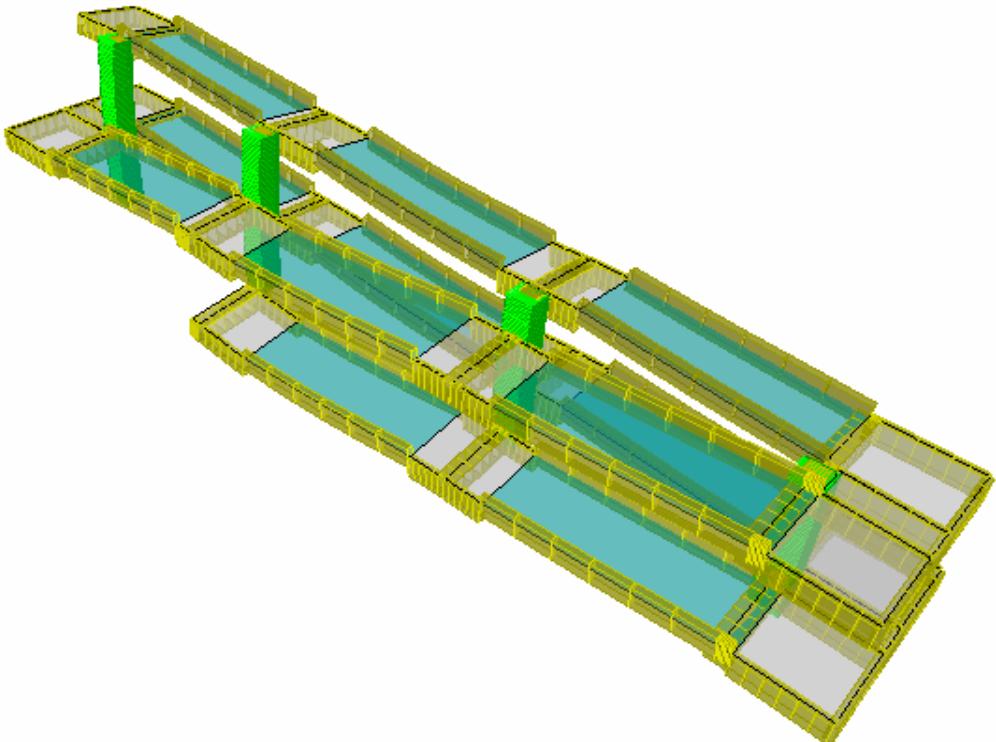


**PROYECTO: CENTRO DE ATENCIÓN
ESPECIALIZADA (CAE) – EL REDENTOR,
BLOQUE A. TRANSV. 30 # 57-50 SUR/
DIAG. 58 SUR # 28-19, BOGOTÁ
(CUNDINAMARCA)**

dye14-2059



**MEMORIAS DE ANÁLISIS
Y DISEÑO ESTRUCTURAL**

Bogotá D.C. MARZO DE 2015

1. DESCRIPCIÓN DEL PROYECTO

1.1. INTRODUCCIÓN

El presente documento contiene las memorias de análisis y diseño estructural correspondiente al proyecto **CENTRO DE ATENCIÓN ESPECIALIZADA (CAE) EL REDENTOR RAMPA** ubicado en la TRANSV. 30 # 57-50 SUR/ DIAG. 58 SUR # 28-19, BOGOTÁ (CUNDINAMARCA).

1.2. DESCRIPCIÓN ARQUITECTÓNICA

El proyecto se encuentra ubicado en un lote de 8449.0m² de área aproximadamente, en la cual se contempla la construcción un edificio de dos niveles, que funcionarán como colegio.

1.3. DESCRIPCIÓN SISTEMA ESTRUCTURAL

El proyecto se soluciona mediante la construcción de una estructura aporticada en concreto, con placa maciza y vigas descolgadas. Se manejan luces que varían entre 2.00m y 6.50m en los dos sentidos de la estructura.

Para el análisis se empleó el programa de computador **ETABS v.9.7.4.**, el cual tiene en cuenta los efectos de segundo orden. Las consideraciones sísmicas empleadas en el análisis estructural del proyecto son las siguientes:

Para la Rampa Peatonal:

- | | |
|---|-----------------------------|
| ✓ Método de análisis: | Análisis Modal |
| ✓ Zona de amenaza sísmica: | Alta |
| ✓ Zona de microzonificación sísmica: | Llanura Aluvial |
| ✓ Capacidad de disipación de energía: | Especial |
| ✓ Coeficiente de disipación de energía: | R_o = 1.50 |

Las cargas horizontales fueron distribuidas entre los diferentes pórticos en proporción a su rigidez y teniendo en cuenta los efectos de torsión.

El dimensionamiento dado a todos los elementos que intervienen en las estructuras satisfacen los requerimientos de solicitud ocasionados por las derivas presentes. Las cargas vivas de diseño son: **4.00kN/m²** para placa maciza.

Para la cimentación se siguieron las recomendaciones descritas en el respectivo estudio de suelos, que recomienda apoyar la estructura a -1.20 m del nivel actual del terreno mediante zapatas aisladas según lo indicado en los planos estructurales. La capacidad portante de seguridad admisible del suelo es **0.22 MPa** y el tipo de suelo es **F**.

El diseño de todas las estructuras se realizó basado en la Norma Colombiana de Diseño y Construcción Sismo Resistente Ley 400 de 1997 (Modificada Ley 1229 de 2008) y Decreto 926 de Marzo de 2010, en el Decreto 523 de 2010 (Microzonificación Sísmica de Bogotá) y en el Reglamento para Concreto Estructural ACI 318S-08.

1.4. MATERIALES

Los materiales utilizados son:

Concreto	21.1 MPa para zapatas, vigas de cimentación, vigas y placas macizas.
Concreto	28 MPa para columnas.
Concreto	14 MPa (para concreto de limpieza).
Acero $f_y = 420$ MPa	para todos los diámetros.

Atentamente:

JAIR USECHE MACÍAS
ING. ESTRUCTURAL
T.P. 25202-56174 CND

MEMORIAL DE RESPONSABILIDAD

Bogotá, D.C. Febrero de 2015

Señores
CURADURÍA URBANA
La Ciudad

Yo, **JAIR USECHE MACÍAS**, ingeniero civil con Matrícula Profesional N° **25202-56174** de **CUNDINAMARCA**, debidamente registrado en el consejo profesional de Ingeniería y Arquitectura de Cundinamarca, presento los Cálculos y Diseños Estructurales elaborados de acuerdo a los requerimientos de la **NORMA COLOMBIANA DE DISEÑO Y CONSTRUCCIÓN SISMO RESISTENTE LEY 400 DE 1997 (MODIFICADA LEY 1229 DE 2008) Y DECRETO 926 DE MARZO DE 2010**, para el proyecto **CENTRO DE ATENCIÓN ESPECIALIZADA (CAE) – EL REDENTOR, BLOQUE A.** ubicado en la **TRANSV. 30 # 57-50 SUR/ DIAG. 58 SUR # 28-19, BOGOTÁ (CUNDINAMARCA)**, declaro que asumo la responsabilidad por los perjuicios que causa de ellos puedan deducirse, exonerando a esta **CURADURIA URBANA** de cualquier responsabilidad.

Acepto y reconozco que la revisión efectuada por esta **CURADURÍA URBANA** no constituye una aprobación al Diseño Estructural, sino una verificación del cumplimiento de la **NORMA COLOMBIANA DE DISEÑO Y CONSTRUCCIÓN SISMO RESISTENTE**.

Atentamente,

JAIR USECHE MACÍAS
ING. ESTRUCTURAL
T.P. 25202-56174 CND



2. AVALÚO DE CARGAS

AVALÚO DE CARGAS

PROYECTO: CEA REDENTOR (RAMPA)

AVALUO DE CARGAS

1. PLACA MACIZA RAMPA

Placa Maciza e=0.10m	0.10x24	2.40 kN/m ²
Impermeabilización	20x0.05	1.00 kN/m ²
	CM	3.40 kN/m ²
	CV	4.00 kN/m ²
	CR	7.40 kN/m ²

$$CU = 1.2 \times 3.4 + 1.6 \times 4 = 10.5 \text{ kN/m}^2$$

Espesor de placa equivalente:

$$e = CM/24 = 0.142 \text{ m}$$

3. ANÁLISIS SÍSMICO

**ANÁLISIS SÍSMICO
COMPROBACIÓN IRREGULARIDAD
TORSIONAL Y DERIVAS**

PROYECTO: CAE - RAMPA
ANÁLISIS SÍSMICO (ESPECTRO DE DISEÑO - CURVA DE DISEÑO)
MICROZONIFICACIÓN SÍSMICA DE BOGOTÁ D.C.

ZONA DE AMENAZA SÍSMICA
INTERMEDIA

ZONA DE MICROZONIFICACIÓN
ALUVIAL-100

EFFECTOS LOCALES

Perfil de Suelo	F
Coeficiente Av	0.20

COEFICIENTE DE IMPORTANCIA

Grupo de Uso	III
Coeficiente de importancia I	1.25

VARIACIÓN COEFICIENTE DE CAPACIDAD DE DISIPACIÓN DE ENERGÍA

Ro: Coeficiente de capacidad de disipación de energía básico.

R: Coeficiente de capacidad de disipación de energía, para ser empleado en el diseño.

ϕ_a : Coeficiente de reducción de R causado por irregularidades en altura de la edificación.

ϕ_p : Coeficiente de reducción de R causado por irregularidades en planta de la edificación.

ϕ_r : Coeficiente de reducción de R causado por ausencia de redundancia en el sistema estructural de resistencia sísmica.

Ro	1.50
ϕ_p	1.00
ϕ_a	1.00
ϕ_r	1.00
ϕ	1.00
R	1.50

TIPO	DESCRIPCION	VALOR
		ϕ_p : 1.00
		ϕ_a : 1.00
		ϕ_r : 1.00
		ϕ : 1.00

Para edificaciones clasificadas como irregulares el valor de **R_o** debe multiplicarse por ϕ_a , ϕ_p
 y por ϕ_r para obtener $R = \phi_a \times \phi_p \times \phi_r \times R_o$

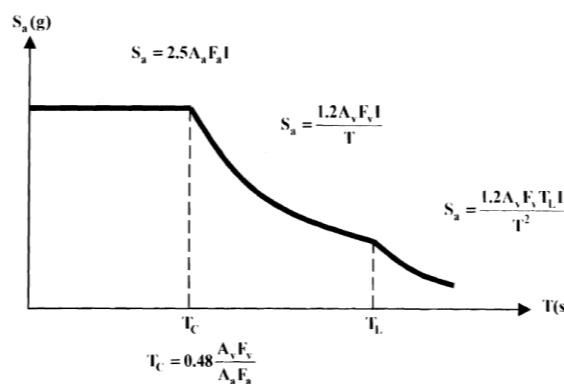
ESPECTRO DE DISEÑO

Fa: Coeficiente de ampliación que afecta la aceleración en la zona de periodos cortos.
 Fv: Coeficiente de ampliación que afecta la aceleración en la zona de periodos intermedios.
 Sa: Aceleración espectral (g).
 Aa: Aceleración horizontal pico efectiva de diseño. Aa=0.15g.
 Ao: Aceleración horizontal pico efectiva del terreno en superficie (g).
 Av: Aceleración que representa la velocidad horizontal pico efectiva de diseño. Av=0.20g.
 T: Periodo de vibración del sistema elástico, en segundos.
 Tc: Periodo corto, en segundos.
 TL: Periodo largo, en segundos.

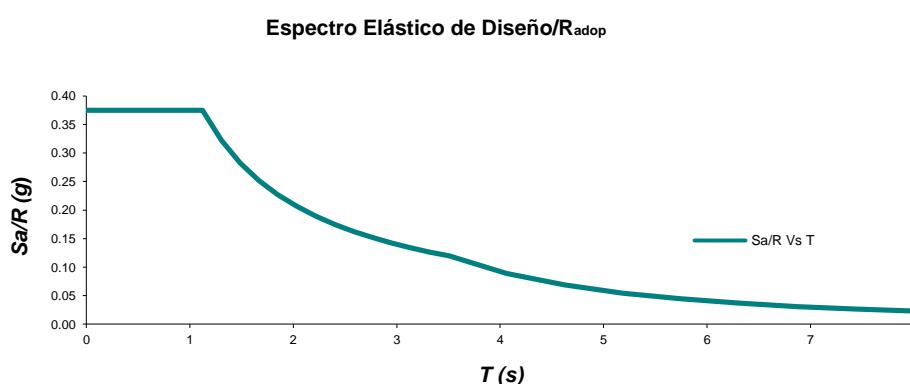
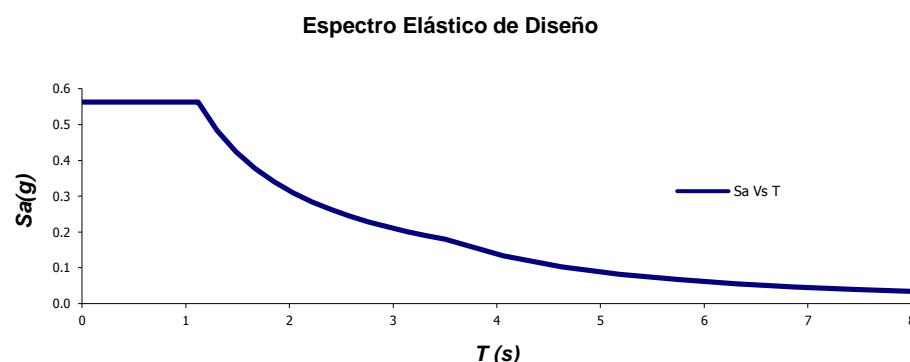
ALUVIAL-100

T _c :	1.12	Seg
T _L :	3.50	Seg
Ao:	0.18	g
Aa:	0.15	g
Fa:	1.20	
Fv:	2.10	

Curva de diseño para un coeficiente de amortiguamiento de 5% del crítico



T (Seg)	Sa (%g)	Sa/R _{adoptado} (%g)
0.00	0.563	0.375
0.16	0.563	0.375
0.32	0.563	0.375
0.48	0.563	0.375
0.64	0.563	0.375
0.80	0.563	0.375
0.96	0.563	0.375
1.12	0.563	0.375
1.30	0.483	0.322
1.49	0.424	0.283
1.67	0.377	0.252
1.85	0.340	0.227
2.04	0.310	0.206
2.22	0.284	0.189
2.40	0.262	0.175
2.58	0.244	0.163
2.77	0.228	0.152
2.95	0.214	0.142
3.13	0.201	0.134
3.32	0.190	0.127
3.50	0.180	0.120
4.06	0.134	0.089
4.63	0.103	0.069
5.19	0.082	0.055
5.75	0.067	0.044
6.31	0.055	0.037
6.88	0.047	0.031
7.44	0.040	0.027
8.00	0.034	0.023



Sistema de resistencia Sísmica: Pórticos resistentes a momentos con Capacidad Moderada de Disipación de Energía (DMO).

Nota: El sistema de pórtico es un sistema estructural compuesto por un pórtico espacial, resistente a momentos, esencialmente completo, sin diagonales, que resiste todas las cargas verticales y las fuerzas horizontales.

MODELO MATEMÁTICO

Modelo Tridimensional con Diafragma Rígido: En este modelo los entrepisos se consideran diafragmas infinitamente rígidos en su propio plano. La masa de cada diafragma se considera concentrada en su centro de masa. Los efectos torsionales accidentales son incluidos haciendo ajustes en la localización de los centros de masa de los diafragmas. Los efectos direccionalles son tomados en cuenta a través de las componentes de los desplazamientos de los grados de libertad horizontales ortogonales del diafragma.

PROYECTO: CAE - RAMPA
ANÁLISIS SÍSMICO (ESPECTRO DE DISEÑO - CURVA DE UMBRAL DE DAÑO)
MICROZONIFICACIÓN SÍSMICA DE BOGOTÁ D.C.

PROYECTO: CAE - RAMPA
ANÁLISIS SÍSMICO (ESPECTRO DE DISEÑO - CURVA DE UMBRAL DE DAÑO)
MICROZONIFICACIÓN SÍSMICA DE BOGOTÁ D.C.

ZONA DE AMENAZA SÍSMICA
INTERMEDIA

ZONA DE MICROZONIFICACIÓN
ALUVIAL-100

EFFECTOS LOCALES

Perfil de Suelo	F
Coeficiente Ad	0.06

COEFICIENTE DE IMPORTANCIA

Grupo de Uso	III
Coeficiente de importancia I	1.25

ESPECTRO DE UMBRAL DE DAÑO

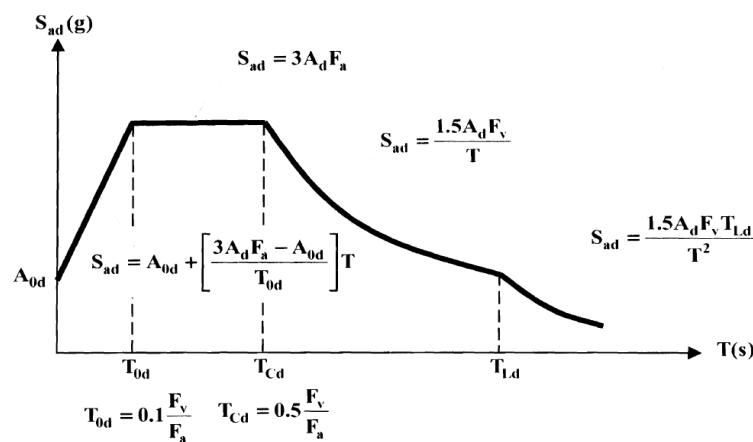
- Fa: Coeficiente de ampliación que afecta la aceleración en la zona de periodos cortos.
Fv: Coeficiente de ampliación que afecta la aceleración en la zona de periodos intermedios.
Sad: Aceleración espectral de umbral de daño (g).
Ad: Aceleración horizontal pico efectiva de umbral de daño. Ad=0.06g.
Aod: Aceleración horizontal pico efectiva del terreno para umbral de daño en superficie (g).
T: Periodo de vibración del sistema elástico, en segundos.
T_{0d}: Periodo inicial de umbral de daño, en segundos.
T_{Cd}: Periodo corto de umbral de daño, en segundos.
T_{Ld}: Periodo largo de umbral de daño, en segundos.

ALUVIAL-100

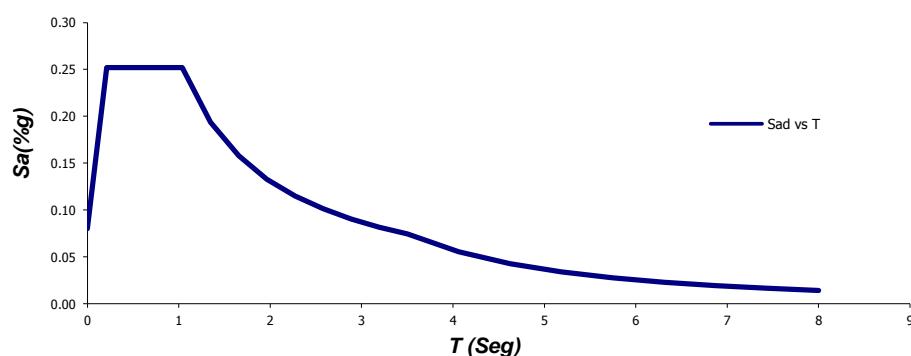
T_{cd}:	1.04	Seg
T_{ld}:	3.50	Seg
T_{0d}:	0.21	Seg
A_{od}:	0.08	g
F_a:	1.40	
F_v:	2.90	

T	S_{ad}
(Seg)	(%g)
0.00	0.080
0.21	0.252
0.28	0.252
0.35	0.252
0.42	0.252
0.49	0.252
0.56	0.252
0.63	0.252
0.69	0.252
0.76	0.252
0.83	0.252
0.90	0.252
0.97	0.252
1.04	0.252
1.35	0.194
1.66	0.158
1.96	0.133
2.27	0.115
2.58	0.101
2.89	0.090
3.19	0.082
3.50	0.075
4.06	0.055
4.63	0.043
5.19	0.034
5.75	0.028
6.31	0.023
6.88	0.019
7.44	0.017
8.00	0.014

Curva de umbral de daño para un coeficiente de amortiguamiento de 2% del crítico.



Espectro De Umbral De Daño



Sistema de resistencia Sísmica: Pórticos resistentes a momentos con Capacidad Moderada de Disipación de Energía (DMO).

Nota: El sistema de pórtico es un sistema estructural compuesto por un pórtico espacial, resistente a momentos, esencialmente completo, sin diagonales, que resiste todas las cargas verticales y las fuerzas horizontales.

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PROYECTO: CAE - RAMPA

CALCULO DEL CORTANTE BASAL DE LA ESTRUCTURA (ESPECTRO DE DISEÑO)

PROYECTO: CAE - RAMPA
CALCULO DEL CORTANTE BASAL DE LA ESTRUCTURA (ESPECTRO DE DISEÑO)
MICROZONIFICACIÓN SÍSMICA DE BOGOTÁ D.C.

CALCULO DEL CORTANTE BASAL DE LA ESTRUCTURA

H _{edificio} =	4.50	m
Tipo de Perfil:	F	
A _a =	0.15	
A _v =	0.20	
F _a =	1.20	
F _v =	2.10	
T _c =	1.12	Seg
C _t =	0.047	
α =	0.90	
T _a =	0.18	Seg
C _u =	1.25	
C _u T _a =	0.23	Seg
T _{modelación estructural} =	0.1985	Seg
ΔT =	9.09	% Ok!
T _{adoptado} =	0.1985	Seg
S _a =	0.563	S _a obtenido del espectro de diseño
g =	9.81	m/s ²
M =	99.40	Ton Masa obtenida del modelo
V _s =	548.99	kN
90% Vs =	494.09	kN Cortante basal para comparación de acuerdo a A.5.4.5 NSR-10

MODELO INICIAL
Response Espectrum Base Reactions

PORCENTAJE PARA REVISIÓN DE CORTANTE BASAL DE ACUERDO A A.5.4.5 NSR-10: 90.0 %

	F1	F2	Total	Factor	g corregido	
V _{s(x)} =	398.13	45.7	400.74	1.233	12.095	Se aplica en SISMO X
V _{s(y)} =	45.7	336.74	339.83	1.454	14.263	Se aplica en SISMO Y

MODELO CORREGIDO
Response Espectrum Base Reactions

	F1	F2	Total	90% Vs
V _{s(x)} =	490.87	56.35	494.09	494.1
V _{s(y)} =	66.45	489.6	494.09	494.1



PROYECTO: CAE - RAMPA

CALCULO DEL CORTANTE BASAL DE LA ESTRUCTURA (ESPECTRO DE UMBRAL DE DAÑO)

PROYECTO: CAE - RAMPA
CALCULO DEL CORTANTE BASAL DE LA ESTRUCTURA (ESPECTRO DE UMBRAL DE DAÑO)
MICROZONIFICACIÓN SÍSMICA DE BOGOTÁ D.C.

CALCULO DEL CORTANTE BASAL DE LA ESTRUCTURA

H _{edificio} =	4.50	m
Tipo de Perfil:	F	
A _d =	0.06	
F _v =	2.10	
C _t =	0.0470	
α =	0.9000	
T _a =	0.18	Seg
C _u =	1.25	
C _u T _a =	0.23	Seg
T ^T modelación estructural =	0.1985	Seg
ΔT =	9.09	% Ok!
T _{adoptado} =	0.1985	Seg
S _a =	0.252	S _a obtenido del espectro de diseño
g =	9.81	m/s ²
M =	99.40	Ton Masa obtenida del modelo
V _s =	245.73	kN
100% Vs =	245.73	kN Cortante basal para comparación de acuerdo a A.5.4.5 NSR-10

MODELO INICIAL
Response Espectrum Base Reactions

PORCENTAJE PARA REVISIÓN DE CORTANTE BASAL DE ACUERDO A A.5.4.5 NSR-10: 100.0 %

	F1	F2	Total	Factor	g corregido	
V _{s(x)} =	110.01	8.75	110.36	2.227	21.844	Se aplica en SISMO X
V _{s(y)} =	8.75	146.24	146.50	1.677	16.454	Se aplica en SISMO Y

MODELO CORREGIDO
Response Espectrum Base Reactions

	F1	F2	Total	100% Vs
V _{s(x)} =	244.96	19.49	245.73	245.7
V _{s(y)} =	14.68	245.28	245.72	245.7

4. DISEÑO DE CIMENTACIÓN

DISEÑO DE CIMENTACIÓN

PROYECTO: CAE EL REDENTOR - RAMPA
CARGAS A CIMENTACIÓN

CARGAS A CIMENTACIÓN

PROYECTO: CAE EL REDENTOR - RAMPA

Story	Point	Load	FX	FY	FZ	MX	MY	MZ
BASE	29	CIMENTACION	10.960	8.930	306.270	100.520	14.041	0.868
BASE	30	CIMENTACION	11.150	21.940	441.030	-1.097	-39.393	0.868
BASE	31	CIMENTACION	-4.740	-82.740	513.190	28.908	17.906	0.868
BASE	32	CIMENTACION	11.460	52.080	409.850	18.567	13.920	0.868

DISEÑO VIGAS DE AMARRE

PROYECTO: CAE EL REDENTOR - RAMPA

VIGA DE AMARRE TIPO

$$f_c = \boxed{28} \text{ MPa}$$

$$f_y = \boxed{420} \text{ MPa}$$

$$b = \boxed{0.40} \text{ m}$$

$$h = \boxed{0.50} \text{ m}$$

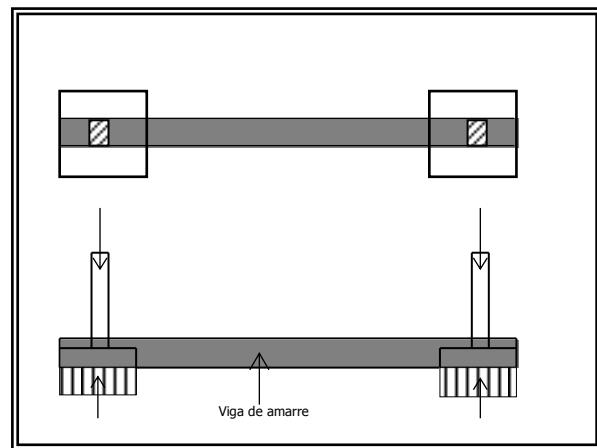
$$P_{\max} = \boxed{513.19} \text{ kN}$$

De acuerdo a el numeral A.3.6.4.2 de la NSR-10 tenemos:

$$A_a = \boxed{0.15}$$

$$\text{Paxial} = 0.25 * A_a * P_{\max}$$

$$\text{Paxial} = \boxed{19.2} \text{ kN}$$



DISEÑO A TENSIÓN

$$A_s = 1.7 * 19.244625 / (0.90 * 420)$$

$$A_s = \boxed{0.87} \text{ cm}^2$$

DISEÑO A COMPRESIÓN

$$P_{\text{com}} = 1.7 * 19.244625$$

$$P_{\text{com}} = \boxed{32.7} \text{ kN}$$

Para esta carga la sección requiere cuantía mínima:

$$A_s = 0.00333 * 0.4 * 0.45$$

$$A_s = \boxed{5.99} \text{ cm}^2$$

Se suministra un refuerzo constituido por 4#5 arriba y 4#5 abajo (como refuerzo mínimo).

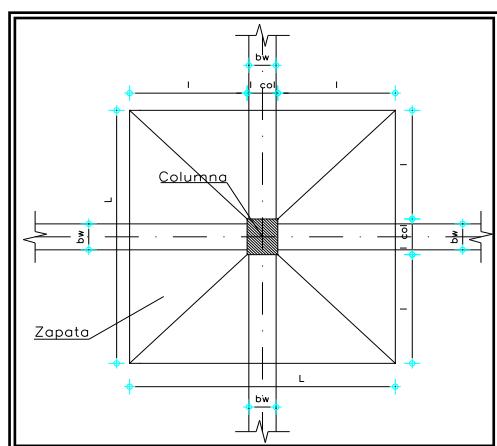
DISEÑO DE ZAPATAS CONCENTRICAS
PROYECTO: CAE EL REDENTOR - RAMPA
ZAPATA TIPO 1 (1 Und)

Columna **b = 50 cm**
 t = 60 cm

f'c = 21.1 MPa
fy = 420 MPa

σ = 0.220 MPa

PREDIMENSIONAMIENTO



L = 1.800 m	I_{col} = 0.600 m	I = 0.600 m	Cargas
			M_u = 100.52 kN*m
			P_u = 306.27 kN
			P_p (10%) = 31 kN
			Σ P = 337 kN
Area necesaria = $\frac{\Sigma P}{\sigma}$ = $\frac{336.90}{0.220}$ = 1.53 m²			
e = 0.33 m	L = 1.237 m	Aproximamos = 1.80 m	
Carga de diseño = $\frac{P_u}{A \text{ real}}$ = $\frac{306.27}{3.240}$ = 0.095 MPa			

Esfuerzos
σ_{máx} = 0.218 MPa OK
σ_{min} = -0.010 MPa OK

DISEÑO DE ZAPATA CONCENTRICA

FLEXIÓN

M borde de la columna = 52.84 kN*m
M_u = 1,7 * M borde de la columna = 89.83 kN*m

Con el criterio de calcular el refuerzo por metro lineal

utilizamos una altura efectiva igual a:

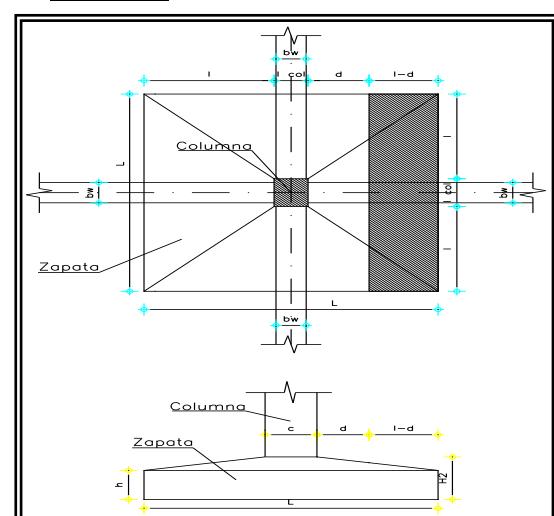
d = 0.23 m

Cuantia = 0.00425604

As = 9.79 cm²/m

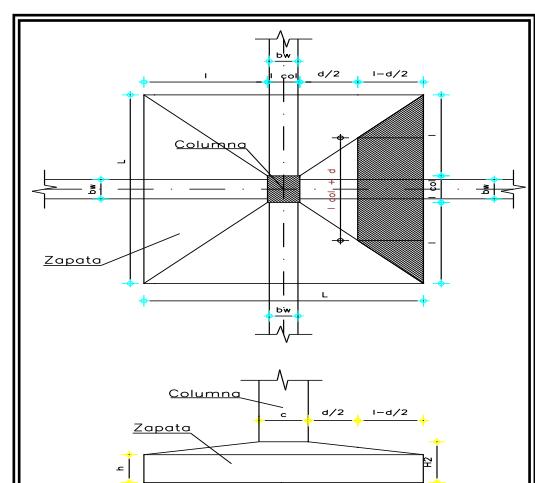
Armadura: 10#521c./0.2 en ambos sentidos

CORTANTE



a. En una dirección (d)

L = 1.80 m	H = 0.30 m
I = 0.60 m	h = 0.30 m
I - d = 0.37 m	H-h = 0.00 m
V(d) = 129.44 kN	
V_u(d) = 1.7*V(d)	v_v = $\frac{V_u}{L * h'} = 0.532$ MPa
V_u(d) = 220.05 kN	
h' = 0.23 m	ϕvC = 0.57 MPa OK



b. En dos direcciones (d/2)

ZAPATA TIPO 1 (1 Und)	
L = 1.800 m	H = 0.30 m
d/2 = 0.115 m	h = 0.30 m
I - d/2 = 0.485 m	H-h = 0.00 m
V(d/2) = 119.3 kN	
V_u(d/2) = 1.5*V(d)	v_v = $\frac{V_u}{b_0 * d_1} = 0.938$ MPa
V_u(d/2) = 179.0 kN	
d₁ = 0.23 m	ϕvC = 1.15 MPa OK

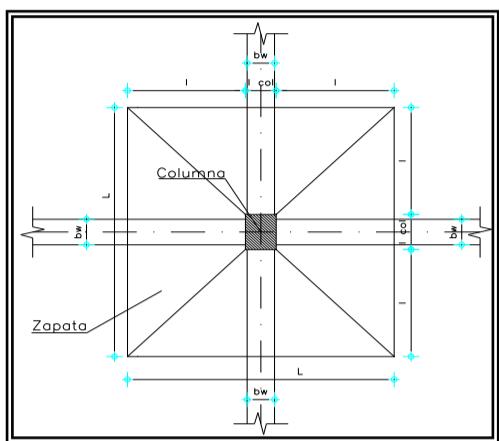
DISEÑO DE ZAPATAS CONCENTRICAS
PROYECTO: CAE EL REDENTOR - RAMPA
ZAPATA TIPO 1 (1 Und)

Columna **b = 50** cm
 t = 60 cm

f'c = 21.1 MPa
fy = 420 MPa

σ = 0.220 MPa

PREDIMENSIONAMIENTO



L = 1.800 m
l_{col} = 0.600 m
I = 0.600 m

Cargas		
M_u = -1.097	kN*m	
P_u = 441.03	kN	
P_{p (10%)} = 44	kN	
Σ P = 485	kN	

$$\text{Área necesaria} = \frac{\Sigma P}{\sigma} = \frac{485.13}{0.220} = 2.21 \text{ m}^2$$

$$e = 0.00 \text{ m}$$

$$L = 1.485 \text{ m}$$

$$\text{Aproximamos} = 1.80 \text{ m}$$

$$\text{Carga de diseño} = \frac{P_u}{A \text{ real}} = \frac{441.03}{3.240} = 0.136 \text{ MPa}$$

Esfuerzos

σ_{máx} = 0.148 MPa	OK
σ_{min} = 0.151 MPa	OK

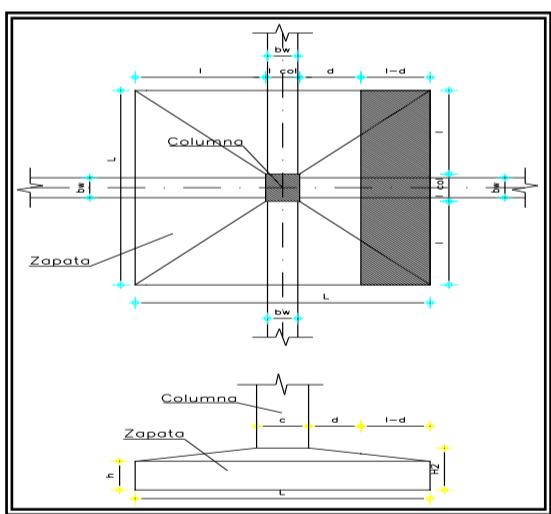
DISEÑO DE ZAPATA CONCENTRICA

FLEXIÓN

M_u = 1,7 * M borde de la columna = 45.18 kN*m

Con el criterio de calcular el refuerzo por metro lineal utilizamos una altura efectiva igual a: **d = 0.23 m**
Cuantia = 0.00208475
As = 4.79 cm²/m

CORTANTE



Armadura: 10#521c./0.20 en ambos sentidos

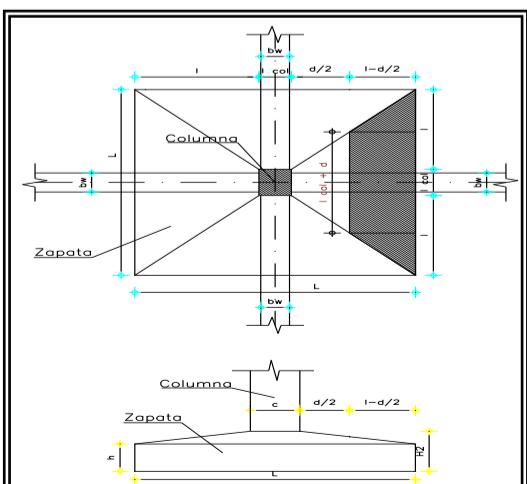
a. En una dirección (d)

L = 1.80 m	H = 0.30 m
I = 0.60 m	h = 0.30 m
I - d = 0.37 m	H-h = 0.00 m

V(d) = 99.06 kN
V_{u(d)} = 1.7*V(d)
V_{u(d)} = 168.41 kN
h' = 0.23 m

v_v = $\frac{V_u}{L * h'} = 0.407 \text{ MPa}$
ϕv_c = 0.57 MPa OK

b. En dos direcciones (d/2)



ZAPATA TIPO 1 (1 Und)

L = 1.800 m	H = 0.30 m
d/2 = 0.115 m	h = 0.30 m
I - d/2 = 0.485 m	H-h = 0.00 m

V(d/2) = 94.9 kN
V_{u(d/2)} = 1.5*V(d)
V_{u(d/2)} = 142.4 kN
d₁ = 0.23 m

v_v = $\frac{V_u}{b_0 * d_1} = 0.746 \text{ MPa}$
ϕv_c = 1.15 MPa OK

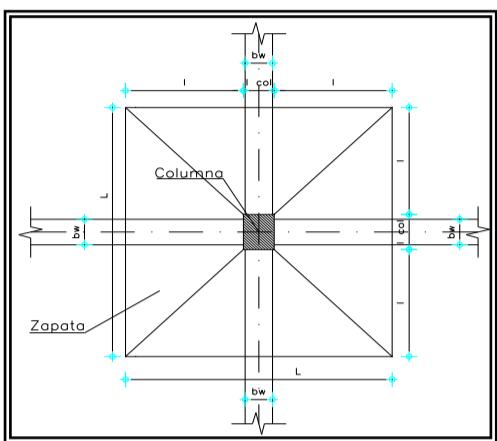
DISEÑO DE ZAPATAS CONCENTRICAS
PROYECTO: CAE EL REDENTOR - RAMPA
ZAPATA TIPO 1 (1 Und)

Columna **b = 50** cm
 t = 60 cm

f'c = 21.1 MPa
fy = 420 MPa

σ = 0.220 MPa

PREDIMENSIONAMIENTO



L = 1.800 m l_{col} = 0.600 m I = 0.600 m	Cargas M_u = 28.908 kN*m P_u = 513.19 kN P_{p (10%)} = 51 kN Σ P = 565 kN
--	--

$$\text{Área necesaria} = \frac{\Sigma P}{\sigma} = \frac{564.51}{0.220} = 2.57 \text{ m}^2$$

$$e = 0.06 \text{ m}$$

$$L = 1.602 \text{ m}$$

Aproximamos = **1.80** m

$$\text{Carga de diseño} = \frac{P_u}{A \text{ real}} = \frac{513.19}{3.240} = 0.158 \text{ MPa}$$

Esfuerzos σ_{máx} = 0.207 MPa σ_{min} = 0.142 MPa	OK
--	-----------

DISEÑO DE ZAPATA CONCENTRICA

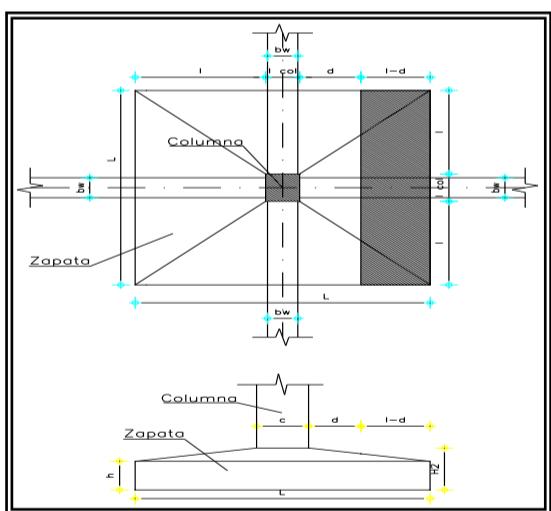
FLEXIÓN

$$\text{M borde de la columna} = 41.18 \text{ kN*m}$$

$$M_u = 1.7 * \text{M borde de la columna} = 70.00 \text{ kN*m}$$

Con el criterio de calcular el refuerzo por metro lineal utilizamos una altura efectiva igual a: $d = 0.23 \text{ m}$
Cuantia = 0.00327666
As = 7.54 cm²/m

CORTANTE



a. En una dirección (d)

L = 1.80 m I = 0.60 m I - d = 0.37 m	H = 0.30 m h = 0.30 m H-h = 0.00 m
---	---

V(d) = 133.35 kN
V_{u(d)} = 1.7*V(d)
V_{u(d)} = 226.69 kN
h' = 0.23 m

v_v = $\frac{V_u}{L * h'} = 0.548 \text{ MPa}$
φv_c = 0.57 MPa OK

b. En dos direcciones (d/2)

L = 1.800 m d/2 = 0.115 m I - d/2 = 0.485 m	H = 0.30 m h = 0.30 m H-h = 0.00 m
--	---

V(d/2) = 126.4 kN
V_{u(d/2)} = 1.5*V(d)
V_{u(d/2)} = 189.5 kN
d₁ = 0.23 m

v_v = $\frac{V_u}{b_0 * d_1} = 0.993 \text{ MPa}$
φv_c = 1.15 MPa OK

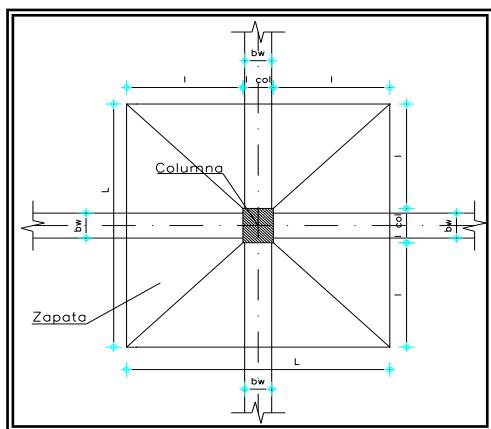
DISEÑO DE ZAPATAS CONCENTRICAS
PROYECTO: CAE EL REDENTOR - RAMPA
ZAPATA TIPO 1 (1 Und)

Columna **b = 50** cm
t = **60** cm

f'c = **21.1** MPa
fy = **420** MPa

σ = 0.220 MPa

PREDIMENSIONAMIENTO



$$\begin{aligned} L &= 1.800 \text{ m} \\ l_{col} &= 0.600 \text{ m} \\ I &= 0.600 \text{ m} \end{aligned}$$

Cargas	
Mu =	18.567 kN*m
Pu =	409.85 kN
Pp (10%) =	41 kN
ΣP =	451 kN

$$\text{Area necesaria} = \frac{\Sigma P}{\sigma} = \frac{450.84}{0.220} = 2.05 \text{ m}^2$$

$$e = 0.05 \text{ m} \quad L = 1.432 \text{ m} \quad \text{Aproximamos} = \textcolor{blue}{1.80} \text{ m}$$

$$\text{Carga de diseño} = \frac{Pu}{A \text{ real}} = \frac{409.85}{3.240} = 0.126 \text{ MPa}$$

Esfuerzos

σmáx =	0.160 MPa	OK
σmin =	0.118 MPa	OK

DISEÑO DE ZAPATA CONCENTRICA

FLEXIÓN

$$\begin{aligned} M \text{ borde de la columna} &= 31.35 \text{ kN*m} \\ Mu = 1.7 * M \text{ borde de la columna} &= 53.30 \text{ kN*m} \end{aligned}$$

