

# Suburban Revision

Rethinking Suburbia through  
Modification

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## **Part One - Research**



The contemporary suburban condition is not working for many different reasons. The architecture is prone to multiplication that is ignorant to local situations and climates. The ubiquitous big box, a large warehouse like retail store that is often a franchise, dilutes local identity and creates a hyper-efficient program that does not encourage spontaneous social collisions<sup>1</sup>.

Architecture has the capability to offer solutions for these deficits. The suburban condition needs to be reconsidered by asking questions such as: What are the benefits of creating a denser population and more defined commercial and public spaces? Can big box stores be successfully integrated into a pedestrian friendly environment? Can “category killers<sup>2</sup>” (a term referring to how these warehouses run smaller more limited functioned stores out of business) cooperate in this environment with smaller businesses?

By investigating a typical struggling “power center” (a chain of big box stores in one area) this thesis will explore the potential for re-appropriating the underdeveloped ‘negative space’ that permeates these landscapes by integrating some level and mixture of new uses. The ultimate goal of this thesis is to develop a model that will suggest larger implications about how these kinds of spaces may be altered in a variety of locations.

1. Lateral Architecture. “Flat Space: Nine Networks of Infrastructure Landscapes.” *Dichotomy 16: Margins and Edges* (2006) : 24

2. Hayden, Dolores. *A Field Guide to Sprawl*. New York: W.W. Norton and Company, (2004).

# Thesis Paper

“Each year, we construct the equivalent of many cities, but the pieces don’t add up to anything memorable or of lasting value. The result doesn’t look like a place, it doesn’t act like a place, and perhaps most significantly it doesn’t feel like a place. Rather it feels like what it is: an uncoordinated agglomeration of standardized single-use zones with little pedestrian life and even less civic identification, connected only by an overtaxed network of roadways. Perhaps the most regrettable fact of all is that exactly the same ingredients - the houses, shops, offices, civic buildings, and roads - could instead have been assembled as new neighborhoods and cities. Countless residents of unincorporated counties could instead be citizens of real towns enjoying the quality of life and civic involvement that such places provide.”

The phenomena of the city has undergone a dramatic evolution from the first initiation of our civilization. And throughout time humans have considered how they should live and what their cities should look like. The current, most prevalent<sup>2</sup> form of housing in America is one that perpetuates the problems of our society. We have reached another point in time when a reconsideration of our current paradigm of living is necessary.

It is easily recognizable that there are issues with suburbia and the technoburbs, which Robert Fishman in Bourgeois Utopias describes as a “peripheral zone, perhaps as large as a county, that has emerged as a viable socioeconomic unit. Spread out along its highway growth corridors are shopping malls, industrial parks, campus like office complexes, hospitals, schools, and a full range of housing types. The residences look to their immediate surroundings rather than to the city for their jobs and other needs; and its industries find not only the employees they need but also the specialized services.” Also noted is the dependence on advanced communication technologies. Critically, Robert Fishman observes that, “The true center of this new city is not in some downtown business district but in each residential unit.” Zoomburbs<sup>3</sup> is another variation of suburbia, which can be described as suburbs that are growing at a ridiculously high rate so that whole communities can be created almost at once. Considering the current condition of our relatively new suburban/technoburb places should be an appropriate first step in a plan of action to ameliorate the problems associated with them.

1: Duany, Andreas, Plater-Zyberk, Elizabeth, and Jeff Speck. Suburban Nation: The Rise of Sprawl and the Decline of the American Dream. New York: North Point Press. (2000) 12.

2: Hayden, Dolores. A Field Guide to Sprawl. New York: W.W. Norton and Company, 2004. “In 2004, suburban housing exceeded urban ones in numbers of residents as well as jobs.”

3: Hayden, Dolores. A Field Guide to Sprawl. New York: W.W. Norton and Company, 2004.



A good way to describe some of the specific problems with suburbia is with the use of the term ‘market failures’<sup>4</sup>. In *Zoned Out*, Jonathan Levine describes market failures as the negative byproducts of a system. According to Levine, some of the market failures of suburbanism are congestion of roads, heightened air pollution, a lack of energy conservation, surface water pollution, and increased traffic accidents. These are all quantifiable repercussions of the system, Levine seems to be searching for scientific evidence for a rebuttal to the situation, but also significant are the other quantitative ramifications. Suburbia is highly inefficient and not sustainable. In fact, its already displaying its lack of sustainability in some areas.

