REVITALIZING THE ELDERLY COMMUNITY

By: Ethan Brammeier

Project Statement

This thesis proposes to design an assisted living facility with a Gold LEED rating and study how combining the natural environment into the building design will benefit the residents that live there.

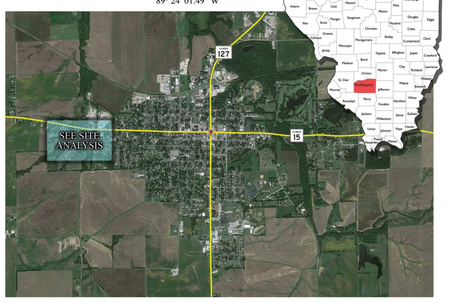
Assisted living facilities are vital for the elderly generation and disabled people. They provide an opportunity for people to live independently without the constant need of a care provider. Each resident has their own room which includes a kitchen, living room, bedroom, and bathroom. Services that are normally provided include; medical supervision, personal care assistance, 24-hour supervision, emergency call systems, housekeeping, social activities, and meals. Assisted living facilities do not provide extensive medical care like that of a nursing home, but they do offer independent living and personal privacy. These facilities are for those that can live independently but would still benefit from the 24-hour care provided.

The site I chose to design an assisted living facility was in Nashville Illinois. The reason I chose this site was based on the fact that there is not one supportive/assisted living facility in the county. A while back there was a proposal to build an assisted living facility in Nashville, but no plans were ever developed. The current site already contains several duplexes designed to house retired couples. This site is in the middle of the county which means it would be within close proximity to all the surrounding towns. An assisted living facility in the town of Nashville would offer shorter travel for anyone visiting from the surrounding area and give the elderly a great place to live.

Site: Nashville, IL Elevation: 530 ft

Population: 3,178 (2013) Address: South Indian Grass Rd

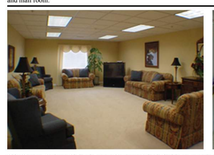
Population Rate: +2.2% 38° 20' 41.54" N 89° 24' 01.49" W



Case Studies

Two weeks ago I visited Prairie Living Villa's in Carbondale. I was given a tour of the facility by Gary Hill, president of Cherry Hill Realty, Inc. Seeing the facility in first person gave me a greater understanding of how an Assisted Living Facility functions. The facility has three levels and contains 125 apartments; 75 - east wing, 50 - west wing. The building was designed with a prairie style by incorporating a low sloped roof with a natural looking facade.

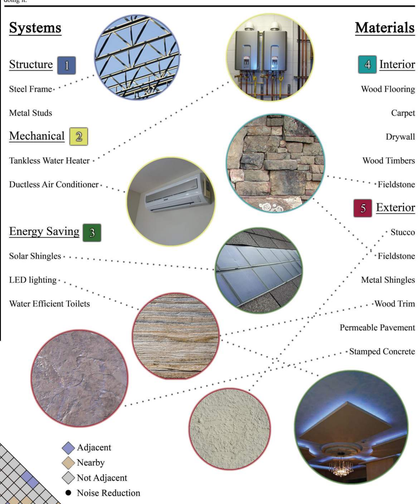
The River to River Residential Community in Murphysboro, Illinois is one of five Assisted Living Facilities in Southern Illinois. This facility offers events such as religious services, brunches, plays, fishing trips, movies, bingo, karaoke, and seasonal parties. The facility consists of two types of apartments: Studio apartments and one bedroom apartments. The studio apartments are 524 square feet and the one bedroom apartments are 567 square feet. The units are laid out to make it easy to maneuver around either on foot or by wheelchair. Common areas included in the building include a central dining room, community room, library, activity room, arts and crafts room, laundry rooms, beauty/barber shop, country store, movie room, and mail room.



Fifth Season Assisted Living is also a Southern Illinois facility located in Benton, Illinois. This facility is one of three Fifth Season facilities in the region. Although this facility is different from the one in Murphysboro, they offer many of the same amenities. They only differ in the design of the building, but the function of the facility is still the same. Being that these facilities are in the same region as this projects proposed site, it will offer great resources in the design of the proposed Assisted Living Facility.

