ANALYSIS STATUS REPORT

Job	C:\SGWIN\DATA\11006\OXDT\SSTRC	
Units system	Kilonewtons, Metres	
Nodes	49	(2500)
Members	71	(5000)
Restrained nodes	17	(2500)
Nodes with spring restraints	0	(2500)
Section properties	7	(100)
Material properties	3	(25)
Constrained nodes	0	(2500)
Member offsets	0	(5000)
Node loads	3	(10000)
Prescribed node displacements	0	(10000)
Member concentrated loads	1	(10000)
Member distributed forces	39	(10000)
Member distributed torsions	0	(10000)
Thermal/Prestress loads	0	(10000)
Self weight load cases	0	(100)
Combination load cases	4	(100)
Load cases with titles	8	(100)
Lumped masses	0	(10000)
Spectral load cases	0	(100)
Static analysis	Y	
Dynamic analysis	N	
Response analysis	N	
Buckling analysis	N	
Ill-conditioned	N	
Non-linear convergence	Y	
Frontwidth	85	
Total degrees of freedom	207	
Primary load cases	3	(100)
Mass load cases	0	(100)

SECTION PROPERTIES (m,m^2,m^4,deg)

Sect	Section Name	Mark	Angle	Type	Flipped	Source
1	700DP X 450WD	S1	Not applicable		No	Standard shape
2	400SQR COLUMN	S2	Not applicable		No	Standard shape
3	600DP X 400WD	S3	Not applicable		No	Standard shape
4	310 UB 40.4	S4	Not applicable		No	AUST300.LSS
5	200 PFC	S5	Not applicable		No	Standard shape
6	200 X 75 HWD					
7	600DP X 200WD	S7	Not applicable		No	Standard shape

Sect	Area of Section	Torsion Constant	Y-Axis Mom of In	Z-Axis Mom of In	Y-Axis Shr Area	Z-Axis Shr Area	Princ Angle
1	3.1500E-01	1.2774E-02	5.3156E-03	1.2862E-02	INFINITE	INFINITE	0.00
2	1.6000E-01	3.6053E-03	2.1333E-03	2.1333E-03	INFINITE	INFINITE	0.00
3	2.4000E-01	7.5125E-03	3.2000E-03	7.2000E-03	INFINITE	INFINITE	0.00
4	5.2100E-03	1.5700E-07	7.6500E-06	8.6400E-05	INFINITE	INFINITE	0.00
5	2.0000E-02	4.5800E-05	1.6700E-05	6.6700E-05	INFINITE	INFINITE	0.00
6	1.5000E-02	2.1500E-05	7.0312E-06	5.0000E-05	INFINITE	INFINITE	0.00
7	1.2000E-01	1.2643E-03	4.0000E-04	3.6000E-03	INFINITE	INFINITE	0.00

Sect	Section Shape	D	B/Bt	Bb/Hf	Tw	Tf
1	Rectangle	0.700	0.450			
2	Rectangle	0.400	0.400			
3	Rectangle	0.600	0.400			
5	Rectangle	0.200	0.100			
6	Rectangle	0.200	0.075			
7	Rectangle	0.600	0.200			

MATERIAL PROPERTIES (kPa,Kg/m^3)

Matl	Material Name	Young's Modulus	Poisson's Ratio	Mass Density	Coeff of Expansion	Concrete Strength
1	TIMBER	1.0500E+07	6.50	1.1000E+03	1.0000E-10	
2	CONCRETE-32	2.8600E+07	0.15	2.4500E+03	1.0000E-05	32000.00
3	TIMBER	1.0500E+07	6.50	1.1000E+03	1.0000E-10	

MEMBER CONCENTRATED LOADS (m,kN,kNm)

Load Case	Memb	Sub Load	Axes Sys	Load Position	X Force/ Moment	Y Force/ Moment	Z Force/ Moment
2	59	1	G	50.000%	0.000	-37.500	0.000
					0.000	0.000	0.000

MEMBER DISTRIBUTED FORCES (m,kN/m)

Load Case	Memb	Sub Load	Axes Sys	Start Position	Finish Position	X Start/ Finish	Y Start/ Finish	Z Start/ Finish
1	26	1	GI	0.000%	100.000%	0.000	-24.840	0.000
						0.000	-24.840	0.000
	26	2	GI	0.000%	100.000%	0.000	-27.840	0.000
						0.000	-27.840	0.000
	27	1	GI	0.000%	100.000%	0.000	-24.840	0.000
						0.000	-24.840	0.000
	27	2	GI	0.000%	100.000%	0.000	-27.840	0.000
						0.000	-27.840	0.000
	28	1	GI	0.000%	100.000%	0.000	-24.840	0.000
						0.000	-24.840	0.000
	28	2	GI	0.000%	100.000%	0.000	-27.840	0.000
						0.000	-27.840	0.000
	29	1	GI	0.000%	100.000%	0.000	-24.840	0.000
						0.000	-24.840	0.000
	29	2	GI	0.000%	100.000%	0.000	-27.840	0.000
						0.000	-27.840	0.000
	30	1	GI	0.000%	100.000%	0.000	-24.840	0.000
						0.000	-24.840	0.000
	30	2	GI	0.000%	100.000%	0.000	-27.840	0.000
						0.000	-27.840	0.000
	31	1	GI	0.000%	100.000%	0.000	-24.840	0.000
						0.000	-24.840	0.000
	31	2	GI	0.000%	100.000%	0.000	-27.840	0.000
						0.000	-27.840	0.000
	32	1	GI	0.000%	100.000%	0.000	-24.840	0.000
						0.000	-24.840	0.000
	32	2	GI	0.000%	100.000%	0.000	-27.840	0.000
						0.000	-27.840	0.000
	33	1	GI	0.000%	100.000%	0.000	-51.000	0.000
						0.000	-51.000	0.000
	34	1	GI	0.000%	100.000%	0.000	-51.000	0.000
						0.000	-51.000	0.000
	40	1	GI	0.000%	100.000%	0.000	-1.290	0.000
						0.000	-1.290	0.000
	41	1	GI	0.000%	100.000%	0.000	-1.290	0.000
						0.000	-1.290	0.000
	42	1	GI	0.000%	100.000%	0.000	-1.290	0.000
						0.000	-1.290	0.000
	43	1	GI	0.000%	100.000%	0.000	-1.290	0.000
						0.000	-1.290	0.000
	45	1	GI	0.000%	100.000%	0.000	-0.780	0.000
						0.000	-0.780	0.000
	46	1	GI	0.000%	100.000%	0.000	-0.780	0.000
						0.000	-0.780	0.000
	47	1	GI	0.000%	100.000%	0.000	-0.780	0.000
						0.000	-0.780	0.000
	48	1	GI	0.000%	100.000%	0.000	-0.780	0.000
						0.000	-0.780	0.000
	67	1	GI	0.000%	100.000%	0.000	-2.070	0.000
						0.000	-2.070	0.000
	71	1	GI	0.000%	100.000%	0.000	-2.070	0.000
						0.000	-2.070	0.000
	73	1	GI	0.000%	100.000%	0.000	-2.070	0.000
						0.000	-2.070	0.000
	74	1	GI	0.000%	100.000%	0.000	-2.070	0.000
						0.000	-2.070	0.000
2	26	1	GI	0.000%	100.000%	0.000	-0.540	0.000
						0.000	-0.540	0.000
	27	1	GI	0.000%	100.000%	0.000	-0.540	0.000
						0.000	-0.540	0.000
	28	1	GI	0.000%	100.000%	0.000	-0.540	0.000
						0.000	-0.540	0.000
	29	1	GI	0.000%	100.000%	0.000	-0.540	0.000
						0.000	-0.540	0.000
	30	1	GI	0.000%	100.000%	0.000	-0.540	0.000
						0.000	-0.540	0.000
	31	1	GI	0.000%	100.000%	0.000	-0.540	0.000
						0.000	-0.540	0.000
	32	1	GI	0.000%	100.000%	0.000	-0.540	0.000
						0.000	-0.540	0.000
	67	1	GI	0.000%	100.000%	0.000	-0.863	0.000
						0.000	-0.863	0.000
	71	1	GI	0.000%	100.000%	0.000	-0.863	0.000
						0.000	-0.863	0.000
	73	1	GI	0.000%	100.000%	0.000	-0.863	0.000
						0.000	-0.863	0.000
	74	1	GI	0.000%	100.000%	0.000	-0.863	0.000
						0.000	-0.863	0.000

COMBINATION LOAD CASES

Load case 5: 1.4DL +1.7LL
- 1.400 * Load case 1: DL
- 1.700 * Load case 2: LL

Load case 6: DL +1.3 LL + 1.3WL
- 1.000 * Load case 1: DL
- 1.300 * Load case 2: LL
- 1.300 * Load case 3: WL

Load case 7: DL + LL + EQL
- 1.000 * Load case 1: DL
- 1.300 * Load case 2: LL
- 1.000 * Load case 4: EQ

Load case 8: DL + LL
- 1.000 * Load case 1: DL
- 1.000 * Load case 2: LL

LOAD CASE TITLES

Load Case	Title
1	DL
2	LL
3	WL
4	EQ
5	1.4DL +1.7LL
6	DL +1.3 LL + 1.3WL
7	DL + LL + EQL
8	DL + LL

MEMBER FORCES AND MOMENTS (kN,kNm)

Load case 1 (Linear): DL

Memb	Node	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
1	3	0.000	0.005	0.000	-0.001	0.000	0.000
	34	0.000	0.005	0.000	-0.001	0.000	0.002
2	5	2.100	0.000	-0.378	-0.038	1.220	0.000
	4	2.100	0.000	-0.378	-0.038	-0.814	-0.001

Memb	Node	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
3	1	0.000	0.000	0.000	0.000	0.000	0.000
	3	0.000	0.000	0.000	0.000	0.000	0.000
4	3	-0.005	0.000	0.000	0.000	-0.001	0.000
	5	-0.005	0.000	0.000	0.000	0.000	0.000
5	11	-0.016	-0.257	0.001	0.003	0.000	0.000
	35	-0.016	-0.257	0.001	0.003	0.000	-0.107
6	5	0.000	0.000	0.000	0.000	0.000	0.000
	6	0.000	0.000	0.000	0.000	0.000	0.000
7	12	3.727	0.001	-0.023	-0.372	-0.058	0.000
	13	3.727	0.001	-0.023	-0.372	-0.182	0.006
8	14	0.000	0.000	0.000	0.000	0.000	0.000
	11	0.000	0.000	0.000	0.000	0.000	0.000
9	11	0.257	0.000	-0.001	0.000	0.003	0.000
	53	0.257	0.000	-0.001	0.000	-0.001	-0.002
10	12	0.000	0.000	0.000	0.000	0.000	0.000
	15	0.000	0.000	0.000	0.000	0.000	0.000
11	16	-0.439	-7.275	0.001	0.005	0.000	0.000
	36	-0.439	-7.275	0.001	0.005	0.000	-3.031
12	17	3.306	1.011	-0.230	-0.816	0.689	0.000
	18	3.306	1.011	-0.230	-0.816	-0.549	5.440
13	19	0.000	0.000	0.000	0.000	0.000	0.000
	16	0.000	0.000	0.000	0.000	0.000	0.000
14	16	7.288	0.000	-0.001	0.000	0.005	0.000
	17	7.288	0.000	-0.001	0.000	-0.005	0.002
15	17	0.000	0.000	0.000	0.000	0.000	0.000
	20	0.000	0.000	0.000	0.000	0.000	0.000
17	22	4.606	1.402	-0.090	0.435	0.198	0.000
	23	4.606	1.402	-0.090	0.435	-0.284	7.544
18	24	0.000	0.000	0.000	0.000	0.000	0.000
	21	0.000	0.000	0.000	0.000	0.000	0.000
19	21	9.584	-0.068	0.001	0.000	-0.003	0.312
	39	9.584	-0.068	0.001	0.000	0.000	0.061
20	22	0.000	0.000	0.000	0.000	0.000	0.000
	25	0.000	0.000	0.000	0.000	0.000	0.000
21	26	-0.015	-0.250	-0.003	-0.009	0.001	0.000
	38	-0.015	-0.250	-0.003	-0.009	0.000	-0.104
22	27	1.148	0.002	-0.014	1.031	-0.068	0.000
	28	1.148	0.002	-0.014	1.031	-0.141	0.009
23	29	0.000	0.000	0.000	0.000	0.000	0.000
	26	0.000	0.000	0.000	0.000	0.000	0.000
24	26	0.250	0.000	0.003	0.000	-0.009	0.000
	27	0.250	0.000	0.003	0.000	0.009	0.000
25	27	0.000	0.000	0.000	0.000	0.000	0.000
	30	0.000	0.000	0.000	0.000	0.000	0.000
26	2	0.000	63.621	0.000	0.000	0.000	-25.462
	31	0.000	-73.347	0.000	0.000	0.000	-38.105
27	7	0.000	84.288	0.000	0.000	0.000	-44.954
	8	0.000	-84.288	0.000	0.000	0.000	-44.954
28	8	0.000	76.386	0.000	0.000	0.000	-36.920
	32	0.000	-76.386	0.000	0.000	0.000	-36.920
29	9	0.377	-15.300	2.831	0.324	-2.739	35.402
	33	0.377	-94.320	2.831	0.324	1.508	-46.813
30	31	0.000	81.078	0.000	0.000	0.000	-38.105
	7	0.000	-87.498	0.000	0.000	0.000	-48.378
31	32	-0.283	101.145	-2.446	-0.664	2.417	-63.585
	9	-0.283	-4.215	-2.446	-0.664	-2.474	33.346
32	33	0.000	78.370	-0.870	0.324	1.508	-46.813
	10	0.000	-58.598	-0.870	0.324	-0.754	-21.108
33	2	0.000	175.950	0.000	0.000	0.000	-202.342
	4	0.000	-175.950	0.000	0.000	0.000	-202.342
34	10	0.000	175.950	0.000	0.000	0.000	-202.342
	28	0.000	-175.950	0.000	0.000	0.000	-202.342
35	34	3.393	0.008	-0.401	0.037	1.516	-0.029
	2	3.393	0.008	-0.401	0.037	-0.642	0.014
36	35	4.038	-0.167	0.356	-0.407	-1.203	0.605
	7	4.038	-0.167	0.356	-0.407	0.714	-0.292
37	36	14.141	-5.972	-0.481	-0.590	1.795	25.016
	8	14.141	-5.972	-0.481	-0.590	-0.792	-7.108
39	38	2.889	-0.306	0.805	1.215	-2.841	1.107
	10	2.889	-0.306	0.805	1.215	1.490	-0.541
40	34	0.353	3.433	-0.089	0.039	0.154	-1.657
	35	0.353	-4.049	-0.089	0.039	-0.364	-3.441
41	35	1.287	1.146	2.768	3.811	-4.507	-1.747
	36	1.287	-2.982	2.768	3.811	4.350	-4.686
42	36	2.730	4.411	0.269	0.726	-0.422	-4.478
	37	2.730	-1.910	0.269	0.726	0.896	1.651
43	37	1.485	1.438	-1.630	-3.799	3.662	1.876
	38	1.485	-3.851	-1.630	-3.799	-3.020	-3.069
44	34	-0.092	-0.041	0.048	0.141	-0.116	0.071
	45	-0.092	-0.041	0.048	0.141	0.092	-0.106
45	5	0.584	2.140	-0.100	0.002	0.210	-1.328
	12	0.584	-2.384	-0.100	0.002	-0.368	-2.036
46	12	-1.015	1.496	2.643	-0.054	-4.420	-1.599
	17	-1.015	-1.000	2.643	-0.054	4.039	-0.807
47	17	-2.219	1.866	0.257	-0.056	-0.280	-1.242
	22	-2.219	-1.956	0.257	-0.056	0.981	-1.462
48	22	-1.252	2.004	-1.654	0.100	3.591	-1.787
	27	-1.252	-1.194	-1.654	0.100	-3.191	-0.125
49	27	-1.902	-0.060	1.236	0.056	-2.152	0.100
	44	-1.902	-0.060	1.236	0.056	1.063	-0.057
50	36	-3.802	7.187	-0.960	-2.003	4.178	-31.132
	41	-3.802	7.187	-0.960	-2.003	0.241	-1.667
51	37	-6.184	8.383	0.583	1.270	-2.498	-36.219
	42	-6.184	8.383	0.583	1.270	-0.106	-1.850
52	35	2.767	-1.140	-1.290	-0.491	3.733	3.060
	43	2.767	-1.140	-1.290	-0.491	-1.554	-1.616
53	39	9.584	-0.068	0.001	0.000	0.000	0.061
	22	9.584	-0.068	0.001	0.000	0.003	-0.156
54	40	1.686	0.946	0.678	-0.228	-0.982	-1.292
	38	1.686	0.946	0.678	-0.228	1.796	2.588
55	49	-2.696	0.152	-1.622	0.379	0.539	-0.337
	12	-2.696	0.152	-1.622	0.379	-3.678	0.057
57	21	-0.645	-9.562	-0.001	-0.003	0.000	-0.312
	37	-0.645	-9.562	-0.001	-0.003	0.000	-4.297
58	43	0.155	1.300	0.027	0.000	-0.042	-2.117
	41	0.155	1.300	0.027	0.000	0.043	2.042
59	41	0.077	0.103	0.003	0.000	-0.008	-0.215
	42	0.077	0.103	0.003	0.000	0.006	0.288
60	42	0.173	-0.830	-0.017	0.000	0.036	1.686
	40	0.173	-0.830	-0.017	0.000	-0.035	-1.716
61	44	0.000	-6.120	0.851	0.000	-0.085	-0.068
	40	0.000	-6.120	0.851	0.000	0.085	-1.292
62	45	0.105	0.040	0.206	-0.108	-0.288	-0.106
	5	0.105	0.040	0.206	-0.108	0.248	-0.002
63	37	11.085	-5.277	0.660	0.265	-1.495	27.397
	9	11.085	-5.277	0.660	0.265	2.056	-0.988
67	49	0.047	6.003	0.000	0.000	0.000	0.000
	45	0.047	-6.003	0.000	0.000	0.000	0.000
68	49	0.000	-6.126	-1.445	0.000	0.145	-0.391
	43	0.000	-6.126	-1.445	0.000	-0.145	-1.616
70	50	-3.825	-8.383	-0.881	0.254	-0.115	0.009
	41	-3.825	-8.383	-0.881	0.254	-0.291	-1.667
71	49	0.224	3.312	0.058	0.011	-0.091	0.000
	50	0.224	-3.312	0.058	0.011	0.094	0.000
72	51	-6.205	-9.315	0.486	-0.128	0.039	0.013
	42	-6.205	-9.315	0.486	-0.128	0.137	-1.850
73	50	0.775	5.071	0.006	0.002	-0.017	0.000
	51	0.775	-5.071	0.006	0.002	0.013	0.000
74	51	0.385	4.244	-0.038	-0.011	0.079	0.000
	44	0.385	-4.244	-0.038	-0.011	-0.077	0.000
75	51	-6.248	0.000	0.876	-0.128	-0.106	0.000
	22	-6.248	0.000	0.876	-0.128	2.172	0.000
76	50	-3.877	0.000	-1.432	0.254	0.226	0.000
	17	-3.877	0.000	-1.432	0.254	-3.497	0.000
77	53	-0.045	-0.002	-0.001	0.000	0.000	0.003
	12	-0.045	-0.002	-0.001	0.000	-0.003	-0.002
78	53	0.017	0.302	0.000	0.001	0.000	-0.005
	49	0.017	0.302	0.000	0.001	0.000	0.043

Load case 2 (Linear): LL

Memb	Node	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
1	3	0.000	-0.004	0.000	-0.002	0.000	0.000
	34	0.000	-0.004	0.000	-0.002	0.000	-0.002
2	5	0.208	0.000	-0.304	-0.098	0.731	0.000
	4	0.208	0.000	-0.304	-0.098	-0.901	-0.001
3	1	0.000	0.000	0.000	0.000	0.000	0.000
	3	0.000	0.000	0.000	0.000	0.000	0.000
4	3	0.004	0.000	0.000	0.000	-0.002	0.000
	5	0.004	0.000	0.000	0.000	0.001	0.000
5	11	-0.043	-0.705	0.002	0.007	0.000	0.000
	35	-0.043	-0.705	0.002	0.007	0.001	-0.294
6	5	0.000	0.000	0.000	0.000	0.000	0.000
	6	0.000	0.000	0.000	0.000	0.000	0.000
7	12	-0.435	0.003	-0.345	-0.990	0.875	0.000
	13	-0.435	0.003	-0.345	-0.990	-0.982	0.017
8	14	0.000	0.000	0.000	0.000	0.000	0.000
	11	0.000	0.000	0.000	0.000	0.000	0.000
9	11	0.706	-0.001	-0.002	0.000	0.007	0.000
	53	0.706	-0.001	-0.002	0.000	-0.002	-0.003
10	12	0.000	0.000	0.000	0.000	0.000	0.000
	15	0.000	0.000	0.000	0.000	0.000	0.000
11	16	-1.129	-18.703	0.003	0.011	-0.001	0.000
	36	-1.129	-18.703	0.003	0.011	0.000	-7.793
12	17	1.509	2.578	-0.516	-2.046	1.499	0.000
	18	1.509	2.578	-0.516	-2.046	-1.278	13.866
13	19	0.000	0.000	0.000	0.000	0.000	0.000
	16	0.000	0.000	0.000	0.000	0.000	0.000
14	16	18.737	0.001	-0.003	0.000	0.011	0.000
	17	18.737	0.001	-0.003	0.000	-0.012	0.006
15	17	0.000	0.000	0.000	0.000	0.000	0.000
	20	0.000	0.000	0.000	0.000	0.000	0.000
17	22	1.930	3.422	-0.153	1.077	0.232	0.000
	23	1.930	3.422	-0.153	1.077	-0.592	18.407
18	24	0.000	0.000	0.000	0.000	0.000	0.000
	21	0.000	0.000	0.000	0.000	0.000	0.000
19	21	22.523	-0.155	0.002	0.000	-0.007	0.724
	39	22.523	-0.155	0.002	0.000	0.001	0.149
20	22	0.000	0.000	0.000	0.000	0.000	0.000
	25	0.000	0.000	0.000	0.000	0.000	0.000
21	26	-0.037	-0.620	-0.006	-0.023	0.001	0.000
	38	-0.037	-0.620	-0.006	-0.023	-0.001	-0.258

Memb	Node	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
22	27	-0.621	0.004	-0.318	2.476	0.838	0.000
	28	-0.621	0.004	-0.318	2.476	-0.870	0.022
23	29	0.000	0.000	0.000	0.000	0.000	0.000
	26	0.000	0.000	0.000	0.000	0.000	0.000
24	26	0.621	0.000	0.006	0.000	-0.023	0.000
	27	0.621	0.000	0.006	0.000	0.022	0.001
25	27	0.000	0.000	0.000	0.000	0.000	0.000
	30	0.000	0.000	0.000	0.000	0.000	0.000
26	2	0.000	0.652	0.000	0.000	0.000	-0.261
	31	0.000	-0.752	0.000	0.000	0.000	-0.391
27	7	0.000	0.864	0.000	0.000	0.000	-0.461
	8	0.000	-0.864	0.000	0.000	0.000	-0.461
28	8	0.000	0.783	0.000	0.000	0.000	-0.378
	32	0.000	-0.783	0.000	0.000	0.000	-0.378
29	9	1.199	-12.731	6.781	0.761	-6.558	12.867
	33	1.199	-13.541	6.781	0.761	3.614	-6.837
30	31	0.000	0.831	0.000	0.000	0.000	-0.391
	7	0.000	-0.897	0.000	0.000	0.000	-0.496
31	32	-0.899	9.736	-5.876	-1.560	5.805	-9.590
	9	-0.899	8.656	-5.876	-1.560	-5.946	8.802
32	33	0.000	4.471	-2.085	0.761	3.614	-6.837
	10	0.000	3.067	-2.085	0.761	-1.807	2.962
33	2	0.000	0.000	0.000	0.000	0.000	0.000
	4	0.000	0.000	0.000	0.000	0.000	0.000
34	10	0.000	0.000	0.000	0.000	0.000	0.000
	28	0.000	0.000	0.000	0.000	0.000	0.000
35	34	0.056	-0.011	0.262	0.050	-0.525	0.039
	2	0.056	-0.011	0.262	0.050	0.882	-0.022
36	35	-8.437	-0.507	0.762	-1.134	-2.315	1.836
	7	-8.437	-0.507	0.762	-1.134	1.782	-0.891
37	36	24.422	-15.450	-1.339	-1.523	5.211	64.579
	8	24.422	-15.450	-1.339	-1.523	-1.991	-18.527
39	38	-4.547	-0.778	-0.014	2.920	0.419	2.810
	10	-4.547	-0.778	-0.014	2.920	0.343	-1.373
40	34	-0.454	0.079	-0.262	0.111	0.480	0.467
	35	-0.454	0.079	-0.262	0.111	-1.041	0.926
41	35	1.754	-5.688	6.960	9.769	-11.303	3.778
	36	1.754	-5.688	6.960	9.769	10.969	-14.423
42	36	5.379	0.319	0.509	1.339	-0.654	5.058
	37	5.379	0.319	0.509	1.339	1.838	6.620
43	37	1.718	2.345	-4.019	-9.142	9.019	-9.065
	38	1.718	2.345	-4.019	-9.142	-7.459	0.549
44	34	-0.255	-0.023	0.192	0.058	-0.428	0.070
	45	-0.255	-0.023	0.192	0.058	0.396	-0.027
45	5	0.846	0.220	-0.264	-0.003	0.556	-0.686
	12	0.846	0.220	-0.264	-0.003	-0.978	0.587
46	12	-2.706	-0.217	6.730	-0.114	-11.221	-0.119
	17	-2.706	-0.217	6.730	-0.114	10.316	-0.812
47	17	-5.778	0.164	0.505	-0.120	-0.364	0.137
	22	-5.778	0.164	0.505	-0.120	2.113	0.940
48	22	-3.420	0.582	-4.048	0.228	8.767	-1.557
	27	-3.420	0.582	-4.048	0.228	-7.830	0.828
49	27	-4.664	-0.077	3.096	0.008	-5.332	0.227
	44	-4.664	-0.077	3.096	0.008	2.718	0.028
50	36	-9.704	19.544	-2.282	-24.691	10.089	-80.802
	41	-9.704	19.544	-2.282	-24.691	0.732	-0.673
51	37	-14.344	20.874	1.560	22.906	-6.562	-86.330
	42	-14.344	20.874	1.560	22.906	-0.164	-0.747
52	35	7.024	-2.627	-2.968	-0.536	9.121	7.529
	43	7.024	-2.627	-2.968	-0.536	-3.046	-3.241
53	39	22.523	-0.155	0.002	0.000	0.001	0.149
	22	22.523	-0.155	0.002	0.000	0.008	-0.348
54	40	4.176	2.165	1.726	0.129	-2.561	-2.802
	38	4.176	2.165	1.726	0.129	4.516	6.074
55	49	-6.914	0.000	-3.895	0.170	0.881	0.116
	12	-6.914	0.000	-3.895	0.170	-9.246	0.115
57	21	-1.512	-22.473	-0.002	-0.007	0.001	-0.724
	37	-1.512	-22.473	-0.002	-0.007	0.000	-10.088
58	43	0.310	2.857	0.067	0.000	-0.106	-4.918
	41	0.310	2.857	0.067	0.000	0.109	4.223
59	41	0.167	18.907	0.005	0.000	-0.016	-22.916
	42	0.167	-18.593	0.005	0.000	0.011	-22.145
60	42	0.451	-1.600	-0.043	0.000	0.089	3.027
	40	0.451	-1.600	-0.043	0.000	-0.086	-3.532
61	44	0.000	-14.018	2.177	0.000	-0.218	0.002
	40	0.000	-14.018	2.177	0.000	0.218	-2.802
62	45	0.260	0.012	0.542	0.045	-0.756	-0.027
	5	0.260	0.012	0.542	0.045	0.653	0.003
63	37	21.387	-12.657	2.098	0.611	-7.221	65.761
	9	21.387	-12.657	2.098	0.611	4.065	-2.321
67	49	-0.218	2.501	0.000	0.000	0.000	0.000
	45	-0.218	-2.501	0.000	0.000	0.000	0.000
68	49	0.000	-16.089	-3.278	0.000	0.328	-0.023
	43	0.000	-16.089	-3.278	0.000	-0.328	-3.241
70	50	-9.766	-3.493	-2.139	2.449	-0.428	0.025
	41	-9.766	-3.493	-2.139	2.449	-0.856	-0.673
71	49	0.400	1.380	0.146	0.028	-0.231	0.000
	50	0.400	-1.380	0.146	0.028	0.238	0.000
72	51	-14.392	-3.881	1.276	-2.266	-0.013	0.029
	42	-14.392	-3.881	1.276	-2.266	0.243	-0.747
73	50	1.846	2.113	0.012	0.003	-0.034	0.000
	51	1.846	-2.113	0.012	0.003	0.024	0.000
74	51	0.919	1.768	-0.093	-0.026	0.195	0.000
	44	0.919	-1.768	-0.093	-0.026	-0.188	0.000
75	51	-14.497	0.000	2.203	-2.266	-0.158	0.000
	22	-14.497	0.000	2.203	-2.266	5.569	0.000
76	50	-9.900	0.000	-3.585	2.449	0.700	0.000
	17	-9.900	0.000	-3.585	2.449	-8.621	0.000
77	53	-0.077	-0.005	-0.003	0.000	0.000	0.009
	12	-0.077	-0.005	-0.003	0.000	-0.007	-0.004
78	53	0.043	0.783	0.000	0.002	0.000	-0.012
	49	0.043	0.783	0.000	0.002	0.000	0.110

Load case 3 (Linear): WL

Memb	Node	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
1	3	0.000	-0.001	0.000	0.001	0.000	0.000
	34	0.000	-0.001	0.000	0.001	0.000	0.000
2	5	-0.093	0.000	0.147	0.049	-0.350	0.000
	4	-0.093	0.000	0.147	0.049	0.441	0.001
3	1	0.000	0.000	0.000	0.000	0.000	0.000
	3	0.000	0.000	0.000	0.000	0.000	0.000
4	3	0.001	0.000	0.000	0.000	0.001	0.000
	5	0.001	0.000	0.000	0.000	-0.001	0.000
5	11	0.008	0.128	-0.001	-0.004	0.000	0.000
	35	0.008	0.128	-0.001	-0.004	0.000	0.053
6	5	0.000	0.000	0.000	0.000	0.000	0.000
	6	0.000	0.000	0.000	0.000	0.000	0.000
7	12	-0.037	-0.006	0.187	0.504	-0.491	0.000
	13	-0.037	-0.006	0.187	0.504	0.516	-0.031
8	14	0.000	0.000	0.000	0.000	0.000	0.000
	11	0.000	0.000	0.000	0.000	0.000	0.000
9	11	-0.129	0.000	0.001	0.000	-0.004	0.000
	53	-0.129	0.000	0.001	0.000	0.001	0.002
10	12	0.000	0.000	0.000	0.000	0.000	0.000
	15	0.000	0.000	0.000	0.000	0.000	0.000
11	16	0.123	2.043	-0.002	-0.007	0.000	0.000
	36	0.123	2.043	-0.002	-0.007	0.000	0.851
12	17	-0.048	-1.351	0.178	1.167	-0.465	0.000
	18	-0.048	-1.351	0.178	1.167	0.495	-7.267
13	19	0.000	0.000	0.000	0.000	0.000	0.000
	16	0.000	0.000	0.000	0.000	0.000	0.000
14	16	-2.047	0.000	0.002	0.000	-0.007	0.000
	17	-2.047	0.000	0.002	0.000	0.007	-0.001
15	17	0.000	0.000	0.000	0.000	0.000	0.000
	20	0.000	0.000	0.000	0.000	0.000	0.000
17	22	-0.224	-2.148	0.155	-0.605	-0.401	0.000
	23	-0.224	-2.148	0.155	-0.605	0.432	-11.553
18	24	0.000	0.000	0.000	0.000	0.000	0.000
	21	0.000	0.000	0.000	0.000	0.000	0.000
19	21	-2.381	0.018	-0.001	0.000	0.004	-0.082
	39	-2.381	0.018	-0.001	0.000	-0.001	-0.017
20	22	0.000	0.000	0.000	0.000	0.000	0.000
	25	0.000	0.000	0.000	0.000	0.000	0.000
21	26	0.005	0.091	0.004	0.014	-0.001	0.000
	38	0.005	0.091	0.004	0.014	0.001	0.038
22	27	0.136	-0.002	0.129	-1.585	-0.320	0.000
	28	0.136	-0.002	0.129	-1.585	0.376	-0.013
23	29	0.000	0.000	0.000	0.000	0.000	0.000
	26	0.000	0.000	0.000	0.000	0.000	0.000
24	26	-0.091	0.000	-0.004	0.000	0.014	0.000
	27	-0.091	0.000	-0.004	0.000	-0.014	0.000
25	27	0.000	0.000	0.000	0.000	0.000	0.000
	30	0.000	0.000	0.000	0.000	0.000	0.000
26	2	0.000	0.000	0.000	0.000	0.000	0.000
	31	0.000	0.000	0.000	0.000	0.000	0.000
27	7	0.000	0.000	0.000	0.000	0.000	0.000
	8	0.000	0.000	0.000	0.000	0.000	0.000
28	8	0.000	0.000	0.000	0.000	0.000	0.000
	32	0.000	0.000	0.000	0.000	0.000	0.000
29	9	-0.111	0.015	0.368	0.694	-0.315	-0.074
	33	-0.111	0.015	0.368	0.694	0.237	-0.052
30	31	0.000	0.000	0.000	0.000	0.000	0.000
	7	0.000	0.000	0.000	0.000	0.000	0.000
31	32	0.083	0.367	-0.580	-1.422	0.532	-0.303
	9	0.083	0.367	-0.580	-1.422	-0.628	0.431
32	33	0.000	0.030	-0.137	0.694	0.237	-0.052
	10	0.000	0.030	-0.137	0.694	-0.119	0.026
33	2	0.000	0.000	0.000	0.000	0.000	0.000
	4	0.000	0.000	0.000	0.000	0.000	0.000
34	10	0.000	0.000	0.000	0.000	0.000	0.000
	28	0.000	0.000	0.000	0.000	0.000	0.000
35	34	0.102	0.002	-0.159	-0.030	0.376	-0.007
	2	0.102	0.002	-0.159	-0.030	-0.481	0.004
36	35	0.504	0.052	-0.211	0.578	0.559	-0.195
	7	0.504	0.052	-0.211	0.578	-0.575	0.084
37	36	0.255	-2.221	-0.165	0.869	0.400	3.172
	8	0.255	-2.221	-0.165	0.869	-0.489	-8.776
39	38	0.158	0.078	-0.143	-1.862	0.341	-0.293
	10	0.158	0.078	-0.143	-1.862	-0.429	0.127
40	34	0.253	0.100	0.133	-0.013	-0.241	-0.360
	35	0.253	0.100	0.133	-0.013	0.528	0.221

Memb	Node	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
41	35	-1.103	0.267	-3.589	-1.190	5.867	-0.323
	36	-1.103	0.267	-3.589	-1.190	-5.617	0.531
42	36	-2.270	0.097	-0.606	-0.106	1.150	-0.331
	37	-2.270	0.097	-0.606	-0.106	-1.821	0.144
43	37	-1.214	0.104	2.537	1.046	-5.715	-0.101
	38	-1.214	0.104	2.537	1.046	4.687	0.325
44	34	0.130	0.002	-0.093	-0.017	0.210	-0.007
	45	0.130	0.002	-0.093	-0.017	-0.191	0.003
45	5	-0.416	-0.094	0.132	0.000	-0.275	0.325
	12	-0.416	-0.094	0.132	0.000	0.490	-0.222
46	12	1.459	-0.147	-3.449	0.013	5.802	0.229
	17	1.459	-0.147	-3.449	0.013	-5.233	-0.241
47	17	3.377	-0.071	-0.598	0.014	0.968	0.173
	22	3.377	-0.071	-0.598	0.014	-1.961	-0.176
48	22	2.046	-0.135	2.561	-0.026	-5.578	0.248
	27	2.046	-0.135	2.561	-0.026	4.921	-0.304
49	27	2.649	0.007	-1.912	-0.015	3.323	-0.025
	44	2.649	0.007	-1.912	-0.015	-1.649	-0.007
50	36	7.246	0.301	1.330	0.462	-5.891	-1.237
	41	7.246	0.301	1.330	0.462	-0.438	-0.002
51	37	6.467	0.185	-0.860	-0.294	3.577	-0.759
	42	6.467	0.185	-0.860	-0.294	0.049	-0.002
52	35	-3.645	0.329	1.565	-0.016	-4.757	-0.928
	43	-3.645	0.329	1.565	-0.016	1.661	0.421
53	39	-2.381	0.018	-0.001	0.000	-0.001	-0.017
	22	-2.381	0.018	-0.001	0.000	-0.005	0.039
54	40	-2.524	-0.257	-1.067	-0.015	1.563	0.338
	38	-2.524	-0.257	-1.067	-0.015	-2.811	-0.715
55	49	12.819	-0.002	2.060	-0.040	-0.552	-0.008
	12	12.819	-0.002	2.060	-0.040	4.805	-0.015
57	21	0.161	2.375	0.001	0.004	0.000	0.082
	37	0.161	2.375	0.001	0.004	0.000	1.072
58	43	-0.184	-0.312	-0.035	0.000	0.056	0.507
	41	-0.184	-0.312	-0.035	0.000	-0.057	-0.493
59	41	-0.098	-0.011	-0.005	0.000	0.015	0.020
	42	-0.098	-0.011	-0.005	0.000	-0.012	-0.034
60	42	-0.263	0.173	0.027	0.000	-0.055	-0.353
	40	-0.263	0.173	0.027	0.000	0.054	0.359
61	44	0.000	1.714	-1.330	0.000	0.133	-0.005
	40	0.000	1.714	-1.330	0.000	-0.133	0.338
62	45	-0.132	-0.001	-0.269	-0.024	0.376	0.003
	5	-0.132	-0.001	-0.269	-0.024	-0.323	0.000
63	37	0.353	-0.948	-0.194	-0.313	0.539	2.983
	9	0.353	-0.948	-0.194	-0.313	-0.505	-2.116
67	49	0.100	0.000	0.000	0.000	0.000	0.000
	45	0.100	0.000	0.000	0.000	0.000	0.000
68	49	0.000	1.863	1.750	0.000	-0.175	0.048
	43	0.000	1.863	1.750	0.000	0.175	0.421
70	50	7.276	0.000	1.244	-0.051	0.261	-0.002
	41	7.276	0.000	1.244	-0.051	0.510	-0.002
71	49	-0.211	0.000	-0.077	-0.002	0.121	0.000
	50	-0.211	0.000	-0.077	-0.002	-0.126	0.000
72	51	6.499	0.000	-0.696	0.024	0.047	-0.002
	42	6.499	0.000	-0.696	0.024	-0.092	-0.002
73	50	-1.062	0.000	-0.012	0.000	0.032	0.000
	51	-1.062	0.000	-0.012	0.000	-0.026	0.000
74	51	-0.583	0.000	0.058	0.002	-0.121	0.000
	44	-0.583	0.000	0.058	0.002	0.117	0.000
75	51	6.569	0.000	-1.175	0.024	0.048	0.000
	22	6.569	0.000	-1.175	0.024	-3.007	0.000
76	50	7.341	0.000	2.095	-0.051	-0.419	0.000
	17	7.341	0.000	2.095	-0.051	5.027	0.000
77	53	0.256	0.003	0.001	0.000	0.000	-0.004
	12	0.256	0.003	0.001	0.000	0.004	0.002
78	53	-0.021	-0.384	0.000	-0.001	0.000	0.006
	49	-0.021	-0.384	0.000	-0.001	0.000	-0.054

Load case 5 (Linear): 1.4DL +1.7LL

Memb	Node	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
1	3	0.000	0.000	-0.001	-0.004	0.000	0.000
	34	0.000	0.000	-0.001	-0.004	0.000	0.000
2	5	3.293	-0.001	-1.045	-0.220	2.951	0.000
	4	3.293	-0.001	-1.045	-0.220	-2.673	-0.003
3	1	0.000	0.000	0.000	0.000	0.000	0.000
	3	0.000	0.000	0.000	0.000	0.000	0.000
4	3	0.000	0.000	0.001	0.000	-0.004	0.000
	5	0.000	0.000	0.001	0.000	0.003	-0.001
5	11	-0.096	-1.558	0.005	0.016	-0.001	0.000
	35	-0.096	-1.558	0.005	0.016	0.001	-0.649
6	5	0.000	0.000	0.000	0.000	0.000	0.000
	6	0.000	0.000	0.000	0.000	0.000	0.000
7	12	4.477	0.007	-0.619	-2.204	1.407	0.000
	13	4.477	0.007	-0.619	-2.204	-1.925	0.037
8	14	0.000	0.000	0.000	0.000	0.000	0.000
	11	0.000	0.000	0.000	0.000	0.000	0.000
9	11	1.561	-0.002	-0.005	0.000	0.016	0.000
	53	1.561	-0.002	-0.005	0.000	-0.005	-0.008
10	12	0.000	0.000	0.000	0.000	0.000	0.000
	15	0.000	0.000	0.000	0.000	0.000	0.000
11	16	-2.533	-41.980	0.008	0.025	-0.002	0.000
	36	-2.533	-41.980	0.008	0.025	0.001	-17.493
12	17	7.193	5.798	-1.200	-4.620	3.513	0.000
	18	7.193	5.798	-1.200	-4.620	-2.942	31.188
13	19	0.000	0.000	0.000	0.000	0.000	0.000
	16	0.000	0.000	0.000	0.000	0.000	0.000
14	16	42.056	0.002	-0.008	0.001	0.025	0.000
	17	42.056	0.002	-0.008	0.001	-0.028	0.014
15	17	0.000	0.000	0.000	0.000	0.000	0.000
	20	0.000	0.000	0.000	0.000	0.000	0.000
17	22	9.730	7.781	-0.386	2.440	0.671	0.000
	23	9.730	7.781	-0.386	2.440	-1.404	41.854
18	24	0.000	0.000	0.000	0.000	0.000	0.000
	21	0.000	0.000	0.000	0.000	0.000	0.000
19	21	51.707	-0.358	0.005	0.000	-0.016	1.667
	39	51.707	-0.358	0.005	0.000	0.002	0.339
20	22	0.000	0.000	0.000	0.000	0.000	0.000
	25	0.000	0.000	0.000	0.000	0.000	0.000
21	26	-0.085	-1.404	-0.015	-0.051	0.003	0.000
	38	-0.085	-1.404	-0.015	-0.051	-0.003	-0.585
22	27	0.551	0.009	-0.559	5.653	1.329	0.000
	28	0.551	0.009	-0.559	5.653	-1.676	0.051
23	29	0.000	0.000	0.000	0.000	0.000	0.000
	26	0.000	0.000	0.000	0.000	0.000	0.000
24	26	1.406	0.000	0.015	0.000	-0.052	0.000
	27	1.406	0.000	0.015	0.000	0.049	0.001
25	27	0.000	0.000	0.000	0.000	0.000	0.000
	30	0.000	0.000	0.000	0.000	0.000	0.000
26	2	0.000	90.178	0.000	0.000	0.000	-36.090
	31	0.000	-103.964	0.000	0.000	0.000	-54.011
27	7	0.000	119.472	0.000	0.000	0.000	-63.718
	8	0.000	-119.472	0.000	0.000	0.000	-63.718
28	8	0.000	108.271	0.000	0.000	0.000	-52.331
	32	0.000	-108.271	0.000	0.000	0.000	-52.331
29	9	2.566	-43.063	15.492	1.747	-14.982	71.437
	33	2.566	-155.068	15.492	1.747	8.255	-77.161
30	31	0.000	114.922	0.000	0.000	0.000	-54.011
	7	0.000	-124.022	0.000	0.000	0.000	-68.572
31	32	-1.925	158.155	-13.412	-3.582	13.252	-105.322
	9	-1.925	8.815	-13.412	-3.582	-13.572	61.648
32	33	0.000	117.319	-4.762	1.747	8.255	-77.161
	10	0.000	-76.823	-4.762	1.747	-4.127	-24.516
33	2	0.000	246.330	0.000	0.000	0.000	-283.280
	4	0.000	-246.330	0.000	0.000	0.000	-283.280
34	10	0.000	246.330	0.000	0.000	0.000	-283.280
	28	0.000	-246.330	0.000	0.000	0.000	-283.280
35	34	4.845	-0.008	-0.117	0.138	1.231	0.025
	2	4.845	-0.008	-0.117	0.138	0.601	-0.017
36	35	-8.691	-1.095	1.794	-2.498	-5.620	3.967
	7	-8.691	-1.095	1.794	-2.498	4.030	-1.924
37	36	61.315	-34.625	-2.950	-3.415	11.371	144.807
	8	61.315	-34.625	-2.950	-3.415	-4.495	-41.447
39	38	-3.685	-1.751	1.103	6.665	-3.266	6.326
	10	-3.685	-1.751	1.103	6.665	2.669	-3.092
40	34	-0.277	4.941	-0.571	0.243	1.031	-1.526
	35	-0.277	-5.533	-0.571	0.243	-2.278	-3.243
41	35	4.784	-8.066	15.707	21.942	-25.525	3.977
	36	4.784	-13.845	15.707	21.942	24.737	-31.079
42	36	12.966	6.718	1.242	3.293	-1.704	2.329
	37	12.966	-2.131	1.242	3.293	4.380	13.566
43	37	5.001	6.000	-9.114	-20.860	20.459	-12.784
	38	5.001	-1.405	-9.114	-20.860	-16.908	-3.364
44	34	-0.563	-0.096	0.393	0.295	-0.890	0.218
	45	-0.563	-0.096	0.393	0.295	0.802	-0.194
45	5	2.256	3.369	-0.589	-0.002	1.239	-3.025
	12	2.256	-2.965	-0.589	-0.002	-2.178	-1.852
46	12	-6.022	1.726	15.142	-0.269	-25.264	-2.441
	17	-6.022	-1.769	15.142	-0.269	23.191	-2.510
47	17	-12.930	2.891	1.219	-0.283	-1.010	-1.506
	22	-12.930	-2.459	1.219	-0.283	4.965	-0.448
48	22	-7.568	3.796	-9.198	0.527	19.932	-5.149
	27	-7.568	-0.682	-9.198	0.527	-17.780	1.234
49	27	-10.592	-0.215	6.994	0.092	-12.077	0.526
	44	-10.592	-0.215	6.994	0.092	6.108	-0.033
50	36	-21.820	43.285	-5.224	-44.779	23.000	-180.949
	41	-21.820	43.285	-5.224	-44.779	1.581	-3.479
51	37	-33.042	47.221	3.469	40.718	-14.652	-197.468
	42	-33.042	47.221	3.469	40.718	-0.428	-3.860
52	35	15.815	-6.062	-6.850	-1.598	20.733	17.083
	43	15.815	-6.062	-6.850	-1.598	-7.354	-7.773
53	39	51.707	-0.358	0.005	0.000	0.002	0.339
	22	51.707	-0.358	0.005	0.000	0.019	-0.811
54	40	9.461	5.005	3.883	-0.101	-5.728	-6.572
	38	9.461	5.005	3.883	-0.101	10.191	13.949
55	49	-15.529	0.212	-8.892	0.819	2.252	-0.275
	12	-15.529	0.212	-8.892	0.819	-20.868	0.276
57	21	-3.475	-51.591	-0.005	-0.016	0.001	-1.667
	37	-3.475	-51.591	-0.005	-0.016	-0.001	-23.165
58	43	0.745	6.676	0.151	0.000	-0.238	-11.325
	41	0.745	6.676	0.151	0.000	0.245	10.039
59	41	0.391	32.286	0.013	0.000	-0.037	-39.258
	42	0.391	-31.464	0.013	0.000	0.027	-37.243

Memb	Node	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
60	42	1.010	-3.881	-0.097	0.000	0.202	7.507
	40	1.010	-3.881	-0.097	0.000	-0.196	-8.407
61	44	0.000	-32.398	4.893	0.000	-0.489	-0.092
	40	0.000	-32.398	4.893	0.000	0.489	-6.572
62	45	0.589	0.076	1.210	-0.074	-1.689	-0.194
	5	0.589	0.076	1.210	-0.074	1.456	0.003
63	37	51.878	-28.904	4.491	1.410	-14.368	150.150
	9	51.878	-28.904	4.491	1.410	9.789	-5.329
67	49	-0.304	12.656	0.000	0.000	0.000	0.000
	45	-0.304	-12.656	0.000	0.000	0.000	0.000
68	49	0.000	-35.928	-7.596	0.000	0.760	-0.587
	43	0.000	-35.928	-7.596	0.000	-0.760	-7.772
70	50	-21.958	-17.675	-4.871	4.518	-0.889	0.056
	41	-21.958	-17.675	-4.871	4.518	-1.863	-3.479
71	49	0.993	6.983	0.330	0.064	-0.520	0.000
	50	0.993	-6.983	0.330	0.064	0.536	0.000
72	51	-33.152	-19.639	2.850	-4.031	0.034	0.067
	42	-33.152	-19.639	2.850	-4.031	0.604	-3.861
73	50	4.222	10.692	0.029	0.008	-0.081	0.000
	51	4.222	-10.692	0.029	0.008	0.059	0.000
74	51	2.102	8.947	-0.212	-0.059	0.442	0.000
	44	2.102	-8.947	-0.212	-0.059	-0.427	0.000
75	51	-33.393	0.000	4.971	-4.031	-0.417	0.000
	22	-33.393	0.000	4.971	-4.031	12.508	0.000
76	50	-22.259	0.000	-8.099	4.518	1.506	0.000
	17	-22.259	0.000	-8.099	4.518	-19.552	0.000
77	53	-0.195	-0.011	-0.006	0.000	-0.001	0.019
	12	-0.195	-0.011	-0.006	0.000	-0.015	-0.009
78	53	0.097	1.753	0.001	0.004	-0.001	-0.028
	49	0.097	1.753	0.001	0.004	-0.001	0.248

