An Address, Not a Room Number: An Assisted Living Community within a Community

Gregory J. Novotnak

University of South Florida

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An Address, Not a Room Number:
An Assisted Living Community within a Community

by

Gregory J. Novotnak

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Architecture
School of Architecture and Community Design
College of Visual and Performing Arts
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Dedication

This Thesis is dedicated to my Grandfather “Pop.” He chose to live out the last several years of his life opting for in-home care assisted living. While he was fortunate to have two of his daughters as his primary caregivers I’m sure he was quite lonely. I have many fond memories of him and many thoughts of him have been with me since he passed away. It was my pondering of his quality of life in his last years that encouraged me devote my Thesis to advancing the model for assisted living for the elderly.

Acknowledgments

First and foremost I would like to give much thanks to my family. They have shown me never ending support and encouragement. I would especially like to say thank you to my parents. Their love and support means the world to me.

I would also like to thank Dr. Wright of Student Services (at the time) and Francisco Vera of the Graduate Department for being in my corner when times got tough, and to Dan Powers of the School of Architecture for giving me this opportunity.

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Thanks would also like to be given to David Carruthers; the principal of the firm I’m employed with for all of his support throughout these last few years of my education and for his encouragement and understanding of the leave of absence I chose to take to devote all of my time to this project.

Last, but not least, I would like to thank Dr. Vikas Mehta, my Thesis Chair, who pushed me to design and produce the best I could and continually encouraged me to keep adding more “cream” to the quality of my project.
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An Address, Not a Room Number:
An Assisted Living Community within a Community
Gregory J. Novotnak

ABSTRACT

As the son of parents of the “baby boomer” generation I foresee the immanent increased demand for assisted living for the elderly. By 2030 an estimated 20 percent - one in five Americans – will be 65 or older. Unless attention is paid now to advancing the designs and opportunities for assisted-living, there will either be a distinct lack of available options, or worse, the continuation of out-dated designs that simply will not be a marketable.

Contemporary thinking with regard to the design of places of residence for the elderly has changed dramatically from the days of outdated structures and philosophies. In my research, I have seen a shift toward the concept of community rather than institution. Owing to cultural change that will surely be the future of assisted living design strategy. Yet, the shift is still in the rut of scaling designs to accommodate up to only a few dozen individuals. While I understand the rationale of such designs, I foresee a shortcoming to that approach. If the design idea is the drive toward the feeling of “home” then I feel it to be conceivable for an expansion of the current model to include multiple neighborhoods of residences, subsidiary structures, and more connection to a feeling of neighborhood and social interaction; the attributes of a true “community.”
What are missing are the environments that appeal to younger citizens. Baby boomers, easily described as much more educated, well-informed, well traveled, financially successful and much more discerning will not find the traditional options appealing or acceptable.

My primary method of research for such an endeavor falls under the classification of Qualitative Research; the category that focuses on personal and informal social science. My design intention is not to separate and isolate the population of those seeking assisted living. Instead, offer more than just a place to live. I intend to discover validity for the concept of a larger networked residential community with more opportunity for social interaction and active lifestyle extending beyond what currently exists.
Introduction

This Master's Thesis Project is intended to be a study and innovative design of an assisted-living community for the elderly.

Demographics

We currently live in a society were youth is glorified and no one wants to admit they're getting old but the facts and figures of the current state of age demographics in the United States suggests that by 2030 an estimated 20 percent - one in five Americans - will be 65 or older (Friedland & Summer, 1999).

As stated earlier, the “baby boomer” generation will imminently increase the demand for assisted-living communities. These are individuals born between 1946 and 1964. While mortality rates and fertility continue to decrease, life expectancy continues to increase. Declining infant mortality, longer lives, and falling fertility rates are the three primary factors responsible for our aging society (Brawley, 2006).

Figure 1. Population 65+ by Age: 1900-2050 (Vierck & Hodges 2003).

Figure 2. Population 85+: The actual and projected population increase of the United States from 1990 to 2050 (Wallman, 2000).
Over the last century, 43 million Americans have celebrated their sixtieth birthdays, thanks to strides in medicine. Adding to that, each day about 5000 Americans turn 65. Over the next thirty years, the number of older Americans is expected to double, growing by over 35 million people. By the year 2030, the population of those 60 and older will more than double to 85 million, while the number of those 85 and older will triple to 8 million (Institute for Research on Women and Gender, 2002). And as the population of these age groups grows, there will be an increased demand for options for assisted-living and long-term care.

A Variance of Needs

With the needs of the elderly varying; depending on their physical and mental health there are three basic classifications of care for the elderly; assisted-living facilities, nursing homes, and hospice.

Assisted-living represents those who only need relatively minimal and virtually non-medical care and only need assistance to perform various activities of daily living. Nursing homes offer much more medically acute care for those individuals whose health is in a more deteriorated state and require skilled and medically trained nursing care. Hospices provide palliative care not curative care. They provide pain and symptom management for those who are terminally ill.

After research of the range of needs of those who require particular levels of care it is determined that those whose needs fall under the category of assisted-living will be the focus of this Thesis.

A Need for Change

Considering the fact that there will be increased demand for this alternative to traditional at-home living, the time has come for new visions of possibilities. Many probably avoid thinking about getting old and the needs and desires they may
have when they do, or moreover, the needs and desires of the population that are already on the cusp of a ripened age. But unless attention is paid now to advancing the designs and opportunities for assisted-living, there will be either a distinct lack of available options, or worse, the continuation of out-dated designs and facilities that simply will not be a marketable. True, personal economics are directly linked to the design of many current assisted living projects. They are designed to be affordable. Ultimately, the residences must be affordable and if the construction and operation of the community comes at too high of a cost, regardless of the quality of the project, it will be unaffordable and thus not marketable. Let’s face it, the grander the project, the more it’s going to cost the residents in the end. Could a community designed that costs more to residents; one unaffordable to previous generations be viable in today’s market? The encouragement for the economic validity of what is envisioned comes from the fact that elders of the generation designed for will have much more money to spend on care than those previously. This demographic will be much more educated, financially successful, have different tastes, much more discerning and ultimately will be able to afford much more than the current elderly or the elderly in the past. In addition to simply needing to fill the call for more and better assisted-care communities, or compassion to want to give the residents the best options for later-life living, it is anticipates that on an architect’s and developer’s business standpoint, these sorts of projects will become very lucrative. Recognizing a Void

What is necessarily wrong or inadequate with the existing state of affairs? Why is there a need for change? The answer is simple. Elderly culture is changing. The following four excerpts from one
source of my research present a good summary of the philosophy of this shift:

“Culture change is the new buzzword in long-term care. Culture change is the process of moving from a traditional nursing home model, characterized as a system that is unintentionally designed to foster dependence keeping residents ‘well cared for, safe, and powerless,’ to a ‘regenerative’ model. This model is also sometimes referred to as ‘resident-centered’ care because it increases the residents’ autonomy and sense of control.”

“Instead of viewing aging as just another step of an incredible personal journey in the second half of life, this country sees aging as a curse. Its long-term care settings aren’t necessarily designed as places to live and thrive. But older adults are remaining at home longer, and the number of assisted living settings is growing. This places more pressure on nursing homes to provide living environments that appeal to younger consumers. Baby boomers, described as ‘well-informed, well educated, well traveled, widely accustomed to creature comforts and instant gratification, and historically outspoken,’ are doing the shopping for parents, and it can be safely assumed that they will not find the traditional nursing home appealing or acceptable. When baby boomers themselves begin requiring care, elder care settings will have to change quickly to accommodate their expectations – expectations for a superlative quality of life for as long as possible.”

“While seniors may be physically healthier than ever before, their spirits may not be. There are seniors who are bored, helpless, and lonely in facilities all over the country. This means we urgently need to move beyond the medical model of care and embrace a more social model that focuses on the individual in a meaningful, life-affirming way.”

“These medical-model nursing homes are nothing
like the homes that most residents come from, and all too often they become places of loneliness, depression, and decline. We supply the necessities for survival, but we deprive them of the necessities for living” (Brawley, 2006)

**Approach to Research**

The primary method of research for such an endeavor falls under the classification of Qualitative Research; the category that focuses on personal and informal social science. Initially, analyzation was done of existing and potentially innovative models of assisted-living communities. In addition to precedent studies first-hand observations of those currently living in assisted-living “homes” was beneficial. In no way exhausting this list of resources for research existing studies, articles and books written by authoritative individuals in the field were researched to form the vision of a promising model for an assisted living community.

**Goals and Solutions**

The overall goal is a complete departure from the “institutional” and a drive toward developing a Master Plan for a true assisted living “Community.” Since the onset of the research phase of the project a multitude of attributes have been discovered that potentially contribute to a successful design. While many of them may be a bit obvious and intuitive, the reasoning behind the appropriate characteristics and thoughtful considerations of their design has been an interesting path of discovery. In the remainder of this introduction strategies of design will be discussed that have been proven to be successful approaches to deliberate evidence-based design. With these strategies being potential goals to be realized in the overall design of the project, means to satisfactory solutions will be addressed. While the following will certainly not be an all-inclusive and in-depth inventory, the idea is that these are essentials.
Residential in nature.

The primary goal of a successful elderly community design should be that essential parts, primarily the residences, must appear and feel “residential” in nature. The first broad stroke of the brush to achieve this would be to avoid large complex buildings and plan for smaller clusters of “neighborhoods.” Other means would be to incorporate appropriate materials and finishes. Front porches are another design solution to accomplish the goal of a residential nature to the project. The front porch concept is reminiscent of “home”, but should not only be treated as simply a transition space. Its proper adaptation blurs the line between the indoors and the outdoors for those afraid to go outside.

Consideration for those with dementia.

Many of the residents will have cognitive deficiencies (dementia) to some extent including those suffering from Alzheimer’s. While the project will not incorporate a sizeable focus for those with dementia it is still worth mentioning appropriate design considerations for persons with cognitive limitations. Persons with dementia are more “susceptible” to the environment. They’re progressively losing their coping abilities and the impact of their environment if designed in an uninformed way will contribute to their stress levels. It is understood that people with Alzheimer’s respond to their environment on a sensory rather intellectual level. This is why in readings thus far it has been reiterated that environments that direct cognition and reduce conflicts with the natural cognitive mapping systems in the brain are essential aspects of good design; on both the large and small scales.

