

MEMORIAS DE CÁLCULO ESTRUCTURALES

I.E.D. VILLAS DE SAN PABLO

INSTITUCIÓN EDUCATIVA DISTRITAL

**CALLE 142^A CON CARRERA 26^B, EN EL
CORREGIMIENTO DE JUAN MINA, ATLÁNTICO.**

EDIFICACIÓN DE UN PISO

TIPO ESCUELA: *BLOQUE DE COCINA*

Propietario:

DISTRITO DE BARRANQUILLA

Calculado por:

ING. CARLOS HASBÚN CÁCERES

MAT. 08202-42244 ATLÁNTICO

BARRANQUILLA, SEPTIEMBRE 23 DE 2014

1.0 INTRODUCCIÓN

Se proyecta construir una edificación: Área de cocina, de un piso, tipo escuela en la dirección: Calle 142^A con carrera 26^B, en el corregimiento de Juan Mina, jurisdicción de la ciudad de Barranquilla, Departamento del Atlántico, diseñada por Arq. Fabio Medina (MP: 08700-17556), propiedad del: Distrito de Barranquilla. Para tal efecto se requiere el diseño de la estructura que soportará el proyecto. La estructura de la edificación debe diseñarse para que tenga resistencia y rigidez adecuadas ante las cargas mínimas de diseño prescritas por el Reglamento (**NSR-10**) y debe, además, verificarse que dispone de rigidez adecuada para limitar la deformabilidad ante las cargas de servicio, de tal manera que no se vea afectado el funcionamiento de la edificación. La edificación requiere estar siempre en servicio, bajo cualquier acción externa de la naturaleza (viento y sismo). La estructura correspondiente al proyecto se diseñó como un sistema de pórticos en concreto y losa maciza en dos direcciones con vigas descolgadas. La cimentación consiste en zapatas cuadradas con vigas de amarre. La carga muerta del edificio constituye, en general, una ventaja en el diseño por viento, debido a que es un factor estabilizante para resistir el levantamiento, volteo, deslizamiento y tiende a reducir la incidencia de vibración. No se diseña por viento, sino por sismo. El código utilizado es: **Reglamento Colombiano de Construcción Sismo Resistente, NSR-10**.

2.0 ESPECIFICACIONES DE MATERIALES

2.1 Concreto

La dosificación del Concreto (NSR-10: C.5.2):

C.5.2.1 — La dosificación de los materiales para el concreto debe establecerse para lograr:

- (a) Trabajabilidad y consistencia que permitan colocar fácilmente el concreto dentro del encofrado y alrededor del refuerzo bajo las condiciones de colocación que vayan a emplearse, sin segregación ni exudación excesiva.
- (b) Resistencia a exposiciones especiales, según lo requerido en el Capítulo C.4.
- (c) Conformidad con los requisitos del ensayo de resistencia de C.5.6.

Según la NSR-10, en C.4.2 define las Categorías y clases de Exposición, en el corregimiento de Juan Mina se encuentra en la Categoría de Exposición C (Para concreto reforzado y preesforzado expuestos a condiciones que requieren protección adicional del refuerzo contra la corrosión) Tabla C.4.2.1, **Severidad: Moderado, Clase: C1**

En C.4.3 define los requisitos para mezclas de concreto y con base en las clases de exposición asignadas en la tabla C.4.2.1, por lo tanto las mezclas deben cumplir con los requisitos más restrictivos de la Tabla C.4.3.1:

Clase de Exposición	Rel. a/mc, máx. \pm	f'_c , min. MPa	Concreto Reforzado	Concreto Preesforzado
CI	0.5	17	0.30	0.06

Se diseñó la estructura tomando el Módulo de elasticidad (NSR-10,C.8.5.1) E_c , para el concreto puede tomarse como $w_c^{1.5} 0.043 \sqrt{f'_c}$ (en MPa), para valores de w_c comprendidos entre 1440 y 2560 kg/m³. Para concreto de densidad normal, E_c puede tomarse como: $4700 \sqrt{f'_c}$. En caso de que no se disponga de este valor experimental, para concretos cuya masa unitaria varíe entre 1400 y 2560 kg/m³, puede tomarse como:

$E_c = 3900 * \sqrt{f'_c}$, Fórmula : El valor medio para toda la información experimental nacional, sin distinguir por tipo de agregado.

en el cual $f'_c = 3000$ p.s.i.(21MPa ó 210 Kgf /cm²)

$$E_c = 3900 * \sqrt{21.0} = 17872.05 \text{ MPa}$$

$$E_c = 12500 * \sqrt{210} = 181142.21 \text{ Kgf /cm}^2$$

$$E_c = 12500 * \sqrt{245} = 195655.95 \text{ Kgf /cm}^2$$

$$E_c = 12500 * \sqrt{280} = 209165.01 \text{ Kgf /cm}^2$$

La resistencia del concreto a los 28 días en las losas, vigas, viga de Amarres debe ser $f'_c = 3500$ p.s.i., la cimentación (Zapatas, Pedestal) debe ser $f'_c = 3500$ p.s.i. La resistencia del concreto a los 28 días en las vigas, losas macizas y columnas debe ser $f'_c = 4000$ p.s.i. El mínimo de muestras para ensayos de resistencia a la compresión de cada clase dada de concreto, debe ser de cinco cilindros y las dimensiones de las probetas deben ser de 150 por 300 mm. Para la evaluación y aceptación del concreto ver C.5.6 (C.5.6.1 a C.5.6.5), los ensayos de concreto fresco realizados en la obra, la preparación de probetas que requieran de un curado bajo condiciones de obra, la preparación de probetas que se vayan a ensayar en laboratorio y el registro de temperaturas del concreto fresco mientras se preparan las probetas de resistencia debe ser realizado por técnicos calificados en **ensayos de campo**. Todos los ensayos de laboratorio deben ser realizados por **técnicos de laboratorio calificados**. El curado del concreto (C.5.11) es a toda la edificación y las muestras de los cilindros para ensayos de resistencia a la compresión.

2.2 Acero

El acero de refuerzo utilizado en el diseño tiene como límite de fluencia mínimo $f_y = 60$ k.s.i (420 MPa) para diámetros mayores a 1/4" y para menores o iguales con $f_y = 37$ k.s.i (240 MPa). Se recomienda adquirir las varillas en longitudes de 12 m para disminuir el desperdicio. Los diámetros utilizados varían entre 3/8" y 1".

3.0 DIMENSIONAMIENTO DE LA ESTRUCTURA

El espesor de losa maciza se calculó con base en el parágrafo C.9.5.3.3 NSR-10 y $f_y=4200 \text{ kg/cm}^2$. Dada la alta rigidez de la viga con respecto a la losa $\alpha_{fm} > 2.0$ usaremos la fórmula:

$$h = \frac{\ell_n \left[0.8 + \frac{f_y}{1400} \right]}{36 + 9\beta} \quad (\text{C.9-13}), \text{ y no menor que } 90 \text{ mm.}$$

(d) En bordes discontinuos debe disponerse una viga de borde que tenga una relación de rigidez α_f no menor de 0.80, o bien aumentar el espesor mínimo requerido por las ecuaciones (C.9-12) ó (C.9-13), por lo menos un 10 por ciento en el panel que tenga un borde discontinuo.

Para Sección Rectangular. GARITA Y TIENDA ESCOLAR											
Inercia Losa		Inercia Viga	Longitud de la Losa		Longitud Viga	Sección Corta Losa		Sección Larga de la Losa		Sección Viga	
l _{corta}	l _{larga}	I _{viga}	L _{corta}	L _{largo}		b	h	b	h	b	h
mm ⁴	mm ⁴	mm ⁴	mm	mm	mm	mm	mm	mm	mm	mm	mm
105833333	342500000	5.721E+09	1270	4110	4110	1270	100	4110	100	250	650

Relación de Rigidez		Valor Promedio	Resistencia Nominal	Relación de la Luz	Espesor Mínimo	
α_1	α_2	α_{fm}	$f_y(\text{MPa})$	β	h(mm)	h(cm)
54.060	16.705	35.382	420	3.236	69.42	6.94

$$\alpha_1 = \frac{I_{viga}}{I_{Losa\text{corta}}}, \quad \alpha_2 = \frac{I_{viga}}{I_{Losa\text{larga}}}, \quad \alpha_{fm} = \frac{(\alpha_1 + \alpha_2)}{2}, \quad \beta = \frac{L_{largo}}{L_{corta}}, \quad I = \frac{b * h^3}{12}$$

$$h = \frac{4110 \left[0.8 + \frac{420}{1400} \right]}{36 + 9 * 3.236} \geq 90 \text{ mm.}$$

$$h = 69.42 \geq 90 \text{ mm, no cumple}$$

$$h = 100 \text{ mm} \geq 90 \text{ mm.}$$

Las dimensiones de las columnas **0.40 m x 0.40 m** se establecieron cumpliendo lo exigido en el parágrafo **C.10.8-Dimensiones de diseño para elementos a compresión (columnas)**, en lo que refiere

a los requisitos geométricos para las columnas (**DMI**). Las luces entre columnas varían entre: en un sentido **8.87 m** y en el otro sentido **8.11 m**. La altura de las columnas para efectos de diseño es de **3.735 m**, acotada desde la mitad de la viga de amarre hasta la mitad de la viga de cubierta.

C.21.7 — Nudos en pórticos especiales resistentes a momento con capacidad especial de disipación de energía (DES)

C.21.7.2.2 — El refuerzo longitudinal de una viga que termine en una columna, debe prolongarse hasta la cara más distante del núcleo confinado de la columna y anclarse, en tracción, de acuerdo con C.21.7.5, y en compresión de acuerdo con el Capítulo C.12.

C.10.9-Limites del refuerzo de elementos a compresión (columnas): C.10.9.1 — El área de refuerzo longitudinal, A_{st} , para elementos no compuestos a compresión no debe ser menor que **0.01Ag** ni mayor que **0.04Ag**. Para estructuras con capacidad de disipación de energía moderada (DMO) y especial (DES) en el Capítulo C.21 se restringe el área máxima admisible.

C.21.7.5 — Longitud de desarrollo de barras en tracción.

C.21.7.5.1 — Para tamaños de barras No. 3 (3/8”) ó 10M (10 mm) a No. 11 (1-3/8”) ó 36M (36 mm), la longitud de desarrollo ℓ_{dh} para una barra con gancho estándar de 90° en concreto de peso normal no debe ser menor que el mayor valor entre $8d_b$, 150 mm, y la longitud requerida por la ecuación (C.21-9):

$$\ell_{dh} = \frac{f_y d_b}{5.4 \sqrt{f'_c}}, MPa = \frac{f_y d_b}{17.2 \sqrt{f'_c}}, kgf/cm^2$$

C.21.12.2.1 — El refuerzo longitudinal de las columnas y muros estructurales que resisten las fuerzas inducidas por los efectos sísmicos debe extenderse dentro de la zapata, losa de cimentación o cabezal de pilotes, y debe estar totalmente desarrollado por tracción en la interfaz.

C.21.12.2.2 — Las columnas que sean diseñadas suponiendo condiciones de empotramiento en la cimentación, deben cumplir con lo indicado en **C.21.12.2.1** y, si se requiere de ganchos el refuerzo longitudinal que resiste la flexión debe tener ganchos de 90 grados cerca del fondo de la cimentación, con el extremo libre de las barras orientado hacia el centro de la columna. (**CR21.12.2.2 — Los ensayos han demostrado C.21.59 que los elementos en flexión que terminan en una zapata, losa o viga (un nudo T) debe tener sus ganchos orientados hacia adentro, en dirección del eje del elemento, para que el nudo sea capaz de resistir la flexión en el elemento que forma el alma de la T.**)

Las vigas principales son de **0.40 m** a **0.55 m** de ancho y **0.65 m** de espesor. Entre las vigas principales se colocaron vigas intermedias de ancho **0.25 m** y **0.65m** de espesor para disminuir la luz libre de la losa maciza. Las vigas de borde se dimensionaron de 0.15 m ó 0.20 m de ancho y 0.65 o 0.45 m de peralte.

4.0 MODELO ESTRUCTURAL ADOPTADO

Se adoptó el modelo estructural de pórticos en concreto, con placa actuando como diafragma rígido, en el cual se asume que la losa es infinitamente rígida en su propio plano, por lo tanto las vigas que lo conforman no presentan deformaciones axiales. Existen deformaciones perpendiculares al plano del diafragma y por lo tanto vectores rotacionales de deformación en el plano del diafragma. La fuerza sísmica se aplica en el centro de masa del diafragma y se distribuye en forma de cortante a cada una de las columnas de acuerdo con su rigidez. Los nudos se consideran conectados rígidamente con los elementos. Las fuerzas sísmicas se aplicarán paralelas al plano que contiene el diafragma.

5.0 MÉTODO DE ANÁLISIS

La estructura del proyecto se analizó por el método elástico de la rigidez con enfoque matricial, el cual considera que los materiales cumplen la ley de Hooke (los esfuerzos son linealmente proporcionales a las deformaciones) y las incógnitas son los desplazamientos. Para tal efecto se utilizó un software de análisis estructural para microcomputador. Este programa de análisis estructural requiere un archivo de información en el cual se describe la topología de la estructura en cuanto a coordenadas de nudos, condiciones de restricción de los nudos, diafragma rígido, conectividad de elemento, propiedades geométricas de las secciones, características de los materiales (concreto, en este caso), orientación de los ejes principales de la sección, cargas sobre los elementos, cargas en los nudos y combinaciones de cargas. Como resultados el programa entrega en diferentes archivos, información sobre los desplazamientos de la estructura para las diferentes hipótesis, reacciones en los nudos restringidos y fuerzas internas en los elementos de acuerdo con el sistema de coordenadas locales de cada uno de ellos. Estos archivos sirven de base para el diseño estructural posterior.

6.0 FUERZAS GRAVITARIAS

6.1 Cargas Muertas (CM): Las cargas muertas cubren todas las cargas de elementos permanentes de construcción y todas aquellas cargas no causadas por la ocupación y uso del edificio. Para calcular las cargas muertas se utilizaron como guía los valores dados la **NSR-10** en los numerales **B.3.2, B.3.3** y **B.3.4** sobre las masas y pesos de los materiales, cargas muertas mínimas y elementos no estructurales respectivamente.

Elementos estructurales	2.4 kN/m²
Placa Maciza o Losa 0.10*24	2.40

Cargas mínimas Horizontales :	1.525 kN/m²
Rellenos de Piso	kN/m²
Concreto con piedra	0.025
Pisos y Acabados	kN/m²

Afinado (25 mm) sobre concreto de agregado pétreo	1.50
---	------

Cargas mínimas Verticales :	0.00 kN/m²
Muros	kN/m²
Muros	0.458
Ventanas	kN/m²
Ventanas, vidrio, entramado y marco	0.00
Enchapes	kN/m²
Enchape en Granito	0.017

Total Cargas Muertas	2.4+1.525+0.475	4.4 kN/m²
-----------------------------	------------------------	-----------------------------

6.2 Cargas Vivas (CV)

Las cargas vivas cubren todas las cargas producidas por el uso y ocupación de la edificación incluyendo los objetos móviles y las personas que tengan acceso a ella. Para calcular las cargas vivas se utilizaron como guía los valores dados en el numeral **B.4.2.1, NSR-10** sobre las cargas vivas mínimas. No se aplicó reducción de carga viva por área ni por número de pisos.

Educativos:	KN/m²	Kgf/m²
Salones de clase	2.0	200
Corredores y Escaleras	5.0	500

6.3 Otras Cargas Vivas

Oficinas:	KN/m²	Kgf/m²
Corredores y Escaleras	3.0	300
Oficinas	2.0	200

7.0 FUERZAS SISMICAS

La estructura de la edificación se clasificó como: **A.3.2.1.3-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 fuerzas horizontales, resistente a momento con capacidad mínima de disipación de energía(a. De concreto)*. El diseño de los elementos estructurales y sus conexiones se realiza cumpliendo los requisitos exigidos para el grado de capacidad de disipación de energía requerido del material el cual se empleó el grado de capacidad

mínima de disipación de energía: **DMI (A.3.1.3)**. El valor asignado de R_0 para estas características es **2.5 (Tabla A.3-3 NSR-10)**, y *coeficiente de sobrerresistencia* Ω_0 de 3.0, sin irregularidad en planta en altura ni ausencia de redundancia respectivamente: $\Phi_p=1.0$, $\Phi_a=1.0$, $\Phi_r=1.0$. El valor del coeficiente de capacidad de disipación de energía para ser empleado en el diseño, corresponde al coeficiente de disipación de energía básico, R_0 , multiplicado por los coeficientes de reducción de capacidad de disipación de energía por irregularidades en altura, en planta, y por ausencia de redundancia en el sistema estructural de resistencia sísmica $R = \Phi_a \Phi_p \Phi_r R_0$.

Se efectúa el diseño de los elementos y sus conexiones utilizando todas las solicitaciones requeridas por el Título B del Reglamento, debidamente combinadas según se exige allí. Las fuerzas sísmicas obtenidas del análisis F_s , se reducen, dividiéndolas por el coeficiente de capacidad de disipación de energía R , correspondiente al sistema estructural de resistencia sísmica, para obtener las fuerzas sísmicas reducidas de diseño $E = F_s / R$ que se emplean en las combinaciones de carga prescritas en el Título B.

7.1 Movimiento sísmico de diseño (A.2.2, NSR-10)

El movimiento sísmico de diseño se define para una probabilidad del diez por ciento de ser excedido en un lapso de cincuenta años en función de la *aceleración pico efectiva*, representada por el parámetro A_a , y de la *velocidad pico efectiva*, representada por el parámetro A_v . Los valores de estos coeficientes, para efectos de este Reglamento, deben determinarse de acuerdo con A.2.2.2 y A.2.2.3. En el mapa de valores de A_a y A_v , Barranquilla está ubicada en la **región 2** para la cual el valor de la aceleración pico efectiva es $A_a = 0.10$ y de la velocidad pico efectiva $A_v = 0.10$ (*Figura A.2.3-2 y Figura A.2.3-3, NSR-10*).

7.2 Zona de amenaza sísmica (A.2.3, NSR-10)

Barranquilla se localiza dentro de la **Zona de amenaza sísmica baja** o sea el conjunto de lugares en donde A_a y A_v es menor o igual a 0.10 (*Figura A.2.3-2 y Figura A.2.3-3, NSR-10*).

7.3 Efectos locales (A.2.4, NSR-10)

Se prescriben dos factores de amplificación del espectro por efectos de sitio, F_a y F_v , los cuales afectan la zona del espectro de períodos cortos y períodos intermedios, respectivamente. Los efectos locales de la respuesta sísmica de la edificación deben evaluarse con base en los perfiles de suelo dados a continuación, independientemente del tipo de cimentación empleado. La identificación del perfil de suelo se realiza a partir de la superficie del terreno. Cuando existan sótanos, o en edificio en ladera, el ingeniero geotecnista, de acuerdo con el tipo de cimentación propuesta, puede variar el punto a partir del cual se inicia la definición del perfil, por medio de un estudio acerca de la interacción que pueda existir entre la estructura de contención y el suelo circundante; pero en ningún caso este punto puede estar por debajo de la losa sobre el terreno del sótano inferior.

7.3.1 Tipo de perfil de suelo (A.2.4.2, NSR-10)

Se definen seis tipos de perfil de suelo los cuales se presentan en la **tabla A.2.4-1**. Los parámetros utilizados en la clasificación son los correspondientes a los 30 m superiores del perfil para los perfiles **tipo A a E**. Para el perfil **tipo F** se aplican otros criterios y la respuesta no debe limitarse a los 30 m superiores del perfil en los casos de perfiles con espesor de suelo significativo.

7.3.2 Definición del tipo de perfil de suelo (A.2.4.4, NSR-10)

El ingeniero geotecnista (Construsuelos Ltda, Ing Antonio Vergel), definió un perfil de suelo **Tipo D. Ver Informe de suelos.**

7.4 Coeficiente de Ampliación (A.2.4.5.5 - A.2.4.5.6, NSR-10)

En la **tabla A.2.4-3** se dan los valores del coeficiente F_a que amplifica las ordenadas del espectro en roca para tener en cuenta los efectos de sitio en el rango de períodos cortos del orden de T_0 , como muestra la **figura A.2.4-1**. Para valores intermedios de A_a se permite interpolar linealmente entre valores del mismo tipo de perfil.

En la **tabla A.2.4-4** se dan los valores del coeficiente F_v que amplifica las ordenadas del espectro en roca para tener en cuenta los efectos de sitio en el rango de períodos intermedios del orden de 1s. Estos coeficientes se presentan también en la **figura A.2.4-2**. Para valores intermedios de A_a se permite interpolar linealmente entre valores del mismo tipo de perfil.

7.4 Coeficiente de Importancia (A.2.5, NSR-10)

7.4.1 Grupo de uso (A.2.5.1, NSR-10)

El proyecto se definió como una edificación de atención a la comunidad. Este grupo comprende aquellas edificaciones, y sus accesos, que son indispensables después de un temblor para atender la emergencia y preservar la salud y la seguridad de las personas, exceptuando las incluidas en el grupo IV. Por tal motivo clasificamos su Grupo de uso como estructura de ocupación especial (Grupo **III**).

7.4.2 Coeficiente de Importancia (A.2.5.2, NSR-10)

El **Coeficiente de Importancia, I** , modifica el espectro, y con ello las fuerzas de diseño, de acuerdo con el grupo de uso a que esté asignada la edificación para tomar en cuenta que para edificaciones de los **grupos II, III y IV** deben considerarse valores de aceleración con una probabilidad menor de ser excedidos que aquella del diez por ciento en un lapso de cincuenta años considerada en el **numeral**

A.2.2.1. Los valores de I se dan en la **tabla A.2.5-1**. De acuerdo con la clasificación anterior (**Grupo III**) el coeficiente de importancia (I) es **1.25** (**Tabla A.2.5-1, NSR-10**).

7.5 Determinación del espectro de diseño (A.2.6, NSR-10)

La forma del espectro elástico de aceleraciones (**A.2.6.1, NSR-10**), S_a expresada como fracción de la gravedad, para un coeficiente de cinco por ciento (5%) del amortiguamiento crítico, que se debe utilizar en el diseño, se da en la **figura A.2.6-1** y se define por medio de la **ecuación A.2.6-1**, con las limitaciones dadas en **A.2.6.1.1 a A.2.6.1.3**.

$$S_a = \frac{1.2 A_v F_v I}{T}, \quad (\text{A.2.6-1})$$

El valor del período fundamental de la edificación, T , debe obtenerse a partir de las propiedades de su sistema de resistencia sísmica, en la dirección bajo consideración, de acuerdo con los principios de la dinámica estructural, utilizando un modelo matemático linealmente elástico de la estructura.

El valor de T no puede exceder $C_u T_a$, donde C_u se calcula por medio de la ecuación **A.4.2-2** y T_a se calcula de acuerdo con **A.4.2-3**.

$$C_u = 1.75 - 1.2 A_v F_v, \quad (\text{A.4.2-2})$$

$$C_u = 1.75 - 1.2 * 0.1 * 2.4 = 1.462$$

$$C_u > 1.2$$

$$C_u T_a = 1.462 * 0.41459 = 0.6061$$

Donde T_a se calcula de acuerdo a **A.4.2-3**.

Pero C_u no debe ser menor de 1.2.

Alternativamente el valor de T puede ser igual al período fundamental aproximado, T_a , que se obtenga por medio de la ecuación **A.4.2-3**.

$$T_a = C_t h^\alpha, \quad (\text{A.4.2-3})$$

Donde C_t y α tienen los valores dados en la **tabla A.4.2-1**.

Tabla A.4.2-1.		
Valor de los parámetros C_t y α para el cálculo del período aproximado T_a		
Sistema estructural de resistencia sísmica	C_t	α
Pórticos resistentes a momentos de concreto reforzado que resisten la totalidad de las fuerzas sísmicas y que no están limitados o adheridos a componentes más rígidos, estructurales o no estructurales, que limiten los desplazamientos horizontales al verse sometidos a las fuerzas sísmicas.	0.047	0.9
Pórticos resistentes a momentos de acero estructural que resisten la totalidad de las fuerzas sísmicas y que no están limitados o adheridos a componentes más rígidos, estructurales o no estructurales, que limiten los desplazamientos horizontales al verse sometidos a las fuerzas sísmicas.	0.072	0.8

Pórticos arriostrados de acero estructural con diagonales excéntricas restringidas a pandeo.	0.073	0.75
Todos los otros sistemas estructurales basados en muros de rigidez similar o mayor a la de muros de concreto o mampostería	0.049	0.75
Alternativamente, para sistemas de muros estructurales de concreto reforzado o mampostería estructural, pueden emplearse los siguientes parámetros C_t y α , donde C_w se calcula utilizando la ecuación A.4.2-4.	$\frac{0.0062}{\sqrt{C_w}}$	1.00

$$T_a = T = 0.047 * (3.635)^{0.9} = 0.1502 \text{ s}$$

$$S_a = \frac{1.2 * 0.1 * 2.4 * 1.25}{0.1502} = 2.397$$

Para períodos de vibración menores de T_C , calculado de acuerdo con la ecuación **A.2.6-2**, el valor de S_a puede limitarse al obtenido de la ecuación **A.2.6-3**.

$$T_c = 0.48 \frac{A_v F_v}{A_a F_a}, \text{ (A.2.6-2)}$$

y

$$S_a = 2.5 A_a F_a I, \text{ (A.2.6-3)}$$

Para períodos de vibración mayores que T_L , calculado de acuerdo con la ecuación **A.2.6-4**, el valor de S_a no puede ser menor que el dado por la ecuación **A.2.6-5**.

$$T_L = 2.4 F_v, \text{ (A.2.6-4)}$$

y

$$S_a = \frac{1.2 A_v F_v T_L I}{T^2}, \text{ (A.2.6-5)}$$

El periodo de vibración (T_c), en segundos, correspondiente a la transición entre la zona de aceleración constante del espectro de diseño, para periodos cortos, y la parte descendente del mismo se calcula por la Formula **A.2.6-2 NSR-10**.

$$T_c = 0.48 \frac{0.1 * 2.4}{0.1 * 1.6} = 0.72 \text{ s}$$

$$T_L = 2.4 * 2.4 = 5.76 \text{ s}$$

$$S_a = \frac{1.2 * 0.1 * 2.4 * 5.76 * 1.25}{0.1502^2} = 91.965$$

Como el periodo de vibración de la estructura (T) es menor que el periodo de vibración (T_c), en **NSR-10** se permite utilizar una aceleración máxima horizontal de diseño (S_a) calculada por la Formula **A.2.6-3 NSR-10**.

$$S_a = 2.5 * 0.1 * 1.6 * 1.25 = 0.50 \text{ de la aceleración de la gravedad.}$$

$S_a = 0.50$ de la aceleración de la gravedad.

EVALUACION DE CARGAS SISMICAS			
METODO DE LA FUERZA HORIZONTAL EQUIVALENTE			
Proyecto : EDIFICACIÓN DE UN PISO			
$F_a = 1.6$	$S_{a\text{inte}} = 2.397$	$\alpha = 0.90$	
$A_a = 0.1$	$S_{a\text{max}} = 0.500$	$S_{a\text{min}} = 91.965$	$C_t = 0.047$
$A_d =$	$T_a = T = 0.15016$	$S_a = 0.500$	$R = 2.5$
Tipo de Perfil = D	$T_c = 0.720$	$K = 1.00$	$F_s = 115,690 \text{ N}$
$I = 1.25$	$T_L = 5.76$		$E = 46,276 \text{ N}$
$\phi_p = 1.0$	$g = 10 \text{ m/s}^2$	$C_u T_a = 0.2195$	
$\phi_a = 1.0$	$M = 23,138 \text{ Kgf}$	$C_u = 1.462 \text{ (Cu} \geq 1.2)$	
$\phi_r = 1.0$		$F_v = 2.4$	
$\Omega_o = 3.0$	SISTEMA ESTRUCTURAL: Pórticos Resistente a Momentos		$A_v = 0.1$
$R_o = 2.5$			

7.6 Método de la Fuerza Horizontal Equivalente: FHE (A.4.3, NSR-10).

Para el análisis del sistema de resistencia sísmica, se utilizó el Método de la Fuerza Horizontal Equivalente, ya que la edificación se ubica en la zona de amenaza sísmica baja.

El cortante sísmico en la base, V_s , equivalente a la totalidad de los efectos inerciales horizontales producidos por los movimientos sísmicos de diseño, en la dirección en estudio, se obtiene por medio de la siguiente ecuación:

$$V_s = S_a g M, \text{ (A.4.3-1)}$$

El valor de S_a en la ecuación anterior corresponde al valor de la aceleración, como fracción de la de la gravedad, leída en el espectro definido en **A.2.6** para el período T de la edificación. El termino $g * M$ es equivalente en este caso al peso muerto total del edificio.

La fuerza sísmica horizontal, F_x , en cualquier nivel x , para la dirección en estudio, debe determinarse usando la siguiente ecuación:

$$F_x = C_{vx} V_x, \quad (\text{A.4.3-2})$$

y

$$C_{vx} = \frac{m_x h_x^k}{\sum_{i=1}^n (m_i h_i^k)}, \quad (\text{A.4.3-3})$$

Donde k es un exponente relacionado con el período fundamental, T , de la edificación de la siguiente manera:

- (a) Para T menor o igual a 0.5 segundos, $k=1.0$,
- (b) Para T entre 0.5 y 2.5 segundos, $k=0.75+0.5T$, y
- (c) Para T mayor que 2.5 segundos, $k=2.0$.

Se determina la Irregularidad en planta y en altura:

$$1.4 \left(\frac{\Delta_1 + \Delta_2}{2} \right) \geq \Delta_1 > 1.2 \left(\frac{\Delta_1 + \Delta_2}{2} \right), \quad 1aP \rightarrow \phi_p = 0.9$$

$$\Delta_1 > 1.4 \left(\frac{\Delta_1 + \Delta_2}{2} \right), \quad 1bP \rightarrow \phi_p = 0.8$$

$$a) 1.3b, \quad \text{Tipo } 3A \rightarrow \phi_a = 0.9$$

SENTIDO X IRREGULARIDAD EN PLANTA				COCINA		$1.2\left(\frac{\Delta_1+\Delta_2}{2}\right)$	$\Delta_1>1.2\left(\frac{\Delta_1+\Delta_2}{2}\right)$	$\Delta_1>1.2\left(\frac{\Delta_1+\Delta_2}{2}\right)$
	Coef. Capac. Disipación de Energía básio							
		NUDO		DESPLAZAMIENTO				
		R0			Δ_1	Δ_2		ϕ_p
				cm	cm			
NIVEL 1	2.5	1	19	0.634413	0.770680	0.8431		1.0

SENTIDO Y IRREGULARIDAD EN PLANTA				COCINA				$1.2\left(\frac{\Delta_1+\Delta_2}{2}\right)$	$\Delta_1>1.2\left(\frac{\Delta_1+\Delta_2}{2}\right)$	$\Delta_1<1.2\left(\frac{\Delta_1+\Delta_2}{2}\right)$	
	Coef. Capac. Disipación de Energía básico										
		NUDO		DESPLAZAMIENTO							
		R0		Δ_1	Δ_2		ϕ_p				ϕ_p
				cm	cm						
NIVEL 1	2.5	1	3	0.685245	0.647734	0.799787		1.0			

SENTIDO X IRREGULARIDAD EN PLANTA		UMBRALES COCINA				$1.2 \left(\frac{\Delta_1 + \Delta_2}{2} \right)$	$\Delta_1 \left(1.2 \left(\frac{\Delta_1 + \Delta_2}{2} \right) \right)$	$\Delta_1 \left(1.2 \left(\frac{\Delta_1 + \Delta_2}{2} \right) \right)$
	Coef. Capac. Disipación de Energía básico	NUDO		DESPLAZAMIENTO				
	R ₀			Δ_1	Δ_2		ϕ_p	ϕ_p
				cm	cm			
NIVEL 1	2.5	1	19	0.114194	0.127272	0.1449		1.0

SENTIDO Y IRREGULARIDAD EN PLANTA		UMBRALES COCINA				$1.2 \left(\frac{\Delta_1 + \Delta_2}{2} \right)$	$\Delta_1 \left(1.2 \left(\frac{\Delta_1 + \Delta_2}{2} \right) \right)$	$\Delta_1 \left(1.2 \left(\frac{\Delta_1 + \Delta_2}{2} \right) \right)$
	Coef. Capac. Disipación de Energía básico	NUDO		DESPLAZAMIENTO				
	R ₀			Δ_1	Δ_2		ϕ_p	ϕ_p
				cm	cm			
NIVEL 1	2.5	1	7	0.123344	0.116592	0.143962		1.0

7.7 Capítulo A.12 Requisitos Especiales para Edificaciones Indispensables de los grupos de uso III y IV

El propósito (A.12.1.1, NSR-10) del presente Capítulo contiene los requisitos adicionales, a los contenidos en los capítulos restantes del presente Título, que se deben cumplir en el diseño y construcción sísmo resistente de las edificaciones pertenecientes al grupo de uso IV, definido en A.2.5.1.1, y las incluidas en los literales (a), (b), (c) y (d) del grupo de uso III, tal como lo define A.2.5.1.2, esenciales para la recuperación de la comunidad con posterioridad a la ocurrencia de una emergencia, incluyendo un sismo, con el fin de garantizar que puedan operar durante y después de la ocurrencia de un temblor, con el fin de garantizar que puedan operar durante y después de la ocurrencia de un temblor. En relación con las edificaciones incluidas en los literales (e) y (f) del Grupo III, como lo define A.2.5.1.2, queda a decisión del propietario en el primer caso o de la autoridad competente en el segundo definir si se requiere adelantar el diseño de ellas según los requisitos especiales del Capítulo A.12.

La Metodología (A.12.1.3, NSR-10) para la determinación de la operatividad de la edificación con posterioridad a la ocurrencia de un sismo se realiza verificando que la edificación se mantiene dentro del rango elástico de respuesta al verse sometida a unas solicitaciones sísmicas correspondientes al inicio del daño, o umbral de daño.

