CONTRACT NO. 76948

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
304	5BR-2	CALHOUN	68	53
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

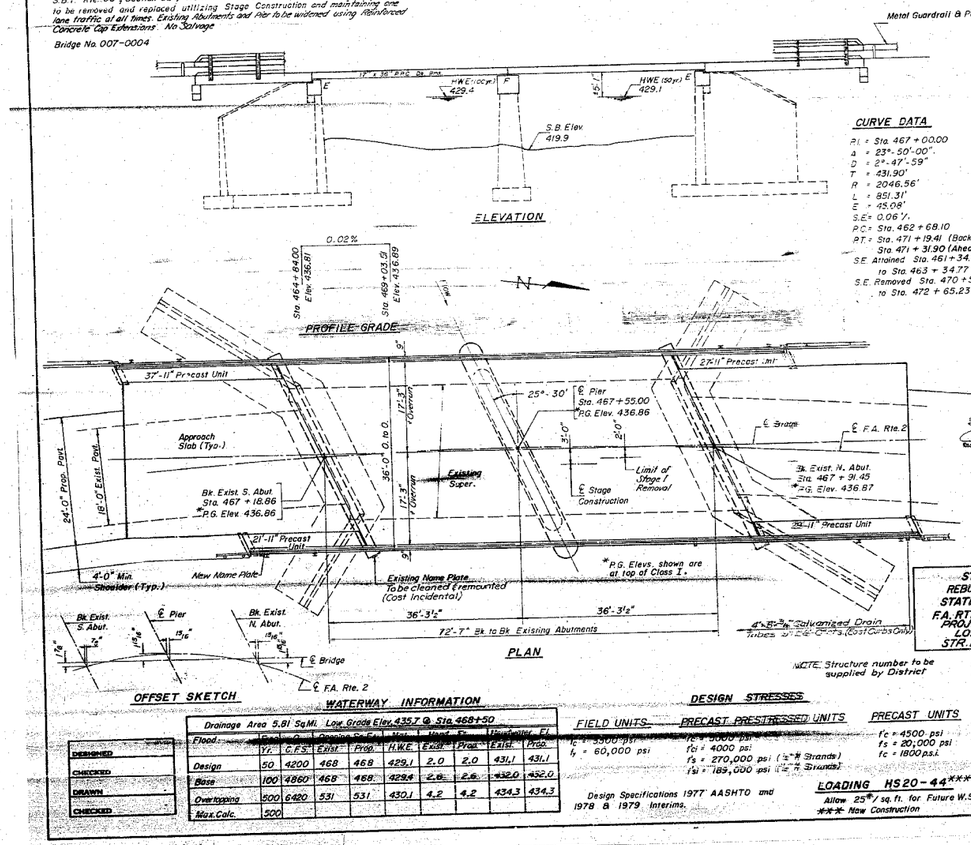
DISTRICT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2	5BR-1	CALHOUN	25	8

SHEET NO. 1
12 SHEETS

B.M.: R.R. Spike in Power Pole (Bent) South of Bridge
Elev. 429.48

Existing Structure: Superstructure consists of a Two Span (non-continuous) R.C. Thru Girder with R.C. Beams and Deck Slab. Substructure consists of two R.C. Closed Abutments and one unreinforced Solid Pier. Built on S.B.I. Rte. 38, Section 38, Station 467+55 in 1924. Existing Superstructure to be removed and replaced utilizing Stage Construction and maintaining one lane traffic at all times. Existing Abutments and Pier to be widened using Reinforced Concrete Cap Extensions. No Salvage

Bridge No. 007-0004



GENERAL NOTES

All structural steel shall be shop painted with two coats of basic lead silico chromate paint, except as noted.

Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the responsibility of the Contractor to verify such dimensions and details in the field and make the 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 work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

The top surface of the beams shall be finished in accordance with Article 505.06 of the Standard Specifications except that the surface shall not be roughened by brooming. The finished surface shall be free of depressions or high spots with sharp corners.

Protective Coat shall not be applied to surfaces to which Waterproofing Membrane System is applied.

Reinforcement bars shall conform to the requirements of AASHTO M-31 or M-53 Grade 60, except as noted.

Shoulder transition to wingwall shall be shaped with broken concrete. Cost incidental.

