

Structural Calculations For 18s Permit Revision

Portland, Oregon
Sera Architects

January 7, 2020
Job Number – 18-T066



FROELICH
ENGINEERS INC.

***** LIMITATIONS *****

**ENGINEERING DESIGN IS BASED UPON INFORMATION PROVIDED BY THE CLIENT, WHO IS
SOLELY RESPONSIBLE FOR ACCURACY OF SAME. NO RESPONSIBILITY AND / OR
LIABILITY IS ASSUMED BY, OR IS TO BE ASSIGNED TO THE ENGINEER
FOR ITEMS BEYOND THAT SHOWN ON THESE SHEETS.**

MAIN OFFICE

17700 SW Upper Boones Ferry RD.
Suite 115
Portland, Oregon 97224
503-624-7005/503-624-9770 FAX

CENTRAL OREGON

745 N.W. Mt. Washington Drive, Suite 204
Bend, Oregon 97701
541-383-1828

DENVER OFFICE

940 Kimbark St, Suite 3
Longmont, Colorado 80501
720-799-1001



**FROELICH
ENGINEERS**

www.froelich-engineers.com

☐ Main Office
17700 SW Upper Boones Ferry Rd. #115
Portland, Oregon 97224
503-624-7005

☐ Central Oregon
745 NW Mt. Washington Dr. #204
Bend, Oregon 97703
541-383-1828

☐ Denver Office
940 Kimbark St. Suite 3
Longmont, Colorado 80501
720-799-1001

CLIENT:

PROJECT:

NUMBER:

DATE:

BY:

PAGE

/

#15

OUT OF PLANE CONNECTION OF 8TH FLOOR WALLS AT ROOF

$$WL = -44 \text{ PSF} (0.6) = -26.4 \text{ PSF}$$

$$\text{LOAD AT EACH TRUSS} = 26.4 \text{ PSF} (10\frac{1}{2}') (2') = 264 \#$$

0.148 x 3" NAILS IL

$$\text{SHEAR CAPACITY} = 105 \# (683) (1.6) = 139 \# / \text{NAIL}$$

↑
L_{EN}

$$\text{USE } (3) 0.148" \times 3" \text{ TOE-NAILS } \pm (3) 139 = 417 \#$$

ASSUMED 3/4" SIDE-MEMBER
TO BE CONSERVATIVE

$$417 + 110 = 527 \# > 264 \# \therefore \text{OKAY}$$

H25A

BLOCKING DOES NOT NEED TO ATTACH TO
DBL TOP IL, SHEAR TRANSFER IS THROUGH SHEATHING

#16

7/8" SHEATHING w/ 10d @ 2" OC

$$\Rightarrow 1,640 \text{ PLF} / 2 = 820 \text{ PLF}$$

$$820 \text{ PLF} \left[\frac{(12' - 5.5')}{2} \right] (1.5) = 4,875 \#$$

L_{eff}

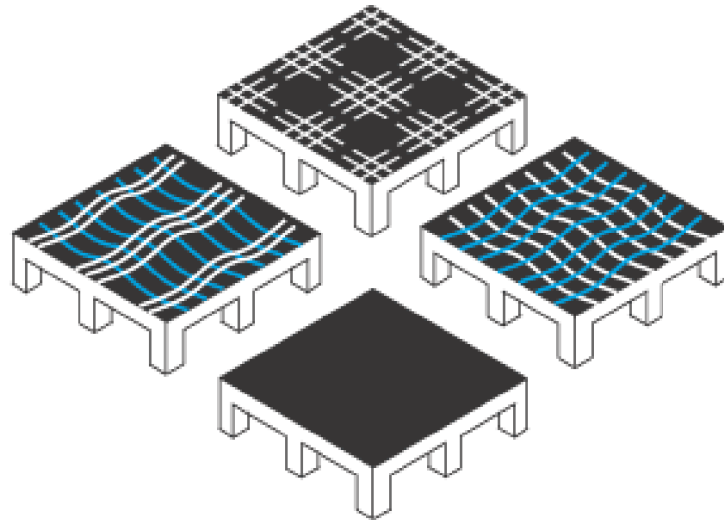
$$820 \text{ PLF} (4.875') = 3,998.5 \#$$

THESE STRIPS JUST TRANSFER LOAD ACROSS GARRISON

7/8" SHEATHING 10d @ 6" OC

$$\Rightarrow 640 \text{ PLF} / 2 = 320 \text{ PLF}$$

$$320 \text{ PLF} (12 - 3.25') = 2,800 \# < 3,998 \# \therefore \text{OKAY}$$



Level 2.23.cpt
1/7/2020

RAM Concept © 2019 Bentley Systems, Inc.
RAM Concept™ is a trademark of Bentley Systems

Table of Contents

Units	3
Signs	4
Materials	5
Loadings	7
Load Combinations	8
Design Rules	17
Detailing Rules	18
Load History	19
Mesh Input: Walls Below Table	20
Mesh Input: Columns Below Table	22
Mesh Input: Slab Areas Table	25
Mesh Input: Beams Table	28
Mesh Input: Standard Plan	31
Other Dead Loading: Point Loads Plan	32
Other Dead Loading: Line Loads Plan	33
Other Dead Loading: Area Loads Plan	34
Live (Reducible) Loading: All Loads Plan	35
Live (Unreducible) Loading: Point Loads Plan	36
Live (Unreducible) Loading: Line Loads Plan	37
Live (Unreducible) Loading: Area Loads Plan	38
Live (Unreducible) Loading: Std Reactions Plan	39
Seismic E/W: Point Loads Plan	40
Seismic E/W: Std Reactions Plan	41
Seismic N/S: Point Loads Plan	42
Seismic N/S: Std Reactions Plan	43
Service LC: D + L: Max Deflection Plan	44
Service LC: D + L: Min Deflection Plan	45
Service LC: D + L: Reaction Plan	46
Long Term deflection: Max Deflection Plan	47
Design Strip: Latitude SSs Table	48
Design Strip: Longitude SSs Table	56
Design Strip: Latitude SSSs Table	64
Design Strip: Longitude SSSs Table	66
Design Strip: Punching Checks Table	68
Design Strip: Latitude Design Spans Plan	71
Design Strip: Longitude Design Spans Plan	72
Design Strip: Punching Checks Plan	73
Reinforcement: Top Bars Plan	74
Reinforcement: Bottom Bars Plan	75
Reinforcement: Shear Bars Plan	76
Reinforcement: SSR Plan	77
Manual Latitude Tendon: Standard Plan	78
Manual Longitude Tendon: Standard Plan	79
Service Design: Top Stress Plan	80
Service Design: Bottom Stress Plan	81
Strength Design: Punching Shear Status Plan	82
Design Status: Status Plan	83

Units

Geometry Unit:

Plan Dimensions: feet
Angles: degrees

Slab Thickness: inches
Elevations: inches

Support Dimensions: inches
Support Height: feet

Loading and Reaction Unit

Point Force: Kips
- Report As Zero: 0 Kips
Point Moment: kip-ft
- Report As Zero: 0 kip-ft

Line Force: kips/ft
- Report As Zero: 0 kips/ft
Line Moment: Kips
- Report As Zero: 0 Kips

Area Force: psf
- Report As Zero: 0 psf
Area Moment: #/foot
- Report As Zero: 0 #/foot

Spring and Stiffness Unit:

Point Force Spring: kips/in
Point Moment Spring: k-ft/°

Line Force Spring: ksi
Line Moment Spring: k/°

Area Force Spring: pci
Area Moment Spring: k/ft°

Slab Analysis Unit:

Force: Kips
- Report As Zero: 0 Kips
Force Per Width: kips/ft
- Report As Zero: 0 kips/ft

Moment: kip-ft
- Report As Zero: 0 kip-ft
Moment Per Width: Kips
- Report As Zero: 0 Kips

Concrete Stress: psi
- Report As Zero: 0 psi
Deflection: inches
- Report As Zero: 0 inches

Materials Unit:

Concrete Volume: yd³
Reinforcement Weight: tons
PT Weight: pounds

Reinforcing Area: in²
Tendon Profile: inches
Cover: inches

PT Force: Kips
Reinforcing Stress: ksi

Miscellaneous Unit:

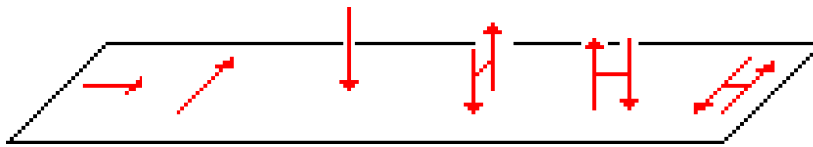
Floor Area: ft²
Tendon Angles (for friction): radians

Density: pcf

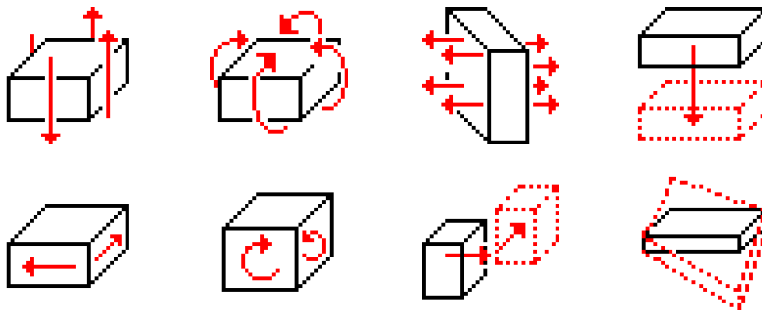
Elongations: inches

Signs

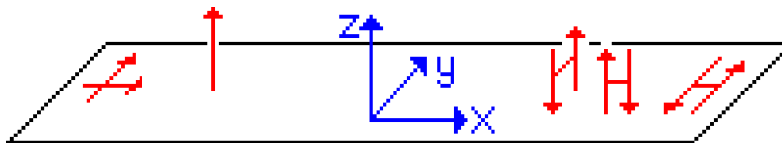
Positive Loads



Positive Analysis



Positive Reactions



Materials

Concrete Mix

Mix Name	Density (pcf)	Density For Loads (pcf)	f_{ci} (psi)	f'_c (psi)	f_{cui} (psi)	f_{cu} (psi)	Poissons Ratio	Ec Calc	User Eci (psi)	User Ec (psi)
3000 psi	150	150	3000	3000	3725	3725	0.2	Code	2500000	3000000
4000 psi	150	150	3000	4000	3725	4975	0.2	Code	2500000	3000000
5000 psi	150	150	3000	5000	3725	6399	0.2	Code	2500000	3000000
6000 psi	150	150	3000	6000	3725	7450	0.2	Code	2500000	3000000

PT Systems

System Name	Type	A_{ps} (in ²)	E_{ps} (ksi)	f_{se} (ksi)	f_{py} (ksi)	f_{pu} (ksi)	Duct Width (inches)	Strands Per Duct	Min Radius (feet)
½" Unbonded	unbonded	0.153	28000	175	243	270	0.5	1	6
½" Bonded	bonded	0.153	28000	160	243	270	3	4	6
0.6" Unbonded	unbonded	0.217	28000	175	243	270	0.6	1	8
0.6" Bonded	bonded	0.217	28000	160	243	270	4	4	8

PT Stressing Parameters

System Name	Jacking Stress (ksi)	Seating Loss (inches)	Anchor Friction	Wobble Friction (1/feet)	Angular Friction (1/radians)	Long-Term Losses (ksi)
½" Unbonded	216	0.25	0	0.0014	0.07	22
½" Bonded	216	0.25	0.02	0.001	0.2	22
0.6" Unbonded	216	0.25	0	0.0014	0.07	22
0.6" Bonded	216	0.25	0.02	0.001	0.2	22

Reinforcing Bars

Bar Name	A_s (in ²)	E_s (ksi)	F_y (ksi)	Coating	Straight Ld/Db	90 Hook Ld/Db	180 Hook Ld/Db
#3	0.11	29000	60	None	Code	Code	Code
#4	0.2	29000	60	None	Code	Code	Code
#5	0.31	29000	60	None	Code	Code	Code
#6	0.44	29000	60	None	Code	Code	Code
#7	0.6	29000	60	None	Code	Code	Code
#8	0.79	29000	60	None	Code	Code	Code
#9	1	29000	60	None	Code	Code	Code
#10	1.27	29000	60	None	Code	Code	Code
#11	1.56	29000	60	None	Code	Code	Code

Materials (2)

SSR Systems

<i>SSR System Name</i>	<i>Stud Area (in²)</i>	<i>Head Area (in²)</i>	<i>Min Clear Head Spacing (inches)</i>	<i>Specified Stud Spacing (inches)</i>	<i>Fy (ksi)</i>	<i>Stud Spacing Rounding Increment (inches)</i>	<i>Min Studs Per Rail</i>	<i>System Type</i>
3/8" SSR	0.11	1.11	0.5	None	50	0.25	2	Rail
1/2" SSR	0.196	1.96	0.5	None	50	0.25	2	Rail
5/8" SSR	0.307	3.07	0.5	None	50	0.25	2	Rail
3/4" SSR	0.442	4.42	0.5	None	50	0.25	2	Rail
Ancon Shearfix Auto-Size	0.217	1.096	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 10 mm	0.1217	1.096	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 12 mm	0.1753	1.578	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 14 mm	0.2386	2.147	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 16 mm	0.3116	2.805	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 20 mm	0.4869	4.383	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 24 mm	0.7012	6.311	0.5906	None	72.52	0.03937	2	Rail

Loadings

<i>Loading Name</i>	<i>Type</i>	<i>Analysis</i>	<i>On-Pattern Factor</i>	<i>Off-Pattern Factor</i>
Self-Dead Loading	Self-Weight	Normal	1	1
Balance Loading	Balance	Normal	1	1
Hyperstatic Loading	Hyperstatic	Hyperstatic	1	1
Temporary Construction (At Stressing) Loading	Stressing Dead	Normal	1	1
Other Dead Loading	Dead	Normal	1	1
Live (Reducible) Loading	Live (Reducible)	Normal	1	0
Live (Unreducible) Loading	Live (Unreducible)	Normal	1	0
Live (Storage) Loading	Live (Storage)	Normal	1	0
Live (Parking) Loading	Live (Parking)	Normal	1	0
Live (Roof) Loading	Live (Roof)	Normal	1	0
Snow Loading	Snow	Normal	1	1
Seismic E/W	Ultimate Seismic 1 (transfer)	Normal	1	0
Seismic N/S	Ultimate Seismic 1 (transfer)	Normal	1	0

Load Combinations

All Dead LC

Active Design Criteria: <none>

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Other Dead Loading	1	1

Dead + Balance LC

Active Design Criteria: <none>

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1

Initial Service LC

Active Design Criteria: Initial Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1.13	1.13
Temporary Construction (At Stressing) Loading	1	1

Service LC: D + L

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Reducible) Loading	1	0
Live (Unreducible) Loading	1	0
Live (Storage) Loading	1	0
Live (Parking) Loading	1	0

Service LC: D + Lr

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Roof) Loading	1	0

Load Combinations (2)

Service LC: D + S

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Snow Loading	1	0

Service LC: D + 0.75L + 0.75Lr

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Reducible) Loading	0.75	0
Live (Unreducible) Loading	0.75	0
Live (Storage) Loading	0.75	0
Live (Parking) Loading	0.75	0
Live (Roof) Loading	0.75	0

Service LC: D + 0.75L + 0.75S

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Reducible) Loading	0.75	0
Live (Unreducible) Loading	0.75	0
Live (Storage) Loading	0.75	0
Live (Parking) Loading	0.75	0
Snow Loading	0.75	0

Sustained Service LC

Active Design Criteria: Sustained Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Reducible) Loading	0.5	0.5
Live (Unreducible) Loading	0.5	0.5
Live (Storage) Loading	1	1
Live (Parking) Loading	0.5	0.5
Live (Roof) Loading	0.5	0.5

Load Combinations (3)

Factored LC: 1.4D

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.4	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.4	0.9

Factored LC: 1.2D + 1.6L + 0.5Lr

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.2	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.2	0.9
Live (Reducible) Loading	1.6	0
Live (Unreducible) Loading	1.6	0
Live (Storage) Loading	1.6	0
Live (Parking) Loading	1.6	0
Live (Roof) Loading	0.5	0

Factored LC: 1.2D + f1L + 1.6Lr

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.2	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.2	0.9
Live (Reducible) Loading	0.5	0
Live (Unreducible) Loading	1	0
Live (Storage) Loading	1	0
Live (Parking) Loading	1	0
Live (Roof) Loading	1.6	0

Factored LC: 1.2D + 1.6L + 0.5S

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.2	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.2	0.9
Live (Reducible) Loading	1.6	0
Live (Unreducible) Loading	1.6	0
Live (Storage) Loading	1.6	0
Live (Parking) Loading	1.6	0
Snow Loading	0.5	0

Load Combinations (4)

Factored LC: $1.2D + f1L + 1.6S$

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.2	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.2	0.9
Live (Reducible) Loading	0.5	0
Live (Unreducible) Loading	1	0
Live (Storage) Loading	1	0
Live (Parking) Loading	1	0
Snow Loading	1.6	0

Long Term deflection

Active Design Criteria: <none>

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	3.35	3.35
Balance Loading	3.35	3.35
Other Dead Loading	3.35	3.35
Live (Unreducible) Loading	2	2
Snow Loading	1	1

Earthquake N-S: $(1.2+.2*Sds)D + 2.5E + 0.5L+0.2S$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.344	1.344
Hyperstatic Loading	1	1
Other Dead Loading	1.344	1.344
Live (Unreducible) Loading	0.5	0.5
Snow Loading	0.2	0.2
Seismic N/S	2.5	2.5

Earthquake N-S: $(0.9-0.2*Sds)D + 2.5E$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.756	0.756
Hyperstatic Loading	1	1
Other Dead Loading	0.756	0.756
Seismic N/S	2.5	2.5

Load Combinations (5)

Earthquake E-W: $(1.2+0.2*S_{ds})D + 2.5E + 0.5L+0.2S$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.344	1.344
Hyperstatic Loading	1	1
Other Dead Loading	1.344	1.344
Live (Unreducible) Loading	0.5	0.5
Snow Loading	0.2	0.2
Seismic E/W	2.5	2.5

Earthquake E-W: $(0.9-0.2*S_{ds})D + 2.5E$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.756	0.756
Hyperstatic Loading	1	1
Other Dead Loading	0.756	0.756
Seismic E/W	2.5	2.5

Earthquake N-S: $(1.0+0.14*S_{ds})D + 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.101	1.101
Balance Loading	1	1
Other Dead Loading	1.101	1.101
Seismic N/S	1.75	1.75

Earthquake N-S: $(1.0+0.105*S_{ds})D + 1.3125E + 0.75L + 0.75S$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.076	1.076
Balance Loading	1	1
Other Dead Loading	1.076	1.076
Live (Unreducible) Loading	0.75	0.75
Snow Loading	0.75	0.75
Seismic N/S	1.313	1.313

Load Combinations (6)

Earthquake N-S: $(0.6-0.14*S_{ds})D + 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.499	0.499
Balance Loading	1	1
Other Dead Loading	0.899	0.899
Seismic N/S	1.75	1.75

Earthquake E-W: $(1.0+0.14*S_{ds})D + 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.101	1.101
Balance Loading	1	1
Other Dead Loading	1.101	1.101
Seismic E/W	1.75	1.75

Earthquake E-W: $(1.0+0.105*S_{ds})D + 1.3125E + 0.75L+0.75S$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.076	1.076
Balance Loading	1	1
Other Dead Loading	1.076	1.076
Live (Unreducible) Loading	0.75	0.75
Snow Loading	0.75	0.75
Seismic E/W	1.313	1.313

Earthquake N-S: $(1.2+0.2*S_{ds})D - 2.5E + .5L + 0.2S$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.344	1.344
Hyperstatic Loading	1	1
Other Dead Loading	1.344	1.344
Live (Unreducible) Loading	0.5	0.5
Snow Loading	0.2	0.2
Seismic N/S	-2.5	-2.5

Load Combinations (7)

Earthquake N-S: $(0.9-0.2*S_{ds})D - 2.5E$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.756	0.756
Hyperstatic Loading	1	1
Other Dead Loading	0.756	0.756
Seismic N/S	-2.5	-2.5

Earthquake E-W: $(1.2+0.2*S_{ds})D - 2.5E + .5L + 0.2S$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.344	1.344
Hyperstatic Loading	1	1
Other Dead Loading	1.344	1.344
Live (Unreducible) Loading	0.5	0.5
Snow Loading	0.2	0.2
Seismic E/W	-2.5	-2.5

Earthquake E-W: $(0.9-0.2*S_{ds})D - 2.5E$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.756	0.756
Hyperstatic Loading	1	1
Other Dead Loading	0.756	0.756
Seismic E/W	-2.5	-2.5

Earthquake N-S: $(1.0+0.14*S_{ds})D - 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.101	1.101
Balance Loading	1	1
Other Dead Loading	1.101	1.101
Seismic N/S	-1.75	-1.75

Load Combinations (8)

Earthquake N-S: $(1.0+0.105*S_{ds})D - 1.3125E + 0.75L + .75S$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.076	1.076
Balance Loading	1	1
Other Dead Loading	1.076	1.076
Live (Unreducible) Loading	0.75	0.75
Snow Loading	0.75	0.75
Seismic N/S	-1.313	-1.313

Earthquake N-S: $(0.6-0.14*S_{ds})D - 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.499	0.499
Balance Loading	1	1
Other Dead Loading	0.899	0.899
Seismic N/S	-1.75	-1.75

Earthquake E-W: $(1.0+0.14*S_{ds})D - 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.101	1.101
Balance Loading	1	1
Other Dead Loading	1.101	1.101
Seismic E/W	-1.75	-1.75

Earthquake E-W: $(0.6-0.14*S_{ds})D + 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.499	0.499
Balance Loading	1	1
Other Dead Loading	0.899	0.899
Seismic E/W	1.75	1.75

Earthquake E-W: $(0.6-0.14*S_{ds})D - 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.499	0.499
Balance Loading	1	1
Other Dead Loading	0.899	0.899
Seismic E/W	-1.75	-1.75

Load Combinations (9)

Earthquake E-W: $(1.0+0.105*S_{ds})D - 1.3125E + 0.75L + 0.75S$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.076	1.076
Balance Loading	1	1
Other Dead Loading	1.076	1.076
Live (Unreducible) Loading	0.75	0.75
Snow Loading	0.75	0.75
Seismic E/W	-1.313	-1.313

Design Rules

Code Minimum Design

318-11 Min. Reinforcement

User Minimum Design

Specified Min. Reinforcement

Initial Service Design

318-11 Initial Service Design

Service Design

318-11 Service Design

Include detailed section analysis

Sustained Service Design

318-11 Sustained Service Design

Strength Design

318-11 Strength Design

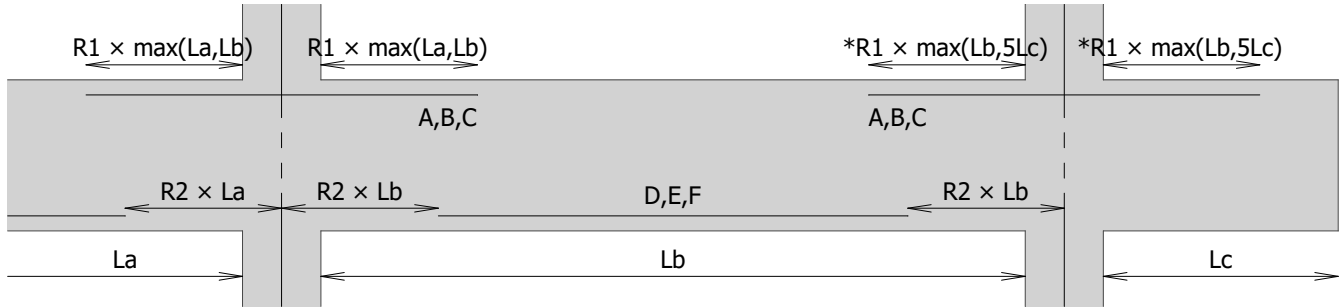
Punching Shear Design

Ductility Design

318-11 Ductility Design

Detailing Rules

Custom Span Detailing Rules



Rule	A	A	B	B	C	C	D	D	E	E	F	F
Name	Fraction	R1	Fraction	R1	Fraction	R1	Fraction	R2	Fraction	R2	Fraction	R2
None	0	0	0	0	0	0	0	0	0	0	0	0

"A", "B" and "C", are support reinforcement sets, based on the peak reinforcement in the support zone.

"D", "E" and "F", are span reinforcement sets, based on the peak reinforcement in the span zone.

"*R1" is never taken as greater than 0.2 when multiplied by L_c (or L_{cc}).

"Fraction" is the ratio of set reinforcement to peak reinforcement. It is always in the 0.0 to 1.0 range.

Load History

<i>Load History Step Name</i>	<i>Load Combination</i>	<i>Duration (days)</i>	<i>Total Age (days)</i>
Maximum Short Term Load	Service LC: D + L	30	33
Sustained Load	Sustained Service LC	5000	5033
Final Instantaneous Load	Service LC: D + L	0	5033

Mesh Input: Walls Below Table

<i>Number</i>	<i>Location feet</i>	<i>Mix</i>	<i>Fixed Near</i>	<i>Fixed Far</i>	<i>Comp.</i>	<i>Height feet</i>	<i>Thickness inches</i>
1	(-163.8,-2)(-192.2,-2.005)	5000 psi	false	false	true	11.5	4
2	(-161.7,-94.62)(-161.7,-5006)	4000 psi	false	false	true	11	16
3	(-158.1,-74.12)(-158.1,-5000)	psi	false	false	true	11	16
4	(-139.7,-83.12)(-162.3,-5003)	psi	false	false	true	11	12
5	(-139.7,-94.11)(-162.3,-5003)	psi	false	false	true	11	12
6	(-136.1,-62.61)(-158.8,-5007)	psi	false	false	true	11	12
7	(-140.3,-94.58)(-140.3,-5006)	psi	false	false	true	11	16
8	(-136.8,-74.05)(-136.8,-5002)	psi	false	false	true	11	16
9	(-56.8,-65.35)(-56.84,-75024)	psi	false	false	true	11	16
10	(-27.39,-1.995)(-27.39,-5004)	psi	false	false	true	11.5	16
11	(-0.6634,-1.994)(-28.14,-50095)	psi	false	false	true	11.5	4

Mesh Input: Walls Below Table (2)

<i>Shear Wall</i>	<i>Use Spec LLR Params</i>	<i>Spec. LLR Levels</i>	<i>Spec. Trib. Area ft²</i>	<i>Spec. Infl. Area ft²</i>	<i>Max LLR %</i>
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40

Mesh Input: Columns Below Table

<i>Number</i>	<i>Location feet</i>	<i>Mix</i>	<i>Fixed Near</i>	<i>Fixed Far</i>	<i>Comp.</i>	<i>Height feet</i>	<i>B inches</i>	<i>D inches</i>
1	(-200.6,-89.05)	5000 psi	true	true	true	11.5	24	18
2	(-198,-65.18)	5000 psi	true	true	true	11.5	24	18
3	(-195.5,-41.31)	5000 psi	true	true	true	11.5	24	18
4	(-193,-17.44)	5000 psi	true	true	true	11.5	24	18
5	(-181.4,-44.55)	5000 psi	true	true	true	11.5	24	18
6	(-177,-67.39)	5000 psi	true	true	true	11.5	24	18
7	(-176.8,-92.28)	5000 psi	true	true	true	11.5	24	18
8	(-164.9,-47.89)	5000 psi	true	true	true	11.5	24	18
9	(-164.6,-22.53)	5000 psi	true	true	true	11.5	24	18
10	(-145.3,-22.83)	5000 psi	true	true	true	11.5	24	18
11	(-138.3,-51.38)	5000 psi	true	true	true	11.5	24	18
12	(-120.6,-101.9)	5000 psi	true	true	true	11.5	24	18
13	(-118.9,-75.16)	5000 psi	true	true	true	11.5	24	18
14	(-118.4,-52.35)	5000 psi	true	true	true	11.5	18	24
15	(-118.3,-22.84)	5000 psi	true	true	true	11.5	24	18
16	(-109.7,-60.83)	5000 psi	true	true	true	11.5	24	18
17	(-99.8,-22.83)	5000 psi	true	true	true	11.5	24	18
18	(-94.99,-75.16)	5000 psi	true	true	true	11.5	24	18
19	(-94.55,-101.9)	5000 psi	true	true	true	11.5	24	18
20	(-87.38,-47.22)	5000 psi	true	true	true	11.5	24	18
21	(-85.98,-66.03)	5000 psi	true	true	true	11.5	24	18
22	(-72.8,-22.83)	5000 psi	true	true	true	11.5	24	18
23	(-71.38,-109.1)	5000 psi	true	true	true	11.5	18	24
24	(-70.75,-75.58)	5000 psi	true	true	true	11.5	24	18
25	(-67.92,-66.08)	5000 psi	true	true	true	11.5	24	18
26	(-65.26,-94)	5000 psi	true	true	true	11.5	24	18
27	(-60.2,-44.83)	5000 psi	true	true	true	11.5	24	18
28	(-45.78,-22.84)	5000 psi	true	true	true	11.5	24	18
29	(-41.7,-44.83)	5000 psi	true	true	true	11.5	24	18
30	(-19.85,-17.33)	5000 psi	true	true	true	11.5	24	18
31	(-14.45,-46.55)	5000 psi	true	true	true	11.5	24	18
32	(-5.378,-16.83)	5000 psi	true	true	true	11.5	24	18

Mesh Input: Columns Below Table (2)

<i>Angle degrees</i>	<i>Roller</i>	<i>I Factor</i>	<i>Use Spec LLR Params</i>	<i>Spec. LLR Levels</i>	<i>Spec. Trib. Area ft²</i>	<i>Spec. Infl. Area ft²</i>
84	false	1	false	1	0	0
84	false	1	false	1	0	0
84	false	1	false	1	0	0
84	false	1	false	1	0	0
-6	false	1	false	1	0	0
84	false	1	false	1	0	0
-6	false	1	false	1	0	0
84	false	1	false	1	0	0
90	false	1	false	1	0	0
90	false	1	false	1	0	0
90	false	1	false	1	0	0
90	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
90	false	1	false	1	0	0
90	false	1	false	1	0	0
90	false	1	false	1	0	0
0	false	1	false	1	0	0
90	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
90	false	1	false	1	0	0
22	false	1	false	1	0	0
90	false	1	false	1	0	0
0	false	1	false	1	0	0
90	false	1	false	1	0	0
90	false	1	false	1	0	0
90	false	1	false	1	0	0
90	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0

Max LLR
%

40

40

40

40

40

40

40

40

40

40

40

40

40

40

40

40

40

40

40

40

40

40

40

40

40

40

40

40

40

40

40

Mesh Input: Slab Areas Table

<i>Number</i>	<i>Location feet</i>	<i>Mix</i>	<i>Thickness inches</i>	<i>TOC inches</i>	<i>Priority</i>	<i>Behavior</i>	<i>R-Axis degrees</i>
1	(-136.4,-53.48)(-136.4,-53.48)(-140.4,-49.49)(-140.4,-53.48)	5000	49.49	(-140.4,-53.48)	2	two-way slab	0
2	(-192.6,-1.5)(-163.8,-1.5001)(-163.8,-21.83)(-28.14,-21.83)(-28.14,-1.253)(-0.2917,-1.253)(-0.2917,-5.644)(-20.58,-5.644)(-2.458,-1.253)(-2.458,-5.644)	5000	16.83	(-28.14,-21.83)	2	two-way slab	0
3	(-116.5,-54.46)(-116.5,-54.46)(-120.5,-50.47)(-120.5,-54.46)	5000	50.47	(-120.5,-54.46)	2	two-way slab	0
4	(-76.04,-102.9)(-84.79,-84.79)(-139.7,-88.1)(-139.7,-94.58)(-139.7,-95.03)(-136.5,-102.9)(-136.5,-102.9)(-140.2,-102.9)	5000	88.1	(-139.7,-94.58)	2	two-way slab	0
5	(-86.31,-49.22)(-86.31,-49.22)(-90.29,-45.23)(-90.29,-49.22)	5000	45.23	(-90.29,-49.22)	2	two-way slab	0

Mesh Input: Slab Areas Table (2)

<i>KMr</i>	<i>KMs</i>	<i>KMrs</i>	<i>KFr</i>	<i>KFs</i>
1	1	1	1	1
1	1	1	1	1
1	1	1	1	1
1	1	1	1	1
1	1	1	1	1

Mesh Input: Slab Areas Table (3)

<i>KVrs</i>
1
1
1
1
1

Mesh Input: Beams Table

Number	Location feet	Mix	Thickness inches	TOC inches	Priority	Mesh As Slab	Width inches
1	(-141.7,-82.62)(-141.7,-50.09)(-143.7,-82.62)(-143.7,-77.09)(-139.7,-82.62)(-139.7,-77.09)	5000ps	14.37	14.37	1	true	48
2	(-139.7,-79.1)(-81.13,-75.01)(-139.7,-77.11)(-81.13,-77.11)(-139.7,-81.1)(-81.13,-81.1)	5000ps	14.37	14.37	1	false	48
3	(-74.18,-102.2)(-83,-80.51)(-74.18,-102.2)(-84.86,-80.96)(-72.33,-101.54)(-81.15,-79.46)	5000ps	14.37	14.37	1	false	48
4	(-100.6,-22.83)(-45.03,-20.84)(-100.6,-23.83)(-45.03,-21.83)(-100.6,-23.83)(-45.03,-23.83)	5000ps	14.37	14.37	1	true	24
5	(-45.05,-22.84)(-28.1,-20.84)(-45.05,-21.84)(-28.1,-21.84)(-45.05,-23.84)(-28.1,-23.84)	5000ps	14.37	14.37	1	true	24
6	(-14.45,-47.3)(-14.45,-20.01)(-15.45,-47.3)(-15.45,-20.01)(-13.45,-47.3)(-13.45,-20.01)	5000ps	14.37	14.37	1	false	24
7	(-14.45,-20.01)(-14.45,-16.02)(-15.45,-20.01)(-15.45,-16.02)(-13.45,-20.01)(-13.45,-16.02)	5000ps	14.37	14.37	1	true	24
8	(-28.14,-18.02)(0,-18)(-28.14,-16.02)(0,-16)(-28.14,-20.02)(0,-20)	5000ps	14.37	14.37	1	true	48

Mesh Input: Beams Table (2)

Width
Inches

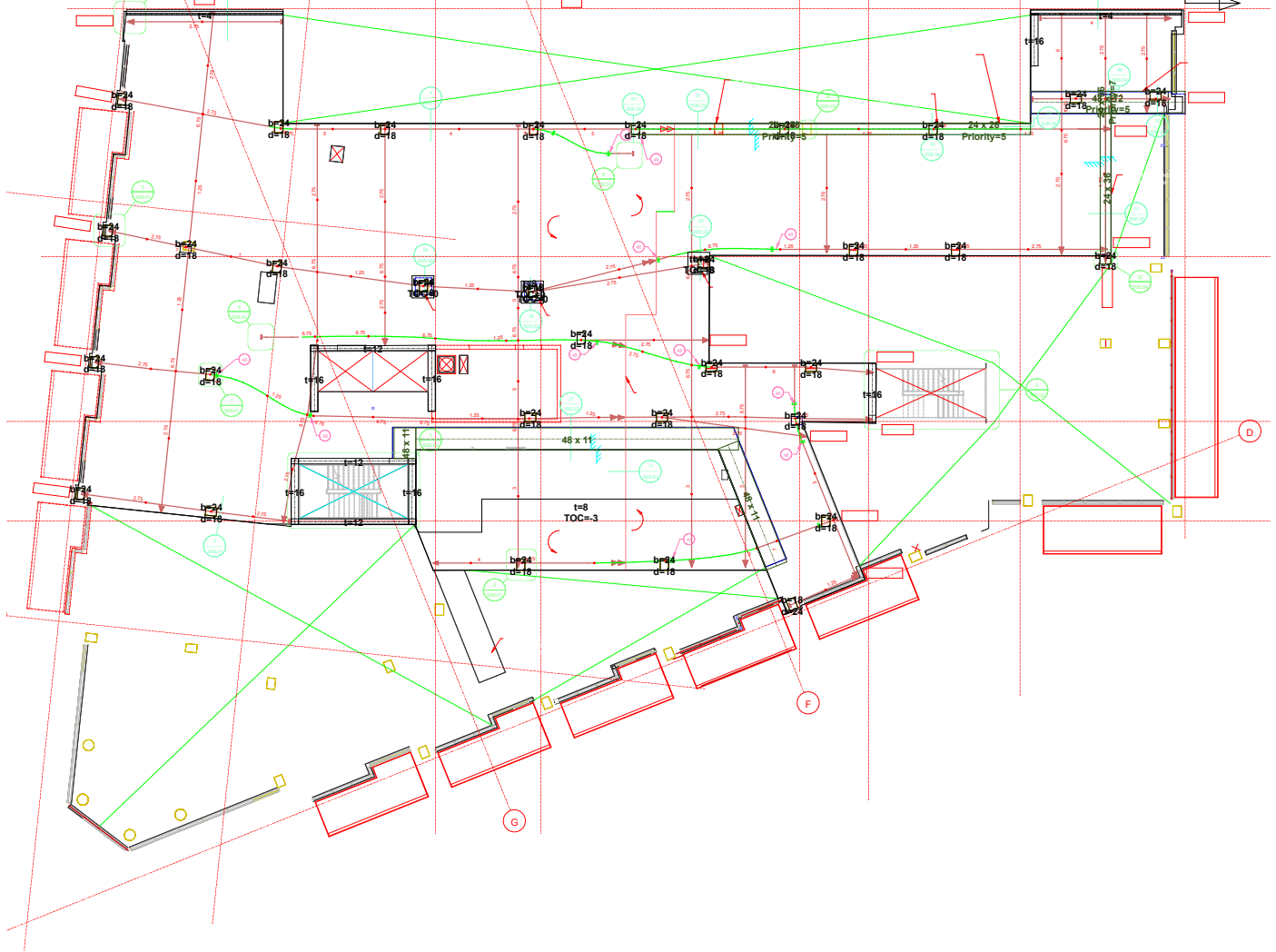
<i>Behavior</i>	<i>KMr</i>	<i>KMs</i>	<i>KMrs</i>	<i>KFr</i>	<i>KFs</i>
no-torsion two-way slab	1	0.001	1	1	1
no-torsion two-way slab	1	0.001	1	1	1
no-torsion two-way slab	1	0.001	1	1	1
no-torsion two-way slab	1	0.001	1	1	1
no-torsion two-way slab	1	0.001	1	1	1
no-torsion two-way slab	1	0.001	1	1	1
no-torsion two-way slab	1	0.001	1	1	1
no-torsion two-way slab	1	0.001	1	1	1

Mesh Input: Beams Table (3)

<i>KVrs</i>
1
1
1
1
1
1
1
1

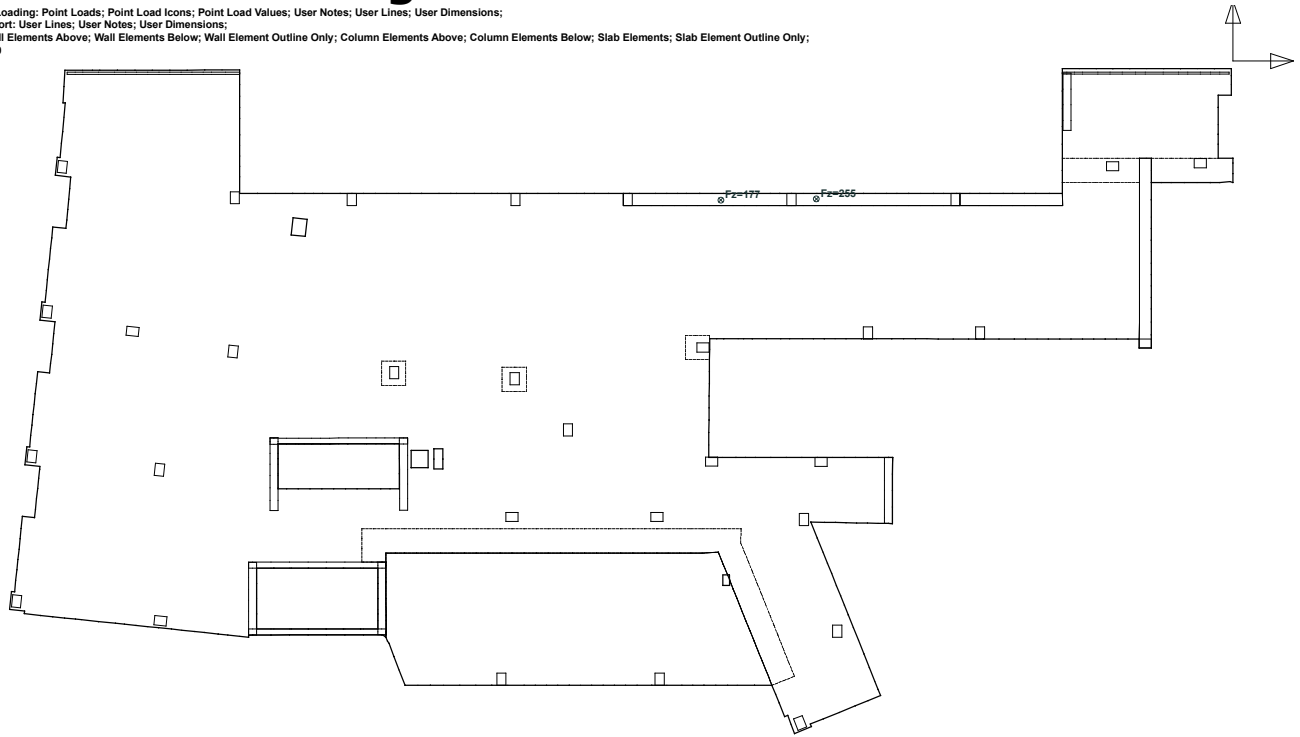
Mesh Input: Standard Plan

Mesh Input: Beams; Beam Dimensions; Beam Priorities; Slab Areas; Slab AreaT hicknesses; Slab Area Elevations; Slab Openings; Point Supports; Point Support Icons; Line Supports; Line Support Icons; Walls Above; Walls Below; Wall Thicknesses; Columns Above; Columns Below; Columns Bel
Drawing Import: User Notes; User Lines; User Dimensions; S-BEAM; S-FNDN; S-DETL-CONC; S-ANNO-SYMB; A-GENM; S-GRID; S-COLS; S-GRID-IDEN; A-DETL; S-ANNO-CUTL; 0; A-DETL-MBND; G-ANNO-SYMB; S-COLS-SYMB; 1803002_A_18S_VE_UPDATE_R17_vt-1-PT Floor P
Scale = 1:380



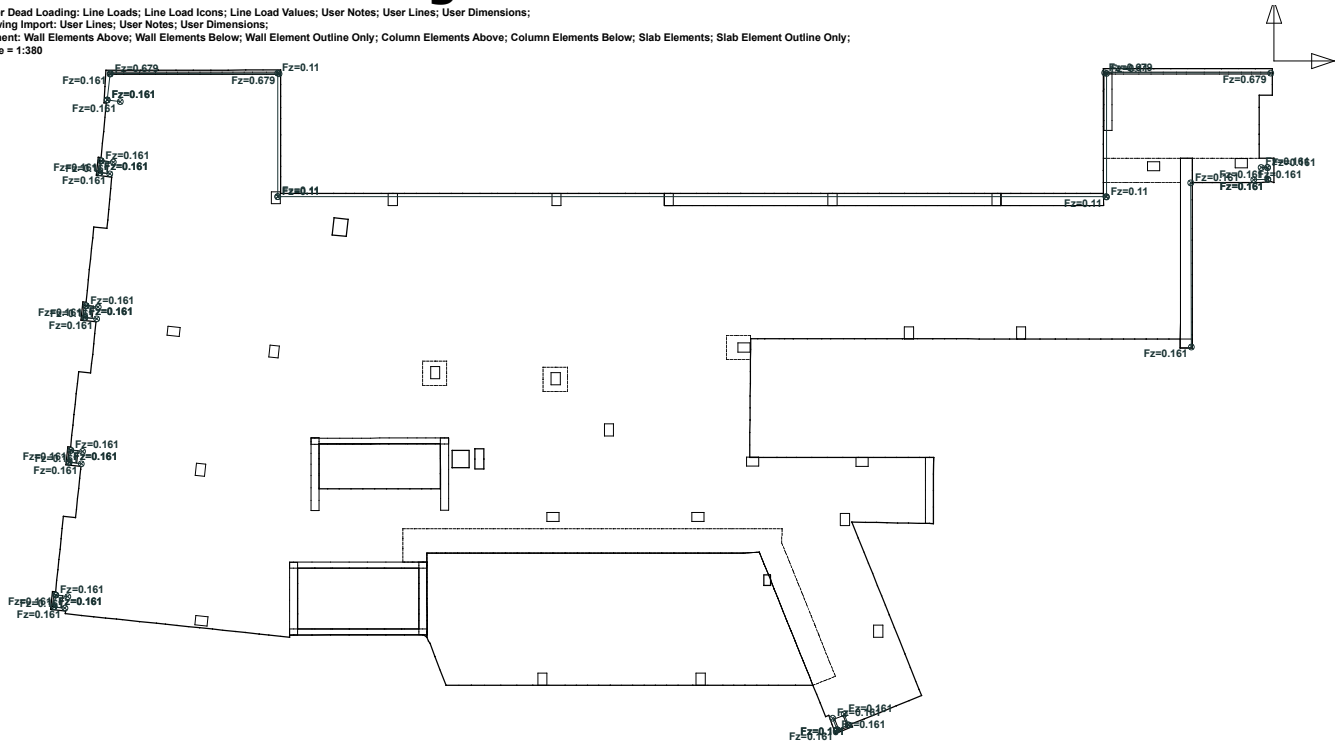
Other Dead Loading: Point Loads Plan

Other Dead Loading: Point Loads; Point Load Icons; Point Load Values; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



Other Dead Loading: Line Loads Plan

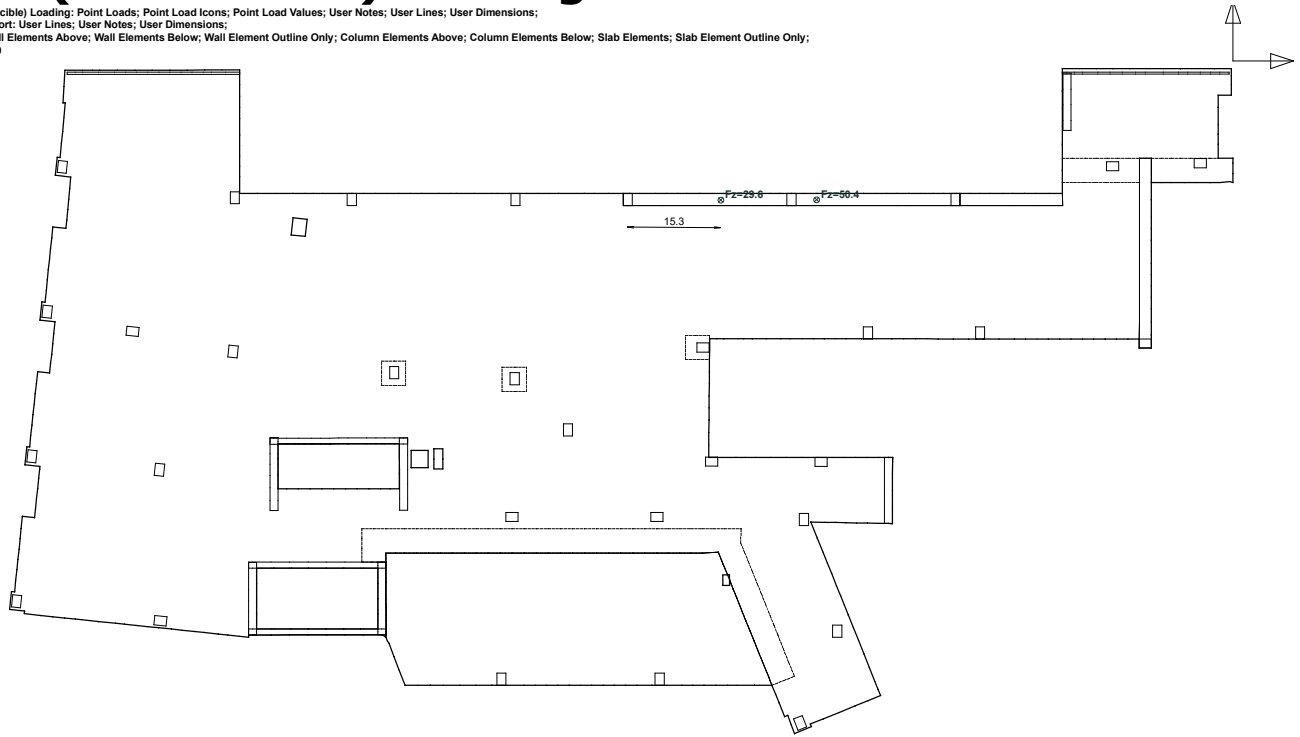
Other Dead Loading: Line Loads; Line Load Icons; Line Load Values; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:300



[illegible]

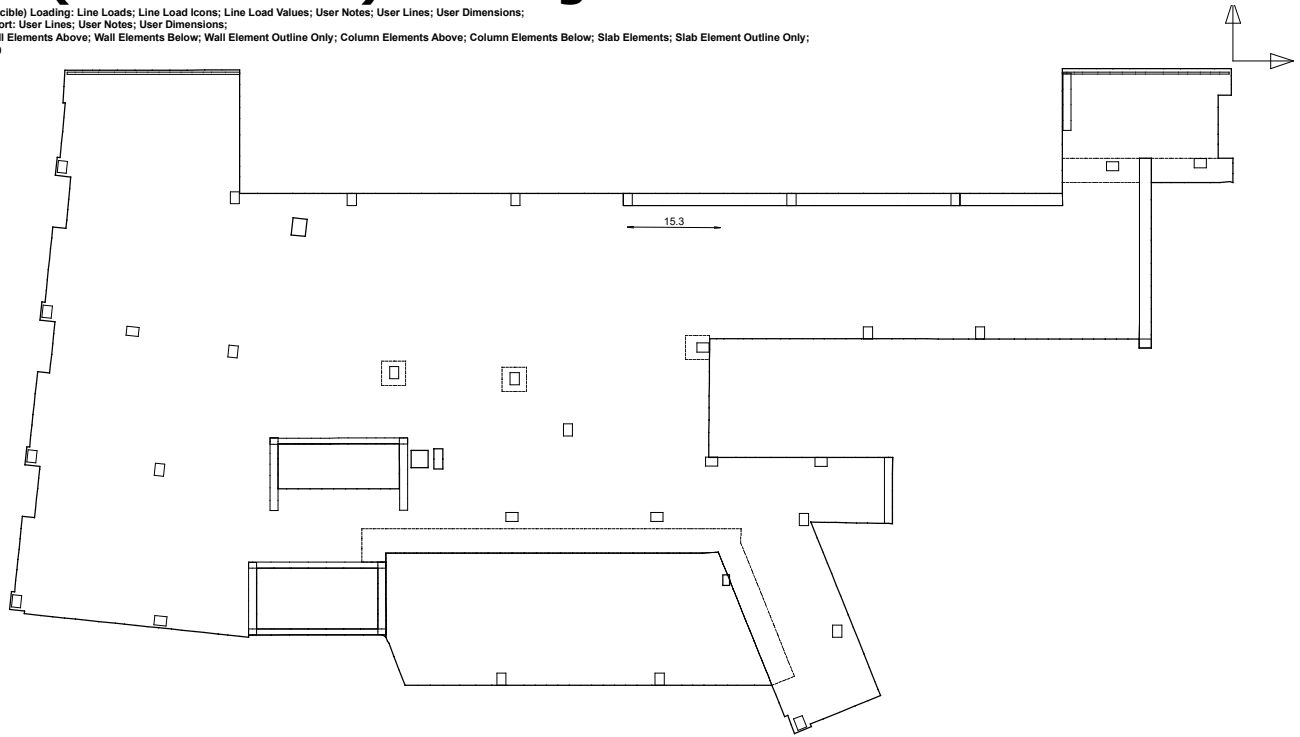
Live (Unreducible) Loading: Point Loads Plan

Live (Unreducible) Loading: Point Loads; Point Load Icons; Point Load Values; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



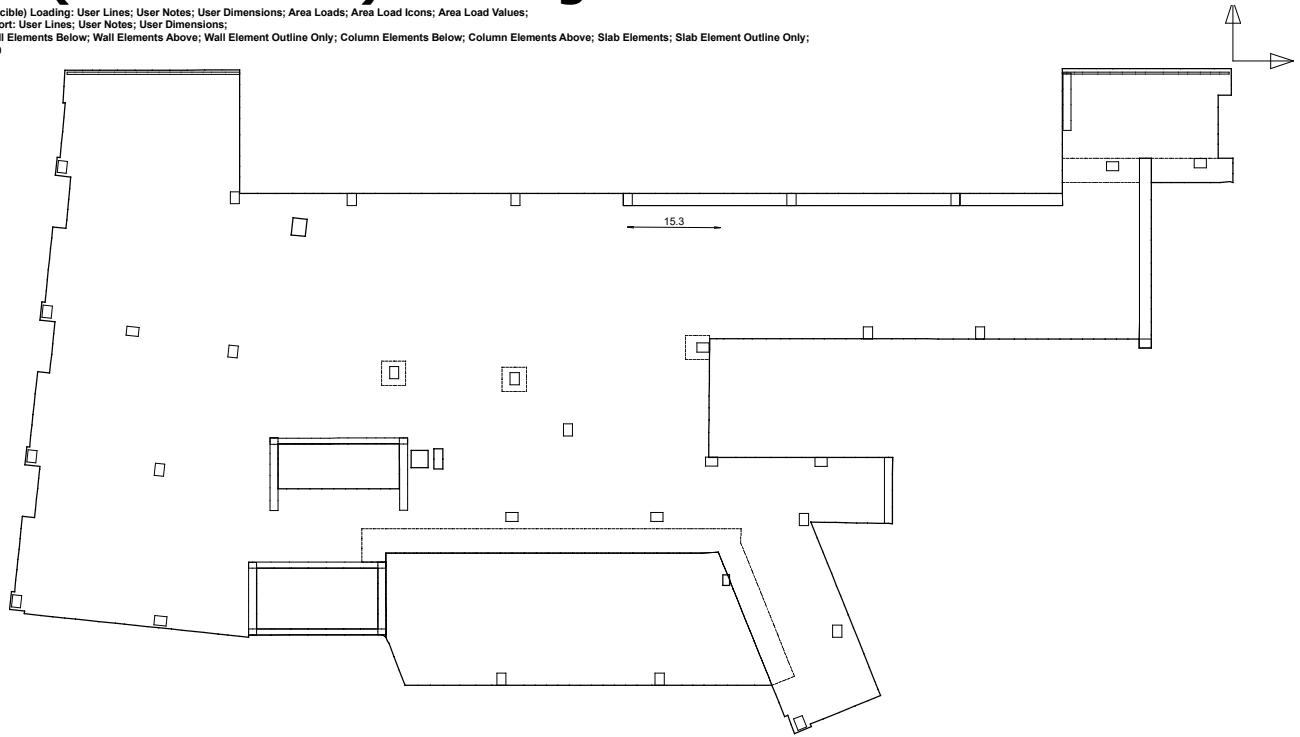
Live (Unreducible) Loading: Line Loads Plan

Live (Unreducible) Loading: Line Loads; Line Load Icons; Line Load Values; User Notes; User Lines; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Scale = 1:380



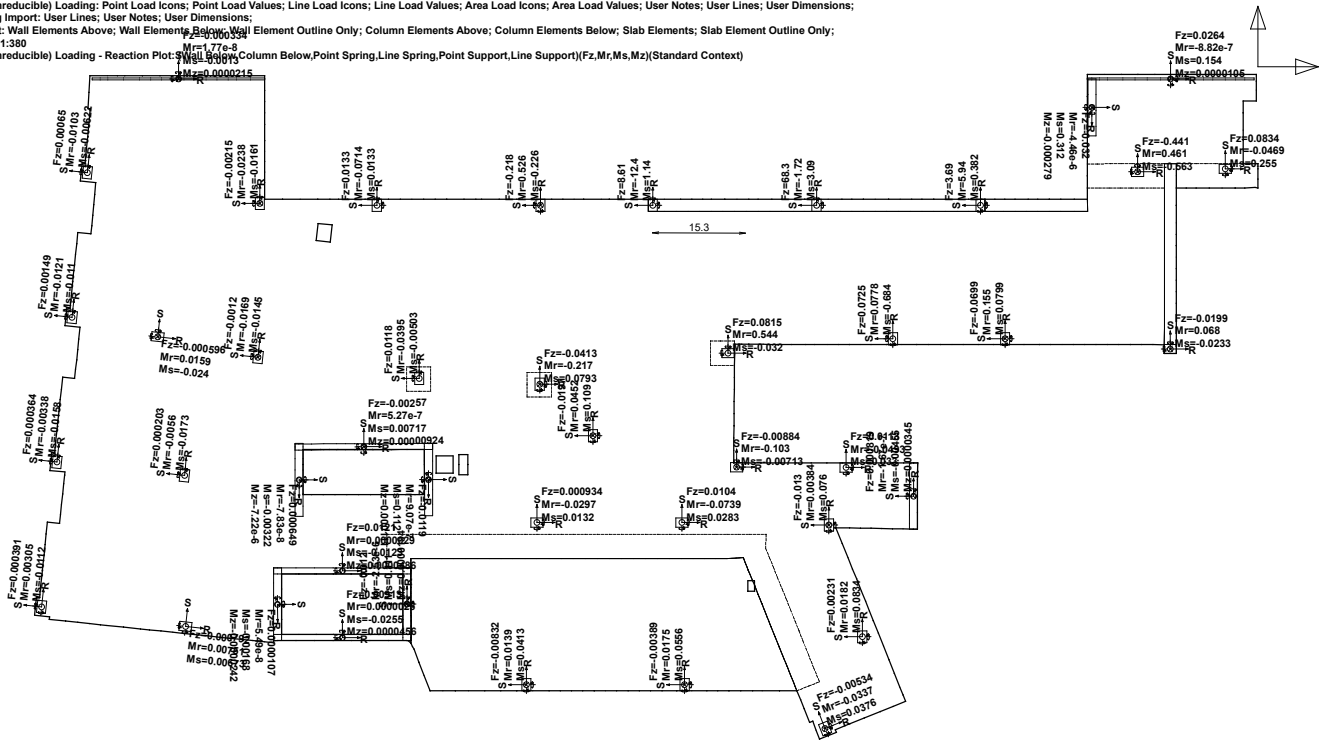
Live (Unreducible) Loading: Area Loads Plan

Live (Unreducible) Loading: User Lines; User Notes; User Dimensions; Area Loads; Area Load Icons; Area Load Values;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:380



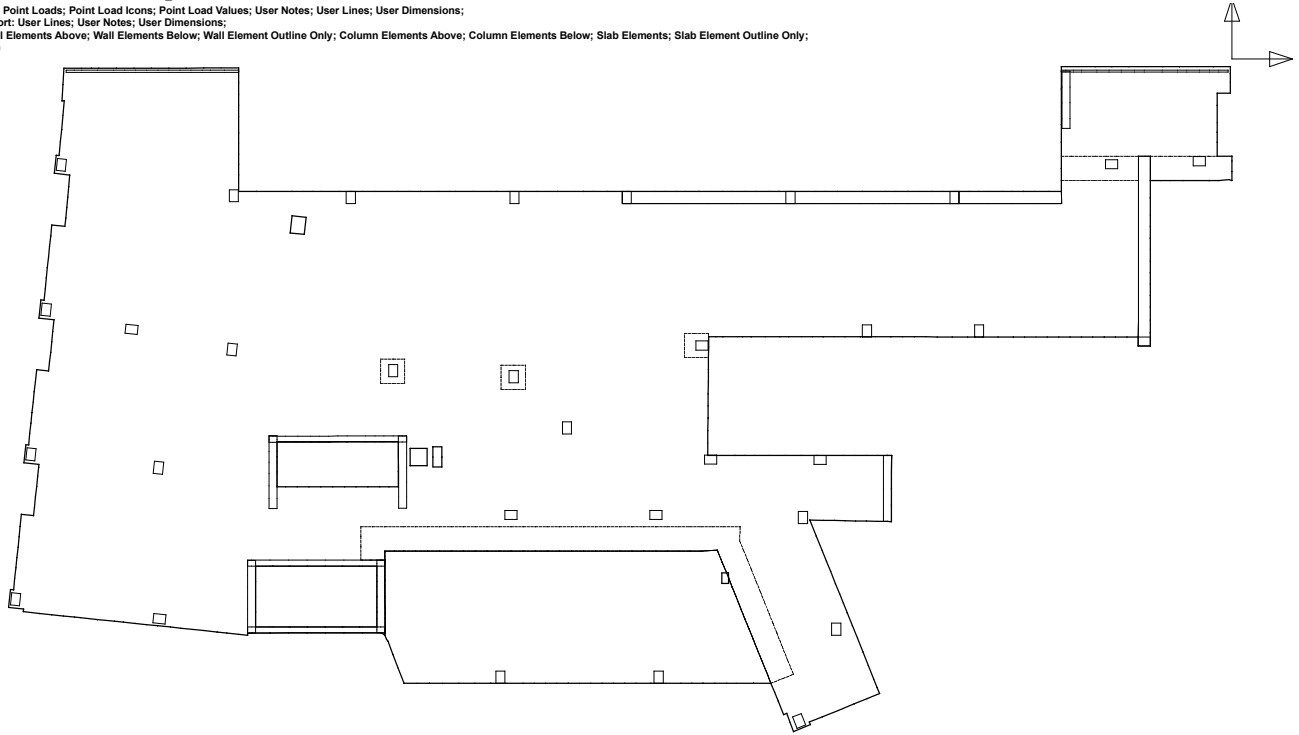
Live (Unreducible) Loading: Std Reactions Plan

Live (Unreducible) Loading: Point Load Icons; Point Load Values; Line Load Icons; Line Load Values; Area Load Icons; Area Load Values; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Elements: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:390
 Live (Unreducible) Loading - Reaction Plot: Wall, Column Below, Point Spring, Line Spring, Point Support, Line Support)(Fz,Mr,Mz)(Standard Context)



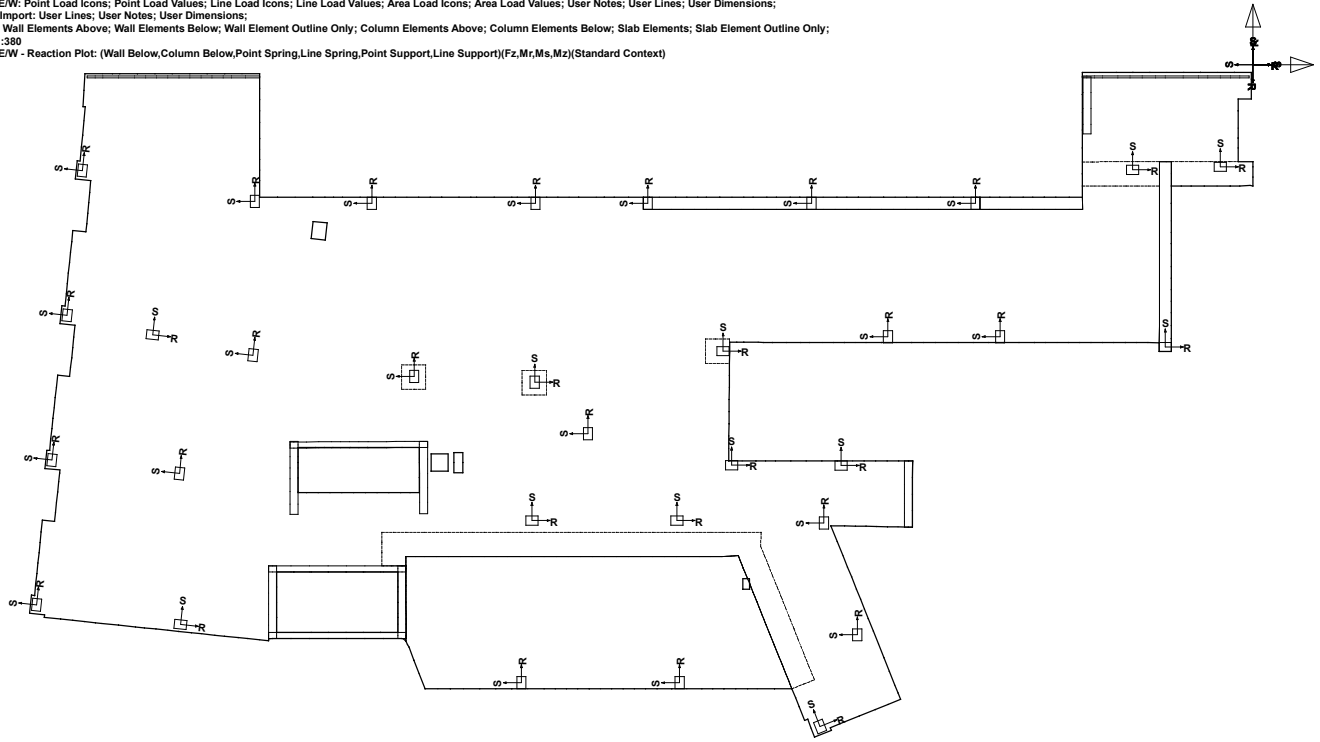
Seismic E/W: Point Loads Plan

Seismic E/W: Point Loads; Point Load Icons; Point Load Values; User Notes; User Lines; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Scale = 1:380



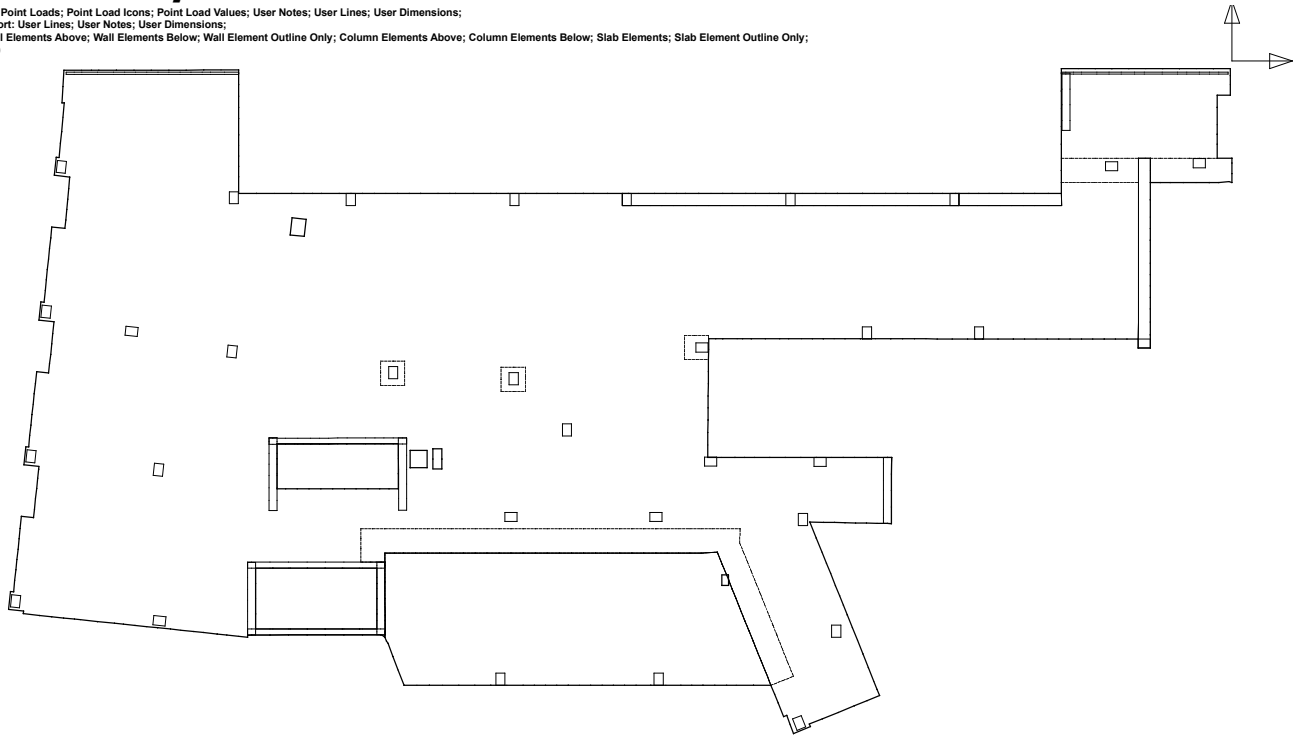
Seismic E/W: Std Reactions Plan

Seismic E/W: Point Load Icons; Point Load Values; Line Load Icons; Line Load Values; Area Load Icons; Area Load Values; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:300
 Seismic E/W - Reaction Plot: (Wall Below,Column Below,Point Spring,Line Spring,Point Support,Line Support)(Fz,Mr,Mz)(Standard Context)



Seismic N/S: Point Loads Plan

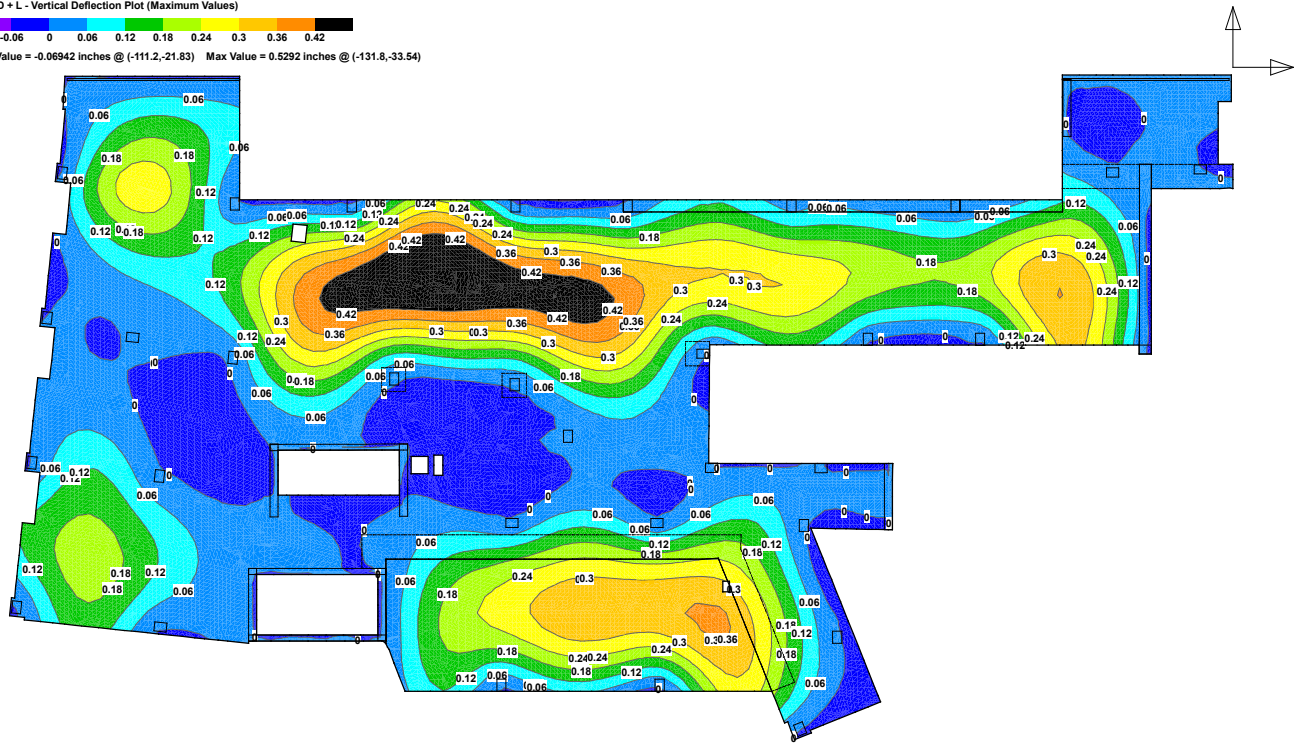
Seismic N/S: Point Loads; Point Load Icons; Point Load Values; User Notes; User Lines; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Scale = 1:380



Service LC: D + L: Max Deflection Plan

Service LC: D + L: User Lines; User Notes; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:380
Service LC: D + L - Vertical Deflection Plot (Maximum Values)

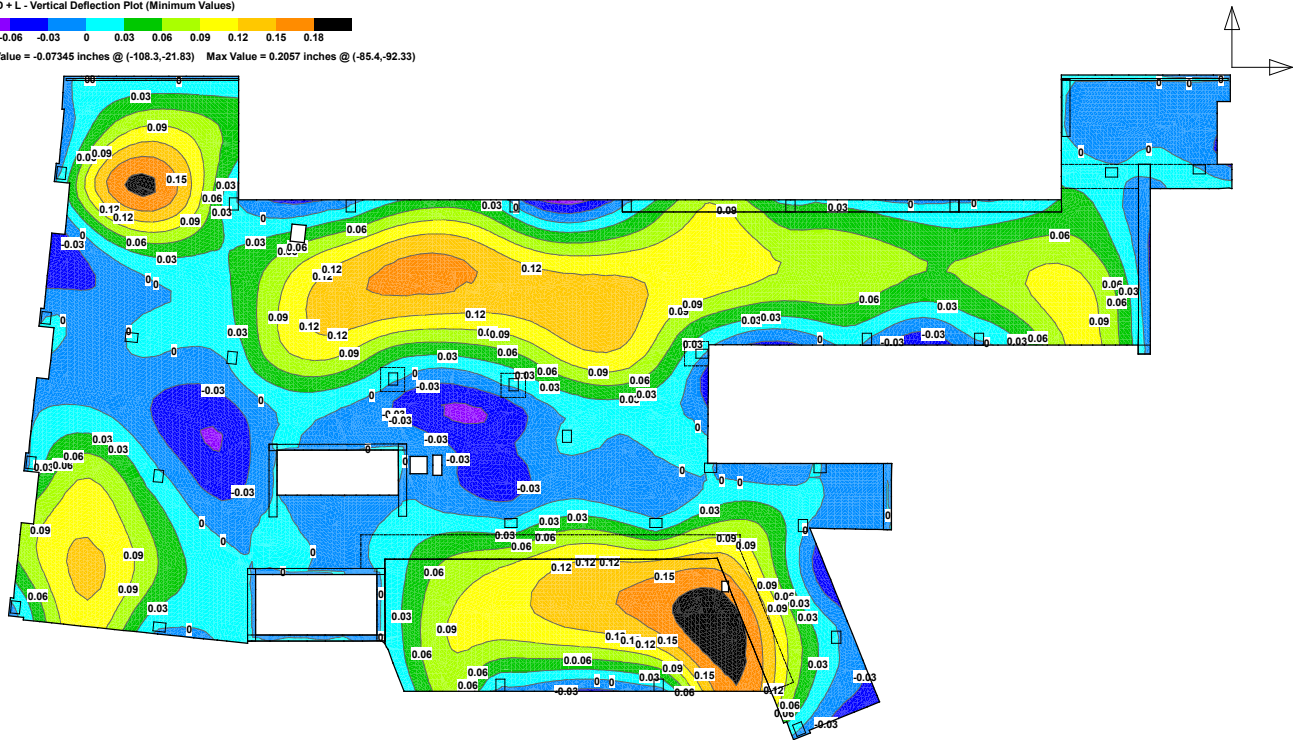
Min Value = -0.06942 inches @ (-111.2,-21.83) Max Value = 0.5292 inches @ (-131.8,-33.54)



Service LC: D + L: Min Deflection Plan

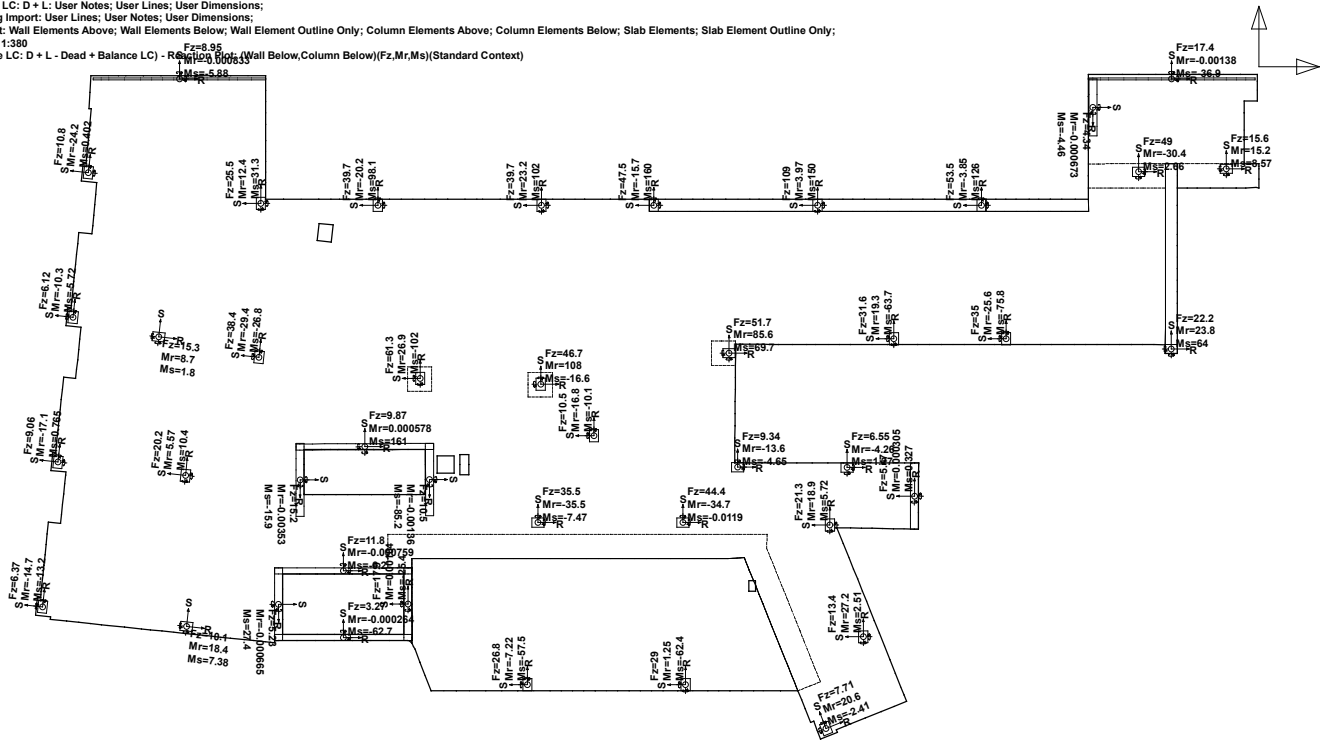
Service LC: D + L: User Lines; User Notes; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:380
Service LC: D + L - Vertical Deflection Plot (Minimum Values)

Min Value = -0.07345 inches @ (-108.3,-21.83) Max Value = 0.2057 inches @ (-85.4,-92.33)



Service LC: D + L: Reaction Plan

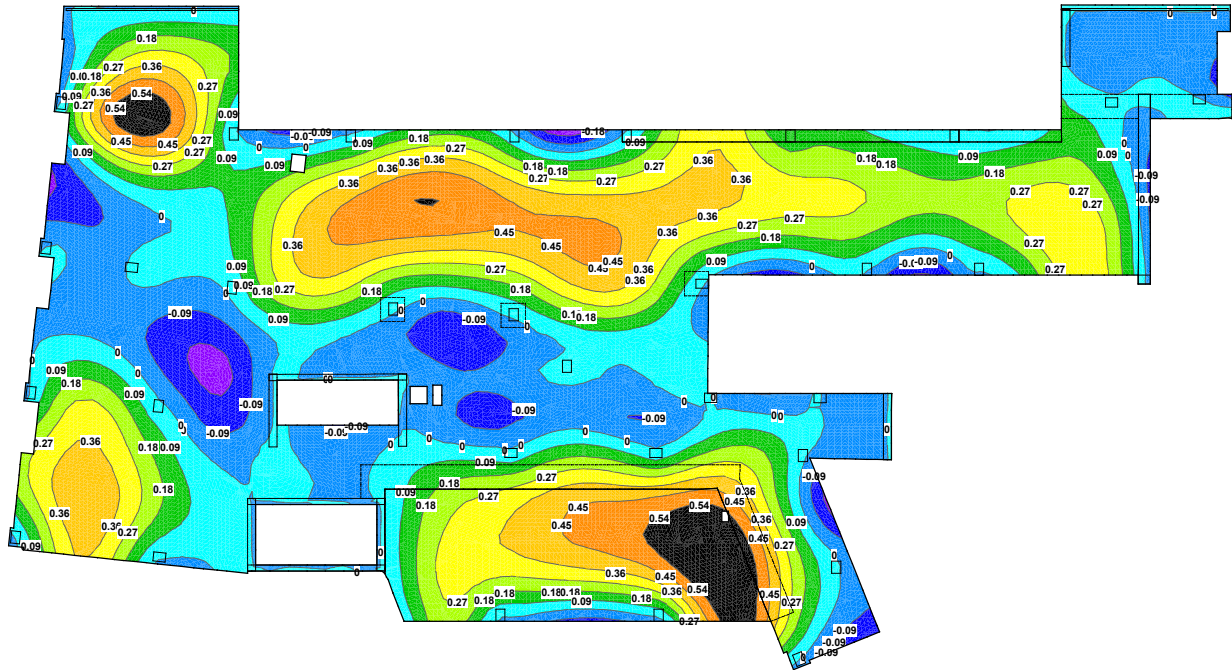
Service LC: D + L: User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:300
 (Service LC: D + L - Dead + Balance LC) - Reaction Plan (Wall Below, Column Below)(Fz,Mr,Ms)(Standard Context)



Long Term deflection: Max Deflection Plan

Long Term deflection: User Lines; User Notes; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
 Scale = 1:390
 Long Term deflection - Vertical Deflection Plot (Maximum Values)

Min Value = -0.2422 inches @ (-111.2,-21.83) Max Value = 0.6891 inches @ (-85.4,-92.33)



Design Strip: Latitude SSs Table

Name	Set	Location feet	Skew degrees	At Support 1	At Support 2	Support Width 1 inches
1-1	latitude	(-200.6,-89.05)(-176.8,- 92.28)	94.37	true	true	18.17
1-2	latitude	(-176.8,-92.28)(-161.5,- 94.37)	94.37	true	true	24.16
2-1	latitude	(-195.5,-41.31)(-181.4,- 44.55)	47.49	true	true	18.29
2-2	latitude	(-181.4,-44.55)(-164.9,- 47.49)	47.49	true	true	24.27
2-3	latitude	(-164.9,-47.89)(-138.3,- 51.38)	51.38	true	true	18.16
2-4	latitude	(-138.3,-51.38)(-118.4,- 52.35)	47.38	true	true	18.18
2-5	latitude	(-118.4,-52.35)(-87.38,- 56.75)	56.75	true	true	18.4
3-1	latitude	(-198,-65.18)(-177,-67. 39)	73.74	true	true	18.16
3-2	latitude	(-177,-67.39)(-158,-73. 74)	73.74	true	true	18.6
3-3	latitude	(-158,-73.74)(-136.6,-7 1.68)	71.68	true	true	13.52
3-4	latitude	(-136.6,-73.68)(-118.9,- 75.16)	75.16	true	true	13.05
3-5	latitude	(-118.9,-75.16)(-94.99,- 74.76)	74.76	true	true	24.16
3-6	latitude	(-94.99,-74.76)(-70.83,- 75.36)	75.36	true	true	24.16
3-7	latitude	(-70.83,-75.36)(-56.75,- 75.51)	75.51	true	true	20.02
4-1	latitude	(-193,-17.44)(-164.6,- 22.53)	22.53	true	true	18.2
4-2	latitude	(-164.6,-22.53)(-145.3,- 22.83)	22.83	true	true	18.16
4-3	latitude	(-145.3,-22.83)(-118.3,- 22.83)	22.83	true	true	18.16
4-4	latitude	(-118.3,-22.84)(-99.8,- 22.83)	22.83	true	true	18.16
4-5	latitude	(-99.8,-22.83)(-72.79,- 22.83)	22.83	true	true	18.16
4-6	latitude	(-72.79,-22.83)(-45.78,- 22.84)	22.84	true	true	17.83
4-7	latitude	(-45.78,-22.84)(-15.45,- 23.02)	23.02	true	false	18.16
5-1	latitude	(-140.1,-94.03)(-120.6,- 101.9)	101.9	true	true	12.35
5-2	latitude	(-120.6,-101.9)(-94.55,- 101.9)	101.9	true	true	18.16
5-3	latitude	(-94.55,-101.9)(-65.26,- 94.03)	94.03	true	true	18.8
5-4	latitude	(-65.26,-94)(-62.99,-93. 09)	93.09	true	false	19.56
6-1	latitude	(-85.98,-66.03)(-67.92,- 66.08)	66.08	true	true	24.16
6-2	latitude	(-67.92,-66.08)(-56.52,- 65.49)	65.49	true	true	24.16
7-1	latitude	(-87.36,-45.48)(-60.2,- 44.83)	44.83	false	true	0
7-2	latitude	(-60.2,-44.83)(-41.7,- 44.83)	44.83	true	true	18.16
7-3	latitude	(-41.7,-44.83)(-15.45,- 41.25)	41.25	true	false	18.16
8-1	latitude	(-71.38,-109.1)(-59.03,- 104.67)	104.67	true	false	18.15
9-1	latitude	(-27.98,-17.62)(-19.02,- 17.34)	17.34	false	true	0.3702
9-2	latitude	(-19.02,-17.34)(-15.45,- 13.45)	13.45	true	false	4.158
9-2(2)	latitude	(-15.45,-17.36)(-13.45,- 13.45)	13.45	false	false	0
9-2(3)	latitude	(-13.45,-17.4)(-5.378,- 16.83)	16.83	false	true	0
9-3	latitude	(-5.378,-16.83)(-0.58963,- 16.83)	16.83	true	false	24.2

Design Strip: Latitude SSs Table (2)

<i>Support Width 1</i>	<i>Support Width 2</i> <i>inches</i>	<i>Support Trans. Width 1</i> <i>inches</i>	<i>Support Trans. Width 2</i> <i>inches</i>	<i>Auto-Support</i>	<i>Min Divisions</i>	<i>Max Division Spacing</i> <i>feet</i>
	24.17	24.01	18.01	true	4	2.5
	19.99	18	55.24	true	4	2.5
	24.33	24.17	18.13	true	4	2.5
	18.24	18.08	24.11	true	4	2.5
	18.31	24.01	24.21	true	4	2.5
	18.18	24.03	24.03	true	4	2.5
	24.48	24.32	18.24	true	4	2.5
	18.16	24	24	true	4	2.5
	19.82	24.58	25.7	true	4	2.5
	19.31	144.2	143.3	true	4	2.5
	24.24	80.15	18.06	true	4	2.5
	24.16	18	18	true	4	2.5
	16.3	18.01	24.01	true	4	2.5
	18.06	24	130.8	true	4	2.5
	18.44	24.06	24.38	true	4	2.5
	18.16	24	24	true	4	2.5
	18.16	24	24	true	4	2.5
	18.16	24	24	true	4	2.5
	18.49	24	24	true	4	2.5
	18.16	24	24	true	4	2.5
	0	24	0	true	4	2.5
	19.57	21.47	25.89	true	4	2.5
	18.16	24	24	true	4	2.5
	18.8	24.86	24.86	true	4	2.5
	0	25.87	0	true	4	2.5
	24.16	18	18	true	4	2.5
	22.84	18	130.8	true	4	2.5
	18.16	0	24.01	true	4	2.5
	18.16	24	24	true	4	2.5
	0	24	0	true	4	2.5
	0	24	0	true	4	2.5
	44.18	0	18.01	true	4	2.5
	0	18	0	true	4	2.5
	0	0	0	true	4	2.5
	24.22	0	18.04	true	4	2.5
	0	18.03	0	true	4	2.5

[illegible]

Design Strip: Latitude SSs Table (4)

[illegible]

Design Strip: Latitude SSs Table (5)

Section Slope	CS Top Bar	CS Bot Bar	CS Shear Bar	CS Top Cover inches	CS Bot Cover inches	CS Shear d calc	CS Torsion Design	CS System
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	Maximize Effective Depth		two-way slab
	#5	#4	#4	1.5	0.75	Maximize Effective Depth		two-way slab
	#5	#4	#4	1.5	0.75	Maximize Effective Depth		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		beam
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		beam
	#5	#4	#4	1.5	0.75	Maximize Effective Depth		beam
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	Maximize Effective Depth		beam
	#5	#4	#4	1.5	0.75	Maximize Effective Depth		beam
	#5	#4	#4	1.5	0.75	Maximize Effective Depth		beam
	#5	#4	#4	1.5	0.75	Maximize Effective Depth		beam
	#5	#4	#4	1.5	0.75	Maximize Effective Depth		beam

Design Strip: Latitude SSs Table (6)

<i>CS Min. Bar Loc.</i>	<i>CS Min T.Bar</i>	<i>CS Min B.Bar</i>	<i>CS Shear Legs</i>	<i>MS Same As CS</i>	<i>MS Auto Trim</i>	<i>MS Section Slope</i>	<i>MS Top Bar</i>	<i>MS Bot Bar</i>
elevated	0	0	2	false	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
elevated	0	0	4	true	none	0.25	#5	#4
elevated	0	0	4	true	none	0.25	#5	#4
elevated	0	0	4	true	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	4	false	none	0.25	#5	#4
stress	0	0	4	false	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
elevated	0	0	4	true	none	0.25	#5	#4
elevated	0	0	4	true	none	0.25	#5	#4
elevated	0	0	4	true	none	0.25	#5	#4
elevated	0	0	4	true	none	0.25	#5	#4
elevated	0	0	4	true	none	0.25	#5	#4

Design Strip: Latitude SSs Table (7)

[illegible]

MS Shear Legs

[illegible]

Design Strip: Longitude SSs Table

<i>Name</i>	<i>Set</i>	<i>Location feet</i>	<i>Skew degrees</i>	<i>At Support 1</i>	<i>At Support 2</i>	<i>Support Width 1 inches</i>
10-1	longitude	(-200.6,-89.05)(-198,-65.18)	-5.001	true	true	24.16
10-2	longitude	(-198,-65.18)(-195.5,-41.31)	-4.631	true	true	24.16
10-3	longitude	(-195.5,-41.31)(-193,-17.44)	-1.644	true	true	24.16
10-4	longitude	(-193,-17.44)(-191.6,-2.25)	-0.258	true	true	24.16
11-1	longitude	(-176.8,-92.28)(-177,-67.39)	-0.995	true	true	18.27
11-2	longitude	(-177,-67.39)(-164.9,-47.89)	-4.289	true	true	26.83
11-3	longitude	(-164.9,-47.89)(-164.6,-22.53)	-0.236	true	true	24.26
11-4	longitude	(-164.6,-22.53)(-138.3,-51.38)	-2.036	true	true	24.16
12-1	longitude	(-145.3,-22.83)(-138.3,-51.38)	-5.139	true	true	24.87
12-2	longitude	(-138.3,-51.38)(-120.6,-101.9)	-6.396	true	true	24.42
13-1	longitude	(-120.6,-101.9)(-119.9,-90.02)	-3.752	true	false	24.21
13-1(2)	longitude	(-119.9,-90.02)(-118.9,-75.16)	-3.515	false	true	0
13-2	longitude	(-118.9,-75.16)(-118.4,-52.35)	-5.105	true	true	18.16
13-3	longitude	(-118.4,-52.35)(-109.7,-60.83)	-0.284	true	true	24.16
14-1	longitude	(-109.7,-60.83)(-94.99,-74.76)	-7.264	true	true	24.97
15-1	longitude	(-94.99,-74.76)(-99.8,-22.83)	-10.197	true	true	27.64
16-1	longitude	(-99.8,-22.83)(-87.38,-47.22)	-4.203	true	false	27.07
17-1	longitude	(-87.38,-47.22)(-70.83,-75.36)	-6.535	true	true	18.16
18-1	longitude	(-70.83,-75.36)(-67.92,-66.08)	-7.416	true	true	19.02
18-2	longitude	(-67.92,-66.08)(-65.26,-94)	-4.663	true	true	30.69
18-3	longitude	(-65.26,-94)(-72.79,-22.83)	-10.213	true	true	26.05
19-1	longitude	(-72.79,-22.83)(-45.78,-22.84)	-4.238	true	true	27.85
20-1	longitude	(-45.78,-22.84)(-19.91,-15.87)	-4.183	true	true	24.57
21-1	longitude	(-19.91,-15.87)(-14.48,-20.06)	-2.427	false	true	0
22-1	longitude	(-14.48,-20.06)(-5.47,-2.005)	-4.578	false	true	0
23-1	longitude	(-5.47,-2.005)(-5.33,-16.93)	-0.377	true	true	3.906
23-2	longitude	(-5.33,-16.93)(-5.308,-11.89)	-1.041	true	false	15.8

Design Strip: Longitude SSs Table (2)

<i>Support Width 1</i>	<i>Support Width 2</i> <i>inches</i>	<i>Support Trans. Width 1</i> <i>inches</i>	<i>Support Trans. Width 2</i> <i>inches</i>	<i>Auto-Support</i>	<i>Min Divisions</i>	<i>Max Division Spacing</i> <i>feet</i>
	24.16	18	18	true	4	2.5
	24.16	18	18	true	4	2.5
	24.16	18	18	true	4	2.5
	3.629	18	26.04	true	4	2.5
	24.31	24.15	18.11	true	4	2.5
	26.83	20.01	20.01	true	4	2.5
	24.16	18.08	18	true	4	2.5
	3.299	18	341	true	4	2.5
	24.87	18.53	18.53	true	4	2.5
	10.49	18.19	55.16	true	4	2.5
	0	18.04	0	true	4	2.5
	18.2	0	24.05	true	4	2.5
	24.16	24	18	true	4	2.5
	24.16	18	18	true	4	2.5
	12.53	26.15	23.31	true	4	2.5
	24.16	24	18	true	4	2.5
	0	20.18	0	true	4	2.5
	19.76	24.01	24.01	true	4	2.5
	19.81	25.15	18.86	true	4	2.5
	25.2	18.79	18.79	true	4	2.5
	26.06	19.42	25.03	true	4	2.5
	27.81	20.74	20.74	true	4	2.5
	24.57	18.31	18.31	true	4	2.5
	4.033	0	160.4	true	4	2.5
	18.16	0	24	true	4	2.5
	20.51	258.7	24	true	4	2.5
	0	24	0	true	4	2.5

[illegible]

Design Strip: Longitude SSs Table (4)

<i>Spec. Infl. Area ft²</i>	<i>Max LLR %</i>	<i>Span Width</i>	<i>Col Strip Width</i>	<i>Lock Strips</i>	<i>Design CS for CS</i>	<i>-CS Auto Trim</i>	<i>CS Section Slope</i>
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	T or L	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	code-beam	false	false	inverted T or L	100
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25

Design Strip: Longitude SSs Table (5)

Section Slope	CS Top Bar	CS Bot Bar	CS Shear Bar	CS Top Cover inches	CS Bot Cover inches	CS Shear d calc	CS Torsion Design	CS System
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	Maximize Effective Depth		two-way slab
	#5	#4	#4	1.5	0.75	Maximize Effective Depth		two-way slab
	#5	#4	#4	1.5	0.75	Maximize Effective Depth		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	Maximize Effective Depth		two-way slab
	#5	#4	#4	1.5	0.75	Maximize Effective Depth		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1	1	Maximize Effective Depth		beam
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab

Design Strip: Longitude SSs Table (6)

<i>CS Min. Bar Loc.</i>	<i>CS Min T.Bar</i>	<i>CS Min B.Bar</i>	<i>CS Shear Legs</i>	<i>MS Same As CS</i>	<i>MS Auto Trim</i>	<i>MS Section Slope</i>	<i>MS Top Bar</i>	<i>MS Bot Bar</i>
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
elevated	0	0	4	true	none	0.25	#5	#4
elevated	0	0	4	true	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
elevated	0	0	4	true	none	0.25	#5	#4
elevated	0	0	4	true	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
bottom	0	0	2	true	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4

Design Strip: Longitude SSs Table (7)

[illegible]

Design Strip: Longitude SSs Table (8)

[illegible]

Design Strip: Latitude SSSs Table

<i>Name</i>	<i>Strip Type</i>	<i>Calc. Trib. Area ft²</i>	<i>Calc. Infl. Area ft²</i>	<i>Top Bar</i>	<i>Bottom Bar</i>	<i>Shear Bar</i>	<i>Top Cover inches</i>
1C-1	center	279	0	#5	#4	#4	1.5
1C-2	center	151.7	0	#5	#4	#4	1.5
2C-1	center	319	0	#5	#4	#4	1.5
2C-2	center	371.7	0	#5	#4	#4	1.5
2C-3	center	526.3	0	#5	#4	#4	1.5
2C-4	center	499.7	0	#5	#4	#4	1.5
2C-5	center	569.5	0	#5	#4	#4	1.5
3C-1	center	454.8	0	#5	#4	#4	1.5
3C-2	center	330.7	0	#5	#4	#4	1.5
3C-3	center	73.06	0	#5	#4	#4	1.5
3C-4	center	370.8	0	#5	#4	#4	1.5
3C-5	center	507.8	0	#5	#4	#4	1.5
3C-6	center	419.7	0	#5	#4	#4	1.5
3C-7	center	41.44	0	#5	#4	#4	1.5
4C-1	center	524.3	0	#5	#4	#4	1.5
4C-2	center	250.6	0	#5	#4	#4	1.5
4C-3	center	330.8	0	#5	#4	#4	1.5
4C-4	center	258.1	0	#5	#4	#4	1.5
4C-5	center	321.9	0	#5	#4	#4	1.5
4C-6	center	311	0	#5	#4	#4	1.5
4C-7	center	251.3	0	#5	#4	#4	1.5
5C-1	center	250.7	0	#5	#4	#4	1.5
5C-2	center	320.5	0	#5	#4	#4	1.5
5C-3	center	347.6	0	#5	#4	#4	1.5
5C-4	center	4.711	0	#5	#4	#4	1.5
6C-1	center	67.14	0	#5	#4	#4	1.5
6C-2	center	49.85	0	#5	#4	#4	1.5
7C-1	center	298.1	0	#5	#4	#4	1.5
7C-2	center	199.3	0	#5	#4	#4	1.5
7C-3	center	283.2	0	#5	#4	#4	1.5
8C-1	center	70.17	0	#5	#4	#4	1.5
9C-1	center	128.7	0	#5	#4	#4	1.5
9C-2	center	55.2	0	#5	#4	#4	1.5
9C-2(2)	center	53.18	0	#5	#4	#4	1.5
9C-2(3)	center	77.26	0	#5	#4	#4	1.5
9C-3	center	27.32	0	#5	#4	#4	1.5

Bot. Cover
inches

Design Strip: Latitude SSSs Table - 65

Design Strip: Longitude SSSs Table

<i>Name</i>	<i>Strip Type</i>	<i>Calc. Trib. Area ft²</i>	<i>Calc. Infl. Area ft²</i>	<i>Top Bar</i>	<i>Bottom Bar</i>	<i>Shear Bar</i>	<i>Top Cover inches</i>
10C-1	center	257	0	#5	#4	#4	1.5
10C-2	center	53.87	0	#5	#4	#4	1.5
10C-3	center	330.2	0	#5	#4	#4	1.5
10C-4	center	260.5	0	#5	#4	#4	1.5
11C-1	center	443.6	0	#5	#4	#4	1.5
11C-2	center	445.3	0	#5	#4	#4	1.5
11C-3	center	451.4	0	#5	#4	#4	1.5
11C-4	center	267.9	0	#5	#4	#4	1.5
12C-1	center	629.3	0	#5	#4	#4	1.5
12C-2	center	215.1	0	#5	#4	#4	1.5
13C-1	center	227.3	0	#5	#4	#4	1.5
13C-1(2)	center	317.9	0	#5	#4	#4	1.5
13C-2	center	316.7	0	#5	#4	#4	1.5
13C-3	center	635.5	0	#5	#4	#4	1.5
14C-1	center	287.7	0	#5	#4	#4	1.5
15C-1	center	649.9	0	#5	#4	#4	1.5
16C-1	center	558.2	0	#5	#4	#4	1.5
17C-1	center	196.3	0	#5	#4	#4	1.5
18C-1	center	134.2	0	#5	#4	#4	1.5
18C-2	center	270.2	0	#5	#4	#4	1.5
18C-3	center	225.9	0	#5	#4	#4	1.5
19C-1	center	480.5	0	#5	#4	#4	1.5
20C-1	center	491.8	0	#5	#4	#4	1.5
21C-1	center	159.6	0	#5	#4	#4	1.5
22C-1	center	275.6	0	#5	#4	#4	1
22R-1	right	71.51	0	#5	#4	#4	1.5
23C-1	center	111.7	0	#5	#4	#4	1.5
23C-2	center	39.77	0	#5	#4	#4	1.5

Bot. Cover
inches

<i>Torsion Design</i>	<i>System</i>	<i>Min Bar Loc.</i>	<i>Min T. Bar</i>	<i>Min B. Bar</i>	<i>Shear Legs</i>
-----------------------	---------------	---------------------	-------------------	-------------------	-------------------

Design Strip: Punching Checks Table

<i>Number</i>	<i>Location feet</i>	<i>Radius feet</i>	<i>Cover To CGS inches</i>	<i>Angle degrees</i>	<i>Edge</i>	<i>Connection</i>
1	(-200.6,-89.05)	10	1.625	84	failure planes	auto
2	(-198,-65.18)	10	1.625	84	failure planes	auto
3	(-195.5,-41.31)	10	1.625	84	failure planes	auto
4	(-193,-17.44)	10	1.625	84	failure planes	auto
5	(-181.4,-44.55)	10	1.625	-6	failure planes	auto
6	(-177,-67.39)	10	1.625	84	failure planes	auto
7	(-176.8,-92.28)	10	1.625	-6	failure planes	auto
8	(-164.9,-47.89)	10	1.625	84	failure planes	auto
9	(-164.6,-22.53)	10	1.625	90	failure planes	auto
10	(-145.3,-22.83)	13	1.625	90	failure planes	auto
11	(-138.3,-51.38)	10	1.625	90	failure planes	auto
12	(-120.6,-101.9)	10	1.625	90	failure planes	auto
13	(-118.9,-75.16)	10	1.625	0	failure planes	auto
14	(-118.4,-52.35)	10	1.625	0	failure planes	auto
15	(-118.3,-22.84)	15	1.625	90	failure planes	auto
16	(-109.7,-60.83)	10	1.625	90	failure planes	auto
17	(-94.99,-75.16)	10	1.625	0	failure planes	auto
18	(-94.55,-101.9)	10	1.625	90	failure planes	auto
19	(-87.38,-47.22)	10	1.625	0	failure planes	auto
20	(-85.98,-66.03)	10	1.625	0	failure planes	auto
21	(-71.38,-109.1)	10	1.625	22	failure planes	auto
22	(-70.75,-75.58)	10	1.625	90	failure planes	auto
23	(-67.92,-66.08)	10	1.625	0	failure planes	auto
24	(-65.26,-94)	10	1.625	90	failure planes	auto
25	(-60.2,-44.83)	10	1.625	90	failure planes	auto
26	(-41.7,-44.83)	10	1.625	90	failure planes	auto
27	(-19.85,-17.33)	6	1.625	0	failure planes	auto
28	(-5.378,-16.83)	6	1.625	0	failure planes	auto

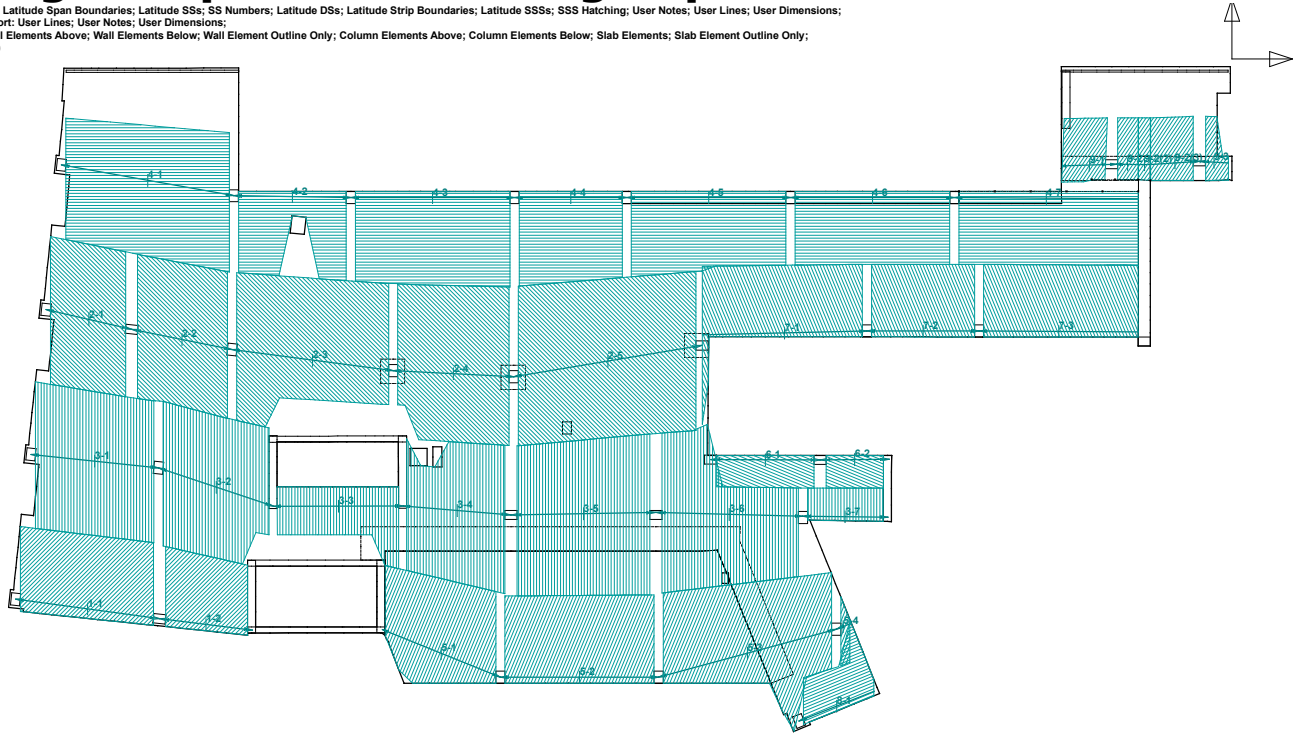
Design Strip: Punching Checks Table (2)

Connection	Use Spec LLR Params	Spec. LLR Levels	Spec. Trib. Area ft ²	Spec. Infl. Area ft ²	Calc. Trib. Area ft ²	Calc. Infl. Area ft ²
	false	1	0	0	159.6	0
	false	1	0	0	227.7	0
	false	1	0	0	151.7	0
	false	1	0	0	279	0
	false	1	0	0	432.8	0
	false	1	0	0	489.7	0
	false	1	0	0	247.7	0
	false	1	0	0	465.4	0
	false	1	0	0	479.5	0
	false	1	0	0	312.2	0
	false	1	0	0	602	0
	false	1	0	0	309.7	0
	false	1	0	0	493.5	0
	false	1	0	0	550.4	0
	false	1	0	0	322.8	0
	false	1	0	0	249.3	0
	false	1	0	0	588.9	0
	false	1	0	0	359.7	0
	false	1	0	0	517.8	0
	false	1	0	0	136.1	0
	false	1	0	0	135.7	0
	false	1	0	0	279.5	0
	false	1	0	0	54.29	0
	false	1	0	0	252.6	0
	false	1	0	0	249.8	0
	false	1	0	0	281.3	0
	false	1	0	0	394.4	0
	false	1	0	0	129.5	0

[illegible]

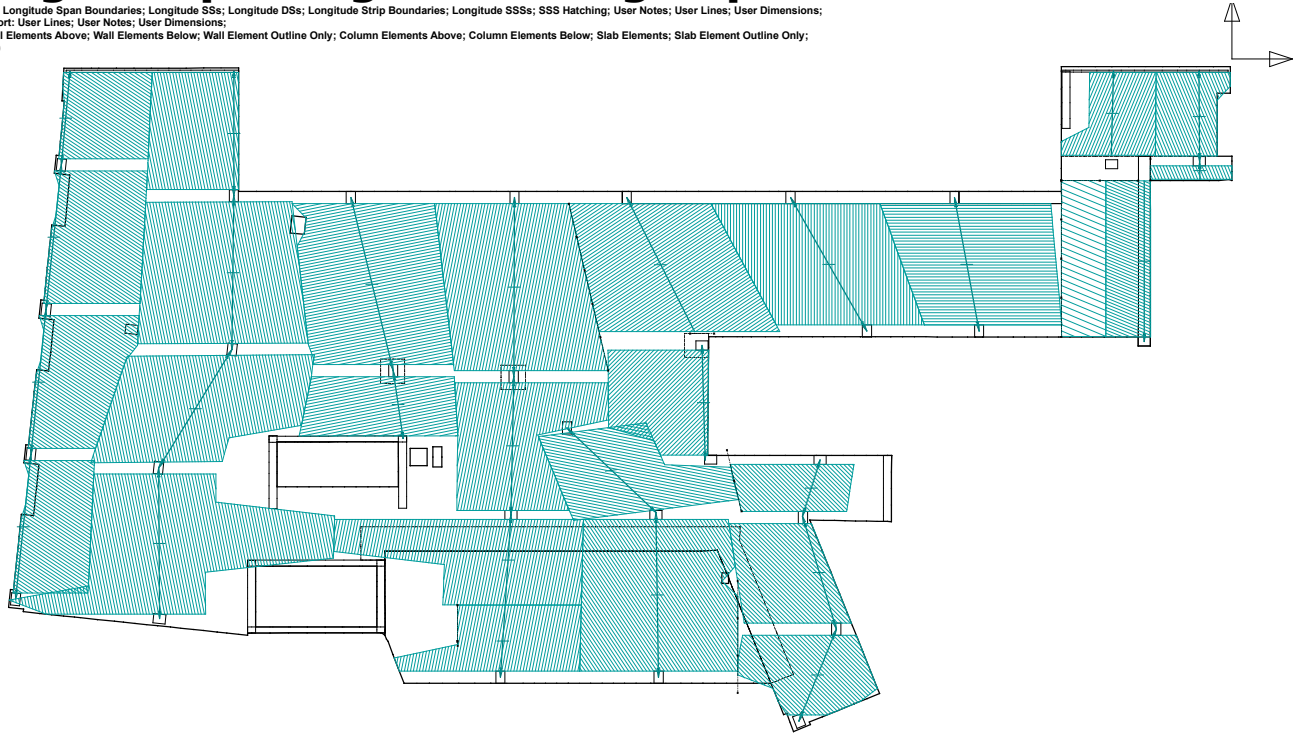
Design Strip: Latitude Design Spans Plan

Design Strip: Latitude Span Boundaries; Latitude SSs; SS Numbers; Latitude DSs; Latitude Strip Boundaries; Latitude SSSs; SSS Hatching; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



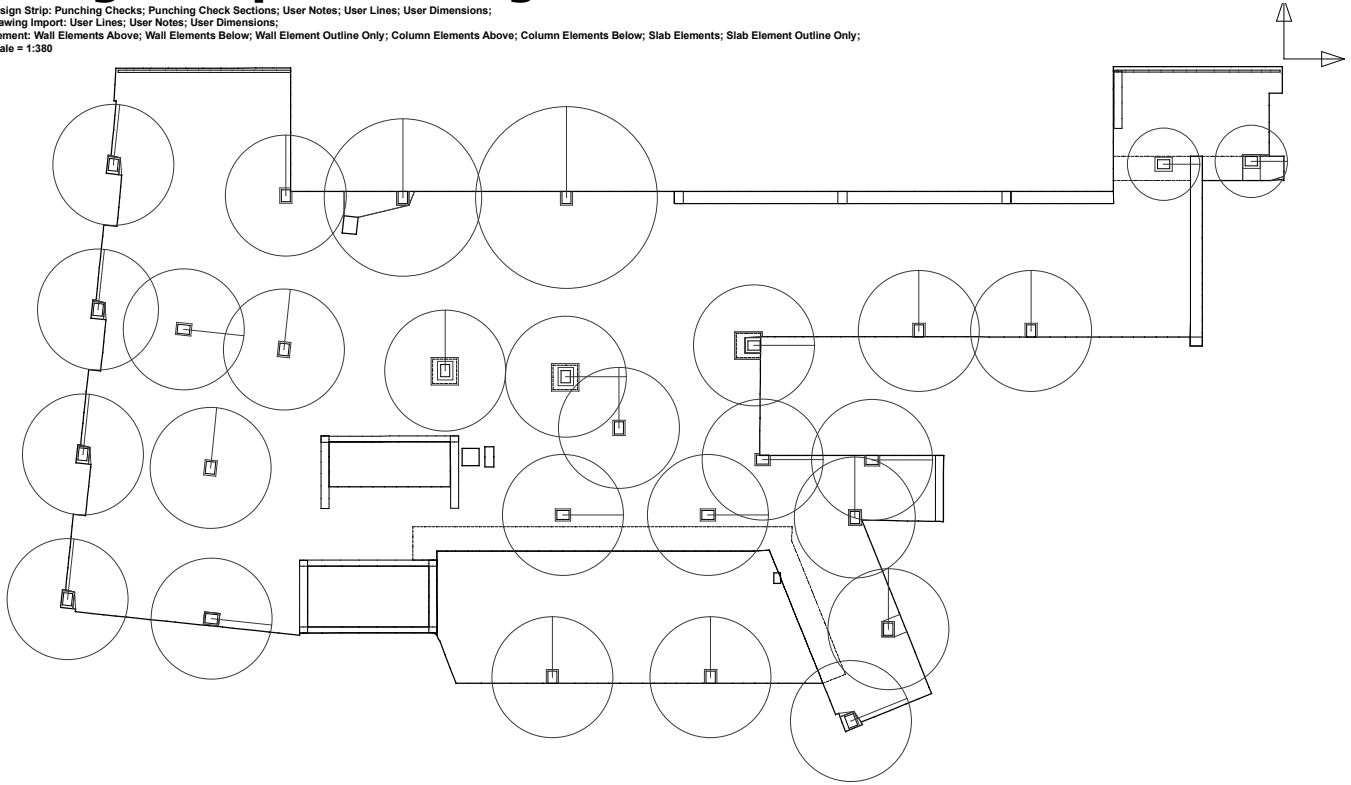
Design Strip: Longitude Design Spans Plan

Design Strip: Longitude Span Boundaries; Longitude SSSs; Longitude DSs; Longitude Strip Boundaries; Longitude SSSs; SSS Hatching; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



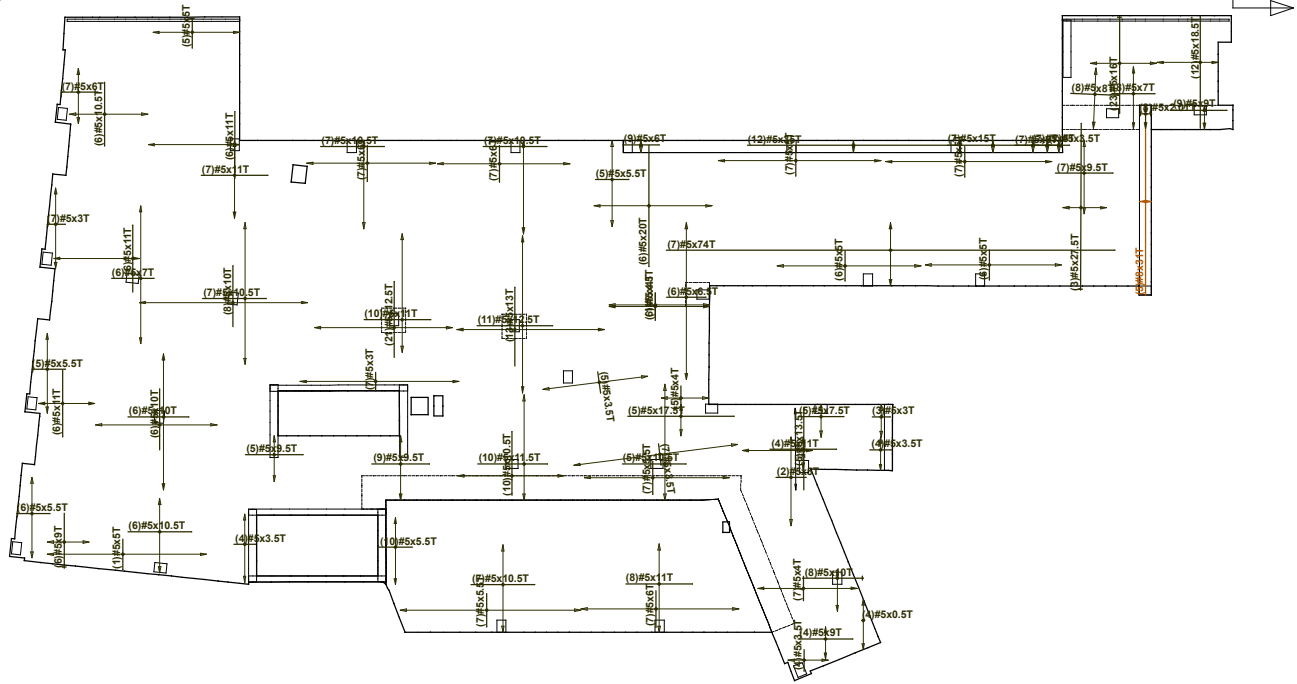
Design Strip: Punching Checks Plan

Design Strip: Punching Checks; Punching Check Sections; User Notes; User Lines; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Scale = 1:380



Reinforcement: Top Bars Plan

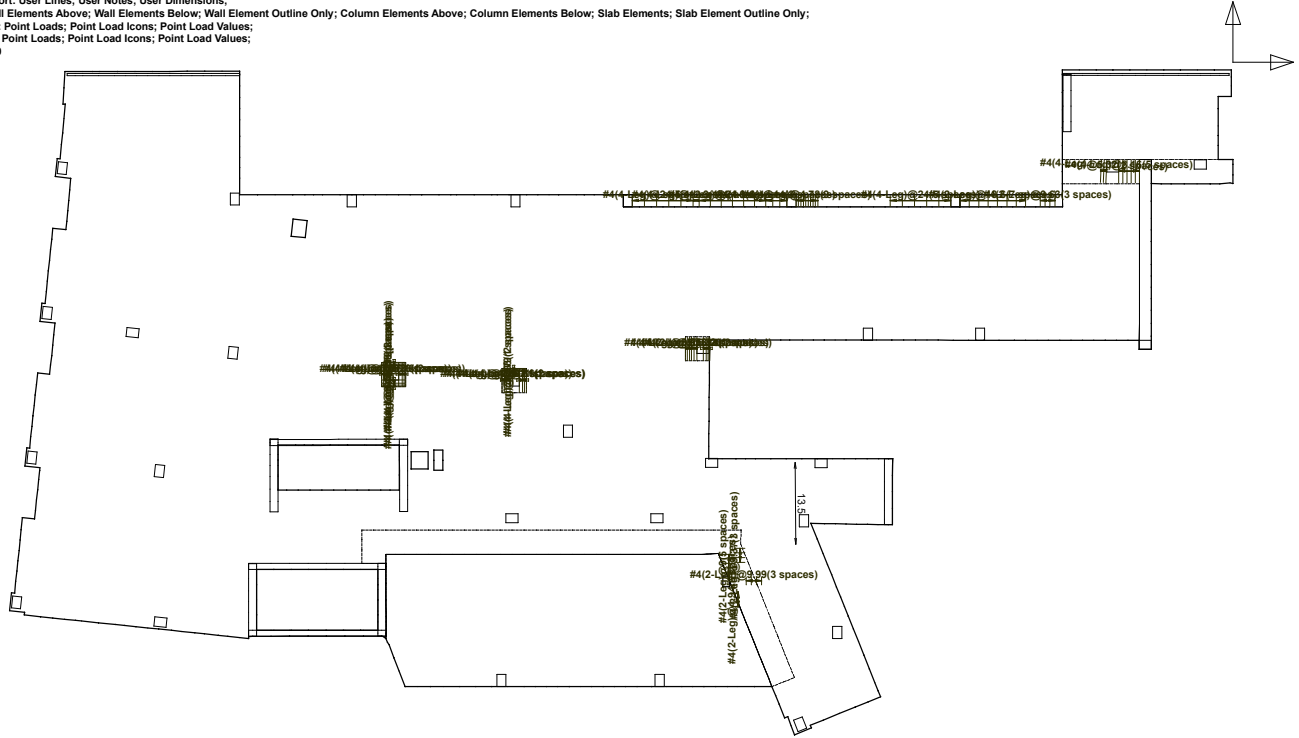
Reinforcement: User Lines; User Notes; User Dimensions; Latitude User Concentrated Reinf.; Latitude Program Concentrated Reinf.; Latitude User Distributed Reinf.; Latitude Program Distributed Reinf.; Longitude User Concentrated Reinf.; Longitude Program Concentrated Reinf.
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



[illegible]

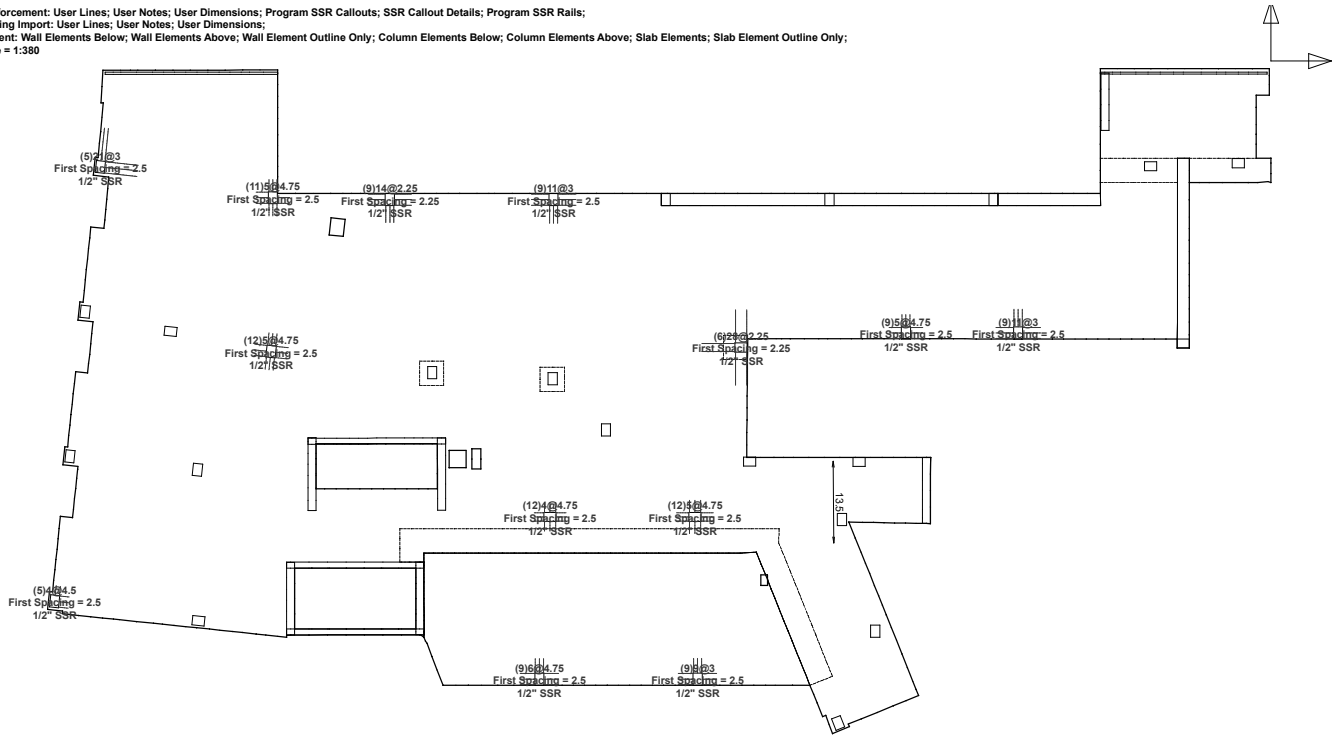
Reinforcement: Shear Bars Plan

Reinforcement: Latitude User Transverse Reinf.; Longitude User Transverse Reinf.; Latitude Program Transverse Reinf.; Longitude Program Transverse Reinf.; Transverse Reinf. Descriptions; Transverse Reinf. Extent; Latitude User Individual Transverse Bars; Longitude User Individual Transverse Bars;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Seismic EW; Point Loads; Point Load Icons; Point Load Values;
 Seismic NS; Point Loads; Point Load Icons; Point Load Values;
 Scale = 1:380

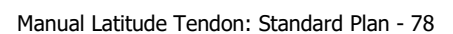


Reinforcement: SSR Plan

Reinforcement: User Lines; User Notes; User Dimensions; Program SSR Callouts; SSR Callout Details; Program SSR Rails;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:380

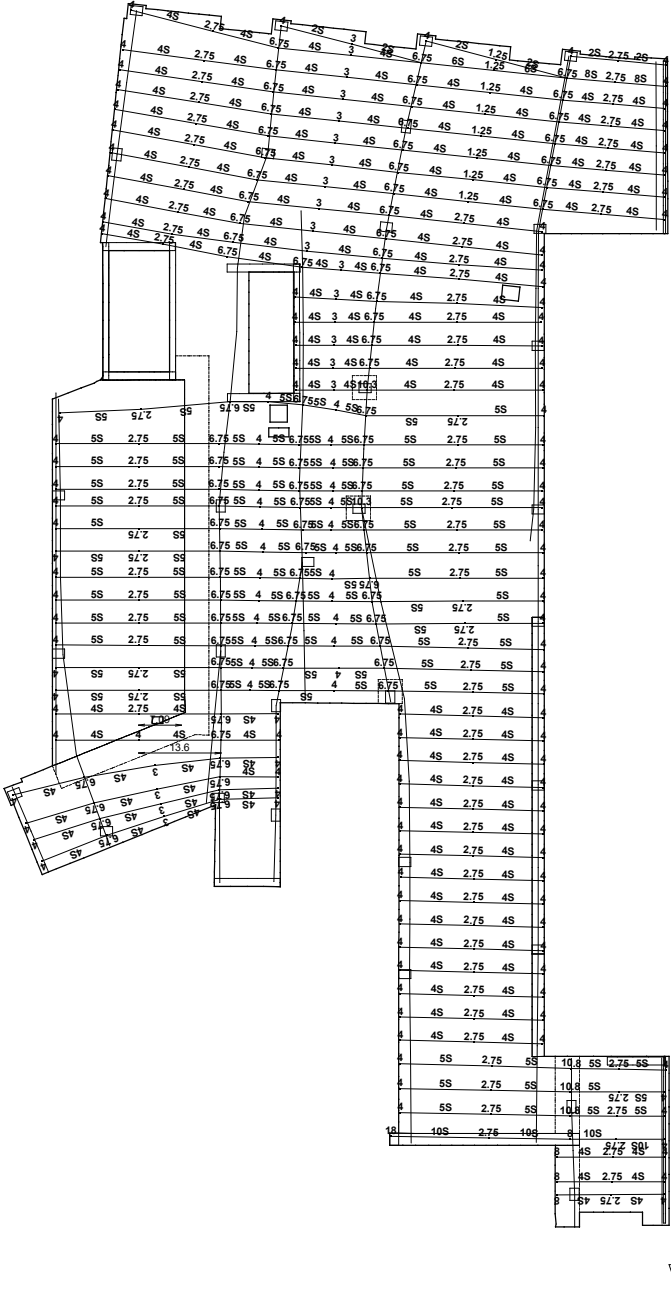


Scale = 1:380



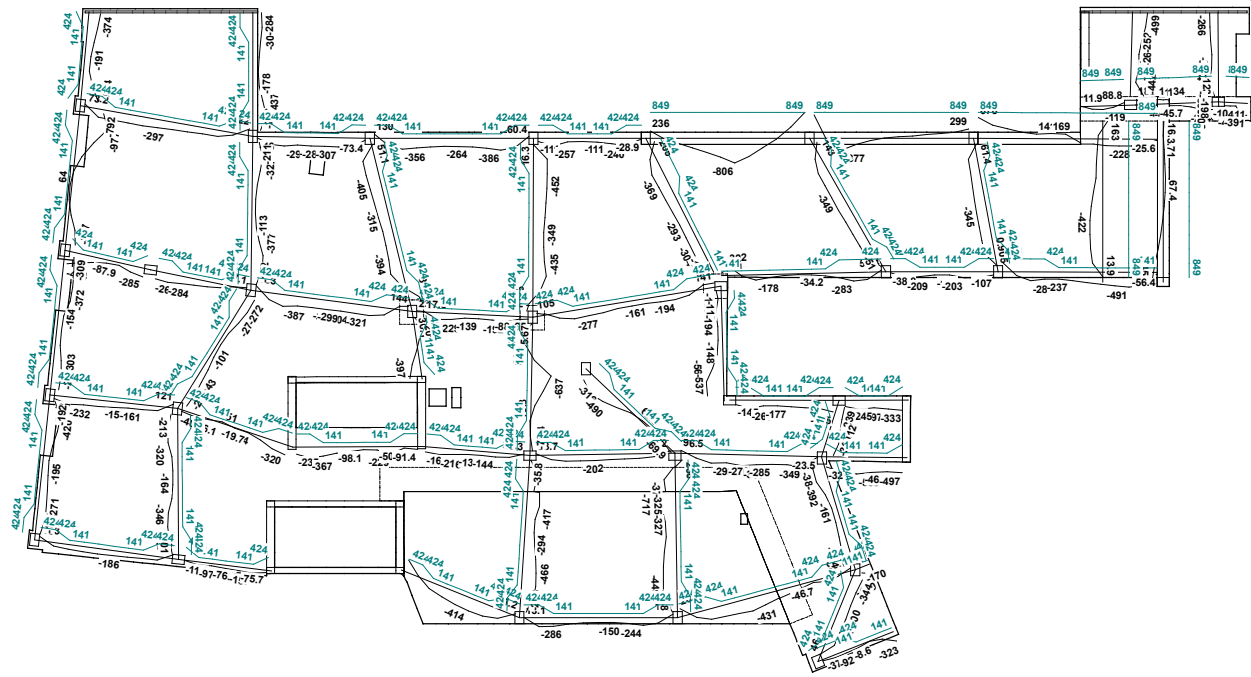
Manual Longitude Tendon: Standard Plan

Manual Longitude Tendon: Tendons; Num Strands; Jacks; Tendon Points; Profile Values; User Notes; User Dimensions;
Drawing Input; User Lines; User Notes; User Dimensions;
Element: Wall Elements Above: Wall Elements Below: Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Standard Tendon; Standard Tendon Description; Distributed Tendon Description; Distributed Tendon Overlap Areas; Profile Points; Profile Elevation Values; Profile Nodes;
Manual Latitude Tendon: Tendons;
Scale = 1/300



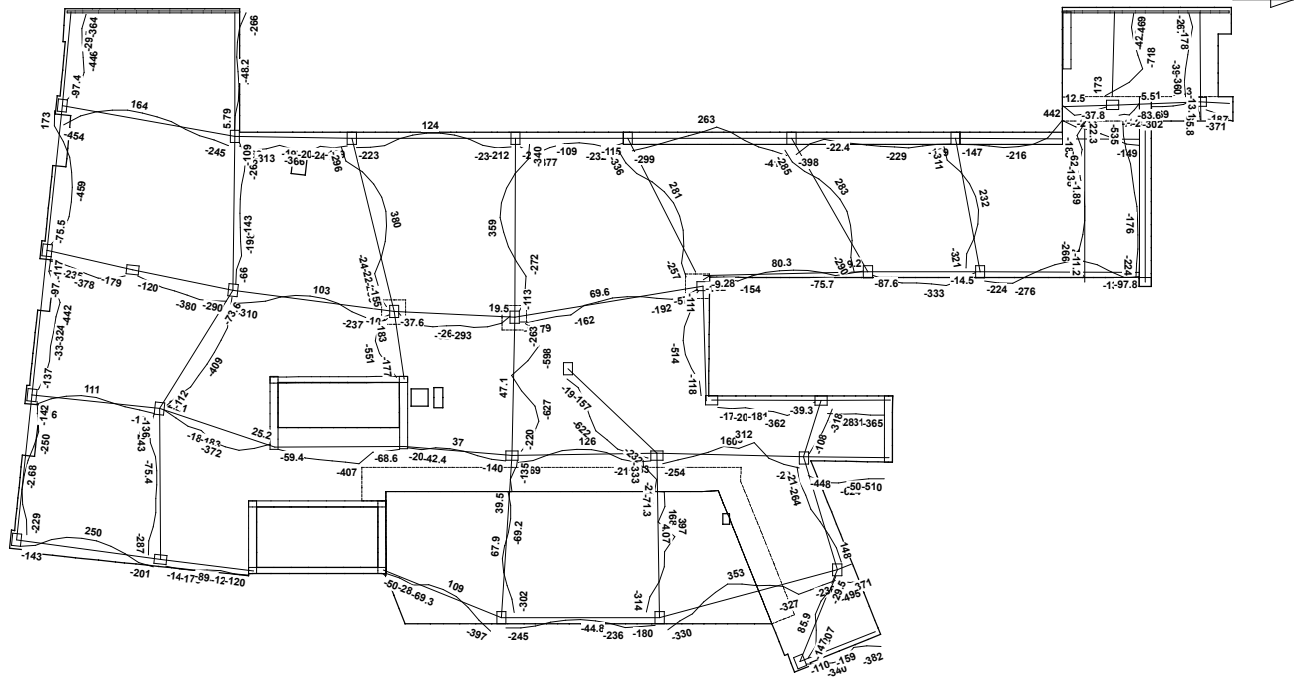
Service Design: Top Stress Plan

Service Design: Latitude Span Designs; Longitude Span Designs; Latitude DS Designs; Longitude DS Designs; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380
 Service Design - Section Analysis Plot: (Gross Section Top Concrete Stress)(Context: Max Capacity,Max Demand)



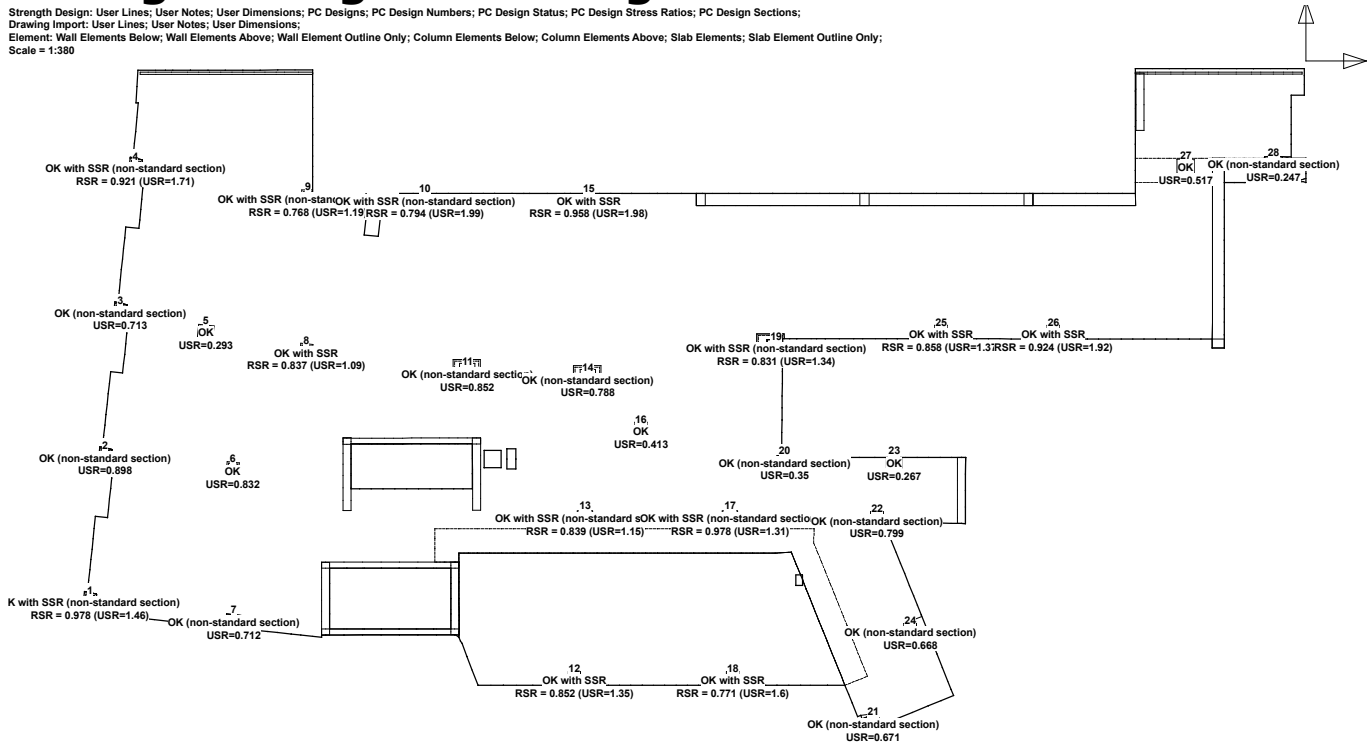
Service Design: Bottom Stress Plan

Service Design: User Lines; User Notes; User Dimensions; Latitude Span Designs; Longitude Span Designs; Latitude DS Designs; Longitude DS Designs;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
 Scale = 1:380
 Service Design - Section Analysis Plot: (Gross Section Bottom Concrete Stress)(Context: Max Demand)



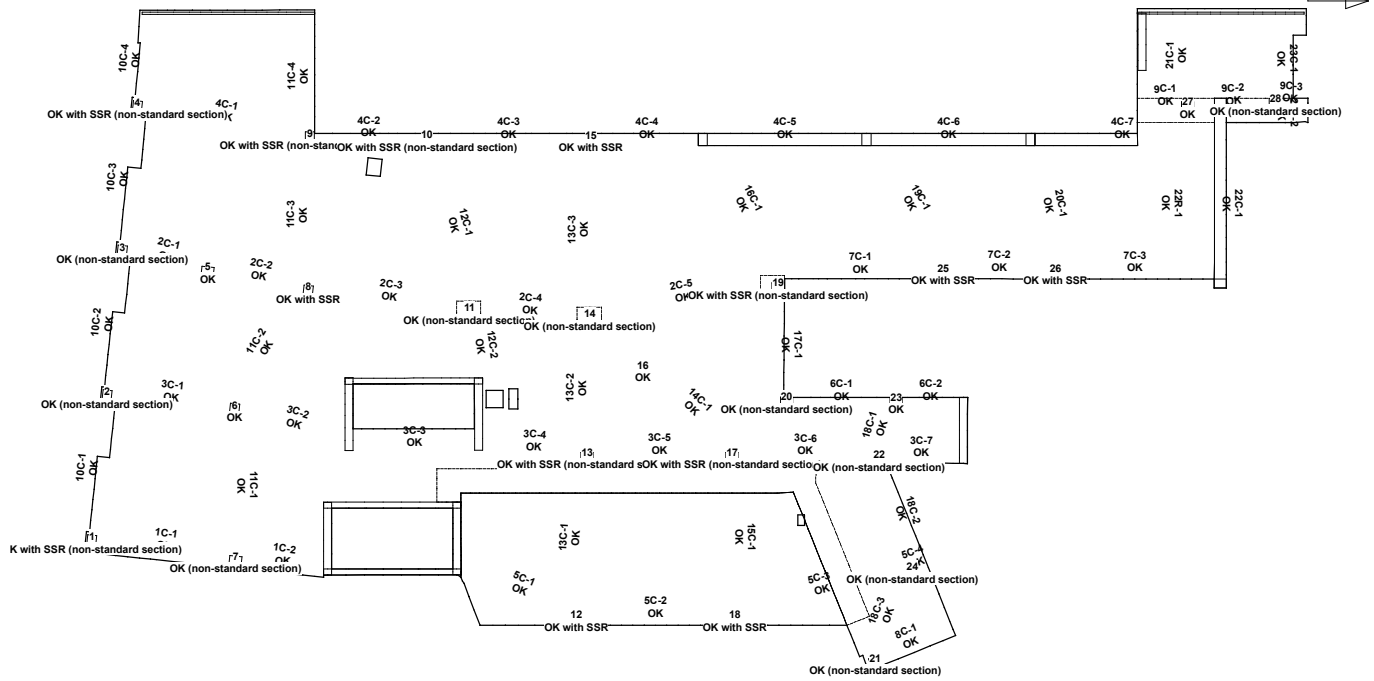
Strength Design: Punching Shear Status Plan

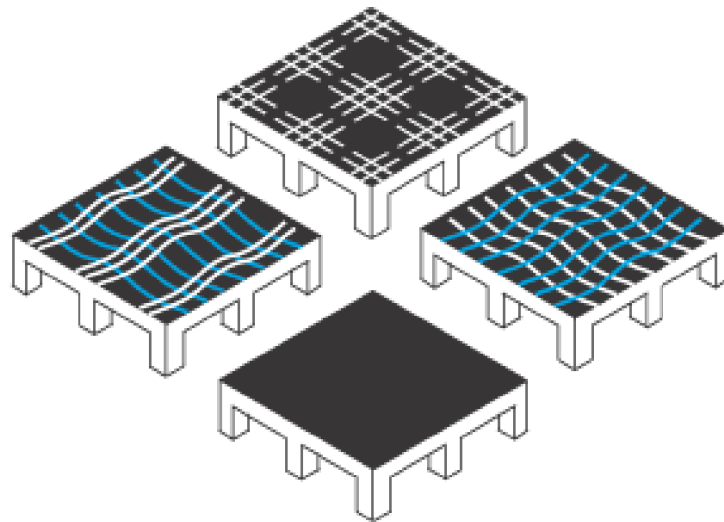
Strength Design: User Lines; User Notes; User Dimensions; PC Designs; PC Design Numbers; PC Design Status; PC Design Stress Ratios; PC Design Sections;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
 Scale = 1:300



Design Status: Status Plan

Design Status: Latitude Span Designs; Longitude Span Designs; Span Design Numbers; Span Design Status; Latitude DS Designs; Longitude DS Designs; DS Design Numbers; DS Design Status; PC Designs; PC Design Numbers; PC Design Status; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380





Level 3.30.cpt
1/7/2020

RAM Concept © 2019 Bentley Systems, Inc.
RAM Concept™ is a trademark of Bentley Systems

Table of Contents

Units	3
Signs	4
Materials	5
Loadings	7
Load Combinations	8
Design Rules	17
Detailing Rules	18
Load History	19
Mesh Input: Walls Below Table	20
Mesh Input: Columns Below Table	22
Mesh Input: Slab Areas Table	28
Mesh Input: Beams Table	30
Mesh Input: Standard Plan	32
Other Dead Loading: Point Loads Plan	33
Other Dead Loading: Line Loads Plan	34
Other Dead Loading: Area Loads Plan	35
Live (Reducible) Loading: All Loads Plan	36
Live (Unreducible) Loading: Point Loads Plan	37
Live (Unreducible) Loading: Line Loads Plan	38
Live (Unreducible) Loading: Area Loads Plan	39
Live (Unreducible) Loading: Std Reactions Plan	40
Seismic E/W: Point Loads Plan	41
Seismic E/W: Std Reactions Plan	42
Seismic N/S: Point Loads Plan	43
Seismic N/S: Std Reactions Plan	44
Service LC: D + L: Max Deflection Plan	45
Service LC: D + L: Min Deflection Plan	46
Service LC: D + L: Reaction Plan	47
Long Term deflection: Max Deflection Plan	48
Design Strip: Latitude SSs Table	49
Design Strip: Longitude SSs Table	65
Design Strip: Latitude SSSs Table	81
Design Strip: Longitude SSSs Table	85
Design Strip: Punching Checks Table	89
Design Strip: Latitude Design Spans Plan	95
Design Strip: Longitude Design Spans Plan	96
Design Strip: Punching Checks Plan	97
Reinforcement: Top Bars Plan	98
Reinforcement: Bottom Bars Plan	99
Reinforcement: Shear Bars Plan	100
Reinforcement: SSR Plan	101
Manual Latitude Tendon: Standard Plan	102
Manual Longitude Tendon: Standard Plan	103
Service Design: Top Stress Plan	104
Service Design: Bottom Stress Plan	105
Strength Design: Punching Shear Status Plan	106
Design Status: Status Plan	107

Units

Geometry Unit:

Plan Dimensions: feet
Angles: degrees

Slab Thickness: inches
Elevations: inches

Support Dimensions: inches
Support Height: feet

Loading and Reaction Unit

Point Force: Kips
- Report As Zero: 0 Kips
Point Moment: kip-ft
- Report As Zero: 0 kip-ft

Line Force: kips/ft
- Report As Zero: 0 kips/ft
Line Moment: Kips
- Report As Zero: 0 Kips

Area Force: psf
- Report As Zero: 0 psf
Area Moment: #/foot
- Report As Zero: 0 #/foot

Spring and Stiffness Unit:

Point Force Spring: kips/in
Point Moment Spring: k-ft/°

Line Force Spring: ksi
Line Moment Spring: k/°

Area Force Spring: pci
Area Moment Spring: k/ft°

Slab Analysis Unit:

Force: Kips
- Report As Zero: 0 Kips
Force Per Width: kips/ft
- Report As Zero: 0 kips/ft

Moment: kip-ft
- Report As Zero: 0 kip-ft
Moment Per Width: Kips
- Report As Zero: 0 Kips

Concrete Stress: psi
- Report As Zero: 0 psi
Deflection: inches
- Report As Zero: 0 inches

Materials Unit:

Concrete Volume: yd³
Reinforcement Weight: tons
PT Weight: pounds

Reinforcing Area: in²
Tendon Profile: inches
Cover: inches

PT Force: Kips
Reinforcing Stress: ksi

Miscellaneous Unit:

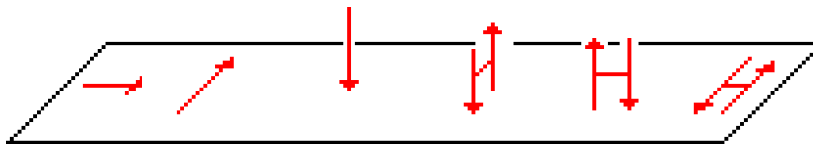
Floor Area: ft²
Tendon Angles (for friction): radians

Density: pcf

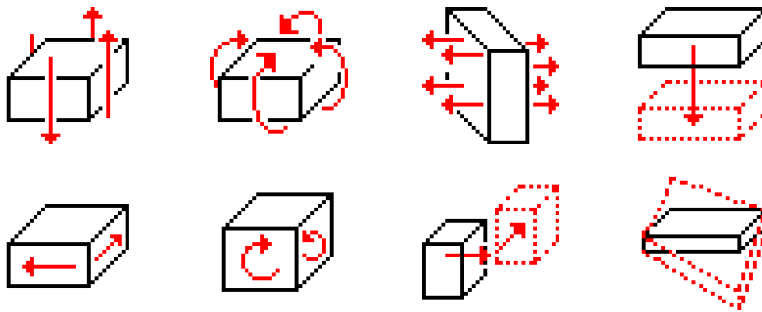
Elongations: inches

Signs

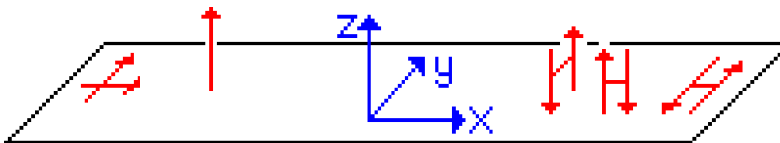
Positive Loads



Positive Analysis



Positive Reactions



Materials

Concrete Mix

Mix Name	Density (pcf)	Density For Loads (pcf)	f_{ci} (psi)	f'_c (psi)	f_{cui} (psi)	f_{cu} (psi)	Poissons Ratio	Ec Calc	User Eci (psi)	User Ec (psi)
3000 psi	150	150	3000	3000	3725	3725	0.2	Code	2500000	3000000
4000 psi	150	150	3000	4000	3725	4975	0.2	Code	2500000	3000000
5000 psi	150	150	3000	5000	3725	6399	0.2	Code	2500000	3000000
6000 psi	150	150	3000	6000	3725	7450	0.2	Code	2500000	3000000

PT Systems

System Name	Type	A_{ps} (in ²)	E_{ps} (ksi)	f_{se} (ksi)	f_{py} (ksi)	f_{pu} (ksi)	Duct Width (inches)	Strands Per Duct	Min Radius (feet)
½" Unbonded	unbonded	0.153	28000	175	243	270	0.5	1	6
½" Bonded	bonded	0.153	28000	160	243	270	3	4	6
0.6" Unbonded	unbonded	0.217	28000	175	243	270	0.6	1	8
0.6" Bonded	bonded	0.217	28000	160	243	270	4	4	8

PT Stressing Parameters

System Name	Jacking Stress (ksi)	Seating Loss (inches)	Anchor Friction	Wobble Friction (1/feet)	Angular Friction (1/radians)	Long-Term Losses (ksi)
½" Unbonded	216	0.25	0	0.0014	0.07	22
½" Bonded	216	0.25	0.02	0.001	0.2	22
0.6" Unbonded	216	0.25	0	0.0014	0.07	22
0.6" Bonded	216	0.25	0.02	0.001	0.2	22

Reinforcing Bars

Bar Name	A_s (in ²)	E_s (ksi)	F_y (ksi)	Coating	Straight Ld/Db	90 Hook Ld/Db	180 Hook Ld/Db
#3	0.11	29000	60	None	Code	Code	Code
#4	0.2	29000	60	None	Code	Code	Code
#5	0.31	29000	60	None	Code	Code	Code
#6	0.44	29000	60	None	Code	Code	Code
#7	0.6	29000	60	None	Code	Code	Code
#8	0.79	29000	60	None	Code	Code	Code
#9	1	29000	60	None	Code	Code	Code
#10	1.27	29000	60	None	Code	Code	Code
#11	1.56	29000	60	None	Code	Code	Code

Materials (2)

SSR Systems

<i>SSR System Name</i>	<i>Stud Area (in²)</i>	<i>Head Area (in²)</i>	<i>Min Clear Head Spacing (inches)</i>	<i>Specified Stud Spacing (inches)</i>	<i>Fy (ksi)</i>	<i>Stud Spacing Rounding Increment (inches)</i>	<i>Min Studs Per Rail</i>	<i>System Type</i>
3/8" SSR	0.11	1.11	0.5	None	50	0.25	2	Rail
1/2" SSR	0.196	1.96	0.5	None	50	0.25	2	Rail
5/8" SSR	0.307	3.07	0.5	None	50	0.25	2	Rail
3/4" SSR	0.442	4.42	0.5	None	50	0.25	2	Rail
Ancon Shearfix Auto-Size	0.217	1.096	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 10 mm	0.1217	1.096	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 12 mm	0.1753	1.578	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 14 mm	0.2386	2.147	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 16 mm	0.3116	2.805	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 20 mm	0.4869	4.383	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 24 mm	0.7012	6.311	0.5906	None	72.52	0.03937	2	Rail

Loadings

<i>Loading Name</i>	<i>Type</i>	<i>Analysis</i>	<i>On-Pattern Factor</i>	<i>Off-Pattern Factor</i>
Self-Dead Loading	Self-Weight	Normal	1	1
Balance Loading	Balance	Normal	1	1
Hyperstatic Loading	Hyperstatic	Hyperstatic	1	1
Temporary Construction (At Stressing) Loading	Stressing Dead	Normal	1	1
Other Dead Loading	Dead	Normal	1	1
Live (Reducible) Loading	Live (Reducible)	Normal	1	0
Live (Unreducible) Loading	Live (Unreducible)	Normal	1	0
Live (Storage) Loading	Live (Storage)	Normal	1	0
Live (Parking) Loading	Live (Parking)	Normal	1	0
Live (Roof) Loading	Live (Roof)	Normal	1	0
Snow Loading	Snow	Normal	1	1
Seismic E/W	Ultimate Seismic 1 (transfer)	Normal	1	0
Seismic N/S	Ultimate Seismic 1 (transfer)	Normal	1	0

Load Combinations

All Dead LC

Active Design Criteria: <none>

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Other Dead Loading	1	1

Dead + Balance LC

Active Design Criteria: <none>

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1

Initial Service LC

Active Design Criteria: Initial Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1.13	1.13
Temporary Construction (At Stressing) Loading	1	1

Service LC: D + L

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Reducible) Loading	1	0
Live (Unreducible) Loading	1	0
Live (Storage) Loading	1	0
Live (Parking) Loading	1	0

Service LC: D + Lr

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Roof) Loading	1	0

Load Combinations (2)

Service LC: D + S

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Snow Loading	1	0

Service LC: D + 0.75L + 0.75Lr

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Reducible) Loading	0.75	0
Live (Unreducible) Loading	0.75	0
Live (Storage) Loading	0.75	0
Live (Parking) Loading	0.75	0
Live (Roof) Loading	0.75	0

Service LC: D + 0.75L + 0.75S

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Reducible) Loading	0.75	0
Live (Unreducible) Loading	0.75	0
Live (Storage) Loading	0.75	0
Live (Parking) Loading	0.75	0
Snow Loading	0.75	0

Sustained Service LC

Active Design Criteria: Sustained Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Reducible) Loading	0.5	0.5
Live (Unreducible) Loading	0.5	0.5
Live (Storage) Loading	1	1
Live (Parking) Loading	0.5	0.5
Live (Roof) Loading	0.5	0.5

Load Combinations (3)

Factored LC: 1.4D

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.4	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.4	0.9

Factored LC: 1.2D + 1.6L + 0.5Lr

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.2	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.2	0.9
Live (Reducible) Loading	1.6	0
Live (Unreducible) Loading	1.6	0
Live (Storage) Loading	1.6	0
Live (Parking) Loading	1.6	0
Live (Roof) Loading	0.5	0

Factored LC: 1.2D + f1L + 1.6Lr

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.2	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.2	0.9
Live (Reducible) Loading	0.5	0
Live (Unreducible) Loading	1	0
Live (Storage) Loading	1	0
Live (Parking) Loading	1	0
Live (Roof) Loading	1.6	0

Factored LC: 1.2D + 1.6L + 0.5S

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.2	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.2	0.9
Live (Reducible) Loading	1.6	0
Live (Unreducible) Loading	1.6	0
Live (Storage) Loading	1.6	0
Live (Parking) Loading	1.6	0
Snow Loading	0.5	0

Load Combinations (4)

Factored LC: $1.2D + f1L + 1.6S$

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.2	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.2	0.9
Live (Reducible) Loading	0.5	0
Live (Unreducible) Loading	1	0
Live (Storage) Loading	1	0
Live (Parking) Loading	1	0
Snow Loading	1.6	0

Long Term deflection

Active Design Criteria: <none>

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	3.35	3.35
Balance Loading	3.35	3.35
Other Dead Loading	3.35	3.35
Live (Unreducible) Loading	2	2
Snow Loading	1	1

Earthquake N-S: $(1.2+.2*Sds)D + 2.5E + 0.5L+0.2S$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.344	1.344
Hyperstatic Loading	1	1
Other Dead Loading	1.344	1.344
Live (Unreducible) Loading	0.5	0.5
Snow Loading	0.2	0.2
Seismic N/S	2.5	2.5

Earthquake N-S: $(0.9-0.2*Sds)D + 2.5E$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.756	0.756
Hyperstatic Loading	1	1
Other Dead Loading	0.756	0.756
Seismic N/S	2.5	2.5

Load Combinations (5)

Earthquake E-W: $(1.2+0.2*S_{ds})D + 2.5E + 0.5L+0.2S$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.344	1.344
Hyperstatic Loading	1	1
Other Dead Loading	1.344	1.344
Live (Unreducible) Loading	0.5	0.5
Snow Loading	0.2	0.2
Seismic E/W	2.5	2.5

Earthquake E-W: $(0.9-0.2*S_{ds})D + 2.5E$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.756	0.756
Hyperstatic Loading	1	1
Other Dead Loading	0.756	0.756
Seismic E/W	2.5	2.5

Earthquake N-S: $(1.0+0.14*S_{ds})D + 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.101	1.101
Balance Loading	1	1
Other Dead Loading	1.101	1.101
Seismic N/S	1.75	1.75

Earthquake N-S: $(1.0+0.105*S_{ds})D + 1.3125E + 0.75L + 0.75S$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.076	1.076
Balance Loading	1	1
Other Dead Loading	1.076	1.076
Live (Unreducible) Loading	0.75	0.75
Snow Loading	0.75	0.75
Seismic N/S	1.313	1.313

Load Combinations (6)

Earthquake N-S: $(0.6-0.14*S_{ds})D + 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.499	0.499
Balance Loading	1	1
Other Dead Loading	0.899	0.899
Seismic N/S	1.75	1.75

Earthquake E-W: $(1.0+0.14*S_{ds})D + 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.101	1.101
Balance Loading	1	1
Other Dead Loading	1.101	1.101
Seismic E/W	1.75	1.75

Earthquake E-W: $(1.0+0.105*S_{ds})D + 1.3125E + 0.75L+0.75S$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.076	1.076
Balance Loading	1	1
Other Dead Loading	1.076	1.076
Live (Unreducible) Loading	0.75	0.75
Snow Loading	0.75	0.75
Seismic E/W	1.313	1.313

Earthquake N-S: $(1.2+0.2*S_{ds})D - 2.5E + .5L + 0.2S$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.344	1.344
Hyperstatic Loading	1	1
Other Dead Loading	1.344	1.344
Live (Unreducible) Loading	0.5	0.5
Snow Loading	0.2	0.2
Seismic N/S	-2.5	-2.5

Load Combinations (7)

Earthquake N-S: $(0.9-0.2*S_{ds})D - 2.5E$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.756	0.756
Hyperstatic Loading	1	1
Other Dead Loading	0.756	0.756
Seismic N/S	-2.5	-2.5

Earthquake E-W: $(1.2+0.2*S_{ds})D - 2.5E + .5L + 0.2S$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.344	1.344
Hyperstatic Loading	1	1
Other Dead Loading	1.344	1.344
Live (Unreducible) Loading	0.5	0.5
Snow Loading	0.2	0.2
Seismic E/W	-2.5	-2.5

Earthquake E-W: $(0.9-0.2*S_{ds})D - 2.5E$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.756	0.756
Hyperstatic Loading	1	1
Other Dead Loading	0.756	0.756
Seismic E/W	-2.5	-2.5

Earthquake N-S: $(1.0+0.14*S_{ds})D - 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.101	1.101
Balance Loading	1	1
Other Dead Loading	1.101	1.101
Seismic N/S	-1.75	-1.75

Load Combinations (8)

Earthquake N-S: $(1.0+0.105*S_{ds})D - 1.3125E + 0.75L + .75S$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.076	1.076
Balance Loading	1	1
Other Dead Loading	1.076	1.076
Live (Unreducible) Loading	0.75	0.75
Snow Loading	0.75	0.75
Seismic N/S	-1.313	-1.313

Earthquake N-S: $(0.6-0.14*S_{ds})D - 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.499	0.499
Balance Loading	1	1
Other Dead Loading	0.899	0.899
Seismic N/S	-1.75	-1.75

Earthquake E-W: $(1.0+0.14*S_{ds})D - 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.101	1.101
Balance Loading	1	1
Other Dead Loading	1.101	1.101
Seismic E/W	-1.75	-1.75

Earthquake E-W: $(0.6-0.14*S_{ds})D + 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.499	0.499
Balance Loading	1	1
Other Dead Loading	0.899	0.899
Seismic E/W	1.75	1.75

Earthquake E-W: $(0.6-0.14*S_{ds})D - 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.499	0.499
Balance Loading	1	1
Other Dead Loading	0.899	0.899
Seismic E/W	-1.75	-1.75

Load Combinations (9)

Earthquake E-W: $(1.0+0.105*S_{ds})D - 1.3125E + 0.75L + 0.75S$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.076	1.076
Balance Loading	1	1
Other Dead Loading	1.076	1.076
Live (Unreducible) Loading	0.75	0.75
Snow Loading	0.75	0.75
Seismic E/W	-1.313	-1.313

Design Rules

Code Minimum Design

318-11 Min. Reinforcement

User Minimum Design

Specified Min. Reinforcement

Initial Service Design

318-11 Initial Service Design

Service Design

318-11 Service Design

Include detailed section analysis

Sustained Service Design

318-11 Sustained Service Design

Strength Design

318-11 Strength Design

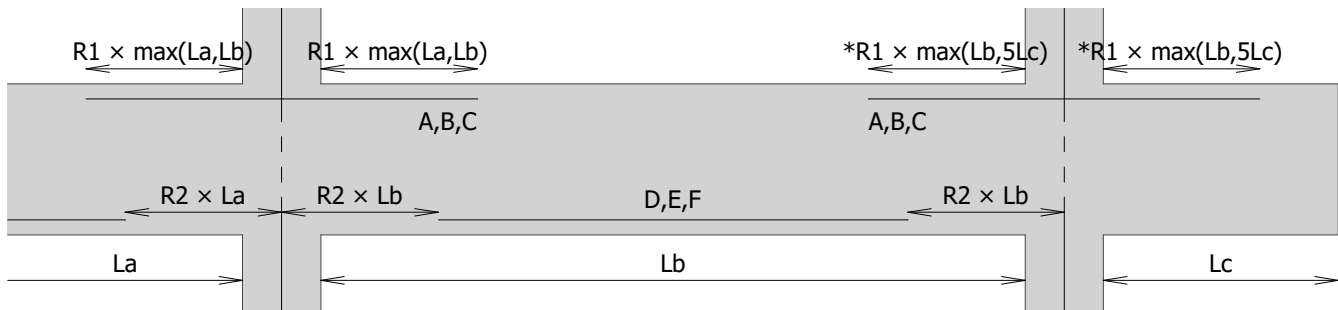
Punching Shear Design

Ductility Design

318-11 Ductility Design

Detailing Rules

Custom Span Detailing Rules



Rule	A	A	B	B	C	C	D	D	E	E	F	F
Name	Fraction	R1	Fraction	R1	Fraction	R1	Fraction	R2	Fraction	R2	Fraction	R2
None	0	0	0	0	0	0	0	0	0	0	0	0

"A", "B" and "C", are support reinforcement sets, based on the peak reinforcement in the support zone.

"D", "E" and "F", are span reinforcement sets, based on the peak reinforcement in the span zone.

"*R1" is never taken as greater than 0.2 when multiplied by L_c (or L_{cc}).

"Fraction" is the ratio of set reinforcement to peak reinforcement. It is always in the 0.0 to 1.0 range.

Load History

<i>Load History Step Name</i>	<i>Load Combination</i>	<i>Duration (days)</i>	<i>Total Age (days)</i>
Maximum Short Term Load	Service LC: D + L	30	33
Sustained Load	Sustained Service LC	5000	5033
Final Instantaneous Load	Service LC: D + L	0	5033

Mesh Input: Walls Below Table

<i>Number</i>	<i>Location feet</i>	<i>Mix</i>	<i>Fixed Near</i>	<i>Fixed Far</i>	<i>Comp.</i>	<i>Height feet</i>	<i>Thickness inches</i>
1	(-163.6,-1.647)(-192,-1.576) psi	5000	false	false	true	10	12
2	(-161.7,-82.62)(-161.7,-80.96) psi	5000	false	false	true	10	16
3	(-158.1,-62.08)(-158.2,-59.02) psi	5000	false	false	true	10	16
4	(-139.7,-94.13)(-162.3,-90.03) psi	5000	false	false	true	10	12
5	(-139.7,-83.13)(-162.3,-80.05) psi	5000	false	false	true	10	12
6	(-136.1,-62.6)(-158.8,-60.59) psi	5000	false	false	true	10	12
7	(-161,-1.721)(-123.1,-1.500) psi	5000	false	false	true	10	12
8	(-140.4,-82.62)(-140.3,-80.62) psi	5000	false	false	true	10	16
9	(-136.8,-62.11)(-136.7,-59.00) psi	5000	false	false	true	10	16
10	(-119.9,-1.567)(-67.86,-1.056) psi	5000	false	false	true	10	12
11	(-56.84,-76.25)(-56.83,-50.83) psi	5000	false	false	true	10	16
12	(-57.52,-65.84)(-41.13,-50.81) psi	5000	false	false	true	10	12
13	(-66.17,-1.72)(-29.51,-1.500) psi	5000	false	false	true	10	12
14	(-34.82,-75.75)(-57.5,-50.74) psi	5000	false	false	true	10	12
15	(-36.33,-88.13)(-36.33,-50.88) psi	5000	false	false	true	11	16
16	(-35.54,-65.33)(-35.5,-50.25) psi	5000	false	false	true	10	16
17	(-27.41,-1.659)(-27.39,-1.000) psi	5000	false	false	true	11	16
18	(-28.05,-1.658)(-1.22,-1.500) psi	5000	false	false	true	10	12

Mesh Input: Walls Below Table (2)

<i>Shear Wall</i>	<i>Use Spec LLR Params</i>	<i>Spec. LLR Levels</i>	<i>Spec. Trib. Area ft²</i>	<i>Spec. Infl. Area ft²</i>	<i>Max LLR %</i>
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40

Mesh Input: Columns Below Table

<i>Number</i>	<i>Location feet</i>	<i>Mix</i>	<i>Fixed Near</i>	<i>Fixed Far</i>	<i>Comp.</i>	<i>Height feet</i>	<i>B inches</i>	<i>D inches</i>
1	(-200.6,-89.05)	5000 psi	true	true	true	10	18	24
2	(-200.1,-144.6)	5000 psi	true	true	true	10	0	24
3	(-199.1,-134.7)	5000 psi	true	true	true	10	0	24
4	(-198.6,-115.2)	5000 psi	true	true	true	10	24	18
5	(-198,-65.18)	5000 psi	true	true	true	10	18	24
6	(-195.5,-41.31)	5000 psi	true	true	true	10	18	24
7	(-193,-17.44)	5000 psi	true	true	true	10	18	24
8	(-191.6,-151)	5000 psi	true	true	true	10	0	24
9	(-182.2,-147.7)	5000 psi	true	true	true	10	0	24
10	(-180.8,-44.12)	5000 psi	true	true	true	10	24	18
11	(-180.5,-117.1)	5000 psi	true	true	true	10	24	18
12	(-177,-67.39)	5000 psi	true	true	true	10	18	24
13	(-176.8,-92.28)	5000 psi	true	true	true	10	18	24
14	(-166,-123.6)	5000 psi	true	true	true	10	18	24
15	(-164.9,-47.89)	5000 psi	true	true	true	10	18	24
16	(-164.6,-22.53)	5000 psi	true	true	true	10	24	18
17	(-164.2,-141.7)	5000 psi	true	true	true	10	18	24
18	(-145.3,-22.83)	5000 psi	true	true	true	10	18	24
19	(-144.5,-120.4)	5000 psi	true	true	true	10	18	24
20	(-138.3,-51.35)	5000 psi	true	true	true	10	18	24
21	(-138.2,-136)	5000 psi	true	true	true	10	18	24
22	(-135.3,-110.1)	5000 psi	true	true	true	10	18	24
23	(-120.6,-101.9)	5000 psi	true	true	true	10	18	24
24	(-118.9,-75.16)	5000 psi	true	true	true	10	24	18
25	(-118.4,-52.35)	5000 psi	true	true	true	10	18	24
26	(-118.3,-22.83)	5000 psi	true	true	true	10	18	24
27	(-115.9,-127)	5000 psi	true	true	true	10	18	24
28	(-109.7,-60.83)	5000 psi	true	true	true	10	18	24
29	(-99.8,-22.83)	5000 psi	true	true	true	10	18	24
30	(-94.99,-75.16)	5000 psi	true	true	true	10	18	24
31	(-94.55,-101.9)	5000 psi	true	true	true	10	18	24
32	(-93.65,-118.1)	5000 psi	true	true	true	10	18	24
33	(-87.45,-47.25)	5000 psi	true	true	true	10	24	18
34	(-86.02,-66.08)	5000 psi	true	true	true	10	24	18
35	(-84.69,-22.81)	5000 psi	true	true	true	10	18	24
36	(-71.38,-109.1)	5000 psi	true	true	true	10	18	24
37	(-68.7,-22.67)	5000 psi	false	true	true	10	18	24
38	(-67.92,-66.08)	5000 psi	true	true	true	10	24	18
39	(-65.26,-94)	5000 psi	true	true	true	10	18	24
40	(-60.2,-44.83)	5000 psi	true	true	true	10	18	24
41	(-49,-100.5)	5000 psi	true	true	true	10	18	24
42	(-45.8,-22.83)	5000 psi	true	true	true	10	18	24
43	(-41.7,-44.83)	5000 psi	true	true	true	10	18	24
44	(-28.53,-90.28)	5000 psi	true	true	true	10	18	24
45	(-19.02,-17.34)	5000 psi	true	true	true	10	24	18
46	(-14.45,-61.73)	5000 psi	true	true	true	10	24	18

Mesh Input: Columns Below Table (2)

<i>Angle degrees</i>	<i>Roller</i>	<i>I Factor</i>	<i>Use Spec LLR Params</i>	<i>Spec. LLR Levels</i>	<i>Spec. Trib. Area ft²</i>	<i>Spec. Infl. Area ft²</i>
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
84	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
90	false	1	false	1	0	0
22	false	1	false	1	0	0
0	false	1	false	1	0	0
22	false	1	false	1	0	0
0	false	1	false	1	0	0
22	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
22	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
90	false	1	false	1	0	0
0	false	1	false	1	0	0
22	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
22	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
112	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0

Max LLR
%

Mesh Input: Columns Below Table - 24

Mesh Input: Columns Below Table (4)

<i>Number</i>	<i>Location feet</i>	<i>Mix</i>	<i>Fixed Near</i>	<i>Fixed Far</i>	<i>Comp.</i>	<i>Height feet</i>	<i>B inches</i>	<i>D inches</i>
47	(-14.45,-46.58)	5000 psi	true	true	true	10	24	18
48	(-5.364,-16.83)	5000 psi	true	true	true	10	24	18
49	(-5.313,-48.07)	5000 psi	true	true	true	10	24	18
50	(-3.839,-76.3)	5000 psi	true	true	true	10	24	18
51	(-3.5,-61.73)	5000 psi	true	true	true	10	24	18
52	(-1.469,-92.28)	5000 psi	true	true	true	10	18	24

Mesh Input: Columns Below Table (5)

<i>Angle degrees</i>	<i>Roller</i>	<i>I Factor</i>	<i>Use Spec LLR Params</i>	<i>Spec. LLR Levels</i>	<i>Spec. Trib. Area ft²</i>	<i>Spec. Infl. Area ft²</i>
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0

Mesh Input: Columns Below Table (6)

<i>infl. Area</i>	<i>Max LLR</i>
	<u>%</u>
	40
	40
	40
	40
	40
	40

Mesh Input: Slab Areas Table

<i>Number</i>	<i>Location feet</i>	<i>Mix</i>	<i>Thickness inches</i>	<i>TOC inches</i>	<i>Priority</i>	<i>Behavior</i>	<i>R-Axis degrees</i>
1	(-163.1,-142.3)(-165.7,-100.8)(-195.2,-207.1)(-192.1,-115.0)(-199.5,-124.3)(-199.7,-115.8)(-199.3,-115.8)(-200,-121.8)(-204.9,-1.067)	5000	10	10	1	1	1
2	(-192.3,-1)(-119.5,-1.005)(-115,-52.5)(-108.2,-52.48)(-107.6,-48.52)(179.08,-48.6)(-78.66,-52.52)(-67.49,-52.59)(-67.54,-1.012)	5000	10	10	1	1	1
3	(-69.54,-1.067)(-69.54,-50.46)(-77.54,-50.46)(-77.54,-46.46)(-109.5,-46.46)(-109.5,-50.46)(-109.5,-50.46)(-117.5,-50.46)(-117.5,-1.067)	5000	10	10	1	1	1

Mesh Input: Slab Areas Table (2)

<i>KMr</i>	<i>KMs</i>	<i>KMrs</i>	<i>KFr</i>	<i>KFs</i>	<i>KVrs</i>
1	1	1	1	1	1
1	1	1	1	1	1
1	1	1	1	1	1

Mesh Input: Beams Table

<i>Number</i>	<i>Location feet</i>	<i>Mix</i>	<i>Thickness inches</i>	<i>TOC inches</i>	<i>Priority</i>	<i>Mesh As Slab</i>	<i>Width inches</i>
1	(-119.5,-1.007)(-119.5,-54.46)(-117.5,-22.07)(-117.5,-54.46)(-121.5,-15.07)(-121.5,-54.46)	5006	22	6	1	true	48
2	(-109.5,-48.46)(-77.54,-30.46)(-109.5,-22.46)(-77.54,-46.46)(-109.5,-56.46)(-77.54,-50.46)	5006	22	6	1	true	48
3	(-117.5,-52.46)(-69.53,-50.46)(-117.5,-22.46)(-69.53,-50.46)(-117.5,-54.46)(-69.53,-54.46)	5006	22	6	1	true	48
4	(-67.54,-1.012)(-67.54,-54.46)(-65.54,-22.12)(-65.54,-54.46)(-69.54,-15.12)(-69.54,-54.46)	5006	22	6	1	true	48

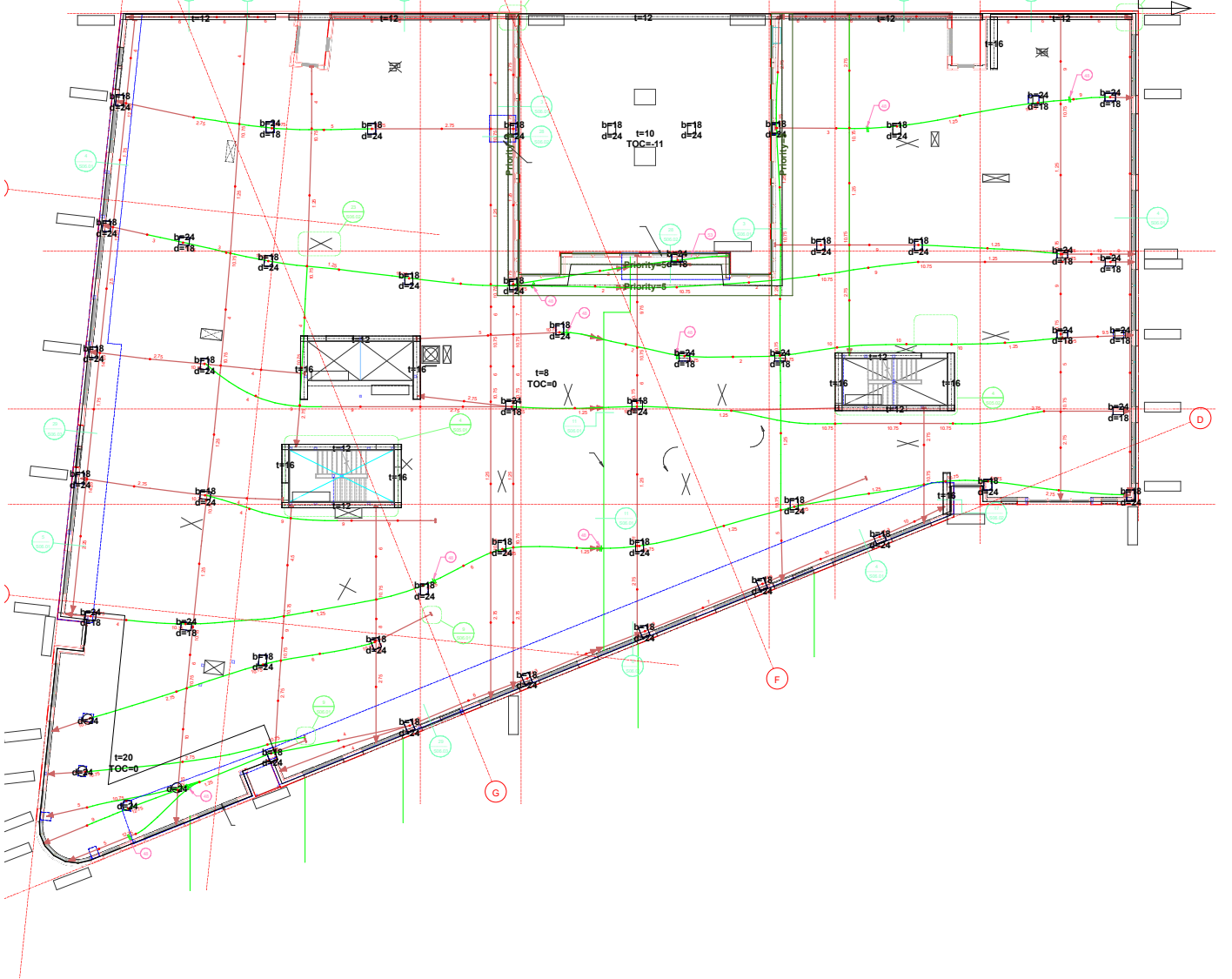
Mesh Input: Beams Table (2)

Width
Inches

<i>Behavior</i>	<i>KMr</i>	<i>KMs</i>	<i>KMr</i>	<i>KFr</i>	<i>KFs</i>	<i>KVrs</i>
no-torsion two-way slab		1	0.001	1	1	1
no-torsion two-way slab		1	0.001	1	1	1
no-torsion two-way slab		1	0.001	1	1	1
no-torsion two-way slab		1	0.001	1	1	1

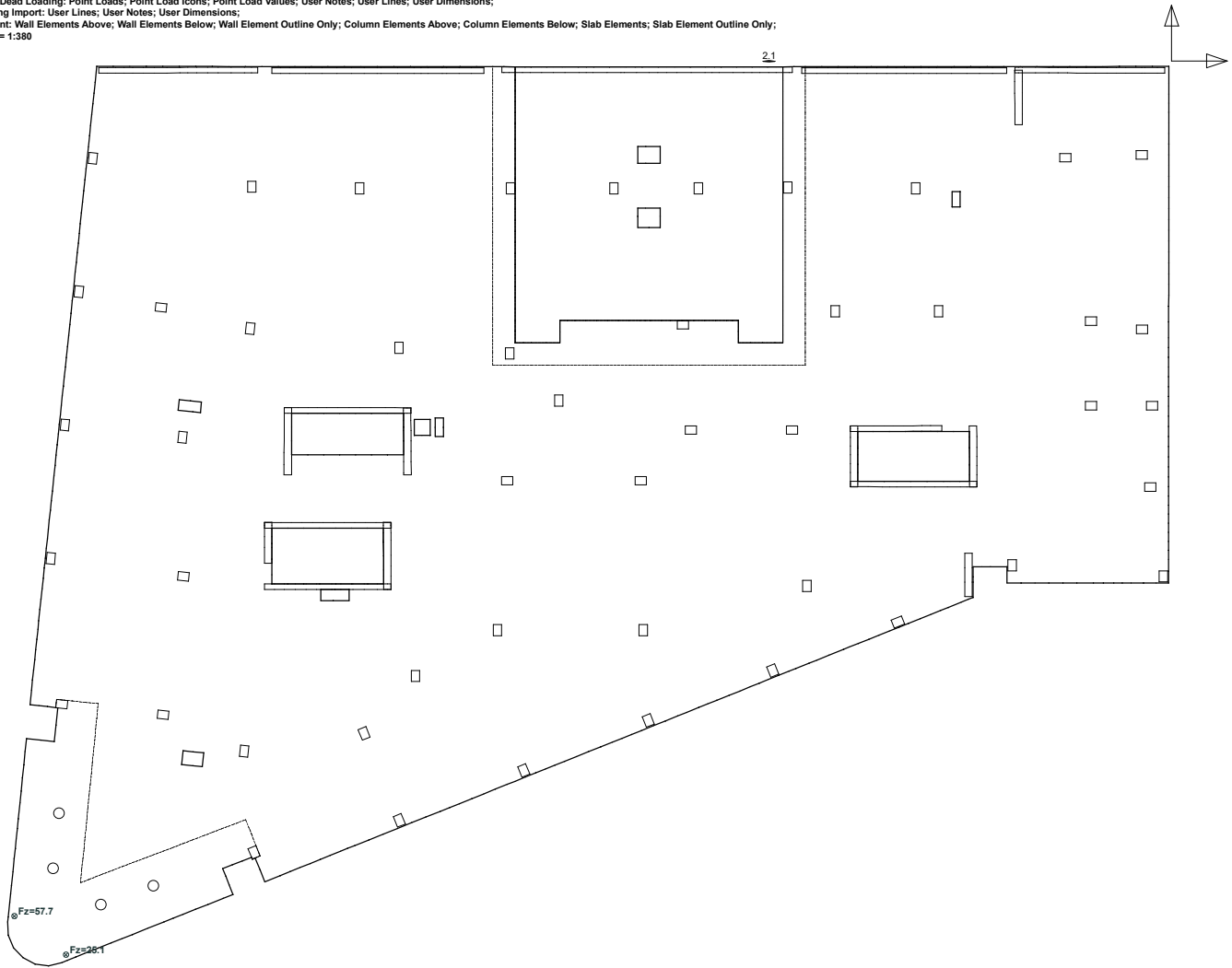
Mesh Input: Standard Plan

Mesh Input: Beams; Beam Priorities; Slab Areas; Slab AreaT hicknesses; Slab Area Elevations; Slab Openings; Point Supports; Point Support Icons; Line Supports; Line Support Icons; Walls Above; Walls Below; Wall Thicknesses; Columns Above; Columns Below; Column Dimen:
Drawing Import: User Notes; User Lines; User Dimensions; S-BEAM; S-COLS; S-COLS-SYMB; A-GENM; A-DETL; 0; 1803002_A_18S_VE_UPDATE_R17_rvt-1-PT Floor Plan - LEVEL 4(S-COLS; S-ANNO-SYMB; 1803002_A_18S_VE_UPDATE_R17_rvt-1-PT Floor Plan - LEVEL 4(S-STRS
Scale = 1:380



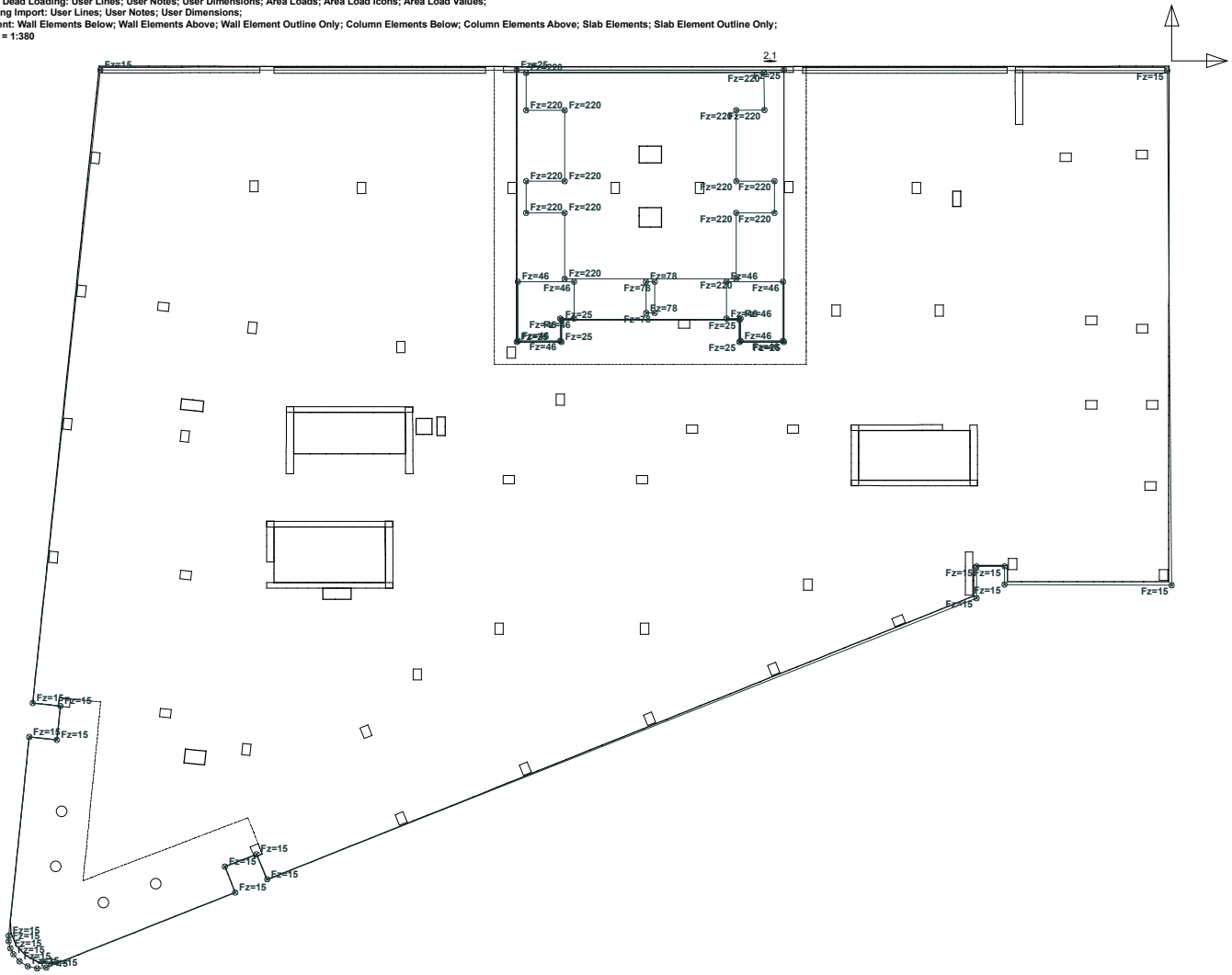
Other Dead Loading: Point Loads Plan

Other Dead Loading: Point Loads; Point Load Icons; Point Load Values; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



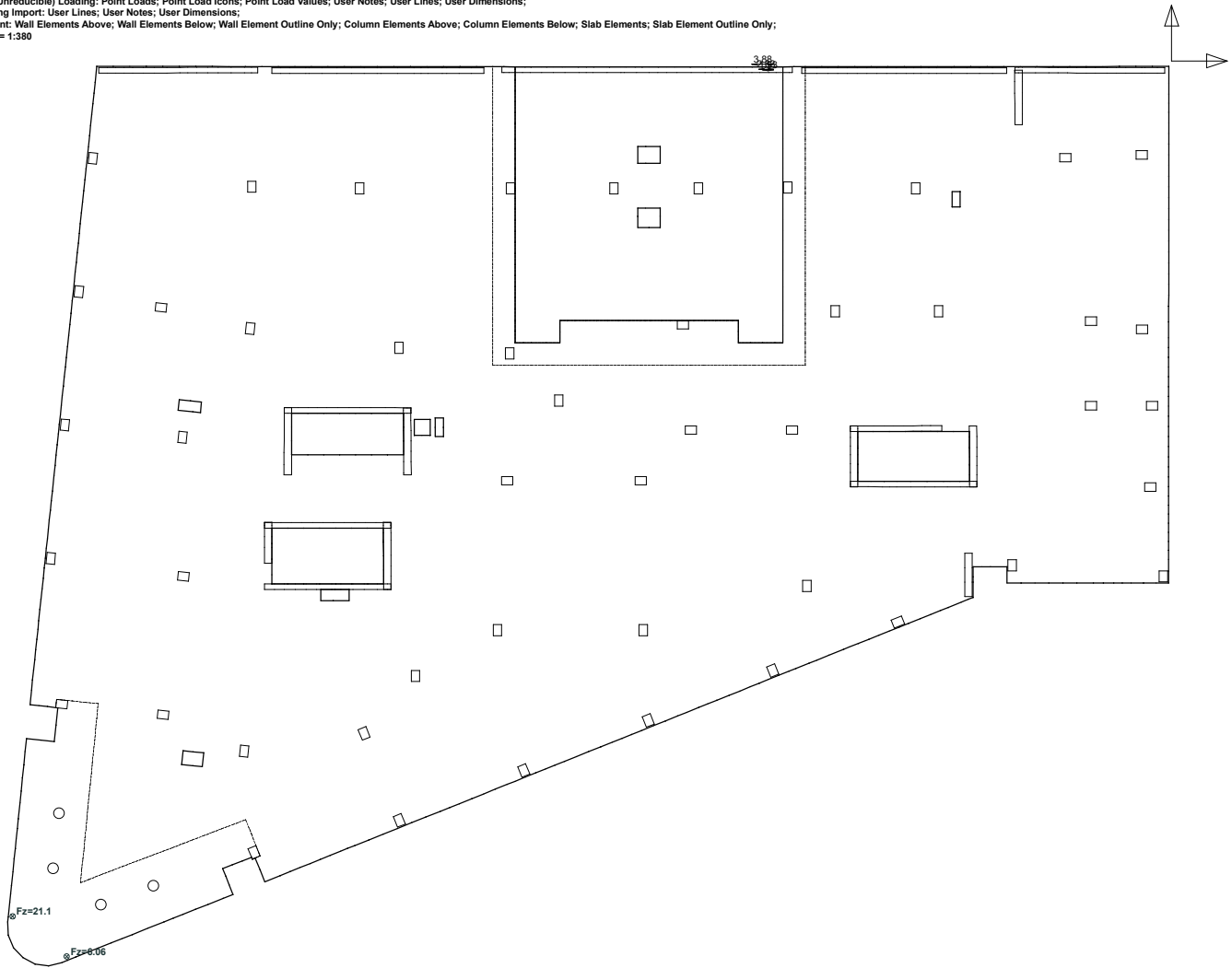
Other Dead Loading: Area Loads Plan

Other Dead Loading: User Lines; User Notes; User Dimensions; Area Loads; Area Load Icons; Area Load Values;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



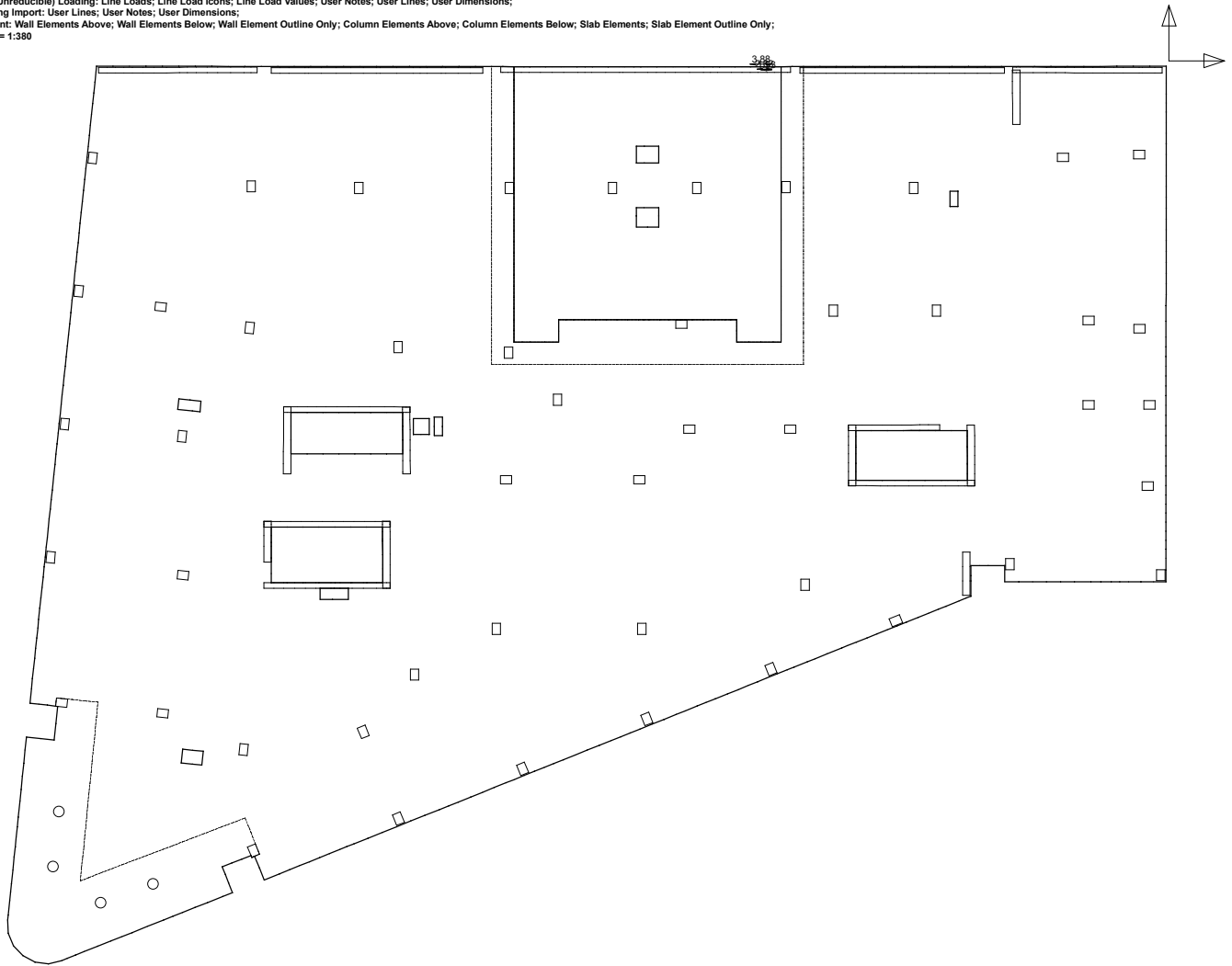
Live (Unreducible) Loading: Point Loads Plan

