

COUNTERWEIGHT PER GIRDER
 123' CUBIC YDS. @ 140 LB. PER CU. FT.
 IMP. 1350
 AMT. TOT. 75500
 LL 69200
 LL + 257
 AMT. TOT. 295

REACTION
 LL 3710
 IMP 500
 TOT. 4270

VERTICAL SCALE
 MOMENT PER 100,000 FT. LB.

CENTER LOC
 2.1 24
 IMP. 24
 TOT. 3:

5'-0" 4'-3"
 11'-0" 2'-0" 3'-0"

ALL ROADWAY STRINGERS
 16" WF 36"
 FOR CURB DETAIL AND SIDE
 WALK BRACKETS SEE DRAWING 15

END L.A.A. 12
 ANG. BARS 1/4" x 4"
 STRUCT. ALT.

CENTER LOCK SHEAR
 LL 24.7'
 IMB 24.7'
 TOT. 32.1'

CENTER LOCK SHEAR
 LL 24.7'
 IMB 24.7'
 TOT. 32.1'

GIRDER MOMENT TABLE FT. KIPS

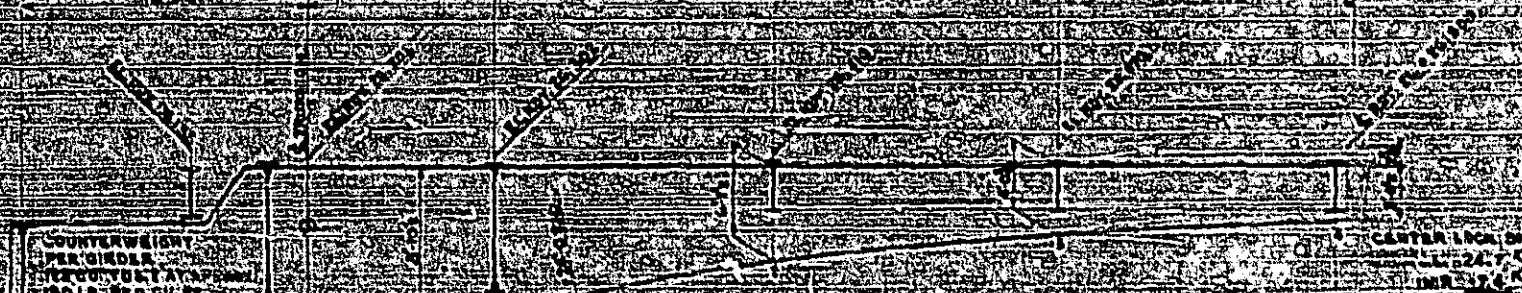
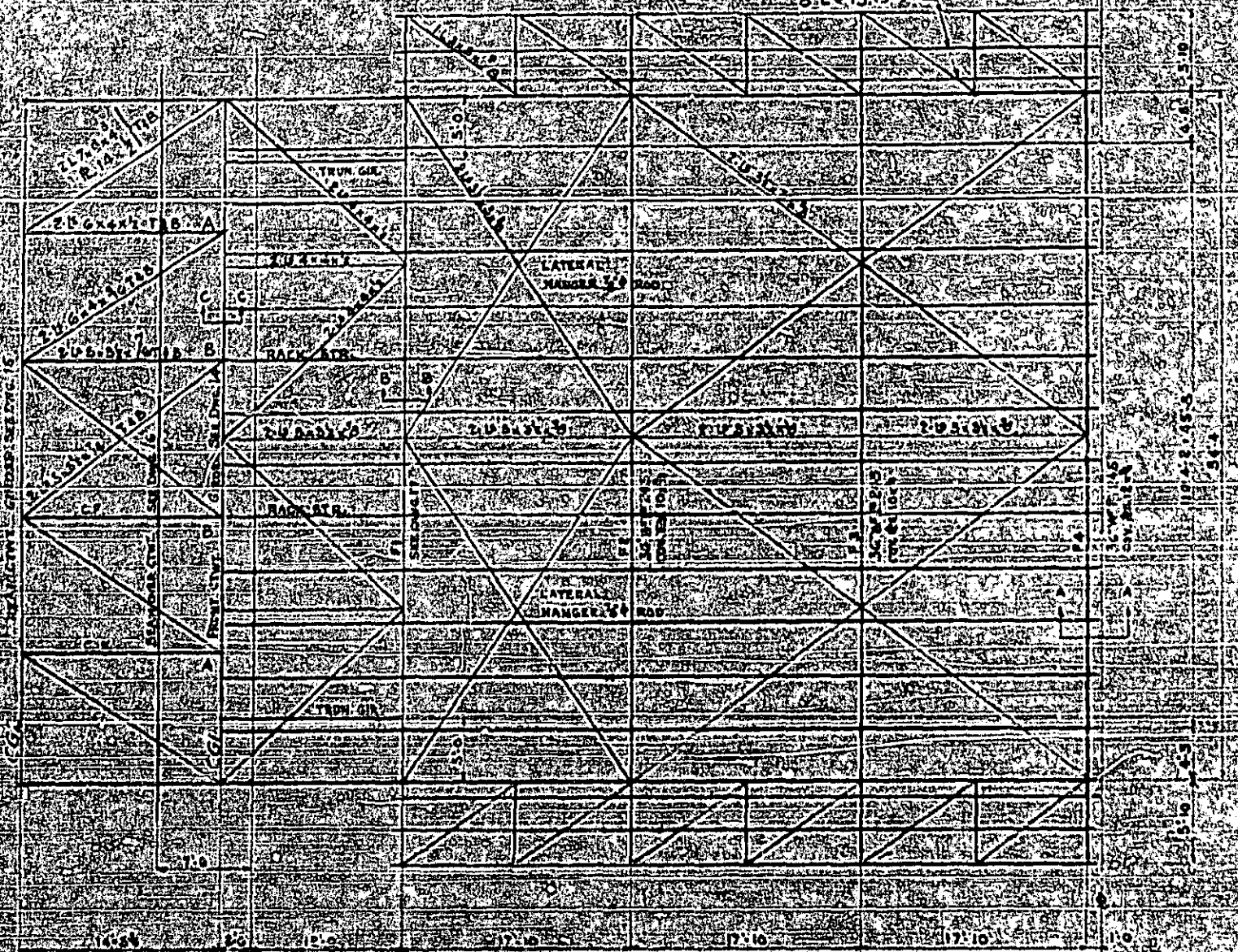
POINT	D.L.	L.L.	IMP.	TOTAL
0	4654.0		9308	5584.0
LS	5172.4	3269.5	6010	7191.4
1	3042.8	3074.0	7510	6892.4
2	1482.5	1807.5	3550	3642.5
3	390.1	507.0	1890	1097.1
4	0	38.0	100	41.8
5	2308.8		4600	2768.8
6	5711.1		11422	12093.1

SHEAR TABLE KIPS

	CO2	CO1	TRUN.	L.L.S	F1	F2	F3	F4
TRUN GIRDER		207						
DEAD LOAD	179	528	660	128.6	128.5	279	520	85
SIDE WALK				17.7	17.8	15.1	17.4	16.7
75% LIVE LOAD		472	526	107.5	101.5	212	358	358
30% IMPACT		181	172	32.3	32.0	252	370	169
MAX. SHEARS TOTAL	179	796	1248	269.0	285.9	2102	1152	653
DEAD LOAD	179	528	660					
75% LIVE LOAD		472	526					
TRUN GIRDER		207						
MAX. SHEARS TOTAL	179	796	1248					