Expansion bolts shall consist of self drilling expansion anchors and ¾"ϕ hooked bolts. Hooked bolts shall extend a minimum of 12" into new concrete, unless otherwise shown.

CURVE DATA

P.I. = Sta. 467+00.00
Δ = 23°-50'-00"
D = 2°-47'-59"
T = 431.90'
R = 2046.56'
L = 851.31'
E = 45.08'
S.E. = 0.06'/'
P.C. = Sta. 462+68.10
P.T. = Sta. 471+19.41 (Back) =
Sta. 471+31.90 (Ahead)
S.E. Attained Sta. 461+34.77
to Sta. 463+34.77
S.E. Removed Sta. 470+52.74
to Sta. 472+65.23

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Portland Cement Mortar Fairing Course	Lin. Ft.	800		800
Bit. Conc. Surface Course, Mix D, Class I	Tons	24		24
Waterproofing Membrane System	Sq. Yds.	285		285
Protective Coat	Sq. Yds.	45		45
Concrete Removal	Cu. Yds.		19.9	19.9
Expansion Bolts ¾"ϕ	Each		108	108
Class X Concrete	Cu. Yds.	14.8	62.9	82.7
Precast Concrete Bridge Slab	Sq. Ft.	441		441
Precast Prestressed Conc. DK Beams (17" Depth)	Sq. Ft.	2616		2616
Steel Railing, Type T	Lin. Ft.	267		267
Reinforcement Bars	Pounds	650	7510	8160
Removal of Existing Superstructures	Each	1		1
Name Plates	Each	1		1
Preformed Joint Seal (2½")	Lin. Ft.	80		80
Temporary Bridge Rail	Lin. Ft.	156		156
Structural Steel	Pounds	3360		3360
Epoxy Crack Sealing	Lin. Ft.		68	68
Temporary Support System	Each		1	1

STATION 467+55
REBUILT 198 BY
STATE OF ILLINOIS
F.A. RTE. 2 SEC. 5BR-1
PROJECT BR-C-2(2)
LOADING HS 20
STR. NO.

NOTE: Structure number to be supplied by District

NAME PLATE
See Std 2113

WATERWAY INFORMATION

Drainage Area 5.81 Sq.Mi. Low Grade Elev. 435.7 @ Sta. 468+50

Flood	Freq. Yr.	C.F.S.	Backwater Elev. Exist.	Backwater Elev. Prop.	H.W.E. Exist.	H.W.E. Prop.	Velocity Exist.	Velocity Prop.	Flow Line Elev. Exist.	Flow Line Elev. Prop.
Design	50	4200	468	468	429.1	2.0	2.0	431.1	431.1
Base	100	4860	468	468	429.4	2.6	2.6	432.0	432.0
Overtopping	500	6420	531	531	430.1	4.2	4.2	434.3	434.3
Max. Calc.	500									

DESIGN STRESSES

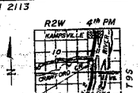
FIELD UNITS
f'_c = 3500 psi
f_s = 60,000 psi

PRECAST PRESTRESSED UNITS
f'_c = 5000 psi
f'_{ci} = 4000 psi
f_s = 270,000 psi (½" ϕ Strands)
f_{si} = 189,000 psi (½" ϕ Strands)

PRECAST UNITS
f'_c = 4500 psi
f_s = 20,000 psi
f_c = 1800 p.s.i.

Design Specifications 1977 AASHTO and 1978 & 1979 Interims.

LOADING HS20-44***
Allow 25#/sq. ft. for Future W.S.
*** New Construction



LOCATION SKETCH

GENERAL PLAN & ELEVATION
F.A. RTE. 2 OVER CRAWFORD CREEK
F.A. ROUTE 2 SECTION 5BR-1
CALHOUN COUNTY
STATION 467+55.00

DESIGNED
CHECKED
DRAWN
CHECKED

FOR INFORMATION ONLY

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS

FAP ROUTE 304
SECTION 5BR-2
CLINTON COUNTY

SCALE: VERT.
HORIZ.
DATE
DRAWN BY
CHECKED BY

PLOT DATE = 1/24/2003
FILE NAME = c:\projects\ed9905\plan\pln9905a.dgn
PLOT SCALE = 50.0000 ' / IN.
REFERENCE = REF