Con el criterio de calcular el refuerzo por metro lineal utilizamos una altura efectiva igual a:

$$d = 0.23 \text{ m}$$

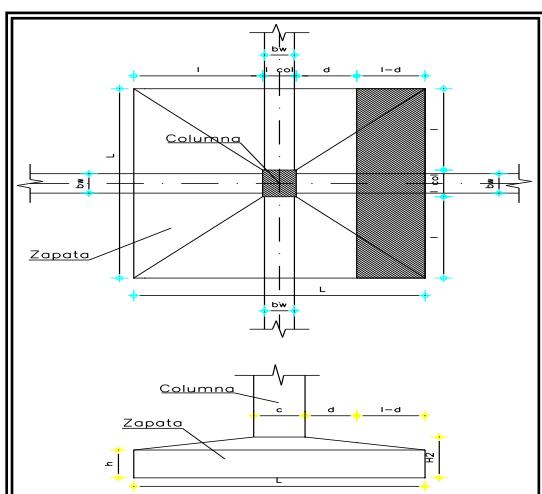
$$\text{Cuantia} = 0.0024704$$

$$As = 5.68 \text{ cm}^2/\text{m}$$

Armadura: 10#521c./0.20

en ambos sentidos

CORTANTE



a. En una dirección (d)

$$\begin{aligned} L &= 1.80 \text{ m} & H &= \textcolor{blue}{0.30} \text{ m} \\ I &= 0.60 \text{ m} & h &= \textcolor{blue}{0.30} \text{ m} \\ I - d &= 0.37 \text{ m} & H-h &= 0.00 \text{ m} \end{aligned}$$

$$V(d) = 103.79 \text{ kN}$$

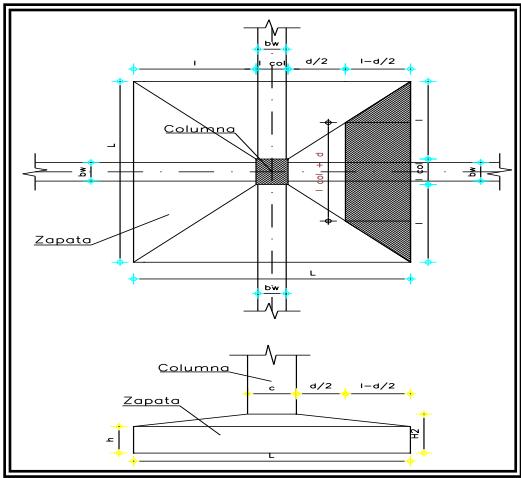
$$Vu(d) = 1.7 * V(d)$$

$$Vu(d) = 176.44 \text{ kN}$$

$$h' = 0.23 \text{ m}$$

$$vv = \frac{Vu}{L * h'} = 0.426 \text{ MPa}$$

$$\phi vc = 0.57 \text{ MPa} \quad \text{OK}$$



b. En dos direcciones (d/2)

ZAPATA TIPO 1 (1 Und)

$$L = 1.800 \text{ m}$$

$$d/2 = 0.115 \text{ m}$$

$$L - d/2 = 0.485 \text{ m}$$

$$H = 0.30 \text{ m}$$

$$h = 0.30 \text{ m}$$

$$H-h = 0.00 \text{ m}$$

$$V(d/2) = 98.5 \text{ kN}$$

$$Vu(d/2) = 1.5 * V(d)$$

$$Vu(d/2) = 147.8 \text{ kN}$$

$$d_1 = 0.23 \text{ m}$$

$$v_u = \frac{v_u}{b_0 \times d_1} = 0.774 \text{ MPa}$$

$$\phi v_c = 1.15 \text{ MPa OK}$$

5. DISEÑO DE VIGAS Y COLUMNAS

**DISEÑO DE VIGAS Y
COLUMNAS**

PROYECTO: CENTRO DE ATENCIÓN ESPECIALIZADA - CAE (RAMPA)**Columna A'-2'**

Nivel	H Libre	Losa	B	H	M1	M2	P	V1	V2	Cuantia	m/mr	Rap	Ras
N+4.42	1.91	.50	.50	.60	0.02 23.97	1.99 217.61	-115.42	77.56	173.23	18/#6 #7 (2.0%) 18/#6 #7 (2.0%)	0.35 0.48	6	5
N+2.01	1.53	.53	.50	.60	10.52 28.70	243.94 483.65	-335.34	86.77	194.48	18/#6 #7 (2.0%) 18/#6 #7 (2.0%)	0.76 0.99	7	7

Columna A'-3'

Nivel	H Libre	Losa	B	H	M1	M2	P	V1	V2	Cuantia	m/mr	Rap	Ras
N+4.05	1.13	.50	.50	.60	32.02 -10.92	166.21 230.38	-137.99	80.21	126.07	18/#5 #6 (1.4%) 18/#5 #6 (1.4%)	0.52 0.66	9	9
N+2.42	.31	.50	.50	.60	21.71 -20.39	95.74 -149.91	-271.41	97.38	171.57	18/#5 #6 (1.4%) 18/#5 #6 (1.4%)	0.38 0.43	37	36
N+1.61	1.16	.50	.50	.60	21.27 28.75	285.73 390.12	-415.08	97.13	164.50	18/#5 #6 (1.4%) 18/#5 #6 (1.4%)	0.86 0.99	9	8

Columna A'-4'

Nivel	H Libre	Losa	B	H	M1	M2	P	V1	V2	Cuantia	m/mr	Rap	Ras
N+3.64	.31	.50	.50	.60	-26.96 10.69	183.51 199.63	-167.98	91.35	317.28	18/#5 (1.2%) 18/#5 (1.2%)	0.64 0.66	35	34
N+2.83	1.13	.50	.50	.60	-5.34 -11.24	72.20 -154.93	-289.02	74.37	152.81	18/#5 (1.2%) 18/#5 (1.2%)	0.38 0.51	9	8
N+1.20	.31	.50	.50	.60	12.26 23.82	294.36 279.81	-572.27	95.60	188.15	18/#5 (1.2%) 18/#5 (1.2%)	0.95 0.97	35	34

PROYECTO: CENTRO DE ATENCIÓN ESPECIALIZADA - CAE (RAMPA)**Columna A'-5'**

Nivel	H Libre	Losa	B	H	M1	M2	P	V1	V2	Cuantia	m/mr	Rap	Ras
N+3.23	1.91	.53	.50	.60	-2.37 17.09	149.88 356.87	-412.39	94.62	210.66	18/#6 (1.4%) 18/#6 (1.4%)	0.38 0.93	5	5
N+0.79	.31	.53	.50	.60	22.06 37.26	210.79 249.51	-227.39	90.69	155.99	18/#6 (1.4%) 18/#6 (1.4%)	0.64 0.69	37	36

DISEÑO DE VIGAS ACI 318-08 RAMPA

Design Preferences

Consider Minimum Eccentricity : 24
 Number of Interaction Curves : 24
 Number of Interaction Points : 11
 Pattern Live Load Factor : 0.750
 Utilization Factor Limit : 0.950

 Phi (Tension Controlled) : 0.900
 Phi (Comp. Controlled Tied) : 0.650
 Phi (Comp. Controlled Spiral) : 0.750
 Phi (Shear and/or Torsion) : 0.750
 Phi (Shear Seismic) : 0.600
 Phi (Shear Joint) : 0.850

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C O N C R E T E B E A M D E S I G N O U T P U T (ACI 318-08/IBC 2009)

FLEXURAL AND TORSION DESIGN OF BEAM-TYPE ELEMENTS

STORY ID	BEAM BAY	SECTION ID	STATION ID	<----- REQUIRED REINFORCING ----->					
				TOP	COMBO	BOTTOM	COMBO	TORSION	COMBO
N+4.45	B25	VIG-15X50	0.000	0.018	COMDIS6	0.020	COMDIS4	2.569	COMDIS4
N+4.45	B25	VIG-15X50	17.250	0.392	COMDIS2	0.392	COMDIS2	2.569	COMDIS4
N+4.45	B25	VIG-15X50	34.500	0.392	COMDIS2	0.392	COMDIS2	2.569	COMDIS4
N+4.45	B25	VIG-15X50	51.750	0.413	COMDIS2	0.392	COMDIS2	2.569	COMDIS4
N+4.45	B25	VIG-15X50	69.000	0.564	COMDIS2	0.392	COMDIS2	2.569	COMDIS4
N+4.45	B25	VIG-15X50	86.250	0.721	COMDIS2	0.392	COMDIS2	2.569	COMDIS4
N+4.45	B25	VIG-15X50	103.500	0.883	COMDIS2	0.392	COMDIS2	2.569	COMDIS4
N+4.45	B25	VIG-15X50	120.750	1.051	COMDIS2	0.392	COMDIS2	2.569	COMDIS4
N+4.45	B25	VIG-15X50	138.000	1.225	COMDIS2	0.392	COMDIS2	2.569	COMDIS4
N+4.45	B25	VIG-15X50	155.250	1.406	COMDIS2	0.392	COMDIS2	2.569	COMDIS4
N+4.45	B25	VIG-15X50	172.500	1.592	COMDIS2	0.788	COMDIS2	2.569	COMDIS4
N+4.45	B36	VIG-15X50	0.000	0.099	COMDIS2	0.049	COMDIS2	0.000	COMDIS6
N+4.45	B36	VIG-15X50	16.500	0.025	COMDIS2	0.040	COMDIS2	0.000	COMDIS6
N+4.45	B36	VIG-15X50	33.000	0.025	COMDIS2	0.118	COMDIS2	0.000	COMDIS6
N+4.45	B36	VIG-15X50	49.500	0.025	COMDIS2	0.174	COMDIS2	0.000	COMDIS6
N+4.45	B36	VIG-15X50	66.000	0.025	COMDIS2	0.213	COMDIS2	0.000	COMDIS6
N+4.45	B36	VIG-15X50	82.500	0.025	COMDIS2	0.231	COMDIS2	0.000	COMDIS6
N+4.45	B36	VIG-15X50	99.000	0.025	COMDIS2	0.225	COMDIS2	0.000	COMDIS6
N+4.45	B36	VIG-15X50	115.500	0.025	COMDIS2	0.195	COMDIS2	0.000	COMDIS6
N+4.45	B36	VIG-15X50	132.000	0.025	COMDIS2	0.143	COMDIS2	0.000	COMDIS6
N+4.45	B36	VIG-15X50	148.500	0.025	COMDIS2	0.074	COMDIS2	0.000	COMDIS6
N+4.45	B36	VIG-15X50	165.000	0.056	COMDIS4	0.028	COMDIS4	0.000	COMDIS6
N+4.45	B37	VIG-15X50	0.000	0.020	COMDIS4	0.018	COMDIS6	0.000	COMDIS6
N+4.45	B37	VIG-15X50	17.250	0.363	COMDIS2	0.363	COMDIS2	0.000	COMDIS6
N+4.45	B37	VIG-15X50	34.500	0.363	COMDIS2	0.363	COMDIS2	0.000	COMDIS6
N+4.45	B37	VIG-15X50	51.750	0.386	COMDIS2	0.363	COMDIS2	0.000	COMDIS6
N+4.45	B37	VIG-15X50	69.000	0.524	COMDIS2	0.363	COMDIS2	0.000	COMDIS6
N+4.45	B37	VIG-15X50	86.250	0.668	COMDIS2	0.363	COMDIS2	0.000	COMDIS6
N+4.45	B37	VIG-15X50	103.500	0.817	COMDIS2	0.363	COMDIS2	0.000	COMDIS6
N+4.45	B37	VIG-15X50	120.750	0.973	COMDIS2	0.363	COMDIS2	0.000	COMDIS6
N+4.45	B37	VIG-15X50	138.000	1.134	COMDIS2	0.363	COMDIS2	0.000	COMDIS6
N+4.45	B37	VIG-15X50	155.250	1.301	COMDIS2	0.363	COMDIS2	0.000	COMDIS6
N+4.45	B37	VIG-15X50	172.500	1.474	COMDIS2	0.730	COMDIS2	0.000	COMDIS6
N+4.42	B32	VIG-40-50	0.000	7.987	COMDIS2	5.178	COMDIS2	6.791	COMDIS6
N+4.42	B32	VIG-40-50	19.750	6.490	COMDIS2	2.555	COMDIS2	6.791	COMDIS6
N+4.42	B32	VIG-40-50	32.500	5.910	COMDIS4	2.555	COMDIS2	6.791	COMDIS6
N+4.42	B32	VIG-40-50	32.500	5.910	COMDIS4	2.555	COMDIS2	0.000	COMDIS6
N+4.42	B32	VIG-40-50	39.500	5.910	COMDIS4	2.555	COMDIS2	0.000	COMDIS6
N+4.42	B32	VIG-40-50	59.250	5.910	COMDIS2	2.555	COMDIS2	0.000	COMDIS6
N+4.42	B32	VIG-40-50	79.000	5.052	COMDIS2	2.555	COMDIS2	0.000	COMDIS6
N+4.42	B32	VIG-40-50	98.750	4.122	COMDIS2	2.555	COMDIS2	0.000	COMDIS6
N+4.42	B32	VIG-40-50	118.500	3.219	COMDIS2	2.555	COMDIS2	0.000	COMDIS6
N+4.42	B32	VIG-40-50	138.250	2.555	COMDIS2	2.555	COMDIS2	0.000	COMDIS6
N+4.42	B32	VIG-40-50	158.000	2.555	COMDIS2	2.555	COMDIS2	0.000	COMDIS6

N+4.42	B32 VIG-40-50	177.750	2.555 COMDIS2	2.555 COMDIS2	0.000 COMDIS6
N+4.42	B32 VIG-40-50	197.500	0.000 COMDIS6	0.170 COMDIS4	0.000 COMDIS6
N+4.05	B26 VIG-15X50	0.000	0.018 COMDIS6	0.020 COMDIS4	2.569 COMDIS4
N+4.05	B26 VIG-15X50	4.379	0.018 COMDIS6	0.020 COMDIS4	2.569 COMDIS4
N+4.05	B26 VIG-15X50	8.758	0.018 COMDIS6	0.020 COMDIS4	2.569 COMDIS4
N+4.05	B26 VIG-15X50	13.137	0.018 COMDIS6	0.020 COMDIS4	2.569 COMDIS4
N+4.05	B26 VIG-15X50	17.516	0.018 COMDIS6	0.020 COMDIS4	2.569 COMDIS4
N+4.05	B26 VIG-15X50	21.895	0.018 COMDIS6	0.020 COMDIS4	2.569 COMDIS4
N+4.05	B26 VIG-15X50	26.274	0.018 COMDIS6	0.020 COMDIS4	2.569 COMDIS4
N+4.05	B26 VIG-15X50	30.653	0.018 COMDIS6	0.020 COMDIS4	2.569 COMDIS4
N+4.05	B26 VIG-15X50	35.032	0.018 COMDIS6	0.020 COMDIS4	2.569 COMDIS4
N+4.05	B26 VIG-15X50	39.411	0.018 COMDIS6	0.020 COMDIS4	2.569 COMDIS4
N+4.05	B26 VIG-15X50	43.790	0.018 COMDIS6	0.020 COMDIS4	2.569 COMDIS4
N+4.05	B27 VIG-15X50	0.000	3.349 COMDIS3	2.163 COMDIS3	2.563 COMDIS6
N+4.05	B27 VIG-15X50	13.621	3.021 COMDIS3	1.066 COMDIS3	2.563 COMDIS6
N+4.05	B27 VIG-15X50	27.242	2.699 COMDIS3	1.066 COMDIS3	2.563 COMDIS6
N+4.05	B27 VIG-15X50	40.863	2.384 COMDIS3	1.066 COMDIS3	2.563 COMDIS6
N+4.05	B27 VIG-15X50	54.484	2.216 COMDIS4	1.066 COMDIS3	2.563 COMDIS6
N+4.05	B27 VIG-15X50	68.105	2.216 COMDIS3	1.066 COMDIS3	2.563 COMDIS6
N+4.05	B27 VIG-15X50	81.726	1.968 COMDIS3	1.066 COMDIS3	2.563 COMDIS6
N+4.05	B27 VIG-15X50	95.347	1.580 COMDIS3	1.066 COMDIS3	2.563 COMDIS6
N+4.05	B27 VIG-15X50	108.968	1.199 COMDIS3	1.066 COMDIS3	2.563 COMDIS6
N+4.05	B27 VIG-15X50	122.589	1.066 COMDIS3	1.066 COMDIS3	2.563 COMDIS6
N+4.05	B27 VIG-15X50	136.210	0.459 COMDIS3	0.229 COMDIS3	2.563 COMDIS6
N+4.05	B33 VIG-40-50	0.000	7.682 COMDIS2	3.458 COMDIS2	6.586 COMDIS5
N+4.05	B33 VIG-40-50	19.750	7.682 COMDIS2	3.458 COMDIS2	6.586 COMDIS5
N+4.05	B33 VIG-40-50	32.500	7.682 COMDIS2	3.458 COMDIS2	6.586 COMDIS5
N+4.05	B33 VIG-40-50	32.500	7.682 COMDIS2	3.458 COMDIS2	6.586 COMDIS5
N+4.05	B33 VIG-40-50	39.500	7.282 COMDIS2	3.458 COMDIS2	6.586 COMDIS5
N+4.05	B33 VIG-40-50	59.250	6.193 COMDIS2	3.458 COMDIS2	6.586 COMDIS5
N+4.05	B33 VIG-40-50	79.000	5.910 COMDIS4	3.458 COMDIS2	6.586 COMDIS5
N+4.05	B33 VIG-40-50	98.750	5.566 COMDIS2	3.458 COMDIS2	6.586 COMDIS5
N+4.05	B33 VIG-40-50	118.500	4.321 COMDIS2	3.458 COMDIS2	6.586 COMDIS5
N+4.05	B33 VIG-40-50	138.250	3.458 COMDIS2	3.458 COMDIS2	6.586 COMDIS5
N+4.05	B33 VIG-40-50	158.000	3.458 COMDIS2	3.458 COMDIS2	6.586 COMDIS5
N+4.05	B33 VIG-40-50	177.750	3.458 COMDIS2	3.458 COMDIS2	6.586 COMDIS5
N+4.05	B33 VIG-40-50	197.500	0.000 COMDIS6	0.047 COMDIS3	6.586 COMDIS5
N+4.05	B38 VIG-15X50	0.000	2.836 COMDIS3	1.842 COMDIS3	2.566 COMDIS6
N+4.05	B38 VIG-15X50	4.379	2.632 COMDIS3	0.909 COMDIS3	2.566 COMDIS6
N+4.05	B38 VIG-15X50	8.758	2.431 COMDIS3	0.909 COMDIS3	2.566 COMDIS6
N+4.05	B38 VIG-15X50	13.137	2.216 COMDIS3	0.909 COMDIS3	2.566 COMDIS6
N+4.05	B38 VIG-15X50	17.516	2.216 COMDIS3	0.909 COMDIS3	2.566 COMDIS6
N+4.05	B38 VIG-15X50	21.895	2.216 COMDIS3	0.909 COMDIS3	2.566 COMDIS6
N+4.05	B38 VIG-15X50	26.274	2.203 COMDIS3	0.909 COMDIS3	2.566 COMDIS6
N+4.05	B38 VIG-15X50	30.653	2.203 COMDIS3	0.909 COMDIS3	2.566 COMDIS6
N+4.05	B38 VIG-15X50	35.032	1.704 COMDIS3	0.909 COMDIS3	2.566 COMDIS6
N+4.05	B38 VIG-15X50	39.411	1.459 COMDIS3	0.909 COMDIS3	2.566 COMDIS6
N+4.05	B38 VIG-15X50	43.790	1.218 COMDIS3	0.604 COMDIS3	2.566 COMDIS6
N+4.05	B39 VIG-15X50	0.000	2.593 COMDIS2	1.688 COMDIS2	2.399 COMDIS4
N+4.05	B39 VIG-15X50	13.621	2.313 COMDIS2	0.834 COMDIS2	2.399 COMDIS4
N+4.05	B39 VIG-15X50	27.242	2.216 COMDIS4	0.834 COMDIS2	2.399 COMDIS4
N+4.05	B39 VIG-15X50	40.863	2.216 COMDIS4	0.834 COMDIS2	2.399 COMDIS4
N+4.05	B39 VIG-15X50	54.484	2.008 COMDIS2	0.834 COMDIS2	2.399 COMDIS4
N+4.05	B39 VIG-15X50	68.105	1.663 COMDIS2	0.834 COMDIS2	2.399 COMDIS4
N+4.05	B39 VIG-15X50	81.726	1.324 COMDIS2	0.834 COMDIS2	2.399 COMDIS4
N+4.05	B39 VIG-15X50	95.347	0.992 COMDIS2	0.834 COMDIS2	2.399 COMDIS4
N+4.05	B39 VIG-15X50	108.968	0.834 COMDIS2	0.834 COMDIS2	2.399 COMDIS4
N+4.05	B39 VIG-15X50	122.589	0.834 COMDIS2	0.834 COMDIS2	2.399 COMDIS4
N+4.05	B39 VIG-15X50	136.210	0.309 COMDIS4	0.265 COMDIS6	2.399 COMDIS4
N+3.64	B28 VIG-15X50	0.000	1.332 COMDIS3	0.660 COMDIS3	2.565 COMDIS6
N+3.64	B28 VIG-15X50	9.000	1.601 COMDIS3	1.002 COMDIS3	2.565 COMDIS6
N+3.64	B28 VIG-15X50	18.000	1.873 COMDIS3	1.002 COMDIS3	2.565 COMDIS6
N+3.64	B28 VIG-15X50	27.000	2.149 COMDIS3	1.002 COMDIS3	2.565 COMDIS6
N+3.64	B28 VIG-15X50	36.000	2.216 COMDIS3	1.002 COMDIS3	2.565 COMDIS6
N+3.64	B28 VIG-15X50	45.000	2.216 COMDIS4	1.002 COMDIS3	2.565 COMDIS6
N+3.64	B28 VIG-15X50	54.000	2.249 COMDIS3	1.002 COMDIS3	2.565 COMDIS6
N+3.64	B28 VIG-15X50	63.000	2.467 COMDIS3	1.002 COMDIS3	2.565 COMDIS6
N+3.64	B28 VIG-15X50	72.000	2.688 COMDIS3	1.002 COMDIS3	2.565 COMDIS6
N+3.64	B28 VIG-15X50	81.000	2.912 COMDIS3	1.002 COMDIS3	2.565 COMDIS6
N+3.64	B28 VIG-15X50	90.000	3.139 COMDIS3	2.032 COMDIS3	2.565 COMDIS6
N+3.64	B29 VIG-15X50	0.000	2.836 COMDIS3	1.842 COMDIS3	2.566 COMDIS6
N+3.64	B29 VIG-15X50	9.000	2.632 COMDIS3	0.909 COMDIS3	2.566 COMDIS6
N+3.64	B29 VIG-15X50	18.000	2.431 COMDIS3	0.909 COMDIS3	2.566 COMDIS6
N+3.64	B29 VIG-15X50	27.000	2.232 COMDIS3	0.909 COMDIS3	2.566 COMDIS6
N+3.64	B29 VIG-15X50	36.000	2.216 COMDIS3	0.909 COMDIS3	2.566 COMDIS6
N+3.64	B29 VIG-15X50	45.000	2.216 COMDIS3	0.909 COMDIS3	2.566 COMDIS6
N+3.64	B29 VIG-15X50	54.000	2.203 COMDIS3	0.909 COMDIS3	2.566 COMDIS6
N+3.64	B29 VIG-15X50	63.000	1.952 COMDIS3	0.909 COMDIS3	2.566 COMDIS6
N+3.64	B29 VIG-15X50	72.000	1.704 COMDIS3	0.909 COMDIS3	2.566 COMDIS6
N+3.64	B29 VIG-15X50	81.000	1.459 COMDIS3	0.909 COMDIS3	2.566 COMDIS6

N+3.64	B29 VIG-15X50	90.000	1.218 COMDIS3	0.604 COMDIS3	2.566 COMDIS6
N+3.64	B34 VIG-40-50	0.000	0.004 COMDIS6	0.064 COMDIS4	6.791 COMDIS1
N+3.64	B34 VIG-40-50	19.750	3.596 COMDIS2	3.596 COMDIS2	6.791 COMDIS1
N+3.64	B34 VIG-40-50	39.500	3.596 COMDIS2	3.596 COMDIS2	6.791 COMDIS1
N+3.64	B34 VIG-40-50	59.250	3.596 COMDIS2	3.596 COMDIS2	6.791 COMDIS1
N+3.64	B34 VIG-40-50	79.000	4.496 COMDIS2	3.596 COMDIS2	6.791 COMDIS1
N+3.64	B34 VIG-40-50	98.750	5.790 COMDIS2	3.596 COMDIS2	6.791 COMDIS1
N+3.64	B34 VIG-40-50	118.500	5.910 COMDIS4	3.596 COMDIS2	6.791 COMDIS1
N+3.64	B34 VIG-40-50	138.250	6.437 COMDIS2	3.596 COMDIS2	6.791 COMDIS1
N+3.64	B34 VIG-40-50	158.000	7.566 COMDIS2	3.596 COMDIS2	6.791 COMDIS1
N+3.64	B34 VIG-40-50	165.000	7.980 COMDIS2	3.596 COMDIS2	6.791 COMDIS1
N+3.64	B34 VIG-40-50	165.000	7.980 COMDIS2	3.596 COMDIS2	6.791 COMDIS1
N+3.64	B34 VIG-40-50	177.750	7.980 COMDIS2	3.596 COMDIS2	6.791 COMDIS1
N+3.64	B34 VIG-40-50	197.500	7.980 COMDIS2	3.596 COMDIS2	6.791 COMDIS1
N+3.64	B40 VIG-15X50	0.000	0.998 COMDIS4	0.496 COMDIS4	2.434 COMDIS4
N+3.64	B40 VIG-15X50	9.000	1.266 COMDIS2	0.973 COMDIS2	2.434 COMDIS4
N+3.64	B40 VIG-15X50	18.000	1.560 COMDIS2	0.973 COMDIS2	2.434 COMDIS4
N+3.64	B40 VIG-15X50	27.000	1.858 COMDIS2	0.973 COMDIS2	2.434 COMDIS4
N+3.64	B40 VIG-15X50	36.000	2.159 COMDIS2	0.973 COMDIS2	2.434 COMDIS4
N+3.64	B40 VIG-15X50	45.000	2.216 COMDIS2	0.973 COMDIS2	2.434 COMDIS4
N+3.64	B40 VIG-15X50	54.000	2.216 COMDIS4	0.973 COMDIS2	2.434 COMDIS4
N+3.64	B40 VIG-15X50	63.000	2.317 COMDIS2	0.973 COMDIS2	2.434 COMDIS4
N+3.64	B40 VIG-15X50	72.000	2.555 COMDIS2	0.973 COMDIS2	2.434 COMDIS4
N+3.64	B40 VIG-15X50	81.000	2.798 COMDIS2	0.973 COMDIS2	2.434 COMDIS4
N+3.64	B40 VIG-15X50	90.000	3.043 COMDIS2	1.972 COMDIS2	2.434 COMDIS4
N+3.64	B41 VIG-15X50	0.000	2.216 COMDIS4	1.381 COMDIS4	2.482 COMDIS3
N+3.64	B41 VIG-15X50	9.000	2.216 COMDIS4	0.684 COMDIS4	2.482 COMDIS3
N+3.64	B41 VIG-15X50	18.000	2.216 COMDIS4	0.684 COMDIS4	2.482 COMDIS3
N+3.64	B41 VIG-15X50	27.000	2.204 COMDIS2	0.684 COMDIS4	2.482 COMDIS3
N+3.64	B41 VIG-15X50	36.000	2.030 COMDIS2	0.684 COMDIS4	2.482 COMDIS3
N+3.64	B41 VIG-15X50	45.000	1.858 COMDIS2	0.684 COMDIS4	2.482 COMDIS3
N+3.64	B41 VIG-15X50	54.000	1.688 COMDIS2	0.684 COMDIS4	2.482 COMDIS3
N+3.64	B41 VIG-15X50	63.000	1.520 COMDIS2	0.684 COMDIS4	2.482 COMDIS3
N+3.64	B41 VIG-15X50	72.000	1.354 COMDIS2	0.684 COMDIS4	2.482 COMDIS3
N+3.64	B41 VIG-15X50	81.000	1.191 COMDIS2	0.684 COMDIS4	2.482 COMDIS3
N+3.64	B41 VIG-15X50	90.000	1.030 COMDIS2	0.511 COMDIS2	2.482 COMDIS3
N+3.23	B9 VIG-15X50	0.000	1.065 COMDIS2	0.529 COMDIS2	2.183 COMDIS4
N+3.23	B9 VIG-15X50	17.250	0.948 COMDIS2	0.263 COMDIS2	2.183 COMDIS4
N+3.23	B9 VIG-15X50	34.500	0.837 COMDIS2	0.263 COMDIS2	2.183 COMDIS4
N+3.23	B9 VIG-15X50	51.750	0.731 COMDIS2	0.263 COMDIS2	2.183 COMDIS4
N+3.23	B9 VIG-15X50	69.000	0.631 COMDIS2	0.263 COMDIS2	2.183 COMDIS4
N+3.23	B9 VIG-15X50	86.250	0.537 COMDIS2	0.263 COMDIS2	2.183 COMDIS4
N+3.23	B9 VIG-15X50	103.500	0.447 COMDIS2	0.263 COMDIS2	2.183 COMDIS4
N+3.23	B9 VIG-15X50	120.750	0.363 COMDIS2	0.263 COMDIS2	2.183 COMDIS4
N+3.23	B9 VIG-15X50	138.000	0.284 COMDIS2	0.263 COMDIS2	2.183 COMDIS4
N+3.23	B9 VIG-15X50	155.250	0.263 COMDIS2	0.263 COMDIS2	2.183 COMDIS4
N+3.23	B9 VIG-15X50	172.500	0.142 COMDIS2	0.071 COMDIS2	2.183 COMDIS4
N+3.23	B22 VIG-15X50	0.000	2.216 COMDIS2	1.238 COMDIS2	0.000 COMDIS6
N+3.23	B22 VIG-15X50	17.250	2.216 COMDIS2	0.614 COMDIS2	0.000 COMDIS6
N+3.23	B22 VIG-15X50	34.500	1.930 COMDIS2	0.614 COMDIS2	0.000 COMDIS6
N+3.23	B22 VIG-15X50	51.750	1.647 COMDIS2	0.614 COMDIS2	0.000 COMDIS6
N+3.23	B22 VIG-15X50	69.000	1.371 COMDIS2	0.614 COMDIS2	0.000 COMDIS6
N+3.23	B22 VIG-15X50	86.250	1.102 COMDIS2	0.614 COMDIS2	0.000 COMDIS6
N+3.23	B22 VIG-15X50	103.500	0.841 COMDIS2	0.614 COMDIS2	0.000 COMDIS6
N+3.23	B22 VIG-15X50	120.750	0.614 COMDIS2	0.614 COMDIS2	0.000 COMDIS6
N+3.23	B22 VIG-15X50	138.000	0.614 COMDIS2	0.614 COMDIS2	0.000 COMDIS6
N+3.23	B22 VIG-15X50	155.250	0.614 COMDIS2	0.614 COMDIS2	0.000 COMDIS6
N+3.23	B22 VIG-15X50	172.500	0.000 COMDIS6	0.138 COMDIS2	0.000 COMDIS6
N+3.23	B24 VIG-15X50	0.000	0.142 COMDIS3	0.071 COMDIS3	2.216 COMDIS4
N+3.23	B24 VIG-15X50	39.500	0.078 COMDIS4	0.044 COMDIS3	2.216 COMDIS4
N+3.23	B24 VIG-15X50	79.000	0.128 COMDIS4	0.044 COMDIS3	2.216 COMDIS4
N+3.23	B24 VIG-15X50	118.500	0.308 COMDIS2	0.044 COMDIS3	2.216 COMDIS4
N+3.23	B24 VIG-15X50	158.000	0.641 COMDIS2	0.044 COMDIS3	2.216 COMDIS4
N+3.23	B24 VIG-15X50	165.000	0.715 COMDIS2	0.044 COMDIS3	2.216 COMDIS4
N+3.23	B24 VIG-15X50	165.000	0.766 COMDIS2	0.044 COMDIS3	0.000 COMDIS6
N+3.23	B24 VIG-15X50	197.500	0.721 COMDIS2	0.044 COMDIS3	0.000 COMDIS6
N+3.23	B24 VIG-15X50	230.000	0.771 COMDIS2	0.044 COMDIS3	0.000 COMDIS6
N+3.23	B24 VIG-15X50	230.000	0.712 COMDIS2	0.044 COMDIS3	2.520 COMDIS1
N+3.23	B24 VIG-15X50	237.000	0.634 COMDIS2	0.044 COMDIS3	2.520 COMDIS1
N+3.23	B24 VIG-15X50	276.500	0.287 COMDIS2	0.044 COMDIS3	2.520 COMDIS1
N+3.23	B24 VIG-15X50	316.000	0.106 COMDIS4	0.051 COMDIS2	2.520 COMDIS1
N+3.23	B24 VIG-15X50	355.500	0.078 COMDIS4	0.046 COMDIS2	2.520 COMDIS1
N+3.23	B24 VIG-15X50	395.000	0.175 COMDIS3	0.087 COMDIS3	2.520 COMDIS1
N+3.23	B30 VIG-15X50	0.000	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+3.23	B30 VIG-15X50	2.500	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+3.23	B30 VIG-15X50	5.000	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+3.23	B30 VIG-15X50	7.500	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+3.23	B30 VIG-15X50	10.000	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+3.23	B30 VIG-15X50	12.500	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+3.23	B30 VIG-15X50	15.000	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6

N+3.23	B30 VIG-15X50	17.500	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+3.23	B30 VIG-15X50	20.000	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+3.23	B30 VIG-15X50	22.500	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+3.23	B30 VIG-15X50	25.000	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+3.23	B31 VIG-15X50	0.000	2.216 COMDIS4	1.296 COMDIS2	0.000 COMDIS6
N+3.23	B31 VIG-15X50	17.250	2.216 COMDIS2	0.642 COMDIS2	0.000 COMDIS6
N+3.23	B31 VIG-15X50	34.500	2.019 COMDIS2	0.642 COMDIS2	0.000 COMDIS6
N+3.23	B31 VIG-15X50	51.750	1.720 COMDIS2	0.642 COMDIS2	0.000 COMDIS6
N+3.23	B31 VIG-15X50	69.000	1.430 COMDIS2	0.642 COMDIS2	0.000 COMDIS6
N+3.23	B31 VIG-15X50	86.250	1.147 COMDIS2	0.642 COMDIS2	0.000 COMDIS6
N+3.23	B31 VIG-15X50	103.500	0.871 COMDIS2	0.642 COMDIS2	0.000 COMDIS6
N+3.23	B31 VIG-15X50	120.750	0.642 COMDIS2	0.642 COMDIS2	0.000 COMDIS6
N+3.23	B31 VIG-15X50	138.000	0.642 COMDIS2	0.642 COMDIS2	0.000 COMDIS6
N+3.23	B31 VIG-15X50	155.250	0.642 COMDIS2	0.642 COMDIS2	0.000 COMDIS6
N+3.23	B31 VIG-15X50	172.500	0.000 COMDIS6	0.163 COMDIS2	0.000 COMDIS6
N+3.23	B35 VIG-40-50	0.000	9.057 COMDIS2	5.848 COMDIS2	6.791 COMDIS6
N+3.23	B35 VIG-40-50	19.750	7.341 COMDIS4	2.881 COMDIS2	6.791 COMDIS6
N+3.23	B35 VIG-40-50	32.500	6.310 COMDIS4	2.881 COMDIS2	6.791 COMDIS6
N+3.23	B35 VIG-40-50	32.500	6.251 COMDIS4	2.881 COMDIS2	6.791 COMDIS6
N+3.23	B35 VIG-40-50	39.500	5.924 COMDIS4	2.881 COMDIS2	6.791 COMDIS6
N+3.23	B35 VIG-40-50	59.250	5.910 COMDIS4	2.881 COMDIS2	6.791 COMDIS6
N+3.23	B35 VIG-40-50	79.000	5.583 COMDIS4	2.881 COMDIS2	6.791 COMDIS6
N+3.23	B35 VIG-40-50	98.750	4.511 COMDIS4	2.881 COMDIS2	6.791 COMDIS6
N+3.23	B35 VIG-40-50	118.500	3.495 COMDIS4	2.881 COMDIS2	6.791 COMDIS6
N+3.23	B35 VIG-40-50	138.250	2.881 COMDIS2	2.881 COMDIS2	6.791 COMDIS6
N+3.23	B35 VIG-40-50	158.000	2.881 COMDIS2	2.881 COMDIS2	6.791 COMDIS6
N+3.23	B35 VIG-40-50	177.750	2.881 COMDIS2	2.881 COMDIS2	6.791 COMDIS6
N+3.23	B35 VIG-40-50	197.500	0.010 COMDIS5	0.118 COMDIS3	6.791 COMDIS6
N+3.23	B42 VIG-15X50	0.000	2.216 COMDIS4	1.296 COMDIS2	0.000 COMDIS6
N+3.23	B42 VIG-15X50	2.500	2.216 COMDIS4	1.296 COMDIS2	0.000 COMDIS6
N+3.23	B42 VIG-15X50	5.000	2.216 COMDIS4	1.296 COMDIS2	0.000 COMDIS6
N+3.23	B42 VIG-15X50	7.500	2.216 COMDIS4	1.296 COMDIS2	0.000 COMDIS6
N+3.23	B42 VIG-15X50	10.000	2.216 COMDIS4	1.296 COMDIS2	0.000 COMDIS6
N+3.23	B42 VIG-15X50	12.500	2.216 COMDIS4	1.296 COMDIS2	0.000 COMDIS6
N+3.23	B42 VIG-15X50	15.000	2.216 COMDIS4	1.296 COMDIS2	0.000 COMDIS6
N+3.23	B42 VIG-15X50	17.500	2.216 COMDIS4	1.296 COMDIS2	0.000 COMDIS6
N+3.23	B42 VIG-15X50	20.000	2.216 COMDIS4	1.296 COMDIS2	0.000 COMDIS6
N+3.23	B42 VIG-15X50	22.500	2.216 COMDIS4	1.296 COMDIS2	0.000 COMDIS6
N+3.23	B42 VIG-15X50	25.000	2.216 COMDIS4	1.296 COMDIS2	0.000 COMDIS6
N+3.23	B43 VIG-15X50	0.000	1.273 COMDIS2	0.631 COMDIS2	2.538 COMDIS6
N+3.23	B43 VIG-15X50	17.250	1.137 COMDIS2	0.314 COMDIS2	2.538 COMDIS6
N+3.23	B43 VIG-15X50	34.500	1.006 COMDIS2	0.314 COMDIS2	2.538 COMDIS6
N+3.23	B43 VIG-15X50	51.750	0.881 COMDIS2	0.314 COMDIS2	2.538 COMDIS6
N+3.23	B43 VIG-15X50	69.000	0.762 COMDIS2	0.314 COMDIS2	2.538 COMDIS6
N+3.23	B43 VIG-15X50	86.250	0.648 COMDIS2	0.314 COMDIS2	2.538 COMDIS6
N+3.23	B43 VIG-15X50	103.500	0.540 COMDIS2	0.314 COMDIS2	2.538 COMDIS6
N+3.23	B43 VIG-15X50	120.750	0.437 COMDIS2	0.314 COMDIS2	2.538 COMDIS6
N+3.23	B43 VIG-15X50	138.000	0.339 COMDIS2	0.314 COMDIS2	2.538 COMDIS6
N+3.23	B43 VIG-15X50	155.250	0.314 COMDIS2	0.314 COMDIS2	2.538 COMDIS6
N+3.23	B43 VIG-15X50	172.500	0.160 COMDIS2	0.080 COMDIS2	2.538 COMDIS6
N+3.20	B13 VIG-40-50	0.000	0.000 COMDIS6	0.217 COMDIS3	6.791 COMDIS5
N+3.20	B13 VIG-40-50	19.750	2.477 COMDIS4	2.477 COMDIS4	6.791 COMDIS5
N+3.20	B13 VIG-40-50	39.500	2.477 COMDIS4	2.477 COMDIS4	6.791 COMDIS5
N+3.20	B13 VIG-40-50	59.250	2.477 COMDIS4	2.477 COMDIS4	6.791 COMDIS5
N+3.20	B13 VIG-40-50	79.000	3.057 COMDIS4	2.477 COMDIS4	6.791 COMDIS5
N+3.20	B13 VIG-40-50	98.750	3.925 COMDIS4	2.477 COMDIS4	6.791 COMDIS5
N+3.20	B13 VIG-40-50	118.500	4.820 COMDIS4	2.477 COMDIS4	6.791 COMDIS5
N+3.20	B13 VIG-40-50	138.250	5.742 COMDIS4	2.477 COMDIS4	6.791 COMDIS5
N+3.20	B13 VIG-40-50	158.000	5.910 COMDIS4	2.477 COMDIS4	6.791 COMDIS5
N+3.20	B13 VIG-40-50	165.000	5.910 COMDIS4	2.477 COMDIS4	6.791 COMDIS5
N+3.20	B13 VIG-40-50	165.000	5.910 COMDIS4	2.477 COMDIS4	6.791 COMDIS6
N+3.20	B13 VIG-40-50	177.750	6.212 COMDIS4	2.477 COMDIS4	6.791 COMDIS6
N+3.20	B13 VIG-40-50	197.500	7.731 COMDIS4	5.017 COMDIS4	6.791 COMDIS6
N+2.83	B7 VIG-15X50	0.000	1.212 COMDIS4	0.601 COMDIS4	0.000 COMDIS6
N+2.83	B7 VIG-15X50	9.000	1.430 COMDIS2	0.928 COMDIS2	0.000 COMDIS6
N+2.83	B7 VIG-15X50	18.000	1.686 COMDIS2	0.928 COMDIS2	0.000 COMDIS6
N+2.83	B7 VIG-15X50	27.000	1.946 COMDIS2	0.928 COMDIS2	0.000 COMDIS6
N+2.83	B7 VIG-15X50	36.000	2.209 COMDIS2	0.928 COMDIS2	0.000 COMDIS6
N+2.83	B7 VIG-15X50	45.000	2.216 COMDIS2	0.928 COMDIS2	0.000 COMDIS6
N+2.83	B7 VIG-15X50	54.000	2.216 COMDIS4	0.928 COMDIS2	0.000 COMDIS6
N+2.83	B7 VIG-15X50	63.000	2.264 COMDIS2	0.928 COMDIS2	0.000 COMDIS6
N+2.83	B7 VIG-15X50	72.000	2.472 COMDIS2	0.928 COMDIS2	0.000 COMDIS6
N+2.83	B7 VIG-15X50	81.000	2.682 COMDIS2	0.928 COMDIS2	0.000 COMDIS6
N+2.83	B7 VIG-15X50	90.000	2.896 COMDIS2	1.879 COMDIS2	0.000 COMDIS6
N+2.83	B8 VIG-15X50	0.000	2.594 COMDIS4	1.688 COMDIS4	0.000 COMDIS6
N+2.83	B8 VIG-15X50	9.000	2.379 COMDIS2	0.835 COMDIS4	0.000 COMDIS6
N+2.83	B8 VIG-15X50	18.000	2.216 COMDIS4	0.835 COMDIS4	0.000 COMDIS6
N+2.83	B8 VIG-15X50	27.000	2.216 COMDIS4	0.835 COMDIS4	0.000 COMDIS6
N+2.83	B8 VIG-15X50	36.000	2.216 COMDIS4	0.835 COMDIS4	0.000 COMDIS6
N+2.83	B8 VIG-15X50	45.000	2.180 COMDIS2	0.835 COMDIS4	0.000 COMDIS6

