

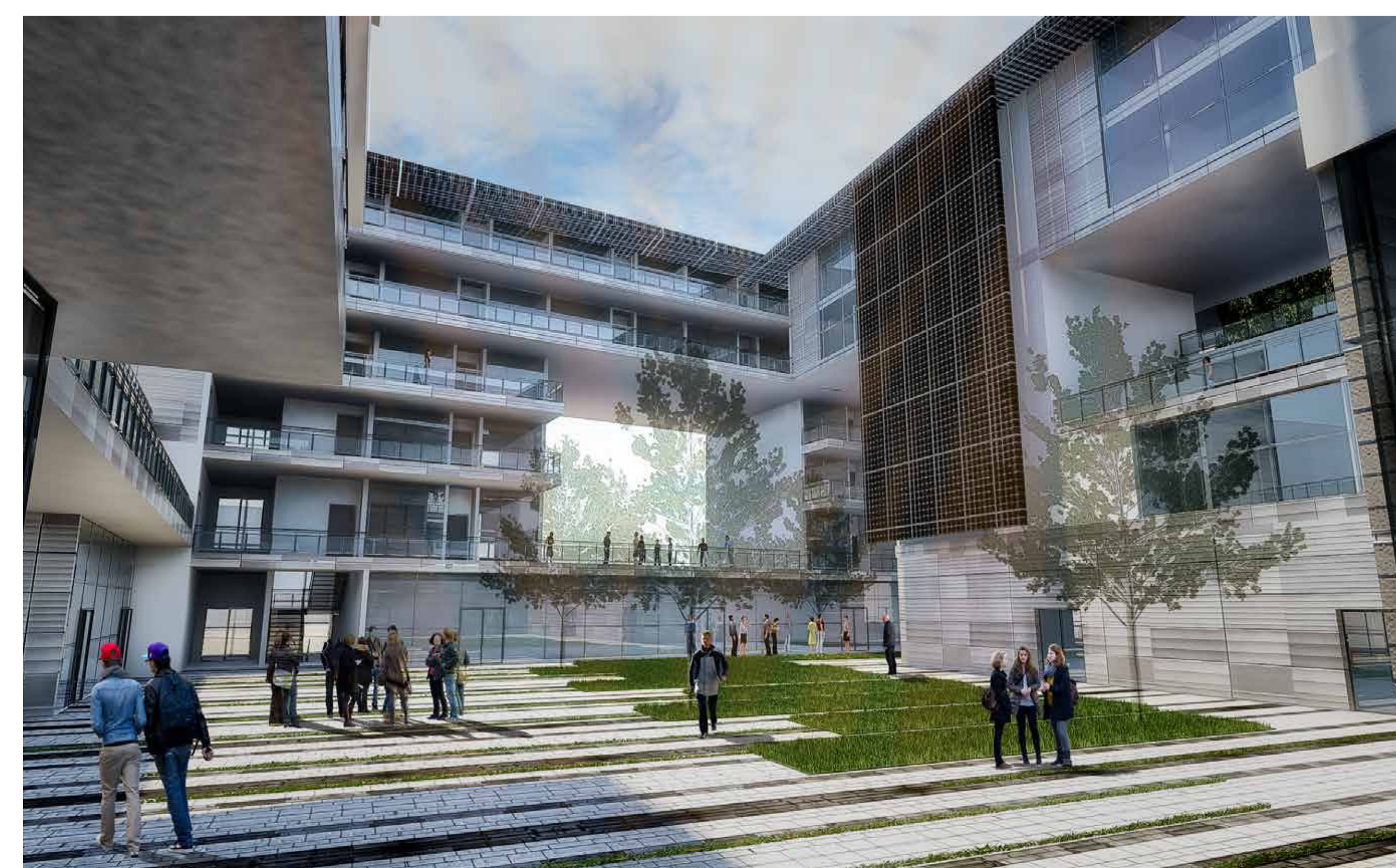
NET ZERO ENERGY perFORM SPIRIT

The main idea for the design is the community living rooms that formed shapes as a homely place to build a community connection with others. The building looks out to the most iconic elements within the site such as the views from Hood Mount Hood, downtown and forest park. But the building also looks in to become the beacon for the community where all the community living rooms are looking in, to form different identities within the site that can be utilize for different activities. The community living rooms allowed an openness to the building creating a sense of porosity through the spaces which reduced heaviness of mass due to the high density of the project housing a total of 79 units.\

The project engages the site by responding to the most driven conditions such as solar exposure, natural light, and wind, as well as bus stop on north side and sandy Blvd. The center of the building is rotated 6 degrees clockwise to allow more direct solar radiation during the cold winter (maximizing heat gain)

The design promotes community activity. All of the that are connected through internal streets that brings people into the project. The vertical circulation was strategically design at the main entry points to promote irresistible stairs that contributes to human health and reduces the use of elevator. Simple and open courtyards with constructed wetlands and living roofs houses native plants to promote ecology growth and incorporates a grey water treatment.

