



Assisted Living Facility

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Abstract

Our client had a five acre site in Plymouth, Massachusetts in the Mixed Commercial Zone. This project entailed three proposed uses, alternative analysis, and preliminary design. After evaluating the different choices of establishing a research lab, entertainment center, or assisted living facility, our alternative analysis indicated that an assisted living facility was the best design.

Introduction

To begin this project, our group researched and reviewed the different zoning and construction laws established by both the state of Massachusetts and the town of Plymouth. After brainstorming different designs and proposed uses for this piece of land, we decided to pursue the options of a research lab, entertainment center, and assisted living facility. In order to gather more information about these different proposals, we researched on topics including building sizes, parking regulations, franchising requirements, and required building permits.



Option 1:
Research
Lab

Option 2:
Entertainment
Center

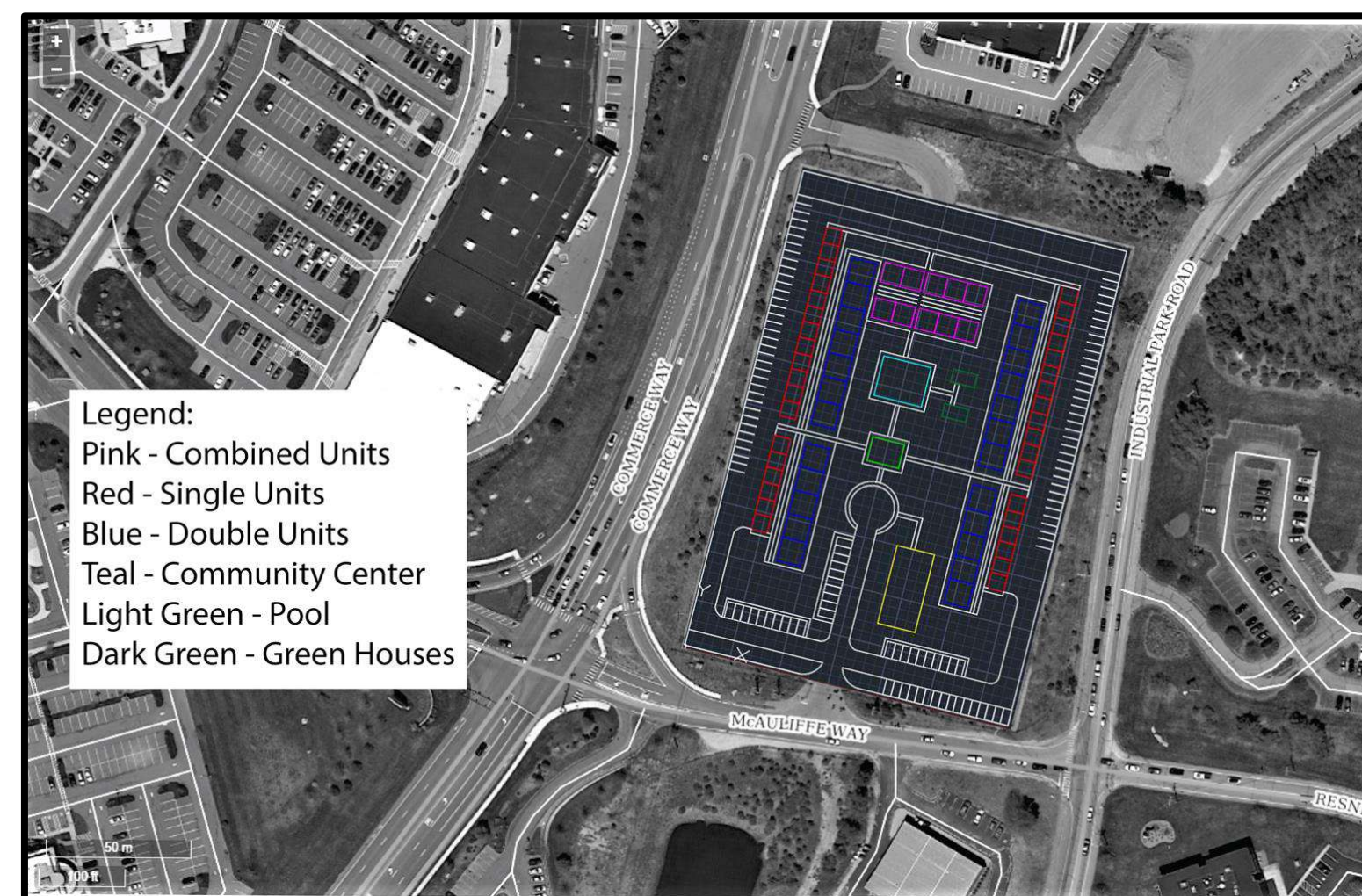
Option 3:
Assisted Living

3 Iterations each

Alternative Analysis

Constraint	Option 1- Research Lab	Option 2- Entertainment Center (Dave and Busters)	Option 3- Assisted Living
Parking Spaces Required:	1/2 space for each 200 sq ft (450 spaces)	1 space for each 200 sq. ft of gross floor area	1/2 space per unit/dwelling
Allowed Use:	Y	Y	N
Special Permit Use:	N	N	Y
Building Size:	+/- 445' x 135'	+/- 175' x 200'	+/- 350' X 500'
Height maximum:	35'	35'	35'
Similar Business(es) Nearby	Research Lab	Movie theatres, bowling alleys	Doctor's offices
Franchise Population Size Requirement:	N/A	750,000 people within 10 mile radius	20,000 seniors

