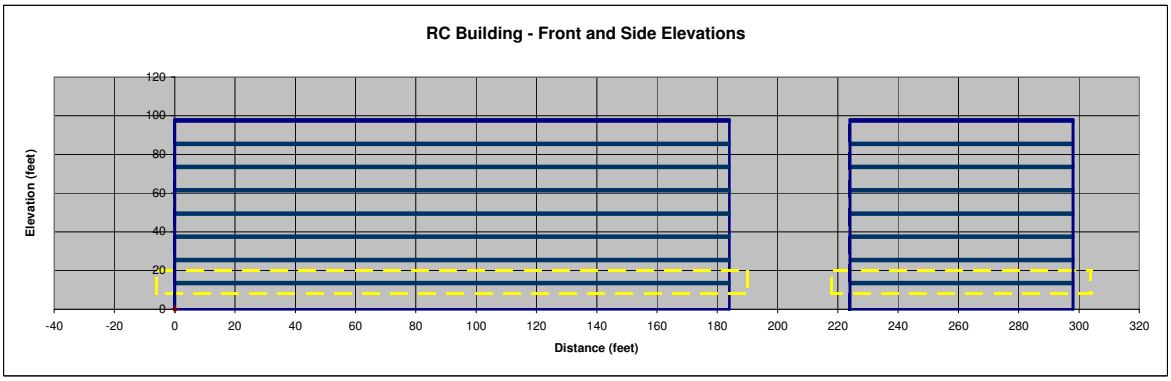
Project	Sample Project, Anytown	**Company Name**	
Job No.	202350.20	**Company Adress**	
By	AL	Company Tel/Fax	
Date	11/28/23	Company Website	
Sheet	_____ of _____	**NBSD-Software.Com**	

INPUT DATA FOR CONCRETE LFRS BUILDING - TYPE, DIMENSIONS, AND WEIGHT
ASCE 7-10 CHAPTER 12 - SEISMIC REQUIREMENTS FOR BUILDING STRUCTURES
SAMPLE PROJECT, ANYTOWN - NEW DESIGN



Building Separation = 40.00 feet

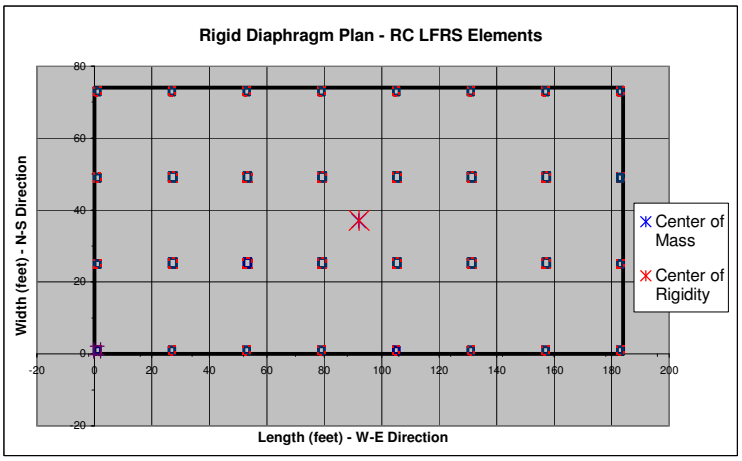
1. Seismic Parameter Data (ASCE 7-10 Section 12.8)

h_n = **98.0** feet (Building Height)

	N-S Direction	W-E Direction
LFRS	RC SMRF	RC SMRF
C_t	0.016	0.016
x	0.90	0.90

ASCE 7-10 Table 12.8-2		
System	**C_t**	**x**
Steel MRF	0.028	0.80
Concrete MRF	0.016	0.90
EBF	0.030	0.75
All other systems	0.020	0.75

R	8.0	8.0	Response Modification Factor (Table 12.2-1)
C_S =	0.079	0.079	g's (Seismic Coefficient - Sect 12.8.1)
ρ =	1.000	1.000	Redundancy Factor (Section 12.3.4)



2. Building Cross-Section Dimensions

RC Diaphragm Dimensions						
Section	Length (feet)	Width (feet)	Thickness (inches)	x (feet)	y (feet)	Weight (kips)
1	184.00	74.00	12.00	-	-	1,906
2						
3						

for ρ = 140 pcf (Unit Weight)

Sum = 1,906 Kips

Note: Weight of diaphragm is provided here for reference only, is not used elsewhere. However, building cross section is used everywhere, including below.

Note: Columns defined in RDA Shear Forces worksheet.

3. Building Elevation and Story Weight Data

W_w = 30.0 psf (Weight of Exterior Walls or Cladding)

			Diaphragm Section 1					Diaphragm Section 2					Diaphragm Section 3					
Floor Level	**Floor Height, H_i (feet)**	**Floor Elevation, H_x (feet)**	**Length (feet)**	**Width (feet)**	**Floor Weight (psf)**	**Floor Weight (Kips)**	**Exterior Wall Weight (Kips)**	**Length (feet)**	**Width (feet)**	**Floor Weight (psf)**	**Floor Weight (Kips)**	**Exterior Wall Weight (Kips)**	**Length (feet)**	**Width (feet)**	**Floor Weight (psf)**	**Floor Weight (Kips)**	**Exterior Wall Weight (Kips)**	**Story Weight, W_x (kips)**
R	12.0	98.0	184	74	140	1,906	93											1,999
8	12.0	86.0	184	74	140	1,906	186											2,092
7	12.0	74.0	184	74	140	1,906	186											2,092
6	12.0	62.0	184	74	140	1,906	186											2,092
5	12.0	50.0	184	74	140	1,906	186											2,092
4	12.0	38.0	184	74	140	1,906	186											2,092
3	12.0	26.0	184	74	140	1,906	186											2,092
2	14.0	14.0	184	74	140	1,906	201											2,107

Σ Weight = 16,659 Kips