The term most often used relating to this concept was “Wayfinding.” Intended to mean much more than signage, it is simply defined as the cognitive process that allows a person to navigate to
a particular place and back again. Donald Norman uses the term “natural mapping” – the environment itself contains the information necessary for its correct use, rather than relying on knowledge held within the user’s head (1998). And it is encouraged that this consideration be applied on a holistic level. As far as possible solutions, a characteristic related to encouraging a positive relationship to the environment for those with declining mental capacities is the strong provisioning of more easily identifiable, distinct and varied social spaces.

Appropriate and healthy lighting.

Another important factor in design for the elderly is the careful consideration of lighting; both natural and artificial. A goal was set that natural lighting be used as the primary lighting system and it was incorporated in copious amounts; especially provisioning for natural morning light. In other words, there is no such thing a too much natural light as long as it’s dealt with correctly and controllably. And plenty of appropriate lighting, for mostly obvious reasons, also helps those who are hard-of-hearing hear others better.

It had been learned that there are natural rhythms within the body called circadian rhythms that balance various things like melatonin and serotonin levels along with hosts of other neurotransmitters. In addition to not sleeping well, many individuals are susceptible to depression and suppressed immune systems. “Light is a potent regulator. Natural light is the primary stimulus for regulating circadian rhythms, seasonal cycles, and neuroendocrine responses in humans” (Klein & Ruppert, 1991). “Lighting can and will make a greater difference in the success of a healthcare setting than any other single feature except the healthcare itself” (Brawley, 2006). A few design solutions were the careful consideration of orientation, the incorporation of clerestory windows,
indoor atriums, skylights and single-loaded corridors with glazing on one side.

Outdoor environments.

A primary goal for good design of an assisted living community should be the encouragement and the providing of opportunity for socialization and activity which provide effective therapy for residents in long-term settings. Solutions would be the generous inclusion of gardens and other outside environments. “Designing garden spaces specifically to enrich the lives of older participants has been an overlooked opportunity to encourage exercise and good health and to create meaningful places that are rich in association and responsive to the magic of the changing seasons” (Brawley, 2002). Getting the elderly outdoors can sometimes be a challenge due to many reasons, so a previously stated concept integral to encouragement of going outdoors is that of the front porch.

Getting the residents outside exercising, walking, socializing and participating in activities is much of what was envisioned for the project; including the design of various outdoor spaces to accommodate larger group activities, spaces for smaller groups to socialize, and the necessary private spaces amongst larger social outdoor spaces. Existing literature suggests that the accommodation and opportunity for privacy actually encourages socialization. In other words, if given opportunity to conveniently “collect” oneself if over stimulated, people would be more likely to venture into these social environments.

Besides providing enough and adequate outdoor spaces, another goal for an effective model of design would be the incorporation of design elements for bringing the outdoors inside. This could be accomplished with the inclusion of indoor gardens and atriums; again, another opportunity to bring much desired natural light to indoor environments.
Other Design Elements

There are numerous other elements that encompass good design of an assisted living community that are suggested as effective in various studies. A major one is the necessity for small, private residential style living quarters. Another often overlooked inclusion are play areas and playgrounds for visiting children. Since no spaces should considered off limits to residents, all support spaces like kitchens and laundry facilities should be designed to encourage the participation of the residents. For example, place a kitchen table in the public kitchens. Additionally, and quite importantly, the need should not be overlooked for the many and strategically placed restrooms. Incontinence is a cause for many falls. Bathrooms need to be numerous and close by no matter where residents may be, either indoors or outdoors. Fitness centers are other important spaces I intend to include in my program.

Conclusion

As stated earlier, the goal is a complete departure from the “institutional” and a drive toward developing a Master Plan for a true assisted living “Community.” Ultimately, the intention is to incorporate the concepts of the Pedestrian Street within the project by transforming the traditional “old folk’s home” into a diverse community of neighborhoods with the pedestrian street as one of the primary focuses with residences, patios, porches, balconies and social and other public indoor and outdoor spaces abounding and oriented towards them. A little town, not an institution is imagined….Main Street, not long corridors…a Town Center, not a dimly lit communal space…community activity, not endless idle days…an address, not a room number.
Lastly, it should be mentioned that in addition to the preceding goals and solutions it was anticipated and realized that after a site was selected and the design portion of this project ensued there were additional and more specific goals addressed.
What is Assisted Living?

The subject of this section is the development of the understanding of what classifies as assisted living for the elderly. Additionally, what levels of needs or assistance are, or in the future, need to be provided for those seeking residence in an assisted-living community.

Over the past couple of decades there seems to have been no clear understanding of what exactly the definition of assisted living was. The definition has clearly evolved over the last decade and has come to symbolize a setting that is resident centered, family friendly, and residential in character (Regnier, 2002). Perhaps the most widely accepted definition came in 2000 from the Assisted Living Federation of America (ALFA): “…A special combination of housing, supportive services, personalized assistance and healthcare designed to respond to the individual needs of those who require help with activities of daily living (ADL) and instrumental activities of daily living (IADL). Supportive services are available, 24 hours a day, to meet scheduled and unscheduled needs, in a way that promotes maximum dignity and independence for each resident and involves the resident’s family, neighbors and friends…” (ALFA, 2000)

Profiles of Assisted Living Residents

While individuals may cross between the two there are generally two profiles of residents who require an assisted living environment; those who are physically frail and those who are mentally frail. These two types of residents have different needs but the model of assisted living serves both. Below are excerpts taken from summaries written by Victor Regnier, an architect and gerontologist:
**Mentally impaired residents.**

“The move to a separate secured dementia unit is normally triggered when residents become a hazard to themselves or begin to disturb others. Dementia units are normally designed around a cluster of units and limited to 12-20 residents. The profile of a mentally frail resident varies, but many experience disorientation, confusion, agitation, and frustration. As the disease progresses, restlessness, aimless wandering, occasional verbal outbursts, and behavioral aggressiveness may develop. However, many residents remain passive and pleasant until the end” (Regnier, 2002).

**Physically impaired residents.**

“Assisted living residents with physical problems are the other type of resident. Typically, these residents move to assisted living in response to an acute or chronic medical problem. The aftermath of a broken hip or heart attack might trigger a move, but most likely it is the increasing chronic disability of mobility impairment, arthritis, or balance control that motivates a change in residence. Residents with physical impairments often have a difficult time walking. A few are in wheelchairs, but most are dependant on a walking stick, four-prong cane, or walker to get around. Many have limitations that are not apparent such as hypertension, heart disease, diabetes, incontinence, hearing loss, or visual impairment. When these limitations are mild, they make preparing meals, driving a car, shopping for groceries, and managing medications difficult. When these conditions become more disabling, they make it difficult to take a shower, dress without assistance, go to the bathroom alone, and eat without assistance. These disabilities can be easily managed in assisted living unless they are so disabling that they require 24-hour supervised nursing care” (Regnier, 2002).
As far as levels of services needed by the residents, the following table and associated references ranks 18 different disabilities that residents require assistance with:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Medication dispensing</td>
<td>66.5%</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Bathing</td>
<td>65.5%</td>
<td>61.0%</td>
<td>62%</td>
</tr>
<tr>
<td>Dressing</td>
<td>47.8%</td>
<td>35.0%</td>
<td>39.6%</td>
</tr>
<tr>
<td>% cognitively impaired</td>
<td>45.0%</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>% hospitalized in last year</td>
<td>—</td>
<td>45.0%</td>
<td>—</td>
</tr>
<tr>
<td>Personal hygiene</td>
<td>43.0%</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Wheelchair/walker users</td>
<td>41.0%</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Toileting</td>
<td>26.9%</td>
<td>25.1%</td>
<td>30.7%</td>
</tr>
<tr>
<td>Daily incontinence</td>
<td>20.4%</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Locomotion (mobility assist.)</td>
<td>24.4%</td>
<td>16.2%</td>
<td>20.2%</td>
</tr>
<tr>
<td>Eating</td>
<td>16.3%</td>
<td>6.2%</td>
<td>5.9%</td>
</tr>
<tr>
<td>Using home health services</td>
<td>—</td>
<td>11.3%</td>
<td>15.7%</td>
</tr>
<tr>
<td>Transferring assistance</td>
<td>—</td>
<td>11.9%</td>
<td>—</td>
</tr>
<tr>
<td>Diabetes</td>
<td>10.4%</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Wheelchair users</td>
<td>—</td>
<td>11.7%</td>
<td>—</td>
</tr>
<tr>
<td>Who could live independently</td>
<td>—</td>
<td>10.9%</td>
<td>7.7%</td>
</tr>
<tr>
<td>Parkinson’s disease</td>
<td>6.1%</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Residents with automobiles</td>
<td>—</td>
<td>5.2%</td>
<td>4.7%</td>
</tr>
<tr>
<td>Nonambulatory/bedridden</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

1 ALFA: ALFA statistics are from an annual national survey of assisted living providers who are ALFA members. The 1999 assisted living portion of the survey involved responses from 260 assisted living providers representing 18,019 units and 18,272 residents. Because the survey is limited to ALFA members, it does not necessarily represent the universe of assisted living environments available to older people. (ALFA, 2000)

2 NIC: The NIC study is the result of a study of 179 assisted living communities located in the contiguous 48 states and of 1033 residence living in those communities. The survey instrument consisted of a facility survey completed by facility personnel and a resident survey with a resident assessment instrument completed by older residents with assistance from family members and staff. (NIC, 1998)

3 NIC-Modern: The “modern subexample” of the NIC study consists of newer facilities that have opened since 1990. They were also screened to meet the following three criteria: (a) free-standing (b) purpose-built, and (c) sponsored by for-profit sponsors. (NIC, 1998)

Figure 3. Percentage of Residents Needing / Receiving Assistance (ALFA, 2000; NIC 1998).

