

A stylized map of a city grid with a highlighted orange area and a green area. The map features a grid of streets, with a prominent orange-shaded area in the lower-left quadrant and a green-shaded area in the lower-right quadrant. The title 'The Transitional Community' is overlaid on the map in a large, orange, sans-serif font.

The Transitional Community

Integrating students into the community of St. Joseph, MN

Kyle Krueger

Design Thesis 2013

THE TRANSITIONAL COMMUNITY

Integrating students into the community of St. Joseph, MN

A Design Thesis Submitted to the
Department of Architecture and Landscape Architecture
of North Dakota State University

by

Kyle Krueger

In Partial Fulfillment of the Requirements
for the Degree of
Bachelor of Landscape Architecture

A handwritten signature in black ink, appearing to read 'James J. [unclear]', positioned above a solid horizontal line.

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A handwritten signature in black ink, appearing to read 'James J. [unclear]', positioned above a solid horizontal line.

Thesis Committee Chair

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Statement of Intent

Abstract

Community design's primary benefactors are the home owners and children forgetting about the young adults of the community. In some towns, but especially college towns, the population of young adults is the majority and not having these young adults interacting with the community can have a negative effect. By integrating young adults into the St. Joseph, MN urban landscape they will improve the cities cultural identity as well as their own self efficacy. Through case study analysis and observations this study will attempt to integrate young adults within their communities utilizing their full potential.

Problem Statement

The presence of the College of Saint Benedict's has resulted in the City of St. Joseph having 25% of its population be between the ages of 20 and 24. Currently the city does not have an outdoor space where the young adults can go and either play or relax as well as interact with the permanent community.

Project Typology

Currently about 80% of United States citizens live in urban areas and this statistic will continue to grow in the coming years (USCB, 2011). With that amount of people living in urban areas coupled with higher education becoming a standard practice in the United States the population of young adults between the ages of 18 and 25 can become the majority in some urban areas. In some areas this phenomenon is more prominent such as small urban areas like towns with one or multiple universities in them. I believe that designing a space where these young adults can live, work, study, and play will be beneficial to both themselves and the people around them.



Thesis Proposal

Narrative

In the beginning of the thesis project I decided to choose the town of St. Joseph and then look for a problem that I could potentially solve through landscape architecture. I grew up just outside St. Joseph and wanted to give something back to the community where I spent a lot of my time. The field of landscape architecture should be concerned with students and young adults because they are the people who will be carrying on the profession in the future. After having the chance to live in a community that is well designed I would hope that they would expect the same standards in the next place that they live. This would force developers and designers to design better communities as well as educate society on what good design can look like.

User/Client

User: Students of The College of Saint Benedict would be able to live, study, play, and grow in this community. Faculty of The College of Saint Benedict could use the community as a tool in their teaching. The surrounding community would be able to use the park and playground areas of the community

Client: The College of Saint Benedict.

Major Project Elements

Former School

- Exercise area
- Kitchen
- Store
- Indoor lounge
- Computer Cluster
- Breakout Rooms
- Religious Space
- Guest Rooms

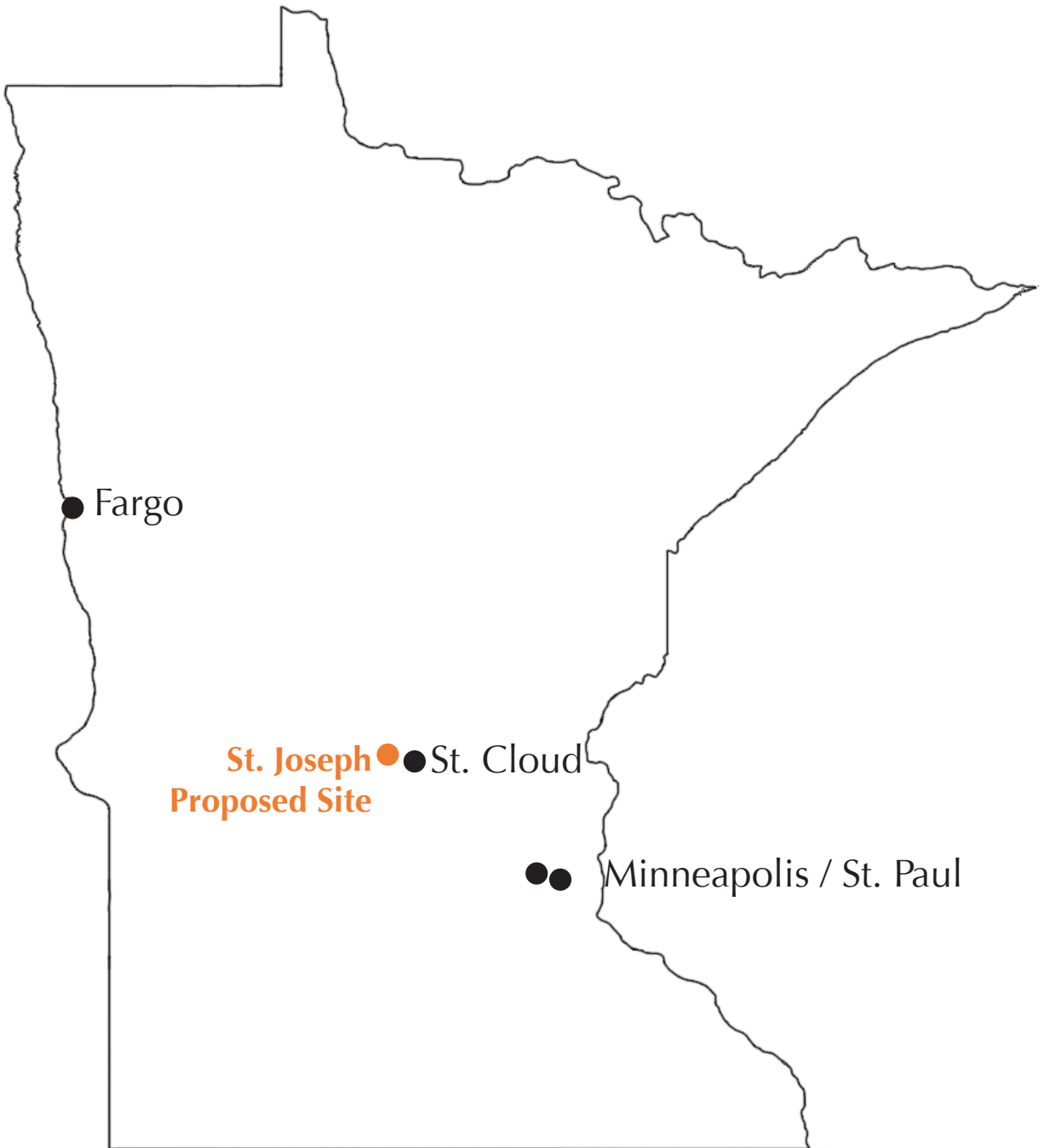
Housing

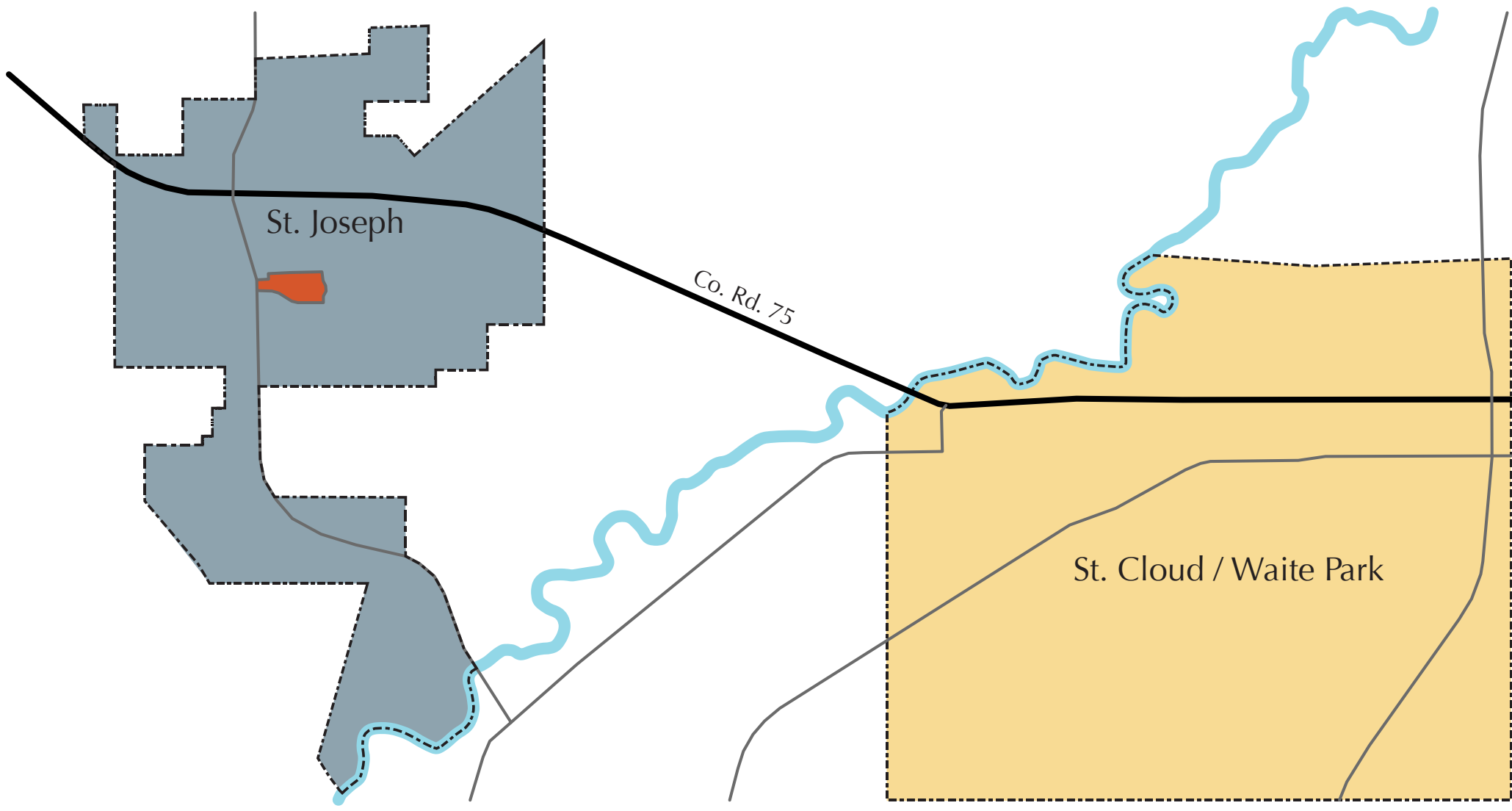
- Apartments
- Townhouses

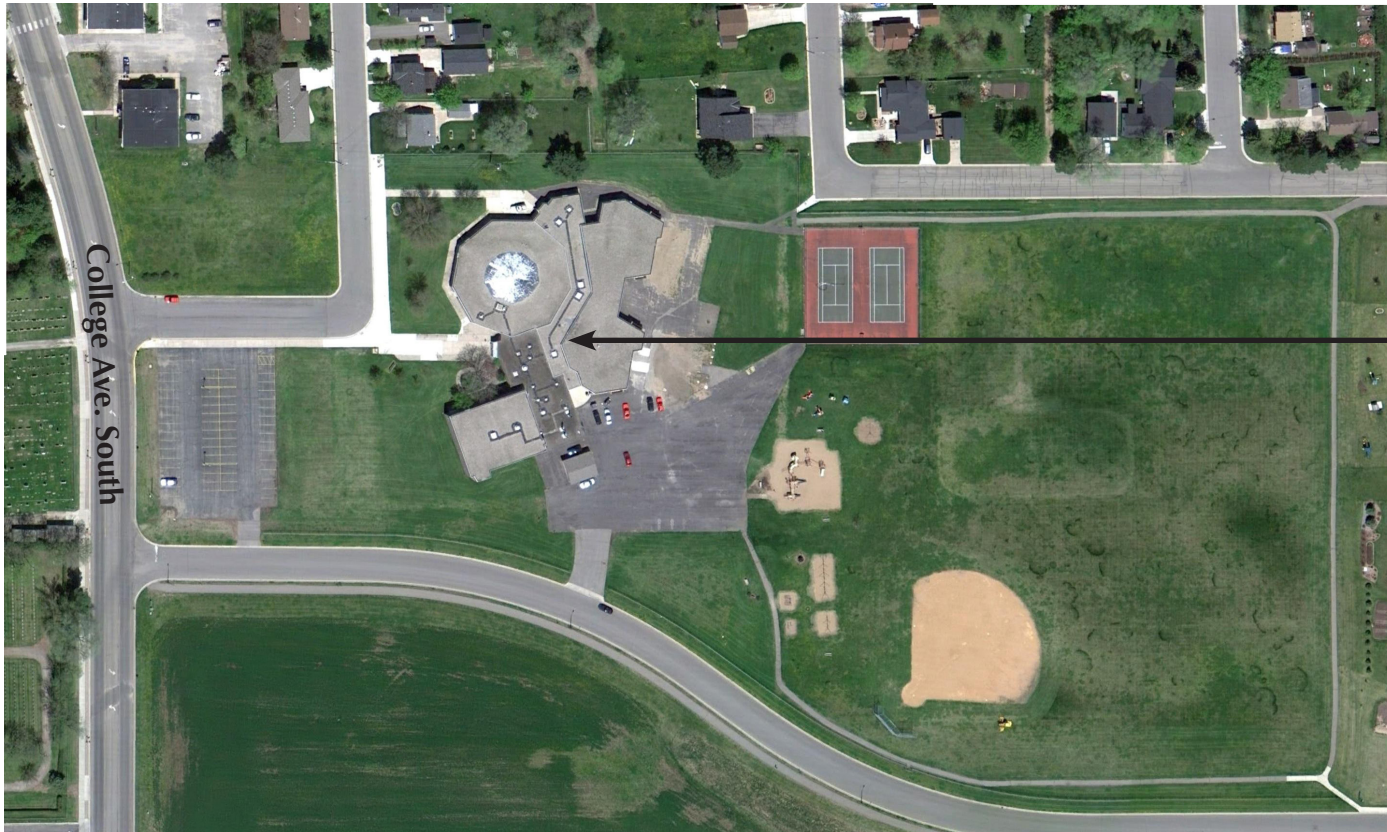
Open Space

- Playground
- Tennis Courts
- Volleyball Courts
- Basketball Courts
- Running/Walking Trail
- Outdoor Patio
- Open Lawn
- Bus Stop
- Signage

Site Information







College Ave. South

Kennedy Elementary School

College Ave. South

Location: St. Joseph, MN

Size: 16 Acres

Existing Structures: Kennedy Elementary School

Zoning: Educational

Surrounding Zoning:

North and East, single family Residential

South, Agricultural

West, Educational

Project Emphasis

Incorporating students into an existing community

Landscape Programming

Seasonal Site Use

Campus planning

Student Housing

A Plan for Proceeding

Introduction

The methodology chapter explains the two methods I used to collect the data needed to conduct this research. Studying case studies and observation are the two methods used to collect data. Stated in this chapter are the measures that were used to analyze and compare each of the case studies to each other. In this chapter I explain each case studies history, components, goals, and why they are relevant to this research. The proposed site for a design intervention is also explained within this chapter.

Method

Collecting the data needed for this thesis was done through case studies, observational studying of the intended site, and previously collected data from organizations such as the United States Census Bureau and United States Geological Survey. Because of the location, scope, and type of data that needs to be collected methods like interviews, surveys, and other methods requiring human interaction are not the best fit for this research.

The three case studies that were researched and analyzed were Univercity, Lexington College Town Study, and Innovista. I give some background information about these case studies in the Literature Review chapter. When researching these case studies the assessment

measures that were used to evaluate and compare them were:

- Walkability
- Infrastructure
- Sustainability
- Friendliness
- Connections

Although two case studies were the minimum requirement for this thesis three case studies were researched in order to provide more validity and reliability to my research.

Observing the site of St. Joseph, MN gave me insight into how young adults move throughout the town, what activities there are inside the town, and what activities and or elements are currently missing. Visiting the town multiple times and on different days of the week will give me a better understanding on what spaces are used the most when young adults are in the town and what spaces are used less. While observing the town I, took notes, pictures and videos to document findings and help archive information so that it can be used at a later time. Assessment measures that were looked at while observing the town were: where young adults are living, where are they traveling to and from, what method of transit are they using, what open spaces are they using and how long are they staying there, what commercial spaces are they using, and how long they are using the

commercial spaces. An inventory and analysis identifying what the towns current physical makeup. These will include building locations, materials, building uses, street patterns, signage, safety, open spaces, and pedestrian/vehicular movement. Also the opportunities and constraints will be done while observing the town. Some of the inventory and analysis was done by looking at aerial images as well as statistical data, which can be done from any location. An advantage to being on site lets the observer feel what it is like to be in a space.

For the scope and time frame of this thesis using data that other people and organizations have already collected was beneficial to the success of this thesis. Collecting data from the United States Census Bureau, the United States Geological Survey, and other sources like these was helpful with the inventory and analysis stage of the thesis and will also benefit me in the design phase of this project.

Case Studies

UniverCity

Walkability

During the planning process of the community walkability was a key factor in making what they call a “complete community”. In the SFU Official Community Plan it states that “The commercial development should be designed as a primarily pedestrian oriented area with

strong links to the University and residential pedestrian and bicycle networks. Vehicular interference with pedestrian movement is to be minimized”(Simon Fraser University, 2002). The plan also states “The pedestrian and bicycle modes of transportation are to be promoted and facilitated within the Ring Road through the provision by the University of sidewalks, bicycle and pedestrian path networks to City standards as a condition of subdivision”(Simon Fraser University, 2002). Even before any of the first residents arrived at the community a separate pedestrian/bicycle pathway system was constructed. Evidence that people in the community are walking and using the pedestrian networks can be found in the survey that was given to the community members in 2010. 22% of people surveyed said that they walked to work, which is an increase from 16% of people walking in 2007.

Infrastructure

The infrastructure for the community of UniverCity was all new construction which means that the Trust could specify materials and dimensions without having to worry about existing infrastructure. When UniverCity is finished there will be a total of 4,536 housing units in the two neighborhoods. Both of these neighborhoods need to have at least 1,000 housing units to ensure a viable critical mass. The layout of these neighborhoods consists of a school/park as the central feature, core residential surrounds the school/park and swing residential surrounds the core residential. The swing residential give the option for enlargement of the neighborhood or being developed by the University. Within the

community there will be a fire protection facility that the University is providing to the City at no cost. Under the Services section of the SFU Official Community Plan it states that if residential neighborhoods are developed that the roads and service infrastructure would be built to City standards by the University and would be owned and maintained by the City. The water that is used by the community comes from the University's water distribution network and a water tower storage reservoir supplied by the City. Both water and sewer systems are to be built by the University up to City standards. The one element of infrastructure that sets UniverCity apart from other communities is that they used permeable pavers when constructing their roads. This allows water to filter through the road to the ground instead of going to a sewer drain like on most roads.

Sustainability

Out of all three of the case studies I reviewed UniverCity was the most focused on building a sustainable community. The community has won several awards for their sustainability and environmental considerations. Most of the land surrounding the community was given to the City to become a conservation zone. Because of this the community took several measures to ensure that this conservation zone is not harmed by the community. When it comes to trees and wildlife the SFU Official Community Plan states that specific significant trees and or tree areas should be preserved as well as planting of trees to retain the appearance of the mountain from Burnaby. The plan also specified that raptor and heron nest surveys needed to be done before any construction of the community took place. A survey

of tailed frog tadpoles was also recommended for use in the water management system of the community. Water management was a big issue in the planning process because the community sits on top of a mountain and is at the start of a watershed. With this in mind the Trust decided to filter the rainwater that falls onto the site to maintain pre-development water quality and runoff rates. The community uses bioswales and filtration practices to achieve these sustainable standards that they set for themselves. UniverCity's strive for sustainability does not stop with the land, most of the buildings in the community are sustainably built and or energy efficient. The star building of UniverCity is Verdant that has "solar-boosted hot water and 20-300-foot-deep, liquid-filled geo-exchange wells that draw heat from the earth, accounting for energy efficiency 65% better than local code"(Lowry, 2008). Another building in the community named The Cornerstone features more energy efficient measures like geothermal heating, higher standards in insulation, and energy efficient light fixtures. The Cornerstone also features reduced water consumption with the help of waterless urinals, two-flush toilets, and special shower heads. The final way that the community is being sustainable is through its transportation network. There are city buses that can transport residents from the community to the outlying city. Some of these buses have been converted to an electric power source to reduce greenhouse gas emissions. In the planning phase is a gondola that would be able to carry people from the bottom of the mountain to the top eliminating the use of a car or bus. The community of UniverCity has become the frontrunner in green community design and hopes that others follow in its steps.

Friendliness

When UniverCity had Mustel Group conduct a survey of the residents living in the community they found that more than 9 - in - 10 residents were satisfied with UniverCity as a place to live, with people citing the quiet natural setting, location, and affordability as reasons for living in UniverCity. Elements of the community that add to the friendliness are the two elementary schools, two neighborhood parks, and walkable complete streets with a variety of shops and services. With the community located next to SFU and 26% of the residents being student at the University the community is transforming into a vibrant round the clock community.

Connections

The conception of UniverCity came from the Simon Fraser University itself. The University wanted a residential community that would be able to support the University financially and support its students. The money that is generated from the community goes to SFU to support its research and facilities. In addition to the University creating the community the University also created a group called the SFU community Trust which handles all decisions regarding to UniverCity. Even though the community is in a densely populated area is sits on top of a mountain and is quite secluded from the rest of the city. With SFU being on the mountain before the community the city bus system had a route going to SFU but with the new community the bus system had to add routes. The SFU Community Trust negotiated with the city and community members now get a discount on a transit

pass which compliments the “U-Pass” program that is in place for the students at SFU. There was also talk about building a gondola from the top of the mountain to the bottom which would save money for the city because buses would no longer have to go to the top of the mountain.

Lexington College Town Infill Revitalization Plan

Walkability

In the beginning of the study the design team states that “For the public realm of the street, to feel like an outdoor room, it must have walls, such as building facades. Street trees provide shade and help define the pedestrian realm”(Ayers/Saint/Gross, 2002). This states the what the teams ideal pedestrian experience is and what they will design the sidewalks to feel like in their design. They list some reasons for people to walk, small compact block size, building fronting the street, mixed land use, low traffic speeds, interconnected street network, safe sidewalks, in-street parallel parking, street trees, and narrow streets. Some of the recommendations that were given have a walkability component. Recommendation one says that the pedestrian realm and the automobile realm must be clearly separated in order to make the pedestrians experience safe, attractive, and conducive to walking. In traffic concept number two the recommendation that raised pedestrian crosswalks and bump-outs (extensions of the sidewalk into the street) will slow down vehicular traffic. The

bump-outs will make it easier for people cross the road because they have less road to cross.