Load case 6 (Linear): DL +1.3 LL + 1.3WL

Memb	Node	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
1	3	0.000	-0.001	0.000	-0.002	0.000	0.000
	34	0.000	-0.001	0.000	-0.002	0.000	-0.001
2	5	2.249	0.000	-0.582	-0.102	1.716	0.000
	4	2.249	0.000	-0.582	-0.102	-1.413	-0.001
3	1	0.000	0.000	0.000	0.000	0.000	0.000
	3	0.000	0.000	0.000	0.000	0.000	0.000
4	3	0.001	0.000	0.000	0.000	-0.002	0.000
	5	0.001	0.000	0.000	0.000	0.001	0.000
5	11	-0.062	-1.006	0.002	0.007	0.000	0.000
	35	-0.062	-1.006	0.002	0.007	0.001	-0.419
6	5	0.000	0.000	0.000	0.000	0.000	0.000
	6	0.000	0.000	0.000	0.000	0.000	0.000
7	12	3.112	-0.002	-0.229	-1.004	0.442	0.000
	13	3.112	-0.002	-0.229	-1.004	-0.788	-0.012
8	14	0.000	0.000	0.000	0.000	0.000	0.000
	11	0.000	0.000	0.000	0.000	0.000	0.000
9	11	1.008	-0.001	-0.002	0.000	0.007	0.000
	53	1.008	-0.001	-0.002	0.000	-0.002	-0.004
10	12	0.000	0.000	0.000	0.000	0.000	0.000
	15	0.000	0.000	0.000	0.000	0.000	0.000
11	16	-1.746	-28.933	0.003	0.010	-0.001	0.000
	36	-1.746	-28.933	0.003	0.010	0.000	-12.056
12	17	5.205	2.606	-0.669	-1.959	2.033	0.000
	18	5.205	2.606	-0.669	-1.959	-1.568	14.019
13	19	0.000	0.000	0.000	0.000	0.000	0.000
	16	0.000	0.000	0.000	0.000	0.000	0.000
14	16	28.986	0.001	-0.003	0.000	0.011	0.000
	17	28.986	0.001	-0.003	0.000	-0.012	0.009
15	17	0.000	0.000	0.000	0.000	0.000	0.000
	20	0.000	0.000	0.000	0.000	0.000	0.000
17	22	6.824	3.059	-0.087	1.049	-0.022	0.000
	23	6.824	3.059	-0.087	1.049	-0.492	16.455
18	24	0.000	0.000	0.000	0.000	0.000	0.000
	21	0.000	0.000	0.000	0.000	0.000	0.000
19	21	35.769	-0.246	0.002	0.000	-0.007	1.146
	39	35.769	-0.246	0.002	0.000	0.001	0.232
20	22	0.000	0.000	0.000	0.000	0.000	0.000
	25	0.000	0.000	0.000	0.000	0.000	0.000
21	26	-0.057	-0.938	-0.006	-0.020	0.001	0.000
	38	-0.057	-0.938	-0.006	-0.020	-0.001	-0.391
22	27	0.518	0.004	-0.258	2.190	0.606	0.000
	28	0.518	0.004	-0.258	2.190	-0.783	0.022
23	29	0.000	0.000	0.000	0.000	0.000	0.000
	26	0.000	0.000	0.000	0.000	0.000	0.000
24	26	0.939	0.000	0.006	0.000	-0.020	0.000
	27	0.939	0.000	0.006	0.000	0.019	0.001
25	27	0.000	0.000	0.000	0.000	0.000	0.000
	30	0.000	0.000	0.000	0.000	0.000	0.000
26	2	0.000	64.469	0.000	0.000	0.000	-25.801
	31	0.000	-74.324	0.000	0.000	0.000	-38.613
27	7	0.000	85.411	0.000	0.000	0.000	-45.553
	8	0.000	-85.411	0.000	0.000	0.000	-45.553
28	8	0.000	77.404	0.000	0.000	0.000	-37.412
	32	0.000	-77.404	0.000	0.000	0.000	-37.412
29	9	1.792	-31.831	12.125	2.215	-11.673	52.033
	33	1.792	-111.904	12.125	2.215	6.514	-55.769
30	31	0.000	82.158	0.000	0.000	0.000	-38.613
	7	0.000	-88.664	0.000	0.000	0.000	-49.022
31	32	-1.344	114.280	-10.838	-4.542	10.655	-76.447
	9	-1.344	7.516	-10.838	-4.542	-11.021	45.349
32	33	0.000	84.222	-3.758	2.215	6.514	-55.769
	10	0.000	-54.572	-3.758	2.215	-3.257	-17.224
33	2	0.000	175.950	0.000	0.000	0.000	-202.342
	4	0.000	-175.950	0.000	0.000	0.000	-202.342
34	10	0.000	175.950	0.000	0.000	0.000	-202.342
	28	0.000	-175.950	0.000	0.000	0.000	-202.342
35	34	3.599	-0.004	-0.268	0.064	1.324	0.013
	2	3.599	-0.004	-0.268	0.064	-0.120	-0.008
36	35	-6.276	-0.758	1.073	-1.130	-3.486	2.737
	7	-6.276	-0.758	1.073	-1.130	2.284	-1.342
37	36	46.221	-28.944	-2.436	-1.440	9.089	113.093
	8	46.221	-28.944	-2.436	-1.440	-4.016	-42.602
39	38	-2.816	-1.216	0.601	2.590	-1.854	4.379
	10	-2.816	-1.216	0.601	2.590	1.378	-2.161
40	34	0.092	3.667	-0.258	0.166	0.465	-1.518
	35	0.092	-3.815	-0.258	0.166	-1.030	-1.950
41	35	2.134	-5.902	7.151	14.964	-11.574	2.745
	36	2.134	-10.030	7.151	14.964	11.308	-22.746
42	36	6.771	4.952	0.142	2.330	0.222	1.666
	37	6.771	-1.369	0.142	2.330	0.919	10.445
43	37	2.141	4.622	-3.556	-14.325	7.957	-10.040
	38	2.141	-0.667	-3.556	-14.325	-6.623	-1.933
44	34	-0.255	-0.068	0.176	0.194	-0.399	0.153
	45	-0.255	-0.068	0.176	0.194	0.359	-0.138
45	5	1.143	2.303	-0.272	-0.001	0.575	-1.797
	12	1.143	-2.221	-0.272	-0.001	-1.002	-1.561
46	12	-2.638	1.023	6.910	-0.185	-11.465	-1.456
	17	-2.638	-1.473	6.910	-0.185	10.646	-2.175
47	17	-5.341	1.986	0.137	-0.195	0.506	-0.839
	22	-5.341	-1.836	0.137	-0.195	1.179	-0.469
48	22	-3.039	2.586	-3.588	0.363	7.737	-3.489
	27	-3.039	-0.612	-3.588	0.363	-6.973	0.558
49	27	-4.521	-0.151	2.775	0.047	-4.764	0.362
	44	-4.521	-0.151	2.775	0.047	2.452	-0.030
50	36	-6.997	32.985	-2.198	-33.501	9.636	-137.783
	41	-6.997	32.985	-2.198	-33.501	0.623	-2.545
51	37	-16.424	35.759	1.493	30.665	-6.379	-149.436
	42	-16.424	35.759	1.493	30.665	-0.256	-2.825
52	35	7.160	-4.128	-3.113	-1.208	9.407	11.641
	43	7.160	-4.128	-3.113	-1.208	-3.355	-5.283
53	39	35.769	-0.246	0.002	0.000	0.001	0.232
	22	35.769	-0.246	0.002	0.000	0.008	-0.558
54	40	3.834	3.427	1.534	-0.080	-2.278	-4.496
	38	3.834	3.427	1.534	-0.080	4.013	9.555
55	49	4.979	0.148	-4.007	0.548	0.967	-0.198
	12	4.979	0.148	-4.007	0.548	-9.451	0.188
57	21	-2.402	-35.689	-0.002	-0.007	0.001	-1.146
	37	-2.402	-35.689	-0.002	-0.007	0.000	-16.017
58	43	0.319	4.607	0.068	0.000	-0.107	-7.852
	41	0.319	4.607	0.068	0.000	0.110	6.892
59	41	0.166	24.668	0.003	0.000	-0.009	-29.979
	42	0.166	-24.082	0.003	0.000	0.004	-28.545
60	42	0.419	-2.684	-0.038	0.000	0.080	5.163
	40	0.419	-2.684	-0.038	0.000	-0.077	-5.842
61	44	0.000	-22.115	1.953	0.000	-0.195	-0.072
	40	0.000	-22.115	1.953	0.000	0.195	-4.495
62	45	0.270	0.054	0.561	-0.081	-0.783	-0.138
	5	0.270	0.054	0.561	-0.081	0.676	0.002
63	37	39.347	-22.963	3.135	0.652	-10.181	116.764
	9	39.347	-22.963	3.135	0.652	6.684	-6.757
67	49	-0.106	9.255	0.000	0.000	0.000	0.000
	45	-0.106	-9.255	0.000	0.000	0.000	0.000
68	49	0.000	-24.620	-3.432	0.000	0.343	-0.359
	43	0.000	-24.620	-3.432	0.000	-0.343	-5.283
70	50	-7.062	-12.925	-2.045	3.370	-0.332	0.040
	41	-7.062	-12.925	-2.045	3.370	-0.741	-2.545
71	49	0.469	5.106	0.148	0.045	-0.233	0.000
	50	0.469	-5.106	0.148	0.045	0.240	0.000
72	51	-16.465	-14.361	1.241	-3.042	0.084	0.047
	42	-16.465	-14.361	1.241	-3.042	0.332	-2.825
73	50	1.794	7.819	0.006	0.006	-0.019	0.000
	51	1.794	-7.819	0.006	0.006	0.010	0.000
74	51	0.822	6.542	-0.084	-0.042	0.175	0.000
	44	0.822	-6.542	-0.084	-0.042	-0.168	0.000
75	51	-16.555	0.000	2.212	-3.042	-0.249	0.000
	22	-16.555	0.000	2.212	-3.042	5.502	0.000
76	50	-7.204	0.000	-3.370	3.370	0.591	0.000
	17	-7.204	0.000	-3.370	3.370	-8.170	0.000
77	53	0.188	-0.005	-0.003	0.000	0.000	0.009
	12	0.188	-0.005	-0.003	0.000	-0.007	-0.004
78	53	0.045	0.819	0.000	0.002	0.000	-0.013
	49	0.045	0.819	0.000	0.002	0.000	0.116

Load case 7 (Linear): DL + LL + EQL

Memb	Node	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
1	3	0.000	0.000	-0.001	-0.003	0.000	0.000
	34	0.000	0.000	-0.001	-0.003	0.000	0.000
2	5	2.370	0.000	-0.773	-0.166	2.171	0.000
	4	2.370	0.000	-0.773	-0.166	-1.986	-0.002

Memb	Node	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
3	1	0.000	0.000	0.000	0.000	0.000	0.000
	3	0.000	0.000	0.000	0.000	0.000	0.000
4	3	0.000	0.000	0.001	0.000	-0.003	0.000
	5	0.000	0.000	0.001	0.000	0.002	0.000
5	11	-0.072	-1.173	0.004	0.012	0.000	0.000
	35	-0.072	-1.173	0.004	0.012	0.001	-0.489
6	5	0.000	0.000	0.000	0.000	0.000	0.000
	6	0.000	0.000	0.000	0.000	0.000	0.000
7	12	3.161	0.005	-0.472	-1.659	1.080	0.000
	13	3.161	0.005	-0.472	-1.659	-1.459	0.028
8	14	0.000	0.000	0.000	0.000	0.000	0.000
	11	0.000	0.000	0.000	0.000	0.000	0.000
9	11	1.176	-0.001	-0.004	0.000	0.012	0.000
	53	1.176	-0.001	-0.004	0.000	-0.004	-0.006
10	12	0.000	0.000	0.000	0.000	0.000	0.000
	15	0.000	0.000	0.000	0.000	0.000	0.000
11	16	-1.906	-31.589	0.006	0.019	-0.002	0.000
	36	-1.906	-31.589	0.006	0.019	0.001	-13.163
12	17	5.267	4.362	-0.901	-3.476	2.638	0.000
	18	5.267	4.362	-0.901	-3.476	-2.211	23.466
13	19	0.000	0.000	0.000	0.000	0.000	0.000
	16	0.000	0.000	0.000	0.000	0.000	0.000
14	16	31.646	0.001	-0.006	0.000	0.019	0.000
	17	31.646	0.001	-0.006	0.000	-0.021	0.010
15	17	0.000	0.000	0.000	0.000	0.000	0.000
	20	0.000	0.000	0.000	0.000	0.000	0.000
17	22	7.115	5.851	-0.289	1.835	0.499	0.000
	23	7.115	5.851	-0.289	1.835	-1.054	31.474
18	24	0.000	0.000	0.000	0.000	0.000	0.000
	21	0.000	0.000	0.000	0.000	0.000	0.000
19	21	38.864	-0.269	0.004	0.000	-0.012	1.253
	39	38.864	-0.269	0.004	0.000	0.002	0.255
20	22	0.000	0.000	0.000	0.000	0.000	0.000
	25	0.000	0.000	0.000	0.000	0.000	0.000
21	26	-0.064	-1.056	-0.011	-0.039	0.002	0.000
	38	-0.064	-1.056	-0.011	-0.039	-0.002	-0.440
22	27	0.340	0.007	-0.426	4.250	1.021	0.000
	28	0.340	0.007	-0.426	4.250	-1.272	0.038
23	29	0.000	0.000	0.000	0.000	0.000	0.000
	26	0.000	0.000	0.000	0.000	0.000	0.000
24	26	1.058	0.000	0.011	0.000	-0.039	0.000
	27	1.058	0.000	0.011	0.000	0.037	0.001
25	27	0.000	0.000	0.000	0.000	0.000	0.000
	30	0.000	0.000	0.000	0.000	0.000	0.000
26	2	0.000	64.469	0.000	0.000	0.000	-25.801
	31	0.000	-74.324	0.000	0.000	0.000	-38.613
27	7	0.000	85.411	0.000	0.000	0.000	-45.553
	8	0.000	-85.411	0.000	0.000	0.000	-45.553
28	8	0.000	77.404	0.000	0.000	0.000	-37.412
	32	0.000	-77.404	0.000	0.000	0.000	-37.412
29	9	1.936	-31.850	11.647	1.313	-11.264	52.129
	33	1.936	-111.923	11.647	1.313	6.206	-55.701
30	31	0.000	82.158	0.000	0.000	0.000	-38.613
	7	0.000	-88.664	0.000	0.000	0.000	-49.022
31	32	-1.452	113.802	-10.084	-2.692	9.963	-76.052
	9	-1.452	7.038	-10.084	-2.692	-10.204	44.789
32	33	0.000	84.183	-3.581	1.313	6.206	-55.701
	10	0.000	-54.610	-3.581	1.313	-3.103	-17.257
33	2	0.000	175.950	0.000	0.000	0.000	-202.342
	4	0.000	-175.950	0.000	0.000	0.000	-202.342
34	10	0.000	175.950	0.000	0.000	0.000	-202.342
	28	0.000	-175.950	0.000	0.000	0.000	-202.342
35	34	3.466	-0.007	-0.061	0.103	0.834	0.021
	2	3.466	-0.007	-0.061	0.103	0.505	-0.014
36	35	-6.931	-0.826	1.347	-1.881	-4.213	2.991
	7	-6.931	-0.826	1.347	-1.881	3.031	-1.451
37	36	45.890	-26.057	-2.222	-2.570	8.569	108.969
	8	45.890	-26.057	-2.222	-2.570	-3.381	-31.193
39	38	-3.022	-1.317	0.787	5.011	-2.297	4.760
	10	-3.022	-1.317	0.787	5.011	1.936	-2.326
40	34	-0.237	3.536	-0.430	0.183	0.778	-1.050
	35	-0.237	-3.946	-0.430	0.183	-1.717	-2.237
41	35	3.568	-6.249	11.816	16.511	-19.201	3.164
	36	3.568	-10.377	11.816	16.511	18.610	-23.436
42	36	9.722	4.826	0.930	2.467	-1.273	2.097
	37	9.722	-1.495	0.930	2.467	3.286	10.258
43	37	3.719	4.487	-6.854	-15.684	15.386	-9.909
	38	3.719	-0.802	-6.854	-15.684	-12.716	-2.355
44	34	-0.424	-0.070	0.297	0.216	-0.672	0.162
	45	-0.424	-0.070	0.297	0.216	0.607	-0.141
45	5	1.684	2.425	-0.443	-0.002	0.932	-2.219
	12	1.684	-2.099	-0.443	-0.002	-1.639	-1.273
46	12	-4.534	1.214	11.393	-0.202	-19.008	-1.754
	17	-4.534	-1.282	11.393	-0.202	17.449	-1.862
47	17	-9.731	2.079	0.914	-0.213	-0.752	-1.064
	22	-9.731	-1.743	0.914	-0.213	3.728	-0.239
48	22	-5.699	2.761	-6.917	0.396	14.988	-3.812
	27	-5.699	-0.437	-6.917	0.396	-13.371	0.952
49	27	-7.966	-0.160	5.261	0.067	-9.084	0.395
	44	-7.966	-0.160	5.261	0.067	4.596	-0.021
50	36	-16.417	32.593	-3.927	-34.101	17.294	-136.175
	41	-16.417	32.593	-3.927	-34.101	1.192	-2.542
51	37	-24.831	35.519	2.612	31.048	-11.028	-148.448
	42	-24.831	35.519	2.612	31.048	-0.320	-2.822
52	35	11.898	-4.555	-5.148	-1.187	15.591	12.847
	43	11.898	-4.555	-5.148	-1.187	-5.514	-5.830
53	39	38.864	-0.269	0.004	0.000	0.002	0.255
	22	38.864	-0.269	0.004	0.000	0.014	-0.609
54	40	7.116	3.761	2.921	-0.061	-4.311	-4.935
	38	7.116	3.761	2.921	-0.061	7.666	10.484
55	49	-11.685	0.152	-6.685	0.600	1.684	-0.187
	12	-11.685	0.152	-6.685	0.600	-15.698	0.207
57	21	-2.612	-38.777	-0.004	-0.012	0.001	-1.253
	37	-2.612	-38.777	-0.004	-0.012	0.000	-17.411
58	43	0.559	5.013	0.114	0.000	-0.179	-8.511
	41	0.559	5.013	0.114	0.000	0.184	7.532
59	41	0.294	24.682	0.010	0.000	-0.028	-30.006
	42	0.294	-24.068	0.010	0.000	0.020	-28.500
60	42	0.760	-2.910	-0.073	0.000	0.152	5.622
	40	0.760	-2.910	-0.073	0.000	-0.147	-6.308
61	44	0.000	-24.343	3.681	0.000	-0.368	-0.066
	40	0.000	-24.343	3.681	0.000	0.368	-4.934
62	45	0.443	0.055	0.910	-0.049	-1.271	-0.141
	5	0.443	0.055	0.910	-0.049	1.096	0.002
63	37	38.889	-21.731	3.388	1.060	-10.882	112.886
	9	38.889	-21.731	3.388	1.060	7.341	-4.006
67	49	-0.236	9.255	0.000	0.000	0.000	0.000
	45	-0.236	-9.255	0.000	0.000	0.000	0.000
68	49	0.000	-27.042	-5.706	0.000	0.571	-0.421
	43	0.000	-27.042	-5.706	0.000	-0.571	-5.829
70	50	-16.521	-12.925	-3.662	3.437	-0.672	0.042
	41	-16.521	-12.925	-3.662	3.437	-1.404	-2.543
71	49	0.744	5.106	0.248	0.048	-0.391	0.000
	50	0.744	-5.106	0.248	0.048	0.403	0.000
72	51	-24.914	-14.361	2.145	-3.074	0.023	0.050
	42	-24.914	-14.361	2.145	-3.074	0.452	-2.822
73	50	3.174	7.819	0.021	0.006	-0.061	0.000
	51	3.174	-7.819	0.021	0.006	0.044	0.000
74	51	1.580	6.542	-0.159	-0.045	0.332	0.000
	44	1.580	-6.542	-0.159	-0.045	-0.321	0.000
75	51	-25.095	0.000	3.740	-3.074	-0.312	0.000
	22	-25.095	0.000	3.740	-3.074	9.411	0.000
76	50	-16.748	0.000	-6.093	3.437	1.136	0.000
	17	-16.748	0.000	-6.093	3.437	-14.705	0.000
77	53	-0.146	-0.008	-0.004	0.000	0.000	0.015
	12	-0.146	-0.008	-0.004	0.000	-0.012	-0.007
78	53	0.073	1.319	0.001	0.003	-0.001	-0.021
	49	0.073	1.319	0.001	0.003	0.000	0.186

Load case 8 (Linear): DL + LL

Memb	Node	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
1	3	0.000	0.001	-0.001	-0.002	0.000	0.000
	34	0.000	0.001	-0.001	-0.002	0.000	0.000
2	5	2.308	0.000	-0.682	-0.136	1.951	0.000
	4	2.308	0.000	-0.682	-0.136	-1.716	-0.002
3	1	0.000	0.000	0.000	0.000	0.000	0.000
	3	0.000	0.000	0.000	0.000	0.000	0.000
4	3	-0.001	0.000	0.001	0.000	-0.002	0.000
	5	-0.001	0.000	0.001	0.000	0.002	0.000
5	11	-0.059	-0.962	0.003	0.010	0.000	0.000
	35	-0.059	-0.962	0.003	0.010	0.001	-0.401
6	5	0.000	0.000	0.000	0.000	0.000	0.000
	6	0.000	0.000	0.000	0.000	0.000	0.000
7	12	3.291	0.004	-0.368	-1.362	0.818	0.000
	13	3.291	0.004	-0.368	-1.362	-1.164	0.023
8	14	0.000	0.000	0.000	0.000	0.000	0.000
	11	0.000	0.000	0.000	0.000	0.000	0.000
9	11	0.964	-0.001	-0.003	0.000	0.010	0.000
	53	0.964	-0.001	-0.003	0.000	-0.003	-0.005
10	12	0.000	0.000	0.000	0.000	0.000	0.000
	15	0.000	0.000	0.000	0.000	0.000	0.000
11	16	-1.568	-25.978	0.005	0.016	-0.001	0.000
	36	-1.568	-25.978	0.005	0.016	0.001	-10.825
12	17	4.815	3.589	-0.746	-2.862	2.188	0.000
	18	4.815	3.589	-0.746	-2.862	-1.827	19.306
13	19	0.000	0.000	0.000	0.000	0.000	0.000
	16	0.000	0.000	0.000	0.000	0.000	0.000
14	16	26.025	0.001	-0.005	0.000	0.016	0.000
	17	26.025	0.001	-0.005	0.000	-0.017	0.008
15	17	0.000	0.000	0.000	0.000	0.000	0.000
	20	0.000	0.000	0.000	0.000	0.000	0.000
17	22	6.536	4.824	-0.243	1.512	0.429	0.000
	23	6.536	4.824	-0.243	1.512	-0.876	25.951
18	24	0.000	0.000	0.000	0.000	0.000	0.000
	21	0.000	0.000	0.000	0.000	0.000	0.000
19	21	32.107	-0.223	0.003	0.000	-0.010	1.036
	39	32.107	-0.223	0.003	0.000	0.002	0.210
20	22	0.000	0.000	0.000	0.000	0.000	0.000
	25	0.000	0.000	0.000	0.000	0.000	0.000
21	26	-0.052	-0.870	-0.009	-0.032	0.002	0.000
	38	-0.052	-0.870	-0.009	-0.032	-0.002	-0.362

Memb	Node	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
22	27	0.527	0.006	-0.331	3.508	0.770	0.000
	28	0.527	0.006	-0.331	3.508	-1.011	0.031
23	29	0.000	0.000	0.000	0.000	0.000	0.000
	26	0.000	0.000	0.000	0.000	0.000	0.000
24	26	0.871	0.000	0.009	0.000	-0.032	0.000
	27	0.871	0.000	0.009	0.000	0.030	0.001
25	27	0.000	0.000	0.000	0.000	0.000	0.000
	30	0.000	0.000	0.000	0.000	0.000	0.000
26	2	0.000	64.273	0.000	0.000	0.000	-25.723
	31	0.000	-74.099	0.000	0.000	0.000	-38.496
27	7	0.000	85.152	0.000	0.000	0.000	-45.414
	8	0.000	-85.152	0.000	0.000	0.000	-45.414
28	8	0.000	77.169	0.000	0.000	0.000	-37.298
	32	0.000	-77.169	0.000	0.000	0.000	-37.298
29	9	1.576	-28.031	9.612	1.085	-9.297	48.269
	33	1.576	-107.861	9.612	1.085	5.122	-53.650
30	31	0.000	81.909	0.000	0.000	0.000	-38.496
	7	0.000	-88.395	0.000	0.000	0.000	-48.874
31	32	-1.182	110.882	-8.321	-2.224	8.222	-73.175
	9	-1.182	4.442	-8.321	-2.224	-8.420	42.148
32	33	0.000	82.841	-2.955	1.085	5.122	-53.650
	10	0.000	-55.531	-2.955	1.085	-2.561	-18.146
33	2	0.000	175.950	0.000	0.000	0.000	-202.342
	4	0.000	-175.950	0.000	0.000	0.000	-202.342
34	10	0.000	175.950	0.000	0.000	0.000	-202.342
	28	0.000	-175.950	0.000	0.000	0.000	-202.342
35	34	3.449	-0.003	-0.140	0.088	0.992	0.010
	2	3.449	-0.003	-0.140	0.088	0.240	-0.008
36	35	-4.400	-0.674	1.118	-1.541	-3.518	2.440
	7	-4.400	-0.674	1.118	-1.541	2.496	-1.183
37	36	38.563	-21.422	-1.820	-2.113	7.006	89.595
	8	38.563	-21.422	-1.820	-2.113	-2.784	-25.635
39	38	-1.658	-1.084	0.791	4.135	-2.422	3.917
	10	-1.658	-1.084	0.791	4.135	1.833	-1.914
40	34	-0.101	3.513	-0.351	0.150	0.634	-1.190
	35	-0.101	-3.969	-0.351	0.150	-1.404	-2.515
41	35	3.041	-4.542	9.728	13.580	-15.810	2.031
	36	3.041	-8.670	9.728	13.580	15.319	-19.109
42	36	8.109	4.730	0.778	2.065	-1.077	0.580
	37	8.109	-1.591	0.778	2.065	2.735	8.272
43	37	3.204	3.783	-5.649	-12.941	12.681	-7.189
	38	3.204	-1.506	-5.649	-12.941	-10.479	-2.520
44	34	-0.347	-0.064	0.240	0.199	-0.544	0.141
	45	-0.347	-0.064	0.240	0.199	0.488	-0.133
45	5	1.430	2.359	-0.364	-0.001	0.766	-2.014
	12	1.430	-2.165	-0.364	-0.001	-1.346	-1.449
46	12	-3.722	1.279	9.374	-0.168	-15.641	-1.718
	17	-3.722	-1.217	9.374	-0.168	14.354	-1.619
47	17	-7.997	2.030	0.763	-0.176	-0.643	-1.105
	22	-7.997	-1.792	0.763	-0.176	3.094	-0.521
48	22	-4.673	2.586	-5.702	0.328	12.358	-3.344
	27	-4.673	-0.612	-5.702	0.328	-11.022	0.704
49	27	-6.566	-0.137	4.332	0.064	-7.484	0.327
	44	-6.566	-0.137	4.332	0.064	3.780	-0.029
50	36	-13.506	26.730	-3.243	-26.694	14.267	-111.935
	41	-13.506	26.730	-3.243	-26.694	0.972	-2.340
51	37	-20.528	29.257	2.144	24.176	-9.060	-122.549
	42	-20.528	29.257	2.144	24.176	-0.271	-2.597
52	35	9.791	-3.767	-4.257	-1.027	12.855	10.589
	43	9.791	-3.767	-4.257	-1.027	-4.600	-4.857
53	39	32.107	-0.223	0.003	0.000	0.002	0.210
	22	32.107	-0.223	0.003	0.000	0.011	-0.504
54	40	5.863	3.111	2.403	-0.100	-3.543	-4.094
	38	5.863	3.111	2.403	-0.100	6.312	8.662
55	49	-9.611	0.152	-5.517	0.549	1.420	-0.221
	12	-9.611	0.152	-5.517	0.549	-12.924	0.173
57	21	-2.158	-32.035	-0.003	-0.010	0.001	-1.036
	37	-2.158	-32.035	-0.003	-0.010	0.000	-14.384
58	43	0.466	4.156	0.093	0.000	-0.147	-7.035
	41	0.466	4.156	0.093	0.000	0.152	6.265
59	41	0.244	19.010	0.008	0.000	-0.023	-23.131
	42	0.244	-18.490	0.008	0.000	0.017	-21.857
60	42	0.625	-2.430	-0.060	0.000	0.125	4.713
	40	0.625	-2.430	-0.060	0.000	-0.121	-5.248
61	44	0.000	-20.138	3.028	0.000	-0.303	-0.066
	40	0.000	-20.138	3.028	0.000	0.303	-4.094
62	45	0.365	0.052	0.748	-0.063	-1.044	-0.133
	5	0.365	0.052	0.748	-0.063	0.900	0.001
63	37	32.473	-17.934	2.758	0.876	-8.716	93.158
	9	32.473	-17.934	2.758	0.876	6.121	-3.309
67	49	-0.171	8.504	0.000	0.000	0.000	0.000
	45	-0.171	-8.504	0.000	0.000	0.000	0.000
68	49	0.000	-22.215	-4.723	0.000	0.472	-0.414
	43	0.000	-22.215	-4.723	0.000	-0.472	-4.857
70	50	-13.591	-11.877	-3.021	2.702	-0.543	0.035
	41	-13.591	-11.877	-3.021	2.702	-1.147	-2.341
71	49	0.624	4.692	0.204	0.040	-0.322	0.000
	50	0.624	-4.692	0.204	0.040	0.332	0.000
72	51	-20.596	-13.196	1.763	-2.394	0.027	0.042
	42	-20.596	-13.196	1.763	-2.394	0.379	-2.598
73	50	2.620	7.185	0.018	0.005	-0.051	0.000
	51	2.620	-7.185	0.018	0.005	0.037	0.000
74	51	1.304	6.012	-0.131	-0.037	0.274	0.000
	44	1.304	-6.012	-0.131	-0.037	-0.265	0.000
75	51	-20.746	0.000	3.079	-2.394	-0.264	0.000
	22	-20.746	0.000	3.079	-2.394	7.741	0.000
76	50	-13.778	0.000	-5.017	2.702	0.926	0.000
	17	-13.778	0.000	-5.017	2.702	-12.118	0.000
77	53	-0.123	-0.007	-0.004	0.000	0.000	0.012
	12	-0.123	-0.007	-0.004	0.000	-0.010	-0.006
78	53	0.060	1.085	0.001	0.003	-0.001	-0.017
	49	0.060	1.085	0.001	0.003	0.000	0.153

NODE REACTIONS (kN,kNm)

Load case 1 (Linear): DL

Node	X-Axis Force	Y-Axis Force	Z-Axis Force	X-Axis Moment	Y-Axis Moment	Z-Axis Moment
2	-0.008	242.964	0.401	-24.820	0.037	202.356
4	0.000	178.050	0.378	0.814	-0.038	-202.343
7	0.167	175.824	-0.356	2.710	-0.407	-0.292
8	5.972	174.815	0.481	8.826	-0.590	-7.108
10	-0.564	237.437	-0.805	19.618	1.969	201.478
13	-0.001	3.727	0.023	0.182	-0.372	0.006
18	-1.011	3.306	0.230	0.549	-0.816	5.440
23	-1.402	4.606	0.090	0.284	0.435	7.544
28	-0.002	177.098	0.014	0.141	1.031	-202.333
31	0.000	154.425	0.000	0.000	0.000	0.000
32	2.446	177.531	-0.283	-26.665	2.417	-0.664
33	3.701	172.690	-0.377	0.000	0.000	0.000
40	-1.704	7.896	0.000	1.944	-1.032	0.000
43	-2.794	8.566	0.000	-1.626	1.657	0.000
44	-1.940	-1.816	0.000	0.056	-1.071	0.000
45	0.197	6.084	0.205	-0.249	-0.380	0.000
49	-3.056	3.358	0.000	0.380	0.593	0.000
Load	0.000	-1726.560	0.000			
Reac	0.000	1726.560	0.000			

Load case 2 (Linear): LL

Node	X-Axis Force	Y-Axis Force	Z-Axis Force	X-Axis Moment	Y-Axis Moment	Z-Axis Moment
2	0.011	0.708	-0.262	-1.143	0.050	-0.022
4	0.000	0.208	0.304	0.901	-0.098	-0.001
7	0.507	-6.676	-0.762	-1.747	-1.134	-0.891
8	15.450	26.069	1.339	2.074	-1.523	-18.527
10	-1.307	-7.614	0.014	-3.305	4.727	-2.135
13	-0.003	-0.435	0.345	0.982	-0.990	0.017
18	-2.578	1.509	0.516	1.278	-2.046	13.866
23	-3.422	1.930	0.153	0.592	1.077	18.407
28	-0.004	-0.621	0.318	0.870	2.476	0.022
31	0.000	1.583	0.000	0.000	0.000	0.000
32	5.876	10.519	-0.899	-9.212	5.805	-1.560
33	8.866	18.012	-1.199	0.000	0.000	0.000
40	-4.219	17.782	0.000	3.403	-2.692	0.000
43	-7.091	21.573	0.000	-4.383	3.268	0.000
44	-4.758	-12.173	0.000	0.008	-2.748	0.000
45	0.515	2.536	0.132	-0.012	-1.152	0.000
49	-7.843	-12.165	0.000	0.170	0.980	0.000
Load	0.000	-62.745	0.000			
Reac	0.000	62.745	0.000			

Load case 3 (Linear): WL

Node	X-Axis Force	Y-Axis Force	Z-Axis Force	X-Axis Moment	Y-Axis Moment	Z-Axis Moment
2	-0.002	0.102	0.159	0.481	-0.030	0.004
4	0.000	-0.093	-0.147	-0.441	0.049	0.001
7	-0.052	0.504	0.211	0.575	0.578	0.084
8	2.221	0.255	0.165	0.489	0.869	-8.776
10	-0.215	0.128	0.143	0.404	-1.744	-0.567
13	0.006	-0.037	-0.187	-0.516	0.504	-0.031
18	1.351	-0.048	-0.178	-0.495	1.167	-7.267
23	2.148	-0.224	-0.155	-0.432	-0.605	-11.553
28	0.002	0.136	-0.129	-0.376	-1.585	-0.013
31	0.000	0.000	0.000	0.000	0.000	0.000
32	0.580	0.367	0.083	-0.303	0.532	-1.422
33	0.505	0.015	0.111	0.000	0.000	0.000
40	2.551	-2.144	0.000	-0.344	1.643	0.000
43	3.680	-2.504	0.000	0.522	-1.780	0.000
44	2.708	1.707	0.000	-0.015	1.665	0.000
45	-0.262	-0.003	-0.076	-0.008	0.566	0.000
49	13.280	1.839	0.000	-0.040	-0.606	0.000
Load	-28.500	0.000	0.000			
Reac	28.500	0.000	0.000			

Load case 5 (Linear): 1.4DL +1.7LL

Node	X-Axis Force	Y-Axis Force	Z-Axis Force	X-Axis Moment	Y-Axis Moment	Z-Axis Moment
2	0.008	341.354	0.117	-36.692	0.138	283.262
4	0.001	249.623	1.045	2.673	-0.220	-283.282
7	1.095	234.804	-1.794	0.824	-2.498	-1.924
8	34.625	289.059	2.950	15.882	-3.415	-41.447
10	-3.012	319.467	-1.103	21.846	10.793	278.440
13	-0.007	4.477	0.619	1.925	-2.204	0.037
18	-5.798	7.193	1.200	2.942	-4.620	31.188
23	-7.781	9.730	0.386	1.404	2.440	41.854
28	-0.009	246.881	0.559	1.676	5.653	-283.229
31	0.000	218.885	0.000	0.000	0.000	0.000
32	13.412	266.427	-1.925	-52.991	13.252	-3.582
33	20.254	272.387	-2.566	0.000	0.000	0.000
40	-9.558	41.285	0.000	8.508	-6.022	0.000
43	-15.966	48.667	0.000	-9.727	7.876	0.000
44	-10.804	-23.236	0.000	0.092	-6.170	0.000
45	1.151	12.828	0.512	-0.369	-2.491	0.000
49	-17.612	-15.980	0.000	0.820	2.496	0.000
Load	0.000	-2523.851	0.000			
Reac	0.000	2523.851	0.000			

Load case 6 (Linear): DL +1.3 LL + 1.3WL

Node	X-Axis Force	Y-Axis Force	Z-Axis Force	X-Axis Moment	Y-Axis Moment	Z-Axis Moment
2	0.004	244.018	0.268	-25.681	0.064	202.334
4	0.000	178.199	0.582	1.413	-0.102	-202.344
7	0.758	167.800	-1.073	1.186	-1.130	-1.342
8	28.944	209.036	2.436	12.157	-1.440	-42.602
10	-2.543	227.705	-0.601	15.846	5.847	197.967

Node	X-Axis Force	Y-Axis Force	Z-Axis Force	X-Axis Moment	Y-Axis Moment	Z-Axis Moment
13	0.002	3.112	0.229	0.788	-1.004	-0.012
18	-2.606	5.205	0.669	1.568	-1.959	14.019
23	-3.059	6.824	0.087	0.492	1.049	16.455
28	-0.004	176.468	0.258	0.783	2.190	-202.321
31	0.000	156.482	0.000	0.000	0.000	0.000
32	10.838	191.684	-1.344	-39.035	10.655	-4.542
33	15.883	196.126	-1.792	0.000	0.000	0.000
40	-3.873	28.226	0.000	5.922	-2.397	0.000
43	-7.228	33.356	0.000	-6.645	3.591	0.000
44	-4.605	-15.422	0.000	0.047	-2.479	0.000
45	0.526	9.376	0.279	-0.275	-1.142	0.000
49	4.012	-10.066	0.000	0.548	1.079	0.000
Load	-37.050	-1808.129	0.000			
Reac	37.050	1808.129	0.000			

Load case 7 (Linear): DL + LL + EQL

Node	X-Axis Force	Y-Axis Force	Z-Axis Force	X-Axis Moment	Y-Axis Moment	Z-Axis Moment
2	0.007	243.885	0.061	-26.306	0.103	202.328
4	0.000	178.320	0.773	1.986	-0.166	-202.345
7	0.826	167.145	-1.347	0.439	-1.881	-1.451
8	26.057	208.705	2.222	11.522	-2.570	-31.193
10	-2.263	227.538	-0.787	15.321	8.114	198.703
13	-0.005	3.161	0.472	1.459	-1.659	0.028
18	-4.362	5.267	0.901	2.211	-3.476	23.466
23	-5.851	7.115	0.289	1.054	1.835	31.474
28	-0.007	176.290	0.426	1.272	4.250	-202.304
31	0.000	156.482	0.000	0.000	0.000	0.000
32	10.084	191.206	-1.452	-38.640	9.963	-2.692
33	15.227	196.106	-1.936	0.000	0.000	0.000
40	-7.189	31.013	0.000	6.369	-4.532	0.000
43	-12.012	36.611	0.000	-7.324	5.906	0.000
44	-8.125	-17.641	0.000	0.067	-4.643	0.000
45	0.866	9.380	0.377	-0.265	-1.878	0.000
49	-13.252	-12.457	0.000	0.600	1.867	0.000
Load	0.000	-1808.129	0.000			
Reac	0.000	1808.129	0.000			

Load case 8 (Linear): DL + LL

Node	X-Axis Force	Y-Axis Force	Z-Axis Force	X-Axis Moment	Y-Axis Moment	Z-Axis Moment
2	0.003	243.672	0.140	-25.963	0.088	202.335
4	0.000	178.258	0.682	1.716	-0.136	-202.344
7	0.674	169.148	-1.118	0.963	-1.541	-1.183
8	21.422	200.884	1.820	10.900	-2.113	-25.635
10	-1.871	229.823	-0.791	16.313	6.696	199.343
13	-0.004	3.291	0.368	1.164	-1.362	0.023
18	-3.589	4.815	0.746	1.827	-2.862	19.306
23	-4.824	6.536	0.243	0.876	1.512	25.951
28	-0.006	176.477	0.331	1.011	3.508	-202.311
31	0.000	156.008	0.000	0.000	0.000	0.000
32	8.321	188.051	-1.182	-35.877	8.222	-2.224
33	12.567	190.703	-1.576	0.000	0.000	0.000
40	-5.923	25.679	0.000	5.348	-3.724	0.000
43	-9.884	30.139	0.000	-6.009	4.925	0.000
44	-6.698	-13.989	0.000	0.064	-3.819	0.000
45	0.712	8.620	0.337	-0.261	-1.532	0.000
49	-10.900	-8.808	0.000	0.549	1.573	0.000
Load	0.000	-1789.305	0.000			
Reac	0.000	1789.305	0.000			

INTERMEDIATE FORCES AND MOMENTS (m,kN,kNm)
---------- (*=Maximum, #=Minimum)

Memb 1, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.005	0.000	-0.001	0.000*	0.000#
0.069	0.000	0.005	0.000	-0.001	0.000	0.000
0.139	0.000	0.005	0.000	-0.001	0.000	0.001
0.208	0.000	0.005	0.000	-0.001	0.000	0.001
0.278	0.000	0.005	0.000	-0.001	0.000	0.001
0.347	0.000	0.005	0.000	-0.001	0.000	0.002
0.417	0.000	0.005	0.000	-0.001	0.000#	0.002*

Memb 2, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	2.100	0.000	-0.378	-0.038	1.220*	0.000*
0.897	2.100	0.000	-0.378	-0.038	0.881	0.000
1.793	2.100	0.000	-0.378	-0.038	0.542	0.000
2.690	2.100	0.000	-0.378	-0.038	0.203	0.000
3.586	2.100	0.000	-0.378	-0.038	-0.136	0.000
4.483	2.100	0.000	-0.378	-0.038	-0.475	0.000
5.379	2.100	0.000	-0.378	-0.038	-0.814#	-0.001#

Memb 3, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000*	0.000#
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000#	0.000*

Memb 4, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.005	0.000	0.000	0.000	-0.001#	0.000*
1.152	-0.005	0.000	0.000	0.000	0.000	0.000
2.304	-0.005	0.000	0.000	0.000	0.000	0.000
3.456	-0.005	0.000	0.000	0.000	0.000	0.000
4.608	-0.005	0.000	0.000	0.000	0.000	0.000
5.760	-0.005	0.000	0.000	0.000	0.000	0.000
6.913	-0.005	0.000	0.000	0.000	0.000*	0.000#

Memb 5, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.016	-0.257	0.001	0.003	0.000#	0.000*
0.069	-0.016	-0.257	0.001	0.003	0.000	-0.018
0.139	-0.016	-0.257	0.001	0.003	0.000	-0.036
0.208	-0.016	-0.257	0.001	0.003	0.000	-0.053
0.278	-0.016	-0.257	0.001	0.003	0.000	-0.071
0.347	-0.016	-0.257	0.001	0.003	0.000	-0.089
0.417	-0.016	-0.257	0.001	0.003	0.000*	-0.107#

Memb 6, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000#	0.000#
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000*	0.000*

Memb 7, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	3.727	0.001	-0.023	-0.372	-0.058*	0.000#
0.897	3.727	0.001	-0.023	-0.372	-0.078	0.001
1.793	3.727	0.001	-0.023	-0.372	-0.099	0.002
2.690	3.727	0.001	-0.023	-0.372	-0.120	0.003
3.586	3.727	0.001	-0.023	-0.372	-0.141	0.004
4.483	3.727	0.001	-0.023	-0.372	-0.161	0.005
5.379	3.727	0.001	-0.023	-0.372	-0.182#	0.006*

Memb 8, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000	0.000#
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000	0.000*

Memb 9, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.257	0.000	-0.001	0.000	0.003*	0.000*
0.718	0.257	0.000	-0.001	0.000	0.002	0.000
1.436	0.257	0.000	-0.001	0.000	0.002	-0.001
2.154	0.257	0.000	-0.001	0.000	0.001	-0.001
2.872	0.257	0.000	-0.001	0.000	0.000	-0.001
3.590	0.257	0.000	-0.001	0.000	0.000	-0.002
4.308	0.257	0.000	-0.001	0.000	-0.001#	-0.002#

Memb 10, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000#	0.000#
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000*	0.000*

Memb 11, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.439	-7.275	0.001	0.005	0.000#	0.000*
0.069	-0.439	-7.275	0.001	0.005	0.000	-0.505
0.139	-0.439	-7.275	0.001	0.005	0.000	-1.010
0.208	-0.439	-7.275	0.001	0.005	0.000	-1.516
0.278	-0.439	-7.275	0.001	0.005	0.000	-2.021
0.347	-0.439	-7.275	0.001	0.005	0.000	-2.526
0.417	-0.439	-7.275	0.001	0.005	0.000*	-3.031#

Memb 12, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	3.306	1.011	-0.230	-0.816	0.689*	0.000#
0.897	3.306	1.011	-0.230	-0.816	0.482	0.907
1.793	3.306	1.011	-0.230	-0.816	0.276	1.813
2.690	3.306	1.011	-0.230	-0.816	0.070	2.720
3.586	3.306	1.011	-0.230	-0.816	-0.137	3.627
4.483	3.306	1.011	-0.230	-0.816	-0.343	4.534
5.379	3.306	1.011	-0.230	-0.816	-0.549#	5.440*

Memb 13, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000*	0.000#
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000#	0.000*

Memb 14, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	7.288	0.000	-0.001	0.000	0.005*	0.000#
1.152	7.288	0.000	-0.001	0.000	0.003	0.000
2.304	7.288	0.000	-0.001	0.000	0.001	0.001
3.456	7.288	0.000	-0.001	0.000	0.000	0.001
4.608	7.288	0.000	-0.001	0.000	-0.002	0.001
5.760	7.288	0.000	-0.001	0.000	-0.004	0.002
6.913	7.288	0.000	-0.001	0.000	-0.005#	0.002*

Memb 15, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000	0.000*
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000	0.000#

Memb 17, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	4.606	1.402	-0.090	0.435	0.198*	0.000#
0.897	4.606	1.402	-0.090	0.435	0.118	1.257
1.793	4.606	1.402	-0.090	0.435	0.037	2.515
2.690	4.606	1.402	-0.090	0.435	-0.043	3.772

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
3.586	4.606	1.402	-0.090	0.435	-0.123	5.029
4.483	4.606	1.402	-0.090	0.435	-0.203	6.287
5.379	4.606	1.402	-0.090	0.435	-0.284#	7.544*

Memb 18, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000	0.000#
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000	0.000*

Memb 19, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	9.584	-0.068	0.001	0.000	-0.003#	0.312*
0.618	9.584	-0.068	0.001	0.000	-0.002	0.270
1.236	9.584	-0.068	0.001	0.000	-0.002	0.228
1.853	9.584	-0.068	0.001	0.000	-0.001	0.187
2.471	9.584	-0.068	0.001	0.000	-0.001	0.145
3.089	9.584	-0.068	0.001	0.000	0.000	0.103
3.707	9.584	-0.068	0.001	0.000	0.000*	0.061#

Memb 20, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000#	0.000#
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000*	0.000*

Memb 21, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.015	-0.250	-0.003	-0.009	0.001*	0.000*
0.069	-0.015	-0.250	-0.003	-0.009	0.000	-0.017
0.139	-0.015	-0.250	-0.003	-0.009	0.000	-0.035
0.208	-0.015	-0.250	-0.003	-0.009	0.000	-0.052
0.278	-0.015	-0.250	-0.003	-0.009	0.000	-0.069
0.347	-0.015	-0.250	-0.003	-0.009	0.000	-0.087
0.417	-0.015	-0.250	-0.003	-0.009	0.000#	-0.104#

Memb 22, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	1.148	0.002	-0.014	1.031	-0.068*	0.000#
0.897	1.148	0.002	-0.014	1.031	-0.080	0.002
1.793	1.148	0.002	-0.014	1.031	-0.093	0.003
2.690	1.148	0.002	-0.014	1.031	-0.105	0.005
3.586	1.148	0.002	-0.014	1.031	-0.117	0.006
4.483	1.148	0.002	-0.014	1.031	-0.129	0.008
5.379	1.148	0.002	-0.014	1.031	-0.141#	0.009*

Memb 23, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000#	0.000#
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000*	0.000*

Memb 24, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.250	0.000	0.003	0.000	-0.009#	0.000*
1.152	0.250	0.000	0.003	0.000	-0.006	0.000
2.304	0.250	0.000	0.003	0.000	-0.003	0.000
3.456	0.250	0.000	0.003	0.000	0.000	0.000
4.608	0.250	0.000	0.003	0.000	0.003	0.000
5.760	0.250	0.000	0.003	0.000	0.006	0.000
6.913	0.250	0.000	0.003	0.000	0.009*	0.000#

Memb 25, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000	0.000#
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000	0.000*

Memb 26, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	63.621*	0.000	0.000	0.000	-25.462
0.433	0.000	40.793	0.000	0.000	0.000	-2.839
0.867	0.000	17.965	0.000	0.000	0.000	9.892
1.300	0.000	-4.863	0.000	0.000	0.000	12.731*
1.733	0.000	-27.691	0.000	0.000	0.000	5.678
2.167	0.000	-50.519	0.000	0.000	0.000	-11.268
2.600	0.000	-73.347#	0.000	0.000	0.000	-38.105#

Memb 27, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	84.288*	0.000	0.000	0.000	-44.954#
0.533	0.000	56.192	0.000	0.000	0.000	-7.492
1.067	0.000	28.096	0.000	0.000	0.000	14.985
1.600	0.000	0.000	0.000	0.000	0.000	22.477*
2.133	0.000	-28.096	0.000	0.000	0.000	14.985
2.667	0.000	-56.192	0.000	0.000	0.000	-7.492
3.200	0.000	-84.288#	0.000	0.000	0.000	-44.954#

Memb 28, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	76.386*	0.000	0.000	0.000	-36.920#
0.483	0.000	50.924	0.000	0.000	0.000	-6.153
0.967	0.000	25.462	0.000	0.000	0.000	12.307
1.450	0.000	0.000	0.000	0.000	0.000	18.460*
1.933	0.000	-25.462	0.000	0.000	0.000	12.307
2.417	0.000	-50.924	0.000	0.000	0.000	-6.153
2.900	0.000	-76.386#	0.000	0.000	0.000	-36.920