El **procedimiento de verificación (A.12.1.4, NSR-10)** además de los pasos que deben cumplirse en el diseño de la edificación presentados en A.1.3.4, deben realizarse los siguientes pasos adicionales,

con el fin de verificar que la estructura y los elementos no estructurales se mantienen dentro del rango elástico de respuesta cuando se presenten los movimientos sísmicos correspondientes al umbral de daño:

Paso A. Movimientos sísmicos correspondientes al umbral de daño

Paso B. Fuerzas sísmicas correspondientes al umbral de daño

Paso C. Análisis de la estructura para las fuerzas sísmicas correspondientes al umbral de daño

Paso D. Verificación para el umbral de daño

Movimientos Sísmicos del Umbral de Daño (A.12.2, NSR-10), los movimientos sísmicos del umbral de daño (A.12.2.1, NSR-10), se definen para una probabilidad del ochenta por ciento de ser excedidos en un lapso de cincuenta años, en función de la aceleración pico efectiva al nivel del umbral de daño, representada por el parámetro A_d . El valor de este coeficiente, para efectos del presente Reglamento, debe determinarse de acuerdo con A.12.2.2 y A.12.2.3.

Se determina el número de la región (A.12.2.2, NSR-10), en donde está localizada la edificación usando el Mapa de la **figura A.12.2-1**. El valor de A_d se obtiene de la **tabla A.12.2-1**, en función del número de la región, o para las ciudades capitales de departamento utilizando la **tabla A.12.2-2** y para los municipios del país en el **Apéndice A-4**, incluido al final del presente Título.

Espectro Sísmico para el Umbral de Daño (A.12.3, NSR-10), los parámetros para determinar el espectro de aceleraciones horizontales (A.12.3.1, NSR-10) para el umbral de daño en el campo elástico, para un amortiguamiento crítico de dos por ciento (2%), que se debe utilizar en las verificaciones del umbral de daño, se dan en la **figura A.12.3-1**. El espectro del umbral de daño se define por medio de la **ecuación A.12.3-1**, en la cual el valor T es el mismo que se utilizó para obtener el espectro sísmico de diseño de la edificación en el **Capítulo A.2** y el valor de S es igual a $1.25F_v$, siendo F_v el valor del coeficiente de amplificación que afecta la aceleración en la zona de períodos intermedios debida a los efectos de sitio que se obtiene de acuerdo con la **sección A.2.4**, empleando allí para A_v el valor de A_d según A.12.2. Además deben cumplirse las limitaciones dadas en A.12.3.2 a A.12.3.4.

$$S_{ad} = \frac{1.5A_d\bar{S}}{T} = \frac{1.5 * 0.03 * (1.25 * 2.4)}{0.1502} = 0.8988$$

$$S_{ad} = A_d(1.0 + 8T) = 0.03 * (1.0 + 8 * 0.1502) = 0.066$$

$$T_{Cd} = 0.5\bar{S} = 0.5 * 1.25 * 2.4 = 1.5$$

$$S_{ad} = 3.0A_d = 3.0 * 0.03 = 0.09$$

$$T_{Ld} = 2.4\bar{S} = 2.4 * 1.25 * 2.4 = 7.2$$

$$S_{ad} = \frac{1.5A_d\bar{S}T_{Ld}}{T^2} = \frac{1.5 * 0.03 * 1.25 * 2.4 * 7.2}{0.1502^2} = 43.08$$

Como el periodo de vibración del sistema elástico (en segundos) de la estructura (T) es menor que el periodo de vibración (T_{Cd}), la **NSR-10** permite utilizar el espectro de aceleraciones horizontales para el umbral de daño en el campo elástico de diseño (S_{ad}) calculada por la Formula **A.12.3-2 NSR-10**.

$S_{ad} = 0.09$ de la aceleración de la gravedad.

7.8 La configuración estructural de la edificación (A.3.3, NSR-10), debe clasificarse como regular o como irregular en planta y en altura o como redundante o con ausencia de redundancia. Se sabe que no solamente es la forma exterior de ella y su tamaño, sino la naturaleza, las dimensiones y la localización de los elementos estructurales, y no estructurales, que afecten el comportamiento de la edificación ante las solicitaciones sísmicas.

Se determina la Irregularidad en planta y en altura:

$$1.4\left(\frac{\Delta_1 + \Delta_2}{2}\right) \geq \Delta_1 \rangle 1.2\left(\frac{\Delta_1 + \Delta_2}{2}\right), \quad 1aP \rightarrow \phi_p = 0.9$$

$$\Delta_1 \rangle 1.4\left(\frac{\Delta_1 + \Delta_2}{2}\right), \quad 1bP \rightarrow \phi_p = 0.8$$

$$a) 1.3b, \quad Tipo \ 3A \rightarrow \phi_a = 0.9$$

Se toman los desplazamientos del software, cuando el sismo actúa el 100% en el sentido X e Y. Se toma primero del primer nivel o losa en el sentido X(SX) y luego en el sentido Y(SY) del mismo piso. Luego se procede igual para el segundo nivel.

8.0 COMBINACIONES DE CARGAS

8.1 Diseño estructural

Basándose en el apéndice C-C, Factores de carga y reducción de la resistencia alternativa: Este Apéndice es nuevo y permite el uso de las ecuaciones de combinación de carga y los factores de reducción de resistencia ϕ que se empleaban en el Reglamento de 1984 y en el NSR-98.

Para el diseño estructural se utilizaron las combinaciones básicas que requiere la NSR-98 en el párrafo B.2.4.2., para el método del estado límite de resistencia.

- 1- $1.40*D + 1.70*L$
- 2- $0.90*D + 1.00*E$
- 3- $1.05*D + 1.28*L + 1.0*E$

La fuerza E utilizada en las anteriores ecuaciones es igual a $E = F_s / R$. Se estudió el efecto de la variabilidad del sentido de la fuerza sísmica y se tuvo en cuenta sus efectos ortogonales (100% en un sentido y 30% en el sentido perpendicular). Para aplicación de las combinaciones de carga en el programa Etabs, se emplearon las siguientes 6 hipótesis básicas de carga.

- 1 - $1.4*CM + 1.7*CV$
- 2 - $0.9 (1.4*CM + 1.7*CV)$
- 3 - *Fuerza Sísmica en el sentido +X más 5% de excentricidad.*
- 4 - *Fuerza Sísmica en el sentido +Y más 5% de excentricidad.*
- 5 - *Fuerza Sísmica en el sentido – X más 5% de excentricidad.*
- 6 - *Fuerza Sísmica en el sentido – Y más 5% de excentricidad.*

8.2 Derivas de diseño

Las derivas de diseño límite para esta estructura se fijaron de acuerdo al párrafo A.6.4.1 NSR-10 como el 1.0% de la altura del piso.

A.6.4.1 La deriva máxima para cualquier piso determinada de acuerdo con el procedimiento de A.6.3.1, no puede exceder los límites establecidos en la tabla A.6.4-1, en la cual la deriva máxima se expresa como un porcentaje de la altura de piso h_{pi} :

Tabla A.6.4-1 Derivas máximas como porcentaje de h_{pi}	
<i>Estructura de:</i>	<i>Deriva máxima</i>
Concreto reforzado, metálicas, de madera, y de mampostería que cumplen los requisitos de A.6.4.2.2	$1.0\% \left(\Delta_{\max}^i \leq 0.01h_{pi} \right)$
De mampostería que cumplen los requisitos de A.6.4.2.3	$0.5\% \left(\Delta_{\max}^i \leq 0.005h_{pi} \right)$

Altura del piso para efectos de diseño = 3.735 m.

Deriva Límite = $0.010 * 3.51 \text{ m} = \mathbf{0.0351 \text{ m}}$

Deriva Máxima (A.6.3.1). La deriva máxima para cualquier piso debe obtenerse así:

A.6.3.1.1 — En edificaciones regulares e irregulares que no tengan irregularidades en planta de los tipos 1aP ó 1bP (véase la tabla A.3-6), o edificaciones con diafragma flexible, la deriva máxima para el piso i , Δ_{\max}^i , corresponde a la mayor deriva de las dos direcciones principales en planta, j , calculada como el valor absoluto de la diferencia algebraica de los

desplazamientos horizontales del centro de masa del diafragma del piso i , $\delta_{cm,j}$, en la dirección principal en planta bajo estudio con respecto a los del diafragma del piso inmediatamente inferior $(i-1)$ en la misma dirección, incluyendo los efectos P-Delta.

$$\Delta_{\max}^i = \sqrt{\sum_{j=1}^2 (\delta_{tot,j}^i - \delta_{tot,j}^{i-1})^2}, \quad (\text{A.6.3-1})$$

Alternativamente se pueden usar procedimientos para estimar respuestas máximas de cantidades vectoriales. El cumplimiento del cálculo de la deriva para cualquier punto del piso se puede realizar verificándola solamente en todos los ejes verticales de columna y en los puntos localizados en los bordes de los muros estructurales. La máxima deriva del piso i , Δ_{\max}^i , corresponde a la máxima deriva que se obtenga de todos los puntos así estudiados dentro del mismo piso i .

Se toman los datos arrojados del Software.

8.3 Requisitos de la Deriva para el Umbral de Daño (A.12.5, NSR-10)

Los desplazamientos horizontales para el umbral de daños (A.12.5.1, NSR-10), en las dos direcciones principales en planta, que tienen todos los grados de libertad de la estructura al verse afectada por los movimientos sísmicos para el umbral de daño, definidos en A.12.2, se determinan por medio del análisis estructural realizado utilizando el método de análisis definido en A.12.4 y con las rigideces indicadas en A.12.4.2. Los desplazamientos horizontales para el umbral de daño, en cualquiera de las direcciones principales en planta y para cualquier grado de libertad de la estructura, se obtienen por medio de la ecuación A.6.2-1, con la excepción de que no hay necesidad de incluir los desplazamientos causados por los efectos P-Delta.

La deriva máxima, para el umbral de daño (A.12.5.2, NSR-10), en cualquier punto del piso bajo estudio se obtiene por medio de la ecuación A.6.3-1.

$$\Delta_{\max}^i = \sqrt{\sum_{j=1}^2 (\delta_{tot,j}^i - \delta_{tot,j}^{i-1})^2}, \quad (\text{A.6.3-1})$$

Límites de la deriva para el umbral de daño (A.12.5.3, NSR-10), la deriva máxima, para el umbral de daño, evaluada en cualquier punto de la estructura, determinada de acuerdo con el procedimiento de A.12.5.2, no puede exceder los límites establecidos en la **tabla A.12.5-1**, en la cual la deriva máxima se expresa como un porcentaje de la altura de piso h_{pi} :

Tabla A.12.5-1 Derivas máximas para el umbral de daño como porcentaje de h_{pi}	
Estructura de:	Deriva máxima

Concreto reforzado, metálicas, de madera, y de mampostería que cumplen los requisitos de A.12.5.3.1	$0.4\% \left(\Delta_{\max}^i \leq 0.0040 h_{pi} \right)$
De mampostería que cumplen los requisitos de A.12.5.3.2	$0.2\% \left(\Delta_{\max}^i \leq 0.0020 h_{pi} \right)$

Altura del piso para efectos de diseño = 3.735 m.

Deriva Límite = $0.0040 * 3.51 \text{ m} = \mathbf{0.01404\text{m}}$

9.0 ANÁLISIS ESTRUCTURAL

9.1 Losa maciza

El refuerzo para retracción de fraguado y variación de temperatura se calculo de acuerdo al parágrafo C.7.12.1 y C.7.12.2.

Espesor de la loseta: 0.1 m Espaciamiento máximo $s = 5 * 0.10\text{m} = 0.5\text{m}$,
del refuerzo de retracción

$$s \leq 5h \qquad s \leq 5 * 100\text{mm} = 500\text{mm}$$

$$s \leq 450\text{mm} \qquad s \leq 450\text{mm}$$

Colocar Malla electrosoldada de 8 mm cada 0.15 m (6.00 m x 2.35 m). Traslapo mínimo 25 cm.

$$R_o = 0.503 / (10 * 15) = 0.0033 > 0.0018, \text{ OK.}$$

9.2 Cargas

La carga total sobre las vigas se determinó de la siguiente forma: Se tomó el peso total de las cargas de Acabados y Elementos estructurales sin incluir el peso de las vigas ni vigas de borde.

Área de las losas por Bloque , Ver Anexos.

Elementos estructurales	2.4 kN/m²
Placa Maciza o Losa 0.10*24	2.40

Cargas mínimas Horizontales :	1.525 kN/m²
Rellenos de Piso	kN/m²
Concreto con piedra	0.025
Pisos y Acabados	kN/m²

Afinado (25 mm) sobre concreto de agregado pétreo	1.50
---	------

Cargas mínimas Verticales :	0.00 kN/m²
Muros	kN/m²
Muros	0.458
Ventanas	kN/m²
Ventanas, vidrio, entramado y marco	0.00
Enchapes	kN/m²
Enchape en Granito	0.017

Total Cargas Muertas	2.4+1.525+0.475	4.4 kN/m²
-----------------------------	------------------------	-----------------------------

Total Cargas Vivas	Salones de clases	2.00 kN/m²
Total Cargas Vivas	Corredores y Escaleras	5.00 kN/m²

Carga de Servicio	4.4+ 2.0	6.40 kN/m²
Carga Mayorada	1.4*4.40 + 1.7*2.0	9.56 kN/m²
Factor de Carga (F.C.)	9.56 / 6.40	1.49

Peso propio vigas

Vigas de Carga y Sismo	0.40*0.40*24	3.84 kN/m
Vigas de carga y sismo Mayoradas	3.84*1.4	5.376 kN/m

10.0 Diseño de Cimentación

- Tipo de Cimentación: Zapata individual, con vigas de amarre.
- La profundidad de cimentación (D_f) = 1.00 m con respecto a la cota actual del terreno, más un solado de espesor de 5 cm.
- $Q_{adm} = 14.10 \text{ t / m}^2 = 1.41 \text{ Kgf / cm}^2 = 141.0 \text{ kPa}$

Donde ;

Q_{adm} = Carga Admisible.

Se deben seguir las recomendaciones del estudio de suelos.

Vigas de Amarre de la Cimentación (C.15.13, NSR-10). Fuerzas de diseño (C.15.13.1) – En el diseño de las vigas de amarre de cimentación, deben cumplirse los siguientes requisitos:

- (a) Los de **A.3.6.4.2** con respecto a las fuerzas axiales que debe resistir la viga de amarre por efectos sísmicos,
- (b) Las recomendaciones que al respecto contenga el estudio geotécnico, y
- (c) Las del Título H del Reglamento.

Dimensiones mínimas (**C.15.13.3, NSR-10**). Las dimensiones de las vigas de amarre deben establecerse en función de las solicitaciones que las afecten, dentro de las cuales se cuentan la resistencia a fuerzas axiales por razones sísmicas y la rigidez y características para efectos de diferencias de carga vertical sobre los elementos de cimentación y la posibilidad de ocurrencia de asentamientos totales y diferenciales.

Las vigas de amarre (**C.15.13.3.1, NSR-10**), deben tener una sección tal que su mayor dimensión debe ser mayor o igual a la luz dividida por **20** para estructuras con capacidad especial de disipación de *energía (DES)*, a la luz dividida por **30** para estructuras con capacidad moderada de disipación de *energía (DMO)* y a la luz dividida por **40** para estructuras con capacidad mínima de disipación de *energía (DMI)*.

A.3.6.4 — AMARRES Y CONTINUIDAD — Todos los elementos estructurales deben interconectarse. La conexión y los elementos conectores deben ser capaces de transmitir las fuerzas sísmicas inducidas por las partes que conectan; además de los requisitos del Capítulo A.8, deben cumplirse los siguientes requisitos:

A.3.6.4.1 — Partes de la edificación — Cualquier parte o porción de la edificación que forme un conjunto indistintamente diferenciado del resto de la estructura, pero que esté estructuralmente vinculado a ésta, debe estar vinculada y amarrada al resto de la edificación por medio de elementos de conexión cuya resistencia se diseñe teniendo en cuenta las fuerzas axiales, de corte y de flexión transmitidas por la interacción entre las partes bajo las combinaciones de carga especificadas en el Título B. La fuerza sísmica involucrada, como mínimo, debe ser $(0.40A_{ag})$ veces la masa de la parte o porción. Es particularmente importante que, en el caso de esta conexión, en el análisis no se utilice nudo maestro u otro método de igualación de grados de libertad para el análisis bajo cargas laterales.

Vigas de amarre en la cimentación (**A.3.6.4.2, NSR-10**). Los elementos de cimentación, tales como zapatas, dados de pilotes, pilas o "caissons", etc., deben amarrarse por medio de elementos capaces de resistir en tensión o compresión una fuerza no menor de $(0.25A_a)$ veces la carga vertical total del elemento que tenga la mayor carga entre los que interconecta, además de las fuerzas que le transmita la superestructura. Para efectos del diseño de la cimentación debe cumplirse lo prescrito en A.3.7.

A.1.5.3 - MEMORIAS - Los planos deben ir acompañados por memorias de diseño y cálculo en las cuales se describan los procedimientos por medio de los cuales se realizaron los diseños.

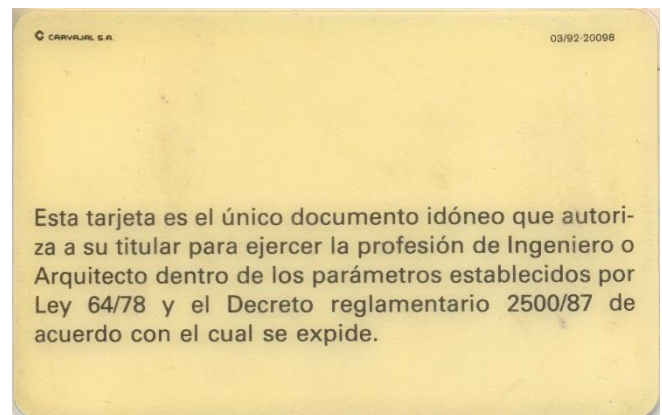
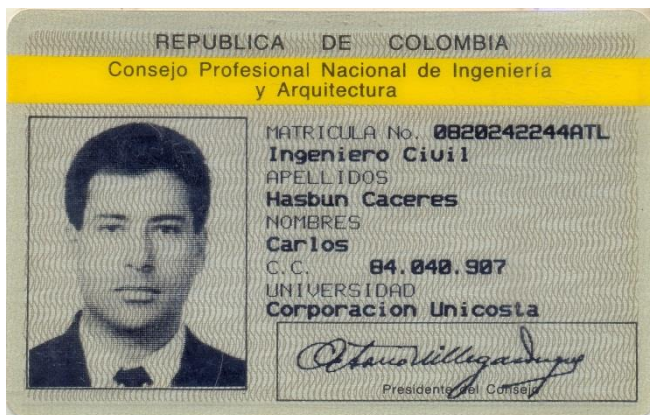
A.1.5.3.1 - Memorias Estructurales - *Los planos estructurales que se presenten para obtener la licencia de construcción deben ir acompañados de la memoria justificativa de cálculos, firmada por el Ingeniero que realizó el diseño estructural. En esta memoria debe incluirse*

una descripción del sistema estructural usado, y además deben anotarse claramente las cargas verticales, el grado de capacidad de disipación de energía del sistema de resistencia sísmica, el cálculo de la fuerza sísmica, el tipo de análisis estructural utilizado y la verificación de que las derivas máximas no fueron excedidas. *Cuando se use un equipo de procesamiento automático de información, además de lo anterior, debe entregarse una descripción de los principios bajo los cuales se realiza el modelo digital y su análisis estructural y los datos de entrada al procesador automático debidamente identificados. Los datos de salida pueden utilizarse para ilustrar los resultados y pueden incluirse en su totalidad en un anexo a las memorias de cálculo, pero no pueden constituirse en sí mismos como memorias de cálculo, requiriéndose de una memoria explicativa de su utilización en el diseño.*

Carlos Hasbun C.

I.C. CARLOS HASBUN CACERES

Ingeniero Civil
Especialista en Estructuras
Mat. # 08202-42244 Atl.



DISEÑO ESTRUCTURAL

PROYECTO	: I.E.D. VILLAS DE SAN PABLO
PROPIETARIO	: DISTRITO DE BARRANQUILLA / DPTO DEL ATLÁNTICO
DIRECCION	: CALLE 142A CON CARRERA 26B
BARRIO	: CORREGIMIENTO DE JUAN MINA
CIUDAD	: CORREGIMIENTO DE JUAN MINA, JURISDIPCION DE BARRANQUILLA / DPTO ATLÁNTICO

CALCULOS ESTRUCTURALES
Ing. Carlos Hasbún Cáceres.
Mat. # 08202-42244 Atlántico
E-Mail: carloshasbun11@yahoo.es

COCINA

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

STORY	POINT	LOAD	FX	FY	FZ	MX	MY	MZ
BASE	1	CM	1018.37	917.07	10632.84	-98144.639	84197.081	-69.102
BASE	1	CV	273.78	153.70	2544.59	-17087.596	17029.345	-74.660
BASE	2	CM	-1122.50	523.34	9765.58	-53076.134	-165782.278	872.003
BASE	2	CV	-434.45	-2.15	560.67	500.965	-65658.840	80.595
BASE	3	CM	-646.98	413.66	10182.91	-49840.968	-109422.546	1173.291
BASE	3	CV	-167.30	3.27	1997.80	-435.090	-34153.537	17.631
BASE	4	CM	2264.82	-255.27	21533.35	39545.714	231041.551	-69.102
BASE	4	CV	765.77	-27.70	5473.63	4218.047	75299.788	-74.660
BASE	5	CM	-1501.31	-183.81	14885.81	29467.937	-209666.250	548.212
BASE	5	CV	-577.12	-2.89	1150.32	585.795	-81866.009	43.422
BASE	6	CM	-496.63	33.63	17835.36	-3419.020	-91289.403	514.190
BASE	6	CV	-104.75	2.37	3352.08	-317.178	-26305.908	-1.620
BASE	7	CM	2123.64	-283.53	19864.08	42864.720	214939.355	-69.102
BASE	7	CV	753.50	-36.11	5208.47	5205.843	74376.714	-74.660
BASE	8	CM	-949.62	-136.14	13747.07	20528.383	-131715.570	345.777
BASE	8	CV	-368.66	-2.99	1117.22	497.597	-51616.410	33.405
BASE	9	CM	-481.12	-59.22	17255.63	8654.072	-89442.310	362.042
BASE	9	CV	-85.33	0.18	3330.01	-37.057	-23704.462	-41.722
BASE	10	CM	2132.21	3.80	20293.02	9118.465	216390.825	-69.102
BASE	10	CV	752.30	10.73	5266.76	-295.795	74715.743	-74.660
BASE	11	CM	-1437.42	-28.19	14278.77	10748.796	-201288.276	449.979
BASE	11	CV	-549.54	-4.97	1118.67	827.831	-77661.786	40.377
BASE	12	CM	-496.55	17.50	17474.80	76.920	-90404.934	308.982
BASE	12	CV	-92.23	-0.61	3361.52	73.901	-23881.490	-56.137
BASE	13	CM	2040.19	-401.75	19616.97	56749.876	206066.007	-69.102
BASE	13	CV	691.86	-56.73	4936.48	7626.880	68138.904	-74.660
BASE	14	CM	-1397.76	-260.93	14036.04	37989.832	-196164.416	392.759
BASE	14	CV	-518.63	-4.11	1037.86	728.225	-73532.694	42.834
BASE	15	CM	-503.17	-167.16	16669.09	22745.334	-90704.464	236.733
BASE	15	CV	-92.86	-1.77	3081.03	234.406	-23454.159	-39.176
BASE	16	CM	1629.89	-380.99	15399.57	54311.249	158268.122	-69.102
BASE	16	CV	566.23	-44.38	4027.74	6176.687	53806.295	-74.660

BASE	17	CM	-1257.59	-328.48	11616.38	46089.543	-179388.707	298.930
BASE	17	CV	-468.91	-7.81	865.52	1163.837	-67301.985	23.508
BASE	18	CM	-541.28	-114.24	14614.08	16905.938	-94837.173	151.677
BASE	18	CV	-102.36	-5.29	2681.17	676.207	-24170.304	-57.716
BASE	19	CM	1420.02	427.13	16097.26	-40601.415	133948.628	-69.102
BASE	19	CV	262.09	30.10	2809.51	-2570.574	18442.396	-74.660
BASE	20	CM	-1202.60	532.20	13645.19	-54598.835	-172634.679	498.740
BASE	20	CV	-368.48	3.60	532.56	-170.003	-55211.916	89.674
BASE	21	CM	-594.60	-268.61	7805.05	35616.409	-100776.042	241.646
BASE	21	CV	-134.89	-6.42	1004.37	823.397	-27674.191	-71.752

Summation	0, 0, Base	CM	0.00	0.00	317248.87	806382429.4	-172370715.3	-8505141.82
Summation	0, 0, Base	CV	0.00	0.00	55457.98150093959.06	-34795850.6	-3129283.079	

POINT DISPLACEMENTS

STORY	POINT	LOAD	UX	UY	UZ	RX	RY	RZ
STORY2	3	SX	0.9233	-0.0013	-0.0044	0.00000	0.00207	-0.00016
STORY2	3	SY	0.0178	0.7483	0.0042	-0.00030	0.00003	0.00006
STORY2	6	SX	1.0816	-0.0013	-0.0051	0.00000	0.00310	-0.00012
STORY2	6	SY	0.0095	0.7465	-0.0012	-0.00025	0.00000	0.00001
STORY2	9	SX	1.1227	-0.0013	-0.0046	0.00000	0.00325	0.00000
STORY2	9	SY	0.0060	0.7449	0.0004	-0.00023	0.00001	0.00002
STORY2	12	SX	1.1165	-0.0013	-0.0053	0.00000	0.00317	0.00001
STORY2	12	SY	0.0004	0.7427	-0.0006	-0.00023	0.00000	0.00002
STORY2	15	SX	1.1103	-0.0013	-0.0053	0.00000	0.00303	0.00001
STORY2	15	SY	-0.0049	0.7390	0.0011	-0.00021	-0.00001	0.00002
STORY2	18	SX	1.0684	-0.0013	-0.0051	0.00000	0.00265	0.00013
STORY2	18	SY	-0.0083	0.7356	0.0023	-0.00020	0.00000	0.00001
STORY2	21	SX	0.9488	-0.0013	-0.0046	0.00000	0.00173	0.00018
STORY2	21	SY	-0.0145	0.7351	-0.0062	-0.00024	-0.00002	0.00005
STORY1	1	SX	0.6344	0.0032	0.0024	0.00000	0.00100	-0.00002
STORY1	1	SY	0.0136	0.6852	0.0029	-0.00103	0.00002	0.00001
STORY1	2	SX	0.6284	-0.0002	0.0020	0.00000	0.00018	0.00000
STORY1	2	SY	0.0134	0.4945	0.0021	-0.00073	0.00000	-0.00004
STORY1	3	SX	0.6283	-0.0014	-0.0044	0.00000	0.00110	-0.00004
STORY1	3	SY	0.0135	0.6477	0.0037	-0.00090	0.00002	0.00017
STORY1	4	SX	0.6471	0.0032	0.0023	0.00000	0.00104	-0.00002
STORY1	4	SY	0.0093	0.6852	-0.0011	-0.00045	0.00001	0.00001
STORY1	5	SX	0.6471	-0.0003	0.0028	0.00000	0.00013	-0.00001
STORY1	5	SY	0.0090	0.4953	-0.0011	-0.00037	0.00000	-0.00001
STORY1	6	SX	0.6519	-0.0013	-0.0051	0.00000	0.00137	-0.00003
STORY1	6	SY	0.0088	0.6517	-0.0011	-0.00055	0.00001	0.00010
STORY1	7	SX	0.6606	0.0032	0.0020	0.00000	0.00115	-0.00002
STORY1	7	SY	0.0047	0.6852	0.0005	-0.00056	0.00001	0.00001
STORY1	8	SX	0.6642	-0.0004	0.0033	0.00000	-0.00017	-0.00001
STORY1	8	SY	0.0046	0.4964	0.0004	-0.00019	0.00000	-0.00002

STORY1	9	SX	0.6692	-0.0013	-0.0046	0.00000	0.00150	-0.00001
STORY1	9	SY	0.0046	0.6532	0.0004	-0.00059	0.00001	0.00011
STORY1	10	SX	0.6731	0.0032	0.0024	0.00000	0.00108	-0.00002
STORY1	10	SY	0.0004	0.6852	-0.0003	-0.00054	0.00000	0.00001
STORY1	11	SX	0.6726	-0.0004	0.0029	0.00000	0.00014	0.00000
STORY1	11	SY	0.0004	0.4948	0.0001	-0.00043	0.00000	-0.00002
STORY1	12	SX	0.6771	-0.0012	-0.0053	0.00000	0.00141	-0.00001
STORY1	12	SY	0.0003	0.6532	-0.0005	-0.00058	0.00000	0.00011
STORY1	13	SX	0.6867	0.0032	0.0025	0.00000	0.00110	-0.00002
STORY1	13	SY	-0.0042	0.6852	0.0004	-0.00054	0.00000	0.00001
STORY1	14	SX	0.6849	-0.0005	0.0028	0.00000	0.00015	-0.00001
STORY1	14	SY	-0.0041	0.4931	0.0002	-0.00038	0.00000	-0.00002
STORY1	15	SX	0.6886	-0.0012	-0.0053	0.00000	0.00139	-0.00001
STORY1	15	SY	-0.0040	0.6519	0.0010	-0.00057	-0.00001	0.00011
STORY1	16	SX	0.6978	0.0032	0.0025	0.00001	0.00113	-0.00002
STORY1	16	SY	-0.0080	0.6852	0.0020	-0.00035	-0.00004	0.00001
STORY1	17	SX	0.6933	-0.0006	0.0025	0.00000	0.00017	0.00000
STORY1	17	SY	-0.0076	0.4921	0.0014	-0.00024	0.00001	-0.00001
STORY1	18	SX	0.6950	-0.0011	-0.0051	0.00000	0.00130	0.00001
STORY1	18	SY	-0.0074	0.6500	0.0021	-0.00044	-0.00001	0.00008
STORY1	19	SX	0.7071	0.0032	0.0027	-0.00005	0.00107	-0.00002
STORY1	19	SY	-0.0111	0.6852	-0.0043	-0.00076	0.00006	0.00001
STORY1	20	SX	0.6974	-0.0006	0.0019	-0.00001	0.00024	-0.00003
STORY1	20	SY	-0.0115	0.4924	-0.0031	-0.00059	-0.00003	-0.00001
STORY1	21	SX	0.6945	-0.0011	-0.0046	0.00000	0.00108	0.00003
STORY1	21	SY	-0.0117	0.6469	-0.0056	-0.00076	-0.00001	0.00014
STORY1	22	SX	0.6344	0.0008	-0.1004	0.00000	0.00030	-0.00002
STORY1	22	SY	0.0136	0.6861	0.0005	-0.00001	0.00001	0.00001
STORY1	23	SX	0.6471	0.0008	-0.1056	-0.00002	0.00033	-0.00002
STORY1	23	SY	0.0093	0.6861	-0.0025	0.00000	0.00000	0.00001
STORY1	24	SX	0.6606	0.0008	-0.1243	0.00000	0.00044	-0.00002
STORY1	24	SY	0.0047	0.6861	-0.0005	0.00000	0.00000	0.00001
STORY1	25	SX	0.6731	0.0008	-0.1099	0.00001	0.00034	-0.00002
STORY1	25	SY	0.0004	0.6861	-0.0002	0.00000	0.00000	0.00001
STORY1	26	SX	0.6867	0.0008	-0.1104	0.00000	0.00034	-0.00002
STORY1	26	SY	-0.0042	0.6861	0.0003	-0.00001	0.00000	0.00001
STORY1	27	SX	0.6978	0.0008	-0.1145	-0.00004	0.00035	-0.00002
STORY1	27	SY	-0.0080	0.6861	0.0083	0.00007	-0.00003	0.00001
STORY1	28	SX	0.7071	0.0008	-0.1031	0.00019	0.00029	-0.00002
STORY1	28	SY	-0.0111	0.6861	-0.0158	-0.00036	0.00005	0.00001
STORY1	29	SX	0.7111	0.0032	-0.0201	-0.00010	0.00009	-0.00002
STORY1	29	SY	-0.0125	0.6852	-0.1868	-0.00066	-0.00024	0.00001
STORY1	31	SX	0.7126	-0.0006	-0.0035	-0.00002	-0.00009	-0.00007
STORY1	31	SY	-0.0120	0.4930	-0.1538	-0.00056	0.00009	-0.00003
STORY1	32	SX	0.7111	0.0008	-0.0324	0.00030	0.00005	-0.00002
STORY1	32	SY	-0.0125	0.6861	-0.1512	-0.00058	-0.00017	0.00001