Infrastructure

The infrastructure for the college town study is mostly existing, water and sewer lines would not be move because it would cost more to move them than leave them where they currently sit. There are however elements like light posts, electrical lines and sidewalks that can be moved and or repaired. In recommendation one the design team specifies changes to the street that will help make it more vibrant and successful, these include burying the existing power lines to make the street less cluttered visually, and installing light posts every 30 feet to add safety as well as ambient light. The sidewalks along this street also need to be repaired and brought up to meet ADA (Americans with Disabilities Act) code. The last transformation is to add a continuous curb edge that is currently missing from the street. In order to make the site feel more like a college town the design team decided to eliminate most of the surface parking and proposed the addition of six parking structures that support the demand for parking in and around the site. The plan for the college town is composed mostly of infilling vacant and or underused lots into residential/retail and thus most of the infrastructure is existing or built upon the existing infrastructure.

Sustainability

The plan for the Lexington college town does not mention any sus-

tainable features that will be added with the revitalization of the area. However there are two elements of the project that have a sustainability component to them. The first is mixed use buildings with retail in the first floor, offices on the second floor, and residential use on the top floors. These mixed use buildings make it possible for people to live and work in the same building thus eliminating commuting from home to work in a car. The second is the promotion of alternate modes of transportation. Traffic concept four discusses the extension of the transit system so that it covers the college town more effectively. This will allow people who do not live in the area to have access to all of the college town. Bicycles are the other mode of transit that is being promoted in the plan. The addition of bike lanes on streets and bike racks in the college town area will help encourage their use. The University will have a big influence in promoting bicycling in the area because most of the people using bicycles will be the students. Giving these students incentives to use bicycles like dedicated pathways, locating racks close to entrances, and covered bike racks will show the Universities students and the public that it supports alternative modes of transportation.

Friendliness

The Lexington College Town plan outlines several way to attract people to the area and keep them feeling safe. One of these ways is to increase police presence in the area however after the area has become established police patrol may not be as needed because the increased activity in the area increases the reality and perception of safety.

Buildings that address the street with large windows let people know that others may be watching and makes people feel safer. In addition, the building are kept to a height of three stories to maintain the look that is commonly found in college towns and so pedestrians are not overwhelmed by large buildings. The plan calls for more street trees to be planted throughout the site which would improve the pedestrian experience by providing shade and bringing large scale spaces to a human scale. Vehicles play a large role when it comes to pedestrians feeling comfortable walking and biking in an area. The design team found the currently the traffic speed is to high for people to feel comfortable walking on the sidewalk and there is no buffer zone separating the sidewalk from the vehicle lanes. Adding a buffer zone and reducing the traffic speed will make people walking and biking feel safer. As the area becomes more vibrant and full of people walking and biking drivers will slow down because they have to watch for people crossing the road and there is more activity in general. Currently the site has many large surface parking lots that take up a lot of space and are not nice to look at or walk by. Eliminating the surface parking lots and adding buildings in there place will create less voids in the streetscape and help people feel safer and more comfortable walking through the area. In general people being in a area attract more people to the area and the more people that are in an area the safer people perceive the area to be.

Connections

While The College Town Study was being conducted a team from the same firm of Ayers/Saint/Gross was working on the master plan for

the University of Kentucky. These two design teams had good communication between them and the result are plans that compliment each other. Another way that the University could connect with the community is illustrated in recommendation number six. In this recommendation the design team suggests that the University of Kentucky use its resources to help revitalize the community. The design team used the University of Pennsylvania as a case study for what they wanted the University of Kentucky to emulate. The team listed four strategies that the University of Pennsylvania had in place.

1. Established a special services district
2. Created K-8 public schools which are funded from the University
3. Developed retail included art house cinema, specialty food market, and structured parking
4. "Penn provides \$15,000 grants to new home buyers. For existing home buyers, Penn provides matching grants up to \$7,500 for home improvements. Penn identified key multi-family properties and provided gap financing and technical assistance for building rehabilitation. The grants for Penn affiliates covered dwellings within several blocks of campus"(Ayers/Saint/Gross, 2002).

As universities continue to grow and need more space for classrooms, labs, and or students it is now becoming more and more popular for the university to acquire a

building outside of its main campus and convert the building so that it serves the university. The design team suggests that the University of Kentucky expand into the college town area to help revitalize the area as well as making a stronger connection between the University and downtown. The buildings that are proposed to be in the college town are student housing, a professional education center, and the Digital Village. With the expansion of the University and the addition of the College Town the transit system will need to be updated to help it run more efficiently. Some of the transit lines will need to be extended so that people have access to the entire College Town. Having public transit throughout the College Town will give people who do not have a car access to the shops and amenities that will be added during the redevelopment of the College Town.

Innovista Master Plan

Walkability

Currently the site for innovista is not conducive for pedestrians, one of the constraints that the design team listed was limited pedestrian and vehicular crossings over a set of railroad tracks running through the site. To make the area more pedestrian friendly and walkable the design team recommended pedestrian promenades throughout the site. The main pedestrian street is Greene Street and its sidewalks will vary in width from 18 feet on the North side and 30 feet on the south side. These large sidewalks provide space for seating area and the ability for restaurants and cafes to have dining areas. Looking

through the document that Sasaki Associates gave the City the narrowest sidewalk width that they specified was 10 feet which is wide enough for people to feel safe and comfortable while walking.

Infrastructure

The infrastructure Innovista is similar to the previous case study of Lexington College Town Study in that most of the infrastructure is existing and the design team is adding onto the existing infrastructure. The plan includes new roads, bridges, pedestrian ways, and the waterfront park. In the Literature Review I listed some constraints that the design team faces in this project, one of them was the power lines that were running parallel to the river. The team dealt with the power lines by burying them for the safety of the public and visual aesthetics. The site for the Innovista development has railroad tracks running north and south below street grade. In order to have more connections the team proposed one vehicular and one pedestrian bridge to cross the rail road tracks. The bridge that spans the tracks at Greene Street is a raised fill platform bridge instead of a typical bridge. This type of bridge was proposed so that the design for Greene Street could be carried seamlessly across the railroad tracks. Like the previous case study the design team eliminated most of the surface parking on site and proposed multiple parking garages to support the parking demands. When reviewing the conceptual cost estimate that Sasake Associates put together it becomes clear that most of the cost is spent improving and adding infrastructure to support the design.

Sustainability

Similar to the Lexington College Town Study, the Innovista Master Plan does not specify any sustainable features that will be added to the landscape. Also like the Lexington College Town Study, Innovista does have some sustainable elements in the plan. With the addition of the proposed waterfront park a twelve mile long trail system will be completed. This trail system could allow people from other parts of Columbia to bike or walk to Innovista and not take a car or bus. Additional bike lanes will be added to two streets, one being Greene street which is the main corridor through the site and the second street being Congaree River Parkway which runs north and south along the waterfront park. The other sustainable element that the plan specified was that the buildings throughout the site would be environmentally sustainable buildings. Because the plan is preliminary the design team did not specify what kind of sustainable features the buildings would need to have.

Friendliness

The Innovista plan adds wide sidewalks to the area for people to walk comfortable and not be crowded by others. The addition of street trees will also assist in making people feel comfortable in the site bringing large areas into a human scale and providing shade for people to sit under. In the plan the design team specifies that the buildings should be faced out to the street and have parking structures integrated into the back side of the building. Having the buildings front face the street gives the building an identity along with

letting people know that they are supposed to walk on that side of the building. By wrapping the building around a parking structure it eliminates people seeing an ugly parking and the need for any surface parking lots in the area, which are unattractive and not appealing to walk next to. The new waterfront park will connect twelve miles to trails which will attract many people to the area. The more people that are in an area makes other people feel safer because there are more eyes watching what is happening around them.

Connections

The city of Columbia was founded 1786 and became one of the nations first planned cities. The city was laid out by John Gabriel Guingnard as a perfect square with four hundred blocks with the capital at the center of the city. The plan laid out by Sasaki Associates plans to extend the historic street grid by completing a town plan that was drawn up shortly after the American Revolution. As a result of continuing the historic street grid there will be more connections between the downtown, the waterfront park and the Congaree River. The waterfront park makes a connection to downtown but also connects a twelve mile long trail system that goes along the Congaree River. People living along or close to the river could use the trail system to get to the shops and amenities that will be added during the redevelopment of the area. In addition to the shop and amenities that will be added to the area there will be some university buildings that will be used as research buildings. Subjects that will be researched in these buildings will be alternative energy, nanotechnology, biomedical science, and environmental science. Having the

University buildings added into the redevelopment will bring a university presence to the area making it vibrant and full of life. Another way that the university is connected to the innovista area is through Greene Street which starts at the University's Thomas Cooper Library and ends at the Congaree Regional Waterfront Park. Greene Street makes a physical and figurative connection from the University to the Innovista area. A unique element of the Innovista area is that it has railroad tracks running North and South dividing the site into East and West sections. The design team outlines the tracks as a constraint pertaining to the design of their concept but later in the plan they point out that there is an AmTrak station located in the heart of Innovista. With the AmTrak station being in the Innovista site this gives the design team a unique opportunity to have their design be the first thing people see as they come to Columbia.

Introduction

In this chapter I discuss the findings from each case study and my observation of the purposed site in St. Joseph, MN. All of the findings in this chapter pertain to the assessment measures that I set in the previous methodology chapter.

Walkability

The case study that has the best walkability is UniverCity simply because it was the only case study that I researched that was implemented and had data to support its case. The other two case studies I researched were and still are in the planning phase elements relating to walkability could differ from what is said in the document to what actually gets built. All three of the case studies have the same elements that make an area walkable. Wide pedestrian walkways, a buffer zone between the cars and the pedestrians, smaller block sizes, bump outs at intersections making the distance pedestrians have to cross the road shorter, and buildings that have large windows with their front facing the street. When a street and or area has all of these components it makes a street that pedestrians want to and feel comfortable to walk on. If people feel comfortable to walk on a street or in an area they will more than likely stay in that area and return to that street or area again. Based on the case studies walkability is a large factor for determining of an area is going to be successful or unsuccessful.

Infrastructure

Based on the three case studies that were researched I can not say that one case study had better infrastructure that the other. In an ideal world every redevelopment project would replace the old infrastructure and put in new infrastructure but unfortunately the world does not work in that fashion. The case study UniverCity did have the ideal situation where they had to build own infrastructure from scratch which did not put as many limits during the design phase of the project compared to the other two case studies. The advantage to having existing infrastructure is that the up front cost for the project will not be as high compared to starting with an open piece of land and having to build all the infrastructure.

Sustainability

The case study that was most focused on sustainability was UniverCity. The other two case studies did not have sustainability as a component of their design. Lexington College Town study and Innovista did have some features that fall under the category of sustainability such as promoting alliterative modes of transit and the construction of mixed use buildings. However they both had no sustainable features that were relevant to the landscape like bio-swales, rain gardens, pervious paving, green roofs, and or green walls.

UniverCity is using bio-swales and pervious pavers as well as using alternative energy sources in some of their residential buildings and community buildings.

Friendliness

What makes an area feel friendly to a pedestrian depends a lot on the aesthetics and the safety of the area. People do not want to walk on a sidewalk with a parking lot on one side and cars going 40 miles and hour on their other side. All three of the case studies that were researched made a large effort to make sure that their designs were friendly. If a design ends up to be not friendly after it is built people will not want to visit that area and as a result the shops and amenities that are in the area loose money making them move to another location. The area then goes full circle and needs to be revitalized again. It is better for everyone involved with a revitalization project that the design team makes sure their design is safe and friendly.

Connections

When looking for case studies for this thesis one of the criteria was that the project had to be next to or in the vicinity of a university to make sure that there is a significant population of young adults in the area. All three of the case studies are close to a university and have a connection to the university. UniverCity has the strongest connection to the campus of SFU because the community was conceived, built, and managed be the University. Lexington College Town study and Innovista both have a connection to a university by close proximity and by having university owned buildings in the redevelopment area.

When redeveloping an area having a connection to other parts of the city is key when you want as many people to visit the area as possible. All the case studies make a strong effort to have public transit reach all areas of the project site. Considering that the case studies are next to a university and not all students have access to a vehicle public transit becomes a larger issue than it would be for other redevelopment projects.

Intervention Site

Currently that site where the my design intervention is going to be is the old Kennedy Elementary School. The school was built in the 1967. It was in use until 2009 when the city built a new elementary school to the south of the original school. As of right now the old school is being used for an after school learning program and a daycare facility. These two programs do not use up all of the building and creates the possibility for adaptive reuse of the old school. Also on the site are newly built town homes that were built by the University of Saint Benedict and are used for student housing. Since these town homes were recently built they did not show up on the aerial image that I had looked at prior to visiting the site. I was a little bit surprised to see the town home and with the addition of these town home I feel it will now be easier than it was before I knew of the town homes to make a connection with the community. The site is about one block away from the town center which would make it a good location for new retail and residential because pedestrians would be able to walk from the current retail center my site without the need of a car. It also sits adjacent to a residential neighborhood which creates good

opportunities for making connections with existing residential but could also be a constraint depending on what demographic of people live in that neighborhood. With a good majority of the site being open land this allows for the design to be unrestricted and designed to be successful even when trends in the design world change. The only infrastructure that is on the site is the old elementary school and the road that lead up to the school making it easy to add to the existing infrastructure and not having to worry about replacing infrastructure as would be the case in a very densely populated area. To my knowledge there have been no sustainable measures taken in the area either by the city or the University. This now community could be the first sustainable community in the city and perhaps the area, which I believe is needed when the subject of being sustainable is so prevalent in our society. With this new community being so close to University and housing some of its students showing these young adults what sustainability can do and look like might inspire them to do great things in their life. This new community could become a model for future communities in the area and I would hope that future community would add to the model making it more efficient.

The city of St. Joseph started in 1854 as a German settlement and became a town shortly after in 1890. The city has a population of 6,534 as of the 2010 census and is growing (United States Census Bureau, 2012). In the past few years the city has added several housing subdivisions and is planning on adding more in the future. The age group that makes up the largest percent of the 6,534 people living in St. Joseph are 20-24 year olds with 1,658 in 2010. The largest draw for these young people are the two universities that are in and close

to the town. The College of Saint Benedict which I have previously mentioned was started by the Sisters of Saint Benedict's monastery not long after St. Joseph became town in 1913 to educate women of the area. Through the next decades the sisters of the monastery were the teaching staff and the administration until the 1970's when the enrollment tripled and they were forced to hire new faculty and staff. "In recent years, the College of Saint Benedict has gained national recognition for its programming in international education and the fine arts. In addition to its emphasis on gender education, the college also is known for its strengths in environmental studies and service learning. In total, these programs and commitments reflect the college's Benedictine heritage and its strong commitment to the liberal arts. Today, the College of Saint Benedict is the nation's only Benedictine college for women and is the highest-ranked Catholic college for women in the country. Consistent with its Benedictine heritage, it also is nationally recognized for its promotion of character and values development" (College of Saint Benedict, 2012). The other college is Saint John's University located approximately two miles north of St. Joseph. The college was founded in 1857 but did not move to its current location until 1864. Through out the colleges history it has thrived keeping to its mission of "fostering the vitality of community through learning and the pursuit of wisdom. Striving for excellence, we unite the wisdom of Catholic social teaching and intellectual tradition with the practicality of the common life envisioned by Saint Benedict" (College of Saint John's, 2012). Some preliminary site photos can be found on the next page.



Research Results & Goals

Introduction

This chapter looks at the existing research in the disciplines of community design/planning and campus planning. The goal of studying the existing research is to learn about the current trends happening in those fields and to find a gap or problem that the literature may not cover and or address. This chapter also states the problem that has been found, research questions that will be answered in a later chapter, and the hypothesis.

Current Research

The existing research in the area of community design/planning focuses on ways to evolve the structure of our physical communities parallel to people's evolving social development (Jin, L., & Mingshu, L.,2010). The overall concept of community is rooted in sociology and refers to the group of people who live in one special region to realize multiple targets (Jin, 2010). These targets can be physical, the way their community is built and maintained, social, their interactions with others in their community, and/or economic, members raising money for a certain cause. As people's quality of life increase so does their expectations about their residence quality. In a good community the elements such as security, emotion, and a special identity are formed by the people, space, environment, economy, and culture (Jin, L., & Mingshu, L.,2010). The residents of a good community generally have more respect for their community, translating into to less crime, higher quality infrastructure, stronger economy and deprivation of social relationships. In contrast a deficient

community generally has higher crime, crumbling infrastructure, a poor economy, and social relationships. What this boils down to is that communities are complex and have numerous variables that can decide whether a community is a success or a failure. There is no formula for designing the perfect community. What makes a community in China may not work in the United States because of culture, government policy or simply geography.

The term sustainability is now a common place word within the design world and is being used more and more by the general public. The term is used in community design/planning in the physical sense, meaning a sustainable community has less dependence on cars and more opportunities for people to bicycle and walk, a coexistence with the ecological system, and a strong connection with the rest of the city or region (Jin, L., & Mingshu, L.,2010). The term that is more relevant to this thesis is social sustainability This type of sustainability concerns itself with creating a community that is diverse and equitable so that all the basic needs of its people are met (Ross, J.,2011). These basic needs range from simple needs like housing and food, to political needs like justice and interactions. The way to achieving social sustainability is largely through changing policy and there remains significant challenges in developing and implementing local planning policies that deliver such outcomes (Ross, 2011). Some designers and planners within the community design field are turning to new technology and social media to design a more successful community. An example of this happened when Harvard University expanded into the city of Boston's Allston neighborhood. Harvard's Allston Development Group and Boston Redevelopment

Authority oversaw the project and the creation of a new park. It was at one of the public meetings that the idea of using the simulation platform of Second Life, an online virtual world that allows people to interact with others around the world, was proposed and passed. Community members were split into two workshops; six 90-minute sessions took place from July through September in which the community members worked collaboratively with the designers to design the park (Knack, R.,2009). The advantage of designing within the Second Life simulations is that aspects about the design can be changed and the effects seen immediately. Having community members involved with this type of process gives them more pride knowing that they helped in making a better space for their community.

The second case study was done in Campbeltown, Scotland, for the purpose of community identity. In recent years the town had become a center for manufacturing wind turbines which was changing the town's identity. Consequently, the residents of the town were losing their local identity and social confidence (MacDonald, S.,2012). Creative practitioners and local people came together to think through and address the challenge: 'how do you create a new identity that can contribute to community well-being and individual confidence' (MacDonald, 2004)? The participants in this study ranged in age from 12 to 60+ and were given the task of making a new map of Campbeltown which would be presented in a digital online format. Each member was to collect his/her information by mobile phones, MP3 players, and or digital cameras. Once all the information was collected, all the participants reviewed and edited the material for a physical map, to be used at the mini-exhibition for public and the digital

version put onto the web. This project was considered a success but was not without its own difficulties such as time-planning, people having to learn how to use the digital technology, and sustainability of the project.

The second broad topic researched was campus planning which can be thought of as community planning just at a smaller, more dense scale. The subject of campus planning has been, and still is, well documented with books and academic journals dedicated to the study. For so many years academic campuses have had an inward focus making them a green oasis separate from the surrounding neighborhoods that were feared to be unsafe. Now, that paradigm has shifted, and campuses are inviting the public to use their libraries, stadiums, and open spaces (Halsband, F.,2005). With college enrollment increasing coupled with buildings needing to be bigger and fitted with the latest technology, the issue that many colleges are facing today is the expansion process. Many colleges such as Brown University in Providence, Massachusetts, and Harvard University in Boston, Massachusetts, have had the city fill in the space around the college. This leaves them with no room to expand forcing them to creating another campus either in the same city or in an entirely different city. Advantages to this method that Frances Halsband (2005) calls the "leapfrog strategy" is that it allows the college to expand its borders without taking up any open space on the central campus that might be a defining factor of that campus. Using the

“leapfrog strategy” can be a powerful tool for a city that wants to revitalize a certain district of their city. “Brown is choosing to locate several large departments in buildings away from its existing campus on historic College Hill in areas of Providence dominated by abandoned manufacturing buildings and underutilized commercial properties. Eventually, it hopes to join the city in a border redevelopment of one of these areas” (Halsband, 2005). However if this process is not successful it can result in the students and faculty not having the same feeling of vibrancy and excitement on the new campus as they do on the original campus. The future model of campuses will include satellite campuses, rented spaces, and campuses being put in nontraditional places, but this is all for the same purpose of creating an environment that nurtures creativity and opens a dialogue between students and faculty that invites the exchange of new ideas to better our society along with the world.

The gap in the current research in community design/development is that young adults between the ages of 18 and 25 are not fully integrated into the urban landscape of the city. When designers/planners are creating a new community or restore an existing community their ultimate benefactors are the homeowners and sometimes children, the people who are going to be living in the community the longest amount of time. The young adults are often overlooked in the process because they are most likely going to be moving out of the community to further their education and or start their own life in a different community. This thesis is attempting to answer two questions relating to young adults and their roles within the urban landscape:

Why are young adults the latent members within the community?
How can the profession of landscape architecture use open space and new technology to integrate young adults into the community?

By answering these questions we can begin to integrate young adults into St. Joseph, Minnesota’s urban landscape thereby improve the cities cultural and social identity as well as their own self efficacy.

This research looks at three case studies that will be used throughout this thesis program. Within this chapter a broad overview of these case studies is given.

UniverCity

Located in the suburb of Burnaby outside of Vancouver, Canada, is Simon Fraser University (SFU). In 1995 the university began the development process for a community to support the university. In the beginning of this process the university transferred 790 acres to the city to be included in the Burnaby Mountain Conservation Area. In return for this land the city granted the approval for the university to begin planning a community. One year later the Zoning Bylaw Amendment and Official Community Plan were approved by the city. The two goals for the community of UniverCity as stated on their website are “to create a more “complete community” on the mountain, with a diverse range of housing choices, shops, and amenities; and to establish an Endowment Fund to support teaching and research at SFU”(SFU Community Trust). With the university taking



on this project of building a new community it created the SFU Community Trust (SFUCT) to oversee all things related to the new community. As of now the community is still not completed, but developers say that they hope to finish within the next 20 years. Sitting on 160 acres the community of UniverCity is a dense, mixed-used community that will have 4,536 residential units and anticipates to house up to 10,000 people. The community is split into two distinct neighborhoods each with its own elementary school and park, other amenities that the community provides its residents are a commercial core,

community facilities, and an extensive network of pedestrian paths as well as bike trails.

