

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED
HIGHWAY BRIDGE PROGRAM

PROJECT BRS-1919(107)
SECTION 06-00057-02-BR
C.H. 30 / F.A.S. 1919 / BOSKEYDELL ROAD
STRUCTURE NO. 039-3124
JOB# C-99-533-07
JACKSON COUNTY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.S. 1919	06-00057-02-BR	JACKSON	6	1
FED. ROAD DIST. NO.		ILLINOIS CONTRACT NO. 99414		

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1.	COVER SHEET
2.	SUMMARY OF QUANTITIES & TYPICAL SECTIONS
3.	PLAN & PROFILE
4.	GUARDRAIL DETAILS AND SEEDING PLAN
5.-6.	BRIDGE PLANS

HIGHWAY STANDARDS:

630301-05	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
701301-03	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701901-01	TRAFFIC CONTROL DEVICES
BLR 26-2	STEEL PLATE BEAM GUARD RAIL

UTILITIES

AT&T
2035 BLACK DIAMOND ROAD
NASHVILLE, ILLINOIS 62263
618-971-7775
ATTN: DUANE DeBORD

360 NETWORKS
130 N. MAIN ST.
BUTTE, MT 59701
406-496-6510
ATTN: HENRY KLOBUCAR

EGYPTIAN ELECTRIC COOPERATIVE
10169 OLD HIGHWAY 3
MURPHYSBORO, IL 62966
618-684-2143
ATTN: SHANE HERMET

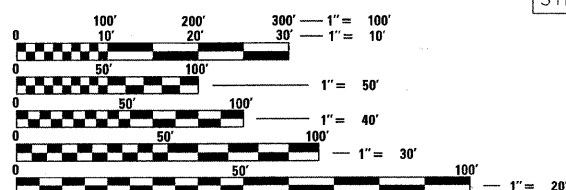
SOUTH HIGHWAY WATER DISTRICT
111 CEDAR CREEK ROAD
MAKANDA, IL 62958
618-529-5313

VERIZON NORTH, INC.
208 WEST UNION
MARION, IL 62959
309-827-1617
ATTN: MARY RUTH WILLIS

MCI (VERIZON BUSINESS)
OSP NATIONAL SUPPORT/INVESTIGATIONS
2400 N. GLENVILLE DR.
RICHARDSON, TX 75082
ATTN: DEAN BOYERS
972-729-6322
FIELD REP: ART SHERIDAN
314-298-6144



FUNCTIONAL CLASSIFICATION: MAJOR COLLECTOR (NON-URBAN)
DESIGN SPEED: 40 MPH
DESIGN TRAFFIC: 725 ADT (2009)

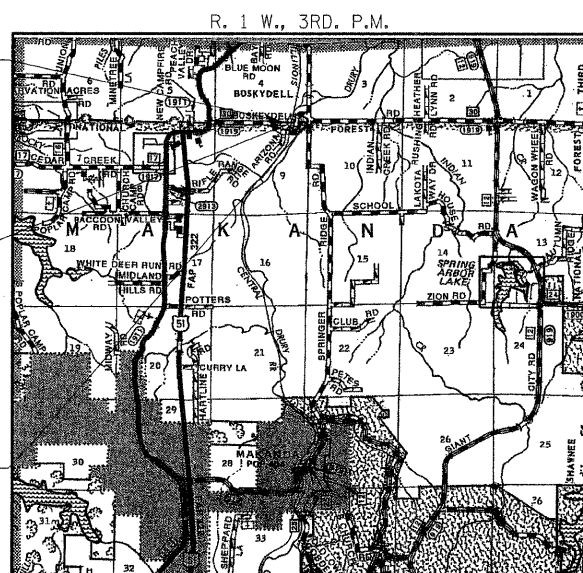


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

IMPROVEMENT BEGINS STATION 11+00

STA. 13+67
SEISMIC RETROFIT OF CONCRETE PIER COLUMNS,
STRUCTURE NO. 039-3124

IMPROVEMENT ENDS STATION 16+50



LOCATION MAP

APPROXIMATE SCALE: 0 1 MILE
NET LENGTH OF SECTION = 550 FEET = 0.104 MILES

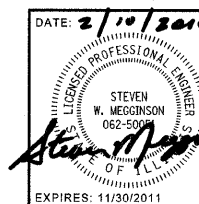


ILLINOIS DEPARTMENT OF TRANSPORTATION

APPROVED: *[Signature]* 2-11 2010
COUNTY ENGINEER

PASSED: *[Signature]* FEBRUARY 16 2010
DISTRICT NINE ENGINEER OF LOCAL ROADS & STREETS

Releasing For Bid Based on Limited Review: *[Signature]* March 11 2010
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.hirengineering.com