Memb 29, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.377	-15.300*	2.831	0.324	-2.739#	35.402*
0.250	0.377	-28.470	2.831	0.324	-2.031	29.931
0.500	0.377	-41.640	2.831	0.324	-1.323	21.167
0.750	0.377	-54.810	2.831	0.324	-0.616	9.111
1.000	0.377	-67.980	2.831	0.324	0.092	-6.238
1.250	0.377	-81.150	2.831	0.324	0.800	-24.879
1.500	0.377	-94.320#	2.831	0.324	1.508*	-46.813#

Memb 30, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	81.078*	0.000	0.000	0.000	-38.105
0.533	0.000	52.982	0.000	0.000	0.000	-2.356
1.067	0.000	24.886	0.000	0.000	0.000	18.409
1.600	0.000	-3.210	0.000	0.000	0.000	24.189*
2.133	0.000	-31.306	0.000	0.000	0.000	14.985
2.667	0.000	-59.402	0.000	0.000	0.000	-9.204
3.200	0.000	-87.498#	0.000	0.000	0.000	-48.378#

Memb 31, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.283	101.145*	-2.446	-0.664	2.417*	-63.585#
0.333	-0.283	83.585	-2.446	-0.664	1.602	-32.797
0.667	-0.283	66.025	-2.446	-0.664	0.787	-7.862
1.000	-0.283	48.465	-2.446	-0.664	-0.028	11.220
1.333	-0.283	30.905	-2.446	-0.664	-0.844	24.449
1.667	-0.283	13.345	-2.446	-0.664	-1.659	31.824
2.000	-0.283	-4.215#	-2.446	-0.664	-2.474#	33.346*

Memb 32, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	78.370*	-0.870	0.324	1.508*	-46.813#
0.433	0.000	55.542	-0.870	0.324	1.131	-17.798
0.867	0.000	32.714	-0.870	0.324	0.754	1.324
1.300	0.000	9.886	-0.870	0.324	0.377	10.554*
1.733	0.000	-12.942	-0.870	0.324	0.000	9.892
2.167	0.000	-35.770	-0.870	0.324	-0.377	-0.662
2.600	0.000	-58.598#	-0.870	0.324	-0.754#	-21.108

Memb 33, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	175.950*	0.000	0.000	0.000	-202.342#
1.150	0.000	117.300	0.000	0.000	0.000	-33.724
2.300	0.000	58.650	0.000	0.000	0.000	67.447
3.450	0.000	0.000	0.000	0.000	0.000	101.171*
4.600	0.000	-58.650	0.000	0.000	0.000	67.447
5.750	0.000	-117.300	0.000	0.000	0.000	-33.724
6.900	0.000	-175.950#	0.000	0.000	0.000	-202.342#

Memb 34, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	175.950*	0.000	0.000	0.000	-202.342#
1.150	0.000	117.300	0.000	0.000	0.000	-33.724
2.300	0.000	58.650	0.000	0.000	0.000	67.447
3.450	0.000	0.000	0.000	0.000	0.000	101.171*
4.600	0.000	-58.650	0.000	0.000	0.000	67.447
5.750	0.000	-117.300	0.000	0.000	0.000	-33.724
6.900	0.000	-175.950#	0.000	0.000	0.000	-202.342#

Memb 35, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	3.393	0.008	-0.401	0.037	1.516*	-0.029#
0.897	3.393	0.008	-0.401	0.037	1.157	-0.022
1.793	3.393	0.008	-0.401	0.037	0.797	-0.015
2.690	3.393	0.008	-0.401	0.037	0.437	-0.008
3.586	3.393	0.008	-0.401	0.037	0.078	0.000
4.483	3.393	0.008	-0.401	0.037	-0.282	0.007
5.379	3.393	0.008	-0.401	0.037	-0.642#	0.014*

Memb 36, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	4.038	-0.167	0.356	-0.407	-1.203#	0.605*
0.897	4.038	-0.167	0.356	-0.407	-0.884	0.455
1.793	4.038	-0.167	0.356	-0.407	-0.564	0.306
2.690	4.038	-0.167	0.356	-0.407	-0.244	0.156
3.586	4.038	-0.167	0.356	-0.407	0.075	0.007
4.483	4.038	-0.167	0.356	-0.407	0.395	-0.142
5.379	4.038	-0.167	0.356	-0.407	0.714*	-0.292#

Memb 37, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	14.141	-5.972	-0.481	-0.590	1.795*	25.016*
0.897	14.141	-5.972	-0.481	-0.590	1.364	19.662
1.793	14.141	-5.972	-0.481	-0.590	0.933	14.308
2.690	14.141	-5.972	-0.481	-0.590	0.501	8.954
3.586	14.141	-5.972	-0.481	-0.590	0.070	3.600
4.483	14.141	-5.972	-0.481	-0.590	-0.361	-1.754
5.379	14.141	-5.972	-0.481	-0.590	-0.792#	-7.108#

Memb 39, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	2.889	-0.306	0.805	1.215	-2.841#	1.107*
0.897	2.889	-0.306	0.805	1.215	-2.119	0.832
1.793	2.889	-0.306	0.805	1.215	-1.398	0.558
2.690	2.889	-0.306	0.805	1.215	-0.676	0.283

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
3.586	2.889	-0.306	0.805	1.215	0.046	0.008
4.483	2.889	-0.306	0.805	1.215	0.768	-0.266
5.379	2.889	-0.306	0.805	1.215	1.490*	-0.541#

Memb 40, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.353	3.433*	-0.089	0.039	0.154*	-1.657
0.967	0.353	2.186	-0.089	0.039	0.067	1.059
1.933	0.353	0.939	-0.089	0.039	-0.019	2.570
2.900	0.353	-0.308	-0.089	0.039	-0.105	2.875*
3.867	0.353	-1.555	-0.089	0.039	-0.191	1.975
4.833	0.353	-2.802	-0.089	0.039	-0.278	-0.130
5.800	0.353	-4.049#	-0.089	0.039	-0.364#	-3.441#

Memb 41, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	1.287	1.146*	2.768	3.811	-4.507#	-1.747
0.533	1.287	0.458	2.768	3.811	-3.031	-1.319
1.067	1.287	-0.230	2.768	3.811	-1.555	-1.259*
1.600	1.287	-0.918	2.768	3.811	-0.079	-1.565
2.133	1.287	-1.606	2.768	3.811	1.398	-2.238
2.667	1.287	-2.294	2.768	3.811	2.874	-3.279
3.200	1.287	-2.982#	2.768	3.811	4.350*	-4.686#

Memb 42, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	2.730	4.411*	0.269	0.726	-0.422#	-4.478#
0.817	2.730	3.358	0.269	0.726	-0.202	-1.305
1.633	2.730	2.304	0.269	0.726	0.017	1.007
2.450	2.730	1.251	0.269	0.726	0.237	2.458
3.267	2.730	0.197	0.269	0.726	0.457	3.050*
4.083	2.730	-0.856	0.269	0.726	0.677	2.781
4.900	2.730	-1.910#	0.269	0.726	0.896*	1.651

Memb 43, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	1.485	1.438*	-1.630	-3.799	3.662*	1.876
0.683	1.485	0.557	-1.630	-3.799	2.548	2.557
1.367	1.485	-0.325	-1.630	-3.799	1.435	2.637*
2.050	1.485	-1.206	-1.630	-3.799	0.321	2.114
2.733	1.485	-2.088	-1.630	-3.799	-0.793	0.988
3.417	1.485	-2.969	-1.630	-3.799	-1.906	-0.739
4.100	1.485	-3.851#	-1.630	-3.799	-3.020#	-3.069#

Memb 44, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.092	-0.041	0.048	0.141	-0.116#	0.071*
0.717	-0.092	-0.041	0.048	0.141	-0.081	0.041
1.433	-0.092	-0.041	0.048	0.141	-0.047	0.012
2.150	-0.092	-0.041	0.048	0.141	-0.012	-0.018
2.867	-0.092	-0.041	0.048	0.141	0.023	-0.047
3.583	-0.092	-0.041	0.048	0.141	0.057	-0.076
4.300	-0.092	-0.041	0.048	0.141	0.092*	-0.106#

Memb 45, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.584	2.140*	-0.100	0.002	0.210*	-1.328
0.967	0.584	1.386	-0.100	0.002	0.114	0.376
1.933	0.584	0.632	-0.100	0.002	0.017	1.352
2.900	0.584	-0.122	-0.100	0.002	-0.079	1.598*
3.867	0.584	-0.876	-0.100	0.002	-0.175	1.115
4.833	0.584	-1.630	-0.100	0.002	-0.271	-0.096
5.800	0.584	-2.384#	-0.100	0.002	-0.368#	-2.036#

Memb 46, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-1.015	1.496*	2.643	-0.054	-4.420#	-1.599#
0.533	-1.015	1.080	2.643	-0.054	-3.010	-0.913
1.067	-1.015	0.664	2.643	-0.054	-1.601	-0.448
1.600	-1.015	0.248	2.643	-0.054	-0.191	-0.205
2.133	-1.015	-0.168	2.643	-0.054	1.219	-0.184*
2.667	-1.015	-0.584	2.643	-0.054	2.629	-0.384
3.200	-1.015	-1.000#	2.643	-0.054	4.039*	-0.807

Memb 47, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-2.219	1.866*	0.257	-0.056	-0.280#	-1.242
0.817	-2.219	1.229	0.257	-0.056	-0.070	0.022
1.633	-2.219	0.592	0.257	-0.056	0.140	0.765
2.450	-2.219	-0.045	0.257	-0.056	0.350	0.989*
3.267	-2.219	-0.682	0.257	-0.056	0.561	0.692
4.083	-2.219	-1.319	0.257	-0.056	0.771	-0.125
4.900	-2.219	-1.956#	0.257	-0.056	0.981*	-1.462#

Memb 48, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-1.252	2.004*	-1.654	0.100	3.591*	-1.787#
0.683	-1.252	1.471	-1.654	0.100	2.460	-0.599
1.367	-1.252	0.938	-1.654	0.100	1.330	0.224
2.050	-1.252	0.405	-1.654	0.100	0.200	0.683
2.733	-1.252	-0.128	-1.654	0.100	-0.931	0.778*
3.417	-1.252	-0.661	-1.654	0.100	-2.061	0.509
4.100	-1.252	-1.194#	-1.654	0.100	-3.191#	-0.125

Memb 49, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-1.902	-0.060	1.236	0.056	-2.152#	0.100*
0.433	-1.902	-0.060	1.236	0.056	-1.616	0.074
0.867	-1.902	-0.060	1.236	0.056	-1.080	0.048
1.300	-1.902	-0.060	1.236	0.056	-0.544	0.022
1.733	-1.902	-0.060	1.236	0.056	-0.009	-0.005
2.167	-1.902	-0.060	1.236	0.056	0.527	-0.031
2.600	-1.902	-0.060	1.236	0.056	1.063*	-0.057#

Memb 50, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-3.802	7.187	-0.960	-2.003	4.178*	-31.132#
0.683	-3.802	7.187	-0.960	-2.003	3.522	-26.221
1.367	-3.802	7.187	-0.960	-2.003	2.865	-21.310
2.050	-3.802	7.187	-0.960	-2.003	2.209	-16.400
2.733	-3.802	7.187	-0.960	-2.003	1.553	-11.489
3.417	-3.802	7.187	-0.960	-2.003	0.897	-6.578
4.100	-3.802	7.187	-0.960	-2.003	0.241#	-1.667*

Memb 51, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-6.184	8.383	0.583	1.270	-2.498#	-36.219#
0.683	-6.184	8.383	0.583	1.270	-2.099	-30.491
1.367	-6.184	8.383	0.583	1.270	-1.701	-24.763
2.050	-6.184	8.383	0.583	1.270	-1.302	-19.035
2.733	-6.184	8.383	0.583	1.270	-0.903	-13.306
3.417	-6.184	8.383	0.583	1.270	-0.505	-7.578
4.100	-6.184	8.383	0.583	1.270	-0.106*	-1.850*

Memb 52, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	2.767	-1.140	-1.290	-0.491	3.733*	3.060*
0.683	2.767	-1.140	-1.290	-0.491	2.852	2.281
1.367	2.767	-1.140	-1.290	-0.491	1.971	1.501
2.050	2.767	-1.140	-1.290	-0.491	1.090	0.722
2.733	2.767	-1.140	-1.290	-0.491	0.208	-0.057
3.417	2.767	-1.140	-1.290	-0.491	-0.673	-0.837
4.100	2.767	-1.140	-1.290	-0.491	-1.554#	-1.616#

Memb 53, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	9.584	-0.068	0.001	0.000	0.000#	0.061*
0.534	9.584	-0.068	0.001	0.000	0.001	0.025
1.069	9.584	-0.068	0.001	0.000	0.001	-0.011
1.603	9.584	-0.068	0.001	0.000	0.002	-0.048
2.137	9.584	-0.068	0.001	0.000	0.002	-0.084
2.672	9.584	-0.068	0.001	0.000	0.003	-0.120
3.206	9.584	-0.068	0.001	0.000	0.003*	-0.156#

Memb 54, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	1.686	0.946	0.678	-0.228	-0.982#	-1.292#
0.683	1.686	0.946	0.678	-0.228	-0.519	-0.645
1.367	1.686	0.946	0.678	-0.228	-0.056	0.002
2.050	1.686	0.946	0.678	-0.228	0.407	0.648
2.733	1.686	0.946	0.678	-0.228	0.870	1.295
3.417	1.686	0.946	0.678	-0.228	1.333	1.942
4.100	1.686	0.946	0.678	-0.228	1.796*	2.588*

Memb 55, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-2.696	0.152	-1.622	0.379	0.539*	-0.337#
0.433	-2.696	0.152	-1.622	0.379	-0.164	-0.271
0.867	-2.696	0.152	-1.622	0.379	-0.867	-0.205
1.300	-2.696	0.152	-1.622	0.379	-1.570	-0.140
1.733	-2.696	0.152	-1.622	0.379	-2.273	-0.074
2.167	-2.696	0.152	-1.622	0.379	-2.975	-0.008
2.600	-2.696	0.152	-1.622	0.379	-3.678#	0.057*

Memb 57, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.645	-9.562	-0.001	-0.003	0.000*	-0.312*
0.069	-0.645	-9.562	-0.001	-0.003	0.000	-0.976
0.139	-0.645	-9.562	-0.001	-0.003	0.000	-1.640
0.208	-0.645	-9.562	-0.001	-0.003	0.000	-2.304
0.278	-0.645	-9.562	-0.001	-0.003	0.000	-2.968
0.347	-0.645	-9.562	-0.001	-0.003	0.000	-3.632
0.417	-0.645	-9.562	-0.001	-0.003	0.000#	-4.297#

Memb 58, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.155	1.300	0.027	0.000	-0.042#	-2.117#
0.533	0.155	1.300	0.027	0.000	-0.028	-1.424
1.067	0.155	1.300	0.027	0.000	-0.013	-0.731
1.600	0.155	1.300	0.027	0.000	0.001	-0.037
2.133	0.155	1.300	0.027	0.000	0.015	0.656
2.667	0.155	1.300	0.027	0.000	0.029	1.349
3.200	0.155	1.300	0.027	0.000	0.043*	2.042*

Memb 59, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.077	0.103	0.003	0.000	-0.008#	-0.215#
0.817	0.077	0.103	0.003	0.000	-0.005	-0.131
1.633	0.077	0.103	0.003	0.000	-0.003	-0.047
2.450	0.077	0.103	0.003	0.000	-0.001	0.037
2.450	0.077	0.103	0.003	0.000	-0.001	0.037
3.267	0.077	0.103	0.003	0.000	0.001	0.121
4.083	0.077	0.103	0.003	0.000	0.004	0.204
4.900	0.077	0.103	0.003	0.000	0.006*	0.288*

Memb 60, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.173	-0.830	-0.017	0.000	0.036*	1.686*
0.683	0.173	-0.830	-0.017	0.000	0.024	1.119
1.367	0.173	-0.830	-0.017	0.000	0.012	0.552
2.050	0.173	-0.830	-0.017	0.000	0.001	-0.015
2.733	0.173	-0.830	-0.017	0.000	-0.011	-0.582
3.417	0.173	-0.830	-0.017	0.000	-0.023	-1.149
4.100	0.173	-0.830	-0.017	0.000	-0.035#	-1.716#

Memb 61, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	-6.120	0.851	0.000	-0.085#	-0.068*
0.033	0.000	-6.120	0.851	0.000	-0.057	-0.272
0.067	0.000	-6.120	0.851	0.000	-0.028	-0.476
0.100	0.000	-6.120	0.851	0.000	0.000	-0.680
0.133	0.000	-6.120	0.851	0.000	0.028	-0.884
0.167	0.000	-6.120	0.851	0.000	0.057	-1.088
0.200	0.000	-6.120	0.851	0.000	0.085*	-1.292#

Memb 62, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.105	0.040	0.206	-0.108	-0.288#	-0.106#
0.433	0.105	0.040	0.206	-0.108	-0.199	-0.088
0.867	0.105	0.040	0.206	-0.108	-0.109	-0.071
1.300	0.105	0.040	0.206	-0.108	-0.020	-0.054
1.733	0.105	0.040	0.206	-0.108	0.069	-0.036
2.167	0.105	0.040	0.206	-0.108	0.158	-0.019
2.600	0.105	0.040	0.206	-0.108	0.248*	-0.002*

Memb 63, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	11.085	-5.277	0.660	0.265	-1.495#	27.397*
0.897	11.085	-5.277	0.660	0.265	-0.903	22.667
1.793	11.085	-5.277	0.660	0.265	-0.311	17.936
2.690	11.085	-5.277	0.660	0.265	0.281	13.205
3.586	11.085	-5.277	0.660	0.265	0.873	8.474
4.483	11.085	-5.277	0.660	0.265	1.465	3.743
5.379	11.085	-5.277	0.660	0.265	2.056*	-0.988#

Memb 67, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.047	6.003*	0.000	0.000	0.000	0.000
0.967	0.047	4.002	0.000	0.000	0.000	4.836
1.933	0.047	2.001	0.000	0.000	0.000	7.737
2.900	0.047	0.000	0.000	0.000	0.000	8.704*
3.867	0.047	-2.001	0.000	0.000	0.000	7.737
4.833	0.047	-4.002	0.000	0.000	0.000	4.836
5.800	0.047	-6.003#	0.000	0.000	0.000	0.000#

Memb 68, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	-6.126	-1.445	0.000	0.145*	-0.391*
0.033	0.000	-6.126	-1.445	0.000	0.096	-0.595
0.067	0.000	-6.126	-1.445	0.000	0.048	-0.799
0.100	0.000	-6.126	-1.445	0.000	0.000	-1.003
0.133	0.000	-6.126	-1.445	0.000	-0.048	-1.208
0.167	0.000	-6.126	-1.445	0.000	-0.096	-1.412
0.200	0.000	-6.126	-1.445	0.000	-0.145#	-1.616#

Memb 70, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-3.825	-8.383	-0.881	0.254	-0.115*	0.009*
0.033	-3.825	-8.383	-0.881	0.254	-0.144	-0.270
0.067	-3.825	-8.383	-0.881	0.254	-0.174	-0.550
0.100	-3.825	-8.383	-0.881	0.254	-0.203	-0.829
0.133	-3.825	-8.383	-0.881	0.254	-0.233	-1.108
0.167	-3.825	-8.383	-0.881	0.254	-0.262	-1.388
0.200	-3.825	-8.383	-0.881	0.254	-0.291#	-1.667#

Memb 71, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.224	3.312*	0.058	0.011	-0.091#	0.000#
0.533	0.224	2.208	0.058	0.011	-0.060	1.472
1.067	0.224	1.104	0.058	0.011	-0.029	2.355
1.600	0.224	0.000	0.058	0.011	0.002	2.650*
2.133	0.224	-1.104	0.058	0.011	0.032	2.355
2.667	0.224	-2.208	0.058	0.011	0.063	1.472
3.200	0.224	-3.312#	0.058	0.011	0.094*	0.000

Memb 72, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-6.205	-9.315	0.486	-0.128	0.039#	0.013*
0.033	-6.205	-9.315	0.486	-0.128	0.056	-0.298
0.067	-6.205	-9.315	0.486	-0.128	0.072	-0.608
0.100	-6.205	-9.315	0.486	-0.128	0.088	-0.919
0.133	-6.205	-9.315	0.486	-0.128	0.104	-1.229
0.167	-6.205	-9.315	0.486	-0.128	0.120	-1.540
0.200	-6.205	-9.315	0.486	-0.128	0.137*	-1.850#

Memb 73, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.775	5.071*	0.006	0.002	-0.017#	0.000#
0.817	0.775	3.381	0.006	0.002	-0.012	3.451
1.633	0.775	1.690	0.006	0.002	-0.007	5.522
2.450	0.775	0.000	0.006	0.002	-0.002	6.213*
3.267	0.775	-1.690	0.006	0.002	0.003	5.522
4.083	0.775	-3.381	0.006	0.002	0.008	3.451
4.900	0.775	-5.071#	0.006	0.002	0.013*	0.000

Memb 74, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.385	4.244*	-0.038	-0.011	0.079*	0.000
0.683	0.385	2.829	-0.038	-0.011	0.053	2.416
1.367	0.385	1.415	-0.038	-0.011	0.027	3.866
2.050	0.385	0.000	-0.038	-0.011	0.001	4.350*
2.733	0.385	-1.415	-0.038	-0.011	-0.025	3.866
3.417	0.385	-2.829	-0.038	-0.011	-0.051	2.416
4.100	0.385	-4.244#	-0.038	-0.011	-0.077#	0.000#

Memb 75, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-6.248	0.000	0.876	-0.128	-0.106#	0.000
0.433	-6.248	0.000	0.876	-0.128	0.274	0.000
0.867	-6.248	0.000	0.876	-0.128	0.653	0.000
1.300	-6.248	0.000	0.876	-0.128	1.033	0.000
1.733	-6.248	0.000	0.876	-0.128	1.413	0.000
2.167	-6.248	0.000	0.876	-0.128	1.792	0.000
2.600	-6.248	0.000	0.876	-0.128	2.172*	0.000

Memb 76, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-3.877	0.000	-1.432	0.254	0.226*	0.000
0.433	-3.877	0.000	-1.432	0.254	-0.395	0.000
0.867	-3.877	0.000	-1.432	0.254	-1.015	0.000
1.300	-3.877	0.000	-1.432	0.254	-1.636	0.000
1.733	-3.877	0.000	-1.432	0.254	-2.256	0.000
2.167	-3.877	0.000	-1.432	0.254	-2.877	0.000
2.600	-3.877	0.000	-1.432	0.254	-3.497#	0.000

Memb 77, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.045	-0.002	-0.001	0.000	0.000*	0.003*
0.434	-0.045	-0.002	-0.001	0.000	-0.001	0.002
0.868	-0.045	-0.002	-0.001	0.000	-0.001	0.001
1.302	-0.045	-0.002	-0.001	0.000	-0.001	0.001
1.736	-0.045	-0.002	-0.001	0.000	-0.002	0.000
2.171	-0.045	-0.002	-0.001	0.000	-0.002	-0.001
2.605	-0.045	-0.002	-0.001	0.000	-0.003#	-0.002#

Memb 78, Case 1 (Linear): DL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.017	0.302	0.000	0.001	0.000#	-0.005#
0.026	0.017	0.302	0.000	0.001	0.000	0.003
0.052	0.017	0.302	0.000	0.001	0.000	0.011
0.079	0.017	0.302	0.000	0.001	0.000	0.019
0.105	0.017	0.302	0.000	0.001	0.000	0.027
0.131	0.017	0.302	0.000	0.001	0.000	0.035
0.157	0.017	0.302	0.000	0.001	0.000*	0.043*

Memb 1, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	-0.004	0.000	-0.002	0.000*	0.000*
0.069	0.000	-0.004	0.000	-0.002	0.000	0.000
0.139	0.000	-0.004	0.000	-0.002	0.000	-0.001
0.208	0.000	-0.004	0.000	-0.002	0.000	-0.001
0.278	0.000	-0.004	0.000	-0.002	0.000	-0.001
0.347	0.000	-0.004	0.000	-0.002	0.000	-0.001
0.417	0.000	-0.004	0.000	-0.002	0.000#	-0.002#

Memb 2, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.208	0.000	-0.304	-0.098	0.731*	0.000*
0.897	0.208	0.000	-0.304	-0.098	0.459	0.000
1.793	0.208	0.000	-0.304	-0.098	0.187	0.000
2.690	0.208	0.000	-0.304	-0.098	-0.085	-0.001
3.586	0.208	0.000	-0.304	-0.098	-0.357	-0.001
4.483	0.208	0.000	-0.304	-0.098	-0.629	-0.001
5.379	0.208	0.000	-0.304	-0.098	-0.901#	-0.001#

Memb 3, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000#	0.000*
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000*	0.000#

Memb 4, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.004	0.000	0.000	0.000	-0.002#	0.000*
1.152	0.004	0.000	0.000	0.000	-0.001	0.000
2.304	0.004	0.000	0.000	0.000	-0.001	0.000
3.456	0.004	0.000	0.000	0.000	0.000	0.000
4.608	0.004	0.000	0.000	0.000	0.000	0.000
5.760	0.004	0.000	0.000	0.000	0.001	0.000
6.913	0.004	0.000	0.000	0.000	0.001*	0.000#

Memb 5, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.043	-0.705	0.002	0.007	0.000#	0.000*
0.069	-0.043	-0.705	0.002	0.007	0.000	-0.049
0.139	-0.043	-0.705	0.002	0.007	0.000	-0.098
0.208	-0.043	-0.705	0.002	0.007	0.000	-0.147
0.278	-0.043	-0.705	0.002	0.007	0.000	-0.196
0.347	-0.043	-0.705	0.002	0.007	0.000	-0.245
0.417	-0.043	-0.705	0.002	0.007	0.001*	-0.294#

Memb 6, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000*	0.000*
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000#	0.000#

Memb 7, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.435	0.003	-0.345	-0.990	0.875*	0.000#
0.897	-0.435	0.003	-0.345	-0.990	0.566	0.003
1.793	-0.435	0.003	-0.345	-0.990	0.256	0.006
2.690	-0.435	0.003	-0.345	-0.990	-0.054	0.008
3.586	-0.435	0.003	-0.345	-0.990	-0.363	0.011
4.483	-0.435	0.003	-0.345	-0.990	-0.673	0.014
5.379	-0.435	0.003	-0.345	-0.990	-0.982#	0.017*

Memb 8, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000#	0.000#
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000*	0.000*

Memb 9, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.706	-0.001	-0.002	0.000	0.007*	0.000*
0.718	0.706	-0.001	-0.002	0.000	0.005	-0.001
1.436	0.706	-0.001	-0.002	0.000	0.004	-0.001
2.154	0.706	-0.001	-0.002	0.000	0.002	-0.002
2.872	0.706	-0.001	-0.002	0.000	0.001	-0.002
3.590	0.706	-0.001	-0.002	0.000	-0.001	-0.003
4.308	0.706	-0.001	-0.002	0.000	-0.002#	-0.003#

Memb 10, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000#	0.000#
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000*	0.000*

Memb 11, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-1.129	-18.703	0.003	0.011	-0.001#	0.000*
0.069	-1.129	-18.703	0.003	0.011	-0.001	-1.299
0.139	-1.129	-18.703	0.003	0.011	0.000	-2.598
0.208	-1.129	-18.703	0.003	0.011	0.000	-3.897
0.278	-1.129	-18.703	0.003	0.011	0.000	-5.196
0.347	-1.129	-18.703	0.003	0.011	0.000	-6.494
0.417	-1.129	-18.703	0.003	0.011	0.000*	-7.793#

Memb 12, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	1.509	2.578	-0.516	-2.046	1.499*	0.000#
0.897	1.509	2.578	-0.516	-2.046	1.036	2.311
1.793	1.509	2.578	-0.516	-2.046	0.573	4.622
2.690	1.509	2.578	-0.516	-2.046	0.110	6.933
3.586	1.509	2.578	-0.516	-2.046	-0.352	9.244
4.483	1.509	2.578	-0.516	-2.046	-0.815	11.555
5.379	1.509	2.578	-0.516	-2.046	-1.278#	13.866*

Memb 13, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000*	0.000#
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000#	0.000*

Memb 14, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	18.737	0.001	-0.003	0.000	0.011*	0.000#
1.152	18.737	0.001	-0.003	0.000	0.007	0.001
2.304	18.737	0.001	-0.003	0.000	0.003	0.002
3.456	18.737	0.001	-0.003	0.000	-0.001	0.003
4.608	18.737	0.001	-0.003	0.000	-0.005	0.004
5.760	18.737	0.001	-0.003	0.000	-0.008	0.005
6.913	18.737	0.001	-0.003	0.000	-0.012#	0.006*

Memb 15, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000#	0.000*
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000*	0.000#

Memb 17, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	1.930	3.422	-0.153	1.077	0.232*	0.000#
0.897	1.930	3.422	-0.153	1.077	0.094	3.068
1.793	1.930	3.422	-0.153	1.077	-0.043	6.136
2.690	1.930	3.422	-0.153	1.077	-0.180	9.204
3.586	1.930	3.422	-0.153	1.077	-0.318	12.272
4.483	1.930	3.422	-0.153	1.077	-0.455	15.339
5.379	1.930	3.422	-0.153	1.077	-0.592#	18.407*

Memb 18, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000	0.000#
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000	0.000*

Memb 19, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	22.523	-0.155	0.002	0.000	-0.007#	0.724*
0.618	22.523	-0.155	0.002	0.000	-0.006	0.628
1.236	22.523	-0.155	0.002	0.000	-0.004	0.532
1.853	22.523	-0.155	0.002	0.000	-0.003	0.436
2.471	22.523	-0.155	0.002	0.000	-0.002	0.341
3.089	22.523	-0.155	0.002	0.000	0.000	0.245
3.707	22.523	-0.155	0.002	0.000	0.001*	0.149#

Memb 20, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000	0.000#
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000	0.000*

Memb 21, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.037	-0.620	-0.006	-0.023	0.001*	0.000*
0.069	-0.037	-0.620	-0.006	-0.023	0.001	-0.043
0.139	-0.037	-0.620	-0.006	-0.023	0.000	-0.086
0.208	-0.037	-0.620	-0.006	-0.023	0.000	-0.129
0.278	-0.037	-0.620	-0.006	-0.023	0.000	-0.172
0.347	-0.037	-0.620	-0.006	-0.023	-0.001	-0.215
0.417	-0.037	-0.620	-0.006	-0.023	-0.001#	-0.258#

Memb 22, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.621	0.004	-0.318	2.476	0.838*	0.000#
0.897	-0.621	0.004	-0.318	2.476	0.554	0.004
1.793	-0.621	0.004	-0.318	2.476	0.269	0.007
2.690	-0.621	0.004	-0.318	2.476	-0.016	0.011
3.586	-0.621	0.004	-0.318	2.476	-0.300	0.015
4.483	-0.621	0.004	-0.318	2.476	-0.585	0.019
5.379	-0.621	0.004	-0.318	2.476	-0.870#	0.022*

Memb 23, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000*	0.000#
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000#	0.000*

Memb 24, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.621	0.000	0.006	0.000	-0.023#	0.000#
1.152	0.621	0.000	0.006	0.000	-0.015	0.000
2.304	0.621	0.000	0.006	0.000	-0.008	0.000
3.456	0.621	0.000	0.006	0.000	-0.001	0.000
4.608	0.621	0.000	0.006	0.000	0.007	0.000
5.760	0.621	0.000	0.006	0.000	0.014	0.001
6.913	0.621	0.000	0.006	0.000	0.022*	0.001*

Memb 25, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000	0.000#
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000	0.000*

Memb 26, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.652*	0.000	0.000	0.000	-0.261
0.433	0.000	0.418	0.000	0.000	0.000	-0.029
0.867	0.000	0.184	0.000	0.000	0.000	0.101
1.300	0.000	-0.050	0.000	0.000	0.000	0.130*
1.733	0.000	-0.284	0.000	0.000	0.000	0.058
2.167	0.000	-0.518	0.000	0.000	0.000	-0.116
2.600	0.000	-0.752#	0.000	0.000	0.000	-0.391#

Memb 27, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.864*	0.000	0.000	0.000	-0.461
0.533	0.000	0.576	0.000	0.000	0.000	-0.077
1.067	0.000	0.288	0.000	0.000	0.000	0.154
1.600	0.000	0.000	0.000	0.000	0.000	0.230*
2.133	0.000	-0.288	0.000	0.000	0.000	0.154
2.667	0.000	-0.576	0.000	0.000	0.000	-0.077
3.200	0.000	-0.864#	0.000	0.000	0.000	-0.461#

Memb 28, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.783*	0.000	0.000	0.000	-0.378
0.483	0.000	0.522	0.000	0.000	0.000	-0.063
0.967	0.000	0.261	0.000	0.000	0.000	0.126
1.450	0.000	0.000	0.000	0.000	0.000	0.189*
1.933	0.000	-0.261	0.000	0.000	0.000	0.126
2.417	0.000	-0.522	0.000	0.000	0.000	-0.063
2.900	0.000	-0.783#	0.000	0.000	0.000	-0.378#

Memb 29, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	1.199	-12.731*	6.781	0.761	-6.558#	12.867*
0.250	1.199	-12.866	6.781	0.761	-4.862	9.667
0.500	1.199	-13.001	6.781	0.761	-3.167	6.434
0.750	1.199	-13.136	6.781	0.761	-1.472	3.167
1.000	1.199	-13.271	6.781	0.761	0.224	-0.134
1.250	1.199	-13.406	6.781	0.761	1.919	-3.469
1.500	1.199	-13.541#	6.781	0.761	3.614*	-6.837#

Memb 30, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.831*	0.000	0.000	0.000	-0.391
0.533	0.000	0.543	0.000	0.000	0.000	-0.024
1.067	0.000	0.255	0.000	0.000	0.000	0.189
1.600	0.000	-0.033	0.000	0.000	0.000	0.248*
2.133	0.000	-0.321	0.000	0.000	0.000	0.154
2.667	0.000	-0.609	0.000	0.000	0.000	-0.094
3.200	0.000	-0.897#	0.000	0.000	0.000	-0.496#

Memb 31, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.899	9.736*	-5.876	-1.560	5.805*	-9.590#
0.333	-0.899	9.556	-5.876	-1.560	3.846	-6.375
0.667	-0.899	9.376	-5.876	-1.560	1.888	-3.219
1.000	-0.899	9.196	-5.876	-1.560	-0.071	-0.124
1.333	-0.899	9.016	-5.876	-1.560	-2.029	2.912
1.667	-0.899	8.836	-5.876	-1.560	-3.988	5.887
2.000	-0.899	8.656#	-5.876	-1.560	-5.946#	8.802*

Memb 32, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	4.471*	-2.085	0.761	3.614*	-6.837#
0.433	0.000	4.237	-2.085	0.761	2.711	-4.950
0.867	0.000	4.003	-2.085	0.761	1.807	-3.165
1.300	0.000	3.769	-2.085	0.761	0.904	-1.481
1.733	0.000	3.535	-2.085	0.761	0.000	0.101
2.167	0.000	3.301	-2.085	0.761	-0.904	1.583
2.600	0.000	3.067#	-2.085	0.761	-1.807#	2.962*

Memb 33, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.150	0.000	0.000	0.000	0.000	0.000	0.000
2.300	0.000	0.000	0.000	0.000	0.000	0.000
3.450	0.000	0.000	0.000	0.000	0.000	0.000
4.600	0.000	0.000	0.000	0.000	0.000	0.000
5.750	0.000	0.000	0.000	0.000	0.000	0.000
6.900	0.000	0.000	0.000	0.000	0.000	0.000

Memb 34, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.150	0.000	0.000	0.000	0.000	0.000	0.000
2.300	0.000	0.000	0.000	0.000	0.000	0.000
3.450	0.000	0.000	0.000	0.000	0.000	0.000
4.600	0.000	0.000	0.000	0.000	0.000	0.000
5.750	0.000	0.000	0.000	0.000	0.000	0.000
6.900	0.000	0.000	0.000	0.000	0.000	0.000

Memb 35, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.056	-0.011	0.262	0.050	-0.525#	0.039*
0.897	0.056	-0.011	0.262	0.050	-0.290	0.029
1.793	0.056	-0.011	0.262	0.050	-0.056	0.019
2.690	0.056	-0.011	0.262	0.050	0.179	0.009
3.586	0.056	-0.011	0.262	0.050	0.413	-0.001
4.483	0.056	-0.011	0.262	0.050	0.648	-0.011
5.379	0.056	-0.011	0.262	0.050	0.882*	-0.022#

Memb 36, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-8.437	-0.507	0.762	-1.134	-2.315#	1.836*
0.897	-8.437	-0.507	0.762	-1.134	-1.632	1.381
1.793	-8.437	-0.507	0.762	-1.134	-0.950	0.927
2.690	-8.437	-0.507	0.762	-1.134	-0.267	0.472
3.586	-8.437	-0.507	0.762	-1.134	0.416	0.018
4.483	-8.437	-0.507	0.762	-1.134	1.099	-0.437
5.379	-8.437	-0.507	0.762	-1.134	1.782*	-0.891#

Memb 37, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	24.422	-15.450	-1.339	-1.523	5.211*	64.579*
0.897	24.422	-15.450	-1.339	-1.523	4.010	50.728
1.793	24.422	-15.450	-1.339	-1.523	2.810	36.877
2.690	24.422	-15.450	-1.339	-1.523	1.610	23.026
3.586	24.422	-15.450	-1.339	-1.523	0.409	9.175
4.483	24.422	-15.450	-1.339	-1.523	-0.791	-4.676
5.379	24.422	-15.450	-1.339	-1.523	-1.991#	-18.527#

Memb 39, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-4.547	-0.778	-0.014	2.920	0.419*	2.810*
0.897	-4.547	-0.778	-0.014	2.920	0.406	2.113
1.793	-4.547	-0.778	-0.014	2.920	0.394	1.416
2.690	-4.547	-0.778	-0.014	2.920	0.381	0.718
3.586	-4.547	-0.778	-0.014	2.920	0.368	0.021
4.483	-4.547	-0.778	-0.014	2.920	0.356	-0.676
5.379	-4.547	-0.778	-0.014	2.920	0.343#	-1.373#

Memb 40, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.454	0.079	-0.262	0.111	0.480*	0.467#
0.967	-0.454	0.079	-0.262	0.111	0.227	0.544
1.933	-0.454	0.079	-0.262	0.111	-0.027	0.620
2.900	-0.454	0.079	-0.262	0.111	-0.280	0.697
3.867	-0.454	0.079	-0.262	0.111	-0.534	0.773
4.833	-0.454	0.079	-0.262	0.111	-0.787	0.850
5.800	-0.454	0.079	-0.262	0.111	-1.041#	0.926*

Memb 41, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	1.754	-5.688	6.960	9.769	-11.303#	3.778*
0.533	1.754	-5.688	6.960	9.769	-7.591	0.744
1.067	1.754	-5.688	6.960	9.769	-3.879	-2.289
1.600	1.754	-5.688	6.960	9.769	-0.167	-5.323
2.133	1.754	-5.688	6.960	9.769	3.545	-8.356
2.667	1.754	-5.688	6.960	9.769	7.257	-11.390
3.200	1.754	-5.688	6.960	9.769	10.969*	-14.423#

Memb 42, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	5.379	0.319	0.509	1.339	-0.654#	5.058#
0.817	5.379	0.319	0.509	1.339	-0.239	5.318
1.633	5.379	0.319	0.509	1.339	0.177	5.578
2.450	5.379	0.319	0.509	1.339	0.592	5.839
3.267	5.379	0.319	0.509	1.339	1.007	6.099
4.083	5.379	0.319	0.509	1.339	1.423	6.360
4.900	5.379	0.319	0.509	1.339	1.838*	6.620*

Memb 43, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	1.718	2.345	-4.019	-9.142	9.019*	-9.065#
0.683	1.718	2.345	-4.019	-9.142	6.272	-7.462
1.367	1.718	2.345	-4.019	-9.142	3.526	-5.860
2.050	1.718	2.345	-4.019	-9.142	0.780	-4.258
2.733	1.718	2.345	-4.019	-9.142	-1.966	-2.655
3.417	1.718	2.345	-4.019	-9.142	-4.712	-1.053
4.100	1.718	2.345	-4.019	-9.142	-7.459#	0.549*

Memb 44, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.255	-0.023	0.192	0.058	-0.428#	0.070*
0.717	-0.255	-0.023	0.192	0.058	-0.291	0.054
1.433	-0.255	-0.023	0.192	0.058	-0.153	0.038
2.150	-0.255	-0.023	0.192	0.058	-0.016	0.021
2.867	-0.255	-0.023	0.192	0.058	0.121	0.005
3.583	-0.255	-0.023	0.192	0.058	0.258	-0.011
4.300	-0.255	-0.023	0.192	0.058	0.396*	-0.027#

Memb 45, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.846	0.220	-0.264	-0.003	0.556*	-0.686#
0.967	0.846	0.220	-0.264	-0.003	0.300	-0.474
1.933	0.846	0.220	-0.264	-0.003	0.045	-0.261
2.900	0.846	0.220	-0.264	-0.003	-0.211	-0.049
3.867	0.846	0.220	-0.264	-0.003	-0.467	0.163
4.833	0.846	0.220	-0.264	-0.003	-0.722	0.375
5.800	0.846	0.220	-0.264	-0.003	-0.978#	0.587*

Memb 46, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-2.706	-0.217	6.730	-0.114	-11.221#	-0.119*
0.533	-2.706	-0.217	6.730	-0.114	-7.632	-0.234
1.067	-2.706	-0.217	6.730	-0.114	-4.042	-0.350
1.600	-2.706	-0.217	6.730	-0.114	-0.453	-0.465
2.133	-2.706	-0.217	6.730	-0.114	3.137	-0.581
2.667	-2.706	-0.217	6.730	-0.114	6.726	-0.696
3.200	-2.706	-0.217	6.730	-0.114	10.316*	-0.812#

Memb 47, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-5.778	0.164	0.505	-0.120	-0.364#	0.137#
0.817	-5.778	0.164	0.505	-0.120	0.049	0.271
1.633	-5.778	0.164	0.505	-0.120	0.462	0.405
2.450	-5.778	0.164	0.505	-0.120	0.875	0.539
3.267	-5.778	0.164	0.505	-0.120	1.288	0.673
4.083	-5.778	0.164	0.505	-0.120	1.700	0.806
4.900	-5.778	0.164	0.505	-0.120	2.113*	0.940*

Memb 48, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-3.420	0.582	-4.048	0.228	8.767*	-1.557#
0.683	-3.420	0.582	-4.048	0.228	6.001	-1.160
1.367	-3.420	0.582	-4.048	0.228	3.235	-0.762
2.050	-3.420	0.582	-4.048	0.228	0.468	-0.364
2.733	-3.420	0.582	-4.048	0.228	-2.298	0.033
3.417	-3.420	0.582	-4.048	0.228	-5.064	0.431
4.100	-3.420	0.582	-4.048	0.228	-7.830#	0.828*

Memb 49, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-4.664	-0.077	3.096	0.008	-5.332#	0.227*
0.433	-4.664	-0.077	3.096	0.008	-3.991	0.194
0.867	-4.664	-0.077	3.096	0.008	-2.649	0.161
1.300	-4.664	-0.077	3.096	0.008	-1.307	0.127
1.733	-4.664	-0.077	3.096	0.008	0.034	0.094
2.167	-4.664	-0.077	3.096	0.008	1.376	0.061
2.600	-4.664	-0.077	3.096	0.008	2.718*	0.028#

Memb 50, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-9.704	19.544	-2.282	-24.691	10.089*	-80.802#
0.683	-9.704	19.544	-2.282	-24.691	8.529	-67.448
1.367	-9.704	19.544	-2.282	-24.691	6.970	-54.093
2.050	-9.704	19.544	-2.282	-24.691	5.410	-40.738
2.733	-9.704	19.544	-2.282	-24.691	3.851	-27.383
3.417	-9.704	19.544	-2.282	-24.691	2.291	-14.028
4.100	-9.704	19.544	-2.282	-24.691	0.732#	-0.673*

Memb 51, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-14.344	20.874	1.560	22.906	-6.562#	-86.330#
0.683	-14.344	20.874	1.560	22.906	-5.496	-72.067
1.367	-14.344	20.874	1.560	22.906	-4.429	-57.803
2.050	-14.344	20.874	1.560	22.906	-3.363	-43.539
2.733	-14.344	20.874	1.560	22.906	-2.297	-29.275
3.417	-14.344	20.874	1.560	22.906	-1.231	-15.011
4.100	-14.344	20.874	1.560	22.906	-0.164*	-0.747*

Memb 52, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	7.024	-2.627	-2.968	-0.536	9.121*	7.529*
0.683	7.024	-2.627	-2.968	-0.536	7.093	5.734
1.367	7.024	-2.627	-2.968	-0.536	5.065	3.939
2.050	7.024	-2.627	-2.968	-0.536	3.038	2.144
2.733	7.024	-2.627	-2.968	-0.536	1.010	0.349
3.417	7.024	-2.627	-2.968	-0.536	-1.018	-1.446
4.100	7.024	-2.627	-2.968	-0.536	-3.046#	-3.241#

Memb 53, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	22.523	-0.155	0.002	0.000	0.001#	0.149*
0.534	22.523	-0.155	0.002	0.000	0.002	0.066
1.069	22.523	-0.155	0.002	0.000	0.003	-0.017
1.603	22.523	-0.155	0.002	0.000	0.005	-0.100
2.137	22.523	-0.155	0.002	0.000	0.006	-0.182
2.672	22.523	-0.155	0.002	0.000	0.007	-0.265
3.206	22.523	-0.155	0.002	0.000	0.008*	-0.348#

Memb 54, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	4.176	2.165	1.726	0.129	-2.561#	-2.802#
0.683	4.176	2.165	1.726	0.129	-1.381	-1.323
1.367	4.176	2.165	1.726	0.129	-0.202	0.157
2.050	4.176	2.165	1.726	0.129	0.978	1.636
2.733	4.176	2.165	1.726	0.129	2.157	3.115
3.417	4.176	2.165	1.726	0.129	3.336	4.594
4.100	4.176	2.165	1.726	0.129	4.516*	6.074*

Memb 55, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-6.914	0.000	-3.895	0.170	0.881*	0.116*
0.433	-6.914	0.000	-3.895	0.170	-0.807	0.116
0.867	-6.914	0.000	-3.895	0.170	-2.495	0.115
1.300	-6.914	0.000	-3.895	0.170	-4.182	0.115
1.733	-6.914	0.000	-3.895	0.170	-5.870	0.115
2.167	-6.914	0.000	-3.895	0.170	-7.558	0.115
2.600	-6.914	0.000	-3.895	0.170	-9.246#	0.115#

Memb 57, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-1.512	-22.473	-0.002	-0.007	0.001*	-0.724*
0.069	-1.512	-22.473	-0.002	-0.007	0.001	-2.284
0.139	-1.512	-22.473	-0.002	-0.007	0.000	-3.845
0.208	-1.512	-22.473	-0.002	-0.007	0.000	-5.406
0.278	-1.512	-22.473	-0.002	-0.007	0.000	-6.967
0.347	-1.512	-22.473	-0.002	-0.007	0.000	-8.527
0.417	-1.512	-22.473	-0.002	-0.007	0.000#	-10.088#

Memb 58, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.310	2.857	0.067	0.000	-0.106#	-4.918#
0.533	0.310	2.857	0.067	0.000	-0.070	-3.395
1.067	0.310	2.857	0.067	0.000	-0.034	-1.871
1.600	0.310	2.857	0.067	0.000	0.001	-0.347
2.133	0.310	2.857	0.067	0.000	0.037	1.176
2.667	0.310	2.857	0.067	0.000	0.073	2.700
3.200	0.310	2.857	0.067	0.000	0.109*	4.223*

Memb 59, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.167	18.907*	0.005	0.000	-0.016#	-22.916#
0.817	0.167	18.907*	0.005	0.000	-0.011	-7.475
1.633	0.167	18.907*	0.005	0.000	-0.007	7.966
2.450	0.167	18.907*	0.005	0.000	-0.002	23.407*
2.450	0.167	-18.593#	0.005	0.000	-0.002	23.407*
3.267	0.167	-18.593#	0.005	0.000	0.002	8.223
4.083	0.167	-18.593#	0.005	0.000	0.007	-6.961
4.900	0.167	-18.593#	0.005	0.000	0.011*	-22.145

Memb 60, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.451	-1.600	-0.043	0.000	0.089*	3.027*
0.683	0.451	-1.600	-0.043	0.000	0.060	1.934
1.367	0.451	-1.600	-0.043	0.000	0.031	0.841
2.050	0.451	-1.600	-0.043	0.000	0.002	-0.253
2.733	0.451	-1.600	-0.043	0.000	-0.028	-1.346
3.417	0.451	-1.600	-0.043	0.000	-0.057	-2.439
4.100	0.451	-1.600	-0.043	0.000	-0.086#	-3.532#

Memb 61, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	-14.018	2.177	0.000	-0.218#	0.002*
0.033	0.000	-14.018	2.177	0.000	-0.145	-0.466
0.067	0.000	-14.018	2.177	0.000	-0.073	-0.933
0.100	0.000	-14.018	2.177	0.000	0.000	-1.400
0.133	0.000	-14.018	2.177	0.000	0.073	-1.867
0.167	0.000	-14.018	2.177	0.000	0.145	-2.335
0.200	0.000	-14.018	2.177	0.000	0.218*	-2.802#

Memb 62, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.260	0.012	0.542	0.045	-0.756#	-0.027#
0.433	0.260	0.012	0.542	0.045	-0.521	-0.022
0.867	0.260	0.012	0.542	0.045	-0.287	-0.017
1.300	0.260	0.012	0.542	0.045	-0.052	-0.012
1.733	0.260	0.012	0.542	0.045	0.183	-0.007
2.167	0.260	0.012	0.542	0.045	0.418	-0.002
2.600	0.260	0.012	0.542	0.045	0.653*	0.003*

Memb 63, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	21.387	-12.657	2.098	0.611	-7.221#	65.761*
0.897	21.387	-12.657	2.098	0.611	-5.340	54.414
1.793	21.387	-12.657	2.098	0.611	-3.459	43.067
2.690	21.387	-12.657	2.098	0.611	-1.578	31.720
3.586	21.387	-12.657	2.098	0.611	0.303	20.373
4.483	21.387	-12.657	2.098	0.611	2.184	9.026
5.379	21.387	-12.657	2.098	0.611	4.065*	-2.321#