GENERAL BRACING WILL BE REQUIRED FOR MAIN GIRDERS, TRUNNION GIRDERS, CURB GIRDERS, RACK STRINGERS AND FLOOR BEAMS SPECIFICATIONS. COUNTERWEIGHT DETAILS SHALL BE PROVIDED THE DROP AND PROVISIONS SHALL BE MADE PROVIDE BLOCKS EQUAL TO 2" UNDER AND OVER THE CALCULATED WEIGHT. PROVIDE 2% OF THE CALCULATED WEIGHT SHALL BE PROVIDED COUNTERWEIGHT BLOCKS TO WEIGH APPROX. 20 LBS. EACH. THE COST OF COUNTERWEIGHTS TO BE INCLUDED IN THE CONTRACT UNIT PRICE. CUBIC YARD FOR COUNTERWEIGHT CONCRETE. PAINT: SEE SPECIFICATION AND SPECIAL PROVISIONS. ALL WELDS/INTERFACES SHALL BE PROTECTED TO PREVENT CORROSION BY THE USE OF

SIC 15159



COUNTERWEIGHT
PER GIRDER
150 LB. PER CU. FT.

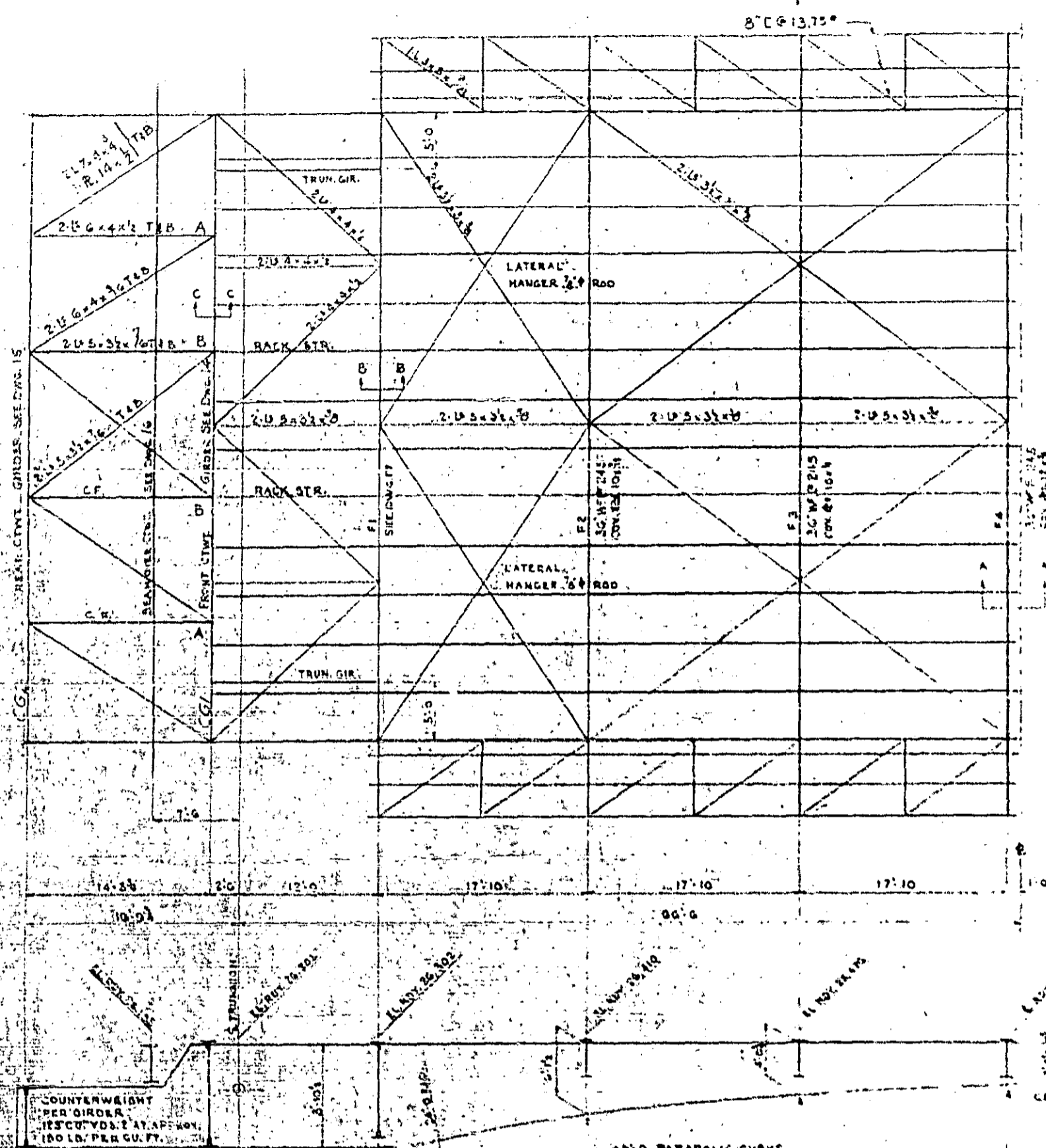
REACTION
IMR 200
TOT 1576

FINAL OUTLINE OF COUNTERWEIGHT
AND UNIT WEIGHT OF CONCRETE TO BE
DETERMINED FROM CENTER OF GRAVITY
CALCULATIONS MADE FROM THE
APPROVED SHOP DETAIL DRAWINGS.



DEAD
LIVE
WIND
TOTAL

DEAD
LIVE
WIND
TOTAL

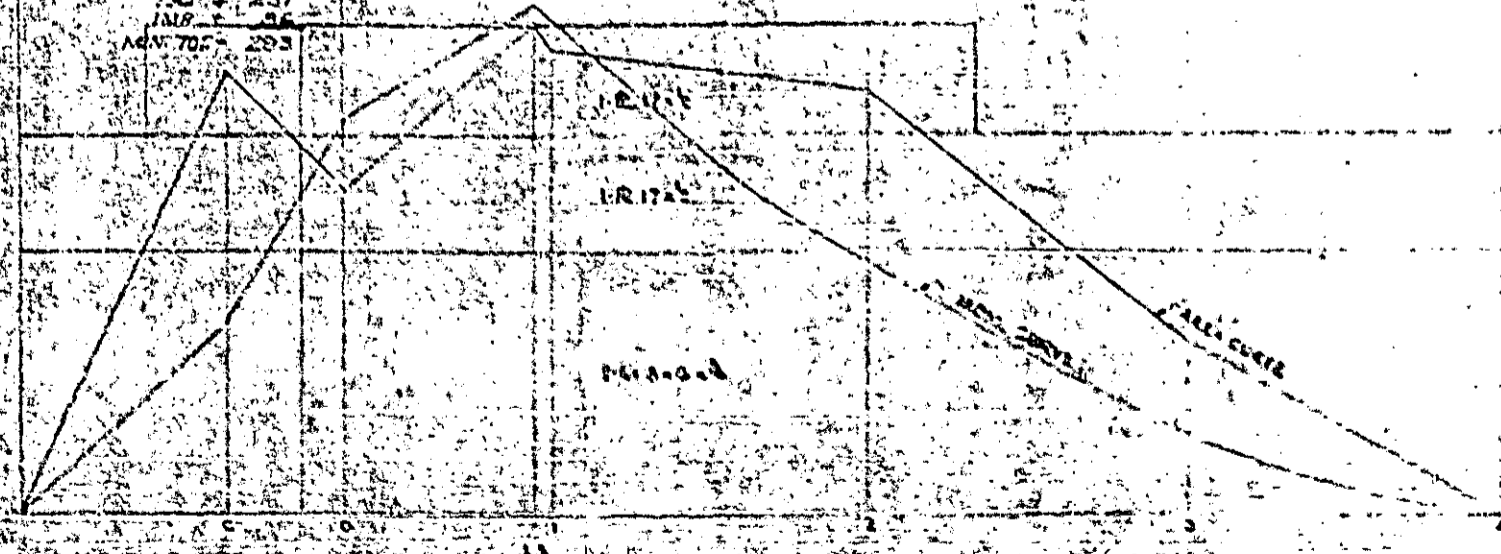


COUNTERWEIGHT PER GIRDER
 115 CU. YDS. @ 140 LB. PER CU. FT.

