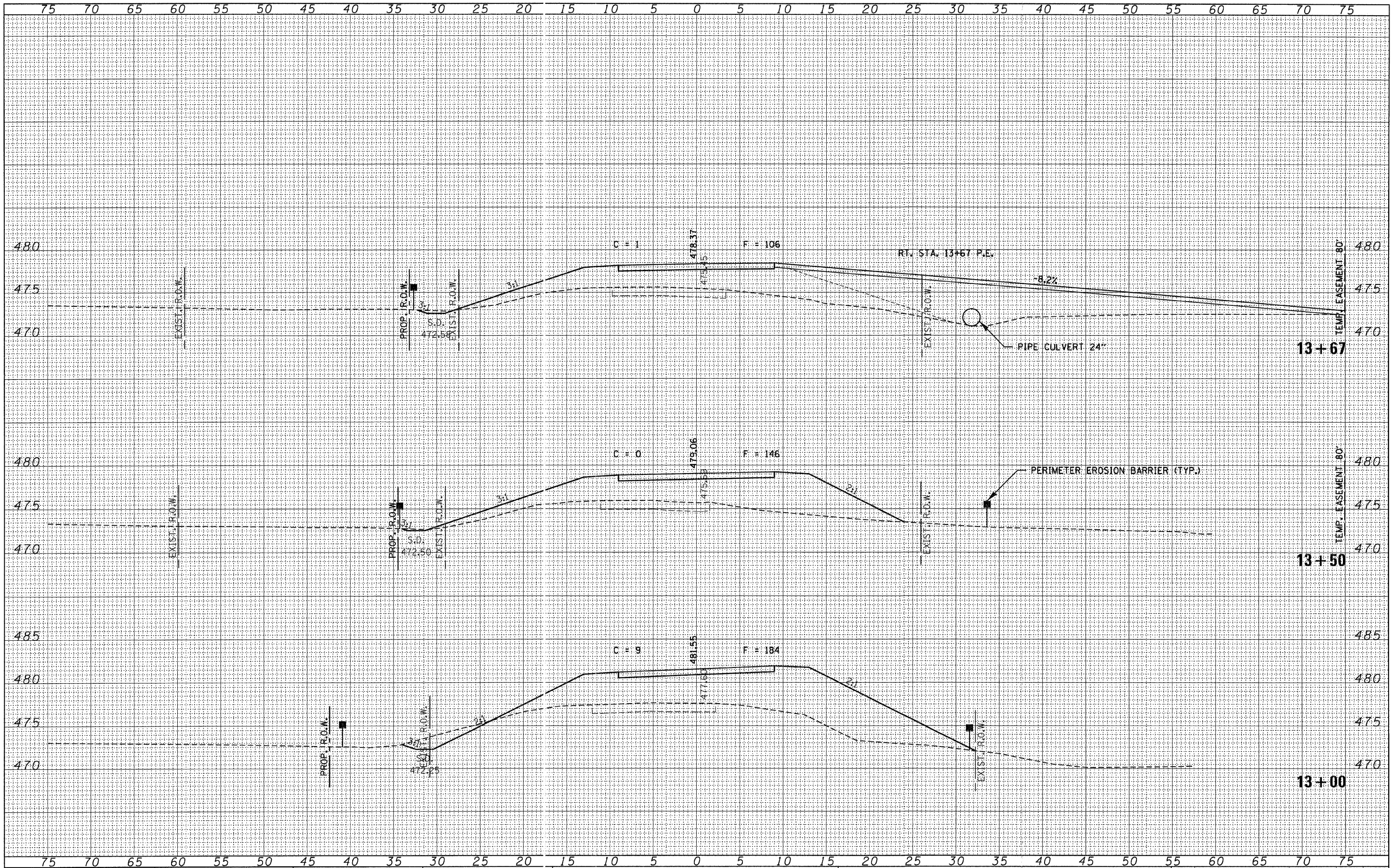
DESIGNED - L.F.S.
 DRAWN - D.T.M.
 CHECKED - S.W.M.
 DATE - 11/13/09

REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
JEFFERSON COUNTY HIGHWAY DEPARTMENT

CROSS SECTIONS
DENKER ROAD
 SCALE: 5H:5V SHEET NO. OF SHEETS STA. 11+50 TO STA. 11+75

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
165	05-16113-00-BR	JEFFERSON	33	18
WEBBER ROAD DISTRICT			CONTRACT NO. 99440	
ILLINOIS FED. AID PROJECT				



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

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

FILE NAME = 090172-ah1-xx.dgn
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 3005 STEVENSON DRIVE, SUITE 201
 SPRINGFIELD, ILLINOIS 62761
 ILLINOIS PROFESSIONAL DESIGN FIRM
 L5 / PE / SE CORP. 184.000999

USER NAME =
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 PLOT DATE = 2/4/2011

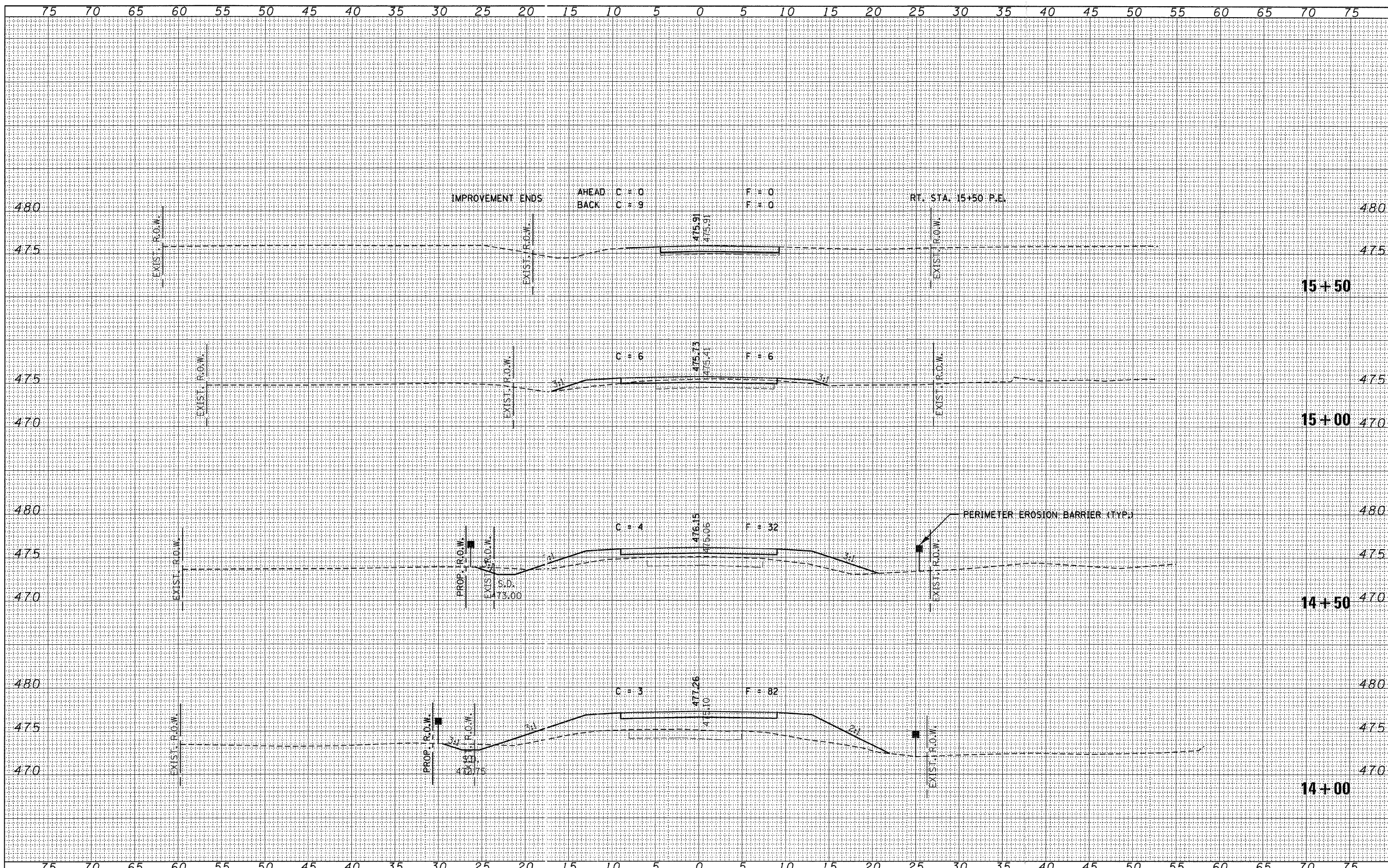
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 DRAWN - D.T.M.
 CHECKED - S.W.M.
 DATE - 11/13/09

REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
 JEFFERSON COUNTY HIGHWAY DEPARTMENT

CROSS SECTIONS
 DENKER ROAD
 SCALE: 5H:5V
 SHEET NO. OF SHEETS STA. 13+00 TO STA. 13+67

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
165	05-16113-00-BR	JEFFERSON	33	20
WEBBER ROAD DISTRICT			CONTRACT NO. 99440	
ILLINOIS FED. AID PROJECT				



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

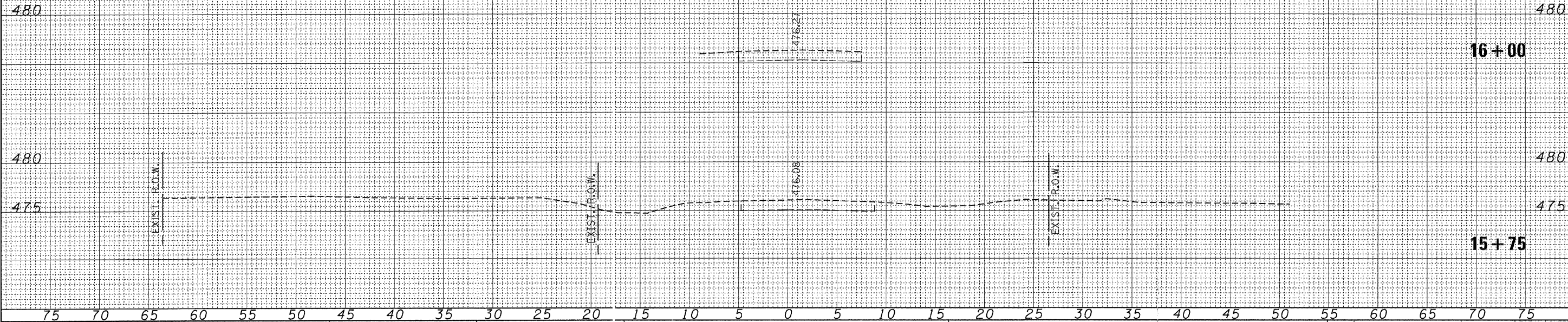
BY	DATE
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	AREAS CHECKED

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3000 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62761		CHECKED - S.W.M.	REVISED -			WEBBER ROAD DISTRICT		CONTRACT NO. 99440		
ILLINOIS PROFESSIONAL DESIGN FIRM L5 / PE / SE CORP. 164-000999		DATE - 11/13/09	REVISED -			SCALE: 5H:5V		SHEET NO. OF SHEETS		STA. 14+00 TO STA. 15+50
						ILLINOIS FED. AID PROJECT				

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

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

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



FILE NAME = 090172-ent-xxx.dgn
HAMPTON, LENZINI AND RENWICK, INC.
 3685 STEVENSON DRIVE, SUITE 201
 SPRINGFIELD, ILLINOIS 62703
 ILLINOIS PROFESSIONAL DESIGN FIRM
 LS / PE / SE CORP. 184.000899

USER NAME =	DESIGNED - L.F.S.	REVISED -
PLOT SCALE =	DRAWN - D.T.M.	REVISED -
PLOT DATE = 2/4/2011	CHECKED - S.W.M.	REVISED -
	DATE - 11/13/09	REVISED -

STATE OF ILLINOIS
JEFFERSON COUNTY HIGHWAY DEPARTMENT

CROSS SECTIONS
DENKER ROAD

SCALE: 5H:5V SHEET NO. OF SHEETS STA. 15+75 TO STA. 16+00

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
165	05-16113-00-BR	JEFFERSON	33	22
WEBBER ROAD DISTRICT			CONTRACT NO. 99440	
ILLINOIS FED. AID PROJECT				

BENCHMARK: Spike nail in fence post. 21' Rt., Sta. 6+09, Elev. 477.48

EXISTING STRUCTURE NO. 041-9910: A seven span beam bridge with timber deck on timber abutments, wingwalls and piers. 116.2' fc.-fc. abuts.; 16.1' o.-o. deck. Structure closed to traffic.

