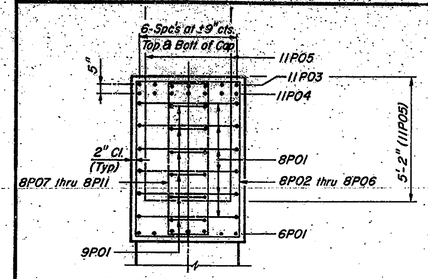
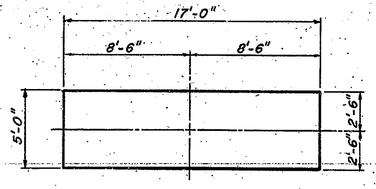
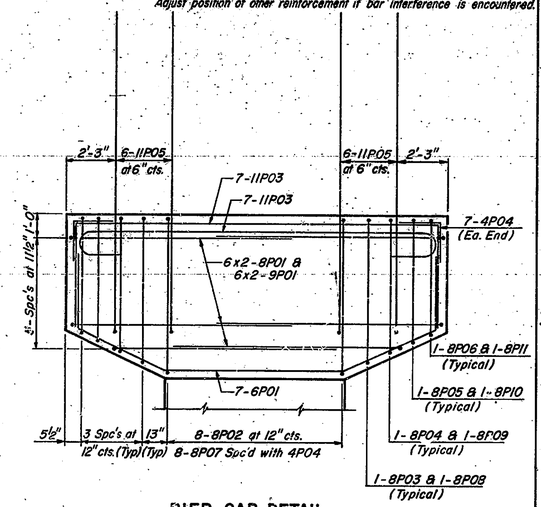


SECTION THRU CAP

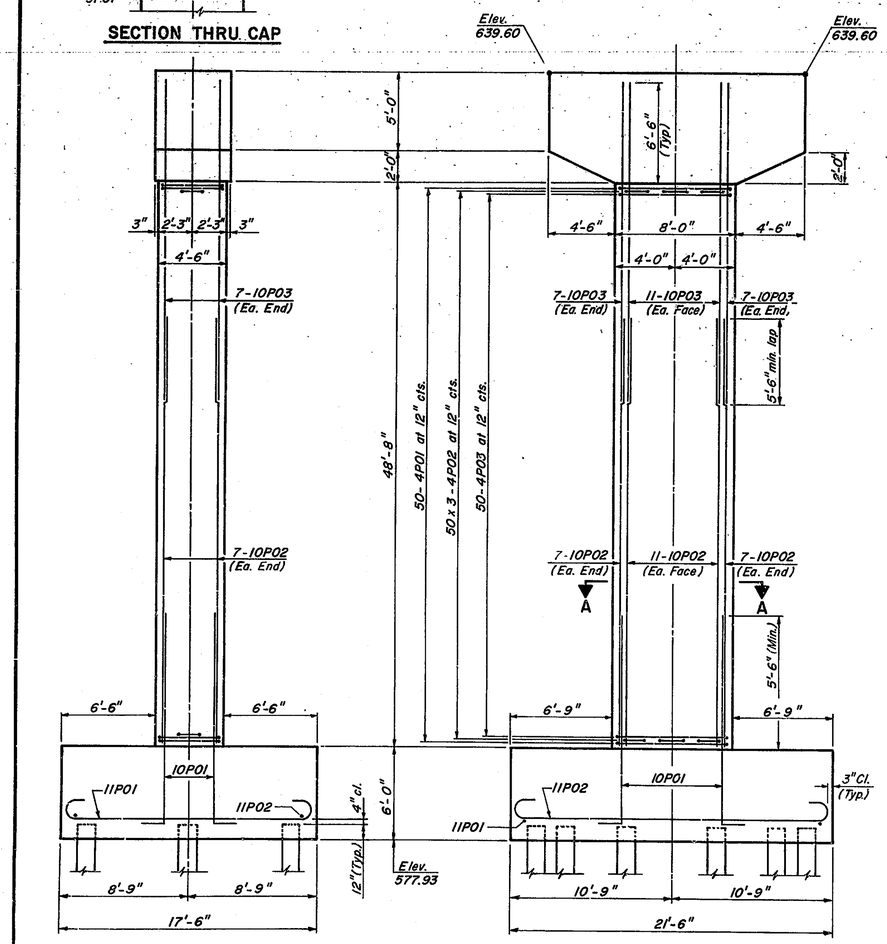


PIER CAP PLAN

NOTE: Placement of 11P05 is Critical.
Adjust position of other reinforcement if bar interference is encountered.

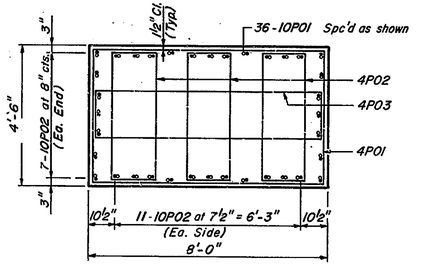


PIER CAP DETAIL

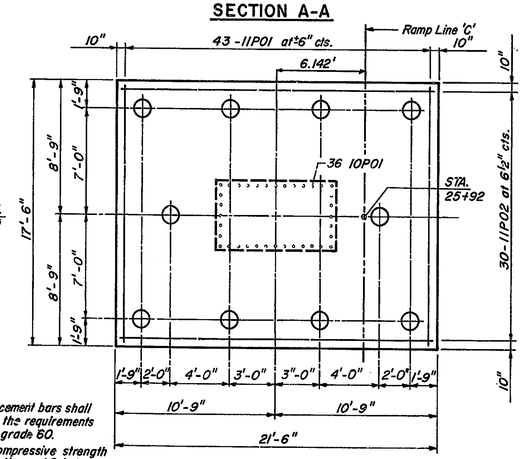


SIDE VIEW

ELEVATION
(Looking Up Station)