Five Levels of Service

From the table above, generally five levels of services can be deduced. Defined this way, these five levels give more of a mental picture of a resident’s day-to-day needs. Victor Regnier conveniently classified them under five general levels of service headings.

60 percent need level:

Apparently two-thirds of residents have conditions that require help with organizing and timing drug regiments that prove too much for a resident to be able to handle on their own. Also, bathing assistance would fall under this level. “The potential for slipping or experiencing a balance control problem in the shower is feared by many older people” (Regnier, 2002). According to the NIC study referenced earlier about half of the residents only needed supervisory assistance.
The remainder need help with getting in and out of the tub/shower or were much more dependent (NIC, 1998).

50 percent need level:
Both the ALFA and the NIC figures show that at least 45 percent of residents have some form of cognitive impairment. With that said, the severity of the impairment is not defined and with most elderly eventually experiencing some type of mental limitedness or memory loss it is not to be assumed that these figures represent those needing intensive support.

40 percent need level:
Assistance with dressing is another personal care that a large number of residents need help with. This number may have much to do with the report that 50 percent of the 65+ population suffer from arthritis (CDC, 1999), and this ailment, over time, and from personal observation, can become more and more disabling. The data in the table shows that 35 to almost 48 percent of residents require this form of assistance. The ALFA study also shows that nearly this percent also require wheelchairs or walkers with assumption that a majority use the later or other walking aides. This assumption is due to 17 percent shown as wheelchair bound in the earlier NIC study.

30 percent need level:
According to the data, 25-30 percent of the assisted living population suffer from incontinence or need assistance with toileting. “An incontinence program can help residents manage this condition with greater dignity. Providing help with toileting is necessary when residents find it difficult to transfer on and off the commode or to self-manage their incontinence” (Regnier, 2002).

10 percent need level:
The smallest segment of residents is shown to have difficulties eating and suffer from chronic diseases like Parkinson’s disease or diabetes.
The table shows that this represents about 6-12 percent of the population.

Conclusion

This insight gives an understanding of what assisted living means and what the disabilities and daily assistance needs are for the demographic that this Thesis addresses.

Figure 4. Percentage of Residents Requiring Assistance.
Figure 5. Multidimensional continuum of care model of available elderly housing showing the niche filled by assisted living facilities (Brummett, 1997).
Figure 6.
Modified continuum of care model representing a greater emphasis on environment; a driver for the Project.
Who are the Residents?

Those who have physical or mental limitations that require the need for assistance with ADL's have traditionally had three choices; move in with a relative or friend who will care for them, move into an assisted living community or opt for in-home (delivered) care. Of course, if an individual has an able spouse living with them the common scenario is that the more able spouse assists the less able one. This works well until either one spouse passes away or neither spouse is able to assist the other and both find themselves in a position to seek care from a third individual.

Residents who choose to move into an assisted living community over the decision for in-home care have weighed the drawbacks and benefits of both and feel that the benefits of an assisted living community exceed those of staying in their current home. Figures 8 and 9 diagram the models of in-home care versus an assisted living community with commentary on the strengths and weaknesses of both.

Residents of an assisted living community have come from various backgrounds, different parts of the community and have different tastes with regard to style of home.
Ultimately, those individuals who would choose a community represented by this thesis are those who would prefer to live in a community of their contemporaries, those who desire to maintain a social and active lifestyle and those who value their independence and personal space.
Strengths:
- No need to move into a new home
- Encourages independence

Weaknesses:
- Caters to isolation from friends and discourages socialization
- Efforts and costs of home maintenance
- Higher costs of assistance

Strengths:
- Opportunity and encouragement of socialization and activity
- No longer the costs or hassles of home maintenance
- Ease of access to desirable community amenities

Weakness:
- Potential feeling of a loss of independence

Figure 8. Traditional In-home Care Model.

Figure 9. Assisted Living Community Model.
Introduction to Research Studies

In the process of identifying potentially applicable needs the project would address, studies were undertaken that would draw conclusions for later consideration in the design of the project. Three specific research studies were carried out.

Sizing the population of the community was of initial importance. The number of residents had to be determined to sustain the number and diversity of desired amenities and also to establish the total number of living units to program for the project.

The next study was done to determine the various housing types appropriate for inclusion in the project. Since the goal was established for a diversity of housing options relating to a resident’s preferences and level of assistance needed, a range of housing choices was established.

The third study took into account pertinent elements of the program with regard to their requirements for available parking to determine the total number of parking spaces needed relative to each. It should be noted that accommodating for all required parking is not a focus in the design of the project; acknowledging that the parking requirements were not completely realized. Nonetheless, the study was valuable research.
Research Study - Sizing Resident Population

Abstract

The backbone to any assisted community is the population of residents who live within it. The intent of this study is to determine the scope of the project with regard to the appropriate number of residential units to sustain the project’s numerous and diverse amenities.

Hypothesis

The number of residents and available amenities vary from community to community. It is reasonable to assume the communities with larger numbers of residents could successfully integrate a larger number of amenities. An early and somewhat intuitive decision was made that this project would include 250 units.

Method of Research

A suitable method of research for this study falls under the category or correlational research. This method of research involves the recognition of patterns of relationships between at least two variables; the variables being the factors involved with the circumstances of the study. For this study a comparison of four existing assisted living communities in the Tampa Bay area were made. These communities include The Fountains at Boca Ciega Bay in St. Petersburg, Freedom Plaza in Sun City Center, Freedom Square in Seminole and Brighton Gardens in Tampa. The two variables that represent the factors for correlation will be the number of living units and the number of amenities.

Analysis

Below is a matrix and a bar chart representing information collected from the four communities studied. The matrix includes total number of living
units and a compiled list of amenities. The bar chart shows a graphic representation of the relationship between the number of units and the level of amenities. For graphic purposes the number of amenities in the chart was multiplied by a factor of ten.

**Limitations**

The number of units in all the communities studied with the exception of Brighton Gardens includes residences for Independent Living in addition to Assisted Living. Since this is strictly a correlational study of numbers of residents to amenities offered the levels of personal services should have little or no effect on these relationships. Another important limitation to mention is that the amenities offered in each of the communities are available only to the residents of the respective community.

<table>
<thead>
<tr>
<th>Amenity</th>
<th>The Fountains</th>
<th>Freedom Plaza</th>
<th>Freedom Square</th>
<th>Brighton Gardens</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Living Units</td>
<td>500</td>
<td>320</td>
<td>362</td>
<td>162</td>
</tr>
<tr>
<td>Library</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Town Hall</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Fitness Center</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Pool</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Auditorium</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Arts &amp; Crafts Studios</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Wood Shop</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Computer / Education Center</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Movie Theater</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Grocery / Country Store</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Beauty/Barber Salon</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Non-denominational Chapel</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Fishing Pier</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Indoor Recreation</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Billiards Room</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Card Room</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Various Restaurant-Style Dining Options</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Cafes / Sandwich Shops</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Bar / Lounge</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Bank</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Walking Paths &amp; Nature Trails</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Guest Accommodations</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Courtyards / Outdoor Gardens</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Outdoor Recreation</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

Figure 10. Matrix of Amenities Offered by Four Local Assisted Living Communities.

Figure 11. Relationship Between Number of Amenities and Number of Units.
Another limitation to this study is that comparisons are made using numbers of units not numbers of residents.

Conclusions
In order for the project’s program of amenities to be justified and supported quite a large population of residents are required. As in the case of The Fountains, which most closely represents the scope of amenities for this project, a population of 500 apparently is enough to validate the level of amenities offered. This project fundamentally differs from these existing communities in that it is the intent of this project to incorporate social interaction with the greater surrounding community by opening many of the amenities to the general public as well. What this approach offers is a reasonable conclusion that a lower number of residents are required if the number of users of the amenities are subsidized by non-residents. Yet, it is an intention of the project that the residents’ do have a sense that they are living in a somewhat private community of their own. This is achieved by not offering all amenities for use by the general public. For the most part, the amenities that represent alternative dining, retail, physical therapy and senior educational components of the program are those available to general public. This portion generally equates to thirty percent of the program of amenities. Given that number, and the numbers taken from primarily from The Fountains study, a deduction is made that a unit number of approximately 300 will support the program of the project.
Research Study – Housing Types

Abstract

Considering that the bulk of the Project is the provision of residences, determination of appropriate and relevant housing types with regard to the overall goals of this Thesis needed to be addressed. Having defined that the project will consist of 300 units the intent of this study was to establish how these residential units are be grouped.

After examination of existing Assisted Living facilities there seemed to be a consistency in the monotony of living unit arrangement that could arguably discourage a resident’s senses of home and community. Rather than situate residences along long double-loaded corridors, it will be shown that there are alternative strategies and that a variety of housing types and scales can still accomplish appropriate living arrangement.

Method of Research

Alternative styles of Assisted Living residence arrangements were sought out and analyzed. It was kept in mind that a primary driver of this Thesis is the destruction of the concept of a large mono-structure conglomerate housing type. Therefore, smaller, more residential type structures were considered. Below are the results of relevant housing types found that share in the nature of the Thesis.

Analysis

Housing type a -

Below is a prototype unit that exists in an Assisted Living Community in Denmark. This concept for housing represents a possibility of choice for the residents should they prefer a unit with no area for communal living.
This represents a style of housing appropriate for residents who require minimal amounts of assistance with activities of daily living.

Below are two-dimensional and three-dimensional diagrams of how this concept could be modified to house five or six units under one roof rather than only two. Preference will be given to the 5-unit arrangement due to opportunity it provides for maximizing exterior wall area which in turn translates into greater opportunity for natural light into the units.

Figure 12.
Unit Type Representing a Possibility for Residents Requiring Minimal Assistance (Regnier, 2002).

Figure 13.
Plan Diagrams of Type A Unit Layouts.