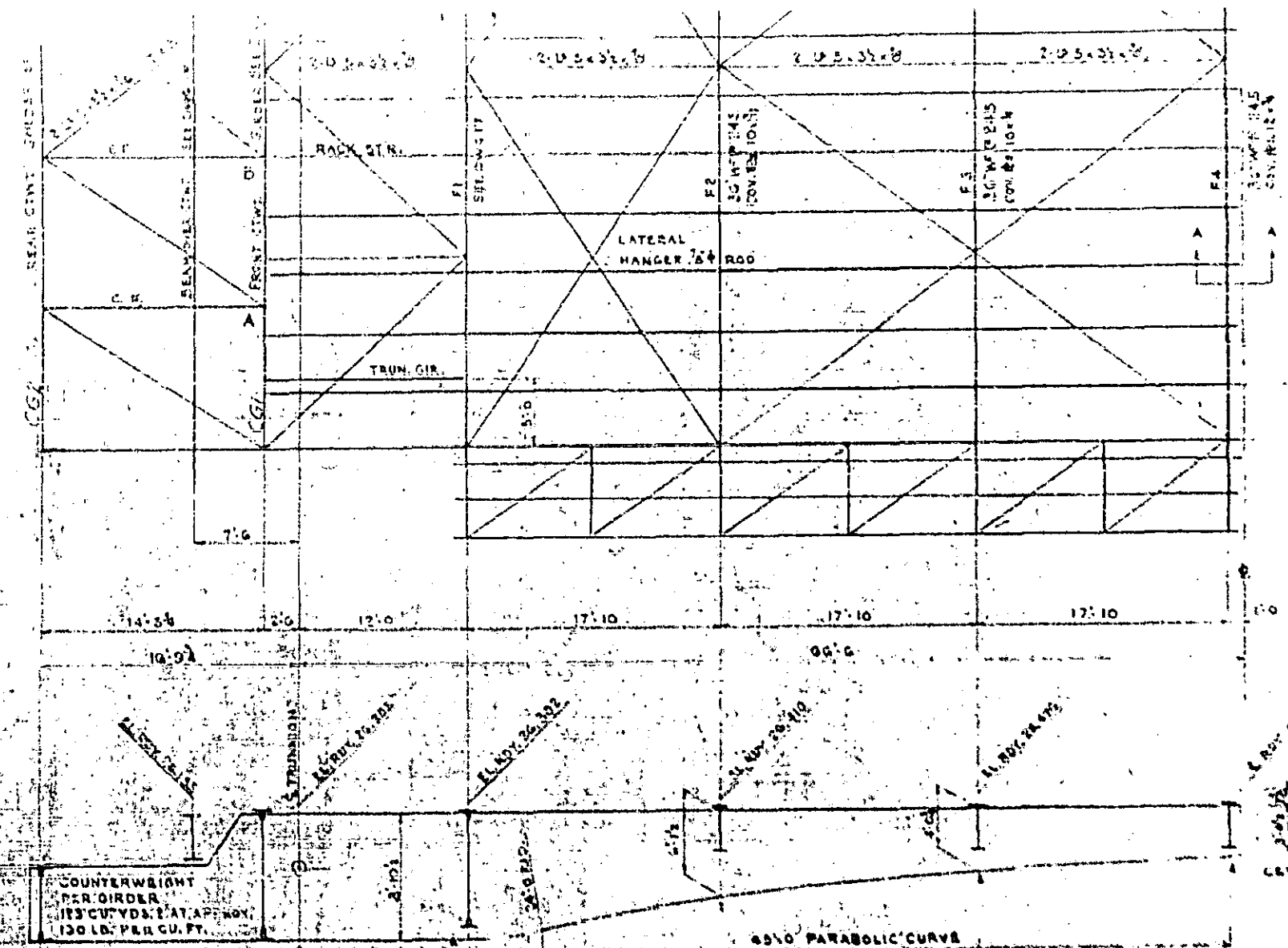
FINAL OUTLINE OF COUNTERWEIGHT AND UNIT WEIGHT OF CONCRETE TO BE DETERMINED FROM CENTER OF GRAVITY CALCULATIONS MADE FROM THE APPROVED SHOP DETAIL DRAWINGS.

TRUSS REACTIONS
 REAR: 115.0 K
 IMP: 135.0
 AMT. TOT: 250.0
 REAR: 115.0 K
 IMP: 135.0
 AMT. TOT: 250.0

REACTIONS
 REAR: 115.0 K
 IMP: 135.0
 TOT: 250.0 K



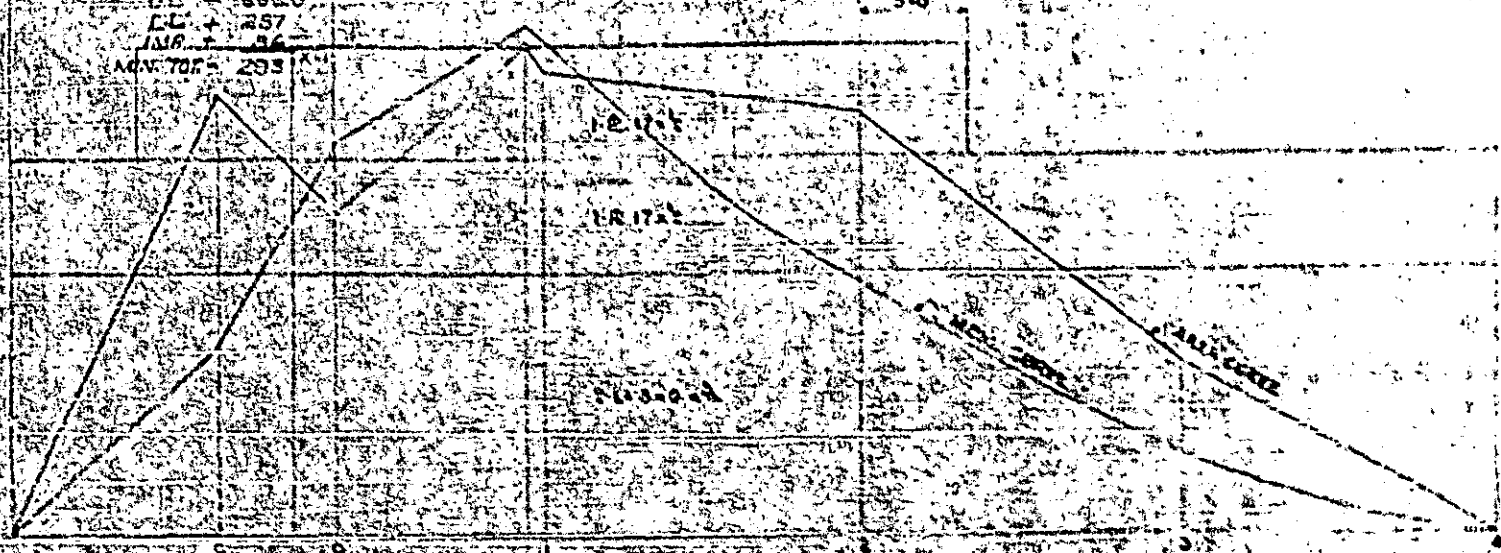
VERTICAL SCALE
 MOMENT 1" = 2,000,000 FT. LBS.