The ground level has all of the commercial spaces. On the outer perimeter there are office spaces and a bike shop. On the inside core there is a café and lunch area that opens up to the three different courtyards and creates the relationship between inside and outside by connecting the two. The second through sixth floor have the residential units. The units are organized by unit types as it has been color coded in the floor plans. The community living rooms occur from level two to level four. Level four has a double high ceiling to allow mix use of space. The second and third are half levels that have a gymnasium with revret technology that captures the kinetic energy to turn it into energy as well as up-cycle eco-charger bicycles. The units are connected through the use of the community living rooms and as it goes to the upper floors, the community living rooms become green living rooms. This system of organization lets the building become porous or transparent which allows a connection between all the spaces, it reduces the mass, and it allows natural light and cross ventilation into all internal spaces.



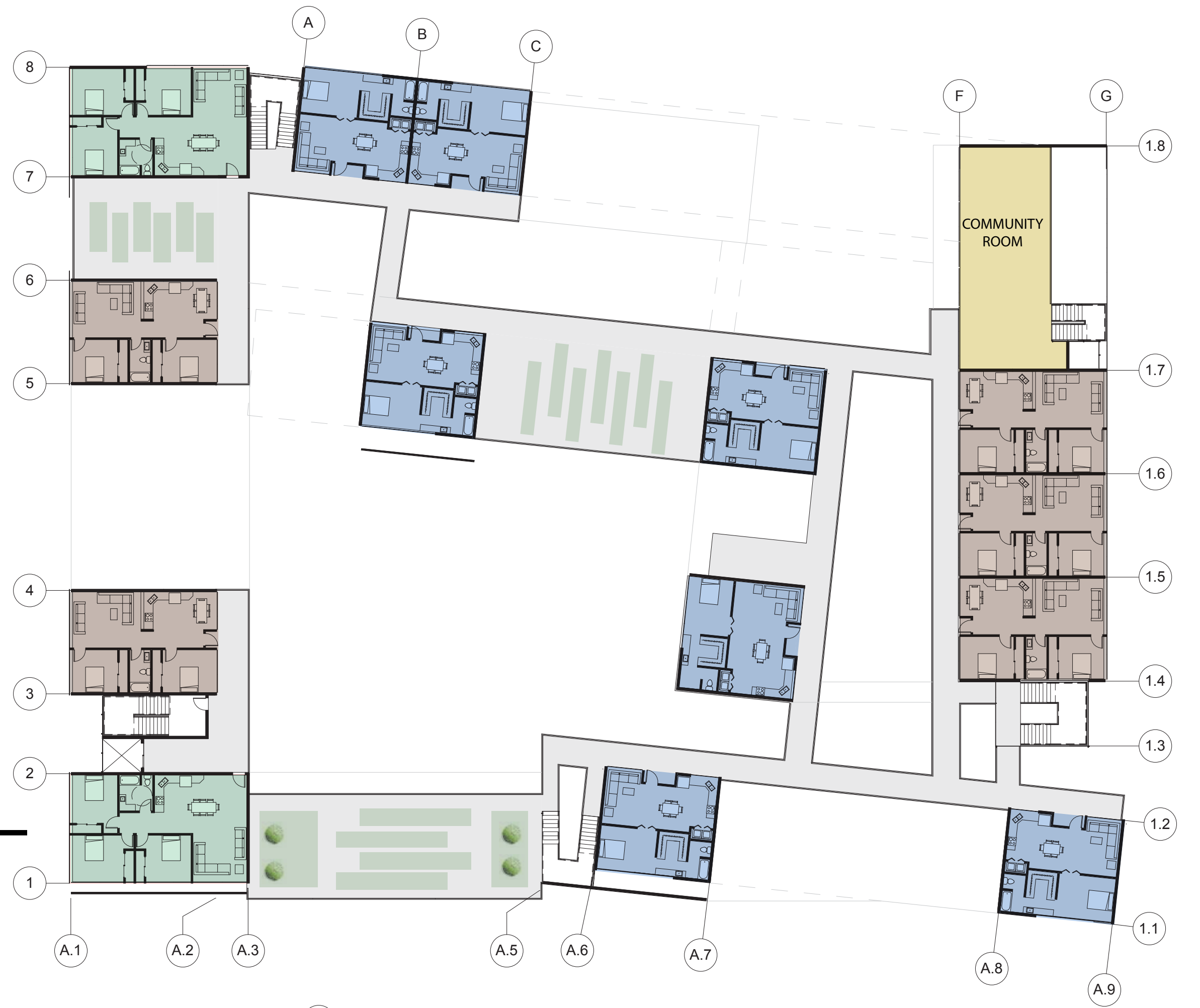
RUNNER UP
Eduardo Gandara,
California State Polytechnic University Pomona