Memb 67, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.218	2.501*	0.000	0.000	0.000	0.000
0.967	-0.218	1.668	0.000	0.000	0.000	2.015
1.933	-0.218	0.834	0.000	0.000	0.000	3.224
2.900	-0.218	0.000	0.000	0.000	0.000	3.627*
3.867	-0.218	-0.834	0.000	0.000	0.000	3.224
4.833	-0.218	-1.668	0.000	0.000	0.000	2.015
5.800	-0.218	-2.501#	0.000	0.000	0.000	0.000#

Memb 68, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	-16.089	-3.278	0.000	0.328*	-0.023*
0.033	0.000	-16.089	-3.278	0.000	0.219	-0.560
0.067	0.000	-16.089	-3.278	0.000	0.109	-1.096
0.100	0.000	-16.089	-3.278	0.000	0.000	-1.632
0.133	0.000	-16.089	-3.278	0.000	-0.109	-2.169
0.167	0.000	-16.089	-3.278	0.000	-0.219	-2.705
0.200	0.000	-16.089	-3.278	0.000	-0.328#	-3.241#

Memb 70, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-9.766	-3.493	-2.139	2.449	-0.428*	0.025*
0.033	-9.766	-3.493	-2.139	2.449	-0.499	-0.091
0.067	-9.766	-3.493	-2.139	2.449	-0.571	-0.208
0.100	-9.766	-3.493	-2.139	2.449	-0.642	-0.324
0.133	-9.766	-3.493	-2.139	2.449	-0.713	-0.440
0.167	-9.766	-3.493	-2.139	2.449	-0.785	-0.557
0.200	-9.766	-3.493	-2.139	2.449	-0.856#	-0.673#

Memb 71, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.400	1.380*	0.146	0.028	-0.231#	0.000#
0.533	0.400	0.920	0.146	0.028	-0.153	0.613
1.067	0.400	0.460	0.146	0.028	-0.075	0.981
1.600	0.400	0.000	0.146	0.028	0.003	1.104*
2.133	0.400	-0.460	0.146	0.028	0.081	0.981
2.667	0.400	-0.920	0.146	0.028	0.159	0.613
3.200	0.400	-1.380#	0.146	0.028	0.238*	0.000

Memb 72, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-14.392	-3.881	1.276	-2.266	-0.013#	0.029*
0.033	-14.392	-3.881	1.276	-2.266	0.030	-0.100
0.067	-14.392	-3.881	1.276	-2.266	0.073	-0.230
0.100	-14.392	-3.881	1.276	-2.266	0.115	-0.359
0.133	-14.392	-3.881	1.276	-2.266	0.158	-0.488
0.167	-14.392	-3.881	1.276	-2.266	0.200	-0.618
0.200	-14.392	-3.881	1.276	-2.266	0.243*	-0.747#

Memb 73, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	1.846	2.113*	0.012	0.003	-0.034#	0.000
0.817	1.846	1.409	0.012	0.003	-0.025	1.438
1.633	1.846	0.704	0.012	0.003	-0.015	2.301
2.450	1.846	0.000	0.012	0.003	-0.005	2.589*
3.267	1.846	-0.704	0.012	0.003	0.005	2.301
4.083	1.846	-1.409	0.012	0.003	0.014	1.438
4.900	1.846	-2.113#	0.012	0.003	0.024*	0.000#

Memb 74, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.919	1.768*	-0.093	-0.026	0.195*	0.000
0.683	0.919	1.179	-0.093	-0.026	0.131	1.007
1.367	0.919	0.589	-0.093	-0.026	0.067	1.611
2.050	0.919	0.000	-0.093	-0.026	0.003	1.812*
2.733	0.919	-0.589	-0.093	-0.026	-0.060	1.611
3.417	0.919	-1.179	-0.093	-0.026	-0.124	1.007
4.100	0.919	-1.768#	-0.093	-0.026	-0.188#	0.000#

Memb 75, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-14.497	0.000	2.203	-2.266	-0.158#	0.000
0.433	-14.497	0.000	2.203	-2.266	0.796	0.000
0.867	-14.497	0.000	2.203	-2.266	1.751	0.000
1.300	-14.497	0.000	2.203	-2.266	2.705	0.000
1.733	-14.497	0.000	2.203	-2.266	3.660	0.000
2.167	-14.497	0.000	2.203	-2.266	4.614	0.000
2.600	-14.497	0.000	2.203	-2.266	5.569*	0.000

Memb 76, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-9.900	0.000	-3.585	2.449	0.700*	0.000
0.433	-9.900	0.000	-3.585	2.449	-0.854	0.000
0.867	-9.900	0.000	-3.585	2.449	-2.407	0.000
1.300	-9.900	0.000	-3.585	2.449	-3.961	0.000
1.733	-9.900	0.000	-3.585	2.449	-5.514	0.000
2.167	-9.900	0.000	-3.585	2.449	-7.068	0.000
2.600	-9.900	0.000	-3.585	2.449	-8.621#	0.000

Memb 77, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.077	-0.005	-0.003	0.000	0.000*	0.009*
0.434	-0.077	-0.005	-0.003	0.000	-0.001	0.007
0.868	-0.077	-0.005	-0.003	0.000	-0.002	0.005
1.302	-0.077	-0.005	-0.003	0.000	-0.004	0.003

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
1.736	-0.077	-0.005	-0.003	0.000	-0.005	0.000
2.171	-0.077	-0.005	-0.003	0.000	-0.006	-0.002
2.605	-0.077	-0.005	-0.003	0.000	-0.007#	-0.004#

Memb 78, Case 2 (Linear): LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.043	0.783	0.000	0.002	0.000#	-0.012#
0.026	0.043	0.783	0.000	0.002	0.000	0.008
0.052	0.043	0.783	0.000	0.002	0.000	0.028
0.079	0.043	0.783	0.000	0.002	0.000	0.049
0.105	0.043	0.783	0.000	0.002	0.000	0.069
0.131	0.043	0.783	0.000	0.002	0.000	0.090
0.157	0.043	0.783	0.000	0.002	0.000*	0.110*

Memb 1, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	-0.001	0.000	0.001	0.000#	0.000*
0.069	0.000	-0.001	0.000	0.001	0.000	0.000
0.139	0.000	-0.001	0.000	0.001	0.000	0.000
0.208	0.000	-0.001	0.000	0.001	0.000	0.000
0.278	0.000	-0.001	0.000	0.001	0.000	0.000
0.347	0.000	-0.001	0.000	0.001	0.000	0.000
0.417	0.000	-0.001	0.000	0.001	0.000*	0.000#

Memb 2, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.093	0.000	0.147	0.049	-0.350#	0.000#
0.897	-0.093	0.000	0.147	0.049	-0.218	0.000
1.793	-0.093	0.000	0.147	0.049	-0.086	0.000
2.690	-0.093	0.000	0.147	0.049	0.046	0.000
3.586	-0.093	0.000	0.147	0.049	0.178	0.000
4.483	-0.093	0.000	0.147	0.049	0.309	0.001
5.379	-0.093	0.000	0.147	0.049	0.441*	0.001*

Memb 3, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000*	0.000*
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000#	0.000#

Memb 4, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.001	0.000	0.000	0.000	0.001*	0.000#
1.152	0.001	0.000	0.000	0.000	0.001	0.000
2.304	0.001	0.000	0.000	0.000	0.000	0.000
3.456	0.001	0.000	0.000	0.000	0.000	0.000
4.608	0.001	0.000	0.000	0.000	0.000	0.000
5.760	0.001	0.000	0.000	0.000	0.000	0.000
6.913	0.001	0.000	0.000	0.000	-0.001#	0.000*

Memb 5, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.008	0.128	-0.001	-0.004	0.000*	0.000#
0.069	0.008	0.128	-0.001	-0.004	0.000	0.009
0.139	0.008	0.128	-0.001	-0.004	0.000	0.018
0.208	0.008	0.128	-0.001	-0.004	0.000	0.027
0.278	0.008	0.128	-0.001	-0.004	0.000	0.036
0.347	0.008	0.128	-0.001	-0.004	0.000	0.045
0.417	0.008	0.128	-0.001	-0.004	0.000#	0.053*

Memb 6, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000*	0.000*
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000#	0.000#

Memb 7, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.037	-0.006	0.187	0.504	-0.491#	0.000*
0.897	-0.037	-0.006	0.187	0.504	-0.323	-0.005
1.793	-0.037	-0.006	0.187	0.504	-0.155	-0.010
2.690	-0.037	-0.006	0.187	0.504	0.013	-0.015
3.586	-0.037	-0.006	0.187	0.504	0.181	-0.020
4.483	-0.037	-0.006	0.187	0.504	0.348	-0.026
5.379	-0.037	-0.006	0.187	0.504	0.516*	-0.031#

Memb 8, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000*	0.000#
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000#	0.000*

Memb 9, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.129	0.000	0.001	0.000	-0.004#	0.000#
0.718	-0.129	0.000	0.001	0.000	-0.003	0.000
1.436	-0.129	0.000	0.001	0.000	-0.002	0.001
2.154	-0.129	0.000	0.001	0.000	-0.001	0.001
2.872	-0.129	0.000	0.001	0.000	-0.001	0.001
3.590	-0.129	0.000	0.001	0.000	0.000	0.002
4.308	-0.129	0.000	0.001	0.000	0.001*	0.002*

Memb 10, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000#	0.000#
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000*	0.000*

Memb 11, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.123	2.043	-0.002	-0.007	0.000*	0.000#
0.069	0.123	2.043	-0.002	-0.007	0.000	0.142
0.139	0.123	2.043	-0.002	-0.007	0.000	0.284
0.208	0.123	2.043	-0.002	-0.007	0.000	0.426
0.278	0.123	2.043	-0.002	-0.007	0.000	0.568
0.347	0.123	2.043	-0.002	-0.007	0.000	0.709
0.417	0.123	2.043	-0.002	-0.007	0.000#	0.851*

Memb 12, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.048	-1.351	0.178	1.167	-0.465#	0.000*
0.897	-0.048	-1.351	0.178	1.167	-0.305	-1.211
1.793	-0.048	-1.351	0.178	1.167	-0.145	-2.422
2.690	-0.048	-1.351	0.178	1.167	0.015	-3.633
3.586	-0.048	-1.351	0.178	1.167	0.175	-4.844
4.483	-0.048	-1.351	0.178	1.167	0.335	-6.055
5.379	-0.048	-1.351	0.178	1.167	0.495*	-7.267#

Memb 13, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000*	0.000*
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000#	0.000#

Memb 14, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-2.047	0.000	0.002	0.000	-0.007#	0.000*
1.152	-2.047	0.000	0.002	0.000	-0.004	0.000
2.304	-2.047	0.000	0.002	0.000	-0.002	0.000
3.456	-2.047	0.000	0.002	0.000	0.000	0.000
4.608	-2.047	0.000	0.002	0.000	0.003	-0.001
5.760	-2.047	0.000	0.002	0.000	0.005	-0.001
6.913	-2.047	0.000	0.002	0.000	0.007*	-0.001#

Memb 15, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000	0.000*
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000	0.000#

Memb 17, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.224	-2.148	0.155	-0.605	-0.401#	0.000*
0.897	-0.224	-2.148	0.155	-0.605	-0.262	-1.925
1.793	-0.224	-2.148	0.155	-0.605	-0.123	-3.851
2.690	-0.224	-2.148	0.155	-0.605	0.016	-5.776
3.586	-0.224	-2.148	0.155	-0.605	0.154	-7.702
4.483	-0.224	-2.148	0.155	-0.605	0.293	-9.627
5.379	-0.224	-2.148	0.155	-0.605	0.432*	-11.553#

Memb 18, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000#	0.000#
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000*	0.000*

Memb 19, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-2.381	0.018	-0.001	0.000	0.004*	-0.082#
0.618	-2.381	0.018	-0.001	0.000	0.003	-0.071
1.236	-2.381	0.018	-0.001	0.000	0.002	-0.061
1.853	-2.381	0.018	-0.001	0.000	0.002	-0.050
2.471	-2.381	0.018	-0.001	0.000	0.001	-0.039
3.089	-2.381	0.018	-0.001	0.000	0.000	-0.028
3.707	-2.381	0.018	-0.001	0.000	-0.001#	-0.017*

Memb 20, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000*	0.000*
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000#	0.000#

Memb 21, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.005	0.091	0.004	0.014	-0.001#	0.000#
0.069	0.005	0.091	0.004	0.014	-0.001	0.006
0.139	0.005	0.091	0.004	0.014	0.000	0.013
0.208	0.005	0.091	0.004	0.014	0.000	0.019

Memb 22, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.278	0.005	0.091	0.004	0.014	0.000	0.025
0.347	0.005	0.091	0.004	0.014	0.001	0.032
0.417	0.005	0.091	0.004	0.014	0.001*	0.038*

Memb 22, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.136	-0.002	0.129	-1.585	-0.320#	0.000*
0.897	0.136	-0.002	0.129	-1.585	-0.204	-0.002
1.793	0.136	-0.002	0.129	-1.585	-0.088	-0.004
2.690	0.136	-0.002	0.129	-1.585	0.028	-0.006
3.586	0.136	-0.002	0.129	-1.585	0.144	-0.008
4.483	0.136	-0.002	0.129	-1.585	0.260	-0.011
5.379	0.136	-0.002	0.129	-1.585	0.376*	-0.013#

Memb 23, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000	0.000#
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000	0.000*

Memb 24, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.091	0.000	-0.004	0.000	0.014*	0.000*
1.152	-0.091	0.000	-0.004	0.000	0.010	0.000
2.304	-0.091	0.000	-0.004	0.000	0.005	0.000
3.456	-0.091	0.000	-0.004	0.000	0.000	0.000
4.608	-0.091	0.000	-0.004	0.000	-0.004	0.000
5.760	-0.091	0.000	-0.004	0.000	-0.009	0.000
6.913	-0.091	0.000	-0.004	0.000	-0.014#	0.000#

Memb 25, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000#	0.000*
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000*	0.000#

Memb 26, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.433	0.000	0.000	0.000	0.000	0.000	0.000
0.867	0.000	0.000	0.000	0.000	0.000	0.000
1.300	0.000	0.000	0.000	0.000	0.000	0.000
1.733	0.000	0.000	0.000	0.000	0.000	0.000
2.167	0.000	0.000	0.000	0.000	0.000	0.000
2.600	0.000	0.000	0.000	0.000	0.000	0.000

Memb 27, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.533	0.000	0.000	0.000	0.000	0.000	0.000
1.067	0.000	0.000	0.000	0.000	0.000	0.000
1.600	0.000	0.000	0.000	0.000	0.000	0.000
2.133	0.000	0.000	0.000	0.000	0.000	0.000
2.667	0.000	0.000	0.000	0.000	0.000	0.000
3.200	0.000	0.000	0.000	0.000	0.000	0.000

Memb 28, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.483	0.000	0.000	0.000	0.000	0.000	0.000
0.967	0.000	0.000	0.000	0.000	0.000	0.000
1.450	0.000	0.000	0.000	0.000	0.000	0.000
1.933	0.000	0.000	0.000	0.000	0.000	0.000
2.417	0.000	0.000	0.000	0.000	0.000	0.000
2.900	0.000	0.000	0.000	0.000	0.000	0.000

Memb 29, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.111	0.015	0.368	0.694	-0.315#	-0.074#
0.250	-0.111	0.015	0.368	0.694	-0.223	-0.070
0.500	-0.111	0.015	0.368	0.694	-0.131	-0.067
0.750	-0.111	0.015	0.368	0.694	-0.039	-0.063
1.000	-0.111	0.015	0.368	0.694	0.053	-0.059
1.250	-0.111	0.015	0.368	0.694	0.145	-0.055
1.500	-0.111	0.015	0.368	0.694	0.237*	-0.052*

Memb 30, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.533	0.000	0.000	0.000	0.000	0.000	0.000
1.067	0.000	0.000	0.000	0.000	0.000	0.000
1.600	0.000	0.000	0.000	0.000	0.000	0.000
2.133	0.000	0.000	0.000	0.000	0.000	0.000
2.667	0.000	0.000	0.000	0.000	0.000	0.000
3.200	0.000	0.000	0.000	0.000	0.000	0.000

Memb 31, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.083	0.367	-0.580	-1.422	0.532*	-0.303#
0.333	0.083	0.367	-0.580	-1.422	0.339	-0.181
0.667	0.083	0.367	-0.580	-1.422	0.145	-0.059
1.000	0.083	0.367	-0.580	-1.422	-0.048	0.064
1.333	0.083	0.367	-0.580	-1.422	-0.241	0.186
1.667	0.083	0.367	-0.580	-1.422	-0.435	0.309
2.000	0.083	0.367	-0.580	-1.422	-0.628#	0.431*

Memb 32, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.030	-0.137	0.694	0.237*	-0.052#
0.433	0.000	0.030	-0.137	0.694	0.178	-0.039
0.867	0.000	0.030	-0.137	0.694	0.119	-0.026
1.300	0.000	0.030	-0.137	0.694	0.059	-0.013
1.733	0.000	0.030	-0.137	0.694	0.000	0.000
2.167	0.000	0.030	-0.137	0.694	-0.059	0.013
2.600	0.000	0.030	-0.137	0.694	-0.119#	0.026*

Memb 33, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.150	0.000	0.000	0.000	0.000	0.000	0.000
2.300	0.000	0.000	0.000	0.000	0.000	0.000
3.450	0.000	0.000	0.000	0.000	0.000	0.000
4.600	0.000	0.000	0.000	0.000	0.000	0.000
5.750	0.000	0.000	0.000	0.000	0.000	0.000
6.900	0.000	0.000	0.000	0.000	0.000	0.000

Memb 34, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.150	0.000	0.000	0.000	0.000	0.000	0.000
2.300	0.000	0.000	0.000	0.000	0.000	0.000
3.450	0.000	0.000	0.000	0.000	0.000	0.000
4.600	0.000	0.000	0.000	0.000	0.000	0.000
5.750	0.000	0.000	0.000	0.000	0.000	0.000
6.900	0.000	0.000	0.000	0.000	0.000	0.000

Memb 35, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.102	0.002	-0.159	-0.030	0.376*	-0.007#
0.897	0.102	0.002	-0.159	-0.030	0.234	-0.005
1.793	0.102	0.002	-0.159	-0.030	0.091	-0.003
2.690	0.102	0.002	-0.159	-0.030	-0.052	-0.001
3.586	0.102	0.002	-0.159	-0.030	-0.195	0.001
4.483	0.102	0.002	-0.159	-0.030	-0.338	0.003
5.379	0.102	0.002	-0.159	-0.030	-0.481#	0.004*

Memb 36, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.504	0.052	-0.211	0.578	0.559*	-0.195#
0.897	0.504	0.052	-0.211	0.578	0.370	-0.149
1.793	0.504	0.052	-0.211	0.578	0.181	-0.102
2.690	0.504	0.052	-0.211	0.578	-0.008	-0.056
3.586	0.504	0.052	-0.211	0.578	-0.197	-0.009
4.483	0.504	0.052	-0.211	0.578	-0.386	0.037
5.379	0.504	0.052	-0.211	0.578	-0.575#	0.084*

Memb 37, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.255	-2.221	-0.165	0.869	0.400*	3.172*
0.897	0.255	-2.221	-0.165	0.869	0.252	1.181
1.793	0.255	-2.221	-0.165	0.869	0.104	-0.811
2.690	0.255	-2.221	-0.165	0.869	-0.044	-2.802
3.586	0.255	-2.221	-0.165	0.869	-0.192	-4.793
4.483	0.255	-2.221	-0.165	0.869	-0.341	-6.785
5.379	0.255	-2.221	-0.165	0.869	-0.489#	-8.776#

Memb 39, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.158	0.078	-0.143	-1.862	0.341*	-0.293#
0.897	0.158	0.078	-0.143	-1.862	0.212	-0.223
1.793	0.158	0.078	-0.143	-1.862	0.084	-0.153
2.690	0.158	0.078	-0.143	-1.862	-0.044	-0.083
3.586	0.158	0.078	-0.143	-1.862	-0.173	-0.013
4.483	0.158	0.078	-0.143	-1.862	-0.301	0.057
5.379	0.158	0.078	-0.143	-1.862	-0.429#	0.127*

Memb 40, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.253	0.100	0.133	-0.013	-0.241#	-0.360#
0.967	0.253	0.100	0.133	-0.013	-0.112	-0.263
1.933	0.253	0.100	0.133	-0.013	0.016	-0.166
2.900	0.253	0.100	0.133	-0.013	0.144	-0.069
3.867	0.253	0.100	0.133	-0.013	0.272	0.027
4.833	0.253	0.100	0.133	-0.013	0.400	0.124
5.800	0.253	0.100	0.133	-0.013	0.528*	0.221*

Memb 41, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-1.103	0.267	-3.589	-1.190	5.867*	-0.323#
0.533	-1.103	0.267	-3.589	-1.190	3.953	-0.181
1.067	-1.103	0.267	-3.589	-1.190	2.039	-0.038
1.600	-1.103	0.267	-3.589	-1.190	0.125	0.104
2.133	-1.103	0.267	-3.589	-1.190	-1.789	0.246
2.667	-1.103	0.267	-3.589	-1.190	-3.703	0.388
3.200	-1.103	0.267	-3.589	-1.190	-5.617#	0.531*

Memb 42, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-2.270	0.097	-0.606	-0.106	1.150*	-0.331#
0.817	-2.270	0.097	-0.606	-0.106	0.655	-0.252
1.633	-2.270	0.097	-0.606	-0.106	0.160	-0.173
2.450	-2.270	0.097	-0.606	-0.106	-0.335	-0.094
3.267	-2.270	0.097	-0.606	-0.106	-0.831	-0.015
4.083	-2.270	0.097	-0.606	-0.106	-1.326	0.065
4.900	-2.270	0.097	-0.606	-0.106	-1.821#	0.144*

Memb 43, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-1.214	0.104	2.537	1.046	-5.715#	-0.101#
0.683	-1.214	0.104	2.537	1.046	-3.981	-0.030
1.367	-1.214	0.104	2.537	1.046	-2.248	0.041
2.050	-1.214	0.104	2.537	1.046	-0.514	0.112

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
2.733	-1.214	0.104	2.537	1.046	1.220	0.183
3.417	-1.214	0.104	2.537	1.046	2.954	0.254
4.100	-1.214	0.104	2.537	1.046	4.687*	0.325*

Memb 44, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.130	0.002	-0.093	-0.017	0.210*	-0.007#
0.717	0.130	0.002	-0.093	-0.017	0.143	-0.005
1.433	0.130	0.002	-0.093	-0.017	0.076	-0.004
2.150	0.130	0.002	-0.093	-0.017	0.010	-0.002
2.867	0.130	0.002	-0.093	-0.017	-0.057	0.000
3.583	0.130	0.002	-0.093	-0.017	-0.124	0.001
4.300	0.130	0.002	-0.093	-0.017	-0.191#	0.003*

Memb 45, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.416	-0.094	0.132	0.000	-0.275#	0.325*
0.967	-0.416	-0.094	0.132	0.000	-0.147	0.234
1.933	-0.416	-0.094	0.132	0.000	-0.020	0.143
2.900	-0.416	-0.094	0.132	0.000	0.108	0.052
3.867	-0.416	-0.094	0.132	0.000	0.235	-0.039
4.833	-0.416	-0.094	0.132	0.000	0.362	-0.131
5.800	-0.416	-0.094	0.132	0.000	0.490*	-0.222#

Memb 46, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	1.459	-0.147	-3.449	0.013	5.802*	0.229*
0.533	1.459	-0.147	-3.449	0.013	3.963	0.151
1.067	1.459	-0.147	-3.449	0.013	2.124	0.072
1.600	1.459	-0.147	-3.449	0.013	0.285	-0.006
2.133	1.459	-0.147	-3.449	0.013	-1.555	-0.084
2.667	1.459	-0.147	-3.449	0.013	-3.394	-0.163
3.200	1.459	-0.147	-3.449	0.013	-5.233#	-0.241#

Memb 47, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	3.377	-0.071	-0.598	0.014	0.968*	0.173*
0.817	3.377	-0.071	-0.598	0.014	0.480	0.115
1.633	3.377	-0.071	-0.598	0.014	-0.008	0.057
2.450	3.377	-0.071	-0.598	0.014	-0.496	-0.002
3.267	3.377	-0.071	-0.598	0.014	-0.985	-0.060
4.083	3.377	-0.071	-0.598	0.014	-1.473	-0.118
4.900	3.377	-0.071	-0.598	0.014	-1.961#	-0.176#

Memb 48, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	2.046	-0.135	2.561	-0.026	-5.578#	0.248*
0.683	2.046	-0.135	2.561	-0.026	-3.828	0.156
1.367	2.046	-0.135	2.561	-0.026	-2.078	0.064
2.050	2.046	-0.135	2.561	-0.026	-0.328	-0.028
2.733	2.046	-0.135	2.561	-0.026	1.422	-0.120
3.417	2.046	-0.135	2.561	-0.026	3.172	-0.212
4.100	2.046	-0.135	2.561	-0.026	4.921*	-0.304#

Memb 49, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	2.649	0.007	-1.912	-0.015	3.323*	-0.025#
0.433	2.649	0.007	-1.912	-0.015	2.494	-0.022
0.867	2.649	0.007	-1.912	-0.015	1.665	-0.019
1.300	2.649	0.007	-1.912	-0.015	0.837	-0.016
1.733	2.649	0.007	-1.912	-0.015	0.008	-0.013
2.167	2.649	0.007	-1.912	-0.015	-0.820	-0.010
2.600	2.649	0.007	-1.912	-0.015	-1.649#	-0.007*

Memb 50, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	7.246	0.301	1.330	0.462	-5.891#	-1.237#
0.683	7.246	0.301	1.330	0.462	-4.982	-1.031
1.367	7.246	0.301	1.330	0.462	-4.073	-0.825
2.050	7.246	0.301	1.330	0.462	-3.164	-0.620
2.733	7.246	0.301	1.330	0.462	-2.255	-0.414
3.417	7.246	0.301	1.330	0.462	-1.346	-0.208
4.100	7.246	0.301	1.330	0.462	-0.438*	-0.002*

Memb 51, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	6.467	0.185	-0.860	-0.294	3.577*	-0.759#
0.683	6.467	0.185	-0.860	-0.294	2.989	-0.633
1.367	6.467	0.185	-0.860	-0.294	2.401	-0.507
2.050	6.467	0.185	-0.860	-0.294	1.813	-0.381
2.733	6.467	0.185	-0.860	-0.294	1.225	-0.255
3.417	6.467	0.185	-0.860	-0.294	0.637	-0.129
4.100	6.467	0.185	-0.860	-0.294	0.049#	-0.002*

Memb 52, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-3.645	0.329	1.565	-0.016	-4.757#	-0.928#
0.683	-3.645	0.329	1.565	-0.016	-3.687	-0.703
1.367	-3.645	0.329	1.565	-0.016	-2.618	-0.478
2.050	-3.645	0.329	1.565	-0.016	-1.548	-0.254
2.733	-3.645	0.329	1.565	-0.016	-0.478	-0.029
3.417	-3.645	0.329	1.565	-0.016	0.591	0.196
4.100	-3.645	0.329	1.565	-0.016	1.661*	0.421*

Memb 53, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-2.381	0.018	-0.001	0.000	-0.001*	-0.017#
0.534	-2.381	0.018	-0.001	0.000	-0.001	-0.008
1.069	-2.381	0.018	-0.001	0.000	-0.002	0.002
1.603	-2.381	0.018	-0.001	0.000	-0.003	0.011
2.137	-2.381	0.018	-0.001	0.000	-0.003	0.020
2.672	-2.381	0.018	-0.001	0.000	-0.004	0.030
3.206	-2.381	0.018	-0.001	0.000	-0.005#	0.039*

Memb 54, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-2.524	-0.257	-1.067	-0.015	1.563*	0.338*
0.683	-2.524	-0.257	-1.067	-0.015	0.834	0.162
1.367	-2.524	-0.257	-1.067	-0.015	0.105	-0.013
2.050	-2.524	-0.257	-1.067	-0.015	-0.624	-0.189
2.733	-2.524	-0.257	-1.067	-0.015	-1.353	-0.364
3.417	-2.524	-0.257	-1.067	-0.015	-2.082	-0.539
4.100	-2.524	-0.257	-1.067	-0.015	-2.811#	-0.715#

Memb 55, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	12.819	-0.002	2.060	-0.040	-0.552#	-0.008*
0.433	12.819	-0.002	2.060	-0.040	0.341	-0.010
0.867	12.819	-0.002	2.060	-0.040	1.234	-0.011
1.300	12.819	-0.002	2.060	-0.040	2.127	-0.012
1.733	12.819	-0.002	2.060	-0.040	3.020	-0.013
2.167	12.819	-0.002	2.060	-0.040	3.912	-0.014
2.600	12.819	-0.002	2.060	-0.040	4.805*	-0.015#

Memb 57, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.161	2.375	0.001	0.004	0.000#	0.082#
0.069	0.161	2.375	0.001	0.004	0.000	0.247
0.139	0.161	2.375	0.001	0.004	0.000	0.412
0.208	0.161	2.375	0.001	0.004	0.000	0.577
0.278	0.161	2.375	0.001	0.004	0.000	0.742
0.347	0.161	2.375	0.001	0.004	0.000	0.907
0.417	0.161	2.375	0.001	0.004	0.000*	1.072*

Memb 58, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.184	-0.312	-0.035	0.000	0.056*	0.507*
0.533	-0.184	-0.312	-0.035	0.000	0.037	0.340
1.067	-0.184	-0.312	-0.035	0.000	0.018	0.173
1.600	-0.184	-0.312	-0.035	0.000	-0.001	0.007
2.133	-0.184	-0.312	-0.035	0.000	-0.020	-0.160
2.667	-0.184	-0.312	-0.035	0.000	-0.039	-0.326
3.200	-0.184	-0.312	-0.035	0.000	-0.057#	-0.493#

Memb 59, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.098	-0.011	-0.005	0.000	0.015*	0.020*
0.817	-0.098	-0.011	-0.005	0.000	0.010	0.011
1.633	-0.098	-0.011	-0.005	0.000	0.006	0.002
2.450	-0.098	-0.011	-0.005	0.000	0.001	-0.007
2.450	-0.098	-0.011	-0.005	0.000	0.001	-0.007
3.267	-0.098	-0.011	-0.005	0.000	-0.003	-0.016
4.083	-0.098	-0.011	-0.005	0.000	-0.008	-0.025
4.900	-0.098	-0.011	-0.005	0.000	-0.012#	-0.034#

Memb 60, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.263	0.173	0.027	0.000	-0.055#	-0.353#
0.683	-0.263	0.173	0.027	0.000	-0.037	-0.234
1.367	-0.263	0.173	0.027	0.000	-0.019	-0.116
2.050	-0.263	0.173	0.027	0.000	-0.001	0.003
2.733	-0.263	0.173	0.027	0.000	0.017	0.122
3.417	-0.263	0.173	0.027	0.000	0.036	0.240
4.100	-0.263	0.173	0.027	0.000	0.054*	0.359*

Memb 61, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	1.714	-1.330	0.000	0.133*	-0.005#
0.033	0.000	1.714	-1.330	0.000	0.089	0.052
0.067	0.000	1.714	-1.330	0.000	0.044	0.109
0.100	0.000	1.714	-1.330	0.000	0.000	0.166
0.133	0.000	1.714	-1.330	0.000	-0.044	0.223
0.167	0.000	1.714	-1.330	0.000	-0.089	0.281
0.200	0.000	1.714	-1.330	0.000	-0.133#	0.338*

Memb 62, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.132	-0.001	-0.269	-0.024	0.376*	0.003*
0.433	-0.132	-0.001	-0.269	-0.024	0.259	0.002
0.867	-0.132	-0.001	-0.269	-0.024	0.143	0.002
1.300	-0.132	-0.001	-0.269	-0.024	0.026	0.001
1.733	-0.132	-0.001	-0.269	-0.024	-0.090	0.001
2.167	-0.132	-0.001	-0.269	-0.024	-0.207	0.000
2.600	-0.132	-0.001	-0.269	-0.024	-0.323#	0.000#

Memb 63, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.353	-0.948	-0.194	-0.313	0.539*	2.983*
0.897	0.353	-0.948	-0.194	-0.313	0.365	2.133
1.793	0.353	-0.948	-0.194	-0.313	0.191	1.283
2.690	0.353	-0.948	-0.194	-0.313	0.017	0.433
3.586	0.353	-0.948	-0.194	-0.313	-0.157	-0.417
4.483	0.353	-0.948	-0.194	-0.313	-0.331	-1.266
5.379	0.353	-0.948	-0.194	-0.313	-0.505#	-2.116#

Memb 67, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.100	0.000	0.000	0.000	0.000	0.000
0.967	0.100	0.000	0.000	0.000	0.000	0.000
1.933	0.100	0.000	0.000	0.000	0.000	0.000
2.900	0.100	0.000	0.000	0.000	0.000	0.000
3.867	0.100	0.000	0.000	0.000	0.000	0.000
4.833	0.100	0.000	0.000	0.000	0.000	0.000
5.800	0.100	0.000	0.000	0.000	0.000	0.000

Memb 68, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	1.863	1.750	0.000	-0.175#	0.048#
0.033	0.000	1.863	1.750	0.000	-0.117	0.110
0.067	0.000	1.863	1.750	0.000	-0.058	0.172
0.100	0.000	1.863	1.750	0.000	0.000	0.234
0.133	0.000	1.863	1.750	0.000	0.058	0.296
0.167	0.000	1.863	1.750	0.000	0.117	0.358
0.200	0.000	1.863	1.750	0.000	0.175*	0.421*

Memb 70, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	7.276	0.000	1.244	-0.051	0.261#	-0.002
0.033	7.276	0.000	1.244	-0.051	0.302	-0.002
0.067	7.276	0.000	1.244	-0.051	0.344	-0.002
0.100	7.276	0.000	1.244	-0.051	0.385	-0.002
0.133	7.276	0.000	1.244	-0.051	0.427	-0.002
0.167	7.276	0.000	1.244	-0.051	0.468	-0.002
0.200	7.276	0.000	1.244	-0.051	0.510*	-0.002

Memb 71, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.211	0.000	-0.077	-0.002	0.121*	0.000
0.533	-0.211	0.000	-0.077	-0.002	0.080	0.000
1.067	-0.211	0.000	-0.077	-0.002	0.039	0.000
1.600	-0.211	0.000	-0.077	-0.002	-0.002	0.000
2.133	-0.211	0.000	-0.077	-0.002	-0.043	0.000
2.667	-0.211	0.000	-0.077	-0.002	-0.084	0.000
3.200	-0.211	0.000	-0.077	-0.002	-0.126#	0.000

Memb 72, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	6.499	0.000	-0.696	0.024	0.047*	-0.002
0.033	6.499	0.000	-0.696	0.024	0.024	-0.002
0.067	6.499	0.000	-0.696	0.024	0.000	-0.002
0.100	6.499	0.000	-0.696	0.024	-0.023	-0.002
0.133	6.499	0.000	-0.696	0.024	-0.046	-0.002
0.167	6.499	0.000	-0.696	0.024	-0.069	-0.002
0.200	6.499	0.000	-0.696	0.024	-0.092#	-0.002

Memb 73, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-1.062	0.000	-0.012	0.000	0.032*	0.000
0.817	-1.062	0.000	-0.012	0.000	0.022	0.000
1.633	-1.062	0.000	-0.012	0.000	0.013	0.000
2.450	-1.062	0.000	-0.012	0.000	0.003	0.000
3.267	-1.062	0.000	-0.012	0.000	-0.007	0.000
4.083	-1.062	0.000	-0.012	0.000	-0.017	0.000
4.900	-1.062	0.000	-0.012	0.000	-0.026#	0.000

Memb 74, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.583	0.000	0.058	0.002	-0.121#	0.000
0.683	-0.583	0.000	0.058	0.002	-0.081	0.000
1.367	-0.583	0.000	0.058	0.002	-0.042	0.000
2.050	-0.583	0.000	0.058	0.002	-0.002	0.000
2.733	-0.583	0.000	0.058	0.002	0.038	0.000
3.417	-0.583	0.000	0.058	0.002	0.078	0.000
4.100	-0.583	0.000	0.058	0.002	0.117*	0.000

Memb 75, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	6.569	0.000	-1.175	0.024	0.048*	0.000
0.433	6.569	0.000	-1.175	0.024	-0.461	0.000
0.867	6.569	0.000	-1.175	0.024	-0.971	0.000
1.300	6.569	0.000	-1.175	0.024	-1.480	0.000
1.733	6.569	0.000	-1.175	0.024	-1.989	0.000
2.167	6.569	0.000	-1.175	0.024	-2.498	0.000
2.600	6.569	0.000	-1.175	0.024	-3.007#	0.000

Memb 76, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	7.341	0.000	2.095	-0.051	-0.419#	0.000
0.433	7.341	0.000	2.095	-0.051	0.489	0.000
0.867	7.341	0.000	2.095	-0.051	1.396	0.000
1.300	7.341	0.000	2.095	-0.051	2.304	0.000
1.733	7.341	0.000	2.095	-0.051	3.212	0.000
2.167	7.341	0.000	2.095	-0.051	4.119	0.000
2.600	7.341	0.000	2.095	-0.051	5.027*	0.000

Memb 77, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.256	0.003	0.001	0.000	0.000#	-0.004#
0.434	0.256	0.003	0.001	0.000	0.001	-0.003
0.868	0.256	0.003	0.001	0.000	0.001	-0.002
1.302	0.256	0.003	0.001	0.000	0.002	-0.001
1.736	0.256	0.003	0.001	0.000	0.002	0.000
2.171	0.256	0.003	0.001	0.000	0.003	0.001
2.605	0.256	0.003	0.001	0.000	0.004*	0.002*

Memb 78, Case 3 (Linear): WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.021	-0.384	0.000	-0.001	0.000*	0.006*
0.026	-0.021	-0.384	0.000	-0.001	0.000	-0.004
0.052	-0.021	-0.384	0.000	-0.001	0.000	-0.014
0.079	-0.021	-0.384	0.000	-0.001	0.000	-0.024
0.105	-0.021	-0.384	0.000	-0.001	0.000	-0.034
0.131	-0.021	-0.384	0.000	-0.001	0.000	-0.044
0.157	-0.021	-0.384	0.000	-0.001	0.000#	-0.054#

Memb 1, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	-0.001	-0.004	0.000*	0.000#
0.069	0.000	0.000	-0.001	-0.004	0.000	0.000
0.139	0.000	0.000	-0.001	-0.004	0.000	0.000
0.208	0.000	0.000	-0.001	-0.004	0.000	0.000
0.278	0.000	0.000	-0.001	-0.004	0.000	0.000
0.347	0.000	0.000	-0.001	-0.004	0.000	0.000
0.417	0.000	0.000	-0.001	-0.004	0.000#	0.000*

Memb 2, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	3.293	-0.001	-1.045	-0.220	2.951*	0.000*
0.897	3.293	-0.001	-1.045	-0.220	2.014	0.000
1.793	3.293	-0.001	-1.045	-0.220	1.076	-0.001
2.690	3.293	-0.001	-1.045	-0.220	0.139	-0.001
3.586	3.293	-0.001	-1.045	-0.220	-0.798	-0.002
4.483	3.293	-0.001	-1.045	-0.220	-1.735	-0.002
5.379	3.293	-0.001	-1.045	-0.220	-2.673#	-0.003#

Memb 3, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000#	0.000#
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000*	0.000*

Memb 4, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.001	0.000	-0.004#	0.000*
1.152	0.000	0.000	0.001	0.000	-0.003	0.000
2.304	0.000	0.000	0.001	0.000	-0.002	0.000
3.456	0.000	0.000	0.001	0.000	0.000	0.000
4.608	0.000	0.000	0.001	0.000	0.001	0.000
5.760	0.000	0.000	0.001	0.000	0.002	0.000
6.913	0.000	0.000	0.001	0.000	0.003*	-0.001#

Memb 5, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.096	-1.558	0.005	0.016	-0.001#	0.000*
0.069	-0.096	-1.558	0.005	0.016	0.000	-0.108
0.139	-0.096	-1.558	0.005	0.016	0.000	-0.216
0.208	-0.096	-1.558	0.005	0.016	0.000	-0.325
0.278	-0.096	-1.558	0.005	0.016	0.001	-0.433
0.347	-0.096	-1.558	0.005	0.016	0.001	-0.541
0.417	-0.096	-1.558	0.005	0.016	0.001*	-0.649#

Memb 6, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000#	0.000*
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000*	0.000#

Memb 7, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	4.477	0.007	-0.619	-2.204	1.407*	0.000#
0.897	4.477	0.007	-0.619	-2.204	0.852	0.006
1.793	4.477	0.007	-0.619	-2.204	0.297	0.012
2.690	4.477	0.007	-0.619	-2.204	-0.259	0.019
3.586	4.477	0.007	-0.619	-2.204	-0.814	0.025
4.483	4.477	0.007	-0.619	-2.204	-1.369	0.031
5.379	4.477	0.007	-0.619	-2.204	-1.925#	0.037*

Memb 8, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000#	0.000#
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000*	0.000*

Memb 9, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	1.561	-0.002	-0.005	0.000	0.016*	0.000*
0.718	1.561	-0.002	-0.005	0.000	0.012	-0.001
1.436	1.561	-0.002	-0.005	0.000	0.009	-0.003
2.154	1.561	-0.002	-0.005	0.000	0.005	-0.004
2.872	1.561	-0.002	-0.005	0.000	0.002	-0.006
3.590	1.561	-0.002	-0.005	0.000	-0.002	-0.007
4.308	1.561	-0.002	-0.005	0.000	-0.005#	-0.008#

Memb 10, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000#	0.000*
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000*	0.000#

Memb 11, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-2.533	-41.980	0.008	0.025	-0.002#	0.000*
0.069	-2.533	-41.980	0.008	0.025	-0.002	-2.915
0.139	-2.533	-41.980	0.008	0.025	-0.001	-5.831
0.208	-2.533	-41.980	0.008	0.025	-0.001	-8.746
0.278	-2.533	-41.980	0.008	0.025	0.000	-11.662
0.347	-2.533	-41.980	0.008	0.025	0.001	-14.577
0.417	-2.533	-41.980	0.008	0.025	0.001*	-17.493#

Memb 12, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	7.193	5.798	-1.200	-4.620	3.513*	0.000#
0.897	7.193	5.798	-1.200	-4.620	2.437	5.198
1.793	7.193	5.798	-1.200	-4.620	1.361	10.396
2.690	7.193	5.798	-1.200	-4.620	0.285	15.594
3.586	7.193	5.798	-1.200	-4.620	-0.790	20.792
4.483	7.193	5.798	-1.200	-4.620	-1.866	25.990
5.379	7.193	5.798	-1.200	-4.620	-2.942#	31.188*

Memb 13, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000	0.000*
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000	0.000#

Memb 14, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	42.056	0.002	-0.008	0.001	0.025*	0.000#
1.152	42.056	0.002	-0.008	0.001	0.017	0.002
2.304	42.056	0.002	-0.008	0.001	0.008	0.005
3.456	42.056	0.002	-0.008	0.001	-0.001	0.007
4.608	42.056	0.002	-0.008	0.001	-0.010	0.009
5.760	42.056	0.002	-0.008	0.001	-0.019	0.011
6.913	42.056	0.002	-0.008	0.001	-0.028#	0.014*

Memb 15, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000*	0.000*
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000#	0.000#

Memb 17, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	9.730	7.781	-0.386	2.440	0.671*	0.000#
0.897	9.730	7.781	-0.386	2.440	0.325	6.976
1.793	9.730	7.781	-0.386	2.440	-0.021	13.951
2.690	9.730	7.781	-0.386	2.440	-0.367	20.927
3.586	9.730	7.781	-0.386	2.440	-0.713	27.903
4.483	9.730	7.781	-0.386	2.440	-1.058	34.878
5.379	9.730	7.781	-0.386	2.440	-1.404#	41.854*

Memb 18, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000	0.000#
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000	0.000*

Memb 19, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	51.707	-0.358	0.005	0.000	-0.016#	1.667*
0.618	51.707	-0.358	0.005	0.000	-0.013	1.446
1.236	51.707	-0.358	0.005	0.000	-0.010	1.224
1.853	51.707	-0.358	0.005	0.000	-0.007	1.003
2.471	51.707	-0.358	0.005	0.000	-0.004	0.781
3.089	51.707	-0.358	0.005	0.000	-0.001	0.560
3.707	51.707	-0.358	0.005	0.000	0.002*	0.339#

Memb 20, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000#	0.000*
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000*	0.000#

Memb 21, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.085	-1.404	-0.015	-0.051	0.003*	0.000*
0.069	-0.085	-1.404	-0.015	-0.051	0.002	-0.097
0.139	-0.085	-1.404	-0.015	-0.051	0.001	-0.195
0.208	-0.085	-1.404	-0.015	-0.051	0.000	-0.292
0.278	-0.085	-1.404	-0.015	-0.051	-0.001	-0.390
0.347	-0.085	-1.404	-0.015	-0.051	-0.002	-0.487
0.417	-0.085	-1.404	-0.015	-0.051	-0.003#	-0.585#

Memb 22, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.551	0.009	-0.559	5.653	1.329*	0.000#
0.897	0.551	0.009	-0.559	5.653	0.828	0.008
1.793	0.551	0.009	-0.559	5.653	0.327	0.017
2.690	0.551	0.009	-0.559	5.653	-0.173	0.025
3.586	0.551	0.009	-0.559	5.653	-0.674	0.034
4.483	0.551	0.009	-0.559	5.653	-1.175	0.042
5.379	0.551	0.009	-0.559	5.653	-1.676#	0.051*

Memb 23, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000	0.000#
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000	0.000*

Memb 24, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	1.406	0.000	0.015	0.000	-0.052#	0.000#
1.152	1.406	0.000	0.015	0.000	-0.035	0.000
2.304	1.406	0.000	0.015	0.000	-0.018	0.000
3.456	1.406	0.000	0.015	0.000	-0.001	0.001
4.608	1.406	0.000	0.015	0.000	0.015	0.001
5.760	1.406	0.000	0.015	0.000	0.032	0.001
6.913	1.406	0.000	0.015	0.000	0.049*	0.001*

Memb 25, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000#	0.000*
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000*	0.000#

Memb 26, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	90.178*	0.000	0.000	0.000	-36.090
0.433	0.000	57.821	0.000	0.000	0.000	-4.024
0.867	0.000	25.464	0.000	0.000	0.000	14.021
1.300	0.000	-6.893	0.000	0.000	0.000	18.045*
1.733	0.000	-39.250	0.000	0.000	0.000	8.048
2.167	0.000	-71.607	0.000	0.000	0.000	-15.971
2.600	0.000	-103.964#	0.000	0.000	0.000	-54.011#

Memb 27, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	119.472*	0.000	0.000	0.000	-63.718
0.533	0.000	79.648	0.000	0.000	0.000	-10.620
1.067	0.000	39.824	0.000	0.000	0.000	21.239
1.600	0.000	0.000	0.000	0.000	0.000	31.859*
2.133	0.000	-39.824	0.000	0.000	0.000	21.239
2.667	0.000	-79.648	0.000	0.000	0.000	-10.620
3.200	0.000	-119.472#	0.000	0.000	0.000	-63.718#

Memb 28, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	108.271*	0.000	0.000	0.000	-52.331#
0.483	0.000	72.181	0.000	0.000	0.000	-8.722
0.967	0.000	36.090	0.000	0.000	0.000	17.444
1.450	0.000	0.000	0.000	0.000	0.000	26.166*
1.933	0.000	-36.090	0.000	0.000	0.000	17.444
2.417	0.000	-72.181	0.000	0.000	0.000	-8.722
2.900	0.000	-108.271#	0.000	0.000	0.000	-52.331

Memb 29, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	2.566	-43.063*	15.492	1.747	-14.982#	71.437*
0.250	2.566	-61.730	15.492	1.747	-11.110	58.338
0.500	2.566	-80.398	15.492	1.747	-7.237	40.572
0.750	2.566	-99.065	15.492	1.747	-3.364	18.139
1.000	2.566	-117.733	15.492	1.747	0.509	-8.961
1.250	2.566	-136.400	15.492	1.747	4.382	-40.728
1.500	2.566	-155.068#	15.492	1.747	8.255*	-77.161#

Memb 30, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	114.922*	0.000	0.000	0.000	-54.011
0.533	0.000	75.098	0.000	0.000	0.000	-3.339
1.067	0.000	35.274	0.000	0.000	0.000	26.093
1.600	0.000	-4.550	0.000	0.000	0.000	34.286*
2.133	0.000	-44.374	0.000	0.000	0.000	21.239
2.667	0.000	-84.198	0.000	0.000	0.000	-13.046
3.200	0.000	-124.022#	0.000	0.000	0.000	-68.572#

Memb 31, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-1.925	158.155*	-13.412	-3.582	13.252*	-105.322#
0.333	-1.925	133.265	-13.412	-3.582	8.782	-56.752
0.667	-1.925	108.375	-13.412	-3.582	4.311	-16.479
1.000	-1.925	83.485	-13.412	-3.582	-0.160	15.498
1.333	-1.925	58.595	-13.412	-3.582	-4.631	39.178
1.667	-1.925	33.705	-13.412	-3.582	-9.102	54.561
2.000	-1.925	8.815#	-13.412	-3.582	-13.572#	61.648*

Memb 32, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	117.319*	-4.762	1.747	8.255*	-77.161#
0.433	0.000	84.962	-4.762	1.747	6.191	-33.334
0.867	0.000	52.605	-4.762	1.747	4.127	-3.527
1.300	0.000	20.248	-4.762	1.747	2.064	12.258
1.733	0.000	-12.109	-4.762	1.747	0.000	14.021*
2.167	0.000	-44.466	-4.762	1.747	-2.064	1.764
2.600	0.000	-76.823#	-4.762	1.747	-4.127#	-24.516

Memb 33, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	246.330*	0.000	0.000	0.000	-283.280#
1.150	0.000	164.220	0.000	0.000	0.000	-47.213
2.300	0.000	82.110	0.000	0.000	0.000	94.426
3.450	0.000	0.000	0.000	0.000	0.000	141.640*
4.600	0.000	-82.110	0.000	0.000	0.000	94.426
5.750	0.000	-164.220	0.000	0.000	0.000	-47.213
6.900	0.000	-246.330#	0.000	0.000	0.000	-283.279