EXPIRES: 11/30/2011

PROJECT NUMBER: 07.0315.130

DATE: 02/05/10

CONTRACT NO. 99414

SUMMARY OF QUANTITIES					
		UNIT	TOTAL	ROADWAY SFTY-3J	SN 039-3124 SFTY-2A
^	25001000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.40	0.40
	25100630	EROSION CONTROL BLANKET	SQ YD	1795	1795
^	28100807	STONE DUMPED RIPRAP, CLASS A4	TON	750	750
	48101200	AGGREGATE SHOULDERS, TYPE B	TON	72	72
^	50200100	STRUCTURE EXCAVATION	CU YD	50	50
	50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	5310	5310
*	63000002	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6.75 FOOT POSTS	FOOT	100	100
^*	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	3	3
^*	63301000	REMOVE AND RE-ERECT STEEL PLATE BEAM GUARD RAIL	FOOT	111	111
^*	63304385	TRAFFIC BARRIER TERMINAL REMOVAL, TYPE 1	EACH	3	3
	67100100	MOBILIZATION	L SUM	1	1
^*	78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	3	3
^	X5020501	UNDERWATER STRUCTURE EXCAVATION PROTECTION - LOCATION 1	EACH	1	1

^ SEE SPECIAL PROVISIONS
* SPECIALTY ITEMS

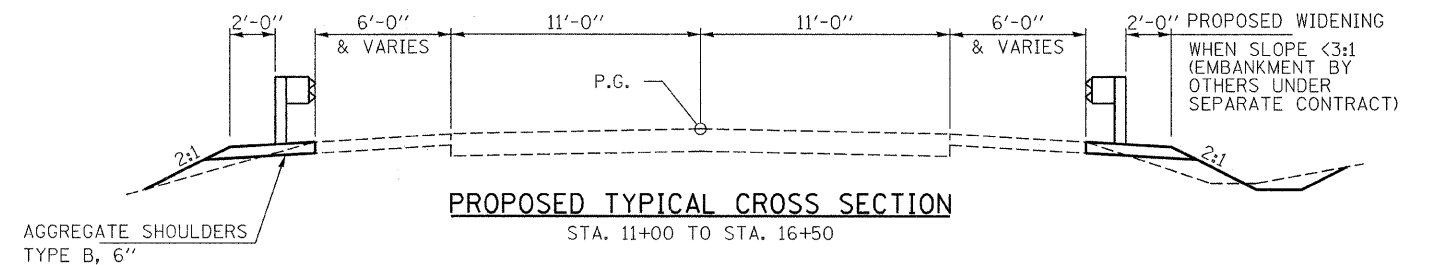
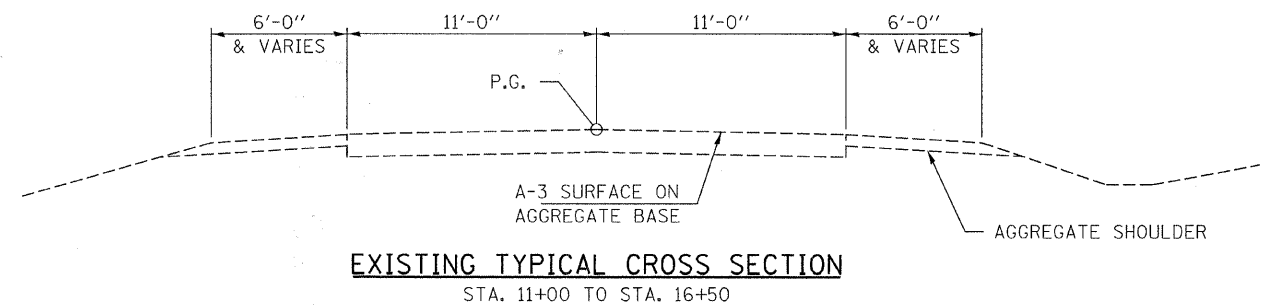
GUARDRAIL SCHEDULE					
LOCATION	TRAFFIC BARRIER TERMINAL REMOVAL TYPE 1	REMOVE AND RE-ERECT STEEL PLATE BEAM GUARD RAIL	STEEL PLATE BEAM GUARD RAIL TYPE A 6.75 FOOT POSTS	TRAFFIC BARRIER TERMINAL TYPE 1 (SPECIAL) TANGENT	TERMINAL MARKER DIRECT APPLIED
LT. STA 12+37.04 TO LT. STA 12+62.04	1				
LT. STA 14+89.29 TO LT. STA 15+14.29	1				
RT. STA 12+19.72 TO RT. STA 12+44.72	1				
		36.75			
LT. STA 12+62.04 TO LT. STA 12+98.79					
LT. STA 14+52.54 TO LT. STA 14+89.29		36.75			
RT. STA 12+44.72 TO RT. STA 12+81.47		36.75			
			62.5		
LT. STA 14+89.29 TO LT. STA 15+51.79					
RT. STA 12+07.22 TO RT. STA 12+44.72			37.5		
				1	1
LT. STA 12+12.04 TO LT. STA 12+62.04				1	1
LT. STA 15+51.79 TO LT. STA 16+01.79				1	1
RT. STA 11+57.22 TO RT. STA 12+07.22				1	1
TOTAL	3	110.25	100	3	3
USE	3	111	100	3	3

