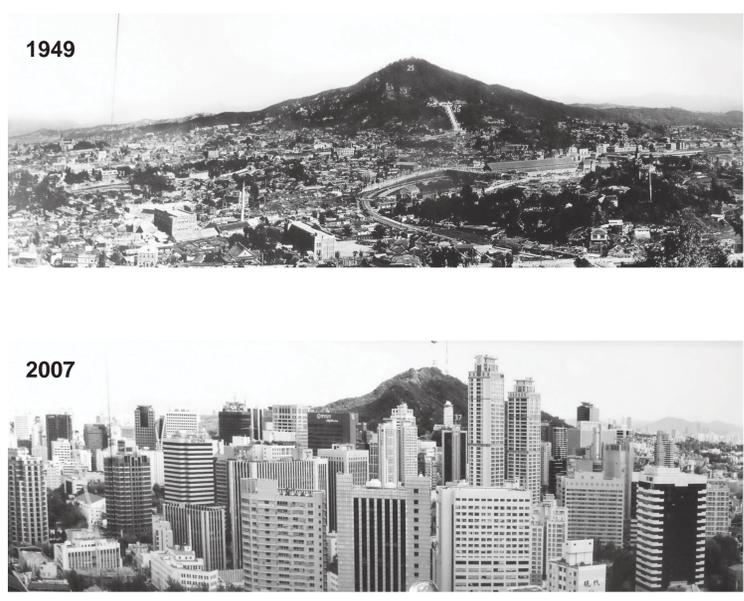


In 2009 South Korea was ranked #1 for mental health issues

By 2040 there will be less than 1% arable farmland in South Korea



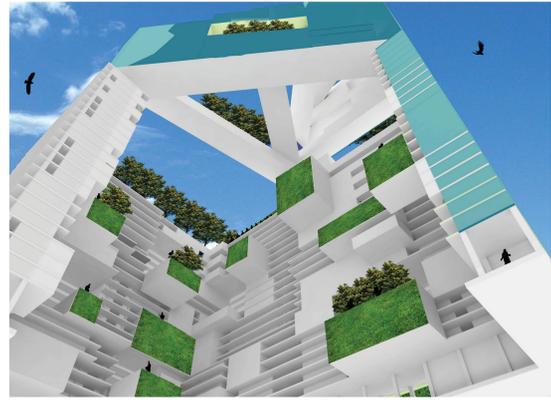
3 Levels of Healing Through Green Spaces



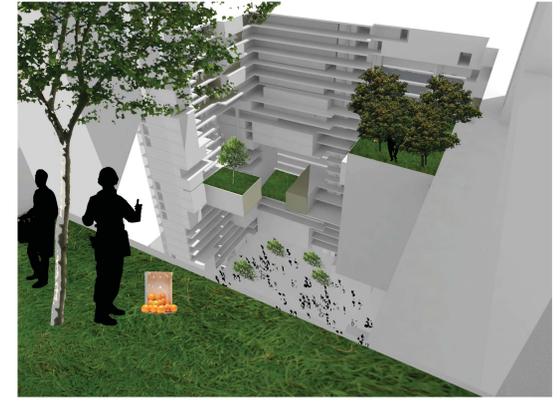
Agenda

- to create a vertical community bound together by two key issues/requirements in Korean society: urban agriculture and mental health care
- to create a 'vertical façade farm' capable of producing 3,909 tons of vegetables (predominantly lettuce, tomatoes, peppers, and strawberries) and 200 tons of fish per year
- to create a mental health sanctuary (or sanatorium) that provides short term (days), midterm (months) and long term (years) residence and care for people with mental health issues that may require physical operations and/or psychological care
- to actively engage the mental health residents in aspects of the agricultural production to draw on research showing that engagement with plants/nature assists in mental healing
- to create a large multi-purpose space at the ground floor of the building which will largely serve as a farmer's market for sale of the agricultural produce and engagement between the community residents and the public
- to create a series of gardens/green spaces at height within the complex, as well as vertical green walls, for healing (residents and urban issues)
- to use the double-skin 'façade farm' for assisting in passive natural ventilation of internal spaces

