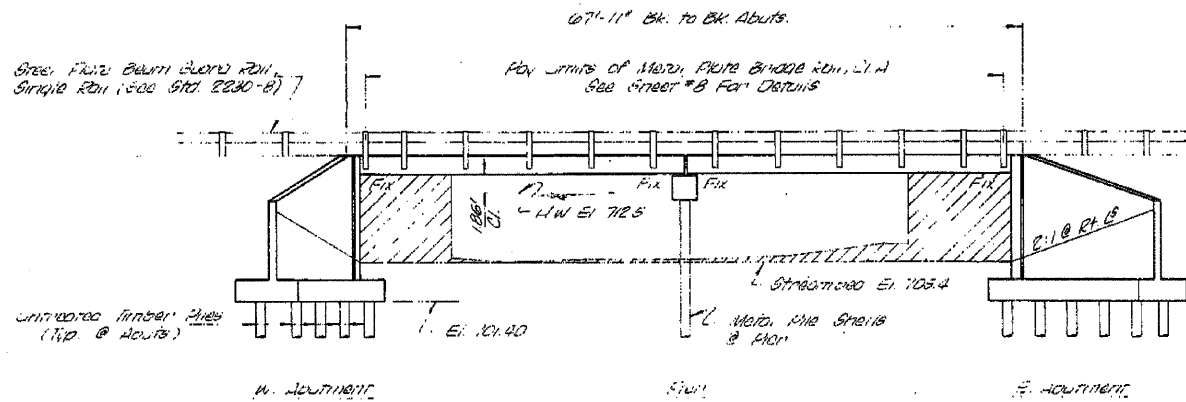
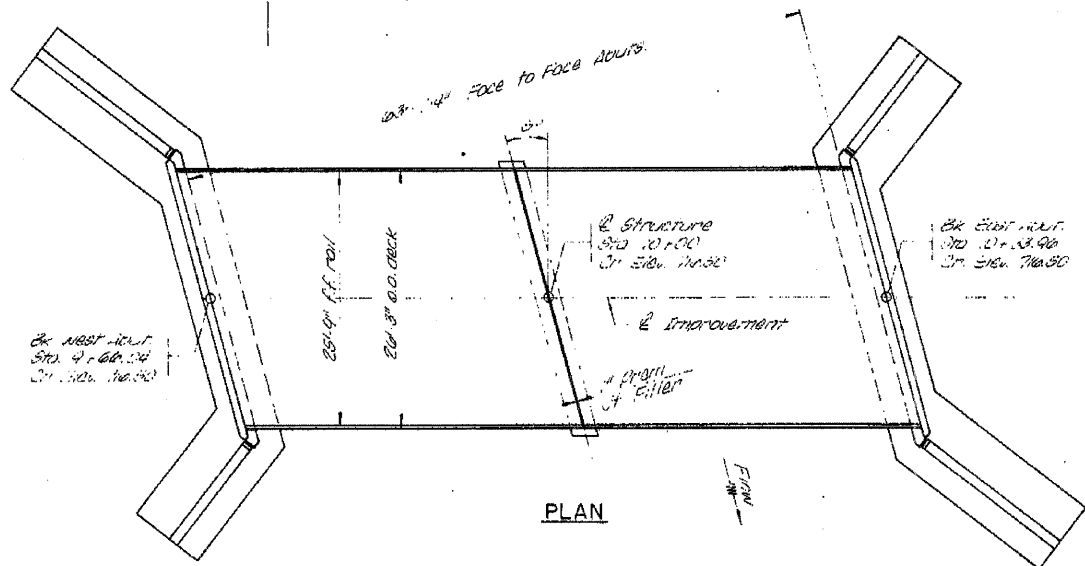


B.M. - RR SIGN IN POWER POLE
 25' LT. 570.10-87
 Elev. 718.19

Existing Structures - Single span pony
 truss, 31' x 17', with timber
 floor on wood stone abutments.
 Construction shall remove existing
 constructing new bridge.