EROSION CONTROL		
LOCATION	SEEDING CLASS 2 (SPECIAL)	EROSION CONTROL BLANKET
	25001000 ACRE	25100630 SQ. YDS.
LT. STA 11+75.00 TO LT. STA 13+54.00	0.09	429
LT. STA 14+30.00 TO LT. STA 16+50.00	0.15	748
RT. STA 11+00.00 TO RT. STA 13+10.00	0.11	518
RT. STA 13+78.00 TO RT. STA 14+30.00	0.02	96
TOTAL	0.37	1791
USE	0.40	1795

GENERAL NOTES

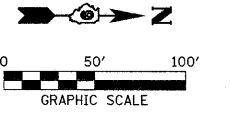
- ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ADOPTED JANUARY 1, 2007," THESE PLANS AND THE SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS.
- ALL CLEARING AND GRUBBING AND REMOVAL OF EXISTING DRAINAGE STRUCTURES SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION. THE REMOVAL OF THE EXISTING OIL AND CHIP SURFACE WILL BE PAID FOR AS EARTH EXCAVATION.
- THE LOCATIONS 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.
- 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.
- DISTURBED AREAS SHALL BE SEEDDED IN ACCORDANCE WITH THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS..."
ESTIMATED QUANTITY = SEEDING CLASS 2 (SPECIAL) = 0.4 ACRES
- THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN CALCULATING PLAN QUANTITIES:

AGGREGATE SHOULDERS, TYPE B 2.05 TON/CU. YD.
- FORTY-EIGHT HOURS BEFORE STARTING EXCAVATION THE CONTRACTOR SHALL CALL J.U.L.I.E. (1-800-892-0123) TO HAVE THE LOCATION OF EXISTING UTILITIES STAKED. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL EXISTING UNDERGROUND UTILITIES. DRAWINGS INDICATE ONLY APPROXIMATE LOCATIONS OF UTILITIES KNOWN TO EXIST AT THE TIME OF DESIGN.



NE 1/4, NE 1/4, SEC 9, T. 10 S., R. 1 W., 3RD P.M.

SE 1/4, SE 1/4, SEC 4, T. 10 S., R. 1 W., 3RD P.M.



PLAN	DRAWN	DATE
NOTED	BY	
CHECKED		
BY		
NO.		

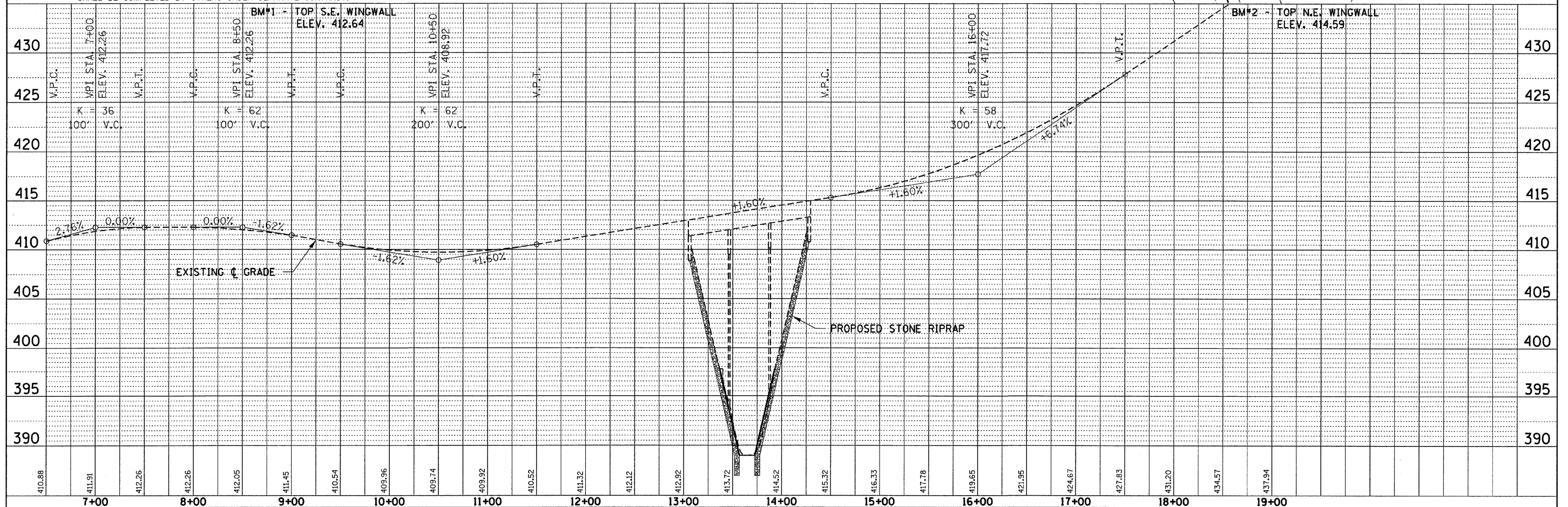
Exist. Curve CUR1
 PI Sta. 8+33.51
 $\Delta = 78^\circ 32' 12''$ (LT)
 $D = 18^\circ 00' 00''$
 $T = 260.24'$
 $R = 318.31'$
 $L = 436.31'$
 $E = 92.84'$
 PC Sta. 5+73.27
 PT Sta. 10+09.58
 S.E. = 0.0000/1'