N+2.83	B8 VIG-15X50	54.000	1.940 COMDIS2	0.835 COMDIS4	0.000 COMDIS6
N+2.83	B8 VIG-15X50	63.000	1.703 COMDIS2	0.835 COMDIS4	0.000 COMDIS6
N+2.83	B8 VIG-15X50	72.000	1.469 COMDIS2	0.835 COMDIS4	0.000 COMDIS6
N+2.83	B8 VIG-15X50	81.000	1.237 COMDIS2	0.835 COMDIS4	0.000 COMDIS6
N+2.83	B8 VIG-15X50	90.000	1.009 COMDIS2	0.501 COMDIS2	0.000 COMDIS6
N+2.83	B12 VIG-40-50	0.000	0.000 COMDIS6	0.052 COMDIS3	6.125 COMDIS6
N+2.83	B12 VIG-40-50	19.750	3.766 COMDIS2	3.766 COMDIS2	6.125 COMDIS6
N+2.83	B12 VIG-40-50	39.500	3.766 COMDIS2	3.766 COMDIS2	6.125 COMDIS6
N+2.83	B12 VIG-40-50	59.250	3.766 COMDIS2	3.766 COMDIS2	6.125 COMDIS6
N+2.83	B12 VIG-40-50	79.000	4.757 COMDIS2	3.766 COMDIS2	6.125 COMDIS6
N+2.83	B12 VIG-40-50	98.750	5.910 COMDIS2	3.766 COMDIS2	6.125 COMDIS6
N+2.83	B12 VIG-40-50	118.500	5.910 COMDIS4	3.766 COMDIS2	6.125 COMDIS6
N+2.83	B12 VIG-40-50	138.250	6.793 COMDIS2	3.766 COMDIS2	6.125 COMDIS6
N+2.83	B12 VIG-40-50	158.000	7.979 COMDIS2	3.766 COMDIS2	6.125 COMDIS6
N+2.83	B12 VIG-40-50	165.000	8.414 COMDIS2	3.766 COMDIS2	6.125 COMDIS6
N+2.83	B12 VIG-40-50	165.000	9.216 COMDIS4	1.296 COMDIS2	0.000 COMDIS6
N+2.83	B12 VIG-40-50	177.750	9.566 COMDIS4	1.296 COMDIS2	0.000 COMDIS6
N+2.83	B12 VIG-40-50	197.500	9.566 COMDIS4	1.296 COMDIS2	0.000 COMDIS6
N+2.83	B20 VIG-15X50	0.000	1.431 COMDIS3	0.708 COMDIS3	0.000 COMDIS6
N+2.83	B20 VIG-15X50	9.000	1.708 COMDIS3	1.051 COMDIS3	0.000 COMDIS6
N+2.83	B20 VIG-15X50	18.000	1.990 COMDIS3	1.051 COMDIS3	0.000 COMDIS6
N+2.83	B20 VIG-15X50	27.000	2.216 COMDIS3	1.051 COMDIS3	0.000 COMDIS6
N+2.83	B20 VIG-15X50	36.000	2.216 COMDIS3	1.051 COMDIS3	0.000 COMDIS6
N+2.83	B20 VIG-15X50	45.000	2.216 COMDIS4	1.051 COMDIS3	0.000 COMDIS6
N+2.83	B20 VIG-15X50	54.000	2.369 COMDIS3	1.051 COMDIS3	0.000 COMDIS6
N+2.83	B20 VIG-15X50	63.000	2.597 COMDIS3	1.051 COMDIS3	0.000 COMDIS6
N+2.83	B20 VIG-15X50	72.000	2.828 COMDIS3	1.051 COMDIS3	0.000 COMDIS6
N+2.83	B20 VIG-15X50	81.000	3.063 COMDIS3	1.051 COMDIS3	0.000 COMDIS6
N+2.83	B20 VIG-15X50	90.000	3.301 COMDIS3	2.133 COMDIS3	0.000 COMDIS6
N+2.83	B21 VIG-15X50	0.000	2.899 COMDIS3	1.881 COMDIS3	0.000 COMDIS6
N+2.83	B21 VIG-15X50	9.000	2.690 COMDIS3	0.929 COMDIS3	0.000 COMDIS6
N+2.83	B21 VIG-15X50	18.000	2.483 COMDIS3	0.929 COMDIS3	0.000 COMDIS6
N+2.83	B21 VIG-15X50	27.000	2.279 COMDIS3	0.929 COMDIS3	0.000 COMDIS6
N+2.83	B21 VIG-15X50	36.000	2.216 COMDIS3	0.929 COMDIS3	0.000 COMDIS6
N+2.83	B21 VIG-15X50	45.000	2.216 COMDIS3	0.929 COMDIS3	0.000 COMDIS6
N+2.83	B21 VIG-15X50	54.000	2.216 COMDIS3	0.929 COMDIS3	0.000 COMDIS6
N+2.83	B21 VIG-15X50	63.000	1.987 COMDIS3	0.929 COMDIS3	0.000 COMDIS6
N+2.83	B21 VIG-15X50	72.000	1.733 COMDIS3	0.929 COMDIS3	0.000 COMDIS6
N+2.83	B21 VIG-15X50	81.000	1.482 COMDIS3	0.929 COMDIS3	0.000 COMDIS6
N+2.83	B21 VIG-15X50	90.000	1.236 COMDIS3	0.613 COMDIS3	0.000 COMDIS6
N+2.42	B3 VIG-15X50	0.000	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+2.42	B3 VIG-15X50	4.379	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+2.42	B3 VIG-15X50	8.758	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+2.42	B3 VIG-15X50	13.137	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+2.42	B3 VIG-15X50	17.516	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+2.42	B3 VIG-15X50	21.895	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+2.42	B3 VIG-15X50	26.274	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+2.42	B3 VIG-15X50	30.653	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+2.42	B3 VIG-15X50	35.032	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+2.42	B3 VIG-15X50	39.411	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+2.42	B3 VIG-15X50	43.790	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+2.42	B5 VIG-15X50	0.000	2.957 COMDIS2	1.918 COMDIS2	0.000 COMDIS6
N+2.42	B5 VIG-15X50	13.621	2.627 COMDIS2	0.947 COMDIS2	0.000 COMDIS6
N+2.42	B5 VIG-15X50	27.242	2.303 COMDIS2	0.947 COMDIS2	0.000 COMDIS6
N+2.42	B5 VIG-15X50	40.863	2.216 COMDIS4	0.947 COMDIS2	0.000 COMDIS6
N+2.42	B5 VIG-15X50	54.484	2.216 COMDIS2	0.947 COMDIS2	0.000 COMDIS6
N+2.42	B5 VIG-15X50	68.105	1.828 COMDIS2	0.947 COMDIS2	0.000 COMDIS6
N+2.42	B5 VIG-15X50	81.726	1.429 COMDIS2	0.947 COMDIS2	0.000 COMDIS6
N+2.42	B5 VIG-15X50	95.347	1.038 COMDIS2	0.947 COMDIS2	0.000 COMDIS6
N+2.42	B5 VIG-15X50	108.968	0.947 COMDIS2	0.947 COMDIS2	0.000 COMDIS6
N+2.42	B5 VIG-15X50	122.589	0.947 COMDIS2	0.947 COMDIS2	0.000 COMDIS6
N+2.42	B5 VIG-15X50	136.210	0.219 COMDIS6	0.337 COMDIS4	0.000 COMDIS6
N+2.42	B11 VIG-40-50	0.000	0.024 COMDIS6	0.057 COMDIS4	6.791 COMDIS1
N+2.42	B11 VIG-40-50	19.750	3.496 COMDIS2	3.496 COMDIS2	6.791 COMDIS1
N+2.42	B11 VIG-40-50	39.500	3.496 COMDIS2	3.496 COMDIS2	6.791 COMDIS1
N+2.42	B11 VIG-40-50	59.250	3.496 COMDIS2	3.496 COMDIS2	6.791 COMDIS1
N+2.42	B11 VIG-40-50	79.000	4.389 COMDIS2	3.496 COMDIS2	6.791 COMDIS1
N+2.42	B11 VIG-40-50	98.750	5.648 COMDIS2	3.496 COMDIS2	6.791 COMDIS1
N+2.42	B11 VIG-40-50	118.500	5.910 COMDIS3	3.496 COMDIS2	6.791 COMDIS1
N+2.42	B11 VIG-40-50	138.250	6.277 COMDIS2	3.496 COMDIS2	6.791 COMDIS1
N+2.42	B11 VIG-40-50	158.000	7.377 COMDIS2	3.496 COMDIS2	6.791 COMDIS1
N+2.42	B11 VIG-40-50	165.000	7.781 COMDIS2	3.496 COMDIS2	6.791 COMDIS1
N+2.42	B11 VIG-40-50	165.000	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+2.42	B11 VIG-40-50	177.750	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+2.42	B11 VIG-40-50	197.500	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+2.42	B16 VIG-15X50	0.000	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+2.42	B16 VIG-15X50	4.379	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+2.42	B16 VIG-15X50	8.758	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+2.42	B16 VIG-15X50	13.137	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+2.42	B16 VIG-15X50	17.516	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6

N+2.42	B16 VIG-15X50	21.895	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+2.42	B16 VIG-15X50	26.274	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+2.42	B16 VIG-15X50	30.653	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+2.42	B16 VIG-15X50	35.032	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+2.42	B16 VIG-15X50	39.411	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+2.42	B16 VIG-15X50	43.790	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+2.42	B18 VIG-15X50	0.000	3.477 COMDIS3	2.216 COMDIS3	0.000 COMDIS6
N+2.42	B18 VIG-15X50	13.621	3.131 COMDIS3	1.105 COMDIS3	0.000 COMDIS6
N+2.42	B18 VIG-15X50	27.242	2.791 COMDIS3	1.105 COMDIS3	0.000 COMDIS6
N+2.42	B18 VIG-15X50	40.863	2.459 COMDIS3	1.105 COMDIS3	0.000 COMDIS6
N+2.42	B18 VIG-15X50	54.484	2.216 COMDIS4	1.105 COMDIS3	0.000 COMDIS6
N+2.42	B18 VIG-15X50	68.105	2.216 COMDIS3	1.105 COMDIS3	0.000 COMDIS6
N+2.42	B18 VIG-15X50	81.726	2.005 COMDIS3	1.105 COMDIS3	0.000 COMDIS6
N+2.42	B18 VIG-15X50	95.347	1.599 COMDIS3	1.105 COMDIS3	0.000 COMDIS6
N+2.42	B18 VIG-15X50	108.968	1.201 COMDIS3	1.105 COMDIS3	0.000 COMDIS6
N+2.42	B18 VIG-15X50	122.589	1.105 COMDIS3	1.105 COMDIS3	0.000 COMDIS6
N+2.42	B18 VIG-15X50	136.210	0.430 COMDIS3	0.215 COMDIS3	0.000 COMDIS6
N+2.01	B1 VIG-15X50	0.000	0.142 COMDIS3	0.071 COMDIS3	2.103 COMDIS2
N+2.01	B1 VIG-15X50	17.250	0.297 COMDIS2	0.297 COMDIS2	2.103 COMDIS2
N+2.01	B1 VIG-15X50	34.500	0.311 COMDIS2	0.297 COMDIS2	2.103 COMDIS2
N+2.01	B1 VIG-15X50	51.750	0.403 COMDIS2	0.297 COMDIS2	2.103 COMDIS2
N+2.01	B1 VIG-15X50	69.000	0.501 COMDIS2	0.297 COMDIS2	2.103 COMDIS2
N+2.01	B1 VIG-15X50	86.250	0.604 COMDIS2	0.297 COMDIS2	2.103 COMDIS2
N+2.01	B1 VIG-15X50	103.500	0.712 COMDIS2	0.297 COMDIS2	2.103 COMDIS2
N+2.01	B1 VIG-15X50	120.750	0.826 COMDIS2	0.297 COMDIS2	2.103 COMDIS2
N+2.01	B1 VIG-15X50	138.000	0.946 COMDIS2	0.297 COMDIS2	2.103 COMDIS2
N+2.01	B1 VIG-15X50	155.250	1.071 COMDIS2	0.297 COMDIS2	2.103 COMDIS2
N+2.01	B1 VIG-15X50	172.500	1.201 COMDIS2	0.596 COMDIS2	2.103 COMDIS2
N+2.01	B2 VIG-15X50	0.000	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+2.01	B2 VIG-15X50	2.500	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+2.01	B2 VIG-15X50	5.000	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+2.01	B2 VIG-15X50	7.500	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+2.01	B2 VIG-15X50	10.000	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+2.01	B2 VIG-15X50	12.500	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+2.01	B2 VIG-15X50	15.000	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+2.01	B2 VIG-15X50	17.500	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+2.01	B2 VIG-15X50	20.000	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+2.01	B2 VIG-15X50	22.500	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+2.01	B2 VIG-15X50	25.000	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+2.01	B10 VIG-40-50	0.000	0.002 COMDIS5	0.135 COMDIS3	6.791 COMDIS5
N+2.01	B10 VIG-40-50	19.750	2.681 COMDIS3	2.681 COMDIS3	6.791 COMDIS5
N+2.01	B10 VIG-40-50	39.500	2.681 COMDIS3	2.681 COMDIS3	6.791 COMDIS5
N+2.01	B10 VIG-40-50	59.250	2.681 COMDIS3	2.681 COMDIS3	6.791 COMDIS5
N+2.01	B10 VIG-40-50	79.000	3.107 COMDIS3	2.681 COMDIS3	6.791 COMDIS5
N+2.01	B10 VIG-40-50	98.750	4.041 COMDIS3	2.681 COMDIS3	6.791 COMDIS5
N+2.01	B10 VIG-40-50	118.500	5.028 COMDIS3	2.681 COMDIS3	6.791 COMDIS5
N+2.01	B10 VIG-40-50	138.250	5.910 COMDIS4	2.681 COMDIS3	6.791 COMDIS5
N+2.01	B10 VIG-40-50	158.000	5.910 COMDIS4	2.681 COMDIS3	6.791 COMDIS5
N+2.01	B10 VIG-40-50	165.000	5.910 COMDIS4	2.681 COMDIS3	6.791 COMDIS5
N+2.01	B10 VIG-40-50	165.000	5.910 COMDIS4	2.681 COMDIS3	6.607 COMDIS6
N+2.01	B10 VIG-40-50	177.750	6.718 COMDIS3	2.681 COMDIS3	6.607 COMDIS6
N+2.01	B10 VIG-40-50	197.500	8.400 COMDIS3	5.437 COMDIS3	6.607 COMDIS6
N+2.01	B14 VIG-15X50	0.000	0.000 COMDIS6	0.148 COMDIS2	0.000 COMDIS6
N+2.01	B14 VIG-15X50	17.250	0.651 COMDIS2	0.651 COMDIS2	0.000 COMDIS6
N+2.01	B14 VIG-15X50	34.500	0.651 COMDIS2	0.651 COMDIS2	0.000 COMDIS6
N+2.01	B14 VIG-15X50	51.750	0.651 COMDIS2	0.651 COMDIS2	0.000 COMDIS6
N+2.01	B14 VIG-15X50	69.000	0.895 COMDIS2	0.651 COMDIS2	0.000 COMDIS6
N+2.01	B14 VIG-15X50	86.250	1.173 COMDIS2	0.651 COMDIS2	0.000 COMDIS6
N+2.01	B14 VIG-15X50	103.500	1.458 COMDIS2	0.651 COMDIS2	0.000 COMDIS6
N+2.01	B14 VIG-15X50	120.750	1.751 COMDIS2	0.651 COMDIS2	0.000 COMDIS6
N+2.01	B14 VIG-15X50	138.000	2.052 COMDIS2	0.651 COMDIS2	0.000 COMDIS6
N+2.01	B14 VIG-15X50	155.250	2.216 COMDIS2	0.651 COMDIS2	0.000 COMDIS6
N+2.01	B14 VIG-15X50	172.500	2.216 COMDIS4	1.314 COMDIS2	0.000 COMDIS6
N+2.01	B15 VIG-15X50	0.000	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+2.01	B15 VIG-15X50	2.500	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+2.01	B15 VIG-15X50	5.000	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+2.01	B15 VIG-15X50	7.500	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+2.01	B15 VIG-15X50	10.000	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+2.01	B15 VIG-15X50	12.500	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+2.01	B15 VIG-15X50	15.000	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+2.01	B15 VIG-15X50	17.500	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+2.01	B15 VIG-15X50	20.000	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+2.01	B15 VIG-15X50	22.500	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+2.01	B15 VIG-15X50	25.000	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+2.01	B23 VIG-15X50	0.000	0.157 COMDIS3	0.078 COMDIS3	2.212 COMDIS4
N+2.01	B23 VIG-15X50	39.500	0.069 COMDIS3	0.040 COMDIS2	2.212 COMDIS4
N+2.01	B23 VIG-15X50	79.000	0.106 COMDIS3	0.039 COMDIS3	2.212 COMDIS4
N+2.01	B23 VIG-15X50	118.500	0.296 COMDIS2	0.039 COMDIS3	2.212 COMDIS4
N+2.01	B23 VIG-15X50	158.000	0.656 COMDIS2	0.039 COMDIS3	2.212 COMDIS4
N+2.01	B23 VIG-15X50	165.000	0.736 COMDIS2	0.039 COMDIS3	2.212 COMDIS4

N+2.01	B23 VIG-15X50	165.000	0.784 COMDIS2	0.039 COMDIS3	0.000 COMDIS6
N+2.01	B23 VIG-15X50	197.500	0.740 COMDIS2	0.039 COMDIS3	0.000 COMDIS6
N+2.01	B23 VIG-15X50	230.000	0.791 COMDIS2	0.039 COMDIS3	0.000 COMDIS6
N+2.01	B23 VIG-15X50	230.000	0.742 COMDIS2	0.039 COMDIS3	2.206 COMDIS3
N+2.01	B23 VIG-15X50	237.000	0.666 COMDIS2	0.039 COMDIS3	2.206 COMDIS3
N+2.01	B23 VIG-15X50	276.500	0.325 COMDIS2	0.039 COMDIS3	2.206 COMDIS3
N+2.01	B23 VIG-15X50	316.000	0.139 COMDIS4	0.039 COMDIS3	2.206 COMDIS3
N+2.01	B23 VIG-15X50	355.500	0.084 COMDIS4	0.039 COMDIS3	2.206 COMDIS3
N+2.01	B23 VIG-15X50	395.000	0.142 COMDIS4	0.071 COMDIS4	2.206 COMDIS3
N+2.01	B25 VIG-15X50	0.000	0.000 COMDIS6	0.137 COMDIS4	0.000 COMDIS6
N+2.01	B25 VIG-15X50	17.250	0.631 COMDIS2	0.631 COMDIS2	0.000 COMDIS6
N+2.01	B25 VIG-15X50	34.500	0.631 COMDIS2	0.631 COMDIS2	0.000 COMDIS6
N+2.01	B25 VIG-15X50	51.750	0.631 COMDIS2	0.631 COMDIS2	0.000 COMDIS6
N+2.01	B25 VIG-15X50	69.000	0.871 COMDIS2	0.631 COMDIS2	0.000 COMDIS6
N+2.01	B25 VIG-15X50	86.250	1.140 COMDIS2	0.631 COMDIS2	0.000 COMDIS6
N+2.01	B25 VIG-15X50	103.500	1.415 COMDIS2	0.631 COMDIS2	0.000 COMDIS6
N+2.01	B25 VIG-15X50	120.750	1.698 COMDIS2	0.631 COMDIS2	0.000 COMDIS6
N+2.01	B25 VIG-15X50	138.000	1.989 COMDIS2	0.631 COMDIS2	0.000 COMDIS6
N+2.01	B25 VIG-15X50	155.250	2.216 COMDIS2	0.631 COMDIS2	0.000 COMDIS6
N+2.01	B25 VIG-15X50	172.500	2.216 COMDIS4	1.274 COMDIS2	0.000 COMDIS6
N+2.01	B37 VIG-15X50	0.000	0.140 COMDIS4	0.070 COMDIS4	2.222 COMDIS2
N+2.01	B37 VIG-15X50	17.250	0.255 COMDIS2	0.255 COMDIS2	2.222 COMDIS2
N+2.01	B37 VIG-15X50	34.500	0.275 COMDIS2	0.255 COMDIS2	2.222 COMDIS2
N+2.01	B37 VIG-15X50	51.750	0.351 COMDIS2	0.255 COMDIS2	2.222 COMDIS2
N+2.01	B37 VIG-15X50	69.000	0.432 COMDIS2	0.255 COMDIS2	2.222 COMDIS2
N+2.01	B37 VIG-15X50	86.250	0.518 COMDIS2	0.255 COMDIS2	2.222 COMDIS2
N+2.01	B37 VIG-15X50	103.500	0.609 COMDIS2	0.255 COMDIS2	2.222 COMDIS2
N+2.01	B37 VIG-15X50	120.750	0.706 COMDIS2	0.255 COMDIS2	2.222 COMDIS2
N+2.01	B37 VIG-15X50	138.000	0.808 COMDIS2	0.255 COMDIS2	2.222 COMDIS2
N+2.01	B37 VIG-15X50	155.250	0.916 COMDIS2	0.255 COMDIS2	2.222 COMDIS2
N+2.01	B37 VIG-15X50	172.500	1.029 COMDIS2	0.511 COMDIS2	2.222 COMDIS2
N+1.98	B32 VIG-40-50	0.000	7.617 COMDIS4	4.945 COMDIS4	6.791 COMDIS2
N+1.98	B32 VIG-40-50	19.750	6.125 COMDIS4	2.442 COMDIS4	6.791 COMDIS2
N+1.98	B32 VIG-40-50	32.500	5.910 COMDIS4	2.442 COMDIS4	6.791 COMDIS2
N+1.98	B32 VIG-40-50	32.500	5.910 COMDIS4	2.442 COMDIS4	6.791 COMDIS5
N+1.98	B32 VIG-40-50	39.500	5.910 COMDIS4	2.442 COMDIS4	6.791 COMDIS5
N+1.98	B32 VIG-40-50	59.250	5.658 COMDIS4	2.442 COMDIS4	6.791 COMDIS5
N+1.98	B32 VIG-40-50	79.000	4.751 COMDIS4	2.442 COMDIS4	6.791 COMDIS5
N+1.98	B32 VIG-40-50	98.750	3.870 COMDIS4	2.442 COMDIS4	6.791 COMDIS5
N+1.98	B32 VIG-40-50	118.500	3.014 COMDIS4	2.442 COMDIS4	6.791 COMDIS5
N+1.98	B32 VIG-40-50	138.250	2.442 COMDIS4	2.442 COMDIS4	6.791 COMDIS5
N+1.98	B32 VIG-40-50	158.000	2.442 COMDIS4	2.442 COMDIS4	6.791 COMDIS5
N+1.98	B32 VIG-40-50	177.750	2.442 COMDIS4	2.442 COMDIS4	6.791 COMDIS5
N+1.98	B32 VIG-40-50	197.500	0.000 COMDIS6	0.216 COMDIS3	6.791 COMDIS5
N+1.61	B26 VIG-15X50	0.000	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+1.61	B26 VIG-15X50	4.379	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+1.61	B26 VIG-15X50	8.758	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+1.61	B26 VIG-15X50	13.137	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+1.61	B26 VIG-15X50	17.516	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+1.61	B26 VIG-15X50	21.895	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+1.61	B26 VIG-15X50	26.274	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+1.61	B26 VIG-15X50	30.653	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+1.61	B26 VIG-15X50	35.032	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+1.61	B26 VIG-15X50	39.411	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+1.61	B26 VIG-15X50	43.790	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+1.61	B27 VIG-15X50	0.000	3.387 COMDIS3	2.187 COMDIS3	0.000 COMDIS6
N+1.61	B27 VIG-15X50	13.621	3.054 COMDIS3	1.077 COMDIS3	0.000 COMDIS6
N+1.61	B27 VIG-15X50	27.242	2.728 COMDIS3	1.077 COMDIS3	0.000 COMDIS6
N+1.61	B27 VIG-15X50	40.863	2.408 COMDIS3	1.077 COMDIS3	0.000 COMDIS6
N+1.61	B27 VIG-15X50	54.484	2.216 COMDIS4	1.077 COMDIS3	0.000 COMDIS6
N+1.61	B27 VIG-15X50	68.105	2.216 COMDIS3	1.077 COMDIS3	0.000 COMDIS6
N+1.61	B27 VIG-15X50	81.726	1.984 COMDIS3	1.077 COMDIS3	0.000 COMDIS6
N+1.61	B27 VIG-15X50	95.347	1.591 COMDIS3	1.077 COMDIS3	0.000 COMDIS6
N+1.61	B27 VIG-15X50	108.968	1.205 COMDIS3	1.077 COMDIS3	0.000 COMDIS6
N+1.61	B27 VIG-15X50	122.589	1.077 COMDIS3	1.077 COMDIS3	0.000 COMDIS6
N+1.61	B27 VIG-15X50	136.210	0.456 COMDIS3	0.227 COMDIS3	0.000 COMDIS6
N+1.61	B33 VIG-40-50	0.000	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+1.61	B33 VIG-40-50	19.750	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+1.61	B33 VIG-40-50	32.500	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+1.61	B33 VIG-40-50	32.500	7.867 COMDIS2	3.529 COMDIS2	6.791 COMDIS2
N+1.61	B33 VIG-40-50	39.500	7.459 COMDIS2	3.529 COMDIS2	6.791 COMDIS2
N+1.61	B33 VIG-40-50	59.250	6.346 COMDIS2	3.529 COMDIS2	6.791 COMDIS2
N+1.61	B33 VIG-40-50	79.000	5.910 COMDIS4	3.529 COMDIS2	6.791 COMDIS2
N+1.61	B33 VIG-40-50	98.750	5.709 COMDIS2	3.529 COMDIS2	6.791 COMDIS2
N+1.61	B33 VIG-40-50	118.500	4.435 COMDIS2	3.529 COMDIS2	6.791 COMDIS2
N+1.61	B33 VIG-40-50	138.250	3.529 COMDIS2	3.529 COMDIS2	6.791 COMDIS2
N+1.61	B33 VIG-40-50	158.000	3.529 COMDIS2	3.529 COMDIS2	6.791 COMDIS2
N+1.61	B33 VIG-40-50	177.750	3.529 COMDIS2	3.529 COMDIS2	6.791 COMDIS2
N+1.61	B33 VIG-40-50	197.500	0.000 COMDIS6	0.047 COMDIS3	6.791 COMDIS2
N+1.61	B38 VIG-15X50	0.000	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6

N+1.61	B38 VIG-15X50	4.379	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+1.61	B38 VIG-15X50	8.758	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+1.61	B38 VIG-15X50	13.137	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+1.61	B38 VIG-15X50	17.516	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+1.61	B38 VIG-15X50	21.895	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+1.61	B38 VIG-15X50	26.274	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+1.61	B38 VIG-15X50	30.653	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+1.61	B38 VIG-15X50	35.032	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+1.61	B38 VIG-15X50	39.411	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+1.61	B38 VIG-15X50	43.790	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+1.61	B39 VIG-15X50	0.000	2.712 COMDIS2	1.763 COMDIS2	0.000 COMDIS6
N+1.61	B39 VIG-15X50	13.621	2.421 COMDIS2	0.871 COMDIS2	0.000 COMDIS6
N+1.61	B39 VIG-15X50	27.242	2.216 COMDIS4	0.871 COMDIS2	0.000 COMDIS6
N+1.61	B39 VIG-15X50	40.863	2.216 COMDIS4	0.871 COMDIS2	0.000 COMDIS6
N+1.61	B39 VIG-15X50	54.484	2.108 COMDIS2	0.871 COMDIS2	0.000 COMDIS6
N+1.61	B39 VIG-15X50	68.105	1.749 COMDIS2	0.871 COMDIS2	0.000 COMDIS6
N+1.61	B39 VIG-15X50	81.726	1.397 COMDIS2	0.871 COMDIS2	0.000 COMDIS6
N+1.61	B39 VIG-15X50	95.347	1.051 COMDIS2	0.871 COMDIS2	0.000 COMDIS6
N+1.61	B39 VIG-15X50	108.968	0.871 COMDIS2	0.871 COMDIS2	0.000 COMDIS6
N+1.61	B39 VIG-15X50	122.589	0.871 COMDIS2	0.871 COMDIS2	0.000 COMDIS6
N+1.61	B39 VIG-15X50	136.210	0.312 COMDIS4	0.247 COMDIS6	0.000 COMDIS6
N+1.20	B28 VIG-15X50	0.000	1.380 COMDIS3	0.684 COMDIS3	0.000 COMDIS6
N+1.20	B28 VIG-15X50	9.000	1.659 COMDIS3	1.038 COMDIS3	0.000 COMDIS6
N+1.20	B28 VIG-15X50	18.000	1.941 COMDIS3	1.038 COMDIS3	0.000 COMDIS6
N+1.20	B28 VIG-15X50	27.000	2.216 COMDIS3	1.038 COMDIS3	0.000 COMDIS6
N+1.20	B28 VIG-15X50	36.000	2.216 COMDIS3	1.038 COMDIS3	0.000 COMDIS6
N+1.20	B28 VIG-15X50	45.000	2.216 COMDIS4	1.038 COMDIS3	0.000 COMDIS6
N+1.20	B28 VIG-15X50	54.000	2.331 COMDIS3	1.038 COMDIS3	0.000 COMDIS6
N+1.20	B28 VIG-15X50	63.000	2.557 COMDIS3	1.038 COMDIS3	0.000 COMDIS6
N+1.20	B28 VIG-15X50	72.000	2.787 COMDIS3	1.038 COMDIS3	0.000 COMDIS6
N+1.20	B28 VIG-15X50	81.000	3.020 COMDIS3	1.038 COMDIS3	0.000 COMDIS6
N+1.20	B28 VIG-15X50	90.000	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+1.20	B29 VIG-15X50	0.000	2.687 COMDIS3	1.747 COMDIS3	0.000 COMDIS6
N+1.20	B29 VIG-15X50	9.000	2.492 COMDIS3	0.863 COMDIS3	0.000 COMDIS6
N+1.20	B29 VIG-15X50	18.000	2.299 COMDIS3	0.863 COMDIS3	0.000 COMDIS6
N+1.20	B29 VIG-15X50	27.000	2.216 COMDIS3	0.863 COMDIS3	0.000 COMDIS6
N+1.20	B29 VIG-15X50	36.000	2.216 COMDIS3	0.863 COMDIS3	0.000 COMDIS6
N+1.20	B29 VIG-15X50	45.000	2.216 COMDIS3	0.863 COMDIS3	0.000 COMDIS6
N+1.20	B29 VIG-15X50	54.000	2.071 COMDIS3	0.863 COMDIS3	0.000 COMDIS6
N+1.20	B29 VIG-15X50	63.000	1.830 COMDIS3	0.863 COMDIS3	0.000 COMDIS6
N+1.20	B29 VIG-15X50	72.000	1.592 COMDIS3	0.863 COMDIS3	0.000 COMDIS6
N+1.20	B29 VIG-15X50	81.000	1.358 COMDIS3	0.863 COMDIS3	0.000 COMDIS6
N+1.20	B29 VIG-15X50	90.000	1.126 COMDIS3	0.559 COMDIS3	0.000 COMDIS6
N+1.20	B34 VIG-40-50	0.000	0.009 COMDIS6	0.062 COMDIS4	6.791 COMDIS1
N+1.20	B34 VIG-40-50	19.750	3.694 COMDIS2	3.694 COMDIS2	6.791 COMDIS1
N+1.20	B34 VIG-40-50	39.500	3.694 COMDIS2	3.694 COMDIS2	6.791 COMDIS1
N+1.20	B34 VIG-40-50	59.250	3.694 COMDIS2	3.694 COMDIS2	6.791 COMDIS1
N+1.20	B34 VIG-40-50	79.000	4.650 COMDIS2	3.694 COMDIS2	6.791 COMDIS1
N+1.20	B34 VIG-40-50	98.750	5.910 COMDIS2	3.694 COMDIS2	6.791 COMDIS1
N+1.20	B34 VIG-40-50	118.500	5.910 COMDIS4	3.694 COMDIS2	6.791 COMDIS1
N+1.20	B34 VIG-40-50	138.250	6.645 COMDIS2	3.694 COMDIS2	6.791 COMDIS1
N+1.20	B34 VIG-40-50	158.000	7.807 COMDIS2	3.694 COMDIS2	6.791 COMDIS1
N+1.20	B34 VIG-40-50	165.000	8.233 COMDIS2	3.694 COMDIS2	6.791 COMDIS1
N+1.20	B34 VIG-40-50	165.000	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+1.20	B34 VIG-40-50	177.750	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+1.20	B34 VIG-40-50	197.500	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
N+1.20	B40 VIG-15X50	0.000	1.033 COMDIS2	0.513 COMDIS2	0.000 COMDIS6
N+1.20	B40 VIG-15X50	9.000	1.316 COMDIS2	0.966 COMDIS2	0.000 COMDIS6
N+1.20	B40 VIG-15X50	18.000	1.602 COMDIS2	0.966 COMDIS2	0.000 COMDIS6
N+1.20	B40 VIG-15X50	27.000	1.891 COMDIS2	0.966 COMDIS2	0.000 COMDIS6
N+1.20	B40 VIG-15X50	36.000	2.184 COMDIS2	0.966 COMDIS2	0.000 COMDIS6
N+1.20	B40 VIG-15X50	45.000	2.216 COMDIS2	0.966 COMDIS2	0.000 COMDIS6
N+1.20	B40 VIG-15X50	54.000	2.216 COMDIS4	0.966 COMDIS2	0.000 COMDIS6
N+1.20	B40 VIG-15X50	63.000	2.316 COMDIS2	0.966 COMDIS2	0.000 COMDIS6
N+1.20	B40 VIG-15X50	72.000	2.548 COMDIS2	0.966 COMDIS2	0.000 COMDIS6
N+1.20	B40 VIG-15X50	81.000	2.783 COMDIS2	0.966 COMDIS2	0.000 COMDIS6
N+1.20	B40 VIG-15X50	90.000	3.022 COMDIS2	1.959 COMDIS2	0.000 COMDIS6
N+1.20	B41 VIG-15X50	0.000	2.269 COMDIS2	1.481 COMDIS2	2.509 COMDIS4
N+1.20	B41 VIG-15X50	9.000	2.216 COMDIS4	0.733 COMDIS2	2.509 COMDIS4
N+1.20	B41 VIG-15X50	18.000	2.216 COMDIS4	0.733 COMDIS2	2.509 COMDIS4
N+1.20	B41 VIG-15X50	27.000	2.216 COMDIS4	0.733 COMDIS2	2.509 COMDIS4
N+1.20	B41 VIG-15X50	36.000	2.204 COMDIS2	0.733 COMDIS2	2.509 COMDIS4
N+1.20	B41 VIG-15X50	45.000	2.005 COMDIS2	0.733 COMDIS2	2.509 COMDIS4
N+1.20	B41 VIG-15X50	54.000	1.809 COMDIS2	0.733 COMDIS2	2.509 COMDIS4
N+1.20	B41 VIG-15X50	63.000	1.615 COMDIS2	0.733 COMDIS2	2.509 COMDIS4
N+1.20	B41 VIG-15X50	72.000	1.424 COMDIS2	0.733 COMDIS2	2.509 COMDIS4
N+1.20	B41 VIG-15X50	81.000	1.235 COMDIS2	0.733 COMDIS2	2.509 COMDIS4
N+1.20	B41 VIG-15X50	90.000	1.049 COMDIS2	0.521 COMDIS2	2.509 COMDIS4
N+0.79	B9 VIG-15X50	0.000	1.061 COMDIS2	0.527 COMDIS2	2.174 COMDIS4
N+0.79	B9 VIG-15X50	17.250	0.946 COMDIS2	0.263 COMDIS2	2.174 COMDIS4

N+0.79	B9 VIG-15X50	34.500	0.836	COMDIS2	0.263	COMDIS2	2.174	COMDIS4
N+0.79	B9 VIG-15X50	51.750	0.732	COMDIS2	0.263	COMDIS2	2.174	COMDIS4
N+0.79	B9 VIG-15X50	69.000	0.633	COMDIS2	0.263	COMDIS2	2.174	COMDIS4
N+0.79	B9 VIG-15X50	86.250	0.540	COMDIS2	0.263	COMDIS2	2.174	COMDIS4
N+0.79	B9 VIG-15X50	103.500	0.451	COMDIS2	0.263	COMDIS2	2.174	COMDIS4
N+0.79	B9 VIG-15X50	120.750	0.368	COMDIS2	0.263	COMDIS2	2.174	COMDIS4
N+0.79	B9 VIG-15X50	138.000	0.291	COMDIS2	0.263	COMDIS2	2.174	COMDIS4
N+0.79	B9 VIG-15X50	155.250	0.263	COMDIS2	0.263	COMDIS2	2.174	COMDIS4
N+0.79	B9 VIG-15X50	172.500	0.151	COMDIS2	0.075	COMDIS2	2.174	COMDIS4
N+0.79	B22 VIG-15X50	0.000	2.216	COMDIS2	1.260	COMDIS2	0.000	COMDIS6
N+0.79	B22 VIG-15X50	17.250	2.216	COMDIS2	0.625	COMDIS2	0.000	COMDIS6
N+0.79	B22 VIG-15X50	34.500	1.963	COMDIS2	0.625	COMDIS2	0.000	COMDIS6
N+0.79	B22 VIG-15X50	51.750	1.674	COMDIS2	0.625	COMDIS2	0.000	COMDIS6
N+0.79	B22 VIG-15X50	69.000	1.393	COMDIS2	0.625	COMDIS2	0.000	COMDIS6
N+0.79	B22 VIG-15X50	86.250	1.119	COMDIS2	0.625	COMDIS2	0.000	COMDIS6
N+0.79	B22 VIG-15X50	103.500	0.852	COMDIS2	0.625	COMDIS2	0.000	COMDIS6
N+0.79	B22 VIG-15X50	120.750	0.625	COMDIS2	0.625	COMDIS2	0.000	COMDIS6
N+0.79	B22 VIG-15X50	138.000	0.625	COMDIS2	0.625	COMDIS2	0.000	COMDIS6
N+0.79	B22 VIG-15X50	155.250	0.625	COMDIS2	0.625	COMDIS2	0.000	COMDIS6
N+0.79	B22 VIG-15X50	172.500	0.000	COMDIS6	0.147	COMDIS2	0.000	COMDIS6
N+0.79	B24 VIG-15X50	0.000	0.151	COMDIS2	0.076	COMDIS2	2.199	COMDIS4
N+0.79	B24 VIG-15X50	39.500	0.080	COMDIS4	0.040	COMDIS2	2.199	COMDIS4
N+0.79	B24 VIG-15X50	79.000	0.131	COMDIS4	0.040	COMDIS2	2.199	COMDIS4
N+0.79	B24 VIG-15X50	118.500	0.327	COMDIS2	0.040	COMDIS2	2.199	COMDIS4
N+0.79	B24 VIG-15X50	158.000	0.663	COMDIS2	0.040	COMDIS2	2.199	COMDIS4
N+0.79	B24 VIG-15X50	165.000	0.738	COMDIS2	0.040	COMDIS2	2.199	COMDIS4
N+0.79	B24 VIG-15X50	165.000	0.792	COMDIS2	0.040	COMDIS2	0.000	COMDIS6
N+0.79	B24 VIG-15X50	197.500	0.740	COMDIS2	0.040	COMDIS2	0.000	COMDIS6
N+0.79	B24 VIG-15X50	230.000	0.783	COMDIS2	0.040	COMDIS2	0.000	COMDIS6
N+0.79	B24 VIG-15X50	230.000	0.728	COMDIS2	0.040	COMDIS2	2.567	COMDIS1
N+0.79	B24 VIG-15X50	237.000	0.648	COMDIS2	0.040	COMDIS2	2.567	COMDIS1
N+0.79	B24 VIG-15X50	276.500	0.294	COMDIS2	0.040	COMDIS2	2.567	COMDIS1
N+0.79	B24 VIG-15X50	316.000	0.112	COMDIS4	0.050	COMDIS2	2.567	COMDIS1
N+0.79	B24 VIG-15X50	355.500	0.073	COMDIS4	0.049	COMDIS2	2.567	COMDIS1
N+0.79	B24 VIG-15X50	395.000	0.162	COMDIS2	0.081	COMDIS2	2.567	COMDIS1
N+0.79	B30 VIG-15X50	0.000	3.256	COMDIS3	2.105	COMDIS3	0.000	COMDIS6
N+0.79	B30 VIG-15X50	2.500	3.256	COMDIS3	2.105	COMDIS3	0.000	COMDIS6
N+0.79	B30 VIG-15X50	5.000	3.256	COMDIS3	2.105	COMDIS3	0.000	COMDIS6
N+0.79	B30 VIG-15X50	7.500	3.256	COMDIS3	2.105	COMDIS3	0.000	COMDIS6
N+0.79	B30 VIG-15X50	10.000	3.256	COMDIS3	2.105	COMDIS3	0.000	COMDIS6
N+0.79	B30 VIG-15X50	12.500	3.256	COMDIS3	2.105	COMDIS3	0.000	COMDIS6
N+0.79	B30 VIG-15X50	15.000	3.256	COMDIS3	2.105	COMDIS3	0.000	COMDIS6
N+0.79	B30 VIG-15X50	17.500	3.256	COMDIS3	2.105	COMDIS3	0.000	COMDIS6
N+0.79	B30 VIG-15X50	20.000	3.256	COMDIS3	2.105	COMDIS3	0.000	COMDIS6
N+0.79	B30 VIG-15X50	22.500	3.256	COMDIS3	2.105	COMDIS3	0.000	COMDIS6
N+0.79	B30 VIG-15X50	25.000	3.256	COMDIS3	2.105	COMDIS3	0.000	COMDIS6
N+0.79	B31 VIG-15X50	0.000	2.216	COMDIS4	1.295	COMDIS2	0.000	COMDIS6
N+0.79	B31 VIG-15X50	17.250	2.216	COMDIS2	0.642	COMDIS2	0.000	COMDIS6
N+0.79	B31 VIG-15X50	34.500	2.019	COMDIS2	0.642	COMDIS2	0.000	COMDIS6
N+0.79	B31 VIG-15X50	51.750	1.722	COMDIS2	0.642	COMDIS2	0.000	COMDIS6
N+0.79	B31 VIG-15X50	69.000	1.432	COMDIS2	0.642	COMDIS2	0.000	COMDIS6
N+0.79	B31 VIG-15X50	86.250	1.150	COMDIS2	0.642	COMDIS2	0.000	COMDIS6
N+0.79	B31 VIG-15X50	103.500	0.875	COMDIS2	0.642	COMDIS2	0.000	COMDIS6
N+0.79	B31 VIG-15X50	120.750	0.642	COMDIS2	0.642	COMDIS2	0.000	COMDIS6
N+0.79	B31 VIG-15X50	138.000	0.642	COMDIS2	0.642	COMDIS2	0.000	COMDIS6
N+0.79	B31 VIG-15X50	155.250	0.642	COMDIS2	0.642	COMDIS2	0.000	COMDIS6
N+0.79	B31 VIG-15X50	172.500	0.000	COMDIS6	0.156	COMDIS2	0.000	COMDIS6
N+0.79	B35 VIG-40-50	0.000	8.535	COMDIS2	5.522	COMDIS2	6.791	COMDIS6
N+0.79	B35 VIG-40-50	19.750	6.847	COMDIS2	2.723	COMDIS2	6.791	COMDIS6
N+0.79	B35 VIG-40-50	32.500	5.910	COMDIS4	2.723	COMDIS2	6.791	COMDIS6
N+0.79	B35 VIG-40-50	32.500	5.910	COMDIS4	2.723	COMDIS2	6.791	COMDIS6
N+0.79	B35 VIG-40-50	39.500	5.910	COMDIS4	2.723	COMDIS2	6.791	COMDIS6
N+0.79	B35 VIG-40-50	59.250	5.910	COMDIS4	2.723	COMDIS2	6.791	COMDIS6
N+0.79	B35 VIG-40-50	79.000	5.092	COMDIS2	2.723	COMDIS2	6.791	COMDIS6
N+0.79	B35 VIG-40-50	98.750	4.078	COMDIS2	2.723	COMDIS2	6.791	COMDIS6
N+0.79	B35 VIG-40-50	118.500	3.125	COMDIS2	2.723	COMDIS2	6.791	COMDIS6
N+0.79	B35 VIG-40-50	138.250	2.723	COMDIS2	2.723	COMDIS2	6.791	COMDIS6
N+0.79	B35 VIG-40-50	158.000	2.723	COMDIS2	2.723	COMDIS2	6.791	COMDIS6
N+0.79	B35 VIG-40-50	177.750	2.723	COMDIS2	2.723	COMDIS2	6.791	COMDIS6
N+0.79	B35 VIG-40-50	197.500	0.000	COMDIS6	0.128	COMDIS4	6.791	COMDIS6
N+0.79	B42 VIG-15X50	0.000	3.256	COMDIS3	2.105	COMDIS3	0.000	COMDIS6
N+0.79	B42 VIG-15X50	2.500	3.256	COMDIS3	2.105	COMDIS3	0.000	COMDIS6
N+0.79	B42 VIG-15X50	5.000	3.256	COMDIS3	2.105	COMDIS3	0.000	COMDIS6
N+0.79	B42 VIG-15X50	7.500	3.256	COMDIS3	2.105	COMDIS3	0.000	COMDIS6
N+0.79	B42 VIG-15X50	10.000	3.256	COMDIS3	2.105	COMDIS3	0.000	COMDIS6
N+0.79	B42 VIG-15X50	12.500	3.256	COMDIS3	2.105	COMDIS3	0.000	COMDIS6
N+0.79	B42 VIG-15X50	15.000	3.256	COMDIS3	2.105	COMDIS3	0.000	COMDIS6
N+0.79	B42 VIG-15X50	17.500	3.256	COMDIS3	2.105	COMDIS3	0.000	COMDIS6
N+0.79	B42 VIG-15X50	20.000	3.256	COMDIS3	2.105	COMDIS3	0.000	COMDIS6
N+0.79	B42 VIG-15X50	22.500	3.256	COMDIS3	2.105	COMDIS3	0.000	COMDIS6
N+0.79	B42 VIG-15X50	25.000	3.256	COMDIS3	2.105	COMDIS3	0.000	COMDIS6

