

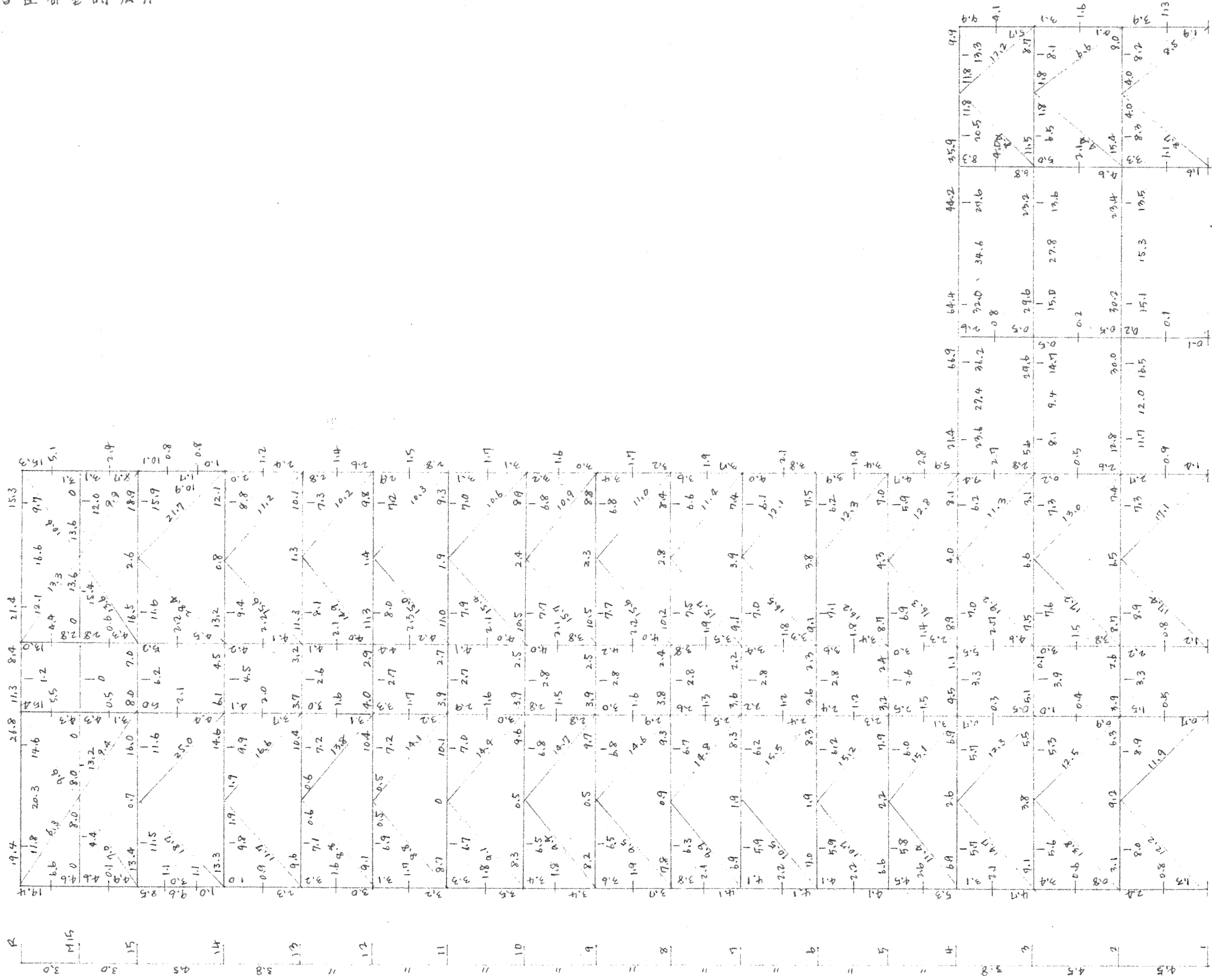
B-6. 鉛直荷重時応力

6-1) 2F以上応力

6-2) 地下階応力

鉛直荷重時応力

X97-X2

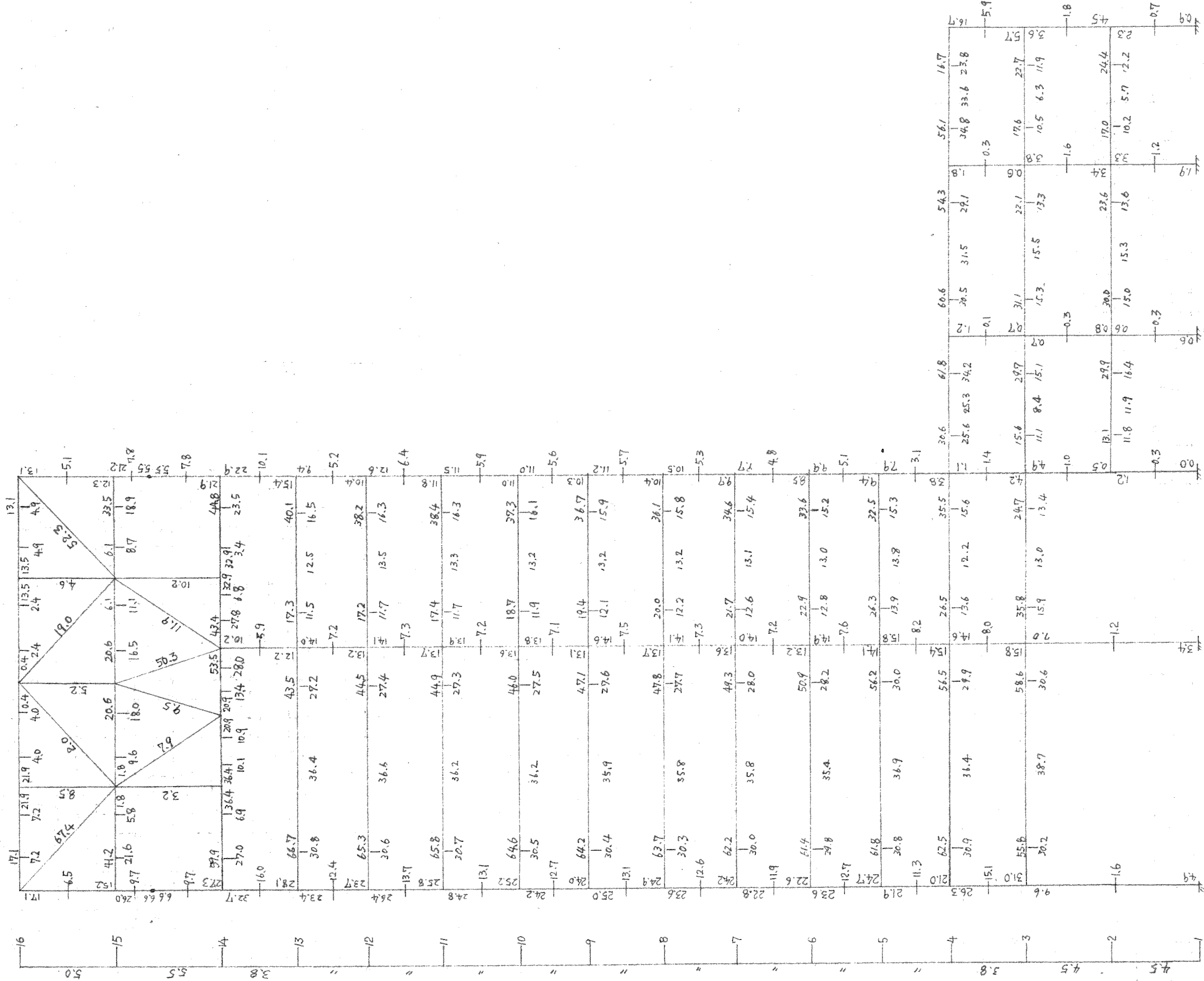


(構造計算用)

(構造計算用)

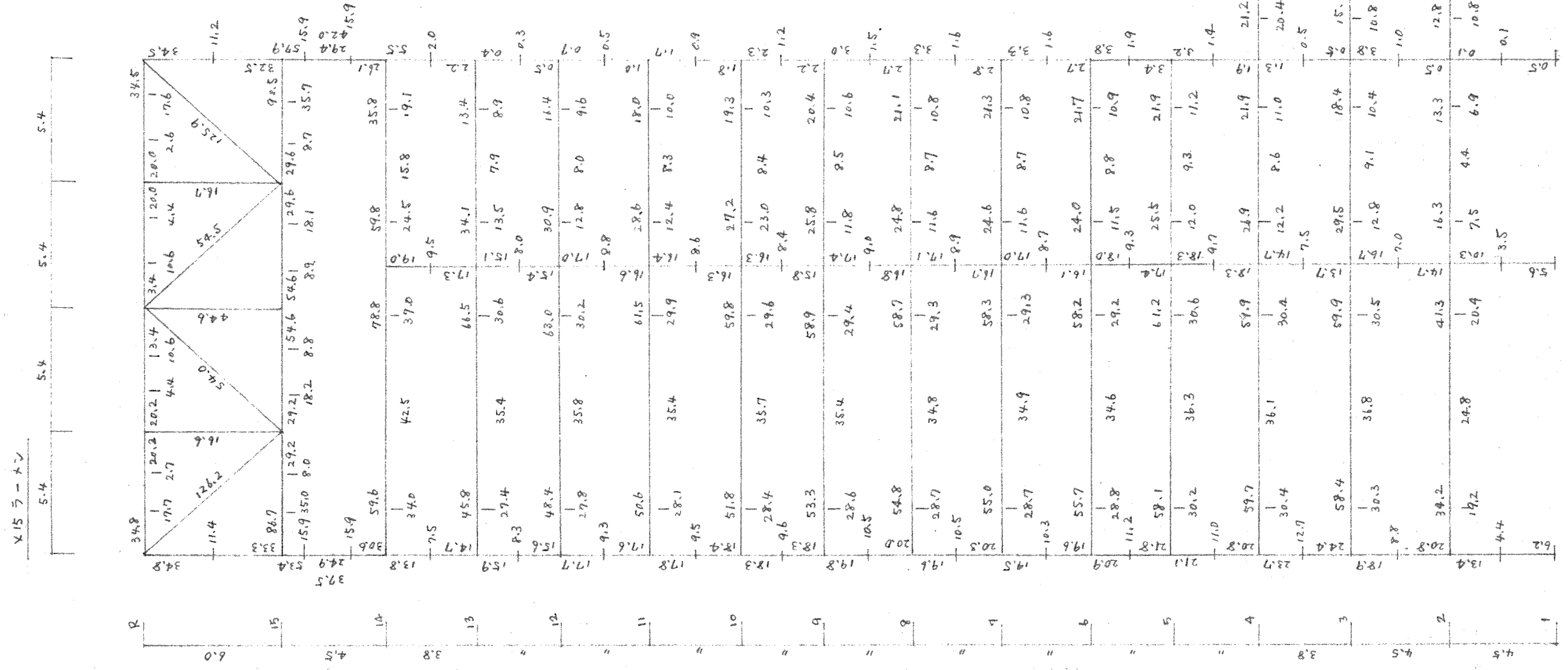
Station	17.5	19.9	1.9	29.6
43.0	17.9	31.3	13.9	13.6
43.0	19.7	19.7	15.7	13.6
43.0	103.0	113.0	73.8	60.2
43.0	12.2	69.1	19.5	39.7
43.0	10.1	108.9	6.6	12.6
43.0	12.2	50.8	18.2	49.4
43.0	37.9	33.1	17.2	20.7
43.0	16.8	45.8	16.1	17.2
43.0	30.1	37.6	9.9	44.8
43.0	21.7	26.3	10.1	17.9
43.0	14.1	36.8	6.8	13.9
43.0	71.0	39.8	10.6	44.0
43.0	26.8	26.4	14.4	17.9
43.0	31.6	37.1	12.3	13.9
43.0	15.1	39.3	7.4	43.3
43.0	10.7	26.5	14.0	17.5
43.0	31.5	26.5	7.2	13.8
43.0	14.3	41.4	13.5	41.4
43.0	68.8	26.8	13.9	17.1
43.0	31.2	36.4	7.1	13.4
43.0	12.7	27.0	14.2	10.9
43.0	69.8	43.0	15.2	40.3
43.0	31.0	36.1	14.2	13.5
43.0	14.1	44.2	7.5	16.8
43.0	26.7	27.2	11.5	16.5
43.0	30.8	46.3	18.7	37.2
43.0	12.9	27.5	11.9	16.1
43.0	63.6	48.5	20.5	35.8
43.0	30.2	27.8	12.3	15.7
43.0	63.5	54.3	7.6	34.3
43.0	31.3	29.7	13.5	15.7
43.0	8.4	45.1	75.1	36.8
43.0	31.1	29.7	12.3	15.9
43.0	54.2	26.5	35.5	25.3
43.0	30.2	40.6	15.7	13.5
43.0	22.1	55.1	7.6	12.8
43.0	31.1	26.7	12.3	12.3
43.0	14.8	26.5	13.5	15.7
43.0	30.1	40.6	15.7	13.5
43.0	22.1	55.1	7.6	12.8
43.0	31.1	26.7	12.3	12.3
43.0	14.8	26.5	13.5	15.7
43.0	30.1	40.6	15.7	13.5
43.0	22.1	55.1	7.6	12.8
43.0	31.1	26.7	12.3	12.3
43.0	14.8	26.5	13.5	15.7
43.0	30.1	40.6	15.7	13.5
43.0	22.1	55.1	7.6	12.8
43.0	31.1	26.7	12.3	12.3
43.0	14.8	26.5	13.5	15.7
43.0	30.1	40.6	15.7	13.5
43.0	22.1	55.1	7.6	12.8
43.0	31.1	26.7	12.3	12.3
43.0	14.8	26.5	13.5	15.7
43.0	30.1	40.6	15.7	13.5
43.0	22.1	55.1	7.6	12.8
43.0	31.1	26.7	12.3	12.3
43.0	14.8	26.5	13.5	15.7
43.0	30.1	40.6	15.7	13.5
43.0	22.1	55.1	7.6	12.8
43.0	31.1	26.7	12.3	12.3
43.0	14.8	26.5	13.5	15.7
43.0	30.1	40.6	15.7	13.5
43.0	22.1	55.1	7.6	12.8
43.0	31.1	26.7	12.3	12.3
43.0	14.8	26.5	13.5	15.7
43.0	30.1	40.6	15.7	13.5
43.0	22.1	55.1	7.6	12.8
43.0	31.1	26.7	12.3	12.3
43.0	14.8	26.5	13.5	15.7
43.0	30.1	40.6	15.7	13.5

X 12.7-XV

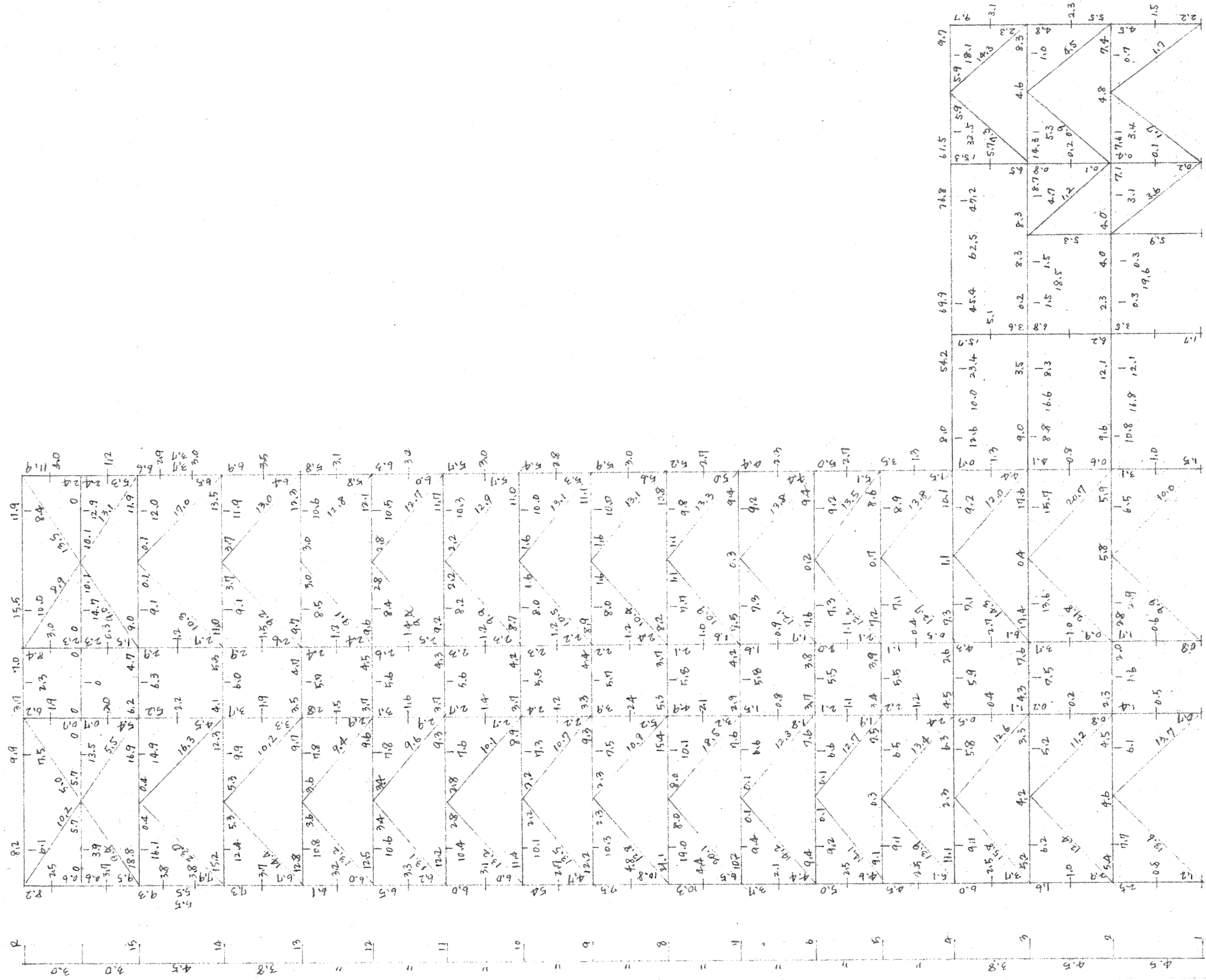


(構造計算用)



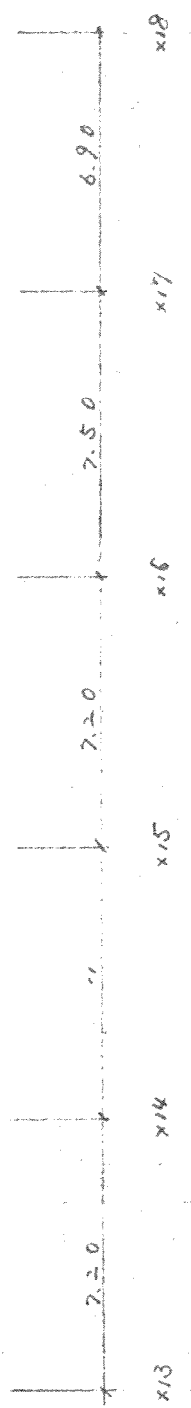
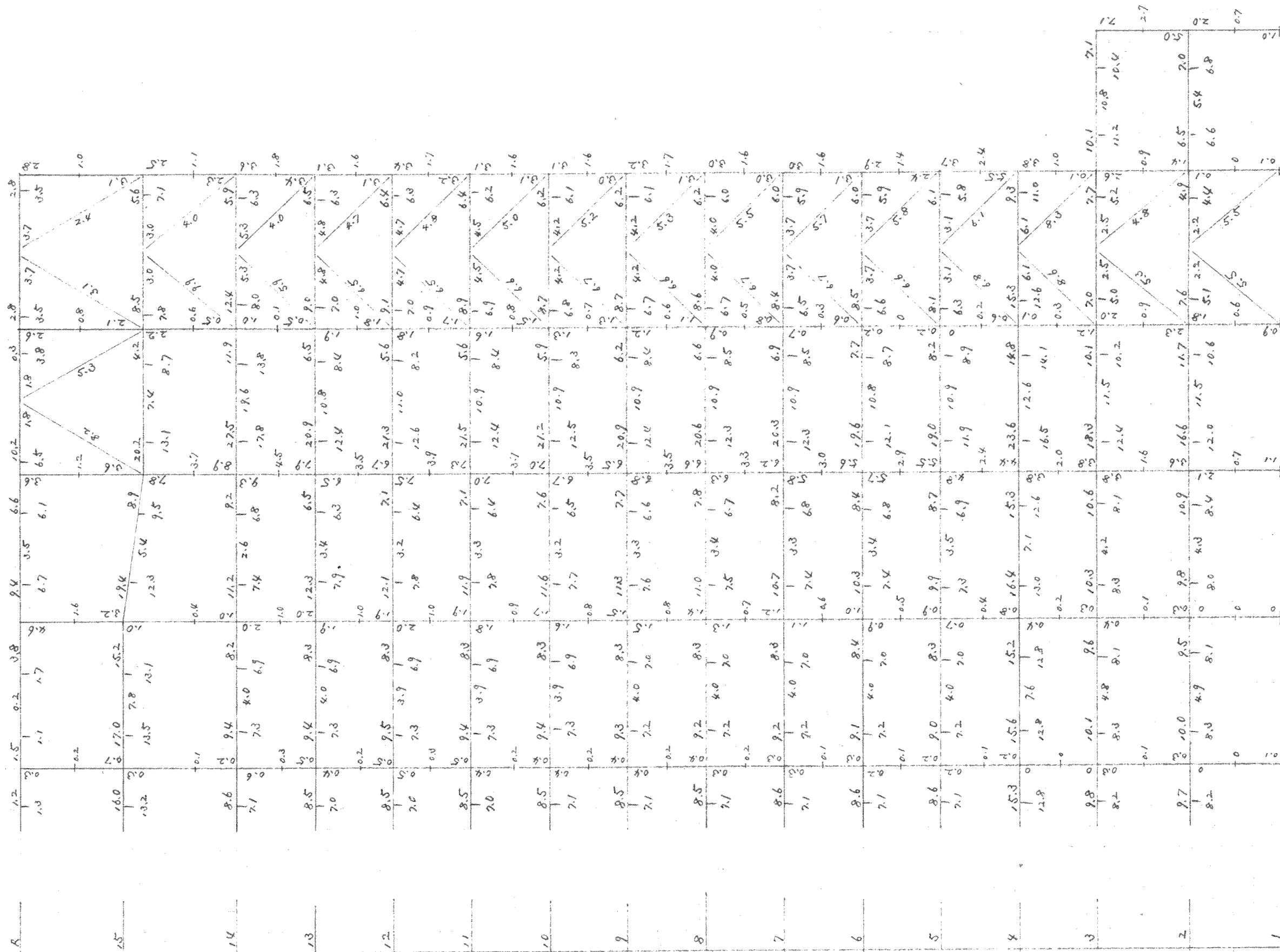