Figure 14.
3-D Diagrams of Type A Unit Layouts.
Housing type b -

To the right is another housing prototype from the same community in Denmark. What is of interest in this layout is the small, residential scale. Additionally, this housing type offers residents the choice to either maintain privacy through direct access into their private living unit, or enter through the communal living area. A drawback could be the inopportunity for the residents to choose to dine in the privacy of their own unit. There are no areas for dining within each unit and the kitchenette provided in each unit is inadequate for preparing private meals. Simple modifications to the private units could be made to this concept of a housing type to accommodate for these less desirable characteristics.

Below and bottom left are diagrams of how this housing type was modified to accommodate four living units rather than three.

---

Figure 15. Plan Diagrams of Type B Unit Layouts.

Figure 16. Unit Type Representing Opportunity for Small Scale Communal Living (Regnier 2002).

Figure 17. 3-D Diagram of Type B Unit Layout.
Below is an aerial photograph of University Square Apartments located in Tampa, Florida. While this complex is not designed for Assisted Living, it does represent a similar size and density that could be appropriate for the arrangement of housing types A and B. With reduced requirements for parking within an assisted living community, this arrangement would provide additional green spaces giving this type of housing more of a Garden Apartment designation. For programming purposes, this site represents approximately eleven acres.

Figure 18.
Aerial Photograph of University Square Apartments (Google Earth).
**Housing type c**

To the right is a concept for group housing taken from a section of a Time Savers Standards publication. What is of interest in this concept is the opportunity it would provide for residents who may require a more substantial level of assistance. This is accommodated by the in-house areas for communal socializing, communal dining areas and communal recreation areas. A proposal for this concept to make a housing type of this kind into a twelve unit two-story style is represented by the diagrams below.

![Diagram](image1)

**Figure 19.** Plan Diagrams of Type C unit Layout.

![Diagram](image2)

**Figure 20.** Unit Type Representing a Concept for Type C (DeCharia & Callender, 2002).

![Diagram](image3)

**Figure 21.** 3-D Diagram of Type C Unit Layout.
Housing type d -

This housing type represents a concept for a mid-rise condominium style housing choice with eight units per floor. There are many similarities between housing Type C and D. The primary difference is that there are additional floors of residential units transforming this concept into a six-story structure rather than two. The same social spaces provided in Type C is to be included in this type as well. Due to a proportionally larger requirement for these spaces based on the increased number of residents, it is determined that the entire first floor would be consumed by these communal spaces; unlike Type C where residential units exist on the first floor in addition to the communal spaces. With the number of units decided to be included in the project, it is determined that not only would this concept be a desirable choice for residents accustomed to multi-level condo living, it is potentially a necessary housing type to include in order to achieve the 300 total units for the project. Below is an aerial photograph of this concept for housing incorporated into a portion of Freedom Square; an Assisted Living community located in Seminole, Florida.
Conclusion

It is determined that these four housing types hold potential for appropriate housing for the elderly. With the varying interests of residents with regard to housing preferences, all four of these housing types will be incorporated in the project. These four housing types also constitute a range of scale of structure; another desirable characteristic of a varied community. Options for privacy and convenience for daily living assistance range amongst the housing types which provides for alternate choices relative to residents' desires and predicted or required levels of assistance. It should be noted here that while these four types represent typical strategies for use within the project, ultimately a fifth is incorporated. With the Town Center portion of the project containing shops, other retail and restaurants, opportunity for urban studios and apartments located on the upper floors of the retail areas exists. These "city apartments" provide yet another option for living offering the sense of in-town living; alternative to the neighborhood style of living of the more rural areas of the community.
Research Study – Required On-site Parking

The purpose of this study is to determine the projected total number of on-site parking spaces that the project would require. While the City of Tampa’s zoning requirements are fairly clear about exact formulas to figure required on-site parking based on building functions, numbers of users, square footages, etc., figuring the numbers for this project are a bit of a challenge. The primary “grey area” involved is figuring additional parking for non-resident users of various program functions.

Who will be Parking?

It is a conceptual driver for the project that there is social interaction between the residents of the project and residents of the surrounding community. This is primarily encouraged by making the shops and restaurants of the town center as well as the rehabilitation and physical therapy portions of the project available to non-residents. Considering that these functions will primarily serve the residents, a number is stipulated representing the anticipated percentages of non-resident use. For the purposes of this study it is to be projected that the residents will make up 75 percent of the town center patrons and the rehabilitation center’s users. This percentage was figured by assuming that “most” of the patrons will be residents. Therefore taking the mean between 51 percent and 99 percent; the range, in which by definition “most” falls, results in a number of 75 percent.

Calculating for Two Groups of Users

First and foremost is figuring parking space numbers strictly for the residents, resident visitors, caregivers, administrators, and other support personnel of the community alone.
To that number is added the additional parking for non-resident patrons.  

Community Residents and Staff  

City of Tampa on-site parking requirements were reviewed yet there is no designation for Assisted Living. Considering that relevant building codes view assisted living as a medically related function, the closest function for considering parking in the City’s zoning requirements is that of nursing care. This stipulates a requirement of 0.35 spaces per bed. While it may be argued that assisted living residents are much more likely to be driving than residents of a nursing facility, consider the findings of an authoritative source.

A study conducted in 1998 by the National Investment Conference (NIC, 1998) of 178 assisted living providers found that only 5 percent of residents owned automobiles (0.05 cars per resident) a substantially smaller number than 0.35. In support of using a number close to 0.35 is a rule-of-thumb number offered by Victor Regnier; an architect, gerontologist and “world renowned expert of design for assisted living environments” (anon Regnier, 2002). “A parking ratio of 0.4 cars per unit is adequate for most sites…”(Regnier, 2002)

Assuming the validated ratio of 0.4 cars per unit, and a total unit number of 300 established for the Project, total spaces for the community residents, staff, etc. shall equal 120 spaces.  

Non-Residents  

For the functions patronized by non-residents City of Tampa zoning requirements are fairly clear for figuring parking for the retail shops and restaurants of the town center. Yet, there is no clear reference made to requirements for rehabilitation centers; the other program function intended to be used by non-residents.
Retail

City of Tampa requirements for the retail portions of the project call for 1.1 spaces per 1000 S.F. for “specialty shops” and 4.0 spaces per 1000 S.F. for “other retail”; the two that closest relate to the nature of the retail portions of the project. Considering that 75 percent will be taken off the top for consideration of primarily resident-use of the retail, the greater will be used. Therefore 25 percent of 4.0 equals 1.0. The figure of 1.0 spaces per 1000 S.F. will be used for retail. Considering the 13 retail shops provided in the town center with a combined square footage of 12,000 S.F. nets additional parking spaces required at 12 spaces.

Restaurants

City of Tampa zoning requires 0.25 spaces per person for walk-in restaurants. With four restaurants programmed for use by residents and non-residents with capacities of 70 persons each, this represents a total capacity of 280 patrons; 75 percent of which parking has already been considered for. Therefore, considering parking for 70 non-residents, the total number of spaces additionally required for the restaurants equals 18 spaces.

Physical Therapy Center

As far as parking for the rehab center, the closest related function the City’s requirements relate to is that of a public health club or public use club; both requiring 3.3 spaces per 1000 S.F. Considering the 75 percent reduction for resident-use, this equates to 0.82 spaces per 1000 S.F. for non-residents. With the rehab center programmed at 16,000 S.F., total additional parking spaces for the center shall be 14.
Conclusion

Community parking totals 120 spaces

Additional parking:
Retail parking totals 12 spaces
Restaurant parking totals 18 spaces
Rehab Center parking spaces totals 14
Total On-site parking: 164 spaces
Precedent Studies - Existing AL Communities

The following are five precedent assisted living facilities / communities studied. They were analyzed for their strengths and weaknesses with regard to particular features of each that would be either suitable or unsuitable concepts for possible inclusion in the Project.
Brighton Gardens is an assisted living facility located in Northwest Tampa, Florida. The facility houses 150 residential units. Of these, approximately 20 percent are in a secured wing to house residents with Alzheimer’s. In addition, a wing for temporary nursing care consisting of 30 beds is located on the first floor.

Strengths:
- Lower construction and operating costs resulting in a potential lower cost of care
- Ease of access to amenities and social spaces
- Immediate access to assistance

Weaknesses:
- Room numbers along long double-loaded corridors
- Discouragement to go outside
- Forced socialization
- Isolation from the greater community
- Not of a residential character residents are accustomed to
- Potential for discouragement of physical activity
The University Village community consists of three neighborhoods; University Village housing Independent Living (IL) and Assisted Living (AL) units in four six-story towers, the Villas, which consists of single occupancy cottages designated for IL only, and The Inn housing AL units as well as nursing care. While all three are not operated by the same entity they do work hand in hand together to provide care for residents with varied ranges of needs and the opportunity for residents to move to a different area of the community should their needs change.

Strengths:
- Varied housing types and scales
- More residential in character
- Access to and from surrounding community
- Proximity to shopping and public transportation
- Relocate to another home within the community when needs change

Weaknesses:
- Segregation of IL and AL units
- Limited community amenities
The Fountains represents the largest community studied with regard to total number of living units among other aspects. This community is comprised of almost 500 units divided between IL and AL. In addition, there is much more outdoor park space designed into this community than found in other communities studied. Third, this community offers more diverse and a higher number of and amenities available to its residents. The Fountains is also the only community studied that is situated on a waterfront site. While it is designed to be primarily occupied by IL residents, the benefits that this community offers would also fit very well into the program for an exclusively AL community.

Strengths:
- Waterfront
- Numerous and diverse amenities
- 14 acres of park space

Weaknesses:
- Single housing type
- Parking arrangement
  - Bisects community
  - Isolates park space

Figure 27. Aerial Photograph of The Fountains (Google Earth).
Freedom Square - Seminole, Florida

Freedom Square is in many aspects quite similar to University Village. There are four towers offering condominiums primarily for independent living, a separate single structure exclusively for assisted living and a separate nursing care facility. In this community there are a total of 362 residential units. While the number of amenities far exceeds those offered at Brighton Gardens, there are considerably less offered at this community than at The Fountains. An attractive aspect of this community is the inclusion of a town center comprised of shops and amenities centrally located within the community. Also, this site is conveniently located directly adjacent to a shopping mall; an aspect that is a highly rated benefit to the residents.

