ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 10	03-03113 -00-BR	JEFFERSON	15	1
FED. ROAD DIST. NO.		ILLINOIS	CONTRACT NO. 99362	

INDEX OF SHEETS

HIGHWAY STANDARDS

000001-05	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
515001-03	NAME PLATE FOR BRIDGES
701901-01	TRAFFIC CONTROL DEVICES
BLR 21-8	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

UTILITIES

ELECTRIC:

AMEREN IP
1800 W. MAIN
MARION, IL 62959
618-236-6207
ATTN: STEVE RALSTON

TELEPHONE:

FRONTIER COMMUNICATIONS
300 LONE OAK ROAD
PADUCAH, KY 42001
ATTN: BILL DANIEL

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED HIGHWAY BRIDGE PROGRAM

PROJECT BROS-081(50)
SECTION 03-03113-00-BR
CASNER ROAD DISTRICT
JEFFERSON COUNTY
T.R. 10 / N. DOPPLER ROAD
PROPOSED STRUCTURE NO. 041-3742
JOB NO. C-99-584-06

LOCATION OF SECTION INDICATED THUS: –

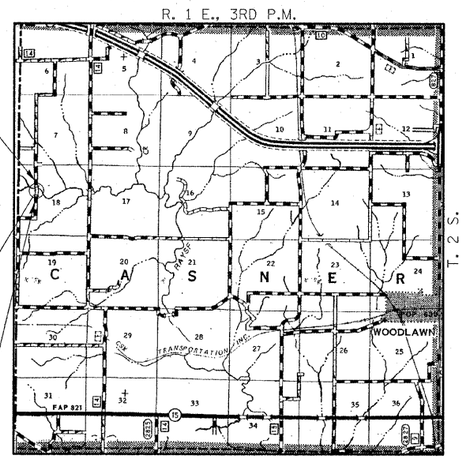
DESIGN DESIGNATION

FUNCTIONAL CLASSIFICATION:	LOCAL ROAD (0-250 ADT)
DESIGN SPEED:	50 MPH
DESIGN TRAFFIC:	80 ADT (2009)
DESIGN GUIDELINES:	3R

IMPROVEMENT ENDS STATION 11+00

STA. 10+00
PRECAST PRESTRESSED CONCRETE DECK BEAM BRIDGE. THREE SPANS @ 44'-0"
24'-0" RDWY.; SKEW = 5°
EXISTING STRUCTURE NO. 041-3064
PROPOSED STRUCTURE NO. 041-3742

IMPROVEMENT BEGINS STATION 8+50



LOCATION MAP

APPROXIMATE SCALE: 0 — 1 MILE

NET LENGTH OF SECTION = 250.00 FEET = 0.047 MILES

N

100' 200' 300' — 1" = 100'
0 10' 20' 30' — 1" = 10'
0 50' 100' — 1" = 50'
0 50' 100' — 1" = 40'
0 50' 100' — 1" = 30'
0 50' 100' — 1" = 20'

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.

WARNING

CALL JULIE TOLL FREE 1-800-892-0123

CALL 811 BEFORE YOU DIG

JEFFERSON COUNTY HIGHWAY DEPT.

APPROVED JANUARY 26 20 09
Kevin Ballis
ROAD DISTRICT COMMISSIONER

APPROVED JANUARY 26 20 09
Steve Schrah
COUNTY ENGINEER

PASSED 2/9 20 09
Richard W. Metzler
DISTRICT NINE ENGINEER OF LOCAL ROADS & STREETS

Releasing For Bid Based on Limited Review Feb 10 20 09
Mary C. Hamis
DEPUTY DIRECTOR OF HIGHWAYS
REGION FIVE ENGINEER
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DATE: 11/22/2009
LOUIS F. STAUDER 062-34227 PROFESSIONAL ENGINEER STATE OF ILLINOIS
EXPIRES: 11/30/2009

HAMPTON, LENZINI & RENWICK, INC.
CIVIL & STRUCTURAL ENGINEERS
LAND SURVEYORS
3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
(217) 546-3400
ELGIN • SPRINGFIELD

PROJECT NUMBER: 08.0127.130 DATE: 01/21/09

CONTRACT NO. 99362

SUMMARY OF QUANTITIES

	CODE No.	ITEM	CONST. CODE X080 - 2R UNIT	TOTAL
	20200100	EARTH EXCAVATION	CU YD	25
	20300100	CHANNEL EXCAVATION	CU YD	1095
	21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	222
^	25001000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.1
^	28101700	RIPRAP, SPECIAL	TON	270
	40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	95
	50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
	50300225	CONCRETE STRUCTURES	CU YD	42
	50300280	CONCRETE ENCASEMENT	CU YD	15.8
	50400305	PRECAST PRESTRESSED CONCRETE DECK BEAMS (17" DEPTH)	SQ FT	3168
	50800105	REINFORCEMENT BARS	POUND	4240
●	50900205	STEEL RAILING, TYPE S1	FOOT	259
	51201600	FURNISHING STEEL PILES HP12X53	FOOT	720
	51202305	DRIVING PILES	FOOT	720
	51500100	NAME PLATES	EACH	1
	59300100	CONTROLLED LOW-STRENGTH MATERIAL	CU YD	40
^	67100100	MOBILIZATION	L SUM	1
● ^	78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4

^ - SEE SPECIAL PROVISIONS

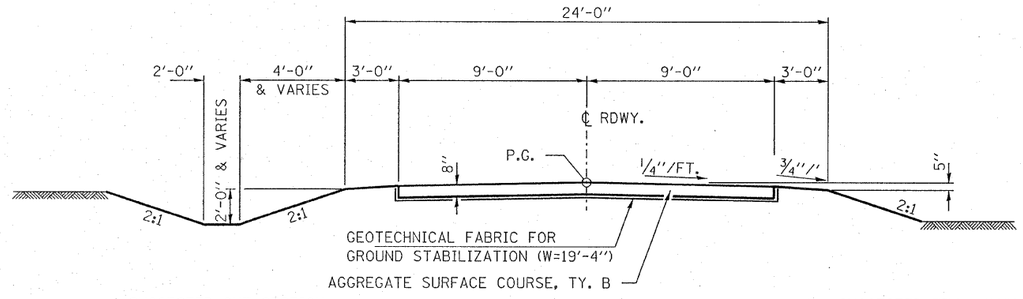
● - ~~SECURITY SYSTEMS~~

SEEDING TABLE

LOCATION	CLASS 2 (SPECIAL) 25001000 ACRE
TR 10	
STA. 8+50 TO STA. 9+33.35	0.06
STA. 10+66.75 TO STA. 11+00	0.03
TOTAL	0.09
USE	0.10

ROADWAY SCHEDULE

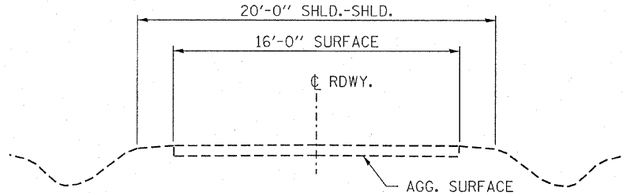
LOCATION	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION 21001000 SQ YD	AGGREGATE SURFACE COURSE TYPE B 8" 40200800 TON
TR 10		
STA. 8+50 TO STA. 9+33.25	162	68
STA. 10+66.75 TO STA. 11+00	60	25
SUB TOTAL	222	93
USE	222	95



TYPICAL CROSS SECTION

STA. 8+50.00 TO 9+33.25
STA. 10+66.75 TO 11+00.00

TRANSITION FROM THE PROPOSED ROADWAY TO THE EXISTING ROADWAY IS TO BE CONSTRUCTED FROM STA. 8+50 TO 9+00 AND STA. 10+66.75 TO 11+00. SEE SHEET 6 FOR TRANSITION AT BRIDGE.



EXISTING CROSS SECTION

STA. 8+50.00 TO 11+00.00

GENERAL NOTES

1 ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED JANUARY 1, 2007," THESE PLANS AND THE SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS.

2 ALL CLEARING AND GRUBBING, FENCE REMOVAL AND REMOVAL OF EXISTING DRAINAGE STRUCTURES SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION. THE REMOVAL OF THE EXISTING BITUMINOUS SURFACE WILL BE PAID FOR AS EARTH EXCAVATION. ALL BITUMINOUS MATERIAL SHALL BE PROPERLY DISPOSED OF BY THE CONTRACTOR IN A METHOD APPROVED BY THE ENGINEER. PROPER DISPOSAL OF BITUMINOUS MATERIAL SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

3 THE LOCATION OF EXISTING GAS MAINS, ELECTRIC POWER LINES, TELEPHONE LINES AND OTHER UTILITIES AS SHOWN ON THE PLANS ARE BASED ON CAREFUL FIELD INVESTIGATION 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.

4 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.

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

6 THE FENCES WILL BE REMOVED BY OTHERS. CONTRACTOR SHALL NOTIFY THE ENGINEER, 5 DAYS BEFORE HIS INTENDED START DATE FOR THE FENCE TO BE RELOCATED.

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

AGGREGATE SURFACE COURSE	2.05 TON/CU YD
RIPRAP, SPECIAL	1.75 TON/CU YD
CEMENT FOR CLSM	200 LBS/CUYD

8 THE AREA TO BE SEEDED SHALL CONSIST OF ALL DISTURBED EARTH SURFACES WITHIN THE R.O.W. AS DIRECTED BY THE ENGINEER.

EARTHWORK SCHEDULE

LOCATION	EARTH EXCAVATION 20200100 CU.YD.	CHANNEL EXCAVATION 20300100 CU.YD.	SHRINKAGE FACTOR	PERCENT USED	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE CU.YD.	EMBANKMENT REQUIRED CU.YD.	EARTHWORK BALANCE CU.YD.
TR 10							
STA 8+50 TO STA 9+33.25	11		25.00%	100.00%	8	54	-46
STA 10+66.75 TO STA 11+00	10		25.00%	100.00%	8	0	8
							0
CHANNEL EXCAVATION		1095	25.00%	70.00%	575		575
							0
TOTAL	21	1095			591	54	537
TOTAL USE	25	1095					537

WASTE 537 CU YDS

FILE NAME = 080127-sht-rdw.dgn	USER NAME =	DESIGNED - L.F.S.	REVISED -
		DRAWN - D.T.M.	REVISED -
	PLOT SCALE =	CHECKED - S.W.M.	REVISED -
	PLOT DATE = 1/21/2009	DATE - 12/15/08	REVISED -

STATE OF ILLINOIS
JEFFERSON COUNTY HIGHWAY DEPARTMENT

HAMPTON, LENZINI & RENWICK, INC.
CIVIL & STRUCTURAL ENGINEERS
LAND SURVEYORS

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

SUMMARY OF QUANTITIES AND GENERAL NOTES

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10	03-03113-00-BR	JEFFERSON	15	2
CASNER ROAD DISTRICT		CONTRACT NO. 99362		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

MARVIN & ORVILLE BOLD
SE¼, NW¼, SEC 18, T. 2 S., R. 1 E., 3RD P.M.