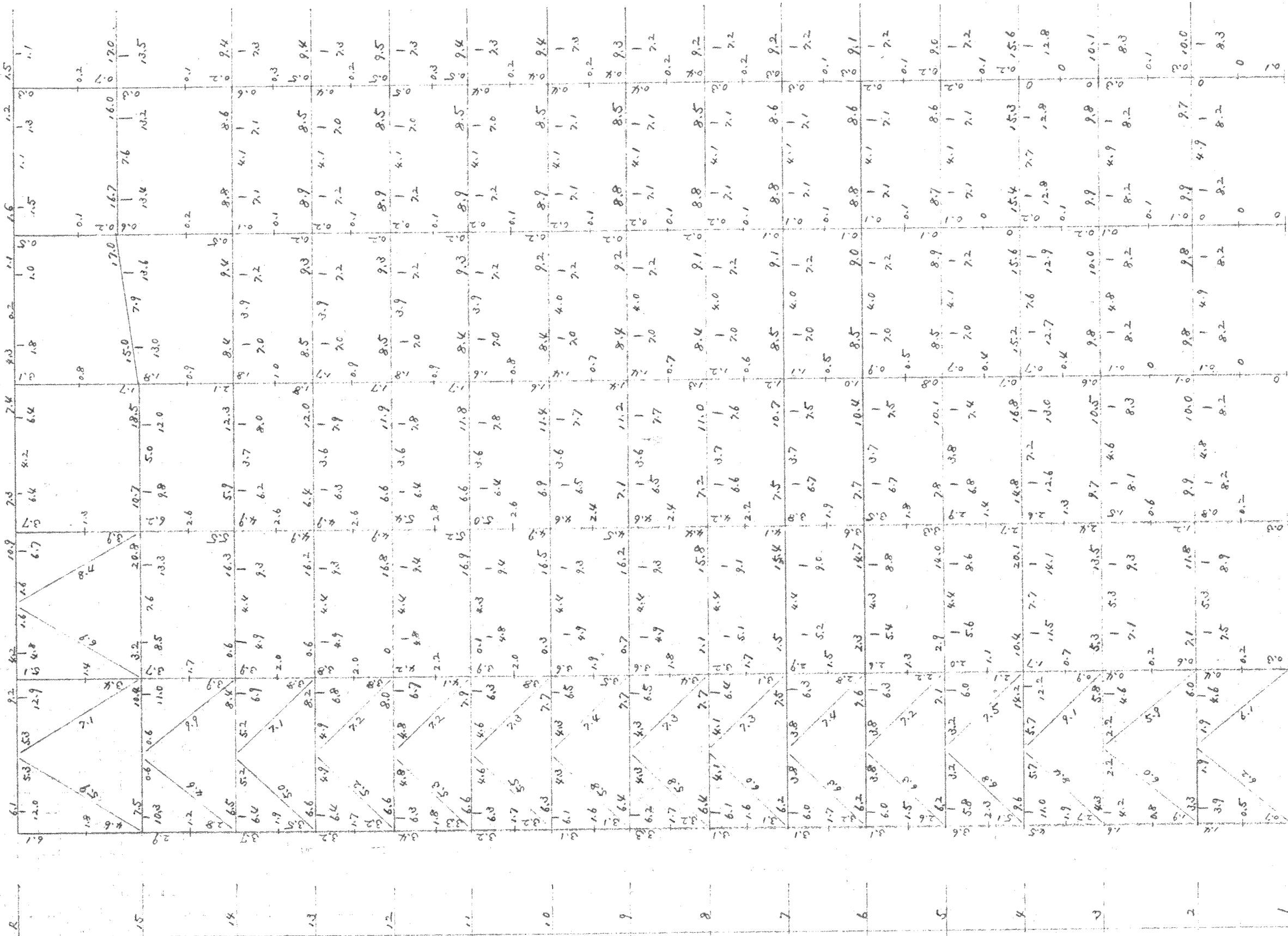
×17.7-7.7



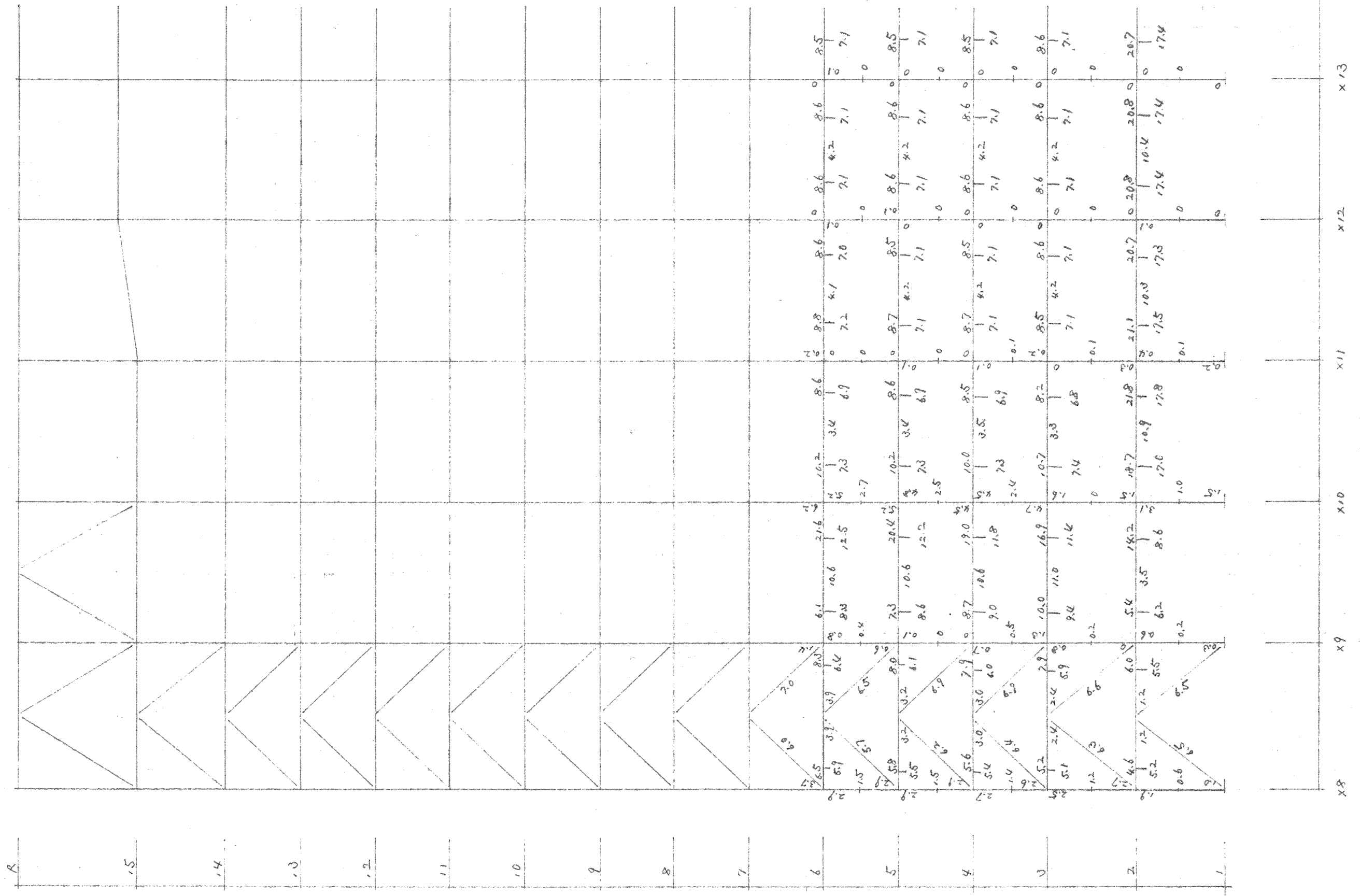
(構造計算用)

Y77-X2

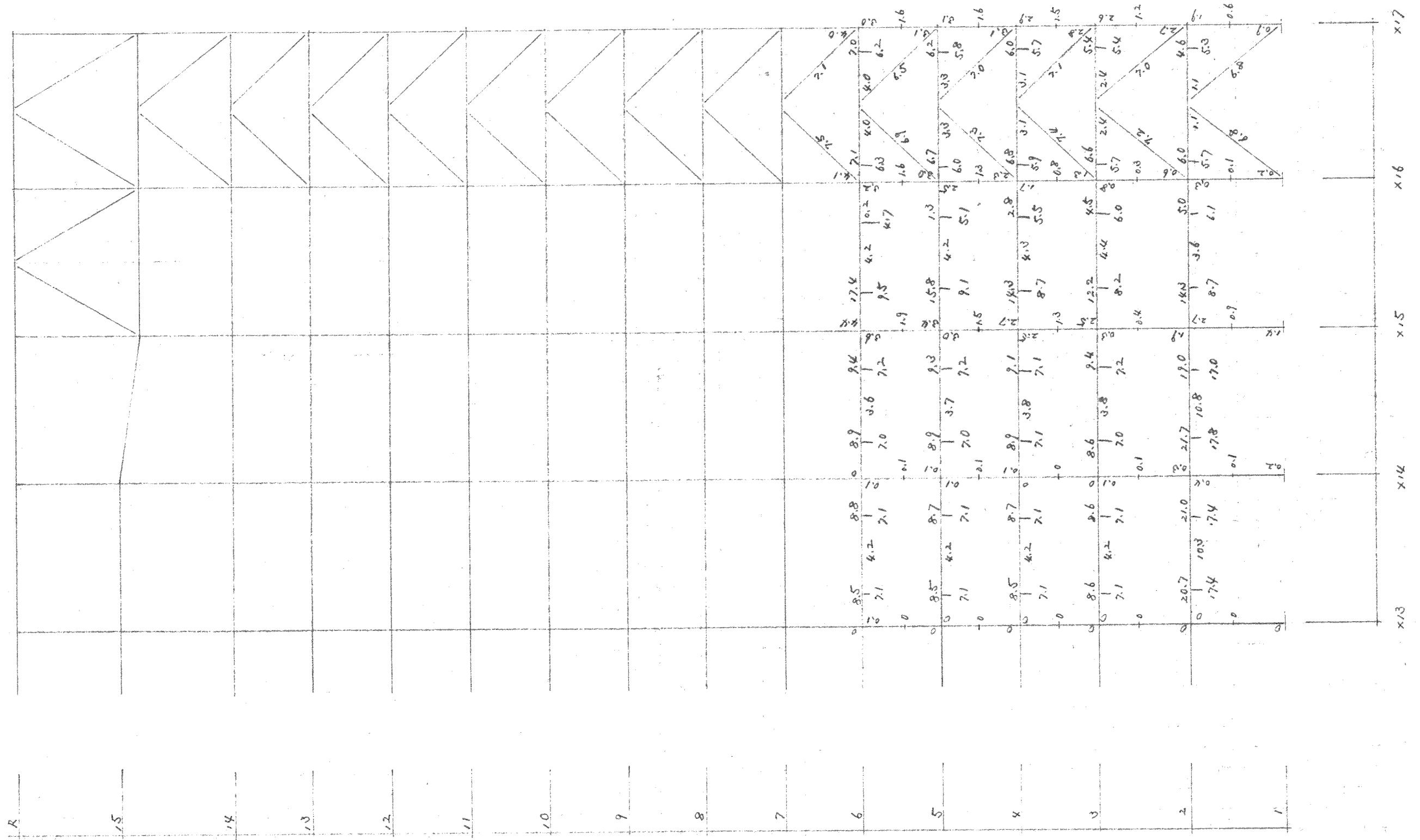


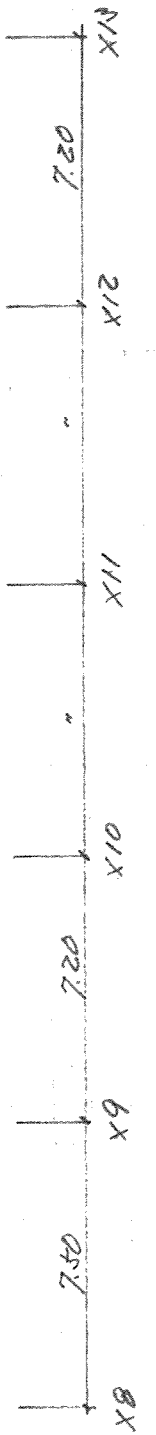
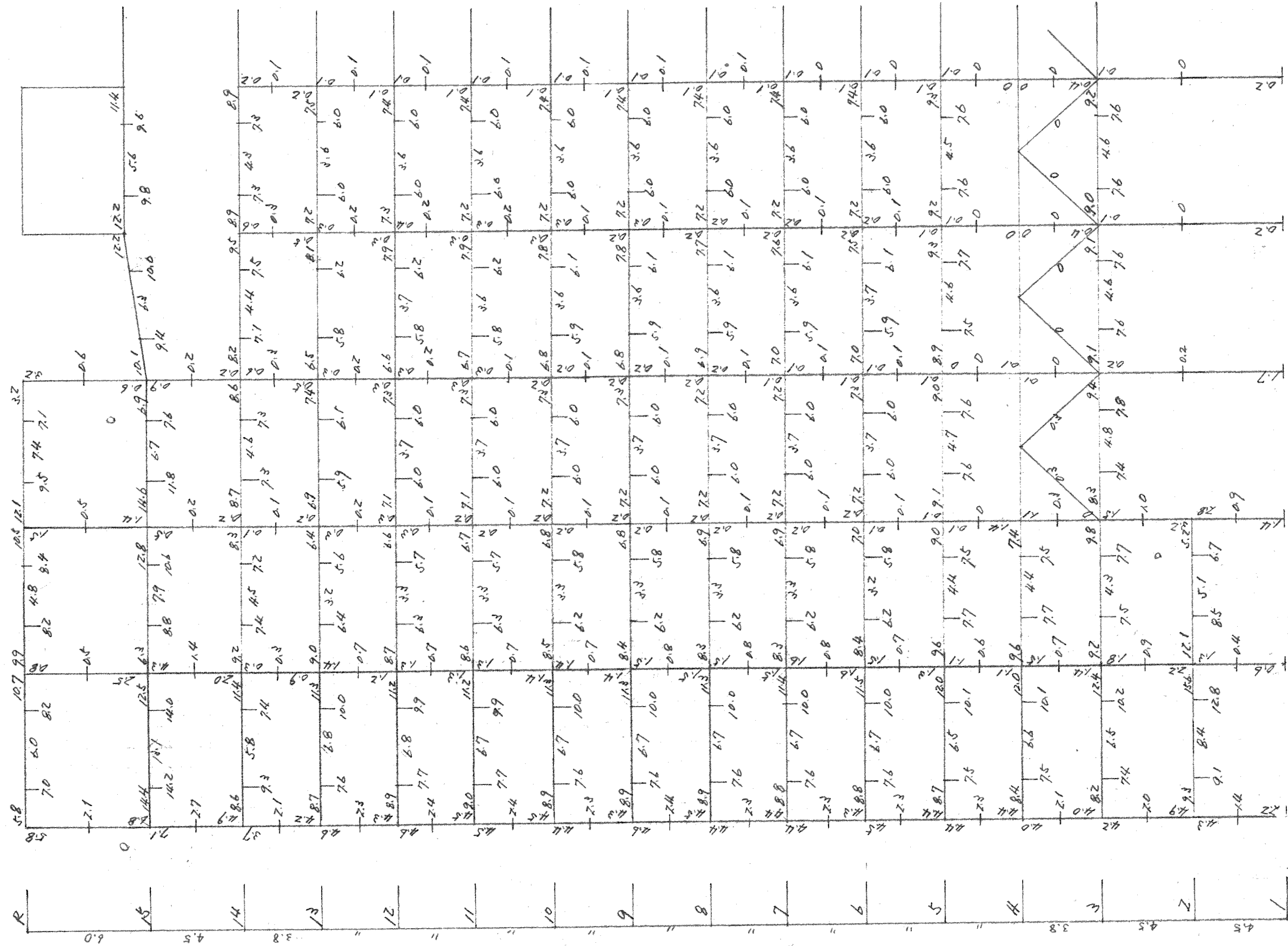