Live (Unreducible) Loading: Point Loads; Point Load Icons; Point Load Values; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



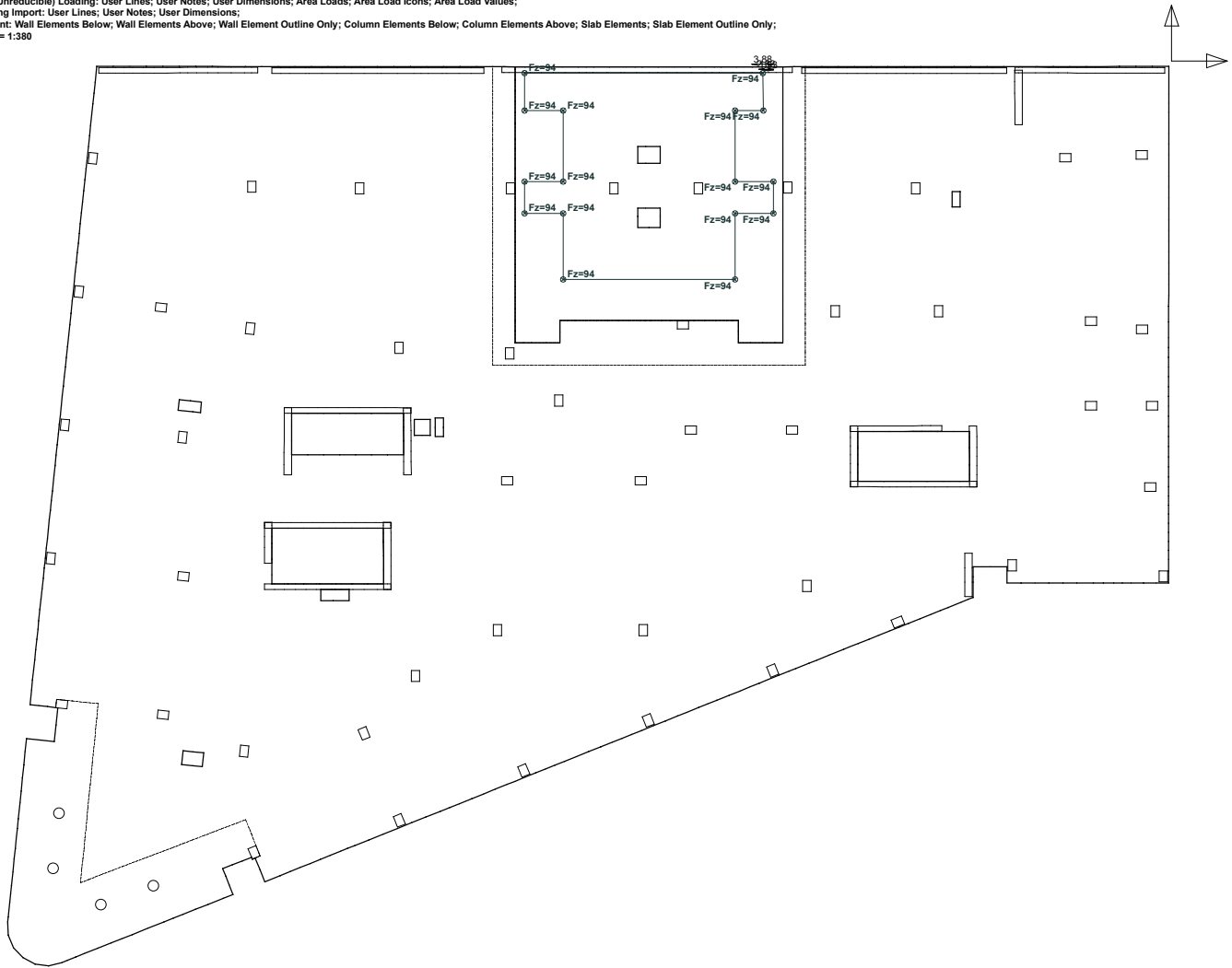
Live (Unreducible) Loading: Line Loads Plan

Live (Unreducible) Loading: Line Loads; Line Load Icons; Line Load Values; User Notes; User Lines; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Scale = 1:380



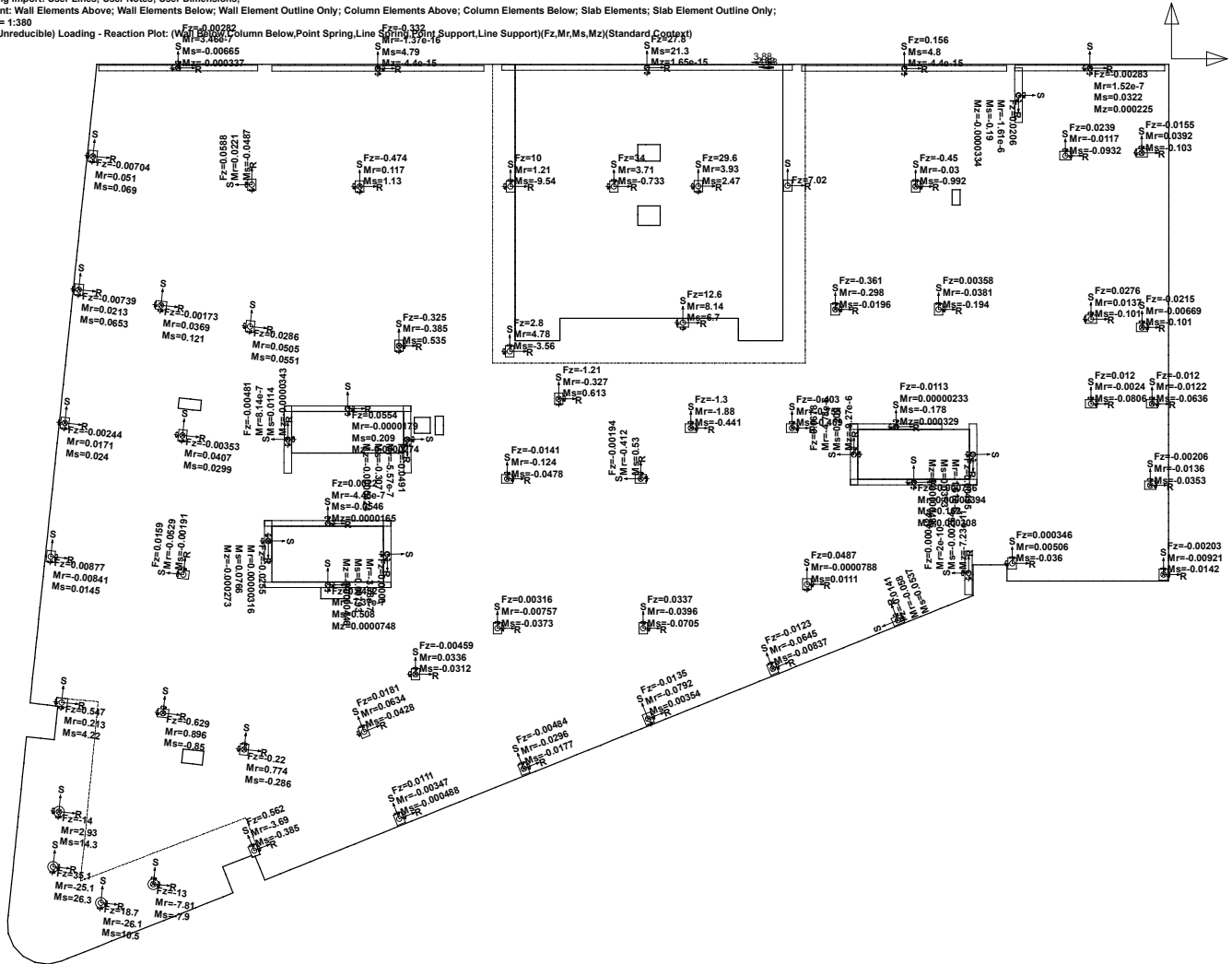
Live (Unreducible) Loading: Area Loads Plan

Live (Unreducible) Loading: User Lines; User Notes; User Dimensions; Area Loads; Area Load Icons; Area Load Values;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



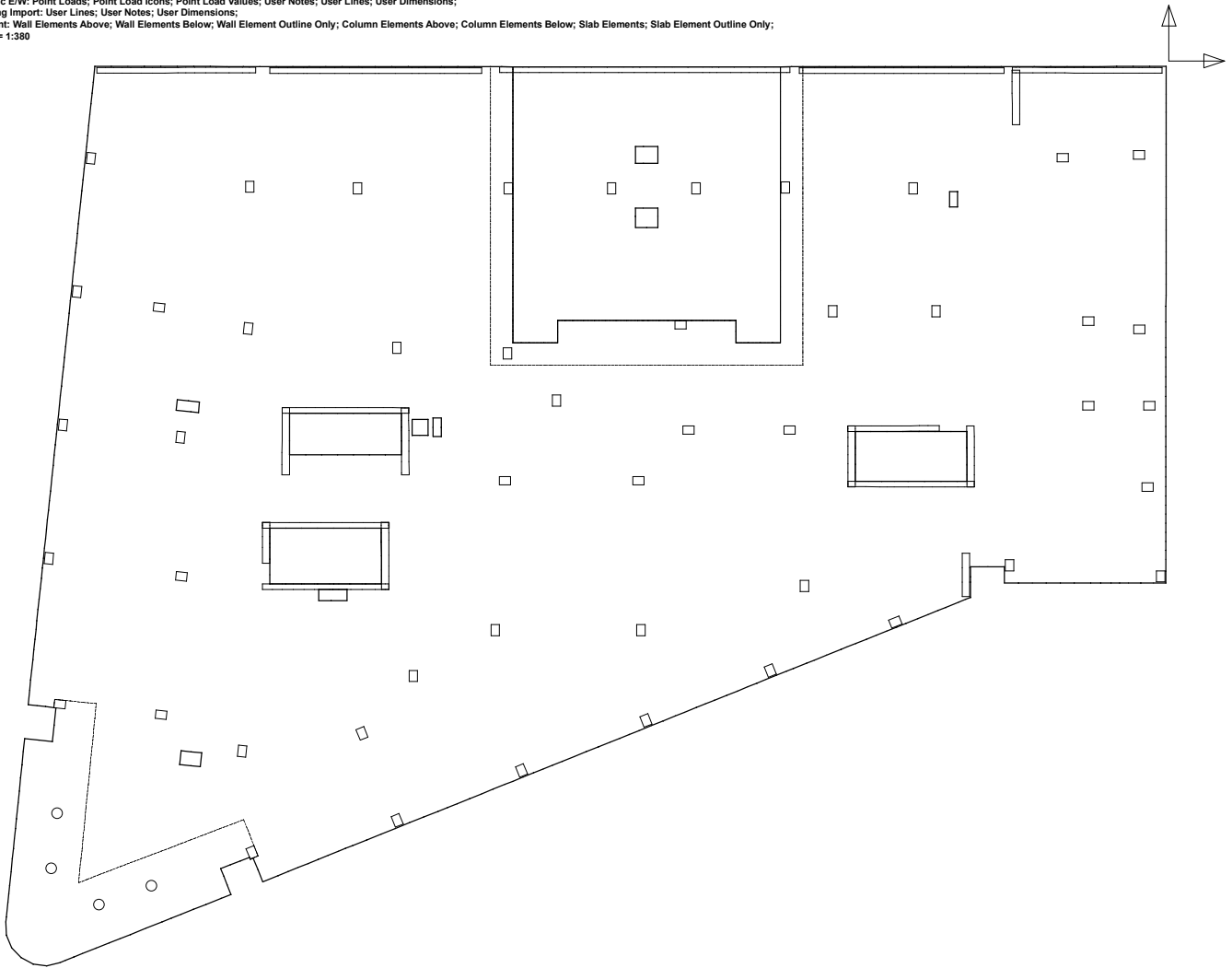
Live (Unreducible) Loading: Std Reactions Plan

Live (Unreducible) Loading: Point Load Icons; Point Load Values; Line Load Icons; Line Load Values; Area Load Icons; Area Load Values; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:390
 Live (Unreducible) Loading - Reaction Plot: (Wall,Column,Point Spring,Line Spring,Support,Line Support)(Fz,Mr,Mz)(Standard,Context)



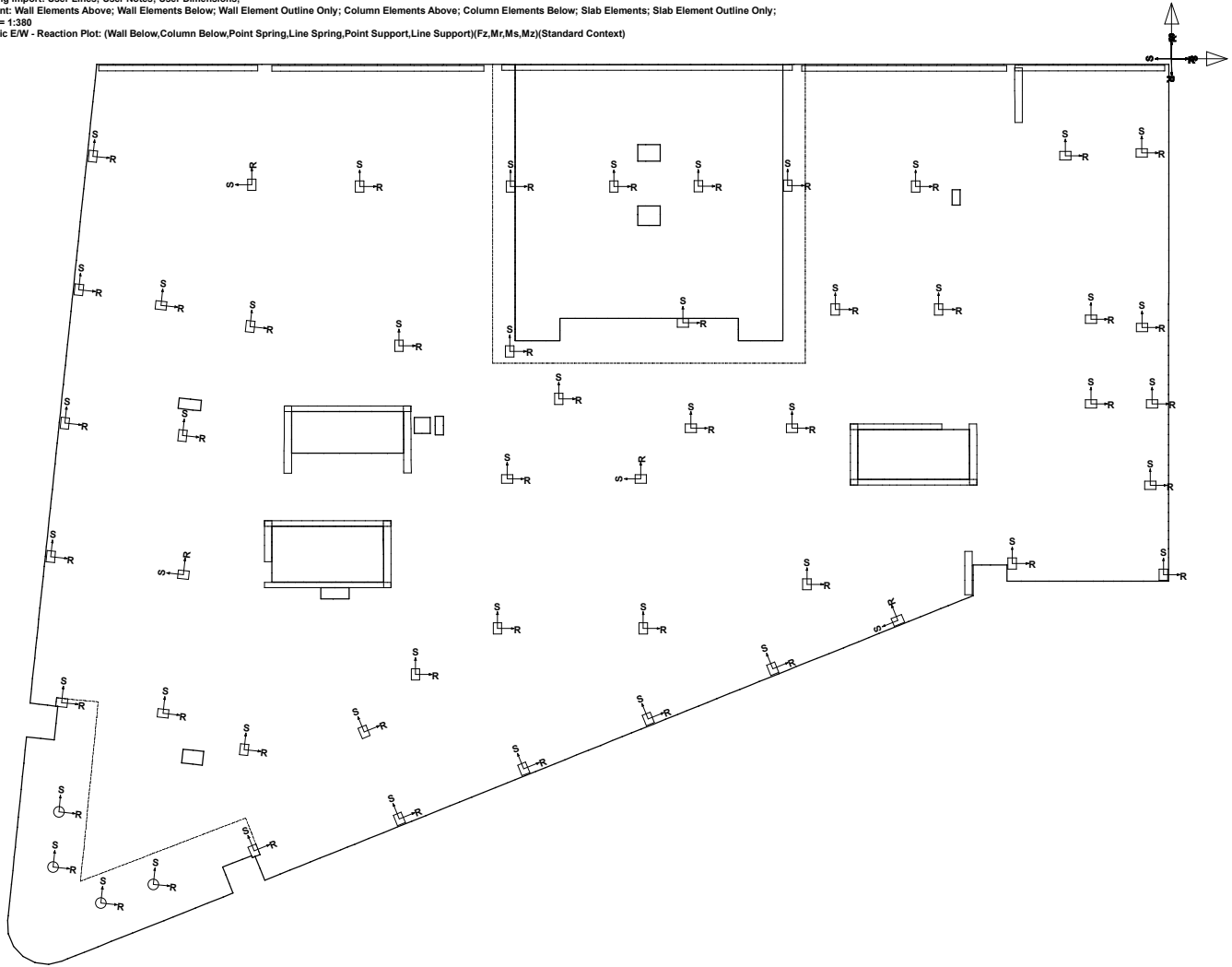
Seismic E/W: Point Loads Plan

Seismic E/W: Point Loads; Point Load Icons; Point Load Values; User Notes; User Lines; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Scale = 1:380



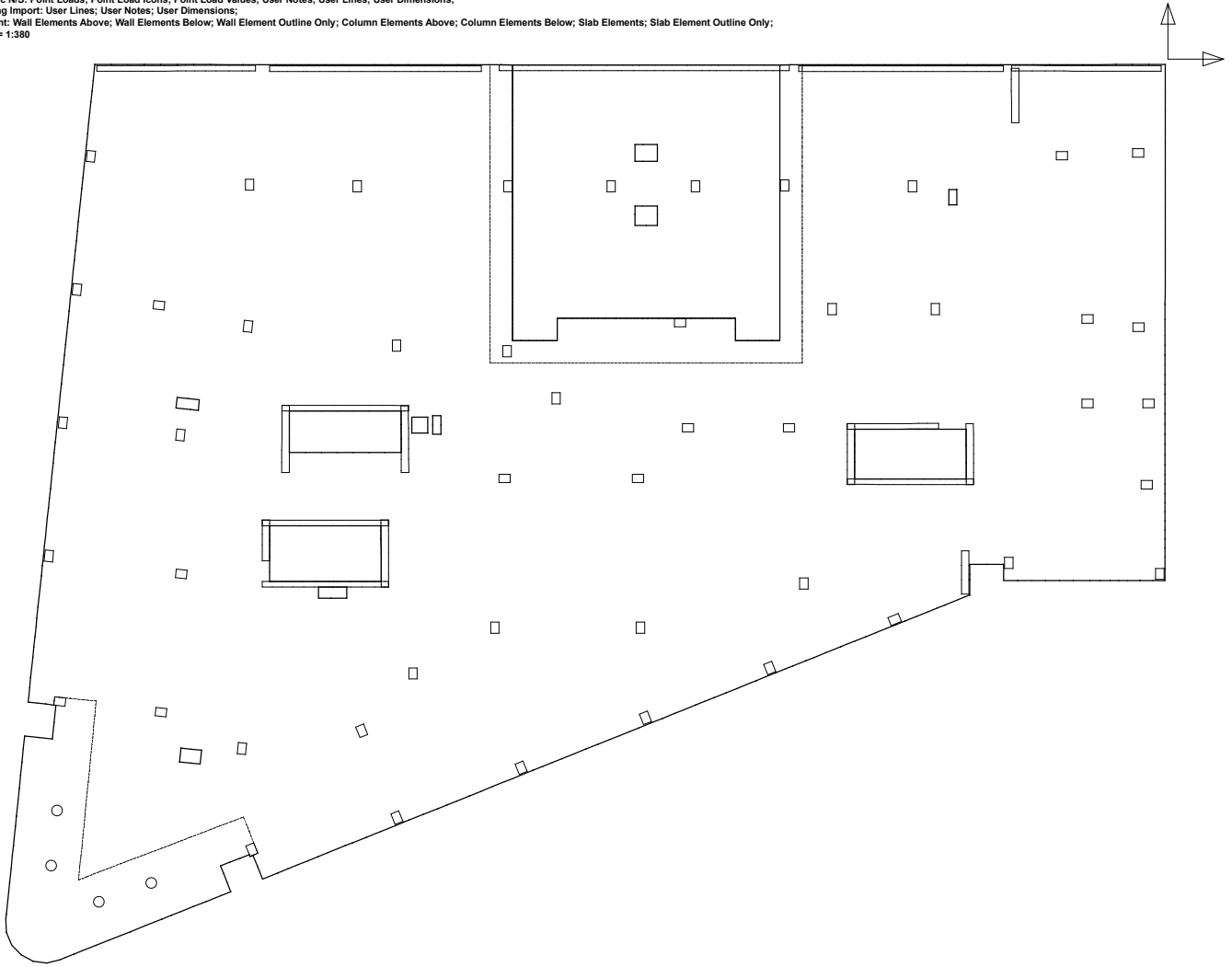
Seismic E/W: Std Reactions Plan

Seismic E/W: Point Load Icons; Point Load Values; Line Load Icons; Line Load Values; Area Load Icons; Area Load Values; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380
 Seismic E/W - Reaction Plot: (Wall Below,Column Below,Point Spring,Line Spring,Point Support,Line Support)(Fz,Mr,Mz)(Standard Context)



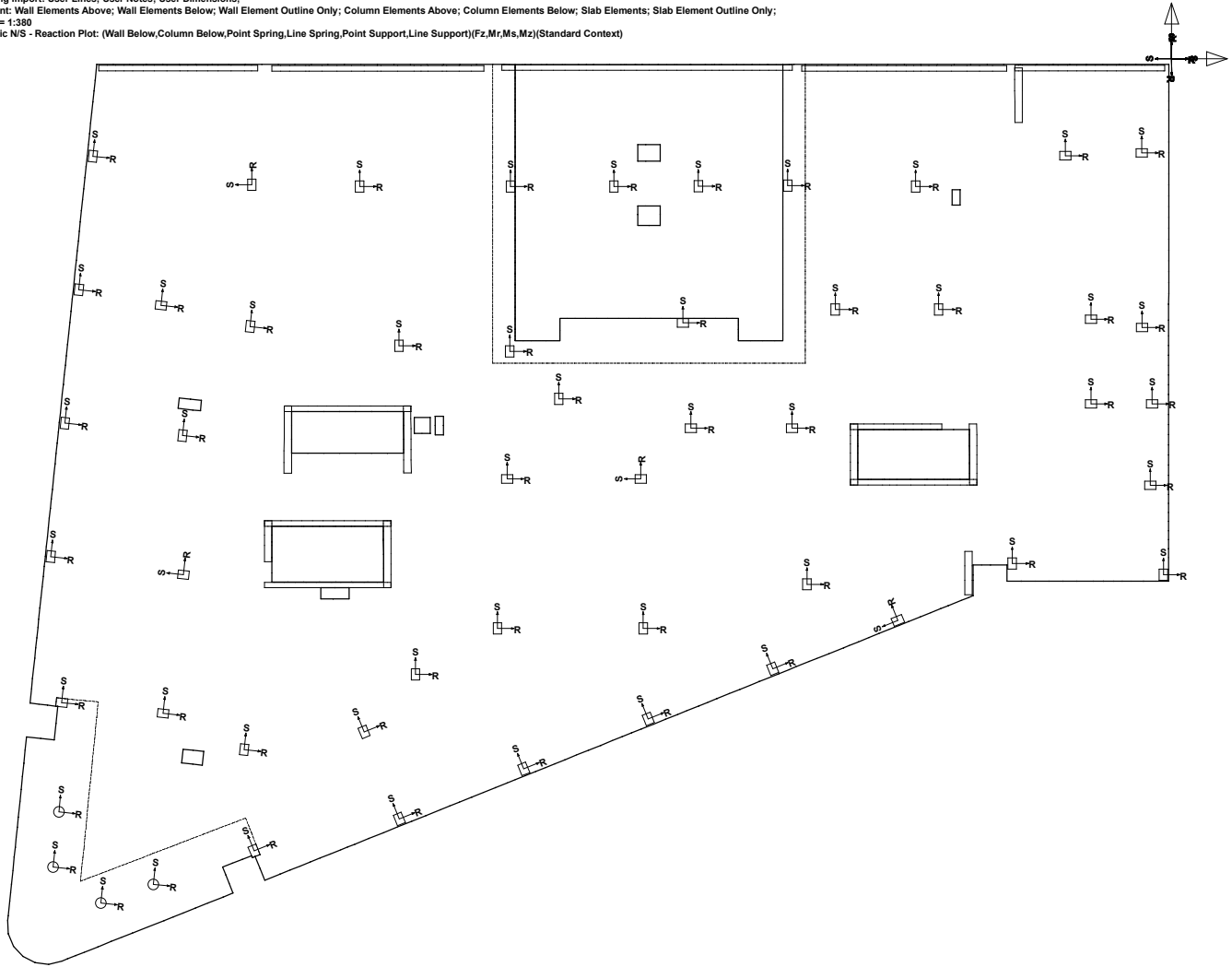
Seismic N/S: Point Loads Plan

Seismic N/S: Point Loads; Point Load Icons; Point Load Values; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



Seismic N/S: Std Reactions Plan

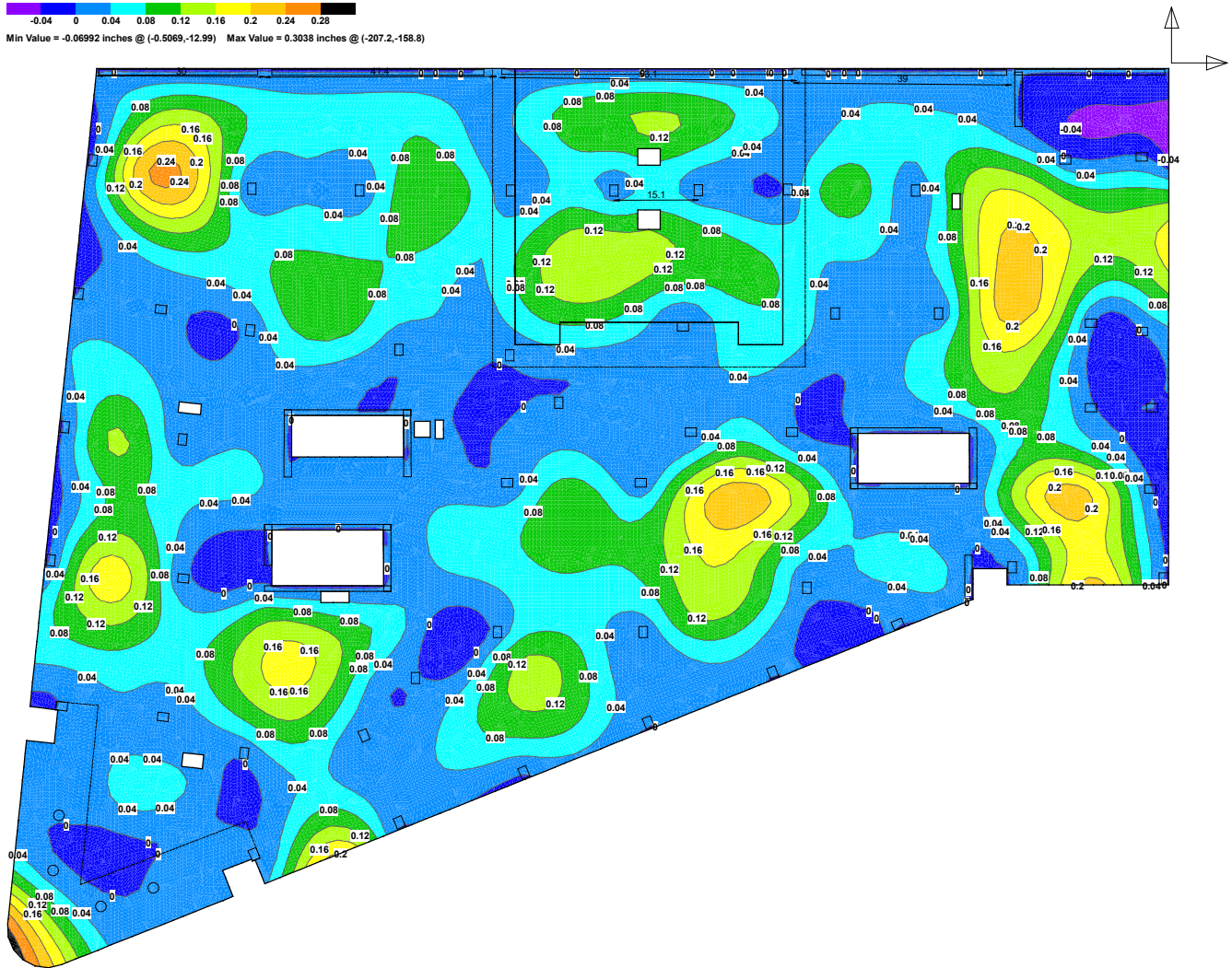
Seismic N/S: Point Load Icons; Point Load Values; Line Load Icons; Line Load Values; Area Load Icons; Area Load Values; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:300
 Seismic N/S - Reaction Plot: (Wall Below,Column Below,Point Spring,Line Spring,Point Support,Line Support)(Fz,Mr,Mz)(Standard Context)



Service LC: D + L: Max Deflection Plan

Service LC: D + L: User Lines; User Notes; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:380
Service LC: D + L - Vertical Deflection Plot (Maximum Values)

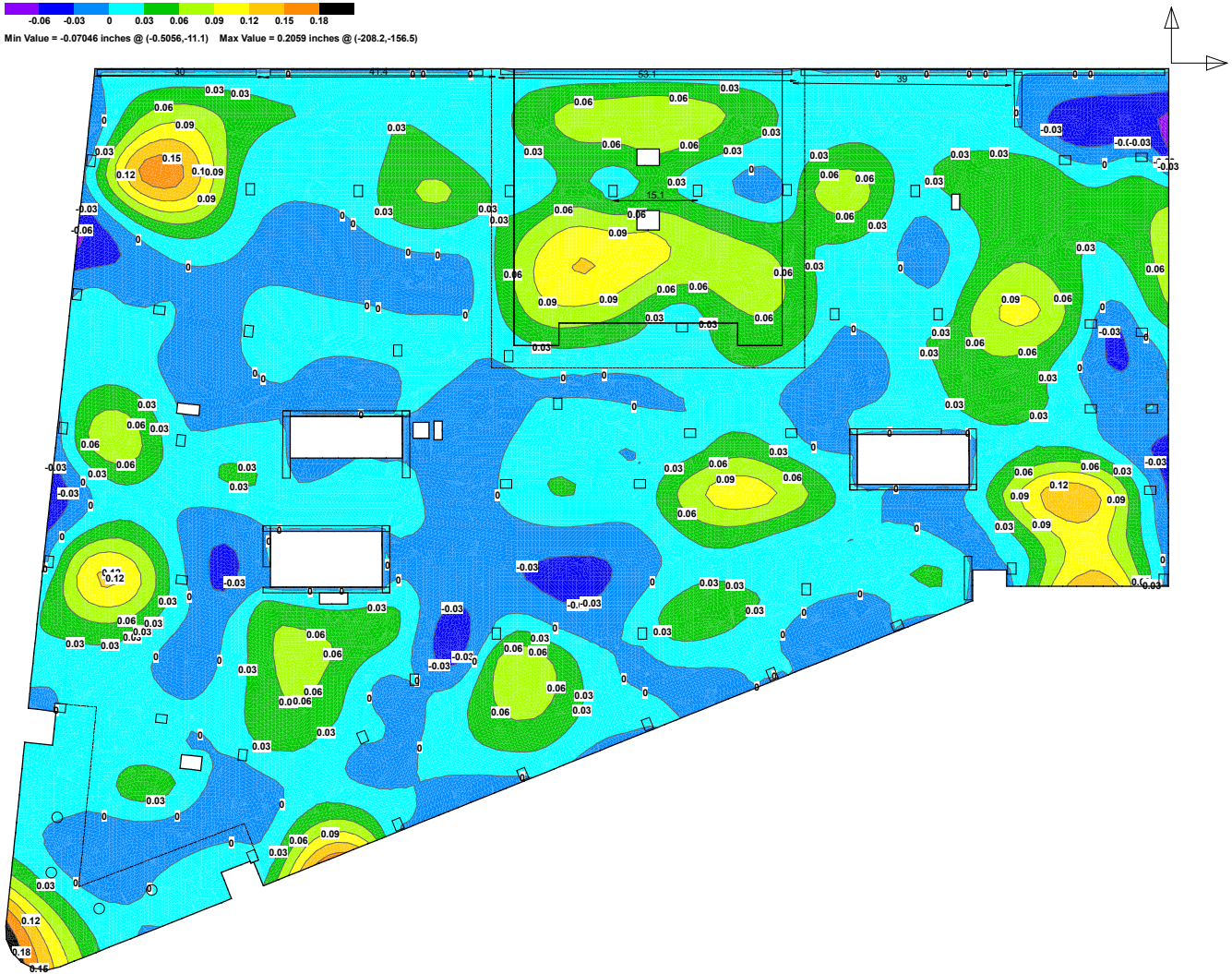
Min Value = -0.06992 inches @ (-0.5069,-12.99) Max Value = 0.3038 inches @ (-207.2,-158.8)



Service LC: D + L: Min Deflection Plan

Service LC: D + L: User Lines; User Notes; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:380
Service LC: D + L - Vertical Deflection Plot (Minimum Values)

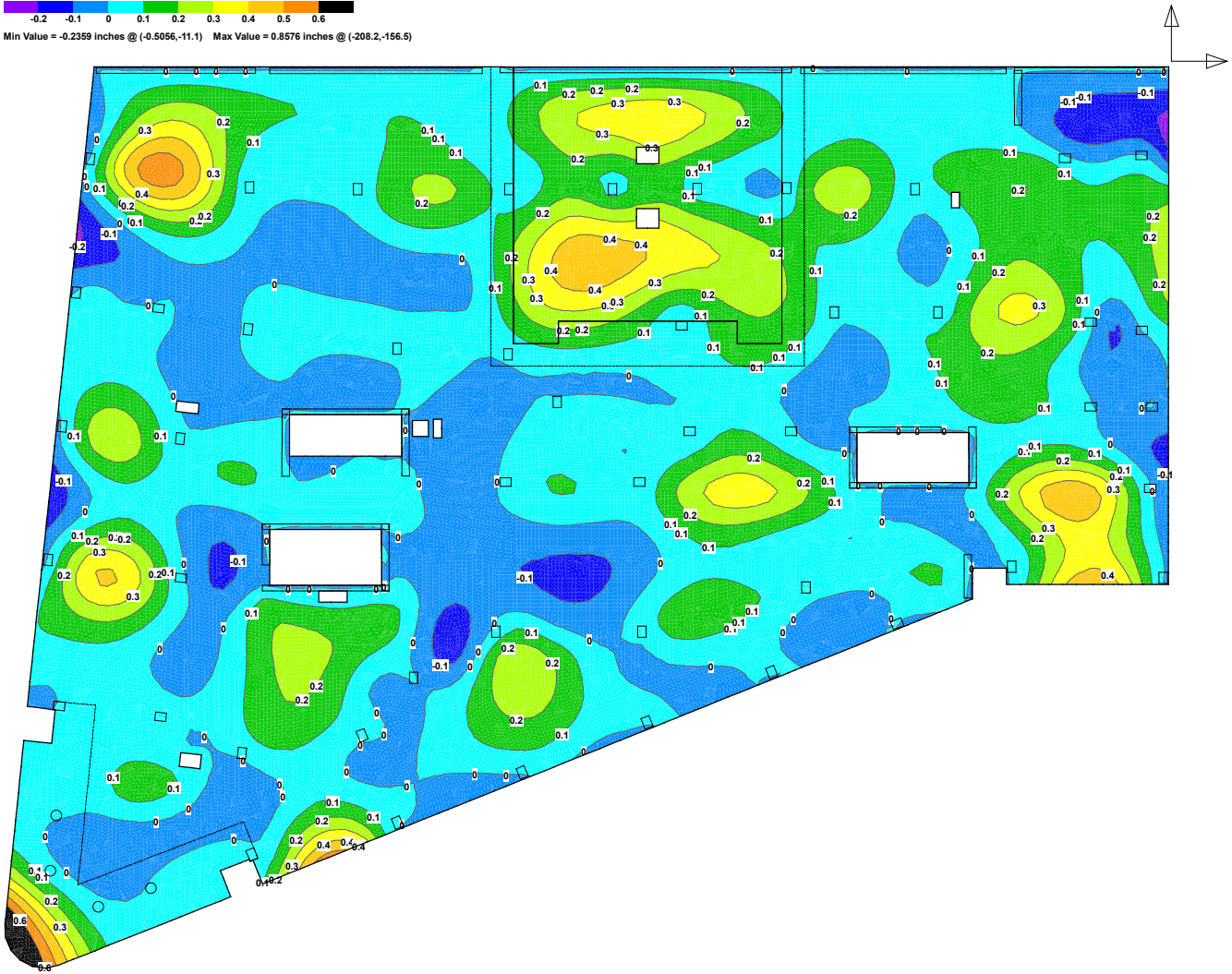
-0.06 -0.03 0 0.03 0.06 0.09 0.12 0.15 0.18
Min Value = -0.07046 inches @ (-0.5056,-11.1) Max Value = 0.2059 inches @ (-208.2,-156.5)



Long Term deflection: Max Deflection Plan

Long Term deflection: User Lines; User Notes; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:390
Long Term deflection - Vertical Deflection Plot (Maximum Values)

Min Value = -0.2359 inches @ (-0.5056,-11.1) Max Value = 0.8576 inches @ (-208.2,-156.5)



Design Strip: Latitude SSs Table

Name	Set	Location feet	Skew degrees	At Support 1	At Support 2	Support Width 1 inches
1-1	latitude	(-207.2,-144.6)(-200.1,-144.6)		false	true	3.087
2-1	latitude	(-206,-133.9)(-199.1,-142.7)		false	true	0
3-1	latitude	(-203.9,-114.5)(-199.6,-115)		false	true	0
4-1	latitude	(-208.4,-158)(-191.6,-152.46)		false	true	23.41
4-2	latitude	(-191.6,-151)(-182.2,-147.51)		true	true	21.1
4-3	latitude	(-182.2,-147.7)(-164.4,-141.34)		true	true	21.03
4-4	latitude	(-164.4,-141.7)(-138.2,-136)		true	true	22.97
4-5	latitude	(-138.2,-136)(-115.9,-127)		true	true	18.16
4-6	latitude	(-115.9,-127)(-93.65,-118.1)		true	true	18.16
4-7	latitude	(-93.65,-118.1)(-71.38,-109.1)		true	true	18.16
4-8	latitude	(-71.38,-109.1)(-49.11,-100.2)		true	true	18.16
4-9	latitude	(-49.11,-100.2)(-36.21,-95.17)		true	true	24.16
5-1	latitude	(-198.6,-115.2)(-180.5,-117.1)		true	true	24.16
5-2	latitude	(-180.5,-117.1)(-166,-123.67)		true	true	25.41
5-3	latitude	(-166,-123.6)(-144.5,-128.448)		true	true	18.75
5-4	latitude	(-144.5,-120.4)(-135.3,-120.67)		true	true	20.22
5-5	latitude	(-135.3,-110.1)(-120.6,-101.23)		true	true	20.78
5-6	latitude	(-120.6,-101.9)(-94.55,-100.93-6)		true	true	18.16
5-7	latitude	(-94.55,-101.9)(-65.26,-95.11)		true	true	18.8
5-8	latitude	(-65.26,-94)(-36.27,-89.09)		true	true	18.4
5-9	latitude	(-36.27,-89.19)(-28.53,-90.28)		true	true	14.77
5-10	latitude	(-28.53,-90.28)(-1.302,-92.45)		true	true	18.21
6-1	latitude	(-200.8,-89.04)(-176.8,-92.28)		true	true	24.84
6-2	latitude	(-176.8,-92.28)(-161.7,-94.89)		true	true	24.16
7-1	latitude	(-195.5,-41.31)(-180.7,-44.59)		true	true	18.27
7-2	latitude	(-180.7,-44.59)(-164.9,-47.89)		true	true	18.49
7-3	latitude	(-164.9,-47.89)(-138.3,-51.35)		true	true	18.17
7-4	latitude	(-138.3,-51.35)(-118.4,-52.35)		true	true	18.18
7-5	latitude	(-118.4,-52.35)(-87.45,-47.25)		true	true	18.4
7-6	latitude	(-87.45,-47.25)(-60.2,-44.83)		true	true	24.25
7-7	latitude	(-60.2,-44.83)(-41.7,-44.83)		true	true	18.16
7-8	latitude	(-41.7,-44.83)(-14.45,-46.58)		true	true	18.19
7-9	latitude	(-14.45,-46.58)(-5.313,-47.92)		true	true	24.41
7-10	latitude	(-5.313,-47.92)(-0.7549,-43.22)		true	false	24.17
8-1	latitude	(-198,-65.18)(-177,-67.39)		true	true	18.16
8-2	latitude	(-177,-67.39)(-158.2,-71.79)		true	true	18.55
9-1	latitude	(-193,-17.44)(-164.2,-22.76)		true	true	18.21
9-2	latitude	(-164.2,-22.76)(-145.3,-22.83)		true	true	9.142
9-3	latitude	(-145.3,-22.83)(-121.5,-22.85)		true	false	18.16
10-1	latitude	(-140.2,-94.08)(-120.6,-107.9)		true	true	14.97
11-1	latitude	(-136.6,-73.6)(-118.9,-75.16)		true	true	13.58
11-2	latitude	(-118.9,-75.16)(-94.99,-75.16)		true	true	24.16
11-3	latitude	(-94.99,-75.16)(-56.84,-75.24)		true	true	24.16
12-1	latitude	(-136.7,-62.49)(-109.7,-60.86)		true	true	13.4
12-2	latitude	(-109.7,-60.83)(-86.02,-66.58)		true	true	18.6
12-3	latitude	(-86.02,-66.08)(-67.92,-66.08-6)		true	true	24.16

Design Strip: Latitude SSs Table (2)

<i>Support Width 1</i>	<i>Support Width 2</i> <i>inches</i>	<i>Support Trans. Width 1</i> <i>inches</i>	<i>Support Trans. Width 2</i> <i>inches</i>	<i>Auto-Support</i>	<i>Min Divisions</i>	<i>Max Division Spacing</i> <i>feet</i>
	21.28	0	21.12	true	4	2.5
	20.95	0	20.79	true	4	2.5
	0	0	0	true	4	2.5
	21.28	0	21.12	true	4	2.5
	21.1	20.94	20.94	true	4	2.5
	13.69	20.87	24.05	true	4	2.5
	18.41	24.34	24.34	true	4	2.5
	18.16	24	24	true	4	2.5
	18.16	24	24	true	4	2.5
	18.16	24	24	true	4	2.5
	24.15	24	18	true	4	2.5
	20.49	18	35.28	true	4	2.5
	24.16	18	18	true	4	2.5
	19.1	18.94	25.26	true	4	2.5
	18.67	24.78	24.68	true	4	2.5
	27.17	26.75	24.14	true	4	2.5
	20.78	27.5	27.5	true	4	2.5
	18.16	24	24	true	4	2.5
	18.8	24.86	24.86	true	4	2.5
	17.92	24.33	57.18	true	4	2.5
	18.33	75.88	24.24	true	4	2.5
	22.23	24.08	24.08	true	4	2.5
	24.17	24.01	18	true	4	2.5
	16.08	18.01	12.09	true	4	2.5
	30.1	24.15	18.11	true	4	2.5
	18.25	18.09	24.12	true	4	2.5
	18.31	24	24.2	true	4	2.5
	18.18	24.03	24.03	true	4	2.5
	24.48	24.32	18.24	true	4	2.5
	18.23	18.07	24.09	true	4	2.5
	18.16	24	24	true	4	2.5
	24.21	24.05	18.04	true	4	2.5
	24.41	18.19	18.19	true	4	2.5
	0	18.01	0	true	4	2.5
	18.16	24	24	true	4	2.5
	16.66	24.53	34.68	true	4	2.5
	27.63	24.07	24.41	true	4	2.5
	18.16	24	24	true	4	2.5
	0	24	0	true	4	2.5
	19.54	25.27	25.84	true	4	2.5
	24.25	77.59	18.07	true	4	2.5
	24.16	18	18	true	4	2.5
	16.17	18	130.9	true	4	2.5
	18.19	118	24.05	true	4	2.5
	24.74	24.58	18.44	true	4	2.5
	24.16	18	18	true	4	2.5

Design Strip: Latitude SSs Table (4)

[illegible]

Design Strip: Latitude SSs Table (5)

[illegible]

Design Strip: Latitude SSs Table - 54

Design Strip: Latitude SSs Table - 55

Design Strip: Latitude SSs Table (8)

Min B.Bar MS Shear Legs[illegible]

Design Strip: Latitude SSs Table (9)

<i>Name</i>	<i>Set</i>	<i>Location feet</i>	<i>Skew degrees</i>	<i>At Support 1</i>	<i>At Support 2</i>	<i>Support Width 1 inches</i>
12-4	latitude	(-67.92,-66.08)(-56.72,-65.52)	-65.52	true	true	24.17
13-1	latitude	(-117.5,-22.85)(-99.8,-22.83)	-22.83	true	true	0
13-2	latitude	(-99.8,-22.83)(-84.69,-22.8067)	-22.8067	true	true	18.16
13-3	latitude	(-84.69,-22.81)(-68.7,-22.67)	-22.67	true	true	18.16
13-4	latitude	(-68.7,-22.67)(-65.54,-22.69)	-22.69	true	false	18.16
13-4(2)	latitude	(-65.54,-22.69)(-45.8,-22.83)	-22.83	false	true	0
13-5	latitude	(-45.8,-22.83)(-19.02,-17.348)	-17.348	true	true	18.53
13-6	latitude	(-19.02,-17.34)(-5.366,-16.88)	-16.88	true	true	24.17
13-7	latitude	(-5.366,-16.83)(-0.7621,-16.76)	-16.76	true	false	24.22
14-1	latitude	(-35.54,-65.89)(-14.45,-61.73)	-61.73	true	true	16.35
14-2	latitude	(-14.45,-61.73)(-3.5,-61.073)	-61.073	true	true	24.16
14-3	latitude	(-3.5,-61.73)(-0.8442,-61.81)	-61.81	true	false	24.17
15-1	latitude	(-35.53,-75.78)(-3.5,-76.3218)	-76.3218	true	true	17.16
15-2	latitude	(-3.5,-76.3)(-0.9865,-76.2165)	-76.2165	true	false	16.03

Design Strip: Latitude SSs Table (10)

<i>Support Width 1</i>	<i>Support Width 2 inches</i>	<i>Support Trans. Width 1 inches</i>	<i>Support Trans. Width 2 inches</i>	<i>Auto-Support</i>	<i>Min Divisions</i>	<i>Max Division Spacing feet</i>
19.15	18.01	131	131	true	4	2.5
18.16	0	24	24	true	4	2.5
18.16	24	24	24	true	4	2.5
18.16	24	24	24	true	4	2.5
0	24	0	0	true	4	2.5
18.16	0	24	24	true	4	2.5
24.66	24.5	18.37	18.37	true	4	2.5
24.12	18.01	18.01	18.01	true	4	2.5
0	18	0	0	true	4	2.5
24.62	48.78	18.35	18.35	true	4	2.5
24.16	18	18	18	true	4	2.5
0	18.01	0	0	true	4	2.5
32.29	131	18	18	true	4	2.5
0	18	0	0	true	4	2.5

Design Strip: Latitude SSs Table (11)

on Spacing

<i>Design For Axial</i>	<i>Environment</i>	<i>Design As PT</i>	<i>Maximize Integrated V:</i>	<i>Use Spec LLR Params</i>	<i>Spec. LLR Levels</i>	<i>Spec. Trib. Area ft²</i>
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	true	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0

Design Strip: Latitude SSs Table (12)

<i>Spec. Infl. Area ft²</i>	<i>Max LLR %</i>	<i>Span Width</i>	<i>Col Strip Width</i>	<i>Lock Strips</i>	<i>Design CS for CS</i>	<i>-CS Auto Trim</i>	<i>CS Section Slope</i>
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	manual	manual	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	manual	manual	false	false	none	0.25
0	40	manual	manual	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25

Design Strip: Latitude SSs Table (13)

Section Slope	CS Top Bar	CS Bot Bar	CS Shear Bar	CS Top Cover inches	CS Bot Cover inches	CS Shear d calc	CS Torsion Design	CS System
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#5	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#5	#4	1.5	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#5	#4	1.5	1	All Tension Reinforcement		two-way slab
	#4	#4	#4	1.5	1	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab

Design Strip: Latitude SSs Table (14)

<i>CS Min. Bar Loc.</i>	<i>CS Min T.Bar</i>	<i>CS Min B.Bar</i>	<i>CS Shear Legs</i>	<i>MS Same As CS</i>	<i>MS Auto Trim</i>	<i>MS Section Slope</i>	<i>MS Top Bar</i>	<i>MS Bot Bar</i>
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	true	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	true	none	0.25	#5	#4
stress	0	0	2	true	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4

Design Strip: Latitude SSs Table (15)

Bot Bar	MS Shear Bar	MS Top Cover inches	MS Bot Cover inches	MS Shear d calc	MS Torsion Design	MS System	MS Min. Bar Loc.	MS Min T.Bar	MS Min B.Bar
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0

Design Strip: Latitude SSs Table (16)

<i>Min B.Bar</i>	<u><i>MS Shear Legs</i></u>
2	
2	
2	
2	
2	
2	
2	
2	
2	
2	
2	
2	
2	
2	

Design Strip: Longitude SSs Table

Name	Set	Location feet	Skew degrees	At Support 1	At Support 2	Support Width 1 inches
16-1	longitude	(-201.7,-162)(-200.1,-154.05)	4.081	false	true	6.268
16-2	longitude	(-200.1,-144.6)(-199.1,-134.7)	1.917	true	true	20.96
16-3	longitude	(-199.1,-134.7)(-198.6,-119.2)	1.492	true	true	21.17
16-4	longitude	(-198.6,-115.2)(-200.6,-89.265)	89.265	true	true	18.45
16-5	longitude	(-200.6,-89.05)(-198,-65.18)	65.18	true	true	24.16
16-6	longitude	(-198,-65.18)(-195.5,-41.31)	41.31	true	true	24.16
16-7	longitude	(-195.5,-41.31)(-193,-17.44)	17.44	true	true	24.16
16-8	longitude	(-193,-17.44)(-191.7,-2.5073)	2.5073	true	true	24.16
17-1	longitude	(-195.3,-159.9)(-191.6,-118.19)	118.19	false	true	0
17-2	longitude	(-191.6,-151)(-180.5,-92.28)	92.28	true	true	21.03
17-3	longitude	(-180.5,-117.1)(-176.8,-92.28)	92.28	true	true	18.17
17-4	longitude	(-176.8,-92.28)(-177,-67.39)	67.39	true	true	18.27
17-5	longitude	(-177,-67.39)(-164.9,-47.89)	47.89	true	true	26.82
17-6	longitude	(-164.9,-47.89)(-164.6,-22.53)	22.53	true	true	24.26
17-7	longitude	(-164.6,-22.53)(-164.9,-125.604)	125.604	true	true	24.16
18-1	longitude	(-164.2,-141.7)(-166,-123.6)	123.6	true	true	25.17
18-2	longitude	(-166,-123.6)(-161.6,-94.26)	94.26	true	true	24.17
19-1	longitude	(-148.6,-94.26)(-144.5,-73.69)	73.69	true	true	9.262
19-2	longitude	(-144.5,-120.4)(-138.2,-102.83)	102.83	true	true	24.15
20-1	longitude	(-141.5,-1.583)(-145.3,-22.83)	22.83	true	true	15.72
20-2	longitude	(-145.3,-22.83)(-138.3,-51.35)	51.35	true	true	24.88
20-3	longitude	(-138.3,-51.35)(-136.9,-73.59)	73.59	true	true	24.34
21-1	longitude	(-140.5,-83.22)(-136.7,-110.93)	110.93	true	true	15.62
22-1	longitude	(-140.5,-94.09)(-135.3,-110.1)	110.1	true	true	13.76
22-2	longitude	(-135.3,-110.1)(-138.2,-118.6)	118.6	true	true	24.31
23-1	longitude	(-118.6,-1.583)(-118.3,-52.35)	52.35	true	true	11.77
23-2	longitude	(-118.3,-22.85)(-118.4,-54.47)	54.47	true	true	23.66
23-3	longitude	(-118.4,-52.35)(-118.5,-75.16)	75.16	true	false	24.16
23-3(2)	longitude	(-118.5,-54.47)(-118.9,-101.9)	101.9	false	true	0
23-4	longitude	(-118.9,-75.16)(-120.6,-115.9)	115.9	true	true	18.2
23-5	longitude	(-120.6,-101.9)(-115.9,-127.64)	127.64	true	true	24.58
24-1	longitude	(-99.8,-1.583)(-99.8,-22.83)	22.83	true	true	11.77
24-2	longitude	(-99.8,-22.83)(-87.59,-46.64)	46.64	true	true	27.17
25-1	longitude	(-94.99,-74.76)(-94.55,-101.9)	101.9	true	true	27.64
25-2	longitude	(-94.55,-101.9)(-93.65,-129.1)	129.1	true	true	24.19
26-1	longitude	(-87.45,-47.25)(-86.87,-54.61)	54.61	true	false	18.21
26-1(2)	longitude	(-86.87,-54.61)(-86.02,-65.38)	65.38	false	true	0
27-1	longitude	(-87.61,-46.44)(-84.69,-22.81)	22.81	true	true	0
27-2	longitude	(-84.69,-22.81)(-84.68,-1.5555)	1.5555	true	true	24.16
28-1	longitude	(-68.45,-1.609)(-68.7,-22.67)	22.67	true	true	11.15
28-2	longitude	(-68.7,-22.67)(-60.2,-44.83)	44.83	true	true	25.86
28-3	longitude	(-60.2,-44.83)(-56.64,-92.793)	92.793	true	true	24.5
29-1	longitude	(-71.38,-109.1)(-65.26,-134.03)	134.03	true	true	26.06
29-2	longitude	(-65.26,-94)(-67.92,-66.034)	66.034	true	true	24.27
30-1	longitude	(-56.76,-75.73)(-49.11,-100.35)	100.35	true	true	13.09
31-1	longitude	(-47.52,-1.583)(-45.8,-24.624)	24.624	true	true	15.5

Design Strip: Longitude SSs Table (2)

<i>Support Width 1</i>	<i>Support Width 2</i> <i>inches</i>	<i>Support Trans. Width 1</i> <i>inches</i>	<i>Support Trans. Width 2</i> <i>inches</i>	<i>Auto-Support</i>	<i>Min Divisions</i>	<i>Max Division Spacing</i> <i>feet</i>
	20.99	0	20.83	true	4	2.5
	20.96	20.8	20.8	true	4	2.5
	18.21	21.02	24.07	true	4	2.5
	24.55	24.39	18.29	true	4	2.5
	24.16	18	18	true	4	2.5
	24.16	18	18	true	4	2.5
	24.16	18	18	true	4	2.5
	4.355	18	27.26	true	4	2.5
	21.26	0	21.1	true	4	2.5
	18.57	20.87	24.55	true	4	2.5
	18.17	24.02	24.02	true	4	2.5
	24.31	24.15	18.11	true	4	2.5
	26.82	20.01	20.01	true	4	2.5
	24.16	18.08	18	true	4	2.5
	0.1654	18	16.18	true	4	2.5
	24.65	18.76	18.38	true	4	2.5
	14.12	18.02	55.98	true	4	2.5
	24.78	76.73	18.47	true	4	2.5
	24.15	18	18	true	4	2.5
	24.55	67.4	18.29	true	4	2.5
	24.88	18.54	18.54	true	4	2.5
	12.76	18.14	56.07	true	4	2.5
	10.87	29.95	17.29	true	4	2.5
	25.38	31.43	18.92	true	4	2.5
	27.42	18.11	20.45	true	4	2.5
	24.66	542.7	18	true	4	2.5
	24.16	18	18	true	4	2.5
	0	18	0	true	4	2.5
	18.16	0	24	true	4	2.5
	24.21	24.05	18.04	true	4	2.5
	24.63	18.31	18.36	true	4	2.5
	24.16	624.1	18	true	4	2.5
	0	20.26	0	true	4	2.5
	24.16	24	18	true	4	2.5
	25.51	18.03	19.01	true	4	2.5
	0	24.07	0	true	4	2.5
	18.21	0	24.07	true	4	2.5
	24.34	0	18.14	true	4	2.5
	12.43	18	624.1	true	4	2.5
	24.16	554.9	18	true	4	2.5
	25.86	19.28	19.28	true	4	2.5
	11.16	18.26	43.11	true	4	2.5
	26.05	25.03	19.42	true	4	2.5
	18.24	18.08	24.11	true	4	2.5
	10.92	28.99	24.08	true	4	2.5
	24.24	148.8	18.06	true	4	2.5

Design Strip: Longitude SSs Table (4)

[illegible]

Design Strip: Longitude SSs Table - 69

Design Strip: Longitude SSs Table - 70

Design Strip: Longitude SSs Table - 71

MS Shear Legs

Design Strip: Longitude SSs Table - 72

Design Strip: Longitude SSs Table (9)

<i>Name</i>	<i>Set</i>	<i>Location feet</i>	<i>Skew degrees</i>	<i>At Support 1</i>	<i>At Support 2</i>	<i>Support Width 1 inches</i>
31-2	longitude	(-45.8,-22.83)(-41.7,-44.83)	57	true	true	24.57
31-3	longitude	(-41.7,-44.83)(-35.45,-61.02)	51	true	true	25.19
32-1	longitude	(-36.1,-88.79)(-35.48,-75.72)	22	true	true	16.07
33-1	longitude	(-28.53,-90.28)(-14.45,-81.26)	73	true	true	26.92
33-2	longitude	(-14.45,-61.73)(-14.45,-46.58)	58	true	true	18.16
33-3	longitude	(-14.45,-46.58)(-19.02,-17.34)	89	true	true	18.38
33-4	longitude	(-19.02,-17.34)(-22,-1.85)	89	true	true	18.49
34-1	longitude	(-5.387,-2.098)(-5.364,-17.54)	99	true	true	1.85
34-2	longitude	(-5.364,-17.54)(-5.313,-47.92)	74	true	true	1.157
34-3	longitude	(-5.313,-47.92)(-3.5,-61.73)	74	true	true	22.09
34-4	longitude	(-3.5,-61.73)(-3.5,-76.3)	0	true	true	18.16
34-5	longitude	(-3.5,-76.3)(-1.302,-92.45)	93	true	true	18.32

Design Strip: Longitude SSs Table (10)

t Width 1

<i>Support Width 2 inches</i>	<i>Support Trans. Width 1 inches</i>	<i>Support Trans. Width 2 inches</i>	<i>Auto-Support</i>	<i>Min Divisions</i>	<i>Max Division Spacing feet</i>
24.57	18.31	18.31	true	4	2.5
14.73	18.77	16.67	true	4	2.5
8.553	16.02	173.8	true	4	2.5
20.23	20.07	26.76	true	4	2.5
18.16	24	24	true	4	2.5
18.38	24.29	24.29	true	4	2.5
6.901	24.44	63.37	true	4	2.5
35.16	322	24	true	4	2.5
14.41	24	24	true	4	2.5
18.31	24.21	24.21	true	4	2.5
18.16	24	24	true	4	2.5
28.42	24.22	18.17	true	4	2.5

Design Strip: Longitude SSs Table (11)

on Spacing

<i>Design For Axial</i>	<i>Environment</i>	<i>Design As PT</i>	<i>Maximize Integrated V:</i>	<i>Use Spec LLR Params</i>	<i>Spec. LLR Levels</i>	<i>Spec. Trib. Area ft²</i>
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	true	false	1	0
true	normal	true	false	false	1	0

Design Strip: Longitude SSs Table (12)

<i>Spec. Infl. Area ft²</i>	<i>Max LLR %</i>	<i>Span Width</i>	<i>Col Strip Width</i>	<i>Lock Strips</i>	<i>Design CS for CS</i>	<i>-CS Auto Trim</i>	<i>CS Section Slope</i>
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25

Design Strip: Longitude SSs Table (13)

Section Slope	CS Top Bar	CS Bot Bar	CS Shear Bar	CS Top Cover inches	CS Bot Cover inches	CS Shear d calc	CS Torsion Design	CS System
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab

Design Strip: Longitude SSs Table (14)

<i>CS Min. Bar Loc.</i>	<i>CS Min T.Bar</i>	<i>CS Min B.Bar</i>	<i>CS Shear Legs</i>	<i>MS Same As CS</i>	<i>MS Auto Trim</i>	<i>MS Section Slope</i>	<i>MS Top Bar</i>	<i>MS Bot Bar</i>
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4

Design Strip: Longitude SSs Table (15)

Bot Bar	MS Shear Bar	MS Top Cover inches	MS Bot Cover inches	MS Shear d calc	MS Torsion Design	MS System	MS Min. Bar Loc.	MS Min T.Bar	MS Min B.Bar
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0

Design Strip: Longitude SSs Table (16)

<i>Min B.Bar</i>	<u><i>MS Shear Legs</i></u>
2	
2	
2	
2	
2	
2	
2	
2	
2	
2	
2	
2	

Design Strip: Latitude SSSs Table

<i>Name</i>	<i>Strip Type</i>	<i>Calc. Trib. Area ft²</i>	<i>Calc. Infl. Area ft²</i>	<i>Top Bar</i>	<i>Bottom Bar</i>	<i>Shear Bar</i>	<i>Top Cover inches</i>
1C-1	center	76.63	0	#5	#4	#4	1.5
2C-1	center	55.07	0	#5	#4	#4	1.5
3C-1	center	46.72	0	#5	#4	#4	1.5
4C-1	center	59.99	0	#5	#4	#4	1.5
4C-2	center	184.1	0	#5	#4	#4	1.5
4C-3	center	283.9	0	#5	#4	#4	1.5
4C-4	center	266.8	0	#5	#4	#4	1.5
4C-5	center	217.5	0	#5	#4	#4	1.5
4C-6	center	243	0	#5	#4	#4	1.5
4C-7	center	162.2	0	#5	#4	#4	1.5
4C-8	center	116	0	#5	#4	#4	1.5
4C-9	center	81.81	0	#5	#4	#4	1.5
5C-1	center	374.9	0	#5	#4	#4	1.5
5C-2	center	324.3	0	#5	#4	#4	1.5
5C-3	center	490.2	0	#5	#4	#4	1.5
5C-4	center	281	0	#5	#4	#4	1.5
5C-5	center	261.4	0	#5	#4	#4	1.5
5C-6	center	603.8	0	#5	#4	#4	1.5
5C-7	center	557.9	0	#5	#4	#4	1.5
5C-8	center	304.6	0	#5	#4	#4	1.5
5C-9	center	78.87	0	#5	#4	#4	1.5
5C-10	center	263.4	0	#5	#4	#4	1.5
6C-1	center	527.9	0	#5	#4	#4	1.5
6C-2	center	317.4	0	#5	#4	#4	1.5
7C-1	center	356.4	0	#5	#4	#4	1.5
7C-2	center	349.6	0	#5	#4	#4	1.5
7C-3	center	460.5	0	#5	#4	#4	1.5
7C-4	center	424.9	0	#5	#4	#4	1.5
7C-5	center	650.9	0	#5	#5	#4	1.5
7C-6	center	526.1	0	#5	#4	#4	1.5
7C-7	center	381.8	0	#5	#4	#4	1.5
7C-8	center	558.1	0	#5	#4	#4	1.5
7C-9	center	180.6	0	#5	#4	#4	1.5
7C-10	center	75.57	0	#5	#4	#4	1.5
8C-1	center	446.7	0	#5	#4	#4	1.5
8C-2	center	323	0	#5	#4	#4	1.5
9C-1	center	562.8	0	#5	#4	#4	1.5
9C-2	center	492.3	0	#5	#4	#4	1.5
9C-3	center	573	0	#5	#4	#4	1.5
10C-1	center	230.7	0	#5	#4	#4	1.5
11C-1	center	324.4	0	#5	#4	#4	1.5
11C-2	center	472.3	0	#5	#4	#4	1.5
11C-3	center	344.7	0	#5	#4	#4	1.5
12C-1	center	112.2	0	#5	#4	#4	1.5
12C-2	center	182.1	0	#5	#4	#4	1.5
12C-3	center	313.2	0	#5	#4	#4	1.5

Bot. Cover
inches

[illegible]

Design Strip: Latitude SSSs Table (3)

<i>Name</i>	<i>Strip Type</i>	<i>Calc. Trib. Area ft²</i>	<i>Calc. Infl. Area ft²</i>	<i>Top Bar</i>	<i>Bottom Bar</i>	<i>Shear Bar</i>	<i>Top Cover inches</i>
12C-4	center	175.6	0	#5	#4	#4	1.5
13C-1	center	433	0	#5	#5	#4	1.5
13C-2	center	229.5	0	#5	#5	#4	1.5
13C-3	center	340.2	0	#5	#5	#4	1.5
13C-4	center	83.57	0	#5	#5	#4	1.5
13C-4(2)	center	433.2	0	#4	#4	#4	1.5
13C-5	center	431.5	0	#5	#4	#4	1.5
13C-6	center	296.7	0	#5	#4	#4	1.5
13C-7	center	75.41	0	#5	#4	#4	1.5
14C-1	center	331.1	0	#5	#4	#4	1.5
14C-2	center	124.5	0	#5	#4	#4	1.5
14C-3	center	16.99	0	#5	#4	#4	1.5
15C-1	center	305.2	0	#5	#4	#4	1.5
15C-2	center	11.21	0	#5	#4	#4	1.5

Design Strip: Latitude SSSs Table (4)

Top Cover
inches

Bot. Cover
inches

<i>Inches</i>	<i>Torsion Design</i>	<i>System</i>	<i>Min Bar Loc.</i>	<i>Min T. Bar</i>	<i>Min B. Bar</i>	<i>Shear Legs</i>
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
1	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
1	none	two-way slab	stress	0	0	2
1	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2

Design Strip: Longitude SSSs Table

<i>Name</i>	<i>Strip Type</i>	<i>Calc. Trib. Area ft²</i>	<i>Calc. Infl. Area ft²</i>	<i>Top Bar</i>	<i>Bottom Bar</i>	<i>Shear Bar</i>	<i>Top Cover inches</i>
16C-1	center	118.3	0	#5	#4	#4	1.5
16C-2	center	138.8	0	#5	#4	#4	1.5
16C-3	center	275.2	0	#5	#4	#4	1.5
16C-4	center	340.5	0	#5	#4	#4	1.5
16C-5	center	247.4	0	#5	#4	#4	1.5
16C-6	center	59.09	0	#5	#4	#4	1.5
16C-7	center	335.4	0	#5	#4	#4	1.5
16C-8	center	202.4	0	#5	#4	#4	1.5
17C-1	center	128.9	0	#5	#4	#4	1.5
17C-2	center	197.8	0	#5	#4	#4	1.5
17C-3	center	460.9	0	#5	#4	#4	1.5
17C-4	center	603.6	0	#5	#4	#4	1.5
17C-5	center	429.7	0	#5	#4	#4	1.5
17C-6	center	463.3	0	#5	#4	#4	1.5
17C-7	center	463	0	#5	#4	#4	1.5
18C-1	center	385.1	0	#5	#4	#4	1.5
18C-2	center	383.5	0	#5	#4	#4	1.5
19C-1	center	249.6	0	#5	#4	#4	1.5
19C-2	center	260.2	0	#5	#4	#4	1.5
20C-1	center	411.7	0	#5	#4	#4	1.5
20C-2	center	547.5	0	#5	#4	#4	1.5
20C-3	center	206	0	#5	#4	#4	1.5
21C-1	center	173.7	0	#5	#4	#4	1.5
22C-1	center	237	0	#5	#4	#4	1.5
22C-2	center	205.2	0	#5	#4	#4	1.5
23C-1	center	498.1	0	#5	#5	#4	1.5
23C-2	center	757	0	#5	#5	#4	1.5
23C-3	center	35.93	0	#5	#4	#4	1.5
23C-3(2)	center	446	0	#5	#4	#4	1.5
23C-4	center	537.9	0	#5	#4	#4	1.5
23C-5	center	452.6	0	#5	#4	#4	1.5
24C-1	center	285.3	0	#5	#5	#4	1.5
24C-2	center	360.6	0	#5	#5	#4	1.5
25C-1	center	674	0	#5	#4	#4	1.5
25C-2	center	382.8	0	#5	#4	#4	1.5
26C-1	center	207.4	0	#5	#4	#4	1.5
26C-1(2)	center	258.5	0	#5	#4	#4	1.5
27C-1	center	293.4	0	#5	#5	#4	1.5
27C-2	center	258.1	0	#5	#5	#4	1.5
28C-1	center	440	0	#5	#5	#4	1.5
28C-2	center	453	0	#5	#4	#4	1.5
28C-3	center	440.9	0	#5	#4	#4	1.5
29C-1	center	303.4	0	#5	#4	#4	1.5
29C-2	center	576.4	0	#5	#4	#4	1.5
30C-1	center	293.2	0	#5	#4	#4	1.5
31C-1	center	348.6	0	#5	#4	#4	1.5

Bot. Cover
inches

Design Strip: Longitude SSSs Table - 86

Design Strip: Longitude SSSs Table (3)

<i>Name</i>	<i>Strip Type</i>	<i>Calc. Trib. Area ft²</i>	<i>Calc. Infl. Area ft²</i>	<i>Top Bar</i>	<i>Bottom Bar</i>	<i>Shear Bar</i>	<i>Top Cover inches</i>
31C-2	center	497	0	#5	#4	#4	1.5
31C-3	center	427.2	0	#5	#4	#4	1.5
32C-1	center	212.1	0	#5	#4	#4	1.5
33C-1	center	343.2	0	#5	#4	#4	1.5
33C-2	center	295	0	#5	#4	#4	1.5
33C-3	center	548.3	0	#5	#4	#4	1.5
33C-4	center	93.58	0	#5	#4	#4	1.5
34C-1	center	152.5	0	#5	#4	#4	1.5
34C-2	center	250.8	0	#5	#4	#4	1.5
34C-3	center	73.5	0	#5	#4	#4	1.5
34C-4	center	125.5	0	#5	#4	#4	1.5
34C-5	center	220.5	0	#5	#4	#4	1.5

Design Strip: Longitude SSSs Table (4)

Top Cover
inches

Bot. Cover
inches

<i>Inches</i>	<i>Torsion Design</i>	<i>System</i>	<i>Min Bar Loc.</i>	<i>Min T. Bar</i>	<i>Min B. Bar</i>	<i>Shear Legs</i>
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2

Design Strip: Punching Checks Table

<i>Number</i>	<i>Location feet</i>	<i>Radius feet</i>	<i>Cover To CGS inches</i>	<i>Angle degrees</i>	<i>Edge</i>	<i>Connection</i>
1	(-200.6,-89.05)	10	1	-6	failure planes	auto
2	(-200.1,-144.6)	10	1	0	failure planes	auto
3	(-199.1,-134.7)	10	1	0	failure planes	auto
4	(-198.6,-115.2)	10	1	-6	failure planes	auto
5	(-198,-65.18)	10	1	-6	failure planes	auto
6	(-195.5,-41.31)	10	1	-6	failure planes	auto
7	(-193,-17.44)	10	1	-6	failure planes	auto
8	(-191.6,-151)	10	1	0	failure planes	auto
9	(-182.2,-147.7)	10	1	0	failure planes	auto
10	(-180.8,-44.12)	10	1	-6	failure planes	auto
11	(-180.5,-117.1)	10	1	-6	failure planes	auto
12	(-177,-67.39)	10	1	-6	failure planes	auto
13	(-176.8,-92.28)	10	1	84	failure planes	auto
14	(-166,-123.6)	10	1	-6	failure planes	auto
15	(-164.9,-47.89)	10	1	-6	failure planes	auto
16	(-164.6,-22.53)	10	1	90	failure planes	auto
17	(-164.2,-141.7)	10	1	22	failure planes	auto
18	(-145.3,-22.83)	10	1	0	failure planes	auto
19	(-144.5,-120.4)	10	1	22	failure planes	auto
20	(-138.3,-51.35)	10	1	0	failure planes	auto
21	(-138.2,-136)	10	1	22	failure planes	auto
22	(-135.3,-110.1)	10	1	0	failure planes	auto
23	(-120.6,-101.9)	10	1	0	failure planes	auto
24	(-118.9,-75.16)	10	1	0	failure planes	auto
25	(-118.4,-52.35)	10	1	0	failure planes	auto
26	(-118.3,-22.83)	10	1	0	failure planes	auto
27	(-115.9,-127)	10	1	22	failure planes	auto
28	(-109.7,-60.83)	10	1	0	failure planes	auto
29	(-99.8,-22.83)	10	1	0	failure planes	auto
30	(-94.99,-75.16)	10	1	90	failure planes	auto
31	(-94.55,-101.9)	10	1	0	failure planes	auto
32	(-93.65,-118.1)	10	1	22	failure planes	auto
33	(-87.45,-47.25)	10	1	0	failure planes	auto
34	(-86.02,-66.08)	10	1	0	failure planes	auto
35	(-84.69,-22.81)	10	1	0	failure planes	auto
36	(-71.38,-109.1)	10	1	22	failure planes	auto
37	(-68.7,-22.67)	10	1	0	failure planes	auto
38	(-67.92,-66.08)	10	1	0	failure planes	auto
39	(-65.26,-94)	10	1	0	failure planes	auto
40	(-60.2,-44.83)	10	1	0	failure planes	auto
41	(-49,-100.5)	10	1	112	failure planes	auto
42	(-45.8,-22.83)	10	1	0	failure planes	auto
43	(-41.7,-44.83)	10	1	0	failure planes	auto
44	(-28.53,-90.28)	10	1	0	failure planes	auto
45	(-19.02,-17.34)	10	1	0	failure planes	auto
46	(-14.45,-61.73)	10	1	0	failure planes	auto

Design Strip: Punching Checks Table (2)

Connection	Use Spec LLR Params	Spec. LLR Levels	Spec. Trib. Area ft ²	Spec. Infl. Area ft ²	Calc. Trib. Area ft ²	Calc. Infl. Area ft ²
	false	1	0	0	291.4	0
	false	1	0	0	225	0
	false	1	0	0	234.7	0
	false	1	0	0	372.1	0
	false	1	0	0	252	0
	false	1	0	0	183.6	0
	false	1	0	0	302.4	0
	false	1	0	0	226.4	0
	false	1	0	0	246.8	0
	false	1	0	0	431.8	0
	false	1	0	0	403.2	0
	false	1	0	0	461.2	0
	false	1	0	0	533.7	0
	false	1	0	0	434.5	0
	false	1	0	0	451.2	0
	false	1	0	0	613.1	0
	false	1	0	0	329	0
	false	1	0	0	582.9	0
	false	1	0	0	429	0
	false	1	0	0	452.8	0
	false	1	0	0	211.2	0
	false	1	0	0	323.6	0
	false	1	0	0	569.1	0
	false	1	0	0	476.3	0
	false	1	0	0	589.2	0
	false	1	0	0	782.4	0
	false	1	0	0	280.3	0
	false	1	0	0	180.2	0
	false	1	0	0	366.6	0
	false	1	0	0	530.7	0
	false	1	0	0	643.2	0
	false	1	0	0	184.1	0
	false	1	0	0	714.2	0
	false	1	0	0	290	0
	false	1	0	0	323.3	0
	false	1	0	0	187.2	0
	false	1	0	0	595.4	0
	false	1	0	0	358.5	0
	false	1	0	0	510.6	0
	false	1	0	0	404.4	0
	false	1	0	0	148.8	0
	false	1	0	0	525.4	0
	false	1	0	0	556.7	0
	false	1	0	0	227.3	0
	false	1	0	0	389.6	0
	false	1	0	0	347.4	0

[illegible]

Design Strip: Punching Checks Table (4)

<i>Number</i>	<i>Location feet</i>	<i>Radius feet</i>	<i>Cover To CGS inches</i>	<i>Angle degrees</i>	<i>Edge</i>	<i>Connection</i>
47	(-14.45,-46.58)	10	1	0	failure planes	auto
48	(-5.364,-16.83)	10	1	0	failure planes	auto
49	(-5.313,-48.07)	10	1	0	failure planes	auto
50	(-3.839,-76.3)	10	1	0	failure planes	auto
51	(-3.5,-61.73)	10	1	0	failure planes	auto
52	(-1.469,-92.28)	10	1	0	failure planes	auto

Design Strip: Punching Checks Table (5)

Connection	Use Spec LLR Params	Spec. LLR Levels	Spec. Trib. Area ft ²	Spec. Infl. Area ft ²	Calc. Trib. Area ft ²	Calc. Infl. Area ft ²
	false	1	0	0	483.1	0
	false	1	0	0	286.5	0
	false	1	0	0	158.3	0
	false	1	0	0	257.1	0
	false	1	0	0	48.61	0
	false	1	0	0	115.4	0

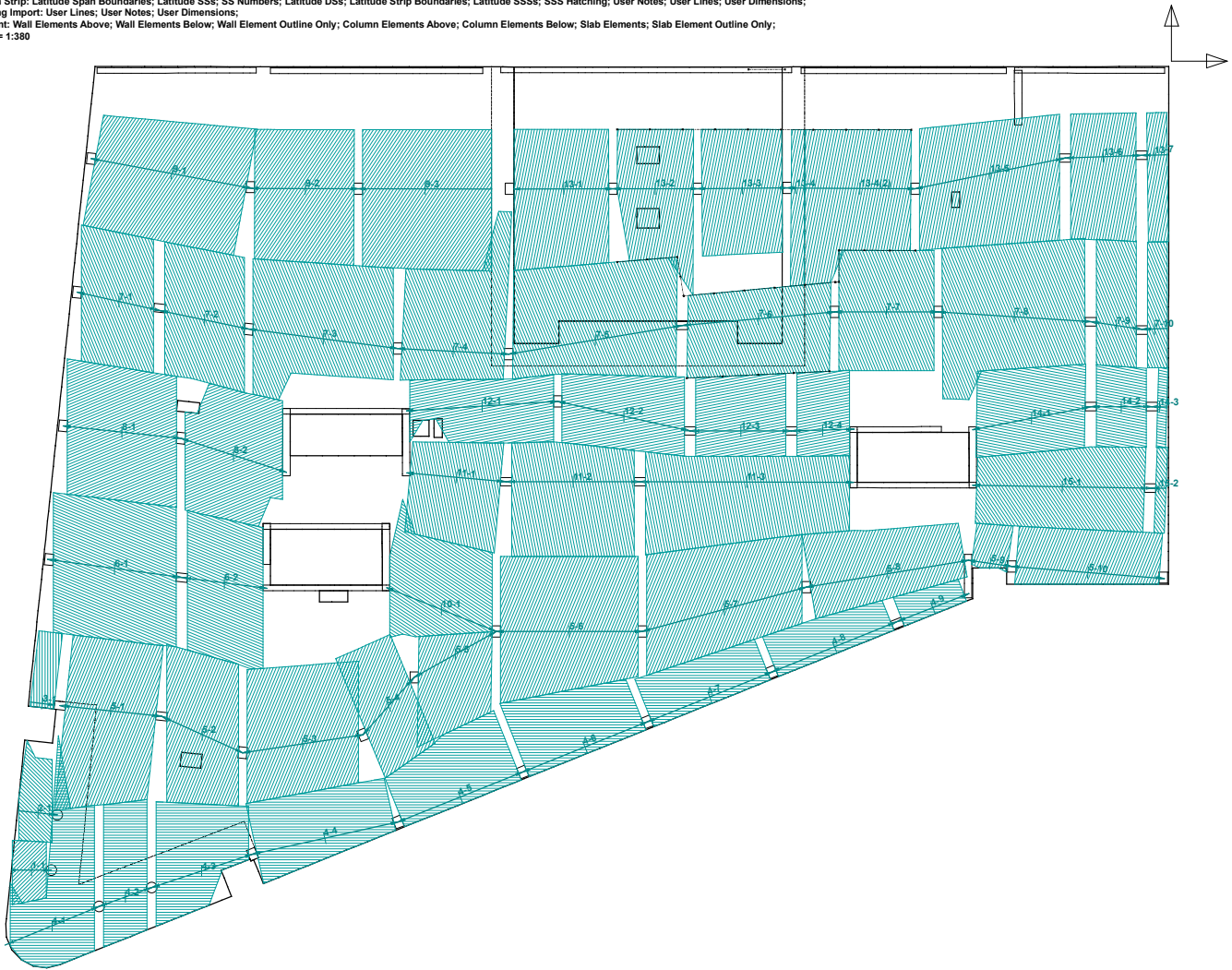
Design Strip: Punching Checks Table (6)

Inf. Area

<i>Max LLR</i> <i>%</i>	<i>Red. Red.</i> <i>%</i>	<i>Stor. Red.</i> <i>%</i>	<i>Park. Red.</i> <i>%</i>
40	0	0	0
40	0	0	0
40	0	0	0
40	0	0	0
40	0	0	0
40	0	0	0

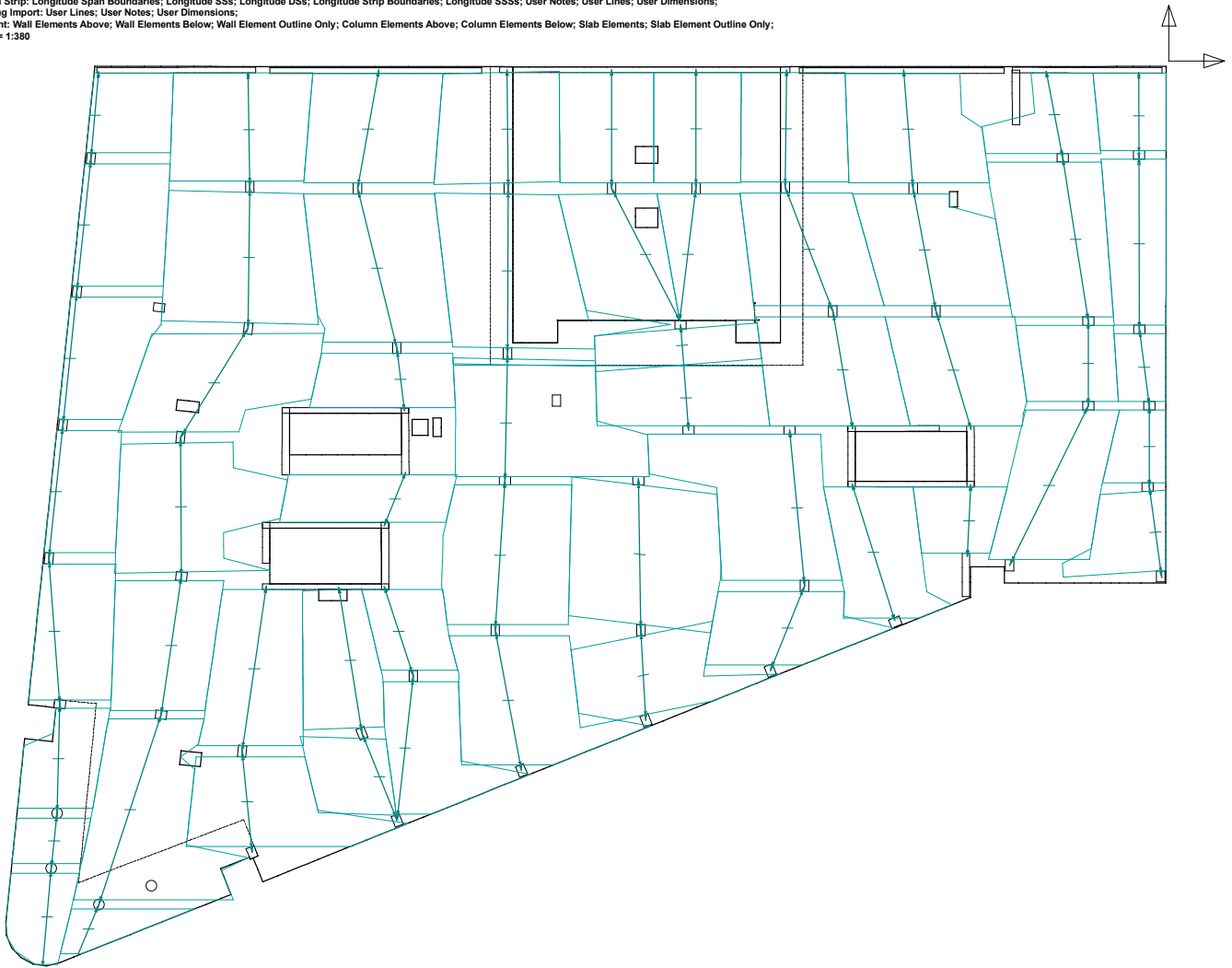
Design Strip: Latitude Design Spans Plan

Design Strip: Latitude Span Boundaries; Latitude SSs; SS Numbers; Latitude DSs; Latitude Strip Boundaries; Latitude SSSs; SSS Hatching; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



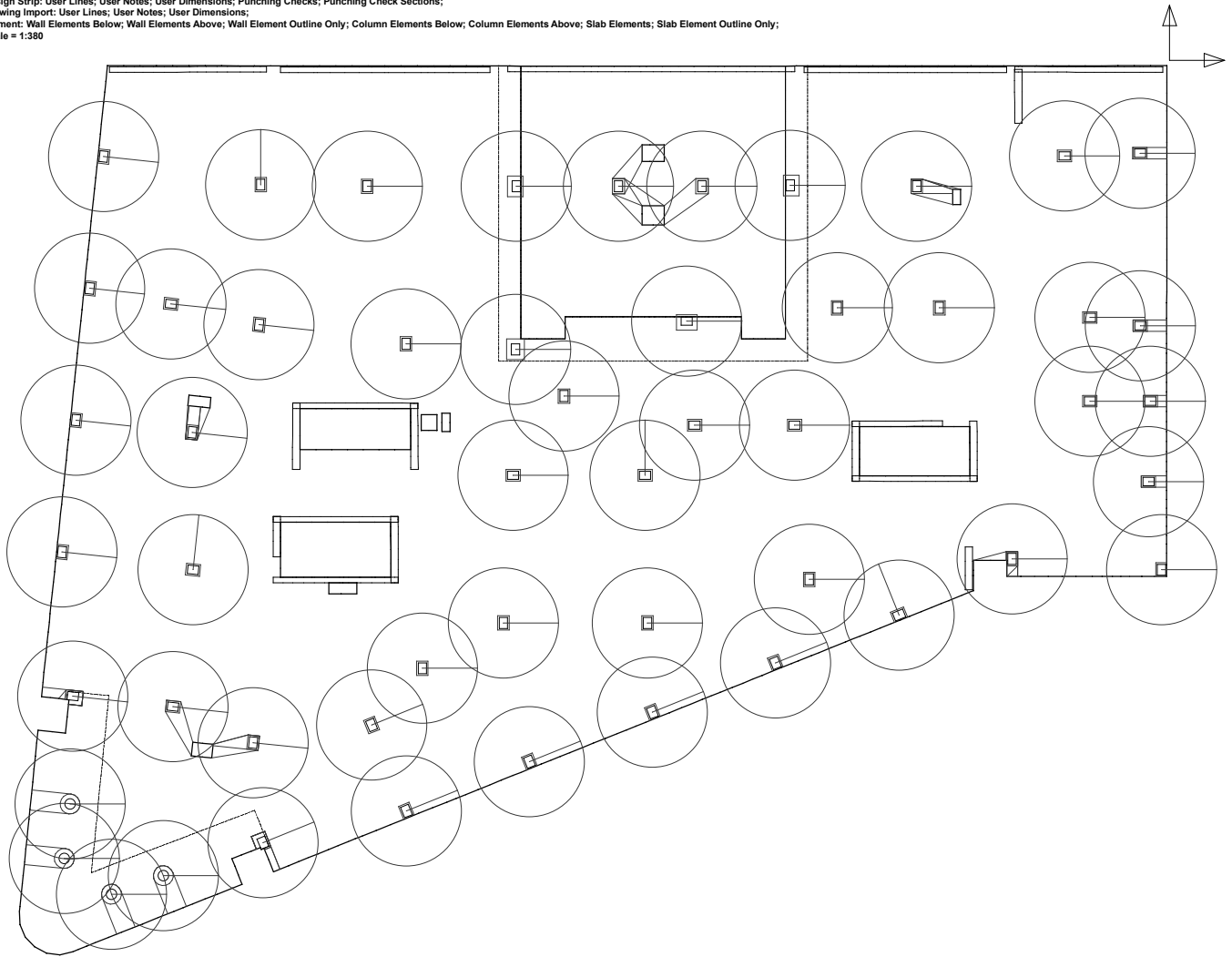
Design Strip: Longitude Design Spans Plan

Design Strip: Longitude Span Boundaries; Longitude SSSs; Longitude DSs; Longitude Strip Boundaries; Longitude SSSs; User Notes; User Lines; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Scale = 1:380



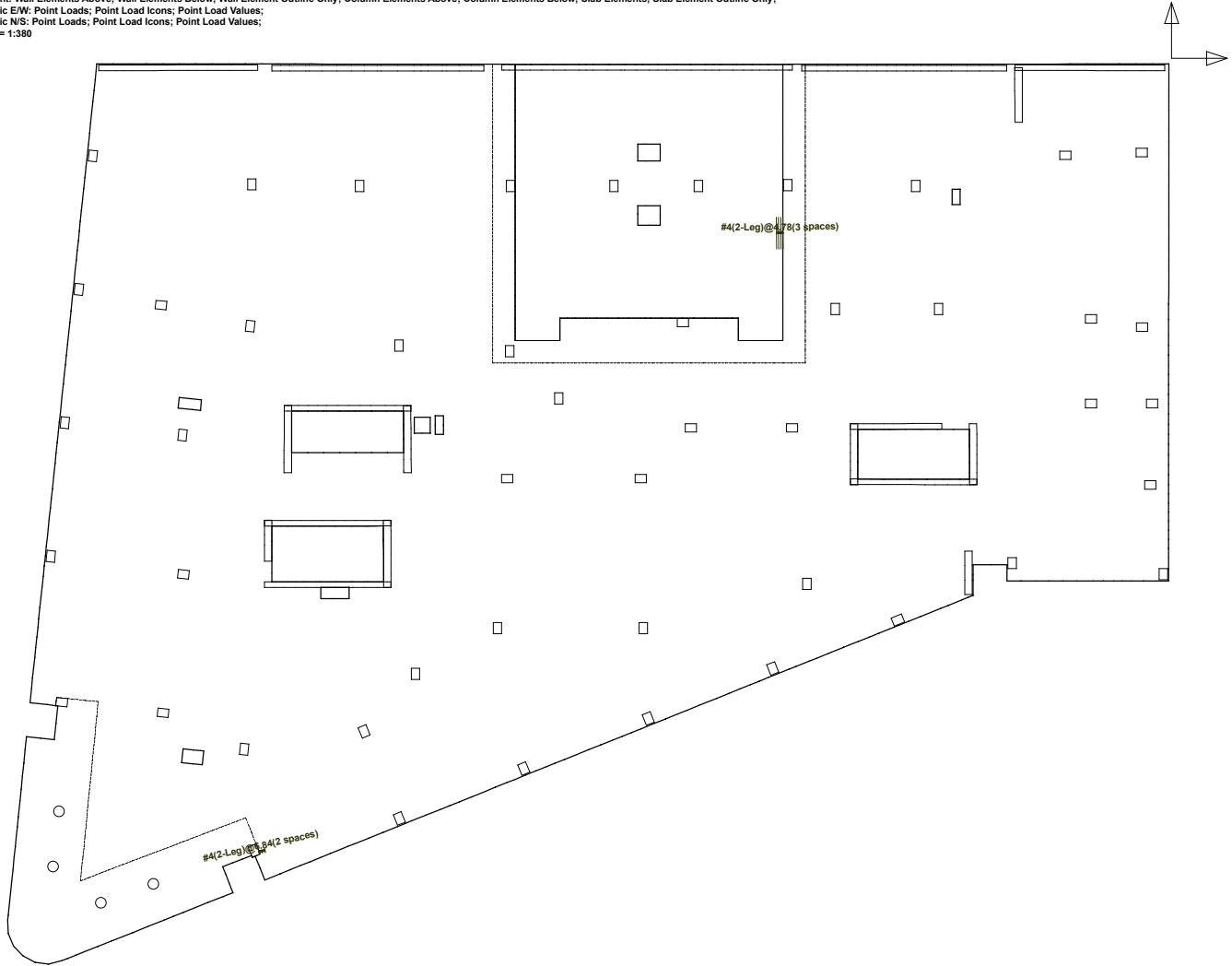
Design Strip: Punching Checks Plan

Design Strip: User Lines; User Notes; User Dimensions; Punching Checks; Punching Check Sections;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:380



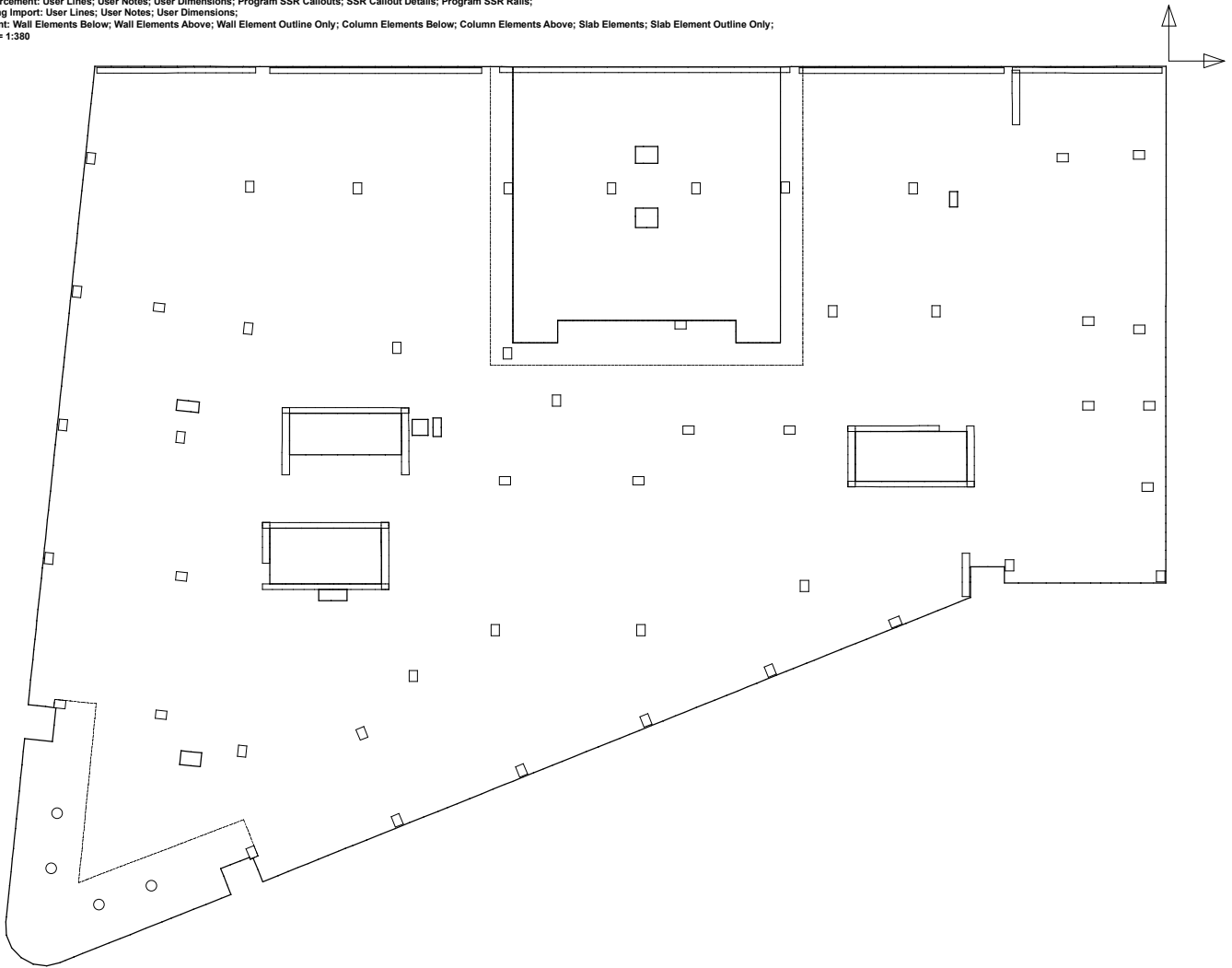
Reinforcement: Shear Bars Plan

Reinforcement: Latitude User Transverse Reinf.; Longitude User Transverse Reinf.; Latitude Program Transverse Reinf.; Longitude Program Transverse Reinf.; Transverse Reinf. Descriptions; Transverse Reinf. Extent; Latitude User Individual Transverse Bars; Longitude User Individual Transverse Bars;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Seismic E/W: Point Loads; Point Load Icons; Point Load Values;
 Seismic N/S: Point Loads; Point Load Icons; Point Load Values;
 Scale = 1:380



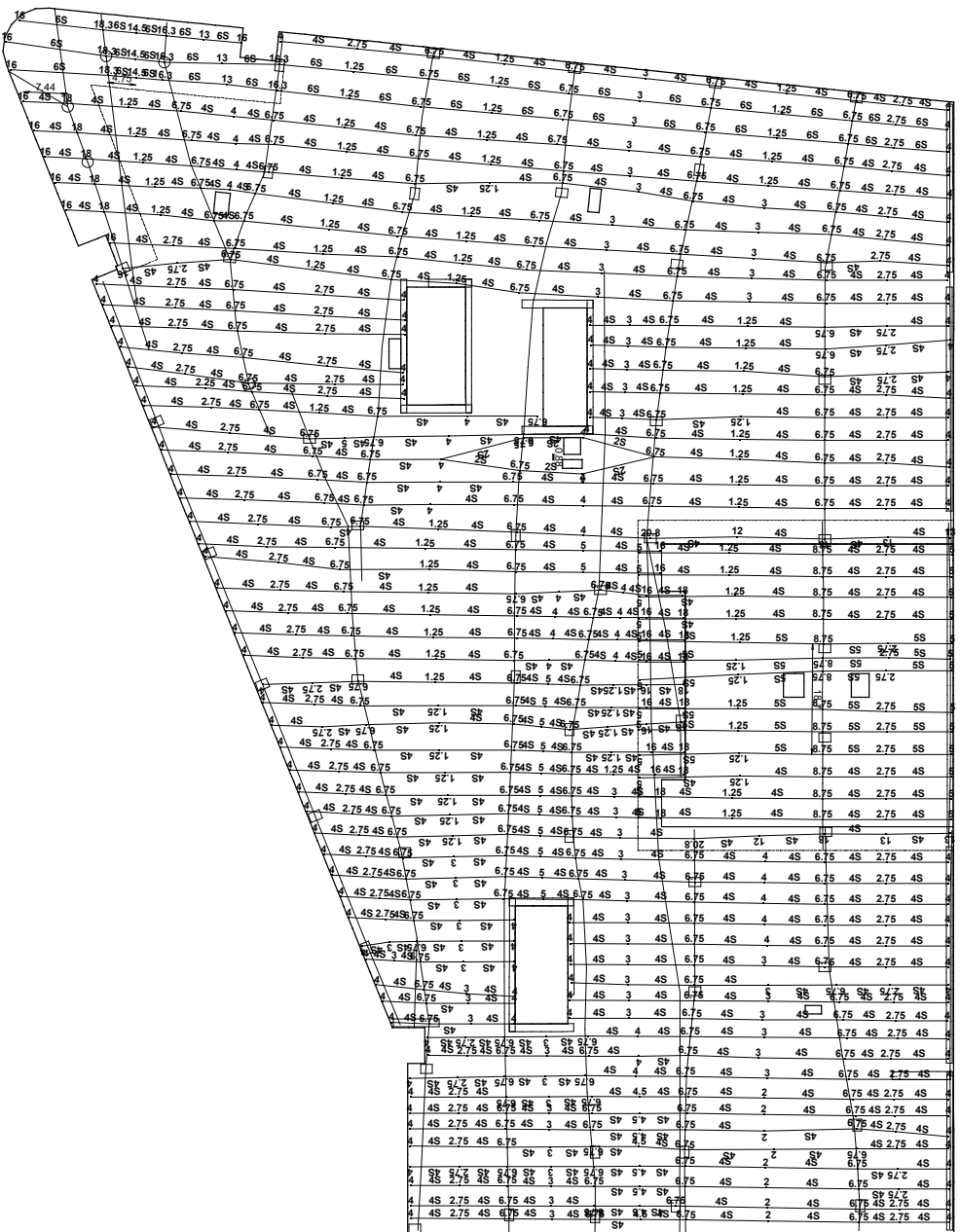
Reinforcement: SSR Plan

Reinforcement: User Lines; User Notes; User Dimensions; Program SSR Callouts; SSR Callout Details; Program SSR Rails;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:380



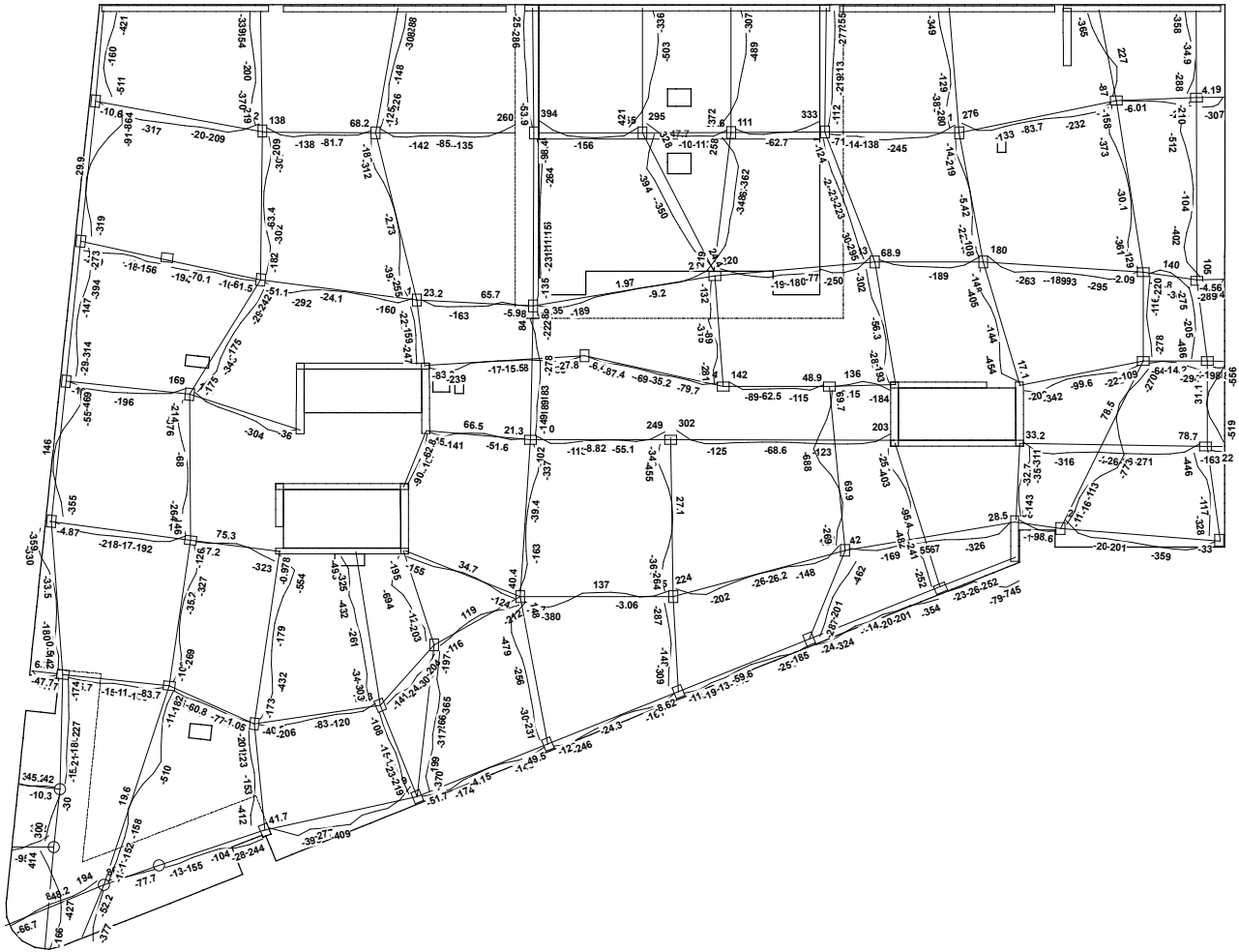
Manual Longitude Tendon: Standard Plan

Manual Longitude Tendon: Tendons, Num Strands, Jacks, Tendon Points, Profile Values, User Notes, User Dimensions:
Drawing Input: User Lines, User Notes, User Dimensions:
Element: Wall Elements Above Wall Elements Below Wall Element Outline Only, Column Elements Above Column Elements Below, Slab Elements, Slab Element Outline Only,
Manual Latitude Tendon: Tendons, Standard Tendon Description, Distributed Tendon Description, Jack Region, Distributed Tendon Overlap Areas, Profile Points, Profile Elevation Values, Profile Notes:
Scale = 1:300



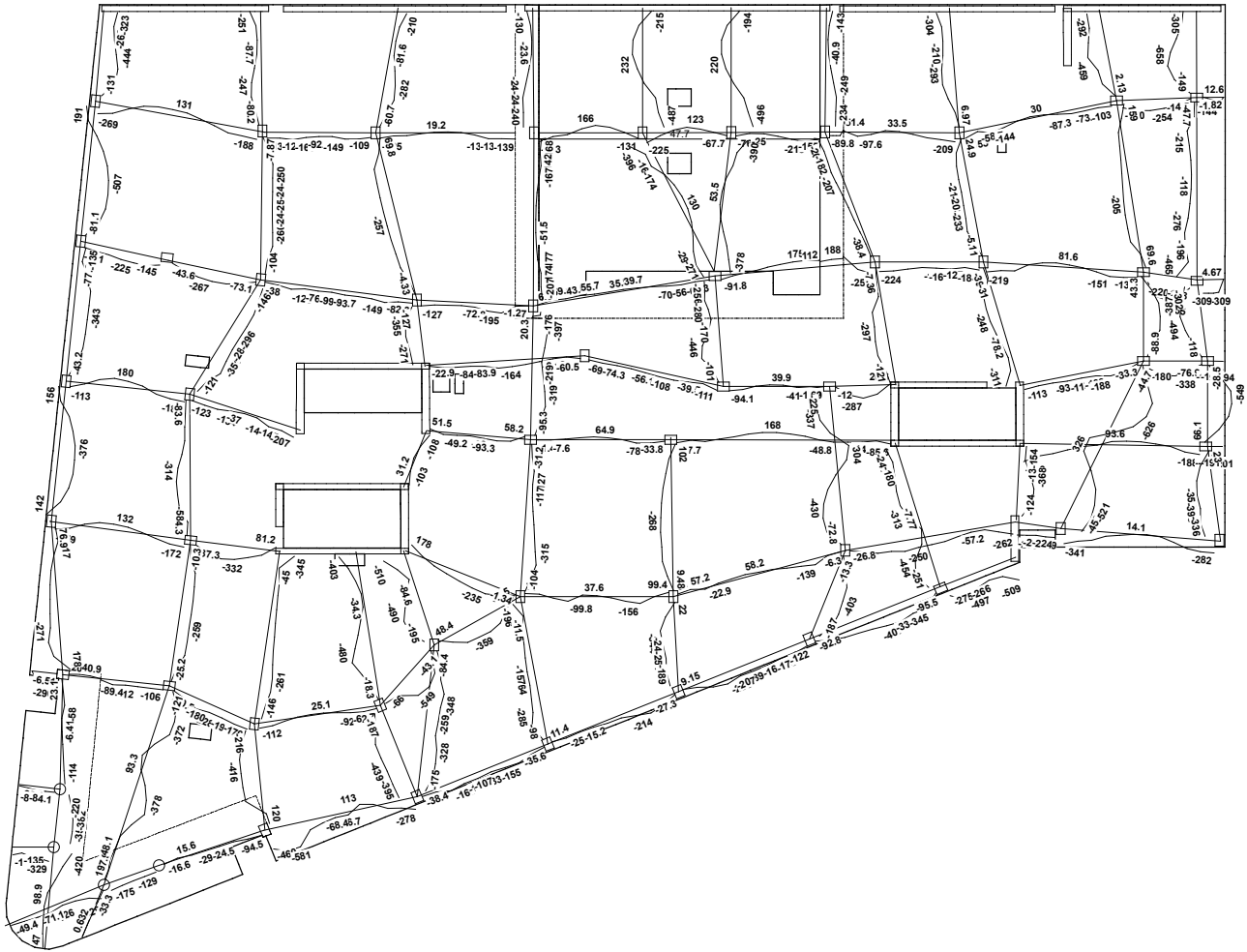
Service Design: Top Stress Plan

Service Design: User Lines; User Notes; User Dimensions; Latitude Span Designs; Longitude Span Designs; Latitude DS Designs; Longitude DS Designs;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
 Scale = 1:300
 Service Design - Section Analysis Plot: (Gross Section Top Concrete Stress)(Context: Max Demand)



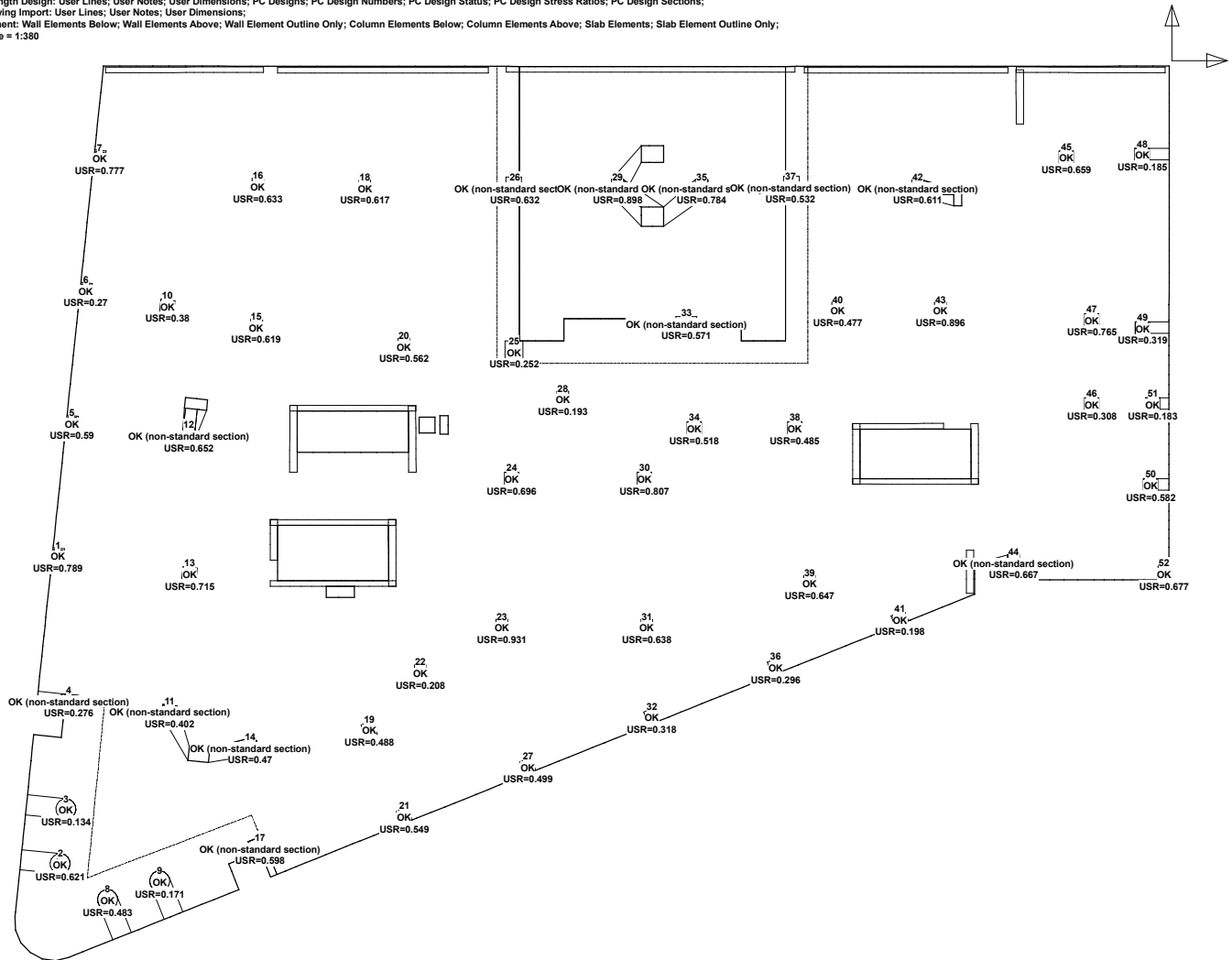
Service Design: Bottom Stress Plan

Service Design: User Lines; User Notes; User Dimensions; Latitude Span Designs; Longitude Span Designs; Latitude DS Designs; Longitude DS Designs;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
 Scale = 1:300
 Service Design - Section Analysis Plot: (Gross Section Bottom Concrete Stress)(Context: Max Demand)



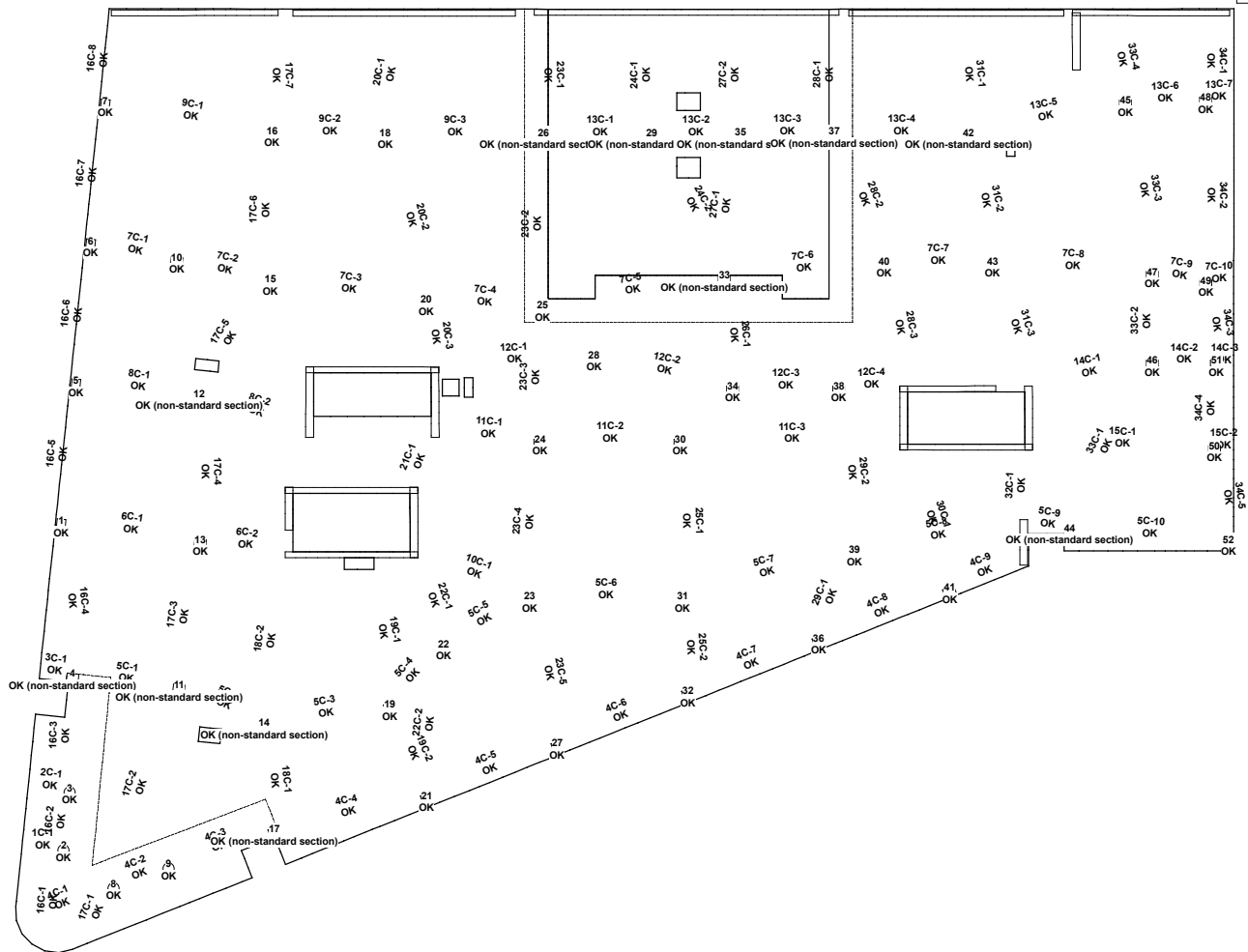
Strength Design: Punching Shear Status Plan

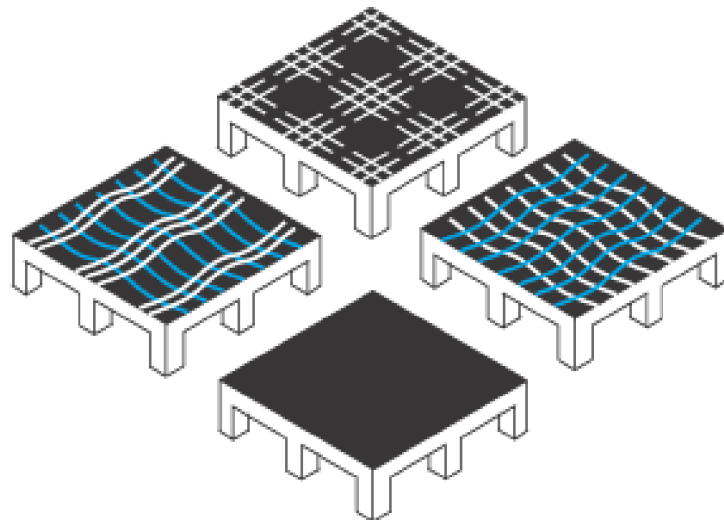
Strength Design: User Lines; User Notes; User Dimensions; PC Designs; PC Design Numbers; PC Design Status; PC Design Stress Ratios; PC Design Sections;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



Design Status: Status Plan

Design Status: Latitude Span Designs; Longitude Span Designs; Span Design Numbers; Span Design Status; Latitude DS Designs; Longitude DS Designs; DS Design Numbers; DS Design Status; PC Designs; PC Design Numbers; PC Design Status; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380





Level 4.50.cpt
1/7/2020

RAM Concept © 2019 Bentley Systems, Inc.
RAM Concept™ is a trademark of Bentley Systems

Table of Contents

Units	4
Signs	5
Materials	6
Loadings	8
Load Combinations	9
Design Rules	15
Detailing Rules	16
Load History	17
Mesh Input: Walls Below Table	18
Mesh Input: Columns Below Table	20
Mesh Input: Slab Areas Table	26
Mesh Input: Beams Table	28
Mesh Input: Standard Plan	30
Other Dead Loading: Point Loads Plan	31
Other Dead Loading: Line Loads Plan	32
Other Dead Loading: Area Loads Plan	33
Live (Unreducible) Loading: Point Loads Plan	34
Live (Unreducible) Loading: Line Loads Plan	35
Live (Unreducible) Loading: Area Loads Plan	36
Live (Unreducible) Loading: Std Reactions Plan	37
Snow Loading: Point Loads Plan	38
Snow Loading: Line Loads Plan	39
Snow Loading: Std Reactions Plan	40
Seismic E/W: Point Loads Plan	41
Seismic E/W: Std Reactions Plan	42
Seismic N/S: Point Loads Plan	43
Seismic N/S: Area Loads Plan	44
Seismic N/S: Std Reactions Plan	45
Service LC: D + L: Max Deflection Plan	46
Service LC: D + L: Min Deflection Plan	47
Service LC: D + L: Reaction Plan	48
Long Term deflection: Max Deflection Plan	49
Design Strip: Latitude SSs Table	50
Design Strip: Longitude SSs Table	66
Design Strip: Latitude SSSs Table	82
Design Strip: Longitude SSSs Table	86
Design Strip: Punching Checks Table	90
Design Strip: Latitude Design Spans Plan	96
Design Strip: Longitude Design Spans Plan	97
Design Strip: Punching Checks Plan	98
Reinforcement: Top Bars Plan	99
Reinforcement: Bottom Bars Plan	100
Reinforcement: Shear Bars Plan	101
Reinforcement: SSR Plan	102
Manual Latitude Tendon: Standard Plan	103
Manual Longitude Tendon: Standard Plan	104
Service Design: Top Stress Plan	105
Service Design: Bottom Stress Plan	106

Table of Contents (2)

Strength Design: Punching Shear Status Plan 107

Design Status: Status Plan 108

Units

Geometry Unit:

Plan Dimensions: feet
Angles: degrees

Slab Thickness: inches
Elevations: inches

Support Dimensions: inches
Support Height: feet

Loading and Reaction Unit

Point Force: Kips
- Report As Zero: 0 Kips
Point Moment: kip-ft
- Report As Zero: 0 kip-ft

Line Force: kips/ft
- Report As Zero: 0 kips/ft
Line Moment: Kips
- Report As Zero: 0 Kips

Area Force: psf
- Report As Zero: 0 psf
Area Moment: #/foot
- Report As Zero: 0 #/foot

Spring and Stiffness Unit:

Point Force Spring: kips/in
Point Moment Spring: k-ft/°

Line Force Spring: ksi
Line Moment Spring: k/°

Area Force Spring: pci
Area Moment Spring: k/ft°

Slab Analysis Unit:

Force: Kips
- Report As Zero: 0 Kips
Force Per Width: kips/ft
- Report As Zero: 0 kips/ft

Moment: kip-ft
- Report As Zero: 0 kip-ft
Moment Per Width: Kips
- Report As Zero: 0 Kips

Concrete Stress: psi
- Report As Zero: 0 psi
Deflection: inches
- Report As Zero: 0 inches

Materials Unit:

Concrete Volume: yd³
Reinforcement Weight: tons
PT Weight: pounds

Reinforcing Area: in²
Tendon Profile: inches
Cover: inches

PT Force: Kips
Reinforcing Stress: ksi

Miscellaneous Unit:

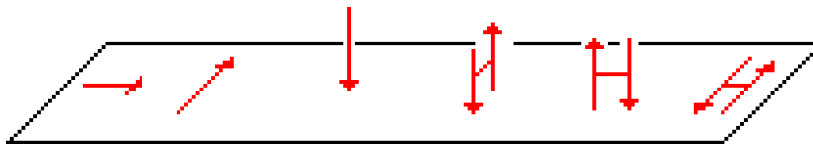
Floor Area: ft²
Tendon Angles (for friction): radians

Density: pcf

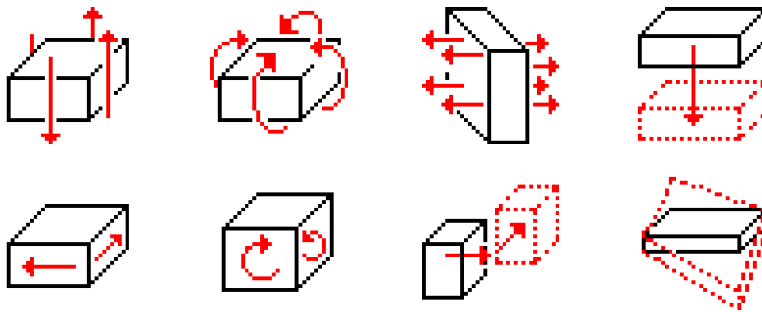
Elongations: inches

Signs

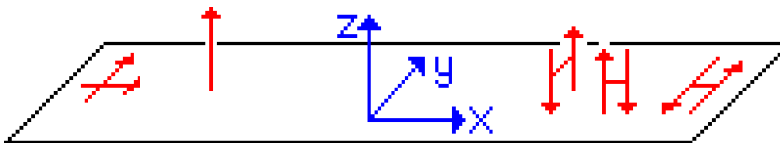
Positive Loads



Positive Analysis



Positive Reactions



Materials

Concrete Mix

Mix Name	Density (pcf)	Density For Loads (pcf)	f_{ci} (psi)	f'_c (psi)	f_{cui} (psi)	f_{cu} (psi)	Poissons Ratio	Ec Calc	User Eci (psi)	User Ec (psi)
3000 psi	150	150	3000	3000	3725	3725	0.2	Code	2500000	3000000
4000 psi	150	150	3000	4000	3725	4975	0.2	Code	2500000	3000000
5000 psi	150	150	3000	5000	3725	6399	0.2	Code	2500000	3000000
6000 psi	150	150	3000	6000	3725	7450	0.2	Code	2500000	3000000

PT Systems

System Name	Type	A_{ps} (in ²)	E_{ps} (ksi)	f_{se} (ksi)	f_{py} (ksi)	f_{pu} (ksi)	Duct Width (inches)	Strands Per Duct	Min Radius (feet)
½" Unbonded	unbonded	0.153	28000	175	243	270	0.5	1	6
½" Bonded	bonded	0.153	28000	160	243	270	3	4	6
0.6" Unbonded	unbonded	0.217	28000	175	243	270	0.6	1	8
0.6" Bonded	bonded	0.217	28000	160	243	270	4	4	8

PT Stressing Parameters

System Name	Jacking Stress (ksi)	Seating Loss (inches)	Anchor Friction	Wobble Friction (1/feet)	Angular Friction (1/radians)	Long-Term Losses (ksi)
½" Unbonded	216	0.25	0	0.0014	0.07	22
½" Bonded	216	0.25	0.02	0.001	0.2	22
0.6" Unbonded	216	0.25	0	0.0014	0.07	22
0.6" Bonded	216	0.25	0.02	0.001	0.2	22

Reinforcing Bars

Bar Name	A_s (in ²)	E_s (ksi)	F_y (ksi)	Coating	Straight Ld/Db	90 Hook Ld/Db	180 Hook Ld/Db
#3	0.11	29000	60	None	Code	Code	Code
#4	0.2	29000	60	None	Code	Code	Code
#5	0.31	29000	60	None	Code	Code	Code
#6	0.44	29000	60	None	Code	Code	Code
#7	0.6	29000	60	None	Code	Code	Code
#8	0.79	29000	60	None	Code	Code	Code
#9	1	29000	60	None	Code	Code	Code
#10	1.27	29000	60	None	Code	Code	Code
#11	1.56	29000	60	None	Code	Code	Code

Materials (2)

SSR Systems

<i>SSR System Name</i>	<i>Stud Area (in²)</i>	<i>Head Area (in²)</i>	<i>Min Clear Head Spacing (inches)</i>	<i>Specified Stud Spacing (inches)</i>	<i>Fy (ksi)</i>	<i>Stud Spacing Rounding Increment (inches)</i>	<i>Min Studs Per Rail</i>	<i>System Type</i>
3/8" SSR	0.11	1.11	0.5	None	50	0.25	2	Rail
1/2" SSR	0.196	1.96	0.5	None	50	0.25	2	Rail
5/8" SSR	0.307	3.07	0.5	None	50	0.25	2	Rail
3/4" SSR	0.442	4.42	0.5	None	50	0.25	2	Rail
Ancon Shearfix Auto-Size	0.217	1.096	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 10 mm	0.1217	1.096	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 12 mm	0.1753	1.578	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 14 mm	0.2386	2.147	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 16 mm	0.3116	2.805	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 20 mm	0.4869	4.383	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 24 mm	0.7012	6.311	0.5906	None	72.52	0.03937	2	Rail

Loadings

<i>Loading Name</i>	<i>Type</i>	<i>Analysis</i>	<i>On-Pattern Factor</i>	<i>Off-Pattern Factor</i>
Self-Dead Loading	Self-Weight	Normal	1	1
Balance Loading	Balance	Normal	1	1
Hyperstatic Loading	Hyperstatic	Hyperstatic	1	1
Temporary Construction (At Stressing) Loading	Stressing Dead	Normal	1	1
Other Dead Loading	Dead	Normal	1	1
Live (Reducible) Loading	Live (Reducible)	Normal	1	0
Live (Unreducible) Loading	Live (Unreducible)	Normal	1	0
Live (Storage) Loading	Live (Storage)	Normal	1	0
Live (Parking) Loading	Live (Parking)	Normal	1	0
Live (Roof) Loading	Live (Roof)	Normal	1	0
Snow Loading	Snow	Normal	1	1
Seismic E/W	Ultimate Seismic 1 (transfer)	Normal	1	0
Seismic N/S	Ultimate Seismic 1 (transfer)	Normal	1	0

Load Combinations

All Dead LC

Active Design Criteria: <none>

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Other Dead Loading	1	1

Dead + Balance LC

Active Design Criteria: <none>

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1

Initial Service LC

Active Design Criteria: Initial Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1.13	1.13
Temporary Construction (At Stressing) Loading	1	1

Service LC: D + L

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Reducible) Loading	1	0
Live (Unreducible) Loading	1	0
Live (Storage) Loading	1	0
Live (Parking) Loading	1	0

Service LC: D + Lr

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Roof) Loading	1	0

Load Combinations (2)

Service LC: D + S

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Snow Loading	1	0

Service LC: D + 0.75L + 0.75Lr

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Reducible) Loading	0.75	0
Live (Unreducible) Loading	0.75	0
Live (Storage) Loading	0.75	0
Live (Parking) Loading	0.75	0
Live (Roof) Loading	0.75	0

Service LC: D + 0.75L + 0.75S

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Reducible) Loading	0.75	0
Live (Unreducible) Loading	0.75	0
Live (Storage) Loading	0.75	0
Live (Parking) Loading	0.75	0
Snow Loading	0.75	0

Sustained Service LC

Active Design Criteria: Sustained Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Reducible) Loading	0.5	0.5
Live (Unreducible) Loading	0.5	0.5
Live (Storage) Loading	1	1
Live (Parking) Loading	0.5	0.5
Live (Roof) Loading	0.5	0.5

Load Combinations (3)

Factored LC: 1.4D

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.4	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.4	0.9

Factored LC: 1.2D + 1.6L + 0.5Lr

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.2	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.2	0.9
Live (Reducible) Loading	1.6	0
Live (Unreducible) Loading	1.6	0
Live (Storage) Loading	1.6	0
Live (Parking) Loading	1.6	0
Live (Roof) Loading	0.5	0

Factored LC: 1.2D + f1L + 1.6Lr

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.2	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.2	0.9
Live (Reducible) Loading	0.5	0
Live (Unreducible) Loading	1	0
Live (Storage) Loading	1	0
Live (Parking) Loading	1	0
Live (Roof) Loading	1.6	0

Factored LC: 1.2D + 1.6L + 0.5S

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.2	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.2	0.9
Live (Reducible) Loading	1.6	0
Live (Unreducible) Loading	1.6	0
Live (Storage) Loading	1.6	0
Live (Parking) Loading	1.6	0
Snow Loading	0.5	0

Load Combinations (4)

Factored LC: $1.2D + f1L + 1.6S$

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.2	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.2	0.9
Live (Reducible) Loading	0.5	0
Live (Unreducible) Loading	1	0
Live (Storage) Loading	1	0
Live (Parking) Loading	1	0
Snow Loading	1.6	0

Long Term deflection

Active Design Criteria: <none>

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	3.35	3.35
Balance Loading	3.35	3.35
Other Dead Loading	3.35	3.35
Live (Unreducible) Loading	2	2
Snow Loading	1	1

Earthquake N-S: $(1.2+.2*Sds)D + 2.5E + 0.5L+0.2S$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.344	1.344
Hyperstatic Loading	1	1
Other Dead Loading	1.344	1.344
Live (Unreducible) Loading	0.5	0.5
Snow Loading	0.2	0.2
Seismic N/S	2.5	2.5

Earthquake N-S: $(0.9-0.2*Sds)D + 2.5E$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.756	0.756
Hyperstatic Loading	1	1
Other Dead Loading	0.756	0.756
Seismic N/S	2.5	2.5

Load Combinations (5)

Earthquake E-W: $(1.2+0.2*S_{ds})D + 2.5E + 0.5L+0.2S$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.344	1.344
Hyperstatic Loading	1	1
Other Dead Loading	1.344	1.344
Live (Unreducible) Loading	0.5	0.5
Snow Loading	0.2	0.2
Seismic E/W	2.5	2.5

Earthquake E-W: $(0.9-0.2*S_{ds})D + 2.5E$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.756	0.756
Hyperstatic Loading	1	1
Other Dead Loading	0.756	0.756
Seismic E/W	2.5	2.5

Earthquake N-S: $(1.2+0.2*S_{ds})D - 2.5E + .5L + 0.2S$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.344	1.344
Hyperstatic Loading	1	1
Other Dead Loading	1.344	1.344
Live (Unreducible) Loading	0.5	0.5
Snow Loading	0.2	0.2
Seismic N/S	-2.5	-2.5

Earthquake N-S: $(0.9-0.2*S_{ds})D - 2.5E$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.756	0.756
Hyperstatic Loading	1	1
Other Dead Loading	0.756	0.756
Seismic N/S	-2.5	-2.5

Load Combinations (6)

Earthquake E-W: $(1.2+0.2*S_{ds})D - 2.5E + .5L + 0.2S$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.344	1.344
Hyperstatic Loading	1	1
Other Dead Loading	1.344	1.344
Live (Unreducible) Loading	0.5	0.5
Snow Loading	0.2	0.2
Seismic E/W	-2.5	-2.5

Earthquake E-W: $(0.9-0.2*S_{ds})D - 2.5E$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.756	0.756
Hyperstatic Loading	1	1
Other Dead Loading	0.756	0.756
Seismic E/W	-2.5	-2.5

Design Rules

Code Minimum Design

318-11 Min. Reinforcement

User Minimum Design

Specified Min. Reinforcement

Initial Service Design

318-11 Initial Service Design

Service Design

318-11 Service Design

Include detailed section analysis

Sustained Service Design

318-11 Sustained Service Design

Strength Design

318-11 Strength Design

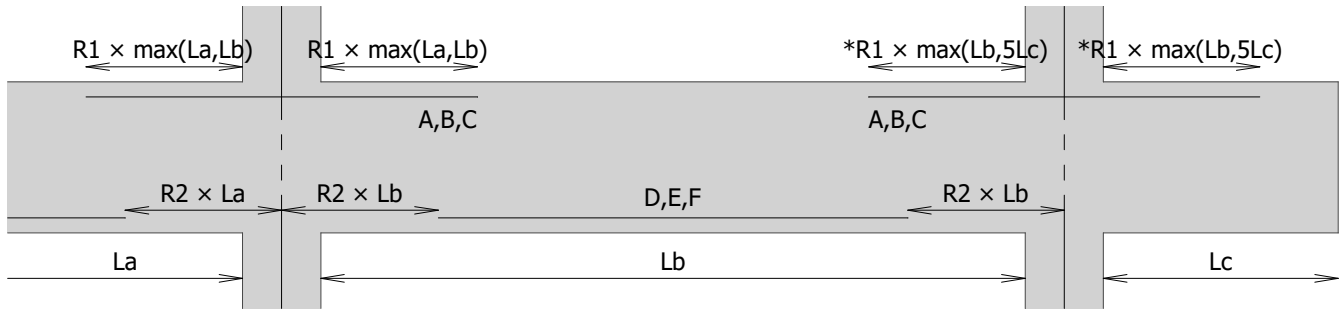
Punching Shear Design

Ductility Design

318-11 Ductility Design

Detailing Rules

Custom Span Detailing Rules



Rule	A	A	B	B	C	C	D	D	E	E	F	F
Name	Fraction	R1	Fraction	R1	Fraction	R1	Fraction	R2	Fraction	R2	Fraction	R2
None	0	0	0	0	0	0	0	0	0	0	0	0

"A", "B" and "C", are support reinforcement sets, based on the peak reinforcement in the support zone.

"D", "E" and "F", are span reinforcement sets, based on the peak reinforcement in the span zone.

"*R1" is never taken as greater than 0.2 when multiplied by L_c (or L_{cc}).

"Fraction" is the ratio of set reinforcement to peak reinforcement. It is always in the 0.0 to 1.0 range.

Load History

<i>Load History Step Name</i>	<i>Load Combination</i>	<i>Duration (days)</i>	<i>Total Age (days)</i>
Maximum Short Term Load	Service LC: D + L	30	33
Sustained Load	Sustained Service LC	5000	5033
Final Instantaneous Load	Service LC: D + L	0	5033

Mesh Input: Walls Below Table

<i>Number</i>	<i>Location feet</i>	<i>Mix</i>	<i>Fixed Near</i>	<i>Fixed Far</i>	<i>Comp.</i>	<i>Height feet</i>	<i>Thickness inches</i>
1	(-192.2,-1.583)(-159.3,-1.583)psi	40583	false	false	true	10	10
2	(-161.6,-82.57)(-161.6,-82.57)psi	60088	false	false	true	10	12
3	(-158,-74.05)(-158,-62.55)psi	65000	false	false	true	10	12
4	(-140.5,-94.13)(-161.6,-94.13)psi	60003	false	false	true	10	12
5	(-140.5,-83.15)(-161.6,-83.15)psi	60002	false	false	true	10	12
6	(-158,-62.55)(-136.2,-62.55)psi	65050	false	false	true	10	12
7	(-140.5,-82.57)(-140.5,-94.13)psi	60057	false	false	true	10	12
8	(-136.7,-62.55)(-136.7,-74.05)psi	60005	false	false	true	10	12
9	(-152,-1.583)(-117.8,-1.583)psi	45000	false	false	true	10	10
10	(-56.72,-65.28)(-56.72,-75.7)psi	60002	false	false	true	10	12
11	(-69.5,-1.552)(-35.53,-1.552)psi	45550	false	false	true	10	8
12	(-56.72,-65.78)(-41.18,-65.78)psi	60008	false	false	true	10	12
13	(-56.72,-75.7)(-35.72,-75.7)psi	60000	false	false	true	10	12
14	(-36.55,-88.08)(-36.55,-94.13)psi	60004	false	false	true	10	12
15	(-35.72,-65.28)(-35.72,-75.7)psi	60002	false	false	true	10	12
16	(-27.39,-11.56)(-27.39,-105.83)psi	60583	false	false	true	10	16
17	(-29.33,-1.583)(-0.6667,-1.583)psi	40583	false	false	true	10	10

Mesh Input: Walls Below Table (2)

<i>Shear Wall</i>	<i>Use Spec LLR Params</i>	<i>Spec. LLR Levels</i>	<i>Spec. Trib. Area ft²</i>	<i>Spec. Infl. Area ft²</i>	<i>Max LLR %</i>
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40

Mesh Input: Columns Below Table

<i>Number</i>	<i>Location feet</i>	<i>Mix</i>	<i>Fixed Near</i>	<i>Fixed Far</i>	<i>Comp.</i>	<i>Height feet</i>	<i>B inches</i>	<i>D inches</i>
1	(-207,-153.1)	5000 psi	true	true	true	10	24	18
2	(-200.6,-89.05)	5000 psi	true	true	true	10	18	24
3	(-199.7,-144.9)	5000 psi	true	true	true	10	18	24
4	(-198.6,-115.2)	5000 psi	true	true	true	10	24	18
5	(-198.6,-134.5)	5000 psi	true	true	true	10	24	18
6	(-198,-65.18)	5000 psi	true	true	true	10	18	24
7	(-197.9,-160)	5000 psi	true	true	true	10	18	24
8	(-195.5,-41.31)	5000 psi	true	true	true	10	18	24
9	(-193,-17.44)	5000 psi	true	true	true	10	18	24
10	(-191.4,-151.5)	5000 psi	true	true	true	10	18	24
11	(-180.8,-44.12)	5000 psi	true	true	true	10	18	24
12	(-180.5,-117.1)	5000 psi	true	true	true	10	24	18
13	(-177,-67.39)	5000 psi	true	true	true	10	18	24
14	(-176.8,-92.28)	5000 psi	true	true	true	10	18	24
15	(-165.9,-123.5)	5000 psi	true	true	true	10	18	24
16	(-164.9,-47.89)	5000 psi	true	true	true	10	18	24
17	(-164.6,-22.53)	5000 psi	true	true	true	10	24	18
18	(-164.4,-141.2)	5000 psi	true	true	true	10	18	24
19	(-145.3,-22.83)	5000 psi	true	true	true	10	18	24
20	(-144.5,-120.4)	5000 psi	true	true	true	10	18	24
21	(-138.3,-51.35)	5000 psi	true	true	true	10	18	24
22	(-138.2,-136)	5000 psi	true	true	true	10	18	24
23	(-135.3,-110.1)	5000 psi	true	true	true	10	18	24
24	(-120.6,-101.9)	5000 psi	true	true	true	10	18	24
25	(-118.9,-75.16)	5000 psi	true	true	true	10	24	18
26	(-118.8,-22.8)	5000 psi	true	true	true	10	18	24
27	(-118.4,-52.35)	5000 psi	true	true	true	10	18	24
28	(-115.9,-127)	5000 psi	true	true	true	10	18	24
29	(-109.7,-60.83)	5000 psi	true	true	true	10	18	24
30	(-95,-75.17)	5000 psi	true	true	true	10	18	24
31	(-94.55,-101.9)	5000 psi	true	true	true	10	18	24
32	(-93.65,-118.1)	5000 psi	true	true	true	10	18	24
33	(-87.45,-47.3)	5000 psi	true	true	true	10	24	18
34	(-86.02,-66.08)	5000 psi	true	true	true	10	24	18
35	(-71.38,-109.1)	5000 psi	true	true	true	10	18	24
36	(-68.7,-22.83)	5000 psi	true	true	true	10	18	24
37	(-67.92,-66.08)	5000 psi	true	true	true	10	24	18
38	(-65.26,-94)	5000 psi	true	true	true	10	18	24
39	(-60.2,-44.83)	5000 psi	true	true	true	10	18	24
40	(-48.99,-100.5)	5000 psi	true	true	true	10	18	24
41	(-45.8,-22.83)	5000 psi	true	true	true	10	18	24
42	(-41.7,-44.83)	5000 psi	true	true	true	10	18	24
43	(-28.53,-90.28)	5000 psi	true	true	true	10	18	24
44	(-19.02,-17.34)	5000 psi	true	true	true	10	24	18
45	(-14.46,-46.58)	5000 psi	true	true	true	10	24	18
46	(-14.45,-61.73)	5000 psi	true	true	true	10	24	18

Mesh Input: Columns Below Table (2)

<i>Angle degrees</i>	<i>Roller</i>	<i>I Factor</i>	<i>Use Spec LLR Params</i>	<i>Spec. LLR Levels</i>	<i>Spec. Trib. Area ft²</i>	<i>Spec. Infl. Area ft²</i>
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
22	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
84	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
84	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
90	false	1	false	1	0	0
22	false	1	false	1	0	0
0	false	1	false	1	0	0
22	false	1	false	1	0	0
0	false	1	false	1	0	0
22	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
22	false	1	false	1	0	0
0	false	1	false	1	0	0
90	false	1	false	1	0	0
0	false	1	false	1	0	0
22	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
22	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
112	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0

Max LLR
%

[illegible]

Mesh Input: Columns Below Table (4)

<i>Number</i>	<i>Location feet</i>	<i>Mix</i>	<i>Fixed Near</i>	<i>Fixed Far</i>	<i>Comp.</i>	<i>Height feet</i>	<i>B inches</i>	<i>D inches</i>
47	(-5.364,-16.83)	5000 psi	true	true	true	10	24	18
48	(-5.313,-48.08)	5000 psi	true	true	true	10	24	18
49	(-3.839,-76.29)	5000 psi	true	true	true	10	24	18
50	(-3.615,-61.75)	5000 psi	true	true	true	10	24	18
51	(-1.469,-92.28)	5000 psi	true	true	true	10	18	24

Mesh Input: Columns Below Table (5)

<i>Angle degrees</i>	<i>Roller</i>	<i>I Factor</i>	<i>Use Spec LLR Params</i>	<i>Spec. LLR Levels</i>	<i>Spec. Trib. Area ft²</i>	<i>Spec. Infl. Area ft²</i>
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0

Mesh Input: Columns Below Table (6)

<i>infl. Area</i>	<i>Max LLR</i>
	<u>%</u>
	40
	40
	40
	40
	40

Mesh Input: Slab Areas Table

<i>Number</i>	<i>Location feet</i>	<i>Mix</i>	<i>Thickness inches</i>	<i>TOC inches</i>	<i>Priority</i>	<i>Behavior</i>	<i>R-Axis degrees</i>
1	(-190.7,-158.2)(-168.1,-140.2)(-169.8,-145)(-163.9,-142.7)(-164.8,-140.3)(-193,-150.8)	5000	14	0	5	two-way slab	0
2	(-164.8,-140.3)(-165.4,-140.6)(-164.5,-142.9)(-163.9,-142.7)	5000	14	0	5	two-way slab	0
3	(-123,-25.33)(-118,-25.33)(-118,-20.33)(-123,-20.33)	5000	14	0	5	two-way slab	0
4	(-192.3,-0.7966)(-159,-0.7966)(-159.9,-12.16)(-154.2,-10.67)(-153.2,-0.7966)(-117.5,-0.7966)(-117.5,-50.35)(-109.4,-50.35)(-109.4,-10.67)(-154.2,-10.67)	5000	14	0	5	two-way slab	0

Mesh Input: Slab Areas Table (2)

<i>KMr</i>	<i>KMs</i>	<i>KMrs</i>	<i>KFr</i>	<i>KFs</i>	<i>KVrs</i>
1	1	1	1	1	1
1	1	1	1	1	1
1	1	1	1	1	1
1	1	1	1	1	1

Mesh Input: Beams Table

<i>Number</i>	<i>Location feet</i>	<i>Mix</i>	<i>Thickness inches</i>	<i>TOC inches</i>	<i>Priority</i>	<i>Mesh As Slab</i>	<i>Width inches</i>
1	(-200.8,-115.5)(-195.6,-59.65)(-204.1,-115.2)(-198.9,-64.31)(-197.5,-115.8)(-192.3,-64.99)	5000	18	17	1	true	80
2	(-190.3,-1)(-196.9,-64.55)(-183,-0.9977)(-194.9,-64.76)(-192.3,-0.9984)(-198.9,-64.34)	5000	18	17	1	true	48
3	(-36.79,-92.65)(-163.5,-100.6)(-35.54,-95.92)(-162.2,-146.8)(-38.1,-89.54)(-164.8,-140.3)	5000	18	17	1	true	84
4	(-97.9,-48.85)(-77.42,-48.85)(-97.9,-46.15)(-77.42,-46.35)(-97.9,-51.35)(-77.42,-51.35)	5000	18	17	1	true	60

Mesh Input: Beams Table (2)

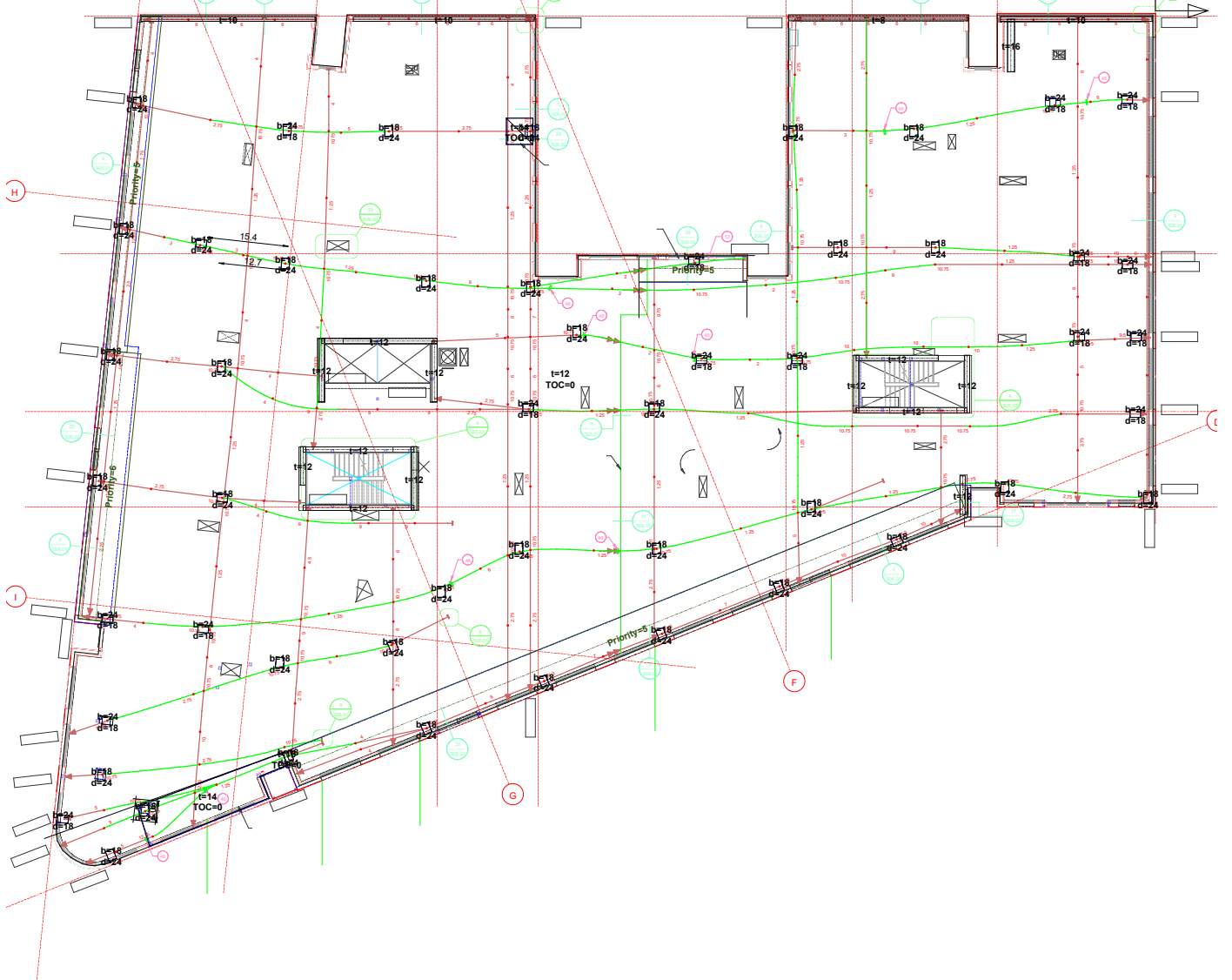
Width
Inches

<i>Behavior</i>	<i>KMr</i>	<i>KMs</i>	<i>KMr</i>	<i>KFr</i>	<i>KFs</i>	<i>KVrs</i>
no-torsion two-way slab	1	1	0.001	1	1	1
no-torsion two-way slab	1	1	0.001	1	1	1
no-torsion two-way slab	1	1	0.001	1	1	1
no-torsion two-way slab	1	1	0.001	1	1	1

Mesh Input: Standard Plan

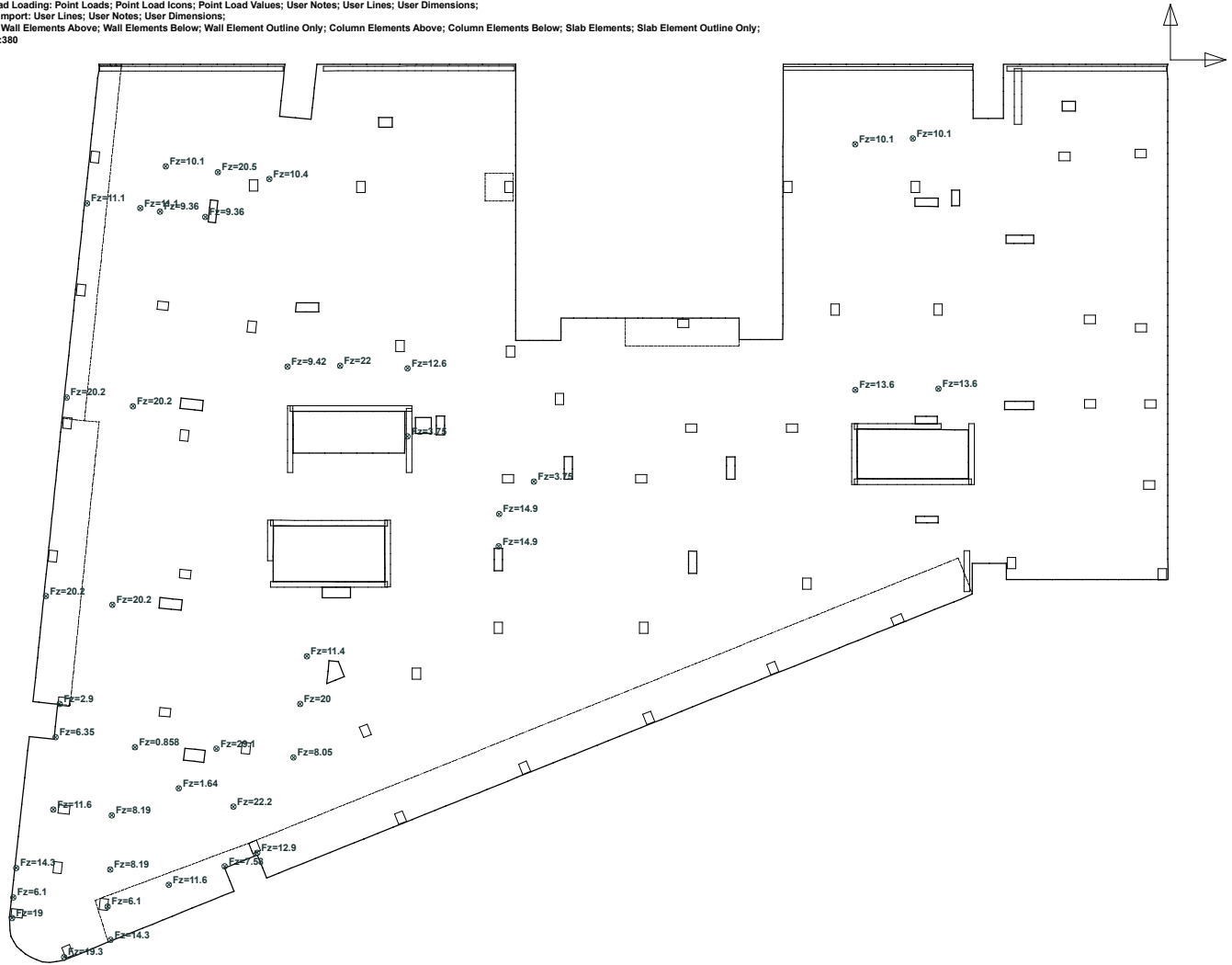
Mesh Input: Beams; Beam Priorities; Slab Areas; Slab AreaT hicknesses; Slab Area Elevations; Slab Openings; Point Supports; Point Support Icons; Line Supports; Line Support Icons; Walls Above; Walls Below; Wall Thicknesses; Columns Above; Columns Below; Column Dimen:
Drawing Import: User Notes; User Lines; User Dimensions; 0; S-BEAM; S-COLS; A-GENM; A-DETL; S-COLS-SYMB; S-ANNO-SYMB; S-GRID-IDEN; S-ANNO-NOTE; 1803002_A_18S_VE_UPDATE_R17_rvt-1-PT Floor Plan - LEVEL 4(S-STRS; 1803002_A_18S_VE_UPDATE_R17_rvt-1-PT

Scale = 1:380



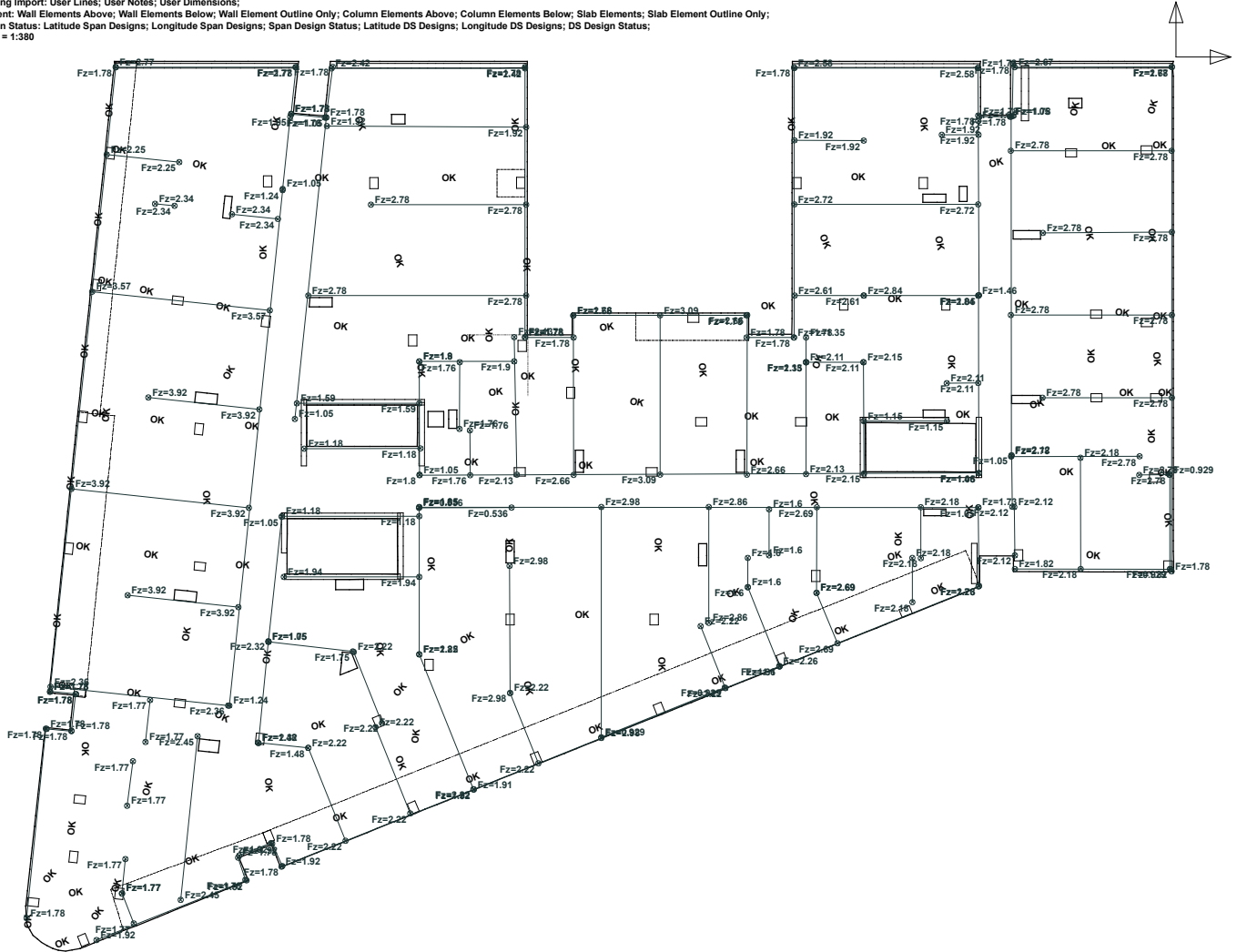
Other Dead Loading: Point Loads Plan

Other Dead Loading: Point Loads; Point Load Icons; Point Load Values; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



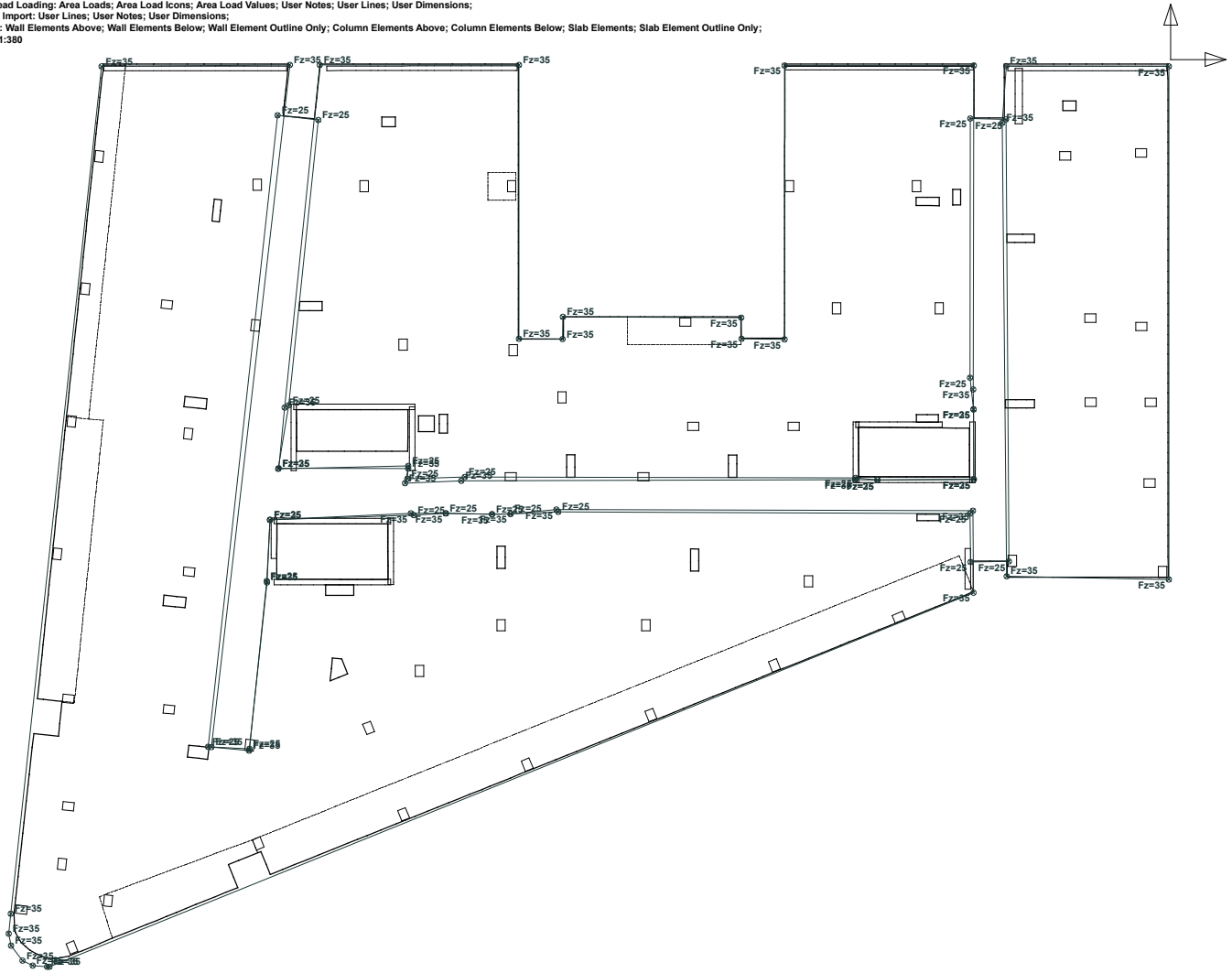
Other Dead Loading: Line Loads Plan

Other Dead Loading: Line Loads; Line Load Icons; Line Load Values; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Design Status: Latitude Span Designs; Longitude Span Designs; Span Design Status; Latitude DS Designs; Longitude DS Designs; DS Design Status;
 Scale = 1:380



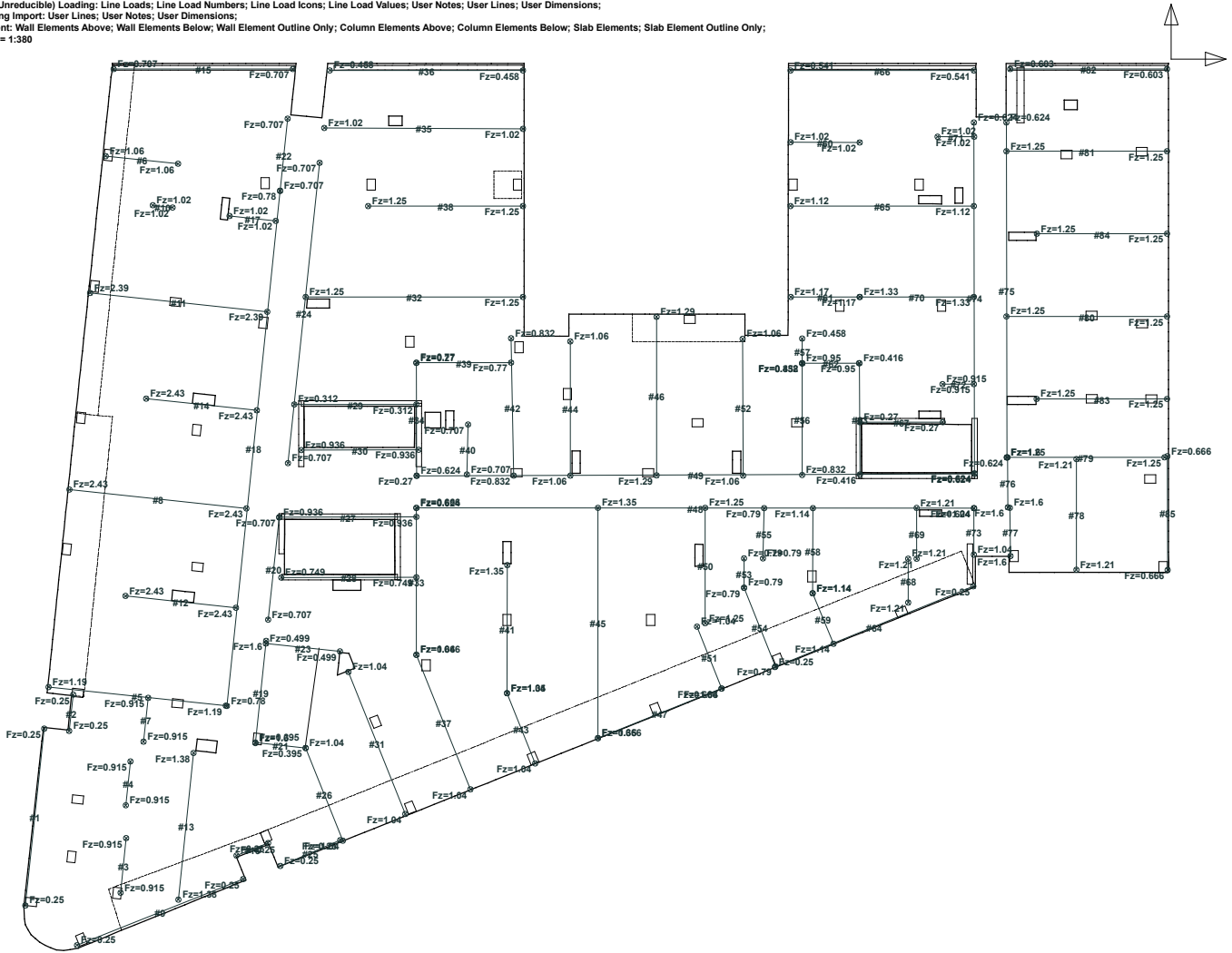
Other Dead Loading: Area Loads Plan

Other Dead Loading: Area Loads; Area Load Icons; Area Load Values; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



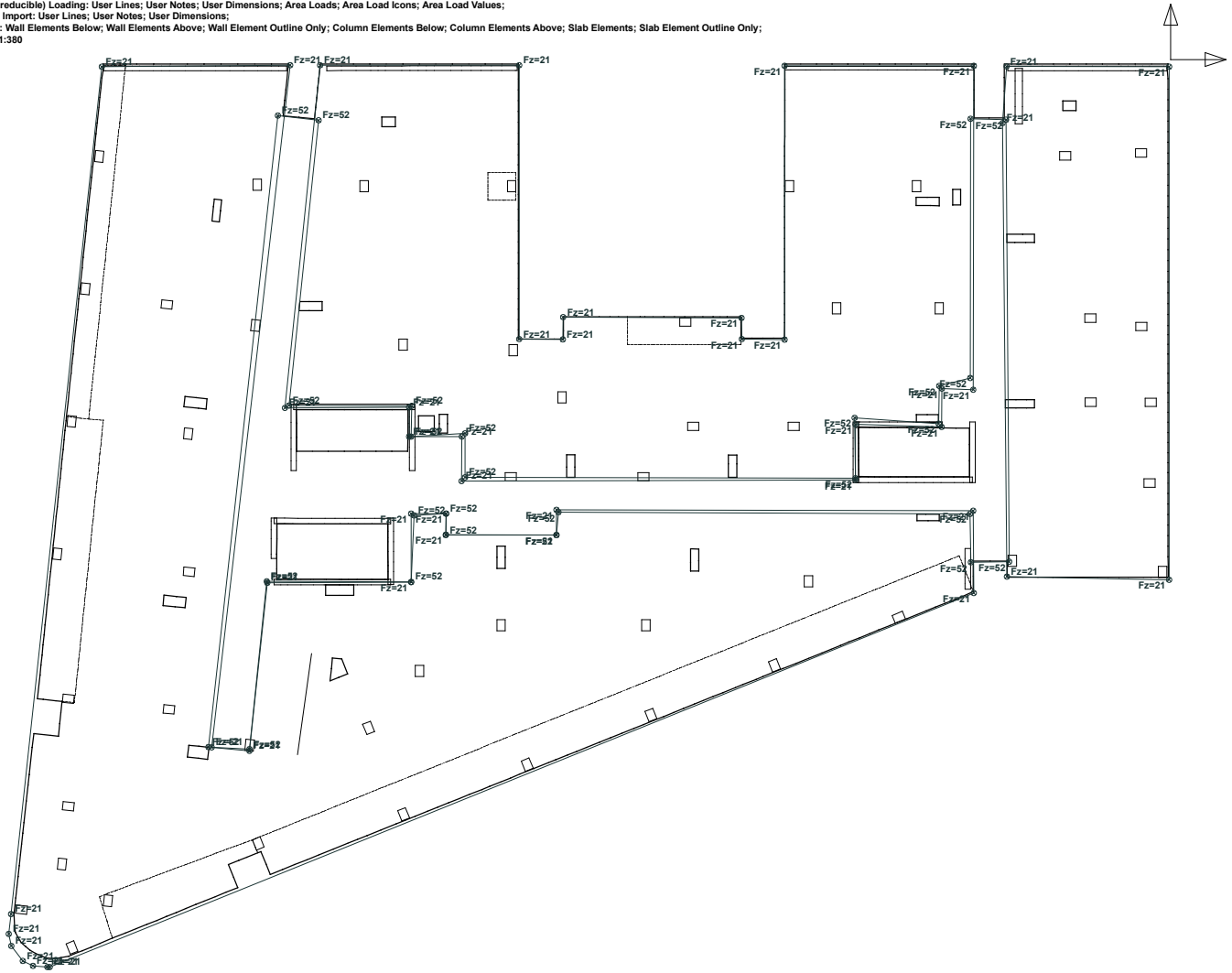
Live (Unreducible) Loading: Line Loads Plan

Live (Unreducible) Loading: Line Loads; Line Load Numbers; Line Load Icons; Line Load Values; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



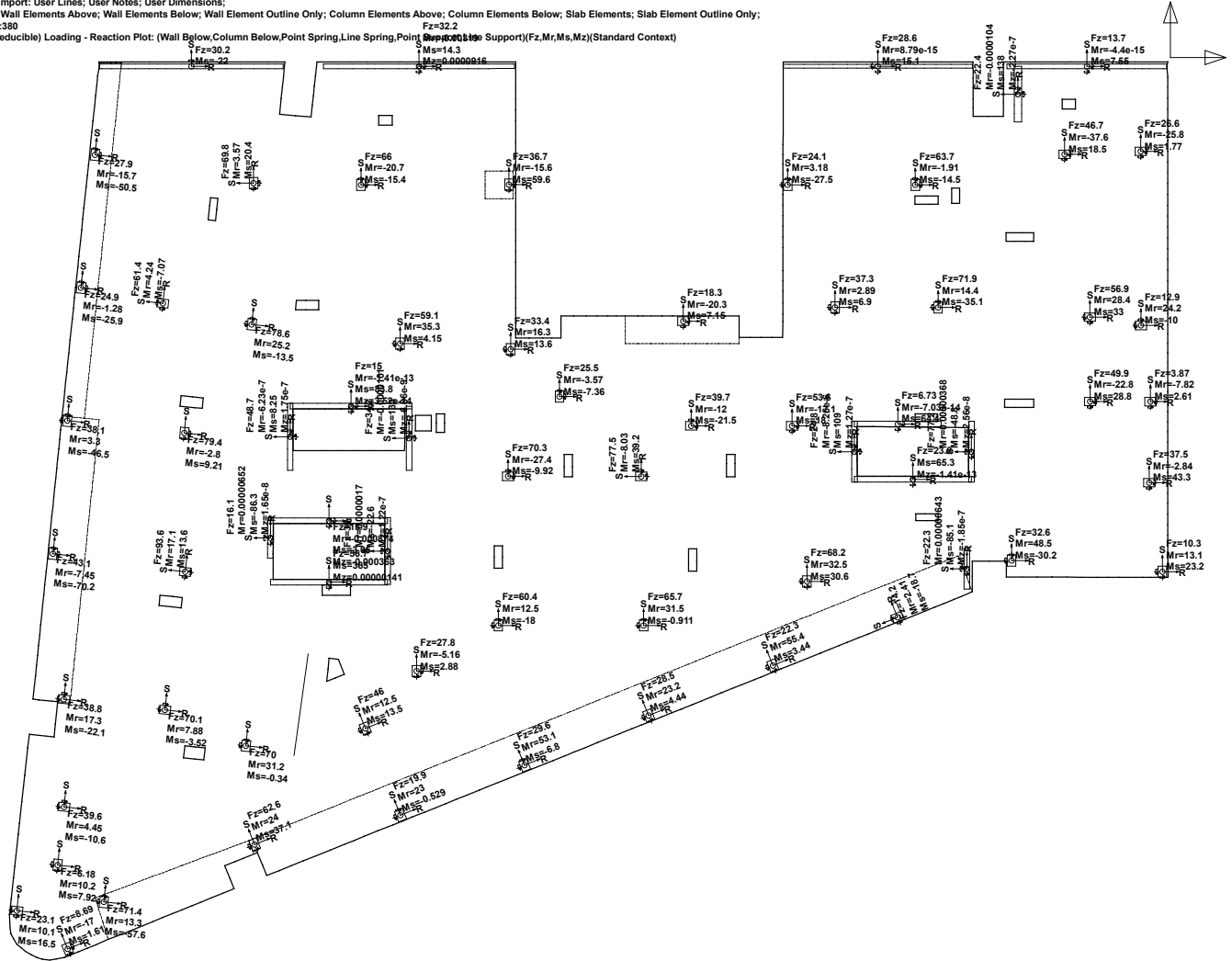
Live (Unreducible) Loading: Area Loads Plan

Live (Unreducible) Loading: User Lines; User Notes; User Dimensions; Area Loads; Area Load Icons; Area Load Values;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



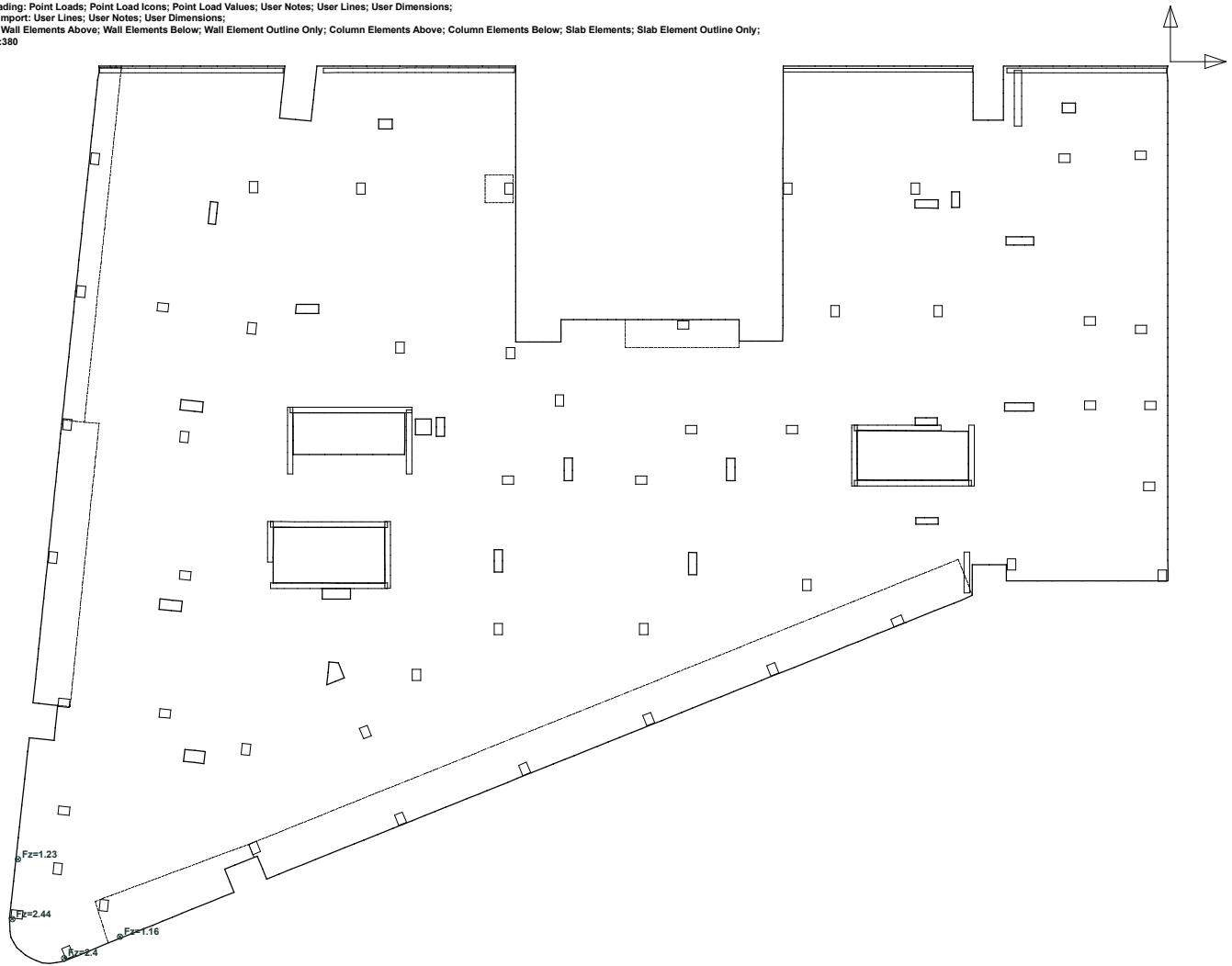
Live (Unreducible) Loading: Std Reactions Plan

Live (Unreducible) Loading: Point Load Icons; Point Load Values; Line Load Icons; Line Load Values; Area Load Icons; Area Load Values; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:390
 Live (Unreducible) Loading - Reaction Plot: (Wall Below,Column Below,Point Spring,Line Spring,Point Spring,Line Spring,Support)(Fz,Mr,Mz,Ms)(Standard Context)

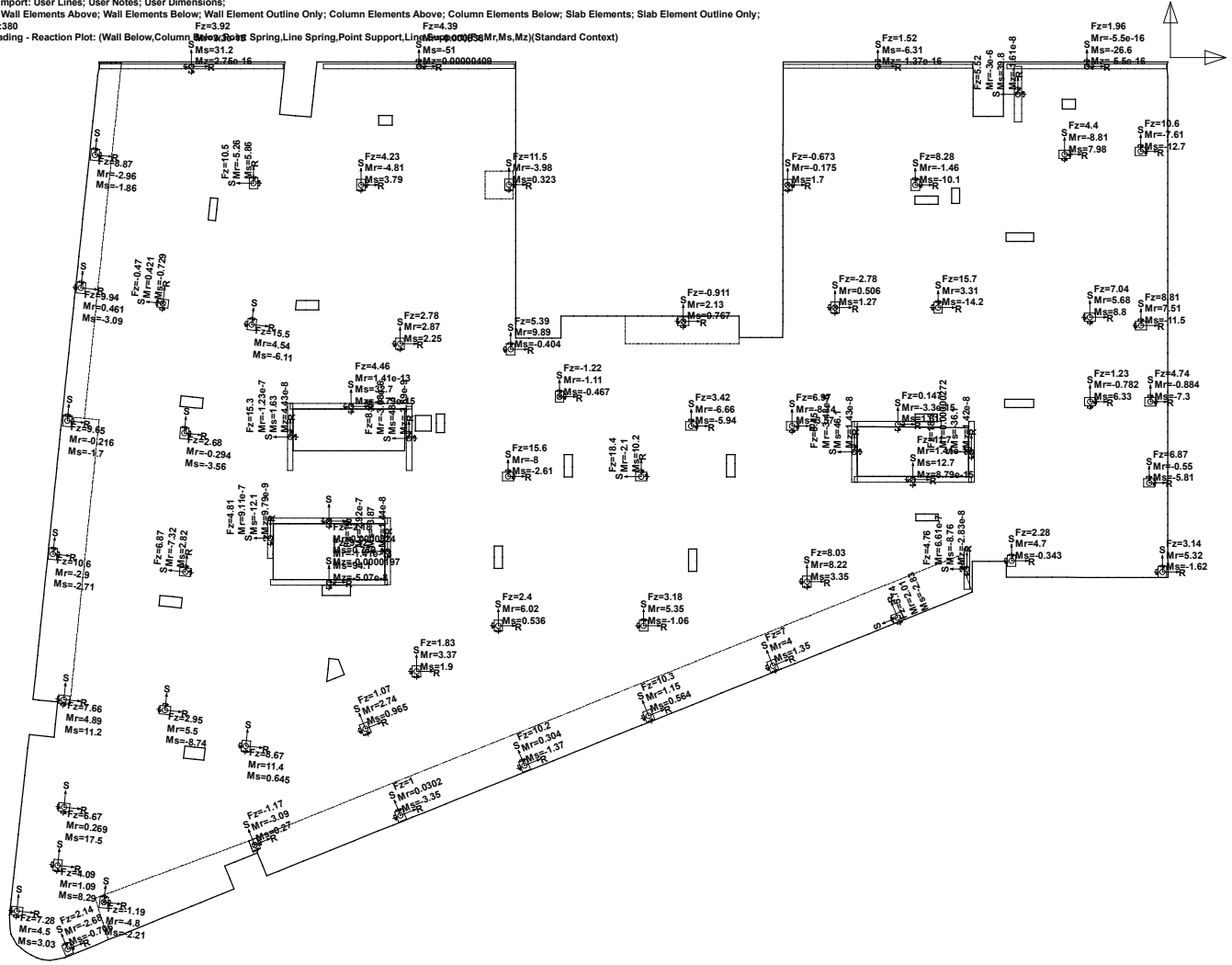


Snow Loading: Point Loads Plan

Snow Loading: Point Loads; Point Load Icons; Point Load Values; User Notes; User Lines; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Scale = 1:380

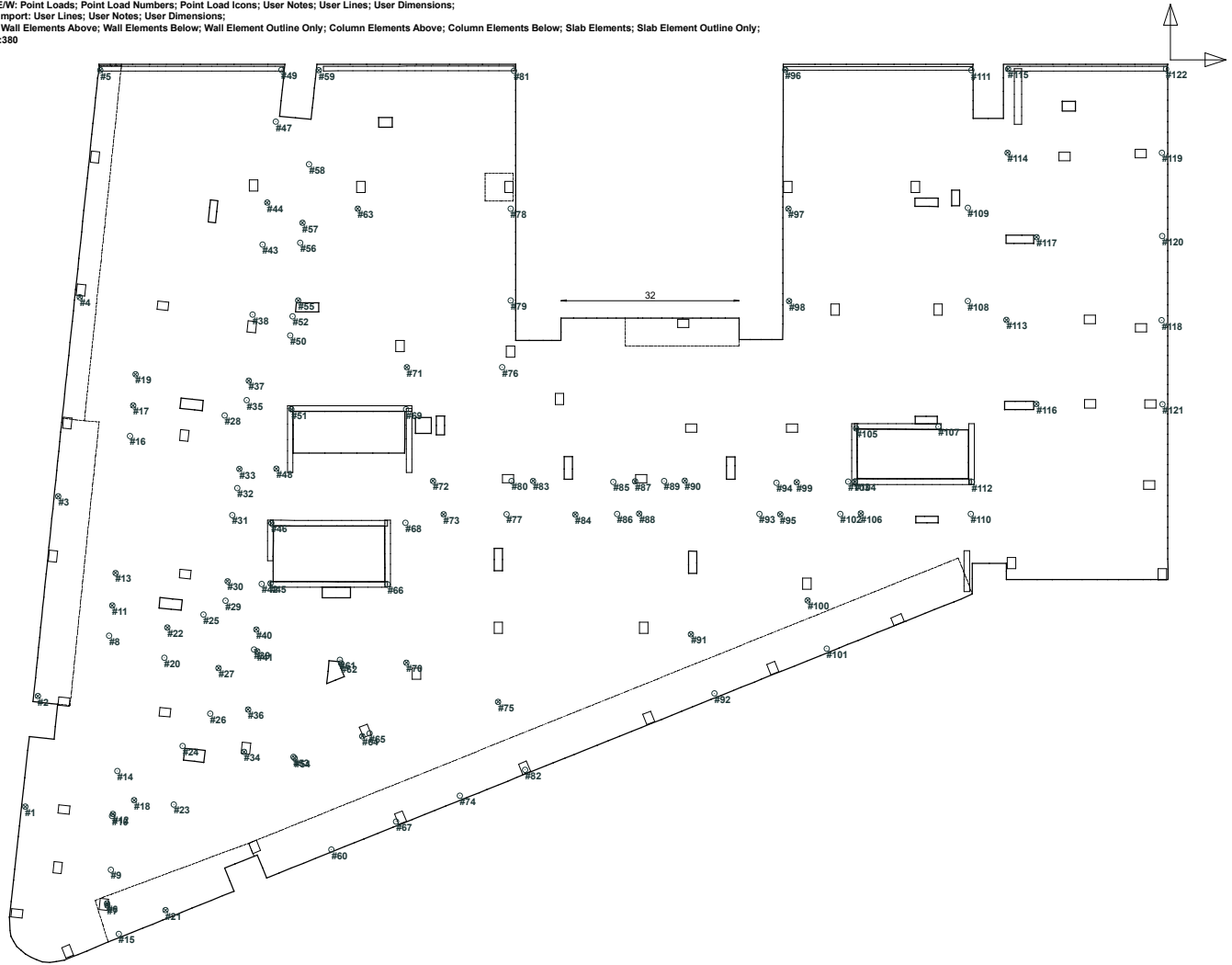


Scale = 1:380 Fz=3.92 Fz=4.39
Snow Loading - Reaction Plot: (Wall Below, Column, Line Spring, Line Support, Point Support, Line Support) (Mr, Ms, Mz) (Standard Context)



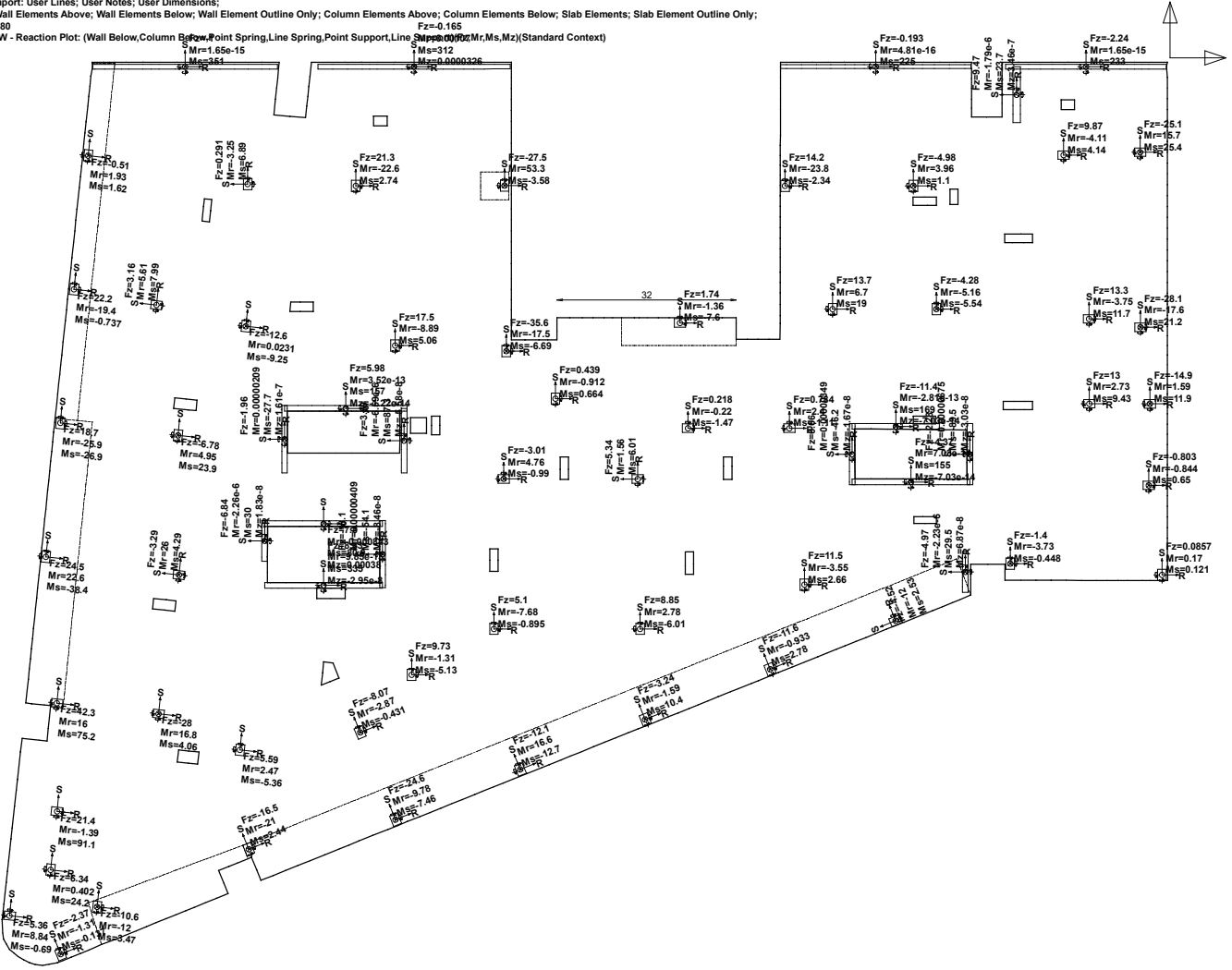
Seismic E/W: Point Loads Plan

Seismic E/W: Point Loads; Point Load Numbers; Point Load Icons; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



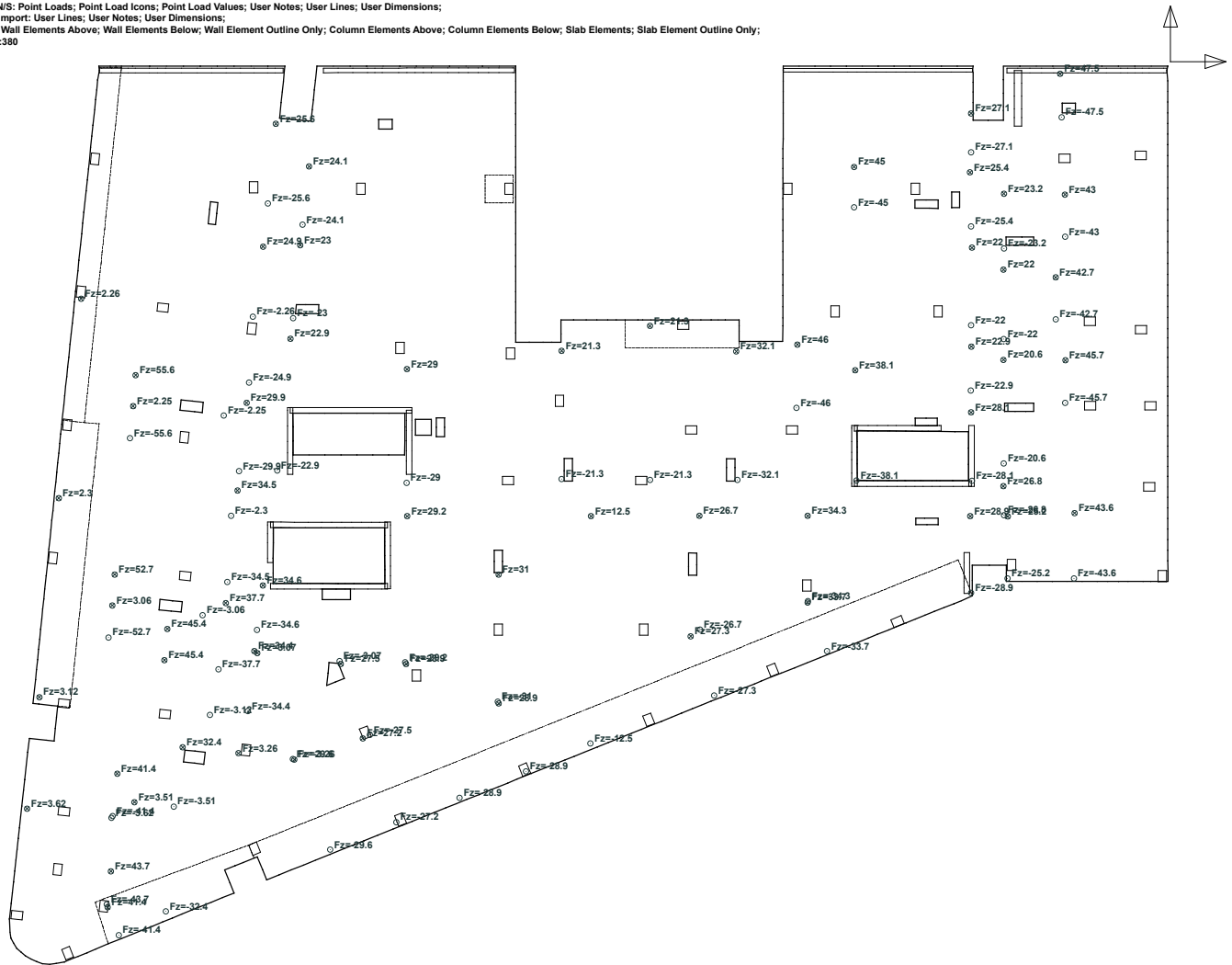
Seismic E/W: Std Reactions Plan

Seismic E/W: Point Load Icons; Point Load Values; Line Load Icons; Line Load Values; Area Load Icons; Area Load Values; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:300
 Seismic E/W - Reaction Plot: (Wall Below,Column Below,Point Spring,Line Spring,Point Support,Line Support,Fz,Mr,Mz)(Standard Context)