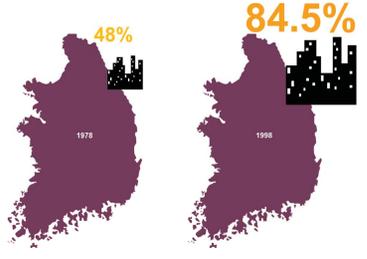
View From Farmer's Market



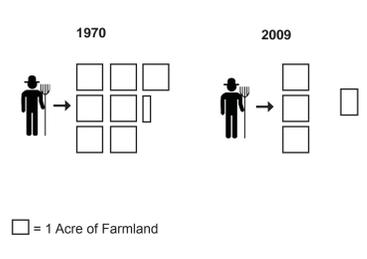
View From Long Term Stay Roof Garden



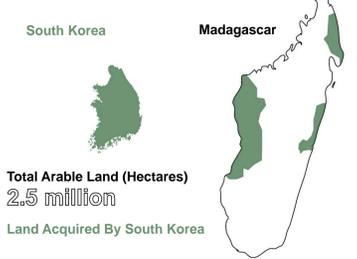
Growing Urban Population



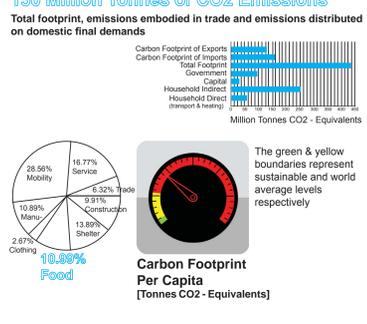
Results of Urban Sprawl



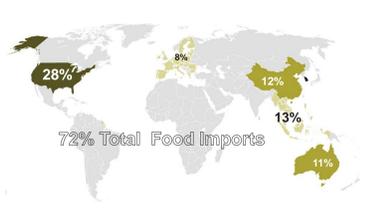
Leasing Farmland



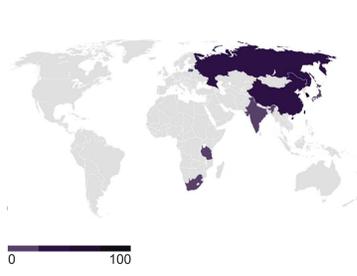
National Carbon Footprint



Foreign Food Imports



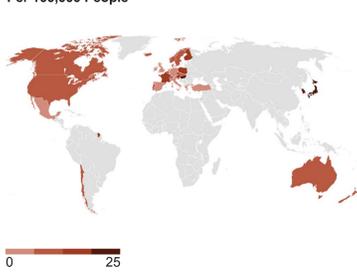
Social Stress



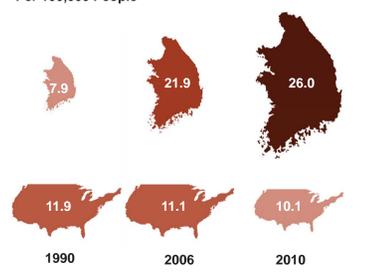
Depression



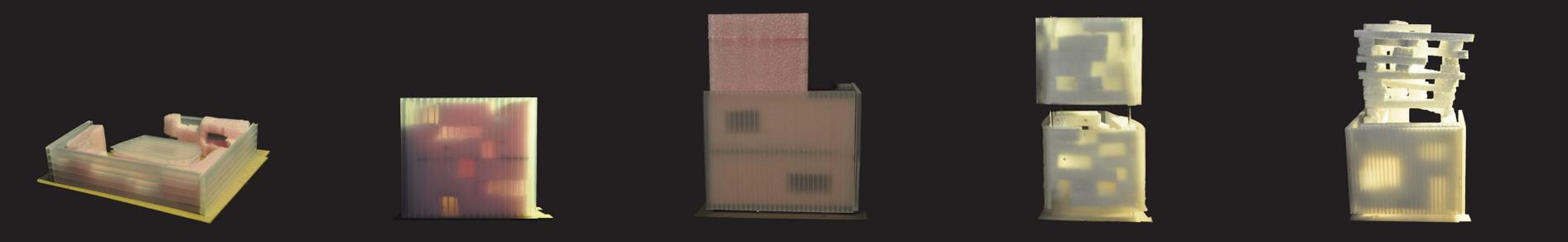
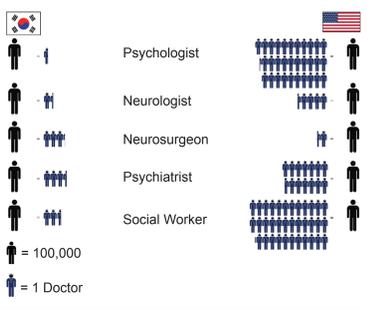
Suicides