ELEVATION



PLAN

WATERWAY DATA

Channel Area	38 Sq. Ft.
Required Opening (13' x 5')	435 Sq. Ft.
Present Opening	325 Sq. Ft.
Proposed Opening	435 Sq. Ft.
Computed Discharge	2,250 CFS

STRUCTURE NO. 3104
 WEST BRANCH BIG ROCK CREEK
 SECTION 11B-1-TR BUILT 1977
 BIG ROCK ROAD DISTRICT
 KANE COUNTY
 LOADING HS 20

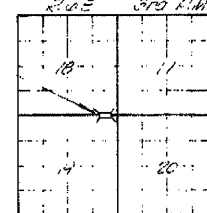
LETTERING FOR NAME PLATE
 300 STD 3113

GENERAL NOTES

All reinforcement shall be lapped 24 diameters unless otherwise shown.
 Boring Data is shown only as a guide to bidders in estimating soil conditions which may be encountered in the work.
 No backfill or embankment shall be placed within the abutments until the abutments are in place, dowels grouted and abutment work poured. See Art. 502.11 of the Standard Specifications.
 The coaks of the abutments and wingwalls shall be waterproofed in accordance with Art. 503.11 of the Standard Specifications.
 The construction shall have two test piles. One tension test pile in a permanent location of the west abutment and one shear and test pile shall be driven in a permanent location of the pier, as directed by the engineer, before ordering the remainder of the piles.
 Pier pile shall be driven a minimum of 15 feet below streambed.

BORING DATA

N - Standard Penetration Test - Blows per foot to drive 2" O.D. Split Spoon Sampler 12" with 140" nominal boring 30".
 CU - Unconfined Compressive Strength - t/1sf
 W - Water Content - Percentage of oven dry weight %
 * - Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer.



LOCATION PLAN

DESIGN STRESSES

$f_c = 1,500$ psi (Abutments)
 $f_c = 1,800$ psi (Prestress Slab)
 $f_c = 1,400$ psi (Class 1 Concrete)
 $f_s = 30,000$ psi (Reinforcement)
 $v = 75$ psi (Ftg.)
 $u = 0$ (Class 1 Concrete)
 $u = 8$ (Prestress Slab)
 Allow. stress 20-100
 E. J. J. J. J.
 Illinois Structure No. 2434

Ground Surface Elev. 718.7

715	8	FILL - Brown SAND & GRAVEL, moist
710	2	FILL - Brick & brown silty clayey TOPSOIL, trace sand & gravel, moist
705	18	Soft black organic CLAY, very moist
700	18	Fine gray SAND & GRAVEL, wet (saturated)
695	14	Fine silty, medium to coarse SAND, little silt, gravel, wet
690	14	Fine gray fine to coarse SAND, wet
685	11	Very tough gray silty CLAY, trace sand & gravel, moist
680	10	Dense gray silty clay, LOAM, moist
675	10	Very tough gray silty CLAY, moist
670	10	Fine brown medium SAND, little clay, wet
665	10	Fine to dense layers of brown silty LOAM & sandy loam, numerous sand laminations
660	10	
655	10	
650	10	Very dense brown SAND & GRAVEL, wet
645	10	Dense brown fine to medium SAND, very moist

BORING # 1 End of Boring Elev 648.7
 5' RT 572 10' L

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Bridge Deck	Sq. Ft.	1,781		1,781
Class 1 Concrete	Cu Yd.		123.1	123.1
Reinforcement Bars	Pounds		7,000	7,000
Wing Plates	Each	1		1
Metal Plate Bridge Rail, Class 1	Lin. Ft.	129		129
Untreated Piles up to 30 Feet	Lin. Ft.		880	880
Test Piles (2)	Each		1	1
Metal Plate Bridge Rail, 2"	Lin. Ft.		192	192
Test Piles Metal Sheels	Each		1	1
Structure Excavation	Cu Yd.		550	550
Excavation of Existing Structures	Each		1	1
Continuous Mixture Concrete	Ton	28		28
Metal Plates	Each		55	55
Structural Mortar (Prime Coat)	Gallon	20		20

GENERAL PLAN & ELEVATION

SECTION 11B-1-TR
 BIG ROCK ROAD DISTRICT
 KANE COUNTY
 STATION 10+00

COLLINS AND RICE
 CONSULTING ENGINEERS

DESIGNED: J.S. CHECKED: V.B.
 DRAWN: J.F. DATE: 3-14-12