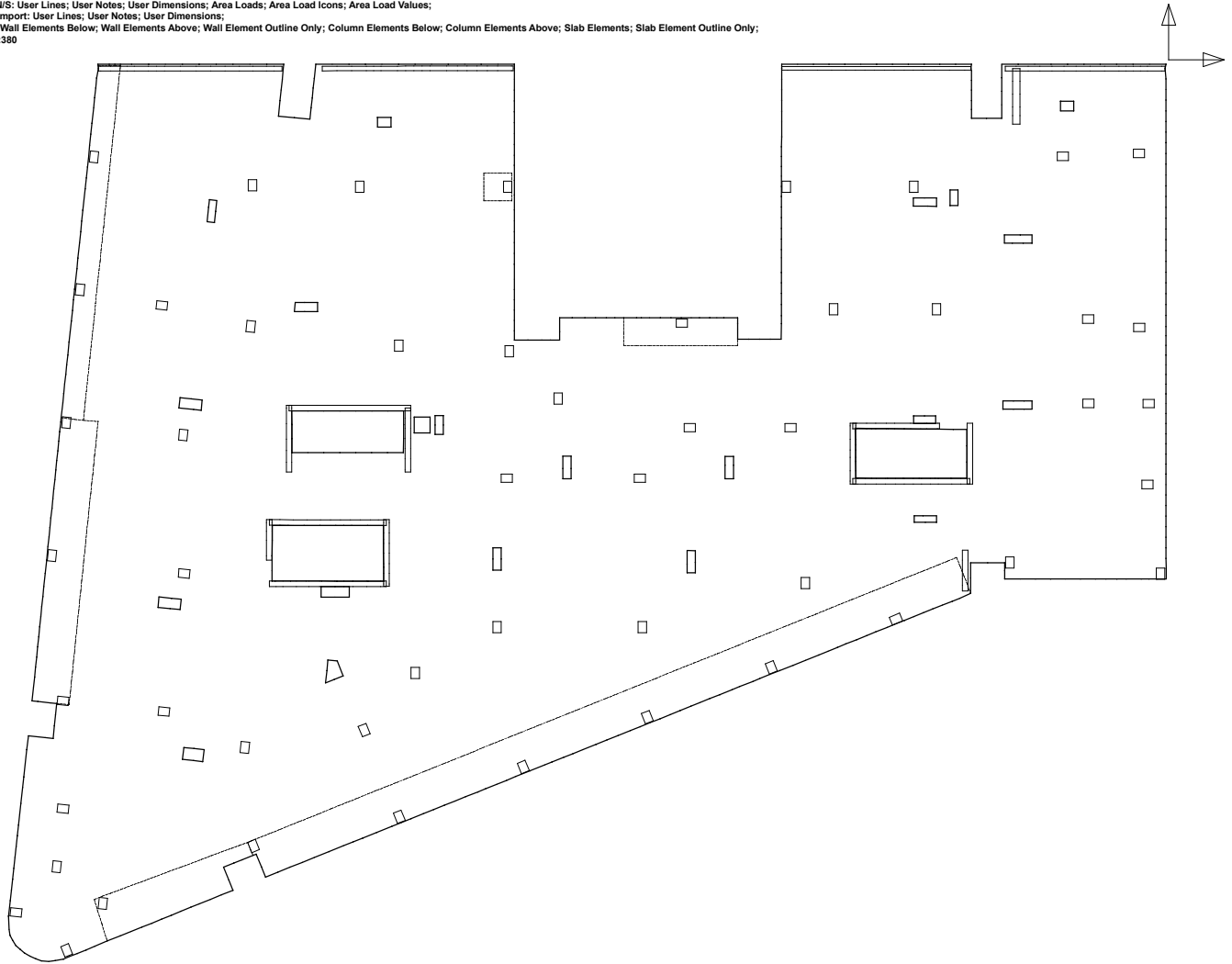
Seismic N/S: Point Loads Plan

Seismic N/S: Point Loads; Point Load Icons; Point Load Values; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



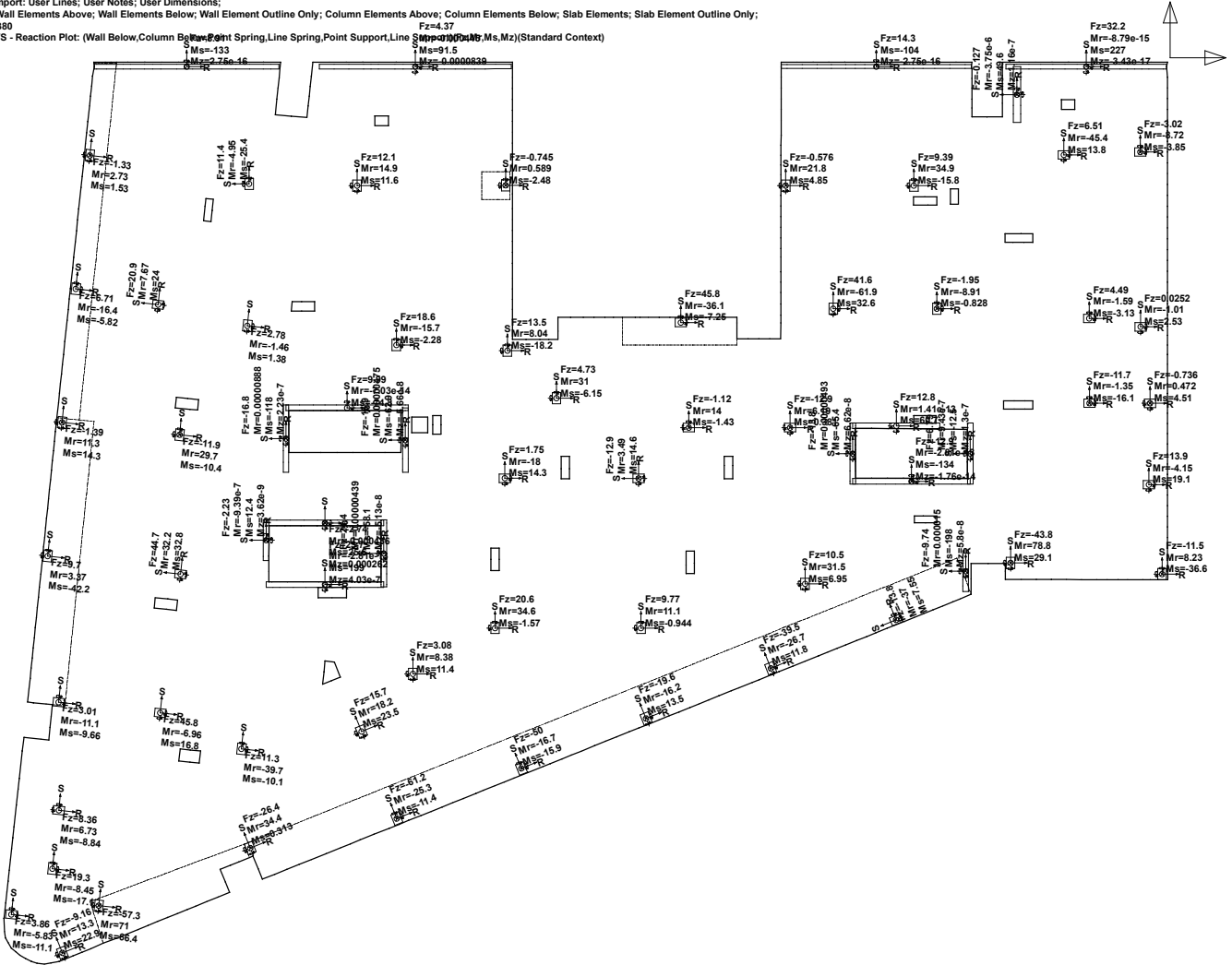
Seismic N/S: Area Loads Plan

Seismic N/S: User Lines; User Notes; User Dimensions; Area Loads; Area Load Icons; Area Load Values;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:380



Seismic N/S: Std Reactions Plan

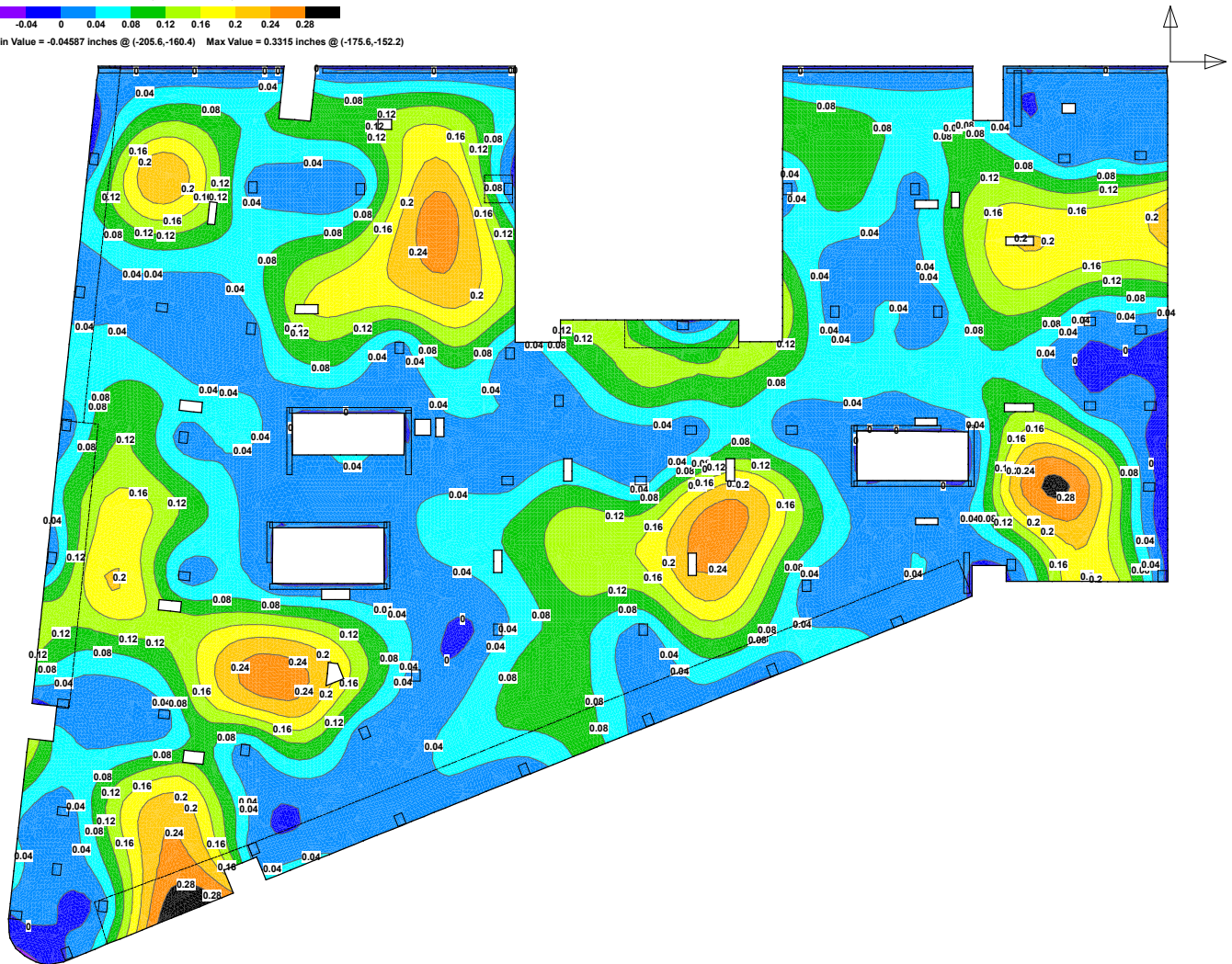
Seismic N/S: Point Load Icons; Point Load Values; Line Load Icons; Line Load Values; Area Load Icons; Area Load Values; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380
 Seismic N/S - Reaction Plot: (Wall Below, Column Below, Point Spring, Line Spring, Point Support, Line Support) (Fz, Mr, Ms, Mz) (Standard Context)



Service LC: D + L: Max Deflection Plan

Service LC: D + L: User Lines; User Notes; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
 Scale = 1:380
 Service LC: D + L - Vertical Deflection Plot (Maximum Values)

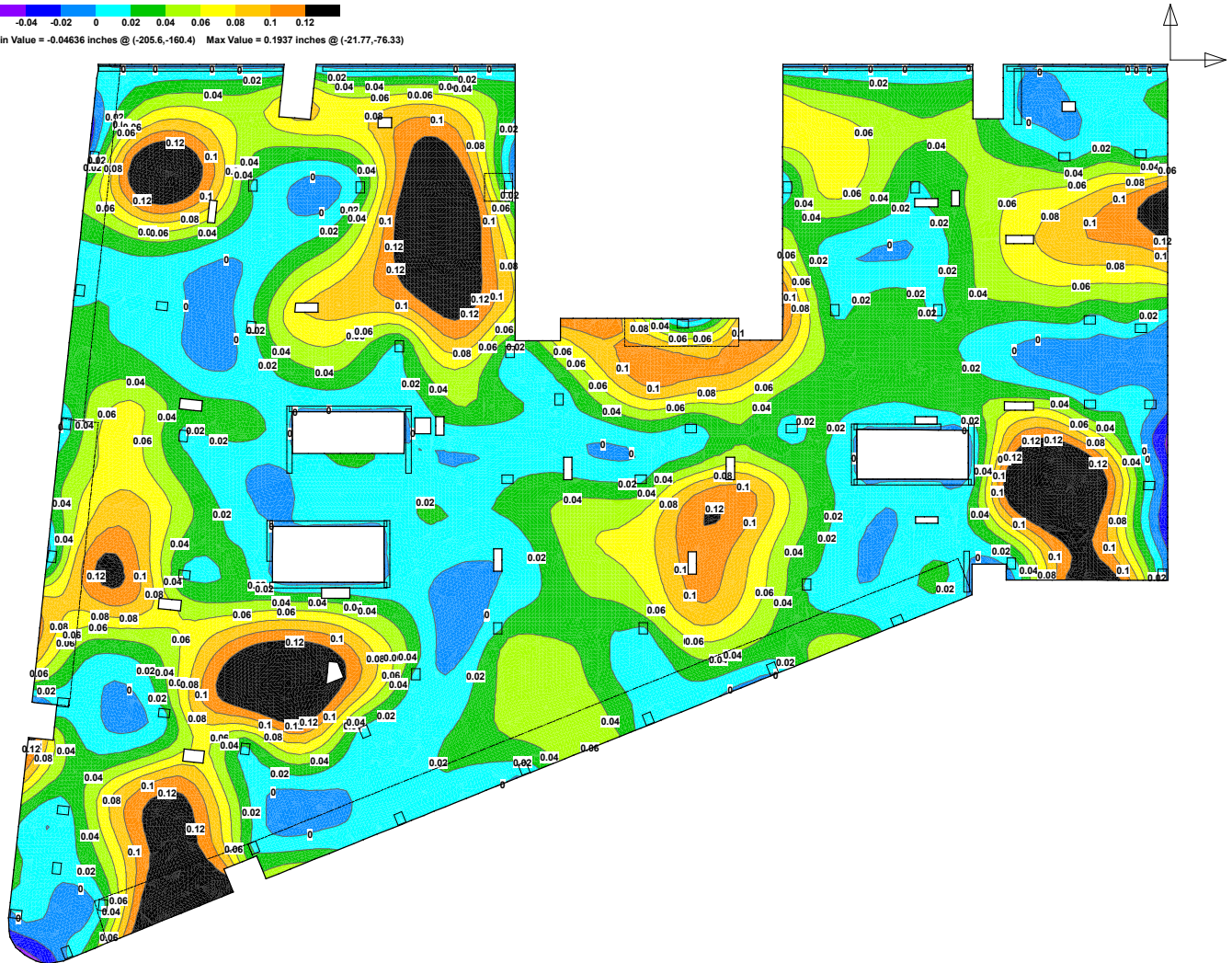
Min Value = -0.04587 inches @ (-205.6,-160.4) Max Value = 0.3315 inches @ (-175.6,-152.2)



Service LC: D + L: Min Deflection Plan

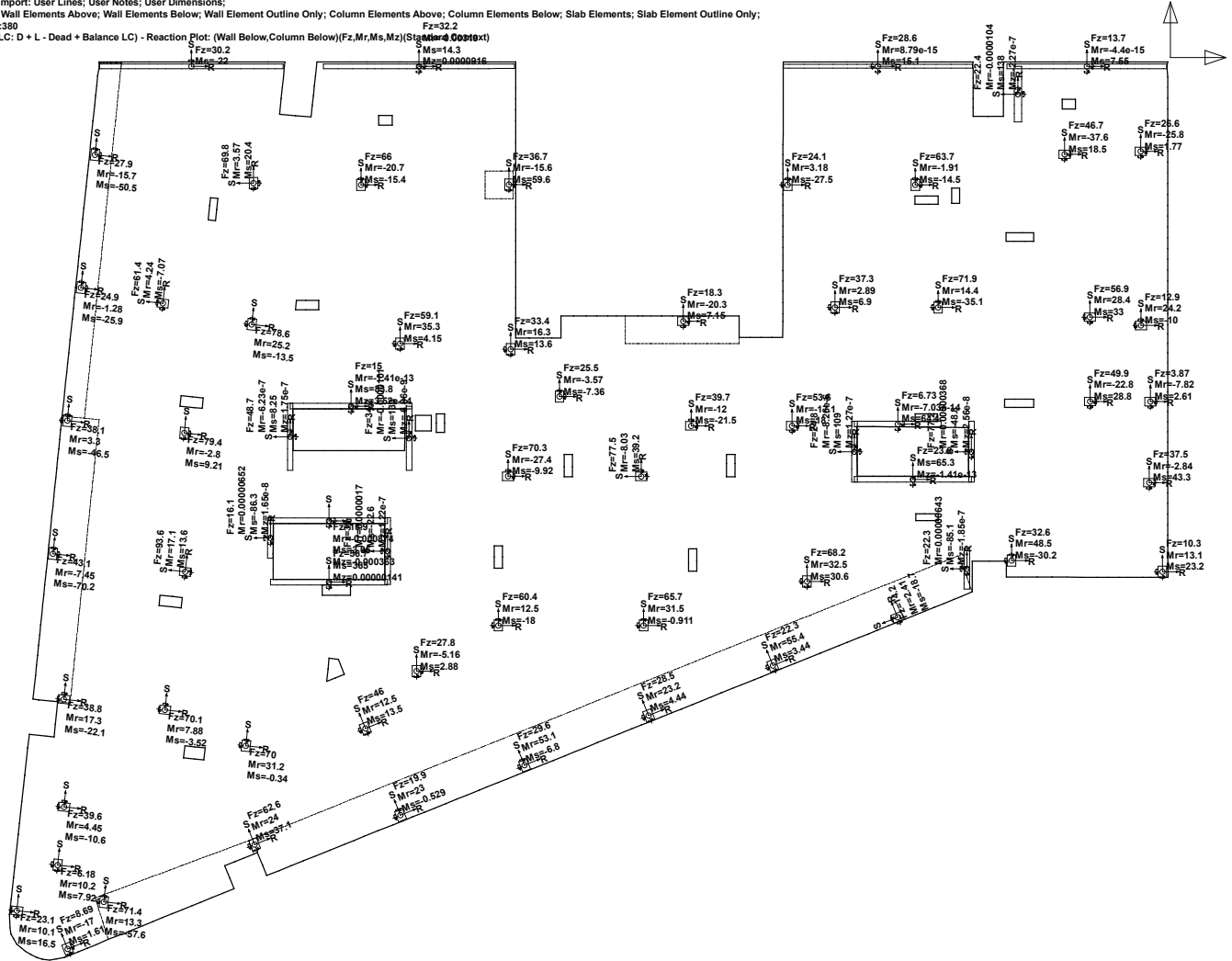
Service LC: D + L: User Lines; User Notes; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:380
Service LC: D + L - Vertical Deflection Plot (Minimum Values)

-0.04 -0.02 0 0.02 0.04 0.06 0.08 0.1 0.12
Min Value = -0.04636 inches @ (-205.6,-160.4) Max Value = 0.1937 inches @ (-21.77,-76.33)



Service LC: D + L: Reaction Plan

Service LC: D + L: User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:300
 (Service LC: D + L - Dead + Balance LC) - Reaction Plot: (Wall Below, Column Below)(Fz, Mr, Ms, Mz)(Std, Max, Opp, Ext)

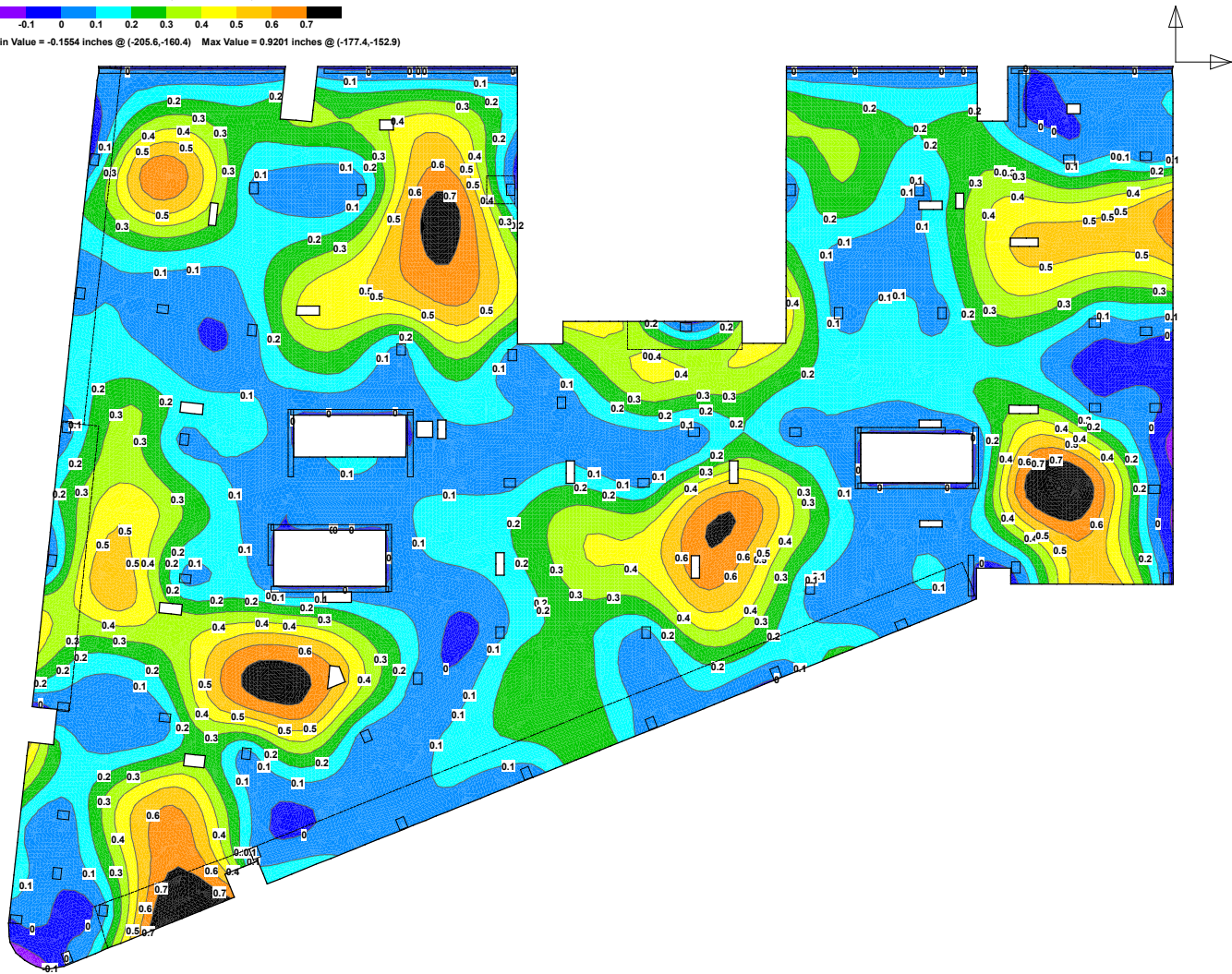


Long Term deflection: Max Deflection Plan

Long Term deflection: User Lines; User Notes; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:390
Long Term deflection - Vertical Deflection Plot (Maximum Values)



Min Value = -0.1554 inches @ (-205.6,-160.4) Max Value = 0.9201 inches @ (-177.4,-152.9)



Design Strip: Latitude SSs Table

Name	Set	Location feet	Skew degrees	At Support 1	At Support 2	Support Width 1 inches
1-1	latitude	(-205,-162.6)(-197.9,-160.2)	182	false	true	0
2-1	latitude	(-204,-114.5)(-198.6,-108.0)	24	false	true	1.39
3-1	latitude	(-207,-153.1)(-195.2,-151.9)	81	true	false	24.68
3-1(2)	latitude	(-195.2,-151.9)(-191.4,-151.8)	181	false	true	0
3-2	latitude	(-191.4,-151.5)(-164.4,-146.8)	86	true	true	20.33
3-3	latitude	(-164.4,-141.2)(-138.2,-136.4)	64	true	true	18.47
3-4	latitude	(-138.2,-136)(-115.9,-127)	127	true	true	18.55
3-5	latitude	(-115.9,-127)(-93.67,-118.1)	18.1	true	true	18.55
3-6	latitude	(-93.67,-118.1)(-71.4,-109.1)	109.1	true	true	18.55
3-7	latitude	(-71.4,-109.1)(-49.13,-100.2)	100.2	true	true	18.55
3-8	latitude	(-49.13,-100.2)(-36.47,-94.24)	94.24	true	true	24.74
4-1	latitude	(-201.3,-89.19)(-195,-89.93)	93	true	false	34.4
5-1	latitude	(-198,-65.18)(-192.6,-61.83)	83	true	false	18.16
6-1	latitude	(-195.5,-41.31)(-192.7,-41.76)	1.76	true	false	18.18
7-1	latitude	(-193,-17.44)(-190.2,-17.89)	17.89	true	false	18.19
8-1	latitude	(-197.3,-115.3)(-180.5,-102.1)	174	false	true	0
8-2	latitude	(-180.5,-117.1)(-166,-123.6)	167	true	true	25.41
8-3	latitude	(-166,-123.6)(-144.5,-128.4)	117	true	true	19.56
8-4	latitude	(-144.5,-120.4)(-135.3,-110.1)	115	true	true	20.23
8-5	latitude	(-135.3,-110.1)(-120.6,-101.6)	109	true	true	20.78
8-6	latitude	(-120.6,-101.9)(-94.55,-100.9)	9.6	true	true	18.16
8-7	latitude	(-94.55,-101.9)(-65.26,-94.8)	81	true	true	18.8
8-8	latitude	(-65.26,-94)(-36.46,-88.5)	10.79	true	true	18.48
9-1	latitude	(-192.4,-41.91)(-181,-44.5)	37	false	true	0
9-2	latitude	(-181,-44.5)(-164.6,-47.85)	82	true	true	27.53
9-3	latitude	(-164.6,-47.85)(-138.3,-51.35)	35	true	true	11.73
9-4	latitude	(-138.3,-51.35)(-118.4,-52.85)	35	true	true	18.18
9-5	latitude	(-118.4,-52.35)(-87.45,-47.25)	25	true	true	18.4
9-6	latitude	(-87.45,-47.25)(-60.2,-48.8)	9e-6	true	true	24.25
9-7	latitude	(-60.2,-44.83)(-41.7,-45.8)	9e-6	true	true	18.16
9-8	latitude	(-41.7,-44.83)(-14.46,-46.58)	587	true	true	18.19
9-9	latitude	(-14.46,-46.58)(-5.313,-47.92)	292	true	true	24.41
9-10	latitude	(-5.313,-47.92)(-0.5036,-49.88)	88	true	false	24.16
10-1	latitude	(-194.8,-89.98)(-176.8,-92.28)	28	false	true	0
10-2	latitude	(-176.8,-92.28)(-161.6,-93.5)	152	true	true	24.16
11-1	latitude	(-192.3,-65.88)(-177,-67.39)	35	false	true	0
11-2	latitude	(-177,-67.39)(-157.9,-68.2)	209	true	true	18.19
12-1	latitude	(-189.8,-18.04)(-164.2,-22.75)	75	false	true	0
12-2	latitude	(-164.2,-22.76)(-145.3,-22.83)	83	true	true	9.307
12-3	latitude	(-145.3,-22.83)(-118.2,-22.45)	45	true	true	18.16
13-1	latitude	(-136.6,-73.5)(-118.9,-75.1)	151	true	true	11.03
13-2	latitude	(-118.9,-75.16)(-94.99,-74.7)	77	true	true	24.16
13-3	latitude	(-94.99,-74.76)(-56.81,-73.8)	352	true	true	23.87
14-1	latitude	(-136.8,-62.55)(-109.7,-60.8)	83	true	true	14.6
14-2	latitude	(-109.7,-60.83)(-86.02,-66.58)	58	true	true	18.6
14-3	latitude	(-86.02,-66.08)(-67.92,-66.0)	9e-6	true	true	24.16

Design Strip: Latitude SSs Table (2)

<i>Support Width 1</i>	<i>Support Width 2</i> <i>inches</i>	<i>Support Trans. Width 1</i> <i>inches</i>	<i>Support Trans. Width 2</i> <i>inches</i>	<i>Auto-Support</i>	<i>Min Divisions</i>	<i>Max Division Spacing</i> <i>feet</i>
18.16	0		24.01	true	4	2.5
24.15	0		18	true	4	2.5
0	18.39		0	true	4	2.5
18.54	0		24.52	true	4	2.5
18.16	26.9		24.01	true	4	2.5
18.07	24.42		24.42	true	4	2.5
17.76	24		24	true	4	2.5
17.76	24		24	true	4	2.5
17.76	24		24	true	4	2.5
23.6	24		18	true	4	2.5
15.5	18.03		28.21	true	4	2.5
0	24		0	true	4	2.5
0	24		0	true	4	2.5
0	24.04		0	true	4	2.5
0	24.04		0	true	4	2.5
24.16	0		18	true	4	2.5
18.27	18.94		25.26	true	4	2.5
18.67	24.78		24.69	true	4	2.5
27.18	26.75		24.14	true	4	2.5
20.78	27.5		27.5	true	4	2.5
18.16	24		24	true	4	2.5
18.8	24.86		24.86	true	4	2.5
14.58	24.43		31.43	true	4	2.5
21.06	0		18.13	true	4	2.5
24.7	18.08		24.11	true	4	2.5
18.32	24		24.21	true	4	2.5
18.18	24.03		24.03	true	4	2.5
24.48	24.32		18.24	true	4	2.5
18.23	18.07		24.09	true	4	2.5
18.16	24		24	true	4	2.5
24.21	24.05		18.04	true	4	2.5
24.41	18.19		18.19	true	4	2.5
3.804	18		0	true	4	2.5
24.16	0		18.01	true	4	2.5
0	18		0	true	4	2.5
18.16	0		24	true	4	2.5
13.8	24.05		144.1	true	4	2.5
27.46	0		24.41	true	4	2.5
18.16	24		24	true	4	2.5
31.77	24		24	true	4	2.5
24.26	64.9		18.08	true	4	2.5
24.45	18		18	true	4	2.5
10.01	18.01		131	true	4	2.5
18.19	113.9		24.05	true	4	2.5
24.74	24.58		18.44	true	4	2.5
24.16	18		18	true	4	2.5

[illegible]

Design Strip: Latitude SSs Table (4)

[illegible]

Design Strip: Latitude SSs Table (5)

[illegible]

Design Strip: Latitude SSs Table - 55

Design Strip: Latitude SSs Table (7)

[illegible]

MS Shear Legs

Design Strip: Latitude SSs Table - 57

Design Strip: Latitude SSs Table (9)

<i>Name</i>	<i>Set</i>	<i>Location feet</i>	<i>Skew degrees</i>	<i>At Support 1</i>	<i>At Support 2</i>	<i>Support Width 1 inches</i>
14-4	latitude	(-67.92,-66.08)(-56.72,-56.72)	-56.72	true	true	24.16
15-1	latitude	(-69.33,-22.67)(-45.8,-22.67)	-45.8	true	true	33.31
15-2	latitude	(-45.8,-22.67)(-19.02,-17.34)	-19.02	true	true	18.51
15-3	latitude	(-19.02,-17.34)(-5.364,-16.83)	-5.364	true	true	24.17
15-4	latitude	(-5.364,-16.83)(-0.5351,-16.83)	-0.5351	true	false	24.16
16-1	latitude	(-41.75,-65.72)(-35.58,-65.72)	-35.58	true	true	13.94
16-2	latitude	(-35.58,-65.81)(-14.45,-61.73)	-14.45	true	true	8.971
16-3	latitude	(-14.45,-61.73)(-3.5,-61.73)	-3.5	true	true	24.16
16-4	latitude	(-3.5,-61.73)(-0.4875,-61.73)	-0.4875	true	false	21.41
17-1	latitude	(-36.22,-75.7)(-3.5,-76.3)	-3.5	true	true	24.16
17-2	latitude	(-3.5,-76.3)(-0.6594,-76.3)	-0.6594	true	false	16.03
18-1	latitude	(-28.53,-90.28)(-1.634,-92.34)	-1.634	true	true	18.2

Design Strip: Latitude SSs Table (10)

t Width 1

<i>Support Width 2 inches</i>	<i>Support Trans. Width 1 inches</i>	<i>Support Trans. Width 2 inches</i>	<i>Auto-Support</i>	<i>Min Divisions</i>	<i>Max Division Spacing feet</i>
12.16	18	131	true	4	2.5
18.16	24	24	true	4	2.5
24.63	24.47	18.35	true	4	2.5
24.17	18.01	18.01	true	4	2.5
3.417	18	0	true	4	2.5
15.51	12	131	true	4	2.5
24.6	29.29	18.33	true	4	2.5
26.91	18	18	true	4	2.5
4.016	18	0	true	4	2.5
32.29	125	18	true	4	2.5
0	18	0	true	4	2.5
14.23	24.05	24.05	true	4	2.5

Design Strip: Latitude SSs Table (11)

on Spacing

<i>Design For Axial</i>	<i>Environment</i>	<i>Design As PT</i>	<i>Maximize Integrated V:</i>	<i>Use Spec LLR Params</i>	<i>Spec. LLR Levels</i>	<i>Spec. Trib. Area ft²</i>
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0

Design Strip: Latitude SSs Table (12)

<i>Spec. Infl. Area ft²</i>	<i>Max LLR %</i>	<i>Span Width</i>	<i>Col Strip Width</i>	<i>Lock Strips</i>	<i>Design CS for CS</i>	<i>-CS Auto Trim</i>	<i>CS Section Slope</i>
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25

Design Strip: Latitude SSs Table (13)

Section Slope	CS Top Bar	CS Bot Bar	CS Shear Bar	CS Top Cover inches	CS Bot Cover inches	CS Shear d calc	CS Torsion Design	CS System
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab

Design Strip: Latitude SSs Table (14)

<i>CS Min. Bar Loc.</i>	<i>CS Min T.Bar</i>	<i>CS Min B.Bar</i>	<i>CS Shear Legs</i>	<i>MS Same As CS</i>	<i>MS Auto Trim</i>	<i>MS Section Slope</i>	<i>MS Top Bar</i>	<i>MS Bot Bar</i>
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4

Design Strip: Latitude SSs Table (15)

Bot Bar	MS Shear Bar	MS Top Cover inches	MS Bot Cover inches	MS Shear d calc	MS Torsion Design	MS System	MS Min. Bar Loc.	MS Min T.Bar	MS Min B.Bar
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0

Design Strip: Latitude SSs Table (16)

<i>Min B.Bar</i>	<u><i>MS Shear Legs</i></u>
2	
2	
2	
2	
2	
2	
2	
2	
2	
2	
2	
2	

Design Strip: Longitude SSs Table

Name	Set	Location feet	Skew degrees	At Support 1	At Support 2	Support Width 1 inches
19-1	longitude	(-207,-159.8)(-207,-153.01)		false	true	21.45
19-2	longitude	(-207,-153.1)(-199.7,-144.9)		true	true	22.33
19-3	longitude	(-199.7,-144.9)(-198.6,-132.5)		true	true	24.16
19-4	longitude	(-198.6,-134.5)(-198.6,-116.872)		true	true	18.26
20-1	longitude	(-203,-115)(-200.6,-89.18)	266	false	true	0
20-2	longitude	(-200.6,-89.18)(-198.1,-65.31)		true	true	27.21
20-3	longitude	(-198.1,-65.31)(-195.5,-41.81)		true	true	27.31
20-4	longitude	(-195.5,-41.31)(-193,-17.57)		true	true	24.16
20-5	longitude	(-193,-17.57)(-191.6,-15.897)		true	true	27.22
21-1	longitude	(-197.9,-160)(-191.4,-137.55)		true	true	21.01
21-2	longitude	(-191.4,-151.5)(-190.7,-149.2)		true	false	24.63
22-1	longitude	(-190.5,-148.5)(-180.5,-116.24)		false	true	0
22-2	longitude	(-180.5,-117.1)(-176.2,-95.44)		true	true	18.2
22-3	longitude	(-176.2,-92.34)(-177,-61.891)		true	true	18.14
22-4	longitude	(-177,-67.39)(-164.6,-42.872)		true	true	26.95
22-5	longitude	(-164.6,-47.85)(-164.2,-22.76)		true	true	22.66
22-6	longitude	(-164.2,-22.76)(-160.1,-11.583)		true	true	30.23
23-1	longitude	(-164.7,-140.2)(-165.9,-121.35)		true	true	0
23-2	longitude	(-165.9,-123.6)(-161.6,-94.78)		true	true	25.34
24-1	longitude	(-152.1,-1.583)(-145.3,-22.83)		true	true	10.65
24-2	longitude	(-145.3,-22.83)(-138.3,-51.35)		true	true	24.88
24-3	longitude	(-138.3,-51.35)(-137.2,-62.685)		true	true	24.28
25-1	longitude	(-145.9,-94.21)(-144.5,-120.4)		true	true	10.33
25-2	longitude	(-144.5,-120.4)(-138.2,-136.06)		true	true	24.16
26-1	longitude	(-138.2,-136)(-135.3,-110.1)		true	true	27.42
26-2	longitude	(-135.3,-110.1)(-136.5,-73.36)		true	true	24.17
27-1	longitude	(-118.8,-1.583)(-118.8,-22.85)		true	true	9.433
27-2	longitude	(-118.8,-22.85)(-118.4,-52.358)		true	true	22.87
27-3	longitude	(-118.4,-52.35)(-118.9,-75.16)		true	true	24.16
27-4	longitude	(-118.9,-75.16)(-120.6,-101.9)		true	true	18.2
27-5	longitude	(-120.6,-101.9)(-115.9,-127.64)		true	true	24.58
28-1	longitude	(-110,-50.87)(-109.6,-60.853)		false	true	0
29-1	longitude	(-94.99,-74.76)(-94.55,-101.167)		true	true	27.89
29-2	longitude	(-94.55,-101.9)(-93.65,-118.85)		true	true	24.19
30-1	longitude	(-87.45,-47.25)(-86.02,-66.388)		true	true	19.46
31-1	longitude	(-68.66,-1.577)(-68.7,-22.67)		true	true	7.567
31-2	longitude	(-68.7,-22.67)(-60.2,-44.83)		true	true	30.15
31-3	longitude	(-60.2,-44.83)(-67.92,-66.08)		true	true	25.69
31-4	longitude	(-67.92,-66.08)(-65.26,-94)		true	true	18.24
31-5	longitude	(-65.26,-94)(-71.38,-109.21)		true	true	26.05
32-1	longitude	(-49.6,-98.98)(-49.11,-75.688)		false	true	0
33-1	longitude	(-47.52,-1.583)(-45.8,-22.824)		true	true	7.433
33-2	longitude	(-45.8,-22.83)(-41.7,-44.83)		true	true	24.57
33-3	longitude	(-41.7,-44.83)(-41.7,-65.04)	1793	true	true	24.16
34-1	longitude	(-36.48,-88.8)(-36.48,-78.851e-6)		true	true	17.24
35-1	longitude	(-15.77,-1.583)(-19.02,-17.04)		true	true	10.38

Design Strip: Longitude SSs Table (2)

<i>Support Width 1</i>	<i>Support Width 2</i> <i>inches</i>	<i>Support Trans. Width 1</i> <i>inches</i>	<i>Support Trans. Width 2</i> <i>inches</i>	<i>Auto-Support</i>	<i>Min Divisions</i>	<i>Max Division Spacing</i> <i>feet</i>
	18.26	0	24.13	true	4	2.5
	29.71	29.55	22.17	true	4	2.5
	18.16	18	24	true	4	2.5
	0	24.13	0	true	4	2.5
	21.1	0	18	true	4	2.5
	21	18	18	true	4	2.5
	24.15	18	18	true	4	2.5
	21.1	18	18	true	4	2.5
	10.05	18	63.15	true	4	2.5
	28.36	27.81	21.15	true	4	2.5
	0	18.36	0	true	4	2.5
	18.54	0	24.5	true	4	2.5
	18.39	24.05	24.05	true	4	2.5
	24.39	24.23	18.18	true	4	2.5
	28.72	20.09	20.1	true	4	2.5
	18.64	18.07	18	true	4	2.5
	10.35	18.34	36.02	true	4	2.5
	23.36	0	18.28	true	4	2.5
	0	18.02	44.82	true	4	2.5
	25.34	0	18.89	true	4	2.5
	24.88	18.54	18.54	true	4	2.5
	12.22	18.09	72.62	true	4	2.5
	25.53	160.9	19.03	true	4	2.5
	24.16	17.99	17.99	true	4	2.5
	24.31	20.45	18.11	true	4	2.5
	9.596	18.01	12.01	true	4	2.5
	25.45	411.3	18	true	4	2.5
	24.16	18	18	true	4	2.5
	18.16	18	24	true	4	2.5
	24.21	24.05	18.04	true	4	2.5
	24.63	18.31	18.36	true	4	2.5
	24.17	0	18.01	true	4	2.5
	24.16	24	18	true	4	2.5
	25.51	18.03	19.01	true	4	2.5
	18.21	24.07	24.07	true	4	2.5
	20.16	407.7	18	true	4	2.5
	25.86	19.28	19.28	true	4	2.5
	19.31	19.15	25.53	true	4	2.5
	24.27	24.11	18.08	true	4	2.5
	26.06	19.42	25.03	true	4	2.5
	13.54	0	252.1	true	4	2.5
	24.24	99.23	18.06	true	4	2.5
	24.57	18.31	18.31	true	4	2.5
	11.22	18	186.5	true	4	2.5
	8.748	12	252	true	4	2.5
	18.54	49.45	24.51	true	4	2.5

Design Strip: Longitude SSs Table (4)

[illegible]

Design Strip: Longitude SSs Table (5)

Section Slope	CS Reinforcement			CS Top Cover	CS Bot Cover	CS Shear d calc	CS Torsion Design	CS System
	CS Top Bar	CS Bot Bar	CS Shear Bar	inches	inches			
1:12	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#7	#7	#4	1	1	All Tension Reinforcement		beam
1:10	#7	#7	#4	1	1	All Tension Reinforcement		beam
	#7	#7	#4	1	1	All Tension Reinforcement		beam
	#7	#7	#4	1	1	All Tension Reinforcement		beam
	#7	#7	#4	1	1	All Tension Reinforcement		beam
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
1:8	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	Maximize Effective Depth		two-way slab
	#5	#5	#4	1	1	Maximize Effective Depth		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
1:6	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
1:4	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	Maximize Effective Depth		two-way slab
1:2	#5	#5	#4	1	1	Maximize Effective Depth		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
Vertical	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab

Design Strip: Longitude SSs Table (6)

[illegible]

Design Strip: Longitude SSs Table (7)

[illegible]

MS Shear Legs

Design Strip: Longitude SSs Table - 73

Design Strip: Longitude SSs Table (9)

<i>Name</i>	<i>Set</i>	<i>Location feet</i>	<i>Skew degrees</i>	<i>At Support 1</i>	<i>At Support 2</i>	<i>Support Width 1 inches</i>
35-2	longitude	(-19.02,-17.34)(-14.45,-46.58)	-46.58	true	true	18.38
35-3	longitude	(-14.45,-46.58)(-14.45,-61.73)	-61.73	true	true	18.17
36-1	longitude	(-1.248,-1.54)(-5.364,-16.83)	-16.83	true	true	11.6
36-2	longitude	(-5.364,-16.83)(-5.313,-47.92)	-47.92	true	true	18.16
36-3	longitude	(-5.313,-47.92)(-3.5,-61.73)	-61.73	true	true	22.35
36-4	longitude	(-3.5,-61.73)(-3.5,-75.6)	-75.6	true	true	18.54
36-5	longitude	(-3.5,-75.6)(-1.302,-92.43)	-92.43	true	true	35.04

Design Strip: Longitude SSs Table (10)

t Width 1

<i>Support Width 2 inches</i>	<i>Support Trans. Width 1 inches</i>	<i>Support Trans. Width 2 inches</i>	<i>Auto-Support</i>	<i>Min Divisions</i>	<i>Max Division Spacing feet</i>
18.36	24.29	24.29	true	4	2.5
18.16	24	24	true	4	2.5
18.8	24.45	24.85	true	4	2.5
14.16	24	24	true	4	2.5
17.93	24.21	24.21	true	4	2.5
1.567	24	24	true	4	2.5
28.39	21.65	18.15	true	4	2.5

Design Strip: Longitude SSs Table (11)

on Spacing

<i>Design For Axial</i>	<i>Environment</i>	<i>Design As PT</i>	<i>Maximize Integrated V:</i>	<i>Use Spec LLR Params</i>	<i>Spec. LLR Levels</i>	<i>Spec. Trib. Area ft²</i>
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	true	false	1	0

Design Strip: Longitude SSs Table (12)

<i>Spec. Infl. Area ft²</i>	<i>Max LLR %</i>	<i>Span Width</i>	<i>Col Strip Width</i>	<i>Lock Strips</i>	<i>Design CS for CS</i>	<i>-CS Auto Trim</i>	<i>CS Section Slope</i>
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25

Design Strip: Longitude SSs Table (13)

Section Slope	CS Top Bar	CS Bot Bar	CS Shear Bar	CS Top Cover inches	CS Bot Cover inches	CS Shear d calc	CS Torsion Design	CS System
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab

Design Strip: Longitude SSs Table (14)

<i>CS Min. Bar Loc.</i>	<i>CS Min T.Bar</i>	<i>CS Min B.Bar</i>	<i>CS Shear Legs</i>	<i>MS Same As CS</i>	<i>MS Auto Trim</i>	<i>MS Section Slope</i>	<i>MS Top Bar</i>	<i>MS Bot Bar</i>
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4

Design Strip: Longitude SSs Table (15)

Bot Bar	MS Shear Bar	MS Top Cover inches	MS Bot Cover inches	MS Shear d calc	MS Torsion Design	MS System	MS Min. Bar Loc.	MS Min T.Bar	MS Min B.Bar
	#4	1.5	0.75	All Tension Reinforcement	two-way slab	stress	0	0	0
	#4	1.5	0.75	All Tension Reinforcement	two-way slab	stress	0	0	0
	#4	1.5	0.75	All Tension Reinforcement	two-way slab	stress	0	0	0
	#4	1.5	0.75	All Tension Reinforcement	two-way slab	stress	0	0	0
	#4	1.5	0.75	All Tension Reinforcement	two-way slab	stress	0	0	0
	#4	1.5	0.75	All Tension Reinforcement	two-way slab	stress	0	0	0
	#4	1.5	0.75	All Tension Reinforcement	two-way slab	stress	0	0	0

Design Strip: Longitude SSs Table (16)

<i>Min B.Bar</i>	<u><i>MS Shear Legs</i></u>
	2
	2
	2
	2
	2
	2
	2

Design Strip: Latitude SSSs Table

<i>Name</i>	<i>Strip Type</i>	<i>Calc. Trib. Area ft²</i>	<i>Calc. Infl. Area ft²</i>	<i>Top Bar</i>	<i>Bottom Bar</i>	<i>Shear Bar</i>	<i>Top Cover inches</i>
1C-1	center	18.09	0	#5	#5	#4	1
2C-1	center	83.59	0	#5	#5	#4	1
3C-1	center	20.28	0	#5	#5	#4	1
3C-1(2)	center	67.73	0	#5	#5	#4	1
3C-2	center	453.7	0	#5	#5	#4	1
3C-3	center	267.7	0	#7	#7	#4	1
3C-4	center	216.7	0	#7	#7	#4	1
3C-5	center	240.8	0	#7	#7	#4	1
3C-6	center	158.9	0	#7	#7	#4	1
3C-7	center	113.2	0	#7	#7	#4	1
3C-8	center	88.14	0	#7	#7	#4	1
4C-1	center	128.1	0	#5	#5	#4	1
5C-1	center	92.91	0	#5	#5	#4	1
6C-1	center	43.19	0	#5	#5	#4	1
7C-1	center	38	0	#5	#5	#4	1
8C-1	center	388.8	0	#5	#5	#4	1
8C-2	center	352.5	0	#5	#5	#4	1
8C-3	center	480.1	0	#5	#5	#4	1
8C-4	center	131.8	0	#5	#5	#4	1
8C-5	center	459.2	0	#5	#5	#4	1
8C-6	center	599.9	0	#5	#5	#4	1
8C-7	center	547.2	0	#5	#5	#4	1
8C-8	center	299.4	0	#5	#5	#4	1
9C-1	center	279.7	0	#5	#5	#4	1
9C-2	center	357.3	0	#5	#5	#4	1
9C-3	center	468.3	0	#5	#5	#4	1
9C-4	center	440.6	0	#5	#5	#4	1
9C-5	center	274.2	0	#5	#5	#4	1
9C-6	center	281	0	#5	#5	#4	1
9C-7	center	391.8	0	#5	#5	#4	1
9C-8	center	565.8	0	#5	#5	#4	1
9C-9	center	178.8	0	#5	#5	#4	1
9C-10	center	74.69	0	#5	#5	#4	1
10C-1	center	351.8	0	#5	#5	#4	1
10C-2	center	378.1	0	#5	#5	#4	1
11C-1	center	325	0	#5	#5	#4	1
11C-2	center	340.9	0	#5	#5	#4	1
12C-1	center	502.3	0	#5	#5	#4	1
12C-2	center	480.4	0	#5	#5	#4	1
12C-3	center	644.9	0	#5	#5	#4	1
13C-1	center	359.5	0	#5	#5	#4	1
13C-2	center	467.2	0	#5	#5	#4	1
13C-3	center	320.7	0	#5	#5	#4	1
14C-1	center	145.4	0	#5	#5	#4	1
14C-2	center	276.2	0	#5	#5	#4	1
14C-3	center	358.3	0	#5	#5	#4	1

Bot. Cover
inches

Bot. Cover
inches

Design Strip: Latitude SSSs Table (3)

<i>Name</i>	<i>Strip Type</i>	<i>Calc. Trib. Area ft²</i>	<i>Calc. Infl. Area ft²</i>	<i>Top Bar</i>	<i>Bottom Bar</i>	<i>Shear Bar</i>	<i>Top Cover inches</i>
14C-4	center	182.4	0	#5	#5	#4	1
15C-1	center	470.1	0	#5	#5	#4	1
15C-2	center	397.4	0	#5	#5	#4	1
15C-3	center	300.5	0	#5	#5	#4	1
15C-4	center	76.18	0	#5	#5	#4	1
16C-1	center	33.1	0	#5	#5	#4	1
16C-2	center	335	0	#5	#5	#4	1
16C-3	center	129.1	0	#5	#5	#4	1
16C-4	center	13.82	0	#5	#5	#4	1
17C-1	center	308.6	0	#5	#5	#4	1
17C-2	center	22.85	0	#5	#5	#4	1
18C-1	center	254.3	0	#5	#5	#4	1

Design Strip: Latitude SSSs Table (4)

Top Cover
inchesBot. Cover
inches

Torsion Design

System

Min Bar Loc.

Min T. Bar

Min B. Bar

Shear Legs

1	none	two-way slab	stress	0	0	2
1	none	two-way slab	stress	0	0	2
1	none	two-way slab	stress	0	0	2
1	none	two-way slab	stress	0	0	2
1	none	two-way slab	stress	0	0	2
1	none	two-way slab	stress	0	0	2
1	none	two-way slab	stress	0	0	2
1	none	two-way slab	stress	0	0	2
1	none	two-way slab	stress	0	0	2
1	none	two-way slab	stress	0	0	2
1	none	two-way slab	stress	0	0	2
1	none	two-way slab	stress	0	0	2

Design Strip: Longitude SSSs Table

<i>Name</i>	<i>Strip Type</i>	<i>Calc. Trib. Area ft²</i>	<i>Calc. Infl. Area ft²</i>	<i>Top Bar</i>	<i>Bottom Bar</i>	<i>Shear Bar</i>	<i>Top Cover inches</i>
19C-1	center	25.83	0	#5	#5	#4	1
19C-2	center	47.73	0	#5	#5	#4	1
19C-3	center	182	0	#5	#5	#4	1
19C-4	center	270	0	#5	#5	#4	1
20C-1	center	79.41	0	#7	#7	#4	1
20C-2	center	240.9	0	#7	#7	#4	1
20C-3	center	144.3	0	#7	#7	#4	1
20C-4	center	181.5	0	#7	#7	#4	1
20C-5	center	129.5	0	#7	#7	#4	1
21C-1	center	130.6	0	#5	#5	#4	1
21C-2	center	33	0	#5	#5	#4	1
22C-1	center	339.1	0	#5	#5	#4	1
22C-2	center	507.5	0	#5	#5	#4	1
22C-3	center	491.6	0	#5	#5	#4	1
22C-4	center	440.9	0	#5	#5	#4	1
22C-5	center	432.8	0	#5	#5	#4	1
22C-6	center	402.9	0	#5	#5	#4	1
23C-1	center	393.1	0	#5	#5	#4	1
23C-2	center	120.3	0	#5	#5	#4	1
24C-1	center	420.2	0	#5	#5	#4	1
24C-2	center	634.9	0	#5	#5	#4	1
24C-3	center	223.6	0	#5	#5	#4	1
25C-1	center	271.4	0	#5	#5	#4	1
25C-2	center	236.5	0	#5	#5	#4	1
26C-1	center	224.9	0	#5	#5	#4	1
26C-2	center	253.4	0	#5	#5	#4	1
27C-1	center	290.5	0	#5	#5	#4	1
27C-2	center	328.2	0	#5	#5	#4	1
27C-3	center	306.5	0	#5	#5	#4	1
27C-4	center	539.5	0	#5	#5	#4	1
27C-5	center	447.1	0	#5	#5	#4	1
28C-1	center	103.2	0	#5	#5	#4	1
29C-1	center	679.7	0	#5	#5	#4	1
29C-2	center	366.3	0	#5	#5	#4	1
30C-1	center	422.4	0	#5	#5	#4	1
31C-1	center	221.7	0	#5	#5	#4	1
31C-2	center	295.5	0	#5	#5	#4	1
31C-3	center	318.6	0	#5	#5	#4	1
31C-4	center	581	0	#5	#5	#4	1
31C-5	center	305.8	0	#5	#5	#4	1
32C-1	center	236.6	0	#5	#5	#4	1
33C-1	center	418.1	0	#5	#5	#4	1
33C-2	center	507.8	0	#5	#5	#4	1
33C-3	center	430.8	0	#5	#5	#4	1
34C-1	center	332.1	0	#5	#5	#4	1
35C-1	center	125.8	0	#5	#5	#4	1

Bot. Cover
inches

Design Strip: Longitude SSSs Table - 87

Design Strip: Longitude SSSs Table (3)

<i>Name</i>	<i>Strip Type</i>	<i>Calc. Trib. Area ft²</i>	<i>Calc. Infl. Area ft²</i>	<i>Top Bar</i>	<i>Bottom Bar</i>	<i>Shear Bar</i>	<i>Top Cover inches</i>
35C-2	center	547.9	0	#5	#5	#4	1
35C-3	center	309	0	#5	#5	#4	1
36C-1	center	138.9	0	#5	#5	#4	1
36C-2	center	257.9	0	#5	#5	#4	1
36C-3	center	69.46	0	#5	#5	#4	1
36C-4	center	288.4	0	#5	#5	#4	1
36C-5	center	221.3	0	#5	#5	#4	1

Design Strip: Longitude SSSs Table (4)

Top Cover
inches

Bot. Cover
inches

	<i>Torsion Design</i>	<i>System</i>	<i>Min Bar Loc.</i>	<i>Min T. Bar</i>	<i>Min B. Bar</i>	<i>Shear Legs</i>
1	none	two-way slab	stress	0	0	2
1	none	two-way slab	stress	0	0	2
1	none	two-way slab	stress	0	0	2
1	none	two-way slab	stress	0	0	2
1	none	two-way slab	stress	0	0	2
1	none	two-way slab	stress	0	0	2
1	none	two-way slab	stress	0	0	2

Design Strip: Punching Checks Table

<i>Number</i>	<i>Location feet</i>	<i>Radius feet</i>	<i>Cover To CGS inches</i>	<i>Angle degrees</i>	<i>Edge</i>	<i>Connection</i>
1	(-207,-153.1)	8	1.5	-6	failure planes	auto
2	(-200.6,-89.05)	10	1.5	-6	failure planes	auto
3	(-199.7,-144.9)	8	1.5	-6	failure planes	auto
4	(-198.6,-115.2)	10	1.5	-6	failure planes	auto
5	(-198.6,-134.5)	8	1.5	-6	failure planes	auto
6	(-198,-65.18)	8	1.5	-6	failure planes	auto
7	(-197.9,-160)	8	1.5	22	failure planes	auto
8	(-195.5,-41.31)	10	1.5	-6	failure planes	auto
9	(-193,-17.44)	8	1.5	-6	failure planes	auto
10	(-191.4,-151.5)	6.5	1.5	-6	failure planes	auto
11	(-180.8,-44.12)	8	1.5	84	failure planes	auto
12	(-180.5,-117.1)	8	1.5	-6	failure planes	auto
13	(-177,-67.39)	8	1.5	-6	failure planes	auto
14	(-176.8,-92.28)	8	1.5	84	failure planes	auto
15	(-165.9,-123.5)	8	1.5	-6	failure planes	auto
16	(-164.9,-47.89)	8	1.5	-6	failure planes	auto
17	(-164.6,-22.53)	8	1.5	90	failure planes	auto
18	(-164.4,-141.2)	15	1.5	22	failure planes	auto
19	(-145.3,-22.83)	8	1.5	0	failure planes	auto
20	(-144.5,-120.4)	8	1.5	22	failure planes	auto
21	(-138.3,-51.35)	8	1.5	0	failure planes	auto
22	(-138.2,-136)	12	1.5	22	failure planes	auto
23	(-135.3,-110.1)	8	1.5	0	failure planes	auto
24	(-120.6,-101.9)	8	1.5	0	failure planes	auto
25	(-118.9,-75.16)	8	1.5	0	failure planes	auto
26	(-118.8,-22.8)	15	1.5	0	failure planes	auto
27	(-118.4,-52.35)	8	1.5	0	failure planes	auto
28	(-115.9,-127)	8	1.5	22	failure planes	auto
29	(-109.7,-60.83)	8	1.5	0	failure planes	auto
30	(-95,-75.17)	8	1.5	90	failure planes	auto
31	(-94.55,-101.9)	8	1.5	0	failure planes	auto
32	(-93.65,-118.1)	8	1.5	22	failure planes	auto
33	(-87.45,-47.3)	10	1.5	0	failure planes	auto
34	(-86.02,-66.08)	8	1.5	0	failure planes	auto
35	(-71.38,-109.1)	8	1.5	22	failure planes	auto
36	(-68.7,-22.83)	12	1.5	0	failure planes	auto
37	(-67.92,-66.08)	8	1.5	0	failure planes	auto
38	(-65.26,-94)	8	1.5	0	failure planes	auto
39	(-60.2,-44.83)	8	1.5	0	failure planes	auto
40	(-48.99,-100.5)	8	1.5	112	failure planes	auto
41	(-45.8,-22.83)	10	1.5	0	failure planes	auto
42	(-41.7,-44.83)	8	1.5	0	failure planes	auto
43	(-28.53,-90.28)	15	1.5	0	failure planes	auto
44	(-19.02,-17.34)	8	1.5	0	failure planes	auto
45	(-14.46,-46.58)	8	1.5	0	failure planes	auto
46	(-14.45,-61.73)	8	1.5	0	failure planes	auto

Design Strip: Punching Checks Table (2)

Connection	Use Spec LLR Params	Spec. LLR Levels	Spec. Trib. Area ft ²	Spec. Infl. Area ft ²	Calc. Trib. Area ft ²	Calc. Infl. Area ft ²
	false	1	0	0	60.16	0
	false	1	0	0	292.1	0
	false	1	0	0	97.23	0
	false	1	0	0	298.4	0
	false	1	0	0	312.7	0
	false	1	0	0	247	0
	false	1	0	0	27.83	0
	false	1	0	0	186.9	0
	false	1	0	0	284.9	0
	false	1	0	0	357.9	0
	false	1	0	0	430.5	0
	false	1	0	0	484	0
	false	1	0	0	464.4	0
	false	1	0	0	555.9	0
	false	1	0	0	455.9	0
	false	1	0	0	449.6	0
	false	1	0	0	597.8	0
	false	1	0	0	385	0
	false	1	0	0	659.9	0
	false	1	0	0	416.5	0
	false	1	0	0	547.2	0
	false	1	0	0	210.9	0
	false	1	0	0	328.5	0
	false	1	0	0	578.7	0
	false	1	0	0	467.2	0
	false	1	0	0	374.9	0
	false	1	0	0	331	0
	false	1	0	0	268.3	0
	false	1	0	0	271.6	0
	false	1	0	0	524.7	0
	false	1	0	0	638.1	0
	false	1	0	0	190.9	0
	false	1	0	0	242.3	0
	false	1	0	0	354.4	0
	false	1	0	0	174	0
	false	1	0	0	259.8	0
	false	1	0	0	396.6	0
	false	1	0	0	518.2	0
	false	1	0	0	405.2	0
	false	1	0	0	135.9	0
	false	1	0	0	574.2	0
	false	1	0	0	556.8	0
	false	1	0	0	241.3	0
	false	1	0	0	401.3	0
	false	1	0	0	486	0
	false	1	0	0	356.2	0

[illegible]

Design Strip: Punching Checks Table (4)

<i>Number</i>	<i>Location feet</i>	<i>Radius feet</i>	<i>Cover To CGS inches</i>	<i>Angle degrees</i>	<i>Edge</i>	<i>Connection</i>
47	(-5.364,-16.83)	8	1.5	0	failure planes	auto
48	(-5.313,-48.08)	8	1.5	0	failure planes	auto
49	(-3.839,-76.29)	8	1.5	0	failure planes	auto
50	(-3.615,-61.75)	8	1.5	0	failure planes	auto
51	(-1.469,-92.28)	15	1.5	0	failure planes	auto

Design Strip: Punching Checks Table (5)

Connection	Use Spec LLR Params	Spec. LLR Levels	Spec. Trib. Area ft ²	Spec. Infl. Area ft ²	Calc. Trib. Area ft ²	Calc. Infl. Area ft ²
	false	1	0	0	288.6	0
	false	1	0	0	162	0
	false	1	0	0	262.5	0
	false	1	0	0	33.47	0
	false	1	0	0	110.3	0

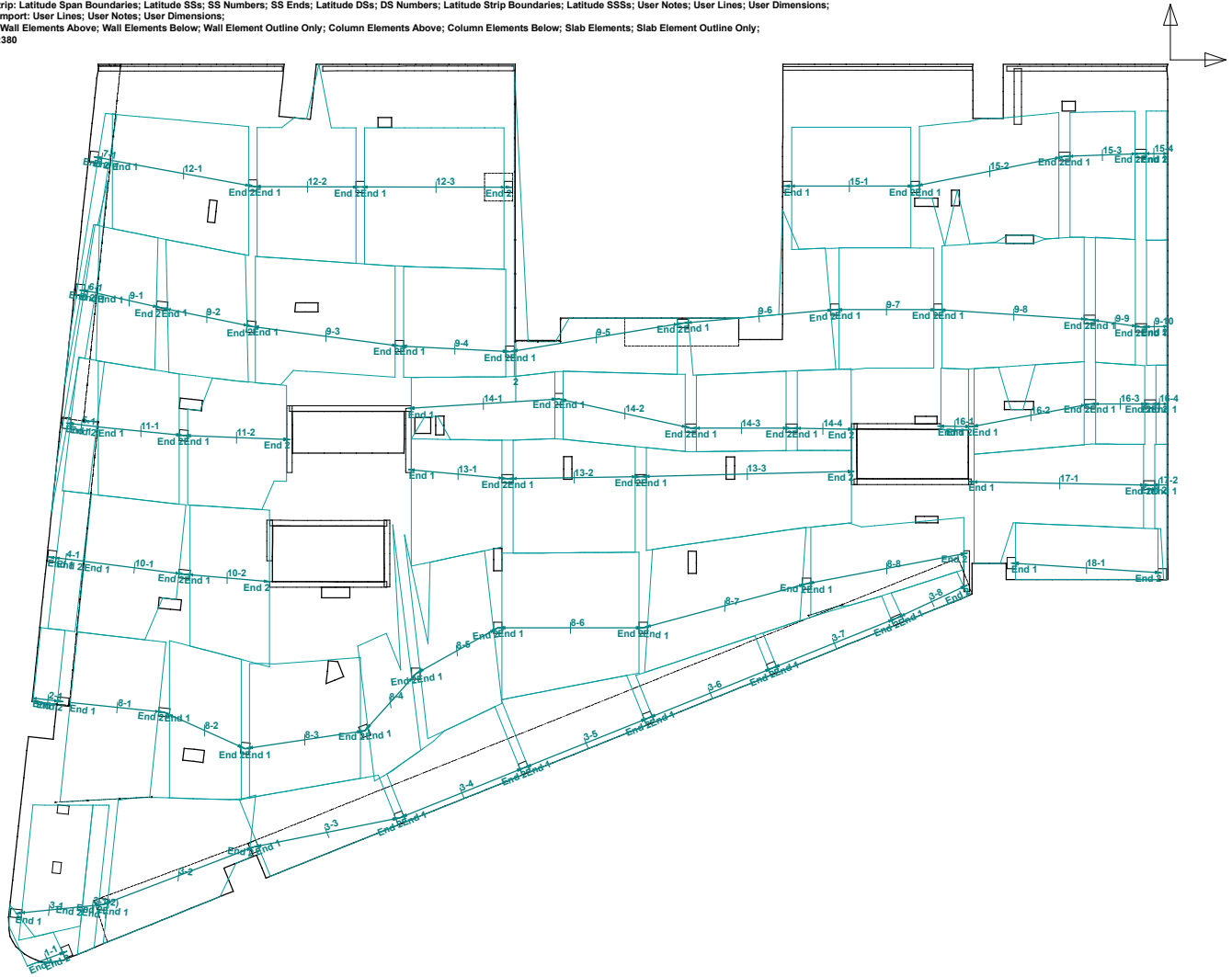
Design Strip: Punching Checks Table (6)

Inf. Area

<i>Max LLR</i> <i>%</i>	<i>Red. Red.</i> <i>%</i>	<i>Stor. Red.</i> <i>%</i>	<i>Park. Red.</i> <i>%</i>
40	0	0	0
40	0	0	0
40	0	0	0
40	0	0	0
40	0	0	0

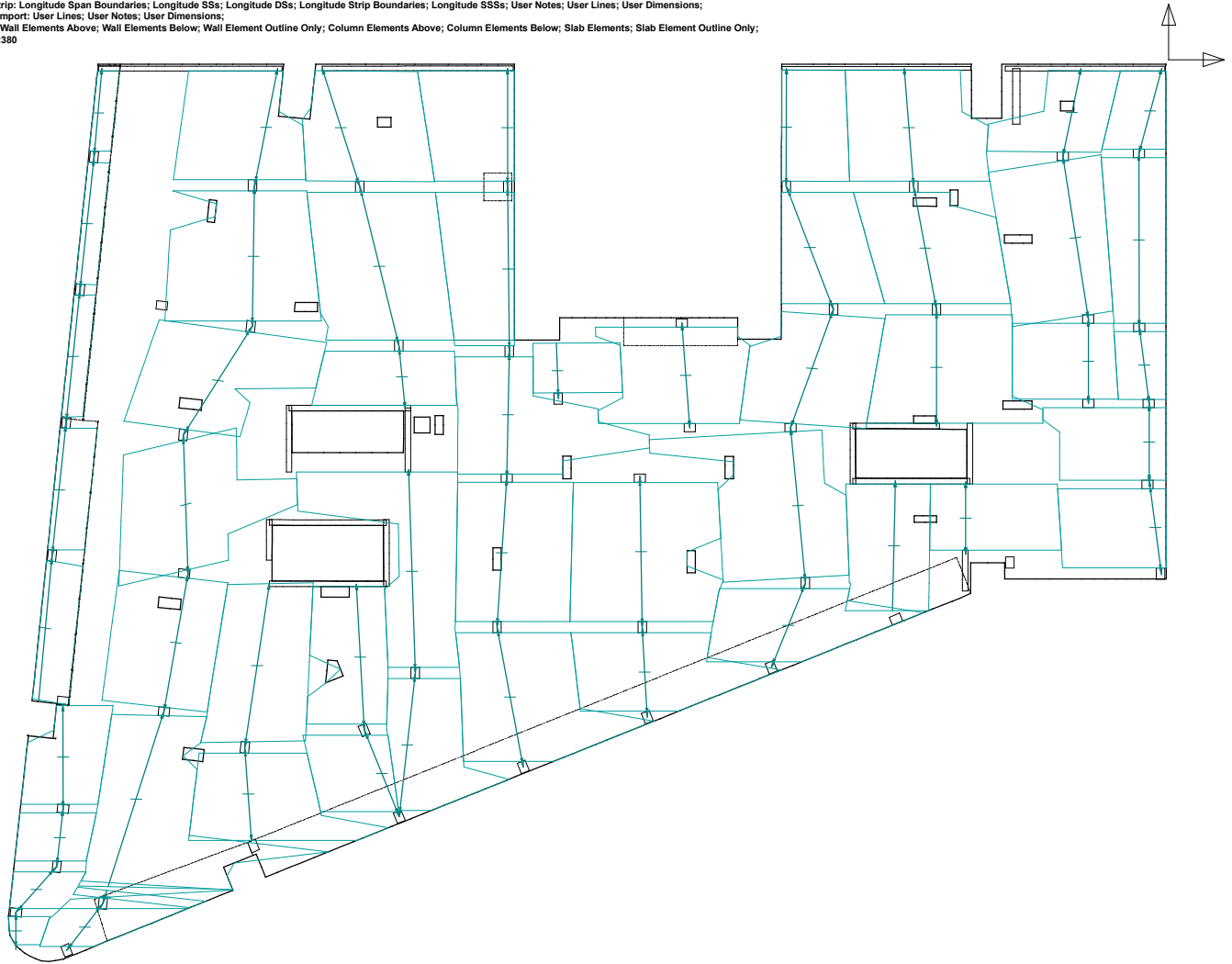
Design Strip: Latitude Design Spans Plan

Design Strip: Latitude Span Boundaries; Latitude SSSs; SS Numbers; SS Ends; Latitude DSs; DS Numbers; Latitude Strip Boundaries; Latitude SSSs; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



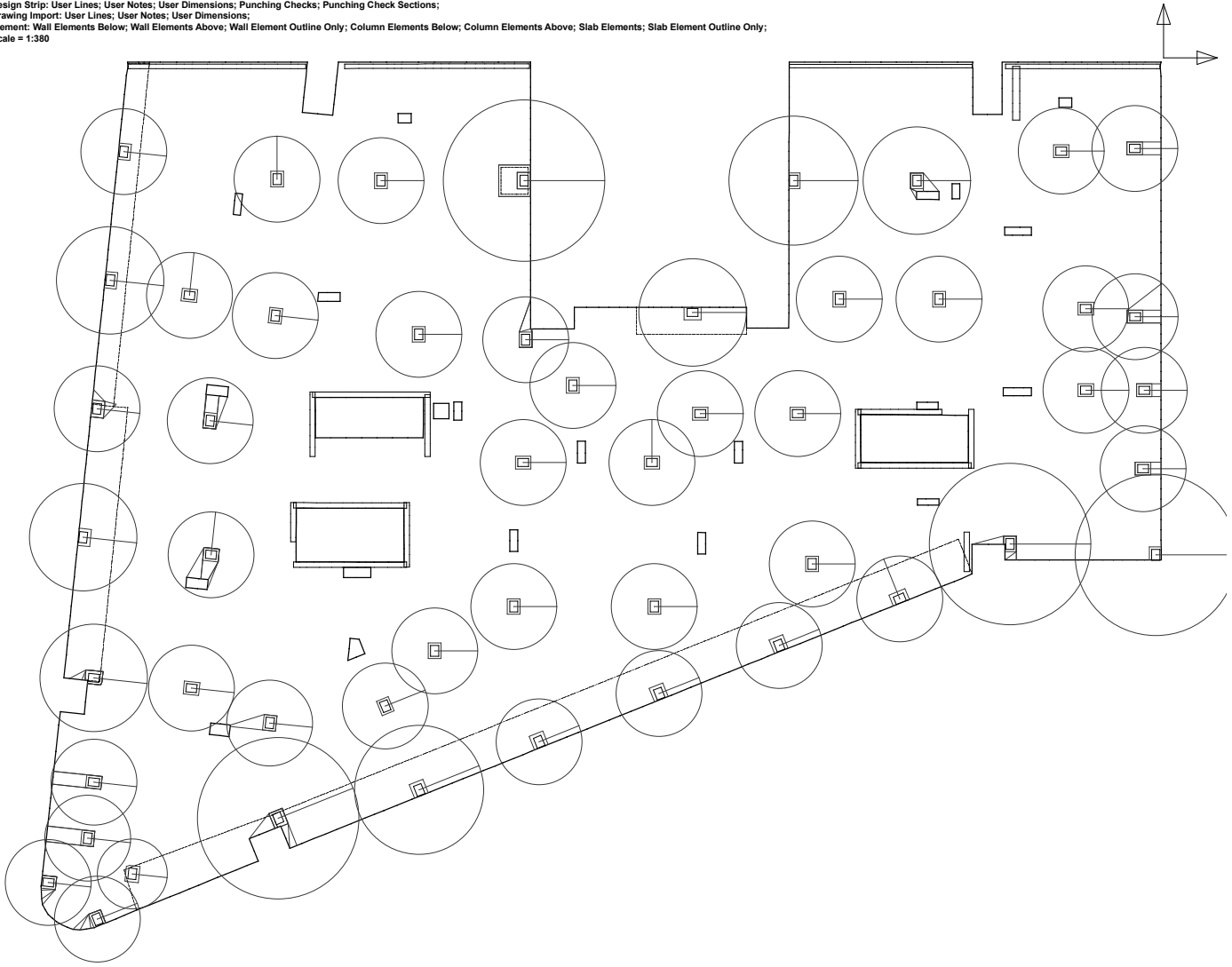
Design Strip: Longitude Design Spans Plan

Design Strip: Longitude Span Boundaries; Longitude SSs; Longitude DSs; Longitude Strip Boundaries; Longitude SSSs; User Notes; User Lines; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Scale = 1:380



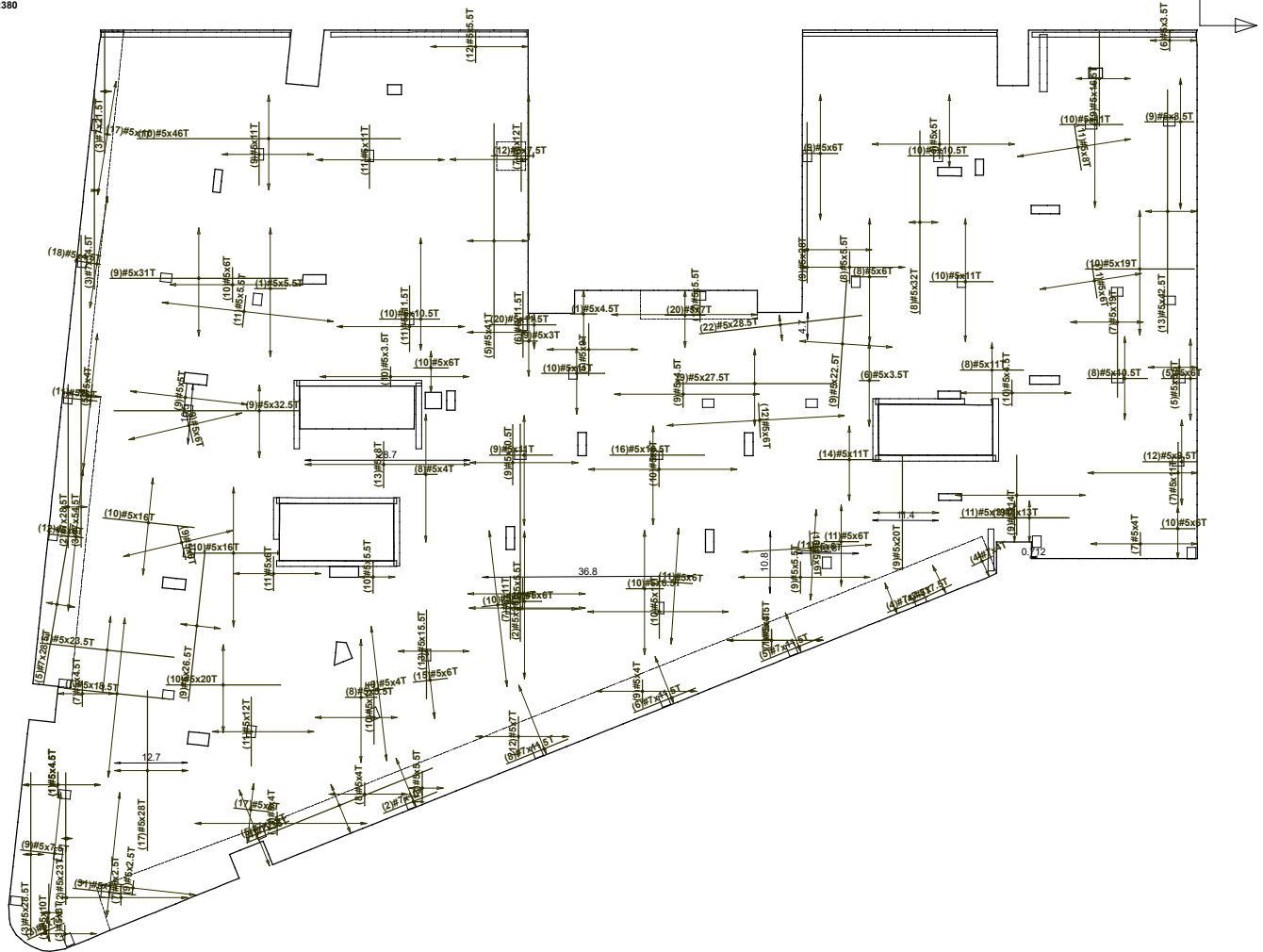
Design Strip: Punching Checks Plan

Design Strip: User Lines; User Notes; User Dimensions; Punching Checks; Punching Check Sections;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:380



Reinforcement: Top Bars Plan

Reinforcement: Latitude User Concentrated Reinf.; Longitude User Concentrated Reinf.; Latitude Program Concentrated Reinf.; Longitude Program Concentrated Reinf.; Top Face Concentrated Reinf.; Both Faces Concentrated Reinf.; Concentrated Reinf. Descriptions; Concentrate
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



Manual Latitude Tendon: Standard Plan

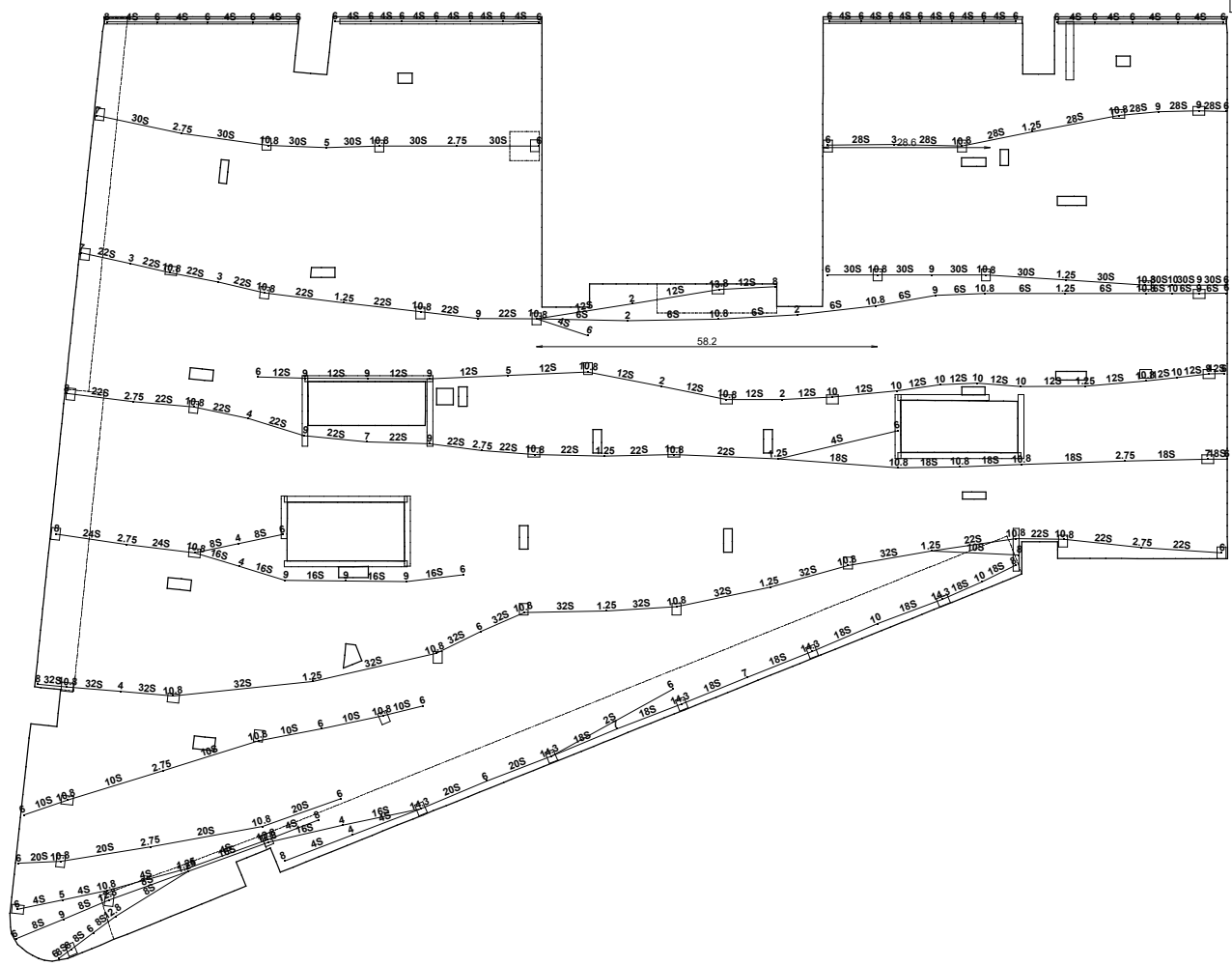
Manual Latitude Tendon: Tendons; Num Strands; Jacks; Tendon Points; Profile Values; User Notes; User Lines; User Dimensions;

Drawing Import: User Lines; User Notes; User Dimensions;

Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;

Latitude Tendon Parameters: Banded Tendon Description; Distributed Tendon Quadrilateral; Distributed Tendon Description; Distributed Tendon Overlap Areas; Profile Points; Profile Elevation Values; Profile Nodes; Jack Region;

Scale = 1:380



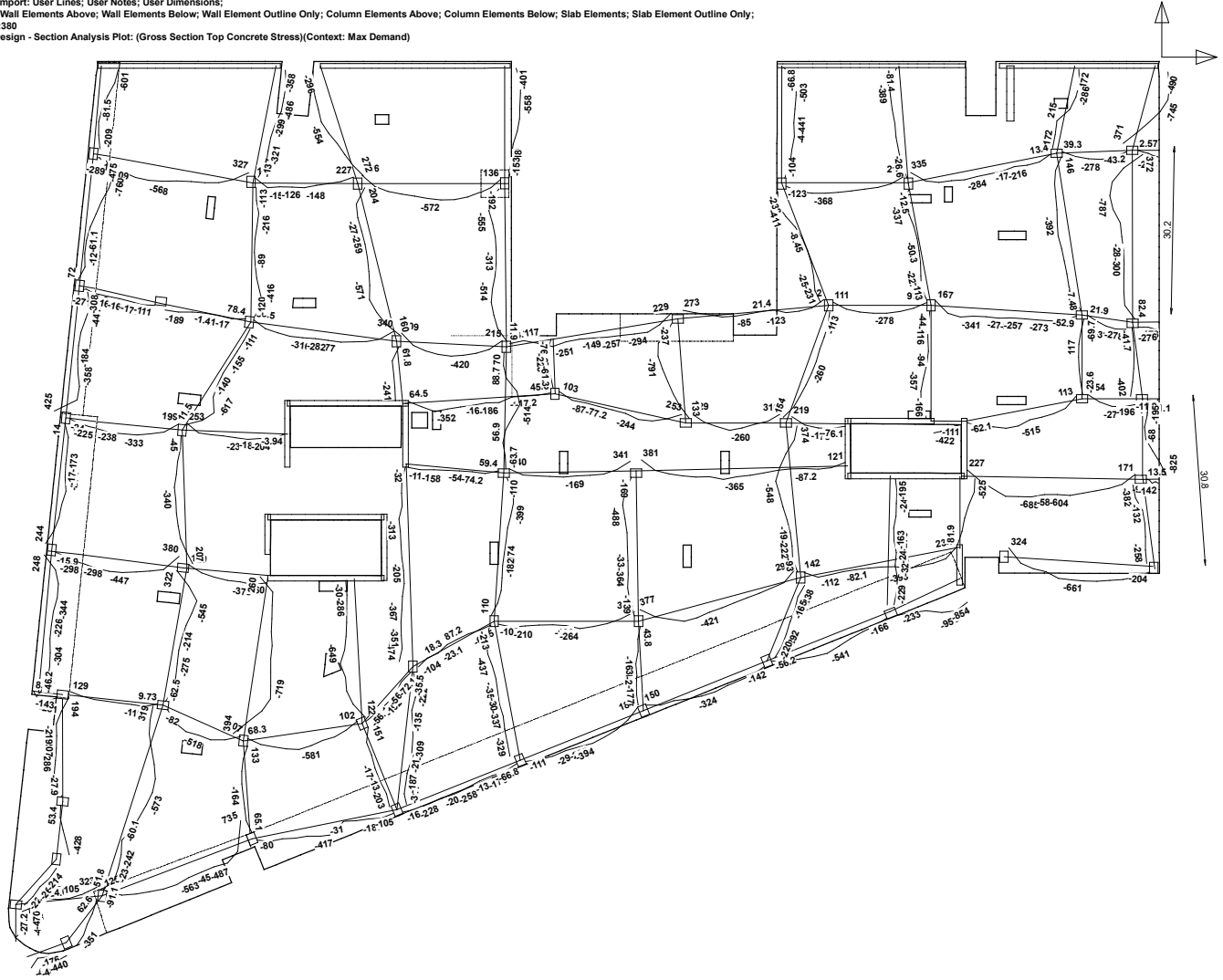
Manual Longitude Tendon: Standard Plan

Manual Longitude Tendon: Tendons; Num Strands; Jacks; Tendon Points; Profile Values; User Notes; User Dimensions;
Drawing: Input; User Lines; User Notes; User Dimensions;
Element: Wall Elements Above; Wall Notes; User Dimensions;
Element: Wall Elements Below; Wall Elements Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Element: Wall Elements Above; Wall Notes; User Dimensions;
Manual Latitude Tendon: Tendons;
Scale = 1:300



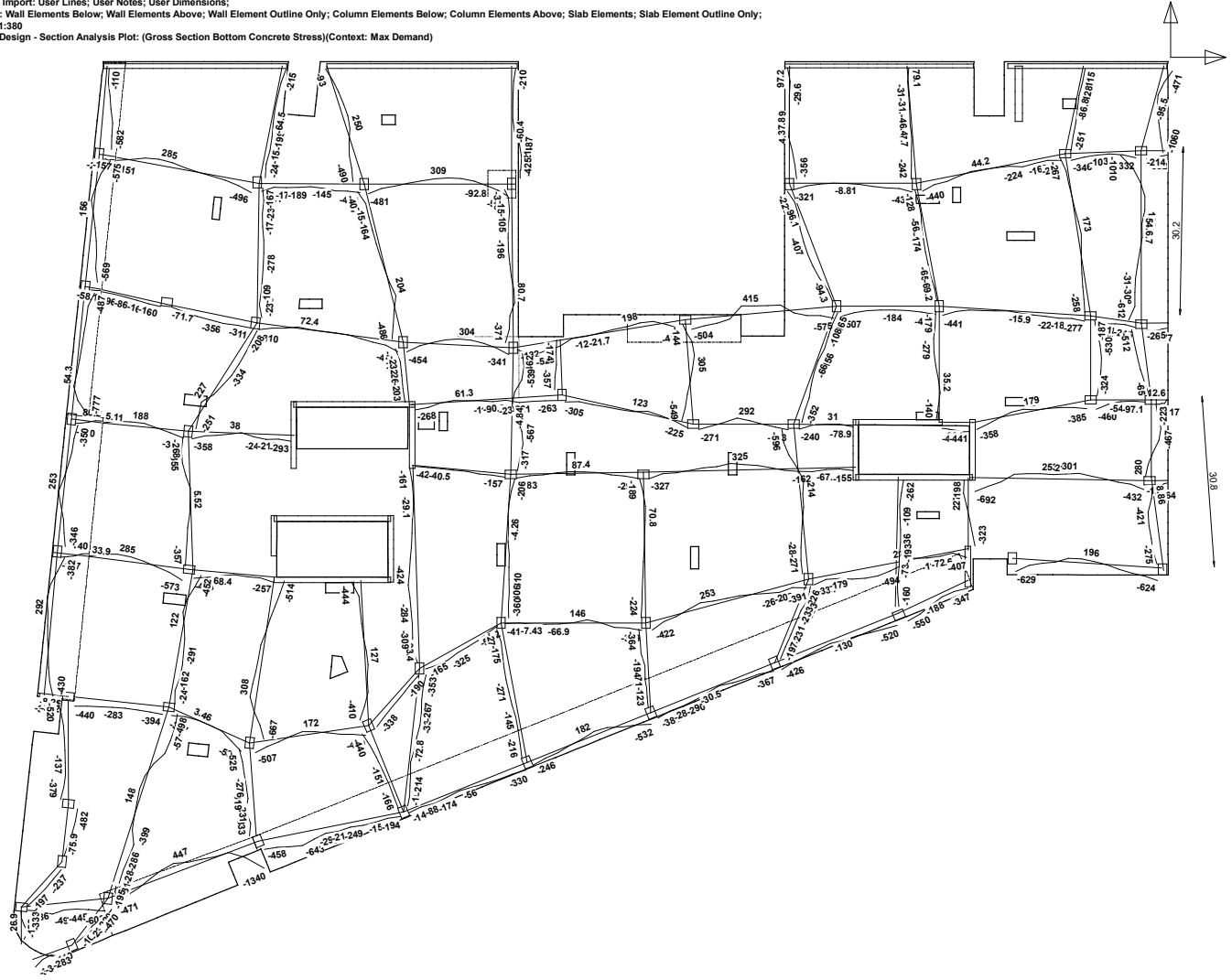
Service Design: Top Stress Plan

Service Design: Latitude Span Designs; Longitude Span Designs; Span Design Detailed Status; Latitude DS Designs; Longitude DS Designs; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:300
 Service Design - Section Analysis Plot: (Gross Section Top Concrete Stress)(Context: Max Demand)



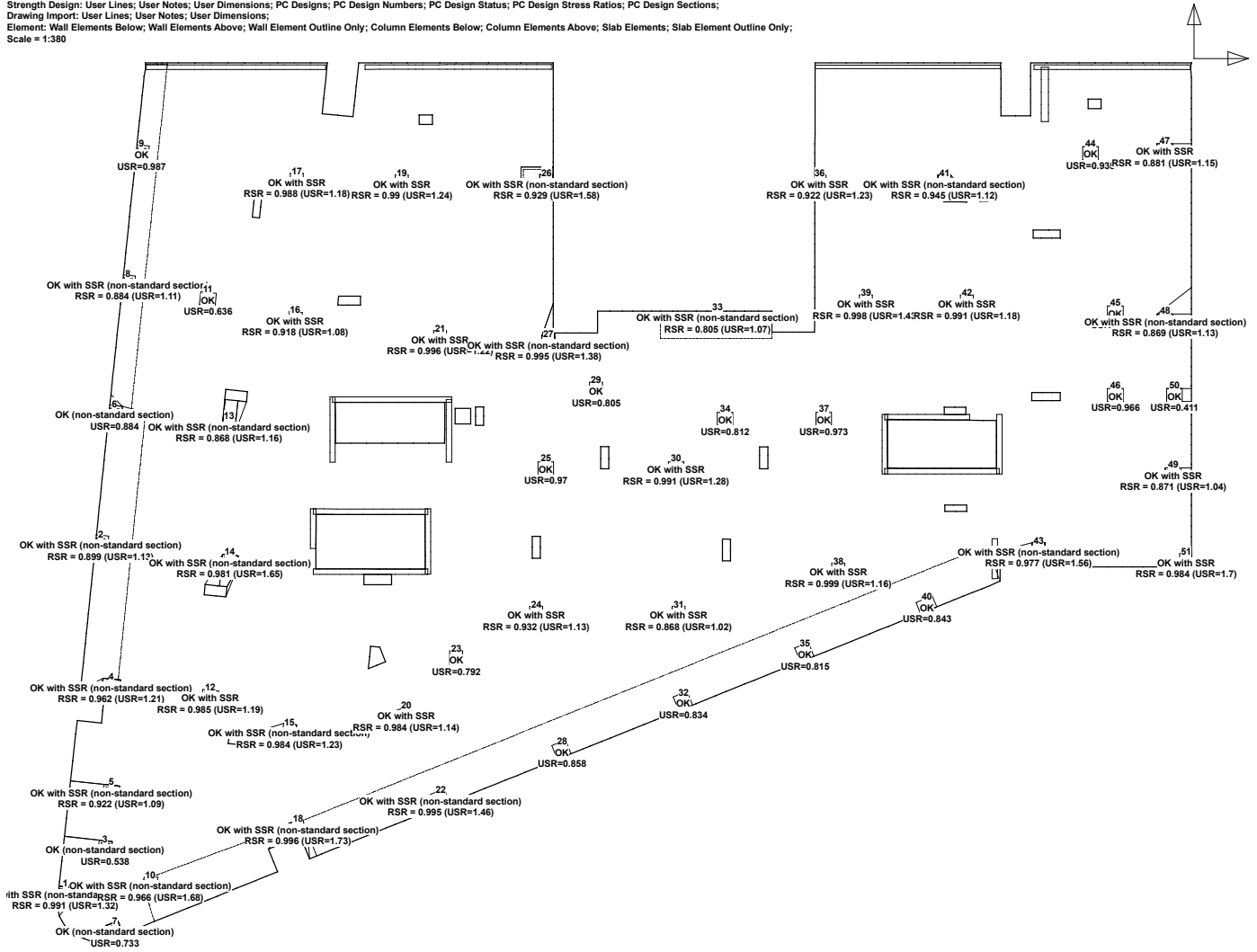
Service Design: Bottom Stress Plan

Service Design: User Lines; User Notes; User Dimensions; Longitude Span Designs; Longitude DS Designs; Latitude DS Designs; Longitude DS Designs;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
 Scale = 1:300
 Service Design - Section Analysis Plot: (Gross Section Bottom Concrete Stress)(Context: Max Demand)



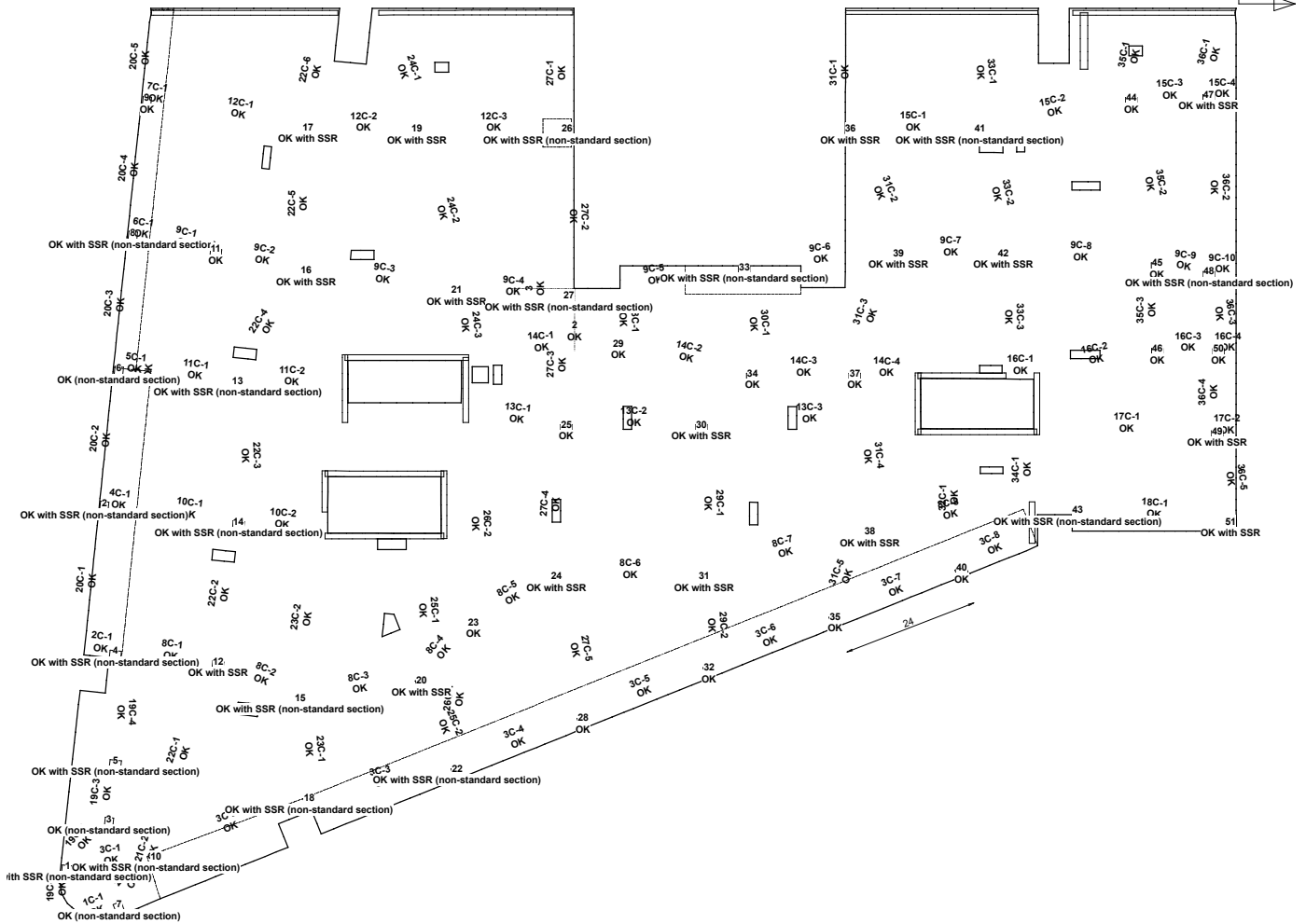
Strength Design: Punching Shear Status Plan

Strength Design: User Lines; User Notes; User Dimensions; PC Designs; PC Design Numbers; PC Design Status; PC Design Stress Ratios; PC Design Sections;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
 Scale = 1:300



Design Status: Status Plan

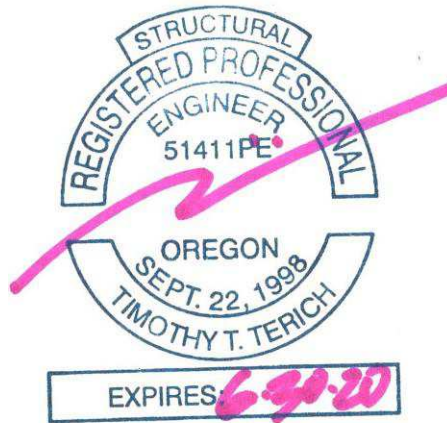
Design Status: Latitude Span Designs; Longitude Span Designs; Span Design Numbers; Span Design Status; Latitude DS Designs; Longitude DS Designs; DS Design Numbers; DS Design Status; PC Designs; PC Design Numbers; PC Design Status; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



Structural Calculations For 18s Permit Revision

Portland, Oregon
Sera Architects

December 11, 2019
Job Number – 18-T066



FROELICH
ENGINEERS INC.

*** LIMITATIONS ***

ENGINEERING DESIGN IS BASED UPON INFORMATION PROVIDED BY THE CLIENT, WHO IS
SOLELY RESPONSIBLE FOR ACCURACY OF SAME. NO RESPONSIBILITY AND / OR
LIABILITY IS ASSUMED BY, OR IS TO BE ASSIGNED TO THE ENGINEER
FOR ITEMS BEYOND THAT SHOWN ON THESE SHEETS.

MAIN OFFICE

17700 SW Upper Boones Ferry RD.
Suite 115
Portland, Oregon 97224
503-624-7005/503-624-9770 FAX

CENTRAL OREGON

745 N.W. Mt. Washington Drive, Suite 204
Bend, Oregon 97701
541-383-1828

DENVER OFFICE

940 Kimbark St, Suite 3
Longmont, Colorado 80501
720-799-1001



FROELICH
ENGINEERS

Client: SERA
Project: 18S
Project Number: 18-T066
Date: December 11, 2019
By: SPD

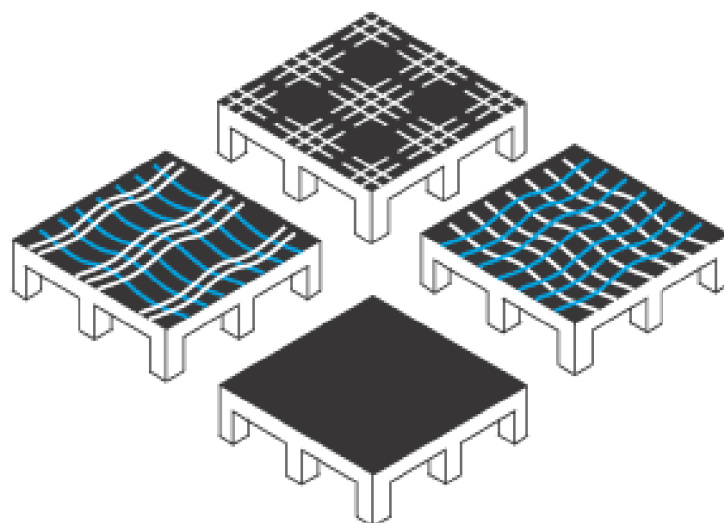
Structural Narrative:

Revisions include:

- Shifted south elevator wall.
- The 1st floor concrete slab on grade and 2nd level PT slab step modifications due to owner changes.
- Revised PT plans after coordination with PT supplier
- Additional minor revision though out are to keep the permit drawings up today to reflect RFI changes since the permit was issued.

www.froelich-engineers.com

☒ MAIN OFFICE	17700 SW Upper Boones Ferry Rd. Suite 115 Portland, Oregon 97223	503-624-7005
☐ CENTRAL OREGON	745 NW Mt. Washington Dr., Suite #204 Bend, Oregon 97703	541-383-1828
☐ DENVER OFFICE	940 Kimbark St., Suite #3 Longmont, Colorado 80501	720-799-1001



Level 2.23.cpt
12/11/2019

RAM Concept © 2019 Bentley Systems, Inc.
RAM Concept™ is a trademark of Bentley Systems

Table of Contents

Units	3
Signs	4
Materials	5
Loadings	7
Load Combinations	8
Design Rules	17
Detailing Rules	18
Load History	19
Mesh Input: Walls Below Table	20
Mesh Input: Columns Below Table	22
Mesh Input: Slab Areas Table	25
Mesh Input: Beams Table	28
Mesh Input: Standard Plan	31
Other Dead Loading: Point Loads Plan	32
Other Dead Loading: Line Loads Plan	33
Other Dead Loading: Area Loads Plan	34
Live (Reducible) Loading: All Loads Plan	35
Live (Unreducible) Loading: Point Loads Plan	36
Live (Unreducible) Loading: Line Loads Plan	37
Live (Unreducible) Loading: Area Loads Plan	38
Live (Unreducible) Loading: Std Reactions Plan	39
Seismic E/W: Point Loads Plan	40
Seismic E/W: Std Reactions Plan	41
Seismic N/S: Point Loads Plan	42
Seismic N/S: Std Reactions Plan	43
Service LC: D + L: Max Deflection Plan	44
Service LC: D + L: Min Deflection Plan	45
Service LC: D + L: Reaction Plan	46
Long Term deflection: Max Deflection Plan	47
Design Strip: Latitude SSs Table	48
Design Strip: Longitude SSs Table	56
Design Strip: Latitude SSSs Table	64
Design Strip: Longitude SSSs Table	66
Design Strip: Punching Checks Table	68
Design Strip: Latitude Design Spans Plan	71
Design Strip: Longitude Design Spans Plan	72
Design Strip: Punching Checks Plan	73
Reinforcement: Top Bars Plan	74
Reinforcement: Bottom Bars Plan	75
Reinforcement: Shear Bars Plan	76
Reinforcement: SSR Plan	77
Manual Latitude Tendon: Standard Plan	78
Manual Longitude Tendon: Standard Plan	79
Service Design: Top Stress Plan	80
Service Design: Bottom Stress Plan	81
Strength Design: Punching Shear Status Plan	82
Design Status: Status Plan	83

Units

Geometry Unit:

Plan Dimensions: feet
Angles: degrees

Slab Thickness: inches
Elevations: inches

Support Dimensions: inches
Support Height: feet

Loading and Reaction Unit

Point Force: Kips
- Report As Zero: 0 Kips
Point Moment: kip-ft
- Report As Zero: 0 kip-ft

Line Force: kips/ft
- Report As Zero: 0 kips/ft
Line Moment: Kips
- Report As Zero: 0 Kips

Area Force: psf
- Report As Zero: 0 psf
Area Moment: #/foot
- Report As Zero: 0 #/foot

Spring and Stiffness Unit:

Point Force Spring: kips/in
Point Moment Spring: k-ft/°

Line Force Spring: ksi
Line Moment Spring: k/°

Area Force Spring: pci
Area Moment Spring: k/ft°

Slab Analysis Unit:

Force: Kips
- Report As Zero: 0 Kips
Force Per Width: kips/ft
- Report As Zero: 0 kips/ft

Moment: kip-ft
- Report As Zero: 0 kip-ft
Moment Per Width: Kips
- Report As Zero: 0 Kips

Concrete Stress: psi
- Report As Zero: 0 psi
Deflection: inches
- Report As Zero: 0 inches

Materials Unit:

Concrete Volume: yd³
Reinforcement Weight: tons
PT Weight: pounds

Reinforcing Area: in²
Tendon Profile: inches
Cover: inches

PT Force: Kips
Reinforcing Stress: ksi

Miscellaneous Unit:

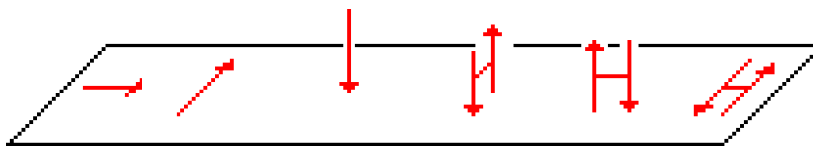
Floor Area: ft²
Tendon Angles (for friction): radians

Density: pcf

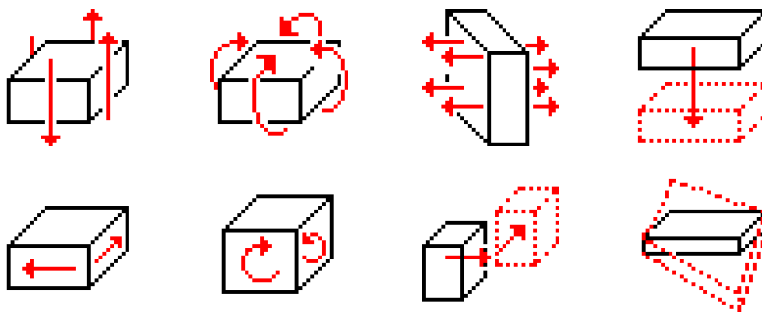
Elongations: inches

Signs

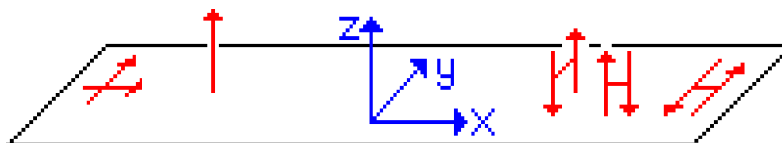
Positive Loads



Positive Analysis



Positive Reactions



Materials

Concrete Mix

Mix Name	Density (pcf)	Density For Loads (pcf)	f_{ci} (psi)	f'_c (psi)	f_{cui} (psi)	f_{cu} (psi)	Poissons Ratio	Ec Calc	User Eci (psi)	User Ec (psi)
3000 psi	150	150	3000	3000	3725	3725	0.2	Code	2500000	3000000
4000 psi	150	150	3000	4000	3725	4975	0.2	Code	2500000	3000000
5000 psi	150	150	3000	5000	3725	6399	0.2	Code	2500000	3000000
6000 psi	150	150	3000	6000	3725	7450	0.2	Code	2500000	3000000

PT Systems

System Name	Type	A_{ps} (in ²)	E_{ps} (ksi)	f_{se} (ksi)	f_{py} (ksi)	f_{pu} (ksi)	Duct Width (inches)	Strands Per Duct	Min Radius (feet)
½" Unbonded	unbonded	0.153	28000	175	243	270	0.5	1	6
½" Bonded	bonded	0.153	28000	160	243	270	3	4	6
0.6" Unbonded	unbonded	0.217	28000	175	243	270	0.6	1	8
0.6" Bonded	bonded	0.217	28000	160	243	270	4	4	8

PT Stressing Parameters

System Name	Jacking Stress (ksi)	Seating Loss (inches)	Anchor Friction	Wobble Friction (1/feet)	Angular Friction (1/radians)	Long-Term Losses (ksi)
½" Unbonded	216	0.25	0	0.0014	0.07	22
½" Bonded	216	0.25	0.02	0.001	0.2	22
0.6" Unbonded	216	0.25	0	0.0014	0.07	22
0.6" Bonded	216	0.25	0.02	0.001	0.2	22

Reinforcing Bars

Bar Name	A_s (in ²)	E_s (ksi)	F_y (ksi)	Coating	Straight Ld/Db	90 Hook Ld/Db	180 Hook Ld/Db
#3	0.11	29000	60	None	Code	Code	Code
#4	0.2	29000	60	None	Code	Code	Code
#5	0.31	29000	60	None	Code	Code	Code
#6	0.44	29000	60	None	Code	Code	Code
#7	0.6	29000	60	None	Code	Code	Code
#8	0.79	29000	60	None	Code	Code	Code
#9	1	29000	60	None	Code	Code	Code
#10	1.27	29000	60	None	Code	Code	Code
#11	1.56	29000	60	None	Code	Code	Code

Materials (2)

SSR Systems

<i>SSR System Name</i>	<i>Stud Area (in²)</i>	<i>Head Area (in²)</i>	<i>Min Clear Head Spacing (inches)</i>	<i>Specified Stud Spacing (inches)</i>	<i>Fy (ksi)</i>	<i>Stud Spacing Rounding Increment (inches)</i>	<i>Min Studs Per Rail</i>	<i>System Type</i>
3/8" SSR	0.11	1.11	0.5	None	50	0.25	2	Rail
1/2" SSR	0.196	1.96	0.5	None	50	0.25	2	Rail
5/8" SSR	0.307	3.07	0.5	None	50	0.25	2	Rail
3/4" SSR	0.442	4.42	0.5	None	50	0.25	2	Rail
Ancon Shearfix Auto-Size	0.217	1.096	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 10 mm	0.1217	1.096	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 12 mm	0.1753	1.578	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 14 mm	0.2386	2.147	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 16 mm	0.3116	2.805	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 20 mm	0.4869	4.383	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 24 mm	0.7012	6.311	0.5906	None	72.52	0.03937	2	Rail

Loadings

<i>Loading Name</i>	<i>Type</i>	<i>Analysis</i>	<i>On-Pattern Factor</i>	<i>Off-Pattern Factor</i>
Self-Dead Loading	Self-Weight	Normal	1	1
Balance Loading	Balance	Normal	1	1
Hyperstatic Loading	Hyperstatic	Hyperstatic	1	1
Temporary Construction (At Stressing) Loading	Stressing Dead	Normal	1	1
Other Dead Loading	Dead	Normal	1	1
Live (Reducible) Loading	Live (Reducible)	Normal	1	0
Live (Unreducible) Loading	Live (Unreducible)	Normal	1	0
Live (Storage) Loading	Live (Storage)	Normal	1	0
Live (Parking) Loading	Live (Parking)	Normal	1	0
Live (Roof) Loading	Live (Roof)	Normal	1	0
Snow Loading	Snow	Normal	1	1
Seismic E/W	Ultimate Seismic 1 (transfer)	Normal	1	0
Seismic N/S	Ultimate Seismic 1 (transfer)	Normal	1	0

Load Combinations

All Dead LC

Active Design Criteria: <none>

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Other Dead Loading	1	1

Dead + Balance LC

Active Design Criteria: <none>

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1

Initial Service LC

Active Design Criteria: Initial Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1.13	1.13
Temporary Construction (At Stressing) Loading	1	1

Service LC: D + L

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Reducible) Loading	1	0
Live (Unreducible) Loading	1	0
Live (Storage) Loading	1	0
Live (Parking) Loading	1	0

Service LC: D + Lr

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Roof) Loading	1	0

Load Combinations (2)

Service LC: D + S

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Snow Loading	1	0

Service LC: D + 0.75L + 0.75Lr

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Reducible) Loading	0.75	0
Live (Unreducible) Loading	0.75	0
Live (Storage) Loading	0.75	0
Live (Parking) Loading	0.75	0
Live (Roof) Loading	0.75	0

Service LC: D + 0.75L + 0.75S

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Reducible) Loading	0.75	0
Live (Unreducible) Loading	0.75	0
Live (Storage) Loading	0.75	0
Live (Parking) Loading	0.75	0
Snow Loading	0.75	0

Sustained Service LC

Active Design Criteria: Sustained Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Reducible) Loading	0.5	0.5
Live (Unreducible) Loading	0.5	0.5
Live (Storage) Loading	1	1
Live (Parking) Loading	0.5	0.5
Live (Roof) Loading	0.5	0.5

Load Combinations (3)

Factored LC: 1.4D

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.4	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.4	0.9

Factored LC: 1.2D + 1.6L + 0.5Lr

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.2	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.2	0.9
Live (Reducible) Loading	1.6	0
Live (Unreducible) Loading	1.6	0
Live (Storage) Loading	1.6	0
Live (Parking) Loading	1.6	0
Live (Roof) Loading	0.5	0

Factored LC: 1.2D + f1L + 1.6Lr

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.2	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.2	0.9
Live (Reducible) Loading	0.5	0
Live (Unreducible) Loading	1	0
Live (Storage) Loading	1	0
Live (Parking) Loading	1	0
Live (Roof) Loading	1.6	0

Factored LC: 1.2D + 1.6L + 0.5S

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.2	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.2	0.9
Live (Reducible) Loading	1.6	0
Live (Unreducible) Loading	1.6	0
Live (Storage) Loading	1.6	0
Live (Parking) Loading	1.6	0
Snow Loading	0.5	0

Load Combinations (4)

Factored LC: $1.2D + f1L + 1.6S$

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.2	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.2	0.9
Live (Reducible) Loading	0.5	0
Live (Unreducible) Loading	1	0
Live (Storage) Loading	1	0
Live (Parking) Loading	1	0
Snow Loading	1.6	0

Long Term deflection

Active Design Criteria: <none>

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	3.35	3.35
Balance Loading	3.35	3.35
Other Dead Loading	3.35	3.35
Live (Unreducible) Loading	2	2
Snow Loading	1	1

Earthquake N-S: $(1.2+.2*Sds)D + 2.5E + 0.5L+0.2S$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.344	1.344
Hyperstatic Loading	1	1
Other Dead Loading	1.344	1.344
Live (Unreducible) Loading	0.5	0.5
Snow Loading	0.2	0.2
Seismic N/S	2.5	2.5

Earthquake N-S: $(0.9-0.2*Sds)D + 2.5E$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.756	0.756
Hyperstatic Loading	1	1
Other Dead Loading	0.756	0.756
Seismic N/S	2.5	2.5

Load Combinations (5)

Earthquake E-W: $(1.2+0.2*S_{ds})D + 2.5E + 0.5L+0.2S$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.344	1.344
Hyperstatic Loading	1	1
Other Dead Loading	1.344	1.344
Live (Unreducible) Loading	0.5	0.5
Snow Loading	0.2	0.2
Seismic E/W	2.5	2.5

Earthquake E-W: $(0.9-0.2*S_{ds})D + 2.5E$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.756	0.756
Hyperstatic Loading	1	1
Other Dead Loading	0.756	0.756
Seismic E/W	2.5	2.5

Earthquake N-S: $(1.0+0.14*S_{ds})D + 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.101	1.101
Balance Loading	1	1
Other Dead Loading	1.101	1.101
Seismic N/S	1.75	1.75

Earthquake N-S: $(1.0+0.105*S_{ds})D + 1.3125E + 0.75L + 0.75S$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.076	1.076
Balance Loading	1	1
Other Dead Loading	1.076	1.076
Live (Unreducible) Loading	0.75	0.75
Snow Loading	0.75	0.75
Seismic N/S	1.313	1.313

Load Combinations (6)

Earthquake N-S: $(0.6-0.14*S_{ds})D + 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.499	0.499
Balance Loading	1	1
Other Dead Loading	0.899	0.899
Seismic N/S	1.75	1.75

Earthquake E-W: $(1.0+0.14*S_{ds})D + 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.101	1.101
Balance Loading	1	1
Other Dead Loading	1.101	1.101
Seismic E/W	1.75	1.75

Earthquake E-W: $(1.0+0.105*S_{ds})D + 1.3125E + 0.75L+0.75S$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.076	1.076
Balance Loading	1	1
Other Dead Loading	1.076	1.076
Live (Unreducible) Loading	0.75	0.75
Snow Loading	0.75	0.75
Seismic E/W	1.313	1.313

Earthquake N-S: $(1.2+0.2*S_{ds})D - 2.5E + .5L + 0.2S$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.344	1.344
Hyperstatic Loading	1	1
Other Dead Loading	1.344	1.344
Live (Unreducible) Loading	0.5	0.5
Snow Loading	0.2	0.2
Seismic N/S	-2.5	-2.5

Load Combinations (7)

Earthquake N-S: $(0.9-0.2*S_{ds})D - 2.5E$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.756	0.756
Hyperstatic Loading	1	1
Other Dead Loading	0.756	0.756
Seismic N/S	-2.5	-2.5

Earthquake E-W: $(1.2+0.2*S_{ds})D - 2.5E + .5L + 0.2S$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.344	1.344
Hyperstatic Loading	1	1
Other Dead Loading	1.344	1.344
Live (Unreducible) Loading	0.5	0.5
Snow Loading	0.2	0.2
Seismic E/W	-2.5	-2.5

Earthquake E-W: $(0.9-0.2*S_{ds})D - 2.5E$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.756	0.756
Hyperstatic Loading	1	1
Other Dead Loading	0.756	0.756
Seismic E/W	-2.5	-2.5

Earthquake N-S: $(1.0+0.14*S_{ds})D - 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.101	1.101
Balance Loading	1	1
Other Dead Loading	1.101	1.101
Seismic N/S	-1.75	-1.75

Load Combinations (8)

Earthquake N-S: $(1.0+0.105*S_{ds})D - 1.3125E + 0.75L + .75S$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.076	1.076
Balance Loading	1	1
Other Dead Loading	1.076	1.076
Live (Unreducible) Loading	0.75	0.75
Snow Loading	0.75	0.75
Seismic N/S	-1.313	-1.313

Earthquake N-S: $(0.6-0.14*S_{ds})D - 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.499	0.499
Balance Loading	1	1
Other Dead Loading	0.899	0.899
Seismic N/S	-1.75	-1.75

Earthquake E-W: $(1.0+0.14*S_{ds})D - 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.101	1.101
Balance Loading	1	1
Other Dead Loading	1.101	1.101
Seismic E/W	-1.75	-1.75

Earthquake E-W: $(0.6-0.14*S_{ds})D + 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.499	0.499
Balance Loading	1	1
Other Dead Loading	0.899	0.899
Seismic E/W	1.75	1.75

Earthquake E-W: $(0.6-0.14*S_{ds})D - 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.499	0.499
Balance Loading	1	1
Other Dead Loading	0.899	0.899
Seismic E/W	-1.75	-1.75

Load Combinations (9)

Earthquake E-W: $(1.0+0.105*S_{ds})D - 1.3125E + 0.75L + 0.75S$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.076	1.076
Balance Loading	1	1
Other Dead Loading	1.076	1.076
Live (Unreducible) Loading	0.75	0.75
Snow Loading	0.75	0.75
Seismic E/W	-1.313	-1.313

Design Rules

Code Minimum Design

318-11 Min. Reinforcement

User Minimum Design

Specified Min. Reinforcement

Initial Service Design

318-11 Initial Service Design

Service Design

318-11 Service Design

Include detailed section analysis

Sustained Service Design

318-11 Sustained Service Design

Strength Design

318-11 Strength Design

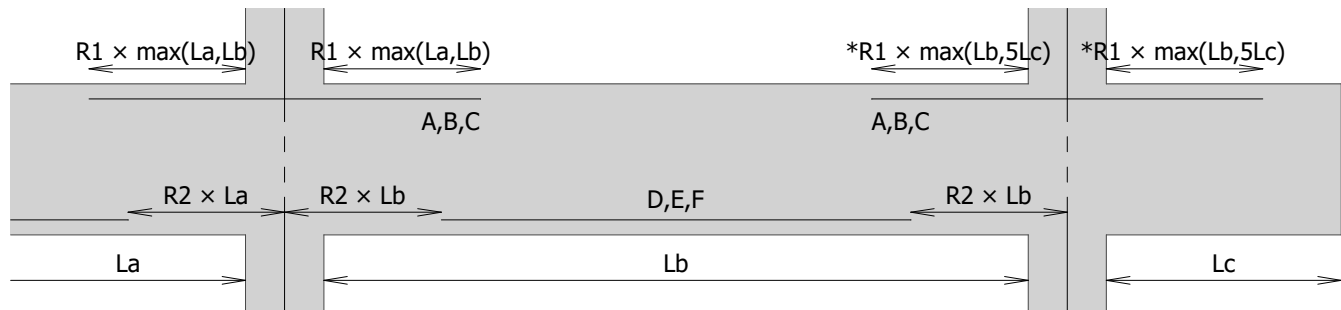
Punching Shear Design

Ductility Design

318-11 Ductility Design

Detailing Rules

Custom Span Detailing Rules



Rule	A	A	B	B	C	C	D	D	E	E	F	F
Name	Fraction	R1	Fraction	R1	Fraction	R1	Fraction	R2	Fraction	R2	Fraction	R2
None	0	0	0	0	0	0	0	0	0	0	0	0

"A", "B" and "C", are support reinforcement sets, based on the peak reinforcement in the support zone.

"D", "E" and "F", are span reinforcement sets, based on the peak reinforcement in the span zone.

"*R1" is never taken as greater than 0.2 when multiplied by Lc (or Lcc).

"Fraction" is the ratio of set reinforcement to peak reinforcement. It is always in the 0.0 to 1.0 range.

Load History

<i>Load History Step Name</i>	<i>Load Combination</i>	<i>Duration (days)</i>	<i>Total Age (days)</i>
Maximum Short Term Load	Service LC: D + L	30	33
Sustained Load	Sustained Service LC	5000	5033
Final Instantaneous Load	Service LC: D + L	0	5033

Mesh Input: Walls Below Table

<i>Number</i>	<i>Location feet</i>	<i>Mix</i>	<i>Fixed Near</i>	<i>Fixed Far</i>	<i>Comp.</i>	<i>Height feet</i>	<i>Thickness inches</i>
1	(-163.8,-2)(-192.2,-2.005)	5000 psi	false	false	true	11.5	4
2	(-161.7,-94.62)(-161.7,-5006)	4000 psi	false	false	true	11	16
3	(-158.1,-74.12)(-158.1,-5000)	psi	false	false	true	11	16
4	(-139.7,-83.12)(-162.3,-5003)	psi	false	false	true	11	12
5	(-139.7,-94.11)(-162.3,-5003)	psi	false	false	true	11	12
6	(-136.1,-62.61)(-158.8,-5007)	psi	false	false	true	11	12
7	(-140.3,-94.58)(-140.3,-5006)	psi	false	false	true	11	16
8	(-136.8,-74.05)(-136.8,-5002)	psi	false	false	true	11	16
9	(-56.8,-65.35)(-56.84,-75024)	psi	false	false	true	11	16
10	(-27.39,-1.995)(-27.39,-5004)	psi	false	false	true	11.5	16
11	(-0.6634,-1.994)(-28.14,-50095)	psi	false	false	true	11.5	4

Mesh Input: Walls Below Table (2)

<i>Shear Wall</i>	<i>Use Spec LLR Params</i>	<i>Spec. LLR Levels</i>	<i>Spec. Trib. Area ft²</i>	<i>Spec. Infl. Area ft²</i>	<i>Max LLR %</i>
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40

Mesh Input: Columns Below Table

<i>Number</i>	<i>Location feet</i>	<i>Mix</i>	<i>Fixed Near</i>	<i>Fixed Far</i>	<i>Comp.</i>	<i>Height feet</i>	<i>B inches</i>	<i>D inches</i>
1	(-200.6,-89.05)	5000 psi	true	true	true	11.5	24	18
2	(-198,-65.18)	5000 psi	true	true	true	11.5	24	18
3	(-195.5,-41.31)	5000 psi	true	true	true	11.5	24	18
4	(-193,-17.44)	5000 psi	true	true	true	11.5	24	18
5	(-181.4,-44.55)	5000 psi	true	true	true	11.5	24	18
6	(-177,-67.39)	5000 psi	true	true	true	11.5	24	18
7	(-176.8,-92.28)	5000 psi	true	true	true	11.5	24	18
8	(-164.9,-47.89)	5000 psi	true	true	true	11.5	24	18
9	(-164.6,-22.53)	5000 psi	true	true	true	11.5	24	18
10	(-145.3,-22.83)	5000 psi	true	true	true	11.5	24	18
11	(-138.3,-51.38)	5000 psi	true	true	true	11.5	24	18
12	(-120.6,-101.9)	5000 psi	true	true	true	11.5	24	18
13	(-118.9,-75.16)	5000 psi	true	true	true	11.5	24	18
14	(-118.4,-52.35)	5000 psi	true	true	true	11.5	18	24
15	(-118.3,-22.84)	5000 psi	true	true	true	11.5	24	18
16	(-109.7,-60.83)	5000 psi	true	true	true	11.5	24	18
17	(-99.8,-22.83)	5000 psi	true	true	true	11.5	24	18
18	(-94.99,-75.16)	5000 psi	true	true	true	11.5	24	18
19	(-94.55,-101.9)	5000 psi	true	true	true	11.5	24	18
20	(-87.38,-47.22)	5000 psi	true	true	true	11.5	24	18
21	(-85.98,-66.03)	5000 psi	true	true	true	11.5	24	18
22	(-72.8,-22.83)	5000 psi	true	true	true	11.5	24	18
23	(-71.38,-109.1)	5000 psi	true	true	true	11.5	18	24
24	(-70.75,-75.58)	5000 psi	true	true	true	11.5	24	18
25	(-67.92,-66.08)	5000 psi	true	true	true	11.5	24	18
26	(-65.26,-94)	5000 psi	true	true	true	11.5	24	18
27	(-60.2,-44.83)	5000 psi	true	true	true	11.5	24	18
28	(-45.78,-22.84)	5000 psi	true	true	true	11.5	24	18
29	(-41.7,-44.83)	5000 psi	true	true	true	11.5	24	18
30	(-19.85,-17.33)	5000 psi	true	true	true	11.5	24	18
31	(-14.45,-46.55)	5000 psi	true	true	true	11.5	24	18
32	(-5.378,-16.83)	5000 psi	true	true	true	11.5	24	18

Mesh Input: Columns Below Table (2)

<i>Angle degrees</i>	<i>Roller</i>	<i>I Factor</i>	<i>Use Spec LLR Params</i>	<i>Spec. LLR Levels</i>	<i>Spec. Trib. Area ft²</i>	<i>Spec. Infl. Area ft²</i>
84	false	1	false	1	0	0
84	false	1	false	1	0	0
84	false	1	false	1	0	0
84	false	1	false	1	0	0
-6	false	1	false	1	0	0
84	false	1	false	1	0	0
-6	false	1	false	1	0	0
84	false	1	false	1	0	0
90	false	1	false	1	0	0
90	false	1	false	1	0	0
90	false	1	false	1	0	0
90	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
90	false	1	false	1	0	0
90	false	1	false	1	0	0
90	false	1	false	1	0	0
0	false	1	false	1	0	0
90	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
90	false	1	false	1	0	0
22	false	1	false	1	0	0
90	false	1	false	1	0	0
0	false	1	false	1	0	0
90	false	1	false	1	0	0
90	false	1	false	1	0	0
90	false	1	false	1	0	0
90	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0

Max LLR
%

Mesh Input: Columns Below Table - 24

Mesh Input: Slab Areas Table

<i>Number</i>	<i>Location feet</i>	<i>Mix</i>	<i>Thickness inches</i>	<i>TOC inches</i>	<i>Priority</i>	<i>Behavior</i>	<i>R-Axis degrees</i>
1	(-136.4,-53.48)(-136.4,-53.48)(-140.4,-49.49)(-140.4,-53.48)	5000	14	0.28	2	two-way slab	0
2	(-192.6,-1.5)(-163.8,-1.5)(-139.7,-21.83)(-28.14,-21.83)(028.14,-1.253)(-0.2917,-1.253)(-102.917,-5.644)(-204.58,-5.644)(-2.458	5000	14	0.28	2	two-way slab	0
3	(-116.5,-54.46)(-116.5,-54.46)(-120.5,-50.47)(-120.5,-54.46)	5000	14	0.28	2	two-way slab	0
4	(-76.04,-102.9)(-84.79,-84.79)(-139.7,-88.1)(-139.7,-94.58)(-139.7,-95.03)(-136.5,-102.9)(-136.5,-102.9)	5000	14	0.28	2	two-way slab	0
5	(-86.31,-49.22)(-86.31,-49.22)(-90.29,-45.23)(-90.29,-49.22)	5000	14	0.28	2	two-way slab	0

Mesh Input: Slab Areas Table (2)

<i>KMr</i>	<i>KMs</i>	<i>KMrs</i>	<i>KFr</i>	<i>KFs</i>
1	1	1	1	1
1	1	1	1	1
1	1	1	1	1
1	1	1	1	1
1	1	1	1	1

Mesh Input: Slab Areas Table (3)

<i>KVrs</i>
1
1
1
1
1

Mesh Input: Beams Table

Number	Location feet	Mix	Thickness inches	TOC inches	Priority	Mesh As Slab	Width inches
1	(-141.7,-82.62)(-141.7,-50.09)(-143.7,-82.62)(-143.7,-77.09)(-139.7,-82.62)(-139.7,-77.09)	5000ps	14	14	1	true	48
2	(-139.7,-79.1)(-81.13,-75.01)(-139.7,-77.11)(-81.13,-77.11)(-139.7,-81.1)(-81.13,-81.1)	5000ps	14	14	1	false	48
3	(-74.18,-102.2)(-83,-80.51)(-76.04,-102.19)(-84.86,-80.96)(-72.33,-101.54)(-81.15,-79.46)	5000ps	14	14	1	false	48
4	(-100.6,-22.83)(-45.03,-20.84)(-100.6,-23.83)(-45.03,-21.83)(-100.6,-23.83)(-45.03,-23.83)	5000ps	14	14	1	true	24
5	(-45.05,-22.84)(-28.1,-20.84)(-45.05,-21.84)(-28.1,-21.84)(-45.05,-23.84)(-28.1,-23.84)	5000ps	14	14	1	true	24
6	(-14.45,-47.3)(-14.45,-20.01)(-15.45,-47.3)(-15.45,-20.01)(-13.45,-47.3)(-13.45,-20.01)	5000ps	14	14	1	false	24
7	(-14.45,-20.01)(-14.45,-16.02)(-15.45,-20.01)(-15.45,-16.02)(-13.45,-20.01)(-13.45,-16.02)	5000ps	14	14	1	true	24
8	(-28.14,-18.02)(0,-18)(-28.14,-16.02)(0,-16)(-20.1312,-16)(-28.14,-20.02)(-20.1312,-20)	5000ps	14	14	1	true	48

Mesh Input: Beams Table (2)

Width
Inches

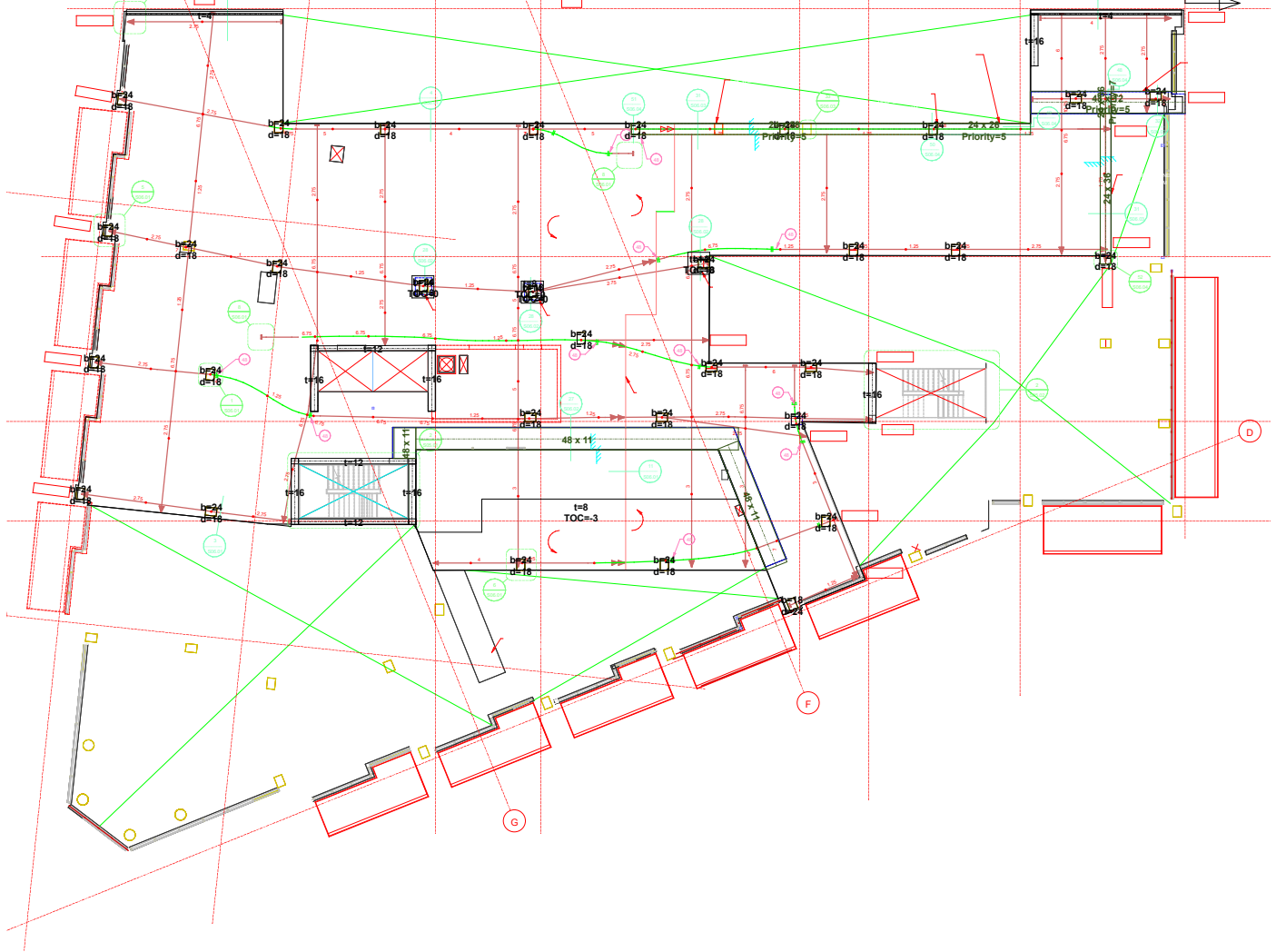
<i>Behavior</i>	<i>KMr</i>	<i>KMs</i>	<i>KMrs</i>	<i>KFr</i>	<i>KFs</i>
no-torsion two-way slab	1	0.001	1	1	1
no-torsion two-way slab	1	0.001	1	1	1
no-torsion two-way slab	1	0.001	1	1	1
no-torsion two-way slab	1	0.001	1	1	1
no-torsion two-way slab	1	0.001	1	1	1
no-torsion two-way slab	1	0.001	1	1	1
no-torsion two-way slab	1	0.001	1	1	1
no-torsion two-way slab	1	0.001	1	1	1

Mesh Input: Beams Table (3)

<i>KVrs</i>
1
1
1
1
1
1
1
1
1

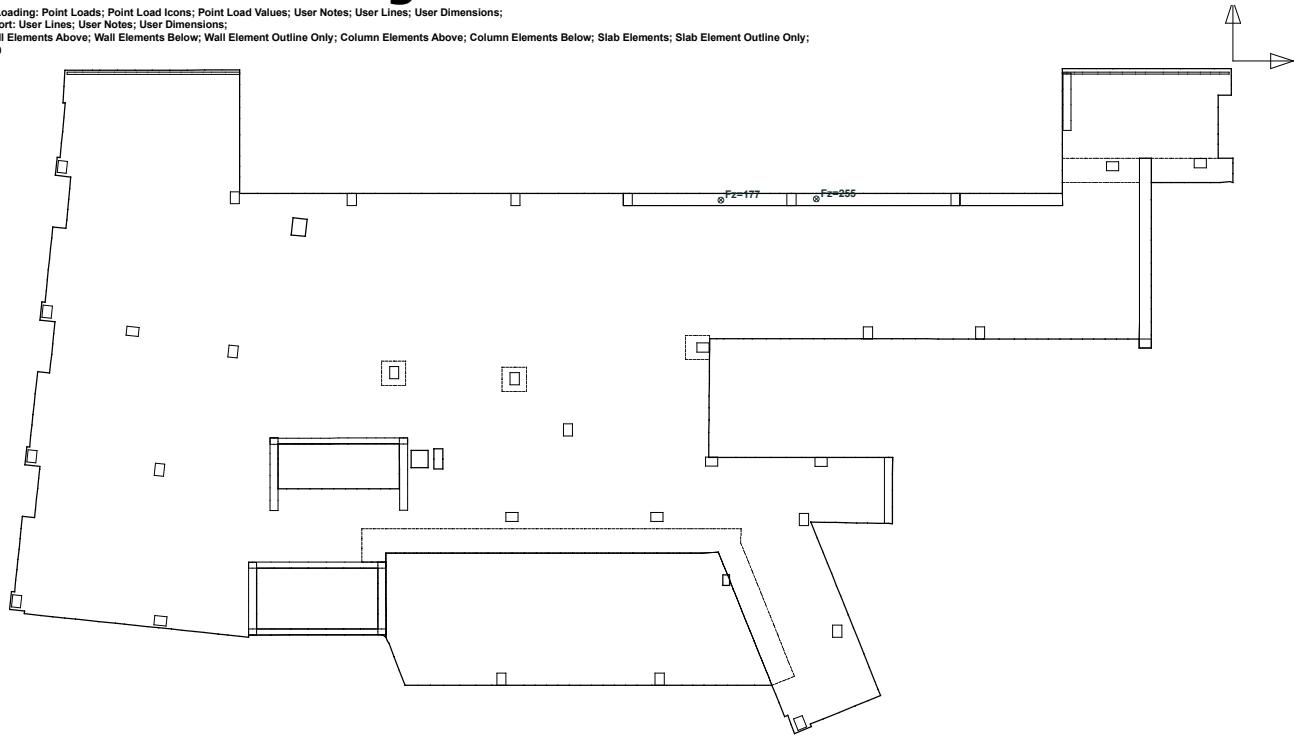
Mesh Input: Standard Plan

Mesh Input: Beams; Beam Dimensions; Beam Priorities; Slab Areas; Slab AreaT hicknesses; Slab Area Elevations; Slab Openings; Point Supports; Point Support Icons; Line Supports; Line Support Icons; Walls Above; Walls Below; Wall Thicknesses; Columns Above; Columns Below; Columns Bel
Drawing Import: User Notes; User Lines; User Dimensions; S-BEAM; S-FNDN; S-DETL-CONC; S-ANNO-SYMB; A-GENM; S-GRID; S-COLS; S-GRID-IDEN; A-DETL; S-ANNO-CUTL; 0; A-DETL-MBND; G-ANNO-SYMB; S-COLS-SYMB; 1803002_A_18S_VE_UPDATE_R17_v1-1-PT Floor P
Scale = 1:380



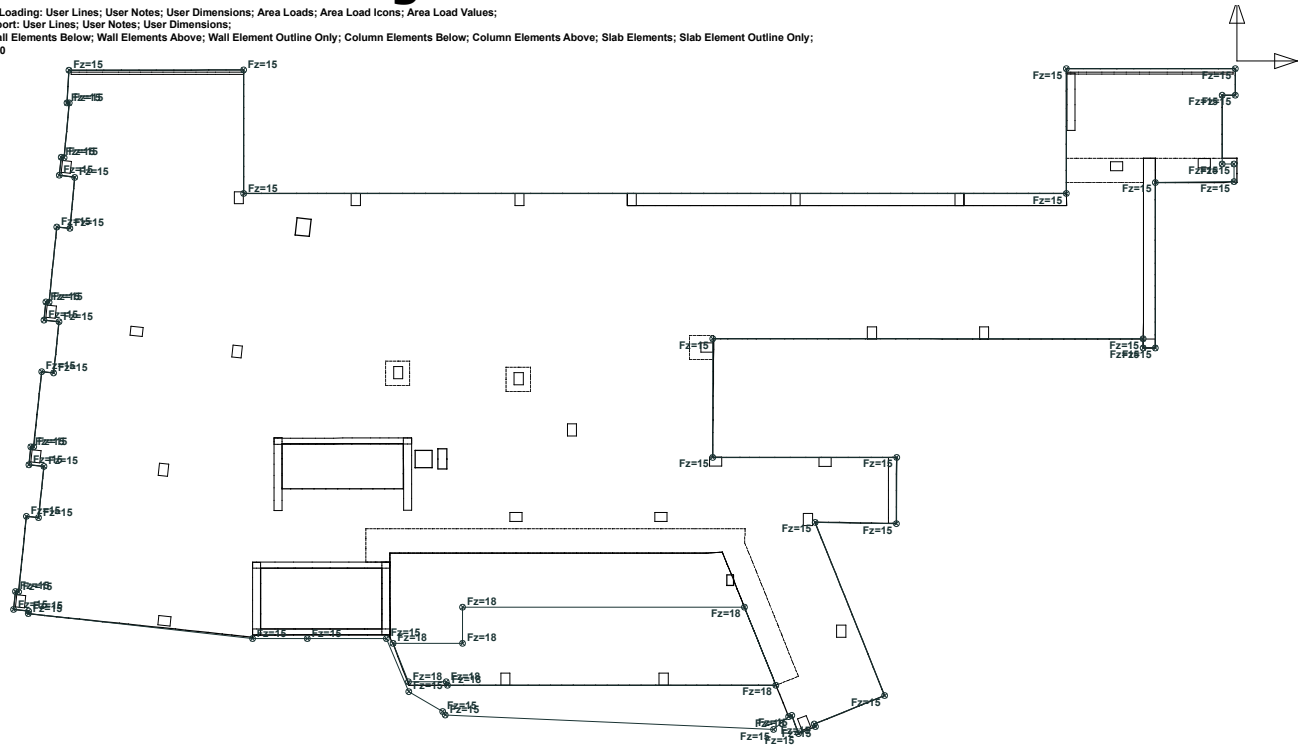
Other Dead Loading: Point Loads Plan

Other Dead Loading: Point Loads; Point Load Icons; Point Load Values; User Notes; User Lines; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Scale = 1:380



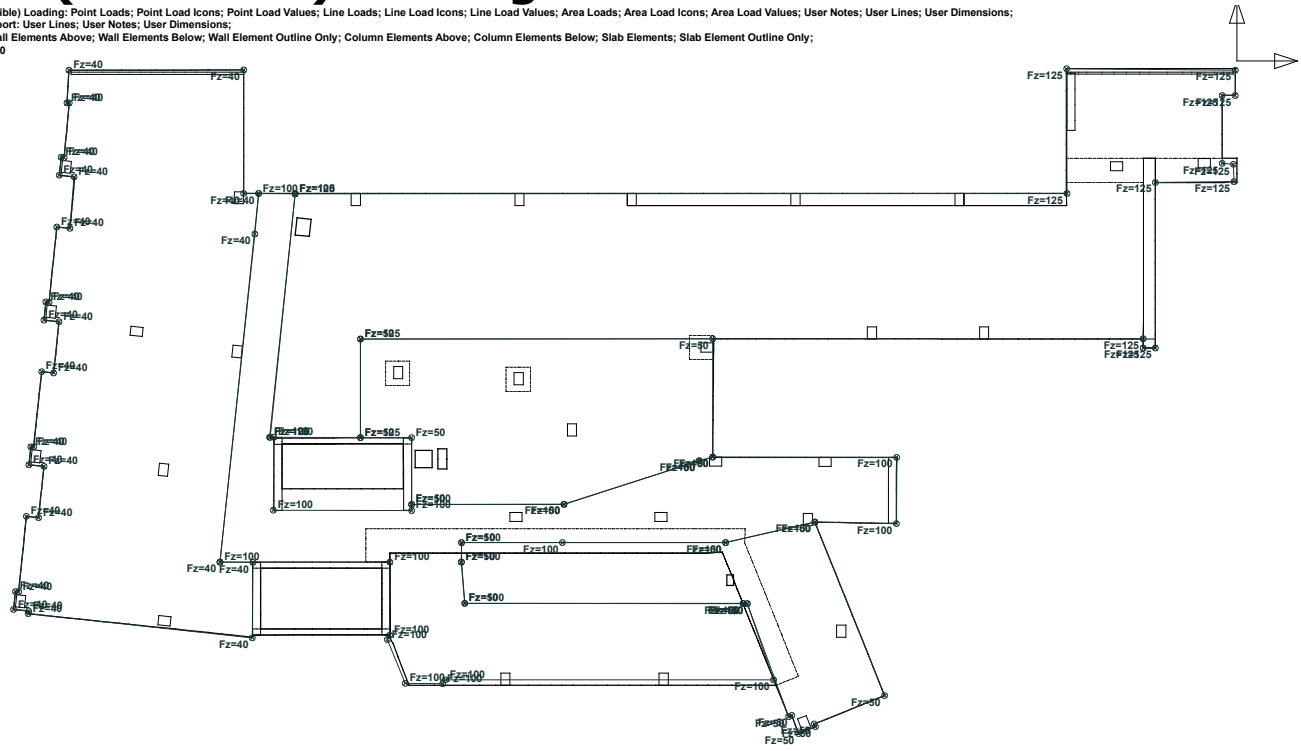
Other Dead Loading: Area Loads Plan

Other Dead Loading: User Lines; User Notes; User Dimensions; Area Loads; Area Load Icons; Area Load Values;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:300



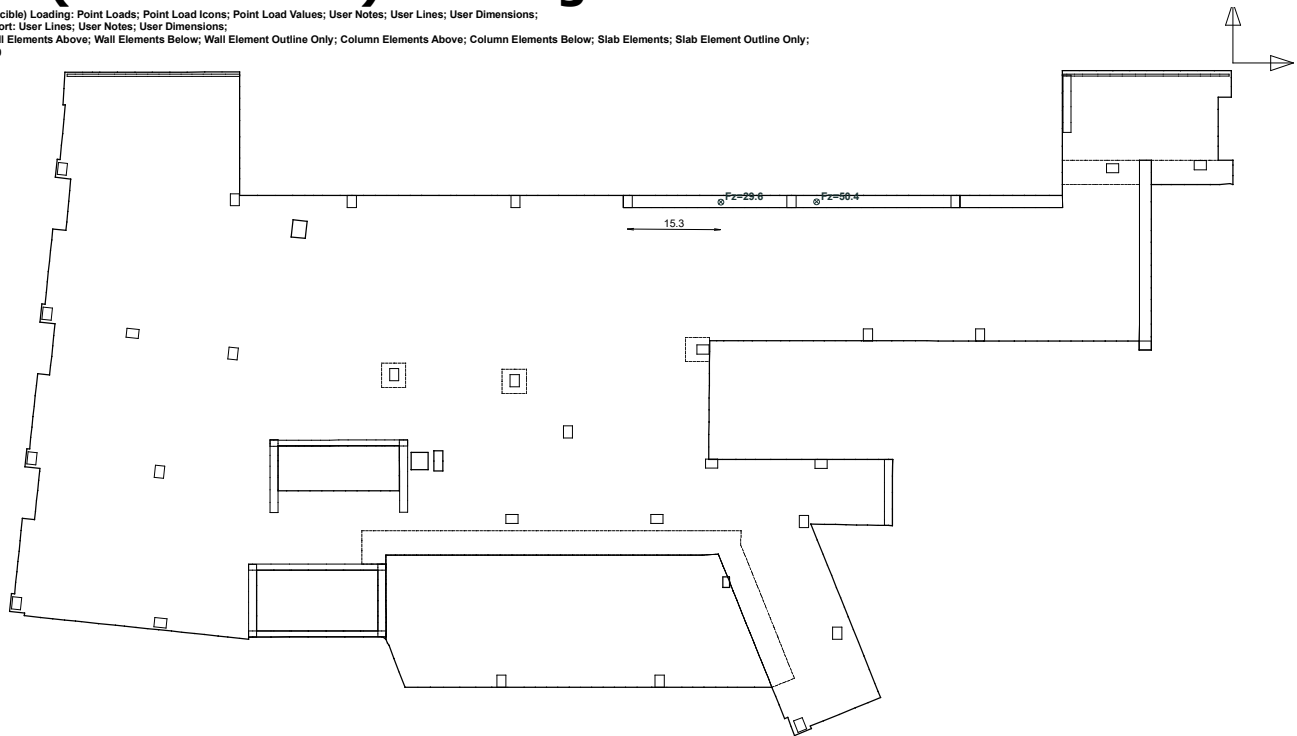
Live (Reducible) Loading: All Loads Plan

Live (Reducible) Loading: Point Loads; Point Load Icons; Point Load Values; Line Loads; Line Load Icons; Line Load Values; Area Loads; Area Load Icons; Area Load Values; User Notes; User Lines; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Scale = 1:380



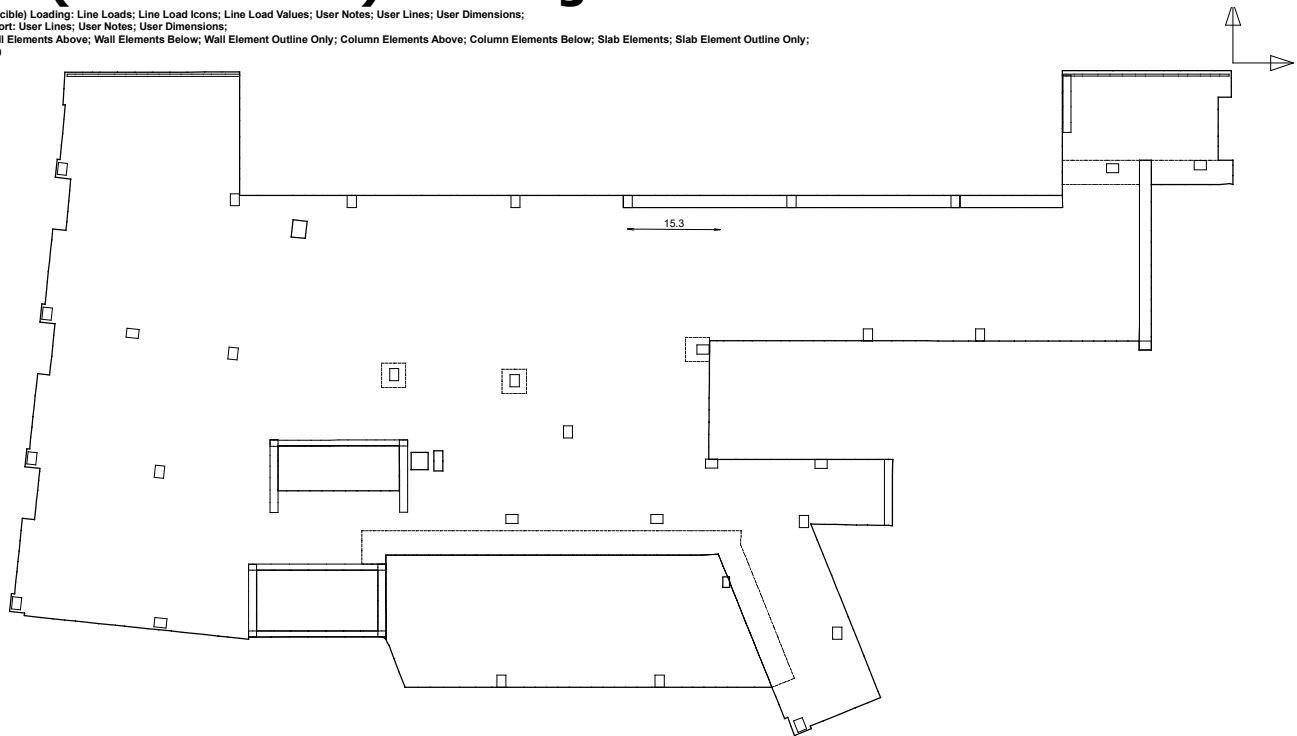
Live (Unreducible) Loading: Point Loads Plan

Live (Unreducible) Loading: Point Loads; Point Load Icons; Point Load Values; User Notes; User Lines; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Scale = 1:380



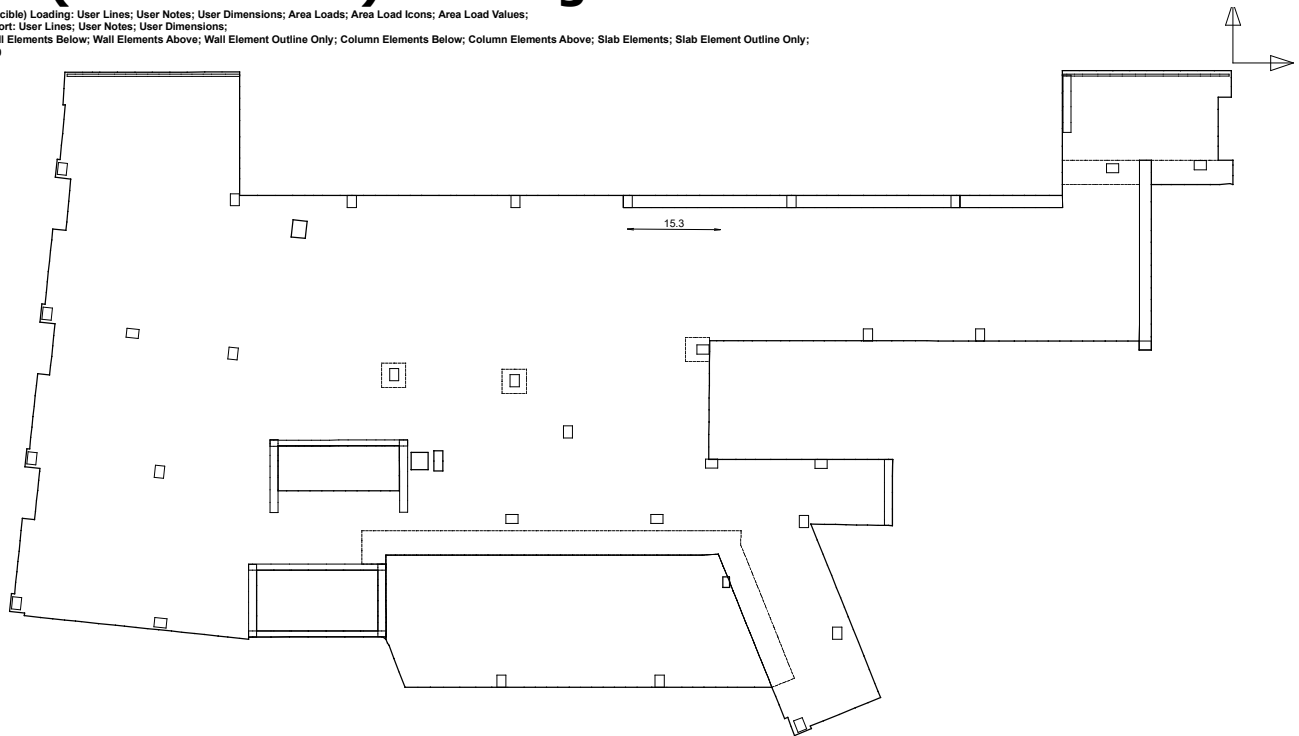
Live (Unreducible) Loading: Line Loads Plan

Live (Unreducible) Loading: Line Loads; Line Load Icons; Line Load Values; User Notes; User Lines; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Scale = 1:380



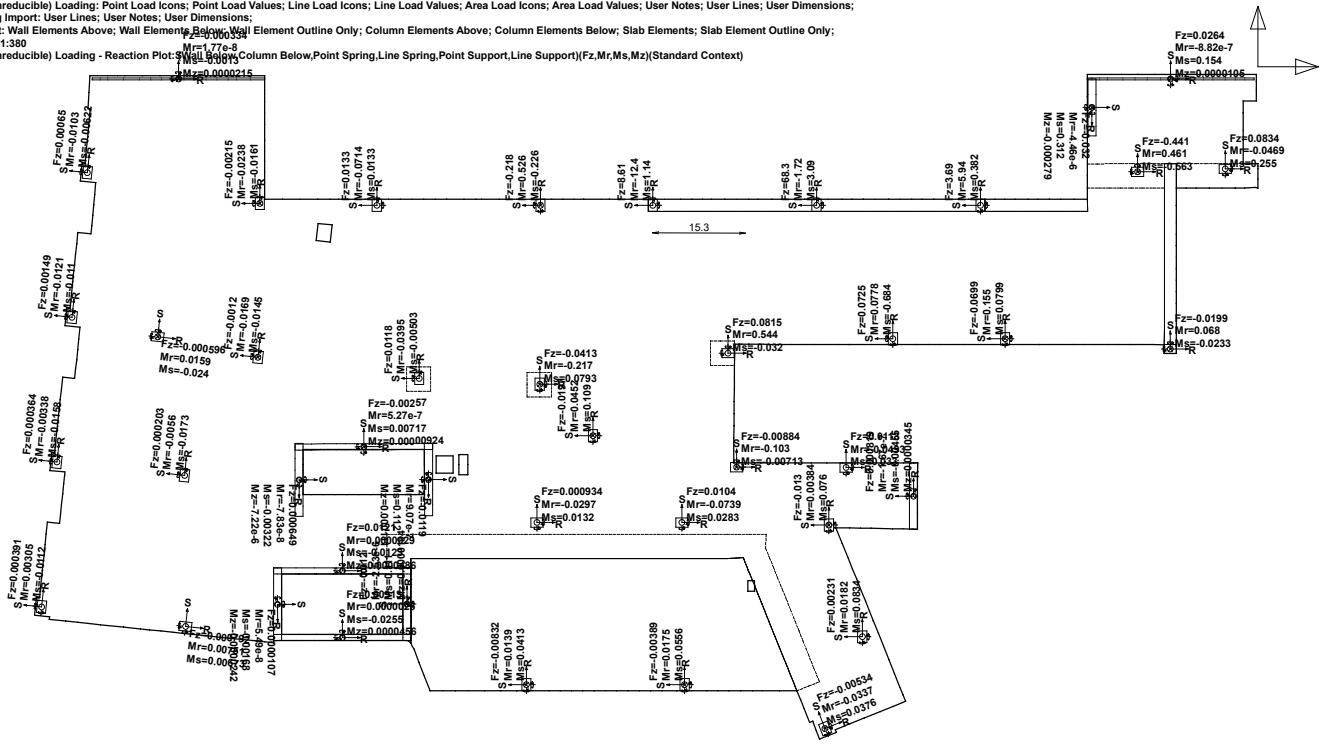
Live (Unreducible) Loading: Area Loads Plan

Live (Unreducible) Loading: User Lines; User Notes; User Dimensions; Area Loads; Area Load Icons; Area Load Values;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:380



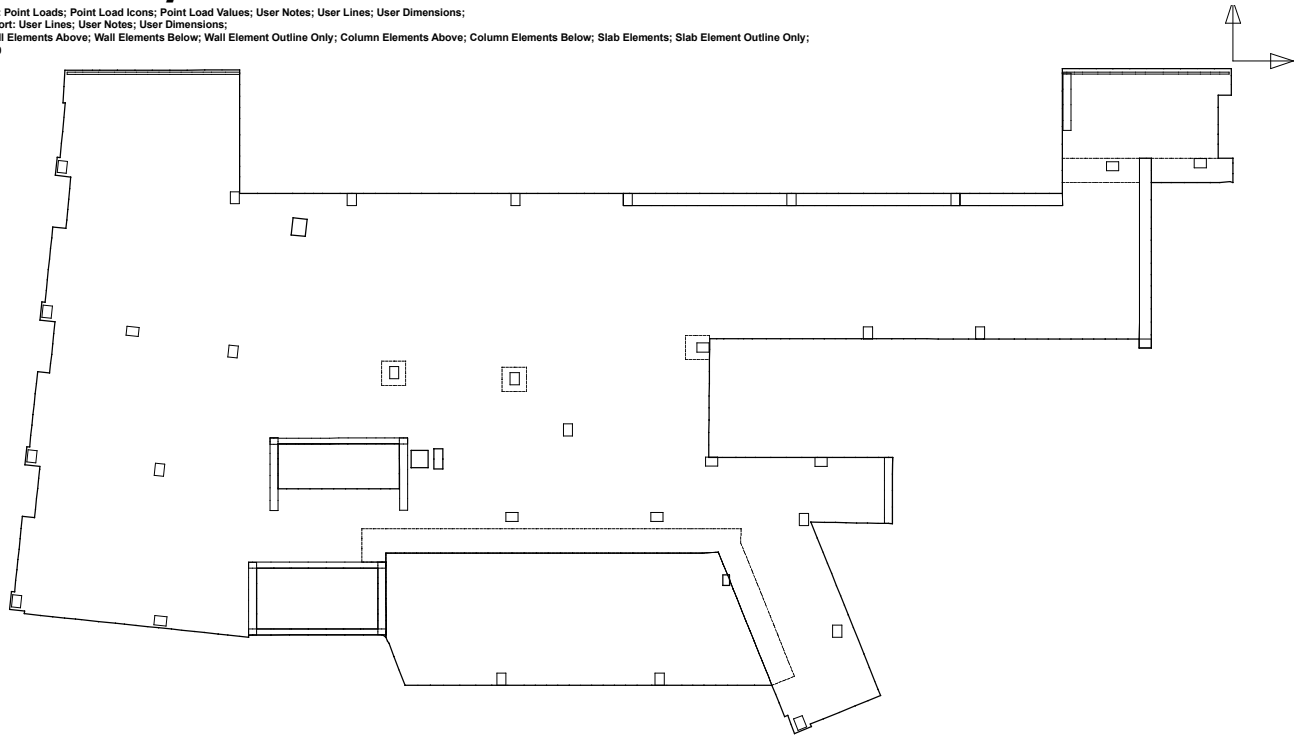
Live (Unreducible) Loading: Std Reactions Plan

Live (Unreducible) Loading: Point Load Icons; Point Load Values; Line Load Icons; Line Load Values; Area Load Icons; Area Load Values; User Notes; User Lines; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Elements: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Scale = 1:390
Live (Unreducible) Loading - Reaction Plot: Wall, Column Below, Point Spring, Line Spring, Point Support, Line Support)(Fz,Mr,Mz)(Standard Context)



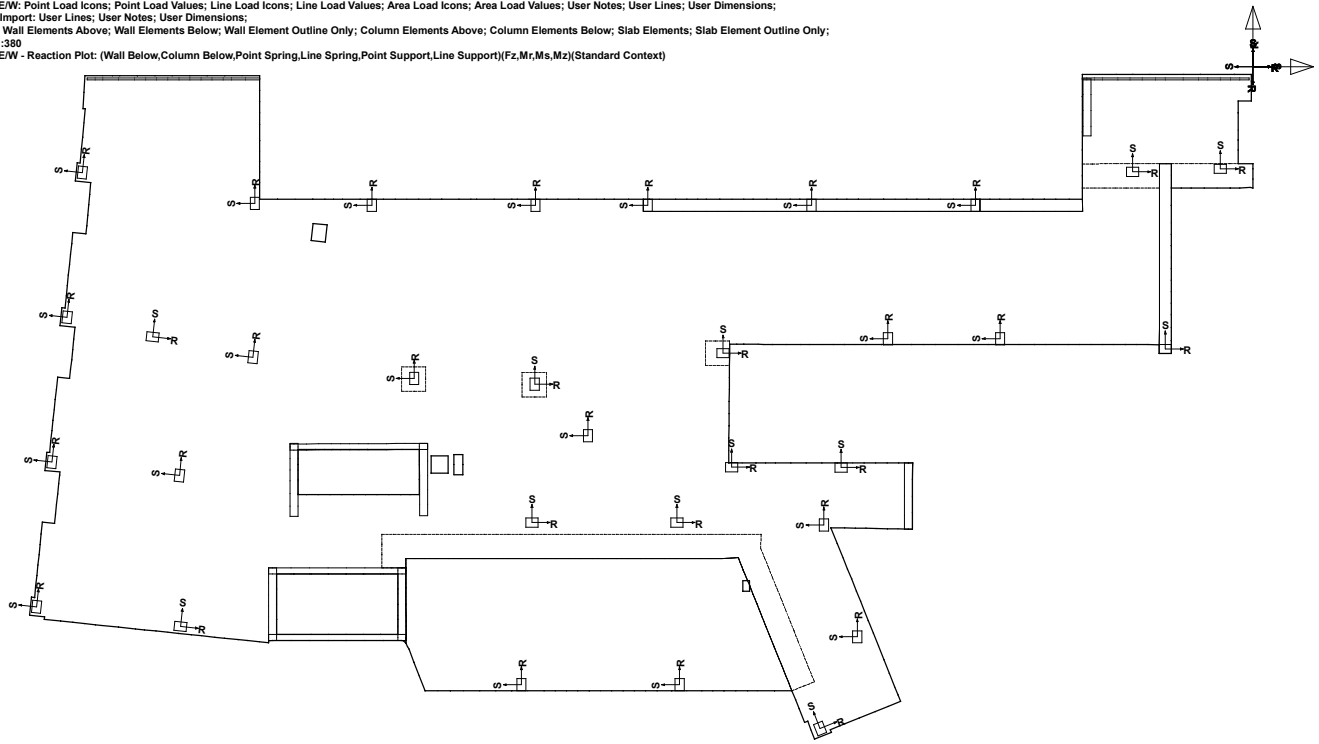
Seismic E/W: Point Loads Plan

Seismic E/W: Point Loads; Point Load Icons; Point Load Values; User Notes; User Lines; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Scale = 1:380



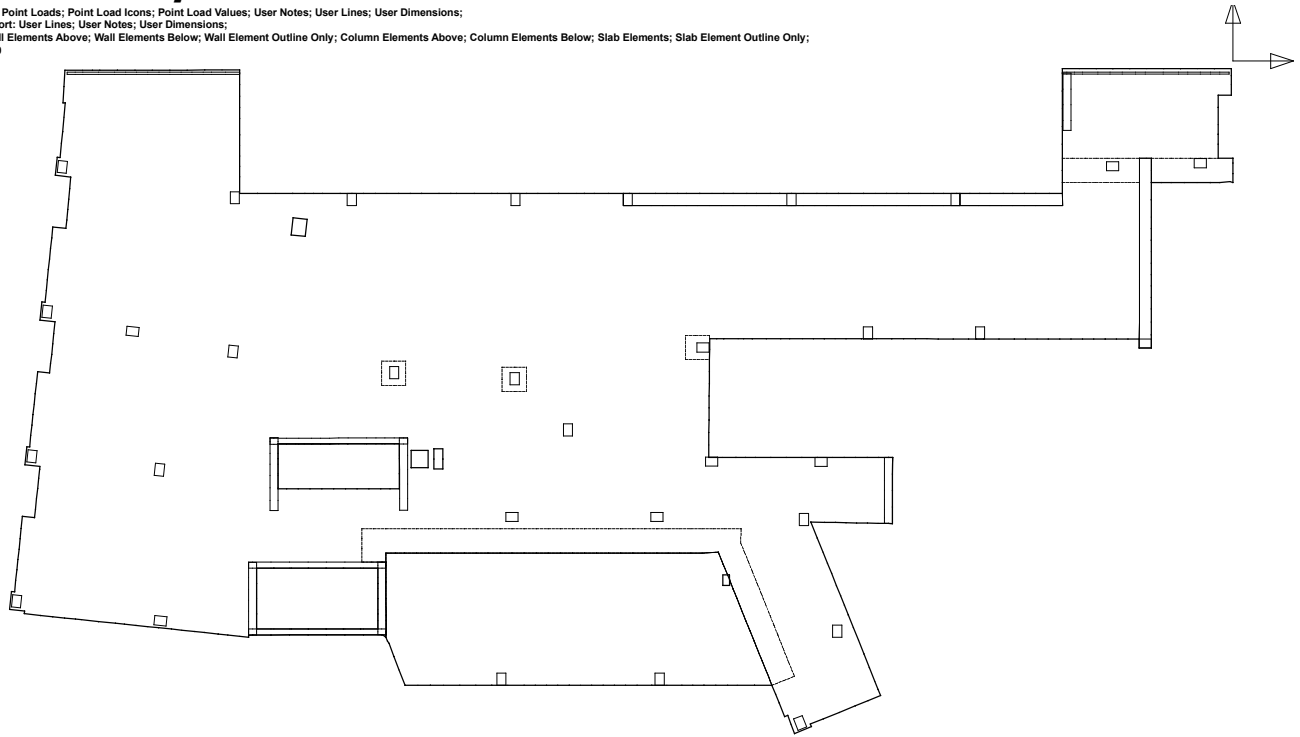
Seismic E/W: Std Reactions Plan

Seismic E/W: Point Load Icons; Point Load Values; Line Load Icons; Line Load Values; Area Load Icons; Area Load Values; User Notes; User Lines; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Scale = 1:380
Seismic E/W - Reaction Plot: (Wall Below,Column Below,Point Spring,Line Spring,Point Support,Line Support)(Fz,Mr,Mz)(Standard Context)



Seismic N/S: Point Loads Plan

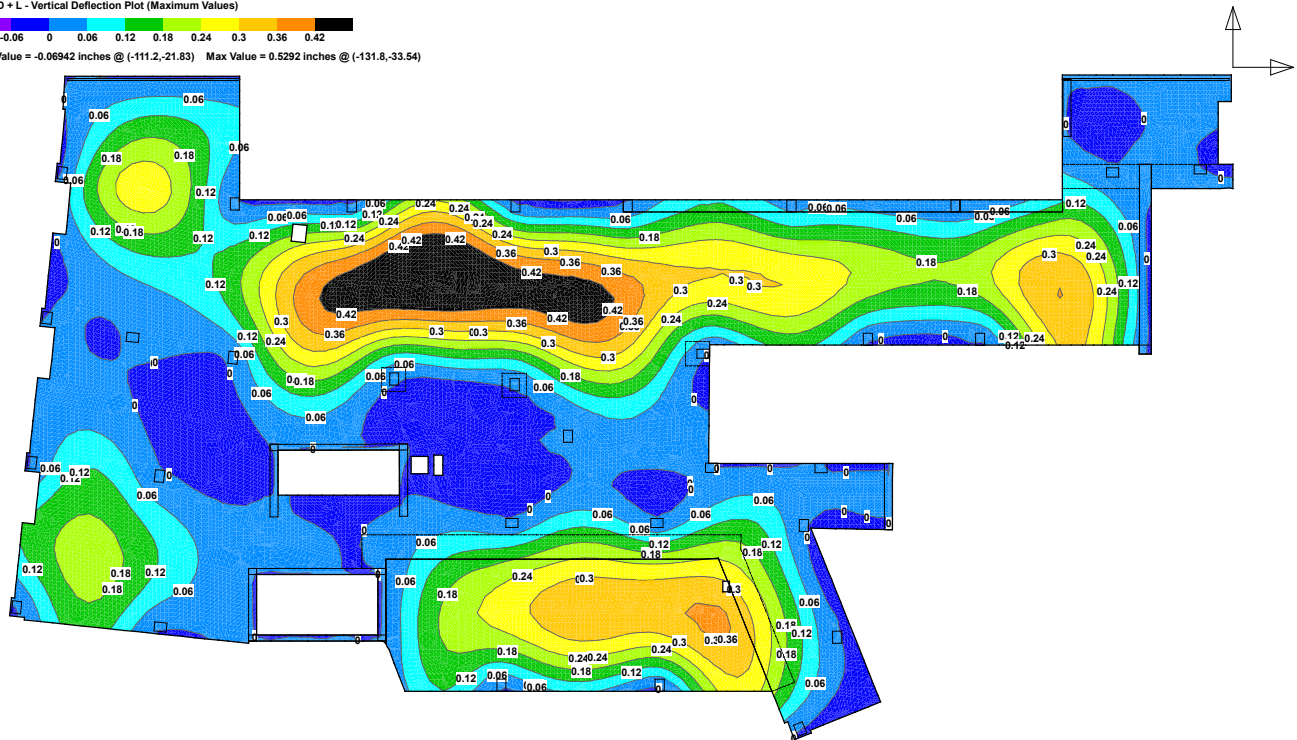
Seismic N/S: Point Loads; Point Load Icons; Point Load Values; User Notes; User Lines; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Scale = 1:380



Service LC: D + L: Max Deflection Plan

Service LC: D + L: User Lines; User Notes; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:380
Service LC: D + L - Vertical Deflection Plot (Maximum Values)

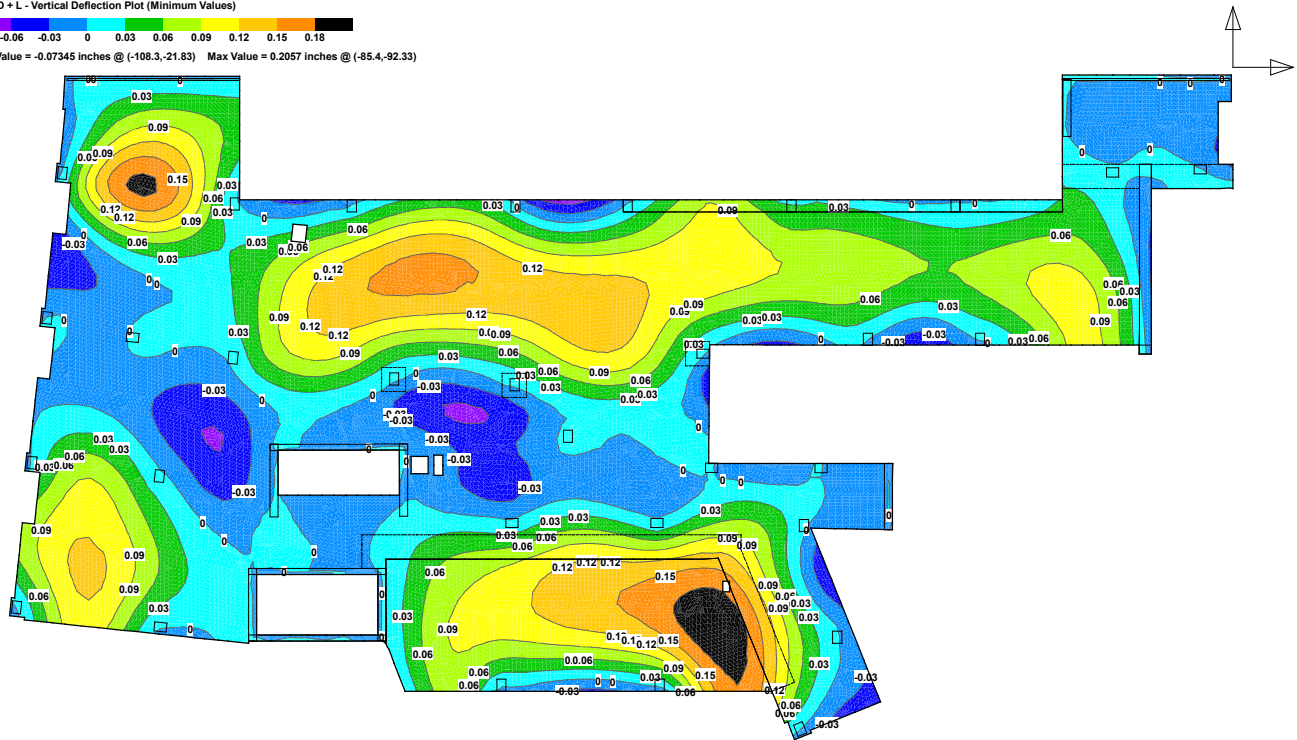
Min Value = -0.06942 inches @ (-111.2,-21.83) Max Value = 0.5292 inches @ (-131.8,-33.54)



Service LC: D + L: Min Deflection Plan

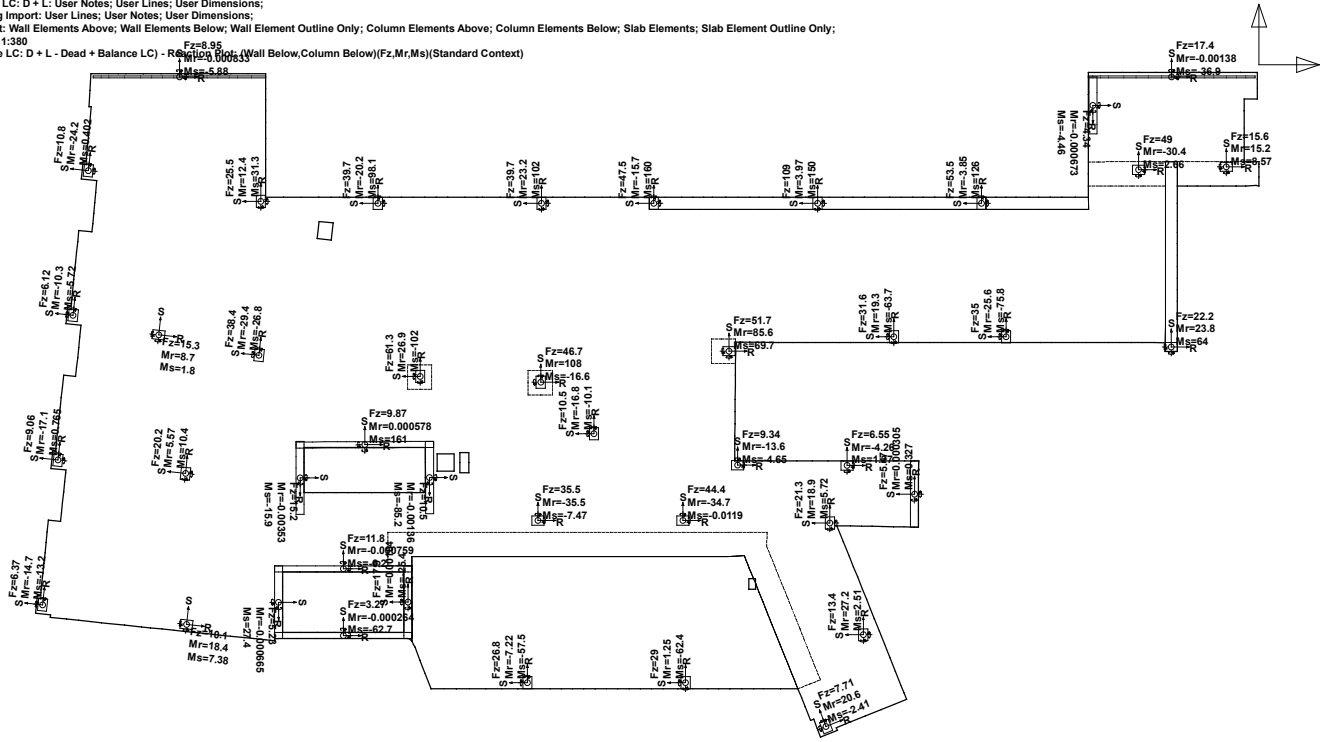
Service LC: D + L: User Lines; User Notes; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:380
Service LC: D + L - Vertical Deflection Plot (Minimum Values)

Min Value = -0.07345 inches @ (-108.3,-21.83) Max Value = 0.2057 inches @ (-85.4,-92.33)



Service LC: D + L: Reaction Plan

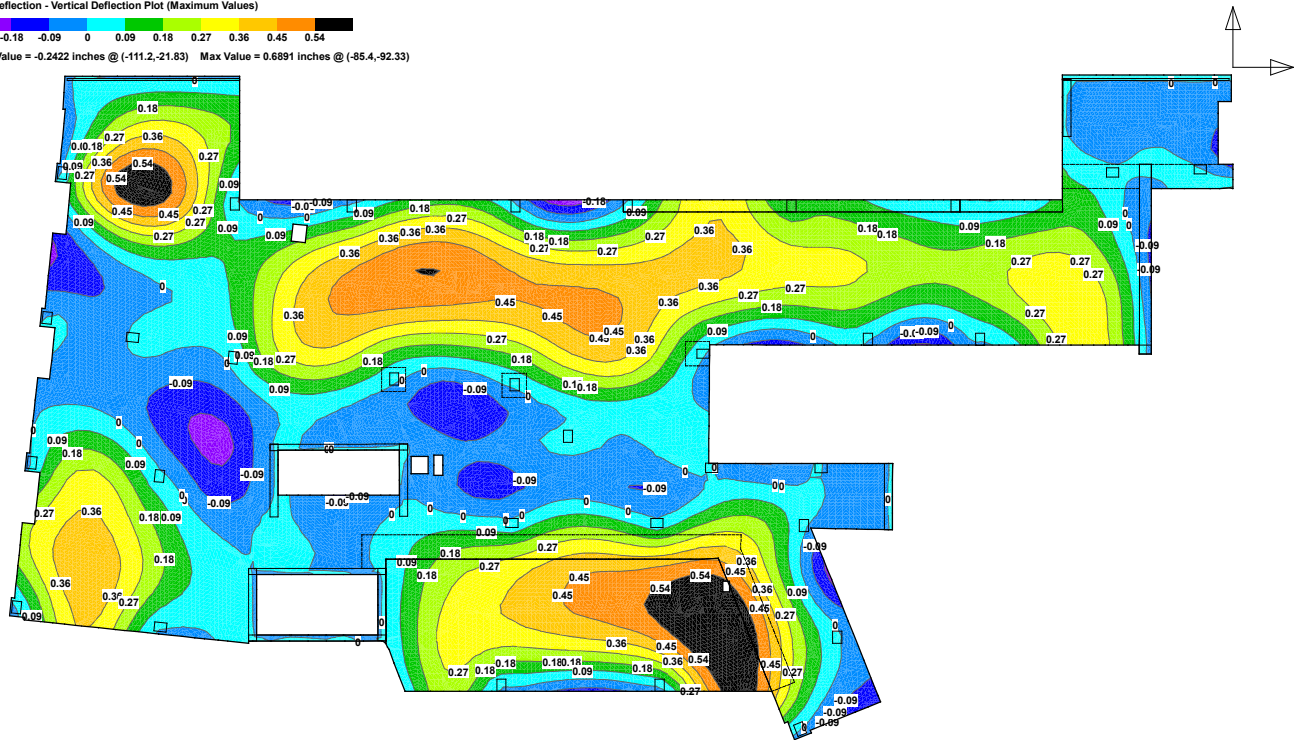
Service LC: D + L: User Notes; User Lines; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Scale = 1:300
(Service LC: D + L - Dead + Balance LC) - Reaction Plan (Wall Below, Column Below)(Fz,Mr,Ms)(Standard Context)



Long Term deflection: Max Deflection Plan

Long Term deflection: User Lines; User Notes; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:390
Long Term deflection - Vertical Deflection Plot (Maximum Values)

Min Value = -0.2422 inches @ (-111.2,-21.83) Max Value = 0.6891 inches @ (-85.4,-92.33)



Design Strip: Latitude SSs Table

Name	Set	Location feet	Skew degrees	At Support 1	At Support 2	Support Width 1 inches
1-1	latitude	(-200.6,-89.05)(-176.8,- 92.28)	90.17	true	true	18.17
1-2	latitude	(-176.8,-92.28)(-161.5,- 94.17)	90.17	true	true	24.16
2-1	latitude	(-195.5,-41.31)(-181.4,- 42.55)	117.49	true	true	18.29
2-2	latitude	(-181.4,-44.55)(-164.9,- 47.89)	117.49	true	true	24.27
2-3	latitude	(-164.9,-47.89)(-138.3,- 51.38)	117.49	true	true	18.16
2-4	latitude	(-138.3,-51.38)(-118.4,- 53.85)	117.49	true	true	18.18
2-5	latitude	(-118.4,-52.35)(-87.38,- 47.38)	117.49	true	true	18.4
3-1	latitude	(-198,-65.18)(-177,-67. 39)	117.49	true	true	18.16
3-2	latitude	(-177,-67.39)(-158,-73. 74)	117.49	true	true	18.6
3-3	latitude	(-158,-73.74)(-136.6,-7 1.68)	117.49	true	true	13.52
3-4	latitude	(-136.6,-73.68)(-118.9,- 75.46)	117.49	true	true	13.05
3-5	latitude	(-118.9,-75.16)(-94.99,- 74.76)	117.49	true	true	24.16
3-6	latitude	(-94.99,-74.76)(-70.83,- 73.36)	117.49	true	true	24.16
3-7	latitude	(-70.83,-75.36)(-56.75,- 75.51)	117.49	true	true	20.02
4-1	latitude	(-193,-17.44)(-164.6,-2 2.53)	117.49	true	true	18.2
4-2	latitude	(-164.6,-22.53)(-145.3,- 22.83)	117.49	true	true	18.16
4-3	latitude	(-145.3,-22.83)(-118.3,- 22.83)	117.49	true	true	18.16
4-4	latitude	(-118.3,-22.84)(-99.8,-2 2.83)	117.49	true	true	18.16
4-5	latitude	(-99.8,-22.83)(-72.79,-2 2.83)	117.49	true	true	18.16
4-6	latitude	(-72.79,-22.83)(-45.78,- 22.83)	117.49	true	true	17.83
4-7	latitude	(-45.78,-22.84)(-15.45,- 23.26)	117.49	true	false	18.16
5-1	latitude	(-140.1,-94.03)(-120.6,- 100.9)	117.49	true	true	12.35
5-2	latitude	(-120.6,-101.9)(-94.55,- 100.9)	117.49	true	true	18.16
5-3	latitude	(-94.55,-101.9)(-65.26,- 95.11)	117.49	true	true	18.8
5-4	latitude	(-65.26,-94)(-62.99,-93. 09)	117.49	true	false	19.56
6-1	latitude	(-85.98,-66.03)(-67.92,- 66.08)	117.49	true	true	24.16
6-2	latitude	(-67.92,-66.08)(-56.52,- 65.49)	117.49	true	true	24.16
7-1	latitude	(-87.36,-45.48)(-60.2,- 44.83)	117.49	false	true	0
7-2	latitude	(-60.2,-44.83)(-41.7,-4 4.83)	117.49	true	true	18.16
7-3	latitude	(-41.7,-44.83)(-15.45,- 40.25)	117.49	true	false	18.16
8-1	latitude	(-71.38,-109.1)(-59.03,- 104.67)	117.49	true	false	18.15
9-1	latitude	(-27.98,-17.62)(-19.02,- 17.02)	117.49	false	true	0.3702
9-2	latitude	(-19.02,-17.34)(-15.45,- 17.36)	117.49	true	false	4.158
9-2(2)	latitude	(-15.45,-17.36)(-13.45,- 17.4)	117.49	false	false	0
9-2(3)	latitude	(-13.45,-17.4)(-5.378,- 16.89)	117.49	false	true	0
9-3	latitude	(-5.378,-16.83)(-0.58963,- 17.11)	117.49	true	false	24.2

Design Strip: Latitude SSs Table (2)

<i>Support Width 1</i>	<i>Support Width 2</i> <i>inches</i>	<i>Support Trans. Width 1</i> <i>inches</i>	<i>Support Trans. Width 2</i> <i>inches</i>	<i>Auto-Support</i>	<i>Min Divisions</i>	<i>Max Division Spacing</i> <i>feet</i>
	24.17	24.01	18.01	true	4	2.5
	19.99	18	55.24	true	4	2.5
	24.33	24.17	18.13	true	4	2.5
	18.24	18.08	24.11	true	4	2.5
	18.31	24.01	24.21	true	4	2.5
	18.18	24.03	24.03	true	4	2.5
	24.48	24.32	18.24	true	4	2.5
	18.16	24	24	true	4	2.5
	19.82	24.58	25.7	true	4	2.5
	19.31	144.2	143.3	true	4	2.5
	24.24	80.15	18.06	true	4	2.5
	24.16	18	18	true	4	2.5
	16.3	18.01	24.01	true	4	2.5
	18.06	24	130.8	true	4	2.5
	18.44	24.06	24.38	true	4	2.5
	18.16	24	24	true	4	2.5
	18.16	24	24	true	4	2.5
	18.16	24	24	true	4	2.5
	18.49	24	24	true	4	2.5
	18.16	24	24	true	4	2.5
	0	24	0	true	4	2.5
	19.57	21.47	25.89	true	4	2.5
	18.16	24	24	true	4	2.5
	18.8	24.86	24.86	true	4	2.5
	0	25.87	0	true	4	2.5
	24.16	18	18	true	4	2.5
	22.84	18	130.8	true	4	2.5
	18.16	0	24.01	true	4	2.5
	18.16	24	24	true	4	2.5
	0	24	0	true	4	2.5
	0	24	0	true	4	2.5
	44.18	0	18.01	true	4	2.5
	0	18	0	true	4	2.5
	0	0	0	true	4	2.5
	24.22	0	18.04	true	4	2.5
	0	18.03	0	true	4	2.5

Design Strip: Latitude SSs Table - 51

Design Strip: Latitude SSs Table - 52

Design Strip: Latitude SSs Table (6)

<i>CS Min. Bar Loc.</i>	<i>CS Min T.Bar</i>	<i>CS Min B.Bar</i>	<i>CS Shear Legs</i>	<i>MS Same As CS</i>	<i>MS Auto Trim</i>	<i>MS Section Slope</i>	<i>MS Top Bar</i>	<i>MS Bot Bar</i>
elevated	0	0	2	false	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
elevated	0	0	4	true	none	0.25	#5	#4
elevated	0	0	4	true	none	0.25	#5	#4
elevated	0	0	4	true	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	4	false	none	0.25	#5	#4
stress	0	0	4	false	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
elevated	0	0	4	true	none	0.25	#5	#4
elevated	0	0	4	true	none	0.25	#5	#4
elevated	0	0	4	true	none	0.25	#5	#4
elevated	0	0	4	true	none	0.25	#5	#4
elevated	0	0	4	true	none	0.25	#5	#4

Design Strip: Latitude SSs Table - 54

Design Strip: Latitude SSs Table (8)

[illegible]

Design Strip: Longitude SSs Table

Name	Set	Location feet	Skew degrees	At Support 1	At Support 2	Support Width 1 inches
10-1	longitude	(-200.6,-89.05)(-198,-65.18)	-5.001	true	true	24.16
10-2	longitude	(-198,-65.18)(-195.5,-41.31)	-4.631	true	true	24.16
10-3	longitude	(-195.5,-41.31)(-193,-17.44)	-1.644	true	true	24.16
10-4	longitude	(-193,-17.44)(-191.6,-2.25)	-0.258	true	true	24.16
11-1	longitude	(-176.8,-92.28)(-177,-67.39)	-0.995	true	true	18.27
11-2	longitude	(-177,-67.39)(-164.9,-47.89)	-4.289	true	true	26.83
11-3	longitude	(-164.9,-47.89)(-164.6,-22.53)	-0.236	true	true	24.26
11-4	longitude	(-164.6,-22.53)(-138.3,-51.38)	-0.036	true	true	24.16
12-1	longitude	(-145.3,-22.83)(-138.3,-51.38)	-5.139	true	true	24.87
12-2	longitude	(-138.3,-51.38)(-136.7,-62.35)	-6.235	true	true	24.42
13-1	longitude	(-120.6,-101.9)(-119.9,-90.02)	-3.752	true	false	24.21
13-1(2)	longitude	(-119.9,-90.02)(-118.9,-75.16)	-3.751	false	true	0
13-2	longitude	(-118.9,-75.16)(-118.4,-52.35)	-5.105	true	true	18.16
13-3	longitude	(-118.4,-52.35)(-109.7,-60.83)	-0.284	true	true	24.16
14-1	longitude	(-109.7,-60.83)(-94.99,-74.76)	-7.026	true	true	24.97
15-1	longitude	(-94.99,-74.76)(-94.55,-101.16)	-10.197	true	true	27.64
16-1	longitude	(-99.8,-22.83)(-88.59,-47.89)	-4.293	true	false	27.07
17-1	longitude	(-87.38,-47.22)(-86.87,-65.55)	-6.655	true	true	18.16
18-1	longitude	(-67.92,-66.08)(-70.83,-75.36)	-7.436	true	true	19.02
18-2	longitude	(-70.83,-75.36)(-65.26,-94)	-9.663	true	true	30.69
18-3	longitude	(-65.26,-94)(-71.38,-102.1)	-10.21	true	true	26.05
19-1	longitude	(-72.79,-22.83)(-60.2,-45.33)	-4.238	true	true	27.85
20-1	longitude	(-45.78,-22.84)(-41.7,-19.56)	-4.183	true	true	24.57
21-1	longitude	(-19.91,-15.87)(-14.48,-20.06)	-2.427	false	true	0
22-1	longitude	(-14.48,-20.06)(-5.47,-2.005)	-4.578	false	true	0
23-1	longitude	(-5.47,-2.005)(-5.33,-16.93)	-0.337	true	true	3.906
23-2	longitude	(-5.33,-16.93)(-5.308,-19.89)	-1.891	true	false	15.8