Memb 34, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	246.330*	0.000	0.000	0.000	-283.280#
1.150	0.000	164.220	0.000	0.000	0.000	-47.213
2.300	0.000	82.110	0.000	0.000	0.000	94.426
3.450	0.000	0.000	0.000	0.000	0.000	141.640*
4.600	0.000	-82.110	0.000	0.000	0.000	94.426
5.750	0.000	-164.220	0.000	0.000	0.000	-47.213
6.900	0.000	-246.330#	0.000	0.000	0.000	-283.279

Memb 35, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	4.845	-0.008	-0.117	0.138	1.231*	0.025*
0.897	4.845	-0.008	-0.117	0.138	1.126	0.018
1.793	4.845	-0.008	-0.117	0.138	1.021	0.011
2.690	4.845	-0.008	-0.117	0.138	0.916	0.004
3.586	4.845	-0.008	-0.117	0.138	0.811	-0.003
4.483	4.845	-0.008	-0.117	0.138	0.706	-0.010
5.379	4.845	-0.008	-0.117	0.138	0.601#	-0.017#

Memb 36, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-8.691	-1.095	1.794	-2.498	-5.620#	3.967*
0.897	-8.691	-1.095	1.794	-2.498	-4.012	2.985
1.793	-8.691	-1.095	1.794	-2.498	-2.404	2.004
2.690	-8.691	-1.095	1.794	-2.498	-0.795	1.022
3.586	-8.691	-1.095	1.794	-2.498	0.813	0.040
4.483	-8.691	-1.095	1.794	-2.498	2.421	-0.942
5.379	-8.691	-1.095	1.794	-2.498	4.030*	-1.924#

Memb 37, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	61.315	-34.625	-2.950	-3.415	11.371*	144.807*
0.897	61.315	-34.625	-2.950	-3.415	8.727	113.765
1.793	61.315	-34.625	-2.950	-3.415	6.083	82.722
2.690	61.315	-34.625	-2.950	-3.415	3.438	51.680
3.586	61.315	-34.625	-2.950	-3.415	0.794	20.638
4.483	61.315	-34.625	-2.950	-3.415	-1.850	-10.405
5.379	61.315	-34.625	-2.950	-3.415	-4.495#	-41.447#

Memb 39, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-3.685	-1.751	1.103	6.665	-3.266#	6.326*
0.897	-3.685	-1.751	1.103	6.665	-2.276	4.757
1.793	-3.685	-1.751	1.103	6.665	-1.287	3.187
2.690	-3.685	-1.751	1.103	6.665	-0.298	1.617
3.586	-3.685	-1.751	1.103	6.665	0.691	0.048
4.483	-3.685	-1.751	1.103	6.665	1.680	-1.522
5.379	-3.685	-1.751	1.103	6.665	2.669*	-3.092#

Memb 40, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.277	4.941*	-0.571	0.243	1.031*	-1.526
0.967	-0.277	3.196	-0.571	0.243	0.480	2.407
1.933	-0.277	1.450	-0.571	0.243	-0.072	4.652
2.900	-0.277	-0.296	-0.571	0.243	-0.624	5.210*
3.867	-0.277	-2.042	-0.571	0.243	-1.175	4.080
4.833	-0.277	-3.788	-0.571	0.243	-1.727	1.262
5.800	-0.277	-5.533#	-0.571	0.243	-2.278#	-3.243#

Memb 41, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	4.784	-8.066*	15.707	21.942	-25.525#	3.977*
0.533	4.784	-9.029	15.707	21.942	-17.148	-0.582
1.067	4.784	-9.992	15.707	21.942	-8.771	-5.654
1.600	4.784	-10.955	15.707	21.942	-0.394	-11.240
2.133	4.784	-11.918	15.707	21.942	7.983	-17.339
2.667	4.784	-12.882	15.707	21.942	16.360	-23.952
3.200	4.784	-13.845#	15.707	21.942	24.737*	-31.079#

Memb 42, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	12.966	6.718*	1.242	3.293	-1.704#	2.329#
0.817	12.966	5.243	1.242	3.293	-0.690	7.213
1.633	12.966	3.768	1.242	3.293	0.324	10.893
2.450	12.966	2.293	1.242	3.293	1.338	13.368
3.267	12.966	0.818	1.242	3.293	2.352	14.639
4.083	12.966	-0.656	1.242	3.293	3.366	14.705*
4.900	12.966	-2.131#	1.242	3.293	4.380*	13.566

Memb 43, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	5.001	6.000*	-9.114	-20.860	20.459*	-12.784#
0.683	5.001	4.766	-9.114	-20.860	14.231	-9.106
1.367	5.001	3.532	-9.114	-20.860	8.003	-6.271
2.050	5.001	2.298	-9.114	-20.860	1.775	-4.279
2.733	5.001	1.064	-9.114	-20.860	-4.452	-3.131
3.417	5.001	-0.170	-9.114	-20.860	-10.680	-2.825*
4.100	5.001	-1.405#	-9.114	-20.860	-16.908#	-3.363

Memb 44, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.563	-0.096	0.393	0.295	-0.890#	0.218*
0.717	-0.563	-0.096	0.393	0.295	-0.608	0.149
1.433	-0.563	-0.096	0.393	0.295	-0.326	0.081
2.150	-0.563	-0.096	0.393	0.295	-0.044	0.012
2.867	-0.563	-0.096	0.393	0.295	0.238	-0.057
3.583	-0.563	-0.096	0.393	0.295	0.520	-0.126
4.300	-0.563	-0.096	0.393	0.295	0.802*	-0.194#

Memb 45, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	2.256	3.369*	-0.589	-0.002	1.239*	-3.025#
0.967	2.256	2.313	-0.589	-0.002	0.669	-0.278
1.933	2.256	1.258	-0.589	-0.002	0.100	1.448
2.900	2.256	0.202	-0.589	-0.002	-0.469	2.153*
3.867	2.256	-0.853	-0.589	-0.002	-1.039	1.839
4.833	2.256	-1.909	-0.589	-0.002	-1.608	0.504
5.800	2.256	-2.965#	-0.589	-0.002	-2.178#	-1.852

Memb 46, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-6.022	1.726*	15.142	-0.269	-25.264#	-2.441
0.533	-6.022	1.143	15.142	-0.269	-17.188	-1.676
1.067	-6.022	0.561	15.142	-0.269	-9.113	-1.221
1.600	-6.022	-0.022	15.142	-0.269	-1.037	-1.077*
2.133	-6.022	-0.604	15.142	-0.269	7.039	-1.244
2.667	-6.022	-1.186	15.142	-0.269	15.115	-1.722
3.200	-6.022	-1.769#	15.142	-0.269	23.191*	-2.510#

Memb 47, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-12.930	2.891*	1.219	-0.283	-1.010#	-1.506#
0.817	-12.930	2.000	1.219	-0.283	-0.014	0.491
1.633	-12.930	1.108	1.219	-0.283	0.982	1.760
2.450	-12.930	0.216	1.219	-0.283	1.978	2.301*
3.267	-12.930	-0.676	1.219	-0.283	2.974	2.113
4.083	-12.930	-1.568	1.219	-0.283	3.970	1.197
4.900	-12.930	-2.459#	1.219	-0.283	4.965*	-0.448

Memb 48, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-7.568	3.796*	-9.198	0.527	19.932*	-5.149#
0.683	-7.568	3.049	-9.198	0.527	13.646	-2.811
1.367	-7.568	2.303	-9.198	0.527	7.361	-0.982
2.050	-7.568	1.557	-9.198	0.527	1.076	0.337
2.733	-7.568	0.811	-9.198	0.527	-5.209	1.146
3.417	-7.568	0.065	-9.198	0.527	-11.494	1.445*
4.100	-7.568	-0.682#	-9.198	0.527	-17.780#	1.234

Memb 49, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-10.592	-0.215	6.994	0.092	-12.077#	0.526*
0.433	-10.592	-0.215	6.994	0.092	-9.046	0.433
0.867	-10.592	-0.215	6.994	0.092	-6.016	0.340
1.300	-10.592	-0.215	6.994	0.092	-2.985	0.247
1.733	-10.592	-0.215	6.994	0.092	0.046	0.153
2.167	-10.592	-0.215	6.994	0.092	3.077	0.060
2.600	-10.592	-0.215	6.994	0.092	6.108*	-0.033#

Memb 50, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-21.820	43.285	-5.224	-44.779	23.000*	-180.949#
0.683	-21.820	43.285	-5.224	-44.779	19.430	-151.371
1.367	-21.820	43.285	-5.224	-44.779	15.860	-121.792
2.050	-21.820	43.285	-5.224	-44.779	12.291	-92.214
2.733	-21.820	43.285	-5.224	-44.779	8.721	-62.635
3.417	-21.820	43.285	-5.224	-44.779	5.151	-33.057
4.100	-21.820	43.285	-5.224	-44.779	1.581#	-3.479*

Memb 51, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-33.042	47.221	3.469	40.718	-14.652#	-197.468#
0.683	-33.042	47.221	3.469	40.718	-12.282	-165.200
1.367	-33.042	47.221	3.469	40.718	-9.911	-132.932
2.050	-33.042	47.221	3.469	40.718	-7.540	-100.664
2.733	-33.042	47.221	3.469	40.718	-5.170	-68.396
3.417	-33.042	47.221	3.469	40.718	-2.799	-36.128
4.100	-33.042	47.221	3.469	40.718	-0.428*	-3.860*

Memb 52, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	15.815	-6.062	-6.850	-1.598	20.733*	17.083*
0.683	15.815	-6.062	-6.850	-1.598	16.052	12.940
1.367	15.815	-6.062	-6.850	-1.598	11.370	8.798
2.050	15.815	-6.062	-6.850	-1.598	6.689	4.655
2.733	15.815	-6.062	-6.850	-1.598	2.008	0.513
3.417	15.815	-6.062	-6.850	-1.598	-2.673	-3.630
4.100	15.815	-6.062	-6.850	-1.598	-7.354#	-7.773#

Memb 53, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	51.707	-0.358	0.005	0.000	0.002#	0.339*
0.534	51.707	-0.358	0.005	0.000	0.005	0.147
1.069	51.707	-0.358	0.005	0.000	0.008	-0.044
1.603	51.707	-0.358	0.005	0.000	0.011	-0.236
2.137	51.707	-0.358	0.005	0.000	0.013	-0.428
2.672	51.707	-0.358	0.005	0.000	0.016	-0.619
3.206	51.707	-0.358	0.005	0.000	0.019*	-0.811#

Memb 54, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	9.461	5.005	3.883	-0.101	-5.728#	-6.572#
0.683	9.461	5.005	3.883	-0.101	-3.075	-3.152
1.367	9.461	5.005	3.883	-0.101	-0.422	0.268
2.050	9.461	5.005	3.883	-0.101	2.231	3.688
2.733	9.461	5.005	3.883	-0.101	4.885	7.109
3.417	9.461	5.005	3.883	-0.101	7.538	10.529
4.100	9.461	5.005	3.883	-0.101	10.191*	13.949*

Memb 55, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-15.529	0.212	-8.892	0.819	2.252*	-0.275#
0.433	-15.529	0.212	-8.892	0.819	-1.601	-0.183
0.867	-15.529	0.212	-8.892	0.819	-5.454	-0.091
1.300	-15.529	0.212	-8.892	0.819	-9.308	0.001
1.733	-15.529	0.212	-8.892	0.819	-13.161	0.093
2.167	-15.529	0.212	-8.892	0.819	-17.014	0.184
2.600	-15.529	0.212	-8.892	0.819	-20.868#	0.276*

Memb 57, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-3.475	-51.591	-0.005	-0.016	0.001*	-1.667*
0.069	-3.475	-51.591	-0.005	-0.016	0.001	-5.250
0.139	-3.475	-51.591	-0.005	-0.016	0.001	-8.833
0.208	-3.475	-51.591	-0.005	-0.016	0.000	-12.416
0.278	-3.475	-51.591	-0.005	-0.016	0.000	-15.999
0.347	-3.475	-51.591	-0.005	-0.016	0.000	-19.582
0.417	-3.475	-51.591	-0.005	-0.016	-0.001#	-23.165#

Memb 58, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.745	6.676	0.151	0.000	-0.238#	-11.325#
0.533	0.745	6.676	0.151	0.000	-0.157	-7.764
1.067	0.745	6.676	0.151	0.000	-0.077	-4.204
1.600	0.745	6.676	0.151	0.000	0.004	-0.643
2.133	0.745	6.676	0.151	0.000	0.084	2.917
2.667	0.745	6.676	0.151	0.000	0.165	6.478
3.200	0.745	6.676	0.151	0.000	0.245*	10.039*

Memb 59, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.391	32.286*	0.013	0.000	-0.037#	-39.258#
0.817	0.391	32.286*	0.013	0.000	-0.026	-12.891
1.633	0.391	32.286*	0.013	0.000	-0.016	13.476
2.450	0.391	32.286*	0.013	0.000	-0.005	39.843*
2.450	0.391	-31.464#	0.013	0.000	-0.005	39.843*
3.267	0.391	-31.464#	0.013	0.000	0.005	14.148
4.083	0.391	-31.464#	0.013	0.000	0.016	-11.547
4.900	0.391	-31.464#	0.013	0.000	0.027*	-37.243

Memb 60, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	1.010	-3.881	-0.097	0.000	0.202*	7.507*
0.683	1.010	-3.881	-0.097	0.000	0.136	4.855
1.367	1.010	-3.881	-0.097	0.000	0.070	2.202
2.050	1.010	-3.881	-0.097	0.000	0.003	-0.450
2.733	1.010	-3.881	-0.097	0.000	-0.063	-3.102
3.417	1.010	-3.881	-0.097	0.000	-0.129	-5.755
4.100	1.010	-3.881	-0.097	0.000	-0.196#	-8.407#

Memb 61, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	-32.398	4.893	0.000	-0.489#	-0.092*
0.033	0.000	-32.398	4.893	0.000	-0.326	-1.172
0.067	0.000	-32.398	4.893	0.000	-0.163	-2.252
0.100	0.000	-32.398	4.893	0.000	0.000	-3.332
0.133	0.000	-32.398	4.893	0.000	0.163	-4.412
0.167	0.000	-32.398	4.893	0.000	0.326	-5.492
0.200	0.000	-32.398	4.893	0.000	0.489*	-6.572#

Memb 62, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.589	0.076	1.210	-0.074	-1.689#	-0.194#
0.433	0.589	0.076	1.210	-0.074	-1.165	-0.162
0.867	0.589	0.076	1.210	-0.074	-0.640	-0.129
1.300	0.589	0.076	1.210	-0.074	-0.116	-0.096
1.733	0.589	0.076	1.210	-0.074	0.408	-0.063
2.167	0.589	0.076	1.210	-0.074	0.932	-0.030
2.600	0.589	0.076	1.210	-0.074	1.456*	0.003*

Memb 63, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	51.878	-28.904	4.491	1.410	-14.368#	150.150*
0.897	51.878	-28.904	4.491	1.410	-10.342	124.237
1.793	51.878	-28.904	4.491	1.410	-6.316	98.323
2.690	51.878	-28.904	4.491	1.410	-2.290	72.410
3.586	51.878	-28.904	4.491	1.410	1.737	46.497
4.483	51.878	-28.904	4.491	1.410	5.763	20.584
5.379	51.878	-28.904	4.491	1.410	9.789*	-5.329#

Memb 67, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.304	12.656*	0.000	0.000	0.000	0.000#
0.967	-0.304	8.438	0.000	0.000	0.000	10.195
1.933	-0.304	4.219	0.000	0.000	0.000	16.313
2.900	-0.304	0.000	0.000	0.000	0.000	18.352*
3.867	-0.304	-4.219	0.000	0.000	0.000	16.313
4.833	-0.304	-8.438	0.000	0.000	0.000	10.195
5.800	-0.304	-12.656#	0.000	0.000	0.000	0.000

Memb 68, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	-35.928	-7.596	0.000	0.760*	-0.587*
0.033	0.000	-35.928	-7.596	0.000	0.506	-1.784
0.067	0.000	-35.928	-7.596	0.000	0.253	-2.982
0.100	0.000	-35.928	-7.596	0.000	0.000	-4.180
0.133	0.000	-35.928	-7.596	0.000	-0.253	-5.377
0.167	0.000	-35.928	-7.596	0.000	-0.506	-6.575
0.200	0.000	-35.928	-7.596	0.000	-0.760#	-7.772#

Memb 70, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-21.958	-17.675	-4.871	4.518	-0.889*	0.056*
0.033	-21.958	-17.675	-4.871	4.518	-1.051	-0.533
0.067	-21.958	-17.675	-4.871	4.518	-1.214	-1.122
0.100	-21.958	-17.675	-4.871	4.518	-1.376	-1.711
0.133	-21.958	-17.675	-4.871	4.518	-1.538	-2.300
0.167	-21.958	-17.675	-4.871	4.518	-1.701	-2.890
0.200	-21.958	-17.675	-4.871	4.518	-1.863#	-3.479#

Memb 71, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.993	6.983*	0.330	0.064	-0.520#	0.000#
0.533	0.993	4.655	0.330	0.064	-0.344	3.103
1.067	0.993	2.328	0.330	0.064	-0.168	4.966
1.600	0.993	0.000	0.330	0.064	0.008	5.586*
2.133	0.993	-2.328	0.330	0.064	0.184	4.966
2.667	0.993	-4.655	0.330	0.064	0.360	3.103
3.200	0.993	-6.983#	0.330	0.064	0.536*	0.000

Memb 72, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-33.152	-19.639	2.850	-4.031	0.034#	0.067*
0.033	-33.152	-19.639	2.850	-4.031	0.129	-0.587
0.067	-33.152	-19.639	2.850	-4.031	0.224	-1.242
0.100	-33.152	-19.639	2.850	-4.031	0.319	-1.897
0.133	-33.152	-19.639	2.850	-4.031	0.414	-2.551
0.167	-33.152	-19.639	2.850	-4.031	0.509	-3.206
0.200	-33.152	-19.639	2.850	-4.031	0.604*	-3.861#

Memb 73, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	4.222	10.692*	0.029	0.008	-0.081#	0.000
0.817	4.222	7.128	0.029	0.008	-0.058	7.277
1.633	4.222	3.564	0.029	0.008	-0.035	11.643
2.450	4.222	0.000	0.029	0.008	-0.011	13.098*
3.267	4.222	-3.564	0.029	0.008	0.012	11.643
4.083	4.222	-7.128	0.029	0.008	0.035	7.277
4.900	4.222	-10.692#	0.029	0.008	0.059*	0.000#

Memb 74, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	2.102	8.947*	-0.212	-0.059	0.442*	0.000#
0.683	2.102	5.964	-0.212	-0.059	0.297	5.095
1.367	2.102	2.982	-0.212	-0.059	0.152	8.151
2.050	2.102	0.000	-0.212	-0.059	0.007	9.170*
2.733	2.102	-2.982	-0.212	-0.059	-0.137	8.151
3.417	2.102	-5.964	-0.212	-0.059	-0.282	5.095
4.100	2.102	-8.947#	-0.212	-0.059	-0.427#	0.000

Memb 75, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-33.393	0.000	4.971	-4.031	-0.417#	0.000
0.433	-33.393	0.000	4.971	-4.031	1.737	0.000
0.867	-33.393	0.000	4.971	-4.031	3.891	0.000
1.300	-33.393	0.000	4.971	-4.031	6.045	0.000
1.733	-33.393	0.000	4.971	-4.031	8.199	0.000
2.167	-33.393	0.000	4.971	-4.031	10.354	0.000
2.600	-33.393	0.000	4.971	-4.031	12.508*	0.000

Memb 76, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-22.259	0.000	-8.099	4.518	1.506*	0.000
0.433	-22.259	0.000	-8.099	4.518	-2.004	0.000
0.867	-22.259	0.000	-8.099	4.518	-5.513	0.000
1.300	-22.259	0.000	-8.099	4.518	-9.023	0.000
1.733	-22.259	0.000	-8.099	4.518	-12.533	0.000
2.167	-22.259	0.000	-8.099	4.518	-16.042	0.000
2.600	-22.259	0.000	-8.099	4.518	-19.552#	0.000

Memb 77, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.195	-0.011	-0.006	0.000	-0.001*	0.019*
0.434	-0.195	-0.011	-0.006	0.000	-0.003	0.015
0.868	-0.195	-0.011	-0.006	0.000	-0.006	0.010
1.302	-0.195	-0.011	-0.006	0.000	-0.008	0.005
1.736	-0.195	-0.011	-0.006	0.000	-0.011	0.000
2.171	-0.195	-0.011	-0.006	0.000	-0.013	-0.005
2.605	-0.195	-0.011	-0.006	0.000	-0.015#	-0.009#

Memb 78, Case 5 (Linear): 1.4DL +1.7LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.097	1.753	0.001	0.004	-0.001#	-0.028#
0.026	0.097	1.753	0.001	0.004	-0.001	0.018
0.052	0.097	1.753	0.001	0.004	-0.001	0.064
0.079	0.097	1.753	0.001	0.004	-0.001	0.110
0.105	0.097	1.753	0.001	0.004	-0.001	0.156
0.131	0.097	1.753	0.001	0.004	-0.001	0.202
0.157	0.097	1.753	0.001	0.004	-0.001*	0.248*

Memb 1, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	-0.001	0.000	-0.002	0.000*	0.000*
0.069	0.000	-0.001	0.000	-0.002	0.000	0.000
0.139	0.000	-0.001	0.000	-0.002	0.000	0.000
0.208	0.000	-0.001	0.000	-0.002	0.000	0.000
0.278	0.000	-0.001	0.000	-0.002	0.000	0.000
0.347	0.000	-0.001	0.000	-0.002	0.000	0.000
0.417	0.000	-0.001	0.000	-0.002	0.000#	-0.001#

Memb 2, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	2.249	0.000	-0.582	-0.102	1.716*	0.000*
0.897	2.249	0.000	-0.582	-0.102	1.195	0.000
1.793	2.249	0.000	-0.582	-0.102	0.673	0.000
2.690	2.249	0.000	-0.582	-0.102	0.152	-0.001
3.586	2.249	0.000	-0.582	-0.102	-0.370	-0.001
4.483	2.249	0.000	-0.582	-0.102	-0.891	-0.001
5.379	2.249	0.000	-0.582	-0.102	-1.413#	-0.001#

Memb 3, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000#	0.000*
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000*	0.000#

Memb 4, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.001	0.000	0.000	0.000	-0.002#	0.000*
1.152	0.001	0.000	0.000	0.000	-0.001	0.000
2.304	0.001	0.000	0.000	0.000	-0.001	0.000
3.456	0.001	0.000	0.000	0.000	0.000	0.000
4.608	0.001	0.000	0.000	0.000	0.000	0.000
5.760	0.001	0.000	0.000	0.000	0.001	0.000
6.913	0.001	0.000	0.000	0.000	0.001*	0.000#

Memb 5, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.062	-1.006	0.002	0.007	0.000#	0.000*
0.069	-0.062	-1.006	0.002	0.007	0.000	-0.070
0.139	-0.062	-1.006	0.002	0.007	0.000	-0.140
0.208	-0.062	-1.006	0.002	0.007	0.000	-0.210
0.278	-0.062	-1.006	0.002	0.007	0.000	-0.280
0.347	-0.062	-1.006	0.002	0.007	0.001	-0.349
0.417	-0.062	-1.006	0.002	0.007	0.001*	-0.419#

Memb 6, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000*	0.000*
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000#	0.000#

Memb 7, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	3.112	-0.002	-0.229	-1.004	0.442*	0.000*
0.897	3.112	-0.002	-0.229	-1.004	0.237	-0.002
1.793	3.112	-0.002	-0.229	-1.004	0.032	-0.004
2.690	3.112	-0.002	-0.229	-1.004	-0.173	-0.006
3.586	3.112	-0.002	-0.229	-1.004	-0.378	-0.008
4.483	3.112	-0.002	-0.229	-1.004	-0.583	-0.010
5.379	3.112	-0.002	-0.229	-1.004	-0.788#	-0.012#

Memb 8, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000*	0.000#
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000#	0.000*

Memb 9, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	1.008	-0.001	-0.002	0.000	0.007*	0.000*
0.718	1.008	-0.001	-0.002	0.000	0.006	-0.001
1.436	1.008	-0.001	-0.002	0.000	0.004	-0.001
2.154	1.008	-0.001	-0.002	0.000	0.002	-0.002
2.872	1.008	-0.001	-0.002	0.000	0.001	-0.003
3.590	1.008	-0.001	-0.002	0.000	-0.001	-0.003
4.308	1.008	-0.001	-0.002	0.000	-0.002#	-0.004#

Memb 10, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000*	0.000#
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000#	0.000*

Memb 11, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-1.746	-28.933	0.003	0.010	-0.001#	0.000*
0.069	-1.746	-28.933	0.003	0.010	-0.001	-2.009
0.139	-1.746	-28.933	0.003	0.010	-0.001	-4.019
0.208	-1.746	-28.933	0.003	0.010	0.000	-6.028
0.278	-1.746	-28.933	0.003	0.010	0.000	-8.037
0.347	-1.746	-28.933	0.003	0.010	0.000	-10.047
0.417	-1.746	-28.933	0.003	0.010	0.000*	-12.056#

Memb 12, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	5.205	2.606	-0.669	-1.959	2.033*	0.000#
0.897	5.205	2.606	-0.669	-1.959	1.433	2.337
1.793	5.205	2.606	-0.669	-1.959	0.833	4.673
2.690	5.205	2.606	-0.669	-1.959	0.233	7.010
3.586	5.205	2.606	-0.669	-1.959	-0.368	9.346
4.483	5.205	2.606	-0.669	-1.959	-0.968	11.683
5.379	5.205	2.606	-0.669	-1.959	-1.568#	14.019*

Memb 13, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000#	0.000*
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000*	0.000#

Memb 14, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	28.986	0.001	-0.003	0.000	0.011*	0.000#
1.152	28.986	0.001	-0.003	0.000	0.007	0.002
2.304	28.986	0.001	-0.003	0.000	0.003	0.003
3.456	28.986	0.001	-0.003	0.000	-0.001	0.005
4.608	28.986	0.001	-0.003	0.000	-0.004	0.006
5.760	28.986	0.001	-0.003	0.000	-0.008	0.008
6.913	28.986	0.001	-0.003	0.000	-0.012#	0.009*

Memb 15, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000*	0.000#
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000#	0.000*

Memb 17, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	6.824	3.059	-0.087	1.049	-0.022*	0.000#
0.897	6.824	3.059	-0.087	1.049	-0.100	2.742
1.793	6.824	3.059	-0.087	1.049	-0.179	5.485
2.690	6.824	3.059	-0.087	1.049	-0.257	8.227
3.586	6.824	3.059	-0.087	1.049	-0.335	10.970
4.483	6.824	3.059	-0.087	1.049	-0.414	13.712
5.379	6.824	3.059	-0.087	1.049	-0.492#	16.455*

Memb 18, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000*	0.000#
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000#	0.000*

Memb 19, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	35.769	-0.246	0.002	0.000	-0.007#	1.146*
0.618	35.769	-0.246	0.002	0.000	-0.006	0.994
1.236	35.769	-0.246	0.002	0.000	-0.004	0.841
1.853	35.769	-0.246	0.002	0.000	-0.003	0.689
2.471	35.769	-0.246	0.002	0.000	-0.002	0.537
3.089	35.769	-0.246	0.002	0.000	0.000	0.385
3.707	35.769	-0.246	0.002	0.000	0.001*	0.232#

Memb 20, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000*	0.000#
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000#	0.000*

Memb 21, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.057	-0.938	-0.006	-0.020	0.001*	0.000*
0.069	-0.057	-0.938	-0.006	-0.020	0.001	-0.065
0.139	-0.057	-0.938	-0.006	-0.020	0.000	-0.130
0.208	-0.057	-0.938	-0.006	-0.020	0.000	-0.195
0.278	-0.057	-0.938	-0.006	-0.020	0.000	-0.260
0.347	-0.057	-0.938	-0.006	-0.020	-0.001	-0.326
0.417	-0.057	-0.938	-0.006	-0.020	-0.001#	-0.391#

Memb 22, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.518	0.004	-0.258	2.190	0.606*	0.000#
0.897	0.518	0.004	-0.258	2.190	0.374	0.004
1.793	0.518	0.004	-0.258	2.190	0.143	0.007
2.690	0.518	0.004	-0.258	2.190	-0.089	0.011
3.586	0.518	0.004	-0.258	2.190	-0.320	0.014
4.483	0.518	0.004	-0.258	2.190	-0.552	0.018
5.379	0.518	0.004	-0.258	2.190	-0.783#	0.022*

Memb 23, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000#	0.000#
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000*	0.000*

Memb 24, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.939	0.000	0.006	0.000	-0.020#	0.000#
1.152	0.939	0.000	0.006	0.000	-0.014	0.000
2.304	0.939	0.000	0.006	0.000	-0.007	0.000
3.456	0.939	0.000	0.006	0.000	-0.001	0.000
4.608	0.939	0.000	0.006	0.000	0.006	0.001
5.760	0.939	0.000	0.006	0.000	0.013	0.001
6.913	0.939	0.000	0.006	0.000	0.019*	0.001*

Memb 25, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000	0.000#
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000	0.000*

Memb 26, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	64.469*	0.000	0.000	0.000	-25.801
0.433	0.000	41.337	0.000	0.000	0.000	-2.877
0.867	0.000	18.205	0.000	0.000	0.000	10.024
1.300	0.000	-4.928	0.000	0.000	0.000	12.901*
1.733	0.000	-28.060	0.000	0.000	0.000	5.753
2.167	0.000	-51.192	0.000	0.000	0.000	-11.418
2.600	0.000	-74.324#	0.000	0.000	0.000	-38.613#

Memb 27, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	85.411*	0.000	0.000	0.000	-45.553
0.533	0.000	56.941	0.000	0.000	0.000	-7.592
1.067	0.000	28.470	0.000	0.000	0.000	15.184
1.600	0.000	0.000	0.000	0.000	0.000	22.776*
2.133	0.000	-28.470	0.000	0.000	0.000	15.184
2.667	0.000	-56.941	0.000	0.000	0.000	-7.592
3.200	0.000	-85.411#	0.000	0.000	0.000	-45.553#

Memb 28, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	77.404*	0.000	0.000	0.000	-37.412#
0.483	0.000	51.603	0.000	0.000	0.000	-6.235
0.967	0.000	25.801	0.000	0.000	0.000	12.471
1.450	0.000	0.000	0.000	0.000	0.000	18.706*
1.933	0.000	-25.801	0.000	0.000	0.000	12.471
2.417	0.000	-51.603	0.000	0.000	0.000	-6.235
2.900	0.000	-77.404#	0.000	0.000	0.000	-37.412

Memb 29, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	1.792	-31.831*	12.125	2.215	-11.673#	52.033*
0.250	1.792	-45.177	12.125	2.215	-8.642	42.407
0.500	1.792	-58.522	12.125	2.215	-5.610	29.445
0.750	1.792	-71.868	12.125	2.215	-2.579	13.146
1.000	1.792	-85.213	12.125	2.215	0.452	-6.489
1.250	1.792	-98.559	12.125	2.215	3.483	-29.461
1.500	1.792	-111.904#	12.125	2.215	6.514*	-55.769#

Memb 30, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	82.158*	0.000	0.000	0.000	-38.613
0.533	0.000	53.688	0.000	0.000	0.000	-2.387
1.067	0.000	25.217	0.000	0.000	0.000	18.654
1.600	0.000	-3.253	0.000	0.000	0.000	24.511*
2.133	0.000	-31.723	0.000	0.000	0.000	15.184
2.667	0.000	-60.194	0.000	0.000	0.000	-9.327
3.200	0.000	-88.664#	0.000	0.000	0.000	-49.022#

Memb 31, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-1.344	114.280*	-10.838	-4.542	10.655*	-76.447#
0.333	-1.344	96.486	-10.838	-4.542	7.043	-41.319
0.667	-1.344	78.692	-10.838	-4.542	3.430	-12.123
1.000	-1.344	60.898	-10.838	-4.542	-0.183	11.142
1.333	-1.344	43.104	-10.838	-4.542	-3.795	28.476
1.667	-1.344	25.310	-10.838	-4.542	-7.408	39.878
2.000	-1.344	7.516#	-10.838	-4.542	-11.021#	45.349*

Memb 32, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	84.222*	-3.758	2.215	6.514*	-55.769#
0.433	0.000	61.089	-3.758	2.215	4.886	-24.284
0.867	0.000	37.957	-3.758	2.215	3.257	-2.824
1.300	0.000	14.825	-3.758	2.215	1.629	8.612
1.733	0.000	-8.307	-3.758	2.215	0.000	10.024*
2.167	0.000	-31.439	-3.758	2.215	-1.629	1.412
2.600	0.000	-54.572#	-3.758	2.215	-3.257#	-17.224

Memb 33, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	175.950*	0.000	0.000	0.000	-202.342#
1.150	0.000	117.300	0.000	0.000	0.000	-33.724
2.300	0.000	58.650	0.000	0.000	0.000	67.447
3.450	0.000	0.000	0.000	0.000	0.000	101.171*
4.600	0.000	-58.650	0.000	0.000	0.000	67.447
5.750	0.000	-117.300	0.000	0.000	0.000	-33.724
6.900	0.000	-175.950#	0.000	0.000	0.000	-202.342#

Memb 34, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	175.950*	0.000	0.000	0.000	-202.342#
1.150	0.000	117.300	0.000	0.000	0.000	-33.724
2.300	0.000	58.650	0.000	0.000	0.000	67.447
3.450	0.000	0.000	0.000	0.000	0.000	101.171*
4.600	0.000	-58.650	0.000	0.000	0.000	67.447
5.750	0.000	-117.300	0.000	0.000	0.000	-33.724
6.900	0.000	-175.950#	0.000	0.000	0.000	-202.342#

Memb 35, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	3.599	-0.004	-0.268	0.064	1.324*	0.013*
0.897	3.599	-0.004	-0.268	0.064	1.083	0.009
1.793	3.599	-0.004	-0.268	0.064	0.842	0.006
2.690	3.599	-0.004	-0.268	0.064	0.602	0.002
3.586	3.599	-0.004	-0.268	0.064	0.361	-0.001
4.483	3.599	-0.004	-0.268	0.064	0.121	-0.005
5.379	3.599	-0.004	-0.268	0.064	-0.120#	-0.008#

Memb 36, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-6.276	-0.758	1.073	-1.130	-3.486#	2.737*
0.897	-6.276	-0.758	1.073	-1.130	-2.524	2.058
1.793	-6.276	-0.758	1.073	-1.130	-1.563	1.378
2.690	-6.276	-0.758	1.073	-1.130	-0.601	0.698
3.586	-6.276	-0.758	1.073	-1.130	0.361	0.018
4.483	-6.276	-0.758	1.073	-1.130	1.322	-0.662
5.379	-6.276	-0.758	1.073	-1.130	2.284*	-1.342#

Memb 37, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	46.221	-28.944	-2.436	-1.440	9.089*	113.093*
0.897	46.221	-28.944	-2.436	-1.440	6.905	87.144
1.793	46.221	-28.944	-2.436	-1.440	4.720	61.195
2.690	46.221	-28.944	-2.436	-1.440	2.536	35.245
3.586	46.221	-28.944	-2.436	-1.440	0.352	9.296
4.483	46.221	-28.944	-2.436	-1.440	-1.832	-16.653
5.379	46.221	-28.944	-2.436	-1.440	-4.016#	-42.602#

Memb 39, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-2.816	-1.216	0.601	2.590	-1.854#	4.379*
0.897	-2.816	-1.216	0.601	2.590	-1.315	3.289
1.793	-2.816	-1.216	0.601	2.590	-0.777	2.199
2.690	-2.816	-1.216	0.601	2.590	-0.238	1.109
3.586	-2.816	-1.216	0.601	2.590	0.301	0.019
4.483	-2.816	-1.216	0.601	2.590	0.839	-1.071
5.379	-2.816	-1.216	0.601	2.590	1.378*	-2.161#

Memb 40, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.092	3.667*	-0.258	0.166	0.465*	-1.518
0.967	0.092	2.420	-0.258	0.166	0.216	1.424
1.933	0.092	1.173	-0.258	0.166	-0.033	3.160
2.900	0.092	-0.074	-0.258	0.166	-0.283	3.691*
3.867	0.092	-1.321	-0.258	0.166	-0.532	3.016
4.833	0.092	-2.568	-0.258	0.166	-0.781	1.136
5.800	0.092	-3.815#	-0.258	0.166	-1.030#	-1.950#

Memb 41, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	2.134	-5.902*	7.151	14.964	-11.574#	2.745*
0.533	2.134	-6.590	7.151	14.964	-7.760	-0.586
1.067	2.134	-7.278	7.151	14.964	-3.947	-4.285
1.600	2.134	-7.966	7.151	14.964	-0.133	-8.350
2.133	2.134	-8.654	7.151	14.964	3.681	-12.781
2.667	2.134	-9.342	7.151	14.964	7.494	-17.580
3.200	2.134	-10.030#	7.151	14.964	11.308*	-22.746#

Memb 42, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	6.771	4.952*	0.142	2.330	0.222#	1.666#
0.817	6.771	3.899	0.142	2.330	0.338	5.280
1.633	6.771	2.845	0.142	2.330	0.455	8.034
2.450	6.771	1.792	0.142	2.330	0.571	9.927
3.267	6.771	0.738	0.142	2.330	0.687	10.960
4.083	6.771	-0.315	0.142	2.330	0.803	11.133*
4.900	6.771	-1.369#	0.142	2.330	0.919*	10.445

Memb 43, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	2.141	4.622*	-3.556	-14.325	7.957*	-10.040#
0.683	2.141	3.740	-3.556	-14.325	5.527	-7.183
1.367	2.141	2.859	-3.556	-14.325	3.097	-4.928
2.050	2.141	1.977	-3.556	-14.325	0.667	-3.276
2.733	2.141	1.096	-3.556	-14.325	-1.763	-2.226
3.417	2.141	0.214	-3.556	-14.325	-4.193	-1.778*
4.100	2.141	-0.667#	-3.556	-14.325	-6.623#	-1.933

Memb 44, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.255	-0.068	0.176	0.194	-0.399#	0.153*
0.717	-0.255	-0.068	0.176	0.194	-0.273	0.105
1.433	-0.255	-0.068	0.176	0.194	-0.147	0.056
2.150	-0.255	-0.068	0.176	0.194	-0.020	0.008
2.867	-0.255	-0.068	0.176	0.194	0.106	-0.041
3.583	-0.255	-0.068	0.176	0.194	0.232	-0.089
4.300	-0.255	-0.068	0.176	0.194	0.359*	-0.138#

Memb 45, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	1.143	2.303*	-0.272	-0.001	0.575*	-1.797#
0.967	1.143	1.549	-0.272	-0.001	0.312	0.065
1.933	1.143	0.795	-0.272	-0.001	0.049	1.197
2.900	1.143	0.041	-0.272	-0.001	-0.214	1.601*
3.867	1.143	-0.713	-0.272	-0.001	-0.477	1.276
4.833	1.143	-1.467	-0.272	-0.001	-0.739	0.222
5.800	1.143	-2.221#	-0.272	-0.001	-1.002#	-1.561

Memb 46, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-2.638	1.023*	6.910	-0.185	-11.465#	-1.456
0.533	-2.638	0.607	6.910	-0.185	-7.780	-1.021
1.067	-2.638	0.191	6.910	-0.185	-4.094	-0.808*
1.600	-2.638	-0.225	6.910	-0.185	-0.409	-0.817
2.133	-2.638	-0.641	6.910	-0.185	3.276	-1.048
2.667	-2.638	-1.057	6.910	-0.185	6.961	-1.501
3.200	-2.638	-1.473#	6.910	-0.185	10.646*	-2.175#

Memb 47, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-5.341	1.986*	0.137	-0.195	0.506#	-0.839#
0.817	-5.341	1.349	0.137	-0.195	0.618	0.524
1.633	-5.341	0.712	0.137	-0.195	0.730	1.366
2.450	-5.341	0.075	0.137	-0.195	0.842	1.687*

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
3.267	-5.341	-0.562	0.137	-0.195	0.954	1.489
4.083	-5.341	-1.199	0.137	-0.195	1.067	0.770
4.900	-5.341	-1.836#	0.137	-0.195	1.179*	-0.469

Memb 48, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-3.039	2.586*	-3.588	0.363	7.737*	-3.489#
0.683	-3.039	2.053	-3.588	0.363	5.285	-1.904
1.367	-3.039	1.520	-3.588	0.363	2.834	-0.683
2.050	-3.039	0.987	-3.588	0.363	0.382	0.173
2.733	-3.039	0.454	-3.588	0.363	-2.070	0.666
3.417	-3.039	-0.079	-3.588	0.363	-4.521	0.794*
4.100	-3.039	-0.612#	-3.588	0.363	-6.973#	0.558

Memb 49, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-4.521	-0.151	2.775	0.047	-4.764#	0.362*
0.433	-4.521	-0.151	2.775	0.047	-3.561	0.297
0.867	-4.521	-0.151	2.775	0.047	-2.359	0.231
1.300	-4.521	-0.151	2.775	0.047	-1.156	0.166
1.733	-4.521	-0.151	2.775	0.047	0.047	0.100
2.167	-4.521	-0.151	2.775	0.047	1.249	0.035
2.600	-4.521	-0.151	2.775	0.047	2.452*	-0.030#

Memb 50, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-6.997	32.985	-2.198	-33.501	9.636*	-137.783#
0.683	-6.997	32.985	-2.198	-33.501	8.134	-115.244
1.367	-6.997	32.985	-2.198	-33.501	6.631	-92.704
2.050	-6.997	32.985	-2.198	-33.501	5.129	-70.164
2.733	-6.997	32.985	-2.198	-33.501	3.627	-47.625
3.417	-6.997	32.985	-2.198	-33.501	2.125	-25.085
4.100	-6.997	32.985	-2.198	-33.501	0.623#	-2.545*

Memb 51, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-16.424	35.759	1.493	30.665	-6.379#	-149.436#
0.683	-16.424	35.759	1.493	30.665	-5.358	-125.000
1.367	-16.424	35.759	1.493	30.665	-4.338	-100.565
2.050	-16.424	35.759	1.493	30.665	-3.318	-76.130
2.733	-16.424	35.759	1.493	30.665	-2.297	-51.695
3.417	-16.424	35.759	1.493	30.665	-1.277	-27.260
4.100	-16.424	35.759	1.493	30.665	-0.256*	-2.825*

Memb 52, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	7.160	-4.128	-3.113	-1.208	9.407*	11.641*
0.683	7.160	-4.128	-3.113	-1.208	7.280	8.820
1.367	7.160	-4.128	-3.113	-1.208	5.153	6.000
2.050	7.160	-4.128	-3.113	-1.208	3.026	3.179
2.733	7.160	-4.128	-3.113	-1.208	0.899	0.358
3.417	7.160	-4.128	-3.113	-1.208	-1.228	-2.462
4.100	7.160	-4.128	-3.113	-1.208	-3.355#	-5.283#

Memb 53, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	35.769	-0.246	0.002	0.000	0.001#	0.232*
0.534	35.769	-0.246	0.002	0.000	0.002	0.101
1.069	35.769	-0.246	0.002	0.000	0.003	-0.031
1.603	35.769	-0.246	0.002	0.000	0.004	-0.163
2.137	35.769	-0.246	0.002	0.000	0.006	-0.294
2.672	35.769	-0.246	0.002	0.000	0.007	-0.426
3.206	35.769	-0.246	0.002	0.000	0.008*	-0.558#

Memb 54, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	3.834	3.427	1.534	-0.080	-2.278#	-4.496#
0.683	3.834	3.427	1.534	-0.080	-1.230	-2.154
1.367	3.834	3.427	1.534	-0.080	-0.181	0.188
2.050	3.834	3.427	1.534	-0.080	0.867	2.530
2.733	3.834	3.427	1.534	-0.080	1.916	4.871
3.417	3.834	3.427	1.534	-0.080	2.964	7.213
4.100	3.834	3.427	1.534	-0.080	4.013*	9.555*

Memb 55, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	4.979	0.148	-4.007	0.548	0.967*	-0.198#
0.433	4.979	0.148	-4.007	0.548	-0.770	-0.133
0.867	4.979	0.148	-4.007	0.548	-2.506	-0.069
1.300	4.979	0.148	-4.007	0.548	-4.242	-0.005
1.733	4.979	0.148	-4.007	0.548	-5.978	0.059
2.167	4.979	0.148	-4.007	0.548	-7.715	0.124
2.600	4.979	0.148	-4.007	0.548	-9.451#	0.188*

Memb 57, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-2.402	-35.689	-0.002	-0.007	0.001*	-1.146*
0.069	-2.402	-35.689	-0.002	-0.007	0.001	-3.624
0.139	-2.402	-35.689	-0.002	-0.007	0.000	-6.103
0.208	-2.402	-35.689	-0.002	-0.007	0.000	-8.582
0.278	-2.402	-35.689	-0.002	-0.007	0.000	-11.060
0.347	-2.402	-35.689	-0.002	-0.007	0.000	-13.539
0.417	-2.402	-35.689	-0.002	-0.007	0.000#	-16.017#

Memb 58, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.319	4.607	0.068	0.000	-0.107#	-7.852#
0.533	0.319	4.607	0.068	0.000	-0.071	-5.395
1.067	0.319	4.607	0.068	0.000	-0.035	-2.938
1.600	0.319	4.607	0.068	0.000	0.001	-0.480
2.133	0.319	4.607	0.068	0.000	0.038	1.977
2.667	0.319	4.607	0.068	0.000	0.074	4.434
3.200	0.319	4.607	0.068	0.000	0.110*	6.892*

Memb 59, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.166	24.668*	0.003	0.000	-0.009#	-29.979#
0.817	0.166	24.668*	0.003	0.000	-0.007	-9.834
1.633	0.166	24.668*	0.003	0.000	-0.004	10.312
2.450	0.166	24.668*	0.003	0.000	-0.002	30.457*
2.450	0.166	-24.082#	0.003	0.000	-0.002	30.457*
3.267	0.166	-24.082#	0.003	0.000	0.000	10.790
4.083	0.166	-24.082#	0.003	0.000	0.002	-8.877
4.900	0.166	-24.082#	0.003	0.000	0.004*	-28.545

Memb 60, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.419	-2.684	-0.038	0.000	0.080*	5.163*
0.683	0.419	-2.684	-0.038	0.000	0.054	3.329
1.367	0.419	-2.684	-0.038	0.000	0.028	1.495
2.050	0.419	-2.684	-0.038	0.000	0.002	-0.339
2.733	0.419	-2.684	-0.038	0.000	-0.025	-2.173
3.417	0.419	-2.684	-0.038	0.000	-0.051	-4.008
4.100	0.419	-2.684	-0.038	0.000	-0.077#	-5.842#

Memb 61, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	-22.115	1.953	0.000	-0.195#	-0.072*
0.033	0.000	-22.115	1.953	0.000	-0.130	-0.809
0.067	0.000	-22.115	1.953	0.000	-0.065	-1.547
0.100	0.000	-22.115	1.953	0.000	0.000	-2.284
0.133	0.000	-22.115	1.953	0.000	0.065	-3.021
0.167	0.000	-22.115	1.953	0.000	0.130	-3.758
0.200	0.000	-22.115	1.953	0.000	0.195*	-4.495#

Memb 62, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.270	0.054	0.561	-0.081	-0.783#	-0.138#
0.433	0.270	0.054	0.561	-0.081	-0.540	-0.114
0.867	0.270	0.054	0.561	-0.081	-0.297	-0.091
1.300	0.270	0.054	0.561	-0.081	-0.054	-0.068
1.733	0.270	0.054	0.561	-0.081	0.189	-0.045
2.167	0.270	0.054	0.561	-0.081	0.432	-0.021
2.600	0.270	0.054	0.561	-0.081	0.676*	0.002*

Memb 63, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	39.347	-22.963	3.135	0.652	-10.181#	116.764*
0.897	39.347	-22.963	3.135	0.652	-7.370	96.177
1.793	39.347	-22.963	3.135	0.652	-4.559	75.590
2.690	39.347	-22.963	3.135	0.652	-1.749	55.004
3.586	39.347	-22.963	3.135	0.652	1.062	34.417
4.483	39.347	-22.963	3.135	0.652	3.873	13.830
5.379	39.347	-22.963	3.135	0.652	6.684*	-6.757#

Memb 67, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.106	9.255*	0.000	0.000	0.000	0.000#
0.967	-0.106	6.170	0.000	0.000	0.000	7.455
1.933	-0.106	3.085	0.000	0.000	0.000	11.928
2.900	-0.106	0.000	0.000	0.000	0.000	13.419*
3.867	-0.106	-3.085	0.000	0.000	0.000	11.928
4.833	-0.106	-6.170	0.000	0.000	0.000	7.455
5.800	-0.106	-9.255#	0.000	0.000	0.000	0.000

Memb 68, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	-24.620	-3.432	0.000	0.343*	-0.359*
0.033	0.000	-24.620	-3.432	0.000	0.229	-1.179
0.067	0.000	-24.620	-3.432	0.000	0.114	-2.000
0.100	0.000	-24.620	-3.432	0.000	0.000	-2.821
0.133	0.000	-24.620	-3.432	0.000	-0.114	-3.641
0.167	0.000	-24.620	-3.432	0.000	-0.229	-4.462
0.200	0.000	-24.620	-3.432	0.000	-0.343#	-5.283#

Memb 70, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-7.062	-12.925	-2.045	3.370	-0.332*	0.040*
0.033	-7.062	-12.925	-2.045	3.370	-0.401	-0.391
0.067	-7.062	-12.925	-2.045	3.370	-0.469	-0.822
0.100	-7.062	-12.925	-2.045	3.370	-0.537	-1.253
0.133	-7.062	-12.925	-2.045	3.370	-0.605	-1.684
0.167	-7.062	-12.925	-2.045	3.370	-0.673	-2.114
0.200	-7.062	-12.925	-2.045	3.370	-0.741#	-2.545#

Memb 71, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.469	5.106*	0.148	0.045	-0.233#	0.000
0.533	0.469	3.404	0.148	0.045	-0.154	2.269
1.067	0.469	1.702	0.148	0.045	-0.076	3.631
1.600	0.469	0.000	0.148	0.045	0.003	4.085*
2.133	0.469	-1.702	0.148	0.045	0.082	3.631
2.667	0.469	-3.404	0.148	0.045	0.161	2.269
3.200	0.469	-5.106#	0.148	0.045	0.240*	0.000#