perFORM
2015
BUILDING DESIGN
COMPETITION

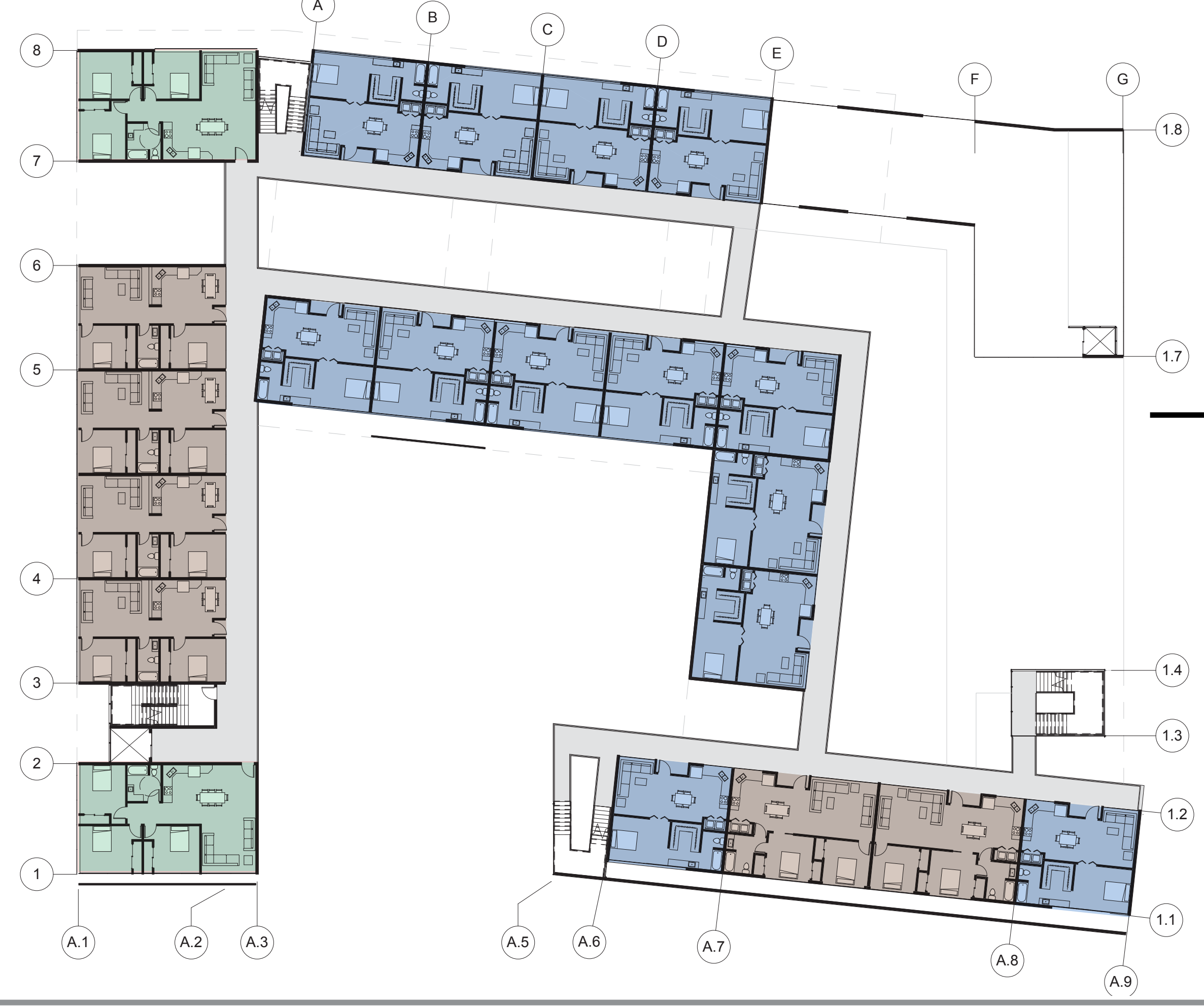




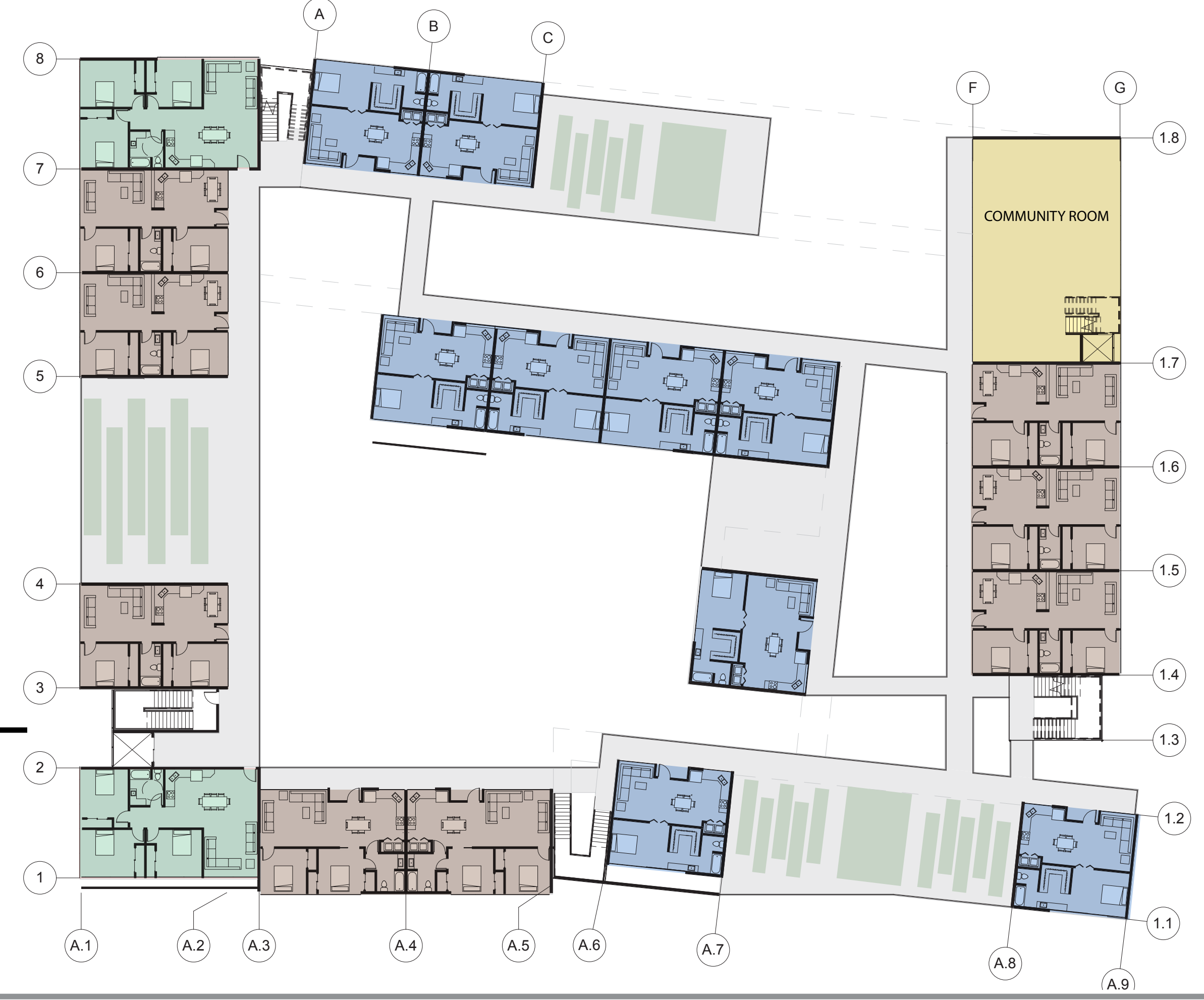
LEVEL FOUR FLOOR PLAN



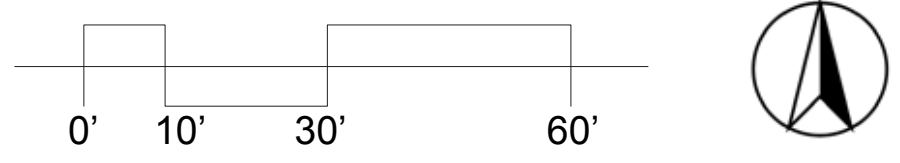
LEVEL THREE FLOOR PLAN



LEVEL FIVE FLOOR PLAN



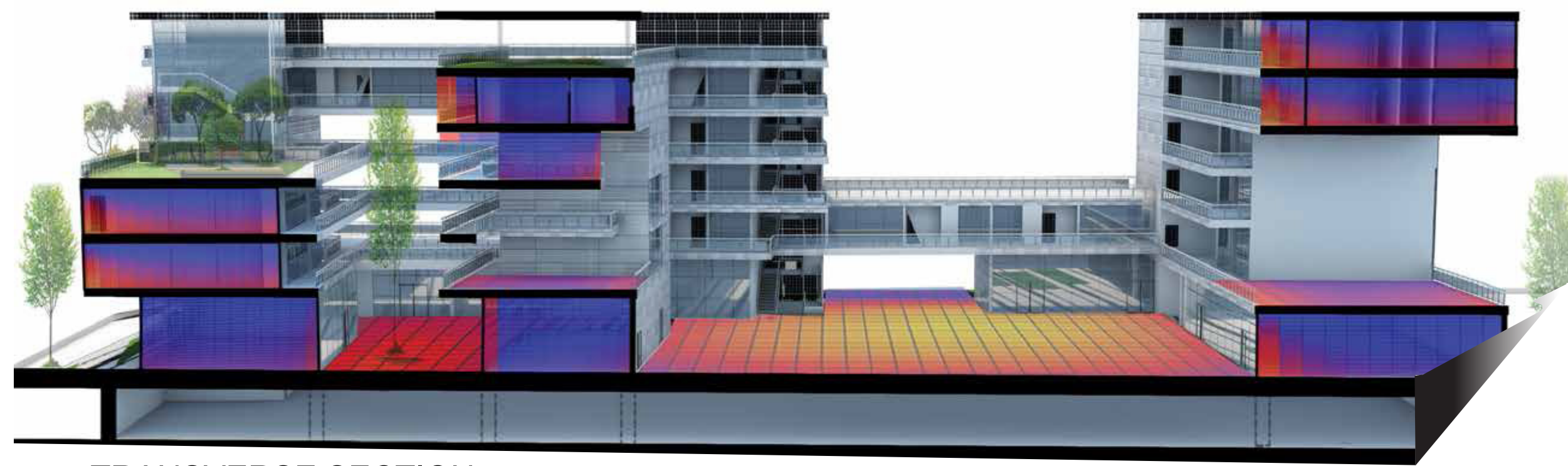
LEVEL TWO FLOOR PLAN