Design Strip: Longitude SSs Table (2)

<i>Support Width 1</i>	<i>Support Width 2</i> <i>inches</i>	<i>Support Trans. Width 1</i> <i>inches</i>	<i>Support Trans. Width 2</i> <i>inches</i>	<i>Auto-Support</i>	<i>Min Divisions</i>	<i>Max Division Spacing</i> <i>feet</i>
24.16	18	18	18	true	4	2.5
24.16	18	18	18	true	4	2.5
24.16	18	18	18	true	4	2.5
3.629	18	26.04	18	true	4	2.5
24.31	24.15	18.11	18	true	4	2.5
26.83	20.01	20.01	18	true	4	2.5
24.16	18.08	18	18	true	4	2.5
3.299	18	341	18	true	4	2.5
24.87	18.53	18.53	18	true	4	2.5
10.49	18.19	55.16	18	true	4	2.5
0	18.04	0	18	true	4	2.5
18.2	0	24.05	18	true	4	2.5
24.16	24	18	18	true	4	2.5
24.16	18	18	18	true	4	2.5
12.53	26.15	23.31	18	true	4	2.5
24.16	24	18	18	true	4	2.5
0	20.18	0	18	true	4	2.5
19.76	24.01	24.01	18	true	4	2.5
19.81	25.15	18.86	18	true	4	2.5
25.2	18.79	18.79	18	true	4	2.5
26.06	19.42	25.03	18	true	4	2.5
27.81	20.74	20.74	18	true	4	2.5
24.57	18.31	18.31	18	true	4	2.5
4.033	0	160.4	18	true	4	2.5
18.16	0	24	18	true	4	2.5
20.51	258.7	24	18	true	4	2.5
0	24	0	18	true	4	2.5

Design Strip: Longitude SSs Table (4)

<i>Spec. Infl. Area ft²</i>	<i>Max LLR %</i>	<i>Span Width</i>	<i>Col Strip Width</i>	<i>Lock Strips</i>	<i>Design CS for CS</i>	<i>CS Auto Trim</i>	<i>CS Section Slope</i>
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	T or L	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	code-beam	false	false	inverted T or L	100
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25

Design Strip: Longitude SSs Table (5)

Section Slope	CS Top Bar	CS Bot Bar	CS Shear Bar	CS Top Cover inches	CS Bot Cover inches	CS Shear d calc	CS Torsion Design	CS System
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	Maximize Effective Depth		two-way slab
	#5	#4	#4	1.5	0.75	Maximize Effective Depth		two-way slab
	#5	#4	#4	1.5	0.75	Maximize Effective Depth		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	Maximize Effective Depth		two-way slab
	#5	#4	#4	1.5	0.75	Maximize Effective Depth		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1	1	Maximize Effective Depth		beam
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab

Design Strip: Longitude SSs Table (6)

<i>CS Min. Bar Loc.</i>	<i>CS Min T.Bar</i>	<i>CS Min B.Bar</i>	<i>CS Shear Legs</i>	<i>MS Same As CS</i>	<i>MS Auto Trim</i>	<i>MS Section Slope</i>	<i>MS Top Bar</i>	<i>MS Bot Bar</i>
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
elevated	0	0	4	true	none	0.25	#5	#4
elevated	0	0	4	true	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
elevated	0	0	4	true	none	0.25	#5	#4
elevated	0	0	4	true	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
bottom	0	0	2	true	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4

Design Strip: Longitude SSs Table (7)

[illegible]

Design Strip: Longitude SSs Table (8)

[illegible]

Design Strip: Latitude SSSs Table

<i>Name</i>	<i>Strip Type</i>	<i>Calc. Trib. Area ft²</i>	<i>Calc. Infl. Area ft²</i>	<i>Top Bar</i>	<i>Bottom Bar</i>	<i>Shear Bar</i>	<i>Top Cover inches</i>
1C-1	center	279	0	#5	#4	#4	1.5
1C-2	center	151.7	0	#5	#4	#4	1.5
2C-1	center	319	0	#5	#4	#4	1.5
2C-2	center	371.7	0	#5	#4	#4	1.5
2C-3	center	526.3	0	#5	#4	#4	1.5
2C-4	center	499.7	0	#5	#4	#4	1.5
2C-5	center	569.5	0	#5	#4	#4	1.5
3C-1	center	454.8	0	#5	#4	#4	1.5
3C-2	center	330.7	0	#5	#4	#4	1.5
3C-3	center	73.06	0	#5	#4	#4	1.5
3C-4	center	370.8	0	#5	#4	#4	1.5
3C-5	center	507.8	0	#5	#4	#4	1.5
3C-6	center	419.7	0	#5	#4	#4	1.5
3C-7	center	41.44	0	#5	#4	#4	1.5
4C-1	center	524.3	0	#5	#4	#4	1.5
4C-2	center	250.6	0	#5	#4	#4	1.5
4C-3	center	330.8	0	#5	#4	#4	1.5
4C-4	center	258.1	0	#5	#4	#4	1.5
4C-5	center	321.9	0	#5	#4	#4	1.5
4C-6	center	311	0	#5	#4	#4	1.5
4C-7	center	251.3	0	#5	#4	#4	1.5
5C-1	center	250.7	0	#5	#4	#4	1.5
5C-2	center	320.5	0	#5	#4	#4	1.5
5C-3	center	347.6	0	#5	#4	#4	1.5
5C-4	center	4.711	0	#5	#4	#4	1.5
6C-1	center	67.14	0	#5	#4	#4	1.5
6C-2	center	49.85	0	#5	#4	#4	1.5
7C-1	center	298.1	0	#5	#4	#4	1.5
7C-2	center	199.3	0	#5	#4	#4	1.5
7C-3	center	283.2	0	#5	#4	#4	1.5
8C-1	center	70.17	0	#5	#4	#4	1.5
9C-1	center	128.7	0	#5	#4	#4	1.5
9C-2	center	55.2	0	#5	#4	#4	1.5
9C-2(2)	center	53.18	0	#5	#4	#4	1.5
9C-2(3)	center	77.26	0	#5	#4	#4	1.5
9C-3	center	27.32	0	#5	#4	#4	1.5

Bot. Cover
inches

[illegible]

Design Strip: Longitude SSSs Table

<i>Name</i>	<i>Strip Type</i>	<i>Calc. Trib. Area ft²</i>	<i>Calc. Infl. Area ft²</i>	<i>Top Bar</i>	<i>Bottom Bar</i>	<i>Shear Bar</i>	<i>Top Cover inches</i>
10C-1	center	257	0	#5	#4	#4	1.5
10C-2	center	53.87	0	#5	#4	#4	1.5
10C-3	center	330.2	0	#5	#4	#4	1.5
10C-4	center	260.5	0	#5	#4	#4	1.5
11C-1	center	443.6	0	#5	#4	#4	1.5
11C-2	center	445.3	0	#5	#4	#4	1.5
11C-3	center	451.4	0	#5	#4	#4	1.5
11C-4	center	267.9	0	#5	#4	#4	1.5
12C-1	center	629.3	0	#5	#4	#4	1.5
12C-2	center	215.1	0	#5	#4	#4	1.5
13C-1	center	227.3	0	#5	#4	#4	1.5
13C-1(2)	center	317.9	0	#5	#4	#4	1.5
13C-2	center	316.7	0	#5	#4	#4	1.5
13C-3	center	635.5	0	#5	#4	#4	1.5
14C-1	center	287.7	0	#5	#4	#4	1.5
15C-1	center	649.9	0	#5	#4	#4	1.5
16C-1	center	558.2	0	#5	#4	#4	1.5
17C-1	center	196.3	0	#5	#4	#4	1.5
18C-1	center	134.2	0	#5	#4	#4	1.5
18C-2	center	270.2	0	#5	#4	#4	1.5
18C-3	center	225.9	0	#5	#4	#4	1.5
19C-1	center	480.5	0	#5	#4	#4	1.5
20C-1	center	491.8	0	#5	#4	#4	1.5
21C-1	center	159.6	0	#5	#4	#4	1.5
22C-1	center	275.6	0	#5	#4	#4	1
22R-1	right	71.51	0	#5	#4	#4	1.5
23C-1	center	111.7	0	#5	#4	#4	1.5
23C-2	center	39.77	0	#5	#4	#4	1.5

Bot. Cover
inches

Design Strip: Longitude SSSs Table - 67

Design Strip: Punching Checks Table

<i>Number</i>	<i>Location feet</i>	<i>Radius feet</i>	<i>Cover To CGS inches</i>	<i>Angle degrees</i>	<i>Edge</i>	<i>Connection</i>
1	(-200.6,-89.05)	10	1.625	84	failure planes	auto
2	(-198,-65.18)	10	1.625	84	failure planes	auto
3	(-195.5,-41.31)	10	1.625	84	failure planes	auto
4	(-193,-17.44)	10	1.625	84	failure planes	auto
5	(-181.4,-44.55)	10	1.625	-6	failure planes	auto
6	(-177,-67.39)	10	1.625	84	failure planes	auto
7	(-176.8,-92.28)	10	1.625	-6	failure planes	auto
8	(-164.9,-47.89)	10	1.625	84	failure planes	auto
9	(-164.6,-22.53)	10	1.625	90	failure planes	auto
10	(-145.3,-22.83)	13	1.625	90	failure planes	auto
11	(-138.3,-51.38)	10	1.625	90	failure planes	auto
12	(-120.6,-101.9)	10	1.625	90	failure planes	auto
13	(-118.9,-75.16)	10	1.625	0	failure planes	auto
14	(-118.4,-52.35)	10	1.625	0	failure planes	auto
15	(-118.3,-22.84)	15	1.625	90	failure planes	auto
16	(-109.7,-60.83)	10	1.625	90	failure planes	auto
17	(-94.99,-75.16)	10	1.625	0	failure planes	auto
18	(-94.55,-101.9)	10	1.625	90	failure planes	auto
19	(-87.38,-47.22)	10	1.625	0	failure planes	auto
20	(-85.98,-66.03)	10	1.625	0	failure planes	auto
21	(-71.38,-109.1)	10	1.625	22	failure planes	auto
22	(-70.75,-75.58)	10	1.625	90	failure planes	auto
23	(-67.92,-66.08)	10	1.625	0	failure planes	auto
24	(-65.26,-94)	10	1.625	90	failure planes	auto
25	(-60.2,-44.83)	10	1.625	90	failure planes	auto
26	(-41.7,-44.83)	10	1.625	90	failure planes	auto
27	(-19.85,-17.33)	6	1.625	0	failure planes	auto
28	(-5.378,-16.83)	6	1.625	0	failure planes	auto

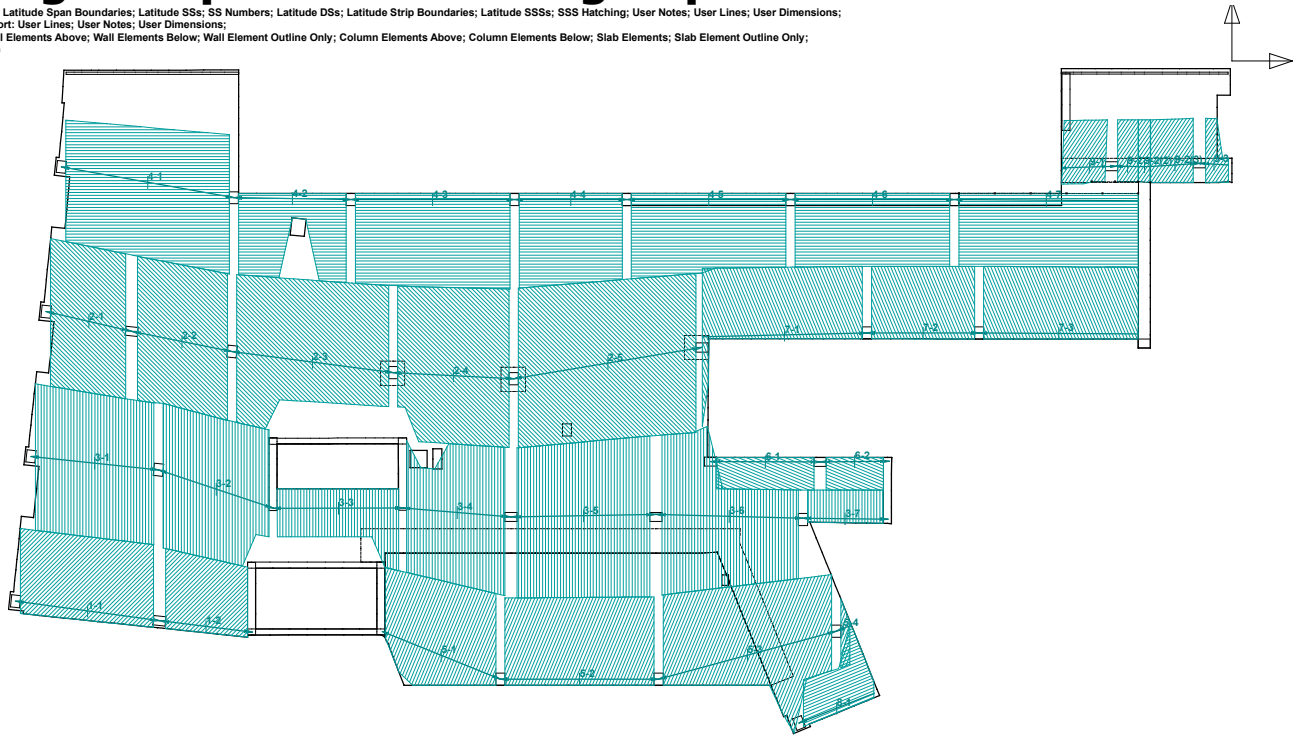
Design Strip: Punching Checks Table (2)

Connection	Use Spec LLR Params	Spec. LLR Levels	Spec. Trib. Area ft ²	Spec. Infl. Area ft ²	Calc. Trib. Area ft ²	Calc. Infl. Area ft ²
	false	1	0	0	159.6	0
	false	1	0	0	227.7	0
	false	1	0	0	151.7	0
	false	1	0	0	279	0
	false	1	0	0	432.8	0
	false	1	0	0	489.7	0
	false	1	0	0	247.7	0
	false	1	0	0	465.4	0
	false	1	0	0	479.5	0
	false	1	0	0	312.2	0
	false	1	0	0	602	0
	false	1	0	0	309.7	0
	false	1	0	0	493.5	0
	false	1	0	0	550.4	0
	false	1	0	0	322.8	0
	false	1	0	0	249.3	0
	false	1	0	0	588.9	0
	false	1	0	0	359.7	0
	false	1	0	0	517.8	0
	false	1	0	0	136.1	0
	false	1	0	0	135.7	0
	false	1	0	0	279.5	0
	false	1	0	0	54.29	0
	false	1	0	0	252.6	0
	false	1	0	0	249.8	0
	false	1	0	0	281.3	0
	false	1	0	0	394.4	0
	false	1	0	0	129.5	0

[illegible]

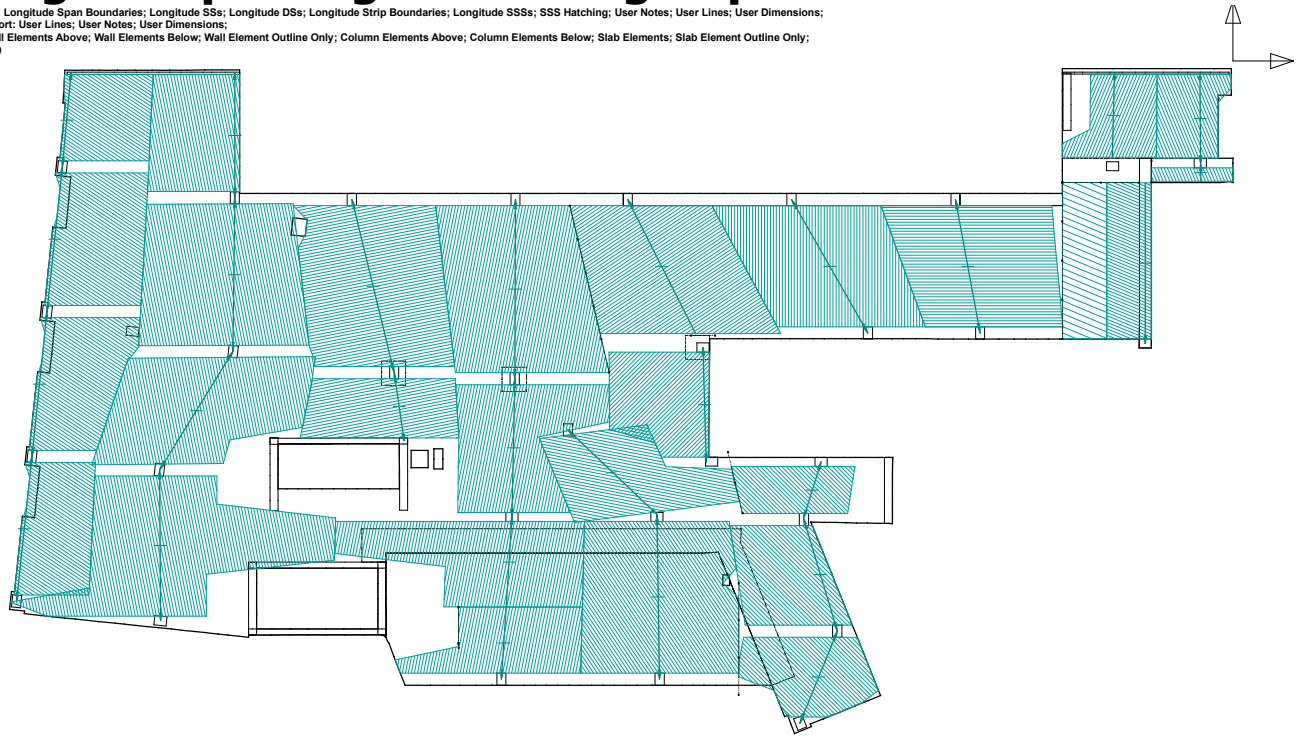
Design Strip: Latitude Design Spans Plan

Design Strip: Latitude Span Boundaries; Latitude SSs; SS Numbers; Latitude DSs; Latitude Strip Boundaries; Latitude SSSs; SSS Hatching; User Notes; User Lines; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Scale = 1:380



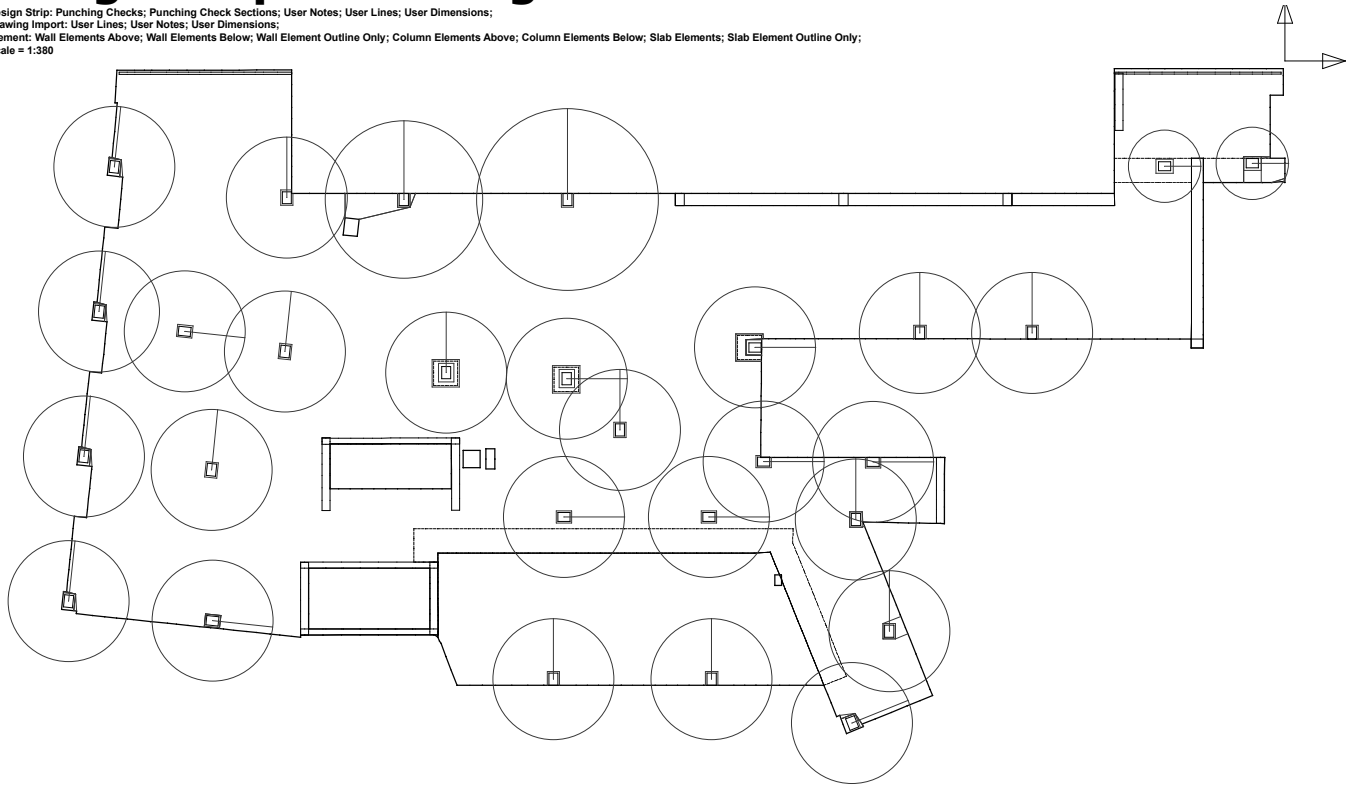
Design Strip: Longitude Design Spans Plan

Design Strip: Longitude Span Boundaries; Longitude SSSs; Longitude DSs; Longitude Strip Boundaries; Longitude SSSs; SSS Hatching; User Notes; User Lines; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Scale = 1:380



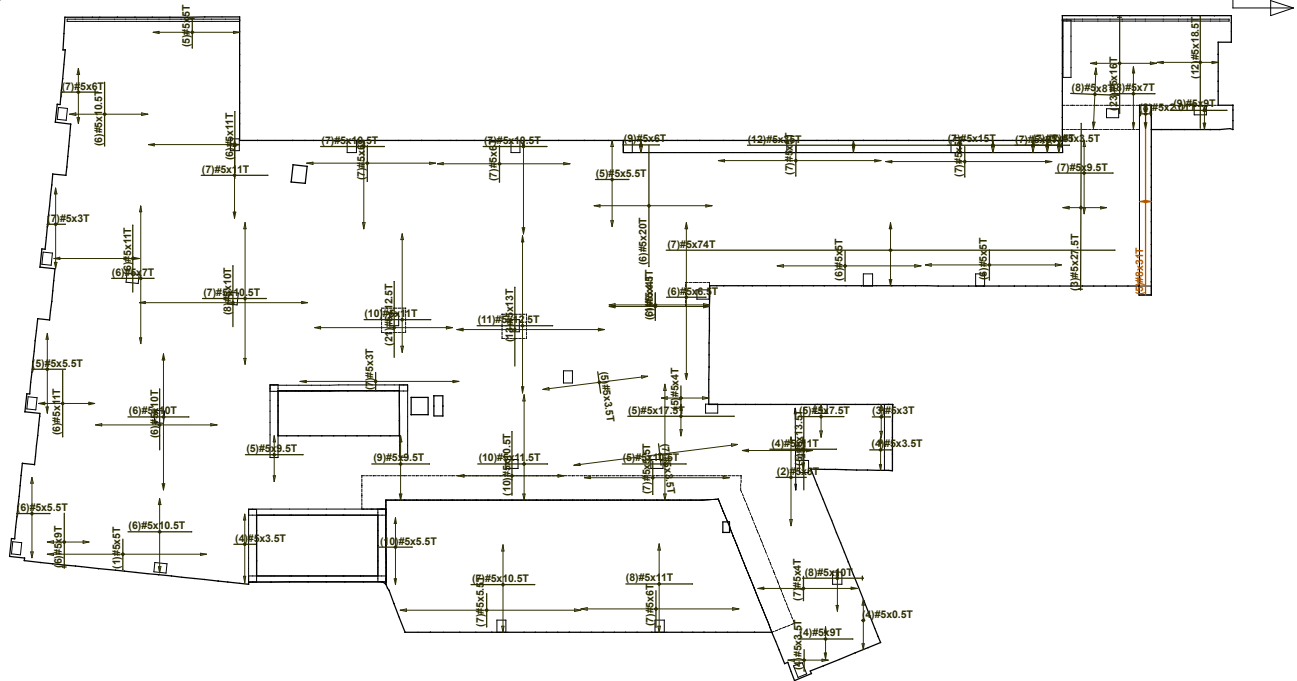
Design Strip: Punching Checks Plan

Design Strip: Punching Checks; Punching Check Sections; User Notes; User Lines; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Scale = 1:380



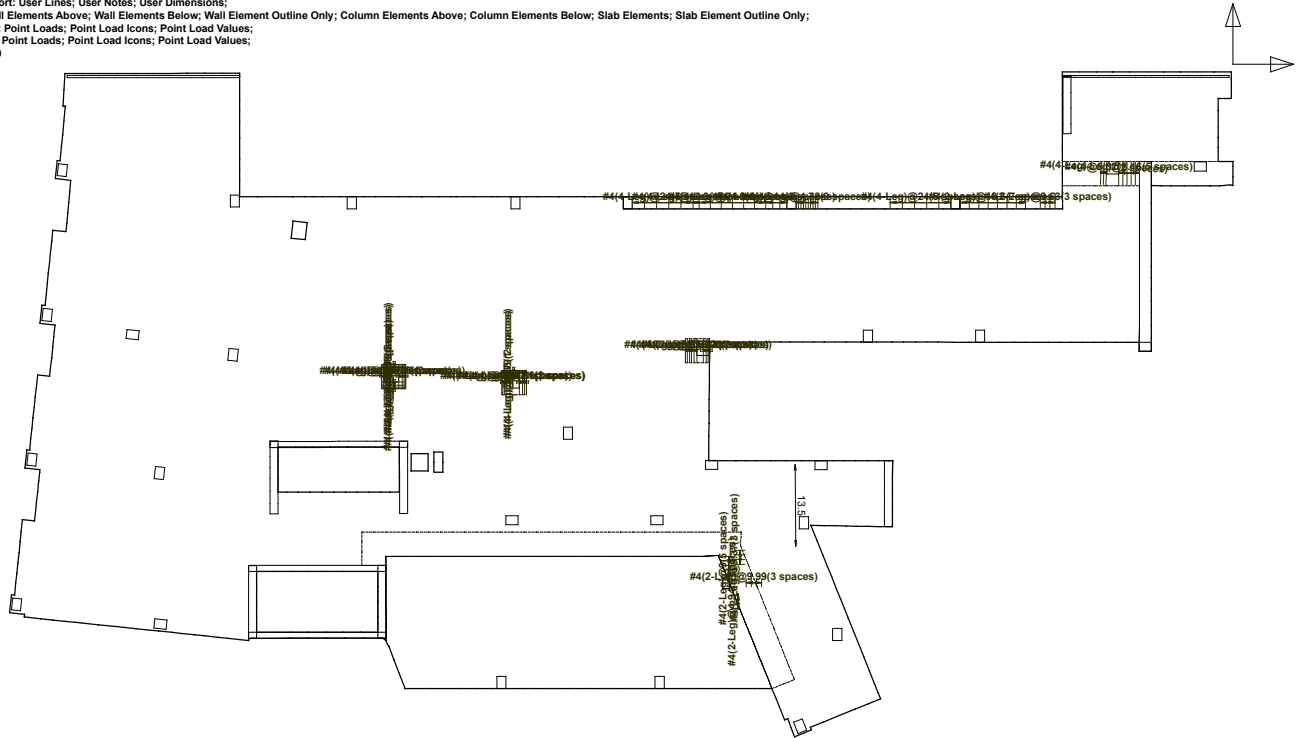
Reinforcement: Top Bars Plan

Reinforcement: User Lines; User Notes; User Dimensions; Latitude User Concentrated Reinf.; Latitude Program Concentrated Reinf.; Latitude User Distributed Reinf.; Latitude Program Distributed Reinf.; Longitude User Concentrated Reinf.; Longitude Program Concentrated Reinf.
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:380



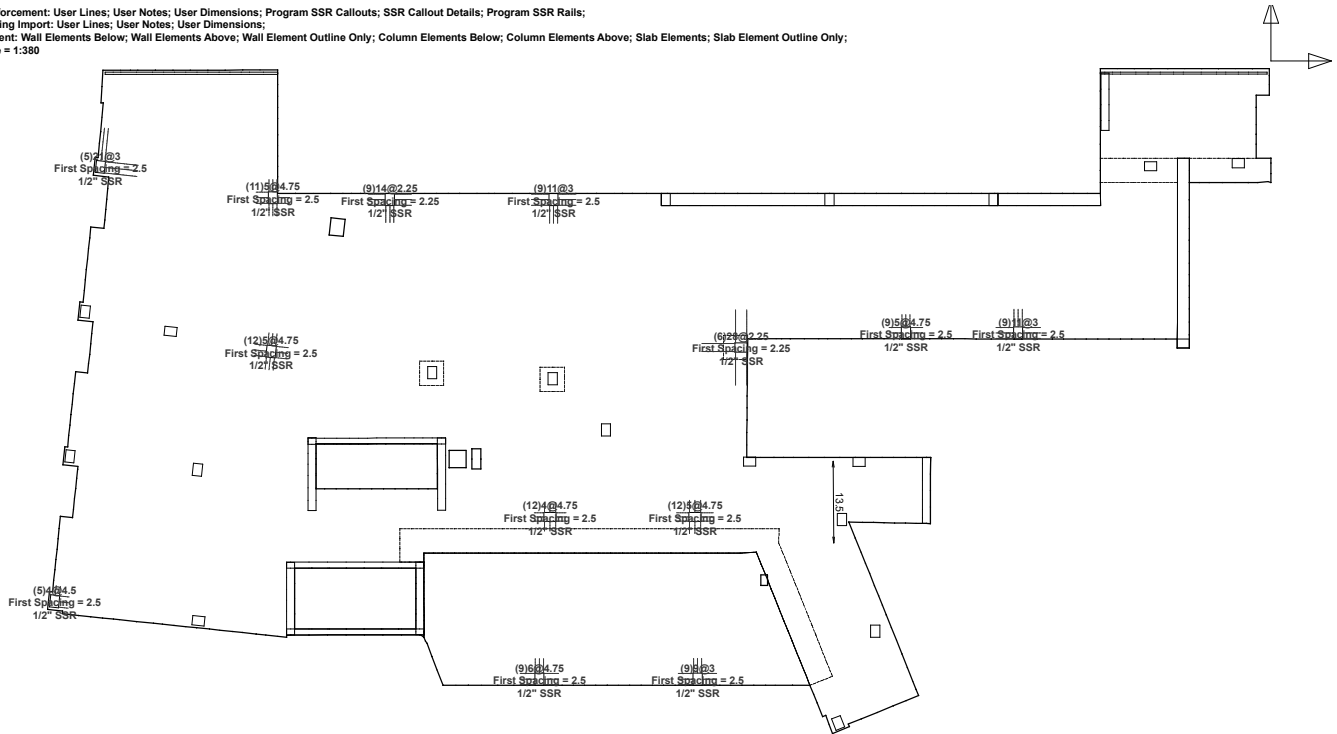
Reinforcement: Shear Bars Plan

Reinforcement: Latitude User Transverse Reinf.; Longitude User Transverse Reinf.; Latitude Program Transverse Reinf.; Longitude Program Transverse Reinf.; Transverse Reinf. Descriptions; Transverse Reinf. Extent; Latitude User Individual Transverse Bars; Longitude User Individual Transverse Bars; User Lines; User Notes; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Seismic E/W; Point Loads; Point Load Icons; Point Load Values;
Seismic N/S; Point Loads; Point Load Icons; Point Load Values;
Scale = 1:380



Reinforcement: SSR Plan

Reinforcement: User Lines; User Notes; User Dimensions; Program SSR Callouts; SSR Callout Details; Program SSR Rails;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:380



Manual Latitude Tendon: Standard Plan

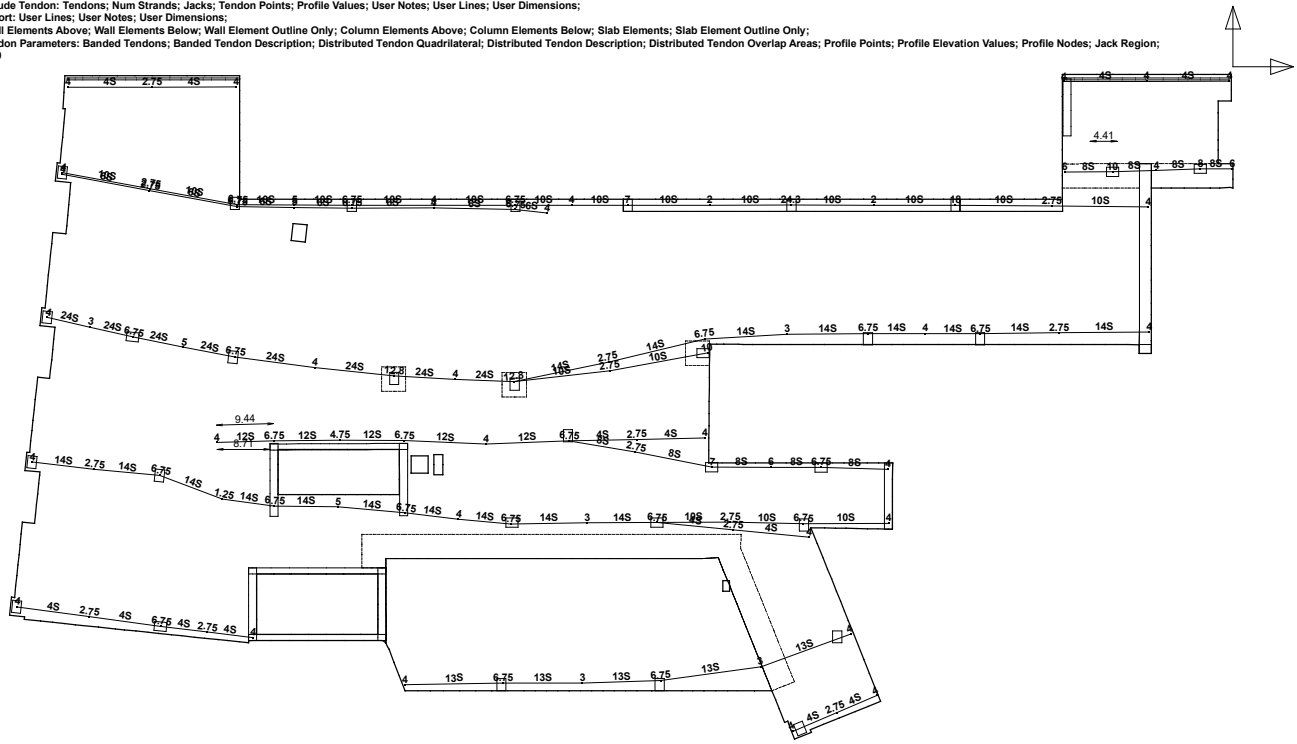
Manual Latitude Tendon: Tendons; Num Strands; Jacks; Tendon Points; Profile Values; User Notes; User Lines; User Dimensions;

Drawing Import: User Lines; User Notes; User Dimensions;

Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;

Latitude Tendon Parameters: Banded Tendons; Banded Tendon Description; Distributed Tendon Quadrilateral; Distributed Tendon Description; Distributed Tendon Overlap Areas; Profile Points; Profile Elevation Values; Profile Nodes; Jack Region;

Scale = 1:380

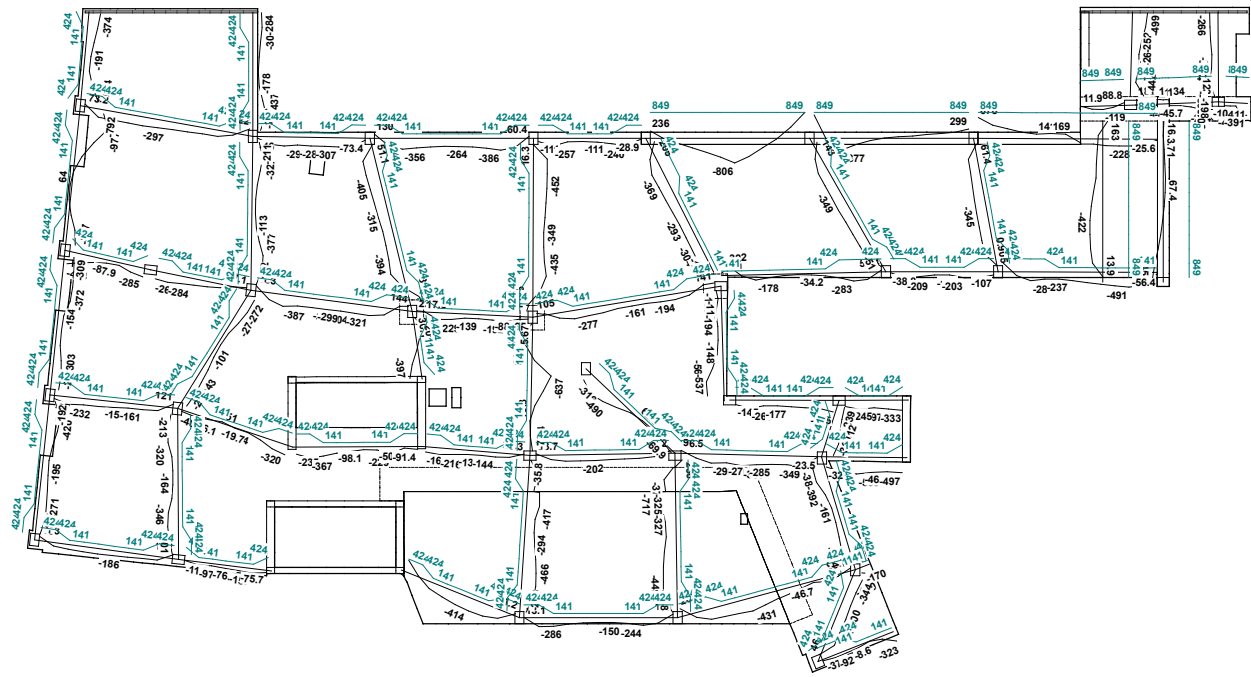


Manual Longitude Tendon: Standard Plan

[illegible]

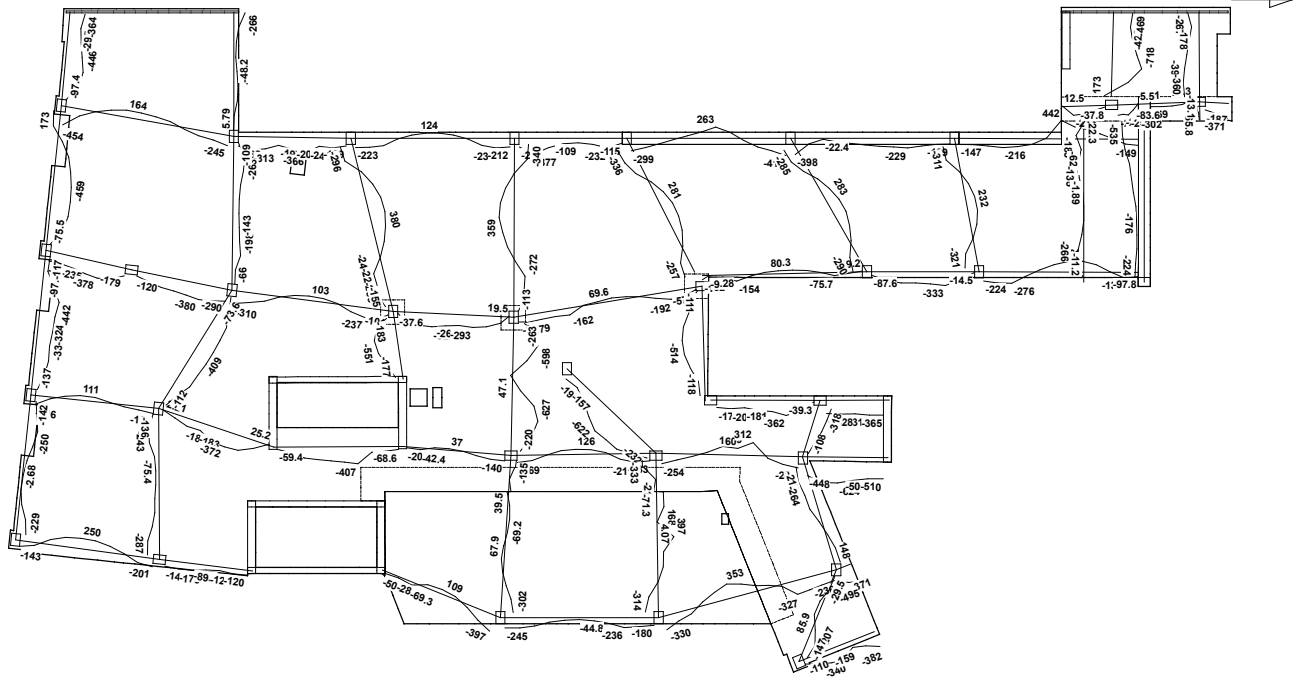
Service Design: Top Stress Plan

Service Design: Latitude Span Designs; Longitude Span Designs; Latitude DS Designs; Longitude DS Designs; User Notes; User Lines; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Scale = 1:380
Service Design - Section Analysis Plot: (Gross Section Top Concrete Stress)(Context: Max Capacity,Max Demand)



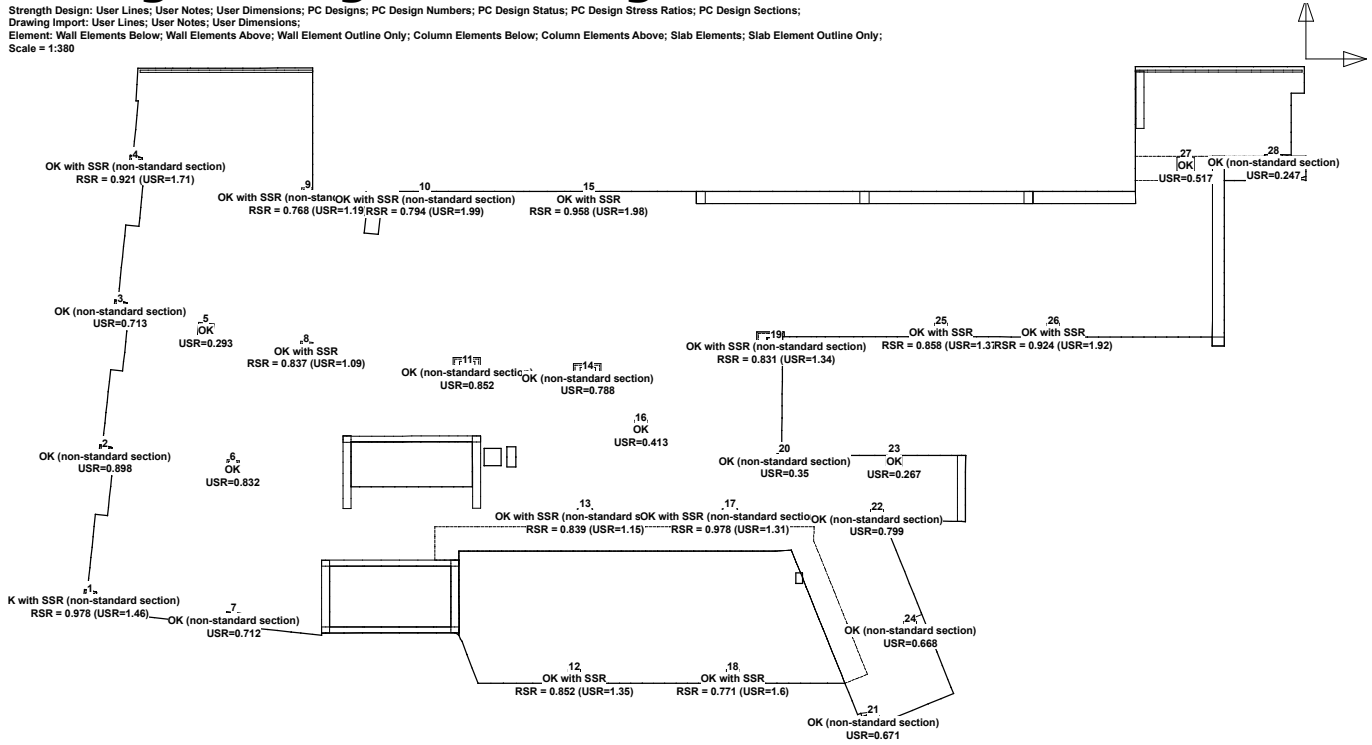
Service Design: Bottom Stress Plan

Service Design: User Lines; User Notes; User Dimensions; Latitude Span Designs; Longitude Span Designs; Latitude DS Designs; Longitude DS Designs;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:380
Service Design - Section Analysis Plot: (Gross Section Bottom Concrete Stress)(Context: Max Demand)



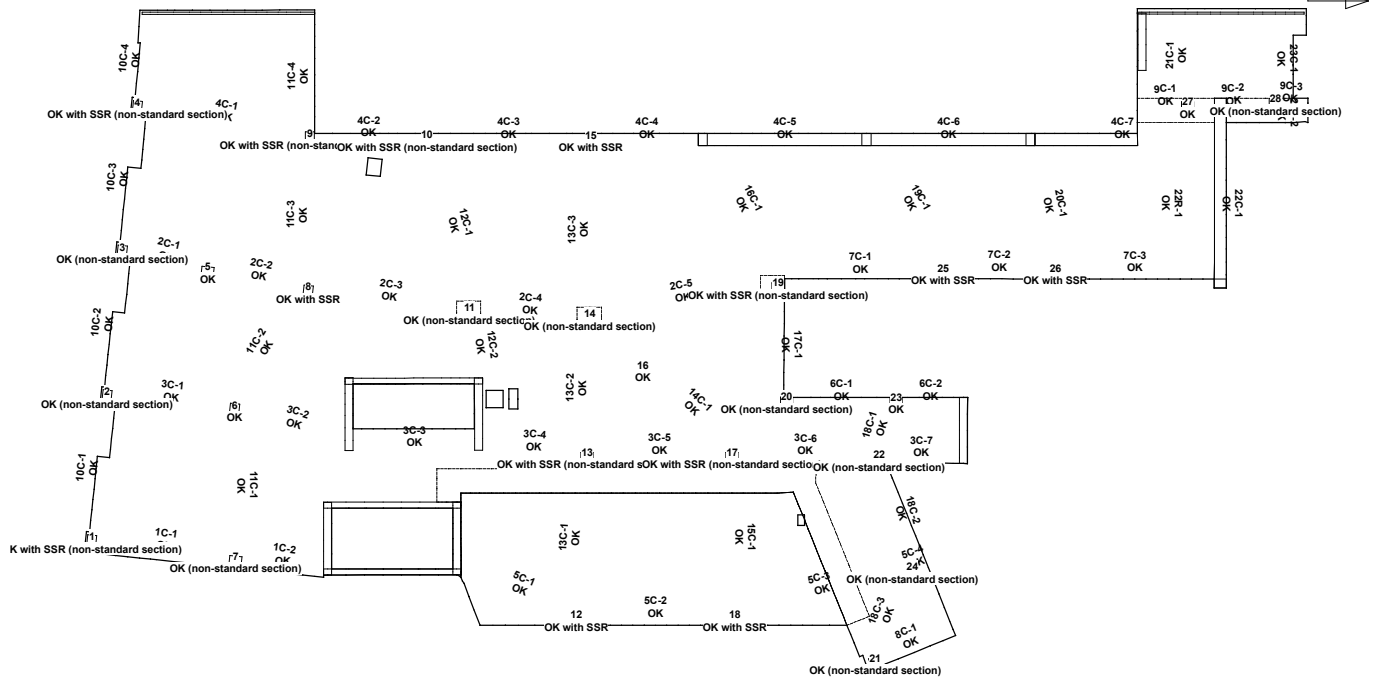
Strength Design: Punching Shear Status Plan

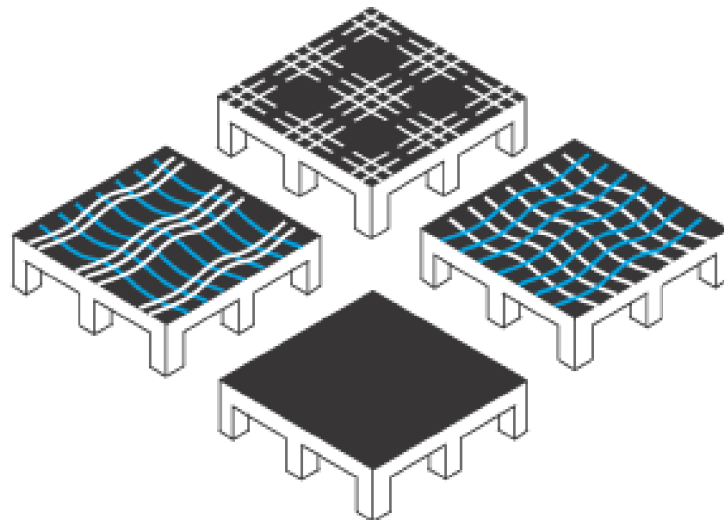
Strength Design: User Lines; User Notes; User Dimensions; PC Designs; PC Design Numbers; PC Design Status; PC Design Stress Ratios; PC Design Sections;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:300



Design Status: Status Plan

Design Status: Latitude Span Designs; Longitude Span Designs; Span Design Numbers; Span Design Status; Latitude DS Designs; Longitude DS Designs; DS Design Numbers; DS Design Status; PC Designs; PC Design Numbers; PC Design Status; User Notes; User Lines; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Scale = 1:380





Level 3.30.cpt
12/12/2019

RAM Concept © 2019 Bentley Systems, Inc.
RAM Concept™ is a trademark of Bentley Systems

Table of Contents

Units	3
Signs	4
Materials	5
Loadings	7
Load Combinations	8
Design Rules	17
Detailing Rules	18
Load History	19
Mesh Input: Walls Below Table	20
Mesh Input: Columns Below Table	22
Mesh Input: Slab Areas Table	28
Mesh Input: Beams Table	30
Mesh Input: Standard Plan	32
Other Dead Loading: Point Loads Plan	33
Other Dead Loading: Line Loads Plan	34
Other Dead Loading: Area Loads Plan	35
Live (Reducible) Loading: All Loads Plan	36
Live (Unreducible) Loading: Point Loads Plan	37
Live (Unreducible) Loading: Line Loads Plan	38
Live (Unreducible) Loading: Area Loads Plan	39
Live (Unreducible) Loading: Std Reactions Plan	40
Seismic E/W: Point Loads Plan	41
Seismic E/W: Std Reactions Plan	42
Seismic N/S: Point Loads Plan	43
Seismic N/S: Std Reactions Plan	44
Service LC: D + L: Max Deflection Plan	45
Service LC: D + L: Min Deflection Plan	46
Service LC: D + L: Reaction Plan	47
Long Term deflection: Max Deflection Plan	48
Design Strip: Latitude SSs Table	49
Design Strip: Longitude SSs Table	65
Design Strip: Latitude SSSs Table	81
Design Strip: Longitude SSSs Table	85
Design Strip: Punching Checks Table	89
Design Strip: Latitude Design Spans Plan	95
Design Strip: Longitude Design Spans Plan	96
Design Strip: Punching Checks Plan	97
Reinforcement: Top Bars Plan	98
Reinforcement: Bottom Bars Plan	99
Reinforcement: Shear Bars Plan	100
Reinforcement: SSR Plan	101
Manual Latitude Tendon: Standard Plan	102
Manual Longitude Tendon: Standard Plan	103
Service Design: Top Stress Plan	104
Service Design: Bottom Stress Plan	105
Strength Design: Punching Shear Status Plan	106
Design Status: Status Plan	107

Units

Geometry Unit:

Plan Dimensions: feet
Angles: degrees

Slab Thickness: inches
Elevations: inches

Support Dimensions: inches
Support Height: feet

Loading and Reaction Unit

Point Force: Kips
- Report As Zero: 0 Kips
Point Moment: kip-ft
- Report As Zero: 0 kip-ft

Line Force: kips/ft
- Report As Zero: 0 kips/ft
Line Moment: Kips
- Report As Zero: 0 Kips

Area Force: psf
- Report As Zero: 0 psf
Area Moment: #/foot
- Report As Zero: 0 #/foot

Spring and Stiffness Unit:

Point Force Spring: kips/in
Point Moment Spring: k-ft/°

Line Force Spring: ksi
Line Moment Spring: k/°

Area Force Spring: pci
Area Moment Spring: k/ft°

Slab Analysis Unit:

Force: Kips
- Report As Zero: 0 Kips
Force Per Width: kips/ft
- Report As Zero: 0 kips/ft

Moment: kip-ft
- Report As Zero: 0 kip-ft
Moment Per Width: Kips
- Report As Zero: 0 Kips

Concrete Stress: psi
- Report As Zero: 0 psi
Deflection: inches
- Report As Zero: 0 inches

Materials Unit:

Concrete Volume: yd³
Reinforcement Weight: tons
PT Weight: pounds

Reinforcing Area: in²
Tendon Profile: inches
Cover: inches

PT Force: Kips
Reinforcing Stress: ksi

Miscellaneous Unit:

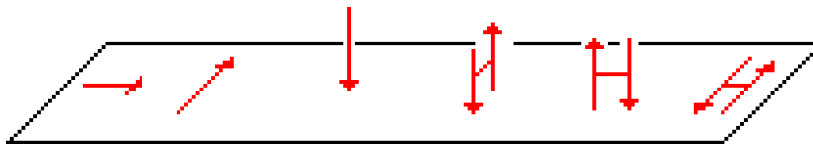
Floor Area: ft²
Tendon Angles (for friction): radians

Density: pcf

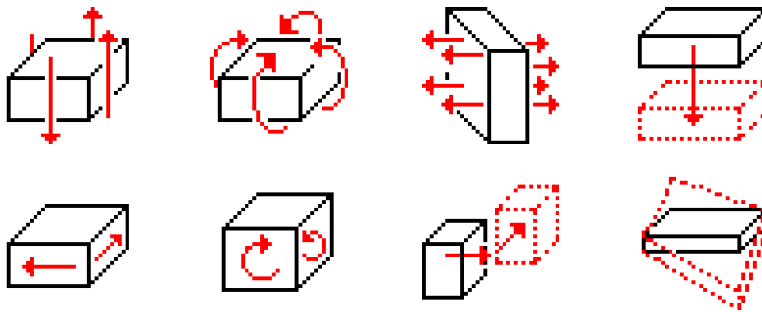
Elongations: inches

Signs

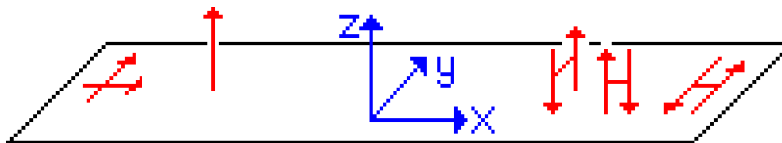
Positive Loads



Positive Analysis



Positive Reactions



Materials

Concrete Mix

Mix Name	Density (pcf)	Density For Loads (pcf)	f_{ci} (psi)	f'_c (psi)	f_{cui} (psi)	f_{cu} (psi)	Poissons Ratio	Ec Calc	User Eci (psi)	User Ec (psi)
3000 psi	150	150	3000	3000	3725	3725	0.2	Code	2500000	3000000
4000 psi	150	150	3000	4000	3725	4975	0.2	Code	2500000	3000000
5000 psi	150	150	3000	5000	3725	6399	0.2	Code	2500000	3000000
6000 psi	150	150	3000	6000	3725	7450	0.2	Code	2500000	3000000

PT Systems

System Name	Type	A_{ps} (in ²)	E_{ps} (ksi)	f_{se} (ksi)	f_{py} (ksi)	f_{pu} (ksi)	Duct Width (inches)	Strands Per Duct	Min Radius (feet)
½" Unbonded	unbonded	0.153	28000	175	243	270	0.5	1	6
½" Bonded	bonded	0.153	28000	160	243	270	3	4	6
0.6" Unbonded	unbonded	0.217	28000	175	243	270	0.6	1	8
0.6" Bonded	bonded	0.217	28000	160	243	270	4	4	8

PT Stressing Parameters

System Name	Jacking Stress (ksi)	Seating Loss (inches)	Anchor Friction	Wobble Friction (1/feet)	Angular Friction (1/radians)	Long-Term Losses (ksi)
½" Unbonded	216	0.25	0	0.0014	0.07	22
½" Bonded	216	0.25	0.02	0.001	0.2	22
0.6" Unbonded	216	0.25	0	0.0014	0.07	22
0.6" Bonded	216	0.25	0.02	0.001	0.2	22

Reinforcing Bars

Bar Name	A_s (in ²)	E_s (ksi)	F_y (ksi)	Coating	Straight Ld/Db	90 Hook Ld/Db	180 Hook Ld/Db
#3	0.11	29000	60	None	Code	Code	Code
#4	0.2	29000	60	None	Code	Code	Code
#5	0.31	29000	60	None	Code	Code	Code
#6	0.44	29000	60	None	Code	Code	Code
#7	0.6	29000	60	None	Code	Code	Code
#8	0.79	29000	60	None	Code	Code	Code
#9	1	29000	60	None	Code	Code	Code
#10	1.27	29000	60	None	Code	Code	Code
#11	1.56	29000	60	None	Code	Code	Code

Materials (2)

SSR Systems

<i>SSR System Name</i>	<i>Stud Area (in²)</i>	<i>Head Area (in²)</i>	<i>Min Clear Head Spacing (inches)</i>	<i>Specified Stud Spacing (inches)</i>	<i>Fy (ksi)</i>	<i>Stud Spacing Rounding Increment (inches)</i>	<i>Min Studs Per Rail</i>	<i>System Type</i>
3/8" SSR	0.11	1.11	0.5	None	50	0.25	2	Rail
1/2" SSR	0.196	1.96	0.5	None	50	0.25	2	Rail
5/8" SSR	0.307	3.07	0.5	None	50	0.25	2	Rail
3/4" SSR	0.442	4.42	0.5	None	50	0.25	2	Rail
Ancon Shearfix Auto-Size	0.217	1.096	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 10 mm	0.1217	1.096	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 12 mm	0.1753	1.578	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 14 mm	0.2386	2.147	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 16 mm	0.3116	2.805	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 20 mm	0.4869	4.383	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 24 mm	0.7012	6.311	0.5906	None	72.52	0.03937	2	Rail

Loadings

<i>Loading Name</i>	<i>Type</i>	<i>Analysis</i>	<i>On-Pattern Factor</i>	<i>Off-Pattern Factor</i>
Self-Dead Loading	Self-Weight	Normal	1	1
Balance Loading	Balance	Normal	1	1
Hyperstatic Loading	Hyperstatic	Hyperstatic	1	1
Temporary Construction (At Stressing) Loading	Stressing Dead	Normal	1	1
Other Dead Loading	Dead	Normal	1	1
Live (Reducible) Loading	Live (Reducible)	Normal	1	0
Live (Unreducible) Loading	Live (Unreducible)	Normal	1	0
Live (Storage) Loading	Live (Storage)	Normal	1	0
Live (Parking) Loading	Live (Parking)	Normal	1	0
Live (Roof) Loading	Live (Roof)	Normal	1	0
Snow Loading	Snow	Normal	1	1
Seismic E/W	Ultimate Seismic 1 (transfer)	Normal	1	0
Seismic N/S	Ultimate Seismic 1 (transfer)	Normal	1	0

Load Combinations

All Dead LC

Active Design Criteria: <none>

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Other Dead Loading	1	1

Dead + Balance LC

Active Design Criteria: <none>

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1

Initial Service LC

Active Design Criteria: Initial Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1.13	1.13
Temporary Construction (At Stressing) Loading	1	1

Service LC: D + L

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Reducible) Loading	1	0
Live (Unreducible) Loading	1	0
Live (Storage) Loading	1	0
Live (Parking) Loading	1	0

Service LC: D + Lr

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Roof) Loading	1	0

Load Combinations (2)

Service LC: D + S

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Snow Loading	1	0

Service LC: D + 0.75L + 0.75Lr

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Reducible) Loading	0.75	0
Live (Unreducible) Loading	0.75	0
Live (Storage) Loading	0.75	0
Live (Parking) Loading	0.75	0
Live (Roof) Loading	0.75	0

Service LC: D + 0.75L + 0.75S

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Reducible) Loading	0.75	0
Live (Unreducible) Loading	0.75	0
Live (Storage) Loading	0.75	0
Live (Parking) Loading	0.75	0
Snow Loading	0.75	0

Sustained Service LC

Active Design Criteria: Sustained Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Reducible) Loading	0.5	0.5
Live (Unreducible) Loading	0.5	0.5
Live (Storage) Loading	1	1
Live (Parking) Loading	0.5	0.5
Live (Roof) Loading	0.5	0.5

Load Combinations (3)

Factored LC: 1.4D

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.4	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.4	0.9

Factored LC: 1.2D + 1.6L + 0.5Lr

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.2	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.2	0.9
Live (Reducible) Loading	1.6	0
Live (Unreducible) Loading	1.6	0
Live (Storage) Loading	1.6	0
Live (Parking) Loading	1.6	0
Live (Roof) Loading	0.5	0

Factored LC: 1.2D + f1L + 1.6Lr

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.2	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.2	0.9
Live (Reducible) Loading	0.5	0
Live (Unreducible) Loading	1	0
Live (Storage) Loading	1	0
Live (Parking) Loading	1	0
Live (Roof) Loading	1.6	0

Factored LC: 1.2D + 1.6L + 0.5S

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.2	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.2	0.9
Live (Reducible) Loading	1.6	0
Live (Unreducible) Loading	1.6	0
Live (Storage) Loading	1.6	0
Live (Parking) Loading	1.6	0
Snow Loading	0.5	0

Load Combinations (4)

Factored LC: $1.2D + f1L + 1.6S$

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.2	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.2	0.9
Live (Reducible) Loading	0.5	0
Live (Unreducible) Loading	1	0
Live (Storage) Loading	1	0
Live (Parking) Loading	1	0
Snow Loading	1.6	0

Long Term deflection

Active Design Criteria: <none>

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	3.35	3.35
Balance Loading	3.35	3.35
Other Dead Loading	3.35	3.35
Live (Unreducible) Loading	2	2
Snow Loading	1	1

Earthquake N-S: $(1.2+.2*Sds)D + 2.5E + 0.5L+0.2S$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.344	1.344
Hyperstatic Loading	1	1
Other Dead Loading	1.344	1.344
Live (Unreducible) Loading	0.5	0.5
Snow Loading	0.2	0.2
Seismic N/S	2.5	2.5

Earthquake N-S: $(0.9-0.2*Sds)D + 2.5E$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.756	0.756
Hyperstatic Loading	1	1
Other Dead Loading	0.756	0.756
Seismic N/S	2.5	2.5

Load Combinations (5)

Earthquake E-W: $(1.2+0.2*S_{ds})D + 2.5E + 0.5L+0.2S$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.344	1.344
Hyperstatic Loading	1	1
Other Dead Loading	1.344	1.344
Live (Unreducible) Loading	0.5	0.5
Snow Loading	0.2	0.2
Seismic E/W	2.5	2.5

Earthquake E-W: $(0.9-0.2*S_{ds})D + 2.5E$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.756	0.756
Hyperstatic Loading	1	1
Other Dead Loading	0.756	0.756
Seismic E/W	2.5	2.5

Earthquake N-S: $(1.0+0.14*S_{ds})D + 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.101	1.101
Balance Loading	1	1
Other Dead Loading	1.101	1.101
Seismic N/S	1.75	1.75

Earthquake N-S: $(1.0+0.105*S_{ds})D + 1.3125E + 0.75L + 0.75S$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.076	1.076
Balance Loading	1	1
Other Dead Loading	1.076	1.076
Live (Unreducible) Loading	0.75	0.75
Snow Loading	0.75	0.75
Seismic N/S	1.313	1.313

Load Combinations (6)

Earthquake N-S: $(0.6-0.14*S_{ds})D + 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.499	0.499
Balance Loading	1	1
Other Dead Loading	0.899	0.899
Seismic N/S	1.75	1.75

Earthquake E-W: $(1.0+0.14*S_{ds})D + 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.101	1.101
Balance Loading	1	1
Other Dead Loading	1.101	1.101
Seismic E/W	1.75	1.75

Earthquake E-W: $(1.0+0.105*S_{ds})D + 1.3125E + 0.75L+0.75S$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.076	1.076
Balance Loading	1	1
Other Dead Loading	1.076	1.076
Live (Unreducible) Loading	0.75	0.75
Snow Loading	0.75	0.75
Seismic E/W	1.313	1.313

Earthquake N-S: $(1.2+0.2*S_{ds})D - 2.5E + .5L + 0.2S$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.344	1.344
Hyperstatic Loading	1	1
Other Dead Loading	1.344	1.344
Live (Unreducible) Loading	0.5	0.5
Snow Loading	0.2	0.2
Seismic N/S	-2.5	-2.5

Load Combinations (7)

Earthquake N-S: $(0.9-0.2*S_{ds})D - 2.5E$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.756	0.756
Hyperstatic Loading	1	1
Other Dead Loading	0.756	0.756
Seismic N/S	-2.5	-2.5

Earthquake E-W: $(1.2+0.2*S_{ds})D - 2.5E + .5L + 0.2S$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.344	1.344
Hyperstatic Loading	1	1
Other Dead Loading	1.344	1.344
Live (Unreducible) Loading	0.5	0.5
Snow Loading	0.2	0.2
Seismic E/W	-2.5	-2.5

Earthquake E-W: $(0.9-0.2*S_{ds})D - 2.5E$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.756	0.756
Hyperstatic Loading	1	1
Other Dead Loading	0.756	0.756
Seismic E/W	-2.5	-2.5

Earthquake N-S: $(1.0+0.14*S_{ds})D - 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.101	1.101
Balance Loading	1	1
Other Dead Loading	1.101	1.101
Seismic N/S	-1.75	-1.75

Load Combinations (8)

Earthquake N-S: $(1.0+0.105*S_{ds})D - 1.3125E + 0.75L + .75S$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.076	1.076
Balance Loading	1	1
Other Dead Loading	1.076	1.076
Live (Unreducible) Loading	0.75	0.75
Snow Loading	0.75	0.75
Seismic N/S	-1.313	-1.313

Earthquake N-S: $(0.6-0.14*S_{ds})D - 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.499	0.499
Balance Loading	1	1
Other Dead Loading	0.899	0.899
Seismic N/S	-1.75	-1.75

Earthquake E-W: $(1.0+0.14*S_{ds})D - 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.101	1.101
Balance Loading	1	1
Other Dead Loading	1.101	1.101
Seismic E/W	-1.75	-1.75

Earthquake E-W: $(0.6-0.14*S_{ds})D + 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.499	0.499
Balance Loading	1	1
Other Dead Loading	0.899	0.899
Seismic E/W	1.75	1.75

Earthquake E-W: $(0.6-0.14*S_{ds})D - 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.499	0.499
Balance Loading	1	1
Other Dead Loading	0.899	0.899
Seismic E/W	-1.75	-1.75

Load Combinations (9)

Earthquake E-W: $(1.0+0.105*S_{ds})D - 1.3125E + 0.75L + 0.75S$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.076	1.076
Balance Loading	1	1
Other Dead Loading	1.076	1.076
Live (Unreducible) Loading	0.75	0.75
Snow Loading	0.75	0.75
Seismic E/W	-1.313	-1.313

Design Rules

Code Minimum Design

318-11 Min. Reinforcement

User Minimum Design

Specified Min. Reinforcement

Initial Service Design

318-11 Initial Service Design

Service Design

318-11 Service Design

Include detailed section analysis

Sustained Service Design

318-11 Sustained Service Design

Strength Design

318-11 Strength Design

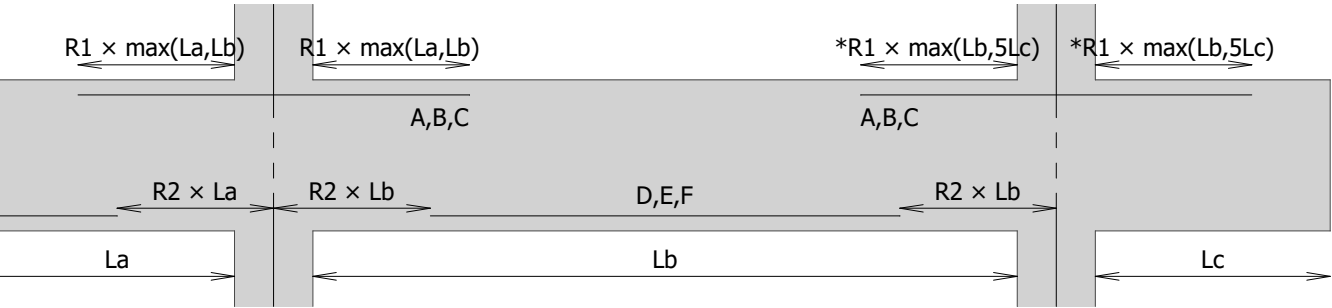
Punching Shear Design

Ductility Design

318-11 Ductility Design

Detailing Rules

Custom Span Detailing Rules



Rule	A	A	B	B	C	C	D	D	E	E	F	F
Name	Fraction	R1	Fraction	R1	Fraction	R1	Fraction	R2	Fraction	R2	Fraction	R2
None	0	0	0	0	0	0	0	0	0	0	0	0

"A", "B" and "C", are support reinforcement sets, based on the peak reinforcement in the support zone.
"D", "E" and "F", are span reinforcement sets, based on the peak reinforcement in the span zone.
"*R1" is never taken as greater than 0.2 when multiplied by L_c (or L_{cc}).
"Fraction" is the ratio of set reinforcement to peak reinforcement. It is always in the 0.0 to 1.0 range.

Load History

<i>Load History Step Name</i>	<i>Load Combination</i>	<i>Duration (days)</i>	<i>Total Age (days)</i>
Maximum Short Term Load	Service LC: D + L	30	33
Sustained Load	Sustained Service LC	5000	5033
Final Instantaneous Load	Service LC: D + L	0	5033

Mesh Input: Walls Below Table

<i>Number</i>	<i>Location feet</i>	<i>Mix</i>	<i>Fixed Near</i>	<i>Fixed Far</i>	<i>Comp.</i>	<i>Height feet</i>	<i>Thickness inches</i>
1	(-163.6,-1.647)(-192,-1.576) psi	5000	false	false	true	10	12
2	(-161.7,-82.62)(-161.7,-80.96) psi	5000	false	false	true	10	16
3	(-158.1,-62.08)(-158.2,-59.02) psi	5000	false	false	true	10	16
4	(-139.7,-94.13)(-162.3,-90.03) psi	5000	false	false	true	10	12
5	(-139.7,-83.13)(-162.3,-80.05) psi	5000	false	false	true	10	12
6	(-136.1,-62.6)(-158.8,-60.59) psi	5000	false	false	true	10	12
7	(-161,-1.721)(-123.1,-1.500) psi	5000	false	false	true	10	12
8	(-140.4,-82.62)(-140.3,-80.62) psi	5000	false	false	true	10	16
9	(-136.8,-62.11)(-136.7,-59.00) psi	5000	false	false	true	10	16
10	(-119.9,-1.567)(-67.86,-1.056) psi	5000	false	false	true	10	12
11	(-56.84,-76.25)(-56.83,-50.83) psi	5000	false	false	true	10	16
12	(-57.52,-65.84)(-41.13,-50.81) psi	5000	false	false	true	10	12
13	(-66.17,-1.72)(-29.51,-1.500) psi	5000	false	false	true	10	12
14	(-34.82,-75.75)(-57.5,-50.74) psi	5000	false	false	true	10	12
15	(-36.33,-88.13)(-36.33,-50.88) psi	5000	false	false	true	11	16
16	(-35.54,-65.33)(-35.5,-50.25) psi	5000	false	false	true	10	16
17	(-27.41,-1.659)(-27.39,-1.000) psi	5000	false	false	true	11	16
18	(-28.05,-1.658)(-1.22,-1.500) psi	5000	false	false	true	10	12

Mesh Input: Walls Below Table (2)

<i>Shear Wall</i>	<i>Use Spec LLR Params</i>	<i>Spec. LLR Levels</i>	<i>Spec. Trib. Area ft²</i>	<i>Spec. Infl. Area ft²</i>	<i>Max LLR %</i>
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40

Mesh Input: Columns Below Table

<i>Number</i>	<i>Location feet</i>	<i>Mix</i>	<i>Fixed Near</i>	<i>Fixed Far</i>	<i>Comp.</i>	<i>Height feet</i>	<i>B inches</i>	<i>D inches</i>
1	(-200.6,-89.05)	5000 psi	true	true	true	10	18	24
2	(-200.1,-144.6)	5000 psi	true	true	true	10	0	24
3	(-199.1,-134.7)	5000 psi	true	true	true	10	0	24
4	(-198.6,-115.2)	5000 psi	true	true	true	10	24	18
5	(-198,-65.18)	5000 psi	true	true	true	10	18	24
6	(-195.5,-41.31)	5000 psi	true	true	true	10	18	24
7	(-193,-17.44)	5000 psi	true	true	true	10	18	24
8	(-191.6,-151)	5000 psi	true	true	true	10	0	24
9	(-182.2,-147.7)	5000 psi	true	true	true	10	0	24
10	(-180.8,-44.12)	5000 psi	true	true	true	10	24	18
11	(-180.5,-117.1)	5000 psi	true	true	true	10	24	18
12	(-177,-67.39)	5000 psi	true	true	true	10	18	24
13	(-176.8,-92.28)	5000 psi	true	true	true	10	18	24
14	(-166,-123.6)	5000 psi	true	true	true	10	18	24
15	(-164.9,-47.89)	5000 psi	true	true	true	10	18	24
16	(-164.6,-22.53)	5000 psi	true	true	true	10	24	18
17	(-164.2,-141.7)	5000 psi	true	true	true	10	18	24
18	(-145.3,-22.83)	5000 psi	true	true	true	10	18	24
19	(-144.5,-120.4)	5000 psi	true	true	true	10	18	24
20	(-138.3,-51.35)	5000 psi	true	true	true	10	18	24
21	(-138.2,-136)	5000 psi	true	true	true	10	18	24
22	(-135.3,-110.1)	5000 psi	true	true	true	10	18	24
23	(-120.6,-101.9)	5000 psi	true	true	true	10	18	24
24	(-118.9,-75.16)	5000 psi	true	true	true	10	24	18
25	(-118.4,-52.35)	5000 psi	true	true	true	10	18	24
26	(-118.3,-22.83)	5000 psi	true	true	true	10	18	24
27	(-115.9,-127)	5000 psi	true	true	true	10	18	24
28	(-109.7,-60.83)	5000 psi	true	true	true	10	18	24
29	(-99.8,-22.83)	5000 psi	true	true	true	10	18	24
30	(-94.99,-75.16)	5000 psi	true	true	true	10	18	24
31	(-94.55,-101.9)	5000 psi	true	true	true	10	18	24
32	(-93.65,-118.1)	5000 psi	true	true	true	10	18	24
33	(-87.45,-47.25)	5000 psi	true	true	true	10	24	18
34	(-86.02,-66.08)	5000 psi	true	true	true	10	24	18
35	(-84.69,-22.81)	5000 psi	true	true	true	10	18	24
36	(-71.38,-109.1)	5000 psi	true	true	true	10	18	24
37	(-68.7,-22.67)	5000 psi	false	true	true	10	18	24
38	(-67.92,-66.08)	5000 psi	true	true	true	10	24	18
39	(-65.26,-94)	5000 psi	true	true	true	10	18	24
40	(-60.2,-44.83)	5000 psi	true	true	true	10	18	24
41	(-49,-100.5)	5000 psi	true	true	true	10	18	24
42	(-45.8,-22.83)	5000 psi	true	true	true	10	18	24
43	(-41.7,-44.83)	5000 psi	true	true	true	10	18	24
44	(-28.53,-90.28)	5000 psi	true	true	true	10	18	24
45	(-19.02,-17.34)	5000 psi	true	true	true	10	24	18
46	(-14.45,-61.73)	5000 psi	true	true	true	10	24	18

Mesh Input: Columns Below Table (2)

<i>Angle degrees</i>	<i>Roller</i>	<i>I Factor</i>	<i>Use Spec LLR Params</i>	<i>Spec. LLR Levels</i>	<i>Spec. Trib. Area ft²</i>	<i>Spec. Infl. Area ft²</i>
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
84	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
90	false	1	false	1	0	0
22	false	1	false	1	0	0
0	false	1	false	1	0	0
22	false	1	false	1	0	0
0	false	1	false	1	0	0
22	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
22	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
90	false	1	false	1	0	0
0	false	1	false	1	0	0
22	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
22	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
112	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0

Mesh Input: Columns Below Table (3)

[illegible]

Mesh Input: Columns Below Table (4)

<i>Number</i>	<i>Location feet</i>	<i>Mix</i>	<i>Fixed Near</i>	<i>Fixed Far</i>	<i>Comp.</i>	<i>Height feet</i>	<i>B inches</i>	<i>D inches</i>
47	(-14.45,-46.58)	5000 psi	true	true	true	10	24	18
48	(-5.364,-16.83)	5000 psi	true	true	true	10	24	18
49	(-5.313,-48.07)	5000 psi	true	true	true	10	24	18
50	(-3.839,-76.3)	5000 psi	true	true	true	10	24	18
51	(-3.5,-61.73)	5000 psi	true	true	true	10	24	18
52	(-1.469,-92.28)	5000 psi	true	true	true	10	18	24

Mesh Input: Columns Below Table (5)

<i>Angle degrees</i>	<i>Roller</i>	<i>I Factor</i>	<i>Use Spec LLR Params</i>	<i>Spec. LLR Levels</i>	<i>Spec. Trib. Area ft²</i>	<i>Spec. Infl. Area ft²</i>
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0

Mesh Input: Columns Below Table (6)

<i>infl. Area</i>	<i>Max LLR</i>
	<u>%</u>
	40
	40
	40
	40
	40
	40

Mesh Input: Slab Areas Table

<i>Number</i>	<i>Location feet</i>	<i>Mix</i>	<i>Thickness inches</i>	<i>TOC inches</i>	<i>Priority</i>	<i>Behavior</i>	<i>R-Axis degrees</i>
1	(-163.1,-142.3)(-165.7,-100.8)(-195.2,-207.1)(-192.1,-115.0)(-199.5,-124.3)(-199.7,-115.8)(-199.3,-115.8)(-200,-121.8)(-204.9,-1.067)	5000	10	10	1	1	1
2	(-192.3,-1)(-119.5,-1.005)(-115,-52.5)(-108.2,-52.48)(-107.6,-48.52)(179.08,-48.6)(-78.66,-52.52)(-67.49,-52.59)(-67.54,-1.012)	5000	10	10	1	1	1
3	(-69.54,-1.067)(-69.54,-50.46)(-77.54,-50.46)(-77.54,-46.46)(-109.5,-46.46)(-109.5,-50.46)(-109.5,-50.46)(-117.5,-50.46)(-117.5,-1.067)	5000	10	10	1	1	1

Mesh Input: Slab Areas Table (2)

<i>KMr</i>	<i>KMs</i>	<i>KMrs</i>	<i>KFr</i>	<i>KFs</i>	<i>KVrs</i>
1	1	1	1	1	1
1	1	1	1	1	1
1	1	1	1	1	1

Mesh Input: Beams Table

<i>Number</i>	<i>Location feet</i>	<i>Mix</i>	<i>Thickness inches</i>	<i>TOC inches</i>	<i>Priority</i>	<i>Mesh As Slab</i>	<i>Width inches</i>
1	(-119.5,-1.007)(-119.5,-50.46)(-117.5,-22.07)(-117.5,-54.46)(-121.5,-15.07)(-121.5,-54.46)	5006	22	6	1	true	48
2	(-109.5,-48.46)(-77.54,-30.46)(-109.5,-22.46)(-77.54,-46.46)(-109.5,-56.46)(-77.54,-50.46)	5006	22	6	1	true	48
3	(-117.5,-52.46)(-69.53,-50.46)(-117.5,-22.46)(-69.53,-50.46)(-117.5,-54.46)(-69.53,-54.46)	5006	22	6	1	true	48
4	(-67.54,-1.012)(-67.54,-50.46)(-65.54,-22.12)(-65.54,-54.46)(-69.54,-15.12)(-69.54,-54.46)	5006	22	6	1	true	48

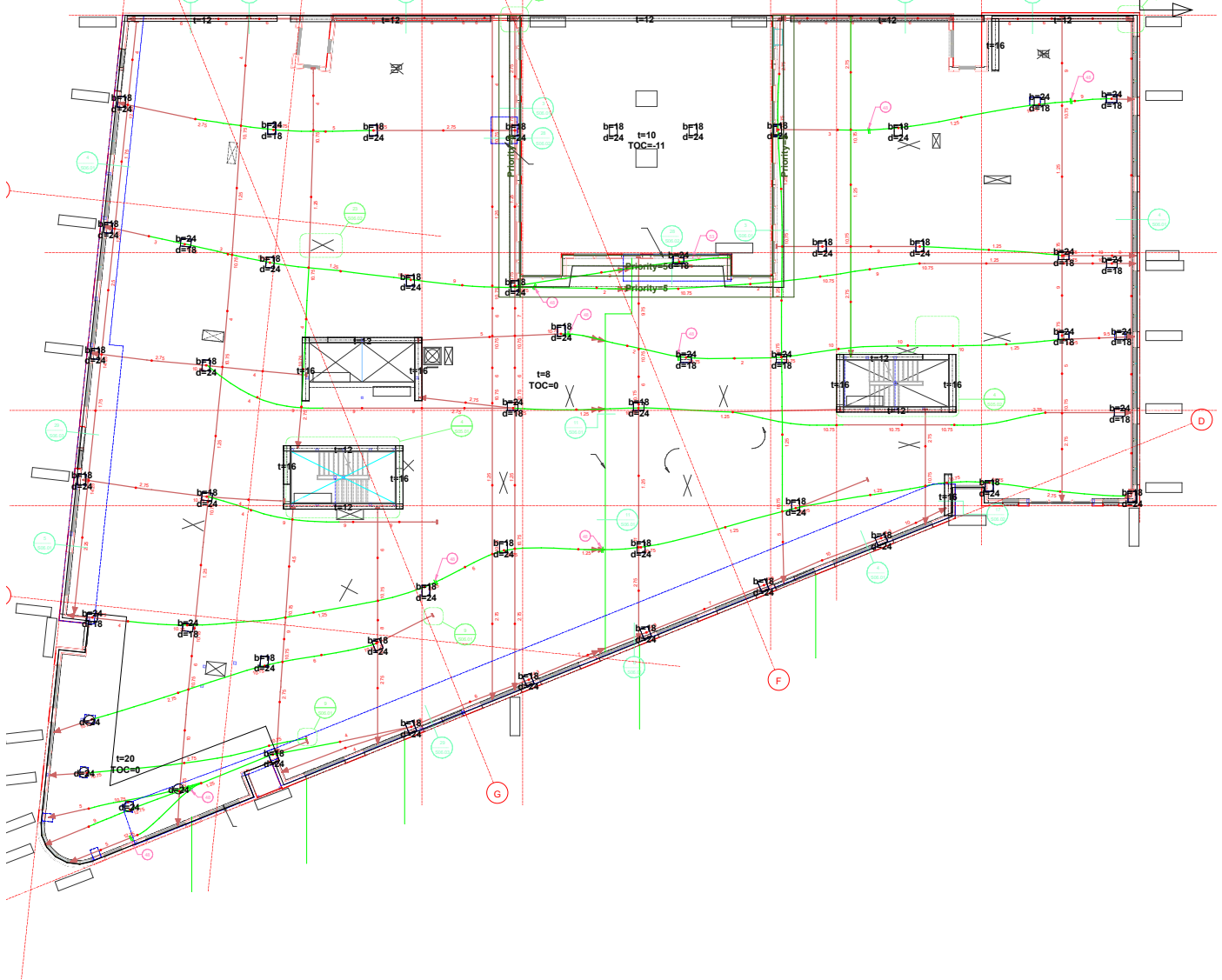
Mesh Input: Beams Table (2)

Width
Inches

<i>Behavior</i>	<i>KMr</i>	<i>KMs</i>	<i>KMrS</i>	<i>KFr</i>	<i>KFs</i>	<i>KVrs</i>
no-torsion two-way slab	1	1	0.001	1	1	1
no-torsion two-way slab	1	1	0.001	1	1	1
no-torsion two-way slab	1	1	0.001	1	1	1
no-torsion two-way slab	1	1	0.001	1	1	1

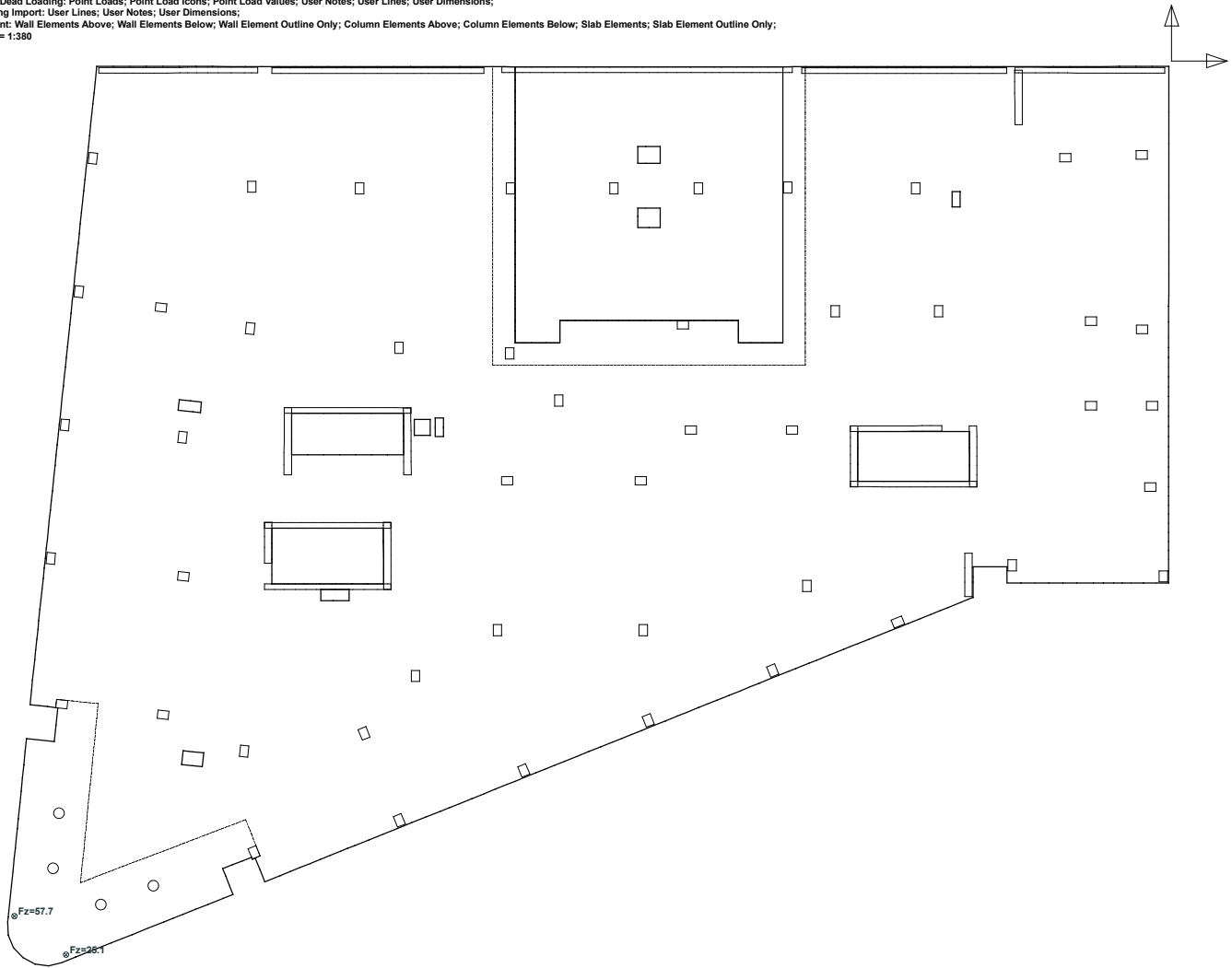
Mesh Input: Standard Plan

Mesh Input: Beams; Beam Priorities; Slab Areas; Slab AreaT hicknesses; Slab Area Elevations; Slab Openings; Point Supports; Point Support Icons; Line Supports; Line Support Icons; Walls Above; Walls Below; Wall Thicknesses; Columns Above; Columns Below; Column Dimen:
Drawing Import: User Notes; User Lines; User Dimensions; S-BEAM; S-COLS; S-COLS-SYMB; A-GENM; A-DETL; 0; 1803002_A_18S_VE_UPDATE_R17_rvt-1-PT Floor Plan - LEVEL 4(S-COLS; S-ANNO-SYMB; 1803002_A_18S_VE_UPDATE_R17_rvt-1-PT Floor Plan - LEVEL 4(S-STRS
Scale = 1:380



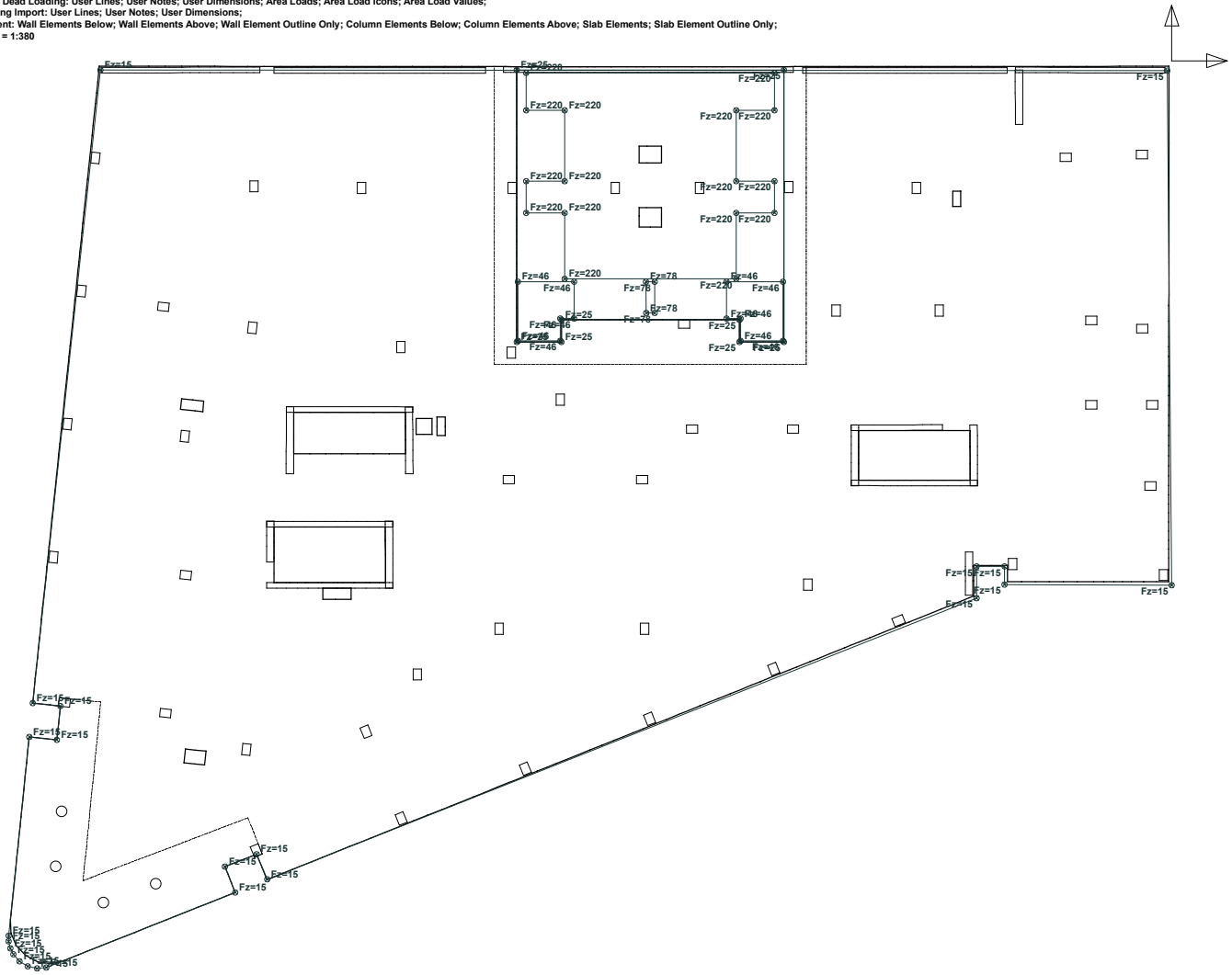
Other Dead Loading: Point Loads Plan

Other Dead Loading: Point Loads; Point Load Icons; Point Load Values; User Notes; User Lines; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Scale = 1:380



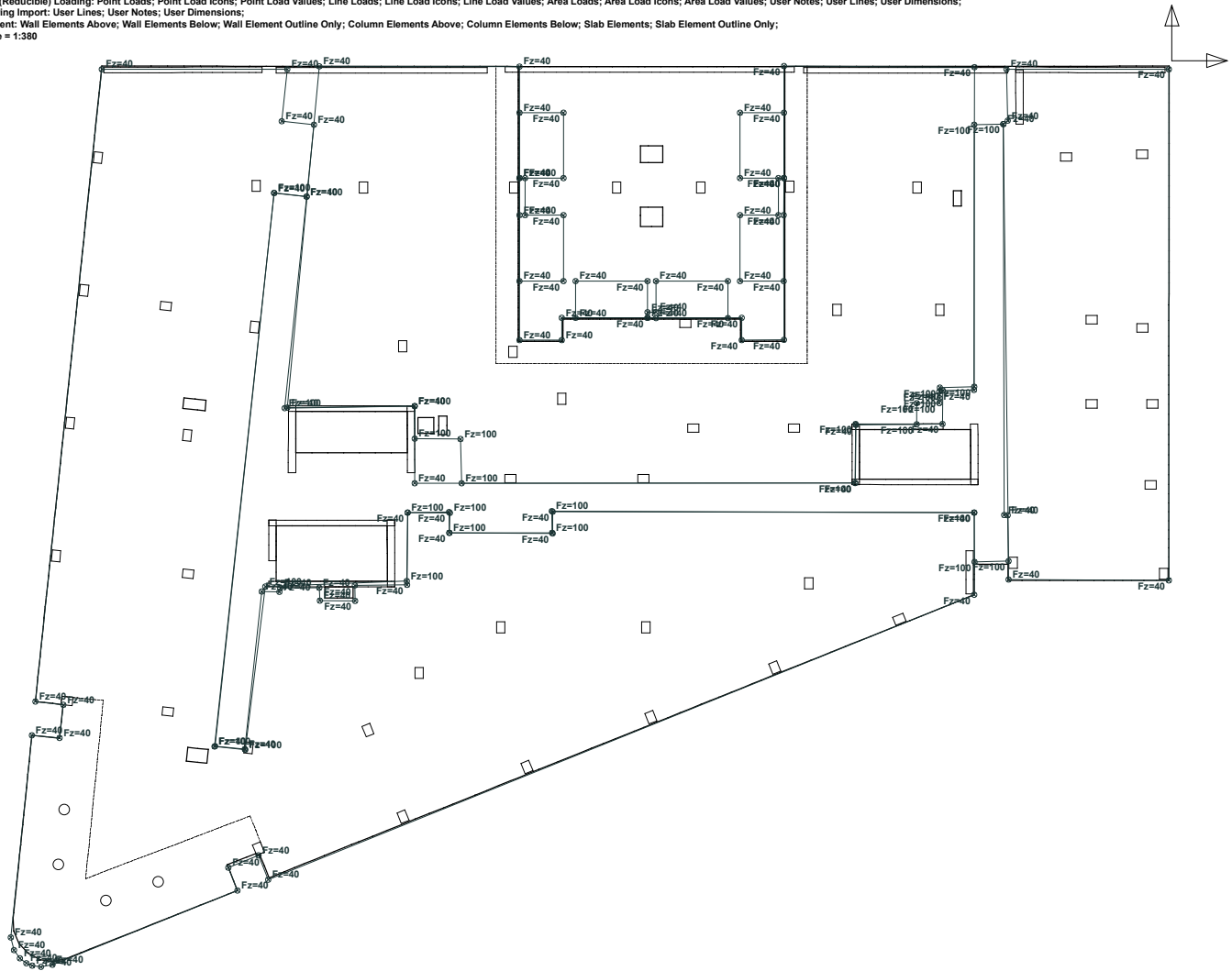
Other Dead Loading: Area Loads Plan

Other Dead Loading: User Lines; User Notes; User Dimensions; Area Loads; Area Load Icons; Area Load Values;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



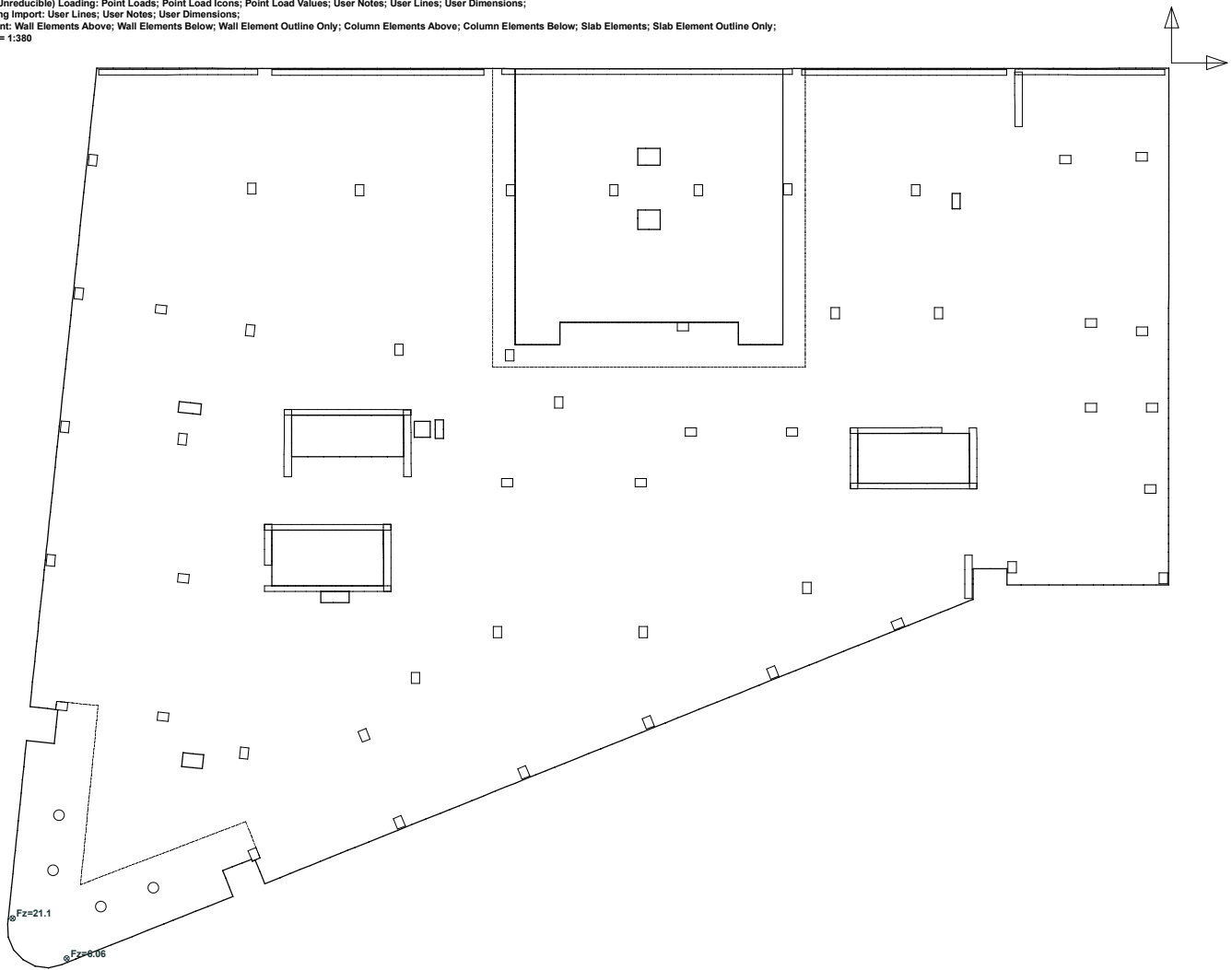
Live (Reducible) Loading: All Loads Plan

Live (Reducible) Loading: Point Loads; Point Load Icons; Point Load Values; Line Loads; Line Load Icons; Line Load Values; Area Loads; Area Load Icons; Area Load Values; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



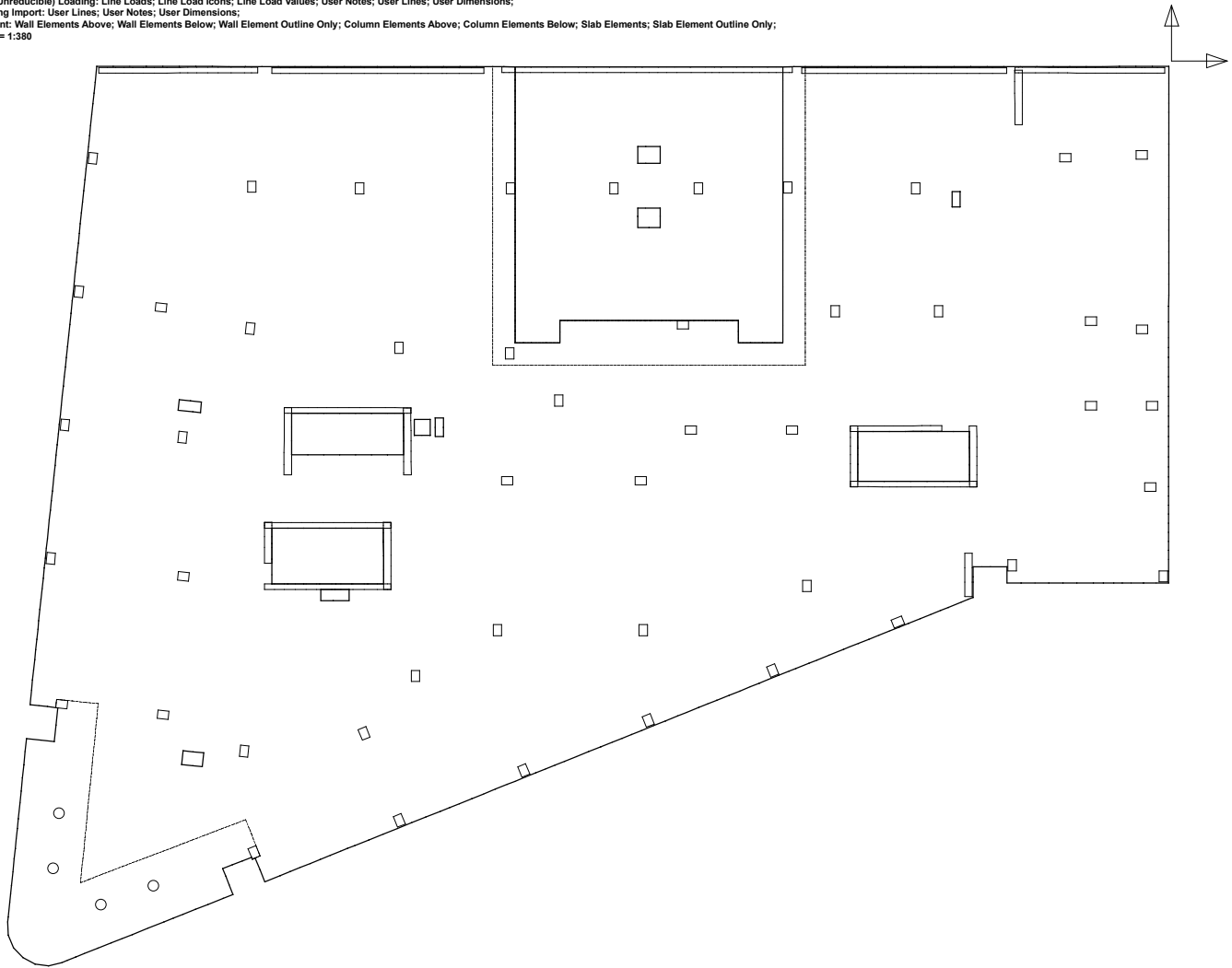
Live (Unreducible) Loading: Point Loads Plan

Live (Unreducible) Loading: Point Loads; Point Load Icons; Point Load Values; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



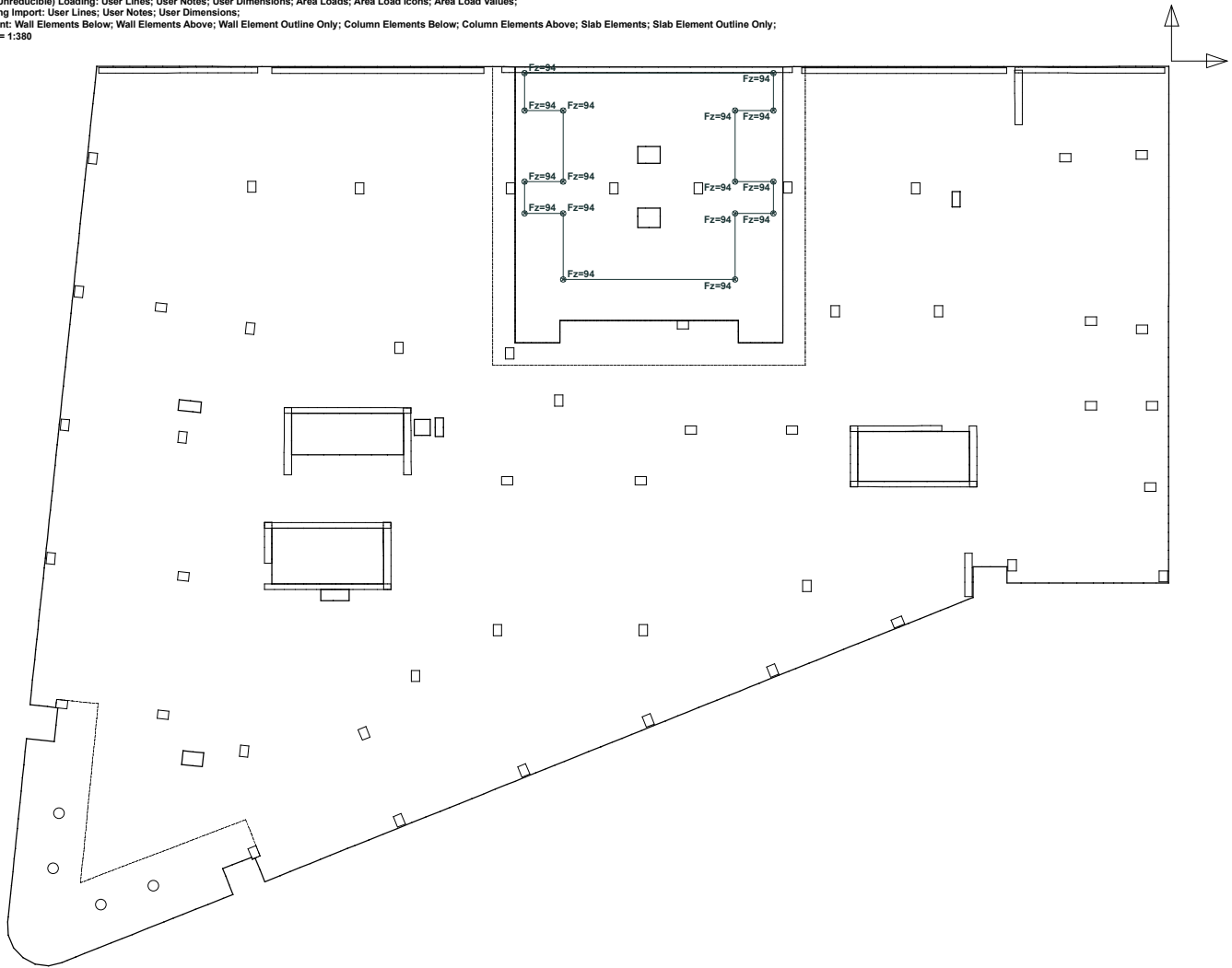
Live (Unreducible) Loading: Line Loads Plan

Live (Unreducible) Loading: Line Loads; Line Load Icons; Line Load Values; User Notes; User Lines; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Scale = 1:380



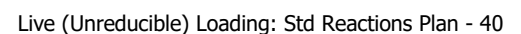
Live (Unreducible) Loading: Area Loads Plan

Live (Unreducible) Loading: User Lines; User Notes; User Dimensions; Area Loads; Area Load Icons; Area Load Values;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



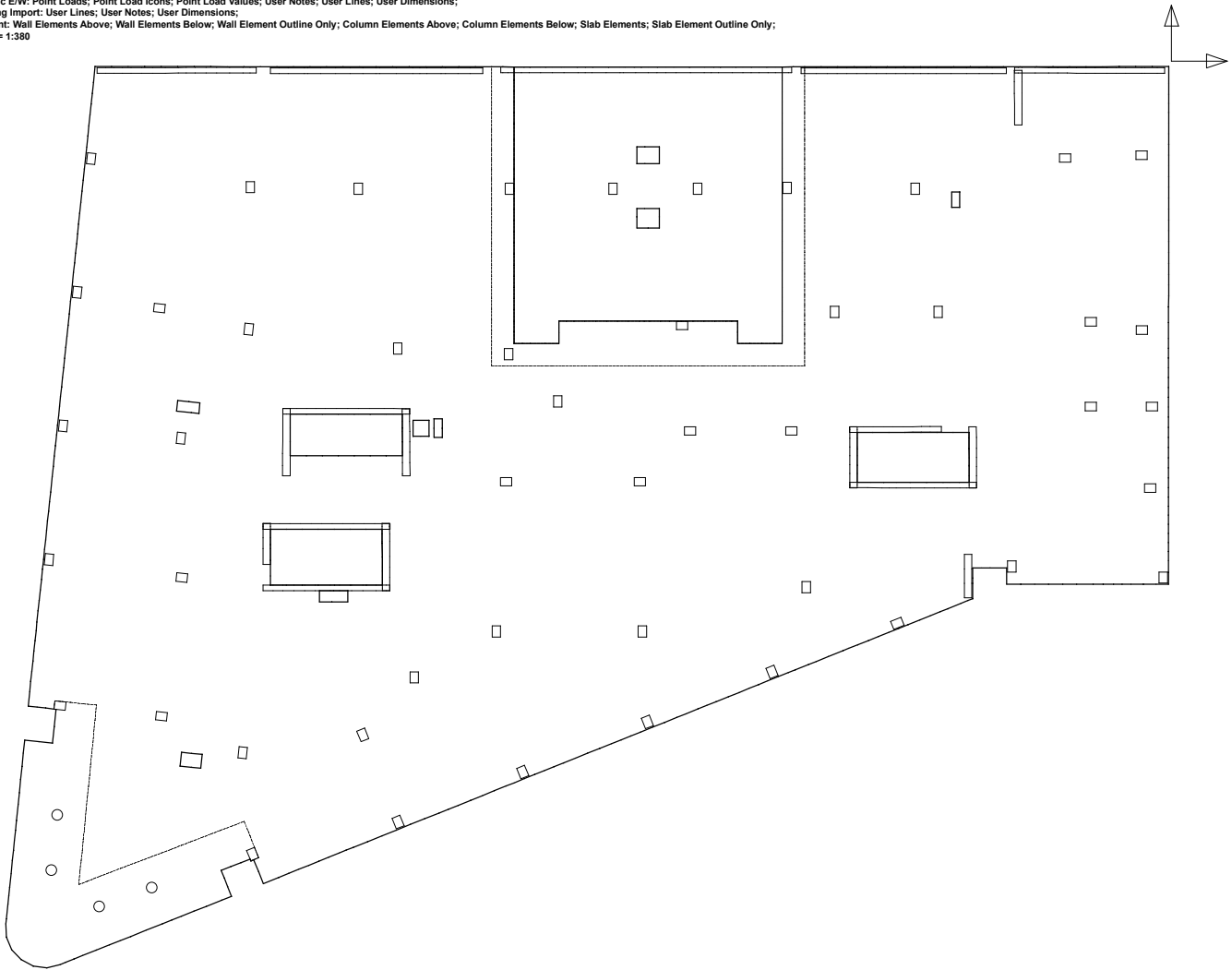
Scale = 1.000

Live (Unreducible) Loading - Reaction Plot: (Wall Below, Column Below, Point Spring, Line Spring, Point Support, Line Support)(Fz, Mr, Ms, Mz)(Standard Context)



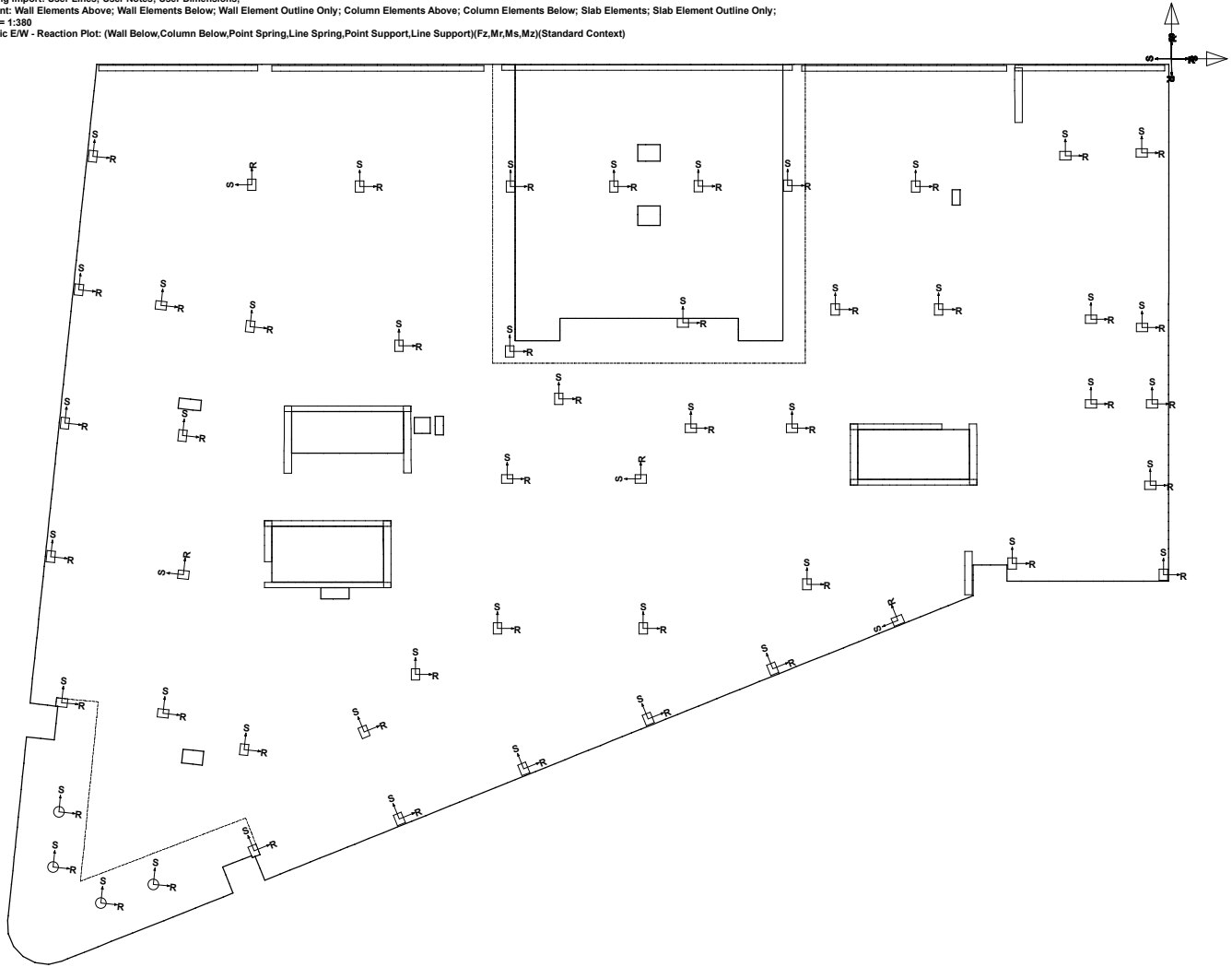
Seismic E/W: Point Loads Plan

Seismic E/W: Point Loads; Point Load Icons; Point Load Values; User Notes; User Lines; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Scale = 1:380



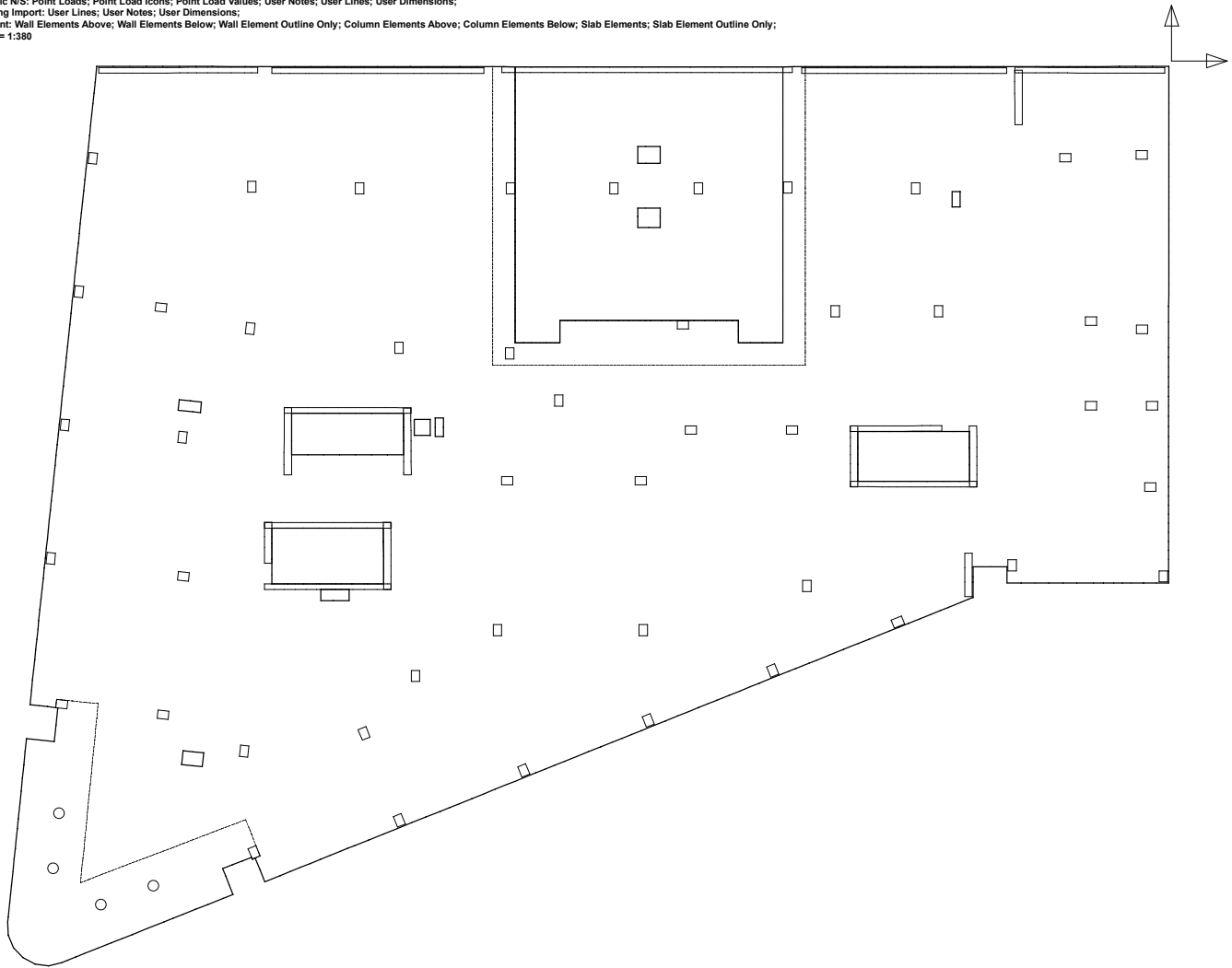
Seismic E/W: Std Reactions Plan

Seismic E/W: Point Load Icons; Point Load Values; Line Load Icons; Line Load Values; Area Load Icons; Area Load Values; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380
 Seismic E/W - Reaction Plot: (Wall Below,Column Below,Point Spring,Line Spring,Point Support,Line Support)(Fz,Mr,Mz)(Standard Context)



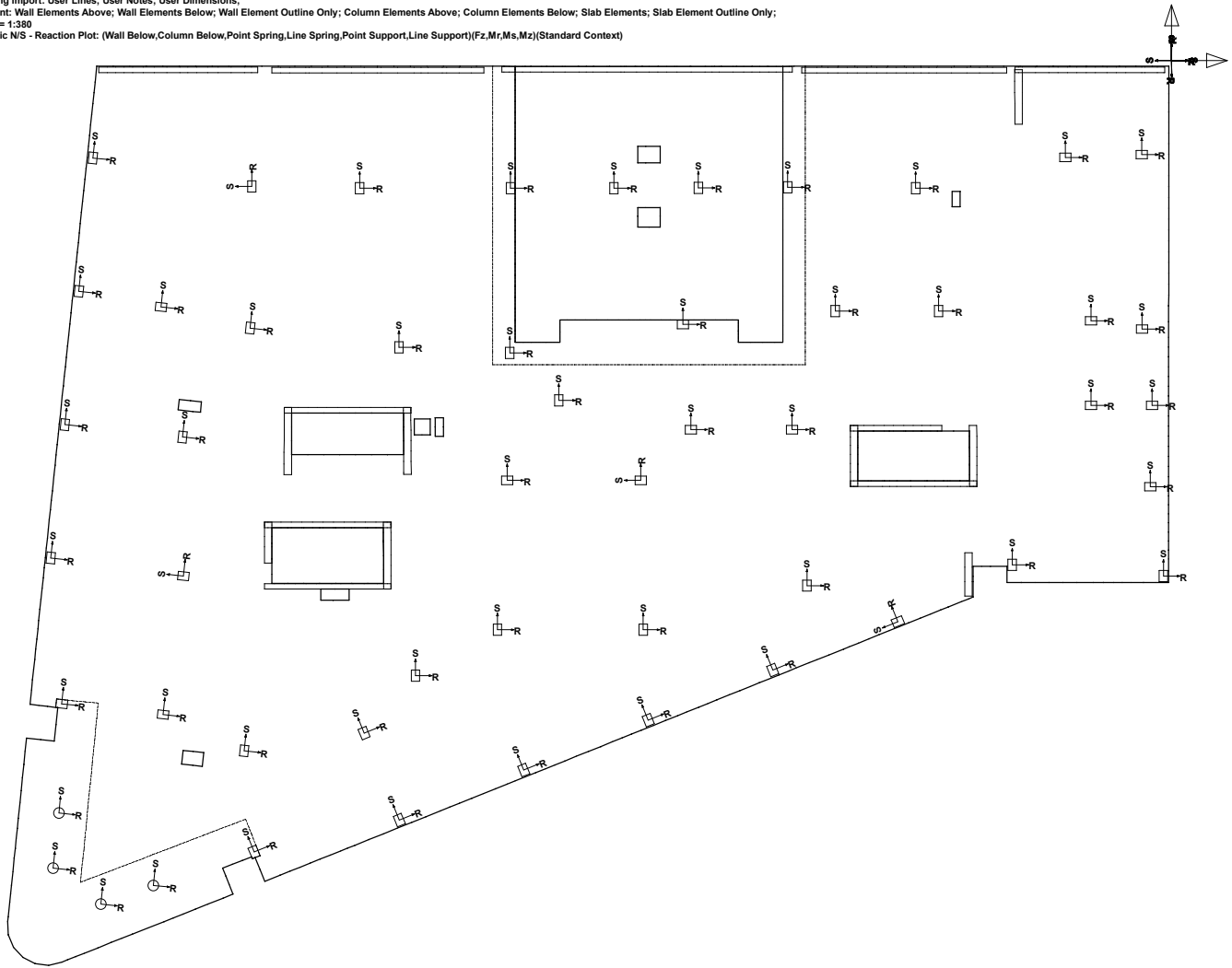
Seismic N/S: Point Loads Plan

Seismic N/S: Point Loads; Point Load Icons; Point Load Values; User Notes; User Lines; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Scale = 1:380



Seismic N/S: Std Reactions Plan

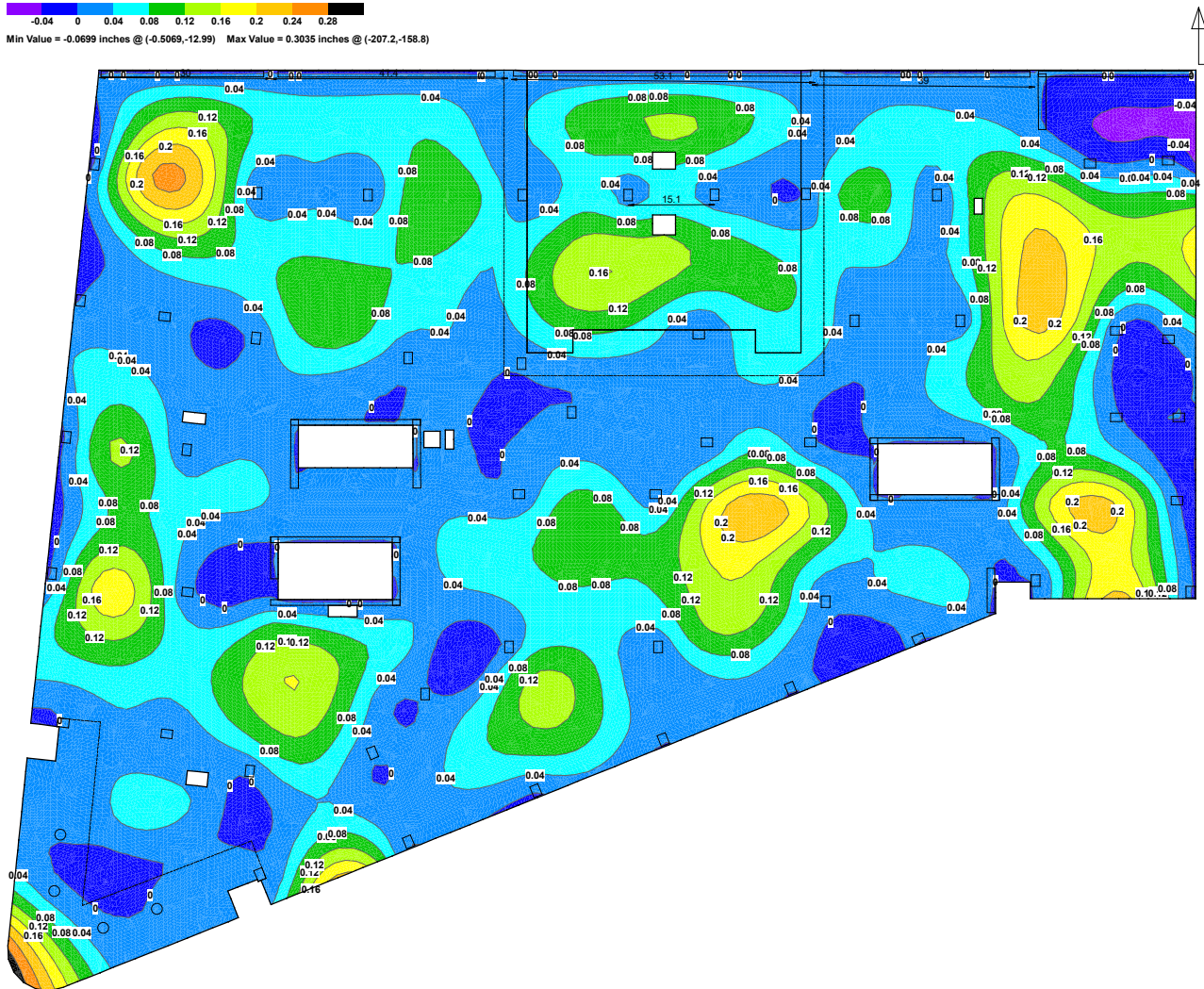
Seismic N/S: Point Load Icons; Point Load Values; Line Load Icons; Line Load Values; Area Load Icons; Area Load Values; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:300
 Seismic N/S - Reaction Plot: (Wall Below,Column Below,Point Spring,Line Spring,Point Support,Line Support)(Fz,Mr,Mz)(Standard Context)



Service LC: D + L: Max Deflection Plan

Service LC: D + L: User Lines; User Notes; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:380
Service LC: D + L - Vertical Deflection Plot (Maximum Values)

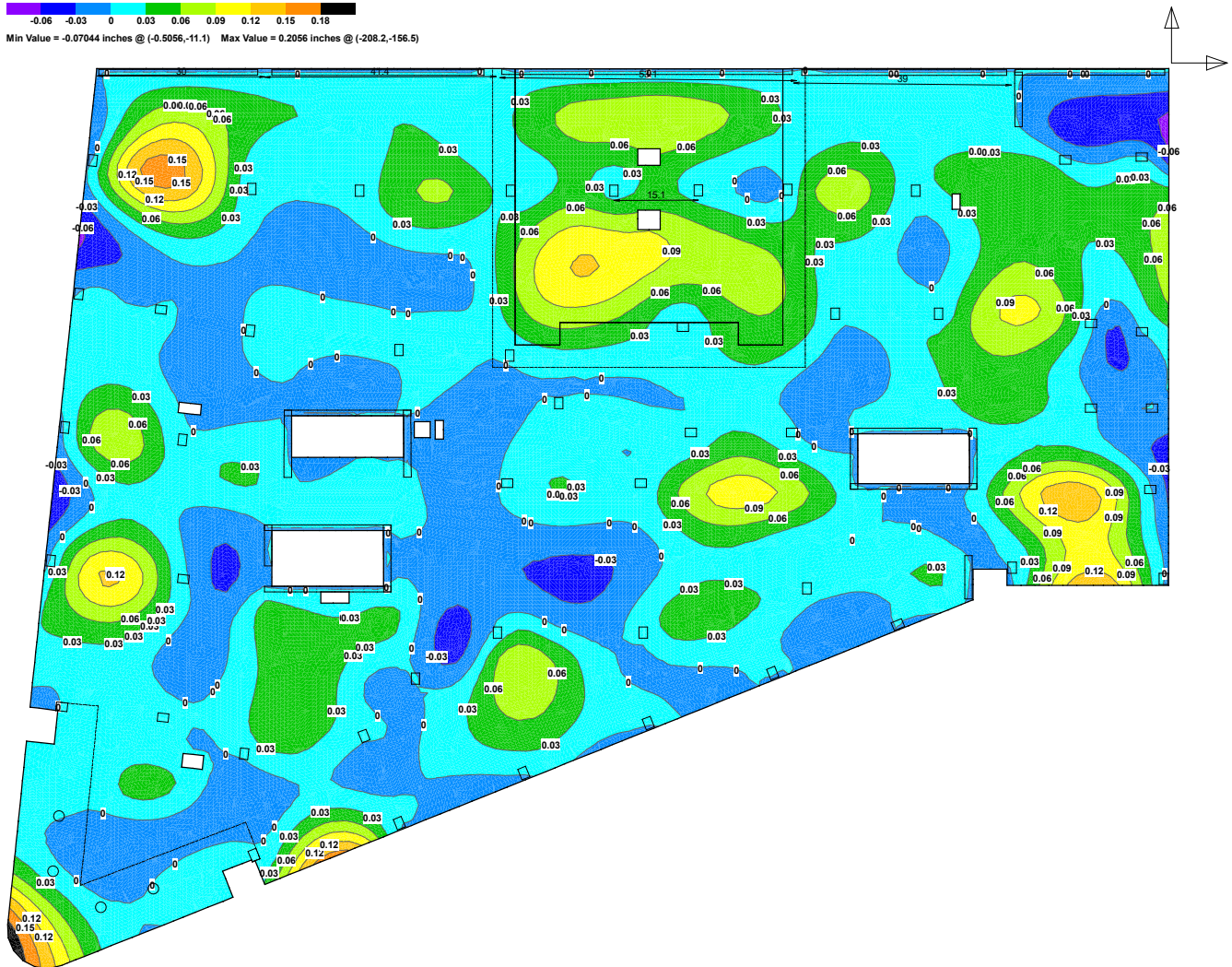
Min Value = -0.0699 inches @ (-0.5069,-12.99) Max Value = 0.3035 inches @ (-207.2,-158.8)



Service LC: D + L: Min Deflection Plan

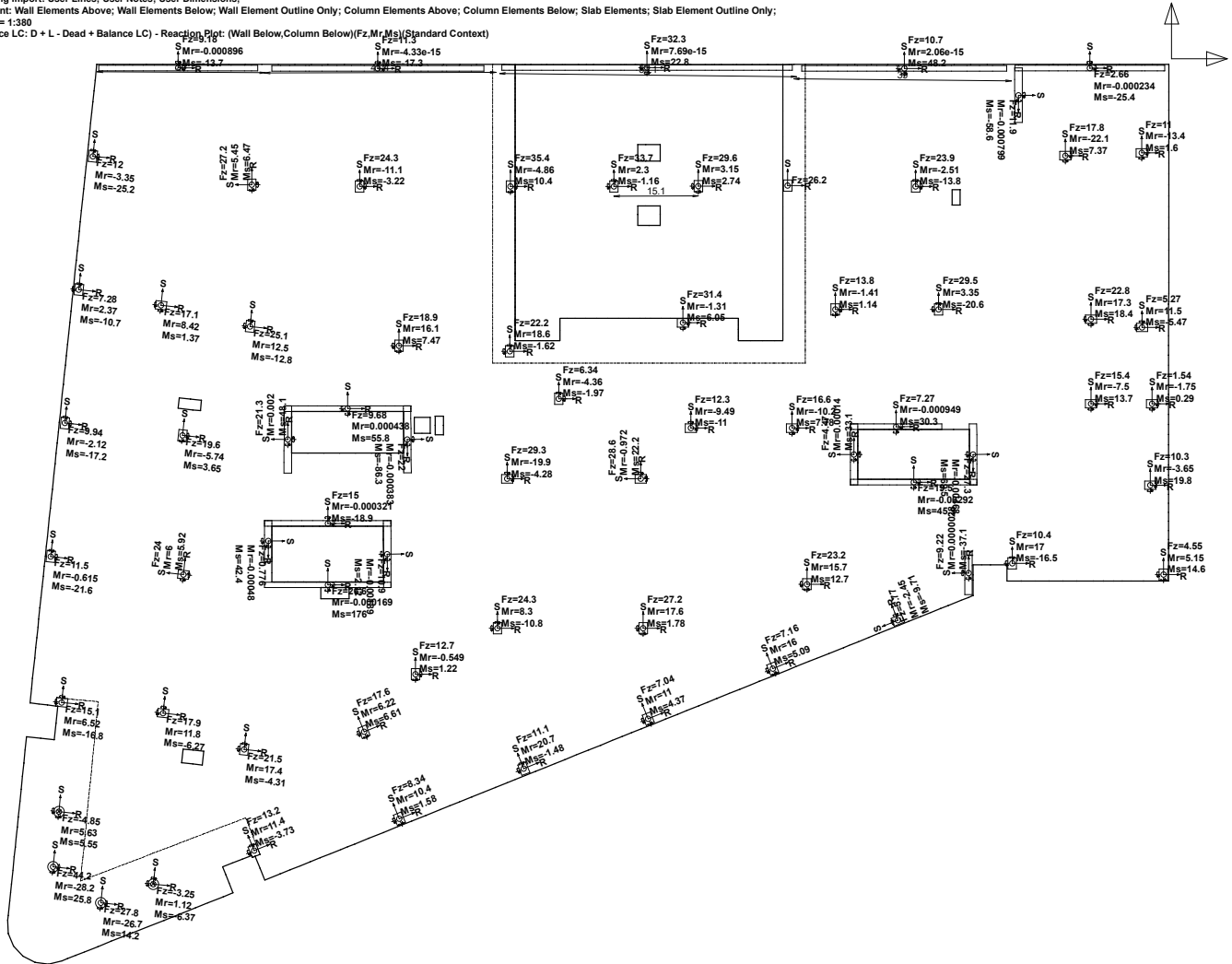
Service LC: D + L: User Lines; User Notes; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
 Scale = 1:380
 Service LC: D + L - Vertical Deflection Plot (Minimum Values)

Min Value = -0.07044 inches @ (-0.5056,-11.1) Max Value = 0.2056 inches @ (-208.2,-156.5)



Service LC: D + L: Reaction Plan

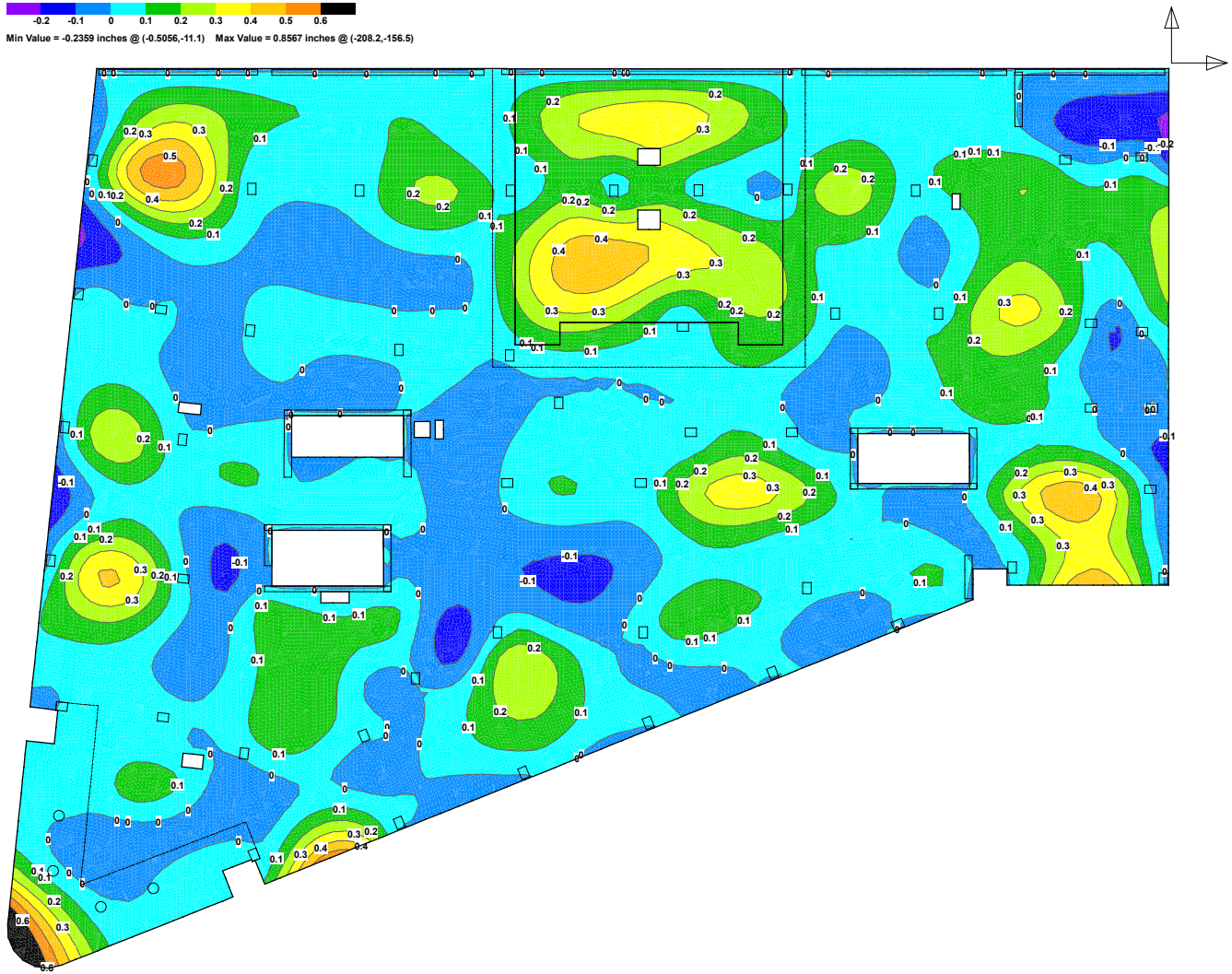
Service LC: D + L: User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:300
 (Service LC: D + L - Dead + Balance LC) - Reaction Plot: (Wall Below, Column Below)(Fz,Mr,Ms)(Standard Context)



Long Term deflection: Max Deflection Plan

Long Term deflection: User Lines; User Notes; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
 Scale = 1:390
 Long Term deflection - Vertical Deflection Plot (Maximum Values)

Min Value = -0.2359 inches @ (-0.5056,-11.1) Max Value = 0.8567 inches @ (-208.2,-156.5)



Design Strip: Latitude SSs Table

<i>Name</i>	<i>Set</i>	<i>Location feet</i>	<i>Skew degrees</i>	<i>At Support 1</i>	<i>At Support 2</i>	<i>Support Width 1 inches</i>
1-1	latitude	(-207.2,-144.6)(-200.1,-144.6)		false	true	3.087
2-1	latitude	(-206,-133.9)(-199.1,-142.7)		false	true	0
3-1	latitude	(-203.9,-114.5)(-199.6,-115)		false	true	0
4-1	latitude	(-208.4,-158)(-191.6,-152.46)		false	true	23.41
4-2	latitude	(-191.6,-151)(-182.2,-147.51)		true	true	21.1
4-3	latitude	(-182.2,-147.7)(-164.4,-141.34)		true	true	21.03
4-4	latitude	(-164.4,-141.7)(-138.2,-136)		true	true	22.97
4-5	latitude	(-138.2,-136)(-115.9,-127)		true	true	18.16
4-6	latitude	(-115.9,-127)(-93.65,-118.1)		true	true	18.16
4-7	latitude	(-93.65,-118.1)(-71.38,-109.1)		true	true	18.16
4-8	latitude	(-71.38,-109.1)(-49.11,-100.2)		true	true	18.16
4-9	latitude	(-49.11,-100.2)(-36.21,-95.17)		true	true	24.16
5-1	latitude	(-198.6,-115.2)(-180.5,-117.1)		true	true	24.16
5-2	latitude	(-180.5,-117.1)(-166,-123.67)		true	true	25.41
5-3	latitude	(-166,-123.6)(-144.5,-128.448)		true	true	18.75
5-4	latitude	(-144.5,-120.4)(-135.3,-120.67)		true	true	20.22
5-5	latitude	(-135.3,-110.1)(-120.6,-101.23)		true	true	20.78
5-6	latitude	(-120.6,-101.9)(-94.55,-100.93-6)		true	true	18.16
5-7	latitude	(-94.55,-101.9)(-65.26,-95.11)		true	true	18.8
5-8	latitude	(-65.26,-94)(-36.27,-89.09)		true	true	18.4
5-9	latitude	(-36.27,-89.19)(-28.53,-90.28)		true	true	14.77
5-10	latitude	(-28.53,-90.28)(-1.302,-92.45)		true	true	18.21
6-1	latitude	(-200.8,-89.04)(-176.8,-95.24)		true	true	24.84
6-2	latitude	(-176.8,-92.28)(-161.7,-94.89)		true	true	24.16
7-1	latitude	(-195.5,-41.31)(-180.7,-44.52)		true	true	18.27
7-2	latitude	(-180.7,-44.59)(-164.9,-47.89)		true	true	18.49
7-3	latitude	(-164.9,-47.89)(-138.3,-51.35)		true	true	18.17
7-4	latitude	(-138.3,-51.35)(-118.4,-52.35)		true	true	18.18
7-5	latitude	(-118.4,-52.35)(-87.45,-47.25)		true	true	18.4
7-6	latitude	(-87.45,-47.25)(-60.2,-46.83)		true	true	24.25
7-7	latitude	(-60.2,-44.83)(-41.7,-44.83)		true	true	18.16
7-8	latitude	(-41.7,-44.83)(-14.45,-46.58)		true	true	18.19
7-9	latitude	(-14.45,-46.58)(-5.313,-47.92)		true	true	24.41
7-10	latitude	(-5.313,-47.92)(-0.7549,-43.22)		true	false	24.17
8-1	latitude	(-198,-65.18)(-177,-67.39)		true	true	18.16
8-2	latitude	(-177,-67.39)(-158.2,-71.791)		true	true	18.55
9-1	latitude	(-193,-17.44)(-164.2,-22.76)		true	true	18.21
9-2	latitude	(-164.2,-22.76)(-145.3,-22.83)		true	true	9.142
9-3	latitude	(-145.3,-22.83)(-121.5,-22.85)		true	false	18.16
10-1	latitude	(-140.2,-94.08)(-120.6,-107.9)		true	true	14.97
11-1	latitude	(-136.6,-73.6)(-118.9,-75.16)		true	true	13.58
11-2	latitude	(-118.9,-75.16)(-94.99,-75.16)		true	true	24.16
11-3	latitude	(-94.99,-75.16)(-56.84,-75.24)		true	true	24.16
12-1	latitude	(-136.7,-62.49)(-109.7,-60.86)		true	true	13.4
12-2	latitude	(-109.7,-60.83)(-86.02,-66.58)		true	true	18.6
12-3	latitude	(-86.02,-66.08)(-67.92,-66.08-6)		true	true	24.16

Design Strip: Latitude SSs Table (2)

<i>Support Width 1</i>	<i>Support Width 2</i>	<i>Support Trans. Width 1</i>	<i>Support Trans. Width 2</i>	<i>Auto-Support</i>	<i>Min Divisions</i>	<i>Max Division Spacing</i>
<i>inches</i>	<i>inches</i>	<i>inches</i>	<i>inches</i>			<i>feet</i>
21.28	0	21.12		true	4	2.5
20.95	0	20.79		true	4	2.5
0	0	0		true	4	2.5
21.28	0	21.12		true	4	2.5
21.1	20.94	20.94		true	4	2.5
13.69	20.87	24.05		true	4	2.5
18.41	24.34	24.34		true	4	2.5
18.16	24	24		true	4	2.5
18.16	24	24		true	4	2.5
18.16	24	24		true	4	2.5
24.15	24	18		true	4	2.5
20.49	18	35.28		true	4	2.5
24.16	18	18		true	4	2.5
19.1	18.94	25.26		true	4	2.5
18.67	24.78	24.68		true	4	2.5
27.17	26.75	24.14		true	4	2.5
20.78	27.5	27.5		true	4	2.5
18.16	24	24		true	4	2.5
18.8	24.86	24.86		true	4	2.5
17.92	24.33	57.18		true	4	2.5
18.33	75.88	24.24		true	4	2.5
22.23	24.08	24.08		true	4	2.5
24.17	24.01	18		true	4	2.5
16.08	18.01	12.09		true	4	2.5
30.1	24.15	18.11		true	4	2.5
18.25	18.09	24.12		true	4	2.5
18.31	24	24.2		true	4	2.5
18.18	24.03	24.03		true	4	2.5
24.48	24.32	18.24		true	4	2.5
18.23	18.07	24.09		true	4	2.5
18.16	24	24		true	4	2.5
24.21	24.05	18.04		true	4	2.5
24.41	18.19	18.19		true	4	2.5
0	18.01	0		true	4	2.5
18.16	24	24		true	4	2.5
16.66	24.53	34.68		true	4	2.5
27.63	24.07	24.41		true	4	2.5
18.16	24	24		true	4	2.5
0	24	0		true	4	2.5
19.54	25.27	25.84		true	4	2.5
24.25	77.59	18.07		true	4	2.5
24.16	18	18		true	4	2.5
16.17	18	130.9		true	4	2.5
18.19	118	24.05		true	4	2.5
24.74	24.58	18.44		true	4	2.5
24.16	18	18		true	4	2.5

Design Strip: Latitude SSs Table (3)

[illegible]

Design Strip: Latitude SSs Table (4)

[illegible]

Design Strip: Latitude SSs Table - 53

Design Strip: Latitude SSs Table (6)

[illegible]

Design Strip: Latitude SSs Table (7)

[illegible]

Design Strip: Latitude SSs Table (8)

Min B.Bar *MS Shear Legs*

[illegible]

Design Strip: Latitude SSs Table (9)

<i>Name</i>	<i>Set</i>	<i>Location feet</i>	<i>Skew degrees</i>	<i>At Support 1</i>	<i>At Support 2</i>	<i>Support Width 1 inches</i>
12-4	latitude	(-67.92,-66.08)(-56.72,-65.52)	-65.52	true	true	24.17
13-1	latitude	(-117.5,-22.85)(-99.8,-22.83)	-22.83	true	true	0
13-2	latitude	(-99.8,-22.83)(-84.69,-22.8067)	-22.8067	true	true	18.16
13-3	latitude	(-84.69,-22.81)(-68.7,-22.67)	-22.67	true	true	18.16
13-4	latitude	(-68.7,-22.67)(-65.54,-22.69)	-22.69	true	false	18.16
13-4(2)	latitude	(-65.54,-22.69)(-45.8,-22.83)	-22.83	false	true	0
13-5	latitude	(-45.8,-22.83)(-19.02,-17.348)	-17.348	true	true	18.53
13-6	latitude	(-19.02,-17.34)(-5.366,-16.88)	-16.88	true	true	24.17
13-7	latitude	(-5.366,-16.83)(-0.7621,-16.76)	-16.76	true	false	24.22
14-1	latitude	(-35.54,-65.89)(-14.45,-61.73)	-61.73	true	true	16.35
14-2	latitude	(-14.45,-61.73)(-3.5,-61.073)	-61.073	true	true	24.16
14-3	latitude	(-3.5,-61.73)(-0.8442,-61.81)	-61.81	true	false	24.17
15-1	latitude	(-35.53,-75.78)(-3.5,-76.3218)	-76.3218	true	true	17.16
15-2	latitude	(-3.5,-76.3)(-0.9865,-76.2165)	-76.2165	true	false	16.03

Design Strip: Latitude SSs Table (10)

t Width 1

<i>Support Width 2 inches</i>	<i>Support Trans. Width 1 inches</i>	<i>Support Trans. Width 2 inches</i>	<i>Auto-Support</i>	<i>Min Divisions</i>	<i>Max Division Spacing feet</i>
19.15	18.01	131	true	4	2.5
18.16	0	24	true	4	2.5
18.16	24	24	true	4	2.5
18.16	24	24	true	4	2.5
0	24	0	true	4	2.5
18.16	0	24	true	4	2.5
24.66	24.5	18.37	true	4	2.5
24.12	18.01	18.01	true	4	2.5
0	18	0	true	4	2.5
24.62	48.78	18.35	true	4	2.5
24.16	18	18	true	4	2.5
0	18.01	0	true	4	2.5
32.29	131	18	true	4	2.5
0	18	0	true	4	2.5

Design Strip: Latitude SSs Table (11)

on Spacing

<i>Design For Axial</i>	<i>Environment</i>	<i>Design As PT</i>	<i>Maximize Integrated V:</i>	<i>Use Spec LLR Params</i>	<i>Spec. LLR Levels</i>	<i>Spec. Trib. Area ft²</i>
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	true	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0

Design Strip: Latitude SSs Table (12)

<i>Spec. Infl. Area ft²</i>	<i>Max LLR %</i>	<i>Span Width</i>	<i>Col Strip Width</i>	<i>Lock Strips</i>	<i>Design CS for CS</i>	<i>-CS Auto Trim</i>	<i>CS Section Slope</i>
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	manual	manual	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	manual	manual	false	false	none	0.25
0	40	manual	manual	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25

Design Strip: Latitude SSs Table (13)

Section Slope	CS Top Bar	CS Bot Bar	CS Shear Bar	CS Top Cover inches	CS Bot Cover inches	CS Shear d calc	CS Torsion Design	CS System
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#5	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#5	#4	1.5	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#5	#4	1.5	1	All Tension Reinforcement		two-way slab
	#4	#4	#4	1.5	1	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab

Design Strip: Latitude SSs Table (14)

<i>CS Min. Bar Loc.</i>	<i>CS Min T.Bar</i>	<i>CS Min B.Bar</i>	<i>CS Shear Legs</i>	<i>MS Same As CS</i>	<i>MS Auto Trim</i>	<i>MS Section Slope</i>	<i>MS Top Bar</i>	<i>MS Bot Bar</i>
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	true	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	true	none	0.25	#5	#4
stress	0	0	2	true	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4

Design Strip: Latitude SSs Table (15)

Bot Bar	MS Shear Bar	MS Top Cover inches	MS Bot Cover inches	MS Shear d calc	MS Torsion Design	MS System	MS Min. Bar Loc.	MS Min T.Bar	MS Min B.Bar
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0

Design Strip: Latitude SSs Table (16)

<i>Min B.Bar</i>	<u><i>MS Shear Legs</i></u>
2	
2	
2	
2	
2	
2	
2	
2	
2	
2	
2	
2	
2	
2	

Design Strip: Longitude SSs Table

Name	Set	Location feet	Skew degrees	At Support 1	At Support 2	Support Width 1 inches
16-1	longitude	(-201.7,-162)(-200.1,-154.05)	4.081	false	true	6.268
16-2	longitude	(-200.1,-144.6)(-199.1,-134.7)	1.917	true	true	20.96
16-3	longitude	(-199.1,-134.7)(-198.6,-119.2)	1.492	true	true	21.17
16-4	longitude	(-198.6,-115.2)(-200.6,-89.265)	89.265	true	true	18.45
16-5	longitude	(-200.6,-89.05)(-198,-65.18)	65.18	true	true	24.16
16-6	longitude	(-198,-65.18)(-195.5,-45.31)	45.31	true	true	24.16
16-7	longitude	(-195.5,-41.31)(-193,-17.44)	17.44	true	true	24.16
16-8	longitude	(-193,-17.44)(-191.7,-2.5073)	2.5073	true	true	24.16
17-1	longitude	(-195.3,-159.9)(-191.6,-113.56)	113.56	false	true	0
17-2	longitude	(-191.6,-151)(-180.5,-113.19)	113.19	true	true	21.03
17-3	longitude	(-180.5,-117.1)(-176.8,-92.28)	92.28	true	true	18.17
17-4	longitude	(-176.8,-92.28)(-177,-67.39)	67.39	true	true	18.27
17-5	longitude	(-177,-67.39)(-164.9,-47.89)	47.89	true	true	26.82
17-6	longitude	(-164.9,-47.89)(-164.6,-22.53)	22.53	true	true	24.26
17-7	longitude	(-164.6,-22.53)(-164.9,-1.9435)	1.9435	true	true	24.16
18-1	longitude	(-164.2,-141.7)(-166,-123.6)	123.6	true	true	25.17
18-2	longitude	(-166,-123.6)(-161.6,-94.02)	94.02	true	true	24.17
19-1	longitude	(-148.6,-94.26)(-144.5,-73.78)	73.78	true	true	9.262
19-2	longitude	(-144.5,-120.4)(-138.2,-103.69)	103.69	true	true	24.15
20-1	longitude	(-141.5,-1.583)(-145.3,-22.83)	22.83	true	true	15.72
20-2	longitude	(-145.3,-22.83)(-138.3,-51.35)	51.35	true	true	24.88
20-3	longitude	(-138.3,-51.35)(-136.9,-62.052)	62.052	true	true	24.34
21-1	longitude	(-140.5,-83.22)(-136.7,-73.59)	73.59	true	true	15.62
22-1	longitude	(-140.5,-94.09)(-135.3,-110.93)	110.93	true	true	13.76
22-2	longitude	(-135.3,-110.1)(-138.2,-136.3)	136.3	true	true	24.31
23-1	longitude	(-118.6,-1.583)(-118.3,-25.354)	25.354	true	true	11.77
23-2	longitude	(-118.3,-22.85)(-118.4,-52.558)	52.558	true	true	23.66
23-3	longitude	(-118.4,-52.35)(-118.5,-54.47)	54.47	true	false	24.16
23-3(2)	longitude	(-118.5,-54.47)(-118.9,-75.16)	75.16	false	true	0
23-4	longitude	(-118.9,-75.16)(-120.6,-101.9)	101.9	true	true	18.2
23-5	longitude	(-120.6,-101.9)(-115.9,-127.64)	127.64	true	true	24.58
24-1	longitude	(-99.8,-1.583)(-99.8,-22.83)	22.83	true	true	11.77
24-2	longitude	(-99.8,-22.83)(-87.59,-46.64)	46.64	true	true	27.17
25-1	longitude	(-94.99,-74.76)(-94.55,-70.74)	70.74	true	true	27.64
25-2	longitude	(-94.55,-101.9)(-93.65,-129.1)	129.1	true	true	24.19
26-1	longitude	(-87.45,-47.25)(-86.87,-54.61)	54.61	true	false	18.21
26-1(2)	longitude	(-86.87,-54.61)(-86.02,-65.38)	65.38	false	true	0
27-1	longitude	(-87.61,-46.44)(-84.69,-22.81)	22.81	true	true	0
27-2	longitude	(-84.69,-22.81)(-84.68,-1.5555)	1.5555	true	true	24.16
28-1	longitude	(-68.45,-1.609)(-68.7,-22.67)	22.67	true	true	11.15
28-2	longitude	(-68.7,-22.67)(-60.2,-44.83)	44.83	true	true	25.86
28-3	longitude	(-60.2,-44.83)(-56.64,-69.793)	69.793	true	true	24.5
29-1	longitude	(-71.38,-109.1)(-65.26,-84.03)	84.03	true	true	26.06
29-2	longitude	(-65.26,-94)(-67.92,-66.034)	66.034	true	true	24.27
30-1	longitude	(-56.76,-75.73)(-49.11,-100.35)	100.35	true	true	13.09
31-1	longitude	(-47.52,-1.583)(-45.8,-24.624)	24.624	true	true	15.5

Design Strip: Longitude SSs Table (2)

<i>Support Width 1</i>	<i>Support Width 2</i> <i>inches</i>	<i>Support Trans. Width 1</i> <i>inches</i>	<i>Support Trans. Width 2</i> <i>inches</i>	<i>Auto-Support</i>	<i>Min Divisions</i>	<i>Max Division Spacing</i> <i>feet</i>
	20.99	0	20.83	true	4	2.5
	20.96	20.8	20.8	true	4	2.5
	18.21	21.02	24.07	true	4	2.5
	24.55	24.39	18.29	true	4	2.5
	24.16	18	18	true	4	2.5
	24.16	18	18	true	4	2.5
	24.16	18	18	true	4	2.5
	4.355	18	27.26	true	4	2.5
	21.26	0	21.1	true	4	2.5
	18.57	20.87	24.55	true	4	2.5
	18.17	24.02	24.02	true	4	2.5
	24.31	24.15	18.11	true	4	2.5
	26.82	20.01	20.01	true	4	2.5
	24.16	18.08	18	true	4	2.5
	0.1654	18	16.18	true	4	2.5
	24.65	18.76	18.38	true	4	2.5
	14.12	18.02	55.98	true	4	2.5
	24.78	76.73	18.47	true	4	2.5
	24.15	18	18	true	4	2.5
	24.55	67.4	18.29	true	4	2.5
	24.88	18.54	18.54	true	4	2.5
	12.76	18.14	56.07	true	4	2.5
	10.87	29.95	17.29	true	4	2.5
	25.38	31.43	18.92	true	4	2.5
	27.42	18.11	20.45	true	4	2.5
	24.66	542.7	18	true	4	2.5
	24.16	18	18	true	4	2.5
	0	18	0	true	4	2.5
	18.16	0	24	true	4	2.5
	24.21	24.05	18.04	true	4	2.5
	24.63	18.31	18.36	true	4	2.5
	24.16	624.1	18	true	4	2.5
	0	20.26	0	true	4	2.5
	24.16	24	18	true	4	2.5
	25.51	18.03	19.01	true	4	2.5
	0	24.07	0	true	4	2.5
	18.21	0	24.07	true	4	2.5
	24.34	0	18.14	true	4	2.5
	12.43	18	624.1	true	4	2.5
	24.16	554.9	18	true	4	2.5
	25.86	19.28	19.28	true	4	2.5
	11.16	18.26	43.11	true	4	2.5
	26.05	25.03	19.42	true	4	2.5
	18.24	18.08	24.11	true	4	2.5
	10.92	28.99	24.08	true	4	2.5
	24.24	148.8	18.06	true	4	2.5

[illegible]

Design Strip: Longitude SSs Table (4)

[illegible]

Design Strip: Longitude SSs Table (5)

[illegible]

Design Strip: Longitude SSs Table (6)

<i>CS Min. Bar Loc.</i>	<i>CS Min T.Bar</i>	<i>CS Min B.Bar</i>	<i>CS Shear Legs</i>	<i>MS Same As CS</i>	<i>MS Auto Trim</i>	<i>MS Section Slope</i>	<i>MS Top Bar</i>	<i>MS Bot Bar</i>
elevated	0	0	2	true	none	0.25	#5	#4
elevated	0	0	2	true	none	0.25	#5	#4
elevated	0	0	2	true	none	0.25	#5	#4
elevated	0	0	2	true	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
elevated	0	0	2	true	none	0.25	#5	#4
elevated	0	0	2	true	none	0.25	#5	#4
elevated	0	0	2	true	none	0.25	#5	#4
elevated	0	0	2	true	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	4	false	none	0.25	#5	#4
stress	0	0	4	false	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	true	none	0.25	#5	#4
stress	0	0	2	true	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	true	none	0.25	#5	#4
stress	0	0	2	true	none	0.25	#5	#4
elevated	0	0	4	true	none	0.25	#5	#4
elevated	0	0	4	true	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4

Design Strip: Longitude SSs Table (7)

[illegible]

Design Strip: Longitude SSs Table (8)

[illegible]

Design Strip: Longitude SSs Table (9)

<i>Name</i>	<i>Set</i>	<i>Location feet</i>	<i>Skew degrees</i>	<i>At Support 1</i>	<i>At Support 2</i>	<i>Support Width 1 inches</i>
31-2	longitude	(-45.8,-22.83)(-41.7,-44.83)	57	true	true	24.57
31-3	longitude	(-41.7,-44.83)(-35.45,-61.05)	51	true	true	25.19
32-1	longitude	(-36.1,-88.79)(-35.48,-75.72)	72	true	true	16.07
33-1	longitude	(-28.53,-90.28)(-14.45,-81.26)	76	true	true	26.92
33-2	longitude	(-14.45,-61.73)(-14.45,-46.58)	65	true	true	18.16
33-3	longitude	(-14.45,-46.58)(-19.02,-17.34)	89	true	true	18.38
33-4	longitude	(-19.02,-17.34)(-22,-1.85)	89	true	true	18.49
34-1	longitude	(-5.387,-2.098)(-5.364,-17.54)	99	true	true	1.85
34-2	longitude	(-5.364,-17.54)(-5.313,-47.92)	74	true	true	1.157
34-3	longitude	(-5.313,-47.92)(-3.5,-61.73)	74	true	true	22.09
34-4	longitude	(-3.5,-61.73)(-3.5,-76.3)	0	true	true	18.16
34-5	longitude	(-3.5,-76.3)(-1.302,-92.45)	93	true	true	18.32

Design Strip: Longitude SSs Table (10)

t Width 1

<i>Support Width 2 inches</i>	<i>Support Trans. Width 1 inches</i>	<i>Support Trans. Width 2 inches</i>	<i>Auto-Support</i>	<i>Min Divisions</i>	<i>Max Division Spacing feet</i>
24.57	18.31	18.31	true	4	2.5
14.73	18.77	16.67	true	4	2.5
8.553	16.02	173.8	true	4	2.5
20.23	20.07	26.76	true	4	2.5
18.16	24	24	true	4	2.5
18.38	24.29	24.29	true	4	2.5
6.901	24.44	63.37	true	4	2.5
35.16	322	24	true	4	2.5
14.41	24	24	true	4	2.5
18.31	24.21	24.21	true	4	2.5
18.16	24	24	true	4	2.5
28.42	24.22	18.17	true	4	2.5

Design Strip: Longitude SSs Table (11)

on Spacing

<i>Design For Axial</i>	<i>Environment</i>	<i>Design As PT</i>	<i>Maximize Integrated V:</i>	<i>Use Spec LLR Params</i>	<i>Spec. LLR Levels</i>	<i>Spec. Trib. Area ft²</i>
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	true	false	1	0
true	normal	true	false	false	1	0

Design Strip: Longitude SSs Table (12)

<i>Spec. Infl. Area ft²</i>	<i>Max LLR %</i>	<i>Span Width</i>	<i>Col Strip Width</i>	<i>Lock Strips</i>	<i>Design CS for CS</i>	<i>-CS Auto Trim</i>	<i>CS Section Slope</i>
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25

Design Strip: Longitude SSs Table (13)

Section Slope	CS Top Bar	CS Bot Bar	CS Shear Bar	CS Top Cover inches	CS Bot Cover inches	CS Shear d calc	CS Torsion Design	CS System
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab

Design Strip: Longitude SSs Table (14)

<i>CS Min. Bar Loc.</i>	<i>CS Min T.Bar</i>	<i>CS Min B.Bar</i>	<i>CS Shear Legs</i>	<i>MS Same As CS</i>	<i>MS Auto Trim</i>	<i>MS Section Slope</i>	<i>MS Top Bar</i>	<i>MS Bot Bar</i>
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4

Design Strip: Longitude SSs Table (15)

Bot Bar	MS Shear Bar	MS Top Cover inches	MS Bot Cover inches	MS Shear d calc	MS Torsion Design	MS System	MS Min. Bar Loc.	MS Min T.Bar	MS Min B.Bar
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0

Design Strip: Longitude SSs Table (16)

<i>Min B.Bar</i>	<u><i>MS Shear Legs</i></u>
2	
2	
2	
2	
2	
2	
2	
2	
2	
2	
2	
2	

Design Strip: Latitude SSSs Table

<i>Name</i>	<i>Strip Type</i>	<i>Calc. Trib. Area ft²</i>	<i>Calc. Infl. Area ft²</i>	<i>Top Bar</i>	<i>Bottom Bar</i>	<i>Shear Bar</i>	<i>Top Cover inches</i>
1C-1	center	76.63	0	#5	#4	#4	1.5
2C-1	center	55.07	0	#5	#4	#4	1.5
3C-1	center	46.72	0	#5	#4	#4	1.5
4C-1	center	59.99	0	#5	#4	#4	1.5
4C-2	center	184.1	0	#5	#4	#4	1.5
4C-3	center	283.9	0	#5	#4	#4	1.5
4C-4	center	266.8	0	#5	#4	#4	1.5
4C-5	center	217.5	0	#5	#4	#4	1.5
4C-6	center	243	0	#5	#4	#4	1.5
4C-7	center	162.2	0	#5	#4	#4	1.5
4C-8	center	116	0	#5	#4	#4	1.5
4C-9	center	81.81	0	#5	#4	#4	1.5
5C-1	center	374.9	0	#5	#4	#4	1.5
5C-2	center	324.3	0	#5	#4	#4	1.5
5C-3	center	490.2	0	#5	#4	#4	1.5
5C-4	center	281	0	#5	#4	#4	1.5
5C-5	center	261.4	0	#5	#4	#4	1.5
5C-6	center	603.8	0	#5	#4	#4	1.5
5C-7	center	557.9	0	#5	#4	#4	1.5
5C-8	center	304.6	0	#5	#4	#4	1.5
5C-9	center	78.87	0	#5	#4	#4	1.5
5C-10	center	263.4	0	#5	#4	#4	1.5
6C-1	center	527.9	0	#5	#4	#4	1.5
6C-2	center	317.4	0	#5	#4	#4	1.5
7C-1	center	356.4	0	#5	#4	#4	1.5
7C-2	center	349.6	0	#5	#4	#4	1.5
7C-3	center	460.5	0	#5	#4	#4	1.5
7C-4	center	424.9	0	#5	#4	#4	1.5
7C-5	center	650.9	0	#5	#5	#4	1.5
7C-6	center	526.1	0	#5	#4	#4	1.5
7C-7	center	381.8	0	#5	#4	#4	1.5
7C-8	center	558.1	0	#5	#4	#4	1.5
7C-9	center	180.6	0	#5	#4	#4	1.5
7C-10	center	75.57	0	#5	#4	#4	1.5
8C-1	center	446.7	0	#5	#4	#4	1.5
8C-2	center	323	0	#5	#4	#4	1.5
9C-1	center	562.8	0	#5	#4	#4	1.5
9C-2	center	492.3	0	#5	#4	#4	1.5
9C-3	center	573	0	#5	#4	#4	1.5
10C-1	center	230.7	0	#5	#4	#4	1.5
11C-1	center	324.4	0	#5	#4	#4	1.5
11C-2	center	472.3	0	#5	#4	#4	1.5
11C-3	center	344.7	0	#5	#4	#4	1.5
12C-1	center	112.2	0	#5	#4	#4	1.5
12C-2	center	182.1	0	#5	#4	#4	1.5
12C-3	center	313.2	0	#5	#4	#4	1.5

Bot. Cover
inches

Design Strip: Latitude SSSs Table - 82

Design Strip: Latitude SSSs Table (3)

<i>Name</i>	<i>Strip Type</i>	<i>Calc. Trib. Area ft²</i>	<i>Calc. Infl. Area ft²</i>	<i>Top Bar</i>	<i>Bottom Bar</i>	<i>Shear Bar</i>	<i>Top Cover inches</i>
12C-4	center	175.6	0	#5	#4	#4	1.5
13C-1	center	433	0	#5	#5	#4	1.5
13C-2	center	229.5	0	#5	#5	#4	1.5
13C-3	center	340.2	0	#5	#5	#4	1.5
13C-4	center	83.57	0	#5	#5	#4	1.5
13C-4(2)	center	433.2	0	#4	#4	#4	1.5
13C-5	center	431.5	0	#5	#4	#4	1.5
13C-6	center	296.7	0	#5	#4	#4	1.5
13C-7	center	75.41	0	#5	#4	#4	1.5
14C-1	center	331.1	0	#5	#4	#4	1.5
14C-2	center	124.5	0	#5	#4	#4	1.5
14C-3	center	16.99	0	#5	#4	#4	1.5
15C-1	center	305.2	0	#5	#4	#4	1.5
15C-2	center	11.21	0	#5	#4	#4	1.5

Design Strip: Latitude SSSs Table (4)

Top Cover
inches

Bot. Cover
inches

<i>Inches</i>	<i>Torsion Design</i>	<i>System</i>	<i>Min Bar Loc.</i>	<i>Min T. Bar</i>	<i>Min B. Bar</i>	<i>Shear Legs</i>
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
1	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
1	none	two-way slab	stress	0	0	2
1	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2

Design Strip: Longitude SSSs Table

<i>Name</i>	<i>Strip Type</i>	<i>Calc. Trib. Area ft²</i>	<i>Calc. Infl. Area ft²</i>	<i>Top Bar</i>	<i>Bottom Bar</i>	<i>Shear Bar</i>	<i>Top Cover inches</i>
16C-1	center	118.3	0	#5	#4	#4	1.5
16C-2	center	138.8	0	#5	#4	#4	1.5
16C-3	center	275.2	0	#5	#4	#4	1.5
16C-4	center	340.5	0	#5	#4	#4	1.5
16C-5	center	247.4	0	#5	#4	#4	1.5
16C-6	center	59.09	0	#5	#4	#4	1.5
16C-7	center	335.4	0	#5	#4	#4	1.5
16C-8	center	202.4	0	#5	#4	#4	1.5
17C-1	center	128.9	0	#5	#4	#4	1.5
17C-2	center	197.8	0	#5	#4	#4	1.5
17C-3	center	460.9	0	#5	#4	#4	1.5
17C-4	center	603.6	0	#5	#4	#4	1.5
17C-5	center	429.7	0	#5	#4	#4	1.5
17C-6	center	463.3	0	#5	#4	#4	1.5
17C-7	center	463	0	#5	#4	#4	1.5
18C-1	center	385.1	0	#5	#4	#4	1.5
18C-2	center	383.5	0	#5	#4	#4	1.5
19C-1	center	249.6	0	#5	#4	#4	1.5
19C-2	center	260.2	0	#5	#4	#4	1.5
20C-1	center	411.7	0	#5	#4	#4	1.5
20C-2	center	547.5	0	#5	#4	#4	1.5
20C-3	center	206	0	#5	#4	#4	1.5
21C-1	center	173.7	0	#5	#4	#4	1.5
22C-1	center	237	0	#5	#4	#4	1.5
22C-2	center	205.2	0	#5	#4	#4	1.5
23C-1	center	498.1	0	#5	#5	#4	1.5
23C-2	center	757	0	#5	#5	#4	1.5
23C-3	center	35.93	0	#5	#4	#4	1.5
23C-3(2)	center	446	0	#5	#4	#4	1.5
23C-4	center	537.9	0	#5	#4	#4	1.5
23C-5	center	452.6	0	#5	#4	#4	1.5
24C-1	center	285.3	0	#5	#5	#4	1.5
24C-2	center	360.6	0	#5	#5	#4	1.5
25C-1	center	674	0	#5	#4	#4	1.5
25C-2	center	382.8	0	#5	#4	#4	1.5
26C-1	center	207.4	0	#5	#4	#4	1.5
26C-1(2)	center	258.5	0	#5	#4	#4	1.5
27C-1	center	293.4	0	#5	#5	#4	1.5
27C-2	center	258.1	0	#5	#5	#4	1.5
28C-1	center	440	0	#5	#5	#4	1.5
28C-2	center	453	0	#5	#4	#4	1.5
28C-3	center	440.9	0	#5	#4	#4	1.5
29C-1	center	303.4	0	#5	#4	#4	1.5
29C-2	center	576.4	0	#5	#4	#4	1.5
30C-1	center	293.2	0	#5	#4	#4	1.5
31C-1	center	348.6	0	#5	#4	#4	1.5

Bot. Cover
inches

Design Strip: Longitude SSSs Table - 86

Design Strip: Longitude SSSs Table (3)

<i>Name</i>	<i>Strip Type</i>	<i>Calc. Trib. Area ft²</i>	<i>Calc. Infl. Area ft²</i>	<i>Top Bar</i>	<i>Bottom Bar</i>	<i>Shear Bar</i>	<i>Top Cover inches</i>
31C-2	center	497	0	#5	#4	#4	1.5
31C-3	center	427.2	0	#5	#4	#4	1.5
32C-1	center	212.1	0	#5	#4	#4	1.5
33C-1	center	343.2	0	#5	#4	#4	1.5
33C-2	center	295	0	#5	#4	#4	1.5
33C-3	center	548.3	0	#5	#4	#4	1.5
33C-4	center	93.58	0	#5	#4	#4	1.5
34C-1	center	152.5	0	#5	#4	#4	1.5
34C-2	center	250.8	0	#5	#4	#4	1.5
34C-3	center	73.5	0	#5	#4	#4	1.5
34C-4	center	125.5	0	#5	#4	#4	1.5
34C-5	center	220.5	0	#5	#4	#4	1.5

Design Strip: Longitude SSSs Table (4)

Top Cover
inches

Bot. Cover
inches

<i>inches</i>	<i>Torsion Design</i>	<i>System</i>	<i>Min Bar Loc.</i>	<i>Min T. Bar</i>	<i>Min B. Bar</i>	<i>Shear Legs</i>
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2

Design Strip: Punching Checks Table

<i>Number</i>	<i>Location feet</i>	<i>Radius feet</i>	<i>Cover To CGS inches</i>	<i>Angle degrees</i>	<i>Edge</i>	<i>Connection</i>
1	(-200.6,-89.05)	10	1	-6	failure planes	auto
2	(-200.1,-144.6)	10	1	0	failure planes	auto
3	(-199.1,-134.7)	10	1	0	failure planes	auto
4	(-198.6,-115.2)	10	1	-6	failure planes	auto
5	(-198,-65.18)	10	1	-6	failure planes	auto
6	(-195.5,-41.31)	10	1	-6	failure planes	auto
7	(-193,-17.44)	10	1	-6	failure planes	auto
8	(-191.6,-151)	10	1	0	failure planes	auto
9	(-182.2,-147.7)	10	1	0	failure planes	auto
10	(-180.8,-44.12)	10	1	-6	failure planes	auto
11	(-180.5,-117.1)	10	1	-6	failure planes	auto
12	(-177,-67.39)	10	1	-6	failure planes	auto
13	(-176.8,-92.28)	10	1	84	failure planes	auto
14	(-166,-123.6)	10	1	-6	failure planes	auto
15	(-164.9,-47.89)	10	1	-6	failure planes	auto
16	(-164.6,-22.53)	10	1	90	failure planes	auto
17	(-164.2,-141.7)	10	1	22	failure planes	auto
18	(-145.3,-22.83)	10	1	0	failure planes	auto
19	(-144.5,-120.4)	10	1	22	failure planes	auto
20	(-138.3,-51.35)	10	1	0	failure planes	auto
21	(-138.2,-136)	10	1	22	failure planes	auto
22	(-135.3,-110.1)	10	1	0	failure planes	auto
23	(-120.6,-101.9)	10	1	0	failure planes	auto
24	(-118.9,-75.16)	10	1	0	failure planes	auto
25	(-118.4,-52.35)	10	1	0	failure planes	auto
26	(-118.3,-22.83)	10	1	0	failure planes	auto
27	(-115.9,-127)	10	1	22	failure planes	auto
28	(-109.7,-60.83)	10	1	0	failure planes	auto
29	(-99.8,-22.83)	10	1	0	failure planes	auto
30	(-94.99,-75.16)	10	1	90	failure planes	auto
31	(-94.55,-101.9)	10	1	0	failure planes	auto
32	(-93.65,-118.1)	10	1	22	failure planes	auto
33	(-87.45,-47.25)	10	1	0	failure planes	auto
34	(-86.02,-66.08)	10	1	0	failure planes	auto
35	(-84.69,-22.81)	10	1	0	failure planes	auto
36	(-71.38,-109.1)	10	1	22	failure planes	auto
37	(-68.7,-22.67)	10	1	0	failure planes	auto
38	(-67.92,-66.08)	10	1	0	failure planes	auto
39	(-65.26,-94)	10	1	0	failure planes	auto
40	(-60.2,-44.83)	10	1	0	failure planes	auto
41	(-49,-100.5)	10	1	112	failure planes	auto
42	(-45.8,-22.83)	10	1	0	failure planes	auto
43	(-41.7,-44.83)	10	1	0	failure planes	auto
44	(-28.53,-90.28)	10	1	0	failure planes	auto
45	(-19.02,-17.34)	10	1	0	failure planes	auto
46	(-14.45,-61.73)	10	1	0	failure planes	auto

Design Strip: Punching Checks Table (2)

Connection	Use Spec LLR Params	Spec. LLR Levels	Spec. Trib. Area ft ²	Spec. Infl. Area ft ²	Calc. Trib. Area ft ²	Calc. Infl. Area ft ²
	false	1	0	0	291.4	0
	false	1	0	0	225	0
	false	1	0	0	234.7	0
	false	1	0	0	372.1	0
	false	1	0	0	252	0
	false	1	0	0	183.6	0
	false	1	0	0	302.4	0
	false	1	0	0	226.4	0
	false	1	0	0	246.8	0
	false	1	0	0	431.8	0
	false	1	0	0	403.2	0
	false	1	0	0	461.2	0
	false	1	0	0	533.7	0
	false	1	0	0	434.5	0
	false	1	0	0	451.2	0
	false	1	0	0	613.1	0
	false	1	0	0	329	0
	false	1	0	0	582.9	0
	false	1	0	0	429	0
	false	1	0	0	452.8	0
	false	1	0	0	211.2	0
	false	1	0	0	323.6	0
	false	1	0	0	569.1	0
	false	1	0	0	476.3	0
	false	1	0	0	589.2	0
	false	1	0	0	782.4	0
	false	1	0	0	280.3	0
	false	1	0	0	180.2	0
	false	1	0	0	366.6	0
	false	1	0	0	530.7	0
	false	1	0	0	643.2	0
	false	1	0	0	184.1	0
	false	1	0	0	714.2	0
	false	1	0	0	290	0
	false	1	0	0	323.3	0
	false	1	0	0	187.2	0
	false	1	0	0	595.4	0
	false	1	0	0	358.5	0
	false	1	0	0	510.6	0
	false	1	0	0	404.4	0
	false	1	0	0	148.8	0
	false	1	0	0	525.4	0
	false	1	0	0	556.7	0
	false	1	0	0	227.3	0
	false	1	0	0	389.6	0
	false	1	0	0	347.4	0

[illegible]

Design Strip: Punching Checks Table (4)

<i>Number</i>	<i>Location feet</i>	<i>Radius feet</i>	<i>Cover To CGS inches</i>	<i>Angle degrees</i>	<i>Edge</i>	<i>Connection</i>
47	(-14.45,-46.58)	10	1	0	failure planes	auto
48	(-5.364,-16.83)	10	1	0	failure planes	auto
49	(-5.313,-48.07)	10	1	0	failure planes	auto
50	(-3.839,-76.3)	10	1	0	failure planes	auto
51	(-3.5,-61.73)	10	1	0	failure planes	auto
52	(-1.469,-92.28)	10	1	0	failure planes	auto

Design Strip: Punching Checks Table (5)

<i>Connection</i>	<i>Use Spec LLR Params</i>	<i>Spec. LLR Levels</i>	<i>Spec. Trib. Area ft²</i>	<i>Spec. Infl. Area ft²</i>	<i>Calc. Trib. Area ft²</i>	<i>Calc. Infl. Area ft²</i>
	false	1	0	0	483.1	0
	false	1	0	0	286.5	0
	false	1	0	0	158.3	0
	false	1	0	0	257.1	0
	false	1	0	0	48.61	0
	false	1	0	0	115.4	0

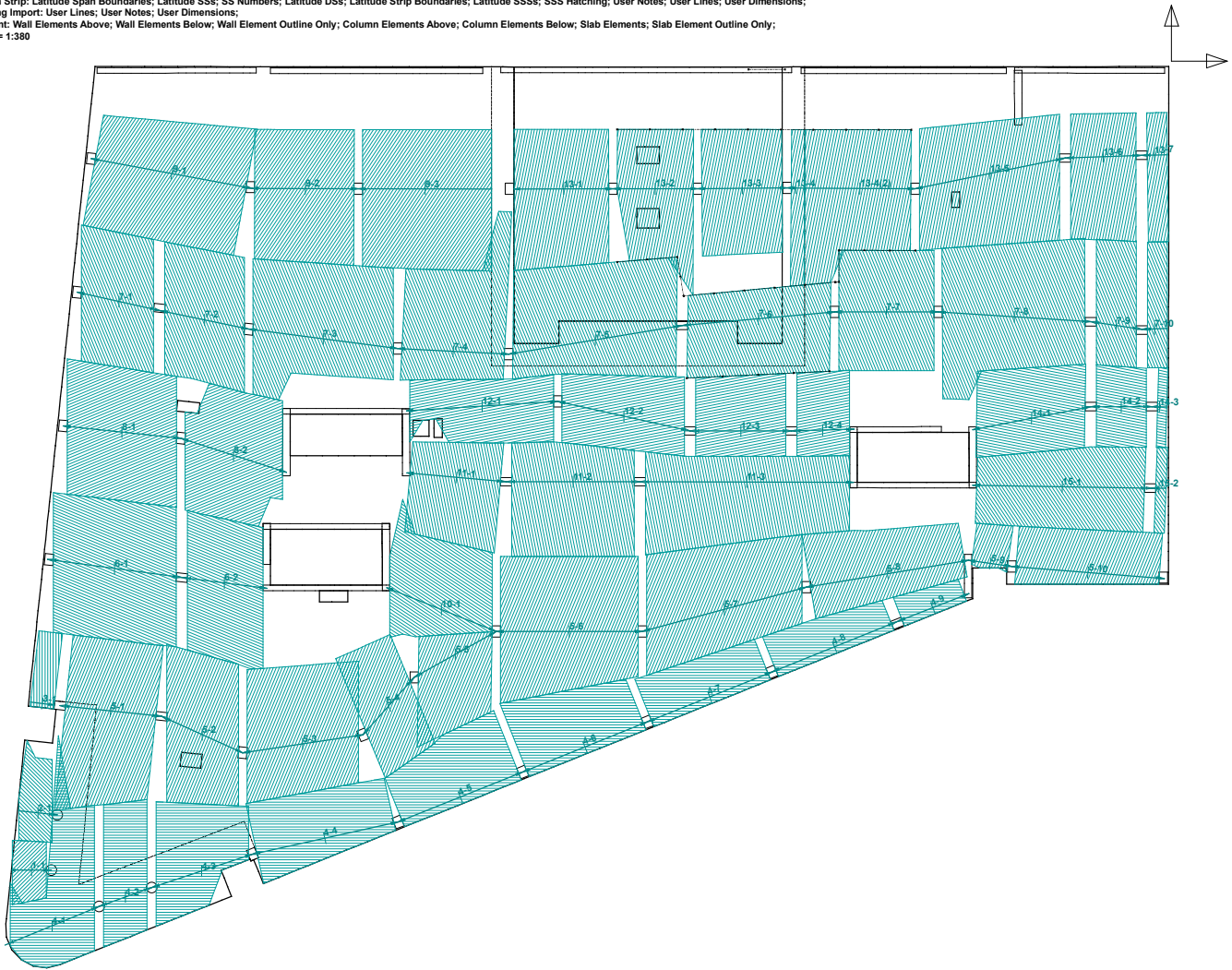
Design Strip: Punching Checks Table (6)

Inf. Area

<i>Max LLR</i> <i>%</i>	<i>Red. Red.</i> <i>%</i>	<i>Stor. Red.</i> <i>%</i>	<i>Park. Red.</i> <i>%</i>
40	0	0	0
40	0	0	0
40	0	0	0
40	0	0	0
40	0	0	0
40	0	0	0

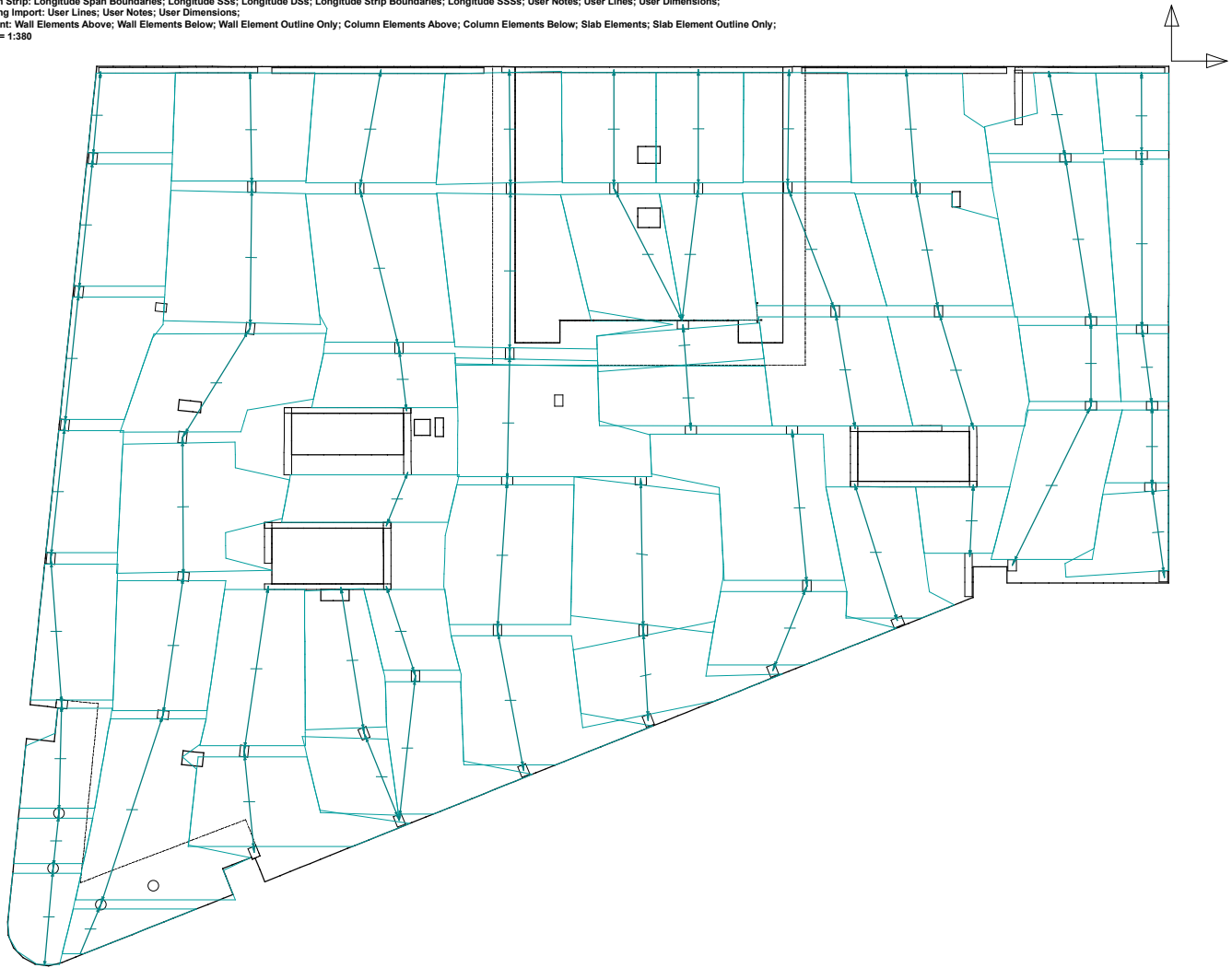
Design Strip: Latitude Design Spans Plan

Design Strip: Latitude Span Boundaries; Latitude SSs; SS Numbers; Latitude DSs; Latitude Strip Boundaries; Latitude SSSs; SSS Hatching; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



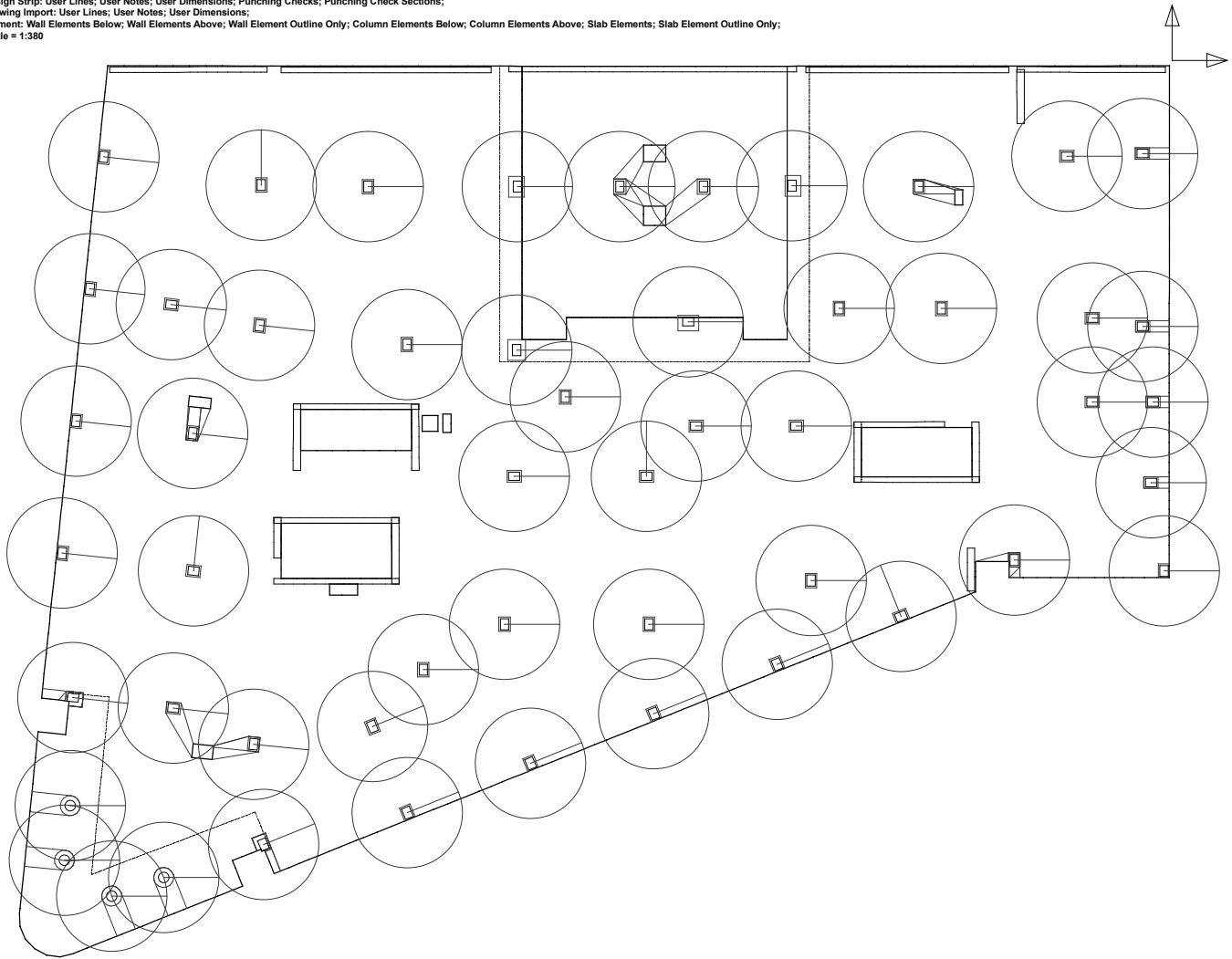
Design Strip: Longitude Design Spans Plan