These inherent flaws in the system will eventually lead to its collapse. If one imagines the situation in which oil deposits have plummeted and the cost of gasoline skyrockets, which scientists have been speaking of for years (if is not the question, but when), suburbia is a useless mess. Without an efficient means to drive automobiles grocery stores, places of work, places of education, and other necessary functions become instantly out of realistic reach.

Because of this, and other immanent problems, suburbia, and the suburban lifestyle, can not continue forever. Therefore a reinventing of the suburban landscape is a necessary and unavoidable obstacle for the future occupation of these areas.

There are even significant qualitative repercussions of suburbia. These include lack of community involvement, spatial inconsistency, a lack of community identity, and a hyper efficient retail situation that prevents spontaneous social collisions<sup>5</sup>. To some of suburbia’s inhabitants it may seem that they have achieved the American Dream only to find it unfulfilling<sup>6</sup>.

This project is seeking to offer a viable alternative to the traditional ubiquitous suburban city. It would offer the benefit of an urban experience without being too far removed from a suburban setting. An alternative lifestyle would be offered, one where someone could live, work, shop, and relax all within walking distance of their house, thus liberating themselves from the necessity of a car, a necessary economic and social burden of living in suburbia. Not only would a space like this offer an alternative lifestyle for those living there, but it would also offer benefits for the single family housing dwellers of the

4: Levine, Jonathan. *Zoned Out*. Washington DC: Resources for the Future, 2006.

5: Lateral Architecture. “Flat Space: Nine Networks of Infrastructure Landscapes” *Dichotomy 16: Margins and Edges* (2006) : 24

6: Radiant City. *Writer/Director: Gary Burns, Producer: Burns Films Ltd.* 2007

## Thesis Paper

surrounding community who would have a chance to experience a more urban and community driven environment.

In an attempt to resolve these issues and create these spaces this project seeks to develop principles that could be applied to a multitude of locations. But it is important to note that the principles would be very adaptable, and are not meant as a base to create a new community but as a system of retrofitting existing communities, making the guidelines inherently loose.

The primary site typologies being considered for this study is one that has a commercial area with big box stores; traditional warehouse-like sheds utilized by big name retailers to limit costs, surrounded by single family housing. A series of these big box stores in one area is called a power center<sup>7</sup>. A further stipulation that has guided the selection of sites being explored is the condition in which one or more of the big box stores is abandoned in the power center and is available for reuse by a different function. This possibility of reusing a retail store for other opportunities is a cornerstone for the goal of getting the community to reconsider the usage of their commercial spaces. This type of site seems to be the ideal framework to investigate the kinds of ideas about mixed-function and reuse that are at the heart of the project.

One could argue that some of the core issues of suburbia reside in the residential sector, implying that this location is more appropriate for constructive change. The problem with that argument is that the residential areas are formally very resilient to changes other than the possibility of infill between houses, or new construction in undeveloped land which is often far from the city core, or wholesale demolition and reconstruction, all of which are not beneficial, often because of cost efficiency and their effect on the overall landscape.

One such system that deals with retrofitting suburban areas is found in Paul Lukez's Suburban Transformations. He proposes principles that he recommends in modifications of edge cities. Lukez was looking for small and prospering but spatially awkward and divided cities. He focused on the commercial and local industrial spaces for development. Lukez creates a system in his book that is meant to be able to be followed by others. At the end of the book he even has a few projects done by some students incorporating his ideas. (A more detailed analysis and

criticism of his work is featured in the precedent section of this thesis book.) His model offers not only a pathway of design process, but also a good section of architectural tactics that can be employed in modifying suburban areas.

A series of experiments were done in master plan format for this thesis to lead to a deciphering of the desires of the spaces where the modifications will occur. The consistent base for the palette was a loose string of big box stores and other businesses surrounded by single family housing. It seemed natural to try to provide spatial definition by sometimes linking together the big box and other stores to create an environment that is more walkable. Another common and appropriate theme was utilization of all of the open space to create a defined park or green-space. In later experiments this led to an integration of the park with existing parking lots. With this the users would get a community experience while going about their errands or recreational shopping. Making the density of the commercial core disperse out onto neighboring plots was another goal being explored, as well as street development and crossing techniques.

