Benchmark: Exist. RR spike 1st power pole East of Mole Creek South side of IL Rte. 23. Elev. = 614.95

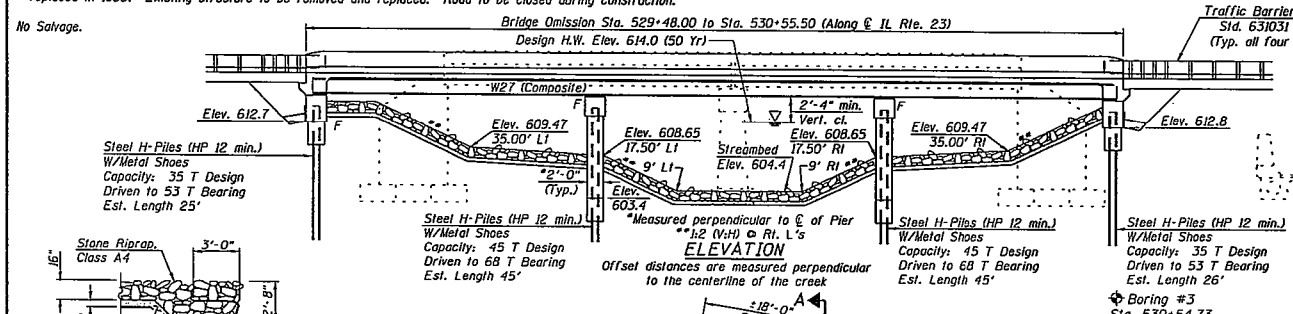
Existing Structure: SN 053-0079, two-span 76'-6" Bk. to Bk. of abutments measuring 46'-5" out to out, with no skew. The structure consists of PPC Deck Beams supported on closed concrete abutments and a solid concrete pier. Built as Route 118 Section 102B at Sta. 530+00.15 in 1928. Superstructure replaced in 1983. Existing structure to be removed and replaced. Road to be closed during construction.

No Salvage.

Design Scour Elevation			
W. Abut.	Pier 1	Pier 2	E. Abut.
612.9	600.4	600.4	613.1

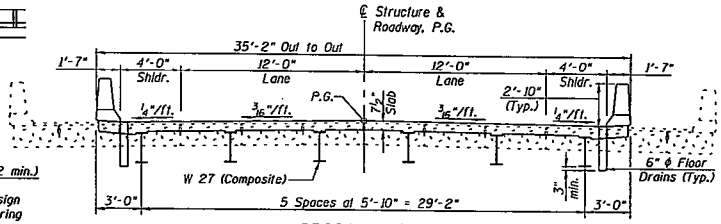
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 68	102 BR	Livingston		1
F.A.P. ROUTE SECT. NO. 2	ILLINOIS	F.A.P. NO. PROJECT		1 SHEETS

Contract #66666

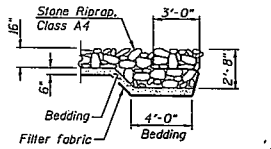


ELEVATION

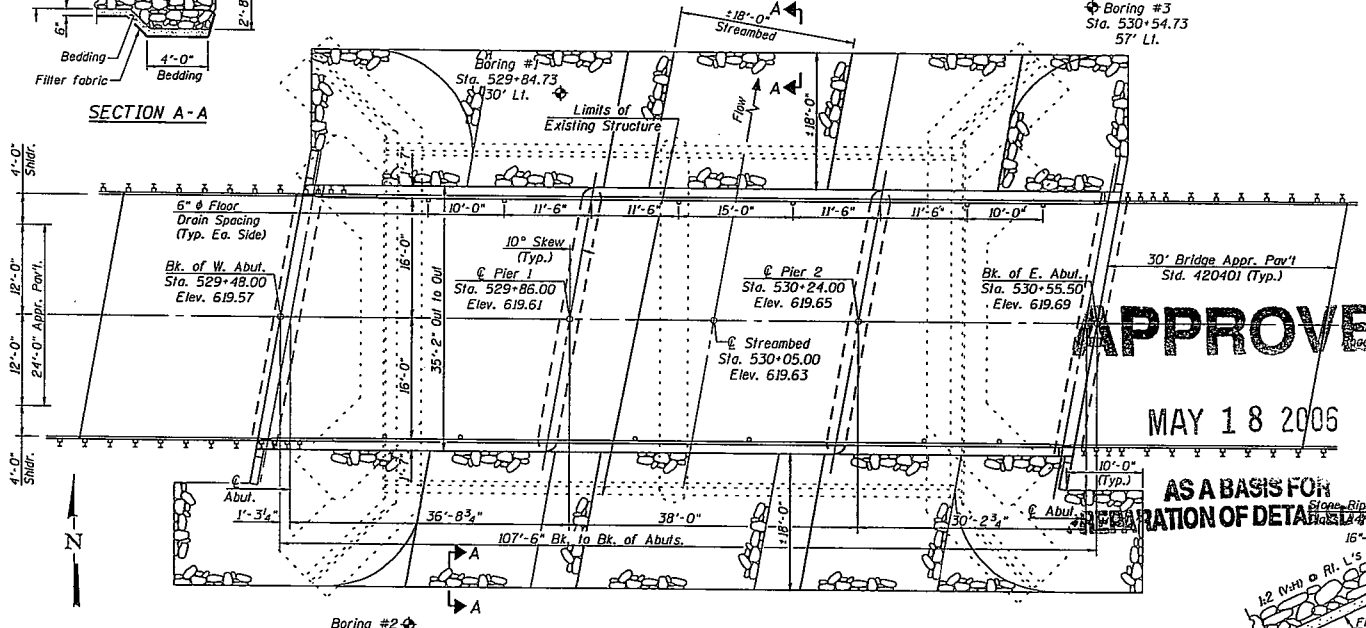
Offset distances are measured perpendicular to the centerline of the creek