Design Strip: Longitude Span Boundaries; Longitude SSSs; Longitude DSs; Longitude Strip Boundaries; Longitude SSSs; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



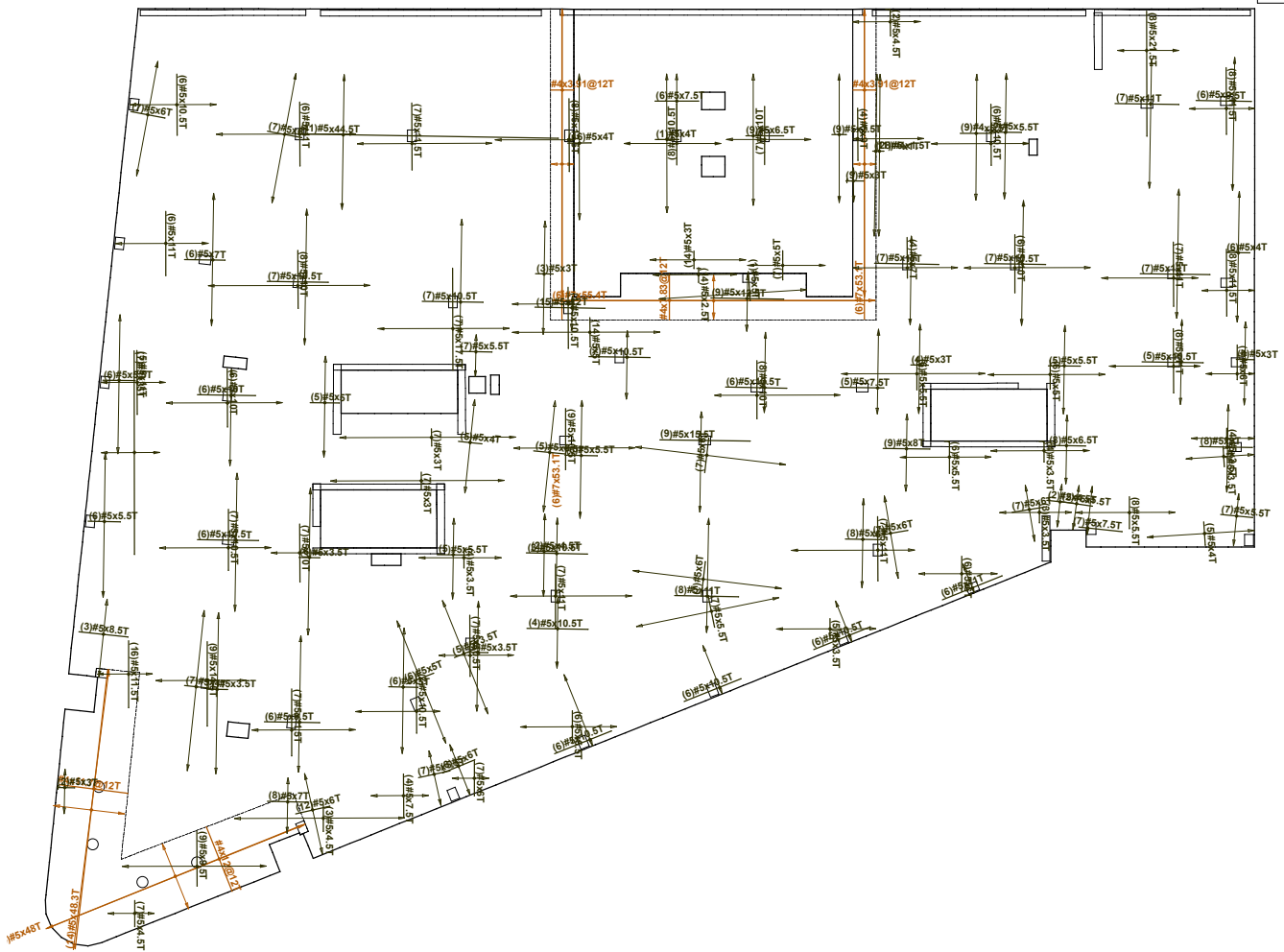
Design Strip: Punching Checks Plan

Design Strip: User Lines; User Notes; User Dimensions; Punching Checks; Punching Check Sections;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



Reinforcement: Top Bars Plan

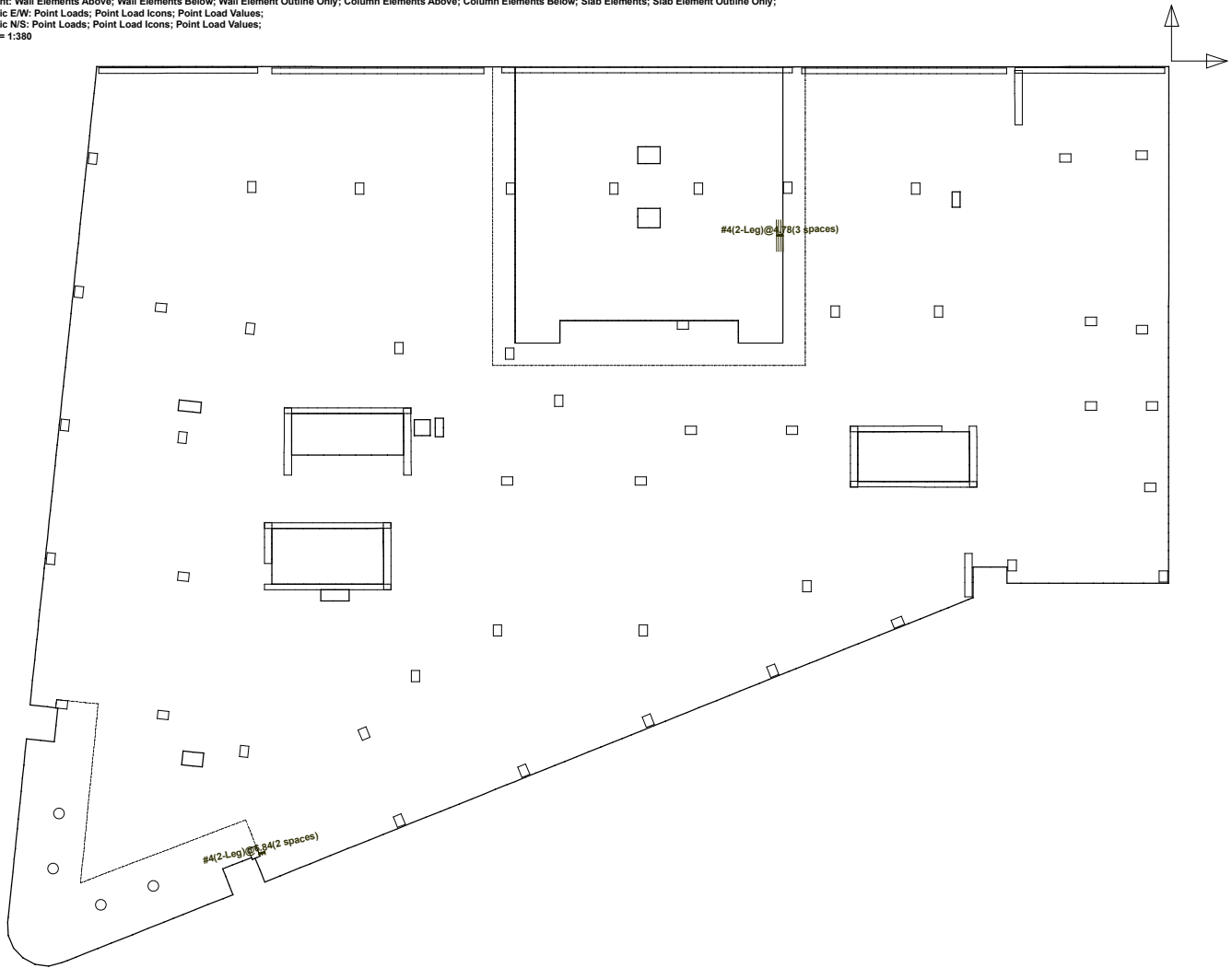
Reinforcement: User Lines; User Notes; User Dimensions; Latitude User Concentrated Reinf.; Latitude Program Concentrated Reinf.; Latitude User Distributed Reinf.; Latitude Program Distributed Reinf.; Longitude User Concentrated Reinf.; Longitude Program Concentrated Reinf.
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



[illegible]

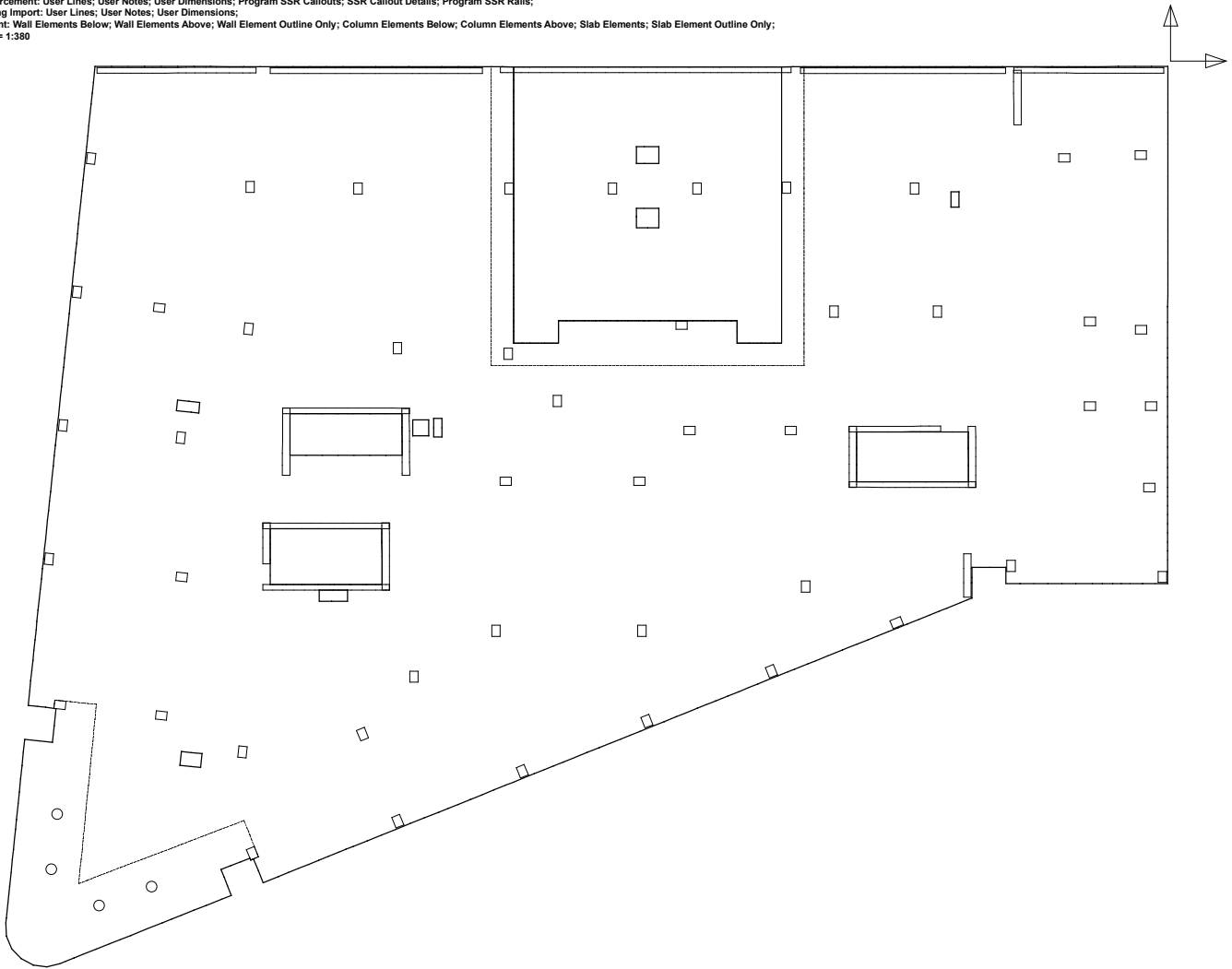
Reinforcement: Shear Bars Plan

Reinforcement: Latitude User Transverse Reinf.; Longitude User Transverse Reinf.; Latitude Program Transverse Reinf.; Longitude Program Transverse Reinf.; Transverse Reinf. Descriptions; Transverse Reinf. Extent; Latitude User Individual Transverse Bars; Longitude User Individual Transverse Bars;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Seismic E/W: Point Loads; Point Load Icons; Point Load Values;
 Seismic N/S: Point Loads; Point Load Icons; Point Load Values;
 Scale = 1:380



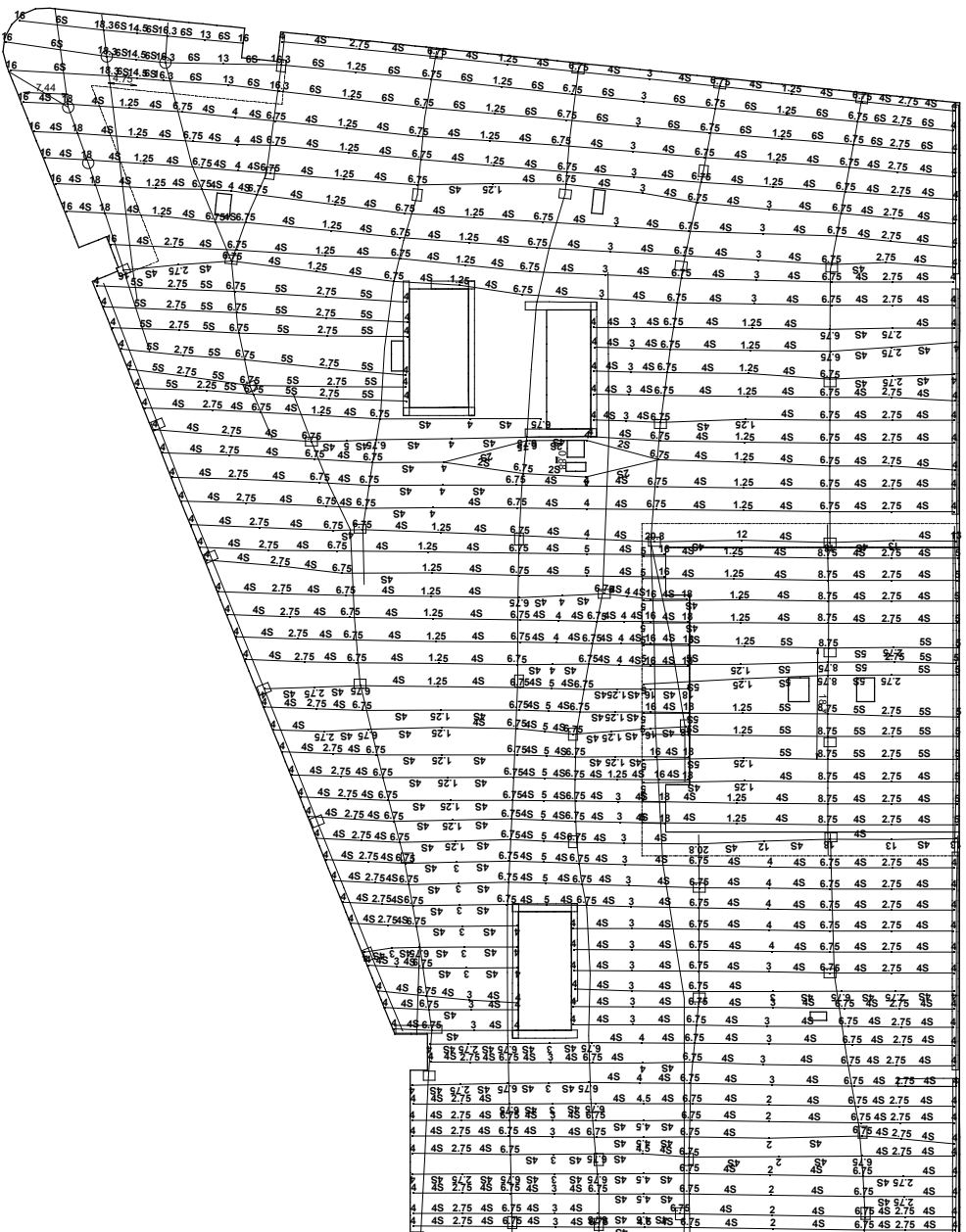
Reinforcement: SSR Plan

Reinforcement: User Lines; User Notes; User Dimensions; Program SSR Callouts; SSR Callout Details; Program SSR Rails;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:380



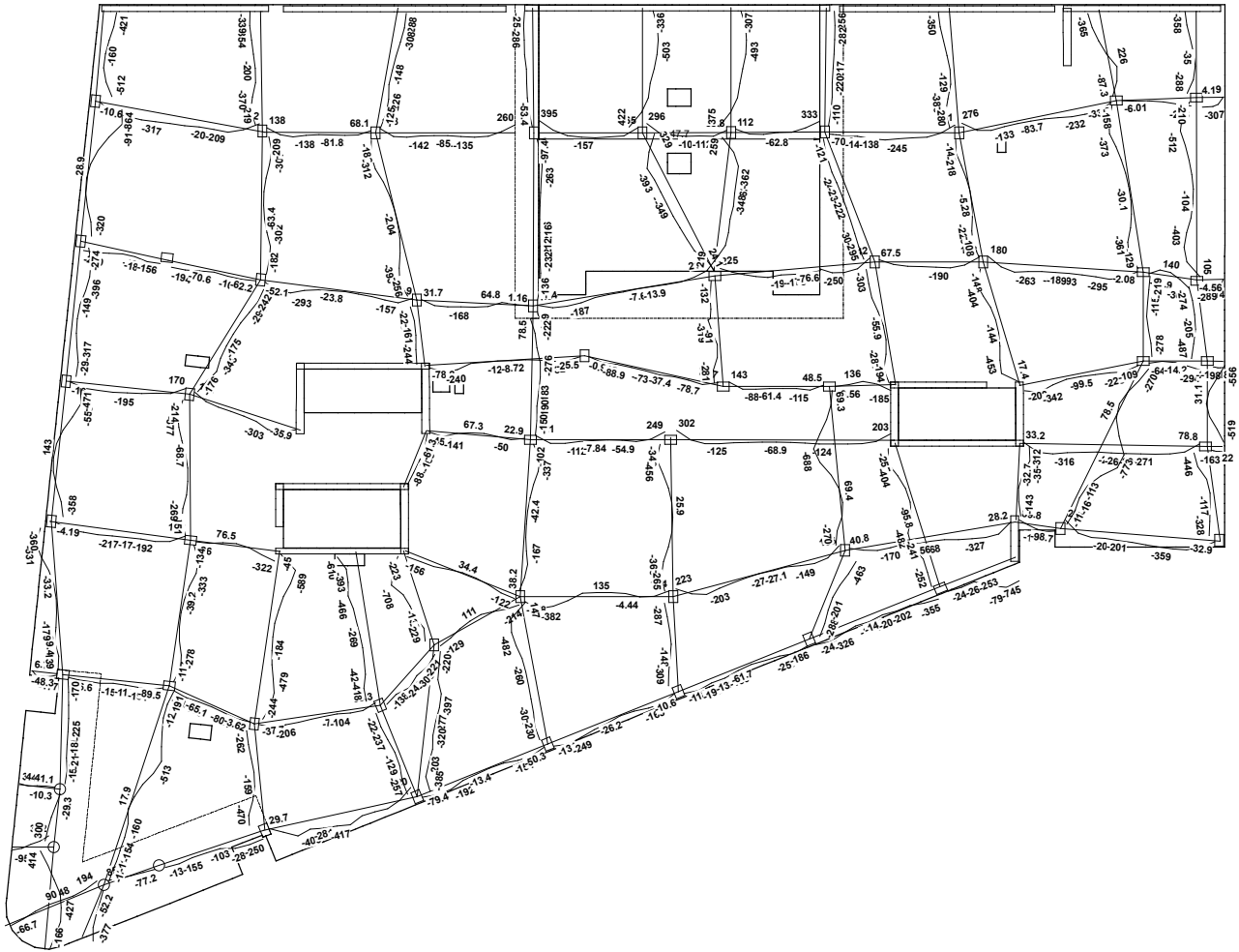
Manual Longitude Tendon: Standard Plan

Manual Longitude Tendon: Tendons; Num Strands; Jacks; Tendon Points; Profile Values; User Notes; User Dimensions;
Drawing Input; User Lines; User Notes; User Dimensions;
Element: Wall Elements Above Wall Elements Below Wall Element Outline Only; Column Elements Above Column Elements Below; Slab Elements; Slab Element Outline Only;
Manual Latitude Tendon: Tendons; Standard Tendon Description; Distributed Tendon Description; Section Region; Distributed Tendon Overlap Areas; Profile Points; Profile Elevation Values; Profile Notes;
Scale = 1:300



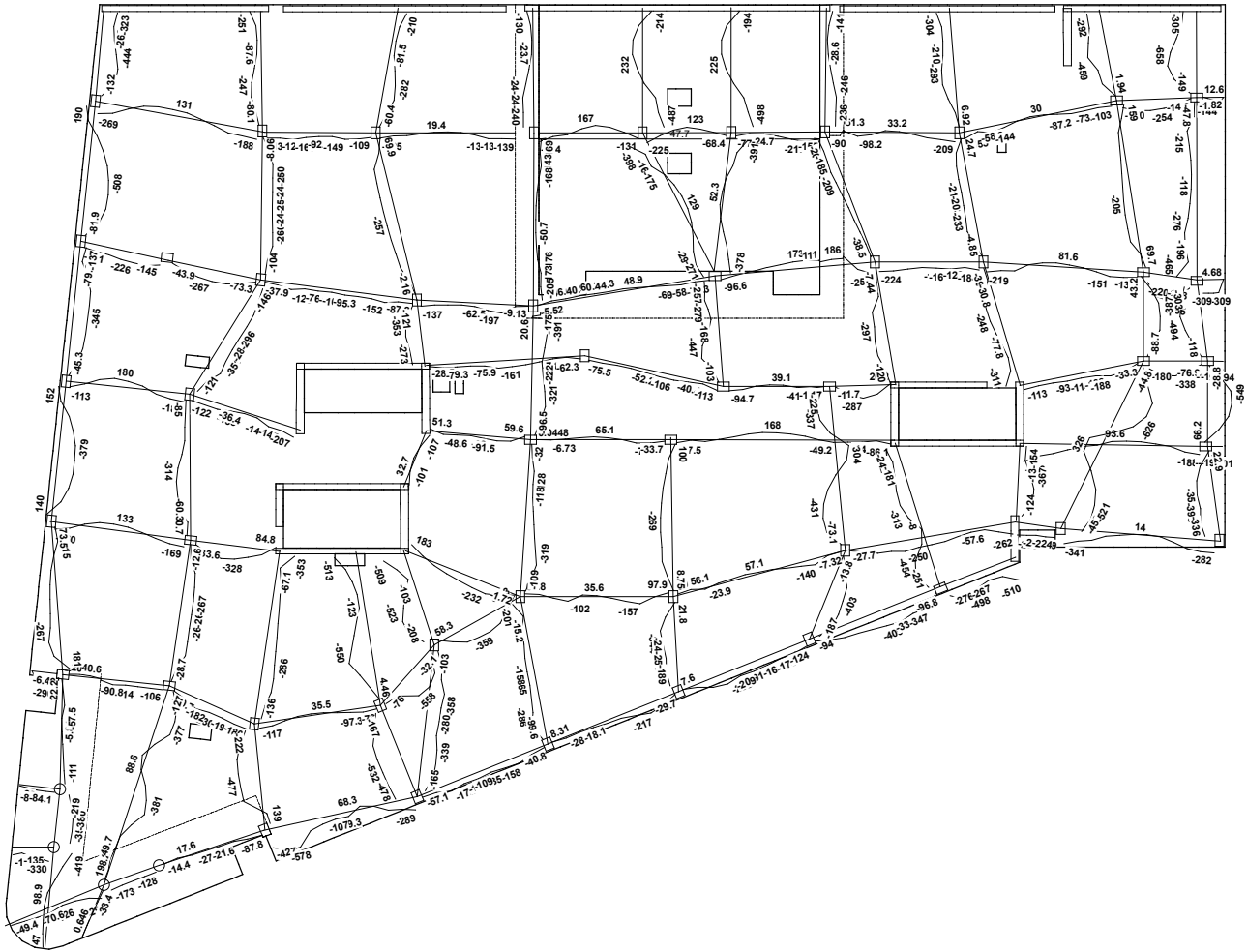
Service Design: Top Stress Plan

Service Design: User Lines; User Notes; User Dimensions; Latitude Span Designs; Longitude Span Designs; Latitude DS Designs; Longitude DS Designs;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
 Scale = 1:300
 Service Design - Section Analysis Plot: (Gross Section Top Concrete Stress)(Context: Max Demand)



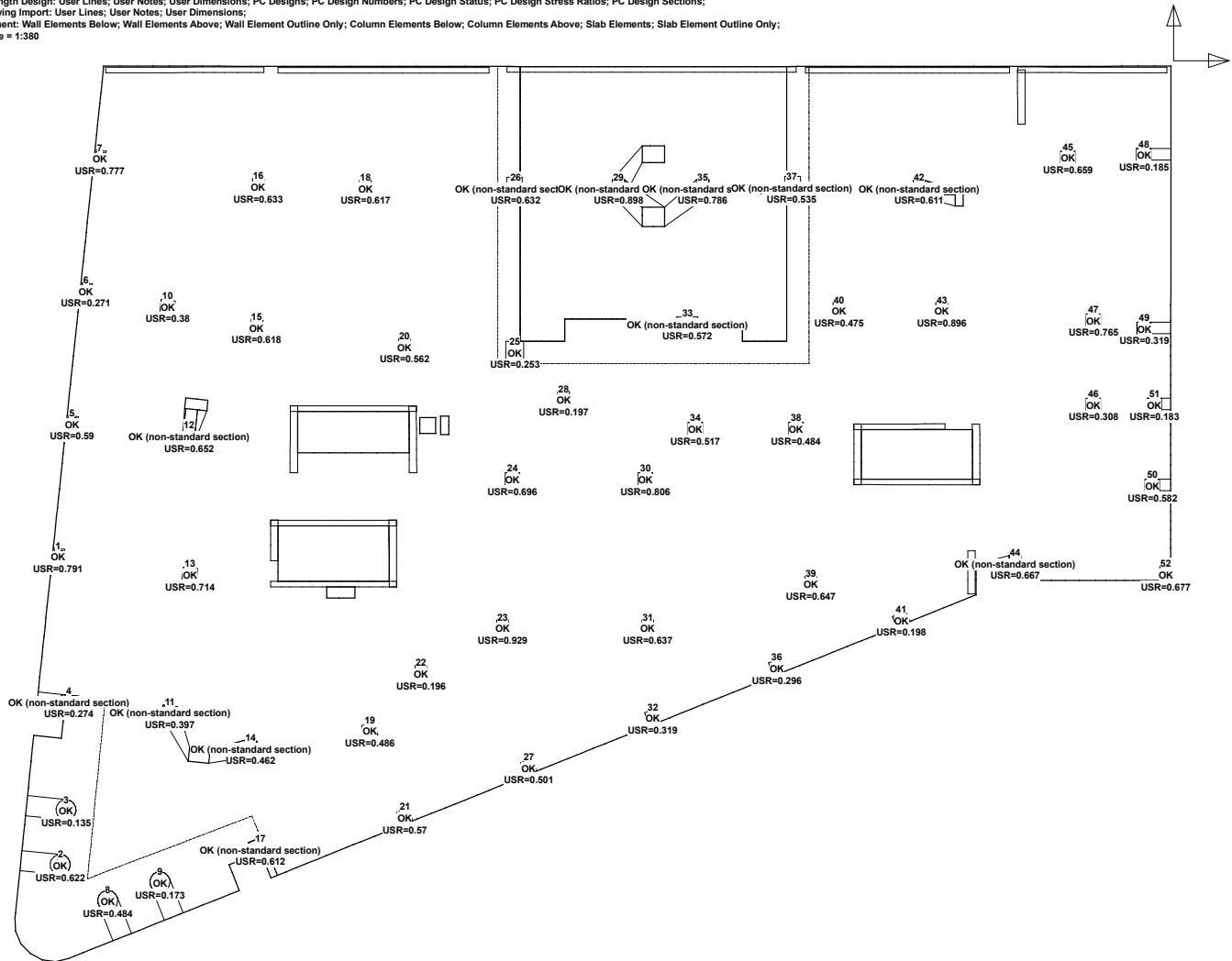
Service Design: Bottom Stress Plan

Service Design: User Lines; User Notes; User Dimensions; Latitude Span Designs; Longitude Span Designs; Latitude DS Designs; Longitude DS Designs;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
 Scale = 1:300
 Service Design - Section Analysis Plot: (Gross Section Bottom Concrete Stress)(Context: Max Demand)



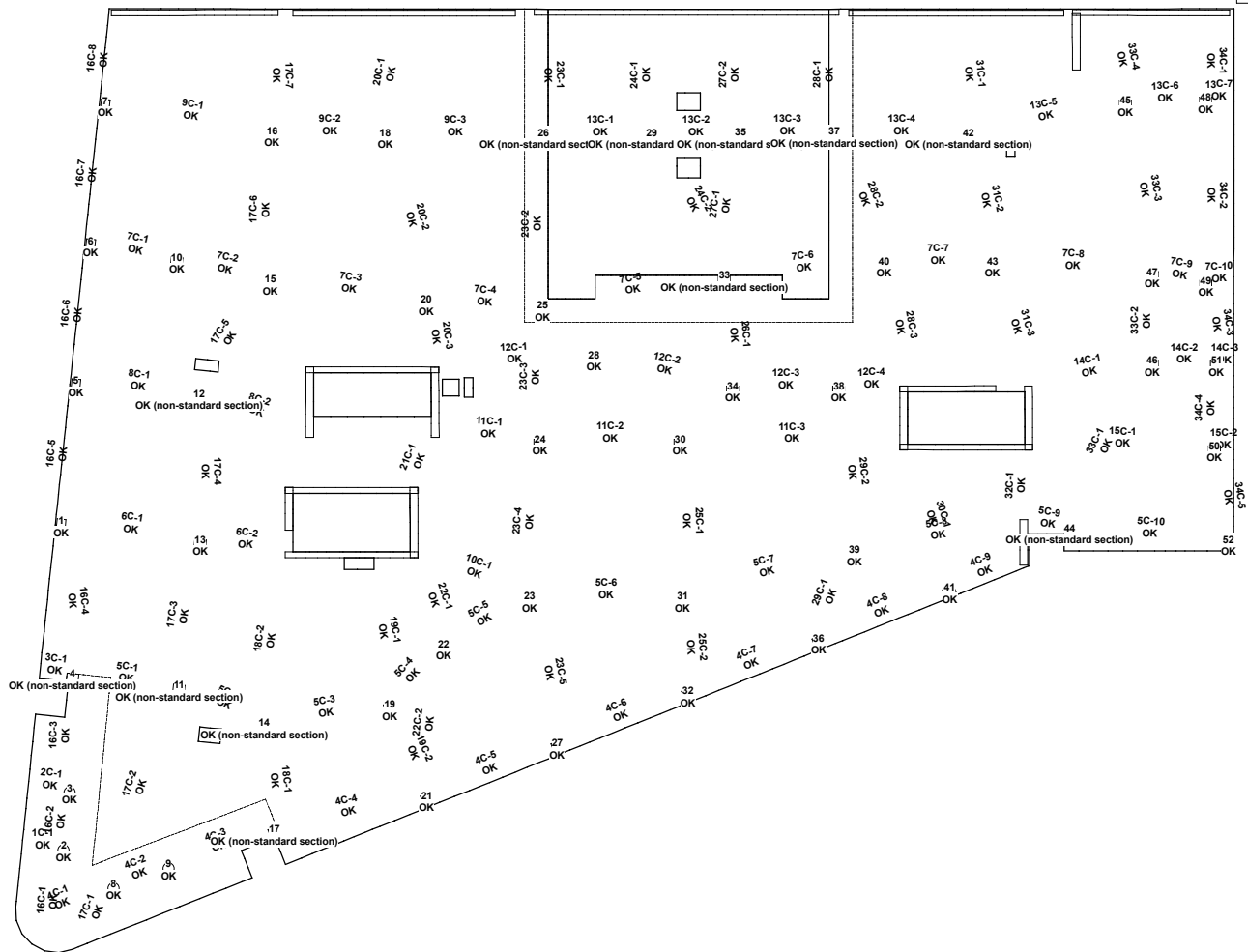
Strength Design: Punching Shear Status Plan

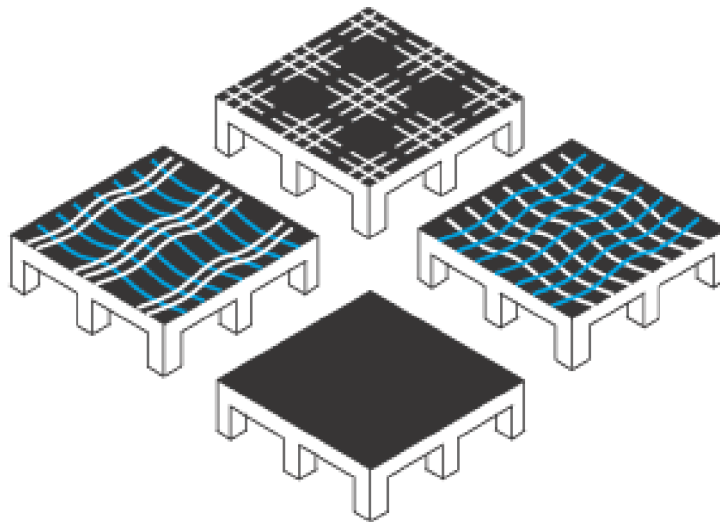
Strength Design: User Lines; User Notes; User Dimensions; PC Designs; PC Design Numbers; PC Design Status; PC Design Stress Ratios; PC Design Sections;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



Design Status: Status Plan

Design Status: Latitude Span Designs; Longitude Span Designs; Span Design Numbers; Span Design Status; Latitude DS Designs; Longitude DS Designs; DS Design Numbers; DS Design Status; PC Designs; PC Design Numbers; PC Design Status; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380





Level 4.50.cpt
12/11/2019

RAM Concept © 2019 Bentley Systems, Inc.
RAM Concept™ is a trademark of Bentley Systems

Table of Contents

Units	4
Signs	5
Materials	6
Loadings	8
Load Combinations	9
Design Rules	15
Detailing Rules	16
Load History	17
Mesh Input: Walls Below Table	18
Mesh Input: Columns Below Table	20
Mesh Input: Slab Areas Table	26
Mesh Input: Beams Table	28
Mesh Input: Standard Plan	30
Other Dead Loading: Point Loads Plan	31
Other Dead Loading: Line Loads Plan	32
Other Dead Loading: Area Loads Plan	33
Live (Unreducible) Loading: Point Loads Plan	34
Live (Unreducible) Loading: Line Loads Plan	35
Live (Unreducible) Loading: Area Loads Plan	36
Live (Unreducible) Loading: Std Reactions Plan	37
Snow Loading: Point Loads Plan	38
Snow Loading: Line Loads Plan	39
Snow Loading: Std Reactions Plan	40
Seismic E/W: Point Loads Plan	41
Seismic E/W: Std Reactions Plan	42
Seismic N/S: Point Loads Plan	43
Seismic N/S: Area Loads Plan	44
Seismic N/S: Std Reactions Plan	45
Service LC: D + L: Max Deflection Plan	46
Service LC: D + L: Min Deflection Plan	47
Service LC: D + L: Reaction Plan	48
Long Term deflection: Max Deflection Plan	49
Design Strip: Latitude SSs Table	50
Design Strip: Longitude SSs Table	66
Design Strip: Latitude SSSs Table	82
Design Strip: Longitude SSSs Table	86
Design Strip: Punching Checks Table	90
Design Strip: Latitude Design Spans Plan	96
Design Strip: Longitude Design Spans Plan	97
Design Strip: Punching Checks Plan	98
Reinforcement: Top Bars Plan	99
Reinforcement: Bottom Bars Plan	100
Reinforcement: Shear Bars Plan	101
Reinforcement: SSR Plan	102
Manual Latitude Tendon: Standard Plan	103
Manual Longitude Tendon: Standard Plan	104
Service Design: Top Stress Plan	105
Service Design: Bottom Stress Plan	106

Table of Contents (2)

Strength Design: Punching Shear Status Plan 107

Design Status: Status Plan 108

Units

Geometry Unit:

Plan Dimensions: feet

Angles: degrees

Slab Thickness: inches

Elevations: inches

Support Dimensions: inches

Support Height: feet

Loading and Reaction Unit

Point Force: Kips

- Report As Zero: 0 Kips

Point Moment: kip-ft

- Report As Zero: 0 kip-ft

Line Force: kips/ft

- Report As Zero: 0 kips/ft

Line Moment: Kips

- Report As Zero: 0 Kips

Area Force: psf

- Report As Zero: 0 psf

Area Moment: #/foot

- Report As Zero: 0 #/foot

Spring and Stiffness Unit:

Point Force Spring: kips/in

Point Moment Spring: k-ft/°

Line Force Spring: ksi

Line Moment Spring: k/°

Area Force Spring: pci

Area Moment Spring: k/ft°

Slab Analysis Unit:

Force: Kips

- Report As Zero: 0 Kips

Force Per Width: kips/ft

- Report As Zero: 0 kips/ft

Moment: kip-ft

- Report As Zero: 0 kip-ft

Moment Per Width: Kips

- Report As Zero: 0 Kips

Concrete Stress: psi

- Report As Zero: 0 psi

Deflection: inches

- Report As Zero: 0 inches

Materials Unit:

Concrete Volume: yd³

Reinforcement Weight: tons

PT Weight: pounds

Reinforcing Area: in²

Tendon Profile: inches

Cover: inches

PT Force: Kips

Reinforcing Stress: ksi

Miscellaneous Unit

Floor Area: ft²

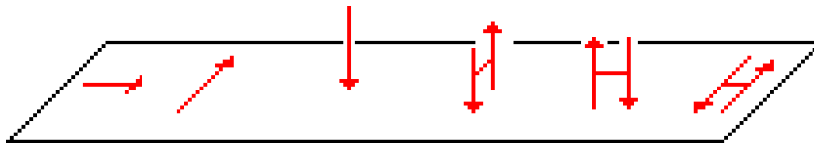
Tendon Angles (for friction): radians

Density: pcf

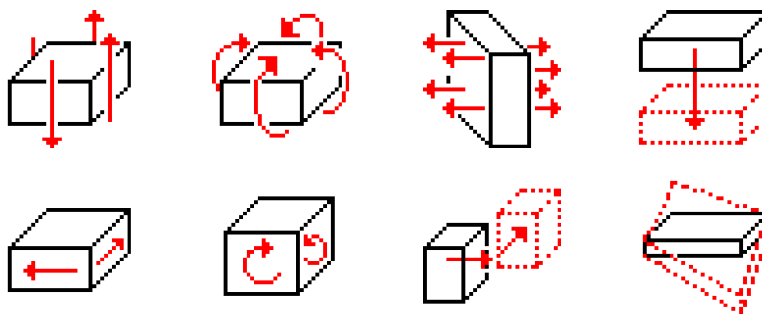
Elongations: inches

Signs

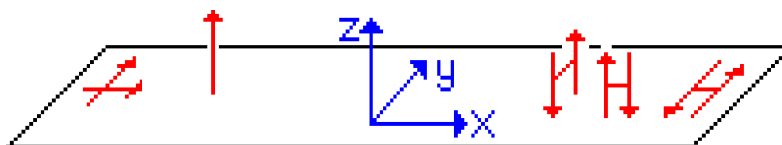
Positive Loads



Positive Analysis



Positive Reactions



Materials

Concrete Mix

Mix Name	Density (pcf)	Density For Loads (pcf)	f'ci (psi)	f'c (psi)	f'cui (psi)	f'cu (psi)	Poissons Ratio	Ec Calc	User Eci (psi)	User Ec (psi)
3000 psi	150	150	3000	3000	3725	3725	0.2	Code	2500000	3000000
4000 psi	150	150	3000	4000	3725	4975	0.2	Code	2500000	3000000
5000 psi	150	150	3000	5000	3725	6399	0.2	Code	2500000	3000000
6000 psi	150	150	3000	6000	3725	7450	0.2	Code	2500000	3000000

PT Systems

System Name	Type	Aps (in ²)	Eps (ksi)	fse (ksi)	fpv (ksi)	fpu (ksi)	Duct Width (inches)	Strands Per Duct	Min Radius (feet)
1/2" Unbonded	unbonded	0.153	28000	175	243	270	0.5	1	6
1/2" Bonded	bonded	0.153	28000	160	243	270	3	4	6
0.6" Unbonded	unbonded	0.217	28000	175	243	270	0.6	1	8
0.6" Bonded	bonded	0.217	28000	160	243	270	4	4	8

PT Stressing Parameters

System Name	Jacking Stress (ksi)	Seating Loss (inches)	Anchor Friction	Wobble Friction (1/feet)	Angular Friction (1/radians)	Long-Term Losses (ksi)
1/2" Unbonded	216	0.25	0	0.0014	0.07	22
1/2" Bonded	216	0.25	0.02	0.001	0.2	22
0.6" Unbonded	216	0.25	0	0.0014	0.07	22
0.6" Bonded	216	0.25	0.02	0.001	0.2	22

Reinforcing Bars

Bar Name	As (in ²)	Es (ksi)	Fy (ksi)	Coating	Straight Ld/Db	90 Hook Ld/Db	180 Hook Ld/Db
#3	0.11	29000	60	None	Code	Code	Code
#4	0.2	29000	60	None	Code	Code	Code
#5	0.31	29000	60	None	Code	Code	Code
#6	0.44	29000	60	None	Code	Code	Code
#7	0.6	29000	60	None	Code	Code	Code
#8	0.79	29000	60	None	Code	Code	Code
#9	1	29000	60	None	Code	Code	Code
#10	1.27	29000	60	None	Code	Code	Code
#11	1.56	29000	60	None	Code	Code	Code

Materials (2)

SSR Systems

<i>SSR System Name</i>	<i>Stud Area (in²)</i>	<i>Head Area (in²)</i>	<i>Min Clear Head Spacing (inches)</i>	<i>Specified Stud Spacing (inches)</i>	<i>Fy (ksi)</i>	<i>Stud Spacing Rounding Increment (inches)</i>	<i>Min Studs Per Rail</i>	<i>System Type</i>
3/8" SSR	0.11	1.11	0.5	None	50	0.25	2	Rail
1/2" SSR	0.196	1.96	0.5	None	50	0.25	2	Rail
5/8" SSR	0.307	3.07	0.5	None	50	0.25	2	Rail
3/4" SSR	0.442	4.42	0.5	None	50	0.25	2	Rail
Ancon Shearfix Auto-Size	0.217	1.096	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 10 mm	0.1217	1.096	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 12 mm	0.1753	1.578	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 14 mm	0.2386	2.147	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 16 mm	0.3116	2.805	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 20 mm	0.4869	4.383	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 24 mm	0.7012	6.311	0.5906	None	72.52	0.03937	2	Rail

Loadings

<i>Loading Name</i>	<i>Type</i>	<i>Analysis</i>	<i>On-Pattern Factor</i>	<i>Off-Pattern Factor</i>
Self-Dead Loading	Self-Weight	Normal	1	1
Balance Loading	Balance	Normal	1	1
Hyperstatic Loading	Hyperstatic	Hyperstatic	1	1
Temporary Construction (At Stressing) Loading	Stressing Dead	Normal	1	1
Other Dead Loading	Dead	Normal	1	1
Live (Reducible) Loading	Live (Reducible)	Normal	1	0
Live (Unreducible) Loading	Live (Unreducible)	Normal	1	0
Live (Storage) Loading	Live (Storage)	Normal	1	0
Live (Parking) Loading	Live (Parking)	Normal	1	0
Live (Roof) Loading	Live (Roof)	Normal	1	0
Snow Loading	Snow	Normal	1	1
Seismic E/W	Ultimate Seismic 1 (transfer)	Normal	1	0
Seismic N/S	Ultimate Seismic 1 (transfer)	Normal	1	0

Load Combinations

All Dead LC

Active Design Criteria: <none>

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Other Dead Loading	1	1

Dead + Balance LC

Active Design Criteria: <none>

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1

Initial Service LC

Active Design Criteria: Initial Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1.13	1.13
Temporary Construction (At Stressing) Loading	1	1

Service LC: D + L

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Reducible) Loading	1	0
Live (Unreducible) Loading	1	0
Live (Storage) Loading	1	0
Live (Parking) Loading	1	0

Service LC: D + Lr

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Roof) Loading	1	0

Load Combinations (2)

Service LC: D + S

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Snow Loading	1	0

Service LC: D + 0.75L + 0.75Lr

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Reducible) Loading	0.75	0
Live (Unreducible) Loading	0.75	0
Live (Storage) Loading	0.75	0
Live (Parking) Loading	0.75	0
Live (Roof) Loading	0.75	0

Service LC: D + 0.75L + 0.75S

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Reducible) Loading	0.75	0
Live (Unreducible) Loading	0.75	0
Live (Storage) Loading	0.75	0
Live (Parking) Loading	0.75	0
Snow Loading	0.75	0

Sustained Service LC

Active Design Criteria: Sustained Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Reducible) Loading	0.5	0.5
Live (Unreducible) Loading	0.5	0.5
Live (Storage) Loading	1	1
Live (Parking) Loading	0.5	0.5
Live (Roof) Loading	0.5	0.5

Load Combinations (3)

Factored LC: 1.4D

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.4	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.4	0.9

Factored LC: 1.2D + 1.6L + 0.5Lr

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.2	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.2	0.9
Live (Reducible) Loading	1.6	0
Live (Unreducible) Loading	1.6	0
Live (Storage) Loading	1.6	0
Live (Parking) Loading	1.6	0
Live (Roof) Loading	0.5	0

Factored LC: 1.2D + f1L + 1.6Lr

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.2	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.2	0.9
Live (Reducible) Loading	0.5	0
Live (Unreducible) Loading	1	0
Live (Storage) Loading	1	0
Live (Parking) Loading	1	0
Live (Roof) Loading	1.6	0

Factored LC: 1.2D + 1.6L + 0.5S

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.2	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.2	0.9
Live (Reducible) Loading	1.6	0
Live (Unreducible) Loading	1.6	0
Live (Storage) Loading	1.6	0
Live (Parking) Loading	1.6	0
Snow Loading	0.5	0

Load Combinations (4)

Factored LC: 1.2D + f1L + 1.6S

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.2	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.2	0.9
Live (Reducible) Loading	0.5	0
Live (Unreducible) Loading	1	0
Live (Storage) Loading	1	0
Live (Parking) Loading	1	0
Snow Loading	1.6	0

Long Term deflection

Active Design Criteria: <none>

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	3.35	3.35
Balance Loading	3.35	3.35
Other Dead Loading	3.35	3.35
Live (Unreducible) Loading	2	2
Snow Loading	1	1

Earthquake N-S: (1.2+.2*Sds)D + 2.5E + 0.5L+0.2S

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.344	1.344
Hyperstatic Loading	1	1
Other Dead Loading	1.344	1.344
Live (Unreducible) Loading	0.5	0.5
Snow Loading	0.2	0.2
Seismic N/S	2.5	2.5

Earthquake N-S: (0.9-0.2*Sds)D + 2.5E

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.756	0.756
Hyperstatic Loading	1	1
Other Dead Loading	0.756	0.756
Seismic N/S	2.5	2.5

Load Combinations (5)

Earthquake E-W: $(1.2+0.2*S_{ds})D + 2.5E + 0.5L+0.2S$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.344	1.344
Hyperstatic Loading	1	1
Other Dead Loading	1.344	1.344
Live (Unreducible) Loading	0.5	0.5
Snow Loading	0.2	0.2
Seismic E/W	2.5	2.5

Earthquake E-W: $(0.9-0.2*S_{ds})D + 2.5E$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.756	0.756
Hyperstatic Loading	1	1
Other Dead Loading	0.756	0.756
Seismic E/W	2.5	2.5

Earthquake N-S: $(1.2+0.2*S_{ds})D - 2.5E + .5L + 0.2S$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.344	1.344
Hyperstatic Loading	1	1
Other Dead Loading	1.344	1.344
Live (Unreducible) Loading	0.5	0.5
Snow Loading	0.2	0.2
Seismic N/S	-2.5	-2.5

Earthquake N-S: $(0.9-0.2*S_{ds})D - 2.5E$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.756	0.756
Hyperstatic Loading	1	1
Other Dead Loading	0.756	0.756
Seismic N/S	-2.5	-2.5

Load Combinations (6)

Earthquake E-W: $(1.2+0.2*S_{ds})D - 2.5E + .5L + 0.2S$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.344	1.344
Hyperstatic Loading	1	1
Other Dead Loading	1.344	1.344
Live (Unreducible) Loading	0.5	0.5
Snow Loading	0.2	0.2
Seismic E/W	-2.5	-2.5

Earthquake E-W: $(0.9-0.2*S_{ds})D - 2.5E$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.756	0.756
Hyperstatic Loading	1	1
Other Dead Loading	0.756	0.756
Seismic E/W	-2.5	-2.5

Design Rules

Code Minimum Design

318-11 Min. Reinforcement

User Minimum Design

Specified Min. Reinforcement

Initial Service Design

318-11 Initial Service Design

Service Design

318-11 Service Design

Include detailed section analysis

Sustained Service Design

318-11 Sustained Service Design

Strength Design

318-11 Strength Design

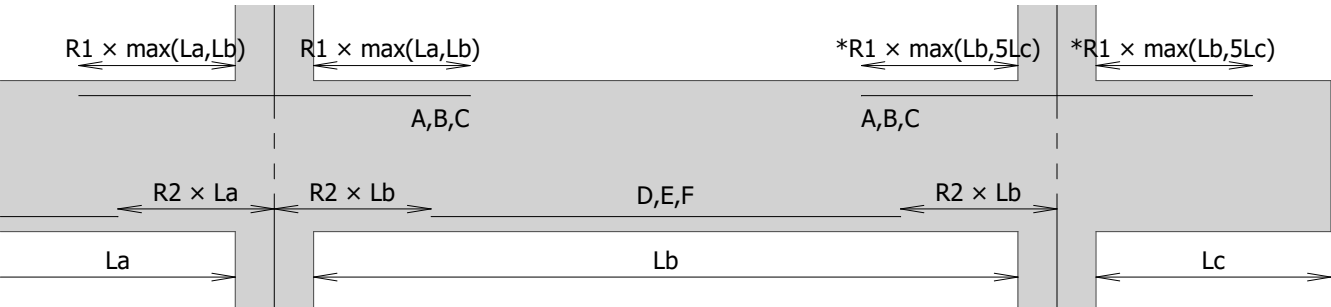
Punching Shear Design

Ductility Design

318-11 Ductility Design

Detailing Rules

Custom Span Detailing Rules



Rule	A	A	B	B	C	C	D	D	E	E	F	F
Name	Fraction	R1	Fraction	R1	Fraction	R1	Fraction	R2	Fraction	R2	Fraction	R2
None	0	0	0	0	0	0	0	0	0	0	0	0

"A", "B" and "C", are support reinforcement sets, based on the peak reinforcement in the support zone.
"D", "E" and "F", are span reinforcement sets, based on the peak reinforcement in the span zone.
"*R1" is never taken as greater than 0.2 when multiplied by Lc (or Lcc).
"Fraction" is the ratio of set reinforcement to peak reinforcement. It is always in the 0.0 to 1.0 range.

Load History

<i>Load History Step Name</i>	<i>Load Combination</i>	<i>Duration (days)</i>	<i>Total Age (days)</i>
Maximum Short Term Load	Service LC: D + L	30	33
Sustained Load	Sustained Service LC	5000	5033
Final Instantaneous Load	Service LC: D + L	0	5033

Mesh Input: Walls Below Table

<i>Number</i>	<i>Location feet</i>	<i>Mix</i>	<i>Fixed Near</i>	<i>Fixed Far</i>	<i>Comp.</i>	<i>Height feet</i>	<i>Thickness inches</i>
1	(-192.2,-1.583)(-159.3,-40583)	psi	false	false	true	10	10
2	(-161.6,-82.57)(-161.6,-60089)	psi	false	false	true	10	12
3	(-158,-74.05)(-158,-62.6500)	psi	false	false	true	10	12
4	(-140.5,-94.13)(-161.6,-60003)	psi	false	false	true	10	12
5	(-140.5,-83.15)(-161.6,-60002)	psi	false	false	true	10	12
6	(-158,-62.55)(-136.2,-62550)	psi	false	false	true	10	12
7	(-140.5,-82.57)(-140.5,-60057)	psi	false	false	true	10	12
8	(-136.7,-62.55)(-136.7,-60005)	psi	false	false	true	10	12
9	(-152,-1.583)(-117.8,-14500)	psi	false	false	true	10	10
10	(-56.72,-65.28)(-56.72,-66002)	psi	false	false	true	10	12
11	(-69.5,-1.552)(-35.53,-14550)	psi	false	false	true	10	8
12	(-56.72,-65.78)(-41.18,-65008)	psi	false	false	true	10	12
13	(-56.72,-75.7)(-35.72,-75000)	psi	false	false	true	10	12
14	(-36.55,-88.08)(-36.55,-65004)	psi	false	false	true	10	12
15	(-35.72,-65.28)(-35.72,-66002)	psi	false	false	true	10	12
16	(-27.39,-11.56)(-27.39,-10583)	psi	false	false	true	10	16
17	(-29.33,-1.583)(-0.666740583)	psi	false	false	true	10	10

Mesh Input: Walls Below Table (2)

<i>Shear Wall</i>	<i>Use Spec LLR Params</i>	<i>Spec. LLR Levels</i>	<i>Spec. Trib. Area ft²</i>	<i>Spec. Infl. Area ft²</i>	<i>Max LLR %</i>
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40

Mesh Input: Columns Below Table

<i>Number</i>	<i>Location feet</i>	<i>Mix</i>	<i>Fixed Near</i>	<i>Fixed Far</i>	<i>Comp.</i>	<i>Height feet</i>	<i>B inches</i>	<i>D inches</i>
1	(-207,-153.1)	5000 psi	true	true	true	10	24	18
2	(-200.6,-89.05)	5000 psi	true	true	true	10	18	24
3	(-199.7,-144.9)	5000 psi	true	true	true	10	18	24
4	(-198.6,-115.2)	5000 psi	true	true	true	10	24	18
5	(-198.6,-134.5)	5000 psi	true	true	true	10	24	18
6	(-198,-65.18)	5000 psi	true	true	true	10	18	24
7	(-197.9,-160)	5000 psi	true	true	true	10	18	24
8	(-195.5,-41.31)	5000 psi	true	true	true	10	18	24
9	(-193,-17.44)	5000 psi	true	true	true	10	18	24
10	(-191.4,-151.5)	5000 psi	true	true	true	10	18	24
11	(-180.8,-44.12)	5000 psi	true	true	true	10	18	24
12	(-180.5,-117.1)	5000 psi	true	true	true	10	24	18
13	(-177,-67.39)	5000 psi	true	true	true	10	18	24
14	(-176.8,-92.28)	5000 psi	true	true	true	10	18	24
15	(-165.9,-123.5)	5000 psi	true	true	true	10	18	24
16	(-164.9,-47.89)	5000 psi	true	true	true	10	18	24
17	(-164.6,-22.53)	5000 psi	true	true	true	10	24	18
18	(-164.4,-141.2)	5000 psi	true	true	true	10	18	24
19	(-145.3,-22.83)	5000 psi	true	true	true	10	18	24
20	(-144.5,-120.4)	5000 psi	true	true	true	10	18	24
21	(-138.3,-51.35)	5000 psi	true	true	true	10	18	24
22	(-138.2,-136)	5000 psi	true	true	true	10	18	24
23	(-135.3,-110.1)	5000 psi	true	true	true	10	18	24
24	(-120.6,-101.9)	5000 psi	true	true	true	10	18	24
25	(-118.9,-75.16)	5000 psi	true	true	true	10	24	18
26	(-118.8,-22.8)	5000 psi	true	true	true	10	18	24
27	(-118.4,-52.35)	5000 psi	true	true	true	10	18	24
28	(-115.9,-127)	5000 psi	true	true	true	10	18	24
29	(-109.7,-60.83)	5000 psi	true	true	true	10	18	24
30	(-95,-75.17)	5000 psi	true	true	true	10	18	24
31	(-94.55,-101.9)	5000 psi	true	true	true	10	18	24
32	(-93.65,-118.1)	5000 psi	true	true	true	10	18	24
33	(-87.45,-47.3)	5000 psi	true	true	true	10	24	18
34	(-86.02,-66.08)	5000 psi	true	true	true	10	24	18
35	(-71.38,-109.1)	5000 psi	true	true	true	10	18	24
36	(-68.7,-22.83)	5000 psi	true	true	true	10	18	24
37	(-67.92,-66.08)	5000 psi	true	true	true	10	24	18
38	(-65.26,-94)	5000 psi	true	true	true	10	18	24
39	(-60.2,-44.83)	5000 psi	true	true	true	10	18	24
40	(-48.99,-100.5)	5000 psi	true	true	true	10	18	24
41	(-45.8,-22.83)	5000 psi	true	true	true	10	18	24
42	(-41.7,-44.83)	5000 psi	true	true	true	10	18	24
43	(-28.53,-90.28)	5000 psi	true	true	true	10	18	24
44	(-19.02,-17.34)	5000 psi	true	true	true	10	24	18
45	(-14.46,-46.58)	5000 psi	true	true	true	10	24	18
46	(-14.45,-61.73)	5000 psi	true	true	true	10	24	18

Mesh Input: Columns Below Table (2)

<i>Angle degrees</i>	<i>Roller</i>	<i>I Factor</i>	<i>Use Spec LLR Params</i>	<i>Spec. LLR Levels</i>	<i>Spec. Trib. Area ft²</i>	<i>Spec. Infl. Area ft²</i>
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
22	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
84	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
84	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
90	false	1	false	1	0	0
22	false	1	false	1	0	0
0	false	1	false	1	0	0
22	false	1	false	1	0	0
0	false	1	false	1	0	0
22	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
22	false	1	false	1	0	0
0	false	1	false	1	0	0
90	false	1	false	1	0	0
0	false	1	false	1	0	0
22	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
22	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
112	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0

cc. Infl. Area

40

Mesh Input: Columns Below Table (4)

<i>Number</i>	<i>Location feet</i>	<i>Mix</i>	<i>Fixed Near</i>	<i>Fixed Far</i>	<i>Comp.</i>	<i>Height feet</i>	<i>B inches</i>	<i>D inches</i>
47	(-5.364,-16.83)	5000 psi	true	true	true	10	24	18
48	(-5.313,-48.08)	5000 psi	true	true	true	10	24	18
49	(-3.839,-76.29)	5000 psi	true	true	true	10	24	18
50	(-3.615,-61.75)	5000 psi	true	true	true	10	24	18
51	(-1.469,-92.28)	5000 psi	true	true	true	10	18	24

Mesh Input: Columns Below Table (5)

<i>Angle degrees</i>	<i>Roller</i>	<i>I Factor</i>	<i>Use Spec LLR Params</i>	<i>Spec. LLR Levels</i>	<i>Spec. Trib. Area ft²</i>	<i>Spec. Infl. Area ft²</i>
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0

Mesh Input: Columns Below Table (6)

<i>c. Infl. Area</i>	<i>Max LLR</i> <i>%</i>
	40
	40
	40
	40
	40

Mesh Input: Slab Areas Table

<i>Number</i>	<i>Location feet</i>	<i>Mix</i>	<i>Thickness inches</i>	<i>TOC inches</i>	<i>Priority</i>	<i>Behavior</i>	<i>R-Axis degrees</i>
1	(-190.7,-158.2)(-168.1,-140.2)(-169.8,-145)(-163.9,-142.7)(-164.8,-140.3)(-193,-150.8)	5000	14	0		two-way slab	0
2	(-164.8,-140.3)(-165.4,-140.6)(-164.5,-142.9)(-163.9,-142.7)	5006	16	5		two-way slab	0
3	(-123,-25.33)(-118,-25.33)(-118,-20.33)(-123,-20.33)	5001	0	5		two-way slab	0
4	(-192.3,-0.7966)(-159,-0.7966)(-159.9,-12.16)(-154.2,-10.67)(-153.2,-0.7966)(-117.5,-0.7966)(-117.5,-50.35)(-109.4,-50.35)(-109	5006	12	7		two-way slab	

Mesh Input: Slab Areas Table (2)

<i>KMr</i>	<i>KMs</i>	<i>KMrs</i>	<i>KFr</i>	<i>KFs</i>	<i>KVrs</i>
1	1	1	1	1	1
1	1	1	1	1	1
1	1	1	1	1	1
1	1	1	1	1	1

Mesh Input: Beams Table

<i>Number</i>	<i>Location feet</i>	<i>Mix</i>	<i>Thickness inches</i>	<i>TOC inches</i>	<i>Priority</i>	<i>Mesh As Slab</i>	<i>Width inches</i>
1	(-200.8,-115.5)(-195.6,-59.65)(-204.1,-165.2)(-198.9,-64.31)(-197.5,-165.8)(-192.3,-64.99)	50065	11.3	0.99	17	true	80
2	(-190.3,-1)(-196.9,-64.55)(-188.3,-0.99)(-194.9,-64.76)(-192.3,-0.99)(-198.9,-64.34)	50065	11.3	0.99	17	true	48
3	(-36.79,-92.65)(-163.5,-100.6)(-35.54,-95.92)(-162.2,-146.8)(-38.1,-89.3)(-164.8,-140.3)	50065	11.3	0.99	17	true	84
4	(-97.9,-48.85)(-77.42,-48.85)(-97.9,-46.35)(-77.42,-46.35)(-97.9,-51.35)(-77.42,-51.35)	50065	11.3	0.99	17	true	60

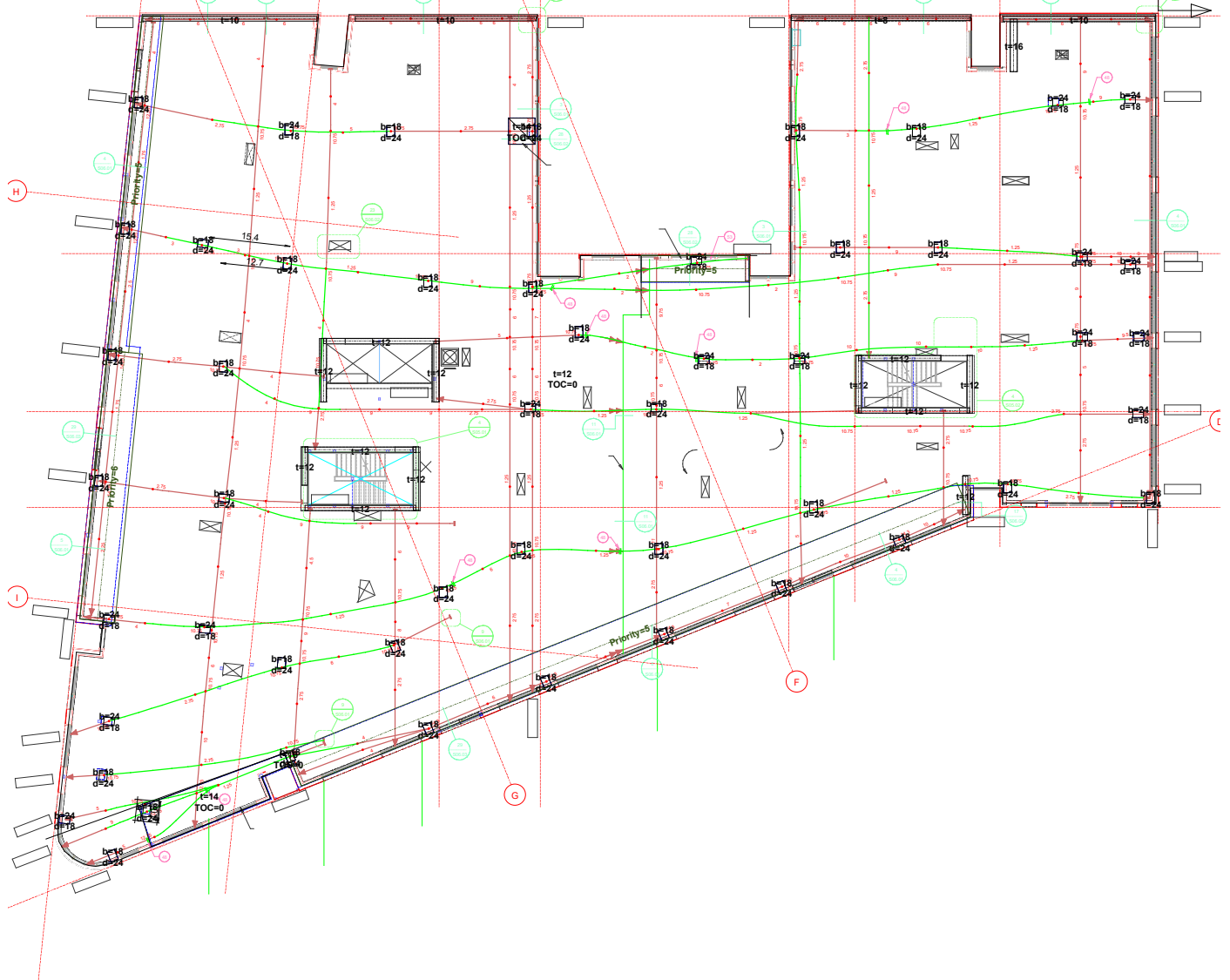
Mesh Input: Beams Table (2)

Width
inches

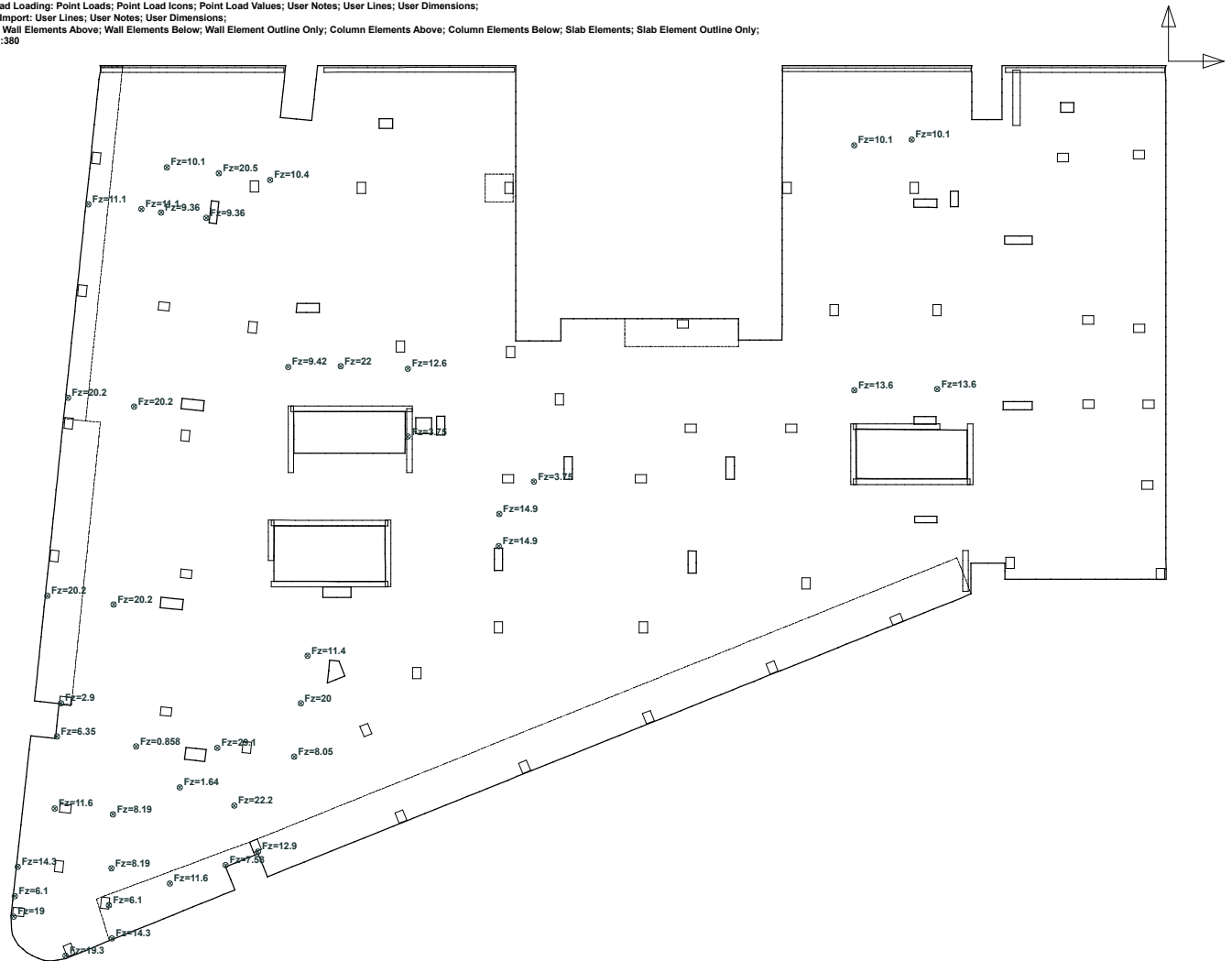
<i>Behavior</i>	<i>KMr</i>	<i>KMs</i>	<i>KMrS</i>	<i>KFr</i>	<i>KFs</i>	<i>KVrs</i>
no-torsion two-way slab	1	1	0.001	1	1	1
no-torsion two-way slab	1	1	0.001	1	1	1
no-torsion two-way slab	1	1	0.001	1	1	1
no-torsion two-way slab	1	1	0.001	1	1	1

Mesh Input: Standard Plan

Mesh Input: Beams; Beam Priorities; Slab Areas; Slab AreaT hicknesses; Slab Area Elevations; Slab Openings; Point Supports; Point Support Icons; Line Supports; Line Support Icons; Walls Above; Walls Below; Wall Thicknesses; Columns Above; Columns Below; Column Dimen:
Drawing Import: User Notes; User Lines; User Dimensions; 0; S-BEAM; S-COLS; A-GENM; A-DETL; S-COLS-SYMB; S-ANNO-SYMB; S-GRID-IDEN; S-ANNO-NOTE; 1803002_A_18S_VE_UPDATE_R17_rvt-1-PT Floor Plan - LEVEL 4(S-STRS; 1803002_A_18S_VE_UPDATE_R17_rvt-1-PT
Scale = 1:380

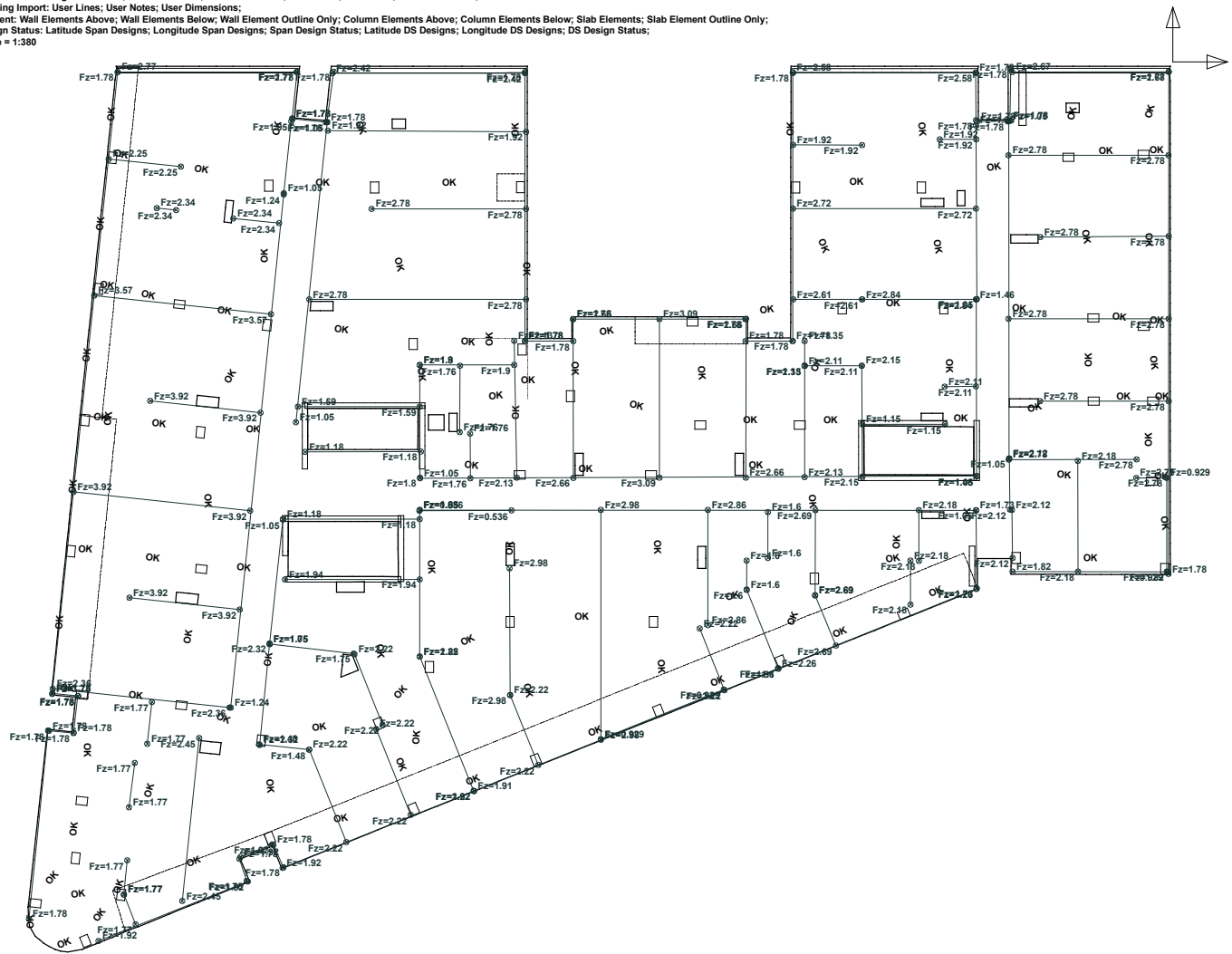


Other Dead Loading: Point Loads; Point Load Icons; Point Load Values; User Notes; User Lines; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Scale = 1:380



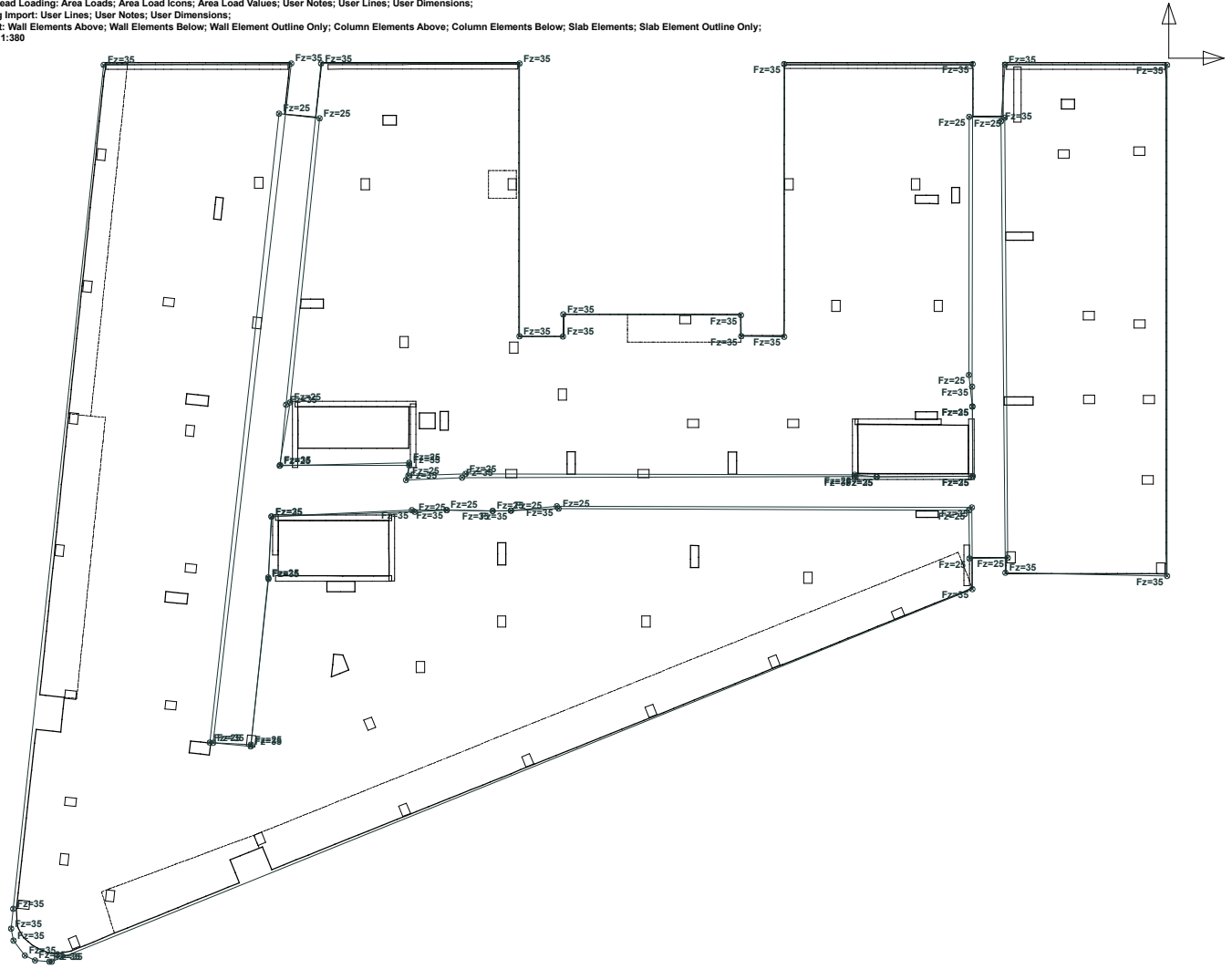
Other Dead Loading: Line Loads Plan

Other Dead Loading: Line Loads; Line Load Icons; Line Load Values; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Design Status: Latitude Span Designs; Span Design Status; Longitude DS Designs; Longitude DS Design Status;
 Scale = 1:380



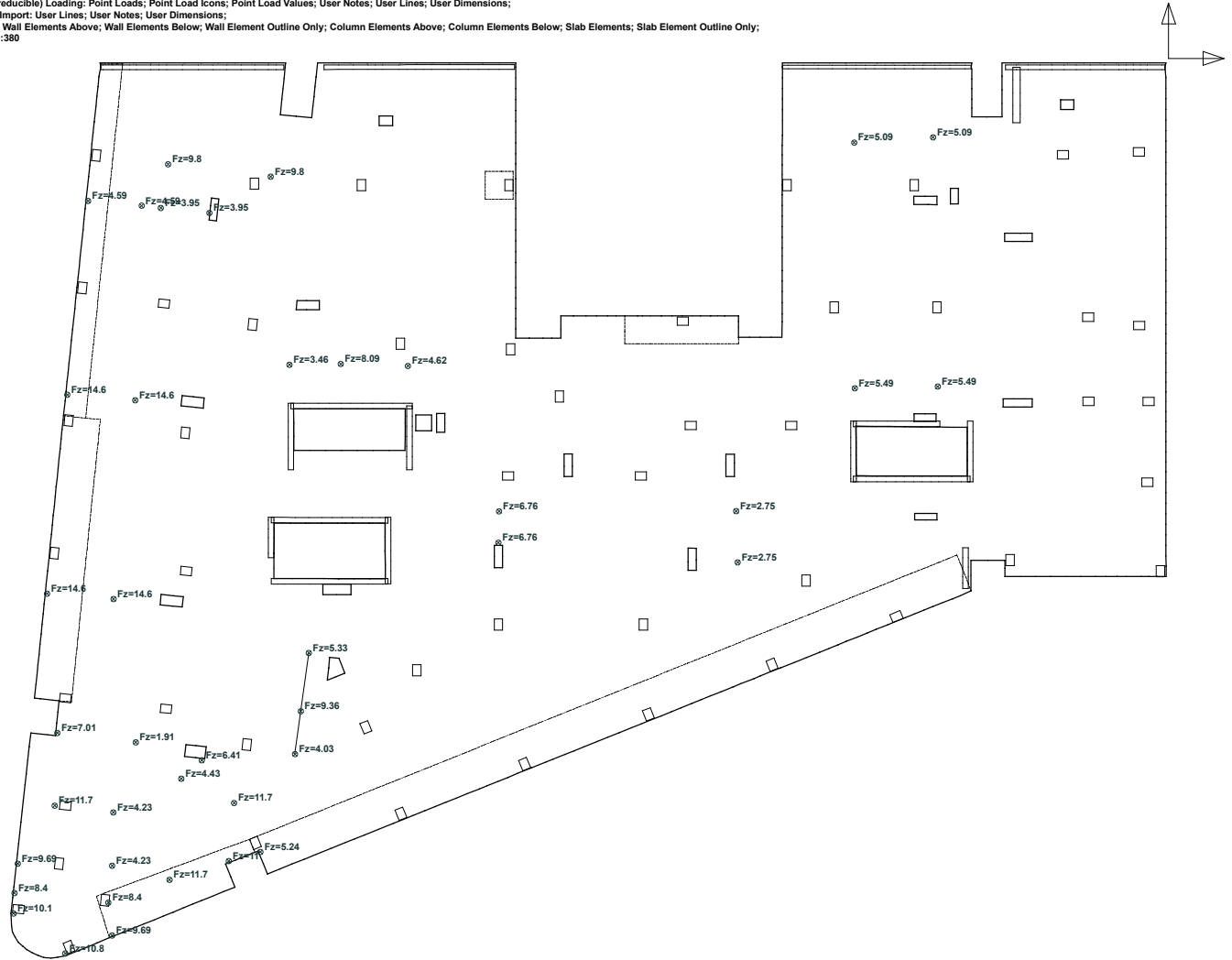
Other Dead Loading: Area Loads Plan

Other Dead Loading: Area Loads; Area Load Icons; Area Load Values; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



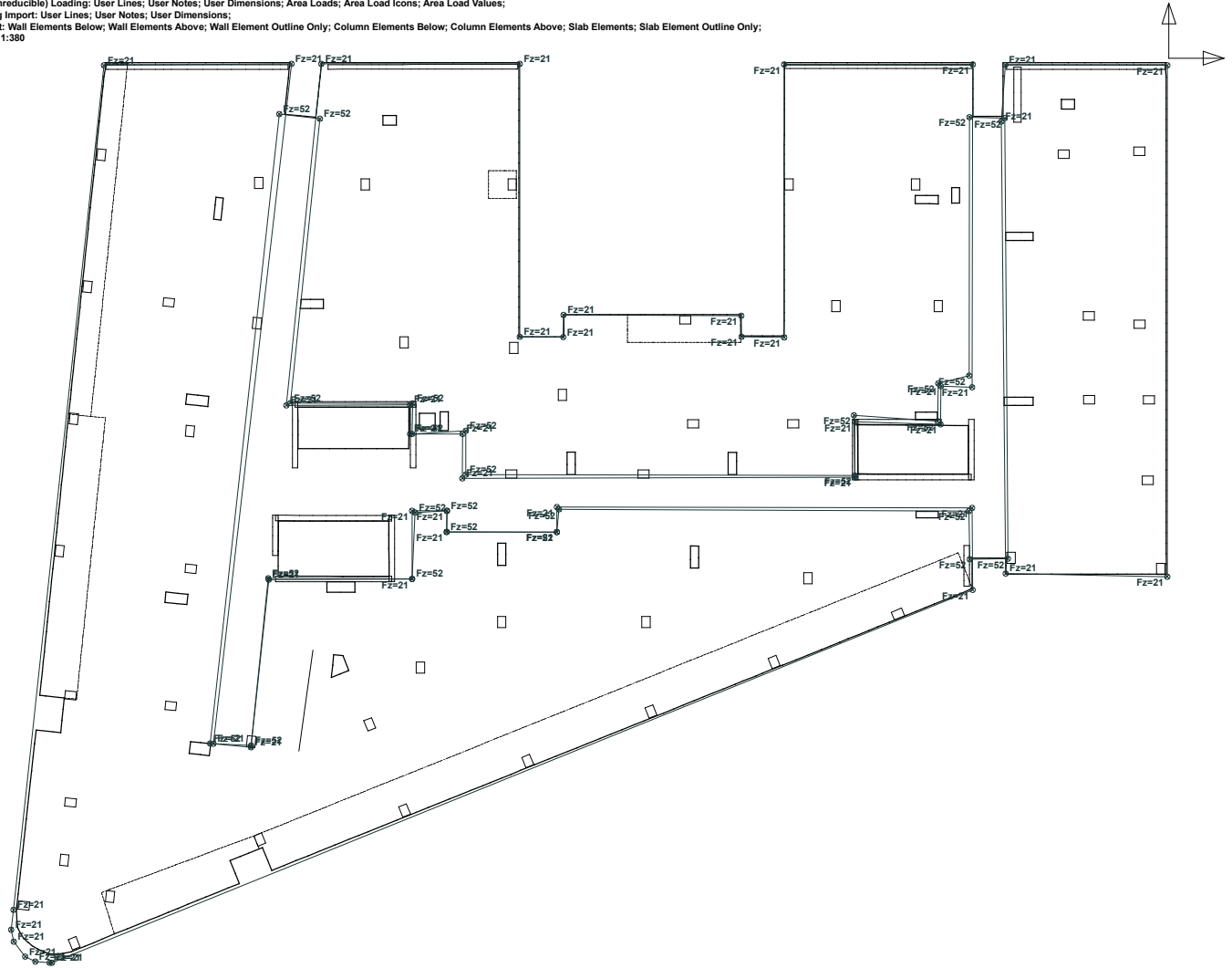
Live (Unreducible) Loading: Point Loads Plan

Live (Unreducible) Loading: Point Loads; Point Load Icons; Point Load Values; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



Live (Unreducible) Loading: Area Loads Plan

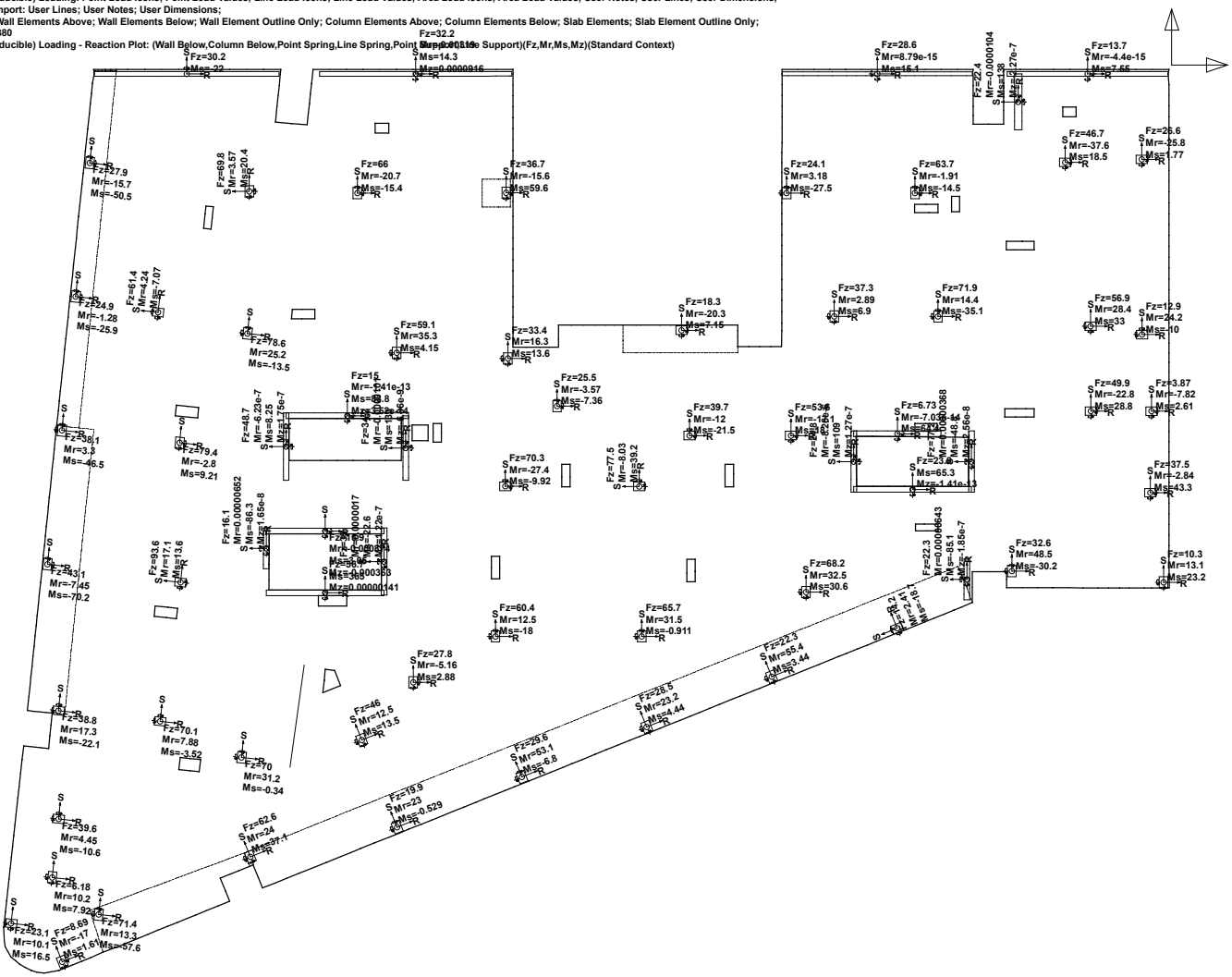
Live (Unreducible) Loading: User Lines; User Notes; User Dimensions; Area Loads; Area Load Icons; Area Load Values;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



Live (Unreducible) Loading: Std Reactions Plan

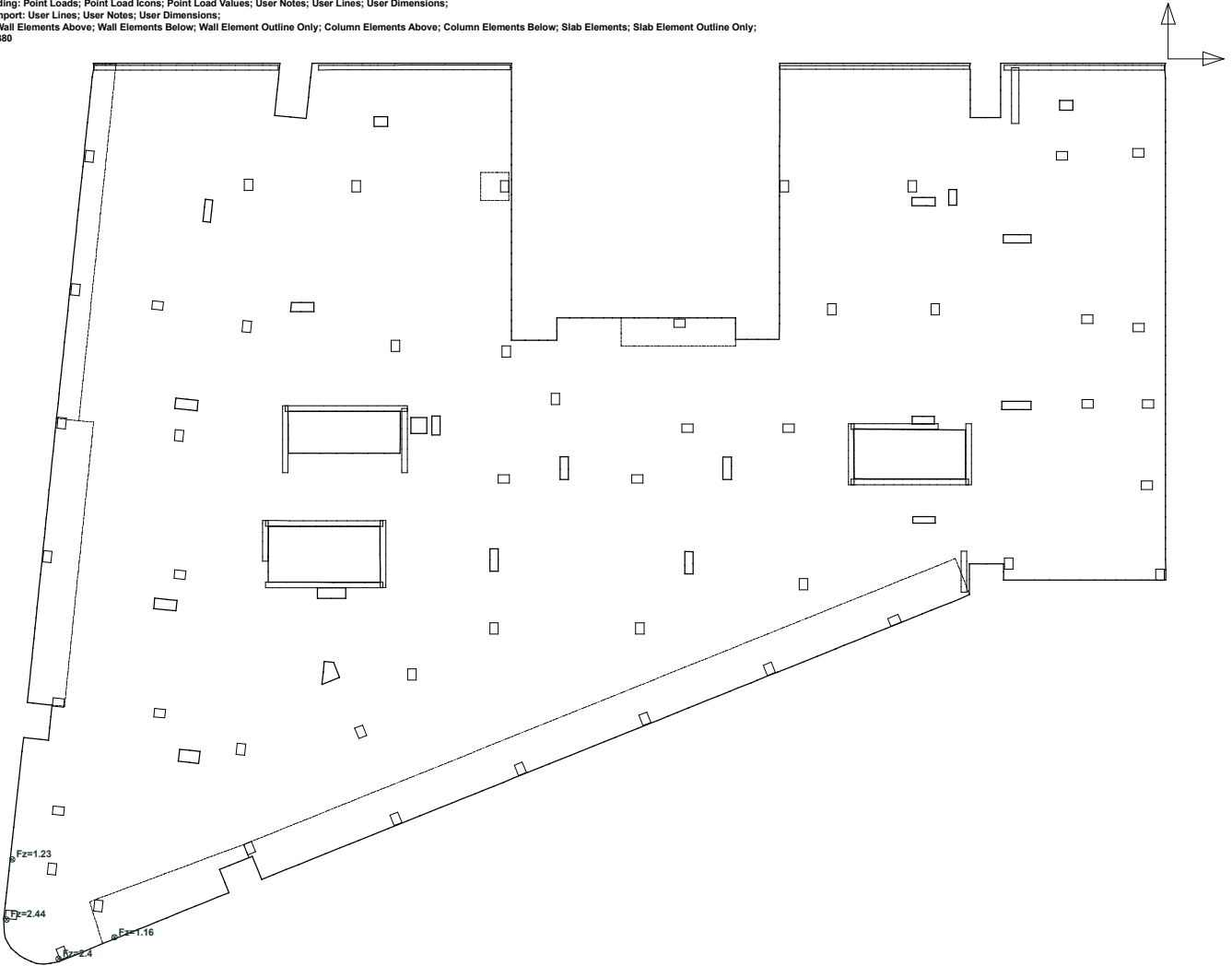
Live (Unreducible) Loading: Point Load Icons; Point Load Values; Line Load Icons; Line Load Values; Area Load Icons; Area Load Values; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380

Live (Unreducible) Loading - Reaction Plot: (Wall Below,Column Below,Point Spring,Line Spring,Point Support,Line Support)(Fz,Mr,Mz)(Standard Context)



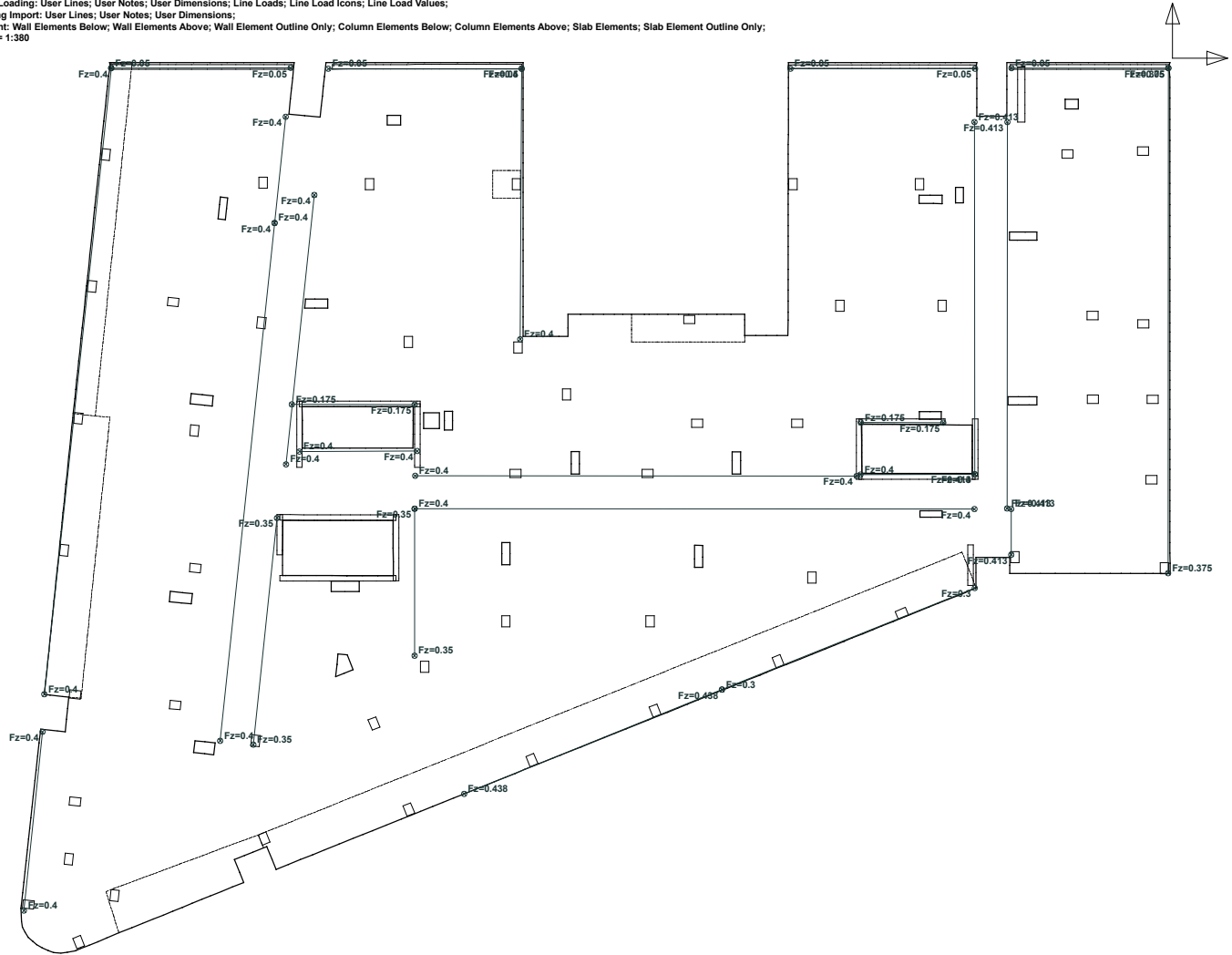
Snow Loading: Point Loads Plan

Snow Loading: Point Loads; Point Load Icons; Point Load Values; User Notes; User Lines; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Scale = 1:380

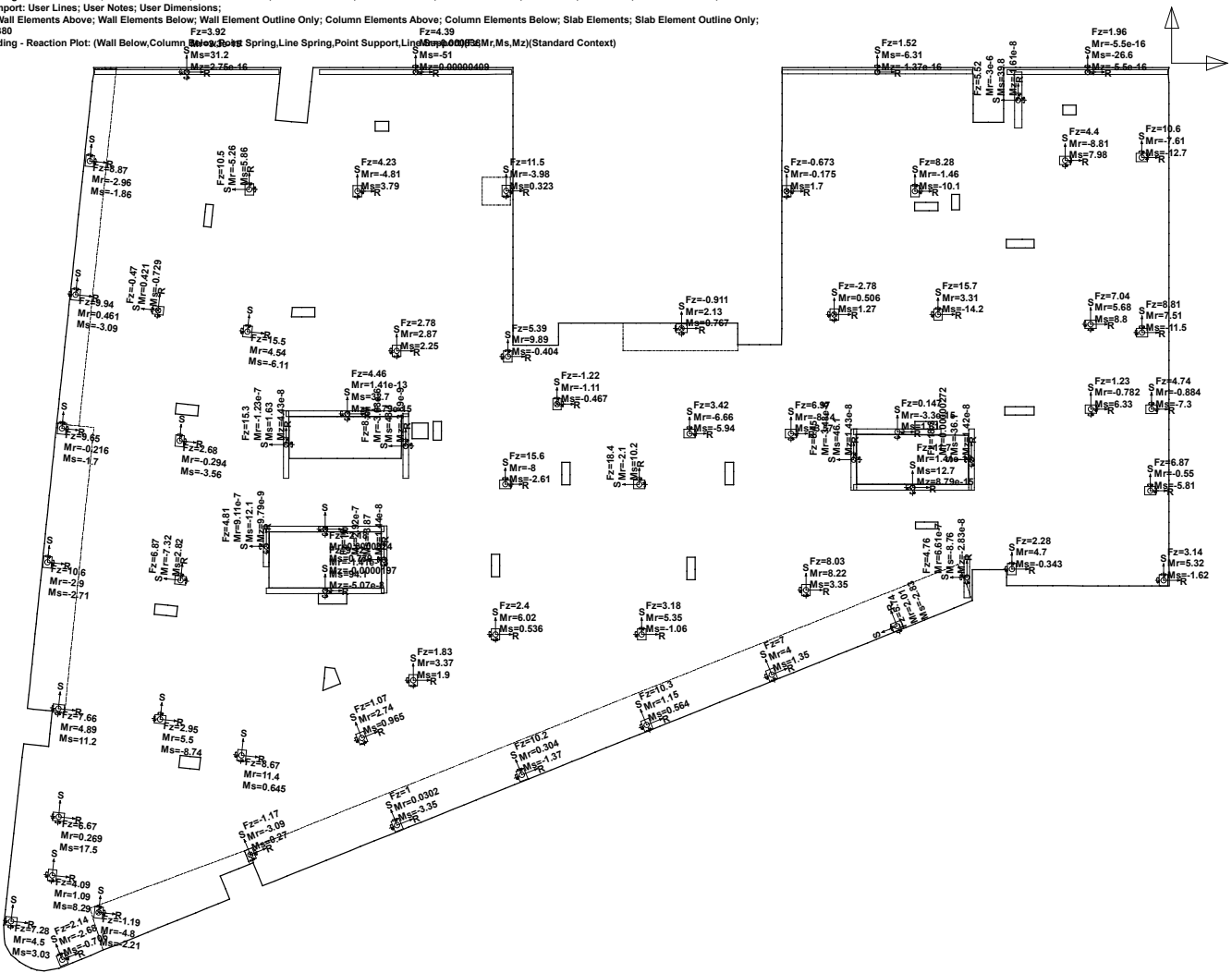


Snow Loading: Line Loads Plan

Snow Loading: User Lines; User Notes; User Dimensions; Line Loads; Line Load Icons; Line Load Values;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
 Scale = 1:380

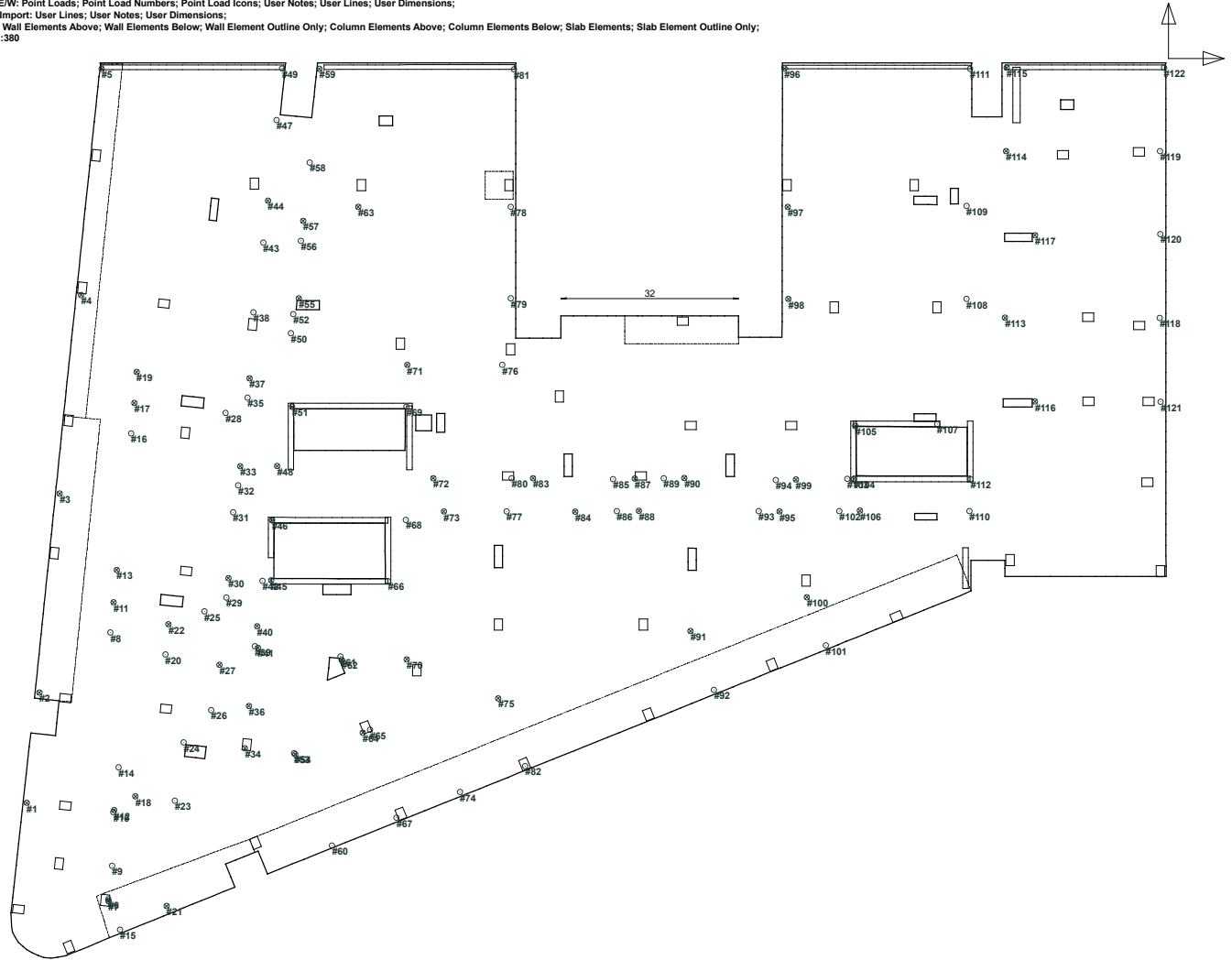


Snow Loading: Point Load Icons; Point Load Values; Line Load Icons; Line Load Values; Area Load Icons; Area Load Values; User Notes; User Lines; User Dimensions;
 Drawing Input: User Notes; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:300 Fz=3.92 Fz=4.39
 Snow Loading - Reaction Plot: (Wall Below,Column Below,Beam Below, Spring,Line Spring,Point Support,Line Support,Mass,Mz) (Standard Context)



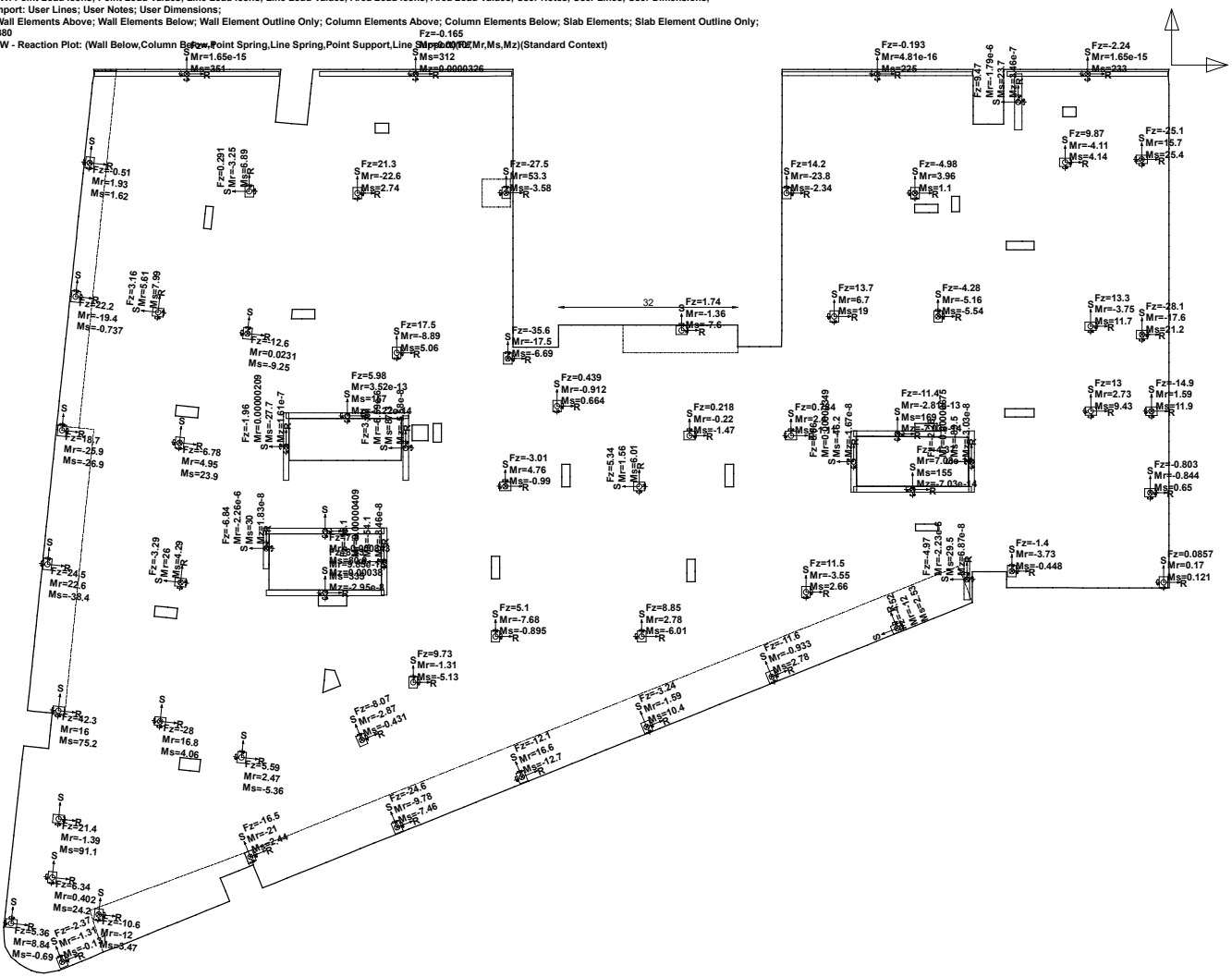
Seismic E/W: Point Loads Plan

Seismic E/W: Point Loads; Point Load Numbers; Point Load Icons; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



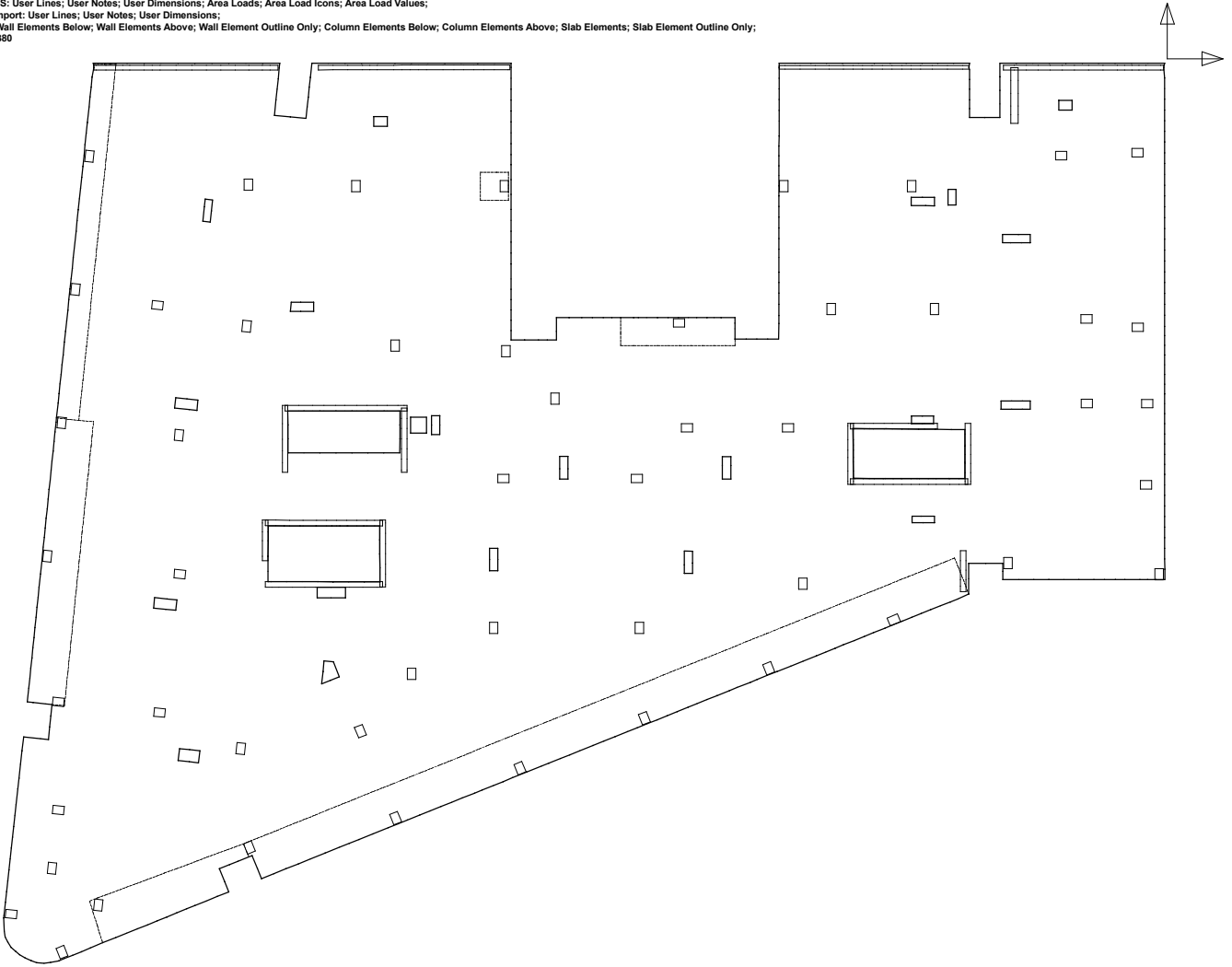
Seismic E/W: Std Reactions Plan

Seismic E/W: Point Load Icons; Point Load Values; Line Load Icons; Line Load Values; Area Load Icons; Area Load Values; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380
 Seismic E/W - Reaction Plot: (Wall Below, Column Below, Point Spring, Line Spring, Point Support, Line Support, Mr, Ms, Mz)(Standard Context)

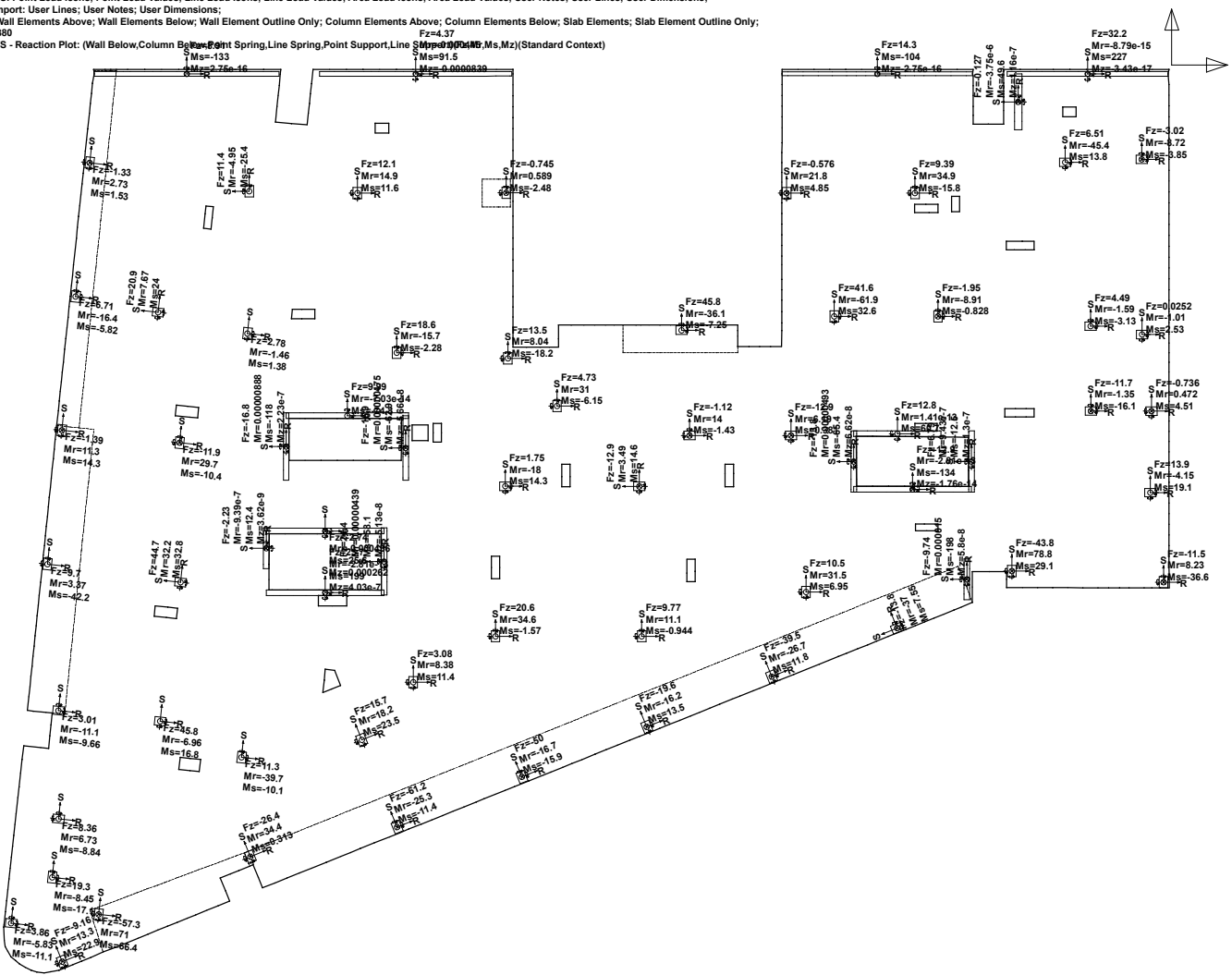


Seismic N/S: Area Loads Plan

Seismic N/S: User Lines; User Notes; User Dimensions; Area Loads; Area Load Icons; Area Load Values;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:380



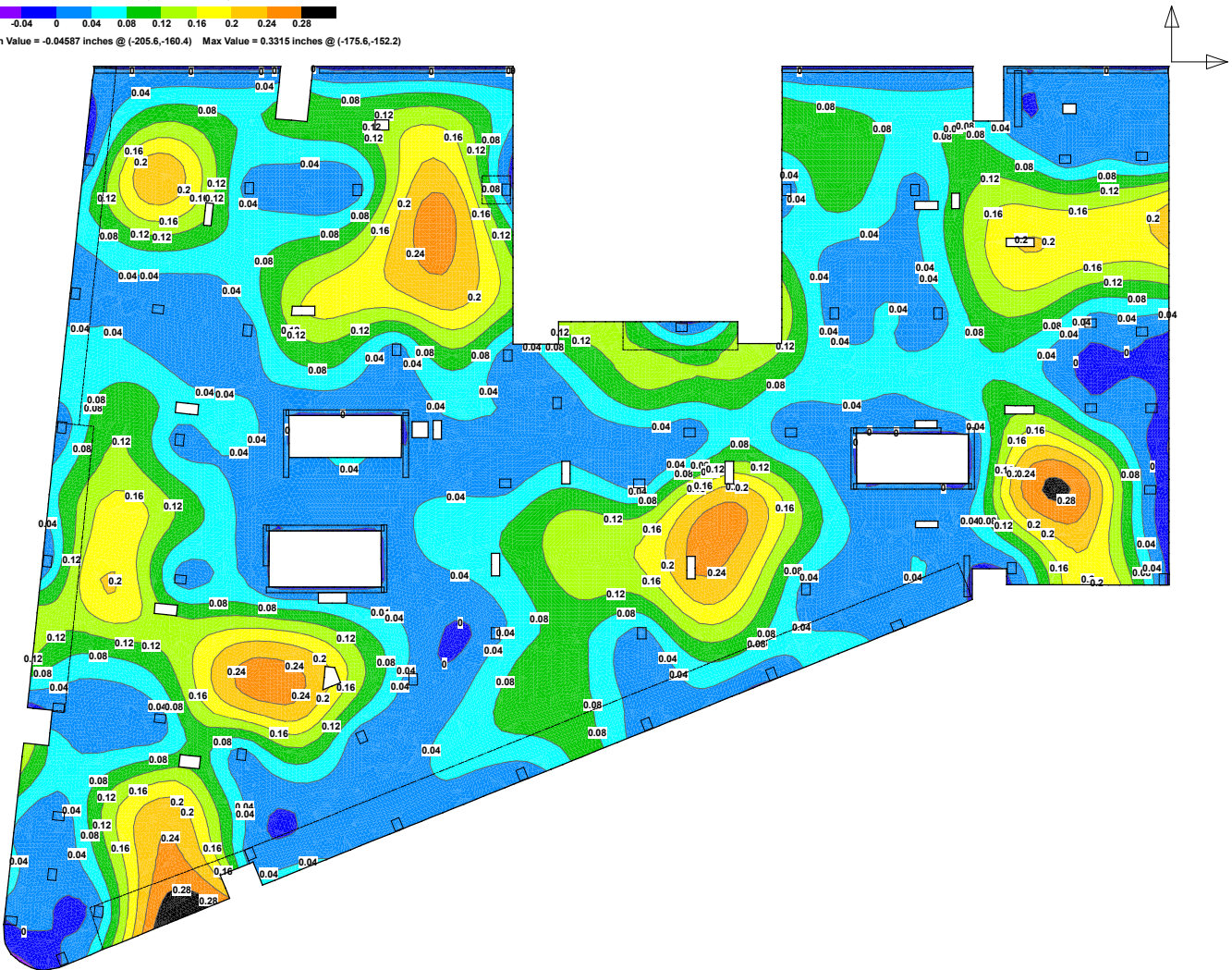
Seismic N/S: Point Load Icons; Point Load Values; Line Load Icons; Line Load Values; Area Load Icons; Area Load Values; User Notes; User Lines; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Scale = 1:380
Seismic N/S - Reaction Plot: (Wall Below,Column Below,Point Spring,Line Spring,Point Support,Line Support,Point Ms,Mz)(Standard Context)



Service LC: D + L: Max Deflection Plan

Service LC: D + L: User Lines; User Notes; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
 Scale = 1:380
 Service LC: D + L - Vertical Deflection Plot (Maximum Values)

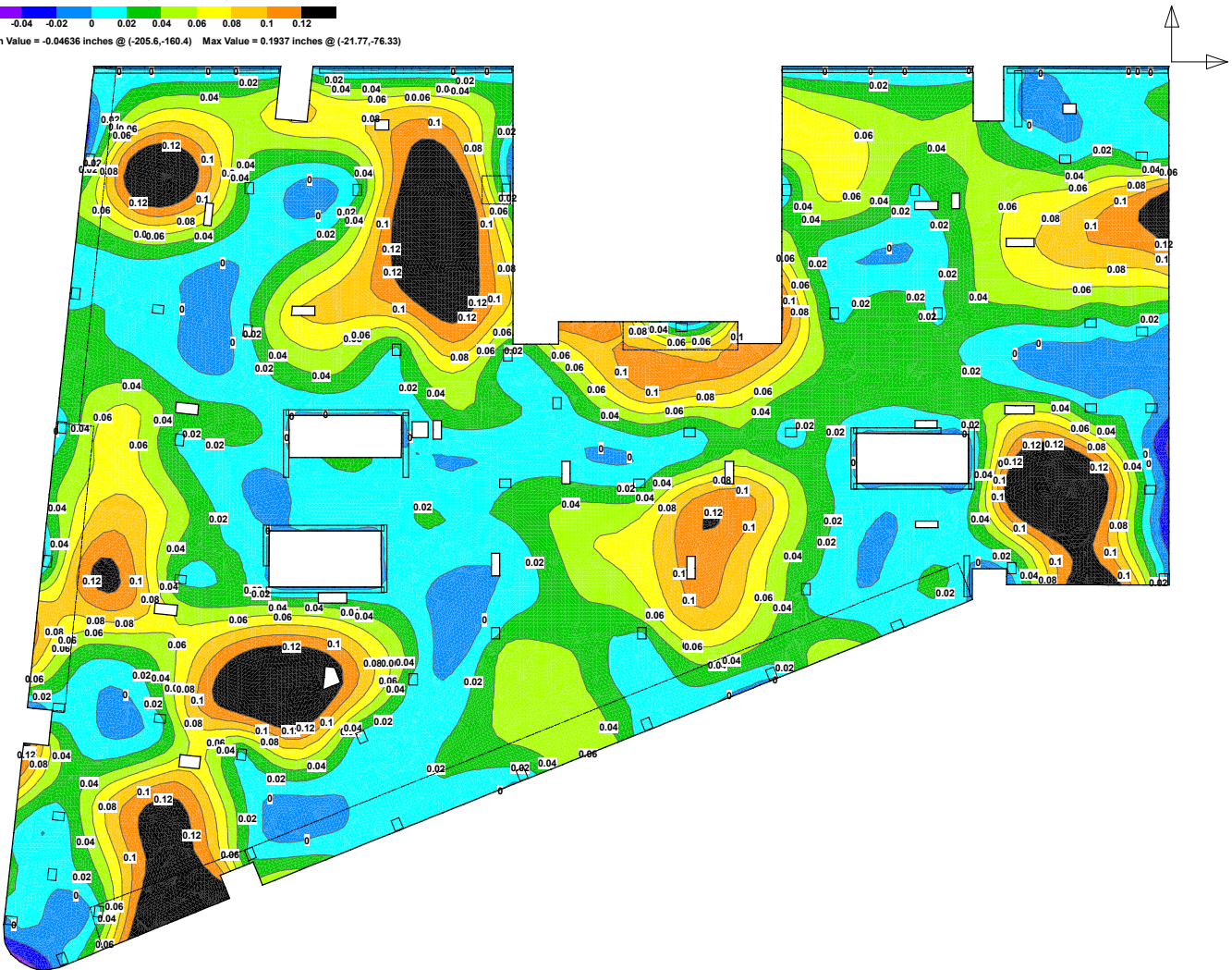
Min Value = -0.04587 inches @ (-205.6,-160.4) Max Value = 0.3315 inches @ (-175.6,-152.2)



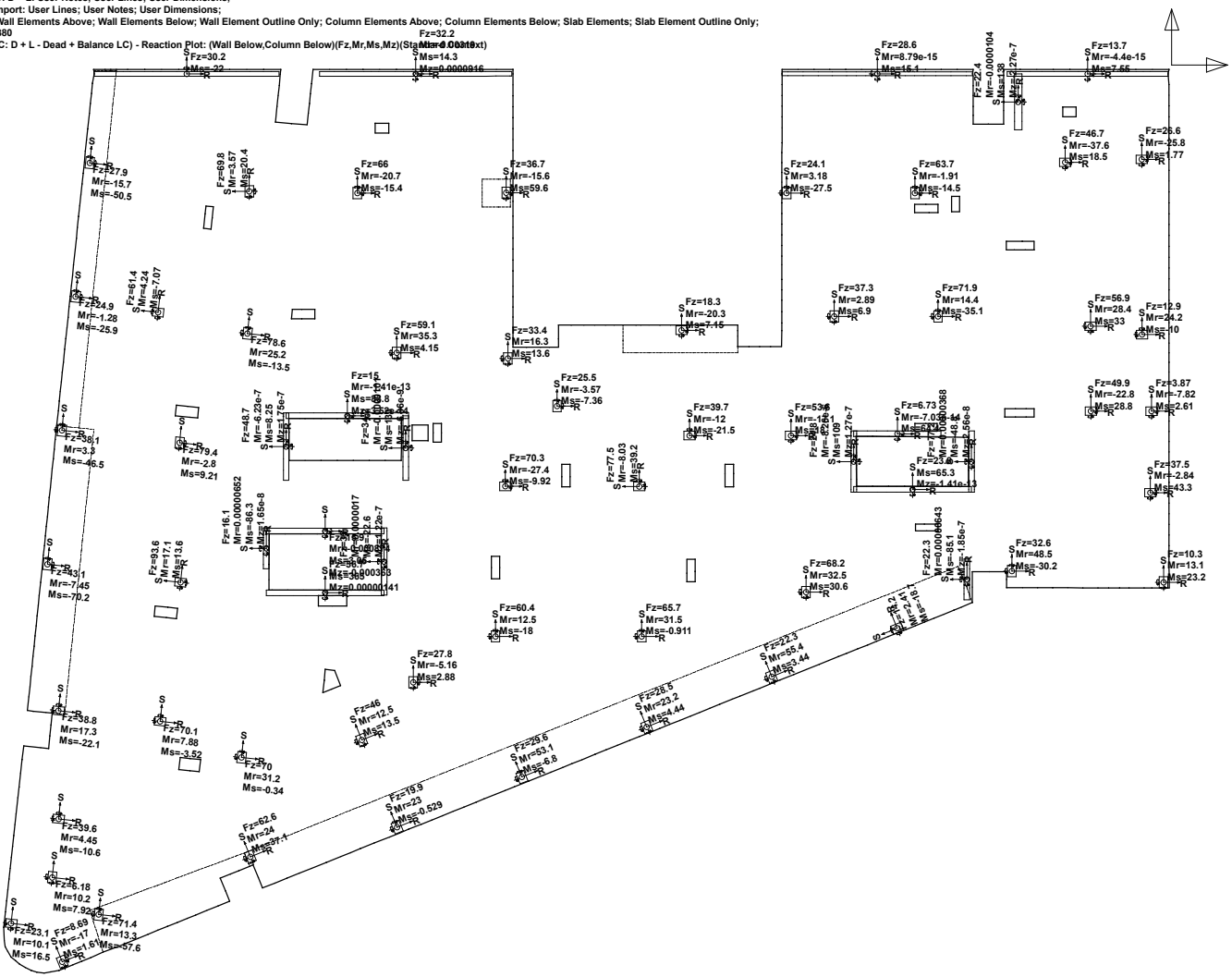
Service LC: D + L: Min Deflection Plan

Service LC: D + L: User Lines; User Notes; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
 Scale = 1:380
 Service LC: D + L - Vertical Deflection Plot (Minimum Values)

Min Value = -0.04636 inches @ (-205.6,-160.4) Max Value = 0.1937 inches @ (-21.77,-76.33)



Service LC: D + L - User Notes; User Lines; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Scale: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Element: 1:380 Fz=32.2
(Service LC: D + L - Dead + Balance LC) - Reaction Plot: (Wall Below,Column Below)(Fz,Mr,Mz)(Stress-Strain)

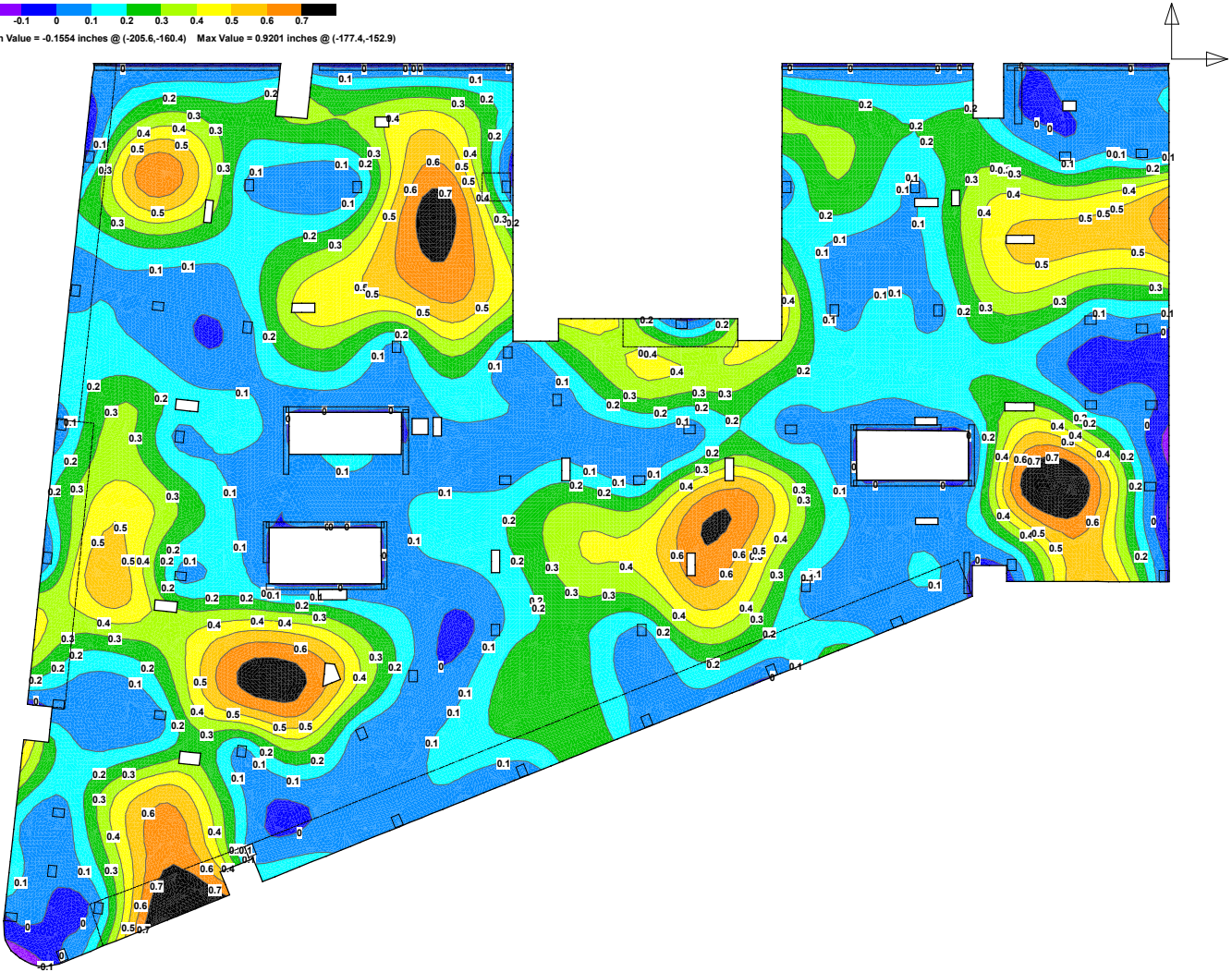


Long Term deflection: Max Deflection Plan

Long Term deflection: User Lines; User Notes; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
 Scale = 1:380

Long Term deflection - Vertical Deflection Plot (Maximum Values)

Min Value = -0.1554 inches @ (-205.6,-160.4) Max Value = 0.9201 inches @ (-177.4,-152.9)



Design Strip: Latitude SSs Table

Name	Set	Location feet	Skew degrees	At Support 1	At Support 2	Support Width 1 inches
1-1	latitude	(-205,-162.6)(-197.9,-160.282)	160.282	false	true	0
2-1	latitude	(-204,-114.5)(-198.6,-105.8024)	105.8024	false	true	1.39
3-1	latitude	(-207,-153.1)(-195.2,-151.981)	151.981	true	false	24.68
3-1(2)	latitude	(-195.2,-151.9)(-191.4,-151.88)	151.88	false	true	0
3-2	latitude	(-191.4,-151.5)(-164.4,-146.86)	146.86	true	true	20.33
3-3	latitude	(-164.4,-141.2)(-138.2,-136.4)	136.4	true	true	18.47
3-4	latitude	(-138.2,-136)(-115.9,-127)	127	true	true	18.55
3-5	latitude	(-115.9,-127)(-93.67,-108.1)	108.1	true	true	18.55
3-6	latitude	(-93.67,-118.1)(-71.4,-109.1)	109.1	true	true	18.55
3-7	latitude	(-71.4,-109.1)(-49.13,-100.2)	100.2	true	true	18.55
3-8	latitude	(-49.13,-100.2)(-36.47,-94.24)	94.24	true	true	24.74
4-1	latitude	(-201.3,-89.19)(-195,-89.93)	89.93	true	false	34.4
5-1	latitude	(-198,-65.18)(-192.6,-65.83)	65.83	true	false	18.16
6-1	latitude	(-195.5,-41.31)(-192.7,-41.76)	41.76	true	false	18.18
7-1	latitude	(-193,-17.44)(-190.2,-17.89)	17.89	true	false	18.19
8-1	latitude	(-197.3,-115.3)(-180.5,-102.174)	102.174	false	true	0
8-2	latitude	(-180.5,-117.1)(-166,-124.17)	124.17	true	true	25.41
8-3	latitude	(-166,-123.6)(-144.5,-128.417)	128.417	true	true	19.56
8-4	latitude	(-144.5,-120.4)(-135.3,-110.15)	110.15	true	true	20.23
8-5	latitude	(-135.3,-110.1)(-120.6,-101.69)	101.69	true	true	20.78
8-6	latitude	(-120.6,-101.9)(-94.55,-100.96)	100.96	true	true	18.16
8-7	latitude	(-94.55,-101.9)(-65.26,-94.81)	94.81	true	true	18.8
8-8	latitude	(-65.26,-94)(-36.46,-88.5179)	88.5179	true	true	18.48
9-1	latitude	(-192.4,-41.91)(-181,-44.537)	44.537	false	true	0
9-2	latitude	(-181,-44.5)(-164.6,-47.8582)	47.8582	true	true	27.53
9-3	latitude	(-164.6,-47.85)(-138.3,-55.35)	55.35	true	true	11.73
9-4	latitude	(-138.3,-51.35)(-118.4,-58.86)	58.86	true	true	18.18
9-5	latitude	(-118.4,-52.35)(-87.45,-47.35)	47.35	true	true	18.4
9-6	latitude	(-87.45,-47.25)(-60.2,-49.809e-6)	49.809e-6	true	true	24.25
9-7	latitude	(-60.2,-44.83)(-41.7,-45.809e-6)	45.809e-6	true	true	18.16
9-8	latitude	(-41.7,-44.83)(-14.46,-46.587)	46.587	true	true	18.19
9-9	latitude	(-14.46,-46.58)(-5.313,-52.92)	52.92	true	true	24.41
9-10	latitude	(-5.313,-47.92)(-0.5036,-49.888)	49.888	true	false	24.16
10-1	latitude	(-194.8,-89.98)(-176.8,-92.48)	92.48	false	true	0
10-2	latitude	(-176.8,-92.28)(-161.6,-93.53)	93.53	true	true	24.16
11-1	latitude	(-192.3,-65.88)(-177,-65.835)	65.835	false	true	0
11-2	latitude	(-177,-67.39)(-157.9,-68.209)	68.209	true	true	18.19
12-1	latitude	(-189.8,-18.04)(-164.2,-22.45)	22.45	false	true	0
12-2	latitude	(-164.2,-22.76)(-145.3,-22.88)	22.88	true	true	9.307
12-3	latitude	(-145.3,-22.83)(-118.2,-22.45)	22.45	true	true	18.16
13-1	latitude	(-136.6,-73.5)(-118.9,-75.35)	75.35	true	true	11.03
13-2	latitude	(-118.9,-75.16)(-94.99,-74.76)	74.76	true	true	24.16
13-3	latitude	(-94.99,-74.76)(-56.81,-73.852)	73.852	true	true	23.87
14-1	latitude	(-136.8,-62.55)(-109.7,-60.68)	60.68	true	true	14.6
14-2	latitude	(-109.7,-60.83)(-86.02,-66.58)	66.58	true	true	18.6
14-3	latitude	(-86.02,-66.08)(-67.92,-66.096)	66.096	true	true	24.16

Design Strip: Latitude SSs Table (2)

<i>Support Width 1 feet</i>	<i>Support Width 2 inches</i>	<i>Support Trans. Width 1 inches</i>	<i>Support Trans. Width 2 inches</i>	<i>Auto-Support</i>	<i>Min Divisions</i>	<i>Max Division Spacing feet</i>
18.16	0		24.01	true	4	2.5
24.15	0		18	true	4	2.5
0	18.39		0	true	4	2.5
18.54	0		24.52	true	4	2.5
18.16	26.9		24.01	true	4	2.5
18.07	24.42		24.42	true	4	2.5
17.76	24		24	true	4	2.5
17.76	24		24	true	4	2.5
17.76	24		24	true	4	2.5
23.6	24		18	true	4	2.5
15.5	18.03		28.21	true	4	2.5
0	24		0	true	4	2.5
0	24		0	true	4	2.5
0	24.04		0	true	4	2.5
0	24.04		0	true	4	2.5
24.16	0		18	true	4	2.5
18.27	18.94		25.26	true	4	2.5
18.67	24.78		24.69	true	4	2.5
27.18	26.75		24.14	true	4	2.5
20.78	27.5		27.5	true	4	2.5
18.16	24		24	true	4	2.5
18.8	24.86		24.86	true	4	2.5
14.58	24.43		31.43	true	4	2.5
21.06	0		18.13	true	4	2.5
24.7	18.08		24.11	true	4	2.5
18.32	24		24.21	true	4	2.5
18.18	24.03		24.03	true	4	2.5
24.48	24.32		18.24	true	4	2.5
18.23	18.07		24.09	true	4	2.5
18.16	24		24	true	4	2.5
24.21	24.05		18.04	true	4	2.5
24.41	18.19		18.19	true	4	2.5
3.804	18		0	true	4	2.5
24.16	0		18.01	true	4	2.5
0	18		0	true	4	2.5
18.16	0		24	true	4	2.5
13.8	24.05		144.1	true	4	2.5
27.46	0		24.41	true	4	2.5
18.16	24		24	true	4	2.5
31.77	24		24	true	4	2.5
24.26	64.9		18.08	true	4	2.5
24.45	18		18	true	4	2.5
10.01	18.01		131	true	4	2.5
18.19	113.9		24.05	true	4	2.5
24.74	24.58		18.44	true	4	2.5
24.16	18		18	true	4	2.5

Division Spacing

Design Strip: Latitude SSs Table - 52

MS Min B.Bar *MS Shear Legs*

[illegible]

Design Strip: Latitude SSs Table (9)

<i>Name</i>	<i>Set</i>	<i>Location feet</i>	<i>Skew degrees</i>	<i>At Support 1</i>	<i>At Support 2</i>	<i>Support Width 1 inches</i>
14-4	latitude	(-67.92,-66.08)(-56.72,-56.28)	-5.609e-6	true	true	24.16
15-1	latitude	(-69.33,-22.67)(-45.8,-22.67)	-1.1424	true	true	33.31
15-2	latitude	(-45.8,-22.67)(-19.02,-17.34)	-5.364	true	true	18.51
15-3	latitude	(-19.02,-17.34)(-5.364,-16.83)	-0.5351	true	true	24.17
15-4	latitude	(-5.364,-16.83)(-0.5351,-0.7807)	-6.816	true	false	24.16
16-1	latitude	(-41.75,-65.72)(-35.58,-65.81)	-14.45	true	true	13.94
16-2	latitude	(-35.58,-65.81)(-14.45,-61.73)	-3.5	true	true	8.971
16-3	latitude	(-14.45,-61.73)(-3.5,-61.73)	-0.4875	true	true	24.16
16-4	latitude	(-3.5,-61.73)(-0.4875,-0.6594)	-76.3	true	false	21.41
17-1	latitude	(-36.22,-75.7)(-3.5,-76.3)	0.058	true	true	24.16
17-2	latitude	(-3.5,-76.3)(-0.6594,-76.2592)	-92.34	true	false	16.03
18-1	latitude	(-28.53,-90.28)(-1.634,-92.34)	-1.634	true	true	18.2

Design Strip: Latitude SSs Table (10)

<i>Support Width 1 feet</i>	<i>Support Width 2 inches</i>	<i>Support Trans. Width 1 inches</i>	<i>Support Trans. Width 2 inches</i>	<i>Auto-Support</i>	<i>Min Divisions</i>	<i>Max Division Spacing feet</i>
12.16	18	131		true	4	2.5
18.16	24	24		true	4	2.5
24.63	24.47	18.35		true	4	2.5
24.17	18.01	18.01		true	4	2.5
3.417	18	0		true	4	2.5
15.51	12	131		true	4	2.5
24.6	29.29	18.33		true	4	2.5
26.91	18	18		true	4	2.5
4.016	18	0		true	4	2.5
32.29	125	18		true	4	2.5
0	18	0		true	4	2.5
14.23	24.05	24.05		true	4	2.5

Design Strip: Latitude SSs Table (11)

vision Spacing

<i>Design For Axial</i>	<i>Environment</i>	<i>Design As PT</i>	<i>Maximize Integrated V.</i>	<i>Use Spec LLR Params</i>	<i>Spec. LLR Levels</i>	<i>Spec. Trib. Area ft²</i>
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0

Design Strip: Latitude SSs Table (12)

<i>Spec. Infl. Area ft²</i>	<i>Max LLR %</i>	<i>Span Width</i>	<i>Col Strip Width</i>	<i>Lock Strips</i>	<i>Design CS for CS</i>	<i>CS Auto Trim</i>	<i>CS Section Slope</i>
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25

Design Strip: Latitude SSs Table (13)

CS Section Slope	CS Top Bar	CS Bot Bar	CS Shear Bar	CS Top Cover inches	CS Bot Cover inches	CS Shear d calc	CS Torsion Design	CS System
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab

Design Strip: Latitude SSs Table (14)

<i>CS Min. Bar Loc.</i>	<i>CS Min T.Bar</i>	<i>CS Min B.Bar</i>	<i>CS Shear Legs</i>	<i>MS Same As CS</i>	<i>MS Auto Trim</i>	<i>MS Section Slope</i>	<i>MS Top Bar</i>	<i>MS Bot Bar</i>
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4

Design Strip: Latitude SSs Table (15)

<i>MS Bot Bar</i>	<i>MS Shear Bar</i>	<i>MS Top Cover inches</i>	<i>MS Bot Cover inches</i>	<i>MS Shear d calc</i>	<i>MS Torsion Design</i>	<i>MS System</i>	<i>MS Min. Bar Loc.</i>	<i>MS Min T.Bar</i>	<i>MS Min B.Bar</i>
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0

Design Strip: Latitude SSs Table (16)

MS Min B.Bar	MS Shear Legs
	2
	2
	2
	2
	2
	2
	2
	2
	2
	2
	2
	2

Design Strip: Longitude SSs Table

Name	Set	Location feet	Skew degrees	At Support 1	At Support 2	Support Width 1 inches
19-1	longitude	(-207,-159.8)(-207,-153.01)		false	true	21.45
19-2	longitude	(-207,-153.1)(-199.7,-144.9)		true	true	22.33
19-3	longitude	(-199.7,-144.9)(-198.6,-132.5)		true	true	24.16
19-4	longitude	(-198.6,-134.5)(-198.6,-110.1872)		true	true	18.26
20-1	longitude	(-203,-115)(-200.6,-89.18)	266	false	true	0
20-2	longitude	(-200.6,-89.18)(-198.1,-65.31)		true	true	27.21
20-3	longitude	(-198.1,-65.31)(-195.5,-41.81)		true	true	27.31
20-4	longitude	(-195.5,-41.31)(-193,-17.57)		true	true	24.16
20-5	longitude	(-193,-17.57)(-191.6,-1.5897)		true	true	27.22
21-1	longitude	(-197.9,-160)(-191.4,-137.55)		true	true	21.01
21-2	longitude	(-191.4,-151.5)(-190.7,-149.2)		true	false	24.63
22-1	longitude	(-190.5,-148.5)(-180.5,-11.24)		false	true	0
22-2	longitude	(-180.5,-117.1)(-176.2,-95.44)		true	true	18.2
22-3	longitude	(-176.2,-92.34)(-177,-61.89)		true	true	18.14
22-4	longitude	(-177,-67.39)(-164.6,-42.57)		true	true	26.95
22-5	longitude	(-164.6,-47.85)(-164.2,-22.76)		true	true	22.66
22-6	longitude	(-164.2,-22.76)(-160.1,-11.583)		true	true	30.23
23-1	longitude	(-164.7,-140.2)(-165.9,-121.35)		true	true	0
23-2	longitude	(-165.9,-123.6)(-161.6,-94.75)		true	true	25.34
24-1	longitude	(-152.1,-1.583)(-145.3,-22.83)		true	true	10.65
24-2	longitude	(-145.3,-22.83)(-138.3,-51.35)		true	true	24.88
24-3	longitude	(-138.3,-51.35)(-137.2,-62.65)		true	true	24.28
25-1	longitude	(-145.9,-94.21)(-144.5,-120.4)		true	true	10.33
25-2	longitude	(-144.5,-120.4)(-138.2,-136.06)		true	true	24.16
26-1	longitude	(-138.2,-136)(-135.3,-110.1)		true	true	27.42
26-2	longitude	(-135.3,-110.1)(-136.5,-73.96)		true	true	24.17
27-1	longitude	(-118.8,-1.583)(-118.8,-22.85)		true	true	9.433
27-2	longitude	(-118.8,-22.85)(-118.4,-52.35)		true	true	22.87
27-3	longitude	(-118.4,-52.35)(-118.9,-75.16)		true	true	24.16
27-4	longitude	(-118.9,-75.16)(-120.6,-101.9)		true	true	18.2
27-5	longitude	(-120.6,-101.9)(-115.9,-127.54)		true	true	24.58
28-1	longitude	(-110,-50.87)(-109.6,-60.1853)		false	true	0
29-1	longitude	(-94.99,-74.76)(-94.55,-101.957)		true	true	27.89
29-2	longitude	(-94.55,-101.9)(-93.65,-118.85)		true	true	24.19
30-1	longitude	(-87.45,-47.25)(-86.02,-66.08)		true	true	19.46
31-1	longitude	(-68.66,-1.577)(-68.7,-22.67)		true	true	7.567
31-2	longitude	(-68.7,-22.67)(-60.2,-44.83)		true	true	30.15
31-3	longitude	(-60.2,-44.83)(-67.92,-66.08)		true	true	25.69
31-4	longitude	(-67.92,-66.08)(-65.26,-94)		true	true	18.24
31-5	longitude	(-65.26,-94)(-71.38,-109.21)		true	true	26.05
32-1	longitude	(-49.6,-98.98)(-49.11,-75.68)		false	true	0
33-1	longitude	(-47.52,-1.583)(-45.8,-22.83)		true	true	7.433
33-2	longitude	(-45.8,-22.83)(-41.7,-44.83)		true	true	24.57
33-3	longitude	(-41.7,-44.83)(-41.7,-65.04)	1793	true	true	24.16
34-1	longitude	(-36.48,-88.8)(-36.48,-78.85)	1e-6	true	true	17.24
35-1	longitude	(-15.77,-1.583)(-19.02,-17.03)		true	true	10.38

Design Strip: Longitude SSs Table (2)

<i>Support Width 1 inches</i>	<i>Support Width 2 inches</i>	<i>Support Trans. Width 1 inches</i>	<i>Support Trans. Width 2 inches</i>	<i>Auto-Support</i>	<i>Min Divisions</i>	<i>Max Division Spacing feet</i>
18.26	0	24.13	24.13	true	4	2.5
29.71	29.55	22.17	22.17	true	4	2.5
18.16	18	24	24	true	4	2.5
0	24.13	0	0	true	4	2.5
21.1	0	18	18	true	4	2.5
21	18	18	18	true	4	2.5
24.15	18	18	18	true	4	2.5
21.1	18	18	18	true	4	2.5
10.05	18	63.15	63.15	true	4	2.5
28.36	27.81	21.15	21.15	true	4	2.5
0	18.36	0	0	true	4	2.5
18.54	0	24.5	24.5	true	4	2.5
18.39	24.05	24.05	24.05	true	4	2.5
24.39	24.23	18.18	18.18	true	4	2.5
28.72	20.09	20.1	20.1	true	4	2.5
18.64	18.07	18	18	true	4	2.5
10.35	18.34	36.02	36.02	true	4	2.5
23.36	0	18.28	18.28	true	4	2.5
0	18.02	44.82	44.82	true	4	2.5
25.34	0	18.89	18.89	true	4	2.5
24.88	18.54	18.54	18.54	true	4	2.5
12.22	18.09	72.62	72.62	true	4	2.5
25.53	160.9	19.03	19.03	true	4	2.5
24.16	17.99	17.99	17.99	true	4	2.5
24.31	20.45	18.11	18.11	true	4	2.5
9.596	18.01	12.01	12.01	true	4	2.5
25.45	411.3	18	18	true	4	2.5
24.16	18	18	18	true	4	2.5
18.16	18	24	24	true	4	2.5
24.21	24.05	18.04	18.04	true	4	2.5
24.63	18.31	18.36	18.36	true	4	2.5
24.17	0	18.01	18.01	true	4	2.5
24.16	24	18	18	true	4	2.5
25.51	18.03	19.01	19.01	true	4	2.5
18.21	24.07	24.07	24.07	true	4	2.5
20.16	407.7	18	18	true	4	2.5
25.86	19.28	19.28	19.28	true	4	2.5
19.31	19.15	25.53	25.53	true	4	2.5
24.27	24.11	18.08	18.08	true	4	2.5
26.06	19.42	25.03	25.03	true	4	2.5
13.54	0	252.1	252.1	true	4	2.5
24.24	99.23	18.06	18.06	true	4	2.5
24.57	18.31	18.31	18.31	true	4	2.5
11.22	18	186.5	186.5	true	4	2.5
8.748	12	252	252	true	4	2.5
18.54	49.45	24.51	24.51	true	4	2.5

Division Spacing

Design Strip: Longitude SSs Table - 68

MS Min B.Bar *MS Shear Legs*

[illegible]

Design Strip: Longitude SSs Table (9)

<i>Name</i>	<i>Set</i>	<i>Location feet</i>	<i>Skew degrees</i>	<i>At Support 1</i>	<i>At Support 2</i>	<i>Support Width 1 inches</i>
35-2	longitude	(-19.02,-17.34)(-14.45,-16.58)	-16.58	true	true	18.38
35-3	longitude	(-14.45,-46.58)(-14.45,-61.73)	-61.73	true	true	18.17
36-1	longitude	(-1.248,-1.54)(-5.364,-16.83)	-16.83	true	true	11.6
36-2	longitude	(-5.364,-16.83)(-5.313,-47.92)	-47.92	true	true	18.16
36-3	longitude	(-5.313,-47.92)(-3.5,-61.73)	-61.73	true	true	22.35
36-4	longitude	(-3.5,-61.73)(-3.5,-75.6)	-75.6	true	true	18.54
36-5	longitude	(-3.5,-75.6)(-1.302,-92.43)	-92.43	true	true	35.04

Design Strip: Longitude SSs Table (10)

<i>Support Width 1 inches</i>	<i>Support Width 2 inches</i>	<i>Support Trans. Width 1 inches</i>	<i>Support Trans. Width 2 inches</i>	<i>Auto-Support</i>	<i>Min Divisions</i>	<i>Max Division Spacing feet</i>
18.36	24.29	24.29	24.29	true	4	2.5
18.16	24	24	24	true	4	2.5
18.8	24.45	24.85	24.85	true	4	2.5
14.16	24	24	24	true	4	2.5
17.93	24.21	24.21	24.21	true	4	2.5
1.567	24	24	24	true	4	2.5
28.39	21.65	18.15	18.15	true	4	2.5

Design Strip: Longitude SSs Table (11)

vision Spacing

<i>Design For Axial</i>	<i>Environment</i>	<i>Design As PT</i>	<i>Maximize Integrated V.</i>	<i>Use Spec LLR Params</i>	<i>Spec. LLR Levels</i>	<i>Spec. Trib. Area ft²</i>
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	true	false	1	0

Design Strip: Longitude SSs Table (12)

<i>Spec. Infl. Area ft²</i>	<i>Max LLR %</i>	<i>Span Width</i>	<i>Col Strip Width</i>	<i>Lock Strips</i>	<i>Design CS for CS</i>	<i>CS Auto Trim</i>	<i>CS Section Slope</i>
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25

Design Strip: Longitude SSs Table (13)

<i>CS Section Slope</i>	<i>CS Top Bar</i>	<i>CS Bot Bar</i>	<i>CS Shear Bar</i>	<i>CS Top Cover inches</i>	<i>CS Bot Cover inches</i>	<i>CS Shear d calc</i>	<i>CS Torsion Design</i>	<i>CS System</i>
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab

Design Strip: Longitude SSs Table (14)

<i>CS Min. Bar Loc.</i>	<i>CS Min T.Bar</i>	<i>CS Min B.Bar</i>	<i>CS Shear Legs</i>	<i>MS Same As CS</i>	<i>MS Auto Trim</i>	<i>MS Section Slope</i>	<i>MS Top Bar</i>	<i>MS Bot Bar</i>
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4

Design Strip: Longitude SSs Table (15)

<i>MS Bot Bar</i>	<i>MS Shear Bar</i>	<i>MS Top Cover inches</i>	<i>MS Bot Cover inches</i>	<i>MS Shear d calc</i>	<i>MS Torsion Design</i>	<i>MS System</i>	<i>MS Min. Bar Loc.</i>	<i>MS Min T.Bar</i>	<i>MS Min B.Bar</i>
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0

Design Strip: Longitude SSs Table (16)

<i>MS Min B.Bar</i>	<i><u>MS Shear Legs</u></i>
	2
	2
	2
	2
	2
	2
	2

Design Strip: Latitude SSSs Table

<i>Name</i>	<i>Strip Type</i>	<i>Calc. Trib. Area ft²</i>	<i>Calc. Infl. Area ft²</i>	<i>Top Bar</i>	<i>Bottom Bar</i>	<i>Shear Bar</i>	<i>Top Cover inches</i>
1C-1	center	18.09	0	#5	#5	#4	1
2C-1	center	83.59	0	#5	#5	#4	1
3C-1	center	20.28	0	#5	#5	#4	1
3C-1(2)	center	67.73	0	#5	#5	#4	1
3C-2	center	453.7	0	#5	#5	#4	1
3C-3	center	267.7	0	#7	#7	#4	1
3C-4	center	216.7	0	#7	#7	#4	1
3C-5	center	240.8	0	#7	#7	#4	1
3C-6	center	158.9	0	#7	#7	#4	1
3C-7	center	113.2	0	#7	#7	#4	1
3C-8	center	88.14	0	#7	#7	#4	1
4C-1	center	128.1	0	#5	#5	#4	1
5C-1	center	92.91	0	#5	#5	#4	1
6C-1	center	43.19	0	#5	#5	#4	1
7C-1	center	38	0	#5	#5	#4	1
8C-1	center	388.8	0	#5	#5	#4	1
8C-2	center	352.5	0	#5	#5	#4	1
8C-3	center	480.1	0	#5	#5	#4	1
8C-4	center	131.8	0	#5	#5	#4	1
8C-5	center	459.2	0	#5	#5	#4	1
8C-6	center	599.9	0	#5	#5	#4	1
8C-7	center	547.2	0	#5	#5	#4	1
8C-8	center	299.4	0	#5	#5	#4	1
9C-1	center	279.7	0	#5	#5	#4	1
9C-2	center	357.3	0	#5	#5	#4	1
9C-3	center	468.3	0	#5	#5	#4	1
9C-4	center	440.6	0	#5	#5	#4	1
9C-5	center	274.2	0	#5	#5	#4	1
9C-6	center	281	0	#5	#5	#4	1
9C-7	center	391.8	0	#5	#5	#4	1
9C-8	center	565.8	0	#5	#5	#4	1
9C-9	center	178.8	0	#5	#5	#4	1
9C-10	center	74.69	0	#5	#5	#4	1
10C-1	center	351.8	0	#5	#5	#4	1
10C-2	center	378.1	0	#5	#5	#4	1
11C-1	center	325	0	#5	#5	#4	1
11C-2	center	340.9	0	#5	#5	#4	1
12C-1	center	502.3	0	#5	#5	#4	1
12C-2	center	480.4	0	#5	#5	#4	1
12C-3	center	644.9	0	#5	#5	#4	1
13C-1	center	359.5	0	#5	#5	#4	1
13C-2	center	467.2	0	#5	#5	#4	1
13C-3	center	320.7	0	#5	#5	#4	1
14C-1	center	145.4	0	#5	#5	#4	1
14C-2	center	276.2	0	#5	#5	#4	1
14C-3	center	358.3	0	#5	#5	#4	1

Design Strip: Latitude SSSs Table (3)

<i>Name</i>	<i>Strip Type</i>	<i>Calc. Trib. Area ft²</i>	<i>Calc. Infl. Area ft²</i>	<i>Top Bar</i>	<i>Bottom Bar</i>	<i>Shear Bar</i>	<i>Top Cover inches</i>
14C-4	center	182.4	0	#5	#5	#4	1
15C-1	center	470.1	0	#5	#5	#4	1
15C-2	center	397.4	0	#5	#5	#4	1
15C-3	center	300.5	0	#5	#5	#4	1
15C-4	center	76.18	0	#5	#5	#4	1
16C-1	center	33.1	0	#5	#5	#4	1
16C-2	center	335	0	#5	#5	#4	1
16C-3	center	129.1	0	#5	#5	#4	1
16C-4	center	13.82	0	#5	#5	#4	1
17C-1	center	308.6	0	#5	#5	#4	1
17C-2	center	22.85	0	#5	#5	#4	1
18C-1	center	254.3	0	#5	#5	#4	1

Design Strip: Latitude SSSs Table (4)

<i>Top Cover inches</i>	<i>Bot. Cover inches</i>	<i>Torsion Design</i>	<i>System</i>	<i>Min Bar Loc.</i>	<i>Min T. Bar</i>	<i>Min B. Bar</i>	<i>Shear Legs</i>
1		none	two-way slab	stress	0	0	2
1		none	two-way slab	stress	0	0	2
1		none	two-way slab	stress	0	0	2
1		none	two-way slab	stress	0	0	2
1		none	two-way slab	stress	0	0	2
1		none	two-way slab	stress	0	0	2
1		none	two-way slab	stress	0	0	2
1		none	two-way slab	stress	0	0	2
1		none	two-way slab	stress	0	0	2
1		none	two-way slab	stress	0	0	2
1		none	two-way slab	stress	0	0	2
1		none	two-way slab	stress	0	0	2

Design Strip: Longitude SSSs Table

<i>Name</i>	<i>Strip Type</i>	<i>Calc. Trib. Area ft²</i>	<i>Calc. Infl. Area ft²</i>	<i>Top Bar</i>	<i>Bottom Bar</i>	<i>Shear Bar</i>	<i>Top Cover inches</i>
19C-1	center	25.83	0	#5	#5	#4	1
19C-2	center	47.73	0	#5	#5	#4	1
19C-3	center	182	0	#5	#5	#4	1
19C-4	center	270	0	#5	#5	#4	1
20C-1	center	79.41	0	#7	#7	#4	1
20C-2	center	240.9	0	#7	#7	#4	1
20C-3	center	144.3	0	#7	#7	#4	1
20C-4	center	181.5	0	#7	#7	#4	1
20C-5	center	129.5	0	#7	#7	#4	1
21C-1	center	130.6	0	#5	#5	#4	1
21C-2	center	33	0	#5	#5	#4	1
22C-1	center	339.1	0	#5	#5	#4	1
22C-2	center	507.5	0	#5	#5	#4	1
22C-3	center	491.6	0	#5	#5	#4	1
22C-4	center	440.9	0	#5	#5	#4	1
22C-5	center	432.8	0	#5	#5	#4	1
22C-6	center	402.9	0	#5	#5	#4	1
23C-1	center	393.1	0	#5	#5	#4	1
23C-2	center	120.3	0	#5	#5	#4	1
24C-1	center	420.2	0	#5	#5	#4	1
24C-2	center	634.9	0	#5	#5	#4	1
24C-3	center	223.6	0	#5	#5	#4	1
25C-1	center	271.4	0	#5	#5	#4	1
25C-2	center	236.5	0	#5	#5	#4	1
26C-1	center	224.9	0	#5	#5	#4	1
26C-2	center	253.4	0	#5	#5	#4	1
27C-1	center	290.5	0	#5	#5	#4	1
27C-2	center	328.2	0	#5	#5	#4	1
27C-3	center	306.5	0	#5	#5	#4	1
27C-4	center	539.5	0	#5	#5	#4	1
27C-5	center	447.1	0	#5	#5	#4	1
28C-1	center	103.2	0	#5	#5	#4	1
29C-1	center	679.7	0	#5	#5	#4	1
29C-2	center	366.3	0	#5	#5	#4	1
30C-1	center	422.4	0	#5	#5	#4	1
31C-1	center	221.7	0	#5	#5	#4	1
31C-2	center	295.5	0	#5	#5	#4	1
31C-3	center	318.6	0	#5	#5	#4	1
31C-4	center	581	0	#5	#5	#4	1
31C-5	center	305.8	0	#5	#5	#4	1
32C-1	center	236.6	0	#5	#5	#4	1
33C-1	center	418.1	0	#5	#5	#4	1
33C-2	center	507.8	0	#5	#5	#4	1
33C-3	center	430.8	0	#5	#5	#4	1
34C-1	center	332.1	0	#5	#5	#4	1
35C-1	center	125.8	0	#5	#5	#4	1

Design Strip: Longitude SSSs Table (3)

<i>Name</i>	<i>Strip Type</i>	<i>Calc. Trib. Area ft²</i>	<i>Calc. Infl. Area ft²</i>	<i>Top Bar</i>	<i>Bottom Bar</i>	<i>Shear Bar</i>	<i>Top Cover inches</i>
35C-2	center	547.9	0	#5	#5	#4	1
35C-3	center	309	0	#5	#5	#4	1
36C-1	center	138.9	0	#5	#5	#4	1
36C-2	center	257.9	0	#5	#5	#4	1
36C-3	center	69.46	0	#5	#5	#4	1
36C-4	center	288.4	0	#5	#5	#4	1
36C-5	center	221.3	0	#5	#5	#4	1

Design Strip: Longitude SSSs Table (4)

<i>Top Cover inches</i>	<i>Bot. Cover inches</i>	<i>Torsion Design</i>	<i>System</i>	<i>Min Bar Loc.</i>	<i>Min T. Bar</i>	<i>Min B. Bar</i>	<i>Shear Legs</i>
1		none	two-way slab	stress	0	0	2
1		none	two-way slab	stress	0	0	2
1		none	two-way slab	stress	0	0	2
1		none	two-way slab	stress	0	0	2
1		none	two-way slab	stress	0	0	2
1		none	two-way slab	stress	0	0	2
1		none	two-way slab	stress	0	0	2

Design Strip: Punching Checks Table

<i>Number</i>	<i>Location feet</i>	<i>Radius feet</i>	<i>Cover To CGS inches</i>	<i>Angle degrees</i>	<i>Edge</i>	<i>Connection</i>
1	(-207,-153.1)	8	1.5	-6	failure planes	auto
2	(-200.6,-89.05)	10	1.5	-6	failure planes	auto
3	(-199.7,-144.9)	8	1.5	-6	failure planes	auto
4	(-198.6,-115.2)	10	1.5	-6	failure planes	auto
5	(-198.6,-134.5)	8	1.5	-6	failure planes	auto
6	(-198,-65.18)	8	1.5	-6	failure planes	auto
7	(-197.9,-160)	8	1.5	22	failure planes	auto
8	(-195.5,-41.31)	10	1.5	-6	failure planes	auto
9	(-193,-17.44)	8	1.5	-6	failure planes	auto
10	(-191.4,-151.5)	6.5	1.5	-6	failure planes	auto
11	(-180.8,-44.12)	8	1.5	84	failure planes	auto
12	(-180.5,-117.1)	8	1.5	-6	failure planes	auto
13	(-177,-67.39)	8	1.5	-6	failure planes	auto
14	(-176.8,-92.28)	8	1.5	84	failure planes	auto
15	(-165.9,-123.5)	8	1.5	-6	failure planes	auto
16	(-164.9,-47.89)	8	1.5	-6	failure planes	auto
17	(-164.6,-22.53)	8	1.5	90	failure planes	auto
18	(-164.4,-141.2)	15	1.5	22	failure planes	auto
19	(-145.3,-22.83)	8	1.5	0	failure planes	auto
20	(-144.5,-120.4)	8	1.5	22	failure planes	auto
21	(-138.3,-51.35)	8	1.5	0	failure planes	auto
22	(-138.2,-136)	12	1.5	22	failure planes	auto
23	(-135.3,-110.1)	8	1.5	0	failure planes	auto
24	(-120.6,-101.9)	8	1.5	0	failure planes	auto
25	(-118.9,-75.16)	8	1.5	0	failure planes	auto
26	(-118.8,-22.8)	15	1.5	0	failure planes	auto
27	(-118.4,-52.35)	8	1.5	0	failure planes	auto
28	(-115.9,-127)	8	1.5	22	failure planes	auto
29	(-109.7,-60.83)	8	1.5	0	failure planes	auto
30	(-95,-75.17)	8	1.5	90	failure planes	auto
31	(-94.55,-101.9)	8	1.5	0	failure planes	auto
32	(-93.65,-118.1)	8	1.5	22	failure planes	auto
33	(-87.45,-47.3)	10	1.5	0	failure planes	auto
34	(-86.02,-66.08)	8	1.5	0	failure planes	auto
35	(-71.38,-109.1)	8	1.5	22	failure planes	auto
36	(-68.7,-22.83)	12	1.5	0	failure planes	auto
37	(-67.92,-66.08)	8	1.5	0	failure planes	auto
38	(-65.26,-94)	8	1.5	0	failure planes	auto
39	(-60.2,-44.83)	8	1.5	0	failure planes	auto
40	(-48.99,-100.5)	8	1.5	112	failure planes	auto
41	(-45.8,-22.83)	10	1.5	0	failure planes	auto
42	(-41.7,-44.83)	8	1.5	0	failure planes	auto
43	(-28.53,-90.28)	15	1.5	0	failure planes	auto
44	(-19.02,-17.34)	8	1.5	0	failure planes	auto
45	(-14.46,-46.58)	8	1.5	0	failure planes	auto
46	(-14.45,-61.73)	8	1.5	0	failure planes	auto

Design Strip: Punching Checks Table (2)

Connection	Use Spec LLR Params	Spec. LLR Levels	Spec. Trib. Area ft ²	Spec. Infl. Area ft ²	Calc. Trib. Area ft ²	Calc. Infl. Area ft ²
	false	1	0	0	60.16	0
	false	1	0	0	292.1	0
	false	1	0	0	97.23	0
	false	1	0	0	298.4	0
	false	1	0	0	312.7	0
	false	1	0	0	247	0
	false	1	0	0	27.83	0
	false	1	0	0	186.9	0
	false	1	0	0	284.9	0
	false	1	0	0	357.9	0
	false	1	0	0	430.5	0
	false	1	0	0	484	0
	false	1	0	0	464.4	0
	false	1	0	0	555.9	0
	false	1	0	0	455.9	0
	false	1	0	0	449.6	0
	false	1	0	0	597.8	0
	false	1	0	0	385	0
	false	1	0	0	659.9	0
	false	1	0	0	416.5	0
	false	1	0	0	547.2	0
	false	1	0	0	210.9	0
	false	1	0	0	328.5	0
	false	1	0	0	578.7	0
	false	1	0	0	467.2	0
	false	1	0	0	374.9	0
	false	1	0	0	331	0
	false	1	0	0	268.3	0
	false	1	0	0	271.6	0
	false	1	0	0	524.7	0
	false	1	0	0	638.1	0
	false	1	0	0	190.9	0
	false	1	0	0	242.3	0
	false	1	0	0	354.4	0
	false	1	0	0	174	0
	false	1	0	0	259.8	0
	false	1	0	0	396.6	0
	false	1	0	0	518.2	0
	false	1	0	0	405.2	0
	false	1	0	0	135.9	0
	false	1	0	0	574.2	0
	false	1	0	0	556.8	0
	false	1	0	0	241.3	0
	false	1	0	0	401.3	0
	false	1	0	0	486	0
	false	1	0	0	356.2	0

c. Infl. Area

c. Infl. Area

Design Strip: Punching Checks Table (4)

<i>Number</i>	<i>Location feet</i>	<i>Radius feet</i>	<i>Cover To CGS inches</i>	<i>Angle degrees</i>	<i>Edge</i>	<i>Connection</i>
47	(-5.364,-16.83)	8	1.5	0	failure planes	auto
48	(-5.313,-48.08)	8	1.5	0	failure planes	auto
49	(-3.839,-76.29)	8	1.5	0	failure planes	auto
50	(-3.615,-61.75)	8	1.5	0	failure planes	auto
51	(-1.469,-92.28)	15	1.5	0	failure planes	auto

Design Strip: Punching Checks Table (5)

<i>Connection</i>	<i>Use Spec LLR Params</i>	<i>Spec. LLR Levels</i>	<i>Spec. Trib. Area ft²</i>	<i>Spec. Infl. Area ft²</i>	<i>Calc. Trib. Area ft²</i>	<i>Calc. Infl. Area ft²</i>
	false	1	0	0	288.6	0
	false	1	0	0	162	0
	false	1	0	0	262.5	0
	false	1	0	0	33.47	0
	false	1	0	0	110.3	0

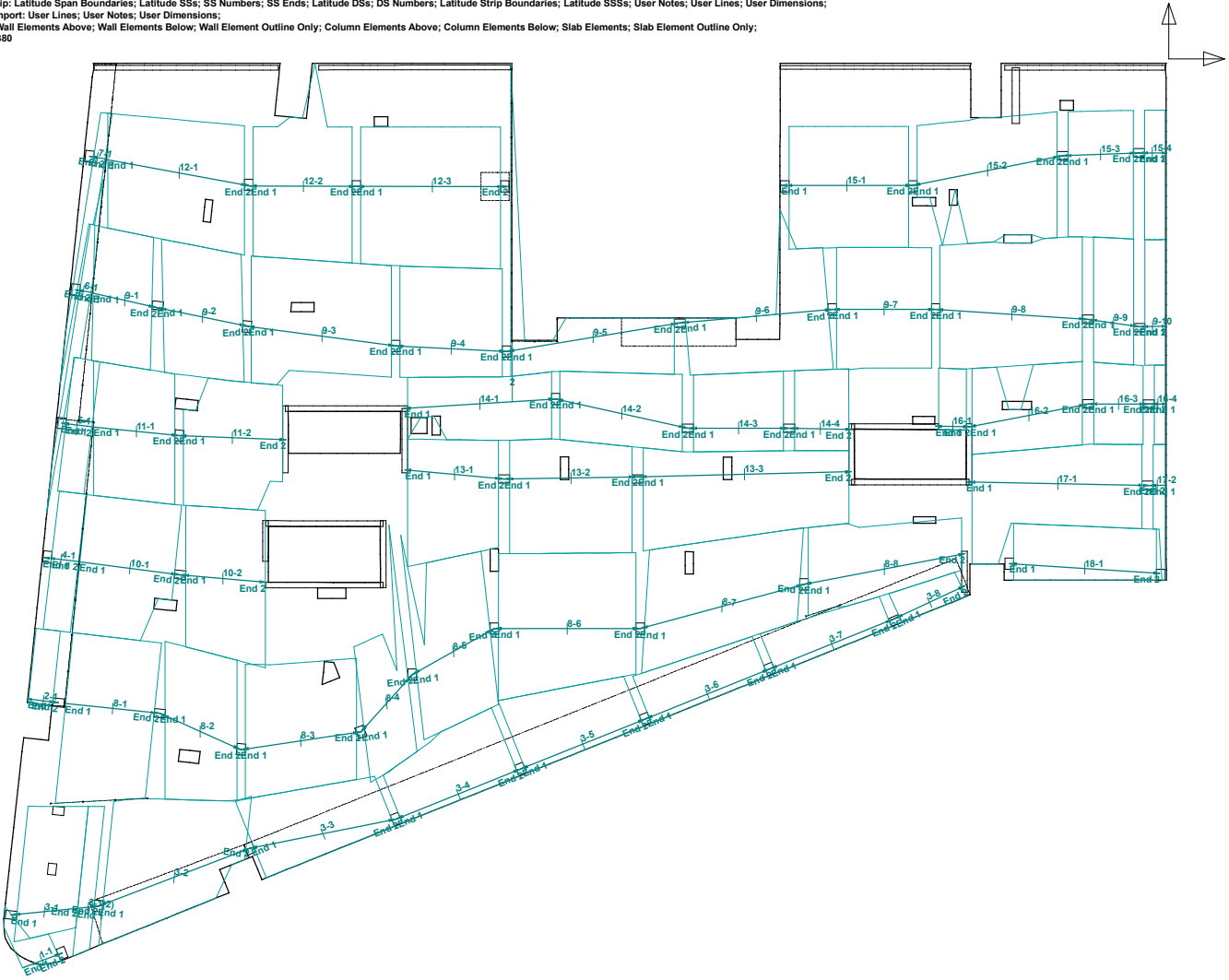
Design Strip: Punching Checks Table (6)

c. Infl. Area

Max LLR %	Red. Red. %	Stor. Red. %	Park. Red. %
40	0	0	0
40	0	0	0
40	0	0	0
40	0	0	0
40	0	0	0

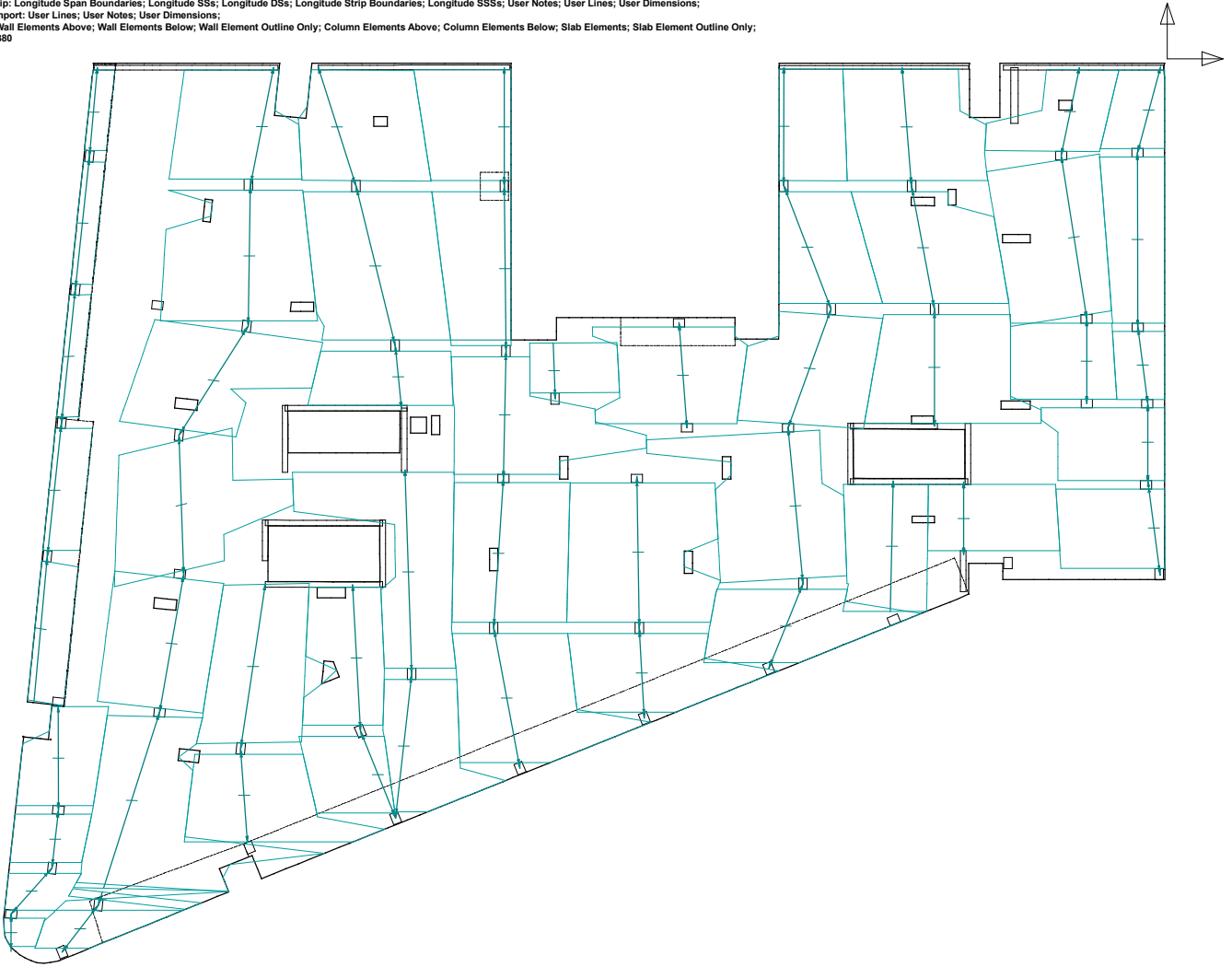
Design Strip: Latitude Design Spans Plan

Design Strip: Latitude Span Boundaries; Latitude SSs; SS Numbers; SS Ends; Latitude DSs; DS Numbers; Latitude Strip Boundaries; Latitude SSSs; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



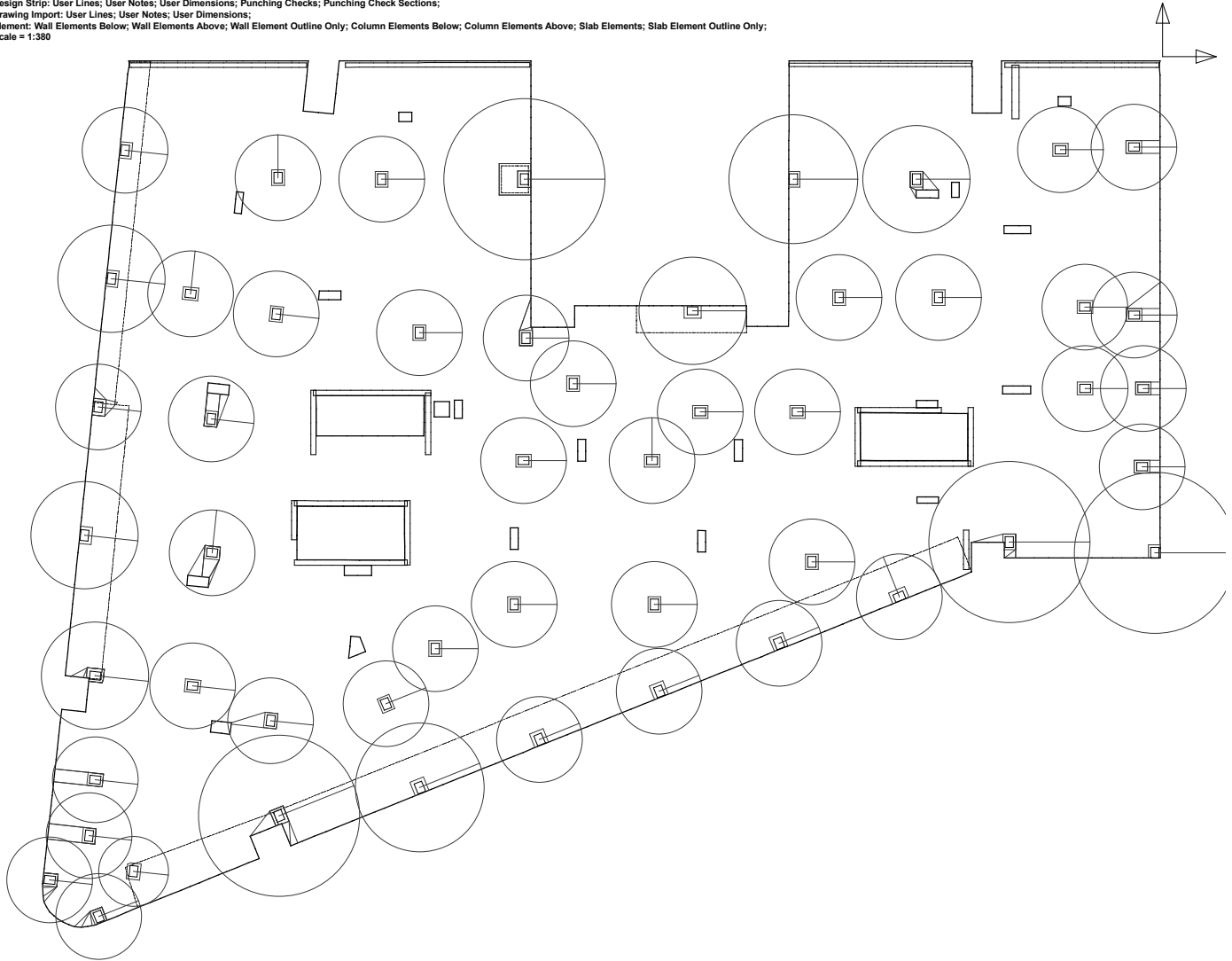
Design Strip: Longitude Design Spans Plan

Design Strip: Longitude Span Boundaries; Longitude SSs; Longitude DSs; Longitude Strip Boundaries; Longitude SSSs; User Notes; User Lines; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Scale = 1:380



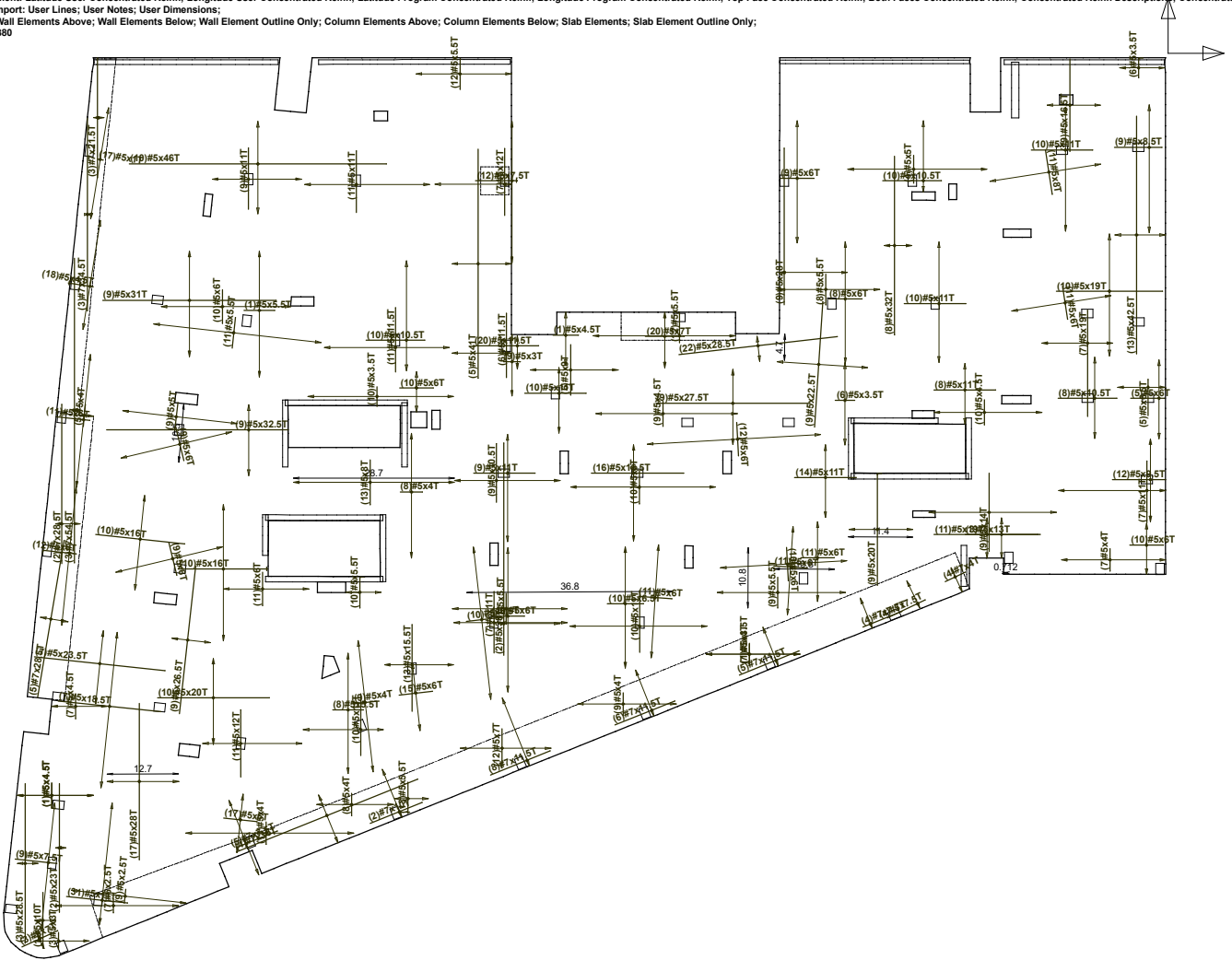
Design Strip: Punching Checks Plan

Design Strip: User Lines; User Notes; User Dimensions; Punching Checks; Punching Check Sections;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:380



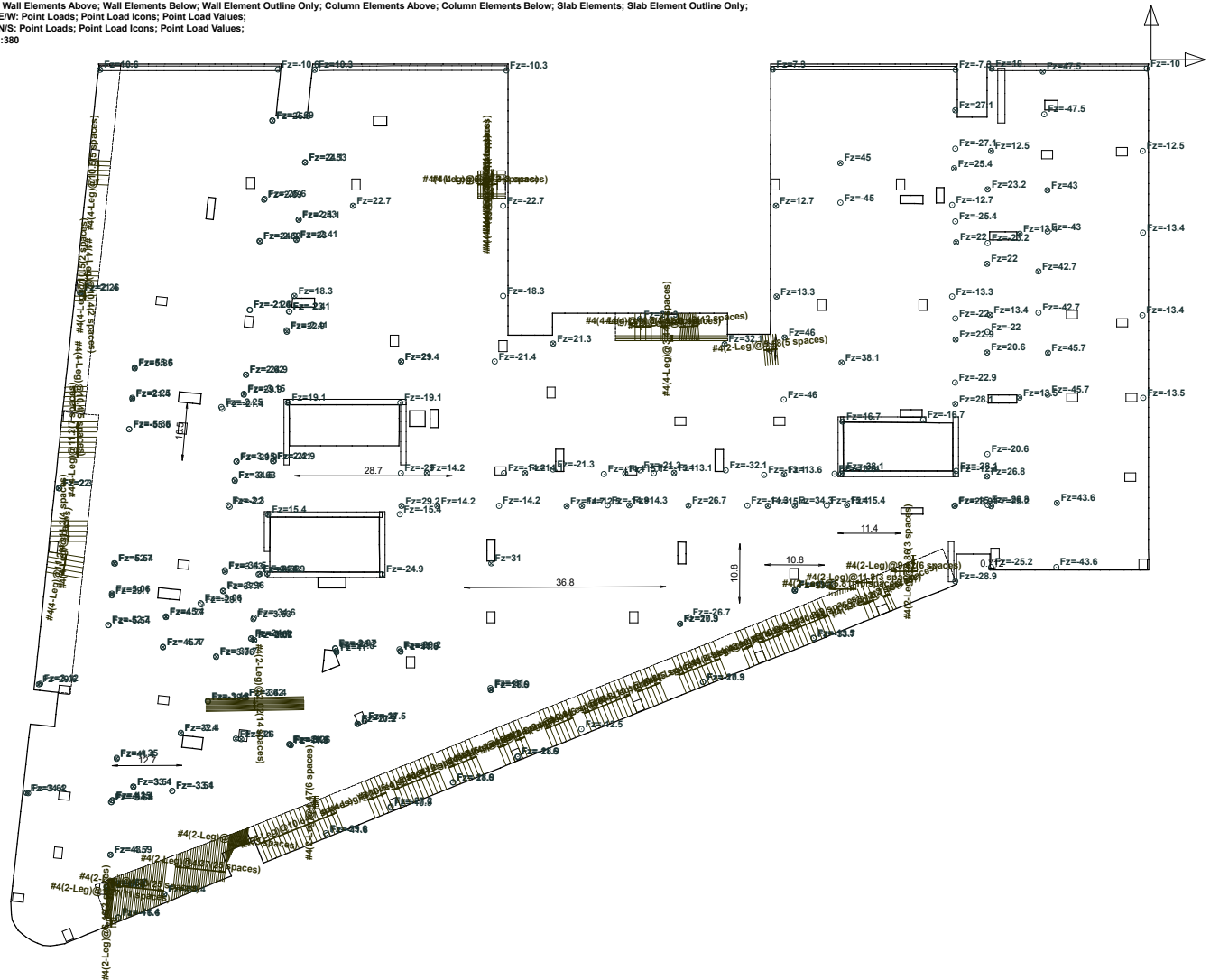
Reinforcement: Top Bars Plan

Reinforcement: Latitude User Concentrated Reinf.; Longitude User Concentrated Reinf.; Latitude Program Concentrated Reinf.; Longitude Program Concentrated Reinf.; Top Face Concentrated Reinf.; Both Faces Concentrated Reinf.; Concentrated Reinf. Descriptions; Concentrate
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



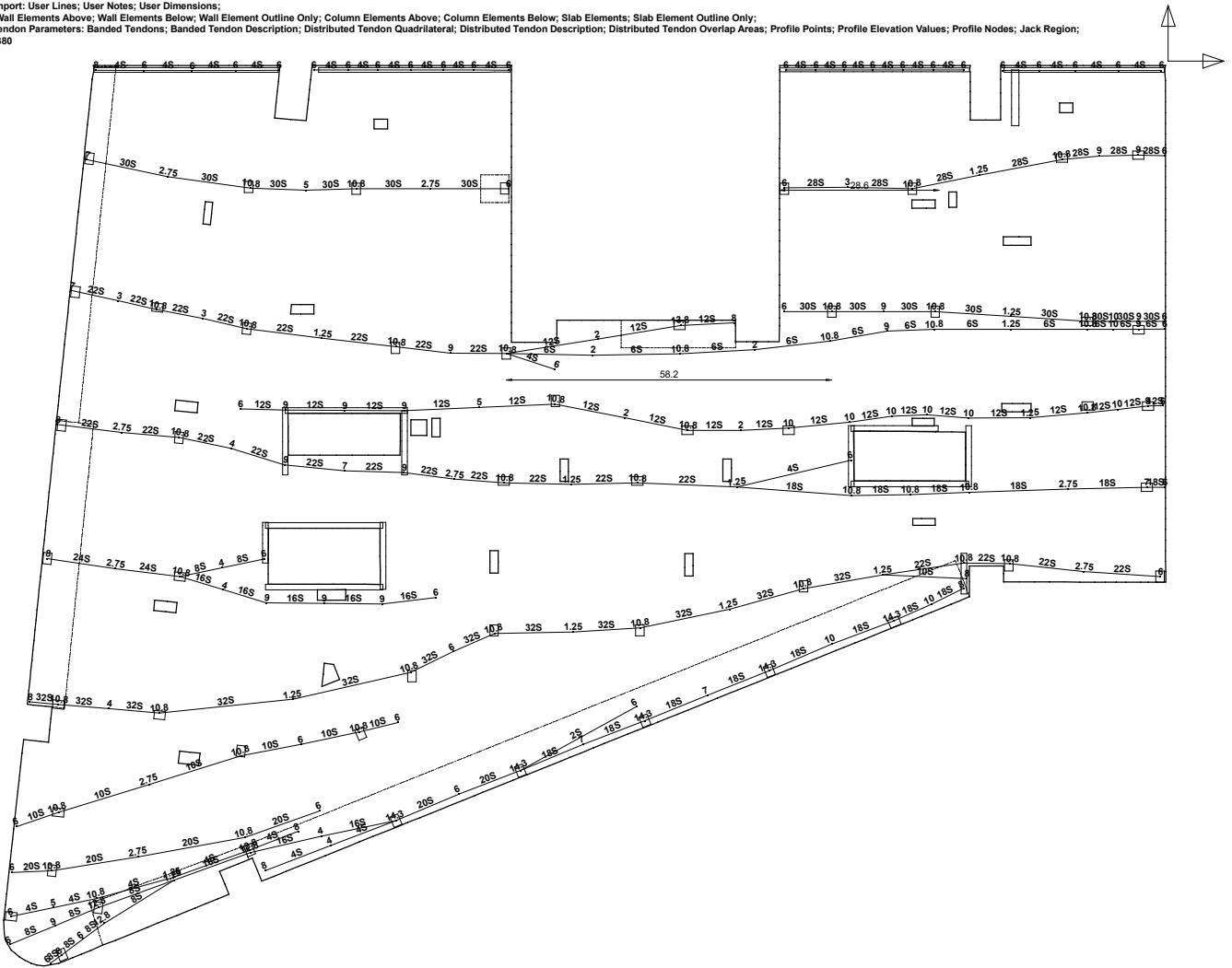
Reinforcement: Shear Bars Plan

Reinforcement: Latitude User Transverse Reinf.; Longitude User Transverse Reinf.; Latitude Program Transverse Reinf.; Longitude Program Transverse Reinf.; Transverse Reinf. Descriptions; Transverse Reinf. Extent; Latitude User Individual Transverse Bars; Longitude User Individual Transverse Bars; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Seismic E/W: Point Loads; Point Load Icons; Point Load Values;
 Seismic N/S: Point Loads; Point Load Icons; Point Load Values;
 Scale = 1:380



Manual Latitude Tendon: Standard Plan

Manual Latitude Tendon: Tendons; Num Strands; Jacks; Tendon Points; Profile Values; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Latitude Tendon Parameters: Banded Tendons; Banded Tendon Description; Distributed Tendon Overlap Areas; Profile Points; Profile Elevation Values; Profile Nodes; Jack Region;
 Scale = 1:380



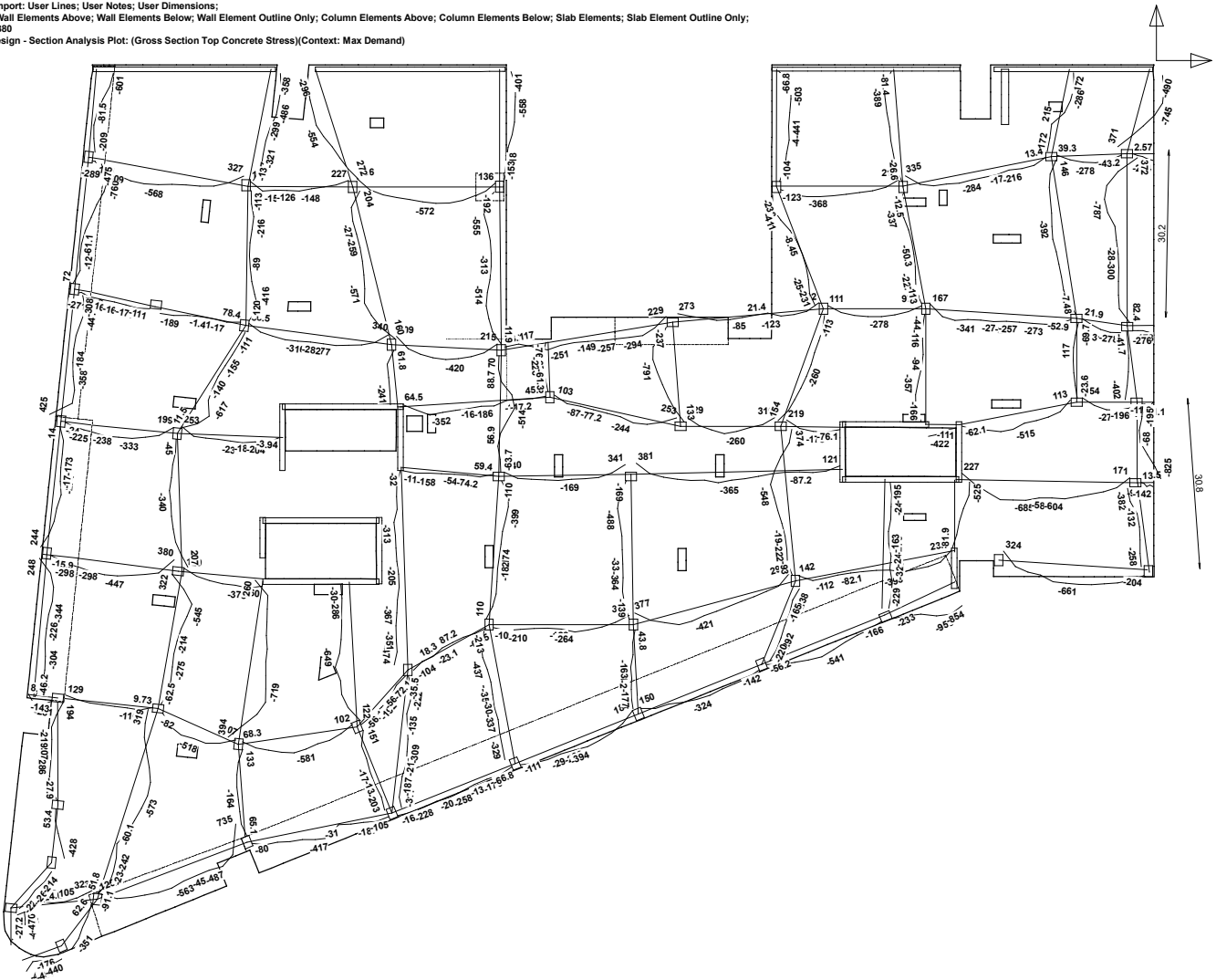
Manual Longitude Tendon: Standard Plan

Manual Longitude Tendon: Tendons; Num Strands; Jacks; Tendon Points; Profile Values; User Notes; User Lines; User Dimensions;
Drawing Input: User Lines; User Notes; User Dimensions;
Drawing Output: User Lines; User Notes; User Dimensions;
Longitudinal Tendon Parameters: Banded Tendons; Banded Tendon Description; Distributed Tendon Overlap Areas; Jack Region; Distributed Tendon Description; Distributed Tendon Overlap Areas; Profile Points; Profile Elevation Values; Profile Nodes;
Scale = 1:300



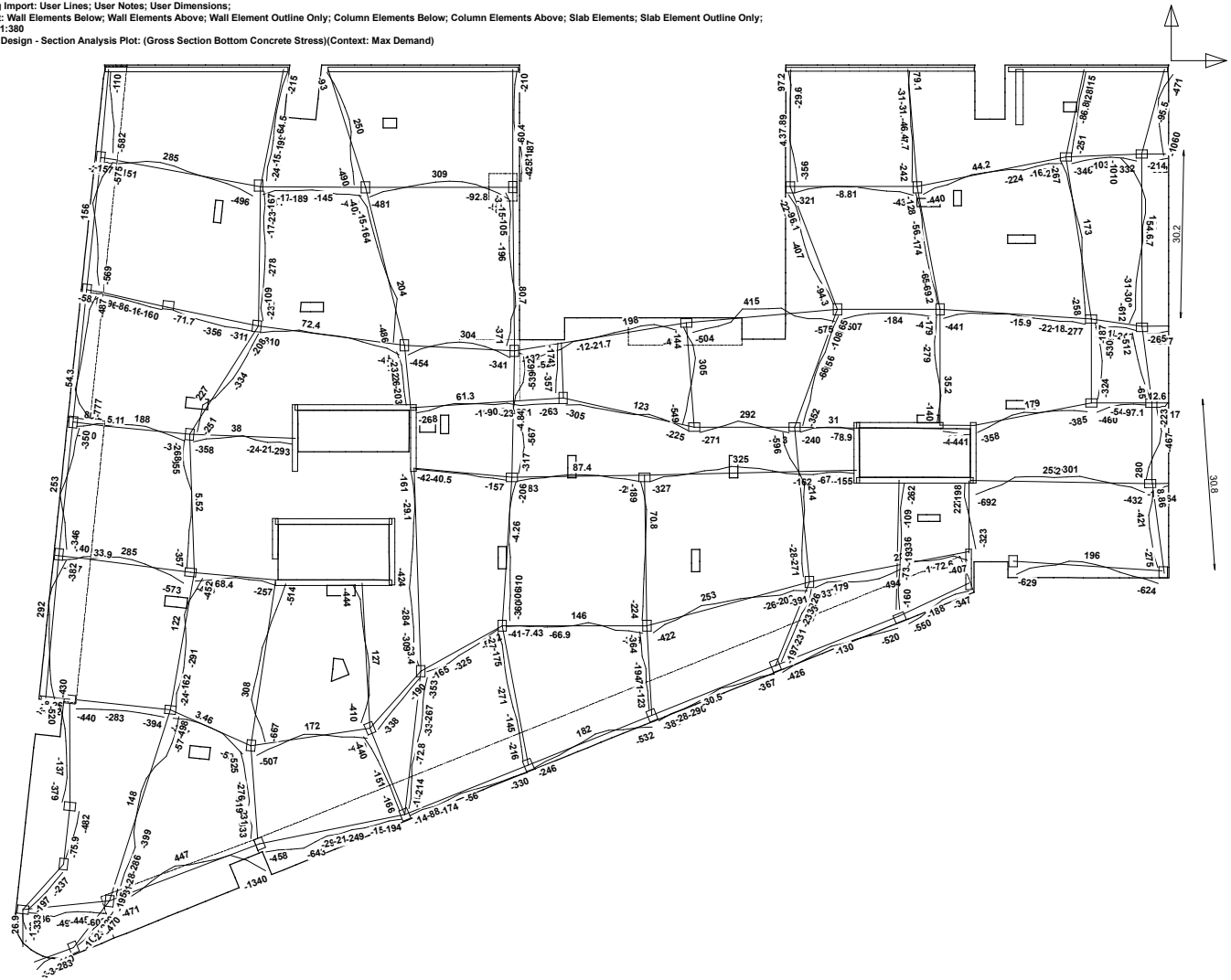
Service Design: Top Stress Plan

Service Design: Latitude Span Designs; Longitude Span Designs; Span Design Detailed Status; Latitude DS Designs; Longitude DS Designs; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380
 Service Design - Section Analysis Plot: (Gross Section Top Concrete Stress)(Context: Max Demand)

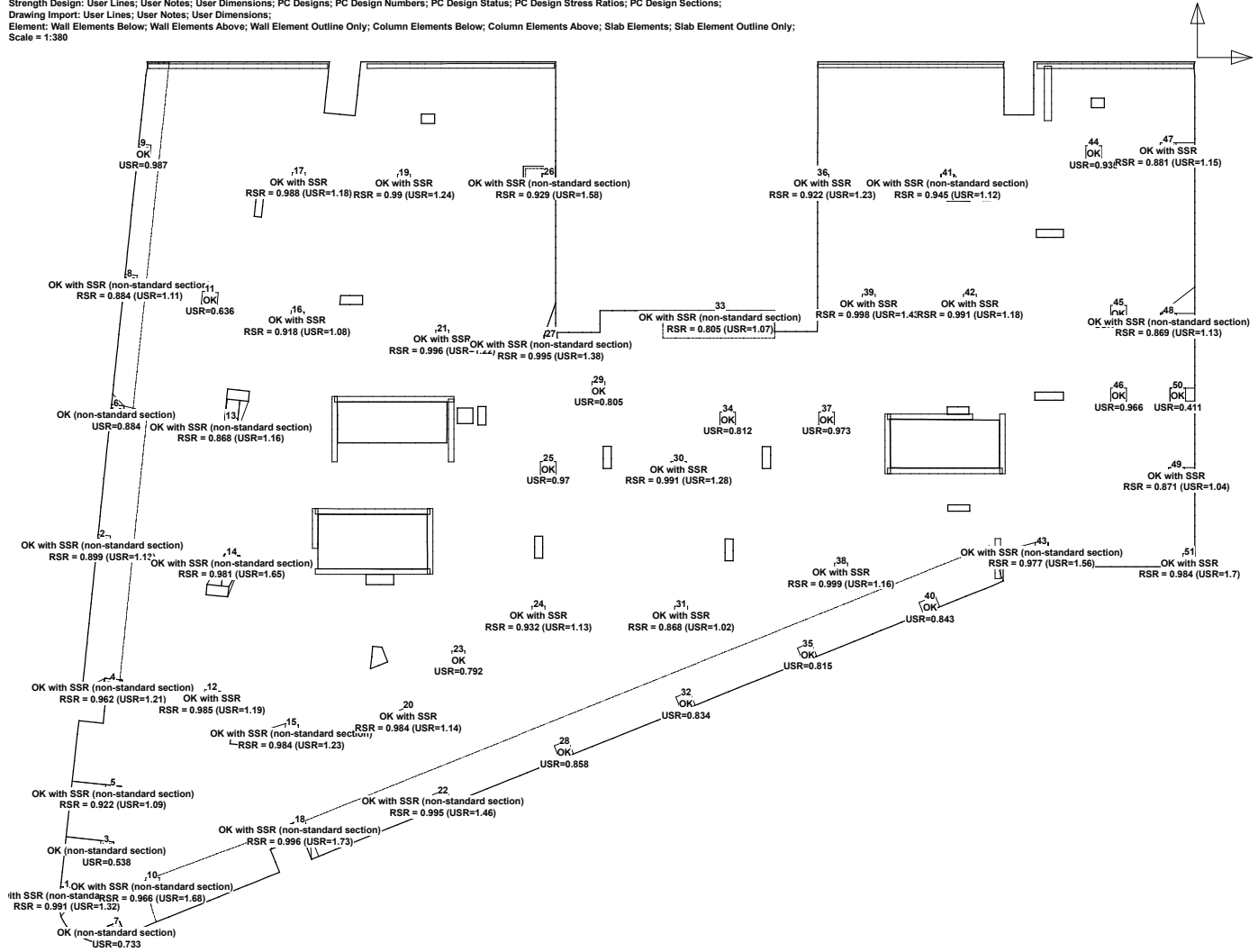


Service Design: Bottom Stress Plan

Service Design: User Lines; User Notes; User Dimensions; Latitude Span Designs; Longitude Span Designs; Latitude DS Designs; Longitude DS Designs;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
 Scale = 1:380
 Service Design - Section Analysis Plot: (Gross Section Bottom Concrete Stress)(Context: Max Demand)

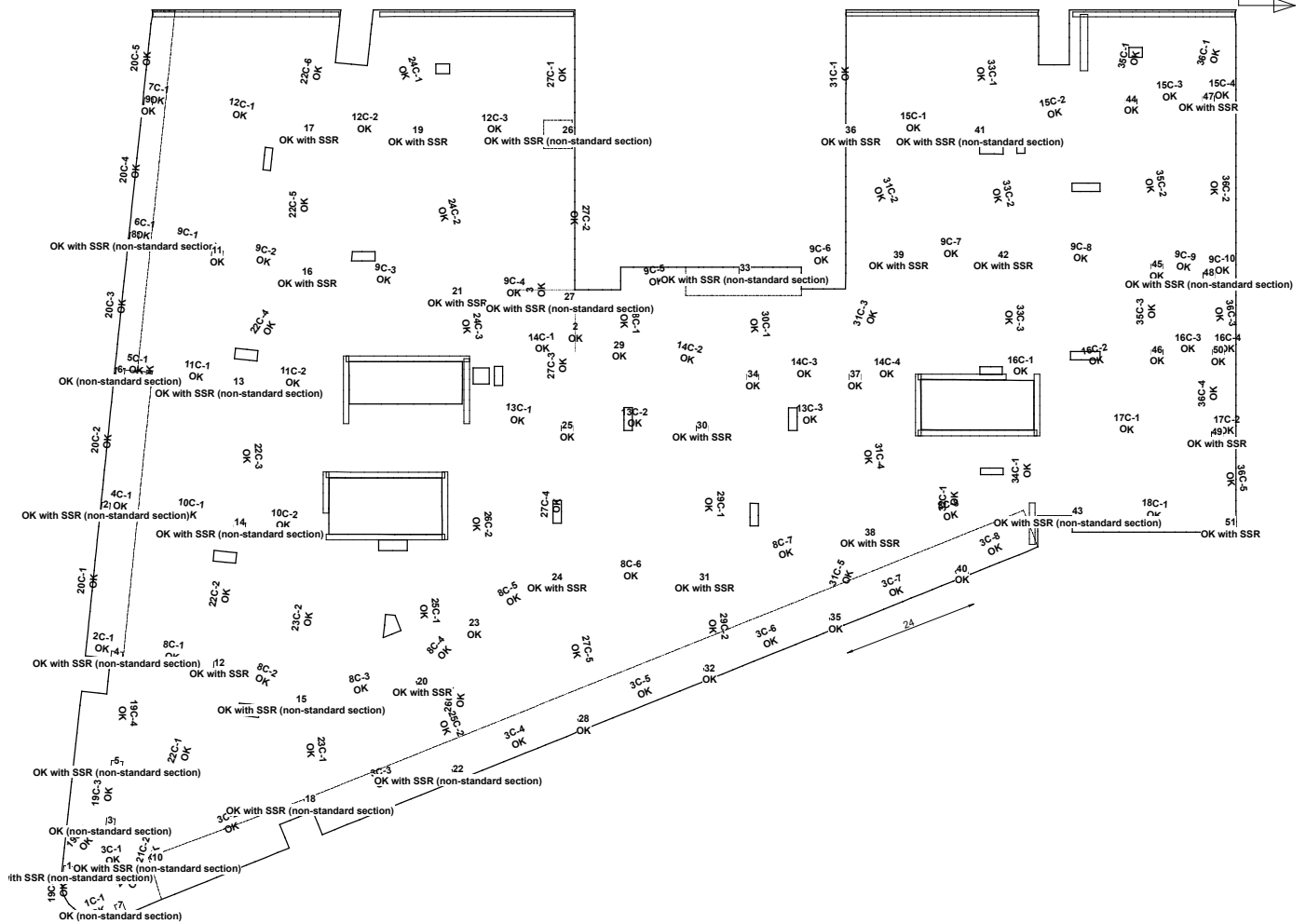


Strength Design: User Lines; User Notes; User Dimensions; PC Designs; PC Design Numbers; PC Design Status; PC Design Stress Ratios; PC Design Sections;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:380



Design Status: Status Plan

Design Status: Latitude Span Designs; Longitude Span Designs; Span Design Numbers; Span Design Status; Latitude DS Designs; Longitude DS Designs; DS Design Numbers; DS Design Status; PC Designs; PC Design Numbers; PC Design Status; User Notes; User Lines; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Scale = 1:380



This Wall in File: P:\2018\18-T066 (18th & Salmon)\Engineering\Calculations\Models\Foundation\retain

RetainPro (c) 1987-2017, Build 11.17.11.03

License : KW-06056142

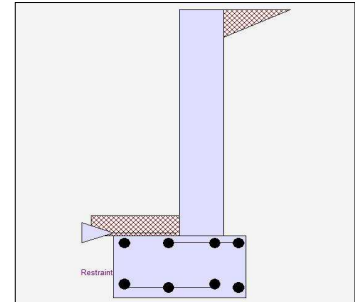
License To : FROELICH CONSULTING ENGINEERS, INC

Cantilevered Retaining Wall

Code: IBC 2015,ACI 318-14,ACI 530-13

Criteria

Retained Height	=	5.50 ft
Wall height above soil	=	0.00 ft
Slope Behind Wall	=	0.00
Height of Soil over Toe	=	6.00 in
Water height over heel	=	0.0 ft



Load Factors

Building Code	IBC 2015,ACI
Dead Load	1.200
Live Load	1.600
Earth, H	1.600
Wind, W	1.000
Seismic, E	1.000

Soil Data and Lateral Earth Pressure

Allow Soil Bearing	=	2,000.0 psf	Soil Density, Heel	=	110.00 pcf
Equivalent Fluid Pressure Method			Soil Density, Toe	=	0.00 pcf
At-Rest Heel Pressure	=	32.0 psf/ft	Footing Soil Friction	=	0.400
	=		Soil height to ignore	=	12.00 in
Passive Pressure	=	250.0 psf/ft	for passive pressure	=	

Surcharge Loads

Surcharge Over Heel	=	100.0 psf	Surcharge Over Toe	=	0.0
Used To Resist Sliding & Overturning			Used for Sliding & Overturning		

Axial Load Applied to Stem

Axial Dead Load	=	100.0 lbs	Axial Load Eccentricity	=	0.0 in
Axial Live Load	=	0.0 lbs			

Use menu item Settings > Printing & Title Block
to set these five lines of information
for your program.