Y37-X2



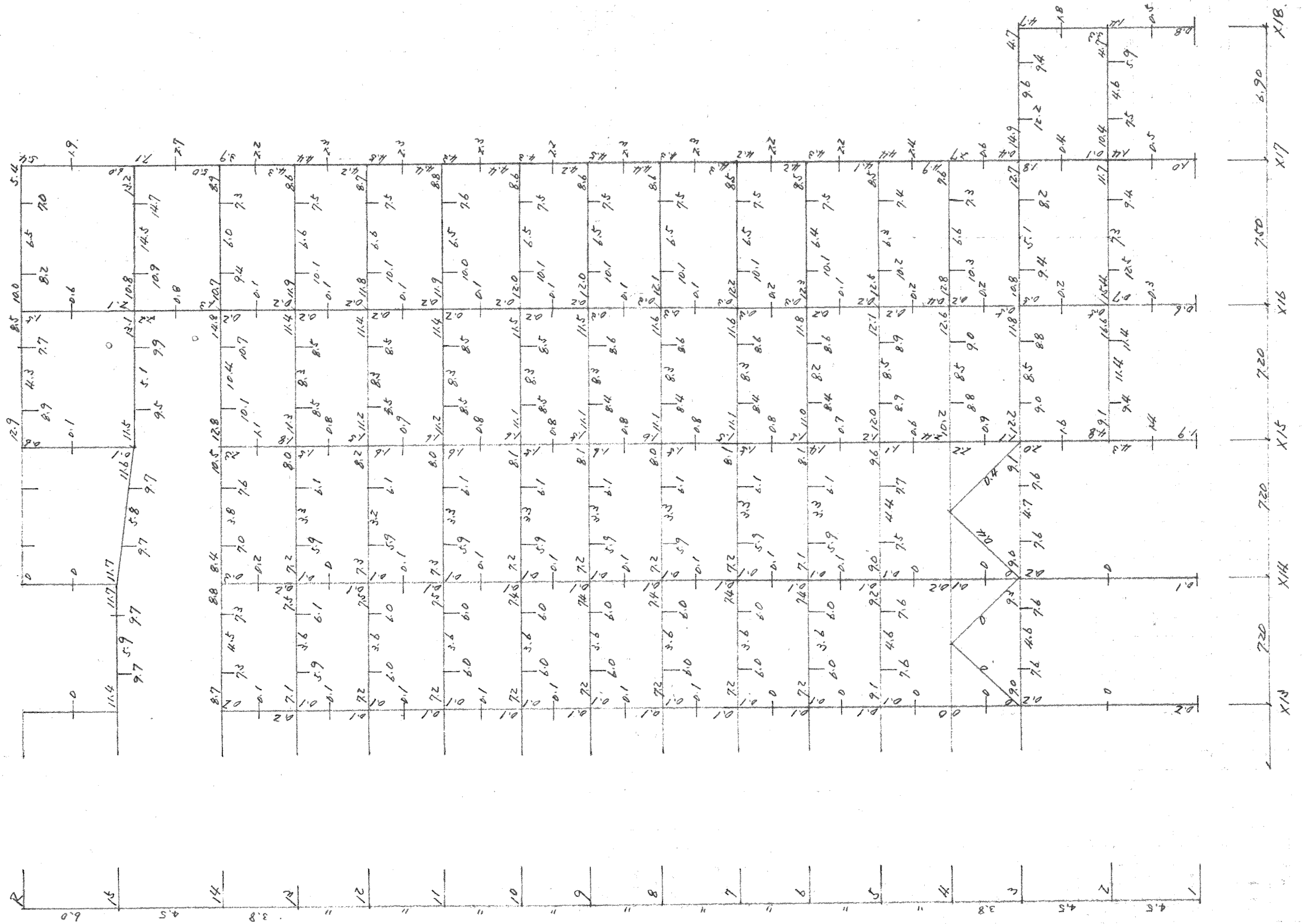
Y7通りに沿い



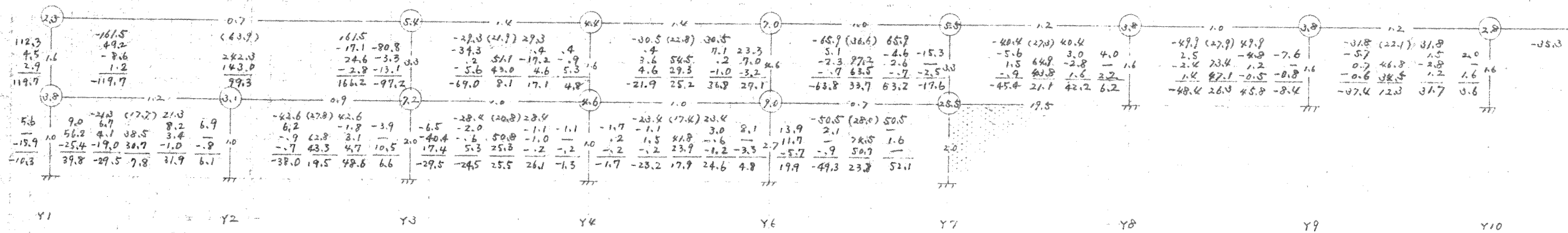


3454

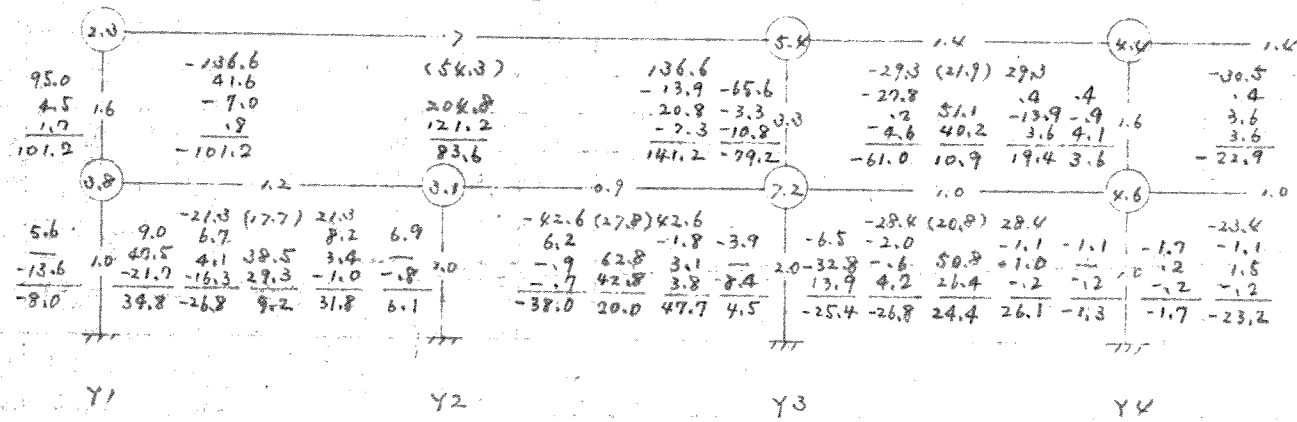
Y67-XV



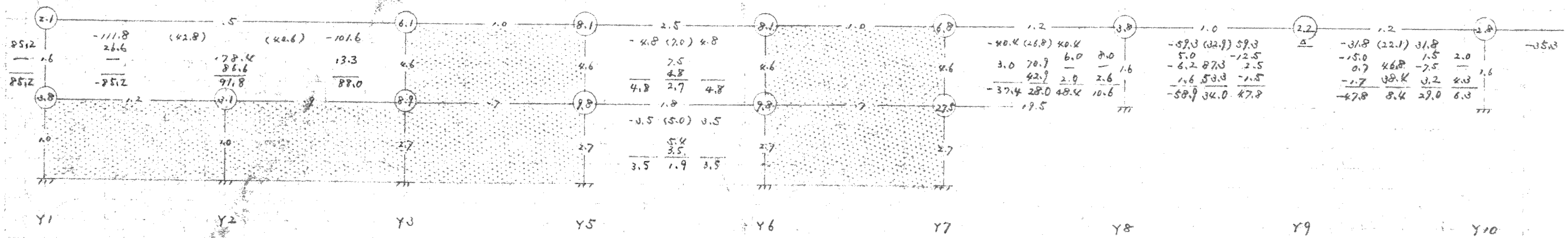
X113-XN



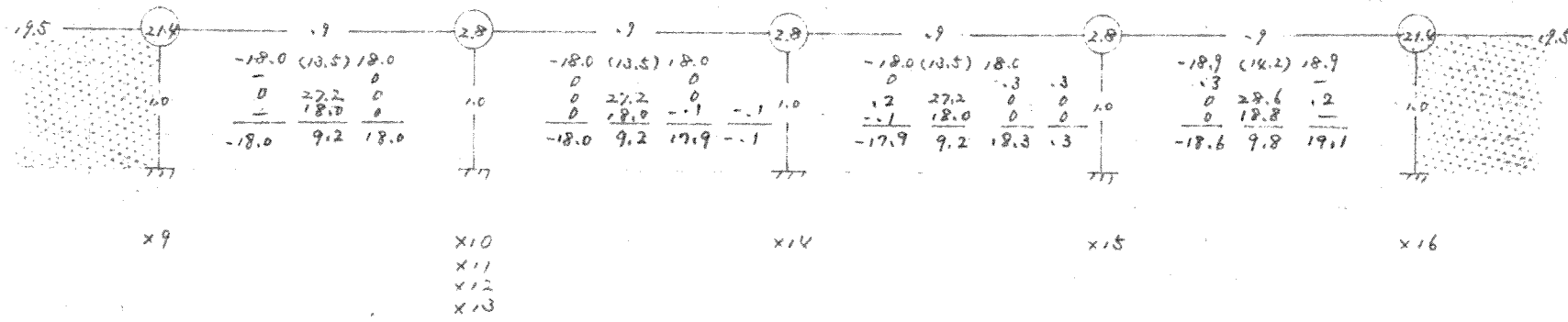
X107-XN



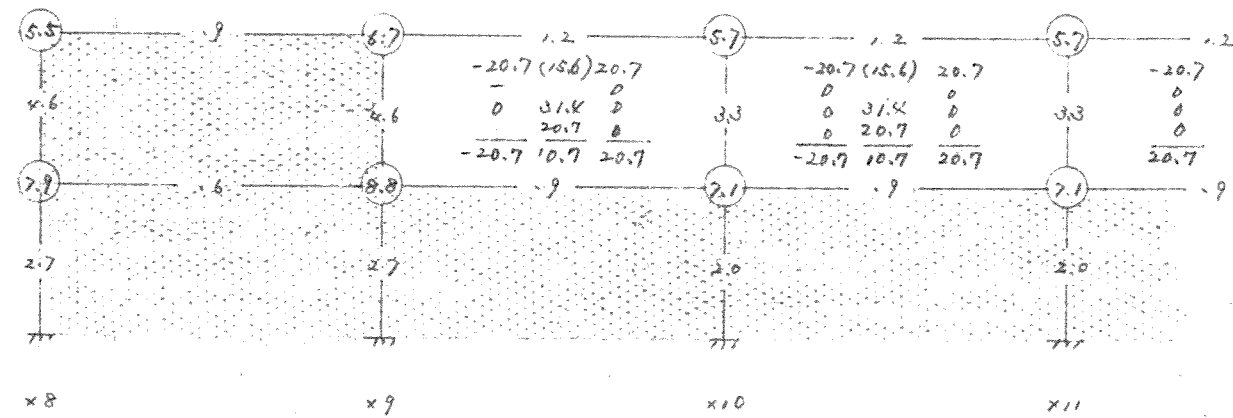
X167-XN



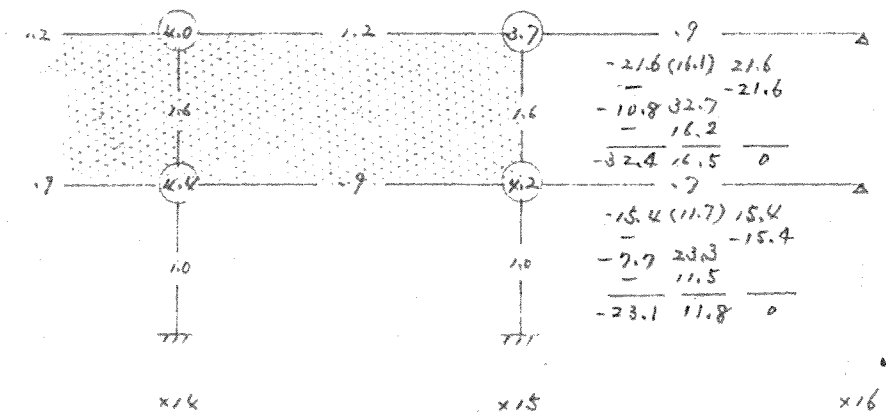
Y23-12



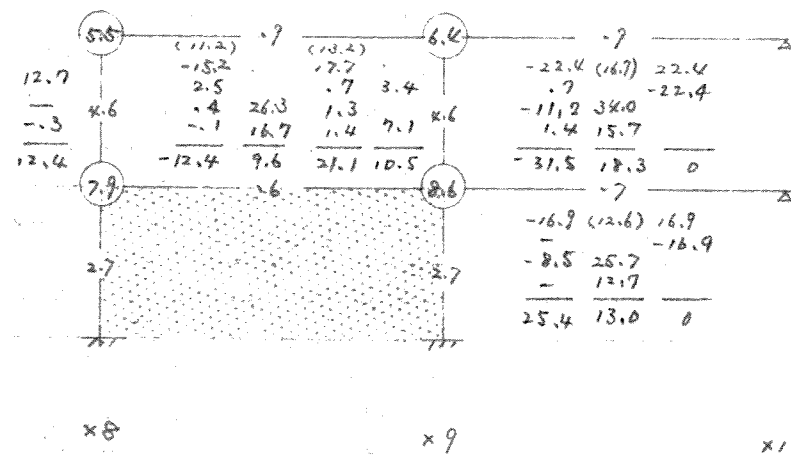
Y33-12



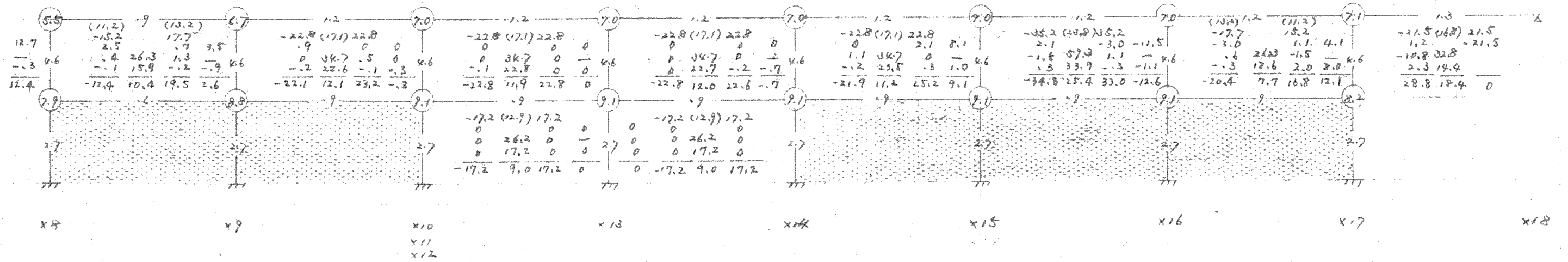
Y43-12



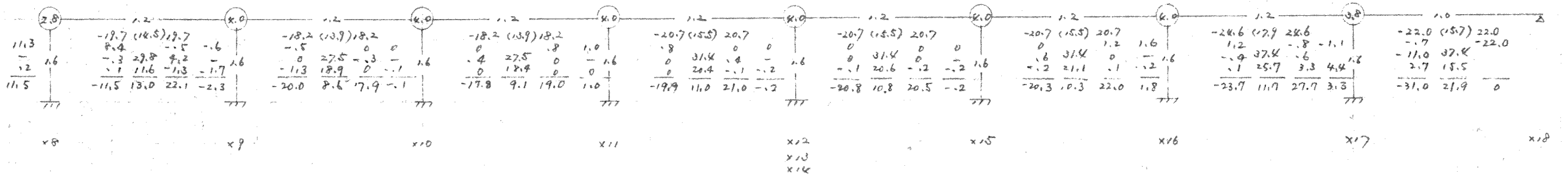
Y53-12



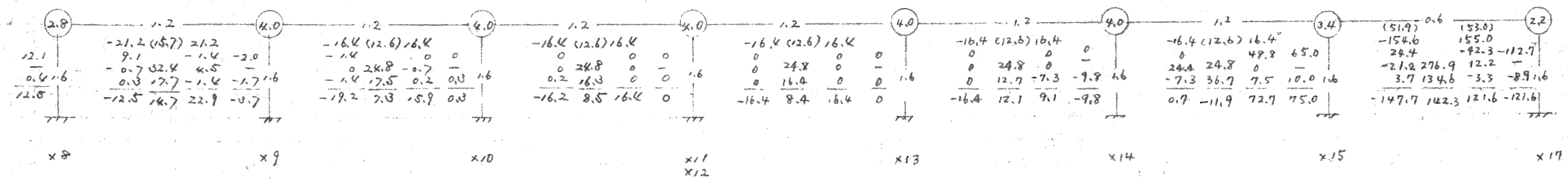
Y6 3-X



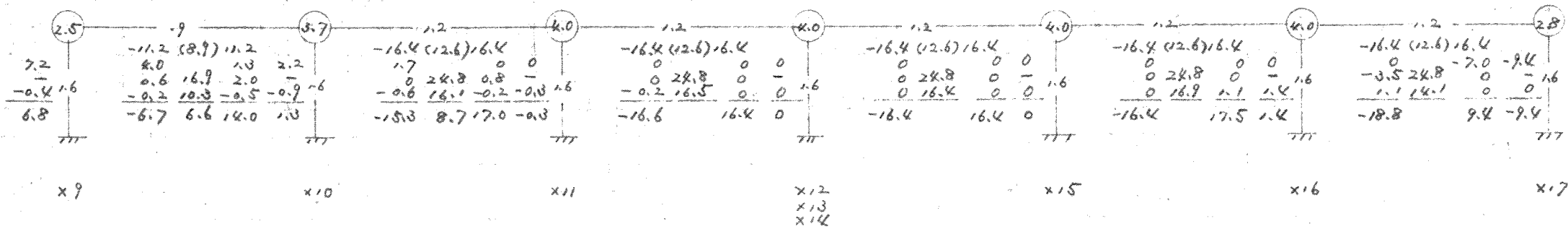
Y8 3-X



Y9 3-X



Y10 3-X



B-7. 地震時応力

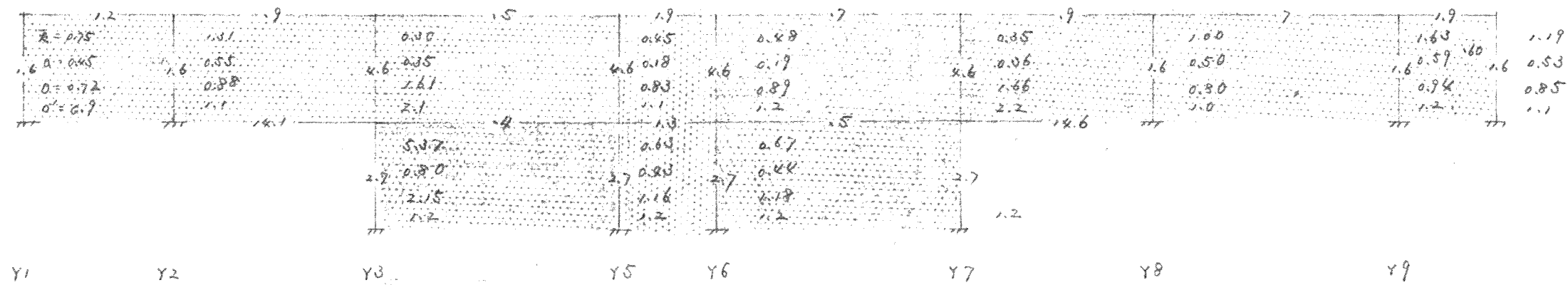
7-1) 日値の計算

7-2) 日分布 - 噴

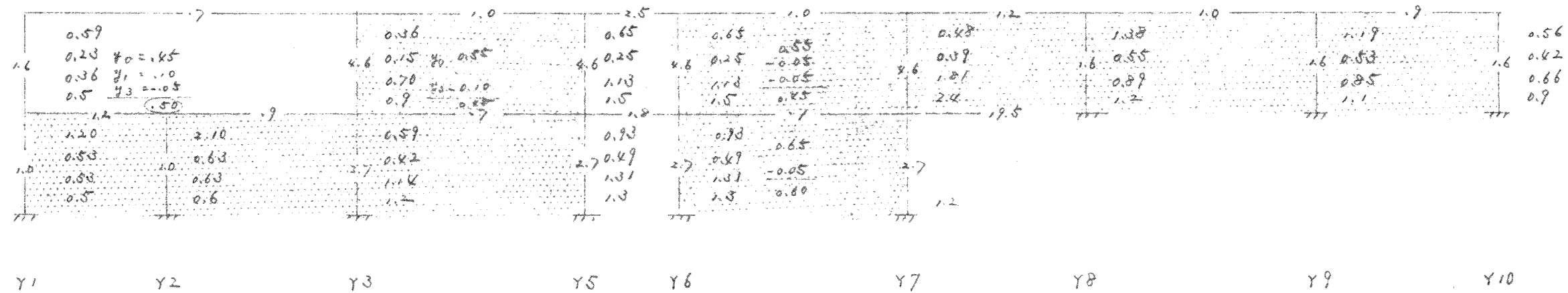
7-3) 耐震壁の設計

7-4) 地震時応力

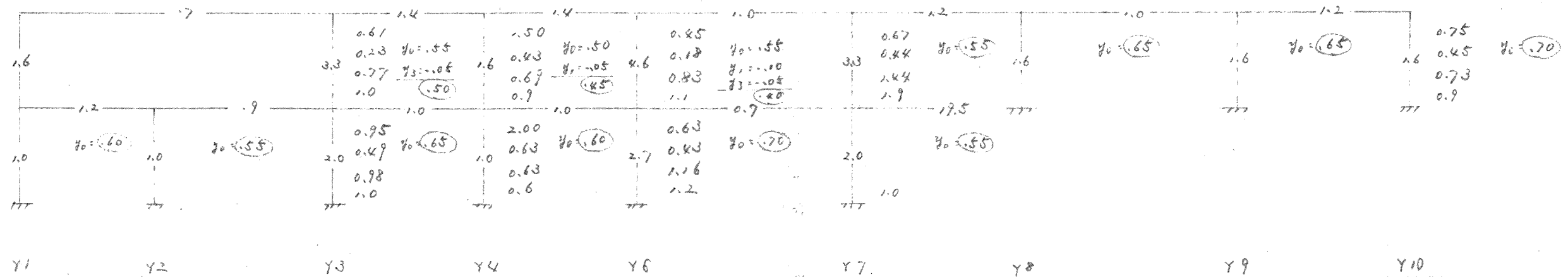
x8-1V



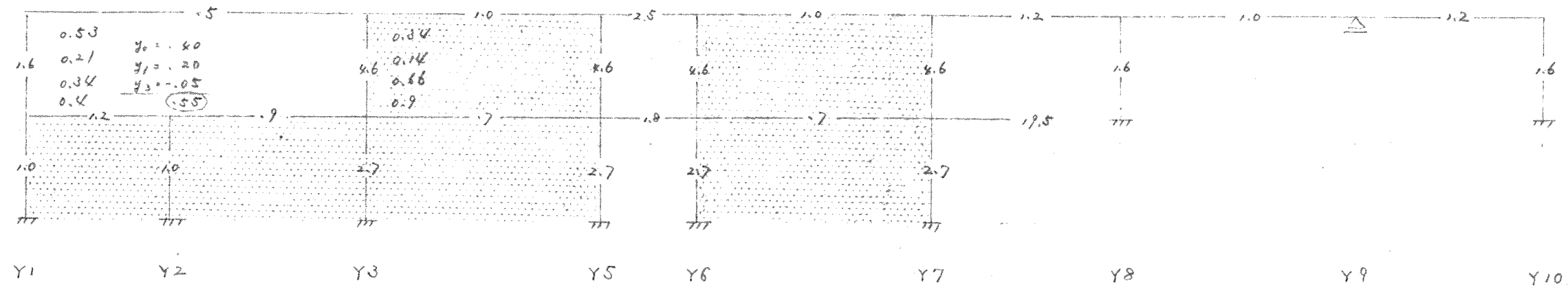
x9-1V



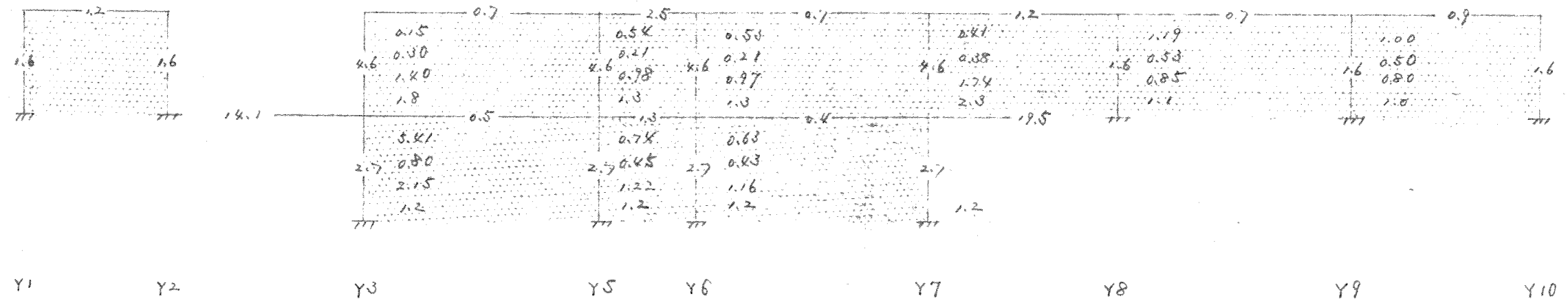
x10~x15-1V



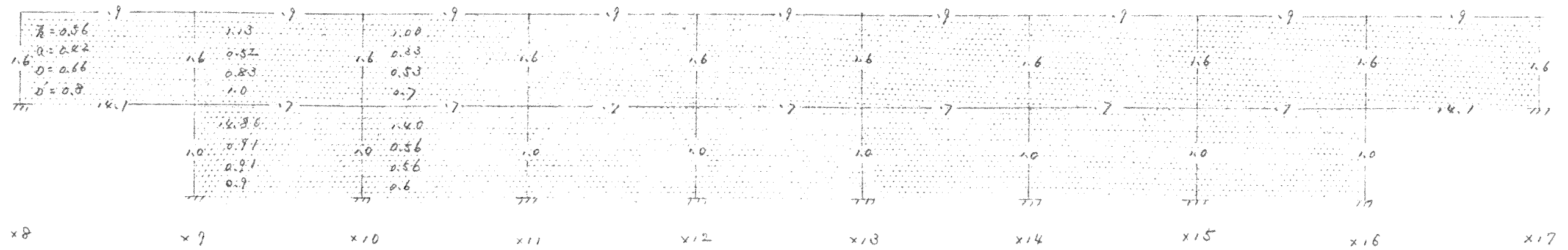
X167-1.2



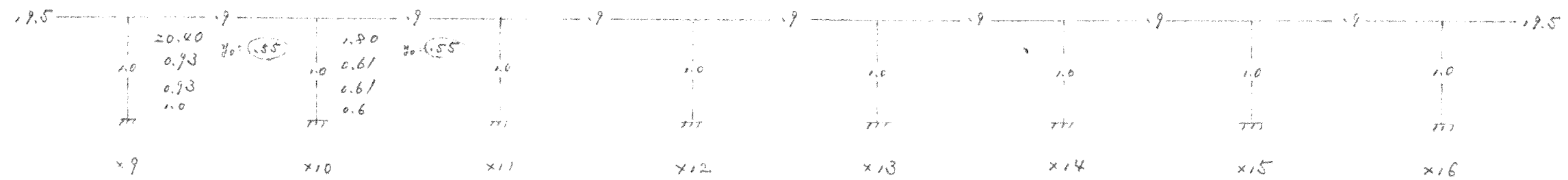
X177-1.2



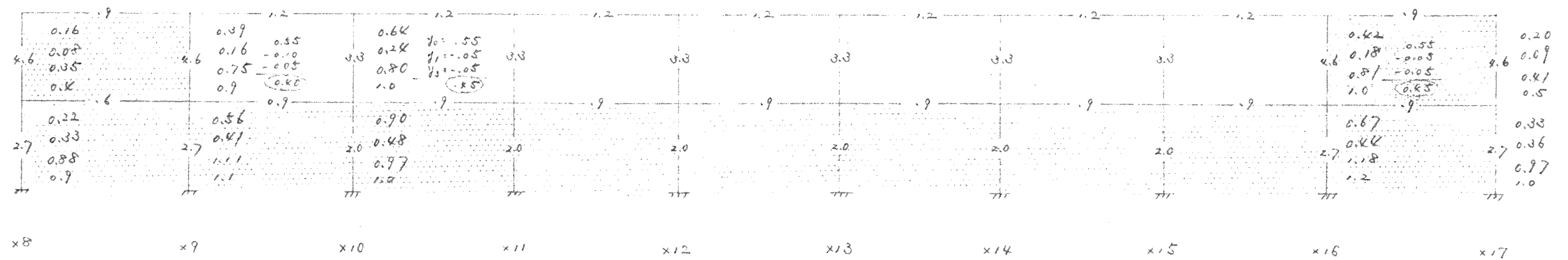
Y1 7-11



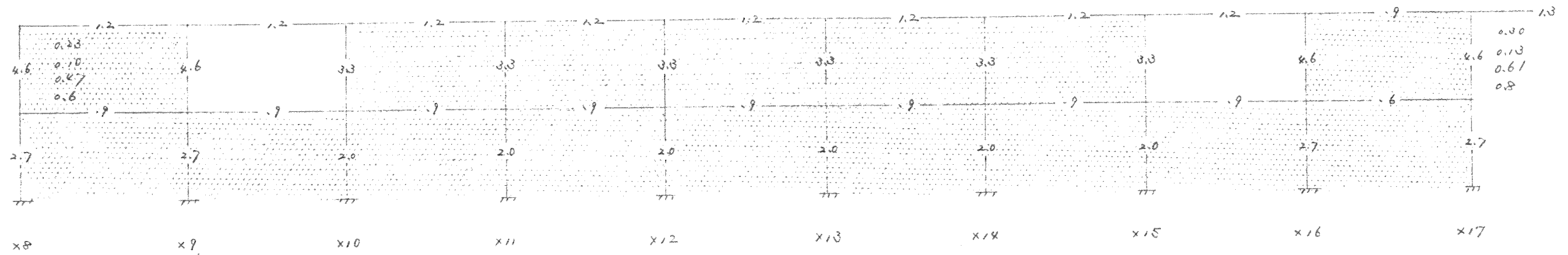
Y2 7-11



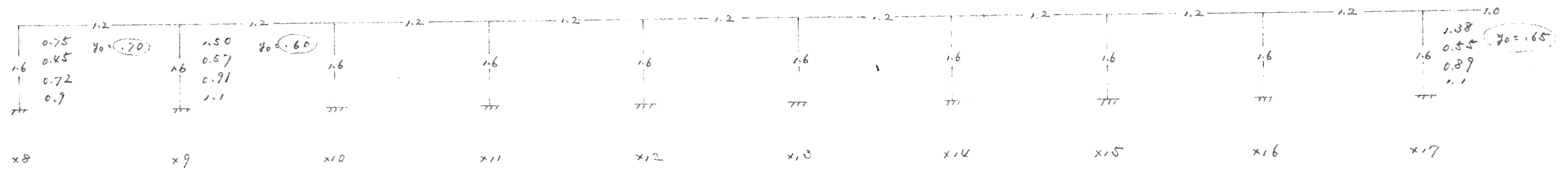
Y3 7-11



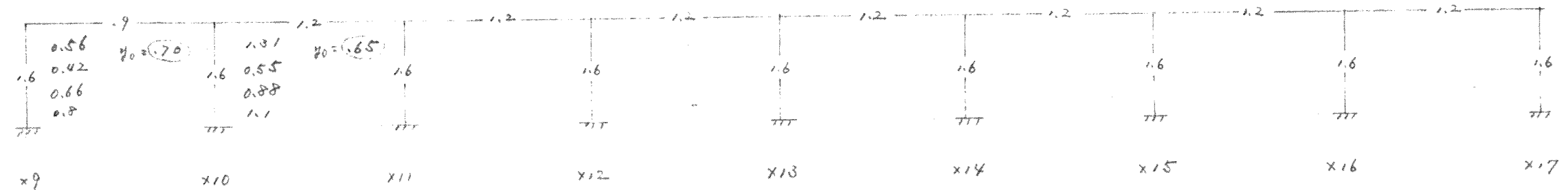
Y7ラメン



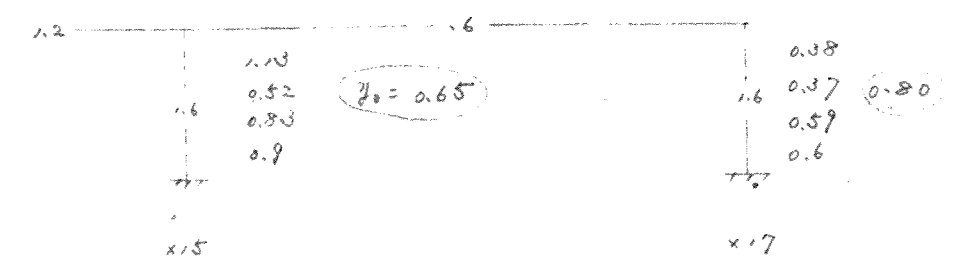
Y8ラメン



Y10ラメン

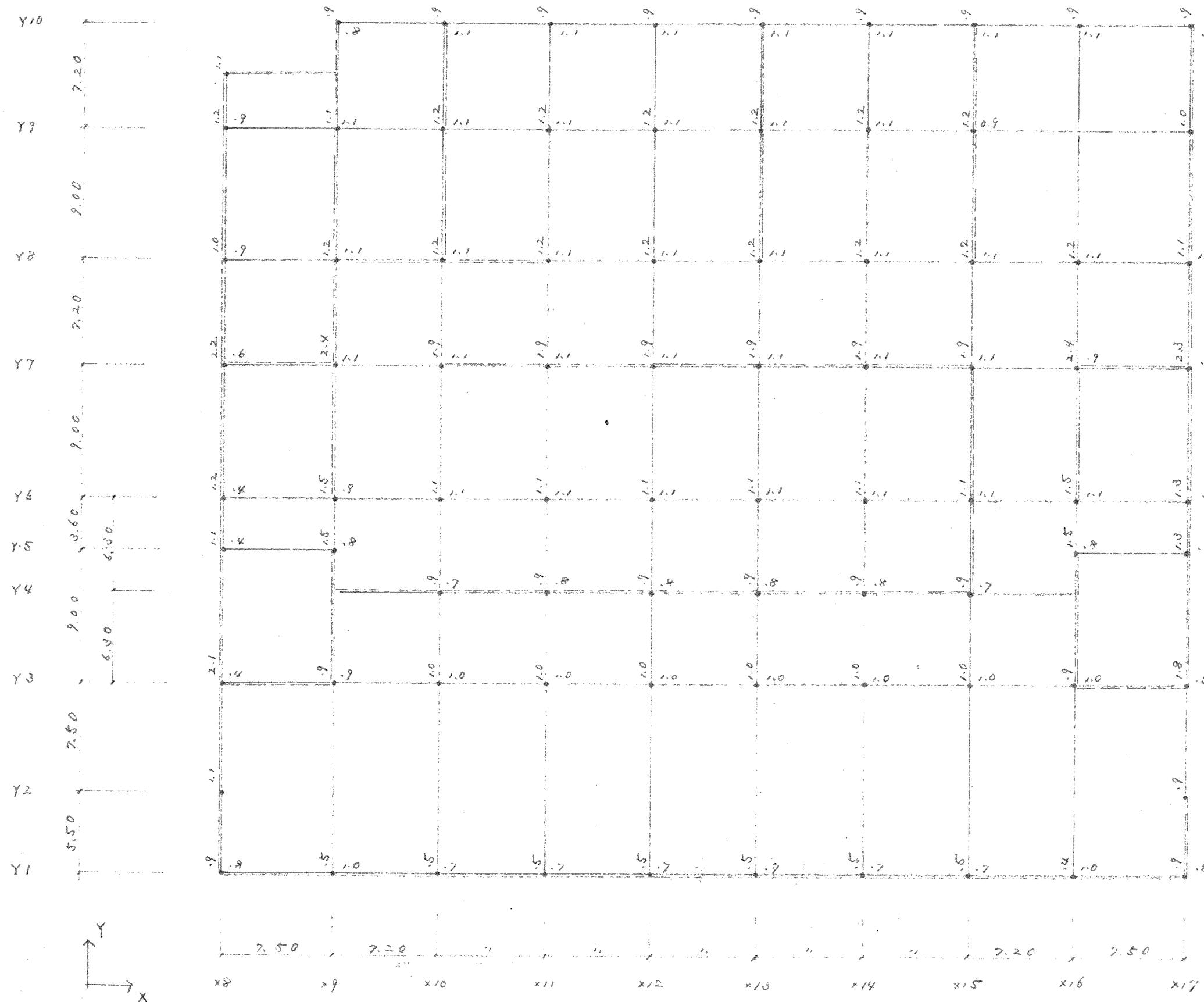


Y9ラメン



分組係数 (柱)

B1 階



$$\Sigma Q = 4431^t$$

$$(X) \Sigma Q_{58\%} = 2573.6^t \quad \Sigma Q_x = 72.7 \quad u_{gx} = 35.4^t$$

$$(Y) \Sigma Q_{63\%} = 2784.8^t \quad \Sigma Q_y = 94.4 \quad u_{gy} = 29.5^t$$

地下2階に伝わる地震力: ΣQ

(X) 柱分担分

$$Q_1 = \Sigma Q_{58\%} \times \frac{Y_i - Y_j \Sigma Q_x}{\Sigma Q_x} = 2573.6 \times \frac{43.5}{72.7} = 1539.9^t$$

壁分担分

$$Q_2 = \Sigma Q_{42\%} \times \frac{Y_i - Y_j \Sigma A_{wx}}{\Sigma A_{wx}} = 1857.4 \times \frac{3971.50}{4355.00} = 1693.8^t$$

$$\Sigma Q = Q_1 + Q_2 = 1539.9 + 1693.8 = 3233.7^t$$

(Y) 柱分担分

$$Q_1 = \Sigma Q_{63\%} \times \frac{Y_i - Y_j \Sigma Q_y}{\Sigma Q_y} = 2784.8 \times \frac{63.0}{94.4} = 1858.5^t$$

