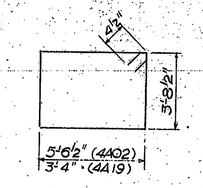
BAR BENDING DIAGRAMS

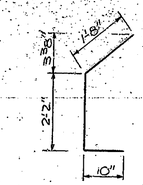
All dimensions are OUT TO OUT.

Bar	a	b
4A01 (E)	10"	5'-10"
4A03	1'-9"	2'-9"
4A04	1'-9"	5'-10"
4A05	1'-9"	7'-8½"
4A06	1'-9"	9'-7"
4A07	1'-9"	3'-5"
4A08	1'-9"	5'-4"
4A09	1'-9"	7'-3"
6A04	6"	7'-0"

4A01(E), 4A03 THRU 4A09, 6A04

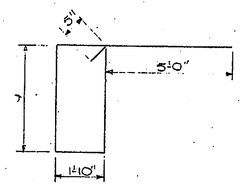


4A02, 4A19

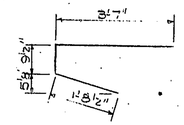


4A16

Bar	a
4A11 (E)	5'-11"
4A12 (E)	4'-10½"
4A13 (E)	3'-9½"
4A14 (E)	2'-8"
4A15 (E)	1'-8½"
4A20 (E)	1'-5½"

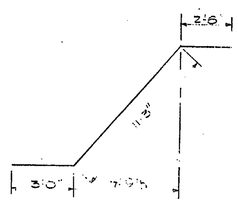


4A11(E) THRU 4A15(E), 4A20

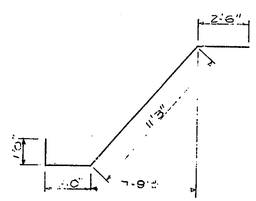


4A17 (E)

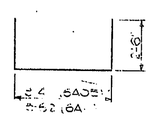
4A18(E)



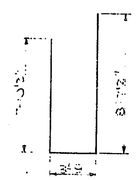
6A02 (E)



6A03 (E)

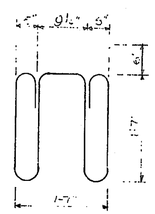


6A04 (6A05, 6A06, 6A07)



6A08, 6A09, 6A10, 6A11

6A10



4C09

BILL OF MATERIALS

Bar	No.	Length	Bent	Stir.
4A01(E)	36	8'-8"	●	
4A02	2	19'-3"	●	
4A03	12	7'-3"	●	
4A04	4	13'-3"	●	
4A05	4	17'-2"	●	
4A06	4	20'-11"	●	
4A07	4	8'-7"	●	
4A08	4	12'-5"	●	
4A09	4	16'-3"	●	
4A10 (E)	8	48'-2"		●
4A11(E)	4	23'-0"	●	
4A12(E)	4	18'-11"	●	
4A13(E)	4	16'-9"	●	
4A14(E)	4	14'-8"	●	
4A15(E)	4	12'-7"	●	
4A16	14	4'-8"	●	
4A17 (E)	14	6'-1"	●	
4A18 (E)	14	10'-8"	●	
4A19	4	14'-10"	●	
4A20(E)	14	12'-0"	●	
4C09	36	10'-0"	●	
6A01 (E)	8	10'-0"		●
6A02 (E)	8	16'-9"	●	
6A03 (E)	8	16'-7"	●	
6A04	18	14'-6"	●	
6A05	10	8'-4"	●	
6A06 (E)	14	20'-3"	●	
6A07 (E)	4	48'-2"		●
6A08	4	5'-8"		●
6A09	10	34'-10"		●
6A10	8	4'-4"	●	
6A11	5	10'-7"	●	

Note:
All reinforcement bars shall conform to the requirements of ASTM, Grade 60.

Minimum compressive strength of Superstructure Concrete shall be 5,500 P.S.I.

ESTIMATED QUANTITIES

Item	Unit	Total
Reinforceing Steel	Lb.	1850.71
Reinforceing Steel Epoxy Coating	Lb.	2194.71

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

10-20-81 Revision: Estimate of Quantites

APPROVED FOR CONSTRUCTION
W. B. ABBOTT
Assistant Engineer of Bridge Design
9-17-81

Flagg and Muller Engineers Inc.
Consulting Engineers
Tallahassee, Florida 32301

ABUTMENT DIAPHRAGM BAR LIST

INDIANA STATE HIGHWAY COMMISSION

LAKE COUNTY - RAMP:- A SECTION:-
SCALE:- N.T.S. DATE:- June 29, 1981
SUBMITTED FOR APPROVAL Eugene C. Figg, Jr.
DRAWING:- OF SHEET:- 133 OF
PROJECT:- MM 220-1 (8)
CONTRACT NO. B-12752
BRIDGE FILE:- 912-45-2546 RWX

EUGENE C. FIGG, JR. REGISTERED No. 11542 STATE OF INDIANA PROFESSIONAL ENGINEER