A large component of UniverCity is sustainability and reducing the impact the community has on its environment. All the streets within the community are built with permeable pavers and lined with bioswales that return 97% of the runoff to the hilltop watershed. Another way the community helps its residents stay sustainable is with public transportation and cooperative car sharing. The community has negotiated with Translink, the local transit authority, and instituted a program in which the residents of UniverCity get a discounted transit pass. This program complements the “U-Pass” program used by the SFU students. “To discourage car use, the parking standards in the community were significantly reduced from the normal parking standards. However, reserved parking for co-op cars and bicycles is a requirement within every development. To encourage the shared use of automobiles, the Trust donated a Toyota Prius to the Cooperative Auto Network (CAN) which oversees a car-sharing program”(Geller, 2005). UniverCity does not require its buildings to include sustainable practices but highly encourages them to be included. Three of the buildings have sought LEED silver or gold certification (Girling, 2008) and there is only medium to high density housing in the community because it has been shown to be more energy efficient with an apartment consuming about 4.8% of the energy required by a single family home (Girling, 2008). UniverCity has also been an innovator in some of its building practices, and “for the first time in North America, amendments were made to the municipal zoning by-law to allow a portion of an



apartment or townhouse suite to have a separate entrance, bathroom, and kitchen facility. The resulting “mortgage helper” can be rented to students or others seeking more affordable housing. To increase affordability, the suites can be as small as 258 square feet and require only one parking space for every four units” (Geller, 2005). Another innovative idea was used in the Verdant building developed by Vancity Enterprises as one of the most energy efficient wood frame buildings in the country. One of the problems that the Trust faced was that developers wanted to integrate green technology and practices into their buildings but were concerned about the cost. The Trust worked with Vancity Enterprises and Vancity Financial to create a green mortgage for all of the energy enhancements and green building features and financed those separately from the building. The payment for that package forms part of the strata fee that residents pay when living in the building. This strategy is a way to take away the argument

that developers would do these green strategies but they cost more. The Trust hopes that other developers and municipalities use this way of financing in the future (SFU Community Trust, 2009). A more controversial innovation that the Trust devised is the “Prohibition of national and multinational retail operations. To create a more unique sense of place, and encourage greater community economic development, only local, family-owned businesses may rent in the village centre. As a result, there is

no Starbucks, no McDonalds, no KFC - not even a Tim Horton’s. This is also consistent with the Trust’s goals of encouraging businesses offering healthier food choices, including organic deli and produce - although the neighborhood pub is allowed to serve fish and chips! The Trust can impose such restrictions by maintaining ownership of the commercial space”(Geller, 2005). As a result of these groundbreaking innovations the community of UniverCity has won numerous awards but most notably:

2012 Planning Institute of British Columbia

Award of Excellence: Planning Practice, City & Urban Areas

2011 Canadian Institute of Planners

Award of Planning Excellence: Neighborhood Planning

2009 Urban Land Institute

Award of Excellence: The Americas for Best Practice in Design, Architecture, and Development

2008 American Planning Association

National Excellence Award for innovation in Green Community Planning

2006 Planning Institute of British Columbia

Award of Excellence for Site Planning and Design

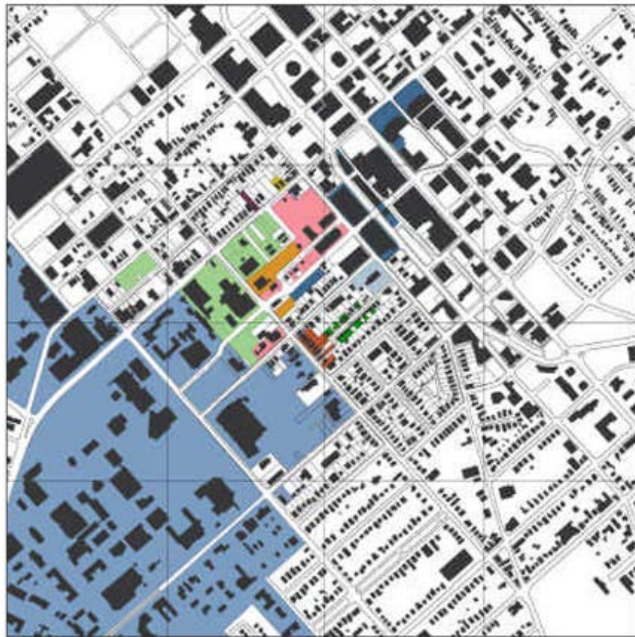
2005 Canadian Home Builders' Association







Georgie Award to The Cornerstone for Best Environmental Consideration and Energy Efficiency

In 2010 the market research firm Mustel Group conducted a survey of the residents living in the community on behalf of the SFU Community Trust. In general the residents of the community had an increase in satisfaction since 2007 with life in UniverCity. The survey team found that more than 9-in-10 residents are satisfied, either very or somewhat, with UniverCity as a place to live. The strongest reasons for people choosing UniverCity were its quiet natural setting, its location and the affordable price. Other factors were found to be ar-

chitectural design of the buildings, the views, the outdoor recreational opportunities, and the sustainability features of the community. The places where the team found the lowest satisfaction were opportunities for input in local decision making, the current provision of healthcare services and access to arts and culture. When the survey was given a total of 41% of residents had some affiliation with SFU and a majority of that percentage was students at 26%. It has been two years since the survey was given and it is safe to assume that the percentage of students living in UniverCity has grown. The community of UniverCity is a step in the right direction for environmentally friendly neighborhoods. Hopefully developers are using and adding to this model community, making neighborhoods more environmentally, economically, and socially sustainable.





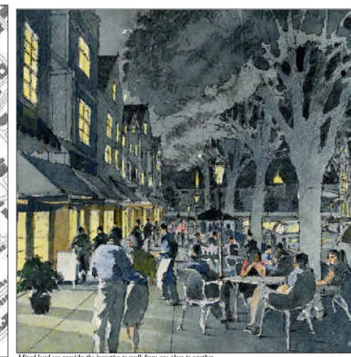
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|  Good Samaritan Hospital |  Professional Arts, L.L.C. |
|  Edward Karum |  Religious |
|  Hagerman Ct, LLC |  U.S. Post Office |

Lexington College Town Infill Revitalization Plan

This study was done by Ayers/Saint/Gross (ASG) architects and planners for the University of Kentucky in conjunction with the university's new master plan. The goals of this study were to "encourage residential and commercial developments, improve pedestrian safety, refine streetscape, maintain and plant street trees, repair

sidewalks, and in general set a high standard for the public realm within the city"(Ayers/Saint/Gross, 2002), with an end goal of "identifying several key sites to be developed within the study area and several improvements to be undertaken by the City"(Ayers/Saint/Gross,

2002). The study area was a 77 acre site between the University of Kentucky and the downtown area of Lexington. The largest owner of land in and around the study area is the University of Kentucky followed by the Good Samaritan Hospital and then the Calvary Baptist Church. After studying the area the design team developed two concepts that would meet the goals determined at the beginning of the study. A third concept was created and chosen that incorporated the favored aspects of the previous two concepts. This college town study also called for a detailed retail and residential study to be conducted by ZHA and Zimmerman Volk Associates respectively. The retail analysis team "recommended supporting the existing businesses on South Limestone Street and strengthening retail activity in this vital corridor which connects the University to downtown"(Ayers/Saint/Gross, 2002). The residential study team similarly "recommended the Martin Luther King Boulevard be developed into a residential thoroughfare that connects the University to



Mixed land use provides the incentive to walk from one place to another.



On-street parking buffers the pedestrians from moving traffic, and supports retail on the street.

downtown” (Ayers/Saint/Gross, 2002). Two of the major problems with this area are the walkability and the parking. Making this area more pedestrian friendly and putting a premium on parking to encourage alternative transit will transform the area and achieve the college town feel desired by the City. The design team at ASG then made ten design recommendations and five traffic recommendations. A short synopsis on each is given.

Recommendation One

Farther development of the retail corridor along Limestone Street by adding approximately 55,000 square feet of retail space in a five year span. Adding this retail will strengthen this street as a connector between the University and downtown as well as bolster pedestrian activities.



Proposed: Mixed-use building at S. Limestone Street across from Chrysalis Court.

Recommendation Two

Like Limestone Street, Martin Luther King Boulevard makes a connection between the University and downtown. The design team has suggested that this area be developed into a residential corridor by in-filing vacant sites and adaptive reuse of some buildings. The team feels that having a higher density of people in the area will have a positive effect on people’s feeling of comfort and safety.



Proposed: View from terminus of MLK Boulevard, as seen from the University of Kentucky Student Union with the proposed Gatton College of Business on the right and new dormitory building on the left.

Recommendation Three

Focusing in on two vacant lot on South Limestone Street, the team recommends developing two mixed use residential buildings. The creation of these buildings will help complete the fragmented street wall and enhance the pedestrian experience with the addition of retail and restaurants on street level.



View from S. Limestone Street of proposed extension of Chrysalis Court to meet MLK Boulevard. Mixed-use left building B is illustrated on right side of image and proposed hospital parking deck is shown in background.

Recommendation Four

The existing site has some corner lots that are vacant either from demolition of a past building or surface parking lots. The design team states that “it is important that intersections within a street grid be defined by buildings on all four corners” (Ayers/Saint/Gross, 2002). Infilling all of these corners will add to the aesthetic for which the City strives.



Proposed: Corner of Limestone and High Streets

Recommendation Five

This recommendation falls outside the study area, but the team felt that it was important to include in their proposal. They would like the area West of South Limestone Street to become a mixed-use corridor to support the activity along S. Limestone Street.



Proposed: Mixed-use development and streetscape improvements along Jersey Street

Recommendation Six

“The University of Kentucky is a powerful economic driver in the Lexington community. It is one of the largest technology centers, employers, developers, and investors. Like other academic institutions, it is the creator and disseminator of knowledge and understanding that can help address urban challenges” (Ayers/Saint/Gross, 2002). The design team researched how other universities in the country have invested in their communities and suggested that the University of Kentucky emulate these programs in all neighborhoods that share edges with the university.



Home ownership helps maintain stability and improve a neighborhood's quality and character.

Recommendation Seven

In the evaluation process the design team unanimously agreed that there should be professional schools located within the college town area. The location of these schools will help bridge the gap between the university and downtown. In this recommendation the team states that there are other university-use buildings in the College Town master plan which include



Proposed: View of Professional Development Center from intersection Main Street and MLK Boulevard looking South

student housing, a professional executive education center, and the Digital Village.

Recommendation Eight

The design team makes the recommendation of implementing an overlay zone in order to protect the existing housing in the study area. "An overlay zone can help protect the character of a neighborhood by designating areas by land use, building type, and massing" (Ayers/Saint/Gross, 2002). Some of the preliminary goals of the overlay zone are:



The college town study area contains many graceful older buildings whose restoration and preservation is essential.

Protect the residential use and avoid a mono-culture of housing types.

Have strict design guidelines for parking structures in the study area. Having buildings define the public realm.

Buildings must have their primary entrance facing a street and not a parking lot.

Recommendation Nine

All students of the university have a UK Plus Account Pass Card for

use on campus to purchase meals and other supplies. The design team suggests that the university explore the idea of students card use off campus. The one restriction would be no purchasing of tobacco and alcohol products. Some advantages to the program are:

Promotes student retail spending in the college town and on campus.

Convenient and safe form of payment.

Retailers promote specials through account management website.

Parents can maintain control how student's money is spent.

Offers variety and more flexible hours.



Extending the PLUS card off campus will help to stimulate college town retail and entertainment.

Recommendation Ten

For the success of this college town the university should not expand on-campus retail and food services for five years after the development of the college town. This ensures that the students, faculty, staff, and the Lexington community are supporting the new businesses and not competing with the university.



The Commons Food Court

Traffic Concept One

Converting one-way streets into two-way streets will help pedestrians feel more safe in the area because the vehicular traffic will be traveling at lower speeds. With this conversion it is possible to add bike lanes which should be greatly used by the students traveling between the university, the college town area, and downtown.



Proposed two-way traffic on Limestone Street near the intersection of High Street

Traffic Concept Two

Transforming city streets to feel like campus roads by using traffic calming strategies and street scape improvements. These strategies include on street parking to make the street feel narrower, adding traffic/pedestrian signals for safer crossings, and creating bump-outs at crosswalks so pedestrians have less street to cross.



Proposed view of the Coliseum on the Avenue of Champions from the intersection of Rose Street

Traffic Concept Three

This concept recommends the use of shared parking, reducing the amount of surface parking, and creating on-street parking for all streets. "Parking spaces that are used to support the University through the work day should be made available in the evenings and weekends to support other activities"(Ayers/Saint/Gross, 2002) is an example of shared parking.



Parking can be incorporated into a building program without sacrificing the pedestrian experience.

Traffic Concept Four

Extending the existing transit system throughout the college town area is a key component in an area where students will be traveling. This concept will need to work in tandem with the previous concept to successfully promote alternative transportation.



Reliability, convenience, and consistency are the three key factors that will help increase transit use.

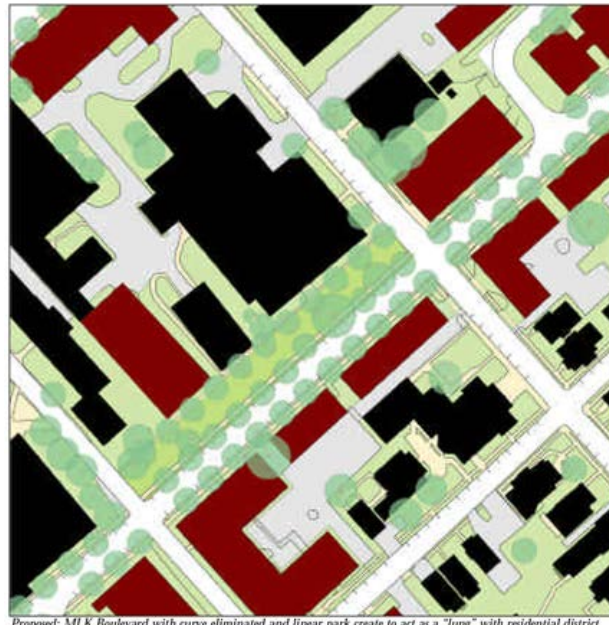
Traffic Concept Five

Currently Martin Luther King Boulevard has a slight jog because of land ownership. The team proposes to straighten out the road and create a linear park. "Straightening Martin Luther King Boulevard would potentially provide a visual connection between the campus and downtown. As a by-product of this alignment, a linear park would be created along the hospital buildings edge, adding much needed open green space" (Ayers/Saint/Gross, 2002).

After these recommendations and concepts, the existing conditions are outlined with zoning maps and street sections. The retail and residential market studies make up the last portion of the document. These are too technical and are not needed for the size and scope of research that will be done in this thesis. At the moment this project is not being implemented and no information about the status could be found from either Ayres/Saint/Gross or the City of Lexington.



Existing: Martin Luther King Boulevard



Proposed: MLK Boulevard with curve eliminated and linear park create to act as a "lung" with residential district.

Innovista Master Plan



Located in Columbia, South Carolina “the Innovista Master Plan is a visionary framework for the urban redevelopment of a 500-acre brownfield site in downtown Columbia”(Sasaki Associates, 2012). This master plan was completed in 2007 by Sasaki Associates. The existing conditions of the site are large commuter parking lots, light industrial, and some suburban office buildings making this area underutilized. “The goal of this plan is to transform this area into a

vibrant urban district that combines university research facilities, low and mid-rise residences, and parkland along the river”(Sasaki Associates, 2007). The master plan itself “extends the historic street grid that was drawn up shortly after the American Revolution; construct mixed-use housing, office space, facilities (for the public and private sector) and retail space; and increase connections between the downtown and the nearby Congaree River”(Sasaki Associates, 2007). The largest feature of this plan is the Congaree Regional Waterfront Park that, if built, will complete the regions existing 12 mile linear trail system and be designed in the tradition of great American urban parks. Some key elements of this park will be freshwater marshes and creeks, flowering gardens, an amphitheater, and two pedestrian/bicycle trails. As with all plans there are opportunities and constraints, for the Innovista Master Plan these were:

1. Current industrial zoning designation
2. Multiple land ownership
3. Limited development area due to the floodplain along the Congaree River
4. Power lines running parallel to the river
5. Lack of connections between downtown and the river
6. Limited number of vehicular and pedestrian crossings over the railroad tracks





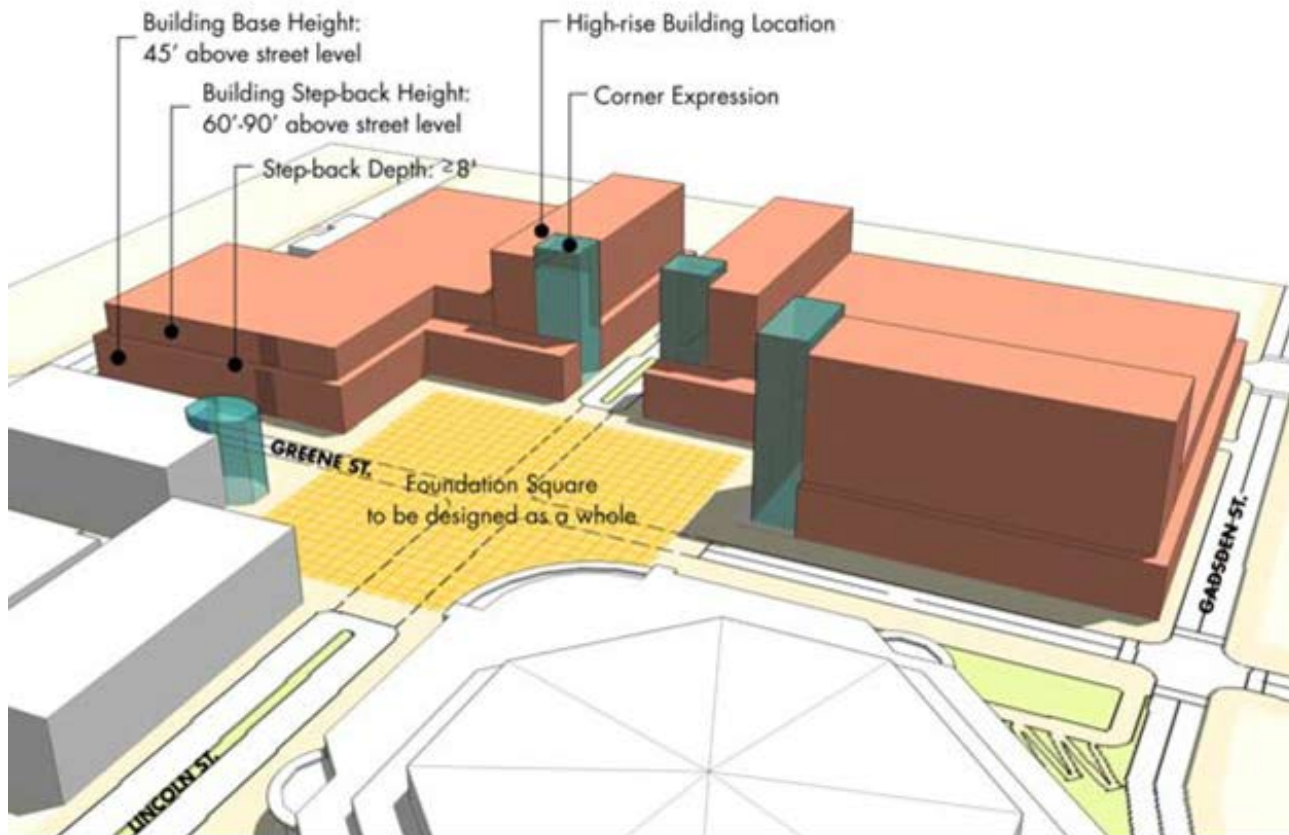
FIGURE 6.7: VIEW OF TRAIL ALONG THE RESTORED COLUMBIA CANAL. TO THE LEFT, RESIDENTIAL BUILDINGS LINE THE NEW CONGAREE RIVER PARKWAY AND FORMAL TERRACES STEP DOWN FROM THE GREENE STREET OVERLOOK. TO THE RIGHT, BOARDWALKS CROSS RESTORED WETLANDS AND LEAD TO THE PUBLIC AMPHITHEATER.



The concept for the master plan is based on a sustainable “garden city” and will provide safe streets for pedestrians as well as bicyclists. The proposed buildings will be environmentally friendly, four-to-six stories high, and be street-fronted with parking in multi-story structures. “The Innovista design concept creates a distinction between streets designated for cars, but designed primarily for pedestrians and bicycles (“A” streets), and streets designed for the automobile (“B” streets) providing efficient vehicular access to all blocks as well as to their service areas”(Sasaki Associates, 2007). The principal street in the master plan is Greene Street which goes from downtown Columbia and will lead pedestrians to the waterfront park. This street “will feature a procession of new public spaces, including Foundation Square - a shaded urban square framed by mixed use buildings with active commercial uses, including restaurants and retail at street level - and a linear Sculpture Park”(Sasaki Associates, 2007). The street configuration for Greene Street features two travel lanes for vehicles, bicycle lanes, wide sidewalks, and seating areas as well as sidewalk cafés. As with all redevelopment of urban areas, transportation and



circulation are always key issues. As previously explained the design team separated our streets into “A” and “B” streets giving pedestrians more value than vehicles. Like the previous case study, the Innovista Master Plan calls for the same shared parking strategy where parking lots have different uses during various times of the day. The design team also recommends that both the City and the University expand their bus services to help manage parking and provide alternative transportation to the area. The team also recognized the potential use of the Amtrak rail lines for a light rail. In the preliminary report that Sasaki Associates provided the University of South Carolina, the design team



creation of 8,700 permanent jobs and an estimated \$17.7 million annual tax revenue for schools, Richland county, and the City of Columbia”(Sasaki Associates, 2007). The Innovista Master Plan has won awards for its planning, these awards are:

American Planning Association

Outstanding Planning Project in a Multi-Jurisdictional Area

Boston Society of Architects/Society of College and University Campus Planning Awards

Honor Award for Excellence in Campus Planning

International Making Cities Livable Organization

Mixed-use Design Commendation

proceeds to specify street widths in all of their components. The team also specifies building placement, conceptual form, heights, set-backs, and building programming throughout the redevelopment area.

If the Innovista Master Plan were to be built according to the conceptual plan put forth by Sasaki Associates, the approximate cost would be around \$121 million and add 8.5 million square feet of mixed use development. This redevelopment would “lead to the

Congress for New Urbanism

Charter Award

Boston Society of Landscape Architects

Honor Award: Landscape Analysis and Planning

“The plan received the unanimous approval of the Columbia City Council, Planning Board, and Design Development Review Commission in the fall of 2007, and a new mixed-use zoning was approved for the whole district in the fall of 2008. In the spring of 2009, the City adopted design guidelines for an overlay district encompassing the Innovista area in order to achieve the urban design quality and principles found in the plan. New development includes an arena, convention center, hotel, and two new laboratory buildings for university research and associated parking garages. In 2011, the university began construction of the Moore School of Business in Innovista”(Sasaki Associates, 2012).

Although there is more information pertaining to these three case studies some of the information, facts, and or figures were not included in the overview because it was not relevant to what this thesis is studying. In the next chapter certain elements or features will be emphasized and used to analyze the three case studies.