Strengths:
- Inclusion of a centralized Town Center district containing shops and cafes
- Multi-structure community amenities
- Located next to a shopping mall
- Majority of parking on the perimeter

Weaknesses:
- Limited outdoor green spaces
- No integration with a surrounding residential community
The Cedars most closely represents the residential style of housing of all the communities studied. The three styles of housing offered at The Cedars fall into three categories. There are “The Cottages” which resemble single family residences that many residents are accustomed to. In addition to these are what are called “The Villas” and “The Verandas.” These are multi-floor and multi-unit structures. What is also appealing about the planning of this community is the scale of structures and their relative placement within the community. The larger scale structures are located near the core of the community and the smaller scale cottages are on the perimeter. This feathers the scales of the community into the surrounding residential communities.

Strengths:
- Diverse housing types
- Residential in character
- Varied scales of structures
- Transition of scale feathered into surrounding neighborhoods
- No need to ever move when needs change
- Outdoor green spaces and lakes

Weaknesses:
- Most amenities housed within a single structure
- Primary central lawn too formal and virtually unusable
Figure 30. Photograph of a “Villa” Housing Type at The Cedars (The Cedars).

Figure 31. Photograph of a “Veranda” Housing Type at The Cedars (The Cedars).

Figure 32. Photograph of a “Cottage” Housing Type at The Cedars (The Cedars).
Programming Criteria

An underlying design intent of this assisted living community is to incorporate programmatic features where as to enable residents to sustain a feeling of “community” somewhat autonomously. In other words, while connection and interaction with the greater surrounding community is of great importance and is addressed and incorporated, the concept of a relatively independent community is important as well so that the residents will have a sense that they are living within a community of their own.

The primary purpose of the project is the provision of residences. Secondary is the provision of amenities and ancillary use spaces in specific and mixed-use structures providing for a community encompassing living and activity within the same environment. One of the aspects that will set this project apart from most all of the precedent studies done to this point is the basic parti of residence distribution and structure. The trend among assisted living is to design residences as apartment units contained within a multi-floor single structure. That parti has its benefits of reduced land requirements, shorter travel distances, costs, etc., yet with every project reviewed there is the consistent long-corridor, non-residential feeling of just a room number not an address. It is believed that the simple rearrangement and distribution of residences to multiple, smaller scale, more residential type structures would greatly effect a resident’s sense of “home”, a primary design driver of the project.

For purposes of a program organization strategy, all the elements of the project are classified under one of three categories. Other than programmatic elements pertaining to residences, there is also the
incorporation of necessary and ancillary supplemental functions within the community for Support Services and Amenities.

Residences

To reiterate, the primary purpose of the project is the provision of residences and the intention is to offer an alternative to what is currently on the market. It is believed that if there are varying housing type options to choose from within a community accommodating varied tastes and varied interests, a resident would feel that they are simply moving to a new address, not into an assisted living facility.

Aware that different individuals come from different backgrounds, housing styles and have different preferences with regard to housing types, the intention is to provide a combination of types ranging from structures containing four residences, structures housing five units, another type containing eight units, and also two apartment buildings providing mid-rise condo style living of forty units each. A reasonable strategy is to design these larger condo-style structures with the intention that they be a more appropriate living choice for those requiring a higher level of assistance. This arrangement would make attending to those with greater needs more efficient, and with portions of the amenities located in the lower floors of these structures the less mobile residents would have easier access to them. With varied housing types to choose from residents would be more likely to feel that they are moving into a new home, in many ways similar to the home they lived in previously with every living unit containing full kitchens and bathrooms; features found lacking in some of the less appealing communities.

With regard to the residences, two of the primary issues addressed are: How many residences will the project include? And how will the various sizes and housing types be divided? It has been determined
that the number of residences will fall close to 300. As far as the division of the various housing types and unit sizes, it is decided that 50% of the units will be one-bedroom, 25% two-bedroom and the remainder to be studio apartments. These numbers were determined by comparative analysis of unit distribution of existing apartment-style communities. Another important consideration was the determination if there will be housing and services for those with Alzheimer’s or other severe dementia. As of current, this is not to be included in the project. Shall it be added to the program in the future communities much more research would be required to understand the delicate nature of people with this condition. With regard to their condition it is understood thus far that they respond to their environments on much more sensory level rather than an intellectual level. This would require a higher degree of attention paid to the design of their environments.

Support Services

Considering that this project is designed for those who are, or are on the cusp of needing assistance with activities of daily living and beyond, a prominent inclusion in the program is that of a structure to house a facility for more acute medical and nursing help for the residents when their health status will require this level of attention. One of the communities studied included a nursing wing for the residents who still maintain an apartment of their own but are staying in the nursing wing for a duration while recovering from a short-term illness or recovering from a surgery and are not yet ready to return to their own apartment. This program element provides the opportunity to include a rehabilitation center associated with the fitness and pool areas for rehabilitation services that would be available to the elderly in the greater community as well.

Providing for meals for those who either do
not desire to cook for themselves or are unable to is another primary support service of the project. Other than the disbursement of a few restaurant-style dining options open to the public as well that would fall under the category of an amenity, dining rooms within the larger residential structures for those with more limited mobility are provided for exclusive use by the residents.

Other inclusions in the program that would fall under the category of a support service are those to house the various requirements for the assistance providers employed by the community. While stated a bit vaguely, a few other primary services requiring designed space include food preparation, administrative spaces and coordination and staging areas for preparation of scheduled daily or weekly house-calls to a resident’s home. Obviously there are the numerous back-of-house requirements needing to be accommodated for; including everything from mechanical rooms to grounds and other maintenance space requirements.

Amenities

Thus far in the research of existing communities a list has been compiled of amenities associated with the various communities that were considered for inclusion within the project. A primary design driver for the project is the creation of a pedestrian friendly mixed-use “town center” to provide for the interests of the resident’s as well as the surrounding community. This is of particular importance in order to create a community that is not intended to solely stand alone but one that has a connection, physically and socially with the greater community. With patrons comprised of both the residents of the project and of the surrounding community supporting many of these amenities, their economic viability should be sustainable.
Project Program

Housing:
The majority of the project consists of 300 single-floor housing units as follows:
150 – One-bedroom units at 800 SF
75 – Two-bedroom units at 1200 SF
75 – Studio units at 500 SF

These units are divided into four different housing types. For the purposes of rough square footage calculation, consideration of studio unit size is excluded from the following.

Type A: 10 total
A five-unit single-story structure consisting of private living units only.
4,800-7,200 SF (based on 1 or 2 bedroom units respectively)

Type B: 10 total
A four-unit single-story structure with communal main living, kitchen and dining area of 700-800 SF – total 3,900-5,600 SF (based on 1 or 2 bedroom units respectively)

Type C: 4 total
A twelve-unit two-story structure with communal living, kitchen, dining and activity spaces of 2,400 SF – total 12,000 SF (based on 1 bedroom units) – total footprint 6000 SF +/-

Type D: 2 total
A forty-unit six-story structure with apartment units on floors two through six with communal living, kitchen, dining, activity and administration spaces of 6400-9600 SF on the first floor. (based on 1 or 2 bedroom units respectively)
Administration:
Entry Lobby – 1000 SF
Reception Desk – 150 SF
Security Room – 120 SF
Administration Offices (3) – 150 SF ea.
Staff Lounge w/ kitchenette – 250 SF
Bldg. Maintenance Office – 100 SF
Bldg. Maintenance Storage – 200 SF
Grounds Maintenance Office – 100 SF
Grounds Maintenance Storage – 300 SF
Total 2670 SF

Nursing and Therapy:
Nursing Center – 32,000 SF
Rehabilitation / Physical Therapy – 16,000SF
Physical Therapy Pool - 1000SF

Outdoor Recreation:
Swimming Pool – 1800 SF

Pool Deck – 1800 SF
Pool Equipment Room – 100 SF
Children’s Play Area – TBD
Boccie Ball – 1800 SF
Horse Shoe Courts (2) – 300 SF ea.
Lawn Bowling (3) – 1,400 SF ea.
Walking Paths
Outdoor Gardens
Dog Walking Areas

Amenities:
Library / Book Exchange – 800 SF
Town Hall / Auditorium / Theatre – 3200 SF
Fitness Center – 1000 SF
Arts & Crafts Studios – 800 SF
Wood Shop – 600 SF
Computer / Education Center – 1200 SF
Grocery / Country Store – 800 SF
Beauty / Barber Salon – 700 SF
Floral Shop – 300 SF
Billiards / Card Room / Bar Lounge – 1500 SF
Non-Denominational Chapel – 1500 SF
Restaurant Style Dining (4) – 1500 SF ea.
Breakfast / Sandwich Café – 800 SF
Town Center / Shops – 2 Acres (site area)
Site Selection Criteria

Considering that the subject of this Master’s Thesis project is an Assisted Living Community for the elderly, or what would be more appropriately termed and which more reflects the scope of the undertaking, a Continuing Care Community with exclusive emphasis on those individuals who require somewhat minimal assistance with activities of daily living with the intention that once a resident’s needs change, additional assistance would become available in their home; preventing the need to relocate to another community at a later age or health status. In other words, the scope of care and assistance ranges from those who can no longer live a completely independent lifestyle to those nearing the end of their life and on the cusp of requiring Hospice services.

A familiarity is had with several facilities accommodating the range of needs comparable to those anticipated to be designed for. While the general resident needs are met at those communities studied thus far the overall design parti for these existing communities is quite different than the goal of the project. Rather than the typical long-corridor hotel-style arrangement of apartment units housed within a single structure, this project is making a departure from this parti to a rearrangement and redistribution of residences to smaller, multiple, human-scale residential structures. Although, for those accustomed to mid-rise condo-style living the project incorporates this preference as well. This requires inquisitive thought into what is an appropriate site for the project.