COUNTERWEIGHT
 PER GIRDER
 113 CU YDS. AT APPROX.
 130 LB. PER CU. FT.

TRUSSION REACTIONS
 D.L. 552.5
 IMP. 1519
 MAX. TOT. 7850
 D.L. 2520
 L.L. + 257
 IMP. 786
 MAX. TOT. 293

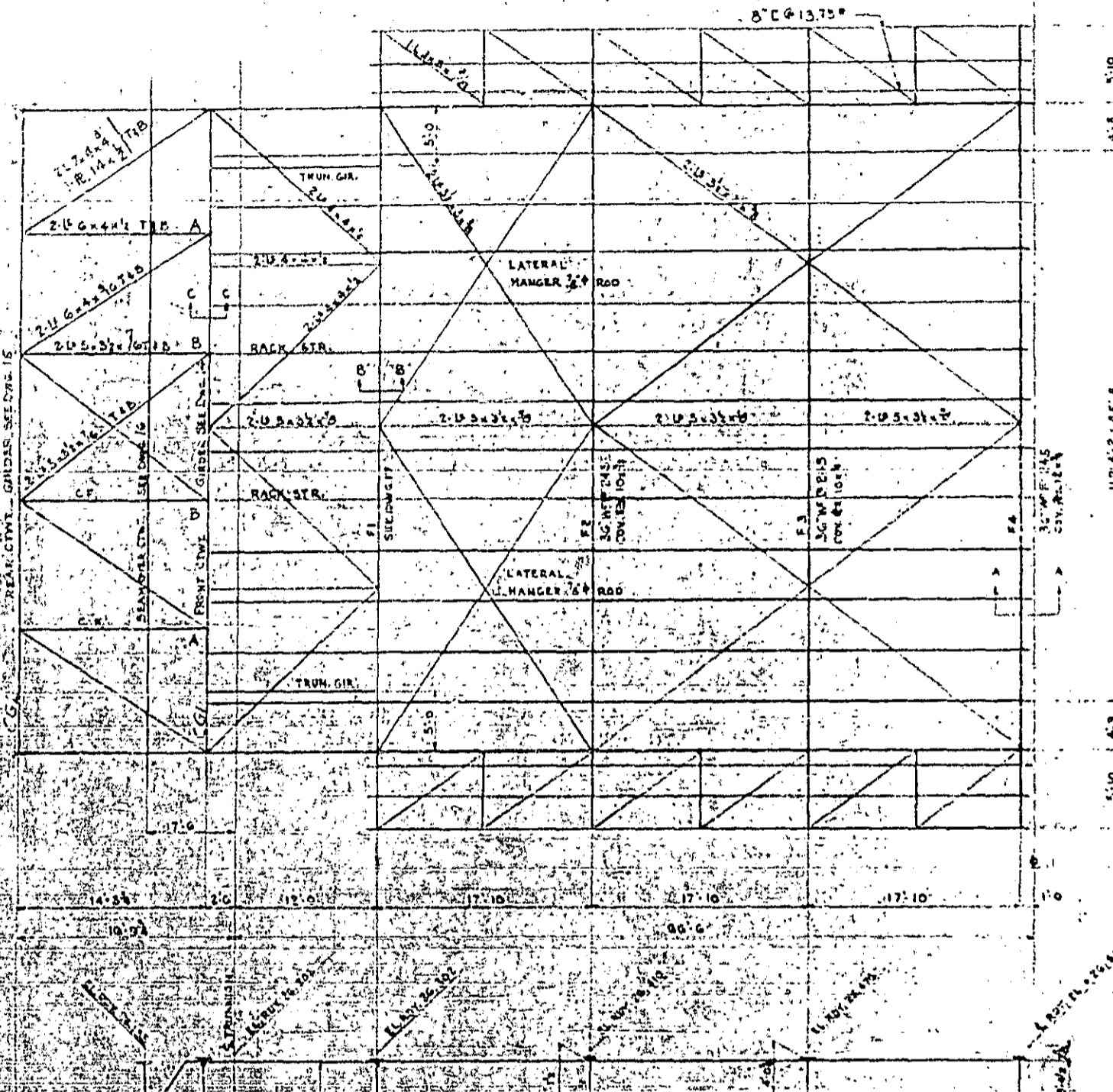
REACTION
 EXISTING
 IMP. 250
 TOT. 257.0



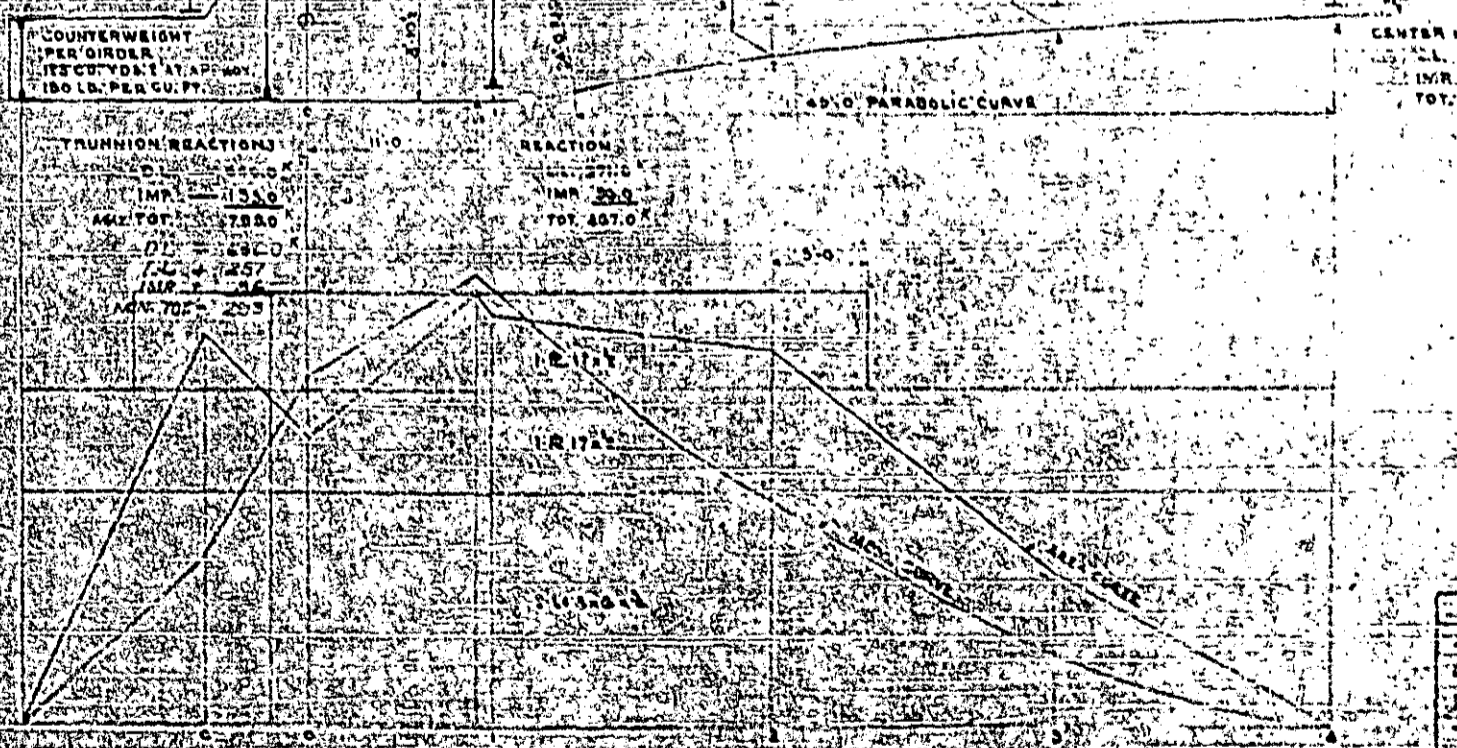
VERTICAL SCALE
 MOMENT 1" = 2,000,000 FT. LB.