Memb 72, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-16.465	-14.361	1.241	-3.042	0.084#	0.047*
0.033	-16.465	-14.361	1.241	-3.042	0.125	-0.431
0.067	-16.465	-14.361	1.241	-3.042	0.167	-0.910
0.100	-16.465	-14.361	1.241	-3.042	0.208	-1.389
0.133	-16.465	-14.361	1.241	-3.042	0.249	-1.867
0.167	-16.465	-14.361	1.241	-3.042	0.291	-2.346
0.200	-16.465	-14.361	1.241	-3.042	0.332*	-2.825#

Memb 73, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	1.794	7.819*	0.006	0.006	-0.019#	0.000
0.817	1.794	5.212	0.006	0.006	-0.014	5.321
1.633	1.794	2.606	0.006	0.006	-0.010	8.514
2.450	1.794	0.000	0.006	0.006	-0.005	9.578*
3.267	1.794	-2.606	0.006	0.006	0.000	8.514
4.083	1.794	-5.212	0.006	0.006	0.005	5.321
4.900	1.794	-7.819#	0.006	0.006	0.010*	0.000#

Memb 74, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.822	6.542*	-0.084	-0.042	0.175*	0.000
0.683	0.822	4.361	-0.084	-0.042	0.118	3.725
1.367	0.822	2.181	-0.084	-0.042	0.061	5.961
2.050	0.822	0.000	-0.084	-0.042	0.003	6.706*
2.733	0.822	-2.181	-0.084	-0.042	-0.054	5.961
3.417	0.822	-4.361	-0.084	-0.042	-0.111	3.725
4.100	0.822	-6.542#	-0.084	-0.042	-0.168#	0.000#

Memb 75, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-16.555	0.000	2.212	-3.042	-0.249#	0.000
0.433	-16.555	0.000	2.212	-3.042	0.709	0.000
0.867	-16.555	0.000	2.212	-3.042	1.668	0.000
1.300	-16.555	0.000	2.212	-3.042	2.626	0.000
1.733	-16.555	0.000	2.212	-3.042	3.585	0.000
2.167	-16.555	0.000	2.212	-3.042	4.543	0.000
2.600	-16.555	0.000	2.212	-3.042	5.502*	0.000

Memb 76, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-7.204	0.000	-3.370	3.370	0.591*	0.000
0.433	-7.204	0.000	-3.370	3.370	-0.869	0.000
0.867	-7.204	0.000	-3.370	3.370	-2.329	0.000
1.300	-7.204	0.000	-3.370	3.370	-3.789	0.000
1.733	-7.204	0.000	-3.370	3.370	-5.249	0.000
2.167	-7.204	0.000	-3.370	3.370	-6.710	0.000
2.600	-7.204	0.000	-3.370	3.370	-8.170#	0.000

Memb 77, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.188	-0.005	-0.003	0.000	0.000*	0.009*
0.434	0.188	-0.005	-0.003	0.000	-0.001	0.007
0.868	0.188	-0.005	-0.003	0.000	-0.003	0.004
1.302	0.188	-0.005	-0.003	0.000	-0.004	0.002
1.736	0.188	-0.005	-0.003	0.000	-0.005	0.000
2.171	0.188	-0.005	-0.003	0.000	-0.006	-0.002
2.605	0.188	-0.005	-0.003	0.000	-0.007#	-0.004#

Memb 78, Case 6 (Linear): DL +1.3 LL + 1.3WL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.045	0.819	0.000	0.002	0.000#	-0.013#
0.026	0.045	0.819	0.000	0.002	0.000	0.009
0.052	0.045	0.819	0.000	0.002	0.000	0.030
0.079	0.045	0.819	0.000	0.002	0.000	0.052
0.105	0.045	0.819	0.000	0.002	0.000	0.073
0.131	0.045	0.819	0.000	0.002	0.000	0.095
0.157	0.045	0.819	0.000	0.002	0.000*	0.116*

Memb 1, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	-0.001	-0.003	0.000*	0.000*
0.069	0.000	0.000	-0.001	-0.003	0.000	0.000
0.139	0.000	0.000	-0.001	-0.003	0.000	0.000
0.208	0.000	0.000	-0.001	-0.003	0.000	0.000
0.278	0.000	0.000	-0.001	-0.003	0.000	0.000
0.347	0.000	0.000	-0.001	-0.003	0.000	0.000
0.417	0.000	0.000	-0.001	-0.003	0.000#	0.000#

Memb 2, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	2.370	0.000	-0.773	-0.166	2.171*	0.000*
0.897	2.370	0.000	-0.773	-0.166	1.478	0.000
1.793	2.370	0.000	-0.773	-0.166	0.785	-0.001
2.690	2.370	0.000	-0.773	-0.166	0.092	-0.001
3.586	2.370	0.000	-0.773	-0.166	-0.601	-0.001
4.483	2.370	0.000	-0.773	-0.166	-1.293	-0.002
5.379	2.370	0.000	-0.773	-0.166	-1.986#	-0.002#

Memb 3, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000*	0.000*
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000#	0.000#

Memb 4, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.001	0.000	-0.003#	0.000*
1.152	0.000	0.000	0.001	0.000	-0.002	0.000
2.304	0.000	0.000	0.001	0.000	-0.001	0.000
3.456	0.000	0.000	0.001	0.000	0.000	0.000
4.608	0.000	0.000	0.001	0.000	0.001	0.000
5.760	0.000	0.000	0.001	0.000	0.001	0.000
6.913	0.000	0.000	0.001	0.000	0.002*	0.000#

Memb 5, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.072	-1.173	0.004	0.012	0.000#	0.000*
0.069	-0.072	-1.173	0.004	0.012	0.000	-0.081
0.139	-0.072	-1.173	0.004	0.012	0.000	-0.163
0.208	-0.072	-1.173	0.004	0.012	0.000	-0.244
0.278	-0.072	-1.173	0.004	0.012	0.001	-0.326
0.347	-0.072	-1.173	0.004	0.012	0.001	-0.407
0.417	-0.072	-1.173	0.004	0.012	0.001*	-0.489#

Memb 6, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000*	0.000#
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000#	0.000*

Memb 7, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	3.161	0.005	-0.472	-1.659	1.080*	0.000#
0.897	3.161	0.005	-0.472	-1.659	0.657	0.005
1.793	3.161	0.005	-0.472	-1.659	0.234	0.009
2.690	3.161	0.005	-0.472	-1.659	-0.189	0.014
3.586	3.161	0.005	-0.472	-1.659	-0.613	0.019
4.483	3.161	0.005	-0.472	-1.659	-1.036	0.023
5.379	3.161	0.005	-0.472	-1.659	-1.459#	0.028*

Memb 8, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000*	0.000*
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000#	0.000#

Memb 9, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	1.176	-0.001	-0.004	0.000	0.012*	0.000*
0.718	1.176	-0.001	-0.004	0.000	0.009	-0.001
1.436	1.176	-0.001	-0.004	0.000	0.007	-0.002
2.154	1.176	-0.001	-0.004	0.000	0.004	-0.003
2.872	1.176	-0.001	-0.004	0.000	0.001	-0.004
3.590	1.176	-0.001	-0.004	0.000	-0.001	-0.005
4.308	1.176	-0.001	-0.004	0.000	-0.004#	-0.006#

Memb 10, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000#	0.000*
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000*	0.000#

Memb 11, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-1.906	-31.589	0.006	0.019	-0.002#	0.000*
0.069	-1.906	-31.589	0.006	0.019	-0.001	-2.194
0.139	-1.906	-31.589	0.006	0.019	-0.001	-4.388
0.208	-1.906	-31.589	0.006	0.019	0.000	-6.581
0.278	-1.906	-31.589	0.006	0.019	0.000	-8.775
0.347	-1.906	-31.589	0.006	0.019	0.000	-10.969
0.417	-1.906	-31.589	0.006	0.019	0.001*	-13.163#

Memb 12, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	5.267	4.362	-0.901	-3.476	2.638*	0.000#
0.897	5.267	4.362	-0.901	-3.476	1.830	3.911
1.793	5.267	4.362	-0.901	-3.476	1.021	7.822
2.690	5.267	4.362	-0.901	-3.476	0.213	11.733
3.586	5.267	4.362	-0.901	-3.476	-0.595	15.644
4.483	5.267	4.362	-0.901	-3.476	-1.403	19.555
5.379	5.267	4.362	-0.901	-3.476	-2.211#	23.466*

Memb 13, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000	0.000#
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000	0.000*

Memb 14, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	31.646	0.001	-0.006	0.000	0.019*	0.000#
1.152	31.646	0.001	-0.006	0.000	0.012	0.002
2.304	31.646	0.001	-0.006	0.000	0.006	0.003
3.456	31.646	0.001	-0.006	0.000	-0.001	0.005
4.608	31.646	0.001	-0.006	0.000	-0.008	0.007
5.760	31.646	0.001	-0.006	0.000	-0.014	0.009
6.913	31.646	0.001	-0.006	0.000	-0.021#	0.010*

Memb 15, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000	0.000#
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000	0.000*

Memb 17, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	7.115	5.851	-0.289	1.835	0.499*	0.000#
0.897	7.115	5.851	-0.289	1.835	0.240	5.246
1.793	7.115	5.851	-0.289	1.835	-0.019	10.491
2.690	7.115	5.851	-0.289	1.835	-0.277	15.737
3.586	7.115	5.851	-0.289	1.835	-0.536	20.982
4.483	7.115	5.851	-0.289	1.835	-0.795	26.228
5.379	7.115	5.851	-0.289	1.835	-1.054#	31.474*

Memb 18, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000	0.000#
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000	0.000*

Memb 19, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	38.864	-0.269	0.004	0.000	-0.012#	1.253*
0.618	38.864	-0.269	0.004	0.000	-0.010	1.087
1.236	38.864	-0.269	0.004	0.000	-0.007	0.920
1.853	38.864	-0.269	0.004	0.000	-0.005	0.754
2.471	38.864	-0.269	0.004	0.000	-0.003	0.587
3.089	38.864	-0.269	0.004	0.000	0.000	0.421
3.707	38.864	-0.269	0.004	0.000	0.002*	0.255#

Memb 20, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000	0.000*
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000	0.000#

Memb 21, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.064	-1.056	-0.011	-0.039	0.002*	0.000*
0.069	-0.064	-1.056	-0.011	-0.039	0.002	-0.073
0.139	-0.064	-1.056	-0.011	-0.039	0.001	-0.147
0.208	-0.064	-1.056	-0.011	-0.039	0.000	-0.220
0.278	-0.064	-1.056	-0.011	-0.039	-0.001	-0.293
0.347	-0.064	-1.056	-0.011	-0.039	-0.001	-0.367
0.417	-0.064	-1.056	-0.011	-0.039	-0.002#	-0.440#

Memb 22, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.340	0.007	-0.426	4.250	1.021*	0.000#
0.897	0.340	0.007	-0.426	4.250	0.639	0.006
1.793	0.340	0.007	-0.426	4.250	0.257	0.013
2.690	0.340	0.007	-0.426	4.250	-0.125	0.019
3.586	0.340	0.007	-0.426	4.250	-0.507	0.025
4.483	0.340	0.007	-0.426	4.250	-0.890	0.032
5.379	0.340	0.007	-0.426	4.250	-1.272#	0.038*

Memb 23, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000	0.000#
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000	0.000*

Memb 24, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	1.058	0.000	0.011	0.000	-0.039#	0.000#
1.152	1.058	0.000	0.011	0.000	-0.026	0.000
2.304	1.058	0.000	0.011	0.000	-0.014	0.000
3.456	1.058	0.000	0.011	0.000	-0.001	0.000
4.608	1.058	0.000	0.011	0.000	0.012	0.001
5.760	1.058	0.000	0.011	0.000	0.024	0.001
6.913	1.058	0.000	0.011	0.000	0.037*	0.001*

Memb 25, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000	0.000#
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000	0.000*

Memb 26, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	64.469*	0.000	0.000	0.000	-25.801
0.433	0.000	41.337	0.000	0.000	0.000	-2.877
0.867	0.000	18.205	0.000	0.000	0.000	10.024
1.300	0.000	-4.928	0.000	0.000	0.000	12.901*
1.733	0.000	-28.060	0.000	0.000	0.000	5.753
2.167	0.000	-51.192	0.000	0.000	0.000	-11.418
2.600	0.000	-74.324#	0.000	0.000	0.000	-38.613#

Memb 27, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	85.411*	0.000	0.000	0.000	-45.553
0.533	0.000	56.941	0.000	0.000	0.000	-7.592
1.067	0.000	28.470	0.000	0.000	0.000	15.184
1.600	0.000	0.000	0.000	0.000	0.000	22.776*
2.133	0.000	-28.470	0.000	0.000	0.000	15.184
2.667	0.000	-56.941	0.000	0.000	0.000	-7.592
3.200	0.000	-85.411#	0.000	0.000	0.000	-45.553#

Memb 28, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	77.404*	0.000	0.000	0.000	-37.412#
0.483	0.000	51.603	0.000	0.000	0.000	-6.235
0.967	0.000	25.801	0.000	0.000	0.000	12.471
1.450	0.000	0.000	0.000	0.000	0.000	18.706*
1.933	0.000	-25.801	0.000	0.000	0.000	12.471
2.417	0.000	-51.603	0.000	0.000	0.000	-6.235
2.900	0.000	-77.404#	0.000	0.000	0.000	-37.412

Memb 29, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	1.936	-31.850*	11.647	1.313	-11.264#	52.129*
0.250	1.936	-45.196	11.647	1.313	-8.352	42.498
0.500	1.936	-58.541	11.647	1.313	-5.440	29.531
0.750	1.936	-71.887	11.647	1.313	-2.529	13.228
1.000	1.936	-85.232	11.647	1.313	0.383	-6.412
1.250	1.936	-98.578	11.647	1.313	3.295	-29.389
1.500	1.936	-111.923#	11.647	1.313	6.206*	-55.701#

Memb 30, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	82.158*	0.000	0.000	0.000	-38.613
0.533	0.000	53.688	0.000	0.000	0.000	-2.387
1.067	0.000	25.217	0.000	0.000	0.000	18.654
1.600	0.000	-3.253	0.000	0.000	0.000	24.511*
2.133	0.000	-31.723	0.000	0.000	0.000	15.184
2.667	0.000	-60.194	0.000	0.000	0.000	-9.327
3.200	0.000	-88.664#	0.000	0.000	0.000	-49.022#

Memb 31, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-1.452	113.802*	-10.084	-2.692	9.963*	-76.052#
0.333	-1.452	96.008	-10.084	-2.692	6.602	-41.084
0.667	-1.452	78.214	-10.084	-2.692	3.241	-12.047
1.000	-1.452	60.420	-10.084	-2.692	-0.120	11.059
1.333	-1.452	42.626	-10.084	-2.692	-3.482	28.234
1.667	-1.452	24.832	-10.084	-2.692	-6.843	39.477
2.000	-1.452	7.038#	-10.084	-2.692	-10.204#	44.789*

Memb 32, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	84.183*	-3.581	1.313	6.206*	-55.701#
0.433	0.000	61.051	-3.581	1.313	4.655	-24.234
0.867	0.000	37.918	-3.581	1.313	3.103	-2.791
1.300	0.000	14.786	-3.581	1.313	1.552	8.629
1.733	0.000	-8.346	-3.581	1.313	0.000	10.024*
2.167	0.000	-31.478	-3.581	1.313	-1.552	1.395
2.600	0.000	-54.610#	-3.581	1.313	-3.103#	-17.257

Memb 33, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	175.950*	0.000	0.000	0.000	-202.342#
1.150	0.000	117.300	0.000	0.000	0.000	-33.724
2.300	0.000	58.650	0.000	0.000	0.000	67.447
3.450	0.000	0.000	0.000	0.000	0.000	101.171*
4.600	0.000	-58.650	0.000	0.000	0.000	67.447
5.750	0.000	-117.300	0.000	0.000	0.000	-33.724
6.900	0.000	-175.950#	0.000	0.000	0.000	-202.342#

Memb 34, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	175.950*	0.000	0.000	0.000	-202.342#
1.150	0.000	117.300	0.000	0.000	0.000	-33.724
2.300	0.000	58.650	0.000	0.000	0.000	67.447
3.450	0.000	0.000	0.000	0.000	0.000	101.171*
4.600	0.000	-58.650	0.000	0.000	0.000	67.447
5.750	0.000	-117.300	0.000	0.000	0.000	-33.724
6.900	0.000	-175.950#	0.000	0.000	0.000	-202.342#

Memb 35, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	3.466	-0.007	-0.061	0.103	0.834*	0.021*
0.897	3.466	-0.007	-0.061	0.103	0.779	0.015
1.793	3.466	-0.007	-0.061	0.103	0.724	0.010
2.690	3.466	-0.007	-0.061	0.103	0.670	0.004
3.586	3.466	-0.007	-0.061	0.103	0.615	-0.002
4.483	3.466	-0.007	-0.061	0.103	0.560	-0.008
5.379	3.466	-0.007	-0.061	0.103	0.505#	-0.014#

Memb 36, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-6.931	-0.826	1.347	-1.881	-4.213#	2.991*
0.897	-6.931	-0.826	1.347	-1.881	-3.006	2.251
1.793	-6.931	-0.826	1.347	-1.881	-1.798	1.511
2.690	-6.931	-0.826	1.347	-1.881	-0.591	0.770
3.586	-6.931	-0.826	1.347	-1.881	0.616	0.030
4.483	-6.931	-0.826	1.347	-1.881	1.824	-0.710
5.379	-6.931	-0.826	1.347	-1.881	3.031*	-1.451#

Memb 37, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	45.890	-26.057	-2.222	-2.570	8.569*	108.969*
0.897	45.890	-26.057	-2.222	-2.570	6.577	85.609
1.793	45.890	-26.057	-2.222	-2.570	4.586	62.248
2.690	45.890	-26.057	-2.222	-2.570	2.594	38.888
3.586	45.890	-26.057	-2.222	-2.570	0.602	15.528
4.483	45.890	-26.057	-2.222	-2.570	-1.389	-7.833
5.379	45.890	-26.057	-2.222	-2.570	-3.381#	-31.193#

Memb 39, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-3.022	-1.317	0.787	5.011	-2.297#	4.760*
0.897	-3.022	-1.317	0.787	5.011	-1.591	3.579
1.793	-3.022	-1.317	0.787	5.011	-0.886	2.398
2.690	-3.022	-1.317	0.787	5.011	-0.180	1.217
3.586	-3.022	-1.317	0.787	5.011	0.525	0.036
4.483	-3.022	-1.317	0.787	5.011	1.230	-1.145
5.379	-3.022	-1.317	0.787	5.011	1.936*	-2.326#

Memb 40, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.237	3.536*	-0.430	0.183	0.778*	-1.050
0.967	-0.237	2.289	-0.430	0.183	0.362	1.766
1.933	-0.237	1.042	-0.430	0.183	-0.054	3.376
2.900	-0.237	-0.205	-0.430	0.183	-0.470	3.781*
3.867	-0.237	-1.452	-0.430	0.183	-0.885	2.981
4.833	-0.237	-2.699	-0.430	0.183	-1.301	0.975
5.800	-0.237	-3.946#	-0.430	0.183	-1.717#	-2.237#

Memb 41, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	3.568	-6.249*	11.816	16.511	-19.201#	3.164*
0.533	3.568	-6.937	11.816	16.511	-12.899	-0.352
1.067	3.568	-7.625	11.816	16.511	-6.597	-4.235
1.600	3.568	-8.313	11.816	16.511	-0.295	-8.485
2.133	3.568	-9.001	11.816	16.511	6.006	-13.101
2.667	3.568	-9.689	11.816	16.511	12.308	-18.085
3.200	3.568	-10.377#	11.816	16.511	18.610*	-23.436#

Memb 42, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	9.722	4.826*	0.930	2.467	-1.273#	2.097#
0.817	9.722	3.772	0.930	2.467	-0.513	5.608
1.633	9.722	2.719	0.930	2.467	0.247	8.259
2.450	9.722	1.665	0.930	2.467	1.007	10.049
3.267	9.722	0.612	0.930	2.467	1.767	10.979
4.083	9.722	-0.442	0.930	2.467	2.526	11.049*
4.900	9.722	-1.495#	0.930	2.467	3.286*	10.258

Memb 43, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	3.719	4.487*	-6.854	-15.684	15.386*	-9.909#
0.683	3.719	3.605	-6.854	-15.684	10.703	-7.144
1.367	3.719	2.724	-6.854	-15.684	6.019	-4.981
2.050	3.719	1.842	-6.854	-15.684	1.335	-3.421
2.733	3.719	0.961	-6.854	-15.684	-3.349	-2.464
3.417	3.719	0.079	-6.854	-15.684	-8.032	-2.108*
4.100	3.719	-0.802#	-6.854	-15.684	-12.716#	-2.355

Memb 44, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.424	-0.070	0.297	0.216	-0.672#	0.162*
0.717	-0.424	-0.070	0.297	0.216	-0.459	0.111
1.433	-0.424	-0.070	0.297	0.216	-0.246	0.061
2.150	-0.424	-0.070	0.297	0.216	-0.033	0.010
2.867	-0.424	-0.070	0.297	0.216	0.180	-0.040
3.583	-0.424	-0.070	0.297	0.216	0.393	-0.091
4.300	-0.424	-0.070	0.297	0.216	0.607*	-0.141#

Memb 45, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	1.684	2.425*	-0.443	-0.002	0.932*	-2.219#
0.967	1.684	1.671	-0.443	-0.002	0.504	-0.239
1.933	1.684	0.917	-0.443	-0.002	0.075	1.012
2.900	1.684	0.163	-0.443	-0.002	-0.353	1.534*
3.867	1.684	-0.591	-0.443	-0.002	-0.782	1.327
4.833	1.684	-1.345	-0.443	-0.002	-1.211	0.392
5.800	1.684	-2.099#	-0.443	-0.002	-1.639#	-1.273

Memb 46, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-4.534	1.214*	11.393	-0.202	-19.008#	-1.754
0.533	-4.534	0.798	11.393	-0.202	-12.932	-1.217
1.067	-4.534	0.382	11.393	-0.202	-6.855	-0.902
1.600	-4.534	-0.034	11.393	-0.202	-0.779	-0.809*
2.133	-4.534	-0.450	11.393	-0.202	5.297	-0.939
2.667	-4.534	-0.866	11.393	-0.202	11.373	-1.289
3.200	-4.534	-1.282#	11.393	-0.202	17.449*	-1.862#

Memb 47, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-9.731	2.079*	0.914	-0.213	-0.752#	-1.064#
0.817	-9.731	1.442	0.914	-0.213	-0.006	0.374
1.633	-9.731	0.805	0.914	-0.213	0.741	1.292
2.450	-9.731	0.168	0.914	-0.213	1.488	1.689*
3.267	-9.731	-0.469	0.914	-0.213	2.234	1.567
4.083	-9.731	-1.106	0.914	-0.213	2.981	0.924
4.900	-9.731	-1.743#	0.914	-0.213	3.728*	-0.239

Memb 48, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-5.699	2.761*	-6.917	0.396	14.988*	-3.812#
0.683	-5.699	2.228	-6.917	0.396	10.262	-2.107
1.367	-5.699	1.695	-6.917	0.396	5.535	-0.767
2.050	-5.699	1.162	-6.917	0.396	0.809	0.209
2.733	-5.699	0.629	-6.917	0.396	-3.918	0.821
3.417	-5.699	0.096	-6.917	0.396	-8.644	1.069*
4.100	-5.699	-0.437#	-6.917	0.396	-13.371#	0.952

Memb 49, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-7.966	-0.160	5.261	0.067	-9.084#	0.395*
0.433	-7.966	-0.160	5.261	0.067	-6.804	0.326
0.867	-7.966	-0.160	5.261	0.067	-4.524	0.257
1.300	-7.966	-0.160	5.261	0.067	-2.244	0.187
1.733	-7.966	-0.160	5.261	0.067	0.036	0.118
2.167	-7.966	-0.160	5.261	0.067	2.316	0.048
2.600	-7.966	-0.160	5.261	0.067	4.596*	-0.021#

Memb 50, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-16.417	32.593	-3.927	-34.101	17.294*	-136.175#
0.683	-16.417	32.593	-3.927	-34.101	14.610	-113.903
1.367	-16.417	32.593	-3.927	-34.101	11.926	-91.631
2.050	-16.417	32.593	-3.927	-34.101	9.243	-69.359
2.733	-16.417	32.593	-3.927	-34.101	6.559	-47.087
3.417	-16.417	32.593	-3.927	-34.101	3.875	-24.815
4.100	-16.417	32.593	-3.927	-34.101	1.192#	-2.542*

Memb 51, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-24.831	35.519	2.612	31.048	-11.028#	-148.448#
0.683	-24.831	35.519	2.612	31.048	-9.244	-124.177
1.367	-24.831	35.519	2.612	31.048	-7.459	-99.906
2.050	-24.831	35.519	2.612	31.048	-5.674	-75.635
2.733	-24.831	35.519	2.612	31.048	-3.890	-51.364
3.417	-24.831	35.519	2.612	31.048	-2.105	-27.093
4.100	-24.831	35.519	2.612	31.048	-0.320*	-2.822*

Memb 52, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	11.898	-4.555	-5.148	-1.187	15.591*	12.847*
0.683	11.898	-4.555	-5.148	-1.187	12.073	9.735
1.367	11.898	-4.555	-5.148	-1.187	8.556	6.622
2.050	11.898	-4.555	-5.148	-1.187	5.038	3.509
2.733	11.898	-4.555	-5.148	-1.187	1.521	0.396
3.417	11.898	-4.555	-5.148	-1.187	-1.997	-2.717
4.100	11.898	-4.555	-5.148	-1.187	-5.514#	-5.830#

Memb 53, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	38.864	-0.269	0.004	0.000	0.002#	0.255*
0.534	38.864	-0.269	0.004	0.000	0.004	0.111
1.069	38.864	-0.269	0.004	0.000	0.006	-0.033
1.603	38.864	-0.269	0.004	0.000	0.008	-0.177
2.137	38.864	-0.269	0.004	0.000	0.010	-0.321
2.672	38.864	-0.269	0.004	0.000	0.012	-0.465
3.206	38.864	-0.269	0.004	0.000	0.014*	-0.609#

Memb 54, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	7.116	3.761	2.921	-0.061	-4.311#	-4.935#
0.683	7.116	3.761	2.921	-0.061	-2.315	-2.365
1.367	7.116	3.761	2.921	-0.061	-0.319	0.205
2.050	7.116	3.761	2.921	-0.061	1.678	2.775
2.733	7.116	3.761	2.921	-0.061	3.674	5.345
3.417	7.116	3.761	2.921	-0.061	5.670	7.914
4.100	7.116	3.761	2.921	-0.061	7.666*	10.484*

Memb 55, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-11.685	0.152	-6.685	0.600	1.684*	-0.187#
0.433	-11.685	0.152	-6.685	0.600	-1.213	-0.121
0.867	-11.685	0.152	-6.685	0.600	-4.110	-0.055
1.300	-11.685	0.152	-6.685	0.600	-7.007	0.010
1.733	-11.685	0.152	-6.685	0.600	-9.904	0.076
2.167	-11.685	0.152	-6.685	0.600	-12.801	0.142
2.600	-11.685	0.152	-6.685	0.600	-15.698#	0.207*

Memb 57, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-2.612	-38.777	-0.004	-0.012	0.001*	-1.253*
0.069	-2.612	-38.777	-0.004	-0.012	0.001	-3.946
0.139	-2.612	-38.777	-0.004	-0.012	0.001	-6.639
0.208	-2.612	-38.777	-0.004	-0.012	0.000	-9.332
0.278	-2.612	-38.777	-0.004	-0.012	0.000	-12.025
0.347	-2.612	-38.777	-0.004	-0.012	0.000	-14.718
0.417	-2.612	-38.777	-0.004	-0.012	0.000#	-17.411#

Memb 58, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.559	5.013	0.114	0.000	-0.179#	-8.511#
0.533	0.559	5.013	0.114	0.000	-0.118	-5.837
1.067	0.559	5.013	0.114	0.000	-0.058	-3.163
1.600	0.559	5.013	0.114	0.000	0.003	-0.489
2.133	0.559	5.013	0.114	0.000	0.063	2.185
2.667	0.559	5.013	0.114	0.000	0.124	4.859
3.200	0.559	5.013	0.114	0.000	0.184*	7.532*

Memb 59, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.294	24.682*	0.010	0.000	-0.028#	-30.006#
0.817	0.294	24.682*	0.010	0.000	-0.020	-9.848
1.633	0.294	24.682*	0.010	0.000	-0.012	10.309
2.450	0.294	24.682*	0.010	0.000	-0.004	30.466*
2.450	0.294	-24.068#	0.010	0.000	-0.004	30.466*
3.267	0.294	-24.068#	0.010	0.000	0.004	10.811
4.083	0.294	-24.068#	0.010	0.000	0.012	-8.845
4.900	0.294	-24.068#	0.010	0.000	0.020*	-28.500

Memb 60, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.760	-2.910	-0.073	0.000	0.152*	5.622*
0.683	0.760	-2.910	-0.073	0.000	0.102	3.633
1.367	0.760	-2.910	-0.073	0.000	0.052	1.645
2.050	0.760	-2.910	-0.073	0.000	0.003	-0.343
2.733	0.760	-2.910	-0.073	0.000	-0.047	-2.331
3.417	0.760	-2.910	-0.073	0.000	-0.097	-4.320
4.100	0.760	-2.910	-0.073	0.000	-0.147#	-6.308#

Memb 61, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	-24.343	3.681	0.000	-0.368#	-0.066*
0.033	0.000	-24.343	3.681	0.000	-0.245	-0.877
0.067	0.000	-24.343	3.681	0.000	-0.123	-1.689
0.100	0.000	-24.343	3.681	0.000	0.000	-2.500
0.133	0.000	-24.343	3.681	0.000	0.123	-3.311
0.167	0.000	-24.343	3.681	0.000	0.245	-4.123
0.200	0.000	-24.343	3.681	0.000	0.368*	-4.934#

Memb 62, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.443	0.055	0.910	-0.049	-1.271#	-0.141#
0.433	0.443	0.055	0.910	-0.049	-0.877	-0.117
0.867	0.443	0.055	0.910	-0.049	-0.482	-0.093
1.300	0.443	0.055	0.910	-0.049	-0.088	-0.069
1.733	0.443	0.055	0.910	-0.049	0.307	-0.046
2.167	0.443	0.055	0.910	-0.049	0.702	-0.022
2.600	0.443	0.055	0.910	-0.049	1.096*	0.002*

Memb 63, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	38.889	-21.731	3.388	1.060	-10.882#	112.886*
0.897	38.889	-21.731	3.388	1.060	-7.845	93.404
1.793	38.889	-21.731	3.388	1.060	-4.808	73.922
2.690	38.889	-21.731	3.388	1.060	-1.771	54.440
3.586	38.889	-21.731	3.388	1.060	1.266	34.958
4.483	38.889	-21.731	3.388	1.060	4.304	15.476
5.379	38.889	-21.731	3.388	1.060	7.341*	-4.006#

Memb 67, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.236	9.255*	0.000	0.000	0.000	0.000#
0.967	-0.236	6.170	0.000	0.000	0.000	7.455
1.933	-0.236	3.085	0.000	0.000	0.000	11.928
2.900	-0.236	0.000	0.000	0.000	0.000	13.419*
3.867	-0.236	-3.085	0.000	0.000	0.000	11.928
4.833	-0.236	-6.170	0.000	0.000	0.000	7.455
5.800	-0.236	-9.255#	0.000	0.000	0.000	0.000

Memb 68, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	-27.042	-5.706	0.000	0.571*	-0.421*
0.033	0.000	-27.042	-5.706	0.000	0.380	-1.322
0.067	0.000	-27.042	-5.706	0.000	0.190	-2.224
0.100	0.000	-27.042	-5.706	0.000	0.000	-3.125
0.133	0.000	-27.042	-5.706	0.000	-0.190	-4.027
0.167	0.000	-27.042	-5.706	0.000	-0.380	-4.928
0.200	0.000	-27.042	-5.706	0.000	-0.571#	-5.829#

Memb 70, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-16.521	-12.925	-3.662	3.437	-0.672*	0.042*
0.033	-16.521	-12.925	-3.662	3.437	-0.794	-0.388
0.067	-16.521	-12.925	-3.662	3.437	-0.916	-0.819
0.100	-16.521	-12.925	-3.662	3.437	-1.038	-1.250
0.133	-16.521	-12.925	-3.662	3.437	-1.160	-1.681
0.167	-16.521	-12.925	-3.662	3.437	-1.282	-2.112
0.200	-16.521	-12.925	-3.662	3.437	-1.404#	-2.543#

Memb 71, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.744	5.106*	0.248	0.048	-0.391#	0.000
0.533	0.744	3.404	0.248	0.048	-0.259	2.269
1.067	0.744	1.702	0.248	0.048	-0.126	3.631
1.600	0.744	0.000	0.248	0.048	0.006	4.085*
2.133	0.744	-1.702	0.248	0.048	0.138	3.631
2.667	0.744	-3.404	0.248	0.048	0.271	2.269
3.200	0.744	-5.106#	0.248	0.048	0.403*	0.000#

Memb 72, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-24.914	-14.361	2.145	-3.074	0.023#	0.050*
0.033	-24.914	-14.361	2.145	-3.074	0.095	-0.428
0.067	-24.914	-14.361	2.145	-3.074	0.166	-0.907
0.100	-24.914	-14.361	2.145	-3.074	0.238	-1.386
0.133	-24.914	-14.361	2.145	-3.074	0.309	-1.864
0.167	-24.914	-14.361	2.145	-3.074	0.381	-2.343
0.200	-24.914	-14.361	2.145	-3.074	0.452*	-2.822#

Memb 73, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	3.174	7.819*	0.021	0.006	-0.061#	0.000
0.817	3.174	5.212	0.021	0.006	-0.044	5.321
1.633	3.174	2.606	0.021	0.006	-0.026	8.514
2.450	3.174	0.000	0.021	0.006	-0.009	9.578*
3.267	3.174	-2.606	0.021	0.006	0.009	8.514
4.083	3.174	-5.212	0.021	0.006	0.026	5.321
4.900	3.174	-7.819#	0.021	0.006	0.044*	0.000#

Memb 74, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	1.580	6.542*	-0.159	-0.045	0.332*	0.000
0.683	1.580	4.361	-0.159	-0.045	0.223	3.725
1.367	1.580	2.181	-0.159	-0.045	0.115	5.961
2.050	1.580	0.000	-0.159	-0.045	0.006	6.706*
2.733	1.580	-2.181	-0.159	-0.045	-0.103	5.961
3.417	1.580	-4.361	-0.159	-0.045	-0.212	3.725
4.100	1.580	-6.542#	-0.159	-0.045	-0.321#	0.000#

Memb 75, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-25.095	0.000	3.740	-3.074	-0.312#	0.000
0.433	-25.095	0.000	3.740	-3.074	1.309	0.000
0.867	-25.095	0.000	3.740	-3.074	2.929	0.000
1.300	-25.095	0.000	3.740	-3.074	4.550	0.000
1.733	-25.095	0.000	3.740	-3.074	6.170	0.000
2.167	-25.095	0.000	3.740	-3.074	7.791	0.000
2.600	-25.095	0.000	3.740	-3.074	9.411*	0.000

Memb 76, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-16.748	0.000	-6.093	3.437	1.136*	0.000
0.433	-16.748	0.000	-6.093	3.437	-1.504	0.000
0.867	-16.748	0.000	-6.093	3.437	-4.144	0.000
1.300	-16.748	0.000	-6.093	3.437	-6.785	0.000
1.733	-16.748	0.000	-6.093	3.437	-9.425	0.000
2.167	-16.748	0.000	-6.093	3.437	-12.065	0.000
2.600	-16.748	0.000	-6.093	3.437	-14.705#	0.000

Memb 77, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.146	-0.008	-0.004	0.000	0.000*	0.015*
0.434	-0.146	-0.008	-0.004	0.000	-0.002	0.011
0.868	-0.146	-0.008	-0.004	0.000	-0.004	0.007
1.302	-0.146	-0.008	-0.004	0.000	-0.006	0.004
1.736	-0.146	-0.008	-0.004	0.000	-0.008	0.000
2.171	-0.146	-0.008	-0.004	0.000	-0.010	-0.003
2.605	-0.146	-0.008	-0.004	0.000	-0.012#	-0.007#

Memb 78, Case 7 (Linear): DL + LL + EQL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.073	1.319	0.001	0.003	-0.001#	-0.021#
0.026	0.073	1.319	0.001	0.003	-0.001	0.014
0.052	0.073	1.319	0.001	0.003	-0.001	0.048
0.079	0.073	1.319	0.001	0.003	-0.001	0.083
0.105	0.073	1.319	0.001	0.003	-0.001	0.117
0.131	0.073	1.319	0.001	0.003	-0.001	0.152
0.157	0.073	1.319	0.001	0.003	0.000*	0.186*

Memb 1, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.001	-0.001	-0.002	0.000*	0.000#
0.069	0.000	0.001	-0.001	-0.002	0.000	0.000
0.139	0.000	0.001	-0.001	-0.002	0.000	0.000
0.208	0.000	0.001	-0.001	-0.002	0.000	0.000
0.278	0.000	0.001	-0.001	-0.002	0.000	0.000
0.347	0.000	0.001	-0.001	-0.002	0.000	0.000
0.417	0.000	0.001	-0.001	-0.002	0.000#	0.000*

Memb 2, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	2.308	0.000	-0.682	-0.136	1.951*	0.000*
0.897	2.308	0.000	-0.682	-0.136	1.340	0.000
1.793	2.308	0.000	-0.682	-0.136	0.729	-0.001
2.690	2.308	0.000	-0.682	-0.136	0.118	-0.001
3.586	2.308	0.000	-0.682	-0.136	-0.493	-0.001
4.483	2.308	0.000	-0.682	-0.136	-1.105	-0.001
5.379	2.308	0.000	-0.682	-0.136	-1.716#	-0.002#

Memb 3, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000#	0.000*
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000*	0.000#

Memb 4, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.001	0.000	0.001	0.000	-0.002#	0.000*
1.152	-0.001	0.000	0.001	0.000	-0.002	0.000
2.304	-0.001	0.000	0.001	0.000	-0.001	0.000
3.456	-0.001	0.000	0.001	0.000	0.000	0.000
4.608	-0.001	0.000	0.001	0.000	0.000	0.000
5.760	-0.001	0.000	0.001	0.000	0.001	0.000
6.913	-0.001	0.000	0.001	0.000	0.002*	0.000#

Memb 5, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.059	-0.962	0.003	0.010	0.000#	0.000*
0.069	-0.059	-0.962	0.003	0.010	0.000	-0.067
0.139	-0.059	-0.962	0.003	0.010	0.000	-0.134
0.208	-0.059	-0.962	0.003	0.010	0.000	-0.200
0.278	-0.059	-0.962	0.003	0.010	0.000	-0.267
0.347	-0.059	-0.962	0.003	0.010	0.001	-0.334
0.417	-0.059	-0.962	0.003	0.010	0.001*	-0.401#

Memb 6, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000#	0.000*
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000*	0.000#

Memb 7, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	3.291	0.004	-0.368	-1.362	0.818*	0.000#
0.897	3.291	0.004	-0.368	-1.362	0.487	0.004
1.793	3.291	0.004	-0.368	-1.362	0.157	0.008
2.690	3.291	0.004	-0.368	-1.362	-0.173	0.012
3.586	3.291	0.004	-0.368	-1.362	-0.504	0.015
4.483	3.291	0.004	-0.368	-1.362	-0.834	0.019
5.379	3.291	0.004	-0.368	-1.362	-1.164#	0.023*

Memb 8, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000#	0.000*
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000*	0.000#

Memb 9, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.964	-0.001	-0.003	0.000	0.010*	0.000*
0.718	0.964	-0.001	-0.003	0.000	0.008	-0.001
1.436	0.964	-0.001	-0.003	0.000	0.005	-0.002
2.154	0.964	-0.001	-0.003	0.000	0.003	-0.003
2.872	0.964	-0.001	-0.003	0.000	0.001	-0.004
3.590	0.964	-0.001	-0.003	0.000	-0.001	-0.004
4.308	0.964	-0.001	-0.003	0.000	-0.003#	-0.005#

Memb 10, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000#	0.000*
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000*	0.000#

Memb 11, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-1.568	-25.978	0.005	0.016	-0.001#	0.000*
0.069	-1.568	-25.978	0.005	0.016	-0.001	-1.804
0.139	-1.568	-25.978	0.005	0.016	-0.001	-3.608
0.208	-1.568	-25.978	0.005	0.016	0.000	-5.412
0.278	-1.568	-25.978	0.005	0.016	0.000	-7.216
0.347	-1.568	-25.978	0.005	0.016	0.000	-9.021
0.417	-1.568	-25.978	0.005	0.016	0.001*	-10.825#

Memb 12, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	4.815	3.589	-0.746	-2.862	2.188*	0.000#
0.897	4.815	3.589	-0.746	-2.862	1.519	3.218
1.793	4.815	3.589	-0.746	-2.862	0.849	6.435
2.690	4.815	3.589	-0.746	-2.862	0.180	9.653
3.586	4.815	3.589	-0.746	-2.862	-0.489	12.871
4.483	4.815	3.589	-0.746	-2.862	-1.158	16.088
5.379	4.815	3.589	-0.746	-2.862	-1.827#	19.306*

Memb 13, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000#	0.000*
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000*	0.000#

Memb 14, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	26.025	0.001	-0.005	0.000	0.016*	0.000#
1.152	26.025	0.001	-0.005	0.000	0.010	0.001
2.304	26.025	0.001	-0.005	0.000	0.005	0.003
3.456	26.025	0.001	-0.005	0.000	-0.001	0.004
4.608	26.025	0.001	-0.005	0.000	-0.006	0.006
5.760	26.025	0.001	-0.005	0.000	-0.012	0.007
6.913	26.025	0.001	-0.005	0.000	-0.017#	0.008*

Memb 15, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000#	0.000#
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000*	0.000*

Memb 17, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	6.536	4.824	-0.243	1.512	0.429*	0.000#
0.897	6.536	4.824	-0.243	1.512	0.212	4.325
1.793	6.536	4.824	-0.243	1.512	-0.006	8.650
2.690	6.536	4.824	-0.243	1.512	-0.223	12.976
3.586	6.536	4.824	-0.243	1.512	-0.441	17.301
4.483	6.536	4.824	-0.243	1.512	-0.658	21.626
5.379	6.536	4.824	-0.243	1.512	-0.876#	25.951*

Memb 18, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000	0.000#
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000	0.000*

Memb 19, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	32.107	-0.223	0.003	0.000	-0.010#	1.036*
0.618	32.107	-0.223	0.003	0.000	-0.008	0.898
1.236	32.107	-0.223	0.003	0.000	-0.006	0.760
1.853	32.107	-0.223	0.003	0.000	-0.004	0.623
2.471	32.107	-0.223	0.003	0.000	-0.002	0.485
3.089	32.107	-0.223	0.003	0.000	0.000	0.348
3.707	32.107	-0.223	0.003	0.000	0.002*	0.210#

Memb 20, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000*	0.000#
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000#	0.000*

Memb 21, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.052	-0.870	-0.009	-0.032	0.002*	0.000*
0.069	-0.052	-0.870	-0.009	-0.032	0.001	-0.060
0.139	-0.052	-0.870	-0.009	-0.032	0.001	-0.121
0.208	-0.052	-0.870	-0.009	-0.032	0.000	-0.181
0.278	-0.052	-0.870	-0.009	-0.032	-0.001	-0.242
0.347	-0.052	-0.870	-0.009	-0.032	-0.001	-0.302
0.417	-0.052	-0.870	-0.009	-0.032	-0.002#	-0.362#

Memb 22, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.527	0.006	-0.331	3.508	0.770*	0.000#
0.897	0.527	0.006	-0.331	3.508	0.473	0.005
1.793	0.527	0.006	-0.331	3.508	0.176	0.010
2.690	0.527	0.006	-0.331	3.508	-0.121	0.016
3.586	0.527	0.006	-0.331	3.508	-0.417	0.021
4.483	0.527	0.006	-0.331	3.508	-0.714	0.026
5.379	0.527	0.006	-0.331	3.508	-1.011#	0.031*

Memb 23, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000	0.000*
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000	0.000#

Memb 24, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.871	0.000	0.009	0.000	-0.032#	0.000#
1.152	0.871	0.000	0.009	0.000	-0.022	0.000
2.304	0.871	0.000	0.009	0.000	-0.011	0.000
3.456	0.871	0.000	0.009	0.000	-0.001	0.000
4.608	0.871	0.000	0.009	0.000	0.010	0.000
5.760	0.871	0.000	0.009	0.000	0.020	0.001
6.913	0.871	0.000	0.009	0.000	0.030*	0.001*

Memb 25, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	0.000	0.000	0.000	0.000	0.000#
0.067	0.000	0.000	0.000	0.000	0.000	0.000
0.134	0.000	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000	0.000
0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.334	0.000	0.000	0.000	0.000	0.000	0.000
0.401	0.000	0.000	0.000	0.000	0.000	0.000*

Memb 26, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	64.273*	0.000	0.000	0.000	-25.723
0.433	0.000	41.211	0.000	0.000	0.000	-2.868
0.867	0.000	18.149	0.000	0.000	0.000	9.994
1.300	0.000	-4.913	0.000	0.000	0.000	12.861*
1.733	0.000	-27.975	0.000	0.000	0.000	5.736
2.167	0.000	-51.037	0.000	0.000	0.000	-11.383
2.600	0.000	-74.099#	0.000	0.000	0.000	-38.496#

Memb 27, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	85.152*	0.000	0.000	0.000	-45.414
0.533	0.000	56.768	0.000	0.000	0.000	-7.569
1.067	0.000	28.384	0.000	0.000	0.000	15.138
1.600	0.000	0.000	0.000	0.000	0.000	22.707*
2.133	0.000	-28.384	0.000	0.000	0.000	15.138
2.667	0.000	-56.768	0.000	0.000	0.000	-7.569
3.200	0.000	-85.152#	0.000	0.000	0.000	-45.414#

Memb 28, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	77.169*	0.000	0.000	0.000	-37.298
0.483	0.000	51.446	0.000	0.000	0.000	-6.216
0.967	0.000	25.723	0.000	0.000	0.000	12.433
1.450	0.000	0.000	0.000	0.000	0.000	18.649*
1.933	0.000	-25.723	0.000	0.000	0.000	12.433
2.417	0.000	-51.446	0.000	0.000	0.000	-6.216
2.900	0.000	-77.169#	0.000	0.000	0.000	-37.298#

Memb 29, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	1.576	-28.031*	9.612	1.085	-9.297#	48.269*
0.250	1.576	-41.336	9.612	1.085	-6.893	39.598
0.500	1.576	-54.641	9.612	1.085	-4.490	27.601
0.750	1.576	-67.946	9.612	1.085	-2.087	12.278
1.000	1.576	-81.251	9.612	1.085	0.316	-6.372
1.250	1.576	-94.556	9.612	1.085	2.719	-28.348
1.500	1.576	-107.861#	9.612	1.085	5.122*	-53.650#

Memb 30, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	81.909*	0.000	0.000	0.000	-38.496
0.533	0.000	53.525	0.000	0.000	0.000	-2.380
1.067	0.000	25.141	0.000	0.000	0.000	18.597
1.600	0.000	-3.243	0.000	0.000	0.000	24.437*
2.133	0.000	-31.627	0.000	0.000	0.000	15.138
2.667	0.000	-60.011	0.000	0.000	0.000	-9.299
3.200	0.000	-88.395#	0.000	0.000	0.000	-48.874#

Memb 31, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-1.182	110.882*	-8.321	-2.224	8.222*	-73.175#
0.333	-1.182	93.142	-8.321	-2.224	5.448	-39.171
0.667	-1.182	75.402	-8.321	-2.224	2.675	-11.081
1.000	-1.182	57.662	-8.321	-2.224	-0.099	11.096
1.333	-1.182	39.922	-8.321	-2.224	-2.873	27.360
1.667	-1.182	22.182	-8.321	-2.224	-5.647	37.711
2.000	-1.182	4.442#	-8.321	-2.224	-8.420#	42.148*

Memb 32, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	82.841*	-2.955	1.085	5.122*	-53.650#
0.433	0.000	59.779	-2.955	1.085	3.841	-22.749
0.867	0.000	36.717	-2.955	1.085	2.561	-1.841
1.300	0.000	13.655	-2.955	1.085	1.280	9.073
1.733	0.000	-9.407	-2.955	1.085	0.000	9.994*
2.167	0.000	-32.469	-2.955	1.085	-1.280	0.921
2.600	0.000	-55.531#	-2.955	1.085	-2.561#	-18.146

Memb 33, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	175.950*	0.000	0.000	0.000	-202.342#
1.150	0.000	117.300	0.000	0.000	0.000	-33.724
2.300	0.000	58.650	0.000	0.000	0.000	67.447
3.450	0.000	0.000	0.000	0.000	0.000	101.171*
4.600	0.000	-58.650	0.000	0.000	0.000	67.447
5.750	0.000	-117.300	0.000	0.000	0.000	-33.724
6.900	0.000	-175.950#	0.000	0.000	0.000	-202.342#

Memb 34, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	175.950*	0.000	0.000	0.000	-202.342#
1.150	0.000	117.300	0.000	0.000	0.000	-33.724
2.300	0.000	58.650	0.000	0.000	0.000	67.447
3.450	0.000	0.000	0.000	0.000	0.000	101.171*
4.600	0.000	-58.650	0.000	0.000	0.000	67.447
5.750	0.000	-117.300	0.000	0.000	0.000	-33.724
6.900	0.000	-175.950#	0.000	0.000	0.000	-202.342#

Memb 35, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	3.449	-0.003	-0.140	0.088	0.992*	0.010*
0.897	3.449	-0.003	-0.140	0.088	0.866	0.007
1.793	3.449	-0.003	-0.140	0.088	0.741	0.004
2.690	3.449	-0.003	-0.140	0.088	0.616	0.001
3.586	3.449	-0.003	-0.140	0.088	0.491	-0.002
4.483	3.449	-0.003	-0.140	0.088	0.366	-0.005
5.379	3.449	-0.003	-0.140	0.088	0.240#	-0.008#