G.P.
SE¼, NW¼, SEC 18, T. 2 S., R. 1 E., 3RD P.M.

P.O.T. STA. 6+00.00
(TO BE SET)
N. 10,000.00
E. 10,000.00

WETLANDS SITE 1

STATION 10+00
PRECAST PRESTRESSED CONCRETE DECK BEAM
BRIDGE, 3 SPANS @ 44'-0"
24'-0" RDWY.; SKEW = 0°
PROPOSED STRUCTURE NO. 041-3742

CREEK

P.O.T. STA. 13+20.00
(TO BE SET)
N. 10,720.00
E. 10,000.00

N

0 20' 40'
GRAPHIC SCALE

CONSTRUCTION LIMITS

EXISTING R.O.W. LINE

℄ PROPOSED IMPROVEMENT

25' R.O.W.
25' EXIST.

7 8 9 10 11 OIL & CHIP 12 13

90°

IMPROVEMENT BEGINS
STATION 8+50

CONSTRUCTION LIMITS

EXISTING R.O.W. LINE

IMPROVEMENT ENDS
STATION 11+00

RAYSE

RAYMOND GROSS
SW¼, NW¼, SEC 18, T. 2 S., R. 1 E., 3RD P.M.

CHANNEL EXCAVATION

THE CHANNEL SHALL BE EXCAVATED AS SHOWN IN THE PLANS WITH 2:1 SIDE SLOPES WITHIN THE LIMITS OF THE PROPOSED STRUCTURE, THEN TAPER TO THE EXISTING CHANNEL AT THE R.O.W. LINES. ONLY SUITABLE EXCAVATED MATERIAL SHALL BE USED IN THE EMBANKMENT.
CHANNEL EXCAVATION = 1,095 CU YD

EXISTING STRUCTURE NO. 041-3064

STATION 10+10 - SINGLE SPAN STEEL I-BEAM BRIDGE ON CLOSED TIMBER ABUTMENTS AND WINGWALLS.
49.4' FC.-FC. ABUTS; 18.00' o.-o. DECK

PLAN
SURVEYED BY
PLOTTED BY
ALIGNMENT CHECKED BY
GRADES CHECKED BY
BM. NOTED BY
STRUCTURE NO.
TYPE OF FILE NAME
NOTE BOOK
NO.
DATE

PROFILE
SURVEYED BY
PLOTTED BY
GRADES CHECKED BY
BM. NOTED BY
STRUCTURE NO.
TYPE OF FILE NAME
NOTE BOOK
NO.
DATE

VPI STA. 9+33.25
ELEV. 479.00

VPI STA. 10+66.75
ELEV. 479.88

BM #1 RR SPIKE IN 16" BIRCH TREE
45' RT. STA. 10+32
ELEV. 476.24

100 YEAR H.W. ELEV. 477.2
15 YEAR H.W. ELEV. 477.0

PROPOSED ℄ GRADE

EXISTING ℄ GRADE

+1.08% +0.66% +0.66% +0.36%

1:2 1:2

RIPRAP, SPECIAL

CHANNEL EXCAVATION

℄ ELEV. 464.5

500 495 490 485 480 475 470 465 460

478.1 478.0 478.0 477.9 478.0 478.1 478.10 478.1 478.64 478.4 478.6 479.11 478.8 479.44 479.2 479.77 479.6 480.00 480.1 480.2 480.4 480.5 481.0 481.4 481.9 482.4

7+50 8+00 8+50 9+00 9+50 10+00 10+50 11+00 11+50 12+00 12+50 13+00

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	PLOT DATE = 1/21/2009	DATE - 11/18/08	REVISED -

STATE OF ILLINOIS
JEFFERSON COUNTY HIGHWAY DEPARTMENT

HAMPTON, LENZINI & RENWICK, INC.
CIVIL & STRUCTURAL ENGINEERS
LAND SURVEYORS

SCALE: 1" = 20' | SHEET NO. 1 OF 1 SHEETS

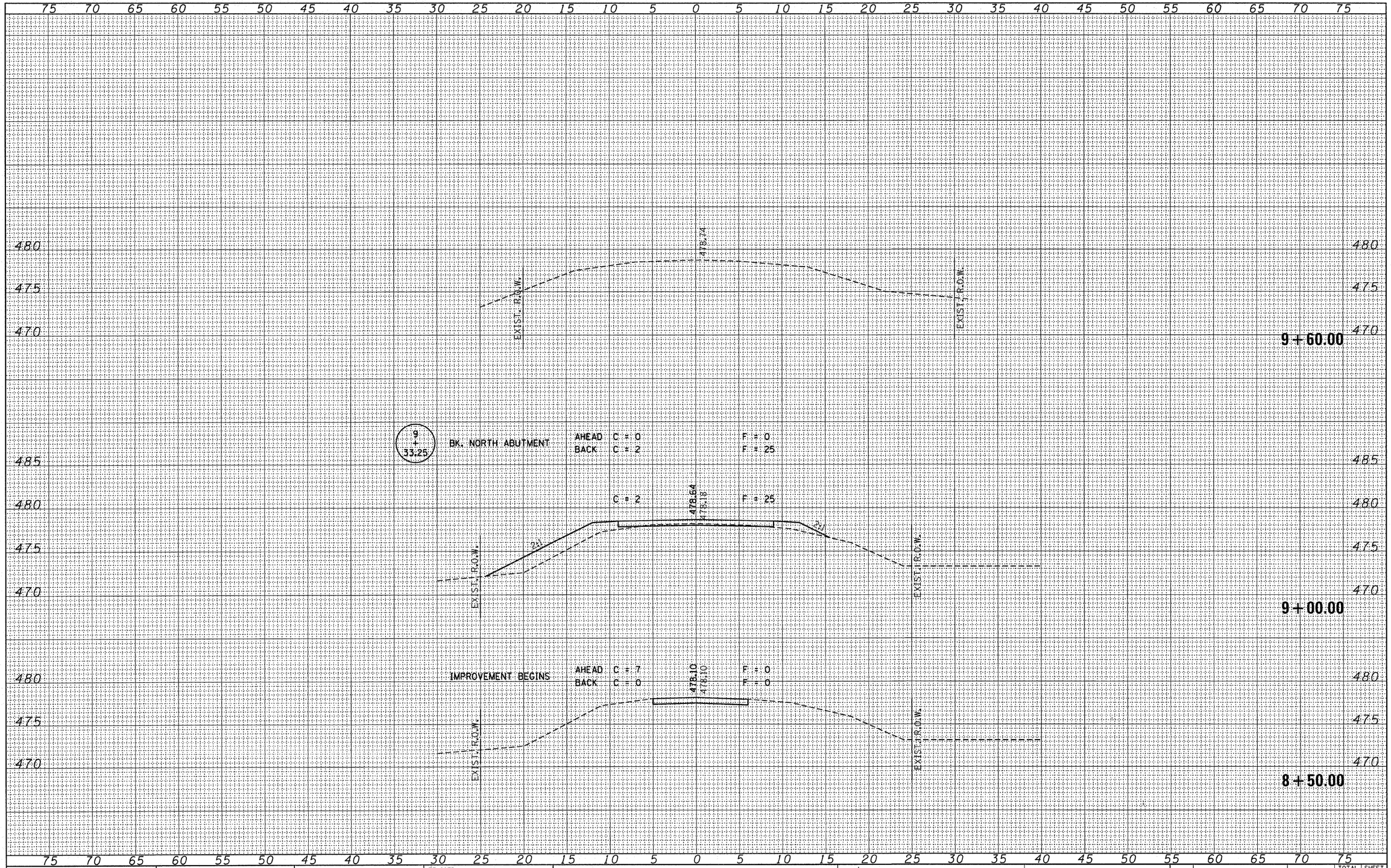
PLAN & PROFILE

STA. 7+00 TO STA. 13+00

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10	03-03113-00-BR	JEFFERSON	15	3
CASNER ROAD DISTRICT		CONTRACT NO. 99362		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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

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



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	PLOT SCALE =	CHECKED - S.W.M.	REVISED -
	PLOT DATE = 1/21/2009	DATE - 11/18/08	REVISED -

STATE OF ILLINOIS
JEFFERSON COUNTY HIGHWAY DEPARTMENT

HAMPTON, LENZINI & RENWICK, INC.
CIVIL & STRUCTURAL ENGINEERS
LAND SURVEYORS

SCALE: 5H:5V | SHEET NO. OF SHEETS

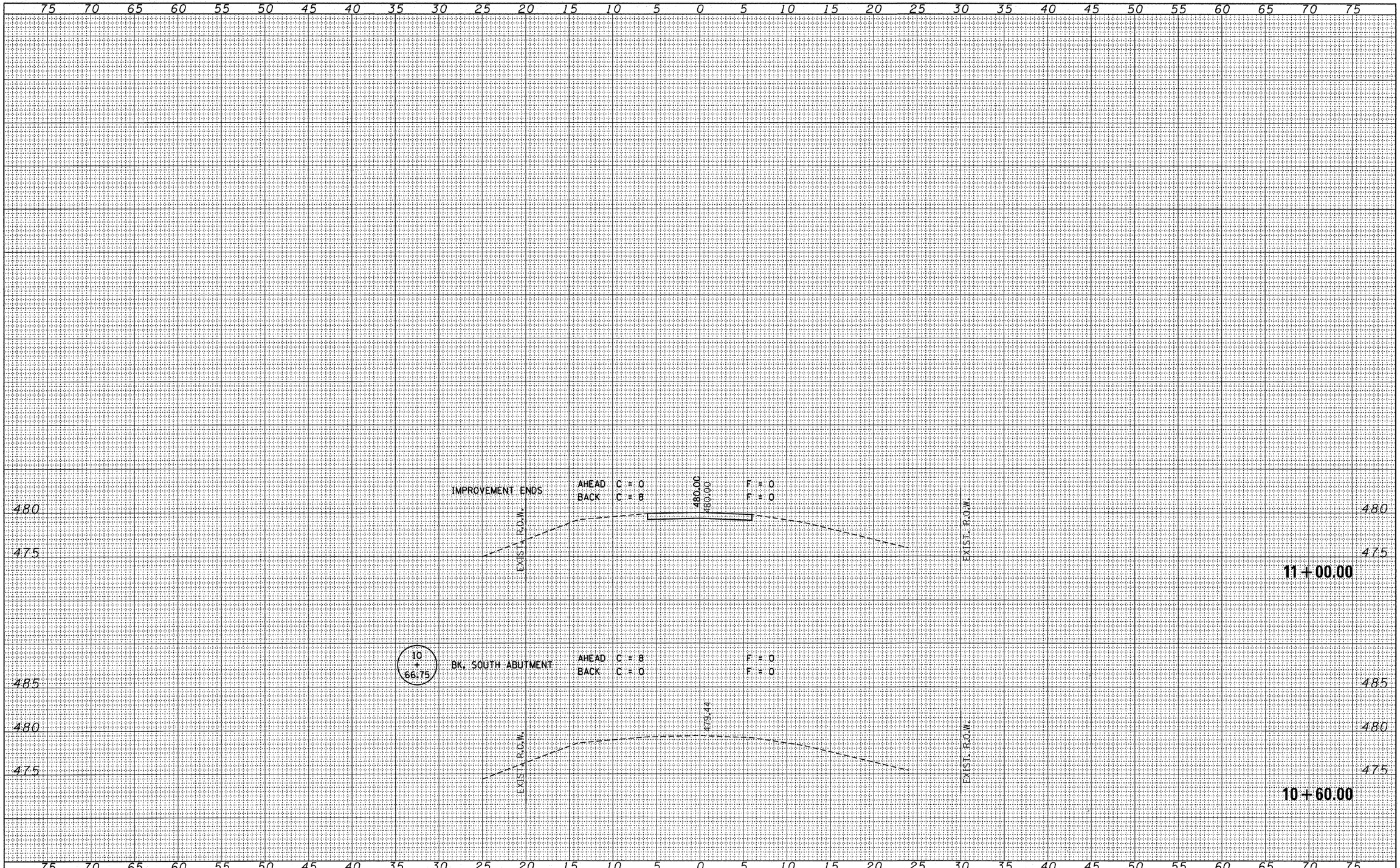
CROSS SECTIONS

STA. 8+50.00 TO STA. 9+60.00

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10	03-03113-00-BR	JEFFERSON	15	4
CASNER ROAD DISTRICT		CONTRACT NO. 99362		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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