Phasing would be necessary and is not included in this series of master plans although implied at some points. In general, phasing can occur to decrease the amount of surface parking into structures or burrowed parking and increase the amount of green-space or retail. Phasing in more retail or housing is also an obvious requirement.

While some of the experiments are overly ambitious about their projections for their site questions arise: What are the chances of a project like this actually happening? Where does the money come from? Why would the local government and businesses want this?

For this specific project there is the hope to inspire people and designers to look at suburban commercial zones differently. The money to fund such projects could come from city taxes at times, the city could rent the mixed use residential units in a big box store, or other private investors or businesses. In reference to the desires of the local government and businesses there is the basic understanding that because the areas are struggling the local government might be more responsive to change that would help their community and retail spaces, thus bringing in more people and businesses to the area, and businesses would be attracted to the project as well because it

## Thesis Paper

is drawing attention to them and getting them much more face time with the people and the community thus bolstering sales.

Important to note is the notion that the needs and desires of the community and its people will change. Therefore a recalibration<sup>8</sup>, that is, an adaptation of the goals and process of the project, should occur as change occurs. This recalibration could occur when new businesses are allowed into the area, or the incorporation of significant new industries to the city that could change the identity of the area, or other new things that would change the kind of people that the community would attract.

This project is not in search of a utopian system, not only are such aims to create a literal utopia misguided, but the current situation of the places being modified innately precludes any notion of this possibility. The project is trying to resolve market failures and other qualitative effects of the suburban landscape by retrofitting retail zones with mixed use. It has an emphasis on adaptation of the landscape and reuse to create an atmosphere driven by community in the hopes of ameliorating the current condition to one that is more palatable.

<sup>8</sup>: Lukez, Paul. Suburban Transformations. New York: Princeton Press, 2007.



# Precedent

## Suburban Transformations

Paul Lukez



Paul Lukez, a designer from Burlington, Massachusetts, saw the blight in his city of residence, an edge node of Boston along I-128 and the Middlesex Turnpike, and developed a proposal for the small city. This proposal tried create a more urbanized environment from many exterior modifications and densifications. This was done in the hope that this kind of environment would spur many different beneficial effects for those that worked, lived, and shopped in the area, specifically making more cohesive spaces, creating a better quality of life, and forming a more discernable local identity.

This proposal was to serve as a model of retrofitting the suburban landscape, a task Anthony Flint, from the Lincoln Institute of Land Policy, saw as the highest calling for urban designers in the coming years<sup>1</sup>.

Lukez seeks to ‘revitalize’ by means of a system called ‘The Adaptive Design Process’. This process involves a very specific sequence of research and application: mapping, editing, selecting tools and typologies, simulating, and finally recalibrating.<sup>2</sup> Lukez works to construct an imitateable system for others to work through so he goes into great detail describing the conceptual and architectural strategies that are employable.

Lukez expresses concerns through his recommendations about certain issues. He makes it clear that some issues are applicable for all suburban landscapes, like the need to assess community values, add additional occupiable landscape with increased density, establish greater connectivity, define the shapes

Zoning Plan



1: Paul Lukez, Suburban Transformations, (2007): 9

2: Paul Lukez, Suburban Transformations, (2007): 41

of public spaces, create landmarks, and integrate pedestrian and automobile traffic. Other, more architectural, techniques he employs are specific to the Burlington site, as in reducing impervious surfaces in an aquifer zone, reestablishing natural water routes, mitigating the automobile's presence, integrating uses with infrastructure specifically in sidewalk and walkway development to provide pedestrian links, mixing uses to create a denser population and urban-like fabric, creating landmarks and a system of orientation, and finally the idea of situating parking lots to maintain around the clock usage from functions that would use them at different times.

An existing mall on the site served as a funnel for many of these pedestrian circulation ideas, and Lahey Clinic, the local hospital, was utilized with other local landmarks in the formation of a local identity.

A compelling part of the project is not only the establishment of a local identity based on the industries or capabilities of the area, but the crafting of an aesthetic identity implied by the designer. This aesthetic and spatial identity should be a driving force in the identity of the place, almost raising it to a brand status for the city and for the suburban retrofitting cause.

Each of the aforementioned architectural techniques is applied to the landscape individually which begs the question; do they all act cohesively? This seems to be implied graphically by the author, and it is possible that simply the likeness of direction



Final Proposed Site Plan

## Precedent



Figure Ground

## Ownership (Public, Semi-Public, Private)



satisfies cohesion. Looking at the spatial conditions a little more intently might answer some of these questions.