N+0.79	B43 VIG-15X50	0.000	1.235	COMDIS2	0.612	COMDIS2	2.535	COMDIS1
N+0.79	B43 VIG-15X50	17.250	1.101	COMDIS2	0.305	COMDIS2	2.535	COMDIS1
N+0.79	B43 VIG-15X50	34.500	0.974	COMDIS2	0.305	COMDIS2	2.535	COMDIS1
N+0.79	B43 VIG-15X50	51.750	0.852	COMDIS2	0.305	COMDIS2	2.535	COMDIS1
N+0.79	B43 VIG-15X50	69.000	0.736	COMDIS2	0.305	COMDIS2	2.535	COMDIS1
N+0.79	B43 VIG-15X50	86.250	0.625	COMDIS2	0.305	COMDIS2	2.535	COMDIS1
N+0.79	B43 VIG-15X50	103.500	0.520	COMDIS2	0.305	COMDIS2	2.535	COMDIS1
N+0.79	B43 VIG-15X50	120.750	0.420	COMDIS2	0.305	COMDIS2	2.535	COMDIS1
N+0.79	B43 VIG-15X50	138.000	0.325	COMDIS2	0.305	COMDIS2	2.535	COMDIS1
N+0.79	B43 VIG-15X50	155.250	0.305	COMDIS2	0.305	COMDIS2	2.535	COMDIS1
N+0.79	B43 VIG-15X50	172.500	0.151	COMDIS2	0.076	COMDIS2	2.535	COMDIS1
N+0.76	B13 VIG-40-50	0.000	0.000	COMDIS6	0.193	COMDIS2	6.791	COMDIS4
N+0.76	B13 VIG-40-50	19.750	2.593	COMDIS2	2.593	COMDIS2	6.791	COMDIS4
N+0.76	B13 VIG-40-50	39.500	2.593	COMDIS2	2.593	COMDIS2	6.791	COMDIS4
N+0.76	B13 VIG-40-50	59.250	2.593	COMDIS2	2.593	COMDIS2	6.791	COMDIS4
N+0.76	B13 VIG-40-50	79.000	3.161	COMDIS2	2.593	COMDIS2	6.791	COMDIS4
N+0.76	B13 VIG-40-50	98.750	4.064	COMDIS2	2.593	COMDIS2	6.791	COMDIS4
N+0.76	B13 VIG-40-50	118.500	4.993	COMDIS2	2.593	COMDIS2	6.791	COMDIS4
N+0.76	B13 VIG-40-50	138.250	5.910	COMDIS2	2.593	COMDIS2	6.791	COMDIS4
N+0.76	B13 VIG-40-50	158.000	5.910	COMDIS4	2.593	COMDIS2	6.791	COMDIS4
N+0.76	B13 VIG-40-50	165.000	5.910	COMDIS4	2.593	COMDIS2	6.791	COMDIS4
N+0.76	B13 VIG-40-50	165.000	5.910	COMDIS4	2.593	COMDIS2	6.791	COMDIS6
N+0.76	B13 VIG-40-50	177.750	6.459	COMDIS2	2.593	COMDIS2	6.791	COMDIS6
N+0.76	B13 VIG-40-50	197.500	8.110	COMDIS2	5.256	COMDIS2	6.791	COMDIS6
N+0.39	B7 VIG-15X50	0.000	1.152	COMDIS2	0.572	COMDIS2	0.000	COMDIS6
N+0.39	B7 VIG-15X50	9.000	1.444	COMDIS2	1.017	COMDIS2	0.000	COMDIS6
N+0.39	B7 VIG-15X50	18.000	1.739	COMDIS2	1.017	COMDIS2	0.000	COMDIS6
N+0.39	B7 VIG-15X50	27.000	2.038	COMDIS2	1.017	COMDIS2	0.000	COMDIS6
N+0.39	B7 VIG-15X50	36.000	2.216	COMDIS2	1.017	COMDIS2	0.000	COMDIS6
N+0.39	B7 VIG-15X50	45.000	2.216	COMDIS4	1.017	COMDIS2	0.000	COMDIS6
N+0.39	B7 VIG-15X50	54.000	2.220	COMDIS2	1.017	COMDIS2	0.000	COMDIS6
N+0.39	B7 VIG-15X50	63.000	2.457	COMDIS2	1.017	COMDIS2	0.000	COMDIS6
N+0.39	B7 VIG-15X50	72.000	2.697	COMDIS2	1.017	COMDIS2	0.000	COMDIS6
N+0.39	B7 VIG-15X50	81.000	2.940	COMDIS2	1.017	COMDIS2	0.000	COMDIS6
N+0.39	B7 VIG-15X50	90.000	3.187	COMDIS2	2.062	COMDIS2	0.000	COMDIS6
N+0.39	B8 VIG-15X50	0.000	2.453	COMDIS2	1.599	COMDIS2	0.000	COMDIS6
N+0.39	B8 VIG-15X50	9.000	2.281	COMDIS2	0.791	COMDIS2	0.000	COMDIS6
N+0.39	B8 VIG-15X50	18.000	2.216	COMDIS4	0.791	COMDIS2	0.000	COMDIS6
N+0.39	B8 VIG-15X50	27.000	2.216	COMDIS4	0.791	COMDIS2	0.000	COMDIS6
N+0.39	B8 VIG-15X50	36.000	2.216	COMDIS2	0.791	COMDIS2	0.000	COMDIS6
N+0.39	B8 VIG-15X50	45.000	2.150	COMDIS2	0.791	COMDIS2	0.000	COMDIS6
N+0.39	B8 VIG-15X50	54.000	1.934	COMDIS2	0.791	COMDIS2	0.000	COMDIS6
N+0.39	B8 VIG-15X50	63.000	1.721	COMDIS2	0.791	COMDIS2	0.000	COMDIS6
N+0.39	B8 VIG-15X50	72.000	1.511	COMDIS2	0.791	COMDIS2	0.000	COMDIS6
N+0.39	B8 VIG-15X50	81.000	1.303	COMDIS2	0.791	COMDIS2	0.000	COMDIS6
N+0.39	B8 VIG-15X50	90.000	1.098	COMDIS2	0.545	COMDIS2	0.000	COMDIS6
N+0.39	B12 VIG-40-50	0.000	0.000	COMDIS6	0.093	COMDIS4	6.791	COMDIS6
N+0.39	B12 VIG-40-50	19.750	3.843	COMDIS2	3.843	COMDIS2	6.791	COMDIS6
N+0.39	B12 VIG-40-50	39.500	3.843	COMDIS2	3.843	COMDIS2	6.791	COMDIS6
N+0.39	B12 VIG-40-50	59.250	3.843	COMDIS2	3.843	COMDIS2	6.791	COMDIS6
N+0.39	B12 VIG-40-50	79.000	4.844	COMDIS2	3.843	COMDIS2	6.791	COMDIS6
N+0.39	B12 VIG-40-50	98.750	5.910	COMDIS2	3.843	COMDIS2	6.791	COMDIS6
N+0.39	B12 VIG-40-50	118.500	5.910	COMDIS4	3.843	COMDIS2	6.791	COMDIS6
N+0.39	B12 VIG-40-50	138.250	6.937	COMDIS2	3.843	COMDIS2	6.791	COMDIS6
N+0.39	B12 VIG-40-50	158.000	8.151	COMDIS2	3.843	COMDIS2	6.791	COMDIS6
N+0.39	B12 VIG-40-50	165.000	8.596	COMDIS2	3.843	COMDIS2	6.791	COMDIS6
N+0.39	B12 VIG-40-50	165.000	8.565	COMDIS2	3.843	COMDIS2	8.702	COMDIS3
N+0.39	B12 VIG-40-50	177.750	10.000	COMDIS2	3.843	COMDIS2	8.702	COMDIS3
N+0.39	B12 VIG-40-50	197.500	12.299	COMDIS2	5.910	COMDIS4	8.702	COMDIS3
N+0.39	B20 VIG-15X50	0.000	1.350	COMDIS2	0.669	COMDIS2	0.000	COMDIS6
N+0.39	B20 VIG-15X50	9.000	1.637	COMDIS2	1.050	COMDIS2	0.000	COMDIS6
N+0.39	B20 VIG-15X50	18.000	1.927	COMDIS2	1.050	COMDIS2	0.000	COMDIS6
N+0.39	B20 VIG-15X50	27.000	2.216	COMDIS2	1.050	COMDIS2	0.000	COMDIS6
N+0.39	B20 VIG-15X50	36.000	2.216	COMDIS2	1.050	COMDIS2	0.000	COMDIS6
N+0.39	B20 VIG-15X50	45.000	2.216	COMDIS4	1.050	COMDIS2	0.000	COMDIS6
N+0.39	B20 VIG-15X50	54.000	2.345	COMDIS2	1.050	COMDIS2	0.000	COMDIS6
N+0.39	B20 VIG-15X50	63.000	2.577	COMDIS2	1.050	COMDIS2	0.000	COMDIS6
N+0.39	B20 VIG-15X50	72.000	2.813	COMDIS2	1.050	COMDIS2	0.000	COMDIS6
N+0.39	B20 VIG-15X50	81.000	3.052	COMDIS2	1.050	COMDIS2	0.000	COMDIS6
N+0.39	B20 VIG-15X50	90.000	3.295	COMDIS2	2.130	COMDIS2	0.000	COMDIS6
N+0.39	B21 VIG-15X50	0.000	2.406	COMDIS3	1.569	COMDIS3	0.000	COMDIS6
N+0.39	B21 VIG-15X50	9.000	2.228	COMDIS3	0.776	COMDIS3	0.000	COMDIS6
N+0.39	B21 VIG-15X50	18.000	2.216	COMDIS4	0.776	COMDIS3	0.000	COMDIS6
N+0.39	B21 VIG-15X50	27.000	2.216	COMDIS3	0.776	COMDIS3	0.000	COMDIS6
N+0.39	B21 VIG-15X50	36.000	2.216	COMDIS3	0.776	COMDIS3	0.000	COMDIS6
N+0.39	B21 VIG-15X50	45.000	2.050	COMDIS3	0.776	COMDIS3	0.000	COMDIS6
N+0.39	B21 VIG-15X50	54.000	1.827	COMDIS3	0.776	COMDIS3	0.000	COMDIS6
N+0.39	B21 VIG-15X50	63.000	1.607	COMDIS3	0.776	COMDIS3	0.000	COMDIS6
N+0.39	B21 VIG-15X50	72.000	1.390	COMDIS3	0.776	COMDIS3	0.000	COMDIS6
N+0.39	B21 VIG-15X50	81.000	1.175	COMDIS3	0.776	COMDIS3	0.000	COMDIS6

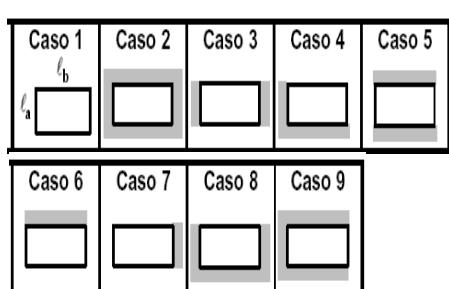
N+0.39	B21 VIG-15X50	90.000	0.963 COMDIS3	0.479 COMDIS3	0.000 COMDIS6
BASE	B4 VIG-15X50	0.000	0.000 COMDIS6	0.000 COMDIS4	0.000 COMDIS6
BASE	B4 VIG-15X50	2.500	0.007 COMDIS2	0.007 COMDIS2	0.000 COMDIS6
BASE	B4 VIG-15X50	5.000	0.007 COMDIS2	0.007 COMDIS2	0.000 COMDIS6
BASE	B4 VIG-15X50	7.500	0.007 COMDIS2	0.007 COMDIS2	0.000 COMDIS6
BASE	B4 VIG-15X50	10.000	0.009 COMDIS2	0.007 COMDIS2	0.000 COMDIS6
BASE	B4 VIG-15X50	12.500	0.012 COMDIS2	0.007 COMDIS2	0.000 COMDIS6
BASE	B4 VIG-15X50	15.000	0.015 COMDIS2	0.007 COMDIS2	0.000 COMDIS6
BASE	B4 VIG-15X50	17.500	0.017 COMDIS2	0.007 COMDIS2	0.000 COMDIS6
BASE	B4 VIG-15X50	20.000	0.020 COMDIS2	0.007 COMDIS2	0.000 COMDIS6
BASE	B4 VIG-15X50	22.500	0.023 COMDIS2	0.007 COMDIS2	0.000 COMDIS6
BASE	B4 VIG-15X50	25.000	0.026 COMDIS2	0.013 COMDIS2	0.000 COMDIS6
BASE	B6 VIG-15X50	0.000	2.216 COMDIS4	1.247 COMDIS2	0.000 COMDIS6
BASE	B6 VIG-15X50	15.500	2.136 COMDIS2	0.618 COMDIS2	0.000 COMDIS6
BASE	B6 VIG-15X50	31.000	1.744 COMDIS2	0.618 COMDIS2	0.000 COMDIS6
BASE	B6 VIG-15X50	46.500	1.360 COMDIS2	0.618 COMDIS2	0.000 COMDIS6
BASE	B6 VIG-15X50	62.000	0.987 COMDIS4	0.618 COMDIS2	0.000 COMDIS6
BASE	B6 VIG-15X50	77.500	0.657 COMDIS4	0.618 COMDIS2	0.000 COMDIS6
BASE	B6 VIG-15X50	93.000	0.618 COMDIS2	0.618 COMDIS2	0.000 COMDIS6
BASE	B6 VIG-15X50	108.500	0.618 COMDIS2	0.618 COMDIS2	0.000 COMDIS6
BASE	B6 VIG-15X50	124.000	0.618 COMDIS2	0.618 COMDIS2	0.000 COMDIS6
BASE	B6 VIG-15X50	139.500	0.618 COMDIS2	0.799 COMDIS2	0.000 COMDIS6
BASE	B6 VIG-15X50	155.000	0.000 COMDIS6	1.148 COMDIS2	0.000 COMDIS6
BASE	B11 VIG-40-50	0.000	0.064 COMDIS4	0.032 COMDIS4	6.630 COMDIS2
BASE	B11 VIG-40-50	19.750	2.087 COMDIS2	2.087 COMDIS2	6.630 COMDIS2
BASE	B11 VIG-40-50	39.500	2.087 COMDIS2	2.087 COMDIS2	6.630 COMDIS2
BASE	B11 VIG-40-50	59.250	2.087 COMDIS2	2.087 COMDIS2	6.630 COMDIS2
BASE	B11 VIG-40-50	79.000	2.464 COMDIS2	2.087 COMDIS2	6.630 COMDIS2
BASE	B11 VIG-40-50	98.750	3.201 COMDIS2	2.087 COMDIS2	6.630 COMDIS2
BASE	B11 VIG-40-50	118.500	3.992 COMDIS2	2.087 COMDIS2	6.630 COMDIS2
BASE	B11 VIG-40-50	138.250	4.839 COMDIS2	2.087 COMDIS2	6.630 COMDIS2
BASE	B11 VIG-40-50	158.000	5.742 COMDIS2	2.087 COMDIS2	6.630 COMDIS2
BASE	B11 VIG-40-50	165.000	5.910 COMDIS2	2.087 COMDIS2	6.630 COMDIS2
BASE	B11 VIG-40-50	165.000	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
BASE	B11 VIG-40-50	177.750	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
BASE	B11 VIG-40-50	197.500	3.256 COMDIS3	2.105 COMDIS3	0.000 COMDIS6
BASE	B17 VIG-15X50	0.000	0.000 COMDIS4	0.000 COMDIS3	0.000 COMDIS6
BASE	B17 VIG-15X50	2.500	0.007 COMDIS2	0.007 COMDIS2	0.000 COMDIS6
BASE	B17 VIG-15X50	5.000	0.007 COMDIS2	0.007 COMDIS2	0.000 COMDIS6
BASE	B17 VIG-15X50	7.500	0.007 COMDIS2	0.007 COMDIS2	0.000 COMDIS6
BASE	B17 VIG-15X50	10.000	0.009 COMDIS2	0.007 COMDIS2	0.000 COMDIS6
BASE	B17 VIG-15X50	12.500	0.012 COMDIS2	0.007 COMDIS2	0.000 COMDIS6
BASE	B17 VIG-15X50	15.000	0.015 COMDIS2	0.007 COMDIS2	0.000 COMDIS6
BASE	B17 VIG-15X50	17.500	0.017 COMDIS2	0.007 COMDIS2	0.000 COMDIS6
BASE	B17 VIG-15X50	20.000	0.020 COMDIS2	0.007 COMDIS2	0.000 COMDIS6
BASE	B17 VIG-15X50	22.500	0.023 COMDIS2	0.007 COMDIS2	0.000 COMDIS6
BASE	B17 VIG-15X50	25.000	0.026 COMDIS2	0.013 COMDIS2	0.000 COMDIS6
BASE	B19 VIG-15X50	0.000	2.612 COMDIS2	1.700 COMDIS2	0.000 COMDIS6
BASE	B19 VIG-15X50	15.500	2.294 COMDIS2	0.840 COMDIS2	0.000 COMDIS6
BASE	B19 VIG-15X50	31.000	2.216 COMDIS4	0.840 COMDIS2	0.000 COMDIS6
BASE	B19 VIG-15X50	46.500	2.216 COMDIS2	0.840 COMDIS2	0.000 COMDIS6
BASE	B19 VIG-15X50	62.000	1.842 COMDIS2	0.840 COMDIS2	0.000 COMDIS6
BASE	B19 VIG-15X50	77.500	1.454 COMDIS2	0.840 COMDIS2	0.000 COMDIS6
BASE	B19 VIG-15X50	93.000	1.074 COMDIS2	0.840 COMDIS2	0.000 COMDIS6
BASE	B19 VIG-15X50	108.500	0.840 COMDIS2	0.840 COMDIS2	0.000 COMDIS6
BASE	B19 VIG-15X50	124.000	0.840 COMDIS2	0.840 COMDIS2	0.000 COMDIS6
BASE	B19 VIG-15X50	139.500	0.840 COMDIS2	0.840 COMDIS2	0.000 COMDIS6
BASE	B19 VIG-15X50	155.000	0.000 COMDIS6	0.375 COMDIS3	0.000 COMDIS6

6. DISEÑO DE ELEMENTOS COMPLEMENTARIOS

**DISEÑO DE ELEMENTOS
COMPLEMENTARIOS**

**PROYECTO: CAE EL REDENTOR (RAMPA)
DISEÑO PLACA MACIZA (EN UNA DIRECCION)**

El diseño de la placa maciza se realiza de acuerdo con lo establecido en C.13.9 de las NSR - 10



Geometría de la losa

$$l_a = \textcolor{teal}{1.90} \text{ m} \quad f_y = \textcolor{teal}{420} \text{ MPa}$$

$$l_b = \textcolor{teal}{7.10} \text{ m} \quad f'_c = \textcolor{teal}{21} \text{ MPa}$$

Relación $m = \frac{l_a}{l_b} = \textcolor{teal}{0.268}$

$$h = l/20 (0.4+Fy/700) = 0.10 \text{ m}$$

Espesor escogido: **0.10 m**

Teniendo en cuenta que la relación m es menor de 0.5, la placa maciza trabaja en una dirección

Cargas

Peso propio de la losa	0.1x1.0x24	2.40	kN/m ²
Impermeabilización	0.05x20	1.00	kN/m ²
Carga Muerta Total		3.40	kN/m ²
Carga Viva		4.00	kN/m ²
Carga Última		10.48	kN/m ²

DISEÑO A MOMENTO FLECTOR

$$M_{u,a} = \textcolor{teal}{4.73} \text{ kN.m}$$

$$\begin{array}{ll} \text{Cuantía: } & 0.0024 \quad A_s = 2.36 \text{ cm}^2/\text{m} \quad \textbf{Transversal} \\ \text{Cuantía: } & 0.0018 \quad A_s = 1.80 \text{ cm}^2/\text{m} \quad \textbf{Longitudinal} \end{array}$$

Distribución de refuerzo:

Colocar 1#3 c/.20 Transversalmente superior e inferior
Colocar 1#3 c/.20 Longitudinalmente superior e inferior

REVISIÓN A CORTANTE

$$R = \textcolor{teal}{9.96} \text{ kN}$$

$$\begin{array}{ll} \phi v_c = & \textcolor{teal}{0.573} \text{ MPa} \\ \phi v_u = & \textcolor{teal}{0.142} \text{ MPa} \end{array}$$

OK

7. ANEXOS DE COMPUTADOR

ANEXOS DE COMPUTADOR

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S T O R Y D A T A

STORY	SIMILAR TO	HEIGHT	ELEVATION
N+4.45	None	0.030	4.450
N+4.42	None	0.370	4.420
N+4.05	None	0.410	4.050
N+3.64	None	0.410	3.640
N+3.23	None	0.030	3.230
N+3.20	None	0.370	3.200
N+2.83	None	0.410	2.830
N+2.42	None	0.410	2.420
N+2.01	None	0.030	2.010
N+1.98	None	0.370	1.980
N+1.61	None	0.410	1.610
N+1.20	None	0.410	1.200
N+0.79	None	0.030	0.790
N+0.76	None	0.370	0.760
N+0.39	None	0.440	0.390
BASE	None		-0.050

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

NAME	TYPE	X	Y	ROTATION	BUBBLESIZE	VISIBLE
GLOBAL	General	0.000	0.000	0.00000	1.250	Yes

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

SYSTEM NAME	GRID DIR	GRID ID	GRID TYPE	GRID HIDE	BUBBLE LOC	GRID COORDINATE
GLOBAL	G	Ad	Sec	No	Start	(0.000,0.000)-(22.271,0.000)
GLOBAL	G	Ac	Sec	No	End	(0.000,1.650)-(22.271,1.650)
GLOBAL	G	Aa	Sec	No	Start	(0.000,3.950)-(22.271,3.950)
GLOBAL	G	Ab	Sec	No	End	(0.000,2.300)-(22.271,2.300)
GLOBAL	G	3b	Sec	No	Start	(8.783,0.000)-(8.783,1.650)
GLOBAL	G	3c	Sec	No	Start	(13.665,0.000)-(13.665,3.950)
GLOBAL	G	4a	Sec	No	Start	(15.465,0.000)-(15.465,3.950)
GLOBAL	G	5a	Sec	No	Start	(20.546,0.000)-(20.546,3.950)
GLOBAL	G	1a	Sec	No	Start	(0.000,0.000)-(0.000,3.950)
GLOBAL	G	5b	Sec	No	Start	(22.271,0.000)-(22.271,3.950)
GLOBAL	G	1b	Sec	No	Start	(1.725,0.000)-(1.725,3.950)
GLOBAL	G	2a	Sec	No	Start	(6.795,0.000)-(6.795,3.950)
GLOBAL	G	3a	Sec	No	Start	(8.595,0.000)-(8.595,3.950)
GLOBAL	G	2b	Sec	No	Start	(6.983,0.000)-(6.983,1.650)
GLOBAL	G	2'	Primary	No	End	(1.975,-1.525)-(1.975,5.475)
GLOBAL	G	3'	Primary	No	End	(7.233,-1.525)-(7.233,5.475)
GLOBAL	G	4'	Primary	No	End	(14.565,-1.525)-(14.565,5.475)
GLOBAL	G	5'	Primary	No	End	(20.296,-1.525)-(20.296,5.475)
GLOBAL	G	A'	Primary	No	Start	(-1.575,1.975)-(23.846,1.975)

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P O I N T C O O R D I N A T E S

POINT	X	Y	DZ-BELOW
1	0.000	0.000	0.000
2	1.725	0.000	0.000
3	1.975	0.000	0.000
4	6.795	0.000	0.000
5	6.983	0.000	0.000
6	7.233	0.000	0.000
7	8.595	0.000	0.000
8	8.783	0.000	0.000
9	13.665	0.000	0.000
10	14.565	0.000	0.000
11	15.465	0.000	0.000
12	20.296	0.000	0.000
13	20.546	0.000	0.000
14	22.271	0.000	0.000
15	0.000	1.650	0.000
16	1.725	1.650	0.000
17	1.975	1.650	0.000

18	6.795	1.650	0.000
19	6.983	1.650	0.000
20	7.233	1.650	0.000
21	8.595	1.650	0.000
22	8.783	1.650	0.000
23	13.665	1.650	0.000
24	14.565	1.650	0.000
25	15.465	1.650	0.000
26	20.296	1.650	0.000
27	20.546	1.650	0.000
28	22.271	1.650	0.000
29	1.975	1.975	0.000
30	7.233	1.975	0.000
31	14.565	1.975	0.000
32	20.296	1.975	0.000
33	0.000	2.300	0.000
34	1.725	2.300	0.000
35	1.975	2.300	0.000
36	6.795	2.300	0.000
37	7.233	2.300	0.000
38	8.595	2.300	0.000
39	13.665	2.300	0.000
40	14.565	2.300	0.000
41	15.465	2.300	0.000
42	20.296	2.300	0.000
43	20.546	2.300	0.000
44	22.271	2.300	0.000
45	0.000	3.950	0.000
46	1.725	3.950	0.000
47	1.975	3.950	0.000
48	6.795	3.950	0.000
49	7.233	3.950	0.000
50	8.595	3.950	0.000
51	13.665	3.950	0.000
52	14.565	3.950	0.000
53	15.465	3.950	0.000
54	20.296	3.950	0.000
55	20.546	3.950	0.000
56	22.271	3.950	0.000

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C O L U M N C O N N E C T I V I T Y D A T A

COLUMN	I END PT	J END PT	I END STORY
C1	29	29	Below
C2	30	30	Below
C3	31	31	Below
C4	32	32	Below

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B E A M C O N N E C T I V I T Y D A T A

BEAM	I END PT	J END PT
------	----------	----------

B1	1	2
B2	2	3
B3	4	6
B4	5	6
B5	6	7
B6	6	8
B7	9	10
B8	10	11
B9	13	14
B10	3	29
B11	6	30
B12	10	31
B13	12	32
B14	15	16
B15	16	17
B16	18	20
B17	19	20
B18	20	21
B19	20	22
B20	23	24
B21	24	25
B22	27	28
B23	1	45
B24	14	56

B25	33	34
B26	36	37
B27	37	38
B28	39	40
B29	40	41
B30	42	43
B31	43	44
B32	29	47
B33	30	49
B34	52	31
B35	32	54
B36	33	45
B37	45	46
B38	48	49
B39	49	50
B40	51	52
B41	52	53
B42	54	55
B43	55	56

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B R A C E C O N N E C T I V I T Y D A T A

BRACE	I END PT	J END PT	I END STORY
D1	3	4	Below
D2	7	9	Below
D3	8	9	Below
D4	11	12	Below
D5	12	13	Below
D6	17	18	Below
D7	21	23	Below
D8	22	23	Below
D9	25	26	Below
D10	26	27	Below
D11	35	34	Below
D12	36	35	Below
D13	39	38	Below
D14	42	41	Below
D15	47	46	Below
D16	48	47	Below
D17	51	50	Below
D18	54	53	Below

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F L O O R C O N N E C T I V I T Y D A T A

FLOOR	POINT	POINT	POINT	POINT
F1	1	3	17	15
F2	4	6	20	18
F3	5	6	20	19
F4	6	7	21	20
F5	6	8	22	20
F6	9	10	24	23
F7	10	11	25	24
F8	13	14	28	27
F9	15	16	34	33
F10	27	28	44	43
F11	33	45	46	34
F12	33	34	46	45
F13	36	37	49	48
F14	37	38	50	49
F15	39	40	52	51
F16	40	41	53	52
F17	42	44	56	54

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

RAMP	POINT 1	POINT 2	POINT 3	POINT 4	PT1 STORY	PT2 STORY	PT3 STORY	PT4 STORY
R1	3	17	18	4	Below	Below	Same	Same
R2	7	21	23	9	Below	Below	Same	Same
R3	8	22	23	9	Below	Below	Same	Same
R4	11	25	26	12	Below	Below	Same	Same
R5	12	26	27	13	Below	Below	Same	Same
R6	35	34	46	47	Below	Same	Same	Below

R7	47	35	34	46	Below	Below	Same	Same
R8	48	36	35	47	Below	Below	Same	Same
R9	36	35	47	48	Below	Same	Same	Below
R10	51	39	38	50	Below	Below	Same	Same
R11	39	38	50	51	Below	Same	Same	Below
R12	54	42	41	53	Below	Below	Same	Same
R13	42	41	53	54	Below	Same	Same	Below

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R I G I D	D I A P H R A G M	P O I N T	C O N N E C T I V I T Y	D A T A
STORY	DIAPHRAGM	POINT	POINT	POINT
N+4.45	D1	29	45	46
				33
N+4.42	D1	29	47	35
N+4.05	D1	29 38	30 48	49 50
				36
N+3.64	D1	29 40	30 41	31 51
				52 53
N+3.23	D1	29 13 43	30 14 44	31 27 55
				32 28 56
N+3.20	D1	29 26	30	31
				32
N+2.83	D1	29 9	30 11	31 23
				32 24
N+2.42	D1	29 4	30 7	31 18
				32 20
N+2.01	D1	29 1 33	30 12 34	31 15 45
				32 16 46
N+1.98	D1	29 35	30	31
				32
N+1.61	D1	29 36	30 37	31 38
				32 48
N+1.20	D1	29 39	30 40	31 41
				32 51
N+0.79	D1	29 13 43	30 14 44	31 27 55
				32 28 56
N+0.76	D1	29 26	30	31
				32
N+0.39	D1	29 9	30 11	31 23
				32 24
BASE	D1	29 5	30 8	31 19
				32 20
				6 22

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M A S S S O U R C E D A T A

MASS LATERAL LUMP MASS
 FROM MASS ONLY AT STORIES

Masses Yes Yes

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D I A P H R A G M M A S S D A T A

STORY	DIAPHRAGM	MASS-X	MASS-Y	MMI	X-M	Y-M
N+4.45	D1	2.015E+00	2.015E+00	2.872E+00	0.791	3.119
N+4.42	D1	3.437E+00	3.437E+00	2.707E+00	1.975	3.032

N+4.05	D1	7.612E+00	7.612E+00	1.915E+01	7.431	3.040
N+3.64	D1	7.928E+00	7.928E+00	6.858E+01	13.811	2.999
N+3.23	D1	8.292E+00	8.292E+00	1.101E+02	20.241	2.414
N+3.20	D1	3.874E+00	3.874E+00	7.340E+01	18.916	1.036
N+2.83	D1	8.311E+00	8.311E+00	7.763E+01	14.073	0.999
N+2.42	D1	8.366E+00	8.366E+00	8.023E+01	8.124	1.006
N+2.01	D1	8.434E+00	8.434E+00	1.074E+02	2.011	1.544
N+1.98	D1	3.869E+00	3.869E+00	7.126E+01	3.321	2.914
N+1.61	D1	8.306E+00	8.306E+00	7.688E+01	8.104	2.951
N+1.20	D1	8.370E+00	8.370E+00	8.103E+01	14.053	2.944
N+0.79	D1	8.439E+00	8.439E+00	1.101E+02	20.242	2.406
N+0.76	D1	3.874E+00	3.874E+00	7.340E+01	18.916	1.036
N+0.39	D1	8.269E+00	8.269E+00	8.010E+01	14.062	1.006

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A S S E M B L E D P O I N T M A S S E S

STORY	POINT	UX	UY	UZ	RX	RY	RZ
N+4.45	1177	2.015E+00	2.015E+00	0.000E+00	0.000E+00	0.000E+00	2.872E+00
N+4.42	1178	3.437E+00	3.437E+00	0.000E+00	0.000E+00	0.000E+00	2.707E+00
N+4.05	1179	7.612E+00	7.612E+00	0.000E+00	0.000E+00	0.000E+00	1.915E+01
N+3.64	1180	7.928E+00	7.928E+00	0.000E+00	0.000E+00	0.000E+00	6.858E+01
N+3.23	1181	8.292E+00	8.292E+00	0.000E+00	0.000E+00	0.000E+00	1.101E+02
N+3.20	1182	3.874E+00	3.874E+00	0.000E+00	0.000E+00	0.000E+00	7.340E+01
N+2.83	1183	8.311E+00	8.311E+00	0.000E+00	0.000E+00	0.000E+00	7.763E+01
N+2.42	1184	8.366E+00	8.366E+00	0.000E+00	0.000E+00	0.000E+00	8.023E+01
N+2.01	1185	8.434E+00	8.434E+00	0.000E+00	0.000E+00	0.000E+00	1.074E+02
N+1.98	1186	3.869E+00	3.869E+00	0.000E+00	0.000E+00	0.000E+00	7.126E+01
N+1.61	1187	8.306E+00	8.306E+00	0.000E+00	0.000E+00	0.000E+00	7.688E+01
N+1.20	1188	8.370E+00	8.370E+00	0.000E+00	0.000E+00	0.000E+00	8.103E+01
N+0.79	1189	8.439E+00	8.439E+00	0.000E+00	0.000E+00	0.000E+00	1.101E+02
N+0.76	1190	3.874E+00	3.874E+00	0.000E+00	0.000E+00	0.000E+00	7.340E+01
N+0.39	1191	8.269E+00	8.269E+00	0.000E+00	0.000E+00	0.000E+00	8.010E+01
BASE	1192	5.502E+00	5.502E+00	0.000E+00	0.000E+00	0.000E+00	4.254E+01
N+4.45	All	2.015E+00	2.015E+00	0.000E+00	0.000E+00	0.000E+00	2.872E+00
N+4.42	All	3.437E+00	3.437E+00	0.000E+00	0.000E+00	0.000E+00	2.707E+00
N+4.05	All	7.612E+00	7.612E+00	0.000E+00	0.000E+00	0.000E+00	1.915E+01
N+3.64	All	7.928E+00	7.928E+00	0.000E+00	0.000E+00	0.000E+00	6.858E+01
N+3.23	All	8.292E+00	8.292E+00	0.000E+00	0.000E+00	0.000E+00	1.101E+02
N+3.20	All	3.874E+00	3.874E+00	0.000E+00	0.000E+00	0.000E+00	7.340E+01
N+2.83	All	8.311E+00	8.311E+00	0.000E+00	0.000E+00	0.000E+00	7.763E+01
N+2.42	All	8.366E+00	8.366E+00	0.000E+00	0.000E+00	0.000E+00	8.023E+01
N+2.01	All	8.434E+00	8.434E+00	0.000E+00	0.000E+00	0.000E+00	1.074E+02
N+1.98	All	3.869E+00	3.869E+00	0.000E+00	0.000E+00	0.000E+00	7.126E+01
N+1.61	All	8.306E+00	8.306E+00	0.000E+00	0.000E+00	0.000E+00	7.688E+01
N+1.20	All	8.370E+00	8.370E+00	0.000E+00	0.000E+00	0.000E+00	8.103E+01
N+0.79	All	8.439E+00	8.439E+00	0.000E+00	0.000E+00	0.000E+00	1.101E+02
N+0.76	All	3.874E+00	3.874E+00	0.000E+00	0.000E+00	0.000E+00	7.340E+01
N+0.39	All	8.269E+00	8.269E+00	0.000E+00	0.000E+00	0.000E+00	8.010E+01
BASE	All	5.502E+00	5.502E+00	0.000E+00	0.000E+00	0.000E+00	4.254E+01
Totals	All	1.049E+02	1.049E+02	0.000E+00	0.000E+00	0.000E+00	1.077E+03

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G R O U P M A S S D A T A

GROUP NAME	SELF MASS	SELF WEIGHT	TOTAL MASS-X	TOTAL MASS-Y	TOTAL MASS-Z
ALL	104.9002	739.386	104.9002	104.9002	0.0000

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M A T E R I A L L I S T B Y E L E M E N T T Y P E

ELEMENT TYPE	MATERIAL	TOTAL MASS tons	NUMBER PIECES	NUMBER STUDS
Column	CON28	11.43	51	
Beam	CON21	26.97	71	0
Brace	CON21	20.21	30	
Wall	CON28	0.32		
Floor	CON21	16.78		

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M A T E R I A L L I S T B Y S E C T I O N

SECTION	ELEMENT TYPE	NUMBER PIECES	TOTAL LENGTH meters	TOTAL MASS tons	NUMBER STUDS
VIG-40-50	Column	2	0.550	0.32	
VIG-40-50	Beam	15	29.625	14.50	0
VIG-15X50	Beam	56	67.950	12.47	0
VIG-15X50	Brace	30	110.121	20.21	
COL-50X60	Column	51	15.570	11.43	
PLACAMACIZA	Floor			16.78	

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M A T E R I A L L I S T B Y S T O R Y

STORY	ELEMENT TYPE	MATERIAL	TOTAL WEIGHT tons	FLOOR AREA m ²	UNIT WEIGHT kg/m ²	NUMBER PIECES	NUMBER STUDS
N+4.45	Column	CON28	0.02	2.846	7.7386	1	
N+4.45	Beam	CON21	0.94	2.846	328.8887	3	0
N+4.45	Brace	CON21	0.09	2.846	32.4753	2	
N+4.45	Floor	CON21	0.99	2.846	347.5193		
N+4.42	Column	CON28	0.27	0.000	1		
N+4.42	Beam	CON21	0.97	0.000	1	0	
N+4.42	Brace	CON21	1.77	0.000	2		
N+4.05	Column	CON28	0.60	2.970	202.7072	2	
N+4.05	Beam	CON21	1.63	2.970	547.9687	5	0
N+4.05	Brace	CON21	1.87	2.970	628.7077	2	
N+4.05	Floor	CON21	1.03	2.970	347.5193		
N+3.64	Column	CON28	0.90	2.970	304.0608	3	
N+3.64	Beam	CON21	1.63	2.970	547.9687	5	0
N+3.64	Brace	CON21	1.78	2.970	599.2307	2	
N+3.64	Floor	CON21	1.03	2.970	347.5193		
N+3.23	Column	CON28	0.09	7.226	12.1921	4	
N+3.23	Beam	CON21	3.05	7.226	422.0683	8	0
N+3.23	Brace	CON21	0.09	7.226	12.7913	2	
N+3.23	Floor	CON21	2.51	7.226	347.5193		
N+3.20	Column	CON28	1.09	0.000	4		
N+3.20	Beam	CON21	0.97	0.000	1	0	
N+3.20	Brace	CON21	1.78	0.000	2		
N+2.83	Column	CON28	1.20	2.970	405.4144	4	
N+2.83	Beam	CON21	1.63	2.970	547.9687	5	0
N+2.83	Brace	CON21	1.87	2.970	628.7077	2	
N+2.83	Floor	CON21	1.03	2.970	347.5193		
N+2.42	Column	CON28	1.20	2.970	405.4144	4	
N+2.42	Beam	CON21	1.63	2.970	547.9687	5	0
N+2.42	Brace	CON21	1.78	2.970	597.9129	2	
N+2.42	Floor	CON21	1.03	2.970	347.5193		
N+2.01	Column	CON28	0.09	7.226	12.1921	4	
N+2.01	Beam	CON21	3.05	7.226	422.0683	8	0
N+2.01	Brace	CON21	0.09	7.226	12.7913	2	
N+2.01	Floor	CON21	2.51	7.226	347.5193		
N+1.98	Column	CON28	1.09	0.000	4		
N+1.98	Beam	CON21	0.97	0.000	1	0	
N+1.98	Brace	CON21	1.77	0.000	2		
N+1.61	Column	CON28	1.20	2.970	405.4144	4	
N+1.61	Beam	CON21	1.63	2.970	547.9687	5	0
N+1.61	Brace	CON21	1.87	2.970	628.7077	2	
N+1.61	Floor	CON21	1.03	2.970	347.5193		
N+1.20	Column	CON28	1.20	2.970	405.4144	4	
N+1.20	Beam	CON21	1.63	2.970	547.9687	5	0
N+1.20	Brace	CON21	1.78	2.970	599.2307	2	
N+1.20	Floor	CON21	1.03	2.970	347.5193		
N+0.79	Column	CON28	0.09	7.226	12.1921	4	
N+0.79	Beam	CON21	3.05	7.226	422.0683	8	0
N+0.79	Brace	CON21	0.09	7.226	12.7913	2	
N+0.79	Floor	CON21	2.51	7.226	347.5193		

N+0.76	Column	CON28	1.09	0.000	4		
N+0.76	Beam	CON21	0.97	0.000	1	0	
N+0.76	Brace	CON21	1.78	0.000	2		
N+0.39	Column	CON28	1.29	2.970	435.0789	4	
N+0.39	Beam	CON21	1.63	2.970	547.9687	5	0
N+0.39	Brace	CON21	1.80	2.970	605.8829	2	
N+0.39	Floor	CON21	1.03	2.970	347.5193		
BASE	Beam	CON21	1.63	2.970	547.9687	5	0
BASE	Floor	CON21	1.03	2.970	347.5193		
SUM	Column	CON28	11.43	48.285	236.7490	51	
SUM	Beam	CON21	26.97	48.285	558.6106	71	0
SUM	Brace	CON21	20.21	48.285	418.6087	30	
SUM	Floor	CON21	16.78	48.285	347.5193		
TOTAL	All	All	75.40	48.285	1561.4876	152	0

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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
CON21	Iso	Concrete	All	21538000.000	0.2000	9.9000E-06	8974166.667
OTHER	Iso	None	All	199947978.80	0.3000	1.1700E-05	76903068.77
CON28	Iso	Concrete	All	24870000.000	0.2000	9.9000E-0610362500.000	
RAMPA	Iso	Concrete	All	0.010	0.2000	9.9000E-06	0.004

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
CON21	2.4000E+00	2.4000E+01
OTHER	7.8271E+00	7.6820E+01
CON28	2.4000E+00	2.4000E+01
RAMPA	2.4000E+00	0.0000E+00

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
CON21	No	21000.000	420000.000	420000.000	N/A
CON28	No	21000.000	420000.000	420000.000	N/A
RAMPA	No	21000.000	420000.000	420000.000	N/A

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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
COL-40X60	CON28	Rectangular	Yes	
VIG-40-50	CON21	Rectangular		Yes
VIG-15X50	CON21	Rectangular		Yes
COL-50X60	CON28	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
COL-40X60	0.6000	0.4000	0.0000	0.0000	0.0000	0.0000

VIG-40-50	0.5000	0.4000	0.0000	0.0000	0.0000	0.0000
VIG-15X50	0.5000	0.1500	0.0000	0.0000	0.0000	0.0000
COL-50X60	0.6000	0.5000	0.0000	0.0000	0.0000	0.0000

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 AREA	TORSIONAL CONSTANT	MOMENTS OF INERTIA I33	I22	SHEAR AREA A2	AREAS A3
COL-40X60	0.2400	0.0075	0.0072	0.0032	0.2000	0.2000
VIG-40-50	0.2000	0.0055	0.0042	0.0027	0.1667	0.1667
VIG-15X50	0.0750	0.0005	0.0016	0.0001	0.0625	0.0625
COL-50X60	0.3000	0.0124	0.0090	0.0063	0.2500	0.2500