壁分担分

$$Q_2 = \Sigma Q_{37\%} \times \frac{Y_i - Y_j \Sigma A_{wy}}{\Sigma A_{wy}} = 1646.2 \times \frac{4191.00}{6031.00} = 1144.0^t$$

$$\Sigma Q = Q_1 + Q_2 = 1858.5 + 1144.0 = 3002.5^t$$

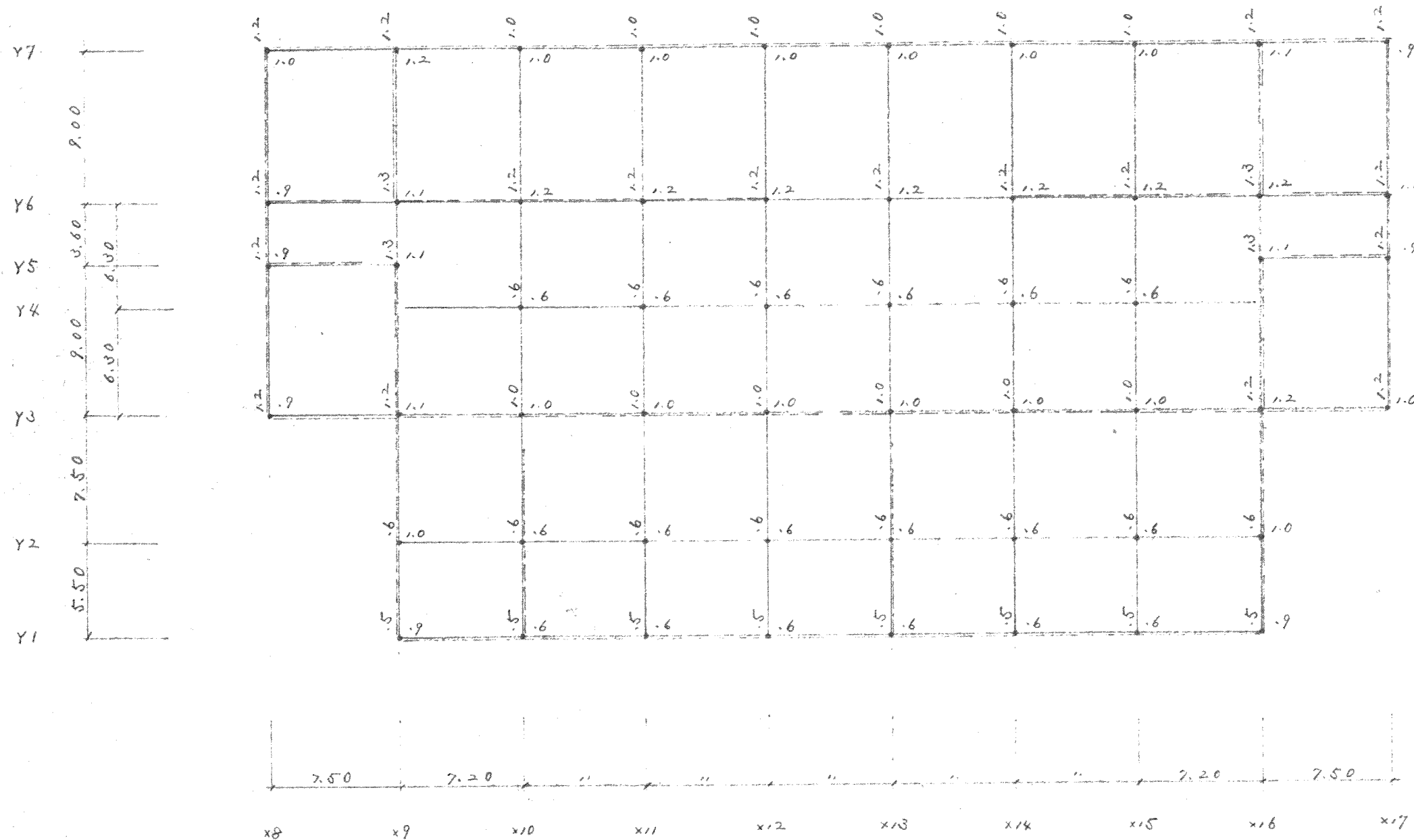
(注) ΣA_{wx} , ΣA_{wy} は X, Y 方向における

耐震壁の TOTAL 断面積を示す。

(構造計算用)

827番

上部階から



$$(X) \sum Q_x = 3233.7 + 708.0 = 3941.7^{\dagger}$$

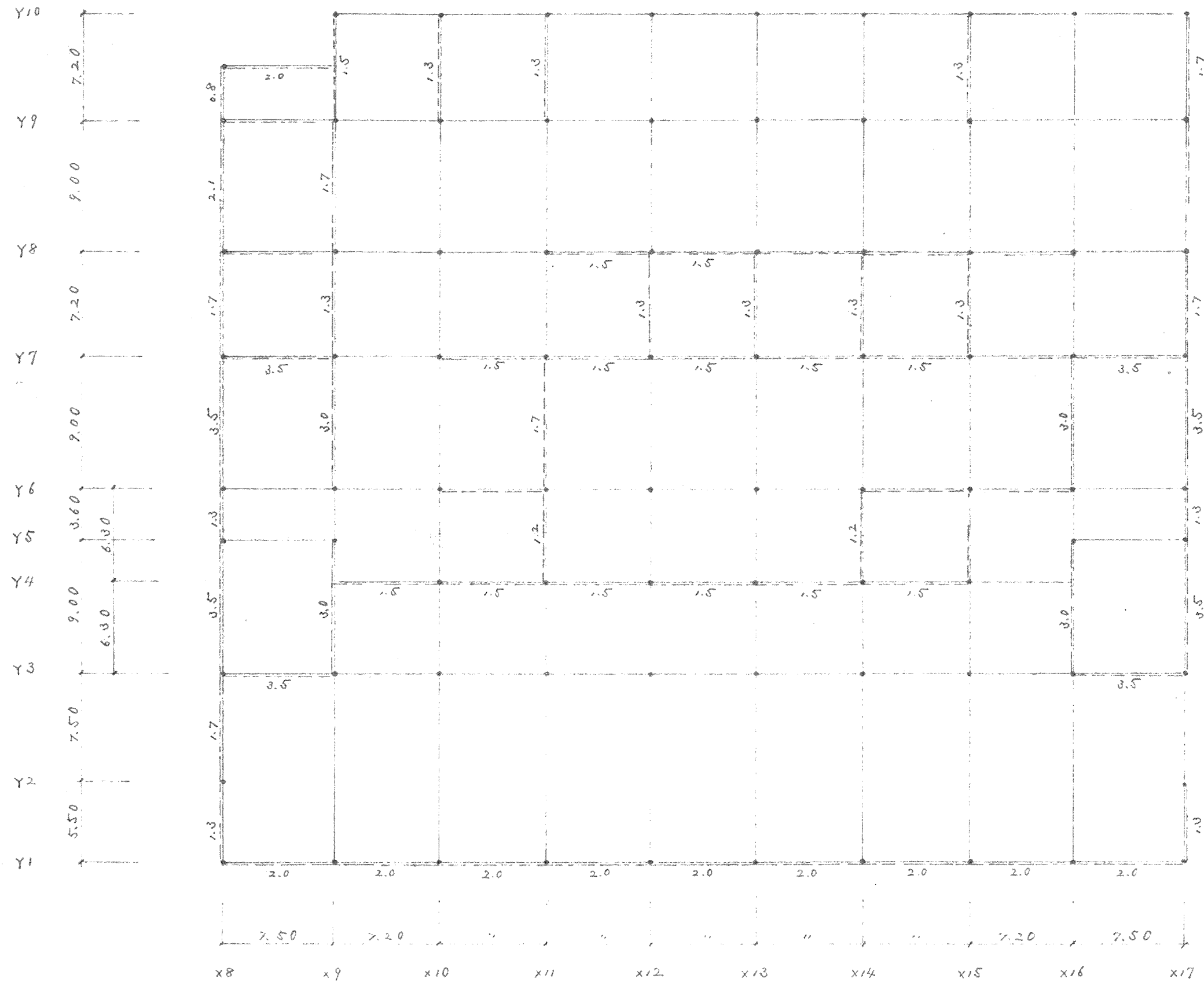
$$(Y) \sum Q_y = 3002.5 + 708.0 = 3710.5^{\dagger}$$

$$(X) \sum Q_{x.40\%} = 1557.1 \quad \sum Q_x = 50.4 \quad u_{gx} = 30.9^{\dagger}$$

$$(Y) \sum Q_{y.42\%} = 1551.4 \quad \sum Q_y = 51.2 \quad u_{gy} = 30.3^{\dagger}$$

分租係數 (壁)

B. 階



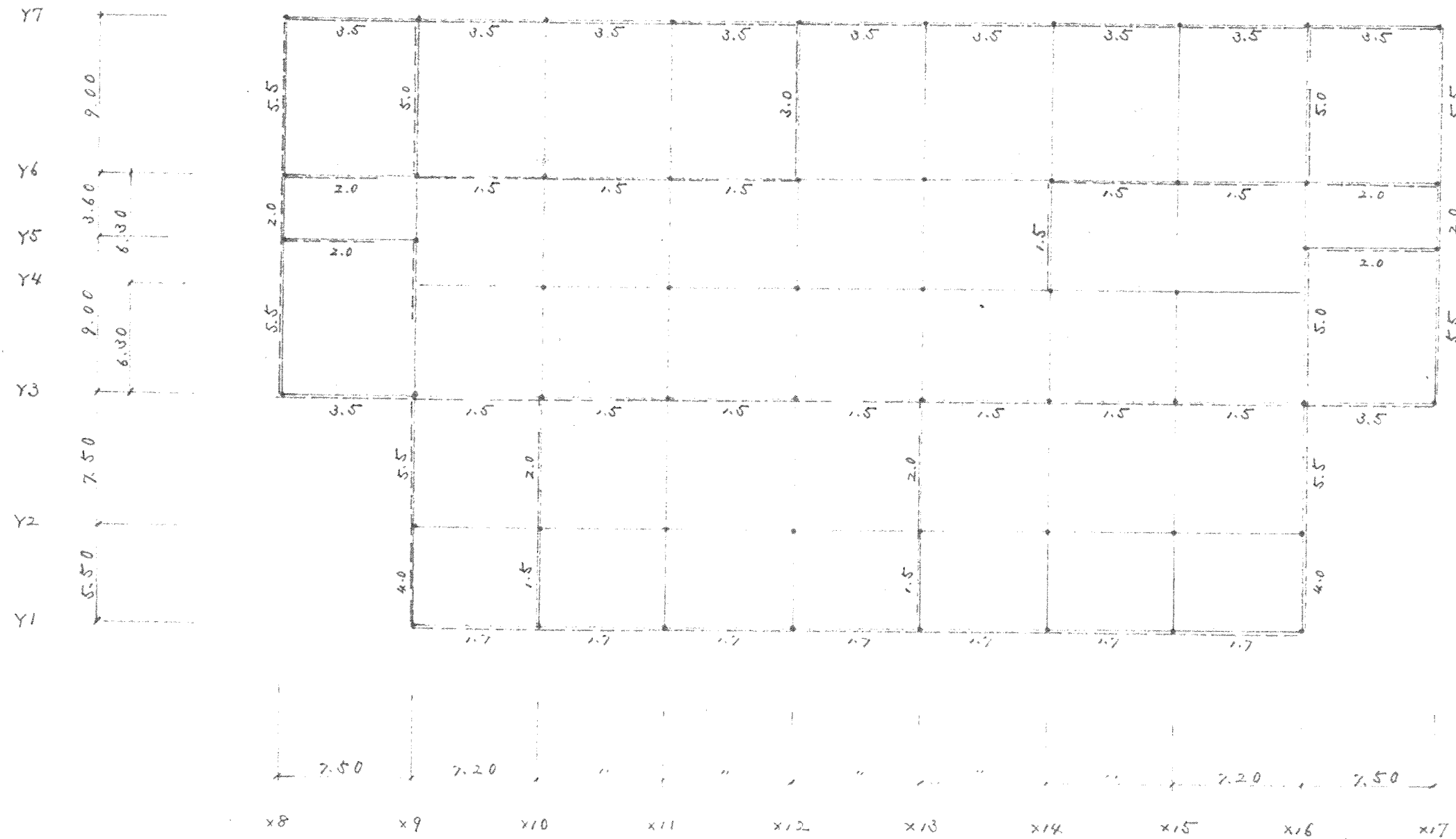
$$(X) \quad QW = 1857.4^{\uparrow} \quad \Sigma D = 53.5$$

$$(Y) \quad QW = 1646.2^{\uparrow} \quad \Sigma D = 58.6$$

$$(X) \quad \mu_{\Sigma W} = \frac{1857.4}{53.5} = 34.7$$

$$(Y) \quad \mu_{\Sigma W} = \frac{1646.2}{58.6} = 28.1$$

B 2 階



$$(x) \quad Q_w = 2384.6^+ \quad \Sigma D = 76.4$$

$$(y) \quad Q_w = 2159.1^+ \quad \Sigma D = 71.5$$

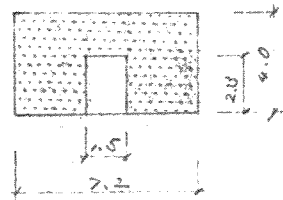
$$(x) \quad u_{gxw} = \frac{2384.6}{76.4} = 31.2^+$$

$$(y) \quad u_{gyw} = \frac{2159.1}{71.5} = 30.2^+$$

無開口耐震壁。剪断力 P 。

階	T	L	D_w	Q_D	τ	階	T	L	D_w	Q_D	τ
B1	40	750	3.5	121.5	4.1	B2	50	750	3.5	109.2	2.9
	25	750	2.0	69.4	3.7		50	720	3.5	109.2	3.0
	25	720	2.0	69.4	3.9		40	750	3.5	109.2	3.6
	20	720	1.5	52.1	3.6		25	720	1.7	53.0	2.9
							20	720	1.5	46.8	3.3
	40	900	3.5	98.4	2.7						
	40	360	1.3	36.5	2.5		50	750	5.5	166.1	4.4
	25	900	2.1	59.0	2.6		50	550	4.0	120.8	4.4
	25	750	1.7	47.8	2.5		40	900	5.5	166.1	4.6
	25	550	1.3	36.5	2.7		40	360	2.0	60.4	4.2
	25	360	0.8	22.5	2.5		20	900	3.0	90.6	5.0
	20	900	1.7	47.8	2.7		20	750	2.0	60.4	4.0
	20	720	1.3	36.5	2.5		20	550	1.5	45.3	4.1
	20	600	1.2	33.7	2.8						

耐震壁の開口寸法

B1F (Y4通) Y7~Y10, Y13~Y15
(Y8通) Y12~Y14

t = 20.0

$$r_1 = 1 - \frac{1.5}{7.2} = 0.79$$

$$r_2 = 1 - \sqrt{\frac{2.3 \times 1.5}{4.0 \times 7.2}} = 0.65$$

$$Q_x = 1.5 \times 34.7 = 52.1^*$$

$$\gamma = \frac{52.100}{20 \times 7.20 \times 0.65} = 5.6 < 7.4 \times 1.5 = 11.1$$

開口部補強

$$T_d = \frac{2.3 \times 1.5}{2 \sqrt{2} \times 7.2} \times 52.1 = 8.8^* \quad \alpha_t = \frac{8.8}{3.0} = 2.9^* \quad 2-016$$

$$T_v = \frac{2.3}{2(7.2 - 1.5)} \times 52.1 = 10.5^* \quad \alpha_t = \frac{10.5}{3.0} = 3.5 \quad 2-016$$

$$T_h = \frac{1.5}{2(4.0 - 2.3)} \times \frac{6.0}{7.2} \times 52.1 = 12.8^* \quad \alpha_t = \frac{12.8}{3.0} = 4.3 \quad 4-016$$

B1F (Y5通) Y7~Y8, Y9~Y10

(同上)

t = 20.0

$$r_1 = 0.79$$

$$r_2 = 0.65$$

$$Q_y = 1.3 \times 28.1 = 36.5^*$$

$$\gamma = 3.90 < 11.1$$

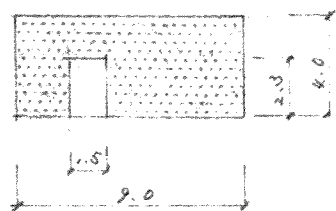
開口部補強

$$T_d = 6.2^* \quad \alpha_t = 2.1 \quad 2-016$$

$$T_v = 7.4^* \quad \alpha_t = 2.5 \quad 2-016$$

$$T_h = 9.0^* \quad \alpha_t = 3.0 \quad 2-016$$

B1F (Y9通) Y8~Y9



t = 20.0

$$r_1 = 1 - \frac{1.5}{2.0} = 0.25$$

$$r_2 = 1 - \sqrt{\frac{2.3 \times 1.5}{4.0 \times 2.0}} = 0.69$$

$$Q_y = 1.7 \times 28.1 = 47.8^*$$

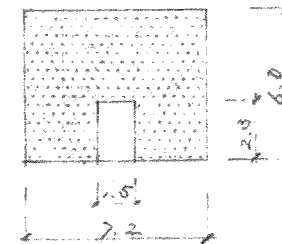
$$\gamma = \frac{47.800}{20 \times 2.00 \times 0.69} = 3.9 < 11.1$$

開口部補強

$$T_d = \frac{2.3 \times 1.5}{2 \sqrt{2} \times 9.0} \times 47.8 = 6.5^* \quad \alpha_t = 2.2 \quad 2-016$$

$$T_v = \frac{2.3}{2 \times (9.0 - 1.5)} \times 47.8 = 7.3^* \quad \alpha_t = 2.4 \quad 2-016$$

$$T_h = \frac{1.5}{2 \times (4.0 - 2.3)} \times \frac{6.0}{9.0} \times 47.8 = 9.4^* \quad \alpha_t = 3.1 \quad 2-016$$

B2F (Y3通) Y9~Y11, Y12~Y13, Y15~Y16
(Y6通) Y9~Y10, Y11~Y12

t = 20.0

$$r_1 = 1 - \frac{1.5}{7.2} = 0.79$$

$$r_2 = 1 - \sqrt{\frac{2.3 \times 1.5}{6.0 \times 7.2}} = 0.72$$

$$Q_x = 1.5 \times 31.2 = 46.8^*$$

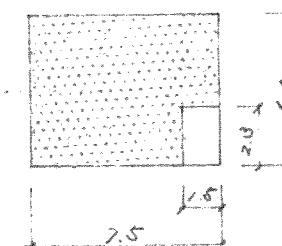
$$\gamma = 4.5 < 11.1$$

開口部補強

$$T_d = \frac{2.3 \times 1.5}{2 \sqrt{2} \times 7.2} \times 46.8 = 7.9^* \quad \alpha_t = 2.6 \quad 2-016$$

$$T_v = \frac{2.3}{2 \times (7.2 - 1.5)} \times 46.8 = 9.4^* \quad \alpha_t = 3.1 \quad 2-016$$

$$T_h = \frac{1.5}{2 \times (6.0 - 2.3)} \times \frac{6.0}{7.2} \times 46.8 = 7.9^* \quad \alpha_t = 2.6 \quad 2-016$$

B2F (Y5通) Y8~Y9, Y16~Y17
(Y6通) " "

t = 20.0

$$r_1 = 1 - \frac{1.5}{7.5} = 0.80$$

$$r_2 = 1 - \sqrt{\frac{2.3 \times 1.5}{6.0 \times 7.5}} = 0.72$$

$$Q_x = 2.0 \times 31.2 = 62.4^*$$

$$\gamma = \frac{62.400}{20 \times 7.50 \times 0.72} = 5.8 < 11.1$$

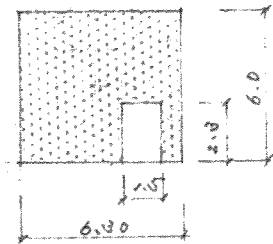
開口部補強

$$T_d = \frac{2.3 \times 1.5}{2 \sqrt{2} \times 7.5} \times 62.4 = 10.1 \quad \alpha_t = 3.4 \quad 2-016$$

$$T_v = \frac{2.3}{2 \times (7.5 - 1.5)} \times 62.4 = 12.0 \quad \alpha_t = 4.0 \quad 4-016$$

$$T_h = \frac{1.5}{2 \times (6.0 - 2.3)} \times \frac{6.0}{7.5} \times 62.4 = 10.1 \quad \alpha_t = 3.4 \quad 2-016$$

B2F (x14通) Y4~Y6



t = 20.0

$$r_1 = 1 - \frac{1.5}{6.3} = 0.76$$

$$r_2 = 1 - \sqrt{\frac{2.3 \times 1.5}{6.0 \times 6.3}} = 0.70$$

$$Q_y = 1.5 \times 30.2 = 45.3 \text{ t}$$

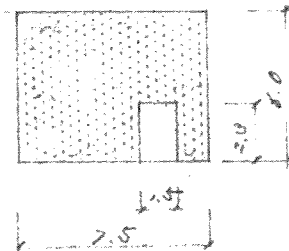
$$\gamma = \frac{45.300}{20 \times 6.30 \times 0.70} = 5.1 < 11.1$$

開口部補強

$$T_d = \frac{2.3 \times 1.5}{2\sqrt{2} \times 6.3} \times 45.3 = 8.8 \text{ t} \quad \alpha_t = 2.9 \quad 2-016$$

$$T_u = \frac{2.3}{2 \times (6.3 - 1.5)} \times 45.3 = 10.9 \text{ t} \quad \alpha_t = 3.6 \quad 2-016$$

$$T_h = \frac{1.5}{2 \times (6.0 - 2.3)} \times \frac{6.0}{6.3} \times 45.3 = 8.7 \text{ t} \quad \alpha_t = 2.9 \quad 2-016$$

B2F (x10通) Y2~Y3
(x13通) "

t = 20.0

$$r_1 = 1 - \frac{1.5}{7.5} = 0.80$$

$$r_2 = 1 - \sqrt{\frac{2.3 \times 1.5}{6.0 \times 7.5}} = 0.72$$

$$Q_y = 2.0 \times 30.2 = 60.4 \text{ t}$$

$$\gamma = 5.6 < 11.1$$

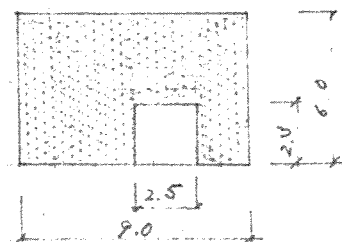
開口部補強

$$T_d = \frac{2.3 \times 1.5}{2\sqrt{2} \times 7.5} \times 60.4 = 9.8 \text{ t} \quad \alpha_t = 3.3 \quad 2-016$$

$$T_u = \frac{2.3}{2 \times (7.5 - 1.5)} \times 60.4 = 11.6 \text{ t} \quad \alpha_t = 3.9 \quad 2-016$$

$$T_h = \frac{1.5}{2 \times (6.0 - 2.3)} \times \frac{6.0}{7.5} \times 60.4 = 9.8 \text{ t} \quad \alpha_t = 3.3 \quad 2-016$$

B2F (x16通) Y6~Y7



t = 40

$$r_1 = 1 - \frac{2.5}{9.0} = 0.78$$

$$r_2 = 1 - \sqrt{\frac{2.3 \times 2.5}{6.0 \times 9.0}} = 0.67$$

$$Q_y = 5.0 \times 30.2 = 151.0 \text{ t}$$

$$\gamma = \frac{151.000}{40 \times 9.00 \times 0.67} = 6.3 < 11.1$$

開口部補強

$$T_d = \frac{2.3 \times 2.5}{2\sqrt{2} \times 9.0} \times 151.0 = 34.1 \text{ t} \quad \alpha_t = 11.4 \quad 4-019$$

$$T_u = \frac{2.3}{2 \times (9.0 - 2.5)} \times 151.0 = 26.7 \text{ t} \quad \alpha_t = 8.9 \quad 4-019$$

$$T_h = \frac{2.5}{2 \times (6.0 - 2.3)} \times \frac{6.0}{9.0} \times 151.0 = 34.0 \text{ t} \quad \alpha_t = 11.3 \quad 4-019$$

B-8 梁断面算定

	R G 1			15 G 1 A		
	Y3 端	中央	Y6 端	Y3 端	中央	Y6 端
長期応力	$\frac{43.0}{17.9} \quad \frac{17.5}{13.9} \quad 31.3$			$\frac{103.0}{68.1} \quad \frac{113.0}{69.1} \quad 108.9$		
地震応力	$(49.0) \quad 51.1 \quad 44.5 (42.4)$			$(99.0) \quad 103.2 \quad 88.8 (84.6)$		
短期応力	$\frac{92.0}{25.5} \quad \frac{59.9}{21.5}$			$\frac{202.0}{83.3} \quad \frac{197.6}{84.3}$		
	$\frac{12.6}{12.05} \quad Y3 \quad Y6$			$\frac{12.6}{12.05} \quad Y3 \quad Y6$		
断面	端部 BH-850×300×16×22 中央 BH-850×300×12×22			端部 BH-1350×200×19×22 中央 BH-1350×200×14×22		
Zx	5325	5829		10149	(10149)	
Zp	5465			12666		
MP	180.3			417.9		
M/Mp	0.22			0.17		
lb	210	210		105	210	
iy	6.16	6.58		2.99	2.99	
lb/iy	34.1	31.9		35.1	70.2	
lb·h/A _t	270			322	644	
f _b = $\frac{900 \cdot A_t}{lb \cdot h}$				29.2	1.40	
M ₂ /M ₁						
C				C=1.0		
i (h/6)						
K = $1 - 0.4 \frac{(lb)^2}{A^2}$						
f _b = K · f _t						
f _b	3.3	2.2		3.3		
σ _b = M/Z	1.73	0.54		1.99	(1.07)	
t × d	1.6 × 80.6	1.2 × 80.6		1.9 × 130.6	1.9 × 130.6	
Q _{AS} (t)	174.0	130.6		334.9	334.9	
1.5 a/dw		11.21			6.92	
2 $\frac{A_t}{A_w} + 1.2$		2.56			1.55	

	14 G 1			13 G 1		
	Y3 端	中央	Y6 端	Y3 端	中央	Y6 端
長期応力	$\frac{81.0}{31.9} \quad \frac{50.8}{33.1} \quad 45.8$			$\frac{71.9}{31.9} \quad \frac{37.6}{26.3} \quad 36.8$		
地震応力	$(91.1) \quad 95.0 \quad 84.4 (80.5)$			$(100.1) \quad 105.0 \quad 94.6 (90.3)$		
短期応力	$\frac{172.1}{52.1} \quad \frac{131.3}{47.3}$			$\frac{172.6}{47.8} \quad \frac{127.9}{42.1}$		
	$\frac{12.6}{12.05} \quad Y3 \quad Y6$			$\frac{12.6}{12.05} \quad Y3 \quad Y6$		
断面	端部 BH-850×300×16×22 中央 BH-850×300×12×22			同 左		
Zx	5325	5829				
Zp						
MP						
M/Mp						
lb	150	300				
iy	6.16	6.58				
lb/iy	24.3	45.6				
lb·h/A _t	193	386.4				
f _b = $\frac{900 \cdot A_t}{lb \cdot h}$		2.33				
M ₂ /M ₁						
C						
i (h/6)						
K = $1 - 0.4 \frac{(lb)^2}{A^2}$						
f _b = K · f _t						
f _b	3.3	2.2				
σ _b = M/Z	0.23	0.79				
t × d	1.6 × 80.6	1.2 × 80.6				
Q _{AS} (t)	174.0	130.6				
1.5 a/dw		11.21				
2 $\frac{A_t}{A_w} + 1.2$		2.56				