Memb 36, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-4.400	-0.674	1.118	-1.541	-3.518#	2.440*
0.897	-4.400	-0.674	1.118	-1.541	-2.516	1.836
1.793	-4.400	-0.674	1.118	-1.541	-1.513	1.233
2.690	-4.400	-0.674	1.118	-1.541	-0.511	0.629
3.586	-4.400	-0.674	1.118	-1.541	0.491	0.025
4.483	-4.400	-0.674	1.118	-1.541	1.494	-0.579
5.379	-4.400	-0.674	1.118	-1.541	2.496*	-1.183#

Memb 37, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	38.563	-21.422	-1.820	-2.113	7.006*	89.595*
0.897	38.563	-21.422	-1.820	-2.113	5.374	70.390
1.793	38.563	-21.422	-1.820	-2.113	3.743	51.185
2.690	38.563	-21.422	-1.820	-2.113	2.111	31.980
3.586	38.563	-21.422	-1.820	-2.113	0.479	12.775
4.483	38.563	-21.422	-1.820	-2.113	-1.152	-6.430
5.379	38.563	-21.422	-1.820	-2.113	-2.784#	-25.635#

Memb 39, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-1.658	-1.084	0.791	4.135	-2.422#	3.917*
0.897	-1.658	-1.084	0.791	4.135	-1.713	2.945
1.793	-1.658	-1.084	0.791	4.135	-1.004	1.973
2.690	-1.658	-1.084	0.791	4.135	-0.295	1.001
3.586	-1.658	-1.084	0.791	4.135	0.415	0.030
4.483	-1.658	-1.084	0.791	4.135	1.124	-0.942
5.379	-1.658	-1.084	0.791	4.135	1.833*	-1.914#

Memb 40, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.101	3.513*	-0.351	0.150	0.634*	-1.190
0.967	-0.101	2.266	-0.351	0.150	0.294	1.603
1.933	-0.101	1.019	-0.351	0.150	-0.046	3.190
2.900	-0.101	-0.228	-0.351	0.150	-0.385	3.572*
3.867	-0.101	-1.475	-0.351	0.150	-0.725	2.749
4.833	-0.101	-2.722	-0.351	0.150	-1.065	0.720
5.800	-0.101	-3.969#	-0.351	0.150	-1.404#	-2.515#

Memb 41, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	3.041	-4.542*	9.728	13.580	-15.810#	2.031*
0.533	3.041	-5.230	9.728	13.580	-10.622	-0.575
1.067	3.041	-5.918	9.728	13.580	-5.434	-3.548
1.600	3.041	-6.606	9.728	13.580	-0.245	-6.888
2.133	3.041	-7.294	9.728	13.580	4.943	-10.595
2.667	3.041	-7.982	9.728	13.580	10.131	-14.668
3.200	3.041	-8.670#	9.728	13.580	15.319*	-19.109#

Memb 42, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	8.109	4.730*	0.778	2.065	-1.077#	0.580#
0.817	8.109	3.677	0.778	2.065	-0.441	4.013
1.633	8.109	2.623	0.778	2.065	0.194	6.585
2.450	8.109	1.570	0.778	2.065	0.829	8.297
3.267	8.109	0.516	0.778	2.065	1.464	9.149*
4.083	8.109	-0.537	0.778	2.065	2.100	9.141
4.900	8.109	-1.591#	0.778	2.065	2.735*	8.272

Memb 43, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	3.204	3.783*	-5.649	-12.941	12.681*	-7.189#
0.683	3.204	2.902	-5.649	-12.941	8.821	-4.905
1.367	3.204	2.020	-5.649	-12.941	4.961	-3.223
2.050	3.204	1.139	-5.649	-12.941	1.101	-2.144
2.733	3.204	0.257	-5.649	-12.941	-2.759	-1.667*
3.417	3.204	-0.624	-5.649	-12.941	-6.619	-1.792
4.100	3.204	-1.506#	-5.649	-12.941	-10.479#	-2.520

Memb 44, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.347	-0.064	0.240	0.199	-0.544#	0.141*
0.717	-0.347	-0.064	0.240	0.199	-0.372	0.095
1.433	-0.347	-0.064	0.240	0.199	-0.200	0.049
2.150	-0.347	-0.064	0.240	0.199	-0.028	0.004
2.867	-0.347	-0.064	0.240	0.199	0.144	-0.042
3.583	-0.347	-0.064	0.240	0.199	0.316	-0.087
4.300	-0.347	-0.064	0.240	0.199	0.488*	-0.133#

Memb 45, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	1.430	2.359*	-0.364	-0.001	0.766*	-2.014#
0.967	1.430	1.605	-0.364	-0.001	0.414	-0.097
1.933	1.430	0.851	-0.364	-0.001	0.062	1.090
2.900	1.430	0.097	-0.364	-0.001	-0.290	1.549*
3.867	1.430	-0.657	-0.364	-0.001	-0.642	1.278
4.833	1.430	-1.411	-0.364	-0.001	-0.994	0.279
5.800	1.430	-2.165#	-0.364	-0.001	-1.346#	-1.449

Memb 46, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-3.722	1.279*	9.374	-0.168	-15.641#	-1.718#
0.533	-3.722	0.863	9.374	-0.168	-10.642	-1.147
1.067	-3.722	0.447	9.374	-0.168	-5.643	-0.797
1.600	-3.722	0.031	9.374	-0.168	-0.643	-0.670*
2.133	-3.722	-0.385	9.374	-0.168	4.356	-0.764
2.667	-3.722	-0.801	9.374	-0.168	9.355	-1.081
3.200	-3.722	-1.217#	9.374	-0.168	14.354*	-1.619

Memb 47, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-7.997	2.030*	0.763	-0.176	-0.643#	-1.105#
0.817	-7.997	1.393	0.763	-0.176	-0.021	0.293
1.633	-7.997	0.756	0.763	-0.176	0.602	1.170
2.450	-7.997	0.119	0.763	-0.176	1.225	1.528*
3.267	-7.997	-0.518	0.763	-0.176	1.848	1.365
4.083	-7.997	-1.155	0.763	-0.176	2.471	0.682
4.900	-7.997	-1.792#	0.763	-0.176	3.094*	-0.521

Memb 48, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-4.673	2.586*	-5.702	0.328	12.358*	-3.344#
0.683	-4.673	2.053	-5.702	0.328	8.461	-1.759
1.367	-4.673	1.520	-5.702	0.328	4.565	-0.538
2.050	-4.673	0.987	-5.702	0.328	0.668	0.319
2.733	-4.673	0.454	-5.702	0.328	-3.229	0.811
3.417	-4.673	-0.079	-5.702	0.328	-7.125	0.940*
4.100	-4.673	-0.612#	-5.702	0.328	-11.022#	0.704

Memb 49, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-6.566	-0.137	4.332	0.064	-7.484#	0.327*
0.433	-6.566	-0.137	4.332	0.064	-5.607	0.268
0.867	-6.566	-0.137	4.332	0.064	-3.729	0.208
1.300	-6.566	-0.137	4.332	0.064	-1.852	0.149
1.733	-6.566	-0.137	4.332	0.064	0.026	0.089
2.167	-6.566	-0.137	4.332	0.064	1.903	0.030
2.600	-6.566	-0.137	4.332	0.064	3.780*	-0.029#

Memb 50, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-13.506	26.730	-3.243	-26.694	14.267*	-111.935#
0.683	-13.506	26.730	-3.243	-26.694	12.051	-93.669
1.367	-13.506	26.730	-3.243	-26.694	9.835	-75.403
2.050	-13.506	26.730	-3.243	-26.694	7.620	-57.138
2.733	-13.506	26.730	-3.243	-26.694	5.404	-38.872
3.417	-13.506	26.730	-3.243	-26.694	3.188	-20.606
4.100	-13.506	26.730	-3.243	-26.694	0.972#	-2.340*

Memb 51, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-20.528	29.257	2.144	24.176	-9.060#	-122.549#
0.683	-20.528	29.257	2.144	24.176	-7.595	-102.557
1.367	-20.528	29.257	2.144	24.176	-6.130	-82.565
2.050	-20.528	29.257	2.144	24.176	-4.665	-62.573
2.733	-20.528	29.257	2.144	24.176	-3.200	-42.581
3.417	-20.528	29.257	2.144	24.176	-1.736	-22.589
4.100	-20.528	29.257	2.144	24.176	-0.271*	-2.597*

Memb 52, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	9.791	-3.767	-4.257	-1.027	12.855*	10.589*
0.683	9.791	-3.767	-4.257	-1.027	9.945	8.014
1.367	9.791	-3.767	-4.257	-1.027	7.036	5.440
2.050	9.791	-3.767	-4.257	-1.027	4.127	2.866
2.733	9.791	-3.767	-4.257	-1.027	1.218	0.291
3.417	9.791	-3.767	-4.257	-1.027	-1.691	-2.283
4.100	9.791	-3.767	-4.257	-1.027	-4.600#	-4.857#

Memb 53, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	32.107	-0.223	0.003	0.000	0.002#	0.210*
0.534	32.107	-0.223	0.003	0.000	0.003	0.091
1.069	32.107	-0.223	0.003	0.000	0.005	-0.028
1.603	32.107	-0.223	0.003	0.000	0.007	-0.147
2.137	32.107	-0.223	0.003	0.000	0.008	-0.266
2.672	32.107	-0.223	0.003	0.000	0.010	-0.385
3.206	32.107	-0.223	0.003	0.000	0.011*	-0.504#

Memb 54, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	5.863	3.111	2.403	-0.100	-3.543#	-4.094#
0.683	5.863	3.111	2.403	-0.100	-1.900	-1.968
1.367	5.863	3.111	2.403	-0.100	-0.258	0.158
2.050	5.863	3.111	2.403	-0.100	1.384	2.284
2.733	5.863	3.111	2.403	-0.100	3.027	4.410
3.417	5.863	3.111	2.403	-0.100	4.669	6.536
4.100	5.863	3.111	2.403	-0.100	6.312*	8.662*

Memb 55, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-9.611	0.152	-5.517	0.549	1.420*	-0.221#
0.433	-9.611	0.152	-5.517	0.549	-0.971	-0.156
0.867	-9.611	0.152	-5.517	0.549	-3.361	-0.090
1.300	-9.611	0.152	-5.517	0.549	-5.752	-0.024
1.733	-9.611	0.152	-5.517	0.549	-8.143	0.041
2.167	-9.611	0.152	-5.517	0.549	-10.533	0.107
2.600	-9.611	0.152	-5.517	0.549	-12.924#	0.173*

Memb 57, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-2.158	-32.035	-0.003	-0.010	0.001*	-1.036*
0.069	-2.158	-32.035	-0.003	-0.010	0.001	-3.261
0.139	-2.158	-32.035	-0.003	-0.010	0.000	-5.485
0.208	-2.158	-32.035	-0.003	-0.010	0.000	-7.710
0.278	-2.158	-32.035	-0.003	-0.010	0.000	-9.935
0.347	-2.158	-32.035	-0.003	-0.010	0.000	-12.160
0.417	-2.158	-32.035	-0.003	-0.010	0.000#	-14.384#

Memb 58, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.466	4.156	0.093	0.000	-0.147#	-7.035#
0.533	0.466	4.156	0.093	0.000	-0.098	-4.818
1.067	0.466	4.156	0.093	0.000	-0.048	-2.602
1.600	0.466	4.156	0.093	0.000	0.002	-0.385
2.133	0.466	4.156	0.093	0.000	0.052	1.832
2.667	0.466	4.156	0.093	0.000	0.102	4.049
3.200	0.466	4.156	0.093	0.000	0.152*	6.265*

Memb 59, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.244	19.010*	0.008	0.000	-0.023#	-23.131#
0.817	0.244	19.010*	0.008	0.000	-0.017	-7.606
1.633	0.244	19.010*	0.008	0.000	-0.010	7.919
2.450	0.244	19.010*	0.008	0.000	-0.003	23.444*
2.450	0.244	-18.490#	0.008	0.000	-0.003	23.444*
3.267	0.244	-18.490#	0.008	0.000	0.003	8.344
4.083	0.244	-18.490#	0.008	0.000	0.010	-6.756
4.900	0.244	-18.490#	0.008	0.000	0.017*	-21.857

Memb 60, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.625	-2.430	-0.060	0.000	0.125*	4.713*
0.683	0.625	-2.430	-0.060	0.000	0.084	3.053
1.367	0.625	-2.430	-0.060	0.000	0.043	1.393
2.050	0.625	-2.430	-0.060	0.000	0.002	-0.267
2.733	0.625	-2.430	-0.060	0.000	-0.039	-1.928
3.417	0.625	-2.430	-0.060	0.000	-0.080	-3.588
4.100	0.625	-2.430	-0.060	0.000	-0.121#	-5.248#

Memb 61, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	-20.138	3.028	0.000	-0.303#	-0.066*
0.033	0.000	-20.138	3.028	0.000	-0.202	-0.737
0.067	0.000	-20.138	3.028	0.000	-0.101	-1.409
0.100	0.000	-20.138	3.028	0.000	0.000	-2.080
0.133	0.000	-20.138	3.028	0.000	0.101	-2.751
0.167	0.000	-20.138	3.028	0.000	0.202	-3.423
0.200	0.000	-20.138	3.028	0.000	0.303*	-4.094#

Memb 62, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.365	0.052	0.748	-0.063	-1.044#	-0.133#
0.433	0.365	0.052	0.748	-0.063	-0.720	-0.111
0.867	0.365	0.052	0.748	-0.063	-0.396	-0.088
1.300	0.365	0.052	0.748	-0.063	-0.072	-0.066
1.733	0.365	0.052	0.748	-0.063	0.252	-0.043
2.167	0.365	0.052	0.748	-0.063	0.576	-0.021
2.600	0.365	0.052	0.748	-0.063	0.900*	0.001*

Memb 63, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	32.473	-17.934	2.758	0.876	-8.716#	93.158*
0.897	32.473	-17.934	2.758	0.876	-6.243	77.080
1.793	32.473	-17.934	2.758	0.876	-3.770	61.002
2.690	32.473	-17.934	2.758	0.876	-1.297	44.924
3.586	32.473	-17.934	2.758	0.876	1.176	28.847
4.483	32.473	-17.934	2.758	0.876	3.648	12.769
5.379	32.473	-17.934	2.758	0.876	6.121*	-3.309#

Memb 67, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.171	8.504*	0.000	0.000	0.000	0.000#
0.967	-0.171	5.670	0.000	0.000	0.000	6.851
1.933	-0.171	2.835	0.000	0.000	0.000	10.961
2.900	-0.171	0.000	0.000	0.000	0.000	12.331*
3.867	-0.171	-2.835	0.000	0.000	0.000	10.961
4.833	-0.171	-5.669	0.000	0.000	0.000	6.851
5.800	-0.171	-8.504#	0.000	0.000	0.000	0.000

Memb 68, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.000	-22.215	-4.723	0.000	0.472*	-0.414*
0.033	0.000	-22.215	-4.723	0.000	0.315	-1.155
0.067	0.000	-22.215	-4.723	0.000	0.157	-1.895
0.100	0.000	-22.215	-4.723	0.000	0.000	-2.636
0.133	0.000	-22.215	-4.723	0.000	-0.157	-3.376
0.167	0.000	-22.215	-4.723	0.000	-0.315	-4.117
0.200	0.000	-22.215	-4.723	0.000	-0.472#	-4.857#

Memb 70, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-13.591	-11.877	-3.021	2.702	-0.543*	0.035*
0.033	-13.591	-11.877	-3.021	2.702	-0.644	-0.361
0.067	-13.591	-11.877	-3.021	2.702	-0.745	-0.757
0.100	-13.591	-11.877	-3.021	2.702	-0.845	-1.153
0.133	-13.591	-11.877	-3.021	2.702	-0.946	-1.549
0.167	-13.591	-11.877	-3.021	2.702	-1.047	-1.945
0.200	-13.591	-11.877	-3.021	2.702	-1.147#	-2.341#

Memb 71, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.624	4.692*	0.204	0.040	-0.322#	0.000
0.533	0.624	3.128	0.204	0.040	-0.213	2.085
1.067	0.624	1.564	0.204	0.040	-0.104	3.337
1.600	0.624	0.000	0.204	0.040	0.005	3.754*
2.133	0.624	-1.564	0.204	0.040	0.114	3.337
2.667	0.624	-3.128	0.204	0.040	0.223	2.085
3.200	0.624	-4.692#	0.204	0.040	0.332*	0.000#

Memb 72, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-20.596	-13.196	1.763	-2.394	0.027#	0.042*
0.033	-20.596	-13.196	1.763	-2.394	0.086	-0.398
0.067	-20.596	-13.196	1.763	-2.394	0.144	-0.838
0.100	-20.596	-13.196	1.763	-2.394	0.203	-1.278
0.133	-20.596	-13.196	1.763	-2.394	0.262	-1.718
0.167	-20.596	-13.196	1.763	-2.394	0.321	-2.158
0.200	-20.596	-13.196	1.763	-2.394	0.379*	-2.598#

Memb 73, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	2.620	7.185*	0.018	0.005	-0.051#	0.000
0.817	2.620	4.790	0.018	0.005	-0.036	4.890
1.633	2.620	2.395	0.018	0.005	-0.022	7.823
2.450	2.620	0.000	0.018	0.005	-0.007	8.801*
3.267	2.620	-2.395	0.018	0.005	0.008	7.823
4.083	2.620	-4.790	0.018	0.005	0.022	4.890
4.900	2.620	-7.185#	0.018	0.005	0.037*	0.000#

Memb 74, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	1.304	6.012*	-0.131	-0.037	0.274*	0.000#
0.683	1.304	4.008	-0.131	-0.037	0.184	3.423
1.367	1.304	2.004	-0.131	-0.037	0.094	5.477
2.050	1.304	0.000	-0.131	-0.037	0.005	6.162*
2.733	1.304	-2.004	-0.131	-0.037	-0.085	5.477
3.417	1.304	-4.008	-0.131	-0.037	-0.175	3.423
4.100	1.304	-6.012#	-0.131	-0.037	-0.265#	0.000

Memb 75, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-20.746	0.000	3.079	-2.394	-0.264#	0.000
0.433	-20.746	0.000	3.079	-2.394	1.070	0.000
0.867	-20.746	0.000	3.079	-2.394	2.404	0.000
1.300	-20.746	0.000	3.079	-2.394	3.738	0.000
1.733	-20.746	0.000	3.079	-2.394	5.072	0.000
2.167	-20.746	0.000	3.079	-2.394	6.407	0.000
2.600	-20.746	0.000	3.079	-2.394	7.741*	0.000

Memb 76, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-13.778	0.000	-5.017	2.702	0.926*	0.000
0.433	-13.778	0.000	-5.017	2.702	-1.248	0.000
0.867	-13.778	0.000	-5.017	2.702	-3.422	0.000
1.300	-13.778	0.000	-5.017	2.702	-5.596	0.000
1.733	-13.778	0.000	-5.017	2.702	-7.770	0.000
2.167	-13.778	0.000	-5.017	2.702	-9.944	0.000
2.600	-13.778	0.000	-5.017	2.702	-12.118#	0.000

Memb 77, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	-0.123	-0.007	-0.004	0.000	0.000*	0.012*
0.434	-0.123	-0.007	-0.004	0.000	-0.002	0.009
0.868	-0.123	-0.007	-0.004	0.000	-0.003	0.006
1.302	-0.123	-0.007	-0.004	0.000	-0.005	0.003

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
1.736	-0.123	-0.007	-0.004	0.000	-0.006	0.000
2.171	-0.123	-0.007	-0.004	0.000	-0.008	-0.003
2.605	-0.123	-0.007	-0.004	0.000	-0.010#	-0.006#

Memb 78, Case 8 (Linear): DL + LL

Station Location	Axial Force	Y-Axis Shear	Z-Axis Shear	X-Axis Torsion	Y-Axis Moment	Z-Axis Moment
0.000	0.060	1.085	0.001	0.003	-0.001#	-0.017#
0.026	0.060	1.085	0.001	0.003	0.000	0.011
0.052	0.060	1.085	0.001	0.003	0.000	0.040
0.079	0.060	1.085	0.001	0.003	0.000	0.068
0.105	0.060	1.085	0.001	0.003	0.000	0.096
0.131	0.060	1.085	0.001	0.003	0.000	0.125
0.157	0.060	1.085	0.001	0.003	0.000*	0.153*

3 DESIGN OF MEMBERS

SUSPENDED SLAB

LOCAL CONTROL ROOM & BLOWER ROOM

Designed as a Continuous Beam : REF. AS 3600

1. Loads

DL	:	Wdl =	**1.00**	kN/m	(plus super)
Self wt	:	Wsw =	**6.88**	kN/m	
Blockwall	:	Wb =	**0.00**	kN/m	
TOTAL	:	=	7.88	kN/m	
LL	:	Wll =	**2**	kN/m	
LL factor	- long term		**0.4**		
	- short term		**0.7**		

2. Beam Section Properties

bw	**1000**	mm
D	**275**	mm
tff	**0**	mm
Cover	**65**	mm
D = Overall depth of section	**275**	mm
Actual length, L	**3250**	mm
Effective Length,Lef	**2850**	mm
Area, A	2.75E+05	mm^2
Neutral Axis, yc	137.50	mm
Moment of Inertia, Ix-x	1.73E+09	mm^4
Neutral Axis, xc	785.00	mm
Moment of Inertia, Iy-y	2.29E+10	mm^4
Effective width, beff	1455.00	mm
Gross Area, Ag	2.75E+05	mm^2

3. Design Parameters

F'c =	**40**	MPa
Fsy =	**410**	MPa
m	2400	kg/m^3
D =	275	mm
Ec =	31975.3505	MPa
Es =	200000	MPa
Gamma =	0.766	

4. INITIAL CHOICE OF SECTION

Effective width = 1570 mm — clause 8.8.2

Is the section RECT or T, L (ans : 1 or 2) = 1

k_1 = 0.045 (RECT sections) 1

= 0.03183953 (T and L sections) 2

what type of span? 6 interior span = 5

end span = 6

k_2 = 0.0054054

kcs = 1.64 (because there will be comp steel at midspan=say .5Ast)

Fdef = 15.627

defln/Lef = **0.004** k_1/k_2 = 8.32500833

d = 60 mm

take d = **190** mm Distance from d to extreme fibre of beam (do) = 85 mm

5. Forces from an Elastic Analysis by Space Gass :

Mmax -ve	=	72.00 kNm	(left support)
Mmax +ve	=	7.40 kNm	(mid-span)
M -ve	=	12.00 kNm	(right support)
Vmax	=	49.00 kN	
V (other end)	=	6.00 kN	

6. FLECTURAL STRENGTH STEEL

Determine - ve steel required : (At arbitrary left support)

Number of reinforcement layers 1 or 2 : 1

take do = 85 mm d = 190

Estimate Area of main steel Ast = 1208.18546 mm^2 Say

5 Y 16 Ast = 1005.30965 mm^2 176.4729903

314 CTS p = 0.0052911

4 Y 12 Asc = 452.389342 mm^2

pc = 0.002381 < pd = 0.025409

p-pc = 0.00291011 pd=0.4*0.85*μ*f'c/fsy

Astmin = 1044.05 mm^2 Governs

Spacing = 302.348767 mm

Y16 at 300 CTS

Check M* <= phiMu

ku = 0.045813 dsc = 83 mm

phi Mu = phi[Fsy x Asc (d - dsc) + 0.85 x F'c x b x Gamma x ku x d x (d - 0.5 x 0.85 x ku x d)]

=	79	kNm	>	M* = 72.00 kNm	OK

Determine - ve steel at right support :

M -ve = 12.00 kNm

Number of reinforcement layers 1 or 2 : 1

take do = 93 mm dst = 182 mm

Estimate Area of main steel Ast = 210.215418 mm^2

5 Y 16 Ast = 1005.30965 mm^2

314 CTS p = 0.00552368

5 Y 12 Asc = 565.486678 mm^2

314 pc = 0.00310707 < pd = 0.025409

p-pc = 0.00241661

Astmin = 1044.05 mm^2

Spacing = 302.348767 mm

Y16 at 300 CTS

Check M* <= phiMu

ku = 0.038044 dsc = 83 mm

phi Mu = phi[Fsy x Asc (d - dsc) + 0.85 x F'c x b x Gamma x ku x d x (d - 0.5 x 0.85 x ku x d)]

=	67	kNm	>	M* = 12.00 kNm	OK

FOR DUCTILITY CHECK AT BOTH SUPPORTS USE EMPHI

Tensile Steel at Midspan :

M* = 7.4 kNm

Steel in one layer then code = 1 take dist between centroid of

" " two " " code = 2 bar/s and soffit = 93 mm

what is the code ? 1 d = 190 mm

Ast = M*/(Phi x 0.85 x d x Fsy) = 124.174616 mm^2

Bottom 3 Y 16 Ast = 603.185789 mm^2

Top 3 Y 16 Asc = 603.185789 mm^2

Assume N - A in flange

Effective width : beff = 1570 mm

ku = 1/(0.85 x0.85) x [Ast/(bw x d)] x (Fsy/F'c)

= 0.03183274

hence	dn	=	6	<	flange thickness hence N -A is in flange
Ast min Governs -	Use Y1 6at		300 CTS		

Phi Mu = 0.9[Fsy x Ast x d (1 - 0.5 x 0.85 x ku)]

=	42 kNm	>	M*+ve =	7.40 kNm	OK

Summary of reinforcement requirement :

left support :	Ast	=	Y16	300 CTS
	Asc	=	Y16	300 CTS
Right support :	Ast	=	Y16	300 CTS
	Asc	=	Y16	300 CTS
midspan	Ast	=	Y16	300 CTS
	Asc	=	Y16	300 CTS

7. STEEL CURTAILMENT REQUIREMENT CHECK

The following requirements regarding curtailment are subject to stress development length requirements.

For -ve steel
i) 1/4 Ast to continue over length of beam = 2 bars
ii) Remainder to be curtailed at 0.3Ln from face of support.
= 0.3 x le = 855 mm ?

For -ve steel
i) 1/4 Ast to continue over length of beam = 2 bars
ii) Remainder to be curtailed at 0.3Ln from face of support.
= 0.3 x le = 855 mm ?

For +ve steel :
i) 1/2 Ast must be carried into outer support = 2 bars
ii) 1/4 Ast into interior support = 2 bars
iii) Remainder curtailed at 0.1Ln from supports
= 0.1 x le = 285 mm

8. STRESS DEVELOPMENT

For Top Steel :

cover : c = 65 mm
d_b = 16 mm # of lines of bars = 2
a_b = 423 mm distance between bars
If a_b > 2c C = 2c + d_b = 146 mm
C is the outside diameter of a concrete annulus
if a_b =< 2c C = a_b + d_b = 439 mm
coaxial with and surrounding a bar
k1 = 1.25 A_b = 201.06193 mm^2
k2 = 2.2 a_b = 423 mm (dist between bars)
factor = 35843.9945
Lsyt = k1 x k2 x fsy x Ab/C x sqrt(f'c) = factor/C
= 245.5068 mm
take fs/Fsy = M*/Phi Mu = 0.908715771
therefore Lsy = 223 mm ≥ 25k1db 500
say = 250 mm

For Bottom Steel :

Cover, c = 65 mm d_b = 16 mm
# of lines of bars = 2
If ab > 2c C = 2c + d_b = 146 mm
if ab < 2c C = a_b + d_b = 593 mm
k1 = 1 A_b = 201.06193 mm^2
k2 = 2.2 a_b = 577 mm (dist between bars)
factor = 28675.1956
Lsyt = 196.4054 mm take fs/Fsy = M*/Phi Mu = 0.177144668
therefore Lsy = 35 mm ≥ 25k1db 400
say = 50 mm

9. SHEAR CHECK

V* = 49.00 kN — Dist to centreline of bottom steel from soffit

critical location : d = 190 mm — dq = 93 mm; do = 182 mm

V* = 47 kN — beta 1 = 1.309 (but not less than 1.1)

hence = 1.309

beta 2 = 1

beta 3 = 1 Unity

phi Vuc = phi x beta 1 x beta 2 x beta 3 x bw x do[Ast x F'c/bw x do]^0.333

= 100.87 kN

phi Vumax = 1019.2 kN > V* No web crushing

phi Vumin = 177 kN > V* OK

If shear reinforcement reqired then proceed as follows :

choose stirrup spacing s = 350 mm — Fsyf = 410 MPa

Determine theta :

bv x s/Fsy f = 853.658537

Asv.min = 298.780488 mm^2

Asv.max = 6153 mm^2

Asv = 2 x area of stirrups = 220 mm^2 2 Ties

theta = 29.79816 degrees

Determine Phi Vu :

Vu = Vuc + Vus

= Vuc + Asv / s x Fsyf x do cot theta

= 226.00 kN

Phi Vu = 158 kN > V* = 47.12375 kN

hence

PROVIDE :	**2 Y12 LIGS**	**@**	**350**	**centres**

Other Support :

V* = 6.00 kN — Dist to centreline of bottom steel from soffit

critical location : d = 190 mm — dq = 93 mm; do = 182 mm

V* = 4.12 kN — beta 1 = 1.309 (but not less than 1.1)

hence = 1.309

beta 2 = 1

beta 3 = 1

phi Vuc = phi x beta 1 x beta 2 x beta 3 x bw x do[Ast x F'c/bw x do]^0.333

= 100.8689 kN

phi Vumax = 1019.2 kN > V* No web crushing

phi Vumin = 177 kN < V* OK

If shear reinforcement reqired then proceed as follows :

choose stirrup spacing s = 350 mm — Fsyf = 410 MPa

Determine theta :

bv x s/Fsy f = 853.658537

Asv.min = 298.780488 mm^2

Asv.max = 6153.38472 mm^2

Asv = 2 x area of stirrups = 600 mm2 2 Ties

theta = 30.77175 degrees

Determine Phi Vu :

Vu = Vuc + Vus

= Vuc + Asv / s x Fsyf x do cot theta

= 358.9269 kN

Phi Vu = 251.2489 kN > V* = 4.12 kN

hence

PROVIDE :	**2 Y16LIGS**	**@**	**350 centres**

10. SERVICEABILITY CHECK

From an Elastic Linear Analysis :

Mr	=	72.00 kNm	Es	=	200000 MPa
Ml	=	12.00 kNm	Ec	=	31975.35051 MPa
Mo	=	49.4 kNm			
Ms	=	7.40 kNm			
Ig	=	1.73E+09 mm^4			

Calculate Icr, Mcr, and Ief at midspan :

Eff. Flange width	b_{eff} =	1570 mm	A_{sc} =		603.1857895 mm^2
webwidth	b_w =	1000 mm	A_{st} =		603.1857895 mm^2
Flange thickness	t_{ff} =	0 mm	d_{sc} =		93 mm
			d_{st} =		190 mm
			d =		190 mm
			D =		275 mm

n = Es/Ec = 6.25481807

1/2 x bw x dn^2 + (beff - bw) x t (dn - t/2) + (n - 1) Asc (dn - dsc) = nAst (d - dn)

500 dn^2 + 6942.44896 dn - 1011611.04) = 0

dn = 38.5704028 mm

d = 190 mm

Icr = bdn3/3 +1/12(beff - bw)x t^3+(beff - bw)xt(dn-t/2)^2+nxAst (d-dn)^2

= 1.06E+08 mm4

Mcr = 0.6sqrtF'c x bD^2/6 = 47.8294496 kNm

Im = [Icr + (Ig - Icr) (Mcr / Ms) ^3]

= 4.40E+11 mm^4

Calculate Icr , Mcr , ILef and Iref at end supports :

b_w =	1000 mm	A_{st} =	1005.30965		mm^2
d_{sc} =	83 mm	A_{sc} =	565.486678		mm^2
d =	190 mm				
Ig =	1.73E+09 mm^4				

At right end (arbitrary)

1/2 x bdnSQ + (n - 1) Asc (dn - dsc) = nAst (d - dn)

500 dn^2 + 9259.55856 dn - 1441362.46) = 0

dn = 45.22 mm

d = 182 mm

Icr = bdn3/3 + n x Asc (d - dn)^2 = 1.48E+08 mm^4

Mcr = 0.6sqrtF'c x bD^2/6 47.8294496 kNm

Iref = [Icr + (Ig - Icr) (Mcr / Mr)^3 = 6.13E+08 mm^4

At left end (arbitrary)

b_w = **1000** mm

d_{sc} = **83** mm

A_{st} = **1005.3096** mm^2

A_{sc} = **452.38934** mm^2

d = **190** mm

1/2 x bdnSQ + (n - 1) Asc (dn - dsc) = nAst (d - dn)

500 dn^2 + 8665.25264 dn - 1392035.07) = 0

dn = 44.8058306 mm

d = 190 mm

Icr = bdn3/3 + n x Asc (d - dn)^2 = 1.63E+08 mm^4

Mcr = 0.6sqrtF'c x bD^2/6 = 47.8294496 kNm

Ilef = [Icr + (Ig - Icr) (Mcr / Ml)^3 = 9.96E+10 mm^4

Iav = [Im + (IL + Ir)/2]/2 = 2.45E+11 mm^4

Midspan Deflection :

Lef = 2850 mm

Defln,s = Lef^2/Ec x Iav [5/48 . Mo - 1/16 ML - 1/16 Mr]

= -0.00010808 mm

Total Deflection :

Long term factor	=	0.2			
Short term factor	=	0.5			
w - long term	=	8.275 kN/m			
w - short term	=	8.875 kN/m			
Defln,s,sus	=	-0.000100774 mm			
At midspan :			Ast	=	603.185789 mm^2
			Asc	=	603.185789 mm^2
Asc/Ast =		1			
kcs	=	2 - (1.2 x Asc/Ast)		>=	0.8
	=	0.8			

therefore

Total Defln	=	Dfln,s + (kcs x Defln,s,sus)
	=	-0.00019 mm

FROM A MORE ACCURATE ANALYSIS Warner,Rangan,Hall HAVE SHOWN THAT THIS CAN BE REDUCED BY UP TO 10%.

ALLOWABLE DEFLN	=	Lef / 500 =	5.7 mm	
			> 0.9 x Total Defln	
ALLOWABLE DEFLN	=	Lef / 250 =	11.4 mm	
			> 0.9 x Total Defln	**OK**

Beam Design

Blower Control Room Beam : REF. AS 3600

1. Loads

DL	:	Wdl =	7.20	kN/m	(plus super)
Self wt	:	Wsw =	7.88	kN/m	
Blockwall	:	Wb =	24.00	kN/m	
TOTAL	:	=	39.08	kN/m	
LL	:	Wll =	0.25	kN/m	
LL factor	- long term		0.4		
	- short term		0.7		

2. Beam Section Properties

bw	450	mm
D	700	mm
tff	0	mm
Cover	65	mm
D = Overall depth of section	700	mm
Actual length, L	6900	mm
Effective Length,Lef	6500	mm
Area, A	3.15E+05	mm^2
Neutral Axis, yc	350.00	mm
Moment of Inertia, Ix-x	1.29E+10	mm^4
Neutral Axis, xc	875.00	mm
Moment of Inertia, Iy-y	5.32E+09	mm^4
Effective width, beff	1750.00	mm
Gross Area, Ag	3.15E+05	mm^2

3. Design Parameters

F'c =	40	MPa
Fsy =	410	MPa
m	2400	kg/m^3
D =	700	mm
Ec =	31975.3505	MPa
Es =	200000	MPa
Gamma =	0.766	

4. INITIAL CHOICE OF SECTION

Effective width = 1750 mm

Is the section RECT or T, L (ans : 1 or 2) = 1 clause 8.8.2

k_1 = 0.045 (RECT sections) 1

= 0.02112103 (T and L sections) 2

what type of span? 6 interior span = 5

end span = 6

k_2 = 0.0054054

kcs = 1.64 (because there will be comp steel at midspan=say .5Ast)

Fdef = 64.422

defln/Lef = 0.004 k_1/k_2 = 8.32500833

d = 212 mm

take d = 599 mm Distance from d to extreme fibre of beam (do) = 101 mm

5. Forces from an Elastic Analysis by Space Gass :

Mmax -ve	=	283.00 kNm	(left support)
Mmax +ve	=	141.00 kNm	(mid-span)
M -ve	=	283.00 kNm	(right support)
Vmax	=	246.00 kN	
V (other end)	=	246.00 kN	
N*	=	0.00 kN	Axial Load

6. FLECTURAL STRENGTH STEEL

Determine - ve steel required : (At arbitrary left support)

Number of reinforcement layers 1 or 2 : 1

take do = 101 mm d = 599

Estimate Area of main steel Ast = 1506.30987 mm^2

4 Y 24 Ast = 1809.55737 mm^2

p = 0.00671325

3 Y 20 Asc = 942.477796 mm^2

pc = 0.00349649 < pd = 0.025409

p-pc = 0.00321677 pd=0.4*0.85*u*f'c/fsy

Check M* <= phiMu

ku = 0.05064 dsc = 87 mm

phi Mu = phi[Fsy x Asc (d - dsc) + 0.85 x F'c x b x Gamma x ku x d x (d - 0.5 x 0.85 x ku x d)]

=	366 kNm	>	M* =	283.00 kNm	OK

Determine - ve steel at right support :

M -ve = 283.00 kNm

Number of reinforcement layers 1 or 2 : 2

take do = 113 mm dst = 599 mm

Estimate Area of main steel Ast = 1506.30987 mm^2

4 Y 24 Ast = 1809.55737 mm^2

p = 0.00671325

3 Y 20 Asc = 942.477796 mm^2

pc = 0.00349649 < pd = 0.025409

p-pc = 0.00321677

Check M* <= phiMu

ku = 0.05064 dsc = 87 mm

phi Mu = phi[Fsy x Asc (d - dsc) + 0.85 x F'c x b x Gamma x ku x d x (d - 0.5 x 0.85 x ku x d)]

=	366 kNm	>	M* =	283.00 kNm	OK

FOR DUCTILITY CHECK AT BOTH SUPPORTS USE EMPHI

Tensile Steel at Midspan :

M* = 141 kNm

Steel in one layer then code = 1

" " two " " code = 2

what is the code ? 1

take dist between centroid of bar/s and soffit = 97 mm

d = 599 mm

Ast = M*/(Phi x 0.85 x d x Fsy) = 750.493609 mm^2

Bottom 3 Y 20 Ast = 942.477796 mm^2

Top 3 Y 16 Asc = 603.185789 mm^2

Assume N - A in flange

Effective width : beff = 1750 mm

ku = 1/(0.85 x0.85) x [Ast/(bw x d)] x (Fsy/F'c)

= 0.01415411

hence dn = 8 < flange thickness

hence N-A is in flange

Phi Mu = 0.9[Fsy x Ast x d (1 - 0.5 x 0.85 x ku)]

=	207 kNm	>	M*+ve =	141.00 kNm	OK

Summary of reinforcement requirement :

left support :	Ast	=	4	Y 24
	Asc	=	3	Y 20
Right support :	Ast	=	4	Y 24
	Asc	=	3	Y 20
midspan	Ast	=	3	Y 20
	Asc	=	3	Y 16

7. STEEL CURTAILMENT REQUIREMENT CHECK

The following requirements regarding curtailment are subject to stress development length requirements.

For -ve steel
i) 1/4 Ast to continue over length of beam = 2 bars
ii) Remainder to be curtailed at 0.3Ln from face of support.
= 0.3 x le = 1950 mm ?

For -ve steel
i) 1/4 Ast to continue over length of beam = 2 bars
ii) Remainder to be curtailed at 0.3Ln from face of support.
= 0.3 x le = 1950 mm ?

For +ve steel :
i) 1/2 Ast must be carried into outer support = 2 bars
ii) 1/4 Ast into interior support = 2 bars
iii) Remainder curtailed at 0.1Ln from supports
= 0.1 x le = 650 mm

8. STRESS DEVELOPMENT

For Top Steel :

cover : c = 65 mm
d_b = 16 mm # of lines of bars = 2
a_b = 148 mm distance between bars
If a_b > 2c C = 2c + d_b = 146 mm
C is the outside diameter of a concrete annulus
if a_b =< 2c C = a_b + d_b = 164 mm
coaxial with and surrounding a bar
k1 = 1.25 A_b = 201.06193 mm^2
k2 = 2.2 a_b = 148 mm (dist between bars)
factor = 35843.9945
Lsyt = k1 x k2 x fsy x Ab/C x sqrt(f'c) = factor/C
= 245.5068 mm
take fs/Fsy = M*/Phi Mu = 0.774097193
therefore Lsy = 190 mm ≥ 25k1db 500
say = 200 mm

For Bottom Steel :

Cover, c = 65 mm d_b = 20 mm
# of lines of bars = 2
If ab > 2c C = 2c + d_b = 150 mm
if ab < 2c C = a_b + d_b = 322 mm
k1 = 1 A_b = 314.159265 mm^2
k2 = 2.2 a_b = 302 mm (dist between bars)
factor = 44804.9931
Lsyt = 298.7 mm take fs/Fsy = M*/Phi Mu = 0.680542922
therefore Lsy = 203 mm ≥ 25k1db 400
say = 200 mm

9. SHEAR CHECK

V* = 246.00 kN — Dist to centreline of bottom steel from soffit

critical location : d = 599 mm — dq = 93 mm

do = 607 mm

V* = 222 kN — beta 1 = 1.0965 (but not less than 1.1)

hence = 1.1

beta 2 = 1

beta 3 = 1 Unity

phi Vuc = phi x beta 1 x beta 2 x beta 3 x bw x do[Ast x F'c/bw x do]^0.333

= 135.15 kN

phi Vumax = 1529.64 kN > V* No web crushing

phi Vumin = 250 kN > V* OK

If shear reinforcement reqired then proceed as follows :

choose stirrup spacing s = 300 mm — Fsyf = 410 MPa

Determine theta :

bv x s/Fsy f = 329.268293

Asv.min = 115.243902 mm^2

Asv.max = 2401 mm^2

Asv = 2 x area of stirrups = 220 mm^2 2 Ties

theta = 30.68733 degrees

Determine Phi Vu :

Vu = Vuc + Vus

= Vuc + Asv / s x Fsyf x do cot theta

= 500.60 kN

Phi Vu = 350 kN > V* = 222.444325 kN

hence

PROVIDE :	**1 Y12 LIGS**	**@**	**300**	**centres**

Other Support :

V* = 246.00 kN — Dist to centreline of bottom steel from soffit

critical location : d = 599 mm — dq = 93 mm

do = 607 mm

V* = 222.44 kN — beta 1 = 1.0965 (but not less than 1.1)

hence = 1.1

beta 2 = 1

beta 3 = 1

phi Vuc = phi x beta 1 x beta 2 x beta 3 x bw x do[Ast x F'c/bw x do]^0.333

= 135.1537 kN

phi Vumax = 1529.64 kN > V* No web crushing

phi Vumin = 250 kN < V* OK

If shear reinforcement reqired then proceed as follows :

choose stirrup spacing s = 300 mm — Fsyf = 410 MPa

Determine theta :

bv x s/Fsy f = 329.268293

Asv.min = 115.243902 mm^2

Asv.max = 2401.4023 mm^2

Asv = 2 x area of stirrups = 330 mm2 2 Ties

theta = 31.40906 degrees

Determine Phi Vu :

Vu = Vuc + Vus

= Vuc + Asv / s x Fsyf x do cot theta

= 641.4032 kN

Phi Vu = 448.9822 kN > V* = 222.44 kN

hence

PROVIDE :	**1 Y12 LIGS**	**@**	**300 centres**

10. SERVICEABILITY CHECK

From an Elastic Linear Analysis :

Mr	=	283.00 kNm		Es	=	200000 MPa
Ml	=	283.00 kNm		Ec	=	31975.35051 MPa
Mo	=	424 kNm				
Ms	=	141.00 kNm				
Ig	=	1.29E+10 mm^4				

Calculate Icr, Mcr, and Ief at midspan :

Eff. Flange width	b_{eff} =	1750 mm		A_{sc} =	603.1857895 mm^2	
webwidth	b_w =	450 mm		A_{st} =	942.4777961 mm^2	
Flange thickness	t_{ff} =	0 mm		d_{sc} =	97 mm	
				d_{st} =	599 mm	
				d =	599 mm	
				D =	700 mm	

n = Es/Ec = 6.25481807

1/2 x bw x dn^2 + (beff - bw) x t (dn - t/2) + (n - 1) Asc (dn - dsc) = nAst (d - dn)

225 dn^2 + 9064.65873 dn - 3838575.52) = 0

dn = 112.015702 mm

d = 599 mm

Icr = bdn3/3 +1/12(beff - bw)x t^3+(beff - bw)xt(dn-t/2)^2+nxAst (d-dn)^2

= 1.61E+09 mm4

Mcr = 0.6sqrtF'c x bD^2/6 = 139.456445 kNm

Im = [Icr + (Ig - Icr) (Mcr / Ms) ^3]

= 1.25E+10 mm^4

Calculate Icr , Mcr , ILef and Iref at end supports :

b_w =	450 mm	A_{st} =	1809.55737 mm^2
d_{sc} =	87 mm	A_{sc} =	942.477796 mm^2
d =	599 mm		

Ig = 1.29E+10 mm^4

At right end (arbitrary)

1/2 x bdnSQ + (n - 1) Asc (dn - dsc) = nAst (d - dn)

225 dn^2 + 16271.0015 dn - 7210624.61) = 0

dn = 146.47 mm

d = 599 mm

Icr = bdn3/3 + n x Asc (d - dn)^2 = 2.79E+09 mm^4

Mcr = 0.6sqrtF'c x bD^2/6 139.456445 kNm

Iref = [Icr + (Ig - Icr) (Mcr / Mr)^3 = 3.99E+09 mm^4

At left end (arbitrary)

b_w =	**450** mm
d_{sc} =	**87** mm
A_{st} =	**1809.5574** mm^2
A_{sc} =	**942.4778** mm^2
d =	**599** mm

1/2 x bdnSQ + (n - 1) Asc (dn - dsc) = nAst (d - dn)

225 dn^2 + 16271.0015 dn - 7210624.61) = 0

dn = 146.474652 mm

d = 599 mm

Icr = bdn3/3 + n x Asc (d - dn)^2 = 2.79E+09 mm^4

Mcr = 0.6sqrtF'c x bD^2/6 = 139.456445 kNm

Ilef = [Icr + (Ig - Icr) (Mcr / Ml)^3 = 3.99E+09 mm^4

Iav = [Im + (IL + Ir)/2]/2 = 8.25E+09 mm^4

Midspan Deflection :

Lef = 6500 mm

Defln,s = Lef^2/Ec x Iav [5/48 . Mo - 1/16 ML - 1/16 Mr]

= 1.4088092 mm

Total Deflection :

Long term factor	=	0.2			
Short term factor	=	0.5			
w - long term	=	39.125	kN/m		
w - short term	=	39.2	kN/m		
Defln,s,sus	=	1.40611377	mm		
At midspan :			Ast	=	942.477796 mm^2
			Asc	=	603.185789 mm^2
Asc/Ast =		0.64			
kcs	=	2 - (1.2 x Asc/Ast)		>=	0.8
	=	1.232			

therefore

Total Defln	=	Dfln,s + (kcs x Defln,s,sus)	
	=	3.14114	mm

FROM A MORE ACCURATE ANALYSIS Warner,Rangan,Hall HAVE SHOWN THAT THIS CAN BE REDUCED BY UP TO 10%.

ALLOWABLE DEFLN	=		Lef / 500 =		13 mm
0.9 x Total Defln =		2.827027225		<	13 OK
ALLOWABLE DEFLN	=		Lef / 250 =		26 mm
0.9 x Total Defln =		2.827027225		<	26 OK

Main Wall Design

Design of a Beam : REF. AS 3600

1. Loads

DL	:	Wdl =	3.83	kN/m	(plus super)
Self wt	:	Wsw =	41.28	kN/m	
Blockwall	:	Wb =	0.00	kN/m	
TOTAL	:	=	45.11	kN/m	
LL	:	Wll =	0.25	kN/m	
LL factor	- long term		0.4		
	- short term		0.7		

2. Beam Section Properties

bw	2064	mm
D	800	mm
tff	0	mm
Cover	75	mm
D = Overall depth of section	800	mm
Actual length, L	7600	mm
Effective Length,Lef	6400	mm
Area, A	1.65E+06	mm^2
Neutral Axis, yc	400.00	mm
Moment of Inertia, Ix-x	8.81E+10	mm^4
Neutral Axis, xc	1032.00	mm
Moment of Inertia, Iy-y	5.86E+11	mm^4
Effective width, beff	2064.00	mm
Gross Area, Ag	1.65E+06	mm^2

3. Design Parameters

F'c =	40	MPa
Fsy =	410	MPa
m	2400	kg/m^3
D =	800	mm
Ec =	31975.3505	MPa
Es =	200000	MPa
Gamma =	0.766	

4. INITIAL CHOICE OF SECTION

Effective width = 2064 mm clause 8.8.2

Is the section RECT or T, L (ans : 1 or 2) = 1

k_1 = 0.045 (RECT sections) 1

= 0.045 (T and L sections) 2

what type of span? 6 interior span = 5

end span = 6

k_2 = 0.0054054

kcs = 1.64 (because there will be comp steel at midspan=say .5Ast)

Fdef = 74.3194

defln/Lef = 0.004 k_1/k_2 = 8.32500833

d = 208 mm

take d = 697 mm Distance from d to extreme fibre of beam (do) = 103 mm

5. Forces from an Elastic Analysis by Space Gass :

Mmax -ve	=	2300.00 kNm	(left support)
Mmax +ve	=	174.00 kNm	(mid-span)
M -ve	=	7.59 kNm	(right support)
Vmax	=	760.00 kN	
V (other end)	=	0.00 kN	
N*	=	138.00 kN	Axial Load

6. FLECTURAL STRENGTH STEEL

Determine - ve steel required : (At arbitrary left support)

Number of reinforcement layers 1 or 2 : 1

take do = 103 mm d = 697

Estimate Area of main steel Ast = 10520.8243 mm²

13 Y 32 Ast = 10455.2204 mm²

159 CTS p = 0.0072676

3 Y 32 Asc = 2412.74316 mm²

688 CTS pc = 0.00167714 < pd = 0.025409

Astmin .0035* p-pc = 0.00559046 pd=0.4*0.85*u*f'c/fsy

Check M* <= phiMu

ku = 0.088008 dsc = 103 mm

phi Mu = phi[Fsy x Asc (d - dsc) + 0.85 x F'c x b x Gamma x ku x d x (d - 0.5 x 0.85 x ku x d)]

=	2520 kNm	>	M* =	2300.00 kNm	OK

Determine - ve steel at right support :

M -ve = 7.59 kNm

Number of reinforcement layers 1 or 2 : 1

take do = 119 mm dst = 681 mm

Estimate Area of main steel Ast = 35.5344315 mm²

3 Y 32 Ast = 2412.74316 mm²

688 CTS p = 0.00171654

3 Y 16 Asc = 603.185789 mm²

688 CTS pc = 0.00042914 < pd = 0.025409

p-pc = 0.00128741

Check M* <= phiMu

ku = 0.020267 dsc = 95 mm

phi Mu = phi[Fsy x Asc (d - dsc) + 0.85 x F'c x b x Gamma x ku x d x (d - 0.5 x 0.85 x ku x d)]

=	581 kNm	>	M* =	7.59 kNm	OK

FOR DUCTILITY CHECK AT BOTH SUPPORTS USE EMPHI

Tensile Steel at Midspan :

M* = 174 kNm

Steel in one layer then code = 1

" " two " " code = 2

what is the code ? 1

take dist between centroid of bar/s and soffit = 119 mm

d = 697 mm

Ast = M*/(Phi x 0.85 x d x Fsy) = 795.923226 mm²

Bottom 3 Y 32 Ast = 2412.74316 mm²

Top 3 Y 16 Asc = 603.185789 mm²

Assume N - A in flange

Effective width : beff = 2064 mm

ku = 1/(0.85 x0.85) x [Ast/(bw x d)] x (Fsy/F'c)

= 0.02640248

hence dn = 18 < flange thickness

hence N -A is in flange

Phi Mu = 0.9[Fsy x Ast x d (1 - 0.5 x 0.85 x ku)]

=	614 kNm	>	M*+ve =	174.00 kNm	OK

Summary of reinforcement requirement :

left support :	Ast	=	3	Y 32
	Asc	=	3	Y 16
Right support :	Ast	=	3	Y 32
	Asc	=	3	Y 32
midspan	Ast	=	3	Y 32
	Asc	=	3	Y 16

7. STEEL CURTAILMENT REQUIREMENT CHECK

The following requirements regarding curtailment are subject to stress development length requirements.