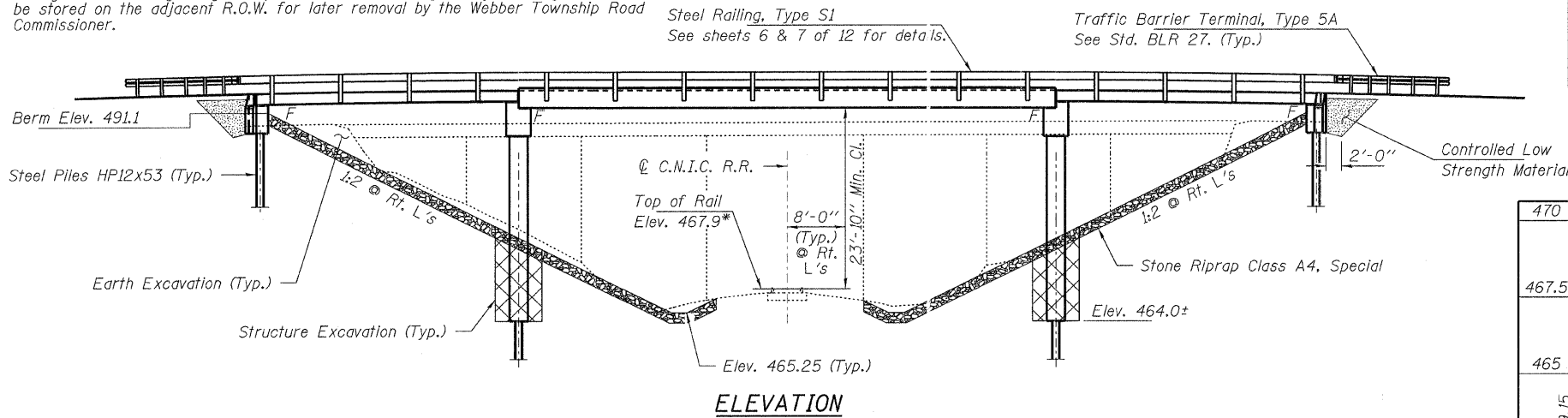
Salvage: All existing bridge components deemed salvagable by the Engineer shall be stored on the adjacent R.O.W. for later removal by the Webber Township Road Commissioner.

C.N./I.C. RAILROAD
BUILT 20__ BY
JEFFERSON COUNTY
SEC. 05-16113-00-BR
WEBBER ROAD DISTRICT
STR. NO. 041-9932
LOADING HL-93

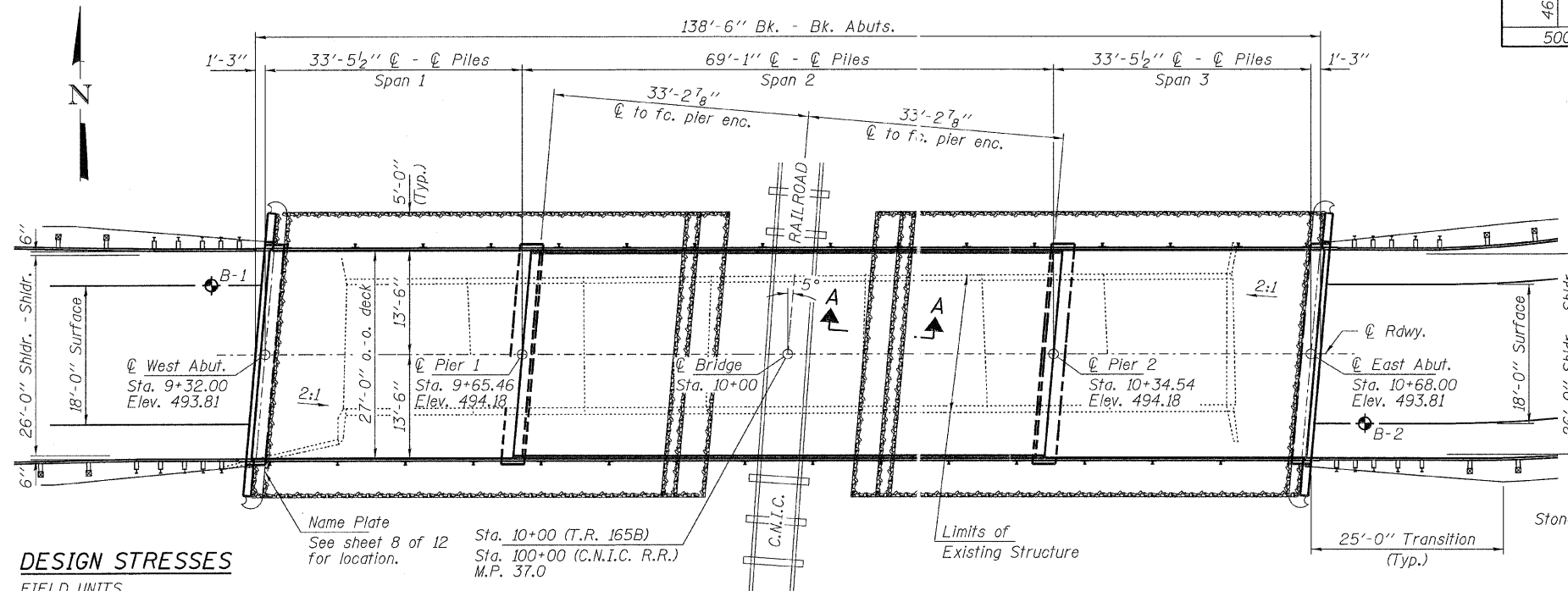
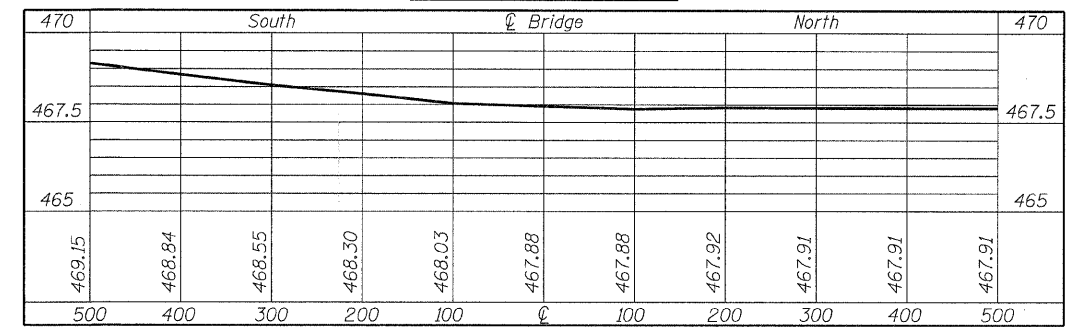
INDEX OF STRUCTURE SHEETS

1. General Plan & Elevation
2. Superstructure - Spans 1 & 3
3. Superstructure Details - Spans 1 & 3
4. Superstructure - Span 2
5. Superstructure Details - Span 2
6. Superstructure Details
7. Steel Railing, Type S-1
8. Abutments
9. Pier 1
10. Pier 2
11. HP Pile Details
12. Borings

NAME PLATE
See Std. 515001



HIGH RAIL PROFILE



GENERAL NOTES

Layout of riprap may be varied in the field to suit ground conditions as directed by the Engineer.
Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). 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.

DESIGN STRESSES

FIELD UNITS

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinf.)

PRECAST PRESTRESSED UNITS

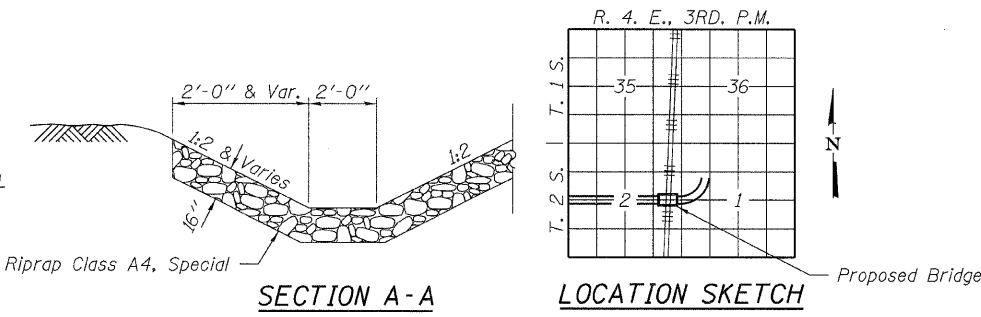
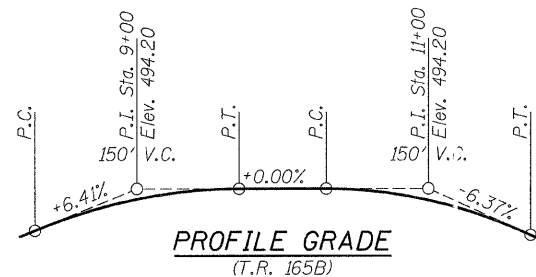
$f'_c = 6,000$ psi
 $f'_{ci} = 5,000$ psi
 $f_{pu} = 270,000$ psi ($\frac{1}{2}$ " low lax. strands)
 $f_{pbt} = 201,960$ psi ($\frac{1}{2}$ " low lax. strands)
 $f_y = 60,000$ psi (Reinf.)

LOADING HL-93

Design Specifications: 2007 AASHTO LRFD with all applicable interims.
50#/Sq. Ft. included in dead load for future wearing surface.

SEISMIC DATA

Seismic Performance Zone (SPZ) = 2
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.289g
Design Spectral Acceleration at 0.2 sec. (S_{D5}) = 0.688g
Soil Site Class = D

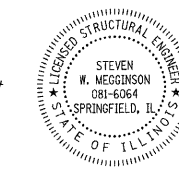


TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Stone Riprap Class A4, Special	Ton		400	400
Removal of Existing Structures	Each			1
Structure Excavation	Cu. Yd.			162
Concrete Structures	Cu. Yd.		163.0	163.0
Precast Prestressed Concrete Deck Beams (17" Depth)	Sq. Ft.	1,836		1,836
Precast Prestressed Concrete Deck Beams (27" Depth)	Sq. Ft.	1,863		1,863
Reinforcement Bars	Pound		12,550	12,550
Steel Railing, Type S1	Foot	283		283
Furnishing Steel Piles HP12x53	Foot		900	900
Driving Piles	Foot		900	900
Name Plates	Each		1	1
Controlled Low Strength Material	Cu. Yd.		50	50

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."

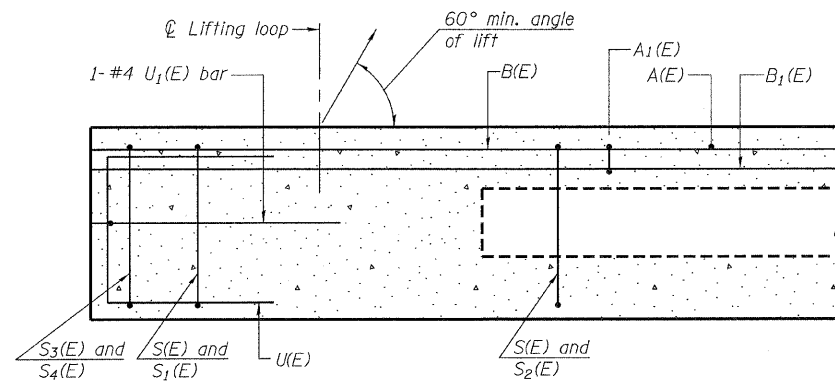
Steven W. Meigs 2/4/2011
ILLINOIS STRUCTURAL NO. 081-6064



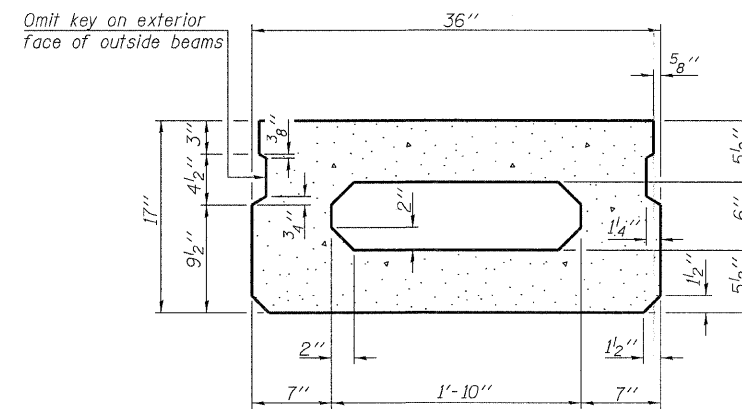
Expires 11-30-2012

DENKER ROAD OVER CN/IC RAILROAD AT M.P. 37.0

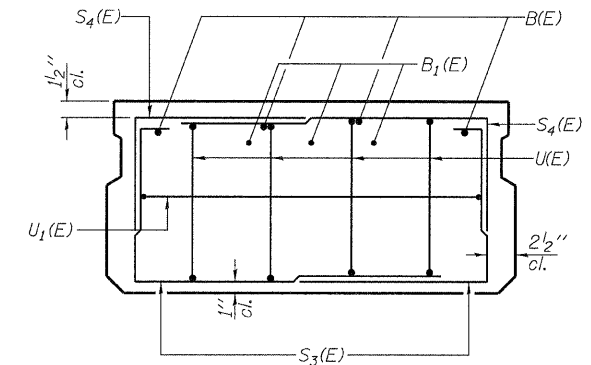
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HAMPTON, LENZINI AND RENWICK, INC.		CHECKED - S.W.M.	REVISED - 07/13/10		165B	05-16113-00-BR	JEFFERSON	34	23
3035 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703	PLOT SCALE =	DRAWN - D.A.B.	REVISED -		WEBBER ROAD DISTRICT	CONTRACT NO. 99440			
ILLINOIS PROFESSIONAL DESIGN FIRM L3 / PE / SE CORP. 184-000899	PLOT DATE =	CHECKED - S.W.M.	REVISED -		ILLINOIS FED. AID PROJECT				



