ROUTE NO.	SECTION	COUNTY	TOT'AL SHEETS	SHEET NO.
FAP 328 (U.S. 45)	(2, 3, 4) RS-1	CLAY	1	1

BENCHMARK T.B.M. CHISELED "□" TOP N.E. CORNER OF BRIDGE STA. 812+27±, 17.5' LT. EL. 504.13

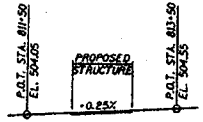
EXISTING STRUCTURE

STRUCTURE NUMBER 013-0009 WAS ORIGINALLY BUILT IN 1920 AND RECONSTRUCTED IN 1974. IT CONSISTS OF A SINGLE SPAN 21' PRECAST, PRESTRESSED CONCRETE DECK BEAM BRIDGE SUPPORTED ON CLOSED CONCRETE ABUTMENTS. THE LOWER PORTION OF THE ABUTMENTS ARE FROM THE ORIGINAL 1920 STRUCTURE AND ARE SUPPORTED ON SPREAD FOOTINGS WHILE THE REINFORCED CONCRETE CAPS ARE FROM THE 1974 RECONSTRUCTION. THE STRUCTURE MEASURES 48'-0" BACK TO BACK OF THE ABUTMENTS AND 33'-0" OUT TO OUT OF THE DECK.

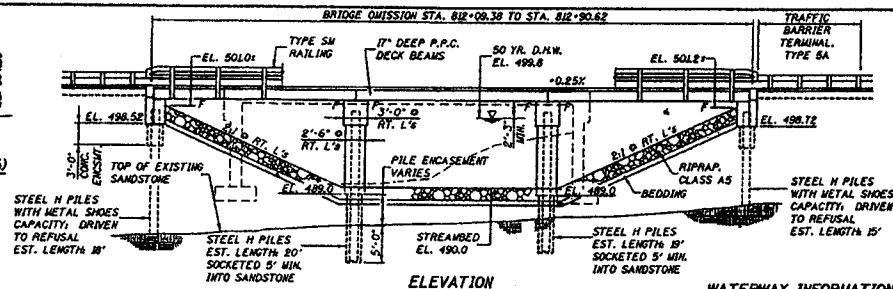
THE EXISTING ROADWAY WILL REMAIN OPEN TO ONE LANE OF TRAFFIC DURING THE CONSTRUCTION PERIOD UTILIZING STAGE CONSTRUCTION.

SALVAGE

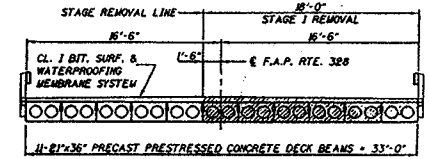
NO SALVAGE



PROFILE GRADE
FAP RTE. 328 (U.S. 45)



ELEVATION

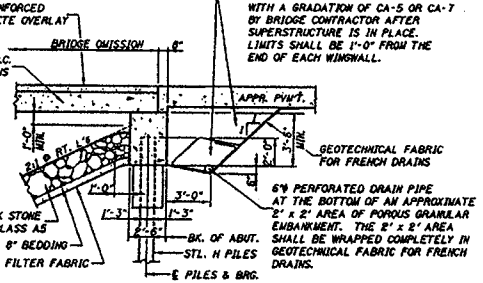


EXISTING STRUCTURE
(LOOKING UPSTATION)

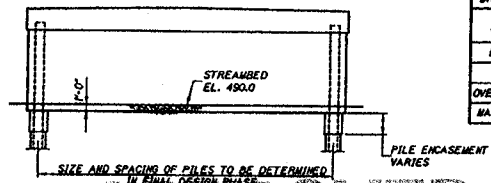
WATERWAY INFORMATION

DRAINAGE AREA = 10.9 SQ.MI. LOW GRADE ELEV. = 504.25 @ STA. 812+08.67

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	2,318	299	406	499.8	1.8	0.7	501.6	500.5
BASE	100	2,650	311	424	500.1	2.2	1.1	502.3	501.2
OVERTOPPING	N/A								
MAX. CALC.	600	3,436	333	456	500.6	2.9	1.8	503.6	502.1



SECTION THRU ABUTMENT
(ALL HORIZONTAL DIMENSIONS SHOWN ARE AT RIGHT ANGLES UNLESS OTHERWISE NOTED.)



PIER ELEVATION

DESIGN SPECIFICATIONS

1996 AASHTO WITH INTERIMS THRU 2000

DESIGN STRESSES

PRECAST PRESTRESSED UNITS

f'c = 5,000 psi
f'ci = 4,000 psi
f's = 270,000 psi (½" ϕ LOW LAX STRANDS)
f'si = 201,960 psi (½" ϕ LOW LAX STRANDS)

FIELD UNITS

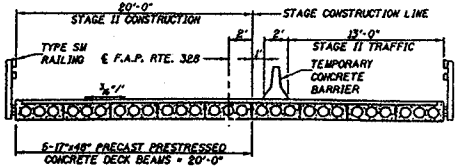
f'c = 3,500 psi
fy = 60,000 psi (REINF.)