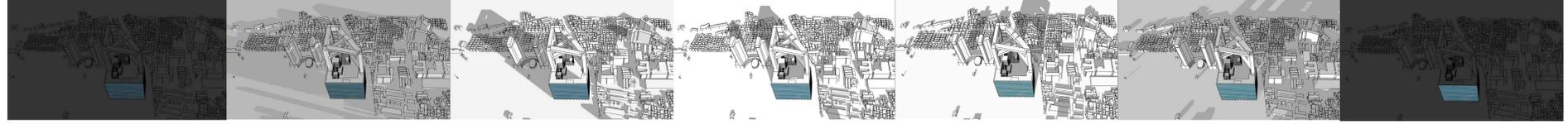
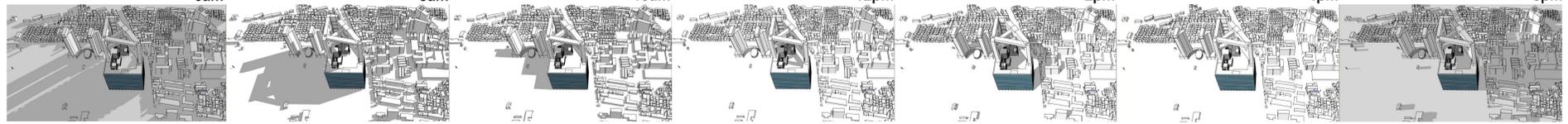
Increasing Suicide Rates



