

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

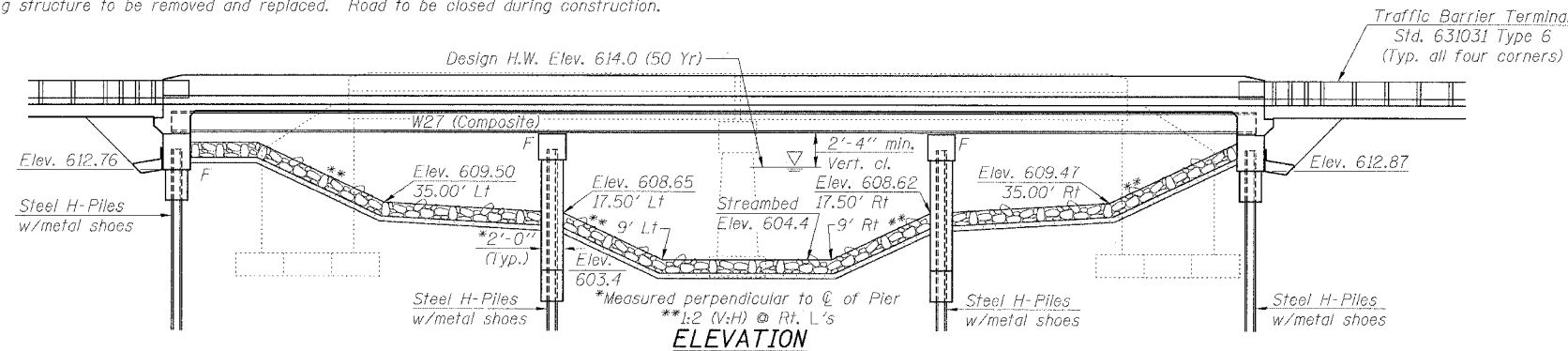
Existing Structure: SN 053-0079, two-span 76'-6" Bk. to Bk. of abutments measuring 46'-5" out to out, with no skew. The structure consists of PPC Deck Beams supported on closed concrete abutments and a solid concrete pier. Built as Route 118 Section 102B at Sta. 530+00.15 in 1928. Superstructure replaced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

No Salvage.

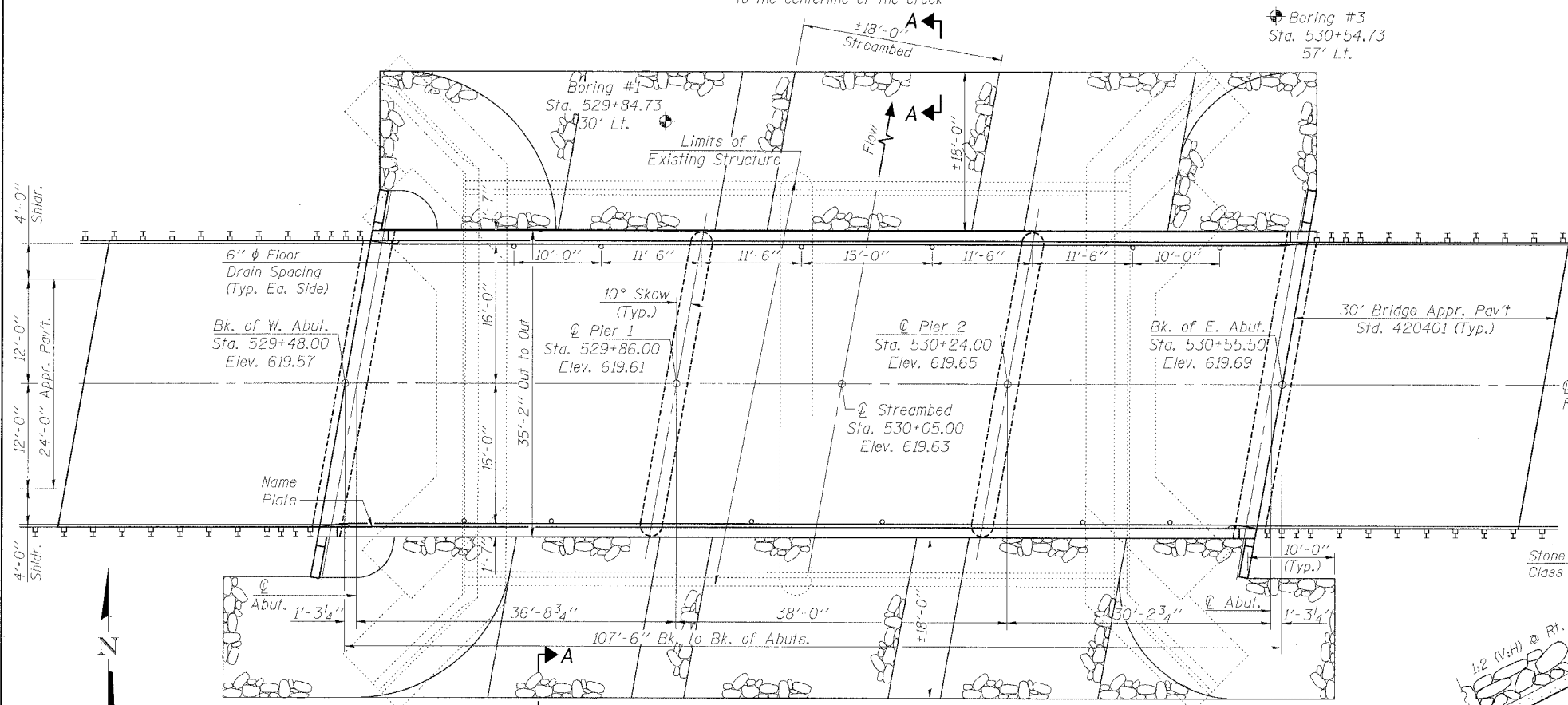
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1
FAP 68	102 BR	Livingston	37	11	17 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

