

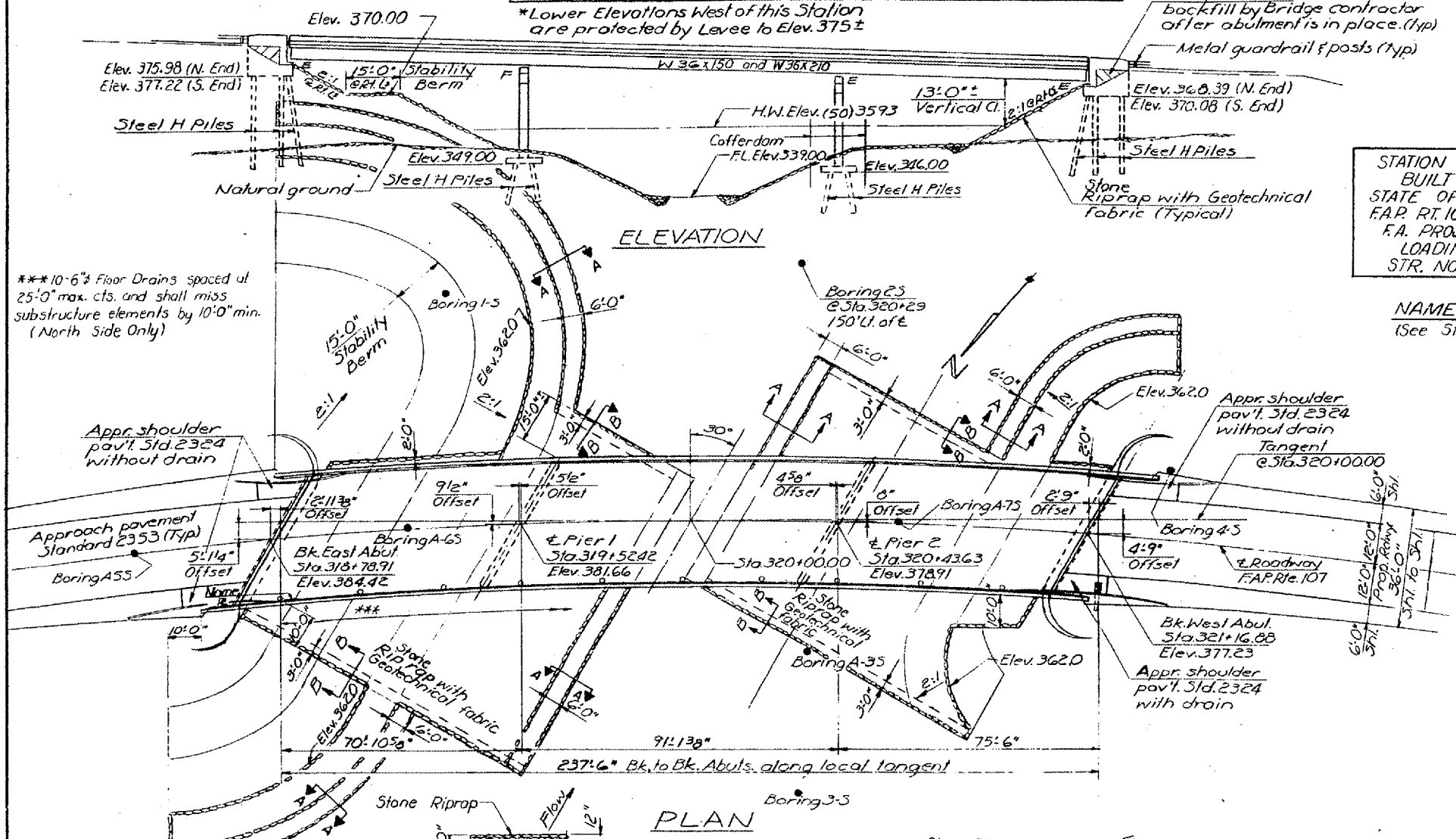
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

WATERWAY INFORMATION

Drainage Area 67.0 a mi. Low Grade Elev. 375' @ Sta. 326+28*

Flood	Freq. Yr.	Q C.F.S.	Opening Sq.Ft. Exist.	Prop. H.W.E.	Nat. H.W.E.	Head-Ft. Exist.	Prop.	Headwater El. Exist.	Prop.
Design	50	5200	1700	1120	359.3	0.05	0.17	359.35	359.47
Base	100	7000	2108	1415	361.6	0.11	0.35	361.71	361.95
Overlapping									
Max. Calc.	500	13700	2764	1950	365.4	0.60	1.00	366.0	366.40

R.R. Spike in 24" Pecon, 37' Rt. Sta. 324+80 Elev. 364.88
 Structure: #039-0029: 24' x 24' wide by 210' long. Built as
 Rte. 144, Sec. 101B5C, at Sta. 337+58.5 in 1928. Existing 4 R.C. slab
 approach spans and one steel span on R.C. piers and abutments
 shall be removed after the new relocated three span w/f beam
 structure is built.
 No salvage.