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



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		DRAWN - D.T.M.	REVISED -		
	PLOT SCALE =	CHECKED - S.W.M.	REVISED -		
	PLOT DATE = 1/21/2009	DATE - 11/18/08	REVISED -		

CROSS SECTIONS

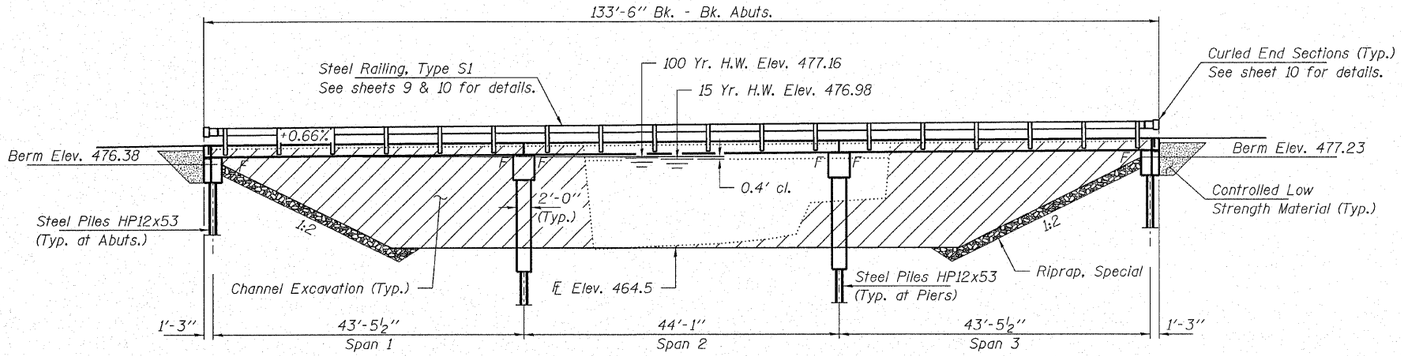
SCALE: 5H:5V | SHEET NO. OF SHEETS | STA. 10+60.00 TO STA. 11+00.00

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10	03-03113-00-BR	JEFFERSON	15	5
CASNER ROAD DISTRICT		CONTRACT NO. 99362		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

BENCHMARK: BM#1 - Railroad Spike in 16" Birch Tree, 45' Rt. Sta. 10+32, Elev. 476.24

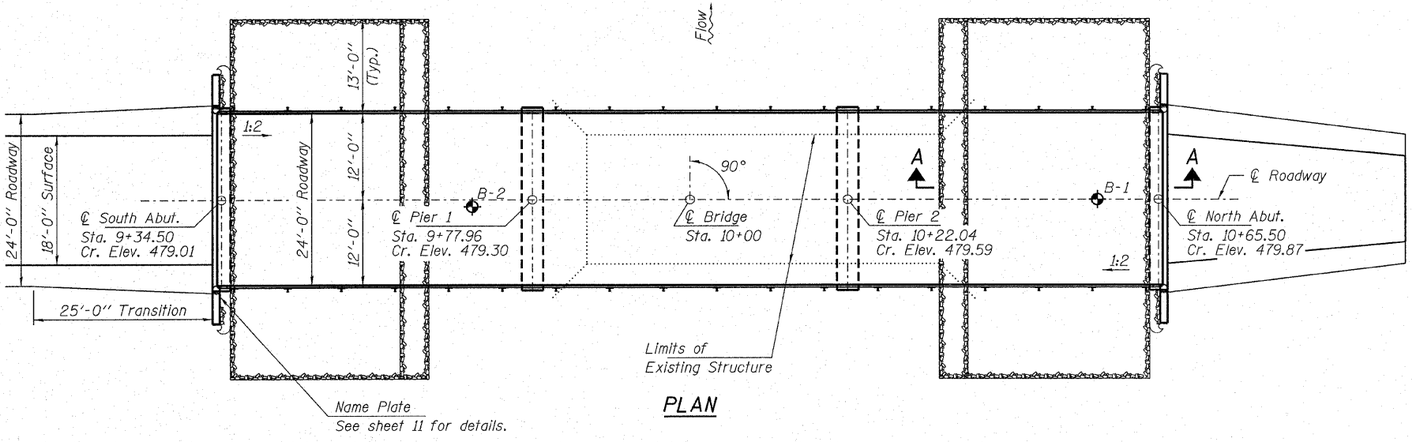
EXISTING STRUCTURE NO. 041-3064: Station 10+10 - Single span steel I-beam bridge on closed timber abutments and wingwalls. 49.4' fc.-fc. abuts.; 18.0' o.-o. deck
Structure closed to traffic.

No Salvage



ELEVATION

N



PLAN

GENERAL NOTES

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

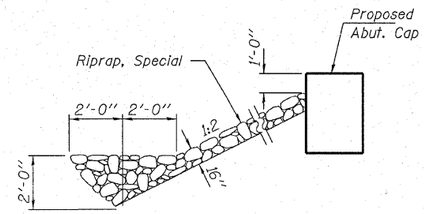
All proposed construction activities shall be in accordance with Nationwide Permit number 14 of the Department of the Army authorized under Section 404 of the Clean Water Act. The IEPA has issued Section 401 Water Quality Certification for this activity. See Special Provisions for conditions.

See sheet 15 for Borings.

BROS-081(50)
RAYSE CREEK
BUILT 200_ BY
JEFFERSON COUNTY
SEC. 03-03113-00-BR
CASNER ROAD DISTRICT
STR. NO. 041-3742
LOADING HL-93

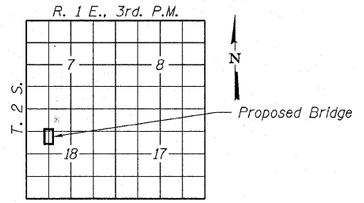
NAME PLATE

See Std. 515001



SECTION A-A

Note: See Special Provisions for Riprap, Special.



LOCATION SKETCH

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Channel Excavation	Cu. Yd.			1,095
Riprap, Special	Ton			270
Removal of Existing Structures	Each			1
Concrete Structures	Cu. Yd.		42.0	42.0
Concrete Encasement	Cu. Yd.		15.8	15.8
Precast Prestressed Concrete Deck Beams (17" Depth)	Sq. Ft.	3,168		3,168
Reinforcement Bars	Pound		4,240	4,240
Steel Railing, Type S1	Foot	259		259
Furnishing Steel Piles HP12x53	Foot		720	720
Driving Piles	Foot		720	720
Name Plates	Each		1	1
Controlled Low Strength Material	Cu. Yd.		40	40

DESIGN STRESSES

FIELD UNITS

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

PRECAST PRESTRESSED UNITS

f'c = 6,000 psi
f'ci = 5,000 psi
fpu = 270,000 psi (½"ϕ low lax. strands)
fpbt = 201,960 psi (½"ϕ low lax. strands)
fy = 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) = 3
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.431g
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.848g
Soil Site Class = E

WATERWAY DATA

Drainage Area ---------- 14.54 Sq. Mi.
Existing Opening (15 yr) ---------- 382 Sq. Ft.
Req'd Opening (15 yr) ---------- 1,191 Sq. Ft.
Proposed Opening (15 yr) ---------- 1,191 Sq. Ft.
Design Discharge (15 yr) ---------- 2,973 C.F.S.
Created Head (15 yr) ---------- Ft.
100 Yr. Discharge ---------- 5,000 C.F.S.
100 Yr. Created Head ---------- 0.12 Ft.

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

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 Megginson 1/22/2009
ILLINOIS STRUCTURAL NO. 081-6064

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

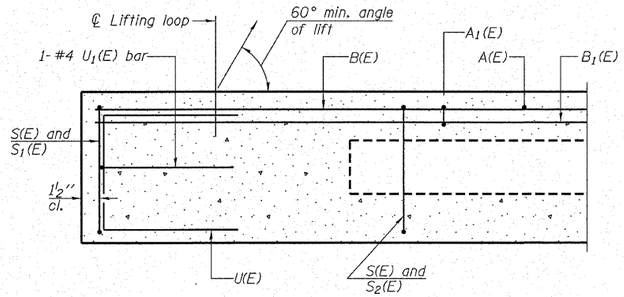
Expires 11-30-10

GENERAL PLAN AND ELEVATION STRUCTURE NO. 041-3742

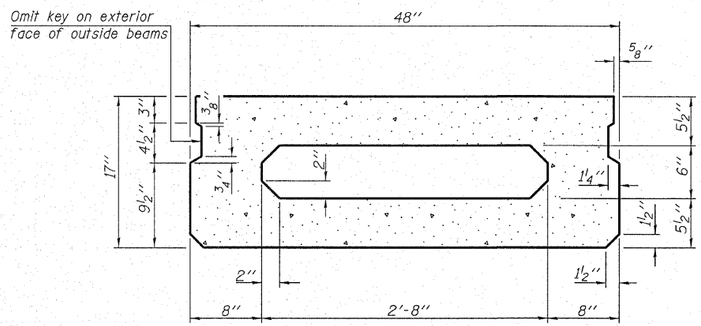
HAMPTON, LENZINI & RENWICK, INC.
CIVIL & STRUCTURAL ENGINEERS
LAND SURVEYORS
3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
(217) 546-3400