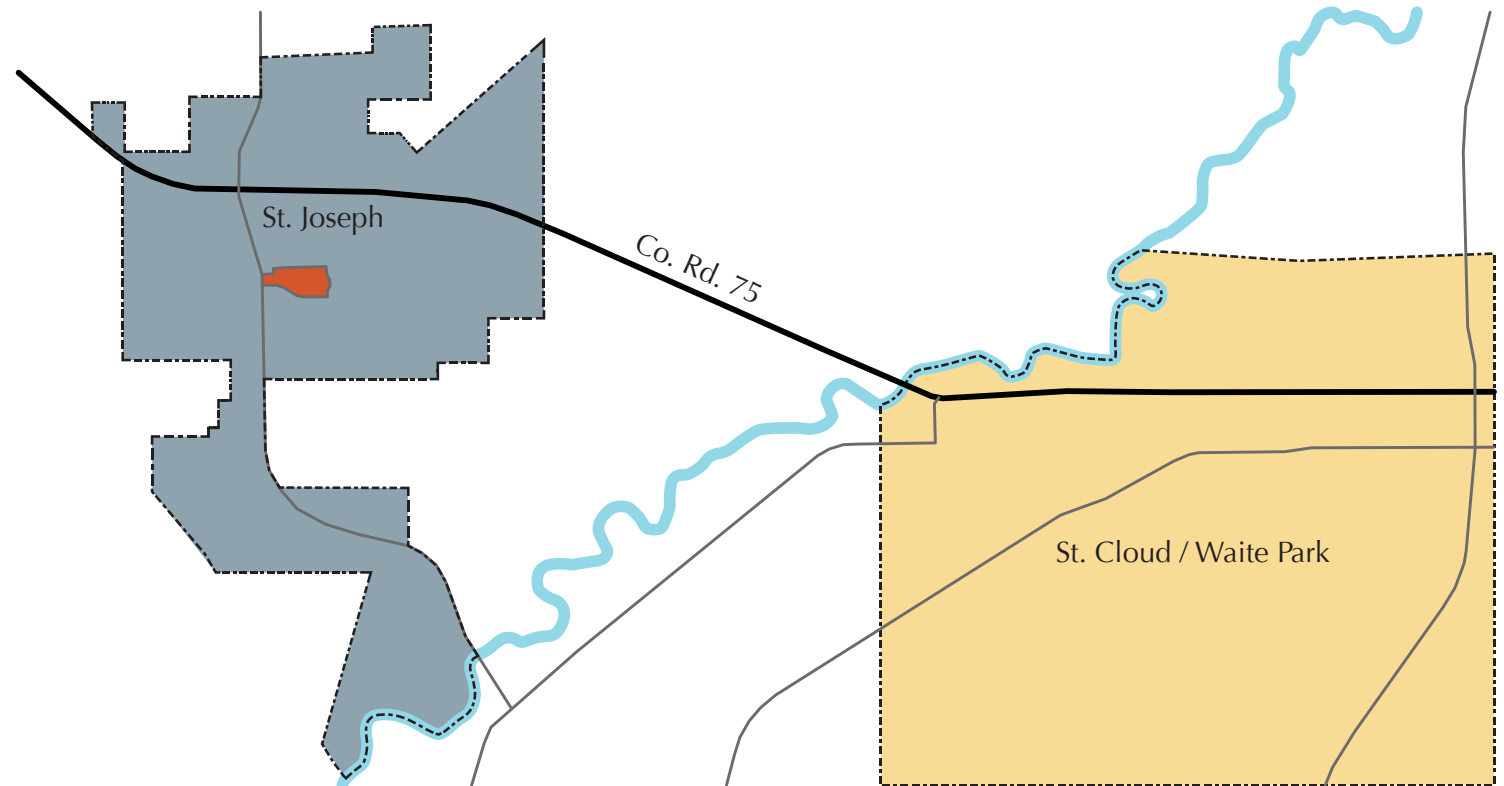
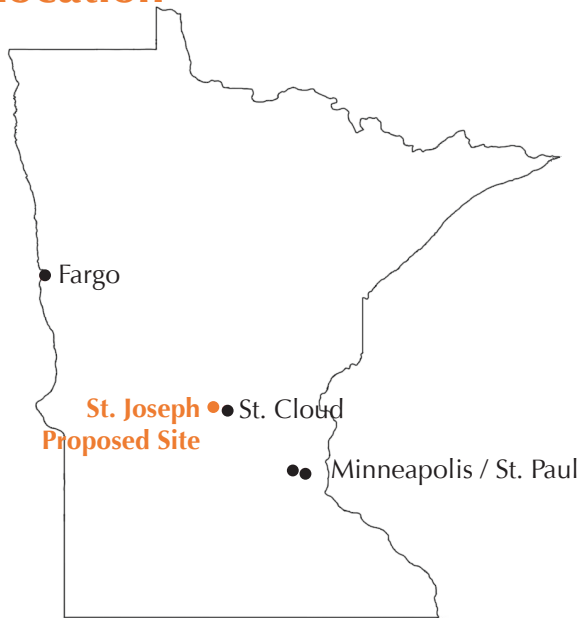
Thesis Goals

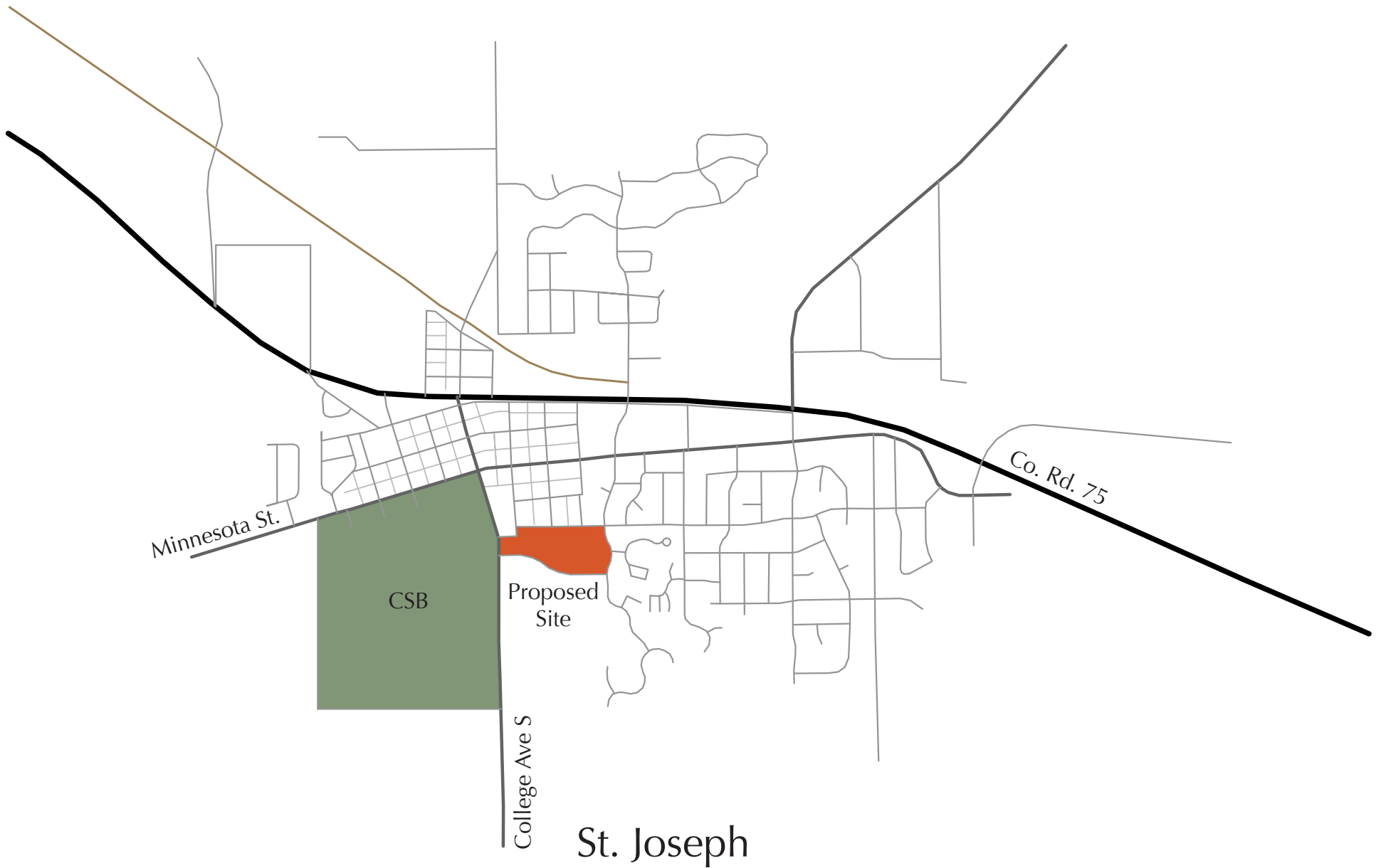
Goals

1. Improve my professional writing skills
2. Improving graphical communication
3. Practice my time management

Site Inventory & Analysis

Site Location



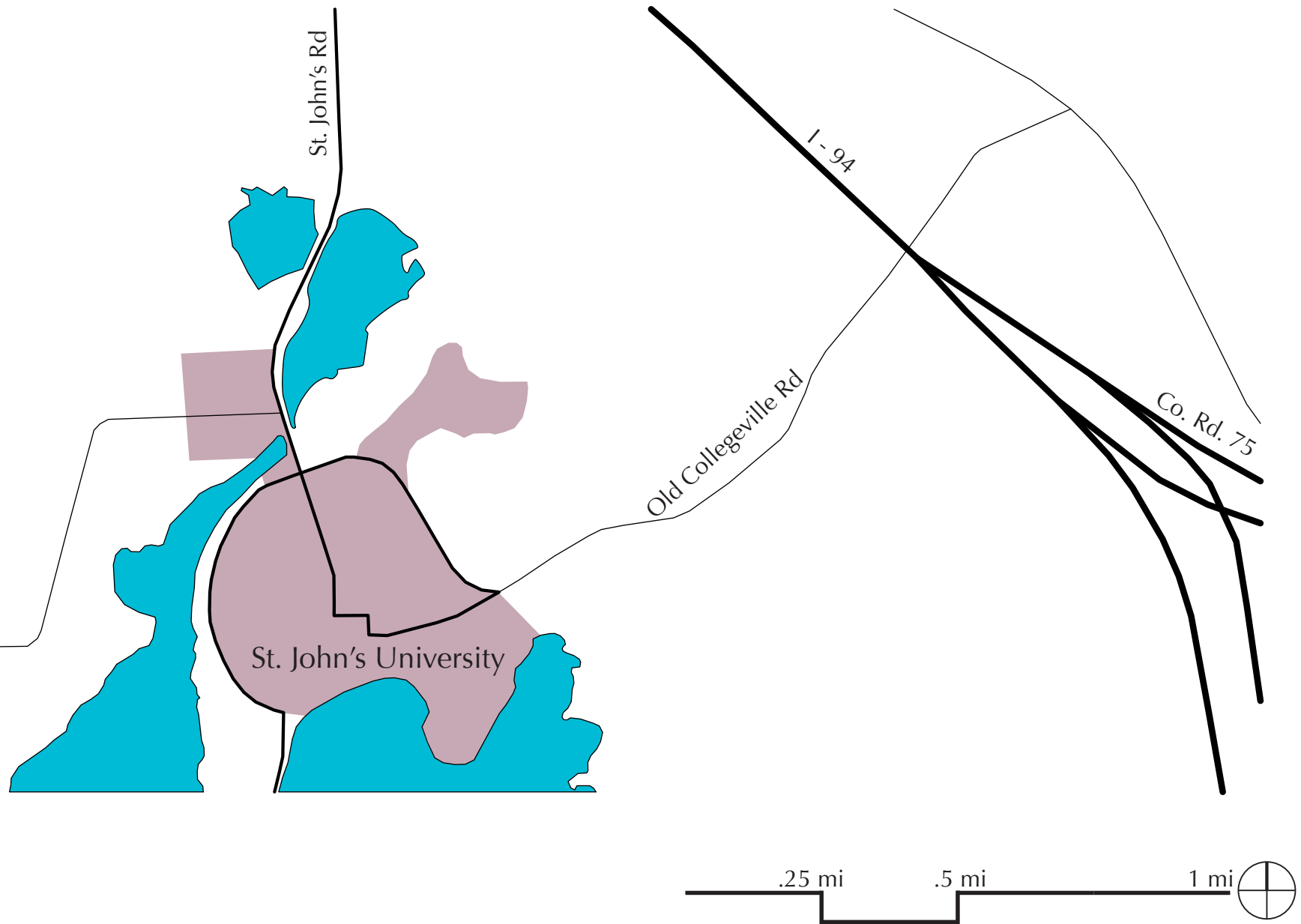


St. Joseph

- German settlement in 1854
- Became city in 1890
- Population of 6,543
- Known for the abduction of Jacob Wetterling and St. John's University.
- Main street is Minnesota Street which is where many of the local businesses are located.



Universities





4 mi

Minnesota St.

Proposed Site

College Ave S

Co. Rd. 75

.25 mi

.5 mi

1 mi



Universities

- College of Saint Benedict is a womens college and Saint John's University is a mens college.
- Both are nationally recognized liberal arts colleges.
- Ranked top 2 and 3 Catholic colleges in the nation.
- Both colleges continue to use the Benedictine values in the academic, spiritual, and social life.
- CSB has gained national recognition for its programming, international education, and the fine arts.
- SJU is more known out of the two colleges because of the Abby and its location among 2,000+ acres of hardwood and softwood forests



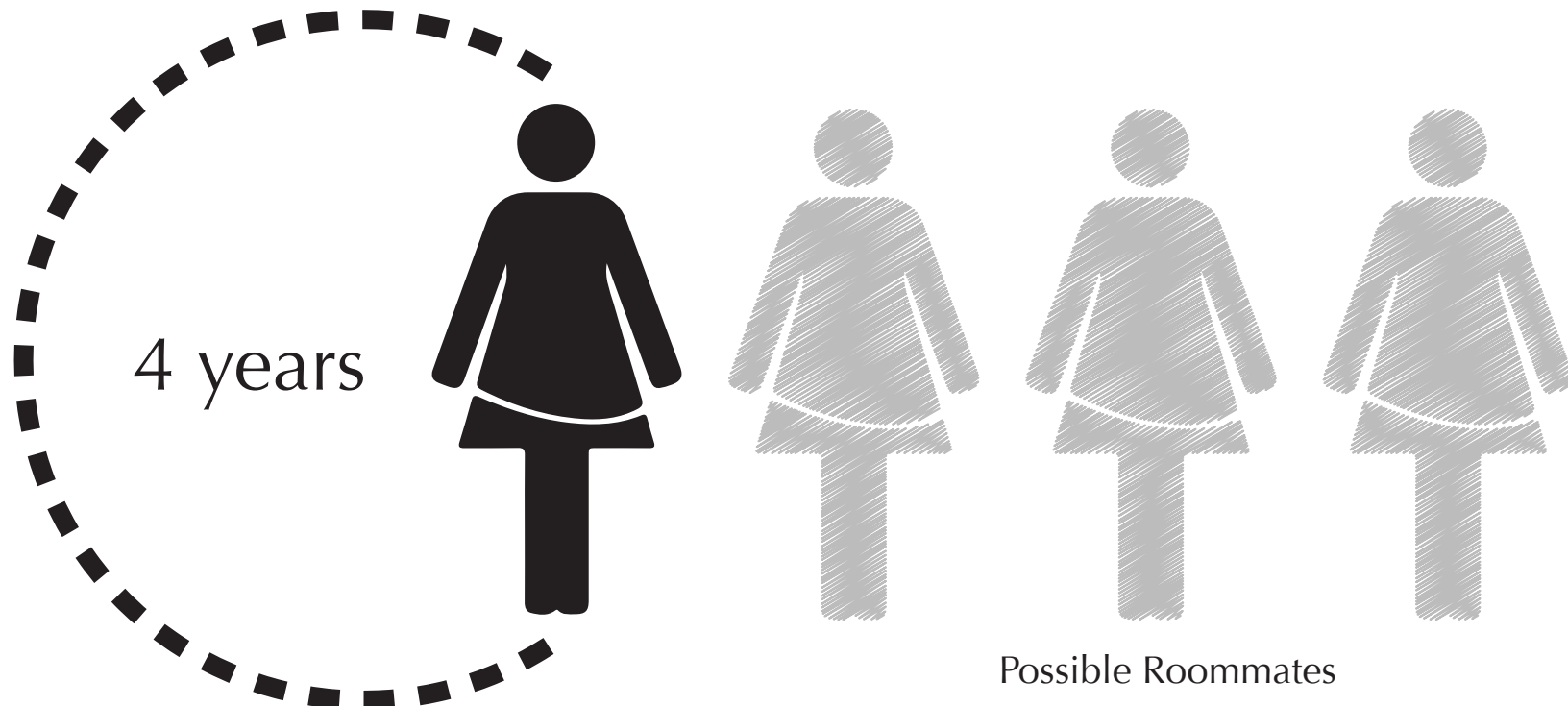
4 Year Residency Requirement

As of 2010 all students are required to live on campus for the four years that they are a full time student at the College of Saint Benedict.

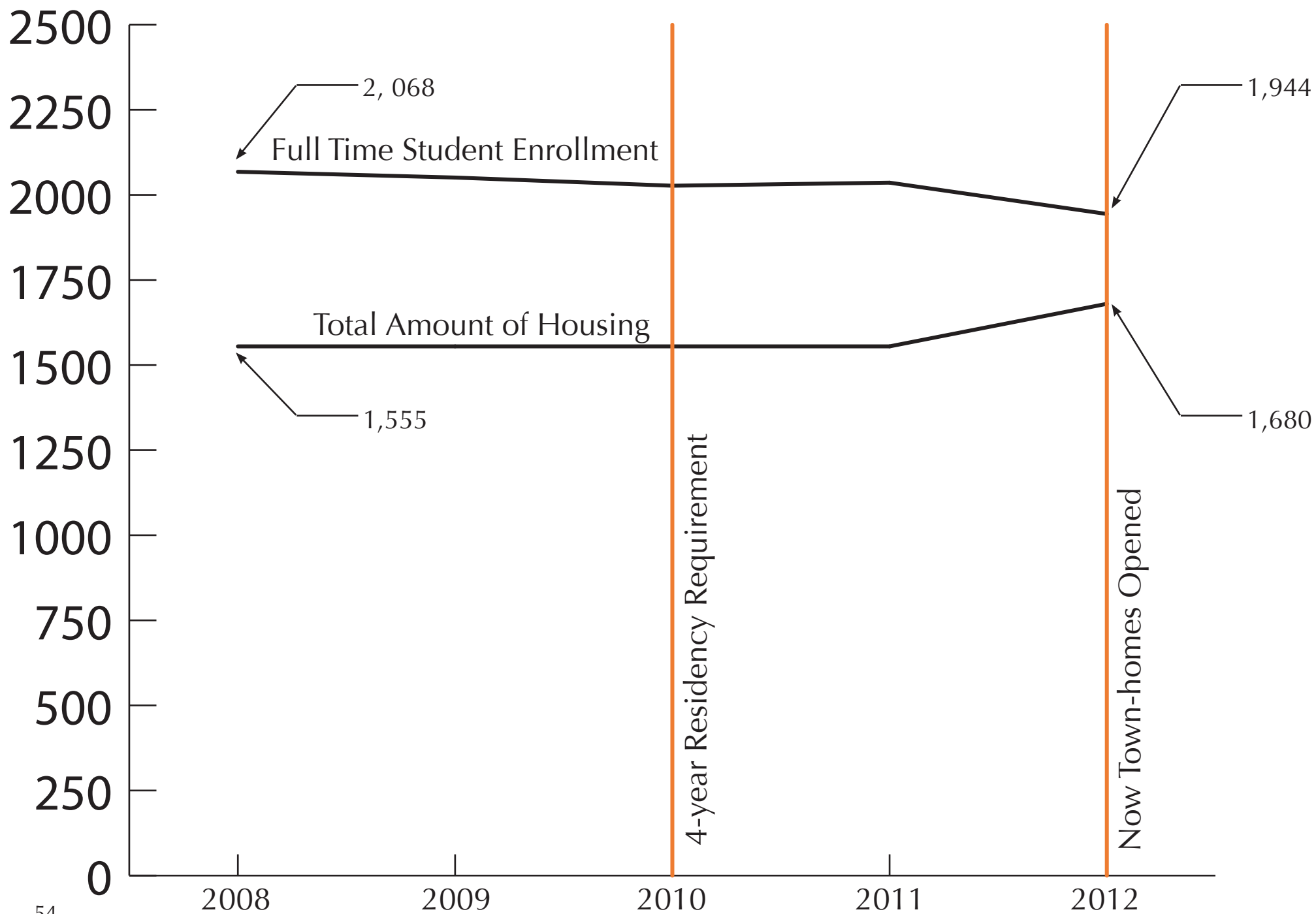
The College believes that this four year residency requirement will promote academic success, social interactions, and diversity.

Student can apply to live off campus if they meet one or more of the following:

- Student who are married or who have dependent children living with them.
- Students who are over the age of 23 or who have attended 8 or more semesters as a full time student.
- Part-time students.
- Students doing internships, clinical or student teaching more that 20 miles away.
- Students with a medical condition that cannot be accommodated on campus.

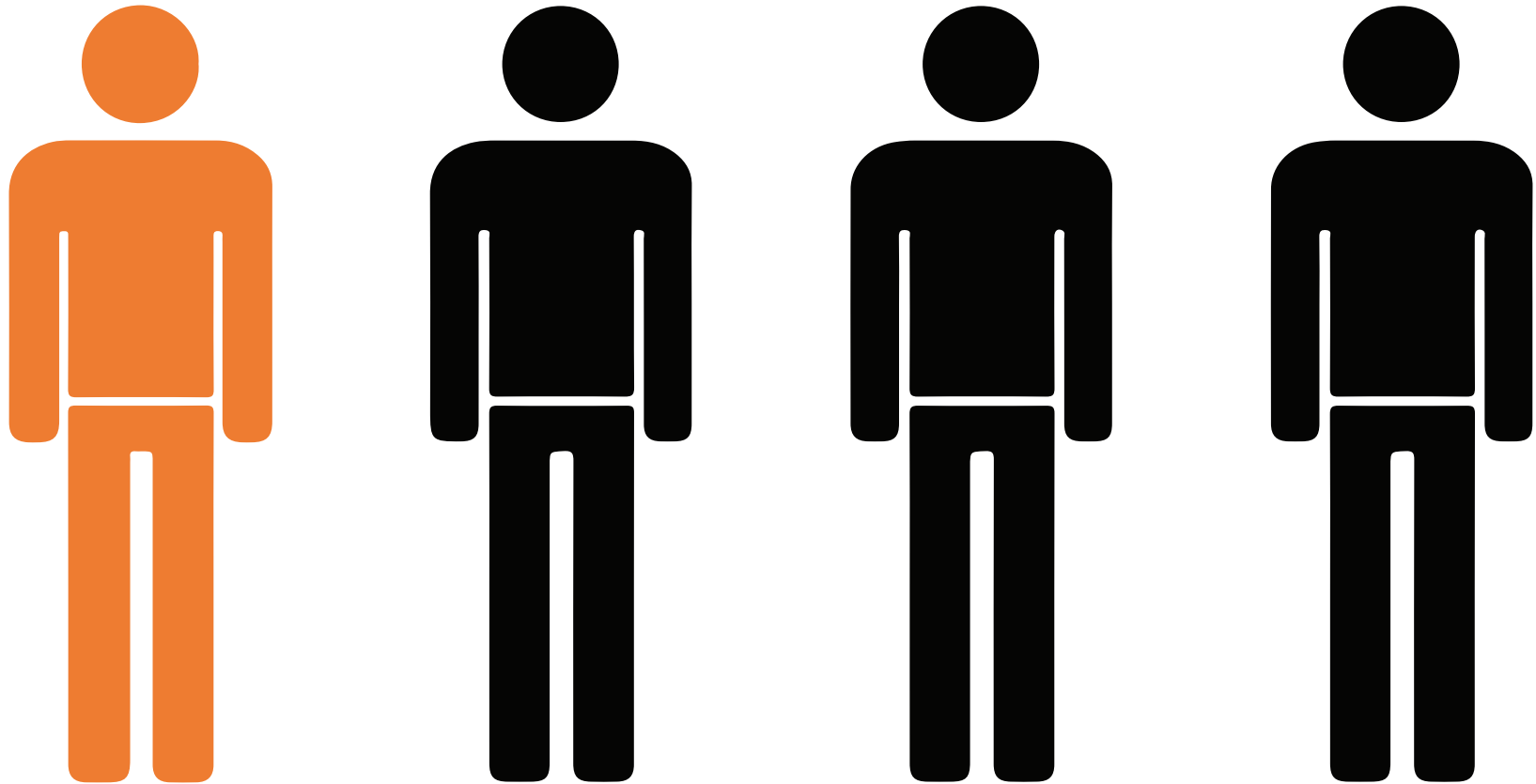


Demographics



Currently the college houses 80% of its students on campus.