SECTION A-A



FOOTING PLAN

PILE DATA

TYPE: High Capacity (14"Ø Steel Encased Concrete)
ESTIMATED LENGTH: 85'
NUMBER REQUIRED: 10

APPROVED FOR CONSTRUCTION
W. B. Abbott 5-18-81
W. B. ABBOTT
Assistant Engineer of Bridge Design

NOTE: All reinforcement bars shall conform to the requirements of ASTM, grade 60.
Minimum compressive strength of both Footing and Substructure Concrete shall be 4,000 p.s.i.

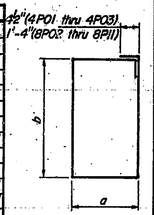
Revision 8-3-81 Reinforcing bar in Pier Cap

DESIGNED HB/MM C.K'D H.H.
DRAWN ABD C.K'D G.R.
TRACED ABD C.K'D G.R.

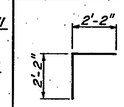
BAR BENDING DIAGRAMS

NOTES: Number preceding letter denotes bar size.
All dimension are out to out.
All bar bending pin diameters shall be in accordance with A.C.I. Standards.

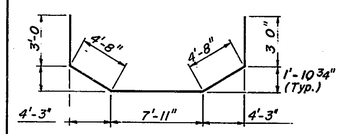
Bar	a	b
4P01	4'-3"	7'-9"
4P02	1'-6"	4'-3"
4P03	1'-7"	7'-9"
8P02	4'-8"	6'-8"
8P03	4'-8"	6'-3½"
8P04	4'-8"	5'-9"
8P05	4'-8"	5'-4"
8P06	4'-8"	4'-10½"
8P07	1'-9"	6'-8"
8P08	1'-9"	6'-2"
8P09	1'-9"	5'-8½"
8P10	1'-9"	5'-3½"
8P11	1'-9"	4'-10"



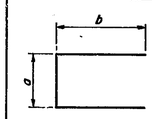
4P01, 4P02, 4P03 & 8P02 thru 8P11



4P04

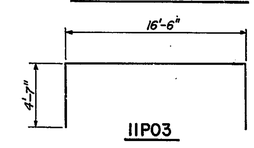


6P01

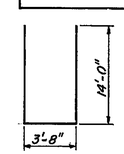


Bar	a	b
8P01	4'-7"	10'-2"
9P01	1'-8"	10'-5"
11P05	4'-0"	5'-11"

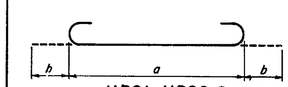
8P01, 9P01 & 11P05



11P03

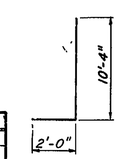


11P05



11P01, 11P02 & 11P04

Bar	a	b
11P01	17'-0"	1'-7"
11P02	21'-0"	1'-7"
11P04	16'-6"	4'-4"



10P01

BILL OF MATERIAL

Bar	No.	Length	Bent	Str.
4P01	50	24'-9"	●	
4P02	150	12'-3"	●	
4P03	50	19'-5"	●	
4P04	14	4'-4"	●	
6P01	7	23'-3"	●	
8P01	12	24'-11"	●	
8P02	8	26'-1"	●	
8P03	2	25'-2"	●	
8P04	2	24'-3"	●	
8P05	2	23'-5"	●	
8P06	2	22'-6"	●	
8P07	8	20'-3"	●	
8P08	2	19'-3"	●	
8P09	2	18'-4"	●	
8P10	2	17'-6"	●	
8P11	2	16'-7"	●	
9P01	12	22'-6"	●	
10P01	36	12'-4"	●	
10P02	36	32'-0"		●
10P03	36	28'-8"		●
11P01	43	20'-2"	●	
11P02	30	24'-2"	●	
11P03	7	25'-8"	●	
11P04	7	25'-2"	●	
11P05	12	31'-8"	●	

ESTIMATED QUANTITIES

Item	Unit	Total
Reinforcing Steel	Lb.	29,317
Substructure Conc.	Cu. Yd.	85.3
Footing Conc.	Cu. Yd.	83.2
High Capacity Piles	Lin. Ft.	850

Figg and Muller Engineers Inc.
424 North Calhoun Street
Tallahassee Florida 32301

PIER 407 DETAILS

INDIANA STATE HIGHWAY COMMISSION

LAKE COUNTY - RAMP:- C SECTION:-
SCALE:- N.T.S. DATE:- MARCH 13, 1981
SUBMITTED FOR APPROVAL Eugene C. Figg Jr.
DRAWING:- OF SHEET:- 31 OF
PROJECT:- MM 220-1(8)
CONTRACT NO. B-12750
BRIDGE FILE:- 912-45-2546 REN

REGISTERED EUGENE C. FIGG, JR. 18343 STATE OF INDIANA PROFESSIONAL ENGINEER