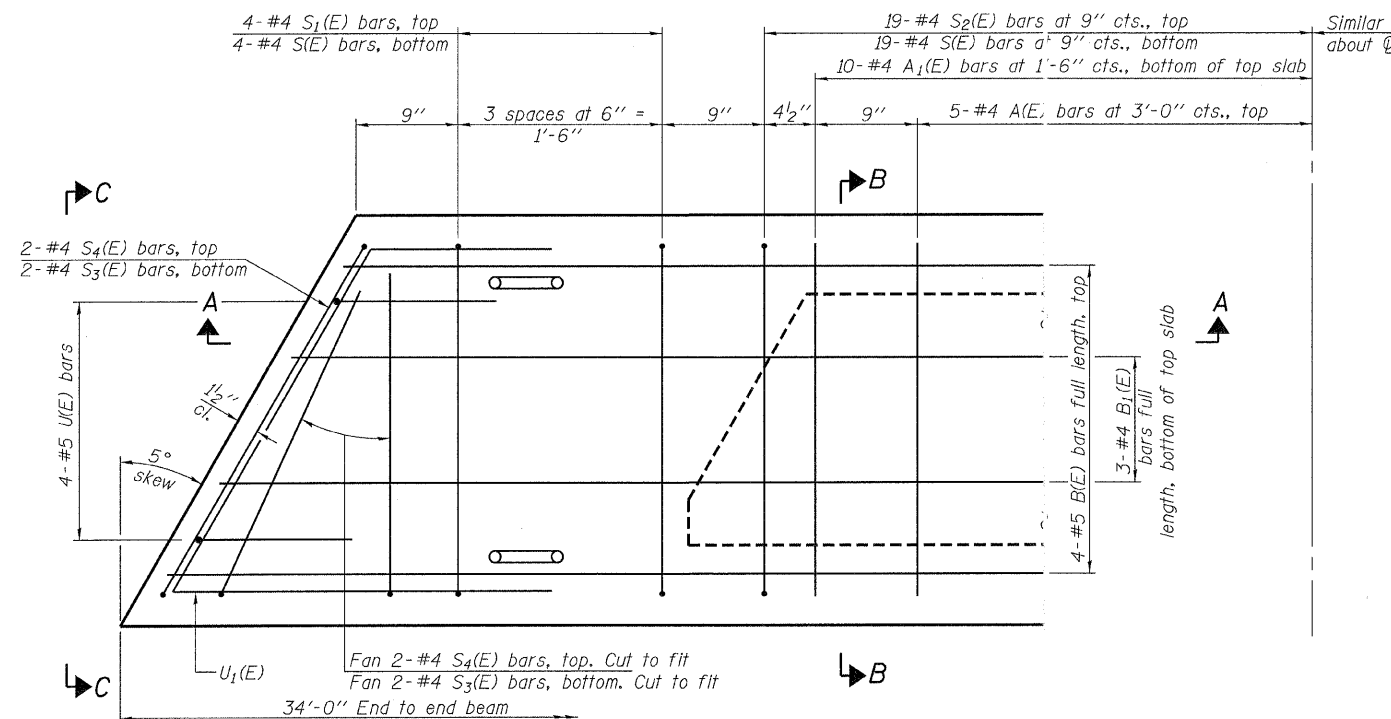
SECTION A-A



SECTION B-B
(Showing dimensions)

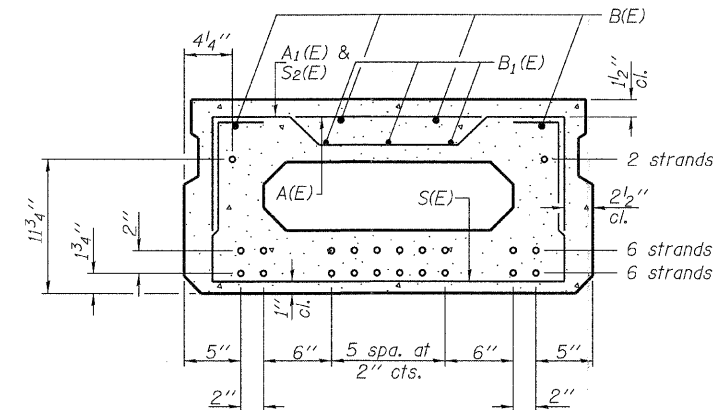


VIEW C-C



PLAN VIEW

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



SECTION B-B

(Showing reinforcement and permissible strand locations)

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

BAR LIST
ONE BEAM ONLY
(For information only)

Bar	No.	Size	Length	Shape
A(E)	10	#4	2'-7"	—
A1(E)	20	#4	2'-10"	—
B(E)	4	#5	33'-8"	—
B1(E)	3	#4	33'-8"	—
S(E)	46	#4	5'-9"	U
S1(E)	8	#4	4'-3"	U
S2(E)	36	#4	4'-6"	U
S3(E)	8	#4	4'-2"	U
S4(E)	8	#4	3'-5"	U
U(E)	8	#5	3'-8"	U
U1(E)	2	#4	5'-3"	U

Note: See sheets 3 & 6 of 12 for additional details and Bill of Material.

MINIMUM BAR LAP

#4 bar = 2'-0"
#5 bar = 2'-6"

PD-1736-L

7-1-10

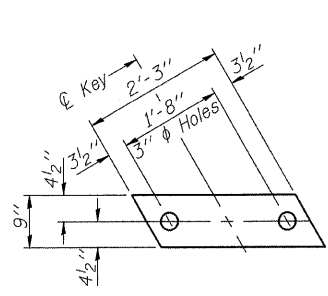
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PLOT SCALE =	DRAWN - D.A.B.	REVISED -	
PLOT DATE =	CHECKED - S.W.M.	REVISED -	

STATE OF ILLINOIS
JEFFERSON COUNTY HIGHWAY DEPARTMENT

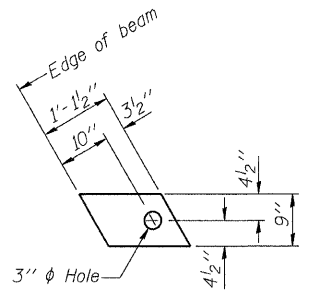
17" x 36" PPC DECK BEAM - SPANS 1 & 3
STRUCTURE NO. 041-9932

SHEET NO. 2 OF 12 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
165B	05-16113-00-BR	JEFFERSON	34	24
WEBBER ROAD DISTRICT		CONTRACT NO. 99440		
ILLINOIS FED. AID PROJECT				

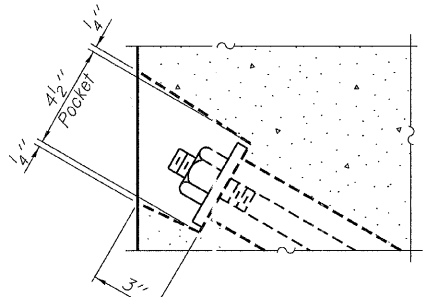


FABRIC BEARING PAD
(Interior - 32 Req'd)

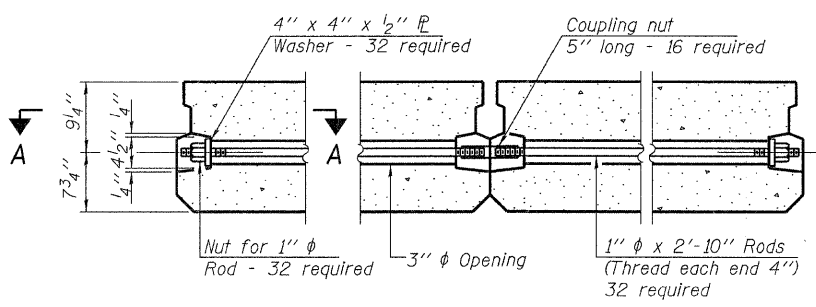


FABRIC BEARING PAD
(Exterior - 8 Req'd)

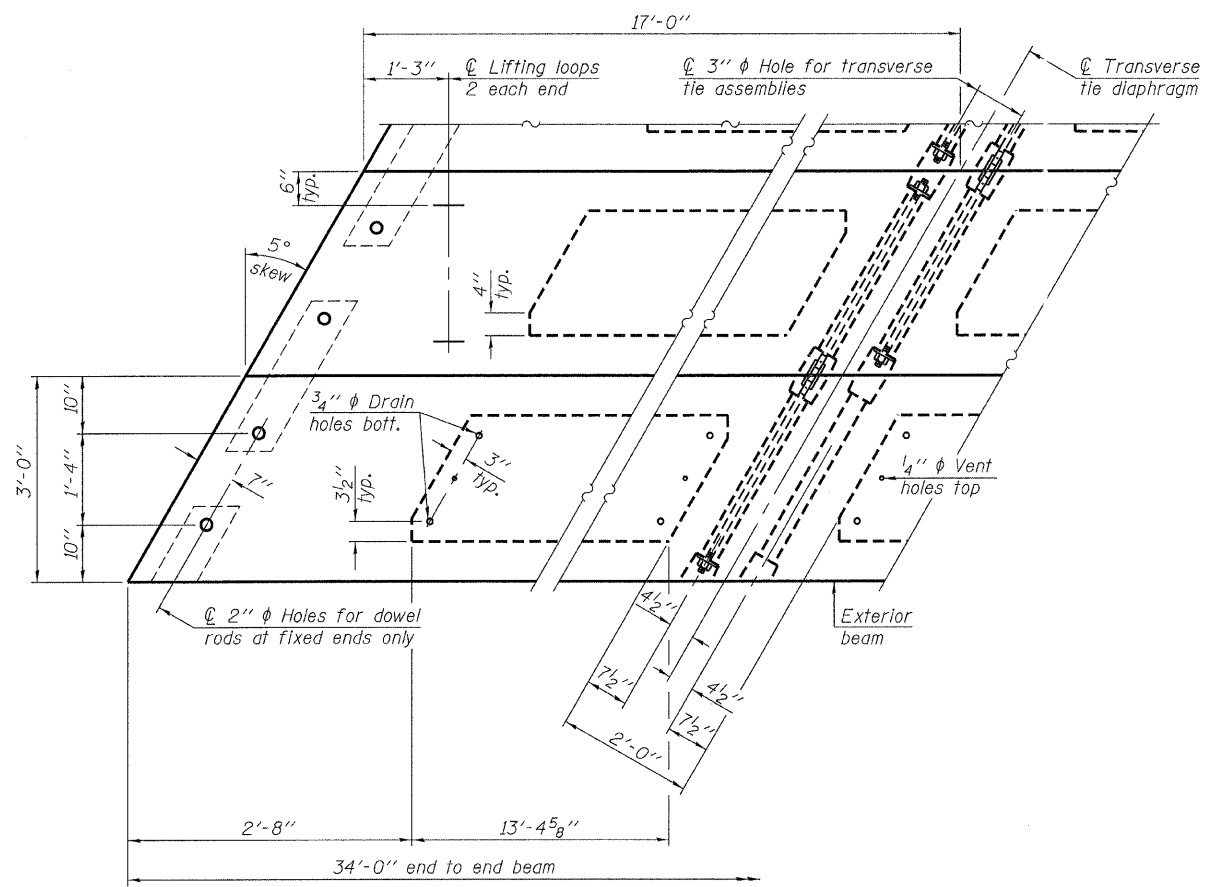
Notes:
All bearing pads shall be 1" thick.
Omit holes when using expansion bearings.
Expansion bearing pad shall be bonded to the substructure.



