Bench Mark: Chisel square S.W. Cor. of S.E. Ret. Wall, Sta. 1898+42.14 18.7' LT. Elev. 676.306.

Existing Structure: S.N. 038-0043, Two-32'-3" spans, continuous 14" concrete slab with closed abutments and solid pier on spread footings. Built in 1924 as two span continuous reinf. concrete through girder bridge. Superstructure replaced in 1952 with widened substructure under F.A. Rt. 26 (S.B.I. Rte. 25) Sec. 34-B-Y. 19'-6" west and 15'-6" east of ℄ (Curb to Curb). "Texas T" type bridge rails, 38'-4" bridge width (Out to Out), 67'-10¾" bridge length (Bk. to Bk. abutments). Central 4' of slab width thickened and longitudinal separation joint eliminated in 1988. Existing structure to be removed and replaced. Traffic to be detoured during construction.

No salvage.

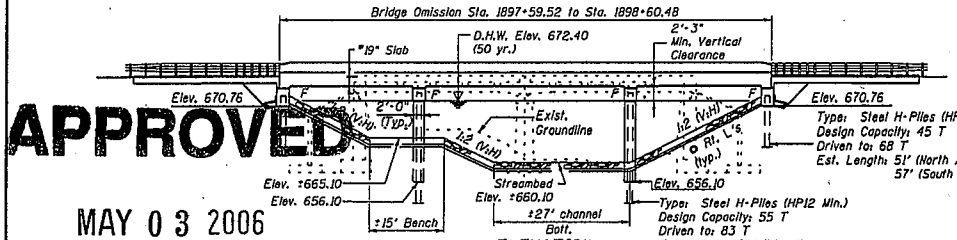
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 338 (U.S. 45)	34 BR-1	IROQUOIS		1 / 1 SHEETS

