

BAB V

KESIMPULAN DAN SARAN

5.1. Kesimpulan

1. Rangka atap digunakan pipa baja diameter 114,3 mm dengan tebal pipa 4,5 mm dan pipa baja diameter 76,3 mm dengan tebal pipa 4 mm dengan mutu baja $f_y = 290$ Mpa, pada sambungan digunakan las tumpul dengan mutu las E70xx.
2. Pelat atap digunakan ketebalan 100 mm dan pelat lantai dengan ketebalan 120 mm dengan arah penulangan x untuk lebar pelat dan arah penulangan y untuk panjang pelat. Sedangkan untuk pelat tangga digunakan ketebalan 150 mm.
3. Balok induk terdiri atas balok dengan dimensi 300x400 mm dan 300x450 mm, sedangkan balok anak terdiri atas balok dengan dimensi 250x400 mm dan 300x400 mm.
4. Kolom terdiri atas lima macam kolom persegi dengan dimensi yang berbeda-beda yaitu 300x300 mm, 400x400 mm, 600x600 mm, 700x700 mm, dan 800x800 mm.
5. Pondasi digunakan pondasi *bored pile* dengan ukuran *poer* 3 x 3 x 0,7 m dan *pile* dengan diameter 50 cm.

5.2. Saran

1. Saat akan merencanakan suatu sistem struktur bangunan sebaiknya dilakukan perkiraan awal tiap elemen struktur guna menghindari mencoba-coba dimensi elemen struktur yang kuat dan ekonomis.
2. Untuk mempermudah pelaksanaan dilapangan sebaiknya hindari penggunaan tulangan yang sangat bervariasi dengan tujuan meningkatkan efisiensi bahan yang digunakan. Hal ini dapat mengakibatkan kesalahan pemasangan tulangan dan dapat menyebabkan kegagalan sistem struktur yang telah direncanakan.
3. Dalam melakukan analisis dan perencanaan suatu sistem struktur hendaknya dilakukan dengan teliti dan cermat, serta memperhatikan hal-hal yang dapat terjadi selama proses pelaksanaan dilapangan.

DAFTAR PUSTAKA

Badan Standarisasi Nasional, 2002, *Tata Cara Perencanaan Ketahanan Gempa Untuk Bangunan Gedung*, SNI 03-1726-2002, Yayasan LPMB, Bandung.

Badan Standarisasi Nasional, 2002, *Tata Cara Perencanaan Struktur Baja Untuk Bangunan Gedung*, SNI 03-1729-2002, Yayasan LPMB, Bandung.

Badan Standarisasi Nasional, 2002, *Tata Cara Perencanaan Struktur Beton Untuk Bangunan Gedung*, SNI 03-2847-2002, Yayasan LPMB, Bandung.

Christady, Hary, 2001, *Teknik Fondasi II*, Yogyakarta.

Departemen Pekerjaan Umum, 1983, *Peraturan Pembebanan Indonesia untuk Gedung*, Yayasan LPMB, Bandung.

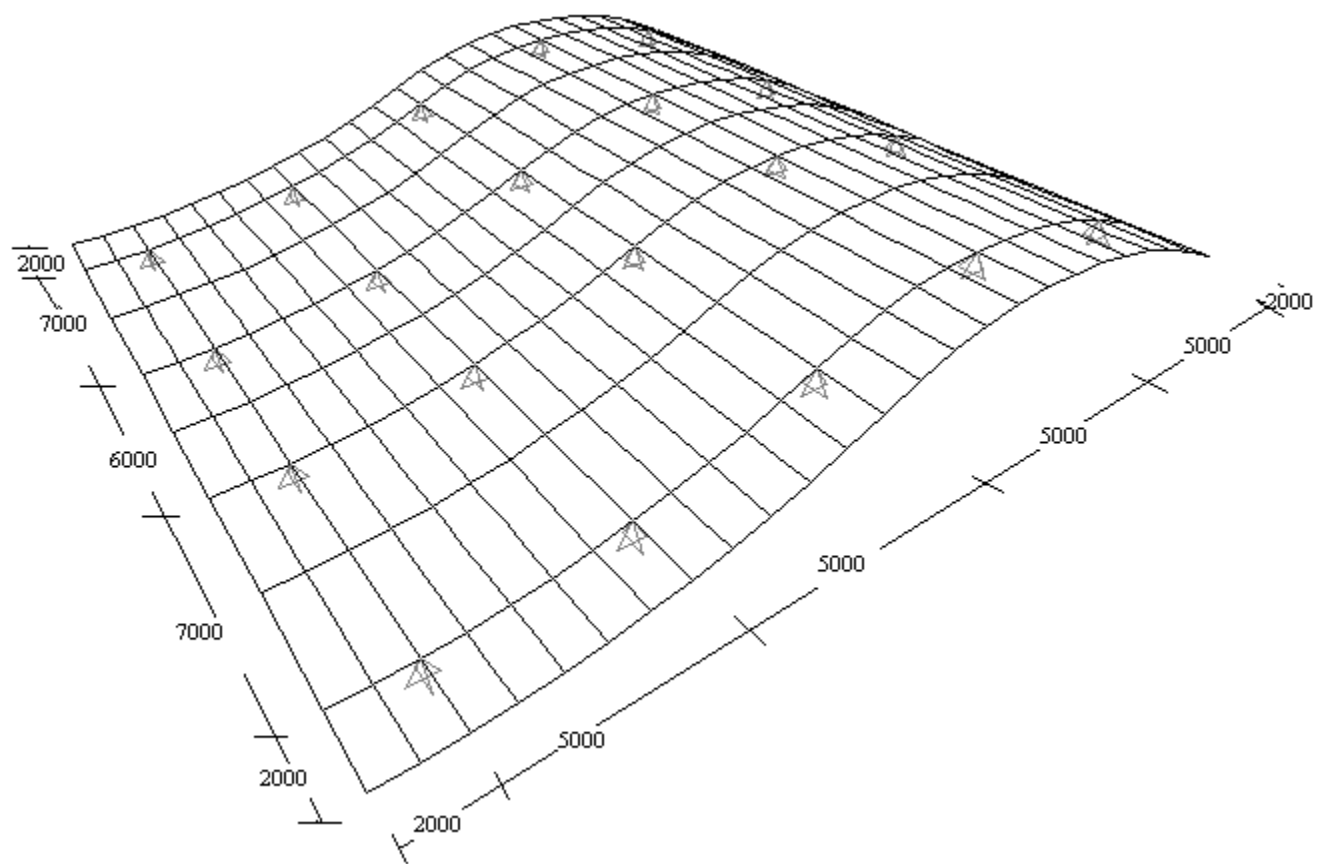
Dipohusodo, Istimawan, 1994, *Struktur Beton Bertulang*, Gramedia, Jakarta.

Ghosh, S.K., 1996, *Notes On ACI 318-95*, Portland Cement Association, USA.

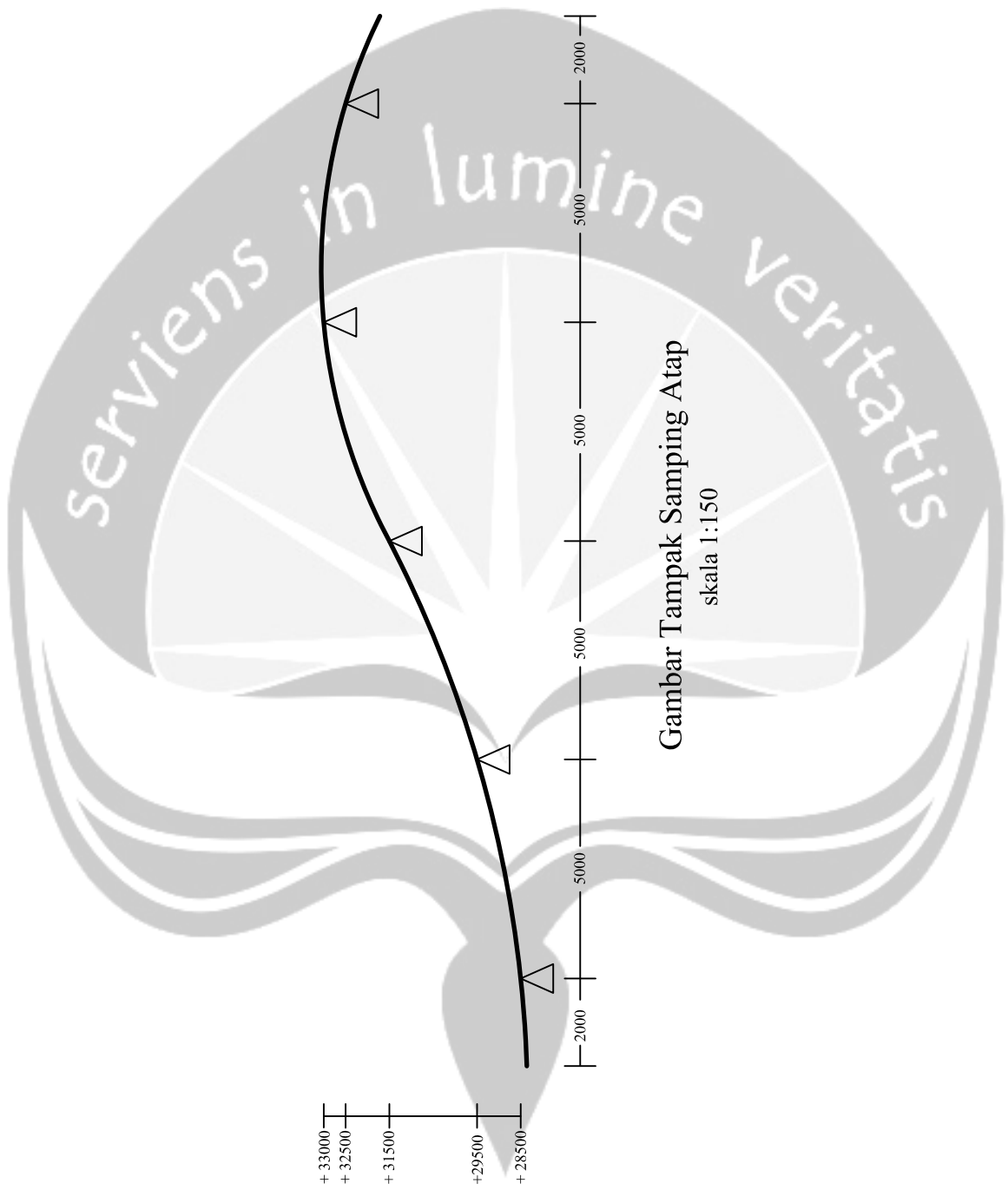
Macgregor, James G., 1997, *Reinforced Concrete Mechanics and Design Third Edition*, Prentice Hall, New Jersey.

Nawy, E., G., 1990, *Beton Bertulang Suatu Pendekatan Dasar*, PT. Eresco, Bandung.

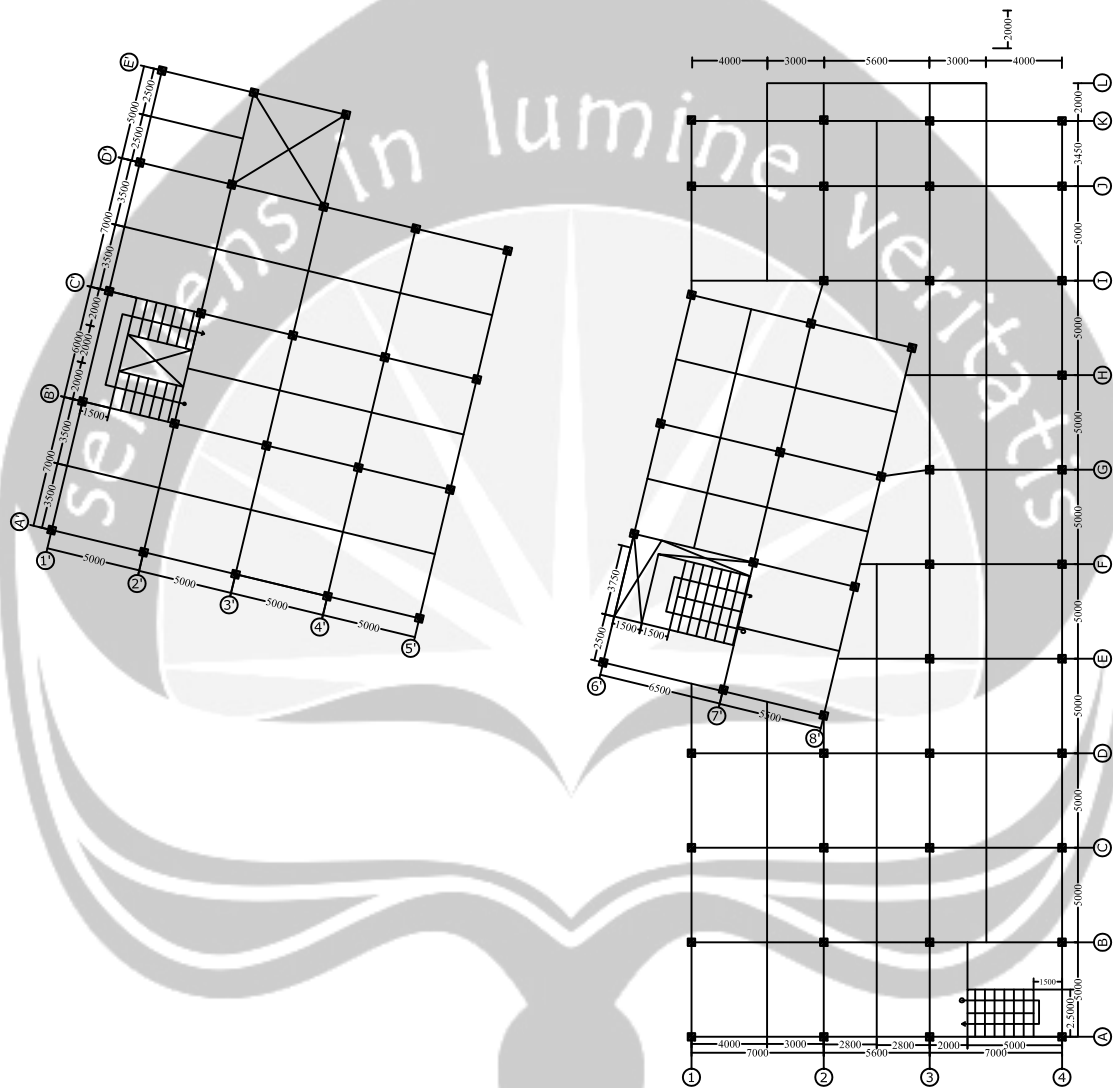
Purwono, Rachmat, 2005, *Perencanaan Struktur Beton Bertulang Tahan Gempa*, ITS Press, Surabaya.



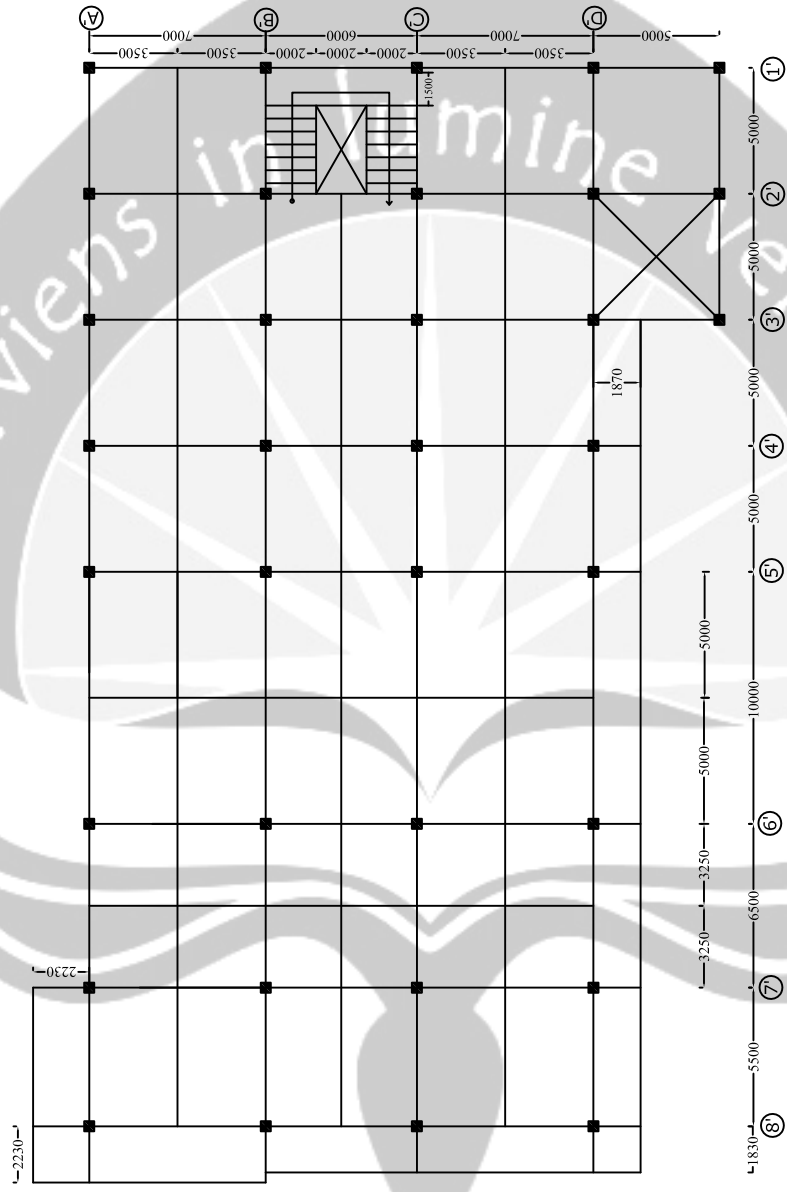
Gambar Rangka Atap



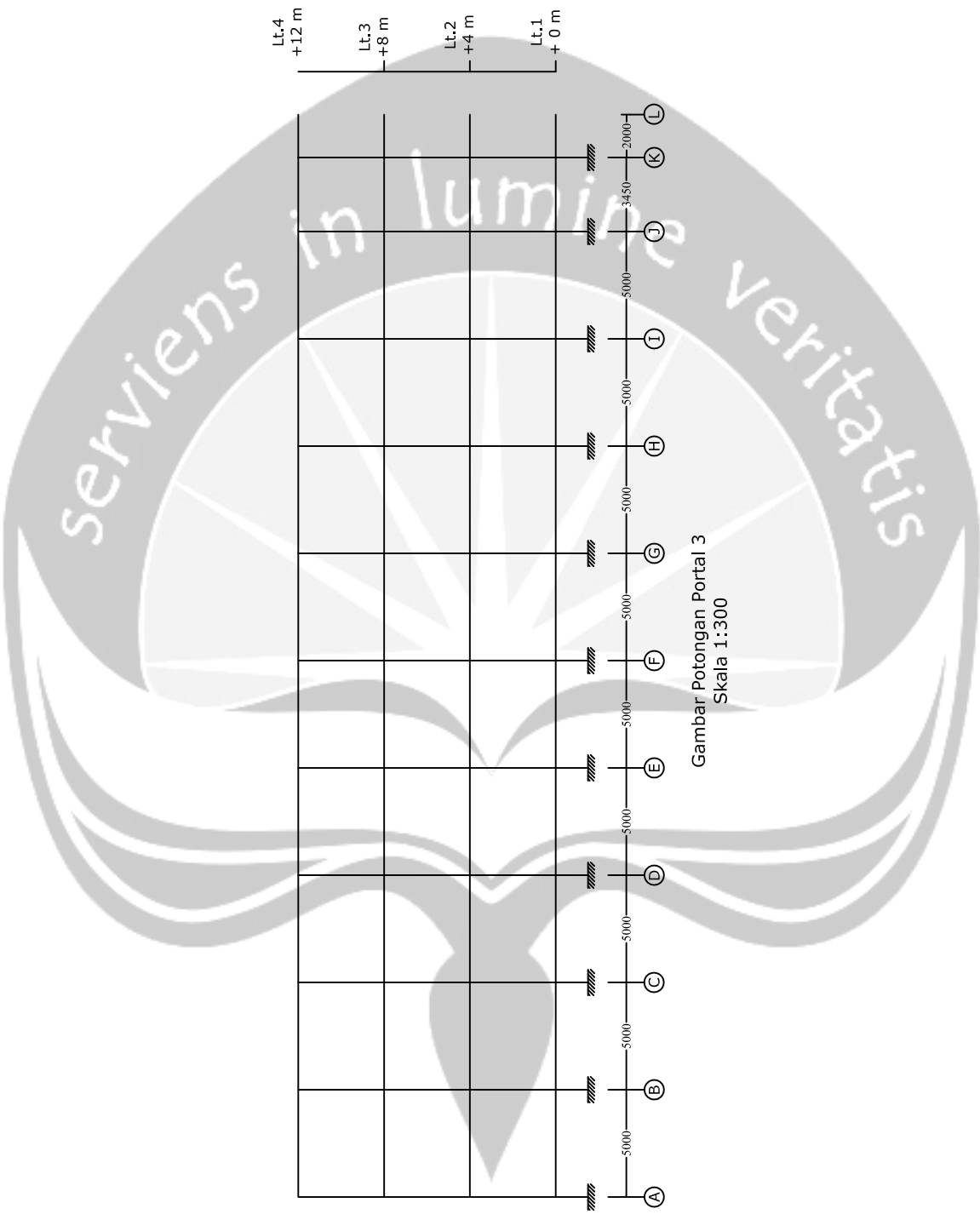
Gambar Tampak Samping Atap
skala 1:150

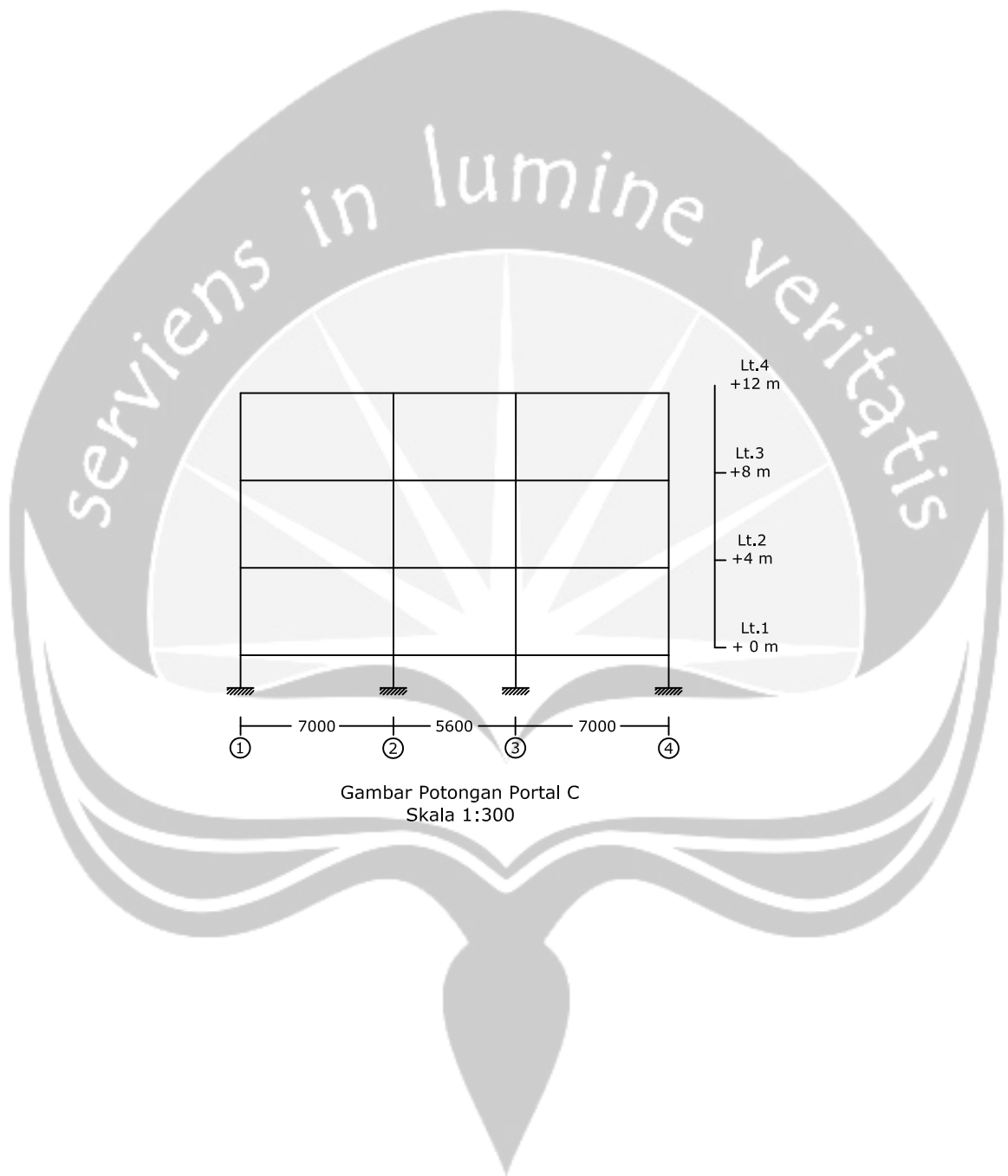


Gambar Denah Balok kolom lt.1-4
Skala 1:400

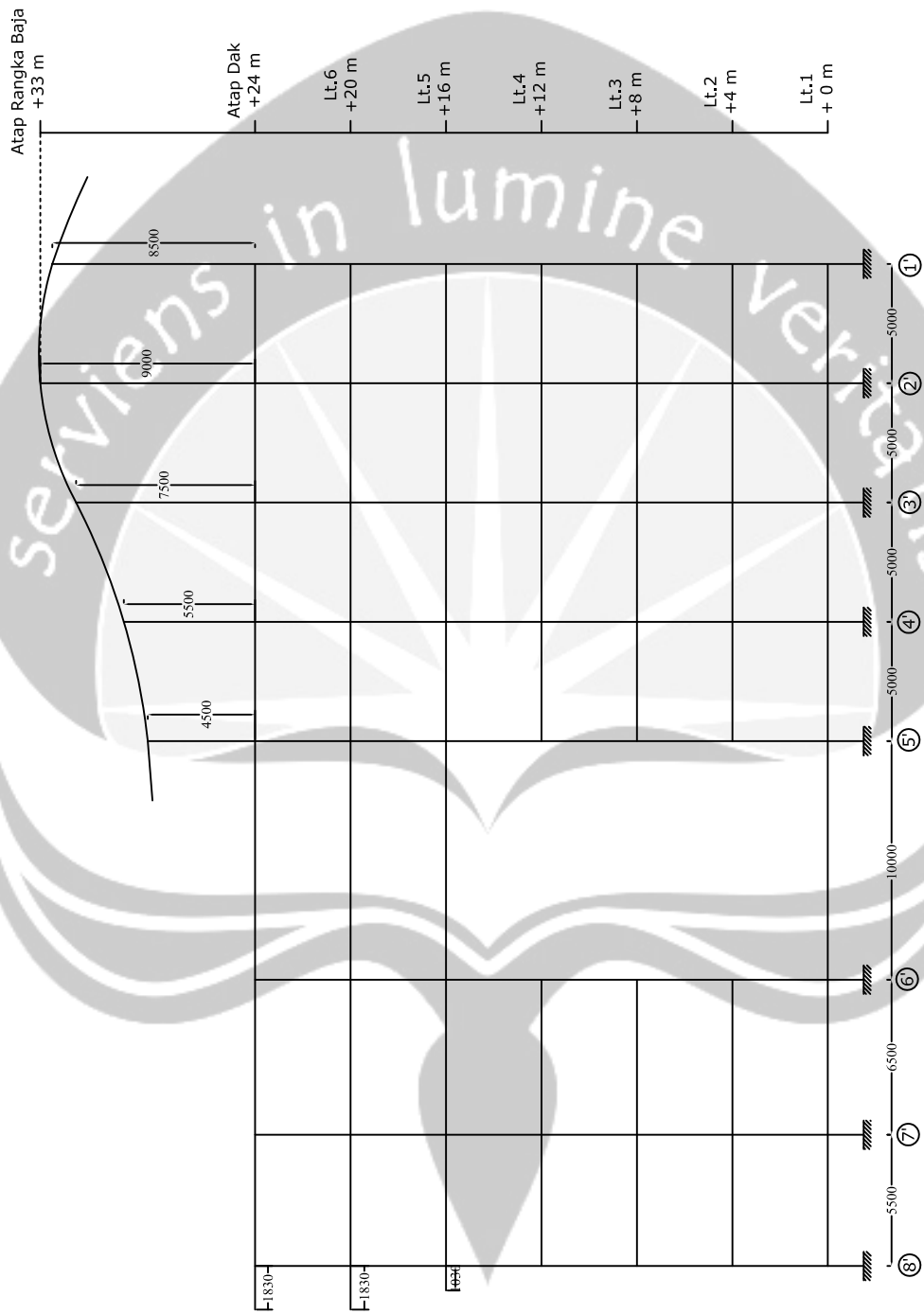


Gambar Denah Balok kolom lt.6
Skala 1:300

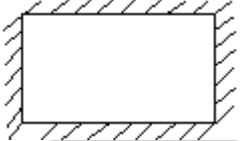
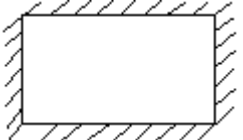
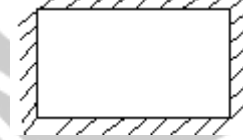
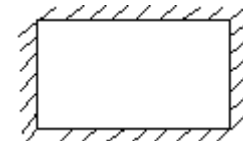