STORY1	33	SX	0.6408	0.0032	0.0021	0.00000	0.00065	-0.00002
STORY1	33	SY	0.0114	0.6852	-0.0602	0.00037	-0.00037	0.00001
STORY1	34	SX	0.6408	0.0008	-0.1009	0.00000	0.00065	-0.00002
STORY1	34	SY	0.0114	0.6861	-0.0017	0.00000	-0.00037	0.00001
STORY1	35	SX	0.6539	0.0032	0.0022	0.00000	0.00075	-0.00002
STORY1	35	SY	0.0070	0.6852	0.0117	0.00026	0.00008	0.00001
STORY1	36	SX	0.6539	0.0008	-0.1172	-0.00003	0.00075	-0.00002
STORY1	36	SY	0.0070	0.6861	-0.0015	0.00000	0.00008	0.00001
STORY1	37	SX	0.6669	0.0032	0.0021	0.00000	0.00076	-0.00002
STORY1	37	SY	0.0025	0.6852	-0.0017	0.00028	-0.00001	0.00001
STORY1	38	SX	0.6669	0.0008	-0.1184	0.00002	0.00076	-0.00002
STORY1	38	SY	0.0025	0.6861	-0.0005	0.00000	-0.00001	0.00001
STORY1	39	SX	0.6799	0.0032	0.0028	0.00000	0.00070	-0.00002
STORY1	39	SY	-0.0019	0.6852	-0.0002	0.00028	-0.00001	0.00001
STORY1	40	SX	0.6799	0.0008	-0.1090	0.00000	0.00070	-0.00002
STORY1	40	SY	-0.0019	0.6861	0.0016	0.00000	-0.00001	0.00001
STORY1	41	SX	0.6923	0.0032	0.0013	0.00000	0.00069	-0.00002
STORY1	41	SY	-0.0061	0.6852	-0.0160	0.00023	-0.00008	0.00001
STORY1	42	SX	0.6923	0.0008	-0.1088	0.00000	0.00069	-0.00002
STORY1	42	SY	-0.0061	0.6861	-0.0032	0.00000	-0.00008	0.00001
STORY1	43	SX	0.7024	0.0032	0.0072	0.00001	0.00083	-0.00002
STORY1	43	SY	-0.0096	0.6852	0.0308	0.00026	0.00001	0.00001
STORY1	44	SX	0.7024	0.0008	-0.1258	-0.00001	0.00083	-0.00002
STORY1	44	SY	-0.0096	0.6861	0.0288	0.00001	0.00001	0.00001
STORY1	54	SX	0.6729	0.0021	0.0000	0.00000	0.00000	-0.00002
STORY1	54	SY	0.0005	0.6856	0.0000	0.00000	0.00000	0.00001

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

STORY	DIAPHRAGM	LOAD	POINT	X	Y	UX	UY	RZ
STORY1	D1	SX	54	73.306	2510.514	0.6729	0.0021	-0.00002
STORY1	D1	SY	54	73.306	2510.514	0.0005	0.6856	0.00001

S T O R Y D R I F T S

STORY	DIRECTION	LOAD	POINT	X	Y	Z	MAX DRIFT
STORY2	X	SX	9	1428.000	1708.000	528.500	0.002748
STORY2	Y	SY	3	1428.000	0.000	528.500	0.000609
STORY1	X	SX	19	0.000	4738.000	363.500	0.001945
STORY1	Y	SY	19	0.000	4738.000	363.500	0.001885

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

STORY	DIAPHRAGM	DIRECTION	LOAD	POINT	X	Y	Z	MAX DRIFT
STORY1	D1	X	SX	19	0.000	4738.000	363.500	0.001945
STORY1	D1	Y	SX	1	0.000	0.000	363.500	0.000009
STORY1	D1	X	SY	1	0.000	0.000	363.500	0.000037
STORY1	D1	Y	SY	19	0.000	4738.000	363.500	0.001885

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	Cartesian	0.000	0.000	0.00000	125.000	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	X	A	Primary	No	Top	0.000
GLOBAL	X	B	Primary	No	Top	811.000
GLOBAL	X	C	Primary	No	Top	1428.000
GLOBAL	Y	15	Primary	No	Left	0.000
GLOBAL	Y	13	Primary	No	Left	828.000
GLOBAL	Y	11	Primary	No	Left	1708.000
GLOBAL	Y	9	Primary	No	Left	2526.000
GLOBAL	Y	7	Primary	No	Left	3413.000
GLOBAL	Y	5	Primary	No	Left	4131.000
GLOBAL	Y	2	Primary	No	Left	4738.000

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	2038902.000	0.3000	1.1700E-05	784193.077
CONC	Iso	Concrete	All	181142.000	0.2000	9.9000E-06	75475.833
OTHER	Iso	None	All	2038902.000	0.3000	1.1700E-05	784193.077
CONC3500	Iso	Concrete	All	195656.000	0.2000	9.9000E-06	81523.333
CONCPLACA	Iso	Concrete	All	181142.000	0.2000	9.9000E-06	75475.833
CONC4000	Iso	Concrete	All	209165.010	0.2000	9.9000E-06	87152.088

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	7.9814E-06	7.8334E-03
CONC	0.0000E+00	2.4000E-03
OTHER	7.9814E-06	7.8334E-03
CONC3500	0.0000E+00	2.4000E-03
CONCPLACA	0.0000E+00	0.0000E+00
CONC4000	0.0000E+00	2.4000E-03

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	3515.348	4569.953	27679.91

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

MATERIAL NAME	LIGHTWEIGHT CONCRETE	CONCRETE FC	REBAR FY	REBAR FYS	LIGHTWT REDUC FACT
CONC	No	210.000	4200.000	4200.000	N/A
CONC3500	No	245.000	4200.000	4200.000	N/A
CONCPLACA	No	210.000	4200.000	4200.000	N/A
CONC4000	No	280.000	4200.000	4200.000	N/A

FRAME SECTION PROPERTY DATA

FRAME SECTION NAME	MATERIAL NAME	SECTION SHAPE NAME OR NAME IN SECTION DATABASE FILE	CONC COL	CONC BEAM
V40X65	CONC4000	Rectangular		Yes
V25X65	CONC4000	Rectangular		Yes
V20X65	CONC4000	Rectangular		Yes
V15X45	CONC4000	Rectangular		Yes
V50X65	CONC4000	Rectangular		Yes
V30X50	CONC4000	Rectangular		Yes
C40X40	CONC4000	Rectangular	Yes	
V55X65	CONC4000	Rectangular		Yes
V25X50	CONC4000	Rectangular		Yes
V45X65	CONC4000	Rectangular		Yes
V20X45	CONC4000	Rectangular		Yes
V20X50	CONC4000	Rectangular		Yes
V15X65	CONC4000	Rectangular		Yes
V25X45	CONC4000	Rectangular		Yes
V30X65A	CONC4000	Rectangular		Yes
V30X65	CONC4000	Rectangular		Yes
V40X75	CONC4000	Rectangular		Yes
D40	CONC4000	Circle	Yes	

FRAME SECTION PROPERTY DATA

FRAME SECTION NAME	SECTION DEPTH	FLANGE WIDTH TOP	FLANGE THICK TOP	WEB THICK	FLANGE WIDTH BOT	FLANGE THICK BOT
V40X65	65.0000	40.0000	0.0000	0.0000	40.0000	0.0000
V25X65	65.0000	25.0000	0.0000	0.0000	25.0000	0.0000
V20X65	65.0000	20.0000	0.0000	0.0000	20.0000	0.0000
V15X45	45.0000	15.0000	0.0000	0.0000	15.0000	0.0000
V50X65	65.0000	50.0000	0.0000	0.0000	0.0000	0.0000
V30X50	50.0000	30.0000	0.0000	0.0000	0.0000	0.0000
C40X40	40.0000	40.0000	0.0000	0.0000	0.0000	0.0000
V55X65	65.0000	55.0000	0.0000	0.0000	0.0000	0.0000
V25X50	50.0000	25.0000	0.0000	0.0000	0.0000	0.0000
V45X65	65.0000	45.0000	0.0000	0.0000	0.0000	0.0000
V20X45	45.0000	20.0000	0.0000	0.0000	0.0000	0.0000
V20X50	50.0000	20.0000	0.0000	0.0000	0.0000	0.0000
V15X65	65.0000	15.0000	0.0000	0.0000	0.0000	0.0000
V25X45	45.0000	25.0000	0.0000	0.0000	0.0000	0.0000
V30X65A	65.0000	30.0000	0.0000	0.0000	0.0000	0.0000
V30X65	65.0000	30.0000	0.0000	0.0000	0.0000	0.0000
V40X75	75.0000	40.0000	0.0000	0.0000	0.0000	0.0000
D40	40.0000	40.0000	0.0000	0.0000	40.0000	0.0000

FRAME SECTION PROPERTY DATA

FRAME SECTION NAME	SECTION AREA	TORSIONAL CONSTANT	MOMENTS OF INERTIA		SHEAR AREAS	
			I33	I22	A2	A3
V40X65	2600.0000	855491.5566	915416.6667	346666.6667	2166.6667	2166.6667
V25X65	1625.0000	256660.0100	572135.4167	84635.4167	1354.1667	1354.1667
V20X65	1300.0000	139758.4315	457708.3333	43333.3333	1083.3333	1083.3333
V15X45	675.0000	40004.6878	113906.2500	12656.2500	562.5000	562.5000
V50X65	3250.0000	1434128.6022	1144270.8333	677083.3333	2708.3333	2708.3333
V30X50	1500.0000	281737.0853	312500.0000	112500.0000	1250.0000	1250.0000
C40X40	1600.0000	360533.3503	213333.3333	213333.3333	1333.3333	1333.3333
V55X65	3575.0000	1765249.6987	1258697.9167	901197.9167	2979.1667	2979.1667
V25X50	1250.0000	178812.6653	260416.6667	65104.1667	1041.6667	1041.6667
V45X65	2925.0000	1129728.6168	1029843.7500	493593.7500	2437.5000	2437.5000
V20X45	900.0000	86509.2527	151875.0000	30000.0000	750.0000	750.0000
V20X50	1000.0000	99805.0144	208333.3333	33333.3333	833.3333	833.3333

V15X65	975.0000	62496.2629	343281.2500	18281.2500	812.5000	812.5000
V25X45	1125.0000	152994.9431	189843.7500	58593.7500	937.5000	937.5000
V30X65A	1950.0000	415543.2181	686562.5000	146250.0000	1625.0000	1625.0000
V30X65	1950.0000	415543.2181	686562.5000	146250.0000	1625.0000	1625.0000
V40X75	3000.0000	1066024.7240	1406250.0000	400000.0000	2500.0000	2500.0000
D40	1256.6371	251327.4123	125663.7061	125663.7061	1130.9733	1130.9733

FRAME SECTION PROPERTY DATA

FRAME SECTION NAME	SECTION MODULI		PLASTIC MODULI		RADIUS OF GYRATION	
	S33	S22	Z33	Z22	R33	R22
V40X65	28166.6667	17333.3333	42250.0000	26000.0000	18.7639	11.5470
V25X65	17604.1667	6770.8333	26406.2500	10156.2500	18.7639	7.2169
V20X65	14083.3333	4333.3333	21125.0000	6500.0000	18.7639	5.7735
V15X45	5062.5000	1687.5000	7593.7500	2531.2500	12.9904	4.3301
V50X65	35208.3333	27083.3333	52812.5000	40625.0000	18.7639	14.4338
V30X50	12500.0000	7500.0000	18750.0000	11250.0000	14.4338	8.6603
C40X40	10666.6667	10666.6667	16000.0000	16000.0000	11.5470	11.5470
V55X65	38729.1667	32770.8333	58093.7500	49156.2500	18.7639	15.8771
V25X50	10416.6667	5208.3333	15625.0000	7812.5000	14.4338	7.2169
V45X65	31687.5000	21937.5000	47531.2500	32906.2500	18.7639	12.9904
V20X45	6750.0000	3000.0000	10125.0000	4500.0000	12.9904	5.7735
V20X50	8333.3333	3333.3333	12500.0000	5000.0000	14.4338	5.7735
V15X65	10562.5000	2437.5000	15843.7500	3656.2500	18.7639	4.3301
V25X45	8437.5000	4687.5000	12656.2500	7031.2500	12.9904	7.2169
V30X65A	21125.0000	9750.0000	31687.5000	14625.0000	18.7639	8.6603
V30X65	21125.0000	9750.0000	31687.5000	14625.0000	18.7639	8.6603
V40X75	37500.0000	20000.0000	56250.0000	30000.0000	21.6506	11.5470
D40	6283.1853	6283.1853	10666.6667	10666.6667	10.0000	10.0000

FRAME SECTION WEIGHTS AND MASSES

FRAME SECTION NAME	TOTAL WEIGHT	TOTAL MASS
V40X65	174202.0800	0.0000
V25X65	22672.6500	0.0000
V20X65	0.0000	0.0000
V15X45	0.0000	0.0000
V50X65	0.0000	0.0000
V30X50	0.0000	0.0000
C40X40	32352.0000	0.0000
V55X65	0.0000	0.0000
V25X50	0.0000	0.0000
V45X65	0.0000	0.0000
V20X45	0.0000	0.0000
V20X50	0.0000	0.0000
V15X65	0.0000	0.0000
V25X45	2583.9000	0.0000
V30X65A	0.0000	0.0000
V30X65	0.0000	0.0000
V40X75	0.0000	0.0000
D40	1096.2902	0.0000

CONCRETE COLUMN DATA

FRAME SECTION NAME	REINF CONFIGURATION		REINF SIZE/TYPE	NUM BARS 3DIR/2DIR	NUM BARS CIRCULAR	BAR COVER
	LONGIT	LATERAL				
C40X40	Rectangular	Ties	#6/Check	4/4	N/A	5.0000
D40	Circular	Ties	#6/Check	N/A	8	5.0000

CONCRETE BEAM DATA

FRAME SECTION NAME	TOP COVER	BOT COVER	TOP LEFT AREA	TOP RIGHT AREA	BOT LEFT AREA	BOT RIGHT AREA
V40X65	5.0000	5.0000	0.000	0.000	0.000	0.000
V25X65	5.0000	5.0000	0.000	0.000	0.000	0.000
V20X65	5.0000	5.0000	0.000	0.000	0.000	0.000
V15X45	5.0000	5.0000	0.000	0.000	0.000	0.000
V50X65	5.0000	5.0000	0.000	0.000	0.000	0.000
V30X50	5.0000	5.0000	0.000	0.000	0.000	0.000
V55X65	7.4900	5.0000	0.000	0.000	0.000	0.000
V25X50	5.0000	5.0000	0.000	0.000	0.000	0.000
V45X65	5.0000	5.0000	0.000	0.000	0.000	0.000
V20X45	5.5000	5.0000	0.000	0.000	0.000	0.000
V20X50	5.0000	5.0000	0.000	0.000	0.000	0.000
V15X65	5.0000	5.0000	0.000	0.000	0.000	0.000
V25X45	5.0000	5.0000	0.000	0.000	0.000	0.000
V30X65A	7.4900	5.0000	0.000	0.000	0.000	0.000
V30X65	5.0000	5.0000	0.000	0.000	0.000	0.000
V40X75	5.0000	5.0000	0.000	0.000	0.000	0.000

STATIC LOAD CASES

STATIC CASE	CASE TYPE	AUTO LAT LOAD	SELF WT MULTIPLIER	NOTIONAL FACTOR	NOTIONAL DIRECTION
CM	DEAD	N/A	1.0000		
CV	LIVE	N/A	0.0000		
SX	QUAKE	USER_COEFF	0.0000		
SY	QUAKE	USER_COEFF	0.0000		

LOADING COMBINATIONS

COMBO	COMBO TYPE	CASE	CASE TYPE	SCALE FACTOR
DERI1	ADD	CM	Static	1.4000
		CV	Static	1.7000
DERI2	ADD	CM	Static	1.4000
DERI3	ADD	DERI1	Combo	0.7500
		SX	Static	1.0000
		SY	Static	0.3000
DERI4	ADD	DERI1	Combo	0.7500
		SX	Static	-1.0000
		SY	Static	0.3000
DERI5	ADD	DERI1	Combo	0.7500
		SX	Static	-1.0000
		SY	Static	-0.3000
DERI6	ADD	DERI1	Combo	0.7500
		SX	Static	1.0000
		SY	Static	-0.3000
DERI7	ADD	DERI1	Combo	0.7500
		SX	Static	0.3000
		SY	Static	1.0000
DERI8	ADD	DERI1	Combo	0.7500
		SX	Static	-0.3000
		SY	Static	1.0000
DERI9	ADD	DERI1	Combo	0.7500
		SX	Static	-0.3000
		SY	Static	-1.0000
DERI10	ADD	DERI1	Combo	0.7500
		SX	Static	0.3000
		SY	Static	-1.0000
COMB1	ADD	CM	Static	1.4000
		CV	Static	1.7000
COMB2	ADD	CM	Static	1.4000
COMB3	ADD	COMB1	Combo	0.7500
		SX	Static	0.4000

		SY	Static	0.1200
COMB4	ADD	COMB1	Combo	0.7500
		SX	Static	-0.4000
		SY	Static	0.1200
COMB5	ADD	COMB1	Combo	0.7500
		SX	Static	-0.4000
		SY	Static	-0.1200
COMB6	ADD	COMB1	Combo	0.7500
		SX	Static	0.4000
		SY	Static	-0.1200
COMB7	ADD	COMB1	Combo	0.7500
		SX	Static	0.1200
		SY	Static	0.4000
COMB8	ADD	COMB1	Combo	0.7500
		SX	Static	-0.1200
		SY	Static	0.4000
COMB9	ADD	COMB1	Combo	0.7500
		SX	Static	-0.1200
		SY	Static	-0.4000
COMB10	ADD	COMB1	Combo	0.7500
		SX	Static	0.1200
		SY	Static	-0.4000
COMB11	ADD	CM	Static	0.9000
		SX	Static	0.4000
		SY	Static	0.1200
COMB12	ADD	CM	Static	0.9000
		SX	Static	-0.4000
		SY	Static	0.1200
COMB13	ADD	CM	Static	0.9000
		SX	Static	-0.4000
		SY	Static	-0.1200
COMB14	ADD	CM	Static	0.9000
		SX	Static	0.4000
		SY	Static	-0.1200
COMB15	ADD	CM	Static	0.9000
		SX	Static	0.1200
		SY	Static	0.4000
COMB16	ADD	CM	Static	0.9000
		SX	Static	-0.1200
		SY	Static	0.4000
COMB17	ADD	CM	Static	0.9000
		SX	Static	-0.1200
		SY	Static	-0.4000
COMB18	ADD	CM	Static	0.9000
		SX	Static	0.1200
		SY	Static	-0.4000
DERI11	ADD	CM	Static	0.9000
		SX	Static	1.0000
		SY	Static	0.3000
DERI12	ADD	CM	Static	0.9000
		SX	Static	-1.0000
		SY	Static	0.3000
DERI13	ADD	CM	Static	0.9000
		SX	Static	-1.0000
		SY	Static	-0.3000
DERI14	ADD	CM	Static	0.9000
		SX	Static	1.0000
		SY	Static	-0.3000
DERI15	ADD	CM	Static	0.9000
		SX	Static	0.3000
		SY	Static	1.0000
DERI16	ADD	CM	Static	0.9000
		SX	Static	-0.3000
		SY	Static	1.0000
DERI17	ADD	CM	Static	0.9000
		SX	Static	-0.3000
		SY	Static	-1.0000
DERI18	ADD	CM	Static	0.9000
		SX	Static	0.3000

		SY	Static	-1.0000
CIMENTA	ADD	CM	Static	1.0000
		CV	Static	1.0000

A U T O S E I S M I C U S E R C O E F F I C I E N T
Case: SX

AUTO SEISMIC INPUT DATA

Direction: X + EccY
Typical Eccentricity = 5%
Eccentricity Overrides: No

Top Story: STORY2
Bottom Story: BASE

C = 0.5
K = 1

AUTO SEISMIC CALCULATION FORMULAS

$V = C W$

AUTO SEISMIC CALCULATION RESULTS

W Used = 293007.92

V Used = 0.5000W = 146503.96

AUTO SEISMIC STORY FORCES

STORY	FX	FY	FZ	MX	MY	MZ
STORY2	(Forces reported at X = 0.0000, Y = 0.0000, Z = 528.5000)					
	33600.34	0.00	0.00	0.000	0.000	-78788674.7
STORY1	(Forces reported at X = 73.3063, Y = 2510.5140, Z = 363.5000)					
	112903.62	0.00	0.00	0.000	0.000	-13651771.11

AUTO SEISMIC DIAPHRAGM FORCES

STORY	DIAPHRAGM	FX	FY	FZ	MX	MY	MZ
STORY1	D1	(Forces reported at X = 73.3063, Y = 2510.5140, Z = 363.5000)					
		60536.55	0.00	0.00	0.000	0.000	-15141703.33

AUTO SEISMIC POINT FORCES

STORY	POINT	FX	FY	FZ	MX	MY	MZ
STORY2	3	(Point and forces located at X = 1428.0000, Y = 0.0000, Z = 528.5000)					
		3222.93	0.00	0.00	0.000	0.000	0.000
STORY2	6	(Point and forces located at X = 1428.0000, Y = 828.0000, Z = 528.5000)					
		6004.08	0.00	0.00	0.000	0.000	0.000
STORY2	9	(Point and forces located at X = 1428.0000, Y = 1708.0000, Z = 528.5000)					
		5983.03	0.00	0.00	0.000	0.000	0.000
STORY2	12	(Point and forces located at X = 1428.0000, Y = 2526.0000, Z = 528.5000)					
		5997.77	0.00	0.00	0.000	0.000	0.000
STORY2	15	(Point and forces located at X = 1428.0000, Y = 3413.0000, Z = 528.5000)					
		5584.72	0.00	0.00	0.000	0.000	0.000

STORY2	18	(Point and forces located at X = 1428.0000, Y = 4131.0000, Z = 528.5000)
		4725.16 0.00 0.00 0.000 0.000 0.000
STORY2	21	(Point and forces located at X = 1428.0000, Y = 4738.0000, Z = 528.5000)
		2082.66 0.00 0.00 0.000 0.000 0.000
STORY1	2	(Point and forces located at X = 811.0000, Y = 0.0000, Z = 363.5000)
		3417.54 0.00 0.00 0.000 0.000 0.000
STORY1	3	(Point and forces located at X = 1428.0000, Y = 0.0000, Z = 363.5000)
		2447.96 0.00 0.00 0.000 0.000 0.000
STORY1	5	(Point and forces located at X = 811.0000, Y = 828.0000, Z = 363.5000)
		4634.11 0.00 0.00 0.000 0.000 0.000
STORY1	6	(Point and forces located at X = 1428.0000, Y = 828.0000, Z = 363.5000)
		3664.53 0.00 0.00 0.000 0.000 0.000
STORY1	8	(Point and forces located at X = 811.0000, Y = 1708.0000, Z = 363.5000)
		4550.10 0.00 0.00 0.000 0.000 0.000
STORY1	9	(Point and forces located at X = 1428.0000, Y = 1708.0000, Z = 363.5000)
		3650.05 0.00 0.00 0.000 0.000 0.000
STORY1	11	(Point and forces located at X = 811.0000, Y = 2526.0000, Z = 363.5000)
		4629.77 0.00 0.00 0.000 0.000 0.000
STORY1	12	(Point and forces located at X = 1428.0000, Y = 2526.0000, Z = 363.5000)
		3660.19 0.00 0.00 0.000 0.000 0.000
STORY1	14	(Point and forces located at X = 811.0000, Y = 3413.0000, Z = 363.5000)
		4484.94 0.00 0.00 0.000 0.000 0.000
STORY1	15	(Point and forces located at X = 1428.0000, Y = 3413.0000, Z = 363.5000)
		3515.36 0.00 0.00 0.000 0.000 0.000
STORY1	17	(Point and forces located at X = 811.0000, Y = 4131.0000, Z = 363.5000)
		4079.41 0.00 0.00 0.000 0.000 0.000
STORY1	18	(Point and forces located at X = 1428.0000, Y = 4131.0000, Z = 363.5000)
		3109.83 0.00 0.00 0.000 0.000 0.000
STORY1	20	(Point and forces located at X = 811.0000, Y = 4738.0000, Z = 363.5000)
		3451.57 0.00 0.00 0.000 0.000 0.000
STORY1	21	(Point and forces located at X = 1428.0000, Y = 4738.0000, Z = 363.5000)
		2127.89 0.00 0.00 0.000 0.000 0.000
STORY1	31	(Point and forces located at X = 811.0000, Y = 5002.5000, Z = 363.5000)
		943.84 0.00 0.00 0.000 0.000 0.000

A U T O S E I S M I C U S E R C O E F F I C I E N T
Case: SY

AUTO SEISMIC INPUT DATA

Direction: Y + EccX
Typical Eccentricity = 5%
Eccentricity Overrides: No

Top Story: STORY2
Bottom Story: BASE

C = 0.5

K = 1

AUTO SEISMIC CALCULATION FORMULAS

$$V = C W$$

AUTO SEISMIC CALCULATION RESULTS

W Used = 293007.92

V Used = 0.5000W = 146503.96

AUTO SEISMIC STORY FORCES

STORY		FX	FY	FZ	MX	MY	MZ
STORY2	(Forces reported at X = 0.0000, Y = 0.0000, Z = 528.5000)						
		0.00	33600.34	0.00	0.000	0.000	47981289.41
STORY1	(Forces reported at X = 73.3063, Y = 2510.5140, Z = 363.5000)						
		0.00	112903.62	0.00	0.000	0.000	52796105.17

AUTO SEISMIC DIAPHRAGM FORCES

STORY	DIAPHRAGM		FX	FY	FZ	MX	MY	MZ
STORY1	D1	(Forces reported at X = 73.3063, Y = 2510.5140, Z = 363.5000)						
			0.00	60536.55	0.00	0.000	0.000	482778.947

AUTO SEISMIC POINT FORCES

STORY	POINT		FX	FY	FZ	MX	MY	MZ
STORY2	3	(Point and forces located at X = 1428.0000, Y = 0.0000, Z = 528.5000)						
			0.00	3222.93	0.00	0.000	0.000	0.000
STORY2	6	(Point and forces located at X = 1428.0000, Y = 828.0000, Z = 528.5000)						
			0.00	6004.08	0.00	0.000	0.000	0.000
STORY2	9	(Point and forces located at X = 1428.0000, Y = 1708.0000, Z = 528.5000)						
			0.00	5983.03	0.00	0.000	0.000	0.000
STORY2	12	(Point and forces located at X = 1428.0000, Y = 2526.0000, Z = 528.5000)						
			0.00	5997.77	0.00	0.000	0.000	0.000
STORY2	15	(Point and forces located at X = 1428.0000, Y = 3413.0000, Z = 528.5000)						
			0.00	5584.72	0.00	0.000	0.000	0.000
STORY2	18	(Point and forces located at X = 1428.0000, Y = 4131.0000, Z = 528.5000)						
			0.00	4725.16	0.00	0.000	0.000	0.000
STORY2	21	(Point and forces located at X = 1428.0000, Y = 4738.0000, Z = 528.5000)						
			0.00	2082.66	0.00	0.000	0.000	0.000
STORY1	2	(Point and forces located at X = 811.0000, Y = 0.0000, Z = 363.5000)						
			0.00	3417.54	0.00	0.000	0.000	0.000
STORY1	3	(Point and forces located at X = 1428.0000, Y = 0.0000, Z = 363.5000)						
			0.00	2447.96	0.00	0.000	0.000	0.000
STORY1	5	(Point and forces located at X = 811.0000, Y = 828.0000, Z = 363.5000)						
			0.00	4634.11	0.00	0.000	0.000	0.000

STORY1	6	(Point and forces located at X = 1428.0000, Y = 828.0000, Z = 363.5000)
		0.00 3664.53 0.00 0.000 0.000 0.000
STORY1	8	(Point and forces located at X = 811.0000, Y = 1708.0000, Z = 363.5000)
		0.00 4550.10 0.00 0.000 0.000 0.000
STORY1	9	(Point and forces located at X = 1428.0000, Y = 1708.0000, Z = 363.5000)
		0.00 3650.05 0.00 0.000 0.000 0.000
STORY1	11	(Point and forces located at X = 811.0000, Y = 2526.0000, Z = 363.5000)
		0.00 4629.77 0.00 0.000 0.000 0.000
STORY1	12	(Point and forces located at X = 1428.0000, Y = 2526.0000, Z = 363.5000)
		0.00 3660.19 0.00 0.000 0.000 0.000
STORY1	14	(Point and forces located at X = 811.0000, Y = 3413.0000, Z = 363.5000)
		0.00 4484.94 0.00 0.000 0.000 0.000
STORY1	15	(Point and forces located at X = 1428.0000, Y = 3413.0000, Z = 363.5000)
		0.00 3515.36 0.00 0.000 0.000 0.000
STORY1	17	(Point and forces located at X = 811.0000, Y = 4131.0000, Z = 363.5000)
		0.00 4079.41 0.00 0.000 0.000 0.000
STORY1	18	(Point and forces located at X = 1428.0000, Y = 4131.0000, Z = 363.5000)
		0.00 3109.83 0.00 0.000 0.000 0.000
STORY1	20	(Point and forces located at X = 811.0000, Y = 4738.0000, Z = 363.5000)
		0.00 3451.57 0.00 0.000 0.000 0.000
STORY1	21	(Point and forces located at X = 1428.0000, Y = 4738.0000, Z = 363.5000)
		0.00 2127.89 0.00 0.000 0.000 0.000
STORY1	31	(Point and forces located at X = 811.0000, Y = 5002.5000, Z = 363.5000)
		0.00 943.84 0.00 0.000 0.000 0.000

R I G I D D I A P H R A G M 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	DIAPHRAGM
-------	------	-----------

STORY1	F1	D1
--------	----	----

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
CM	STORY1	F1	Floor	Gravity	0.0200
CV	STORY1	F1	Floor	Gravity	0.0200

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
COMB1	ADD	CM	Static	1.4000
		CV	Static	1.7000
COMB2	ADD	CM	Static	1.4000
COMB3	ADD	COMB1	Combo	0.7500
		SX	Static	0.4000
		SY	Static	0.1200
COMB4	ADD	COMB1	Combo	0.7500
		SX	Static	-0.4000
		SY	Static	0.1200
COMB5	ADD	COMB1	Combo	0.7500
		SX	Static	-0.4000

		SY	Static	-0.1200
COMB6	ADD	COMB1	Combo	0.7500
		SX	Static	0.4000
		SY	Static	-0.1200
COMB7	ADD	COMB1	Combo	0.7500
		SX	Static	0.1200
		SY	Static	0.4000
COMB8	ADD	COMB1	Combo	0.7500
		SX	Static	-0.1200
		SY	Static	0.4000
COMB9	ADD	COMB1	Combo	0.7500
		SX	Static	-0.1200
		SY	Static	-0.4000
COMB10	ADD	COMB1	Combo	0.7500
		SX	Static	0.1200
		SY	Static	-0.4000
COMB11	ADD	CM	Static	0.9000
		SX	Static	0.4000
		SY	Static	0.1200
COMB12	ADD	CM	Static	0.9000
		SX	Static	-0.4000
		SY	Static	0.1200
COMB13	ADD	CM	Static	0.9000
		SX	Static	-0.4000
		SY	Static	-0.1200
COMB14	ADD	CM	Static	0.9000
		SX	Static	0.4000
		SY	Static	-0.1200
COMB15	ADD	CM	Static	0.9000
		SX	Static	0.1200
		SY	Static	0.4000
COMB16	ADD	CM	Static	0.9000
		SX	Static	-0.1200
		SY	Static	0.4000
COMB17	ADD	CM	Static	0.9000
		SX	Static	-0.1200
		SY	Static	-0.4000
COMB18	ADD	CM	Static	0.9000
		SX	Static	0.1200
		SY	Static	-0.4000

CONCRETE CODE PREFERENCES

Code : ACI 318-99

CONCRETE CODE PREFERENCES

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

 Phi (Bending/Tension) : 0.900
 Phi (Compression Tied) : 0.700
 Phi (Compression Spiral) : 0.750
 Phi (Shear) : 0.850

MATERIAL PROPERTY DATA

MATERIAL NAME	MATERIAL TYPE	DESIGN TYPE	MATERIAL DIR/PLANE	MODULUS OF ELASTICITY	POISSON'S RATIO	THERMAL COEFF	SHEAR MODULUS
CONC4000	Iso	Concrete	All	209165.010	0.2000	9.9000E-06	87152.088

MATERIAL PROPERTY MASS AND WEIGHT

MATERIAL NAME	MASS PER UNIT VOL	WEIGHT PER UNIT VOL
CONC4000	0.0000E+00	2.4000E-03

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
CONC4000	No	280.000	4200.000	4200.000	N/A

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

SECTION LABEL	MAT LABEL	COLUMN DEPTH	COLUMN WIDTH	REBAR PATTERN	CONCRETE COVER	BAR SIZE	CORNER BAR SIZE
C40X40CONC4000		40.000	40.000	RR-4-4	5.000	#6	#6
D40CONC4000		40.000	40.000	CC-3	5.000	#6	#6

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

SECTION LABEL	MAT LABEL	BEAM DEPTH	BEAM WIDTH	TOP COVER	BOTTOM COVER	REBAR AT-1	REBAR AT-2	REBAR AB-1	REBAR AB-2
V40X65CONC4000		65.000	40.000	5.000	5.000	0.000	0.000	0.000	0.000
V25X65CONC4000		65.000	25.000	5.000	5.000	0.000	0.000	0.000	0.000
V20X65CONC4000		65.000	20.000	5.000	5.000	0.000	0.000	0.000	0.000
V15X45CONC4000		45.000	15.000	5.000	5.000	0.000	0.000	0.000	0.000
V50X65CONC4000		65.000	50.000	5.000	5.000	0.000	0.000	0.000	0.000
V30X50CONC4000		50.000	30.000	5.000	5.000	0.000	0.000	0.000	0.000
V55X65CONC4000		65.000	55.000	7.490	5.000	0.000	0.000	0.000	0.000
V25X50CONC4000		50.000	25.000	5.000	5.000	0.000	0.000	0.000	0.000
V45X65CONC4000		65.000	45.000	5.000	5.000	0.000	0.000	0.000	0.000
V20X45CONC4000		45.000	20.000	5.500	5.000	0.000	0.000	0.000	0.000
V20X50CONC4000		50.000	20.000	5.000	5.000	0.000	0.000	0.000	0.000
V15X65CONC4000		65.000	15.000	5.000	5.000	0.000	0.000	0.000	0.000
V25X45CONC4000		45.000	25.000	5.000	5.000	0.000	0.000	0.000	0.000
V30X65A CONC4000		65.000	30.000	7.490	5.000	0.000	0.000	0.000	0.000
V30X65CONC4000		65.000	30.000	5.000	5.000	0.000	0.000	0.000	0.000
V40X75CONC4000		75.000	40.000	5.000	5.000	0.000	0.000	0.000	0.000