Iterative Site Design Methods

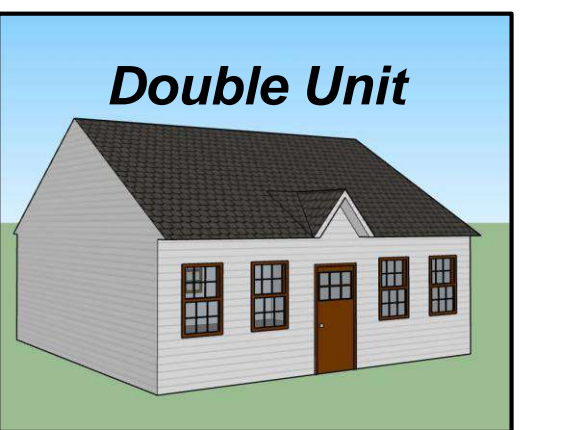
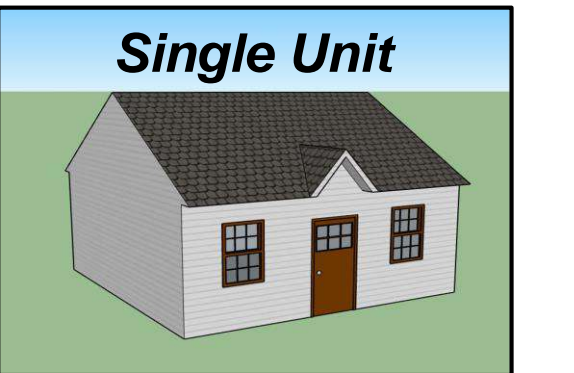
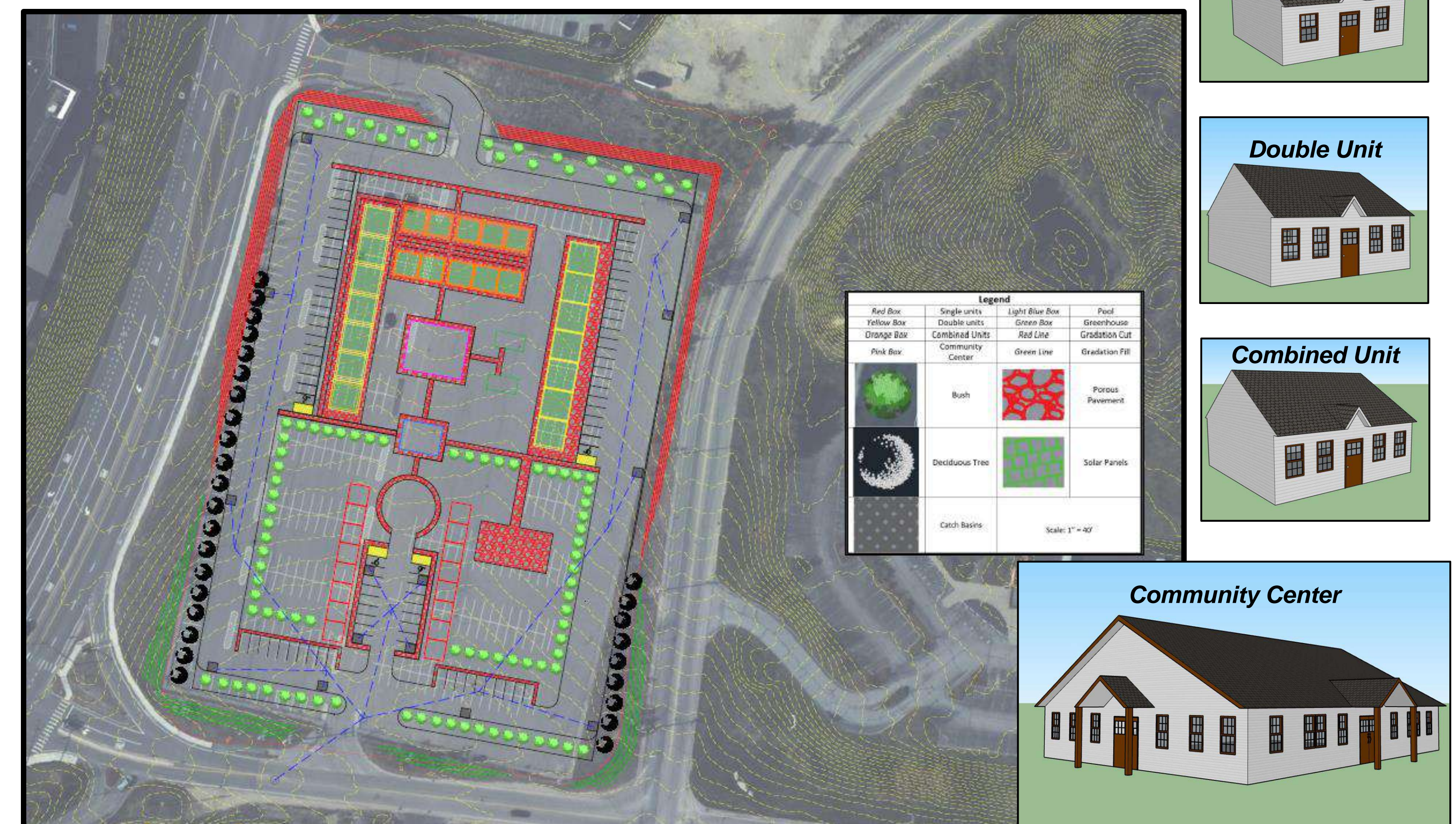


Selected Option: Assisted Living
Iteration 4

Lifelong Learning

- **Building**- An overwhelming number of units caused us to decrease our building count by 20%, making more room for other amenities- *Nichole Wardell*;
- **Drainage**- By adding a more complex drainage system, our site became more eco-friendly and water efficient- *Will Doane*;
- **Grading**- By using leveling tactics and creating appropriate slopes, our site offers a more even platform for construction- *Jerry Lu*;
- **Parking**- Adding handicapped parking to this site made it more accessible to a wider demographic- *Michael Tortora*;
- **Site Amenities & Landscaping**- The quality of residential life was improved through the addition of green spaces and sound barriers- *Matthew Medeiros*;
- **Site Circulation & Intersections**- Research found that curved roads and pedestrian-friendly sidewalks made this site more safe and accessible- *Amanda Siciliano*;
- **Sustainability & Environment**- Porous pavement and solar panels were implemented to create a more sustainable site- *Jake Berry*.

Final Conceptual Design



Conclusions

After brainstorming, researching, designing, and re-evaluating, our final site is an assisted living facility. This Plymouth project has sixteen single units, fourteen double units, and ten combined units for residents. It includes amenities such as a community center, a pool, greenhouses and greenspaces. Because of the demographic, geographic, and commercial areas in the town of Plymouth, we found that an assisted living facility was the most favorable and profitable option.

Acknowledgements

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