SECTION A-A

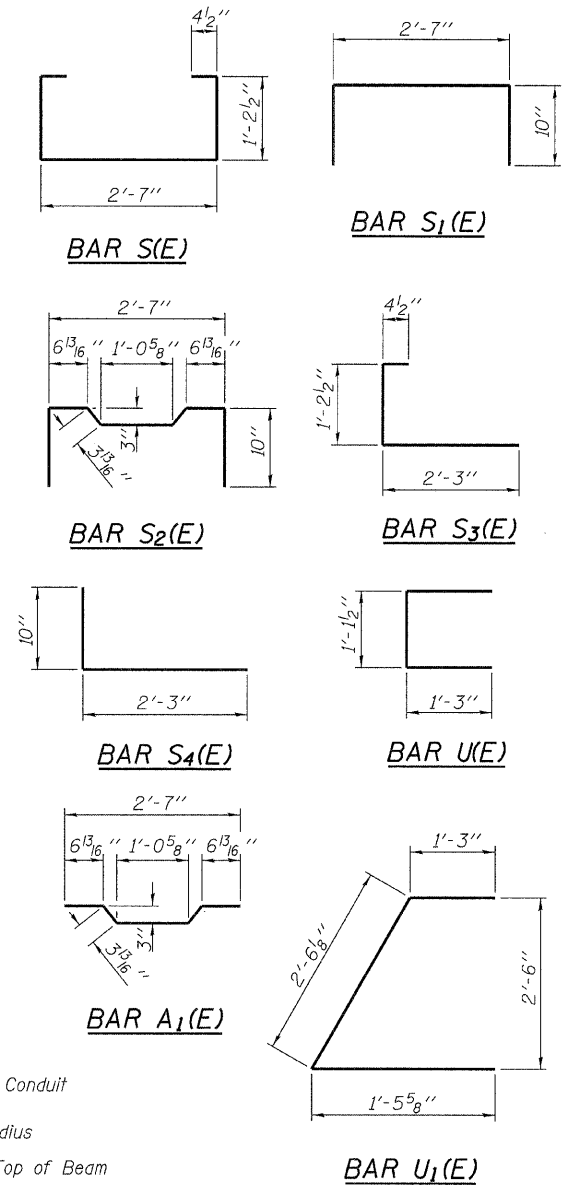


TYPICAL TRANSVERSE TIE ASSEMBLY



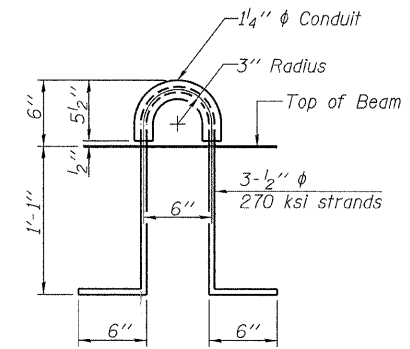
PLAN VIEW

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



BILL OF MATERIAL

Precast Prestressed Conc. Deck Bms. (17" depth)	Sq. Ft.	1,836



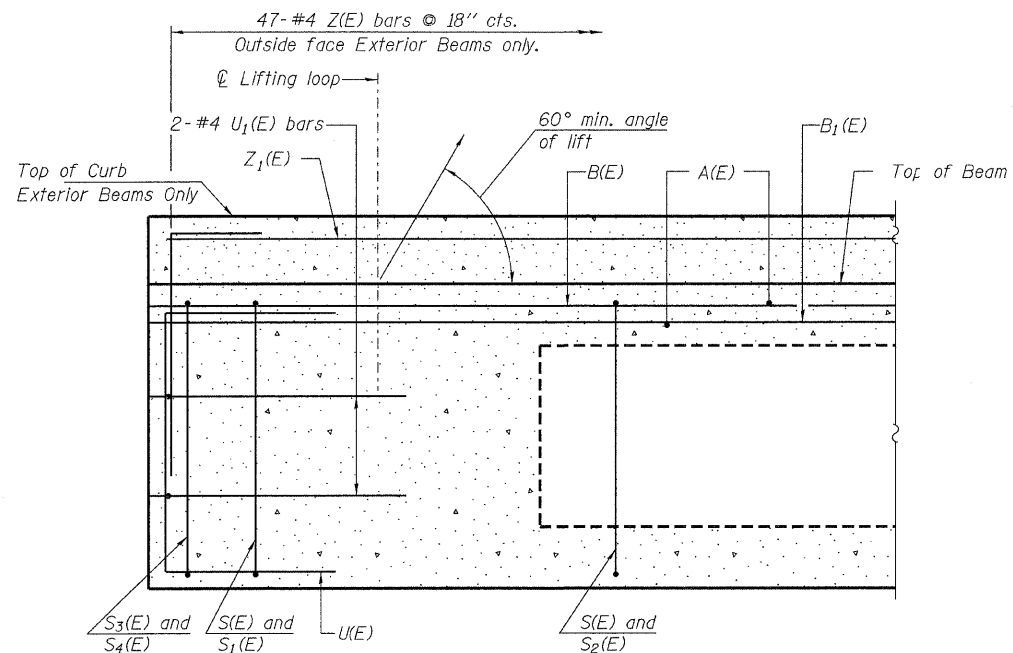
LIFTING LOOP DETAIL

NOTES

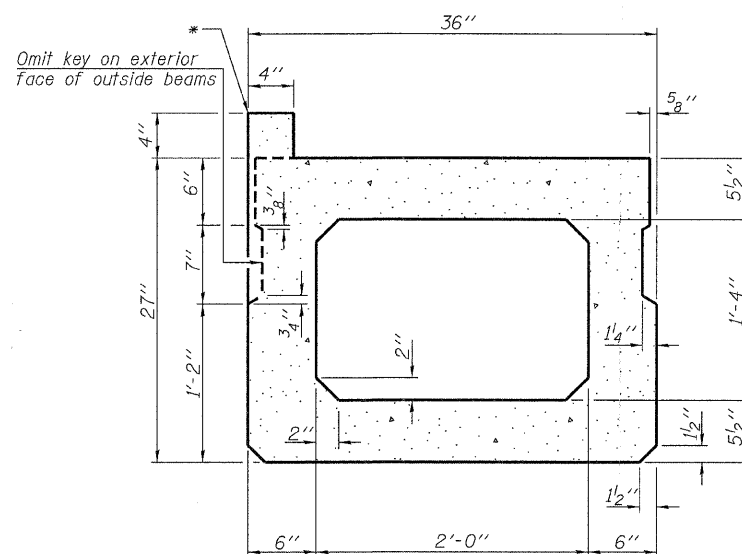
Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in. The 1" diameter rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets 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 reinforcement bars shall be epoxy coated.

PD-1736-LD 7-1-10

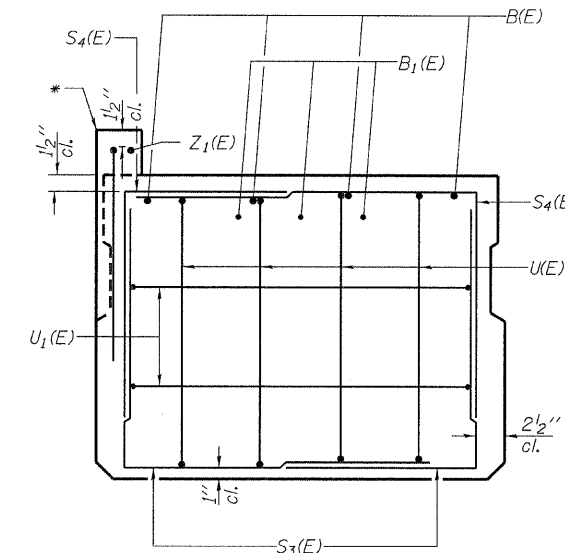
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HAMPTON, LENZINI AND RENWICK, INC. 3345 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703	PLOT SCALE =	CHECKED - S.W.M.	REVISED - 07/13/10			165B	05-16113-00-BR	JEFFERSON	34	25	
ILLINOIS PROFESSIONAL DESIGN FIRM L.S. / P.E. / S.E. CORP. 184-000969	PLOT DATE =	DRAWN - D.A.B.	REVISED -			WEBBER ROAD DISTRICT	CONTRACT NO. 99440				
		CHECKED - S.W.M.	REVISED -			ILLINOIS FED. AID PROJECT					
SHEET NO. 3 OF 12 SHEETS											



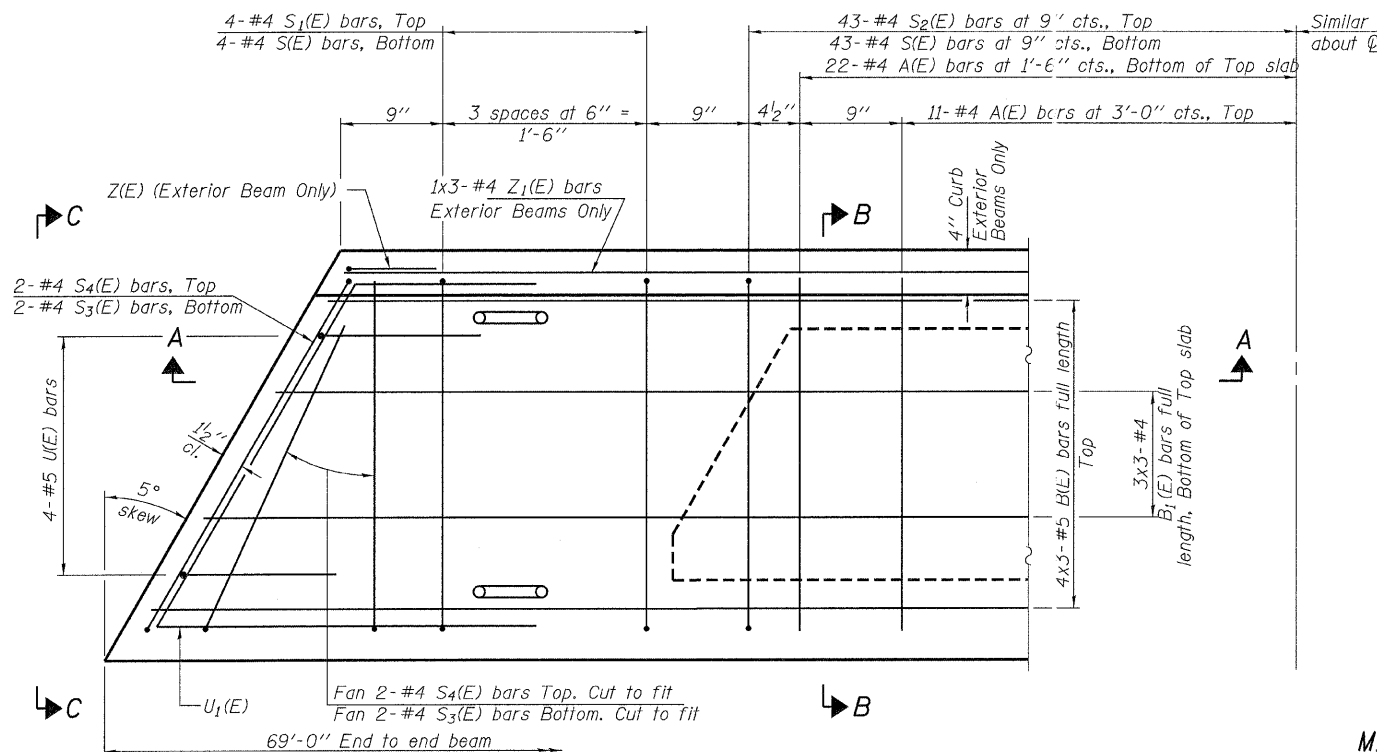
SECTION A-A



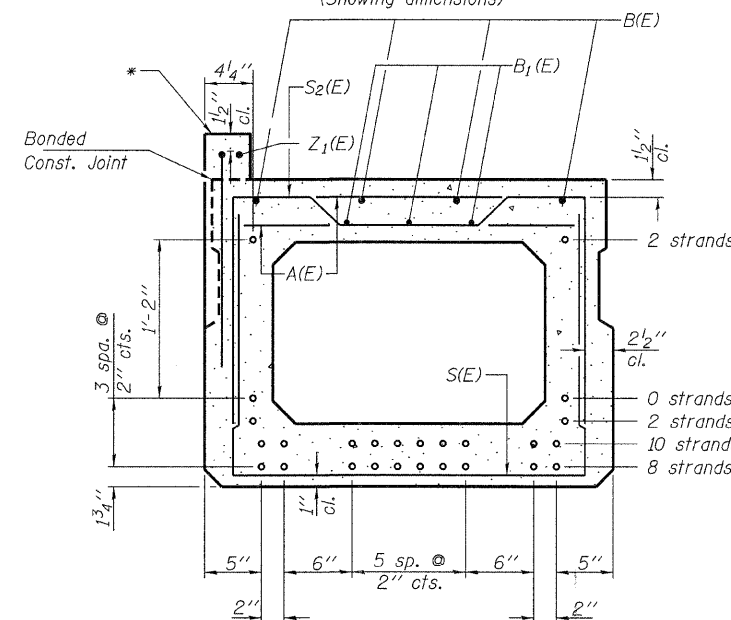
SECTION B-B
(Showing dimensions)



VIEW C-C



PLAN VIEW



SECTION B-B

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

*Drainage curb shall be constructed on outside beams center span only. Concrete shall be cast only after strands release.