2,025 students - 1,680 total housing = 345 student deference



1,658 people or 25% of the population living in St. Joseph are between the ages of 20 and 24

Student Transportation



Two bus stops on campus that go between CSB and SJU

There is a possibility of an additional bus stop on my site

Students also have access to a dial-a-ride service that has a discounted fee for students

A car is available for students to rent for \$8/hour or \$60/day



Permanent Community

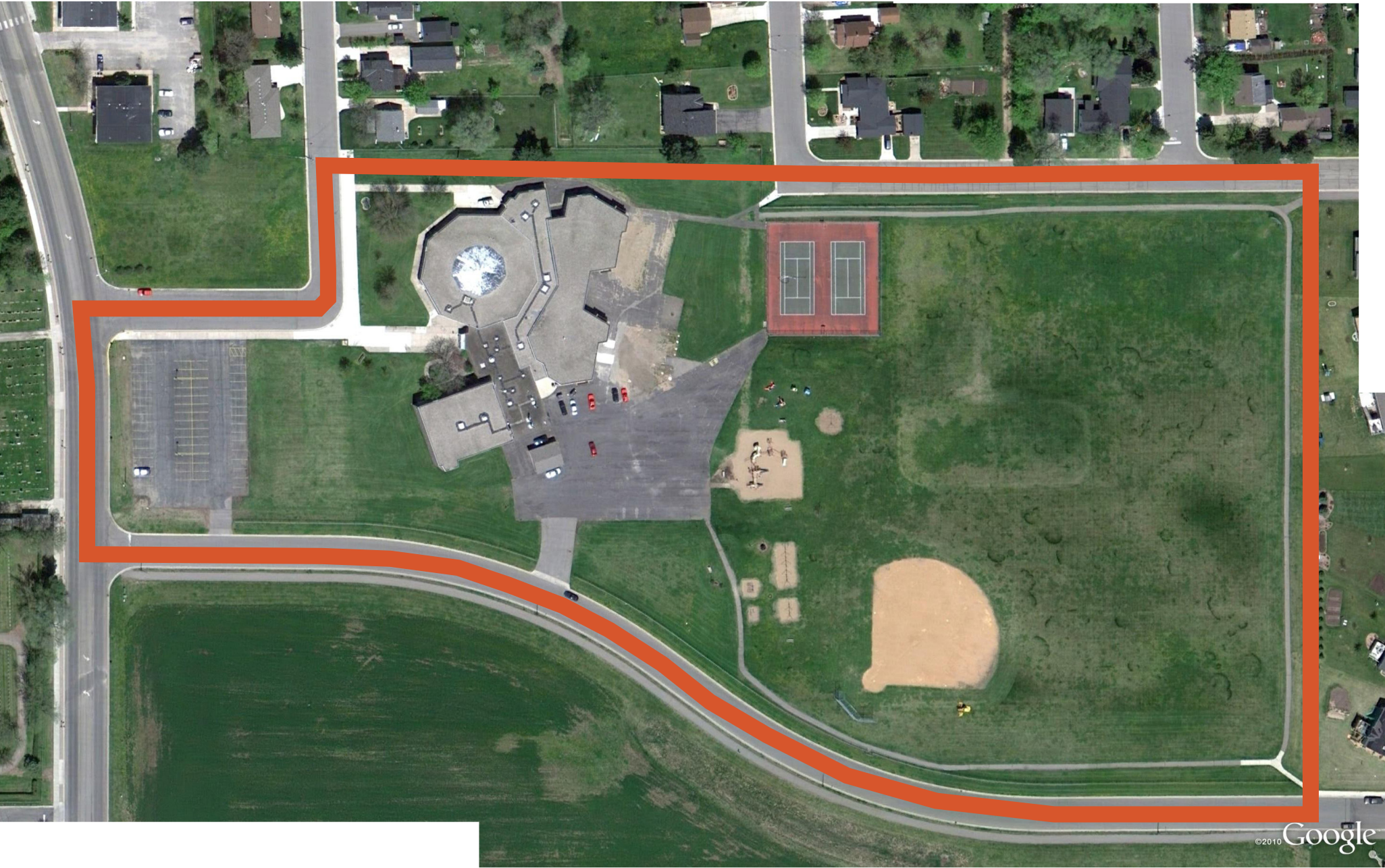


Campus Housing



- ① Brian Hall, Margretta Hall, Lottie & Frank J. Ardolf Jr. Hall
- ② West Apartments: Dominica, Gable, Girgen, Schumacher, Smith, Sohler, Westkaemper
- ③ Regina Hall, Aurora, Hall, Corona Hall
- ④ East Apartments: Luetmer, McDonald, Wirth, Zierden
- ⑤ College Avenue Apartments

Site Specifics



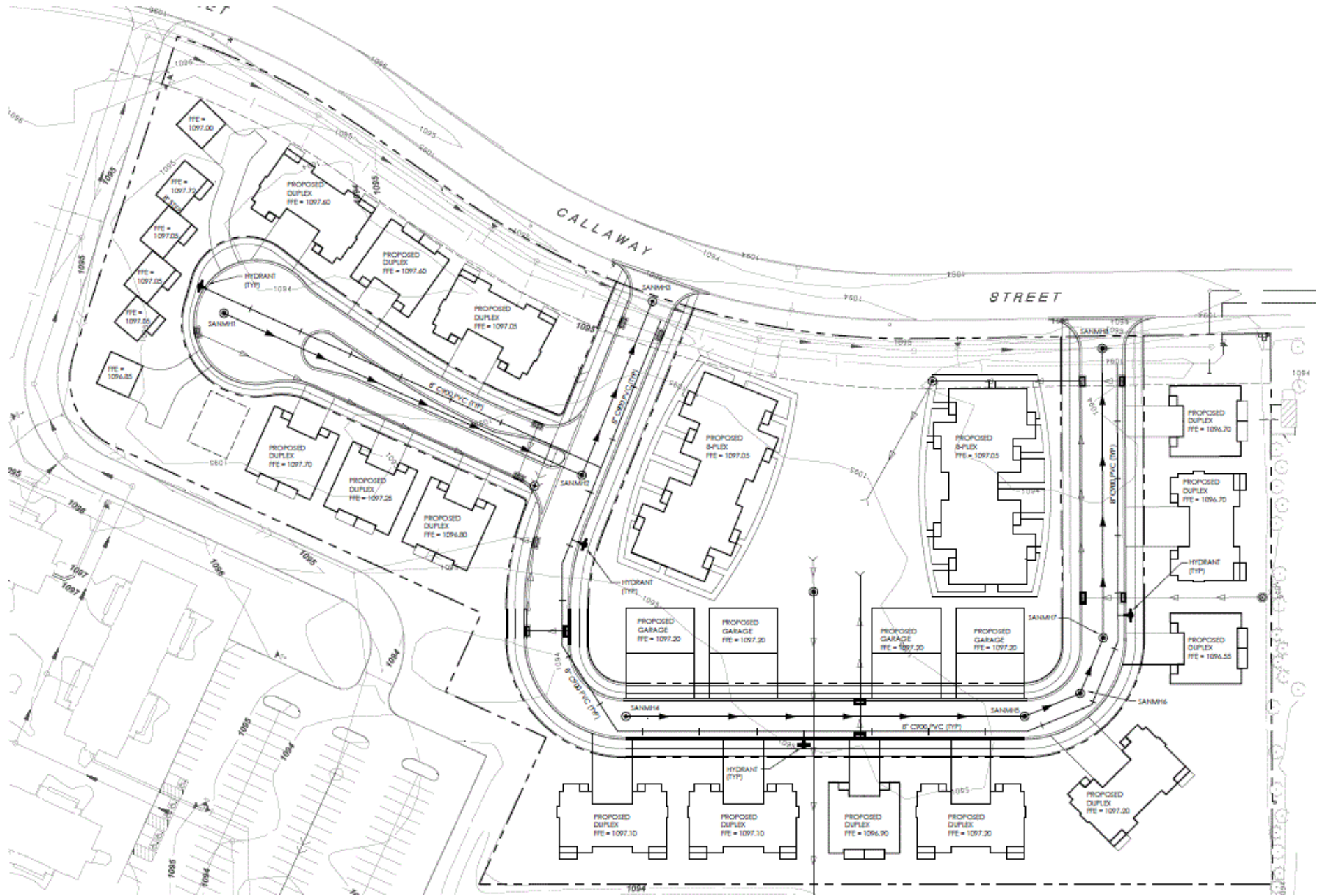
- 16 Acres
- Existing Elementary School
- 65 space parking space
- Tennis courts
- Playground equipment
- Baseball field
- Walking / running trail
- Residential developments to the North and East
- CSB to the West

Recent Developments



Centennial Commons Town-homes

- Opened this year
- 124 beds
- 31 four-bedroom two-story units with two full baths, laundry facilities, full kitchen and dining, living room, storage space, and shared front porches



Millstream Village
 Will be a senior living community with assisted living options

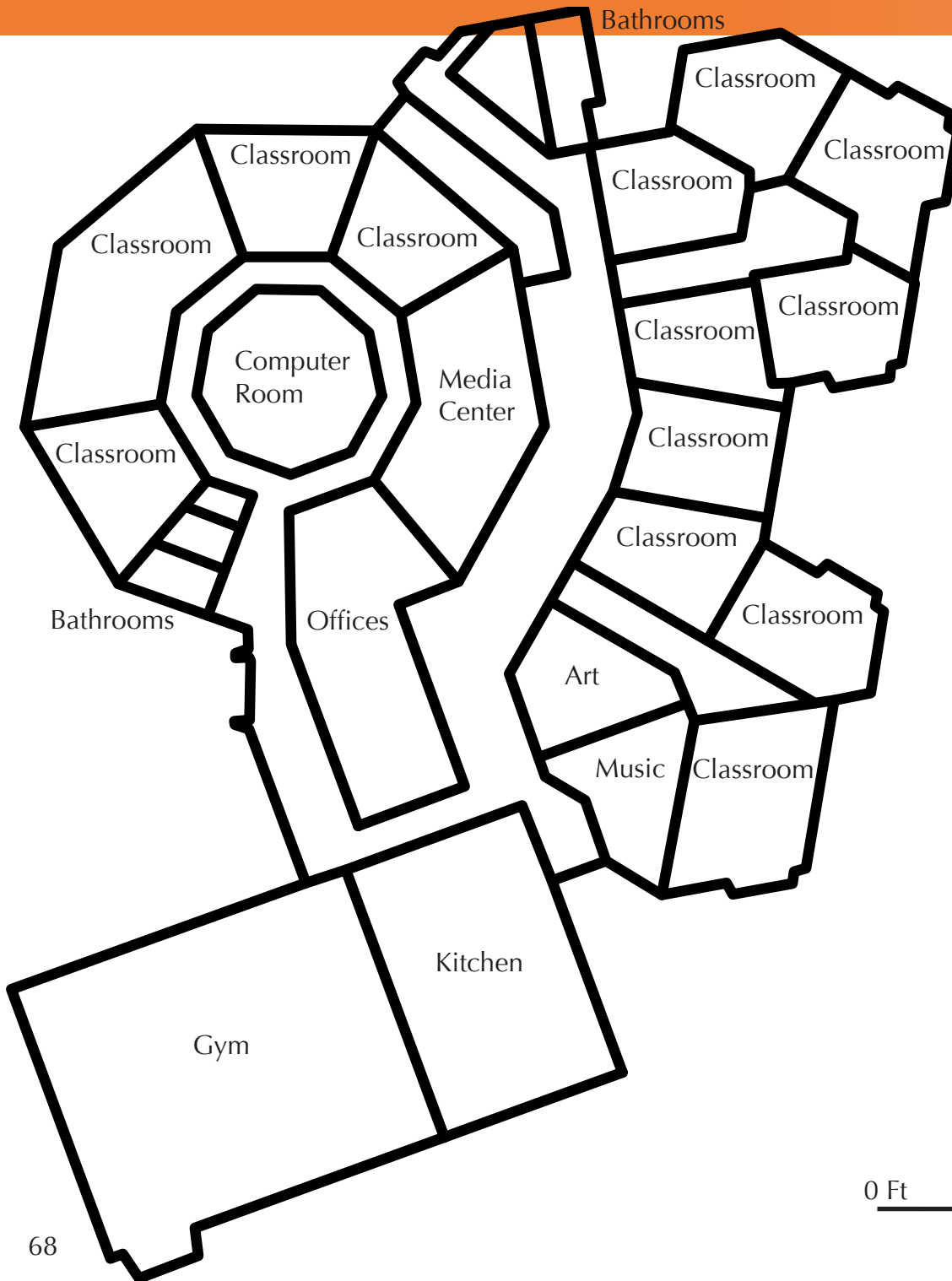








Conceptual/Final Design Work



Opened in 1967

New school was opened in 2010

Two businesses are using the building
-An after school program
-A daycare with an emphasis on music

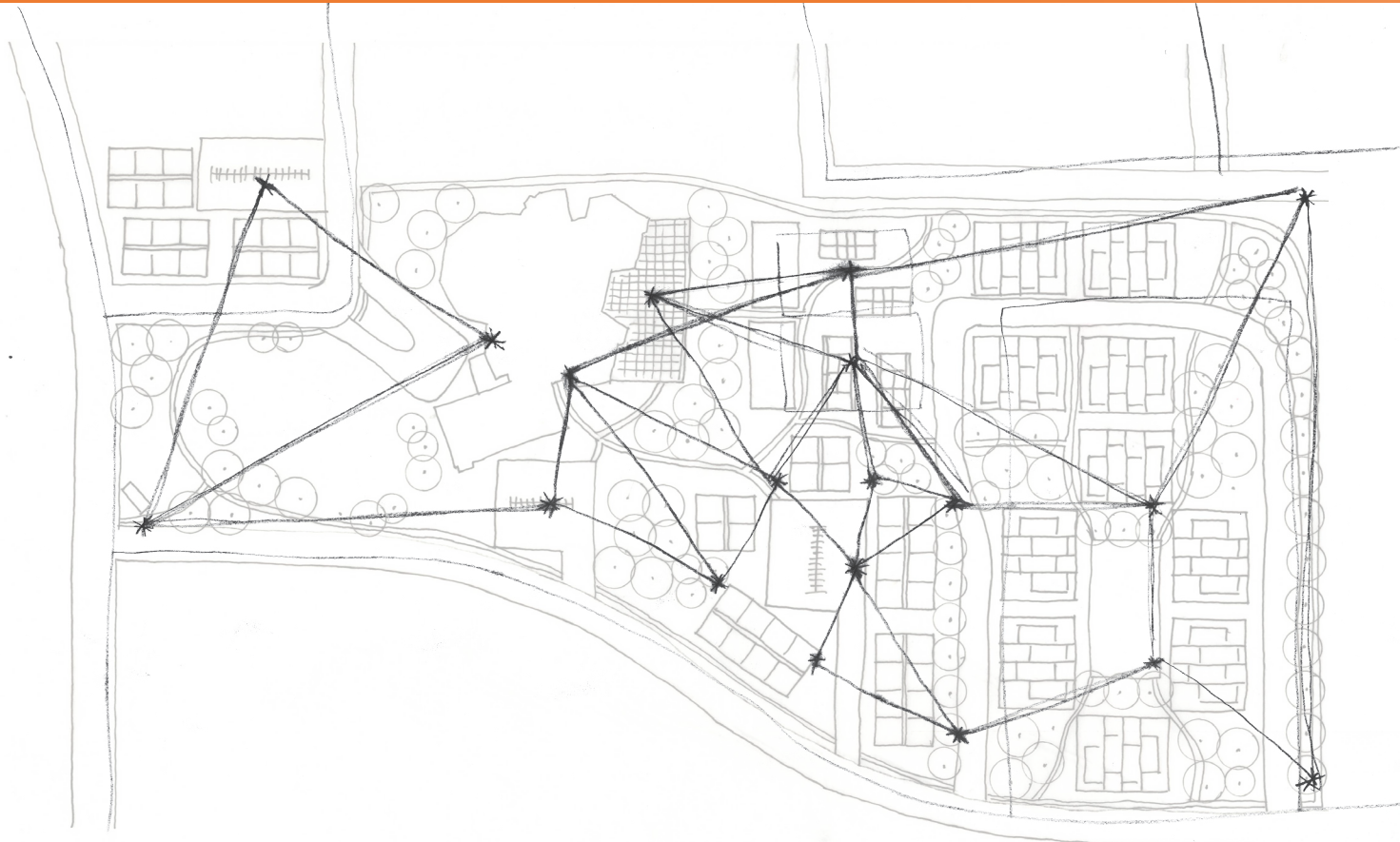
0 Ft

100 Ft

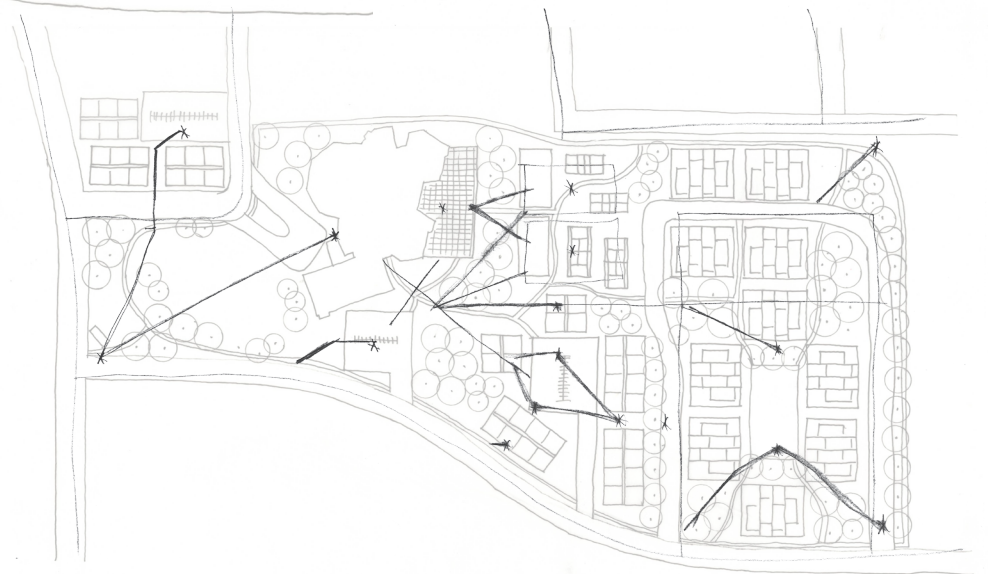




Development Sketches



Sidewalk placement



School

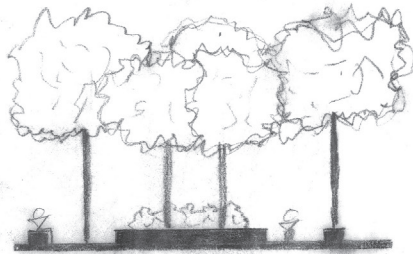
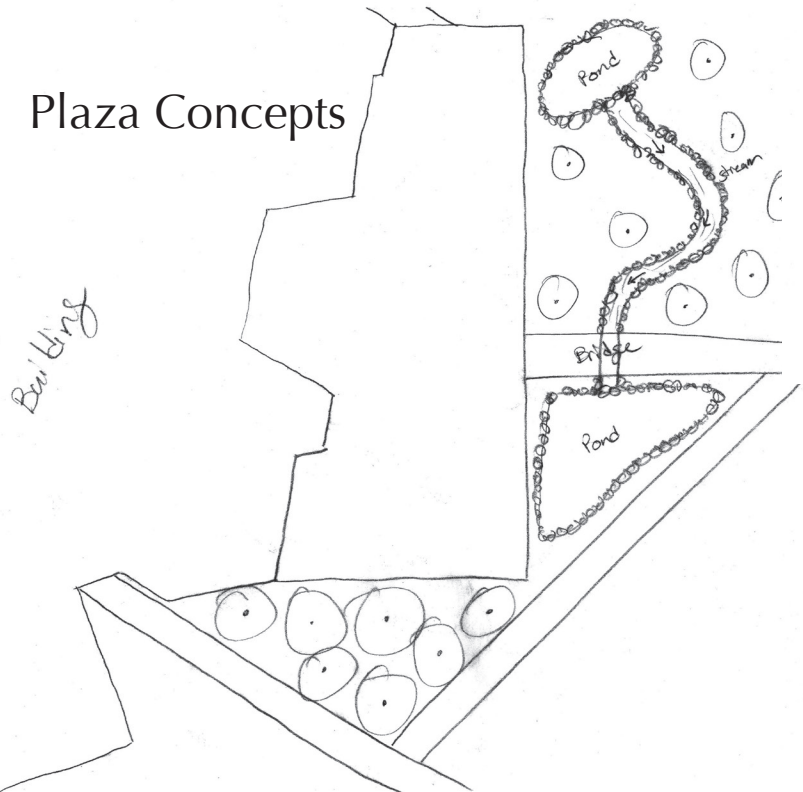
Start point