C O N C R E T E C O L U M N D E S I G N E L E M E N T I N F O R M A T I O N (ACI 318-99)

STORY ID	COLUMN LINE	SECTION ID	FRAMING TYPE	RLLF FACTOR	L_RATIO MAJOR	L_RATIO MINOR	K MAJOR	K MINOR
STORY1	C1	C40X40	SWYORDN	1.000	0.821	0.821	1.000	1.000
STORY1	C2	C40X40	SWYORDN	1.000	0.821	0.821	1.000	1.000
STORY2	C3	C40X40	SWYORDN	1.000	0.606	0.606	1.000	1.000
STORY1	C3	C40X40	SWYORDN	1.000	0.821	0.821	1.000	1.000
STORY1	C4	C40X40	SWYORDN	1.000	0.821	0.821	1.000	1.000
STORY1	C5	C40X40	SWYORDN	1.000	0.821	0.821	1.000	1.000
STORY2	C6	C40X40	SWYORDN	1.000	0.606	0.606	1.000	1.000
STORY1	C6	C40X40	SWYORDN	1.000	0.821	0.821	1.000	1.000
STORY1	C7	C40X40	SWYORDN	1.000	0.821	0.821	1.000	1.000
STORY1	C8	D40	SWYORDN	1.000	0.821	0.821	1.000	1.000
STORY2	C9	C40X40	SWYORDN	1.000	0.606	0.606	1.000	1.000
STORY1	C9	C40X40	SWYORDN	1.000	0.821	0.821	1.000	1.000
STORY1	C10	C40X40	SWYORDN	1.000	0.821	0.821	1.000	1.000
STORY1	C11	C40X40	SWYORDN	1.000	0.821	0.821	1.000	1.000
STORY2	C12	C40X40	SWYORDN	1.000	0.606	0.606	1.000	1.000
STORY1	C12	C40X40	SWYORDN	1.000	0.821	0.821	1.000	1.000
STORY1	C13	C40X40	SWYORDN	1.000	0.821	0.821	1.000	1.000

STORY1	C14	C40X40	SWYORDN	1.000	0.821	0.821	1.000	1.000
STORY2	C15	C40X40	SWYORDN	1.000	0.606	0.606	1.000	1.000
STORY1	C15	C40X40	SWYORDN	1.000	0.821	0.821	1.000	1.000
STORY1	C16	C40X40	SWYORDN	1.000	0.821	0.821	1.000	1.000
STORY1	C17	C40X40	SWYORDN	1.000	0.821	0.821	1.000	1.000
STORY2	C18	C40X40	SWYORDN	1.000	0.606	0.606	1.000	1.000
STORY1	C18	C40X40	SWYORDN	1.000	0.821	0.821	1.000	1.000
STORY1	C19	C40X40	SWYORDN	1.000	0.821	0.821	1.000	1.000
STORY1	C20	C40X40	SWYORDN	1.000	0.821	0.821	1.000	1.000
STORY2	C21	C40X40	SWYORDN	1.000	0.606	0.606	1.000	1.000
STORY1	C21	C40X40	SWYORDN	1.000	0.821	0.821	1.000	1.000

C O N C R E T E B E A M D E S I G N E L E M E N T I N F O R M A T I O N (ACI 318-99)

STORY ID	BAY ID	SECTION ID	FRAMING TYPE	RLLF FACTOR	L_RATIO MAJOR	L_RATIO MINOR
STORY2	B13	V40X65	SWYORDN	1.000	0.952	0.952
STORY2	B14	V40X65	SWYORDN	1.000	0.955	0.955
STORY2	B15	V40X65	SWYORDN	1.000	0.951	0.951
STORY2	B16	V40X65	SWYORDN	1.000	0.955	0.955
STORY2	B17	V40X65	SWYORDN	1.000	0.944	0.944
STORY2	B18	V40X65	SWYORDN	1.000	0.934	0.934
STORY1	B1	V40X65	SWYORDN	1.000	0.952	0.476
STORY1	B2	V40X65	SWYORDN	1.000	0.955	0.477
STORY1	B3	V40X65	SWYORDN	1.000	0.951	0.476
STORY1	B4	V40X65	SWYORDN	1.000	0.955	0.477
STORY1	B5	V40X65	SWYORDN	1.000	0.944	0.472
STORY1	B6	V40X65	SWYORDN	1.000	0.934	0.467
STORY1	B7	V40X65	SWYORDN	1.000	0.952	0.952
STORY1	B8	V40X65	SWYORDN	1.000	0.955	0.955
STORY1	B9	V40X65	SWYORDN	1.000	0.951	0.951
STORY1	B10	V40X65	SWYORDN	1.000	0.955	0.955
STORY1	B11	V40X65	SWYORDN	1.000	0.944	0.944
STORY1	B12	V40X65	SWYORDN	1.000	0.934	0.934
STORY1	B13	V40X65	SWYORDN	1.000	0.952	0.952
STORY1	B14	V40X65	SWYORDN	1.000	0.955	0.955
STORY1	B15	V40X65	SWYORDN	1.000	0.951	0.951
STORY1	B16	V40X65	SWYORDN	1.000	0.955	0.955
STORY1	B17	V40X65	SWYORDN	1.000	0.944	0.944
STORY1	B18	V40X65	SWYORDN	1.000	0.934	0.934
STORY1	B19	V40X65	SWYORDN	1.000	0.951	0.779
STORY1	B20	V40X65	SWYORDN	1.000	0.935	0.935
STORY1	B21	V40X65	SWYORDN	1.000	0.951	0.779
STORY1	B22	V40X65	SWYORDN	1.000	0.935	0.935
STORY1	B23	V40X65	SWYORDN	1.000	0.951	0.779
STORY1	B24	V40X65	SWYORDN	1.000	0.935	0.935
STORY1	B25	V40X65	SWYORDN	1.000	0.951	0.779
STORY1	B26	V40X65	SWYORDN	1.000	0.935	0.935
STORY1	B27	V40X65	SWYORDN	1.000	0.951	0.779
STORY1	B28	V40X65	SWYORDN	1.000	0.935	0.935
STORY1	B29	V40X65	SWYORDN	1.000	0.951	0.779
STORY1	B30	V40X65	SWYORDN	1.000	0.935	0.935
STORY1	B31	V40X65	SWYORDN	1.000	0.951	0.779
STORY1	B32	V40X65	SWYORDN	1.000	0.935	0.935
STORY1	B33	V25X65	SWYORDN	1.000	1.000	0.500
STORY1	B34	V25X65	SWYORDN	1.000	1.000	0.500
STORY1	B35	V25X65	SWYORDN	1.000	1.000	0.500
STORY1	B36	V25X65	SWYORDN	1.000	1.000	0.500
STORY1	B37	V25X65	SWYORDN	1.000	1.000	0.500
STORY1	B38	V25X65	SWYORDN	1.000	1.000	0.500
STORY1	B43	V40X65	SWYORDN	1.000	0.924	0.924
STORY1	B44	V40X65	SWYORDN	1.000	0.924	0.924
STORY1	B47	V25X65	SWYORDN	1.000	1.000	1.000
STORY1	B48	V25X65	SWYORDN	1.000	1.000	1.000
STORY1	B49	V25X65	SWYORDN	1.000	1.000	1.000
STORY1	B50	V25X45	SWYORDN	1.000	1.000	1.000
STORY1	B51	V25X45	SWYORDN	1.000	1.000	1.000

STORY1	B52	V25X45 SWYORDN	1.000	1.000	1.000
STORY1	B53	V25X45 SWYORDN	1.000	1.000	1.000
STORY1	B54	V25X45 SWYORDN	1.000	1.000	1.000
STORY1	B55	V25X45 SWYORDN	1.000	1.000	1.000

C O N C R E T E C O L U M N C H E C K O U T P U T (ACI 318-99)

BIAXIAL P-M INTERACTION CAPACITY CHECK AND SHEAR DESIGN OF COLUMN-TYPE ELEMENTS

STORY ID	COLUMN LINE	SECTION ID	STATION ID	INTERACTION RATIO	COMBO ID	SHEAR22 REBAR	COMBO ID	SHEAR33 REBAR	COMBO ID
STORY1	C1	C40X40	0.000	0.356	COMB9	0.000	COMB18	0.000	COMB18
STORY1	C1	C40X40	149.250	0.105	COMB3	0.000	COMB18	0.000	COMB18
STORY1	C1	C40X40	298.500	0.366	COMB9	0.000	COMB18	0.000	COMB18
STORY1	C2	C40X40	0.000	0.429	COMB3	0.000	COMB18	0.000	COMB18
STORY1	C2	C40X40	149.250	0.053	COMB8	0.000	COMB18	0.000	COMB18
STORY1	C2	C40X40	298.500	0.364	COMB6	0.000	COMB18	0.000	COMB18
STORY2	C3	C40X40	0.000	0.145	COMB3	0.000	COMB18	0.000	COMB18
STORY2	C3	C40X40	50.000	0.080	COMB11	0.000	COMB18	0.000	COMB18
STORY2	C3	C40X40	100.000	0.090	COMB9	0.000	COMB18	0.000	COMB18
STORY1	C3	C40X40	0.000	0.325	COMB10	0.000	COMB18	0.000	COMB18
STORY1	C3	C40X40	149.250	0.073	COMB6	0.000	COMB18	0.000	COMB18
STORY1	C3	C40X40	298.500	0.219	COMB10	0.000	COMB18	0.000	COMB18
STORY1	C4	C40X40	0.000	0.420	COMB8	0.000	COMB18	0.000	COMB18
STORY1	C4	C40X40	149.250	0.160	COMB1	0.000	COMB18	0.000	COMB18
STORY1	C4	C40X40	298.500	0.467	COMB8	0.000	COMB18	0.000	COMB18
STORY1	C5	C40X40	0.000	0.468	COMB3	0.033	COMB6	0.000	COMB18
STORY1	C5	C40X40	149.250	0.077	COMB1	0.033	COMB6	0.000	COMB18
STORY1	C5	C40X40	298.500	0.421	COMB3	0.033	COMB6	0.000	COMB18
STORY2	C6	C40X40	0.000	0.198	COMB12	0.000	COMB18	0.000	COMB18
STORY2	C6	C40X40	50.000	0.128	COMB12	0.000	COMB18	0.000	COMB18
STORY2	C6	C40X40	100.000	0.085	COMB4	0.000	COMB18	0.000	COMB18
STORY1	C6	C40X40	0.000	0.307	COMB10	0.000	COMB18	0.000	COMB18
STORY1	C6	C40X40	149.250	0.104	COMB1	0.000	COMB18	0.000	COMB18
STORY1	C6	C40X40	298.500	0.197	COMB18	0.000	COMB18	0.000	COMB18
STORY1	C7	C40X40	0.000	0.413	COMB8	0.000	COMB18	0.000	COMB18
STORY1	C7	C40X40	149.250	0.151	COMB1	0.000	COMB18	0.000	COMB18
STORY1	C7	C40X40	298.500	0.451	COMB8	0.000	COMB18	0.000	COMB18
STORY1	C8	D40	0.000	0.505	COMB3	0.000	COMB18	0.000	COMB18
STORY1	C8	D40	149.250	0.097	COMB1	0.000	COMB18	0.000	COMB18
STORY1	C8	D40	298.500	0.472	COMB3	0.000	COMB18	0.000	COMB18
STORY2	C9	C40X40	0.000	0.199	COMB12	0.000	COMB18	0.000	COMB18
STORY2	C9	C40X40	50.000	0.131	COMB13	0.000	COMB18	0.000	COMB18
STORY2	C9	C40X40	100.000	0.087	COMB4	0.000	COMB18	0.000	COMB18
STORY1	C9	C40X40	0.000	0.309	COMB7	0.000	COMB18	0.000	COMB18
STORY1	C9	C40X40	149.250	0.102	COMB6	0.000	COMB18	0.000	COMB18
STORY1	C9	C40X40	298.500	0.195	COMB15	0.000	COMB18	0.000	COMB18
STORY1	C10	C40X40	0.000	0.400	COMB4	0.000	COMB18	0.000	COMB18
STORY1	C10	C40X40	149.250	0.152	COMB1	0.000	COMB18	0.000	COMB18
STORY1	C10	C40X40	298.500	0.446	COMB5	0.000	COMB18	0.000	COMB18
STORY1	C11	C40X40	0.000	0.472	COMB3	0.033	COMB6	0.000	COMB18
STORY1	C11	C40X40	149.250	0.074	COMB1	0.033	COMB6	0.000	COMB18
STORY1	C11	C40X40	298.500	0.421	COMB3	0.033	COMB6	0.000	COMB18

STORY2	C12	C40X40	0.000	0.199	COMB14	0.000	COMB18	0.000	COMB18
STORY2	C12	C40X40	50.000	0.131	COMB14	0.000	COMB18	0.000	COMB18
STORY2	C12	C40X40	100.000	0.085	COMB6	0.000	COMB18	0.000	COMB18
STORY1	C12	C40X40	0.000	0.306	COMB10	0.000	COMB18	0.000	COMB18
STORY1	C12	C40X40	149.250	0.102	COMB1	0.000	COMB18	0.000	COMB18
STORY1	C12	C40X40	298.500	0.197	COMB18	0.000	COMB18	0.000	COMB18
STORY1	C13	C40X40	0.000	0.422	COMB8	0.000	COMB18	0.000	COMB18
STORY1	C13	C40X40	149.250	0.146	COMB1	0.000	COMB18	0.000	COMB18
STORY1	C13	C40X40	298.500	0.456	COMB8	0.000	COMB18	0.000	COMB18
STORY1	C14	C40X40	0.000	0.473	COMB3	0.033	COMB6	0.000	COMB18
STORY1	C14	C40X40	149.250	0.072	COMB1	0.033	COMB6	0.000	COMB18
STORY1	C14	C40X40	298.500	0.419	COMB3	0.033	COMB6	0.000	COMB18
STORY2	C15	C40X40	0.000	0.186	COMB12	0.000	COMB18	0.000	COMB18
STORY2	C15	C40X40	50.000	0.122	COMB12	0.000	COMB18	0.000	COMB18
STORY2	C15	C40X40	100.000	0.082	COMB4	0.000	COMB18	0.000	COMB18
STORY1	C15	C40X40	0.000	0.320	COMB7	0.000	COMB18	0.000	COMB18
STORY1	C15	C40X40	149.250	0.099	COMB6	0.000	COMB18	0.000	COMB18
STORY1	C15	C40X40	298.500	0.210	COMB7	0.000	COMB18	0.000	COMB18
STORY1	C16	C40X40	0.000	0.410	COMB8	0.000	COMB18	0.000	COMB18
STORY1	C16	C40X40	149.250	0.121	COMB6	0.000	COMB18	0.000	COMB18
STORY1	C16	C40X40	298.500	0.428	COMB8	0.000	COMB18	0.000	COMB18
STORY1	C17	C40X40	0.000	0.467	COMB3	0.033	COMB6	0.000	COMB18
STORY1	C17	C40X40	149.250	0.059	COMB1	0.033	COMB6	0.000	COMB18
STORY1	C17	C40X40	298.500	0.406	COMB3	0.033	COMB6	0.000	COMB18
STORY2	C18	C40X40	0.000	0.154	COMB13	0.000	COMB18	0.000	COMB18
STORY2	C18	C40X40	50.000	0.099	COMB13	0.000	COMB18	0.000	COMB18
STORY2	C18	C40X40	100.000	0.068	COMB9	0.000	COMB18	0.000	COMB18
STORY1	C18	C40X40	0.000	0.330	COMB7	0.000	COMB18	0.000	COMB18
STORY1	C18	C40X40	149.250	0.091	COMB6	0.000	COMB18	0.000	COMB18
STORY1	C18	C40X40	298.500	0.225	COMB7	0.000	COMB18	0.000	COMB18
STORY1	C19	C40X40	0.000	0.357	COMB5	0.000	COMB18	0.000	COMB18
STORY1	C19	C40X40	149.250	0.113	COMB3	0.000	COMB18	0.000	COMB18
STORY1	C19	C40X40	298.500	0.360	COMB5	0.000	COMB18	0.000	COMB18
STORY1	C20	C40X40	0.000	0.452	COMB6	0.000	COMB18	0.000	COMB18
STORY1	C20	C40X40	149.250	0.067	COMB1	0.000	COMB18	0.000	COMB18
STORY1	C20	C40X40	298.500	0.388	COMB6	0.000	COMB18	0.000	COMB18
STORY2	C21	C40X40	0.000	0.085	COMB6	0.000	COMB18	0.000	COMB18
STORY2	C21	C40X40	50.000	0.053	COMB14	0.000	COMB18	0.000	COMB18
STORY2	C21	C40X40	100.000	0.070	COMB8	0.000	COMB18	0.000	COMB18
STORY1	C21	C40X40	0.000	0.343	COMB3	0.000	COMB18	0.000	COMB18
STORY1	C21	C40X40	149.250	0.065	COMB3	0.000	COMB18	0.000	COMB18
STORY1	C21	C40X40	298.500	0.222	COMB7	0.000	COMB18	0.000	COMB18

C O N C R E T E C O L U M N J O I N T O U T P U T (ACI 318-99)

BEAM TO COLUMN CAPACITY RATIOS AND JOINT SHEAR CAPACITY CHECK

STORY ID	COLUMN LINE	SECTION ID	<- (6/5) BEAM-COLUMN CAPACITY RATIOS->				<-- JOINT SHEAR CAPACITY RATIOS-->			
			MAJOR	COMBO	MINOR	COMBO	MAJOR	COMBO	MINOR	COMBO
STORY1	C1	C40X40								
STORY1	C2	C40X40								
STORY2	C3	C40X40								
STORY1	C3	C40X40								
STORY1	C4	C40X40								

STORY1	C5	C40X40
STORY2	C6	C40X40
STORY1	C6	C40X40
STORY1	C7	C40X40
STORY1	C8	D40
STORY2	C9	C40X40
STORY1	C9	C40X40
STORY1	C10	C40X40
STORY1	C11	C40X40
STORY2	C12	C40X40
STORY1	C12	C40X40
STORY1	C13	C40X40
STORY1	C14	C40X40
STORY2	C15	C40X40
STORY1	C15	C40X40
STORY1	C16	C40X40
STORY1	C17	C40X40
STORY2	C18	C40X40
STORY1	C18	C40X40
STORY1	C19	C40X40
STORY1	C20	C40X40
STORY2	C21	C40X40
STORY1	C21	C40X40

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 318-99)

FLEXURAL AND TORSION DESIGN OF BEAM-TYPE ELEMENTS

STORY ID	BEAM BAY	SECTION ID	STATION ID	<-----REQUIRED REINFORCING----->					
				TOP	COMBO	BOTTOM	COMBO	TORSION	COMBO
STORY2	B13	V40X65	20.000	2.014	COMB10	0.000	COMB18	0.000	COMB18
STORY2	B13	V40X65	69.250	1.278	COMB10	0.402	COMB16	0.000	COMB18
STORY2	B13	V40X65	118.500	0.640	COMB10	0.742	COMB16	0.000	COMB18
STORY2	B13	V40X65	167.750	0.159	COMB18	1.065	COMB8	0.000	COMB18
STORY2	B13	V40X65	217.000	0.000	COMB18	1.295	COMB8	0.000	COMB18
STORY2	B13	V40X65	266.250	0.000	COMB18	1.433	COMB2	0.000	COMB18
STORY2	B13	V40X65	315.500	0.000	COMB18	1.635	COMB2	0.000	COMB18
STORY2	B13	V40X65	364.750	0.000	COMB18	1.711	COMB2	0.000	COMB18
STORY2	B13	V40X65	414.000	0.000	COMB18	1.663	COMB1	0.000	COMB18
STORY2	B13	V40X65	463.250	0.000	COMB18	1.490	COMB1	0.000	COMB18
STORY2	B13	V40X65	512.500	0.000	COMB18	1.192	COMB1	0.000	COMB18
STORY2	B13	V40X65	561.750	0.000	COMB18	0.877	COMB10	0.000	COMB18
STORY2	B13	V40X65	611.000	0.272	COMB16	0.577	COMB10	0.000	COMB18
STORY2	B13	V40X65	660.250	0.855	COMB8	0.223	COMB18	0.000	COMB18
STORY2	B13	V40X65	709.500	1.565	COMB8	0.000	COMB18	0.000	COMB18
STORY2	B13	V40X65	758.750	2.373	COMB8	0.000	COMB18	0.000	COMB18
STORY2	B13	V40X65	808.000	3.279	COMB8	0.000	COMB18	0.000	COMB18
STORY2	B14	V40X65	20.000	2.852	COMB9	0.000	COMB18	0.000	COMB18
STORY2	B14	V40X65	69.412	2.011	COMB9	0.000	COMB18	0.000	COMB18
STORY2	B14	V40X65	118.824	1.269	COMB9	0.000	COMB18	0.000	COMB18
STORY2	B14	V40X65	168.235	0.625	COMB9	0.369	COMB15	0.000	COMB18
STORY2	B14	V40X65	217.647	0.127	COMB17	0.728	COMB7	0.000	COMB18
STORY2	B14	V40X65	267.059	0.000	COMB18	1.008	COMB7	0.000	COMB18
STORY2	B14	V40X65	316.471	0.000	COMB18	1.288	COMB1	0.000	COMB18
STORY2	B14	V40X65	365.882	0.000	COMB18	1.527	COMB1	0.000	COMB18
STORY2	B14	V40X65	415.294	0.000	COMB18	1.640	COMB1	0.000	COMB18
STORY2	B14	V40X65	464.706	0.000	COMB18	1.626	COMB1	0.000	COMB18
STORY2	B14	V40X65	514.118	0.000	COMB18	1.485	COMB1	0.000	COMB18
STORY2	B14	V40X65	563.529	0.000	COMB18	1.219	COMB1	0.000	COMB18
STORY2	B14	V40X65	612.941	0.000	COMB18	0.917	COMB9	0.000	COMB18
STORY2	B14	V40X65	662.353	0.183	COMB15	0.616	COMB9	0.000	COMB18
STORY2	B14	V40X65	711.765	0.720	COMB7	0.259	COMB17	0.000	COMB18
STORY2	B14	V40X65	761.176	1.385	COMB7	0.000	COMB18	0.000	COMB18
STORY2	B14	V40X65	810.588	2.148	COMB7	0.000	COMB18	0.000	COMB18
STORY2	B14	V40X65	860.000	3.031	COMB1	0.000	COMB18	0.000	COMB18

STORY2	B15	V40X65	20.000	2.650	COMB10	0.000	COMB18	0.000	COMB18
STORY2	B15	V40X65	68.625	1.870	COMB10	0.000	COMB18	0.000	COMB18
STORY2	B15	V40X65	117.250	1.185	COMB10	0.038	COMB16	0.000	COMB18
STORY2	B15	V40X65	165.875	0.593	COMB10	0.368	COMB16	0.000	COMB18
STORY2	B15	V40X65	214.500	0.135	COMB18	0.661	COMB8	0.000	COMB18
STORY2	B15	V40X65	263.125	0.000	COMB18	0.881	COMB8	0.000	COMB18
STORY2	B15	V40X65	311.750	0.000	COMB18	1.092	COMB2	0.000	COMB18
STORY2	B15	V40X65	360.375	0.000	COMB18	1.267	COMB1	0.000	COMB18
STORY2	B15	V40X65	409.000	0.000	COMB18	1.320	COMB1	0.000	COMB18
STORY2	B15	V40X65	457.625	0.000	COMB18	1.250	COMB1	0.000	COMB18
STORY2	B15	V40X65	506.250	0.000	COMB18	1.059	COMB1	0.000	COMB18
STORY2	B15	V40X65	554.875	0.000	COMB18	0.839	COMB10	0.000	COMB18
STORY2	B15	V40X65	603.500	0.175	COMB16	0.607	COMB10	0.000	COMB18
STORY2	B15	V40X65	652.125	0.651	COMB8	0.309	COMB18	0.000	COMB18
STORY2	B15	V40X65	700.750	1.255	COMB8	0.000	COMB18	0.000	COMB18
STORY2	B15	V40X65	749.375	1.953	COMB8	0.000	COMB18	0.000	COMB18
STORY2	B15	V40X65	798.000	2.746	COMB8	0.000	COMB18	0.000	COMB18
STORY2	B16	V40X65	20.000	3.022	COMB2	0.000	COMB18	0.000	COMB18
STORY2	B16	V40X65	69.824	2.085	COMB9	0.000	COMB18	0.000	COMB18
STORY2	B16	V40X65	119.647	1.320	COMB9	0.000	COMB18	0.000	COMB18
STORY2	B16	V40X65	169.471	0.654	COMB9	0.262	COMB15	0.000	COMB18
STORY2	B16	V40X65	219.294	0.126	COMB17	0.642	COMB7	0.000	COMB18
STORY2	B16	V40X65	269.118	0.000	COMB18	0.957	COMB7	0.000	COMB18
STORY2	B16	V40X65	318.941	0.000	COMB18	1.292	COMB1	0.000	COMB18
STORY2	B16	V40X65	368.765	0.000	COMB18	1.562	COMB1	0.000	COMB18
STORY2	B16	V40X65	418.588	0.000	COMB18	1.704	COMB1	0.000	COMB18
STORY2	B16	V40X65	468.412	0.000	COMB18	1.717	COMB1	0.000	COMB18
STORY2	B16	V40X65	518.235	0.000	COMB18	1.601	COMB1	0.000	COMB18
STORY2	B16	V40X65	568.059	0.000	COMB18	1.357	COMB1	0.000	COMB18
STORY2	B16	V40X65	617.882	0.000	COMB18	1.006	COMB10	0.000	COMB18
STORY2	B16	V40X65	667.706	0.034	COMB16	0.711	COMB10	0.000	COMB18
STORY2	B16	V40X65	717.529	0.529	COMB8	0.334	COMB18	0.000	COMB18
STORY2	B16	V40X65	767.353	1.175	COMB8	0.000	COMB18	0.000	COMB18
STORY2	B16	V40X65	817.176	1.920	COMB8	0.000	COMB18	0.000	COMB18
STORY2	B16	V40X65	867.000	2.801	COMB2	0.000	COMB18	0.000	COMB18
STORY2	B17	V40X65	20.000	2.546	COMB10	0.000	COMB18	0.000	COMB18
STORY2	B17	V40X65	68.429	1.798	COMB10	0.000	COMB18	0.000	COMB18
STORY2	B17	V40X65	116.857	1.144	COMB10	0.061	COMB16	0.000	COMB18
STORY2	B17	V40X65	165.286	0.582	COMB10	0.334	COMB16	0.000	COMB18
STORY2	B17	V40X65	213.714	0.145	COMB18	0.562	COMB8	0.000	COMB18
STORY2	B17	V40X65	262.143	0.000	COMB18	0.720	COMB8	0.000	COMB18
STORY2	B17	V40X65	310.571	0.000	COMB18	0.894	COMB1	0.000	COMB18
STORY2	B17	V40X65	359.000	0.000	COMB18	1.011	COMB1	0.000	COMB18
STORY2	B17	V40X65	407.429	0.000	COMB18	1.006	COMB1	0.000	COMB18
STORY2	B17	V40X65	455.857	0.000	COMB18	0.880	COMB1	0.000	COMB18
STORY2	B17	V40X65	504.286	0.000	COMB18	0.802	COMB10	0.000	COMB18
STORY2	B17	V40X65	552.714	0.272	COMB16	0.638	COMB10	0.000	COMB18
STORY2	B17	V40X65	601.143	0.713	COMB8	0.398	COMB18	0.000	COMB18
STORY2	B17	V40X65	649.571	1.282	COMB8	0.117	COMB18	0.000	COMB18
STORY2	B17	V40X65	698.000	1.944	COMB8	0.000	COMB18	0.000	COMB18
STORY2	B18	V40X65	20.000	2.176	COMB9	0.000	COMB18	0.000	COMB18
STORY2	B18	V40X65	67.250	1.476	COMB9	0.076	COMB15	0.000	COMB18
STORY2	B18	V40X65	114.500	0.866	COMB9	0.317	COMB15	0.000	COMB18
STORY2	B18	V40X65	161.750	0.367	COMB17	0.507	COMB7	0.000	COMB18
STORY2	B18	V40X65	209.000	0.000	COMB18	0.637	COMB7	0.000	COMB18
STORY2	B18	V40X65	256.250	0.000	COMB18	0.747	COMB1	0.000	COMB18
STORY2	B18	V40X65	303.500	0.000	COMB18	0.894	COMB1	0.000	COMB18
STORY2	B18	V40X65	350.750	0.000	COMB18	0.929	COMB2	0.000	COMB18
STORY2	B18	V40X65	398.000	0.000	COMB18	0.970	COMB10	0.000	COMB18
STORY2	B18	V40X65	445.250	0.067	COMB16	0.974	COMB10	0.000	COMB18
STORY2	B18	V40X65	492.500	0.417	COMB16	0.892	COMB10	0.000	COMB18
STORY2	B18	V40X65	539.750	0.866	COMB8	0.748	COMB18	0.000	COMB18
STORY2	B18	V40X65	587.000	1.428	COMB8	0.555	COMB18	0.000	COMB18
STORY1	B1	V40X65	20.000	4.033	COMB9	1.852	COMB15	0.000	COMB18
STORY1	B1	V40X65	69.250	2.597	COMB9	2.353	COMB15	0.000	COMB18

STORY1	B1	V40X65	118.500	1.551	COMB17	2.958	COMB7	0.000	COMB18
STORY1	B1	V40X65	167.750	0.689	COMB17	3.438	COMB7	0.000	COMB18
STORY1	B1	V40X65	217.000	0.000	COMB18	3.742	COMB7	0.000	COMB18
STORY1	B1	V40X65	266.250	0.000	COMB18	3.867	COMB7	0.000	COMB18
STORY1	B1	V40X65	315.500	0.000	COMB18	4.112	COMB1	0.000	COMB18
STORY1	B1	V40X65	364.750	0.000	COMB18	4.246	COMB1	0.000	COMB18
STORY1	B1	V40X65	414.000	0.000	COMB18	4.191	COMB1	0.000	COMB18
STORY1	B1	V40X65	414.000	0.000	COMB18	4.191	COMB1	0.000	COMB18
STORY1	B1	V40X65	463.250	0.000	COMB18	3.734	COMB1	0.000	COMB18
STORY1	B1	V40X65	512.500	0.000	COMB18	3.089	COMB1	0.000	COMB18
STORY1	B1	V40X65	561.750	0.000	COMB18	2.223	COMB1	0.000	COMB18
STORY1	B1	V40X65	611.000	0.602	COMB15	1.291	COMB9	0.000	COMB18
STORY1	B1	V40X65	660.250	1.834	COMB7	0.718	COMB17	0.000	COMB18
STORY1	B1	V40X65	709.500	3.374	COMB7	0.140	COMB17	0.000	COMB18
STORY1	B1	V40X65	758.750	5.108	COMB7	0.000	COMB18	0.000	COMB18
STORY1	B1	V40X65	808.000	7.026	COMB7	0.000	COMB18	0.000	COMB18
STORY1	B2	V40X65	20.000	6.080	COMB9	0.000	COMB18	0.000	COMB18
STORY1	B2	V40X65	66.667	4.483	COMB9	0.000	COMB18	0.000	COMB18
STORY1	B2	V40X65	113.333	3.045	COMB9	0.000	COMB18	0.000	COMB18
STORY1	B2	V40X65	160.000	1.777	COMB9	0.421	COMB15	0.000	COMB18
STORY1	B2	V40X65	206.667	0.718	COMB17	0.954	COMB7	0.000	COMB18
STORY1	B2	V40X65	253.333	0.000	COMB18	1.856	COMB1	0.000	COMB18
STORY1	B2	V40X65	300.000	0.000	COMB18	2.638	COMB1	0.000	COMB18
STORY1	B2	V40X65	346.667	0.000	COMB18	3.218	COMB1	0.000	COMB18
STORY1	B2	V40X65	393.333	0.000	COMB18	3.599	COMB1	0.000	COMB18
STORY1	B2	V40X65	440.000	0.000	COMB18	3.813	COMB1	0.000	COMB18
STORY1	B2	V40X65	440.000	0.000	COMB18	3.813	COMB1	0.000	COMB18
STORY1	B2	V40X65	486.667	0.000	COMB18	3.655	COMB1	0.000	COMB18
STORY1	B2	V40X65	533.333	0.000	COMB18	3.331	COMB1	0.000	COMB18
STORY1	B2	V40X65	580.000	0.000	COMB18	2.806	COMB1	0.000	COMB18
STORY1	B2	V40X65	626.667	0.000	COMB18	2.080	COMB1	0.000	COMB18
STORY1	B2	V40X65	673.333	0.652	COMB15	1.318	COMB9	0.000	COMB18
STORY1	B2	V40X65	720.000	1.588	COMB7	0.748	COMB17	0.000	COMB18
STORY1	B2	V40X65	766.667	2.803	COMB7	0.181	COMB17	0.000	COMB18
STORY1	B2	V40X65	813.333	4.188	COMB7	0.000	COMB18	0.000	COMB18
STORY1	B2	V40X65	860.000	5.731	COMB7	0.000	COMB18	0.000	COMB18
STORY1	B3	V40X65	20.000	5.551	COMB9	0.000	COMB18	0.000	COMB18
STORY1	B3	V40X65	68.625	4.012	COMB9	0.000	COMB18	0.000	COMB18
STORY1	B3	V40X65	117.250	2.643	COMB9	0.481	COMB15	0.000	COMB18
STORY1	B3	V40X65	165.875	1.457	COMB9	0.935	COMB15	0.000	COMB18
STORY1	B3	V40X65	214.500	0.581	COMB17	1.397	COMB7	0.000	COMB18
STORY1	B3	V40X65	263.125	0.000	COMB18	1.991	COMB1	0.000	COMB18
STORY1	B3	V40X65	311.750	0.000	COMB18	2.556	COMB1	0.000	COMB18
STORY1	B3	V40X65	360.375	0.000	COMB18	2.904	COMB1	0.000	COMB18
STORY1	B3	V40X65	409.000	0.000	COMB18	3.070	COMB1	0.000	COMB18
STORY1	B3	V40X65	409.000	0.000	COMB18	3.070	COMB1	0.000	COMB18
STORY1	B3	V40X65	457.625	0.000	COMB18	2.844	COMB1	0.000	COMB18
STORY1	B3	V40X65	506.250	0.000	COMB18	2.435	COMB1	0.000	COMB18
STORY1	B3	V40X65	554.875	0.013	COMB15	1.810	COMB1	0.000	COMB18
STORY1	B3	V40X65	603.500	0.716	COMB15	1.171	COMB9	0.000	COMB18
STORY1	B3	V40X65	652.125	1.698	COMB7	0.723	COMB17	0.000	COMB18
STORY1	B3	V40X65	700.750	2.938	COMB7	0.232	COMB17	0.000	COMB18
STORY1	B3	V40X65	749.375	4.361	COMB7	0.000	COMB18	0.000	COMB18
STORY1	B3	V40X65	798.000	5.957	COMB7	0.000	COMB18	0.000	COMB18
STORY1	B4	V40X65	20.000	5.854	COMB9	0.000	COMB18	0.000	COMB18
STORY1	B4	V40X65	67.056	4.251	COMB9	0.000	COMB18	0.000	COMB18
STORY1	B4	V40X65	114.111	2.809	COMB9	0.218	COMB15	0.000	COMB18
STORY1	B4	V40X65	161.167	1.539	COMB9	0.803	COMB15	0.000	COMB18
STORY1	B4	V40X65	208.222	0.576	COMB17	1.414	COMB7	0.000	COMB18
STORY1	B4	V40X65	255.278	0.000	COMB18	2.251	COMB1	0.000	COMB18
STORY1	B4	V40X65	302.333	0.000	COMB18	3.018	COMB1	0.000	COMB18
STORY1	B4	V40X65	349.389	0.000	COMB18	3.579	COMB1	0.000	COMB18
STORY1	B4	V40X65	396.444	0.000	COMB18	3.937	COMB1	0.000	COMB18
STORY1	B4	V40X65	443.500	0.000	COMB18	4.124	COMB1	0.000	COMB18
STORY1	B4	V40X65	443.500	0.000	COMB18	4.124	COMB1	0.000	COMB18
STORY1	B4	V40X65	490.556	0.000	COMB18	3.935	COMB1	0.000	COMB18