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 MODULI S33	MODULI S22	PLASTIC MODULI Z33	Z22	RADIUS OF GYRATION R33	R22
COL-40X60	0.0240	0.0160	0.0360	0.0240	0.1732	0.1155
VIG-40-50	0.0167	0.0133	0.0250	0.0200	0.1443	0.1155
VIG-15X50	0.0063	0.0019	0.0094	0.0028	0.1443	0.0433
COL-50X60	0.0300	0.0250	0.0450	0.0375	0.1732	0.1443

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

FRAME SECTION NAME	TOTAL WEIGHT	TOTAL MASS
COL-40X60	3.1680	0.3168
VIG-40-50	142.2000	14.2200
VIG-15X50	320.5271	32.0527
COL-50X60	112.1040	11.2104

C O N C R E T E C O L U M N D A T A

FRAME SECTION NAME	REINF CONFIGURATION LONGIT	REINF LATERAL	SIZE/TYPE	NUM BARS 3DIR/2DIR	NUM BARS CIRCULAR	BAR COVER
COL-40X60	Rectangular	Ties	#9/Design	4/6	N/A	0.0500
COL-50X60	Rectangular	Ties	#8/Design	5/6	N/A	0.0500

C O N C R E T E B E A M D A T A

FRAME SECTION NAME	TOP COVER	BOT COVER	TOP LEFT AREA	TOP RIGHT AREA	BOT LEFT AREA	BOT RIGHT AREA
VIG-40-50	0.0500	0.0500	0.000	0.000	0.000	0.000
VIG-15X50	0.0500	0.0500	0.000	0.000	0.000	0.000

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S H E L L S E C T I O N P R O P E R T Y D A T A

SHELL SECTION	MATERIAL NAME	SHELL TYPE	LOAD DIST ONE WAY	MEMBRANE THICK	BENDING THICK	TOTAL WEIGHT	TOTAL MASS
RAMPA	RAMPA	Membrane	Yes	0.1420	0.1420	0.0000	30.9615
PLACAMACIZA	CON21	Membrane	Yes	0.1420	0.1420	164.5553	16.4555

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

DECK SECTION	DECK TYPE	SLAB MATERIAL	DECK MATERIAL	DECK SHEAR THICK	DECK UNIT WT
DECK1	Filled	CON21	N/A	N/A	1.1012E-01

D E C K S E C T I O N S H E A R S T U D D A T A

DECK SECTION	STUD DIAM	STUD HEIGHT	STUD FU

DECK1 0.0191 0.1524 448159.263

D E C K S E C T I O N G E O M E T R Y D A T A

DECK SECTION	SLAB DEPTH	RIB DEPTH	RIB WIDTH	RIB SPACING
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DECK1	0.0889	0.0762	0.1524	0.3048
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L I N K P R O P E R T Y D A T A

LINK: NLPR1

TYPE: Damper

MASS	WEIGHT	INERTIA 1	INERTIA 2	INERTIA 3	P-D M2I	P-D M2J	P-D M3I	P-D M3J
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
DOF	KE	CE	DJ	K	C	C EXP		
U1	0.0000	0.0000	N/A	---	---	---		

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S T A T I C L O A D C A S E S

STATIC CASE	CASE TYPE	AUTO LOAD	SELF WT MULTIPLIER	NOTIONAL FACTOR	NOTIONAL DIRECTION
DEAD	DEAD	N/A	1.0000		
LIVE	LIVE	N/A	0.0000		

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R E S P O N S E S P E C T R U M C A S E S

RESP SPEC CASE: SISDERX

BASIC RESPONSE SPECTRUM DATA

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

RESPONSE SPECTRUM FUNCTION ASSIGNMENT DATA

DIRECTION	FUNCTION	SCALE FACT
U1	DERIVAS	12.0950
U2	----	N/A
UZ	----	N/A

RESP SPEC CASE: SISDERY

BASIC RESPONSE SPECTRUM DATA

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

RESPONSE SPECTRUM FUNCTION ASSIGNMENT DATA

DIRECTION	FUNCTION	SCALE FACT
U1	----	N/A
U2	DERIVAS	14.2630
UZ	----	N/A

RESP SPEC CASE: SISDISX

BASIC RESPONSE SPECTRUM DATA

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

RESPONSE SPECTRUM FUNCTION ASSIGNMENT DATA

DIRECTION	FUNCTION	SCALE FACT
U1	DISENO	12.0950
U2	----	N/A
UZ	----	N/A

RESP SPEC CASE: SISDISY

BASIC RESPONSE SPECTRUM DATA

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

RESPONSE SPECTRUM FUNCTION ASSIGNMENT DATA

DIRECTION	FUNCTION	SCALE FACT
U1	----	N/A
U2	DISENO	14.2630
UZ	----	N/A

RESP SPEC CASE: SISUMBX

BASIC RESPONSE SPECTRUM DATA

MODAL COMBO	DIRECTION COMBO	MODAL DAMPING	SPECTRUM ANGLE	TYPICAL ECCEN
SRSS	SRSS	0.0200	0.0000	0.0500

RESPONSE SPECTRUM FUNCTION ASSIGNMENT DATA

DIRECTION	FUNCTION	SCALE FACT
U1	UMBRAL	21.8440
U2	----	N/A
UZ	----	N/A

RESP SPEC CASE: SISUMBY

BASIC RESPONSE SPECTRUM DATA

MODAL COMBO	DIRECTION COMBO	MODAL DAMPING	SPECTRUM ANGLE	TYPICAL ECCEN
SRSS	SRSS	0.0200	0.0000	0.0500

RESPONSE SPECTRUM FUNCTION ASSIGNMENT DATA

DIRECTION	FUNCTION	SCALE FACT
U1	----	N/A
U2	UMBRAL	16.4540
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

COMDIS1	ADD	DEAD	Static	1.4000
COMDIS2	ADD	DEAD	Static	1.2000
		LIVE	Static	1.6000
COMDIS3	ADD	DEAD	Static	1.2000
		LIVE	Static	1.0000
		SISDISX	Spectra	1.0000
		SISDISY	Spectra	0.3000
COMDIS4	ADD	DEAD	Static	1.2000
		LIVE	Static	1.0000
		SISDISX	Spectra	0.3000
		SISDISY	Spectra	1.0000
COMDIS5	ADD	DEAD	Static	0.9000
		SISDISX	Spectra	1.0000
		SISDISY	Spectra	0.3000
COMDIS6	ADD	DEAD	Static	0.9000
		SISDISX	Spectra	0.3000
		SISDISY	Spectra	1.0000
ENVOLVENTE	ENVE	COMDIS1	Combo	1.0000
		COMDIS2	Combo	1.0000
		COMDIS3	Combo	1.0000
		COMDIS4	Combo	1.0000
		COMDIS5	Combo	1.0000
		COMDIS6	Combo	1.0000
COMDER1	ADD	SISDERX	Spectra	1.0000
		SISDERY	Spectra	0.3000
COMDER2	ADD	SISDERX	Spectra	0.3000
		SISDERY	Spectra	1.0000
COMUMB1	ADD	SISUMBX	Spectra	1.0000
		SISUMBY	Spectra	0.3000
COMUMB2	ADD	SISUMBX	Spectra	0.3000
		SISUMBY	Spectra	1.0000
CIMENTACION	ADD	DEAD	Static	1.0000
		LIVE	Static	1.0000

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R E S P O N S E S P E C T R U M F U N C T I O N - F R O M F I L E

FUNCTION NAME: DERIVAS

FILE NAME: c:\users\user1\desktop\felipe\rampa cae - correcciones\modelo\derivas.txt
 DATA TYPE: Period vs Acceleration
 NUMBER OF HEADER LINES = 0

PERIOD	ACCEL
0.0000	0.5630
0.1600	0.5630
0.3200	0.5630
0.4800	0.5630
0.6400	0.5630
0.8000	0.5630
0.9600	0.5630
1.1200	0.5630
1.3000	0.4830
1.4900	0.4240
1.6700	0.3770
1.8500	0.3400
2.0400	0.3100
2.2200	0.2840
2.4000	0.2620
2.5800	0.2440
2.7700	0.2280
2.9500	0.2140
3.1300	0.2010
3.3200	0.1900
3.5000	0.1800
4.0600	0.1340
4.6300	0.1030
5.1900	0.0820
5.7500	0.0670
6.3100	0.0550
6.8800	0.0470
7.4400	0.0400
8.0000	0.0340

FUNCTION NAME: DISENO

FILE NAME: c:\users\user1\desktop\felipe\rampa cae - correcciones\modelo\diseño.txt
DATA TYPE: Period vs Acceleration
NUMBER OF HEADER LINES = 0

PERIOD	ACCEL
0.0000	0.3750
0.1600	0.3750
0.3200	0.3750
0.4800	0.3750
0.6400	0.3750
0.8000	0.3750
0.9600	0.3750
1.1200	0.3750
1.3000	0.3220
1.4900	0.2830
1.6700	0.2520
1.8500	0.2270
2.0400	0.2060
2.2200	0.1890
2.4000	0.1750
2.5800	0.1630
2.7700	0.1520
2.9500	0.1420
3.1300	0.1340
3.3200	0.1270
3.5000	0.1200
4.0600	0.0890
4.6300	0.0690
5.1900	0.0550
5.7500	0.0440
6.3100	0.0370
6.8800	0.0310
7.4400	0.0270
8.0000	0.0230

FUNCTION NAME: UMBRAL

FILE NAME: c:\users\user1\desktop\felipe\rampa cae - correcciones\modelo\umbral.txt
DATA TYPE: Period vs Acceleration
NUMBER OF HEADER LINES = 0

PERIOD	ACCEL
0.0000	0.0800
0.2100	0.2520
0.2800	0.2520
0.3500	0.2520
0.4200	0.2520
0.4900	0.2520
0.5600	0.2520
0.6300	0.2520
0.6900	0.2520
0.7600	0.2520
0.8300	0.2520
0.9000	0.2520
0.9700	0.2520
1.0400	0.2520
1.3500	0.1940
1.6600	0.1580
1.9600	0.1330
2.2700	0.1150
2.5800	0.1010
2.8900	0.0900
3.1900	0.0820
3.5000	0.0750
4.0600	0.0550
4.6300	0.0430
5.1900	0.0340
5.7500	0.0280
6.3100	0.0230
6.8800	0.0190
7.4400	0.0170
8.0000	0.0140

STORY	DIAPHRAGM	POINT	POINT	POINT	POINT	POINT
N+4.45	D1	29	45	46	33	34
N+4.42	D1	29	47	35		
N+4.05	D1	29	30	49	36	37
N+4.05	D1	38	48	50		
N+3.64	D1	29	30	31	52	39
N+3.64	D1	40	41	51	53	
N+3.23	D1	29	30	31	32	54
N+3.23	D1	13	14	27	28	42
N+3.23	D1	43	44	55	56	
N+3.20	D1	29	30	31	32	12
N+3.20	D1	26				
N+2.83	D1	29	30	31	32	10
N+2.83	D1	9	11	23	24	25
N+2.42	D1	29	30	31	32	6
N+2.42	D1	4	7	18	20	21
N+2.01	D1	29	30	31	32	3
N+2.01	D1	1	2	15	16	17
N+2.01	D1	33	34	45	46	
N+1.98	D1	29	30	31	32	47
N+1.98	D1	35				
N+1.61	D1	29	30	31	32	49
N+1.61	D1	36	37	38	48	50
N+1.20	D1	29	30	31	32	52
N+1.20	D1	39	40	41	51	53
N+0.79	D1	29	30	31	32	54
N+0.79	D1	13	14	27	28	42
N+0.79	D1	43	44	55	56	
N+0.76	D1	29	30	31	32	12
N+0.76	D1	26				
N+0.39	D1	29	30	31	32	10
N+0.39	D1	9	11	23	24	25

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S U P P O R T (R E S T R A I N T) D A T A

STORY	POINT	-----REstrained DOF's-----					
		UX	UY	UZ	RX	RY	RZ
BASE	29	Yes	Yes	Yes	Yes	Yes	Yes
BASE	30	Yes	Yes	Yes	Yes	Yes	Yes
BASE	31	Yes	Yes	Yes	Yes	Yes	Yes
BASE	32	Yes	Yes	Yes	Yes	Yes	Yes

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

STORY LEVEL	LINE ID	LINE TYPE	SECTION TYPE	AUTO SECTION	SELECT SECTION	ANALYSIS SECTION	DESIGN PROCEDURE	DESIGN SECTION
N+4.45	C1	Column	Rectangular	None	COL-50X60	Conc Frame	COL-50X60	
N+4.42	C1	Column	Rectangular	None	COL-50X60	Conc Frame	COL-50X60	
N+4.05	C1	Column	Rectangular	None	COL-50X60	Conc Frame	COL-50X60	
N+4.05	C2	Column	Rectangular	None	COL-50X60	Conc Frame	COL-50X60	
N+3.64	C1	Column	Rectangular	None	COL-50X60	Conc Frame	COL-50X60	
N+3.64	C2	Column	Rectangular	None	COL-50X60	Conc Frame	COL-50X60	
N+3.64	C3	Column	Rectangular	None	COL-50X60	Conc Frame	COL-50X60	
N+3.23	C1	Column	Rectangular	None	COL-50X60	Conc Frame	COL-50X60	
N+3.23	C2	Column	Rectangular	None	COL-50X60	Conc Frame	COL-50X60	
N+3.23	C3	Column	Rectangular	None	COL-50X60	Conc Frame	COL-50X60	
N+3.23	C4	Column	Rectangular	None	COL-50X60	Conc Frame	COL-50X60	
N+3.20	C1	Column	Rectangular	None	COL-50X60	Conc Frame	COL-50X60	
N+3.20	C2	Column	Rectangular	None	COL-50X60	Conc Frame	COL-50X60	
N+3.20	C3	Column	Rectangular	None	COL-50X60	Conc Frame	COL-50X60	
N+3.20	C4	Column	Rectangular	None	COL-50X60	Conc Frame	COL-50X60	
N+2.83	C1	Column	Rectangular	None	COL-50X60	Conc Frame	COL-50X60	
N+2.83	C2	Column	Rectangular	None	COL-50X60	Conc Frame	COL-50X60	
N+2.83	C3	Column	Rectangular	None	COL-50X60	Conc Frame	COL-50X60	
N+2.83	C4	Column	Rectangular	None	COL-50X60	Conc Frame	COL-50X60	
N+2.42	C1	Column	Rectangular	None	COL-50X60	Conc Frame	COL-50X60	
N+2.42	C2	Column	Rectangular	None	COL-50X60	Conc Frame	COL-50X60	
N+2.42	C3	Column	Rectangular	None	COL-50X60	Conc Frame	COL-50X60	
N+2.42	C4	Column	Rectangular	None	COL-50X60	Conc Frame	COL-50X60	
N+2.01	C1	Column	Rectangular	None	COL-50X60	Conc Frame	COL-50X60	
N+2.01	C2	Column	Rectangular	None	COL-50X60	Conc Frame	COL-50X60	
N+2.01	C3	Column	Rectangular	None	COL-50X60	Conc Frame	COL-50X60	
N+2.01	C4	Column	Rectangular	None	COL-50X60	Conc Frame	COL-50X60	

N+0.79	B35	Beam	Rectangular	None	VIG-40-50	Conc Frame	VIG-40-50
N+0.79	B42	Beam	Rectangular	None	VIG-15X50	Conc Frame	VIG-15X50
N+0.79	B43	Beam	Rectangular	None	VIG-15X50	Conc Frame	VIG-15X50
N+0.76	B13	Beam	Rectangular	None	VIG-40-50	Conc Frame	VIG-40-50
N+0.39	B7	Beam	Rectangular	None	VIG-15X50	Conc Frame	VIG-15X50
N+0.39	B8	Beam	Rectangular	None	VIG-15X50	Conc Frame	VIG-15X50
N+0.39	B12	Beam	Rectangular	None	VIG-40-50	Conc Frame	VIG-40-50
N+0.39	B20	Beam	Rectangular	None	VIG-15X50	Conc Frame	VIG-15X50
N+0.39	B21	Beam	Rectangular	None	VIG-15X50	Conc Frame	VIG-15X50
BASE	B4	Beam	Rectangular	None	VIG-15X50	Conc Frame	VIG-15X50
BASE	B6	Beam	Rectangular	None	VIG-15X50	Conc Frame	VIG-15X50
BASE	B11	Beam	Rectangular	None	VIG-40-50	Conc Frame	VIG-40-50
BASE	B17	Beam	Rectangular	None	VIG-15X50	Conc Frame	VIG-15X50
BASE	B19	Beam	Rectangular	None	VIG-15X50	Conc Frame	VIG-15X50
N+4.45	D11	Brace	Rectangular	None	VIG-15X50	Conc Frame	VIG-15X50
N+4.45	D15	Brace	Rectangular	None	VIG-15X50	Conc Frame	VIG-15X50
N+4.42	D12	Brace	Rectangular	None	VIG-15X50	Conc Frame	VIG-15X50
N+4.42	D16	Brace	Rectangular	None	VIG-15X50	Conc Frame	VIG-15X50
N+4.05	D13	Brace	Rectangular	None	VIG-15X50	Conc Frame	VIG-15X50
N+4.05	D17	Brace	Rectangular	None	VIG-15X50	Conc Frame	VIG-15X50
N+3.64	D14	Brace	Rectangular	None	VIG-15X50	Conc Frame	VIG-15X50
N+3.64	D18	Brace	Rectangular	None	VIG-15X50	Conc Frame	VIG-15X50
N+3.23	D5	Brace	Rectangular	None	VIG-15X50	Conc Frame	VIG-15X50
N+3.23	D10	Brace	Rectangular	None	VIG-15X50	Conc Frame	VIG-15X50
N+3.20	D4	Brace	Rectangular	None	VIG-15X50	Conc Frame	VIG-15X50
N+3.20	D9	Brace	Rectangular	None	VIG-15X50	Conc Frame	VIG-15X50
N+2.83	D2	Brace	Rectangular	None	VIG-15X50	Conc Frame	VIG-15X50
N+2.83	D7	Brace	Rectangular	None	VIG-15X50	Conc Frame	VIG-15X50
N+2.42	D1	Brace	Rectangular	None	VIG-15X50	Conc Frame	VIG-15X50
N+2.42	D6	Brace	Rectangular	None	VIG-15X50	Conc Frame	VIG-15X50
N+2.01	D11	Brace	Rectangular	None	VIG-15X50	Conc Frame	VIG-15X50
N+2.01	D15	Brace	Rectangular	None	VIG-15X50	Conc Frame	VIG-15X50
N+1.98	D12	Brace	Rectangular	None	VIG-15X50	Conc Frame	VIG-15X50
N+1.98	D16	Brace	Rectangular	None	VIG-15X50	Conc Frame	VIG-15X50
N+1.61	D13	Brace	Rectangular	None	VIG-15X50	Conc Frame	VIG-15X50
N+1.61	D17	Brace	Rectangular	None	VIG-15X50	Conc Frame	VIG-15X50
N+1.20	D14	Brace	Rectangular	None	VIG-15X50	Conc Frame	VIG-15X50
N+1.20	D18	Brace	Rectangular	None	VIG-15X50	Conc Frame	VIG-15X50
N+0.79	D5	Brace	Rectangular	None	VIG-15X50	Conc Frame	VIG-15X50
N+0.79	D10	Brace	Rectangular	None	VIG-15X50	Conc Frame	VIG-15X50
N+0.76	D4	Brace	Rectangular	None	VIG-15X50	Conc Frame	VIG-15X50
N+0.76	D9	Brace	Rectangular	None	VIG-15X50	Conc Frame	VIG-15X50
N+0.39	D3	Brace	Rectangular	None	VIG-15X50	Conc Frame	VIG-15X50
N+0.39	D8	Brace	Rectangular	None	VIG-15X50	Conc Frame	VIG-15X50

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C A R D I N A L	P O I N T	A S S I G N M E N T S	T O	L I N E	O B J E C T S
STORY	LINE	LINE	CARDINAL	MIRROR	TRANSFORM
LEVEL	ID	TYPE	POINT	ABOUT 2	STIFFNESS
N+4.45	C1	Column	10	No	No
N+4.42	C1	Column	10	No	No
N+4.05	C1	Column	10	No	No
N+4.05	C2	Column	10	No	No
N+3.64	C1	Column	10	No	No
N+3.64	C2	Column	10	No	No
N+3.64	C3	Column	10	No	No
N+3.23	C1	Column	10	No	No
N+3.23	C2	Column	10	No	No
N+3.23	C3	Column	10	No	No
N+3.23	C4	Column	10	No	No
N+3.23	C1	Column	10	No	No
N+2.83	C1	Column	10	No	No
N+2.83	C2	Column	10	No	No
N+2.83	C3	Column	10	No	No
N+2.83	C4	Column	10	No	No
N+2.42	C1	Column	10	No	No
N+2.42	C2	Column	10	No	No
N+2.42	C3	Column	10	No	No
N+2.42	C4	Column	10	No	No
N+2.01	C1	Column	10	No	No
N+2.01	C2	Column	10	No	No
N+2.01	C3	Column	10	No	No
N+2.01	C4	Column	10	No	No
N+1.98	C1	Column	10	No	No
N+1.98	C2	Column	10	No	No

N+1.98	C3	Column	10	No	No
N+1.98	C4	Column	10	No	No
N+1.61	C1	Column	10	No	No
N+1.61	C2	Column	10	No	No
N+1.61	C3	Column	10	No	No
N+1.61	C4	Column	10	No	No
N+1.20	C1	Column	10	No	No
N+1.20	C2	Column	10	No	No
N+1.20	C3	Column	10	No	No
N+1.20	C4	Column	10	No	No
N+0.79	C1	Column	10	No	No
N+0.79	C2	Column	10	No	No
N+0.79	C3	Column	10	No	No
N+0.79	C4	Column	10	No	No
N+0.76	C1	Column	10	No	No
N+0.76	C2	Column	10	No	No
N+0.76	C3	Column	10	No	No
N+0.76	C4	Column	10	No	No
N+0.39	C1	Column	10	No	No
N+0.39	C2	Column	10	No	No
N+0.39	C3	Column	10	No	No
N+0.39	C4	Column	10	No	No
N+4.45	B25	Beam	8	No	No
N+4.45	B36	Beam	8	No	No
N+4.45	B37	Beam	8	No	No
N+4.42	B32	Beam	8	No	No
N+4.05	B26	Beam	8	No	No
N+4.05	B27	Beam	8	No	No
N+4.05	B33	Beam	8	No	No
N+4.05	B38	Beam	8	No	No
N+4.05	B39	Beam	8	No	No
N+3.64	B28	Beam	8	No	No
N+3.64	B29	Beam	8	No	No
N+3.64	B34	Beam	8	No	No
N+3.64	B40	Beam	8	No	No
N+3.64	B41	Beam	8	No	No
N+3.23	B9	Beam	8	No	No
N+3.23	B22	Beam	8	No	No
N+3.23	B24	Beam	8	No	No
N+3.23	B30	Beam	8	No	No
N+3.23	B31	Beam	8	No	No
N+3.23	B35	Beam	8	No	No
N+3.23	B42	Beam	8	No	No
N+3.23	B43	Beam	8	No	No
N+3.20	B13	Beam	8	No	No
N+2.83	B7	Beam	8	No	No
N+2.83	B8	Beam	8	No	No
N+2.83	B12	Beam	8	No	No
N+2.83	B20	Beam	8	No	No
N+2.83	B21	Beam	8	No	No
N+2.42	B3	Beam	8	No	No
N+2.42	B5	Beam	8	No	No
N+2.42	B11	Beam	8	No	No
N+2.42	B16	Beam	8	No	No
N+2.42	B18	Beam	8	No	No
N+2.01	B1	Beam	8	No	No
N+2.01	B2	Beam	8	No	No
N+2.01	B10	Beam	8	No	No
N+2.01	B14	Beam	8	No	No
N+2.01	B15	Beam	8	No	No
N+2.01	B23	Beam	8	No	No
N+2.01	B25	Beam	8	No	No
N+2.01	B37	Beam	8	No	No
N+1.98	B32	Beam	8	No	No
N+1.61	B26	Beam	8	No	No
N+1.61	B27	Beam	8	No	No
N+1.61	B33	Beam	8	No	No
N+1.61	B38	Beam	8	No	No
N+1.61	B39	Beam	8	No	No
N+1.20	B28	Beam	8	No	No
N+1.20	B29	Beam	8	No	No
N+1.20	B34	Beam	8	No	No
N+1.20	B40	Beam	8	No	No
N+1.20	B41	Beam	8	No	No
N+0.79	B9	Beam	8	No	No
N+0.79	B22	Beam	8	No	No
N+0.79	B24	Beam	8	No	No
N+0.79	B30	Beam	8	No	No
N+0.79	B31	Beam	8	No	No
N+0.79	B35	Beam	8	No	No
N+0.79	B42	Beam	8	No	No

N+0.79	B43	Beam	8	No	No
N+0.76	B13	Beam	8	No	No
N+0.39	B7	Beam	8	No	No
N+0.39	B8	Beam	8	No	No
N+0.39	B12	Beam	8	No	No
N+0.39	B20	Beam	8	No	No
N+0.39	B21	Beam	8	No	No
BASE	B4	Beam	8	No	No
BASE	B6	Beam	8	No	No
BASE	B11	Beam	8	No	No
BASE	B17	Beam	8	No	No
BASE	B19	Beam	8	No	No
N+4.45	D11	Brace	10	No	No
N+4.45	D15	Brace	10	No	No
N+4.42	D12	Brace	10	No	No
N+4.42	D16	Brace	10	No	No
N+4.05	D13	Brace	10	No	No
N+4.05	D17	Brace	10	No	No
N+3.64	D14	Brace	10	No	No
N+3.64	D18	Brace	10	No	No
N+3.23	D5	Brace	10	No	No
N+3.23	D10	Brace	10	No	No
N+3.20	D4	Brace	10	No	No
N+3.20	D9	Brace	10	No	No
N+2.83	D2	Brace	10	No	No
N+2.83	D7	Brace	10	No	No
N+2.42	D1	Brace	10	No	No
N+2.42	D6	Brace	10	No	No
N+2.01	D11	Brace	10	No	No
N+2.01	D15	Brace	10	No	No
N+1.98	D12	Brace	10	No	No
N+1.98	D16	Brace	10	No	No
N+1.61	D13	Brace	10	No	No
N+1.61	D17	Brace	10	No	No
N+1.20	D14	Brace	10	No	No
N+1.20	D18	Brace	10	No	No
N+0.79	D5	Brace	10	No	No
N+0.79	D10	Brace	10	No	No
N+0.76	D4	Brace	10	No	No
N+0.76	D9	Brace	10	No	No
N+0.39	D3	Brace	10	No	No
N+0.39	D8	Brace	10	No	No

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E N D	O F F S E T	(A L O N G	L E N G T H)	A S S I G N M E N T S	T O	L I N E	O B J E C T S
STORY	LINE	LINE	OFFSET	I END	J END	RIGID	ZONE
LEVEL	ID	TYPE	TYPE	OFFSET	OFFSET	FACTOR	
N+4.45	C1	Column	User define	0.0000	0.0000	0.0000	
N+4.42	C1	Column	User define	0.0000	0.0000	0.0000	
N+4.05	C1	Column	User define	0.0000	0.0000	0.0000	
N+4.05	C2	Column	User define	0.0000	0.0000	0.0000	
N+3.64	C1	Column	User define	0.0000	0.0000	0.0000	
N+3.64	C2	Column	User define	0.0000	0.0000	0.0000	
N+3.64	C3	Column	User define	0.0000	0.0000	0.0000	
N+3.23	C1	Column	User define	0.0000	0.0000	0.0000	
N+3.23	C2	Column	User define	0.0000	0.0000	0.0000	
N+3.23	C3	Column	User define	0.0000	0.0000	0.0000	
N+3.23	C4	Column	User define	0.0000	0.0000	0.0000	
N+3.20	C1	Column	User define	0.0000	0.0000	0.0000	
N+3.20	C2	Column	User define	0.0000	0.0000	0.0000	
N+3.20	C3	Column	User define	0.0000	0.0000	0.0000	
N+3.20	C4	Column	User define	0.0000	0.0000	0.0000	
N+2.83	C1	Column	User define	0.0000	0.0000	0.0000	
N+2.83	C2	Column	User define	0.0000	0.0000	0.0000	
N+2.83	C3	Column	User define	0.0000	0.0000	0.0000	
N+2.83	C4	Column	User define	0.0000	0.0000	0.0000	
N+2.83	C1	Column	User define	0.0000	0.0000	0.0000	
N+2.42	C2	Column	User define	0.0000	0.0000	0.0000	
N+2.42	C3	Column	User define	0.0000	0.0000	0.0000	
N+2.42	C4	Column	User define	0.0000	0.0000	0.0000	
N+2.42	C1	Column	User define	0.0000	0.0000	0.0000	
N+2.01	C2	Column	User define	0.0000	0.0000	0.0000	
N+2.01	C3	Column	User define	0.0000	0.0000	0.0000	
N+2.01	C4	Column	User define	0.0000	0.0000	0.0000	
N+2.01	C1	Column	User define	0.0000	0.0000	0.0000	
N+1.98	C2	Column	User define	0.0000	0.0000	0.0000	
N+1.98	C3	Column	User define	0.0000	0.0000	0.0000	
N+1.98	C4	Column	User define	0.0000	0.0000	0.0000	

N+0.39	B7	Beam	User define	0.0000	0.0000	0.0000
N+0.39	B8	Beam	User define	0.0000	0.0000	0.0000
N+0.39	B12	Beam	User define	0.0000	0.0000	0.0000
N+0.39	B20	Beam	User define	0.0000	0.0000	0.0000
N+0.39	B21	Beam	User define	0.0000	0.0000	0.0000
BASE	B4	Beam	User define	0.0000	0.0000	0.0000
BASE	B6	Beam	User define	0.0000	0.0000	0.0000
BASE	B11	Beam	User define	0.0000	0.0000	0.0000
BASE	B17	Beam	User define	0.0000	0.0000	0.0000
BASE	B19	Beam	User define	0.0000	0.0000	0.0000
N+4.45	D11	Brace	User define	0.0000	0.0000	0.0000
N+4.45	D15	Brace	User define	0.0000	0.0000	0.0000
N+4.42	D12	Brace	User define	0.0000	0.0000	0.0000
N+4.42	D16	Brace	User define	0.0000	0.0000	0.0000
N+4.05	D13	Brace	User define	0.0000	0.0000	0.0000
N+4.05	D17	Brace	User define	0.0000	0.0000	0.0000
N+3.64	D14	Brace	User define	0.0000	0.0000	0.0000
N+3.64	D18	Brace	User define	0.0000	0.0000	0.0000
N+3.23	D5	Brace	User define	0.0000	0.0000	0.0000
N+3.23	D10	Brace	User define	0.0000	0.0000	0.0000
N+3.20	D4	Brace	User define	0.0000	0.0000	0.0000
N+3.20	D9	Brace	User define	0.0000	0.0000	0.0000
N+2.83	D2	Brace	User define	0.0000	0.0000	0.0000
N+2.83	D7	Brace	User define	0.0000	0.0000	0.0000
N+2.42	D1	Brace	User define	0.0000	0.0000	0.0000
N+2.42	D6	Brace	User define	0.0000	0.0000	0.0000
N+2.01	D11	Brace	User define	0.0000	0.0000	0.0000
N+2.01	D15	Brace	User define	0.0000	0.0000	0.0000
N+1.98	D12	Brace	User define	0.0000	0.0000	0.0000
N+1.98	D16	Brace	User define	0.0000	0.0000	0.0000
N+1.61	D13	Brace	User define	0.0000	0.0000	0.0000
N+1.61	D17	Brace	User define	0.0000	0.0000	0.0000
N+1.20	D14	Brace	User define	0.0000	0.0000	0.0000
N+1.20	D18	Brace	User define	0.0000	0.0000	0.0000
N+0.79	D5	Brace	User define	0.0000	0.0000	0.0000
N+0.79	D10	Brace	User define	0.0000	0.0000	0.0000
N+0.76	D4	Brace	User define	0.0000	0.0000	0.0000
N+0.76	D9	Brace	User define	0.0000	0.0000	0.0000
N+0.39	D3	Brace	User define	0.0000	0.0000	0.0000
N+0.39	D8	Brace	User define	0.0000	0.0000	0.0000

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O U T P U T S T A T I O N A S S I G N M E N T S T O L I N E O B J E C T S

STORY LEVEL	LINE ID	LINE TYPE	MAX STATION SPACING	MIN NUMBER STATIONS
N+4.45	C1	Column	N/A	3
N+4.42	C1	Column	N/A	3
N+4.05	C1	Column	N/A	3
N+4.05	C2	Column	N/A	3
N+3.64	C1	Column	N/A	3
N+3.64	C2	Column	N/A	3
N+3.64	C3	Column	N/A	3
N+3.23	C1	Column	N/A	3
N+3.23	C2	Column	N/A	3
N+3.23	C3	Column	N/A	3
N+3.23	C4	Column	N/A	3
N+3.20	C1	Column	N/A	3
N+3.20	C2	Column	N/A	3
N+3.20	C3	Column	N/A	3
N+3.20	C4	Column	N/A	3
N+2.83	C1	Column	N/A	3
N+2.83	C2	Column	N/A	3
N+2.83	C3	Column	N/A	3
N+2.83	C4	Column	N/A	3
N+2.42	C1	Column	N/A	3
N+2.42	C2	Column	N/A	3
N+2.42	C3	Column	N/A	3
N+2.42	C4	Column	N/A	3
N+2.01	C1	Column	N/A	3
N+2.01	C2	Column	N/A	3
N+2.01	C3	Column	N/A	3
N+2.01	C4	Column	N/A	3
N+1.98	C1	Column	N/A	3
N+1.98	C2	Column	N/A	3
N+1.98	C3	Column	N/A	3
N+1.98	C4	Column	N/A	3
N+1.61	C1	Column	N/A	3
N+1.61	C2	Column	N/A	3

N+1.61	C3	Column	N/A	3
N+1.61	C4	Column	N/A	3
N+1.20	C1	Column	N/A	3
N+1.20	C2	Column	N/A	3
N+1.20	C3	Column	N/A	3
N+1.20	C4	Column	N/A	3
N+0.79	C1	Column	N/A	3
N+0.79	C2	Column	N/A	3
N+0.79	C3	Column	N/A	3
N+0.79	C4	Column	N/A	3
N+0.76	C1	Column	N/A	3
N+0.76	C2	Column	N/A	3
N+0.76	C3	Column	N/A	3
N+0.76	C4	Column	N/A	3
N+0.39	C1	Column	N/A	3
N+0.39	C2	Column	N/A	3
N+0.39	C3	Column	N/A	3
N+0.39	C4	Column	N/A	3
N+4.45	B25	Beam	N/A	3
N+4.45	B36	Beam	N/A	3
N+4.45	B37	Beam	N/A	3
N+4.42	B32	Beam	N/A	3
N+4.05	B26	Beam	N/A	3
N+4.05	B27	Beam	N/A	3
N+4.05	B33	Beam	N/A	3
N+4.05	B38	Beam	N/A	3
N+4.05	B39	Beam	N/A	3
N+3.64	B28	Beam	N/A	3
N+3.64	B29	Beam	N/A	3
N+3.64	B34	Beam	N/A	3
N+3.64	B40	Beam	N/A	3
N+3.64	B41	Beam	N/A	3
N+3.23	B9	Beam	N/A	3
N+3.23	B22	Beam	N/A	3
N+3.23	B24	Beam	N/A	3
N+3.23	B30	Beam	N/A	3
N+3.23	B31	Beam	N/A	3
N+3.23	B35	Beam	N/A	3
N+3.23	B42	Beam	N/A	3
N+3.23	B43	Beam	N/A	3
N+3.20	B13	Beam	N/A	3
N+2.83	B7	Beam	N/A	3
N+2.83	B8	Beam	N/A	3
N+2.83	B12	Beam	N/A	3
N+2.83	B20	Beam	N/A	3
N+2.83	B21	Beam	N/A	3
N+2.42	B3	Beam	N/A	3
N+2.42	B5	Beam	N/A	3
N+2.42	B11	Beam	N/A	3
N+2.42	B16	Beam	N/A	3
N+2.42	B18	Beam	N/A	3
N+2.01	B1	Beam	N/A	3
N+2.01	B2	Beam	N/A	3
N+2.01	B10	Beam	N/A	3
N+2.01	B14	Beam	N/A	3
N+2.01	B15	Beam	N/A	3
N+2.01	B23	Beam	N/A	3
N+2.01	B25	Beam	N/A	3
N+2.01	B37	Beam	N/A	3
N+1.98	B32	Beam	N/A	3
N+1.61	B26	Beam	N/A	3
N+1.61	B27	Beam	N/A	3
N+1.61	B33	Beam	N/A	3
N+1.61	B38	Beam	N/A	3
N+1.61	B39	Beam	N/A	3
N+1.20	B28	Beam	N/A	3
N+1.20	B29	Beam	N/A	3
N+1.20	B34	Beam	N/A	3
N+1.20	B40	Beam	N/A	3
N+1.20	B41	Beam	N/A	3
N+0.79	B9	Beam	N/A	3
N+0.79	B22	Beam	N/A	3
N+0.79	B24	Beam	N/A	3
N+0.79	B30	Beam	N/A	3
N+0.79	B31	Beam	N/A	3
N+0.79	B35	Beam	N/A	3
N+0.79	B42	Beam	N/A	3
N+0.79	B43	Beam	N/A	3
N+0.76	B13	Beam	N/A	3
N+0.39	B7	Beam	N/A	3
N+0.39	B8	Beam	N/A	3

N+0.39	B12	Beam	N/A	3
N+0.39	B20	Beam	N/A	3
N+0.39	B21	Beam	N/A	3
BASE	B4	Beam	N/A	3
BASE	B6	Beam	N/A	3
BASE	B11	Beam	N/A	3
BASE	B17	Beam	N/A	3
BASE	B19	Beam	N/A	3
N+4.45	D11	Brace	N/A	3
N+4.45	D15	Brace	N/A	3
N+4.42	D12	Brace	N/A	3
N+4.42	D16	Brace	N/A	3
N+4.05	D13	Brace	N/A	3
N+4.05	D17	Brace	N/A	3
N+3.64	D14	Brace	N/A	3
N+3.64	D18	Brace	N/A	3
N+3.23	D5	Brace	N/A	3
N+3.23	D10	Brace	N/A	3
N+3.20	D4	Brace	N/A	3
N+3.20	D9	Brace	N/A	3
N+2.83	D2	Brace	N/A	3
N+2.83	D7	Brace	N/A	3
N+2.42	D1	Brace	N/A	3
N+2.42	D6	Brace	N/A	3
N+2.01	D11	Brace	N/A	3
N+2.01	D15	Brace	N/A	3
N+1.98	D12	Brace	N/A	3
N+1.98	D16	Brace	N/A	3
N+1.61	D13	Brace	N/A	3
N+1.61	D17	Brace	N/A	3
N+1.20	D14	Brace	N/A	3
N+1.20	D18	Brace	N/A	3
N+0.79	D5	Brace	N/A	3
N+0.79	D10	Brace	N/A	3
N+0.76	D4	Brace	N/A	3
N+0.76	D9	Brace	N/A	3
N+0.39	D3	Brace	N/A	3
N+0.39	D8	Brace	N/A	3

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L O C A L A X E S A S S I G N M E N T S T O L I N E O B J E C T S

STORY	LINE	LINETYPE	ANGLE
N+4.45	C1	Column	0.0000
N+4.42	C1	Column	0.0000
N+4.05	C1	Column	0.0000
N+4.05	C2	Column	0.0000
N+3.64	C1	Column	0.0000
N+3.64	C2	Column	0.0000
N+3.64	C3	Column	0.0000
N+3.23	C1	Column	0.0000
N+3.23	C2	Column	0.0000
N+3.23	C3	Column	0.0000
N+3.23	C4	Column	0.0000
N+3.20	C1	Column	0.0000
N+3.20	C2	Column	0.0000
N+3.20	C3	Column	0.0000
N+3.20	C4	Column	0.0000
N+2.83	C1	Column	0.0000
N+2.83	C2	Column	0.0000
N+2.83	C3	Column	0.0000
N+2.83	C4	Column	0.0000
N+2.42	C1	Column	0.0000
N+2.42	C2	Column	0.0000
N+2.42	C3	Column	0.0000
N+2.42	C4	Column	0.0000
N+2.01	C1	Column	0.0000
N+2.01	C2	Column	0.0000
N+2.01	C3	Column	0.0000
N+2.01	C4	Column	0.0000
N+1.98	C1	Column	0.0000
N+1.98	C2	Column	0.0000
N+1.98	C3	Column	0.0000
N+1.98	C4	Column	0.0000
N+1.61	C1	Column	0.0000
N+1.61	C2	Column	0.0000
N+1.61	C3	Column	0.0000
N+1.61	C4	Column	0.0000
N+1.20	C1	Column	0.0000

N+1.20	C2	Column	0.0000
N+1.20	C3	Column	0.0000
N+1.20	C4	Column	0.0000
N+0.79	C1	Column	0.0000
N+0.79	C2	Column	0.0000
N+0.79	C3	Column	0.0000
N+0.79	C4	Column	0.0000
N+0.76	C1	Column	0.0000
N+0.76	C2	Column	0.0000
N+0.76	C3	Column	0.0000
N+0.76	C4	Column	0.0000
N+0.39	C1	Column	0.0000
N+0.39	C2	Column	0.0000
N+0.39	C3	Column	0.0000
N+0.39	C4	Column	0.0000
N+4.45	B25	Beam	0.0000
N+4.45	B36	Beam	0.0000
N+4.45	B37	Beam	0.0000
N+4.42	B32	Beam	0.0000
N+4.05	B26	Beam	0.0000
N+4.05	B27	Beam	0.0000
N+4.05	B33	Beam	0.0000
N+4.05	B38	Beam	0.0000
N+4.05	B39	Beam	0.0000
N+3.64	B28	Beam	0.0000
N+3.64	B29	Beam	0.0000
N+3.64	B34	Beam	0.0000
N+3.64	B40	Beam	0.0000
N+3.64	B41	Beam	0.0000
N+3.23	B9	Beam	0.0000
N+3.23	B22	Beam	0.0000
N+3.23	B24	Beam	0.0000
N+3.23	B30	Beam	0.0000
N+3.23	B31	Beam	0.0000
N+3.23	B35	Beam	0.0000
N+3.23	B42	Beam	0.0000
N+3.23	B43	Beam	0.0000
N+3.20	B13	Beam	0.0000
N+2.83	B7	Beam	0.0000
N+2.83	B8	Beam	0.0000
N+2.83	B12	Beam	0.0000
N+2.83	B20	Beam	0.0000
N+2.83	B21	Beam	0.0000
N+2.42	B3	Beam	0.0000
N+2.42	B5	Beam	0.0000
N+2.42	B11	Beam	0.0000
N+2.42	B16	Beam	0.0000
N+2.42	B18	Beam	0.0000
N+2.01	B1	Beam	0.0000
N+2.01	B2	Beam	0.0000
N+2.01	B10	Beam	0.0000
N+2.01	B14	Beam	0.0000
N+2.01	B15	Beam	0.0000
N+2.01	B23	Beam	0.0000
N+2.01	B25	Beam	0.0000
N+2.01	B37	Beam	0.0000
N+1.98	B32	Beam	0.0000
N+1.61	B26	Beam	0.0000
N+1.61	B27	Beam	0.0000
N+1.61	B33	Beam	0.0000
N+1.61	B38	Beam	0.0000
N+1.61	B39	Beam	0.0000
N+1.20	B28	Beam	0.0000
N+1.20	B29	Beam	0.0000
N+1.20	B34	Beam	0.0000
N+1.20	B40	Beam	0.0000
N+1.20	B41	Beam	0.0000
N+0.79	B9	Beam	0.0000
N+0.79	B22	Beam	0.0000
N+0.79	B24	Beam	0.0000
N+0.79	B30	Beam	0.0000
N+0.79	B31	Beam	0.0000
N+0.79	B35	Beam	0.0000
N+0.79	B42	Beam	0.0000
N+0.79	B43	Beam	0.0000
N+0.76	B13	Beam	0.0000
N+0.39	B7	Beam	0.0000
N+0.39	B8	Beam	0.0000
N+0.39	B12	Beam	0.0000
N+0.39	B20	Beam	0.0000
N+0.39	B21	Beam	0.0000