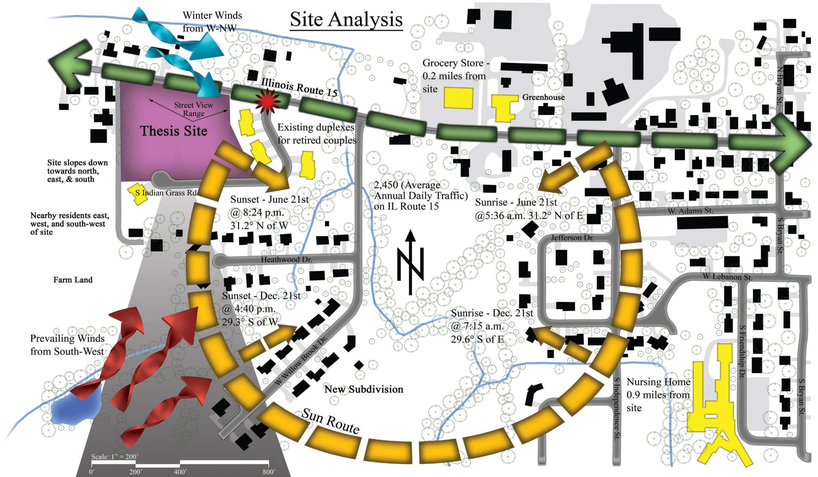
Systems & Materials

Every material and system used in the design of this building will help with receiving LEED certification. LEED certification isn't based off only the building but also the construction. If any waste during the construction process is recycled, it will help with receiving LEED points. The types of materials used in the design of the building also attribute to certication scoring. The materials preferred are those that do not deteriorate or put off harmful gases over time. Mechanical systems are the same in that they should be the most energy efficient system that waste little to no energy. These materials and systems may be more expensive than the generic choice, but they will save the building energy costs in the future and be clean while doing it.



*TO BE FURTHER DEVELOPED

Site Analysis

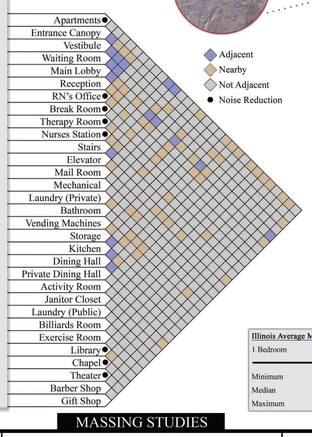


Program

#	Room Name	S.F.	Quantity	Total S.F.
1	1 Bedroom Apartment	650	24	15,600
2	2 Bedroom Apartment	1000	8	8,000
3	Studio Apartment	560	10	5,600
4	Entrance (Canopy)	1000	1	1000
5	Vestibule	200	1	200
6	Waiting Room	250	1	250
7	Main Lobby	650	1	650
8	Reception	100	1	100
9	RN's Office	150	1	150
10	Break Room	240	1	240
11	Therapy Room	600	1	600
12	Nurses Station	550	1	550
13	Stairs	200	3	600
14	Elevator	80	3	240
15	Mail Room	40	1	40
16	Mechanical		20%	9,812
17	Laundry (House Keeping)	160	1	160
18	Bathroom	80	3	240
19	Vending Machines	60	1	60
20	Storage	1400	1	1400
21	Kitchen	1800	1	1800
22	Dining Hall	3200	1	3200
23	Private Dining Hall	800	1	800
24	Activity Room	600	2	1200
25	Janitor Closet	60	2	120
26	Laundry (Public)	120	2	240
27	Billiards Room	1200	1	1200
28	Exercise Room	600	1	600
29	Library	600	1	600
30	Chapel	600	1	600
31	Theater	2600	1	2600
32	Barber Shop	180	1	180
33	Gift Shop	240	1	240
			Total S.F.	58,872