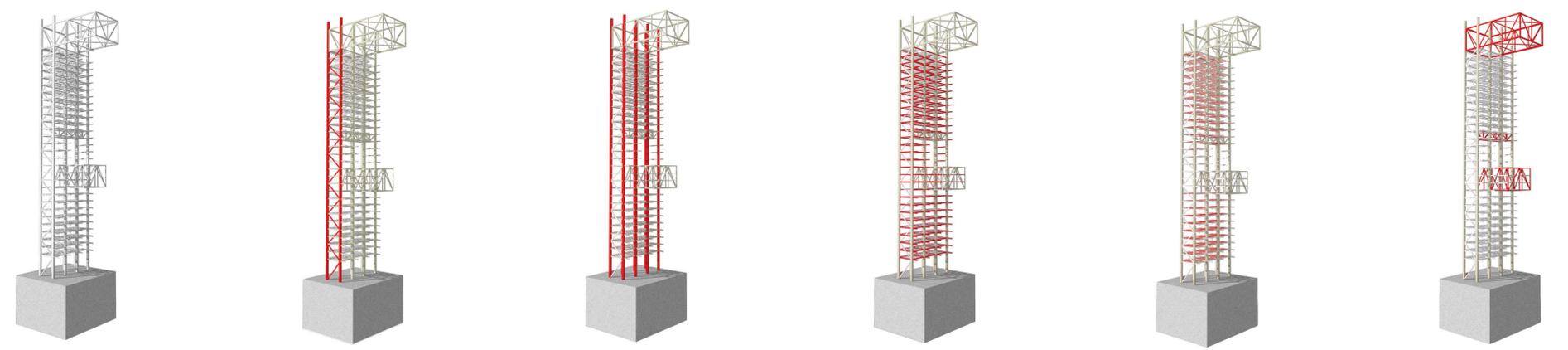
Doctor to Patient



Sun Study

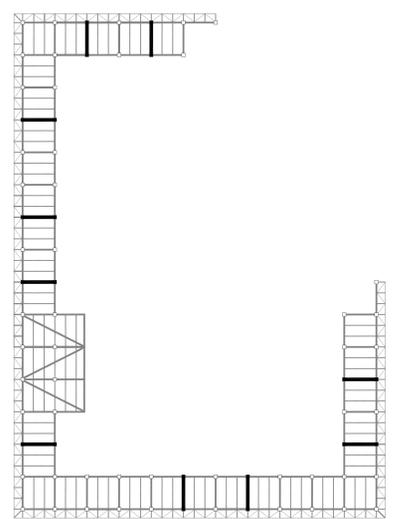


Structure

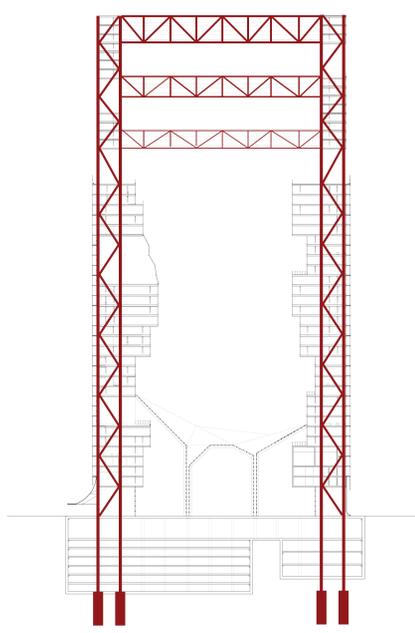


Structural System Braced Wall Columns Beams Floor Joists Trusses

Structural Plan



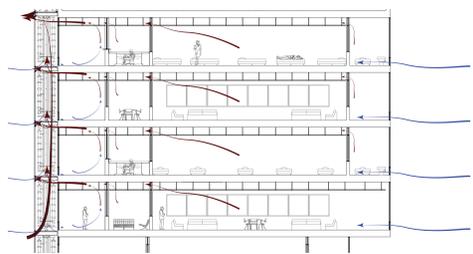
