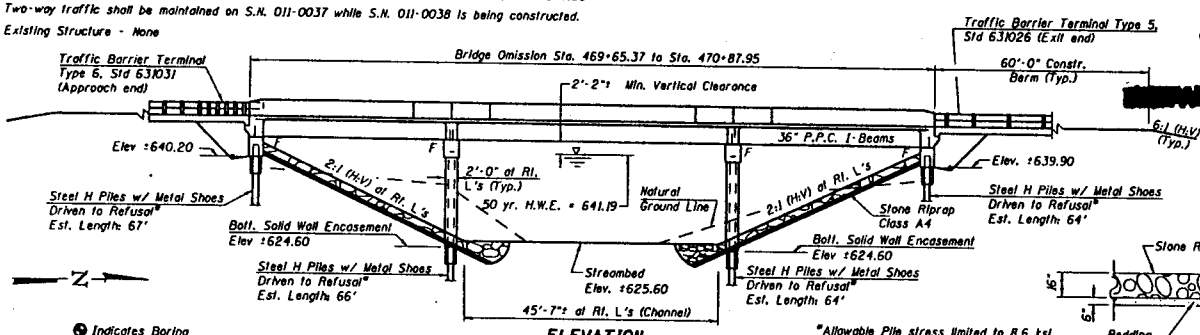
BM - Chiseled "□" on Northeast Wingwall of SN 011-0037 Sta. 470+76.0, 17.0' Lt., Elev. 647.33
Two-way traffic shall be maintained on S.N. 011-0037 while S.N. 011-0038 is being constructed.
Existing Structure - None