	12 G1			11 G1		
	Y3 端	中央	Y6 端	Y3 端	中央	Y6 端
長期応力	$\frac{71.0}{31.6} \quad \frac{37.8}{26.4}$			$\frac{70.7}{31.5} \quad \frac{39.3}{26.5}$		
地震応力	$\frac{(108.8) 113.5}{17.1} \quad \frac{101.6 (96.9)}{17.1}$			$\frac{(112.2) 117.0}{17.6} \quad \frac{105.3 (100.5)}{17.6}$		
短期応力	$\frac{179.8}{48.7} \quad \frac{134.7}{43.5}$			$\frac{182.9}{49.1} \quad \frac{139.8}{44.1}$		
断面	$\frac{Y3}{()} \quad \frac{Y6}{()}$			$\frac{Y3}{()} \quad \frac{Y6}{()}$		
Zx				6007	6500	
ZP						
MP						
$\bar{M}/M_P$						
l_b				150	300	
i_Y				6.36	6.76	
l_b/i_Y				23.5	44.4	
$l_b \cdot h/A_t$				170	340	
$f_b = \frac{900 \cdot A_t}{l_b \cdot h}$						
M_2/M_1						
C						
$i (h/6)$						
$K = 1 - 0.4 \frac{(\frac{l_b}{i})^2}{\Lambda^2}$						
$f_b = K \cdot f_t$						
f_b				3.3	2.2	
$\sigma_b = M/Z$				3.04	0.56	
$t \times d$				1.6 \times 80	1.2 \times 80.0	
$Q_{AS}(t)$				172.8	129.6	
$1.5 a/d_w$					11.30	
$2 \frac{A_t}{A_w} + 1.2$					2.70	

	10 G1			9 G1		
	Y3 端	中央	Y6 端	Y3 端	中央	Y6 端
長期応力	$\frac{69.8}{31.2} \quad \frac{41.4}{26.8}$			$\frac{67.8}{31.0} \quad \frac{43.0}{27.0}$		
地震応力	$\frac{(113.6) 118.5}{17.8} \quad \frac{106.2 (101.3)}{17.8}$			$\frac{(115.5) 120.5}{18.2} \quad \frac{108.3 (103.3)}{18.2}$		
短期応力	$\frac{182.4}{49.0} \quad \frac{142.7}{44.6}$			$\frac{183.3}{49.2} \quad \frac{146.3}{45.2}$		
断面	$\frac{Y3}{()} \quad \frac{Y6}{()}$			$\frac{Y3}{()} \quad \frac{Y6}{()}$		
Zx						
ZP						
MP						
$\bar{M}/M_P$						
l_b						
i_Y						
l_b/i_Y						
$l_b \cdot h/A_t$						
$f_b = \frac{900 \cdot A_t}{l_b \cdot h}$						
M_2/M_1						
C						
$i (h/6)$						
$K = 1 - 0.4 \frac{(\frac{l_b}{i})^2}{\Lambda^2}$						
$f_b = K \cdot f_t$						
f_b						
$\sigma_b = M/Z$						
$t \times d$						
$Q_{AS}(t)$						
$1.5 a/d_w$						
$2 \frac{A_t}{A_w} + 1.2$						

	8 G 1			7 G 1		
	Y3 - Y6 x 11			Y3 - Y6 x 11		
	Y3 端	中 央	Y6 端	Y3 端	中 央	Y6 端
長期応力						
地震応力						
短期応力						
断 面	端部 BH-850x300x16x28 中央 BH-850x300x12x28			同 左		
Zx	6680	7162				
Zp						
MP						
M/Mp						
lb	150	300				
iy	6.54	6.92				
lb/iy	22.9	43.4				
lb·h/A _f	152	303.6				
f _b = $\frac{900 \cdot A_f}{lb \cdot h}$		2.96				
M ₂ /M ₁						
C						
i (h/6)						
K = $1 - 0.4 \frac{(\frac{lb}{i})^2}{\lambda^2}$						
f _b = K · f _t						
f _b	3.3	2.2				
σ _b = M/Z	2.79	0.50				
t × d	1.6 × 79.4	1.2 × 79.4				
Q _{As} (t)	171.5	128.6				
1.5 a/dw		11.38				
2 $\frac{A_f}{A_w} + 1.2$		2.96				

	6 G 1			5 G 1		
	Y3 - Y6 x 11			Y3 - Y6 x 11		
	Y3 端	中 央	Y6 端	Y3 端	中 央	Y6 端
長期応力						
地震応力						
短期応力						
断 面	同 左			同 左		
Zx						
Zp						
MP						
M/Mp						
lb						
iy						
lb/iy						
lb·h/A _f						
f _b = $\frac{900 \cdot A_f}{lb \cdot h}$						
M ₂ /M ₁						
C						
i (h/6)						
K = $1 - 0.4 \frac{(\frac{lb}{i})^2}{\lambda^2}$						
f _b = K · f _t						
f _b						
σ _b = M/Z						
t × d						
Q _{As} (t)						
1.5 a/dw						
2 $\frac{A_f}{A_w} + 1.2$						

	A G 1			3 G 1		
	Y3 端	中央	Y6 端	Y3 端	中央	Y6 端
長期応力						
地震応力						
短期応力						
断面	端部 BH-850×300×16×(28) 中央 BH-850×300×12×(28)			端部 BH-1000×300×19×(25) 中央 BH-1000×300×16×(25)		
Zx	6680	7162		7131	7832	
Zp						
MP						
M/Mp						
lb	150	300		150	300	
iy	6.54	6.92		5.84	6.11	
lb/iy	22.9	43.4		25.7	49.1	
lb·h/A _f	152	303.6		200	400	
f _b = $\frac{900 \cdot A_f}{lb \cdot h}$					2.25	
M2/M1						
C						
i (h/6)						
K = $1 - 0.4 \frac{i}{A^2}$						
f _b = K · f _t						
f _b	3.30	2.20		3.30	2.20	
σ _b = M/Z	2.20	0.52		1.89	0.52	
t × d	1.6 × 79.4	1.2 × 79.4		1.9 × 95	1.6 × 95.0	
Q _{AS} (t)	171.5	128.6		243.6	205.2	
1.5 a/dw		11.38			9.41	
2 $\frac{A_f}{A_w} + 1.2$		2.96			2.19	

	R G 1			15 G 1		
	Y3 端	中央	Y6 端	Y3 端	中央	Y6 端
長期応力						
地震応力						
短期応力						
断面	端部 BH-850×300×16×(22) 中央 BH-850×300×12×(22)			端部 BH-1000×300×19×(25) 中央 BH-1000×300×16×(22)		
Zx	5325	5889		7131	7832	
Zp				7313		
MP				241.3		
M/Mp				0.28		
lb	150	300		210	210	
iy	6.16	6.58		5.84	6.11	
lb/iy	24.3	45.6		35.9	34.4	
lb·h/A _f	193	386.4		280	280	
f _b = $\frac{900 \cdot A_f}{lb \cdot h}$		2.32				
M2/M1						
C						
i (h/6)						
K = $1 - 0.4 \frac{i}{A^2}$						
f _b = K · f _t						
f _b	3.30	2.20		3.3	2.2	
σ _b = M/Z	1.63	0.94		2.74	1.10	
t × d	1.6 × 80.6	1.2 × 80.6		1.9 × 95	1.6 × 95.0	
Q _{AS} (t)	174.0	130.6		243.6	205.2	
1.5 a/dw		11.21			9.51	
2 $\frac{A_f}{A_w} + 1.2$		2.56			2.19	

	2 G1			G		
	Y3 端	中央	Y6 端	端	中央	端
長期応力	$\frac{34.4}{19.1} \quad 23.7 \quad \frac{43.2}{20.5}$					
地震応力	$(85.0) \quad \frac{88.8}{13.8} \quad 79.3 (75.5)$					
短期応力	$\frac{119.4}{32.9} \quad 118.7 \quad \frac{118.7}{39.3}$					
						
断面	端部 BH-850 x 300 x 16 x (28) 中央 BH-850 x 300 x 12 x (25)					
Zx	6680	7162				
ZP						
MP						
M/MP						
lb	150	300				
iy	6.54	6.92				
lb/iy	22.9	44.3				
lb·h/A _f	152	303.6				
$f_b = \frac{900 \cdot A_f}{lb \cdot h}$						
M2/M1						
C						
i (h/6)						
$K = 1 - 0.4 \frac{(\frac{lb}{i})^2}{\lambda^2}$						
f _b = K · f _t						
f _b	3.30	2.20				
σ _b = M/Z	1.79	0.33				
t × d	1.6 × 79.4	1.2 × 79.4				
Q _{AS} (t)	171.5	128.6				
1.5 a/dw		11.26				
$2 \frac{A_f}{A_w} + 1.2$		2.96				

	G			G		
	端	中央	端	端	中央	端
長期応力						
地震応力						
短期応力						
						
断面						
Zx						
ZP						
MP						
M/MP						
lb						
iy						
lb/iy						
lb·h/A _f						
$f_b = \frac{900 \cdot A_f}{lb \cdot h}$						
M2/M1						
C						
i (h/6)						
$K = 1 - 0.4 \frac{(\frac{lb}{i})^2}{\lambda^2}$						
f _b = K · f _t						
f _b						
σ _b = M/Z						
t × d						
Q _{AS} (t)						
1.5 a/dw						
$2 \frac{A_f}{A_w} + 1.2$						

	R G 2			15 G 2-A		
	Y6-Y7 x11			Y6-Y7 x11		
	端	中 央	端	端	中 央	端
長期応力	1.9	29.6		73.8	60.2	
	7.4	13.5	13.6	42.7	50.0	39.7
地震応力		37.6 (35.7)			81.5 (77.5)	
	(21.3)	23.2	6.8	(46.5)	50.5	14.7
短期応力	23.2	45.3		120.3	137.7	
	14.2	20.4		57.4	54.4	
	Y6 () Y7			Y6 () Y7		
断 面	端部 BH-850×250×16×22 中央 BH-850×250×12×19			端部 BH-1350×200×19×22 中央 BH-1350×200×19×19		
Zx	(算	定	外)	10149	6812	
Zp				12666		
MP				417.9		
M/MP				0.08		
lb				105	210	
iy				2.99	2.83	
lb/iy				35.1	74.2	
lb·h/A _f				322		
f _b = $\frac{900 \cdot A_f}{lb \cdot h}$					$\eta = 10.0$	
M2/M1						
C					C = 1.0	
i (h/e)						
K = $1 - 0.4 \frac{i}{\Lambda^2}$						
f _b = K · f _t						
f _b				3.3	1.74	
$\sigma_b = M/Z$				1.18	0.73	
t × d				1.9 × 130.6		
QAS (t)				334.9		
1.5 a/dw					4.8	
$2 \frac{A_f}{A_w} + 1.2$					1.5	

	14 G 2			13 G 2		
	Y6-Y7 x11			Y6-Y7 x11		
	端	中 央	端	端	中 央	端
長期応力	18.2	49.4		9.9	44.8	
	13.7	17.2	20.7	10.1	13.9	17.9
地震応力		80.6 (76.1)			91.9 (86.7)	
	(61.0)	65.5	16.2	(72.3)	77.5	18.8
短期応力	79.2	125.5		82.2	131.5	
	29.9	36.9		28.9	36.7	
	Y6 () Y7			Y6 () Y7		
断 面	同 右			端部 BH-850×250×16×22 中央 BH-850×250×12×19		
Zx				4375	4437	
Zp						
MP						
M/MP						
lb				300	150	
iy				5.07	4.90	
lb/iy				59.2	30.6	
lb·h/A _f				447	193	
f _b = $\frac{900 \cdot A_f}{lb \cdot h}$					$\eta = 9.1$	
M2/M1						
C					C = 1.0	
i (h/e)						
K = $1 - 0.4 \frac{i}{\Lambda^2}$						
f _b = K · f _t						
f _b				1.89	3.3	
$\sigma_b = M/Z$				0.32	2.96	
t × d				1.2 × 81.2	1.6 × 80.6	
QAS (t)					174.0	
1.5 a/dw				7.8		
$2 \frac{A_f}{A_w} + 1.2$				2.1		

	12 G 2			11 G 2		
	Y6 端	中 央	Y7 端	Y6 端	中 央	Y7 端
長期応力	10.6	44.0		11.6	43.3	
地震応力	10.3	13.9	17.7	10.5	13.8	17.5
短期応力	(81.1)	86.9	103.1 (99.3)	(86.3)	92.4	101.8 (95.7)
	91.6	141.3		97.9	139.0	
	31.4	38.8		32.8	39.8	
断 面	同 右			同 右		
Zx						
ZP						
MP						
$\bar{M}/M_P$						
l_b						
i_y						
l_b/i_y						
$l_b \cdot f_t / A_t$						
$f_b = \frac{900 \cdot A_t}{l_b \cdot h}$						
M_2/M_1						
C						
$\lambda (h/e)$						
$K = 1 - 0.4 \frac{(\frac{l_b}{i})^2}{\lambda^2}$						
$f_b = K \cdot f_t$						
f_b						
$\sigma_b = M/Z$						
$t \times d$						
$Q_{AS}(t)$						
$1.5 a/d_w$						
$2 \frac{A_t}{A_w} + 1.2$						

	10 G 2			9 G 2		
	Y6 端	中 央	Y7 端	Y6 端	中 央	Y7 端
長期応力	13.8	41.4		15.2	40.3	
地震応力	10.9	13.6	17.1	11.2	13.5	16.8
短期応力	(88.9)	95.2	111.4 (105.1)	(93.1)	99.6	115.0 (108.5)
	102.7	146.5		108.3	148.8	
	33.9	40.1		35.0	40.6	
断 面	同 右			同 右		
Zx						
ZP						
MP						
$\bar{M}/M_P$						
l_b						
i_y						
l_b/i_y						
$l_b \cdot h / A_t$						
$f_b = \frac{900 \cdot A_t}{l_b \cdot h}$						
M_2/M_1						
C						
$\lambda (h/e)$						
$K = 1 - 0.4 \frac{(\frac{l_b}{i})^2}{\lambda^2}$						
$f_b = K \cdot f_t$						
f_b						
$\sigma_b = M/Z$						
$t \times d$						
$Q_{AS}(t)$						
$1.5 a/d_w$						
$2 \frac{A_t}{A_w} + 1.2$						

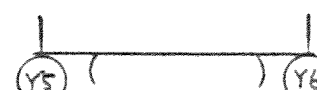
端部 BH-850×300×16×22
中央 BH-850×300×12×19

	8 G2			7 G2		
	Y6 端	中央	Y7 端	Y6 端	中央	Y7 端
長期応力	16.4	39.2		18.7	37.2	
地震応力	11.5	13.4	16.5	11.9	13.3	16.1
短期応力	(94.3)	100.9	24.1	(94.1)	100.7	24.0
	110.7	148.8		112.8	146.5	
	35.6	40.6		35.9	40.1	
断面	端部 BH-850×300×16×22 中央 BH-850×300×12×19			同 左		
Zx		5147	5325			
ZP						
MP						
M/M _P						
l _b		300	150			
i _Y		6.36	6.16			
l _b /i _Y		47.1	24.3			
l _b ·h/A _f		447	193			
f _b = $\frac{900 \cdot A_f}{l_b \cdot h}$						
M ₂ /M ₁						
C						
i (h/ε)						
K = 1 - 0.4 $\frac{(\frac{l_b}{i})^2}{\Lambda^2}$						
f _b = K · f _t						
f _b		2.01	3.3			
σ _b = M/Z		0.26	2.79			
t × d		1.2 × 81.2	1.6 × 80.6			
Q A _s (t)		131.5	174.0			
1.5 a/d _w		7.8				
2 $\frac{A_s}{A_w} + 1.2$		2.1				

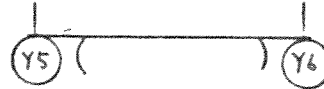
	6 G2			5 G2		
	Y6 端	中央	Y7 端	Y6 端	中央	Y7 端
長期応力	20.5	35.8		24.3	34.3	
地震応力	12.3	13.1	15.7	13.5	13.9	15.7
短期応力	(94.2)	100.8	23.9	(92.1)	98.6	23.7
	114.7	143.3		116.4	142.4	
	36.2	39.6		37.2	39.4	
断面	同 左			同 左		
Zx						
ZP						
MP						
M/M _P						
l _b						
i _Y						
l _b /i _Y						
l _b ·h/A _f						
f _b = $\frac{900 \cdot A_f}{l_b \cdot h}$						
M ₂ /M ₁						
C						
i (h/ε)						
K = 1 - 0.4 $\frac{(\frac{l_b}{i})^2}{\Lambda^2}$						
f _b = K · f _t						
f _b						
σ _b = M/Z						
t × d						
Q A _s (t)						
1.5 a/d _w						
2 $\frac{A_s}{A_w} + 1.2$						

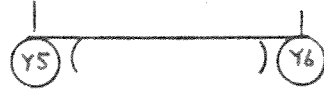
	4 G2				3 G2-A			
	$\frac{Y6-Y7}{\times 11}$				$\frac{Y6-Y7}{\times 11}$			
	Y6 端	中 央	Y7 端	端	Y6 端	中 央	Y7 端	端
長期応力	$\begin{array}{ccc} 25.1 & & 36.8 \\ & 12.3 & \\ 13.3 & & 15.9 \end{array}$				$\begin{array}{ccc} 35.5 & & 25.3 \\ & 12.8 & \\ 15.7 & & 13.5 \end{array}$			
地震応力	$\begin{array}{ccc} (64.0) & 68.4 & 14.6 \\ & 64.0 & (60.0) \end{array}$				$\begin{array}{ccc} (59.7) & 63.8 & 14.8 \\ & 69.7 & (65.6) \end{array}$			
短期応力	$\begin{array}{ccc} 89.1 & & 100.8 \\ & & \\ 27.6 & & 30.5 \end{array}$				$\begin{array}{ccc} 95.5 & & 90.9 \\ & & \\ 30.5 & & 28.3 \end{array}$			
								
断 面	端部 BH-850×300×16×22 中央 BH-850×300×12×19				端部 BH-1000×300×19×25 中央 BH-1000×300×16×22			
Zx					7131	7267		
ZP	(84 1=3放)							
MP								
$\bar{M}/M_F$								
l_b					150	300		
i_Y					5.84	5.90		
l_b/i_Y					25.7	50.8		
$l_b \cdot h/A_t$					200	454		
$f_b = \frac{900 \cdot A_t}{l_b \cdot h}$						$\eta = 8.9$		
M_2/M_1								
C						C=1.0		
$i (h/6)$								
$K = 1 - 0.4 \frac{(l_b)^2}{\Lambda^2}$								
$f_b = K \cdot f_t$								
f_b					3.3	1.98		
$\sigma_b = M/Z$					1.34	0.18		
$t \times d$					1.9×95	1.6×95.6		
$\theta_{AS}(t)$					243.6	206.4		
$1.5 \sigma/dw$						6.6		
$2 \frac{A_t}{A_w} + 1.2$						2.1		

	2 G2		$\frac{Y6 - Y7}{\times 10}$		G		
	Y6 端	中 央	Y7 端		端	中 央	端
長期応力	$\begin{array}{ccc} 33.4 & & 33.6 \\ & 17.5 & \\ 17.2 & & 17.2 \end{array}$						
地震応力	$\begin{array}{ccc} (70.3) & 74.8 & 16.4 \\ & 72.8 & (68.3) \end{array}$						
短期応力	$\begin{array}{ccc} 70.3 & & 101.9 \\ & & \\ 33.6 & & 33.6 \end{array}$						
							
断 面	端 部 BH-850 x 300 x 16 x 22 中 央 BH-850 x 300 x 12 x 19						
Zx		5147	5325				
ZP							
MP							
$\bar{M}/M$							
l_b		300	150				
i_Y		6.36	6.16				
l_b/i_Y		47.1	24.6				
$l_b \cdot h/A_t$		447	193				
$f_b = \frac{900 \cdot A_t}{l_b \cdot h}$							
M_2/M_1							
C							
$\lambda (h/6)$							
$K = 1 - 0.4 \frac{(\frac{l_b}{\lambda})^2}{\lambda^2}$							
$f_b = K \cdot f_t$							
f_b		2.01	2.3				
$\sigma_b = M/Z$		0.34	1.91				
$t \times d$		1.2 x 81.2	1.6 x 80.6				
$\theta_{As}(t)$		131.5	174.0				
1.5 σ/dw		7.8					
$2 \frac{A_t}{A_w} + 1.2$		2.1					

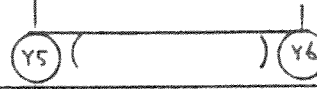
	R G5 $\frac{Y5-Y6}{\times 9}$			15 G5 $\frac{Y5-Y6}{\times 9}$		
	Y5 端	中央	Y6 端	Y5 端	中央	Y6 端
長期応力	$\frac{11.3}{11.2} \quad \frac{8.4}{11.2}$			$\frac{8.0}{6.2} \quad \frac{7.0}{6.2}$		
地震応力	$\frac{35.4 (30.4)}{(30.0) \quad 35.5 \quad 20.0}$			$\frac{63.4 (53.7)}{(53.7) \quad 63.4 \quad 35.2}$		
短期応力	$\frac{41.3}{21.2} \quad \frac{38.8}{21.2}$			$\frac{61.7}{41.4} \quad \frac{60.7}{41.4}$		
						
断面	8 G5 1=1枚う			8 G5 1=1枚う		
Zx						
Zp						
MP						
$\bar{M}/M_p$						
l_b						
i_y						
l_b/i_y						
$l_b \cdot h/A_f$						
$f_b = \frac{900 \cdot A_f}{l_b \cdot h}$						
M_2/M_1						
C						
$i(h/6)$						
$K = 1 - 0.4 \frac{(\frac{l_b}{i})^2}{C A^2}$						
$f_b = K \cdot f_t$						
f_b						
$\sigma_b = M/Z$						
$t \times d$						
$Q_{As}(t)$						
$1.5 a/dw$						
$2 \frac{A_f}{A_w} + 1.2$						

	14 G5 $\frac{Y5-Y6}{\times 9}$			13 G5 $\frac{Y5-Y6}{\times 9}$		
	Y5 端	中央	Y6 端	Y5 端	中央	Y6 端
長期応力	$\frac{6.1}{4.5} \quad \frac{4.5}{4.5}$			$\frac{3.7}{2.6} \quad \frac{3.2}{2.6}$		
地震応力	$\frac{80.8 (68.5)}{(68.5) \quad 80.8 \quad 44.9}$			$\frac{94.5 (80.1)}{(80.2) \quad 94.6 \quad 52.5}$		
短期応力	$\frac{74.6}{49.4} \quad \frac{73.0}{49.4}$			$\frac{83.9}{55.1} \quad \frac{83.3}{55.1}$		
						
断面	8 G5 1=1枚う			8 G5 1=1枚う		
Zx						
Zp						
MP						
$\bar{M}/M$						
l_b						
i_y						
l_b/i_y						
$l_b \cdot h/A_f$						
$f_b = \frac{900 \cdot A_f}{l_b \cdot h}$						
M_2/M_1						
C						
$i(h/6)$						
$K = 1 - 0.4 \frac{(\frac{l_b}{i})^2}{C A^2}$						
$f_b = K \cdot f_t$						
f_b						
$\sigma_b = M/Z$						
$t \times d$						
$Q_{As}(t)$						
$1.5 a/dw$						
$2 \frac{A_f}{A_w} + 1.2$						

	12 G5 $\frac{Y5-Y6}{\times 9}$			11 G5 $\frac{Y5-Y6}{\times 9}$		
	Y5 端	中央	Y6 端	Y5 端	中央	Y6 端
長期応力	$\frac{4.0}{2.7} \quad \frac{2.9}{2.7}$			$\frac{3.9}{2.7} \quad \frac{2.7}{2.7}$		
地震応力	$\frac{(87.2) \quad 102.9 \quad 57.2}{102.9 \quad (87.2)}$			$\frac{(92.7) \quad 109.4 \quad 60.8}{109.4 \quad (92.7)}$		
短期応力	$\frac{91.2}{59.9} \quad \frac{90.1}{59.9}$			$\frac{96.6}{63.5} \quad \frac{95.4}{63.5}$		
						
断面	8G5 1=1.5m			8G5 1=1.5m		
Zx						
Zp						
MP						
$\bar{M}/M_P$						
l_b						
i_y						
l_b/i_y						
$l_b \cdot h/A_f$						
$f_b = \frac{900 \cdot A_f}{l_b \cdot h}$						
M_2/M_1						
C						
$i(h/6)$						
$K = 1 - 0.4 \frac{(\frac{l_b}{i})^2}{\lambda^2}$						
$f_b = K \cdot f_t$						
f_b						
$\sigma_b = M/Z$						
$t \times d$						
$Q_{As}(t)$						
$1.5 a/dw$						
$2 \frac{A_f}{A_w} + 1.2$						

	10 G5 $\frac{Y5-Y6}{\times 9}$			9 G5 $\frac{Y5-Y6}{\times 9}$		
	Y5 端	中央	Y6 端	Y5 端	中央	Y6 端
長期応力	$\frac{3.9}{2.8} \quad \frac{2.5}{2.8}$			$\frac{3.9}{2.8} \quad \frac{2.5}{2.8}$		
地震応力	$\frac{(96.8) \quad 114.3 \quad 63.5}{114.3 \quad (96.8)}$			$\frac{(103.0) \quad 121.6 \quad 67.5}{121.6 \quad (103.0)}$		
短期応力	$\frac{100.7}{66.3} \quad \frac{99.3}{66.3}$			$\frac{106.9}{70.3} \quad \frac{105.5}{70.3}$		
						
断面	8G5 1=1.5m			8G5 1=1.5m		
Zx						
Zp						
MP						
$\bar{M}/M_P$						
l_b						
i_y						
l_b/i_y						
$l_b \cdot h/A_f$						
$f_b = \frac{900 \cdot A_f}{l_b \cdot h}$						
M_2/M_1						
C						
$i(h/6)$						
$K = 1 - 0.4 \frac{(\frac{l_b}{i})^2}{\lambda^2}$						
$f_b = K \cdot f_t$						
f_b						
$\sigma_b = M/Z$						
$t \times d$						
$Q_{As}(t)$						
$1.5 a/dw$						
$2 \frac{A_f}{A_w} + 1.2$						