GENERAL OUTLINE OF COUNTERWEIGHT
 AND UNIT WEIGHT OF CONCRETE TO BE
 DETERMINED FROM CENTER OF GRAVITY
 CALCULATIONS MADE FROM THE
 APPROVED SHOP DETAIL DRAWINGS.

HP 42-2-1-15-5
 5-10-43
 CENTER LINE
 TOT. J



8' @ 13.75'



FINAL OUTLINE OF COUNTERWEIGHT AND UNIT WEIGHT OF CONCRETE TO BE DETERMINED FROM CENTER OF GRAVITY CALCULATIONS MADE FROM THE APPROVED SHOP DETAIL DRAWING.

COUNTERWEIGHT PER GIRDER ITS CENTER AT APPROX. 150 LB. PER CU. FT.

TRUSSION REACTIONS

IMP. 1150
 MAX. TOT. 1780
 REACT. 1280
 REACT. 1257
 MAX. TOT. 203

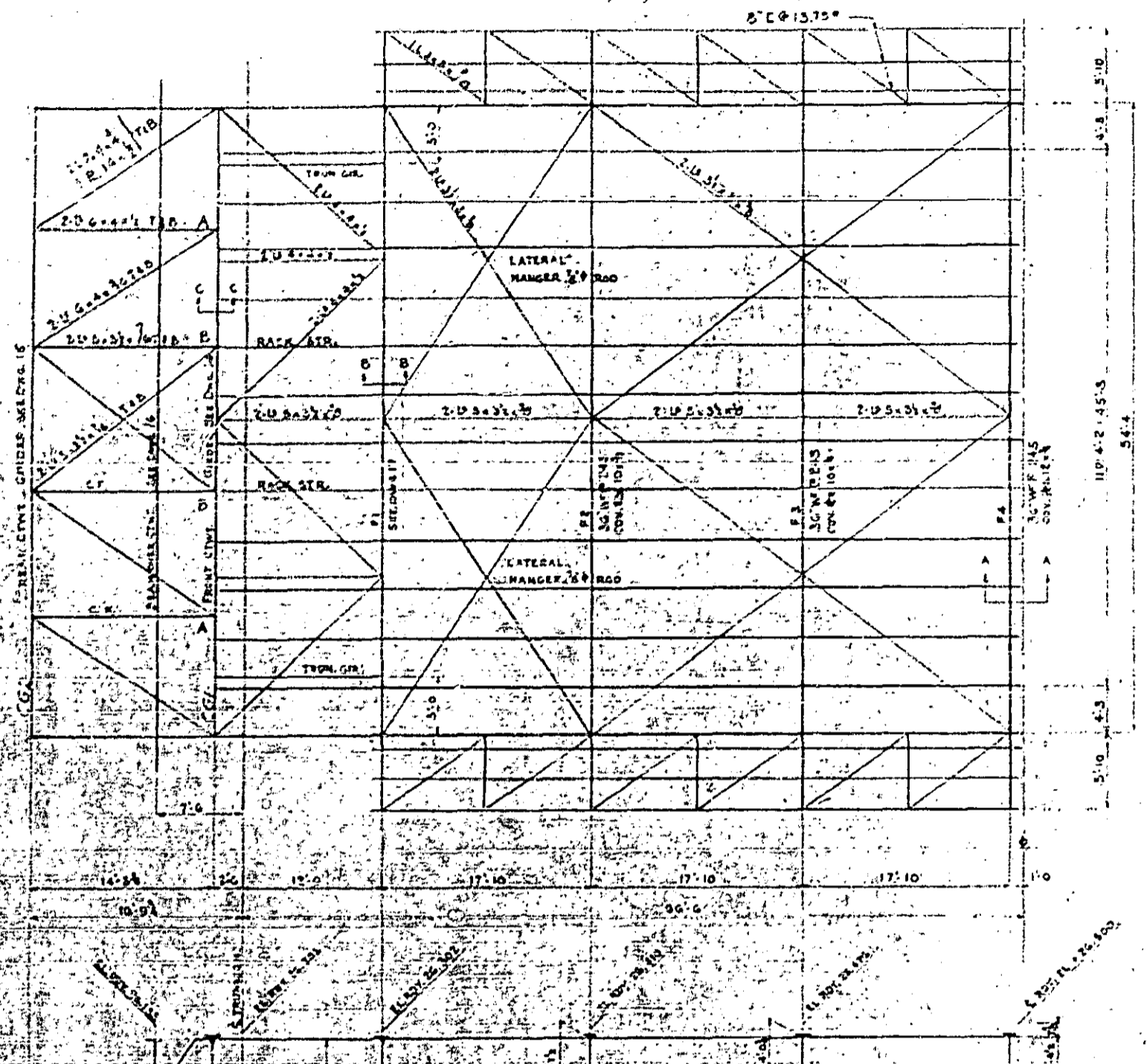
REACTIONS

IMP. 200
 TOT. 407.0

VERTICAL SCALE
 MOMENT IN 100,000 FT. LB.

CENTER LOCK SHELL
 24.7
 11R 2.4
 TOT. 32.1

TRUSSION	DEAD LO
IMP. WA	75% LI
30% IN	MAX. SHE
DEAD LO	MAX. SHE
IMP. WA	75% LI
30% IN	MAX. SHE



COUNTERWEIGHT PER GIRDER (PER CURVE) AT APPROX. 150 LB. PER CU. FT.