Another questionable proposal is the concept to turn the Lahey Clinic into an extensive campus and the creation of a prominent tower for the clinic to be used as an administrative and research center. This does not seem to be based on the actual needs of the company but just the desires of the architect.

One important issue in the project was almost ignored. The plan calls for a greater population density in the area but then just barely mentions, and doesn't show, that some multi-family housing will be made near the conserved land. Knowing that it is irresponsible to just build homes before an appropriate demand has been generated, one can appreciate them not being called for immediately but if so this phasing concept should have been explained and the layout of a typical unit should have been indicated.

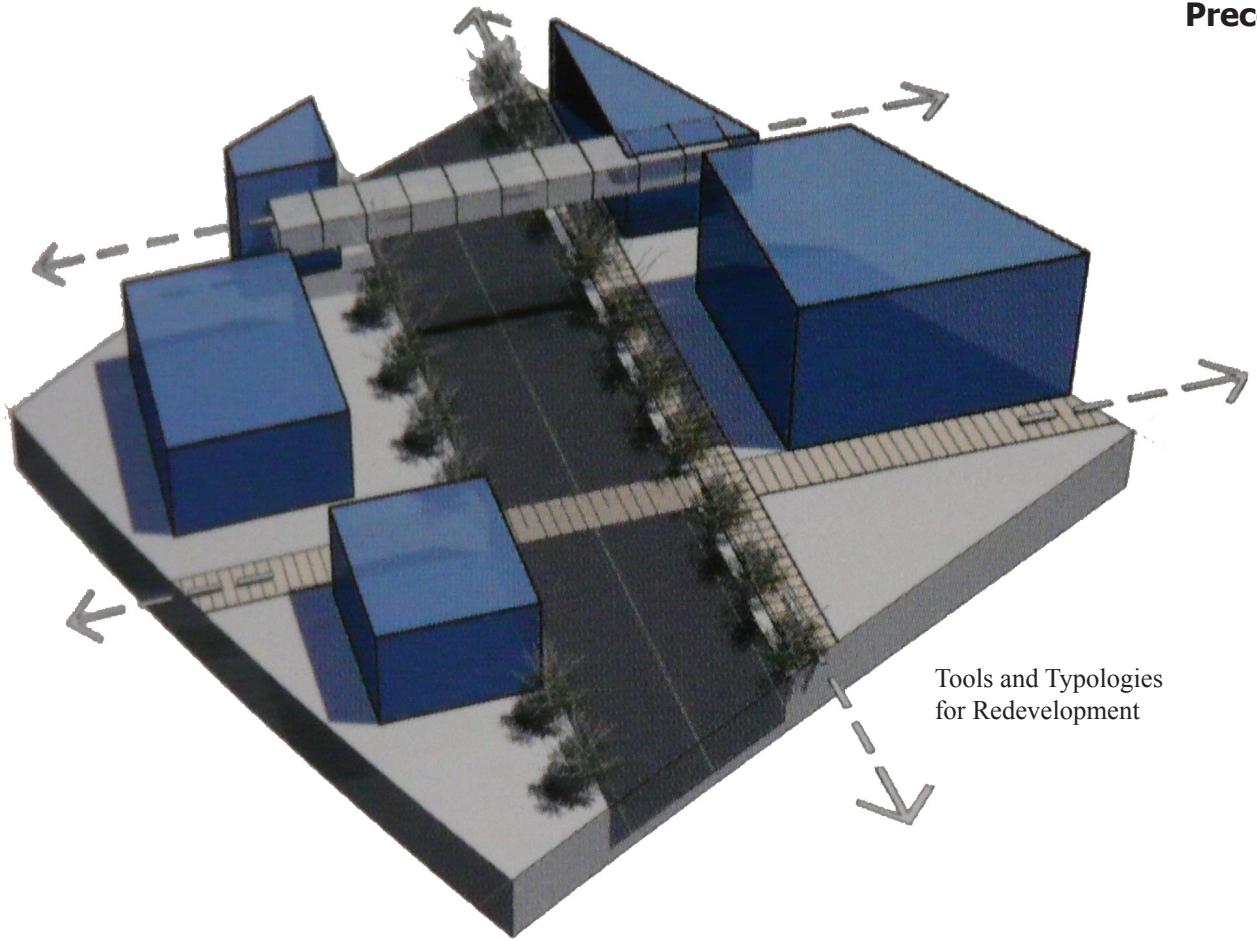
The pedestrian walkways seem successful in achieving a pedestrian link over the highway, which can be a major problem in areas like this, although their immense size and therefore implied additional functions are questionable.