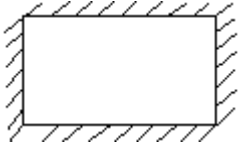
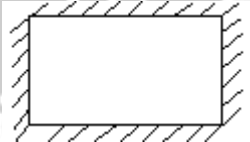
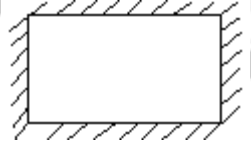
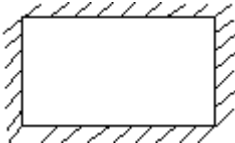


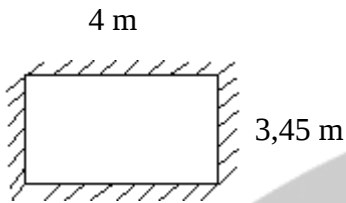
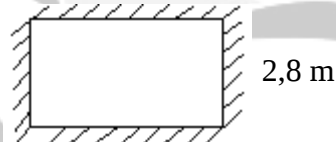
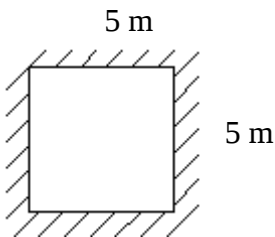
Gambar Potongan Portal C
Skala 1:300

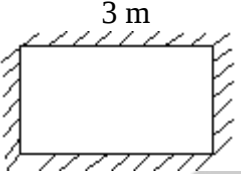
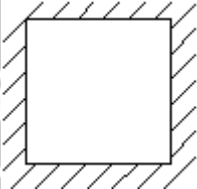
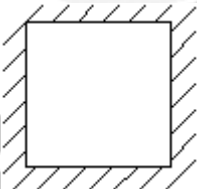


Tabel Penulangan Plat Dak
(tebal plat 100 mm)

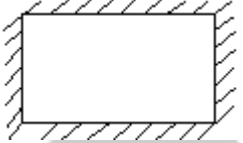
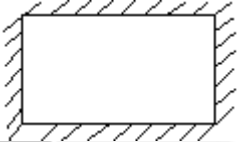
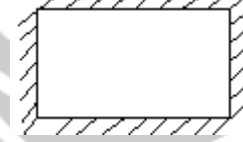
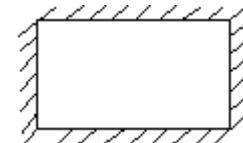
1	 5 m 3,5 m	Plat tipe 1 Tumpuan arah x dipasang tulangan P10-100 Tumpuan arah y dipasang tulangan P10-200 Lapangan arah x dipasang tulangan P10-200 Lapangan arah y dipasang tulangan P10-200
2	 5 m 3 m	Plat tipe 2 Tumpuan arah x dipasang tulangan P10-200 Tumpuan arah y dipasang tulangan P10-200 Lapangan arah x dipasang tulangan P10-200 Lapangan arah y dipasang tulangan P10-200
3	 5 m 4 m	Plat tipe 3 Tumpuan arah x dipasang tulangan P10-100 Tumpuan arah y dipasang tulangan P10-100 Lapangan arah x dipasang tulangan P10-200 Lapangan arah y dipasang tulangan P10-200
4	 5 m 2,8 m	Plat tipe 4 Tumpuan arah x dipasang tulangan P10-200 Tumpuan arah y dipasang tulangan P10-200 Lapangan arah x dipasang tulangan P10-200 Lapangan arah y dipasang tulangan P10-200

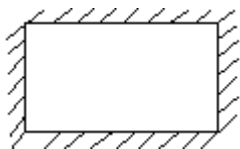
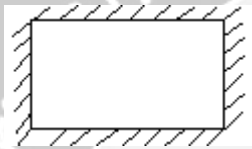
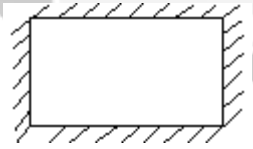
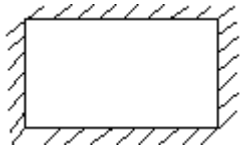
5		Plat tipe 5 Tumpuan arah x dipasang tulangan P10-100 Tumpuan arah y dipasang tulangan P10-200 Lapangan arah x dipasang tulangan P10-200 Lapangan arah y dipasang tulangan P10-200
6		Plat tipe 6 Tumpuan arah x dipasang tulangan P10-200 Tumpuan arah y dipasang tulangan P10-200 Lapangan arah x dipasang tulangan P10-200 Lapangan arah y dipasang tulangan P10-200
7		Plat tipe 7 Tumpuan arah x dipasang tulangan P10-200 Tumpuan arah y dipasang tulangan P10-200 Lapangan arah x dipasang tulangan P10-200 Lapangan arah y dipasang tulangan P10-200
8		Plat tipe 8 Tumpuan arah x dipasang tulangan P10-200 Tumpuan arah y dipasang tulangan P10-200 Lapangan arah x dipasang tulangan P10-200 Lapangan arah y dipasang tulangan P10-200

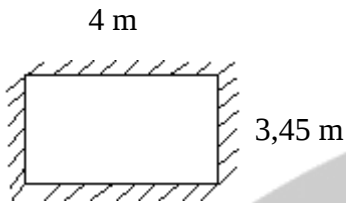
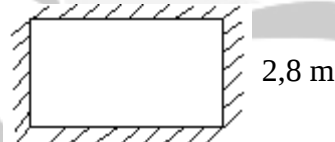
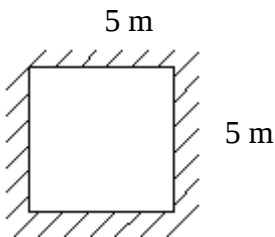
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10		Plat tipe 10 Tumpuan arah x dipasang tulangan P10-200 Tumpuan arah y dipasang tulangan P10-200 Lapangan arah x dipasang tulangan P10-200 Lapangan arah y dipasang tulangan P10-200
11		Plat tipe 11 Tumpuan arah x dipasang tulangan P10-200 Tumpuan arah y dipasang tulangan P10-200 Lapangan arah x dipasang tulangan P10-200 Lapangan arah y dipasang tulangan P10-200
12		Plat tipe 12 Tumpuan arah x dipasang tulangan P10-100 Tumpuan arah y dipasang tulangan P10-100 Lapangan arah x dipasang tulangan P10-200 Lapangan arah y dipasang tulangan P10-200

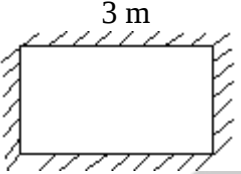
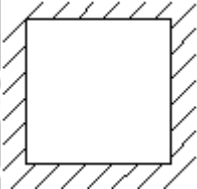
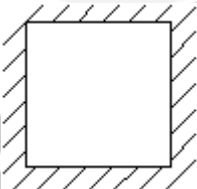
13		Plat tipe 13 Tumpuan arah x dipasang tulangan P10-200 Tumpuan arah y dipasang tulangan P10-200 Lapangan arah x dipasang tulangan P10-200 Lapangan arah y dipasang tulangan P10-200
14		Plat tipe 14 Tumpuan arah x dipasang tulangan P10-200 Tumpuan arah y dipasang tulangan P10-100 Lapangan arah x dipasang tulangan P10-200 Lapangan arah y dipasang tulangan P10-200
15		Plat tipe 15 Tumpuan arah x dipasang tulangan P10-200 Tumpuan arah y dipasang tulangan P10-200 Lapangan arah x dipasang tulangan P10-200 Lapangan arah y dipasang tulangan P10-200

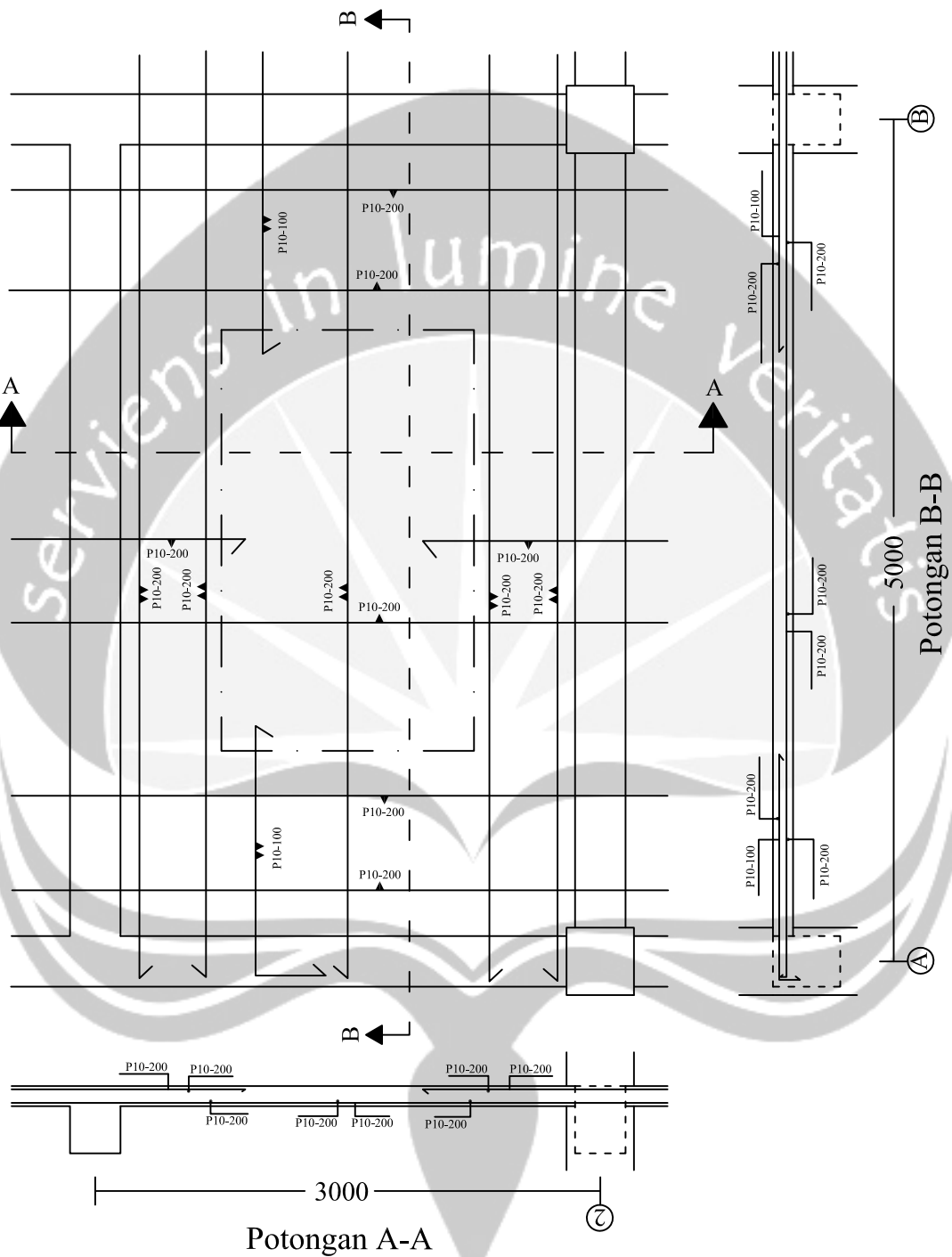
Tabel Penulangan Plat Lantai
(tebal plat 120 mm)

1	 5 m 3,5 m	Plat tipe 1 Tumpuan arah x dipasang tulangan P10-100 Tumpuan arah y dipasang tulangan P10-200 Lapangan arah x dipasang tulangan P10-200 Lapangan arah y dipasang tulangan P10-200
2	 5 m 3 m	Plat tipe 2 Tumpuan arah x dipasang tulangan P10-200 Tumpuan arah y dipasang tulangan P10-200 Lapangan arah x dipasang tulangan P10-200 Lapangan arah y dipasang tulangan P10-200
3	 5 m 4 m	Plat tipe 3 Tumpuan arah x dipasang tulangan P10-100 Tumpuan arah y dipasang tulangan P10-100 Lapangan arah x dipasang tulangan P10-200 Lapangan arah y dipasang tulangan P10-200
4	 5 m 2,8 m	Plat tipe 4 Tumpuan arah x dipasang tulangan P10-200 Tumpuan arah y dipasang tulangan P10-200 Lapangan arah x dipasang tulangan P10-200 Lapangan arah y dipasang tulangan P10-200

5		Plat tipe 5 Tumpuan arah x dipasang tulangan P10-100 Tumpuan arah y dipasang tulangan P10-100 Lapangan arah x dipasang tulangan P10-200 Lapangan arah y dipasang tulangan P10-200
6		Plat tipe 6 Tumpuan arah x dipasang tulangan P10-200 Tumpuan arah y dipasang tulangan P10-200 Lapangan arah x dipasang tulangan P10-200 Lapangan arah y dipasang tulangan P10-200
7		Plat tipe 7 Tumpuan arah x dipasang tulangan P10-200 Tumpuan arah y dipasang tulangan P10-200 Lapangan arah x dipasang tulangan P10-200 Lapangan arah y dipasang tulangan P10-200
8		Plat tipe 8 Tumpuan arah x dipasang tulangan P10-200 Tumpuan arah y dipasang tulangan P10-200 Lapangan arah x dipasang tulangan P10-200 Lapangan arah y dipasang tulangan P10-200

9		Plat tipe 9 Tumpuan arah x dipasang tulangan P10-200 Tumpuan arah y dipasang tulangan P10-200 Lapangan arah x dipasang tulangan P10-200 Lapangan arah y dipasang tulangan P10-200
10		Plat tipe 10 Tumpuan arah x dipasang tulangan P10-200 Tumpuan arah y dipasang tulangan P10-200 Lapangan arah x dipasang tulangan P10-200 Lapangan arah y dipasang tulangan P10-200
11		Plat tipe 11 Tumpuan arah x dipasang tulangan P10-200 Tumpuan arah y dipasang tulangan P10-200 Lapangan arah x dipasang tulangan P10-200 Lapangan arah y dipasang tulangan P10-200
12		Plat tipe 12 Tumpuan arah x dipasang tulangan P10-100 Tumpuan arah y dipasang tulangan P10-100 Lapangan arah x dipasang tulangan P10-200 Lapangan arah y dipasang tulangan P10-200

13		Plat tipe 13 Tumpuan arah x dipasang tulangan P10-200 Tumpuan arah y dipasang tulangan P10-200 Lapangan arah x dipasang tulangan P10-200 Lapangan arah y dipasang tulangan P10-200
14		Plat tipe 14 Tumpuan arah x dipasang tulangan P10-200 Tumpuan arah y dipasang tulangan P10-200 Lapangan arah x dipasang tulangan P10-200 Lapangan arah y dipasang tulangan P10-200
15		Plat tipe 15 Tumpuan arah x dipasang tulangan P10-200 Tumpuan arah y dipasang tulangan P10-200 Lapangan arah x dipasang tulangan P10-200 Lapangan arah y dipasang tulangan P10-200



Gambar Penulangan Plat Lantai
skala 1:40

GETCMGL

LOAD COMBINATION MULTIPLIERS

COMBO	TYPE	CASE	FACTOR	TYPE	TITLE
COMB1	ADD				COMB1
		DEAD	1.2000	STATIC(DEAD)	
		LIVE	1.6000	STATIC(LIVE)	

GETCMGL

JOINT REACTIONS

JOINT	LOAD	F1	F2	F3	M1	M2	M3
1	COMB1	57.0442	0.0000	67.6138	0.0000	-22.4152	0.0000
4	COMB1	-57.0442	0.0000	64.5334	0.0000	-22.2006	0.0000

GETCMGL

FRAME ELEMENT FORCES

FRAME	LOAD	LOC	P	V2	V3	T	M2	M3
1	COMB1	0.00	-83.58	-28.98	0.00	0.00	0.00	-22.42
		2.04	-68.68	-3.91	0.00	0.00	0.00	11.06
		4.07	-53.78	21.17	0.00	0.00	0.00	-6.51
2	COMB1	0.00	0.00	-16.61	0.00	0.00	0.00	-12.46
		3.8E-01	0.00	-12.46	0.00	0.00	0.00	-7.01
		7.5E-01	0.00	-8.31	0.00	0.00	0.00	-3.12
		1.13	0.00	-4.15	0.00	0.00	0.00	-7.788E-01
		1.50	0.00	0.00	0.00	0.00	0.00	0.00
3	COMB1	0.00	53.54	-21.00	0.00	0.00	0.00	-5.96
		2.00	67.30	4.07	0.00	0.00	0.00	10.95
		3.99	81.05	29.14	0.00	0.00	0.00	-22.20

GETCMGL

LOAD COMBINATION MULTIPLIERS

COMBO	TYPE	CASE	FACTOR	TYPE	TITLE
COMB1	ADD	DEAD	1.2000	STATIC(DEAD)	COMB1
		LIVE	1.6000	STATIC(LIVE)	

GETCMGL

JOINT REACTIONS

JOINT	LOAD	F1	F2	F3	M1	M2	M3
1	COMB1	92.6623	0.0000	78.9575	0.0000	0.0000	0.0000
3	COMB1	-92.6623	0.0000	-4.0083	0.0000	0.0000	0.0000

GETCMGL

FRAME ELEMENT FORCES

FRAME	LOAD	LOC	P	V2	V3	T	M2	M3
1	COMB1							
		0.00	-120.00	-20.54	0.00	0.00	0.00	0.00
		2.04	-105.09	4.54	0.00	0.00	0.00	16.29
		4.07	-90.19	29.61	0.00	0.00	0.00	-18.47
2	COMB1							
		0.00	-92.66	-20.62	0.00	0.00	0.00	-18.47
		3.8E-01	-92.66	-16.47	0.00	0.00	0.00	-11.52
		7.5E-01	-92.66	-12.32	0.00	0.00	0.00	-6.12
		1.13	-92.66	-8.16	0.00	0.00	0.00	-2.28
		1.50	-92.66	-4.01	0.00	0.00	0.00	0.00

M A T E R I A L P R O P E R T Y D A T A

MATERIAL NAME	MATERIAL TYPE	DESIGN TYPE	MATERIAL DIR/PLANE	MODULUS OF ELASTICITY	POISSON'S RATIO	THERMAL COEFF	SHEAR MODULUS
STEEL	Iso	Steel	All	199947978.80	0.3000	1.1700E-05	76903068.77
CONC	Iso	Concrete	All	23500000.000	0.2000	9.9000E-06	9791666.667
OTHER	Iso	None	All	199947978.80	0.3000	1.1700E-05	76903068.77

M A T E R I A L P R O P E R T Y M A S S A N D W E I G H T

MATERIAL NAME	MASS PER UNIT VOL	WEIGHT PER UNIT VOL
STEEL	7.8271E+00	7.6820E+01
CONC	2.4010E+00	2.3560E+01
OTHER	7.8271E+00	7.6820E+01

M A T E R I A L D E S I G N D A T A F O R S T E E L M A T E R I A L S

MATERIAL NAME	STEEL FY	STEEL FU	STEEL COST (\$)
STEEL	344737.894	448159.263	271447.16

M A T E R I A L D E S I G N D A T A F O R C O N C R E T E M A T E R I A L S

MATERIAL NAME	LIGHTWEIGHT CONCRETE	CONCRETE FC	REBAR FY	REBAR FYS	LIGHTWT REDUC FACT
CONC	No	25000.000	400000.000	240000.000	N/A

F R A M E S E C T I O N P R O P E R T Y D A T A

FRAME SECTION NAME	MATERIAL NAME	SECTION SHAPE NAME OR NAME IN SECTION DATABASE FILE	CONC COL	CONC BEAM
B300X400	CONC	Rectangular		Yes
K1000X1000	CONC	Rectangular	Yes	
K1200X1200	CONC	Rectangular	Yes	
K400X400	CONC	Rectangular	Yes	
K500X500	CONC	Rectangular	Yes	
K600X600	CONC	Rectangular	Yes	
K800X800	CONC	Rectangular	Yes	
K700X700	CONC	Rectangular	Yes	
B200X300	CONC	Rectangular		Yes
K300X300	CONC	Rectangular	Yes	
B150X250	CONC	Rectangular		Yes
B200X350	CONC	Rectangular		Yes
B250X400	CONC	Rectangular		Yes
B250X450	CONC	Rectangular		Yes
B400X650	CONC	Rectangular		Yes
B600X1000	CONC	Rectangular		Yes
B300X450	CONC	Rectangular		Yes

F R A M E S E C T I O N P R O P E R T Y D A T A

FRAME SECTION NAME	SECTION DEPTH	FLANGE WIDTH TOP	FLANGE THICK TOP	WEB THICK	FLANGE WIDTH BOT	FLANGE THICK BOT
B300X400	0.4000	0.3000	0.0000	0.0000	0.0000	0.0000
K1000X1000	1.0000	1.0000	0.0000	0.0000	0.0000	0.0000
K1200X1200	1.2000	1.2000	0.0000	0.0000	0.0000	0.0000
K400X400	0.4000	0.4000	0.0000	0.0000	0.0000	0.0000
K500X500	0.5000	0.5000	0.0000	0.0000	0.0000	0.0000
K600X600	0.6000	0.6000	0.0000	0.0000	0.0000	0.0000
K800X800	0.8000	0.8000	0.0000	0.0000	0.0000	0.0000
K700X700	0.7000	0.7000	0.0000	0.0000	0.0000	0.0000
B200X300	0.3000	0.2000	0.0000	0.0000	0.0000	0.0000
K300X300	0.3000	0.3000	0.0000	0.0000	0.0000	0.0000
B150X250	0.2500	0.1500	0.0000	0.0000	0.0000	0.0000
B200X350	0.3500	0.2000	0.0000	0.0000	0.0000	0.0000

B250X400	0.4000	0.2500	0.0000	0.0000	0.0000	0.0000
B250X450	0.4500	0.2500	0.0000	0.0000	0.0000	0.0000
B400X650	0.6500	0.4000	0.0000	0.0000	0.0000	0.0000
B600X1000	1.0000	0.6000	0.0000	0.0000	0.0000	0.0000
B300X450	0.4500	0.3000	0.0000	0.0000	0.0000	0.0000

FRAME SECTION PROPERTY DATA

FRAME SECTION NAME	SECTION AREA	TORSIONAL CONSTANT	MOMENTS OF INERTIA		SHEAR AREAS	
			I33	I22	A2	A3
B300X400	0.1200	0.0019	0.0016	0.0009	0.1000	0.1000
K1000X1000	1.0000	0.1408	0.0833	0.0833	0.8333	0.8333
K1200X1200	1.4400	0.2920	0.1728	0.1728	1.2000	1.2000
K400X400	0.1600	0.0036	0.0021	0.0021	0.1333	0.1333
K500X500	0.2500	0.0088	0.0052	0.0052	0.2083	0.2083
K600X600	0.3600	0.0183	0.0108	0.0108	0.3000	0.3000
K800X800	0.6400	0.0577	0.0341	0.0341	0.5333	0.5333
K700X700	0.4900	0.0338	0.0200	0.0200	0.4083	0.4083
B200X300	0.0600	0.0005	0.0005	0.0002	0.0500	0.0500
K300X300	0.0900	0.0011	0.0007	0.0007	0.0750	0.0750
B150X250	0.0375	0.0002	0.0002	0.0001	0.0313	0.0313
B200X350	0.0700	0.0006	0.0007	0.0002	0.0583	0.0583
B250X400	0.1000	0.0013	0.0013	0.0005	0.0833	0.0833
B250X450	0.1125	0.0015	0.0019	0.0006	0.0938	0.0938
B400X650	0.2600	0.0086	0.0092	0.0035	0.2167	0.2167
B600X1000	0.6000	0.0451	0.0500	0.0180	0.5000	0.5000
B300X450	0.1350	0.0024	0.0023	0.0010	0.1125	0.1125

FRAME SECTION PROPERTY DATA

FRAME SECTION NAME	SECTION MODULI		PLASTIC MODULI		RADIUS OF GYRATION	
	S33	S22	Z33	Z22	R33	R22
B300X400	0.0080	0.0060	0.0120	0.0090	0.1155	0.0866
K1000X1000	0.1667	0.1667	0.2500	0.2500	0.2887	0.2887
K1200X1200	0.2880	0.2880	0.4320	0.4320	0.3464	0.3464
K400X400	0.0107	0.0107	0.0160	0.0160	0.1155	0.1155
K500X500	0.0208	0.0208	0.0313	0.0313	0.1443	0.1443
K600X600	0.0360	0.0360	0.0540	0.0540	0.1732	0.1732
K800X800	0.0853	0.0853	0.1280	0.1280	0.2309	0.2309
K700X700	0.0572	0.0572	0.0858	0.0858	0.2021	0.2021
B200X300	0.0030	0.0020	0.0045	0.0030	0.0866	0.0577
K300X300	0.0045	0.0045	0.0068	0.0068	0.0866	0.0866
B150X250	0.0016	0.0009	0.0023	0.0014	0.0722	0.0433
B200X350	0.0041	0.0023	0.0061	0.0035	0.1010	0.0577
B250X400	0.0067	0.0042	0.0100	0.0063	0.1155	0.0722
B250X450	0.0084	0.0047	0.0127	0.0070	0.1299	0.0722
B400X650	0.0282	0.0173	0.0423	0.0260	0.1876	0.1155
B600X1000	0.1000	0.0600	0.1500	0.0900	0.2887	0.1732
B300X450	0.0101	0.0068	0.0152	0.0101	0.1299	0.0866

FRAME SECTION WEIGHTS AND MASSES

FRAME SECTION NAME	TOTAL WEIGHT	TOTAL MASS
B300X400	9318.8674	949.6859
K1000X1000	0.0000	0.0000
K1200X1200	0.0000	0.0000
K400X400	1553.0752	158.2739
K500X500	0.0000	0.0000
K600X600	2239.1424	228.1910
K800X800	4221.9520	430.2592
K700X700	3232.4320	329.4172
B200X300	0.0000	0.0000
K300X300	288.3744	29.3882
B150X250	0.0000	0.0000
B200X350	0.0000	0.0000
B250X400	183.7411	18.7251
B250X450	0.0000	0.0000
B400X650	0.0000	0.0000
B600X1000	0.0000	0.0000
B300X450	3072.0229	313.0699