BASE	B4	Beam	0.0000
BASE	B6	Beam	0.0000
BASE	B11	Beam	0.0000
BASE	B17	Beam	0.0000
BASE	B19	Beam	0.0000
N+4.45	D11	Brace	0.0000
N+4.45	D15	Brace	0.0000
N+4.42	D12	Brace	0.0000
N+4.42	D16	Brace	0.0000
N+4.05	D13	Brace	0.0000
N+4.05	D17	Brace	0.0000
N+3.64	D14	Brace	0.0000
N+3.64	D18	Brace	0.0000
N+3.23	D5	Brace	0.0000
N+3.23	D10	Brace	0.0000
N+3.20	D4	Brace	0.0000
N+3.20	D9	Brace	0.0000
N+2.83	D2	Brace	0.0000
N+2.83	D7	Brace	0.0000
N+2.42	D1	Brace	0.0000
N+2.42	D6	Brace	0.0000
N+2.01	D11	Brace	0.0000
N+2.01	D15	Brace	0.0000
N+1.98	D12	Brace	0.0000
N+1.98	D16	Brace	0.0000
N+1.61	D13	Brace	0.0000
N+1.61	D17	Brace	0.0000
N+1.20	D14	Brace	0.0000
N+1.20	D18	Brace	0.0000
N+0.79	D5	Brace	0.0000
N+0.79	D10	Brace	0.0000
N+0.76	D4	Brace	0.0000
N+0.76	D9	Brace	0.0000
N+0.39	D3	Brace	0.0000
N+0.39	D8	Brace	0.0000

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L I N E A U T O M E S H A S S I G N M E N T S

STORY LINE LINETYPE AUTOMESH

N+4.45	C1	Column	P/L/E
N+4.42	C1	Column	P/L/E
N+4.05	C1	Column	P/L/E
N+4.05	C2	Column	P/L/E
N+3.64	C1	Column	P/L/E
N+3.64	C2	Column	P/L/E
N+3.64	C3	Column	P/L/E
N+3.23	C1	Column	P/L/E
N+3.23	C2	Column	P/L/E
N+3.23	C3	Column	P/L/E
N+3.23	C4	Column	P/L/E
N+3.20	C1	Column	P/L/E
N+3.20	C2	Column	P/L/E
N+3.20	C3	Column	P/L/E
N+3.20	C4	Column	P/L/E
N+2.83	C1	Column	P/L/E
N+2.83	C2	Column	P/L/E
N+2.83	C3	Column	P/L/E
N+2.83	C4	Column	P/L/E
N+2.42	C1	Column	P/L/E
N+2.42	C2	Column	P/L/E
N+2.42	C3	Column	P/L/E
N+2.42	C4	Column	P/L/E
N+2.01	C1	Column	P/L/E
N+2.01	C2	Column	P/L/E
N+2.01	C3	Column	P/L/E
N+2.01	C4	Column	P/L/E
N+1.98	C1	Column	P/L/E
N+1.98	C2	Column	P/L/E
N+1.98	C3	Column	P/L/E
N+1.98	C4	Column	P/L/E
N+1.61	C1	Column	P/L/E
N+1.61	C2	Column	P/L/E
N+1.61	C3	Column	P/L/E
N+1.61	C4	Column	P/L/E
N+1.20	C1	Column	P/L/E
N+1.20	C2	Column	P/L/E
N+1.20	C3	Column	P/L/E
N+1.20	C4	Column	P/L/E

N+0.79	C1	Column	P/L/E
N+0.79	C2	Column	P/L/E
N+0.79	C3	Column	P/L/E
N+0.79	C4	Column	P/L/E
N+0.76	C1	Column	P/L/E
N+0.76	C2	Column	P/L/E
N+0.76	C3	Column	P/L/E
N+0.76	C4	Column	P/L/E
N+0.39	C1	Column	P/L/E
N+0.39	C2	Column	P/L/E
N+0.39	C3	Column	P/L/E
N+0.39	C4	Column	P/L/E
N+4.45	B25	Beam	P/L/E
N+4.45	B36	Beam	P/L/E
N+4.45	B37	Beam	P/L/E
N+4.42	B32	Beam	P/L/E
N+4.05	B26	Beam	P/L/E
N+4.05	B27	Beam	P/L/E
N+4.05	B33	Beam	P/L/E
N+4.05	B38	Beam	P/L/E
N+4.05	B39	Beam	P/L/E
N+3.64	B28	Beam	P/L/E
N+3.64	B29	Beam	P/L/E
N+3.64	B34	Beam	P/L/E
N+3.64	B40	Beam	P/L/E
N+3.64	B41	Beam	P/L/E
N+3.23	B9	Beam	P/L/E
N+3.23	B22	Beam	P/L/E
N+3.23	B24	Beam	P/L/E
N+3.23	B30	Beam	P/L/E
N+3.23	B31	Beam	P/L/E
N+3.23	B35	Beam	P/L/E
N+3.23	B42	Beam	P/L/E
N+3.23	B43	Beam	P/L/E
N+3.20	B13	Beam	P/L/E
N+2.83	B7	Beam	P/L/E
N+2.83	B8	Beam	P/L/E
N+2.83	B12	Beam	P/L/E
N+2.83	B20	Beam	P/L/E
N+2.83	B21	Beam	P/L/E
N+2.42	B3	Beam	P/L/E
N+2.42	B5	Beam	P/L/E
N+2.42	B11	Beam	P/L/E
N+2.42	B16	Beam	P/L/E
N+2.42	B18	Beam	P/L/E
N+2.01	B1	Beam	P/L/E
N+2.01	B2	Beam	P/L/E
N+2.01	B10	Beam	P/L/E
N+2.01	B14	Beam	P/L/E
N+2.01	B15	Beam	P/L/E
N+2.01	B23	Beam	P/L/E
N+2.01	B25	Beam	P/L/E
N+2.01	B37	Beam	P/L/E
N+1.98	B32	Beam	P/L/E
N+1.61	B26	Beam	P/L/E
N+1.61	B27	Beam	P/L/E
N+1.61	B33	Beam	P/L/E
N+1.61	B38	Beam	P/L/E
N+1.61	B39	Beam	P/L/E
N+1.20	B28	Beam	P/L/E
N+1.20	B29	Beam	P/L/E
N+1.20	B34	Beam	P/L/E
N+1.20	B40	Beam	P/L/E
N+1.20	B41	Beam	P/L/E
N+0.79	B9	Beam	P/L/E
N+0.79	B22	Beam	P/L/E
N+0.79	B24	Beam	P/L/E
N+0.79	B30	Beam	P/L/E
N+0.79	B31	Beam	P/L/E
N+0.79	B35	Beam	P/L/E
N+0.79	B42	Beam	P/L/E
N+0.79	B43	Beam	P/L/E
N+0.76	B13	Beam	P/L/E
N+0.39	B7	Beam	P/L/E
N+0.39	B8	Beam	P/L/E
N+0.39	B12	Beam	P/L/E
N+0.39	B20	Beam	P/L/E
N+0.39	B21	Beam	P/L/E
BASE	B4	Beam	P/L/E
BASE	B6	Beam	P/L/E
BASE	B11	Beam	P/L/E

BASE	B17	Beam	P/L/E
BASE	B19	Beam	P/L/E
N+4.45	D11	Brace	P/L/E
N+4.45	D15	Brace	P/L/E
N+4.42	D12	Brace	P/L/E
N+4.42	D16	Brace	P/L/E
N+4.05	D13	Brace	P/L/E
N+4.05	D17	Brace	P/L/E
N+3.64	D14	Brace	P/L/E
N+3.64	D18	Brace	P/L/E
N+3.23	D5	Brace	P/L/E
N+3.23	D10	Brace	P/L/E
N+3.20	D4	Brace	P/L/E
N+3.20	D9	Brace	P/L/E
N+2.83	D2	Brace	P/L/E
N+2.83	D7	Brace	P/L/E
N+2.42	D1	Brace	P/L/E
N+2.42	D6	Brace	P/L/E
N+2.01	D11	Brace	P/L/E
N+2.01	D15	Brace	P/L/E
N+1.98	D12	Brace	P/L/E
N+1.98	D16	Brace	P/L/E
N+1.61	D13	Brace	P/L/E
N+1.61	D17	Brace	P/L/E
N+1.20	D14	Brace	P/L/E
N+1.20	D18	Brace	P/L/E
N+0.79	D5	Brace	P/L/E
N+0.79	D10	Brace	P/L/E
N+0.76	D4	Brace	P/L/E
N+0.76	D9	Brace	P/L/E
N+0.39	D3	Brace	P/L/E
N+0.39	D8	Brace	P/L/E

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D I S T R I B U T E D L O A D A S S I G N M E N T S T O L I N E O B J E C T S

LOAD CASE	STORY LEVEL	LINE ID	LOAD TYPE	LOAD DIRECTION	ABSOLUTE DISTANCE A	ABSOLUTE DISTANCE B	LOAD A PER LENGTH	LOAD B PER LENGTH
DEAD	N+4.45	D11	Force	Gravity	0.000	0.252	3.100	3.100
DEAD	N+4.45	D15	Force	Gravity	0.000	0.252	3.100	3.100
DEAD	N+4.42	D12	Force	Gravity	0.000	4.834	3.100	3.100
DEAD	N+4.42	D16	Force	Gravity	0.000	4.834	3.100	3.100
DEAD	N+4.05	D13	Force	Gravity	0.000	5.087	3.100	3.100
DEAD	N+4.05	D17	Force	Gravity	0.000	5.087	3.100	3.100
DEAD	N+3.64	D14	Force	Gravity	0.000	4.848	3.100	3.100
DEAD	N+3.64	D18	Force	Gravity	0.000	4.848	3.100	3.100
DEAD	N+3.23	D5	Force	Gravity	0.000	0.252	3.100	3.100
DEAD	N+3.23	D10	Force	Gravity	0.000	0.252	3.100	3.100
DEAD	N+3.20	D4	Force	Gravity	0.000	4.845	3.100	3.100
DEAD	N+3.20	D9	Force	Gravity	0.000	4.845	3.100	3.100
DEAD	N+2.83	D2	Force	Gravity	0.000	5.087	3.100	3.100
DEAD	N+2.83	D7	Force	Gravity	0.000	5.087	3.100	3.100
DEAD	N+2.42	D1	Force	Gravity	0.000	4.837	3.100	3.100
DEAD	N+2.42	D6	Force	Gravity	0.000	4.837	3.100	3.100
DEAD	N+2.01	D11	Force	Gravity	0.000	0.252	3.100	3.100
DEAD	N+2.01	D15	Force	Gravity	0.000	0.252	3.100	3.100
DEAD	N+1.98	D12	Force	Gravity	0.000	4.834	3.100	3.100
DEAD	N+1.98	D16	Force	Gravity	0.000	4.834	3.100	3.100
DEAD	N+1.61	D13	Force	Gravity	0.000	5.087	3.100	3.100
DEAD	N+1.61	D17	Force	Gravity	0.000	5.087	3.100	3.100
DEAD	N+1.20	D14	Force	Gravity	0.000	4.848	3.100	3.100
DEAD	N+1.20	D18	Force	Gravity	0.000	4.848	3.100	3.100
DEAD	N+0.79	D5	Force	Gravity	0.000	0.252	3.100	3.100
DEAD	N+0.79	D10	Force	Gravity	0.000	0.252	3.100	3.100
DEAD	N+0.76	D4	Force	Gravity	0.000	4.845	3.100	3.100
DEAD	N+0.76	D9	Force	Gravity	0.000	4.845	3.100	3.100
DEAD	N+0.39	D3	Force	Gravity	0.000	4.902	3.100	3.100
DEAD	N+0.39	D8	Force	Gravity	0.000	4.902	3.100	3.100
LIVE	N+4.45	D11	Force	Gravity	0.000	0.252	3.600	3.600
LIVE	N+4.45	D15	Force	Gravity	0.000	0.252	3.600	3.600
LIVE	N+4.42	D12	Force	Gravity	0.000	4.834	3.600	3.600
LIVE	N+4.42	D16	Force	Gravity	0.000	4.834	3.600	3.600
LIVE	N+4.05	D13	Force	Gravity	0.000	5.087	3.600	3.600
LIVE	N+4.05	D17	Force	Gravity	0.000	5.087	3.600	3.600
LIVE	N+3.64	D14	Force	Gravity	0.000	4.848	3.600	3.600
LIVE	N+3.64	D18	Force	Gravity	0.000	4.848	3.600	3.600
LIVE	N+3.23	D5	Force	Gravity	0.000	0.252	3.600	3.600
LIVE	N+3.23	D10	Force	Gravity	0.000	0.252	3.600	3.600
LIVE	N+3.20	D4	Force	Gravity	0.000	4.845	3.600	3.600

LIVE	N+3.20	D9	Force	Gravity	0.000	4.845	3.600	3.600
LIVE	N+2.83	D2	Force	Gravity	0.000	5.087	3.600	3.600
LIVE	N+2.83	D7	Force	Gravity	0.000	5.087	3.600	3.600
LIVE	N+2.42	D1	Force	Gravity	0.000	4.837	3.600	3.600
LIVE	N+2.42	D6	Force	Gravity	0.000	4.837	3.600	3.600
LIVE	N+2.01	D11	Force	Gravity	0.000	0.252	3.600	3.600
LIVE	N+2.01	D15	Force	Gravity	0.000	0.252	3.600	3.600
LIVE	N+1.98	D12	Force	Gravity	0.000	4.834	3.600	3.600
LIVE	N+1.98	D16	Force	Gravity	0.000	4.834	3.600	3.600
LIVE	N+1.61	D13	Force	Gravity	0.000	5.087	3.600	3.600
LIVE	N+1.61	D17	Force	Gravity	0.000	5.087	3.600	3.600
LIVE	N+1.20	D14	Force	Gravity	0.000	4.848	3.600	3.600
LIVE	N+1.20	D18	Force	Gravity	0.000	4.848	3.600	3.600
LIVE	N+0.79	D5	Force	Gravity	0.000	0.252	3.600	3.600
LIVE	N+0.79	D10	Force	Gravity	0.000	0.252	3.600	3.600
LIVE	N+0.76	D4	Force	Gravity	0.000	4.845	3.600	3.600
LIVE	N+0.76	D9	Force	Gravity	0.000	4.845	3.600	3.600
LIVE	N+0.39	D3	Force	Gravity	0.000	4.902	3.600	3.600
LIVE	N+0.39	D8	Force	Gravity	0.000	4.902	3.600	3.600

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W A L L , S L A B , D E C K & O P E N I N G A S S I G N M E N T S T O A R E A O B J E C T S

STORY LEVEL	AREA ID	AREA TYPE	SECTION TYPE	SECTION LABEL
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N+4.45	F11	Floor	Slab	PLACAMACIZA
N+4.05	F13	Floor	Slab	PLACAMACIZA
N+4.05	F14	Floor	Slab	PLACAMACIZA
N+3.64	F15	Floor	Slab	PLACAMACIZA
N+3.64	F16	Floor	Slab	PLACAMACIZA
N+3.23	F8	Floor	Slab	PLACAMACIZA
N+3.23	F10	Floor	Slab	PLACAMACIZA
N+3.23	F17	Floor	Slab	PLACAMACIZA
N+2.83	F6	Floor	Slab	PLACAMACIZA
N+2.83	F7	Floor	Slab	PLACAMACIZA
N+2.42	F2	Floor	Slab	PLACAMACIZA
N+2.42	F4	Floor	Slab	PLACAMACIZA
N+2.01	F1	Floor	Slab	PLACAMACIZA
N+2.01	F9	Floor	Slab	PLACAMACIZA
N+2.01	F12	Floor	Slab	PLACAMACIZA
N+1.61	F13	Floor	Slab	PLACAMACIZA
N+1.61	F14	Floor	Slab	PLACAMACIZA
N+1.20	F15	Floor	Slab	PLACAMACIZA
N+1.20	F16	Floor	Slab	PLACAMACIZA
N+0.79	F8	Floor	Slab	PLACAMACIZA
N+0.79	F10	Floor	Slab	PLACAMACIZA
N+0.79	F17	Floor	Slab	PLACAMACIZA
N+0.39	F6	Floor	Slab	PLACAMACIZA
N+0.39	F7	Floor	Slab	PLACAMACIZA
BASE	F3	Floor	Slab	PLACAMACIZA
BASE	F5	Floor	Slab	PLACAMACIZA
N+4.45	R6	Ramp	Slab	RAMPA
N+4.42	R9	Ramp	Slab	RAMPA
N+4.05	R11	Ramp	Slab	RAMPA
N+3.64	R13	Ramp	Slab	RAMPA
N+3.23	R5	Ramp	Slab	RAMPA
N+3.20	R4	Ramp	Slab	RAMPA
N+2.83	R2	Ramp	Slab	RAMPA
N+2.42	R1	Ramp	Slab	RAMPA
N+2.01	R7	Ramp	Slab	RAMPA
N+1.98	R8	Ramp	Slab	RAMPA
N+1.61	R10	Ramp	Slab	RAMPA
N+1.20	R12	Ramp	Slab	RAMPA
N+0.79	R5	Ramp	Slab	RAMPA
N+0.76	R4	Ramp	Slab	RAMPA
N+0.39	R3	Ramp	Slab	RAMPA

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L O C A L A X E S A S S I G N M E N T S T O A R E A O B J E C T S

STORY	AREA	AREA TYPE	ANGLE
N+4.45	F11	Floor	0.0000
N+4.05	F13	Floor	0.0000
N+4.05	F14	Floor	0.0000
N+3.64	F15	Floor	0.0000
N+3.64	F16	Floor	0.0000
N+3.23	F8	Floor	0.0000

N+3.23	F10	Floor	0.0000
N+3.23	F17	Floor	0.0000
N+2.83	F6	Floor	0.0000
N+2.83	F7	Floor	0.0000
N+2.42	F2	Floor	0.0000
N+2.42	F4	Floor	0.0000
N+2.01	F1	Floor	0.0000
N+2.01	F9	Floor	0.0000
N+2.01	F12	Floor	0.0000
N+1.61	F13	Floor	0.0000
N+1.61	F14	Floor	0.0000
N+1.20	F15	Floor	0.0000
N+1.20	F16	Floor	0.0000
N+0.79	F8	Floor	0.0000
N+0.79	F10	Floor	0.0000
N+0.79	F17	Floor	0.0000
N+0.39	F6	Floor	0.0000
N+0.39	F7	Floor	0.0000
BASE	F3	Floor	0.0000
BASE	F5	Floor	0.0000
N+4.45	R6	Ramp	0.0000
N+4.42	R9	Ramp	0.0000
N+4.05	R11	Ramp	0.0000
N+3.64	R13	Ramp	0.0000
N+3.23	R5	Ramp	0.0000
N+3.20	R4	Ramp	0.0000
N+2.83	R2	Ramp	0.0000
N+2.42	R1	Ramp	0.0000
N+2.01	R7	Ramp	0.0000
N+1.98	R8	Ramp	0.0000
N+1.61	R10	Ramp	0.0000
N+1.20	R12	Ramp	0.0000
N+0.79	R5	Ramp	0.0000
N+0.76	R4	Ramp	0.0000
N+0.39	R3	Ramp	0.0000

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FLOOR	MESH	OPTION	ASSIGNMENTS	TO	AREA	OBJECTS
STORY	AREA	MESH OPTION				
N+4.45	F11	Auto Mesh				
N+4.05	F13	Auto Mesh				
N+4.05	F14	Auto Mesh				
N+3.64	F15	Auto Mesh				
N+3.64	F16	Auto Mesh				
N+3.23	F8	Auto Mesh				
N+3.23	F10	Auto Mesh				
N+3.23	F17	Auto Mesh				
N+2.83	F6	Auto Mesh				
N+2.83	F7	Auto Mesh				
N+2.42	F2	Auto Mesh				
N+2.42	F4	Auto Mesh				
N+2.01	F1	Auto Mesh				
N+2.01	F9	Auto Mesh				
N+2.01	F12	Auto Mesh				
N+1.61	F13	Auto Mesh				
N+1.61	F14	Auto Mesh				
N+1.20	F15	Auto Mesh				
N+1.20	F16	Auto Mesh				
N+0.79	F8	Auto Mesh				
N+0.79	F10	Auto Mesh				
N+0.79	F17	Auto Mesh				
N+0.39	F6	Auto Mesh				
N+0.39	F7	Auto Mesh				
N+4.45	R6	No Auto Mesh				
N+4.42	R9	No Auto Mesh				
N+4.05	R11	No Auto Mesh				
N+3.64	R13	No Auto Mesh				
N+3.23	R5	No Auto Mesh				
N+3.20	R4	No Auto Mesh				
N+2.83	R2	No Auto Mesh				
N+2.42	R1	No Auto Mesh				
N+2.01	R7	No Auto Mesh				
N+1.98	R8	No Auto Mesh				
N+1.61	R10	No Auto Mesh				
N+1.20	R12	No Auto Mesh				
N+0.79	R5	No Auto Mesh				
N+0.76	R4	No Auto Mesh				
N+0.39	R3	No Auto Mesh				

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

CASE	STORY	AREA	AREATYPE	DIRECTION	LOAD
LIVE	N+4.45	F11	Floor	Gravity	4.0000
LIVE	N+4.05	F13	Floor	Gravity	4.0000
LIVE	N+4.05	F14	Floor	Gravity	4.0000
LIVE	N+3.64	F15	Floor	Gravity	4.0000
LIVE	N+3.64	F16	Floor	Gravity	4.0000
LIVE	N+3.23	F8	Floor	Gravity	4.0000
LIVE	N+3.23	F10	Floor	Gravity	4.0000
LIVE	N+3.23	F17	Floor	Gravity	4.0000
LIVE	N+2.83	F6	Floor	Gravity	4.0000
LIVE	N+2.83	F7	Floor	Gravity	4.0000
LIVE	N+2.42	F2	Floor	Gravity	4.0000
LIVE	N+2.42	F4	Floor	Gravity	4.0000
LIVE	N+2.01	F1	Floor	Gravity	4.0000
LIVE	N+2.01	F9	Floor	Gravity	4.0000
LIVE	N+2.01	F12	Floor	Gravity	4.0000
LIVE	N+1.61	F13	Floor	Gravity	4.0000
LIVE	N+1.61	F14	Floor	Gravity	4.0000
LIVE	N+1.20	F15	Floor	Gravity	4.0000
LIVE	N+1.20	F16	Floor	Gravity	4.0000
LIVE	N+0.79	F8	Floor	Gravity	4.0000
LIVE	N+0.79	F10	Floor	Gravity	4.0000
LIVE	N+0.79	F17	Floor	Gravity	4.0000
LIVE	N+0.39	F6	Floor	Gravity	4.0000
LIVE	N+0.39	F7	Floor	Gravity	4.0000
LIVE	BASE	F3	Floor	Gravity	4.0000
LIVE	BASE	F5	Floor	Gravity	4.0000

PROYECTO: MEGACOLEGIO CALI (RAMPA)

FUERZAS EN VIGAS

BEAM FORCES

UNID: kN-m

Story	Beam	Load	Loc	P	V2	T	M3
N+2.01	B1	ENVOLVENTE MAX	0	0	5.83	1.889	-0.547
N+2.01	B1	ENVOLVENTE MAX	0.863	0	7.7	1.889	-2.521
N+2.01	B1	ENVOLVENTE MAX	1.725	0	9.56	1.889	-5.699
N+2.01	B1	ENVOLVENTE MIN	0	0	1.59	0.473	-1.809
N+2.01	B1	ENVOLVENTE MIN	0.863	0	2.99	0.473	-7.643
N+2.01	B1	ENVOLVENTE MIN	1.725	0	4.38	0.473	-15.085
N+2.01	B2	ENVOLVENTE MAX	0	0	9.56	1.889	-5.699
N+2.01	B2	ENVOLVENTE MAX	0.125	0	9.83	1.889	-6.26
N+2.01	B2	ENVOLVENTE MAX	0.25	0	10.1	1.889	-6.846
N+2.01	B2	ENVOLVENTE MIN	0	0	4.38	0.473	-15.085
N+2.01	B2	ENVOLVENTE MIN	0.125	0	4.59	0.473	-16.296
N+2.01	B2	ENVOLVENTE MIN	0.25	0	4.79	0.473	-17.542
N+2.42	B3	ENVOLVENTE MAX	0	0	27.34	0.798	-7.387
N+2.42	B3	ENVOLVENTE MAX	0.219	0	27.82	0.798	-9.083
N+2.42	B3	ENVOLVENTE MAX	0.438	0	28.29	0.798	-9.933
N+2.42	B3	ENVOLVENTE MIN	0	0	2.6	-0.086	-23.109
N+2.42	B3	ENVOLVENTE MIN	0.219	0	2.95	-0.086	-28.745
N+2.42	B3	ENVOLVENTE MIN	0.438	0	3.31	-0.086	-34.485
BASE	B4	ENVOLVENTE MAX	0	0	1.08	0	0
BASE	B4	ENVOLVENTE MAX	0.125	0	1.35	0	-0.052
BASE	B4	ENVOLVENTE MAX	0.25	0	1.62	0	-0.13
BASE	B4	ENVOLVENTE MIN	0	0	0.32	0	0
BASE	B4	ENVOLVENTE MIN	0.125	0	0.52	0	-0.152
BASE	B4	ENVOLVENTE MIN	0.25	0	0.72	0	-0.338
N+2.42	B5	ENVOLVENTE MAX	0	0	-9.24	0.696	-12.737
N+2.42	B5	ENVOLVENTE MAX	0.681	0	-8.13	0.696	-6.817
N+2.42	B5	ENVOLVENTE MAX	1.362	0	-7.03	0.696	3.165
N+2.42	B5	ENVOLVENTE MIN	0	0	-37.37	-0.408	-47.706
N+2.42	B5	ENVOLVENTE MIN	0.681	0	-35.9	-0.408	-22.758
N+2.42	B5	ENVOLVENTE MIN	1.362	0	-34.43	-0.408	-1.668
BASE	B6	ENVOLVENTE MAX	0	0	-10.28	0.65	-9.004
BASE	B6	ENVOLVENTE MAX	0.775	0	-9.03	0.65	-1.394
BASE	B6	ENVOLVENTE MAX	1.55	0	-7.77	0.65	14.425
BASE	B6	ENVOLVENTE MIN	0	0	-31.17	-0.176	-31.301
BASE	B6	ENVOLVENTE MIN	0.775	0	-29.5	-0.176	-7.789
BASE	B6	ENVOLVENTE MIN	1.55	0	-27.83	-0.176	4.246
N+2.83	B7	ENVOLVENTE MAX	0	0	34.57	0.767	-3.529
N+2.83	B7	ENVOLVENTE MAX	0.45	0	35.54	0.767	-10.683
N+2.83	B7	ENVOLVENTE MAX	0.9	0	36.51	0.767	-14.506
N+2.83	B7	ENVOLVENTE MIN	0	0	7.07	-0.376	-14.781
N+2.83	B7	ENVOLVENTE MIN	0.45	0	7.8	-0.376	-30.556
N+2.83	B7	ENVOLVENTE MIN	0.9	0	8.53	-0.376	-46.769
N+0.39	B7	ENVOLVENTE MAX	0	0	39.83	0.722	-4.227
N+0.39	B7	ENVOLVENTE MAX	0.45	0	40.8	0.722	-10.784
N+0.39	B7	ENVOLVENTE MAX	0.9	0	41.78	0.722	-17.251
N+0.39	B7	ENVOLVENTE MIN	0	0	12.57	-0.14	-14.476
N+0.39	B7	ENVOLVENTE MIN	0.45	0	13.3	-0.14	-32.619
N+0.39	B7	ENVOLVENTE MIN	0.9	0	14.02	-0.14	-51.2
N+2.83	B8	ENVOLVENTE MAX	0	0	-6.53	0.354	-10.515
N+2.83	B8	ENVOLVENTE MAX	0.45	0	-5.8	0.354	-7.596
N+2.83	B8	ENVOLVENTE MAX	0.9	0	-5.07	0.354	-4.189
N+2.83	B8	ENVOLVENTE MIN	0	0	-33.84	-0.681	-41.777
N+2.83	B8	ENVOLVENTE MIN	0.45	0	-32.87	-0.681	-27.02
N+2.83	B8	ENVOLVENTE MIN	0.9	0	-31.89	-0.681	-12.7
N+0.39	B8	ENVOLVENTE MAX	0	0	-8.2	0.069	-11.744
N+0.39	B8	ENVOLVENTE MAX	0.45	0	-7.47	0.069	-8.187
N+0.39	B8	ENVOLVENTE MAX	0.9	0	-6.74	0.069	-4.764
N+0.39	B8	ENVOLVENTE MIN	0	0	-30.01	-0.831	-39.944
N+0.39	B8	ENVOLVENTE MIN	0.45	0	-29.04	-0.831	-26.659
N+0.39	B8	ENVOLVENTE MIN	0.9	0	-28.06	-0.831	-13.811
N+3.23	B9	ENVOLVENTE MAX	0	0	-4.15	-0.499	-5.384
N+3.23	B9	ENVOLVENTE MAX	0.862	0	-2.75	-0.499	-2.386
N+3.23	B9	ENVOLVENTE MAX	1.725	0	-1.35	-0.499	-0.592
N+3.23	B9	ENVOLVENTE MIN	0	0	-8.58	-1.793	-13.393
N+3.23	B9	ENVOLVENTE MIN	0.862	0	-6.72	-1.793	-6.797
N+3.23	B9	ENVOLVENTE MIN	1.725	0	-4.85	-1.793	-1.808
N+0.79	B9	ENVOLVENTE MAX	0	0	-4.19	-0.617	-5.49
N+0.79	B9	ENVOLVENTE MAX	0.862	0	-2.79	-0.617	-2.483

N+0.79	B9	ENVOLVENTE MAX	1.725	0	-1.39	-0.617	-0.68
N+0.79	B9	ENVOLVENTE MIN	0	0	-8.49	-1.927	-13.353
N+0.79	B9	ENVOLVENTE MIN	0.862	0	-6.63	-1.927	-6.835
N+0.79	B9	ENVOLVENTE MIN	1.725	0	-4.76	-1.927	-1.923
N+2.01	B10	ENVOLVENTE MAX	0	0	42.8	1.255	1.525
N+2.01	B10	ENVOLVENTE MAX	0.987	0	58.71	1.255	-13.789
N+2.01	B10	ENVOLVENTE MAX	1.65	0	69.39	1.255	-27.236
N+2.01	B10	ENVOLVENTE MAX	1.65	0	126.38	18.722	-27.117
N+2.01	B10	ENVOLVENTE MAX	1.975	0	128.25	18.722	-39.478
N+2.01	B10	ENVOLVENTE MIN	0	0	10.61	-8.602	0.179
N+2.01	B10	ENVOLVENTE MIN	0.987	0	17.86	-8.602	-48.753
N+2.01	B10	ENVOLVENTE MIN	1.65	0	22.73	-8.602	-91.188
N+2.01	B10	ENVOLVENTE MIN	1.65	0	37.31	-9.89	-90.884
N+2.01	B10	ENVOLVENTE MIN	1.975	0	38.71	-9.89	-132.26
N+2.42	B11	ENVOLVENTE MAX	0	0	63.82	2.929	0.581
N+2.42	B11	ENVOLVENTE MAX	0.987	0	78.83	2.929	-26.36
N+2.42	B11	ENVOLVENTE MAX	1.65	0	88.9	2.929	-47.932
N+2.42	B11	ENVOLVENTE MAX	1.65	0	152.44	15.468	-47.906
N+2.42	B11	ENVOLVENTE MAX	1.975	0	154.31	15.468	-66.617
N+2.42	B11	ENVOLVENTE MIN	0	0	23.22	-19.011	-0.157
N+2.42	B11	ENVOLVENTE MIN	0.987	0	30.21	-19.011	-70.063
N+2.42	B11	ENVOLVENTE MIN	1.65	0	34.9	-19.011	-125.623
N+2.42	B11	ENVOLVENTE MIN	1.65	0	56.84	-56.555	-125.509
N+2.42	B11	ENVOLVENTE MIN	1.975	0	58.24	-56.555	-175.356
BASE	B11	ENVOLVENTE MAX	0	0	32.8	-8.874	0.176
BASE	B11	ENVOLVENTE MAX	0.987	0	47.81	-8.874	-14.143
BASE	B11	ENVOLVENTE MAX	1.65	0	57.88	-8.874	-27.618
BASE	B11	ENVOLVENTE MAX	1.65	0	91.58	-24.138	-27.311
BASE	B11	ENVOLVENTE MAX	1.975	0	93.46	-24.138	-39.11
BASE	B11	ENVOLVENTE MIN	0	0	11	-30.963	-0.65
BASE	B11	ENVOLVENTE MIN	0.987	0	17.99	-30.963	-40.199
BASE	B11	ENVOLVENTE MIN	1.65	0	22.69	-30.963	-75.206
BASE	B11	ENVOLVENTE MIN	1.65	0	35.08	-73.032	-75.319
BASE	B11	ENVOLVENTE MIN	1.975	0	36.49	-73.032	-105.388
N+2.83	B12	ENVOLVENTE MAX	0	0	69.79	12.418	0.605
N+2.83	B12	ENVOLVENTE MAX	0.987	0	84.8	12.418	-29.129
N+2.83	B12	ENVOLVENTE MAX	1.65	0	94.87	12.418	-52.657
N+2.83	B12	ENVOLVENTE MAX	1.65	0	163.87	41.609	-52.561
N+2.83	B12	ENVOLVENTE MAX	1.975	0	165.74	41.609	-73.605
N+2.83	B12	ENVOLVENTE MIN	0	0	26.17	-6.566	0.113
N+2.83	B12	ENVOLVENTE MIN	0.987	0	33.17	-6.566	-75.73
N+2.83	B12	ENVOLVENTE MIN	1.65	0	37.86	-6.566	-135.248
N+2.83	B12	ENVOLVENTE MIN	1.65	0	64.04	-20.826	-135.057
N+2.83	B12	ENVOLVENTE MIN	1.975	0	65.44	-20.826	-188.618
N+0.39	B12	ENVOLVENTE MAX	0	0	71.79	13.166	1.128
N+0.39	B12	ENVOLVENTE MAX	0.987	0	86.8	13.166	-27.738
N+0.39	B12	ENVOLVENTE MAX	1.65	0	96.87	13.166	-50.595
N+0.39	B12	ENVOLVENTE MAX	1.65	0	167.84	34.494	-50.195
N+0.39	B12	ENVOLVENTE MAX	1.975	0	169.72	34.494	-70.913
N+0.39	B12	ENVOLVENTE MIN	0	0	25.16	0.39	0.25
N+0.39	B12	ENVOLVENTE MIN	0.987	0	32.16	0.39	-77.172
N+0.39	B12	ENVOLVENTE MIN	1.65	0	36.85	0.39	-138.01
N+0.39	B12	ENVOLVENTE MIN	1.65	0	62.17	-1.362	-137.54
N+0.39	B12	ENVOLVENTE MIN	1.975	0	63.57	-1.362	-192.393
N+3.20	B13	ENVOLVENTE MAX	0	0	47.93	8.079	2.675
N+3.20	B13	ENVOLVENTE MAX	0.987	0	53.62	8.079	-12.814
N+3.20	B13	ENVOLVENTE MAX	1.65	0	57.43	8.079	-24.539
N+3.20	B13	ENVOLVENTE MAX	1.65	0	122.96	8.602	-23.663
N+3.20	B13	ENVOLVENTE MAX	1.975	0	124.83	8.602	-37.339
N+3.20	B13	ENVOLVENTE MIN	0	0	12	-0.509	0.737
N+3.20	B13	ENVOLVENTE MIN	0.987	0	16.27	-0.509	-47.461
N+3.20	B13	ENVOLVENTE MIN	1.65	0	19.13	-0.509	-84.246
N+3.20	B13	ENVOLVENTE MIN	1.65	0	38.45	-14.529	-83.129
N+3.20	B13	ENVOLVENTE MIN	1.975	0	39.85	-14.529	-123.395
N+0.76	B13	ENVOLVENTE MAX	0	0	51.11	8.294	2.465
N+0.76	B13	ENVOLVENTE MAX	0.987	0	56.8	8.294	-17.375
N+0.76	B13	ENVOLVENTE MAX	1.65	0	60.61	8.294	-31.936
N+0.76	B13	ENVOLVENTE MAX	1.65	0	127.34	5.203	-31.619
N+0.76	B13	ENVOLVENTE MAX	1.975	0	129.21	5.203	-46.659
N+0.76	B13	ENVOLVENTE MIN	0	0	16.28	0.603	0.752
N+0.76	B13	ENVOLVENTE MIN	0.987	0	20.55	0.603	-50.812
N+0.76	B13	ENVOLVENTE MIN	1.65	0	23.41	0.603	-89.702
N+0.76	B13	ENVOLVENTE MIN	1.65	0	45.54	-10.038	-88.953
N+0.76	B13	ENVOLVENTE MIN	1.975	0	46.94	-10.038	-130.641
N+2.01	B14	ENVOLVENTE MAX	0	0	18.34	0.596	1.888
N+2.01	B14	ENVOLVENTE MAX	0.862	0	20.2	0.596	-5.801
N+2.01	B14	ENVOLVENTE MAX	1.725	0	22.07	0.596	-13.649
N+2.01	B14	ENVOLVENTE MIN	0	0	6.93	0.145	0.57
N+2.01	B14	ENVOLVENTE MIN	0.862	0	8.33	0.145	-14.734

N+2.01	B14	ENVOLVENTE MIN	1.725	0	9.72	0.145	-32.962
N+2.01	B15	ENVOLVENTE MAX	0	0	25.01	0.596	-13.649
N+2.01	B15	ENVOLVENTE MAX	0.125	0	25.28	0.596	-14.984
N+2.01	B15	ENVOLVENTE MAX	0.25	0	25.55	0.596	-16.345
N+2.01	B15	ENVOLVENTE MIN	0	0	10.58	0.145	-32.962
N+2.01	B15	ENVOLVENTE MIN	0.125	0	10.79	0.145	-36.104
N+2.01	B15	ENVOLVENTE MIN	0.25	0	10.99	0.145	-39.281
N+2.42	B16	ENVOLVENTE MAX	0	0	30.45	0.61	0.697
N+2.42	B16	ENVOLVENTE MAX	0.219	0	30.92	0.61	0.389
N+2.42	B16	ENVOLVENTE MAX	0.438	0	31.4	0.61	0.029
N+2.42	B16	ENVOLVENTE MIN	0	0	1.07	-0.221	-21.107
N+2.42	B16	ENVOLVENTE MIN	0.219	0	1.42	-0.221	-27.79
N+2.42	B16	ENVOLVENTE MIN	0.438	0	1.78	-0.221	-34.602
BASE	B17	ENVOLVENTE MAX	0	0	1.08	0	0
BASE	B17	ENVOLVENTE MAX	0.125	0	1.35	0	-0.052
BASE	B17	ENVOLVENTE MAX	0.25	0	1.62	0	-0.13
BASE	B17	ENVOLVENTE MIN	0	0	0.32	0	0
BASE	B17	ENVOLVENTE MIN	0.125	0	0.52	0	-0.152
BASE	B17	ENVOLVENTE MIN	0.25	0	0.72	0	-0.338
N+2.42	B18	ENVOLVENTE MAX	0	0	-8.25	0.672	-9.088
N+2.42	B18	ENVOLVENTE MAX	0.681	0	-7.15	0.672	-3.826
N+2.42	B18	ENVOLVENTE MAX	1.362	0	-6.05	0.672	0.829
N+2.42	B18	ENVOLVENTE MIN	0	0	-35.83	-0.411	-50.49
N+2.42	B18	ENVOLVENTE MIN	0.681	0	-34.36	-0.411	-26.893
N+2.42	B18	ENVOLVENTE MIN	1.362	0	-32.89	-0.411	-4.441
BASE	B19	ENVOLVENTE MAX	0	0	-11.2	0.441	-14.265
BASE	B19	ENVOLVENTE MAX	0.775	0	-9.94	0.441	-6.068
BASE	B19	ENVOLVENTE MAX	1.55	0	-8.69	0.441	4.729
BASE	B19	ENVOLVENTE MIN	0	0	-32.08	-0.31	-42.408
BASE	B19	ENVOLVENTE MIN	0.775	0	-30.41	-0.31	-18.191
BASE	B19	ENVOLVENTE MIN	1.55	0	-28.74	-0.31	1.127
N+2.83	B20	ENVOLVENTE MAX	0	0	36.11	0.699	-3.055
N+2.83	B20	ENVOLVENTE MAX	0.45	0	37.08	0.699	-6.671
N+2.83	B20	ENVOLVENTE MAX	0.9	0	38.05	0.699	-10.528
N+2.83	B20	ENVOLVENTE MIN	0	0	7.4	-0.4	-16.319
N+2.83	B20	ENVOLVENTE MIN	0.45	0	8.13	-0.4	-32.7
N+2.83	B20	ENVOLVENTE MIN	0.9	0	8.86	-0.4	-49.603
N+0.39	B20	ENVOLVENTE MAX	0	0	38.92	0.467	-5.571
N+0.39	B20	ENVOLVENTE MAX	0.45	0	39.89	0.467	-11.512
N+0.39	B20	ENVOLVENTE MAX	0.9	0	40.87	0.467	-17.769
N+0.39	B20	ENVOLVENTE MIN	0	0	12.76	-0.296	-16.923
N+0.39	B20	ENVOLVENTE MIN	0.45	0	13.49	-0.296	-34.657
N+0.39	B20	ENVOLVENTE MIN	0.9	0	14.22	-0.296	-52.829
N+2.83	B21	ENVOLVENTE MAX	0	0	-5.13	0.553	-3.068
N+2.83	B21	ENVOLVENTE MAX	0.45	0	-4.4	0.553	-0.914
N+2.83	B21	ENVOLVENTE MAX	0.9	0	-3.68	0.553	0.949
N+2.83	B21	ENVOLVENTE MIN	0	0	-32.29	-0.478	-41.202
N+2.83	B21	ENVOLVENTE MIN	0.45	0	-31.32	-0.478	-26.898
N+2.83	B21	ENVOLVENTE MIN	0.9	0	-30.34	-0.478	-13.069
N+0.39	B21	ENVOLVENTE MAX	0	0	-7.5	0.2	-7.475
N+0.39	B21	ENVOLVENTE MAX	0.45	0	-6.77	0.2	-4.262
N+0.39	B21	ENVOLVENTE MAX	0.9	0	-6.04	0.2	-1.375
N+0.39	B21	ENVOLVENTE MIN	0	0	-30.11	-0.589	-36.538
N+0.39	B21	ENVOLVENTE MIN	0.45	0	-29.14	-0.589	-23.207
N+0.39	B21	ENVOLVENTE MIN	0.9	0	-28.17	-0.589	-10.859
N+3.23	B22	ENVOLVENTE MAX	0	0	-9.17	-0.207	-12.784
N+3.23	B22	ENVOLVENTE MAX	0.863	0	-7.77	-0.207	-5.429
N+3.23	B22	ENVOLVENTE MAX	1.725	0	-6.37	-0.207	1.761
N+3.23	B22	ENVOLVENTE MIN	0	0	-20.9	-0.626	-31.084
N+3.23	B22	ENVOLVENTE MIN	0.863	0	-19.04	-0.626	-13.858
N+3.23	B22	ENVOLVENTE MIN	1.725	0	-17.18	-0.626	0.546
N+0.79	B22	ENVOLVENTE MAX	0	0	-9.56	-0.215	-13.293
N+0.79	B22	ENVOLVENTE MAX	0.863	0	-8.16	-0.215	-5.622
N+0.79	B22	ENVOLVENTE MAX	1.725	0	-6.76	-0.215	1.866
N+0.79	B22	ENVOLVENTE MIN	0	0	-21.27	-0.677	-31.61
N+0.79	B22	ENVOLVENTE MIN	0.863	0	-19.41	-0.677	-14.068
N+0.79	B22	ENVOLVENTE MIN	1.725	0	-17.54	-0.677	0.666
N+2.01	B23	ENVOLVENTE MAX	0	0	-1.59	-0.547	-0.473
N+2.01	B23	ENVOLVENTE MAX	1.65	0	14.82	-0.547	-4.105
N+2.01	B23	ENVOLVENTE MAX	1.65	0	-0.96	0.081	-4.317
N+2.01	B23	ENVOLVENTE MAX	1.975	0	0.49	0.081	-4.046
N+2.01	B23	ENVOLVENTE MAX	2.3	0	3.77	0.081	-4.168
N+2.01	B23	ENVOLVENTE MAX	2.3	0	-5.48	1.781	-3.952
N+2.01	B23	ENVOLVENTE MAX	3.95	0	4.61	1.781	-0.432
N+2.01	B23	ENVOLVENTE MIN	0	0	-5.83	-1.809	-1.889
N+2.01	B23	ENVOLVENTE MIN	1.65	0	5.7	-1.809	-9.305
N+2.01	B23	ENVOLVENTE MIN	1.65	0	-3.52	0.007	-9.901
N+2.01	B23	ENVOLVENTE MIN	1.975	0	-0.37	0.007	-9.35
N+2.01	B23	ENVOLVENTE MIN	2.3	0	1.01	0.007	-9.983