LOADING HS20-44

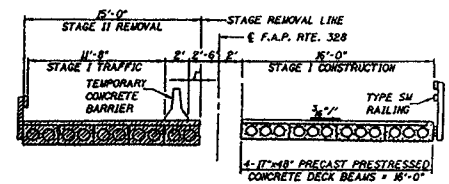
ALLOW 50 psf FOR FUTURE WEARING SURFACE.

SEISMIC DATA

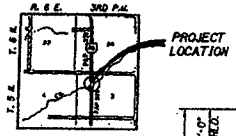
SEISMIC PERFORMANCE CATEGORY (SPC): A
BEDROCK ACCELERATION COEFFICIENT: 8.0%
SITE COEFFICIENT (S) = 1.0



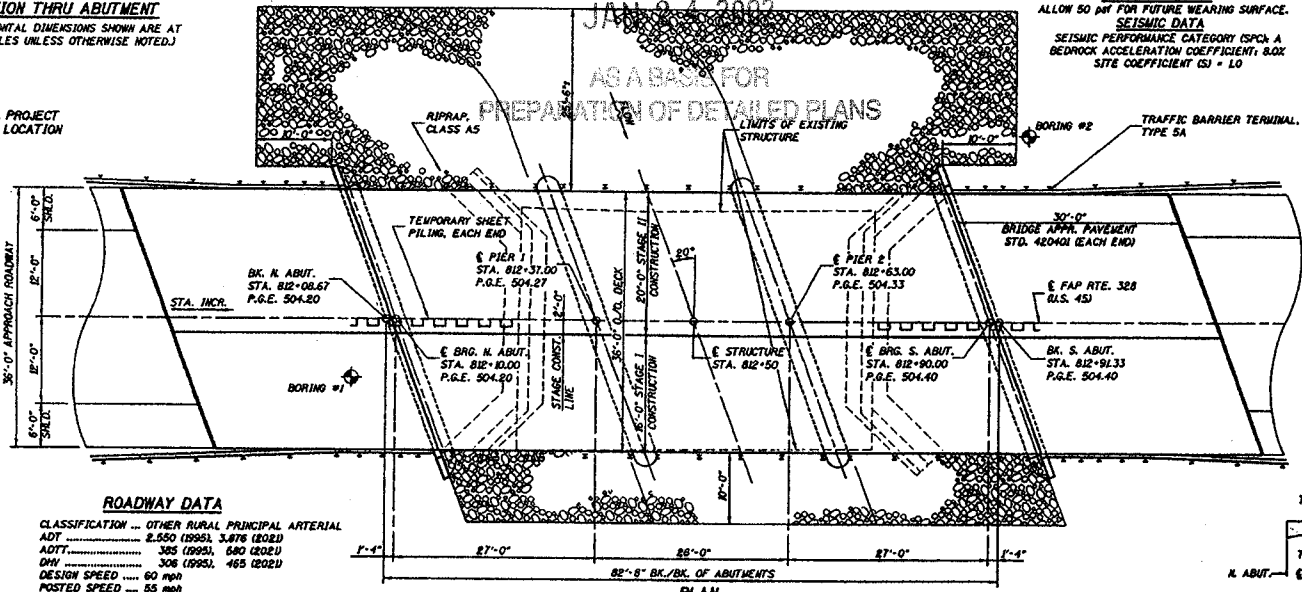
STAGE I CONSTRUCTION
(LOOKING UPSTATION)



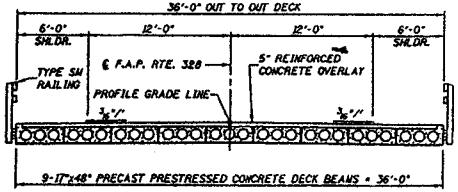
STAGE I CONSTRUCTION
(LOOKING UPSTATION)



LOCATION SKETCH



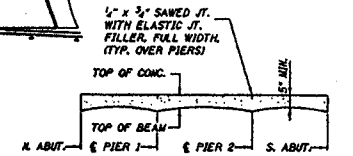
PLAN



PROPOSED STRUCTURE
(LOOKING UPSTATION)

ROADWAY DATA

CLASSIFICATION ... OTHER RURAL PRINCIPAL ARTERIAL
ADT 2,550 (1998), 3,876 (2021)
ADTT 385 (1998), 580 (2021)
DHV 306 (1998), 465 (2021)
DESIGN SPEED ..... 60 mph
POSTED SPEED ..... 55 mph



PROFILE OF CONCRETE OVERLAY

DESIGNED:	B.G.H.
CHECKED:	K.L.F.
DRAWN:	K.H.L.
CHECKED:	B.G.H.

GENERAL PLAN
F.A.P. RTE. 328 (U.S. 45)
OVER LUCAS CREEK
SECTION (2, 3, 4)RS-1
CLAY COUNTY
STA. 812+50
S.N. 013-0039 (PROPOSED)

APPROVED
JAN 24 2002
AS A BASIS FOR
PREPARATION OF DETAILED PLANS

FP-165-5.DGN JAN 9, 2002