BAR LIST
ONE BEAM ONLY
(For information only)

Bar	No.	Size	Length	Shape
A(E)	66	#4	2'-7"	—
B(E)	12	#5	24'-7"	—
B1(E)	9	#4	24'-3"	—
S(E)	94	#4	6'-5"	┌
S1(E)	8	#4	5'-11"	┌
S2(E)	86	#4	6'-2"	┌
S3(E)	8	#4	4'-2"	┌
S4(E)	8	#4	3'-11"	┌
U(E)	8	#5	4'-6"	┌
U1(E)	4	#4	5'-3"	┌
Z(E)	*47	#4	2'-11"	┌
Z1(E)	*3	#4	24'-3"	—

Note: See sheets 5 & 6 of 12 for additional details and Bill of Material.

MINIMUM BAR LAP

#4 bar = 2'-0"
#5 bar = 2'-6"

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 4x3-#5 etc. indicates 4 lines of bars with 3 lengths per line.

PD-2736-L

7-1-10

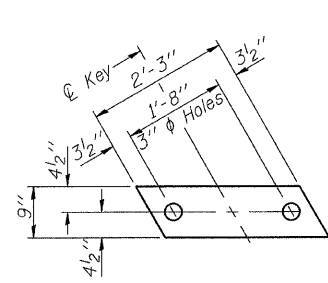
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3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62765	PLOT SCALE =	DRAWN - D.A.B.	REVISED -
ILLINOIS PROFESSIONAL DESIGN FIRM L8 / PE / SE CORP. 184.000989	PLOT DATE =	CHECKED - S.W.M.	REVISED -

STATE OF ILLINOIS
JEFFERSON COUNTY HIGHWAY DEPARTMENT

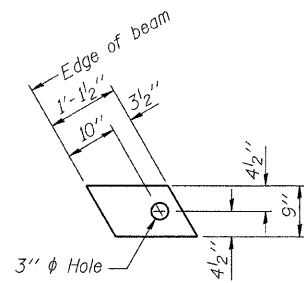
27" x 36" PPC DECK BEAM - SPAN 2
STRUCTURE NO. 041-9932

SHEET NO. 4 OF 12 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
165B	05-16113-00-BR	JEFFERSON	34	26
WEBBER ROAD DISTRICT	CONTRACT NO. 99440			
ILLINOIS FED. AID PROJECT				



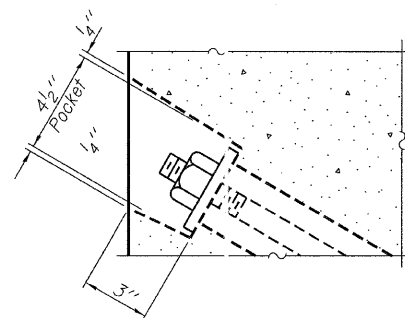
FABRIC BEARING PAD
(Interior - 16 Req'd)



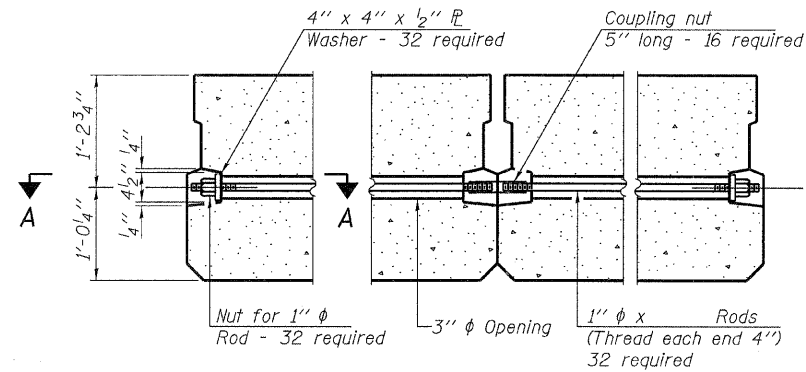
FABRIC BEARING PAD
(Exterior - 4 Req'd)

FIXED

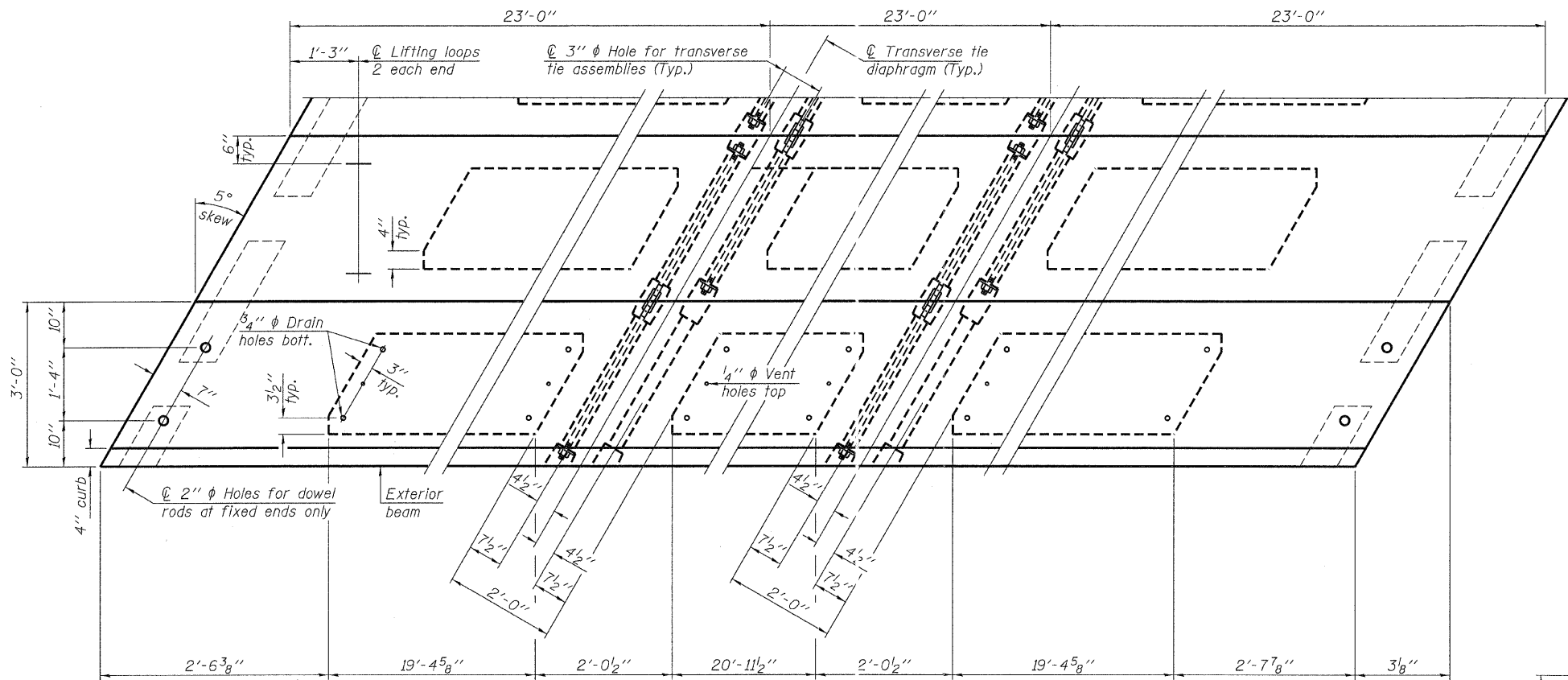
Notes:
All bearing pads shall be 1" thick.
Omit holes when using expansion bearings.
Expansion bearing pad shall be bonded to the substructure.



SECTION A-A



TYPICAL TRANSVERSE TIE ASSEMBLY

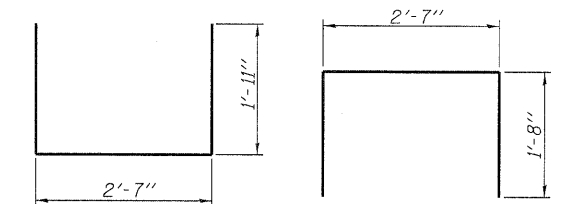


PLAN VIEW

NOTES

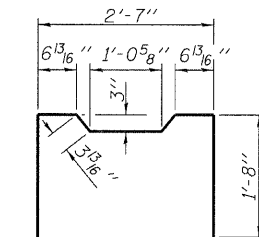
Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in. The 1" rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior 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 5/8" 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 reinforcement bars shall be epoxy coated.

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



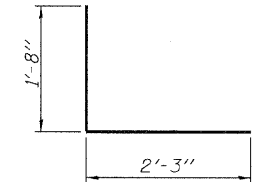
BAR S1(E)

BAR S1(E)



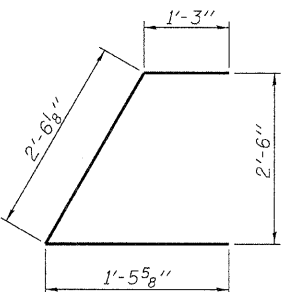
BAR S2(E)

BAR S3(E)

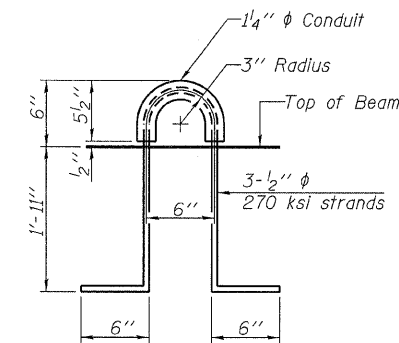


BAR S4(E)

BAR U1(E)



BAR U1(E)



LIFTING LOOP DETAIL

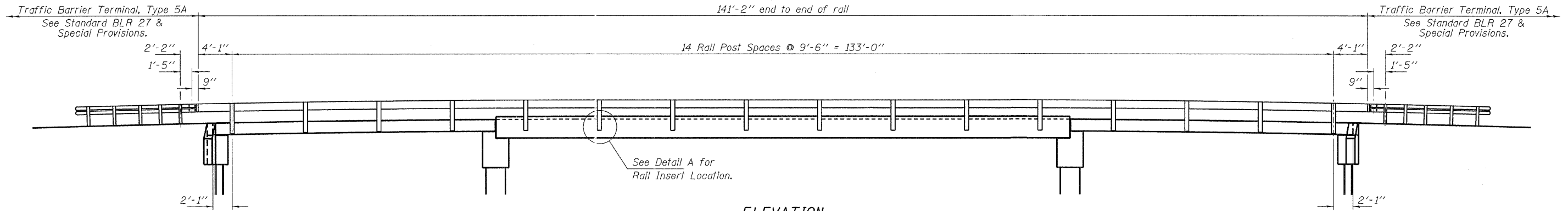
BILL OF MATERIAL

Precast Prestressed Conc. Deck Bms. (27" depth)	Sq. Ft.	1,863
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SUPERSTRUCTURE DETAILS - SPAN 2
27" X 36" PPC DECK BEAM DETAILS

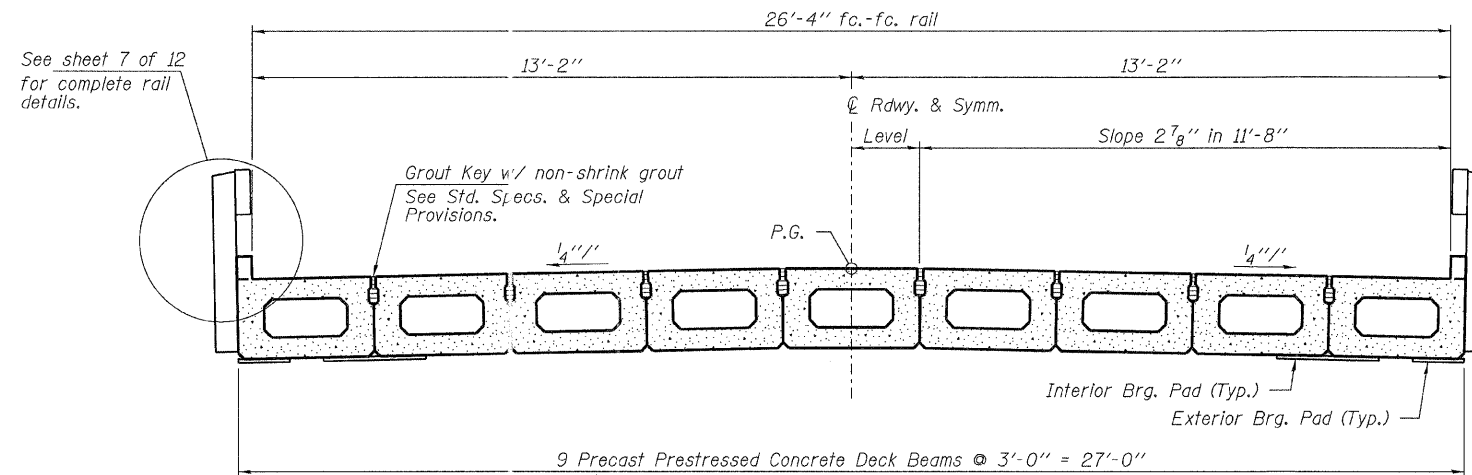
PD-2736-LD 7-1-10

FILE NAME = 090172-shr-bridge.dgn	USER NAME =	DESIGNED - A.S.L.	REVISED - 05/26/10	STATE OF ILLINOIS JEFFERSON COUNTY HIGHWAY DEPARTMENT	27" x 36" PPC DECK BEAM DETAILS - SPAN 2 STRUCTURE NO. 041-9932	T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HAMPTON, LENZINI AND RENWICK, INC.		CHECKED - S.W.M.	REVISED - 07/13/10			165B	05-16113-00-BR	JEFFERSON	34	27
3535 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703	PLOT SCALE =	DRAWN - D.A.B.	REVISED -			WEBBER ROAD DISTRICT	CONTRACT NO. 99440			
ILLINOIS PROFESSIONAL DESIGN FIRM L8 / PE / SE CORP. 184-000999	PLOT DATE =	CHECKED - S.W.M.	REVISED -			SHEET NO. 5 OF 12 SHEETS				
						ILLINOIS FED. AID PROJECT				



