PROJECT NARRATIVE

900 market st. In oakland, california is a site nestled between an underutilized urban shopping center and a new senior housing facility. Our proposal for the site is to construct affordable and market-rate housing buildings that incorporate a childcare facility and grocery store to further serve the community's needs.

The goal of this project is to provide building solutions that utilize sustainable design methods in order to obtain net-zero building performance and to enhance the quality of life of building residents and patrons.

Our project aims to build community by bridging the gap between a range of generations and economic positions through purposeful design.

To obtain net-zero performance, our project employs several sustainable design strategies. Our proposal utilizes daylight to reduce the need for artificial light and energy use and to enhance the quality of interior spaces. Sun shading devices on south-facing facades control glare and also contribute to the sustainable language of the building. A key natural ventilation strategy in the design includes cross ventilation via the building's operable windows.

Water is collected in cisterns on roof surfaces, filtered, and distributed for non-potable purposes such as flushing, laundry, and process water. Additionally, a solar hot water system captures solar energy for domestic hot water needs.

Sustainable heating and cooling methods utilized in our proposal include vegetated roofs, an enthalpy wheel that uses waste heat from an existing refrigeration system, and geothermal systems. Energy is produced on-site with south-facing, roof-mounted photovoltaic panels, which will significantly reduces energy burdens.





1. SOLAR WATER HEATING SYSTEM



4. GREEN ROOFTOP COURTYARD

5. DIMMING LED FIXTURES

6. USER OPERATED WINDOWS FOR CROSS VENTIALATION

7. LIVING GREEN WALL ON BALCONY

8. RADIANT IN-FLOOR HEATING/ CHILLED BEAM COOLING

9. GEOTHERMAL HEATING/COOLING

10.RAINWATER STORAGE

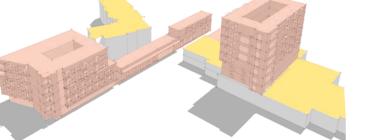
11. STORM WATER MANAGEMENT

12. EAST-WEST BAR ORIENTATION

13.UNDERGROUND PARKING TO CONSERVE GREEN SPACE

14.MILLENIUM TILE STAINLESS STEEL EXTERIOR CLADDING

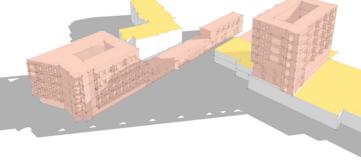
ILLUSTRATED CROSS SECTION



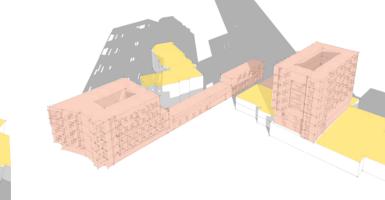
SUMMER SOLSTICE 10:00AM



SUMMER SOLSTICE 5:00PM



WINTER SOLSTICE 10:00AM



WINTER SOLSTICE 5:00PM