STORY1	B4	V40X65	537.611	0.000	COMB18	3.575	COMB1	0.000	COMB18
STORY1	B4	V40X65	584.667	0.000	COMB18	3.011	COMB1	0.000	COMB18
STORY1	B4	V40X65	631.722	0.000	COMB18	2.243	COMB1	0.000	COMB18
STORY1	B4	V40X65	678.778	0.582	COMB15	1.412	COMB9	0.000	COMB18
STORY1	B4	V40X65	725.833	1.539	COMB7	0.794	COMB17	0.000	COMB18
STORY1	B4	V40X65	772.889	2.809	COMB7	0.207	COMB17	0.000	COMB18
STORY1	B4	V40X65	819.944	4.251	COMB7	0.000	COMB18	0.000	COMB18
STORY1	B4	V40X65	867.000	5.854	COMB7	0.000	COMB18	0.000	COMB18
STORY1	B5	V40X65	20.000	5.422	COMB9	0.000	COMB18	0.000	COMB18
STORY1	B5	V40X65	68.429	3.921	COMB9	0.000	COMB18	0.000	COMB18
STORY1	B5	V40X65	116.857	2.589	COMB9	0.436	COMB15	0.000	COMB18
STORY1	B5	V40X65	165.286	1.437	COMB9	0.844	COMB15	0.000	COMB18
STORY1	B5	V40X65	213.714	0.567	COMB17	1.235	COMB7	0.000	COMB18
STORY1	B5	V40X65	262.143	0.000	COMB18	1.701	COMB1	0.000	COMB18
STORY1	B5	V40X65	310.571	0.000	COMB18	2.194	COMB1	0.000	COMB18
STORY1	B5	V40X65	359.000	0.000	COMB18	2.507	COMB1	0.000	COMB18
STORY1	B5	V40X65	359.000	0.000	COMB18	2.507	COMB1	0.000	COMB18
STORY1	B5	V40X65	407.429	0.000	COMB18	2.431	COMB1	0.000	COMB18
STORY1	B5	V40X65	455.857	0.000	COMB18	2.175	COMB1	0.000	COMB18
STORY1	B5	V40X65	504.286	0.000	COMB18	1.704	COMB1	0.000	COMB18
STORY1	B5	V40X65	552.714	0.492	COMB16	1.344	COMB10	0.000	COMB18
STORY1	B5	V40X65	601.143	1.294	COMB8	0.954	COMB18	0.000	COMB18
STORY1	B5	V40X65	649.571	2.406	COMB8	0.576	COMB18	0.000	COMB18
STORY1	B5	V40X65	698.000	3.681	COMB8	0.087	COMB18	0.000	COMB18
STORY1	B6	V40X65	20.000	3.746	COMB9	1.003	COMB15	0.000	COMB18
STORY1	B6	V40X65	67.250	2.582	COMB9	1.118	COMB15	0.000	COMB18
STORY1	B6	V40X65	114.500	1.574	COMB9	1.125	COMB15	0.000	COMB18
STORY1	B6	V40X65	161.750	0.785	COMB17	1.069	COMB7	0.000	COMB18
STORY1	B6	V40X65	209.000	0.199	COMB18	0.936	COMB8	0.000	COMB18
STORY1	B6	V40X65	256.250	0.000	COMB18	1.044	COMB1	0.000	COMB18
STORY1	B6	V40X65	303.500	0.000	COMB18	1.027	COMB1	0.000	COMB18
STORY1	B6	V40X65	303.500	0.000	COMB18	1.027	COMB1	0.000	COMB18
STORY1	B6	V40X65	350.750	0.623	COMB15	0.945	COMB9	0.000	COMB18
STORY1	B6	V40X65	398.000	1.383	COMB7	0.926	COMB17	0.000	COMB18
STORY1	B6	V40X65	445.250	2.403	COMB7	0.890	COMB17	0.000	COMB18
STORY1	B6	V40X65	492.500	3.594	COMB7	0.737	COMB17	0.000	COMB18
STORY1	B6	V40X65	539.750	4.958	COMB7	0.470	COMB17	0.000	COMB18
STORY1	B6	V40X65	587.000	6.484	COMB7	0.096	COMB17	0.000	COMB18
STORY1	B7	V40X65	20.000	2.588	COMB10	1.492	COMB16	0.000	COMB18
STORY1	B7	V40X65	69.250	1.779	COMB18	1.768	COMB8	0.000	COMB18
STORY1	B7	V40X65	118.500	1.135	COMB18	2.032	COMB8	0.000	COMB18
STORY1	B7	V40X65	167.750	0.574	COMB18	2.201	COMB8	0.000	COMB18
STORY1	B7	V40X65	217.000	0.095	COMB18	2.276	COMB8	0.000	COMB18
STORY1	B7	V40X65	266.250	0.000	COMB18	2.257	COMB8	0.000	COMB18
STORY1	B7	V40X65	315.500	0.000	COMB18	2.143	COMB7	0.000	COMB18
STORY1	B7	V40X65	364.750	0.000	COMB18	2.010	COMB1	0.000	COMB18
STORY1	B7	V40X65	414.000	0.000	COMB18	1.907	COMB1	0.000	COMB18
STORY1	B7	V40X65	463.250	0.000	COMB18	1.678	COMB1	0.000	COMB18
STORY1	B7	V40X65	512.500	0.000	COMB18	1.324	COMB1	0.000	COMB18
STORY1	B7	V40X65	561.750	0.000	COMB18	1.103	COMB10	0.000	COMB18
STORY1	B7	V40X65	611.000	0.534	COMB16	0.875	COMB10	0.000	COMB18
STORY1	B7	V40X65	660.250	1.278	COMB8	0.605	COMB18	0.000	COMB18
STORY1	B7	V40X65	709.500	2.147	COMB8	0.282	COMB18	0.000	COMB18
STORY1	B7	V40X65	758.750	3.114	COMB8	0.000	COMB18	0.000	COMB18
STORY1	B7	V40X65	808.000	4.182	COMB8	0.000	COMB18	0.000	COMB18
STORY1	B8	V40X65	20.000	3.329	COMB10	0.000	COMB18	0.000	COMB18
STORY1	B8	V40X65	69.412	2.442	COMB10	0.000	COMB18	0.000	COMB18
STORY1	B8	V40X65	118.824	1.655	COMB10	0.000	COMB18	0.000	COMB18
STORY1	B8	V40X65	168.235	0.965	COMB10	0.385	COMB16	0.000	COMB18
STORY1	B8	V40X65	217.647	0.400	COMB18	0.730	COMB8	0.000	COMB18
STORY1	B8	V40X65	267.059	0.000	COMB18	1.024	COMB8	0.000	COMB18
STORY1	B8	V40X65	316.471	0.000	COMB18	1.224	COMB8	0.000	COMB18
STORY1	B8	V40X65	365.882	0.000	COMB18	1.446	COMB1	0.000	COMB18
STORY1	B8	V40X65	415.294	0.000	COMB18	1.597	COMB1	0.000	COMB18
STORY1	B8	V40X65	464.706	0.000	COMB18	1.621	COMB1	0.000	COMB18

STORY1	B8	V40X65	514.118	0.000	COMB18	1.520	COMB1	0.000	COMB18
STORY1	B8	V40X65	563.529	0.000	COMB18	1.292	COMB1	0.000	COMB18
STORY1	B8	V40X65	612.941	0.000	COMB18	0.969	COMB9	0.000	COMB18
STORY1	B8	V40X65	662.353	0.073	COMB15	0.712	COMB9	0.000	COMB18
STORY1	B8	V40X65	711.765	0.578	COMB7	0.376	COMB17	0.000	COMB18
STORY1	B8	V40X65	761.176	1.229	COMB7	0.010	COMB17	0.000	COMB18
STORY1	B8	V40X65	810.588	1.978	COMB7	0.000	COMB18	0.000	COMB18
STORY1	B8	V40X65	860.000	2.825	COMB7	0.000	COMB18	0.000	COMB18
STORY1	B9	V40X65	20.000	2.789	COMB10	0.000	COMB18	0.000	COMB18
STORY1	B9	V40X65	68.625	1.982	COMB10	0.000	COMB18	0.000	COMB18
STORY1	B9	V40X65	117.250	1.270	COMB10	0.102	COMB16	0.000	COMB18
STORY1	B9	V40X65	165.875	0.652	COMB10	0.389	COMB16	0.000	COMB18
STORY1	B9	V40X65	214.500	0.166	COMB18	0.636	COMB8	0.000	COMB18
STORY1	B9	V40X65	263.125	0.000	COMB18	0.810	COMB8	0.000	COMB18
STORY1	B9	V40X65	311.750	0.000	COMB18	1.027	COMB1	0.000	COMB18
STORY1	B9	V40X65	360.375	0.000	COMB18	1.188	COMB1	0.000	COMB18
STORY1	B9	V40X65	409.000	0.000	COMB18	1.228	COMB2	0.000	COMB18
STORY1	B9	V40X65	457.625	0.000	COMB18	1.146	COMB2	0.000	COMB18
STORY1	B9	V40X65	506.250	0.000	COMB18	1.102	COMB10	0.000	COMB18
STORY1	B9	V40X65	554.875	0.130	COMB16	0.988	COMB10	0.000	COMB18
STORY1	B9	V40X65	603.500	0.546	COMB16	0.781	COMB10	0.000	COMB18
STORY1	B9	V40X65	652.125	1.088	COMB8	0.529	COMB18	0.000	COMB18
STORY1	B9	V40X65	700.750	1.740	COMB8	0.216	COMB18	0.000	COMB18
STORY1	B9	V40X65	749.375	2.486	COMB8	0.000	COMB18	0.000	COMB18
STORY1	B9	V40X65	798.000	3.329	COMB8	0.000	COMB18	0.000	COMB18
STORY1	B10	V40X65	20.000	3.411	COMB10	0.000	COMB18	0.000	COMB18
STORY1	B10	V40X65	69.824	2.488	COMB10	0.000	COMB18	0.000	COMB18
STORY1	B10	V40X65	119.647	1.666	COMB10	0.402	COMB16	0.000	COMB18
STORY1	B10	V40X65	169.471	0.944	COMB10	0.745	COMB16	0.000	COMB18
STORY1	B10	V40X65	219.294	0.374	COMB18	1.060	COMB8	0.000	COMB18
STORY1	B10	V40X65	269.118	0.000	COMB18	1.293	COMB8	0.000	COMB18
STORY1	B10	V40X65	318.941	0.000	COMB18	1.430	COMB8	0.000	COMB18
STORY1	B10	V40X65	368.765	0.000	COMB18	1.631	COMB2	0.000	COMB18
STORY1	B10	V40X65	418.588	0.000	COMB18	1.755	COMB2	0.000	COMB18
STORY1	B10	V40X65	468.412	0.000	COMB18	1.751	COMB2	0.000	COMB18
STORY1	B10	V40X65	518.235	0.000	COMB18	1.618	COMB2	0.000	COMB18
STORY1	B10	V40X65	568.059	0.000	COMB18	1.358	COMB9	0.000	COMB18
STORY1	B10	V40X65	617.882	0.000	COMB18	1.214	COMB9	0.000	COMB18
STORY1	B10	V40X65	667.706	0.347	COMB15	0.973	COMB9	0.000	COMB18
STORY1	B10	V40X65	717.529	0.932	COMB7	0.660	COMB17	0.000	COMB18
STORY1	B10	V40X65	767.353	1.662	COMB7	0.312	COMB17	0.000	COMB18
STORY1	B10	V40X65	817.176	2.492	COMB7	0.000	COMB18	0.000	COMB18
STORY1	B10	V40X65	867.000	3.423	COMB7	0.000	COMB18	0.000	COMB18
STORY1	B11	V40X65	20.000	3.156	COMB10	0.000	COMB18	0.000	COMB18
STORY1	B11	V40X65	68.429	2.321	COMB10	0.082	COMB16	0.000	COMB18
STORY1	B11	V40X65	116.857	1.580	COMB10	0.395	COMB16	0.000	COMB18
STORY1	B11	V40X65	165.286	0.933	COMB10	0.630	COMB16	0.000	COMB18
STORY1	B11	V40X65	213.714	0.413	COMB18	0.821	COMB8	0.000	COMB18
STORY1	B11	V40X65	262.143	0.000	COMB18	0.943	COMB7	0.000	COMB18
STORY1	B11	V40X65	310.571	0.000	COMB18	0.974	COMB7	0.000	COMB18
STORY1	B11	V40X65	359.000	0.000	COMB18	1.101	COMB1	0.000	COMB18
STORY1	B11	V40X65	407.429	0.000	COMB18	1.128	COMB1	0.000	COMB18
STORY1	B11	V40X65	455.857	0.000	COMB18	1.035	COMB1	0.000	COMB18
STORY1	B11	V40X65	504.286	0.000	COMB18	1.039	COMB10	0.000	COMB18
STORY1	B11	V40X65	552.714	0.284	COMB16	0.958	COMB10	0.000	COMB18
STORY1	B11	V40X65	601.143	0.748	COMB16	0.786	COMB10	0.000	COMB18
STORY1	B11	V40X65	649.571	1.347	COMB8	0.580	COMB18	0.000	COMB18
STORY1	B11	V40X65	698.000	2.046	COMB8	0.302	COMB18	0.000	COMB18
STORY1	B12	V40X65	20.000	2.122	COMB9	1.066	COMB15	0.000	COMB18
STORY1	B12	V40X65	67.250	1.518	COMB9	1.018	COMB15	0.000	COMB18
STORY1	B12	V40X65	114.500	1.003	COMB9	0.897	COMB15	0.000	COMB18
STORY1	B12	V40X65	161.750	0.589	COMB18	0.714	COMB8	0.000	COMB18
STORY1	B12	V40X65	209.000	0.252	COMB18	0.448	COMB8	0.000	COMB18
STORY1	B12	V40X65	256.250	0.000	COMB18	0.097	COMB8	0.000	COMB18
STORY1	B12	V40X65	303.500	0.346	COMB7	0.205	COMB17	0.000	COMB18

STORY1	B12	V40X65	350.750	0.873	COMB7	0.322	COMB17	0.000	COMB18
STORY1	B12	V40X65	398.000	1.487	COMB7	0.364	COMB17	0.000	COMB18
STORY1	B12	V40X65	445.250	2.191	COMB7	0.333	COMB17	0.000	COMB18
STORY1	B12	V40X65	492.500	2.985	COMB7	0.229	COMB17	0.000	COMB18
STORY1	B12	V40X65	539.750	3.870	COMB7	0.050	COMB17	0.000	COMB18
STORY1	B12	V40X65	587.000	4.848	COMB7	0.000	COMB18	0.000	COMB18
STORY1	B13	V40X65	20.000	3.789	COMB10	1.541	COMB16	0.000	COMB18
STORY1	B13	V40X65	69.250	2.846	COMB10	1.787	COMB16	0.000	COMB18
STORY1	B13	V40X65	118.500	2.003	COMB10	1.953	COMB16	0.000	COMB18
STORY1	B13	V40X65	167.750	1.312	COMB18	2.091	COMB8	0.000	COMB18
STORY1	B13	V40X65	217.000	0.715	COMB18	2.146	COMB8	0.000	COMB18
STORY1	B13	V40X65	266.250	0.200	COMB18	2.107	COMB8	0.000	COMB18
STORY1	B13	V40X65	315.500	0.000	COMB18	1.974	COMB8	0.000	COMB18
STORY1	B13	V40X65	364.750	0.000	COMB18	1.746	COMB8	0.000	COMB18
STORY1	B13	V40X65	414.000	0.000	COMB18	1.643	COMB1	0.000	COMB18
STORY1	B13	V40X65	463.250	0.000	COMB18	1.486	COMB1	0.000	COMB18
STORY1	B13	V40X65	512.500	0.000	COMB18	1.302	COMB10	0.000	COMB18
STORY1	B13	V40X65	561.750	0.188	COMB16	1.293	COMB10	0.000	COMB18
STORY1	B13	V40X65	611.000	0.827	COMB16	1.189	COMB10	0.000	COMB18
STORY1	B13	V40X65	660.250	1.584	COMB8	1.028	COMB18	0.000	COMB18
STORY1	B13	V40X65	709.500	2.474	COMB8	0.819	COMB18	0.000	COMB18
STORY1	B13	V40X65	758.750	3.463	COMB8	0.531	COMB18	0.000	COMB18
STORY1	B13	V40X65	808.000	4.554	COMB8	0.163	COMB18	0.000	COMB18
STORY1	B14	V40X65	20.000	3.930	COMB10	0.000	COMB18	0.000	COMB18
STORY1	B14	V40X65	69.412	2.956	COMB10	0.349	COMB16	0.000	COMB18
STORY1	B14	V40X65	118.824	2.081	COMB10	0.702	COMB16	0.000	COMB18
STORY1	B14	V40X65	168.235	1.306	COMB10	0.975	COMB16	0.000	COMB18
STORY1	B14	V40X65	217.647	0.673	COMB18	1.212	COMB8	0.000	COMB18
STORY1	B14	V40X65	267.059	0.144	COMB18	1.376	COMB8	0.000	COMB18
STORY1	B14	V40X65	316.471	0.000	COMB18	1.446	COMB8	0.000	COMB18
STORY1	B14	V40X65	365.882	0.000	COMB18	1.503	COMB1	0.000	COMB18
STORY1	B14	V40X65	415.294	0.000	COMB18	1.623	COMB1	0.000	COMB18
STORY1	B14	V40X65	464.706	0.000	COMB18	1.617	COMB1	0.000	COMB18
STORY1	B14	V40X65	514.118	0.000	COMB18	1.485	COMB1	0.000	COMB18
STORY1	B14	V40X65	563.529	0.000	COMB18	1.462	COMB10	0.000	COMB18
STORY1	B14	V40X65	612.941	0.208	COMB16	1.383	COMB10	0.000	COMB18
STORY1	B14	V40X65	662.353	0.744	COMB16	1.209	COMB10	0.000	COMB18
STORY1	B14	V40X65	711.765	1.396	COMB8	0.974	COMB18	0.000	COMB18
STORY1	B14	V40X65	761.176	2.180	COMB8	0.694	COMB18	0.000	COMB18
STORY1	B14	V40X65	810.588	3.064	COMB8	0.333	COMB18	0.000	COMB18
STORY1	B14	V40X65	860.000	4.049	COMB8	0.000	COMB18	0.000	COMB18
STORY1	B15	V40X65	20.000	3.871	COMB10	0.336	COMB16	0.000	COMB18
STORY1	B15	V40X65	68.625	2.935	COMB10	0.673	COMB16	0.000	COMB18
STORY1	B15	V40X65	117.250	2.095	COMB10	0.933	COMB16	0.000	COMB18
STORY1	B15	V40X65	165.875	1.351	COMB10	1.114	COMB16	0.000	COMB18
STORY1	B15	V40X65	214.500	0.740	COMB18	1.256	COMB8	0.000	COMB18
STORY1	B15	V40X65	263.125	0.229	COMB18	1.325	COMB8	0.000	COMB18
STORY1	B15	V40X65	311.750	0.000	COMB18	1.303	COMB8	0.000	COMB18
STORY1	B15	V40X65	360.375	0.000	COMB18	1.255	COMB1	0.000	COMB18
STORY1	B15	V40X65	409.000	0.000	COMB18	1.307	COMB1	0.000	COMB18
STORY1	B15	V40X65	457.625	0.000	COMB18	1.237	COMB1	0.000	COMB18
STORY1	B15	V40X65	506.250	0.000	COMB18	1.267	COMB10	0.000	COMB18
STORY1	B15	V40X65	554.875	0.257	COMB16	1.276	COMB10	0.000	COMB18
STORY1	B15	V40X65	603.500	0.781	COMB16	1.193	COMB10	0.000	COMB18
STORY1	B15	V40X65	652.125	1.412	COMB8	1.045	COMB18	0.000	COMB18
STORY1	B15	V40X65	700.750	2.170	COMB8	0.851	COMB18	0.000	COMB18
STORY1	B15	V40X65	749.375	3.024	COMB8	0.580	COMB18	0.000	COMB18
STORY1	B15	V40X65	798.000	3.975	COMB8	0.230	COMB18	0.000	COMB18
STORY1	B16	V40X65	20.000	4.036	COMB10	0.000	COMB18	0.000	COMB18
STORY1	B16	V40X65	69.824	3.038	COMB10	0.326	COMB16	0.000	COMB18
STORY1	B16	V40X65	119.647	2.143	COMB10	0.698	COMB16	0.000	COMB18
STORY1	B16	V40X65	169.471	1.348	COMB10	0.989	COMB16	0.000	COMB18
STORY1	B16	V40X65	219.294	0.695	COMB18	1.240	COMB8	0.000	COMB18
STORY1	B16	V40X65	269.118	0.153	COMB18	1.422	COMB8	0.000	COMB18
STORY1	B16	V40X65	318.941	0.000	COMB18	1.507	COMB8	0.000	COMB18

STORY1	B16	V40X65	368.765	0.000	COMB18	1.567	COMB1	0.000	COMB18
STORY1	B16	V40X65	418.588	0.000	COMB18	1.704	COMB1	0.000	COMB18
STORY1	B16	V40X65	468.412	0.000	COMB18	1.712	COMB1	0.000	COMB18
STORY1	B16	V40X65	518.235	0.000	COMB18	1.591	COMB1	0.000	COMB18
STORY1	B16	V40X65	568.059	0.000	COMB18	1.519	COMB10	0.000	COMB18
STORY1	B16	V40X65	617.882	0.100	COMB16	1.445	COMB10	0.000	COMB18
STORY1	B16	V40X65	667.706	0.631	COMB16	1.275	COMB10	0.000	COMB18
STORY1	B16	V40X65	717.529	1.265	COMB8	1.027	COMB18	0.000	COMB18
STORY1	B16	V40X65	767.353	2.047	COMB8	0.746	COMB18	0.000	COMB18
STORY1	B16	V40X65	817.176	2.931	COMB8	0.384	COMB18	0.000	COMB18
STORY1	B16	V40X65	867.000	3.916	COMB8	0.000	COMB18	0.000	COMB18
STORY1	B17	V40X65	20.000	3.709	COMB10	0.529	COMB16	0.000	COMB18
STORY1	B17	V40X65	68.429	2.803	COMB10	0.790	COMB16	0.000	COMB18
STORY1	B17	V40X65	116.857	1.992	COMB10	0.973	COMB16	0.000	COMB18
STORY1	B17	V40X65	165.286	1.276	COMB10	1.079	COMB16	0.000	COMB18
STORY1	B17	V40X65	213.714	0.689	COMB18	1.142	COMB8	0.000	COMB18
STORY1	B17	V40X65	262.143	0.196	COMB18	1.130	COMB8	0.000	COMB18
STORY1	B17	V40X65	310.571	0.000	COMB18	1.027	COMB8	0.000	COMB18
STORY1	B17	V40X65	359.000	0.000	COMB18	0.999	COMB1	0.000	COMB18
STORY1	B17	V40X65	407.429	0.000	COMB18	0.982	COMB1	0.000	COMB18
STORY1	B17	V40X65	455.857	0.000	COMB18	1.092	COMB10	0.000	COMB18
STORY1	B17	V40X65	504.286	0.356	COMB16	1.170	COMB10	0.000	COMB18
STORY1	B17	V40X65	552.714	0.871	COMB16	1.157	COMB10	0.000	COMB18
STORY1	B17	V40X65	601.143	1.494	COMB8	1.080	COMB18	0.000	COMB18
STORY1	B17	V40X65	649.571	2.237	COMB8	0.951	COMB18	0.000	COMB18
STORY1	B17	V40X65	698.000	3.074	COMB8	0.745	COMB18	0.000	COMB18
STORY1	B18	V40X65	20.000	3.582	COMB10	1.307	COMB16	0.000	COMB18
STORY1	B18	V40X65	67.250	2.608	COMB10	1.326	COMB16	0.000	COMB18
STORY1	B18	V40X65	114.500	1.727	COMB10	1.272	COMB16	0.000	COMB18
STORY1	B18	V40X65	161.750	0.962	COMB18	1.168	COMB8	0.000	COMB18
STORY1	B18	V40X65	209.000	0.296	COMB18	1.001	COMB8	0.000	COMB18
STORY1	B18	V40X65	256.250	0.000	COMB18	0.750	COMB1	0.000	COMB18
STORY1	B18	V40X65	303.500	0.000	COMB18	0.907	COMB10	0.000	COMB18
STORY1	B18	V40X65	350.750	0.110	COMB16	1.350	COMB10	0.000	COMB18
STORY1	B18	V40X65	398.000	0.608	COMB16	1.708	COMB10	0.000	COMB18
STORY1	B18	V40X65	445.250	1.181	COMB16	1.980	COMB10	0.000	COMB18
STORY1	B18	V40X65	492.500	1.830	COMB16	2.165	COMB10	0.000	COMB18
STORY1	B18	V40X65	539.750	2.593	COMB8	2.300	COMB18	0.000	COMB18
STORY1	B18	V40X65	587.000	3.462	COMB8	2.375	COMB18	0.000	COMB18
STORY1	B19	V40X65	20.000	3.871	COMB5	1.573	COMB11	0.000	COMB18
STORY1	B19	V40X65	66.500	1.773	COMB13	3.183	COMB3	0.000	COMB18
STORY1	B19	V40X65	113.000	0.263	COMB13	5.141	COMB3	0.000	COMB18
STORY1	B19	V40X65	159.500	0.000	COMB18	6.990	COMB3	0.000	COMB18
STORY1	B19	V40X65	159.500	0.000	COMB18	6.991	COMB3	0.000	COMB18
STORY1	B19	V40X65	208.077	0.000	COMB18	6.702	COMB1	0.000	COMB18
STORY1	B19	V40X65	256.654	0.000	COMB18	6.365	COMB1	0.000	COMB18
STORY1	B19	V40X65	305.231	0.000	COMB18	5.973	COMB1	0.000	COMB18
STORY1	B19	V40X65	353.808	0.000	COMB18	5.458	COMB1	0.000	COMB18
STORY1	B19	V40X65	402.385	0.000	COMB18	4.819	COMB1	0.000	COMB18
STORY1	B19	V40X65	450.962	0.000	COMB18	4.058	COMB1	0.000	COMB18
STORY1	B19	V40X65	499.538	0.000	COMB18	3.178	COMB1	0.000	COMB18
STORY1	B19	V40X65	548.115	0.000	COMB18	2.179	COMB1	0.000	COMB18
STORY1	B19	V40X65	596.692	0.276	COMB3	1.063	COMB1	0.000	COMB18
STORY1	B19	V40X65	645.269	1.529	COMB3	0.338	COMB13	0.000	COMB18
STORY1	B19	V40X65	693.846	2.883	COMB3	0.000	COMB18	0.000	COMB18
STORY1	B19	V40X65	742.423	4.341	COMB3	0.000	COMB18	0.000	COMB18
STORY1	B19	V40X65	791.000	5.905	COMB3	0.000	COMB18	0.000	COMB18
STORY1	B20	V40X65	20.000	4.493	COMB5	0.253	COMB11	0.000	COMB18
STORY1	B20	V40X65	68.083	3.387	COMB5	0.320	COMB11	0.000	COMB18
STORY1	B20	V40X65	116.167	2.379	COMB5	0.311	COMB11	0.000	COMB18
STORY1	B20	V40X65	164.250	1.466	COMB5	0.225	COMB11	0.000	COMB18
STORY1	B20	V40X65	212.333	0.646	COMB5	0.063	COMB11	0.000	COMB18
STORY1	B20	V40X65	260.417	0.396	COMB3	0.300	COMB13	0.000	COMB18
STORY1	B20	V40X65	308.500	0.683	COMB3	0.910	COMB13	0.000	COMB18
STORY1	B20	V40X65	356.583	1.060	COMB3	1.445	COMB13	0.000	COMB18

STORY1	B20	V40X65	404.667	1.528	COMB3	1.905	COMB13	0.000	COMB18
STORY1	B20	V40X65	452.750	2.086	COMB3	2.288	COMB13	0.000	COMB18
STORY1	B20	V40X65	500.833	2.738	COMB3	2.595	COMB13	0.000	COMB18
STORY1	B20	V40X65	548.917	3.482	COMB3	2.824	COMB13	0.000	COMB18
STORY1	B20	V40X65	597.000	4.320	COMB3	2.977	COMB13	0.000	COMB18
STORY1	B21	V40X65	20.000	5.765	COMB5	0.532	COMB11	0.000	COMB18
STORY1	B21	V40X65	66.500	1.553	COMB13	3.638	COMB3	0.000	COMB18
STORY1	B21	V40X65	113.000	0.000	COMB18	8.035	COMB1	0.000	COMB18
STORY1	B21	V40X65	159.500	0.000	COMB18	10.247	COMB1	0.000	COMB18
STORY1	B21	V40X65	159.500	0.000	COMB18	10.248	COMB1	0.000	COMB18
STORY1	B21	V40X65	208.077	0.000	COMB18	9.561	COMB1	0.000	COMB18
STORY1	B21	V40X65	256.654	0.000	COMB18	8.840	COMB1	0.000	COMB18
STORY1	B21	V40X65	305.231	0.000	COMB18	8.035	COMB6	0.000	COMB18
STORY1	B21	V40X65	353.808	0.000	COMB18	8.035	COMB1	0.000	COMB18
STORY1	B21	V40X65	402.385	0.000	COMB18	8.035	COMB1	0.000	COMB18
STORY1	B21	V40X65	450.962	0.000	COMB18	6.731	COMB1	0.000	COMB18
STORY1	B21	V40X65	499.538	0.000	COMB18	5.178	COMB1	0.000	COMB18
STORY1	B21	V40X65	548.115	0.000	COMB18	3.514	COMB1	0.000	COMB18
STORY1	B21	V40X65	596.692	0.196	COMB3	1.744	COMB1	0.000	COMB18
STORY1	B21	V40X65	645.269	1.977	COMB3	0.000	COMB18	0.000	COMB18
STORY1	B21	V40X65	693.846	3.869	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B21	V40X65	742.423	6.205	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B21	V40X65	791.000	8.035	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B22	V40X65	20.000	6.155	COMB5	0.000	COMB18	0.000	COMB18
STORY1	B22	V40X65	68.083	4.816	COMB5	0.000	COMB18	0.000	COMB18
STORY1	B22	V40X65	116.167	3.579	COMB5	0.000	COMB18	0.000	COMB18
STORY1	B22	V40X65	164.250	2.441	COMB5	0.000	COMB18	0.000	COMB18
STORY1	B22	V40X65	212.333	1.678	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B22	V40X65	260.417	1.251	COMB6	0.058	COMB12	0.000	COMB18
STORY1	B22	V40X65	308.500	1.476	COMB3	0.824	COMB13	0.000	COMB18
STORY1	B22	V40X65	356.583	1.791	COMB3	1.518	COMB13	0.000	COMB18
STORY1	B22	V40X65	404.667	2.197	COMB3	2.136	COMB13	0.000	COMB18
STORY1	B22	V40X65	452.750	2.695	COMB3	2.680	COMB13	0.000	COMB18
STORY1	B22	V40X65	500.833	3.284	COMB3	3.147	COMB13	0.000	COMB18
STORY1	B22	V40X65	548.917	3.967	COMB3	3.538	COMB13	0.000	COMB18
STORY1	B22	V40X65	597.000	4.743	COMB3	3.852	COMB13	0.000	COMB18
STORY1	B23	V40X65	20.000	5.554	COMB5	0.559	COMB11	0.000	COMB18
STORY1	B23	V40X65	66.500	1.597	COMB13	3.446	COMB3	0.000	COMB18
STORY1	B23	V40X65	113.000	0.000	COMB18	7.528	COMB1	0.000	COMB18
STORY1	B23	V40X65	159.500	0.000	COMB18	9.508	COMB1	0.000	COMB18
STORY1	B23	V40X65	159.500	0.000	COMB18	9.509	COMB1	0.000	COMB18
STORY1	B23	V40X65	208.077	0.000	COMB18	8.929	COMB1	0.000	COMB18
STORY1	B23	V40X65	256.654	0.000	COMB18	8.313	COMB1	0.000	COMB18
STORY1	B23	V40X65	305.231	0.000	COMB18	8.035	COMB6	0.000	COMB18
STORY1	B23	V40X65	353.808	0.000	COMB18	8.035	COMB1	0.000	COMB18
STORY1	B23	V40X65	402.385	0.000	COMB18	7.879	COMB1	0.000	COMB18
STORY1	B23	V40X65	450.962	0.000	COMB18	6.572	COMB1	0.000	COMB18
STORY1	B23	V40X65	499.538	0.000	COMB18	5.150	COMB1	0.000	COMB18
STORY1	B23	V40X65	548.115	0.000	COMB18	3.616	COMB1	0.000	COMB18
STORY1	B23	V40X65	596.692	0.000	COMB18	1.972	COMB1	0.000	COMB18
STORY1	B23	V40X65	645.269	1.133	COMB1	0.222	COMB1	0.000	COMB18
STORY1	B23	V40X65	693.846	3.160	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B23	V40X65	742.423	5.335	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B23	V40X65	791.000	7.664	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B24	V40X65	20.000	5.746	COMB5	0.000	COMB18	0.000	COMB18
STORY1	B24	V40X65	68.083	4.445	COMB5	0.000	COMB18	0.000	COMB18
STORY1	B24	V40X65	116.167	3.458	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B24	V40X65	164.250	2.630	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B24	V40X65	212.333	1.927	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B24	V40X65	260.417	1.796	COMB3	0.365	COMB13	0.000	COMB18
STORY1	B24	V40X65	308.500	1.930	COMB3	1.084	COMB13	0.000	COMB18
STORY1	B24	V40X65	356.583	2.155	COMB3	1.729	COMB13	0.000	COMB18
STORY1	B24	V40X65	404.667	2.470	COMB3	2.300	COMB13	0.000	COMB18
STORY1	B24	V40X65	452.750	2.876	COMB3	2.794	COMB13	0.000	COMB18
STORY1	B24	V40X65	500.833	3.374	COMB3	3.212	COMB13	0.000	COMB18