Title **Grid 7 Wall Cantilevered**
Job # :
Description....

Dsgnr:

Page 301 of 324 2
Date: 8 OCT 2019

This Wall in File: P:\2018\18-T066 (18th & Salmon)\Engineering\Calculations\Models\Foundation\retain

RetainPro (c) 1987-2017, Build 11.17.11.03

License : KW-06056142

License To : FROELICH CONSULTING ENGINEERS, INC

Cantilevered Retaining Wall

Code: IBC 2015,ACI 318-14,ACI 530-13

Lateral Load Applied to Stem

Lateral Load	=	0.0 #/ft
...Height to Top	=	2.50 ft
...Height to Bottom	=	1.50 ft
Load Type	=	Seismic (E) (Service Level)

Wind on Exposed Stem

Wind on Exposed Stem (Service Level)	=	0.0 psf
---	---	---------

Adjacent Footing Load

Adjacent Footing Load	=	0.0 lbs	Footing Type	Line Load
Footing Width	=	0.00 ft	Base Above/Below Soil	
Eccentricity	=	0.00 in	at Back of Wall	= 0.0 ft
Wall to Ftg CL Dist	=	0.00 ft	Poisson's Ratio	= 0.300

Use menu item **Settings > Printing & Title Block**
to set these five lines of information
for your program.

Title **Grid 7 Wall Cantilevered**
Job # :
Description....

Page 302 of 3
Date: 8 OCT 2019

This Wall in File: P:\2018\18-T066 (18th & Salmon)\Engineering\Calculations\Models\Foundation\retain

RetainPro (c) 1987-2017, Build 11.17.11.03
License : KW-06056142
License To : FROELICH CONSULTING ENGINEERS, INC

Cantilevered Retaining Wall

Code: IBC 2015,ACI 318-14,ACI 530-13

Wall Design Summary

Stability Ratios

Overturning = 1.61 OK
Slab Resists All Sliding !

Soil Bearing

Total Bearing Load = 1,953 lbs
...resultant ecc. = 9.04 in

Soil Pressure @ Toe = 1,743 psf OK
Soil Pressure @ Heel = 0 psf OK
Allowable = 2,000 psf
Soil Pressure Less Than Allowable

ACI Factored @ Toe = 2,440 psf
ACI Factored @ Heel = 0 psf

Footing Shear @ Toe = 2.9 psi OK
Footing Shear @ Heel = 3.0 psi OK
Allowable = 94.9 psi

Sliding

Resisting Forces

Vertical Forces

	Force
Soil Over Heel	302.5 lbs
Sloped Soil Over Heel	0.0
Surcharge Over Heel	50.0
Adjacent Footing Load	0.0
Axial Dead Load on Stem	100.0
Axial Live Load on Stem *	Omit
Soil Over Toe	0.0
Surcharge Over Toe	0.0
Stem Weight(s)	825.0
Earth @ Stem Transitions	0.0
Footing Weight	675.0
Key Weight	0.0
Vert. Component **	0.0

Total Vertical Loads 1,952.5 lbs

* Axial live load NOT included in total displayed , or used for overturning
or sliding resistance, but is included for soil pressure calculations.

Sliding Calcs

Lateral Sliding Force = 939.6 lbs

Sliding Forces

Lateral Forces

	Force
* Heel Active Pressure	784.0 lbs
Surcharge over Heel	155.6
Adjacent Footing	0.0
Surcharge Over Toe	0.0
Load @ Stem Above Soil	0.0
Added Lateral Load	0.0
Seismic Load	0.0
Seismic-Self-weight	0.0
Lateral on Key	0.0

Totals = 939.6 lbs

*Includes water table effect

Vertical component of active lateral soil pressure IS NOT considered in
the calculation of soil bearing pressures.

Use menu item Settings > Printing & Title Block
to set these five lines of information
for your program.

Title **Grid 7 Wall Cantilevered**
Job # :
Description....

Page 303 of 4
Date: 8 OCT 2019

This Wall in File: P:\2018\18-T066 (18th & Salmon)\Engineering\Calculations\Models\Foundation\retain

RetainPro (c) 1987-2017, Build 11.17.11.03
License : KW-06056142
License To : FROELICH CONSULTING ENGINEERS, INC

Cantilevered Retaining Wall

Code: IBC 2015,ACI 318-14,ACI 530-13

Overturning

Resisting Moments

<u>Resisting Moments</u>	<u>Force</u>	<u>Distance</u>	<u>Moment</u>
Soil Over Heel	302.5 lbs	2.75 ft	831.9 ft-#
Sloped Soil Over Heel	0.0		
Surcharge Over Heel	50.0	2.75	137.5
Adjacent Footing Load	0.0		
Axial Dead Load on Stem	100.0	2.00	200.0
Axial Live Load on Stem *	0.0		
Soil Over Toe	0.0	0.75	
Surcharge Over Toe	0.0		
Stem Weight(s)	825.0	2.00	1,650.0
Earth @ Stem Transitions	0.0		
Footing Weight	675.0	1.50	1,012.5
Key Weight	0.0	0.50	
Vert. Component	0.0		
Total Vertical Loads	1,952.5 lbs		
Resisting Moment			3,831.9 ft-#
Eccentricity			9.0 in

* Axial live load NOT included in total displayed, or used for overturning or sliding resistance, but is included for soil pressure calculations.

Overturning

Overturning Moments

<u>Overturning Moments</u>	<u>Force</u>	<u>Distance</u>	<u>Moment</u>
Heel Active Pressure	784.0 lbs	2.33 ft	1,829.3 ft-#
Surcharge over Heel	155.6	3.50	544.4
Adjacent Footing	0.0		
Surcharge Over Toe	0.0		
Load @ Stem Above Soil	0.0		
Added Lateral Load	0.0		
Seismic Load	0.0		
Seismic-Self-weight	0.0		
Totals =	939.6 lbs		
Overturning Moment			2,373.8 ft-#

Use menu item Settings > Printing & Title Block
to set these five lines of information
for your program.

Title **Grid 7 Wall Cantilevered**
Job # :
Description....

Page 304 of 305
Date: 8 OCT 2019

This Wall in File: P:\2018\18-T066 (18th & Salmon)\Engineering\Calculations\Models\Foundation\retain

RetainPro (c) 1987-2017, Build 11.17.11.03
License : KW-06056142
License To : FROELICH CONSULTING ENGINEERS, INC

Cantilevered Retaining Wall

Code: IBC 2015,ACI 318-14,ACI 530-13

Stem Design Summary

Bottom		
Stem OK		
Design Height Above Ftg	ft =	0.00
Wall Material Above "Ht"	=	Concrete
Design Method	=	LRFD
Thickness	=	12.00
Rebar Size	=	# 7
Rebar Spacing	=	12.00
Rebar Placed at	=	Edge
Design Data		
fb/FB + fa/Fa	=	0.085
Total Force @ Section		
Service Level	lbs =	
Strength Level	lbs =	1,030.4
Moment....Actual		
Service Level	ft-# =	
Strength Level	ft-# =	2,123.7
Moment.....Allowable	=	24,863.0
Shear.....Actual		
Service Level	psi =	
Strength Leve	psi =	9.0
Shear.....Allowable	psi =	106.1
Anet	in2 =	
Rebar Depth 'd'	in =	9.56
Masonry Data		
f'm	psi =	
Fs	psi =	
Solid Grouting	=	
Modular Ratio 'n'	=	
Wall Weight	psf =	150.0
Short Term Factor	=	
Equiv. Solid Thick.	=	
Masonry Block Type	=	Medium Weight
Masonry Design Method	=	ASD
Concrete Data		
f'c	psi =	5,000.0
Fy	psi =	60,000.0

Use menu item Settings > Printing & Title Block
to set these five lines of information
for your program.

Title **Grid 7 Wall Cantilevered**
Job # :
Description....

Page 305 of 324
Date: 8 OCT 2019

This Wall in File: P:\2018\18-T066 (18th & Salmon)\Engineering\Calculations\Models\Foundation\retain

RetainPro (c) 1987-2017, Build 11.17.11.03
License : KW-06056142
License To : FROELICH CONSULTING ENGINEERS, INC

Cantilevered Retaining Wall

Code: IBC 2015, ACI 318-14, ACI 530-13

Concrete Stem Rebar Area Details

Bottom Stem	Vertical Reinforcing	Horizontal Reinforcing
As (based on applied moment) :	0.051 in ² /ft	
(4/3) * As :	0.0679 in ² /ft	Min Stem T&S Reinf Area 1.584 in ²
3sqrt(f'c)bd/fy : 3sqrt(5000)(12)(9.5625)/60000	0.04057 in ² /ft	Min Stem T&S Reinf Area per ft of stem Height : 0.288 in ² /ft
0.0018bh : 0.0018(12)(12) :	0.2592 in ² /ft	Horizontal Reinforcing Options :
	=====	One layer of : Two layers of :
Required Area :	0.2592 in ² /ft	#4@ 8.33 in #4@ 16.67 in
Provided Area :	0.6 in ² /ft	#5@ 12.92 in #5@ 25.83 in
Maximum Area :	2.4384 in ² /ft	#6@ 18.33 in #6@ 36.67 in

Footing Design Results

		<u>Toe</u>	<u>Heel</u>
Factored Pressure	=	2,440	0 psf
Mu' : Upward	=	2,133	0 ft-#
Mu' : Downward	=	378	145 ft-#
Mu: Design	=	1,755	145 ft-#
Actual 1-Way Shear	=	2.92	3.01 psi
Allow 1-Way Shear	=	50.60	50.60 psi
Toe Reinforcing	=	# 8 @ 12.00 in	
Heel Reinforcing	=	# 6 @ 16.00 in	
Key Reinforcing	=	None Spec'd	

Other Acceptable Sizes & Spacings

Toe: Not req'd: $\mu < \phi * 5 * \lambda * \sqrt{f'c} * S_m$

Heel: Not req'd: $\mu < \phi * 5 * \lambda * \sqrt{f'c} * S_m$

Key: Slab Resists Sliding - No Force on Key

Min footing T&S reinf Area	1.17	in ²
Min footing T&S reinf Area per fc	0.39	in ² /ft

If one layer of horizontal bars: If two layers of horizontal bars:

#4@ 6.17 in	#4@ 12.35 in
#5@ 9.57 in	#5@ 19.14 in
#6@ 13.58 in	#6@ 27.16 in

because the wall would then tend to rotate into the retained soil.

This Wall in File: P:\2018\18-T066 (18th & Salmon)\Engineering\Calculations\Models\Foundation\retain

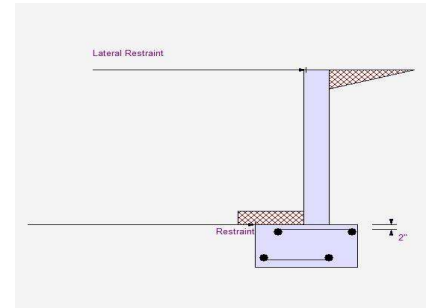
RetainPro (c) 1987-2017, Build 11.17.11.03
License : KW-06056142
License To : FROELICH CONSULTING ENGINEERS, INC

Restrained Retaining Wall

Code: IBC 2015,ACI 318-14,ACI 530-13

Criteria

Retained Height	=	5.50 ft
Wall height above soil	=	0.00 ft
Total Wall Height	=	5.50 ft
Top Support Height	=	5.50 ft
Slope Behind Wall	=	0.00
Height of Soil over Toe	=	6.00 in



Load Factors

Building Code	IBC 2015,ACI 318-14,ACI 530-13
Dead Load	1.200
Live Load	1.600
Earth, H	1.600
Wind, W	1.000
Seismic, E	1.000

Soil Data

Allow Soil Bearing	=	2,000.0 psf
Equivalent Fluid Pressure Method		
At-rest Heel Pressure	=	32.0 psf/ft
	=	
Passive Pressure	=	250.0 psf/ft
Soil Density	=	110.00 pcf
Footings Soil Friction	=	0.400
Soil height to ignore for passive pressure	=	12.00 in

Surcharge Loads

Surcharge Over Heel	=	250.0 psf
>>>Used To Resist Sliding & Overturning		
Surcharge Over Toe	=	0.0 psf
Used for Sliding & Overturning		

Axial Load Applied to Stem

Axial Dead Load	=	100.0 lbs
Axial Live Load	=	0.0 lbs
Axial Load Eccentricity	=	0.0 in

Use menu item Settings > Printing & Title Block
to set these five lines of information
for your program.

Title **Grid 7 Wall Restrained**
Job # :
Description....

Dsgnr:

Page 308 of 324
Date: 8 OCT 2019

This Wall in File: P:\2018\18-T066 (18th & Salmon)\Engineering\Calculations\Models\Foundation\retain

RetainPro (c) 1987-2017, Build 11.17.11.03

License : KW-06056142

License To : FROELICH CONSULTING ENGINEERS, INC

Restrained Retaining Wall

Code: IBC 2015,ACI 318-14,ACI 530-13

Uniform Lateral Load Applied to Stem

Lateral Load	=	44.0 #/ft
...Height to Top	=	3.80 ft
...Height to Bottom	=	2.80 ft
Load Type	=	Seismic (E) (Strength Level)
Wind on Exposed Stem	=	0.0 psf

Adjacent Footing Load

Adjacent Footing Load	=	0.0 lbs
Footing Width	=	0.00 ft
Eccentricity	=	0.00 in
Wall to Ftg CL Dist	=	0.00 ft
Footing Type	Line Load	
Base Above/Below Soil		
at Back of Wall	=	0.0 ft
Poisson's Ratio	=	0.300

Earth Pressure Seismic Load

K_h Soil Density Multiplier	=	1.980 g
Added seismic per unit area	=	0.0 psf

Stem Weight Seismic Load

F_p / W_p Weight Multiplier	=	0.000 g
Added seismic per unit area	=	0.0 psf

Use menu item **Settings > Printing & Title Block**
to set these five lines of information
for your program.

Title **Grid 7 Wall Restrained**
Job # :
Description....

Page 309 of 312
Date: 8 OCT 2019

This Wall in File: P:\2018\18-T066 (18th & Salmon)\Engineering\Calculations\Models\Foundation\retain

RetainPro (c) 1987-2017, Build 11.17.11.03
License : KW-06056142
License To : FROELICH CONSULTING ENGINEERS, INC

Restrained Retaining Wall

Code: IBC 2015,ACI 318-14,ACI 530-13

Design Summary

Total Bearing Load	=	2,120 lbs
...resultant ecc.	=	5.25 in
Soil Pressure @ Toe	=	707 psf OK
Soil Pressure @ Heel	=	707 psf OK
Allowable	=	2,000 psf
Soil Pressure Less Than Allowable		
ACI Factored @ Toe	=	106 psf
ACI Factored @ Heel	=	1,590 psf
Footing Shear @ Toe	=	0.3 psi OK
Footing Shear @ Heel	=	0.1 psi OK
Allowable	=	94.9 psi
Reaction at Top	=	386.7 lbs
Reaction at Bottom	=	949.4 lbs

Sliding Calcs

Lateral Sliding Force = 949.4 lbs

Vertical component of active lateral soil pressure IS NOT considered in the calculation of Sliding Resistance.

Concrete Stem Construction

Thickness	=	8.00 in	Fy	=	60,000 psi
Wall Weight	=	100.0 psf	f'c	=	4,000 psi
Stem is FREE to rotate at top of footing					

		@ Top Support	Mmax Between Top & Base	@ Base of Wall
		Stem OK	Stem OK	Stem OK
Design Height Above Ftg	=	5.50 ft	2.58 ft	0.00 ft
Rebar Size	=	# 5	# 5	# 5
Rebar Spacing	=	12.00 in	12.00 in	12.00 in
Rebar Placed at	=	Center	Center	Center
Rebar Depth 'd'	=	4.00 in	4.00 in	4.00 in
Design Data				
fb/FB + fa/Fa	=	0.000	0.194	0.000
Mu....Actual	=	0.0 ft-#	1,018.5 ft-#	0.0 ft-#
Mn * Phi.....Allowable	=	5,261.1 ft-#	5,261.1 ft-#	5,261.1 ft-#
Shear Force @ this height	=	607.1 lbs		853.9 lbs
Shear.....Actual	=	12.65 psi		17.79 psi
Shear.....Allowable	=	94.87 psi		94.87 psi

Other Acceptable Sizes & Spacings:

Toe: # 8 @ 18.00 in	-or-	Not req'd: Mu < phi*5*lambda*sqrt(f'c)*Sm
Heel: # 6 @ 16.00 in	-or-	Not req'd: Mu < phi*5*lambda*sqrt(f'c)*Sm
Key: Slab Resists Sliding	-or-	Slab Resists Sliding - No Force on

Use menu item Settings > Printing & Title Block
to set these five lines of information
for your program.

Title **Grid 7 Wall Restrained**
Job # :
Description....

Page 310 of 4
Date: 8 OCT 2019

This Wall in File: P:\2018\18-T066 (18th & Salmon)\Engineering\Calculations\Models\Foundation\retain

RetainPro (c) 1987-2017, Build 11.17.11.03
License : KW-06056142
License To : FROELICH CONSULTING ENGINEERS, INC

Restrained Retaining Wall

Code: IBC 2015,ACI 318-14,ACI 530-13

Concrete Stem Rebar Area Details

Top Support	Vertical Reinforcing	Horizontal Reinforcing
As (based on applied moment) :	0 in2/ft	
(4/3) * As :	0 in2/ft	Min Stem T&S Reinf Area 1.056 in2
200bd/fy : 200(12)(4)/60000 :	0.16 in2/ft	Min Stem T&S Reinf Area per ft of stem Height : 0.192 in2/ft
0.0018bh : 0.0018(12)(8) :	0.1728 in2/ft	Horizontal Reinforcing Options :
	=====	One layer of : Two layers of :
Required Area :	0.1728 in2/ft	#4@ 12.50 in #4@ 25.00 in
Provided Area :	0.31 in2/ft	#5@ 19.38 in #5@ 38.75 in
Maximum Area :	0.867 in2/ft	#6@ 27.50 in #6@ 55.00 in
Mmax Between Ends	Vertical Reinforcing	Horizontal Reinforcing
As (based on applied moment) :	0.0615 in2/ft	
(4/3) * As :	0.082 in2/ft	Min Stem T&S Reinf Area 0.560 in2
200bd/fy : 200(12)(4)/60000 :	0.16 in2/ft	Min Stem T&S Reinf Area per ft of stem Height : 0.192 in2/ft
0.0018bh : 0.0018(12)(8) :	0.1728 in2/ft	Horizontal Reinforcing Options :
	=====	One layer of : Two layers of :
Required Area :	0.1728 in2/ft	#4@ 12.50 in #4@ 25.00 in
Provided Area :	0.31 in2/ft	#5@ 19.38 in #5@ 38.75 in
Maximum Area :	0.867 in2/ft	#6@ 27.50 in #6@ 55.00 in
Base Support	Vertical Reinforcing	Horizontal Reinforcing
As (based on applied moment) :	0 in2/ft	
(4/3) * As :	0 in2/ft	Min Stem T&S Reinf Area 0.496 in2
200bd/fy : 200(12)(4)/60000 :	0.16 in2/ft	Min Stem T&S Reinf Area per ft of stem Height : 0.192 in2/ft
0.0018bh : 0.0018(12)(8) :	0.1728 in2/ft	Horizontal Reinforcing Options :
	=====	One layer of : Two layers of :
Required Area :	0.1728 in2/ft	#4@ 12.50 in #4@ 25.00 in
Provided Area :	0.31 in2/ft	#5@ 19.38 in #5@ 38.75 in
Maximum Area :	0.867 in2/ft	#6@ 27.50 in #6@ 55.00 in

Footings Strengths & Dimensions

Toe Width	=	1.50 ft
Heel Width	=	1.50
Total Footing Width	=	3.00
Footing Thickness	=	18.00 in
Key Width	=	12.00 in
Key Depth	=	0.00 in
Key Distance from Toe	=	2.00 ft
f'c	=	4,000 psi
Fy	=	60,000 psi
Footing Concrete Density	=	150.00 pcf
Min. As %	=	0.0018
Cover @ Top = 2.00 in @ Btm.= 3.00 in		

Use menu item Settings > Printing & Title Block
to set these five lines of information
for your program.

Title **Grid 7 Wall Restrained**
Job # :
Description....

Page 311 of 324 5
Date: 8 OCT 2019

This Wall in File: P:\2018\18-T066 (18th & Salmon)\Engineering\Calculations\Models\Foundation\retain

RetainPro (c) 1987-2017, Build 11.17.11.03
License : KW-06056142
License To : FROELICH CONSULTING ENGINEERS, INC

Restrained Retaining Wall

Code: IBC 2015,ACI 318-14,ACI 530-13

Footing Design Results

		<u>Toe</u>	<u>Heel</u>
Factored Pressure	=	106	1,590 psf
Mu' : Upward	=	398	581 ft-#
Mu' : Downward	=	378	485 ft-#
Mu: Design	=	20	-96 ft-#
Actual 1-Way Shear	=	0.26	0.06 psi
Allow 1-Way Shear	=	94.87	94.87 psi

Min footing T&S reinf Area 1.17 in2

Min footing T&S reinf Area per fc 0.39 in2 /ft

If one layer of horizontal bars: If two layers of horizontal bars:

#4@ 6.17 in

#5@ 9.57 in

#6@ 13.58 in

Summary of Forces on Footing : Slab RESISTS sliding, stem is PINNED at footing

Forces acting on footing soil pressure

(taking moments about front of footing to find eccentricity)

Surcharge Over Heel	=	208.3 lbs	2.58 ft	538.2 ft-#
Axial Dead Load on Stem	=	100.0 lbs	1.83 ft	183.3 ft-#
Soil Over Toe	=	82.5 lbs	0.75 ft	61.9 ft-#
Adjacent Footing Load	=	lbs	ft	ft-#
Surcharge Over Toe	=	lbs	ft	ft-#
Stem Weight	=	550.0 lbs	1.83 ft	1,008.3 ft-#
Soil Over Heel	=	504.2 lbs	2.58 ft	1,302.4 ft-#
Footing Weight	=	675.0 lbs	1.50 ft	1,013.0 ft-#
Total Vertical Force	=	2,120.0 lbs	Moment =	4,107.2 ft-#

Net Mom. at Stem/Ftg Interface = -927.2 ft-#

Allow. Mom. @ Stem/Ftg Interface = 3,288.2 ft-#

Allow. Mom. Exceeds Applied Mom.? Yes

Vertical component of active lateral soil pressure IS NOT considered in the calculation of soil bearing pressures.

Title Block Line 1
 You can change this area
 using the "Settings" menu item
 and then using the "Printing &
 Title Block" selection.
 Title Block Line 6

Project Title:
 Engineer:
 Project ID:
 Project Descr:

Page 312 of 324

Printed: 8 OCT 2019, 11:09PM

Concrete Beam

Lic. # : KW-06002304

File = P:\2018\1LXLCE-PIEHTEC6-Q\IC7A4YC-F\Models\FNHN3S-U\lateral distribution to piles.ec6 .

Software copyright ENERCALC, INC. 1983-2019, Build:12.19.8.30 .

FROELICH CONSULTING ENGINEERS

DESCRIPTION: Grade Beam Under Retaining Wall

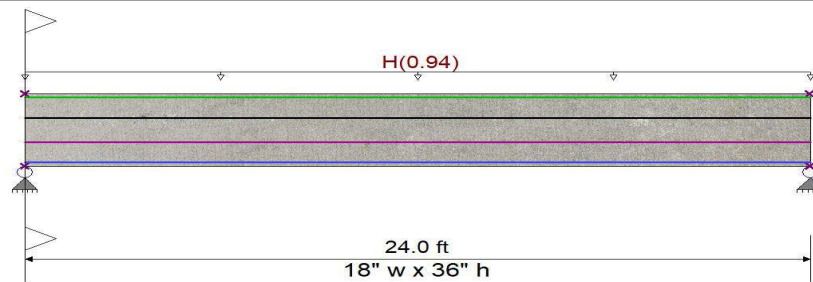
CODE REFERENCES

Calculations per ACI 318-11, IBC 2012, CBC 2013, ASCE 7-10

Load Combination Set : ASCE 7-16

Material Properties

f'c	=	4.0 ksi	Φ Phi Values	Flexure :	0.90
fr = f'c ^{1/2} * 7.50	=	474.342 psi		Shear :	0.750
Ψ Density	=	145.0 pcf	β ₁	=	0.850
λ LtWt Factor	=	1.0			
Elastic Modulus	=	3,122.0 ksi	Fy - Stirrups		40.0 ksi
fy - Main Rebar	=	60.0 ksi	E - Stirrups	=	29,000.0 ksi
E - Main Rebar	=	29,000.0 ksi	Stirrup Bar Size #		3
		Number of Resisting Legs Per Stirrup	=		2



Cross Section & Reinforcing Details

Rectangular Section, Width = 18.0 in, Height = 36.0 in

Span #1 Reinforcing....

2-#5 at 2.0 in from Bottom, from 0.0 to 24.0 ft in this span
 2-#5 at 12.0 in from Bottom, from 0.0 to 24.0 ft in this span

2-#5 at 2.0 in from Top, from 0.0 to 24.0 ft in this span
 2-#5 at 12.0 in from Top, from 0.0 to 24.0 ft in this span

Load for Span Number 1

Uniform Load : $H = 0.940$ k/ft, Tributary Width = 1.0 ft

DESIGN SUMMARY

Design OK

Maximum Bending Stress Ratio	=	0.685	: 1	Maximum Deflection			
Section used for this span		Typical Section		Max Downward Transient Deflection	0.032 in	Ratio =	8970 >= 360.
μ_u : Applied		128.592	k-ft	Max Upward Transient Deflection	0.000 in	Ratio =	0 < 360.0
$M_n \times \phi$: Allowable		187.632	k-ft	Max Downward Total Deflection	0.032 in	Ratio =	8970 >= 180.
Location of maximum on span		12.022	ft	Max Upward Total Deflection	0.000 in	Ratio =	0 < 180.0
Span # where maximum occurs		Span # 1					

Vertical Reactions

Support notation : Far left is #1

Load Combination	Support 1	Support 2
Overall MAXimum	11.280	11.280
Overall MINimum	6.768	6.768
+D+H	11.280	11.280
+D+L+H	11.280	11.280
+D+Lr+H	11.280	11.280
+D+S+H	11.280	11.280
+D+0.750Lr+0.750L+H	11.280	11.280
+D+0.750L+0.750S+H	11.280	11.280
+D+0.60W+H	11.280	11.280
+D+0.750Lr+0.750L+0.450W+H	11.280	11.280
+D+0.750L+0.750S+0.450W+H	11.280	11.280
+0.60D+0.60W+0.60H	6.768	6.768
+D+0.70E+0.60H	6.768	6.768

Title Block Line 1
 You can change this area
 using the "Settings" menu item
 and then using the "Printing &
 Title Block" selection.
 Title Block Line 6

Project Title:
 Engineer:
 Project ID:
 Project Descr:

Page 313 of 324

Printed: 8 OCT 2019, 11:09PM

Concrete Beam

File = P:\2018\1LXLCE-PIEHTEC6-Q\7A4YC-F\Models\FNHN3S-U\lateral distribution to piles.ec6 .

Software copyright ENERCALC, INC. 1983-2019, Build:12.19.8.30 .

Lic. # : KW-06002304

FROELICH CONSULTING ENGINEERS

DESCRIPTION: Grade Beam Under Retaining Wall

Vertical Reactions

Support notation : Far left is #1

Load Combination	Support 1	Support 2
+D+0.750L+0.750S+0.5250E+H	11.280	11.280
+0.60D+0.70E+H	11.280	11.280
D Only		
Lr Only		
L Only		
S Only		
W Only		
E Only		
H Only	11.280	11.280

Detailed Shear Information

Load Combination	Span Number	Distance (ft)	'd' (in)	Vu (k) Actual	Vu (k) Design	Mu (k-ft)	d*Vu/Mu	Phi*Vc (k)	Comment	Phi*Vs (k)	Phi*Vn (k)	Spacing (in) Req'd Suggest
+1.20D+L+0.20S+E+1.90H	1	0.00	34.00	21.43	21.43	0.00	1.00	57.48	Vu < PhiVc/2	lot Req'd 11.4	57.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	0.26	34.00	20.96	20.96	5.56	1.00	57.48	Vu < PhiVc/2	lot Req'd 11.4	57.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	0.52	34.00	20.50	20.50	11.00	1.00	57.48	Vu < PhiVc/2	lot Req'd 11.4	57.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	0.79	34.00	20.03	20.03	16.31	1.00	57.48	Vu < PhiVc/2	lot Req'd 11.4	57.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	1.05	34.00	19.56	19.56	21.50	1.00	57.48	Vu < PhiVc/2	lot Req'd 11.4	57.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	1.31	34.00	19.09	19.09	26.57	1.00	57.48	Vu < PhiVc/2	lot Req'd 11.4	57.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	1.57	34.00	18.62	18.62	31.52	1.00	57.48	Vu < PhiVc/2	lot Req'd 11.4	57.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	1.84	34.00	18.15	18.15	36.34	1.00	57.48	Vu < PhiVc/2	lot Req'd 11.4	57.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	2.10	34.00	17.68	17.68	41.04	1.00	57.48	Vu < PhiVc/2	lot Req'd 11.4	57.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	2.36	34.00	17.22	17.22	45.62	1.00	57.48	Vu < PhiVc/2	lot Req'd 11.4	57.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	2.62	34.00	16.75	16.75	50.07	0.95	57.36	Vu < PhiVc/2	lot Req'd 11.4	57.4	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	2.89	34.00	16.28	16.28	54.40	0.85	57.13	Vu < PhiVc/2	lot Req'd 11.4	57.1	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	3.15	34.00	15.81	15.81	58.61	0.76	56.93	Vu < PhiVc/2	lot Req'd 11.4	56.9	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	3.41	34.00	15.34	15.34	62.70	0.69	56.77	Vu < PhiVc/2	lot Req'd 11.4	56.8	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	3.67	34.00	14.87	14.87	66.66	0.63	56.63	Vu < PhiVc/2	lot Req'd 11.4	56.6	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	3.93	34.00	14.41	14.41	70.50	0.58	56.50	Vu < PhiVc/2	lot Req'd 11.4	56.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	4.20	34.00	13.94	13.94	74.22	0.53	56.39	Vu < PhiVc/2	lot Req'd 11.4	56.4	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	4.46	34.00	13.47	13.47	77.81	0.49	56.30	Vu < PhiVc/2	lot Req'd 11.4	56.3	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	4.72	34.00	13.00	13.00	81.28	0.45	56.21	Vu < PhiVc/2	lot Req'd 11.4	56.2	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	4.98	34.00	12.53	12.53	84.63	0.42	56.13	Vu < PhiVc/2	lot Req'd 11.4	56.1	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	5.25	34.00	12.06	12.06	87.86	0.39	56.06	Vu < PhiVc/2	lot Req'd 11.4	56.1	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	5.51	34.00	11.59	11.59	90.96	0.36	56.00	Vu < PhiVc/2	lot Req'd 11.4	56.0	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	5.77	34.00	11.13	11.13	93.94	0.34	55.94	Vu < PhiVc/2	lot Req'd 11.4	55.9	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	6.03	34.00	10.66	10.66	96.79	0.31	55.88	Vu < PhiVc/2	lot Req'd 11.4	55.9	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	6.30	34.00	10.19	10.19	99.53	0.29	55.83	Vu < PhiVc/2	lot Req'd 11.4	55.8	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	6.56	34.00	9.72	9.72	102.14	0.27	55.78	Vu < PhiVc/2	lot Req'd 11.4	55.8	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	6.82	34.00	9.25	9.25	104.63	0.25	55.74	Vu < PhiVc/2	lot Req'd 11.4	55.7	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	7.08	34.00	8.78	8.78	106.99	0.23	55.70	Vu < PhiVc/2	lot Req'd 11.4	55.7	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	7.34	34.00	8.32	8.32	109.24	0.22	55.66	Vu < PhiVc/2	lot Req'd 11.4	55.7	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	7.61	34.00	7.85	7.85	111.36	0.20	55.62	Vu < PhiVc/2	lot Req'd 11.4	55.6	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	7.87	34.00	7.38	7.38	113.35	0.18	55.59	Vu < PhiVc/2	lot Req'd 11.4	55.6	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	8.13	34.00	6.91	6.91	115.23	0.17	55.55	Vu < PhiVc/2	lot Req'd 11.4	55.6	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	8.39	34.00	6.44	6.44	116.98	0.16	55.52	Vu < PhiVc/2	lot Req'd 11.4	55.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	8.66	34.00	5.97	5.97	118.60	0.14	55.49	Vu < PhiVc/2	lot Req'd 11.4	55.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	8.92	34.00	5.50	5.50	120.11	0.13	55.46	Vu < PhiVc/2	lot Req'd 11.4	55.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	9.18	34.00	5.04	5.04	121.49	0.12	55.43	Vu < PhiVc/2	lot Req'd 11.4	55.4	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	9.44	34.00	4.57	4.57	122.75	0.11	55.40	Vu < PhiVc/2	lot Req'd 11.4	55.4	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	9.70	34.00	4.10	4.10	123.89	0.09	55.37	Vu < PhiVc/2	lot Req'd 11.4	55.4	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	9.97	34.00	3.63	3.63	124.90	0.08	55.35	Vu < PhiVc/2	lot Req'd 11.4	55.3	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	10.23	34.00	3.16	3.16	125.79	0.07	55.32	Vu < PhiVc/2	lot Req'd 11.4	55.3	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	10.49	34.00	2.69	2.69	126.56	0.06	55.30	Vu < PhiVc/2	lot Req'd 11.4	55.3	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	10.75	34.00	2.23	2.23	127.21	0.05	55.27	Vu < PhiVc/2	lot Req'd 11.4	55.3	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	11.02	34.00	1.76	1.76	127.73	0.04	55.25	Vu < PhiVc/2	lot Req'd 11.4	55.2	0.0 0.0

Title Block Line 1
 You can change this area
 using the "Settings" menu item
 and then using the "Printing &
 Title Block" selection.
 Title Block Line 6

Project Title:
 Engineer:
 Project ID:
 Project Descr:

Page 314 of 324

Printed: 8 OCT 2019, 11:09PM

Concrete Beam

File = P:\2018\1LXLCE-PIEHTEC6-Q\7A4YC-F\Models\FNHN3S-U\lateral distribution to piles.ec6 .

Software copyright ENERCALC, INC. 1983-2019, Build:12.19.8.30 .

Lic. # : KW-06002304

FROELICH CONSULTING ENGINEERS

DESCRIPTION: Grade Beam Under Retaining Wall

Detailed Shear Information

Load Combination	Span Number	Distance (ft)	'd' (in)	Vu (k) Actual	Vu (k) Design	Mu (k-ft)	d*Vu/Mu	Phi*Vc (k)	Comment	Phi*Vs (k)	Phi*Vn (k)	Spacing (in) Req'd Suggest
+1.20D+L+0.20S+E+1.90H	1	11.28	34.00	1.29	1.29	128.13	0.03	55.22	Vu < PhiVc/2	lot Req'd 11.4	55.2	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	11.54	34.00	0.82	0.82	128.40	0.02	55.20	Vu < PhiVc/2	lot Req'd 11.4	55.2	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	11.80	34.00	0.35	0.35	128.56	0.01	55.17	Vu < PhiVc/2	lot Req'd 11.4	55.2	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	12.07	34.00	-0.12	0.12	128.59	0.00	55.16	Vu < PhiVc/2	lot Req'd 11.4	55.2	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	12.33	34.00	-0.59	0.59	128.50	0.01	55.19	Vu < PhiVc/2	lot Req'd 11.4	55.2	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	12.59	34.00	-1.05	1.05	128.28	0.02	55.21	Vu < PhiVc/2	lot Req'd 11.4	55.2	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	12.85	34.00	-1.52	1.52	127.94	0.03	55.23	Vu < PhiVc/2	lot Req'd 11.4	55.2	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	13.11	34.00	-1.99	1.99	127.48	0.04	55.26	Vu < PhiVc/2	lot Req'd 11.4	55.3	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	13.38	34.00	-2.46	2.46	126.90	0.05	55.28	Vu < PhiVc/2	lot Req'd 11.4	55.3	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	13.64	34.00	-2.93	2.93	126.19	0.07	55.31	Vu < PhiVc/2	lot Req'd 11.4	55.3	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	13.90	34.00	-3.40	3.40	125.36	0.08	55.33	Vu < PhiVc/2	lot Req'd 11.4	55.3	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	14.16	34.00	-3.86	3.86	124.41	0.09	55.36	Vu < PhiVc/2	lot Req'd 11.4	55.4	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	14.43	34.00	-4.33	4.33	123.34	0.10	55.39	Vu < PhiVc/2	lot Req'd 11.4	55.4	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	14.69	34.00	-4.80	4.80	122.14	0.11	55.42	Vu < PhiVc/2	lot Req'd 11.4	55.4	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	14.95	34.00	-5.27	5.27	120.82	0.12	55.44	Vu < PhiVc/2	lot Req'd 11.4	55.4	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	15.21	34.00	-5.74	5.74	119.37	0.14	55.47	Vu < PhiVc/2	lot Req'd 11.4	55.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	15.48	34.00	-6.21	6.21	117.81	0.15	55.50	Vu < PhiVc/2	lot Req'd 11.4	55.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	15.74	34.00	-6.68	6.68	116.12	0.16	55.54	Vu < PhiVc/2	lot Req'd 11.4	55.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	16.00	34.00	-7.14	7.14	114.30	0.18	55.57	Vu < PhiVc/2	lot Req'd 11.4	55.6	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	16.26	34.00	-7.61	7.61	112.37	0.19	55.60	Vu < PhiVc/2	lot Req'd 11.4	55.6	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	16.52	34.00	-8.08	8.08	110.31	0.21	55.64	Vu < PhiVc/2	lot Req'd 11.4	55.6	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	16.79	34.00	-8.55	8.55	108.13	0.22	55.68	Vu < PhiVc/2	lot Req'd 11.4	55.7	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	17.05	34.00	-9.02	9.02	105.83	0.24	55.72	Vu < PhiVc/2	lot Req'd 11.4	55.7	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	17.31	34.00	-9.49	9.49	103.40	0.26	55.76	Vu < PhiVc/2	lot Req'd 11.4	55.8	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	17.57	34.00	-9.95	9.95	100.85	0.28	55.81	Vu < PhiVc/2	lot Req'd 11.4	55.8	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	17.84	34.00	-10.42	10.42	98.18	0.30	55.86	Vu < PhiVc/2	lot Req'd 11.4	55.9	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	18.10	34.00	-10.89	10.89	95.38	0.32	55.91	Vu < PhiVc/2	lot Req'd 11.4	55.9	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	18.36	34.00	-11.36	11.36	92.46	0.35	55.97	Vu < PhiVc/2	lot Req'd 11.4	56.0	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	18.62	34.00	-11.83	11.83	89.42	0.37	56.03	Vu < PhiVc/2	lot Req'd 11.4	56.0	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	18.89	34.00	-12.30	12.30	86.26	0.40	56.10	Vu < PhiVc/2	lot Req'd 11.4	56.1	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	19.15	34.00	-12.77	12.77	82.97	0.44	56.17	Vu < PhiVc/2	lot Req'd 11.4	56.2	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	19.41	34.00	-13.23	13.23	79.56	0.47	56.25	Vu < PhiVc/2	lot Req'd 11.4	56.3	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	19.67	34.00	-13.70	13.70	76.03	0.51	56.34	Vu < PhiVc/2	lot Req'd 11.4	56.3	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	19.93	34.00	-14.17	14.17	72.37	0.55	56.45	Vu < PhiVc/2	lot Req'd 11.4	56.4	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	20.20	34.00	-14.64	14.64	68.59	0.60	56.56	Vu < PhiVc/2	lot Req'd 11.4	56.6	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	20.46	34.00	-15.11	15.11	64.69	0.66	56.69	Vu < PhiVc/2	lot Req'd 11.4	56.7	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	20.72	34.00	-15.58	15.58	60.67	0.73	56.85	Vu < PhiVc/2	lot Req'd 11.4	56.8	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	20.98	34.00	-16.04	16.04	56.52	0.80	57.03	Vu < PhiVc/2	lot Req'd 11.4	57.0	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	21.25	34.00	-16.51	16.51	52.25	0.90	57.24	Vu < PhiVc/2	lot Req'd 11.4	57.2	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	21.51	34.00	-16.98	16.98	47.86	1.00	57.48	Vu < PhiVc/2	lot Req'd 11.4	57.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	21.77	34.00	-17.45	17.45	43.34	1.00	57.48	Vu < PhiVc/2	lot Req'd 11.4	57.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	22.03	34.00	-17.92	17.92	38.71	1.00	57.48	Vu < PhiVc/2	lot Req'd 11.4	57.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	22.30	34.00	-18.39	18.39	33.94	1.00	57.48	Vu < PhiVc/2	lot Req'd 11.4	57.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	22.56	34.00	-18.86	18.86	29.06	1.00	57.48	Vu < PhiVc/2	lot Req'd 11.4	57.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	22.82	34.00	-19.32	19.32	24.05	1.00	57.48	Vu < PhiVc/2	lot Req'd 11.4	57.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	23.08	34.00	-19.79	19.79	18.92	1.00	57.48	Vu < PhiVc/2	lot Req'd 11.4	57.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	23.34	34.00	-20.26	20.26	13.67	1.00	57.48	Vu < PhiVc/2	lot Req'd 11.4	57.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	23.61	34.00	-20.73	20.73	8.29	1.00	57.48	Vu < PhiVc/2	lot Req'd 11.4	57.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	23.87	34.00	-21.20	21.20	2.80	1.00	57.48	Vu < PhiVc/2	lot Req'd 11.4	57.5	0.0 0.0

Maximum Forces & Stresses for Load Combinations

Load Combination		Location (ft)	Bending Stress Results (k-ft)		
Segment	Span #	along Beam	Mu : Max	Phi*Mnx	Stress Ratio
MAXimum BENDING Envelope					
Span # 1	1	24.000	128.59	187.63	0.69

Title Block Line 1
 You can change this area
 using the "Settings" menu item
 and then using the "Printing &
 Title Block" selection.
 Title Block Line 6

Project Title:
 Engineer:
 Project ID:
 Project Descr:

Printed: 8 OCT 2019, 11:09PM

Concrete Beam

File = P:\2018\1LXLCE-PIEHTEC6-Q\IC7A4YC-F\Models\FNHN3S-U\lateral distribution to piles.ec6 .

Software copyright ENERCALC, INC. 1983-2019, Build:12.19.8.30 .

Lic. # : KW-06002304

FROELICH CONSULTING ENGINEERS

DESCRIPTION: Grade Beam Under Retaining Wall

Load Combination Segment	Span #	Location (ft) along Beam	Bending Stress Results (k-ft)		
			Mu : Max	Phi*Mnx	Stress Ratio
+1.40D+1.60H Span # 1	1	24.000	108.29	187.63	0.58
+1.20D+0.50Lr+1.60L+1.60H Span # 1	1	24.000	108.29	187.63	0.58
+1.20D+1.60L+0.50S+1.60H Span # 1	1	24.000	108.29	187.63	0.58
+1.20D+1.60Lr+L+1.60H Span # 1	1	24.000	108.29	187.63	0.58
+1.20D+1.60Lr+0.50W+1.60H Span # 1	1	24.000	108.29	187.63	0.58
+1.20D+L+1.60S+1.60H Span # 1	1	24.000	108.29	187.63	0.58
+1.20D+1.60S+0.50W+1.60H Span # 1	1	24.000	108.29	187.63	0.58
+1.20D+0.50Lr+L+W+1.60H Span # 1	1	24.000	108.29	187.63	0.58
+1.20D+L+0.50S+W+1.60H Span # 1	1	24.000	108.29	187.63	0.58
+0.90D+W+1.60H Span # 1	1	24.000	108.29	187.63	0.58
+1.20D+L+0.20S+E+1.90H Span # 1	1	24.000	128.59	187.63	0.69
+0.90D+E+0.90H Span # 1	1	24.000	60.91	187.63	0.32

Overall Maximum Deflections

Load Combination	Span	Max. "-" Defl (in)	Location in Span (ft)	Load Combination	Max. "+" Defl (in)	Location in Span (ft)
H Only	1	0.0321	12.000		0.0000	0.000



FROELICH
ENGINEERS
www.froelich-engineers.com

- ☐ Main Office
17700 SW Upper Boones Ferry Rd. #115
Portland, Oregon 97224
503-624-7005
- ☐ Central Oregon
745 NW Mt. Washington Dr. #204
Bend, Oregon 97703
541-383-1828
- ☐ Denver Office
940 Kimbark St. Suite 3
Longmont, Colorado 80501
720-799-1001

CLIENT:

PROJECT:

NUMBER:

DATE:

BY:

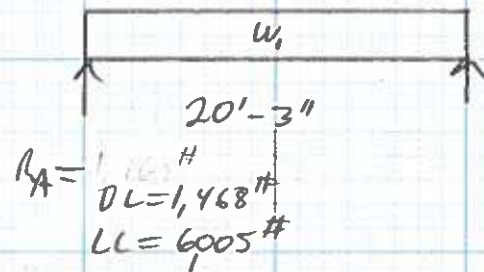
ELEVATOR LOBBY BEAM

$$DL = (11.75' / 2) (21) = 123 \text{ PLF}$$

$$LL = (11.75' / 2) (100) = 588 \text{ PLF}$$

$$DL = 33 - 12 = 21 \text{ PSF}$$

(NO. PARTITIONS)



POSTS SUPPORTING BEAM

ROOF LEVEL

$$DL = 1.5 \text{ K}$$

$$LL = 6.0 \text{ K}$$

6x6 DFA1

8TH FLOOR

$$DL = 3.0 \text{ K}$$

$$LL = 12 \text{ K}$$

6x6 DFA1

7TH FLOOR

$$DL = 4.5 \text{ K}$$

$$LL = 18 \text{ K}$$

6x8 DFA1

6TH FLOOR

$$DL = 6 \text{ K}$$

$$LL = 24 \text{ K} (74) = 17.8 \text{ K}$$

6x8 DFA1

5TH FLOOR

$$DL = 7.5 \text{ K}$$

$$LL = 30 \text{ K} (0.68) = 20.5 \text{ K}$$

6x8 DFA1

$$A = 119 \text{ K}$$

$$0.25 + \frac{15}{\sqrt{16} \text{ K}}$$

$$= 0.25 + \frac{15}{\sqrt{2} \text{ K}}$$

$$0.25 + \frac{15}{\sqrt{2} \text{ K} (11)}$$

$$= 0.74$$

$$0.25 + \frac{15}{\sqrt{2} \text{ K} (14)}$$

$$=$$



WoodWorks®
SOFTWARE FOR WOOD DESIGN

COMPANY

Dec. 10, 2019 08:32

PROJECT

Elevator Lobby Beam.wwb

Page 317 of 324

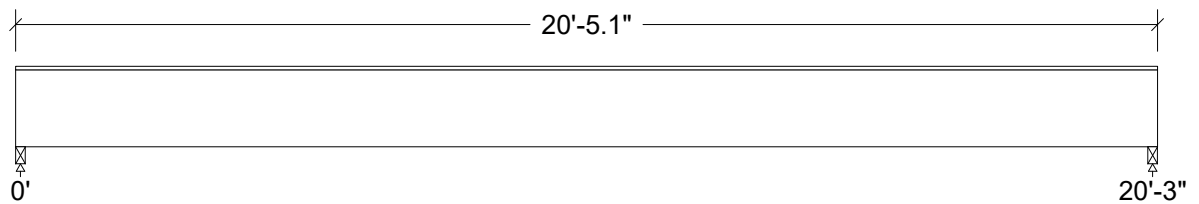
Design Check Calculation Sheet

WoodWorks Sizer 10.45

Loads:

Load	Type	Distribution	Pat- tern	Location [ft] Start End	Magnitude Start End	Unit
Load1	Dead	Full UDL			123.0	plf
Load2	Live	Full UDL			588.0	plf
Self-weight	Dead	Full UDL			20.9	plf

Maximum Reactions (lbs), Bearing Capacities (lbs) and Bearing Lengths (in) :



Unfactored:			
Dead	1468		1468
Live	6005		6005
Factored:			
Total	7472		7472
Bearing:			
Capacity			
Beam	7472		7472
Support	7675		7675
Anal/Des			
Beam	1.00		1.00
Support	0.97		0.97
Load comb	#2		#2
Length	2.09		2.09
Min req'd	2.09		2.09
Cb	1.00		1.00
Cb min	1.00		1.00
Cb support	1.07		1.07
Fcp sup	625		625

Glulam-Unbal., West Species, 24F-1.8E WS, 5-1/2"x16-1/2"

11 laminations, 5-1/2" maximum width,
Supports: All - Timber-soft Beam, D.Fir-L No.2
Total length: 20'-5.1"; volume = 12.9 cu.ft.;
Lateral support: top= full, bottom= at supports;

Analysis vs. Allowable Stress and Deflection using NDS 2012 :

Criterion	Analysis Value	Design Value	Unit	Analysis/Design
Shear	$f_v = 105$	$F_v' = 265$	psi	$f_v/F_v' = 0.40$
Bending (+)	$f_b = 1804$	$F_b' = 2317$	psi	$f_b/F_b' = 0.78$
Live Defl'n	$0.60 = L/404$	$0.68 = L/360$	in	0.89
Total Defl'n	$0.82 = L/296$	$1.01 = L/240$	in	0.81

Additional Data:

FACTORS:	F/E (psi)	CD	CM	Ct	CL	CV	Cfu	Cr	Cfrt	Notes	Cn*Cvr	LC#
Fv'	265	1.00	1.00	1.00	-	-	-	-	1.00	1.00	1.00	2
Fb'+	2400	1.00	1.00	1.00	1.000	0.965	1.00	1.00	1.00	1.00	-	2
Fcp'	650	-	1.00	1.00	-	-	-	-	1.00	-	-	-
E'	1.8 million	1.00	1.00	1.00	-	-	-	-	1.00	-	-	2
Eminy'	0.85 million	1.00	1.00	1.00	-	-	-	-	1.00	-	-	2

CRITICAL LOAD COMBINATIONS:

Shear : LC #2 = D+L, V = 7410, V design = 6340 lbs

Bending(+): LC #2 = D+L, M = 37515 lbs-ft

Deflection: LC #2 = D+L (live)

LC #2 = D+L (total)

D=dead L=live S=snow W=wind I=impact Lr=roof live Lc=concentrated E=earthquake

All LC's are listed in the Analysis output

Load combinations: ASCE 7-10 / IBC 2012

CALCULATIONS:

Deflection: EI = 3706e06 lb-in²

"Live" deflection = Deflection from all non-dead loads (live, wind, snow...)

Total Deflection = 1.50(Dead Load Deflection) + Live Load Deflection.

Design Notes:

1. WoodWorks analysis and design are in accordance with the ICC International Building Code (IBC 2012), the National Design Specification (NDS 2012), and NDS Design Supplement.
2. Please verify that the default deflection limits are appropriate for your application.
3. Glulam design values are for materials conforming to ANSI 117-2010 and manufactured in accordance with ANSI A190.1-2007
4. GLULAM: bxd = actual breadth x actual depth.
5. Glulam Beams shall be laterally supported according to the provisions of NDS Clause 3.3.3.
6. GLULAM: bearing length based on smaller of Fcp(tension), Fcp(comp'n).



WoodWorks®
SOFTWARE FOR WOOD DESIGN

COMPANY

Dec. 10, 2019 08:59

PROJECT

Column1

Page 319 of 324

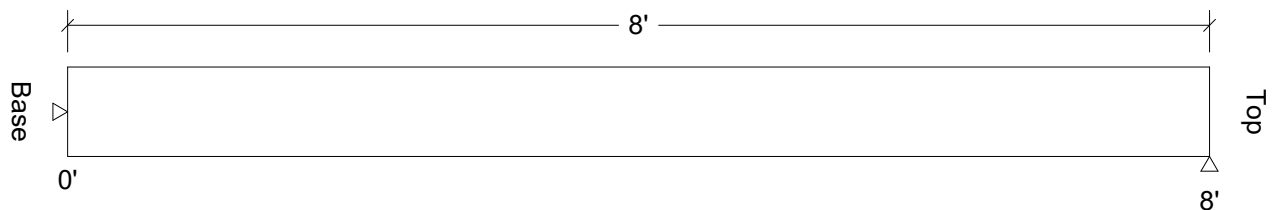
Design Check Calculation Sheet

WoodWorks Sizer 10.45

Loads:

Load	Type	Distribution	Pat- tern	Location [ft] Start End	Magnitude Start End	Unit
Load1	Dead	Axial		(Ecc. = 0.50")	7500	lbs
Load2	Live	Axial		(Ecc. = 0.50")	20500	lbs
Self-weight	Dead	Axial			78	lbs

Lateral Reactions (lbs):



Unfactored:			
Dead	39		-39
Live	107		-107
Factored:			
R->L			146
Load comb			#2
L->R	146		
Load comb	#2		#1

Timber-soft, D.Fir-L, No.1, 6x8 (5-1/2"x7-1/2")

Support: Non-wood

Total length: 8'; volume = 2.3 cu.ft.; Post and timber;

Pinned base; Load face = width(b); Ke x Lb: 1.0 x 0.0 = 0.0 [ft]; Ke x Ld: 1.0 x 8.0 = 8.0 [ft];

Analysis vs. Allowable Stress and Deflection using NDS 2012 :

Criterion	Analysis Value	Design Value	Unit	Analysis/Design
Shear	$f_v = 5$	$F_v' = 170$	psi	$f_v/F_v' = 0.03$
Bending (+)	$f_b = 272$	$F_b' = 1200$	psi	$f_b/F_b' = 0.23$
Axial	$f_c = 681$	$F_c' = 916$	psi	$f_c/F_c' = 0.74$
Combined (axial + eccentric moment)				Eq. 15.4-3 = 0.86
Axial Bearing	$f_c = 681$	$F_c^* = 1000$	psi	$f_c/F_c^* = 0.68$
Live Defl'n	$0.02 = <L/999$	$0.53 = L/180$	in	0.04
Total Defl'n	$0.03 = <L/999$	$0.53 = L/180$	in	0.06

Additional Data:

FACTORS:	F/E (psi)	CD	CM	Ct	CL/CP	CF	Cfu	Cr	Cfrt	Ci	LC#
Fv'	170	1.00	1.00	1.00	-	-	-	-	1.00	1.00	2
Fb'+	1200	1.00	1.00	1.00	1.000	1.000	1.00	1.00	1.00	1.00	2
Fc'	1000	1.00	1.00	1.00	0.916	1.000	-	-	1.00	1.00	2
E'	1.6 million	1.00	1.00	1.00	-	-	-	-	1.00	1.00	2
Emin'	0.58 million	1.00	1.00	1.00	-	-	-	-	1.00	1.00	2
Fc*	1000	1.00	1.00	1.00	-	1.000	-	-	1.00	1.00	2

CRITICAL LOAD COMBINATIONS:

Shear : LC #2 = D+L, V = 146, V design = 146 lbs
 Bending(+): LC #2 = D+L, M = 1167 lbs-ft
 Deflection: LC #2 = D+L (live)
 LC #2 = D+L (total)
 Axial : LC #2 = D+L, P = 28078 lbs
 Eq.15.4-3 : LC #2 = D+L Fb'= 1200
 FcE= 2910 Pxe/S=fc(6xe/d)= 272
 D=dead L=live S=snow W=wind I=impact Lr=roof live Lc=concentrated E=earthquake
 All LC's are listed in the Analysis output
 Load combinations: ASCE 7-10 / IBC 2012

CALCULATIONS:

Deflection: EI = 309e06 lb-in²
 "Live" deflection = Deflection from all non-dead loads (live, wind, snow...)
 Total Deflection = 1.50(Dead Load Deflection) + Live Load Deflection.

Design Notes:

1. WoodWorks analysis and design are in accordance with the ICC International Building Code (IBC 2012), the National Design Specification (NDS 2012), and NDS Design Supplement.
2. Please verify that the default deflection limits are appropriate for your application.



WoodWorks®
SOFTWARE FOR WOOD DESIGN

COMPANY

Dec. 10, 2019 09:03

PROJECT

Column1

Page 321 of 324

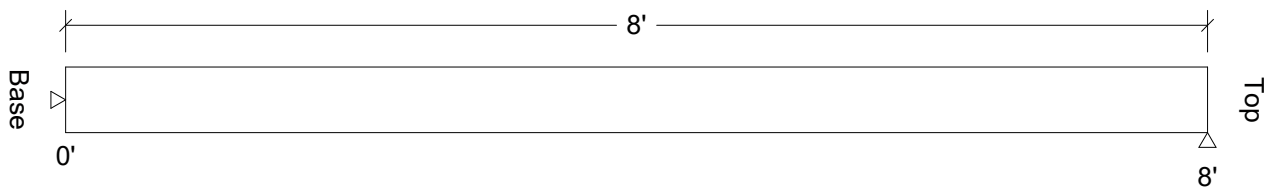
Design Check Calculation Sheet

WoodWorks Sizer 10.45

Loads:

Load	Type	Distribution	Pat- tern	Location [ft] Start End	Magnitude Start End	Unit
Load1	Dead	Axial		(Ecc. = 0.50")	3000	lbs
Load2	Live	Axial		(Ecc. = 0.50")	12000	lbs
Self-weight	Dead	Axial			57	lbs

Lateral Reactions (lbs):



Unfactored:			
Dead	16		-16
Live	63		-63
Factored:			
R->L			78
Load comb			#2
L->R	78		
Load comb	#2		#1

Timber-soft, D.Fir-L, No.1, 6x6 (5-1/2"x5-1/2")

Support: Non-wood

Total length: 8'; volume = 1.7 cu.ft.; Post and timber;

Pinned base; Load face = width(b); $K_e \times L_b: 1.0 \times 0.0 = 0.0$ [ft]; $K_e \times L_d: 1.0 \times 8.0 = 8.0$ [ft];

Analysis vs. Allowable Stress and Deflection using NDS 2012 :

Criterion	Analysis Value	Design Value	Unit	Analysis/Design
Shear	$f_v = 4$	$F_v' = 170$	psi	$f_v/F_v' = 0.02$
Bending (+)	$f_b = 270$	$F_b' = 1200$	psi	$f_b/F_b' = 0.23$
Axial	$f_c = 498$	$F_c' = 820$	psi	$f_c/F_c' = 0.61$
Combined (axial + eccentric moment)				Eq.15.4-3 = 0.72
Axial Bearing	$f_c = 498$	$F_c^* = 1000$	psi	$f_c/F_c^* = 0.50$
Live Defl'n	$0.03 = <L/999$	$0.53 = L/180$	in	0.05
Total Defl'n	$0.04 = <L/999$	$0.53 = L/180$	in	0.07

Additional Data:

FACTORS:	F/E (psi)	CD	CM	Ct	CL/CP	CF	Cfu	Cr	Cfrt	Ci	LC#
Fv'	170	1.00	1.00	1.00	-	-	-	-	1.00	1.00	2
Fb'+	1200	1.00	1.00	1.00	1.000	1.000	1.00	1.00	1.00	1.00	2
Fc'	1000	1.00	1.00	1.00	0.820	1.000	-	-	1.00	1.00	2
E'	1.6 million	1.00	1.00	1.00	-	-	-	-	1.00	1.00	2
Emin'	0.58 million	1.00	1.00	1.00	-	-	-	-	1.00	1.00	2
Fc*	1000	1.00	1.00	1.00	-	1.000	-	-	1.00	1.00	2

CRITICAL LOAD COMBINATIONS:

Shear : LC #2 = D+L, V = 78, V design = 78 lbs

Bending(+): LC #2 = D+L, M = 625 lbs-ft

Deflection: LC #2 = D+L (live)

LC #2 = D+L (total)

Axial : LC #2 = D+L, P = 15057 lbs

Eq.15.4-3 : LC #2 = D+L Fb'= 1200

FcE= 1565 Pxe/S=fc(6xe/d)= 270

D=dead L=live S=snow W=wind I=impact Lr=roof live Lc=concentrated E=earthquake

All LC's are listed in the Analysis output

Load combinations: ASCE 7-10 / IBC 2012

CALCULATIONS:

Deflection: EI = 122e06 lb-in²

"Live" deflection = Deflection from all non-dead loads (live, wind, snow...)

Total Deflection = 1.50(Dead Load Deflection) + Live Load Deflection.

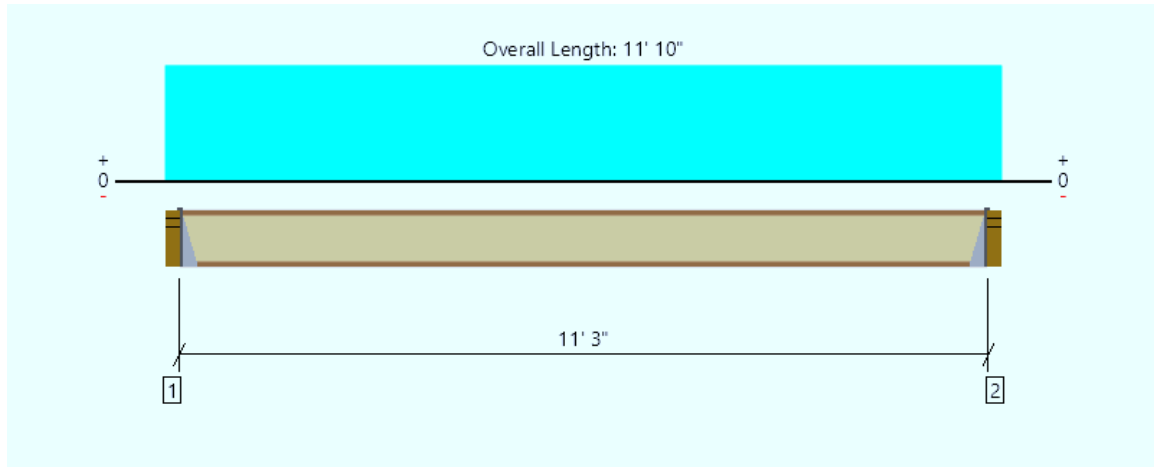
Design Notes:

1. WoodWorks analysis and design are in accordance with the ICC International Building Code (IBC 2012), the National Design Specification (NDS 2012), and NDS Design Supplement.

2. Please verify that the default deflection limits are appropriate for your application.

Level, Floor: Joist

1 piece(s) 11 7/8" TJI® 560D @ 24" OC



All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal.

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	686 @ 3' 1/2"	1400 (1.75")	Passed (49%)	1.00	1.0 D + 1.0 L (All Spans)
Shear (lbs)	686 @ 3' 1/2"	2255	Passed (30%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	1930 @ 5' 11"	9605	Passed (20%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.057 @ 5' 11"	0.375	Passed (L/999+)	--	1.0 D + 1.0 L (All Spans)
Total Load Defl. (in)	0.088 @ 5' 11"	0.563	Passed (L/999+)	--	1.0 D + 1.0 L (All Spans)
TJ-Pro™ Rating	56	40	Passed	--	--

System : Floor
Member Type : Joist
Building Use : Residential
Building Code : IBC 2015
Design Methodology : ASD

- Deflection criteria: LL (L/360) and TL (L/240).
- Top Edge Bracing (Lu): Top compression edge must be braced at 11' 3" o/c unless detailed otherwise.
- Bottom Edge Bracing (Lu): Bottom compression edge must be braced at 11' 3" o/c unless detailed otherwise.
- A structural analysis of the deck has not been performed.
- Deflection analysis is based on composite action with a single layer of 23/32" Weyerhaeuser Edge™ Panel (24" Span Rating) that is glued and nailed down.
- Additional considerations for the TJ-Pro™ Rating include: Pour Flooring Overlay.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Floor Live	Total	
1 - Hanger on DF studWall	3.50"	Hanger ¹	1.75" / 1.75" ²	249	473	722	See note ¹
2 - Hanger on DF studWall	3.50"	Hanger ¹	1.75" / 1.75" ²	249	473	722	See note ¹

At hanger supports, the Total Bearing dimension is equal to the width of the material that is supporting the hanger

- ¹ See Connector grid below for additional information and/or requirements.
- ² Required Bearing Length / Required Bearing Length with Web Stiffeners

Connector: Simpson Strong-Tie							
Support	Model	Seat Length	Top Fasteners	Face Fasteners	Member Fasteners	Accessories	
1 - Top Mount Hanger	ITS3.56/11.88	2.00"	4-10d	2-10d	2-Strong-Grip		
2 - Top Mount Hanger	ITS3.56/11.88	2.00"	4-10d	2-10d	2-Strong-Grip		

Vertical Loads	Location (Side)	Spacing	Dead (0.90)	Floor Live (1.00)	Comments
1 - Uniform (PSF)	0 to 11' 10"	24"	21.0	40.0	Default Load
2 - Point (lb)	0	N/A	-	-	
3 - Point (lb)	0	N/A	-	-	
4 - Point (lb)	0	N/A	-	-	
5 - Point (lb)	0	N/A	-	-	
6 - Point (lb)	0	N/A	-	-	
7 - Point (lb)	0	N/A	-	-	

ForteWEB Software Operator	Job Notes
Seth Davis Froelich Engineers (503) 924-6314 sdavis@froelich-engineers.com	

12/11/2019 7:25:47 PM UTC

ForteWEB v2.1, Engine: V7.3.2.309, Data: V7.2.0.2

File Name: Starfish Manor

Page 1 / 2

Weyerhaeuser Notes

Weyerhaeuser warrants that the sizing of its products will be in accordance with Weyerhaeuser product design criteria and published design values. Weyerhaeuser expressly disclaims any other warranties related to the software. Use of this software is not intended to circumvent the need for a design professional as determined by the authority having jurisdiction. The design professional or framer is responsible to assure that this calculation is compatible with the overall project. Accessories (Rim Board, Blocking Panels and Squash Blocks) are not designed by this software. Products manufactured at Weyerhaeuser facilities are third-party certified to sustainable forestry standards. Weyerhaeuser Engineered Lumber Products have been evaluated by ICC-ES under evaluation reports ESR-1153 and ESR-1387 and/or tested in accordance with applicable ASTM standards. For current code evaluation reports, Weyerhaeuser product literature and installation details refer to www.weyerhaeuser.com/woodproducts/document-library.

The product application, input design loads, dimensions and support information have been provided by ForteWEB Software Operator

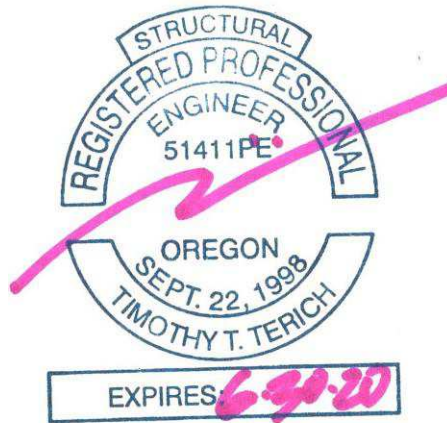


ForteWEB Software Operator	Job Notes
Seth Davis Froelich Engineers (503) 924-6314 sdavis@froelich-engineers.com	

Structural Calculations For 18s Permit Revision

Portland, Oregon
Sera Architects

November 1, 2019
Job Number – 18-T066



FROELICH
ENGINEERS INC.

***** LIMITATIONS *****

**ENGINEERING DESIGN IS BASED UPON INFORMATION PROVIDED BY THE CLIENT, WHO IS
SOLELY RESPONSIBLE FOR ACCURACY OF SAME. NO RESPONSIBILITY AND / OR
LIABILITY IS ASSUMED BY, OR IS TO BE ASSIGNED TO THE ENGINEER
FOR ITEMS BEYOND THAT SHOWN ON THESE SHEETS.**

MAIN OFFICE

17700 SW Upper Boones Ferry RD.
Suite 115
Portland, Oregon 97224
503-624-7005/503-624-9770 FAX

CENTRAL OREGON

745 N.W. Mt. Washington Drive, Suite 204
Bend, Oregon 97701
541-383-1828

DENVER OFFICE

940 Kimbark St, Suite 3
Longmont, Colorado 80501
720-799-1001



FROELICH
ENGINEERS

Client: SERA
Project: 18S
Project Number: 18-T066
Date: November 1, 2019
By: SPD

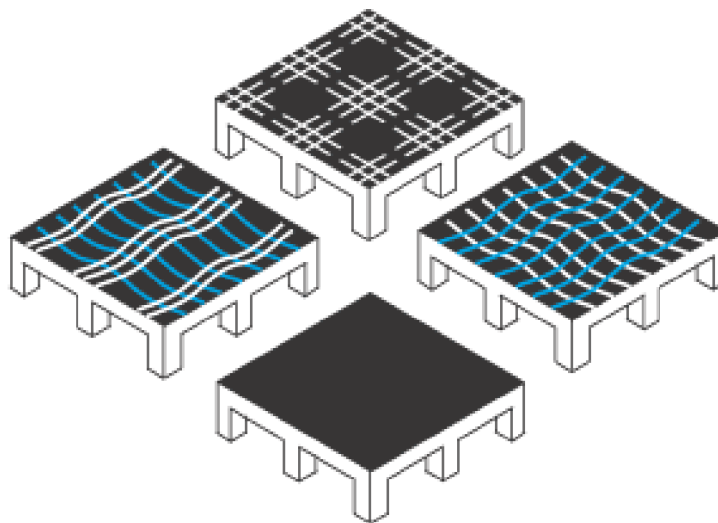
Structural Narrative:

The 1st floor concrete slab on grade and 2nd level PT was modified due to owner changes.

Additional revisions are to keep the permit drawings up today to reflect RFI changes since the permit was issued.

www.froelich-engineers.com

☒ MAIN OFFICE	17700 SW Upper Boones Ferry Rd. Suite 115 Portland, Oregon 97223	503-624-7005
☐ CENTRAL OREGON	745 NW Mt. Washington Dr., Suite #204 Bend, Oregon 97703	541-383-1828
☐ DENVER OFFICE	940 Kimbark St., Suite #3 Longmont, Colorado 80501	720-799-1001



Level 2.19 (VE).cpt
10/31/2019

RAM Concept © 2019 Bentley Systems, Inc.
RAM Concept™ is a trademark of Bentley Systems

Table of Contents

Units	3
Signs	4
Materials	5
Loadings	7
Load Combinations	8
Design Rules	17
Detailing Rules	18
Load History	19
Mesh Input: Walls Below Table	20
Mesh Input: Columns Below Table	22
Mesh Input: Slab Areas Table	25
Mesh Input: Beams Table	28
Mesh Input: Standard Plan	31
Other Dead Loading: Point Loads Plan	32
Other Dead Loading: Line Loads Plan	33
Other Dead Loading: Area Loads Plan	34
Live (Reducible) Loading: All Loads Plan	35
Live (Unreducible) Loading: Point Loads Plan	36
Live (Unreducible) Loading: Line Loads Plan	37
Live (Unreducible) Loading: Area Loads Plan	38
Live (Unreducible) Loading: Std Reactions Plan	39
Seismic E/W: Point Loads Plan	40
Seismic E/W: Std Reactions Plan	41
Seismic N/S: Point Loads Plan	42
Seismic N/S: Std Reactions Plan	43
Service LC: D + L: Max Deflection Plan	44
Service LC: D + L: Min Deflection Plan	45
Service LC: D + L: Reaction Plan	46
Long Term deflection: Max Deflection Plan	47
Design Strip: Latitude SSs Table	48
Design Strip: Longitude SSs Table	56
Design Strip: Latitude SSSs Table	64
Design Strip: Longitude SSSs Table	66
Design Strip: Punching Checks Table	68
Design Strip: Latitude Design Spans Plan	71
Design Strip: Longitude Design Spans Plan	72
Design Strip: Punching Checks Plan	73
Reinforcement: Top Bars Plan	74
Reinforcement: Bottom Bars Plan	75
Reinforcement: Shear Bars Plan	76
Reinforcement: SSR Plan	77
Manual Latitude Tendon: Standard Plan	78
Manual Longitude Tendon: Standard Plan	79
Service Design: Top Stress Plan	80
Service Design: Bottom Stress Plan	81
Strength Design: Punching Shear Status Plan	82
Design Status: Status Plan	83

Units

Geometry Unit:

Plan Dimensions: feet
Angles: degrees

Slab Thickness: inches
Elevations: inches

Support Dimensions: inches
Support Height: feet

Loading and Reaction Unit

Point Force: Kips
- Report As Zero: 0 Kips
Point Moment: kip-ft
- Report As Zero: 0 kip-ft

Line Force: kips/ft
- Report As Zero: 0 kips/ft
Line Moment: Kips
- Report As Zero: 0 Kips

Area Force: psf
- Report As Zero: 0 psf
Area Moment: #/foot
- Report As Zero: 0 #/foot

Spring and Stiffness Unit:

Point Force Spring: kips/in
Point Moment Spring: k-ft/°

Line Force Spring: ksi
Line Moment Spring: k/°

Area Force Spring: pci
Area Moment Spring: k/ft°

Slab Analysis Unit:

Force: Kips
- Report As Zero: 0 Kips
Force Per Width: kips/ft
- Report As Zero: 0 kips/ft

Moment: kip-ft
- Report As Zero: 0 kip-ft
Moment Per Width: Kips
- Report As Zero: 0 Kips

Concrete Stress: psi
- Report As Zero: 0 psi
Deflection: inches
- Report As Zero: 0 inches

Materials Unit:

Concrete Volume: yd³
Reinforcement Weight: tons
PT Weight: pounds

Reinforcing Area: in²
Tendon Profile: inches
Cover: inches

PT Force: Kips
Reinforcing Stress: ksi

Miscellaneous Unit

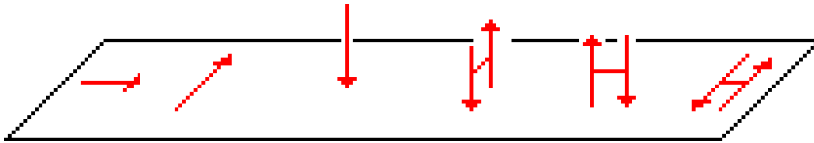
Floor Area: ft²
Tendon Angles (for friction): radians

Density: pcf

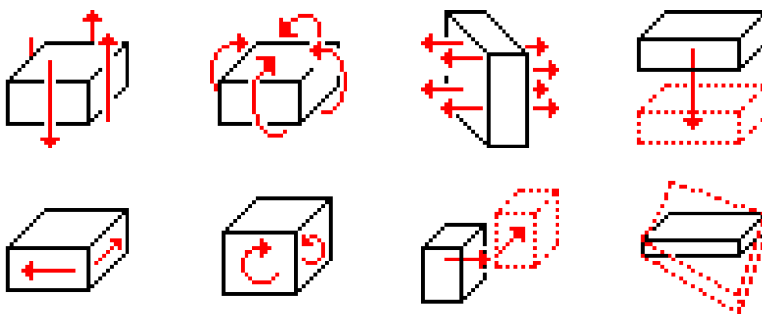
Elongations: inches

Signs

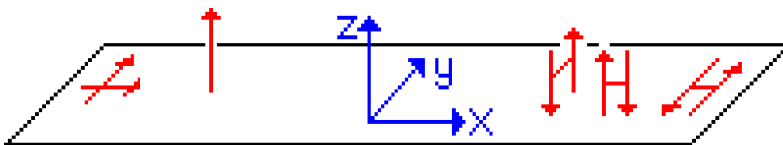
Positive Loads



Positive Analysis



Positive Reactions



Materials

Concrete Mix

Mix Name	Density (pcf)	Density For Loads (pcf)	fci (psi)	f'c (psi)	fcui (psi)	fcu (psi)	Poissons Ratio	Ec Calc	User Eci (psi)	User Ec (psi)
3000 psi	150	150	3000	3000	3725	3725	0.2	Code	2500000	3000000
4000 psi	150	150	3000	4000	3725	4975	0.2	Code	2500000	3000000
5000 psi	150	150	3000	5000	3725	6399	0.2	Code	2500000	3000000
6000 psi	150	150	3000	6000	3725	7450	0.2	Code	2500000	3000000

PT Systems

System Name	Type	Aps (in ²)	Eps (ksi)	fse (ksi)	fpv (ksi)	fpu (ksi)	Duct Width (inches)	Strands Per Duct	Min Radius (feet)
1/2" Unbonded	unbonded	0.153	28000	175	243	270	0.5	1	6
1/2" Bonded	bonded	0.153	28000	160	243	270	3	4	6
0.6" Unbonded	unbonded	0.217	28000	175	243	270	0.6	1	8
0.6" Bonded	bonded	0.217	28000	160	243	270	4	4	8

PT Stressing Parameters

System Name	Jacking Stress (ksi)	Seating Loss (inches)	Anchor Friction	Wobble Friction (1/feet)	Angular Friction (1/radians)	Long-Term Losses (ksi)
1/2" Unbonded	216	0.25	0	0.0014	0.07	22
1/2" Bonded	216	0.25	0.02	0.001	0.2	22
0.6" Unbonded	216	0.25	0	0.0014	0.07	22
0.6" Bonded	216	0.25	0.02	0.001	0.2	22

Reinforcing Bars

Bar Name	As (in ²)	Es (ksi)	Fy (ksi)	Coating	Straight Ld/Db	90 Hook Ld/Db	180 Hook Ld/Db
#3	0.11	29000	60	None	Code	Code	Code
#4	0.2	29000	60	None	Code	Code	Code
#5	0.31	29000	60	None	Code	Code	Code
#6	0.44	29000	60	None	Code	Code	Code
#7	0.6	29000	60	None	Code	Code	Code
#8	0.79	29000	60	None	Code	Code	Code
#9	1	29000	60	None	Code	Code	Code
#10	1.27	29000	60	None	Code	Code	Code
#11	1.56	29000	60	None	Code	Code	Code

Materials (2)

SSR Systems

<i>SSR System Name</i>	<i>Stud Area (in²)</i>	<i>Head Area (in²)</i>	<i>Min Clear Head Spacing (inches)</i>	<i>Specified Stud Spacing (inches)</i>	<i>Fy (ksi)</i>	<i>Stud Spacing Rounding Increment (inches)</i>	<i>Min Studs Per Rail</i>	<i>System Type</i>
3/8" SSR	0.11	1.11	0.5	None	50	0.25	2	Rail
1/2" SSR	0.196	1.96	0.5	None	50	0.25	2	Rail
5/8" SSR	0.307	3.07	0.5	None	50	0.25	2	Rail
3/4" SSR	0.442	4.42	0.5	None	50	0.25	2	Rail
Ancon Shearfix Auto-Size	0.217	1.096	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 10 mm	0.1217	1.096	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 12 mm	0.1753	1.578	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 14 mm	0.2386	2.147	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 16 mm	0.3116	2.805	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 20 mm	0.4869	4.383	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 24 mm	0.7012	6.311	0.5906	None	72.52	0.03937	2	Rail

Loadings

<i>Loading Name</i>	<i>Type</i>	<i>Analysis</i>	<i>On-Pattern Factor</i>	<i>Off-Pattern Factor</i>
Self-Dead Loading	Self-Weight	Normal	1	1
Balance Loading	Balance	Normal	1	1
Hyperstatic Loading	Hyperstatic	Hyperstatic	1	1
Temporary Construction (At Stressing) Loading	Stressing Dead	Normal	1	1
Other Dead Loading	Dead	Normal	1	1
Live (Reducible) Loading	Live (Reducible)	Normal	1	0
Live (Unreducible) Loading	Live (Unreducible)	Normal	1	0
Live (Storage) Loading	Live (Storage)	Normal	1	0
Live (Parking) Loading	Live (Parking)	Normal	1	0
Live (Roof) Loading	Live (Roof)	Normal	1	0
Snow Loading	Snow	Normal	1	1
Seismic E/W	Ultimate Seismic 1 (transfer)	Normal	1	0
Seismic N/S	Ultimate Seismic 1 (transfer)	Normal	1	0

Load Combinations

All Dead LC

Active Design Criteria: <none>

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Other Dead Loading	1	1

Dead + Balance LC

Active Design Criteria: <none>

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1

Initial Service LC

Active Design Criteria: Initial Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1.13	1.13
Temporary Construction (At Stressing) Loading	1	1

Service LC: D + L

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Reducible) Loading	1	0
Live (Unreducible) Loading	1	0
Live (Storage) Loading	1	0
Live (Parking) Loading	1	0

Service LC: D + Lr

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Roof) Loading	1	0

Load Combinations (2)

Service LC: D + S

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Snow Loading	1	0

Service LC: D + 0.75L + 0.75Lr

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Reducible) Loading	0.75	0
Live (Unreducible) Loading	0.75	0
Live (Storage) Loading	0.75	0
Live (Parking) Loading	0.75	0
Live (Roof) Loading	0.75	0

Service LC: D + 0.75L + 0.75S

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Reducible) Loading	0.75	0
Live (Unreducible) Loading	0.75	0
Live (Storage) Loading	0.75	0
Live (Parking) Loading	0.75	0
Snow Loading	0.75	0

Sustained Service LC

Active Design Criteria: Sustained Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Reducible) Loading	0.5	0.5
Live (Unreducible) Loading	0.5	0.5
Live (Storage) Loading	1	1
Live (Parking) Loading	0.5	0.5
Live (Roof) Loading	0.5	0.5

Load Combinations (3)

Factored LC: 1.4D

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design
Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.4	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.4	0.9

Factored LC: 1.2D + 1.6L + 0.5Lr

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design
Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.2	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.2	0.9
Live (Reducible) Loading	1.6	0
Live (Unreducible) Loading	1.6	0
Live (Storage) Loading	1.6	0
Live (Parking) Loading	1.6	0
Live (Roof) Loading	0.5	0

Factored LC: 1.2D + f1L + 1.6Lr

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design
Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.2	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.2	0.9
Live (Reducible) Loading	0.5	0
Live (Unreducible) Loading	1	0
Live (Storage) Loading	1	0
Live (Parking) Loading	1	0
Live (Roof) Loading	1.6	0

Factored LC: 1.2D + 1.6L + 0.5S

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design
Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.2	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.2	0.9
Live (Reducible) Loading	1.6	0
Live (Unreducible) Loading	1.6	0
Live (Storage) Loading	1.6	0
Live (Parking) Loading	1.6	0
Snow Loading	0.5	0

Load Combinations (4)

Factored LC: $1.2D + f1L + 1.6S$

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design
Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.2	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.2	0.9
Live (Reducible) Loading	0.5	0
Live (Unreducible) Loading	1	0
Live (Storage) Loading	1	0
Live (Parking) Loading	1	0
Snow Loading	1.6	0

Long Term deflection

Active Design Criteria: <none>
Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	3.35	3.35
Balance Loading	3.35	3.35
Other Dead Loading	3.35	3.35
Live (Unreducible) Loading	2	2
Snow Loading	1	1

Earthquake N-S: $(1.2+.2*Sds)D + 2.5E + 0.5L+0.2S$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design
Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.344	1.344
Hyperstatic Loading	1	1
Other Dead Loading	1.344	1.344
Live (Unreducible) Loading	0.5	0.5
Snow Loading	0.2	0.2
Seismic N/S	2.5	2.5

Earthquake N-S: $(0.9-0.2*Sds)D + 2.5E$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design
Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.756	0.756
Hyperstatic Loading	1	1
Other Dead Loading	0.756	0.756
Seismic N/S	2.5	2.5

Load Combinations (5)

Earthquake E-W: $(1.2+0.2*S_{ds})D + 2.5E + 0.5L+0.2S$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.344	1.344
Hyperstatic Loading	1	1
Other Dead Loading	1.344	1.344
Live (Unreducible) Loading	0.5	0.5
Snow Loading	0.2	0.2
Seismic E/W	2.5	2.5

Earthquake E-W: $(0.9-0.2*S_{ds})D + 2.5E$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.756	0.756
Hyperstatic Loading	1	1
Other Dead Loading	0.756	0.756
Seismic E/W	2.5	2.5

Earthquake N-S: $(1.0+0.14*S_{ds})D + 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.101	1.101
Balance Loading	1	1
Other Dead Loading	1.101	1.101
Seismic N/S	1.75	1.75

Earthquake N-S: $(1.0+0.105*S_{ds})D + 1.3125E + 0.75L + 0.75S$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.076	1.076
Balance Loading	1	1
Other Dead Loading	1.076	1.076
Live (Unreducible) Loading	0.75	0.75
Snow Loading	0.75	0.75
Seismic N/S	1.313	1.313

Load Combinations (6)

Earthquake N-S: $(0.6-0.14*S_{ds})D + 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.499	0.499
Balance Loading	1	1
Other Dead Loading	0.899	0.899
Seismic N/S	1.75	1.75

Earthquake E-W: $(1.0+0.14*S_{ds})D + 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.101	1.101
Balance Loading	1	1
Other Dead Loading	1.101	1.101
Seismic E/W	1.75	1.75

Earthquake E-W: $(1.0+0.105*S_{ds})D + 1.3125E + 0.75L+0.75S$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.076	1.076
Balance Loading	1	1
Other Dead Loading	1.076	1.076
Live (Unreducible) Loading	0.75	0.75
Snow Loading	0.75	0.75
Seismic E/W	1.313	1.313

Earthquake N-S: $(1.2+0.2*S_{ds})D - 2.5E + .5L + 0.2S$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.344	1.344
Hyperstatic Loading	1	1
Other Dead Loading	1.344	1.344
Live (Unreducible) Loading	0.5	0.5
Snow Loading	0.2	0.2
Seismic N/S	-2.5	-2.5

Load Combinations (7)

Earthquake N-S: $(0.9-0.2*S_{ds})D - 2.5E$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.756	0.756
Hyperstatic Loading	1	1
Other Dead Loading	0.756	0.756
Seismic N/S	-2.5	-2.5

Earthquake E-W: $(1.2+0.2*S_{ds})D - 2.5E + .5L + 0.2S$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.344	1.344
Hyperstatic Loading	1	1
Other Dead Loading	1.344	1.344
Live (Unreducible) Loading	0.5	0.5
Snow Loading	0.2	0.2
Seismic E/W	-2.5	-2.5

Earthquake E-W: $(0.9-0.2*S_{ds})D - 2.5E$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.756	0.756
Hyperstatic Loading	1	1
Other Dead Loading	0.756	0.756
Seismic E/W	-2.5	-2.5

Earthquake N-S: $(1.0+0.14*S_{ds})D - 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.101	1.101
Balance Loading	1	1
Other Dead Loading	1.101	1.101
Seismic N/S	-1.75	-1.75

Load Combinations (8)

Earthquake N-S: $(1.0+0.105*S_{ds})D - 1.3125E + 0.75L + .75S$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.076	1.076
Balance Loading	1	1
Other Dead Loading	1.076	1.076
Live (Unreducible) Loading	0.75	0.75
Snow Loading	0.75	0.75
Seismic N/S	-1.313	-1.313

Earthquake N-S: $(0.6-0.14*S_{ds})D - 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.499	0.499
Balance Loading	1	1
Other Dead Loading	0.899	0.899
Seismic N/S	-1.75	-1.75

Earthquake E-W: $(1.0+0.14*S_{ds})D - 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.101	1.101
Balance Loading	1	1
Other Dead Loading	1.101	1.101
Seismic E/W	-1.75	-1.75

Earthquake E-W: $(0.6-0.14*S_{ds})D + 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.499	0.499
Balance Loading	1	1
Other Dead Loading	0.899	0.899
Seismic E/W	1.75	1.75

Earthquake E-W: $(0.6-0.14*S_{ds})D - 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.499	0.499
Balance Loading	1	1
Other Dead Loading	0.899	0.899
Seismic E/W	-1.75	-1.75

Load Combinations (9)

Earthquake E-W: $(1.0+0.105*S_{ds})D - 1.3125E + 0.75L + 0.75S$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.076	1.076
Balance Loading	1	1
Other Dead Loading	1.076	1.076
Live (Unreducible) Loading	0.75	0.75
Snow Loading	0.75	0.75
Seismic E/W	-1.313	-1.313

Design Rules

Code Minimum Design

318-11 Min. Reinforcement

User Minimum Design

Specified Min. Reinforcement

Initial Service Design

318-11 Initial Service Design

Service Design

318-11 Service Design

Include detailed section analysis

Sustained Service Design

318-11 Sustained Service Design

Strength Design

318-11 Strength Design

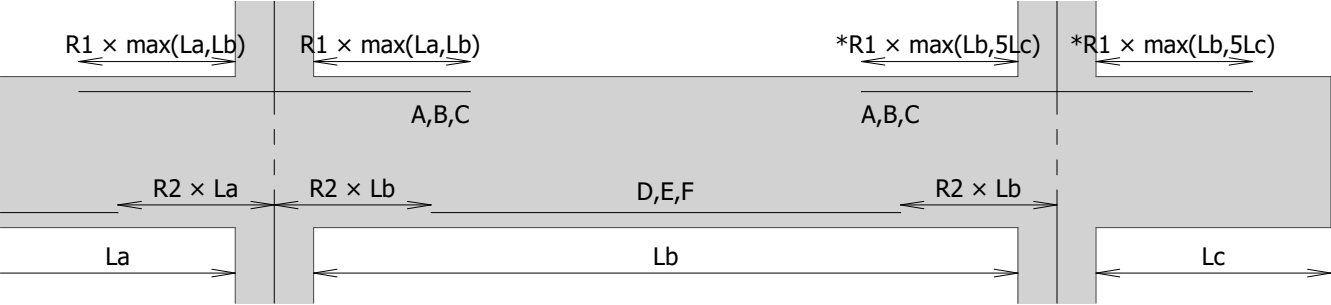
Punching Shear Design

Ductility Design

318-11 Ductility Design

Detailing Rules

Custom Span Detailing Rules



Rule	A	A	B	B	C	C	D	D	E	E	F	F
Name	Fraction	R1	Fraction	R1	Fraction	R1	Fraction	R2	Fraction	R2	Fraction	R2
None	0	0	0	0	0	0	0	0	0	0	0	0

"A", "B" and "C", are support reinforcement sets, based on the peak reinforcement in the support zone.
"D", "E" and "F", are span reinforcement sets, based on the peak reinforcement in the span zone.
"*R1" is never taken as greater than 0.2 when multiplied by L_c (or L_{cc}).
"Fraction" is the ratio of set reinforcement to peak reinforcement. It is always in the 0.0 to 1.0 range.

Load History

<i>Load History Step Name</i>	<i>Load Combination</i>	<i>Duration (days)</i>	<i>Total Age (days)</i>
Maximum Short Term Load	Service LC: D + L	30	33
Sustained Load	Sustained Service LC	5000	5033
Final Instantaneous Load	Service LC: D + L	0	5033

Mesh Input: Walls Below Table

<i>Number</i>	<i>Location feet</i>	<i>Mix</i>	<i>Fixed Near</i>	<i>Fixed Far</i>	<i>Comp.</i>	<i>Height feet</i>	<i>Thickness inches</i>
1	(-163.8,-2)(-192.2,-2.005)	5000 psi	false	false	true	11.5	4
2	(-161.7,-94.62)(-161.7,-5006)	psi	false	false	true	11	16
3	(-158.1,-74.12)(-158.1,-5000)	psi	false	false	true	11	16
4	(-139.7,-83.12)(-162.3,-5003)	psi	false	false	true	11	12
5	(-139.7,-94.11)(-162.3,-5003)	psi	false	false	true	11	12
6	(-136.1,-62.61)(-158.8,-5007)	psi	false	false	true	11	12
7	(-140.3,-94.58)(-140.3,-5006)	psi	false	false	true	11	16
8	(-136.8,-74.05)(-136.8,-5002)	psi	false	false	true	11	16
9	(-56.8,-65.35)(-56.84,-75024)	psi	false	false	true	11	16
10	(-27.39,-1.995)(-27.39,-5004)	psi	false	false	true	11.5	16
11	(-0.6634,-1.994)(-28.1450095)	psi	false	false	true	11.5	4

Mesh Input: Walls Below Table (2)

<i>Shear Wall</i>	<i>Use Spec LLR Params</i>	<i>Spec. LLR Levels</i>	<i>Spec. Trib. Area ft²</i>	<i>Spec. Infl. Area ft²</i>	<i>Max LLR %</i>
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40

Mesh Input: Columns Below Table

<i>Number</i>	<i>Location feet</i>	<i>Mix</i>	<i>Fixed Near</i>	<i>Fixed Far</i>	<i>Comp.</i>	<i>Height feet</i>	<i>B inches</i>	<i>D inches</i>
1	(-200.6,-89.05)	5000 psi	true	true	true	11.5	24	18
2	(-198,-65.18)	5000 psi	true	true	true	11.5	24	18
3	(-195.5,-41.31)	5000 psi	true	true	true	11.5	24	18
4	(-193,-17.44)	5000 psi	true	true	true	11.5	24	18
5	(-181.4,-44.55)	5000 psi	true	true	true	11.5	24	18
6	(-177,-67.39)	5000 psi	true	true	true	11.5	24	18
7	(-176.8,-92.28)	5000 psi	true	true	true	11.5	24	18
8	(-164.9,-47.89)	5000 psi	true	true	true	11.5	24	18
9	(-164.6,-22.53)	5000 psi	true	true	true	11.5	24	18
10	(-145.3,-22.83)	5000 psi	true	true	true	11.5	24	18
11	(-138.3,-51.38)	5000 psi	true	true	true	11.5	24	18
12	(-120.6,-101.9)	5000 psi	true	true	true	11.5	24	18
13	(-118.9,-75.16)	5000 psi	true	true	true	11.5	24	18
14	(-118.4,-52.35)	5000 psi	true	true	true	11.5	18	24
15	(-118.3,-22.84)	5000 psi	true	true	true	11.5	24	18
16	(-109.7,-60.83)	5000 psi	true	true	true	11.5	24	18
17	(-99.8,-22.83)	5000 psi	true	true	true	11.5	24	18
18	(-94.99,-75.16)	5000 psi	true	true	true	11.5	24	18
19	(-94.55,-101.9)	5000 psi	true	true	true	11.5	24	18
20	(-87.38,-47.22)	5000 psi	true	true	true	11.5	24	18
21	(-85.98,-66.03)	5000 psi	true	true	true	11.5	24	18
22	(-72.8,-22.83)	5000 psi	true	true	true	11.5	24	18
23	(-71.38,-109.1)	5000 psi	true	true	true	11.5	18	24
24	(-70.75,-75.58)	5000 psi	true	true	true	11.5	24	18
25	(-67.92,-66.08)	5000 psi	true	true	true	11.5	24	18
26	(-65.26,-94)	5000 psi	true	true	true	11.5	24	18
27	(-60.2,-44.83)	5000 psi	true	true	true	11.5	24	18
28	(-45.78,-22.84)	5000 psi	true	true	true	11.5	24	18
29	(-41.7,-44.83)	5000 psi	true	true	true	11.5	24	18
30	(-19.85,-17.33)	5000 psi	true	true	true	11.5	24	18
31	(-14.45,-46.55)	5000 psi	true	true	true	11.5	24	18
32	(-5.378,-16.83)	5000 psi	true	true	true	11.5	24	18

Mesh Input: Columns Below Table (2)

<i>Angle degrees</i>	<i>Roller</i>	<i>I Factor</i>	<i>Use Spec LLR Params</i>	<i>Spec. LLR Levels</i>	<i>Spec. Trib. Area ft²</i>	<i>Spec. Infl. Area ft²</i>
84	false	1	false	1	0	0
84	false	1	false	1	0	0
84	false	1	false	1	0	0
84	false	1	false	1	0	0
-6	false	1	false	1	0	0
84	false	1	false	1	0	0
-6	false	1	false	1	0	0
84	false	1	false	1	0	0
90	false	1	false	1	0	0
90	false	1	false	1	0	0
90	false	1	false	1	0	0
90	false	1	false	1	0	0
90	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
90	false	1	false	1	0	0
90	false	1	false	1	0	0
90	false	1	false	1	0	0
0	false	1	false	1	0	0
90	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
90	false	1	false	1	0	0
22	false	1	false	1	0	0
90	false	1	false	1	0	0
0	false	1	false	1	0	0
90	false	1	false	1	0	0
90	false	1	false	1	0	0
90	false	1	false	1	0	0
90	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0

Max LLR
%

[illegible]

Mesh Input: Slab Areas Table

<i>Number</i>	<i>Location feet</i>	<i>Mix</i>	<i>Thickness inches</i>	<i>TOC inches</i>	<i>Priority</i>	<i>Behavior</i>	<i>R-Axis degrees</i>
1	(-136.4,-53.48)(-136.4,-53.48)(-140.4,-49.49)(-140.4,-53.48)	5000	49.49	028.14,-1.253	2	two-way slab	0
2	(-192.6,-1.5)(-163.8,-1.500)(-163.8,-21.83)(-28.14,-21.83)	5000	21.83	(-0.2917,-1.253)(-0.2917,-1.253)	2	two-way slab	0
3	(-116.5,-54.46)(-116.5,-54.46)(-120.5,-50.47)(-120.5,-54.46)	5000	50.47	(-139.7,-95.03)(-139.7,-95.03)	2	two-way slab	0
4	(-76.04,-102.9)(-84.79,-102.9)(-139.7,-88.1)(-139.7,-94.58)	5000	88.1	(-136.5,-102.9)(-136.5,-102.9)	2	two-way slab	0
5	(-86.31,-49.22)(-86.31,-49.22)(-90.29,-45.23)(-90.29,-49.22)	5000	45.23		2	two-way slab	0

Mesh Input: Slab Areas Table (2)

axis
trees

<i>KMr</i>	<i>KMs</i>	<i>KMrs</i>	<i>KFr</i>	<i>KFs</i>
1	1	1	1	1
1	1	1	1	1
1	1	1	1	1
1	1	1	1	1
1	1	1	1	1

Mesh Input: Slab Areas Table (3)

<i>KVrs</i>
1
1
1
1
1

Mesh Input: Beams Table

Number	Location feet	Mix	Thickness inches	TOC inches	Priority	Mesh As Slab	Width inches
1	(-141.7,-82.62)(-141.7,-50.09)(-139.7,-77.11)(-139.7,-82.62)	5000	143.7	82.62	(-143.7,-77.09)(-139.7,-82.62)(-139.7,-77.09)	false	48
2	(-139.7,-79.1)(-81.13,-75.00)(-139.7,-77.11)(-81.13,-77.1)	5000	139.7	81.1	(-139.7,-81.1)(-81.13,-81.1)	false	48
3	(-74.18,-102.2)(-83,-80.51)(-74.18,-102.2)(-84.86,-80.96)	5000	74.18	80.96	(-72.33,-101.54)(-81.15,-79.46)	false	48
4	(-100.6,-22.83)(-45.03,-20.84)(-100.6,-22.83)(-45.03,-21.83)	5000	100.6	21.83	(-100.6,-23.83)(-45.03,-23.83)	true	24
5	(-45.05,-22.84)(-28.1,-20.84)(-45.05,-22.84)(-28.1,-21.84)	5000	45.05	21.84	(-45.05,-23.84)(-28.1,-23.84)	true	24
6	(-14.45,-47.3)(-14.45,-20.01)(-15.45,-47.3)(-15.45,-20.01)	5000	14.45	47.3	(-13.45,-20.01)(-13.45,-20.01)	false	24
7	(-14.45,-20.01)(-14.45,-16.02)(-15.45,-20.01)(-15.45,-16.02)	5000	14.45	16.02	(-13.45,-20.01)(-13.45,-16.02)	true	24
8	(-28.14,-18.02)(0,-18)(-28.14,-16.02)(0,-16)	5000	28.14	16.02	(-28.14,-20.02)(0,-20)	true	48

Mesh Input: Beams Table (2)

Width
inches

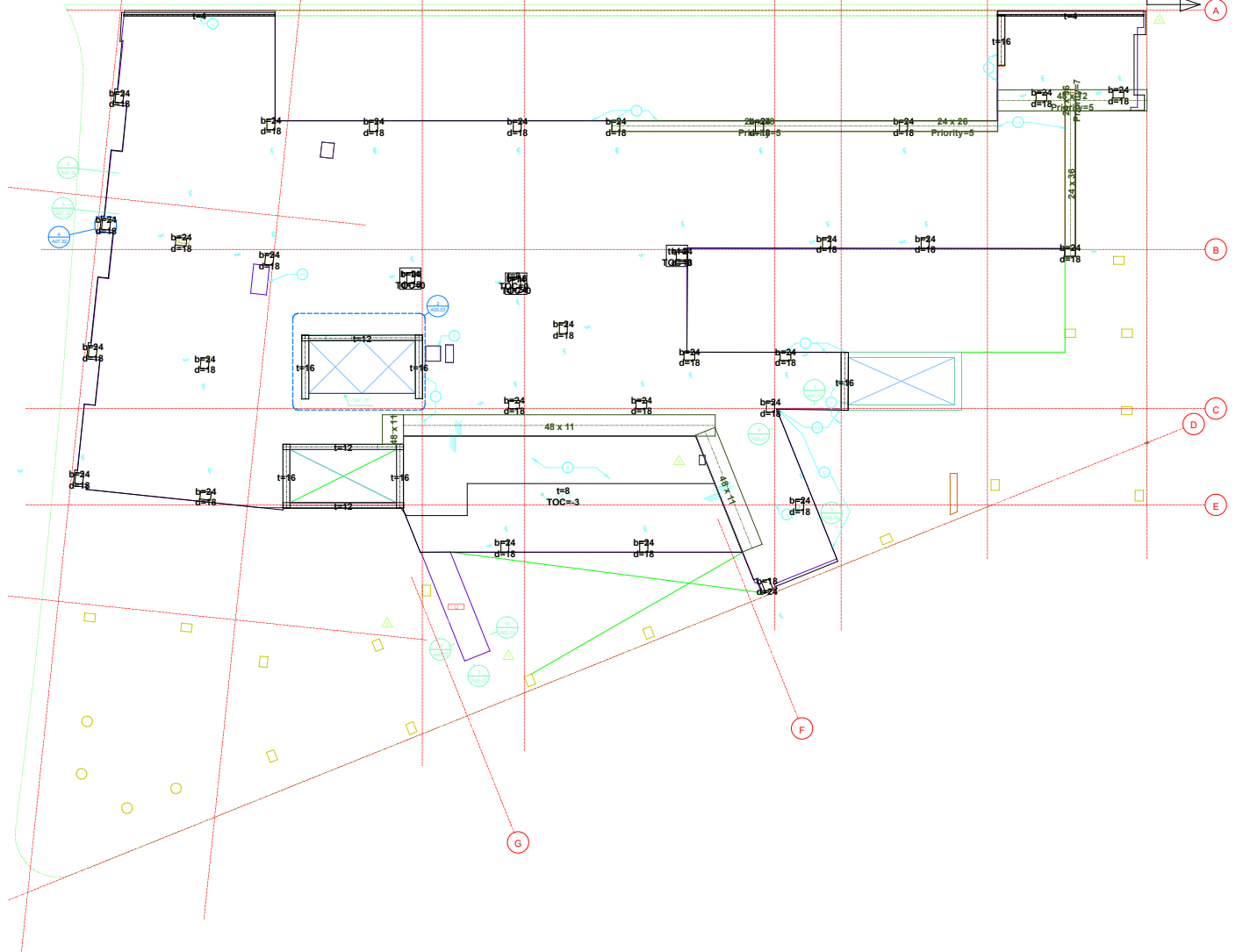
<i>Behavior</i>	<i>KMr</i>	<i>KMs</i>	<i>KMrs</i>	<i>KFr</i>	<i>KFs</i>
no-torsion two-way slab		1	0.001	1	1
no-torsion two-way slab		1	0.001	1	1
no-torsion two-way slab		1	0.001	1	1
no-torsion two-way slab		1	0.001	1	1
no-torsion two-way slab		1	0.001	1	1
no-torsion two-way slab		1	0.001	1	1
no-torsion two-way slab		1	0.001	1	1
no-torsion two-way slab		1	0.001	1	1

Mesh Input: Beams Table (3)

<i>KVrs</i>
1
1
1
1
1
1
1
1

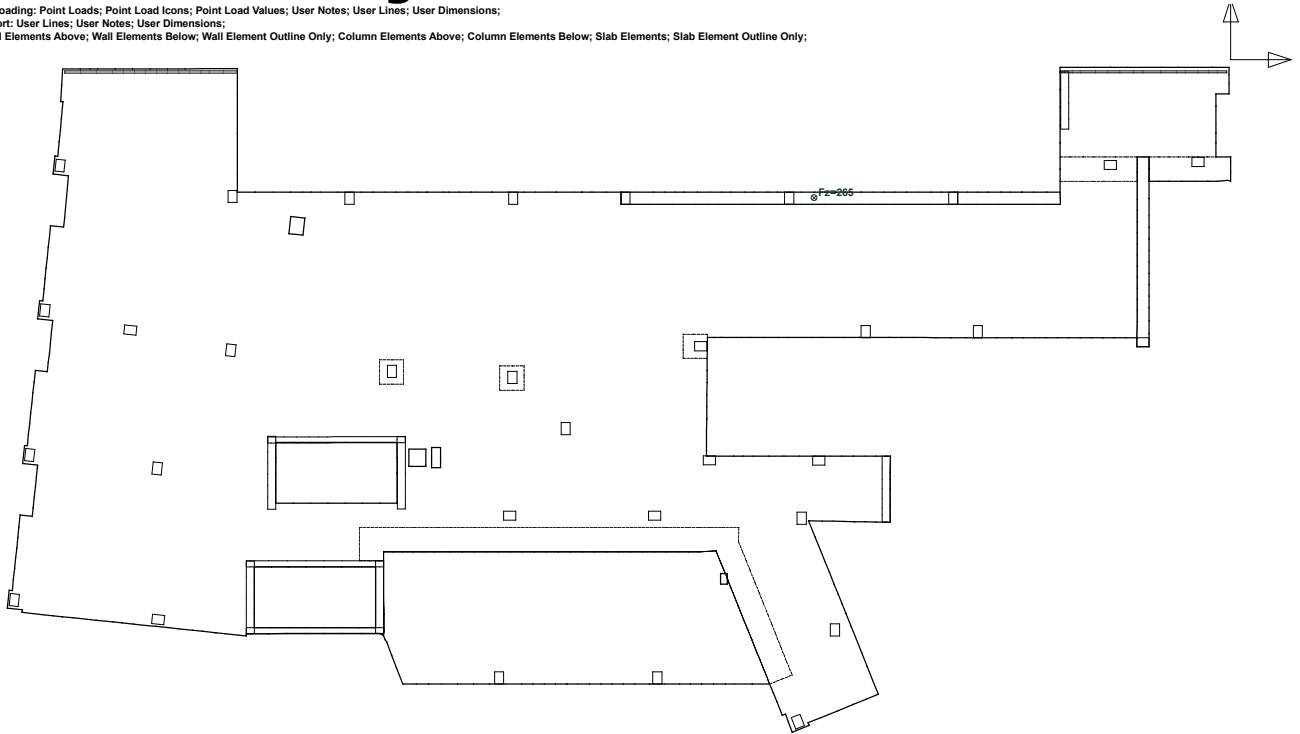
Mesh Input: Standard Plan

Mesh Input: Beams; Beam Dimensions; Beam Priorities; Slab Areas; Slab AreaT hicknesses; Slab Area Elevations; Slab Openings; Point Supports; Point Support Icons; Line Supports; Line Support Icons; Walls Above; Walls Below; Wall Thicknesses; Columns Above; Columns Below; Drawing Import: User Notes; User Lines; User Dimensions; A-DETL; A-DETL-THIN; G-ANNO-TTLB; G-ANNO-TEXT; A-WALL; A-FLOR; G-ANNO-SCHD; A-DETL-HDLN; G-ANNO-REVC-IDEN; A-ANNO-NOTE-MEDM; S-GRID; A-ANNO-DIMS; A-ANNO-NOTE-96; S-FNDN; A-ANNO-DIMS-96
Scale = 1:380



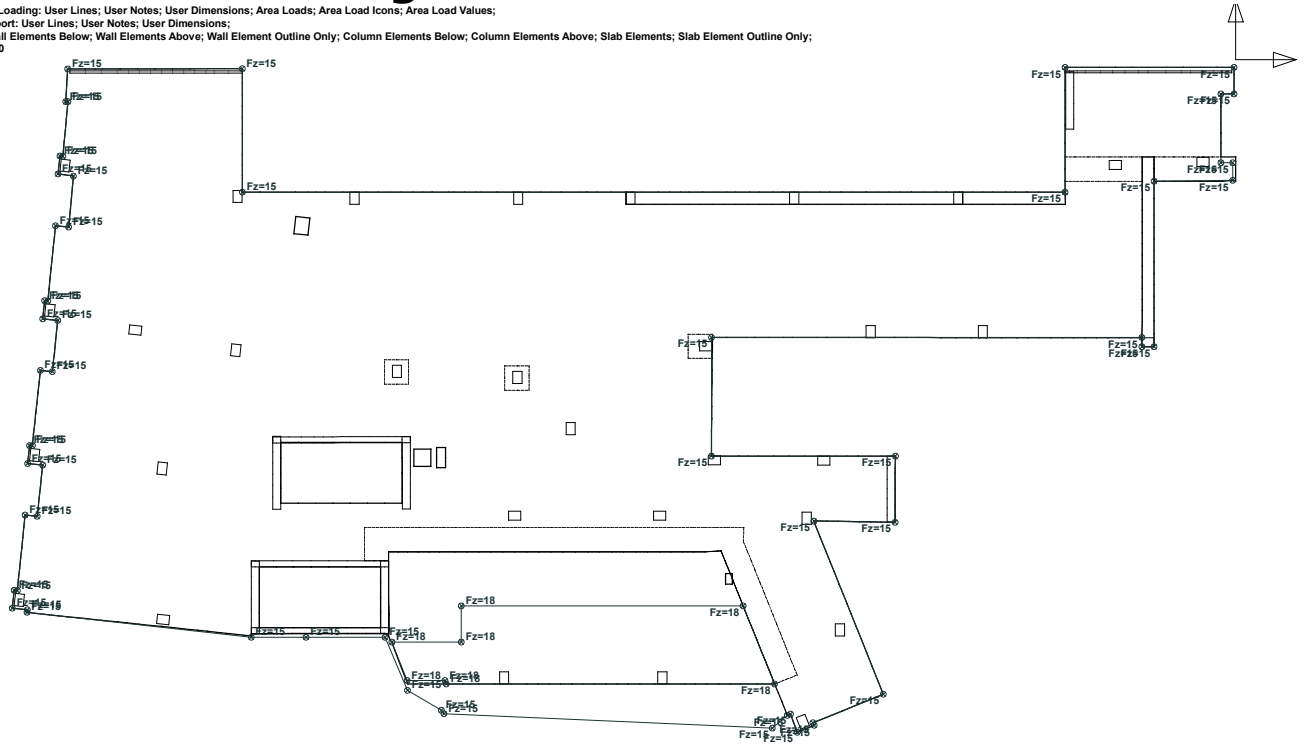
Other Dead Loading: Point Loads Plan

Other Dead Loading: Point Loads; Point Load Icons; Point Load Values; User Notes; User Lines; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Scale = 1:380



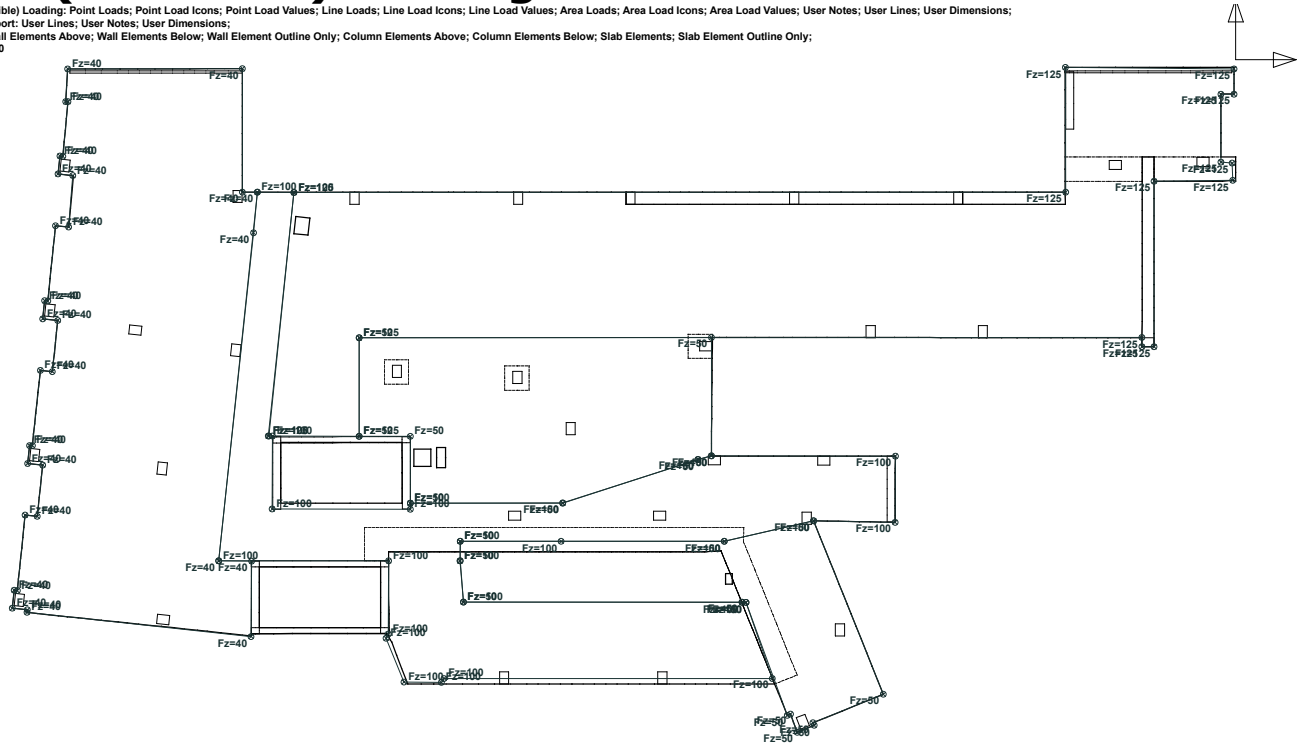
Other Dead Loading: Area Loads Plan

Other Dead Loading: User Lines; User Notes; User Dimensions; Area Loads; Area Load Icons; Area Load Values;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



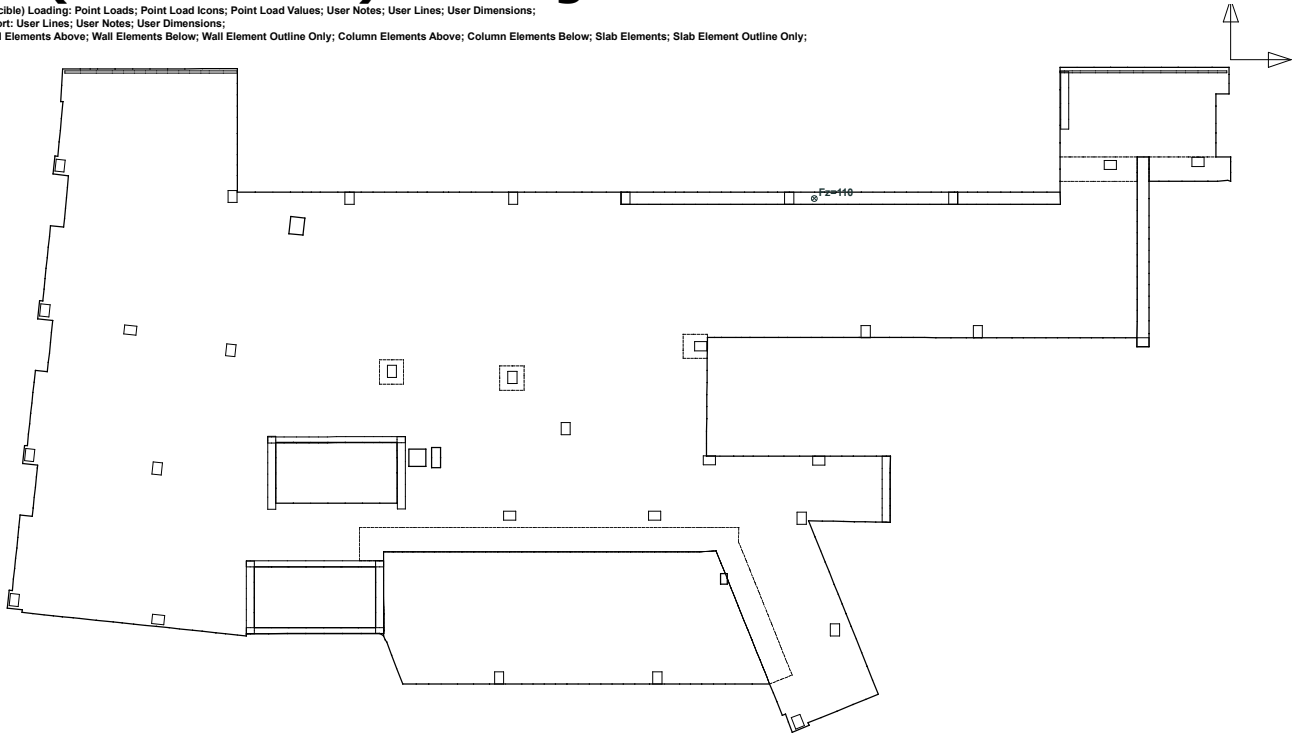
Live (Reducible) Loading: All Loads Plan

Live (Reducible) Loading: Point Loads; Point Load Icons; Point Load Values; Line Loads; Line Load Icons; Line Load Values; Area Loads; Area Load Icons; Area Load Values; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380

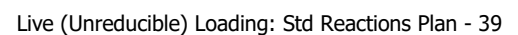


Live (Unreducible) Loading: Point Loads Plan

Live (Unreducible) Loading: Point Loads; Point Load Icons; Point Load Values; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



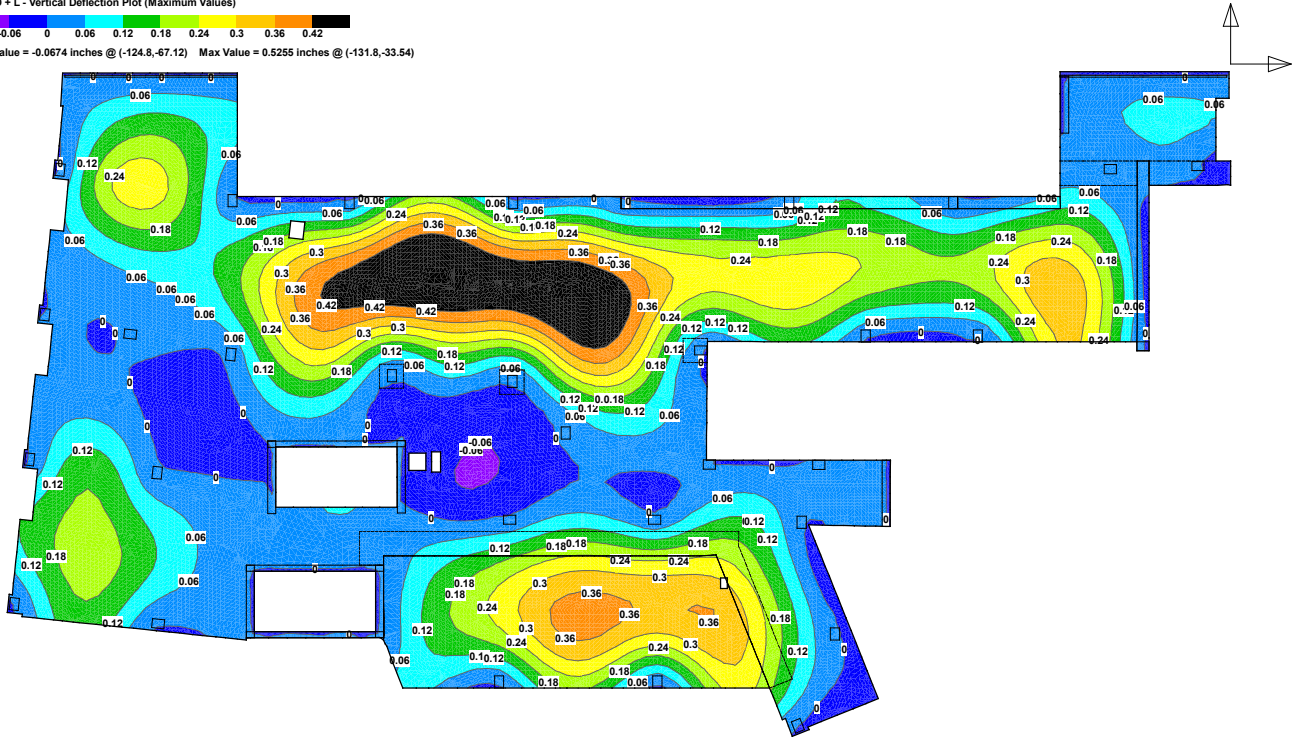
Live (Unreducible) Loading - Reaction Plot: $\text{SWall Below Column Below, Point Spring, Line Spring, Point Support, Line Support}$ (Fz, Mr, Ms, Mz) (Standard Context)



Service LC: D + L: Max Deflection Plan

Service LC: D + L: User Lines; User Notes; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:380
Service LC: D + L - Vertical Deflection Plot (Maximum Values)

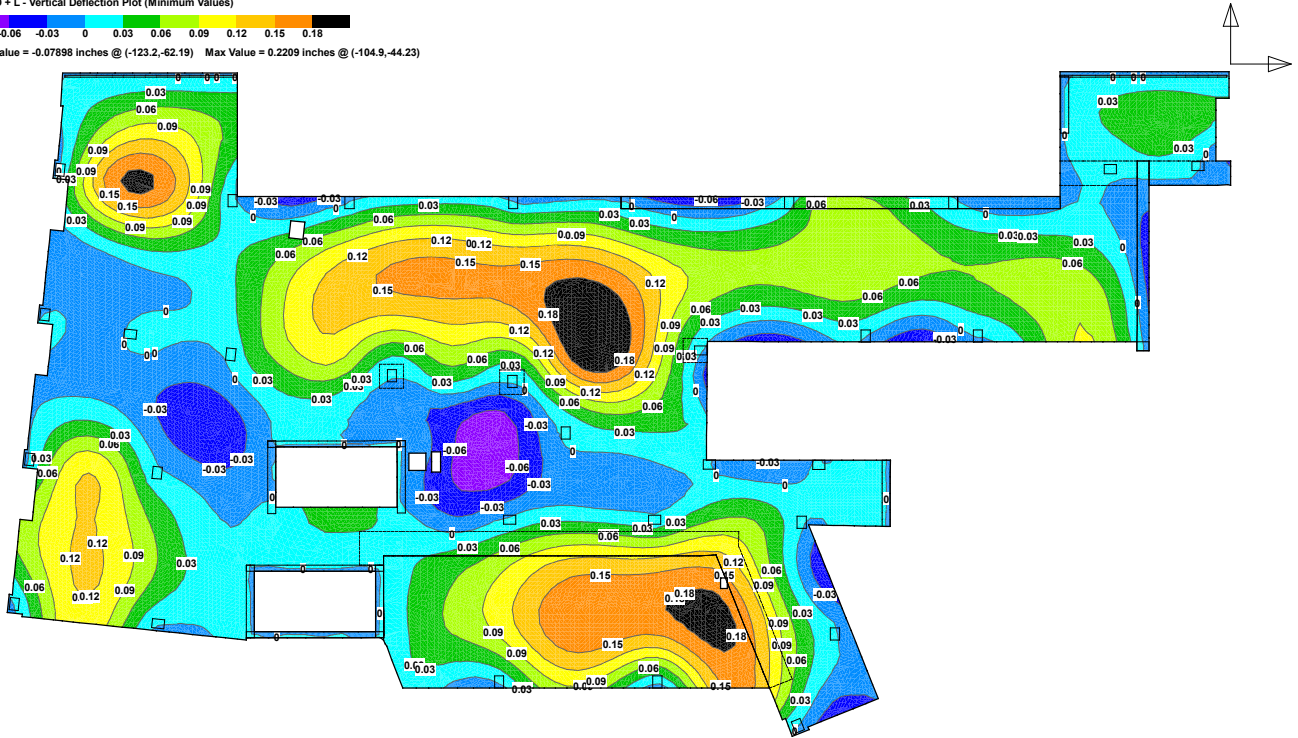
Min Value = -0.0674 inches @ (-124.8,-67.12) Max Value = 0.5255 inches @ (-131.8,-33.54)



Service LC: D + L: Min Deflection Plan

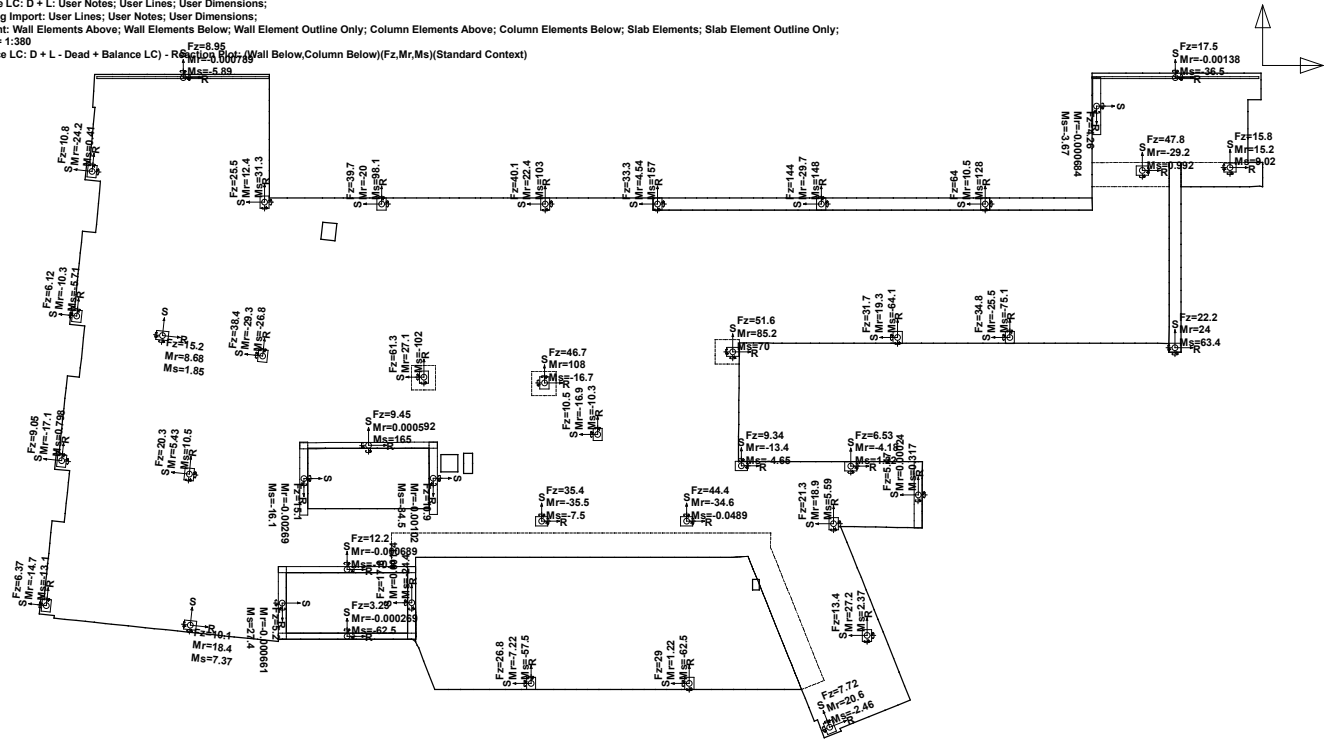
Service LC: D + L: User Lines; User Notes; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:380
Service LC: D + L - Vertical Deflection Plot (Minimum Values)

Min Value = -0.07898 inches @ (-123.2,-62.19) Max Value = 0.2209 inches @ (-104.9,-44.23)



Service LC: D + L: Reaction Plan

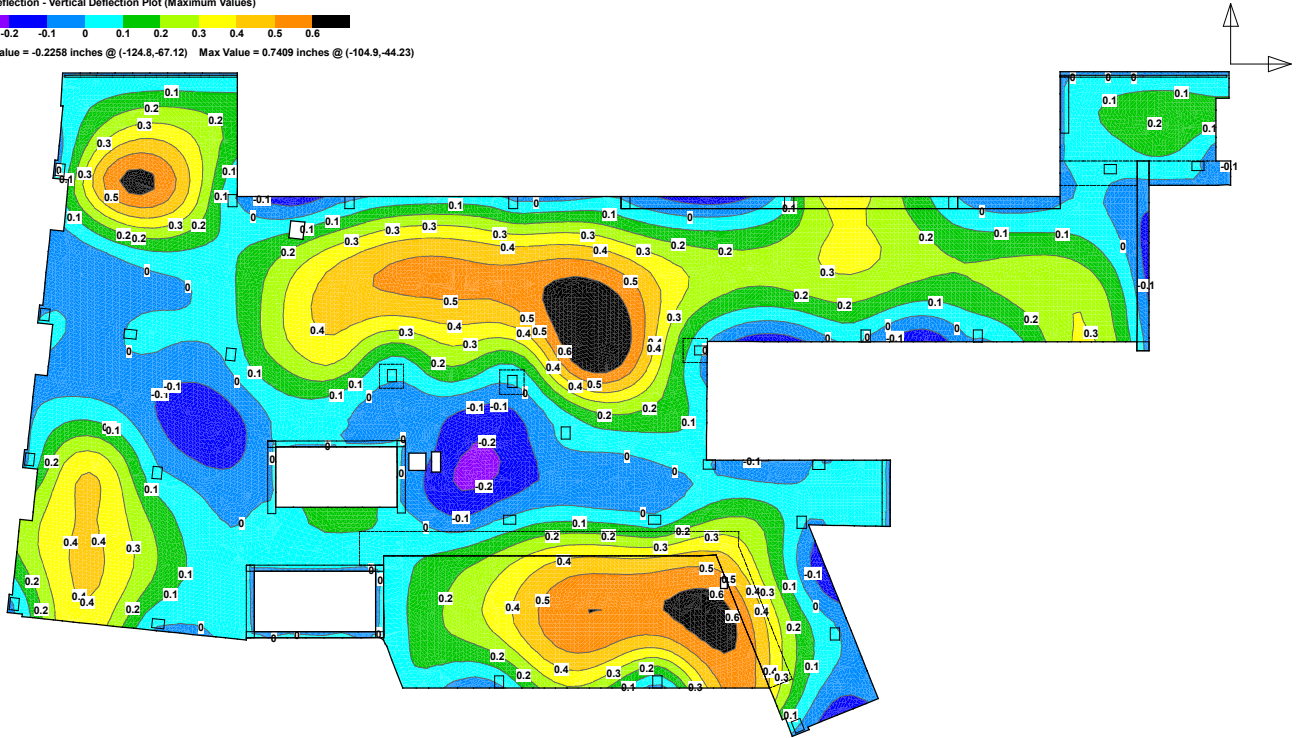
Service LC: D + L: User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380
 (Service LC: D + L - Dead + Balance LC) - Reaction Plan (Fz,Mr,Ms)(Standard Context)



Long Term deflection: Max Deflection Plan

Long Term deflection: User Lines; User Notes; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:380
Long Term deflection - Vertical Deflection Plot (Maximum Values)

Min Value = -0.2258 inches @ (-124.8,-67.12) Max Value = 0.7409 inches @ (-104.9,-44.23)



Design Strip: Latitude SSs Table

Name	Set	Location feet	Skew degrees	At Support 1	At Support 2	Support Width 1 inches
1-1	latitude	(-200.6,-89.05)(-176.8,- 92.58)	24.17	true	true	18.17
1-2	latitude	(-176.8,-92.28)(-161.5,- 94.17)	24.17	true	true	24.16
2-1	latitude	(-195.5,-41.31)(-181.4,- 42.55)	18.29	true	true	18.29
2-2	latitude	(-181.4,-44.55)(-164.9,- 47.49)	24.27	true	true	24.27
2-3	latitude	(-164.9,-47.89)(-138.3,- 51.38)	18.16	true	true	18.16
2-4	latitude	(-138.3,-51.38)(-118.4,- 53.85)	18.18	true	true	18.18
2-5	latitude	(-118.4,-52.35)(-87.38,- 47.32)	18.4	true	true	18.4
3-1	latitude	(-198,-65.18)(-177,-67. 39)	18.16	true	true	18.16
3-2	latitude	(-177,-67.39)(-158,-73. 46)	18.6	true	true	18.6
4-1	latitude	(-193,-17.44)(-164.6,- 22.53)	18.2	true	true	18.2
4-2	latitude	(-164.6,-22.53)(-145.3,- 22.83)	18.16	true	true	18.16
4-3	latitude	(-145.3,-22.83)(-118.3,- 22.83)	18.16	true	true	18.16
4-4	latitude	(-118.3,-22.84)(-99.8,- 22.83)	18.16	true	true	18.16
4-5	latitude	(-99.8,-22.83)(-72.79,- 22.83)	18.16	true	true	18.16
4-6	latitude	(-72.79,-22.83)(-45.78,- 22.83)	17.83	true	true	17.83
4-7	latitude	(-45.78,-22.84)(-15.45,- 22.83)	18.16	true	false	18.16
5-1	latitude	(-140.1,-94.03)(-120.6,- 100.9)	12.35	true	true	12.35
5-2	latitude	(-120.6,-101.9)(-94.55,- 100.9)	18.16	true	true	18.16
5-3	latitude	(-94.55,-101.9)(-65.26,- 94.09)	18.8	true	true	18.8
5-4	latitude	(-65.26,-94)(-62.99,-93. 09)	19.56	true	false	19.56
6-1	latitude	(-136.6,-73.68)(-118.9,- 75.45)	13.05	true	true	13.05
6-2	latitude	(-118.9,-75.16)(-94.99,- 74.76)	24.16	true	true	24.16
6-3	latitude	(-94.99,-74.76)(-70.83,- 75.36)	24.16	true	true	24.16
6-4	latitude	(-70.83,-75.36)(-56.75,- 75.51)	20.02	true	true	20.02
7-1	latitude	(-85.98,-66.03)(-67.92,- 66.03)	24.16	true	true	24.16
7-2	latitude	(-67.92,-66.08)(-56.52,- 65.49)	24.16	true	true	24.16
8-1	latitude	(-87.36,-45.48)(-60.2,- 44.83)	0	false	true	0
8-2	latitude	(-60.2,-44.83)(-41.7,- 44.83)	18.16	true	true	18.16
8-3	latitude	(-41.7,-44.83)(-15.45,- 41.75)	18.16	true	false	18.16
9-1	latitude	(-71.38,-109.1)(-59.03,- 104.67)	18.15	true	false	18.15
10-1	latitude	(-27.98,-17.62)(-19.02,- 17.02)	0.3702	false	true	0.3702
10-2	latitude	(-19.02,-17.34)(-15.45,- 13.45)	4.158	true	false	4.158
10-2(2)	latitude	(-15.45,-17.36)(-13.45,- 13.45)	0	false	false	0
10-2(3)	latitude	(-13.45,-17.4)(-5.378,- 16.83)	0	false	true	0
10-3	latitude	(-5.378,-16.83)(-0.58963,- 16.83)	24.2	true	false	24.2

Design Strip: Latitude SSs Table (2)

<i>Support Width 1 inches</i>	<i>Support Width 2 inches</i>	<i>Support Trans. Width 1 inches</i>	<i>Support Trans. Width 2 inches</i>	<i>Auto-Support</i>	<i>Min Divisions</i>	<i>Max Division Spacing feet</i>
24.17	24.01	18.01	18.01	true	4	2.5
19.99	18	55.24	55.24	true	4	2.5
24.33	24.17	18.13	18.13	true	4	2.5
18.24	18.08	24.11	24.11	true	4	2.5
18.31	24.01	24.21	24.21	true	4	2.5
18.18	24.03	24.03	24.03	true	4	2.5
24.48	24.32	18.24	18.24	true	4	2.5
18.16	24	24	24	true	4	2.5
19.82	24.58	25.71	25.71	true	4	2.5
18.44	24.06	24.38	24.38	true	4	2.5
18.16	24	24	24	true	4	2.5
18.16	24	24	24	true	4	2.5
18.16	24	24	24	true	4	2.5
18.49	24	24	24	true	4	2.5
18.16	24	24	24	true	4	2.5
0	24	0	0	true	4	2.5
19.57	21.46	25.89	25.89	true	4	2.5
18.16	24	24	24	true	4	2.5
18.8	24.86	24.86	24.86	true	4	2.5
0	25.87	0	0	true	4	2.5
24.24	80.15	18.06	18.06	true	4	2.5
24.16	18	18	18	true	4	2.5
16.3	18.01	24.01	24.01	true	4	2.5
18.06	24	130.8	130.8	true	4	2.5
24.16	18	18	18	true	4	2.5
22.85	18	130.8	130.8	true	4	2.5
18.16	0	24.01	24.01	true	4	2.5
18.16	24	24	24	true	4	2.5
0	24	0	0	true	4	2.5
0	24	0	0	true	4	2.5
44.18	0	18.01	18.01	true	4	2.5
0	18	0	0	true	4	2.5
0	0	0	0	true	4	2.5
24.22	0	18.04	18.04	true	4	2.5
0	18.03	0	0	true	4	2.5

Design Strip: Latitude SSs Table (5)

CS Section Slope	CS Top Bar	CS Bot Bar	CS Shear Bar	CS Top Cover inches	CS Bot Cover inches	CS Shear d calc	CS Torsion Design	CS System
#5	#4	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
#5	#4	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
#5	#4	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
#5	#4	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
#5	#4	#4	#4	1.5	0.75	Maximize Effective Depth		two-way slab
#5	#4	#4	#4	1.5	0.75	Maximize Effective Depth		two-way slab
#5	#4	#4	#4	1.5	0.75	Maximize Effective Depth		two-way slab
#5	#4	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
#5	#4	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
#5	#4	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
#5	#4	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
#5	#4	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
#5	#4	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
#5	#4	#4	#4	1.5	0.75	All Tension Reinforcement		beam
#5	#4	#4	#4	1.5	0.75	All Tension Reinforcement		beam
#5	#4	#4	#4	1.5	0.75	Maximize Effective Depth		beam
#5	#4	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
#5	#4	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
#5	#4	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
#5	#4	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
#5	#4	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
#5	#4	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
#5	#4	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
#5	#4	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
#5	#4	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
#5	#4	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
#5	#4	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
#5	#4	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
#5	#4	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
#5	#4	#4	#4	1.5	0.75	Maximize Effective Depth		beam
#5	#4	#4	#4	1.5	0.75	Maximize Effective Depth		beam
#5	#4	#4	#4	1.5	0.75	Maximize Effective Depth		beam
#5	#4	#4	#4	1.5	0.75	Maximize Effective Depth		beam
#5	#4	#4	#4	1.5	0.75	Maximize Effective Depth		beam

Design Strip: Latitude SSs Table (8)

MS Min B.Bar *MS Shear Legs*

[illegible]

Design Strip: Longitude SSs Table

<i>Name</i>	<i>Set</i>	<i>Location feet</i>	<i>Skew degrees</i>	<i>At Support 1</i>	<i>At Support 2</i>	<i>Support Width 1 inches</i>
11-1	longitude	(-200.6,-89.05)(-198,-65.18)	5.001	true	true	24.16
11-2	longitude	(-198,-65.18)(-195.5,-46.31)	4.631	true	true	24.16
11-3	longitude	(-195.5,-41.31)(-193,-17.44)	17.44	true	true	24.16
11-4	longitude	(-193,-17.44)(-191.6,-2.25)	2.25	true	true	24.16
12-1	longitude	(-176.8,-92.28)(-177,-67.39)	24.89	true	true	18.27
12-2	longitude	(-177,-67.39)(-164.9,-47.89)	22.53	true	true	26.83
12-3	longitude	(-164.9,-47.89)(-164.6,-22.53)	2.036	true	true	24.26
12-4	longitude	(-164.6,-22.53)(-138.3,-51.38)	51.38	true	true	24.16
13-1	longitude	(-145.3,-22.83)(-138.3,-51.38)	62.55	true	true	24.87
13-2	longitude	(-138.3,-51.38)(-120.6,-101.9)	91.52	true	true	24.42
14-1	longitude	(-120.6,-101.9)(-119.9,-90.02)	75.16	true	false	24.21
14-1(2)	longitude	(-119.9,-90.02)(-118.9,-75.16)	52.35	false	true	0
14-2	longitude	(-118.9,-75.16)(-118.4,-52.35)	22.84	true	true	18.16
14-3	longitude	(-118.4,-52.35)(-109.7,-60.83)	79.73	true	true	24.16
15-1	longitude	(-109.7,-60.83)(-94.99,-74.76)	101.16	true	true	24.97
16-1	longitude	(-94.99,-74.76)(-88.59,-42.93)	42.93	true	true	27.64
17-1	longitude	(-88.59,-42.93)(-87.38,-47.22)	65.35	true	false	27.07
18-1	longitude	(-87.38,-47.22)(-70.83,-75.36)	75.36	true	true	18.16
19-1	longitude	(-70.83,-75.36)(-67.92,-66.08)	75.36	true	true	19.02
19-2	longitude	(-67.92,-66.08)(-65.26,-94)	94	true	true	30.69
19-3	longitude	(-65.26,-94)(-71.38,-102.1)	102.1	true	true	26.05
20-1	longitude	(-72.79,-22.83)(-60.2,-45.78)	45.78	true	true	27.85
21-1	longitude	(-45.78,-22.84)(-41.7,-19.91)	19.91	true	true	24.57
22-1	longitude	(-19.91,-15.87)(-14.48,-20.06)	46.57	false	true	0
23-1	longitude	(-14.48,-20.06)(-5.47,-2.005)	9.33	false	true	0
24-1	longitude	(-5.47,-2.005)(-5.33,-16.93)	16.93	true	true	3.906
24-2	longitude	(-5.33,-16.93)(-5.308,-19.89)	19.89	true	false	15.8

Design Strip: Longitude SSs Table (2)

<i>Support Width 1 feet</i>	<i>Support Width 2 inches</i>	<i>Support Trans. Width 1 inches</i>	<i>Support Trans. Width 2 inches</i>	<i>Auto-Support</i>	<i>Min Divisions</i>	<i>Max Division Spacing feet</i>
24.16	18	18	18	true	4	2.5
24.16	18	18	18	true	4	2.5
24.16	18	18	18	true	4	2.5
3.629	18	26.04	26.04	true	4	2.5
24.31	24.15	18.11	18.11	true	4	2.5
26.83	20.01	20.01	20.01	true	4	2.5
24.16	18.08	18	18	true	4	2.5
3.299	18	341	341	true	4	2.5
24.87	18.53	18.53	18.53	true	4	2.5
10.49	18.19	55.16	55.16	true	4	2.5
0	18.04	0	0	true	4	2.5
18.2	0	24.05	24.05	true	4	2.5
24.16	24	18	18	true	4	2.5
24.16	18	18	18	true	4	2.5
12.53	26.15	23.31	23.31	true	4	2.5
24.16	24	18	18	true	4	2.5
0	20.18	0	0	true	4	2.5
19.76	24.01	24.01	24.01	true	4	2.5
19.81	25.15	18.86	18.86	true	4	2.5
25.2	18.79	18.79	18.79	true	4	2.5
26.06	19.42	25.03	25.03	true	4	2.5
27.81	20.74	20.74	20.74	true	4	2.5
24.57	18.31	18.31	18.31	true	4	2.5
4.033	0	160.4	160.4	true	4	2.5
18.16	0	24	24	true	4	2.5
20.51	258.7	24	24	true	4	2.5
0	24	0	0	true	4	2.5

[illegible]

Design Strip: Longitude SSs Table (4)

<i>Spec. Infl. Area ft²</i>	<i>Max LLR %</i>	<i>Span Width</i>	<i>Col Strip Width</i>	<i>Lock Strips</i>	<i>Design CS for CS</i>	<i>CS Auto Trim</i>	<i>CS Section Slope</i>
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	T or L	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	code-beam	false	false	inverted T or L	100
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25

Design Strip: Longitude SSs Table (5)

CS Section Slope	CS Top Bar	CS Bot Bar	CS Shear Bar	CS Top Cover inches	CS Bot Cover inches	CS Shear d calc	CS Torsion Design	CS System
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	Maximize Effective Depth		two-way slab
	#5	#4	#4	1.5	0.75	Maximize Effective Depth		two-way slab
	#5	#4	#4	1.5	0.75	Maximize Effective Depth		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	Maximize Effective Depth		two-way slab
	#5	#4	#4	1.5	0.75	Maximize Effective Depth		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1	1	Maximize Effective Depth		beam
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab

Design Strip: Longitude SSs Table (6)

<i>CS Min. Bar Loc.</i>	<i>CS Min T.Bar</i>	<i>CS Min B.Bar</i>	<i>CS Shear Legs</i>	<i>MS Same As CS</i>	<i>MS Auto Trim</i>	<i>MS Section Slope</i>	<i>MS Top Bar</i>	<i>MS Bot Bar</i>
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
elevated	0	0	2	false	none	0.25	#5	#4
elevated	0	0	4	true	none	0.25	#5	#4
elevated	0	0	4	true	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
elevated	0	0	4	true	none	0.25	#5	#4
elevated	0	0	4	true	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
bottom	0	0	2	true	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4

[illegible]

Design Strip: Latitude SSSs Table

<i>Name</i>	<i>Strip Type</i>	<i>Calc. Trib. Area ft²</i>	<i>Calc. Infl. Area ft²</i>	<i>Top Bar</i>	<i>Bottom Bar</i>	<i>Shear Bar</i>	<i>Top Cover inches</i>
1C-1	center	274.3	0	#5	#4	#4	1.5
1C-2	center	152	0	#5	#4	#4	1.5
2C-1	center	319.6	0	#5	#4	#4	1.5
2C-2	center	371.8	0	#5	#4	#4	1.5
2C-3	center	525.8	0	#5	#4	#4	1.5
2C-4	center	499.9	0	#5	#4	#4	1.5
2C-5	center	569.8	0	#5	#4	#4	1.5
3C-1	center	448.6	0	#5	#4	#4	1.5
3C-2	center	325.6	0	#5	#4	#4	1.5
4C-1	center	532.1	0	#5	#4	#4	1.5
4C-2	center	250.6	0	#5	#4	#4	1.5
4C-3	center	330.6	0	#5	#4	#4	1.5
4C-4	center	257.9	0	#5	#4	#4	1.5
4C-5	center	321.8	0	#5	#4	#4	1.5
4C-6	center	311	0	#5	#4	#4	1.5
4C-7	center	251.3	0	#5	#4	#4	1.5
5C-1	center	323.2	0	#5	#4	#4	1.5
5C-2	center	320.3	0	#5	#4	#4	1.5
5C-3	center	347.6	0	#5	#4	#4	1.5
5C-4	center	4.711	0	#5	#4	#4	1.5
6C-1	center	369.2	0	#5	#4	#4	1.5
6C-2	center	508.2	0	#5	#4	#4	1.5
6C-3	center	419.6	0	#5	#4	#4	1.5
6C-4	center	41.45	0	#5	#4	#4	1.5
7C-1	center	67.15	0	#5	#4	#4	1.5
7C-2	center	49.83	0	#5	#4	#4	1.5
8C-1	center	298.2	0	#5	#4	#4	1.5
8C-2	center	199.3	0	#5	#4	#4	1.5
8C-3	center	283.2	0	#5	#4	#4	1.5
9C-1	center	71.28	0	#5	#4	#4	1.5
10C-1	center	128.7	0	#5	#4	#4	1.5
10C-2	center	55.2	0	#5	#4	#4	1.5
10C-2(2)	center	53.18	0	#5	#4	#4	1.5
10C-2(3)	center	77.26	0	#5	#4	#4	1.5
10C-3	center	27.32	0	#5	#4	#4	1.5

Design Strip: Latitude SSSs Table (2)

[illegible]

Design Strip: Longitude SSSs Table

<i>Name</i>	<i>Strip Type</i>	<i>Calc. Trib. Area ft²</i>	<i>Calc. Infl. Area ft²</i>	<i>Top Bar</i>	<i>Bottom Bar</i>	<i>Shear Bar</i>	<i>Top Cover inches</i>
11C-1	center	257	0	#5	#4	#4	1.5
11C-2	center	53.72	0	#5	#4	#4	1.5
11C-3	center	330.2	0	#5	#4	#4	1.5
11C-4	center	260.2	0	#5	#4	#4	1.5
12C-1	center	447.7	0	#5	#4	#4	1.5
12C-2	center	445.9	0	#5	#4	#4	1.5
12C-3	center	451.6	0	#5	#4	#4	1.5
12C-4	center	267.9	0	#5	#4	#4	1.5
13C-1	center	630	0	#5	#4	#4	1.5
13C-2	center	213.1	0	#5	#4	#4	1.5
14C-1	center	225	0	#5	#4	#4	1.5
14C-1(2)	center	321.5	0	#5	#4	#4	1.5
14C-2	center	319.8	0	#5	#4	#4	1.5
14C-3	center	634.6	0	#5	#4	#4	1.5
15C-1	center	287.3	0	#5	#4	#4	1.5
16C-1	center	649.5	0	#5	#4	#4	1.5
17C-1	center	558.6	0	#5	#4	#4	1.5
18C-1	center	196.3	0	#5	#4	#4	1.5
19C-1	center	132	0	#5	#4	#4	1.5
19C-2	center	270.3	0	#5	#4	#4	1.5
19C-3	center	225.8	0	#5	#4	#4	1.5
20C-1	center	480.5	0	#5	#4	#4	1.5
21C-1	center	491.8	0	#5	#4	#4	1.5
22C-1	center	159.6	0	#5	#4	#4	1.5
23C-1	center	275.6	0	#5	#4	#4	1
23R-1	right	71.52	0	#5	#4	#4	1.5
24C-1	center	111.7	0	#5	#4	#4	1.5
24C-2	center	39.77	0	#5	#4	#4	1.5

Design Strip: Longitude SSSs Table (2)

<i>Top Cover inches</i>	<i>Bot. Cover inches</i>	<i>Torsion Design</i>	<i>System</i>	<i>Min Bar Loc.</i>	<i>Min T. Bar</i>	<i>Min B. Bar</i>	<i>Shear Legs</i>
0.75	none		two-way slab	stress	0	0	2
0.75	none		two-way slab	stress	0	0	2
0.75	none		two-way slab	stress	0	0	2
0.75	none		two-way slab	stress	0	0	2
0.75	none		two-way slab	stress	0	0	2
0.75	none		two-way slab	stress	0	0	2
0.75	none		two-way slab	stress	0	0	2
0.75	none		two-way slab	elevated	0	0	2
0.75	none		two-way slab	elevated	0	0	4
0.75	none		two-way slab	elevated	0	0	4
0.75	none		two-way slab	stress	0	0	2
0.75	none		two-way slab	stress	0	0	2
0.75	none		two-way slab	elevated	0	0	4
0.75	none		two-way slab	elevated	0	0	4
0.75	none		two-way slab	stress	0	0	2
0.75	none		two-way slab	stress	0	0	2
0.75	none		two-way slab	stress	0	0	2
0.75	none		two-way slab	stress	0	0	2
0.75	none		two-way slab	stress	0	0	2
0.75	none		two-way slab	stress	0	0	2
0.75	none		two-way slab	stress	0	0	2
0.75	none		two-way slab	stress	0	0	2
0.75	none		two-way slab	stress	0	0	2
0.75	none		two-way slab	stress	0	0	2
0.75	none		two-way slab	stress	0	0	2
1	none		beam	bottom	0	0	2
0.75	none		two-way slab	stress	0	0	2
0.75	none		two-way slab	stress	0	0	2
0.75	none		two-way slab	stress	0	0	2

Design Strip: Punching Checks Table

<i>Number</i>	<i>Location feet</i>	<i>Radius feet</i>	<i>Cover To CGS inches</i>	<i>Angle degrees</i>	<i>Edge</i>	<i>Connection</i>
1	(-200.6,-89.05)	10	1.625	84	failure planes	auto
2	(-198,-65.18)	10	1.625	84	failure planes	auto
3	(-195.5,-41.31)	10	1.625	84	failure planes	auto
4	(-193,-17.44)	10	1.625	84	failure planes	auto
5	(-181.4,-44.55)	10	1.625	-6	failure planes	auto
6	(-177,-67.39)	10	1.625	84	failure planes	auto
7	(-176.8,-92.28)	10	1.625	-6	failure planes	auto
8	(-164.9,-47.89)	10	1.625	84	failure planes	auto
9	(-164.6,-22.53)	10	1.625	90	failure planes	auto
10	(-145.3,-22.83)	13	1.625	90	failure planes	auto
11	(-138.3,-51.38)	10	1.625	90	failure planes	auto
12	(-120.6,-101.9)	10	1.625	90	failure planes	auto
13	(-118.9,-75.16)	10	1.625	0	failure planes	auto
14	(-118.4,-52.35)	10	1.625	0	failure planes	auto
15	(-118.3,-22.84)	15	1.625	90	failure planes	auto
16	(-109.7,-60.83)	10	1.625	90	failure planes	auto
17	(-94.99,-75.16)	10	1.625	0	failure planes	auto
18	(-94.55,-101.9)	10	1.625	90	failure planes	auto
19	(-87.38,-47.22)	10	1.625	0	failure planes	auto
20	(-85.98,-66.03)	10	1.625	0	failure planes	auto
21	(-71.38,-109.1)	10	1.625	22	failure planes	auto
22	(-70.75,-75.58)	10	1.625	90	failure planes	auto
23	(-67.92,-66.08)	10	1.625	0	failure planes	auto
24	(-65.26,-94)	10	1.625	90	failure planes	auto
25	(-60.2,-44.83)	10	1.625	90	failure planes	auto
26	(-41.7,-44.83)	10	1.625	90	failure planes	auto
27	(-19.85,-17.33)	6	1.625	0	failure planes	auto
28	(-5.378,-16.83)	6	1.625	0	failure planes	auto

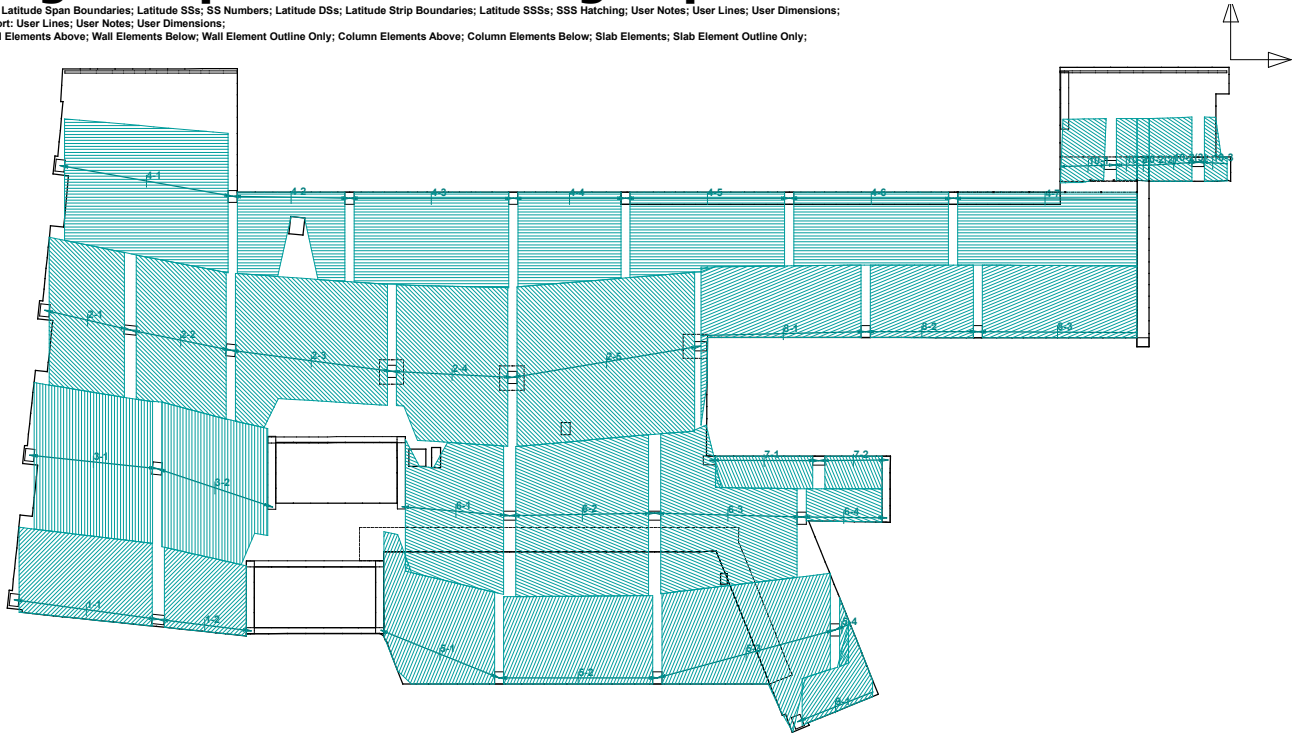
Design Strip: Punching Checks Table (2)

Connection	Use Spec LLR Params	Spec. LLR Levels	Spec. Trib. Area ft ²	Spec. Infl. Area ft ²	Calc. Trib. Area ft ²	Calc. Infl. Area ft ²
	false	1	0	0	159.5	0
	false	1	0	0	227.4	0
	false	1	0	0	151.7	0
	false	1	0	0	279	0
	false	1	0	0	432.6	0
	false	1	0	0	493.6	0
	false	1	0	0	247.8	0
	false	1	0	0	465.4	0
	false	1	0	0	479.5	0
	false	1	0	0	312	0
	false	1	0	0	601.6	0
	false	1	0	0	309.7	0
	false	1	0	0	498.8	0
	false	1	0	0	551.1	0
	false	1	0	0	323.4	0
	false	1	0	0	249	0
	false	1	0	0	588.4	0
	false	1	0	0	359.6	0
	false	1	0	0	518	0
	false	1	0	0	136.1	0
	false	1	0	0	135.7	0
	false	1	0	0	279.5	0
	false	1	0	0	54.26	0
	false	1	0	0	252.6	0
	false	1	0	0	249.8	0
	false	1	0	0	281.3	0
	false	1	0	0	394.4	0
	false	1	0	0	129.5	0

[illegible]

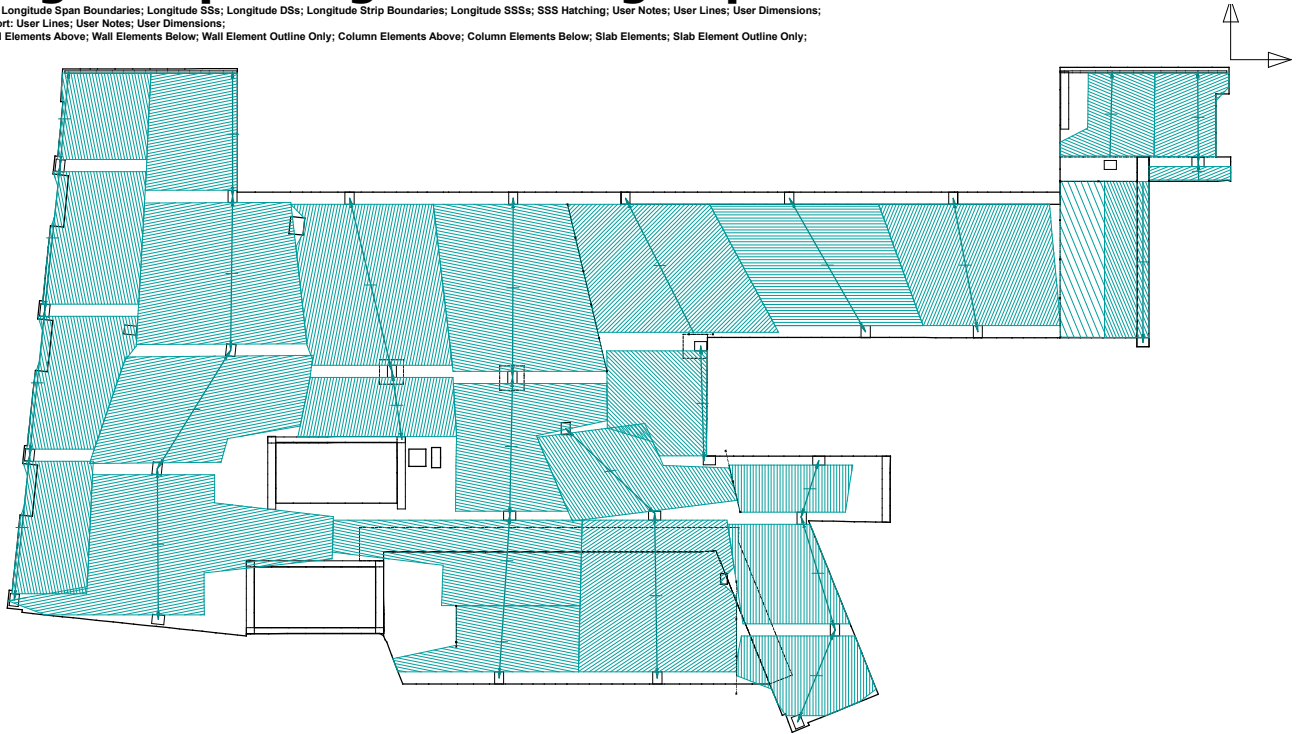
Design Strip: Latitude Design Spans Plan

Design Strip: Latitude Span Boundaries; Latitude SSs; SS Numbers; Latitude DSs; Latitude Strip Boundaries; Latitude SSSs; SSS Hatching; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



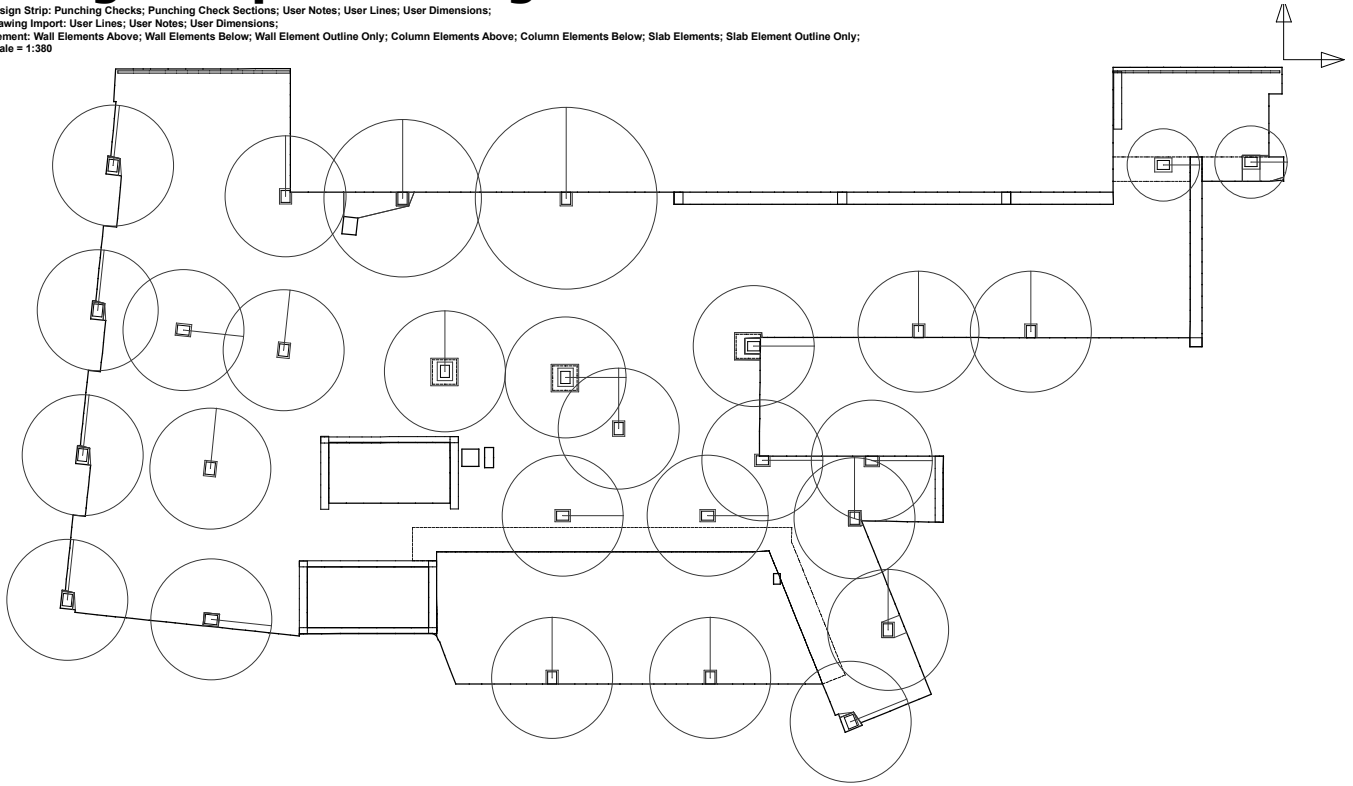
Design Strip: Longitude Design Spans Plan

Design Strip: Longitude Span Boundaries; Longitude SSs; Longitude DSs; Longitude Strip Boundaries; Longitude SSSs; SSS Hatching; User Notes; User Lines; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Scale = 1:380



Design Strip: Punching Checks Plan

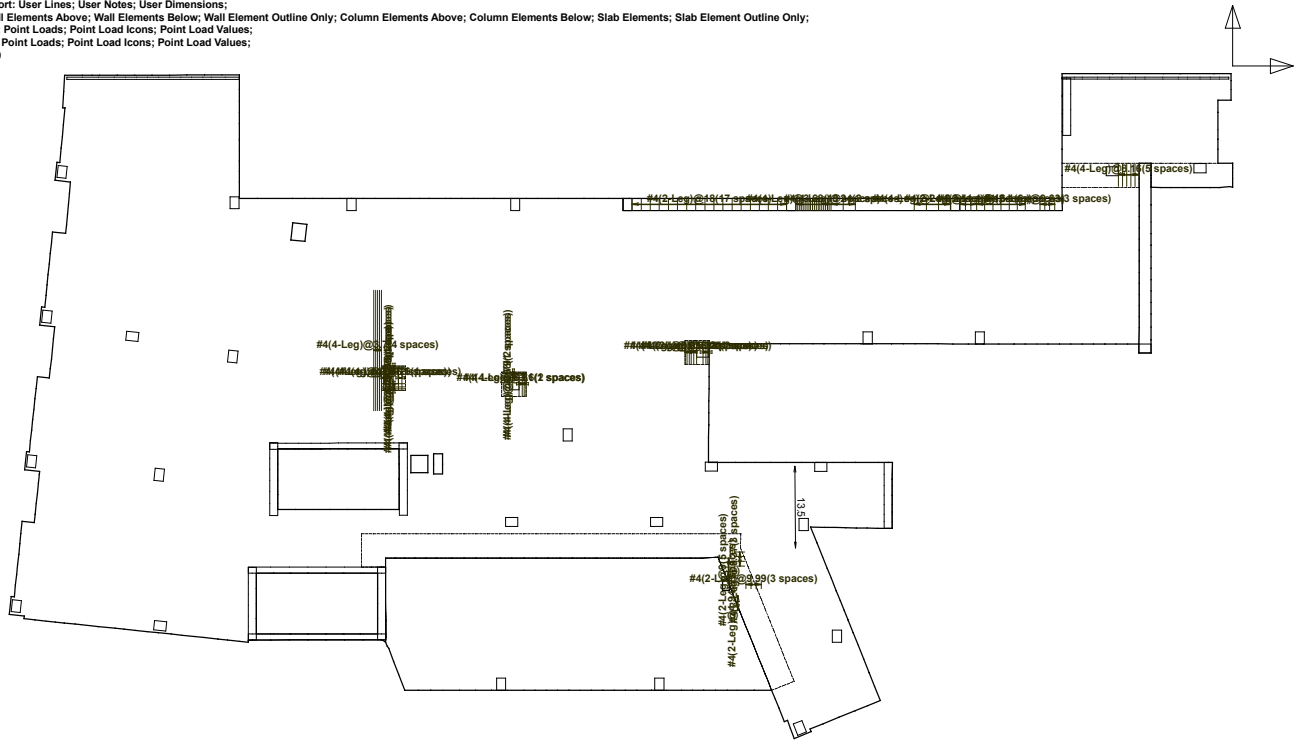
Design Strip: Punching Checks; Punching Check Sections; User Notes; User Lines; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Scale = 1:380



[illegible]

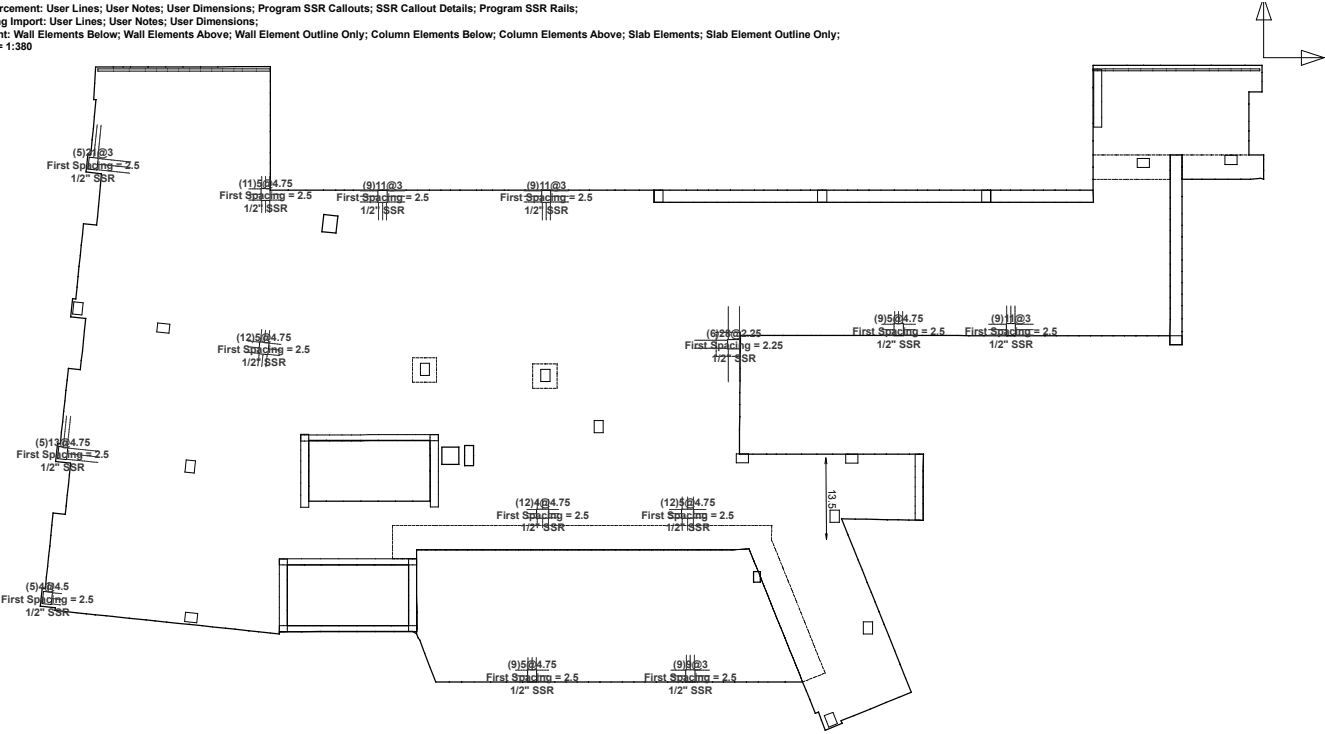
Reinforcement: Shear Bars Plan

Reinforcement: Latitude User Transverse Reinf.; Longitude User Transverse Reinf.; Latitude Program Transverse Reinf.; Longitude Program Transverse Reinf.; Transverse Reinf. Descriptions; Transverse Reinf. Extent; Latitude User Individual Transverse Bars; Longitude User Individual Transverse Bars;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Seismic E/W: Point Loads; Point Load Icons; Point Load Values;
 Seismic N/S: Point Loads; Point Load Icons; Point Load Values;
 Scale = 1:380