Structural Section Diagram



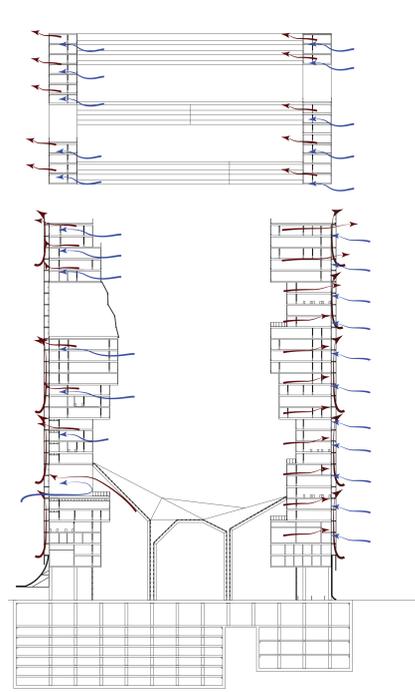
Structural 3D Detail



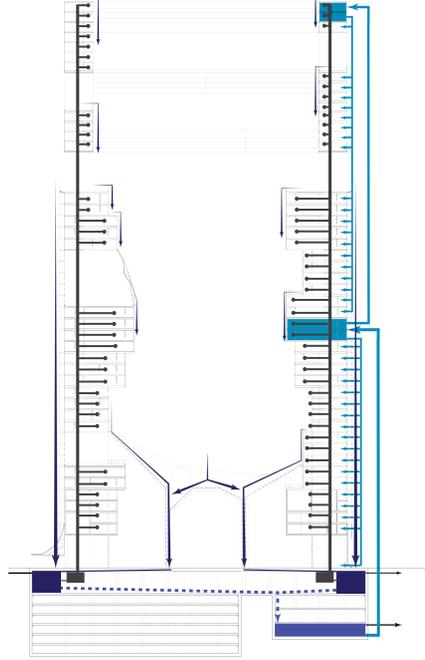
Detailed Ventilation Diagram



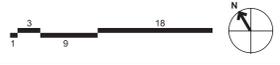
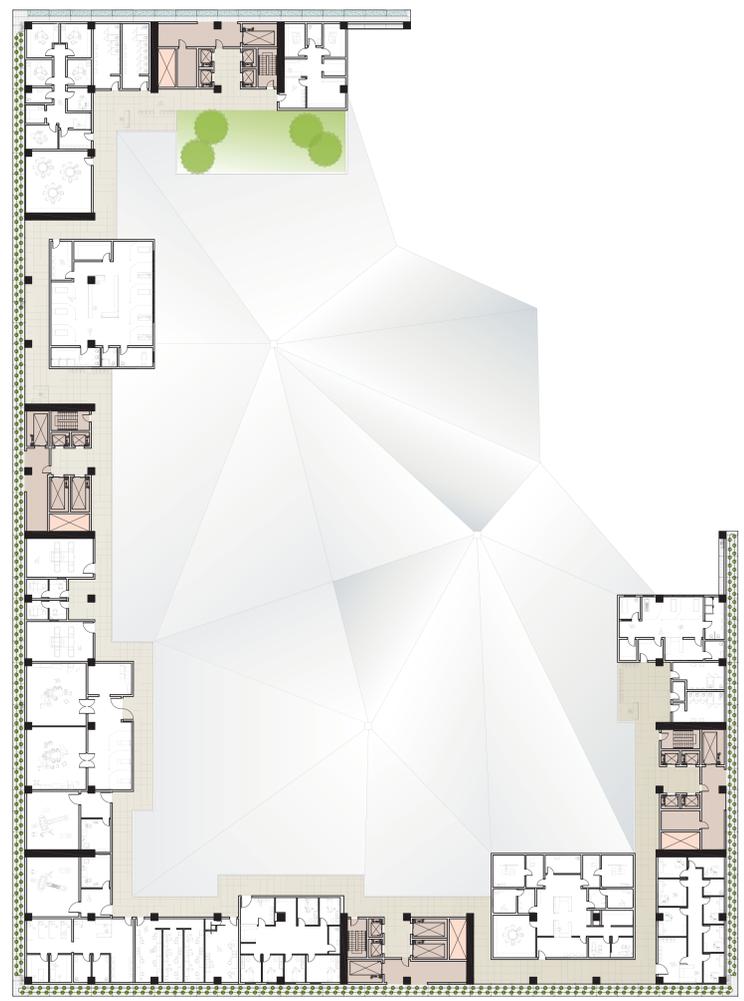
Natural Ventilation