Exist. Curve CUR2
 PI Sta. 20+79.19
 $\Delta = 115^\circ 35' 58''$ (RT)
 $D = 17^\circ 00' 01''$
 $T = 535.19'$
 $R = 337.03'$
 $L = 679.99'$
 $E = 295.44'$
 PC Sta. 15+44.00
 PT Sta. 22+23.99
 $S.E. = 0.0753/1'$
 S.E. TRANSITION:
 STA. 14+54 TO STA. 15+89

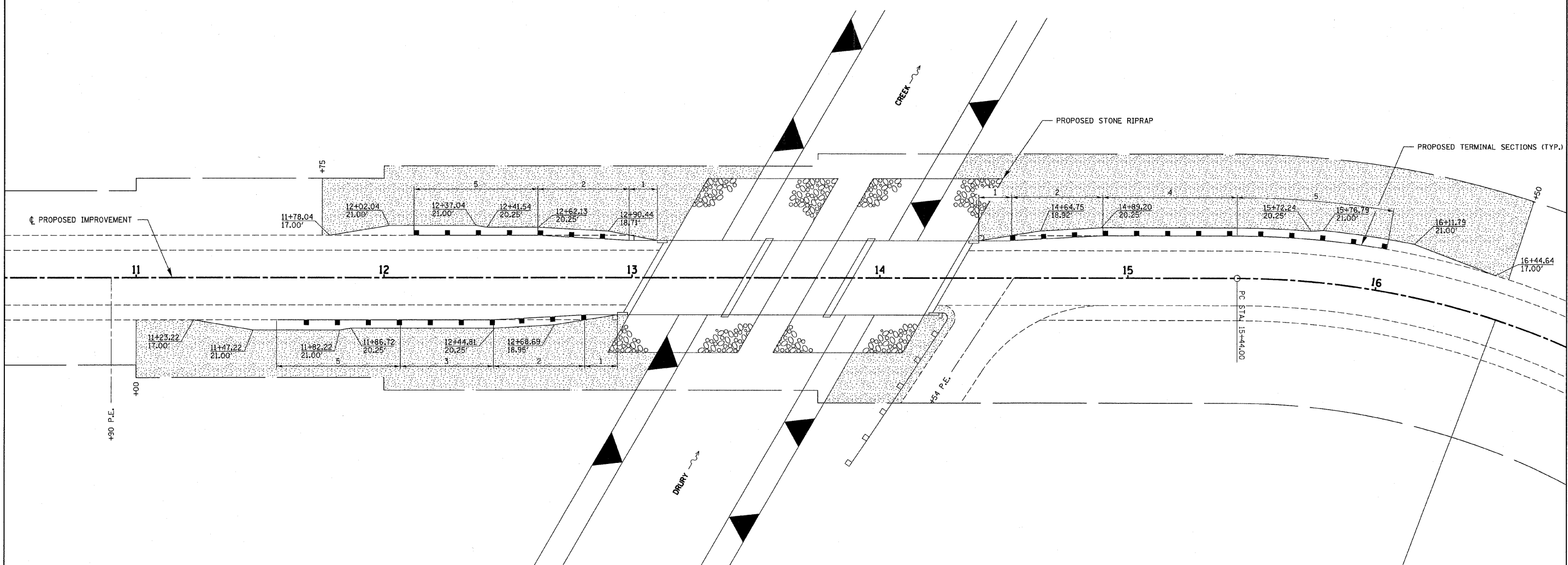
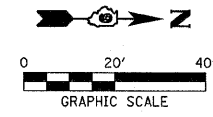
- ① 13'-3" EXISTING TRAFFIC BARRIER TERMINAL, TYPE 5A - TO REMAIN IN PLACE
- ② 36'-9" REMOVE & RE-ERECT STEEL PLATE BEAM GUARDRAIL
- ③ 37'-6" STEEL PLATE BEAM GUARD RAIL, TYPE A, 6 FOOT POSTS
- ④ 62'-6" STEEL PLATE BEAM GUARD RAIL, TYPE A, 6 FOOT POSTS
- ⑤ 50'-0" TRAFFIC BARRIER TERMINAL, TYPE 1, SPECIAL (TANGENT)

NOTES: SEE GUARD RAIL TABLE FOR STATIONING AND QUANTITY
 EXISTING T.B.T. TYPE 1 (BLR 23-3) TO BE REMOVED = (3 EACH @ 25FT LENGTH)
 630301-05 SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS SHALL BE COMPLETED BY OTHERS UNDER SEPARATE CONTRACT.

PROFILE	DRAWN	DATE
NOTED	BY	
CHECKED		
BY		
NO.		