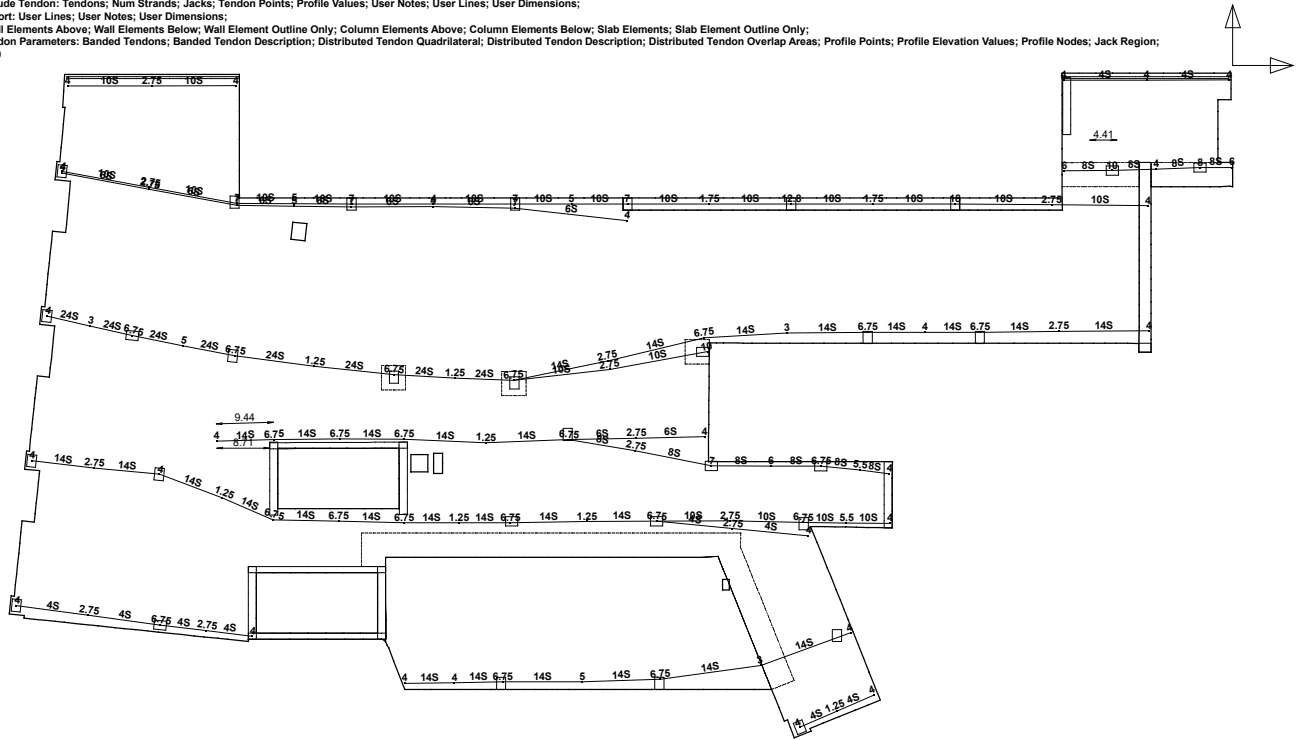
Reinforcement: SSR Plan

Reinforcement: User Lines; User Notes; User Dimensions; Program SSR Callouts; SSR Callout Details; Program SSR Rails;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:380



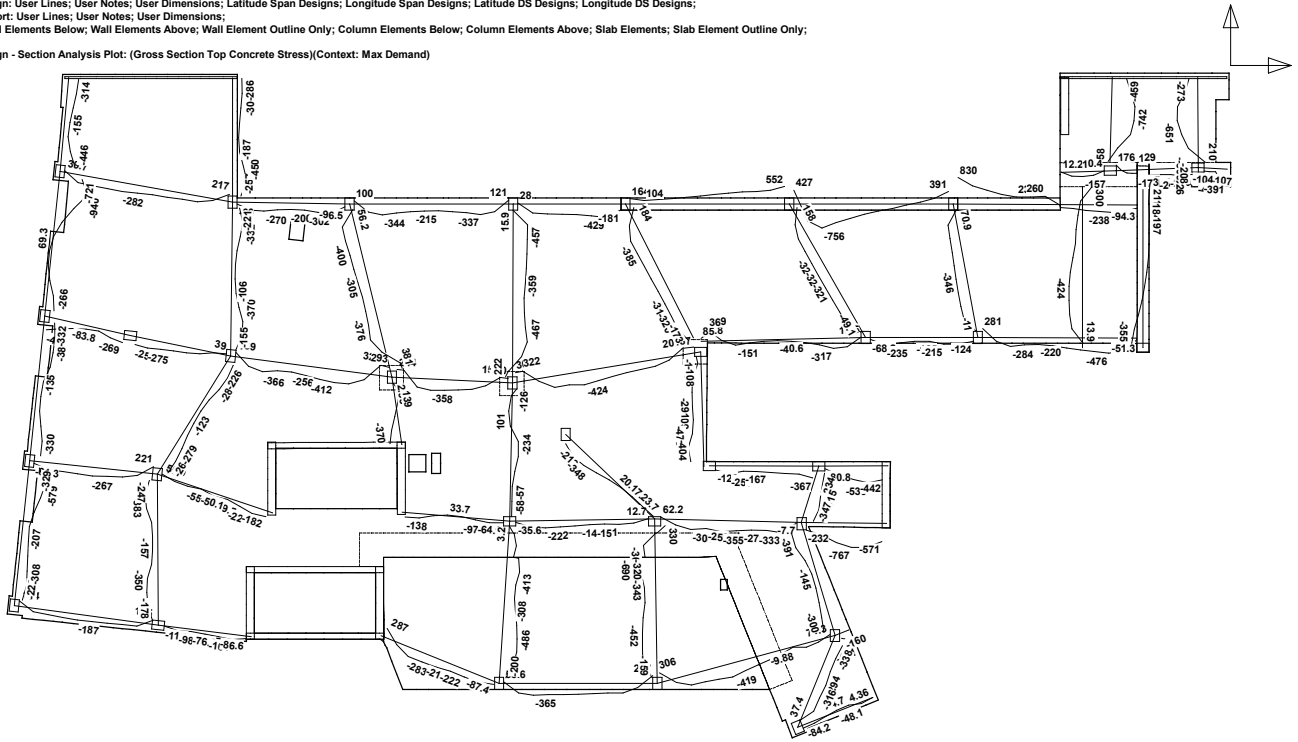
Manual Latitude Tendon: Standard Plan

Manual Latitude Tendon: Tendons; Num Strands; Jacks; Tendon Points; Profile Values; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Latitude Tendon Parameters: Banded Tendons; Banded Tendon Description; Distributed Tendon Quadrilateral; Distributed Tendon Description; Distributed Tendon Overlap Areas; Profile Points; Profile Elevation Values; Profile Nodes; Jack Region;
 Scale = 1:380



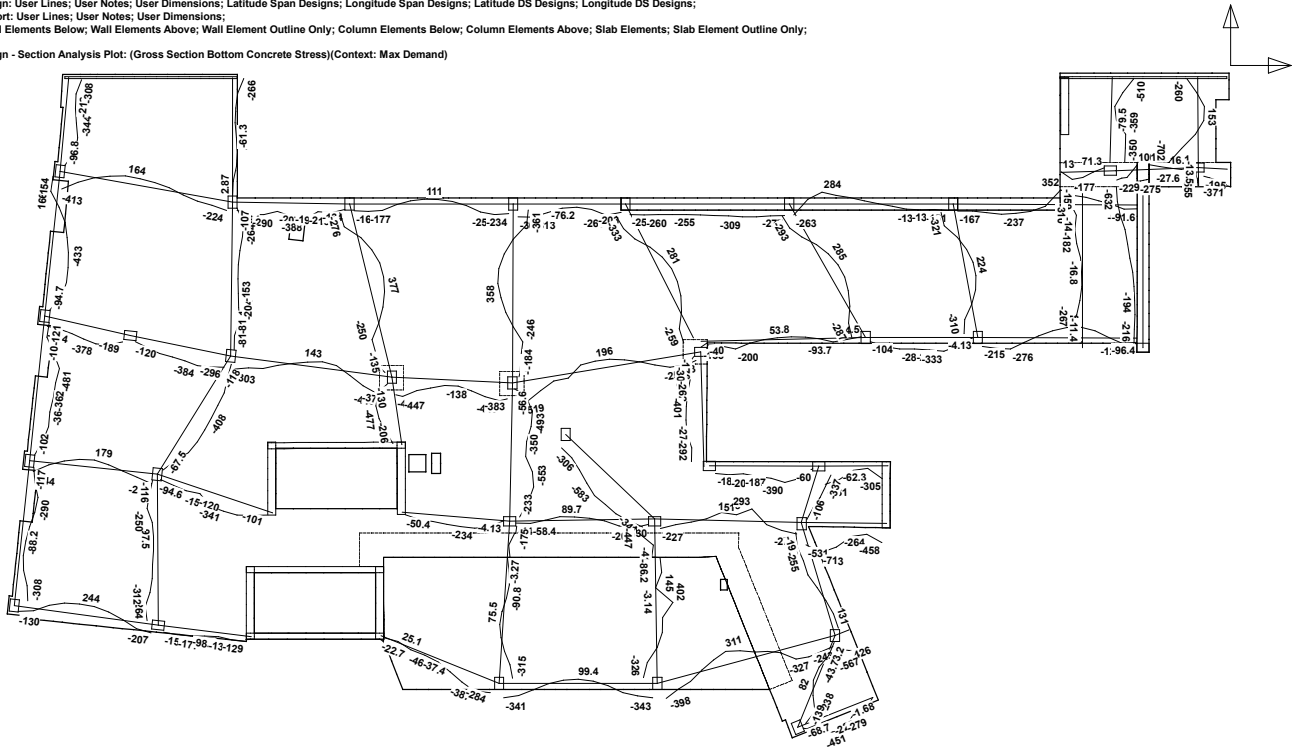
Service Design: Top Stress Plan

Service Design: User Lines; User Notes; User Dimensions; Latitude Span Designs; Longitude Span Designs; Latitude DS Designs; Longitude DS Designs;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
 Scale = 1:380
 Service Design - Section Analysis Plot: (Gross Section Top Concrete Stress)(Context: Max Demand)



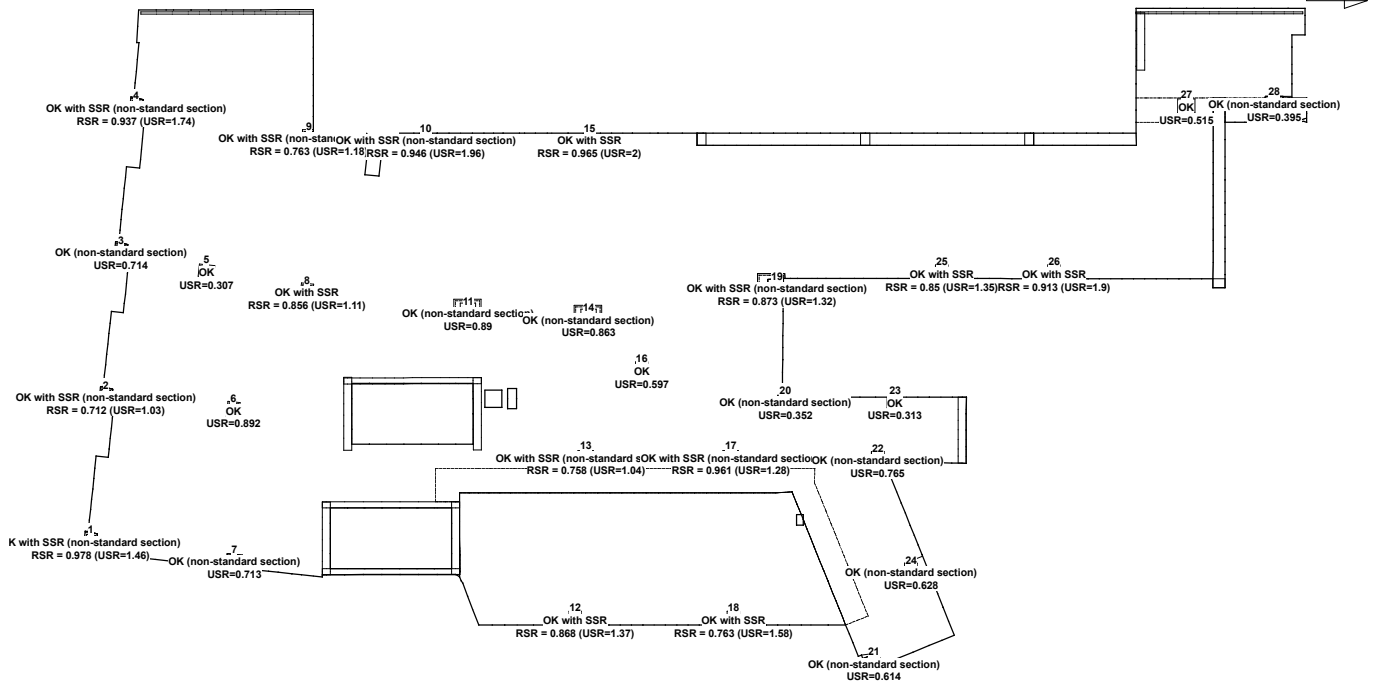
Service Design: Bottom Stress Plan

Service Design: User Lines; User Notes; User Dimensions; Latitude Span Designs; Longitude Span Designs; Latitude DS Designs; Longitude DS Designs;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
 Scale = 1:380
 Service Design - Section Analysis Plot: (Gross Section Bottom Concrete Stress)(Context: Max Demand)



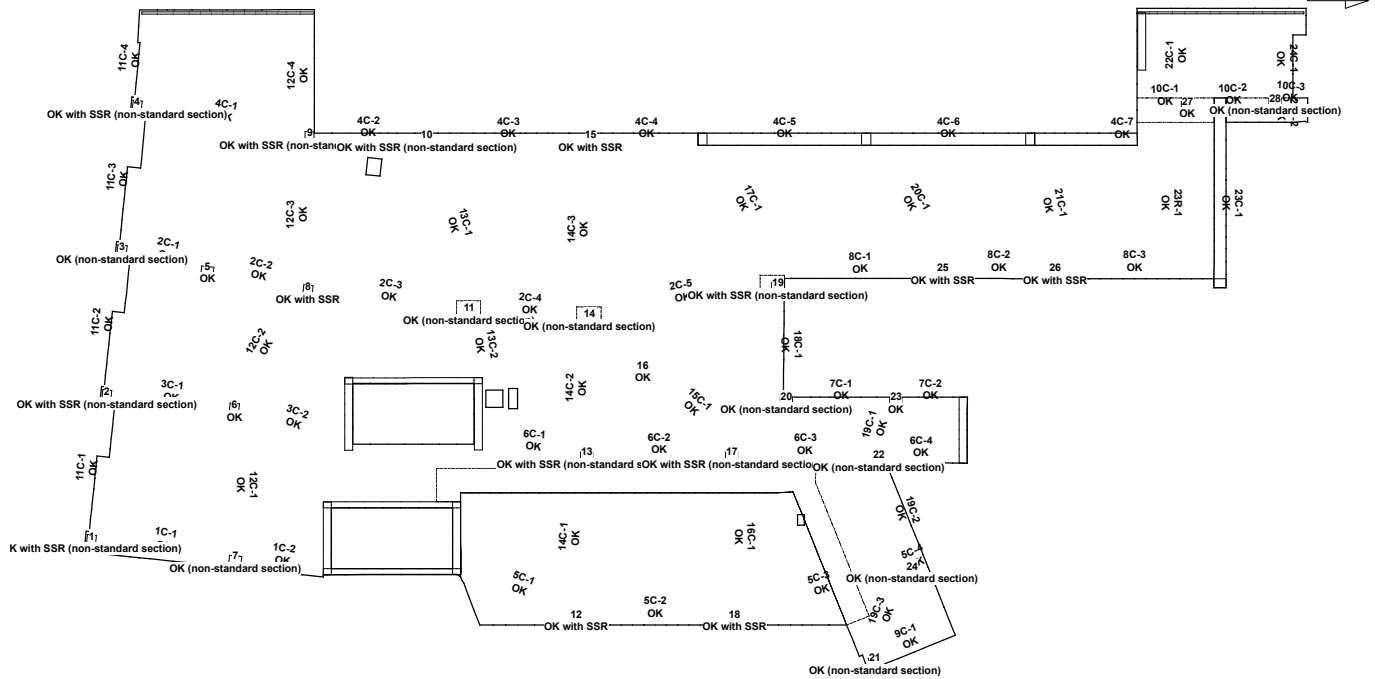
Strength Design: Punching Shear Status Plan

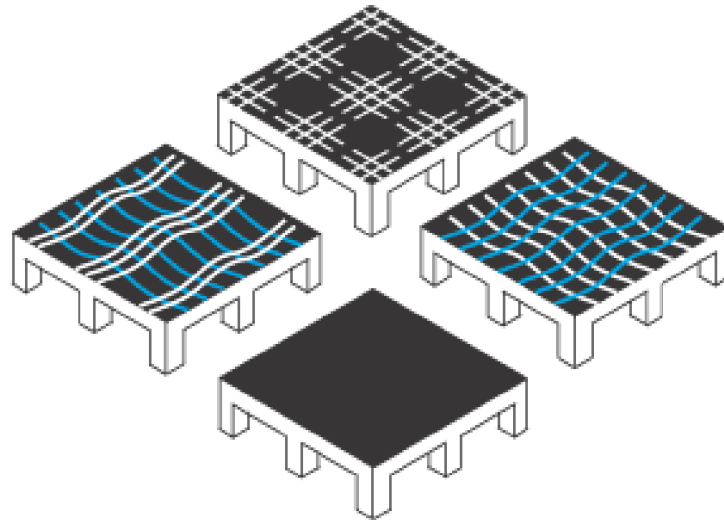
Strength Design: User Lines; User Notes; User Dimensions; PC Designs; PC Design Numbers; PC Design Status; PC Design Stress Ratios; PC Design Sections;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



Design Status: Status Plan

Design Status: Latitude Span Designs; Longitude Span Designs; Span Design Numbers; Span Design Status; Latitude DS Designs; Longitude DS Designs; DS Design Numbers; DS Design Status; PC Designs; PC Design Numbers; PC Design Status; User Notes; User Lines; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Scale = 1:380





Level 3.24.2.cpt
10/31/2019

RAM Concept © 2019 Bentley Systems, Inc.
RAM Concept™ is a trademark of Bentley Systems

Table of Contents

Units	3
Signs	4
Materials	5
Loadings	7
Load Combinations	8
Design Rules	17
Detailing Rules	18
Load History	19
Mesh Input: Walls Below Table	20
Mesh Input: Columns Below Table	22
Mesh Input: Slab Areas Table	28
Mesh Input: Beams Table	30
Mesh Input: Standard Plan	32
Other Dead Loading: Point Loads Plan	33
Other Dead Loading: Line Loads Plan	34
Other Dead Loading: Area Loads Plan	35
Live (Reducible) Loading: All Loads Plan	36
Live (Unreducible) Loading: Point Loads Plan	37
Live (Unreducible) Loading: Line Loads Plan	38
Live (Unreducible) Loading: Area Loads Plan	39
Live (Unreducible) Loading: Std Reactions Plan	40
Seismic E/W: Point Loads Plan	41
Seismic E/W: Std Reactions Plan	42
Seismic N/S: Point Loads Plan	43
Seismic N/S: Std Reactions Plan	44
Service LC: D + L: Max Deflection Plan	45
Service LC: D + L: Min Deflection Plan	46
Service LC: D + L: Reaction Plan	47
Long Term deflection: Max Deflection Plan	48
Design Strip: Latitude SSs Table	49
Design Strip: Longitude SSs Table	65
Design Strip: Latitude SSSs Table	81
Design Strip: Longitude SSSs Table	85
Design Strip: Punching Checks Table	89
Design Strip: Latitude Design Spans Plan	95
Design Strip: Longitude Design Spans Plan	96
Design Strip: Punching Checks Plan	97
Reinforcement: Top Bars Plan	98
Reinforcement: Bottom Bars Plan	99
Reinforcement: Shear Bars Plan	100
Reinforcement: SSR Plan	101
Manual Latitude Tendon: Standard Plan	102
Manual Longitude Tendon: Standard Plan	103
Service Design: Top Stress Plan	104
Service Design: Bottom Stress Plan	105
Strength Design: Punching Shear Status Plan	106
Design Status: Status Plan	107

Units

Geometry Unit:

Plan Dimensions: feet
Angles: degrees

Slab Thickness: inches
Elevations: inches

Support Dimensions: inches
Support Height: feet

Loading and Reaction Unit

Point Force: Kips
- Report As Zero: 0 Kips
Point Moment: kip-ft
- Report As Zero: 0 kip-ft

Line Force: kips/ft
- Report As Zero: 0 kips/ft
Line Moment: Kips
- Report As Zero: 0 Kips

Area Force: psf
- Report As Zero: 0 psf
Area Moment: #/foot
- Report As Zero: 0 #/foot

Spring and Stiffness Unit:

Point Force Spring: kips/in
Point Moment Spring: k-ft/°

Line Force Spring: ksi
Line Moment Spring: k/°

Area Force Spring: pci
Area Moment Spring: k/ft°

Slab Analysis Unit:

Force: Kips
- Report As Zero: 0 Kips
Force Per Width: kips/ft
- Report As Zero: 0 kips/ft

Moment: kip-ft
- Report As Zero: 0 kip-ft
Moment Per Width: Kips
- Report As Zero: 0 Kips

Concrete Stress: psi
- Report As Zero: 0 psi
Deflection: inches
- Report As Zero: 0 inches

Materials Unit:

Concrete Volume: yd³
Reinforcement Weight: tons
PT Weight: pounds

Reinforcing Area: in²
Tendon Profile: inches
Cover: inches

PT Force: Kips
Reinforcing Stress: ksi

Miscellaneous Unit:

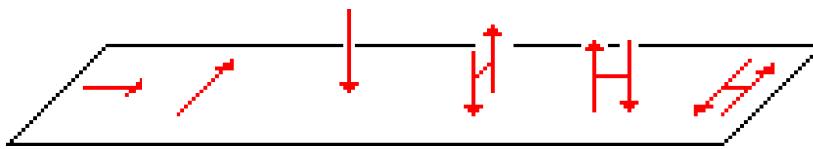
Floor Area: ft²
Tendon Angles (for friction): radians

Density: pcf

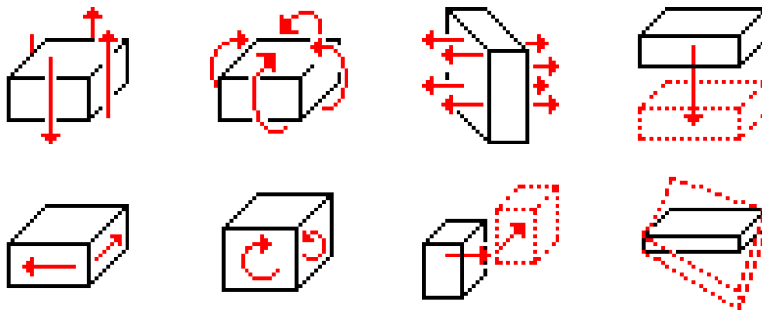
Elongations: inches

Signs

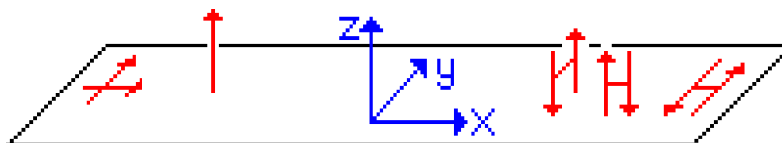
Positive Loads



Positive Analysis



Positive Reactions



Materials

Concrete Mix

Mix Name	Density (pcf)	Density For Loads (pcf)	f_{ci} (psi)	f'_c (psi)	f_{cui} (psi)	f_{cu} (psi)	Poissons Ratio	Ec Calc	User Eci (psi)	User Ec (psi)
3000 psi	150	150	3000	3000	3725	3725	0.2	Code	2500000	3000000
4000 psi	150	150	3000	4000	3725	4975	0.2	Code	2500000	3000000
5000 psi	150	150	3000	5000	3725	6399	0.2	Code	2500000	3000000
6000 psi	150	150	3000	6000	3725	7450	0.2	Code	2500000	3000000

PT Systems

System Name	Type	A_{ps} (in ²)	E_{ps} (ksi)	f_{se} (ksi)	f_{py} (ksi)	f_{pu} (ksi)	Duct Width (inches)	Strands Per Duct	Min Radius (feet)
½" Unbonded	unbonded	0.153	28000	175	243	270	0.5	1	6
½" Bonded	bonded	0.153	28000	160	243	270	3	4	6
0.6" Unbonded	unbonded	0.217	28000	175	243	270	0.6	1	8
0.6" Bonded	bonded	0.217	28000	160	243	270	4	4	8

PT Stressing Parameters

System Name	Jacking Stress (ksi)	Seating Loss (inches)	Anchor Friction	Wobble Friction (1/feet)	Angular Friction (1/radians)	Long-Term Losses (ksi)
½" Unbonded	216	0.25	0	0.0014	0.07	22
½" Bonded	216	0.25	0.02	0.001	0.2	22
0.6" Unbonded	216	0.25	0	0.0014	0.07	22
0.6" Bonded	216	0.25	0.02	0.001	0.2	22

Reinforcing Bars

Bar Name	A_s (in ²)	E_s (ksi)	F_y (ksi)	Coating	Straight Ld/Db	90 Hook Ld/Db	180 Hook Ld/Db
#3	0.11	29000	60	None	Code	Code	Code
#4	0.2	29000	60	None	Code	Code	Code
#5	0.31	29000	60	None	Code	Code	Code
#6	0.44	29000	60	None	Code	Code	Code
#7	0.6	29000	60	None	Code	Code	Code
#8	0.79	29000	60	None	Code	Code	Code
#9	1	29000	60	None	Code	Code	Code
#10	1.27	29000	60	None	Code	Code	Code
#11	1.56	29000	60	None	Code	Code	Code

Materials (2)

SSR Systems

<i>SSR System Name</i>	<i>Stud Area (in²)</i>	<i>Head Area (in²)</i>	<i>Min Clear Head Spacing (inches)</i>	<i>Specified Stud Spacing (inches)</i>	<i>Fy (ksi)</i>	<i>Stud Spacing Rounding Increment (inches)</i>	<i>Min Studs Per Rail</i>	<i>System Type</i>
3/8" SSR	0.11	1.11	0.5	None	50	0.25	2	Rail
1/2" SSR	0.196	1.96	0.5	None	50	0.25	2	Rail
5/8" SSR	0.307	3.07	0.5	None	50	0.25	2	Rail
3/4" SSR	0.442	4.42	0.5	None	50	0.25	2	Rail
Ancon Shearfix Auto-Size	0.217	1.096	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 10 mm	0.1217	1.096	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 12 mm	0.1753	1.578	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 14 mm	0.2386	2.147	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 16 mm	0.3116	2.805	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 20 mm	0.4869	4.383	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 24 mm	0.7012	6.311	0.5906	None	72.52	0.03937	2	Rail

Loadings

<i>Loading Name</i>	<i>Type</i>	<i>Analysis</i>	<i>On-Pattern Factor</i>	<i>Off-Pattern Factor</i>
Self-Dead Loading	Self-Weight	Normal	1	1
Balance Loading	Balance	Normal	1	1
Hyperstatic Loading	Hyperstatic	Hyperstatic	1	1
Temporary Construction (At Stressing) Loading	Stressing Dead	Normal	1	1
Other Dead Loading	Dead	Normal	1	1
Live (Reducible) Loading	Live (Reducible)	Normal	1	0
Live (Unreducible) Loading	Live (Unreducible)	Normal	1	0
Live (Storage) Loading	Live (Storage)	Normal	1	0
Live (Parking) Loading	Live (Parking)	Normal	1	0
Live (Roof) Loading	Live (Roof)	Normal	1	0
Snow Loading	Snow	Normal	1	1
Seismic E/W	Ultimate Seismic 1 (transfer)	Normal	1	0
Seismic N/S	Ultimate Seismic 1 (transfer)	Normal	1	0

Load Combinations

All Dead LC

Active Design Criteria: <none>

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Other Dead Loading	1	1

Dead + Balance LC

Active Design Criteria: <none>

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1

Initial Service LC

Active Design Criteria: Initial Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1.13	1.13
Temporary Construction (At Stressing) Loading	1	1

Service LC: D + L

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Reducible) Loading	1	0
Live (Unreducible) Loading	1	0
Live (Storage) Loading	1	0
Live (Parking) Loading	1	0

Service LC: D + Lr

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Roof) Loading	1	0

Load Combinations (2)

Service LC: D + S

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Snow Loading	1	0

Service LC: D + 0.75L + 0.75Lr

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Reducible) Loading	0.75	0
Live (Unreducible) Loading	0.75	0
Live (Storage) Loading	0.75	0
Live (Parking) Loading	0.75	0
Live (Roof) Loading	0.75	0

Service LC: D + 0.75L + 0.75S

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Reducible) Loading	0.75	0
Live (Unreducible) Loading	0.75	0
Live (Storage) Loading	0.75	0
Live (Parking) Loading	0.75	0
Snow Loading	0.75	0

Sustained Service LC

Active Design Criteria: Sustained Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Reducible) Loading	0.5	0.5
Live (Unreducible) Loading	0.5	0.5
Live (Storage) Loading	1	1
Live (Parking) Loading	0.5	0.5
Live (Roof) Loading	0.5	0.5

Load Combinations (3)

Factored LC: 1.4D

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.4	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.4	0.9

Factored LC: 1.2D + 1.6L + 0.5Lr

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.2	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.2	0.9
Live (Reducible) Loading	1.6	0
Live (Unreducible) Loading	1.6	0
Live (Storage) Loading	1.6	0
Live (Parking) Loading	1.6	0
Live (Roof) Loading	0.5	0

Factored LC: 1.2D + f1L + 1.6Lr

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.2	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.2	0.9
Live (Reducible) Loading	0.5	0
Live (Unreducible) Loading	1	0
Live (Storage) Loading	1	0
Live (Parking) Loading	1	0
Live (Roof) Loading	1.6	0

Factored LC: 1.2D + 1.6L + 0.5S

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.2	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.2	0.9
Live (Reducible) Loading	1.6	0
Live (Unreducible) Loading	1.6	0
Live (Storage) Loading	1.6	0
Live (Parking) Loading	1.6	0
Snow Loading	0.5	0

Load Combinations (4)

Factored LC: $1.2D + f1L + 1.6S$

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.2	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.2	0.9
Live (Reducible) Loading	0.5	0
Live (Unreducible) Loading	1	0
Live (Storage) Loading	1	0
Live (Parking) Loading	1	0
Snow Loading	1.6	0

Long Term deflection

Active Design Criteria: <none>

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	3.35	3.35
Balance Loading	3.35	3.35
Other Dead Loading	3.35	3.35
Live (Unreducible) Loading	2	2
Snow Loading	1	1

Earthquake N-S: $(1.2+.2*Sds)D + 2.5E + 0.5L+0.2S$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.344	1.344
Hyperstatic Loading	1	1
Other Dead Loading	1.344	1.344
Live (Unreducible) Loading	0.5	0.5
Snow Loading	0.2	0.2
Seismic N/S	2.5	2.5

Earthquake N-S: $(0.9-0.2*Sds)D + 2.5E$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.756	0.756
Hyperstatic Loading	1	1
Other Dead Loading	0.756	0.756
Seismic N/S	2.5	2.5

Load Combinations (5)

Earthquake E-W: $(1.2+0.2*S_{ds})D + 2.5E + 0.5L+0.2S$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.344	1.344
Hyperstatic Loading	1	1
Other Dead Loading	1.344	1.344
Live (Unreducible) Loading	0.5	0.5
Snow Loading	0.2	0.2
Seismic E/W	2.5	2.5

Earthquake E-W: $(0.9-0.2*S_{ds})D + 2.5E$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.756	0.756
Hyperstatic Loading	1	1
Other Dead Loading	0.756	0.756
Seismic E/W	2.5	2.5

Earthquake N-S: $(1.0+0.14*S_{ds})D + 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.101	1.101
Balance Loading	1	1
Other Dead Loading	1.101	1.101
Seismic N/S	1.75	1.75

Earthquake N-S: $(1.0+0.105*S_{ds})D + 1.3125E + 0.75L + 0.75S$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.076	1.076
Balance Loading	1	1
Other Dead Loading	1.076	1.076
Live (Unreducible) Loading	0.75	0.75
Snow Loading	0.75	0.75
Seismic N/S	1.313	1.313

Load Combinations (6)

Earthquake N-S: $(0.6-0.14*S_{ds})D + 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.499	0.499
Balance Loading	1	1
Other Dead Loading	0.899	0.899
Seismic N/S	1.75	1.75

Earthquake E-W: $(1.0+0.14*S_{ds})D + 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.101	1.101
Balance Loading	1	1
Other Dead Loading	1.101	1.101
Seismic E/W	1.75	1.75

Earthquake E-W: $(1.0+0.105*S_{ds})D + 1.3125E + 0.75L+0.75S$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.076	1.076
Balance Loading	1	1
Other Dead Loading	1.076	1.076
Live (Unreducible) Loading	0.75	0.75
Snow Loading	0.75	0.75
Seismic E/W	1.313	1.313

Earthquake N-S: $(1.2+0.2*S_{ds})D - 2.5E + .5L + 0.2S$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.344	1.344
Hyperstatic Loading	1	1
Other Dead Loading	1.344	1.344
Live (Unreducible) Loading	0.5	0.5
Snow Loading	0.2	0.2
Seismic N/S	-2.5	-2.5

Load Combinations (7)

Earthquake N-S: $(0.9-0.2*S_{ds})D - 2.5E$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.756	0.756
Hyperstatic Loading	1	1
Other Dead Loading	0.756	0.756
Seismic N/S	-2.5	-2.5

Earthquake E-W: $(1.2+0.2*S_{ds})D - 2.5E + .5L + 0.2S$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.344	1.344
Hyperstatic Loading	1	1
Other Dead Loading	1.344	1.344
Live (Unreducible) Loading	0.5	0.5
Snow Loading	0.2	0.2
Seismic E/W	-2.5	-2.5

Earthquake E-W: $(0.9-0.2*S_{ds})D - 2.5E$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.756	0.756
Hyperstatic Loading	1	1
Other Dead Loading	0.756	0.756
Seismic E/W	-2.5	-2.5

Earthquake N-S: $(1.0+0.14*S_{ds})D - 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.101	1.101
Balance Loading	1	1
Other Dead Loading	1.101	1.101
Seismic N/S	-1.75	-1.75

Load Combinations (8)

Earthquake N-S: $(1.0+0.105*S_{ds})D - 1.3125E + 0.75L + .75S$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.076	1.076
Balance Loading	1	1
Other Dead Loading	1.076	1.076
Live (Unreducible) Loading	0.75	0.75
Snow Loading	0.75	0.75
Seismic N/S	-1.313	-1.313

Earthquake N-S: $(0.6-0.14*S_{ds})D - 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.499	0.499
Balance Loading	1	1
Other Dead Loading	0.899	0.899
Seismic N/S	-1.75	-1.75

Earthquake E-W: $(1.0+0.14*S_{ds})D - 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.101	1.101
Balance Loading	1	1
Other Dead Loading	1.101	1.101
Seismic E/W	-1.75	-1.75

Earthquake E-W: $(0.6-0.14*S_{ds})D + 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.499	0.499
Balance Loading	1	1
Other Dead Loading	0.899	0.899
Seismic E/W	1.75	1.75

Earthquake E-W: $(0.6-0.14*S_{ds})D - 1.75E$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.499	0.499
Balance Loading	1	1
Other Dead Loading	0.899	0.899
Seismic E/W	-1.75	-1.75

Load Combinations (9)

Earthquake E-W: $(1.0+0.105*S_{ds})D - 1.3125E + 0.75L + 0.75S$

Active Design Criteria: Service Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.076	1.076
Balance Loading	1	1
Other Dead Loading	1.076	1.076
Live (Unreducible) Loading	0.75	0.75
Snow Loading	0.75	0.75
Seismic E/W	-1.313	-1.313

Design Rules

Code Minimum Design

318-11 Min. Reinforcement

User Minimum Design

Specified Min. Reinforcement

Initial Service Design

318-11 Initial Service Design

Service Design

318-11 Service Design

Include detailed section analysis

Sustained Service Design

318-11 Sustained Service Design

Strength Design

318-11 Strength Design

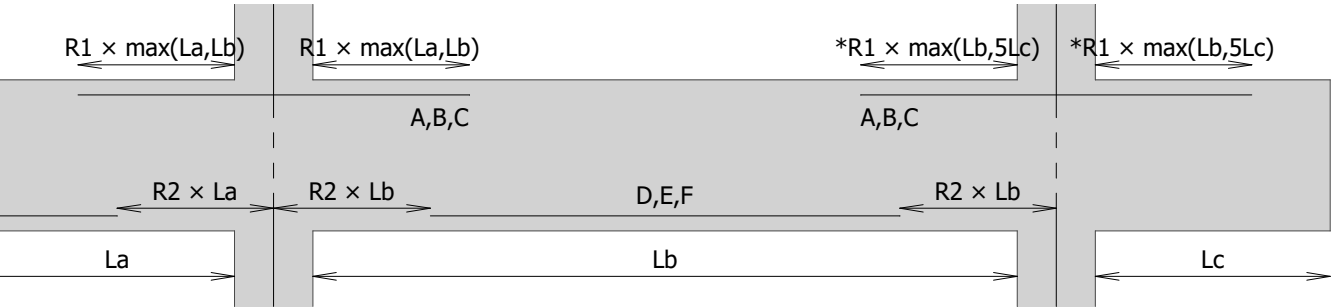
Punching Shear Design

Ductility Design

318-11 Ductility Design

Detailing Rules

Custom Span Detailing Rules



Rule	A	A	B	B	C	C	D	D	E	E	F	F
Name	Fraction	R1	Fraction	R1	Fraction	R1	Fraction	R2	Fraction	R2	Fraction	R2
None	0	0	0	0	0	0	0	0	0	0	0	0

"A", "B" and "C", are support reinforcement sets, based on the peak reinforcement in the support zone.
"D", "E" and "F", are span reinforcement sets, based on the peak reinforcement in the span zone.
"*R1" is never taken as greater than 0.2 when multiplied by L_c (or L_{cc}).
"Fraction" is the ratio of set reinforcement to peak reinforcement. It is always in the 0.0 to 1.0 range.

Load History

<i>Load History Step Name</i>	<i>Load Combination</i>	<i>Duration (days)</i>	<i>Total Age (days)</i>
Maximum Short Term Load	Service LC: D + L	30	33
Sustained Load	Sustained Service LC	5000	5033
Final Instantaneous Load	Service LC: D + L	0	5033

Mesh Input: Walls Below Table

<i>Number</i>	<i>Location feet</i>	<i>Mix</i>	<i>Fixed Near</i>	<i>Fixed Far</i>	<i>Comp.</i>	<i>Height feet</i>	<i>Thickness inches</i>
1	(-163.6,-1.647)(-192,-1.576) psi	5000	false	false	true	10	12
2	(-161.7,-82.62)(-161.7,-80.96) psi	5000	false	false	true	10	16
3	(-158.1,-62.08)(-158.2,-59.02) psi	5000	false	false	true	10	16
4	(-139.7,-94.13)(-162.3,-90.03) psi	5000	false	false	true	10	12
5	(-139.7,-83.13)(-162.3,-80.05) psi	5000	false	false	true	10	12
6	(-136.1,-62.6)(-158.8,-60.59) psi	5000	false	false	true	10	12
7	(-161,-1.721)(-123.1,-1.500) psi	5000	false	false	true	10	12
8	(-140.4,-82.62)(-140.3,-80.62) psi	5000	false	false	true	10	16
9	(-136.8,-62.11)(-136.7,-59.00) psi	5000	false	false	true	10	16
10	(-119.9,-1.567)(-67.86,-1.056) psi	5000	false	false	true	10	12
11	(-56.84,-76.25)(-56.83,-50.83) psi	5000	false	false	true	10	16
12	(-57.52,-65.84)(-41.13,-50.81) psi	5000	false	false	true	10	12
13	(-66.17,-1.72)(-29.51,-1.500) psi	5000	false	false	true	10	12
14	(-34.82,-75.75)(-57.5,-50.74) psi	5000	false	false	true	10	12
15	(-36.33,-88.13)(-36.33,-50.88) psi	5000	false	false	true	11	16
16	(-35.54,-65.33)(-35.5,-50.25) psi	5000	false	false	true	10	16
17	(-27.41,-1.659)(-27.39,-1.000) psi	5000	false	false	true	11	16
18	(-28.05,-1.658)(-1.22,-1.500) psi	5000	false	false	true	10	12

Mesh Input: Walls Below Table (2)

<i>Shear Wall</i>	<i>Use Spec LLR Params</i>	<i>Spec. LLR Levels</i>	<i>Spec. Trib. Area ft²</i>	<i>Spec. Infl. Area ft²</i>	<i>Max LLR %</i>
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40

Mesh Input: Columns Below Table

<i>Number</i>	<i>Location feet</i>	<i>Mix</i>	<i>Fixed Near</i>	<i>Fixed Far</i>	<i>Comp.</i>	<i>Height feet</i>	<i>B inches</i>	<i>D inches</i>
1	(-200.6,-89.05)	5000 psi	true	true	true	10	18	24
2	(-200.1,-144.6)	5000 psi	true	true	true	10	0	24
3	(-199.1,-134.7)	5000 psi	true	true	true	10	0	24
4	(-198.6,-115.2)	5000 psi	true	true	true	10	24	18
5	(-198,-65.18)	5000 psi	true	true	true	10	18	24
6	(-195.5,-41.31)	5000 psi	true	true	true	10	18	24
7	(-193,-17.44)	5000 psi	true	true	true	10	18	24
8	(-191.6,-151)	5000 psi	true	true	true	10	0	24
9	(-182.2,-147.7)	5000 psi	true	true	true	10	0	24
10	(-180.8,-44.12)	5000 psi	true	true	true	10	24	18
11	(-180.5,-117.1)	5000 psi	true	true	true	10	24	18
12	(-177,-67.39)	5000 psi	true	true	true	10	18	24
13	(-176.8,-92.28)	5000 psi	true	true	true	10	18	24
14	(-166,-123.6)	5000 psi	true	true	true	10	18	24
15	(-164.9,-47.89)	5000 psi	true	true	true	10	18	24
16	(-164.6,-22.53)	5000 psi	true	true	true	10	24	18
17	(-164.2,-141.7)	5000 psi	true	true	true	10	18	24
18	(-145.3,-22.83)	5000 psi	true	true	true	10	18	24
19	(-144.5,-120.4)	5000 psi	true	true	true	10	18	24
20	(-138.3,-51.35)	5000 psi	true	true	true	10	18	24
21	(-138.2,-136)	5000 psi	true	true	true	10	18	24
22	(-135.3,-110.1)	5000 psi	true	true	true	10	18	24
23	(-120.6,-101.9)	5000 psi	true	true	true	10	18	24
24	(-118.9,-75.16)	5000 psi	true	true	true	10	24	18
25	(-118.4,-52.35)	5000 psi	true	true	true	10	18	24
26	(-118.3,-22.83)	5000 psi	true	true	true	10	18	24
27	(-115.9,-127)	5000 psi	true	true	true	10	18	24
28	(-109.7,-60.83)	5000 psi	true	true	true	10	18	24
29	(-99.8,-22.83)	5000 psi	true	true	true	10	18	24
30	(-94.99,-75.16)	5000 psi	true	true	true	10	18	24
31	(-94.55,-101.9)	5000 psi	true	true	true	10	18	24
32	(-93.65,-118.1)	5000 psi	true	true	true	10	18	24
33	(-87.45,-47.25)	5000 psi	true	true	true	10	24	18
34	(-86.02,-66.08)	5000 psi	true	true	true	10	24	18
35	(-71.38,-109.1)	5000 psi	true	true	true	10	18	24
36	(-68.7,-22.67)	5000 psi	false	true	true	10	18	24
37	(-67.92,-66.08)	5000 psi	true	true	true	10	24	18
38	(-65.26,-94)	5000 psi	true	true	true	10	18	24
39	(-60.2,-44.83)	5000 psi	true	true	true	10	18	24
40	(-49,-100.5)	5000 psi	true	true	true	10	18	24
41	(-45.8,-22.83)	5000 psi	true	true	true	10	18	24
42	(-41.7,-44.83)	5000 psi	true	true	true	10	18	24
43	(-28.53,-90.28)	5000 psi	true	true	true	10	18	24
44	(-19.02,-17.34)	5000 psi	true	true	true	10	24	18
45	(-14.45,-61.73)	5000 psi	true	true	true	10	24	18
46	(-14.45,-46.58)	5000 psi	true	true	true	10	24	18

Mesh Input: Columns Below Table (2)

<i>Angle degrees</i>	<i>Roller</i>	<i>I Factor</i>	<i>Use Spec LLR Params</i>	<i>Spec. LLR Levels</i>	<i>Spec. Trib. Area ft²</i>	<i>Spec. Infl. Area ft²</i>
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
84	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
90	false	1	false	1	0	0
22	false	1	false	1	0	0
0	false	1	false	1	0	0
22	false	1	false	1	0	0
0	false	1	false	1	0	0
22	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
22	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
90	false	1	false	1	0	0
0	false	1	false	1	0	0
22	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
22	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
112	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0

Max LLR
%

Mesh Input: Columns Below Table - 24

Mesh Input: Columns Below Table (4)

<i>Number</i>	<i>Location feet</i>	<i>Mix</i>	<i>Fixed Near</i>	<i>Fixed Far</i>	<i>Comp.</i>	<i>Height feet</i>	<i>B inches</i>	<i>D inches</i>
47	(-5.364,-16.83)	5000 psi	true	true	true	10	24	18
48	(-5.313,-48.07)	5000 psi	true	true	true	10	24	18
49	(-3.839,-76.3)	5000 psi	true	true	true	10	24	18
50	(-3.5,-61.73)	5000 psi	true	true	true	10	24	18
51	(-1.469,-92.28)	5000 psi	true	true	true	10	18	24

Mesh Input: Columns Below Table (5)

<i>Angle degrees</i>	<i>Roller</i>	<i>I Factor</i>	<i>Use Spec LLR Params</i>	<i>Spec. LLR Levels</i>	<i>Spec. Trib. Area ft²</i>	<i>Spec. Infl. Area ft²</i>
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0

Mesh Input: Columns Below Table (6)

<i>infl. Area</i>	<i>Max LLR</i>
	<u>%</u>
	40
	40
	40
	40
	40

Mesh Input: Slab Areas Table

<i>Number</i>	<i>Location feet</i>	<i>Mix</i>	<i>Thickness inches</i>	<i>TOC inches</i>	<i>Priority</i>	<i>Behavior</i>	<i>R-Axis degrees</i>
1	(-163.1,-142.3)(-165.7,-100.8)(-195.2,-207.1)(-192.1,-115.0)(-199.5,-124.3)(-199.7,-115.8)(-199.3,-115.8)(-200,-121.8)(-204.9,-1.067)	5000	18	15	1	1	1
2	(-192.3,-1)(-119.5,-1.005)(-115,-52.5)(-108.2,-52.48)(-107.6,-48.52)(179.08,-48.6)(-78.66,-52.52)(-67.49,-52.59)(-67.54,-1.012)	5000	18	15	1	1	1
3	(-69.54,-1.067)(-69.54,-50.46)(-77.54,-50.46)(-77.54,-46.46)(-109.5,-46.46)(-109.5,-50.46)(-117.5,-50.46)(-117.5,-46.46)(-117.5,-1.067)	5000	18	15	1	1	1

Mesh Input: Slab Areas Table (2)

<i>KMr</i>	<i>KMs</i>	<i>KMrs</i>	<i>KFr</i>	<i>KFs</i>	<i>KVrs</i>
1	1	1	1	1	1
1	1	1	1	1	1
1	1	1	1	1	1

Mesh Input: Beams Table

Number	Location feet	Mix	Thickness inches	TOC inches	Priority	Mesh As Slab	Width inches
1	(-119.5,-1.007)(-119.5,-50.46)(-117.5,-26.57)(-117.5,-54.46)	50046	26.57	(-121.5,-15.07)(-121.5,-54.46)	1	true	48
2	(-115.5,-1.007)(-115.5,-50.46)(-113.5,-14.07)(-113.5,-50.46)	50046	14.07	(-117.5,-15.07)(-117.5,-50.46)	2	true	48
3	(-113.5,-48.46)(-109.5,-50.46)(-113.5,-48.46)(-109.5,-46.46)	50046	48.46	(-113.5,-56.46)(-109.5,-50.46)	3	true	48
4	(-111.5,-1.007)(-111.5,-50.46)(-109.5,-13.07)(-109.5,-38.46)	50046	13.07	(-113.5,-15.07)(-113.5,-38.46)	4	true	48
5	(-109.5,-48.46)(-77.54,-50.46)(-109.5,-46.46)(-77.54,-46.46)	50046	46.46	(-109.5,-56.46)(-77.54,-50.46)	5	true	48
6	(-113.5,-44.46)(-73.54,-50.46)(-113.5,-42.46)(-73.54,-42.46)	50046	42.46	(-113.5,-46.46)(-73.54,-46.46)	6	true	48
7	(-113.5,-40.46)(-73.54,-50.46)(-113.5,-38.46)(-73.54,-38.46)	50046	38.46	(-113.5,-42.46)(-73.54,-42.46)	7	true	48
8	(-117.5,-52.46)(-69.53,-50.46)(-117.5,-50.46)(-117.5,-54.46)	50046	50.46	(-117.5,-54.46)(-69.53,-54.46)	8	true	48
9	(-77.54,-48.46)(-73.54,-50.46)(-77.54,-46.46)(-73.54,-46.46)	50046	46.46	(-77.54,-56.46)(-73.54,-50.46)	9	true	48
10	(-75.54,-1.012)(-75.54,-50.46)(-73.54,-13.12)(-73.54,-38.46)	50046	13.12	(-77.54,-15.12)(-77.54,-38.46)	10	true	48
11	(-71.54,-1.012)(-71.54,-50.46)(-69.54,-14.12)(-69.54,-50.46)	50046	14.12	(-73.54,-15.12)(-73.54,-50.46)	11	true	48
12	(-67.54,-1.012)(-67.54,-50.46)(-65.54,-26.52)(-65.54,-54.46)	50046	26.52	(-69.54,-15.12)(-69.54,-54.46)	12	true	48

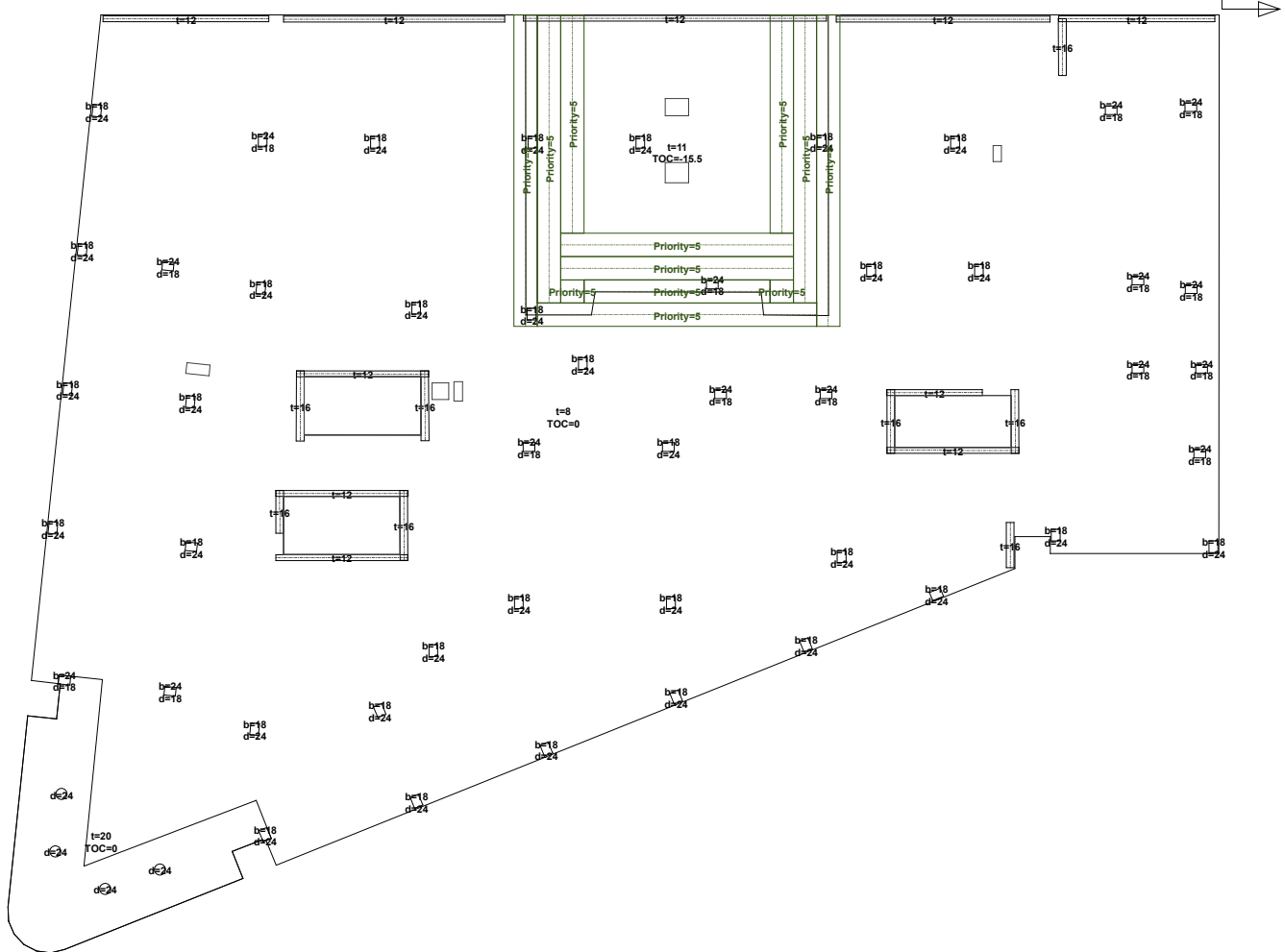
Mesh Input: Beams Table (2)

Width
Inches

<i>Behavior</i>	<i>KMr</i>	<i>KMs</i>	<i>KMrS</i>	<i>KFr</i>	<i>KFs</i>	<i>KVrs</i>
no-torsion two-way slab	1	1	0.001	1	1	1
no-torsion two-way slab	1	1	0.001	1	1	1
no-torsion two-way slab	1	1	0.001	1	1	1
no-torsion two-way slab	1	1	0.001	1	1	1
no-torsion two-way slab	1	1	0.001	1	1	1
no-torsion two-way slab	1	1	0.001	1	1	1
no-torsion two-way slab	1	1	0.001	1	1	1
no-torsion two-way slab	1	1	0.001	1	1	1
no-torsion two-way slab	1	1	0.001	1	1	1
no-torsion two-way slab	1	1	0.001	1	1	1
no-torsion two-way slab	1	1	0.001	1	1	1
no-torsion two-way slab	1	1	0.001	1	1	1

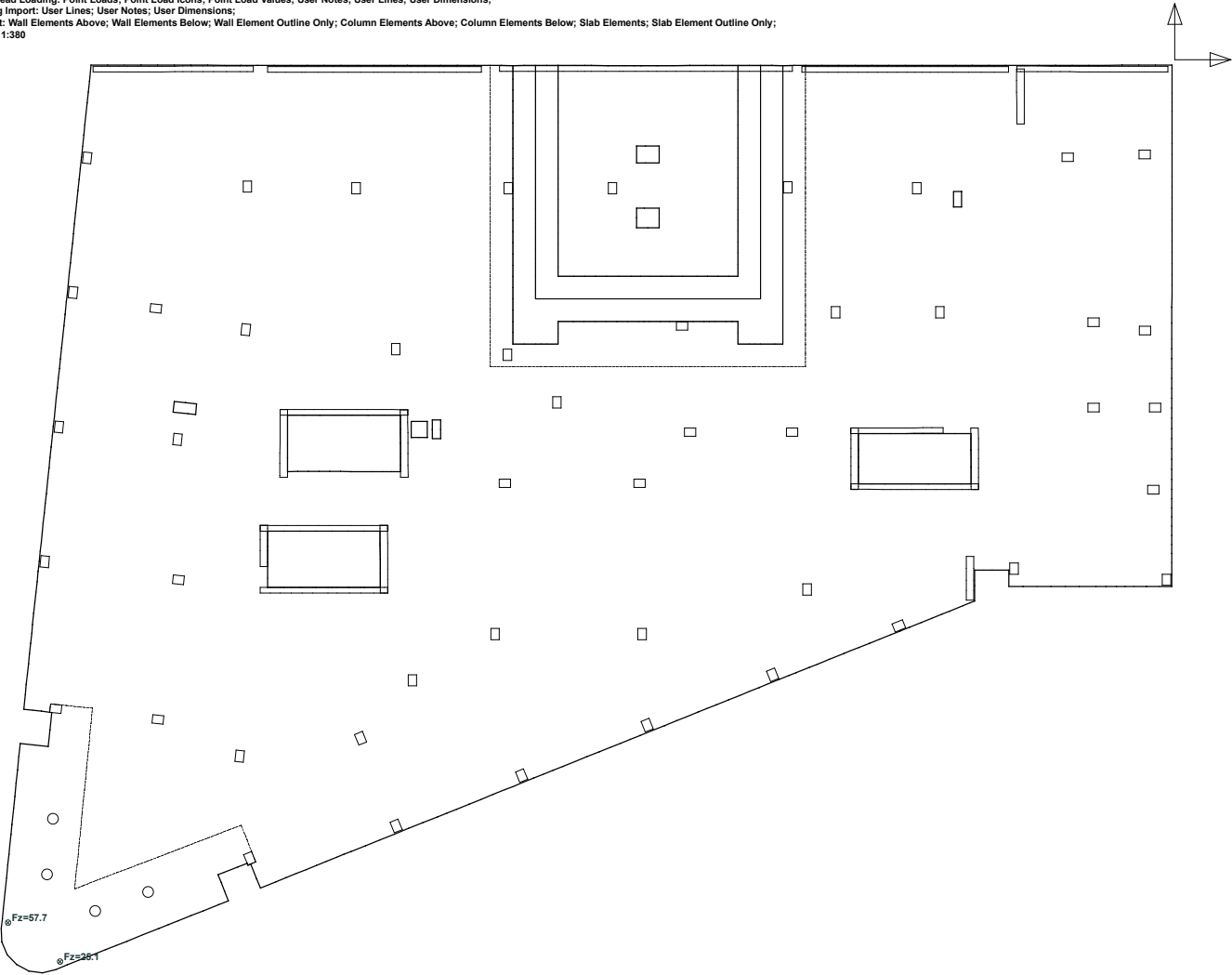
Mesh Input: Standard Plan

Mesh Input: Beams; Beam Priorities; Slab Areas; Slab Area Elevations; Slab Area Thicknesses; Slab Area Elevations; Slab Openings; Point Supports; Point Support Icons; Line Supports; Line Support Icons; Walls Above; Walls Below; Wall Thicknesses; Columns Above; Columns Below; Column Dimensions; Drawing Input: User Lines; User Notes; User Dimensions;
Scale = 1:380



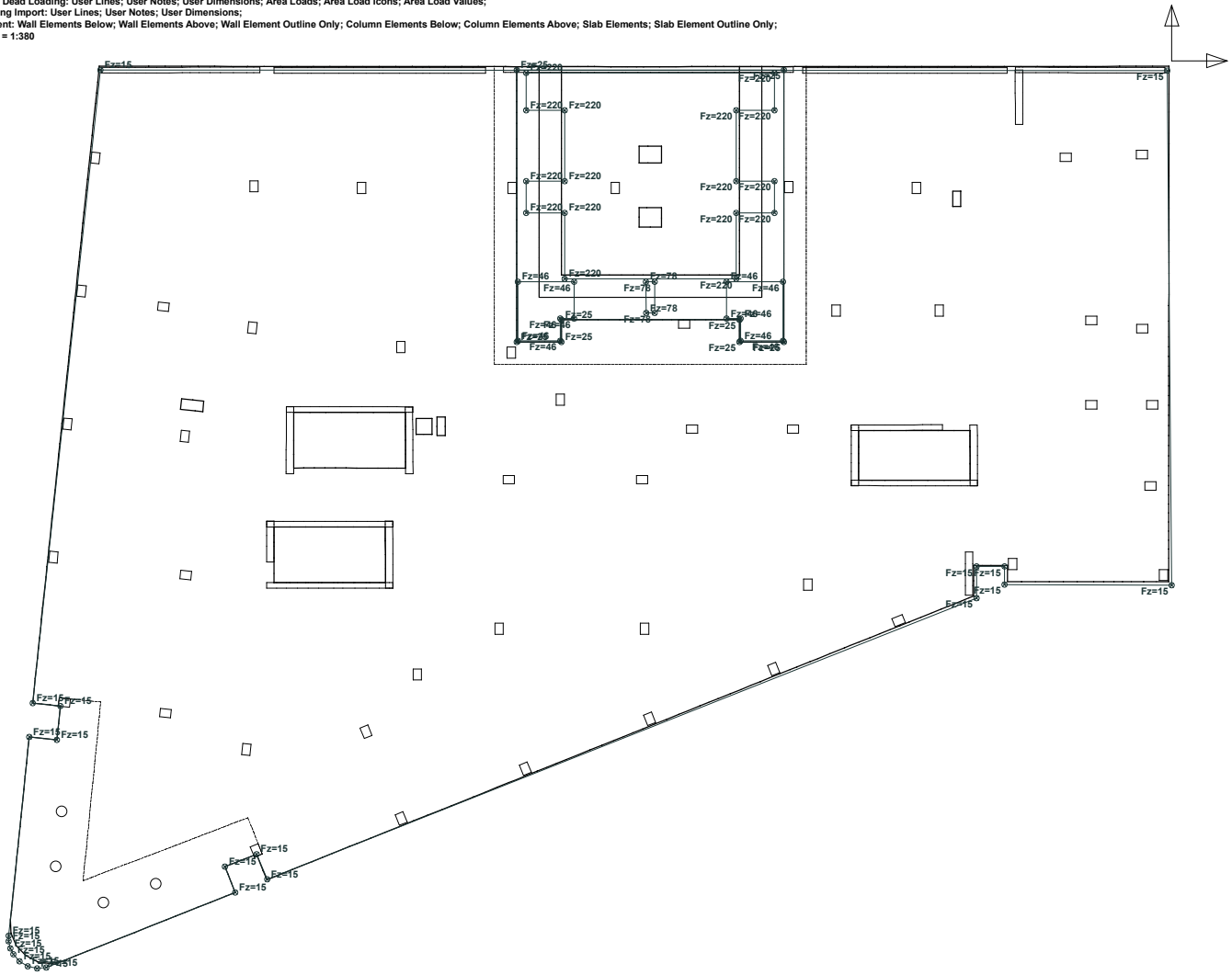
Other Dead Loading: Point Loads Plan

Other Dead Loading: Point Loads; Point Load Icons; Point Load Values; User Notes; User Lines; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Scale = 1:380



Other Dead Loading: Area Loads Plan

Other Dead Loading: User Lines; User Notes; User Dimensions; Area Loads; Area Load Icons; Area Load Values;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



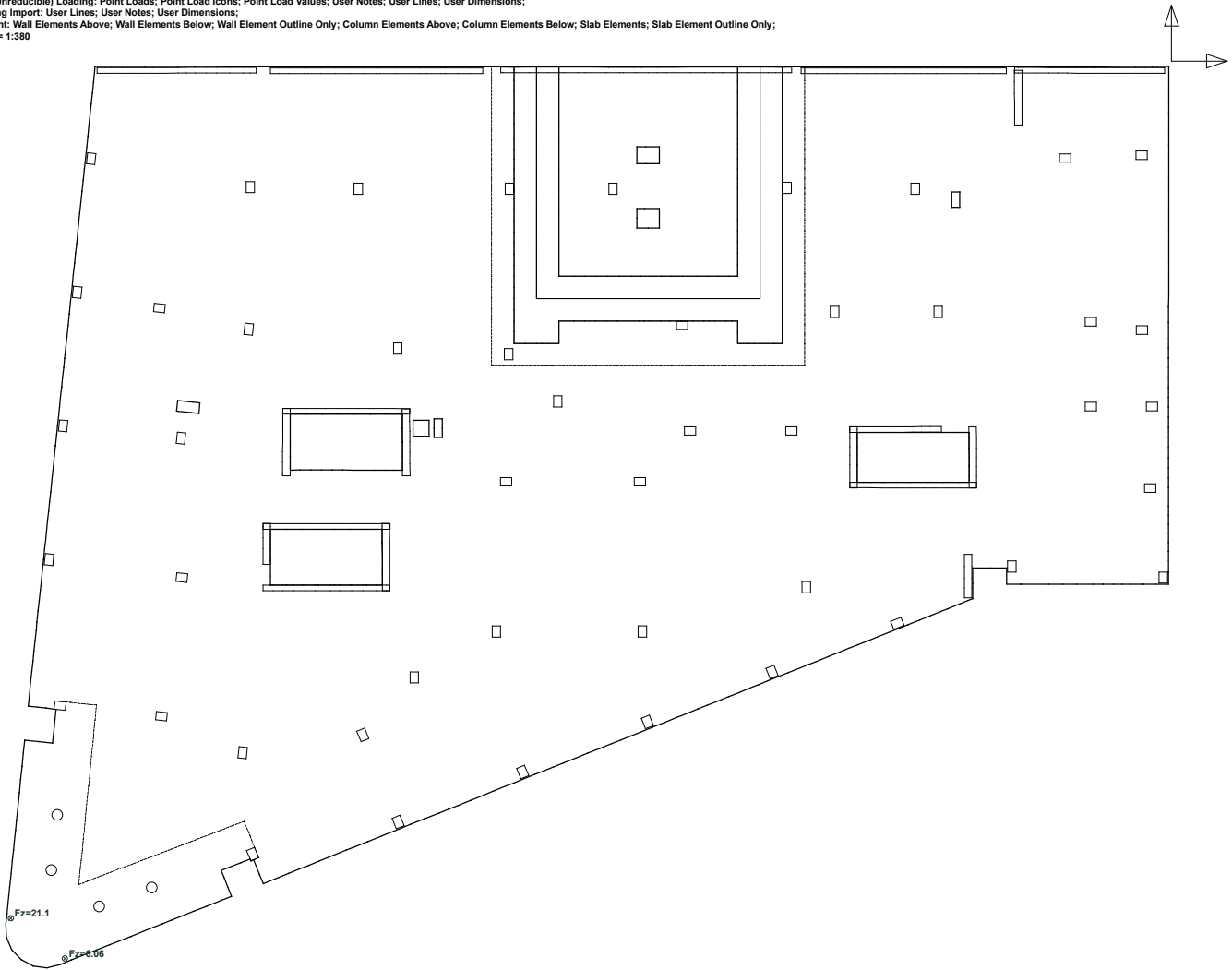
Live (Reducible) Loading: All Loads Plan

Live (Reducible) Loading: Point Loads; Point Load Icons; Point Load Values; Line Loads; Line Load Icons; Line Load Values; Area Loads; Area Load Icons; Area Load Values; User Notes; User Lines; User Dimensions;
 Drawing Import: User Notes; User Lines; User Dimensions; A-FLOOR; A-GLAZ; I-WALL; S-COLS; O; A-WALL; A-DETL-MEDM; A-DETL-MBND; G-ANNO-TTLB-MEDM; S-STRS-TEXT; G-ANNO-TTLB; A-ANNO-NOTE; G-ANNO-TEXT; A-AREA-PATT; G-ANNO-SCHD; A-GLAZ-CWMG; I-FUR
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



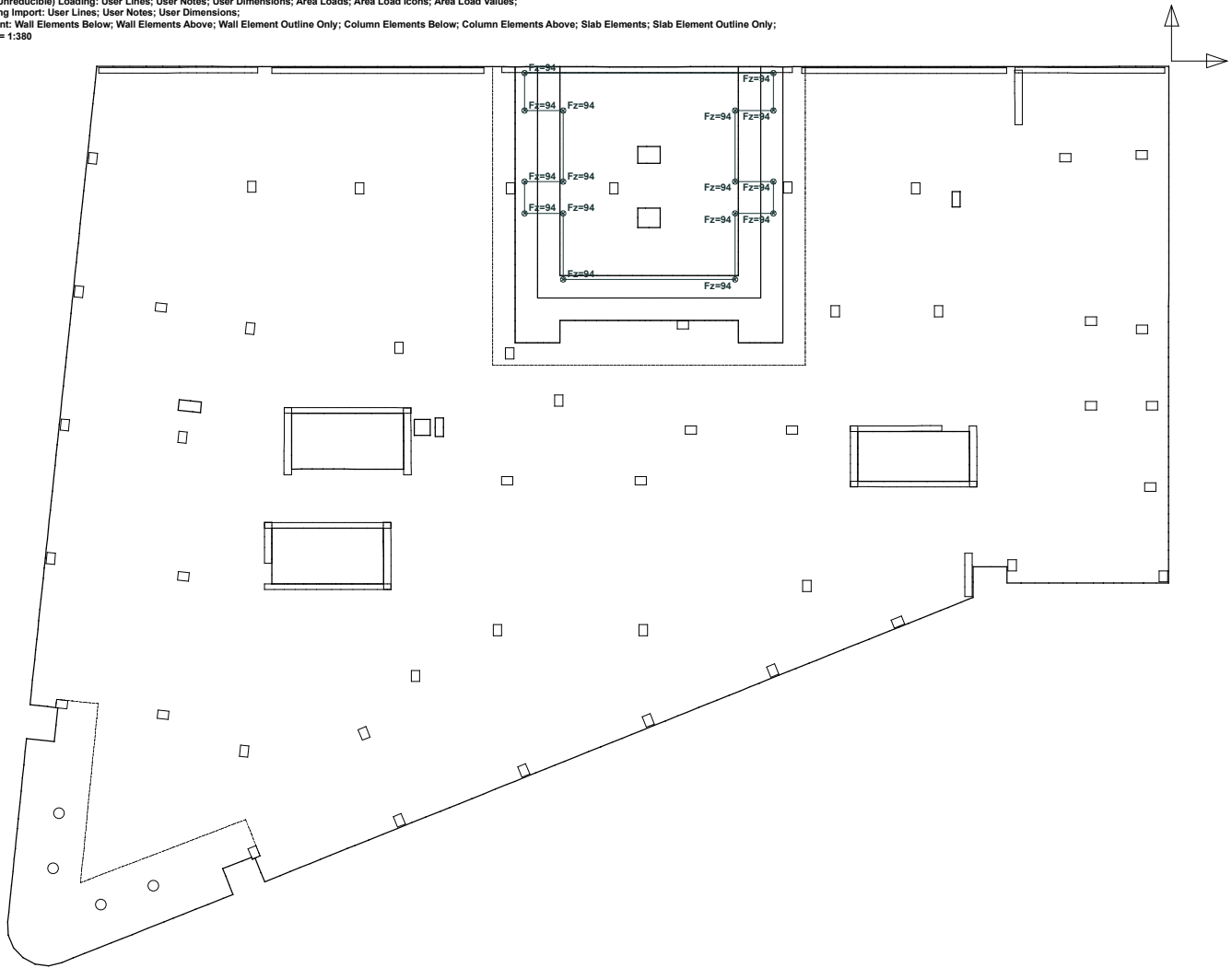
Live (Unreducible) Loading: Point Loads Plan

Live (Unreducible) Loading: Point Loads; Point Load Icons; Point Load Values; User Notes; User Lines; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Scale = 1:380



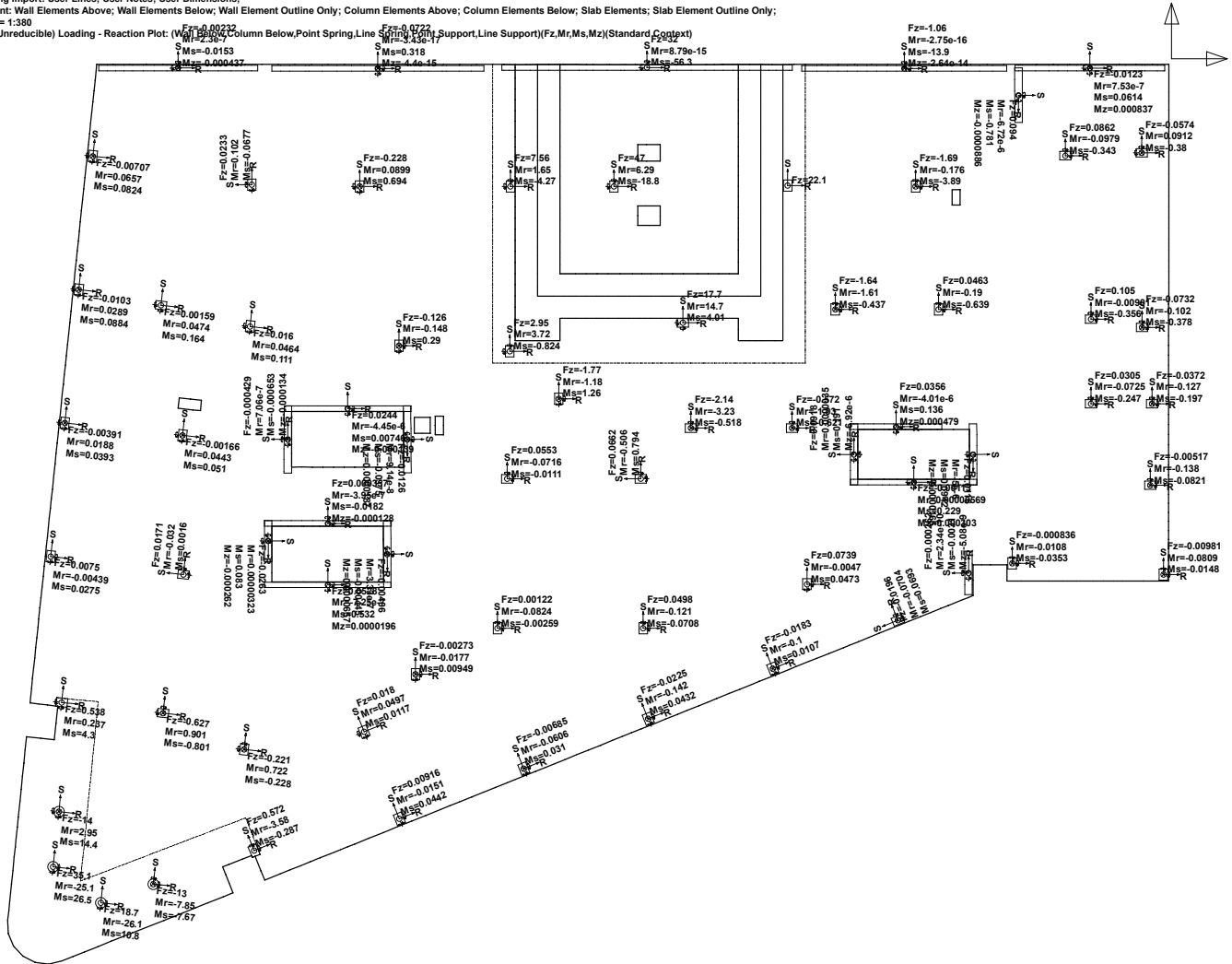
Live (Unreducible) Loading: Area Loads Plan

Live (Unreducible) Loading: User Lines; User Notes; User Dimensions; Area Loads; Area Load Icons; Area Load Values;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



Live (Unreducible) Loading: Std Reactions Plan

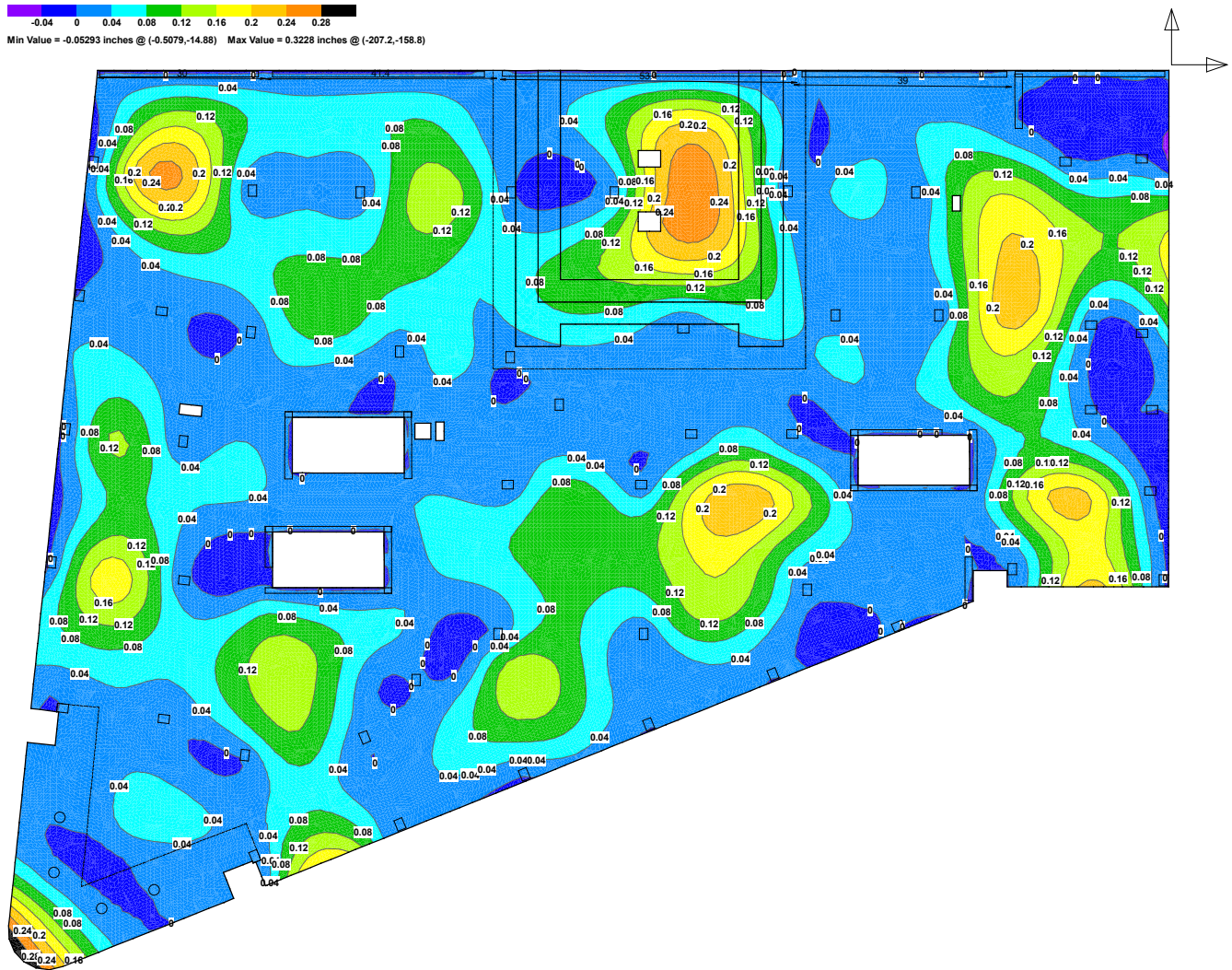
Live (Unreducible) Loading: Point Load Icons; Point Load Values; Line Load Icons; Line Load Values; Area Load Icons; Area Load Values; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:390
 Live (Unreducible) Loading - Reaction Plot: (Wall,Column,Point Spring,Line Support,Line Support)(Fz,Mr,Mz)(Standard Context)



Service LC: D + L: Max Deflection Plan

Service LC: D + L: User Lines; User Notes; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
 Scale = 1:380
 Service LC: D + L - Vertical Deflection Plot (Maximum Values)

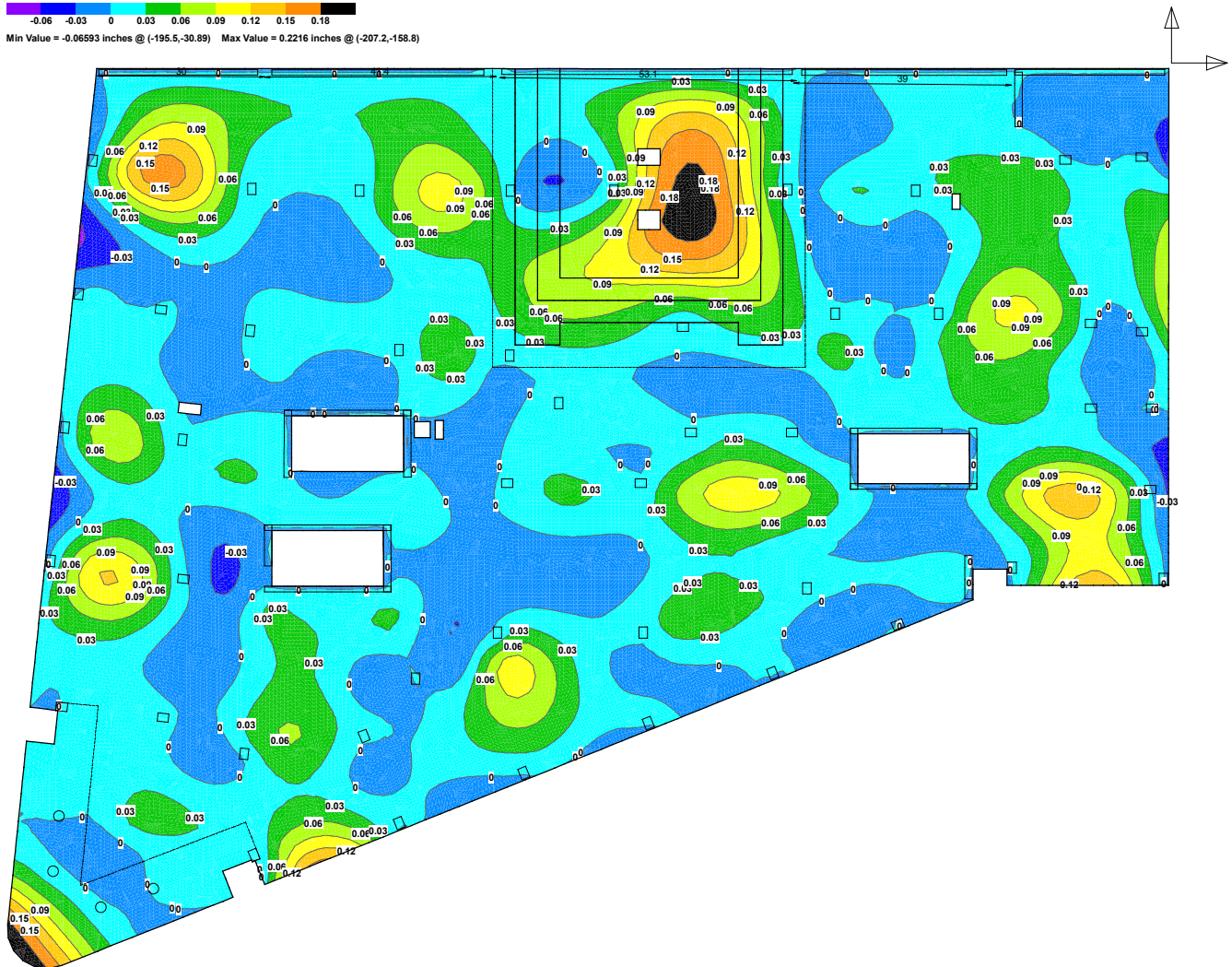
Min Value = -0.05293 inches @ (-0.5079, -14.88) Max Value = 0.32228 inches @ (-207.2, -158.8)



Service LC: D + L: Min Deflection Plan

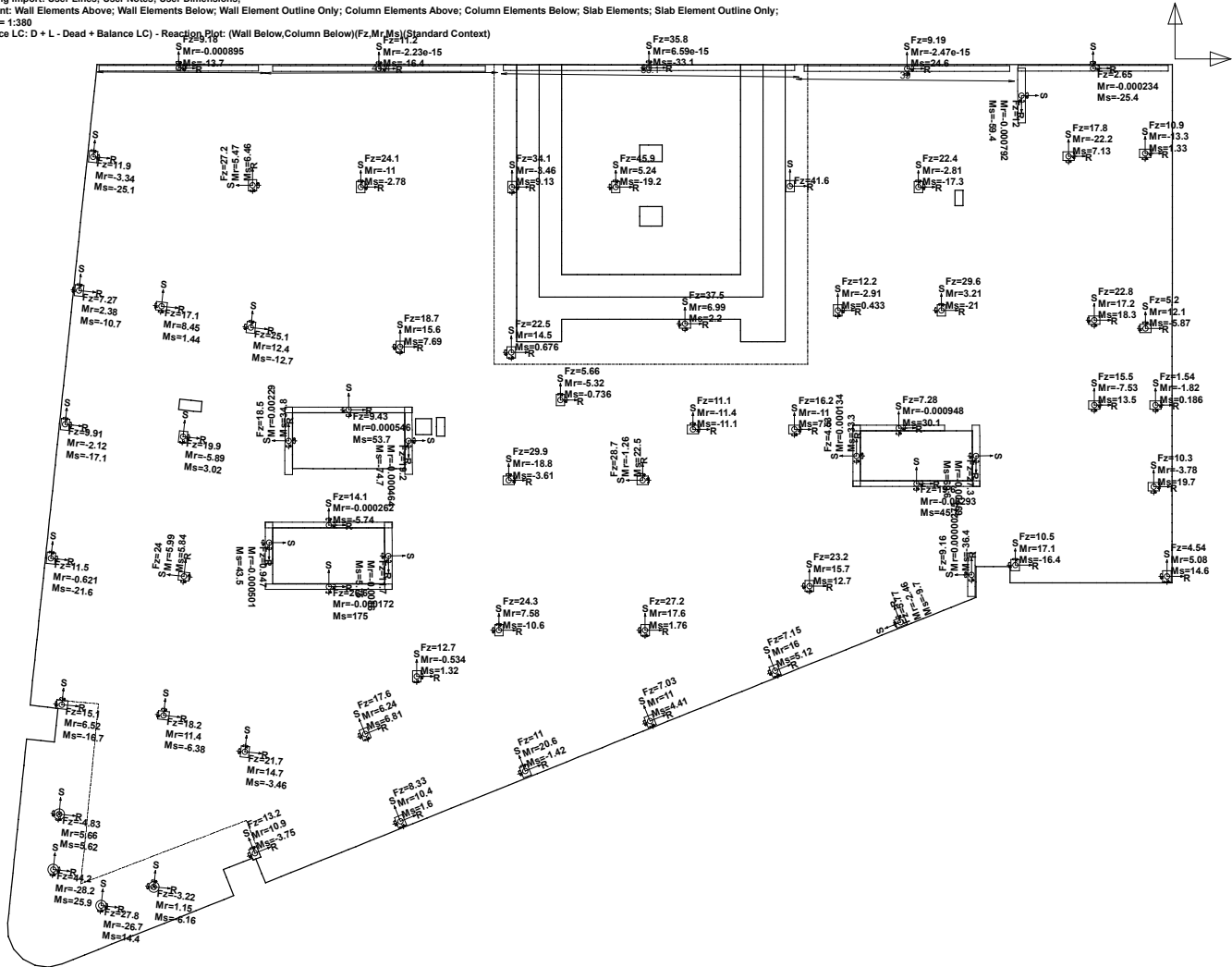
Service LC: D + L: User Lines; User Notes; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
 Scale = 1:380
 Service LC: D + L - Vertical Deflection Plot (Minimum Values)

Min Value = -0.06593 inches @ (-195.5,-30.89) Max Value = 0.2216 inches @ (-207.2,-158.8)



Service LC: D + L: Reaction Plan

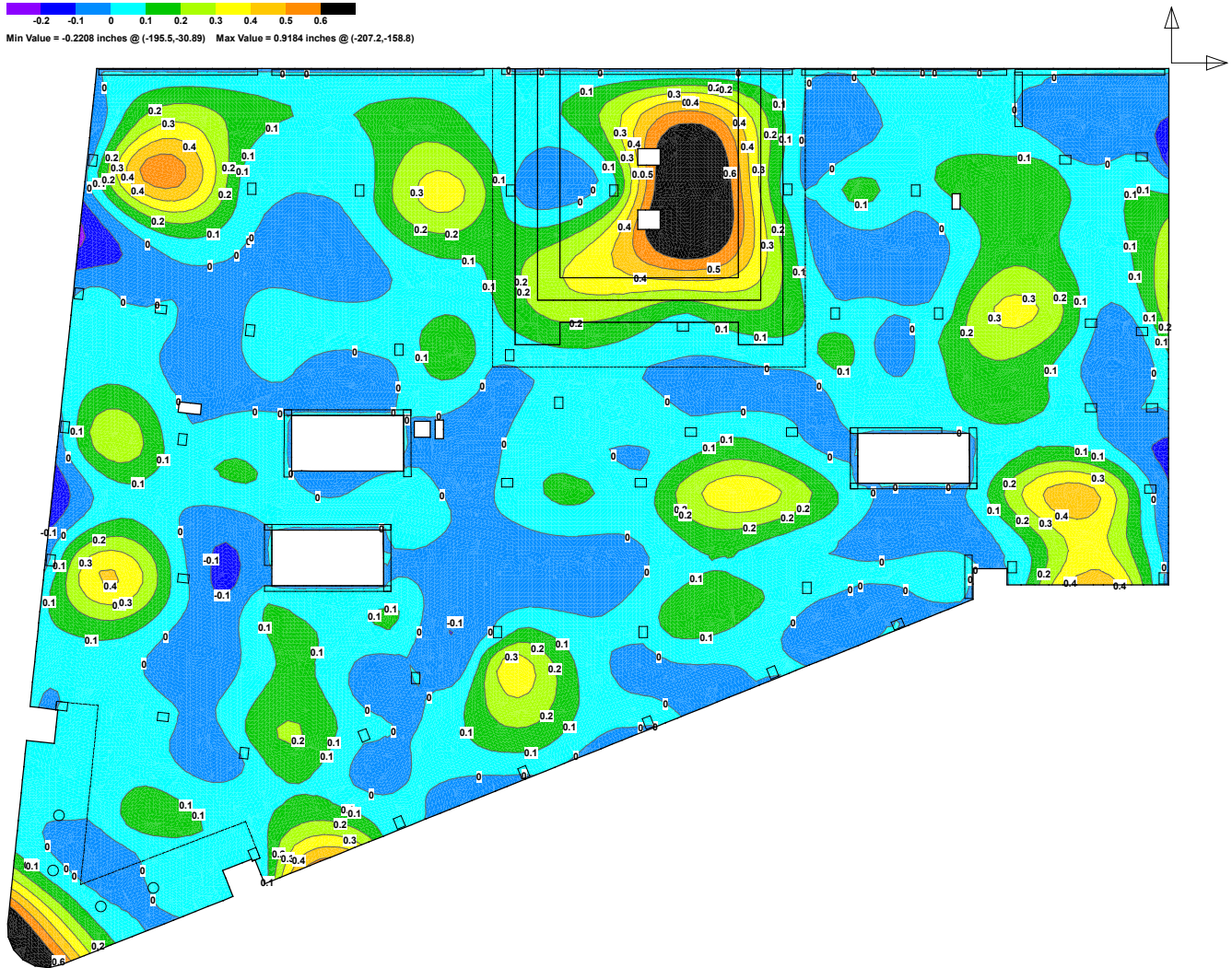
Service LC: D + L: User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:300
 (Service LC: D + L - Dead + Balance LC) - Reaction Plot: (Wall Below, Column Below)(Fz, Mr, Ms)(Standard Context)



Long Term deflection: Max Deflection Plan

Long Term deflection: User Lines; User Notes; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
 Scale = 1:390
 Long Term deflection - Vertical Deflection Plot (Maximum Values)

Min Value = -0.2208 inches @ (-195.5,-30.89) Max Value = 0.9184 inches @ (-207.2,-158.8)



Design Strip: Latitude SSs Table

<i>Name</i>	<i>Set</i>	<i>Location feet</i>	<i>Skew degrees</i>	<i>At Support 1</i>	<i>At Support 2</i>	<i>Support Width 1 inches</i>
1-1	latitude	(-207.2,-144.6)(-200.1,-144.6)		false	true	3.087
2-1	latitude	(-206,-133.9)(-199.1,-142.7)		false	true	0
3-1	latitude	(-203.9,-114.5)(-199.6,-115)		false	true	0
4-1	latitude	(-208.4,-158)(-191.6,-152.46)		false	true	23.41
4-2	latitude	(-191.6,-151)(-182.2,-147.51)		true	true	21.1
4-3	latitude	(-182.2,-147.7)(-164.4,-141.34)		true	true	21.03
4-4	latitude	(-164.4,-141.7)(-138.2,-136)		true	true	22.97
4-5	latitude	(-138.2,-136)(-115.9,-127)		true	true	18.16
4-6	latitude	(-115.9,-127)(-93.65,-118.1)		true	true	18.16
4-7	latitude	(-93.65,-118.1)(-71.38,-109.1)		true	true	18.16
4-8	latitude	(-71.38,-109.1)(-49.11,-100.2)		true	true	18.16
4-9	latitude	(-49.11,-100.2)(-36.21,-95.17)		true	true	24.16
5-1	latitude	(-198.6,-115.2)(-180.5,-117.1)		true	true	24.16
5-2	latitude	(-180.5,-117.1)(-166,-123.67)		true	true	25.41
5-3	latitude	(-166,-123.6)(-144.5,-128.448)		true	true	18.75
5-4	latitude	(-144.5,-120.4)(-135.3,-120.67)		true	true	20.22
5-5	latitude	(-135.3,-110.1)(-120.6,-101.23)		true	true	20.78
5-6	latitude	(-120.6,-101.9)(-94.55,-100.93-6)		true	true	18.16
5-7	latitude	(-94.55,-101.9)(-65.26,-94.11)		true	true	18.8
5-8	latitude	(-65.26,-94)(-36.27,-89.09)		true	true	18.4
5-9	latitude	(-36.27,-89.19)(-28.53,-90.28)		true	true	14.77
5-10	latitude	(-28.53,-90.28)(-1.302,-92.45)		true	true	18.21
6-1	latitude	(-200.8,-89.04)(-176.8,-92.28)		true	true	24.84
6-2	latitude	(-176.8,-92.28)(-161.7,-94.89)		true	true	24.16
7-1	latitude	(-195.5,-41.31)(-180.7,-44.59)		true	true	18.27
7-2	latitude	(-180.7,-44.59)(-164.9,-47.89)		true	true	18.49
7-3	latitude	(-164.9,-47.89)(-138.3,-51.35)		true	true	18.17
7-4	latitude	(-138.3,-51.35)(-118.4,-52.35)		true	true	18.18
7-5	latitude	(-118.4,-52.35)(-87.45,-47.25)		true	true	18.4
7-6	latitude	(-87.45,-47.25)(-60.2,-44.83)		true	true	24.25
7-7	latitude	(-60.2,-44.83)(-41.7,-44.83)		true	true	18.16
7-8	latitude	(-41.7,-44.83)(-14.45,-46.58)		true	true	18.19
7-9	latitude	(-14.45,-46.58)(-5.313,-47.92)		true	true	24.41
7-10	latitude	(-5.313,-47.92)(-0.7549,-43.22)		true	false	24.17
8-1	latitude	(-198,-65.18)(-177,-67.39)		true	true	18.16
8-2	latitude	(-177,-67.39)(-158.2,-71.791)		true	true	18.55
9-1	latitude	(-193,-17.44)(-164.2,-22.76)		true	true	18.21
9-2	latitude	(-164.2,-22.76)(-145.3,-22.83)		true	true	9.142
9-3	latitude	(-145.3,-22.83)(-121.5,-22.85)		true	false	18.16
10-1	latitude	(-140.2,-94.08)(-120.6,-107.9)		true	true	14.97
11-1	latitude	(-136.6,-73.6)(-118.9,-75.16)		true	true	13.58
11-2	latitude	(-118.9,-75.16)(-94.99,-75.16)		true	true	24.16
11-3	latitude	(-94.99,-75.16)(-56.84,-75.23)		true	true	24.16
12-1	latitude	(-136.7,-62.49)(-109.7,-60.86)		true	true	13.4
12-2	latitude	(-109.7,-60.83)(-86.02,-66.58)		true	true	18.6
12-3	latitude	(-86.02,-66.08)(-67.92,-66.08-6)		true	true	24.16

Design Strip: Latitude SSs Table (2)

<i>Support Width 1</i>	<i>Support Width 2</i>	<i>Support Trans. Width 1</i>	<i>Support Trans. Width 2</i>	<i>Auto-Support</i>	<i>Min Divisions</i>	<i>Max Division Spacing</i>
<i>inches</i>	<i>inches</i>	<i>inches</i>	<i>inches</i>			<i>feet</i>
21.28	0	21.12		true	4	2.5
20.95	0	20.79		true	4	2.5
0	0	0		true	4	2.5
21.28	0	21.12		true	4	2.5
21.1	20.94	20.94		true	4	2.5
13.69	20.87	24.05		true	4	2.5
18.41	24.34	24.34		true	4	2.5
18.16	24	24		true	4	2.5
18.16	24	24		true	4	2.5
18.16	24	24		true	4	2.5
24.15	24	18		true	4	2.5
20.49	18	35.28		true	4	2.5
24.16	18	18		true	4	2.5
19.1	18.94	25.26		true	4	2.5
18.67	24.78	24.68		true	4	2.5
27.17	26.75	24.14		true	4	2.5
20.78	27.5	27.5		true	4	2.5
18.16	24	24		true	4	2.5
18.8	24.86	24.86		true	4	2.5
17.92	24.33	57.18		true	4	2.5
18.33	75.88	24.24		true	4	2.5
22.23	24.08	24.08		true	4	2.5
24.17	24.01	18		true	4	2.5
16.08	18.01	12.09		true	4	2.5
30.1	24.15	18.11		true	4	2.5
18.25	18.09	24.12		true	4	2.5
18.31	24	24.2		true	4	2.5
18.18	24.03	24.03		true	4	2.5
24.48	24.32	18.24		true	4	2.5
18.23	18.07	24.09		true	4	2.5
18.16	24	24		true	4	2.5
24.21	24.05	18.04		true	4	2.5
24.41	18.19	18.19		true	4	2.5
0	18.01	0		true	4	2.5
18.16	24	24		true	4	2.5
16.66	24.53	34.67		true	4	2.5
27.63	24.07	24.41		true	4	2.5
18.16	24	24		true	4	2.5
0	24	0		true	4	2.5
19.54	25.27	25.84		true	4	2.5
24.25	77.59	18.07		true	4	2.5
24.16	18	18		true	4	2.5
16.17	18	130.9		true	4	2.5
18.19	118	24.05		true	4	2.5
24.74	24.58	18.44		true	4	2.5
24.16	18	18		true	4	2.5

Design Strip: Latitude SSs Table (4)

[illegible]

Design Strip: Latitude SSs Table (5)

[illegible]

Design Strip: Latitude SSs Table - 54

Design Strip: Latitude SSs Table (7)

[illegible]

Design Strip: Latitude SSs Table (8)

Min B.Bar MS Shear Legs[illegible]

Design Strip: Latitude SSs Table (9)

<i>Name</i>	<i>Set</i>	<i>Location feet</i>	<i>Skew degrees</i>	<i>At Support 1</i>	<i>At Support 2</i>	<i>Support Width 1 inches</i>
12-4	latitude	(-67.92,-66.08)(-56.72,-65.52)	-65.52	true	true	24.17
13-1	latitude	(-117.5,-22.85)(-99.8,-22.83)	-22.83	true	true	0
13-2	latitude	(-99.8,-22.83)(-73.54,-22.69)	-22.69	true	false	18.16
13-2(2)	latitude	(-73.54,-22.69)(-68.7,-22.67)	-22.67	false	true	0
13-3	latitude	(-68.7,-22.67)(-65.54,-22.69)	-22.69	true	false	18.16
13-3(2)	latitude	(-65.54,-22.69)(-45.8,-22.83)	-22.83	false	true	0
13-4	latitude	(-45.8,-22.83)(-19.02,-17.34)	-17.34	true	true	18.53
13-5	latitude	(-19.02,-17.34)(-5.366,-16.83)	-16.83	true	true	24.17
13-6	latitude	(-5.366,-16.83)(-0.7621,-16.76)	-16.76	true	false	24.22
14-1	latitude	(-35.54,-65.89)(-14.45,-61.73)	-61.73	true	true	16.35
14-2	latitude	(-14.45,-61.73)(-3.5,-61.073)	-61.073	true	true	24.16
14-3	latitude	(-3.5,-61.73)(-0.8442,-61.81)	-61.81	true	false	24.17
15-1	latitude	(-35.53,-75.78)(-3.5,-76.3)	-76.3	true	true	17.16
15-2	latitude	(-3.5,-76.3)(-0.9865,-76.2)	-76.2	true	false	16.03

Design Strip: Latitude SSs Table (10)

<i>Support Width 1</i>	<i>Support Width 2</i> <i>inches</i>	<i>Support Trans. Width 1</i> <i>inches</i>	<i>Support Trans. Width 2</i> <i>inches</i>	<i>Auto-Support</i>	<i>Min Divisions</i>	<i>Max Division Spacing</i> <i>feet</i>
19.15	18.01	131	24	true	4	2.5
18.16	0	24	0	true	4	2.5
0	24	0	24	true	4	2.5
18.16	0	24	0	true	4	2.5
0	24	0	24	true	4	2.5
18.16	0	24	18.37	true	4	2.5
24.66	24.5	18.01	0	true	4	2.5
24.12	18	18.35	18	true	4	2.5
0	48.78	18	0	true	4	2.5
24.62	18	0	18	true	4	2.5
24.16	18.01	0	18	true	4	2.5
0	131	18	0	true	4	2.5
32.29	18	0	0	true	4	2.5

Design Strip: Latitude SSs Table (11)

on Spacing

<i>Design For Axial</i>	<i>Environment</i>	<i>Design As PT</i>	<i>Maximize Integrated V:</i>	<i>Use Spec LLR Params</i>	<i>Spec. LLR Levels</i>	<i>Spec. Trib. Area ft²</i>
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0

Design Strip: Latitude SSs Table (12)

<i>Spec. Infl. Area ft²</i>	<i>Max LLR %</i>	<i>Span Width</i>	<i>Col Strip Width</i>	<i>Lock Strips</i>	<i>Design CS for CS</i>	<i>-CS Auto Trim</i>	<i>CS Section Slope</i>
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	manual	manual	false	false	none	0.25
0	40	manual	manual	false	false	none	0.25
0	40	manual	manual	false	false	none	0.25
0	40	manual	manual	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25

Design Strip: Latitude SSs Table (13)

Section Slope	CS Top Bar	CS Bot Bar	CS Shear Bar	CS Top Cover inches	CS Bot Cover inches	CS Shear d calc	CS Torsion Design	CS System
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#5	#4	1.5	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1.5	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1.5	1	All Tension Reinforcement		two-way slab
	#4	#4	#4	1.5	1	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab

Design Strip: Latitude SSs Table (14)

<i>CS Min. Bar Loc.</i>	<i>CS Min T.Bar</i>	<i>CS Min B.Bar</i>	<i>CS Shear Legs</i>	<i>MS Same As CS</i>	<i>MS Auto Trim</i>	<i>MS Section Slope</i>	<i>MS Top Bar</i>	<i>MS Bot Bar</i>
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	true	none	0.25	#5	#4
stress	0	0	2	true	none	0.25	#5	#4
stress	0	0	2	true	none	0.25	#5	#4
stress	0	0	2	true	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4

Design Strip: Latitude SSs Table (15)

<i>Bot Bar</i>	<i>MS Shear Bar</i>	<i>MS Top Cover inches</i>	<i>MS Bot Cover inches</i>	<i>MS Shear d calc</i>	<i>MS Torsion Design</i>	<i>MS System</i>	<i>MS Min. Bar Loc.</i>	<i>MS Min T.Bar</i>	<i>MS Min B.Bar</i>
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0

Design Strip: Latitude SSs Table (16)

Min B.Bar	<u>MS Shear Legs</u>
	2
	2
	2
	2
	2
	2
	2
	2
	2
	2
	2
	2
	2
	2

Design Strip: Longitude SSs Table

Name	Set	Location feet	Skew degrees	At Support 1	At Support 2	Support Width 1 inches
16-1	longitude	(-201.7,-162)(-200.1,-154.05)	4.051	false	true	6.268
16-2	longitude	(-200.1,-144.6)(-199.1,-134.7)	1.917	true	true	20.96
16-3	longitude	(-199.1,-134.7)(-198.6,-119.2)	1.452	true	true	21.17
16-4	longitude	(-198.6,-115.2)(-200.6,-89.265)	89.265	true	true	18.45
16-5	longitude	(-200.6,-89.05)(-198,-65.18)	65.18	true	true	24.16
16-6	longitude	(-198,-65.18)(-195.5,-41.31)	41.31	true	true	24.16
16-7	longitude	(-195.5,-41.31)(-193,-17.44)	17.44	true	true	24.16
16-8	longitude	(-193,-17.44)(-191.7,-2.5073)	2.5073	true	true	24.16
17-1	longitude	(-195.3,-159.9)(-191.6,-113.56)	113.56	false	true	0
17-2	longitude	(-191.6,-151)(-180.5,-113.19)	113.19	true	true	21.03
17-3	longitude	(-180.5,-117.1)(-176.8,-92.28)	92.28	true	true	18.17
17-4	longitude	(-176.8,-92.28)(-177,-67.39)	67.39	true	true	18.27
17-5	longitude	(-177,-67.39)(-164.9,-47.89)	47.89	true	true	26.82
17-6	longitude	(-164.9,-47.89)(-164.6,-22.53)	22.53	true	true	24.26
17-7	longitude	(-164.6,-22.53)(-164.9,-1.9435)	1.9435	true	true	24.16
18-1	longitude	(-164.2,-141.7)(-166,-123.6)	123.6	true	true	25.17
18-2	longitude	(-166,-123.6)(-161.6,-94.02)	94.02	true	true	24.17
19-1	longitude	(-148.6,-94.26)(-144.5,-73.78)	73.78	true	true	9.262
19-2	longitude	(-144.5,-120.4)(-138.2,-103.69)	103.69	true	true	24.15
20-1	longitude	(-141.5,-1.583)(-145.3,-22.83)	22.83	true	true	15.72
20-2	longitude	(-145.3,-22.83)(-138.3,-51.35)	51.35	true	true	24.88
20-3	longitude	(-138.3,-51.35)(-136.9,-73.59)	73.59	true	true	24.34
21-1	longitude	(-140.5,-83.22)(-136.7,-73.59)	73.59	true	true	15.62
22-1	longitude	(-140.5,-94.09)(-135.3,-110.93)	110.93	true	true	13.76
22-2	longitude	(-135.3,-110.1)(-138.2,-136.3)	136.3	true	true	24.31
23-1	longitude	(-118.6,-1.583)(-118.3,-25.35)	25.35	true	true	11.77
23-2	longitude	(-118.3,-22.85)(-118.4,-52.35)	52.35	true	true	23.66
23-3	longitude	(-118.4,-52.35)(-118.5,-75.16)	75.16	true	false	24.16
23-3(2)	longitude	(-118.5,-54.47)(-118.9,-75.16)	75.16	false	true	0
23-4	longitude	(-118.9,-75.16)(-120.6,-101.9)	101.9	true	true	18.2
23-5	longitude	(-120.6,-101.9)(-115.9,-127.64)	127.64	true	true	24.58
24-1	longitude	(-99.8,-1.583)(-99.8,-22.83)	22.83	true	true	11.77
24-2	longitude	(-99.8,-22.83)(-87.59,-42.66)	42.66	true	true	27.17
25-1	longitude	(-94.99,-74.76)(-94.55,-101.9)	101.9	true	true	27.64
25-2	longitude	(-94.55,-101.9)(-93.65,-129.1)	129.1	true	true	24.19
26-1	longitude	(-87.45,-47.25)(-86.87,-54.61)	54.61	true	false	18.21
26-1(2)	longitude	(-86.87,-54.61)(-86.02,-63.08)	63.08	false	true	0
27-1	longitude	(-68.45,-1.609)(-68.7,-22.67)	22.67	true	true	11.15
27-2	longitude	(-68.7,-22.67)(-60.2,-44.83)	44.83	true	true	25.86
27-3	longitude	(-60.2,-44.83)(-56.64,-69.79)	69.79	true	true	24.5
28-1	longitude	(-71.38,-109.1)(-65.26,-94.03)	94.03	true	true	26.06
28-2	longitude	(-65.26,-94)(-67.92,-66.03)	66.03	true	true	24.27
29-1	longitude	(-56.76,-75.73)(-49.11,-100.36)	100.36	true	true	13.09
30-1	longitude	(-47.52,-1.583)(-45.8,-22.83)	22.83	true	true	15.5
30-2	longitude	(-45.8,-22.83)(-41.7,-44.83)	44.83	true	true	24.57
30-3	longitude	(-41.7,-44.83)(-35.45,-61.62)	61.62	true	true	25.19

Design Strip: Longitude SSs Table (2)

<i>Support Width 1</i>	<i>Support Width 2</i> <i>inches</i>	<i>Support Trans. Width 1</i> <i>inches</i>	<i>Support Trans. Width 2</i> <i>inches</i>	<i>Auto-Support</i>	<i>Min Divisions</i>	<i>Max Division Spacing</i> <i>feet</i>
	20.99	0	20.83	true	4	2.5
	20.96	20.8	20.8	true	4	2.5
	18.21	21.02	24.07	true	4	2.5
	24.55	24.39	18.29	true	4	2.5
	24.16	18	18	true	4	2.5
	24.16	18	18	true	4	2.5
	24.16	18	18	true	4	2.5
	4.355	18	27.26	true	4	2.5
	21.26	0	21.1	true	4	2.5
	18.57	20.87	24.55	true	4	2.5
	18.17	24.02	24.02	true	4	2.5
	24.31	24.15	18.11	true	4	2.5
	26.82	20.01	20.01	true	4	2.5
	24.16	18.08	18	true	4	2.5
	0.1654	18	16.18	true	4	2.5
	24.65	18.76	18.38	true	4	2.5
	14.12	18.02	55.98	true	4	2.5
	24.78	76.73	18.47	true	4	2.5
	24.15	18	18	true	4	2.5
	24.55	67.4	18.29	true	4	2.5
	24.88	18.54	18.54	true	4	2.5
	12.76	18.14	56.07	true	4	2.5
	10.87	29.95	17.29	true	4	2.5
	25.38	31.43	18.92	true	4	2.5
	27.42	18.11	20.45	true	4	2.5
	24.66	542.7	18	true	4	2.5
	24.16	18	18	true	4	2.5
	0	18	0	true	4	2.5
	18.16	0	24	true	4	2.5
	24.21	24.05	18.04	true	4	2.5
	24.63	18.31	18.36	true	4	2.5
	24.16	624.1	18	true	4	2.5
	0	20.26	0	true	4	2.5
	24.16	24	18	true	4	2.5
	25.51	18.03	19.01	true	4	2.5
	0	24.07	0	true	4	2.5
	18.21	0	24.07	true	4	2.5
	24.16	554.9	18	true	4	2.5
	25.86	19.28	19.28	true	4	2.5
	11.16	18.26	43.11	true	4	2.5
	26.05	25.03	19.42	true	4	2.5
	18.24	18.08	24.11	true	4	2.5
	10.92	28.99	24.08	true	4	2.5
	24.24	148.8	18.06	true	4	2.5
	24.57	18.31	18.31	true	4	2.5
	14.73	18.77	16.67	true	4	2.5

Design Strip: Longitude SSs Table (3)

[illegible]

Design Strip: Longitude SSs Table (4)

[illegible]

Design Strip: Longitude SSs Table - 69

Design Strip: Longitude SSs Table (6)

[illegible]

Design Strip: Longitude SSs Table - 71

Design Strip: Longitude SSs Table (8)

[illegible]

Design Strip: Longitude SSs Table (9)

<i>Name</i>	<i>Set</i>	<i>Location feet</i>	<i>Skew degrees</i>	<i>At Support 1</i>	<i>At Support 2</i>	<i>Support Width 1 inches</i>
31-1	longitude	(-36.1,-88.79)(-35.48,-75.22)	-75.22	true	true	16.07
32-1	longitude	(-28.53,-90.28)(-14.45,-76.76)	-76.76	true	true	26.92
32-2	longitude	(-14.45,-61.73)(-14.45,-46.58)	-46.58	true	true	18.16
32-3	longitude	(-14.45,-46.58)(-19.02,-37.84)	-37.84	true	true	18.38
32-4	longitude	(-19.02,-17.34)(-22,-1.85)	-1.85	true	true	18.49
33-1	longitude	(-5.387,-2.098)(-5.364,-17.08)	-17.08	true	true	1.85
33-2	longitude	(-5.364,-17.54)(-5.313,-47.02)	-47.02	true	true	1.157
33-3	longitude	(-5.313,-47.92)(-3.5,-61.73)	-61.73	true	true	22.09
33-4	longitude	(-3.5,-61.73)(-3.5,-76.3)	-76.3	true	true	18.16
33-5	longitude	(-3.5,-76.3)(-1.302,-92.45)	-92.45	true	true	18.32

Design Strip: Longitude SSs Table (10)

<i>t Width 1</i>	<i>Support Width 2 inches</i>	<i>Support Trans. Width 1 inches</i>	<i>Support Trans. Width 2 inches</i>	<i>Auto-Support</i>	<i>Min Divisions</i>	<i>Max Division Spacing feet</i>
	8.553	16.02	173.8	true	4	2.5
	20.23	20.07	26.76	true	4	2.5
	18.16	24	24	true	4	2.5
	18.38	24.29	24.29	true	4	2.5
	6.901	24.44	63.37	true	4	2.5
	35.16	322	24	true	4	2.5
	14.41	24	24	true	4	2.5
	18.31	24.21	24.21	true	4	2.5
	18.16	24	24	true	4	2.5
	28.42	24.22	18.17	true	4	2.5

Design Strip: Longitude SSs Table (11)

on Spacing

<i>Design For Axial</i>	<i>Environment</i>	<i>Design As PT</i>	<i>Maximize Integrated V:</i>	<i>Use Spec LLR Params</i>	<i>Spec. LLR Levels</i>	<i>Spec. Trib. Area ft²</i>
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	true	false	1	0
true	normal	true	false	false	1	0

Design Strip: Longitude SSs Table (12)

<i>Spec. Infl. Area ft²</i>	<i>Max LLR %</i>	<i>Span Width</i>	<i>Col Strip Width</i>	<i>Lock Strips</i>	<i>Design CS for CS</i>	<i>-CS Auto Trim</i>	<i>CS Section Slope</i>
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25

Design Strip: Longitude SSs Table (13)

Section Slope	CS Top Bar	CS Bot Bar	CS Shear Bar	CS Top Cover inches	CS Bot Cover inches	CS Shear d calc	CS Torsion Design	CS System
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab
	#5	#4	#4	1.5	0.75	All Tension Reinforcement		two-way slab

Design Strip: Longitude SSs Table (14)

<i>CS Min. Bar Loc.</i>	<i>CS Min T.Bar</i>	<i>CS Min B.Bar</i>	<i>CS Shear Legs</i>	<i>MS Same As CS</i>	<i>MS Auto Trim</i>	<i>MS Section Slope</i>	<i>MS Top Bar</i>	<i>MS Bot Bar</i>
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4

Design Strip: Longitude SSs Table (15)

Bot Bar	MS Shear Bar	MS Top Cover inches	MS Bot Cover inches	MS Shear d calc	MS Torsion Design	MS System	MS Min. Bar Loc.	MS Min T.Bar	MS Min B.Bar
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0

Design Strip: Longitude SSs Table (16)

<i>Min B.Bar</i>	<u><i>MS Shear Legs</i></u>
	2
	2
	2
	2
	2
	2
	2
	2
	2
	2

Design Strip: Latitude SSSs Table

<i>Name</i>	<i>Strip Type</i>	<i>Calc. Trib. Area ft²</i>	<i>Calc. Infl. Area ft²</i>	<i>Top Bar</i>	<i>Bottom Bar</i>	<i>Shear Bar</i>	<i>Top Cover inches</i>
1C-1	center	76.66	0	#5	#4	#4	1.5
2C-1	center	55.21	0	#5	#4	#4	1.5
3C-1	center	46.62	0	#5	#4	#4	1.5
4C-1	center	57.22	0	#5	#4	#4	1.5
4C-2	center	183.7	0	#5	#4	#4	1.5
4C-3	center	284.4	0	#5	#4	#4	1.5
4C-4	center	260.6	0	#5	#4	#4	1.5
4C-5	center	218.1	0	#5	#4	#4	1.5
4C-6	center	242.8	0	#5	#4	#4	1.5
4C-7	center	162.1	0	#5	#4	#4	1.5
4C-8	center	115.8	0	#5	#4	#4	1.5
4C-9	center	81.88	0	#5	#4	#4	1.5
5C-1	center	374.5	0	#5	#4	#4	1.5
5C-2	center	333.4	0	#5	#4	#4	1.5
5C-3	center	489.3	0	#5	#4	#4	1.5
5C-4	center	281.4	0	#5	#4	#4	1.5
5C-5	center	256.9	0	#5	#4	#4	1.5
5C-6	center	604.1	0	#5	#4	#4	1.5
5C-7	center	558.7	0	#5	#4	#4	1.5
5C-8	center	307.2	0	#5	#4	#4	1.5
5C-9	center	77.83	0	#5	#4	#4	1.5
5C-10	center	264.3	0	#5	#4	#4	1.5
6C-1	center	527.6	0	#5	#4	#4	1.5
6C-2	center	316.9	0	#5	#4	#4	1.5
7C-1	center	356.3	0	#5	#4	#4	1.5
7C-2	center	349.7	0	#5	#4	#4	1.5
7C-3	center	459.4	0	#5	#4	#4	1.5
7C-4	center	429.4	0	#5	#4	#4	1.5
7C-5	center	677.4	0	#5	#5	#4	1.5
7C-6	center	556.4	0	#5	#4	#4	1.5
7C-7	center	378.3	0	#5	#4	#4	1.5
7C-8	center	558.8	0	#5	#4	#4	1.5
7C-9	center	179.3	0	#5	#4	#4	1.5
7C-10	center	74.63	0	#5	#4	#4	1.5
8C-1	center	446.9	0	#5	#4	#4	1.5
8C-2	center	318.7	0	#5	#4	#4	1.5
9C-1	center	562.9	0	#5	#4	#4	1.5
9C-2	center	491.6	0	#5	#4	#4	1.5
9C-3	center	573.3	0	#5	#4	#4	1.5
10C-1	center	235.4	0	#5	#4	#4	1.5
11C-1	center	322	0	#5	#4	#4	1.5
11C-2	center	474.3	0	#5	#4	#4	1.5
11C-3	center	347.4	0	#5	#4	#4	1.5
12C-1	center	119.6	0	#5	#4	#4	1.5
12C-2	center	165.2	0	#5	#4	#4	1.5
12C-3	center	301.6	0	#5	#4	#4	1.5

Bot. Cover
inches

[illegible]

Design Strip: Latitude SSSs Table (3)

<i>Name</i>	<i>Strip Type</i>	<i>Calc. Trib. Area ft²</i>	<i>Calc. Infl. Area ft²</i>	<i>Top Bar</i>	<i>Bottom Bar</i>	<i>Shear Bar</i>	<i>Top Cover inches</i>
12C-4	center	171.6	0	#5	#4	#4	1.5
13C-1	center	442.7	0	#5	#4	#4	1.5
13C-2	center	517.3	0	#5	#5	#4	1.5
13C-2(2)	center	66.27	0	#5	#5	#4	1.5
13C-3	center	87.39	0	#5	#5	#4	1.5
13C-3(2)	center	446.4	0	#4	#4	#4	1.5
13C-4	center	428.2	0	#5	#4	#4	1.5
13C-5	center	296.6	0	#5	#4	#4	1.5
13C-6	center	75.37	0	#5	#4	#4	1.5
14C-1	center	331.1	0	#5	#4	#4	1.5
14C-2	center	125.3	0	#5	#4	#4	1.5
14C-3	center	18.62	0	#5	#4	#4	1.5
15C-1	center	305.3	0	#5	#4	#4	1.5
15C-2	center	11.21	0	#5	#4	#4	1.5

Design Strip: Latitude SSSs Table (4)

Top Cover
inches

Bot. Cover
inches

<i>inches</i>	<i>Torsion Design</i>	<i>System</i>	<i>Min Bar Loc.</i>	<i>Min T. Bar</i>	<i>Min B. Bar</i>	<i>Shear Legs</i>
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
1	none	two-way slab	stress	0	0	2
1	none	two-way slab	stress	0	0	2
1	none	two-way slab	stress	0	0	2
1	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2

Design Strip: Longitude SSSs Table

<i>Name</i>	<i>Strip Type</i>	<i>Calc. Trib. Area ft²</i>	<i>Calc. Infl. Area ft²</i>	<i>Top Bar</i>	<i>Bottom Bar</i>	<i>Shear Bar</i>	<i>Top Cover inches</i>
16C-1	center	117.7	0	#5	#4	#4	1.5
16C-2	center	138.5	0	#5	#4	#4	1.5
16C-3	center	275.7	0	#5	#4	#4	1.5
16C-4	center	340.2	0	#5	#4	#4	1.5
16C-5	center	247.2	0	#5	#4	#4	1.5
16C-6	center	58.89	0	#5	#4	#4	1.5
16C-7	center	335.3	0	#5	#4	#4	1.5
16C-8	center	202.4	0	#5	#4	#4	1.5
17C-1	center	129.5	0	#5	#4	#4	1.5
17C-2	center	204.5	0	#5	#4	#4	1.5
17C-3	center	462.7	0	#5	#4	#4	1.5
17C-4	center	604.7	0	#5	#4	#4	1.5
17C-5	center	430.3	0	#5	#4	#4	1.5
17C-6	center	464.3	0	#5	#4	#4	1.5
17C-7	center	463.6	0	#5	#4	#4	1.5
18C-1	center	387.5	0	#5	#4	#4	1.5
18C-2	center	383.3	0	#5	#4	#4	1.5
19C-1	center	256.9	0	#5	#4	#4	1.5
19C-2	center	262	0	#5	#4	#4	1.5
20C-1	center	407.5	0	#5	#4	#4	1.5
20C-2	center	538.9	0	#5	#4	#4	1.5
20C-3	center	206.6	0	#5	#4	#4	1.5
21C-1	center	192	0	#5	#4	#4	1.5
22C-1	center	243.3	0	#5	#4	#4	1.5
22C-2	center	205.1	0	#5	#4	#4	1.5
23C-1	center	506.9	0	#5	#5	#4	1.5
23C-2	center	763.2	0	#5	#5	#4	1.5
23C-3	center	36.51	0	#5	#4	#4	1.5
23C-3(2)	center	453.5	0	#5	#4	#4	1.5
23C-4	center	534.6	0	#5	#4	#4	1.5
23C-5	center	452.8	0	#5	#4	#4	1.5
24C-1	center	407.7	0	#5	#4	#4	1.5
24C-2	center	602.2	0	#5	#4	#4	1.5
25C-1	center	673.5	0	#5	#4	#4	1.5
25C-2	center	382.7	0	#5	#4	#4	1.5
26C-1	center	218.6	0	#5	#4	#4	1.5
26C-1(2)	center	264.5	0	#5	#4	#4	1.5
27C-1	center	578.8	0	#5	#5	#4	1.5
27C-2	center	515.6	0	#5	#4	#4	1.5
27C-3	center	424.9	0	#5	#4	#4	1.5
28C-1	center	303.4	0	#5	#4	#4	1.5
28C-2	center	573	0	#5	#4	#4	1.5
29C-1	center	293.5	0	#5	#4	#4	1.5
30C-1	center	334.5	0	#5	#4	#4	1.5
30C-2	center	489.6	0	#5	#4	#4	1.5
30C-3	center	428.1	0	#5	#4	#4	1.5

Bot. Cover
inches

Design Strip: Longitude SSSs Table - 86

Design Strip: Longitude SSSs Table (3)

<i>Name</i>	<i>Strip Type</i>	<i>Calc. Trib. Area ft²</i>	<i>Calc. Infl. Area ft²</i>	<i>Top Bar</i>	<i>Bottom Bar</i>	<i>Shear Bar</i>	<i>Top Cover inches</i>
31C-1	center	212.9	0	#5	#4	#4	1.5
32C-1	center	343.7	0	#5	#4	#4	1.5
32C-2	center	291.8	0	#5	#4	#4	1.5
32C-3	center	548.3	0	#5	#4	#4	1.5
32C-4	center	93.16	0	#5	#4	#4	1.5
33C-1	center	152.3	0	#5	#4	#4	1.5
33C-2	center	248.8	0	#5	#4	#4	1.5
33C-3	center	72.81	0	#5	#4	#4	1.5
33C-4	center	125.4	0	#5	#4	#4	1.5
33C-5	center	220.5	0	#5	#4	#4	1.5

Design Strip: Longitude SSSs Table (4)

Top Cover
inches

Bot. Cover
inches

<i>Inches</i>	<i>Torsion Design</i>	<i>System</i>	<i>Min Bar Loc.</i>	<i>Min T. Bar</i>	<i>Min B. Bar</i>	<i>Shear Legs</i>
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2
0.75	none	two-way slab	stress	0	0	2

Design Strip: Punching Checks Table

<i>Number</i>	<i>Location feet</i>	<i>Radius feet</i>	<i>Cover To CGS inches</i>	<i>Angle degrees</i>	<i>Edge</i>	<i>Connection</i>
1	(-200.6,-89.05)	10	1	-6	failure planes	auto
2	(-200.1,-144.6)	10	1	0	failure planes	auto
3	(-199.1,-134.7)	10	1	0	failure planes	auto
4	(-198.6,-115.2)	10	1	-6	failure planes	auto
5	(-198,-65.18)	10	1	-6	failure planes	auto
6	(-195.5,-41.31)	10	1	-6	failure planes	auto
7	(-193,-17.44)	10	1	-6	failure planes	auto
8	(-191.6,-151)	10	1	0	failure planes	auto
9	(-182.2,-147.7)	10	1	0	failure planes	auto
10	(-180.8,-44.12)	10	1	-6	failure planes	auto
11	(-180.5,-117.1)	10	1	-6	failure planes	auto
12	(-177,-67.39)	10	1	-6	failure planes	auto
13	(-176.8,-92.28)	10	1	84	failure planes	auto
14	(-166,-123.6)	10	1	-6	failure planes	auto
15	(-164.9,-47.89)	10	1	-6	failure planes	auto
16	(-164.6,-22.53)	10	1	90	failure planes	auto
17	(-164.2,-141.7)	10	1	22	failure planes	auto
18	(-145.3,-22.83)	10	1	0	failure planes	auto
19	(-144.5,-120.4)	10	1	22	failure planes	auto
20	(-138.3,-51.35)	10	1	0	failure planes	auto
21	(-138.2,-136)	10	1	22	failure planes	auto
22	(-135.3,-110.1)	10	1	0	failure planes	auto
23	(-120.6,-101.9)	10	1	0	failure planes	auto
24	(-118.9,-75.16)	10	1	0	failure planes	auto
25	(-118.4,-52.35)	10	1	0	failure planes	auto
26	(-118.3,-22.83)	10	1	0	failure planes	auto
27	(-115.9,-127)	10	1	22	failure planes	auto
28	(-109.7,-60.83)	10	1	0	failure planes	auto
29	(-99.8,-22.83)	10	1	0	failure planes	auto
30	(-94.99,-75.16)	10	1	90	failure planes	auto
31	(-94.55,-101.9)	10	1	0	failure planes	auto
32	(-93.65,-118.1)	10	1	22	failure planes	auto
33	(-87.45,-47.25)	10	1	0	failure planes	auto
34	(-86.02,-66.08)	10	1	0	failure planes	auto
35	(-71.38,-109.1)	10	1	22	failure planes	auto
36	(-68.7,-22.67)	10	1	0	failure planes	auto
37	(-67.92,-66.08)	10	1	0	failure planes	auto
38	(-65.26,-94)	10	1	0	failure planes	auto
39	(-60.2,-44.83)	10	1	0	failure planes	auto
40	(-49,-100.5)	10	1	112	failure planes	auto
41	(-45.8,-22.83)	10	1	0	failure planes	auto
42	(-41.7,-44.83)	10	1	0	failure planes	auto
43	(-28.53,-90.28)	10	1	0	failure planes	auto
44	(-19.02,-17.34)	10	1	0	failure planes	auto
45	(-14.45,-61.73)	10	1	0	failure planes	auto
46	(-14.45,-46.58)	10	1	0	failure planes	auto

Design Strip: Punching Checks Table (2)

Connection	Use Spec LLR Params	Spec. LLR Levels	Spec. Trib. Area ft ²	Spec. Infl. Area ft ²	Calc. Trib. Area ft ²	Calc. Infl. Area ft ²
	false	1	0	0	291.3	0
	false	1	0	0	224.6	0
	false	1	0	0	235.5	0
	false	1	0	0	371.7	0
	false	1	0	0	251.7	0
	false	1	0	0	183.6	0
	false	1	0	0	302.4	0
	false	1	0	0	225.9	0
	false	1	0	0	247.6	0
	false	1	0	0	431.5	0
	false	1	0	0	408.1	0
	false	1	0	0	464.9	0
	false	1	0	0	533.7	0
	false	1	0	0	439.2	0
	false	1	0	0	451.7	0
	false	1	0	0	614.3	0
	false	1	0	0	327.8	0
	false	1	0	0	575.7	0
	false	1	0	0	429.6	0
	false	1	0	0	446	0
	false	1	0	0	211	0
	false	1	0	0	324.2	0
	false	1	0	0	569.1	0
	false	1	0	0	484.9	0
	false	1	0	0	585.4	0
	false	1	0	0	786.9	0
	false	1	0	0	280	0
	false	1	0	0	173.1	0
	false	1	0	0	489.1	0
	false	1	0	0	532	0
	false	1	0	0	643.6	0
	false	1	0	0	183.9	0
	false	1	0	0	802.6	0
	false	1	0	0	270.3	0
	false	1	0	0	187.1	0
	false	1	0	0	773.7	0
	false	1	0	0	350.1	0
	false	1	0	0	511.5	0
	false	1	0	0	379.7	0
	false	1	0	0	148.7	0
	false	1	0	0	504.2	0
	false	1	0	0	558.8	0
	false	1	0	0	227.6	0
	false	1	0	0	390.6	0
	false	1	0	0	348	0
	false	1	0	0	483.4	0

[illegible]

Design Strip: Punching Checks Table (4)

<i>Number</i>	<i>Location feet</i>	<i>Radius feet</i>	<i>Cover To CGS inches</i>	<i>Angle degrees</i>	<i>Edge</i>	<i>Connection</i>
47	(-5.364,-16.83)	10	1	0	failure planes	auto
48	(-5.313,-48.07)	10	1	0	failure planes	auto
49	(-3.839,-76.3)	10	1	0	failure planes	auto
50	(-3.5,-61.73)	10	1	0	failure planes	auto
51	(-1.469,-92.28)	10	1	0	failure planes	auto

Design Strip: Punching Checks Table (5)

Connection	Use Spec LLR Params	Spec. LLR Levels	Spec. Trib. Area ft ²	Spec. Infl. Area ft ²	Calc. Trib. Area ft ²	Calc. Infl. Area ft ²
	false	1	0	0	285.7	0
	false	1	0	0	157.5	0
	false	1	0	0	257	0
	false	1	0	0	49.09	0
	false	1	0	0	115.4	0

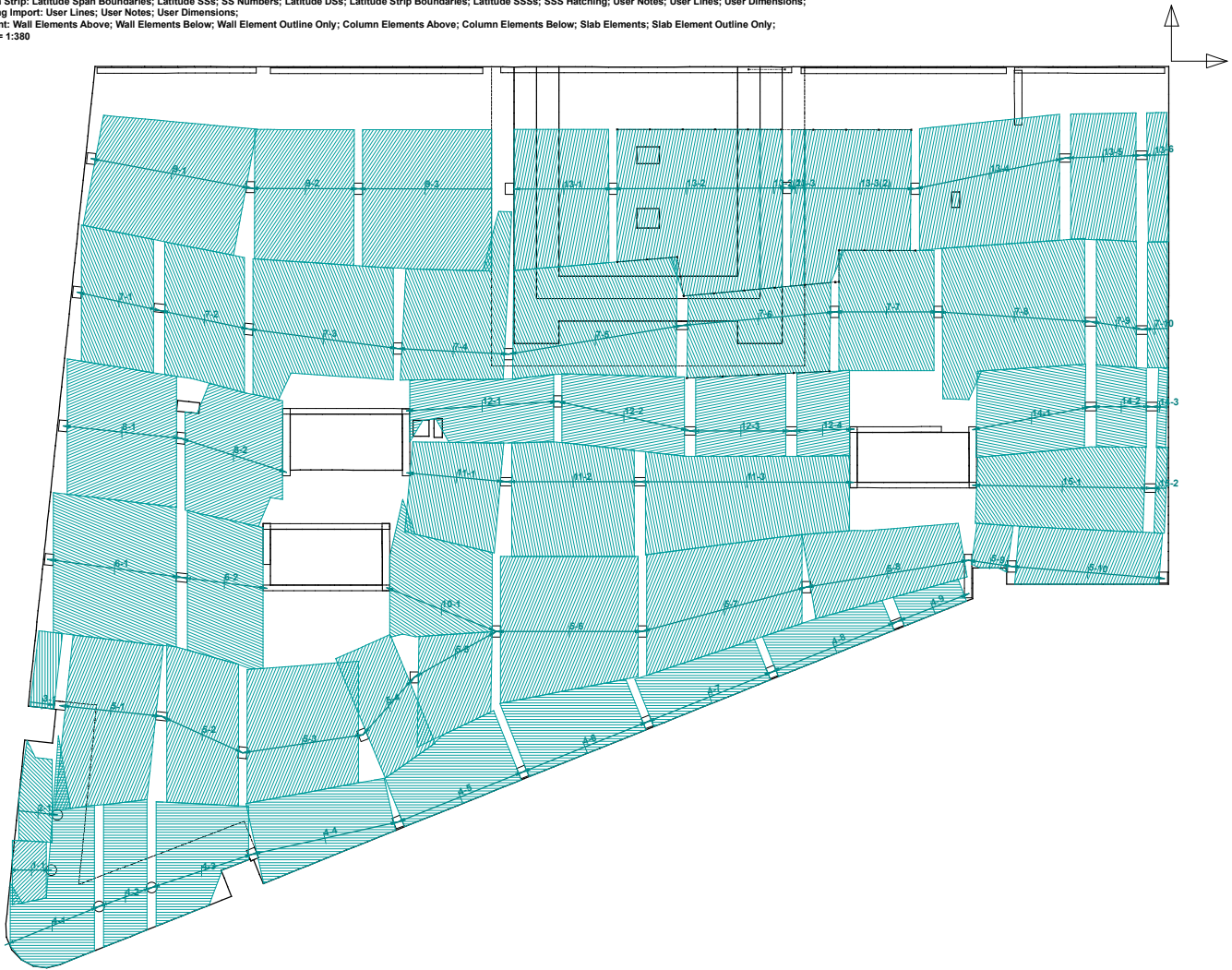
Design Strip: Punching Checks Table (6)

Inf. Area

<i>Max LLR %</i>	<i>Red. Red. %</i>	<i>Stor. Red. %</i>	<i>Park. Red. %</i>
40	0	0	0
40	0	0	0
40	0	0	0
40	0	0	0
40	0	0	0

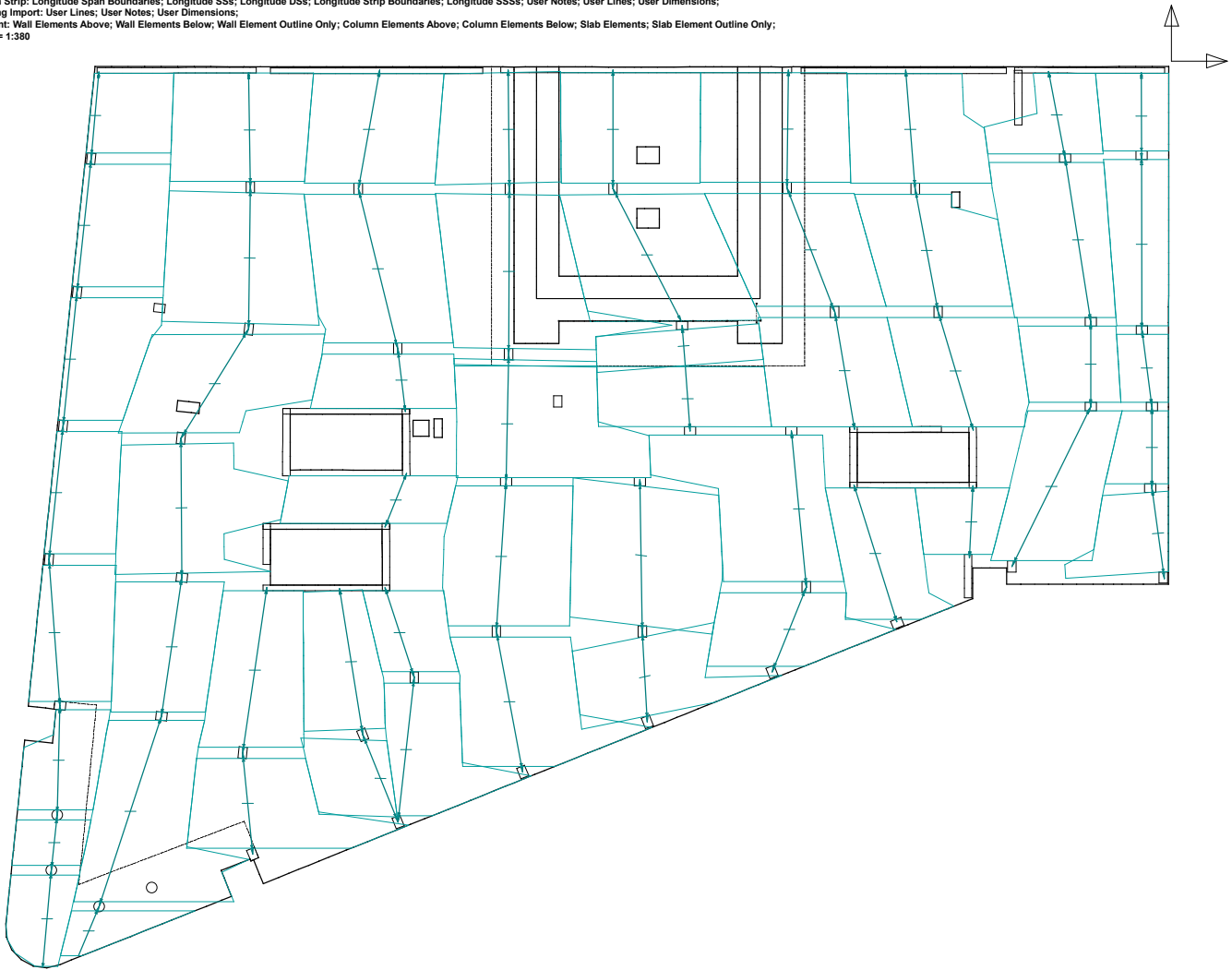
Design Strip: Latitude Design Spans Plan

Design Strip: Latitude Span Boundaries; Latitude SSs; SS Numbers; Latitude DSs; Latitude Strip Boundaries; Latitude SSSs; SSS Hatching; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



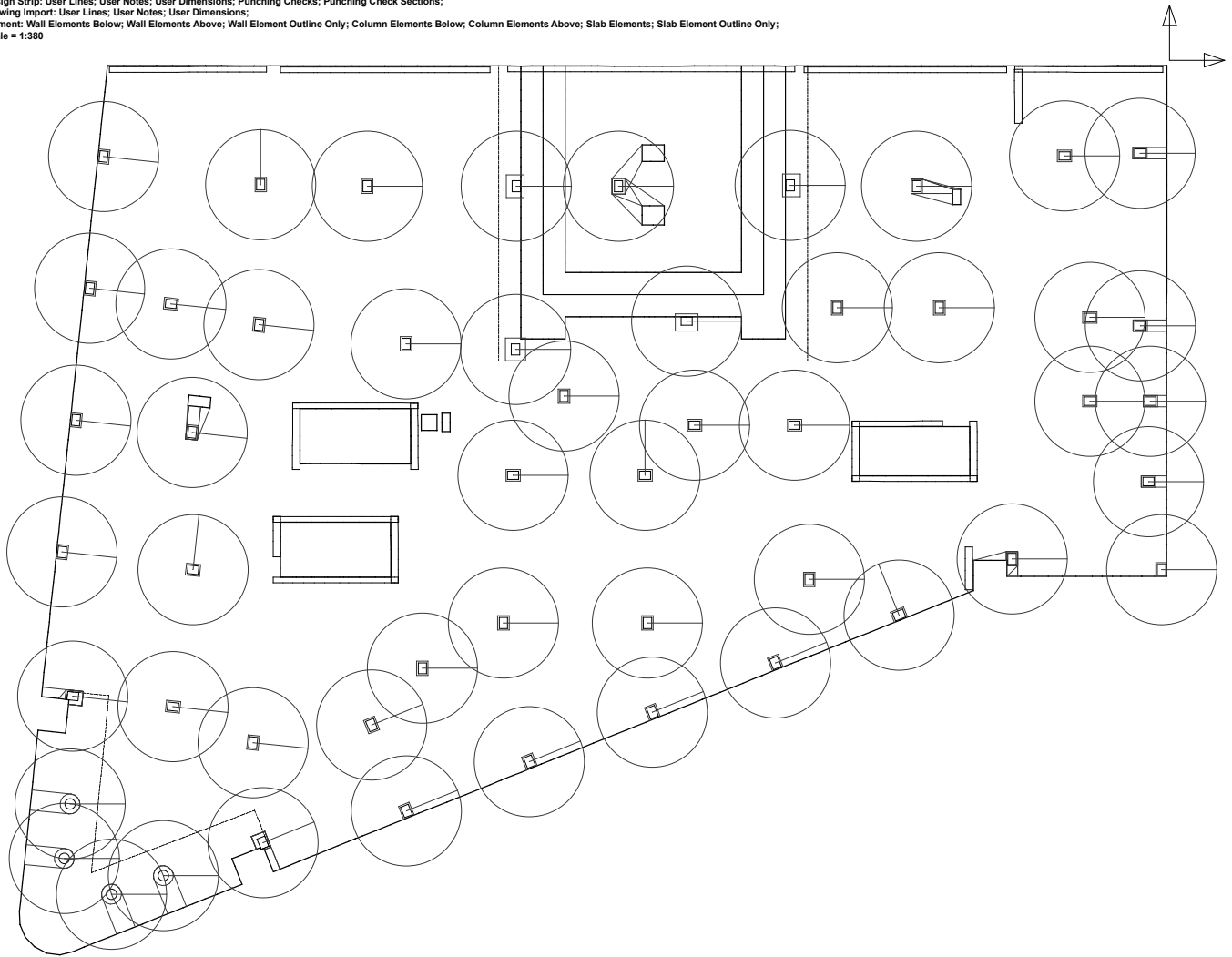
Design Strip: Longitude Design Spans Plan

Design Strip: Longitude Span Boundaries; Longitude SSSs; Longitude DSs; Longitude Strip Boundaries; Longitude SSSs; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



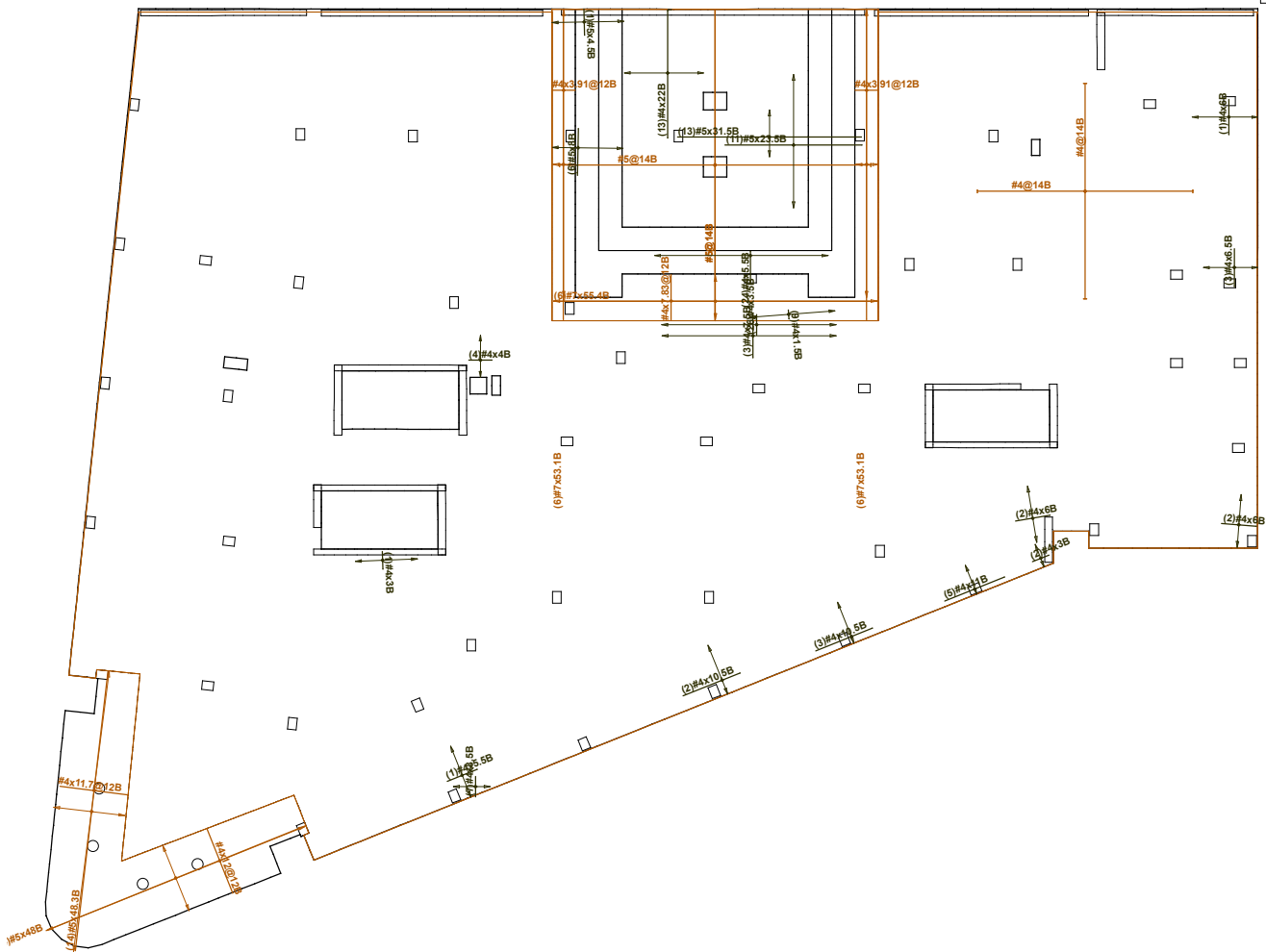
Design Strip: Punching Checks Plan

Design Strip: User Lines; User Notes; User Dimensions; Punching Checks; Punching Check Sections;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



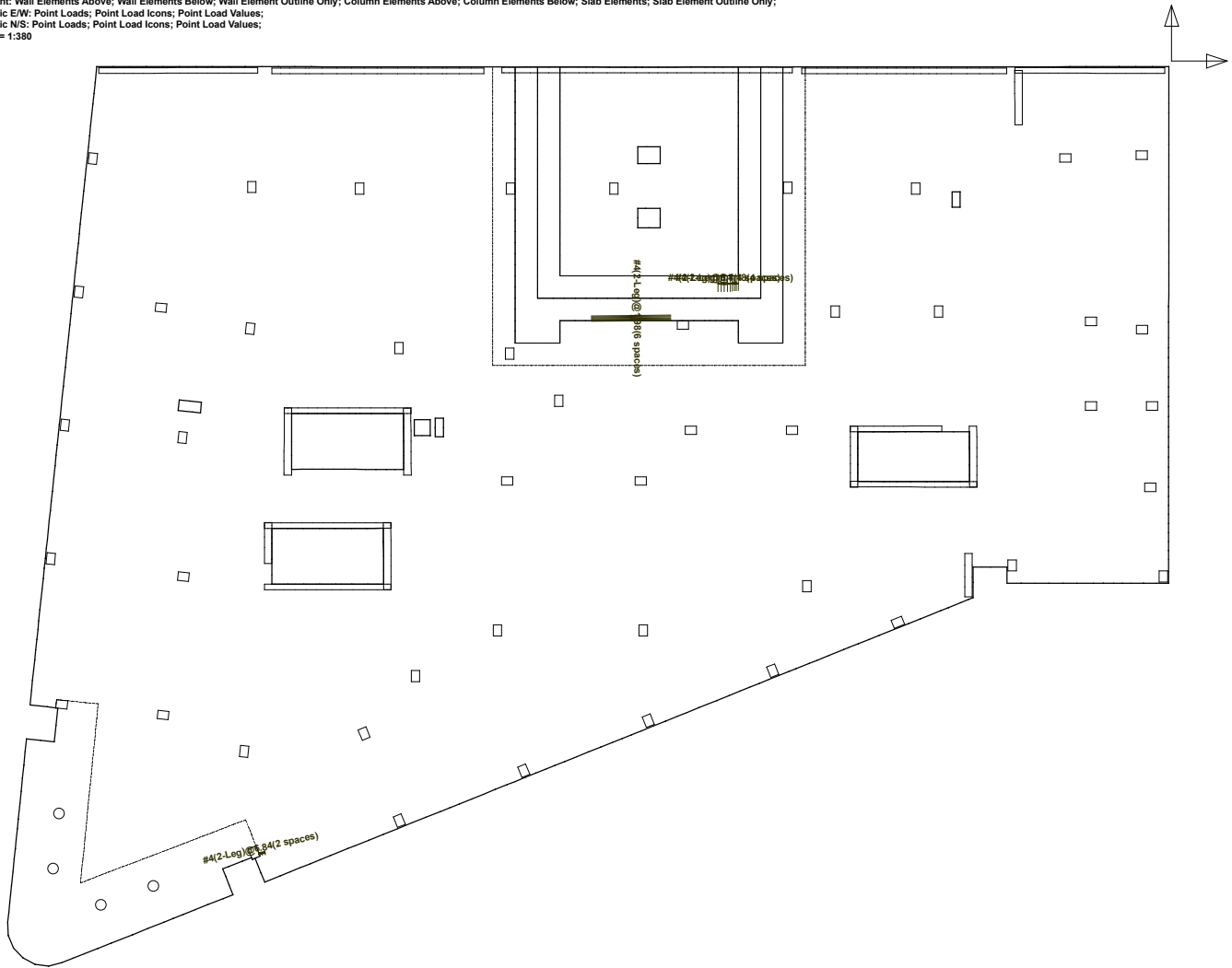
Reinforcement: Bottom Bars Plan

Reinforcement: Latitude User Concentrated Reinf.; Longitude User Concentrated Reinf.; Latitude Program Concentrated Reinf.; Longitude Program Concentrated Reinf.; Bottom Face Concentrated Reinf.; Both Faces Concentrated Reinf.; Concentrated Reinf. Descriptions; Concent Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



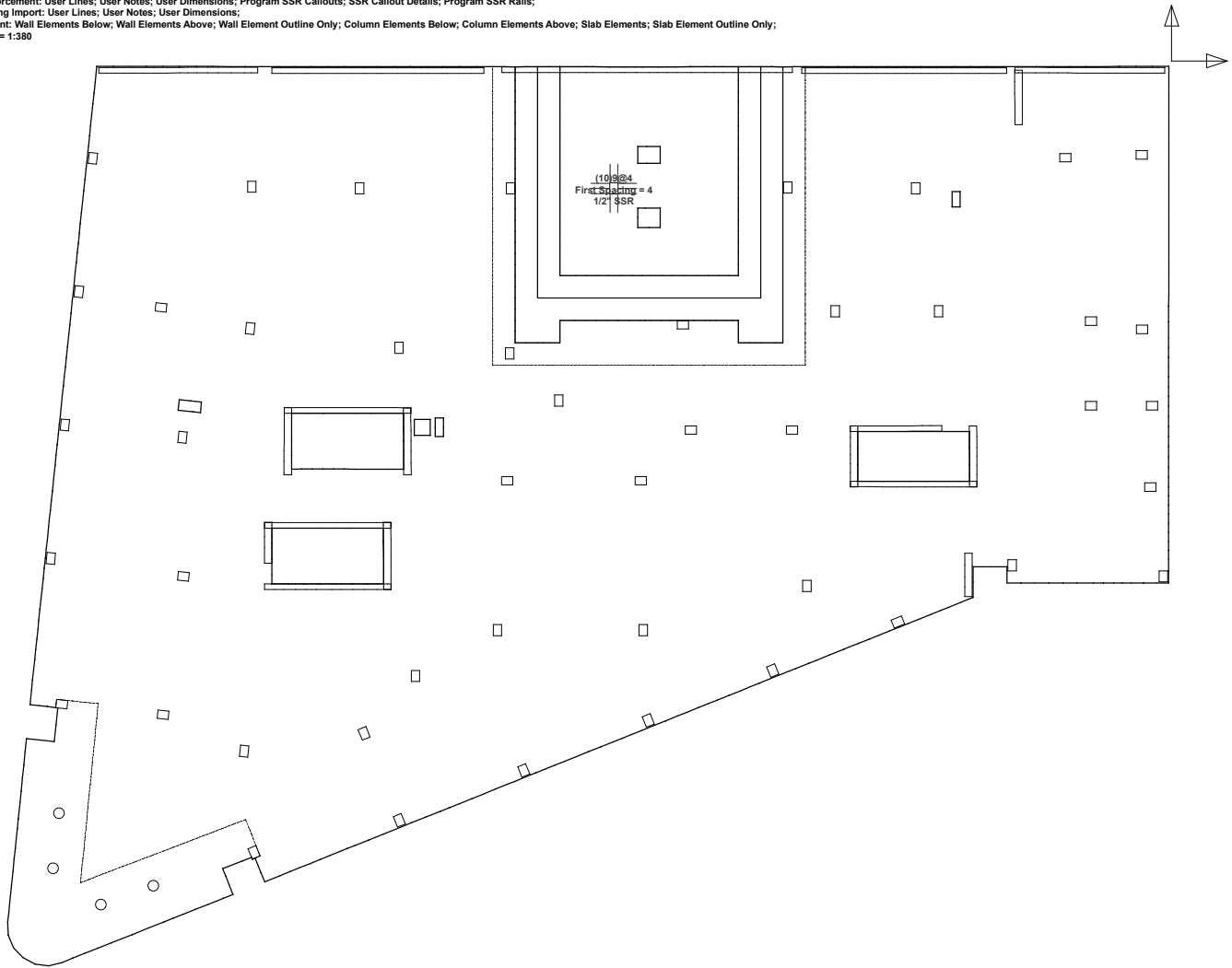
Reinforcement: Shear Bars Plan

Reinforcement: Latitude User Transverse Reinf.; Longitude User Transverse Reinf.; Latitude Program Transverse Reinf.; Longitude Program Transverse Reinf.; Transverse Reinf. Descriptions; Transverse Reinf. Extent; Latitude User Individual Transverse Bars; Longitude User Individual Transverse Bars;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Seismic E/W: Point Loads; Point Load Icons; Point Load Values;
 Seismic N/S: Point Loads; Point Load Icons; Point Load Values;
 Scale = 1:380



Reinforcement: SSR Plan

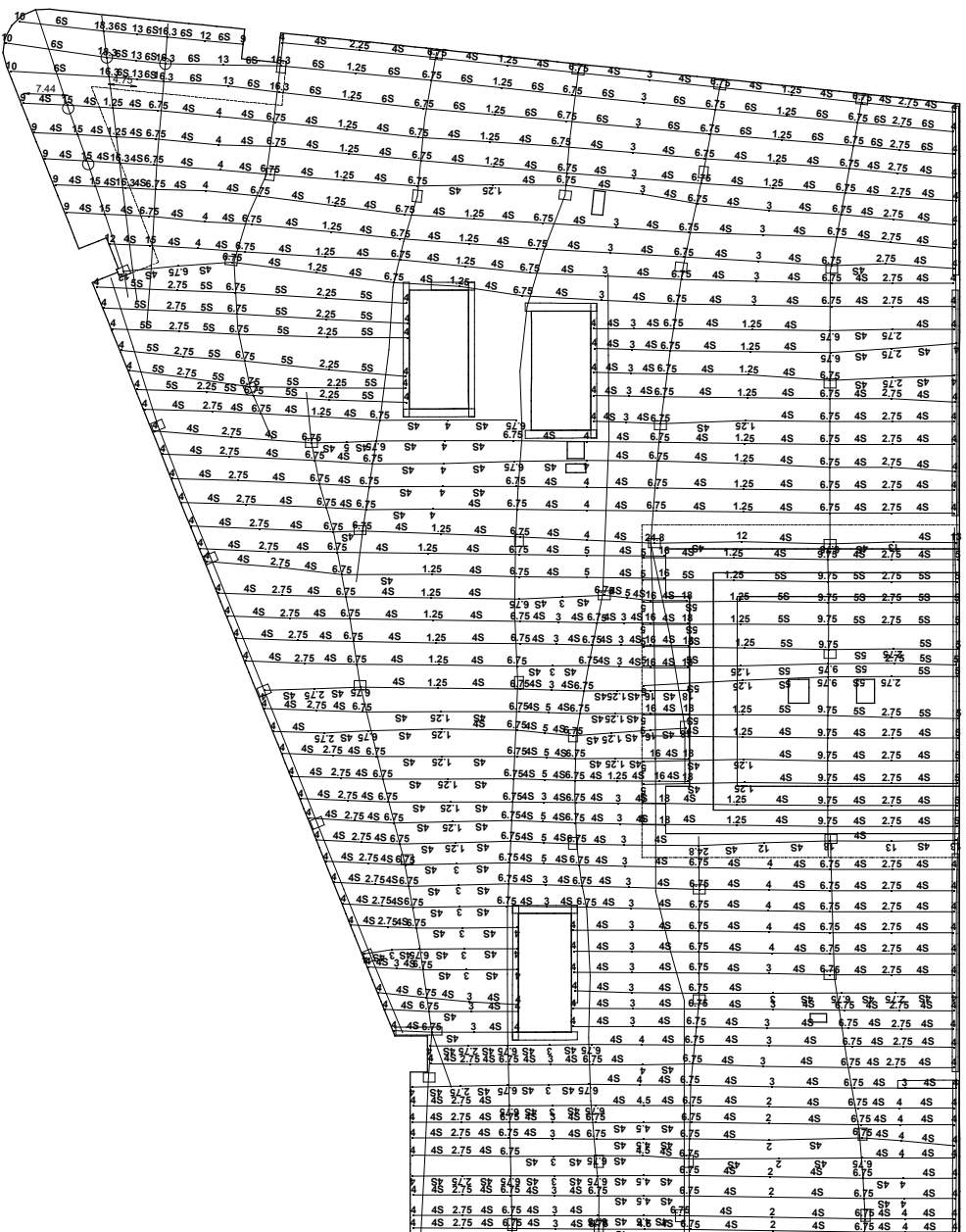
Reinforcement: User Lines; User Notes; User Dimensions; Program SSR Callouts; SSR Callout Details; Program SSR Rails;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:380



[illegible]

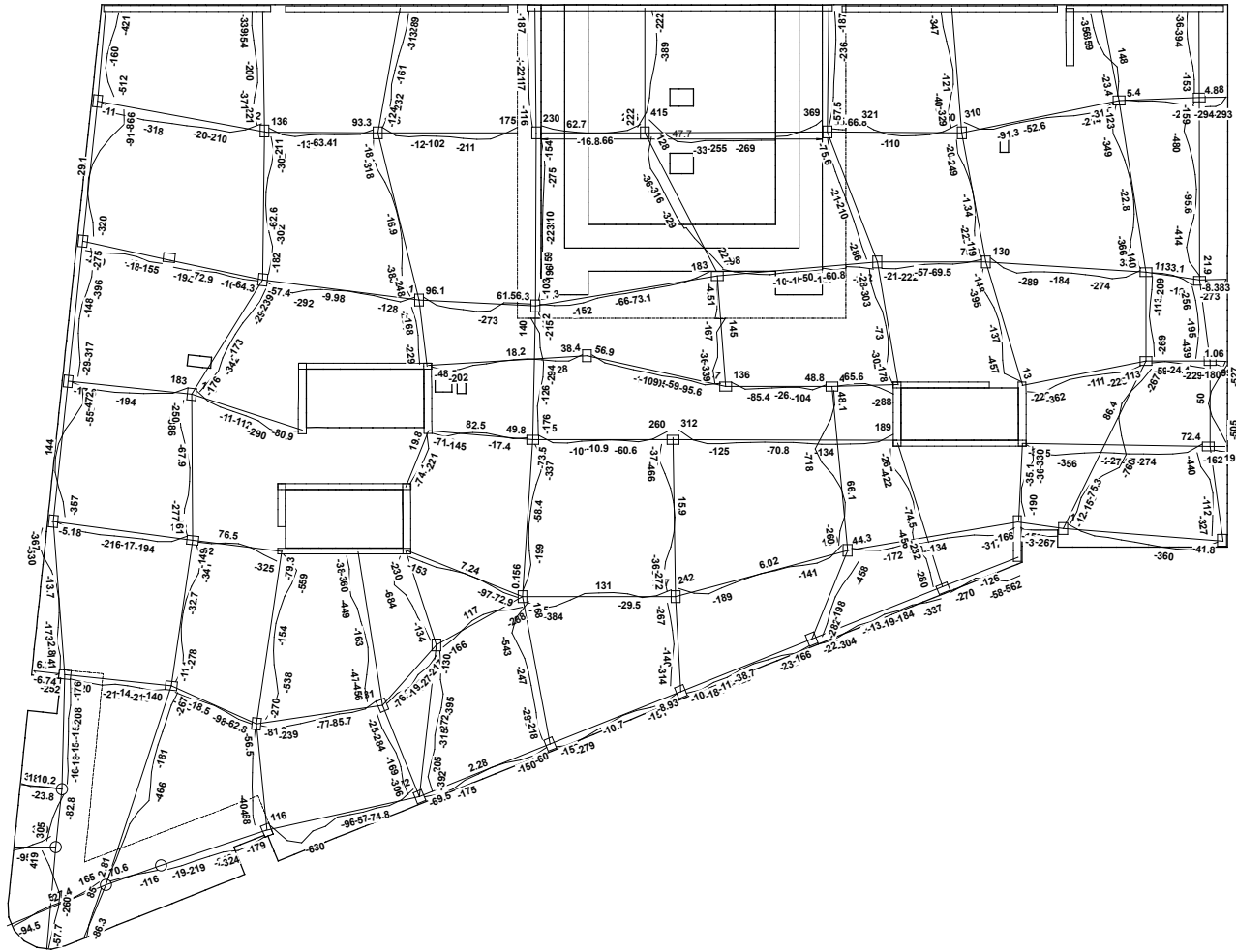
Manual Longitude Tendon: Standard Plan

Manual Longitude Tendon: Tendons, Num Strands, Jacks, Tendon Points, Profile Values, User Notes, User Lines, User Dimensions;
Drawing Input: User Lines, User Notes, User Dimensions;
Element: Wall Elements Above Wall Elements Below Wall Element Outline Only; Column Elements Above Column Elements Below; Slab Elements, Slab Element Outline Only;
Manual Latitude Tendon: Tendons, Standard Tendon Description, Distributed Tendon Description, Section Region, Distributed Tendon Overlap Areas; Profile Points, Profile Elevation Values, Profile Notes;
Scale = 1/320



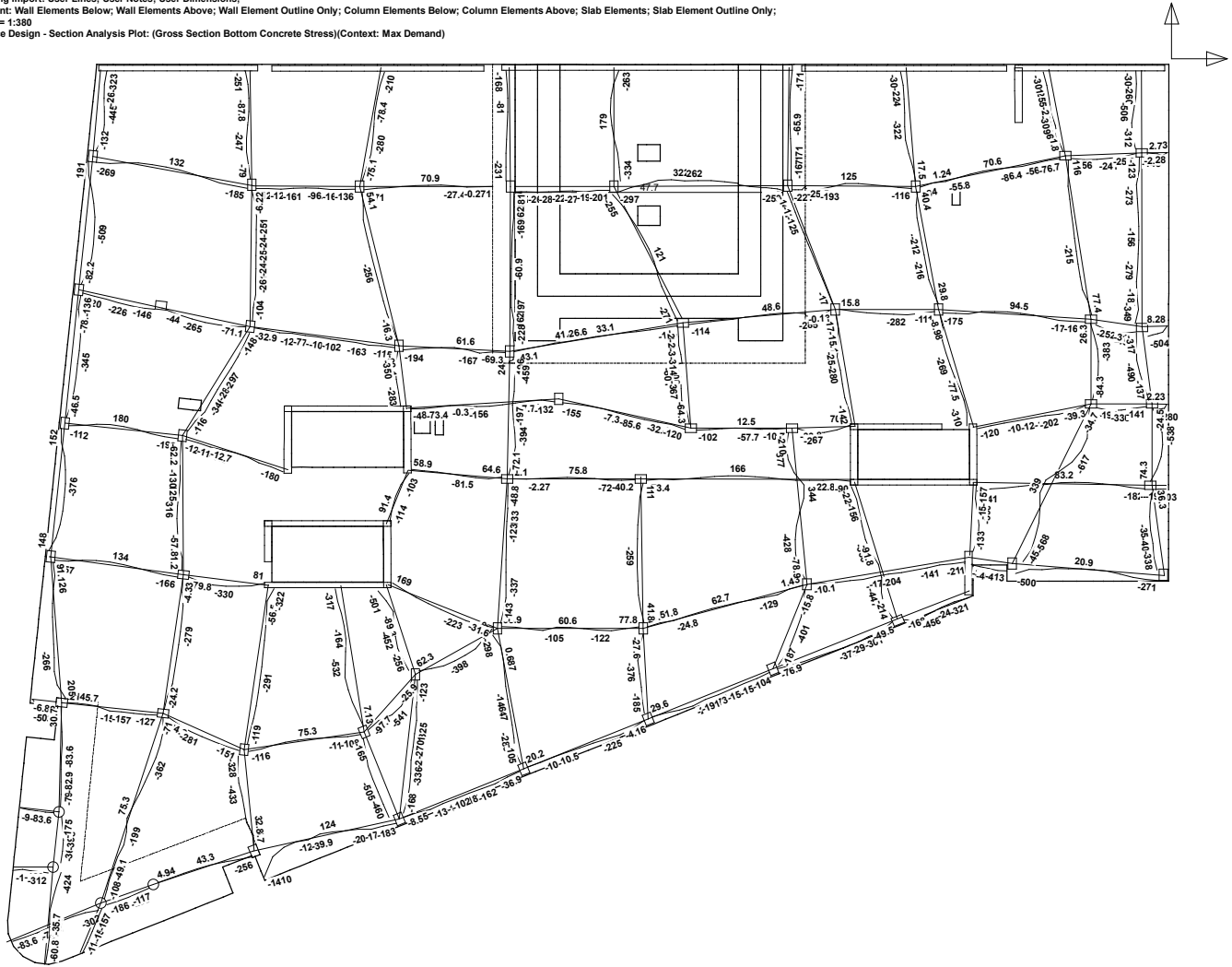
Service Design: Top Stress Plan

Service Design: User Lines; User Notes; User Dimensions; Latitude Span Designs; Longitude Span Designs; Latitude DS Designs; Longitude DS Designs;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
 Scale = 1:300
 Service Design - Section Analysis Plot: (Gross Section Top Concrete Stress)(Context: Max Demand)



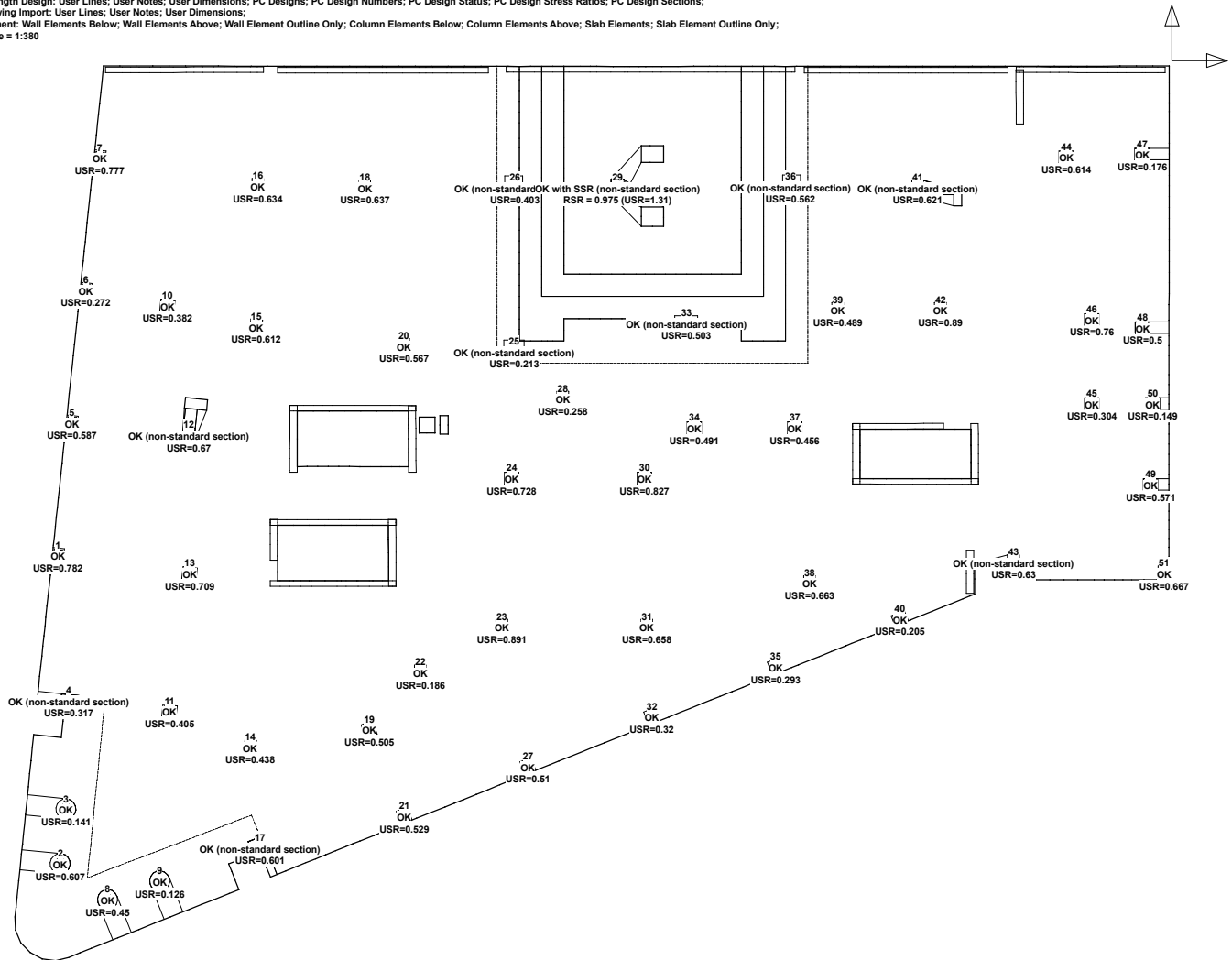
Service Design: Bottom Stress Plan

Service Design: User Lines; User Notes; User Dimensions; Longitude Span Designs; Longitude DS Designs; Latitude DS Designs; Longitude DS Designs;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
 Scale = 1:300
 Service Design - Section Analysis Plot: (Gross Section Bottom Concrete Stress)(Context: Max Demand)



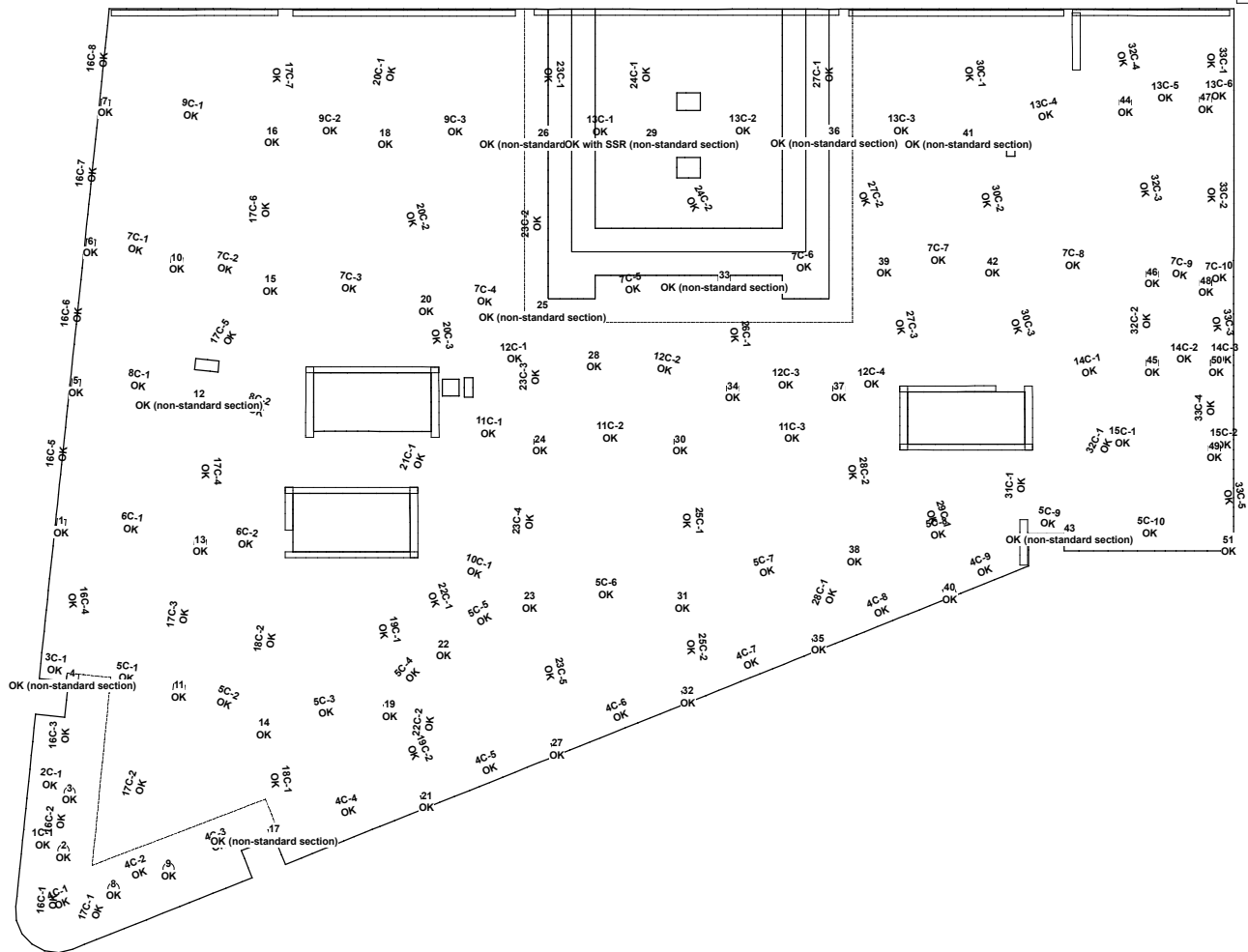
Strength Design: Punching Shear Status Plan

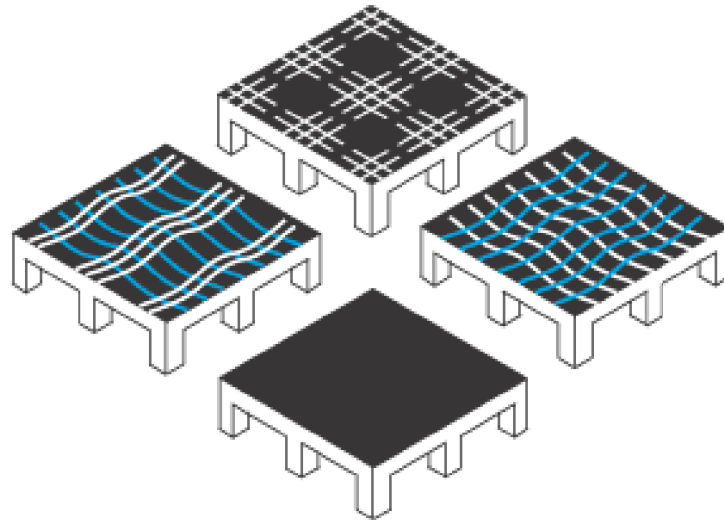
Strength Design: User Lines; User Notes; User Dimensions; PC Designs; PC Design Numbers; PC Design Status; PC Design Stress Ratios; PC Design Sections;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



Design Status: Status Plan

Design Status: Latitude Span Designs; Longitude Span Designs; Span Design Numbers; Span Design Status; Latitude DS Designs; Longitude DS Designs; DS Design Numbers; DS Design Status; PC Designs; PC Design Numbers; PC Design Status; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380





Level 4.46.cpt
10/31/2019

RAM Concept © 2019 Bentley Systems, Inc.
RAM Concept™ is a trademark of Bentley Systems

Table of Contents

Units	4
Signs	5
Materials	6
Loadings	8
Load Combinations	9
Design Rules	15
Detailing Rules	16
Load History	17
Mesh Input: Walls Below Table	18
Mesh Input: Columns Below Table	20
Mesh Input: Slab Areas Table	26
Mesh Input: Beams Table	28
Mesh Input: Standard Plan	30
Other Dead Loading: Point Loads Plan	31
Other Dead Loading: Line Loads Plan	32
Other Dead Loading: Area Loads Plan	33
Live (Unreducible) Loading: Point Loads Plan	34
Live (Unreducible) Loading: Line Loads Plan	35
Live (Unreducible) Loading: Area Loads Plan	36
Live (Unreducible) Loading: Std Reactions Plan	37
Snow Loading: Point Loads Plan	38
Snow Loading: Line Loads Plan	39
Snow Loading: Std Reactions Plan	40
Seismic E/W: Point Loads Plan	41
Seismic E/W: Std Reactions Plan	42
Seismic N/S: Point Loads Plan	43
Seismic N/S: Area Loads Plan	44
Seismic N/S: Std Reactions Plan	45
Service LC: D + L: Max Deflection Plan	46
Service LC: D + L: Min Deflection Plan	47
Service LC: D + L: Reaction Plan	48
Long Term deflection: Max Deflection Plan	49
Design Strip: Latitude SSs Table	50
Design Strip: Longitude SSs Table	66
Design Strip: Latitude SSSs Table	82
Design Strip: Longitude SSSs Table	86
Design Strip: Punching Checks Table	90
Design Strip: Latitude Design Spans Plan	96
Design Strip: Longitude Design Spans Plan	97
Design Strip: Punching Checks Plan	98
Reinforcement: Top Bars Plan	99
Reinforcement: Bottom Bars Plan	100
Reinforcement: Shear Bars Plan	101
Reinforcement: SSR Plan	102
Manual Latitude Tendon: Standard Plan	103
Manual Longitude Tendon: Standard Plan	104
Service Design: Top Stress Plan	105
Service Design: Bottom Stress Plan	106

Table of Contents (2)

Strength Design: Punching Shear Status Plan 107

Design Status: Status Plan 108

Units

Geometry Unit:

Plan Dimensions: feet
Angles: degrees

Slab Thickness: inches
Elevations: inches

Support Dimensions: inches
Support Height: feet

Loading and Reaction Unit

Point Force: Kips
- Report As Zero: 0 Kips
Point Moment: kip-ft
- Report As Zero: 0 kip-ft

Line Force: kips/ft
- Report As Zero: 0 kips/ft
Line Moment: Kips
- Report As Zero: 0 Kips

Area Force: psf
- Report As Zero: 0 psf
Area Moment: #/foot
- Report As Zero: 0 #/foot

Spring and Stiffness Unit:

Point Force Spring: kips/in
Point Moment Spring: k-ft/°

Line Force Spring: ksi
Line Moment Spring: k/°

Area Force Spring: pci
Area Moment Spring: k/ft°

Slab Analysis Unit:

Force: Kips
- Report As Zero: 0 Kips
Force Per Width: kips/ft
- Report As Zero: 0 kips/ft

Moment: kip-ft
- Report As Zero: 0 kip-ft
Moment Per Width: Kips
- Report As Zero: 0 Kips

Concrete Stress: psi
- Report As Zero: 0 psi
Deflection: inches
- Report As Zero: 0 inches

Materials Unit:

Concrete Volume: yd³
Reinforcement Weight: tons
PT Weight: pounds

Reinforcing Area: in²
Tendon Profile: inches
Cover: inches

PT Force: Kips
Reinforcing Stress: ksi

Miscellaneous Unit:

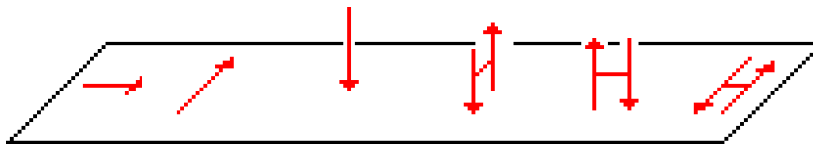
Floor Area: ft²
Tendon Angles (for friction): radians

Density: pcf

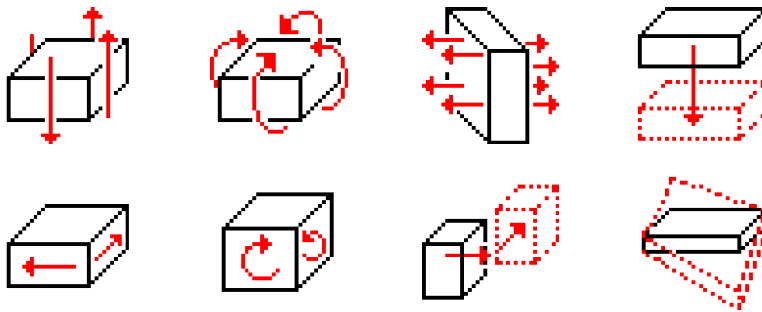
Elongations: inches

Signs

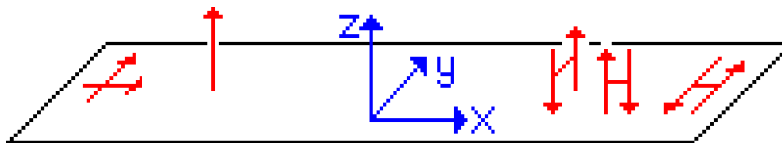
Positive Loads



Positive Analysis



Positive Reactions



Materials

Concrete Mix

Mix Name	Density (pcf)	Density For Loads (pcf)	f_{ci} (psi)	f'_c (psi)	f_{cui} (psi)	f_{cu} (psi)	Poissons Ratio	Ec Calc	User Eci (psi)	User Ec (psi)
3000 psi	150	150	3000	3000	3725	3725	0.2	Code	2500000	3000000
4000 psi	150	150	3000	4000	3725	4975	0.2	Code	2500000	3000000
5000 psi	150	150	3000	5000	3725	6399	0.2	Code	2500000	3000000
6000 psi	150	150	3000	6000	3725	7450	0.2	Code	2500000	3000000

PT Systems

System Name	Type	A_{ps} (in ²)	E_{ps} (ksi)	f_{se} (ksi)	f_{py} (ksi)	f_{pu} (ksi)	Duct Width (inches)	Strands Per Duct	Min Radius (feet)
½" Unbonded	unbonded	0.153	28000	175	243	270	0.5	1	6
½" Bonded	bonded	0.153	28000	160	243	270	3	4	6
0.6" Unbonded	unbonded	0.217	28000	175	243	270	0.6	1	8
0.6" Bonded	bonded	0.217	28000	160	243	270	4	4	8

PT Stressing Parameters

System Name	Jacking Stress (ksi)	Seating Loss (inches)	Anchor Friction	Wobble Friction (1/feet)	Angular Friction (1/radians)	Long-Term Losses (ksi)
½" Unbonded	216	0.25	0	0.0014	0.07	22
½" Bonded	216	0.25	0.02	0.001	0.2	22
0.6" Unbonded	216	0.25	0	0.0014	0.07	22
0.6" Bonded	216	0.25	0.02	0.001	0.2	22

Reinforcing Bars

Bar Name	A_s (in ²)	E_s (ksi)	F_y (ksi)	Coating	Straight Ld/Db	90 Hook Ld/Db	180 Hook Ld/Db
#3	0.11	29000	60	None	Code	Code	Code
#4	0.2	29000	60	None	Code	Code	Code
#5	0.31	29000	60	None	Code	Code	Code
#6	0.44	29000	60	None	Code	Code	Code
#7	0.6	29000	60	None	Code	Code	Code
#8	0.79	29000	60	None	Code	Code	Code
#9	1	29000	60	None	Code	Code	Code
#10	1.27	29000	60	None	Code	Code	Code
#11	1.56	29000	60	None	Code	Code	Code

Materials (2)

SSR Systems

<i>SSR System Name</i>	<i>Stud Area (in²)</i>	<i>Head Area (in²)</i>	<i>Min Clear Head Spacing (inches)</i>	<i>Specified Stud Spacing (inches)</i>	<i>Fy (ksi)</i>	<i>Stud Spacing Rounding Increment (inches)</i>	<i>Min Studs Per Rail</i>	<i>System Type</i>
3/8" SSR	0.11	1.11	0.5	None	50	0.25	2	Rail
1/2" SSR	0.196	1.96	0.5	None	50	0.25	2	Rail
5/8" SSR	0.307	3.07	0.5	None	50	0.25	2	Rail
3/4" SSR	0.442	4.42	0.5	None	50	0.25	2	Rail
Ancon Shearfix Auto-Size	0.217	1.096	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 10 mm	0.1217	1.096	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 12 mm	0.1753	1.578	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 14 mm	0.2386	2.147	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 16 mm	0.3116	2.805	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 20 mm	0.4869	4.383	0.5906	None	72.52	0.03937	2	Rail
Ancon Shearfix 24 mm	0.7012	6.311	0.5906	None	72.52	0.03937	2	Rail

Loadings

<i>Loading Name</i>	<i>Type</i>	<i>Analysis</i>	<i>On-Pattern Factor</i>	<i>Off-Pattern Factor</i>
Self-Dead Loading	Self-Weight	Normal	1	1
Balance Loading	Balance	Normal	1	1
Hyperstatic Loading	Hyperstatic	Hyperstatic	1	1
Temporary Construction (At Stressing) Loading	Stressing Dead	Normal	1	1
Other Dead Loading	Dead	Normal	1	1
Live (Reducible) Loading	Live (Reducible)	Normal	1	0
Live (Unreducible) Loading	Live (Unreducible)	Normal	1	0
Live (Storage) Loading	Live (Storage)	Normal	1	0
Live (Parking) Loading	Live (Parking)	Normal	1	0
Live (Roof) Loading	Live (Roof)	Normal	1	0
Snow Loading	Snow	Normal	1	1
Seismic E/W	Ultimate Seismic 1 (transfer)	Normal	1	0
Seismic N/S	Ultimate Seismic 1 (transfer)	Normal	1	0

Load Combinations

All Dead LC

Active Design Criteria: <none>

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Other Dead Loading	1	1

Dead + Balance LC

Active Design Criteria: <none>

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1

Initial Service LC

Active Design Criteria: Initial Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1.13	1.13
Temporary Construction (At Stressing) Loading	1	1

Service LC: D + L

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Reducible) Loading	1	0
Live (Unreducible) Loading	1	0
Live (Storage) Loading	1	0
Live (Parking) Loading	1	0

Service LC: D + Lr

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Roof) Loading	1	0

Load Combinations (2)

Service LC: D + S

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Snow Loading	1	0

Service LC: D + 0.75L + 0.75Lr

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Reducible) Loading	0.75	0
Live (Unreducible) Loading	0.75	0
Live (Storage) Loading	0.75	0
Live (Parking) Loading	0.75	0
Live (Roof) Loading	0.75	0

Service LC: D + 0.75L + 0.75S

Active Design Criteria: User Minimum Design, Code Minimum Design, Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Reducible) Loading	0.75	0
Live (Unreducible) Loading	0.75	0
Live (Storage) Loading	0.75	0
Live (Parking) Loading	0.75	0
Snow Loading	0.75	0

Sustained Service LC

Active Design Criteria: Sustained Service Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1	1
Balance Loading	1	1
Other Dead Loading	1	1
Live (Reducible) Loading	0.5	0.5
Live (Unreducible) Loading	0.5	0.5
Live (Storage) Loading	1	1
Live (Parking) Loading	0.5	0.5
Live (Roof) Loading	0.5	0.5

Load Combinations (3)

Factored LC: 1.4D

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.4	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.4	0.9

Factored LC: 1.2D + 1.6L + 0.5Lr

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.2	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.2	0.9
Live (Reducible) Loading	1.6	0
Live (Unreducible) Loading	1.6	0
Live (Storage) Loading	1.6	0
Live (Parking) Loading	1.6	0
Live (Roof) Loading	0.5	0

Factored LC: 1.2D + f1L + 1.6Lr

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.2	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.2	0.9
Live (Reducible) Loading	0.5	0
Live (Unreducible) Loading	1	0
Live (Storage) Loading	1	0
Live (Parking) Loading	1	0
Live (Roof) Loading	1.6	0

Factored LC: 1.2D + 1.6L + 0.5S

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.2	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.2	0.9
Live (Reducible) Loading	1.6	0
Live (Unreducible) Loading	1.6	0
Live (Storage) Loading	1.6	0
Live (Parking) Loading	1.6	0
Snow Loading	0.5	0

Load Combinations (4)

Factored LC: $1.2D + f1L + 1.6S$

Active Design Criteria: User Minimum Design, Code Minimum Design, Strength Design, Ductility Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.2	0.9
Hyperstatic Loading	1	1
Other Dead Loading	1.2	0.9
Live (Reducible) Loading	0.5	0
Live (Unreducible) Loading	1	0
Live (Storage) Loading	1	0
Live (Parking) Loading	1	0
Snow Loading	1.6	0

Long Term deflection

Active Design Criteria: <none>

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	3.35	3.35
Balance Loading	3.35	3.35
Other Dead Loading	3.35	3.35
Live (Unreducible) Loading	2	2
Snow Loading	1	1

Earthquake N-S: $(1.2+.2*Sds)D + 2.5E + 0.5L+0.2S$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.344	1.344
Hyperstatic Loading	1	1
Other Dead Loading	1.344	1.344
Live (Unreducible) Loading	0.5	0.5
Snow Loading	0.2	0.2
Seismic N/S	2.5	2.5

Earthquake N-S: $(0.9-0.2*Sds)D + 2.5E$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.756	0.756
Hyperstatic Loading	1	1
Other Dead Loading	0.756	0.756
Seismic N/S	2.5	2.5

Load Combinations (5)

Earthquake E-W: $(1.2+0.2*S_{ds})D + 2.5E + 0.5L+0.2S$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.344	1.344
Hyperstatic Loading	1	1
Other Dead Loading	1.344	1.344
Live (Unreducible) Loading	0.5	0.5
Snow Loading	0.2	0.2
Seismic E/W	2.5	2.5

Earthquake E-W: $(0.9-0.2*S_{ds})D + 2.5E$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.756	0.756
Hyperstatic Loading	1	1
Other Dead Loading	0.756	0.756
Seismic E/W	2.5	2.5

Earthquake N-S: $(1.2+0.2*S_{ds})D - 2.5E + .5L + 0.2S$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.344	1.344
Hyperstatic Loading	1	1
Other Dead Loading	1.344	1.344
Live (Unreducible) Loading	0.5	0.5
Snow Loading	0.2	0.2
Seismic N/S	-2.5	-2.5

Earthquake N-S: $(0.9-0.2*S_{ds})D - 2.5E$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.756	0.756
Hyperstatic Loading	1	1
Other Dead Loading	0.756	0.756
Seismic N/S	-2.5	-2.5

Load Combinations (6)

Earthquake E-W: $(1.2+0.2*Sds)D - 2.5E + .5L + 0.2S$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	1.344	1.344
Hyperstatic Loading	1	1
Other Dead Loading	1.344	1.344
Live (Unreducible) Loading	0.5	0.5
Snow Loading	0.2	0.2
Seismic E/W	-2.5	-2.5

Earthquake E-W: $(0.9-0.2*Sds)D - 2.5E$

Active Design Criteria: Strength Design, Code Minimum Design, User Minimum Design

Analysis: Linear

<i>Loading</i>	<i>Standard Factor</i>	<i>Alt. Envelope Factor</i>
Self-Dead Loading	0.756	0.756
Hyperstatic Loading	1	1
Other Dead Loading	0.756	0.756
Seismic E/W	-2.5	-2.5

Design Rules

Code Minimum Design

318-11 Min. Reinforcement

User Minimum Design

Specified Min. Reinforcement

Initial Service Design

318-11 Initial Service Design

Service Design

318-11 Service Design

Include detailed section analysis

Sustained Service Design

318-11 Sustained Service Design

Strength Design

318-11 Strength Design

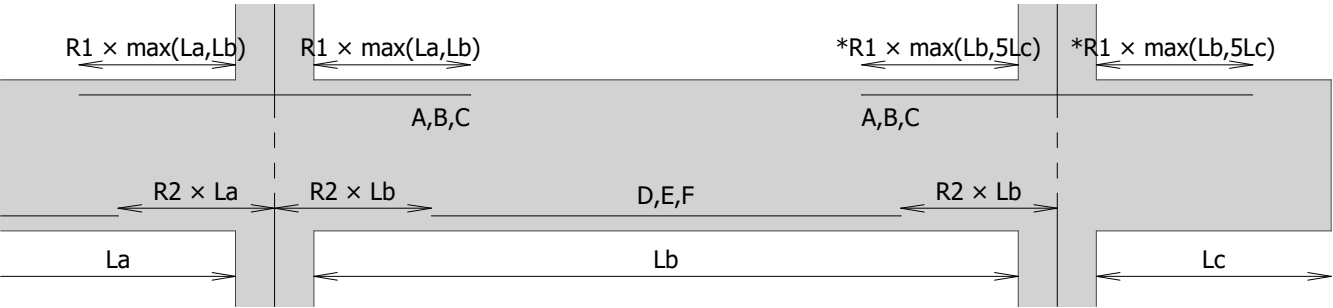
Punching Shear Design

Ductility Design

318-11 Ductility Design

Detailing Rules

Custom Span Detailing Rules



Rule	A	A	B	B	C	C	D	D	E	E	F	F
Name	Fraction	R1	Fraction	R1	Fraction	R1	Fraction	R2	Fraction	R2	Fraction	R2
None	0	0	0	0	0	0	0	0	0	0	0	0

"A", "B" and "C", are support reinforcement sets, based on the peak reinforcement in the support zone.
"D", "E" and "F", are span reinforcement sets, based on the peak reinforcement in the span zone.
"*R1" is never taken as greater than 0.2 when multiplied by L_c (or L_{cc}).
"Fraction" is the ratio of set reinforcement to peak reinforcement. It is always in the 0.0 to 1.0 range.