N+2.01	B23	ENVOLVENTE MIN	2.3	0	-13.88	0.533	-9.372
N+2.01	B23	ENVOLVENTE MIN	3.95	0	1.27	0.533	-1.722
N+3.23	B24	ENVOLVENTE MAX	0	0	-1.35	1.808	-0.499
N+3.23	B24	ENVOLVENTE MAX	1.65	0	13.64	1.808	-3.781
N+3.23	B24	ENVOLVENTE MAX	1.65	0	-0.93	0.069	-4.052
N+3.23	B24	ENVOLVENTE MAX	1.975	0	0.49	0.069	-3.97
N+3.23	B24	ENVOLVENTE MAX	2.3	0	3.75	0.069	-4.285
N+3.23	B24	ENVOLVENTE MAX	2.3	0	-5.53	-0.659	-3.939
N+3.23	B24	ENVOLVENTE MAX	3.95	0	6.22	-0.659	-0.631
N+3.23	B24	ENVOLVENTE MIN	0	0	-4.85	0.592	-1.793
N+3.23	B24	ENVOLVENTE MIN	1.65	0	5.36	0.592	-9.042
N+3.23	B24	ENVOLVENTE MIN	1.65	0	-3.54	-0.021	-9.668
N+3.23	B24	ENVOLVENTE MIN	1.975	0	-0.33	-0.021	-9.11
N+3.23	B24	ENVOLVENTE MIN	2.3	0	1.06	-0.021	-9.736
N+3.23	B24	ENVOLVENTE MIN	2.3	0	-14.44	-2.034	-9.004
N+3.23	B24	ENVOLVENTE MIN	3.95	0	1.73	-2.034	-2.219
N+0.79	B24	ENVOLVENTE MAX	0	0	-1.39	1.923	-0.617
N+0.79	B24	ENVOLVENTE MAX	1.65	0	13.73	1.923	-4.056
N+0.79	B24	ENVOLVENTE MAX	1.65	0	-1.22	0.06	-4.284
N+0.79	B24	ENVOLVENTE MAX	1.975	0	0.17	0.06	-4.034
N+0.79	B24	ENVOLVENTE MAX	2.3	0	3.47	0.06	-4.214
N+0.79	B24	ENVOLVENTE MAX	2.3	0	-5.73	-0.64	-4
N+0.79	B24	ENVOLVENTE MAX	3.95	0	6	-0.64	-0.608
N+0.79	B24	ENVOLVENTE MIN	0	0	-4.76	0.68	-1.927
N+0.79	B24	ENVOLVENTE MIN	1.65	0	5.49	0.68	-9.324
N+0.79	B24	ENVOLVENTE MIN	1.65	0	-3.81	0.001	-10.001
N+0.79	B24	ENVOLVENTE MIN	1.975	0	-0.35	0.001	-9.353
N+0.79	B24	ENVOLVENTE MIN	2.3	0	1.12	0.001	-9.889
N+0.79	B24	ENVOLVENTE MIN	2.3	0	-14.65	-1.928	-9.193
N+0.79	B24	ENVOLVENTE MIN	3.95	0	1.75	-1.928	-2.057
N+4.45	B25	ENVOLVENTE MAX	0	0	9.7	1.258	0.185
N+4.45	B25	ENVOLVENTE MAX	0.862	0	11.57	1.258	-3.543
N+4.45	B25	ENVOLVENTE MAX	1.725	0	13.43	1.258	-8.432
N+4.45	B25	ENVOLVENTE MIN	0	0	3.57	0.443	-0.155
N+4.45	B25	ENVOLVENTE MIN	0.862	0	4.97	0.443	-9.108
N+4.45	B25	ENVOLVENTE MIN	1.725	0	6.37	0.443	-19.888
N+2.01	B25	ENVOLVENTE MAX	0	0	17.65	-0.178	1.702
N+2.01	B25	ENVOLVENTE MAX	0.862	0	19.51	-0.178	-5.593
N+2.01	B25	ENVOLVENTE MAX	1.725	0	21.38	-0.178	-13.168
N+2.01	B25	ENVOLVENTE MIN	0	0	6.6	-0.61	0.49
N+2.01	B25	ENVOLVENTE MIN	0.862	0	8	-0.61	-14.325
N+2.01	B25	ENVOLVENTE MIN	1.725	0	9.39	-0.61	-31.958
N+4.05	B26	ENVOLVENTE MAX	0	0	27.81	0.922	-0.17
N+4.05	B26	ENVOLVENTE MAX	0.219	0	28.29	0.922	-1.114
N+4.05	B26	ENVOLVENTE MAX	0.438	0	28.76	0.922	-2.136
N+4.05	B26	ENVOLVENTE MIN	0	0	4.13	-0.547	-19.772
N+4.05	B26	ENVOLVENTE MIN	0.219	0	4.49	-0.547	-25.912
N+4.05	B26	ENVOLVENTE MIN	0.438	0	4.84	-0.547	-32.156
N+1.61	B26	ENVOLVENTE MAX	0	0	30.11	0.735	0.741
N+1.61	B26	ENVOLVENTE MAX	0.219	0	30.58	0.735	0.093
N+1.61	B26	ENVOLVENTE MAX	0.438	0	31.06	0.735	-0.625
N+1.61	B26	ENVOLVENTE MIN	0	0	2.58	-0.611	-21.141
N+1.61	B26	ENVOLVENTE MIN	0.219	0	2.94	-0.611	-27.743
N+1.61	B26	ENVOLVENTE MIN	0.438	0	3.29	-0.611	-34.455
N+4.05	B27	ENVOLVENTE MAX	0	0	-9.35	1.154	-10.826
N+4.05	B27	ENVOLVENTE MAX	0.681	0	-8.24	1.154	-4.827
N+4.05	B27	ENVOLVENTE MAX	1.362	0	-7.14	1.154	0.436
N+4.05	B27	ENVOLVENTE MIN	0	0	-35.69	-0.408	-50.249
N+4.05	B27	ENVOLVENTE MIN	0.681	0	-34.21	-0.408	-26.599
N+4.05	B27	ENVOLVENTE MIN	1.362	0	-32.74	-0.408	-4.862
N+1.61	B27	ENVOLVENTE MAX	0	0	-8.49	0.822	-9.504
N+1.61	B27	ENVOLVENTE MAX	0.681	0	-7.38	0.822	-4.052
N+1.61	B27	ENVOLVENTE MAX	1.362	0	-6.28	0.822	0.668
N+1.61	B27	ENVOLVENTE MIN	0	0	-35.18	-0.472	-49.457
N+1.61	B27	ENVOLVENTE MIN	0.681	0	-33.71	-0.472	-26.597
N+1.61	B27	ENVOLVENTE MIN	1.362	0	-32.24	-0.472	-4.758
N+3.64	B28	ENVOLVENTE MAX	0	0	36.25	1.142	-2.756
N+3.64	B28	ENVOLVENTE MAX	0.45	0	37.22	1.142	-6.793
N+3.64	B28	ENVOLVENTE MAX	0.9	0	38.2	1.142	-11.152
N+3.64	B28	ENVOLVENTE MIN	0	0	8.58	-0.418	-15.198
N+3.64	B28	ENVOLVENTE MIN	0.45	0	9.31	-0.418	-31.622
N+3.64	B28	ENVOLVENTE MIN	0.9	0	10.03	-0.418	-48.591
N+1.20	B28	ENVOLVENTE MAX	0	0	36.75	0.796	-3.169
N+1.20	B28	ENVOLVENTE MAX	0.45	0	37.73	0.796	-7.045
N+1.20	B28	ENVOLVENTE MAX	0.9	0	38.7	0.796	-11.241
N+1.20	B28	ENVOLVENTE MIN	0	0	8.16	-0.485	-15.934
N+1.20	B28	ENVOLVENTE MIN	0.45	0	8.89	-0.485	-32.693
N+1.20	B28	ENVOLVENTE MIN	0.9	0	9.62	-0.485	-49.889
N+3.64	B29	ENVOLVENTE MAX	0	0	-4.73	1.363	-3.43

N+3.64	B29	ENVOLVENTE MAX	0.45	0	-4.01	1.363	-1.428
N+3.64	B29	ENVOLVENTE MAX	0.9	0	-3.28	1.363	0.263
N+3.64	B29	ENVOLVENTE MIN	0	0	-31.52	-0.172	-40.487
N+3.64	B29	ENVOLVENTE MIN	0.45	0	-30.55	-0.172	-26.556
N+3.64	B29	ENVOLVENTE MIN	0.9	0	-29.58	-0.172	-13.079
N+1.20	B29	ENVOLVENTE MAX	0	0	-5.34	0.898	-4.07
N+1.20	B29	ENVOLVENTE MAX	0.45	0	-4.61	0.898	-1.802
N+1.20	B29	ENVOLVENTE MAX	0.9	0	-3.88	0.898	0.147
N+1.20	B29	ENVOLVENTE MIN	0	0	-30.57	-0.29	-38.711
N+1.20	B29	ENVOLVENTE MIN	0.45	0	-29.6	-0.29	-25.202
N+1.20	B29	ENVOLVENTE MIN	0.9	0	-28.62	-0.29	-12.141
N+3.23	B30	ENVOLVENTE MAX	0	0	-10.95	0.732	-16.223
N+3.23	B30	ENVOLVENTE MAX	0.125	0	-10.75	0.732	-14.857
N+3.23	B30	ENVOLVENTE MAX	0.25	0	-10.54	0.732	-13.515
N+3.23	B30	ENVOLVENTE MIN	0	0	-25.39	0.214	-38.786
N+3.23	B30	ENVOLVENTE MIN	0.125	0	-25.12	0.214	-35.628
N+3.23	B30	ENVOLVENTE MIN	0.25	0	-24.85	0.214	-32.505
N+0.79	B30	ENVOLVENTE MAX	0	0	-11.06	0.696	-16.452
N+0.79	B30	ENVOLVENTE MAX	0.125	0	-10.86	0.696	-15.08
N+0.79	B30	ENVOLVENTE MAX	0.25	0	-10.65	0.696	-13.734
N+0.79	B30	ENVOLVENTE MIN	0	0	-25.33	0.209	-38.756
N+0.79	B30	ENVOLVENTE MIN	0.125	0	-25.06	0.209	-35.607
N+0.79	B30	ENVOLVENTE MIN	0.25	0	-24.79	0.209	-32.491
N+3.23	B31	ENVOLVENTE MAX	0	0	-9.68	0.732	-13.515
N+3.23	B31	ENVOLVENTE MAX	0.863	0	-8.29	0.732	-5.693
N+3.23	B31	ENVOLVENTE MAX	1.725	0	-6.89	0.732	2.08
N+3.23	B31	ENVOLVENTE MIN	0	0	-21.91	0.214	-32.505
N+3.23	B31	ENVOLVENTE MIN	0.863	0	-20.05	0.214	-14.409
N+3.23	B31	ENVOLVENTE MIN	1.725	0	-18.19	0.214	0.649
N+0.79	B31	ENVOLVENTE MAX	0	0	-9.79	0.696	-13.734
N+0.79	B31	ENVOLVENTE MAX	0.863	0	-8.4	0.696	-5.805
N+0.79	B31	ENVOLVENTE MAX	1.725	0	-7	0.696	1.985
N+0.79	B31	ENVOLVENTE MIN	0	0	-21.85	0.209	-32.491
N+0.79	B31	ENVOLVENTE MIN	0.863	0	-19.99	0.209	-14.45
N+0.79	B31	ENVOLVENTE MIN	1.725	0	-18.12	0.209	0.643
N+4.42	B32	ENVOLVENTE MAX	0	0	-42.29	10.504	-46.877
N+4.42	B32	ENVOLVENTE MAX	0.325	0	-40.89	10.504	-32.125
N+4.42	B32	ENVOLVENTE MAX	0.325	0	-23.79	2.194	-32.363
N+4.42	B32	ENVOLVENTE MAX	0.988	0	-20.92	2.194	-17.551
N+4.42	B32	ENVOLVENTE MAX	1.975	0	-16.66	2.194	1.928
N+4.42	B32	ENVOLVENTE MIN	0	0	-117.27	-11.54	-128.767
N+4.42	B32	ENVOLVENTE MIN	0.325	0	-115.4	-11.54	-90.958
N+4.42	B32	ENVOLVENTE MIN	0.325	0	-60.6	-3.932	-90.407
N+4.42	B32	ENVOLVENTE MIN	0.988	0	-56.79	-3.932	-51.522
N+4.42	B32	ENVOLVENTE MIN	1.975	0	-51.1	-3.932	0.245
N+1.98	B32	ENVOLVENTE MAX	0	0	-38.23	8.577	-35.859
N+1.98	B32	ENVOLVENTE MAX	0.325	0	-36.82	8.577	-22.305
N+1.98	B32	ENVOLVENTE MAX	0.325	0	-18.29	7.144	-23.195
N+1.98	B32	ENVOLVENTE MAX	0.988	0	-15.43	7.144	-12.026
N+1.98	B32	ENVOLVENTE MAX	1.975	0	-11.16	7.144	2.543
N+1.98	B32	ENVOLVENTE MIN	0	0	-122.95	-19.264	-120.458
N+1.98	B32	ENVOLVENTE MIN	0.325	0	-121.08	-19.264	-80.804
N+1.98	B32	ENVOLVENTE MIN	0.325	0	-55.9	-1.651	-81.849
N+1.98	B32	ENVOLVENTE MIN	0.988	0	-52.08	-1.651	-46.081
N+1.98	B32	ENVOLVENTE MIN	1.975	0	-46.39	-1.651	0.623
N+4.05	B33	ENVOLVENTE MAX	0	0	-58.96	43.678	-64.395
N+4.05	B33	ENVOLVENTE MAX	0.325	0	-57.56	43.678	-45.425
N+4.05	B33	ENVOLVENTE MAX	0.325	0	-33.57	12.468	-45.55
N+4.05	B33	ENVOLVENTE MAX	0.988	0	-28.88	12.468	-24.865
N+4.05	B33	ENVOLVENTE MAX	1.975	0	-21.88	12.468	0.565
N+4.05	B33	ENVOLVENTE MIN	0	0	-153.79	-10.676	-173.457
N+4.05	B33	ENVOLVENTE MIN	0.325	0	-151.92	-10.676	-123.778
N+4.05	B33	ENVOLVENTE MIN	0.325	0	-88.1	-5.352	-124.105
N+4.05	B33	ENVOLVENTE MIN	0.988	0	-78.03	-5.352	-69.076
N+4.05	B33	ENVOLVENTE MIN	1.975	0	-63.02	-5.352	0.1
N+1.61	B33	ENVOLVENTE MAX	0	0	-59.39	49.495	-67.252
N+1.61	B33	ENVOLVENTE MAX	0.325	0	-57.99	49.495	-47.879
N+1.61	B33	ENVOLVENTE MAX	0.325	0	-35.02	14.63	-48.008
N+1.61	B33	ENVOLVENTE MAX	0.988	0	-30.33	14.63	-26.361
N+1.61	B33	ENVOLVENTE MAX	1.975	0	-23.34	14.63	0.535
N+1.61	B33	ENVOLVENTE MIN	0	0	-155.48	-16.585	-176.971
N+1.61	B33	ENVOLVENTE MIN	0.325	0	-153.61	-16.585	-126.745
N+1.61	B33	ENVOLVENTE MIN	0.325	0	-89.78	-5.602	-126.936
N+1.61	B33	ENVOLVENTE MIN	0.988	0	-79.71	-5.602	-70.792
N+1.61	B33	ENVOLVENTE MIN	1.975	0	-64.7	-5.602	0.074
N+3.64	B34	ENVOLVENTE MAX	0	0	65.82	1.79	0.72
N+3.64	B34	ENVOLVENTE MAX	0.988	0	80.84	1.79	-26.993
N+3.64	B34	ENVOLVENTE MAX	1.65	0	90.91	1.79	-49.042
N+3.64	B34	ENVOLVENTE MAX	1.65	0	159.11	13.144	-48.954

N+3.64	B34	ENVOLVENTE MAX	1.975	0	160.99	13.144	-68.614
N+3.64	B34	ENVOLVENTE MIN	0	0	23.94	-20.508	0.044
N+3.64	B34	ENVOLVENTE MIN	0.988	0	30.93	-20.508	-71.765
N+3.64	B34	ENVOLVENTE MIN	1.65	0	35.62	-20.508	-128.654
N+3.64	B34	ENVOLVENTE MIN	1.65	0	59.77	-45.866	-128.262
N+3.64	B34	ENVOLVENTE MIN	1.975	0	61.18	-45.866	-180.278
N+1.20	B34	ENVOLVENTE MAX	0	0	68.12	2.423	0.684
N+1.20	B34	ENVOLVENTE MAX	0.988	0	83.13	2.423	-28.349
N+1.20	B34	ENVOLVENTE MAX	1.65	0	93.2	2.423	-51.438
N+1.20	B34	ENVOLVENTE MAX	1.65	0	161.62	13.283	-51.229
N+1.20	B34	ENVOLVENTE MAX	1.975	0	163.49	13.283	-72.082
N+1.20	B34	ENVOLVENTE MIN	0	0	25.51	-16.582	-0.001
N+1.20	B34	ENVOLVENTE MIN	0.988	0	32.5	-16.582	-74.095
N+1.20	B34	ENVOLVENTE MIN	1.65	0	37.19	-16.582	-132.502
N+1.20	B34	ENVOLVENTE MIN	1.65	0	63.3	-44.203	-132.251
N+1.20	B34	ENVOLVENTE MIN	1.975	0	64.71	-44.203	-185.081
N+3.23	B35	ENVOLVENTE MAX	0	0	-44.11	12.918	-45.64
N+3.23	B35	ENVOLVENTE MAX	0.325	0	-42.71	12.918	-30.375
N+3.23	B35	ENVOLVENTE MAX	0.325	0	-25.1	-0.727	-30.774
N+3.23	B35	ENVOLVENTE MAX	0.988	0	-20.23	-0.727	-15.758
N+3.23	B35	ENVOLVENTE MAX	1.975	0	-12.97	-0.727	1.304
N+3.23	B35	ENVOLVENTE MIN	0	0	-134.83	-11.8	-144.946
N+3.23	B35	ENVOLVENTE MIN	0.325	0	-132.96	-11.8	-101.431
N+3.23	B35	ENVOLVENTE MIN	0.325	0	-75.31	-11.949	-101.207
N+3.23	B35	ENVOLVENTE MIN	0.988	0	-64.63	-11.949	-54.854
N+3.23	B35	ENVOLVENTE MIN	1.975	0	-48.71	-11.949	0.074
N+0.79	B35	ENVOLVENTE MAX	0	0	-44.29	10.87	-45.455
N+0.79	B35	ENVOLVENTE MAX	0.325	0	-42.89	10.87	-30.696
N+0.79	B35	ENVOLVENTE MAX	0.325	0	-25.36	-0.701	-31.191
N+0.79	B35	ENVOLVENTE MAX	0.988	0	-20.5	-0.701	-15.964
N+0.79	B35	ENVOLVENTE MAX	1.975	0	-13.24	-0.701	1.462
N+0.79	B35	ENVOLVENTE MIN	0	0	-131.39	-7.732	-137.086
N+0.79	B35	ENVOLVENTE MIN	0.325	0	-129.52	-7.732	-94.687
N+0.79	B35	ENVOLVENTE MIN	0.325	0	-71.65	-9.626	-94.913
N+0.79	B35	ENVOLVENTE MIN	0.988	0	-60.97	-9.626	-50.985
N+0.79	B35	ENVOLVENTE MIN	1.975	0	-45.05	-9.626	0.229
N+4.45	B36	ENVOLVENTE MAX	0	0	-3.57	0.185	-0.443
N+4.45	B36	ENVOLVENTE MAX	0.825	0	-0.05	0.185	2.934
N+4.45	B36	ENVOLVENTE MAX	1.65	0	8.79	0.185	0.052
N+4.45	B36	ENVOLVENTE MIN	0	0	-9.7	-0.155	-1.258
N+4.45	B36	ENVOLVENTE MIN	0.825	0	-0.6	-0.155	1.037
N+4.45	B36	ENVOLVENTE MIN	1.65	0	3.08	-0.155	-0.602
N+4.45	B37	ENVOLVENTE MAX	0	0	8.79	0.052	0.155
N+4.45	B37	ENVOLVENTE MAX	0.862	0	10.65	0.052	-3.106
N+4.45	B37	ENVOLVENTE MAX	1.725	0	12.51	0.052	-7.571
N+4.45	B37	ENVOLVENTE MIN	0	0	3.08	-0.602	-0.185
N+4.45	B37	ENVOLVENTE MIN	0.862	0	4.48	-0.602	-8.448
N+4.45	B37	ENVOLVENTE MIN	1.725	0	5.87	-0.602	-18.438
N+2.01	B37	ENVOLVENTE MAX	0	0	4.61	-0.432	-0.533
N+2.01	B37	ENVOLVENTE MAX	0.862	0	6.47	-0.432	-2.256
N+2.01	B37	ENVOLVENTE MAX	1.725	0	8.34	-0.432	-5.159
N+2.01	B37	ENVOLVENTE MIN	0	0	1.27	-1.722	-1.781
N+2.01	B37	ENVOLVENTE MIN	0.862	0	2.66	-1.722	-6.56
N+2.01	B37	ENVOLVENTE MIN	1.725	0	4.06	-1.722	-12.946
N+4.05	B38	ENVOLVENTE MAX	0	0	29.97	0.732	-7.336
N+4.05	B38	ENVOLVENTE MAX	0.219	0	30.45	0.732	-9.163
N+4.05	B38	ENVOLVENTE MAX	0.438	0	30.92	0.732	-11.034
N+4.05	B38	ENVOLVENTE MIN	0	0	7.88	-0.631	-22.656
N+4.05	B38	ENVOLVENTE MIN	0.219	0	8.24	-0.631	-29.27
N+4.05	B38	ENVOLVENTE MIN	0.438	0	8.59	-0.631	-35.988
N+1.61	B38	ENVOLVENTE MAX	0	0	31.52	0.513	-7.471
N+1.61	B38	ENVOLVENTE MAX	0.219	0	31.99	0.513	-8.561
N+1.61	B38	ENVOLVENTE MAX	0.438	0	32.46	0.513	-9.71
N+1.61	B38	ENVOLVENTE MIN	0	0	4.67	-0.775	-22.786
N+1.61	B38	ENVOLVENTE MIN	0.219	0	5.03	-0.775	-29.515
N+1.61	B38	ENVOLVENTE MIN	0.438	0	5.38	-0.775	-36.349
N+4.05	B39	ENVOLVENTE MAX	0	0	-7.25	1.143	-10.913
N+4.05	B39	ENVOLVENTE MAX	0.681	0	-6.15	1.143	-6.312
N+4.05	B39	ENVOLVENTE MAX	1.362	0	-5.05	1.143	2.153
N+4.05	B39	ENVOLVENTE MIN	0	0	-32.1	-0.396	-42.114
N+4.05	B39	ENVOLVENTE MIN	0.681	0	-30.63	-0.396	-20.755
N+4.05	B39	ENVOLVENTE MIN	1.362	0	-29.15	-0.396	-2.718
N+1.61	B39	ENVOLVENTE MAX	0	0	-8.22	0.831	-12.165
N+1.61	B39	ENVOLVENTE MAX	0.681	0	-7.12	0.831	-6.824
N+1.61	B39	ENVOLVENTE MAX	1.362	0	-6.02	0.831	1.983
N+1.61	B39	ENVOLVENTE MIN	0	0	-33.25	-0.484	-43.95
N+1.61	B39	ENVOLVENTE MIN	0.681	0	-31.78	-0.484	-21.803
N+1.61	B39	ENVOLVENTE MIN	1.362	0	-30.31	-0.484	-2.805
N+3.64	B40	ENVOLVENTE MAX	0	0	39.84	1.091	-2.86

N+3.64	B40	ENVOLVENTE MAX	0.45	0	40.81	1.091	-10.715
N+3.64	B40	ENVOLVENTE MAX	0.9	0	41.78	1.091	-15.528
N+3.64	B40	ENVOLVENTE MIN	0	0	9.54	-0.427	-12.286
N+3.64	B40	ENVOLVENTE MIN	0.45	0	10.27	-0.427	-30.433
N+3.64	B40	ENVOLVENTE MIN	0.9	0	11	-0.427	-49.018
N+1.20	B40	ENVOLVENTE MAX	0	0	38.68	0.762	-3.623
N+1.20	B40	ENVOLVENTE MAX	0.45	0	39.66	0.762	-10.52
N+1.20	B40	ENVOLVENTE MAX	0.9	0	40.63	0.762	-15.297
N+1.20	B40	ENVOLVENTE MIN	0	0	9.51	-0.517	-13.006
N+1.20	B40	ENVOLVENTE MIN	0.45	0	10.23	-0.517	-30.632
N+1.20	B40	ENVOLVENTE MIN	0.9	0	10.96	-0.517	-48.696
N+3.64	B41	ENVOLVENTE MAX	0	0	-2.46	1.469	-7.728
N+3.64	B41	ENVOLVENTE MAX	0.45	0	-1.74	1.469	-6.513
N+3.64	B41	ENVOLVENTE MAX	0.9	0	-1.01	1.469	-3.59
N+3.64	B41	ENVOLVENTE MIN	0	0	-26.39	-0.042	-33.723
N+3.64	B41	ENVOLVENTE MIN	0.45	0	-25.41	-0.042	-23.123
N+3.64	B41	ENVOLVENTE MIN	0.9	0	-24.44	-0.042	-12.961
N+1.20	B41	ENVOLVENTE MAX	0	0	-5.6	1.086	-9.836
N+1.20	B41	ENVOLVENTE MAX	0.45	0	-4.87	1.086	-7.455
N+1.20	B41	ENVOLVENTE MAX	0.9	0	-4.14	1.086	-3.966
N+1.20	B41	ENVOLVENTE MIN	0	0	-27.54	-0.158	-37.062
N+1.20	B41	ENVOLVENTE MIN	0.45	0	-26.57	-0.158	-24.911
N+1.20	B41	ENVOLVENTE MIN	0.9	0	-25.6	-0.158	-13.197
N+3.23	B42	ENVOLVENTE MAX	0	0	-4.93	2.219	-7.237
N+3.23	B42	ENVOLVENTE MAX	0.125	0	-4.73	2.219	-6.633
N+3.23	B42	ENVOLVENTE MAX	0.25	0	-4.53	2.219	-6.055
N+3.23	B42	ENVOLVENTE MIN	0	0	-10.48	0.631	-18.522
N+3.23	B42	ENVOLVENTE MIN	0.125	0	-10.21	0.631	-17.228
N+3.23	B42	ENVOLVENTE MIN	0.25	0	-9.94	0.631	-15.969
N+0.79	B42	ENVOLVENTE MAX	0	0	-4.95	2.057	-7.26
N+0.79	B42	ENVOLVENTE MAX	0.125	0	-4.75	2.057	-6.654
N+0.79	B42	ENVOLVENTE MAX	0.25	0	-4.54	2.057	-6.074
N+0.79	B42	ENVOLVENTE MIN	0	0	-10.27	0.608	-17.996
N+0.79	B42	ENVOLVENTE MIN	0.125	0	-10	0.608	-16.729
N+0.79	B42	ENVOLVENTE MIN	0.25	0	-9.73	0.608	-15.496
N+3.23	B43	ENVOLVENTE MAX	0	0	-4.53	2.219	-6.055
N+3.23	B43	ENVOLVENTE MAX	0.863	0	-3.13	2.219	-2.755
N+3.23	B43	ENVOLVENTE MAX	1.725	0	-1.73	2.219	-0.659
N+3.23	B43	ENVOLVENTE MIN	0	0	-9.94	0.631	-15.969
N+3.23	B43	ENVOLVENTE MIN	0.863	0	-8.08	0.631	-8.198
N+3.23	B43	ENVOLVENTE MIN	1.725	0	-6.22	0.631	-2.034
N+0.79	B43	ENVOLVENTE MAX	0	0	-4.54	2.057	-6.074
N+0.79	B43	ENVOLVENTE MAX	0.863	0	-3.15	2.057	-2.757
N+0.79	B43	ENVOLVENTE MAX	1.725	0	-1.75	2.057	-0.64
N+0.79	B43	ENVOLVENTE MIN	0	0	-9.73	0.608	-15.496
N+0.79	B43	ENVOLVENTE MIN	0.863	0	-7.87	0.608	-7.908
N+0.79	B43	ENVOLVENTE MIN	1.725	0	-6	0.608	-1.928

Story	Brace	Load	Loc	P	V2	T	M3
N+2.42	D1	ENVOLVENTE MAX	0	48.71	-9.92	0.759	-5.593
N+2.42	D1	ENVOLVENTE MAX	2.419	49.62	0.71	0.759	10.351
N+2.42	D1	ENVOLVENTE MAX	4.837	50.52	27.86	0.759	-7.387
N+2.42	D1	ENVOLVENTE MIN	0	-113.86	-28.24	-0.098	-24.04
N+2.42	D1	ENVOLVENTE MIN	2.419	-111.92	-1.1	-0.098	1.678
N+2.42	D1	ENVOLVENTE MIN	4.837	-109.98	9.56	-0.098	-23.109
N+2.83	D2	ENVOLVENTE MAX	0	67.85	-9.14	0.726	3.165
N+2.83	D2	ENVOLVENTE MAX	2.543	68.75	3.4	0.726	30.726
N+2.83	D2	ENVOLVENTE MAX	5.087	69.65	32.65	0.726	-3.529
N+2.83	D2	ENVOLVENTE MIN	0	-103.16	-26.37	-0.39	-1.668
N+2.83	D2	ENVOLVENTE MIN	2.543	-101.22	0.37	-0.39	11.373
N+2.83	D2	ENVOLVENTE MIN	5.087	-99.28	11.55	-0.39	-14.781
N+0.39	D3	ENVOLVENTE MAX	0	37.95	-8.09	0.685	14.425
N+0.39	D3	ENVOLVENTE MAX	2.451	40.03	5.9	0.685	34.795
N+0.39	D3	ENVOLVENTE MAX	4.902	42.12	34.31	0.685	-4.227
N+0.39	D3	ENVOLVENTE MIN	0	-20.4	-22.52	-0.158	4.246
N+0.39	D3	ENVOLVENTE MIN	2.451	-19.43	1.78	-0.158	12.756
N+0.39	D3	ENVOLVENTE MIN	4.902	-18.46	12.54	-0.158	-14.476
N+3.20	D4	ENVOLVENTE MAX	0	64.77	-8.73	0.362	-4.189
N+3.20	D4	ENVOLVENTE MAX	2.422	65.59	2.89	0.362	15.74
N+3.20	D4	ENVOLVENTE MAX	4.845	66.41	30.43	0.362	-4.643
N+3.20	D4	ENVOLVENTE MIN	0	-94.31	-25.8	-0.652	-12.7
N+3.20	D4	ENVOLVENTE MIN	2.422	-92.55	0	-0.652	3.35
N+3.20	D4	ENVOLVENTE MIN	4.845	-90.8	10.65	-0.652	-24.456
N+0.76	D4	ENVOLVENTE MAX	0	50.23	-8.87	0.081	-4.764
N+0.76	D4	ENVOLVENTE MAX	2.422	51.98	2.84	0.081	14.114
N+0.76	D4	ENVOLVENTE MAX	4.845	53.74	30.64	0.081	-6.932
N+0.76	D4	ENVOLVENTE MIN	0	-29.74	-25.59	-0.803	-13.811
N+0.76	D4	ENVOLVENTE MIN	2.422	-28.93	0.32	-0.803	3.546

N+0.76	D4	ENVOLVENTE MIN	4.845	-28.11	10.98	-0.803	-26.066
N+3.23	D5	ENVOLVENTE MAX	0	59.96	2.72	-0.664	-4.79
N+3.23	D5	ENVOLVENTE MAX	0.126	60.02	3.27	-0.664	-5.166
N+3.23	D5	ENVOLVENTE MAX	0.252	60.09	3.82	-0.664	-5.384
N+3.23	D5	ENVOLVENTE MIN	0	-91.29	-22.39	-2.343	-17.285
N+3.23	D5	ENVOLVENTE MIN	0.126	-91.15	-21.2	-2.343	-15.247
N+3.23	D5	ENVOLVENTE MIN	0.252	-91	-20.02	-2.343	-13.393
N+0.79	D5	ENVOLVENTE MAX	0	49	-3.5	-0.803	-6.247
N+0.79	D5	ENVOLVENTE MAX	0.126	49.14	-2.95	-0.803	-5.839
N+0.79	D5	ENVOLVENTE MAX	0.252	49.28	-2.4	-0.803	-5.49
N+0.79	D5	ENVOLVENTE MIN	0	-33.59	-21.65	-2.476	-18.342
N+0.79	D5	ENVOLVENTE MIN	0.126	-33.52	-20.47	-2.476	-15.756
N+0.79	D5	ENVOLVENTE MIN	0.252	-33.46	-19.28	-2.476	-13.353
N+2.42	D6	ENVOLVENTE MAX	0	55.83	-7.98	0.592	-0.722
N+2.42	D6	ENVOLVENTE MAX	2.419	56.74	2.65	0.592	11.413
N+2.42	D6	ENVOLVENTE MAX	4.837	57.64	25.86	0.592	0.697
N+2.42	D6	ENVOLVENTE MIN	0	-74.57	-30.24	-0.223	-33.025
N+2.42	D6	ENVOLVENTE MIN	2.419	-72.63	-5.4	-0.223	2.612
N+2.42	D6	ENVOLVENTE MIN	4.837	-70.68	6.13	-0.223	-21.107
N+2.83	D7	ENVOLVENTE MAX	0	61.05	-9.2	0.68	0.829
N+2.83	D7	ENVOLVENTE MAX	2.543	62.15	3.11	0.68	27.902
N+2.83	D7	ENVOLVENTE MAX	5.087	64.1	32.11	0.68	-3.055
N+2.83	D7	ENVOLVENTE MIN	0	-63.99	-26.91	-0.403	-4.441
N+2.83	D7	ENVOLVENTE MIN	2.543	-62.25	-0.02	-0.403	9.993
N+2.83	D7	ENVOLVENTE MIN	5.087	-61.34	11.16	-0.403	-16.319
N+0.39	D8	ENVOLVENTE MAX	0	34.91	-9.04	0.453	4.729
N+0.39	D8	ENVOLVENTE MAX	2.451	36.99	4.42	0.453	28.723
N+0.39	D8	ENVOLVENTE MAX	4.902	39.08	32.83	0.453	-5.571
N+0.39	D8	ENVOLVENTE MIN	0	-10.04	-24	-0.302	1.127
N+0.39	D8	ENVOLVENTE MIN	2.451	-9.07	1.6	-0.302	10.161
N+0.39	D8	ENVOLVENTE MIN	4.902	-8.1	12.36	-0.302	-16.923
N+3.20	D9	ENVOLVENTE MAX	0	49.46	-6.32	0.557	0.949
N+3.20	D9	ENVOLVENTE MAX	2.422	50.27	5.93	0.557	14.699
N+3.20	D9	ENVOLVENTE MAX	4.845	51.09	31.89	0.557	-2.169
N+3.20	D9	ENVOLVENTE MIN	0	-62.92	-24.34	-0.47	-13.069
N+3.20	D9	ENVOLVENTE MIN	2.422	-61.17	-1.32	-0.47	3.316
N+3.20	D9	ENVOLVENTE MIN	4.845	-59.41	9.33	-0.47	-32.308
N+0.76	D9	ENVOLVENTE MAX	0	32.09	-7.37	0.204	-1.375
N+0.76	D9	ENVOLVENTE MAX	2.422	33.13	4.94	0.204	14.297
N+0.76	D9	ENVOLVENTE MAX	4.845	34.88	32.01	0.204	-5.466
N+0.76	D9	ENVOLVENTE MIN	0	-34.09	-24.22	-0.579	-10.859
N+0.76	D9	ENVOLVENTE MIN	2.422	-32.57	-0.18	-0.579	3.575
N+0.76	D9	ENVOLVENTE MIN	4.845	-31.75	10.47	-0.579	-29.836
N+3.23	D10	ENVOLVENTE MAX	0	-2.07	-8.75	-0.274	-15.111
N+3.23	D10	ENVOLVENTE MAX	0.126	-2	-8.2	-0.274	-13.927
N+3.23	D10	ENVOLVENTE MAX	0.252	-1.93	-7.65	-0.274	-12.784
N+3.23	D10	ENVOLVENTE MIN	0	-61.86	-28.73	-0.837	-37.952
N+3.23	D10	ENVOLVENTE MIN	0.126	-61.71	-27.28	-0.837	-34.426
N+3.23	D10	ENVOLVENTE MIN	0.252	-61.57	-25.82	-0.837	-31.084
N+0.79	D10	ENVOLVENTE MAX	0	-2.09	-9.73	-0.264	-16.018
N+0.79	D10	ENVOLVENTE MAX	0.126	-2.03	-9.18	-0.264	-14.665
N+0.79	D10	ENVOLVENTE MAX	0.252	-1.96	-8.63	-0.264	-13.293
N+0.79	D10	ENVOLVENTE MIN	0	-52.43	-29.96	-0.863	-38.788
N+0.79	D10	ENVOLVENTE MIN	0.126	-52.28	-28.51	-0.863	-35.107
N+0.79	D10	ENVOLVENTE MIN	0.252	-52.14	-27.05	-0.863	-31.61
N+4.45	D11	ENVOLVENTE MAX	0	0.63	-7.8	1.046	-10.556
N+4.45	D11	ENVOLVENTE MAX	0.126	0.69	-7.25	1.046	-9.462
N+4.45	D11	ENVOLVENTE MAX	0.252	0.76	-6.7	1.046	-8.432
N+4.45	D11	ENVOLVENTE MIN	0	-25.48	-21.83	0.346	-25.019
N+4.45	D11	ENVOLVENTE MIN	0.126	-25.34	-20.38	0.346	-22.362
N+4.45	D11	ENVOLVENTE MIN	0.252	-25.2	-18.92	0.346	-19.888
N+2.01	D11	ENVOLVENTE MAX	0	1.05	-8.64	-0.202	-15.758
N+2.01	D11	ENVOLVENTE MAX	0.126	1.12	-8.08	-0.202	-14.478
N+2.01	D11	ENVOLVENTE MAX	0.252	1.18	-7.53	-0.202	-13.168
N+2.01	D11	ENVOLVENTE MIN	0	-65.58	-29.08	-0.773	-38.914
N+2.01	D11	ENVOLVENTE MIN	0.126	-65.43	-27.63	-0.773	-35.344
N+2.01	D11	ENVOLVENTE MIN	0.252	-65.29	-26.17	-0.773	-31.958
N+4.42	D12	ENVOLVENTE MAX	0	44.4	-6.76	0.918	-0.17
N+4.42	D12	ENVOLVENTE MAX	2.417	46.16	4.72	0.918	11.979
N+4.42	D12	ENVOLVENTE MAX	4.834	47.91	30.14	0.918	-2.444
N+4.42	D12	ENVOLVENTE MIN	0	-34.09	-25.97	-0.533	-19.772
N+4.42	D12	ENVOLVENTE MIN	2.417	-33.28	-2.05	-0.533	3.323
N+4.42	D12	ENVOLVENTE MIN	4.834	-32.46	8.58	-0.533	-30.391
N+1.98	D12	ENVOLVENTE MAX	0	55.23	-6.19	0.74	0.741
N+1.98	D12	ENVOLVENTE MAX	2.417	56.99	5.31	0.74	11.679
N+1.98	D12	ENVOLVENTE MAX	4.834	58.74	30.13	0.74	-0.482
N+1.98	D12	ENVOLVENTE MIN	0	-53.94	-25.97	-0.603	-21.141
N+1.98	D12	ENVOLVENTE MIN	2.417	-53.12	-2.7	-0.603	2.719
N+1.98	D12	ENVOLVENTE MIN	4.834	-52.31	7.93	-0.603	-32.511