Contract #66666

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

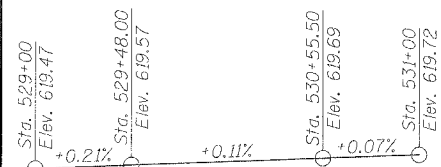


Offset distances are measured perpendicular to the centerline of the creek

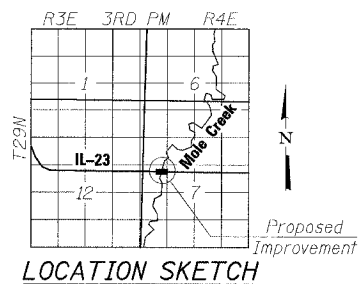


PLAN

Boring #2
Sta. 529+65.00
50' Rt.



PROFILE GRADE
(Located at C of Structure)



LOCATION SKETCH

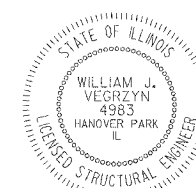
WATERWAY INFORMATION

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

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.		Head - Ft.		Headwater El.	
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.
10	1630	303	416	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	
Overtopping	-	-	-	-	-	-	-	-	-	
Max. Calc.	500	3438	398	530	614.9	1.3	0.8	616.2	615.7	

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

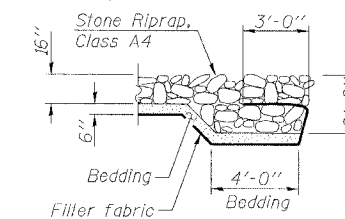
William J. Vegryzn
ENGINEER OF BRIDGES AND STRUCTURES



B. W. Veigh 10-17-06
Expires 11-30-08

STATION 530+05
BUILT 20 BY
STATE OF ILLINOIS
F.A.P. RT. 68 SEC. 102BR
LOADING HS20
STR. NO. 053-0183

NAME PLATE
See Std. 515001



SECTION A-A

LOADING HS20-44
Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS
2002 AASHTO (17th Edition)

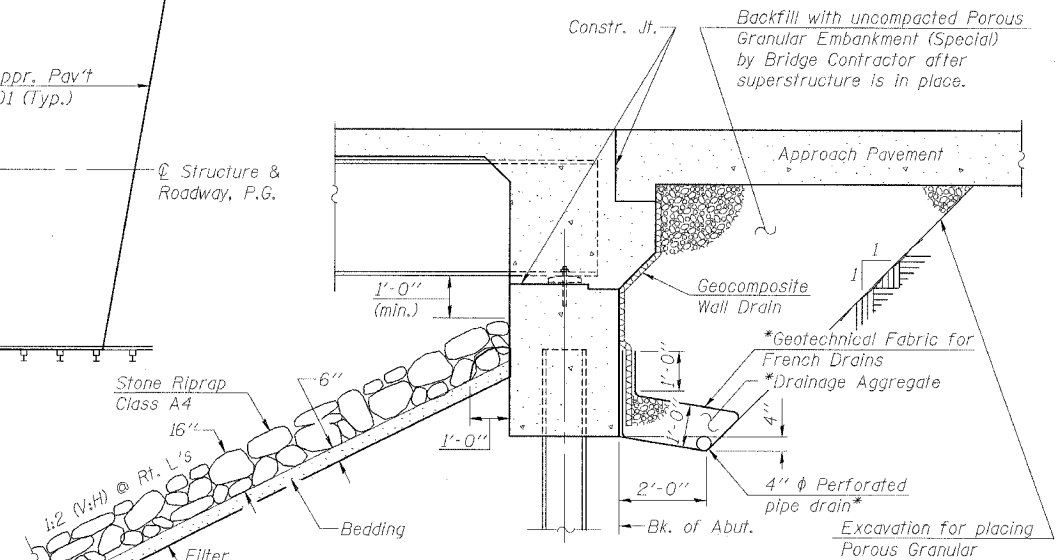
DESIGN STRESSES

FIELD UNITS

$f_c = 3,500$ psi
 $f_y = 60,000$ psi (reinforcement)
 $f_y = 50,000$ psi (AASHTO M270 Grade 50W)

SEISMIC DATA

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



PIPE UNDERDRAIN AND RIPRAP DETAIL

(Horiz. dim. @ Rt. L's)
*Cost included with Pipe Underdrains for Structures.

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 60110D).

Excellence through Ownership

200 West Front Street
Wheaton, IL 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION

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

DATE: 10/20/2006
DRAWN BY JMT
CHECKED BY WJV