	8 G5			7 G5		
	Y5-Y6 x9			Y5-Y6 x9		
	Y5 端	中央	Y6 端	Y5 端	中央	Y6 端
長期応力	$\frac{3.8 \quad 2.4}{2.8}$			$\frac{3.6 \quad 2.2}{2.8}$		
地震応力	$\frac{(117.2) \quad 126.5 \quad 126.4 \quad (117.1)}{126.5 \quad 170.2}$			$\frac{(105.8) \quad 124.9 \quad 124.8 \quad (105.7)}{124.9 \quad 69.3}$		
短期応力	$\frac{121.0 \quad 119.5}{73.0}$			$\frac{109.4 \quad 107.9}{72.1}$		
						
断面	端部 } BH-600x300x12x22 中央 }			同 左		
Zx	3677					
Zp						
MP						
M/Mp						
lb	155					
iy	7.06					
lb/iy	21.9					
lb·h/A _t	141					
$f_b = \frac{900 \cdot A_t}{lb \cdot h}$						
M ₂ /M ₁						
C						
i (h/6)						
$K = 1 - 0.4 \frac{(lb)^2}{A^2}$						
f _b = K · f _t						
f _b	3.3					
σ _b = M/Z	3.29					
t × d	1.2 × 55.6	1.2 × 55.6				
Q _{As} (t)	90.0	90.0				
1.5 a/dw		4.1				
$2 \frac{A_t}{A_w} + 1.2$		3.1				

	6 G5			5 G5		
	Y5-Y6 x9			Y5-Y6 x9		
	Y5 端	中央	Y6 端	Y5 端	中央	Y6 端
長期応力	$\frac{3.6 \quad 2.3}{2.8}$			$\frac{3.2 \quad 2.4}{2.6}$		
地震応力	$\frac{(105.7) \quad 124.7 \quad 124.6 \quad (105.6)}{124.7 \quad 69.2}$			$\frac{(103.8) \quad 122.5 \quad 122.3 \quad (103.6)}{122.5 \quad 68.0}$		
短期応力	$\frac{109.3 \quad 107.9}{72.0}$			$\frac{107.0 \quad 106.0}{70.6}$		
						
断面	同 左			同 左		
Zx						
Zp						
MP						
M/Mp						
lb						
iy						
lb/iy						
lb·h/A _t						
$f_b = \frac{900 \cdot A_t}{lb \cdot h}$						
M ₂ /M ₁						
C						
i (h/6)						
$K = 1 - 0.4 \frac{(lb)^2}{A^2}$						
f _b = K · f _t						
f _b						
σ _b = M/Z						
t × d						
Q _{As} (t)						
1.5 a/dw						
$2 \frac{A_t}{A_w} + 1.2$						

	4 G5 $\frac{Y5-Y6}{\times 9}$			3 G5 $\frac{Y5-Y6}{\times 9}$		
	Y5 端	中央	Y6 端	Y5 端	中央	Y6 端
長期応力	$\frac{4.5}{3.3} \quad 1.1$			$\frac{5.1}{3.9} \quad 0.1$		
地震応力	$(84.7) \quad \frac{100.0}{55.5} \quad (84.7)$			$(80.8) \quad \frac{95.3}{52.9} \quad (80.7)$		
短期応力	$\frac{89.2}{58.8} \quad 85.8$			$\frac{85.9}{56.8} \quad 80.8$		
断面	8G51= 1筋			8G51= 1筋		
Zx						
Zp						
MP						
$\bar{M}/M_p$						
l_b						
i_y						
l_b/i_y						
$l_b \cdot h/A_t$						
$f_b = \frac{900 \cdot A_t}{l_b \cdot h}$						
M_2/M_1						
C						
$i(h/6)$						
$K = 1 - 0.4 \frac{i}{\lambda^2}$						
$f_b = K \cdot f_t$						
f_b						
$\sigma_b = M/Z$						
$t \times d$						
$Q_{AS}(t)$						
$1.5 a/d_w$						
$2 \frac{A_t}{A_w} + 1.2$						

	2 G5 $\frac{Y5-Y6}{\times 9}$			G		
	Y5 端	中央	Y6 端	端	中央	端
長期応力	$\frac{3.9}{3.3} \quad 2.6$					
地震応力	$(95.6) \quad \frac{112.8}{62.7} \quad (95.7)$					
短期応力	$\frac{99.5}{66.0} \quad 98.3$					
断面	8G51= 1筋					
Zx						
Zp						
MP						
$\bar{M}/M_p$						
l_b						
i_y						
l_b/i_y						
$l_b \cdot h/A_t$						
$f_b = \frac{900 \cdot A_t}{l_b \cdot h}$						
M_2/M_1						
C						
$i(h/6)$						
$K = 1 - 0.4 \frac{i}{\lambda^2}$						
$f_b = K \cdot f_t$						
f_b						
$\sigma_b = M/Z$						
$t \times d$						
$Q_{AS}(t)$						
$1.5 a/d_w$						
$2 \frac{A_t}{A_w} + 1.2$						

	R G 102 $\frac{x15-x16}{Y7}$			15 G 102 $\frac{x15-x16}{Y7}$		
	x15 端	中央	x16 端	x15 端	中央	x16 端
長期応力						
地震応力						
短期応力						
断面	同 右			端部 BH-850x300x16x22 中央 BH-850x300x12x19		
Zx				5147	5325	
Zp					5465	
MP					180.0	
$\bar{M}/M_p$						
l_b				230	230	
i_y				6.36	6.16	
l_b/i_y				36.1	37.0	
$l_b \cdot h/A_f$						
$f_b = \frac{900 \cdot A_f}{l_b \cdot h}$						
M_2/M_1						
C						
$i(h/6)$						
$K = 1 - 0.4 \frac{(\frac{l_b}{i})^2}{\lambda^2}$						
$f_b = K \cdot f_t$						
f_b				2.2	0.0	
$\sigma_b = M/Z$				0.14	1.77	
$t \times d$				1.2 x 81.2	1.6 x 80.6	
$Q_{As}(t)$				131.5	174.1	
$1.5 a/dw$				6.14		
$2 \frac{A_f}{A_w} + 1.2$				2.37		

	14 G 102 $\frac{x15-x16}{Y7}$			13 G 102 $\frac{x15-x16}{Y7}$		
	x15 端	中央	x16 端	x15 端	中央	x16 端
長期応力						
地震応力						
短期応力						
断面	同 右			端部 BH-850x250x16x22 中央 BH-850x250x12x19		
Zx				4375	4437	
Zp					4554	
MP					150.2	
$\bar{M}/M_p$						
l_b				230	230	
i_y				5.07	4.90	
l_b/i_y				45.4	46.9	
$l_b \cdot h/A_f$						
$f_b = \frac{900 \cdot A_f}{l_b \cdot h}$				$\gamma = 9.0$	$\gamma = 8.1$	
M_2/M_1						
C						
$i(h/6)$						
$K = 1 - 0.4 \frac{(\frac{l_b}{i})^2}{\lambda^2}$						
$f_b = K \cdot f_t$						
f_b				2.2	3.3	
$\sigma_b = M/Z$				0.25	2.58	
$t \times d$				1.2 x 81.2	1.6 x 80.6	
$Q_{As}(t)$				131.5	174.1	
$1.5 a/dw$				6.14		
$2 \frac{A_f}{A_w} + 1.2$				2.17		

	12 G 102 $\frac{x15-x16}{Y7}$			11 G 102 $\frac{x15-x16}{Y7}$		
	x15 端	中央	x16 端	x15 端	中央	x16 端
長期応力	$\frac{21.3}{12.6} \quad \frac{5.6}{8.2}$			$\frac{21.5}{12.4} \quad \frac{5.6}{8.4}$		
地震応力	$(105.0) \quad \frac{114.5}{34.5} \quad 133.5 (124.0)$			$(113.9) \quad \frac{124.1}{37.0} \quad 142.0 (131.8)$		
短期応力	$\frac{126.3}{47.1} \quad \frac{129.6}{42.7}$			$\frac{135.4}{49.4} \quad \frac{137.4}{45.4}$		
断面	同 右			同 右		
Zx						
ZP						
MP						
$\bar{M}/M_P$						
l_b						
i_Y						
l_b/i_Y						
$l_b \cdot h/A_f$						
$f_b = \frac{900 \cdot A_f}{l_b \cdot h}$						
M_2/M_1						
C						
$i(h/6)$						
$K = 1 - 0.4 \frac{(l_b)^2}{A^2}$						
$f_b = K \cdot f_t$						
f_b						
$\sigma_b = M/Z$						
$t \times d$						
$\theta_{AS}(t)$						
$1.5 a/dw$						
$2 \frac{A_f}{A_w} + 1.2$						

	10 G 102 $\frac{x15-x16}{Y7}$			9 G 102 $\frac{x15-x16}{Y7}$		
	x15 端	中央	x16 端	x15 端	中央	x16 端
長期応力	$\frac{21.2}{12.5} \quad \frac{5.9}{8.3}$			$\frac{20.9}{12.4} \quad \frac{6.2}{8.4}$		
地震応力	$(109.3) \quad \frac{129.9}{39.5} \quad 147.6 (137.0)$			$(125.1) \quad \frac{136.1}{40.1} \quad 152.6 (141.6)$		
短期応力	$\frac{140.5}{51.0} \quad \frac{142.9}{46.8}$			$\frac{146.0}{52.5} \quad \frac{147.8}{48.5}$		
断面	同 右			端部 BH-850×300×16×22 中央 BH-850×300×12×19		
Zx					5147	5325
ZP						5465
MP						180.3
$\bar{M}/M_P$						
l_b					230	230
i_Y					6.36	6.16
l_b/i_Y					36.1	37.3
$l_b \cdot h/A_f$						
$f_b = \frac{900 \cdot A_f}{l_b \cdot h}$						
M_2/M_1						
C						
$i(h/6)$						
$K = 1 - 0.4 \frac{(l_b)^2}{A^2}$						
$f_b = K \cdot f_t$						
f_b					2.2	3.3
$\sigma_b = M/Z$						2.78
$t \times d$					1.2×81.2	1.6×80.6
$\theta_{AS}(t)$					131.5	174.1
$1.5 a/dw$					6.14	
$2 \frac{A_f}{A_w} + 1.2$					2.37	

	8 G 102 $\frac{x15-x16}{Y7}$			7 G 102 $\frac{x15-x16}{Y7}$		
	x15 端	中央	x16 端	x15 端	中央	x16 端
長期応力	$\begin{array}{ccc} 20.6 & & 6.6 \\ & 10.9 & \\ 12.3 & & 8.5 \end{array}$			$\begin{array}{ccc} 20.3 & & 6.9 \\ & 10.9 & \\ 12.3 & & 8.5 \end{array}$		
地震応力	$\begin{array}{ccc} & 154.7 (143.5) & \\ (128.6) & 139.8 & 40.9 \end{array}$			$\begin{array}{ccc} & 159.3 (147.7) & \\ (133.7) & 145.3 & 42.1 \end{array}$		
短期応力	$\begin{array}{ccc} 149.2 & & 150.1 \\ & & \\ 53.2 & & 49.4 \end{array}$			$\begin{array}{ccc} 154.0 & & 154.6 \\ & & \\ 54.4 & & 50.6 \end{array}$		
	$\begin{array}{ccc} & 7.2 & \\ \textcircled{x15} & (6.65) & \textcircled{x16} \end{array}$			$\begin{array}{ccc} & 7.2 & \\ \textcircled{x15} & (6.65) & \textcircled{x16} \end{array}$		
断面	端部 BH-850 x 300 x 16 x 22 中央 BH-850 x 300 x 12 x 19			端部 BH-850 x 300 x 16 x 25 中央 BH-850 x 300 x 12 x 22		
Zx		5147	5325	6007	5329	
ZP			5465	6188		
MP			180.3	204.2		
$\bar{M}/M_P$						
l_b		230	230	230	230	
i_Y		6.36	6.16	6.36	6.58	
l_b/i_Y		36.1	37.3	36.1	35.0	
$l_b \cdot h/A_f$				260		
$f_b = \frac{900 \cdot A_f}{l_b \cdot h}$						
M_2/M_1						
C						
$i (h/6)$						
$K = 1 - 0.4 \frac{(l_b)^2}{A^2}$						
$f_b = K \cdot f_t$						
f_b		2.2	3.3	3.3	2.2	
$\sigma_b = M/Z$		0.21	2.82	2.56	0.20	
$t \times d$		1.2 x 81.2	1.6 x 80.6	1.6 x 80.0	1.2 x 80.6	
$Q_{AS}(t)$		131.5	174.1	172.8	130.6	
$1.5 a/dw$		6.14			6.19	
$2 \frac{A_f}{A_w} + 1.2$		2.37			2.56	

	6 G 102 $\frac{x15-x16}{Y7}$			5 G 102 $\frac{x15-x16}{Y7}$		
	x15 端	中央	x16 端	x15 端	中央	x16 端
長期応力	$\begin{array}{ccc} 19.6 & & 7.7 \\ & 10.8 & \\ 12.1 & & 8.7 \end{array}$			$\begin{array}{ccc} 19.0 & & 8.2 \\ & 10.9 & \\ 11.9 & & 8.9 \end{array}$		
地震応力	$\begin{array}{ccc} & 158.4 (146.8) & \\ (132.8) & 144.4 & 42.1 \end{array}$			$\begin{array}{ccc} & 156.8 (145.3) & \\ (132.6) & 144.1 & 41.8 \end{array}$		
短期応力	$\begin{array}{ccc} 152.4 & & 154.5 \\ & & \\ 54.2 & & 50.8 \end{array}$			$\begin{array}{ccc} 151.6 & & 153.5 \\ & & \\ 53.7 & & 50.7 \end{array}$		
	$\begin{array}{ccc} & & \\ \textcircled{x15} & () & \textcircled{x16} \end{array}$			$\begin{array}{ccc} & & \\ \textcircled{x15} & () & \textcircled{x16} \end{array}$		
断面	同 左			同 左		
Zx						
ZP						
MP						
$\bar{M}/M_P$						
l_b						
i_Y						
l_b/i_Y						
$l_b \cdot h/A_f$						
$f_b = \frac{900 \cdot A_f}{l_b \cdot h}$						
M_2/M_1						
C						
$i (h/6)$						
$K = 1 - 0.4 \frac{(l_b)^2}{A^2}$						
$f_b = K \cdot f_t$						
f_b						
$\sigma_b = M/Z$						
$t \times d$						
$Q_{AS}(t)$						
$1.5 a/dw$						
$2 \frac{A_f}{A_w} + 1.2$						

	4 G 102 $\frac{x15-x16}{Y7}$			3 G 102 $\frac{x15-x16}{Y7}$		
	x15 端	中央	x16 端	x15 端	中央	x16 端
長期応力	$\begin{array}{ccc} 23.6 & & 14.8 \\ & 12.6 & \\ 16.5 & & 14.1 \end{array}$			$\begin{array}{ccc} 18.3 & & 10.1 \\ & 11.5 & \\ 12.4 & & 10.2 \end{array}$		
地震応力	$\begin{array}{ccc} (114.1) & 123.9 & 134.0 (124.2) \\ & & \\ & 35.8 & \end{array}$			$\begin{array}{ccc} (112.1) & 121.8 & 132.1 (122.4) \\ & & \\ & 35.3 & \end{array}$		
短期応力	$\begin{array}{ccc} 137.7 & & 139.0 \\ & & \\ 52.3 & & 49.9 \end{array}$			$\begin{array}{ccc} 130.4 & & 132.5 \\ & & \\ 47.7 & & 45.5 \end{array}$		
断面	同 右			同 右		
Zx						
Zp						
MP						
$\bar{M}/M_P$						
l_b						
i_y						
l_b/i_y						
$l_b \cdot h/A_f$						
$f_b = \frac{900 \cdot A_f}{l_b \cdot h}$						
M_2/M_1						
C						
$i(h/6)$						
$K = 1 - 0.4 \frac{(l_b)^2}{A^2}$						
$f_b = K \cdot f_t$						
f_b						
$\sigma_b = M/Z$						
$t \times d$						
$Q_{AS}(t)$						
$1.5 a/d_w$						
$2 \frac{A_f}{A_w} + 1.2$						

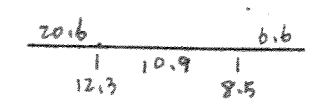
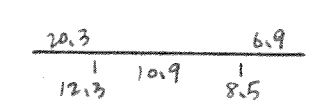
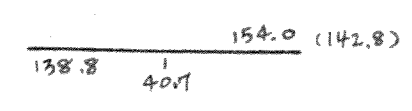
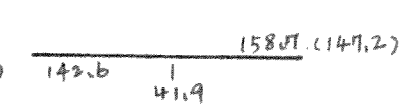
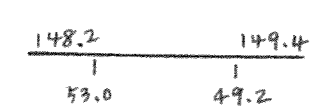
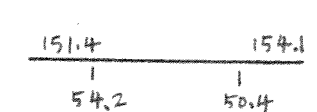
	2 G 102 $\frac{x15-x16}{Y7}$			R G 102 $\frac{x14-x15}{x7}$		
	x15 端	中央	x16 端	x14 端	中央	x15 端
長期応力	$\begin{array}{ccc} 16.6 & & 11.7 \\ & 11.5 & \\ 12.0 & & 10.6 \end{array}$			$\begin{array}{ccc} 9.4 & & 6.6 \\ & 3.5 & \\ 6.7 & & 6.1 \end{array}$		
地震応力	$\begin{array}{ccc} (127.6) & 138.3 & 142.6 (131.9) \\ & & \\ & 39.0 & \end{array}$			$\begin{array}{ccc} (54.7) & 59.0 & 54.1 (49.8) \\ & & \\ & 15.7 & \end{array}$		
短期応力	$\begin{array}{ccc} 144.2 & & 143.6 \\ & & \\ 51.0 & & 49.6 \end{array}$			$\begin{array}{ccc} 64.1 & & 56.4 \\ & & \\ 22.4 & & 21.8 \end{array}$		
断面	端部 BH-850 x 300 x 16 x (25) 中央 BH-850 x 300 x 12 x (22)			端部 BH-850 x 300 x 16 x (22) 中央 BH-850 x 300 x 12 x (19)		
Zx	6007	5329				
Zp	6188			(算 定 外)		
MP	204.2					
$\bar{M}/M$						
l_b	230	230				
i_y	6.36	6.58				
l_b/i_y	36.1	35.0				
$l_b \cdot h/A_f$	260					
$f_b = \frac{900 \cdot A_f}{l_b \cdot h}$						
M_2/M_1						
C						
$i(h/6)$						
$K = 1 - 0.4 \frac{(l_b)^2}{A^2}$						
$f_b = K \cdot f_t$						
f_b	3.3	2.2				
$\sigma_b = M/Z$	2.40	0.22				
$t \times d$	1.6 x 80.0	1.2 x 80.6				
$Q_{AS}(t)$	172.8	130.6				
$1.5 a/d_w$		6.19				
$2 \frac{A_f}{A_w} + 1.2$		2.56				

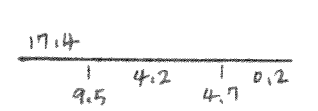
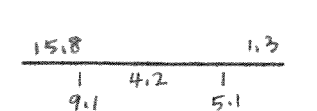
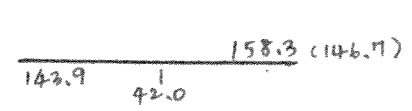
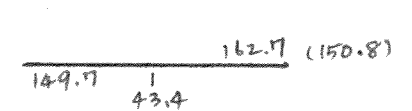
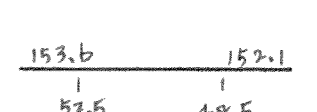
	R G 102			15 G 102		
	$\frac{x15-x16}{Y3}$			$\frac{x15-x16}{Y3}$		
	x15 端	中央	x16 端	x15 端	中央	x16 端
長期応力						
地震応力						
短期応力						
断面	同 右			端部 BH-850×300×16×22 中央 BH-850×300×12×19		
Zx				5147	5325	
ZP					5465	
MP					180.3	
$\bar{M}/M_P$					0.16	
l_b				230	230	
i_y				6.36	6.16	
l_b/i_y				36.2	37.3	
$l_b \cdot h/A_f$					296	
$f_b = \frac{900 \cdot A_f}{l_b \cdot h}$						
M_2/M_1						
C						
$i(h/6)$						
$K = 1 - 0.4 \frac{(l_b)^2}{A^2}$						
$f_b = K \cdot f_t$						
f_b				2.2	3.3	
$\sigma_b = M/Z$				0.44	1.75	
$t \times d$				1.2 × 81.2	1.6 × 80.6	
$Q_{AS}(t)$				131.5	174.1	
$1.5 a/dw$				6.14		
$2 \frac{A_f}{A_w} + 1.2$				2.37		

	X14 G 102			13 G 102		
	$\frac{x15-x16}{Y3}$			$\frac{x15-x16}{Y3}$		
	x15 端	中央	x16 端	x15 端	中央	x16 端
長期応力						
地震応力						
短期応力						
断面	同 右			端部 BH-850×250×16×22 中央 BH-850×250×12×19		
Zx				4375	4437	
ZP					4554	
MP					150.2	
$\bar{M}/M_P$						
l_b				230	230	
i_y				5.07	4.90	
l_b/i_y				45.4	46.9	
$l_b \cdot h/A_f$						
$f_b = \frac{900 \cdot A_f}{l_b \cdot h}$				$\gamma = \frac{i_h}{A_f} = 9.0$	$\gamma = 8.1$	
M_2/M_1						
C						
$i(h/6)$						
$K = 1 - 0.4 \frac{(l_b)^2}{A^2}$						
$f_b = K \cdot f_t$						
f_b				2.2	3.3	
$\sigma_b = M/Z$					2.56	
$t \times d$				1.2 × 81.2	1.6 × 80.6	
$Q_{AS}(t)$				131.5	174.1	
$1.5 a/dw$				6.14		
$2 \frac{A_f}{A_w} + 1.2$				2.17		

	12 G 102 $\frac{x15-x16}{Y3}$			11 G 102 $\frac{x15-x16}{Y3}$		
	x15 端	中央	x16 端	x15 端	中央	x16 端
長期応力	$\frac{21.3}{12.6} \quad \frac{6.5}{8.4}$			$\frac{21.5}{12.4} \quad \frac{5.6}{8.4}$		
地震応力	$(103.6) \quad \frac{113.0}{34.1} \quad 132.3 (122.9)$			$(112.7) \quad \frac{122.8}{36.6} \quad 140.9 (130.8)$		
短期応力	$\frac{124.9}{46.7} \quad \frac{129.4}{42.5}$			$\frac{134.2}{49.0} \quad \frac{136.4}{45.0}$		
断面	(同 右)			(同 右)		
Zx						
Zp						
MP						
$\bar{M}/M_p$						
l_b						
i_y						
l_b/i_y						
$l_b \cdot h/A_f$						
$f_b = \frac{900 \cdot A_f}{l_b \cdot h}$						
M_2/M_1						
C						
$i(h/6)$						
$K = 1 - 0.4 \frac{(l_b)^2}{\Lambda^2}$						
$f_b = K \cdot f_t$						
f_b						
$\sigma_b = M/Z$						
$t \times d$						
$\theta_{AS}(t)$						
$1.5 \alpha/dw$						
$2 \frac{A_f}{A_w} + 1.2$						

	10 G 102 $\frac{x15-x16}{Y3}$			9 G 102 $\frac{x15-x16}{Y3}$		
	x15 端	中央	x16 端	x15 端	中央	x16 端
長期応力	$\frac{21.2}{12.5} \quad \frac{5.9}{8.3}$			$\frac{20.9}{12.4} \quad \frac{6.2}{8.4}$		
地震応力	$(118.3) \quad \frac{128.8}{38.2} \quad 146.6 (136.1)$			$(124.2) \quad \frac{135.1}{39.8} \quad 151.7 (140.8)$		
短期応力	$\frac{139.5}{50.7} \quad \frac{142.0}{46.5}$			$\frac{145.1}{52.2} \quad \frac{147.0}{48.2}$		
断面	(同 右)			端部 BH-850×300×16×22 中央 BH-850×300×12×19		
Zx				5147	5329	
Zp						
MP						
$\bar{M}/M$						
l_b				230	230	
i_y				6.58	6.58	
l_b/i_y				36.2	34.9	
$l_b \cdot h/A_f$						148.1
$f_b = \frac{900 \cdot A_f}{l_b \cdot h}$						
M_2/M_1						
C						
$i(h/6)$						
$K = 1 - 0.4 \frac{(l_b)^2}{\Lambda^2}$						
$f_b = K \cdot f_t$						
f_b				2.2	3.0	
$\sigma_b = M/Z$						2.76
$t \times d$				1.2×81.2	1.6×80.6	
$\theta_{AS}(t)$				131.5	174.1	
$1.5 \alpha/dw$				6.14		
$2 \frac{A_f}{A_w} + 1.2$				2.37		

	8 G 102 $\frac{x15-x16}{Y3}$			7 G 102 $\frac{x15-x16}{Y3}$		
	x15 端	中央	x16 端	x15 端	中央	x16 端
長期応力						
地震応力						
短期応力						
断面	端部 BH-850x300x16x22 中央 BH-850x300x12x19			端部 BH-850x300x16x25 中央 BH-850x300x12x22		
Zx		5147	5325		5325	6007
Zp						6188
MP						204.2
M/Mp						0.18
lb		230	230		230	230
iy		6.36	6.58		6.58	6.36
lb/iy		36.2	34.9		35.0	36.2
lb·h/A _t			148.1			130.3
f _b = $\frac{900 \cdot A_t}{lb \cdot h}$						
M2/M1						
C						
i (h/6)						
K = 1 - 0.4 $\frac{(\frac{lb}{i})^2}{A^2}$						
f _b = K · f _t						
f _b		2.2	3.3		2.2	3.3
σ _b = M/Z		0.79	2.80		0.60	2.56
t × d		1.2 × 81.2	1.6 × 80.6		1.2 × 80.6	1.6 × 80.0
Q _{AS} (t)		131.5	174.1		130.6	172.8
1.5 a/dw		6.14			6.19	
2 $\frac{A_t}{A_w} + 1.2$		2.37			2.56	