*Numbers correspond to massing models

Affinity Matrix



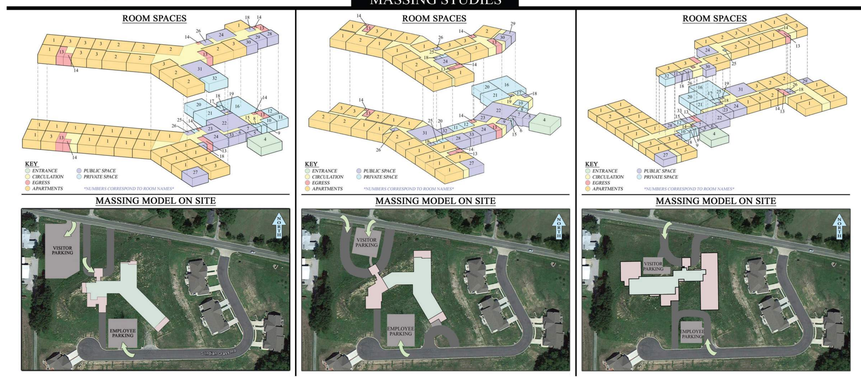
Studio Apartment	
	S.F.
Entry/Foyer	20
Living Room/Bedroom	250
Kitchen	140
Storage	20
Closet	20
Bathroom	80
TOTAL	530

One Bedroom Apartment	
	S.F.
Entry/Foyer	20
Living Room	155
Bedroom	160
Kitchen	150
Storage	25
Closet 1	20
Closet 2	20
Bathroom	90
TOTAL	640

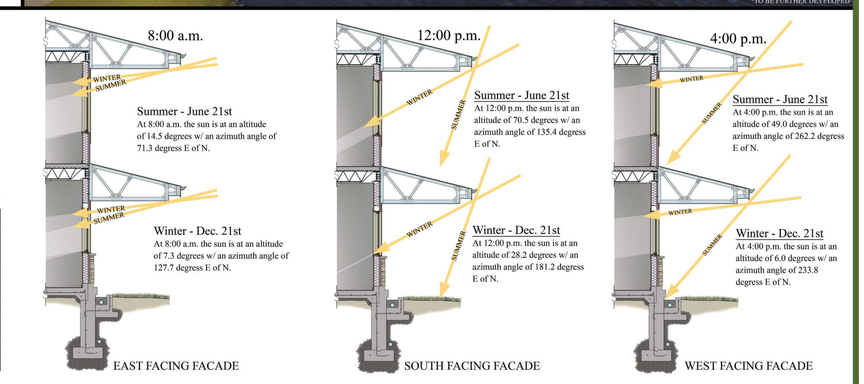
Two Bedroom Apartment	
	S.F.
Entry/Foyer	20
Living Room	175
Bedroom 1	170
Bedroom 2	170
Kitchen	170
Storage	25
Closet 1	20
Closet 2	20
Bathroom	100
TOTAL	870

Illinois Average Monthly Rate Plan	
1 Bedroom	$4,057
Minimum	$1,048
Median	$3,805
Maximum	$6,500