RUNNER UP
Eduardo Gandara,
California State Polytechnic University Pomona

PERFORM
2015
BUILDING DESIGN
COMPETITION

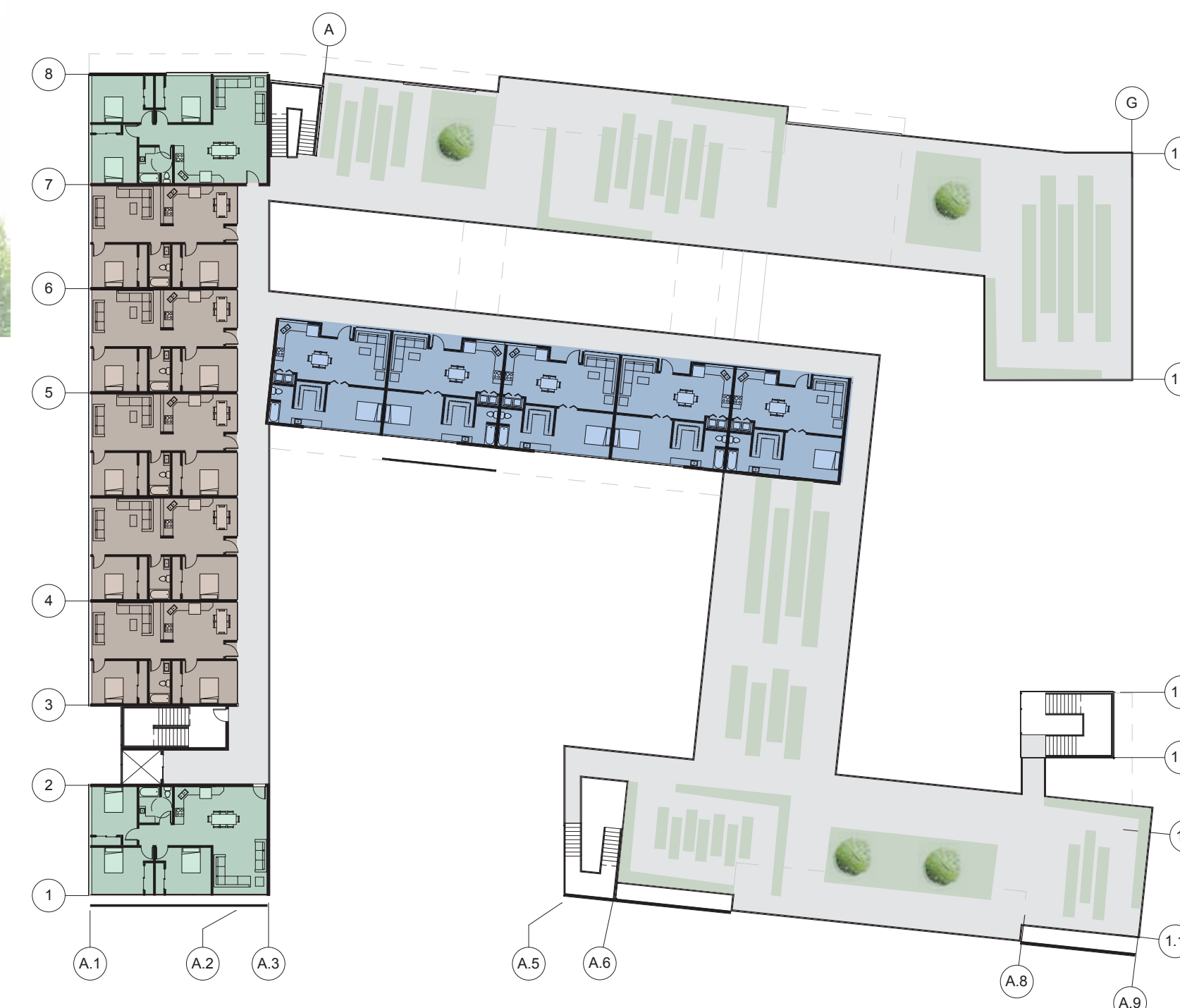




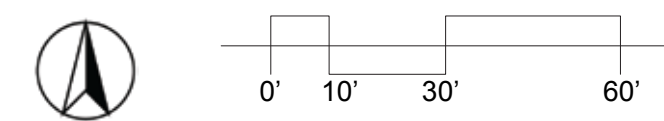
TRANSVERSE SECTION



LONGITUDINAL SECTION



LEVEL SIX FLOOR PLAN



NORTH ELEVATION



