

DATE	BY	QUANTITY	ISSUED	BY	REVISION
FAT 72		SANGAMON	559	254	44 SHEETS

Contract No. 72541

Bench Marks:
 IDOT BM #15 Chiseled square at the southeast quadrant of the intersection of West Grand Avenue and Hazel Dell Road. Benchmark is located 33 feet south of the centerline of Hazel Dell Road on a headwall of a concrete pipe culvert. NAVD88 El. 602.47.
 IDOT BM #80 Chiseled cross on the center bolt of the east leg of an iron sign-truss over the eastbound lane of Interstate 72. Benchmark is located 1.62 miles east of I Route 4. NAVD88 El. 601.28
 IDOT BM #0150 Dist. In monument vault on survey calibration baseline. Benchmark is located 13 feet north of the centerline of Hazel Dell Road and 0.5 miles west of the intersection of Hazel Dell Road and West Grand Avenue. NAVD88 El. 600.47
 IDOT BM #374 Railroad spike in power pole west of a bike path and southeast of Recreation Drive. Benchmark is located 0.81 miles south of the intersection of West Grand Avenue and Hazel Dell Road. NAVD88 El. 604.61

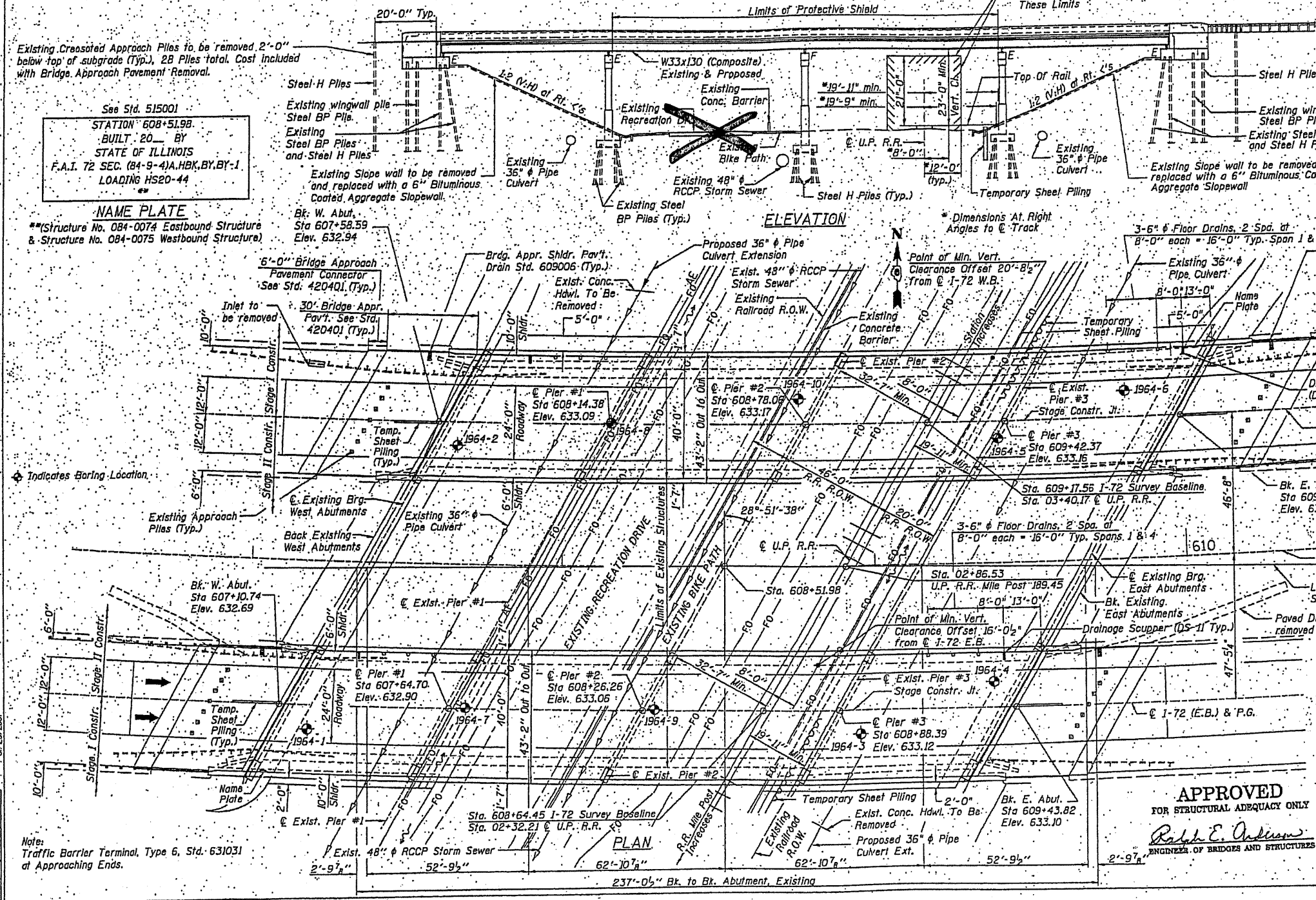
EXISTING STRUCTURE
 Sta. 608+51.98 F.A.I. 72
 Over Recreation Drive and U.P. Railroad
 Dual 4-Span Continuous non-composite steel stringer structure. Constructed in 1966.
 Length of W.B. Structure = 238'-3/4" and Length of E.B. Structure = 236'-2" Bk. to Bk.
 Abutments along C of Roadway. Both E.B. and W.B. Structures are 36'-0" wide. Substructure consists of 6 reinforced concrete piers on steel piles and 4 reinforced concrete Abutments supported on steel piles. Structure No. 084-0074 Eastbound; Structure No. 084-0075 Westbound.