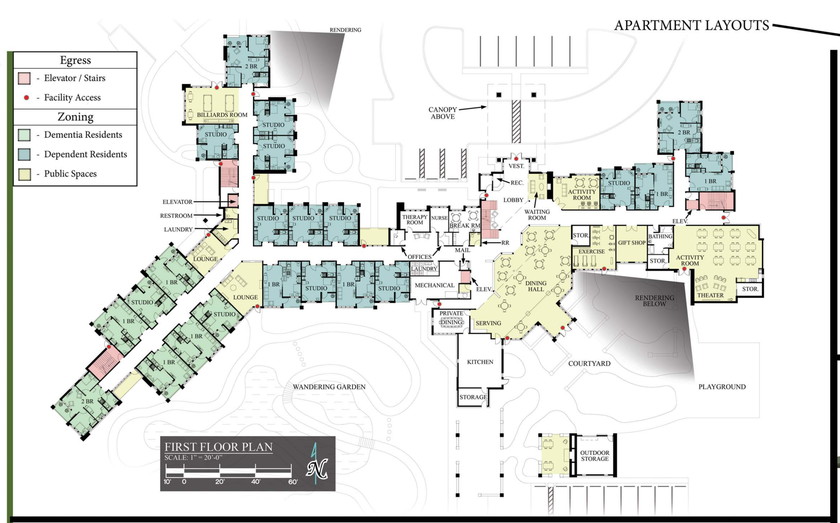
MASSING STUDIES

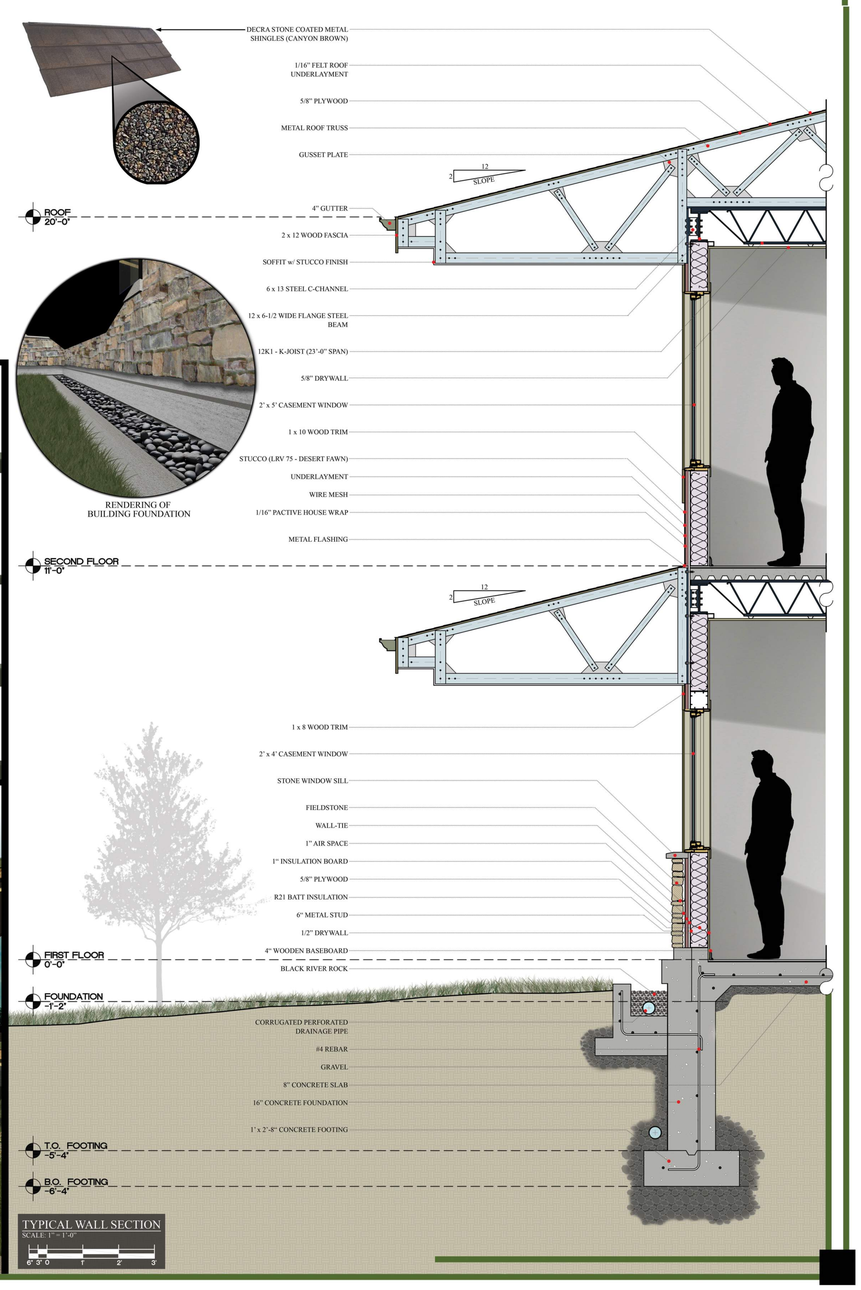


MASSING MODEL ON SITE



APARTMENT LAYOUTS



OUTDOOR COURTYARD

BUILDING EXTERIOR