CONCRETE COLUMN DATA

FRAME SECTION NAME	REINF CONFIGURATION LONGIT LATERAL	REINF SIZE/TYPE	NUM BARS 3DIR/2DIR	NUM BARS CIRCULAR	BAR COVER
K1000X1000	Rectangular Ties	25d/Design	5/5	N/A	0.0625
K1200X1200	Rectangular Ties	25d/Design	7/7	N/A	0.0625
K400X400	Rectangular Ties	20d/Design	4/4	N/A	0.0625
K500X500	Rectangular Ties	20d/Design	4/4	N/A	0.0625
K600X600	Rectangular Ties	20M/Design	5/5	N/A	0.0625
K800X800	Rectangular Ties	20d/Design	6/6	N/A	0.0625
K700X700	Rectangular Ties	#9/Design	3/3	N/A	0.0600
K300X300	Rectangular Ties	#9/Design	3/3	N/A	0.0600

CONCRETE BEAM DATA

FRAME SECTION NAME	TOP COVER	BOT COVER	TOP LEFT AREA	TOP RIGHT AREA	BOT LEFT AREA	BOT RIGHT AREA
B300X400	0.0470	0.0470	0.000	0.000	0.000	0.000
B200X300	0.0400	0.0400	0.000	0.000	0.000	0.000
B150X250	0.0250	0.0250	0.000	0.000	0.000	0.000
B200X350	0.0350	0.0350	0.000	0.000	0.000	0.000
B250X400	0.0400	0.0400	0.000	0.000	0.000	0.000
B250X450	0.0450	0.0450	0.000	0.000	0.000	0.000
B400X650	0.0650	0.0650	0.000	0.000	0.000	0.000
B600X1000	0.1000	0.1000	0.000	0.000	0.000	0.000
B300X450	0.0450	0.0450	0.000	0.000	0.000	0.000

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SHELL SECTION PROPERTY DATA

SHELL SECTION	MATERIAL NAME	SHELL TYPE	LOAD DIST ONE WAY	MEMBRANE THICK	BENDING THICK	TOTAL WEIGHT	TOTAL MASS
WALL1	CONC	Shell-Thin	No	0.2500	0.2500	0.0000	0.0000
SLAB1	CONC	Shell-Thin	No	0.2500	0.2500	0.0000	0.0000
DECK1	CONC	Membrane	No	0.0889	0.0889	0.0000	0.0000
PLANK1	CONC	Membrane	Yes	0.2500	0.2500	0.0000	0.0000
PLATDAK	CONC	Membrane	No	0.1000	0.1000	3773.1101	384.5177
PLATLANTAI	CONC	Membrane	No	0.1200	0.1200	14039.0085	1430.7156

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RESPONSE SPECTRUM CASES

RESP SPEC CASE: XDIR

BASIC RESPONSE SPECTRUM DATA

MODAL COMBO	DIRECTION COMBO	MODAL DAMPING	SPECTRUM ANGLE	TYPICAL ECCEN
CQC	SRSS	0.0500	0.0000	0.0000

RESPONSE SPECTRUM FUNCTION ASSIGNMENT DATA

DIRECTION	FUNCTION	SCALE FACT
U1	RSG2LUNAK	2.0867
U2	----	N/A
UZ	----	N/A

RESP SPEC CASE: YDIR

BASIC RESPONSE SPECTRUM DATA

MODAL COMBO	DIRECTION COMBO	MODAL DAMPING	SPECTRUM ANGLE	TYPICAL ECCEN
CQC	SRSS	0.0500	0.0000	0.0000

RESPONSE SPECTRUM FUNCTION ASSIGNMENT DATA

DIRECTION	FUNCTION	SCALE FACT
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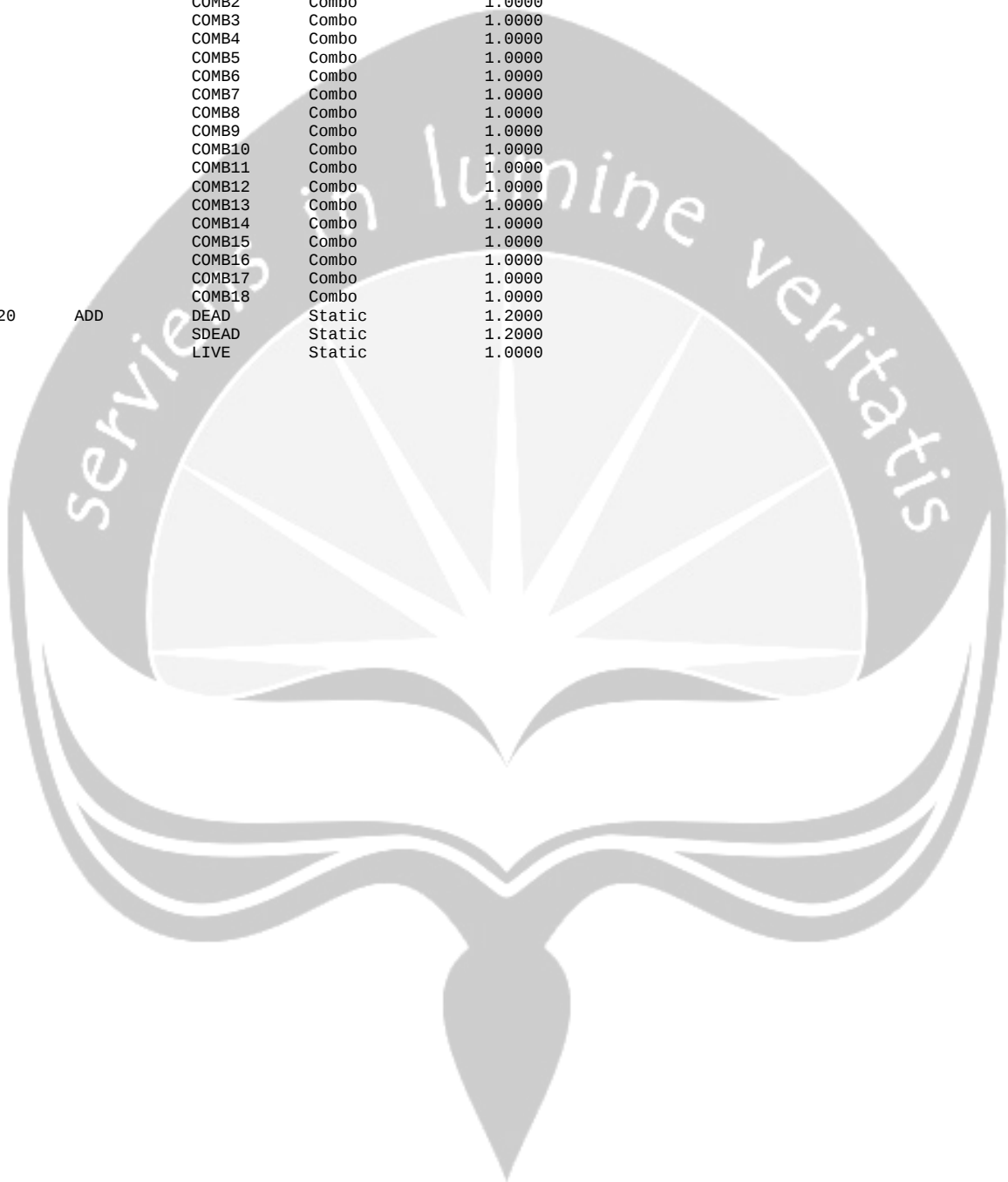
U1	----	N/A
U2	RSG2LUNAK	2.0667
UZ	----	N/A

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L O A D I N G C O M B I N A T I O N S

COMBO	COMBO TYPE	CASE	CASE TYPE	SCALE FACTOR
COMB0				
COMB1	ADD	DEAD	Static	1.4000
		SDEAD	Static	1.4000
COMB2	ADD	DEAD	Static	1.2000
		SDEAD	Static	1.2000
		LIVE	Static	1.6000
COMB3	ADD	DEAD	Static	1.2000
		SDEAD	Static	1.2000
		LIVE	Static	1.0000
		XDIR	Spectra	1.0000
		YDIR	Spectra	0.3000
COMB4	ADD	DEAD	Static	1.2000
		SDEAD	Static	1.2000
		LIVE	Static	1.0000
		XDIR	Spectra	1.0000
		YDIR	Spectra	-0.3000
COMB5	ADD	DEAD	Static	1.2000
		SDEAD	Static	1.2000
		LIVE	Static	1.0000
		XDIR	Spectra	-1.0000
		YDIR	Spectra	0.3000
COMB6	ADD	DEAD	Static	1.2000
		SDEAD	Static	1.2000
		LIVE	Static	1.0000
		XDIR	Spectra	-1.0000
		YDIR	Spectra	-0.3000
COMB7	ADD	DEAD	Static	1.2000
		SDEAD	Static	1.2000
		LIVE	Static	1.0000
		YDIR	Spectra	1.0000
		XDIR	Spectra	0.3000
COMB8	ADD	DEAD	Static	1.2000
		SDEAD	Static	1.2000
		LIVE	Static	1.0000
		YDIR	Spectra	1.0000
		XDIR	Spectra	-0.3000
COMB9	ADD	DEAD	Static	1.2000
		SDEAD	Static	1.2000
		LIVE	Static	1.0000
		YDIR	Spectra	-1.0000
		XDIR	Spectra	0.3000
COMB10	ADD	DEAD	Static	1.2000
		SDEAD	Static	1.2000
		LIVE	Static	1.0000
		YDIR	Spectra	-1.0000
		XDIR	Spectra	-0.3000
COMB11	ADD	DEAD	Static	0.9000
		SDEAD	Static	0.9000
		XDIR	Spectra	1.0000
		YDIR	Spectra	0.3000
COMB12	ADD	DEAD	Static	0.9000
		SDEAD	Static	0.9000
		XDIR	Spectra	1.0000
		YDIR	Spectra	-0.3000
COMB13	ADD	DEAD	Static	0.9000
		SDEAD	Static	0.9000
		XDIR	Spectra	-1.0000
		YDIR	Spectra	0.3000
COMB14	ADD	DEAD	Static	0.9000
		SDEAD	Static	0.9000
		XDIR	Spectra	-1.0000
		YDIR	Spectra	-0.3000
COMB15	ADD	DEAD	Static	0.9000
		SDEAD	Static	0.9000
		YDIR	Spectra	1.0000
		XDIR	Spectra	0.3000
COMB16	ADD	DEAD	Static	0.9000
		SDEAD	Static	0.9000
		YDIR	Spectra	1.0000
		XDIR	Spectra	-0.3000
COMB17	ADD	DEAD	Static	0.9000

		SDEAD	Static	0.9000
		YDIR	Spectra	-1.0000
		XDIR	Spectra	0.3000
COMB18	ADD	DEAD	Static	0.9000
		SDEAD	Static	0.9000
		YDIR	Spectra	-1.0000
		XDIR	Spectra	-0.3000
COMB19	ENVE	COMB1	Combo	1.0000
		COMB2	Combo	1.0000
		COMB3	Combo	1.0000
		COMB4	Combo	1.0000
		COMB5	Combo	1.0000
		COMB6	Combo	1.0000
		COMB7	Combo	1.0000
		COMB8	Combo	1.0000
		COMB9	Combo	1.0000
		COMB10	Combo	1.0000
		COMB11	Combo	1.0000
		COMB12	Combo	1.0000
		COMB13	Combo	1.0000
		COMB14	Combo	1.0000
		COMB15	Combo	1.0000
		COMB16	Combo	1.0000
		COMB17	Combo	1.0000
		COMB18	Combo	1.0000
COMB20	ADD	DEAD	Static	1.2000
		SDEAD	Static	1.2000
		LIVE	Static	1.0000



B E A M F O R C E S

STORY	BEAM	LOAD	LOC	P	V2	V3	T	M2	M3
STORY4	B310	COMB19 MAX	0.1500	0.00	-26.16	0.00	0.137	0.000	10.106
			0.6313	0.00	-23.99	0.00	0.137	0.000	22.214
			1.1125	0.00	-20.83	0.00	0.137	0.000	38.107
			1.5938	0.00	-16.69	0.00	0.137	0.000	55.620
			2.0750	0.00	-11.59	0.00	0.137	0.000	69.424
			2.5563	0.00	-6.78	0.00	0.137	0.000	79.103
			3.0375	0.00	-2.95	0.00	0.137	0.000	85.931
			3.5188	0.00	-0.10	0.00	0.137	0.000	94.479
			4.0000	0.00	1.77	0.00	0.137	0.000	101.156
			4.0000	0.00	57.27	0.00	0.137	0.000	101.156
			4.4750	0.00	59.94	0.00	0.137	0.000	74.844
			4.9500	0.00	64.35	0.00	0.137	0.000	50.891
			5.4250	0.00	70.48	0.00	0.137	0.000	27.006
			5.9000	0.00	77.11	0.00	0.137	0.000	6.447
			6.3750	0.00	82.06	0.00	0.137	0.000	-10.371
			6.8500	0.00	85.28	0.00	0.137	0.000	-28.434
STORY4	B310	COMB19 MIN	0.1500	0.00	-64.96	0.00	-0.057	0.000	-68.947
			0.6313	0.00	-61.69	0.00	-0.057	0.000	-38.401
			1.1125	0.00	-56.64	0.00	-0.057	0.000	-14.927
			1.5938	0.00	-49.82	0.00	-0.057	0.000	2.316
			2.0750	0.00	-41.27	0.00	-0.057	0.000	17.332
			2.5563	0.00	-33.22	0.00	-0.057	0.000	29.888
			3.0375	0.00	-26.96	0.00	-0.057	0.000	40.364
			3.5188	0.00	-22.46	0.00	-0.057	0.000	49.230
			4.0000	0.00	-19.74	0.00	-0.057	0.000	55.875
			4.0000	0.00	21.36	0.00	-0.057	0.000	55.875
			4.4750	0.00	23.20	0.00	-0.057	0.000	37.264
			4.9500	0.00	26.00	0.00	-0.057	0.000	17.549
			5.4250	0.00	29.75	0.00	-0.057	0.000	-3.721
			5.9000	0.00	33.78	0.00	-0.057	0.000	-33.394
			6.3750	0.00	36.88	0.00	-0.057	0.000	-71.265
			6.8500	0.00	39.02	0.00	-0.057	0.000	-111.077
STORY4	B321	COMB19 MAX	0.1500	0.00	-25.98	0.00	0.163	0.000	-26.954
			0.5917	0.00	-24.17	0.00	0.163	0.000	-15.849
			1.0333	0.00	-21.52	0.00	0.163	0.000	-5.730
			1.4750	0.00	-18.07	0.00	0.163	0.000	3.039
			1.9167	0.00	-14.88	0.00	0.163	0.000	13.500
			2.3583	0.00	-12.51	0.00	0.163	0.000	24.899
			2.8000	0.00	-10.98	0.00	0.163	0.000	38.939
			2.8000	0.00	33.72	0.00	0.163	0.000	38.939
			3.2417	0.00	35.97	0.00	0.163	0.000	25.562
			3.6833	0.00	39.70	0.00	0.163	0.000	14.467
			4.1250	0.00	44.93	0.00	0.163	0.000	3.987
			4.5667	0.00	50.63	0.00	0.163	0.000	-4.584
			5.0083	0.00	54.88	0.00	0.163	0.000	-14.506
			5.4500	0.00	57.63	0.00	0.163	0.000	-25.414
STORY4	B321	COMB19 MIN	0.1500	0.00	-58.32	0.00	-0.149	0.000	-86.525
			0.5917	0.00	-55.57	0.00	-0.149	0.000	-61.320
			1.0333	0.00	-51.32	0.00	-0.149	0.000	-37.661
			1.4750	0.00	-45.63	0.00	-0.149	0.000	-16.206
			1.9167	0.00	-40.39	0.00	-0.149	0.000	-0.480
			2.3583	0.00	-36.66	0.00	-0.149	0.000	11.099
			2.8000	0.00	-34.41	0.00	-0.149	0.000	21.457
			2.8000	0.00	10.53	0.00	-0.149	0.000	21.457
			3.2417	0.00	12.07	0.00	-0.149	0.000	10.940
			3.6833	0.00	14.43	0.00	-0.149	0.000	-0.442
			4.1250	0.00	17.62	0.00	-0.149	0.000	-15.647
			4.5667	0.00	21.07	0.00	-0.149	0.000	-36.798
			5.0083	0.00	23.72	0.00	-0.149	0.000	-60.151
			5.4500	0.00	25.54	0.00	-0.149	0.000	-85.051
STORY4	B330	COMB19 MAX	0.1500	0.00	-39.14	0.00	0.070	0.000	-28.691
			0.6250	0.00	-37.00	0.00	0.070	0.000	-10.571
			1.1000	0.00	-33.90	0.00	0.070	0.000	6.306
			1.5750	0.00	-29.87	0.00	0.070	0.000	26.710
			2.0500	0.00	-26.12	0.00	0.070	0.000	50.654
			2.5250	0.00	-23.32	0.00	0.070	0.000	74.182
			3.0000	0.00	-21.49	0.00	0.070	0.000	100.526
			3.0000	0.00	19.61	0.00	0.070	0.000	100.526
			3.4813	0.00	22.33	0.00	0.070	0.000	93.881
			3.9625	0.00	26.83	0.00	0.070	0.000	85.365
			4.4438	0.00	33.10	0.00	0.070	0.000	78.114
			4.9250	0.00	41.14	0.00	0.070	0.000	68.452
			5.4063	0.00	49.69	0.00	0.070	0.000	54.664
			5.8875	0.00	56.51	0.00	0.070	0.000	37.169
			6.3688	0.00	61.56	0.00	0.070	0.000	21.491
			6.8500	0.00	64.84	0.00	0.070	0.000	9.399
STORY4	B330	COMB19 MIN	0.1500	0.00	-85.32	0.00	-0.273	0.000	-112.216
			0.6250	0.00	-82.10	0.00	-0.273	0.000	-72.388
			1.1000	0.00	-77.15	0.00	-0.273	0.000	-34.499

			1.5750	0.00	-70.51	0.00	-0.273	0.000	-4.596
			2.0500	0.00	-64.38	0.00	-0.273	0.000	16.689
			2.5250	0.00	-59.98	0.00	-0.273	0.000	36.420
			3.0000	0.00	-57.30	0.00	-0.273	0.000	55.049
			3.0000	0.00	-1.80	0.00	-0.273	0.000	55.049
			3.4813	0.00	0.06	0.00	-0.273	0.000	49.382
			3.9625	0.00	2.91	0.00	-0.273	0.000	40.574
			4.4438	0.00	6.75	0.00	-0.273	0.000	30.158
			4.9250	0.00	11.56	0.00	-0.273	0.000	17.660
			5.4063	0.00	16.66	0.00	-0.273	0.000	2.704
			5.8875	0.00	20.80	0.00	-0.273	0.000	-14.480
			6.3688	0.00	23.96	0.00	-0.273	0.000	-38.094
			6.8500	0.00	26.13	0.00	-0.273	0.000	-68.580
STORY3	B310	COMB19 MAX	0.2000	0.00	-36.10	0.00	0.239	0.000	2.262
			0.6750	0.00	-33.25	0.00	0.239	0.000	18.796
			1.1500	0.00	-28.77	0.00	0.239	0.000	33.588
			1.6250	0.00	-22.67	0.00	0.239	0.000	55.924
			2.1000	0.00	-15.01	0.00	0.239	0.000	79.383
			2.5750	0.00	-7.97	0.00	0.239	0.000	95.981
			3.0500	0.00	-2.55	0.00	0.239	0.000	112.318
			3.5250	0.00	1.24	0.00	0.239	0.000	129.886
			4.0000	0.00	3.41	0.00	0.239	0.000	144.707
			4.0000	0.00	90.76	0.00	0.239	0.000	144.707
			4.4667	0.00	94.13	0.00	0.239	0.000	103.724
			4.9333	0.00	100.68	0.00	0.239	0.000	72.642
			5.4000	0.00	110.40	0.00	0.239	0.000	39.421
			5.8667	0.00	121.70	0.00	0.239	0.000	17.526
			6.3333	0.00	130.87	0.00	0.239	0.000	-1.954
			6.8000	0.00	136.21	0.00	0.239	0.000	-23.102
STORY3	B310	COMB19 MIN	0.2000	0.00	-114.96	0.00	-0.320	0.000	-164.512
			0.6750	0.00	-110.12	0.00	-0.320	0.000	-110.925
			1.1500	0.00	-101.98	0.00	-0.320	0.000	-60.421
			1.6250	0.00	-90.55	0.00	-0.320	0.000	-24.621
			2.1000	0.00	-75.97	0.00	-0.320	0.000	0.567
			2.5750	0.00	-62.63	0.00	-0.320	0.000	22.152
			3.0500	0.00	-52.59	0.00	-0.320	0.000	40.778
			3.5250	0.00	-45.84	0.00	-0.320	0.000	57.215
			4.0000	0.00	-42.38	0.00	-0.320	0.000	61.773
			4.0000	0.00	22.52	0.00	-0.320	0.000	61.773
			4.4667	0.00	24.64	0.00	-0.320	0.000	34.923
			4.9333	0.00	28.33	0.00	-0.320	0.000	6.718
			5.4000	0.00	33.58	0.00	-0.320	0.000	-23.573
			5.8667	0.00	39.43	0.00	-0.320	0.000	-72.929
			6.3333	0.00	43.79	0.00	-0.320	0.000	-131.526
			6.8000	0.00	46.58	0.00	-0.320	0.000	-193.072
STORY3	B321	COMB19 MAX	0.2000	0.00	-29.26	0.00	0.323	0.000	-8.556
			0.6333	0.00	-26.86	0.00	0.323	0.000	3.652
			1.0667	0.00	-23.11	0.00	0.323	0.000	14.527
			1.5000	0.00	-18.07	0.00	0.323	0.000	25.655
			1.9333	0.00	-13.59	0.00	0.323	0.000	43.759
			2.3667	0.00	-10.46	0.00	0.323	0.000	60.318
			2.8000	0.00	-8.69	0.00	0.323	0.000	83.737
			2.8000	0.00	61.09	0.00	0.323	0.000	83.737
			3.2333	0.00	63.93	0.00	0.323	0.000	60.267
			3.6667	0.00	69.51	0.00	0.323	0.000	43.675
			4.1000	0.00	77.83	0.00	0.323	0.000	25.531
			4.5333	0.00	87.27	0.00	0.323	0.000	14.455
			4.9667	0.00	94.12	0.00	0.323	0.000	3.563
			5.4000	0.00	98.22	0.00	0.323	0.000	-8.662
STORY3	B321	COMB19 MIN	0.2000	0.00	-98.13	0.00	-0.145	0.000	-132.285
			0.6333	0.00	-94.02	0.00	-0.145	0.000	-90.554
			1.0667	0.00	-87.18	0.00	-0.145	0.000	-51.195
			1.5000	0.00	-77.74	0.00	-0.145	0.000	-17.562
			1.9333	0.00	-69.42	0.00	-0.145	0.000	2.932
			2.3667	0.00	-63.84	0.00	-0.145	0.000	21.777
			2.8000	0.00	-61.00	0.00	-0.145	0.000	39.551
			2.8000	0.00	8.73	0.00	-0.145	0.000	39.551
			3.2333	0.00	10.50	0.00	-0.145	0.000	21.763
			3.6667	0.00	13.63	0.00	-0.145	0.000	2.901
			4.1000	0.00	18.11	0.00	-0.145	0.000	-17.610
			4.5333	0.00	23.15	0.00	-0.145	0.000	-51.353
			4.9667	0.00	26.90	0.00	-0.145	0.000	-90.752
			5.4000	0.00	29.30	0.00	-0.145	0.000	-132.524
STORY3	B330	COMB19 MAX	0.2000	0.00	-46.67	0.00	0.207	0.000	-23.199
			0.6667	0.00	-43.88	0.00	0.207	0.000	-2.010
			1.1333	0.00	-39.52	0.00	0.207	0.000	17.511
			1.6000	0.00	-33.67	0.00	0.207	0.000	39.539
			2.0667	0.00	-28.42	0.00	0.207	0.000	72.803
			2.5333	0.00	-24.73	0.00	0.207	0.000	103.959
			3.0000	0.00	-22.61	0.00	0.207	0.000	144.987
			3.0000	0.00	42.29	0.00	0.207	0.000	144.987
			3.4750	0.00	45.75	0.00	0.207	0.000	130.212
			3.9500	0.00	52.50	0.00	0.207	0.000	112.691
			4.4250	0.00	62.54	0.00	0.207	0.000	96.455
			4.9000	0.00	75.88	0.00	0.207	0.000	79.927

			5.3750	0.00	90.46	0.00	0.207	0.000	56.538
			5.8500	0.00	101.89	0.00	0.207	0.000	34.169
			6.3250	0.00	110.03	0.00	0.207	0.000	19.446
			6.8000	0.00	114.87	0.00	0.207	0.000	2.981
STORY3	B330	COMB19 MIN	0.2000	0.00	-136.31	0.00	-0.315	0.000	-193.223
			0.6667	0.00	-130.97	0.00	-0.315	0.000	-131.608
			1.1333	0.00	-121.80	0.00	-0.315	0.000	-72.942
			1.6000	0.00	-110.55	0.00	-0.315	0.000	-23.609
			2.0667	0.00	-100.82	0.00	-0.315	0.000	6.750
			2.5333	0.00	-94.27	0.00	-0.315	0.000	35.022
			3.0000	0.00	-90.90	0.00	-0.315	0.000	61.940
			3.0000	0.00	-3.56	0.00	-0.315	0.000	61.940
			3.4750	0.00	-1.39	0.00	-0.315	0.000	57.407
			3.9500	0.00	2.41	0.00	-0.315	0.000	41.011
			4.4250	0.00	7.83	0.00	-0.315	0.000	22.428
			4.9000	0.00	14.87	0.00	-0.315	0.000	0.885
			5.3750	0.00	22.52	0.00	-0.315	0.000	-24.262
			5.8500	0.00	28.62	0.00	-0.315	0.000	-59.916
			6.3250	0.00	33.10	0.00	-0.315	0.000	-110.377
			6.8000	0.00	35.96	0.00	-0.315	0.000	-163.921
STORY2	B310	COMB19 MAX	0.2000	0.00	-39.34	0.00	0.249	0.000	-10.995
			0.6750	0.00	-36.48	0.00	0.249	0.000	7.076
			1.1500	0.00	-32.00	0.00	0.249	0.000	23.406
			1.6250	0.00	-25.90	0.00	0.249	0.000	45.220
			2.1000	0.00	-18.25	0.00	0.249	0.000	70.356
			2.5750	0.00	-11.21	0.00	0.249	0.000	88.632
			3.0500	0.00	-5.79	0.00	0.249	0.000	108.702
			3.5250	0.00	-1.99	0.00	0.249	0.000	126.558
			4.0000	0.00	0.18	0.00	0.249	0.000	141.668
			4.0000	0.00	87.22	0.00	0.249	0.000	141.668
			4.4667	0.00	90.59	0.00	0.249	0.000	100.968
			4.9333	0.00	97.14	0.00	0.249	0.000	67.641
			5.4000	0.00	108.27	0.00	0.249	0.000	33.203
			5.8667	0.00	121.09	0.00	0.249	0.000	10.897
			6.3333	0.00	130.26	0.00	0.249	0.000	-9.938
			6.8000	0.00	135.60	0.00	0.249	0.000	-32.440
STORY2	B310	COMB19 MIN	0.2000	0.00	-114.77	0.00	-0.279	0.000	-157.176
			0.6750	0.00	-109.30	0.00	-0.279	0.000	-104.827
			1.1500	0.00	-99.86	0.00	-0.279	0.000	-55.561
			1.6250	0.00	-87.94	0.00	-0.279	0.000	-18.940
			2.1000	0.00	-73.36	0.00	-0.279	0.000	4.870
			2.5750	0.00	-60.03	0.00	-0.279	0.000	25.076
			3.0500	0.00	-49.98	0.00	-0.279	0.000	42.323
			3.5250	0.00	-43.23	0.00	-0.279	0.000	57.381
			4.0000	0.00	-39.77	0.00	-0.279	0.000	60.814
			4.0000	0.00	25.42	0.00	-0.279	0.000	60.814
			4.4667	0.00	27.54	0.00	-0.279	0.000	35.475
			4.9333	0.00	31.23	0.00	-0.279	0.000	8.780
			5.4000	0.00	36.48	0.00	-0.279	0.000	-20.000
			5.8667	0.00	42.34	0.00	-0.279	0.000	-68.651
			6.3333	0.00	46.69	0.00	-0.279	0.000	-125.599
			6.8000	0.00	49.48	0.00	-0.279	0.000	-185.497
STORY2	B321	COMB19 MAX	0.2000	0.00	-31.35	0.00	0.264	0.000	-13.419
			0.6333	0.00	-28.95	0.00	0.264	0.000	-0.305
			1.0667	0.00	-25.20	0.00	0.264	0.000	11.474
			1.5000	0.00	-20.16	0.00	0.264	0.000	24.340
			1.9333	0.00	-15.68	0.00	0.264	0.000	43.341
			2.3667	0.00	-12.55	0.00	0.264	0.000	62.096
			2.8000	0.00	-10.78	0.00	0.264	0.000	85.490
			2.8000	0.00	59.02	0.00	0.264	0.000	85.490
			3.2333	0.00	61.86	0.00	0.264	0.000	61.996
			3.6667	0.00	67.44	0.00	0.264	0.000	43.182
			4.1000	0.00	75.76	0.00	0.264	0.000	24.095
			4.5333	0.00	85.20	0.00	0.264	0.000	11.300
			4.9667	0.00	92.05	0.00	0.264	0.000	-0.526
			5.4000	0.00	96.15	0.00	0.264	0.000	-13.686
STORY2	B321	COMB19 MIN	0.2000	0.00	-95.95	0.00	-0.180	0.000	-125.237
			0.6333	0.00	-91.85	0.00	-0.180	0.000	-84.448
			1.0667	0.00	-85.00	0.00	-0.180	0.000	-46.032
			1.5000	0.00	-75.56	0.00	-0.180	0.000	-14.173
			1.9333	0.00	-67.24	0.00	-0.180	0.000	5.386
			2.3667	0.00	-61.66	0.00	-0.180	0.000	23.296
			2.8000	0.00	-58.82	0.00	-0.180	0.000	40.130
			2.8000	0.00	10.88	0.00	-0.180	0.000	40.130
			3.2333	0.00	12.66	0.00	-0.180	0.000	23.237
			3.6667	0.00	15.79	0.00	-0.180	0.000	5.280
			4.1000	0.00	20.27	0.00	-0.180	0.000	-14.326
			4.5333	0.00	25.30	0.00	-0.180	0.000	-46.388
			4.9667	0.00	29.06	0.00	-0.180	0.000	-84.891
			5.4000	0.00	31.46	0.00	-0.180	0.000	-125.766
STORY2	B330	COMB19 MAX	0.2000	0.00	-49.39	0.00	0.226	0.000	-32.077
			0.6667	0.00	-46.60	0.00	0.226	0.000	-9.620
			1.1333	0.00	-42.24	0.00	0.226	0.000	11.169
			1.6000	0.00	-36.39	0.00	0.226	0.000	33.619