CROSS SECTION



SECTION A-A



PLAN

APPROVED

MAY 18 2006

AS A BASIS FOR PREPARATION OF DETAILED PLANS

HIGHWAY CLASSIFICATION

FAP Rte. 68 - IL Rte. 23
Functional Class: Rural Minor Arterial
ADT: 1,850 (2005); 2,500 (2027)
DHV: 173 (2003); 263 (2027)
Design Speed: 55 m.p.h.
Posted Speed: 55 m.p.h.

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = .04g
Site Coefficient (S) = 1.2

LOADING HS20-44

Allow 50#/sq. ft. for future wearing surface.

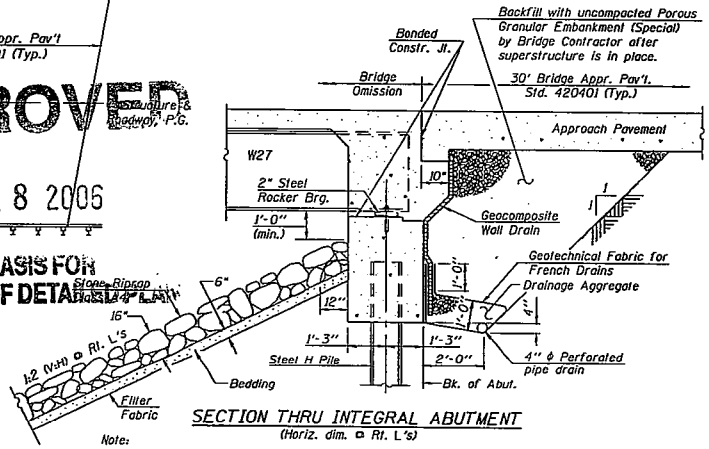
DESIGN SPECIFICATIONS

2002 AASHTO (17th Edition)

DESIGN STRESSES

FIELD UNITS

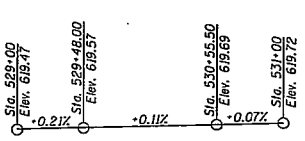
f'_c = 3,500 psi
f_y = 60,000 psi (reinforcement)
f_y = 50,000 psi (AASHTO M270 Grade 50W)



SECTION THRU INTEGRAL ABUTMENT

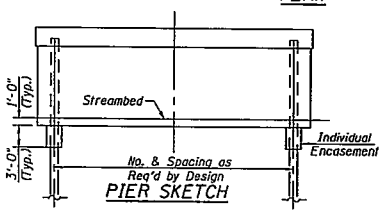
(Horiz. dim. ⊙ Rt. L's)

Note:
All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).

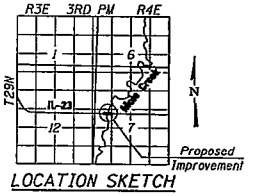


PROFILE GRADE

(Located at ℄ of Structure)



PIER SKETCH



LOCATION SKETCH

WATERWAY INFORMATION

Drainage Area = 22.9 sq. mi. Low Grade Elev. = 619.28 ⊙ Sta. 529+00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	1630	303	416	613.3	0.7	0.2	614.0	613.5
Design	50	2398	355	474	614.0	0.9	0.4	614.9	614.5
Base	100	2710	370	493	614.3	1.0	0.6	615.3	614.8
Overlopping	-	-	-	-	-	-	-	-	-
Max. Calc.	500	3438	398	530	614.9	1.3	0.8	616.2	615.7

ILLINOIS DEPARTMENT OF TRANSPORTATION

GENERAL PLAN
IL ROUTE 23 OVER MOLE CREEK
FAP RTE 68 SECTION 102 BR
LIVINGSTON COUNTY
STATION 530+05
STRUCTURE NO. 053-0183

DATE: 5-15-06

DRAWN BY JMT
CHECKED BY WJV