N+4.05	D13	ENVOLVENTE MAX	0	45.07	-11.07	1.142	-2.756
N+4.05	D13	ENVOLVENTE MAX	2.543	45.97	0.11	1.142	28.155
N+4.05	D13	ENVOLVENTE MAX	5.087	46.88	27.26	1.142	0.436
N+4.05	D13	ENVOLVENTE MIN	0	-55.21	-31.76	-0.41	-15.198
N+4.05	D13	ENVOLVENTE MIN	2.543	-53.26	-2.77	-0.41	10.112
N+4.05	D13	ENVOLVENTE MIN	5.087	-51.32	9.4	-0.41	-4.862
N+1.61	D13	ENVOLVENTE MAX	0	51.96	-11.15	0.805	-3.169
N+1.61	D13	ENVOLVENTE MAX	2.543	52.87	0.03	0.805	27.863
N+1.61	D13	ENVOLVENTE MAX	5.087	53.77	27.04	0.805	0.668
N+1.61	D13	ENVOLVENTE MIN	0	-66.78	-31.97	-0.476	-15.934
N+1.61	D13	ENVOLVENTE MIN	2.543	-64.83	-2.96	-0.476	10.086
N+1.61	D13	ENVOLVENTE MIN	5.087	-62.89	9.3	-0.476	-4.758
N+3.64	D14	ENVOLVENTE MAX	0	49.99	-9.59	1.349	-3.163
N+3.64	D14	ENVOLVENTE MAX	2.424	50.89	1.06	1.349	14.042
N+3.64	D14	ENVOLVENTE MAX	4.848	51.8	24.3	1.349	0.263
N+3.64	D14	ENVOLVENTE MIN	0	-56.26	-31.93	-0.171	-32.355
N+3.64	D14	ENVOLVENTE MIN	2.424	-54.31	-5.74	-0.171	2.997
N+3.64	D14	ENVOLVENTE MIN	4.848	-52.37	6.53	-0.171	-13.079
N+1.20	D14	ENVOLVENTE MAX	0	46.17	-10.09	0.882	-4.959
N+1.20	D14	ENVOLVENTE MAX	2.424	47.07	0.57	0.882	14.229
N+1.20	D14	ENVOLVENTE MAX	4.848	47.98	24.1	0.882	0.147
N+1.20	D14	ENVOLVENTE MIN	0	-53.84	-32.13	-0.294	-30.864
N+1.20	D14	ENVOLVENTE MIN	2.424	-51.9	-5.48	-0.294	3.834
N+1.20	D14	ENVOLVENTE MIN	4.848	-49.95	6.88	-0.294	-12.141
N+4.45	D15	ENVOLVENTE MAX	0	16.1	-6.5	-0.149	-9.115
N+4.45	D15	ENVOLVENTE MAX	0.126	16.17	-5.95	-0.149	-8.318
N+4.45	D15	ENVOLVENTE MAX	0.252	16.23	-5.4	-0.149	-7.571
N+4.45	D15	ENVOLVENTE MIN	0	-25.33	-22.3	-1.118	-23.687
N+4.45	D15	ENVOLVENTE MIN	0.126	-25.19	-20.85	-1.118	-20.971
N+4.45	D15	ENVOLVENTE MIN	0.252	-25.05	-19.39	-1.118	-18.438
N+2.01	D15	ENVOLVENTE MAX	0	56.16	2.02	-0.537	-4.655
N+2.01	D15	ENVOLVENTE MAX	0.126	56.23	2.57	-0.537	-4.943
N+2.01	D15	ENVOLVENTE MAX	0.252	56.29	3.12	-0.537	-5.159
N+2.01	D15	ENVOLVENTE MIN	0	-83.62	-21.84	-2.215	-16.843
N+2.01	D15	ENVOLVENTE MIN	0.126	-83.47	-20.66	-2.215	-14.803
N+2.01	D15	ENVOLVENTE MIN	0.252	-83.33	-19.47	-2.215	-12.946
N+4.42	D16	ENVOLVENTE MAX	0	28.23	-9.41	0.737	-7.336
N+4.42	D16	ENVOLVENTE MAX	2.417	29.04	1.22	0.737	11
N+4.42	D16	ENVOLVENTE MAX	4.834	30.76	28.15	0.737	-5.216
N+4.42	D16	ENVOLVENTE MIN	0	-32.19	-27.95	-0.6	-22.656
N+4.42	D16	ENVOLVENTE MIN	2.417	-30.44	-0.98	-0.6	2.492
N+4.42	D16	ENVOLVENTE MIN	4.834	-29.58	9.65	-0.6	-23.15
N+1.98	D16	ENVOLVENTE MAX	0	67.73	-9.32	0.521	-7.471
N+1.98	D16	ENVOLVENTE MAX	2.417	68.55	1.31	0.521	11.619
N+1.98	D16	ENVOLVENTE MAX	4.834	69.47	27.84	0.521	-3.244
N+1.98	D16	ENVOLVENTE MIN	0	-76.41	-28.26	-0.746	-22.786
N+1.98	D16	ENVOLVENTE MIN	2.417	-74.66	-1.45	-0.746	2.056
N+1.98	D16	ENVOLVENTE MIN	4.834	-73	9.31	-0.746	-23.268
N+4.05	D17	ENVOLVENTE MAX	0	54.44	-11.24	1.111	-2.86
N+4.05	D17	ENVOLVENTE MAX	2.543	55.34	-0.06	1.111	31.18
N+4.05	D17	ENVOLVENTE MAX	5.087	56.25	27.17	1.111	2.153
N+4.05	D17	ENVOLVENTE MIN	0	-119.75	-31.84	-0.408	-12.286
N+4.05	D17	ENVOLVENTE MIN	2.543	-117.81	-2.69	-0.408	11.479
N+4.05	D17	ENVOLVENTE MIN	5.087	-115.86	9.52	-0.408	-2.718
N+1.61	D17	ENVOLVENTE MAX	0	54.04	-11.41	0.792	-3.623
N+1.61	D17	ENVOLVENTE MAX	2.543	54.94	-0.23	0.792	30.691
N+1.61	D17	ENVOLVENTE MAX	5.087	55.84	27.08	0.792	1.983
N+1.61	D17	ENVOLVENTE MIN	0	-99.43	-31.93	-0.498	-13.006
N+1.61	D17	ENVOLVENTE MIN	2.543	-97.48	-2.65	-0.498	11.089
N+1.61	D17	ENVOLVENTE MIN	5.087	-95.54	9.59	-0.498	-2.805
N+3.64	D18	ENVOLVENTE MAX	0	42.97	-11.41	1.433	-7.964
N+3.64	D18	ENVOLVENTE MAX	2.424	43.87	-0.76	1.433	12.909
N+3.64	D18	ENVOLVENTE MAX	4.848	44.77	24.73	1.433	-3.59
N+3.64	D18	ENVOLVENTE MIN	0	-142.06	-31.5	-0.051	-29.371
N+3.64	D18	ENVOLVENTE MIN	2.424	-140.12	-3.48	-0.051	2.376
N+3.64	D18	ENVOLVENTE MIN	4.848	-138.18	8.58	-0.051	-12.961
N+1.20	D18	ENVOLVENTE MAX	0	36.85	-11.33	1.049	-7.962
N+1.20	D18	ENVOLVENTE MAX	2.424	37.76	-0.68	1.049	13.994
N+1.20	D18	ENVOLVENTE MAX	4.848	38.66	25.27	1.049	-3.966
N+1.20	D18	ENVOLVENTE MIN	0	-93.15	-30.95	-0.171	-26.966
N+1.20	D18	ENVOLVENTE MIN	2.424	-91.21	-2.88	-0.171	3.41
N+1.20	D18	ENVOLVENTE MIN	4.848	-89.26	8.95	-0.171	-13.197

FUERZAS EN COLUMNAS

Story	Column	Load	Loc	P	V2	V3	T	M2	M3
N+4.45	C1	ENVOLVENTE MAX	0	-0.19	7.41	66.41	13.4	1.992	0.222
N+4.45	C1	ENVOLVENTE MAX	0.015	-0.1	7.41	66.41	13.4	0.996	0.111
N+4.45	C1	ENVOLVENTE MAX	0.03	0	7.41	66.41	13.4	0	0
N+4.45	C1	ENVOLVENTE MIN	0	-0.3	-34.78	-0.2	-3.114	-0.006	-1.043
N+4.45	C1	ENVOLVENTE MIN	0.015	-0.15	-34.78	-0.2	-3.114	-0.003	-0.522
N+4.45	C1	ENVOLVENTE MIN	0.03	0	-34.78	-0.2	-3.114	0	0
N+4.42	C1	ENVOLVENTE MAX	0	-44.88	30.64	62.8	12.054	130.724	20.401
N+4.42	C1	ENVOLVENTE MAX	0.185	-43.68	30.64	62.8	12.054	130.382	15.084
N+4.42	C1	ENVOLVENTE MAX	0.37	-42.49	30.64	62.8	12.054	130.343	10.136
N+4.42	C1	ENVOLVENTE MIN	0	-120.73	-19.42	-62.55	-12.782	33.871	-18.104
N+4.42	C1	ENVOLVENTE MIN	0.185	-119.13	-19.42	-62.55	-12.782	45.066	-14.863
N+4.42	C1	ENVOLVENTE MIN	0.37	-117.53	-19.42	-62.55	-12.782	47.623	-11.992
N+4.05	C1	ENVOLVENTE MAX	0	-47.54	29.94	38.82	17.447	142.163	24.987
N+4.05	C1	ENVOLVENTE MAX	0.205	-46.21	29.94	38.82	17.447	136.342	22.557
N+4.05	C1	ENVOLVENTE MAX	0.41	-44.88	29.94	38.82	17.447	130.724	20.401
N+4.05	C1	ENVOLVENTE MIN	0	-124.27	-34.78	-65.69	-25.185	11.416	-24.676
N+4.05	C1	ENVOLVENTE MIN	0.205	-122.5	-34.78	-65.69	-25.185	22.745	-21.252
N+4.05	C1	ENVOLVENTE MIN	0.41	-120.73	-34.78	-65.69	-25.185	33.871	-18.104
N+3.64	C1	ENVOLVENTE MAX	0	-50.2	-0.73	83.23	15.49	171.656	18.848
N+3.64	C1	ENVOLVENTE MAX	0.205	-48.87	-0.73	83.23	15.49	156.553	19.952
N+3.64	C1	ENVOLVENTE MAX	0.41	-47.54	-0.73	83.23	15.49	142.163	24.987
N+3.64	C1	ENVOLVENTE MIN	0	-127.81	-50.01	-61.36	-28.504	-9.111	-39.341
N+3.64	C1	ENVOLVENTE MIN	0.205	-126.04	-50.01	-61.36	-28.504	1.509	-30.043
N+3.64	C1	ENVOLVENTE MIN	0.41	-124.27	-50.01	-61.36	-28.504	11.416	-24.676
N+3.23	C1	ENVOLVENTE MAX	0	-50.39	70.75	173.23	13.683	176.19	17.939
N+3.23	C1	ENVOLVENTE MAX	0.015	-50.29	70.75	173.23	13.683	173.921	18.393
N+3.23	C1	ENVOLVENTE MAX	0.03	-50.2	70.75	173.23	13.683	171.656	18.848
N+3.23	C1	ENVOLVENTE MIN	0	-128.07	-31.38	-9.65	-29.822	-8.738	-37.251
N+3.23	C1	ENVOLVENTE MIN	0.015	-127.94	-31.38	-9.65	-29.822	-8.922	-38.296
N+3.23	C1	ENVOLVENTE MIN	0.03	-127.81	-31.38	-9.65	-29.822	-9.111	-39.341
N+3.20	C1	ENVOLVENTE MAX	0	-52.79	46.7	89.45	13.688	205.926	10.44
N+3.20	C1	ENVOLVENTE MAX	0.185	-51.59	46.7	89.45	13.688	190.966	13.055
N+3.20	C1	ENVOLVENTE MAX	0.37	-50.39	46.7	89.45	13.688	176.19	17.939
N+3.20	C1	ENVOLVENTE MIN	0	-131.27	-29.58	-47.29	-28.833	-22.872	-23.417
N+3.20	C1	ENVOLVENTE MIN	0.185	-129.67	-29.58	-47.29	-28.833	-15.712	-29.2
N+3.20	C1	ENVOLVENTE MIN	0.37	-128.07	-29.58	-47.29	-28.833	-8.738	-37.251
N+2.83	C1	ENVOLVENTE MAX	0	-55.45	42.73	34.83	13.662	204.068	7.468
N+2.83	C1	ENVOLVENTE MAX	0.205	-54.12	42.73	34.83	13.662	204.91	7.839
N+2.83	C1	ENVOLVENTE MAX	0.41	-52.79	42.73	34.83	13.662	205.926	10.44
N+2.83	C1	ENVOLVENTE MIN	0	-134.81	-24.07	-138.85	-26.309	-63.66	-12.797
N+2.83	C1	ENVOLVENTE MIN	0.205	-133.04	-24.07	-138.85	-26.309	-43.179	-16.992
N+2.83	C1	ENVOLVENTE MIN	0.41	-131.27	-24.07	-138.85	-26.309	-22.872	-23.417
N+2.42	C1	ENVOLVENTE MAX	0	-58.1	77.56	62.45	13.309	217.613	27.866
N+2.42	C1	ENVOLVENTE MAX	0.205	-56.77	77.56	62.45	13.309	210.757	13.657
N+2.42	C1	ENVOLVENTE MAX	0.41	-55.45	77.56	62.45	13.309	204.068	7.468
N+2.42	C1	ENVOLVENTE MIN	0	-138.35	-34.26	-140.65	-23.434	-109.269	-15.443
N+2.42	C1	ENVOLVENTE MIN	0.205	-136.58	-34.26	-140.65	-23.434	-86.381	-10.11
N+2.42	C1	ENVOLVENTE MIN	0.41	-134.81	-34.26	-140.65	-23.434	-63.66	-12.797
N+2.01	C1	ENVOLVENTE MAX	0	-98.02	92.57	145.39	12.792	125.284	17.32
N+2.01	C1	ENVOLVENTE MAX	0.015	-97.92	92.57	145.39	12.792	123.561	17.283
N+2.01	C1	ENVOLVENTE MAX	0.03	-97.82	92.57	145.39	12.792	121.842	17.297
N+2.01	C1	ENVOLVENTE MIN	0	-266.86	-81.97	-93.47	-22.234	-181.574	-13.411
N+2.01	C1	ENVOLVENTE MIN	0.015	-266.73	-81.97	-93.47	-22.234	-180.63	-13.533
N+2.01	C1	ENVOLVENTE MIN	0.03	-266.6	-81.97	-93.47	-22.234	-179.689	-13.706
N+1.98	C1	ENVOLVENTE MAX	0	-141.71	75.82	180.19	12.349	256.647	17.107
N+1.98	C1	ENVOLVENTE MAX	0.185	-140.51	75.82	180.19	12.349	225.036	9.072
N+1.98	C1	ENVOLVENTE MAX	0.37	-139.31	75.82	180.19	12.349	194.01	11.249
N+1.98	C1	ENVOLVENTE MIN	0	-393.01	-53.77	-89.86	-21.053	-128.159	-15.723
N+1.98	C1	ENVOLVENTE MIN	0.185	-391.41	-53.77	-89.86	-21.053	-113.259	-11.769
N+1.98	C1	ENVOLVENTE MIN	0.37	-389.81	-53.77	-89.86	-21.053	-98.944	-18.027
N+1.61	C1	ENVOLVENTE MAX	0	-144.36	45.06	194.48	11.195	333.169	30.383
N+1.61	C1	ENVOLVENTE MAX	0.205	-143.03	45.06	194.48	11.195	294.704	22.816
N+1.61	C1	ENVOLVENTE MAX	0.41	-141.71	45.06	194.48	11.195	256.647	17.107
N+1.61	C1	ENVOLVENTE MIN	0	-396.55	-54.2	-86.69	-17.803	-160.488	-32.747
N+1.61	C1	ENVOLVENTE MIN	0.205	-394.78	-54.2	-86.69	-17.803	-144.119	-23.307
N+1.61	C1	ENVOLVENTE MIN	0.41	-393.01	-54.2	-86.69	-17.803	-128.159	-15.723
N+1.20	C1	ENVOLVENTE MAX	0	-147.02	46.21	135.07	9.201	386.352	48.346
N+1.20	C1	ENVOLVENTE MAX	0.205	-145.69	46.21	135.07	9.201	359.646	39.212
N+1.20	C1	ENVOLVENTE MAX	0.41	-144.36	46.21	135.07	9.201	333.169	30.383
N+1.20	C1	ENVOLVENTE MIN	0	-400.09	-65.43	-115.59	-13.715	-205.684	-58.591
N+1.20	C1	ENVOLVENTE MIN	0.205	-398.32	-65.43	-115.59	-13.715	-182.972	-45.516
N+1.20	C1	ENVOLVENTE MIN	0.41	-396.55	-65.43	-115.59	-13.715	-160.488	-32.747
N+0.79	C1	ENVOLVENTE MAX	0	-147.21	67.61	130.1	7.62	390.098	50.164
N+0.79	C1	ENVOLVENTE MAX	0.015	-147.12	67.61	130.1	7.62	388.224	49.254
N+0.79	C1	ENVOLVENTE MAX	0.03	-147.02	67.61	130.1	7.62	386.352	48.346
N+0.79	C1	ENVOLVENTE MIN	0	-400.35	-61.77	-119.79	-11.703	-209.12	-60.234
N+0.79	C1	ENVOLVENTE MIN	0.015	-400.22	-61.77	-119.79	-11.703	-207.401	-59.412

N+0.79	C1	ENVOLVENTE MIN	0.03	-400.09	-61.77	-119.79	-11.703	-205.684	-58.591
N+0.76	C1	ENVOLVENTE MAX	0	-149.61	59.73	121.79	6.077	431.542	70.243
N+0.76	C1	ENVOLVENTE MAX	0.185	-148.41	59.73	121.79	6.077	410.747	60.097
N+0.76	C1	ENVOLVENTE MAX	0.37	-147.21	59.73	121.79	6.077	390.098	50.164
N+0.76	C1	ENVOLVENTE MIN	0	-403.55	-72.67	-136.19	-9.527	-255.892	-85.101
N+0.76	C1	ENVOLVENTE MIN	0.185	-401.95	-72.67	-136.19	-9.527	-232.433	-72.561
N+0.76	C1	ENVOLVENTE MIN	0.37	-400.35	-72.67	-136.19	-9.527	-209.12	-60.234
N+0.39	C1	ENVOLVENTE MAX	0	-152.46	68.97	126.84	2.531	483.647	99.769
N+0.39	C1	ENVOLVENTE MAX	0.22	-151.04	68.97	126.84	2.531	457.532	84.96
N+0.39	C1	ENVOLVENTE MAX	0.44	-149.61	68.97	126.84	2.531	431.542	70.243
N+0.39	C1	ENVOLVENTE MIN	0	-407.35	-86.77	-141.74	-3.992	-314.55	-122.461
N+0.39	C1	ENVOLVENTE MIN	0.22	-405.45	-86.77	-141.74	-3.992	-285.158	-103.736
N+0.39	C1	ENVOLVENTE MIN	0.44	-403.55	-86.77	-141.74	-3.992	-255.892	-85.101
N+4.05	C2	ENVOLVENTE MAX	0	-61.62	15.96	103.35	17.447	183.031	29.459
N+4.05	C2	ENVOLVENTE MAX	0.205	-60.29	15.96	103.35	17.447	177.862	36.158
N+4.05	C2	ENVOLVENTE MAX	0.41	-58.96	15.96	103.35	17.447	173.457	43.678
N+4.05	C2	ENVOLVENTE MIN	0	-157.34	-80.21	-76.22	-25.185	41.091	-22.799
N+4.05	C2	ENVOLVENTE MIN	0.205	-155.57	-80.21	-76.22	-25.185	56.525	-16.327
N+4.05	C2	ENVOLVENTE MIN	0.41	-153.79	-80.21	-76.22	-25.185	64.395	-10.676
N+3.64	C2	ENVOLVENTE MAX	0	-64.27	-3.83	27.62	15.49	177.842	18.877
N+3.64	C2	ENVOLVENTE MAX	0.205	-62.95	-3.83	27.62	15.49	179.829	21.014
N+3.64	C2	ENVOLVENTE MAX	0.41	-61.62	-3.83	27.62	15.49	183.031	29.459
N+3.64	C2	ENVOLVENTE MIN	0	-160.88	-61.74	-96.48	-28.504	18.048	-39.098
N+3.64	C2	ENVOLVENTE MIN	0.205	-159.11	-61.74	-96.48	-28.504	30.177	-27.794
N+3.64	C2	ENVOLVENTE MIN	0.41	-157.34	-61.74	-96.48	-28.504	41.091	-22.799
N+3.23	C2	ENVOLVENTE MAX	0	-64.47	64.46	27.19	13.683	177.338	17.88
N+3.23	C2	ENVOLVENTE MAX	0.015	-64.37	64.46	27.19	13.683	177.589	18.378
N+3.23	C2	ENVOLVENTE MAX	0.03	-64.27	64.46	27.19	13.683	177.842	18.877
N+3.23	C2	ENVOLVENTE MIN	0	-161.14	-34.42	-121.58	-29.822	15.72	-37.2
N+3.23	C2	ENVOLVENTE MIN	0.015	-161.01	-34.42	-121.58	-29.822	16.885	-38.148
N+3.23	C2	ENVOLVENTE MIN	0.03	-160.88	-34.42	-121.58	-29.822	18.048	-39.098
N+3.20	C2	ENVOLVENTE MAX	0	-66.87	39.32	35.23	13.688	179.997	7.136
N+3.20	C2	ENVOLVENTE MAX	0.185	-65.67	39.32	35.23	13.688	178.256	12.003
N+3.20	C2	ENVOLVENTE MAX	0.37	-64.47	39.32	35.23	13.688	177.338	17.88
N+3.20	C2	ENVOLVENTE MIN	0	-164.34	-34.89	-100.54	-28.833	-11.102	-24.816
N+3.20	C2	ENVOLVENTE MIN	0.185	-162.74	-34.89	-100.54	-28.833	2.72	-30.503
N+3.20	C2	ENVOLVENTE MIN	0.37	-161.14	-34.89	-100.54	-28.833	15.72	-37.2
N+2.83	C2	ENVOLVENTE MAX	0	-69.52	38.29	126.07	13.662	230.381	3.815
N+2.83	C2	ENVOLVENTE MAX	0.205	-68.19	38.29	126.07	13.662	205.083	1.271
N+2.83	C2	ENVOLVENTE MAX	0.41	-66.87	38.29	126.07	13.662	179.997	7.136
N+2.83	C2	ENVOLVENTE MIN	0	-167.88	-64.88	-31.1	-26.309	-22.549	-32.394
N+2.83	C2	ENVOLVENTE MIN	0.205	-166.11	-64.88	-31.1	-26.309	-16.72	-24.401
N+2.83	C2	ENVOLVENTE MIN	0.41	-164.34	-64.88	-31.1	-26.309	-11.102	-24.816
N+2.42	C2	ENVOLVENTE MAX	0	-133.01	48.78	136.27	13.309	139.034	17.494
N+2.42	C2	ENVOLVENTE MAX	0.205	-131.68	48.78	136.27	13.309	111.914	18.505
N+2.42	C2	ENVOLVENTE MAX	0.41	-130.35	48.78	136.27	13.309	88.746	29.593
N+2.42	C2	ENVOLVENTE MIN	0	-325.73	-69.72	-31.69	-23.434	-103.925	-13.57
N+2.42	C2	ENVOLVENTE MIN	0.205	-323.96	-69.72	-31.69	-23.434	-98.245	-10.289
N+2.42	C2	ENVOLVENTE MIN	0.41	-322.19	-69.72	-31.69	-23.434	-96.517	-17.084
N+2.01	C2	ENVOLVENTE MAX	0	-133.2	44.35	62.87	12.792	140.705	16.282
N+2.01	C2	ENVOLVENTE MAX	0.015	-133.1	44.35	62.87	12.792	139.869	16.876
N+2.01	C2	ENVOLVENTE MAX	0.03	-133.01	44.35	62.87	12.792	139.034	17.494
N+2.01	C2	ENVOLVENTE MIN	0	-325.99	-97.38	-68.23	-22.234	-105.756	-13.949
N+2.01	C2	ENVOLVENTE MIN	0.015	-325.86	-97.38	-68.23	-22.234	-104.84	-13.748
N+2.01	C2	ENVOLVENTE MIN	0.03	-325.73	-97.38	-68.23	-22.234	-103.925	-13.57
N+1.98	C2	ENVOLVENTE MAX	0	-135.6	53.86	33.59	12.349	140.343	26.994
N+1.98	C2	ENVOLVENTE MAX	0.185	-134.4	53.86	33.59	12.349	137.154	19.119
N+1.98	C2	ENVOLVENTE MAX	0.37	-133.2	53.86	33.59	12.349	140.705	16.282
N+1.98	C2	ENVOLVENTE MIN	0	-329.19	-91.98	-171.57	-21.053	-156.449	-38.765
N+1.98	C2	ENVOLVENTE MIN	0.185	-327.59	-91.98	-171.57	-21.053	-127.732	-23.838
N+1.98	C2	ENVOLVENTE MIN	0.37	-325.99	-91.98	-171.57	-21.053	-105.756	-13.949
N+1.61	C2	ENVOLVENTE MAX	0	-198.81	50.14	55.3	11.195	287.872	30.961
N+1.61	C2	ENVOLVENTE MAX	0.205	-197.48	50.14	55.3	11.195	285.212	25.136
N+1.61	C2	ENVOLVENTE MAX	0.41	-196.15	50.14	55.3	11.195	282.776	22.425
N+1.61	C2	ENVOLVENTE MIN	0	-488.21	-97.13	-164.5	-17.803	-131.148	-29.088
N+1.61	C2	ENVOLVENTE MIN	0.205	-486.44	-97.13	-164.5	-17.803	-106.102	-13.63
N+1.61	C2	ENVOLVENTE MIN	0.41	-484.67	-97.13	-164.5	-17.803	-81.28	-1.286
N+1.20	C2	ENVOLVENTE MAX	0	-201.47	47.31	106.6	9.201	329.799	48.221
N+1.20	C2	ENVOLVENTE MAX	0.205	-200.14	47.31	106.6	9.201	308.741	38.861
N+1.20	C2	ENVOLVENTE MAX	0.41	-198.81	47.31	106.6	9.201	287.872	30.961
N+1.20	C2	ENVOLVENTE MIN	0	-491.75	-74.63	-92.23	-13.715	-167.185	-57.546
N+1.20	C2	ENVOLVENTE MIN	0.205	-489.98	-74.63	-92.23	-13.715	-149.072	-42.587
N+1.20	C2	ENVOLVENTE MIN	0.41	-488.21	-74.63	-92.23	-13.715	-131.148	-29.088
N+0.79	C2	ENVOLVENTE MAX	0	-201.66	68.24	95.71	7.62	332.419	50.05
N+0.79	C2	ENVOLVENTE MAX	0.015	-201.57	68.24	95.71	7.62	331.108	49.135
N+0.79	C2	ENVOLVENTE MAX	0.03	-201.47	68.24	95.71	7.62	329.799	48.221
N+0.79	C2	ENVOLVENTE MIN	0	-492.01	-65.53	-108.74	-11.703	-170.196	-59.294
N+0.79	C2	ENVOLVENTE MIN	0.015	-491.88	-65.53	-108.74	-11.703	-168.69	-58.419
N+0.79	C2	ENVOLVENTE MIN	0.03	-491.75	-65.53	-108.74	-11.703	-167.185	-57.546

N+0.76	C2	ENVOLVENTE MAX	0	-204.06	60.05	85.34	6.077	357.153	70.211
N+0.76	C2	ENVOLVENTE MAX	0.185	-202.86	60.05	85.34	6.077	344.69	60.022
N+0.76	C2	ENVOLVENTE MAX	0.37	-201.66	60.05	85.34	6.077	332.419	50.05
N+0.76	C2	ENVOLVENTE MIN	0	-495.21	-74.64	-129.98	-9.527	-211.449	-84.853
N+0.76	C2	ENVOLVENTE MIN	0.185	-493.61	-74.64	-129.98	-9.527	-190.727	-71.965
N+0.76	C2	ENVOLVENTE MIN	0.37	-492.01	-74.64	-129.98	-9.527	-170.196	-59.294
N+0.39	C2	ENVOLVENTE MAX	0	-206.91	69.02	89.49	2.531	390.123	99.757
N+0.39	C2	ENVOLVENTE MAX	0.22	-205.49	69.02	89.49	2.531	373.594	84.938
N+0.39	C2	ENVOLVENTE MAX	0.44	-204.06	69.02	89.49	2.531	357.153	70.211
N+0.39	C2	ENVOLVENTE MIN	0	-499.01	-87.14	-126.04	-3.992	-260.501	-122.372
N+0.39	C2	ENVOLVENTE MIN	0.22	-497.11	-87.14	-126.04	-3.992	-235.931	-103.566
N+0.39	C2	ENVOLVENTE MIN	0.44	-495.21	-87.14	-126.04	-3.992	-211.449	-84.853
N+3.64	C3	ENVOLVENTE MAX	0	-63.83	58.31	103.31	15.49	196.418	15.049
N+3.64	C3	ENVOLVENTE MAX	0.205	-62.51	58.31	103.31	15.49	188.348	12.23
N+3.64	C3	ENVOLVENTE MAX	0.41	-61.18	58.31	103.31	15.49	180.278	13.144
N+3.64	C3	ENVOLVENTE MIN	0	-164.53	-40.57	-56.07	-28.504	50.225	-40.494
N+3.64	C3	ENVOLVENTE MIN	0.205	-162.76	-40.57	-56.07	-28.504	61.501	-41.314
N+3.64	C3	ENVOLVENTE MIN	0.41	-160.99	-40.57	-56.07	-28.504	68.614	-45.866
N+3.23	C3	ENVOLVENTE MAX	0	-64.03	91.35	-13.71	13.683	188.209	14.717
N+3.23	C3	ENVOLVENTE MAX	0.015	-63.93	91.35	-13.71	13.683	192.313	14.882
N+3.23	C3	ENVOLVENTE MAX	0.03	-63.83	91.35	-13.71	13.683	196.418	15.049
N+3.23	C3	ENVOLVENTE MIN	0	-164.79	-18.24	-317.28	-29.822	46.392	-37.968
N+3.23	C3	ENVOLVENTE MIN	0.015	-164.66	-18.24	-317.28	-29.822	48.33	-39.23
N+3.23	C3	ENVOLVENTE MIN	0.03	-164.53	-18.24	-317.28	-29.822	50.225	-40.494
N+3.20	C3	ENVOLVENTE MAX	0	-66.43	79.04	64.36	13.688	199.632	12.425
N+3.20	C3	ENVOLVENTE MAX	0.185	-65.23	79.04	64.36	13.688	191.334	12.778
N+3.20	C3	ENVOLVENTE MAX	0.37	-64.03	79.04	64.36	13.688	188.209	14.717
N+3.20	C3	ENVOLVENTE MIN	0	-167.98	-28.54	-70.99	-28.833	28.605	-16.993
N+3.20	C3	ENVOLVENTE MIN	0.185	-166.39	-28.54	-70.99	-28.833	38.13	-26.688
N+3.20	C3	ENVOLVENTE MIN	0.37	-164.79	-28.54	-70.99	-28.833	46.392	-37.968
N+2.83	C3	ENVOLVENTE MAX	0	-135.19	68.97	125.09	13.662	92.426	9.034
N+2.83	C3	ENVOLVENTE MAX	0.205	-133.86	68.97	125.09	13.662	67.151	12.174
N+2.83	C3	ENVOLVENTE MAX	0.41	-132.54	68.97	125.09	13.662	43.505	17.11
N+2.83	C3	ENVOLVENTE MIN	0	-337.27	-30.77	-29.69	-26.309	-56.586	-18.724
N+2.83	C3	ENVOLVENTE MIN	0.205	-335.49	-30.77	-29.69	-26.309	-50.868	-29.694
N+2.83	C3	ENVOLVENTE MIN	0.41	-333.72	-30.77	-29.69	-26.309	-46.78	-42.461
N+2.42	C3	ENVOLVENTE MAX	0	-137.85	54.43	58.76	13.309	113.176	16.337
N+2.42	C3	ENVOLVENTE MAX	0.205	-136.52	54.43	58.76	13.309	102.754	10.079
N+2.42	C3	ENVOLVENTE MAX	0.41	-135.19	54.43	58.76	13.309	92.426	9.034
N+2.42	C3	ENVOLVENTE MIN	0	-340.81	-22.22	-77.39	-23.434	-84.972	-12.822
N+2.42	C3	ENVOLVENTE MIN	0.205	-339.04	-22.22	-77.39	-23.434	-70.732	-13.167
N+2.42	C3	ENVOLVENTE MIN	0.41	-337.27	-22.22	-77.39	-23.434	-56.586	-18.724
N+2.01	C3	ENVOLVENTE MAX	0	-138.04	38.84	70.75	12.792	115.208	15.739
N+2.01	C3	ENVOLVENTE MAX	0.015	-137.95	38.84	70.75	12.792	114.192	16.031
N+2.01	C3	ENVOLVENTE MAX	0.03	-137.85	38.84	70.75	12.792	113.176	16.337
N+2.01	C3	ENVOLVENTE MIN	0	-341.07	-56.93	-66.12	-22.234	-86.864	-12.766
N+2.01	C3	ENVOLVENTE MIN	0.015	-340.94	-56.93	-66.12	-22.234	-85.918	-12.787
N+2.01	C3	ENVOLVENTE MIN	0.03	-340.81	-56.93	-66.12	-22.234	-84.972	-12.822
N+1.98	C3	ENVOLVENTE MAX	0	-140.44	51.56	82.91	12.349	144.868	25.89
N+1.98	C3	ENVOLVENTE MAX	0.185	-139.24	51.56	82.91	12.349	129.99	19.02
N+1.98	C3	ENVOLVENTE MAX	0.37	-138.04	51.56	82.91	12.349	115.208	15.739
N+1.98	C3	ENVOLVENTE MIN	0	-344.26	-40.28	-64.36	-21.053	-109.661	-18.743
N+1.98	C3	ENVOLVENTE MIN	0.185	-342.67	-40.28	-64.36	-21.053	-98.215	-13.96
N+1.98	C3	ENVOLVENTE MIN	0.37	-341.07	-40.28	-64.36	-21.053	-86.864	-12.766
N+1.61	C3	ENVOLVENTE MAX	0	-143.1	74.37	37.87	11.195	147.618	52.63
N+1.61	C3	ENVOLVENTE MAX	0.205	-141.77	74.37	37.87	11.195	143.869	38.784
N+1.61	C3	ENVOLVENTE MAX	0.41	-140.44	74.37	37.87	11.195	144.868	25.89
N+1.61	C3	ENVOLVENTE MIN	0	-347.81	-56.75	-152.81	-17.803	-159.538	-38.256
N+1.61	C3	ENVOLVENTE MIN	0.205	-346.04	-56.75	-152.81	-17.803	-132.227	-28.023
N+1.61	C3	ENVOLVENTE MIN	0.41	-344.26	-56.75	-152.81	-17.803	-109.661	-18.743
N+1.20	C3	ENVOLVENTE MAX	0	-210.95	83.83	42.14	9.201	293.74	47.639
N+1.20	C3	ENVOLVENTE MAX	0.205	-209.62	83.83	42.14	9.201	293.952	31.919
N+1.20	C3	ENVOLVENTE MAX	0.41	-208.3	83.83	42.14	9.201	294.364	16.624
N+1.20	C3	ENVOLVENTE MIN	0	-514.84	-67.31	-158.67	-13.715	-126.272	-57.409
N+1.20	C3	ENVOLVENTE MIN	0.205	-513.07	-67.31	-158.67	-13.715	-102.594	-45.078
N+1.20	C3	ENVOLVENTE MIN	0.41	-511.3	-67.31	-158.67	-13.715	-79.118	-33.17
N+0.79	C3	ENVOLVENTE MAX	0	-211.15	95.6	81.77	7.62	296.018	50.054
N+0.79	C3	ENVOLVENTE MAX	0.015	-211.05	95.6	81.77	7.62	294.878	48.846
N+0.79	C3	ENVOLVENTE MAX	0.03	-210.95	95.6	81.77	7.62	293.74	47.639
N+0.79	C3	ENVOLVENTE MIN	0	-515.1	-64.35	-83.08	-11.703	-128.588	-58.888
N+0.79	C3	ENVOLVENTE MIN	0.015	-514.97	-64.35	-83.08	-11.703	-127.429	-58.148
N+0.79	C3	ENVOLVENTE MIN	0.03	-514.84	-64.35	-83.08	-11.703	-126.272	-57.409
N+0.76	C3	ENVOLVENTE MAX	0	-213.54	94.52	188.15	6.077	363.526	80.057
N+0.76	C3	ENVOLVENTE MAX	0.185	-212.35	94.52	188.15	6.077	329.62	64.942
N+0.76	C3	ENVOLVENTE MAX	0.37	-211.15	94.52	188.15	6.077	296.018	50.054
N+0.76	C3	ENVOLVENTE MIN	0	-518.3	-69.11	-135.04	-9.527	-139.449	-79.489
N+0.76	C3	ENVOLVENTE MIN	0.185	-516.7	-69.11	-135.04	-9.527	-133.866	-69.075
N+0.76	C3	ENVOLVENTE MIN	0.37	-515.1	-69.11	-135.04	-9.527	-128.588	-58.888
N+0.39	C3	ENVOLVENTE MAX	0	-280.29	88.44	177.91	2.531	279.813	95.545

N+0.39	C3	ENVOLVENTE MAX	0.22	-278.86	88.44	177.91	2.531	241.542	76.959
N+0.39	C3	ENVOLVENTE MAX	0.44	-277.44	88.44	177.91	2.531	208.242	58.484
N+0.39	C3	ENVOLVENTE MIN	0	-691.81	-80.44	-40.12	-3.992	-231.026	-124.587
N+0.39	C3	ENVOLVENTE MIN	0.22	-689.91	-80.44	-40.12	-3.992	-223.068	-107.762
N+0.39	C3	ENVOLVENTE MIN	0.44	-688.01	-80.44	-40.12	-3.992	-220.083	-91.049
N+3.23	C4	ENVOLVENTE MAX	0	-44.3	35.46	210.66	13.683	149.882	11.257
N+3.23	C4	ENVOLVENTE MAX	0.015	-44.21	35.46	210.66	13.683	147.414	12.073
N+3.23	C4	ENVOLVENTE MAX	0.03	-44.11	35.46	210.66	13.683	144.946	12.918
N+3.23	C4	ENVOLVENTE MIN	0	-135.09	-89.88	-12.13	-29.822	48.076	-11.771
N+3.23	C4	ENVOLVENTE MIN	0.015	-134.96	-89.88	-12.13	-29.822	46.899	-11.772
N+3.23	C4	ENVOLVENTE MIN	0.03	-134.83	-89.88	-12.13	-29.822	45.64	-11.8
N+3.20	C4	ENVOLVENTE MAX	0	-90.23	17.09	86.09	13.688	61.523	12.547
N+3.20	C4	ENVOLVENTE MAX	0.185	-89.03	17.09	86.09	13.688	51.776	18.221
N+3.20	C4	ENVOLVENTE MAX	0.37	-87.83	17.09	86.09	13.688	45.41	24.757
N+3.20	C4	ENVOLVENTE MIN	0	-263.12	-50.83	-56.62	-28.833	-17.74	-19.614
N+3.20	C4	ENVOLVENTE MIN	0.185	-261.52	-50.83	-56.62	-28.833	-13.447	-19.049
N+3.20	C4	ENVOLVENTE MIN	0.37	-259.92	-50.83	-56.62	-28.833	-12.533	-19.344
N+2.83	C4	ENVOLVENTE MAX	0	-92.88	24.99	39.18	13.662	62.079	8.634
N+2.83	C4	ENVOLVENTE MAX	0.205	-91.56	24.99	39.18	13.662	60.853	9.772
N+2.83	C4	ENVOLVENTE MAX	0.41	-90.23	24.99	39.18	13.662	61.523	12.547
N+2.83	C4	ENVOLVENTE MIN	0	-266.66	-22.25	-125.88	-26.309	-53.843	-14.577
N+2.83	C4	ENVOLVENTE MIN	0.205	-264.89	-22.25	-125.88	-26.309	-34.843	-16.277
N+2.83	C4	ENVOLVENTE MIN	0.41	-263.12	-22.25	-125.88	-26.309	-17.74	-19.614
N+2.42	C4	ENVOLVENTE MAX	0	-95.54	42.99	68.19	13.309	88.127	16.263
N+2.42	C4	ENVOLVENTE MAX	0.205	-94.21	42.99	68.19	13.309	75.038	10.595
N+2.42	C4	ENVOLVENTE MAX	0.41	-92.88	42.99	68.19	13.309	62.079	8.634
N+2.42	C4	ENVOLVENTE MIN	0	-270.2	-19.91	-76.27	-23.434	-83.205	-12.743
N+2.42	C4	ENVOLVENTE MIN	0.205	-268.43	-19.91	-76.27	-23.434	-68.459	-11.806
N+2.42	C4	ENVOLVENTE MIN	0.41	-266.66	-19.91	-76.27	-23.434	-53.843	-14.577
N+2.01	C4	ENVOLVENTE MAX	0	-95.74	33.3	74.63	12.792	90.222	15.52
N+2.01	C4	ENVOLVENTE MAX	0.015	-95.64	33.3	74.63	12.792	89.174	15.886
N+2.01	C4	ENVOLVENTE MAX	0.03	-95.54	33.3	74.63	12.792	88.127	16.263
N+2.01	C4	ENVOLVENTE MIN	0	-270.46	-57.55	-70.83	-22.234	-85.185	-12.728
N+2.01	C4	ENVOLVENTE MIN	0.015	-270.33	-57.55	-70.83	-22.234	-84.194	-12.73
N+2.01	C4	ENVOLVENTE MIN	0.03	-270.2	-57.55	-70.83	-22.234	-83.205	-12.743
N+1.98	C4	ENVOLVENTE MAX	0	-98.13	40.84	91.42	12.349	122.094	21.662
N+1.98	C4	ENVOLVENTE MAX	0.185	-96.93	40.84	91.42	12.349	106.059	16.878
N+1.98	C4	ENVOLVENTE MAX	0.37	-95.74	40.84	91.42	12.349	90.222	15.52
N+1.98	C4	ENVOLVENTE MIN	0	-273.66	-38.49	-62.04	-21.053	-106.186	-17.998
N+1.98	C4	ENVOLVENTE MIN	0.185	-272.06	-38.49	-62.04	-21.053	-95.586	-13.649
N+1.98	C4	ENVOLVENTE MIN	0.37	-270.46	-38.49	-62.04	-21.053	-85.185	-12.728
N+1.61	C4	ENVOLVENTE MAX	0	-100.79	39.41	151.78	11.195	182.748	32.342
N+1.61	C4	ENVOLVENTE MAX	0.205	-99.46	39.41	151.78	11.195	152.319	26.234
N+1.61	C4	ENVOLVENTE MAX	0.41	-98.13	39.41	151.78	11.195	122.094	21.662
N+1.61	C4	ENVOLVENTE MIN	0	-277.2	-54.77	-35.08	-17.803	-118.994	-34.976
N+1.61	C4	ENVOLVENTE MIN	0.205	-275.43	-54.77	-35.08	-17.803	-112.488	-25.719
N+1.61	C4	ENVOLVENTE MIN	0.41	-273.66	-54.77	-35.08	-17.803	-106.186	-17.998
N+1.20	C4	ENVOLVENTE MAX	0	-103.45	54.58	134.71	9.201	235.946	53.712
N+1.20	C4	ENVOLVENTE MAX	0.205	-102.12	54.58	134.71	9.201	209.227	42.859
N+1.20	C4	ENVOLVENTE MAX	0.41	-100.79	54.58	134.71	9.201	182.748	32.342
N+1.20	C4	ENVOLVENTE MIN	0	-280.74	-81.92	-51.7	-13.715	-138.16	-67.555
N+1.20	C4	ENVOLVENTE MIN	0.205	-278.97	-81.92	-51.7	-13.715	-128.457	-51.099
N+1.20	C4	ENVOLVENTE MIN	0.41	-277.2	-81.92	-51.7	-13.715	-118.994	-34.976
N+0.79	C4	ENVOLVENTE MAX	0	-148.86	86.34	65.89	7.62	356.869	49.944
N+0.79	C4	ENVOLVENTE MAX	0.015	-148.76	86.34	65.89	7.62	356.394	48.764
N+0.79	C4	ENVOLVENTE MAX	0.03	-148.66	86.34	65.89	7.62	355.921	47.585
N+0.79	C4	ENVOLVENTE MIN	0	-412.39	-94.62	-123.75	-11.703	-88.903	-60.898
N+0.79	C4	ENVOLVENTE MIN	0.015	-412.27	-94.62	-123.75	-11.703	-87.56	-59.593
N+0.79	C4	ENVOLVENTE MIN	0.03	-412.14	-94.62	-123.75	-11.703	-86.219	-58.29
N+0.76	C4	ENVOLVENTE MAX	0	-199.59	69.87	61.64	6.077	248.744	68.916
N+0.76	C4	ENVOLVENTE MAX	0.185	-198.39	69.87	61.64	6.077	245.82	56.92
N+0.76	C4	ENVOLVENTE MAX	0.37	-197.19	69.87	61.64	6.077	243.45	45.163
N+0.76	C4	ENVOLVENTE MIN	0	-544.8	-90.69	-155.99	-9.527	-179.521	-82.739
N+0.76	C4	ENVOLVENTE MIN	0.185	-543.2	-90.69	-155.99	-9.527	-159.142	-66.892
N+0.76	C4	ENVOLVENTE MIN	0.37	-541.6	-90.69	-155.99	-9.527	-139.317	-51.283
N+0.39	C4	ENVOLVENTE MAX	0	-202.44	70.88	66.41	2.531	260.109	99.29
N+0.39	C4	ENVOLVENTE MAX	0.22	-201.01	70.88	66.41	2.531	254.193	84.055
N+0.39	C4	ENVOLVENTE MAX	0.44	-199.59	70.88	66.41	2.531	248.744	68.916
N+0.39	C4	ENVOLVENTE MIN	0	-548.6	-90.19	-153.1	-3.992	-229.025	-121.611
N+0.39	C4	ENVOLVENTE MIN	0.22	-546.7	-90.19	-153.1	-3.992	-204.04	-102.127
N+0.39	C4	ENVOLVENTE MIN	0.44	-544.8	-90.19	-153.1	-3.992	-179.521	-82.739