	6 G 102 $\frac{x15-x16}{Y3}$			5 G 102 $\frac{x15-x16}{Y3}$		
	x15 端	中央	x16 端	x15 端	中央	x16 端
長期応力						
地震応力						
短期応力						
断面	(同 左)			(同 左)		
Zx						
Zp						
MP						
M/Mp						
lb						
iy						
lb/iy						
lb·h/A _t						
f _b = $\frac{900 \cdot A_t}{lb \cdot h}$						
M2/M1						
C						
i (h/6)						
K = 1 - 0.4 $\frac{(\frac{lb}{i})^2}{A^2}$						
f _b = K · f _t						
f _b						
σ _b = M/Z						
t × d						
Q _{AS} (t)						
1.5 a/dw						
2 $\frac{A_t}{A_w} + 1.2$						

	4 G102 $\frac{x15-x16}{Y3}$			3 G102 $\frac{x15-x16}{Y3}$		
	x15 端	中央	x16 端	x15 端	中央	x16 端
長期応力						
地震応力						
短期応力						
断面	端部 BH-850×300×16×25 中央 BH-850×300×12×22			同 左		
Zx	6007	5325			5325	6007
Zp	6188	5465				
MP	204.2	180.3				
$\bar{M}/M_p$	0.18					
l_b	115	230			230	115
i_y	6.36	6.58			6.58	6.36
l_b/i_y	18.1	34.9			34.9	18.1
$l_b \cdot h/A_f$	130.3					
$f_b = \frac{900 \cdot A_f}{l_b \cdot h}$						
M_2/M_1						
C						
$i(h/6)$						
$K = 1 - 0.4 \frac{(l_b)^2}{A^2}$						
$f_b = K \cdot f_t$						
f_b	3.30	2.20			2.20	3.30
$\sigma_b = M/Z$	2.39	0.71			0.79	2.67
$t \times d$	1.6 × 80.0	1.2 × 80.6			1.2 × 80.6	1.6 × 80.0
$Q_{AS}(t)$	172.8	130.6			130.6	172.8
$1.5 a/d_w$		6.19			6.19	
$2 \frac{A_f}{A_w} + 1.2$		2.56			2.56	

	2 G102 $\frac{x15-x16}{Y3}$			R G102 $\frac{x14-x15}{Y3}$		
	x15 端	中央	x16 端	x14 端	中央	x15 端
長期応力						
地震応力						
短期応力						
断面	同 左			端部 BH-850×300×16×22 中 BH-850×300×12×19		
Zx	6007	5325				
Zp	6188			(算定外)		
MP	204.2					
$\bar{M}/M_p$						
l_b	115	230				
i_y	6.36	6.58				
l_b/i_y	18.1	34.9				
$l_b \cdot h/A_f$	130.3					
$f_b = \frac{900 \cdot A_f}{l_b \cdot h}$						
M_2/M_1						
C						
$i(h/6)$						
$K = 1 - 0.4 \frac{(l_b)^2}{A^2}$						
$f_b = K \cdot f_t$						
f_b	3.3	2.2				
$\sigma_b = M/Z$	3.06	0.97				
$t \times d$	1.6 × 80.0	1.2 × 80.6				
$Q_{AS}(t)$	172.8	130.6				
$1.5 a/d_w$		6.19				
$2 \frac{A_f}{A_w} + 1.2$		2.56				

	R G 103			15 G 103		
	x16 端	中央	x17 端	x16 端	中央	x17 端
長期応力						
地震応力	(22.2) 24.0 24.0 (22.2)			(45.3) 48.9 48.9 (45.3)		
短期応力						
断面	端部 BH-850×250×16×(9) 中央 BH-850×250×12×(9)			同 左		
Zx	3860	3801		3860	3801	
Zp						
MP						
M/Mp						
lb	115			115		
iy	5.07			5.07		
lb/iy	22.7			22.7		
lb·h/A _t	205.8			205.8		
f _b = $\frac{900 \cdot A_t}{lb \cdot h}$						
M2/M1						
C						
i (h/6)						
K = $1 - 0.4 \frac{(\frac{lb}{i})^2}{A^2}$						
f _b = K · f _t						
f _b	3.30	2.2		3.30		
σ _b = M/Z	0.58			1.18		
t × d	1.6 × 81.2	1.2 × 81.8		1.6 × 81.2	1.2 × 81.8	
Q _{AS} (t)	175.4	132.5		175.4	132.5	
1.5 a/dw		6.10			6.10	
2 $\frac{A_t}{A_w} + 1.2$		2.01			2.01	

	14 G 103			13 G 103		
	x16 端	中央	x17 端	x16 端	中央	x17 端
長期応力						
地震応力	(53.9) 58.2 58.2 (53.9)			(56.6) 61.1 61.1 (56.6)		
短期応力						
断面	端部 BH-850×250×16×(23) 中央 BH-850×250×12×(9)			同 左		
Zx	4437	4375		4437	3801	
Zp						
MP						
M/Mp						
lb	170			170		
iy						
lb/iy						
lb·h/A _t						
f _b = $\frac{900 \cdot A_t}{lb \cdot h}$						
M2/M1						
C						
i (h/6)						
K = $1 - 0.4 \frac{(\frac{lb}{i})^2}{A^2}$						
f _b = K · f _t						
f _b	3.30			3.30		
σ _b = M/Z	1.22			1.28		
t × d	1.6 × 80.6	1.2 × 81.2		1.6 × 80.6	1.2 × 81.2	
Q _{AS} (t)	174.1	131.5		174.1	131.5	
1.5 a/dw		6.13			6.13	
2 $\frac{A_t}{A_w} + 1.2$		2.17			2.17	

	11 G103			10 G103		
	x16 端	中央	x17 端	x16 端	中央	x17 端
長期応力						
地震応力	(67.7)	73.1	72.1 (67.7)	(73.9)	79.8	79.8 (73.9)
短期応力		19.5			21.3	
断面	上部 BH-850×300×16×22 中央 BH-850×300×12×19			同 左		
Zx	5325	5019		5325	5019	
Zp						
MP						
M/Mp						
lb	170	170		170	170	
iy	6.58	6.76		6.58	6.76	
lb/iy	25.9	25.2		25.9	25.2	
lb·h/A _f	218.9	253.5		218.9	253.5	
$f_b = \frac{900 \cdot A_f}{lb \cdot h}$						
M2/M1						
C						
i (h/6)						
$K = 1 - 0.4 \frac{(\frac{lb}{i})^2}{A^2}$						
$f_b = K \cdot f_t$						
f _b	3.30	2.20		3.30	2.20	
$\sigma_b = M/Z$	1.28			1.39		
t × d	1.6 × 80.6	1.2 × 81.2		1.6 × 80.6	1.2 × 81.2	
Q _{As} (t)	174.1	131.5		131.5	174.1	
1.5 a/dw		6.85		6.85		
$2 \frac{A_f}{A_w} + 1.2$		2.37		2.37		

	9 G103			8 G103		
	x16 端	中央	x17 端	x16 端	中央	x17 端
長期応力						
地震応力	(79.5)	85.8	85.8 (79.5)	(83.4)	90.0	90.0 (83.4)
短期応力		22.9			24.0	
断面	同 左			同 左		
Zx	5325	5019		5325	5019	
Zp						
MP						
M/Mp						
lb	170	170		170	170	
iy	6.58	6.76		6.58	6.76	
lb/iy	25.9	25.2		25.9	25.2	
lb·h/A _f	218.9	253.5		218.9	253.5	
$f_b = \frac{900 \cdot A_f}{lb \cdot h}$						
M2/M1						
C						
i (h/6)						
$K = 1 - 0.4 \frac{(\frac{lb}{i})^2}{A^2}$						
$f_b = K \cdot f_t$						
f _b	3.30	2.20		3.30	2.20	
$\sigma_b = M/Z$	1.50			1.57		
t × d	1.6 × 80.6	1.2 × 81.2		1.6 × 80.6	1.2 × 80.6	
Q _{As} (t)	174.1	131.5		174.1	131.5	
1.5 a/dw		6.85			6.85	
$2 \frac{A_f}{A_w} + 1.2$		2.37			2.37	

	7 G103			6 G103		
	x16 端	中央	x17 端	x16 端	中央	x17 端
長期応力						
地震応力	(88.9)	95.9	95.9 (88.9)	(91.8)	99.1	99.2 (91.8)
短期応力						
断面	端部 BH-850×300×16×25 中央 BH-850×300×12×23			同 左		
Zx	6007	5703		6007	5703	
Zp						
MP						
M/Mp						
lb	170	170		170	170	
ly	6.76	6.95		6.76	6.95	
lb/ly	25.2	24.5		25.2	24.5	
lb·h/A _t	192.7	219.0		192.7	219.0	
$f_b = \frac{900 \cdot A_t}{lb \cdot h}$						
M2/M1						
C						
i (h/6)						
$K = 1 - 0.4 \frac{(\frac{lb}{h})^2}{A^2}$						
f _b = K · f _t						
f _b	3.30	2.20		3.30	2.20	
σ _b = M/2	1.48			1.53		
t × d	1.6 × 80.0	1.2 × 80.6		1.6 × 80.0	1.2 × 80.6	
Q _{AS} (t)	172.8	130.6		172.8	130.6	
1.5 a/dw		6.47			6.47	
$2 \frac{A_t}{A_w} + 1.2$		2.56			2.56	

	5 G103			4 G103		
	x16 端	中央	x17 端	x16 端	中央	x17 端
長期応力						
地震応力	(94.4)	101.9	101.2 (94.5)	(88.2)	95.2	96.9 (89.9)
短期応力						
断面	同 左			同 左		
Zx	6007	5703			5703	6007
Zp						
MP						
M/Mp						
lb	170	170			170	170
ly	6.76	6.95			6.95	6.76
lb/ly	25.2	24.5			24.5	25.2
lb·h/A _t	192.7	219.0			219.0	192.7
$f_b = \frac{900 \cdot A_t}{lb \cdot h}$						
M2/M1						
C						
i (h/6)						
$K = 1 - 0.4 \frac{(\frac{lb}{h})^2}{A^2}$						
f _b = K · f _t						
f _b	3.30	2.20			2.20	3.30
σ _b = M/2	1.58					1.50
t × d	1.6 × 80.0	1.2 × 80.6			1.2 × 80.6	1.6 × 80.0
Q _{AS} (t)	172.8	130.6			130.6	172.8
1.5 a/dw		6.47			6.47	
$2 \frac{A_t}{A_w} + 1.2$		2.56			2.56	

	3 G 103 $\frac{x16-x17}{Y5}$			2 G 103 $\frac{x16-x17}{Y5}$		
	x16 端	中央	x17 端	x16 端	中央	x17 端
長期応力						
地震応力	(109.7) 117.6 $\frac{97.4 (89.5)}{28.7}$			(137.0) 147.3 $\frac{133.4 (123.1)}{37.5}$		
短期応力						
断面	端部 BH-850 x 300 x 16 x (25) 中央 BH-850 x 300 x 12 x (22)			同 左		
Zx	6007	5703		6007	5703	
Zp						
MP						
$\bar{M}/M_P$						
l_b	170	170		170	170	
i_y	6.76	6.95		6.76	6.95	
l_b/i_y	25.2	24.5		25.2	24.5	
$l_b \cdot h/A_f$	192.7	219.0		192.7	219.0	
$f_b = \frac{900 \cdot A_f}{l_b \cdot h}$						
M_2/M_1						
C						
$i(h/6)$						
$K = 1 - 0.4 \frac{(l_b)^2}{A^2}$						
$f_b = K \cdot f_t$						
f_b	3.30	2.20		3.30	2.20	
$\sigma_b = M/Z$	1.83			2.29		
$t \times d$	1.6 x 80.0	1.2 x 80.6		1.6 x 80.0	1.2 x 80.6	
$Q_{AS}(t)$	172.8	130.6		172.8	130.6	
$1.5 a/d_w$		6.47			6.47	
$2 \frac{A_f}{A_w} + 1.2$		2.56			2.56	

	G			G		
	端	中央	端	端	中央	端
長期応力						
地震応力						
短期応力						
断面						
Zx						
Zp						
MP						
$\bar{M}/M$						
l_b						
i_y						
l_b/i_y						
$l_b \cdot h/A_f$						
$f_b = \frac{900 \cdot A_f}{l_b \cdot h}$						
M_2/M_1						
C						
$i(h/6)$						
$K = 1 - 0.4 \frac{(l_b)^2}{A^2}$						
$f_b = K \cdot f_t$						
f_b						
$\sigma_b = M/Z$						
$t \times d$						
$Q_{AS}(t)$						
$1.5 a/d_w$						
$2 \frac{A_f}{A_w} + 1.2$						

	4 G9 $\frac{Y7-Y8}{\times 15}$			3 G9 $\frac{Y7-Y8}{\times 15}$		
	Y7 端	中央	Y8 端	Y7 端	中央	Y8 端
長期応力						
地震応力						
短期応力						
断面	端部 BH-850×300×16×(22) 中央 BH-850×300×12×(19)			同 左		
Zx	5325	5019	5325	5325	5019	
ZP						
MP						
$\bar{M}/M_P$						
l_b	115	230	230	115	230	
i_y	6.58	6.76	6.58	6.58	6.76	
l_b/i_y	17.5	34.1	35.0	17.5	34.1	
$l_b \cdot h/A_f$	148.1	342.9	148.1	148.1	342.9	
$f_b = \frac{900 \cdot A_f}{l_b \cdot h}$						
M_2/M_1						
C						
$i (h/6)$						
$K = 1 - 0.4 \frac{(\frac{l_b}{i})^2}{\lambda^2}$						
$f_b = K \cdot f_t$						
f_b	3.30	2.20	3.30	3.30	2.20	
$\sigma_b = M/Z$	1.97	0.32	2.64	1.94	0.15	
$t \times d$	1.6×80.6	1.2×81.2	1.6×80.6	1.6×80.6	1.2×81.2	
$Q_{AS}(t)$	174.1	131.5	174.1	174.1	131.5	
$1.5 a/dw$		6.17			6.17	
$2 \frac{A_f}{A_w} + 1.2$		2.37			2.37	

	2 G9 $\frac{Y7-Y8}{\times 15}$			4 G10 $\frac{Y8-Y9}{\times 15}$		
	Y7 端	中央	Y8 端	Y8 端	中央	Y9 端
長期応力						
地震応力						
短期応力						
断面	同 左			同 左		
Zx	5325	5019		5325	5019	5325
ZP						
MP						
$\bar{M}/M_P$						
l_b	115	230		110	220	110
i_y	6.58	6.76		6.58	6.76	6.58
l_b/i_y	17.5	34.1		16.7	32.6	16.7
$l_b \cdot h/A_f$	148.1	342.9		141.7	328.0	141.7
$f_b = \frac{900 \cdot A_f}{l_b \cdot h}$						
M_2/M_1						
C						
$i (h/6)$						
$K = 1 - 0.4 \frac{(\frac{l_b}{i})^2}{\lambda^2}$						
$f_b = K \cdot f_t$						
f_b	3.30	2.20		2.20	2.20	3.30
$\sigma_b = M/Z$	1.96	0.18		2.06	1.65	2.56
$t \times d$	1.6×80.6	1.2×81.2		1.6×80.6	1.2×81.2	1.6×80.2
$Q_{AS}(t)$	174.1	131.5		174.1	131.5	174.1
$1.5 a/dw$		6.17			7.85	
$2 \frac{A_f}{A_w} + 1.2$		2.37			2.37	

	3 G 10 $\frac{Y8-Y9}{\times 15}$			2 G 10 $\frac{Y8-Y9}{\times 15}$		
	Y8 端	中央	Y9 端	Y8 端	中央	Y9 端
長期応力	$\begin{array}{ccc} 51.8 & & 40.7 \\ & 33.6 & \\ 28.3 & & 25.9 \end{array}$			$\begin{array}{ccc} 46.8 & & 43.8 \\ & 34.5 & \\ 27.4 & & 26.8 \end{array}$		
地震応力	$\begin{array}{ccc} & 51.8 & (49.0) \\ (46.7) & 49.6 & \\ & 11.3 & \end{array}$			$\begin{array}{ccc} & 48.1 & (45.5) \\ (43.2) & 45.8 & \\ & 10.4 & \end{array}$		
短期応力	$\begin{array}{ccc} 98.5 & & 89.7 \\ & & \\ 39.6 & & 37.2 \end{array}$			$\begin{array}{ccc} 90.0 & & 89.3 \\ & & \\ 37.8 & & 37.2 \end{array}$		
断面	$\begin{array}{c} \text{端部 } BH-850 \times 300 \times 16 \times (22) \\ \text{中央 } BH-850 \times 300 \times 12 \times (19) \end{array}$			同 左		
Zx	5325	5019		5325	5019	
Zp						
MP						
$\bar{M}/M_p$						
l_b	145	290		145	290	
i_y	6.58	6.76		6.58	6.76	
l_b/i_y	22.1	42.9		22.1	42.9	
$l_b \cdot h/A_f$	186.7	432.4		186.7	432.4	
$f_b = \frac{900 \cdot A_f}{l_b \cdot h}$						
M_2/M_1						
C						
$i(h/6)$						
$K = 1 - 0.4 \frac{(l_b)^2}{A^2}$						
$f_b = K \cdot f_t$						
f_b	3.30	2.20		3.30	2.20	
$\sigma_b = M/Z$	1.85	0.67		1.69	0.69	
$t \times d$	1.6 × 80.6	1.2 × 81.2		1.6 × 80.6	1.2 × 81.2	
$Q_{AS}(t)$	174.1	131.5		174.1	131.5	
1.5 a/d_w		7.85			7.85	
$2 \frac{A_f}{A_w} + 1.2$		2.37			2.37	

	4 G 10 $\frac{Y9-Y10}{\times 15}$			3 G 10 $\frac{Y9-Y10}{\times 15}$		
	Y9 端	中央	Y10 端	Y9 端	中央	Y10 端
長期応力	$\begin{array}{ccc} 102.0 & & 26.4 \\ & 45.6 & \\ 56.5 & & 35.5 \end{array}$			$\begin{array}{ccc} 26.2 & & 34.4 \\ & 12.3 & \\ 16.9 & & 19.1 \end{array}$		
地震応力	$\begin{array}{ccc} & 42.4 & (39.8) \\ (30.9) & 33.5 & \\ & 10.5 & \end{array}$			$\begin{array}{ccc} & 76.5 & (71.7) \\ (57.9) & 62.7 & \\ & 19.3 & \end{array}$		
短期応力	$\begin{array}{ccc} 132.9 & & 66.2 \\ & & \\ 67.0 & & 46.0 \end{array}$			$\begin{array}{ccc} 84.1 & & 106.1 \\ & & \\ 36.2 & & 38.4 \end{array}$		
断面	同 左			同 左		
Zx	5325	5019	5325		5019	5325
Zp						
MP						
$\bar{M}/M$						
l_b	115	230	115		230	115
i_y	6.58	6.76	6.58		6.76	6.58
l_b/i_y	17.5	34.1	17.5		34.1	17.5
$l_b \cdot h/A_f$	148.1	342.9	148.1		342.9	148.1
$f_b = \frac{900 \cdot A_f}{l_b \cdot h}$						
M_2/M_1						
C						
$i(h/6)$						
$K = 1 - 0.4 \frac{(l_b)^2}{A^2}$						
$f_b = K \cdot f_t$						
f_b	2.20	2.20	3.30		2.20	3.30
$\sigma_b = M/Z$	1.92	0.91	1.25		0.25	2.00
$t \times d$	1.6 × 80.6	1.2 × 81.2			1.2 × 81.2	1.6 × 80.6
$Q_{AS}(t)$	174.1	131.5			131.5	174.1
1.5 a/d_w		6.19			6.19	
$2 \frac{A_f}{A_w} + 1.2$		2.37			2.37	

	2 G 10			4 G 10		
	Y9 端	中央	Y10 端	Y9 端	中央	Y10 端
長期応力	$\begin{array}{ccc} 31.3 & & 31.7 \\ & 11.1 & \\ 17.9 & & 18.5 \end{array}$			$\begin{array}{ccc} 35.9 & & 9.9 \\ & 11.8 & \\ 20.5 & & 13.3 \end{array}$		
地震応力	$\begin{array}{ccc} & 80.8 (75.7) & \\ (60.4) & 65.5 & \\ & 20.3 & \end{array}$			$\begin{array}{ccc} & 0.4 & 41.0 (38.2) \\ (22.4) & 24.0 & \\ & 6.8 & \\ & 11.3 & \end{array}$		
短期応力	$\begin{array}{ccc} 91.4 & & 107.4 \\ & & \\ 38.2 & & 38.8 \end{array}$			$\begin{array}{ccc} 58.9 & & 48.1 \\ & 12.2 & \\ 27.3 & & 24.6 \end{array}$		
	$\begin{array}{ccc} & 7.2 & \\ (Y9) & (6.7) & (Y10) \end{array}$			$\begin{array}{ccc} & 7.2 & \\ (Y9) & (6.7) & (Y10) \end{array}$		
断面	端部 BH-850×300×16×(22) 中央 BH-850×300×12×(19)			同 左		
Zx		50.9	5325	5325	50.9	
ZP						
MP						
M/M _P						
l _b		230	115	115	230	
i _Y		6.76	6.58	6.58	6.76	
l _b /i _Y		34.1	17.5	17.5	34.1	
l _b ·h/A _f		342.9	148.1	148.1	342.9	
f _b = $\frac{900 \cdot A_f}{l_b \cdot h}$						
M ₂ /M ₁						
C						
i (h/6)						
K = 1 - 0.4 $\frac{(l_b)^2}{A^2}$						
f _b = K · f _t						
f _b		2.20	3.30	3.30	2.20	
σ _b = M/Z		0.23	2.02	1.11	0.24	
t × d	1.6 × 80.6	1.2 × 81.2	1.6 × 80.6	1.6 × 80.6	1.2 × 81.2	
Q _{AS} (t)	174.1	131.5	174.1	174.1	131.5	
1.5 a/dw		6.19			6.19	
2 $\frac{A_f}{A_w} + 1.2$		2.37			2.37	

	3 G 10			2 G 10		
	Y9 端	中央	Y10 端	Y9 端	中央	Y10 端
長期応力	$\begin{array}{ccc} 11.5 & & 8.7 \\ & 1.8 & \\ 6.5 & & 8.1 \end{array}$			$\begin{array}{ccc} 15.4 & & 8.0 \\ & 4.0 & \\ 8.3 & & 8.2 \end{array}$		
地震応力	$\begin{array}{ccc} & 0.9 & 72.5 (67.5) \\ (45.3) & 48.7 & \\ & 13.8 & \\ & 19.9 & \end{array}$			$\begin{array}{ccc} & 1.4 & 82.6 (77.0) \\ (53.0) & 57.0 & \\ & 16.2 & \\ & 22.5 & \end{array}$		
短期応力	$\begin{array}{ccc} 56.8 & & 76.2 \\ & 2.7 & \\ 20.3 & & 28.0 \end{array}$			$\begin{array}{ccc} 68.4 & & 85.0 \\ & 5.4 & \\ 24.5 & & 30.7 \end{array}$		
	$\begin{array}{ccc} & 7.2 & \\ (Y9) & (6.7) & (Y10) \end{array}$			$\begin{array}{ccc} & 7.2 & \\ (Y9) & (6.7) & (Y10) \end{array}$		
断面	同 左			同 左		
Zx		50.9	5325		50.9	5325
ZP						
MP						
M/M _P						
l _b		230	115		230	115
i _Y		6.76	6.58		6.76	6.58
l _b /i _Y		34.1	17.5		34.1	17.5
l _b ·h/A _f		342.9	148.1		342.9	148.1
f _b = $\frac{900 \cdot A_f}{l_b \cdot h}$						
M ₂ /M ₁						
C						
i (h/6)						
K = 1 - 0.4 $\frac{(l_b)^2}{A^2}$						
f _b = K · f _t						
f _b		2.20	3.30		2.20	3.30
σ _b = M/Z		0.04	1.43		0.08	1.60
t × d		1.2 × 81.2	1.6 × 80.6		1.2 × 81.2	1.6 × 80.6
Q _{AS} (t)		131.5	174.1		131.5	174.1
1.5 a/dw		6.19			6.19	
2 $\frac{A_f}{A_w} + 1.2$		2.37			2.37	

	4 G 10 $\frac{Y9-Y10}{\times 17}$			3 G 10 $\frac{Y9-Y10}{\times 17}$		
	Y9 端	中央	Y10 端	Y9 端	中央	Y10 端
長期応力						
地震応力						
短期応力						
断面	端部 BH-850×300×16×22 中央 BH-850×300×12×19			同 左		
Zx	5325	5019	5325	5325	5019	
Zp						
MP						
M/MP						
lb	115	230	115	115	230	
ly	6.58	6.76	6.58	6.58	6.76	
lb/ly	17.5	34.1	17.5	17.5	34.1	
lb·h/A _t	148.1	342.9	148.1	148.1	342.9	
$f_b = \frac{900 \cdot A_t}{lb \cdot h}$						
M2/M1						
C						
$i (h/6)$						
$K = 1 - 0.4 \frac{i}{A^2}$						
$f_b = K \cdot f_t$						
f _b	2.20	2.20	3.30	3.30	2.20	
$\sigma_b = M/Z$	1.16	0.12	0.86	1.38	0.10	
t × d	1.6 × 80.6	1.2 × 81.2	1.6 × 80.6	1.6 × 80.6	1.2 × 81.2	
Q A _s (t)	174.1	131.5	174.1	174.1	131.5	
1.5 Q/dw		6.19			6.19	
$2 \frac{A_t}{A_w} + 1.2$		2.37			2.37	

	2 G 10 $\frac{Y9-Y10}{\times 17}$			G		
	Y9 端	中央	Y10 端	端	中央	端
長期応力						
地震応力						
短期応力						
断面	同 左			同 左		
Zx		5019	5325			
Zp						
MP						
M/MP						
lb		230	115			
ly		6.76	6.58			
lb/ly		34.1	17.5			
lb·h/A _t		342.9	148.1			
$f_b = \frac{900 \cdot A_t}{lb \cdot h}$						
M2/M1						
C						
$i (h/6)$						
$K = 1 - 0.4 \frac{i}{A^2}$						
$f_b = K \cdot f_t$						
f _b		2.20	3.30			
$\sigma_b = M/Z$		0.10	1.53			
t × d		1.2 × 81.2	1.6 × 80.6			
Q A _s (t)		131.5	174.1			
1.5 Q/dw		6.19				
$2 \frac{A_t}{A_w} + 1.2$		2.37				