FILE NAME = 070315-ehh-pp1.dgn	USER NAME =	DESIGNED - A.S.L.	REVISED -	STATE OF ILLINOIS JACKSON COUNTY HIGHWAY DEPARTMENT		PLAN & PROFILE C.H. 30 / F.A.S. 1919 / BOSKEYDELL ROAD		F.A.S. 1919	SECTION 06-00057-02-BR	COUNTY JACKSON	TOTAL SHEETS 6	SHEET NO. 3	
PLOT SCALE =	CHECKED - S.W.M.	REVISED -	REVISED -			SCALE: 50H:5V		SHEET NO. 1 OF 1 SHEETS		STA. 5+73.27 TO STA. 19+00		CONTRACT NO. 99414	
PLOT DATE = 2/5/2012	DATE = 10/27/09	REVISED -	REVISED -			FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		BRS-1919(167)			
						SCALE: 50H:5V		SHEET NO. 1 OF 1 SHEETS		STA. 5+73.27 TO STA. 19+00			



SEEDING CLASS 2, SPECIAL AND EROSION CONTROL BLANKET

- ① 13'-3" EXISTING TRAFFIC BARRIER TERMINAL, TYPE 5A - TO REMAIN IN PLACE
- ② 36'-9" REMOVE & RE-ERECT STEEL PLATE BEAM GUARDRAIL
- ③ 37'-6" STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS
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NOTES: SEE GUARD RAIL TABLE FOR STATIONING AND QUANTITY
 EXISTING T.B.T. TYPE 1 (BLR 23-3) TO BE REMOVED = (3 EACH @ 25FT LENGTH)
 630301-05 SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS SHALL BE COMPLETED BY OTHERS UNDER SEPARATE CONTRACT.

FILE NAME = 078315-shr-plan28.dgn	USER NAME =	DESIGNED - A.S.L.	REVISED -
		DRAWN - D.T.M.	REVISED -
	PLOT SCALE =	CHECKED - S.W.M.	REVISED -
	PLOT DATE = 2/5/2010	DATE - 11/18/09	REVISED -

STATE OF ILLINOIS
JACKSON COUNTY HIGHWAY DEPARTMENT

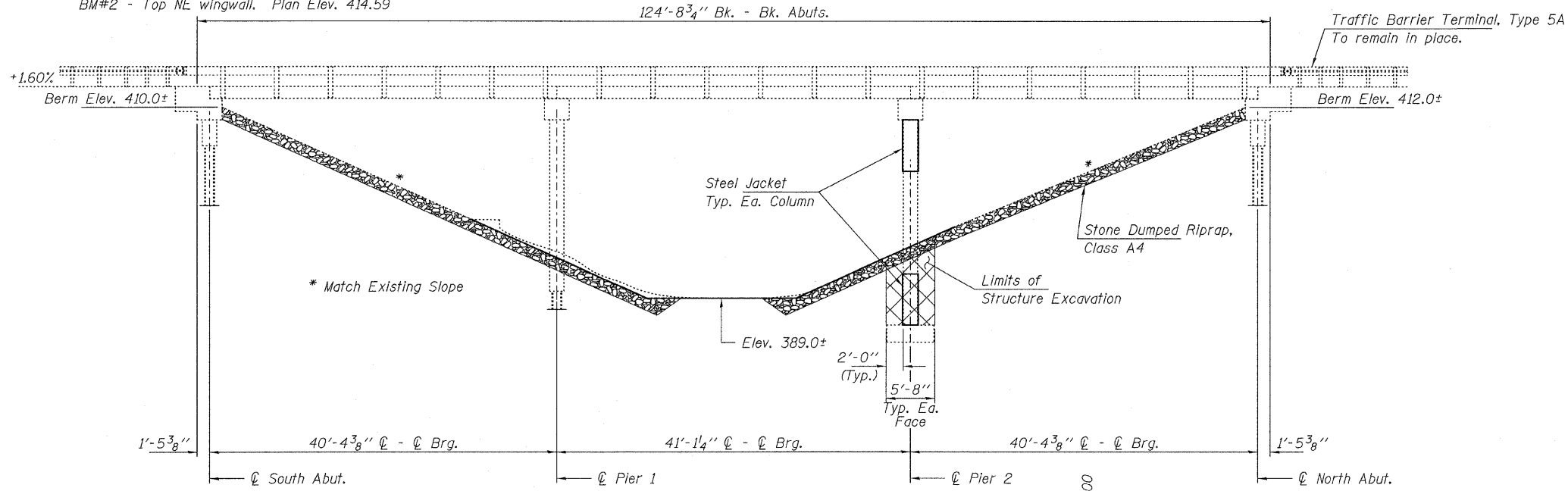


GUARDRAIL DETAILS AND SEEDING PLAN
C.H. 30 / F.A.S. 1919 / BOSKEYDELL ROAD

F.A.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1919	06-00057-02-BR	JACKSON	6	4
CONTRACT NO. 99414				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT BRS-1919 (107)				

SCALE: 1" = 20' SHEET NO. 1 OF 1 SHEETS STA. 10+50 TO STA. 16+80

BENCHMARKS: BM#1 - Top SE wingwall, Plan Elev. 412.64
 BM#2 - Top NE wingwall, Plan Elev. 414.59



ELEVATION

GENERAL NOTES

Field welding is permitted only in locations specified in the contract documents. The Inorganic Zinc Rich Primer / Acrylic / Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the final finish coat for all steel surfaces shall be gray, Munsell No. 5B 7/1. See Special Provision for "Cleaning and Painting New Metal Structures".

