El Retiro Del Sol







Purpose

Our goal of this project is to design a LEED certified green retirement community with three gold certified buildings that incorporates healthy living with an authentic hacienda theme.

Sun City, Arizona

Located in the Phoenix Metropolitan area

Center of the state's economy

Close proximity to:

Entertainment venues

Sports arenas

Cultural institutions



Demographic

37,499 residents

79.8% of the population is 65+ years old

Median age is 75 years old

Median household income: \$32,508



Climate

American Southwest

~ 9 inches of rain annually, <1 inch snow each decad

Design Priorities

Keep hot temperatures out -- shade, light walls

Protect from summer sun

Evaporative cooling in summer -- fountain in courtyard

Thermal mass -- water

Let winter sun in -- building orientation

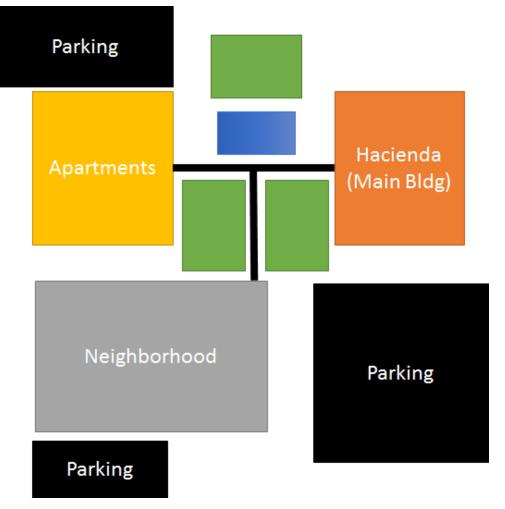
Natural ventilation - prevailing winds

Connect Buildings

-via gardens

-meditation area

-pool area



Entrance to the Hacienda

Main Building

-concert hall

-chapel

-multipurpose rooms

-suites

-management offices

-daycare



Design

Open Corridors

Open Center

Natural sunlight

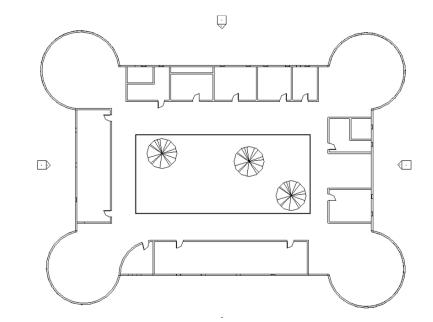
Cooling with Shade

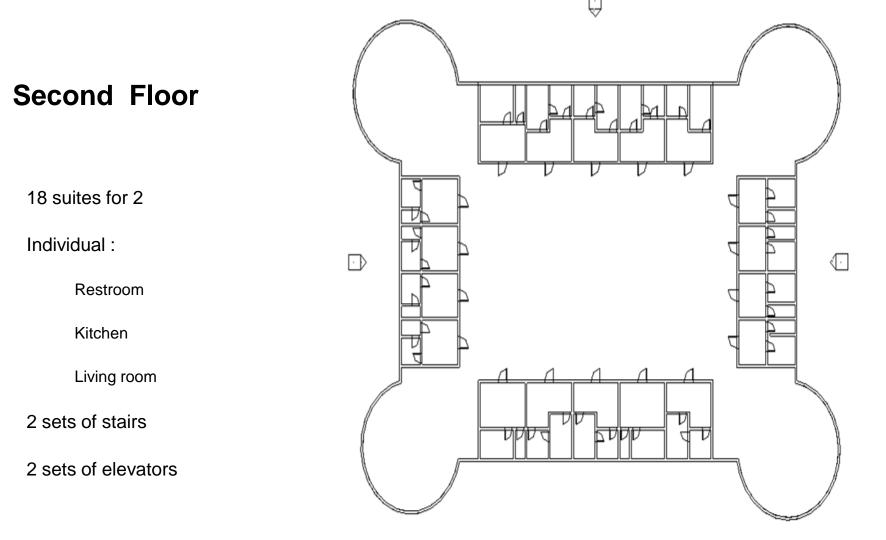
Beams structures



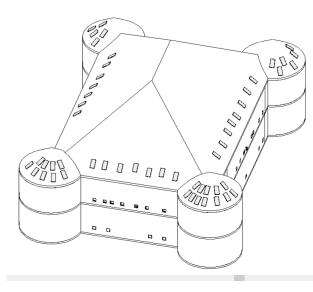
Patio/Gardens

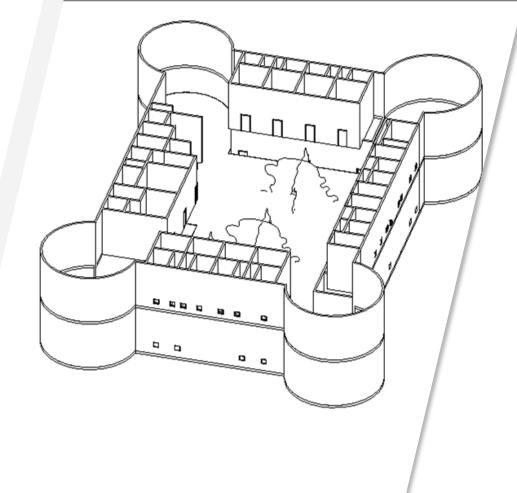
First Floor





Final Hacienda





LEED Points

Succulent Plants

Open Corridors

Adobe and Clay structure

Slanted roofs

Water-Saving Toilets

Automatic Lighting

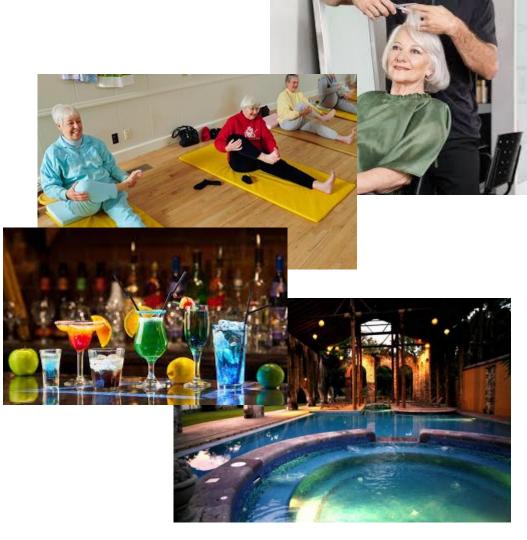