As is visible in the graphics of this project, Lukez is fond of creating green spaces, even to the point of excess. He believes that as density grows more green space must be created to balance this. The green spaces in the project seem over the top in their abundance. Green spaces are necessary in an urbanized, dense setting, but it needs to be balanced against hardscape. When most people see a suburb they don't think, "We could use some more green here," the balance is already tipping toward green space.

On the whole the project seems very promising and achieves what it set out to do; make a system of suburban redevelopment for an environment that inspires further, similar transformations.



**Precedent**



Tools and Typologies  
for Redevelopment



# Sketch Problem

## Cube

An analysis of some of the architectural issues of suburbia was the starting point for this sketch problem. A series of 'cubes' were created to describe problems with material usage in typical single family housing. Each cube referred to a specific material.

### Wood

The root idea behind the wood cube was the observation that wood is commonly used in structure and is hidden, thus lacking identity. The attempt toward dematerialization, a neutering of the material, was utilized to try to convey this idea. This experiment also tried to determine how people decipher what a material is and its qualities.

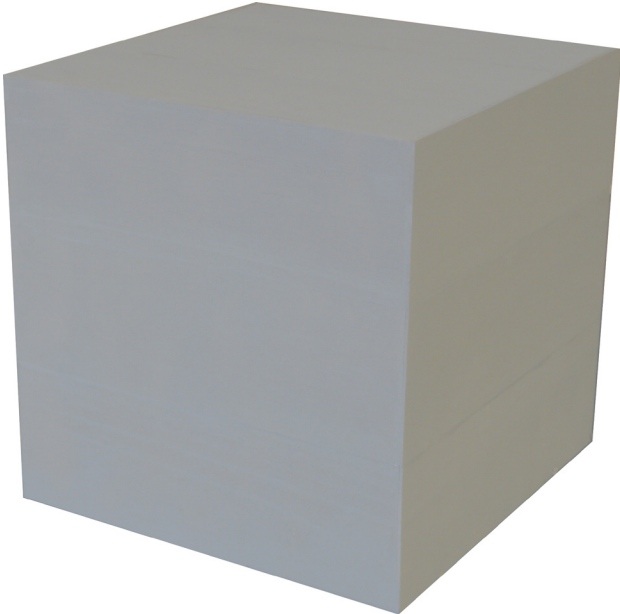
Some of the qualities modified in the wood cube were form, weight, smell, texture, color, flexibility, light reflection, and techniques applied to the cube including connections. The object was made perfectly cubed, two feet in each dimension, out of a surface of balsa wood to give it an unreal lightness. Its surface was covered in layers of gray spray paint obscuring its color, texture, and smells.

### Plastic Siding

The use of plastic siding is prevalent in suburban housing. Although the plastic itself is an interesting material, it is made to look like wood siding, with fake wood grain applied to the surface. This cube questioned this bastardization of plastic. By rearranging the material the cube suggested that the plastic could be used in exterior cladding panels, rather than implied wood siding.

### Concrete

Concrete has a certain duality in architecture; sometimes it is used beautifully in great works, and sometimes it is hidden and used just for structure in concrete masonry units, as is common in single family suburban housing. This concrete cube explores the use of CMU and brick veneer wall sections. Brick has always implied a great status and social value,







## Sketch Problem

stemming from perceived labor and quality, that has withstood the mass production characteristics of our contemporary society.<sup>1</sup> The cube considers how the brick surface is applied on the structure of the concrete, and this is carried out by making a formwork that applies a brick surface on the concrete block. This dissolves the last layer of deception in this type of wall section, revealing a distorted and derived use of materials.

### Metal

Most of the materials mentioned so far are commonly limited to external cladding usage or structural applications in suburban housing. But this next material, metal, can be used in either case. Although it is not commonly seen in Michigan, metal can be used as a framework in housing applications. This cube explores how metal as a frame compares to metal as a cladding material, and how exposure can change the perception of the material.

