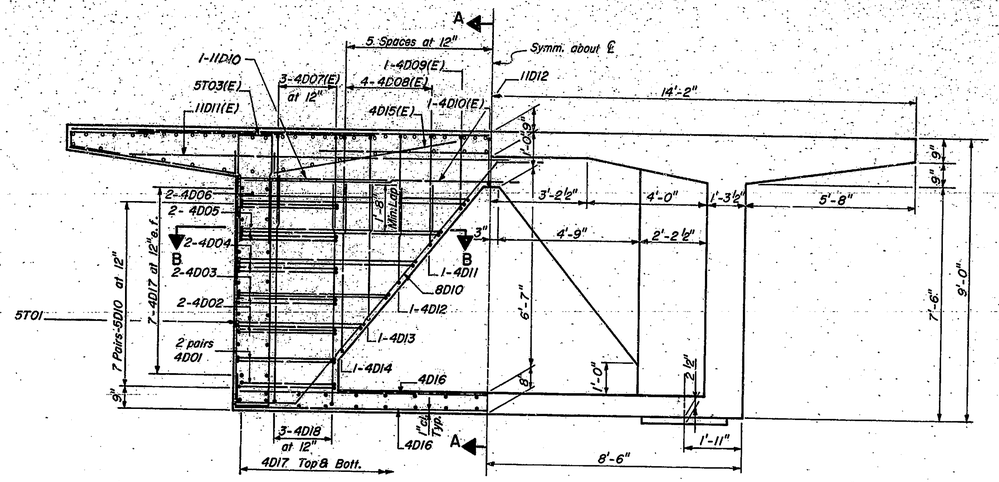
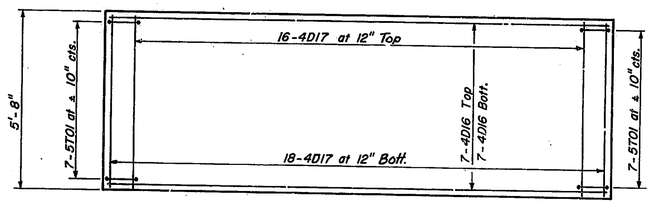
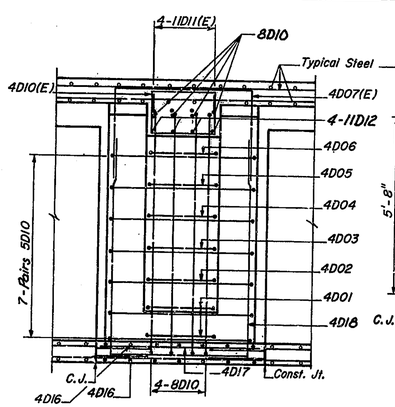


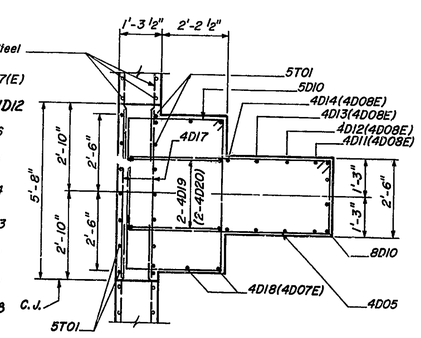
CROSS SECTION AT PIER DIAPHRAGM



PLAN VIEW-BOTTOM SLAB



SECTION A-A



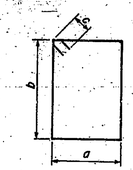
SECTION B-B

DESIGNED M.M. C'K'D. M.M.
DRAWN T.F. C'K'D. M.M.
TRACED C'K'D.

BAR BENDING DIAGRAMS

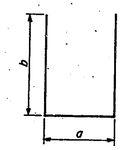
PIER DIAPHRAM REINFORCEMENT

Bar	a	b	c
4D01	3'-3"	2'-4"	4½"
4D02	4'-0¼"	2'-4"	4½"
4D03	4'-10"	2'-4"	4½"
4D04	5'-7¾"	2'-4"	4½"
4D05	6'-5½"	2'-4"	4½"
4D06	7'-3¼"	2'-4"	4½"
4D09(E)	2'-3"	2'-4½"	4½"
4D10(E)	2'-3"	1'-6"	4½"
5D10	3'-3"	4'-10"	5½"

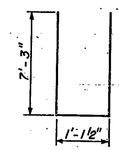


4D01 thru 4D06, 4D09(E), 4D10(E), 5D10

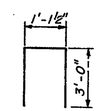
Bar	a	b
4D07(E)	4'-8½"	3'-0"
4D08(E)	2'-3"	3'-0"
4D11	2'-3"	2'-3"
4D12	2'-3"	3'-6"
4D13	2'-3"	4'-8"
4D14	2'-3"	5'-11"
4D18	4'-8½"	7'-3"
4D19	3'-1½"	7'-3"
4D20(E)	3'-1½"	3'-0"
11D10	2'-2½"	4'-10"



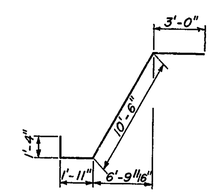
4D07(E), 4D08(E), 4D11 thru 4D14, 4D18, 4D19, 4D20(E), 11D10



5T01



5T03



8D10

APPROVED FOR CONSTRUCTION

W. B. Abbott

W. B. ABBOTT
Assistant Engineer of Bridge Design 11-2-81

BILL OF MATERIAL (*)

Bar	No.	Length	Bent	Str.
4D01	24	11'-11"	•	
4D02	12	13'-6"	•	
4D03	12	15'-1"	•	
4D04	12	16'-9"	•	
4D05	12	18'-4"	•	
4D06	12	20'-0"	•	
4D07(E)	18	10'-9"	•	
4D08(E)	24	8'-3"	•	
4D09(E)	6	10'-0"	•	
4D10(E)	3	8'-3"	•	
4D11	6	6'-9"	•	
4D12	6	9'-3"	•	
4D13	6	11'-7"	•	
4D14	6	14'-1"	•	
4D16	42	16'-10"		•
4D17	186	5'-6"		•
4D18	18	19'-3"	•	
4D19	12	17'-8"	•	
4D20(E)	12	9'-2"	•	
5D10	84	17'-1"	•	
5T01	42	15'-8"	•	
5T03	42	7'-2"	•	
8D10	24	16'-9"	•	
11D10	6	11'-11"	•	
11D11 (E)	12	24'-0"		•
11D12	12	15'-0"		•

ESTIMATED QUANTITIES

Item	Unit	Total
Reinforcing Steel	Lb.	7,463.94
Reinforcing Steel (Epoxy Coated)	Lb.	4,921.76

(*) Quantities of Reinforcement are for 3 (three) Pier Diaphragms
Concrete Quantities included in Bill of Material Sheet 107.

Figg and Muller Engineers Inc.
Post Office Drawer 1000
Tallahassee, Florida 32301

PIER DIAPHRAGM DETAILS

INDIANA STATE HIGHWAY COMMISSION

LAKE COUNTY - RAMP:- D SECTION:-
SCALE:- ½"=1'-0" DATE:- July 29, 1981
SUBMITTED FOR APPROVAL Eugene C. Figg Jr.
DRAWING:- OF SHEET: 110 OF
PROJECT:- MM 220-1(8)
CONTRACT NO. B-12752
BRIDGE FILE:- 912-45-2546 REX

EUGENE C. FIGG JR. REGISTERED No. 18513 STATE OF INDIANA PROFESSIONAL ENGINEER