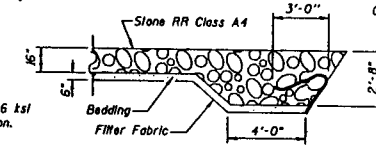
APPROVED
AS A BASIS FOR
PREPARATION OF DETAILED PLANS
JAN 24 2006

FAP 322	11-13	CHRISTIAN			SHEET NO. 1 / 1 SHEET

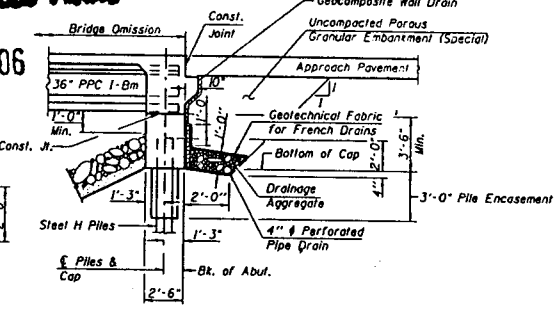
Contract #72961



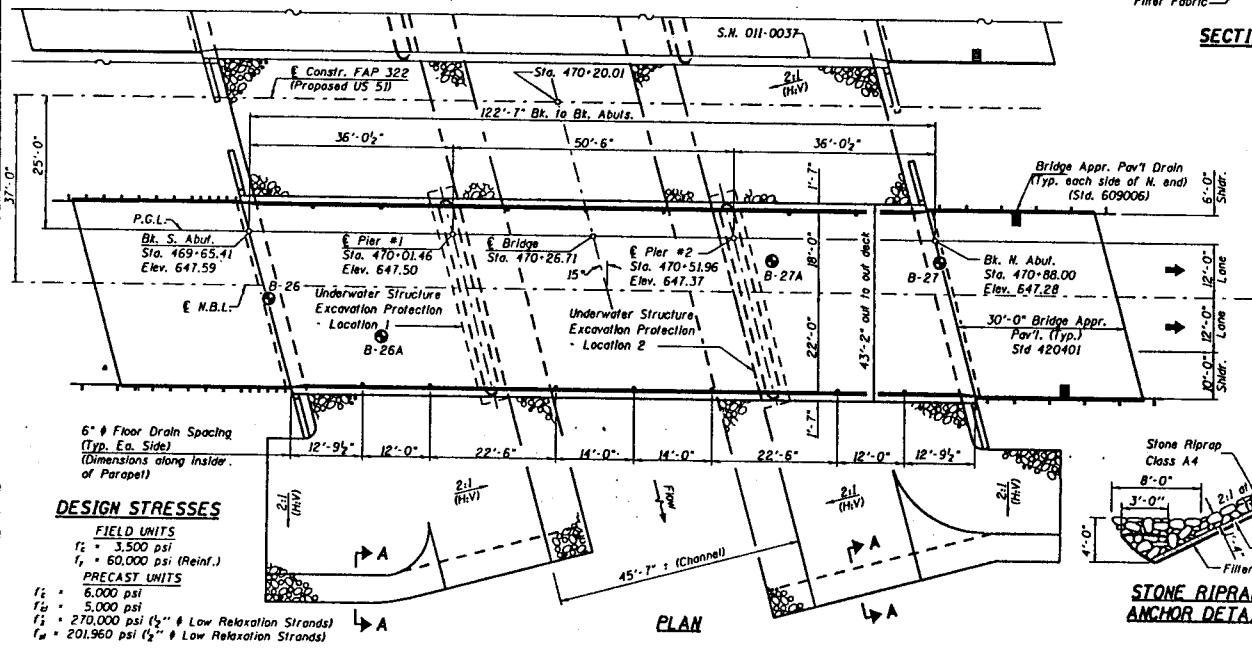
ELEVATION



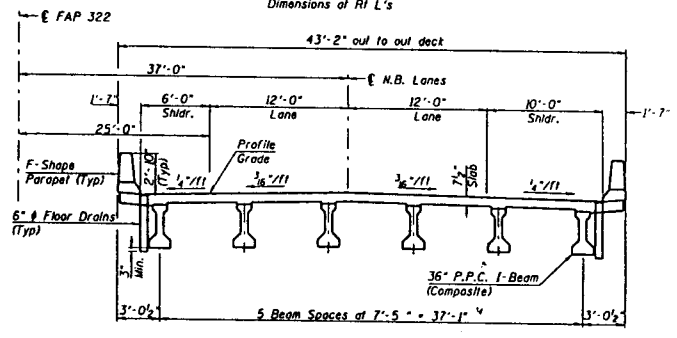
SECTION A-A



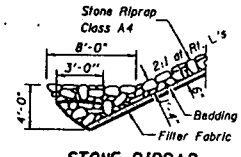
SECTION THRU INTEGRAL ABUTMENT
Dimensions at Rt L's



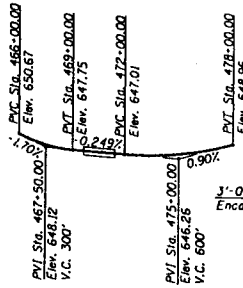
PLAN



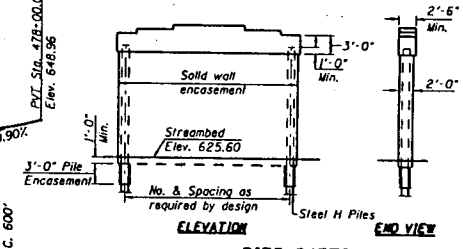
CROSS SECTION
(Looking North)



STONE RIPRAP ANCHOR DETAIL



FAP RTE. 322 PROFILE GRADE
(Along edge of inside N.B. lane)



PIER SKETCH

DESIGN STRESSES

FIELD UNITS
f'_c = 3,500 psi
f_y = 60,000 psi (Reinf.)

PRECAST UNITS
f'_c = 6,000 psi
f'_{ci} = 5,000 psi
f'_s = 270,000 psi (½" ϕ Low Relaxation Strands)
f_{pi} = 201,960 psi (½" ϕ Low Relaxation Strands)

DESIGN SPECIFICATIONS

2002 AASHTO "Standard Specifications for Highway Bridges"

LOADING HS20-44

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

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.057g
Site Coefficient (S) = 1.0

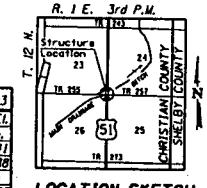
HIGHWAY CLASSIFICATION

F.A.P. Rte. 322 (US Rte. 51)
Functional Class: Principal Arterial (Expressway)
ADT: 4,500 (1994) 7,000 (2014)
ADTT: 797 (1994) 1,239 (2014)
DHV: 620 (1994) 930 (2014)
Design Speed = 70 mph
Posted Speed = 65 mph

WATERWAY INFORMATION

Drainage Area = 28.46 Sq. Mi. Low Grade Elev. 646.84 at Sta. 473+30.03

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.
Design	50	3419	929.1	929.1	641.19	0.22	0.22	641.41	641.41
Base	100	3941	970.3	970.3	641.60	0.28	0.28	641.88	641.88
Overtopping	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Max. Calc.	500	5201	1074.2	1074.2	642.60	0.37	0.37	642.97	642.97



LOCATION SKETCH

ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL PLAN
FAP RTE 322 (US 51) OVER
MAIN DRAINAGE DITCH
SECTION 11-13
CHRISTIAN COUNTY
STATION 470+20.01
S.N. 011-0038