DESIGN SPECIFICATIONS
 AASHTO 2002
 AASHTO 2003 Curved Girder Spec.
LOADING HS20-44 & ALT.
 Allow 25 psf for future wearing surface.

SEISMIC DATA
 Seismic Performance Category (SPC) = A
 Bedrock Acceleration Coefficient (A) = 0.05g
 Site Coefficient (S) = 2.0

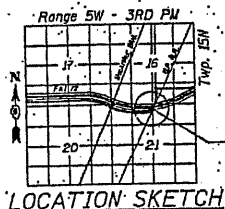
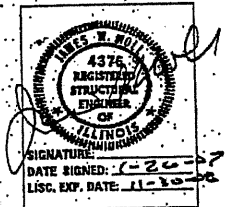
DESIGN STRESSES
FIELD UNITS (Load Factor Design)
 f_c = 3,500 psi (Existing and New Concrete)
 f_y = 40,000 psi (Existing Reinforcement)
 f_y = 60,000 psi (New Reinforcement)
 f_y = 36,000 psi ASTM A36 (Existing Structural Steel)
 f_y = 36,000 psi ASTM A36 (New Structural Steel)

CURVE DATA
 (I-72 Survey Baseline)
 P.I. STA = 607+25.73
 Δ = 36° 03' 13" (L+)
 D = 01° 36' 09"
 R = 3,575.65'
 T = 1,163.65'
 L = 2,250.00'
 E = 184.58'
 P.C. STA = 595+62.07
 P.T. STA = 618+12.07
 S.E. = 4.5%
 S.E. ATTN: 594+35 to 596+35
 617+52 to 619+52



See Std. 515001
 STATION 608+51.98
 BUILT 20 BY
 STATE OF ILLINOIS
 F.A.I. 72 SEC. (84-9-4)A,HBK,BY,BY-1
 LOADING HS20-44

NAME PLATE
 **Structure No. 084-0074 Eastbound Structure & Structure No. 084-0075 Westbound Structure



Corporate License Number 184-001-084
GENERAL PLAN AND ELEVATION
 F.A.I. 72 OVER UNION PACIFIC RAILROAD
 SECTION (84-9-4)A,HBK,BY,BY-1
 SANGAMON COUNTY
 STATION 608+51.98
 STR. NO. 084-0074 EB - 084-0075 WB
 Copyright Hanson Professional Services Inc. 2007
 96S2002B
 01/12/06

APPROVED
 FOR STRUCTURAL ADEQUACY ONLY
 Robert E. Anderson
 ENGINEER OF BRIDGES AND STRUCTURES

No. 2 of 3
 STRUCTURE

EXISTING PLANS, SN 084-0074,0075
 VARIOUS ROUTES
 D6REHAB BDGE PAINTING 2011
 MONT, SANG, SCHUY COUNTIES

FOR INFORMATION ONLY