Rainwater harvesting tanks

Solar panels

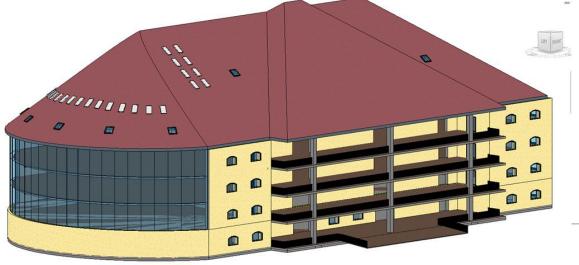


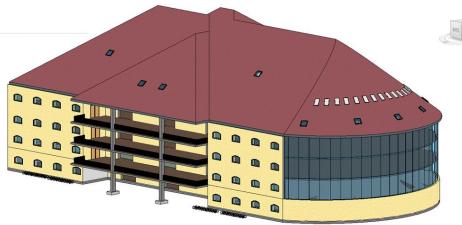
Amenities and Services

- Wellness Center
- Chapel
- Hair Salon/Barber
- Restaurant On-site
- Community Cafeteria
- Patios
- Concert Hall
- Children's Center
- Medical Center



Complementary structure





Apartment Services



Main housing for the ill or more impaired elderly

Provided with

Nurses

Kitchen & dining hall

Medical center

Wheelchair accessibility

LEED Points

Indoor Air Circulation

Succulent Plants

Adobe and Clay structure

Slanted roofs

Water-Saving Toilets

Natural Lighting

Rainwater harvesting tanks

Solar panels

Energy efficient windows

Neighborhood Home Housing

1 story homes

Southwest pueblo style

Succulents in plant beds

LEED Points:

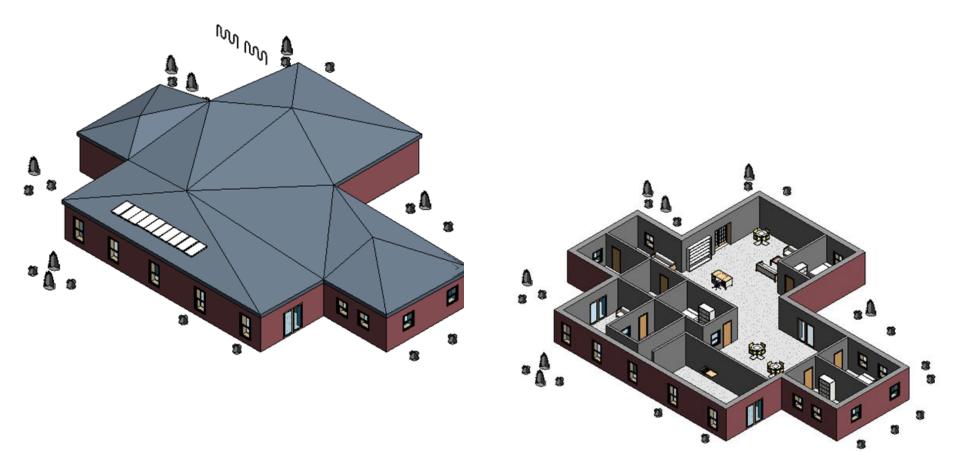
Performance tests -- water and air

Locally sourced materials

Native plants

Site selection





Multifamily Midrise LEED Points

Succulent Plants

Adobe and Clay structure

Slanted roofs

Water-Saving Toilets

Automatic Lighting

Solar panels (35 degrees)

Utility metering

Air/water distribution tests

Access to transit





Safety within the Gated Community

To make residents feel safe, we will provide a gate and security guard service

They will also provide additional medical services

Enhance the community feel

Budget

300 residents

36 individuals in Neighborhood

\$250K

16 suites (2 ea.) in Hacienda

Starting budget:

\$262 MM, more improvements added with time

 Only 1 medical center, located in apartments



Questions?