Load History

<i>Load History Step Name</i>	<i>Load Combination</i>	<i>Duration (days)</i>	<i>Total Age (days)</i>
Maximum Short Term Load	Service LC: D + L	30	33
Sustained Load	Sustained Service LC	5000	5033
Final Instantaneous Load	Service LC: D + L	0	5033

Mesh Input: Walls Below Table

<i>Number</i>	<i>Location feet</i>	<i>Mix</i>	<i>Fixed Near</i>	<i>Fixed Far</i>	<i>Comp.</i>	<i>Height feet</i>	<i>Thickness inches</i>
1	(-192.2,-1.583)(-159.3,-40583)psi	40583	false	false	true	10	10
2	(-161.6,-82.57)(-161.6,-60088)psi	60088	false	false	true	10	12
3	(-158,-74.05)(-158,-62.65)00 psi	62.65	false	false	true	10	12
4	(-140.5,-94.13)(-161.6,-60003)psi	60003	false	false	true	10	12
5	(-140.5,-83.15)(-161.6,-60002)psi	60002	false	false	true	10	12
6	(-158,-62.55)(-136.2,-62.55) psi	62.55	false	false	true	10	12
7	(-140.5,-82.57)(-140.5,-60057)psi	60057	false	false	true	10	12
8	(-136.7,-62.55)(-136.7,-60005)psi	60005	false	false	true	10	12
9	(-152,-1.583)(-117.8,-1.583) psi	1.583	false	false	true	10	10
10	(-56.72,-65.28)(-56.72,-60002)psi	60002	false	false	true	10	12
11	(-69.5,-1.552)(-35.53,-14552)psi	14552	false	false	true	10	8
12	(-56.72,-65.78)(-41.18,-60008)psi	60008	false	false	true	10	12
13	(-56.72,-75.7)(-35.72,-5000) psi	5000	false	false	true	10	12
14	(-36.55,-88.08)(-36.55,-60004)psi	60004	false	false	true	10	12
15	(-35.72,-65.28)(-35.72,-60002)psi	60002	false	false	true	10	12
16	(-27.39,-11.56)(-27.39,-10583)psi	10583	false	false	true	10	16
17	(-29.33,-1.583)(-0.66674,-10583)psi	10583	false	false	true	10	10

Mesh Input: Walls Below Table (2)

<i>Shear Wall</i>	<i>Use Spec LLR Params</i>	<i>Spec. LLR Levels</i>	<i>Spec. Trib. Area ft²</i>	<i>Spec. Infl. Area ft²</i>	<i>Max LLR %</i>
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40
true	false	1	0	0	40

Mesh Input: Columns Below Table

<i>Number</i>	<i>Location feet</i>	<i>Mix</i>	<i>Fixed Near</i>	<i>Fixed Far</i>	<i>Comp.</i>	<i>Height feet</i>	<i>B inches</i>	<i>D inches</i>
1	(-207,-153.1)	5000 psi	true	true	true	10	24	18
2	(-200.6,-89.05)	5000 psi	true	true	true	10	18	24
3	(-199.7,-144.9)	5000 psi	true	true	true	10	18	24
4	(-198.6,-115.2)	5000 psi	true	true	true	10	24	18
5	(-198.6,-134.5)	5000 psi	true	true	true	10	24	18
6	(-198,-65.18)	5000 psi	true	true	true	10	18	24
7	(-197.9,-160)	5000 psi	true	true	true	10	18	24
8	(-195.5,-41.31)	5000 psi	true	true	true	10	18	24
9	(-193,-17.44)	5000 psi	true	true	true	10	18	24
10	(-191.4,-151.5)	5000 psi	true	true	true	10	18	24
11	(-180.8,-44.12)	5000 psi	true	true	true	10	18	24
12	(-180.5,-117.1)	5000 psi	true	true	true	10	24	18
13	(-177,-67.39)	5000 psi	true	true	true	10	18	24
14	(-176.8,-92.28)	5000 psi	true	true	true	10	18	24
15	(-165.9,-123.5)	5000 psi	true	true	true	10	18	24
16	(-164.9,-47.89)	5000 psi	true	true	true	10	18	24
17	(-164.6,-22.53)	5000 psi	true	true	true	10	24	18
18	(-164.4,-141.2)	5000 psi	true	true	true	10	18	24
19	(-145.3,-22.83)	5000 psi	true	true	true	10	18	24
20	(-144.5,-120.4)	5000 psi	true	true	true	10	18	24
21	(-138.3,-51.35)	5000 psi	true	true	true	10	18	24
22	(-138.2,-136)	5000 psi	true	true	true	10	18	24
23	(-135.3,-110.1)	5000 psi	true	true	true	10	18	24
24	(-120.6,-101.9)	5000 psi	true	true	true	10	18	24
25	(-118.9,-75.16)	5000 psi	true	true	true	10	24	18
26	(-118.8,-22.8)	5000 psi	true	true	true	10	18	24
27	(-118.4,-52.35)	5000 psi	true	true	true	10	18	24
28	(-115.9,-127)	5000 psi	true	true	true	10	18	24
29	(-109.7,-60.83)	5000 psi	true	true	true	10	18	24
30	(-95,-75.17)	5000 psi	true	true	true	10	18	24
31	(-94.55,-101.9)	5000 psi	true	true	true	10	18	24
32	(-93.65,-118.1)	5000 psi	true	true	true	10	18	24
33	(-87.45,-47.3)	5000 psi	true	true	true	10	24	18
34	(-86.02,-66.08)	5000 psi	true	true	true	10	24	18
35	(-71.38,-109.1)	5000 psi	true	true	true	10	18	24
36	(-68.7,-22.83)	5000 psi	true	true	true	10	18	24
37	(-67.92,-66.08)	5000 psi	true	true	true	10	24	18
38	(-65.26,-94)	5000 psi	true	true	true	10	18	24
39	(-60.2,-44.83)	5000 psi	true	true	true	10	18	24
40	(-48.99,-100.5)	5000 psi	true	true	true	10	18	24
41	(-45.8,-22.83)	5000 psi	true	true	true	10	18	24
42	(-41.7,-44.83)	5000 psi	true	true	true	10	18	24
43	(-28.53,-90.28)	5000 psi	true	true	true	10	18	24
44	(-19.02,-17.34)	5000 psi	true	true	true	10	24	18
45	(-14.46,-46.58)	5000 psi	true	true	true	10	24	18
46	(-14.45,-61.73)	5000 psi	true	true	true	10	24	18

Mesh Input: Columns Below Table (2)

<i>Angle degrees</i>	<i>Roller</i>	<i>I Factor</i>	<i>Use Spec LLR Params</i>	<i>Spec. LLR Levels</i>	<i>Spec. Trib. Area ft²</i>	<i>Spec. Infl. Area ft²</i>
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
22	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
84	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
84	false	1	false	1	0	0
-6	false	1	false	1	0	0
-6	false	1	false	1	0	0
90	false	1	false	1	0	0
22	false	1	false	1	0	0
0	false	1	false	1	0	0
22	false	1	false	1	0	0
0	false	1	false	1	0	0
22	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
22	false	1	false	1	0	0
0	false	1	false	1	0	0
90	false	1	false	1	0	0
0	false	1	false	1	0	0
22	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
22	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
112	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0

Max LLR
%

Mesh Input: Columns Below Table - 22

Mesh Input: Columns Below Table (4)

<i>Number</i>	<i>Location feet</i>	<i>Mix</i>	<i>Fixed Near</i>	<i>Fixed Far</i>	<i>Comp.</i>	<i>Height feet</i>	<i>B inches</i>	<i>D inches</i>
47	(-5.364,-16.83)	5000 psi	true	true	true	10	24	18
48	(-5.313,-48.08)	5000 psi	true	true	true	10	24	18
49	(-3.839,-76.29)	5000 psi	true	true	true	10	24	18
50	(-3.615,-61.75)	5000 psi	true	true	true	10	24	18
51	(-1.469,-92.28)	5000 psi	true	true	true	10	18	24

Mesh Input: Columns Below Table (5)

<i>Angle degrees</i>	<i>Roller</i>	<i>I Factor</i>	<i>Use Spec LLR Params</i>	<i>Spec. LLR Levels</i>	<i>Spec. Trib. Area ft²</i>	<i>Spec. Infl. Area ft²</i>
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0
0	false	1	false	1	0	0

Mesh Input: Columns Below Table (6)

<i>infl. Area</i>	<i>Max LLR</i>
	<u>%</u>
	40
	40
	40
	40
	40

Mesh Input: Slab Areas Table

<i>Number</i>	<i>Location feet</i>	<i>Mix</i>	<i>Thickness inches</i>	<i>TOC inches</i>	<i>Priority</i>	<i>Behavior</i>	<i>R-Axis degrees</i>
1	(-190.7,-158.2)(-168.1,-140.2)(-169.8,-145)(-163.9,-142.7)(-164.8,-140.3)(-193,-150.8)	5000	14	0	5	two-way slab	0
2	(-164.8,-140.3)(-165.4,-140.6)(-164.5,-142.9)(-163.9,-142.7)	5000	14	0	5	two-way slab	0
3	(-123,-25.33)(-118,-25.33)(-118,-20.33)(-123,-20.33)	5000	14	0	5	two-way slab	0
4	(-192.3,-0.7966)(-159,-0.7966)(-159.9,-12.16)(-154.2,-10.67)(-153.2,-0.7966)(-117.5,-0.7966)(-117.5,-50.35)(-109.4,-50.35)(-109.4,-12.16)(-154.2,-10.67)	5000	14	0	5	two-way slab	0

Mesh Input: Slab Areas Table (2)

<i>KMr</i>	<i>KMs</i>	<i>KMrs</i>	<i>KFr</i>	<i>KFs</i>	<i>KVrs</i>
1	1	1	1	1	1
1	1	1	1	1	1
1	1	1	1	1	1
1	1	1	1	1	1

Mesh Input: Beams Table

<i>Number</i>	<i>Location feet</i>	<i>Mix</i>	<i>Thickness inches</i>	<i>TOC inches</i>	<i>Priority</i>	<i>Mesh As Slab</i>	<i>Width inches</i>
1	(-200.8,-115.5)(-195.6,-59.65)(-204.1,-115.2)(-198.9,-64.31)(-197.5,-115.8)(-192.3,-64.99)	500188	11	11	1	true	80
2	(-190.3,-1)(-196.9,-64.55)(-183,-0.9977)(-194.9,-64.76)(-192.3,-0.9984)(-198.9,-64.34)	500188	11	11	1	true	48
3	(-36.79,-92.65)(-163.5,-90.6)(-35.54,-95.92)(-162.2,-146.8)(-38.1,-89.54)(-164.8,-140.3)	500188	11	11	1	true	84
4	(-97.9,-48.85)(-77.42,-48.85)(-97.9,-46.15)(-77.42,-46.35)(-97.9,-51.35)(-77.42,-51.35)	500188	11	11	1	true	60

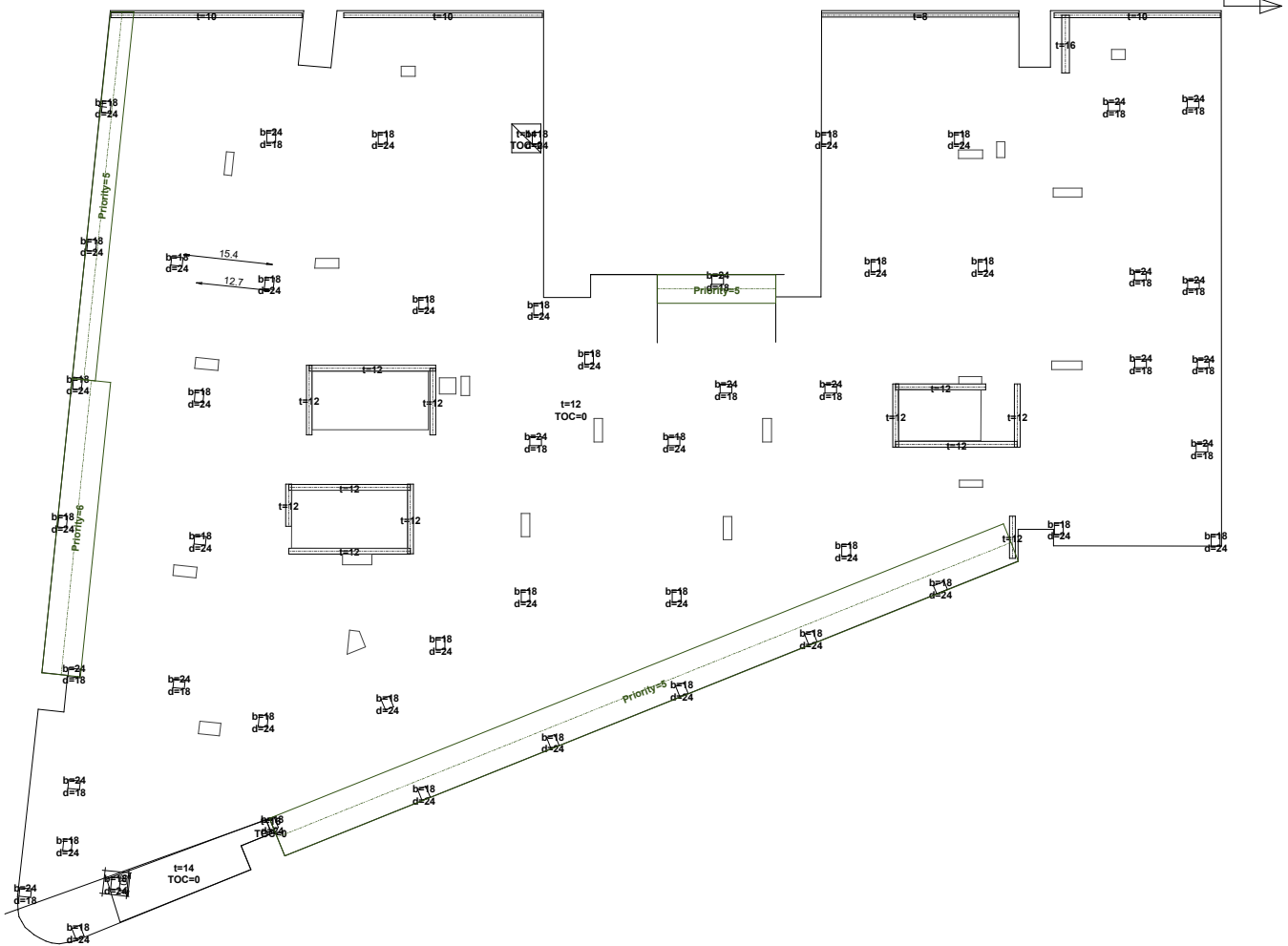
Mesh Input: Beams Table (2)

Width
Inches

<i>Behavior</i>	<i>KMr</i>	<i>KMs</i>	<i>KMr</i>	<i>KFr</i>	<i>KFs</i>	<i>KVrs</i>
no-torsion two-way slab		1	0.001	1	1	1
no-torsion two-way slab		1	0.001	1	1	1
no-torsion two-way slab		1	0.001	1	1	1
no-torsion two-way slab		1	0.001	1	1	1

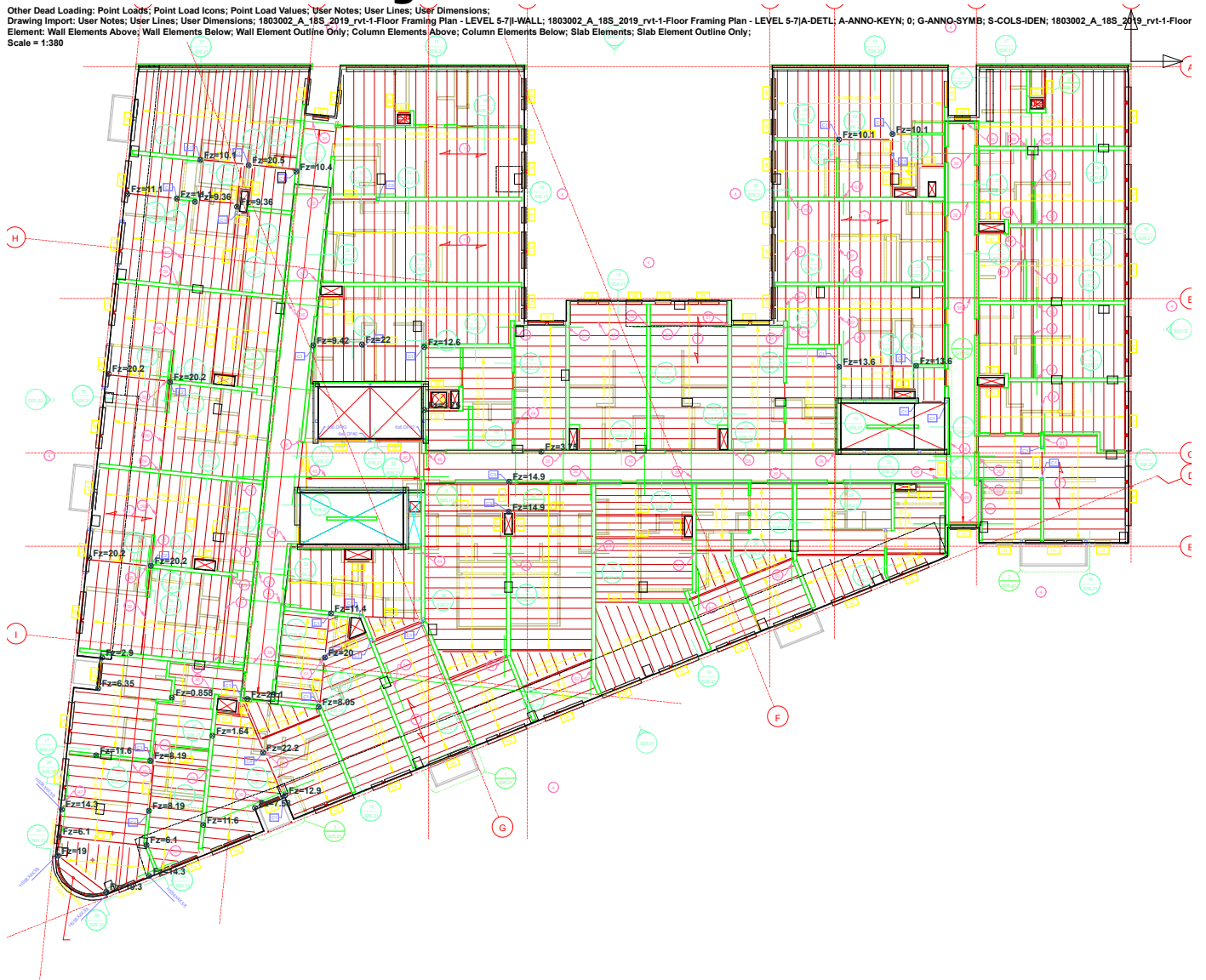
Mesh Input: Standard Plan

Mesh Input: Beams; Beam Priorities; Slab Areas; Slab AreaT thicknesses; Slab Area Elevations; Slab Openings; Point Supports; Point Support Icons; Line Supports; Line Support Icons; Walls Above; Walls Below; Wall Thicknesses; Columns Above; Columns Below; Column Dimen:
Drawing Import: User Lines; User Notes; User Dimensions;
Scale = 1:380



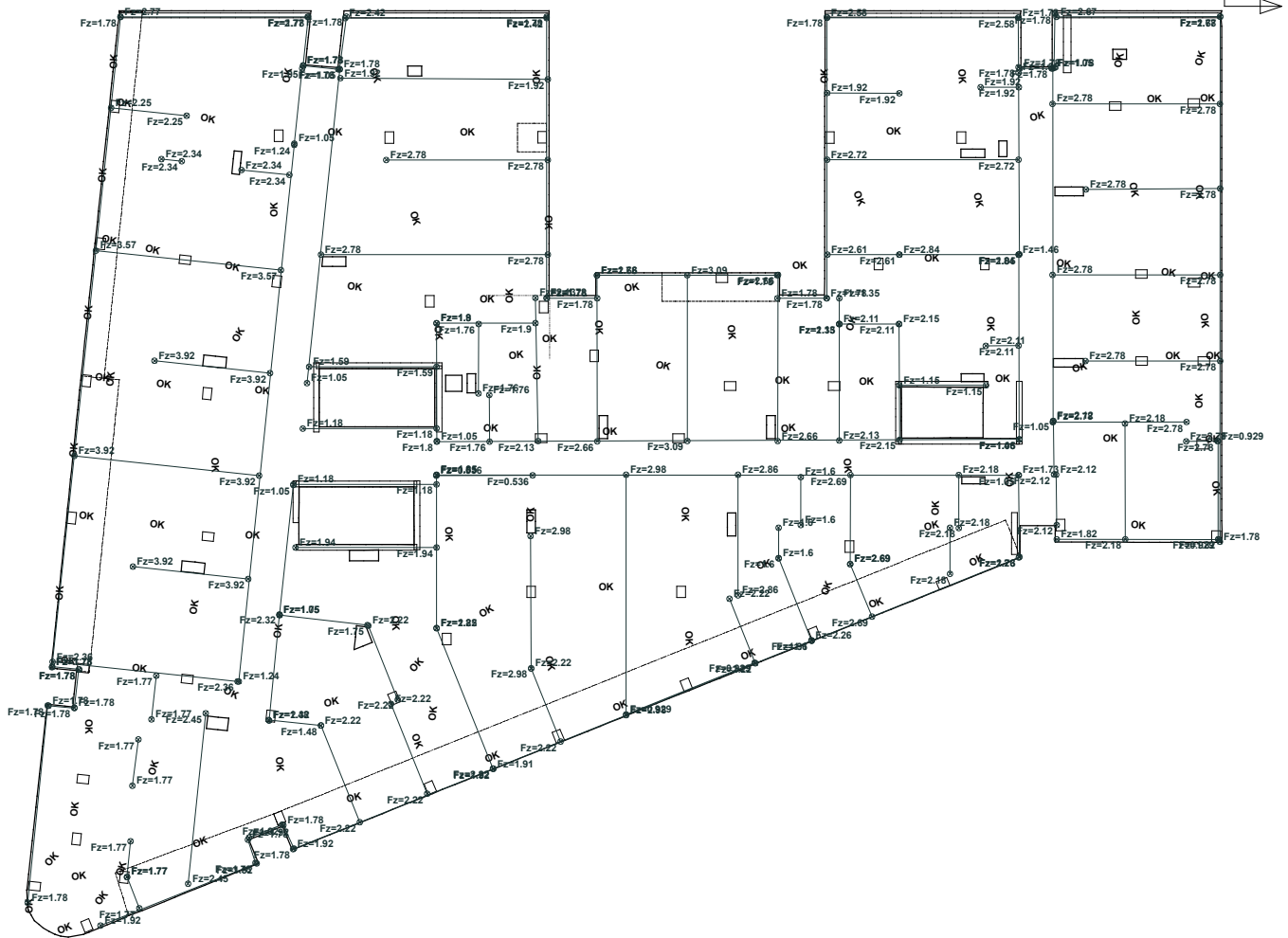
Other Dead Loading: Point Loads Plan

Other Dead Loading: Point Loads; Point Load Icons; Point Load Values; User Notes; User Lines; User Dimensions;
 Drawing Import: User Notes; User Lines; User Dimensions; 1803002_A_18S_2019_rvt-1-Floor Framing Plan - LEVEL 5-7J-WALL; 1803002_A_18S_2019_rvt-1-Floor Framing Plan - LEVEL 5-7J-A-DETL; A-ANNO-KEYN; 0; G-ANNO-SYMB; S-COLS-IDEN; 1803002_A_18S_2019_rvt-1-Floor
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



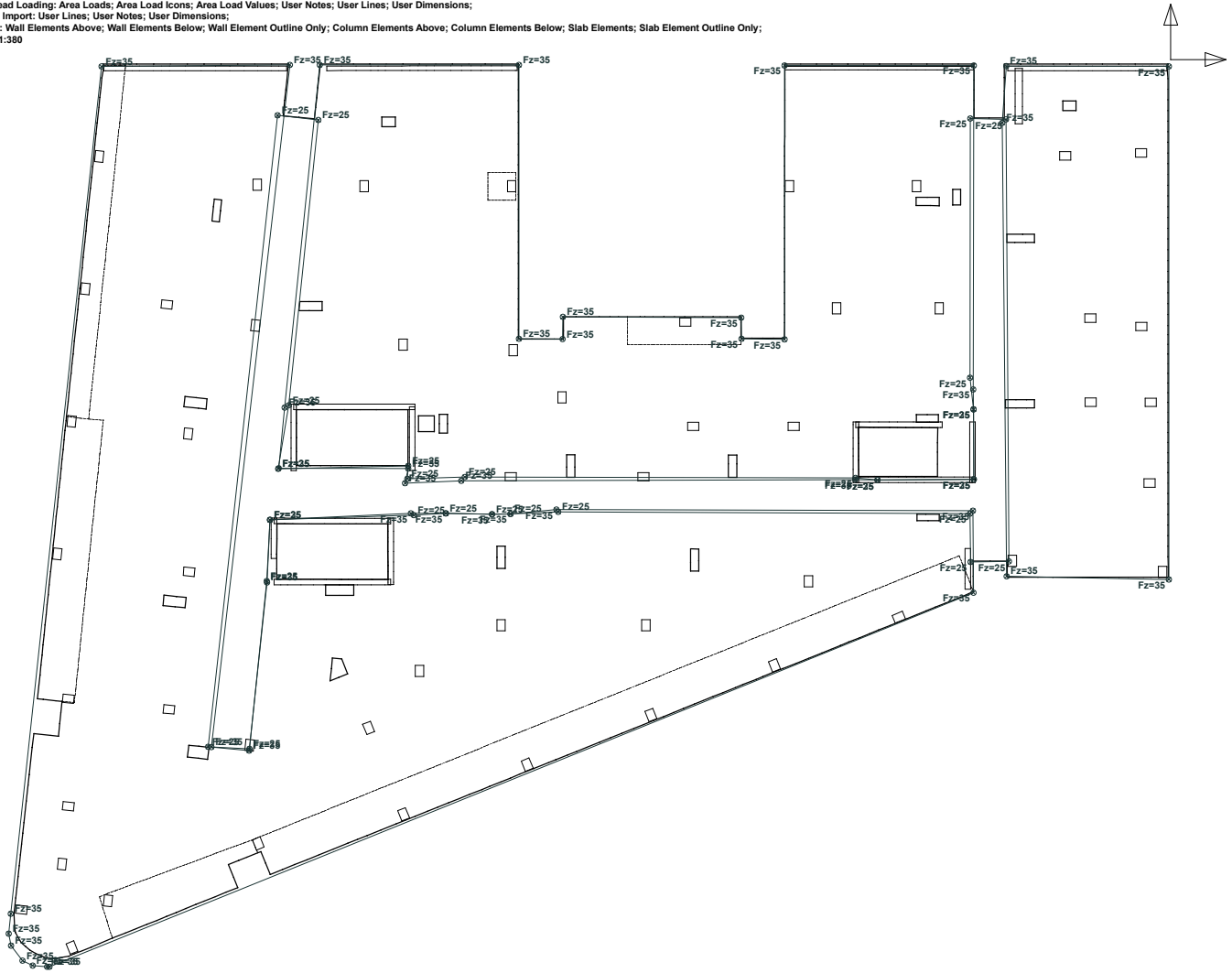
Other Dead Loading: Line Loads Plan

Other Dead Loading: Line Loads; Line Load Icons; Line Load Values; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Design Status: Latitude Span Designs; Longitude Span Designs; Span Design Status; Latitude DS Designs; Longitude DS Designs; DS Design Status;
 Scale = 1:380



Other Dead Loading: Area Loads Plan

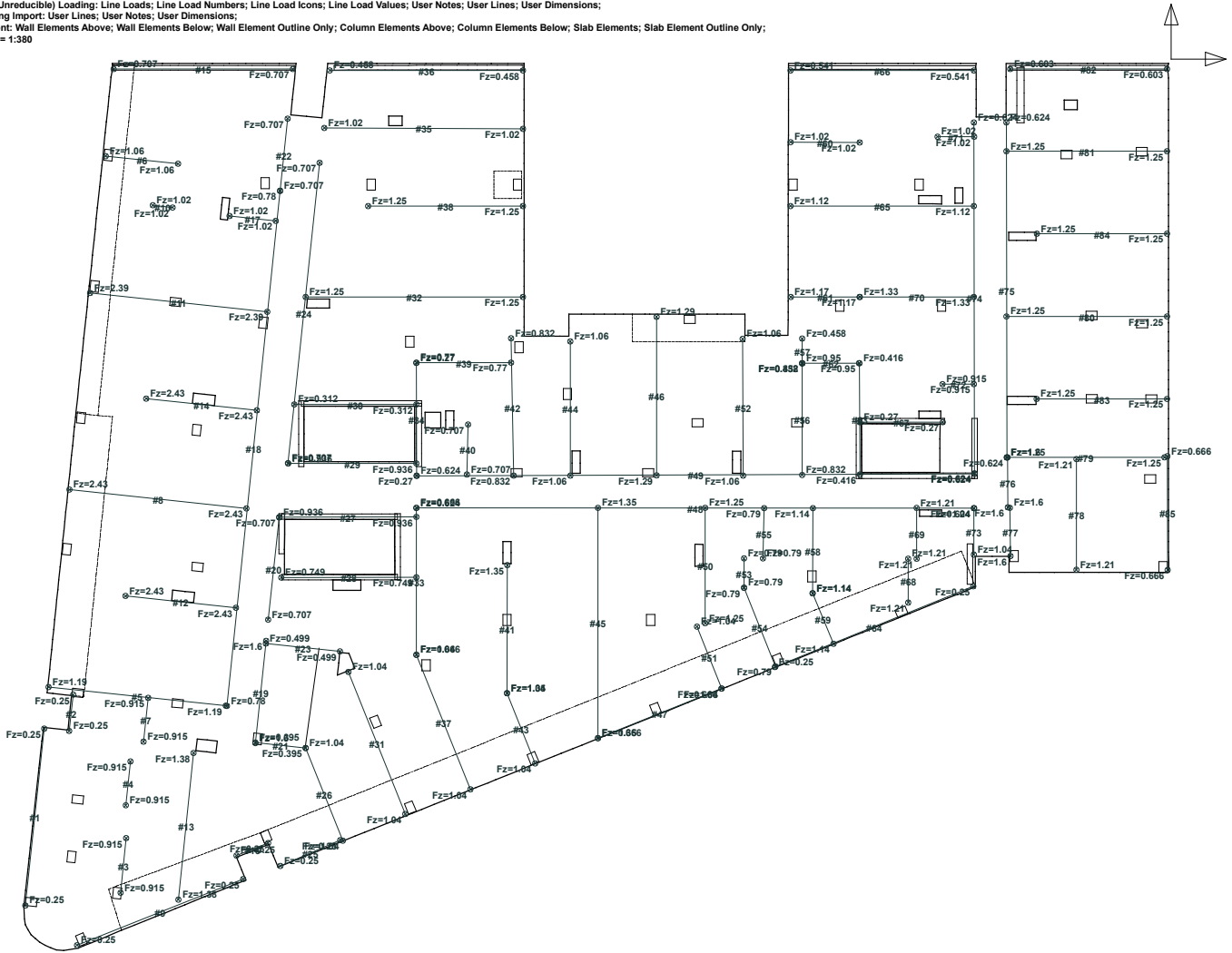
Other Dead Loading: Area Loads; Area Load Icons; Area Load Values; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



[illegible]

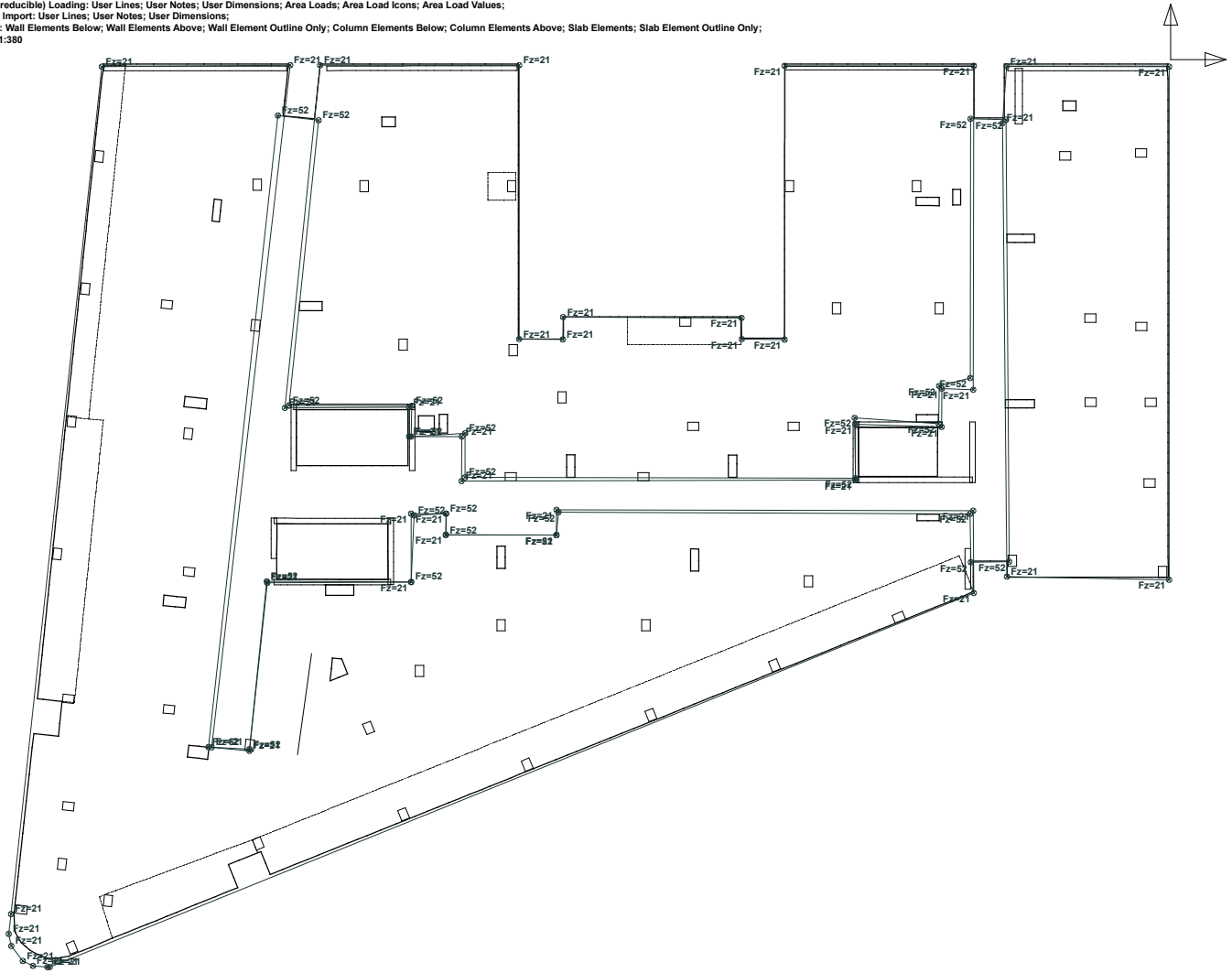
Live (Unreducible) Loading: Line Loads Plan

Live (Unreducible) Loading: Line Loads; Line Load Numbers; Line Load Icons; Line Load Values; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380

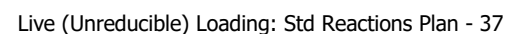


Live (Unreducible) Loading: Area Loads Plan

Live (Unreducible) Loading: User Lines; User Notes; User Dimensions; Area Loads; Area Load Icons; Area Load Values;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
 Scale = 1:380

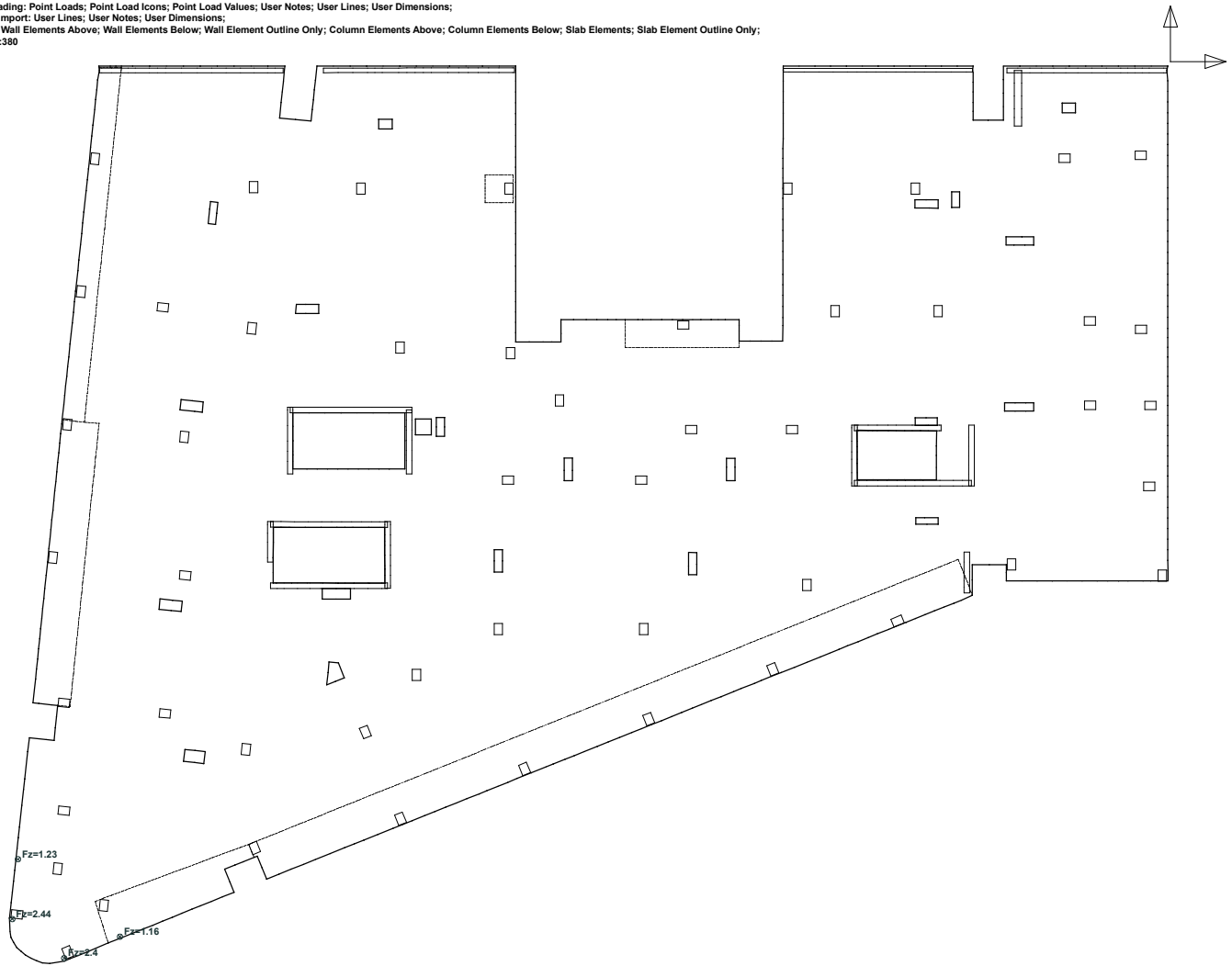


Live (Unreducible) Loading - Reaction Plot: (Wall Beam,Column Below,Point Spring,Line Spring,Point Support,Roller Support)(Fz,Mr,Ms,Mz)(Standard Context)

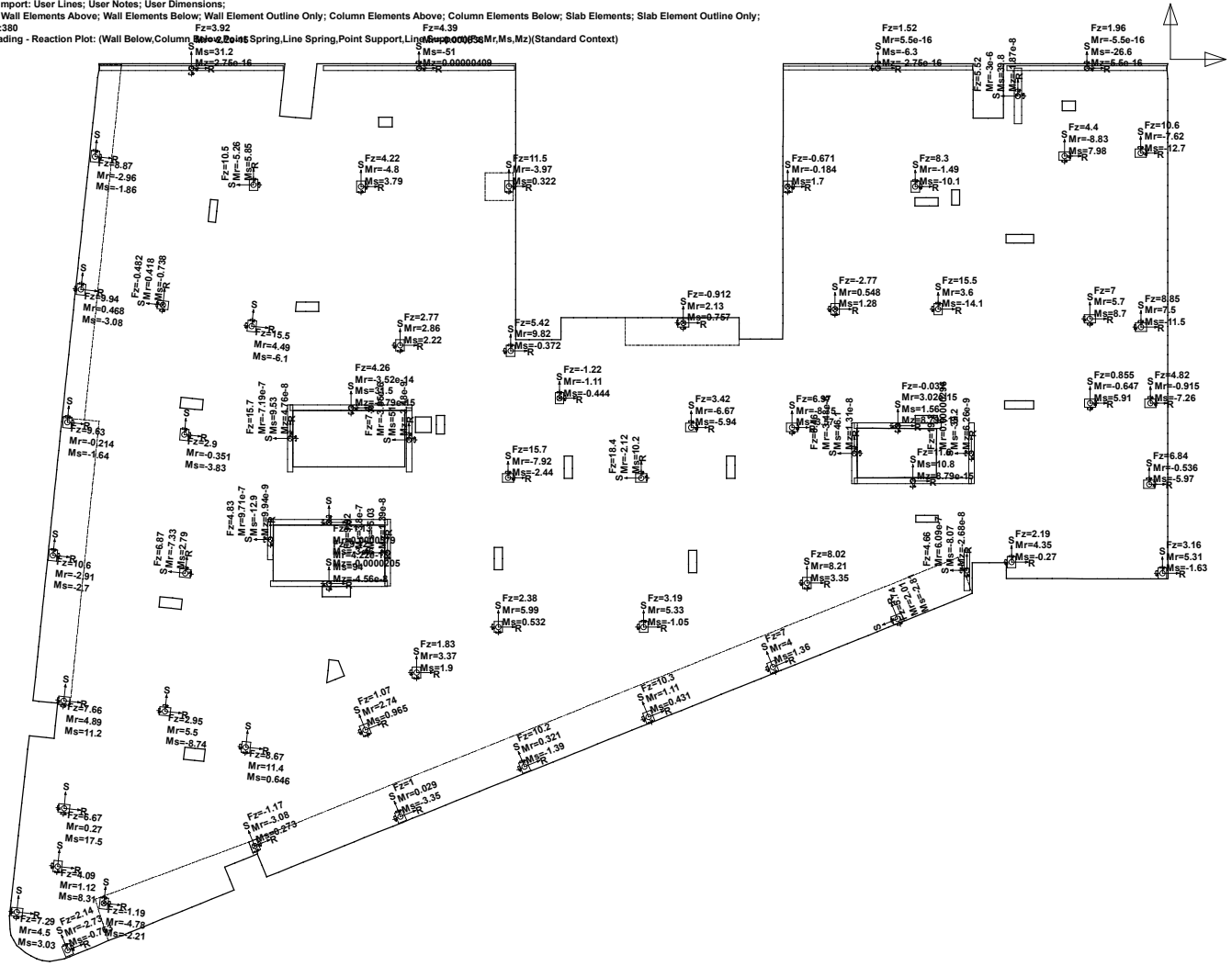


Snow Loading: Point Loads Plan

Snow Loading: Point Loads; Point Load Icons; Point Load Values; User Notes; User Lines; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Scale = 1:380



Scale = 1:380 Fz=3.92 Fz=4.39
Snow Loading - Reaction Plot: (Wall Below,Column,Beam,Point Spring,Line Spring,Point Support,Line Support) Mr,Ms,Mz /Standard Context



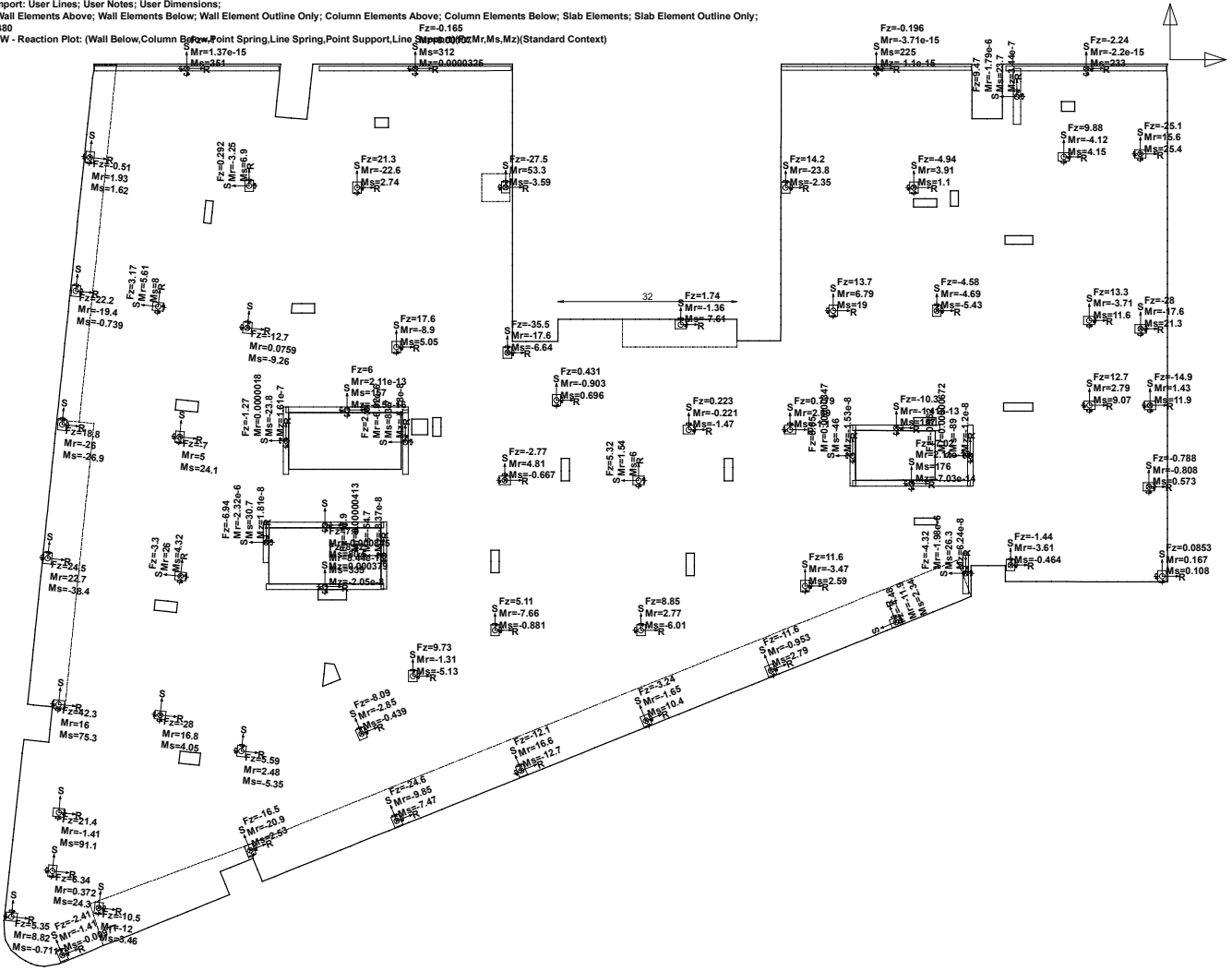
Seismic E/W: Point Loads Plan

Seismic E/W: Point Loads; Point Load Numbers; Point Load Icons; User Notes; User Lines; User Dimensions;
 Drawing Import: User Notes; User Lines; User Dimensions; 0; 1803002_A_18S_2019_rvt-1-Floor Framing Plan - LEVEL 5-7(A)-DET; 1803002_A_18S_2019_rvt-1-Floor Framing Plan - LEVEL 5-7(A)-GEN; 1803002_A_18S_2019_rvt-1-Floor Framing Plan - LEVEL 5-7(A)-FLOOR; S-GRID-ID
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



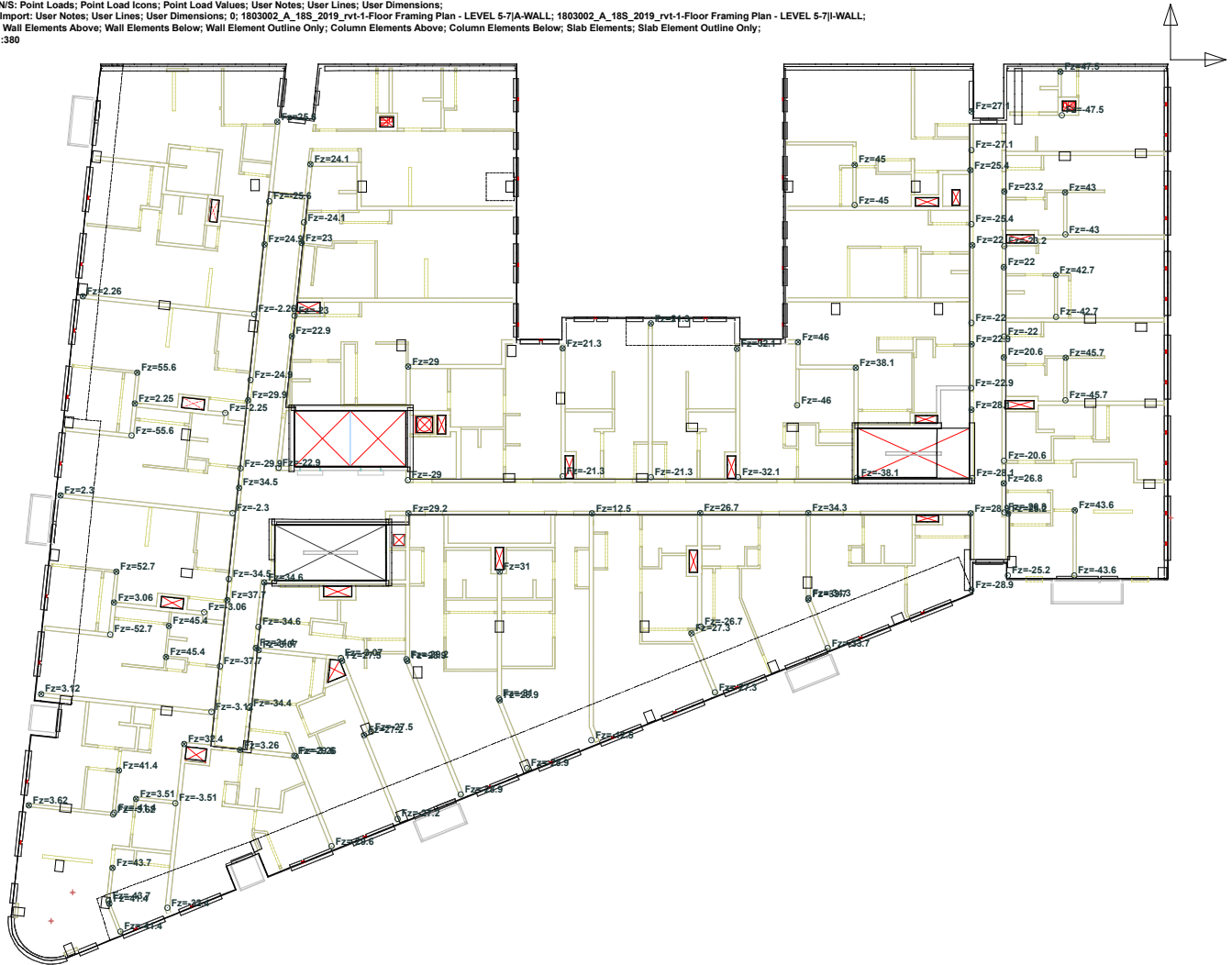
Seismic E/W: Std Reactions Plan

Seismic E/W: Point Load Icons; Point Load Values; Line Load Icons; Line Load Values; Area Load Icons; Area Load Values; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:300
 Seismic E/W - Reaction Plot: (Wall Below, Column Below, Point Spring, Line Spring, Point Support, Line Support, Mr, Ms, Mz)(Standard Context)



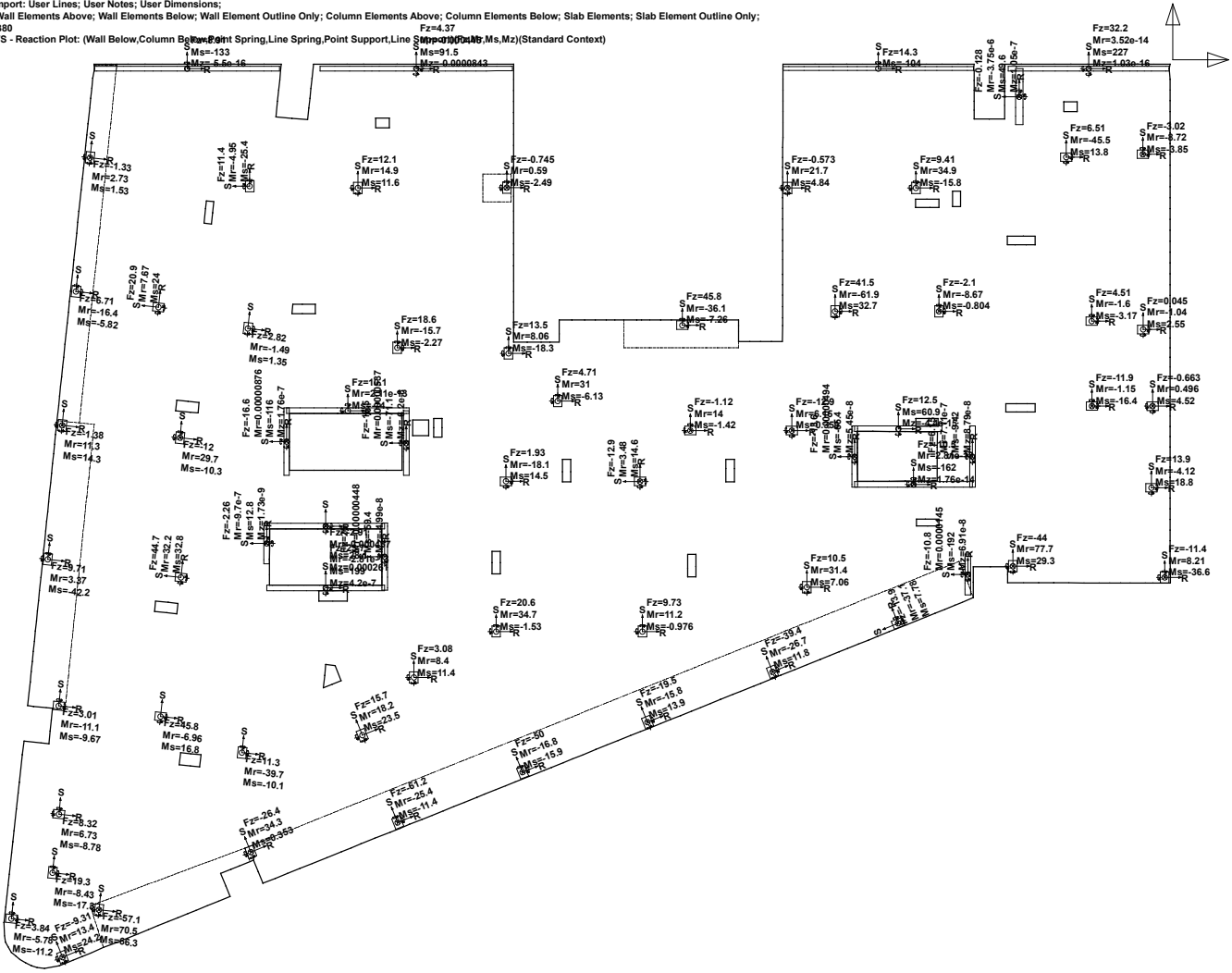
Seismic N/S: Point Loads Plan

Seismic N/S: Point Loads; Point Load Icons; Point Load Values; User Notes; User Lines; User Dimensions;
 Drawing Import: User Notes; User Lines; User Dimensions; 0; 1803002_A_18S_2019_rvt-1-Floor Framing Plan - LEVEL 5-7J(A-WALL); 1803002_A_18S_2019_rvt-1-Floor Framing Plan - LEVEL 5-7J(I-WALL);
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



Seismic N/S: Std Reactions Plan

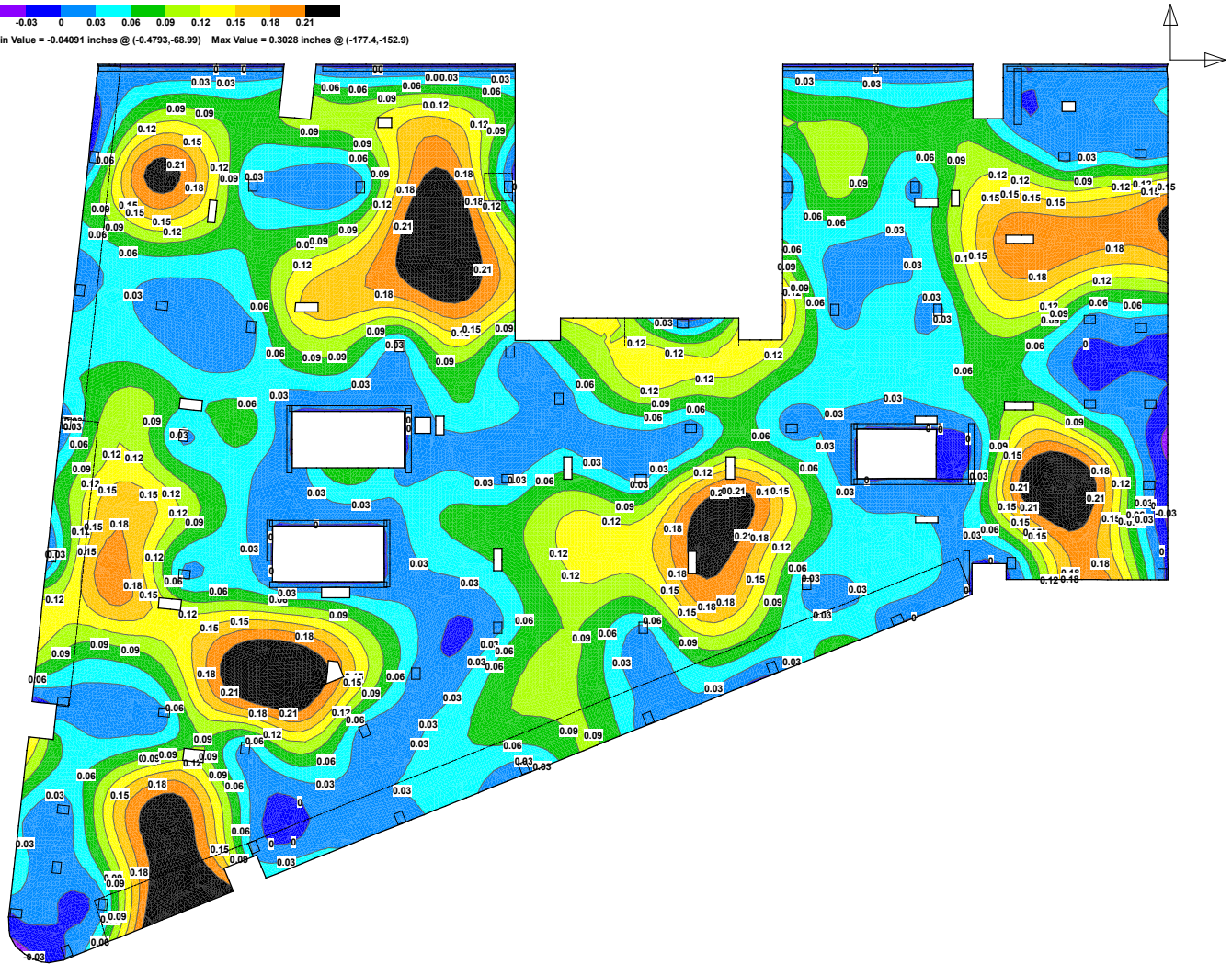
Seismic N/S: Point Load Icons; Point Load Values; Line Load Icons; Line Load Values; Area Load Icons; Area Load Values; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:300
 Seismic N/S - Reaction Plot: (Wall Below, Column Below, Point Spring, Line Spring, Point Support, Line Support) (Fz, Mr, Ms, Mz) (Standard Context)



Service LC: D + L: Max Deflection Plan

Service LC: D + L: User Lines; User Notes; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
 Scale = 1:380
 Service LC: D + L - Vertical Deflection Plot (Maximum Values)

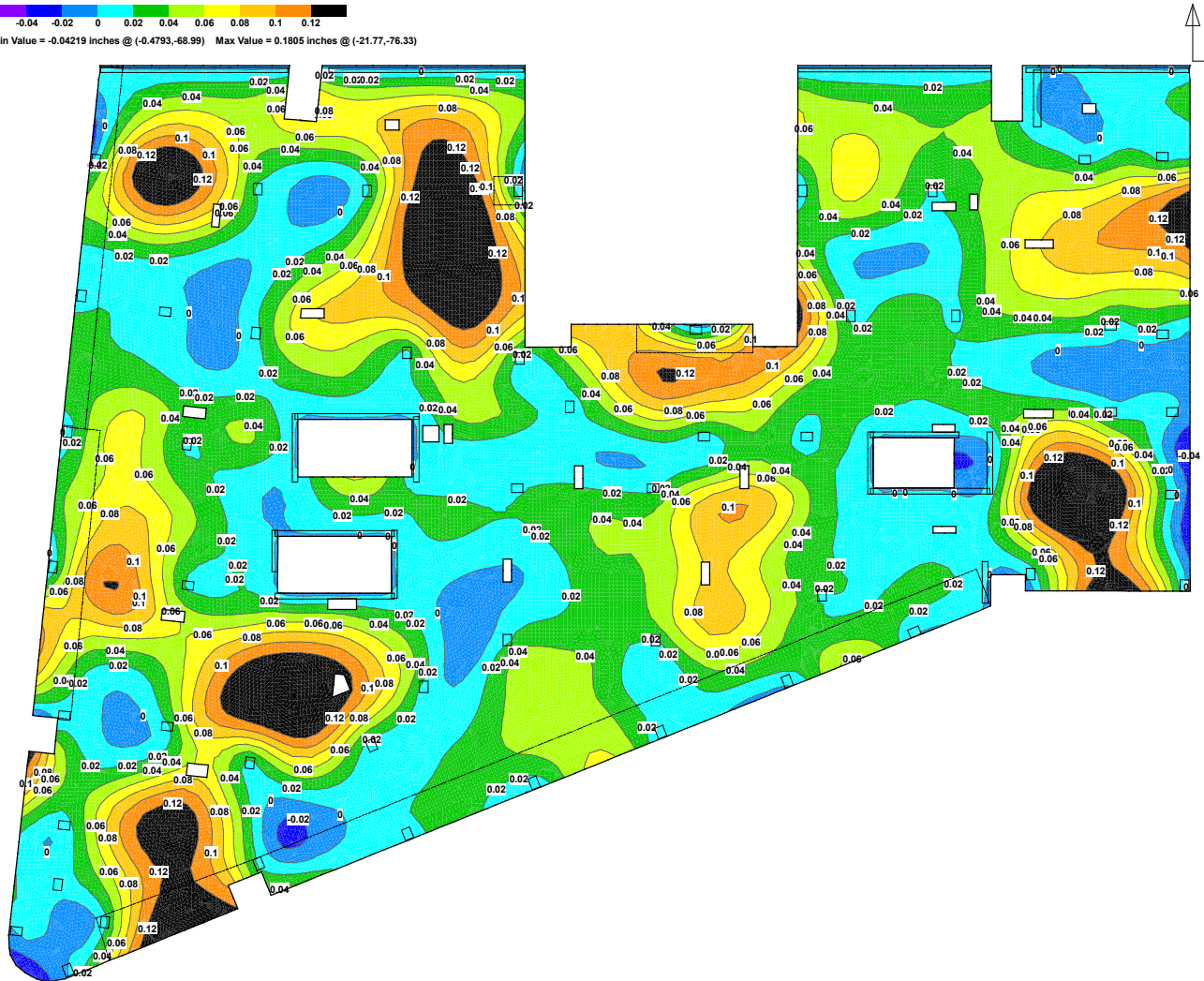
Min Value = -0.04091 inches @ (-0.4793,-68.99) Max Value = 0.3028 inches @ (-177.4,-152.9)



Service LC: D + L: Min Deflection Plan

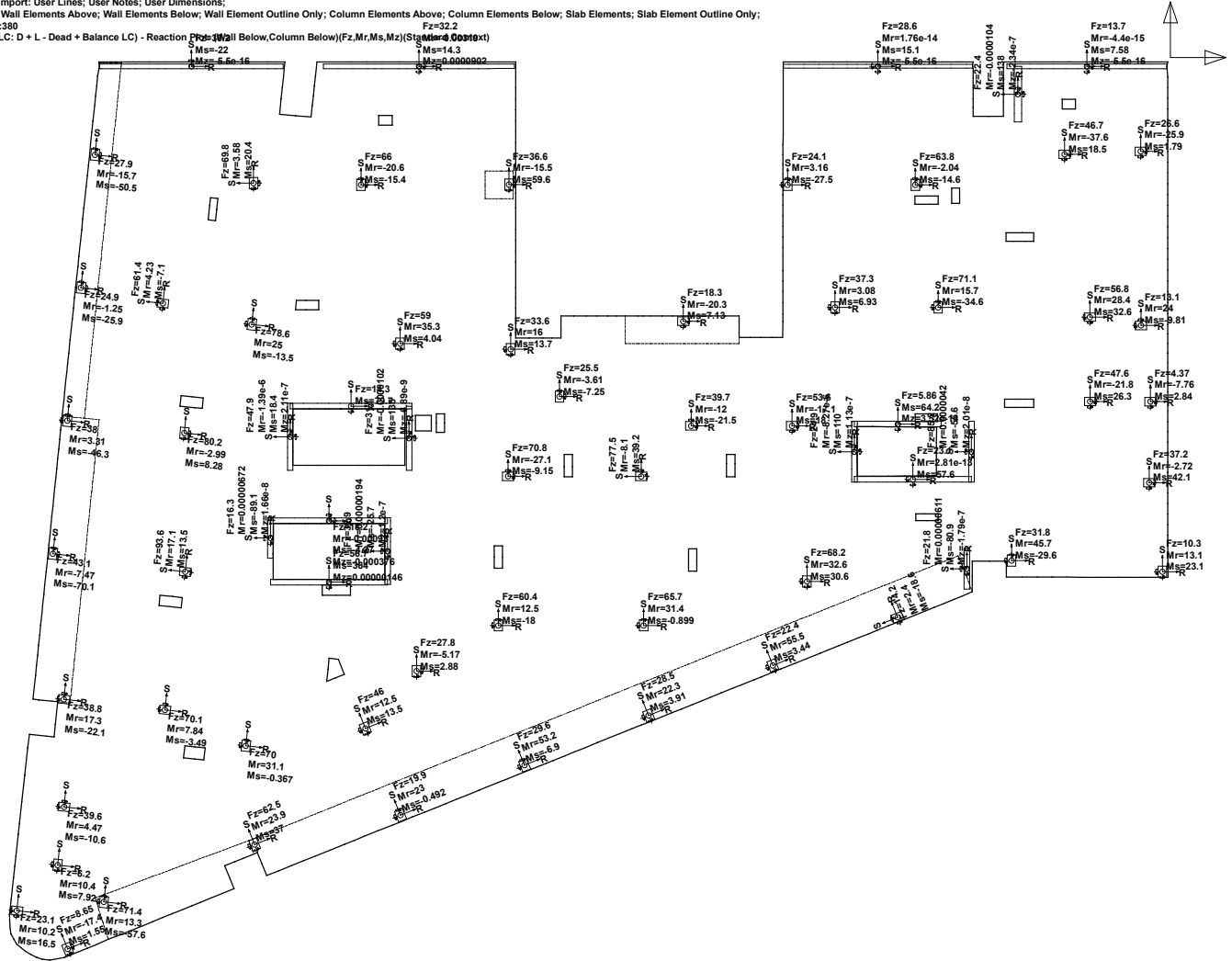
Service LC: D + L: User Lines; User Notes; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:380
Service LC: D + L - Vertical Deflection Plot (Minimum Values)

Min Value = -0.04219 inches @ (-0.4793,-68.99) Max Value = 0.1805 inches @ (-21.77,-76.33)



Service LC: D + L: Reaction Plan

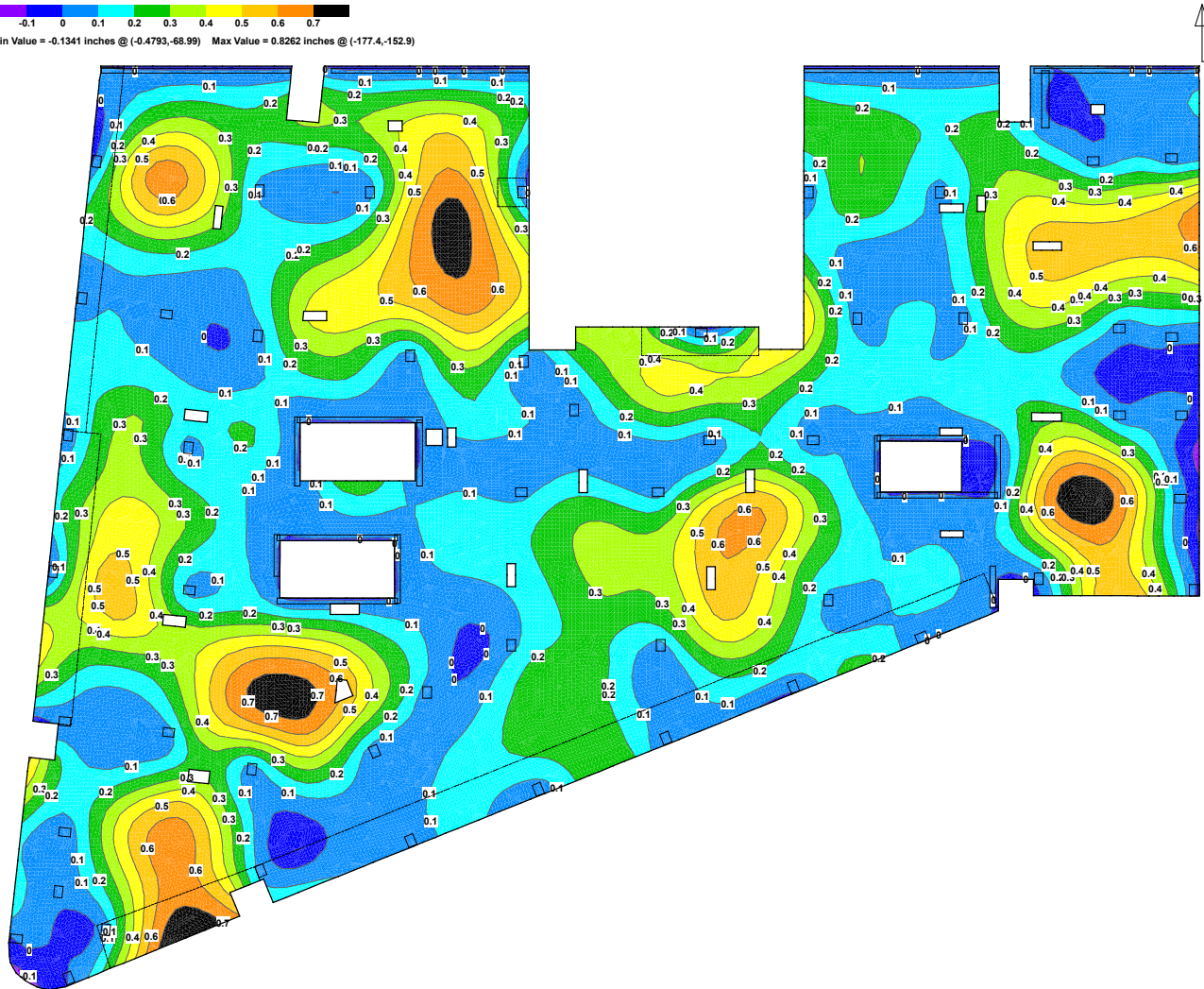
Service LC: D + L: User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:300
 (Service LC: D + L - Dead + Balance LC) - Reaction



Long Term deflection: Max Deflection Plan

Long Term deflection: User Lines; User Notes; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:390
Long Term deflection - Vertical Deflection Plot (Maximum Values)

Min Value = -0.1341 inches @ (-0.4793,-68.99) Max Value = 0.8262 inches @ (-177.4,-152.9)



Design Strip: Latitude SSs Table

Name	Set	Location feet	Skew degrees	At Support 1	At Support 2	Support Width 1 inches
1-1	latitude	(-205,-162.6)(-197.9,-160.2)	182	false	true	0
2-1	latitude	(-204,-114.5)(-198.6,-108.0)	24	false	true	1.39
3-1	latitude	(-207,-153.1)(-195.2,-151.9)	81	true	false	24.68
3-1(2)	latitude	(-195.2,-151.9)(-191.4,-151.8)	181	false	true	0
3-2	latitude	(-191.4,-151.5)(-164.4,-146.8)	86	true	true	20.33
3-3	latitude	(-164.4,-141.2)(-138.2,-136.4)	54	true	true	18.47
3-4	latitude	(-138.2,-136)(-115.9,-127)	127	true	true	18.55
3-5	latitude	(-115.9,-127)(-93.67,-118.1)	18.1	true	true	18.55
3-6	latitude	(-93.67,-118.1)(-71.4,-109.1)	109.1	true	true	18.55
3-7	latitude	(-71.4,-109.1)(-49.13,-100.2)	100.2	true	true	18.55
3-8	latitude	(-49.13,-100.2)(-36.47,-94.24)	94.24	true	true	24.74
4-1	latitude	(-201.3,-89.19)(-195,-89.93)	93	true	false	34.4
5-1	latitude	(-198,-65.18)(-192.6,-61.83)	83	true	false	18.16
6-1	latitude	(-195.5,-41.31)(-192.7,-41.76)	1.76	true	false	18.18
7-1	latitude	(-193,-17.44)(-190.2,-17.89)	17.89	true	false	18.19
8-1	latitude	(-197.3,-115.3)(-180.5,-102.1)	174	false	true	0
8-2	latitude	(-180.5,-117.1)(-166,-123.6)	167	true	true	25.41
8-3	latitude	(-166,-123.6)(-144.5,-128.4)	117	true	true	19.56
8-4	latitude	(-144.5,-120.4)(-135.3,-110.1)	115	true	true	20.23
8-5	latitude	(-135.3,-110.1)(-120.6,-101.6)	109	true	true	20.78
8-6	latitude	(-120.6,-101.9)(-94.55,-100.9)	9.6	true	true	18.16
8-7	latitude	(-94.55,-101.9)(-65.26,-94.8)	81	true	true	18.8
8-8	latitude	(-65.26,-94)(-36.46,-88.5)	10.79	true	true	18.48
9-1	latitude	(-192.4,-41.91)(-181,-44.5)	37	false	true	0
9-2	latitude	(-181,-44.5)(-164.6,-47.85)	82	true	true	27.53
9-3	latitude	(-164.6,-47.85)(-138.3,-51.35)	35	true	true	11.73
9-4	latitude	(-138.3,-51.35)(-118.4,-52.85)	85	true	true	18.18
9-5	latitude	(-118.4,-52.35)(-87.45,-47.25)	25	true	true	18.4
9-6	latitude	(-87.45,-47.25)(-60.2,-48.8)	9e-6	true	true	24.25
9-7	latitude	(-60.2,-44.83)(-41.7,-45.8)	9e-6	true	true	18.16
9-8	latitude	(-41.7,-44.83)(-14.46,-46.58)	587	true	true	18.19
9-9	latitude	(-14.46,-46.58)(-5.313,-47.92)	292	true	true	24.41
9-10	latitude	(-5.313,-47.92)(-0.5036,-49.88)	88	true	false	24.16
10-1	latitude	(-194.8,-89.98)(-176.8,-92.28)	28	false	true	0
10-2	latitude	(-176.8,-92.28)(-161.6,-93.5)	152	true	true	24.16
11-1	latitude	(-192.3,-65.88)(-177,-67.39)	35	false	true	0
11-2	latitude	(-177,-67.39)(-157.9,-68.2)	209	true	true	18.19
12-1	latitude	(-189.8,-18.04)(-164.2,-22.75)	75	false	true	0
12-2	latitude	(-164.2,-22.76)(-145.3,-22.83)	83	true	true	9.307
12-3	latitude	(-145.3,-22.83)(-118.2,-22.45)	45	true	true	18.16
13-1	latitude	(-136.6,-73.5)(-118.9,-75.1)	151	true	true	11.03
13-2	latitude	(-118.9,-75.16)(-94.99,-74.7)	76	true	true	24.16
13-3	latitude	(-94.99,-74.76)(-56.81,-73.8)	352	true	true	23.87
14-1	latitude	(-136.8,-62.55)(-109.7,-60.8)	83	true	true	14.6
14-2	latitude	(-109.7,-60.83)(-86.02,-66.58)	58	true	true	18.6
14-3	latitude	(-86.02,-66.08)(-67.92,-66.0)	9e-6	true	true	24.16

Design Strip: Latitude SSs Table (2)

<i>Support Width 1</i>	<i>Support Width 2</i> <i>inches</i>	<i>Support Trans. Width 1</i> <i>inches</i>	<i>Support Trans. Width 2</i> <i>inches</i>	<i>Auto-Support</i>	<i>Min Divisions</i>	<i>Max Division Spacing</i> <i>feet</i>
18.16	0		24.01	true	4	2.5
24.15	0		18	true	4	2.5
0	18.39		0	true	4	2.5
18.54	0		24.52	true	4	2.5
18.16	26.9		24.01	true	4	2.5
18.07	24.42		24.42	true	4	2.5
17.76	24		24	true	4	2.5
17.76	24		24	true	4	2.5
17.76	24		24	true	4	2.5
23.6	24		18	true	4	2.5
15.5	18.03		28.21	true	4	2.5
0	24		0	true	4	2.5
0	24		0	true	4	2.5
0	24.04		0	true	4	2.5
0	24.04		0	true	4	2.5
24.16	0		18	true	4	2.5
18.27	18.94		25.26	true	4	2.5
18.67	24.78		24.69	true	4	2.5
27.18	26.75		24.14	true	4	2.5
20.78	27.5		27.5	true	4	2.5
18.16	24		24	true	4	2.5
18.8	24.86		24.86	true	4	2.5
14.58	24.43		31.43	true	4	2.5
21.06	0		18.13	true	4	2.5
24.7	18.08		24.11	true	4	2.5
18.32	24		24.21	true	4	2.5
18.18	24.03		24.03	true	4	2.5
24.48	24.32		18.24	true	4	2.5
18.23	18.07		24.09	true	4	2.5
18.16	24		24	true	4	2.5
24.21	24.05		18.04	true	4	2.5
24.41	18.19		18.19	true	4	2.5
3.804	18		0	true	4	2.5
24.16	0		18.01	true	4	2.5
0	18		0	true	4	2.5
18.16	0		24	true	4	2.5
13.8	24.05		144.1	true	4	2.5
27.46	0		24.41	true	4	2.5
18.16	24		24	true	4	2.5
31.77	24		24	true	4	2.5
24.26	64.9		18.08	true	4	2.5
24.45	18		18	true	4	2.5
10.01	18.01		131	true	4	2.5
18.19	113.9		24.05	true	4	2.5
24.74	24.58		18.44	true	4	2.5
24.16	18		18	true	4	2.5

Design Strip: Latitude SSs Table (3)

[illegible]

Design Strip: Latitude SSs Table (4)

[illegible]

Design Strip: Latitude SSs Table (5)

[illegible]

Design Strip: Latitude SSs Table (6)

[illegible]

Design Strip: Latitude SSs Table (7)

[illegible]

MS Shear Legs

Design Strip: Latitude SSs Table - 57

Design Strip: Latitude SSs Table (9)

<i>Name</i>	<i>Set</i>	<i>Location feet</i>	<i>Skew degrees</i>	<i>At Support 1</i>	<i>At Support 2</i>	<i>Support Width 1 inches</i>
14-4	latitude	(-67.92,-66.08)(-56.72,-56.72)	-56.72	true	true	24.16
15-1	latitude	(-69.33,-22.67)(-45.8,-22.67)	-45.8	true	true	33.31
15-2	latitude	(-45.8,-22.67)(-19.02,-17.34)	-19.02	true	true	18.51
15-3	latitude	(-19.02,-17.34)(-5.364,-16.83)	-5.364	true	true	24.17
15-4	latitude	(-5.364,-16.83)(-0.5351,-16.83)	-0.5351	true	false	24.16
16-1	latitude	(-41.75,-65.72)(-35.58,-65.72)	-35.58	true	true	13.94
16-2	latitude	(-35.58,-65.81)(-14.45,-61.73)	-14.45	true	true	8.971
16-3	latitude	(-14.45,-61.73)(-3.5,-61.73)	-3.5	true	true	24.16
16-4	latitude	(-3.5,-61.73)(-0.4875,-61.73)	-0.4875	true	false	21.41
17-1	latitude	(-36.22,-75.7)(-3.5,-76.3)	-3.5	true	true	24.16
17-2	latitude	(-3.5,-76.3)(-0.6594,-76.3)	-0.6594	true	false	16.03
18-1	latitude	(-28.53,-90.28)(-1.634,-92.34)	-1.634	true	true	18.2

Design Strip: Latitude SSs Table (10)

t Width 1

<i>Support Width 2 inches</i>	<i>Support Trans. Width 1 inches</i>	<i>Support Trans. Width 2 inches</i>	<i>Auto-Support</i>	<i>Min Divisions</i>	<i>Max Division Spacing feet</i>
12.16	18	131	true	4	2.5
18.16	24	24	true	4	2.5
24.63	24.47	18.35	true	4	2.5
24.17	18.01	18.01	true	4	2.5
3.417	18	0	true	4	2.5
15.51	12	131	true	4	2.5
24.6	29.29	18.33	true	4	2.5
26.91	18	18	true	4	2.5
4.016	18	0	true	4	2.5
32.29	125	18	true	4	2.5
0	18	0	true	4	2.5
14.23	24.05	24.05	true	4	2.5

Design Strip: Latitude SSs Table (11)

on Spacing

<i>Design For Axial</i>	<i>Environment</i>	<i>Design As PT</i>	<i>Maximize Integrated V:Use Spec LLR Params</i>	<i>Spec. LLR Levels</i>	<i>Spec. Trib. Area ft²</i>	
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0

Design Strip: Latitude SSs Table (12)

<i>Spec. Infl. Area ft²</i>	<i>Max LLR %</i>	<i>Span Width</i>	<i>Col Strip Width</i>	<i>Lock Strips</i>	<i>Design CS for CS</i>	<i>-CS Auto Trim</i>	<i>CS Section Slope</i>
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25

Design Strip: Latitude SSs Table (13)

Section Slope	CS Top Bar	CS Bot Bar	CS Shear Bar	CS Top Cover inches	CS Bot Cover inches	CS Shear d calc	CS Torsion Design	CS System
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab

Design Strip: Latitude SSs Table (14)

<i>CS Min. Bar Loc.</i>	<i>CS Min T.Bar</i>	<i>CS Min B.Bar</i>	<i>CS Shear Legs</i>	<i>MS Same As CS</i>	<i>MS Auto Trim</i>	<i>MS Section Slope</i>	<i>MS Top Bar</i>	<i>MS Bot Bar</i>
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4

Design Strip: Latitude SSs Table (15)

Bot Bar	MS Shear Bar	MS Top Cover inches	MS Bot Cover inches	MS Shear d calc	MS Torsion Design	MS System	MS Min. Bar Loc.	MS Min T.Bar	MS Min B.Bar
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0
#4		1.5	0.75	All Tension Reinforcement		two-way slab	stress	0	0

Design Strip: Latitude SSs Table (16)

<i>Min B.Bar</i>	<u><i>MS Shear Legs</i></u>
	2
	2
	2
	2
	2
	2
	2
	2
	2
	2
	2
	2

Design Strip: Longitude SSs Table

Name	Set	Location feet	Skew degrees	At Support 1	At Support 2	Support Width 1 inches
19-1	longitude	(-207,-159.8)(-207,-153.01)		false	true	21.45
19-2	longitude	(-207,-153.1)(-199.7,-144.9)		true	true	22.33
19-3	longitude	(-199.7,-144.9)(-198.6,-132.5)		true	true	24.16
19-4	longitude	(-198.6,-134.5)(-198.6,-116.872)		true	true	18.26
20-1	longitude	(-203,-115)(-200.6,-89.18)	266	false	true	0
20-2	longitude	(-200.6,-89.18)(-198.1,-65.31)		true	true	27.21
20-3	longitude	(-198.1,-65.31)(-195.5,-41.81)		true	true	27.31
20-4	longitude	(-195.5,-41.31)(-193,-17.57)		true	true	24.16
20-5	longitude	(-193,-17.57)(-191.6,-15.897)		true	true	27.22
21-1	longitude	(-197.9,-160)(-191.4,-137.55)		true	true	21.01
21-2	longitude	(-191.4,-151.5)(-190.7,-149.2)		true	false	24.63
22-1	longitude	(-190.5,-148.5)(-180.5,-116.24)		false	true	0
22-2	longitude	(-180.5,-117.1)(-176.2,-95.44)		true	true	18.2
22-3	longitude	(-176.2,-92.34)(-177,-61.891)		true	true	18.14
22-4	longitude	(-177,-67.39)(-164.6,-42.872)		true	true	26.95
22-5	longitude	(-164.6,-47.85)(-164.2,-22.76)		true	true	22.66
22-6	longitude	(-164.2,-22.76)(-160.1,-11.583)		true	true	30.23
23-1	longitude	(-164.7,-140.2)(-165.9,-121.35)		true	true	0
23-2	longitude	(-165.9,-123.6)(-161.6,-94.78)		true	true	25.34
24-1	longitude	(-152.1,-1.583)(-145.3,-22.83)		true	true	10.65
24-2	longitude	(-145.3,-22.83)(-138.3,-51.35)		true	true	24.88
24-3	longitude	(-138.3,-51.35)(-137.2,-62.65)		true	true	24.28
25-1	longitude	(-145.9,-94.21)(-144.5,-120.4)		true	true	10.33
25-2	longitude	(-144.5,-120.4)(-138.2,-136.06)		true	true	24.16
26-1	longitude	(-138.2,-136)(-135.3,-103.38)		true	true	27.42
26-2	longitude	(-135.3,-110.1)(-136.5,-73.36)		true	true	24.17
27-1	longitude	(-118.8,-1.583)(-118.8,-22.85)		true	true	9.433
27-2	longitude	(-118.8,-22.85)(-118.4,-52.358)		true	true	22.87
27-3	longitude	(-118.4,-52.35)(-118.9,-75.16)		true	true	24.16
27-4	longitude	(-118.9,-75.16)(-120.6,-101.9)		true	true	18.2
27-5	longitude	(-120.6,-101.9)(-115.9,-127.64)		true	true	24.58
28-1	longitude	(-110,-50.87)(-109.6,-60.853)		false	true	0
29-1	longitude	(-94.99,-74.76)(-94.55,-101.167)		true	true	27.89
29-2	longitude	(-94.55,-101.9)(-93.65,-118.85)		true	true	24.19
30-1	longitude	(-87.45,-47.25)(-86.02,-63.18)		true	true	19.46
31-1	longitude	(-68.66,-1.577)(-68.7,-22.67)		true	true	7.567
31-2	longitude	(-68.7,-22.67)(-60.2,-44.83)		true	true	30.15
31-3	longitude	(-60.2,-44.83)(-67.92,-66.08)		true	true	25.69
31-4	longitude	(-67.92,-66.08)(-65.26,-94.21)		true	true	18.24
31-5	longitude	(-65.26,-94)(-71.38,-109.21)		true	true	26.05
32-1	longitude	(-49.6,-98.98)(-49.11,-75.68)		false	true	0
33-1	longitude	(-47.52,-1.583)(-45.8,-22.824)		true	true	7.433
33-2	longitude	(-45.8,-22.83)(-41.7,-44.83)		true	true	24.57
33-3	longitude	(-41.7,-44.83)(-41.7,-65.01793)		true	true	24.16
34-1	longitude	(-36.48,-88.8)(-36.48,-78.551e-6)		true	true	17.24
35-1	longitude	(-15.77,-1.583)(-19.02,-17.04)		true	true	10.38

Design Strip: Longitude SSs Table (2)

<i>Support Width 1</i>	<i>Support Width 2</i> <i>inches</i>	<i>Support Trans. Width 1</i> <i>inches</i>	<i>Support Trans. Width 2</i> <i>inches</i>	<i>Auto-Support</i>	<i>Min Divisions</i>	<i>Max Division Spacing</i> <i>feet</i>
	18.26	0	24.13	true	4	2.5
	29.71	29.55	22.17	true	4	2.5
	18.16	18	24	true	4	2.5
	0	24.13	0	true	4	2.5
	21.1	0	18	true	4	2.5
	21	18	18	true	4	2.5
	24.15	18	18	true	4	2.5
	21.1	18	18	true	4	2.5
	10.05	18	63.15	true	4	2.5
	28.36	27.81	21.15	true	4	2.5
	0	18.36	0	true	4	2.5
	18.54	0	24.5	true	4	2.5
	18.39	24.05	24.05	true	4	2.5
	24.39	24.23	18.18	true	4	2.5
	28.72	20.09	20.1	true	4	2.5
	18.64	18.07	18	true	4	2.5
	10.35	18.34	36.02	true	4	2.5
	23.36	0	18.28	true	4	2.5
	0	18.02	44.82	true	4	2.5
	25.34	0	18.89	true	4	2.5
	24.88	18.54	18.54	true	4	2.5
	12.22	18.09	72.62	true	4	2.5
	25.53	160.9	19.03	true	4	2.5
	24.16	17.99	17.99	true	4	2.5
	24.31	20.45	18.11	true	4	2.5
	9.596	18.01	12.01	true	4	2.5
	25.45	411.3	18	true	4	2.5
	24.16	18	18	true	4	2.5
	18.16	18	24	true	4	2.5
	24.21	24.05	18.04	true	4	2.5
	24.63	18.31	18.36	true	4	2.5
	24.17	0	18.01	true	4	2.5
	24.16	24	18	true	4	2.5
	25.51	18.03	19.01	true	4	2.5
	18.21	24.07	24.07	true	4	2.5
	20.16	407.7	18	true	4	2.5
	25.86	19.28	19.28	true	4	2.5
	19.31	19.15	25.53	true	4	2.5
	24.27	24.11	18.08	true	4	2.5
	26.06	19.42	25.03	true	4	2.5
	13.54	0	252.1	true	4	2.5
	24.24	99.23	18.06	true	4	2.5
	24.57	18.31	18.31	true	4	2.5
	11.22	18	186.5	true	4	2.5
	8.748	12	252	true	4	2.5
	18.54	49.45	24.51	true	4	2.5

Design Strip: Longitude SSs Table - 69

Design Strip: Longitude SSs Table - 70

Design Strip: Longitude SSs Table - 71

Design Strip: Longitude SSs Table (7)

[illegible]

Design Strip: Longitude SSs Table (8)

[illegible]

Design Strip: Longitude SSs Table (9)

<i>Name</i>	<i>Set</i>	<i>Location feet</i>	<i>Skew degrees</i>	<i>At Support 1</i>	<i>At Support 2</i>	<i>Support Width 1 inches</i>
35-2	longitude	(-19.02,-17.34)(-14.45,-16.58)	-16.58	true	true	18.38
35-3	longitude	(-14.45,-46.58)(-14.45,-61.73)	-61.73	true	true	18.17
36-1	longitude	(-1.248,-1.54)(-5.364,-16.83)	-16.83	true	true	11.6
36-2	longitude	(-5.364,-16.83)(-5.313,-47.92)	-47.92	true	true	18.16
36-3	longitude	(-5.313,-47.92)(-3.5,-61.73)	-61.73	true	true	22.35
36-4	longitude	(-3.5,-61.73)(-3.5,-75.6)	-75.6	true	true	18.54
36-5	longitude	(-3.5,-75.6)(-1.302,-92.43)	-92.43	true	true	35.04

Design Strip: Longitude SSs Table (10)

<i>Support Width 1</i>	<i>Support Width 2</i> <i>inches</i>	<i>Support Trans. Width 1</i> <i>inches</i>	<i>Support Trans. Width 2</i> <i>inches</i>	<i>Auto-Support</i>	<i>Min Divisions</i>	<i>Max Division Spacing</i> <i>feet</i>
18.36	24.29	24.29	24.29	true	4	2.5
18.16	24	24	24	true	4	2.5
18.8	24.45	24.85	24.85	true	4	2.5
14.16	24	24	24	true	4	2.5
17.93	24.21	24.21	24.21	true	4	2.5
1.567	24	24	24	true	4	2.5
28.39	21.65	18.15	18.15	true	4	2.5

Design Strip: Longitude SSs Table (11)

on Spacing

<i>Design For Axial</i>	<i>Environment</i>	<i>Design As PT</i>	<i>Maximize Integrated V:</i>	<i>Use Spec LLR Params</i>	<i>Spec. LLR Levels</i>	<i>Spec. Trib. Area ft²</i>
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	false	false	1	0
true	normal	true	true	false	1	0

Design Strip: Longitude SSs Table (12)

<i>Spec. Infl. Area ft²</i>	<i>Max LLR %</i>	<i>Span Width</i>	<i>Col Strip Width</i>	<i>Lock Strips</i>	<i>Design CS for CS</i>	<i>-CS Auto Trim</i>	<i>CS Section Slope</i>
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25
0	40	auto	full	false	false	none	0.25

Design Strip: Longitude SSs Table (13)

Section Slope	CS Top Bar	CS Bot Bar	CS Shear Bar	CS Top Cover inches	CS Bot Cover inches	CS Shear d calc	CS Torsion Design	CS System
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab
	#5	#5	#4	1	1	All Tension Reinforcement		two-way slab

Design Strip: Longitude SSs Table (14)

<i>CS Min. Bar Loc.</i>	<i>CS Min T.Bar</i>	<i>CS Min B.Bar</i>	<i>CS Shear Legs</i>	<i>MS Same As CS</i>	<i>MS Auto Trim</i>	<i>MS Section Slope</i>	<i>MS Top Bar</i>	<i>MS Bot Bar</i>
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4
stress	0	0	2	false	none	0.25	#5	#4

Design Strip: Longitude SSs Table (15)

Bot Bar	MS Shear Bar	MS Top Cover inches	MS Bot Cover inches	MS Shear d calc	MS Torsion Design	MS System	MS Min. Bar Loc.	MS Min T.Bar	MS Min B.Bar
	#4	1.5	0.75	All Tension Reinforcement	two-way slab	stress	0	0	0
	#4	1.5	0.75	All Tension Reinforcement	two-way slab	stress	0	0	0
	#4	1.5	0.75	All Tension Reinforcement	two-way slab	stress	0	0	0
	#4	1.5	0.75	All Tension Reinforcement	two-way slab	stress	0	0	0
	#4	1.5	0.75	All Tension Reinforcement	two-way slab	stress	0	0	0
	#4	1.5	0.75	All Tension Reinforcement	two-way slab	stress	0	0	0
	#4	1.5	0.75	All Tension Reinforcement	two-way slab	stress	0	0	0

Design Strip: Longitude SSs Table (16)

<i>Min B.Bar</i>	<u><i>MS Shear Legs</i></u>
	2
	2
	2
	2
	2
	2
	2

Design Strip: Latitude SSSs Table

<i>Name</i>	<i>Strip Type</i>	<i>Calc. Trib. Area ft²</i>	<i>Calc. Infl. Area ft²</i>	<i>Top Bar</i>	<i>Bottom Bar</i>	<i>Shear Bar</i>	<i>Top Cover inches</i>
1C-1	center	17.87	0	#5	#5	#4	1
2C-1	center	83.59	0	#5	#5	#4	1
3C-1	center	20.07	0	#5	#5	#4	1
3C-1(2)	center	65.94	0	#5	#5	#4	1
3C-2	center	452.4	0	#5	#5	#4	1
3C-3	center	270.2	0	#7	#7	#4	1
3C-4	center	216.7	0	#7	#7	#4	1
3C-5	center	241	0	#7	#7	#4	1
3C-6	center	158.6	0	#7	#7	#4	1
3C-7	center	113.3	0	#7	#7	#4	1
3C-8	center	88.8	0	#7	#7	#4	1
4C-1	center	128.1	0	#5	#5	#4	1
5C-1	center	92.91	0	#5	#5	#4	1
6C-1	center	43.19	0	#5	#5	#4	1
7C-1	center	37.91	0	#5	#5	#4	1
8C-1	center	388.8	0	#5	#5	#4	1
8C-2	center	356.1	0	#5	#5	#4	1
8C-3	center	479.8	0	#5	#5	#4	1
8C-4	center	131.1	0	#5	#5	#4	1
8C-5	center	459.9	0	#5	#5	#4	1
8C-6	center	600.2	0	#5	#5	#4	1
8C-7	center	547.5	0	#5	#5	#4	1
8C-8	center	295.2	0	#5	#5	#4	1
9C-1	center	279.6	0	#5	#5	#4	1
9C-2	center	357.4	0	#5	#5	#4	1
9C-3	center	468	0	#5	#5	#4	1
9C-4	center	441	0	#5	#5	#4	1
9C-5	center	274.4	0	#5	#5	#4	1
9C-6	center	281	0	#5	#5	#4	1
9C-7	center	389.4	0	#5	#5	#4	1
9C-8	center	561.8	0	#5	#5	#4	1
9C-9	center	179.6	0	#5	#5	#4	1
9C-10	center	74.68	0	#5	#5	#4	1
10C-1	center	351.7	0	#5	#5	#4	1
10C-2	center	380.1	0	#5	#5	#4	1
11C-1	center	325.3	0	#5	#5	#4	1
11C-2	center	334.5	0	#5	#5	#4	1
12C-1	center	502.3	0	#5	#5	#4	1
12C-2	center	480.3	0	#5	#5	#4	1
12C-3	center	644.9	0	#5	#5	#4	1
13C-1	center	353.8	0	#5	#5	#4	1
13C-2	center	467.9	0	#5	#5	#4	1
13C-3	center	320.7	0	#5	#5	#4	1
14C-1	center	152.2	0	#5	#5	#4	1
14C-2	center	282	0	#5	#5	#4	1
14C-3	center	358.4	0	#5	#5	#4	1

Design Strip: Latitude SSSs Table (2)

[illegible]

Design Strip: Latitude SSSs Table (3)

<i>Name</i>	<i>Strip Type</i>	<i>Calc. Trib. Area ft²</i>	<i>Calc. Infl. Area ft²</i>	<i>Top Bar</i>	<i>Bottom Bar</i>	<i>Shear Bar</i>	<i>Top Cover inches</i>
14C-4	center	182.2	0	#5	#5	#4	1
15C-1	center	470.4	0	#5	#5	#4	1
15C-2	center	397.9	0	#5	#5	#4	1
15C-3	center	300.6	0	#5	#5	#4	1
15C-4	center	76.18	0	#5	#5	#4	1
16C-1	center	69.4	0	#5	#5	#4	1
16C-2	center	336.6	0	#5	#5	#4	1
16C-3	center	127.3	0	#5	#5	#4	1
16C-4	center	13.91	0	#5	#5	#4	1
17C-1	center	314.4	0	#5	#5	#4	1
17C-2	center	22.6	0	#5	#5	#4	1
18C-1	center	252.2	0	#5	#5	#4	1

Design Strip: Latitude SSSs Table (4)

Top Cover
inches

Bot. Cover
inches

	<i>Torsion Design</i>	<i>System</i>	<i>Min Bar Loc.</i>	<i>Min T. Bar</i>	<i>Min B. Bar</i>	<i>Shear Legs</i>
1	none	two-way slab	stress	0	0	2
1	none	two-way slab	stress	0	0	2
1	none	two-way slab	stress	0	0	2
1	none	two-way slab	stress	0	0	2
1	none	two-way slab	stress	0	0	2
1	none	two-way slab	stress	0	0	2
1	none	two-way slab	stress	0	0	2
1	none	two-way slab	stress	0	0	2
1	none	two-way slab	stress	0	0	2
1	none	two-way slab	stress	0	0	2
1	none	two-way slab	stress	0	0	2
1	none	two-way slab	stress	0	0	2

Design Strip: Longitude SSSs Table

<i>Name</i>	<i>Strip Type</i>	<i>Calc. Trib. Area ft²</i>	<i>Calc. Infl. Area ft²</i>	<i>Top Bar</i>	<i>Bottom Bar</i>	<i>Shear Bar</i>	<i>Top Cover inches</i>
19C-1	center	25.76	0	#5	#5	#4	1
19C-2	center	47.97	0	#5	#5	#4	1
19C-3	center	184.1	0	#5	#5	#4	1
19C-4	center	269.8	0	#5	#5	#4	1
20C-1	center	79.37	0	#7	#7	#4	1
20C-2	center	240.7	0	#7	#7	#4	1
20C-3	center	144.2	0	#7	#7	#4	1
20C-4	center	181.5	0	#7	#7	#4	1
20C-5	center	129.9	0	#7	#7	#4	1
21C-1	center	130.2	0	#5	#5	#4	1
21C-2	center	33	0	#5	#5	#4	1
22C-1	center	339.1	0	#5	#5	#4	1
22C-2	center	507.5	0	#5	#5	#4	1
22C-3	center	498	0	#5	#5	#4	1
22C-4	center	444.6	0	#5	#5	#4	1
22C-5	center	432.9	0	#5	#5	#4	1
22C-6	center	402.9	0	#5	#5	#4	1
23C-1	center	405.6	0	#5	#5	#4	1
23C-2	center	120.4	0	#5	#5	#4	1
24C-1	center	420.2	0	#5	#5	#4	1
24C-2	center	634.9	0	#5	#5	#4	1
24C-3	center	225.1	0	#5	#5	#4	1
25C-1	center	271.4	0	#5	#5	#4	1
25C-2	center	237.1	0	#5	#5	#4	1
26C-1	center	224.8	0	#5	#5	#4	1
26C-2	center	245	0	#5	#5	#4	1
27C-1	center	290.5	0	#5	#5	#4	1
27C-2	center	328.2	0	#5	#5	#4	1
27C-3	center	320.3	0	#5	#5	#4	1
27C-4	center	538.8	0	#5	#5	#4	1
27C-5	center	447.5	0	#5	#5	#4	1
28C-1	center	102.6	0	#5	#5	#4	1
29C-1	center	679.4	0	#5	#5	#4	1
29C-2	center	366.9	0	#5	#5	#4	1
30C-1	center	422.4	0	#5	#5	#4	1
31C-1	center	221.6	0	#5	#5	#4	1
31C-2	center	295.8	0	#5	#5	#4	1
31C-3	center	319.9	0	#5	#5	#4	1
31C-4	center	581	0	#5	#5	#4	1
31C-5	center	305.9	0	#5	#5	#4	1
32C-1	center	232.8	0	#5	#5	#4	1
33C-1	center	418.1	0	#5	#5	#4	1
33C-2	center	507.2	0	#5	#5	#4	1
33C-3	center	437.6	0	#5	#5	#4	1
34C-1	center	337.3	0	#5	#5	#4	1
35C-1	center	125.9	0	#5	#5	#4	1

Design Strip: Longitude SSSs Table (2)

[illegible]

Design Strip: Longitude SSSs Table (3)

<i>Name</i>	<i>Strip Type</i>	<i>Calc. Trib. Area ft²</i>	<i>Calc. Infl. Area ft²</i>	<i>Top Bar</i>	<i>Bottom Bar</i>	<i>Shear Bar</i>	<i>Top Cover inches</i>
35C-2	center	547.8	0	#5	#5	#4	1
35C-3	center	303.5	0	#5	#5	#4	1
36C-1	center	138.9	0	#5	#5	#4	1
36C-2	center	258.3	0	#5	#5	#4	1
36C-3	center	72.67	0	#5	#5	#4	1
36C-4	center	283	0	#5	#5	#4	1
36C-5	center	220.6	0	#5	#5	#4	1

Design Strip: Longitude SSSs Table (4)

Top Cover
inches

Bot. Cover
inches

	<i>Torsion Design</i>	<i>System</i>	<i>Min Bar Loc.</i>	<i>Min T. Bar</i>	<i>Min B. Bar</i>	<i>Shear Legs</i>
1	none	two-way slab	stress	0	0	2
1	none	two-way slab	stress	0	0	2
1	none	two-way slab	stress	0	0	2
1	none	two-way slab	stress	0	0	2
1	none	two-way slab	stress	0	0	2
1	none	two-way slab	stress	0	0	2
1	none	two-way slab	stress	0	0	2

Design Strip: Punching Checks Table

<i>Number</i>	<i>Location feet</i>	<i>Radius feet</i>	<i>Cover To CGS inches</i>	<i>Angle degrees</i>	<i>Edge</i>	<i>Connection</i>
1	(-207,-153.1)	8	1.5	-6	failure planes	auto
2	(-200.6,-89.05)	10	1.5	-6	failure planes	auto
3	(-199.7,-144.9)	8	1.5	-6	failure planes	auto
4	(-198.6,-115.2)	10	1.5	-6	failure planes	auto
5	(-198.6,-134.5)	8	1.5	-6	failure planes	auto
6	(-198,-65.18)	8	1.5	-6	failure planes	auto
7	(-197.9,-160)	8	1.5	22	failure planes	auto
8	(-195.5,-41.31)	10	1.5	-6	failure planes	auto
9	(-193,-17.44)	8	1.5	-6	failure planes	auto
10	(-191.4,-151.5)	6.5	1.5	-6	failure planes	auto
11	(-180.8,-44.12)	8	1.5	84	failure planes	auto
12	(-180.5,-117.1)	8	1.5	-6	failure planes	auto
13	(-177,-67.39)	8	1.5	-6	failure planes	auto
14	(-176.8,-92.28)	8	1.5	84	failure planes	auto
15	(-165.9,-123.5)	8	1.5	-6	failure planes	auto
16	(-164.9,-47.89)	8	1.5	-6	failure planes	auto
17	(-164.6,-22.53)	8	1.5	90	failure planes	auto
18	(-164.4,-141.2)	15	1.5	22	failure planes	auto
19	(-145.3,-22.83)	8	1.5	0	failure planes	auto
20	(-144.5,-120.4)	8	1.5	22	failure planes	auto
21	(-138.3,-51.35)	8	1.5	0	failure planes	auto
22	(-138.2,-136)	12	1.5	22	failure planes	auto
23	(-135.3,-110.1)	8	1.5	0	failure planes	auto
24	(-120.6,-101.9)	8	1.5	0	failure planes	auto
25	(-118.9,-75.16)	8	1.5	0	failure planes	auto
26	(-118.8,-22.8)	15	1.5	0	failure planes	auto
27	(-118.4,-52.35)	8	1.5	0	failure planes	auto
28	(-115.9,-127)	8	1.5	22	failure planes	auto
29	(-109.7,-60.83)	8	1.5	0	failure planes	auto
30	(-95,-75.17)	8	1.5	90	failure planes	auto
31	(-94.55,-101.9)	8	1.5	0	failure planes	auto
32	(-93.65,-118.1)	8	1.5	22	failure planes	auto
33	(-87.45,-47.3)	10	1.5	0	failure planes	auto
34	(-86.02,-66.08)	8	1.5	0	failure planes	auto
35	(-71.38,-109.1)	8	1.5	22	failure planes	auto
36	(-68.7,-22.83)	12	1.5	0	failure planes	auto
37	(-67.92,-66.08)	8	1.5	0	failure planes	auto
38	(-65.26,-94)	8	1.5	0	failure planes	auto
39	(-60.2,-44.83)	8	1.5	0	failure planes	auto
40	(-48.99,-100.5)	8	1.5	112	failure planes	auto
41	(-45.8,-22.83)	10	1.5	0	failure planes	auto
42	(-41.7,-44.83)	8	1.5	0	failure planes	auto
43	(-28.53,-90.28)	15	1.5	0	failure planes	auto
44	(-19.02,-17.34)	8	1.5	0	failure planes	auto
45	(-14.46,-46.58)	8	1.5	0	failure planes	auto
46	(-14.45,-61.73)	8	1.5	0	failure planes	auto

Design Strip: Punching Checks Table (2)

Connection	Use Spec LLR Params	Spec. LLR Levels	Spec. Trib. Area ft ²	Spec. Infl. Area ft ²	Calc. Trib. Area ft ²	Calc. Infl. Area ft ²
	false	1	0	0	60.18	0
	false	1	0	0	292	0
	false	1	0	0	97.35	0
	false	1	0	0	298.4	0
	false	1	0	0	312.6	0
	false	1	0	0	246.7	0
	false	1	0	0	27.72	0
	false	1	0	0	186.9	0
	false	1	0	0	284.9	0
	false	1	0	0	358.1	0
	false	1	0	0	430.3	0
	false	1	0	0	483.9	0
	false	1	0	0	468.6	0
	false	1	0	0	556.1	0
	false	1	0	0	456	0
	false	1	0	0	449.8	0
	false	1	0	0	597.8	0
	false	1	0	0	384.9	0
	false	1	0	0	659.8	0
	false	1	0	0	416.4	0
	false	1	0	0	546.9	0
	false	1	0	0	210.9	0
	false	1	0	0	328.5	0
	false	1	0	0	578.8	0
	false	1	0	0	472.8	0
	false	1	0	0	374.8	0
	false	1	0	0	331.9	0
	false	1	0	0	268.6	0
	false	1	0	0	271.2	0
	false	1	0	0	524.2	0
	false	1	0	0	638.8	0
	false	1	0	0	190	0
	false	1	0	0	242.2	0
	false	1	0	0	354.6	0
	false	1	0	0	174.1	0
	false	1	0	0	259.9	0
	false	1	0	0	396.8	0
	false	1	0	0	517.9	0
	false	1	0	0	405.2	0
	false	1	0	0	135.8	0
	false	1	0	0	575	0
	false	1	0	0	550	0
	false	1	0	0	236.9	0
	false	1	0	0	401.6	0
	false	1	0	0	485.1	0
	false	1	0	0	341.9	0

[illegible]

Design Strip: Punching Checks Table (4)

<i>Number</i>	<i>Location feet</i>	<i>Radius feet</i>	<i>Cover To CGS inches</i>	<i>Angle degrees</i>	<i>Edge</i>	<i>Connection</i>
47	(-5.364,-16.83)	8	1.5	0	failure planes	auto
48	(-5.313,-48.08)	8	1.5	0	failure planes	auto
49	(-3.839,-76.29)	8	1.5	0	failure planes	auto
50	(-3.615,-61.75)	8	1.5	0	failure planes	auto
51	(-1.469,-92.28)	15	1.5	0	failure planes	auto

Design Strip: Punching Checks Table (5)

<i>Connection</i>	<i>Use Spec LLR Params</i>	<i>Spec. LLR Levels</i>	<i>Spec. Trib. Area ft²</i>	<i>Spec. Infl. Area ft²</i>	<i>Calc. Trib. Area ft²</i>	<i>Calc. Infl. Area ft²</i>
	false	1	0	0	288.6	0
	false	1	0	0	163.4	0
	false	1	0	0	260.9	0
	false	1	0	0	36.58	0
	false	1	0	0	110.8	0

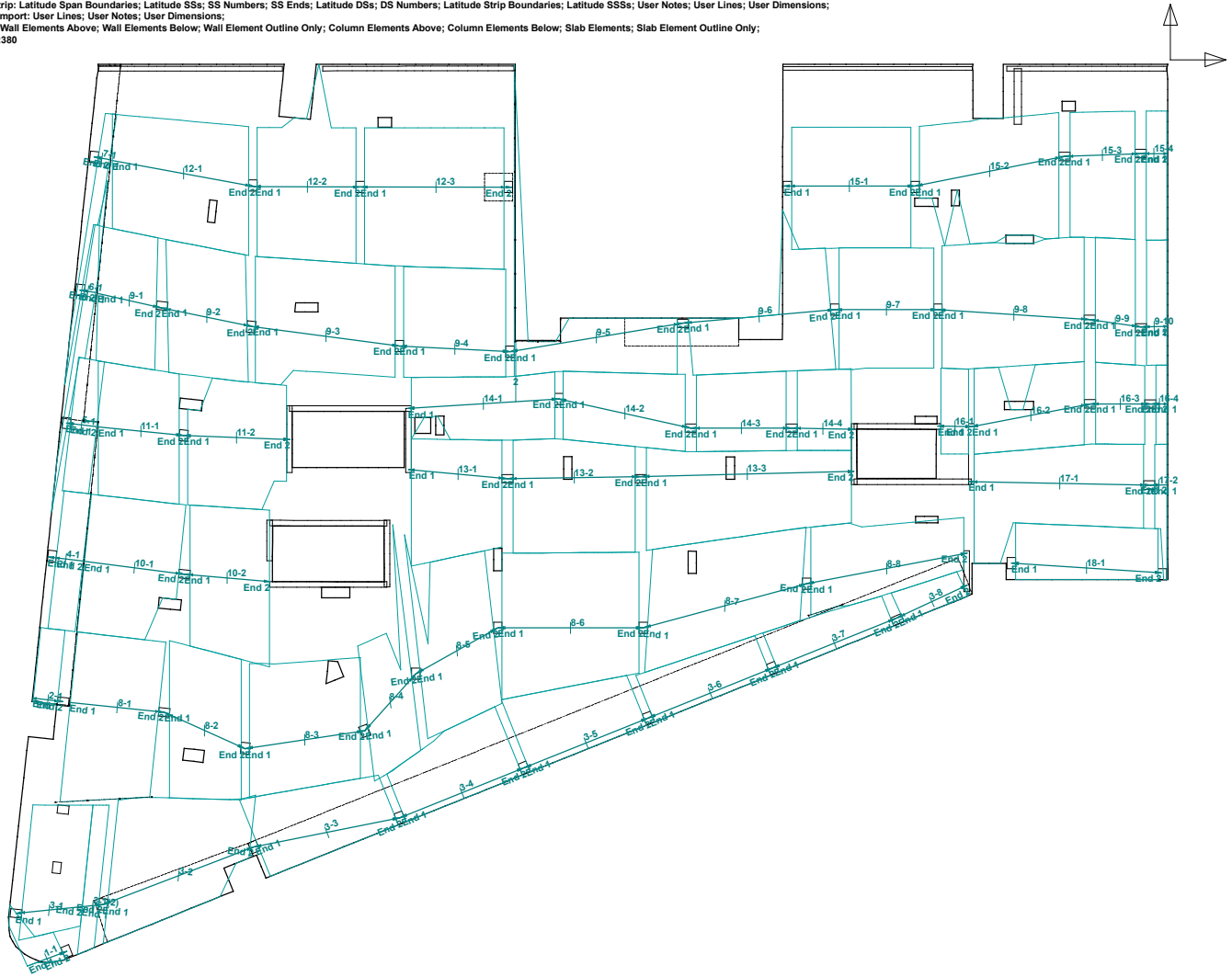
Design Strip: Punching Checks Table (6)

Inf. Area

<i>Max LLR</i> <i>%</i>	<i>Red. Red.</i> <i>%</i>	<i>Stor. Red.</i> <i>%</i>	<i>Park. Red.</i> <i>%</i>
40	0	0	0
40	0	0	0
40	0	0	0
40	0	0	0
40	0	0	0

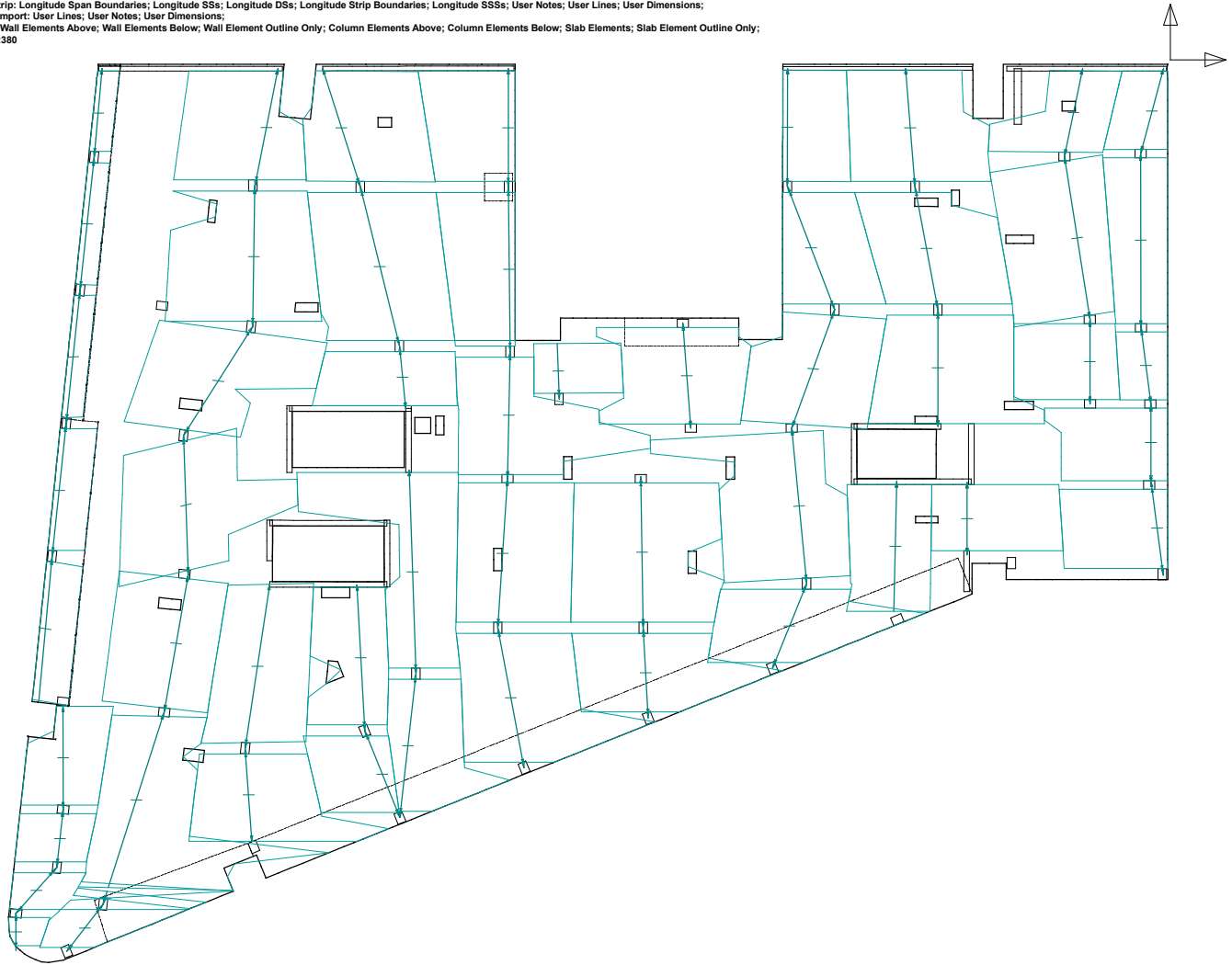
Design Strip: Latitude Design Spans Plan

Design Strip: Latitude Span Boundaries; Latitude SSSs; SS Numbers; SS Ends; Latitude DSs; DS Numbers; Latitude Strip Boundaries; Latitude SSSs; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



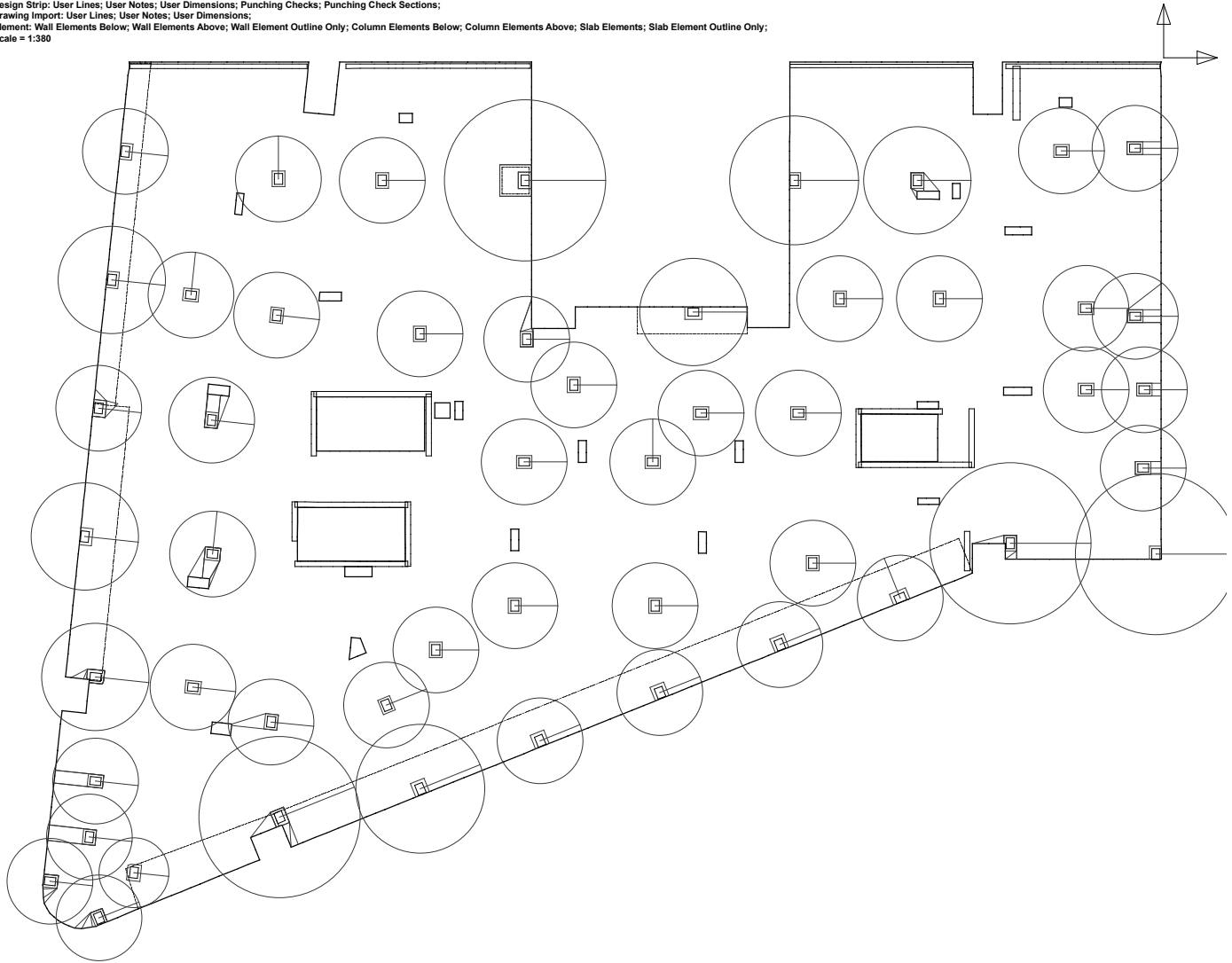
Design Strip: Longitude Design Spans Plan

Design Strip: Longitude Span Boundaries; Longitude SSs; Longitude DSs; Longitude Strip Boundaries; Longitude SSSs; User Notes; User Lines; User Dimensions;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
Scale = 1:380



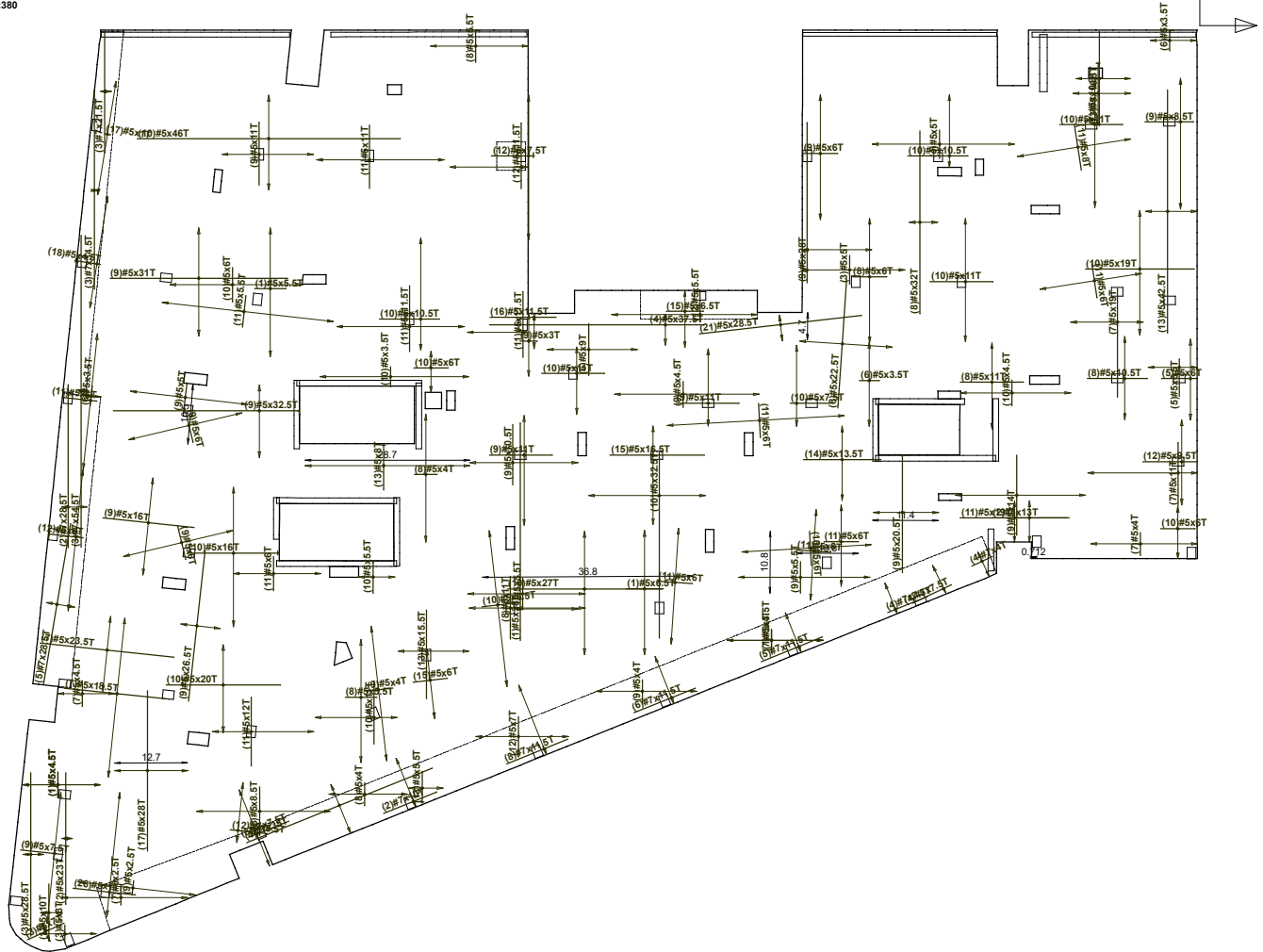
Design Strip: Punching Checks Plan

Design Strip: User Lines; User Notes; User Dimensions; Punching Checks; Punching Check Sections;
Drawing Import: User Lines; User Notes; User Dimensions;
Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
Scale = 1:380



Reinforcement: Top Bars Plan

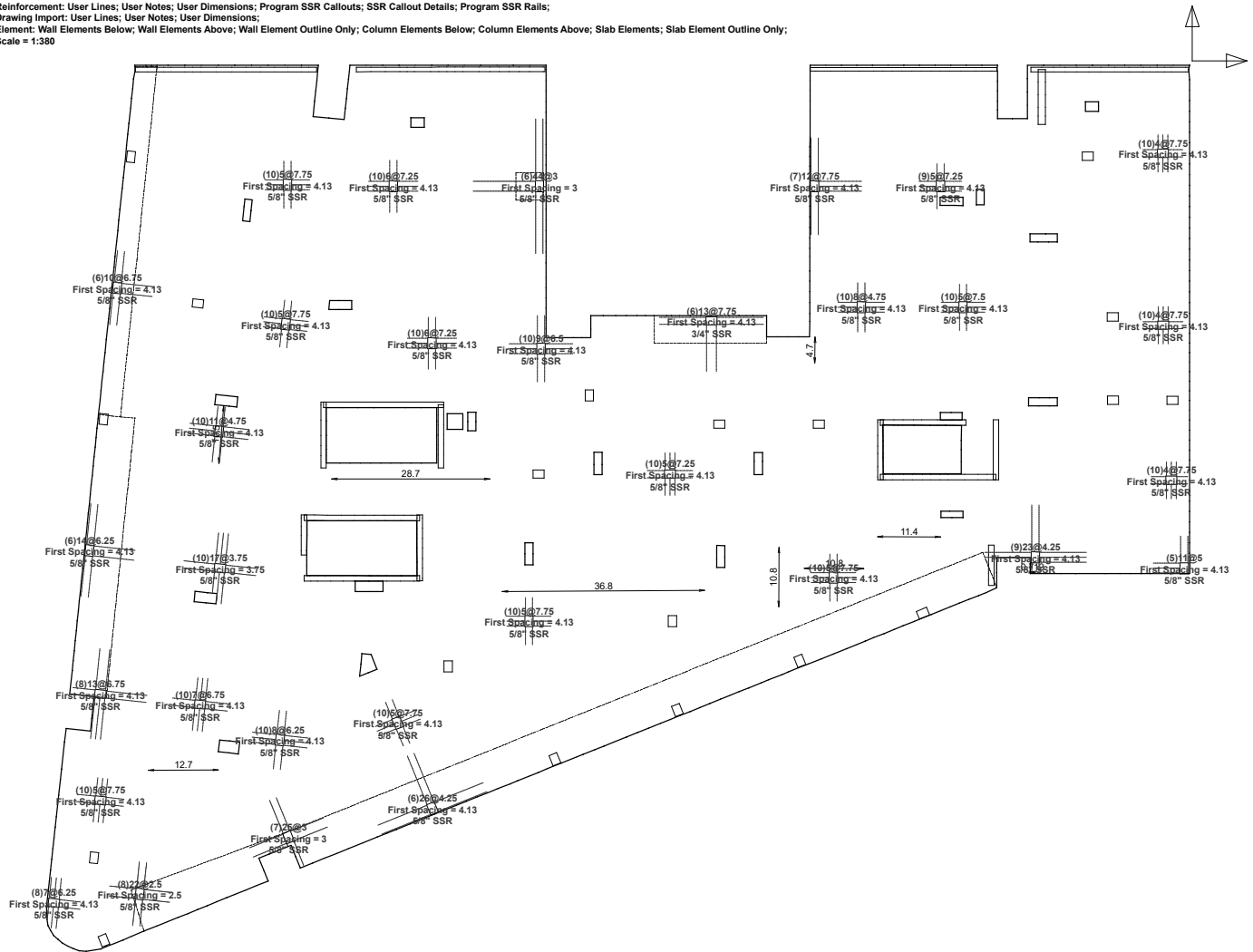
Reinforcement: Latitude User Concentrated Reinf.; Longitude User Concentrated Reinf.; Latitude Program Concentrated Reinf.; Longitude Program Concentrated Reinf.; Top Face Concentrated Reinf.; Both Faces Concentrated Reinf.; Concentrated Reinf. Descriptions; Concentrate
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



[illegible]

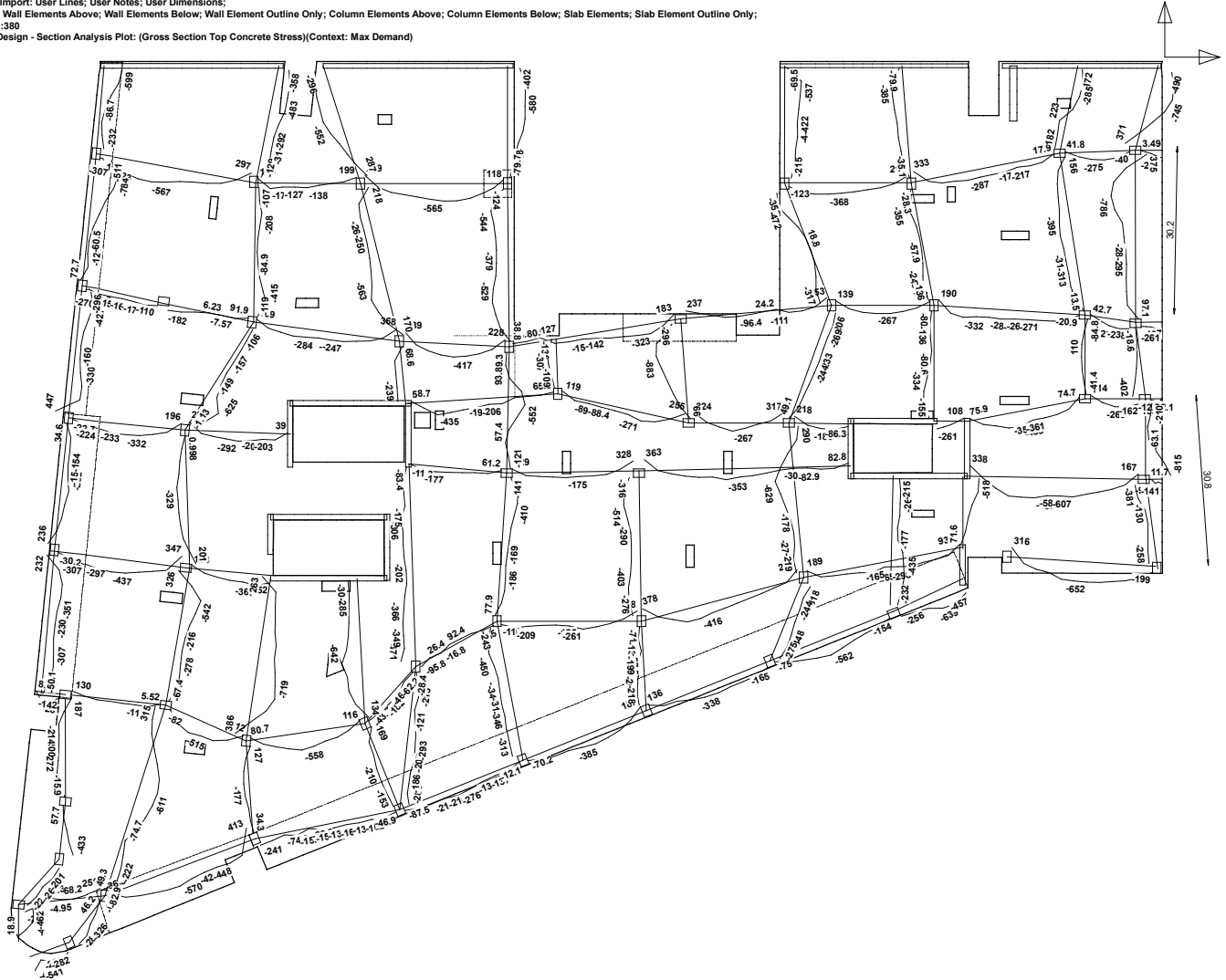
Reinforcement: SSR Plan

Reinforcement: User Lines; User Notes; User Dimensions; Program SSR Callouts; SSR Callout Details; Program SSR Rails;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
 Scale = 1:380



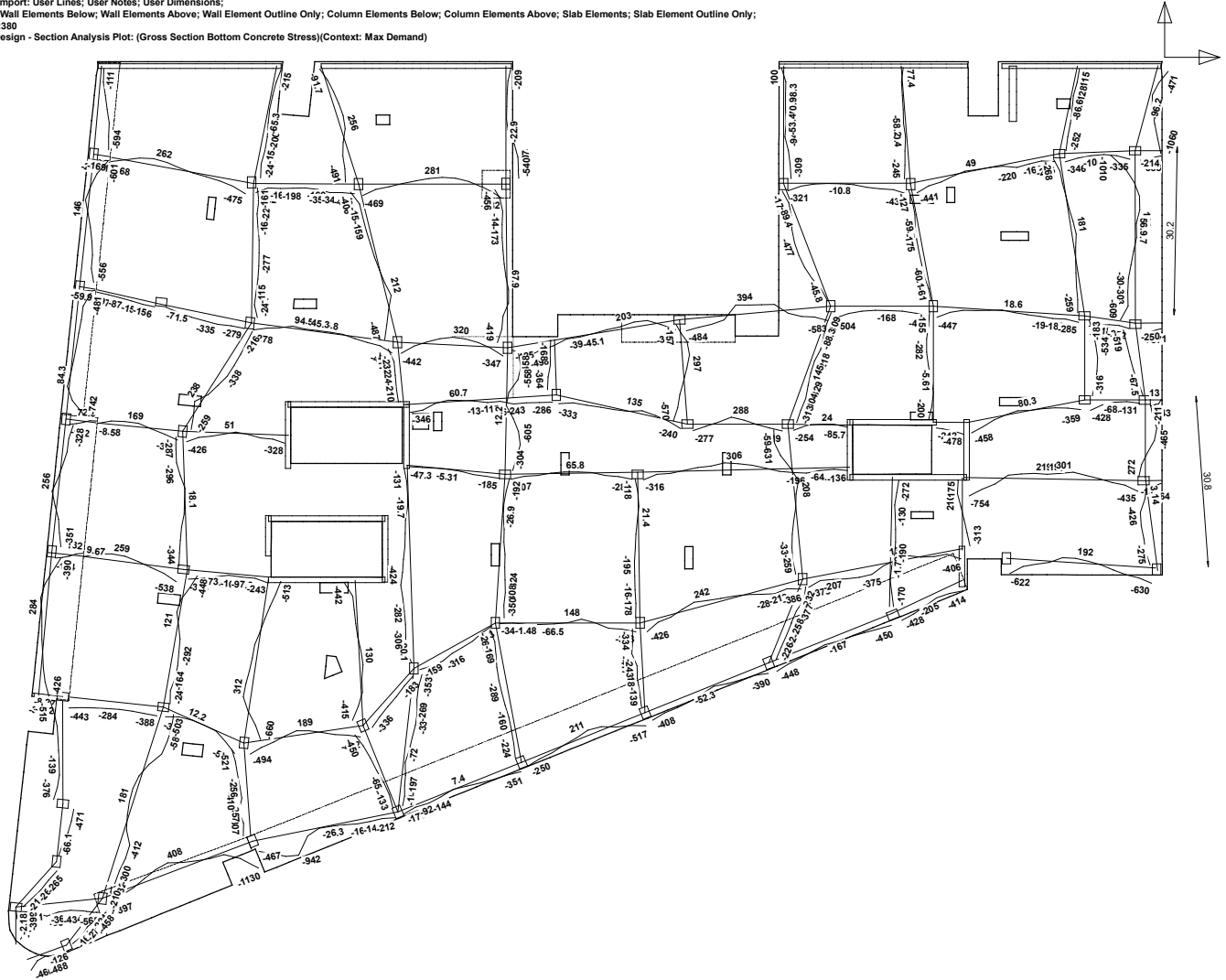
Service Design: Top Stress Plan

Service Design: Latitude Span Designs; Longitude Span Designs; Span Design Detailed Status; Latitude DS Designs; Longitude DS Designs; User Notes; User Lines; User Dimensions;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Above; Wall Elements Below; Wall Element Outline Only; Column Elements Above; Column Elements Below; Slab Elements; Slab Element Outline Only;
 Scale = 1:300
 Service Design - Section Analysis Plot: (Gross Section Top Concrete Stress)(Context: Max Demand)



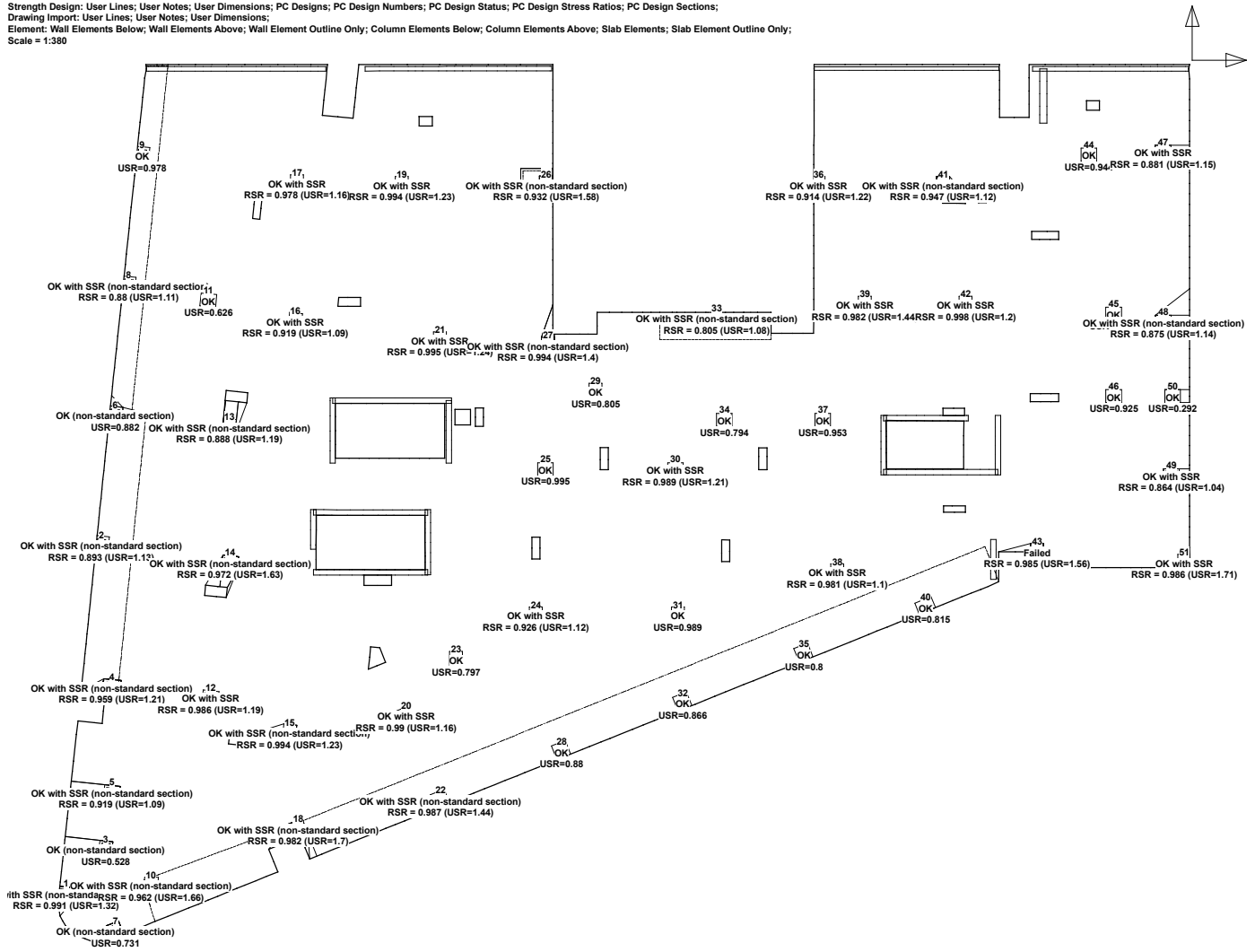
Service Design: Bottom Stress Plan

Service Design: User Lines; User Notes; User Dimensions; Longitude Span Designs; Longitude DS Designs; Latitude DS Designs; Longitude DS Designs;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
 Scale = 1:300
 Service Design - Section Analysis Plot: (Gross Section Bottom Concrete Stress)(Context: Max Demand)



Strength Design: Punching Shear Status Plan

Strength Design: User Lines; User Notes; User Dimensions; PC Designs; PC Design Numbers; PC Design Status; PC Design Stress Ratios; PC Design Sections;
 Drawing Import: User Lines; User Notes; User Dimensions;
 Element: Wall Elements Below; Wall Elements Above; Wall Element Outline Only; Column Elements Below; Column Elements Above; Slab Elements; Slab Element Outline Only;
 Scale = 1:300



Use menu item Settings > Printing & Title Block
to set these five lines of information
for your program.

Title **Grid 7 Wall Cantilevered**
Job # :
Description....

Page : 1
Date: 8 OCT 2019

This Wall in File: P:\2018\18-T066 (18th & Salmon)\Engineering\Calculations\Models\Foundation\retain

RetainPro (c) 1987-2017, Build 11.17.11.03

License : KW-06056142

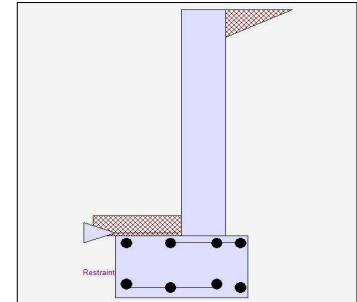
License To : FROELICH CONSULTING ENGINEERS, INC

Cantilevered Retaining Wall

Code: IBC 2015,ACI 318-14,ACI 530-13

Criteria

Retained Height	=	5.50 ft
Wall height above soil	=	0.00 ft
Slope Behind Wall	=	0.00
Height of Soil over Toe	=	6.00 in
Water height over heel	=	0.0 ft



Load Factors

Building Code	IBC 2015,ACI
Dead Load	1.200
Live Load	1.600
Earth, H	1.600
Wind, W	1.000
Seismic, E	1.000

Soil Data and Lateral Earth Pressure

Allow Soil Bearing	=	2,000.0 psf	Soil Density, Heel	=	110.00 pcf
Equivalent Fluid Pressure Method			Soil Density, Toe	=	0.00 pcf
At-Rest Heel Pressure	=	32.0 psf/ft	Footing Soil Friction	=	0.400
	=		Soil height to ignore	=	12.00 in
Passive Pressure	=	250.0 psf/ft	for passive pressure	=	

Surcharge Loads

Surcharge Over Heel	=	100.0 psf	Surcharge Over Toe	=	0.0
Used To Resist Sliding & Overturning			Used for Sliding & Overturning		

Axial Load Applied to Stem

Axial Dead Load	=	100.0 lbs	Axial Load Eccentricity	=	0.0 in
Axial Live Load	=	0.0 lbs			

Use menu item Settings > Printing & Title Block
to set these five lines of information
for your program.

Title **Grid 7 Wall Cantilevered**
Job # : Dsgnr:
Description....

Page : 2
Date: 8 OCT 2019

This Wall in File: P:\2018\18-T066 (18th & Salmon)\Engineering\Calculations\Models\Foundation\retain

RetainPro (c) 1987-2017, Build 11.17.11.03

License : KW-06056142

License To : FROELICH CONSULTING ENGINEERS, INC

Cantilevered Retaining Wall

Code: IBC 2015,ACI 318-14,ACI 530-13

Lateral Load Applied to Stem

Lateral Load	=	0.0 #/ft
...Height to Top	=	2.50 ft
...Height to Bottom	=	1.50 ft
Load Type	=	Seismic (E) (Service Level)

Wind on Exposed Stem

Wind on Exposed Stem (Service Level)	=	0.0 psf
---	---	---------

Adjacent Footing Load

Adjacent Footing Load	=	0.0 lbs	Footing Type	Line Load
Footing Width	=	0.00 ft	Base Above/Below Soil	
Eccentricity	=	0.00 in	at Back of Wall	= 0.0 ft
Wall to Ftg CL Dist	=	0.00 ft	Poisson's Ratio	= 0.300

This Wall in File: P:\2018\18-T066 (18th & Salmon)\Engineering\Calculations\Models\Foundation\retain

RetainPro (c) 1987-2017, Build 11.17.11.03
License : KW-06056142
License To : FROELICH CONSULTING ENGINEERS, INC

Cantilevered Retaining Wall

Code: IBC 2015,ACI 318-14,ACI 530-13

Wall Design Summary

Stability Ratios

Overturning = 1.61 OK
Slab Resists All Sliding !

Soil Bearing

Total Bearing Load = 1,953 lbs
...resultant ecc. = 9.04 in

Soil Pressure @ Toe = 1,743 psf OK
Soil Pressure @ Heel = 0 psf OK
Allowable = 2,000 psf
Soil Pressure Less Than Allowable

ACI Factored @ Toe = 2,440 psf
ACI Factored @ Heel = 0 psf

Footing Shear @ Toe = 2.9 psi OK
Footing Shear @ Heel = 3.0 psi OK
Allowable = 94.9 psi

Sliding

Resisting Forces

Vertical Forces

	Force
Soil Over Heel	302.5 lbs
Sloped Soil Over Heel	0.0
Surcharge Over Heel	50.0
Adjacent Footing Load	0.0
Axial Dead Load on Stem	100.0
Axial Live Load on Stem *	Omit
Soil Over Toe	0.0
Surcharge Over Toe	0.0
Stem Weight(s)	825.0
Earth @ Stem Transitions	0.0
Footing Weight	675.0
Key Weight	0.0
Vert. Component **	0.0

Total Vertical Loads 1,952.5 lbs

* Axial live load NOT included in total displayed , or used for overturning
or sliding resistance, but is included for soil pressure calculations.

Sliding Calcs

Lateral Sliding Force = 939.6 lbs

Sliding Forces

Lateral Forces

	Force
* Heel Active Pressure	784.0 lbs
Surcharge over Heel	155.6
Adjacent Footing	0.0
Surcharge Over Toe	0.0
Load @ Stem Above Soil	0.0
Added Lateral Load	0.0
Seismic Load	0.0
Seismic-Self-weight	0.0
Lateral on Key	0.0

Totals = 939.6 lbs

*Includes water table effect

Vertical component of active lateral soil pressure IS NOT considered in
the calculation of soil bearing pressures.

Use menu item Settings > Printing & Title Block
to set these five lines of information
for your program.

Title **Grid 7 Wall Cantilevered**
Job # :
Description....

Page : 4
Date: 8 OCT 2019

This Wall in File: P:\2018\18-T066 (18th & Salmon)\Engineering\Calculations\Models\Foundation\retain

RetainPro (c) 1987-2017, Build 11.17.11.03
License : KW-06056142
License To : FROELICH CONSULTING ENGINEERS, INC

Cantilevered Retaining Wall

Code: IBC 2015,ACI 318-14,ACI 530-13

Overturning

Resisting Moments

<u>Resisting Moments</u>	<u>Force</u>	<u>Distance</u>	<u>Moment</u>
Soil Over Heel	302.5 lbs	2.75 ft	831.9 ft-#
Sloped Soil Over Heel	0.0		
Surcharge Over Heel	50.0	2.75	137.5
Adjacent Footing Load	0.0		
Axial Dead Load on Stem	100.0	2.00	200.0
Axial Live Load on Stem *	0.0		
Soil Over Toe	0.0	0.75	
Surcharge Over Toe	0.0		
Stem Weight(s)	825.0	2.00	1,650.0
Earth @ Stem Transitions	0.0		
Footing Weight	675.0	1.50	1,012.5
Key Weight	0.0	0.50	
Vert. Component	0.0		
Total Vertical Loads	1,952.5 lbs		
Resisting Moment			3,831.9 ft-#
Eccentricity			9.0 in

* Axial live load NOT included in total displayed, or used for overturning or sliding resistance, but is included for soil pressure calculations.

Overturning

Overturning Moments

<u>Overturning Moments</u>	<u>Force</u>	<u>Distance</u>	<u>Moment</u>
Heel Active Pressure	784.0 lbs	2.33 ft	1,829.3 ft-#
Surcharge over Heel	155.6	3.50	544.4
Adjacent Footing	0.0		
Surcharge Over Toe	0.0		
Load @ Stem Above Soil	0.0		
Added Lateral Load	0.0		
Seismic Load	0.0		
Seismic-Self-weight	0.0		
Totals =	939.6 lbs		
Overturning Moment			2,373.8 ft-#

Use menu item Settings > Printing & Title Block
to set these five lines of information
for your program.

Title **Grid 7 Wall Cantilevered**
Job # :
Description....

Page : 5
Date: 8 OCT 2019

This Wall in File: P:\2018\18-T066 (18th & Salmon)\Engineering\Calculations\Models\Foundation\retain

RetainPro (c) 1987-2017, Build 11.17.11.03
License : KW-06056142
License To : FROELICH CONSULTING ENGINEERS, INC

Cantilevered Retaining Wall

Code: IBC 2015,ACI 318-14,ACI 530-13

Stem Design Summary

Bottom		
Stem OK		
Design Height Above Ftg	ft =	0.00
Wall Material Above "Ht"	=	Concrete
Design Method	=	LRFD
Thickness	=	12.00
Rebar Size	=	# 7
Rebar Spacing	=	12.00
Rebar Placed at	=	Edge
Design Data		
fb/FB + fa/Fa	=	0.085
Total Force @ Section		
Service Level	lbs =	
Strength Level	lbs =	1,030.4
Moment....Actual		
Service Level	ft-# =	
Strength Level	ft-# =	2,123.7
Moment.....Allowable	=	24,863.0
Shear.....Actual		
Service Level	psi =	
Strength Leve	psi =	9.0
Shear.....Allowable	psi =	106.1
Anet	in2 =	
Rebar Depth 'd'	in =	9.56
Masonry Data		
f'm	psi =	
Fs	psi =	
Solid Grouting	=	
Modular Ratio 'n'	=	
Wall Weight	psf =	150.0
Short Term Factor	=	
Equiv. Solid Thick.	=	
Masonry Block Type	=	Medium Weight
Masonry Design Method	=	ASD
Concrete Data		
f'c	psi =	5,000.0
Fy	psi =	60,000.0

Use menu item Settings > Printing & Title Block
to set these five lines of information
for your program.

Title **Grid 7 Wall Cantilevered**
Job # :
Description....

Page : 6
Date: 8 OCT 2019

This Wall in File: P:\2018\18-T066 (18th & Salmon)\Engineering\Calculations\Models\Foundation\retain

RetainPro (c) 1987-2017, Build 11.17.11.03
License : KW-06056142
License To : FROELICH CONSULTING ENGINEERS, INC

Cantilevered Retaining Wall

Code: IBC 2015,ACI 318-14,ACI 530-13

Concrete Stem Rebar Area Details

Bottom Stem	Vertical Reinforcing	Horizontal Reinforcing
As (based on applied moment) :	0.051 in ² /ft	
(4/3) * As :	0.0679 in ² /ft	Min Stem T&S Reinf Area 1.584 in ²
3sqrt(f'c)bd/fy : 3sqrt(5000)(12)(9.5625)/60000	0.04057 in ² /ft	Min Stem T&S Reinf Area per ft of stem Height : 0.288 in ² /ft
0.0018bh : 0.0018(12)(12) :	0.2592 in ² /ft	Horizontal Reinforcing Options :
	=====	One layer of : Two layers of :
Required Area :	0.2592 in ² /ft	#4@ 8.33 in #4@ 16.67 in
Provided Area :	0.6 in ² /ft	#5@ 12.92 in #5@ 25.83 in
Maximum Area :	2.4384 in ² /ft	#6@ 18.33 in #6@ 36.67 in

Footing Design Results

		<u>Toe</u>	<u>Heel</u>
Factored Pressure	=	2,440	0 psf
Mu' : Upward	=	2,133	0 ft-#
Mu' : Downward	=	378	145 ft-#
Mu: Design	=	1,755	145 ft-#
Actual 1-Way Shear	=	2.92	3.01 psi
Allow 1-Way Shear	=	50.60	50.60 psi
Toe Reinforcing	=	# 8 @ 12.00 in	
Heel Reinforcing	=	# 6 @ 16.00 in	
Key Reinforcing	=	None Spec'd	

Other Acceptable Sizes & Spacings

Toe: Not req'd: $\mu < \phi * 5 * \lambda * \sqrt{f'c} * S_m$

Heel: Not req'd: $\mu < \phi * 5 * \lambda * \sqrt{f'c} * S_m$

Key: Slab Resists Sliding - No Force on Key

Min footing T&S reinf Area	1.17	in ²
Min footing T&S reinf Area per fc	0.39	in ² /ft

If one layer of horizontal bars: If two layers of horizontal bars:

#4@ 6.17 in	#4@ 12.35 in
#5@ 9.57 in	#5@ 19.14 in
#6@ 13.58 in	#6@ 27.16 in

Date: Page : 7
8 OCT 2019

This Wall in File: P:\2018\18-T066 (18th & Salmon)\Engineering\Calculations\Models\Foundation\retain

RetainPro (c) 1987-2017, Build 11.17.11.03
License: JGN-00050140

License : KW-06056142

License To : FROELICH CONSULTING ENGINEERS, INC

Cantilevered Retaining Wall

Code: IBC 2015,ACI 318-14,ACI 530-13

Tilt

Horizontal Deflection at Top of Wall due to settlement of soil

(Deflection due to wall bending not considered)

Soil Spring Reaction Modulus	250.0	pci
------------------------------	-------	-----

Horizontal Defl @ Top of Wall (approximate only)	0.089 in
--	----------

The above calculation is not valid if the heel soil bearing pressure exceeds that of the toe.

because the wall would then tend to rotate into the retained soil.

This Wall in File: P:\2018\18-T066 (18th & Salmon)\Engineering\Calculations\Models\Foundation\retain

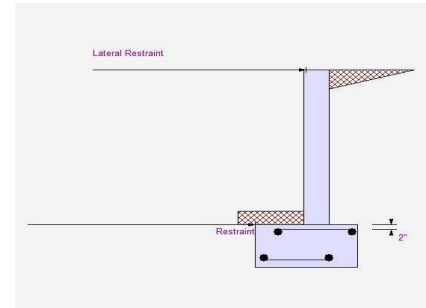
RetainPro (c) 1987-2017, Build 11.17.11.03
License : KW-06056142
License To : FROELICH CONSULTING ENGINEERS, INC

Restrained Retaining Wall

Code: IBC 2015,ACI 318-14,ACI 530-13

Criteria

Retained Height	=	5.50 ft
Wall height above soil	=	0.00 ft
Total Wall Height	=	5.50 ft
Top Support Height	=	5.50 ft
Slope Behind Wall	=	0.00
Height of Soil over Toe	=	6.00 in



Load Factors

Building Code	IBC 2015,ACI 318-14,ACI 530-13
Dead Load	1.200
Live Load	1.600
Earth, H	1.600
Wind, W	1.000
Seismic, E	1.000

Soil Data

Allow Soil Bearing	=	2,000.0 psf
Equivalent Fluid Pressure Method		
At-rest Heel Pressure	=	32.0 psf/ft
	=	
Passive Pressure	=	250.0 psf/ft
Soil Density	=	110.00 pcf
Footings Soil Friction	=	0.400
Soil height to ignore for passive pressure	=	12.00 in

Surcharge Loads

Surcharge Over Heel	=	250.0 psf
>>>Used To Resist Sliding & Overturning		
Surcharge Over Toe	=	0.0 psf
Used for Sliding & Overturning		

Axial Load Applied to Stem

Axial Dead Load	=	100.0 lbs
Axial Live Load	=	0.0 lbs
Axial Load Eccentricity	=	0.0 in

Use menu item Settings > Printing & Title Block
to set these five lines of information
for your program.

Title **Grid 7 Wall Restrained**
Job # : Dsgnr:
Description....

Page : 2
Date: 8 OCT 2019

This Wall in File: P:\2018\18-T066 (18th & Salmon)\Engineering\Calculations\Models\Foundation\retain

RetainPro (c) 1987-2017, Build 11.17.11.03

License : KW-06056142

License To : FROELICH CONSULTING ENGINEERS, INC

Restrained Retaining Wall

Code: IBC 2015,ACI 318-14,ACI 530-13

Uniform Lateral Load Applied to Stem

Lateral Load	=	44.0 #/ft
...Height to Top	=	3.80 ft
...Height to Bottom	=	2.80 ft
Load Type	=	Seismic (E) (Strength Level)
Wind on Exposed Stem	=	0.0 psf

Adjacent Footing Load

Adjacent Footing Load	=	0.0 lbs
Footing Width	=	0.00 ft
Eccentricity	=	0.00 in
Wall to Ftg CL Dist	=	0.00 ft
Footing Type	Line Load	
Base Above/Below Soil		
at Back of Wall	=	0.0 ft
Poisson's Ratio	=	0.300

Earth Pressure Seismic Load

K_h Soil Density Multiplier	=	1.980 g
Added seismic per unit area	=	0.0 psf

Stem Weight Seismic Load

F_p / W_p Weight Multiplier	=	0.000 g
Added seismic per unit area	=	0.0 psf

This Wall in File: P:\2018\18-T066 (18th & Salmon)\Engineering\Calculations\Models\Foundation\retain

RetainPro (c) 1987-2017, Build 11.17.11.03

License : KW-06056142

License To : FROELICH CONSULTING ENGINEERS, INC

Restrained Retaining Wall

Code: IBC 2015,ACI 318-14,ACI 530-13

Design Summary

Total Bearing Load	=	2,120 lbs
...resultant ecc.	=	5.25 in
Soil Pressure @ Toe	=	707 psf OK
Soil Pressure @ Heel	=	707 psf OK
Allowable	=	2,000 psf
Soil Pressure Less Than Allowable		
ACI Factored @ Toe	=	106 psf
ACI Factored @ Heel	=	1,590 psf
Footing Shear @ Toe	=	0.3 psi OK
Footing Shear @ Heel	=	0.1 psi OK
Allowable	=	94.9 psi
Reaction at Top	=	386.7 lbs
Reaction at Bottom	=	949.4 lbs

Sliding Calcs

$$\text{Lateral Sliding Force} = 949.4 \text{ lbs}$$

Vertical component of active lateral soil pressure IS NOT considered in the calculation of Sliding Resistance.

Concrete Stem Construction

Thickness	=	8.00 in	Fy	=	60,000 psi
Wall Weight	=	100.0 psf	f'c	=	4,000 psi
Stem is FREE to rotate at top of footing					

		@ Top Support	Mmax Between Top & Base	@ Base of Wall
		Stem OK	Stem OK	Stem OK
Design Height Above Ftg	=	5.50 ft	2.58 ft	0.00 ft
Rebar Size	=	# 5	# 5	# 5
Rebar Spacing	=	12.00 in	12.00 in	12.00 in
Rebar Placed at	=	Center	Center	Center
Rebar Depth 'd'	=	4.00 in	4.00 in	4.00 in
Design Data				
fb/FB + fa/Fa	=	0.000	0.194	0.000
Mu....Actual	=	0.0 ft-#	1,018.5 ft-#	0.0 ft-#
Mn * Phi.....Allowable	=	5,261.1 ft-#	5,261.1 ft-#	5,261.1 ft-#
Shear Force @ this height	=	607.1 lbs		853.9 lbs
Shear.....Actual	=	12.65 psi		17.79 psi
Shear.....Allowable	=	94.87 psi		94.87 psi

Other Acceptable Sizes & Spacings:

Toe: # 8 @ 18.00 in	-or-	Not req'd: $\mu < \phi * 5 * \lambda * \sqrt{f'c} * S_m$
Heel: # 6 @ 16.00 in	-or-	Not req'd: $\mu < \phi * 5 * \lambda * \sqrt{f'c} * S_m$
Key: Slab Resists Sliding	-or-	Slab Resists Sliding - No Force on

Use menu item Settings > Printing & Title Block
to set these five lines of information
for your program.

Title **Grid 7 Wall Restrained**
Job # :
Description....

Page : 4
Date: 8 OCT 2019

This Wall in File: P:\2018\18-T066 (18th & Salmon)\Engineering\Calculations\Models\Foundation\retain

RetainPro (c) 1987-2017, Build 11.17.11.03
License : KW-06056142
License To : FROELICH CONSULTING ENGINEERS, INC

Restrained Retaining Wall

Code: IBC 2015,ACI 318-14,ACI 530-13

Concrete Stem Rebar Area Details

Top Support	Vertical Reinforcing	Horizontal Reinforcing
As (based on applied moment) :	0 in2/ft	
(4/3) * As :	0 in2/ft	Min Stem T&S Reinf Area 1.056 in2
200bd/fy : 200(12)(4)/60000 :	0.16 in2/ft	Min Stem T&S Reinf Area per ft of stem Height : 0.192 in2/ft
0.0018bh : 0.0018(12)(8) :	0.1728 in2/ft	Horizontal Reinforcing Options :
	=====	One layer of : Two layers of :
Required Area :	0.1728 in2/ft	#4@ 12.50 in #4@ 25.00 in
Provided Area :	0.31 in2/ft	#5@ 19.38 in #5@ 38.75 in
Maximum Area :	0.867 in2/ft	#6@ 27.50 in #6@ 55.00 in
Mmax Between Ends	Vertical Reinforcing	Horizontal Reinforcing
As (based on applied moment) :	0.0615 in2/ft	
(4/3) * As :	0.082 in2/ft	Min Stem T&S Reinf Area 0.560 in2
200bd/fy : 200(12)(4)/60000 :	0.16 in2/ft	Min Stem T&S Reinf Area per ft of stem Height : 0.192 in2/ft
0.0018bh : 0.0018(12)(8) :	0.1728 in2/ft	Horizontal Reinforcing Options :
	=====	One layer of : Two layers of :
Required Area :	0.1728 in2/ft	#4@ 12.50 in #4@ 25.00 in
Provided Area :	0.31 in2/ft	#5@ 19.38 in #5@ 38.75 in
Maximum Area :	0.867 in2/ft	#6@ 27.50 in #6@ 55.00 in
Base Support	Vertical Reinforcing	Horizontal Reinforcing
As (based on applied moment) :	0 in2/ft	
(4/3) * As :	0 in2/ft	Min Stem T&S Reinf Area 0.496 in2
200bd/fy : 200(12)(4)/60000 :	0.16 in2/ft	Min Stem T&S Reinf Area per ft of stem Height : 0.192 in2/ft
0.0018bh : 0.0018(12)(8) :	0.1728 in2/ft	Horizontal Reinforcing Options :
	=====	One layer of : Two layers of :
Required Area :	0.1728 in2/ft	#4@ 12.50 in #4@ 25.00 in
Provided Area :	0.31 in2/ft	#5@ 19.38 in #5@ 38.75 in
Maximum Area :	0.867 in2/ft	#6@ 27.50 in #6@ 55.00 in

Footings Strengths & Dimensions

Toe Width	=	1.50 ft
Heel Width	=	1.50
Total Footing Width	=	3.00
Footing Thickness	=	18.00 in
Key Width	=	12.00 in
Key Depth	=	0.00 in
Key Distance from Toe	=	2.00 ft
f'c	=	4,000 psi
Fy	=	60,000 psi
Footing Concrete Density	=	150.00 pcf
Min. As %	=	0.0018
Cover @ Top	=	2.00 in
Cover @ Btm	=	3.00 in

Use menu item Settings > Printing & Title Block
to set these five lines of information
for your program.

Title **Grid 7 Wall Restrained**
Job # :
Description....

Page : 5
Date: 8 OCT 2019

This Wall in File: P:\2018\18-T066 (18th & Salmon)\Engineering\Calculations\Models\Foundation\retain

RetainPro (c) 1987-2017, Build 11.17.11.03
License : KW-06056142
License To : FROELICH CONSULTING ENGINEERS, INC

Restrained Retaining Wall

Code: IBC 2015,ACI 318-14,ACI 530-13

Footing Design Results

		<u>Toe</u>	<u>Heel</u>
Factored Pressure	=	106	1,590 psf
Mu' : Upward	=	398	581 ft-#
Mu' : Downward	=	378	485 ft-#
Mu: Design	=	20	-96 ft-#
Actual 1-Way Shear	=	0.26	0.06 psi
Allow 1-Way Shear	=	94.87	94.87 psi

Min footing T&S reinf Area 1.17 in2

Min footing T&S reinf Area per fc 0.39 in2 /ft

If one layer of horizontal bars: If two layers of horizontal bars:

#4@ 6.17 in

#5@ 9.57 in

#6@ 13.58 in

Summary of Forces on Footing : Slab RESISTS sliding, stem is PINNED at footing

Forces acting on footing soil pressure

(taking moments about front of footing to find eccentricity)

Surcharge Over Heel	=	208.3 lbs	2.58 ft	538.2 ft-#
Axial Dead Load on Stem	=	100.0 lbs	1.83 ft	183.3 ft-#
Soil Over Toe	=	82.5 lbs	0.75 ft	61.9 ft-#
Adjacent Footing Load	=	lbs	ft	ft-#
Surcharge Over Toe	=	lbs	ft	ft-#
Stem Weight	=	550.0 lbs	1.83 ft	1,008.3 ft-#
Soil Over Heel	=	504.2 lbs	2.58 ft	1,302.4 ft-#
Footing Weight	=	675.0 lbs	1.50 ft	1,013.0 ft-#
Total Vertical Force	=	2,120.0 lbs	Moment =	4,107.2 ft-#

Net Mom. at Stem/Ftg Interface = -927.2 ft-#

Allow. Mom. @ Stem/Ftg Interface = 3,288.2 ft-#

Allow. Mom. Exceeds Applied Mom.? Yes

Vertical component of active lateral soil pressure IS NOT considered in the calculation of soil bearing pressures.

Title Block Line 1
You can change this area
using the "Settings" menu item
and then using the "Printing &
Title Block" selection.
Title Block Line 6

Project Title:
Engineer:
Project ID:
Project Descr:

Printed: 8 OCT 2019, 11:09PM

Concrete Beam

Lic. # : KW-06002304

File = P:\2018\1LXLCE-PIEHTEC6-Q\IC7A4YC-F\Models\FNHN3S-U\lateral distribution to piles.ec6 .

Software copyright ENERCALC, INC. 1983-2019, Build:12.19.8.30 .

FROELICH CONSULTING ENGINEERS

DESCRIPTION: Grade Beam Under Retaining Wall

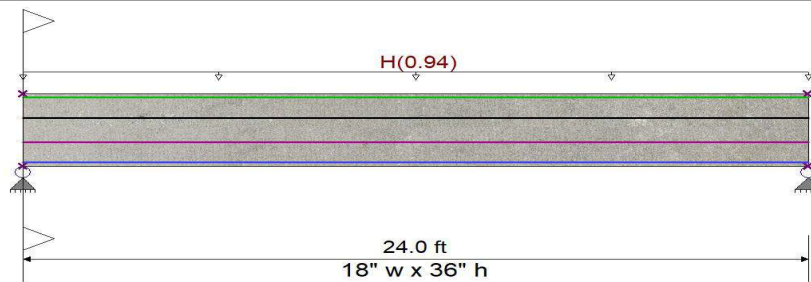
CODE REFERENCES

Calculations per ACI 318-11, IBC 2012, CBC 2013, ASCE 7-10

Load Combination Set : ASCE 7-16

Material Properties

f'c	=	4.0 ksi	Φ Phi Values	Flexure :	0.90
fr = f'c ^{1/2} * 7.50	=	474.342 psi		Shear :	0.750
Ψ Density	=	145.0 pcf	β ₁	=	0.850
λ LtWt Factor	=	1.0			
Elastic Modulus	=	3,122.0 ksi	Fy - Stirrups		40.0 ksi
fy - Main Rebar	=	60.0 ksi	E - Stirrups	=	29,000.0 ksi
E - Main Rebar	=	29,000.0 ksi	Stirrup Bar Size #		3
		Number of Resisting Legs Per Stirrup	=		2



Cross Section & Reinforcing Details

Rectangular Section, Width = 18.0 in, Height = 36.0 in

Span #1 Reinforcing....

2-#5 at 2.0 in from Bottom, from 0.0 to 24.0 ft in this span
2-#5 at 12.0 in from Bottom, from 0.0 to 24.0 ft in this span

2-#5 at 2.0 in from Top, from 0.0 to 24.0 ft in this span
2-#5 at 12.0 in from Top, from 0.0 to 24.0 ft in this span

Load for Span Number 1

Uniform Load : H = 0.940 k/ft, Tributary Width = 1.0 ft

DESIGN SUMMARY

Design OK

Maximum Bending Stress Ratio =	0.685 : 1	Maximum Deflection	
Section used for this span	Typical Section	Max Downward Transient Deflection	0.032 in Ratio = 8970 >= 360.
Mu : Applied	128.592 k-ft	Max Upward Transient Deflection	0.000 in Ratio = 0 < 360.0
Mn * Phi : Allowable	187.632 k-ft	Max Downward Total Deflection	0.032 in Ratio = 8970 >= 180.
Location of maximum on span	12.022 ft	Max Upward Total Deflection	0.000 in Ratio = 0 < 180.0
Span # where maximum occurs	Span # 1		

Vertical Reactions

Support notation : Far left is #1

Load Combination	Support 1	Support 2
Overall MAXimum	11.280	11.280
Overall MINimum	6.768	6.768
+D+H	11.280	11.280
+D+L+H	11.280	11.280
+D+Lr+H	11.280	11.280
+D+S+H	11.280	11.280
+D+0.750Lr+0.750L+H	11.280	11.280
+D+0.750L+0.750S+H	11.280	11.280
+D+0.60W+H	11.280	11.280
+D+0.750Lr+0.750L+0.450W+H	11.280	11.280
+D+0.750L+0.750S+0.450W+H	11.280	11.280
+0.60D+0.60W+0.60H	6.768	6.768
+D+0.70E+0.60H	6.768	6.768

Title Block Line 1
 You can change this area
 using the "Settings" menu item
 and then using the "Printing &
 Title Block" selection.
 Title Block Line 6

Project Title:
 Engineer:
 Project ID:
 Project Descr:

Printed: 8 OCT 2019, 11:09PM

Concrete Beam

File = P:\2018\1LXLC-PIEHTEC6-Q\7A4YC-F\Models\FNHN3S-U\lateral distribution to piles.ec6 .

Software copyright ENERCALC, INC. 1983-2019, Build:12.19.8.30 .

Lic. # : KW-06002304

FROELICH CONSULTING ENGINEERS

DESCRIPTION: Grade Beam Under Retaining Wall

Vertical Reactions

Support notation : Far left is #1

Load Combination	Support 1	Support 2
+D+0.750L+0.750S+0.5250E+H	11.280	11.280
+0.60D+0.70E+H	11.280	11.280
D Only		
Lr Only		
L Only		
S Only		
W Only		
E Only		
H Only	11.280	11.280

Detailed Shear Information

Load Combination	Span Number	Distance (ft)	'd' (in)	Vu (k) Actual	Vu (k) Design	Mu (k-ft)	d*Vu/Mu	Phi*Vc (k)	Comment	Phi*Vs (k)	Phi*Vn (k)	Spacing (in) Req'd Suggest
+1.20D+L+0.20S+E+1.90H	1	0.00	34.00	21.43	21.43	0.00	1.00	57.48	Vu < PhiVc/2	lot Req'd 11.4	57.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	0.26	34.00	20.96	20.96	5.56	1.00	57.48	Vu < PhiVc/2	lot Req'd 11.4	57.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	0.52	34.00	20.50	20.50	11.00	1.00	57.48	Vu < PhiVc/2	lot Req'd 11.4	57.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	0.79	34.00	20.03	20.03	16.31	1.00	57.48	Vu < PhiVc/2	lot Req'd 11.4	57.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	1.05	34.00	19.56	19.56	21.50	1.00	57.48	Vu < PhiVc/2	lot Req'd 11.4	57.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	1.31	34.00	19.09	19.09	26.57	1.00	57.48	Vu < PhiVc/2	lot Req'd 11.4	57.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	1.57	34.00	18.62	18.62	31.52	1.00	57.48	Vu < PhiVc/2	lot Req'd 11.4	57.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	1.84	34.00	18.15	18.15	36.34	1.00	57.48	Vu < PhiVc/2	lot Req'd 11.4	57.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	2.10	34.00	17.68	17.68	41.04	1.00	57.48	Vu < PhiVc/2	lot Req'd 11.4	57.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	2.36	34.00	17.22	17.22	45.62	1.00	57.48	Vu < PhiVc/2	lot Req'd 11.4	57.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	2.62	34.00	16.75	16.75	50.07	0.95	57.36	Vu < PhiVc/2	lot Req'd 11.4	57.4	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	2.89	34.00	16.28	16.28	54.40	0.85	57.13	Vu < PhiVc/2	lot Req'd 11.4	57.1	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	3.15	34.00	15.81	15.81	58.61	0.76	56.93	Vu < PhiVc/2	lot Req'd 11.4	56.9	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	3.41	34.00	15.34	15.34	62.70	0.69	56.77	Vu < PhiVc/2	lot Req'd 11.4	56.8	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	3.67	34.00	14.87	14.87	66.66	0.63	56.63	Vu < PhiVc/2	lot Req'd 11.4	56.6	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	3.93	34.00	14.41	14.41	70.50	0.58	56.50	Vu < PhiVc/2	lot Req'd 11.4	56.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	4.20	34.00	13.94	13.94	74.22	0.53	56.39	Vu < PhiVc/2	lot Req'd 11.4	56.4	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	4.46	34.00	13.47	13.47	77.81	0.49	56.30	Vu < PhiVc/2	lot Req'd 11.4	56.3	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	4.72	34.00	13.00	13.00	81.28	0.45	56.21	Vu < PhiVc/2	lot Req'd 11.4	56.2	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	4.98	34.00	12.53	12.53	84.63	0.42	56.13	Vu < PhiVc/2	lot Req'd 11.4	56.1	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	5.25	34.00	12.06	12.06	87.86	0.39	56.06	Vu < PhiVc/2	lot Req'd 11.4	56.1	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	5.51	34.00	11.59	11.59	90.96	0.36	56.00	Vu < PhiVc/2	lot Req'd 11.4	56.0	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	5.77	34.00	11.13	11.13	93.94	0.34	55.94	Vu < PhiVc/2	lot Req'd 11.4	55.9	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	6.03	34.00	10.66	10.66	96.79	0.31	55.88	Vu < PhiVc/2	lot Req'd 11.4	55.9	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	6.30	34.00	10.19	10.19	99.53	0.29	55.83	Vu < PhiVc/2	lot Req'd 11.4	55.8	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	6.56	34.00	9.72	9.72	102.14	0.27	55.78	Vu < PhiVc/2	lot Req'd 11.4	55.8	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	6.82	34.00	9.25	9.25	104.63	0.25	55.74	Vu < PhiVc/2	lot Req'd 11.4	55.7	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	7.08	34.00	8.78	8.78	106.99	0.23	55.70	Vu < PhiVc/2	lot Req'd 11.4	55.7	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	7.34	34.00	8.32	8.32	109.24	0.22	55.66	Vu < PhiVc/2	lot Req'd 11.4	55.7	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	7.61	34.00	7.85	7.85	111.36	0.20	55.62	Vu < PhiVc/2	lot Req'd 11.4	55.6	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	7.87	34.00	7.38	7.38	113.35	0.18	55.59	Vu < PhiVc/2	lot Req'd 11.4	55.6	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	8.13	34.00	6.91	6.91	115.23	0.17	55.55	Vu < PhiVc/2	lot Req'd 11.4	55.6	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	8.39	34.00	6.44	6.44	116.98	0.16	55.52	Vu < PhiVc/2	lot Req'd 11.4	55.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	8.66	34.00	5.97	5.97	118.60	0.14	55.49	Vu < PhiVc/2	lot Req'd 11.4	55.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	8.92	34.00	5.50	5.50	120.11	0.13	55.46	Vu < PhiVc/2	lot Req'd 11.4	55.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	9.18	34.00	5.04	5.04	121.49	0.12	55.43	Vu < PhiVc/2	lot Req'd 11.4	55.4	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	9.44	34.00	4.57	4.57	122.75	0.11	55.40	Vu < PhiVc/2	lot Req'd 11.4	55.4	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	9.70	34.00	4.10	4.10	123.89	0.09	55.37	Vu < PhiVc/2	lot Req'd 11.4	55.4	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	9.97	34.00	3.63	3.63	124.90	0.08	55.35	Vu < PhiVc/2	lot Req'd 11.4	55.3	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	10.23	34.00	3.16	3.16	125.79	0.07	55.32	Vu < PhiVc/2	lot Req'd 11.4	55.3	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	10.49	34.00	2.69	2.69	126.56	0.06	55.30	Vu < PhiVc/2	lot Req'd 11.4	55.3	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	10.75	34.00	2.23	2.23	127.21	0.05	55.27	Vu < PhiVc/2	lot Req'd 11.4	55.3	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	11.02	34.00	1.76	1.76	127.73	0.04	55.25	Vu < PhiVc/2	lot Req'd 11.4	55.2	0.0 0.0

Title Block Line 1
 You can change this area
 using the "Settings" menu item
 and then using the "Printing &
 Title Block" selection.
 Title Block Line 6

Project Title:
 Engineer:
 Project ID:
 Project Descr:

Printed: 8 OCT 2019, 11:09PM

Concrete Beam

File = P:\2018\1LXLCE-PIEHTEC6-Q\IC7A4YC-F\Models\FNHN3S-U\lateral distribution to piles.ec6 .

Software copyright ENERCALC, INC. 1983-2019, Build:12.19.8.30 .

Lic. # : KW-06002304

FROELICH CONSULTING ENGINEERS

DESCRIPTION: Grade Beam Under Retaining Wall

Detailed Shear Information

Load Combination	Span Number	Distance (ft)	'd' (in)	Vu (k) Actual	Vu (k) Design	Mu (k-ft)	d*Vu/Mu	Phi*Vc (k)	Comment	Phi*Vs (k)	Phi*Vn (k)	Spacing (in) Req'd Suggest
+1.20D+L+0.20S+E+1.90H	1	11.28	34.00	1.29	1.29	128.13	0.03	55.22	Vu < PhiVc/2	lot Req'd 11.4	55.2	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	11.54	34.00	0.82	0.82	128.40	0.02	55.20	Vu < PhiVc/2	lot Req'd 11.4	55.2	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	11.80	34.00	0.35	0.35	128.56	0.01	55.17	Vu < PhiVc/2	lot Req'd 11.4	55.2	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	12.07	34.00	-0.12	0.12	128.59	0.00	55.16	Vu < PhiVc/2	lot Req'd 11.4	55.2	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	12.33	34.00	-0.59	0.59	128.50	0.01	55.19	Vu < PhiVc/2	lot Req'd 11.4	55.2	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	12.59	34.00	-1.05	1.05	128.28	0.02	55.21	Vu < PhiVc/2	lot Req'd 11.4	55.2	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	12.85	34.00	-1.52	1.52	127.94	0.03	55.23	Vu < PhiVc/2	lot Req'd 11.4	55.2	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	13.11	34.00	-1.99	1.99	127.48	0.04	55.26	Vu < PhiVc/2	lot Req'd 11.4	55.3	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	13.38	34.00	-2.46	2.46	126.90	0.05	55.28	Vu < PhiVc/2	lot Req'd 11.4	55.3	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	13.64	34.00	-2.93	2.93	126.19	0.07	55.31	Vu < PhiVc/2	lot Req'd 11.4	55.3	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	13.90	34.00	-3.40	3.40	125.36	0.08	55.33	Vu < PhiVc/2	lot Req'd 11.4	55.3	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	14.16	34.00	-3.86	3.86	124.41	0.09	55.36	Vu < PhiVc/2	lot Req'd 11.4	55.4	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	14.43	34.00	-4.33	4.33	123.34	0.10	55.39	Vu < PhiVc/2	lot Req'd 11.4	55.4	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	14.69	34.00	-4.80	4.80	122.14	0.11	55.42	Vu < PhiVc/2	lot Req'd 11.4	55.4	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	14.95	34.00	-5.27	5.27	120.82	0.12	55.44	Vu < PhiVc/2	lot Req'd 11.4	55.4	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	15.21	34.00	-5.74	5.74	119.37	0.14	55.47	Vu < PhiVc/2	lot Req'd 11.4	55.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	15.48	34.00	-6.21	6.21	117.81	0.15	55.50	Vu < PhiVc/2	lot Req'd 11.4	55.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	15.74	34.00	-6.68	6.68	116.12	0.16	55.54	Vu < PhiVc/2	lot Req'd 11.4	55.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	16.00	34.00	-7.14	7.14	114.30	0.18	55.57	Vu < PhiVc/2	lot Req'd 11.4	55.6	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	16.26	34.00	-7.61	7.61	112.37	0.19	55.60	Vu < PhiVc/2	lot Req'd 11.4	55.6	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	16.52	34.00	-8.08	8.08	110.31	0.21	55.64	Vu < PhiVc/2	lot Req'd 11.4	55.6	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	16.79	34.00	-8.55	8.55	108.13	0.22	55.68	Vu < PhiVc/2	lot Req'd 11.4	55.7	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	17.05	34.00	-9.02	9.02	105.83	0.24	55.72	Vu < PhiVc/2	lot Req'd 11.4	55.7	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	17.31	34.00	-9.49	9.49	103.40	0.26	55.76	Vu < PhiVc/2	lot Req'd 11.4	55.8	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	17.57	34.00	-9.95	9.95	100.85	0.28	55.81	Vu < PhiVc/2	lot Req'd 11.4	55.8	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	17.84	34.00	-10.42	10.42	98.18	0.30	55.86	Vu < PhiVc/2	lot Req'd 11.4	55.9	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	18.10	34.00	-10.89	10.89	95.38	0.32	55.91	Vu < PhiVc/2	lot Req'd 11.4	55.9	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	18.36	34.00	-11.36	11.36	92.46	0.35	55.97	Vu < PhiVc/2	lot Req'd 11.4	56.0	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	18.62	34.00	-11.83	11.83	89.42	0.37	56.03	Vu < PhiVc/2	lot Req'd 11.4	56.0	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	18.89	34.00	-12.30	12.30	86.26	0.40	56.10	Vu < PhiVc/2	lot Req'd 11.4	56.1	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	19.15	34.00	-12.77	12.77	82.97	0.44	56.17	Vu < PhiVc/2	lot Req'd 11.4	56.2	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	19.41	34.00	-13.23	13.23	79.56	0.47	56.25	Vu < PhiVc/2	lot Req'd 11.4	56.3	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	19.67	34.00	-13.70	13.70	76.03	0.51	56.34	Vu < PhiVc/2	lot Req'd 11.4	56.3	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	19.93	34.00	-14.17	14.17	72.37	0.55	56.45	Vu < PhiVc/2	lot Req'd 11.4	56.4	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	20.20	34.00	-14.64	14.64	68.59	0.60	56.56	Vu < PhiVc/2	lot Req'd 11.4	56.6	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	20.46	34.00	-15.11	15.11	64.69	0.66	56.69	Vu < PhiVc/2	lot Req'd 11.4	56.7	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	20.72	34.00	-15.58	15.58	60.67	0.73	56.85	Vu < PhiVc/2	lot Req'd 11.4	56.8	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	20.98	34.00	-16.04	16.04	56.52	0.80	57.03	Vu < PhiVc/2	lot Req'd 11.4	57.0	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	21.25	34.00	-16.51	16.51	52.25	0.90	57.24	Vu < PhiVc/2	lot Req'd 11.4	57.2	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	21.51	34.00	-16.98	16.98	47.86	1.00	57.48	Vu < PhiVc/2	lot Req'd 11.4	57.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	21.77	34.00	-17.45	17.45	43.34	1.00	57.48	Vu < PhiVc/2	lot Req'd 11.4	57.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	22.03	34.00	-17.92	17.92	38.71	1.00	57.48	Vu < PhiVc/2	lot Req'd 11.4	57.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	22.30	34.00	-18.39	18.39	33.94	1.00	57.48	Vu < PhiVc/2	lot Req'd 11.4	57.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	22.56	34.00	-18.86	18.86	29.06	1.00	57.48	Vu < PhiVc/2	lot Req'd 11.4	57.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	22.82	34.00	-19.32	19.32	24.05	1.00	57.48	Vu < PhiVc/2	lot Req'd 11.4	57.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	23.08	34.00	-19.79	19.79	18.92	1.00	57.48	Vu < PhiVc/2	lot Req'd 11.4	57.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	23.34	34.00	-20.26	20.26	13.67	1.00	57.48	Vu < PhiVc/2	lot Req'd 11.4	57.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	23.61	34.00	-20.73	20.73	8.29	1.00	57.48	Vu < PhiVc/2	lot Req'd 11.4	57.5	0.0 0.0
+1.20D+L+0.20S+E+1.90H	1	23.87	34.00	-21.20	21.20	2.80	1.00	57.48	Vu < PhiVc/2	lot Req'd 11.4	57.5	0.0 0.0

Maximum Forces & Stresses for Load Combinations

Load Combination		Location (ft)	Bending Stress Results (k-ft)		
Segment	Span #	along Beam	Mu : Max	Phi*Mnx	Stress Ratio
MAXimum BENDING Envelope					
Span # 1	1	24.000	128.59	187.63	0.69

Title Block Line 1
 You can change this area
 using the "Settings" menu item
 and then using the "Printing &
 Title Block" selection.
 Title Block Line 6

Project Title:
 Engineer:
 Project ID:
 Project Descr:

Printed: 8 OCT 2019, 11:09PM

Concrete Beam

File = P:\2018\1LXLCE-PIEHTEC6-Q\IC7A4YC-F\Models\FNHN3S-U\lateral distribution to piles.ec6 .

Software copyright ENERCALC, INC. 1983-2019, Build:12.19.8.30 .

Lic. # : KW-06002304

FROELICH CONSULTING ENGINEERS

DESCRIPTION: Grade Beam Under Retaining Wall

Load Combination Segment	Span #	Location (ft) along Beam	Bending Stress Results (k-ft)		
			Mu : Max	Phi*Mnx	Stress Ratio
+1.40D+1.60H Span # 1	1	24.000	108.29	187.63	0.58
+1.20D+0.50Lr+1.60L+1.60H Span # 1	1	24.000	108.29	187.63	0.58
+1.20D+1.60L+0.50S+1.60H Span # 1	1	24.000	108.29	187.63	0.58
+1.20D+1.60Lr+L+1.60H Span # 1	1	24.000	108.29	187.63	0.58
+1.20D+1.60Lr+0.50W+1.60H Span # 1	1	24.000	108.29	187.63	0.58
+1.20D+L+1.60S+1.60H Span # 1	1	24.000	108.29	187.63	0.58
+1.20D+1.60S+0.50W+1.60H Span # 1	1	24.000	108.29	187.63	0.58
+1.20D+0.50Lr+L+W+1.60H Span # 1	1	24.000	108.29	187.63	0.58
+1.20D+L+0.50S+W+1.60H Span # 1	1	24.000	108.29	187.63	0.58
+0.90D+W+1.60H Span # 1	1	24.000	108.29	187.63	0.58
+1.20D+L+0.20S+E+1.90H Span # 1	1	24.000	128.59	187.63	0.69
+0.90D+E+0.90H Span # 1	1	24.000	60.91	187.63	0.32

Overall Maximum Deflections

Load Combination	Span	Max. "-" Defl (in)	Location in Span (ft)	Load Combination	Max. "+" Defl (in)	Location in Span (ft)
H Only	1	0.0321	12.000		0.0000	0.000