PROJECT NUMBER: 08.0127.130 | DATE: 01/21/09

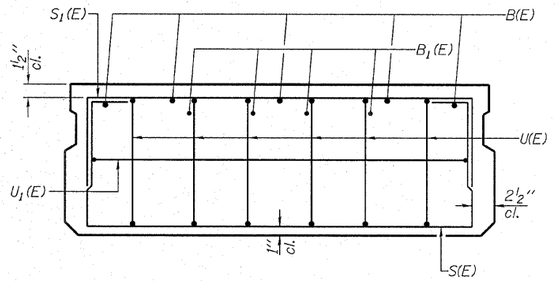
T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10	03-03113-00-BR	JEFFERSON	15	6
CASNER ROAD DISTRICT		CONTRACT NO. 99362		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



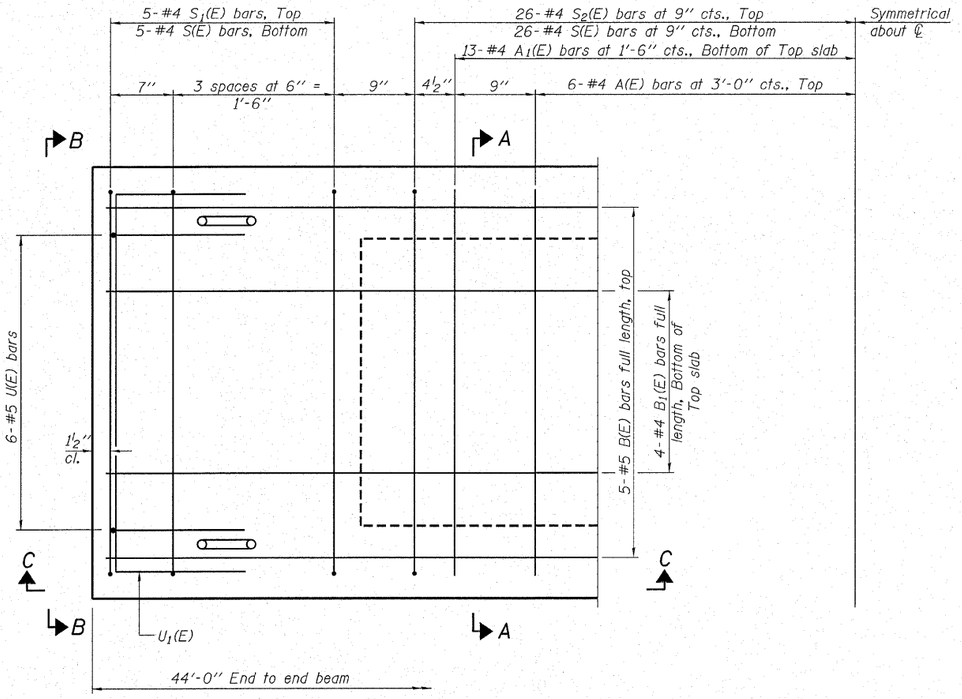
SECTION C-C



SECTION A-A
(Showing dimensions)

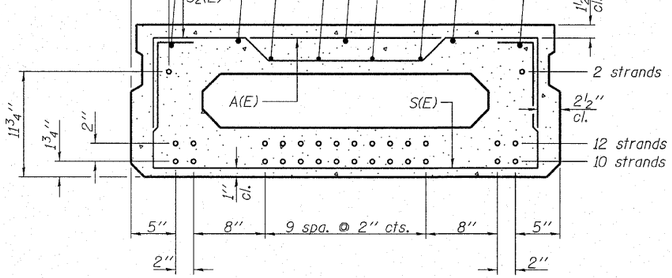


VIEW B-B



PLAN VIEW

Note: Spacing of S(E) and $S_2(E)$ 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 A-A
(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)	12	#4	3'-7"	—
$A_1(E)$	26	#4	3'-10"	~
B(E)	5	#5	43'-8"	—
$B_1(E)$	4	#4	43'-8"	—
S(E)	62	#4	6'-9"	⊔
$S_1(E)$	10	#4	5'-3"	⊓
$S_2(E)$	52	#4	5'-6"	⊓
U(E)	12	#5	3'-8"	⊏
$U_1(E)$	2	#4	6'-0"	⊓

Note: See sheet 8 & 9 for additional details and Bill of Material.

SUPERSTRUCTURE
17" X 48" PPC DECK BEAM
STRUCTURE NO. 041-3742

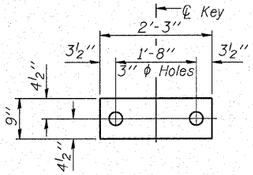
DESIGNED	A.S.L.
CHECKED	S.W.M.
DRAWN	D.T.M.
CHECKED	D.A.B.

PD-1748-0 10-1-08

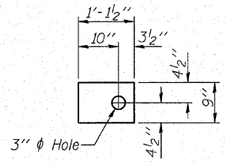
HAMPTON, LENZINI & RENWICK, INC.
CIVIL & STRUCTURAL ENGINEERS
LAND SURVEYORS
HLR
3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
(217) 545-3400

PROJECT NUMBER: 08.0127.130 DATE: 01/21/09

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10	03-03113-00-BR	JEFFERSON	15	7
CASNER ROAD DISTRICT		CONTRACT NO. 99362		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



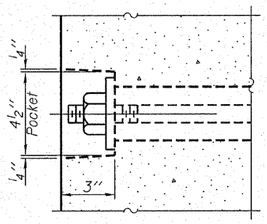
FABRIC BEARING PAD
(Interior)



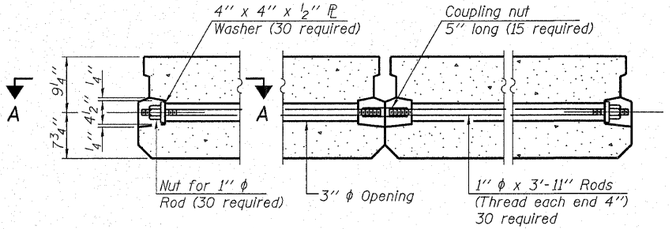
FABRIC BEARING PAD
(Exterior)

FIXED

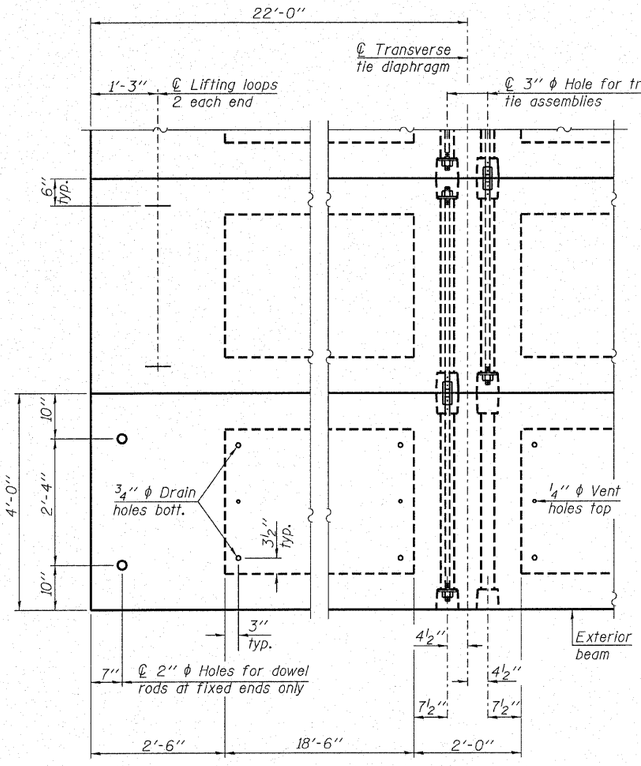
Note: Omit holes when using expansion bearings.



SECTION A-A

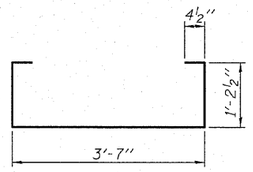


TYPICAL TRANSVERSE TIE ASSEMBLY

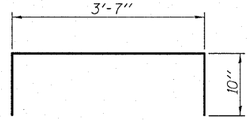


PLAN VIEW

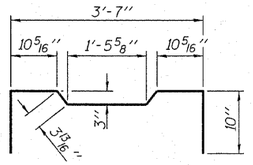
Note: Connect beams in pairs with the transverse tie configuration shown.



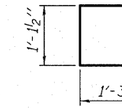
BAR S(E)



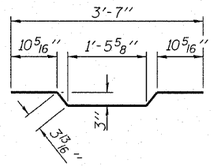
BAR S_1(E)



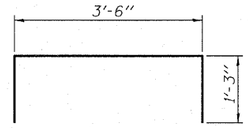
BAR S_2(E)



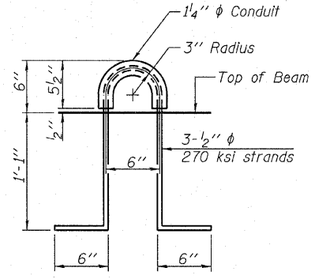
BAR U(E)



BAR A_1(E)



BAR U_1(E)



LIFTING LOOP DETAIL
See Special Provisions for Alternate Lifting Lugs.

BILL OF MATERIAL

Precast Prestressed Conc. Deck Bms. (17" depth)	Sq. Ft.	3,168

NOTES

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

The 1" ϕ 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 ⅛" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.

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

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

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

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

PD-1748-0D 10-1-08

HAMPTON, LENZINI & RENWICK, INC.
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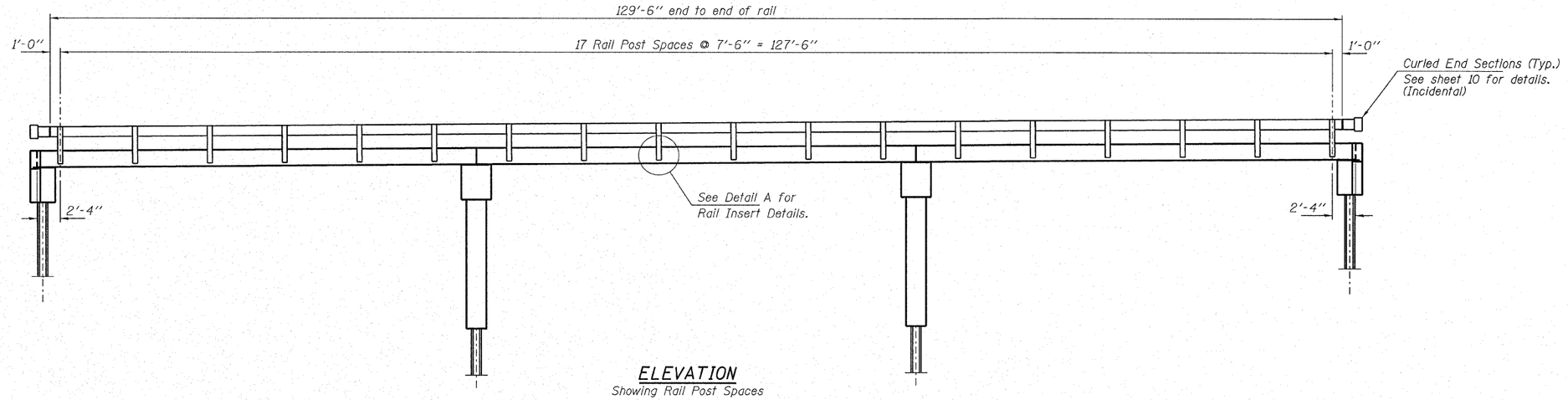
LAND SURVEYORS
HLR
3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
(217) 546-3400