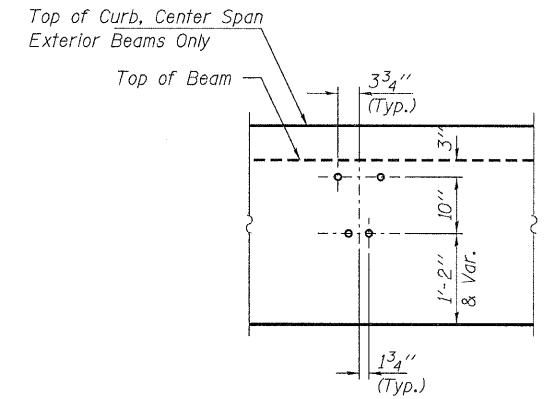
ELEVATION

Showing Rail Post Spaces
See sheet 7 of 12 for Railing Details.

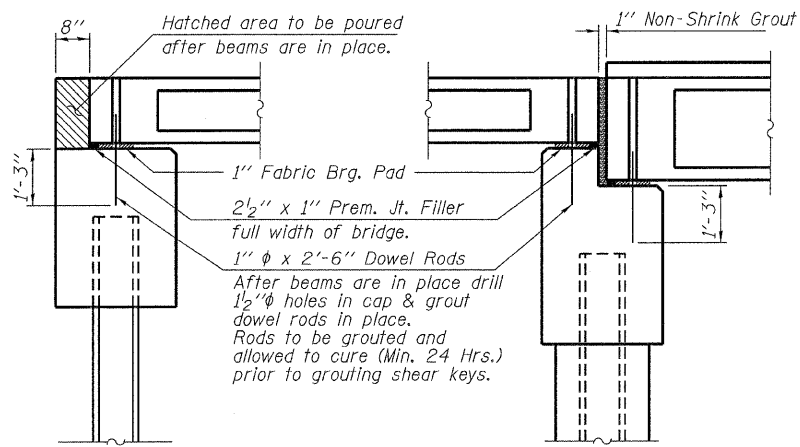


CROSS SECTION

See sheets 2 thru 5 of 12 for Superstructure.



DETAIL A



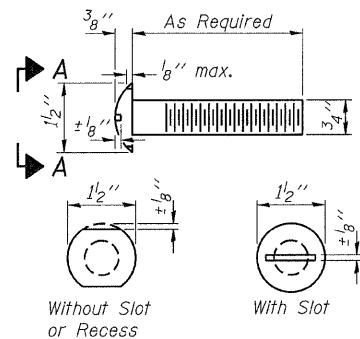
SECTION AT ABUTMENTS

© Rt. L's

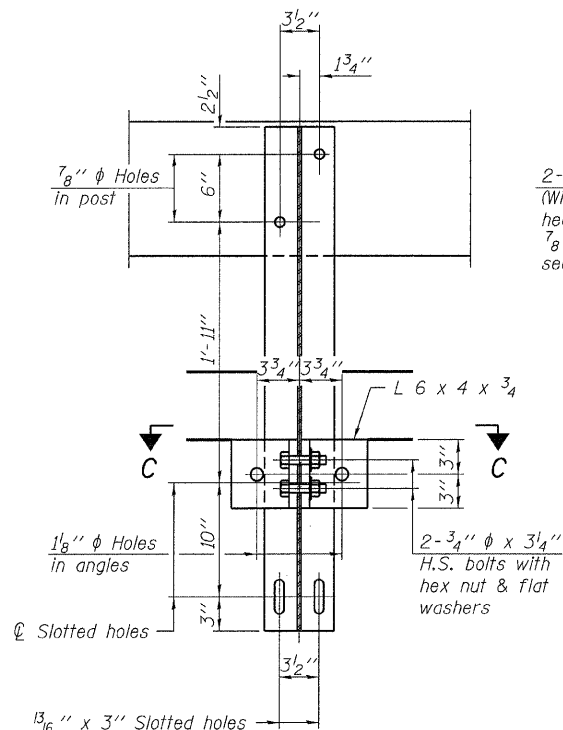
SECTION AT PIERS

© Rt. L's

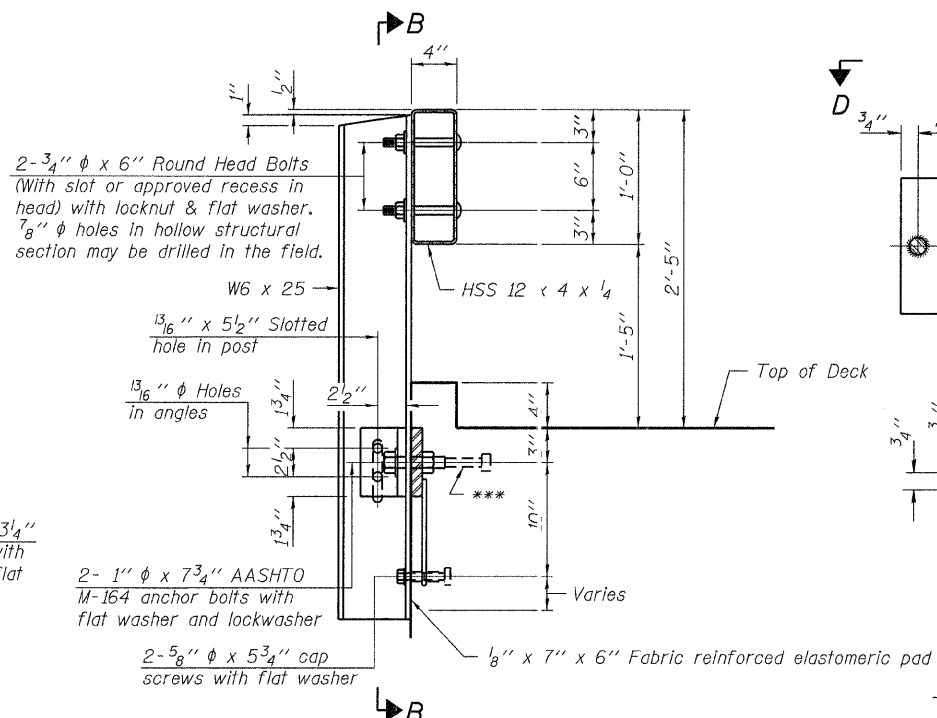
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HAMPTON, LENZINI AND RENWICK, INC. 3008 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703	PLOT SCALE =	CHECKED - S.W.M.	REVISED - 07/13/10			165B	05-16113-00-BR	JEFFERSON	34	28	
HLR ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000259	PLOT DATE =	DRAWN - D.A.B.	REVISED -			WEBBER ROAD DISTRICT		CONTRACT NO. 99440			
		CHECKED - S.W.M.	REVISED -			SHEET NO. 6 OF 12 SHEETS		ILLINOIS FED. AID PROJECT			



**VIEW A-A
ROUND HEAD BOLT**

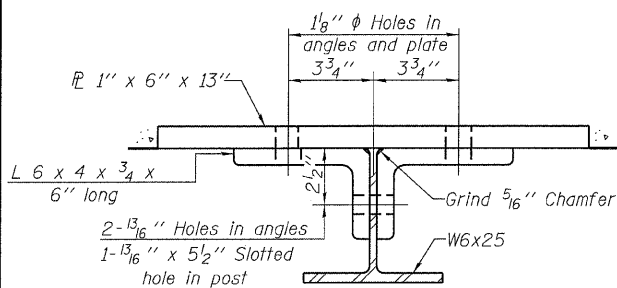


SECTION B-B

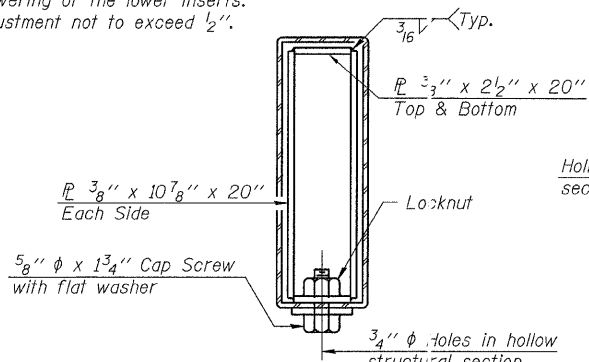


SECTION AT RAILING POST

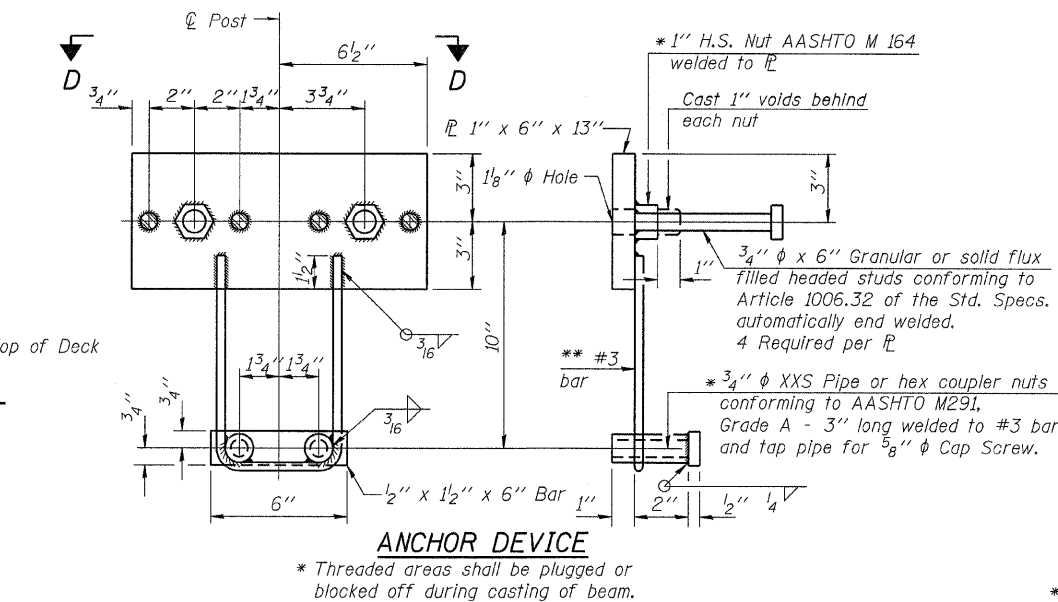
*** Whenever the lower insert assemblies interfere with strand locations, the #3 bars shall be cut and adjusted in order to allow raising or lowering of the lower inserts. Maximum adjustment not to exceed 1/2 inch.