Side walk

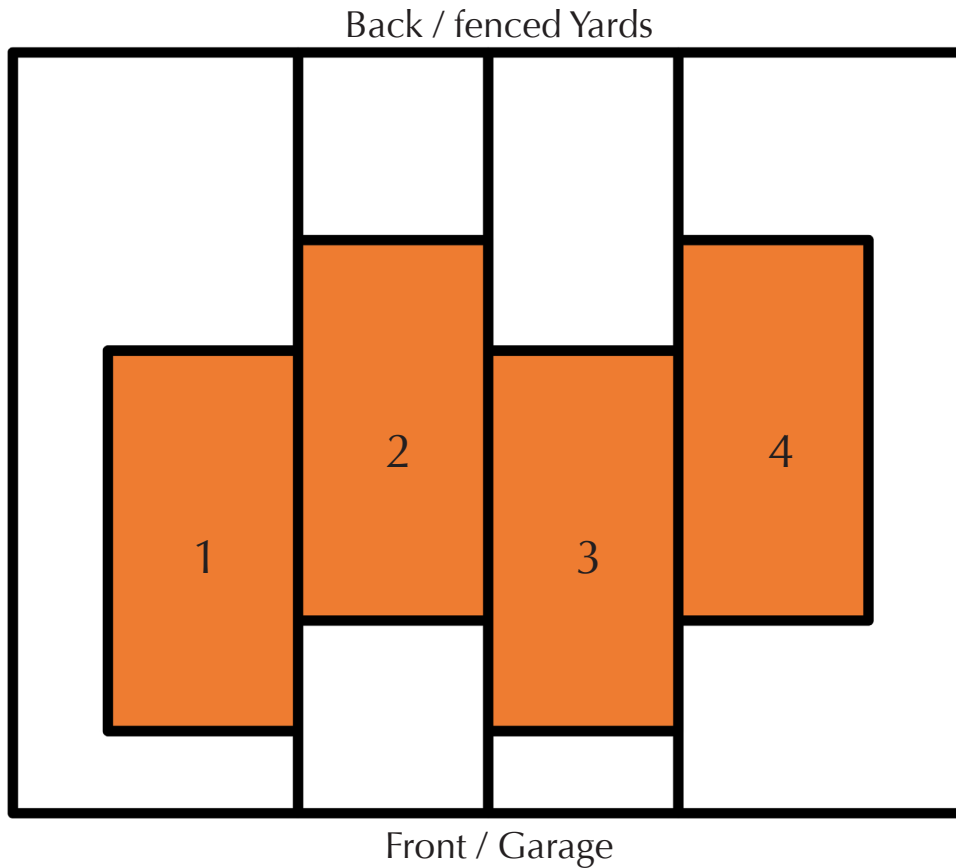
Plaza Concepts

Building



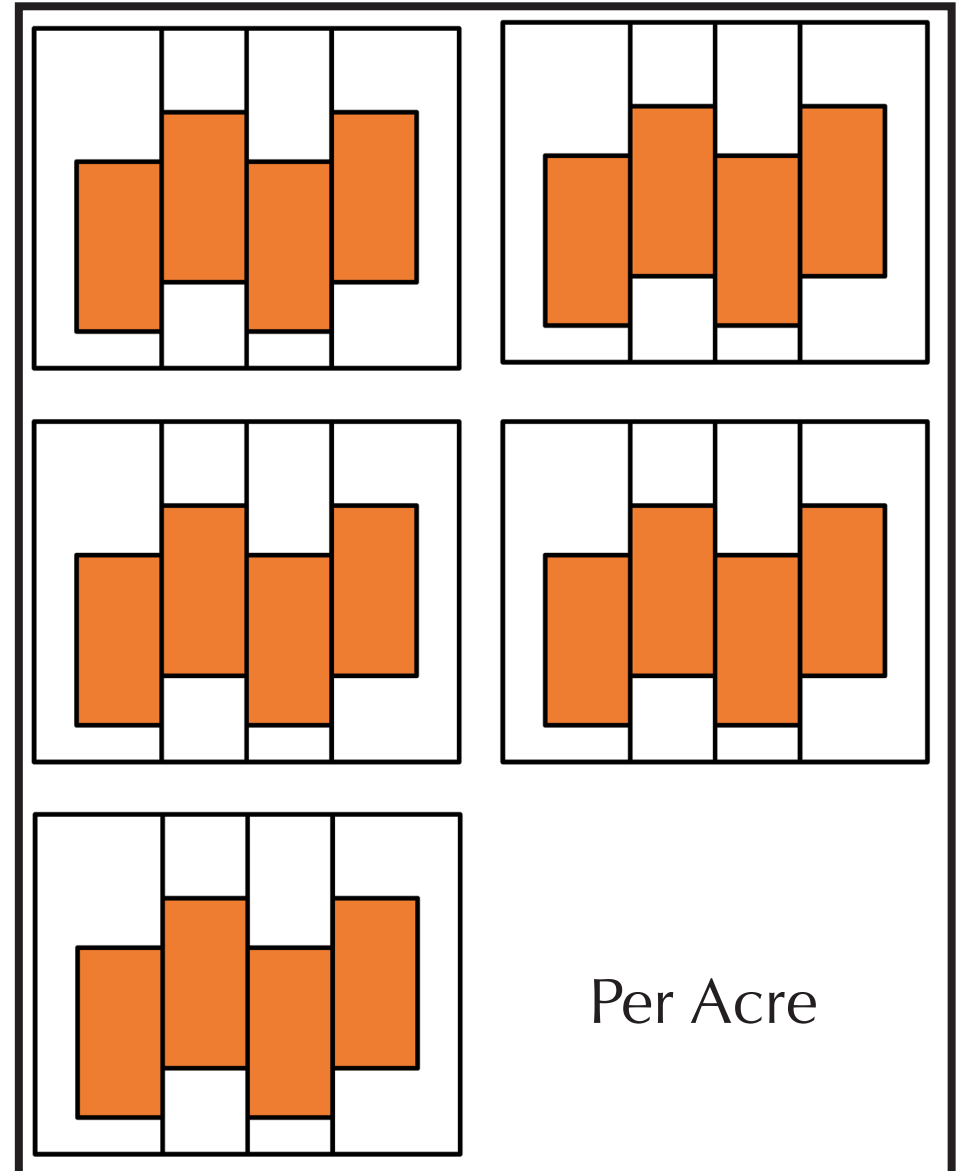
Concept Sections

Student Housing



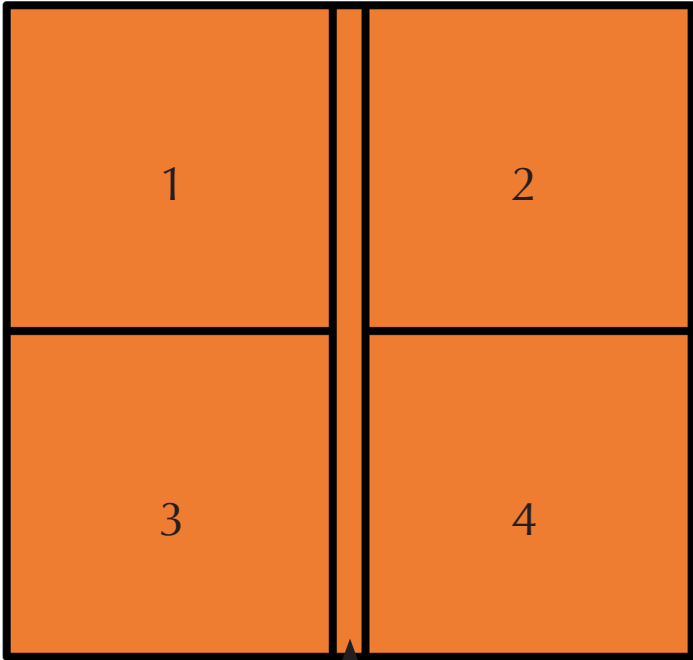
Town-house Units

Allows for 50 students per acre



3 stories tall with the garage being on the first floor and the top two floors being living spaces