			2.0667	0.00	-31.13	0.00	0.226	0.000	67.966
			2.5333	0.00	-27.45	0.00	0.226	0.000	101.218
			3.0000	0.00	-25.33	0.00	0.226	0.000	141.811
			3.0000	0.00	39.97	0.00	0.226	0.000	141.811
			3.4750	0.00	43.43	0.00	0.226	0.000	126.593
			3.9500	0.00	50.18	0.00	0.226	0.000	108.628
			4.4250	0.00	60.22	0.00	0.226	0.000	88.477
			4.9000	0.00	73.56	0.00	0.226	0.000	70.114
			5.3750	0.00	88.14	0.00	0.226	0.000	44.890
			5.8500	0.00	100.09	0.00	0.226	0.000	23.212
			6.3250	0.00	109.53	0.00	0.226	0.000	6.841
			6.8000	0.00	114.99	0.00	0.226	0.000	-11.272
STORY2	B330	COMB19 MIN	0.2000	0.00	-135.38	0.00	-0.311	0.000	-184.875
			0.6667	0.00	-130.04	0.00	-0.311	0.000	-125.063
			1.1333	0.00	-120.87	0.00	-0.311	0.000	-68.201
			1.6000	0.00	-108.04	0.00	-0.311	0.000	-19.824
			2.0667	0.00	-96.96	0.00	-0.311	0.000	8.916
			2.5333	0.00	-90.41	0.00	-0.311	0.000	35.570
			3.0000	0.00	-87.04	0.00	-0.311	0.000	60.869
			3.0000	0.00	-0.09	0.00	-0.311	0.000	60.869
			3.4750	0.00	2.08	0.00	-0.311	0.000	57.426
			3.9500	0.00	5.88	0.00	-0.311	0.000	42.322
			4.4250	0.00	11.29	0.00	-0.311	0.000	25.029
			4.9000	0.00	18.34	0.00	-0.311	0.000	4.777
			5.3750	0.00	25.99	0.00	-0.311	0.000	-19.079
			5.8500	0.00	32.09	0.00	-0.311	0.000	-55.969
			6.3250	0.00	36.57	0.00	-0.311	0.000	-105.327
			6.8000	0.00	39.42	0.00	-0.311	0.000	-157.768

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BEAM FORCES

STORY	BEAM	LOAD	LOC	P	V2	V3	T	M2	M3
STORY4	B98	COMB19 MAX	0.1500	0.00	-5.00	0.00	1.397	0.000	22.410
			0.6200	0.00	-3.03	0.00	1.397	0.000	26.284
			1.0900	0.00	-0.13	0.00	1.397	0.000	30.519
			1.5600	0.00	3.67	0.00	1.397	0.000	32.165
			2.0300	0.00	7.76	0.00	1.397	0.000	30.672
			2.5000	0.00	13.39	0.00	1.397	0.000	25.978
			2.9700	0.00	20.20	0.00	1.397	0.000	21.546
			3.4400	0.00	27.01	0.00	1.397	0.000	18.223
			3.9100	0.00	33.32	0.00	1.397	0.000	12.696
			4.3800	0.00	37.99	0.00	1.397	0.000	8.455
			4.8500	0.00	40.97	0.00	1.397	0.000	4.105
STORY4	B98	COMB19 MIN	0.1500	0.00	-32.71	0.00	0.375	0.000	-29.464
			0.6200	0.00	-29.73	0.00	0.375	0.000	-16.674
			1.0900	0.00	-25.06	0.00	0.375	0.000	-7.185
			1.5600	0.00	-18.76	0.00	0.375	0.000	0.722
			2.0300	0.00	-11.94	0.00	0.375	0.000	6.743
			2.5000	0.00	-6.68	0.00	0.375	0.000	10.844
			2.9700	0.00	-2.60	0.00	0.375	0.000	10.495
			3.4400	0.00	1.49	0.00	0.375	0.000	2.049
			3.9100	0.00	5.29	0.00	0.375	0.000	-8.283
			4.3800	0.00	8.19	0.00	0.375	0.000	-24.073
			4.8500	0.00	10.16	0.00	0.375	0.000	-42.695
STORY4	B99	COMB19 MAX	0.1500	0.00	-10.28	0.00	-0.242	0.000	0.186
			0.6200	0.00	-8.32	0.00	-0.242	0.000	4.595
			1.0900	0.00	-5.42	0.00	-0.242	0.000	7.861
			1.5600	0.00	-1.62	0.00	-0.242	0.000	12.127
			2.0300	0.00	2.47	0.00	-0.242	0.000	13.942
			2.5000	0.00	6.56	0.00	-0.242	0.000	14.837
			2.9700	0.00	13.17	0.00	-0.242	0.000	15.882
			3.4400	0.00	19.98	0.00	-0.242	0.000	14.685
			3.9100	0.00	26.28	0.00	-0.242	0.000	10.472
			4.3800	0.00	30.95	0.00	-0.242	0.000	7.635
			4.8500	0.00	33.93	0.00	-0.242	0.000	3.655
STORY4	B99	COMB19 MIN	0.1500	0.00	-35.25	0.00	-0.652	0.000	-41.351
			0.6200	0.00	-32.27	0.00	-0.652	0.000	-25.418
			1.0900	0.00	-27.60	0.00	-0.652	0.000	-11.283
			1.5600	0.00	-21.29	0.00	-0.652	0.000	-2.318
			2.0300	0.00	-14.48	0.00	-0.652	0.000	4.073
			2.5000	0.00	-7.67	0.00	-0.652	0.000	7.220
			2.9700	0.00	-3.38	0.00	-0.652	0.000	3.182
			3.4400	0.00	0.70	0.00	-0.652	0.000	-2.780
			3.9100	0.00	4.51	0.00	-0.652	0.000	-10.749
			4.3800	0.00	7.41	0.00	-0.652	0.000	-24.265
			4.8500	0.00	9.37	0.00	-0.652	0.000	-39.580
STORY4	B100	COMB19 MAX	0.1500	0.00	-8.88	0.00	0.112	0.000	5.546
			0.6200	0.00	-6.92	0.00	0.112	0.000	9.296
			1.0900	0.00	-4.02	0.00	0.112	0.000	12.508
			1.5600	0.00	-0.21	0.00	0.112	0.000	16.582
			2.0300	0.00	3.87	0.00	0.112	0.000	17.519

			2.5000	0.00	8.22	0.00	0.112	0.000	16.807
			2.9700	0.00	15.04	0.00	0.112	0.000	16.363
			3.4400	0.00	21.85	0.00	0.112	0.000	14.686
			3.9100	0.00	28.15	0.00	0.112	0.000	10.017
			4.3800	0.00	32.82	0.00	0.112	0.000	6.920
			4.8500	0.00	35.80	0.00	0.112	0.000	2.679
STORY4	B100	COMB19 MIN	0.1500	0.00	-34.23	0.00	-0.479	0.000	-37.988
			0.6200	0.00	-31.25	0.00	-0.479	0.000	-22.536
			1.0900	0.00	-26.58	0.00	-0.479	0.000	-9.485
			1.5600	0.00	-20.27	0.00	-0.479	0.000	-1.469
			2.0300	0.00	-13.46	0.00	-0.479	0.000	4.662
			2.5000	0.00	-6.92	0.00	-0.479	0.000	8.864
			2.9700	0.00	-2.83	0.00	-0.479	0.000	4.586
			3.4400	0.00	1.26	0.00	-0.479	0.000	-2.034
			3.9100	0.00	5.06	0.00	-0.479	0.000	-10.687
			4.3800	0.00	7.96	0.00	-0.479	0.000	-25.083
			4.8500	0.00	9.93	0.00	-0.479	0.000	-41.276
STORY4	B101	COMB19 MAX	0.1500	0.00	-9.80	0.00	-0.619	0.000	2.945
			0.6200	0.00	-7.84	0.00	-0.619	0.000	7.127
			1.0900	0.00	-4.94	0.00	-0.619	0.000	10.220
			1.5600	0.00	-1.13	0.00	-0.619	0.000	14.826
			2.0300	0.00	2.96	0.00	-0.619	0.000	16.306
			2.5000	0.00	7.10	0.00	-0.619	0.000	15.998
			2.9700	0.00	13.91	0.00	-0.619	0.000	15.589
			3.4400	0.00	20.72	0.00	-0.619	0.000	13.921
			3.9100	0.00	27.03	0.00	-0.619	0.000	9.235
			4.3800	0.00	31.70	0.00	-0.619	0.000	6.051
			4.8500	0.00	34.68	0.00	-0.619	0.000	1.725
STORY4	B101	COMB19 MIN	0.1500	0.00	-34.25	0.00	-1.376	0.000	-38.839
			0.6200	0.00	-31.27	0.00	-1.376	0.000	-23.376
			1.0900	0.00	-26.60	0.00	-1.376	0.000	-9.764
			1.5600	0.00	-20.30	0.00	-1.376	0.000	-1.837
			2.0300	0.00	-13.48	0.00	-1.376	0.000	4.192
			2.5000	0.00	-6.73	0.00	-1.376	0.000	8.226
			2.9700	0.00	-2.65	0.00	-1.376	0.000	4.563
			3.4400	0.00	1.44	0.00	-1.376	0.000	-1.624
			3.9100	0.00	5.24	0.00	-1.376	0.000	-9.816
			4.3800	0.00	8.14	0.00	-1.376	0.000	-23.683
			4.8500	0.00	10.11	0.00	-1.376	0.000	-39.348
STORY4	B102	COMB19 MAX	0.1500	0.00	-9.44	0.00	2.352	0.000	3.804
			0.6200	0.00	-7.48	0.00	2.352	0.000	7.819
			1.0900	0.00	-4.58	0.00	2.352	0.000	11.479
			1.5600	0.00	-0.77	0.00	2.352	0.000	15.737
			2.0300	0.00	3.31	0.00	2.352	0.000	16.859
			2.5000	0.00	7.84	0.00	2.352	0.000	16.607
			2.9700	0.00	14.65	0.00	2.352	0.000	16.172
			3.4400	0.00	21.47	0.00	2.352	0.000	13.940
			3.9100	0.00	27.77	0.00	2.352	0.000	9.070
			4.3800	0.00	32.44	0.00	2.352	0.000	5.555
			4.8500	0.00	35.42	0.00	2.352	0.000	0.906
STORY4	B102	COMB19 MIN	0.1500	0.00	-33.20	0.00	0.428	0.000	-35.440
			0.6200	0.00	-30.22	0.00	0.428	0.000	-20.473
			1.0900	0.00	-25.55	0.00	0.428	0.000	-8.092
			1.5600	0.00	-19.24	0.00	0.428	0.000	-0.481
			2.0300	0.00	-12.43	0.00	0.428	0.000	5.242
			2.5000	0.00	-6.06	0.00	0.428	0.000	8.396
			2.9700	0.00	-1.98	0.00	0.428	0.000	4.255
			3.4400	0.00	2.11	0.00	0.428	0.000	-2.032
			3.9100	0.00	5.91	0.00	0.428	0.000	-10.704
			4.3800	0.00	8.82	0.00	0.428	0.000	-24.904
			4.8500	0.00	10.78	0.00	0.428	0.000	-40.910
STORY4	B103	COMB19 MAX	0.1500	0.00	-5.42	0.00	1.873	0.000	9.047
			0.6200	0.00	-3.45	0.00	1.873	0.000	11.169
			1.0900	0.00	-0.55	0.00	1.873	0.000	12.856
			1.5600	0.00	3.28	0.00	1.873	0.000	14.793
			2.0300	0.00	7.56	0.00	1.873	0.000	13.555
			2.5000	0.00	13.44	0.00	1.873	0.000	12.311
			2.9700	0.00	20.41	0.00	1.873	0.000	12.753
			3.4400	0.00	27.28	0.00	1.873	0.000	9.945
			3.9100	0.00	33.32	0.00	1.873	0.000	7.805
			4.3800	0.00	37.79	0.00	1.873	0.000	4.359
			4.8500	0.00	40.68	0.00	1.873	0.000	-0.191
STORY4	B103	COMB19 MIN	0.1500	0.00	-32.69	0.00	-1.692	0.000	-36.535
			0.6200	0.00	-29.71	0.00	-1.692	0.000	-21.807
			1.0900	0.00	-25.04	0.00	-1.692	0.000	-9.586
			1.5600	0.00	-18.68	0.00	-1.692	0.000	-1.788
			2.0300	0.00	-11.52	0.00	-1.692	0.000	3.995
			2.5000	0.00	-6.09	0.00	-1.692	0.000	4.436
			2.9700	0.00	-1.91	0.00	-1.692	0.000	-2.086
			3.4400	0.00	2.20	0.00	-1.692	0.000	-10.560
			3.9100	0.00	5.86	0.00	-1.692	0.000	-24.650
			4.3800	0.00	8.65	0.00	-1.692	0.000	-41.422
			4.8500	0.00	10.57	0.00	-1.692	0.000	-59.923

STORY4	B104	COMB19 MAX	0.1500	0.00	-20.06	0.00	11.869	0.000	-11.461
			0.6350	0.00	-17.96	0.00	11.869	0.000	-2.198
			1.1200	0.00	-14.82	0.00	11.869	0.000	5.787
			1.6050	0.00	-11.10	0.00	11.869	0.000	12.089
			2.0900	0.00	-7.29	0.00	11.869	0.000	21.018
			2.5750	0.00	-3.54	0.00	11.869	0.000	27.607
			3.0600	0.00	0.15	0.00	11.869	0.000	32.517
			3.5450	0.00	3.78	0.00	11.869	0.000	37.498
			4.0300	0.00	7.05	0.00	11.869	0.000	41.882
			4.5150	0.00	11.13	0.00	11.869	0.000	45.255
			5.0000	0.00	13.67	0.00	11.869	0.000	46.969
			0.1500	0.00	-53.47	0.00	4.696	0.000	-84.434
			0.6350	0.00	-50.26	0.00	4.696	0.000	-59.200
STORY4	B104	COMB19 MIN	1.1200	0.00	-45.17	0.00	4.696	0.000	-35.990
			1.6050	0.00	-39.05	0.00	4.696	0.000	-15.539
			2.0900	0.00	-32.76	0.00	4.696	0.000	-2.599
			2.5750	0.00	-26.58	0.00	4.696	0.000	7.822
			3.0600	0.00	-20.50	0.00	4.696	0.000	16.341
			3.5450	0.00	-14.53	0.00	4.696	0.000	19.012
			4.0300	0.00	-9.20	0.00	4.696	0.000	16.378
			4.5150	0.00	-6.37	0.00	4.696	0.000	12.283
			5.0000	0.00	-4.63	0.00	4.696	0.000	7.109
STORY4	B105	COMB19 MAX	0.0000	0.00	-5.14	0.00	-4.952	0.000	19.834
			0.4850	0.00	-3.41	0.00	-4.952	0.000	23.504
			0.9700	0.00	-0.95	0.00	-4.952	0.000	25.589
			1.4550	0.00	2.55	0.00	-4.952	0.000	25.589
			1.9400	0.00	7.84	0.00	-4.952	0.000	23.126
			2.4250	0.00	13.69	0.00	-4.952	0.000	18.107
			2.9100	0.00	19.55	0.00	-4.952	0.000	10.535
			3.3950	0.00	25.41	0.00	-4.952	0.000	2.619
			3.8800	0.00	30.96	0.00	-4.952	0.000	-5.333
			4.3650	0.00	35.49	0.00	-4.952	0.000	-14.663
			4.8500	0.00	38.75	0.00	-4.952	0.000	-25.122
STORY4	B105	COMB19 MIN	0.0000	0.00	-10.18	0.00	-11.144	0.000	-0.324
			0.4850	0.00	-7.49	0.00	-11.144	0.000	2.373
			0.9700	0.00	-3.49	0.00	-11.144	0.000	4.030
			1.4550	0.00	0.73	0.00	-11.144	0.000	4.366
			1.9400	0.00	3.99	0.00	-11.144	0.000	3.168
			2.4250	0.00	7.24	0.00	-11.144	0.000	0.381
			2.9100	0.00	10.50	0.00	-11.144	0.000	-4.000
			3.3950	0.00	13.75	0.00	-11.144	0.000	-12.182
			3.8800	0.00	16.85	0.00	-11.144	0.000	-24.420
			4.3650	0.00	19.47	0.00	-11.144	0.000	-38.891
			4.8500	0.00	21.48	0.00	-11.144	0.000	-55.139
STORY4	B106	COMB19 MAX	0.1500	0.00	-11.77	0.00	-0.583	0.000	1.112
			0.6200	0.00	-9.80	0.00	-0.583	0.000	6.219
			1.0900	0.00	-6.90	0.00	-0.583	0.000	10.183
			1.5600	0.00	-3.10	0.00	-0.583	0.000	14.246
			2.0300	0.00	0.99	0.00	-0.583	0.000	17.504
			2.5000	0.00	5.07	0.00	-0.583	0.000	17.566
			2.9700	0.00	10.10	0.00	-0.583	0.000	17.331
			3.4400	0.00	16.91	0.00	-0.583	0.000	18.286
			3.9100	0.00	23.22	0.00	-0.583	0.000	16.718
			4.3800	0.00	27.89	0.00	-0.583	0.000	13.210
			4.8500	0.00	30.87	0.00	-0.583	0.000	11.259
STORY4	B106	COMB19 MIN	0.1500	0.00	-41.15	0.00	-1.433	0.000	-57.184
			0.6200	0.00	-38.17	0.00	-1.433	0.000	-38.478
			1.0900	0.00	-33.50	0.00	-1.433	0.000	-21.570
			1.5600	0.00	-27.19	0.00	-1.433	0.000	-8.933
			2.0300	0.00	-20.38	0.00	-1.433	0.000	-0.514
			2.5000	0.00	-13.57	0.00	-1.433	0.000	5.980
			2.9700	0.00	-7.70	0.00	-1.433	0.000	8.209
			3.4400	0.00	-3.62	0.00	-1.433	0.000	3.005
			3.9100	0.00	0.19	0.00	-1.433	0.000	-4.138
			4.3800	0.00	3.09	0.00	-1.433	0.000	-13.514
			4.8500	0.00	5.05	0.00	-1.433	0.000	-27.386
STORY4	B107	COMB19 MAX	0.1500	0.00	16.64	0.00	-0.691	0.000	19.291
			0.6000	0.00	18.73	0.00	-0.691	0.000	11.417
			1.0500	0.00	23.10	0.00	-0.691	0.000	2.513
			1.5000	0.00	29.00	0.00	-0.691	0.000	-5.899
			1.9500	0.00	35.52	0.00	-0.691	0.000	-4.060
			2.4000	0.00	41.42	0.00	-0.691	0.000	-3.929
			2.8500	0.00	45.79	0.00	-0.691	0.000	-5.215
			3.3000	0.00	48.61	0.00	-0.691	0.000	-7.531
STORY4	B107	COMB19 MIN	0.1500	0.00	-14.93	0.00	-1.877	0.000	-21.769
			0.6000	0.00	-12.34	0.00	-1.877	0.000	-15.627
			1.0500	0.00	-9.62	0.00	-1.877	0.000	-11.104
			1.5000	0.00	-6.05	0.00	-1.877	0.000	-10.802
			1.9500	0.00	-2.14	0.00	-1.877	0.000	-25.315
			2.4000	0.00	1.43	0.00	-1.877	0.000	-42.680
			2.8500	0.00	4.15	0.00	-1.877	0.000	-62.360

			3.3000	0.00	6.01	0.00	-1.877	0.000	-83.657
STORY4	B108	COMB19 MAX	0.1500	0.00	-32.37	0.00	2.250	0.000	-48.168
			0.6125	0.00	-30.44	0.00	2.250	0.000	-33.608
			1.0750	0.00	-27.63	0.00	2.250	0.000	-20.148
			1.5375	0.00	-25.10	0.00	2.250	0.000	-7.989
			2.0000	0.00	-23.47	0.00	2.250	0.000	5.338
STORY4	B108	COMB19 MIN	0.1500	0.00	-53.41	0.00	-5.524	0.000	-79.008
			0.6125	0.00	-50.28	0.00	-5.524	0.000	-54.954
			1.0750	0.00	-45.31	0.00	-5.524	0.000	-32.786
			1.5375	0.00	-40.90	0.00	-5.524	0.000	-12.923
			2.0000	0.00	-38.38	0.00	-5.524	0.000	3.083
STORY3	B98	COMB19 MAX	0.2000	0.00	-3.04	0.00	5.264	0.000	28.348
			0.6600	0.00	-0.45	0.00	5.264	0.000	29.209
			1.1200	0.00	3.64	0.00	5.264	0.000	31.279
			1.5800	0.00	8.64	0.00	5.264	0.000	33.124
			2.0400	0.00	13.79	0.00	5.264	0.000	30.572
			2.5000	0.00	19.97	0.00	5.264	0.000	25.091
			2.9600	0.00	29.59	0.00	5.264	0.000	23.341
			3.4200	0.00	39.20	0.00	5.264	0.000	24.241
			3.8800	0.00	48.53	0.00	5.264	0.000	20.876
			4.3400	0.00	56.02	0.00	5.264	0.000	20.867
			4.8000	0.00	60.46	0.00	5.264	0.000	19.316
STORY3	B98	COMB19 MIN	0.2000	0.00	-56.88	0.00	2.910	0.000	-72.237
			0.6600	0.00	-52.43	0.00	2.910	0.000	-46.979
			1.1200	0.00	-44.95	0.00	2.910	0.000	-27.225
			1.5800	0.00	-35.62	0.00	2.910	0.000	-13.308
			2.0400	0.00	-26.00	0.00	2.910	0.000	-1.744
			2.5000	0.00	-17.43	0.00	2.910	0.000	7.454
			2.9600	0.00	-12.29	0.00	2.910	0.000	3.148
			3.4200	0.00	-7.14	0.00	2.910	0.000	-9.106
			3.8800	0.00	-2.14	0.00	2.910	0.000	-23.843
			4.3400	0.00	1.95	0.00	2.910	0.000	-47.998
			4.8000	0.00	4.54	0.00	2.910	0.000	-74.906
STORY3	B99	COMB19 MAX	0.2000	0.00	-6.20	0.00	2.321	0.000	23.395
			0.6600	0.00	-3.61	0.00	2.321	0.000	25.711
			1.1200	0.00	0.51	0.00	2.321	0.000	28.628
			1.5800	0.00	6.07	0.00	2.321	0.000	32.862
			2.0400	0.00	12.04	0.00	2.321	0.000	31.994
			2.5000	0.00	18.83	0.00	2.321	0.000	30.817
			2.9600	0.00	30.12	0.00	2.321	0.000	30.663
			3.4200	0.00	41.42	0.00	2.321	0.000	29.010
			3.8800	0.00	51.90	0.00	2.321	0.000	22.359
			4.3400	0.00	59.43	0.00	2.321	0.000	19.814
			4.8000	0.00	63.88	0.00	2.321	0.000	15.727
STORY3	B99	COMB19 MIN	0.2000	0.00	-58.40	0.00	1.252	0.000	-63.746
			0.6600	0.00	-53.95	0.00	1.252	0.000	-37.786
			1.1200	0.00	-46.42	0.00	1.252	0.000	-16.728
			1.5800	0.00	-35.94	0.00	1.252	0.000	-3.395
			2.0400	0.00	-24.64	0.00	1.252	0.000	7.239
			2.5000	0.00	-14.16	0.00	1.252	0.000	13.932
			2.9600	0.00	-8.19	0.00	1.252	0.000	4.275
			3.4200	0.00	-2.22	0.00	1.252	0.000	-8.130
			3.8800	0.00	3.35	0.00	1.252	0.000	-23.340
			4.3400	0.00	7.46	0.00	1.252	0.000	-49.065
			4.8000	0.00	10.06	0.00	1.252	0.000	-77.545
STORY3	B100	COMB19 MAX	0.2000	0.00	-6.96	0.00	0.349	0.000	20.668
			0.6600	0.00	-4.37	0.00	0.349	0.000	23.332
			1.1200	0.00	-0.25	0.00	0.349	0.000	25.554
			1.5800	0.00	5.32	0.00	0.349	0.000	30.317
			2.0400	0.00	11.29	0.00	0.349	0.000	29.978
			2.5000	0.00	17.68	0.00	0.349	0.000	28.692
			2.9600	0.00	28.97	0.00	0.349	0.000	28.855
			3.4200	0.00	40.27	0.00	0.349	0.000	28.215
			3.8800	0.00	50.75	0.00	0.349	0.000	22.537
			4.3400	0.00	58.28	0.00	0.349	0.000	20.826
			4.8000	0.00	62.73	0.00	0.349	0.000	17.572
STORY3	B100	COMB19 MIN	0.2000	0.00	-60.60	0.00	-0.189	0.000	-71.639
			0.6600	0.00	-56.16	0.00	-0.189	0.000	-44.666
			1.1200	0.00	-48.62	0.00	-0.189	0.000	-21.550
			1.5800	0.00	-38.14	0.00	-0.189	0.000	-7.383
			2.0400	0.00	-26.85	0.00	-0.189	0.000	4.083
			2.5000	0.00	-15.97	0.00	-0.189	0.000	12.804
			2.9600	0.00	-10.00	0.00	-0.189	0.000	3.638
			3.4200	0.00	-4.03	0.00	-0.189	0.000	-8.419
			3.8800	0.00	1.53	0.00	-0.189	0.000	-23.239
			4.3400	0.00	5.65	0.00	-0.189	0.000	-48.435
			4.8000	0.00	8.24	0.00	-0.189	0.000	-76.386
STORY3	B101	COMB19 MAX	0.2000	0.00	-7.29	0.00	-0.077	0.000	20.150
			0.6600	0.00	-4.70	0.00	-0.077	0.000	22.966