It seems that as long as these existing facilities are within an appropriate range of a hospital and not too far from a scheduled bus trip to local attractions pretty much any site will do. This project, however,
requires site characteristics much more focused to incorporate an ideal fit of this community into the greater community and characteristics that offer the opportunity to successfully design and accommodate for the wider range of structures and programmatic elements of the unique community envisioned.

Coincidentally, we live in a state appropriate for senior living with its rising senior population and fair weather year-round. Additionally, the central eastern coast has, and will continue to have a senior population that would validate the selection of a site in this area. With that said, it has been determined that the site will be located Tampa Bay area.

The following will be a discussion of primary site characteristics that will provide for the support and sustainability of the project. First and foremost, the site must support the development of a community that has a residential and neighborhood feel to it. Additionally, easy access to nearby residential neighborhoods is an important criteria for the selection of the site to be able to sustain the public and resident shared components of the project. This includes the aspect of appropriate vehicular and pedestrian access and traffic as well.

Another primary characteristic of the site that has been at the top of the list of must-haves is that the site contains or have frontage on a body of water. This could mean lake-front, river-front, bay-front or gulf-front. This requirement is not only to provide interest to the overall design, but to provide therapeutic and recreation value as well. This inclusion as a site requirement would also create desirable views from the site.

Culturally speaking, a site located relatively close to venues of interest, such as theater, music, or other performance and visual art experiential opportunities would serve as a benefit. This further validates the selection of a site close to the
Tampa Bay area with its many and convenient venues of these types.

Additionally, and not to diminish its importance by late mention, the site will have a reasonable proximity to more medically advanced and equipped healthcare facilities; e.g. a hospital. Day-to-day assistance will be available to the residents in their home. More attentive assistance will be available on site within the nursing and rehabilitative areas of the project. Yet, there will be the inevitable need for the residents to have readily available access to much more acute and involved medical attention. Considering that this level of medical care is beyond the scope provided by the caregivers within the community, having a hospital close by to provide comprehensive care would be extremely beneficial to the project.

With this discussion primarily focusing on major site requirements, the question of the project’s physical size needs to be addressed so that a rough idea of the acreage required be entered into the consideration of proposed sites. Without the benefit of discovering a precedent that encompasses the scope and density that the project aspires to, acreage requirements of the various areas of the project have been approximated by mapping site sizes of existing functions that resemble the various aspects of the project. For example, University Square Apartments represents a similar scale and density that is appropriate for the neighborhood of smaller scale residential structures. This particular complex consumes approximately eleven acres of land. Another precedent investigated is the community associated with University Villages located north of Fowler Avenue and to the West of Bruce B. Downs. This location consists of single-story residential structures designed as a separate neighborhood for independent living, a larger apartment building for
residents requiring assisted living, and a separate on-site nursing care facility. Aerial mapping of the site informs that the total acreage of the campus is approximately twenty to twenty-two acres. By visiting these sites and obtaining a “feel” for their size and densities there is confidence in the estimation that a site of approximately twenty-five acres will be sufficient to include the residential, nursing, and additional programmatic elements of the project leaving ample outdoor area for green spaces and thus far unrealized space requirements.

The site chosen for the project is a twenty-five acre plot on the Hillsborough River just to the south of the Tampa Heights residential neighborhood.
Site Documentation and Analysis

After careful consideration of the desired site characteristics outlined in the previous site selection criteria section, an appropriate site was chosen for the project. The selected site consists of twenty-five acres and is situated along the Hillsborough River approximately .75 mi. to the northwest of Downtown Tampa, FL. More specifically, the site is bounded by Tampa Street to the east, North Boulevard to the west, Ross Avenue to the north and the Hillsborough River to the south. The site is currently vacant with the exception of an existing warehouse structure housing a workshop for a local armature works business.

Previous use of the site was as a section of the Tampa Heights neighborhood that primarily contains single-family homes. Prospectors demolished all of the homes on the site with the anticipation of developing multi-family mid-to-high-rise condominiums. That effort has since stalled with the declining housing market so the site now sits unused and undeveloped. Aware of such an available piece of real estate of adequate acreage in a prime location for residential and retail improvement, it was intently pursued as a prospective site for the project. Since the site holds most, if not all of the previously prescribed characteristics it was established as the site for the Project. The following will be a discussion of the results of pertinent analysis within and without the site.

As described, the site is virtually vacant of improvements. Additionally, the site is virtually vacant of existent landscaping and trees as well with grasses prevailing. The site has a relatively flat topography with a slight slope to the south. This is a critical characteristic considering that a nature of the project...
is its walkability and pedestrian friendliness to its elderly residents. Relatively flat or considerably low sloped walking paths encourage walking; a necessary opportunity for activity and exercise of the residents. Geologically speaking, it is assumed that site possesses ample soils and bearing capacities since previous assessment of the site for accommodation of large structures proved adequate. Also from within the site are desirable views out to the Hillsborough River and of the Downtown Tampa skyline. Directly across the river is the campus of Blake High School. This is also considered a desirable view as there are numerous outdoor activities on the grounds of the school that would be observed by the residents; activities of the youth of the community providing reminiscence of the residents own youth.

As mentioned, the site is bounded to north by the remaining neighborhood of Tampa Heights. This was an important criteria of the site’s selection due to the residential nature of the project and the desired social interaction between the residents of the project and those of the surrounding community. Additionally, residential neighborhoods exist in close proximity to the east and across the river to the southwest. Directly to the east, between the site and its easterly residential counterpart is the commercial and business corridor that makes up this area’s portion of Tampa Street, which is conveniently a primary route of the City’s public transportation system feeding its central hub only one-half mile from the site.

Within this area along Tampa Street and mere steps from the site exists several beneficial prospects for use by the residents of the project. These include Brewster Technical Center and the Hillsborough Adult Education Center located just off the northeast corner of the site and Highland Playground; convenient for walks to with grandchildren of the residents. Directly across Tampa Street is a location of Metropolitan
Ministries; a prospect for volunteering opportunities for the residents and Palm Avenue Baptist Church. Also convenient and less than one-half mile from the site is Interstate 275. This constitutes a fulfillment of a requirement that the site be well-suited to easy vehicular access and egress. Most, if not all of the residents of the project will be entertaining visitors so this proximity to one of Florida’s primary interstates is ideal. This proximity provides equally well for resident trips to venues of interest in the surrounding Tampa Bay and St. Petersburg areas.

With regard to pedestrian access to and from the site, it would be arguably difficult to criticize its appropriateness. For quite some time there has been talk of a River Walk along the east side of the Hillsborough River extending from Downtown and possibly conveniently terminating at the southeast corner of the site. Since a pedestrian friendly town center containing retail shops and restaurants is incorporated into the project, this River Walk provides pedestrian invitation into the site. Likewise, this Walk provides ideal opportunity and encouragement for residents to access by foot the surrounding greater community. With primary vehicular access from the east and the west and with the north side of the site bounding a residential community there is additional provision for pedestrian access and egress from these directions.

Another desirable aspect of the site is its proximity to parks. Phil Bourquarez Park is situated and borders the site directly to the southeast. While ample outdoor green space is incorporated within the project, this contiguous park provides opportunity for the residents to enjoy extended walks and additional prospects for outdoor entertainment. Also, a short walk south across the North Boulevard bridge is Edgewater Park.
This ease of access to additional park space makes this choice of site that much more engaging.

As mentioned, the site is located close to Downtown. This provides a benefit to the residents of convenient access to the many cultural venues the Downtown area has to offer. These include the Tampa Bay Performing Arts Center and variety of galleries and museums. Also convenient is John F. Germany public library; located on the north side of Downtown between Downtown and the site. Last but not least of the requirements met by the location of the site is the relatively close proximity to Tampa General Hospital; a comprehensive medical center located just to the southwest of the Downtown area.

Following are composite diagrams graphically representing a majority of the primary analysis discussed in addition to photographs of the site.
Figure 33. Amenities Adjacent to the Site.
Figure 34.
Local Amenities and Adjacent Land Usages.
Figure 35. Vehicular Access to the Site.
Figure 36.
Views To and From the Site.
Figure 37. Solar Analysis.
Figure 38.
Site Aerial Photograph (Google Earth).
Figure 39. Context Figure-Ground Diagram.
Site Photographs

Figure 40.
Photo Looking Southeast from West Edge of Site.

Figure 41.
Photo Looking East from Water’s Edge at near West edge of Site.
Figure 42. Photo From Southeast Corner of Site looking Northwest.

Figure 43. Photo Looking Southeast from Water’s Edge – Downtown Skyline.

Figure 44. Photo Looking South towards Blake High School.

Figure 45. Photo of Downtown Skyline at Night.
Figure 46. Panoramic Photo Looking North from the Hillsborough River.

Figure 47. Panoramic Photo Looking South from the Roof of the Warehouse.
Problem Statement

The primary issue of this Thesis is the rethinking of traditional design for an assisted living community; more specifically, the intention to transform the conventional multi-unit single-structure nature of existing facilities into a varied community of more residential type structures.

Given this intention, the primary problem to solve will be how to transform the typical monostructure design into a parti of varied scales and structures. Single-structure parts enforce the feeling of one’s home being that of just a room number and limits privacy. These also force social interaction on the residents the moment they walk out of their door. A solution will have to be found that provides residences which encourage more of a sense of one having an address that provides personal identity and offers choices for control over sociability versus privacy and personal space. The solution is the deliberate design of varied housing types with varied numbers of units as well as varied mixtures of services within each of the housing types. Additionally, the various housing types will provide for a range of privacy and communally shared spaces.
Another issue to be solved will be how to create identity within the community that does not isolate from yet integrates with the surrounding community. Residents will desire a certain level of privacy and sense of individual community yet a balance will have to found that provides for openness and porosity inviting to non-residents to patron the various shared aspects of the program. Two primary opportunities exist for the invitation of vehicular and pedestrian integration with the greater community; the vehicular and pedestrian Palm Avenue and the pedestrian connection to Tampa’s River Walk which will connect with the community at its southeast corner.

The site is bisected by Palm Avenue; a common route for the existing neighborhood’s vehicular circulation. Integration and development of this route through the site will be addressed and resolved.