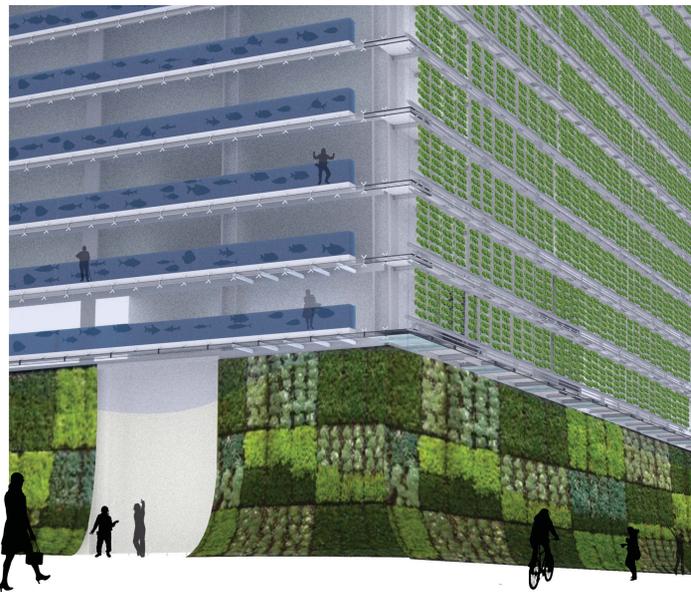
Water Catchment & Circulation System



Medical Service Plan 1:300



North West Corner Detail



Systems of Inspiration

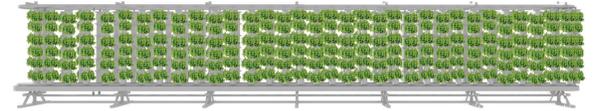


Hydroponic Column System

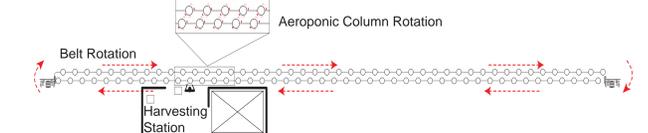


Aquaponic Flat Bed System

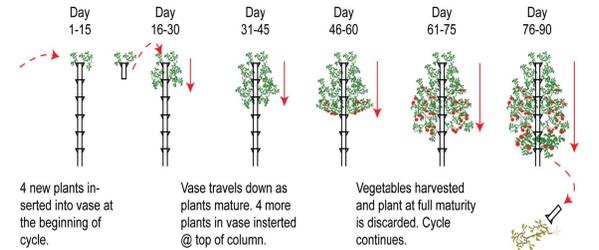
Aeroponic System



Aeroponic System Rotation

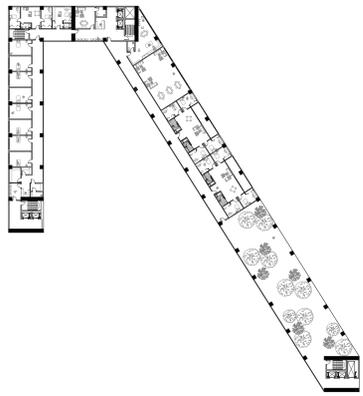


Plant Rotation

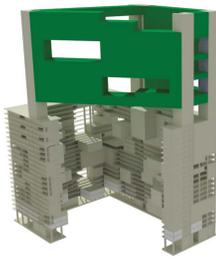


Long Term Residences

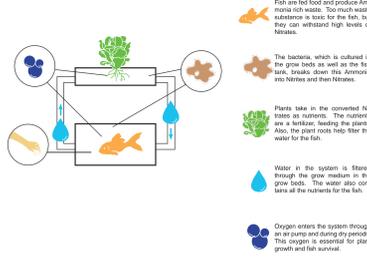
1:600



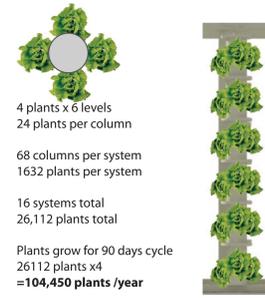
Long Term Residences Levels 26-49



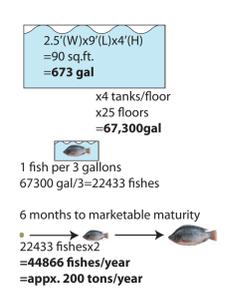
Aquaponic System Diagram



Annual Harvest

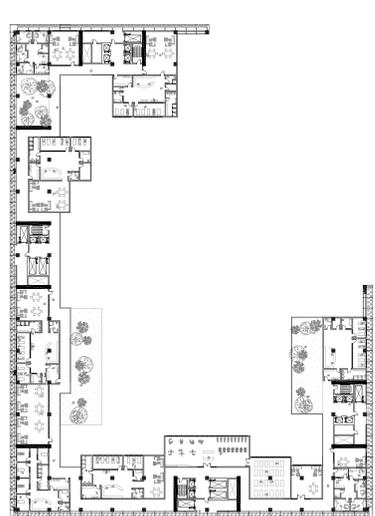


Annual Aquaponic Yields

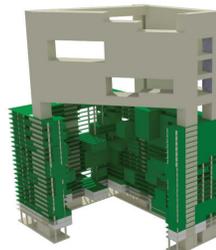


Short & Mid Term Residences

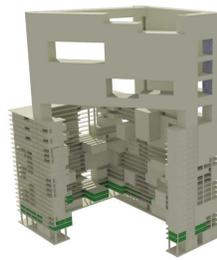
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Short and Mid Term Residences Levels 4-25