***10'-6" Floor Drains spaced at
 25'-0" max. cts. and shall miss
 substructure elements by 10'-0" min.
 (North Side Only)

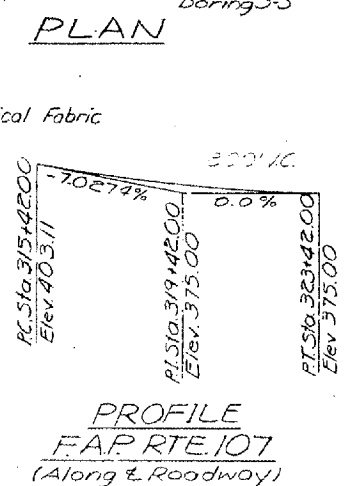
Appr. shoulder
 pav't. Std. 2324
 without drain

Approach pavement
 Standard 2353 (Typ)
 Boring A55

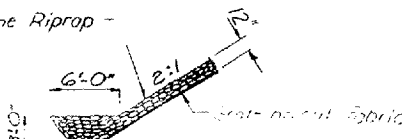
CURVE DATA
 $\Delta = 86^\circ 52' 140''$ $D = 3^\circ 59' 17.7''$
 $R = 1436.62'$ $T = 1360.22'$
 $L = 2172.11'$ $E = 541.75'$
 P.I. Sta. 318+20.31
 Super. = 0.08%
 Attain: Sta. 303+4.3 to 305+18
 Remove: Sta. 325+80 to 327+76

DESIGNED Rick Brunette
 CHECKED Jim Kohout
 DRAWN R. Doty
 CHECKED JK

July 10, 1984
 EXAMINED
 PASSED
 APPROVED
 DIRECTOR OF HIGHWAYS



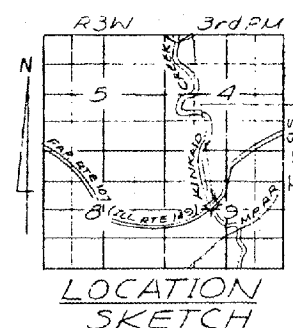
SEC. A-A



DESIGN STRESSES
 $f'_c = 3,500$ psi.
 $f_y = 60,000$ psi. (Reinforcement)
 $f_y = 50,000$ psi. AASHTO M222 (Struct.)

Allow 25#/Sq.Ft. for future wearing surf.
 Design Specifications: 1977 AASHTO
 and 1978 thru 1983 interim specs.

LOADING HS20-14



GENERAL NOTES

Fasteners shall be high strength bolts (AASHTO M 164, Type 3). Bolts $\frac{3}{4}$ "
 open holes $\frac{1}{8}$ " ϕ and bolts $\frac{1}{8}$ " ϕ , open holes $\frac{1}{8}$ " ϕ , unless otherwise noted.
 Calculated weight of AASHTO M 222 Structural Steel = 232,230 Pounds.
 The Zinc-silicate and vinyl paint system shall be used for shop and field
 painting of Structural Steel except where otherwise noted.
 All structural steel shall be AASHTO M 222.
 AASHTO M 222 structural steel shall not be painted except, that for a
 distance of three times the depth of the beams (but not exceeding 10 feet)
 each way from deck joints, the AASHTO M 222 structural steel shall be
 cleaned and given one coat of the zinc-silicate primer and a dark macroon
 vinyl finish coat. Both coats may be applied in the shop with spot painting
 only in the field.
 Field welding of construction accessories will not be permitted to the
 bottom flange of beams nor to the top flange for a distance equal to
 one-fourth the span length each way from the pier supports. Field welding
 in other areas will be permitted only when approved by the Engineer.
 Anchor bolts shall be set before bolting diaphragms over supports.
 The structural steel bearing plates of the Elastomeric Bearing Assembly
 shall conform to the requirements of AASHTO M 222.
 The main load carrying member components subject to tensile stress shall
 conform to the Supplemental Requirements for Notch Toughness Zone 2.
 These Components are the wide flange beams and all splice plate material.
 Reinforcement bars shall conform to the requirements of AASHTO M-31
 or M-53 Grade 60.
 Bearing seat surfaces shall be adjusted to the designated elevations
 within a tolerance of $\frac{1}{8}$ inch. Adjustment shall be made either by
 grinding the surface or by shimming the bearing. Two $\frac{1}{8}$ " adjusting shims,
 of the dimensions of the bottom bearing plate, shall be provided for each
 bearing in addition to all other plates or shims. (For Type I Elastomeric
 Bearings, shims of the dimensions of top plate shall be provided and placed
 as detailed).
 Plan dimensions, elevations and details relative to previously built
 substructure have been taken from substructure plans and are subject
 to nominal construction variations. It shall be the Contractor's
 responsibility to verify such dimensions, elevations and details in the
 field and make necessary approved adjustments prior to construction
 or ordering of materials. Such variations shall not be cause for
 additional compensation for a change in the scope of the work, however,
 the Contractor will be paid for the quantity actually furnished at
 the unit price bid for the work.

STATION 320+00.00
 BUILT 19 BY
 STATE OF ILLINOIS
 F.A.P. RT. 107 SEC. 101B5-1
 F.A. PROJECT F-107(32)
 LOADING HS20
 STR. NO. 039-0056

NAME PLATE
 (See Std. 2113)

SUPERSTRUCTURE ONLY
 TOTAL BILL OF MATERIAL

Item	Unit	Total
Removal of Existing Structures	Each	1
Protective Coat	Sq. Yd.	1157
Floor Drains	Each	10
Class X Concrete	Cu. Yd.	280.2
Structural Steel	Lump Sum	1
Stud Shear Connectors	Each	3105
Reinforcement Bars	Pound	770
Reinforcement Bars (Epoxy Coated)	Pound	73770
Neoprene Expansion Joint 24"	Lin. Ft.	88
Elastomeric Bearing Assembly, Type I	Each	10
Elastomeric Bearing Assembly, Type II	Each	5
Name Plates	Each	1

FOR INFORMATION ONLY:

BRIDGE NO. 3 STRUCTURE 039-0056

GENERAL PLAN
 ILL. RTE. 149 OVER KINKAID CREEK
 F.A.P. ROUTE 107
 SECTION 101B5-1
 JACKSON COUNTY
 STATION 320+0000