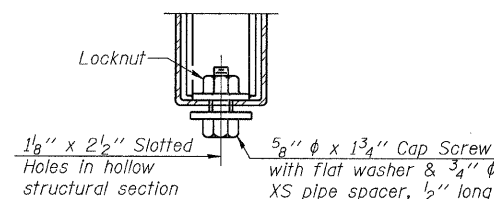
SECTION C-C



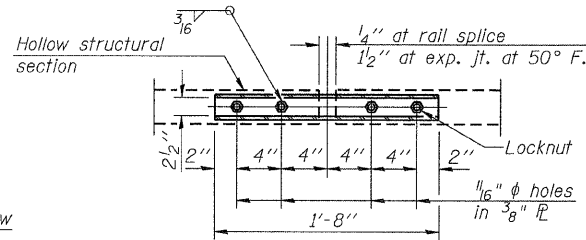
SECTIONS AT RAIL SPLICE



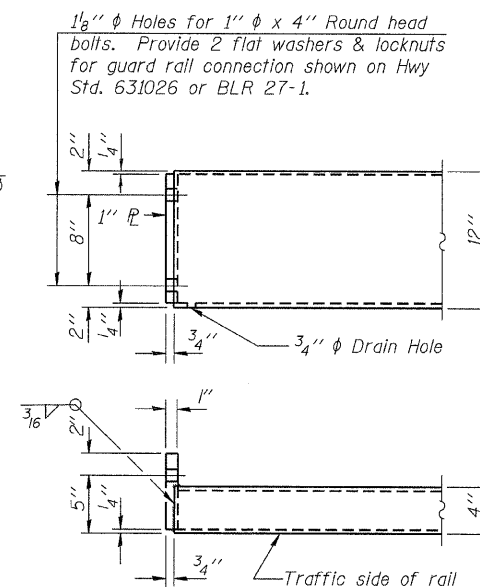
ANCHOR DEVICE



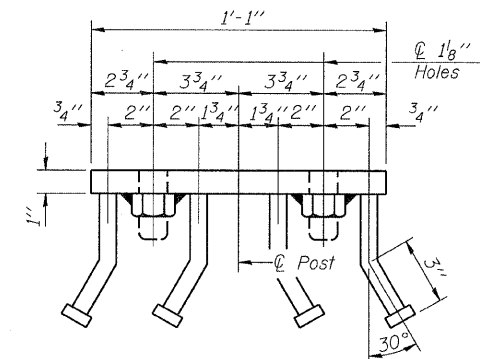
**RAIL SPLICE CONNECTION
AT EXPANSION JT.**



**PLAN-BOTT. SPLICE R
TYPICAL**



END OF RAIL DETAILS



VIEW D-D

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type S-1	Foot	283

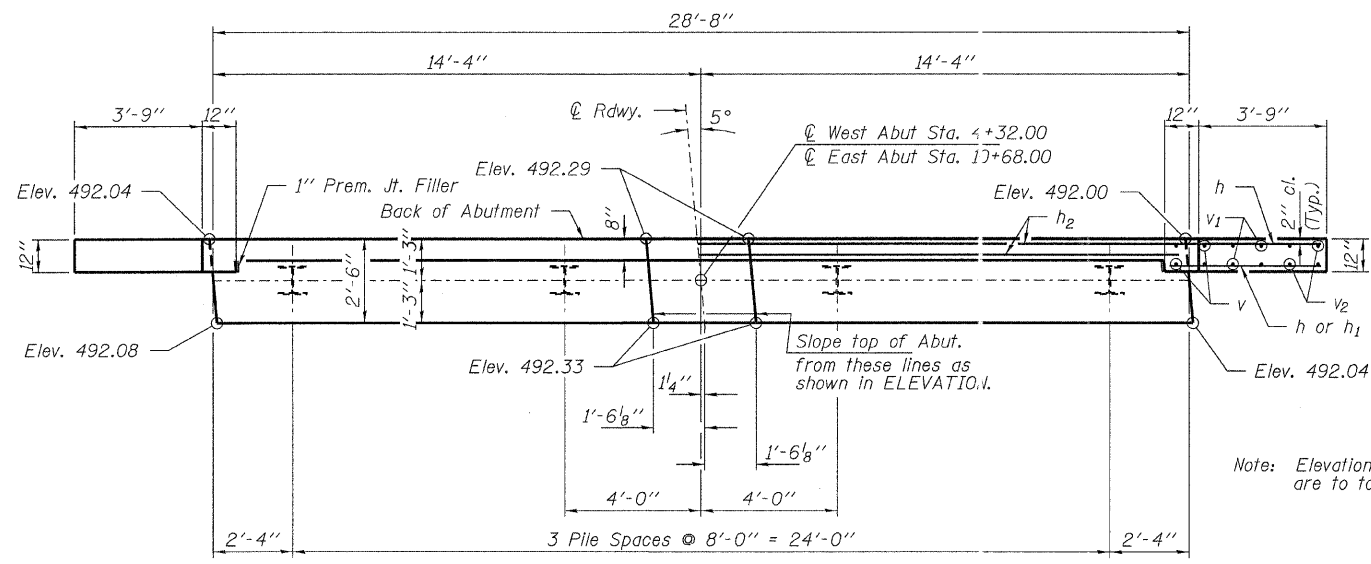
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 USER NAME =
 DESIGNED - A.S.L.
 CHECKED - S.W.M.
 DRAWN - D.A.B.
 CHECKED - S.W.M.

DESIGNED - A.S.L.
 CHECKED - S.W.M.
 DRAWN - D.A.B.
 CHECKED - S.W.M.

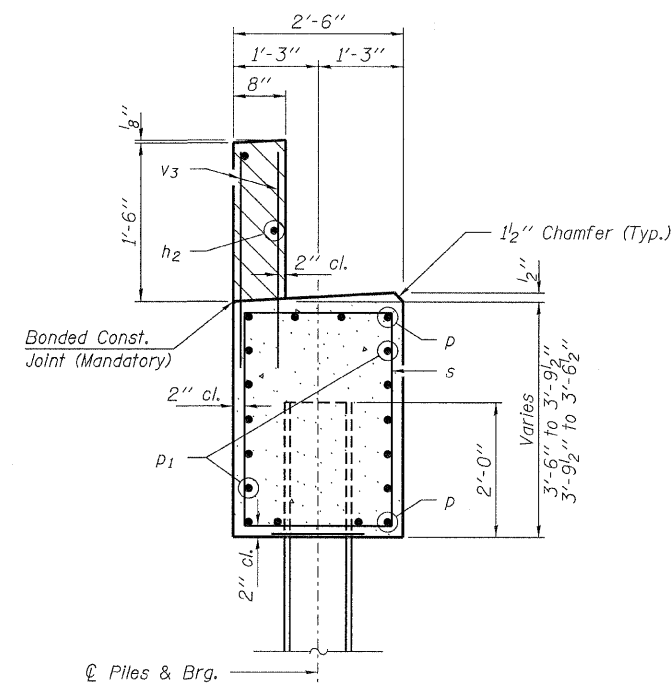
REVISI - 05/26/10
 REVISI - 07/13/10
 STATE OF ILLINOIS
 JEFFERSON COUNTY HIGHWAY DEPARTMENT

STEEL RAILING, TYPE S-1
 STRUCTURE NO. 041-9932
 SHEET NO. 7 OF 12 SHEETS

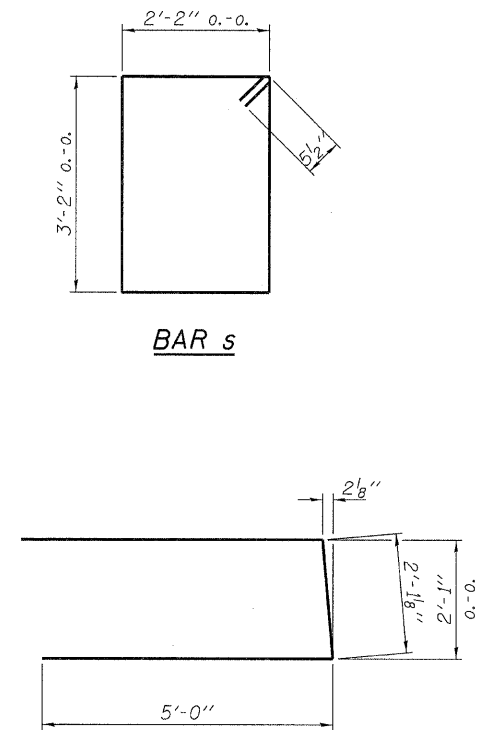
T.R. SECTION COUNTY TOTAL SHEETS SHEET NO.
 165B 05-16113-00-BR JEFFERSON 34 29
 WEBBER ROAD DISTRICT CONTRACT NO. 99440
 ILLINOIS FED. AID PROJECT



PLAN

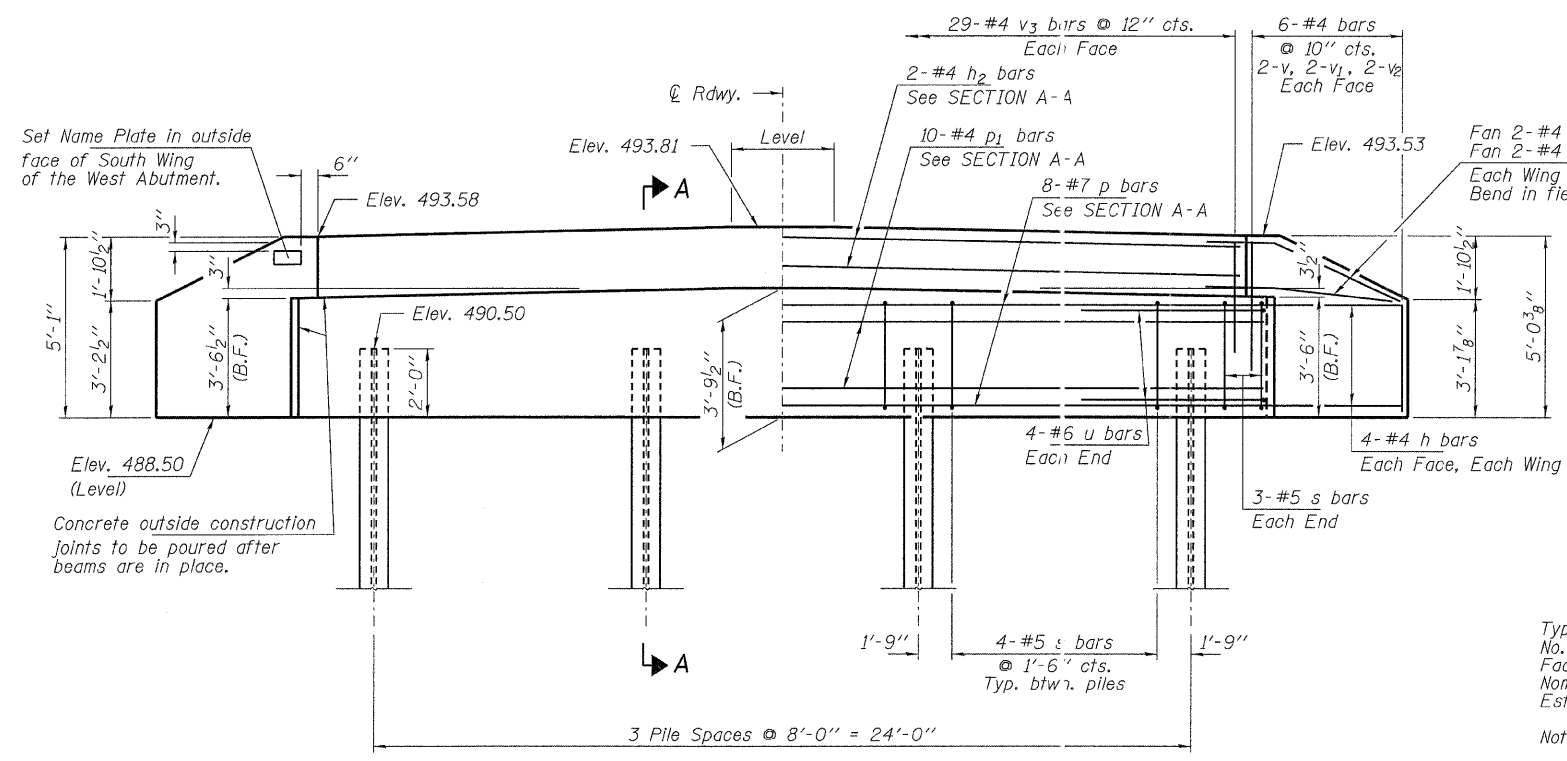


SECTION A-A



BAR s

BAR u



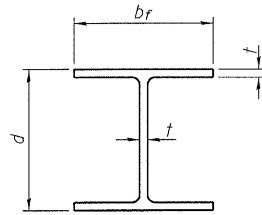
ELEVATION

PILE DATA

Type: Steel HP12x53
 No. Req'd. (2 Abutments): 8
 Factored Resistance Available (Rf): 209 Kips/Pile
 Nominal Required Bearing (Rn): 419 Kips/Pile
 Est. Length: 45 Ft/Pile
 Notes: The Steel H-Piles shall be according to AASHTO M270 Grade 50.

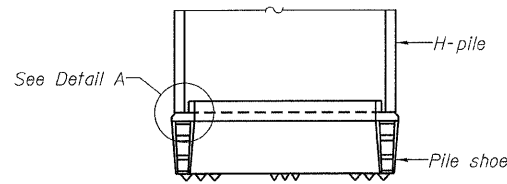
BILL OF MATERIAL - 2 ABUTS.