STORY1	B24	V40X65	548.917	3.964	COMB3	3.553	COMB13	0.000	COMB18
STORY1	B24	V40X65	597.000	4.648	COMB3	3.817	COMB13	0.000	COMB18
STORY1	B25	V40X65	20.000	5.705	COMB5	0.736	COMB11	0.000	COMB18
STORY1	B25	V40X65	66.500	1.672	COMB13	3.655	COMB3	0.000	COMB18
STORY1	B25	V40X65	113.000	0.000	COMB18	7.719	COMB1	0.000	COMB18
STORY1	B25	V40X65	159.500	0.000	COMB18	9.716	COMB1	0.000	COMB18
STORY1	B25	V40X65	159.500	0.000	COMB18	9.716	COMB1	0.000	COMB18
STORY1	B25	V40X65	208.077	0.000	COMB18	9.096	COMB1	0.000	COMB18
STORY1	B25	V40X65	256.654	0.000	COMB18	8.431	COMB1	0.000	COMB18
STORY1	B25	V40X65	305.231	0.000	COMB18	8.035	COMB6	0.000	COMB18
STORY1	B25	V40X65	353.808	0.000	COMB18	8.035	COMB1	0.000	COMB18
STORY1	B25	V40X65	402.385	0.000	COMB18	7.849	COMB1	0.000	COMB18
STORY1	B25	V40X65	450.962	0.000	COMB18	6.482	COMB1	0.000	COMB18
STORY1	B25	V40X65	499.538	0.000	COMB18	5.000	COMB1	0.000	COMB18
STORY1	B25	V40X65	548.115	0.000	COMB18	3.407	COMB1	0.000	COMB18
STORY1	B25	V40X65	596.692	0.212	COMB3	1.706	COMB1	0.000	COMB18
STORY1	B25	V40X65	645.269	1.947	COMB3	0.055	COMB13	0.000	COMB18
STORY1	B25	V40X65	693.846	3.791	COMB3	0.000	COMB18	0.000	COMB18
STORY1	B25	V40X65	742.423	5.971	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B25	V40X65	791.000	8.035	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B26	V40X65	20.000	6.117	COMB4	0.000	COMB18	0.000	COMB18
STORY1	B26	V40X65	68.083	4.771	COMB4	0.000	COMB18	0.000	COMB18
STORY1	B26	V40X65	116.167	3.527	COMB4	0.000	COMB18	0.000	COMB18
STORY1	B26	V40X65	164.250	2.381	COMB4	0.000	COMB18	0.000	COMB18
STORY1	B26	V40X65	212.333	1.577	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B26	V40X65	260.417	1.191	COMB3	0.111	COMB13	0.000	COMB18
STORY1	B26	V40X65	308.500	1.441	COMB3	0.886	COMB13	0.000	COMB18
STORY1	B26	V40X65	356.583	1.781	COMB3	1.589	COMB13	0.000	COMB18
STORY1	B26	V40X65	404.667	2.212	COMB6	2.216	COMB12	0.000	COMB18
STORY1	B26	V40X65	452.750	2.734	COMB6	2.769	COMB12	0.000	COMB18
STORY1	B26	V40X65	500.833	3.348	COMB6	3.245	COMB12	0.000	COMB18
STORY1	B26	V40X65	548.917	4.056	COMB6	3.645	COMB12	0.000	COMB18
STORY1	B26	V40X65	597.000	4.858	COMB6	3.967	COMB12	0.000	COMB18
STORY1	B27	V40X65	20.000	5.606	COMB4	0.884	COMB14	0.000	COMB18
STORY1	B27	V40X65	66.500	1.748	COMB12	3.655	COMB6	0.000	COMB18
STORY1	B27	V40X65	113.000	0.000	COMB18	7.420	COMB6	0.000	COMB18
STORY1	B27	V40X65	159.500	0.000	COMB18	9.193	COMB1	0.000	COMB18
STORY1	B27	V40X65	159.500	0.000	COMB18	9.193	COMB1	0.000	COMB18
STORY1	B27	V40X65	208.077	0.000	COMB18	8.622	COMB1	0.000	COMB18
STORY1	B27	V40X65	256.654	0.000	COMB18	8.035	COMB10	0.000	COMB18
STORY1	B27	V40X65	305.231	0.000	COMB18	8.035	COMB6	0.000	COMB18
STORY1	B27	V40X65	353.808	0.000	COMB18	8.035	COMB1	0.000	COMB18
STORY1	B27	V40X65	402.385	0.000	COMB18	7.494	COMB1	0.000	COMB18
STORY1	B27	V40X65	450.962	0.000	COMB18	6.194	COMB1	0.000	COMB18
STORY1	B27	V40X65	499.538	0.000	COMB18	4.778	COMB1	0.000	COMB18
STORY1	B27	V40X65	548.115	0.000	COMB18	3.251	COMB1	0.000	COMB18
STORY1	B27	V40X65	596.692	0.234	COMB6	1.614	COMB1	0.000	COMB18
STORY1	B27	V40X65	645.269	1.919	COMB6	0.110	COMB12	0.000	COMB18
STORY1	B27	V40X65	693.846	3.713	COMB6	0.000	COMB18	0.000	COMB18
STORY1	B27	V40X65	742.423	5.743	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B27	V40X65	791.000	8.035	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B28	V40X65	20.000	6.002	COMB4	0.000	COMB18	0.000	COMB18
STORY1	B28	V40X65	68.083	4.671	COMB4	0.000	COMB18	0.000	COMB18
STORY1	B28	V40X65	116.167	3.441	COMB4	0.000	COMB18	0.000	COMB18
STORY1	B28	V40X65	164.250	2.309	COMB4	0.000	COMB18	0.000	COMB18
STORY1	B28	V40X65	212.333	1.467	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B28	V40X65	260.417	1.094	COMB3	0.118	COMB13	0.000	COMB18
STORY1	B28	V40X65	308.500	1.352	COMB6	0.886	COMB12	0.000	COMB18
STORY1	B28	V40X65	356.583	1.702	COMB6	1.581	COMB12	0.000	COMB18
STORY1	B28	V40X65	404.667	2.142	COMB6	2.201	COMB12	0.000	COMB18
STORY1	B28	V40X65	452.750	2.673	COMB6	2.746	COMB12	0.000	COMB18
STORY1	B28	V40X65	500.833	3.297	COMB6	3.215	COMB12	0.000	COMB18
STORY1	B28	V40X65	548.917	4.014	COMB6	3.607	COMB12	0.000	COMB18
STORY1	B28	V40X65	597.000	4.825	COMB6	3.922	COMB12	0.000	COMB18

STORY1	B29	V40X65	20.000	5.050	COMB5	1.261	COMB11	0.000	COMB18
STORY1	B29	V40X65	66.500	1.881	COMB12	3.577	COMB6	0.000	COMB18
STORY1	B29	V40X65	113.000	0.000	COMB18	6.653	COMB6	0.000	COMB18
STORY1	B29	V40X65	159.500	0.000	COMB18	8.035	COMB10	0.000	COMB18
STORY1	B29	V40X65	159.500	0.000	COMB18	8.035	COMB10	0.000	COMB18
STORY1	B29	V40X65	208.077	0.000	COMB18	8.035	COMB6	0.000	COMB18
STORY1	B29	V40X65	256.654	0.000	COMB18	8.035	COMB1	0.000	COMB18
STORY1	B29	V40X65	305.231	0.000	COMB18	8.035	COMB1	0.000	COMB18
STORY1	B29	V40X65	353.808	0.000	COMB18	7.404	COMB1	0.000	COMB18
STORY1	B29	V40X65	402.385	0.000	COMB18	6.442	COMB1	0.000	COMB18
STORY1	B29	V40X65	450.962	0.000	COMB18	5.361	COMB1	0.000	COMB18
STORY1	B29	V40X65	499.538	0.000	COMB18	4.163	COMB1	0.000	COMB18
STORY1	B29	V40X65	548.115	0.000	COMB18	2.849	COMB1	0.000	COMB18
STORY1	B29	V40X65	596.692	0.278	COMB6	1.423	COMB1	0.000	COMB18
STORY1	B29	V40X65	645.269	1.812	COMB6	0.261	COMB12	0.000	COMB18
STORY1	B29	V40X65	693.846	3.451	COMB6	0.000	COMB18	0.000	COMB18
STORY1	B29	V40X65	742.423	5.199	COMB6	0.000	COMB18	0.000	COMB18
STORY1	B29	V40X65	791.000	7.155	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B30	V40X65	20.000	5.510	COMB5	0.100	COMB11	0.000	COMB18
STORY1	B30	V40X65	68.083	4.247	COMB5	0.142	COMB11	0.000	COMB18
STORY1	B30	V40X65	116.167	3.084	COMB5	0.109	COMB11	0.000	COMB18
STORY1	B30	V40X65	164.250	2.018	COMB5	0.000	COMB18	0.000	COMB18
STORY1	B30	V40X65	212.333	1.122	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B30	V40X65	260.417	0.826	COMB6	0.202	COMB12	0.000	COMB18
STORY1	B30	V40X65	308.500	1.102	COMB6	0.923	COMB12	0.000	COMB18
STORY1	B30	V40X65	356.583	1.468	COMB6	1.570	COMB12	0.000	COMB18
STORY1	B30	V40X65	404.667	1.924	COMB6	2.142	COMB12	0.000	COMB18
STORY1	B30	V40X65	452.750	2.472	COMB6	2.639	COMB12	0.000	COMB18
STORY1	B30	V40X65	500.833	3.112	COMB6	3.059	COMB12	0.000	COMB18
STORY1	B30	V40X65	548.917	3.846	COMB6	3.402	COMB12	0.000	COMB18
STORY1	B30	V40X65	597.000	4.674	COMB6	3.668	COMB12	0.000	COMB18
STORY1	B31	V40X65	20.000	4.620	COMB4	1.599	COMB14	0.000	COMB18
STORY1	B31	V40X65	66.500	1.960	COMB12	3.466	COMB6	0.000	COMB18
STORY1	B31	V40X65	113.000	0.019	COMB13	5.719	COMB3	0.000	COMB18
STORY1	B31	V40X65	159.500	0.000	COMB18	7.903	COMB1	0.000	COMB18
STORY1	B31	V40X65	159.500	0.000	COMB18	7.903	COMB1	0.000	COMB18
STORY1	B31	V40X65	208.077	0.000	COMB18	7.556	COMB1	0.000	COMB18
STORY1	B31	V40X65	256.654	0.000	COMB18	7.124	COMB1	0.000	COMB18
STORY1	B31	V40X65	305.231	0.000	COMB18	6.618	COMB1	0.000	COMB18
STORY1	B31	V40X65	353.808	0.000	COMB18	5.988	COMB1	0.000	COMB18
STORY1	B31	V40X65	402.385	0.000	COMB18	5.236	COMB1	0.000	COMB18
STORY1	B31	V40X65	450.962	0.000	COMB18	4.362	COMB1	0.000	COMB18
STORY1	B31	V40X65	499.538	0.000	COMB18	3.370	COMB1	0.000	COMB18
STORY1	B31	V40X65	548.115	0.000	COMB18	2.260	COMB1	0.000	COMB18
STORY1	B31	V40X65	596.692	0.327	COMB6	1.035	COMB1	0.000	COMB18
STORY1	B31	V40X65	645.269	1.672	COMB3	0.404	COMB13	0.000	COMB18
STORY1	B31	V40X65	693.846	3.125	COMB3	0.000	COMB18	0.000	COMB18
STORY1	B31	V40X65	742.423	4.683	COMB3	0.000	COMB18	0.000	COMB18
STORY1	B31	V40X65	791.000	6.349	COMB3	0.000	COMB18	0.000	COMB18
STORY1	B32	V40X65	20.000	4.901	COMB4	0.224	COMB14	0.000	COMB18
STORY1	B32	V40X65	68.083	3.748	COMB4	0.294	COMB14	0.000	COMB18
STORY1	B32	V40X65	116.167	2.694	COMB4	0.288	COMB14	0.000	COMB18
STORY1	B32	V40X65	164.250	1.735	COMB4	0.205	COMB14	0.000	COMB18
STORY1	B32	V40X65	212.333	0.870	COMB4	0.046	COMB14	0.000	COMB18
STORY1	B32	V40X65	260.417	0.419	COMB3	0.129	COMB13	0.000	COMB18
STORY1	B32	V40X65	308.500	0.688	COMB3	0.768	COMB13	0.000	COMB18
STORY1	B32	V40X65	356.583	1.049	COMB6	1.333	COMB12	0.000	COMB18
STORY1	B32	V40X65	404.667	1.508	COMB6	1.831	COMB12	0.000	COMB18
STORY1	B32	V40X65	452.750	2.059	COMB6	2.253	COMB12	0.000	COMB18
STORY1	B32	V40X65	500.833	2.702	COMB6	2.599	COMB12	0.000	COMB18
STORY1	B32	V40X65	548.917	3.438	COMB6	2.868	COMB12	0.000	COMB18
STORY1	B32	V40X65	597.000	4.268	COMB6	3.059	COMB12	0.000	COMB18
STORY1	B33	V25X65	0.000	0.004	COMB9	0.000	COMB18	0.000	COMB18
STORY1	B33	V25X65	46.000	0.000	COMB18	1.060	COMB1	0.000	COMB18
STORY1	B33	V25X65	92.000	0.000	COMB18	2.009	COMB1	0.000	COMB18

STORY1	B33	V25X65	138.000	0.000	COMB18	2.804	COMB1	0.000	COMB18
STORY1	B33	V25X65	184.000	0.000	COMB18	3.451	COMB1	0.000	COMB18
STORY1	B33	V25X65	230.000	0.000	COMB18	3.943	COMB1	0.000	COMB18
STORY1	B33	V25X65	276.000	0.000	COMB18	4.276	COMB1	0.000	COMB18
STORY1	B33	V25X65	322.000	0.000	COMB18	4.449	COMB1	0.000	COMB18
STORY1	B33	V25X65	368.000	0.000	COMB18	4.465	COMB1	0.000	COMB18
STORY1	B33	V25X65	414.000	0.000	COMB18	4.359	COMB1	0.000	COMB18
STORY1	B33	V25X65	414.000	0.000	COMB18	4.359	COMB1	0.000	COMB18
STORY1	B33	V25X65	460.000	0.000	COMB18	3.927	COMB1	0.000	COMB18
STORY1	B33	V25X65	506.000	0.000	COMB18	3.374	COMB1	0.000	COMB18
STORY1	B33	V25X65	552.000	0.000	COMB18	2.670	COMB1	0.000	COMB18
STORY1	B33	V25X65	598.000	0.000	COMB18	1.813	COMB1	0.000	COMB18
STORY1	B33	V25X65	644.000	0.000	COMB18	0.807	COMB1	0.000	COMB18
STORY1	B33	V25X65	690.000	1.093	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B33	V25X65	736.000	2.536	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B33	V25X65	782.000	4.162	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B33	V25X65	828.000	5.022	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B34	V25X65	0.000	5.022	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B34	V25X65	48.889	4.234	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B34	V25X65	97.778	2.697	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B34	V25X65	146.667	1.364	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B34	V25X65	195.556	0.231	COMB1	0.575	COMB1	0.000	COMB18
STORY1	B34	V25X65	244.444	0.000	COMB18	1.469	COMB1	0.000	COMB18
STORY1	B34	V25X65	293.333	0.000	COMB18	2.193	COMB1	0.000	COMB18
STORY1	B34	V25X65	342.222	0.000	COMB18	2.743	COMB1	0.000	COMB18
STORY1	B34	V25X65	391.111	0.000	COMB18	3.118	COMB1	0.000	COMB18
STORY1	B34	V25X65	440.000	0.000	COMB18	3.355	COMB1	0.000	COMB18
STORY1	B34	V25X65	440.000	0.000	COMB18	3.355	COMB1	0.000	COMB18
STORY1	B34	V25X65	488.889	0.000	COMB18	3.239	COMB1	0.000	COMB18
STORY1	B34	V25X65	537.778	0.000	COMB18	2.984	COMB1	0.000	COMB18
STORY1	B34	V25X65	586.667	0.000	COMB18	2.553	COMB1	0.000	COMB18
STORY1	B34	V25X65	635.556	0.000	COMB18	1.947	COMB1	0.000	COMB18
STORY1	B34	V25X65	684.444	0.000	COMB18	1.167	COMB1	0.000	COMB18
STORY1	B34	V25X65	733.333	0.507	COMB1	0.218	COMB1	0.000	COMB18
STORY1	B34	V25X65	782.222	1.686	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B34	V25X65	831.111	3.063	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B34	V25X65	880.000	4.606	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B35	V25X65	0.000	4.605	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B35	V25X65	45.444	3.235	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B35	V25X65	90.889	2.002	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B35	V25X65	136.333	0.940	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B35	V25X65	181.778	0.052	COMB4	0.645	COMB1	0.000	COMB18
STORY1	B35	V25X65	227.222	0.000	COMB18	1.349	COMB1	0.000	COMB18
STORY1	B35	V25X65	272.667	0.000	COMB18	1.905	COMB1	0.000	COMB18
STORY1	B35	V25X65	318.111	0.000	COMB18	2.309	COMB1	0.000	COMB18
STORY1	B35	V25X65	363.556	0.000	COMB18	2.565	COMB1	0.000	COMB18
STORY1	B35	V25X65	409.000	0.000	COMB18	2.704	COMB1	0.000	COMB18
STORY1	B35	V25X65	409.000	0.000	COMB18	2.704	COMB1	0.000	COMB18
STORY1	B35	V25X65	454.444	0.000	COMB18	2.525	COMB1	0.000	COMB18
STORY1	B35	V25X65	499.889	0.000	COMB18	2.230	COMB1	0.000	COMB18
STORY1	B35	V25X65	545.333	0.000	COMB18	1.785	COMB1	0.000	COMB18
STORY1	B35	V25X65	590.778	0.000	COMB18	1.191	COMB1	0.000	COMB18
STORY1	B35	V25X65	636.222	0.283	COMB1	0.448	COMB1	0.000	COMB18
STORY1	B35	V25X65	681.667	1.227	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B35	V25X65	727.111	2.341	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B35	V25X65	772.556	3.626	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B35	V25X65	818.000	5.022	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B36	V25X65	0.000	5.022	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B36	V25X65	49.278	3.384	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B36	V25X65	98.556	1.888	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B36	V25X65	147.833	0.598	COMB1	0.151	COMB1	0.000	COMB18
STORY1	B36	V25X65	197.111	0.000	COMB18	1.190	COMB1	0.000	COMB18
STORY1	B36	V25X65	246.389	0.000	COMB18	2.058	COMB1	0.000	COMB18
STORY1	B36	V25X65	295.667	0.000	COMB18	2.752	COMB1	0.000	COMB18
STORY1	B36	V25X65	344.944	0.000	COMB18	3.267	COMB1	0.000	COMB18
STORY1	B36	V25X65	394.222	0.000	COMB18	3.604	COMB1	0.000	COMB18

STORY1	B36	V25X65	443.500	0.000	COMB18	3.798	COMB1	0.000	COMB18
STORY1	B36	V25X65	443.500	0.000	COMB18	3.798	COMB1	0.000	COMB18
STORY1	B36	V25X65	492.778	0.000	COMB18	3.636	COMB1	0.000	COMB18
STORY1	B36	V25X65	542.056	0.000	COMB18	3.330	COMB1	0.000	COMB18
STORY1	B36	V25X65	591.333	0.000	COMB18	2.846	COMB1	0.000	COMB18
STORY1	B36	V25X65	640.611	0.000	COMB18	2.183	COMB1	0.000	COMB18
STORY1	B36	V25X65	689.889	0.000	COMB18	1.345	COMB1	0.000	COMB18
STORY1	B36	V25X65	739.167	0.366	COMB1	0.336	COMB1	0.000	COMB18
STORY1	B36	V25X65	788.444	1.615	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B36	V25X65	837.722	3.068	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B36	V25X65	887.000	4.690	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B37	V25X65	0.000	4.689	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B37	V25X65	44.875	3.354	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B37	V25X65	89.750	2.152	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B37	V25X65	134.625	1.116	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B37	V25X65	179.500	0.244	COMB1	0.373	COMB1	0.000	COMB18
STORY1	B37	V25X65	224.375	0.000	COMB18	1.037	COMB1	0.000	COMB18
STORY1	B37	V25X65	269.250	0.000	COMB18	1.555	COMB1	0.000	COMB18
STORY1	B37	V25X65	314.125	0.000	COMB18	1.931	COMB1	0.000	COMB18
STORY1	B37	V25X65	359.000	0.000	COMB18	2.194	COMB1	0.000	COMB18
STORY1	B37	V25X65	359.000	0.000	COMB18	2.194	COMB1	0.000	COMB18
STORY1	B37	V25X65	403.875	0.000	COMB18	2.146	COMB1	0.000	COMB18
STORY1	B37	V25X65	448.750	0.000	COMB18	1.985	COMB1	0.000	COMB18
STORY1	B37	V25X65	493.625	0.000	COMB18	1.679	COMB1	0.000	COMB18
STORY1	B37	V25X65	538.500	0.000	COMB18	1.225	COMB1	0.000	COMB18
STORY1	B37	V25X65	583.375	0.000	COMB18	0.625	COMB1	0.000	COMB18
STORY1	B37	V25X65	628.250	0.572	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B37	V25X65	673.125	1.493	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B37	V25X65	718.000	2.539	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B38	V25X65	0.000	2.539	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B38	V25X65	43.357	1.630	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B38	V25X65	86.714	0.836	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B38	V25X65	130.071	0.207	COMB2	0.152	COMB1	0.000	COMB18
STORY1	B38	V25X65	173.429	0.000	COMB18	0.610	COMB1	0.000	COMB18
STORY1	B38	V25X65	216.786	0.000	COMB18	0.932	COMB1	0.000	COMB18
STORY1	B38	V25X65	260.143	0.000	COMB18	1.121	COMB1	0.000	COMB18
STORY1	B38	V25X65	303.500	0.000	COMB18	1.206	COMB1	0.000	COMB18
STORY1	B38	V25X65	303.500	0.000	COMB18	1.206	COMB1	0.000	COMB18
STORY1	B38	V25X65	346.857	0.000	COMB18	0.997	COMB1	0.000	COMB18
STORY1	B38	V25X65	390.214	0.199	COMB16	0.698	COMB10	0.000	COMB18
STORY1	B38	V25X65	433.571	0.494	COMB16	0.410	COMB10	0.000	COMB18
STORY1	B38	V25X65	476.929	0.864	COMB16	0.015	COMB10	0.000	COMB18
STORY1	B38	V25X65	520.286	1.416	COMB8	0.000	COMB18	0.000	COMB18
STORY1	B38	V25X65	563.643	2.156	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B38	V25X65	607.000	3.158	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B43	V40X65	20.000	5.865	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B43	V40X65	68.900	4.231	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B43	V40X65	117.800	2.825	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B43	V40X65	166.700	1.662	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B43	V40X65	215.600	0.735	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B43	V40X65	264.500	4.437E-05	COMB13	3.752E-04	COMB3	0.000	COMB18
STORY1	B44	V40X65	20.000	4.702	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B44	V40X65	68.900	3.501	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B44	V40X65	117.800	2.433	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B44	V40X65	166.700	1.494	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B44	V40X65	215.600	0.684	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B44	V40X65	264.500	2.226E-06	COMB12	7.187E-05	COMB6	0.000	COMB18
STORY1	B47	V25X65	0.000	3.157	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B47	V25X65	44.083	2.287	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B47	V25X65	88.167	1.535	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B47	V25X65	132.250	0.978	COMB8	0.000	COMB18	0.000	COMB18
STORY1	B47	V25X65	176.333	0.550	COMB8	0.000	COMB18	0.000	COMB18
STORY1	B47	V25X65	220.417	0.233	COMB8	0.000	COMB18	0.000	COMB18
STORY1	B47	V25X65	264.500	4.462E-04	COMB3	4.569E-05	COMB13	0.000	COMB18

STORY1	B48	V25X65	0.000	5.516E-04	COMB13	0.001	COMB3	0.000	COMB18
STORY1	B48	V25X65	39.875	0.000	COMB18	0.509	COMB1	0.000	COMB18
STORY1	B48	V25X65	79.750	0.000	COMB18	0.933	COMB1	0.000	COMB18
STORY1	B48	V25X65	119.625	0.000	COMB18	1.247	COMB1	0.000	COMB18
STORY1	B48	V25X65	159.500	0.000	COMB18	1.473	COMB1	0.000	COMB18
STORY1	B49	V25X65	0.000	0.000	COMB18	1.473	COMB1	0.000	COMB18
STORY1	B49	V25X65	46.536	0.000	COMB18	1.826	COMB1	0.000	COMB18
STORY1	B49	V25X65	93.071	0.000	COMB18	2.108	COMB1	0.000	COMB18
STORY1	B49	V25X65	139.607	0.000	COMB18	2.321	COMB1	0.000	COMB18
STORY1	B49	V25X65	186.143	0.000	COMB18	2.462	COMB1	0.000	COMB18
STORY1	B49	V25X65	232.679	0.000	COMB18	2.533	COMB1	0.000	COMB18
STORY1	B49	V25X65	279.214	0.000	COMB18	2.533	COMB1	0.000	COMB18
STORY1	B49	V25X65	325.750	0.000	COMB18	2.461	COMB1	0.000	COMB18
STORY1	B49	V25X65	372.286	0.000	COMB18	2.319	COMB1	0.000	COMB18
STORY1	B49	V25X65	418.821	0.000	COMB18	2.106	COMB1	0.000	COMB18
STORY1	B49	V25X65	465.357	0.000	COMB18	1.822	COMB1	0.000	COMB18
STORY1	B49	V25X65	511.893	0.000	COMB18	1.469	COMB1	0.000	COMB18
STORY1	B49	V25X65	558.429	0.000	COMB18	1.047	COMB1	0.000	COMB18
STORY1	B49	V25X65	604.964	0.000	COMB18	0.557	COMB1	0.000	COMB18
STORY1	B49	V25X65	651.500	0.001	COMB2	0.000	COMB18	0.000	COMB18
STORY1	B50	V25X45	0.000	0.004	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B50	V25X45	39.875	0.000	COMB18	0.274	COMB1	0.000	COMB18
STORY1	B50	V25X45	79.750	0.000	COMB18	0.391	COMB1	0.000	COMB18
STORY1	B50	V25X45	119.625	0.000	COMB18	0.276	COMB1	0.000	COMB18
STORY1	B50	V25X45	159.500	0.000	COMB18	0.001	COMB1	0.000	COMB18
STORY1	B51	V25X45	0.000	0.001	COMB4	0.000	COMB18	0.000	COMB18
STORY1	B51	V25X45	39.875	0.000	COMB18	0.275	COMB1	0.000	COMB18
STORY1	B51	V25X45	79.750	0.000	COMB18	0.392	COMB1	0.000	COMB18
STORY1	B51	V25X45	119.625	0.000	COMB18	0.276	COMB1	0.000	COMB18
STORY1	B51	V25X45	159.500	0.000	COMB18	7.251E-04	COMB1	0.000	COMB18
STORY1	B52	V25X45	0.000	0.001	COMB5	6.722E-05	COMB11	0.000	COMB18
STORY1	B52	V25X45	39.875	0.000	COMB18	0.276	COMB1	0.000	COMB18
STORY1	B52	V25X45	79.750	0.000	COMB18	0.392	COMB1	0.000	COMB18
STORY1	B52	V25X45	119.625	0.000	COMB18	0.276	COMB1	0.000	COMB18
STORY1	B52	V25X45	159.500	0.000	COMB18	6.247E-04	COMB1	0.000	COMB18
STORY1	B53	V25X45	0.000	0.002	COMB1	0.000	COMB18	0.000	COMB18
STORY1	B53	V25X45	39.875	0.000	COMB18	0.275	COMB1	0.000	COMB18
STORY1	B53	V25X45	79.750	0.000	COMB18	0.392	COMB1	0.000	COMB18
STORY1	B53	V25X45	119.625	0.000	COMB18	0.276	COMB1	0.000	COMB18
STORY1	B53	V25X45	159.500	0.000	COMB18	9.283E-04	COMB1	0.000	COMB18
STORY1	B54	V25X45	0.000	0.001	COMB5	2.921E-04	COMB11	0.000	COMB18
STORY1	B54	V25X45	39.875	0.000	COMB18	0.276	COMB1	0.000	COMB18
STORY1	B54	V25X45	79.750	0.000	COMB18	0.392	COMB1	0.000	COMB18
STORY1	B54	V25X45	119.625	0.000	COMB18	0.276	COMB1	0.000	COMB18
STORY1	B54	V25X45	159.500	0.000	COMB18	5.968E-04	COMB6	0.000	COMB18
STORY1	B55	V25X45	0.000	0.001	COMB4	4.021E-05	COMB14	0.000	COMB18
STORY1	B55	V25X45	39.875	0.000	COMB18	0.275	COMB1	0.000	COMB18
STORY1	B55	V25X45	79.750	0.000	COMB18	0.392	COMB1	0.000	COMB18
STORY1	B55	V25X45	119.625	0.000	COMB18	0.276	COMB1	0.000	COMB18
STORY1	B55	V25X45	159.500	5.383E-06	COMB12	7.590E-04	COMB6	0.000	COMB18

CONCRETE BEAM DESIGN OUTPUT (ACI 318-99)

TORSION AND SHEAR DESIGN OF BEAM-TYPE ELEMENTS

STORY ID	BEAM BAY	SECTION ID	STATION ID	<-----REQUIRED REINFORCING----->			
				TORSION	COMBO	SHEAR	COMBO
STORY2	B13	V40X65	20.000	0.000	COMB18	0.000	COMB18
STORY2	B13	V40X65	69.250	0.000	COMB18	0.000	COMB18