Given the site, located on the riverfront at the edge of downtown and the residential neighborhood to the north, a successful solution will have to be found to accomplish two necessities. The first would be addressing the riverfront and an expression of an appropriate density and scale that this site would

Figure 49. Sketch Diagram of Varied Scaled Structures at a Riverfront Site.
demand. The other is the necessary scaling of structures and density that successfully transitions into the context of single-family residences bounding the north of the site.

Presently, the only existing structure on the site is a run-down historical warehouse structure of approximately 60,000 S.F. The idea of demolishing it was considered to essentially provide more freedoms with regard to overall site design. It was decided to retain the structure and to rehabilitate and integrate it into the project.

A socially active community is a healthy community so attention will have to be paid to how to provide for opportunities to the residents to get out and about and be active.

Another consideration to be handled is the physical connection to the Hillsborough River. Opportunities present themselves for both a social and ecological connection to the water’s edge.

Last, but not least, capitalization of the most desirable views from the site, those being to the south of the river and the downtown skyline will be had from many areas within the community; not just available from the river’s edge.
Goals and Objectives

When the design problems for this Thesis have been successfully solved key objectives will be realized. Among others that will be addressed there are three primary problems to be solved. The first is the transformation of the typical single-structure assisted living building type into multiple structures more residential in nature. Second is the integration of the community with the greater community that balances individual identity and porosity. Third is two-fold; addressing the appropriate scales and densities that a riverfront site demands as well as transitioning this density and scale into the adjacent residential neighborhood.

When the project is completed, homes will be offered that are residential in nature and provide the resident a dwelling of personal identity, privacy and personal space not encroached upon by forced socialization; an aspect unavoidable with large mono-structure communities. Upon walking out one’s door, a resident will have the freedom of choice whether or

Figure 50.
Diagram of Private, Semi-Private and Semi-Public Space.
not to actively participate in the social aspects of the community. Different housing types will be offered that house not only a resident’s private living unit but will contain varied mixtures of services within each of the housing types. And as mentioned previously, the various housing types will provide for a range of privacy and communally shared spaces. For example, each first floor living unit will have two options for entry into the unit. One will be through a semi-private community space and the other will be a private entrance into the unit directly from the outside. Some living units will be housed in a five unit structure with no communal living areas. Other living units without interior access to communal spaces will be those in the mixed-use structures in the town’s community center. Other units will be in a more communal cluster of four units with each unit sharing a community living, kitchen and dining area providing greater opportunity

Figure 51. Diagram of a Community’s Interaction and Connection with Surrounding Communities.

Figure 52. Diagram of a Community’s Connection to its Town Center and that Center’s Connection to the River Walk.
for socialization with the housing type. Other Units will be located in twelve unit clusters providing even more communal spaces in addition to support staging areas within the structure.

After a successful design solution has been realized the community will have a personal identity that the residents can share in and call their own. This will be balanced with a resident’s feeling that their community is connected to the surrounding community along with the benefits this connection provides. The benefits are social interaction with neighbors of the greater community and opportunities for shared use of public spaces and amenities of both the project’s and those of the surrounding community. There are numerous amenities of the greater community in close proximity to the site that will be readily available to the elderly residents of the project. Likewise, several amenities within the project will be available to patrons that are not residents of the community. Namely, these will be the retail type amenities that will be situated in a community Town Center as well as other aspects of the program like the physical therapy center. These will create a bridge to the greater community through social shopping opportunities and services for outside elderly that may one day decide to move to this community when their physical needs encourage them. As mentioned, a goal is to revitalize Palm Avenue; an existing vehicular route that virtually bisects the site. Activating this circulation route will be achieved by centrally locating the community’s town center by straddling Palm Avenue thus creating a circulatory and sociable connection to the greater community.

This riverfront site will be a place of appropriately scaled residential and commercial structures. The Town Center will be the pedestrian friendly social hotspot of the community by its central location and the connection of Tampa’s River Walk
with the community’s Town Center. As a resident retreats from this social core they will experience a transition of privacy and scale of structures where they’ll find a portion of the Project’s most residentially scaled homes seamlessly integrated into the surrounding neighborhood of single-family homes.

As mentioned, the existing structure on the site will be rehabilitated and integrated into the community. With its size and proximity to the town center it will prove to be an appropriate choice to house two of the largest items in the program, the nursing care center and the physical therapy center. With much square footage still left over it would also be an appropriate structure to house the primary support and assistance staging areas for the community.

The Hillsborough River bounds the site to the south and provides for several beneficial opportunities; recreational, social, educational and therapeutic. The edge of the river is also what Tampa’s River Walk will follow into the site. This natural boundary will be addressed by providing an interactive ecological preserve transitioning the river into the site.

Another goal previously set fourth was the inclusion of varied outdoor environments. A large landscaped park will be provided to keep a strong connection to nature and to provide for relaxing strolls down to the river. In addition this park space will provide for outdoor recreational activities. There will be smaller scale gathering areas provided at pedestrian nodes within the community that will provide seating and active and relaxed social opportunities with varied environments that will appeal to a variety of senses. Additionally there will be incorporated a large outdoor serenity fountain with a generous resting area surrounding it. Lastly, with regard to outdoor environments, the town center
will be a socially active outdoor space itself with a majority of the community’s amenities surrounding it. All residents will have grand views to the south of the river and of the Downtown skyline; a prized benefit provided by the location of their community. Whether from their home, while going for a walk, taking a respite on a bench, enjoying the Town Center, eating a sandwich at a cafe or while taking advantage of the invitation to venture that the River Walk and Water Taxi provide these views will be available and cherished.

Lastly, a goal previously mentioned was the incorporation of a children’s activity feature. Elderly enjoy watching children play. To provide for this the town center will also feature a playfully interactive water feature to excite the grandchildren when they visit as well as the children of other patrons of the town center.
Site Specific Analysis and Proposed Land Uses

Figure 54.
Diagram of Site Specific Analysis and Proposed Land Uses.
Figure 55. Overall Master Plan. Scale: 1/16" = 10'-0". This drawing was hand-rendered with Prismacolor marker and originally presented at 1"=30'-0".
Site Zoning - Ground Level

Figure 56.
Overall Site Zoning Diagram - Ground Level.
Site Zoning - Isometric

Figure 57.
Overall Site Isometric Zoning Diagram.
The diagram on this page is intended to represent the community’s connection to the greater community. The purple arrows represent residents of the surrounding community while the yellow arrows represent residents of the project. Primary vehicular and pedestrian access is by way of Palm Avenue that bisects the site. Secondary access is via the pedestrian corridor connecting the Town Center to Tampa’s River Walk. Just as the residents of the project have access to the amenities offered by the surrounding community (the smaller yellow arrows) the residents of nearby communities are welcomed to enjoy many of the amenities offered in this community’s town center (small purple arrows). In addition to access to and the enjoyment of the retail district the physical therapy center is also available to the elderly of the greater community.
Housing Types and Locations

Figure 59. Housing Type Locations Diagram.
Figures 60 and 61 represent how the concepts of community and neighborhood work on different scales. While the community as a whole shares the town center as the social center of their community, smaller neighborhoods within the community have been created by clustering the different housing types giving each neighborhood a feel and relative center of their own.
Figure 61. Diagram of Neighborhoods of Housing Types and their Relative Neighborhood Centers.
Figure 62.
Housing Type A Plan.
Housing type A represents an arrangement of five living units appropriate for residents who are still healthy enough to live virtually independently with visits by caregivers only needed on a minimal basis. The five units share a common front patio enclosed raised planters with each unit also having their own private patio.
Housing Type B Plan

Figure 63. Housing Type B Plan.
Housing type B represents a living arrangement more appropriate for residents who are less mobile and who require a higher level of assistance. There are common kitchen, dining and living areas shared by the residents of the four apartment units. This gives the residents the option to live in a more communal atmosphere. The residents have the choice to either cook and dine together or to prepare their meals in the privacy of their own unit. This plan also provides the residents a private entry into their unit.
Figure 64. Housing Type C First Floor Plan. This housing type provides four residential units on the first floor. The second floor provides an additional eight with a second floor communal living area.
Housing type C is a twelve apartment unit arrangement with four units on the first floor and eight units on the second floor. Considering the original concept to develop housing types with graduated levels of assistance this housing type represents an option for residents who may require assistance on a daily basis. These residents would understandably be less mobile so their visits to and use of the amenities of the community might not be as frequent. Therefore, this housing type incorporates social, activity and support spaces “in-house” so-to-speak. Additionally, a caregiver has an office for staging assistance. This housing type was modeled after the concept of a virtually self-sustaining assisted living home.
Housing Type E Plan

Housing Type E represents the “in-town” apartments occupying the second through fourth floors over the retail shops in the Town Center. In the case of the multi-use structures bounding the East and West sides of the Town Center the second floor is leased office space with residential units on the third floor. This plan represents the first floor retail and the patio areas overlooking the park and the river.

Figure 65. Housing Type E First Floor Plan.
Figure 66.
Housing Type E
Second Floor Plan.
This plan shows
three residential units
with “front porch”
patios and balconies
overlooking the Town
Center. Also on the
second floor is an
outdoor multi-use
space for use by the
residents.

Figure 67.
Housing Type E Third
and Fourth Floor
Plan. This plan shows
six residential units
including two studio
apartments. Also
located on the upper
floors is a communal
patio area adjacent to
the vertical circulation
and overlooking the
Town Center.
The diagram on this page represents all the housing types and the graduation of assistance mixtures that the different types provide. Also diagrammed is the highest of assistance levels; the nursing care center located in the rehabilitated structure that was existing on the site.
Figure 69 diagrams the proximity of minimal assistance residents to the community’s administration hub (pink) and the proximity of higher assistance residents to the community’s health services and primary assistance staging hubs (red).
Figure 70. Section Key.

Figure 71. Section 1 Showing the Character of the Neighborhood of Housing Type B.

Figure 72. Section 2 Showing the Character of the Neighborhood of Housing Type A.