			1.1200	0.00	-0.58	0.00	-0.077	0.000	25.290
			1.5800	0.00	4.99	0.00	-0.077	0.000	30.214
			2.0400	0.00	10.96	0.00	-0.077	0.000	30.037
			2.5000	0.00	17.33	0.00	-0.077	0.000	28.722
			2.9600	0.00	28.62	0.00	-0.077	0.000	28.590
			3.4200	0.00	39.92	0.00	-0.077	0.000	27.781
			3.8800	0.00	50.40	0.00	-0.077	0.000	21.932
			4.3400	0.00	57.93	0.00	-0.077	0.000	20.043
			4.8000	0.00	62.38	0.00	-0.077	0.000	16.611
STORY3	B101	COMB19 MIN							
			0.2000	0.00	-60.24	0.00	-1.113	0.000	-70.889
			0.6600	0.00	-55.79	0.00	-1.113	0.000	-44.085
			1.1200	0.00	-48.25	0.00	-1.113	0.000	-21.087
			1.5800	0.00	-37.77	0.00	-1.113	0.000	-7.098
			2.0400	0.00	-26.48	0.00	-1.113	0.000	4.190
			2.5000	0.00	-15.59	0.00	-1.113	0.000	12.719
			2.9600	0.00	-9.62	0.00	-1.113	0.000	4.036
			3.4200	0.00	-3.65	0.00	-1.113	0.000	-7.869
			3.8800	0.00	1.92	0.00	-1.113	0.000	-22.535
			4.3400	0.00	6.04	0.00	-1.113	0.000	-47.569
			4.8000	0.00	8.63	0.00	-1.113	0.000	-75.359
STORY3	B102	COMB19 MAX							
			0.2000	0.00	-6.99	0.00	2.094	0.000	20.580
			0.6600	0.00	-4.39	0.00	2.094	0.000	23.256
			1.1200	0.00	-0.28	0.00	2.094	0.000	26.017
			1.5800	0.00	5.29	0.00	2.094	0.000	30.621
			2.0400	0.00	11.26	0.00	2.094	0.000	30.123
			2.5000	0.00	18.02	0.00	2.094	0.000	28.797
			2.9600	0.00	29.32	0.00	2.094	0.000	28.421
			3.4200	0.00	40.61	0.00	2.094	0.000	27.103
			3.8800	0.00	51.09	0.00	2.094	0.000	21.243
			4.3400	0.00	58.63	0.00	2.094	0.000	19.025
			4.8000	0.00	63.08	0.00	2.094	0.000	15.263
STORY3	B102	COMB19 MIN							
			0.2000	0.00	-59.13	0.00	0.470	0.000	-68.006
			0.6600	0.00	-54.68	0.00	0.470	0.000	-41.710
			1.1200	0.00	-47.15	0.00	0.470	0.000	-19.801
			1.5800	0.00	-36.67	0.00	0.470	0.000	-6.141
			2.0400	0.00	-25.37	0.00	0.470	0.000	4.818
			2.5000	0.00	-14.87	0.00	0.470	0.000	12.882
			2.9600	0.00	-8.90	0.00	0.470	0.000	3.618
			3.4200	0.00	-2.93	0.00	0.470	0.000	-8.427
			3.8800	0.00	2.64	0.00	0.470	0.000	-23.731
			4.3400	0.00	6.75	0.00	0.470	0.000	-49.086
			4.8000	0.00	9.35	0.00	0.470	0.000	-77.197
STORY3	B103	COMB19 MAX							
			0.2000	0.00	-4.53	0.00	1.780	0.000	23.969
			0.6600	0.00	-1.93	0.00	1.780	0.000	25.513
			1.1200	0.00	2.18	0.00	1.780	0.000	27.649
			1.5800	0.00	7.81	0.00	1.780	0.000	30.577
			2.0400	0.00	14.11	0.00	1.780	0.000	28.198
			2.5000	0.00	22.92	0.00	1.780	0.000	25.008
			2.9600	0.00	34.52	0.00	1.780	0.000	24.563
			3.4200	0.00	45.93	0.00	1.780	0.000	21.775
			3.8800	0.00	56.41	0.00	1.780	0.000	18.605
			4.3400	0.00	63.95	0.00	1.780	0.000	15.827
			4.8000	0.00	68.39	0.00	1.780	0.000	11.506
STORY3	B103	COMB19 MIN							
			0.2000	0.00	-57.58	0.00	-0.165	0.000	-66.221
			0.6600	0.00	-53.13	0.00	-0.165	0.000	-40.640
			1.1200	0.00	-45.60	0.00	-0.165	0.000	-19.950
			1.5800	0.00	-35.00	0.00	-0.165	0.000	-6.472
			2.0400	0.00	-23.04	0.00	-0.165	0.000	4.206
			2.5000	0.00	-13.86	0.00	-0.165	0.000	10.306
			2.9600	0.00	-7.74	0.00	-0.165	0.000	-0.450
			3.4200	0.00	-1.71	0.00	-0.165	0.000	-14.000
			3.8800	0.00	3.85	0.00	-0.165	0.000	-35.001
			4.3400	0.00	7.97	0.00	-0.165	0.000	-62.801
			4.8000	0.00	10.56	0.00	-0.165	0.000	-93.357
STORY3	B104	COMB19 MAX							
			0.2000	0.00	-29.78	0.00	18.533	0.000	-18.557
			0.6800	0.00	-27.04	0.00	18.533	0.000	-4.852
			1.1600	0.00	-22.65	0.00	18.533	0.000	7.142
			1.6400	0.00	-17.22	0.00	18.533	0.000	16.739
			2.1200	0.00	-11.68	0.00	18.533	0.000	32.064
			2.6000	0.00	-6.24	0.00	18.533	0.000	43.619
			3.0800	0.00	-0.90	0.00	18.533	0.000	52.444
			3.5600	0.00	4.33	0.00	18.533	0.000	59.674
			4.0400	0.00	9.34	0.00	18.533	0.000	61.690
			4.5200	0.00	15.81	0.00	18.533	0.000	59.488
			5.0000	0.00	19.12	0.00	18.533	0.000	58.935
STORY3	B104	COMB19 MIN							
			0.2000	0.00	-83.27	0.00	4.243	0.000	-123.105
			0.6800	0.00	-77.93	0.00	4.243	0.000	-85.514
			1.1600	0.00	-68.55	0.00	4.243	0.000	-50.991
			1.6400	0.00	-57.47	0.00	4.243	0.000	-20.927
			2.1200	0.00	-47.09	0.00	4.243	0.000	-4.232
			2.6000	0.00	-36.91	0.00	4.243	0.000	8.663
			3.0800	0.00	-26.92	0.00	4.243	0.000	18.945
			3.5600	0.00	-17.15	0.00	4.243	0.000	26.620

			4.0400	0.00	-8.99	0.00	4.243	0.000	25.519
			4.5200	0.00	-5.38	0.00	4.243	0.000	20.328
			5.0000	0.00	-3.33	0.00	4.243	0.000	13.748
STORY3	B105	COMB19 MAX	0.0000	0.00	-4.32	0.00	-4.363	0.000	19.319
			0.4800	0.00	-2.27	0.00	-4.363	0.000	26.934
			0.9600	0.00	1.00	0.00	-4.363	0.000	32.318
			1.4400	0.00	6.10	0.00	-4.363	0.000	34.556
			1.9200	0.00	14.60	0.00	-4.363	0.000	32.950
			2.4000	0.00	23.11	0.00	-4.363	0.000	27.312
			2.8800	0.00	32.54	0.00	-4.363	0.000	17.625
			3.3600	0.00	42.46	0.00	-4.363	0.000	8.565
			3.8400	0.00	51.88	0.00	-4.363	0.000	-0.347
			4.3200	0.00	59.36	0.00	-4.363	0.000	-11.186
			4.8000	0.00	64.50	0.00	-4.363	0.000	-23.547
STORY3	B105	COMB19 MIN	0.0000	0.00	-17.71	0.00	-20.540	0.000	5.946
			0.4800	0.00	-14.41	0.00	-20.540	0.000	7.822
			0.9600	0.00	-8.63	0.00	-20.540	0.000	8.371
			1.4400	0.00	-2.17	0.00	-20.540	0.000	7.122
			1.9200	0.00	2.44	0.00	-20.540	0.000	3.702
			2.4000	0.00	7.05	0.00	-20.540	0.000	-1.987
			2.8800	0.00	11.66	0.00	-20.540	0.000	-9.925
			3.3600	0.00	16.28	0.00	-20.540	0.000	-24.792
			3.8400	0.00	20.69	0.00	-20.540	0.000	-46.034
			4.3200	0.00	24.30	0.00	-20.540	0.000	-70.792
			4.8000	0.00	26.96	0.00	-20.540	0.000	-98.236
STORY3	B106	COMB19 MAX	0.2000	0.00	-8.48	0.00	-0.255	0.000	19.354
			0.6600	0.00	-5.89	0.00	-0.255	0.000	22.718
			1.1200	0.00	-1.77	0.00	-0.255	0.000	24.538
			1.5800	0.00	3.80	0.00	-0.255	0.000	29.423
			2.0400	0.00	9.77	0.00	-0.255	0.000	30.565
			2.5000	0.00	15.73	0.00	-0.255	0.000	28.434
			2.9600	0.00	25.75	0.00	-0.255	0.000	28.226
			3.4200	0.00	37.05	0.00	-0.255	0.000	29.435
			3.8800	0.00	47.53	0.00	-0.255	0.000	25.542
			4.3400	0.00	55.06	0.00	-0.255	0.000	22.737
			4.8000	0.00	59.51	0.00	-0.255	0.000	20.550
STORY3	B106	COMB19 MIN	0.2000	0.00	-64.62	0.00	-1.236	0.000	-83.359
			0.6600	0.00	-60.18	0.00	-1.236	0.000	-54.537
			1.1200	0.00	-52.64	0.00	-1.236	0.000	-28.471
			1.5800	0.00	-42.16	0.00	-1.236	0.000	-11.877
			2.0400	0.00	-30.86	0.00	-1.236	0.000	0.657
			2.5000	0.00	-19.57	0.00	-1.236	0.000	10.444
			2.9600	0.00	-12.32	0.00	-1.236	0.000	6.524
			3.4200	0.00	-6.35	0.00	-1.236	0.000	-4.833
			3.8800	0.00	-0.79	0.00	-1.236	0.000	-18.890
			4.3400	0.00	3.33	0.00	-1.236	0.000	-40.442
			4.8000	0.00	5.92	0.00	-1.236	0.000	-66.912
STORY3	B107	COMB19 MAX	0.2000	0.00	28.40	0.00	-0.234	0.000	45.902
			0.6357	0.00	30.82	0.00	-0.234	0.000	33.052
			1.0714	0.00	34.60	0.00	-0.234	0.000	19.673
			1.5071	0.00	42.72	0.00	-0.234	0.000	3.255
			1.9429	0.00	53.42	0.00	-0.234	0.000	6.899
			2.3786	0.00	63.06	0.00	-0.234	0.000	15.472
			2.8143	0.00	69.96	0.00	-0.234	0.000	22.101
			3.2500	0.00	74.10	0.00	-0.234	0.000	27.379
STORY3	B107	COMB19 MIN	0.2000	0.00	-45.69	0.00	-1.439	0.000	-52.428
			0.6357	0.00	-41.55	0.00	-1.439	0.000	-33.322
			1.0714	0.00	-34.65	0.00	-1.439	0.000	-17.443
			1.5071	0.00	-28.01	0.00	-1.439	0.000	-4.084
			1.9429	0.00	-22.35	0.00	-1.439	0.000	-17.702
			2.3786	0.00	-17.22	0.00	-1.439	0.000	-43.168
			2.8143	0.00	-13.44	0.00	-1.439	0.000	-72.247
			3.2500	0.00	-11.02	0.00	-1.439	0.000	-103.731
STORY3	B108	COMB19 MAX	0.2000	0.00	-46.24	0.00	11.565	0.000	-68.372
			0.6500	0.00	-43.72	0.00	11.565	0.000	-48.075
			1.1000	0.00	-39.82	0.00	11.565	0.000	-29.238
			1.5500	0.00	-36.49	0.00	11.565	0.000	-12.124
			2.0000	0.00	-34.61	0.00	11.565	0.000	8.233
STORY3	B108	COMB19 MIN	0.2000	0.00	-88.90	0.00	-8.684	0.000	-129.347
			0.6500	0.00	-84.00	0.00	-8.684	0.000	-90.311
			1.1000	0.00	-75.73	0.00	-8.684	0.000	-54.271
			1.5500	0.00	-68.86	0.00	-8.684	0.000	-21.874
			2.0000	0.00	-65.55	0.00	-8.684	0.000	3.804
STORY2	B98	COMB19 MAX	0.2000	0.00	-5.78	0.00	3.875	0.000	21.539
			0.6600	0.00	-3.18	0.00	3.875	0.000	23.659
			1.1200	0.00	0.91	0.00	3.875	0.000	26.735
			1.5800	0.00	5.91	0.00	3.875	0.000	29.899
			2.0400	0.00	11.05	0.00	3.875	0.000	28.666
			2.5000	0.00	17.10	0.00	3.875	0.000	25.457

			2.9600	0.00	26.72	0.00	3.875	0.000	23.759
			3.4200	0.00	36.34	0.00	3.875	0.000	23.430
			3.8800	0.00	45.67	0.00	3.875	0.000	18.728
			4.3400	0.00	53.15	0.00	3.875	0.000	17.429
			4.8000	0.00	57.60	0.00	3.875	0.000	14.588
STORY2	B98	COMB19 MIN	0.2000	0.00	-54.20	0.00	2.142	0.000	-64.437
			0.6600	0.00	-49.75	0.00	2.142	0.000	-40.408
			1.1200	0.00	-42.27	0.00	2.142	0.000	-21.632
			1.5800	0.00	-32.94	0.00	2.142	0.000	-9.005
			2.0400	0.00	-23.33	0.00	2.142	0.000	1.269
			2.5000	0.00	-14.62	0.00	2.142	0.000	9.178
			2.9600	0.00	-9.48	0.00	2.142	0.000	3.894
			3.4200	0.00	-4.34	0.00	2.142	0.000	-7.102
			3.8800	0.00	0.66	0.00	2.142	0.000	-20.474
			4.3400	0.00	4.75	0.00	2.142	0.000	-43.310
			4.8000	0.00	7.35	0.00	2.142	0.000	-68.899
STORY2	B99	COMB19 MAX	0.2000	0.00	-8.75	0.00	1.642	0.000	17.190
			0.6600	0.00	-6.15	0.00	1.642	0.000	20.676
			1.1200	0.00	-2.04	0.00	1.642	0.000	24.224
			1.5800	0.00	3.53	0.00	1.642	0.000	29.734
			2.0400	0.00	9.50	0.00	1.642	0.000	30.143
			2.5000	0.00	16.05	0.00	1.642	0.000	29.973
			2.9600	0.00	27.35	0.00	1.642	0.000	29.039
			3.4200	0.00	38.64	0.00	1.642	0.000	26.859
			3.8800	0.00	49.12	0.00	1.642	0.000	19.580
			4.3400	0.00	56.66	0.00	1.642	0.000	16.402
			4.8000	0.00	61.11	0.00	1.642	0.000	11.682
STORY2	B99	COMB19 MIN	0.2000	0.00	-57.25	0.00	0.770	0.000	-62.210
			0.6600	0.00	-52.81	0.00	0.770	0.000	-36.778
			1.1200	0.00	-45.27	0.00	0.770	0.000	-15.707
			1.5800	0.00	-34.79	0.00	0.770	0.000	-3.007
			2.0400	0.00	-23.50	0.00	0.770	0.000	6.993
			2.5000	0.00	-12.79	0.00	0.770	0.000	13.578
			2.9600	0.00	-6.82	0.00	0.770	0.000	5.090
			3.4200	0.00	-0.85	0.00	0.770	0.000	-6.146
			3.8800	0.00	4.72	0.00	0.770	0.000	-20.084
			4.3400	0.00	8.84	0.00	0.770	0.000	-44.532
			4.8000	0.00	11.43	0.00	0.770	0.000	-71.737
STORY2	B100	COMB19 MAX	0.2000	0.00	-9.24	0.00	0.236	0.000	15.480
			0.6600	0.00	-6.64	0.00	0.236	0.000	19.191
			1.1200	0.00	-2.53	0.00	0.236	0.000	22.408
			1.5800	0.00	3.04	0.00	0.236	0.000	28.244
			2.0400	0.00	9.01	0.00	0.236	0.000	28.978
			2.5000	0.00	15.35	0.00	0.236	0.000	28.808
			2.9600	0.00	26.64	0.00	0.236	0.000	28.089
			3.4200	0.00	37.94	0.00	0.236	0.000	26.519
			3.8800	0.00	48.42	0.00	0.236	0.000	19.847
			4.3400	0.00	55.95	0.00	0.236	0.000	17.139
			4.8000	0.00	60.40	0.00	0.236	0.000	12.928
STORY2	B100	COMB19 MIN	0.2000	0.00	-58.58	0.00	-0.220	0.000	-66.819
			0.6600	0.00	-54.13	0.00	-0.220	0.000	-40.776
			1.1200	0.00	-46.60	0.00	-0.220	0.000	-18.540
			1.5800	0.00	-36.12	0.00	-0.220	0.000	-5.330
			2.0400	0.00	-24.82	0.00	-0.220	0.000	5.180
			2.5000	0.00	-13.89	0.00	-0.220	0.000	12.943
			2.9600	0.00	-7.92	0.00	-0.220	0.000	4.731
			3.4200	0.00	-1.95	0.00	-0.220	0.000	-6.279
			3.8800	0.00	3.61	0.00	-0.220	0.000	-19.989
			4.3400	0.00	7.73	0.00	-0.220	0.000	-44.072
			4.8000	0.00	10.32	0.00	-0.220	0.000	-70.951
STORY2	B101	COMB19 MAX	0.2000	0.00	-9.50	0.00	-0.396	0.000	15.004
			0.6600	0.00	-6.91	0.00	-0.396	0.000	18.837
			1.1200	0.00	-2.79	0.00	-0.396	0.000	22.108
			1.5800	0.00	2.78	0.00	-0.396	0.000	28.064
			2.0400	0.00	8.75	0.00	-0.396	0.000	28.918
			2.5000	0.00	15.09	0.00	-0.396	0.000	28.647
			2.9600	0.00	26.38	0.00	-0.396	0.000	27.633
			3.4200	0.00	37.67	0.00	-0.396	0.000	25.922
			3.8800	0.00	48.16	0.00	-0.396	0.000	19.149
			4.3400	0.00	55.69	0.00	-0.396	0.000	16.344
			4.8000	0.00	60.14	0.00	-0.396	0.000	11.995
STORY2	B101	COMB19 MIN	0.2000	0.00	-58.28	0.00	-1.285	0.000	-66.437
			0.6600	0.00	-53.83	0.00	-1.285	0.000	-40.534
			1.1200	0.00	-46.29	0.00	-1.285	0.000	-18.370
			1.5800	0.00	-35.81	0.00	-1.285	0.000	-5.298
			2.0400	0.00	-24.52	0.00	-1.285	0.000	5.074
			2.5000	0.00	-13.59	0.00	-1.285	0.000	12.693
			2.9600	0.00	-7.62	0.00	-1.285	0.000	4.986
			3.4200	0.00	-1.65	0.00	-1.285	0.000	-5.902
			3.8800	0.00	3.91	0.00	-1.285	0.000	-19.529
			4.3400	0.00	8.03	0.00	-1.285	0.000	-43.532
			4.8000	0.00	10.62	0.00	-1.285	0.000	-70.291

STORY2	B102	COMB19 MAX	0.2000	0.00	-9.27	0.00	2.098	0.000	15.305
			0.6600	0.00	-6.68	0.00	2.098	0.000	19.030
			1.1200	0.00	-2.56	0.00	2.098	0.000	22.670
			1.5800	0.00	3.01	0.00	2.098	0.000	28.378
			2.0400	0.00	8.98	0.00	2.098	0.000	28.985
			2.5000	0.00	15.62	0.00	2.098	0.000	28.789
			2.9600	0.00	26.92	0.00	2.098	0.000	27.671
			3.4200	0.00	38.21	0.00	2.098	0.000	25.572
			3.8800	0.00	48.69	0.00	2.098	0.000	18.777
			4.3400	0.00	56.23	0.00	2.098	0.000	15.723
			4.8000	0.00	60.68	0.00	2.098	0.000	11.126
STORY2	B102	COMB19 MIN	0.2000	0.00	-57.43	0.00	0.785	0.000	-64.067
			0.6600	0.00	-52.98	0.00	0.785	0.000	-38.553
			1.1200	0.00	-45.45	0.00	0.785	0.000	-17.253
			1.5800	0.00	-34.97	0.00	0.785	0.000	-4.429
			2.0400	0.00	-23.67	0.00	0.785	0.000	5.695
			2.5000	0.00	-13.05	0.00	0.785	0.000	12.878
			2.9600	0.00	-7.08	0.00	0.785	0.000	4.645
			3.4200	0.00	-1.12	0.00	0.785	0.000	-6.350
			3.8800	0.00	4.45	0.00	0.785	0.000	-20.451
			4.3400	0.00	8.57	0.00	0.785	0.000	-44.702
			4.8000	0.00	11.16	0.00	0.785	0.000	-71.708
STORY2	B103	COMB19 MAX	0.2000	0.00	-7.38	0.00	1.374	0.000	18.124
			0.6600	0.00	-4.78	0.00	1.374	0.000	20.979
			1.1200	0.00	-0.67	0.00	1.374	0.000	24.253
			1.5800	0.00	4.96	0.00	1.374	0.000	28.689
			2.0400	0.00	11.26	0.00	1.374	0.000	27.818
			2.5000	0.00	19.64	0.00	1.374	0.000	26.033
			2.9600	0.00	31.24	0.00	1.374	0.000	24.510
			3.4200	0.00	42.65	0.00	1.374	0.000	21.075
			3.8800	0.00	53.13	0.00	1.374	0.000	16.246
			4.3400	0.00	60.67	0.00	1.374	0.000	12.624
			4.8000	0.00	65.11	0.00	1.374	0.000	7.459
STORY2	B103	COMB19 MIN	0.2000	0.00	-56.17	0.00	-0.076	0.000	-62.397
			0.6600	0.00	-51.73	0.00	-0.076	0.000	-37.462
			1.1200	0.00	-44.19	0.00	-0.076	0.000	-17.246
			1.5800	0.00	-33.59	0.00	-0.076	0.000	-4.611
			2.0400	0.00	-21.63	0.00	-0.076	0.000	5.223
			2.5000	0.00	-12.03	0.00	-0.076	0.000	11.014
			2.9600	0.00	-5.91	0.00	-0.076	0.000	1.569
			3.4200	0.00	0.12	0.00	-0.076	0.000	-10.670
			3.8800	0.00	5.69	0.00	-0.076	0.000	-29.347
			4.3400	0.00	9.80	0.00	-0.076	0.000	-55.639
			4.8000	0.00	12.40	0.00	-0.076	0.000	-84.686
STORY2	B104	COMB19 MAX	0.2000	0.00	-31.92	0.00	18.236	0.000	-25.653
			0.6800	0.00	-29.18	0.00	18.236	0.000	-10.919
			1.1600	0.00	-24.79	0.00	18.236	0.000	2.102
			1.6400	0.00	-19.36	0.00	18.236	0.000	12.726
			2.1200	0.00	-13.83	0.00	18.236	0.000	28.454
			2.6000	0.00	-8.39	0.00	18.236	0.000	41.180
			3.0800	0.00	-3.05	0.00	18.236	0.000	51.661
			3.5600	0.00	2.19	0.00	18.236	0.000	59.302
			4.0400	0.00	6.89	0.00	18.236	0.000	61.729
			4.5200	0.00	13.36	0.00	18.236	0.000	59.939
			5.0000	0.00	16.67	0.00	18.236	0.000	57.118
STORY2	B104	COMB19 MIN	0.2000	0.00	-84.13	0.00	4.786	0.000	-120.501
			0.6800	0.00	-78.78	0.00	4.786	0.000	-83.351
			1.1600	0.00	-69.41	0.00	4.786	0.000	-49.269
			1.6400	0.00	-57.50	0.00	4.786	0.000	-19.645
			2.1200	0.00	-46.17	0.00	4.786	0.000	-2.767
			2.6000	0.00	-35.99	0.00	4.786	0.000	9.545
			3.0800	0.00	-26.00	0.00	4.786	0.000	19.251
			3.5600	0.00	-16.23	0.00	4.786	0.000	26.358
			4.0400	0.00	-7.76	0.00	4.786	0.000	26.643
			4.5200	0.00	-4.15	0.00	4.786	0.000	22.490
			5.0000	0.00	-2.10	0.00	4.786	0.000	16.941
STORY2	B105	COMB19 MAX	0.0000	0.00	-4.41	0.00	-4.918	0.000	20.091
			0.4800	0.00	-2.36	0.00	-4.918	0.000	26.892
			0.9600	0.00	0.90	0.00	-4.918	0.000	31.459
			1.4400	0.00	6.19	0.00	-4.918	0.000	33.364
			1.9200	0.00	14.69	0.00	-4.918	0.000	31.421
			2.4000	0.00	23.20	0.00	-4.918	0.000	25.429
			2.8800	0.00	33.05	0.00	-4.918	0.000	15.370
			3.3600	0.00	42.97	0.00	-4.918	0.000	6.157
			3.8400	0.00	52.39	0.00	-4.918	0.000	-3.047
			4.3200	0.00	59.87	0.00	-4.918	0.000	-14.178
			4.8000	0.00	65.01	0.00	-4.918	0.000	-26.832
STORY2	B105	COMB19 MIN	0.0000	0.00	-16.91	0.00	-19.804	0.000	7.778
			0.4800	0.00	-13.60	0.00	-19.804	0.000	9.679
			0.9600	0.00	-7.83	0.00	-19.804	0.000	10.236
			1.4400	0.00	-1.56	0.00	-19.804	0.000	8.982
			1.9200	0.00	3.05	0.00	-19.804	0.000	5.559