PROJECT NUMBER: 08.0127.130 DATE: 01/21/09

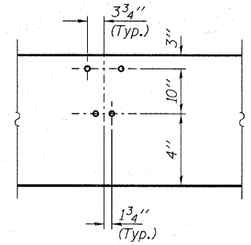
17" X 48" PPC DECK BEAM DETAILS
STRUCTURE NO. 041-3742

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10	03-03113-00-BR	JEFFERSON	15	8
CASNER ROAD DISTRICT		CONTRACT NO. 99362		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

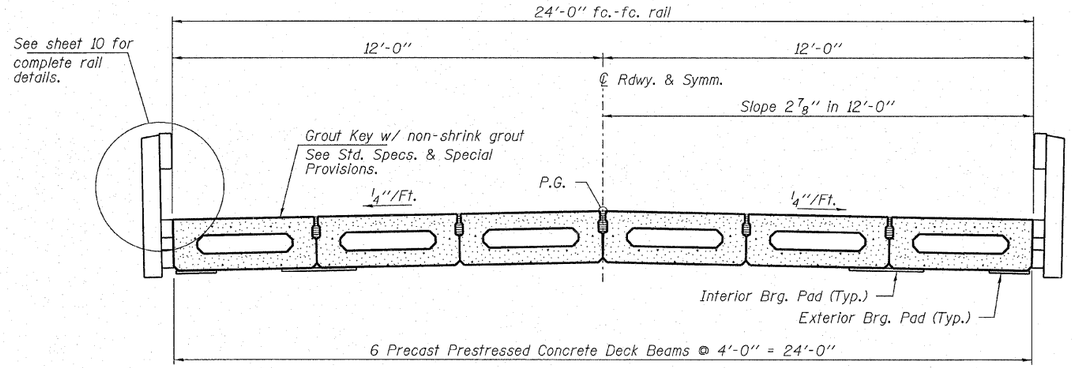


ELEVATION
Showing Rail Post Spaces

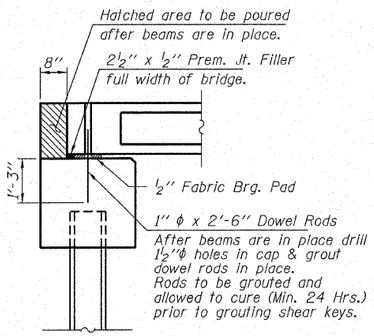
See sheet 10 for Railing Details.



DETAIL A



CROSS SECTION
See sheets 7 & 8 for Superstructure.



SECTION AT ABUTMENTS
@ Rt. L's

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

SUPERSTRUCTURE DETAILS
STRUCTURE NO. 041-3742

HAMPTON, LENZINI & RENWICK, INC.
CIVIL & STRUCTURAL ENGINEERS
LAND SURVEYORS
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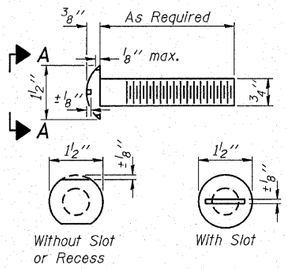
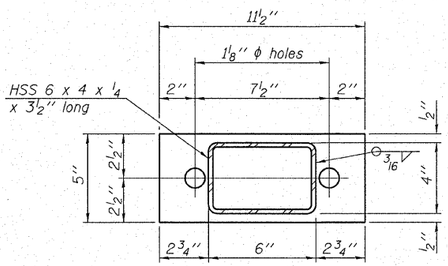
(217) 546-3400

PROJECT NUMBER: 08.0127.130 | DATE: 01/21/09

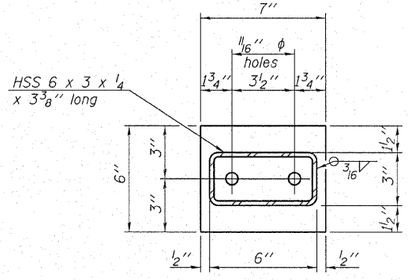
T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10	03-03113-00-BR	JEFFERSON	15	9
CASNER ROAD DISTRICT		CONTRACT NO. 99362		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



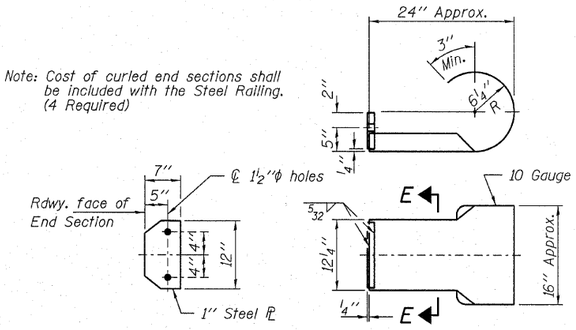
VIEW A-A
ROUND HEAD BOLT



PL 1/2" x 11 1/2" x 5"

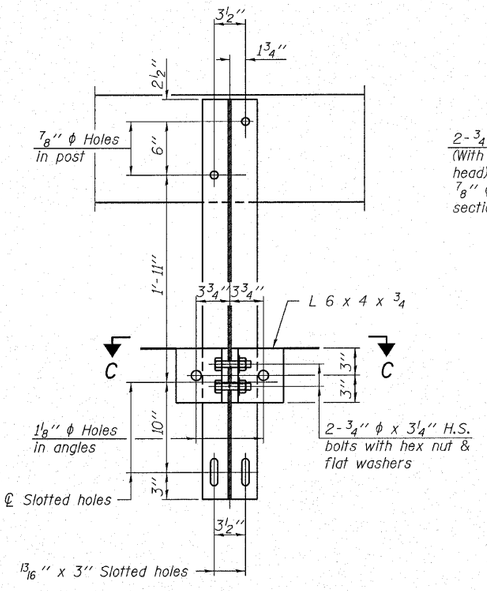


PL 1/2" x 7" x 6"

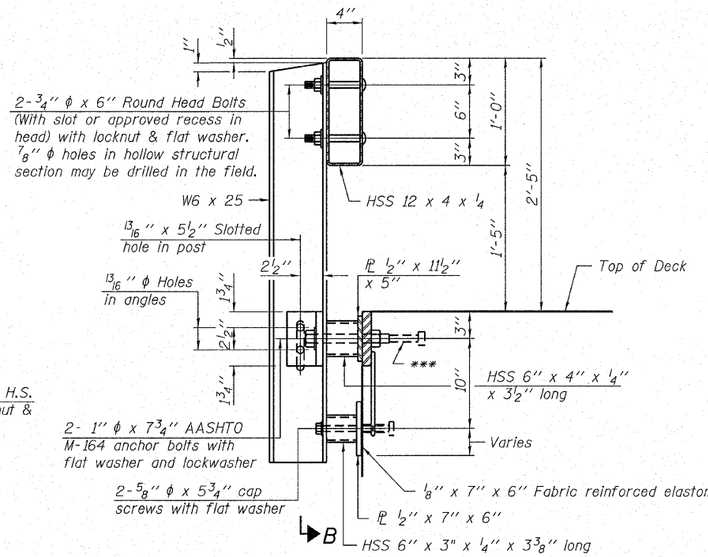


SECTION E-E

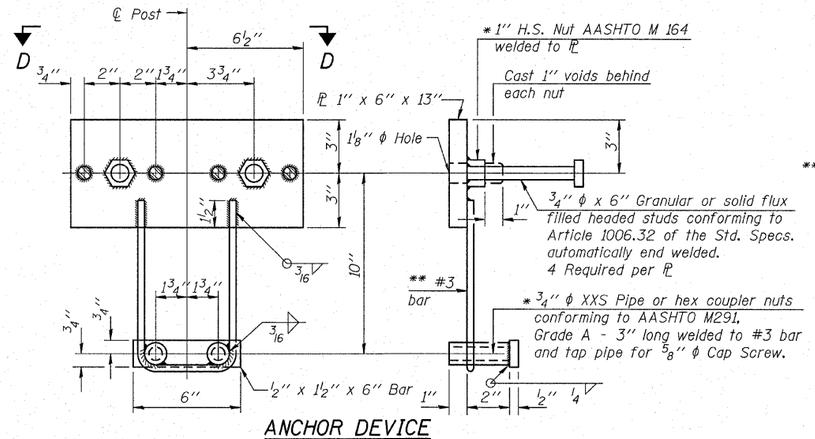
CURLED END SECTION DETAILS



SECTION B-B



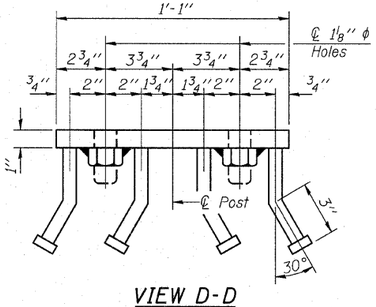
SECTION AT RAILING POST



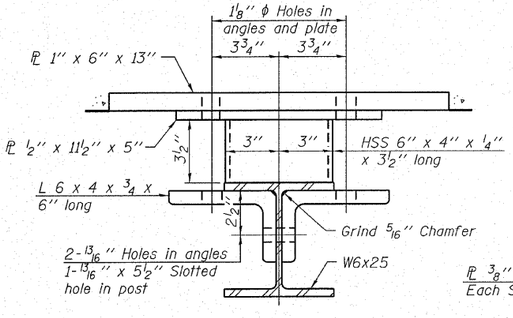
ANCHOR DEVICE

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

*** Notes:
All field drilled holes shall be coated with an approved zinc rich paint before erection.
For multi-span bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type S-1.
All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.
The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device.

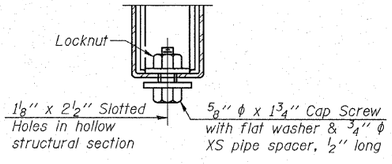


VIEW D-D

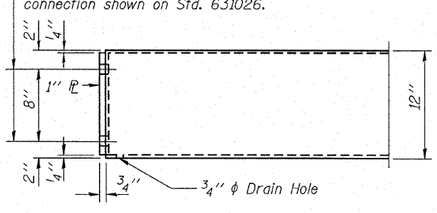


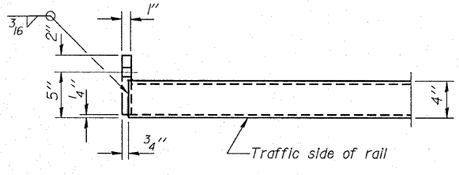
SECTION C-C

** 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".



RAIL SPLICE CONNECTION AT EXPANSION JT.