The Contractor shall obtain a construction permit from the Illinois Department of Natural Resources (IDNR), Office of Water Resources for any temporary construction activity placed in the water other than the Underwater Structure Excavation Protection. This shall include the placement of material for run-arounds, causeways, etc. Any permit application by the Contractor shall refer to the IDNR permit number as shown in the contract plans.

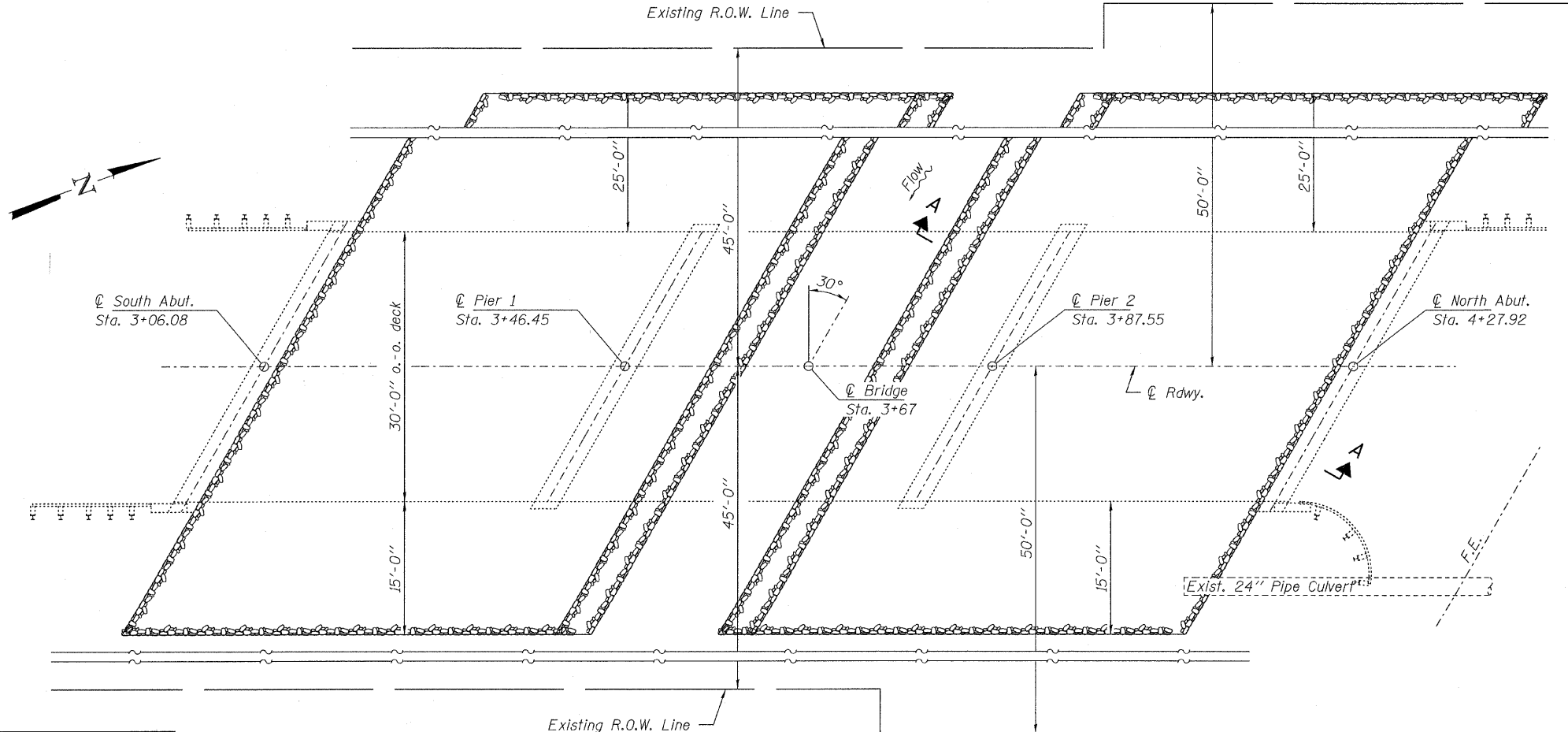
Non-shrink grout shall be in accordance with Section 1024 of the Standard Specifications. The cost of the grout shall be included with the unit price of Structural Steel.

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

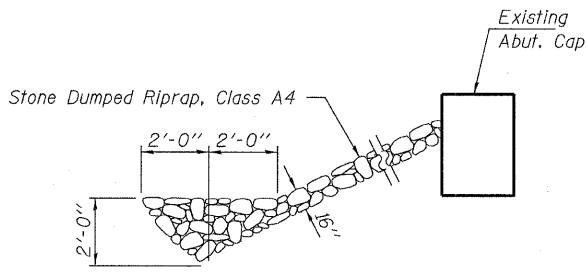
Calculated weight of Structural Steel = 5,310 Pounds

Excavation tree removal and final shaping required for installation of riprap shall be included in the cost of Stone Dumped Riprap.