STORY2	B13	V40X65	118.500	0.000	COMB18	0.000	COMB18
STORY2	B13	V40X65	167.750	0.000	COMB18	0.000	COMB18
STORY2	B13	V40X65	217.000	0.000	COMB18	0.000	COMB18
STORY2	B13	V40X65	266.250	0.000	COMB18	0.000	COMB18
STORY2	B13	V40X65	315.500	0.000	COMB18	0.000	COMB18
STORY2	B13	V40X65	364.750	0.000	COMB18	0.000	COMB18
STORY2	B13	V40X65	414.000	0.000	COMB18	0.000	COMB18
STORY2	B13	V40X65	463.250	0.000	COMB18	0.000	COMB18
STORY2	B13	V40X65	512.500	0.000	COMB18	0.000	COMB18
STORY2	B13	V40X65	561.750	0.000	COMB18	0.000	COMB18
STORY2	B13	V40X65	611.000	0.000	COMB18	0.000	COMB18
STORY2	B13	V40X65	660.250	0.000	COMB18	0.000	COMB18
STORY2	B13	V40X65	709.500	0.000	COMB18	0.000	COMB18
STORY2	B13	V40X65	758.750	0.000	COMB18	0.000	COMB18
STORY2	B13	V40X65	808.000	0.000	COMB18	0.000	COMB18
STORY2	B14	V40X65	20.000	0.000	COMB18	0.000	COMB18
STORY2	B14	V40X65	69.412	0.000	COMB18	0.000	COMB18
STORY2	B14	V40X65	118.824	0.000	COMB18	0.000	COMB18
STORY2	B14	V40X65	168.235	0.000	COMB18	0.000	COMB18
STORY2	B14	V40X65	217.647	0.000	COMB18	0.000	COMB18
STORY2	B14	V40X65	267.059	0.000	COMB18	0.000	COMB18
STORY2	B14	V40X65	316.471	0.000	COMB18	0.000	COMB18
STORY2	B14	V40X65	365.882	0.000	COMB18	0.000	COMB18
STORY2	B14	V40X65	415.294	0.000	COMB18	0.000	COMB18
STORY2	B14	V40X65	464.706	0.000	COMB18	0.000	COMB18
STORY2	B14	V40X65	514.118	0.000	COMB18	0.000	COMB18
STORY2	B14	V40X65	563.529	0.000	COMB18	0.000	COMB18
STORY2	B14	V40X65	612.941	0.000	COMB18	0.000	COMB18
STORY2	B14	V40X65	662.353	0.000	COMB18	0.000	COMB18
STORY2	B14	V40X65	711.765	0.000	COMB18	0.000	COMB18
STORY2	B14	V40X65	761.176	0.000	COMB18	0.000	COMB18
STORY2	B14	V40X65	810.588	0.000	COMB18	0.000	COMB18
STORY2	B14	V40X65	860.000	0.000	COMB18	0.000	COMB18
STORY2	B15	V40X65	20.000	0.000	COMB18	0.000	COMB18
STORY2	B15	V40X65	68.625	0.000	COMB18	0.000	COMB18
STORY2	B15	V40X65	117.250	0.000	COMB18	0.000	COMB18
STORY2	B15	V40X65	165.875	0.000	COMB18	0.000	COMB18
STORY2	B15	V40X65	214.500	0.000	COMB18	0.000	COMB18
STORY2	B15	V40X65	263.125	0.000	COMB18	0.000	COMB18
STORY2	B15	V40X65	311.750	0.000	COMB18	0.000	COMB18
STORY2	B15	V40X65	360.375	0.000	COMB18	0.000	COMB18
STORY2	B15	V40X65	409.000	0.000	COMB18	0.000	COMB18
STORY2	B15	V40X65	457.625	0.000	COMB18	0.000	COMB18
STORY2	B15	V40X65	506.250	0.000	COMB18	0.000	COMB18
STORY2	B15	V40X65	554.875	0.000	COMB18	0.000	COMB18
STORY2	B15	V40X65	603.500	0.000	COMB18	0.000	COMB18
STORY2	B15	V40X65	652.125	0.000	COMB18	0.000	COMB18
STORY2	B15	V40X65	700.750	0.000	COMB18	0.000	COMB18
STORY2	B15	V40X65	749.375	0.000	COMB18	0.000	COMB18
STORY2	B15	V40X65	798.000	0.000	COMB18	0.000	COMB18
STORY2	B16	V40X65	20.000	0.000	COMB18	0.000	COMB18
STORY2	B16	V40X65	69.824	0.000	COMB18	0.000	COMB18
STORY2	B16	V40X65	119.647	0.000	COMB18	0.000	COMB18
STORY2	B16	V40X65	169.471	0.000	COMB18	0.000	COMB18
STORY2	B16	V40X65	219.294	0.000	COMB18	0.000	COMB18
STORY2	B16	V40X65	269.118	0.000	COMB18	0.000	COMB18
STORY2	B16	V40X65	318.941	0.000	COMB18	0.000	COMB18
STORY2	B16	V40X65	368.765	0.000	COMB18	0.000	COMB18
STORY2	B16	V40X65	418.588	0.000	COMB18	0.000	COMB18
STORY2	B16	V40X65	468.412	0.000	COMB18	0.000	COMB18
STORY2	B16	V40X65	518.235	0.000	COMB18	0.000	COMB18
STORY2	B16	V40X65	568.059	0.000	COMB18	0.000	COMB18
STORY2	B16	V40X65	617.882	0.000	COMB18	0.000	COMB18
STORY2	B16	V40X65	667.706	0.000	COMB18	0.000	COMB18
STORY2	B16	V40X65	717.529	0.000	COMB18	0.000	COMB18
STORY2	B16	V40X65	767.353	0.000	COMB18	0.000	COMB18

STORY2	B16	V40X65	817.176	0.000	COMB18	0.000	COMB18
STORY2	B16	V40X65	867.000	0.000	COMB18	0.000	COMB18
STORY2	B17	V40X65	20.000	0.000	COMB18	0.000	COMB18
STORY2	B17	V40X65	68.429	0.000	COMB18	0.000	COMB18
STORY2	B17	V40X65	116.857	0.000	COMB18	0.000	COMB18
STORY2	B17	V40X65	165.286	0.000	COMB18	0.000	COMB18
STORY2	B17	V40X65	213.714	0.000	COMB18	0.000	COMB18
STORY2	B17	V40X65	262.143	0.000	COMB18	0.000	COMB18
STORY2	B17	V40X65	310.571	0.000	COMB18	0.000	COMB18
STORY2	B17	V40X65	359.000	0.000	COMB18	0.000	COMB18
STORY2	B17	V40X65	407.429	0.000	COMB18	0.000	COMB18
STORY2	B17	V40X65	455.857	0.000	COMB18	0.000	COMB18
STORY2	B17	V40X65	504.286	0.000	COMB18	0.000	COMB18
STORY2	B17	V40X65	552.714	0.000	COMB18	0.000	COMB18
STORY2	B17	V40X65	601.143	0.000	COMB18	0.000	COMB18
STORY2	B17	V40X65	649.571	0.000	COMB18	0.000	COMB18
STORY2	B17	V40X65	698.000	0.000	COMB18	0.000	COMB18
STORY2	B18	V40X65	20.000	0.000	COMB18	0.000	COMB18
STORY2	B18	V40X65	67.250	0.000	COMB18	0.000	COMB18
STORY2	B18	V40X65	114.500	0.000	COMB18	0.000	COMB18
STORY2	B18	V40X65	161.750	0.000	COMB18	0.000	COMB18
STORY2	B18	V40X65	209.000	0.000	COMB18	0.000	COMB18
STORY2	B18	V40X65	256.250	0.000	COMB18	0.000	COMB18
STORY2	B18	V40X65	303.500	0.000	COMB18	0.000	COMB18
STORY2	B18	V40X65	350.750	0.000	COMB18	0.000	COMB18
STORY2	B18	V40X65	398.000	0.000	COMB18	0.000	COMB18
STORY2	B18	V40X65	445.250	0.000	COMB18	0.000	COMB18
STORY2	B18	V40X65	492.500	0.000	COMB18	0.000	COMB18
STORY2	B18	V40X65	539.750	0.000	COMB18	0.000	COMB18
STORY2	B18	V40X65	587.000	0.000	COMB18	0.000	COMB18
STORY1	B1	V40X65	20.000	0.000	COMB18	0.000	COMB18
STORY1	B1	V40X65	69.250	0.000	COMB18	0.000	COMB18
STORY1	B1	V40X65	118.500	0.000	COMB18	0.000	COMB18
STORY1	B1	V40X65	167.750	0.000	COMB18	0.000	COMB18
STORY1	B1	V40X65	217.000	0.000	COMB18	0.000	COMB18
STORY1	B1	V40X65	266.250	0.000	COMB18	0.000	COMB18
STORY1	B1	V40X65	315.500	0.000	COMB18	0.000	COMB18
STORY1	B1	V40X65	364.750	0.000	COMB18	0.000	COMB18
STORY1	B1	V40X65	414.000	0.000	COMB18	0.000	COMB18
STORY1	B1	V40X65	414.000	0.000	COMB18	0.000	COMB18
STORY1	B1	V40X65	463.250	0.000	COMB18	0.000	COMB18
STORY1	B1	V40X65	512.500	0.000	COMB18	0.000	COMB18
STORY1	B1	V40X65	561.750	0.000	COMB18	0.000	COMB18
STORY1	B1	V40X65	611.000	0.000	COMB18	0.000	COMB18
STORY1	B1	V40X65	660.250	0.000	COMB18	0.000	COMB18
STORY1	B1	V40X65	709.500	0.000	COMB18	0.000	COMB18
STORY1	B1	V40X65	758.750	0.000	COMB18	0.000	COMB18
STORY1	B1	V40X65	808.000	0.000	COMB18	0.000	COMB18
STORY1	B2	V40X65	20.000	0.000	COMB18	0.000	COMB18
STORY1	B2	V40X65	66.667	0.000	COMB18	0.000	COMB18
STORY1	B2	V40X65	113.333	0.000	COMB18	0.000	COMB18
STORY1	B2	V40X65	160.000	0.000	COMB18	0.000	COMB18
STORY1	B2	V40X65	206.667	0.000	COMB18	0.000	COMB18
STORY1	B2	V40X65	253.333	0.000	COMB18	0.000	COMB18
STORY1	B2	V40X65	300.000	0.000	COMB18	0.000	COMB18
STORY1	B2	V40X65	346.667	0.000	COMB18	0.000	COMB18
STORY1	B2	V40X65	393.333	0.000	COMB18	0.000	COMB18
STORY1	B2	V40X65	440.000	0.000	COMB18	0.000	COMB18
STORY1	B2	V40X65	440.000	0.000	COMB18	0.000	COMB18
STORY1	B2	V40X65	486.667	0.000	COMB18	0.000	COMB18
STORY1	B2	V40X65	533.333	0.000	COMB18	0.000	COMB18
STORY1	B2	V40X65	580.000	0.000	COMB18	0.000	COMB18
STORY1	B2	V40X65	626.667	0.000	COMB18	0.000	COMB18
STORY1	B2	V40X65	673.333	0.000	COMB18	0.000	COMB18
STORY1	B2	V40X65	720.000	0.000	COMB18	0.000	COMB18

STORY1	B2	V40X65	766.667	0.000	COMB18	0.000	COMB18
STORY1	B2	V40X65	813.333	0.000	COMB18	0.000	COMB18
STORY1	B2	V40X65	860.000	0.000	COMB18	0.000	COMB18
STORY1	B3	V40X65	20.000	0.000	COMB18	0.000	COMB18
STORY1	B3	V40X65	68.625	0.000	COMB18	0.000	COMB18
STORY1	B3	V40X65	117.250	0.000	COMB18	0.000	COMB18
STORY1	B3	V40X65	165.875	0.000	COMB18	0.000	COMB18
STORY1	B3	V40X65	214.500	0.000	COMB18	0.000	COMB18
STORY1	B3	V40X65	263.125	0.000	COMB18	0.000	COMB18
STORY1	B3	V40X65	311.750	0.000	COMB18	0.000	COMB18
STORY1	B3	V40X65	360.375	0.000	COMB18	0.000	COMB18
STORY1	B3	V40X65	409.000	0.000	COMB18	0.000	COMB18
STORY1	B3	V40X65	409.000	0.000	COMB18	0.000	COMB18
STORY1	B3	V40X65	457.625	0.000	COMB18	0.000	COMB18
STORY1	B3	V40X65	506.250	0.000	COMB18	0.000	COMB18
STORY1	B3	V40X65	554.875	0.000	COMB18	0.000	COMB18
STORY1	B3	V40X65	603.500	0.000	COMB18	0.000	COMB18
STORY1	B3	V40X65	652.125	0.000	COMB18	0.000	COMB18
STORY1	B3	V40X65	700.750	0.000	COMB18	0.000	COMB18
STORY1	B3	V40X65	749.375	0.000	COMB18	0.000	COMB18
STORY1	B3	V40X65	798.000	0.000	COMB18	0.000	COMB18
STORY1	B4	V40X65	20.000	0.000	COMB18	0.000	COMB18
STORY1	B4	V40X65	67.056	0.000	COMB18	0.000	COMB18
STORY1	B4	V40X65	114.111	0.000	COMB18	0.000	COMB18
STORY1	B4	V40X65	161.167	0.000	COMB18	0.000	COMB18
STORY1	B4	V40X65	208.222	0.000	COMB18	0.000	COMB18
STORY1	B4	V40X65	255.278	0.000	COMB18	0.000	COMB18
STORY1	B4	V40X65	302.333	0.000	COMB18	0.000	COMB18
STORY1	B4	V40X65	349.389	0.000	COMB18	0.000	COMB18
STORY1	B4	V40X65	396.444	0.000	COMB18	0.000	COMB18
STORY1	B4	V40X65	443.500	0.000	COMB18	0.000	COMB18
STORY1	B4	V40X65	443.500	0.000	COMB18	0.000	COMB18
STORY1	B4	V40X65	490.556	0.000	COMB18	0.000	COMB18
STORY1	B4	V40X65	537.611	0.000	COMB18	0.000	COMB18
STORY1	B4	V40X65	584.667	0.000	COMB18	0.000	COMB18
STORY1	B4	V40X65	631.722	0.000	COMB18	0.000	COMB18
STORY1	B4	V40X65	678.778	0.000	COMB18	0.000	COMB18
STORY1	B4	V40X65	725.833	0.000	COMB18	0.000	COMB18
STORY1	B4	V40X65	772.889	0.000	COMB18	0.000	COMB18
STORY1	B4	V40X65	819.944	0.000	COMB18	0.000	COMB18
STORY1	B4	V40X65	867.000	0.000	COMB18	0.000	COMB18
STORY1	B5	V40X65	20.000	0.000	COMB18	0.000	COMB18
STORY1	B5	V40X65	68.429	0.000	COMB18	0.000	COMB18
STORY1	B5	V40X65	116.857	0.000	COMB18	0.000	COMB18
STORY1	B5	V40X65	165.286	0.000	COMB18	0.000	COMB18
STORY1	B5	V40X65	213.714	0.000	COMB18	0.000	COMB18
STORY1	B5	V40X65	262.143	0.000	COMB18	0.000	COMB18
STORY1	B5	V40X65	310.571	0.000	COMB18	0.000	COMB18
STORY1	B5	V40X65	359.000	0.000	COMB18	0.000	COMB18
STORY1	B5	V40X65	359.000	0.000	COMB18	0.000	COMB18
STORY1	B5	V40X65	407.429	0.000	COMB18	0.000	COMB18
STORY1	B5	V40X65	455.857	0.000	COMB18	0.000	COMB18
STORY1	B5	V40X65	504.286	0.000	COMB18	0.000	COMB18
STORY1	B5	V40X65	552.714	0.000	COMB18	0.000	COMB18
STORY1	B5	V40X65	601.143	0.000	COMB18	0.000	COMB18
STORY1	B5	V40X65	649.571	0.000	COMB18	0.000	COMB18
STORY1	B5	V40X65	698.000	0.000	COMB18	0.000	COMB18
STORY1	B6	V40X65	20.000	0.000	COMB18	0.000	COMB18
STORY1	B6	V40X65	67.250	0.000	COMB18	0.000	COMB18
STORY1	B6	V40X65	114.500	0.000	COMB18	0.000	COMB18
STORY1	B6	V40X65	161.750	0.000	COMB18	0.000	COMB18
STORY1	B6	V40X65	209.000	0.000	COMB18	0.000	COMB18
STORY1	B6	V40X65	256.250	0.000	COMB18	0.000	COMB18
STORY1	B6	V40X65	303.500	0.000	COMB18	0.000	COMB18
STORY1	B6	V40X65	303.500	0.000	COMB18	0.000	COMB18

STORY1	B6	V40X65	350.750	0.000	COMB18	0.000	COMB18
STORY1	B6	V40X65	398.000	0.000	COMB18	0.000	COMB18
STORY1	B6	V40X65	445.250	0.000	COMB18	0.000	COMB18
STORY1	B6	V40X65	492.500	0.000	COMB18	0.000	COMB18
STORY1	B6	V40X65	539.750	0.000	COMB18	0.000	COMB18
STORY1	B6	V40X65	587.000	0.000	COMB18	0.000	COMB18
STORY1	B7	V40X65	20.000	0.000	COMB18	0.000	COMB18
STORY1	B7	V40X65	69.250	0.000	COMB18	0.000	COMB18
STORY1	B7	V40X65	118.500	0.000	COMB18	0.000	COMB18
STORY1	B7	V40X65	167.750	0.000	COMB18	0.000	COMB18
STORY1	B7	V40X65	217.000	0.000	COMB18	0.000	COMB18
STORY1	B7	V40X65	266.250	0.000	COMB18	0.000	COMB18
STORY1	B7	V40X65	315.500	0.000	COMB18	0.000	COMB18
STORY1	B7	V40X65	364.750	0.000	COMB18	0.000	COMB18
STORY1	B7	V40X65	414.000	0.000	COMB18	0.000	COMB18
STORY1	B7	V40X65	463.250	0.000	COMB18	0.000	COMB18
STORY1	B7	V40X65	512.500	0.000	COMB18	0.000	COMB18
STORY1	B7	V40X65	561.750	0.000	COMB18	0.000	COMB18
STORY1	B7	V40X65	611.000	0.000	COMB18	0.000	COMB18
STORY1	B7	V40X65	660.250	0.000	COMB18	0.000	COMB18
STORY1	B7	V40X65	709.500	0.000	COMB18	0.000	COMB18
STORY1	B7	V40X65	758.750	0.000	COMB18	0.000	COMB18
STORY1	B7	V40X65	808.000	0.000	COMB18	0.000	COMB18
STORY1	B8	V40X65	20.000	0.000	COMB18	0.000	COMB18
STORY1	B8	V40X65	69.412	0.000	COMB18	0.000	COMB18
STORY1	B8	V40X65	118.824	0.000	COMB18	0.000	COMB18
STORY1	B8	V40X65	168.235	0.000	COMB18	0.000	COMB18
STORY1	B8	V40X65	217.647	0.000	COMB18	0.000	COMB18
STORY1	B8	V40X65	267.059	0.000	COMB18	0.000	COMB18
STORY1	B8	V40X65	316.471	0.000	COMB18	0.000	COMB18
STORY1	B8	V40X65	365.882	0.000	COMB18	0.000	COMB18
STORY1	B8	V40X65	415.294	0.000	COMB18	0.000	COMB18
STORY1	B8	V40X65	464.706	0.000	COMB18	0.000	COMB18
STORY1	B8	V40X65	514.118	0.000	COMB18	0.000	COMB18
STORY1	B8	V40X65	563.529	0.000	COMB18	0.000	COMB18
STORY1	B8	V40X65	612.941	0.000	COMB18	0.000	COMB18
STORY1	B8	V40X65	662.353	0.000	COMB18	0.000	COMB18
STORY1	B8	V40X65	711.765	0.000	COMB18	0.000	COMB18
STORY1	B8	V40X65	761.176	0.000	COMB18	0.000	COMB18
STORY1	B8	V40X65	810.588	0.000	COMB18	0.000	COMB18
STORY1	B8	V40X65	860.000	0.000	COMB18	0.000	COMB18
STORY1	B9	V40X65	20.000	0.000	COMB18	0.000	COMB18
STORY1	B9	V40X65	68.625	0.000	COMB18	0.000	COMB18
STORY1	B9	V40X65	117.250	0.000	COMB18	0.000	COMB18
STORY1	B9	V40X65	165.875	0.000	COMB18	0.000	COMB18
STORY1	B9	V40X65	214.500	0.000	COMB18	0.000	COMB18
STORY1	B9	V40X65	263.125	0.000	COMB18	0.000	COMB18
STORY1	B9	V40X65	311.750	0.000	COMB18	0.000	COMB18
STORY1	B9	V40X65	360.375	0.000	COMB18	0.000	COMB18
STORY1	B9	V40X65	409.000	0.000	COMB18	0.000	COMB18
STORY1	B9	V40X65	457.625	0.000	COMB18	0.000	COMB18
STORY1	B9	V40X65	506.250	0.000	COMB18	0.000	COMB18
STORY1	B9	V40X65	554.875	0.000	COMB18	0.000	COMB18
STORY1	B9	V40X65	603.500	0.000	COMB18	0.000	COMB18
STORY1	B9	V40X65	652.125	0.000	COMB18	0.000	COMB18
STORY1	B9	V40X65	700.750	0.000	COMB18	0.000	COMB18
STORY1	B9	V40X65	749.375	0.000	COMB18	0.000	COMB18
STORY1	B9	V40X65	798.000	0.000	COMB18	0.000	COMB18
STORY1	B10	V40X65	20.000	0.000	COMB18	0.000	COMB18
STORY1	B10	V40X65	69.824	0.000	COMB18	0.000	COMB18
STORY1	B10	V40X65	119.647	0.000	COMB18	0.000	COMB18
STORY1	B10	V40X65	169.471	0.000	COMB18	0.000	COMB18
STORY1	B10	V40X65	219.294	0.000	COMB18	0.000	COMB18
STORY1	B10	V40X65	269.118	0.000	COMB18	0.000	COMB18
STORY1	B10	V40X65	318.941	0.000	COMB18	0.000	COMB18

STORY1	B10	V40X65	368.765	0.000	COMB18	0.000	COMB18
STORY1	B10	V40X65	418.588	0.000	COMB18	0.000	COMB18
STORY1	B10	V40X65	468.412	0.000	COMB18	0.000	COMB18
STORY1	B10	V40X65	518.235	0.000	COMB18	0.000	COMB18
STORY1	B10	V40X65	568.059	0.000	COMB18	0.000	COMB18
STORY1	B10	V40X65	617.882	0.000	COMB18	0.000	COMB18
STORY1	B10	V40X65	667.706	0.000	COMB18	0.000	COMB18
STORY1	B10	V40X65	717.529	0.000	COMB18	0.000	COMB18
STORY1	B10	V40X65	767.353	0.000	COMB18	0.000	COMB18
STORY1	B10	V40X65	817.176	0.000	COMB18	0.000	COMB18
STORY1	B10	V40X65	867.000	0.000	COMB18	0.000	COMB18
STORY1	B11	V40X65	20.000	0.000	COMB18	0.000	COMB18
STORY1	B11	V40X65	68.429	0.000	COMB18	0.000	COMB18
STORY1	B11	V40X65	116.857	0.000	COMB18	0.000	COMB18
STORY1	B11	V40X65	165.286	0.000	COMB18	0.000	COMB18
STORY1	B11	V40X65	213.714	0.000	COMB18	0.000	COMB18
STORY1	B11	V40X65	262.143	0.000	COMB18	0.000	COMB18
STORY1	B11	V40X65	310.571	0.000	COMB18	0.000	COMB18
STORY1	B11	V40X65	359.000	0.000	COMB18	0.000	COMB18
STORY1	B11	V40X65	407.429	0.000	COMB18	0.000	COMB18
STORY1	B11	V40X65	455.857	0.000	COMB18	0.000	COMB18
STORY1	B11	V40X65	504.286	0.000	COMB18	0.000	COMB18
STORY1	B11	V40X65	552.714	0.000	COMB18	0.000	COMB18
STORY1	B11	V40X65	601.143	0.000	COMB18	0.000	COMB18
STORY1	B11	V40X65	649.571	0.000	COMB18	0.000	COMB18
STORY1	B11	V40X65	698.000	0.000	COMB18	0.000	COMB18
STORY1	B12	V40X65	20.000	0.000	COMB18	0.000	COMB18
STORY1	B12	V40X65	67.250	0.000	COMB18	0.000	COMB18
STORY1	B12	V40X65	114.500	0.000	COMB18	0.000	COMB18
STORY1	B12	V40X65	161.750	0.000	COMB18	0.000	COMB18
STORY1	B12	V40X65	209.000	0.000	COMB18	0.000	COMB18
STORY1	B12	V40X65	256.250	0.000	COMB18	0.000	COMB18
STORY1	B12	V40X65	303.500	0.000	COMB18	0.000	COMB18
STORY1	B12	V40X65	350.750	0.000	COMB18	0.000	COMB18
STORY1	B12	V40X65	398.000	0.000	COMB18	0.000	COMB18
STORY1	B12	V40X65	445.250	0.000	COMB18	0.000	COMB18
STORY1	B12	V40X65	492.500	0.000	COMB18	0.000	COMB18
STORY1	B12	V40X65	539.750	0.000	COMB18	0.000	COMB18
STORY1	B12	V40X65	587.000	0.000	COMB18	0.000	COMB18
STORY1	B13	V40X65	20.000	0.000	COMB18	0.000	COMB18
STORY1	B13	V40X65	69.250	0.000	COMB18	0.000	COMB18
STORY1	B13	V40X65	118.500	0.000	COMB18	0.000	COMB18
STORY1	B13	V40X65	167.750	0.000	COMB18	0.000	COMB18
STORY1	B13	V40X65	217.000	0.000	COMB18	0.000	COMB18
STORY1	B13	V40X65	266.250	0.000	COMB18	0.000	COMB18
STORY1	B13	V40X65	315.500	0.000	COMB18	0.000	COMB18
STORY1	B13	V40X65	364.750	0.000	COMB18	0.000	COMB18
STORY1	B13	V40X65	414.000	0.000	COMB18	0.000	COMB18
STORY1	B13	V40X65	463.250	0.000	COMB18	0.000	COMB18
STORY1	B13	V40X65	512.500	0.000	COMB18	0.000	COMB18
STORY1	B13	V40X65	561.750	0.000	COMB18	0.000	COMB18
STORY1	B13	V40X65	611.000	0.000	COMB18	0.000	COMB18
STORY1	B13	V40X65	660.250	0.000	COMB18	0.000	COMB18
STORY1	B13	V40X65	709.500	0.000	COMB18	0.000	COMB18
STORY1	B13	V40X65	758.750	0.000	COMB18	0.000	COMB18
STORY1	B13	V40X65	808.000	0.000	COMB18	0.000	COMB18
STORY1	B14	V40X65	20.000	0.000	COMB18	0.000	COMB18
STORY1	B14	V40X65	69.412	0.000	COMB18	0.000	COMB18
STORY1	B14	V40X65	118.824	0.000	COMB18	0.000	COMB18
STORY1	B14	V40X65	168.235	0.000	COMB18	0.000	COMB18
STORY1	B14	V40X65	217.647	0.000	COMB18	0.000	COMB18
STORY1	B14	V40X65	267.059	0.000	COMB18	0.000	COMB18
STORY1	B14	V40X65	316.471	0.000	COMB18	0.000	COMB18
STORY1	B14	V40X65	365.882	0.000	COMB18	0.000	COMB18
STORY1	B14	V40X65	415.294	0.000	COMB18	0.000	COMB18

STORY1	B14	V40X65	464.706	0.000	COMB18	0.000	COMB18
STORY1	B14	V40X65	514.118	0.000	COMB18	0.000	COMB18
STORY1	B14	V40X65	563.529	0.000	COMB18	0.000	COMB18
STORY1	B14	V40X65	612.941	0.000	COMB18	0.000	COMB18
STORY1	B14	V40X65	662.353	0.000	COMB18	0.000	COMB18
STORY1	B14	V40X65	711.765	0.000	COMB18	0.000	COMB18
STORY1	B14	V40X65	761.176	0.000	COMB18	0.000	COMB18
STORY1	B14	V40X65	810.588	0.000	COMB18	0.000	COMB18
STORY1	B14	V40X65	860.000	0.000	COMB18	0.000	COMB18
STORY1	B15	V40X65	20.000	0.000	COMB18	0.000	COMB18
STORY1	B15	V40X65	68.625	0.000	COMB18	0.000	COMB18
STORY1	B15	V40X65	117.250	0.000	COMB18	0.000	COMB18
STORY1	B15	V40X65	165.875	0.000	COMB18	0.000	COMB18
STORY1	B15	V40X65	214.500	0.000	COMB18	0.000	COMB18
STORY1	B15	V40X65	263.125	0.000	COMB18	0.000	COMB18
STORY1	B15	V40X65	311.750	0.000	COMB18	0.000	COMB18
STORY1	B15	V40X65	360.375	0.000	COMB18	0.000	COMB18
STORY1	B15	V40X65	409.000	0.000	COMB18	0.000	COMB18
STORY1	B15	V40X65	457.625	0.000	COMB18	0.000	COMB18
STORY1	B15	V40X65	506.250	0.000	COMB18	0.000	COMB18
STORY1	B15	V40X65	554.875	0.000	COMB18	0.000	COMB18
STORY1	B15	V40X65	603.500	0.000	COMB18	0.000	COMB18
STORY1	B15	V40X65	652.125	0.000	COMB18	0.000	COMB18
STORY1	B15	V40X65	700.750	0.000	COMB18	0.000	COMB18
STORY1	B15	V40X65	749.375	0.000	COMB18	0.000	COMB18
STORY1	B15	V40X65	798.000	0.000	COMB18	0.000	COMB18
STORY1	B16	V40X65	20.000	0.000	COMB18	0.000	COMB18
STORY1	B16	V40X65	69.824	0.000	COMB18	0.000	COMB18
STORY1	B16	V40X65	119.647	0.000	COMB18	0.000	COMB18
STORY1	B16	V40X65	169.471	0.000	COMB18	0.000	COMB18
STORY1	B16	V40X65	219.294	0.000	COMB18	0.000	COMB18
STORY1	B16	V40X65	269.118	0.000	COMB18	0.000	COMB18
STORY1	B16	V40X65	318.941	0.000	COMB18	0.000	COMB18
STORY1	B16	V40X65	368.765	0.000	COMB18	0.000	COMB18
STORY1	B16	V40X65	418.588	0.000	COMB18	0.000	COMB18
STORY1	B16	V40X65	468.412	0.000	COMB18	0.000	COMB18
STORY1	B16	V40X65	518.235	0.000	COMB18	0.000	COMB18
STORY1	B16	V40X65	568.059	0.000	COMB18	0.000	COMB18
STORY1	B16	V40X65	617.882	0.000	COMB18	0.000	COMB18
STORY1	B16	V40X65	667.706	0.000	COMB18	0.000	COMB18
STORY1	B16	V40X65	717.529	0.000	COMB18	0.000	COMB18
STORY1	B16	V40X65	767.353	0.000	COMB18	0.000	COMB18
STORY1	B16	V40X65	817.176	0.000	COMB18	0.000	COMB18
STORY1	B16	V40X65	867.000	0.000	COMB18	0.000	COMB18
STORY1	B17	V40X65	20.000	0.000	COMB18	0.000	COMB18
STORY1	B17	V40X65	68.429	0.000	COMB18	0.000	COMB18
STORY1	B17	V40X65	116.857	0.000	COMB18	0.000	COMB18
STORY1	B17	V40X65	165.286	0.000	COMB18	0.000	COMB18
STORY1	B17	V40X65	213.714	0.000	COMB18	0.000	COMB18
STORY1	B17	V40X65	262.143	0.000	COMB18	0.000	COMB18
STORY1	B17	V40X65	310.571	0.000	COMB18	0.000	COMB18
STORY1	B17	V40X65	359.000	0.000	COMB18	0.000	COMB18
STORY1	B17	V40X65	407.429	0.000	COMB18	0.000	COMB18
STORY1	B17	V40X65	455.857	0.000	COMB18	0.000	COMB18
STORY1	B17	V40X65	504.286	0.000	COMB18	0.000	COMB18
STORY1	B17	V40X65	552.714	0.000	COMB18	0.000	COMB18
STORY1	B17	V40X65	601.143	0.000	COMB18	0.000	COMB18
STORY1	B17	V40X65	649.571	0.000	COMB18	0.000	COMB18
STORY1	B17	V40X65	698.000	0.000	COMB18	0.000	COMB18
STORY1	B18	V40X65	20.000	0.000	COMB18	0.000	COMB18
STORY1	B18	V40X65	67.250	0.000	COMB18	0.000	COMB18
STORY1	B18	V40X65	114.500	0.000	COMB18	0.000	COMB18
STORY1	B18	V40X65	161.750	0.000	COMB18	0.000	COMB18
STORY1	B18	V40X65	209.000	0.000	COMB18	0.000	COMB18
STORY1	B18	V40X65	256.250	0.000	COMB18	0.000	COMB18