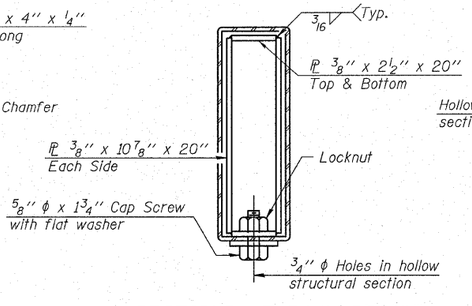




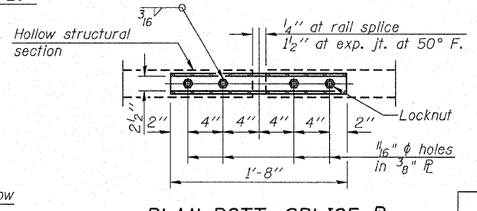
END OF RAIL DETAILS

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type S-1	Foot	259



SECTIONS AT RAIL SPLICE



PLAN-BOTT. SPLICE PL TYPICAL

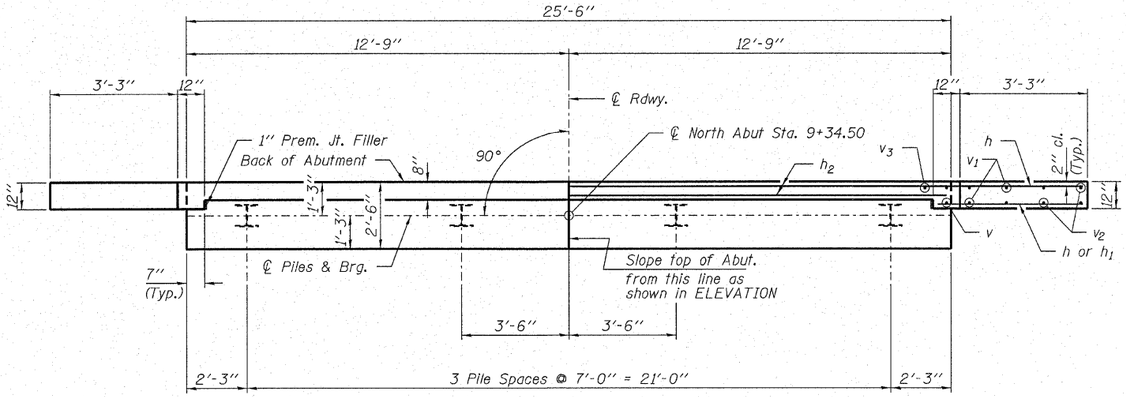
STEEL RAILING, TYPE S-1
STRUCTURE NO. 041-3742

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

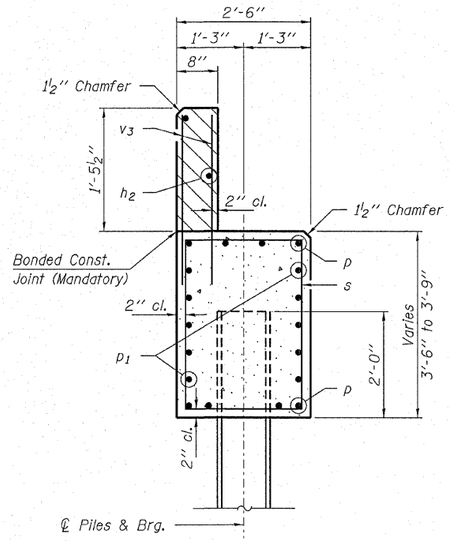
R-23A 10-1-08 (10'-9" Maximum Post Spacing)

HAMPTON, LENZINI & RENWICK, INC.
CIVIL & STRUCTURAL ENGINEERS
LAND SURVEYORS
3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
(217) 546-3400
PROJECT NUMBER: 08.0127.130 DATE: 01/21/09

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10	03-03113-00-BR	JEFFERSON	15	10
CASNER ROAD DISTRICT		CONTRACT NO. 99362		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

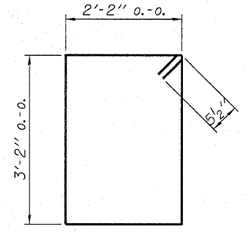


PLAN

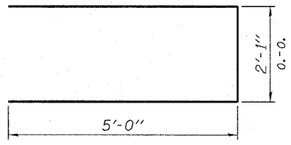


SECTION A-A

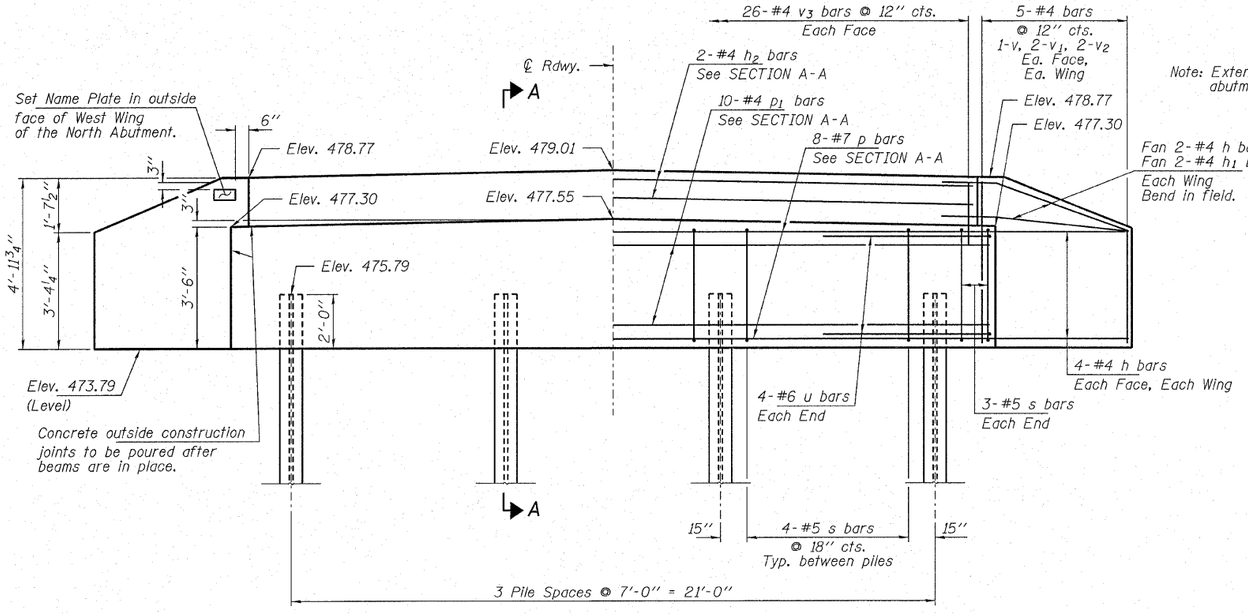
Hatched area to be poured after beams are in place.



BAR s



BAR u



ELEVATION

PILE DATA

Type	Steel HP12x53
No. Req'd. (N. Abut.)	4
Factored Resistance Available (Rf)	209 Kips/Pile
Nominal Required Bearing (Rn)	419 Kips/Pile
Est. Length	40 Ft/Pile

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

BILL OF MATERIAL - S. ABUT.

BAR	NO.	SIZE	LENGTH	SHAPE
h	20	#4	5'-6"	—
h_1	4	#4	4'-0"	—
h_2	2	#4	25'-2"	—
p	8	#7	25'-2"	—
p_1	10	#4	25'-2"	—
s	18	#5	11'-7"	□
u	8	#6	12'-1"	▭
v	4	#4	4'-6"	—
v_1	8	#4	4'-0"	—
v_2	8	#4	3'-0"	—
v_3	52	#4	2'-4"	—
Concrete Structures			Cu. Yd.	10.7
Reinforcement Bars			Pound	1,190
Steel Piles HP12x53			Foot	160
Name Plates			Each	1

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

HAMPTON, LENZINI & RENWICK, INC.
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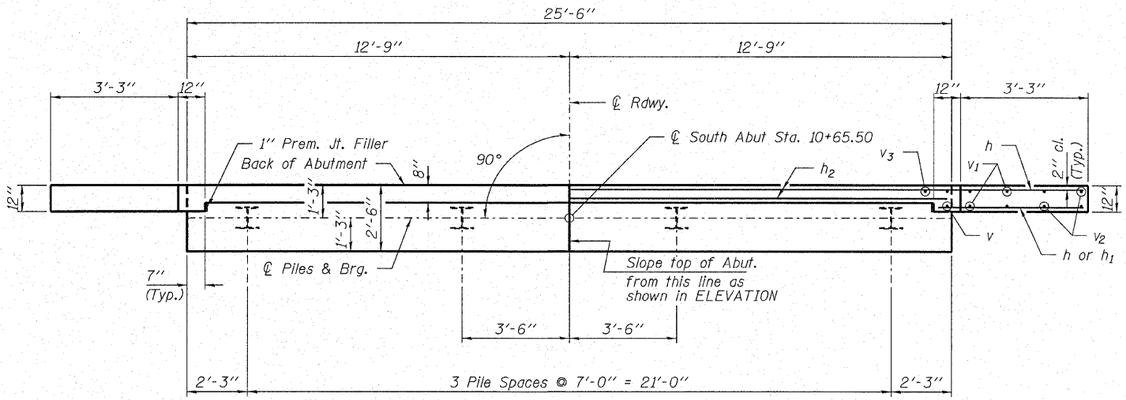
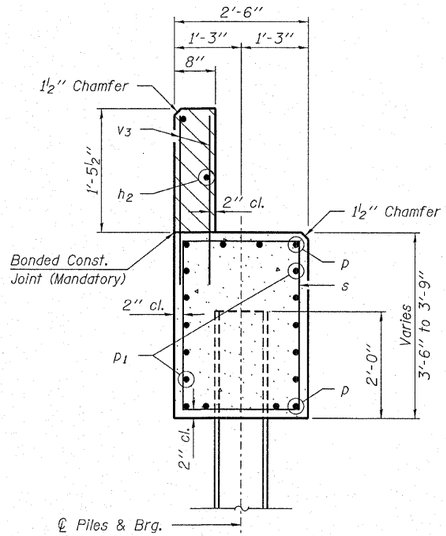
PROJECT NUMBER: 08.0127.130 | DATE: 01/21/09

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10	03-03113-00-BR	JEFFERSON	15	11
CASNER ROAD DISTRICT		CONTRACT NO. 99362		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SOUTH ABUTMENT
STRUCTURE NO. 041-3742