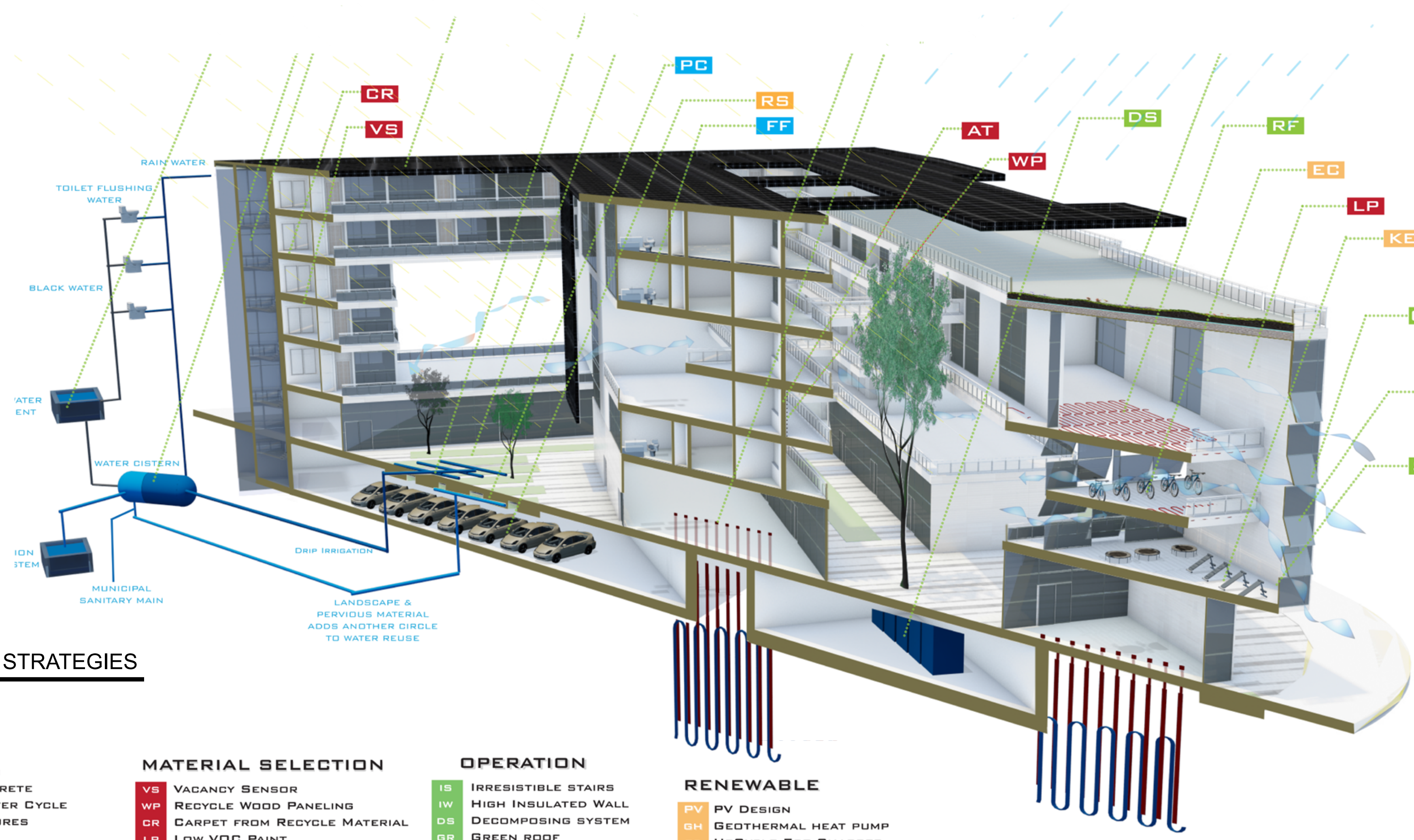
EAST ELEVATION



SOUTH ELEVATION



WEST ELEVATION



SUSTAINABLE STRATEGIES

WATER

- DRIP IRRIGATION
- PERVIOUS CONCRETE
- ADDITIONAL WATER CYCLE
- LOW FLOW FIXTURES
- WATER CISTERN
- RAIN WATER COLLECTOR
- BLACK WATER TREATMENT
- NATIVE PLANTS

MATERIAL SELECTION

- VS VACANCY SENSOR
- WP RECYCLE WOOD PANELING
- CR CARPET FROM RECYCLE MATERIAL
- LP LOW VOC PAINT
- AT AIR TIGHT CONSTRUCTION
- EG HIGH EFFICIENT GLAZING

OPERATION

- IS IRRESISTIBLE STAIRS
- IW HIGH INSULATED WALL
- DS DECOMPOSING SYSTEM
- GR GREEN ROOF
- RF RADIANT FLOORING
- DW OPERABLE WINDOWS
- SD INTERNAL SHADING DEVICE

RENEWABLE

- PV PV DESIGN
- GH GEOTHERMAL HEAT PUMP
- EC UP/CYCLE ECO-CHARGER
- KE REVRET (CAPTURES KE GENERATED BY AEROBICS)
- RS ELECTRIC CARS RECHARGEABLE STATION

RUNNER UP
Eduardo Gandara,
California State Polytechnic University Pomona

PERFORM
2015
BUILDING DESIGN
COMPETITION