Removal of existing Terminal Sections and Steel Plate Beam Guardrail and grading required to access the site shall be included in the contract cost and no additional compensation will be allowed.



PLAN



SECTION A-A

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

DESIGNED - S.M.S.
CHECKED - M.D.C.
DRAWN - D.T.M.
CHECKED - S.W.M.

DESIGN STRESSES

FIELD UNITS

$f_y = 36,000$ psi (AASHTO M270 Grade 36)

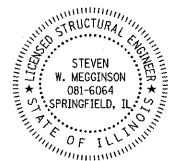
DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications.
 1995 FHWA Seismic Retrofitting Manual for Highway Bridges.

HAMPTON, LENZINI AND RENWICK, INC.
 CIVIL ENGINEERS - STRUCTURAL ENGINEERS - LAND SURVEYORS
 3085 STEVENSON DRIVE, SUITE 201
 SPRINGFIELD, ILLINOIS 62703
 217.546.3400 www.hlrenwicking.com

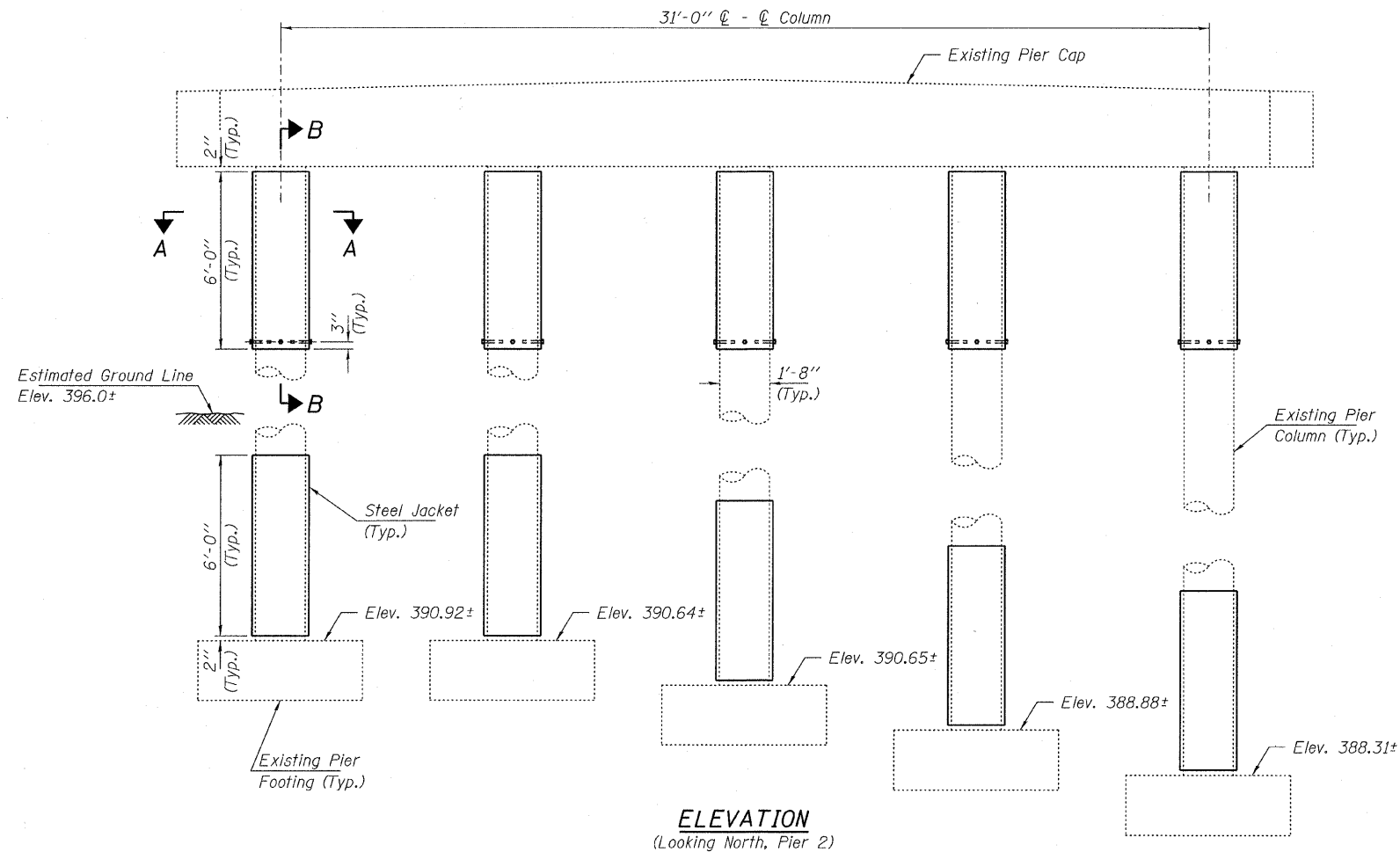
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORPORATION
 PROJECT NUMBER: 07.0315.130 DATE: 10/28/09