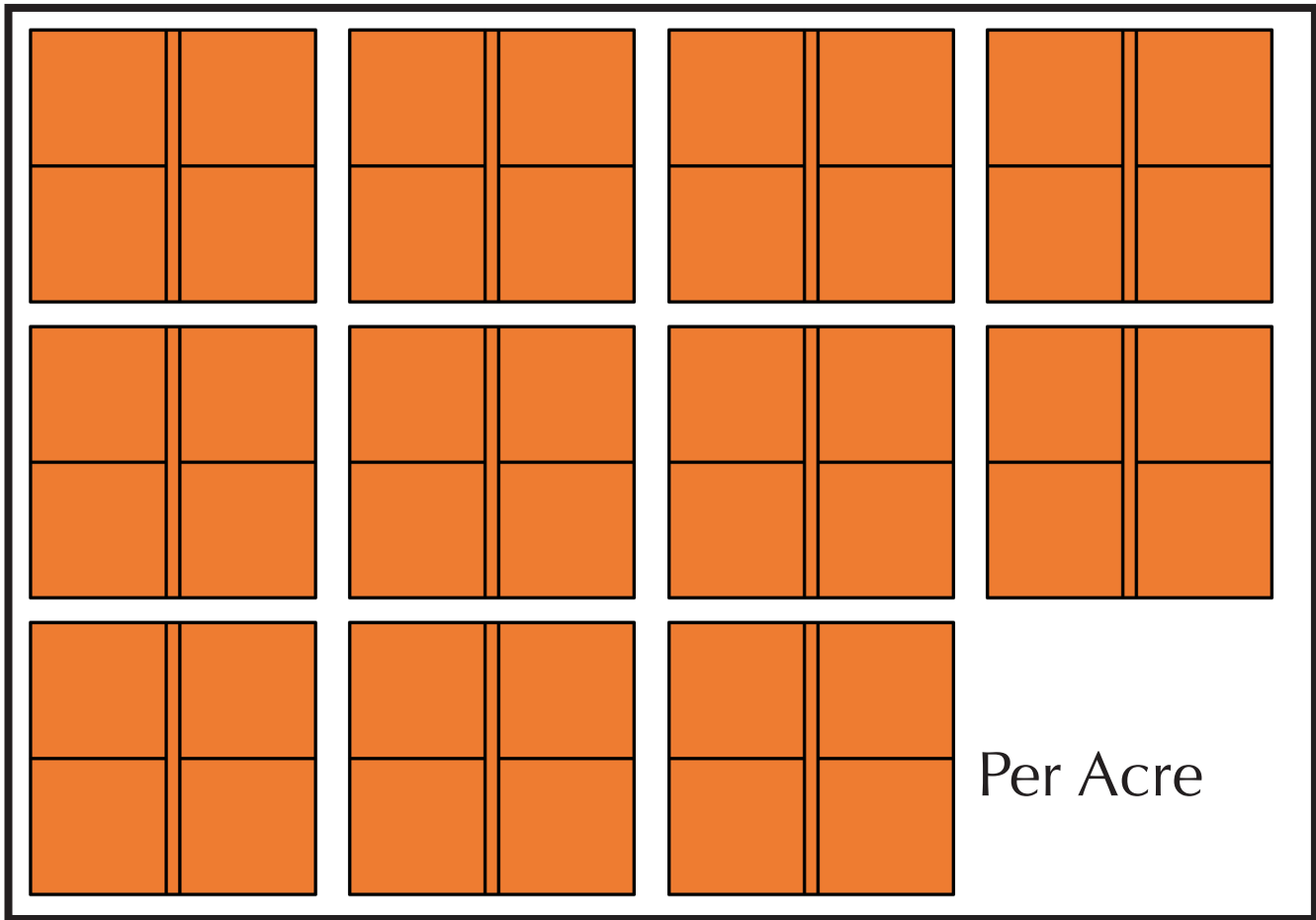
Apartment Units



Hallway and Entrance

3 stories of living space

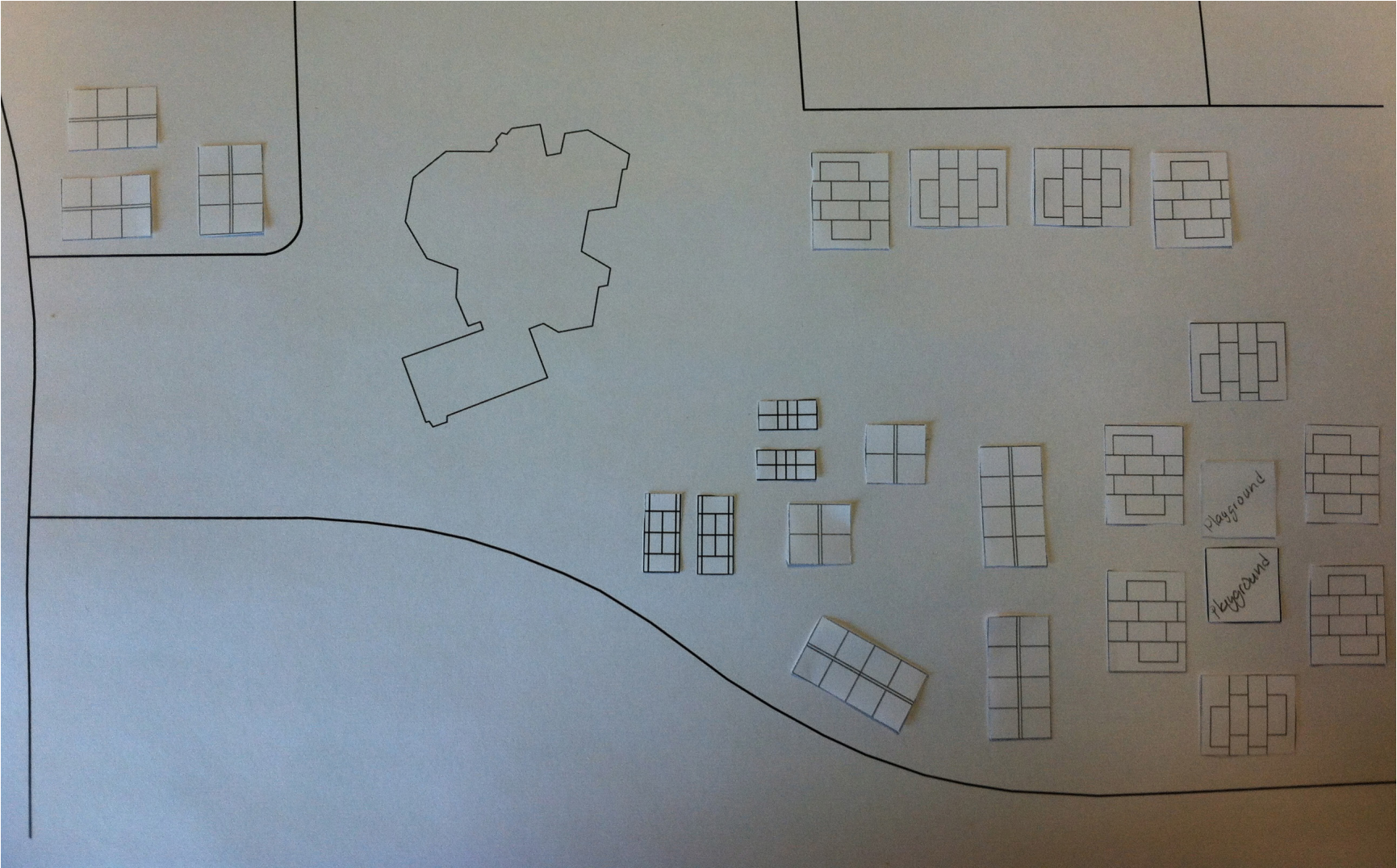
Allows for 330 students per acre



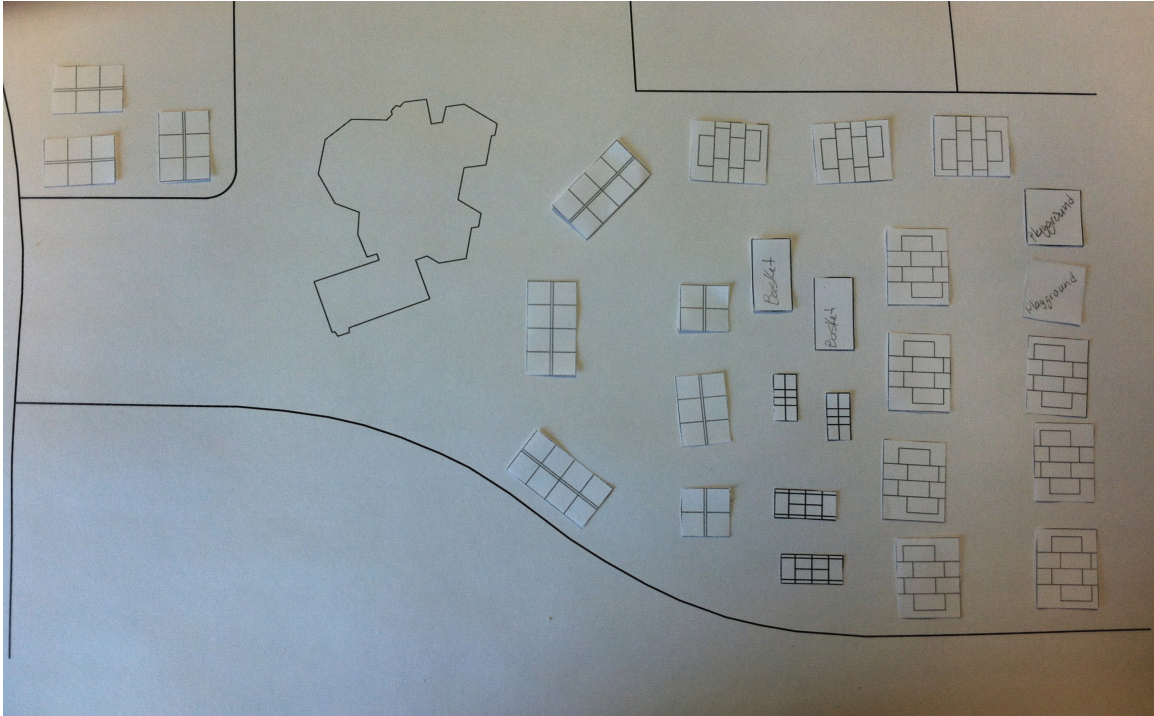
Per Acre

Site Layout

Option 1



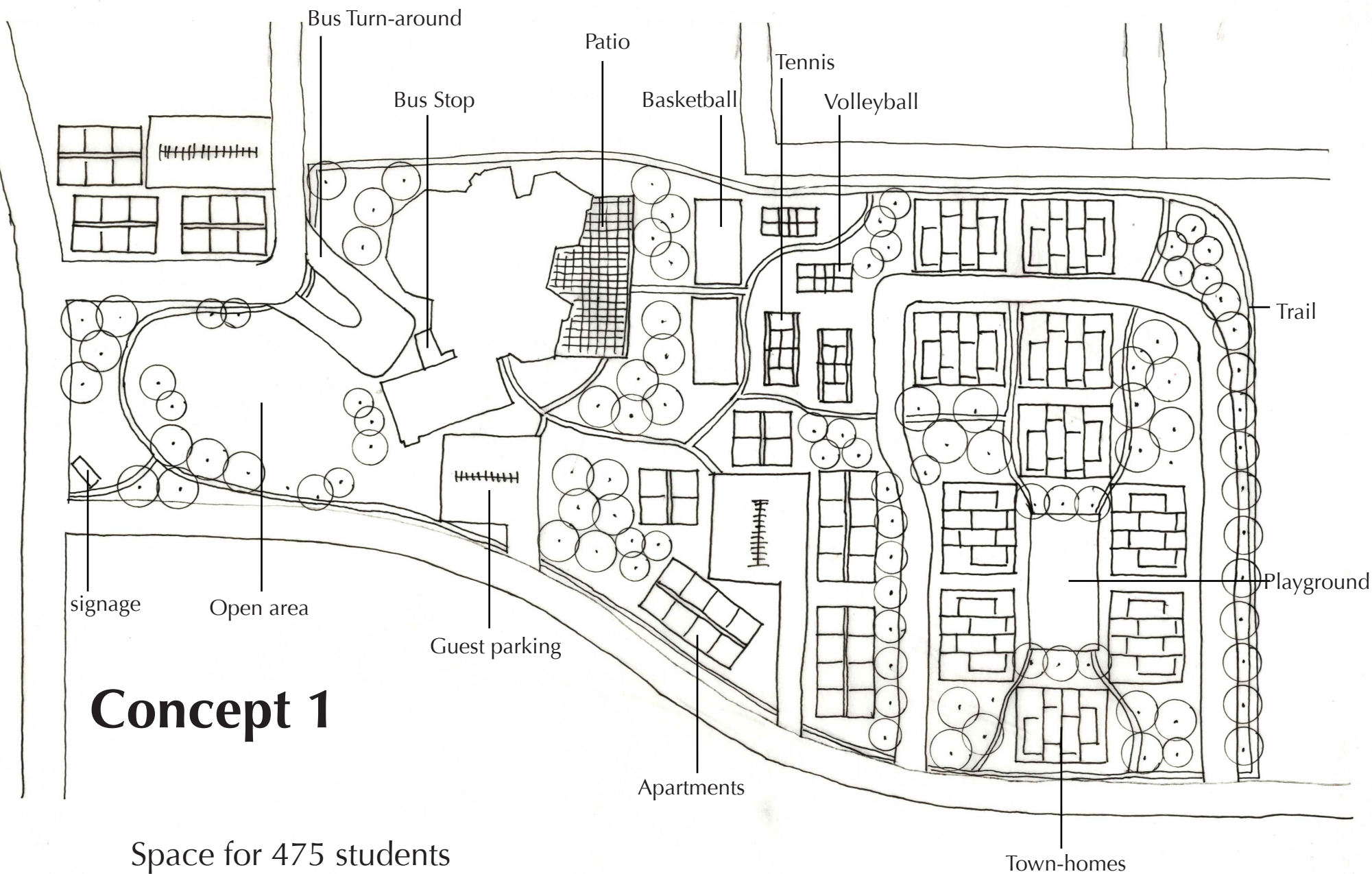
Option 2



Option 3

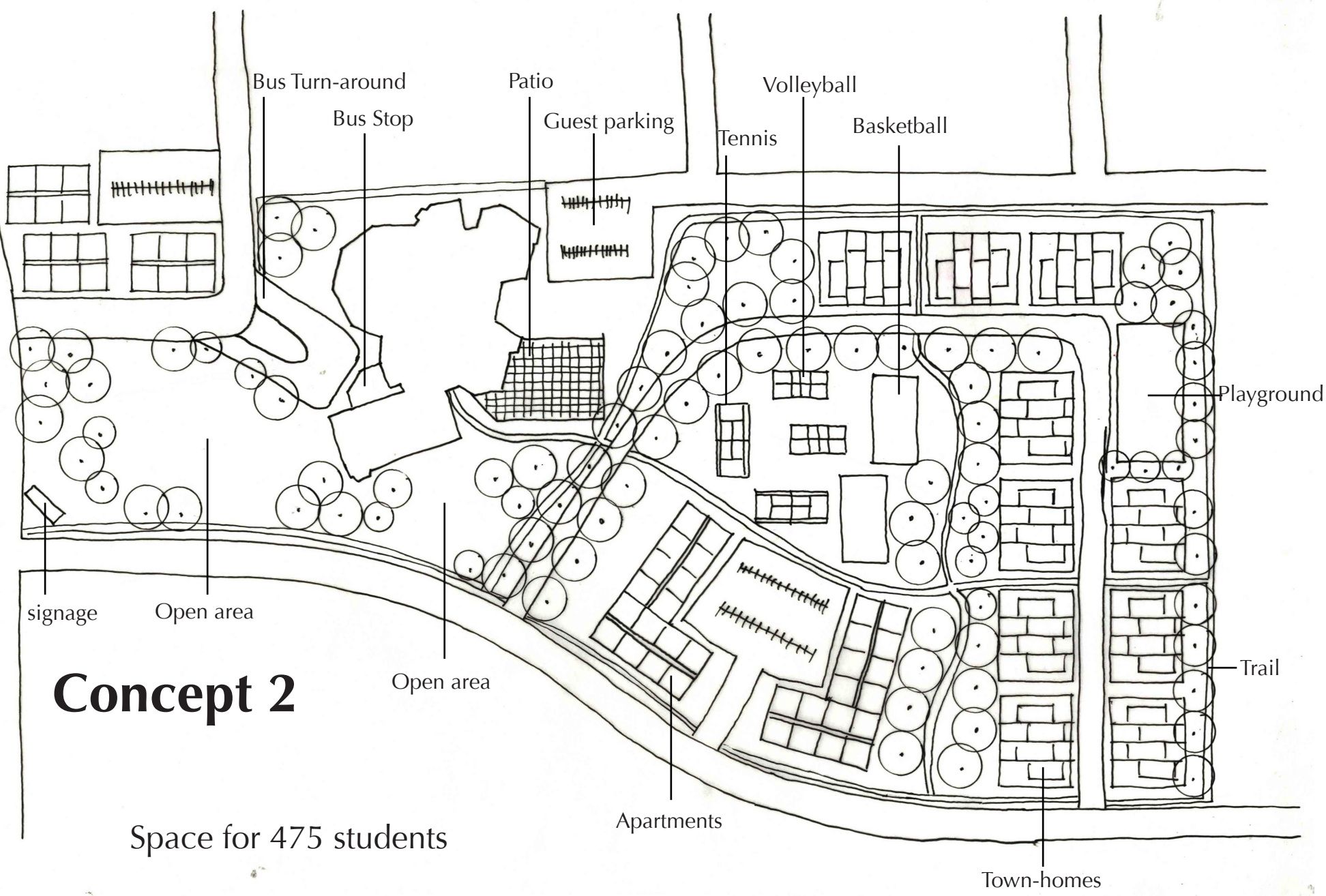


Concept Plans



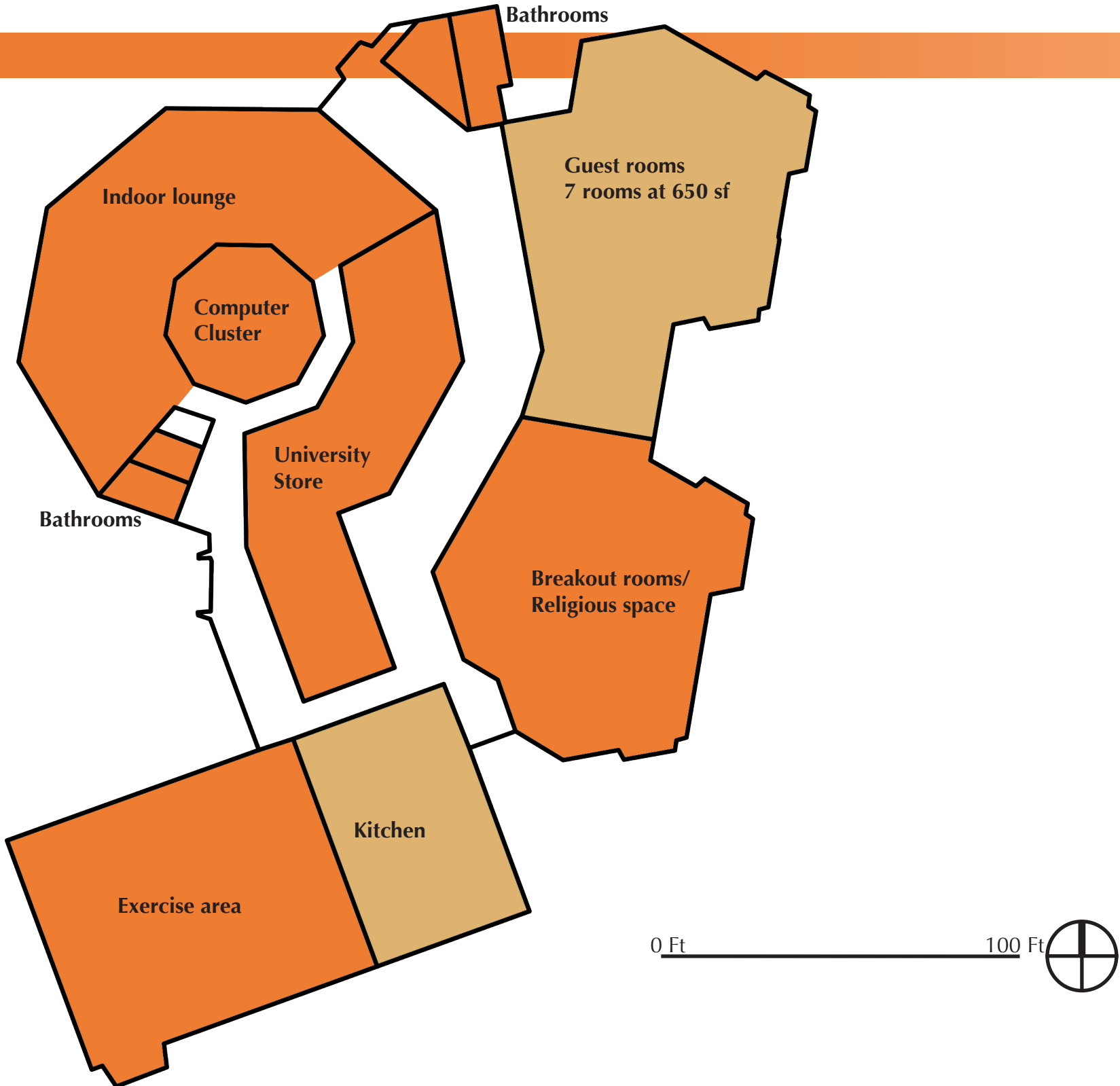
Concept 1

Space for 475 students



Concept 2

Space for 475 students





Master Plan



Volleyball Court

Tennis Court

Basketball Court



E. Baker Street

Running / Walking Trail

Main Pathway

The Parkland

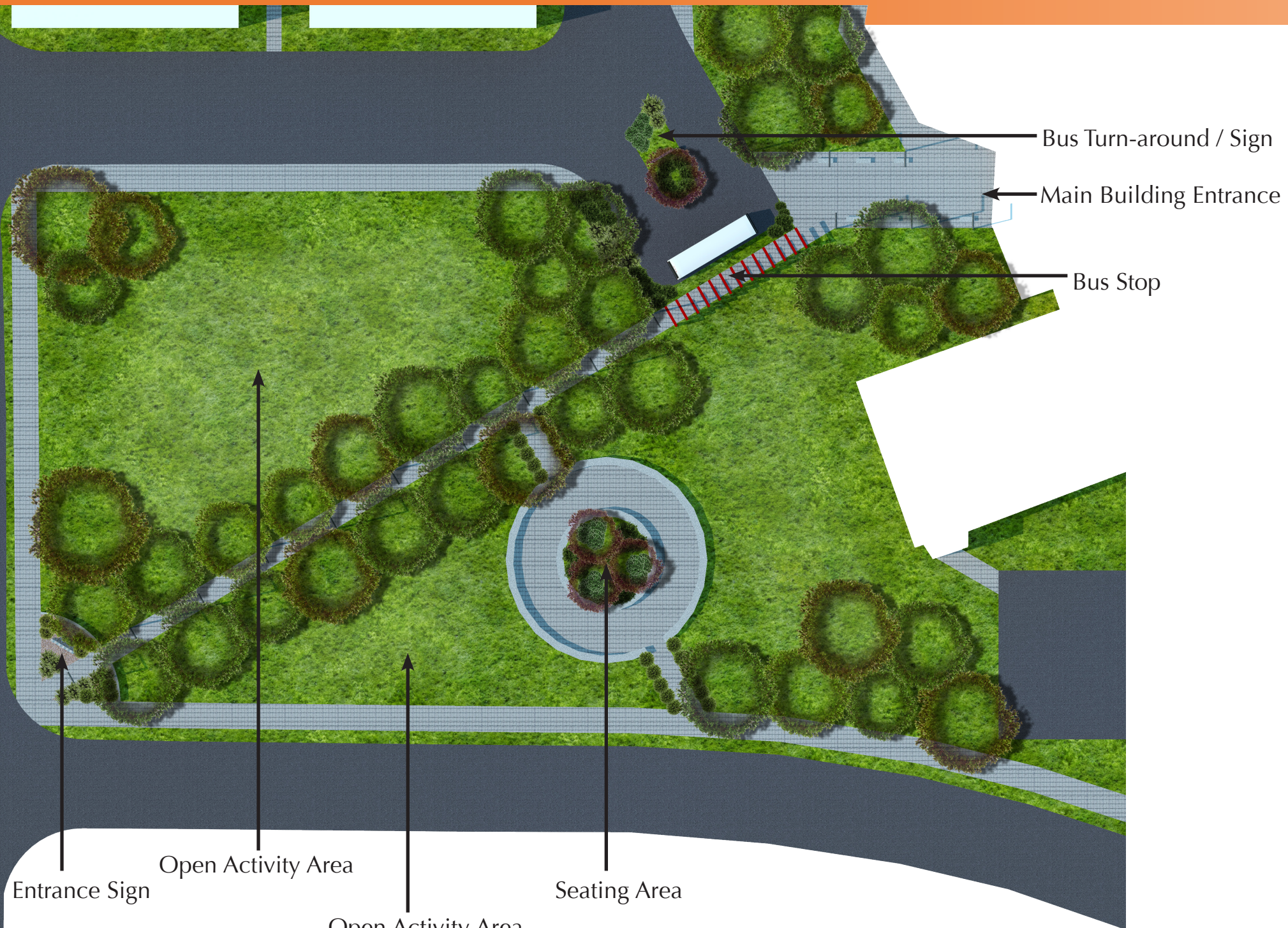
Forested Play Area

Playground

Callaway Street

The use of brick and concrete ties this new community back to both The College of Saint Benedict and Saint Johns University. Straight line paths that get students from point A to point B as well as a mixture of formal and natural spaces give the community a university feel. Lined trees along paths like in detail area A give the community a formal feel and clustered trees tie the community to the rich forests of the surrounding area.

The Promenade



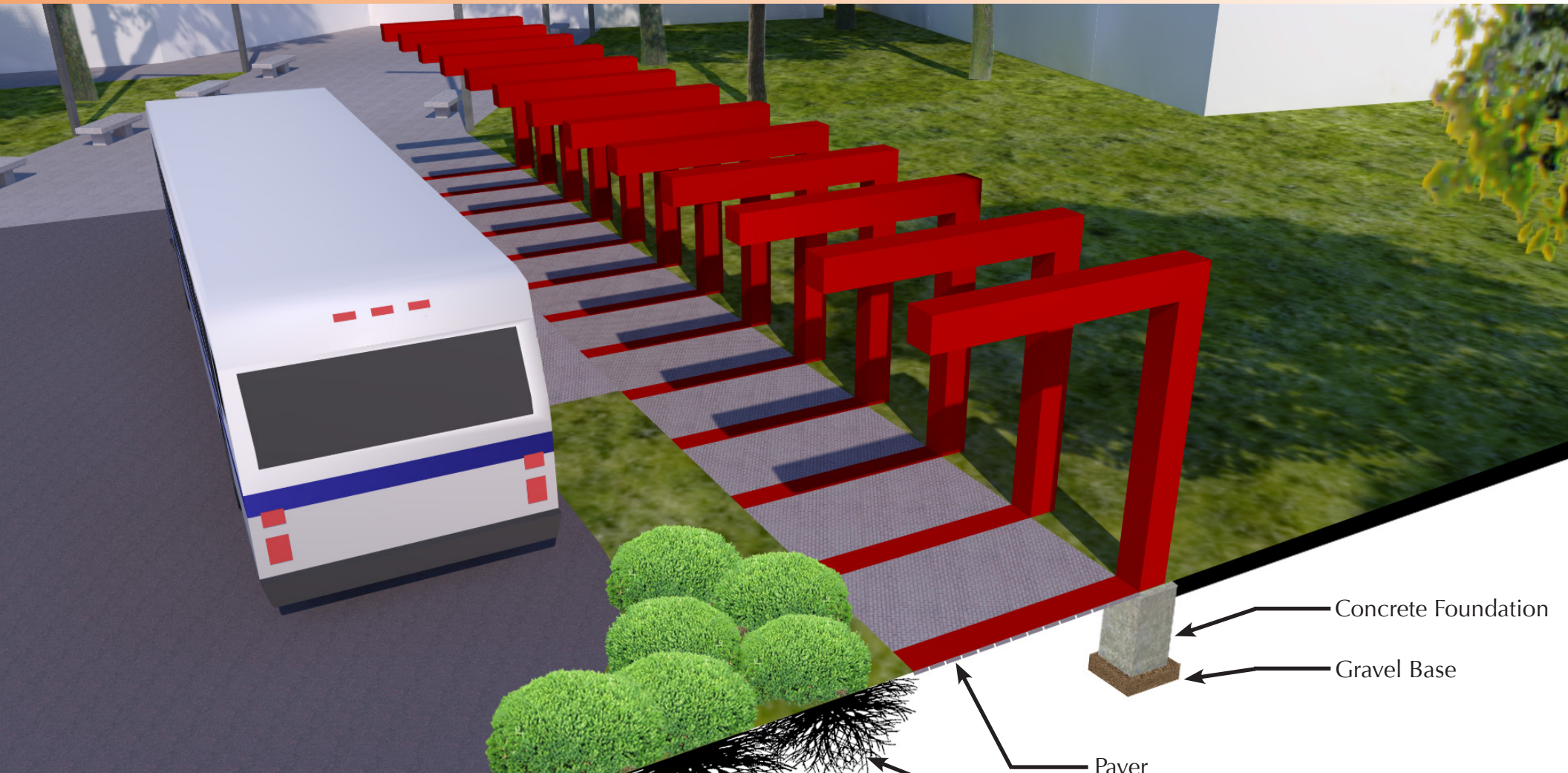


Perspective looking East

The sidewalk that cuts the space in half provides a formal entrance to the site from the existing university. The promenade area contains large spaces for students to play games like ultimate frisbee and other games. A formal seating area allows students to study or just have a conversation with friends. The new bus stop is located close to the renovated school building for easy access.