	4 G 105 $\frac{x16-x17}{Y8}$			3 G 105 $\frac{x16-x17}{Y8}$		
	端	中央	端	端	中央	端
長期応力						
地震応力						
短期応力						
断面	端部 BH-850×300×16×(22) 中央 BH-850×300×12×(19)			同 左		
Zx	5325	5019			5019	5325
Zp						
MP						
$\bar{M}/M_p$						
l_b	230	230			230	230
i_y	6.58	6.76			6.76	6.58
l_b/i_y	35.0	34.1			34.1	35.0
$l_b \cdot h / A_f$	296.2	342.9			342.9	296.2
$f_b = \frac{900 \cdot A_f}{l_b \cdot h}$						
M_2/M_1						
C						
$i (h/6)$						
$K = 1 - 0.4 \frac{(l_b)^2}{A^2}$						
$f_b = K \cdot f_t$						
f_b	3.30	2.20			2.20	3.30
$\sigma_b = M/Z$	1.12	0.29			0.07	1.40
$t \times d$	1.6 × 80.6	1.2 × 81.2			1.2 × 81.2	1.6 × 80.6
$Q_{AS}(t)$	174.1	131.5			131.5	174.1
$1.5 a/dw$		6.47			6.47	
$2 \frac{A_f}{A_w} + 1.2$		2.37			2.37	

	2 G 105 $\frac{x16-x17}{Y8}$			4 G 105 $\frac{x8-x9}{Y8}$		
	x16 端	中央	x17 端	x8 端	中央	x9 端
長期応力						
地震応力						
短期応力						
断面	同 左			同 左		
Zx	5325	5019			5019	5325
Zp						
MP						
$\bar{M}/M_p$						
l_b	230	230			230	230
i_y	6.58	6.76			6.76	6.58
l_b/i_y	35.0	34.1			34.1	35.0
$l_b \cdot h / A_f$	296.2	342.9			342.9	296.2
$f_b = \frac{900 \cdot A_f}{l_b \cdot h}$						
M_2/M_1						
C						
$i (h/6)$						
$K = 1 - 0.4 \frac{(l_b)^2}{A^2}$						
$f_b = K \cdot f_t$						
f_b	3.30	2.20			2.20	3.30
$\sigma_b = M/Z$	1.52	0.09			0.32	1.04
$t \times d$	1.6 × 80.6	1.2 × 81.2			1.2 × 81.2	1.6 × 80.6
$Q_{AS}(t)$	174.1	131.5			131.5	174.1
$1.5 a/dw$		6.47			6.47	
$2 \frac{A_f}{A_w} + 1.2$		2.37			2.37	

	3 G 105 $\frac{x8-x9}{Y8}$			2 G 105 $\frac{x8-x9}{Y8}$		
	x8 端	中央	x9 端	x8 端	中央	x9 端
長期応力						
地震応力						
短期応力						
断面	端部 BH-850×300×16×22 中央 BH-850×300×12×19			同 左		
Zx	5325	5019		5325	5019	
Zp						
MP						
$\bar{M}/M_P$						
lb	230	230		230	230	
iy	6.58	6.76		6.58	6.76	
lb/iy	35.0	34.1		35.0	34.1	
lb·h/A _t	296.2	342.9		296.2	342.9	
$f_b = \frac{900 \cdot A_t}{lb \cdot h}$						
M ₂ /M ₁						
C						
i (h/6)						
$K = 1 - 0.4 \frac{(\frac{lb}{i})^2}{A^2}$						
$f_b = K \cdot f_t$						
f _b	3.30	2.20		3.30	2.20	
$\sigma_b = M/Z$	1.77	0.10		2.19	0.12	
t × d	1.6 × 80.6	1.2 × 81.2		1.6 × 80.6	1.2 × 81.2	
Q _{AS} (t)	174.1	131.5		174.1	131.5	
1.5 Q/dw		6.47			6.47	
$2 \frac{A_t}{A_w} + 1.2$		2.37			2.37	

	4 G 106 $\frac{x15-x17}{Y9}$			3 G 106 $\frac{x15-x17}{Y9}$		
	x15 端	中央	x17 端	x15 端	中央	x17 端
長期応力						
地震応力						
短期応力						
断面	同 左			同 左		
Zx	5325	5019	5325		5019	5325
Zp						
MP						
$\bar{M}/M_P$						
lb	230	230	230		230	230
iy	6.58	6.76	6.58		6.76	6.58
lb/iy	35.0	34.1	35.0		34.1	35.0
lb·h/A _t	296.2	342.9	296.2		342.9	296.2
$f_b = \frac{900 \cdot A_t}{lb \cdot h}$						
M ₂ /M ₁						
C						
i (h/6)						
$K = 1 - 0.4 \frac{(\frac{lb}{i})^2}{A^2}$						
$f_b = K \cdot f_t$						
f _b	2.20	2.20	3.30		2.20	3.30
$\sigma_b = M/Z$	1.35	1.15	1.39		0.36	1.97
t × d	1.6 × 80.6	1.2 × 81.2			1.2 × 81.2	1.6 × 80.6
Q _{AS} (t)	174.1	131.5			131.5	174.1
1.5 Q/dw		13.12			13.12	
$2 \frac{A_t}{A_w} + 1.2$		2.37			2.37	

	2 G106 $\frac{x15-x17}{Y9}$			2 G106 $\frac{x14-x15}{Y9}$		
	x15 端	中央	x17 端	x14 端	中央	x15 端
長期応力						
地震応力						
短期応力						
断面	端部 BH-850×300×16×(22) 中央 BH-850×300×12×(19)			同 左		
Zx		50.9	53.25		50.9	53.25
Zp						
MP						
$\bar{M}/M_P$						
l_b		230	230		230	230
i_Y		6.76	6.58		6.76	6.58
l_b/i_Y		34.1	35.0		34.1	35.0
$l_b \cdot h/A_f$		342.9	296.2		342.9	296.2
$f_b = \frac{900 \cdot A_f}{l_b \cdot h}$						
M_2/M_1						
C						
$i(h/6)$						
$K = 1 - 0.4 \frac{(l_b/i)^2}{\lambda^2}$						
$f_b = K \cdot f_t$						
f_b		2.20	3.30		2.20	3.30
$\sigma_b = M/Z$		0.46	2.15		0.03	1.48
$t \times d$		1.2 × 81.2	1.6 × 80.4		1.2 × 81.2	1.6 × 80.4
$Q_{AS}(t)$		131.5	174.1		131.5	174.1
1.5 a/dw		13.12			6.19	
$2 \frac{A_f}{A_w} + 1.2$		2.37			2.37	

	4 G105 $\frac{x16-x17}{Y10}$			3 G105 $\frac{x16-x17}{Y10}$		
	x16 端	中央	x17 端	x16 端	中央	x17 端
長期応力						
地震応力						
短期応力						
断面	同 左			同 左		
Zx	53.25	50.9			50.9	53.25
Zp						
MP						
$\bar{M}/M_P$						
l_b	230	230			230	230
i_Y	6.58	6.76			6.76	6.58
l_b/i_Y	35.0	34.1			34.1	35.0
$l_b \cdot h/A_f$	296.2	342.9			342.9	296.2
$f_b = \frac{900 \cdot A_f}{l_b \cdot h}$						
M_2/M_1						
C						
$i(h/6)$						
$K = 1 - 0.4 \frac{(l_b/i)^2}{\lambda^2}$						
$f_b = K \cdot f_t$						
f_b	3.30	2.20			2.20	3.30
$\sigma_b = M/Z$	0.80	0.17			0.07	1.50
$t \times d$	1.6 × 80.4	1.2 × 81.2			1.2 × 81.2	1.6 × 80.4
$Q_{AS}(t)$	174.1	131.5			131.5	174.1
1.5 a/dw		6.47			6.47	
$2 \frac{A_f}{A_w} + 1.2$		2.37			2.37	

	2 G 105 $\frac{x14-x17}{Y_{10}}$			G		
	x16 端	中央	x17 端	端	中央	端
長期応力	$\frac{7.8}{5.7} \quad \frac{3.3}{4.5}$					
地震応力	$(75.9) \quad \frac{82.0}{24.4} \quad \frac{101.3}{(95.2)}$					
短期応力	$\frac{83.7}{30.1} \quad \frac{98.5}{28.9}$					
断面	端部 BH-850×300×16×22 中央 BH-850×300×12×19					
Zx		5019	5325			
ZP						
MP						
$\bar{M}/M_P$						
l_b		230	230			
i_y		6.76	6.58			
l_b/i_y		34.1	35.0			
$l_b \cdot h/A_f$		342.9	296.2			
$f_b = \frac{900 \cdot A_f}{l_b \cdot h}$						
M_2/M_1						
C						
$i(h/6)$						
$K = 1 - 0.4 \frac{(l_b)^4}{A^2}$						
$f_b = K \cdot f_t$						
f_b		2.20	3.30			
$\sigma_b = M/Z$		0.08	1.85			
$t \times d$		1.2 × 81.2	1.6 × 80.6			
$Q_{AS}(t)$		131.5	174.1			
$1.5 a/dw$		6.47				
$2 \frac{A_f}{A_w} + 1.2$		2.37				

	G			G		
	端	中央	端	端	中央	端
長期応力						
地震応力						
短期応力						
断面						
Zx						
ZP						
MP						
$\bar{M}/M_P$						
l_b						
i_y						
l_b/i_y						
$l_b \cdot h/A_f$						
$f_b = \frac{900 \cdot A_f}{l_b \cdot h}$						
M_2/M_1						
C						
$i(h/6)$						
$K = 1 - 0.4 \frac{(l_b)^4}{A^2}$						
$f_b = K \cdot f_t$						
f_b						
$\sigma_b = M/Z$						
$t \times d$						
$Q_{AS}(t)$						
$1.5 a/dw$						
$2 \frac{A_f}{A_w} + 1.2$						

GK		Y3-Y5 x9							部 材	A	Z _F	i	L _K	λ	f _c	i*	L _b	f _{b1}	f _{b2}	σ _c	$\frac{\sigma_c}{f_c}$	σ _b	$\frac{\sigma_b}{f_b}$	$\frac{\sigma_c + \sigma_b}{f_c + f_b}$																																								
		M			R			N _K																																																								
		L	K	S	L	K	S																																																									
15	E	13.4	11.7	25.1	11.5	3.1	14.6	25.1	BH-500×300×12×22	188	3018	7.28	422	58	2.52	7.28	422		3.3	0.36	0.14	0.93	0.25	0.39																																								
	C	0.7	1.2	1.9																																																												
	E	16.0	2.1	18.1	11.6	0.2	11.8	67.1																																																								
14	E	13.3	16.6	18.7	9.8	4.0	13.8	41.0												0.27	0.11	0.71	0.22	0.33																																								
	C	1.9	0.5	2.4																																																												
	E	14.6	6.9	21.5	9.9	1.5	11.4	50.2																																																								
13	E	9.6	21.1	30.7	7.1	5.0	12.1	44.0												0.33	0.13	1.08	0.33	0.46																																								
	C	0.6	0	0.6																																																												
	E	10.4	11.4	32.5	7.2	2.7	9.9	61.9																																																								
12	E	9.1	23.2	32.3	6.9	5.4	12.3	51.1												0.33	0.13	1.07	0.32	0.45																																								
	C	0.5	0.3	0.8																																																												
	E	10.4	13.8	24.2	7.2	3.4	10.6	81.6																																																								
11	E	8.7	24.2	32.9	6.7	5.5	12.2	55.3												0.35	0.14	1.09	0.33	0.47																																								
	C	0	1.1	1.1																																																												
	E	10.1	16.1	26.2	7.0	4.1	11.1	65.1																																																								
10	E	8.3	25.8	34.1	6.5	5.7	12.2	58.0												0.39	0.16	1.13	0.34	0.50																																								
	C	0.5	1.7	2.2																																																												
	E	9.6	18.0	27.6	6.8	4.7	11.5	74.1																																																								
9	E	8.2	27.6	35.8	6.5	6.1	12.6	65.8												0.38	0.15	1.19	0.36	0.51																																								
	C	0.5	1.9	2.4																																																												
	E	9.7	20.3	30.0	6.8	5.2	12.0	70.5																																																								
8	E	7.8	28.5	36.3	6.3	6.1	12.4	66.5												0.40	0.16	1.20	0.36	0.52																																								
	C	0.9	2.7	3.6																																																												
	E	9.3	22.5	31.8	6.7	6.0	12.7	75.9																																																								
7	E	6.9	28.0	34.9	5.9	5.8	11.7	72.9												0.43	0.17	1.16	0.35	0.52																																								
	C	1.9	3.4	5.2																																																												
	E	8.3	23.2	31.5	6.2	6.3	12.5	81.5																																																								
6	E	7.0	27.8	34.8	5.9	5.7	11.6	76.2												0.43	0.17	1.15	0.35	0.52																																								
	C	1.9	3.6	5.5																																																												
	E	8.3	24.0	32.3	6.2	6.5	12.7	80.7																																																								
5	E	6.6	27.9	34.5	5.8	5.6	11.4	77.1												0.41	0.16	1.14	0.35	0.51																																								
	C	2.2	4.3	6.5																																																												
	E	7.9	25.4	33.3	7.9	7.0	14.9	71.2																																																								
4	E	6.9	20.3	27.2	5.7	3.5	9.2	86.9												0.46	0.18	0.95	0.29	0.47																																								
	C	2.6	5.4	8.0																																																												
	E	6.9	21.7	28.6	5.7	6.4	12.1	28.8																																																								
3	E	7.1	20.6	27.7	5.6	3.3	8.9	51.1												0.58	0.23	1.00	0.30	0.53																																								
	C	3.8	6.6	10.4																																																												
	E	5.5	24.6	30.1	5.3	7.4	12.7	108.8																																																								
2	E	3.1	36.1	39.2	8.0	7.2	15.2	60.8												0.50	0.20	1.43	0.43	0.63																																								
	C	9.2	6.0	15.2																																																												
	E	6.3	36.8	43.1	8.9	9.5	18.4	94.0																																																								
	E																																																															
	C																																																															
	E																																																															
	E																																																															
	C																																																															
	E																																																															

x8-x9
Y3

9/10%

		M			Q			Nk	部 材	A	Z _F	i	l _K	x	t _c	i*	l _b	t _{b1}	t _{b2}	σ _c	$\frac{\sigma_c}{f_c}$	σ _b	$\frac{\sigma_b}{f_b}$	$\frac{\sigma_c + \sigma_b}{f_c + f_b}$			
		L	K	S	L	K	S																				
R	E	6.1	4.0	10.1	12.0	1.5	13.5	89.0	BH-850x300x16x22	261	5325	6.17	347.5	56	2.57	6.17	347.5		3.02	0.34	0.13	0.82	0.27	0.40			
	C	5.3	1.2	6.5																							
	E	9.2	34.2	43.4	12.9	9.5	22.4	86.3																			
15	E	7.5	11.7	19.2	10.3	3.4	13.7	15.6												0.26	0.10	0.39	0.13	0.23			
	C	0.6	0	0.6																							
	E	10.4	10.3	20.7	11.0	3.0	14.0	68.9																			
14	E	6.5	23.2	29.7	6.4	6.2	12.6	60.7													0.23	0.09	0.56	0.18	0.27		
	C	5.2	1.5	6.7																							
	E	8.4	4.3	12.7	6.9	1.7	8.6	0.1																			
13	E	6.6	23.3	29.9	6.4	6.0	12.4	37.5													0.14	0.06	0.56	0.19	0.25		
	C	4.9	2.2	7.1																							
	E	8.2	5.3	13.5	6.8	2.2	9.0	33.6																			
12	E	6.6	25.8	32.4	6.3	6.8	13.1	47.0													0.18	0.07	0.61	0.20	0.27		
	C	4.8	2.3	7.1																							
	E	8.0	5.5	13.5	6.7	2.2	8.9	25.8																			
11	E	6.6	28.0	34.6	6.3	7.2	13.5	44.1													0.17	0.07	0.65	0.22	0.29		
	C	4.6	3.0	7.6																							
	E	7.9	9.0	16.9	6.3	3.4	9.7	40.1																			
10	E	6.3	32.5	38.8	6.1	8.3	14.4	47.3													0.18	0.07	0.73	0.24	0.31		
	C	4.3	3.7	8.0																							
	E	7.7	12.9	20.6	6.5	4.8	11.3	47.9																			
9	E	6.4	35.4	41.8	6.2	9.1	15.3	53.2													0.20	0.08	0.78	0.26	0.34		
	C	4.3	3.8	8.1																							
	E	7.7	16.6	24.3	6.5	5.9	12.4	44.4																			
8	E	6.4	36.9	43.3	6.1	9.3	13.3	50.1													0.21	0.08	0.81	0.27	0.35		
	C	4.1	4.6	8.7																							
	E	7.7	20.5	28.5	6.4	7.2	13.6	54.6																			
7	E	6.2	40.1	46.3	6.0	10.0	16.0	56.9													0.22	0.09	0.87	0.29	0.38		
	C	3.8	5.2	9.0																							
	E	7.5	22.7	30.4	6.3	8.1	14.4	58.3																			
6	E	6.5	43.5	50.0	5.9	11.0	16.9	60.9													0.23	0.09	0.94	0.31	0.40		
	C	3.9	5.3	9.2																							
	E	8.3	28.2	36.5	6.4	9.6	16.0	59.4																			
5	E	5.8	50.6	56.9	5.5	12.7	18.2	55.2													0.39	0.15	1.06	0.35	0.50		
	C	3.2	6.5	9.7																							
	E	8.0	36.3	44.3	6.1	12.3	18.7	103.0																			
4	E	5.6	50.0	55.6	5.4	12.3	17.7	90.7													0.35	0.14	1.04	0.35	0.49		
	C	3.0	7.5	10.5																							
	E	7.9	39.2	47.1	6.0	13.4	19.4	56.6																			
3	E	5.2	69.9	75.1	5.1	16.9	21.8	61.6													0.70	0.27	1.41	0.47	0.74		
	C	2.4	12.0	14.4																							
	E	7.9	62.7	70.6	5.9	20.3	26.2	182.2																			
2	E	4.6	106.9	111.5	5.2	27.9	33.1	77.0													0.48	0.19	2.09	0.69	0.88		
	C	1.2	10.0	11.2																							
	E	6.0	98.5	94.5	5.5	28.3	33.8	124.4																			

X16 - K17
Y7

G10K

		M			Q			Nx	部 材	A	Z _x	i	I _x	λ	t _c	i [*]	d _h	t _{b1}	t _{b2}	σ _c	$\frac{\sigma_c}{f_c}$	f _b	$\frac{\sigma_b}{f_b}$	$\frac{\sigma_c + \sigma_b}{f_c + f_b}$		
		L	K	S	L	K	S																			
R	E	2.8	34.7	37.5	3.5	9.6	13.1	88.2	BH-850×300×16×22	261	5325	6.17	347.5	56	2.57	6.17	347.5		3.02	0.35	0.14	0.70	0.23	0.37		
	C	3.7	1.2	4.9																						
	E	2.8	4.6	7.4	3.5	1.6	5.1	90.1																		
15	E	8.5	10.5	19.0	7.8	3.0	10.8	75.1																		
	C	3.0	0	3.0																						
	E	5.6	12.3	17.9	7.1	3.6	10.7	14.3																		
14	E	12.4	4.7	17.1	8.0	1.8	9.8	2.3																		
	C	5.3	1.5	6.8																						
	E	5.9	24.2	30.1	6.3	6.5	12.8	64.0																		
13	E	9.0	5.6	14.6	7.0	2.3	9.3	34.6																		
	C	4.8	2.3	7.1																						
	E	6.5	23.5	30.0	6.3	6.1	12.4	37.9																		
12	E	9.1	5.8	14.9	7.0	2.3	9.3	26.4																		
	C	4.7	2.3	7.0																						
	E	6.4	26.3	32.7	6.4	6.9	13.3	47.8																		
11	E	8.9	9.4	18.4	6.9	3.6	10.5	42.5																		
	C	4.5	3.0	7.5																						
	E	6.4	28.6	42.7	6.2	7.3	13.5	43.5																		
10	E	8.7	13.5	22.2	6.8	5.0	11.8	40.9																		
	C	4.2	3.7	7.9																						
	E	6.2	33.3	39.5	6.1	8.5	14.6	48.3																		
9	E	8.7	17.4	26.1	6.7	6.1	12.8	45.6																		
	C	4.2	3.8	8.0																						
	E	6.2	36.3	42.5	6.1	9.3	15.4	54.4																		
8	E	8.6	21.5	30.1	6.7	7.5	14.2	56.1																		
	C	4.0	4.6	8.6																						
	E	6.2	38.0	44.2	6.0	9.6	15.6	51.5																		
7	E	8.4	29.2	32.6	6.5	8.5	15.0	59.9																		
	C	3.7	5.3	9.0																						
	E	6.0	41.2	47.2	5.9	10.4	16.3	58.8																		
6	E	8.5	29.7	38.2	6.6	10.1	16.7	60.8																		
	C	3.7	5.3	9.0																						
	E	6.0	45.3	51.3	5.9	11.5	17.4	61.4																		
5	E	8.1	34.8	42.9	6.3	11.9	18.2	80.7																		
	C	3.1	6.6	9.7																						
	E	6.1	46.7	52.8	5.8	11.5	17.3	61.9																		
4	E	15.3	40.2	55.5	12.6	14.1	26.7	37.3																		
	C	6.1	8.9	15.0																						
	E	9.3	58.1	67.4	11.0	14.2	25.2	65.8																		
3	E	7.0	47.4	54.4	5.0	18.6	23.1	52.5																		
	C	2.5	15.0	17.5																						
	E	7.7	29.3	37.0	5.2	4.1	9.3	22.2																		
2	E	7.6	79.8	87.4	5.1	23.8	28.9	71.4																		
	C	2.2	3.0	5.2																						
	E	4.9	58.8	63.7	4.4	16.1	20.5	91.0																		

片持梁の設計

(41)



1.50m
Y₂, Y₁

$$P = 1.26 \times \frac{1.50}{2} \times 7.2 = 6.8 \uparrow$$

$$wq = 0.20 \text{ t/m}$$

$$ME = 6.8 \times 1.50 + \frac{1}{2} \times 0.20 \times 1.50^2 = 10.43 \text{ tmm}$$

$$Q = 6.8 + 0.20 \times 1.50 = 7.1 \uparrow$$

USE: BH-500 × 300 × 12 × 25 (元端) $I = 93799$ $Z = 3751$ $Z_F = 3388$
 $i^* = 8.28$ $R_b = 150$ $\lambda = 18.1$

$$\gamma_{b1} = \left\{ 1.0 - 0.4 \frac{18.1^2}{102.2^2} \right\} \times 2.2 = 2.19$$

$$\gamma_{b2} = \frac{900 \times 2.5 \times 30.0}{150 \times 50} = 9.0$$

$$\gamma_b = 2.20$$

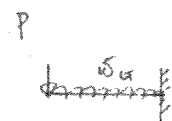
$$\sigma_b = 1043 / 3388 = 0.31 \quad \sigma_b / \gamma_b = 0.14 < 1.0$$

$$T = 7.1 / 1.2(50 - 12) = 0.16 < 0.90$$

$$\delta = \frac{6.8 \times 150^3}{3 \times 2100 \times 93799} + \frac{0.002 \times 150^4}{8 \times 2100 \times 93799} = 0.039 + 0.001 = 0.040 \text{ cm}$$

$$\delta / l = 1 / 3751$$

(42)



3.00m
Y₁₀

$$P = \frac{0.60 \times 1.5 \times 7.2 = 6.5}{0.48 \times 7.2 = 3.5} \quad wq = 0.26 \text{ t/m}$$

$$P = 10.0 \uparrow$$

$$ME = 10.0 \times 3.0 + \frac{1}{2} \times 0.26 \times 3.0^2 = 31.19 \text{ tmm}$$

$$Q = 10.0 + 0.26 \times 3.0 = 10.78 \uparrow$$

USE: BH-850 × 300 × 16 × 25 (元端) $I = 323578$ $Z = 7613$ $Z_F = 6003$
 $i^* = 7.74$ $R_b = 360$ $\lambda = 38.8$

$$\gamma_{b1} = \left\{ 1.0 - 0.4 \frac{38.8^2}{102.2^2} \right\} \times 2.2 = 2.09$$

$$\gamma_{b2} = \frac{900 \times 2.5 \times 300}{300 \times 85} = 2.65$$

$$\gamma_b = 2.20$$

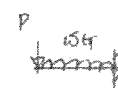
$$\sigma_b = 3119 / 6003 = 0.52 \quad \sigma_b / \gamma_b = 0.24 < 1.0$$

$$T = 10.78 / 1.6(85 - 12) = 0.092 < 0.90$$

$$\delta = \frac{10.0 \times 300^3}{3 \times 2100 \times 323578} + \frac{0.0026 \times 300^4}{8 \times 2100 \times 323578} = 0.132 + 0.004 = 0.136 \text{ cm}$$

$$\delta / l = 1 / 2206$$

(43)



1.00m
Y₁₁

$$P = \frac{0.75 \times \frac{1.0}{2} \times 7.2 = 2.59}{0.46 \times 7.2 = 3.31} \quad wq = 0.26 \text{ t/m}$$

$$P = 5.9 \uparrow$$

$$ME = 5.9 \times 1.0 + \frac{1}{2} \times 0.26 \times 1.0^2 = 6.0 \text{ tmm}$$

$$Q = 5.9 + 0.26 \times 1.0 = 6.16 \uparrow$$

USE: BH-850 × 300 × 12 × 22 (元端) $I = 278656$ $Z = 5829$ $Z_F = 5325$
 $i^* = 7.95$ $R_b = 100$ $\lambda = 12.6$

$$\gamma_{b1} = \left\{ 1.0 - 0.4 \frac{12.6^2}{102.2^2} \right\} \times 2.2 = 2.19$$

$$\gamma_{b2} = \frac{900 \times 2.2 \times 30.0}{100 \times 85} = 7.0$$

$$\gamma_b = 2.20$$

$$\sigma_b = 600 / 5325 = 0.11 \quad \sigma_b / \gamma_b = 0.05$$

$$\delta = \frac{5.9 \times 100^3}{3 \times 2100 \times 278656} + \frac{0.0026 \times 100^4}{8 \times 2100 \times 278656} = 0.003 + 0 = 0.003 \text{ cm}$$

$$\delta / l = 1 / 3333$$