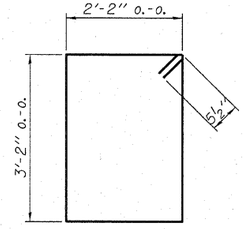


PLAN

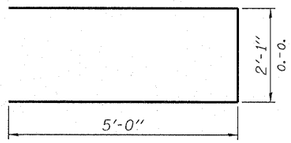


SECTION A-A

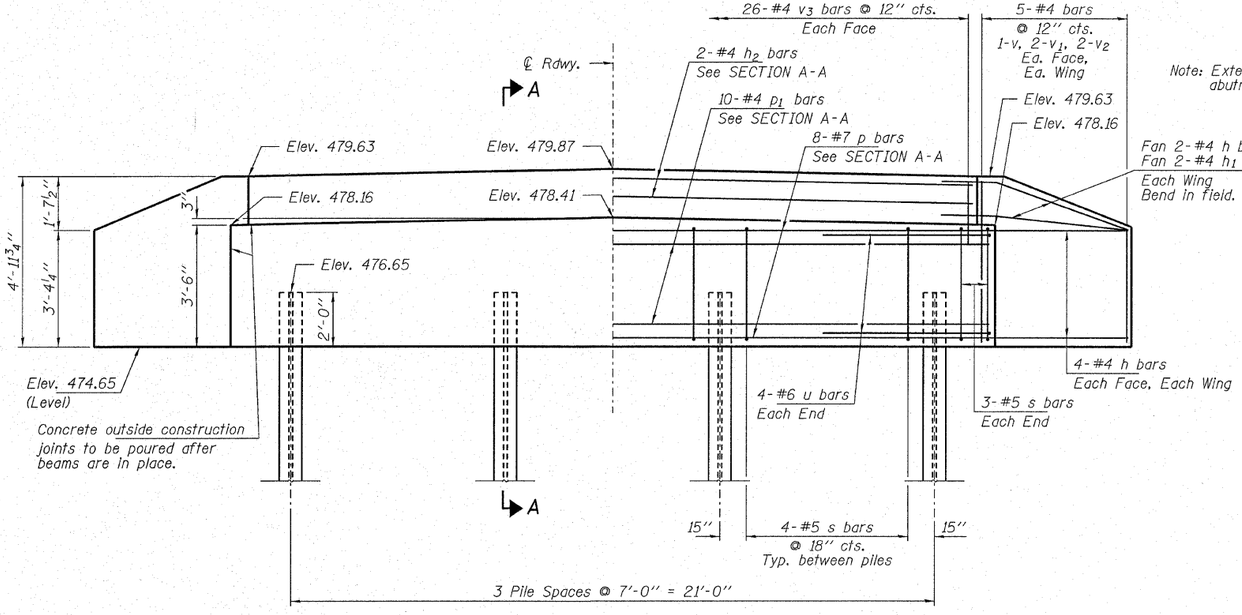
Hatched area to be poured after beams are in place.



BAR s



BAR u



ELEVATION

BILL OF MATERIAL - N. ABUT.

BAR	NO.	SIZE	LENGTH	SHAPE
h	20	#4	5'-6"	——
h_1	4	#4	4'-0"	——
h_2	2	#4	25'-2"	——
p	8	#7	25'-2"	——
p_1	10	#4	25'-2"	——
s	18	#5	11'-7"	□
u	8	#6	12'-1"	⊐
v	4	#4	4'-6"	——
v_1	8	#4	4'-0"	——
v_2	8	#4	3'-0"	——
v_3	52	#4	2'-4"	——
Concrete Structures			Cu. Yd.	10.7
Reinforcement Bars			Pound	1,190
Steel Piles HP12x53			Foot	160

PILE DATA

Type _____ Steel HP12x53
No. Req'd. (S. Abut.) _____ 4
Factored Resistance Available (Rf) ___ 209 Kips/Pile
Nominal Required Bearing (Rn) _____ 419 Kips/Pile
Est. Length _____ 40 Ft/Pile

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

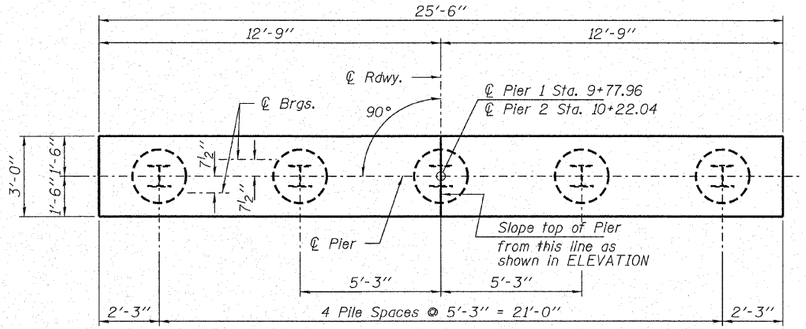
DESIGNED	A.S.L.
CHECKED	S.W.M.
DRAWN	D.T.M.
CHECKED	D.A.B.

NORTH ABUTMENT
STRUCTURE NO. 041-3742

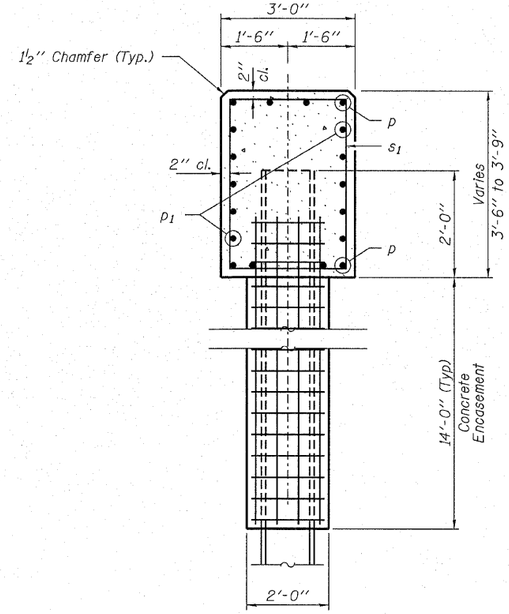
HAMPTON, LENZINI & RENWICK, INC.
CIVIL & STRUCTURAL ENGINEERS
LAND SURVEYORS
3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
(217) 546-3400

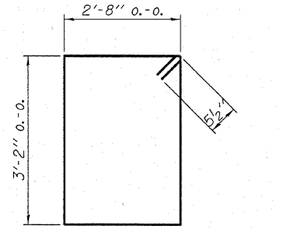
PROJECT NUMBER 08.0127.130 | DATE: 01/21/09

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10	03-03113-00-BR	JEFFERSON	15	12
CASNER ROAD DISTRICT		CONTRACT NO. 99362		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

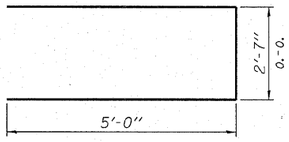


PLAN

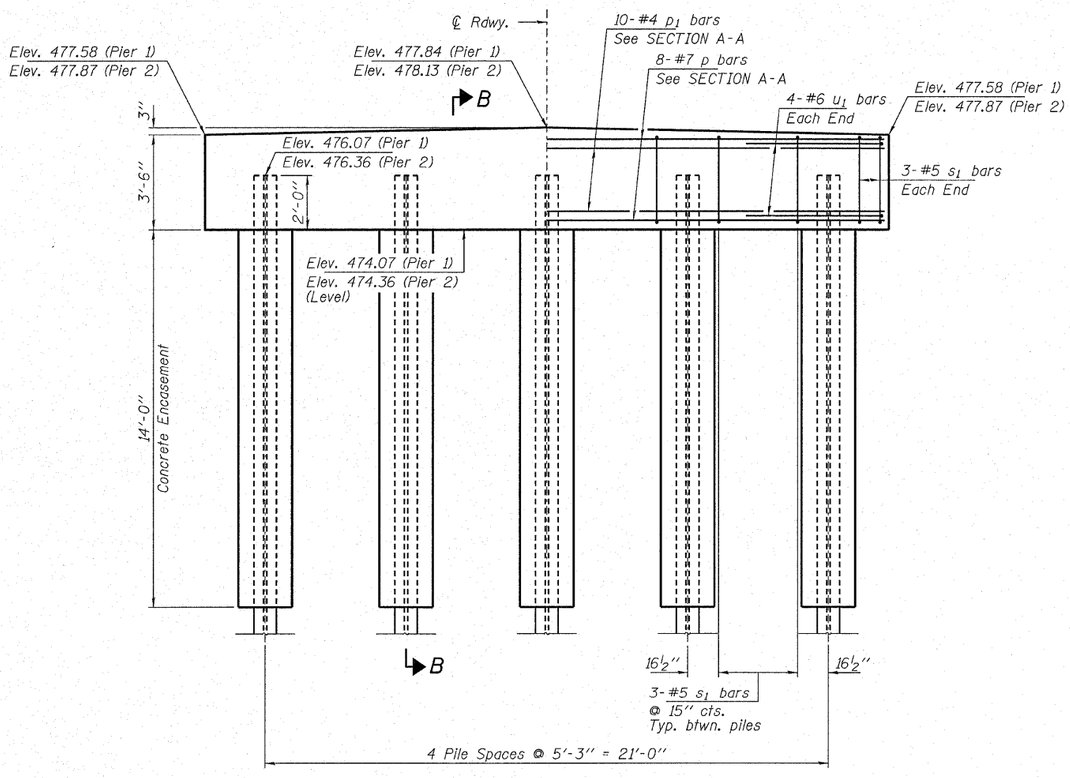




BAR s_1



BAR u_1



ELEVATION

SECTION B-B

BAR LAPS

#4 Bar = 1'-8"

PILE DATA

Type _____ Steel HP12x53
No. Req'd. (2 Piers) _____ 10
Factored Resistance Available (Rf) ____ 209 Kips/Pile
Nominal Required Bearing (Rn) _____ 419 Kips/Pile
Est. Length _____ 40 Ft/Pile

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

BILL OF MATERIAL - 2 PIERS

BAR	NO.	SIZE	LENGTH	SHAPE
p	16	#7	25'-2"	——
p_1	20	#4	25'-2"	——
s_1	30	#5	12'-7"	□
u_1	16	#6	12'-7"	▭
Concrete Structures			Cu. Yd.	20.6
Concrete Encasement			Cu. Yd.	15.8
Reinforcement Bars			Pound	1,860
Steel Piles HP12x53			Foot	400

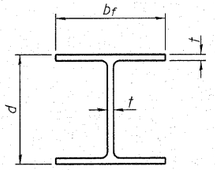
DESIGNED -	A.S.L.
CHECKED -	S.W.M.
DRAWN -	D.T.M.
CHECKED -	D.A.B.