			2.4000	0.00	7.66	0.00	-19.804	0.000	-0.113
			2.8800	0.00	12.28	0.00	-19.804	0.000	-8.018
			3.3600	0.00	16.89	0.00	-19.804	0.000	-23.070
			3.8400	0.00	21.30	0.00	-19.804	0.000	-44.360
			4.3200	0.00	24.91	0.00	-19.804	0.000	-69.163
			4.8000	0.00	27.57	0.00	-19.804	0.000	-96.653
STORY2	B106	COMB19 MAX	0.2000	0.00	-10.75	0.00	-0.182	0.000	13.187
			0.6600	0.00	-8.16	0.00	-0.182	0.000	17.596
			1.1200	0.00	-4.04	0.00	-0.182	0.000	20.461
			1.5800	0.00	1.53	0.00	-0.182	0.000	26.522
			2.0400	0.00	7.49	0.00	-0.182	0.000	28.616
			2.5000	0.00	13.46	0.00	-0.182	0.000	28.292
			2.9600	0.00	23.68	0.00	-0.182	0.000	27.796
			3.4200	0.00	34.98	0.00	-0.182	0.000	27.823
			3.8800	0.00	45.46	0.00	-0.182	0.000	22.749
			4.3400	0.00	52.99	0.00	-0.182	0.000	19.187
			4.8000	0.00	57.44	0.00	-0.182	0.000	15.911
STORY2	B106	COMB19 MIN	0.2000	0.00	-62.06	0.00	-1.008	0.000	-76.704
			0.6600	0.00	-57.61	0.00	-1.008	0.000	-49.063
			1.1200	0.00	-50.07	0.00	-1.008	0.000	-24.178
			1.5800	0.00	-39.59	0.00	-1.008	0.000	-8.897
			2.0400	0.00	-28.30	0.00	-1.008	0.000	2.548
			2.5000	0.00	-17.00	0.00	-1.008	0.000	11.246
			2.9600	0.00	-9.96	0.00	-1.008	0.000	6.624
			3.4200	0.00	-3.99	0.00	-1.008	0.000	-3.688
			3.8800	0.00	1.58	0.00	-1.008	0.000	-16.700
			4.3400	0.00	5.70	0.00	-1.008	0.000	-37.632
			4.8000	0.00	8.29	0.00	-1.008	0.000	-63.151
STORY2	B107	COMB19 MAX	0.2000	0.00	22.43	0.00	-0.221	0.000	40.038
			0.6357	0.00	24.85	0.00	-0.221	0.000	29.790
			1.0714	0.00	28.63	0.00	-0.221	0.000	19.551
			1.5071	0.00	35.70	0.00	-0.221	0.000	6.190
			1.9429	0.00	46.40	0.00	-0.221	0.000	6.295
			2.3786	0.00	56.04	0.00	-0.221	0.000	13.555
			2.8143	0.00	62.94	0.00	-0.221	0.000	18.870
			3.2500	0.00	67.08	0.00	-0.221	0.000	22.834
STORY2	B107	COMB19 MIN	0.2000	0.00	-43.72	0.00	-1.184	0.000	-48.148
			0.6357	0.00	-39.59	0.00	-1.184	0.000	-29.899
			1.0714	0.00	-32.68	0.00	-1.184	0.000	-15.417
			1.5071	0.00	-24.99	0.00	-1.184	0.000	-3.369
			1.9429	0.00	-19.34	0.00	-1.184	0.000	-11.705
			2.3786	0.00	-14.21	0.00	-1.184	0.000	-34.113
			2.8143	0.00	-10.42	0.00	-1.184	0.000	-60.134
			3.2500	0.00	-8.00	0.00	-1.184	0.000	-88.560
STORY2	B108	COMB19 MAX	0.2000	0.00	-46.07	0.00	10.378	0.000	-68.369
			0.6500	0.00	-43.55	0.00	10.378	0.000	-48.151
			1.1000	0.00	-39.64	0.00	10.378	0.000	-29.394
			1.5500	0.00	-36.31	0.00	10.378	0.000	-12.359
			2.0000	0.00	-34.44	0.00	10.378	0.000	7.841
STORY2	B108	COMB19 MIN	0.2000	0.00	-88.77	0.00	-6.915	0.000	-129.507
			0.6500	0.00	-83.88	0.00	-6.915	0.000	-90.528
			1.1000	0.00	-75.60	0.00	-6.915	0.000	-54.547
			1.5500	0.00	-68.73	0.00	-6.915	0.000	-22.208
			2.0000	0.00	-65.42	0.00	-6.915	0.000	3.496

Tabel Penulangan Lentur dan Geser Balok Portal 3

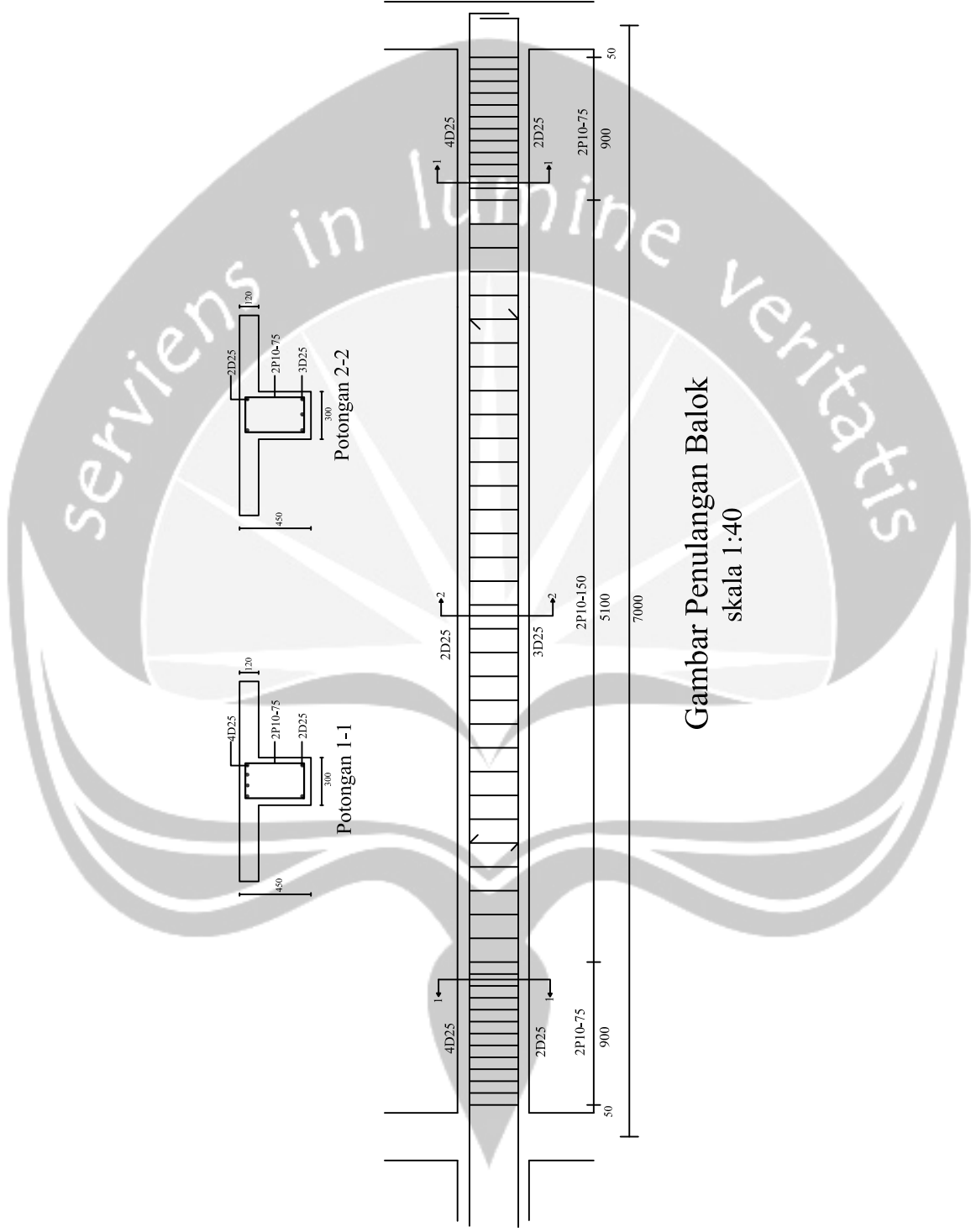
Lantai	Balok	Penulangan	b (mm)	h (mm)	ln (mm)	d' (mm)	d (mm)	Mu (KNm)	Rn	ρ perlu	ρ dipasang	As perlu (mm2)	jumlah tulangan	dipasang tulangan		Mn ka (KNm)	Mn ki (KNm)	Ve (KN)	S perlu (mm)	dipasang sengkang		
														tulangan	As					sendi plastis	luar sendi plastis	
4	B98	Lapangan	300	400	4700	62.5	337.5	32.165	0.94127	0.00241	0.0035	354.375	0.72164	2	D 25	982.1429						
		Tumpuan	300	400	4700	62.5	337.5	-29.464	0.86223	0.0022	0.0035	354.375	0.72164	2	D 25	982.1429	120.366	144.11	87.9816	386.489	2 P 10 - 75	2 P 10 - 150
		Tumpuan	300	400	4700	62.5	337.5	-42.695	1.24942	0.00322	0.0035	354.375	0.72164	2	D 25	982.1429						
	B99	Lapangan	300	400	4700	62.5	337.5	15.882	0.46477	0.00117	0.0035	354.375	0.72164	2	D 25	982.1429						
		Tumpuan	300	400	4700	62.5	337.5	-41.351	1.21009	0.00312	0.0035	354.375	0.72164	2	D 25	982.1429	120.366	144.11	84.5116	449.659	2 P 10 - 75	2 P 10 - 150
		Tumpuan	300	400	4700	62.5	337.5	-39.58	1.15826	0.00298	0.0035	354.375	0.72164	2	D 25	982.1429						
	B100	Lapangan	300	400	4700	62.5	337.5	17.519	0.51267	0.0013	0.0035	354.375	0.72164	2	D 25	982.1429						
		Tumpuan	300	400	4700	62.5	337.5	-37.988	1.11167	0.00286	0.0035	354.375	0.72164	2	D 25	982.1429	120.366	144.11	84.6416	446.923	2 P 10 - 75	2 P 10 - 150
		Tumpuan	300	400	4700	62.5	337.5	-41.276	1.20789	0.00311	0.0035	354.375	0.72164	2	D 25	982.1429						
	B101	Lapangan	300	400	4700	62.5	337.5	16.306	0.47718	0.00121	0.0035	354.375	0.72164	2	D 25	982.1429						
		Tumpuan	300	400	4700	62.5	337.5	-38.839	1.13658	0.00292	0.0035	354.375	0.72164	2	D 25	982.1429	120.366	144.11	84.0616	459.397	2 P 10 - 75	2 P 10 - 150
		Tumpuan	300	400	4700	62.5	337.5	-39.348	1.15147	0.00296	0.0035	354.375	0.72164	2	D 25	982.1429						
	B102	Lapangan	300	400	4700	62.5	337.5	16.859	0.49336	0.00125	0.0035	354.375	0.72164	2	D 25	982.1429						
		Tumpuan	300	400	4700	62.5	337.5	-35.44	1.03711	0.00266	0.0035	354.375	0.72164	2	D 25	982.1429	120.366	144.11	84.9616	440.326	2 P 10 - 75	2 P 10 - 150
		Tumpuan	300	400	4700	62.5	337.5	-40.91	1.19718	0.00308	0.0035	354.375	0.72164	2	D 25	982.1429						
	B103	Lapangan	300	400	4700	62.5	337.5	14.793	0.4329	0.00109	0.0035	354.375	0.72164	2	D 25	982.1429						
		Tumpuan	300	400	4700	62.5	337.5	-36.535	1.06915	0.00274	0.0035	354.375	0.72164	2	D 25	982.1429	120.366	144.11	88.0116	386.021	2 P 10 - 75	2 P 10 - 150
		Tumpuan	300	400	4700	62.5	337.5	-59.923	1.75358	0.00458	0.00458	463.876	0.94462	2	D 25	982.1429						
	B104	Lapangan	300	400	4700	62.5	337.5	46.969	1.37449	0.00356	0.00356	359.963	0.73302	2	D 25	982.1429						
		Tumpuan	300	400	4700	62.5	337.5	-84.434	2.47086	0.00659	0.00659	666.763	1.35777	2	D 25	982.1429	120.366	144.11	101.702	248.473	2 P 10 - 75	2 P 10 - 150
		Tumpuan	300	400	4700	62.5	337.5	-7.109	0.20804	0.00052	0.0035	354.375	0.72164	2	D 25	982.1429						
	B105	Lapangan	300	400	4700	62.5	337.5	25.589	0.74883	0.00191	0.0035	354.375	0.72164	2	D 25	982.1429						
		Tumpuan	300	400	4700	62.5	337.5	-0.324	0.00948	2.4E-05	0.0035	354.375	0.72164	2	D 25	982.1429	120.366	144.11	91.5516	337.683	2 P 10 - 75	2 P 10 - 150
		Tumpuan	300	400	4700	62.5	337.5	-55.139	1.61358	0.0042	0.0042	425.247	0.86596	2	D 25	982.1429						
	B106	Lapangan	300	400	4700	62.5	337.5	18.286	0.53512	0.00136	0.0035	354.375	0.72164	2	D 25	982.1429						
		Tumpuan	300	400	4700	62.5	337.5	-57.184	1.67342	0.00436	0.00436	441.723	0.89951	2	D 25	982.1429	120.366	144.11	88.9916	371.307	2 P 10 - 75	2 P 10 - 150
		Tumpuan	300	400	4700	62.5	337.5	-27.386	0.80142	0.00204	0.0035	354.375	0.72164	2	D 25	982.1429						
	B107	Lapangan	300	400	3150	62.5	337.5	19.291	0.56453	0.00143	0.0035	354.375	0.72164	2	D 25	982.1429						
		Tumpuan	300	400	3150	62.5	337.5	-21.769	0.63704	0.00162	0.0035	354.375	0.72164	2	D 25	982.1429	120.366	144.11	117.151	177.214	2 P 10 - 75	2 P 10 - 150
		Tumpuan	300	400	3150	62.5	337.5	-83.657	2.44812	0.00652	0.00652	660.197	1.3444	2	D 25	982.1429						
	B108	Tumpuan	300	400	1700	62.5	337.5	-79.008	-2.3121	-0.0055	0.0035	354.375	0.72164	2	D 25	982.1429	120.366	0	120.424	167.064	2 P 10 - 75	2 P 10 - 150

Lantai	Balok	Penulangan	b (mm)	h (mm)	ln (mm)	d' (mm)	d (mm)	Mu (KNm)	Rn	ρ perlu	ρ dipasang	As perlu (mm2)	jumlah tulangan	dipasang tulangan		Mn ka (KNm)	Mn ki (KNm)	Ve (KN)	S perlu (mm)	dipasang sengkang	
														tulangan	As					sendi plastis	luar sendi plastis
	B98	Lapangan	300	400	4700	62.5	337.5	33.124	-0.9693	-0.0024	0.0035	354.375	0.72164	2	D 25	982.1429	147.888	99.3653	264.561	2 P 10 - 75	2 P 10 - 150
		Tumpuan	300	400	4700	62.5	337.5	-72.237	2.11393	0.00558	0.00558	564.735	1.15001	2	D 25	982.1429	120.366				
		Tumpuan	300	400	4700	62.5	337.5	-74.906	-2.192	-0.0052	0.0035	354.375	0.72164	2	D 25	982.1429					
	B99	Lapangan	300	400	4700	62.5	337.5	32.862	-0.9617	-0.0024	0.0035	354.375	0.72164	2	D 25	982.1429	147.888	104.865	229.569	2 P 10 - 75	2 P 10 - 150
		Tumpuan	300	400	4700	62.5	337.5	-63.746	1.86545	0.00489	0.00489	494.966	1.00793	2	D 25	982.1429	120.366				
		Tumpuan	300	400	4700	62.5	337.5	-77.545	-2.2693	-0.0054	0.0035	354.375	0.72164	2	D 25	982.1429					
	B100	Lapangan	300	400	4700	62.5	337.5	30.317	-0.8872	-0.0022	0.0035	354.375	0.72164	2	D 25	982.1429	147.888	103.195	239.175	2 P 10 - 75	2 P 10 - 150
		Tumpuan	300	400	4700	62.5	337.5	-71.639	2.09643	0.00553	0.00553	559.788	1.13993	2	D 25	982.1429	120.366				
		Tumpuan	300	400	4700	62.5	337.5	-76.386	-2.2353	-0.0053	0.0035	354.375	0.72164	2	D 25	982.1429					
	B101	Lapangan	300	400	4700	62.5	337.5	30.214	-0.8842	-0.0022	0.0035	354.375	0.72164	2	D 25	982.1429	147.888	103.195	239.175	2 P 10 - 75	2 P 10 - 150
		Tumpuan	300	400	4700	62.5	337.5	-70.889	2.07448	0.00547	0.00547	553.591	1.12731	2	D 25	982.1429	120.366				
		Tumpuan	300	400	4700	62.5	337.5	-75.359	-2.2053	-0.0053	0.0035	354.375	0.72164	2	D 25	982.1429					
	B102	Lapangan	300	400	4700	62.5	337.5	30.621	-0.8961	-0.0022	0.0035	354.375	0.72164	2	D 25	982.1429	147.888	104.105	233.843	2 P 10 - 75	2 P 10 - 150
		Tumpuan	300	400	4700	62.5	337.5	-68.006	1.99012	0.00523	0.00523	529.844	1.07896	2	D 25	982.1429	120.366				
		Tumpuan	300	400	4700	62.5	337.5	-77.197	-2.2591	-0.0054	0.0035	354.375	0.72164	2	D 25	982.1429					
	B103	Lapangan	300	400	4700	62.5	337.5	30.577	-0.8948	-0.0022	0.0035	354.375	0.72164	2	D 25	982.1429	147.888	108.375	211.7	2 P 10 - 75	2 P 10 - 150
		Tumpuan	300	400	4700	62.5	337.5	-66.221	1.93788	0.00509	0.00509	515.199	1.04913	2	D 25	982.1429	120.366				
		Tumpuan	300	400	4700	62.5	337.5	-93.357	-2.732	-0.0064	0.0035	354.375	0.72164	2	D 25	982.1429					
	B104	Lapangan	300	400	4700	62.5	337.5	61.69	-1.8053	-0.0043	0.0035	354.375	0.72164	2	D 25	982.1429	147.888	139.975	124.474	2 P 10 - 75	2 P 10 - 150
		Tumpuan	300	400	4700	62.5	337.5	-123.105	3.60252	0.00994	0.00994	1005.95	2.04849	3	D 25	1473.214	174.322				
		Tumpuan	300	400	4700	62.5	337.5	-13.748	-0.4023	-0.001	0.0035	354.375	0.72164	2	D 25	982.1429					
	B105	Lapangan	300	400	4700	62.5	337.5	34.556	-1.0112	-0.0025	0.0035	354.375	0.72164	2	D 25	982.1429	147.888	112.685	193.232	2 P 10 - 75	2 P 10 - 150
		Tumpuan	300	400	4700	62.5	337.5	8.371	-0.245	-0.0006	0.0035	354.375	0.72164	2	D 25	982.1429	120.366				
		Tumpuan	300	400	4700	62.5	337.5	-98.236	-2.8748	-0.0068	0.0035	354.375	0.72164	2	D 25	982.1429					
	B106	Lapangan	300	400	4700	62.5	337.5	30.565	-0.8944	-0.0022	0.0035	354.375	0.72164	2	D 25	982.1429	147.888	104.685	230.567	2 P 10 - 75	2 P 10 - 150
		Tumpuan	300	400	4700	62.5	337.5	-83.359	2.4394	0.0065	0.0065	657.682	1.33928	2	D 25	982.1429	120.366				
		Tumpuan	300	400	4700	62.5	337.5	-66.912	-1.9581	-0.0047	0.0035	354.375	0.72164	2	D 25	982.1429					
	B107	Lapangan	300	400	3150	62.5	337.5	45.902	-1.3433	-0.0033	0.0035	354.375	0.72164	2	D 25	982.1429	147.888	125.39	153.705	2 P 10 - 75	2 P 10 - 150
		Tumpuan	300	400	3150	62.5	337.5	-52.428	1.53424	0.00399	0.00399	403.489	0.82165	2	D 25	982.1429	120.366				
		Tumpuan	300	400	3150	62.5	337.5	-103.731	-3.0356	-0.0071	0.0035	354.375	0.72164	2	D 25	982.1429					
	B108	Tumpuan	300	400	1700	62.5	337.5	-129.347	3.78519	0.0105	0.0105	1063.2	2.16507	3	D 25	1473.214	174.322	181.792	80.5531	2 P 10 - 75	2 P 10 - 150

Lantai	Balok	Penulangan	b (mm)	h (mm)	In (mm)	d' (mm)	d (mm)	Mu (KNm)	Rn	ρ dipasang	ρ perlu	jumlah tulangan	dipasang tulangan		Mn ka (KNm)	Mn ki (KNm)	Ve (KN)	S perlu (mm)	dipasang sengkang	
													tulangan	As					sendi plastis	luar sendi plastis
	B98	Lapangan	300	400	4600	62.5	337.5	29.899	-0.875	0.0035	-0.0021	0.72164	2	D 25	982.1429					
		Tumpuan	300	400	4600	62.5	337.5	-64.437	-1.8857	0.0035	-0.0045	0.72164	2	D 25	982.1429	147.888	100.506	256.453	2 P 10 - 75	2 P 10 - 150
		Tumpuan	300	400	4600	62.5	337.5	-68.899	2.01625	0.00531	0.00531	1.09391	2	D 25	982.1429	120.366				
	B99	Lapangan	300	400	4600	62.5	337.5	30.143	-0.8821	0.0035	-0.0022	0.72164	2	D 25	982.1429					
		Tumpuan	300	400	4600	62.5	337.5	-62.21	-1.8205	0.0035	-0.0044	0.72164	2	D 25	982.1429	147.888	105.296	227.216	2 P 10 - 75	2 P 10 - 150
		Tumpuan	300	400	4600	62.5	337.5	-71.737	2.0993	0.00554	0.00554	1.14158	2	D 25	982.1429					
	B100	Lapangan	300	400	4600	62.5	337.5	28.978	-0.848	0.0035	-0.0021	0.72164	2	D 25	982.1429					
		Tumpuan	300	400	4600	62.5	337.5	-66.819	-1.9554	0.0035	-0.0047	0.72164	2	D 25	982.1429	120.366	104.276	232.869	2 P 10 - 75	2 P 10 - 150
		Tumpuan	300	400	4600	62.5	337.5	-70.951	2.0763	0.00547	0.00547	1.12836	2	D 25	982.1429					
	B101	Lapangan	300	400	4600	62.5	337.5	28.918	-0.8463	0.0035	-0.0021	0.72164	2	D 25	982.1429					
		Tumpuan	300	400	4600	62.5	337.5	-66.437	-1.9442	0.0035	-0.0047	0.72164	2	D 25	982.1429	120.366	104.296	232.756	2 P 10 - 75	2 P 10 - 150
		Tumpuan	300	400	4600	62.5	337.5	-70.291	2.05698	0.00542	0.00542	1.11726	2	D 25	982.1429					
	B102	Lapangan	300	400	4600	62.5	337.5	28.985	-0.8482	0.0035	-0.0021	0.72164	2	D 25	982.1429					
		Tumpuan	300	400	4600	62.5	337.5	-64.067	-1.8748	0.0035	-0.0045	0.72164	2	D 25	982.1429	120.366	104.986	228.905	2 P 10 - 75	2 P 10 - 150
		Tumpuan	300	400	4600	62.5	337.5	-71.708	2.09845	0.00553	0.00553	1.14109	2	D 25	982.1429					
	B103	Lapangan	300	400	4600	62.5	337.5	28.689	-0.8396	0.0035	-0.0021	0.72164	2	D 25	982.1429					
		Tumpuan	300	400	4600	62.5	337.5	-62.397	-1.826	0.0035	-0.0044	0.72164	2	D 25	982.1429	120.366	108.686	210.251	2 P 10 - 75	2 P 10 - 150
		Tumpuan	300	400	4600	62.5	337.5	-84.686	2.47824	0.00661	0.00661	1.36211	2	D 25	982.1429					
	B104	Lapangan	300	400	4600	62.5	337.5	61.729	-1.8064	0.0035	-0.0043	0.72164	2	D 25	982.1429					
		Tumpuan	300	400	4600	62.5	337.5	-120.501	-3.5263	0.0035	-0.0082	0.72164	2	D 25	982.1429	120.366	130.506	142.007	2 P 10 - 75	2 P 10 - 150
		Tumpuan	300	400	4600	62.5	337.5	-16.941	0.49576	0.00125	0.00125	0.72164	2	D 25	982.1429					
	B105	Lapangan	300	400	4600	62.5	337.5	33.364	-0.9764	0.0035	-0.0024	0.72164	2	D 25	982.1429					
		Tumpuan	300	400	4600	62.5	337.5	7.778	0.22761	0.00057	0.00057	0.72164	2	D 25	982.1429	120.366	114.366	186.874	2 P 10 - 75	2 P 10 - 150
		Tumpuan	300	400	4600	62.5	337.5	-96.653	2.82844	0.00762	0.00762	1.57052	2	D 25	982.1429					
	B106	Lapangan	300	400	4600	62.5	337.5	28.616	-0.8374	0.0035	-0.0021	0.72164	2	D 25	982.1429					
		Tumpuan	300	400	4600	62.5	337.5	-76.704	-2.2447	0.0035	-0.0053	0.72164	2	D 25	982.1429	120.366	105.676	225.179	2 P 10 - 75	2 P 10 - 150
		Tumpuan	300	400	4600	62.5	337.5	-63.151	1.84804	0.00484	0.00484	0.99805	2	D 25	982.1429					
	B107	Lapangan	300	400	3050	62.5	337.5	40.038	-1.1717	0.0035	-0.0029	0.72164	2	D 25	982.1429					
		Tumpuan	300	400	3050	62.5	337.5	-48.148	-1.409	0.0035	-0.0034	0.72164	2	D 25	982.1429	120.366	125.652	153.059	2 P 10 - 75	2 P 10 - 150
		Tumpuan	300	400	3050	62.5	337.5	-88.56	2.5916	0.00693	0.00693	1.42908	2	D 25	982.1429					
	B108	Tumpuan	300	400	1650	62.5	337.5	-129.507	3.78987	0.01052	0.01052	2.16808	3	D 25	1473.214	174.322	184.77	78.579	2 P 10 - 75	2 P 10 - 150