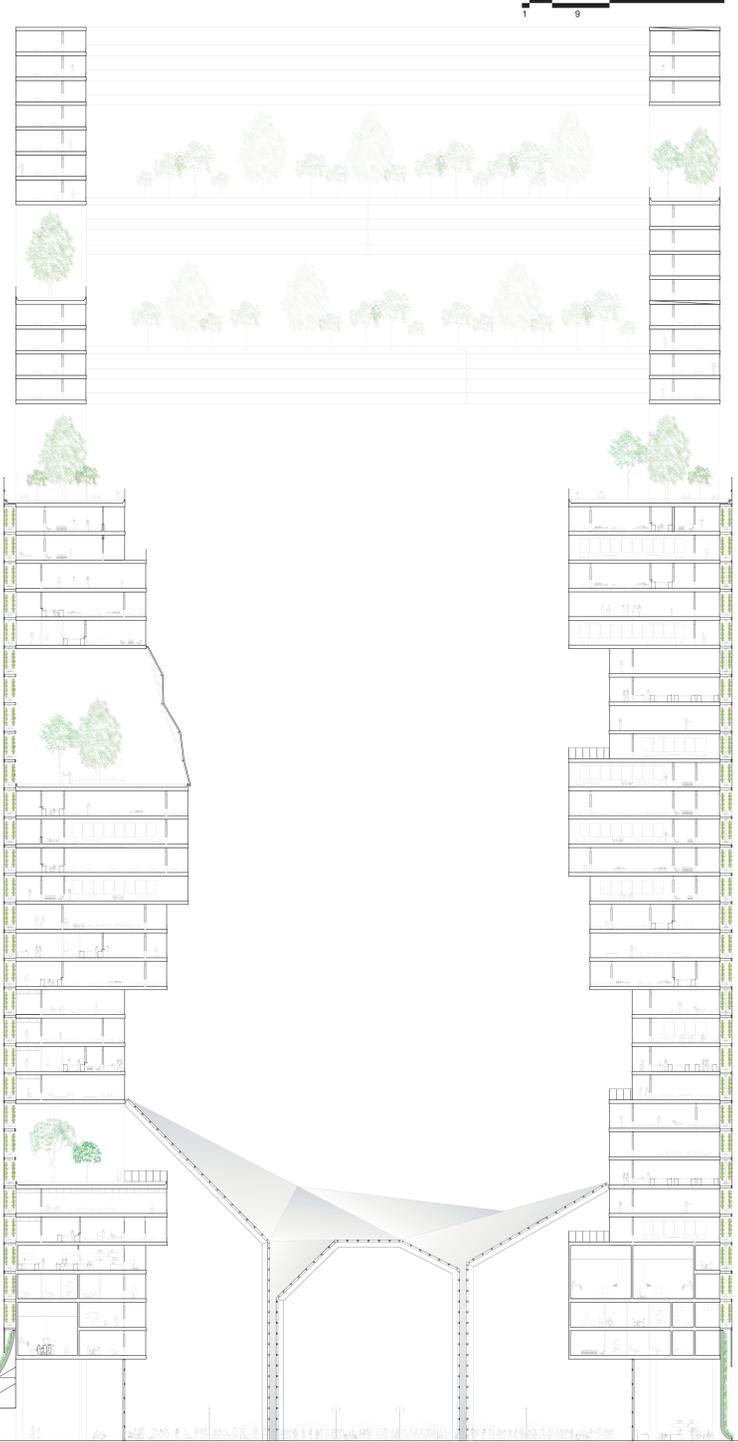


Medical Service Levels 2-3



Section

1:300



Site & Ground Floor Plan

1:500