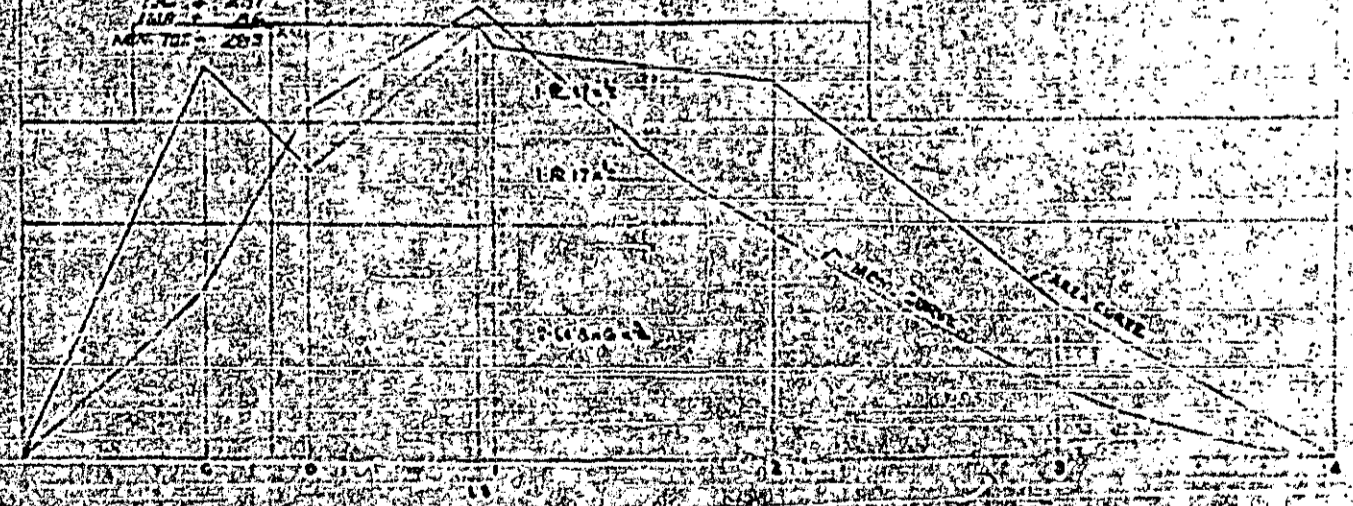
FINAL OUTLINE OF COUNTERWEIGHT AND UNIT WEIGHT OF CONCRETE TO BE DETERMINED FROM CENTER OF GRAVITY CALCULATIONS MADE FROM THE APPROVED SHOP DETAIL DRAWING.

TRUSSION REACTIONS

IMR	1350
MAX. TOT.	1750
DL	650
T.C.	257
MAX. TOT.	203

REACTION

IMR	39.0
TOT.	157.0

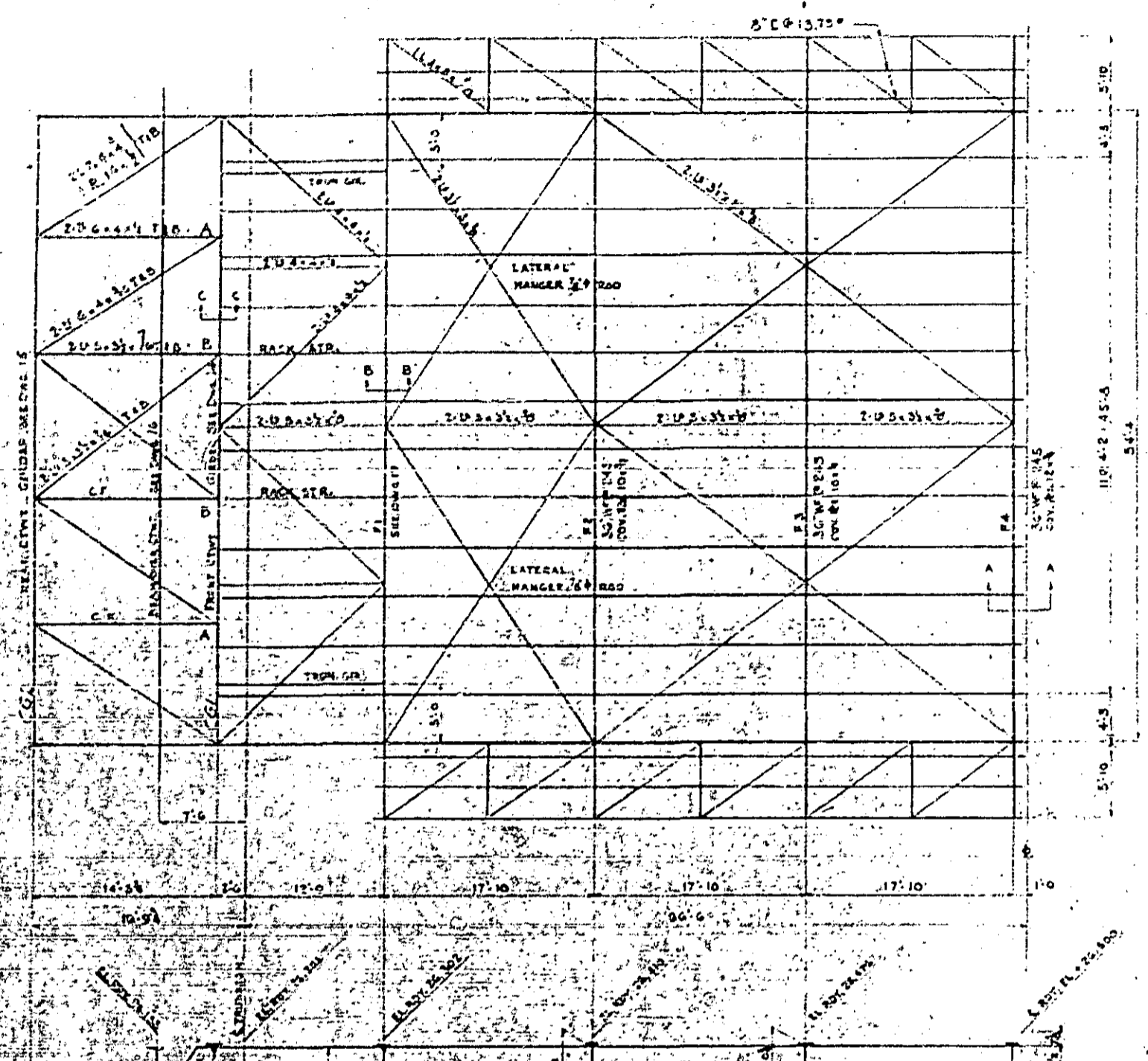


VERTICAL SCALE
MOMENT IN 2,000,000 FT. LBS.

CENTER LOCK ONE
CL. 24.7
IMR. 7.4
TOT. 32.1

TRUSSION	
DEAD	
SIDE W	
75% LI	
30% LA	
MAX. 7.21	

DEAD	
30% LI	
30% LA	
MAX. 7.21	

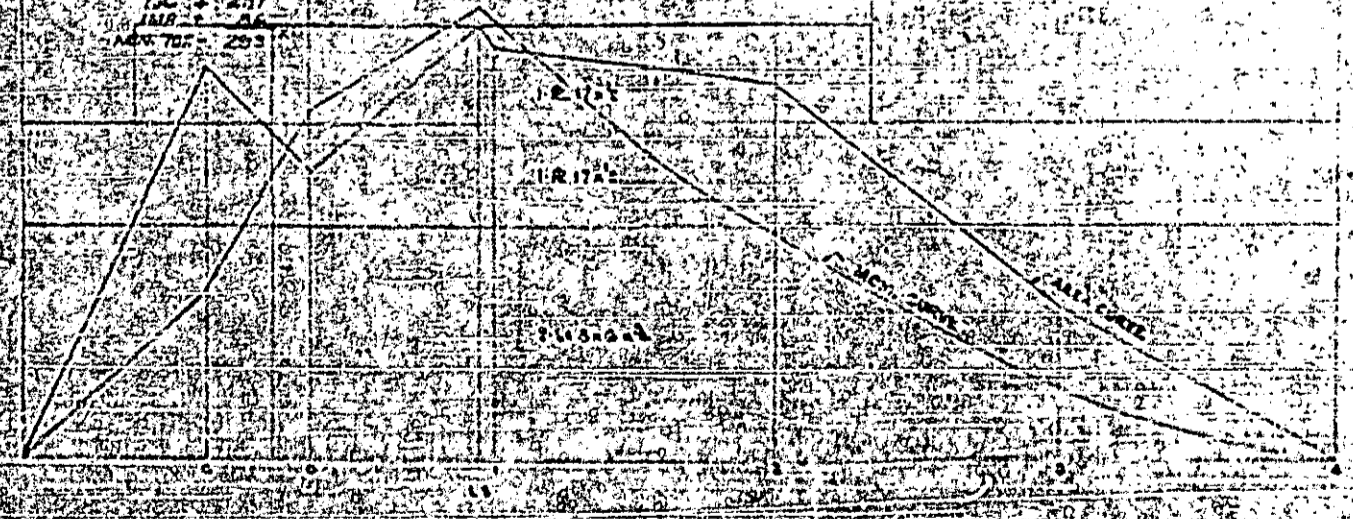


COUNTERWEIGHT PER GIRDER
 150 LB. PER CU. FT.