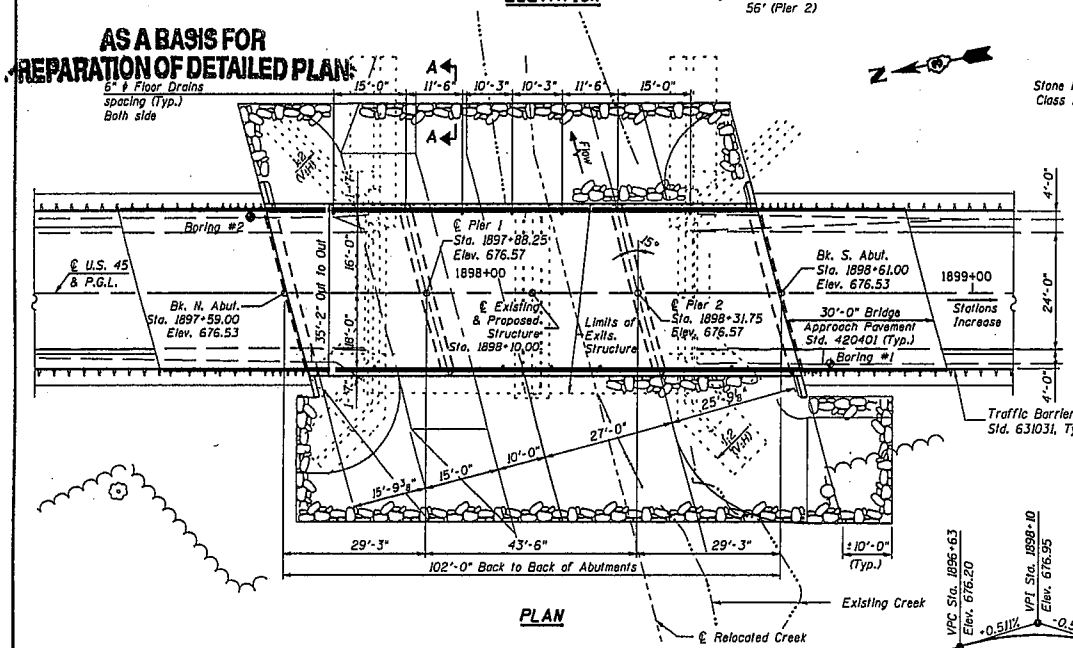
APPROVED

MAY 0 3 2006

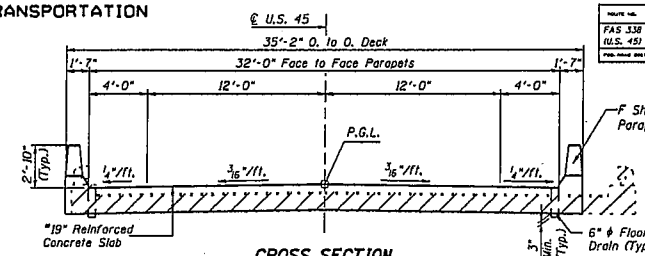
AS A BASIS FOR PREPARATION OF DETAILED PLAN



ELEVATION



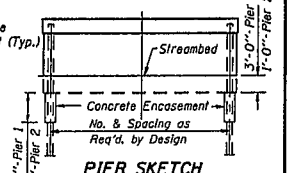
PLAN



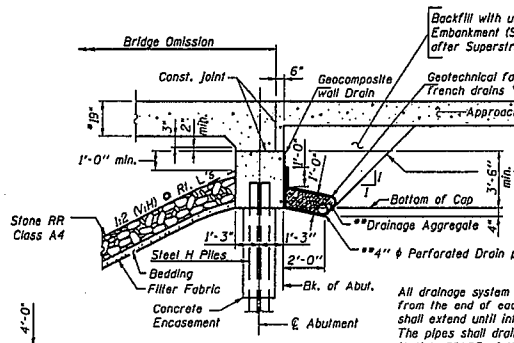
CROSS SECTION

(Looking South)

* Slab thickness may be refined during final design.



PIER SKETCH

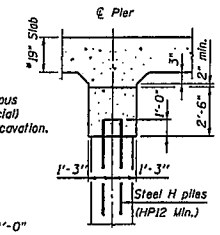


All drainage system component shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls (Article 601.05 of the Standard Specifications and Highway Standard 601101).

** Included in the cost of Pipe Underdrains for Structures.

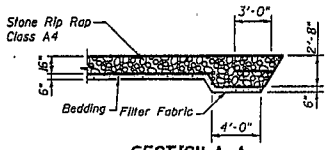
SECTION THRU INTEGRAL ABUTMENT

(Horiz. dim. ○ Rt. L's)



SECTION THRU PIER

(Horiz. dim. ○ Rt. L's)



SECTION A-A

HIGHWAY CLASSIFICATION

FAS Rte. 338 - U.S. 45
Functional Class: Major Collector (Non Urban)
ADT: 1250 (2003); 1400 (2007)
DHV: 150 (2007)
Design Speed: 55 m.p.h.
Posted Speed: 55 m.p.h.

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)

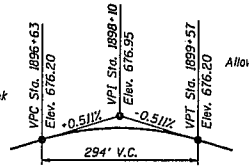
SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.045g
Site Coefficient (S) = 1.2

WATERWAY INFORMATION

Drainage Area = 20.9 mi² Prop. Low Grade Elev. 675.60 ft. ○ Sta. 1903+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	1421	480	611	671.4	0.2	0.1	671.6	671.5
Design	50	2085	542	695	672.4	0.4	0.2	672.8	672.6
Base	100	2350	561	721	672.7	0.4	0.3	673.1	673.0
Overlopping	165	2971	604	783	673.4	0.6	0.4	674.0	673.8



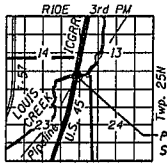
PROFILE GRADE

along ℄ U.S. 45

SCOUR ELEVATION TABLE

Design Scour Elevation (ft)	N. Abutment	Pier 1	Pier 2	S. Abutment
	670.55	661.10	656.10	670.65

76 76 ← Bottom of Abutment Cap



LOCATION SKETCH

GENERAL PLAN
U.S. 45 OVER LOUIS CREEK
FAS ROUTE 338 (U.S. 45)
SECTION 34 BR-1
IROQUOIS COUNTY
STATION 1898+10.00
STRUCTURE NO. 038-0212

DESIGNED	MR
CHECKED	HT
DRAWN	JS
CHECKED	HT/MR