STORY1	B18	V40X65	303.500	0.000	COMB18	0.000	COMB18
STORY1	B18	V40X65	350.750	0.000	COMB18	0.000	COMB18
STORY1	B18	V40X65	398.000	0.000	COMB18	0.000	COMB18
STORY1	B18	V40X65	445.250	0.000	COMB18	0.000	COMB18
STORY1	B18	V40X65	492.500	0.000	COMB18	0.000	COMB18
STORY1	B18	V40X65	539.750	0.000	COMB18	0.000	COMB18
STORY1	B18	V40X65	587.000	0.000	COMB18	0.000	COMB18
STORY1	B19	V40X65	20.000	0.000	COMB18	0.033	COMB5
STORY1	B19	V40X65	66.500	0.000	COMB18	0.033	COMB1
STORY1	B19	V40X65	113.000	0.000	COMB18	0.033	COMB1
STORY1	B19	V40X65	159.500	0.000	COMB18	0.033	COMB1
STORY1	B19	V40X65	159.500	0.000	COMB18	0.000	COMB18
STORY1	B19	V40X65	208.077	0.000	COMB18	0.000	COMB18
STORY1	B19	V40X65	256.654	0.000	COMB18	0.000	COMB18
STORY1	B19	V40X65	305.231	0.000	COMB18	0.000	COMB18
STORY1	B19	V40X65	353.808	0.000	COMB18	0.000	COMB18
STORY1	B19	V40X65	402.385	0.000	COMB18	0.000	COMB18
STORY1	B19	V40X65	450.962	0.000	COMB18	0.000	COMB18
STORY1	B19	V40X65	499.538	0.000	COMB18	0.000	COMB18
STORY1	B19	V40X65	548.115	0.000	COMB18	0.000	COMB18
STORY1	B19	V40X65	596.692	0.000	COMB18	0.000	COMB18
STORY1	B19	V40X65	645.269	0.000	COMB18	0.000	COMB18
STORY1	B19	V40X65	693.846	0.000	COMB18	0.000	COMB18
STORY1	B19	V40X65	742.423	0.000	COMB18	0.000	COMB18
STORY1	B19	V40X65	791.000	0.000	COMB18	0.000	COMB18
STORY1	B20	V40X65	20.000	0.000	COMB18	0.000	COMB18
STORY1	B20	V40X65	68.083	0.000	COMB18	0.000	COMB18
STORY1	B20	V40X65	116.167	0.000	COMB18	0.000	COMB18
STORY1	B20	V40X65	164.250	0.000	COMB18	0.000	COMB18
STORY1	B20	V40X65	212.333	0.000	COMB18	0.000	COMB18
STORY1	B20	V40X65	260.417	0.000	COMB18	0.000	COMB18
STORY1	B20	V40X65	308.500	0.000	COMB18	0.000	COMB18
STORY1	B20	V40X65	356.583	0.000	COMB18	0.000	COMB18
STORY1	B20	V40X65	404.667	0.000	COMB18	0.000	COMB18
STORY1	B20	V40X65	452.750	0.000	COMB18	0.000	COMB18
STORY1	B20	V40X65	500.833	0.000	COMB18	0.000	COMB18
STORY1	B20	V40X65	548.917	0.000	COMB18	0.000	COMB18
STORY1	B20	V40X65	597.000	0.000	COMB18	0.000	COMB18
STORY1	B21	V40X65	20.000	0.000	COMB18	0.033	COMB18
STORY1	B21	V40X65	66.500	0.000	COMB18	0.033	COMB18
STORY1	B21	V40X65	113.000	0.000	COMB18	0.033	COMB17
STORY1	B21	V40X65	159.500	0.000	COMB18	0.033	COMB13
STORY1	B21	V40X65	159.500	0.000	COMB18	0.000	COMB18
STORY1	B21	V40X65	208.077	0.000	COMB18	0.000	COMB18
STORY1	B21	V40X65	256.654	0.000	COMB18	0.000	COMB18
STORY1	B21	V40X65	305.231	0.000	COMB18	0.000	COMB18
STORY1	B21	V40X65	353.808	0.000	COMB18	0.000	COMB18
STORY1	B21	V40X65	402.385	0.000	COMB18	0.000	COMB18
STORY1	B21	V40X65	450.962	0.000	COMB18	0.000	COMB18
STORY1	B21	V40X65	499.538	0.000	COMB18	0.000	COMB18
STORY1	B21	V40X65	548.115	0.000	COMB18	0.000	COMB18
STORY1	B21	V40X65	596.692	0.000	COMB18	0.000	COMB18
STORY1	B21	V40X65	645.269	0.000	COMB18	0.000	COMB18
STORY1	B21	V40X65	693.846	0.000	COMB18	0.000	COMB18
STORY1	B21	V40X65	742.423	0.000	COMB18	0.000	COMB18
STORY1	B21	V40X65	791.000	0.000	COMB18	0.000	COMB18
STORY1	B22	V40X65	20.000	0.000	COMB18	0.000	COMB18
STORY1	B22	V40X65	68.083	0.000	COMB18	0.000	COMB18
STORY1	B22	V40X65	116.167	0.000	COMB18	0.000	COMB18
STORY1	B22	V40X65	164.250	0.000	COMB18	0.000	COMB18
STORY1	B22	V40X65	212.333	0.000	COMB18	0.000	COMB18
STORY1	B22	V40X65	260.417	0.000	COMB18	0.000	COMB18
STORY1	B22	V40X65	308.500	0.000	COMB18	0.000	COMB18
STORY1	B22	V40X65	356.583	0.000	COMB18	0.000	COMB18
STORY1	B22	V40X65	404.667	0.000	COMB18	0.000	COMB18

STORY1	B22	V40X65	452.750	0.000	COMB18	0.000	COMB18
STORY1	B22	V40X65	500.833	0.000	COMB18	0.000	COMB18
STORY1	B22	V40X65	548.917	0.000	COMB18	0.000	COMB18
STORY1	B22	V40X65	597.000	0.000	COMB18	0.000	COMB18
STORY1	B23	V40X65	20.000	0.000	COMB18	0.033	COMB17
STORY1	B23	V40X65	66.500	0.000	COMB18	0.033	COMB13
STORY1	B23	V40X65	113.000	0.000	COMB18	0.033	COMB13
STORY1	B23	V40X65	159.500	0.000	COMB18	0.033	COMB10
STORY1	B23	V40X65	159.500	0.000	COMB18	0.000	COMB18
STORY1	B23	V40X65	208.077	0.000	COMB18	0.000	COMB18
STORY1	B23	V40X65	256.654	0.000	COMB18	0.000	COMB18
STORY1	B23	V40X65	305.231	0.000	COMB18	0.000	COMB18
STORY1	B23	V40X65	353.808	0.000	COMB18	0.000	COMB18
STORY1	B23	V40X65	402.385	0.000	COMB18	0.000	COMB18
STORY1	B23	V40X65	450.962	0.000	COMB18	0.000	COMB18
STORY1	B23	V40X65	499.538	0.000	COMB18	0.000	COMB18
STORY1	B23	V40X65	548.115	0.000	COMB18	0.000	COMB18
STORY1	B23	V40X65	596.692	0.000	COMB18	0.000	COMB18
STORY1	B23	V40X65	645.269	0.000	COMB18	0.000	COMB18
STORY1	B23	V40X65	693.846	0.000	COMB18	0.000	COMB18
STORY1	B23	V40X65	742.423	0.000	COMB18	0.000	COMB18
STORY1	B23	V40X65	791.000	0.000	COMB18	0.000	COMB18
STORY1	B24	V40X65	20.000	0.000	COMB18	0.000	COMB18
STORY1	B24	V40X65	68.083	0.000	COMB18	0.000	COMB18
STORY1	B24	V40X65	116.167	0.000	COMB18	0.000	COMB18
STORY1	B24	V40X65	164.250	0.000	COMB18	0.000	COMB18
STORY1	B24	V40X65	212.333	0.000	COMB18	0.000	COMB18
STORY1	B24	V40X65	260.417	0.000	COMB18	0.000	COMB18
STORY1	B24	V40X65	308.500	0.000	COMB18	0.000	COMB18
STORY1	B24	V40X65	356.583	0.000	COMB18	0.000	COMB18
STORY1	B24	V40X65	404.667	0.000	COMB18	0.000	COMB18
STORY1	B24	V40X65	452.750	0.000	COMB18	0.000	COMB18
STORY1	B24	V40X65	500.833	0.000	COMB18	0.000	COMB18
STORY1	B24	V40X65	548.917	0.000	COMB18	0.000	COMB18
STORY1	B24	V40X65	597.000	0.000	COMB18	0.000	COMB18
STORY1	B25	V40X65	20.000	0.000	COMB18	0.033	COMB18
STORY1	B25	V40X65	66.500	0.000	COMB18	0.033	COMB17
STORY1	B25	V40X65	113.000	0.000	COMB18	0.033	COMB13
STORY1	B25	V40X65	159.500	0.000	COMB18	0.033	COMB10
STORY1	B25	V40X65	159.500	0.000	COMB18	0.000	COMB18
STORY1	B25	V40X65	208.077	0.000	COMB18	0.000	COMB18
STORY1	B25	V40X65	256.654	0.000	COMB18	0.000	COMB18
STORY1	B25	V40X65	305.231	0.000	COMB18	0.000	COMB18
STORY1	B25	V40X65	353.808	0.000	COMB18	0.000	COMB18
STORY1	B25	V40X65	402.385	0.000	COMB18	0.000	COMB18
STORY1	B25	V40X65	450.962	0.000	COMB18	0.000	COMB18
STORY1	B25	V40X65	499.538	0.000	COMB18	0.000	COMB18
STORY1	B25	V40X65	548.115	0.000	COMB18	0.000	COMB18
STORY1	B25	V40X65	596.692	0.000	COMB18	0.000	COMB18
STORY1	B25	V40X65	645.269	0.000	COMB18	0.000	COMB18
STORY1	B25	V40X65	693.846	0.000	COMB18	0.000	COMB18
STORY1	B25	V40X65	742.423	0.000	COMB18	0.000	COM

STORY1	B26	V40X65	597.000	0.000	COMB18	0.000	COMB18
STORY1	B27	V40X65	20.000	0.000	COMB18	0.033	COMB17
STORY1	B27	V40X65	66.500	0.000	COMB18	0.033	COMB13
STORY1	B27	V40X65	113.000	0.000	COMB18	0.033	COMB10
STORY1	B27	V40X65	159.500	0.000	COMB18	0.033	COMB10
STORY1	B27	V40X65	159.500	0.000	COMB18	0.000	COMB18
STORY1	B27	V40X65	208.077	0.000	COMB18	0.000	COMB18
STORY1	B27	V40X65	256.654	0.000	COMB18	0.000	COMB18
STORY1	B27	V40X65	305.231	0.000	COMB18	0.000	COMB18
STORY1	B27	V40X65	353.808	0.000	COMB18	0.000	COMB18
STORY1	B27	V40X65	402.385	0.000	COMB18	0.000	COMB18
STORY1	B27	V40X65	450.962	0.000	COMB18	0.000	COMB18
STORY1	B27	V40X65	499.538	0.000	COMB18	0.000	COMB18
STORY1	B27	V40X65	548.115	0.000	COMB18	0.000	COMB18
STORY1	B27	V40X65	596.692	0.000	COMB18	0.000	COMB18
STORY1	B27	V40X65	645.269	0.000	COMB18	0.000	COMB18
STORY1	B27	V40X65	693.846	0.000	COMB18	0.000	COMB18
STORY1	B27	V40X65	742.423	0.000	COMB18	0.000	COMB18
STORY1	B27	V40X65	791.000	0.000	COMB18	0.000	COMB18
STORY1	B28	V40X65	20.000	0.000	COMB18	0.000	COMB18
STORY1	B28	V40X65	68.083	0.000	COMB18	0.000	COMB18
STORY1	B28	V40X65	116.167	0.000	COMB18	0.000	COMB18
STORY1	B28	V40X65	164.250	0.000	COMB18	0.000	COMB18
STORY1	B28	V40X65	212.333	0.000	COMB18	0.000	COMB18
STORY1	B28	V40X65	260.417	0.000	COMB18	0.000	COMB18
STORY1	B28	V40X65	308.500	0.000	COMB18	0.000	COMB18
STORY1	B28	V40X65	356.583	0.000	COMB18	0.000	COMB18
STORY1	B28	V40X65	404.667	0.000	COMB18	0.000	COMB18
STORY1	B28	V40X65	452.750	0.000	COMB18	0.000	COMB18
STORY1	B28	V40X65	500.833	0.000	COMB18	0.000	COMB18
STORY1	B28	V40X65	548.917	0.000	COMB18	0.000	COMB18
STORY1	B28	V40X65	597.000	0.000	COMB18	0.000	COMB18
STORY1	B29	V40X65	20.000	0.000	COMB18	0.033	COMB10
STORY1	B29	V40X65	66.500	0.000	COMB18	0.033	COMB10
STORY1	B29	V40X65	113.000	0.000	COMB18	0.033	COMB10
STORY1	B29	V40X65	159.500	0.000	COMB18	0.033	COMB10
STORY1	B29	V40X65	159.500	0.000	COMB18	0.000	COMB18
STORY1	B29	V40X65	208.077	0.000	COMB18	0.000	COMB18
STORY1	B29	V40X65	256.654	0.000	COMB18	0.000	COMB18
STORY1	B29	V40X65	305.231	0.000	COMB18	0.000	COMB18
STORY1	B29	V40X65	353.808	0.000	COMB18	0.000	COMB18
STORY1	B29	V40X65	402.385	0.000	COMB18	0.000	COMB18
STORY1	B29	V40X65	450.962	0.000	COMB18	0.000	COMB18
STORY1	B29	V40X65	499.538	0.000	COMB18	0.000	COMB18
STORY1	B29	V40X65	548.115	0.000	COMB18	0.000	COMB18
STORY1	B29	V40X65	596.692	0.000	COMB18	0.000	COMB18
STORY1	B29	V40X65	645.269	0.000	COMB18	0.000	COMB18
STORY1	B29	V40X65	693.846	0.000	COMB18	0.000	COMB18
STORY1	B29	V40X65	742.423	0.000	COMB18	0.000	COMB18
STORY1	B29	V40X65	791.000	0.000	COMB18	0.000	COMB18
STORY1	B30	V40X65	20.000	0.000	COMB18	0.000	COMB18
STORY1	B30	V40X65	68.083	0.000	COMB18	0.000	COMB18
STORY1	B30	V40X65	116.167	0.000	COMB18	0.000	COMB18
STORY1	B30	V40X65	164.250	0.000	COMB18	0.000	COMB18
STORY1	B30	V40X65	212.333	0.000	COMB18	0.000	COMB18
STORY1	B30	V40X65	260.417	0.000	COMB18	0.000	COMB18
STORY1	B30	V40X65	308.500	0.000	COMB18	0.000	COMB18
STORY1	B30	V40X65	356.583	0.000	COMB18	0.000	COMB18
STORY1	B30	V40X65	404.667	0.000	COMB18	0.000	COMB18
STORY1	B30	V40X65	452.750	0.000	COMB18	0.000	COMB18
STORY1	B30	V40X65	500.833	0.000	COMB18	0.000	COMB18
STORY1	B30	V40X65	548.917	0.000	COMB18	0.000	COMB18
STORY1	B30	V40X65	597.000	0.000	COMB18	0.000	COMB18
STORY1	B31	V40X65	20.000	0.000	COMB18	0.033	COMB10

STORY1	B31	V40X65	66.500	0.000	COMB18	0.033	COMB9
STORY1	B31	V40X65	113.000	0.000	COMB18	0.033	COMB8
STORY1	B31	V40X65	159.500	0.000	COMB18	0.033	COMB8
STORY1	B31	V40X65	159.500	0.000	COMB18	0.000	COMB18
STORY1	B31	V40X65	208.077	0.000	COMB18	0.000	COMB18
STORY1	B31	V40X65	256.654	0.000	COMB18	0.000	COMB18
STORY1	B31	V40X65	305.231	0.000	COMB18	0.000	COMB18
STORY1	B31	V40X65	353.808	0.000	COMB18	0.000	COMB18
STORY1	B31	V40X65	402.385	0.000	COMB18	0.000	COMB18
STORY1	B31	V40X65	450.962	0.000	COMB18	0.000	COMB18
STORY1	B31	V40X65	499.538	0.000	COMB18	0.000	COMB18
STORY1	B31	V40X65	548.115	0.000	COMB18	0.000	COMB18
STORY1	B31	V40X65	596.692	0.000	COMB18	0.000	COMB18
STORY1	B31	V40X65	645.269	0.000	COMB18	0.000	COMB18
STORY1	B31	V40X65	693.846	0.000	COMB18	0.000	COMB18
STORY1	B31	V40X65	742.423	0.000	COMB18	0.000	COMB18
STORY1	B31	V40X65	791.000	0.000	COMB18	0.000	COMB18
STORY1	B32	V40X65	20.000	0.000	COMB18	0.000	COMB18
STORY1	B32	V40X65	68.083	0.000	COMB18	0.000	COMB18
STORY1	B32	V40X65	116.167	0.000	COMB18	0.000	COMB18
STORY1	B32	V40X65	164.250	0.000	COMB18	0.000	COMB18
STORY1	B32	V40X65	212.333	0.000	COMB18	0.000	COMB18
STORY1	B32	V40X65	260.417	0.000	COMB18	0.000	COMB18
STORY1	B32	V40X65	308.500	0.000	COMB18	0.000	COMB18
STORY1	B32	V40X65	356.583	0.000	COMB18	0.000	COMB18
STORY1	B32	V40X65	404.667	0.000	COMB18	0.000	COMB18
STORY1	B32	V40X65	452.750	0.000	COMB18	0.000	COMB18
STORY1	B32	V40X65	500.833	0.000	COMB18	0.000	COMB18
STORY1	B32	V40X65	548.917	0.000	COMB18	0.000	COMB18
STORY1	B32	V40X65	597.000	0.000	COMB18	0.000	COMB18
STORY1	B33	V25X65	0.000	0.000	COMB18	0.000	COMB18
STORY1	B33	V25X65	46.000	0.000	COMB18	0.000	COMB18
STORY1	B33	V25X65	92.000	0.000	COMB18	0.000	COMB18
STORY1	B33	V25X65	138.000	0.000	COMB18	0.000	COMB18
STORY1	B33	V25X65	184.000	0.000	COMB18	0.000	COMB18
STORY1	B33	V25X65	230.000	0.000	COMB18	0.000	COMB18
STORY1	B33	V25X65	276.000	0.000	COMB18	0.000	COMB18
STORY1	B33	V25X65	322.000	0.000	COMB18	0.000	COMB18
STORY1	B33	V25X65	368.000	0.000	COMB18	0.000	COMB18
STORY1	B33	V25X65	414.000	0.000	COMB18	0.000	COMB18
STORY1	B33	V25X65	414.000	0.000	COMB18	0.000	COMB18
STORY1	B33	V25X65	460.000	0.000	COMB18	0.000	COMB18
STORY1	B33	V25X65	506.000	0.000	COMB18	0.000	COMB18
STORY1	B33	V25X65	552.000	0.000	COMB18	0.000	COMB18
STORY1	B33	V25X65	598.000	0.000	COMB18	0.000	COMB18
STORY1	B33	V25X65	644.000	0.000	COMB18	0.000	COMB18
STORY1	B33	V25X65	690.000	0.000	COMB18	0.000	COMB18
STORY1	B33	V25X65	736.000	0.000	COMB18	0.000	COMB18
STORY1	B33	V25X65	782.000	0.000	COMB18	0.021	COMB1
STORY1	B33	V25X65	828.000	0.000	COMB18	0.021	COMB1
STORY1	B34	V25X65	0.000	0.000	COMB18	0.021	COMB1
STORY1	B34	V25X65	48.889	0.000	COMB18	0.000	COMB18
STORY1	B34	V25X65	97.778	0.000	COMB18	0.000	COMB18
STORY1	B34	V25X65	146.667	0.000	COMB18	0.000	COMB18
STORY1	B34	V25X65	195.556	0.000	COMB18	0.000	COMB18
STORY1	B34	V25X65	244.444	0.000	COMB18	0.000	COMB18
STORY1	B34	V25X65	293.333	0.000	COMB18	0.000	COMB18
STORY1	B34	V25X65	342.222	0.000	COMB18	0.000	COMB18
STORY1	B34	V25X65	391.111	0.000	COMB18	0.000	COMB18
STORY1	B34	V25X65	440.000	0.000	COMB18	0.000	COMB18
STORY1	B34	V25X65	440.000	0.000	COMB18	0.000	COMB18
STORY1	B34	V25X65	488.889	0.000	COMB18	0.000	COMB18
STORY1	B34	V25X65	537.778	0.000	COMB18	0.000	COMB18
STORY1	B34	V25X65	586.667	0.000	COMB18	0.000	COMB18
STORY1	B34	V25X65	635.556	0.000	COMB18	0.000	COMB18
STORY1	B34	V25X65	684.444	0.000	COMB18	0.000	COMB18

STORY1	B34	V25X65	733.333	0.000	COMB18	0.000	COMB18
STORY1	B34	V25X65	782.222	0.000	COMB18	0.000	COMB18
STORY1	B34	V25X65	831.111	0.000	COMB18	0.000	COMB18
STORY1	B34	V25X65	880.000	0.000	COMB18	0.000	COMB18
STORY1	B35	V25X65	0.000	0.000	COMB18	0.000	COMB18
STORY1	B35	V25X65	45.444	0.000	COMB18	0.000	COMB18
STORY1	B35	V25X65	90.889	0.000	COMB18	0.000	COMB18
STORY1	B35	V25X65	136.333	0.000	COMB18	0.000	COMB18
STORY1	B35	V25X65	181.778	0.000	COMB18	0.000	COMB18
STORY1	B35	V25X65	227.222	0.000	COMB18	0.000	COMB18
STORY1	B35	V25X65	272.667	0.000	COMB18	0.000	COMB18
STORY1	B35	V25X65	318.111	0.000	COMB18	0.000	COMB18
STORY1	B35	V25X65	363.556	0.000	COMB18	0.000	COMB18
STORY1	B35	V25X65	409.000	0.000	COMB18	0.000	COMB18
STORY1	B35	V25X65	409.000	0.000	COMB18	0.000	COMB18
STORY1	B35	V25X65	454.444	0.000	COMB18	0.000	COMB18
STORY1	B35	V25X65	499.889	0.000	COMB18	0.000	COMB18
STORY1	B35	V25X65	545.333	0.000	COMB18	0.000	COMB18
STORY1	B35	V25X65	590.778	0.000	COMB18	0.000	COMB18
STORY1	B35	V25X65	636.222	0.000	COMB18	0.000	COMB18
STORY1	B35	V25X65	681.667	0.000	COMB18	0.000	COMB18
STORY1	B35	V25X65	727.111	0.000	COMB18	0.000	COMB18
STORY1	B35	V25X65	772.556	0.000	COMB18	0.000	COMB18
STORY1	B35	V25X65	818.000	0.000	COMB18	0.000	COMB18
STORY1	B36	V25X65	0.000	0.000	COMB18	0.021	COMB1
STORY1	B36	V25X65	49.278	0.000	COMB18	0.000	COMB18
STORY1	B36	V25X65	98.556	0.000	COMB18	0.000	COMB18
STORY1	B36	V25X65	147.833	0.000	COMB18	0.000	COMB18
STORY1	B36	V25X65	197.111	0.000	COMB18	0.000	COMB18
STORY1	B36	V25X65	246.389	0.000	COMB18	0.000	COMB18
STORY1	B36	V25X65	295.667	0.000	COMB18	0.000	COMB18
STORY1	B36	V25X65	344.944	0.000	COMB18	0.000	COMB18
STORY1	B36	V25X65	394.222	0.000	COMB18	0.000	COMB18
STORY1	B36	V25X65	443.500	0.000	COMB18	0.000	COMB18
STORY1	B36	V25X65	443.500	0.000	COMB18	0.000	COMB18
STORY1	B36	V25X65	492.778	0.000	COMB18	0.000	COMB18
STORY1	B36	V25X65	542.056	0.000	COMB18	0.000	COMB18
STORY1	B36	V25X65	591.333	0.000	COMB18	0.000	COMB18
STORY1	B36	V25X65	640.611	0.000	COMB18	0.000	COMB18
STORY1	B36	V25X65	689.889	0.000	COMB18	0.000	COMB18
STORY1	B36	V25X65	739.167	0.000	COMB18	0.000	COMB18
STORY1	B36	V25X65	788.444	0.000	COMB18	0.000	COMB18
STORY1	B36	V25X65	837.722	0.000	COMB18	0.000	COMB18
STORY1	B36	V25X65	887.000	0.000	COMB18	0.000	COMB18
STORY1	B37	V25X65	0.000	0.000	COMB18	0.000	COMB18
STORY1	B37	V25X65	44.875	0.000	COMB18	0.000	COMB18
STORY1	B37	V25X65	89.750	0.000	COMB18	0.000	COMB18
STORY1	B37	V25X65	134.625	0.000	COMB18	0.000	COMB18
STORY1	B37	V25X65	179.500	0.000	COMB18	0.000	COMB18
STORY1	B37	V25X65	224.375	0.000	COMB18	0.000	COMB18
STORY1	B37	V25X65	269.250	0.000	COMB18	0.000	COMB18
STORY1	B37	V25X65	314.125	0.000	COMB18	0.000	COMB18
STORY1	B37	V25X65	359.000	0.000	COMB18	0.000	COMB18
STORY1	B37	V25X65	359.000	0.000	COMB18	0.000	COMB18
STORY1	B37	V25X65	403.875	0.000	COMB18	0.000	COMB18
STORY1	B37	V25X65	448.750	0.000	COMB18	0.000	COMB18
STORY1	B37	V25X65	493.625	0.000	COMB18	0.000	COMB18
STORY1	B37	V25X65	538.500	0.000	COMB18	0.000	COMB18
STORY1	B37	V25X65	583.375	0.000	COMB18	0.000	COMB18
STORY1	B37	V25X65	628.250	0.000	COMB18	0.000	COMB18
STORY1	B37	V25X65	673.125	0.000	COMB18	0.000	COMB18
STORY1	B37	V25X65	718.000	0.000	COMB18	0.000	COMB18
STORY1	B38	V25X65	0.000	0.000	COMB18	0.000	COMB18
STORY1	B38	V25X65	43.357	0.000	COMB18	0.000	COMB18
STORY1	B38	V25X65	86.714	0.000	COMB18	0.000	COMB18

STORY1	B38	V25X65	130.071	0.000	COMB18	0.000	COMB18
STORY1	B38	V25X65	173.429	0.000	COMB18	0.000	COMB18
STORY1	B38	V25X65	216.786	0.000	COMB18	0.000	COMB18
STORY1	B38	V25X65	260.143	0.000	COMB18	0.000	COMB18
STORY1	B38	V25X65	303.500	0.000	COMB18	0.000	COMB18
STORY1	B38	V25X65	303.500	0.000	COMB18	0.000	COMB18
STORY1	B38	V25X65	346.857	0.000	COMB18	0.000	COMB18
STORY1	B38	V25X65	390.214	0.000	COMB18	0.000	COMB18
STORY1	B38	V25X65	433.571	0.000	COMB18	0.000	COMB18
STORY1	B38	V25X65	476.929	0.000	COMB18	0.000	COMB18
STORY1	B38	V25X65	520.286	0.000	COMB18	0.000	COMB18
STORY1	B38	V25X65	563.643	0.000	COMB18	0.000	COMB18
STORY1	B38	V25X65	607.000	0.000	COMB18	0.000	COMB18
STORY1	B43	V40X65	20.000	0.000	COMB18	0.000	COMB18
STORY1	B43	V40X65	68.900	0.000	COMB18	0.000	COMB18
STORY1	B43	V40X65	117.800	0.000	COMB18	0.000	COMB18
STORY1	B43	V40X65	166.700	0.000	COMB18	0.000	COMB18
STORY1	B43	V40X65	215.600	0.000	COMB18	0.000	COMB18
STORY1	B43	V40X65	264.500	0.000	COMB18	0.000	COMB18
STORY1	B44	V40X65	20.000	0.000	COMB18	0.000	COMB18
STORY1	B44	V40X65	68.900	0.000	COMB18	0.000	COMB18
STORY1	B44	V40X65	117.800	0.000	COMB18	0.000	COMB18
STORY1	B44	V40X65	166.700	0.000	COMB18	0.000	COMB18
STORY1	B44	V40X65	215.600	0.000	COMB18	0.000	COMB18
STORY1	B44	V40X65	264.500	0.000	COMB18	0.000	COMB18
STORY1	B47	V25X65	0.000	0.000	COMB18	0.000	COMB18
STORY1	B47	V25X65	44.083	0.000	COMB18	0.000	COMB18
STORY1	B47	V25X65	88.167	0.000	COMB18	0.000	COMB18
STORY1	B47	V25X65	132.250	0.000	COMB18	0.000	COMB18
STORY1	B47	V25X65	176.333	0.000	COMB18	0.000	COMB18
STORY1	B47	V25X65	220.417	0.000	COMB18	0.000	COMB18
STORY1	B47	V25X65	264.500	0.000	COMB18	0.000	COMB18
STORY1	B48	V25X65	0.000	0.000	COMB18	0.000	COMB18
STORY1	B48	V25X65	39.875	0.000	COMB18	0.000	COMB18
STORY1	B48	V25X65	79.750	0.000	COMB18	0.000	COMB18
STORY1	B48	V25X65	119.625	0.000	COMB18	0.000	COMB18
STORY1	B48	V25X65	159.500	0.000	COMB18	0.000	COMB18
STORY1	B49	V25X65	0.000	0.000	COMB18	0.000	COMB18
STORY1	B49	V25X65	46.536	0.000	COMB18	0.000	COMB18
STORY1	B49	V25X65	93.071	0.000	COMB18	0.000	COMB18
STORY1	B49	V25X65	139.607	0.000	COMB18	0.000	COMB18
STORY1	B49	V25X65	186.143	0.000	COMB18	0.000	COMB18
STORY1	B49	V25X65	232.679	0.000	COMB18	0.000	COMB18
STORY1	B49	V25X65	279.214	0.000	COMB18	0.000	COMB18
STORY1	B49	V25X65	325.750	0.000	COMB18	0.000	COMB18
STORY1	B49	V25X65	372.286	0.000	COMB18	0.000	COMB18
STORY1	B49	V25X65	418.821	0.000	COMB18	0.000	COMB18
STORY1	B49	V25X65	465.357	0.000	COMB18	0.000	COMB18
STORY1	B49	V25X65	511.893	0.000	COMB18	0.000	COMB18
STORY1	B49	V25X65	558.429	0.000	COMB18	0.000	COMB18
STORY1	B49	V25X65	604.964	0.000	COMB18	0.000	COMB18
STORY1	B49	V25X65	651.500	0.000	COMB18	0.000	COMB18
STORY1	B50	V25X45	0.000	0.000	COMB18	0.000	COMB18
STORY1	B50	V25X45	39.875	0.000	COMB18	0.000	COMB18
STORY1	B50	V25X45	79.750	0.000	COMB18	0.000	COMB18
STORY1	B50	V25X45	119.625	0.000	COMB18	0.000	COMB18
STORY1	B50	V25X45	159.500	0.000	COMB18	0.000	COMB18
STORY1	B51	V25X45	0.000	0.000	COMB18	0.000	COMB18
STORY1	B51	V25X45	39.875	0.000	COMB18	0.000	COMB18
STORY1	B51	V25X45	79.750	0.000	COMB18	0.000	COMB18
STORY1	B51	V25X45	119.625	0.000	COMB18	0.000	COMB18
STORY1	B51	V25X45	159.500	0.000	COMB18	0.000	COMB18

STORY1	B52	V25X45	0.000	0.000	COMB18	0.000	COMB18
STORY1	B52	V25X45	39.875	0.000	COMB18	0.000	COMB18
STORY1	B52	V25X45	79.750	0.000	COMB18	0.000	COMB18
STORY1	B52	V25X45	119.625	0.000	COMB18	0.000	COMB18
STORY1	B52	V25X45	159.500	0.000	COMB18	0.000	COMB18
STORY1	B53	V25X45	0.000	0.000	COMB18	0.000	COMB18
STORY1	B53	V25X45	39.875	0.000	COMB18	0.000	COMB18
STORY1	B53	V25X45	79.750	0.000	COMB18	0.000	COMB18
STORY1	B53	V25X45	119.625	0.000	COMB18	0.000	COMB18
STORY1	B53	V25X45	159.500	0.000	COMB18	0.000	COMB18
STORY1	B54	V25X45	0.000	0.000	COMB18	0.000	COMB18
STORY1	B54	V25X45	39.875	0.000	COMB18	0.000	COMB18
STORY1	B54	V25X45	79.750	0.000	COMB18	0.000	COMB18
STORY1	B54	V25X45	119.625	0.000	COMB18	0.000	COMB18
STORY1	B54	V25X45	159.500	0.000	COMB18	0.000	COMB18
STORY1	B55	V25X45	0.000	0.000	COMB18	0.000	COMB18
STORY1	B55	V25X45	39.875	0.000	COMB18	0.000	COMB18
STORY1	B55	V25X45	79.750	0.000	COMB18	0.000	COMB18
STORY1	B55	V25X45	119.625	0.000	COMB18	0.000	COMB18
STORY1	B55	V25X45	159.500	0.000	COMB18	0.000	COMB18

UMBRAL DE DAÑO COCINA

A U T O S E I S M I C U S E R C O E F F I C I E N T
Case: SX

AUTO SEISMIC INPUT DATA

Direction: X + EccY
Typical Eccentricity = 5%
Eccentricity Overrides: No

Top Story: STORY2
Bottom Story: BASE

C = 0.09
K = 1

AUTO SEISMIC CALCULATION FORMULAS

$V = C W$

AUTO SEISMIC CALCULATION RESULTS

W Used = 293007.92

V Used = 0.0900W = 26370.71

AUTO SEISMIC STORY FORCES

STORY	FX	FY	FZ	MX	MY	MZ
STORY2	(Forces reported at X = 0.0000, Y = 0.0000, Z = 528.5000)					
	6048.06	0.00	0.00	0.000	0.000	-14181961.44

STORY1 (Forces reported at X = 73.3063, Y = 2510.5140, Z = 363.5000)
20322.65 0.00 0.00 0.000 0.000-2457318.800

AUTO SEISMIC DIAPHRAGM FORCES

STORY	DIAPHRAGM	FX	FY	FZ	MX	MY	MZ
STORY1	D1	(Forces reported at X = 73.3063, Y = 2510.5140, Z = 363.5000)					
		10896.58	0.00	0.00	0.000	0.000-2725506.599	
STORY1	31	(Point and forces located at X = 811.0000, Y = 5002.5000, Z = 363.5000)					
		169.89	0.00	0.00	0.000	0.000	0.000

AUTO SEISMIC USER COEFFICIENT

Case: SY

AUTO SEISMIC INPUT DATA

Direction: Y + EccX
Typical Eccentricity = 5%
Eccentricity Overrides: No

Top Story: STORY2
Bottom Story: BASE

C = 0.09
K = 1

AUTO SEISMIC CALCULATION FORMULAS

$V = C W$

AUTO SEISMIC CALCULATION RESULTS

W Used = 293007.92
V Used = 0.0900W = 26370.71

AUTO SEISMIC STORY FORCES

STORY	FX	FY	FZ	MX	MY	MZ
STORY2	(Forces reported at X = 0.0000, Y = 0.0000, Z = 528.5000)					
	0.00	6048.06	0.00	0.000	0.000	8636632.095
STORY1	(Forces reported at X = 73.3063, Y = 2510.5140, Z = 363.5000)					
	0.00	20322.65	0.00	0.000	0.000	9503298.931

AUTO SEISMIC DIAPHRAGM FORCES

STORY	DIAPHRAGM	FX	FY	FZ	MX	MY	MZ
STORY1	D1	(Forces reported at X = 73.3063, Y = 2510.5140, Z = 363.5000)					
		0.00	10896.58	0.00	0.000	0.000	86900.210

R I G I D D I A P H R A G M 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	DIAPHRAGM
-------	------	-----------

STORY1	F1	D1
--------	----	----

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
------	-------	------	----------	-----------	------

CM	STORY1	F1	Floor	Gravity	0.0200
----	--------	----	-------	---------	--------

CV	STORY1	F1	Floor	Gravity	0.0200
----	--------	----	-------	---------	--------