TRUSSION REACTIONS
 IMP. 1320
 MAX. TOT. 2780
 D.L. 5800
 IMP. 257
 MAX. TOT. 293

REACTION
 IMP. 290
 TOT. 467.0

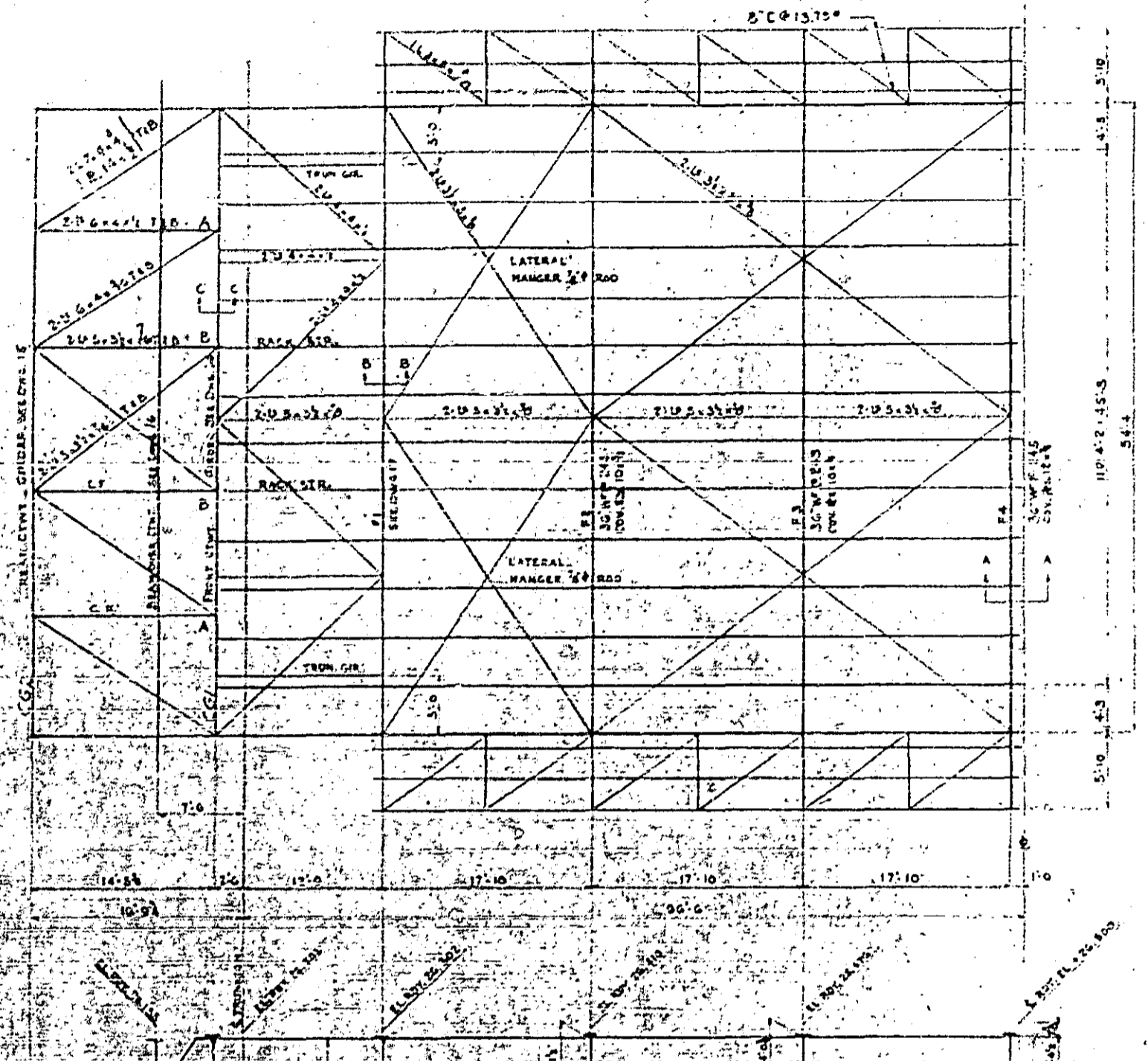
FINAL OUTLINE OF COUNTERWEIGHT
 AND UNIT WEIGHT OF CONCRETE TO BE
 DETERMINED FROM CENTER OF GRAVITY
 CALCULATIONS MADE FROM THE
 APPROVED SHOP DETAIL DRAWING.



VERTICAL SCALE
 MOMENT 1" = 2,000,000 FT. LBS.

TRUSSION
 DEAD L
 3101 W
 75% L
 800 L
 MAX. 378

DEAD L
 300% DE
 MAX. 378



COUNTERWEIGHT
PER GIRDER
1125 CU. YD. AT APPROX.
110 LB. PER CU. YD.

FINAL OUTLINE OF COUNTERWEIGHT
AND UNIT WEIGHT OF CONCRETE TO BE
DETERMINED FROM CENTER OF GRAVITY
CALCULATIONS MADE FROM THE
APPROVED SHOP DETAIL DRAWING.

