



Asclepius Medic Tower

University of Puerto Rico at Mayagüez
UPRM Seismic Design Team



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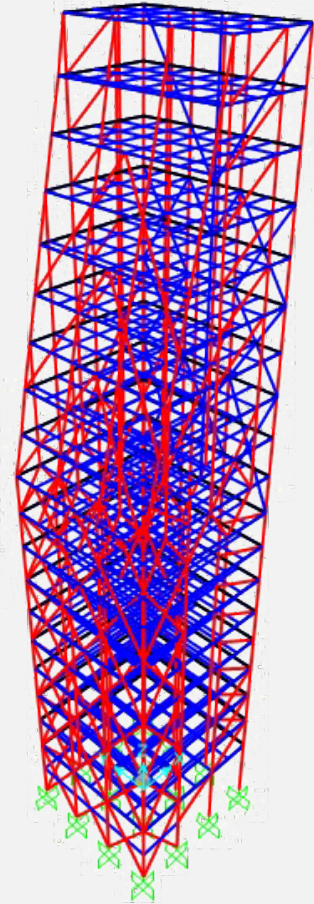
Geotechnical and Structural Details

Soil Classification: Clay

Type of Soil: D

Problems found with the addition of the extension:

- Torsion Problem
 - Isometric Geometry of the structure
- Axial Load
 - Overloading of Foundations
 - Overloading on Columns
- Shear Load
 - Dynamic Event: Seismic Event



Structure Analysis Results

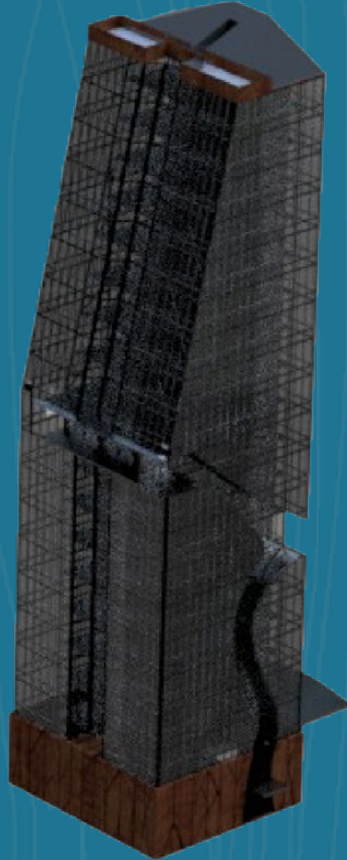
Time Histories	Max. Inter-Story Drift Ratio (in ²)	Aver. Inter-Story	Max. Axial Force (pound)	Max. Bending Force (pound-in)	Max. Shear Force (pound)	Member with Peak Force	ASCE Max Load Combination	Weight (pounds)	Max. Rentable Area (in ²)
TH 3 (N/S)	0.0049	0.000363	2.46	0.0297	0.0133	Column 1-G	D +0.7E	0.5	2376
TH 3 (E/W)	0.007	0.000153	2.4	0.0295	0.0130	Column 1-G	D +0.7E		

Nonlinear Analysis using SAP 2000



Architecture Design

The main attraction focuses on the negative space created by the curves on the North/South facades which are intended to represent *the Rod of Asclepius* this symbol originates from Greek mythology and is associated with healing and medicine.



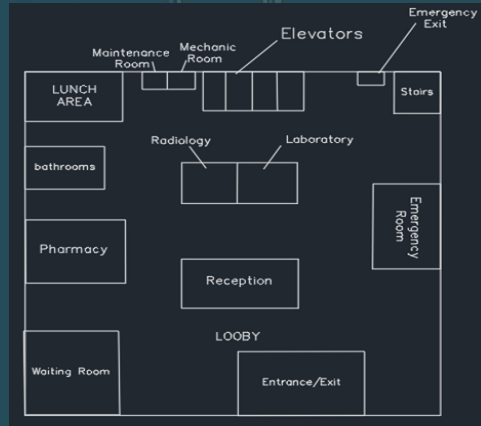
The wooden components at the bottom are intentionally placed in the entrance to evoke a feeling of warmth and coziness for the individuals who are about to enter the building.



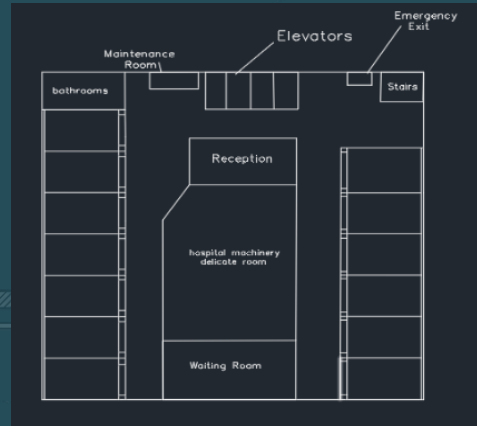
Extension of the building parameters in the West/ East facades with non rentable space to create the illusion of the building being displaced in its central portion; this extra space is intended to be use for vegetation.



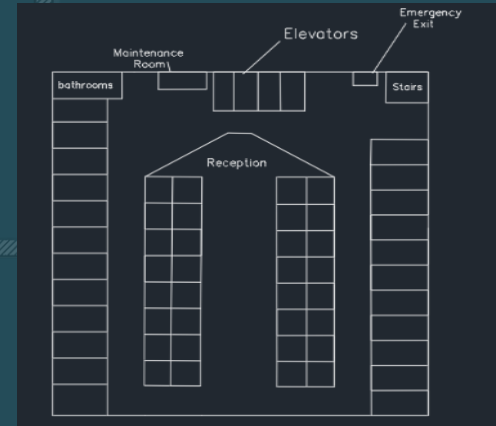
Floor Plans Distribution



Entrance / Emergency Area



Floor 2 / Facility Rooms



Floor 3 - Floor 19