PIERS
STRUCTURE NO. 041-3742

HAMPTON, LENZINI & RENWICK, INC.
CIVIL & STRUCTURAL ENGINEERS
LAND SURVEYORS
3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
(217) 546-3400

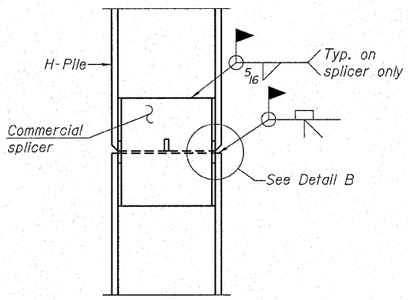
PROJECT NUMBER: 08.0127.130 | DATE: 01/21/09

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10	03-03113-00-BR	JEFFERSON	15	13
CASNER ROAD DISTRICT		CONTRACT NO. 99362		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

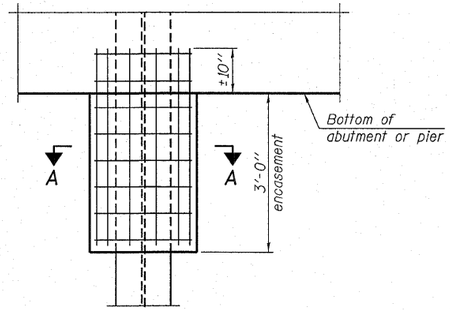


STEEL PILE TABLE

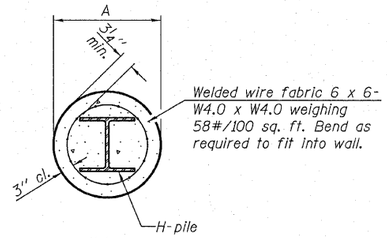
Designation	Depth d	Flange width b_f	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	13/16"	30"
x102	14"	14 3/4"	11/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	11/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"
x53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



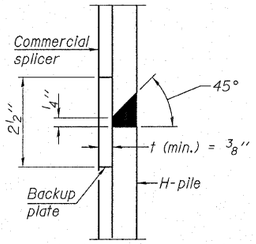
ELEVATION



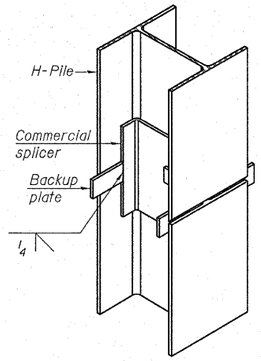
Note:
Forms for encasement may be omitted when soil conditions permit.

SECTION A-A

PILE ENCASEMENT

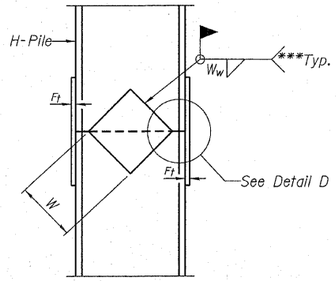


DETAIL "B"



ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE



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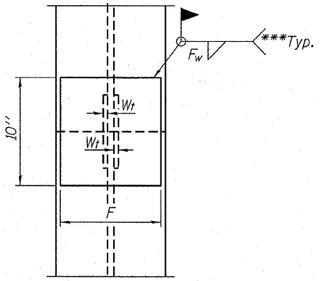
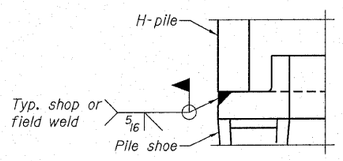
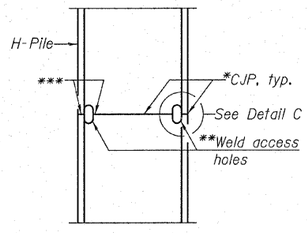


END VIEW

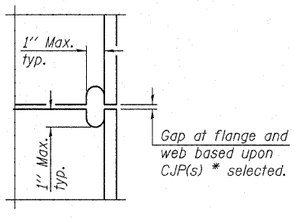


DETAIL A

H-PILE SHOE ATTACHMENT

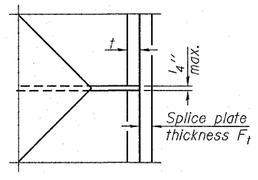


ELEVATION



DETAIL C

COMPLETE PENETRATION WELD SPLICE



DETAIL D

Designation	F	F_f	F_w	W	W_f	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"	11/16"	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"	11/16"	6 1/2"	5/8"	1/2"
x74	10"	7/8"	11/16"	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"

WELDED PLATE FIELD SPLICE

* Use joint conforming to Figure 3.4 in AWS D1.1, Structure Welding Code - Steel.

** Preparation per Fig. 5.2 in AWS D1.1, Structure Welding Code - Steel.

*** Interrupt welds 1/4" from end of each pile.

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

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

F-HP 10-1-08

HAMPTON, LENZINI & RENWICK, INC.
CIVIL & STRUCTURAL ENGINEERS
LAND SURVEYORS
HLR
3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
(217) 546-3400

PROJECT NUMBER: 08.0127.130 DATE: 01/21/09

HP PILE DETAILS
STRUCTURE NO. 041-3742

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10	03-03113-00-BR	JEFFERSON	15	14
CASNER ROAD DISTRICT		CONTRACT NO. 99362		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

Illinois Department of Transportation
Division of Highways
Ill. Dept. of Trans. 0-7

SOIL BORING LOG

Page 1 of 2

Date 6/9/05

ROUTE TR 10 DESCRIPTION Rayse Creek LOGGED BY E. Sandschafer

SECTION 03-03113-00-BR LOCATION NW 1/4, SEC. 18, TWP. 2 S, RNG. 1 E, 3 PM

COUNTY Jefferson DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO. 041-3064
Station

BORING NO. 1 (S Abut)
Station 22' S of exist S Abut
Offset 0.00ft
Ground Surface Elev. 478.78 ft

Surface Water Elev. 465.75 ft
Stream Bed Elev. 464.57 ft

Groundwater Elev.:
First Encounter 456.8 ft
Upon Completion Washed ft
After ___ Hrs. samples ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
478.38			
1" oil & chip surface over mixture of Sandy Loam, oil and Gravel. Very stiff to stiff, damp, red, CLAY w/ trace fine gravel.			
	5		
	6	4.0	13
	8	PP	
474.28			
Stiff, damp, red marbled gray, SILTY LOAM.	6		
-5	6	1.7	18
	5	S	
471.78			
Medium to very soft, very damp, dark gray, SILTY LOAM.	0		
	2	0.6	27
	2	B	
-10	0		
	0	0.1	27
	0	B	
	0		
466.28			
Very soft, very damp, dark gray, SANDY LOAM.	0		
	0	0.1	23
	1	B	
-15	0		
463.66			
Very soft to medium, very damp, gray/brown/red, SILTY LOAM.	0	0.1	25
	0	B	
	0		
	2	0.5	23
	2	B	
-20	0		

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
	2	0.5	22
Very soft to medium, very damp, gray/brown/red, SILTY LOAM. (continued)	2	B	
456.48			
Medium, damp, red marbled gray, SILTY CLAY.	1		
	2	0.7	21
	3	BS	
453.78			
-25 Very soft, very damp, gray, SILTY LOAM.	0		
	2	0.1	23
	2	B	
451.78			
Soft to medium, damp, dark gray, SILTY CLAY.	0		
	0	0.5	23
	1	B	
-30	0		
	3	0.7	24
	3	B	
* Very dense, moist, gray w/ black specks, SANDSTONE.			
** 50/3"			
50/1"			
50/1"			
443.88			
-35 Very dense, damp, gray, SAND. 13% passing #200 sieve.	17		
	40		20
	50/4"		
439.28			
* 438.98	**		
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Latitude N 39 deg 21.21 min. Longitude W 89 deg 05.45 min. Map Datum WGS 84

Illinois Department of Transportation
Division of Highways
Ill. Dept. of Trans. 0-7

ROCK CORE LOG

Page 2 of 2

Date 6/9/05

ROUTE TR 10 DESCRIPTION Rayse Creek LOGGED BY E. Sandschafer

SECTION 03-03113-00-BR LOCATION NW 1/4, SEC. 18, TWP. 2 S, RNG. 1 E, 3 PM

COUNTY Jefferson CORING METHOD Rotary, surf set diamond bit

STRUCT. NO. 041-3064
Station

CORING BARREL TYPE & SIZE NW, conv dbl bbl, split inner

BORING NO. 1 (S Abut)
Station 22' S of exist S Abut
Offset 0.00ft
Ground Surface Elev. 478.78 ft

Core Diameter 2.06 in
Top of Rock Elev. 439.28 ft
Begin Core Elev. 438.98 ft

DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
438.98					
Gray w/ thin black layering, highly weathered, SANDSTONE.		100	15	0.3	
433.98					
-45 Gray w/ thin black layering, slightly weathered, SANDSTONE.		100	79	0.3	
428.98					
-50 Extent of exploration.					

Benchmark: Nail in 12" dia Birch tree NE of existing bridge = 476.24', provided by Jefferson County Engineer.

Color pictures of the cores ___
Cores will be stored for examination until ___
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Ill. Dept. of Trans. 0-7

SOIL BORING LOG

Page 1 of 1

Date 6/15/05

ROUTE TR 10 DESCRIPTION Rayse Creek LOGGED BY E. Sandschafer

SECTION 03-03113-00-BR LOCATION NW 1/4, SEC. 18, TWP. 2 S, RNG. 1 E, 3 PM

COUNTY Jefferson DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO. 041-3064
Station

BORING NO. 2 (N Abut)
Station 16' N of exist N Abut
Offset 1.00ft W of centerline
Ground Surface Elev. 479.38 ft

Surface Water Elev. 466.75 ft
Stream Bed Elev. 464.57 ft

Groundwater Elev.:
First Encounter 459.9 ft
Upon Completion 462.4 ft
After ___ Hrs. N/A ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
478.98			
1" oil & chip surface over mixture of Sandy Loam, oil and Gravel. Medium to soft, damp, gray mottled red, SILTY LOAM.			
	2		
	4	0.8	12
	4	B	
-5	1		
	2	1.1	23
	4	B	
	1		
	1	0.3	24
	1	B	
-10	0		
	0	0.5	23
	2	B	
	0		
	0	0.5	24
	2	B	
-15	0		
464.38			
Soft to medium, damp, gray/brown/red, SILTY CLAY.	1	0.5	25
	2	B	
	1		
	2	0.5	25
	3	B	
459.48			
-20 Gray marbled brown.	0		

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
	2	1.1	24
Stiff, damp, gray marbled brown, CLAY w/ black specks. (continued)	3	B	
456.66			
Medium, damp, gray marbled red, SILTY CLAY.	1		
	2	0.8	24
	3	B	
-25	0		
	2	0.8	24
	4	B	
	2		
	4	0.8	22
	5	B	
-30	1		
	2	0.8	22
	3	B	
* Extent of exploration.			
Benchmark: Nail in 12" dia Birch tree NE of existing bridge = 476.24', provided by Jefferson County Engineer.			
** 50/2"			
50/1"			
50/1"			
444.88			
-35 Loose, damp, gray, SANDY LOAM w/ many gray, Sandstone fragments and trace Coal.	1		
	2		16
	7		
441.88			
Very dense, moist, gray, SANDSTONE.			
* 439.58	**		
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Latitude N 39 deg 21.23 min. Longitude W 89 deg 05.45 min. Map Datum WGS 84

BORING 1

BORING 2

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

HAMPTON, LENZINI & RENWICK, INC.
CIVIL & STRUCTURAL ENGINEERS
LAND SURVEYORS
HLR
3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
(217) 546-3400

PROJECT NUMBER 08.0127.130 DATE: 01/21/09

PIERS
STRUCTURE NO. 041-3742

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10	03-03113-00-BR	JEFFERSON	15	15
CASNER ROAD DISTRICT		CONTRACT NO. 99362		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		