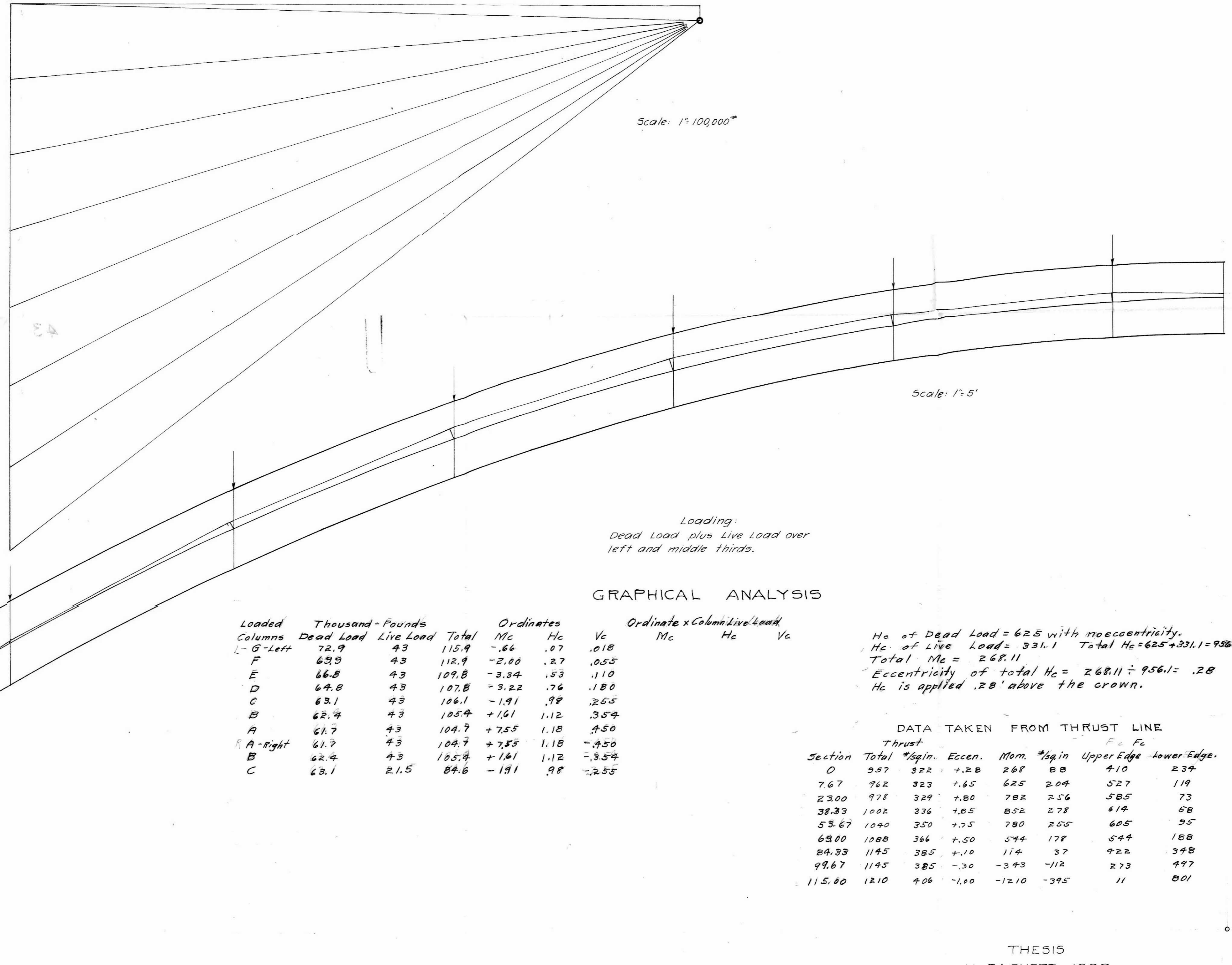


MATHEMATICAL ANALYSIS

Section	Load	$f_c M$	$f_c N$	$f_c(\text{upper})$	$f_c(\text{lower})$
15.33	Dead	+8	211		
	Live (Middle)	+184	82	+501	+145
	Live (L. end)	-14	30		
	Sum	+178	+323		
30.67	Dead	+22	214		
	Live (Middle)	+45	85	+558	+100
	L (L. end)	+162	30		
	Sum	+229	+329		
46.00	D	+39	219	+682	-6
	L	-25	88		
	L	+330	31		
	S	+344	+338		
61.33	D	+53	226		
	L	-134	88	+654	+48
	L	+384	37		
	S	+303	+351		
76.67	D	+64	236		
	L	-119	88	+582	+154
	L	+269	44		
	S	+214	368		
92.00	D	+51	247	+472	+304
	L	+18	88		
	L	+15	53		
	S	+84	+388		
107.33	D	+21	257		
	L	+279	87	+239	+575
	L	-468	63		
	S	-168	407		



Scale: 1"=100,000'

Scale: 1"=5'

Loading:
Dead Load plus Live Load over left and middle thirds.

GRAPHICAL ANALYSIS

Loaded Columns	Thousand-Pounds			Ordinates			Ordinate x Column Live Load		
	Dead Load	Live Load	Total	M_c	H_c	V_c	M_c	H_c	V_c
L-G-Left	72.9	43	115.9	-.66	.07	.018			
F	69.9	43	112.9	-2.00	.27	.055			
E	66.8	43	109.8	-3.34	.53	.110			
D	64.8	43	107.8	-3.22	.76	.180			
C	63.1	43	106.1	-1.91	.98	.255			
B	62.4	43	105.4	+1.61	1.12	.354			
A	61.7	43	104.7	+7.55	1.18	.450			
R A-Right	61.7	43	104.7	+7.55	1.18	-.450			
B	62.4	43	105.4	+1.61	1.12	-.354			
C	63.1	21.5	84.6	-1.91	.98	-.255			

H_c of Dead Load = 62.5 with no eccentricity.
 H_c of Live Load = 331.1 Total $H_c = 62.5 + 331.1 = 956.11$
 Total $M_c = 268.11$
 Eccentricity of total $H_c = 268.11 \div 956.11 = .28$
 H_c is applied .28' above the crown.

DATA TAKEN FROM THRUST LINE

Section	Total Thrust	Total #sq.in.	Eccen.	Mom. #sq.in.	$F_c F_c$		
					Upper Edge	Lower Edge	
0	957	322	+2.8	268	88	410	234
7.67	962	323	+6.5	625	204	527	119
23.00	978	329	+8.0	782	256	585	73
38.33	1002	336	+8.5	852	278	614	58
53.67	1040	350	+7.5	780	255	605	95
69.00	1088	366	+5.0	544	178	544	188
84.33	1145	385	+1.0	114	37	422	348
99.67	1145	385	-.30	-343	-112	273	497
115.00	1210	406	-1.00	-1210	-395	11	801