Steven W. Megginson 2/10/2010
 ILLINOIS STRUCTURAL ENGINEER NO. 081-6064

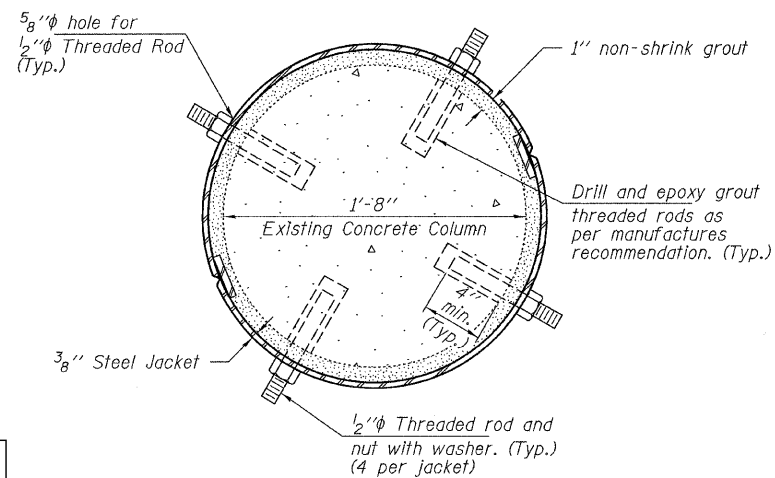


**GENERAL PLAN & ELEVATION
 STRUCTURE NO. 039-3124**

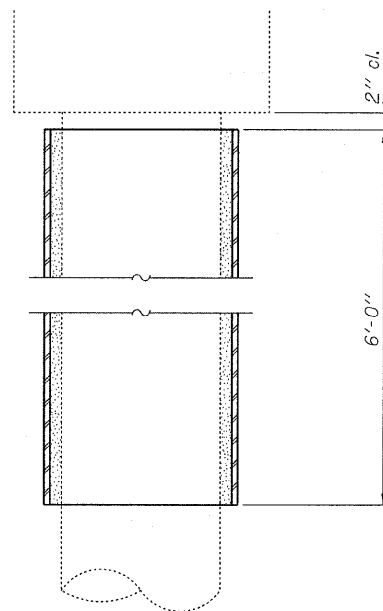
SHEET NO. 1 2 SHEETS	F.A.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	1919	06-00057-02-BR	JACKSON	6	5
FED. ROAD DIST. NO.			ILLINOIS	FED. AID PROJECT BRS-1919(07)	
CONTRACT NO. 99414					



ELEVATION
(Looking North, Pier 2)



SECTION A-A

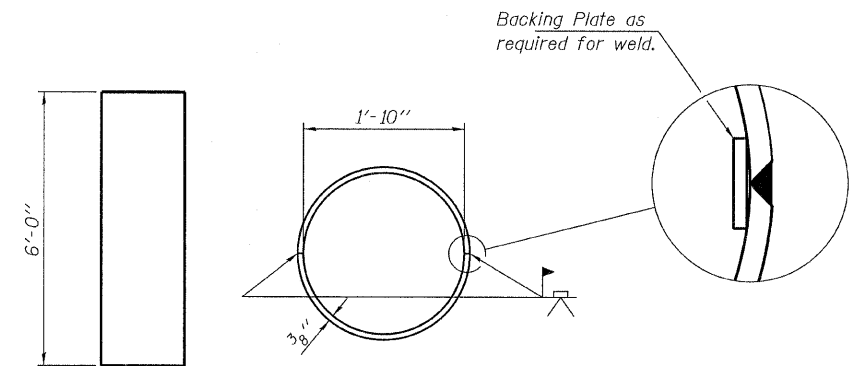


SECTION B-B

SUGGESTED SEQUENCE OF WORK

1. Excavate to top of the footings of Pier 2.
2. Remove all dirt and debris from the concrete columns within the limits of the proposed steel jackets. (Cost included with price of Structure Excavation.)
3. Install and field weld steel jackets at designated locations.
4. Place non-shrink grout between concrete columns and steel jackets. The steel jacket and grout shall have a 2" clearance between the end of the steel jacket and the existing cap or footing.
5. After the grout has cured, the steel jacket shall be painted and allowed to cure.
6. Backfill the excavated material to its original condition around the base of the pier. (Cost included with the unit price for Structure Excavation.)

Notes:
Threaded rods to be installed in top Jacket to secure in place. Cost included with unit price for Furnishing and Erecting Structural Steel. Alternates allowed upon approval of Engineer.



STEEL JACKET DETAIL

DESIGNED - S.M.S.
CHECKED - M.D.C.
DRAWN - D.T.M.
CHECKED - S.W.M.

PIER 2
STRUCTURE NO. 039-3124

HAMPTON, LENZINI AND RENWICK, INC. CIVIL ENGINEERS - STRUCTURAL ENGINEERS - LAND SURVEYORS HLR 3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 217.546.3400 www.hlrengineering.com <small>184.00989 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORPORATION</small>	SHEET NO. 2	F.A.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2 SHEETS	1919	06-00057-02-BR	JACKSON	6	6
PROJECT NUMBER: 07.0315.130	DATE: 10/28/09	CONTRACT NO. 99414				
		FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	BRS-1919 (107)	