BAR	NO.	SIZE	LENGTH	SHAPE
h	40	#4	6'-0"	—
h1	8	#4	4'-6"	—
h2	4	#4	28'-4"	—
p	16	#7	28'-4"	—
p1	20	#4	28'-4"	—
s	38	#5	11'-7"	□
u	16	#6	12'-2"	U
v	16	#4	4'-10"	—
v1	16	#4	4'-0"	—
v2	16	#4	3'-0"	—
v3	116	#4	2'-8"	—
Concrete Structures		Cu. Yd.	24.4	
Reinforcement Bars		Pound	2,650	
Steel Piles HP12x53		Foot	360	
Name Plates		Each	1	

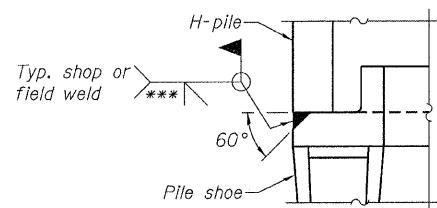


STEEL PILE TABLE

Designation	Depth d	Flange width b _f	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	13/16"	30"
x102	14"	14 3/4"	1/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"
x53	11 3/4"	12"	7/16"	24"
HP 10x57	10"	10 1/4"	9/16"	24"
x42	9 3/4"	10 1/8"	7/16"	24"
HP 8x36	8"	8 1/8"	7/16"	18"

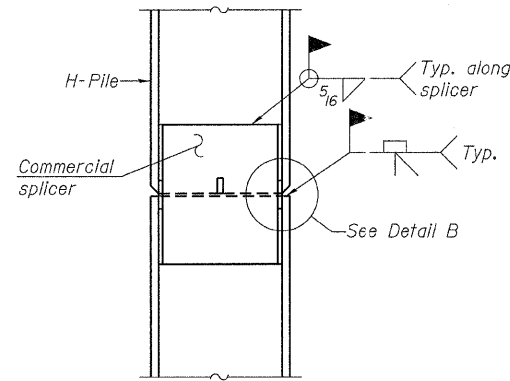


ELEVATION

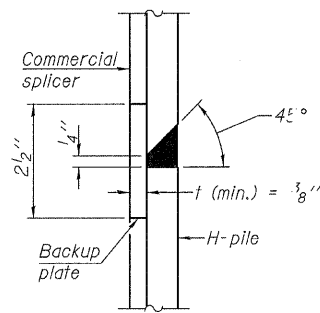


DETAIL A

H-PILE SHOE ATTACHMENT

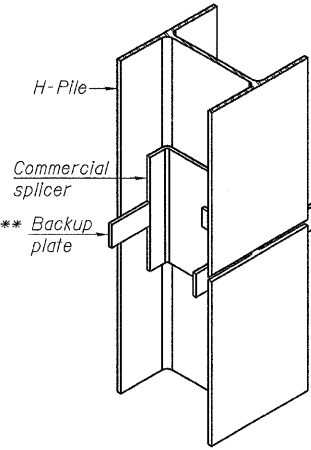


ELEVATION

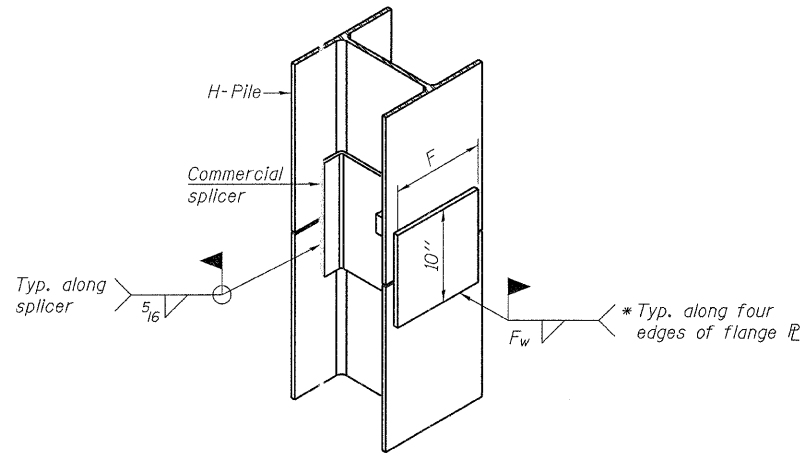


DETAIL "B"

WELDED COMMERCIAL SPLICE



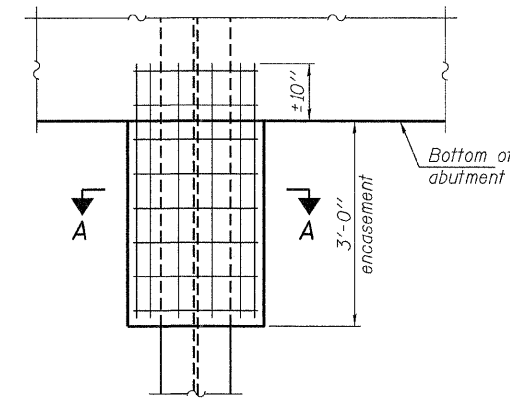
ISOMETRIC VIEW



ISOMETRIC VIEW

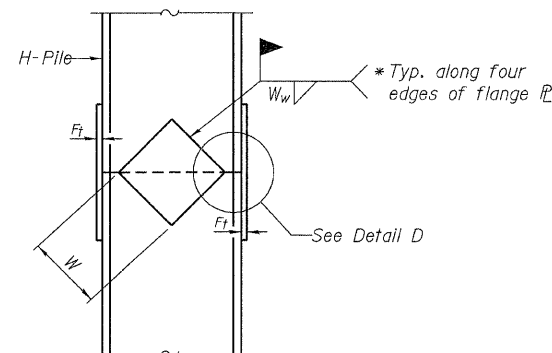
WELDED COMMERCIAL SPLICE ALTERNATE

- * Interrupt welds 1/4" from end of web and/or each flange.
- ** Remove portions of backup plates that extend outside the flanges.
- *** Weld size per pile shoe manufacturer (5/16" min.).

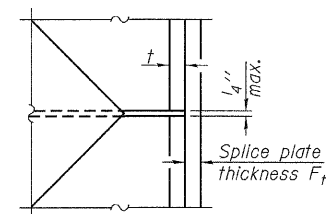


ELEVATION

PILE ENCASEMENT

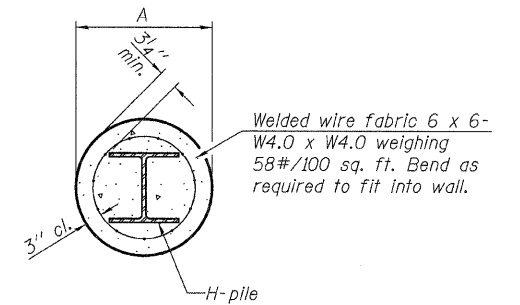


ELEVATION



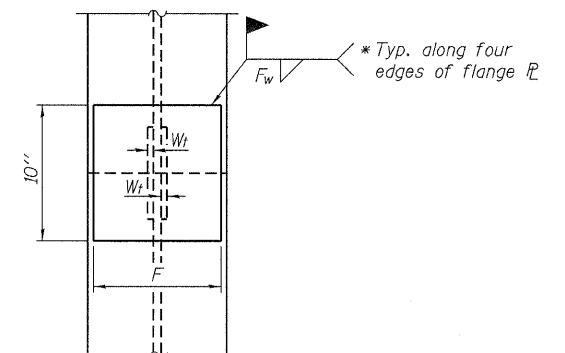
DETAIL D

WELDED PLATE FIELD SPLICE



SECTION A-A

Note:
Forms for encasement may be omitted when soil conditions permit.



END VIEW

Designation	F	F _t	F _w	W	W _t	W _w
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5/8"	1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5/8"	1/2"
x89	12 1/2"	3/4"	1/16"	7 3/4"	5/8"	1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5/8"	1/2"
HP 12x84	10"	7/8"	1/16"	6 1/2"	5/8"	1/2"
x74	10"	7/8"	1/16"	6 1/2"	5/8"	1/2"
x63	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
x53	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
HP 10x57	8"	3/4"	9/16"	5 1/4"	1/2"	3/8"
x42	8"	5/8"	9/16"	5 1/4"	1/2"	3/8"
HP 8x36	7"	5/8"	7/16"	4 1/4"	1/2"	3/8"

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

F-HP 7-1-10

FILE NAME = 090172-shr-bridge.dgn	USER NAME =	DESIGNED - A.S.L.	REVISED - 05/26/10	STATE OF ILLINOIS JEFFERSON COUNTY HIGHWAY DEPARTMENT	HP PILE DETAILS STRUCTURE NO. 041-9932	T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
HAMPTON, LENZINI AND RENWICK, INC. 3088 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703	PLLOT SCALE =	CHECKED - S.W.M.	REVISED - 07/13/10			165B	05-16113-00-BR	JEFFERSON	34	33	
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184-00089	PLLOT DATE =	DRAWN - D.A.B.	REVISED -			WEBBER ROAD DISTRICT		CONTRACT NO. 99440		[ILLINOIS] FED. AID PROJECT	
		CHECKED - S.W.M.	REVISED -			SHEET NO. 11 OF 12 SHEETS					

HOLCOMB FOUNDATION ENGINEERING INC. P.O. Box 88 618-529-5262 Carbondale, Il. 62903 618-457-8991 fax Page 1 of 1									
Bridge Foundation Boring Log									
Project: H-09298		Bridge: Denker Road		Date: 1-5-2010					
Section: 05-16113-00-BR		Station:		Bored by: J. Russell					
Structure: 041-9910				Checked By: J. Holcomb					
County: Jefferson									
Boring No: 1		Station: 9+25		Offset: 9' Lt					
Surface Water Elev.:		Ground Water Elev. During Drilling: None		Upon Completion: None					
Elevation	N	Qu	w	Elevation	N	Qu	w		
489.1	0							sandy clay (continued)	
								4" Crushed Stone and Clay Mix	
								Brown Mottled Gray Sandy CLAY (A-6)	
	4	1.25	21		8	1.85	19		
								462.6	
	4	1.35	20		10	1.85	19	Brown Mottled Gray Sandy CLAY (A-6)	
								480.1	
	8	2.65	18					Gray Mottled Brown Sandy CLAY (A-6)	
								477.6	
	9	4.55	14		29	9.58	11	Brown Mottled Gray Sandy CLAY (A-6)	
								475.1	
	9	1.75	20					Gray Mottled Brown Sandy CLAY (A-6)	
								472.6	
	9	1.25	22		100/5"	--	8	Gray Silty CLAY (A-6)	
								450.1	
					100/5"	--	6	Brown Mottled Gray SHALE	
								448.1	
	4	1.15	27					Gray SHALE	
								445.1	
	6	1.78	18		100/6"	--	7	Gray Mot. Brown Sandy CLAY(A-6)	
End of Boring @ -44.0'									
N = Standard Penetration Test Blows per foot to drive 2" O.D. Split Spoon Sampler 12" with a 140 lbs. hammer falling 30"					Qu-Unconfined Compressive Strength in tons/sq.ft. w-Water Content-percentage of oven dry weight-%				
B = Bulge Failure S = Shear Failure E = Estimated Value P = Penetrometer									

BORING 1

HOLCOMB FOUNDATION ENGINEERING INC. P.O. Box 88 618-529-5262 Carbondale, Il. 62903 618-457-8991 fax Page 1 of 1									
Bridge Foundation Boring Log									
Project: H-09298		Bridge: Denker Road		Date: 1-5-2010					
Section: 05-16113-00-BR		Station:		Bored by: J. Russell					
Structure: 041-9910				Checked By: J. Holcomb					
County: Jefferson									
Boring No: 2		Station: 10+75		Offset: 9' Rt					
Surface Water Elev.:		Ground Water Elev. During Drilling: 461.3		Upon Completion: Plugged					
Elevation	N	Qu	w	Elevation	N	Qu	w		
491.3	0							sandy clay (continued)	
								4" Crushed Stone and Clay Mix	
								Brown Mottled Gray Sandy CLAY (A-6)	
	7	1.15	18		8	2.05	14		
								464.8	
	6	2.75	17		7	1.75	19	Brown Mottled Gray Sandy CLAY (A-6)	
								484.8	
	9	4.65	14		8	1.88	17	Gray Mottled Brown Sandy CLAY (A-6)	
								479.8	
	14	2.85	14		30	7.88	11	Brown Mottled Gray Sandy CLAY (A-6)	
								475.1	
	11	4.55	16					Gray Mottled Brown Sandy CLAY (A-6)	
								474.8	
	10	4.15	18		100/5"	--	8	Gray Mottled Brown Silty CLAY (A-6)	
								452.3	
					100/6"	--	7	Brown Mottled Gray SHALE	
								447.3	
	10	1.45	20		100/6"	--	6	Gray Mot. Brown Sandy CLAY(A-6)	
End of Boring @ -44.0'									
N = Standard Penetration Test Blows per foot to drive 2" O.D. Split Spoon Sampler 12" with a 140 lbs. hammer falling 30"					Qu-Unconfined Compressive Strength in tons/sq.ft. w-Water Content-percentage of oven dry weight-%				
B = Bulge Failure S = Shear Failure E = Estimated Value P = Penetrometer									

BORING 2