For -ve steel
i) 1/4 Ast to continue over length of beam = 2 bars
ii) Remainder to be curtailed at 0.3Ln from face of support.
= 0.3 x le = 1920 mm ?

For -ve steel
i) 1/4 Ast to continue over length of beam = 2 bars
ii) Remainder to be curtailed at 0.3Ln from face of support.
= 0.3 x le = 1920 mm ?

For +ve steel :
i) 1/2 Ast must be carried into outer support = 2 bars
ii) 1/4 Ast into interior support = 2 bars
iii) Remainder curtailed at 0.1Ln from supports
= 0.1 x le = 640 mm

8. STRESS DEVELOPMENT

For Top Steel :

cover : c = 75 mm
d_b = 16 mm # of lines of bars = 2
a_b = 945 mm distance between bars
If a_b > 2c C = 2c + d_b = 166 mm
C is the outside diameter of a concrete annulus
if a_b =< 2c C = a_b + d_b = 961 mm
coaxial with and surrounding a bar
k1 = 1.25 A_b = 201.06193 mm^2
k2 = 2.0 a_b = 945 mm (dist between bars)
factor = 35843.9945
Lsyt = k1 x k2 x fsy x Ab/C x sqrt(f'c) = factor/C
= 215.9277 mm
take fs/Fsy = M*/Phi Mu = 0.912720019
therefore Lsy = 197 mm ≥ 25k1db 500
say = 500 mm

For Bottom Steel :

Cover, c = 75 mm d_b = 32 mm
# of lines of bars = 2
If ab > 2c C = 2c + d_b = 182 mm
if ab < 2c C = a_b + d_b = 1151 mm
k1 = 1 A_b = 804.247719 mm^2
k2 = 2.2 a_b = 1119 mm (dist between bars)
factor = 114700.782
Lsyt = 630.2241 mm take fs/Fsy = M*/Phi Mu = 0.283265066
therefore Lsy = 179 mm ≥ 25k1db 400
say = 400 mm

9. SHEAR CHECK

V* = 760.00 kN

Dist to centreline of bottom steel from soffit

critical location : d = 697 mm dq = 93 mm

do = 707 mm

V* = 728 kN beta 1 = 1.0465 (but not less than 1.1)

hence = 1.1

beta 2 = 1

beta 3 = 1 Unity

phi Vuc = phi x beta 1 x beta 2 x beta 3 x bw x do[Ast x F'c/bw x do]^0.333

= 741.12 kN

phi Vumax = 8171.7888 kN > V* No web crushing

phi Vumin = 1354 kN > V* OK

If shear reinforcement reqired then proceed as follows :

choose stirrup spacing s = 350 mm Fsyf = 410 MPa

Determine theta :

bv x s/Fsy f = 1761.95122

Asv.min = 616.682927 mm^2

Asv.max = 12817 mm^2

Asv = 2 x area of stirrups = 220 mm^2 2 Ties

theta = 29.5123 degrees

Determine Phi Vu :

Vu = Vuc + Vus

= Vuc + Asv / s x Fsyf x do cot theta

= 1380.63 kN

Phi Vu = 966 kN > V* = 728.38408 kN

hence

PROVIDE :	**1 Y12 LIGS**	**@**	**350**	**centres**

Other Support :

V* = 0.00 kN

Dist to centreline of bottom steel from soffit

critical location : d = 697 mm dq = 93 mm

do = 707 mm

V* = -31.62 kN beta 1 = 1.0465 (but not less than 1.1)

hence = 1.1

beta 2 = 1

beta 3 = 1

phi Vuc = phi x beta 1 x beta 2 x beta 3 x bw x do[Ast x F'c/bw x do]^0.333

= 454.8069 kN

phi Vumax = 8171.7888 kN > V* No web crushing

phi Vumin = 1068 kN < V* OK

If shear reinforcement reqired then proceed as follows :

choose stirrup spacing s = 350 mm Fsyf = 410 MPa

Determine theta :

bv x s/Fsy f = 1761.95122

Asv.min = 616.682927 mm^2

Asv.max = 13311.1083 mm^2

Asv = 2 x area of stirrups = 330 mm2 2 Ties

theta = 29.66125 degrees

Determine Phi Vu :

Vu = Vuc + Vus

= Vuc + Asv / s x Fsyf x do cot theta

= 1129.634 kN

Phi Vu = 790.7441 kN > V* = -31.62 kN

hence

PROVIDE :	**1 Y12 LIGS**	**@**	**350 centres**

10. SERVICEABILITY CHECK

From an Elastic Linear Analysis :

Mr	=	2300.00 kNm		Es	=	200000 MPa
Ml	=	7.59 kNm		Ec	=	31975.35051 MPa
Mo	=	1327.795 kNm				
Ms	=	174.00 kNm				
Ig	=	8.81E+10 mm^4				

Calculate Icr, Mcr, and Ief at midspan :

Eff. Flange width	b_{eff} =	2064 mm	A_{sc} =	603.1857895	mm^2
webwidth	b_w =	2064 mm	A_{st} =	2412.743158	mm^2
Flange thickness	t_{ff} =	0 mm	d_{sc} =	119	mm
			d_{st} =	697	mm
			d =	697	mm
			D =	800	mm

n = Es/Ec = 6.25481807

1/2 x bw x dn^2 + (beff - bw) x t (dn - t/2) + (n - 1) Asc (dn - dsc) = nAst (d - dn)

1032 dn^2 + 18260.9011 dn - 10895801) = 0

dn = 94.2847254 mm

d = 697 mm

Icr = bdn3/3 +1/12(beff - bw)x t^3+(beff - bw)xt(dn-t/2)^2+nxAst (d-dn)^2

= 6.06E+09 mm4

Mcr = 0.6sqrtF'c x bD^2/6 = 835.44846 kNm

Im	=	[Icr + (Ig - Icr) (Mcr / Ms) ^3]
	=	9.08E+12 mm^4

Calculate Icr , Mcr, ILef and Iref at end supports :

b_w =	2064 mm	A_{st} =	2412.74316	mm^2	
d_{sc} =	95 mm	A_{sc} =	603.185789	mm^2	
d =	697 mm				
Ig =	8.81E+10 mm^4				

At right end (arbitrary)

1/2 x bdnSQ + (n - 1) Asc (dn - dsc) = nAst (d - dn)

1032 dn^2 + 18260.9011 dn - 10819729.8) = 0

dn = 93.93 mm

d = 681 mm

Icr = bdn3/3 + n x Asc (d - dn)^2 = 5.77E+09 mm^4

Mcr = 0.6sqrtF'c x bD^2/6 835.44846 kNm

Iref = [Icr + (Ig - Icr) (Mcr / Mr)^3 = 9.72E+09 mm^4

At left end (arbitrary)

b_w =	**2064**	mm
d_{sc} =	**103**	mm
A_{st} =	**10455.22**	mm^2
A_{sc} =	**2412.7432**	mm^2
d =	**697**	mm

1/2 x bdnSQ + (n - 1) Asc (dn - dsc) = nAst (d - dn)

1032 dn^2 + 78074.0275 dn - 46886552.5) = 0

dn = 178.653354 mm

d = 697 mm

Icr = bdn3/3 + n x Asc (d - dn)^2 = 2.15E+10 mm^4

Mcr = 0.6sqrtF'c x bD^2/6 = 835.44846 kNm

Ilef = [Icr + (Ig - Icr) (Mcr / Ml)^3 = 8.88E+16 mm^4

Iav	=	[Im + (IL + Ir)/2]/2 = 2.22E+16 mm^4

Midspan Deflection :

Lef = 6400 mm

Defln,s = Lef^2/Ec x Iav [5/48 . Mo - 1/16 ML - 1/16 Mr]

= -3.4117E-07 mm

Total Deflection :

Long term factor	=	0.2			
Short term factor	=	0.5			
w - long term	=	45.16	kN/m		
w - short term	=	45.235	kN/m		
Defln,s,sus	=	-3.406E-07	mm		
At midspan :				Ast =	2412.74316 mm^2
				Asc =	603.185789 mm^2
Asc/Ast =		0.25			
kcs =		2 - (1.2 x Asc/Ast)		>= 0.8	
=		1.7			

therefore

Total Defln	=	Dfln,s + (kcs x Defln,s,sus)
	=	0.00000 mm

FROM A MORE ACCURATE ANALYSIS Warner,Rangan,Hall HAVE SHOWN THAT THIS CAN BE REDUCED BY UP TO 10%.

ALLOWABLE DEFLN	=	Lef / 500 =	12.8 mm	
			>	0.9 x Total Defln
ALLOWABLE DEFLN	=	Lef / 250 =	25.6 mm	
			>	0.9 x Total Defln

Roof Beam Design

Design of a Continuous Beam : REF. AS 3600

1. Loads

DL	:	Wdl =	0.60	kN/m	(plus super)
Self wt	:	Wsw =	2.19	kN/m	
Blockwall	:	Wb =	0.00	kN/m	
TOTAL	:	=	2.79	kN/m	
LL	:	Wll =	0.25	kN/m	
LL factor	- long term		0.4		
	- short term		0.7		

2. Beam Section Properties

bw	250	mm
D	350	mm
tff	0	mm
Cover	65	mm
D = Overall depth of section	350	mm
Actual length, L	6900	mm
Effective Length,Lef	6500	mm
Area, A	8.75E+04	mm^2
Neutral Axis, yc	175.00	mm
Moment of Inertia, Ix-x	8.93E+08	mm^4
Neutral Axis, xc	775.00	mm
Moment of Inertia, Iy-y	4.56E+08	mm^4
Effective width, beff	1550.00	mm
Gross Area, Ag	8.75E+04	mm^2

3. Design Parameters

F'c =	40	MPa
Fsy =	410	MPa
m	2400	kg/m^3
D =	350	mm
Ec =	31975.3505	MPa
Es =	200000	MPa
Gamma =	0.766	

4. INITIAL CHOICE OF SECTION

Effective width = 1550 mm clause 8.8.2

Is the section RECT or T, L (ans : 1 or 2) = 1

k_1 = 0.045 (RECT sections) 1

= 0.01886216 (T and L sections) 2

what type of span? 5 interior span = 5

end span = 6

k_2 = 0.0026042

kcs = 1.64 (because there will be comp steel at midspan=say .5Ast)

Fdef = 4.9105

defln/Lef = 0.004 k_1/k_2 = 17.2797788

d = 74 mm

take d = 253 mm Distance from d to extreme fibre of beam (do) = 97 mm

5. Forces from an Elastic Analysis by Space Gass :

Mmax -ve	=	21.10 kNm	(left support)
Mmax +ve	=	21.10 kNm	(mid-span)
M -ve	=	21.10 kNm	(right support)
Vmax	=	13.00 kN	
V (other end)	=	13.00 kN	
N*	=	0.00 kN	Axial Load

6. FLECTURAL STRENGTH STEEL

Determine - ve steel required : (At arbitrary left support)

Number of reinforcement layers 1 or 2 : 1

take do = 97 mm d = 253

Estimate Area of main steel Ast = 265.898962 mm^2

3 Y 20 Ast = 942.477796 mm^2

p = 0.01490083

3 Y 16 Asc = 603.185789 mm^2

pc = 0.00953653 < pd = 0.025409

p-pc = 0.0053643 pd=0.4*0.85*μ*f'c/fsy

Check M* <= phiMu

ku = 0.084448 dsc = 85 mm

phi Mu = phi[Fsy x Asc (d - dsc) + 0.85 x F'c x b x Gamma x ku x d x (d - 0.5 x 0.85 x ku x d)]

=	68	kNm	>	M* =	21.10 kNm	OK

Determine - ve steel at right support :

M -ve = 21.10 kNm

Number of reinforcement layers 1 or 2 : 1

take do = 97 mm dst = 253 mm

Estimate Area of main steel Ast = 265.898962 mm^2

3 Y 20 Ast = 942.477796 mm^2

p = 0.01490083

3 Y 16 Asc = 603.185789 mm^2

pc = 0.00953653 < pd = 0.025409

p-pc = 0.0053643

Check M* <= phiMu

ku = 0.084448 dsc = 85 mm

phi Mu = phi[Fsy x Asc (d - dsc) + 0.85 x F'c x b x Gamma x ku x d x (d - 0.5 x 0.85 x ku x d)]

=	68	kNm	>	M* =	21.10 kNm	OK

FOR DUCTILITY CHECK AT BOTH SUPPORTS USE EMPHI

Tensile Steel at Midspan :

M* = 21.1 kNm

Steel in one layer then code = 1

" " two " " code = 2

what is the code ? 1

take dist between centroid of bar/s and soffit = 97 mm

d = 253 mm

Ast = M*/(Phi x 0.85 x d x Fsy) = 265.898962 mm^2

Bottom 3 Y 20 Ast = 942.477796 mm^2

Top 3 Y 16 Asc = 603.185789 mm^2

Assume N - A in flange

Effective width : beff = 1550 mm

ku = 1/(0.85 x0.85) x [Ast/(bw x d)] x (Fsy/F'c)

= 0.03783512

hence dn = 10 < flange thickness

hence N -A is in flange

Phi Mu = 0.9[Fsy x Ast x d (1 - 0.5 x 0.85 x ku)]

=	87 kNm	>	M*+ve =	21.10 kNm	OK

Summary of reinforcement requirement :

left support :	Ast	=	3	Y 20
	Asc	=	3	Y 16
Right support :	Ast	=	3	Y 20
	Asc	=	3	Y 16
midspan	Ast	=	3	Y 20
	Asc	=	3	Y 16

7. STEEL CURTAILMENT REQUIREMENT CHECK

The following requirements regarding curtailment are subject to stress development length requirements.

For -ve steel
i) 1/4 Ast to continue over length of beam = 2 bars
ii) Remainder to be curtailed at 0.3Ln from face of support.
= 0.3 x le = 1950 mm ?

For -ve steel
i) 1/4 Ast to continue over length of beam = 2 bars
ii) Remainder to be curtailed at 0.3Ln from face of support.
= 0.3 x le = 1950 mm ?

For +ve steel :
i) 1/2 Ast must be carried into outer support = 2 bars
ii) 1/4 Ast into interior support = 2 bars
iii) Remainder curtailed at 0.1Ln from supports
= 0.1 x le = 650 mm

8. STRESS DEVELOPMENT

For Top Steel :

cover : c = 65 mm
d_b = 16 mm # of lines of bars = 2
a_b = 48 mm distance between bars
If a_b > 2c C = 2c + d_b = 146 mm
C is the outside diameter of a concrete annulus
if a_b =< 2c C = a_b + d_b = 64 mm
coaxial with and surrounding a bar
k1 = 1.25 A_b = 201.06193 mm^2
k2 = 2.2 a_b = 48 mm (dist between bars)
factor = 35843.9945
Lsyt = k1 x k2 x fsy x Ab/C x sqrt(f'c) = factor/C
= 560.0624 mm
take fs/Fsy = M*/Phi Mu = 0.310608659
therefore Lsy = 174 mm ≥ 25k1db 500
say = 500 mm

For Bottom Steel :

Cover, c = 65 mm d_b = 20 mm
# of lines of bars = 2
If ab > 2c C = 2c + d_b = 150 mm
if ab < 2c C = a_b + d_b = 222 mm
k1 = 1 A_b = 314.159265 mm^2
k2 = 2.2 a_b = 202 mm (dist between bars)
factor = 44804.9931
Lsyt = 298.7 mm take fs/Fsy = M*/Phi Mu = 0.243334552
therefore Lsy = 73 mm ≥ 25k1db 400
say = 400 mm

9. SHEAR CHECK

V* = 13.00 kN

Dist to centreline of bottom steel from soffit

critical location : d = 253 mm dq = 93 mm

do = 257 mm

V* = 12 kN beta 1 = 1.2715 (but not less than 1.1)

hence = 1.2715

beta 2 = 1

beta 3 = 1 Unity

phi Vuc = phi x beta 1 x beta 2 x beta 3 x bw x do[Ast x F'c/bw x do]^0.333

= 47.88 kN

phi Vumax = 359.8 kN > V* No web crushing

phi Vumin = 75 kN > V* OK

If shear reinforcement reqired then proceed as follows :

choose stirrup spacing s = 350 mm Fsyf = 410 MPa

Determine theta :

bv x s/Fsy f = 213.414634

Asv.min = 74.695122 mm^2

Asv.max = 1480 mm^2

Asv = 2 x area of stirrups = 220 mm^2 2 Ties

theta = 31.55085 degrees

Determine Phi Vu :

Vu = Vuc + Vus

= Vuc + Asv / s x Fsyf x do cot theta

= 176.27 kN

Phi Vu = 123 kN > V* = 12.2315125 kN

hence

PROVIDE :	**1 Y12 LIGS**	**@**	**350**	**centres**

Other Support :

V* = 13.00 kN

Dist to centreline of bottom steel from soffit

critical location : d = 253 mm dq = 93 mm

do = 257 mm

V* = 12.23 kN beta 1 = 1.2715 (but not less than 1.1)

hence = 1.2715

beta 2 = 1

beta 3 = 1

phi Vuc = phi x beta 1 x beta 2 x beta 3 x bw x do[Ast x F'c/bw x do]^0.333

= 47.8833 kN

phi Vumax = 359.8 kN > V* No web crushing

phi Vumin = 75 kN < V* OK

If shear reinforcement reqired then proceed as follows :

choose stirrup spacing s = 350 mm Fsyf = 410 MPa

Determine theta :

bv x s/Fsy f = 213.414634

Asv.min = 74.695122 mm^2

Asv.max = 1480.10204 mm^2

Asv = 2 x area of stirrups = 330 mm2 2 Ties

theta = 32.72489 degrees

Determine Phi Vu :

Vu = Vuc + Vus

= Vuc + Asv / s x Fsyf x do cot theta

= 223.0087 kN

Phi Vu = 156.1061 kN > V* = 12.23 kN

hence

PROVIDE :	**1 Y12 LIGS**	**@**	**350 centres**

10. SERVICEABILITY CHECK

From an Elastic Linear Analysis :

Mr	=	21.10 kNm	Es	=	200000 MPa
Ml	=	21.10 kNm	Ec	=	31975.35051 MPa
Mo	=	42.2 kNm			
Ms	=	21.10 kNm			
Ig	=	8.93E+08 mm^4			

Calculate Icr, Mcr, and Ief at midspan :

Eff. Flange width	b_{eff} =	1550 mm	A_{sc} =		603.1857895 mm^2
webwidth	b_w =	250 mm	A_{st} =		942.4777961 mm^2
Flange thickness	t_{ff} =	0 mm	d_{sc} =		97 mm
			d_{st} =		253 mm
			d =		253 mm
			D =		350 mm

n = Es/Ec = 6.25481807

1/2 x bw x dn^2 + (beff - bw) x t (dn - t/2) + (n - 1) Asc (dn - dsc) = nAst (d - dn)

125 dn^2 + 9064.65873 dn - 1798896.13) = 0

dn = 89.0643784 mm

d = 253 mm

Icr = bdn3/3 +1/12(beff - bw)x t^3+(beff - bw)xt(dn-t/2)^2+nxAst (d-dn)^2

= 2.17E+08 mm4

Mcr = 0.6sqrtF'c x bD^2/6 = 19.3689507 kNm

Im = [Icr + (Ig - Icr) (Mcr / Ms) ^3]

= 7.40E+08 mm^4

Calculate Icr , Mcr , ILef and Iref at end supports :

b_w =	250 mm	A_{st} =	942.477796 mm^2		
d_{sc} =	85 mm	A_{sc} =	603.185789 mm^2		
d =	253 mm				

Ig = 8.93E+08 mm^4

At right end (arbitrary)

1/2 x bdnSQ + (n - 1) Asc (dn - dsc) = nAst (d - dn)

125 dn^2 + 9064.65873 dn - 1760860.55) = 0

dn = 87.84 mm

d = 253 mm

Icr = bdn3/3 + n x Asc (d - dn)^2 = 2.17E+08 mm^4

Mcr = 0.6sqrtF'c x bD^2/6 19.3689507 kNm

Iref = [Icr + (Ig - Icr) (Mcr / Mr)^3 = 7.40E+08 mm^4

At left end (arbitrary)

b_w =	**250** mm				
d_{sc} =	**85** mm				
A_{st} =	**942.4778** mm^2				
A_{sc} =	**603.18579** mm^2				
d =	**253** mm				

1/2 x bdnSQ + (n - 1) Asc (dn - dsc) = nAst (d - dn)

125 dn^2 + 9064.65873 dn - 1760860.55) = 0

dn = 87.8444393 mm

d = 253 mm

Icr = bdn3/3 + n x Asc (d - dn)^2 = 2.17E+08 mm^4

Mcr = 0.6sqrtF'c x bD^2/6 = 19.3689507 kNm

Ilef = [Icr + (Ig - Icr) (Mcr / Ml)^3 = 7.40E+08 mm^4

Iav = [Im + (IL + Ir)/2]/2 = 7.40E+08 mm^4

Midspan Deflection :

Lef = 6500 mm

Defln,s = Lef^2/Ec x Iav [5/48 . Mo - 1/16 ML - 1/16 Mr]

= 3.13904315 mm

Total Deflection :

Long term factor	=	0.2			
Short term factor	=	0.5			
w - long term	=	2.8375	kN/m		
w - short term	=	2.9125	kN/m		
Defln,s,sus	=	3.058209418	mm		
At midspan :				Ast =	942.477796 mm^2
				Asc =	603.185789 mm^2
Asc/Ast =		0.64			
kcs	=	2 - (1.2 x Asc/Ast)		>= 0.8	
	=	1.232			

therefore

Total Defln	=	Dfln,s + (kcs x Defln,s,sus)
	=	6.90676 mm

FROM A MORE ACCURATE ANALYSIS Warner,Rangan,Hall HAVE SHOWN THAT THIS CAN BE REDUCED BY UP TO 10%.

ALLOWABLE DEFLN	=	Lef / 500 =	13 mm	
			> 0.9 x Total Defln	
ALLOWABLE DEFLN	=	Lef / 250 =	26 mm	
			> 0.9 x Total Defln	

RC COLUMN DESIGN WITH MRCSECT PACKAGE

INTERACTION DIAGRAM FOR RECTANGULAR COLUMN SECTION
(NON-PRESTRESSED REINFORCEMENT ONLY)

INPUT

400 x 400 RC COLUMN DESIGN

Using RECTANGULAR STRESS BLOCK

Width (mm).....=	400	mm
Depth (mm).....=	400	mm
No of lines of reinforcement.=	3	
Concrete strength =	32	MPa
Yield stress of steel..=	410	Mpa

STEEL DETAILS

Line no	Depth to steel	Bar diameter	No of bars
1	87	20	3
2	200	16	2
3	317	20	3

OUTPUT: MRCSECT ANALYSIS RESULTS

Depth to Plastic Centroid (Ref Axis for Moment) = 200.00 **mm**

SERVICE ENVELOPE

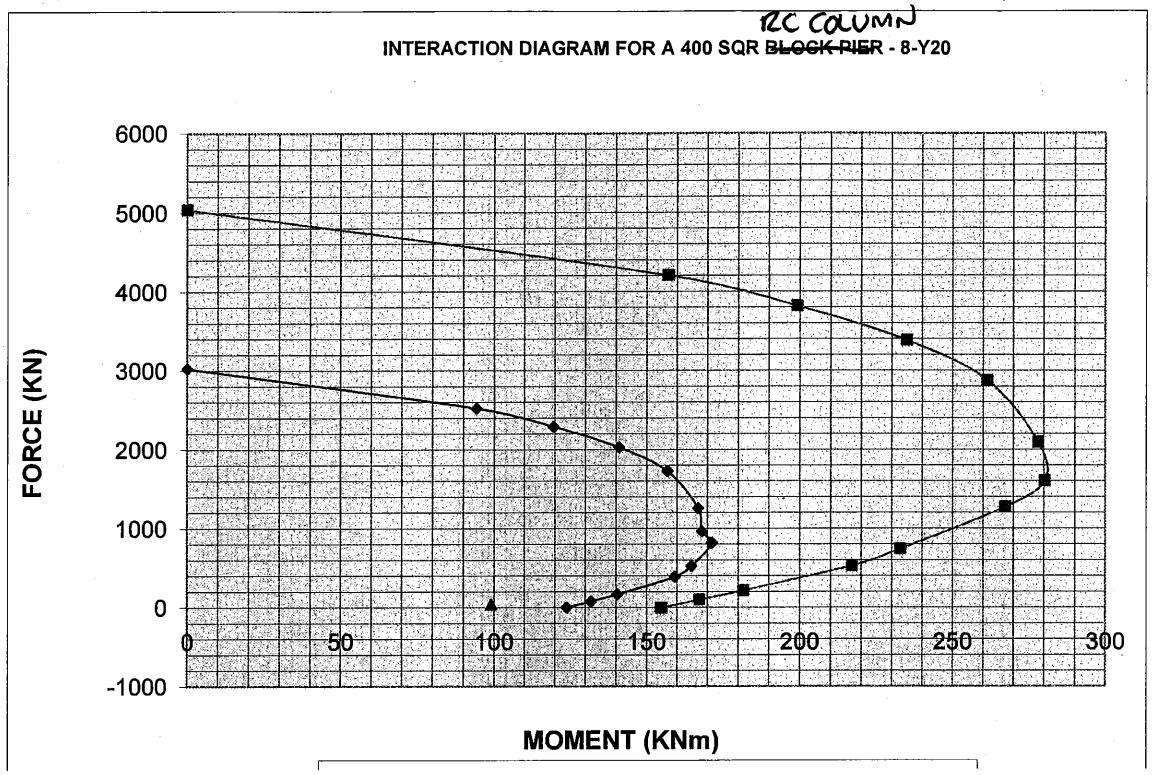
Eccentricity (mm)	Moment (KNm)	Force (KN)	Top strain	Bottom strain	N.A.factor Ku
0.00	0.00	5042.36	0.003	0.003	1000.000
37.35	157.12	4206.89	0.003	0.000	1.000
52.15	199.15	3818.58	0.003	-0.0003	0.909
69.44	234.91	3382.86	0.003	-0.0007	0.811
90.85	261.44	2877.57	0.003	-0.0013	0.892
132.69	278.06	2095.48	0.003	-0.0024	0.710
147.89	280.26	1602.46	0.003	-0.0033	0.620
209.93	267.32	1273.40	0.003	-0.0042	0.566
313.89	232.82	741.72	0.003	-0.0620	0.475
409.53	216.90	529.81	0.003	-0.0072	0.439
834.42	181.74	217.80	0.003	-0.0097	0.352
1667.05	167.34	100.38	0.003	-0.0111	0.322
	154.84	-0.56	0.003	-0.0123	0.312

DESIGN ENVELOPE

PHI	ØMOMENT (KNm)	ØFORCE (KN)
0.6	0.000	3027.218
0.6	94.272	2524.134
0.6	119.489	2291.146
0.6	140.945	2029.718
0.6	156.8622	1726.544
0.6	166.833	1257.291
0.6	168.16	961.478
0.64107	171.37	816.344
0.707428	164.70	524.712
0.73388	159.23	388.813
0.77282	140.45	168.322
0.78747	131.77	79.046
0.8	123.87	-0.447

SERVICE FORCES

M*=	99.00 **KNm**
N* =	41.00 **KNm**


RC COLUMN
INTERACTION DIAGRAM FOR A 400 SQR ~~BLOCK PIER~~ - 8-Y20
FORCE (KN)
6000
5000
4000
3000
2000
1000
0
-1000
0
50
100
150
200
250
300
MOMENT (KNm)

STEEL BEAM DESIGN

PROJECT	Blower Control Room
JOB NO.	11006
MEMBER DESIGNED	ROOF BEAM DESIGN
DESIGNED BY	TT
DATE	10/08/2011
CHECKED BY	
DATE	

TRIAL SIZE =		310 UB 40.4		
d1=	284 mm	Es	2.00E+05	Mpa
tf=	10.2 mm	G	8.00E+04	Mpa
tw =	6.1 mm	J	1.57E+05	mm4
Ag =	5210 mm2	Iw	1.65E+11	mm6
Ix =	8.64E+07 mm4	Stee Grade	300	Mpa
Iy =	7.65E+06 mm4	L	4.9	m
Zex =	5.69E+05 mm3	Lef =	4.5	m
ry =	38.3 mm			

Unfactored Loads		Load Factors	
WDl	0.4	Dl	1.4
WLL	0	LL	1.7
PDL	0		
PLL	37.5		

Long Term Loads		Short Term Loads	
WG =	0.56	WG =	0
WQ =	0	WQ =	0
PG =	0	PG =	0
PQ =	0	PQ =	63.75

M* =	59	KNm
V* =	34	KN

Section Slenderness = Non-compact about both x- and y- axis

fyf =	320	MPa
fyw =	320	MPa

kt = twist restraint factor.
Using AS4100 Table 5.6.3(1) for restriant arrangement FP
The equation is to change depending of restraint

kt = 1 + (2d1/l)(0.5tf/tw)3 1.03 Fu 1.03
Kt 1.033872

le = effective length (AS4100 Clause 5.6.3)
le = ktklkrls
kt = see Note 1 in Table 5.2.1 kt= 1.03
kl = loads acting on top flange, acting downwards 1
kr = see Section 5.4.2 also 1
ls = distance between lateral restraingts (LRs) = 4.9 m
sdistance between support intermediate restrataint
the supports

le = ktklkrls
le = 5 m
5065.974 mm Say 5000 mm

Mo = reference bucklin given by AS4100 Equation 5.6.1.1(3):
Equation is plit into 3 part A, B and C in these calculations:

Let A = Π^2EIy/le^2 = 6.04E+05 N

Let B = Π^2EIw/le^2 = 1.30E+10 Nmm^2

Let C = GJ = 1.26E+10 Nmm2

Equations are recombined int:
Mo = Ö(A(C+B)) = 1.24E+08 Nmm
124 KNm

Max = Ms = nominal section moment capacity
= fyZex As 4100 Clause 5.2.1

Ms = 1.82E+08 Nmm
182.08 KNm

ØMsx =
Ø = 0.9 AS 4100 Table 3.4

ØMsx = 163.872 KNm > 59 OK

αs = slenderness reduction factor AS4100 Equation 5.6.1.1(2)

αs = 0.6(Ö(Ms^2/Mo^2 + 3) - Ms/Mo

αs = 0.482202

ØMb = Member Moment Capacity AS 4100 Equation 5.6.1.1(1)

Mb = ØαmαsMs <= Ma

1.7Mm*/((M2*)^2+(M3*)^2+(M4*)^2)^0.5

Mm* =	59	KNm	Max Design BMin the Segment
M2* =	3	KNm	Design BM at 1/4Points of Segment
M3* =	17	KNm	Design BM at 1/2 Point of Segment
M4* =	38	KNm	Design BM at 1/4 Points of Segment

αm = 2.403128

ØMb = 189.8938 KNm

M* ≤ ØMb must be satisfied

= 59 <= 189.893814 OK

EFFICIENCY = 31 %

Service ability design actions/loads for deflection

Permissible Deflection Δ = l/250 = 20 mm

Actual Deflection δ ≤ Δ = lef/250 = Must be Satisfied:

Δ = 14 <= 20 OK

Space Gas Value =

STEEL BEAM DESIGN

PROJECT	Blower Control Room
JOB NO.	11006
MEMBER DESIGNED	HOIST BEAM
DESIGNED BY	TT
DATE	4/11/2011
CHECKED BY	
DATE	

TRIAL SIZE = 310 UB 40.4

d1=	284	mm	Es	2.00E+05	Mpa
tf=	10.2	mm	G	8.00E+04	Mpa
tw =	6.1	mm	J	1.57E+05	mm4
Ag =	5210	mm2	Iw	1.65E+11	mm6
Ix =	8.64E+07	mm4	Stee Grade	300	Mpa
Iy =	7.65E+06	mm4	L	4.9	m
Zex =	5.69E+05	mm3	Lef =	4.5	m
ry =	38.3	mm			

Unfactored Loads		Load Factors	
WDl	0.4	Dl	1.4
WLL	0	LL	1.7
PDL	0		
PLL	37.5		

Long Term Loads		Short Term Loads	
WG =	0.56	WG =	0
WQ =	0	WQ =	0
PG =	0	PG =	0
PQ =	0	PQ =	63.75

M* = 71 KNm
V* = 35 KN

Section Slenderness = Non-compact about both x- and y- axis

fyf = 320 MPa
fyw = 320 MPa

kt = twist restraint factor.
Using AS4100 Table 5.6.3(1) for restriant arrangement FP
The equation is to change depending of restraint

kt = 1 + (2d1/l)(0.5tf/tw)3 1.03 Fu 1.03
Kt 1.033872

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sdistance between support intermediate restrataint
the supports

le = ktklkrls
le = 5 m
5065.974 mm Say 5000 mm

Mo = reference bucklin given by AS4100 Equation 5.6.1.1(3):
Equation is plit into 3 part A, B and C in these calculations:

Let A = Π^2EIy/le^2 = 6.04E+05 N

Let B = Π^2EIw/le^2 = 1.30E+10 Nmm^2

Let C = GJ = 1.26E+10 Nmm2

Equations are recombined int:
Mo = Ö(A(C+B)) = 1.24E+08 Nmm
124 KNm

Max = Ms = nominal section moment capacity
= fyZex As 4100 Clause 5.2.1

Ms = 1.82E+08 Nmm
182.08 KNm

ØMsx =
Ø = 0.9 AS 4100 Table 3.4

ØMsx = 163.872 KNm > 71 OK

αs = slenderness reduction factor AS4100 Equation 5.6.1.1(2)

αs = 0.6(Ö(Ms^2/Mo^2 + 3) - Ms/Mo

αs = 0.482202

ØMb = Member Moment Capacity AS 4100 Equation 5.6.1.1(1)

Mb = ØαmαsMs <= Ma

1.7Mm*/((M2*)^2+(M3*)^2+(M4*)^2)^0.5

Mm* =	71	KNm	Max Design BMin the Segment
M2* =	3	KNm	Design BM at 1/4Points of Segment
M3* =	17	KNm	Design BM at 1/2 Point of Segment
M4* =	38	KNm	Design BM at 1/4 Points of Segment

αm = 2.891899

ØMb = 228.5163 KNm

M* ≤ ØMb must be satisfied

= 71 <= 228.516285 OK

EFFICIENCY = 31 %

Service ability design actions/loads for deflection

Permissible Deflection Δ = l/250 = 20 mm

Actual Deflection б ≤ Δ = lef/250 = Must be Satisfied:

Δ = 13 <= 20 OK

Space Gas Value =

RC BEAM DESIGN

Base Slab - Designed as a Continuous Beam : REF. AS 3600

1. Loads

DL	:	Wdl =	0.50	kN/m	(plus super)
Self wt	:	Wsw =	19.20	kN/m	
Blockwall	:	Wb =	0.00	kN/m	
TOTAL	:	=	19.70	kN/m	
LL	:	Wll =	2	kN/m	
LL factor	- long term		0.4		
	- short term		0.7		

2. Beam Section Properties

bw	1000	mm
D	850	mm
tff	800	mm
Cover	75	mm
D = Overall depth of section	1650	mm
Actual length, L	2850	mm
Effective Length,Lef	2550	mm
Area, A	1.26E+06	mm^2
Neutral Axis, yc	433.11	mm
Moment of Inertia, Ix-x	7.41E+10	mm^4
Neutral Axis, xc	755.00	mm
Moment of Inertia, Iy-y	2.34E+11	mm^4
Effective width, beff	1399.00	mm
Gross Area, Ag	1.97E+06	mm^2

3. Design Parameters

F'c =	40	MPa
Fsy =	410	MPa
m	2400	kg/m^3
D =	850	mm
Ec =	31975.3505	MPa
Es =	200000	MPa
Gamma =	0.766	

4. INITIAL CHOICE OF SECTION

Effective width = 1510 mm

clause 8.8.2

Is the section RECT or T, L (ans : 1 or 2) = 1

k_1 = 0.045 (RECT sections) 1

= 0.03266038 (T and L sections) 2

what type of span? 6 interior span = 5

end span = 6

k_2 = 0.0054054

kcs = 1.64 (because there will be comp steel at midspan=say .5Ast)

Fdef = 35.02

defln/Lef = 0.004 k_1/k_2 = 8.32500833

d = 71 mm

take d = 759 mm Distance from d to extreme fibre of beam (do) = 103 mm

5. Forces from an Elastic Analysis by Space Gass :

Mmax -ve	=	2300.00 kNm	(left support)
Mmax +ve	=	773.00 kNm	(mid-span)
M -ve	=	711.00 kNm	(right support)
Vmax	=	445.00 kN	
V (other end)	=	160.00 kN	

759

6. FLECTURAL STRENGTH STEEL

Determine - ve steel required : (At arbitrary left support)

Number of reinforcement layers 1 or 2 : 1

take do = 103 mm d = 1547

Estimate Area of main steel Ast = 4740.15159 mm² Say

6 Y 32 Ast = 4825.48632 mm²

at 252 CTS p = 0.00635769

4 Y 28 Asc = 2463.00864 mm²

at 377.5 pc = 0.00159212 < pd = 0.025409

p-pc = 0.00476557

Astmin = 4011.315 mm²

Spacing = 42.537173 mm

Y32 at 170 CTS

Check M* <= phiMu

ku = 0.075022 dsc = 101 mm

phi Mu = phi[Fsy x Asc (d - dsc) + 0.85 x F'c x b x Gamma x ku x d x (d - 0.5 x 0.85 x ku x d)]

= 6649 kNm > M* = 2300.00 kNm OK

Determine - ve steel at right support :

M -ve = 711.00 kNm

Number of reinforcement layers 1 or 2 : 1

take do = 119 mm dst = 1531 mm

Estimate Area of main steel Ast = 1480.63877 mm²

6 Y 32 Ast = 4825.48632 mm²

p = 0.00315185

4 Y 32 Asc = 3216.99088 mm²

pc = 0.00210124 < pd = 0.025409

p-pc = 0.00105062

Astmin = 4011.315 mm²

Spacing = 42.537173 mm

Y12 at 170 CTS

Check M* <= phiMu

ku = 0.016539 dsc = 103 mm

phi Mu = phi[Fsy x Asc (d - dsc) + 0.85 x F'c x b x Gamma x ku x d x (d - 0.5 x 0.85 x ku x d)]

= 3016 kNm > M* = 711.00 kNm OK

FOR DUCTILITY CHECK AT BOTH SUPPORTS USE EMPHI

Tensile Steel at Midspan :

M* = 773 kNm

Steel in one layer then code = 1

" " two " " code = 2

what is the code ? 1

take dist between centroid of bar/s and soffit = 119 mm

d = 759 mm

Ast = M*/(Phi x 0.85 x d x Fsy) = 3247.07579 mm²

Bottom 6 Y 32 Ast = 4825.48632 mm²

Top 4 Y 28 Asc = 2463.00864 mm²

Assume N - A in flange

Effective width : beff = 1510 mm

ku = 1/(0.85 x0.85) x [Ast/(bw x d)] x (Fsy/F'c)

= 0.06628245

	hence	dn	=	50	<	flange thickness hence N -A is in flange
Ast Governs -		Use Y28 at	251.6666667 CTS		Astmin	4011.315

Phi Mu = 0.9[Fsy x Ast x d (1 - 0.5 x 0.85 x ku)]

=	1317 kNm	>	M*+ve =	773.00 kNm	OK

Summary of reinforcement requirement :

left support :	Ast	=	Y32	250 CTS
	Asc	=	Y32	250 CTS
Right support :	Ast	=	Y32	250 CTS
	Asc	=	Y32	250 CTS
midspan	Ast	=	Y32	250 CTS
	Asc	=	Y32	250 CTS

7. STEEL CURTAILMENT REQUIREMENT CHECK

The following requirements regarding curtailment are subject to stress development length requirements.

For -ve steel
i) 1/4 Ast to continue over length of beam = 2 bars
ii) Remainder to be curtailed at 0.3Ln from face of support.
= 0.3 x le = 765 mm ?

For -ve steel
i) 1/4 Ast to continue over length of beam = 2 bars
ii) Remainder to be curtailed at 0.3Ln from face of support.
= 0.3 x le = 765 mm ?

For +ve steel :
i) 1/2 Ast must be carried into outer support = 2 bars
ii) 1/4 Ast into interior support = 2 bars
iii) Remainder curtailed at 0.1Ln from supports
= 0.1 x le = 255 mm

8. STRESS DEVELOPMENT

For Top Steel :

cover : c = 75 mm
d_b = 28 mm # of lines of bars = 2
a_b = 413 mm distance between bars
If a_b > 2c C = 2c + d_b = 178 mm
C is the outside diameter of a concrete annulus
if a_b =< 2c C = a_b + d_b = 441 mm
coaxial with and surrounding a bar
k1 = 1 A_b = 615.75216 mm^2
k2 = 2.2 a_b = 413 mm (dist between bars)
factor = 109772.233
Lsyt = k1 x k2 x fsy x Ab/C x sqrt(f'c) = factor/C
= 616.6979 mm
take fs/Fsy = M*/Phi Mu = 0.345915812
therefore Lsy = 213 mm ≥ 25k1db 875
say = 200 mm

For Bottom Steel :

Cover, c = 75 mm d_b = 32 mm
# of lines of bars = 2
If ab > 2c C = 2c + d_b = 182 mm
if ab < 2c C = a_b + d_b = 619 mm
k1 = 1 A_b = 804.247719 mm^2
k2 = 2.2 a_b = 587 mm (dist between bars)
factor = 114700.782
Lsyt = 630.2241 mm take fs/Fsy = M*/Phi Mu = 0.586864307
therefore Lsy = 370 mm ≥ 25k1db 700
say = 400 mm

9. SHEAR CHECK

V* = 445.00 kN

Dist to centreline of bottom steel from soffit

critical location : d = 759 mm dq = 93 mm

do = 757 mm

V* = 429 kN beta 1 = 1.0215 (but not less than 1.1)

hence = 1.1

beta 2 = 1

beta 3 = 1 Unity

phi Vuc = phi x beta 1 x beta 2 x beta 3 x bw x do[Ast x F'c/bw x do]^0.333

= 369.79 kN

phi Vumax = 4239.2 kN > V* No web crushing

phi Vumin = 688 kN > V* OK

If shear reinforcement reqired then proceed as follows :

choose stirrup spacing s = 300 mm Fsyf = 410 MPa

Determine theta :

bv x s/Fsy f = 731.707317

Asv.min = 256.097561 mm^2

Asv.max = 5343 mm^2

Asv = 2 x area of stirrups = 220 mm^2 2 Ties

theta = 29.89356 degrees

Determine Phi Vu :

Vu = Vuc + Vus

= Vuc + Asv / s x Fsyf x do cot theta

= 924.19 kN

Phi Vu = 647 kN > V* = 428.5297 kN

hence

PROVIDE :	**2 Y12 LIGS**	**@**	**300 centres**

Other Support :

V* = 160.00 kN

Dist to centreline of bottom steel from soffit

critical location : d = 759 mm dq = 93 mm

do = 757 mm

V* = 143.53 kN beta 1 = 1.0215 (but not less than 1.1)

hence = 1.1

beta 2 = 1

beta 3 = 1

phi Vuc = phi x beta 1 x beta 2 x beta 3 x bw x do[Ast x F'c/bw x do]^0.333

= 369.788 kN

phi Vumax = 4239.2 kN > V* No web crushing

phi Vumin = 688 kN < V* OK

If shear reinforcement reqired then proceed as follows :

choose stirrup spacing s = 300 mm Fsyf = 410 MPa

Determine theta :

bv x s/Fsy f = 731.707317

Asv.min = 256.097561 mm^2

Asv.max = 5343.04031 mm^2

Asv = 2 x area of stirrups = 330 mm2 2 Ties

theta = 30.21792 degrees

Determine Phi Vu :

Vu = Vuc + Vus

= Vuc + Asv / s x Fsyf x do cot theta

= 1114.443 kN

Phi Vu = 780.11 kN > V* = 143.53 kN

hence

PROVIDE :	**2 Y12 LIGS**	**@**	**300 centres**

10. SERVICEABILITY CHECK

From an Elastic Linear Analysis :

Mr	=	2300.00 kNm	Es	=	200000 MPa
Ml	=	711.00 kNm	Ec	=	31975.35051 MPa
Mo	=	2278.5 kNm			
Ms	=	773.00 kNm			
Ig	=	7.41E+10 mm^4			

Calculate Icr, Mcr, and Ief at midspan :

Eff. Flange width	b_{eff} =	1510 mm	A_{sc} =		2463.00864 mm^2
webwidth	b_w =	1000 mm	A_{st} =		4825.486316 mm^2
Flange thickness	t_{ff} =	800 mm	d_{sc} =		119 mm
			d_{st} =		759 mm
			d =		759 mm
			D =		1650 mm

n = Es/Ec = 6.25481807

1/2 x bw x dn^2 + (beff - bw) x t (dn - t/2) + (n - 1) Asc (dn - dsc) = nAst (d - dn)

500 dn^2 + 451125.201 dn - 187648724) = 0

dn = 309.671352 mm

d = 759 mm

Icr = bdn3/3 +1/12(beff - bw)x t^3+(beff - bw)xt(dn-t/2)^2+nxAst (d-dn)^2

= 4.11E+10 mm4

Mcr = 0.6sqrtF'c x bD^2/6 = 1721.86019 kNm

Im = [Icr + (Ig - Icr) (Mcr / Ms) ^3]

= 4.06E+11 mm^4

Calculate Icr , Mcr , ILef and Iref at end supports :

b_w =	1000 mm	A_{st} =	4825.48632 mm^2		
d_{sc} =	103 mm	A_{sc} =	3216.99088 mm^2		
d =	759 mm				

Ig = 7.41E+10 mm^4

At right end (arbitrary)

1/2 x bdnSQ + (n - 1) Asc (dn - dsc) = nAst (d - dn)

500 dn^2 + 47087.2408 dn - 24649731.4) = 0

dn = 179.89 mm

d = 1531 mm

Icr = bdn3/3 + n x Asc (d - dn)^2 = 5.70E+10 mm^4

Mcr = 0.6sqrtF'c x bD^2/6 456.949122 kNm

Iref = [Icr + (Ig - Icr) (Mcr / Mr)^3 = 5.72E+10 mm^4

At left end (arbitrary)

b_w = **1000** mm

d_{sc} = **101** mm

A_{st} = **4825.4863** mm^2

A_{sc} = **2463.0086** mm^2

d = **759** mm

1/2 x bdnSQ + (n - 1) Asc (dn - dsc) = nAst (d - dn)

500 dn^2 + 43125.2013 dn - 24215756) = 0

dn = 181.132006 mm

d = 1547 mm

Icr = bdn3/3 + n x Asc (d - dn)^2 = 5.83E+10 mm^4

Mcr = 0.6sqrtF'c x bD^2/6 = 456.949122 kNm

Ilef = [Icr + (Ig - Icr) (Mcr / Ml)^3 = 6.25E+10 mm^4

Iav = [Im + (IL + Ir)/2]/2 = 2.33E+11 mm^4

Midspan Deflection :

Lef = 2550 mm

Defln,s = Lef^2/Ec x Iav [5/48 . Mo - 1/16 ML - 1/16 Mr]

= 0.04292895 mm

Total Deflection :

Long term factor	=	0.2	
Short term factor	=	0.5	
w - long term	=	20.1 kN/m	
w - short term	=	20.7 kN/m	
Defln,s,sus	=	0.041684631 mm	
At midspan :		Ast =	4825.48632 mm^2
		Asc =	2463.00864 mm^2
Asc/Ast =		0.510416667	
kcs	=	2 - (1.2 x Asc/Ast)	>= 0.8
	=	1.3875	

therefore

Total Defln	=	Dfln,s + (kcs x Defln,s,sus)
	=	0.10077 mm

FROM A MORE ACCURATE ANALYSIS Warner,Rangan,Hall HAVE SHOWN THAT THIS CAN BE REDUCED BY UP TO 10%.

ALLOWABLE DEFLN	=	Lef / 500 =	5.1 mm	
			> 0.9 x Total Defln	
ALLOWABLE DEFLN	=	Lef / 250 =	10.2 mm	
			> 0.9 x Total Defln	**OK**