Perspective looking West highlighting the bus stop



Perspective section of the bus stop

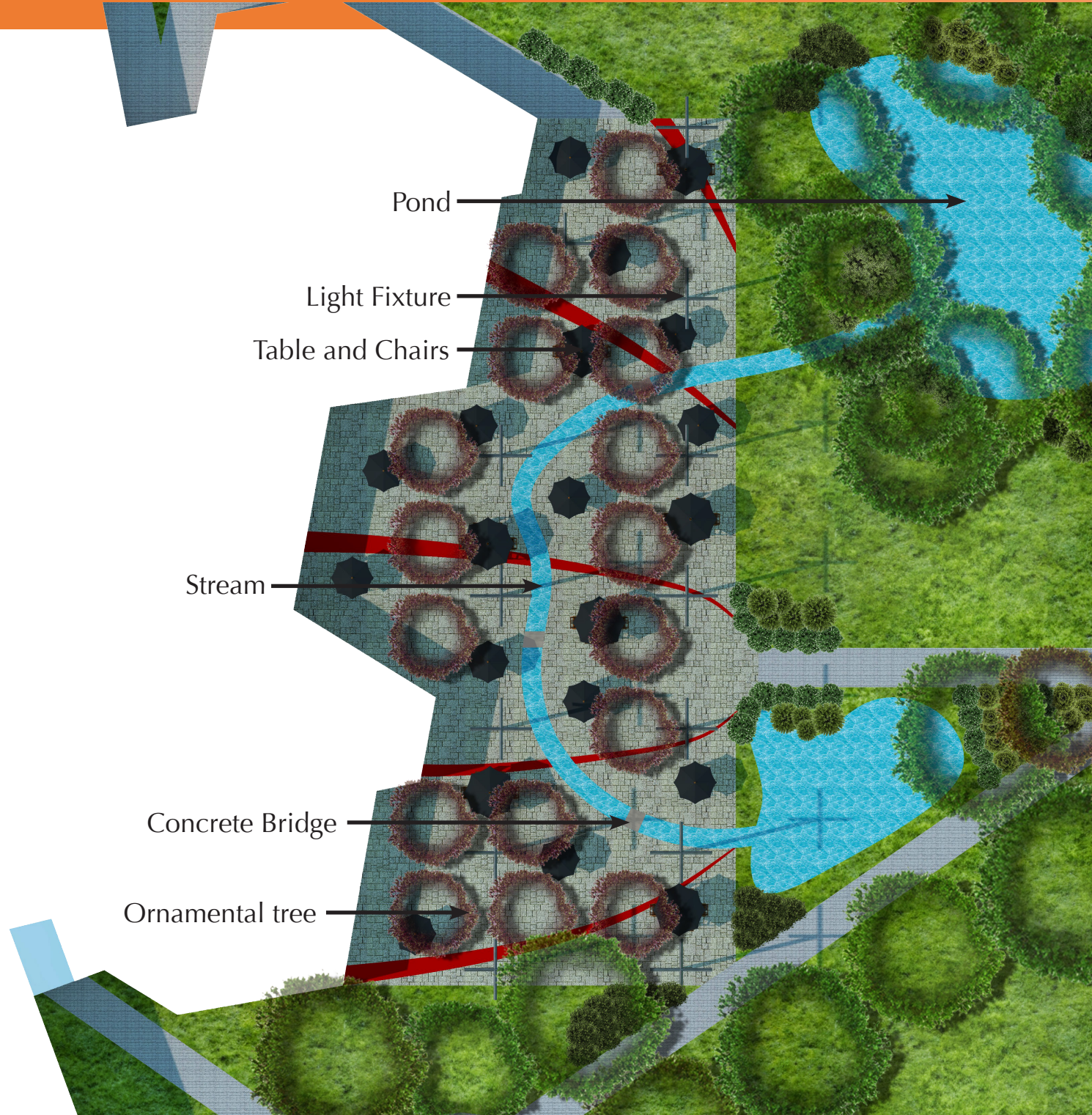
Concrete Foundation

Gravel Base

Paver

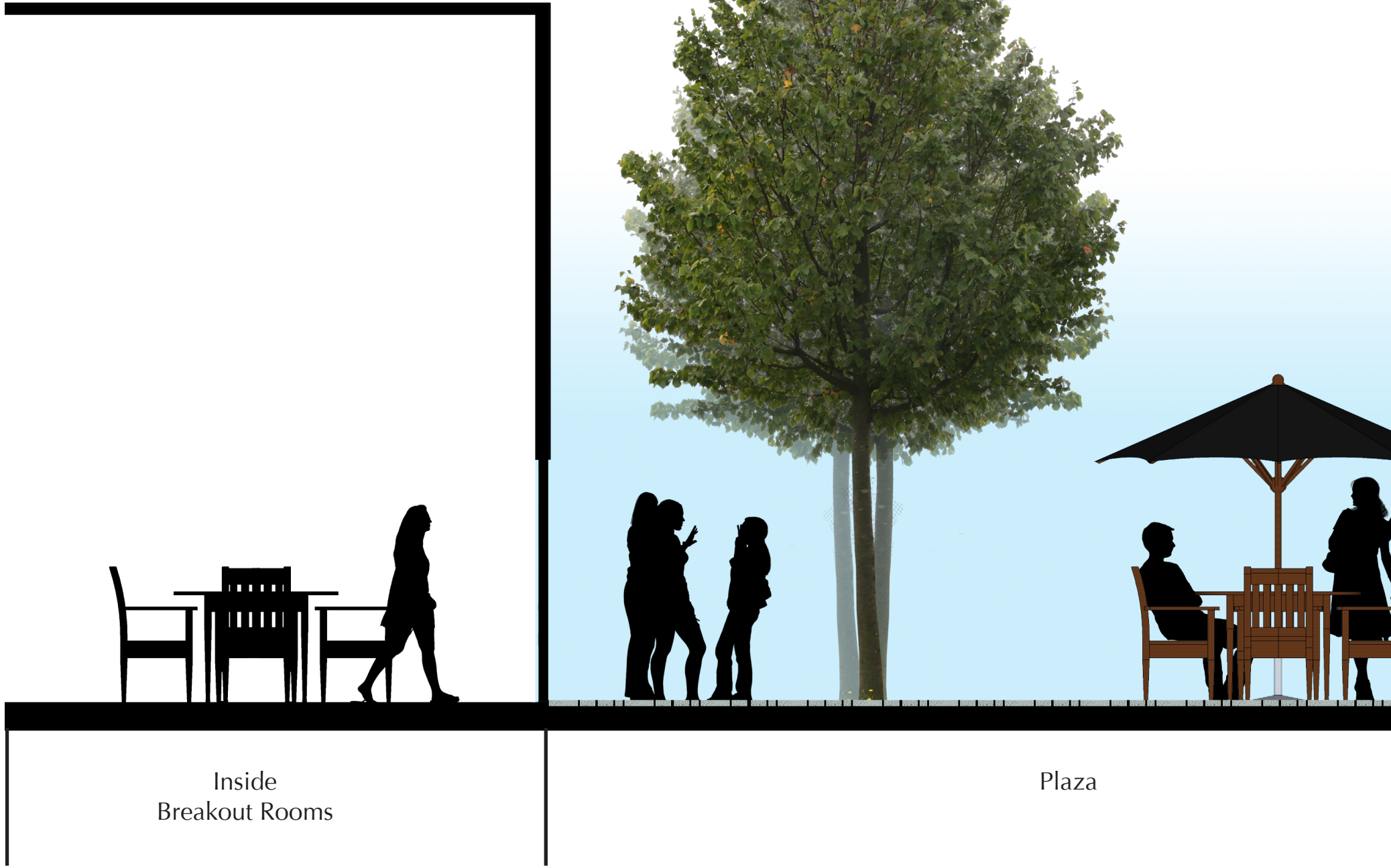
Shrub Roots

The Plaza



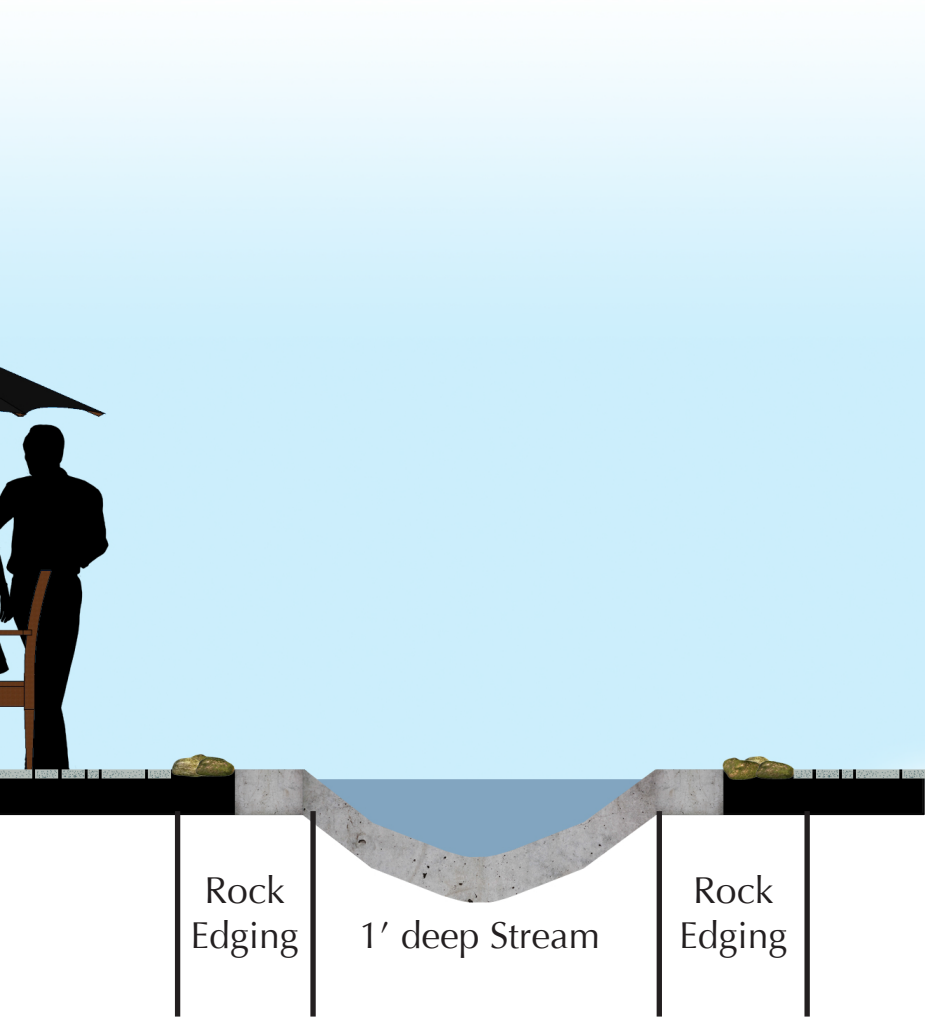


Section showing the transition
from the inside to the outside



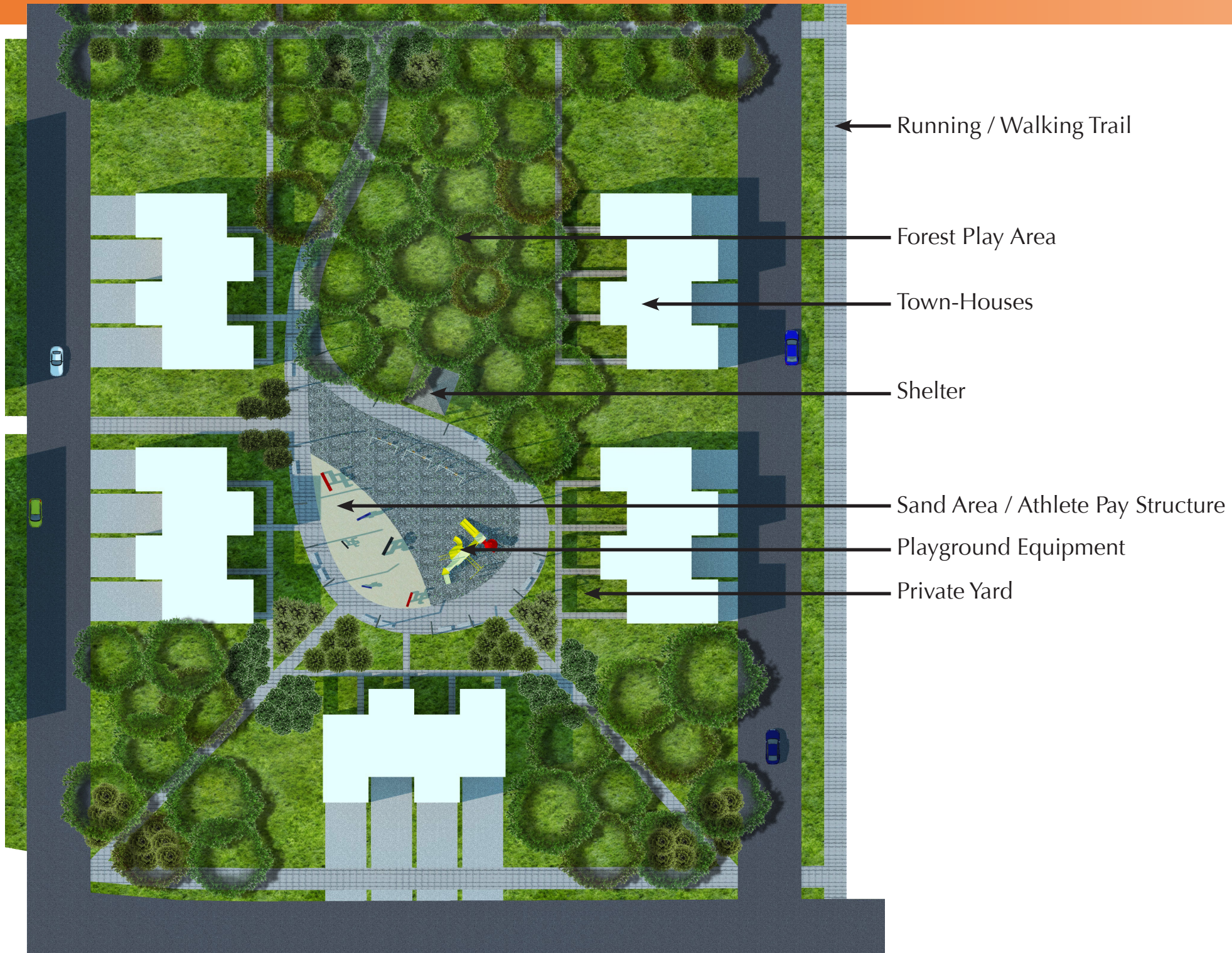
Inside
Breakout Rooms

Plaza



The Plaza has tables and chairs for students to sit and study or spend time with family or friends. The water feature that goes through the plaza breaks up the space making it feel smaller. Water is also a very prominent element in the catholic religion. Allowing people to interact with the water will bring them deeper in their faith and provide a soothing affect. The tree arrangement reflects spaces that can be found on the University of Saint John's campus.

The Parkland

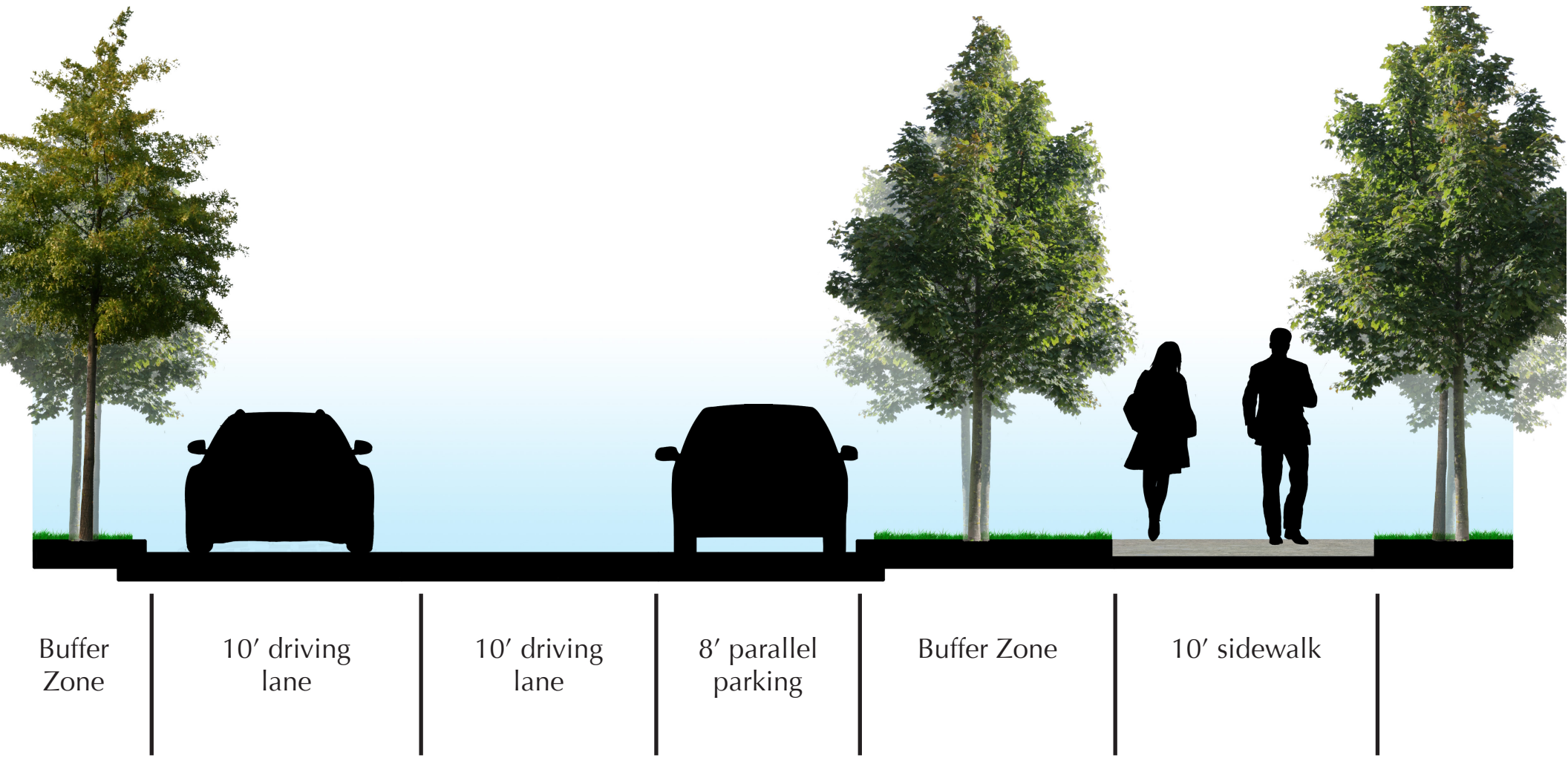




Perspective looking South

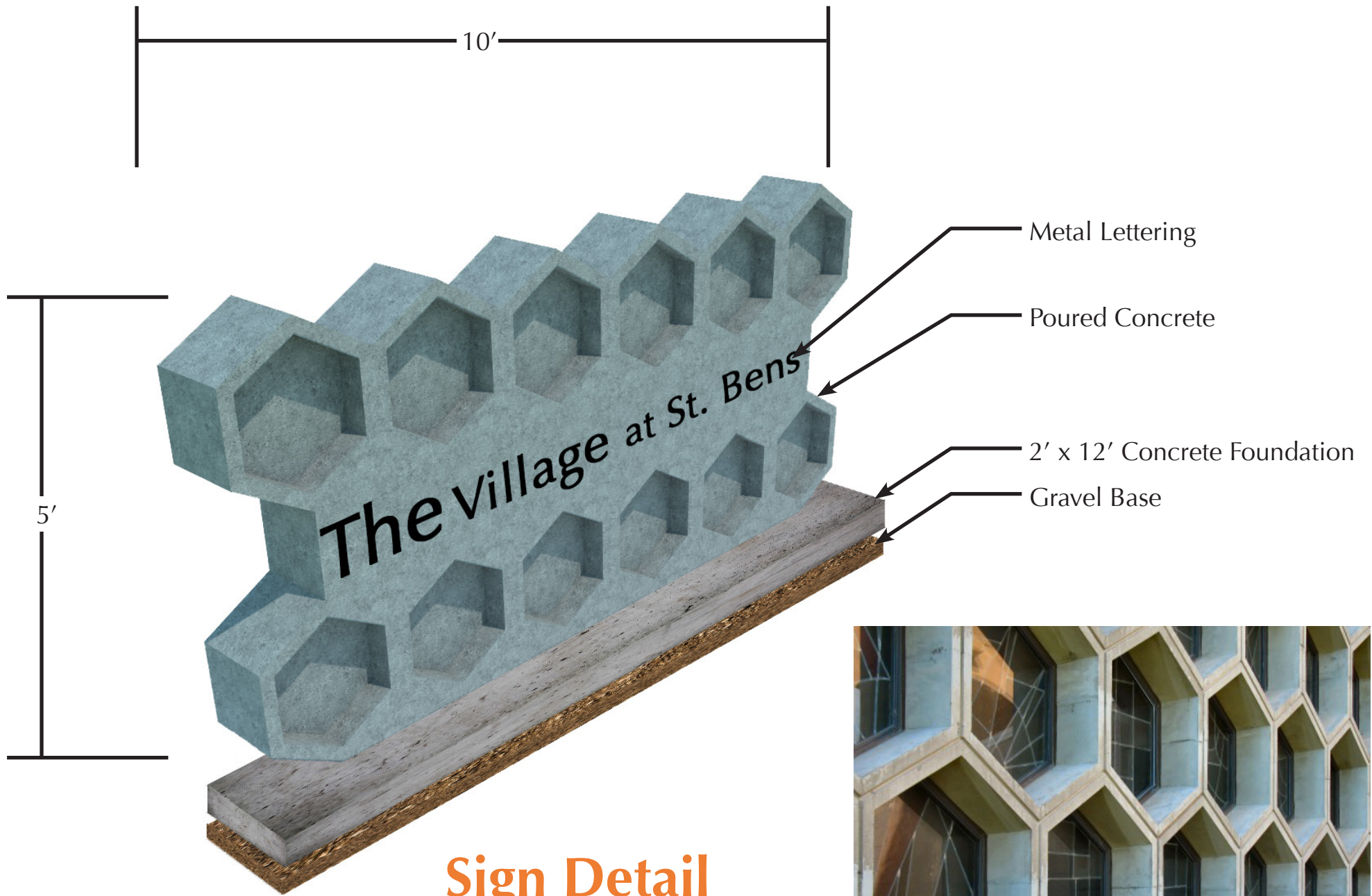
The Parkland is a space for children of students and the surrounding community can come to play. The playground has replicas of The Athlete found on the campus of SJU that the children can climb and play on. The area to the north is a forest that reflects the wooded areas surrounding the town of St. Joseph where children can use their imagination. There is a shelter that can accommodate large gathering and the town houses provide some privacy from the surrounding community.

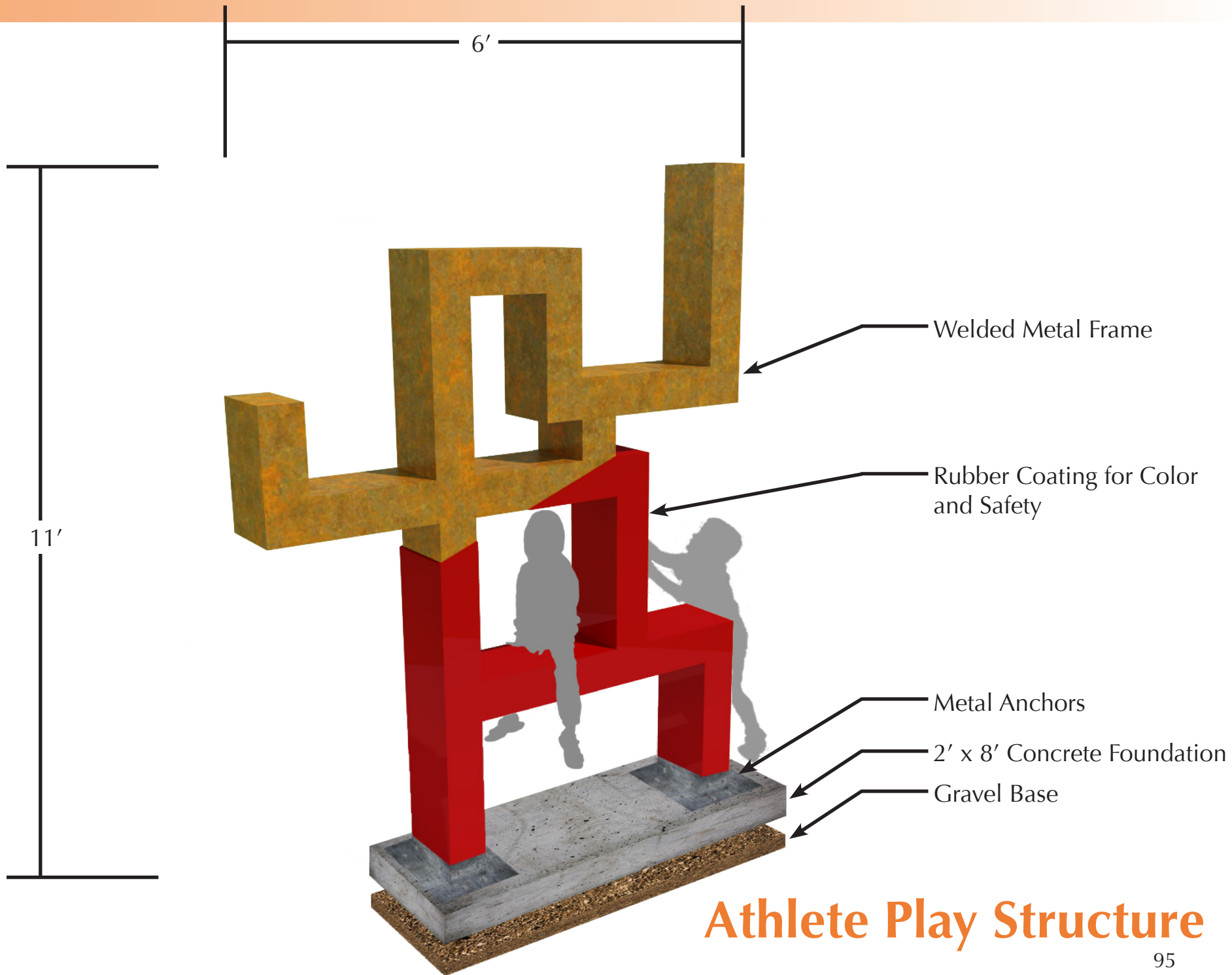
Section illustrating the new road





Design Details





Previous Design Studio Experience

2nd Year

Fall 2009: Introduction to Landscape Architecture Studio

Instructor: Kathleen Pepple

Tea House - Fargo, ND

Fine Arts Club - Fargo, ND

Spring 2010: Parks and Open Space

Instructor: Matt Chambers and Dominic Fischer

Outdoor Smoking Area - Fargo, ND

Woodlawn Park - Moorhead, MN

One-way Street Conversion - Fargo, ND

3rd Year

Fall 2010: Environmental Art and Site Design Studio

Instructor: Stevie Famulari

Defining Space - Fargo, ND

Snow Symposium - Fargo, ND

Fargo Public Library Art Installation - Fargo, ND

Spring 2011: Community Design Studio

Instructor: Kathleen Pepple

Neighborhood Study - St. Joseph, MN

Fort Yates Equestrian Center - Fort Yates, ND

Chicago Neighborhood Design - Chicago, IL

4th Year

Fall 2011: Urban Design Studio

Instructor: Jay Kost

Block Study - Fargo, ND

Building Study - Fargo, ND

Street Study - Fargo, ND

Downtown Denver - Denver, CO

Spring 2012: Environmental Remediation and Plant Design Studio

Instructor: Tyler Kirchner and Dominic Fischer

Serenity Park Remediation - St. Cloud, MN

Midtown Dam - Fargo, ND

5th Year

Fall 2012: Environmental Planning Studio

Instructor: Mehran Madani

Rem Koolhaas Study - Fargo, ND

Civic Center Redevelopment - Fargo, ND

Spring 2013: Design Thesis Studio

Instructor: Jay Kost

The Transitional Community - St. Joseph, MN

Reference List

Ayers/Saint/Gross. (2002). Lexington Kentucky College Town Study. Retrieved from <http://www.lexingtondda.com/cts-docs.html>

Biello, D. (2011). How Green Is My City. *Scientific American*, 305(3), 66-69.

College of Saint Benedict. (2012) CSB History. Retrieved from <http://www.csbsju.edu/About/College-of-Saint-Benedict/CSB-History.htm>

College of Saint John's. (2012). Mission, Vision, and Values. Retrieved from <http://www.csbsju.edu/About/Saint-Johns-University/SJU-Mission.htm>

Geller, M. (2005). UniverCity: the new community at Simon Fraser University. *Plan Canada*, 45(4), 31-34.

Girling, C. (2008). UniverCity: building a new green neighborhood [Burnaby, Vancouver]. *Places*, 20(2), 26-29.

Halsband, F. (2005). Campuses in place [United States]. *Places*, 17(1), 4-11.

Huntsman, D., & Wagner, S. (2008). Nontraditional sites for academic campuses. *Urban Land*, 67(3), 87-91.

Jin, L., & Mingshu, L. (2010). The Urban Design Methods of Future Community. *Asian Social Science*, 6(10), 40-43.

Knack, R. (2009). The next level: Second Life put to the test. *Planning*, 75(3), 38-40.

Levinson, N. (2004). Campus planning is breaking new ground. *Architectural Record*, 192(8), 86.

- Lowry, S. (2008). Taking green higher [APA Awards]. *Planning*, 74(4), 6-8.
- MacDonald, S. (2012). Tools for community: Ivan Illich's legacy. *International Journal Of Education Through Art*, 8(2), 121-133.
- Ross, J. (2011). Social sustainability in urban areas: communities, connectivity and the urban fabric, edited by Tony Manzi... [et al.]. *Australian Planner*, 48(3), 245-246.
- Sasaki Associates (2007). Innovista Master Plan, Columbia, South Carolina, Preliminary Report, July 2007. Retrieved from http://www.columbia.sc.gov/tasks/sites/cocassetsFileDev_Services/InnovistaMasterPlan_2007_08_01.pdf
- Sasaki Associates. (2012). University of South Carolina Innovista Master Plan. <http://www.sasaki.com/project/35/university-of-south-carolina-innovista-masterplan/>
- SFU Community Trust. (2012). History and Background. <http://university.ca/overview/history-and-background/>
- SFU Community Trust. (2009, November 13). UniverCity on Burnaby Mountain <http://www.youtube.com/watch?v=Ddt7MJ4yOzs>
- Simon Fraser University. (2002) Simon Fraser University Official COmmunity Plan. Retrieved from http://university.ca/wp-content/themes/Univercity/media/Simon_Fraser_University_Official_Community_Plan.pdf
- Tang, L., Lin, L., Shao, G., Su, X., & Zhao, J. (2011). Redefining the digital city for promoting sustainable urban development. *International Journal Of Sustainable Development & World Ecology*, 18(6), 543-547. doi: 10.1080/13504509.2011.603762
- United States Census Bureau. (2012). State and Country QuickFacts. <http://quickfacts.census.gov/qfd/states/27/2757130lk.html>



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Phone: (320)-249-4436

“Going through the landscape architecture program has given me the necessary skills to have a happy and successful future.”