

**BENCH MARK**

BM 356 Cut Square On North End  
Of Original West Abutment Of Bridge 99  
Station 8+122.951 3.02m Lt  
Elev. = 230.447

**PILE DATA (WEST ABUT.)**

Type & Size: Metal Shell - 356mm dia. x 6.35mm Walls (14in. dia. x 0.250in. Walls)  
Nominal Required Bearing: 510 KN (111 Kips)  
Allowable Resistance Available: 170 KN (37 Kips)  
Est. Length: 16.5 M  
No. Production Piles: 2 Each  
No. Test Piles: 1 Each

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**ELEVATION VIEW (LOOKING UPSTREAM)**

NOT TO SCALE

**PLAN VIEW**

NOT TO SCALE

**WATERWAY INFORMATION**

Drainage Area = 3,434 sq.km. Low Grade Elev. = 231.28 @ 8+257.81					
Flood	Freq. Year	Q (cfs)	Opening (sq.ft.)		H.W.E.
			Existing	Proposed	
Design	100	19,620	10,091	6,688	233.320

**BILL OF MATERIALS - BRIDGE 99**

ITEM	UNIT	QUANTITY
CONCRETE STRUCTURES	CM	89.9
REINFORCEMENT BARS	KG	4220
FURNISHING PILES, METAL SHELL 356mmx6.35mm	M	66
DRIVING PILES	M	66
TEST PILE, METAL SHELLS	EA	2
PEDESTRIAN BRIDGE SUPERSTRUCTURE	SM	504
ANCHOR BOLTS, M24	EA	32
STONE RIPRAP, CLASS A5	SM	630
FILTER FABRIC	SM	630
RIPRAP, SPECIAL	M TONS	410
DRILL AND GROUT BARS	EA	118
POROUS GRANULAR EMBANKMENT	CM	95.0
WOOD RAIL	M	10
NAME PLATE, SPECIAL	EA	1
MONODIRECTIONAL PRISMATIC BARRIER REFLECTORS	EA	12
STRUCTURAL REPAIR OF CONCRETE (DEPTH>125mm)	SM	44.4
STRUCTURAL REPAIR OF CONCRETE (DEPTH<125mm)	SM	38.9
CONCRETE REMOVAL, SPECIAL	SM	24.3
EXPANSION BOLTS, M20	EA	16
UNDERWATER STRUCTURE EXCAVATION PROTECTION L1	EA	1

**DESIGN LOADING**

MS9 (H-10)  
4.07 KN/M<sup>2</sup> (85 psf)  
Lateral Stream Force (See Bridge General Notes)

**DESIGN STRESSES**

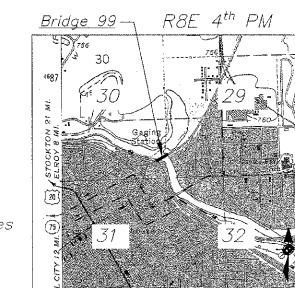
f<sub>c</sub> = 24 MPa (Field Placed Concrete)  
f<sub>y</sub> = 420 MPa (Reinforcement Bars)

**DESIGN SPECIFICATIONS**

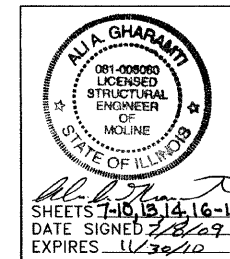
2002 AASHTO Standard Specifications - 17th Edition  
(Excluding Article 3.18.2 - See Bridge General Notes)  
AASHTO Guide Specifications for Design of Pedestrian Bridges

**SEISMIC DATA**

Seismic Performance Category (SPC) = A  
Bedrock Acceleration Coefficient (A) = 3.15%  
Site Coefficient(s) = 1.0



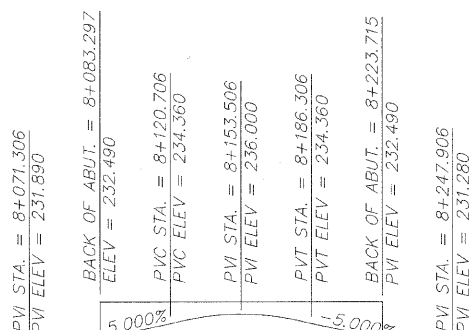
LOCATION SKETCH



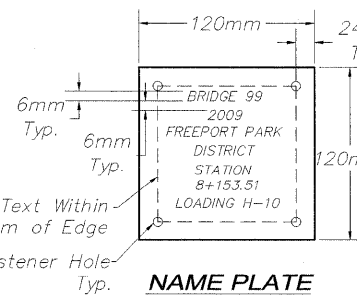
DIMENSIONS AND ELEVATIONS  
MAY VARY WITH PREFABRICATED  
BRIDGE MANUFACTURER.  
DETERMINE ACTUAL BACK WALL  
HEIGHT AND BRIDGE SEAT  
ELEVATION IN ACCORDANCE WITH  
SHOP DRAWINGS SUPPLIED FOR  
THIS PROJECT.

GENERAL PLAN & ELEVATION  
OVER THE PECATONICA RIVER  
SECTION 09-P4000-00-BT  
STEPHENSON COUNTY  
STATION 8+153.506

Sheet 1 of 4



PROFILE GRADE



NAME PLATE

**REVISIONS**

NO.	ITEM	DATE
1.	Revised from 5-span structure to 4-spans	2-26-09
2.	Preliminary IDOT Submittal	5-5-09

PLOTTING SCALE: 1 : 100

DRAWN BY: CTB/CDS

CHECKED BY: JWH/AC

DATE: JUNE, 2009



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Bridge No. 99 STA. 8+153.506

PECATONICA PRAIRIE PATH

STEPHENSON COUNTY

SECTION 09-P4000-00-BT

JOB NUMBER: 04-28-98-037

SHEET NO.

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OF  
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