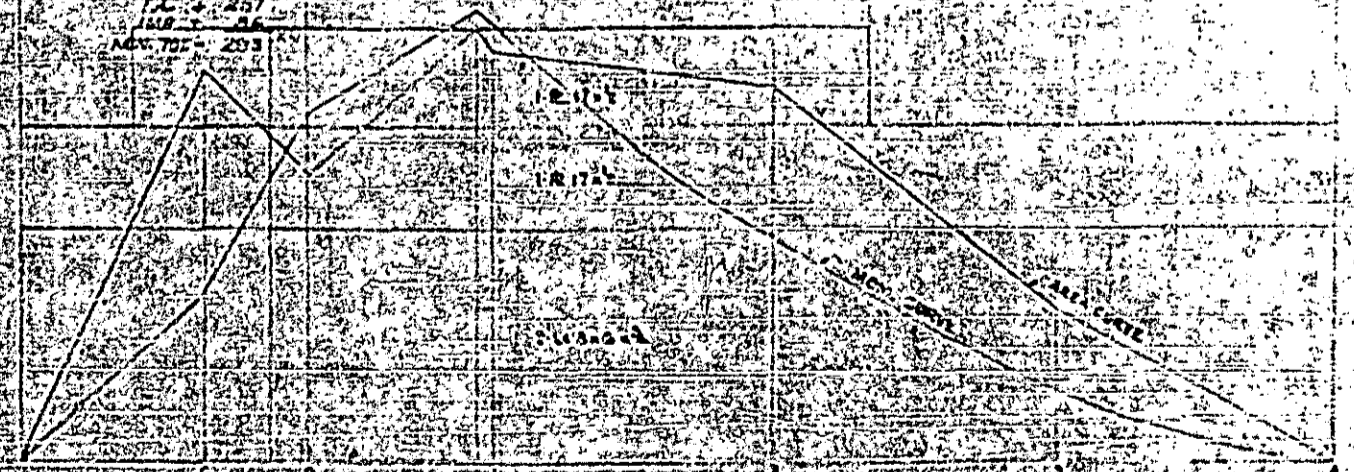
TRUSSION REACTIONS

DL	300.0
IMP	1350
AMT. TOT.	1750
DL	690.0
IMP	257
ACT. TOT.	203

REACTIONS

DL	2710
IMP	290
TOT.	4670

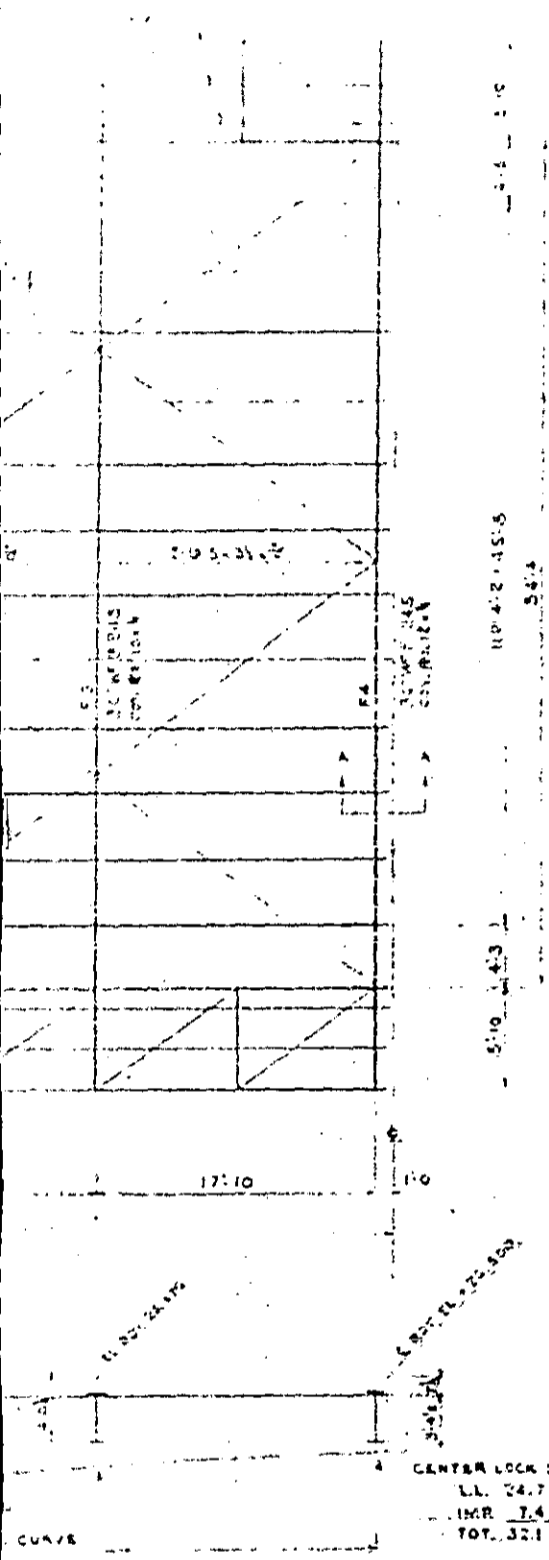
CENTER LOCK SHEET
24.7
IMR. 7.6
TOTAL 32.1



VERTICAL SCALE
MOMENT IN 2,000,000 FT. LBS.

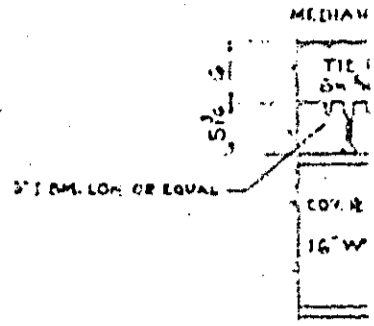
TRUSSION
DEAD LOAD
SIDE WEIGHT
75% LI
30% EA
MAX. SHE

DEAD
200% DE
MAX. SHE



STEEL BRIDGE FLOOR

STEEL BRIDGE FLOOR SHALL BE 5" TH. LOCK OR EQUAL EXCEPT OVER MACHINERY AREA WHERE 3" TH. LOCK (OR EQUAL) SHALL BE USED. THE COST OF CONCRETE (CLASS A) FOR THE 3" ARMORED FLOOR SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR STEEL ROADWAY FLOOR.



ALL ROADWAY STRINGERS
16" W P 36"
FOR CURB DETAIL AND SIDE
WALK BRACKET SEE DWG 18

3" ARMORED FLOOR

END L 4.4.2
ANG. BARS 1/2" x 6"
9" CURB, ALT.

CENTER LOCK SHEAR
LL 24.7'
IMR 1.4'
TOT. 32.1'

GIRDER MOMENT TABLE FT. KIP

POINT	D.L.	L.L.	IMP.	TOTAL
0	2054.0		198.5	2252.5
1.5	3177.5	3150.2	201.0	6538.7
1	2476.6	3074.6	181.0	5732.2
2	1492.8	1807.3	300.0	3599.1
3	396.3	507.0	189.0	1092.3
4	0	38.8	16.5	55.3
5	2100.0		440.0	2540.0

SHEAR TABLE KIPS

	CO2	CO1	TRUN	L.L.S	F11	F2	F3	F4
TRUSS GIRDER								
DEAD LOAD	175	523	656	120.9	1783	873	510	227
SIDE WALK				17.2	17.2	157	74	27
75% LIVE LOAD		747.1	516	1075	1915	892	528	348
30% IMPACT		151.3	172	323	322	222	170	104
MAX. THEOR. TOTAL	175	796.3	748	2260	2815	2042	1372	765
DEAD LOAD	175	523	656	120.9	1783	873	510	227
75% LIVE LOAD		747.1	516	1075	1915	892	528	348
30% IMPACT		151.3	172	323	322	222	170	104
MAX. THEOR. TOTAL	175	796.3	748	2260	2815	2042	1372	765

GENERAL BRACING WILL BE REQUIRED FOR THE MAIN CHORDS, TRUSSION GIRDERS, COUNTERWEIGHT GIRDERS, RACK STRINGERS AND FLOOR BEAMS, PER SPECIFICATIONS. COUNTERWEIGHT DETAILS SHALL BE FURNISHED WITH THE DRAWINGS. PROVISIONS SHALL BE MADE FOR MOVABLE BRACKS EQUAL TO 3% UNIFORM AND 5% OVER THE CALCULATED WEIGHT. BRACKS EQUAL TO 5% OF THE CALCULATED WEIGHT SHALL BE PROVIDED. COUNTERWEIGHT BRACKS TO WEIGH APPROXIMATELY 20 LBS. EACH. THE COST OF COUNTERWEIGHT BRACKS TO BE INCLUDED IN THE CONTRACT UNIT PRICE PER CUBIC YARD FOR COUNTERWEIGHT CONCRETE. PRINT: SEE SPECIFICATION AND SPECIAL PROVISIONS. ALL WELDS TO BE FULL PENETRATION WELDS UNLESS OTHERWISE NOTED.