Figure 73. Section 3 Cutting Through the Pedestrian Corridor Connecting the Town Center with the River Walk.
Figure 74. Section 4 Cutting Through the Serenity Fountain Courtyard.

Figure 75. Enlarged Plan of Where Section 4 is Cut.
Existing Warehouse - Intervention

As previously mentioned, the only existing structure on the site was a large historically styled brick warehouse and workshop operated by Tampa Armature Works. Instead of demolishing the structure, it was decided to be rehabilitated and incorporated into the project. This structure represents approximately 60,000 square feet and with the nursing care center and the physical therapy center representing the largest square footage requirements in the program, these are the two primary functions housed in this structure. This structure also houses the primary hub for the staging of assistance to the residents of the community. Also incorporated into the structure is the botanical conservatory gardening center; a symbol of health and rejuvenation. Other spaces that incorporated in the structure are the craft studios and woodshop. While visiting the site before the design process began, the space naturally had a workshop feel to it and there are a few large overhead doors on the south side of the structure opening to outdoor brick-paved areas. It was anticipated at that time that this portion of the building would be appropriate for the crafts and woodshops. Residents can open the doors and work on their projects both indoors and out while enjoying the fresh air and the views to the river, the park to the south and Downtown.
Figure 76.  
South and East Facades of the Existing Warehouse Structure.

Figure 77.  
Looking Out Through the Overhead Door of the Future Woodshop.

Figure 78.  
Character of the Interior of the Existing Warehouse Structure.
Figure 79. Adjacency Diagram of Primary Functions of the Rehabilitated Warehouse Structure.

Figure 80. Plan / Function Diagram.

Figure 81. Space Planning Development Sketch.

Figure 82. Development Sketch.
Figure 83. Isometric Sketch of Rehabilitated Warehouse Structure. This sketch also shows the ecological preserve and the pedestrian corridor forming the pedestrian connection between the Town Center and the River Walk. The mansard roofs depicted on the new structures were an initial suggestion but are not representative of the architectural style chosen for their design.
Figure 84. Diagram of Pedestrian and Ecological Connections to the River Walk and the River.
Figure 85. Diagram of Views Through the Site and of the Park, the River and Downtown.
Enlarged Plans and Site Details

This plan shows the graduation of setbacks of retail shops providing for a large canopied outdoor sitting area. This setting back of structures is a typical design strategy for addressing the four primary pedestrian corners along Palm Avenue. This strategy makes these corners much more pedestrian friendly and accommodates for greater opportunity for social interaction.

Figure 86.
Enlarged Plan of the Northwest Pedestrian Corner Along Palm Avenue.
To the right is the plan of the northeast pedestrian corner along Palm Avenue. This corner is treated as a more relaxed outdoor seating area without the circulation of foot traffic into the retail stores passing through the space as with the case of the previous corner plan. Also, to provide for a more tranquil environment the area is canopied naturally by a large oak tree in a large grade-level planter and surrounded by raised planters. This treatment provides more of a garden atmosphere to this social space.
Figure 88 is the plan of the southeast pedestrian corner along Palm Avenue. This is the most active and sensorially appealing of the corners along Palm Avenue. This corner is occupied by a small flower shop with outdoor displays to provide for an outdoor market feel. Also, as with other major corners within the Town Center is a cafe; this one with both umbrellaed and canopied outdoor seating. Across from the flush-to-grade electric cart traffic route leading through the Town Center is additional outdoor seating. This rigid canopied area contains permanent seating and tables of a cast stone material with inlaid tile patterns of table games like checkers, chess and backgammon. To the south of the cafe begins the retail portions of the Town Center with the storefronts fronted by a covered “loggia”. This storefront treatment is typical within the Town Center to provide for shaded strolling along the shops and to provide opportunity for the shop vendors to extend their businesses outdoors.
Figure 89.
Enlarged Plan of the Town Center.
Figure 89 on the previous page is an enlarged plan of the town center. The hard surfaces within the town center contain no curbs; limiting tripping hazards. The ground surface is a colored paver differentiating it from other sidewalks. The electric cart traffic route through the town center is reserved for resident use and is flush with the surrounding pavers; delineated only by change in paver color and texture. At the center is a grade-level interactive fountain feature. This provides for the play of visiting grandchildren and is flanked by long continuous seating areas for observation. On each side of the lawn areas are the covered gaming table areas previously mentioned. The corners of the Town Center are opened up to provide for views through to the park, river and of Downtown Tampa. To provide for addition views from within the Town Center the four-story central structure has a two-story high opening at the center creating a picture window framing the Downtown skyline.
Figure 90.
Enlarged Plan of the Recreation District.
Figure 90 on the previous page is an enlarged plan of the recreation district. Flanking the pedestrian corridor that connects the town center to the River Walk are the primary outdoor recreational amenities of the community. Smaller scale structures house recreation related shops and storage of recreation equipment. These shops would include a golf shop, bike shop and a bait and tackle shop.

Occupying a portion of the park with its meandering walks and covered seating and barbeque areas are a chipping green and areas designed and maintained for lawn bowling, horse shoes and boccie ball. The rehabilitated warehouse structure houses the fitness center and the indoor physical therapy pool adjacent to the outdoor recreational pool. These recreational areas of the community are where residents of the greater community, while making their way into the town center, see vital seniors being active. This promotes a positive image of seniors in the greater community. Also, the juxtaposition of these physical activity environments with the nursing center and physical therapy center (the two primary functions within the renovated structure) provides for physical therapy and psychological encouragement for the temporary residents of the nursing center to get back on their feet.
Below is a plan of the boat docks, ecological preserve and fishing pier. In addressing the community’s connection to the river these waterfront elements were designed. The ecological preserve transitions the river into the site and also provides recreational, therapeutic and educational opportunities. Additionally, this preserve provides a natural barrier to mitigate storm surge. Plants are maintained and displayed that are native to Florida estuaries.
Figure 92. Section through the Ecological Preserve.
Figure 93.
Massing Model of a Majority of the Site Surrounding the Town Center.
Figure 94. Area of the Project Represented in the Final Model.

Figure 95. Final Model Photo 1.
Figure 96. Final Model Photo 2.
Figure 98.
Final Model Photo 4.
Figure 99.
Final Model Photo 5. Looking from Town Center towards the Serenity Fountain surrounded by raised planters.
Figure 100.
Final Model Photo 6. Looking from interior of the Town Center through the 2-story picture window framing the view to Downtown.
Conclusions

Reflecting on the development and ultimately the final outcome of the project the following is a discussion of the achievements, limitations, unresolved issues and what further development and research would benefit future projects of this nature.

The primary goal to advancing the opportunities for alternative assisted living design was achieved by transforming the traditional mono-structure plan into a diversity of smaller structures with the sum of their parts constituting a comprehensive community that not only caters to its elderly residents but also has a strong connection to the greater community. A balance was struck by creating a community that in many ways is virtually self-sustainable yet dependent on interaction with residents of the surrounding Tampa Bay area. Providing shared amenities and leasable space to outside enterprises, encouraging the opportunities for providing something for everyone and to bring revenue into the community, was the key to achieving this goal. Otherwise, if the community was intended to be completely self-sustaining its economic viability and affordability for the residents would certainly be questionable. It's all an issue of scale. The more that is provided, the more outside help it would need to survive.

With the scope of a project of this size, it is to be understood that while many issues were addressed and resolved there are certainly many that would require further development and resolution. One of those issues minimally addressed in the overall design is adequate and effectively distributed parking for both the residents and the staff of the community and for visitors and patrons.
Related to parking, more inter-community vehicular traffic routes would benefit the project. This would include both automobiles and the electric carts the residents use within the community. As the project stands, the only electric cart traffic routes provided are those connecting the neighborhood on the north end of the property to the rest of the community. Ironically, that is the neighborhood of homes designed for those requiring the least amount of assistance. It could easily argued that these are the individuals that would require the least amount of the mobility assistance that electric carts provide. In addition, more inter-community cart traffic routes would increase the effective and efficient delivery of assistance by caregivers.

Another major issue that was not chosen to be addressed in the project was deliberate consideration for those with Alzheimer’s or other debilitating dementia. An improvement to the project would have been the inclusion of a neighborhood catering to residents with this condition. Designing for residents with Alzheimer’s is intensive and would require considerable additional research.

The following are a few other issues discussed during the presentation of this project that are more minor yet valid. First would be the questioning of effective vehicular traffic along Palm Avenue. As is stands, Palm Avenue is arguably too tight and narrow for accommodating for thru-traffic and angled on-street parking. It was under consideration to widen Palm and to add more on-street parking but it was found to be a challenge to mitigate the providing for efficient thru-traffic and at the same time to slow traffic through the community. Also, the wider Palm Avenue becomes the more there would seem to be a disconnection between the neighborhood to the north of the property to the town center and the rest of the community for that matter.
While not completely resolved, “intimate and slow” was the concept for addressing Palm Avenue.

Also, there is not a consideration for storm water retention on the property; a somewhat bigger issue. In reality this would certainly have to be addressed. A smaller issue brought up was that the communal patios in some of the housing types might be too small relative to the number of residents of the respective housing type. Another issue was the minimal opportunity to provide for natural lighting into the nursing care center. Opening up the structure more and/or bringing light in from above would have benefitted the design.

Last, while it was intended from the beginning to design a community for a generation that is arguably more affluent than previous generations, it was suggested that the time has also come for designing desirable communities for lower-income residents as well. This project was well received for a proposed community available to those who can afford it. With the future demand for assisting living certainly growing across all demographics, the struggle will be the provision of effectively designed communities desirable to those who barely can.
References


About the Author

Greg Novotnak received an Associates Degree in Architecture from St. Petersburg Junior College in 2001 and was accepted into the Master of Architecture program at the University of South Florida. A couple years into pursuing his M.Arch. he took a hiatus to complete a Bachelor’s Degree in Scenic and Lighting Design from the USF Theatre Department. After completing the B.A. he returned to the School of Architecture to complete his Master’s.

He is currently employed by Carruthers and Associates Architects P.A. in Tampa, Florida.