Tabel Penulangan Lentur dan Geser Balok Portal C

Lantai	Balok	Penulangan	b (mm)	h (mm)	ln (mm)	d' (mm)	d (mm)	Mu (KNm)	Rn	ρ perlu	ρ dipasang	As perlu (mm2)	jumlah tulangan	dipasang tulangan		Mn ka (KNm)	Mn ki (KNm)	Ve (KN)	S perlu (mm)	dipasang sengkang				
														tulangan	As					sendi plastis	luar sendi plastis			
4	B310	Lapangan	300	450	6700	62.5	387.5	101.156	2.807	0.00755	0.00755	878.217	1.7883689	2	D 25	982.143	163.753	122.128	221.557	2 P 10 -	75	2 P 10 -	150	
		Tumpuan	300	450	6700	62.5	387.5	-68.947	1.9132	0.00502	0.00502	583.599	1.188419	2	D 25	982.143	140.009							
		Tumpuan	300	450	6700	62.5	387.5	-111.08	3.0823	0.00836	0.00836	972.324	1.980006	2	D 25	982.143								
	B321	Lapangan	300	400	5300	62.5	337.5	38.939	1.4244	0.00369	0.00369	373.515	0.7606121	2	D 25	982.143	144.11	101.921	326.206	2 P 10 -	75	2 P 10 -	150	
		Tumpuan	300	400	5300	62.5	337.5	-86.525	3.1651	0.00861	0.00861	871.808	1.7753189	2	D 25	982.143	120.366							
		Tumpuan	300	400	5300	62.5	337.5	-85.051	3.1111	0.00845	0.00845	855.55	1.7422101	2	D 25	982.143								
3	B330	Lapangan	300	450	6700	62.5	387.5	100.526	2.7895	0.0075	0.0075	872.297	1.7763145	2	D 25	982.143	163.753	131.727	185.553	2 P 10 -	75	2 P 10 -	150	
		Tumpuan	300	450	6700	62.5	387.5	-112.22	3.1139	0.00846	0.00846	983.238	2.0022295	3	D 25	1473.21	203.786							
		Tumpuan	300	450	6700	62.5	387.5	-68.58	1.903	0.00499	0.00499	580.331	1.181765	2	D 25	982.143								
	B310	Lapangan	300	450	6700	62.5	387.5	144.707	4.0155	0.01122	0.01122	1304.84	2.6571221	3	D 25	1473.21	173.754	182.556	99.7341	2 P 10 -	75	2 P 10 -	150	
		Tumpuan	300	450	6700	62.5	387.5	-164.51	4.565	0.013	0.013	1511.73	3.0784402	4	D 25	1964.29	265.871							
		Tumpuan	300	450	6700	62.5	387.5	-193.07	5.3575	0.01572	0.01572	1827.39	3.7212337	4	D 25	1964.29								
2	B321	Lapangan	300	400	5300	62.5	337.5	83.737	3.0631	0.00831	0.00831	841.105	1.7127952	2	D 25	982.143	151.445	143.895	134.005	2 P 10 -	75	2 P 10 -	150	
		Tumpuan	300	400	5300	62.5	337.5	-132.29	4.839	0.01392	0.01392	1409.55	2.8703519	3	D 25	1473.21	174.322							
		Tumpuan	300	400	5300	62.5	337.5	-132.52	4.8477	0.01395	0.01395	1412.55	2.8764609	3	D 25	1473.21								
	B330	Lapangan	300	450	6700	62.5	387.5	144.987	4.0232	0.01125	0.01125	1307.7	2.6629539	3	D 25	1473.21	173.754	182.676	99.6253	2 P 10 -	75	2 P 10 -	150	
		Tumpuan	300	450	6700	62.5	387.5	-193.22	5.3617	0.01573	0.01573	1829.12	3.7247563	4	D 25	1964.29	265.871							
		Tumpuan	300	450	6700	62.5	387.5	-163.92	4.5486	0.01295	0.01295	1505.43	3.0655975	4	D 25	1964.29								
2	B310	Lapangan	300	450	6600	62.5	387.5	141.668	3.9311	0.01096	0.01096	1273.86	2.5940461	3	D 25	1473.21	171.087	182.686	99.6161	2 P 10 -	75	2 P 10 -	150	
		Tumpuan	300	450	6600	62.5	387.5	-157.18	4.3615	0.01234	0.01234	1434.04	2.9202353	3	D 25	1473.21	265.871							
		Tumpuan	300	450	6600	62.5	387.5	-185.5	5.1473	0.01498	0.01498	1741.48	3.5462851	4	D 25	1964.29								
	B321	Lapangan	300	400	5200	62.5	337.5	85.49	3.1272	0.0085	0.0085	860.386	1.7520584	2	D 25	982.143	151.445	145.137	131.709	2 P 10 -	75	2 P 10 -	150	
		Tumpuan	300	400	5200	62.5	337.5	-125.24	4.5811	0.01306	0.01306	1322.08	2.6922321	3	D 25	1473.21	174.322							
		Tumpuan	300	400	5200	62.5	337.5	-125.77	4.6005	0.01312	0.01312	1328.58	2.7054677	3	D 25	1473.21								
B330	Lapangan	300	450	6600	62.5	387.5	141.811	3.1481	0.00856	0.00856	995.076	2.026336	3	D 25	1473.21	203.786	171.087	173.089	109.135	2 P 10 -	75	2 P 10 -	150	
	Tumpuan	300	450	6600	62.5	387.5	-184.88	4.1041	0.01151	0.01151	1337.59	2.7238295	3	D 25	1473.21									
		Tumpuan	300	450	6600	62.5	387.5	-157.77	3.5023	0.00963	0.00963	1119.29	2.2792749	3	D 25	1473.21								



C O L U M N F O R C E S

STORY	COLUMN	LOAD	LOC	P	V2	V3	T	M2	M3
STORY4	C66	COMB19 MAX	0.0000	-61.25	19.11	35.46	0.250	64.636	36.096
			1.7750	-57.86	19.11	35.46	0.250	2.026	2.275
			3.5500	-54.47	19.11	35.46	0.250	5.367	29.196
STORY4	C66	COMB19 MIN	0.0000	-117.03	-17.52	-3.60	-0.211	-7.459	-33.005
			1.7750	-112.52	-17.52	-3.60	-0.211	-1.395	-2.016
			3.5500	-108.00	-17.52	-3.60	-0.211	-61.282	-31.770
STORY4	C70	COMB19 MAX	0.0000	-121.25	18.37	14.53	0.250	27.952	34.818
			1.7750	-117.87	18.37	14.53	0.250	2.278	2.357
			3.5500	-114.48	18.37	14.53	0.250	51.152	28.348
STORY4	C70	COMB19 MIN	0.0000	-218.10	-17.03	-30.10	-0.211	-55.702	-32.137
			1.7750	-213.58	-17.03	-30.10	-0.211	-2.391	-2.043
			3.5500	-209.06	-17.03	-30.10	-0.211	-23.626	-30.402
STORY4	C74	COMB19 MAX	0.0000	-119.67	18.64	29.59	0.250	54.364	35.455
			1.7750	-116.28	18.64	29.59	0.250	1.959	2.521
			3.5500	-112.90	18.64	29.59	0.250	24.599	28.002
STORY4	C74	COMB19 MIN	0.0000	-214.72	-16.75	-15.17	-0.211	-29.262	-31.466
			1.7750	-210.20	-16.75	-15.17	-0.211	-2.448	-1.890
			3.5500	-205.68	-16.75	-15.17	-0.211	-50.679	-30.729
STORY4	C89	COMB19 MAX	0.0000	-58.94	18.66	2.83	0.250	6.221	35.516
			1.7750	-55.55	18.66	2.83	0.250	1.510	2.565
			3.5500	-52.16	18.66	2.83	0.250	62.345	27.403
STORY4	C89	COMB19 MIN	0.0000	-115.81	-16.49	-36.10	-0.211	-65.839	-31.154
			1.7750	-111.29	-16.49	-36.10	-0.211	-2.075	-2.063
			3.5500	-106.77	-16.49	-36.10	-0.211	-3.859	-30.761
STORY3	C66	COMB19 MAX	0.0000	-151.21	29.58	61.98	0.805	124.583	61.118
			1.7750	-145.19	29.58	61.98	0.805	14.746	8.674
			3.5500	-139.17	29.58	61.98	0.805	-9.507	40.170
STORY3	C66	COMB19 MIN	0.0000	-326.26	-26.99	2.36	-0.729	-1.209	-55.668
			1.7750	-318.23	-26.99	2.36	-0.729	-5.573	-7.822
			3.5500	-310.20	-26.99	2.36	-0.729	-95.521	-43.915
STORY3	C70	COMB19 MAX	0.0000	-294.88	27.86	22.80	0.805	47.962	57.638
			1.7750	-288.86	27.86	22.80	0.805	7.564	8.291
			3.5500	-282.83	27.86	22.80	0.805	77.652	38.425
STORY3	C70	COMB19 MIN	0.0000	-580.93	-25.77	-50.47	-0.729	-101.528	-53.115
			1.7750	-572.90	-25.77	-50.47	-0.729	-12.021	-7.469
			3.5500	-564.88	-25.77	-50.47	-0.729	-33.001	-41.306
STORY3	C74	COMB19 MAX	0.0000	-293.11	28.45	50.62	0.805	101.770	58.460
			1.7750	-287.09	28.45	50.62	0.805	11.997	8.105
			3.5500	-281.07	28.45	50.62	0.805	32.980	36.485
STORY3	C74	COMB19 MIN	0.0000	-576.01	-24.51	-22.83	-0.729	-48.084	-50.580
			1.7750	-567.99	-24.51	-22.83	-0.729	-7.636	-7.216
			3.5500	-559.96	-24.51	-22.83	-0.729	-77.944	-42.586
STORY3	C89	COMB19 MAX	0.0000	-148.96	28.27	-1.77	0.805	1.992	57.973
			1.7750	-142.93	28.27	-1.77	0.805	5.296	7.982
			3.5500	-136.91	28.27	-1.77	0.805	93.585	36.625
STORY3	C89	COMB19 MIN	0.0000	-325.64	-24.38	-61.04	-0.729	-123.206	-50.002
			1.7750	-317.61	-24.38	-61.04	-0.729	-15.023	-6.909
			3.5500	-309.58	-24.38	-61.04	-0.729	8.174	-42.450
STORY2	C66	COMB19 MAX	0.0000	-244.22	14.53	29.48	0.411	61.507	40.177
			1.7750	-238.20	14.53	29.48	0.411	13.050	14.401
			3.5500	-232.18	14.53	29.48	0.411	-19.292	10.993
STORY2	C66	COMB19 MIN	0.0000	-536.27	-13.59	-1.04	-0.380	-23.901	-37.293
			1.7750	-528.24	-13.59	-1.04	-0.380	-25.921	-13.194
			3.5500	-520.21	-13.59	-1.04	-0.380	-47.778	-11.464
STORY2	C70	COMB19 MAX	0.0000	-468.63	14.46	11.13	0.411	37.335	40.098
			1.7750	-462.60	14.46	11.13	0.411	19.398	14.463
			3.5500	-456.58	14.46	11.13	0.411	30.236	11.628

STORY2	C70	COMB19 MIN	0.0000	-942.12	-13.75	-23.54	-0.380	-53.409	-37.374
			1.7750	-934.09	-13.75	-23.54	-0.380	-13.444	-12.989
			3.5500	-926.07	-13.75	-23.54	-0.380	-2.254	-11.404
STORY2	C74	COMB19 MAX	0.0000	-466.76	15.19	23.72	0.411	53.964	41.193
			1.7750	-460.74	15.19	23.72	0.411	13.558	14.266
			3.5500	-454.72	15.19	23.72	0.411	2.282	11.752
STORY2	C74	COMB19 MIN	0.0000	-935.98	-13.85	-11.07	-0.380	-37.106	-37.512
			1.7750	-927.95	-13.85	-11.07	-0.380	-19.153	-12.959
			3.5500	-919.92	-13.85	-11.07	-0.380	-30.332	-12.817
STORY2	C89	COMB19 MAX	0.0000	-242.05	15.91	1.16	0.411	24.210	42.447
			1.7750	-236.03	15.91	1.16	0.411	26.132	14.256
			3.5500	-230.01	15.91	1.16	0.411	47.534	13.046
STORY2	C89	COMB19 MIN	0.0000	-535.91	-14.50	-29.21	-0.380	-60.848	-38.522
			1.7750	-527.88	-14.50	-29.21	-0.380	-12.966	-12.823
			3.5500	-519.85	-14.50	-29.21	-0.380	19.144	-14.106

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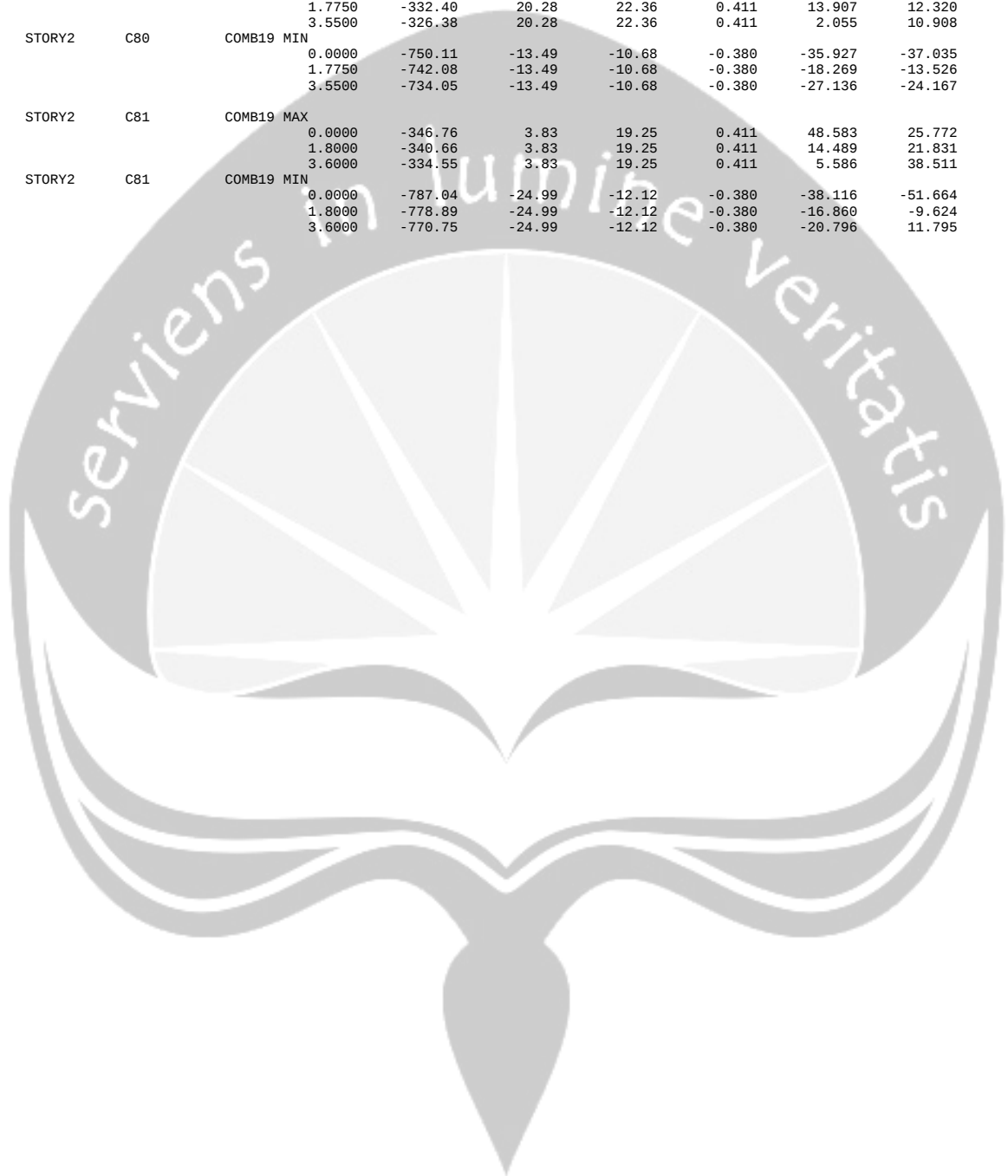
C O L U M N F O R C E S

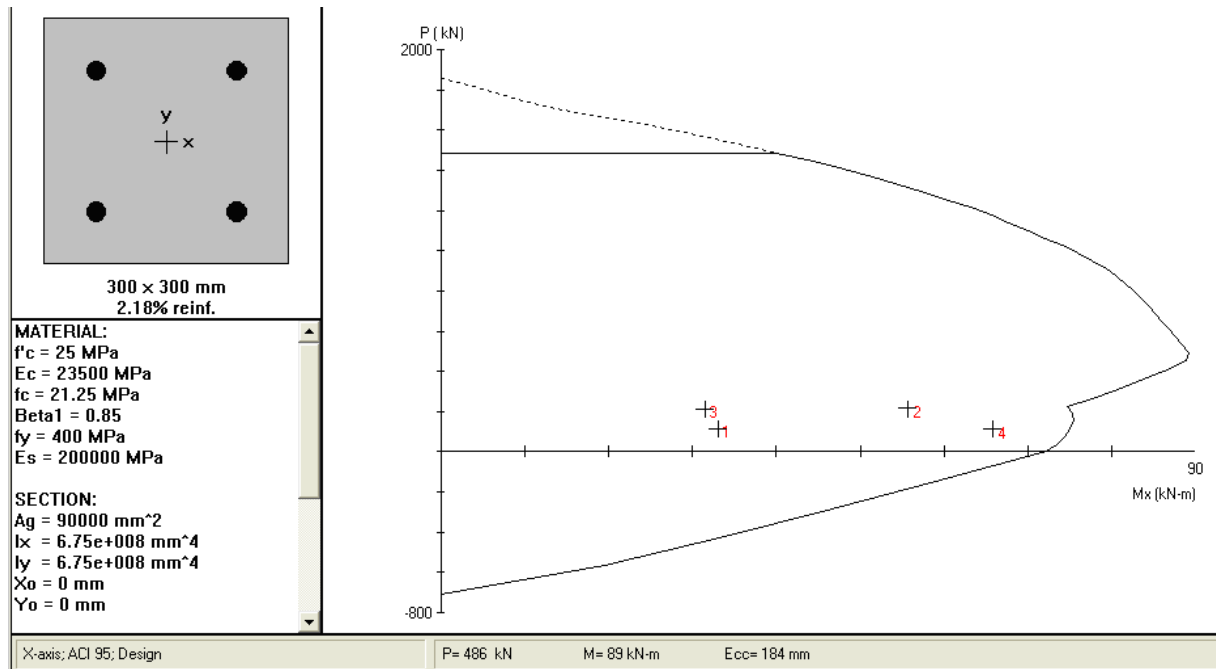
STORY	COLUMN	LOAD	LOC	P	V2	V3	T	M2	M3
STORY4	C72	COMB19 MAX	0.0000	-63.12	10.95	18.17	0.250	27.471	22.310
			1.7750	-59.73	10.95	18.17	0.250	-4.636	3.385
			3.5500	-56.34	10.95	18.17	0.250	32.520	35.057
STORY4	C72	COMB19 MIN	0.0000	-125.60	-19.55	-23.57	-0.211	-53.330	-34.400
			1.7750	-121.09	-19.55	-23.57	-0.211	-11.635	-0.212
			3.5500	-116.57	-19.55	-23.57	-0.211	-39.201	-16.622
STORY4	C73	COMB19 MAX	0.0000	-121.90	19.05	27.20	0.250	46.855	34.467
			1.7750	-118.51	19.05	27.20	0.250	-0.512	1.156
			3.5500	-115.12	19.05	27.20	0.250	25.669	29.112
STORY4	C73	COMB19 MIN	0.0000	-221.74	-18.25	-17.10	-0.211	-35.050	-35.705
			1.7750	-217.22	-18.25	-17.10	-0.211	-5.603	-3.803
			3.5500	-212.71	-18.25	-17.10	-0.211	-49.703	-33.168
STORY4	C74	COMB19 MAX	0.0000	-119.67	18.64	29.59	0.250	54.364	35.455
			1.7750	-116.28	18.64	29.59	0.250	1.959	2.521
			3.5500	-112.90	18.64	29.59	0.250	24.599	28.002
STORY4	C74	COMB19 MIN	0.0000	-214.72	-16.75	-15.17	-0.211	-29.262	-31.466
			1.7750	-210.20	-16.75	-15.17	-0.211	-2.448	-1.890
			3.5500	-205.68	-16.75	-15.17	-0.211	-50.679	-30.729
STORY4	C75	COMB19 MAX	0.0000	-123.31	19.16	29.71	0.250	54.758	36.095
			1.7750	-119.92	19.16	29.71	0.250	2.124	2.222
			3.5500	-116.53	19.16	29.71	0.250	25.373	27.895
STORY4	C75	COMB19 MIN	0.0000	-217.91	-16.78	-15.41	-0.211	-29.339	-31.702
			1.7750	-213.39	-16.78	-15.41	-0.211	-2.091	-2.054
			3.5500	-208.88	-16.78	-15.41	-0.211	-50.726	-31.952
STORY4	C76	COMB19 MAX	0.0000	-127.49	19.32	26.32	0.250	48.075	36.471
			1.7750	-124.10	19.32	26.32	0.250	1.467	2.305
			3.5500	-120.72	19.32	26.32	0.250	28.124	28.779
STORY4	C76	COMB19 MIN	0.0000	-226.33	-17.30	-16.71	-0.211	-31.212	-32.639
			1.7750	-221.81	-17.30	-16.71	-0.211	-1.652	-2.059
			3.5500	-217.30	-17.30	-16.71	-0.211	-45.357	-32.118
STORY4	C77	COMB19 MAX	0.0000	-105.72	19.43	32.82	0.250	60.936	36.548
			1.7750	-102.33	19.43	32.82	0.250	2.746	2.225
			3.5500	-98.95	19.43	32.82	0.250	25.052	28.138
STORY4	C77	COMB19 MIN	0.0000	-203.15	-16.98	-14.79	-0.211	-27.453	-32.177
			1.7750	-198.63	-16.98	-14.79	-0.211	-1.261	-2.186
			3.5500	-194.12	-16.98	-14.79	-0.211	-55.565	-32.432
STORY4	C78	COMB19 MAX	0.0000	-62.26	13.20	38.42	0.250	72.032	24.909
			1.7750	-58.88	13.20	38.42	0.250	3.868	1.667
			3.5500	-55.49	13.20	38.42	0.250	30.742	33.985
STORY4	C78	COMB19 MIN	0.0000	-289.34	-20.98	-17.43	-0.211	-31.130	-40.544
			1.7750	-284.83	-20.98	-17.43	-0.211	-0.223	-3.486

			3.5500	-280.31	-20.98	-17.43	-0.211	-64.355	-21.988
STORY4	C79	COMB19 MAX	0.0000	-121.63	20.61	32.58	0.250	60.344	39.020
			1.7750	-118.25	20.61	32.58	0.250	2.548	2.663
			3.5500	-114.86	20.61	32.58	0.250	22.309	19.560
STORY4	C79	COMB19 MIN	0.0000	-229.92	-11.80	-13.73	-0.211	-26.432	-22.382
			1.7750	-225.40	-11.80	-13.73	-0.211	-2.090	-1.662
			3.5500	-220.89	-11.80	-13.73	-0.211	-55.305	-34.195
STORY4	C80	COMB19 MAX	0.0000	-85.39	24.48	29.08	0.250	53.562	46.189
			1.7750	-82.00	24.48	29.08	0.250	1.997	2.819
			3.5500	-78.62	24.48	29.08	0.250	25.258	25.978
STORY4	C80	COMB19 MIN	0.0000	-164.71	-15.86	-15.42	-0.211	-29.482	-30.351
			1.7750	-160.19	-15.86	-15.42	-0.211	-2.161	-2.281
			3.5500	-155.67	-15.86	-15.42	-0.211	-49.665	-40.740
STORY4	C81	COMB19 MAX	0.0000	-100.28	6.65	26.50	0.250	48.462	12.825
			1.7750	-96.89	6.65	26.50	0.250	1.481	1.243
			3.5500	-93.51	6.65	26.50	0.250	28.445	45.087
STORY4	C81	COMB19 MIN	0.0000	-195.08	-26.96	-17.09	-0.211	-32.239	-50.673
			1.7750	-190.56	-26.96	-17.09	-0.211	-1.965	-3.038
			3.5500	-186.04	-26.96	-17.09	-0.211	-45.637	-10.830
STORY3	C72	COMB19 MAX	0.0000	-25.74	16.94	3.15	0.805	11.966	36.834
			1.7750	-19.72	16.94	3.15	0.805	6.474	7.069
			3.5500	-13.69	16.94	3.15	0.805	116.562	32.432
STORY3	C72	COMB19 MIN	0.0000	-156.19	-22.39	-73.01	-0.729	-142.645	-47.204
			1.7750	-148.16	-22.39	-73.01	-0.729	-13.160	-7.762
			3.5500	-140.13	-22.39	-73.01	-0.729	0.745	-23.449
STORY3	C73	COMB19 MAX	0.0000	-250.38	23.82	33.89	0.805	70.569	49.780
			1.7750	-244.36	23.82	33.89	0.805	10.489	7.776
			3.5500	-238.34	23.82	33.89	0.805	53.781	52.624
STORY3	C73	COMB19 MIN	0.0000	-525.75	-33.74	-35.23	-0.729	-71.317	-67.202
			1.7750	-517.72	-33.74	-35.23	-0.729	-8.862	-7.583
			3.5500	-509.69	-33.74	-35.23	-0.729	-49.779	-34.817
STORY3	C74	COMB19 MAX	0.0000	-293.11	28.45	50.62	0.805	101.770	58.460
			1.7750	-287.09	28.45	50.62	0.805	11.997	8.105
			3.5500	-281.07	28.45	50.62	0.805	32.980	36.485
STORY3	C74	COMB19 MIN	0.0000	-576.01	-24.51	-22.83	-0.729	-48.084	-50.580
			1.7750	-567.99	-24.51	-22.83	-0.729	-7.636	-7.216
			3.5500	-559.96	-24.51	-22.83	-0.729	-77.944	-42.586
STORY3	C75	COMB19 MAX	0.0000	-295.44	28.38	51.30	0.805	102.849	58.448
			1.7750	-289.42	28.38	51.30	0.805	11.855	8.298
			3.5500	-283.40	28.38	51.30	0.805	31.917	37.544
STORY3	C75	COMB19 MIN	0.0000	-576.48	-25.04	-22.27	-0.729	-47.166	-51.415
			1.7750	-568.45	-25.04	-22.27	-0.729	-7.690	-7.100
			3.5500	-560.42	-25.04	-22.27	-0.729	-79.272	-42.361
STORY3	C76	COMB19 MAX	0.0000	-303.86	28.99	41.25	0.805	82.812	59.516
			1.7750	-297.83	28.99	41.25	0.805	9.785	8.179
			3.5500	-291.81	28.99	41.25	0.805	35.413	39.494
STORY3	C76	COMB19 MIN	0.0000	-597.30	-26.34	-25.61	-0.729	-55.525	-54.053
			1.7750	-589.27	-26.34	-25.61	-0.729	-10.249	-7.427
			3.5500	-581.24	-26.34	-25.61	-0.729	-63.627	-43.452
STORY3	C77	COMB19 MAX	0.0000	-257.38	28.60	59.86	0.805	119.273	58.676
			1.7750	-251.36	28.60	59.86	0.805	13.082	8.047
			3.5500	-245.34	28.60	59.86	0.805	25.204	39.033
STORY3	C77	COMB19 MIN	0.0000	-529.44	-26.00	-18.00	-0.729	-38.698	-53.325
			1.7750	-521.41	-26.00	-18.00	-0.729	-6.813	-7.296
			3.5500	-513.38	-26.00	-18.00	-0.729	-93.241	-42.883
STORY3	C78	COMB19 MAX	0.0000	-191.82	15.07	74.96	0.805	148.096	32.779
			1.7750	-185.80	15.07	74.96	0.805	15.079	6.209
			3.5500	-179.78	15.07	74.96	0.805	26.662	60.500
STORY3	C78	COMB19 MIN	0.0000	-635.53	-39.19	-18.72	-0.729	-39.816	-78.687
			1.7750	-627.50	-39.19	-18.72	-0.729	-6.619	-9.300
			3.5500	-619.47	-39.19	-18.72	-0.729	-118.021	-20.773
STORY3	C79	COMB19 MAX							

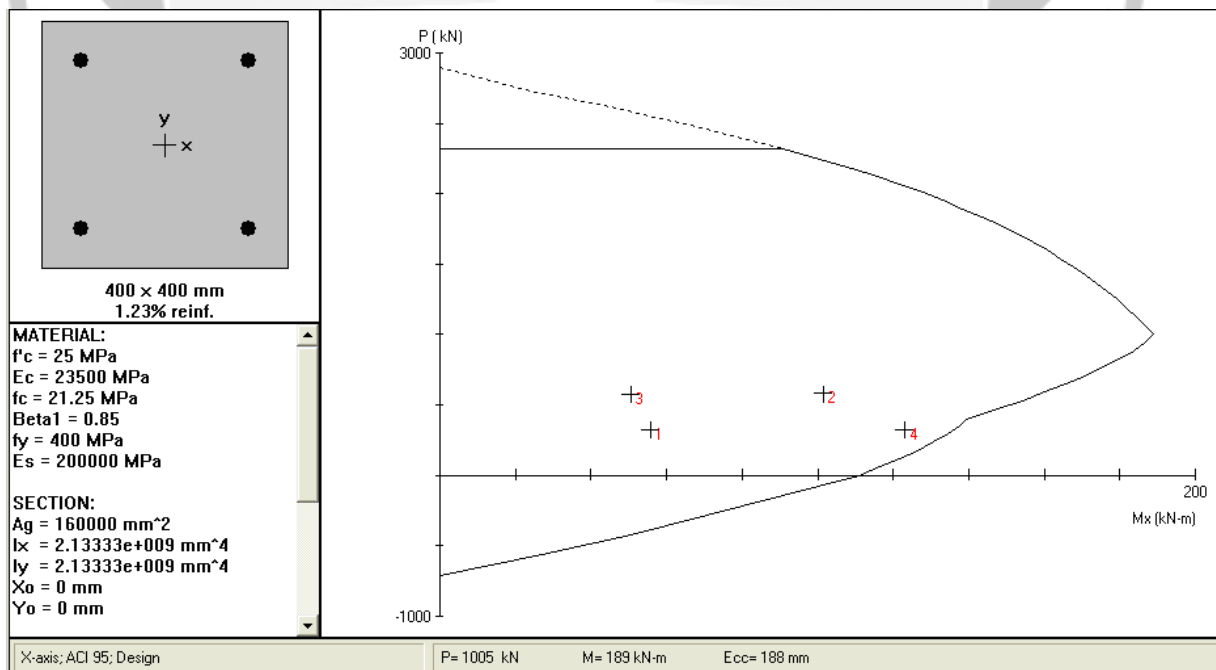
			0.0000	-287.57	33.16	58.76	0.805	117.369	68.250
			1.7750	-281.55	33.16	58.76	0.805	13.088	9.606
			3.5500	-275.53	33.16	58.76	0.805	28.541	19.219
STORY3	C79	COMB19 MIN	0.0000	-602.29	-13.97	-20.10	-0.729	-42.836	-30.460
			1.7750	-594.26	-13.97	-20.10	-0.729	-7.176	-5.884
			3.5500	-586.23	-13.97	-20.10	-0.729	-91.252	-49.565
STORY3	C80	COMB19 MAX	0.0000	-210.08	40.50	50.17	0.805	101.130	81.266
			1.7750	-204.06	40.50	50.17	0.805	12.104	9.464
			3.5500	-198.03	40.50	50.17	0.805	34.615	36.529
STORY3	C80	COMB19 MIN	0.0000	-456.19	-24.31	-23.99	-0.729	-50.559	-49.801
			1.7750	-448.16	-24.31	-23.99	-0.729	-8.009	-6.741
			3.5500	-440.13	-24.31	-23.99	-0.729	-76.997	-62.547
STORY3	C81	COMB19 MAX	0.0000	-222.57	1.47	43.25	0.805	87.903	7.245
			1.8000	-216.46	1.47	43.25	0.805	10.094	4.865
			3.6000	-210.36	1.47	43.25	0.805	40.244	78.121
STORY3	C81	COMB19 MIN	0.0000	-493.25	-48.77	-26.83	-0.729	-56.356	-97.570
			1.8000	-485.11	-48.77	-26.83	-0.729	-8.104	-10.046
			3.6000	-476.97	-48.77	-26.83	-0.729	-67.812	1.842
STORY2	C72	COMB19 MAX	0.0000	7.45	10.62	4.19	0.411	28.754	34.690
			1.7750	13.47	10.62	4.19	0.411	23.326	17.273
			3.5500	19.49	10.62	4.19	0.411	49.201	11.929
STORY2	C72	COMB19 MIN	0.0000	-185.36	-13.59	-32.32	-0.380	-65.721	-36.671
			1.7750	-177.33	-13.59	-32.32	-0.380	-10.347	-13.980
			3.5500	-169.30	-13.59	-32.32	-0.380	13.725	-3.362
STORY2	C73	COMB19 MAX	0.0000	-382.07	13.44	17.14	0.411	45.571	38.437
			1.7750	-376.05	13.44	17.14	0.411	15.859	15.232
			3.5500	-370.03	13.44	17.14	0.411	13.442	19.834
STORY2	C73	COMB19 MIN	0.0000	-831.23	-17.27	-16.24	-0.380	-44.257	-41.544
			1.7750	-823.20	-17.27	-16.24	-0.380	-16.153	-11.544
			3.5500	-815.17	-17.27	-16.24	-0.380	-15.345	-9.351
STORY2	C74	COMB19 MAX	0.0000	-466.76	15.19	23.72	0.411	53.964	41.193
			1.7750	-460.74	15.19	23.72	0.411	13.558	14.266
			3.5500	-454.72	15.19	23.72	0.411	2.282	11.752
STORY2	C74	COMB19 MIN	0.0000	-935.98	-13.85	-11.07	-0.380	-37.106	-37.512
			1.7750	-927.95	-13.85	-11.07	-0.380	-19.153	-12.959
			3.5500	-919.92	-13.85	-11.07	-0.380	-30.332	-12.817
STORY2	C75	COMB19 MAX	0.0000	-467.86	15.25	23.64	0.411	53.630	41.265
			1.7750	-461.84	15.25	23.64	0.411	13.356	14.241
			3.5500	-455.82	15.25	23.64	0.411	1.871	11.970
STORY2	C75	COMB19 MIN	0.0000	-934.39	-13.95	-10.75	-0.380	-36.348	-37.641
			1.7750	-926.36	-13.95	-10.75	-0.380	-18.949	-12.913
			3.5500	-918.33	-13.95	-10.75	-0.380	-30.338	-12.940
STORY2	C76	COMB19 MAX	0.0000	-483.83	15.45	18.49	0.411	46.648	41.534
			1.7750	-477.81	15.45	18.49	0.411	14.461	14.148
			3.5500	-471.79	15.45	18.49	0.411	8.351	13.582
STORY2	C76	COMB19 MIN	0.0000	-973.78	-14.65	-13.51	-0.380	-39.646	-38.552
			1.7750	-965.75	-14.65	-13.51	-0.380	-16.297	-12.595
			3.5500	-957.72	-14.65	-13.51	-0.380	-19.027	-13.459
STORY2	C77	COMB19 MAX	0.0000	-410.42	15.20	27.13	0.411	57.791	41.212
			1.7750	-404.40	15.20	27.13	0.411	12.093	14.259
			3.5500	-398.38	15.20	27.13	0.411	-2.554	13.121
STORY2	C77	COMB19 MIN	0.0000	-854.28	-14.42	-8.46	-0.380	-32.693	-38.259
			1.7750	-846.26	-14.42	-8.46	-0.380	-20.125	-12.696
			3.5500	-838.23	-14.42	-8.46	-0.380	-38.608	-12.948
STORY2	C78	COMB19 MAX	0.0000	-328.67	9.45	33.47	0.411	65.989	33.163
			1.7750	-322.65	9.45	33.47	0.411	9.875	18.399
			3.5500	-316.63	9.45	33.47	0.411	-2.454	27.016
STORY2	C78	COMB19 MIN	0.0000	-969.48	-20.44	-8.41	-0.380	-32.379	-45.684
			1.7750	-961.45	-20.44	-8.41	-0.380	-20.741	-11.409
			3.5500	-953.42	-20.44	-8.41	-0.380	-52.888	-0.515
STORY2	C79	COMB19 MAX	0.0000	-455.69	17.80	26.13	0.411	56.736	44.616
			1.7750	-449.67	17.80	26.13	0.411	12.463	13.674
			3.5500	-443.64	17.80	26.13	0.411	-1.549	1.597

STORY2	C79	COMB19 MIN						
			0.0000	-974.08	-9.27	-8.90	-0.380	-33.197
			1.7750	-966.05	-9.27	-8.90	-0.380	-19.495
			3.5500	-958.02	-9.27	-8.90	-0.380	-36.055
STORY2	C80	COMB19 MAX						
			0.0000	-338.42	20.28	22.36	0.411	52.283
			1.7750	-332.40	20.28	22.36	0.411	13.907
			3.5500	-326.38	20.28	22.36	0.411	2.055
STORY2	C80	COMB19 MIN						
			0.0000	-750.11	-13.49	-10.68	-0.380	-35.927
			1.7750	-742.08	-13.49	-10.68	-0.380	-18.269
			3.5500	-734.05	-13.49	-10.68	-0.380	-27.136
STORY2	C81	COMB19 MAX						
			0.0000	-346.76	3.83	19.25	0.411	48.583
			1.8000	-340.66	3.83	19.25	0.411	14.489
			3.6000	-334.55	3.83	19.25	0.411	5.586
STORY2	C81	COMB19 MIN						
			0.0000	-787.04	-24.99	-12.12	-0.380	-38.116
			1.8000	-778.89	-24.99	-12.12	-0.380	-16.860
			3.6000	-770.75	-24.99	-12.12	-0.380	-20.796

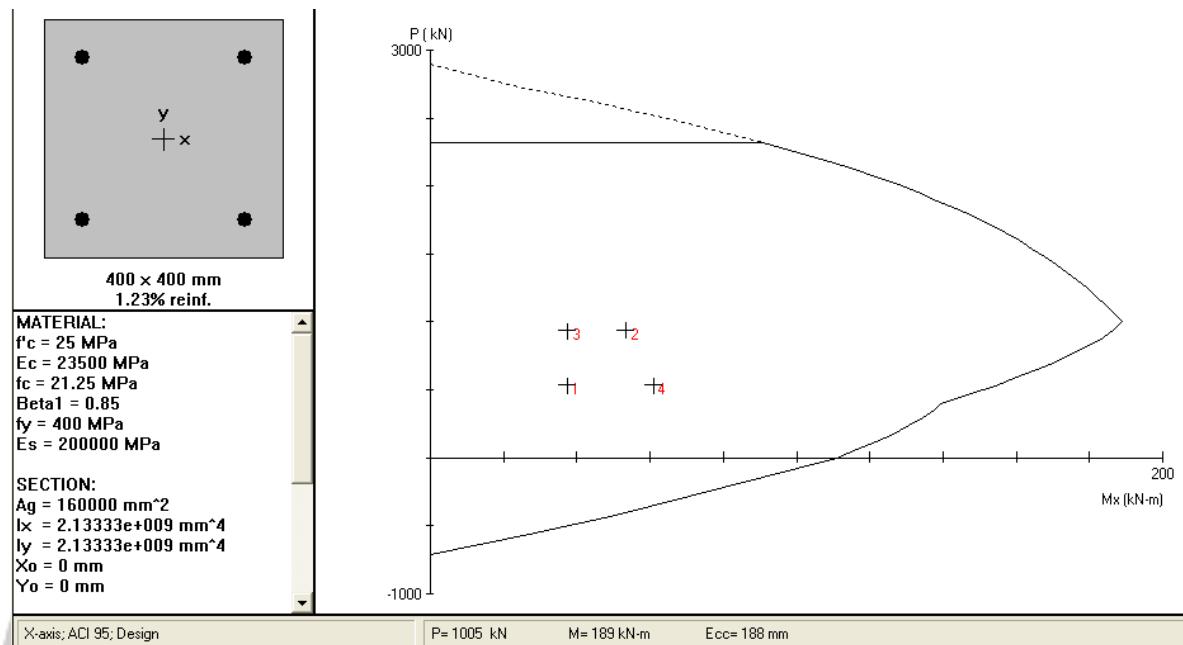




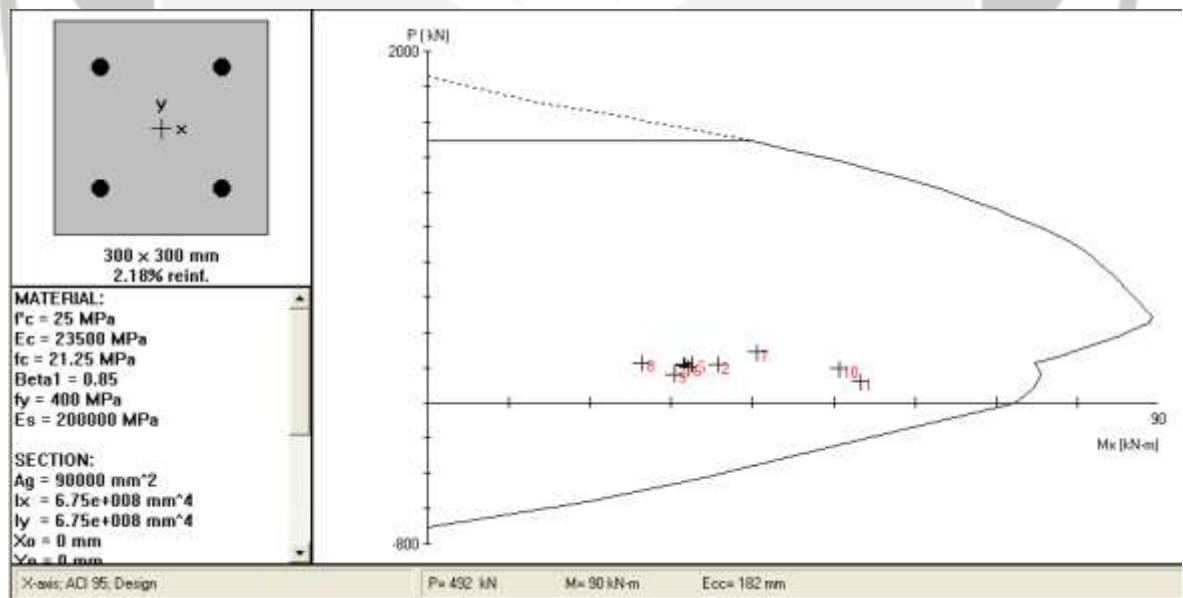
Gambar Diagram Interaksi Kolom 300/300 Portal C lt.4



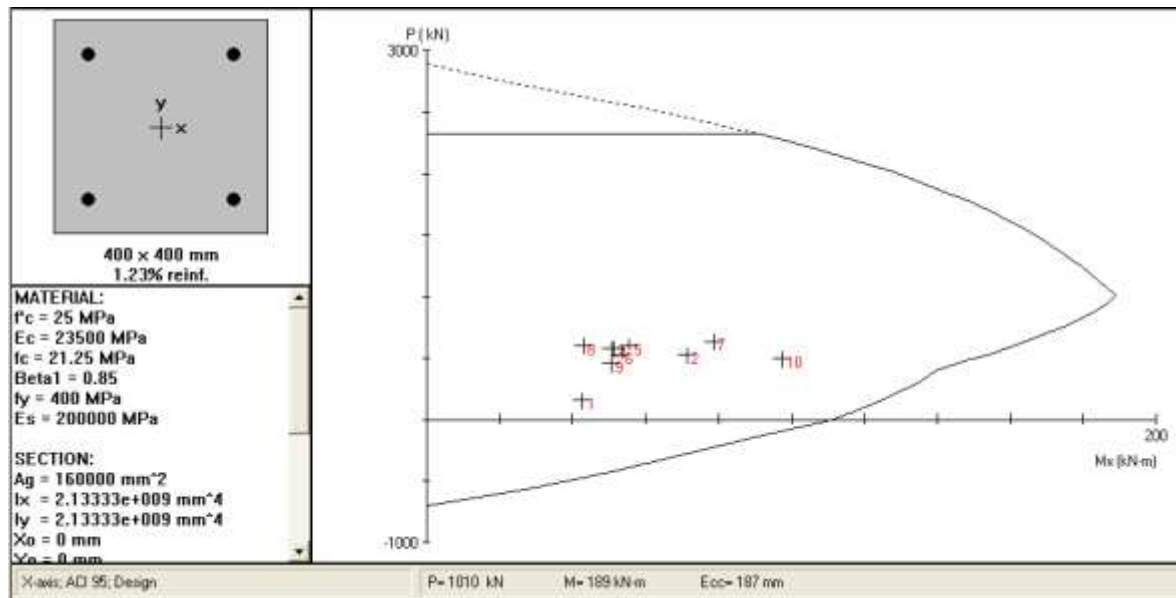
Gambar Diagram Interaksi Kolom 400/400 Portal C lt.3



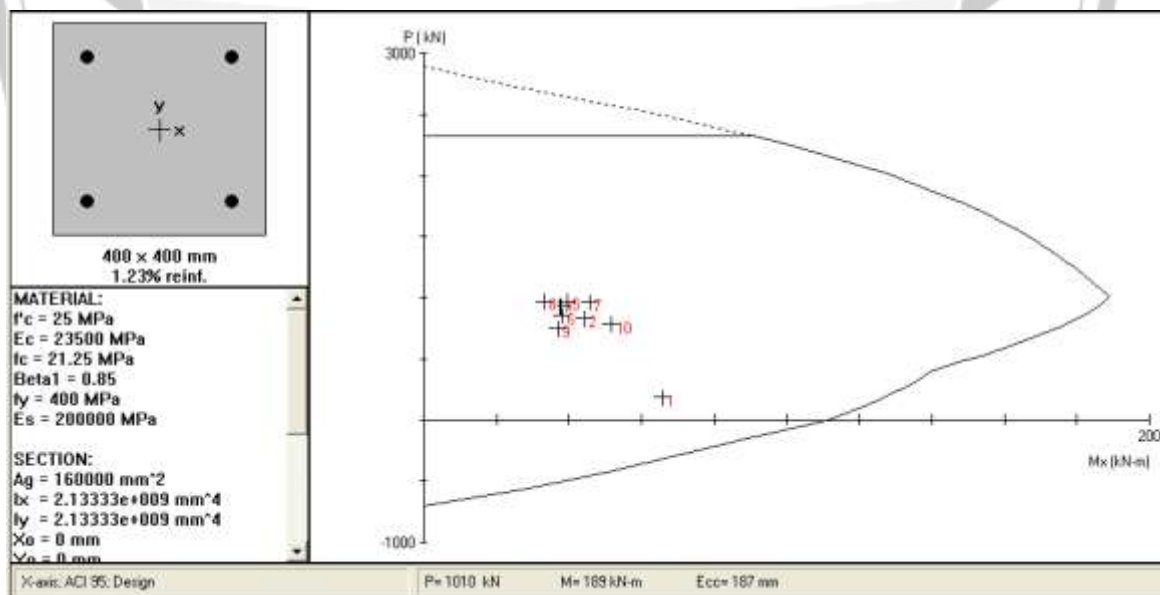
Gambar Diagram Interaksi Kolom 400/400 Portal C lt.2



Gambar Diagram Interaksi Kolom 300/300 Portal 3 lt.4



Gambar Diagram Interaksi Kolom 400/400 Portal 3 lt.3



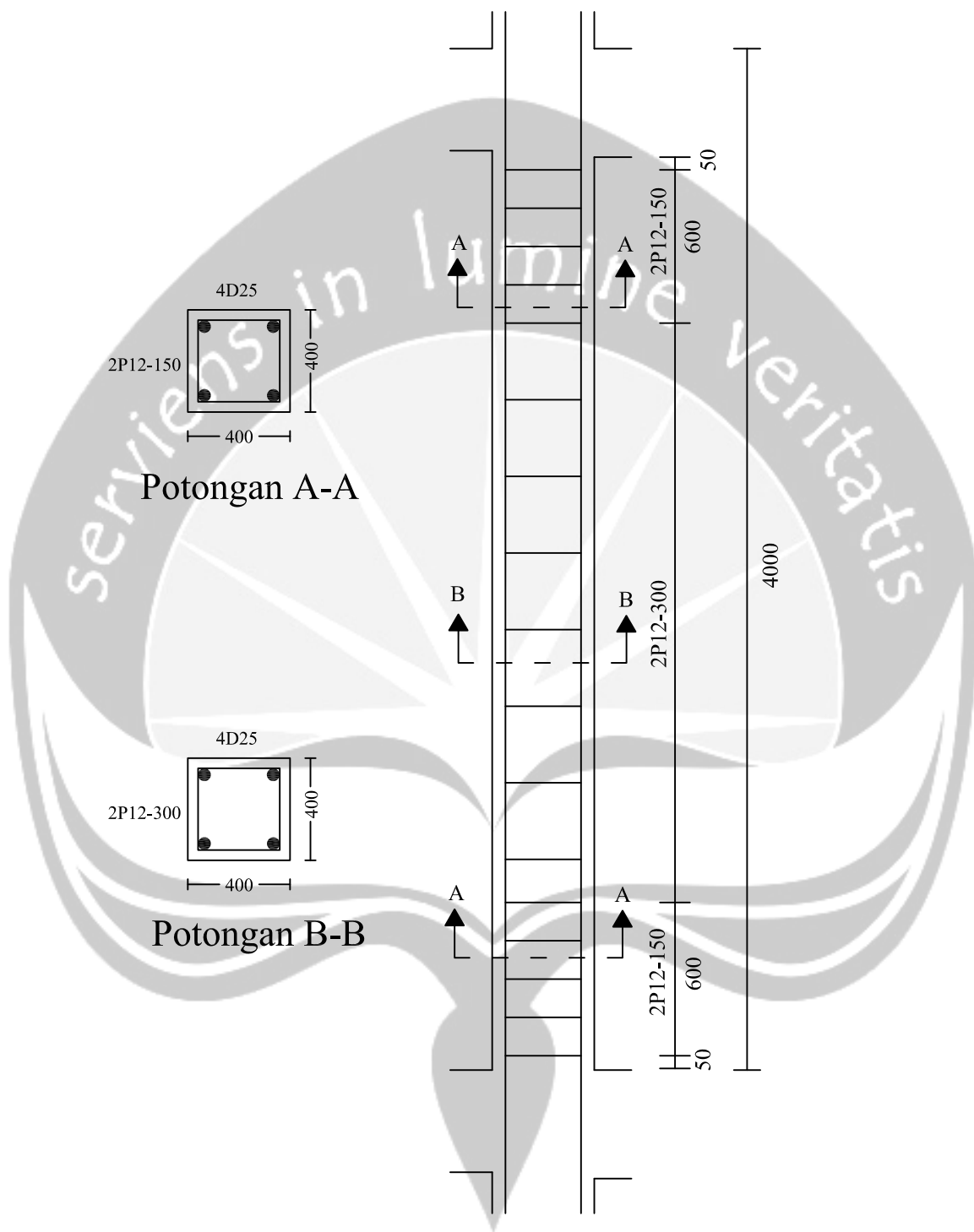
Gambar Diagram Interaksi Kolom 400/400 Portal 3 lt.2

Tabel Penulangan Lentur dan Geser Kolom Portal 3

Lantai	Kolom	b (mm)	h (mm)	d (mm)	Hn (mm)	Pu (kN)	Mux (kNm)	Muy (kNm)	Digunakan tulangan	As (mm ²)	Mn (kNm)	Ve (kN)	Vc (kN)	sengkan
4	C72	300	300	235.5	3550	-125.6	-34.4	-53.33	4 D 25	1964.286	89	50.14085	58.86913	2 P 12 - 150
	C73	300	300	235.5	3550	-221.74	-35.705	-35.05	4 D 25	1964.286	89	50.14085	58.86464	2 P 12 - 150
	C74	300	300	235.5	3550	-214.72	-31.466	-29.262	4 D 25	1964.286	89	50.14085	58.86497	2 P 12 - 150
	C75	300	300	235.5	3550	-217.91	-31.702	-29.339	4 D 25	1964.286	89	50.14085	58.86482	2 P 12 - 150
	C76	300	300	235.5	3550	-226.33	-32.639	-31.212	4 D 25	1964.286	89	50.14085	58.86442	2 P 12 - 150
	C77	300	300	235.5	3550	-203.15	-32.177	-27.453	4 D 25	1964.286	89	50.14085	58.86551	2 P 12 - 150
	C78	300	300	235.5	3550	-289.34	-40.544	-31.13	4 D 25	1964.286	89	50.14085	58.86148	2 P 12 - 150
	C79	300	300	235.5	3550	-229.92	-22.382	-26.432	4 D 25	1964.286	89	50.14085	58.86426	2 P 12 - 150
3	C80	300	300	235.5	3550	-164.71	-30.351	-29.482	4 D 25	1964.286	89	50.14085	58.8673	2 P 12 - 150
	C81	300	300	235.5	3550	-195.08	-50.673	-32.239	4 D 25	1964.286	89	50.14085	58.86588	2 P 12 - 150
	C72	400	400	335.5	3550	-156.19	-47.204	-42.645	4 D 25	1964.286	190	107.0423	111.8255	2 P 12 - 150
	C73	400	400	335.5	3550	-525.75	-67.202	-71.317	4 D 25	1964.286	190	107.0423	111.8071	2 P 12 - 150
	C74	400	400	335.5	3550	-576.01	-50.58	-48.084	4 D 25	1964.286	190	107.0423	111.8046	2 P 12 - 150
	C75	400	400	335.5	3550	-576.48	-51.415	-47.166	4 D 25	1964.286	190	107.0423	111.8046	2 P 12 - 150
	C76	400	400	335.5	3550	-597.3	-54.053	-55.525	4 D 25	1964.286	190	107.0423	111.8035	2 P 12 - 150
	C77	400	400	335.5	3550	-529.44	-53.325	-38.698	4 D 25	1964.286	190	107.0423	111.8069	2 P 12 - 150
2	C78	400	400	335.5	3550	-635.53	-78.687	-39.816	4 D 25	1964.286	190	107.0423	111.8016	2 P 12 - 150
	C79	400	400	335.5	3550	-602.29	-30.46	-42.836	4 D 25	1964.286	190	107.0423	111.8033	2 P 12 - 150
	C80	400	400	335.5	3550	-456.19	-49.801	-50.559	4 D 25	1964.286	190	107.0423	111.8106	2 P 12 - 150
	C81	400	400	335.5	3550	-493.25	-97.57	-56.356	4 D 25	1964.286	190	107.0423	111.8087	2 P 12 - 150
	C72	400	400	335.5	3550	-185.36	-36.671	-65.721	4 D 25	1964.286	190	107.0423	111.8241	2 P 12 - 150
	C73	400	400	335.5	3550	-831.23	-41.544	-44.257	4 D 25	1964.286	190	107.0423	111.7918	2 P 12 - 150
	C74	400	400	335.5	3550	-935.98	-37.512	-37.106	4 D 25	1964.286	190	107.0423	111.7866	2 P 12 - 150
	C75	400	400	335.5	3550	-934.39	-37.641	-36.348	4 D 25	1964.286	190	107.0423	111.7867	2 P 12 - 150

Tabel Penulangan Lentur dan Geser Kolom Portal C

Lantai	Kolom	b (mm)	h (mm)	d (mm)	Hn (mm)	Pu (kN)	Mux (kNm)	Muy (kNm)	Digunakan tulangan	As (mm ²)	Mn (kNm)	Ve (kN)	Vc (kN)	senggang
4	C66	300	300	235.5	3550	-117.03	-33.005	-7.459	4 D 25	1964.286	89	50.14085	58.86953	2 P 12 - 150
	C70	300	300	235.5	3550	-218.1	-32.137	-55.702	4 D 25	1964.286	89	50.14085	58.86481	2 P 12 - 150
	C74	300	300	235.5	3550	-214.72	-31.466	-29.262	4 D 25	1964.286	89	50.14085	58.86497	2 P 12 - 150
	C89	300	300	235.5	3550	-115.81	-31.154	-65.839	4 D 25	1964.286	89	50.14085	58.86959	2 P 12 - 150
3	C66	400	400	335.5	3550	-326.26	-55.668	-1.209	4 D 25	1964.286	190	107.0423	111.817	2 P 12 - 150
	C70	400	400	335.5	3550	-580.93	-53.115	-101.528	4 D 25	1964.286	190	107.0423	111.8043	2 P 12 - 150
	C74	400	400	335.5	3550	-576.01	-50.58	-48.084	4 D 25	1964.286	190	107.0423	111.8046	2 P 12 - 150
	C89	400	400	335.5	3550	-325.64	-50.002	-123.206	4 D 25	1964.286	190	107.0423	111.8171	2 P 12 - 150
2	C66	400	400	335.5	3550	-536.27	-37.293	-23.901	4 D 25	1964.286	190	107.0423	111.8066	2 P 12 - 150
	C70	400	400	335.5	3550	-942.12	-37.374	-53.409	4 D 25	1964.286	190	107.0423	111.7863	2 P 12 - 150
	C74	400	400	335.5	3550	-935.98	-37.512	-37.106	4 D 25	1964.286	190	107.0423	111.7866	2 P 12 - 150
	C89	400	400	335.5	3550	-535.91	-38.522	-60.848	4 D 25	1964.286	190	107.0423	111.8066	2 P 12 - 150



Gambar Penulangan Kolom
skala 1:25