In the series there were a few common themes working

### Grayness

Together the cubes create a partial material palette of the suburb. In summary, the conventional uses have been found wanting, distorted and awkward. Another common theme among the cubes is their grayness, which is expressive of the overall banal nature of the material usage.



### Application

When this sketch problem was started, the direction of the thesis was focused on creating a new type of residential area in suburbia, so the sketch project directly related to the material usage of those buildings, but the thesis changed direction to developing a commercial/retail area. This sketch problem can still have an application in the new premise in that a questioning of conventional material usage is always necessary, especially when 'new' styles of living are being advocated. It is necessary to get people to not apply prior preconceptions of interpretation to the space based on materials. A fresh look at living styles mandates a fresh look at materials.



# Site Criteria

## Program

This thesis project is predicated on producing a more urbanized, multi-use space whose interplay between functions creates the driving dynamic.

Some of the project's most basic programmatic elements can be generalized as Shopping, **Relaxing, Living, Working and Playing**.

## Shopping

Creating a new kind of housing model could not make a rapid change to the multitude of suburban towns because it is dependent on constructing new housing, and replacing existing suburbs. With this in mind (avoiding living spaces as the primary setting for change), a location that is high in activity is prime for constructive change. Suburban shopping spaces are both in need of revision and are also more capable of accommodating a drastic change. Many 'big box' stores are exemplary of some of the problems of suburbia such as car dependence, dispersed arrangement, and efficient activity.

Looking, Meandering, Purchasing



## Relaxing

To contrast directly the current hyper functionality<sup>1</sup> of these warehouse-like stores a space for pausing will be provided. It is critical to make a place where people can meet and spontaneous interaction is encouraged.<sup>2</sup> This distinct program will slow down and undermine the efficient circuit of "find and buy" created in these types of stores. This will morph into an atmosphere where the retail opportunities are not primary, but only a part of the overall ambiance. The space will create a place to celebrate life.

Sitting, Watching, Pausing

## Living

To supplement these, residential units will be established on the site to intensify the occupation of the place of relaxing, and to create a new image for what is currently perceived as a commercial zone. A more urban understanding of the area will evolve from the interplay between these functions, thus creating a viable local alternative to a suburban single family house.

Sleeping, Cooking, Bathing,

## Working

In the creation of a lifestyle on the site the siting of locations for work is important to remove the necessity of a car. These locations should add to the identity of the area and be well connected to the community.

## Playing

The site needs to be able to accommodate a multitude of different pastimes. Manipulating program in hardscapes and green spaces should make available as many activities as possible to offer a medley of activities.

1: Lateral Architecture. "Flat Space: Nine Networks of Infrastructure Landscapes". *Dichotomy* 16: Margins and Edges (2006) : 24

2: Lateral Architecture. "Flat Space: Nine Networks of Infrastructure Landscapes". *Dichotomy* 16: Margins and Edges (2006) : 24 Mentioned is experimental retail layouts to encourage such unplanned interactions



### Site

In a certain sense almost any site in a suburban area or community where a power center is located could be an appropriate setting to explore these ideas, but a situation which may be especially apt is one in which the power center is struggling and some of the big box stores are abandoned and their shells are available for infill and redevelopment.

### Opportunity

The abandoned buildings on the site offer increased viability for the project, as they can serve as a shell for incoming functions. The act of employing a new function in what was once a retail store will challenge the user's perception of the nature of the space and it's function in a way that is similar to how the entire project challenges the nature of suburban retail spaces at the larger scale.

It is also important to note that abandoned

buildings can and often do occur in prospering communities as well as suffering ones. A big box store will often build a new structure altogether if they need additional square footage, leaving the old building abandoned.



# Site Candidates/Research

## Park Site

## Ann Arbor Trail and Middlebelt Road

### Commercial

The primary commercial structures are located to the NE and SE of the intersection. The big box store to the north east of the intersection, which is abandoned, faces a parking lot adjacent to Middlebelt and the building to the south of it faces the parking lot as well, with minimal street presence even though it is close to the road.

### Housing

The commercial area is partially surrounded by higher density apartments to the north and east, and single family homes across the roads to the south, and west.

### Civic

There is a school located within walking distance from the site on Ann Arbor Trail to the east.

### Parking

The organization of the site is of a typical suburban retail development; the parking lots are in between the stores and the roads. The commercial buildings are facing the parking lots. Currently there is an excess of parking spaces because of the abandoned building on the site.

### Greenspace

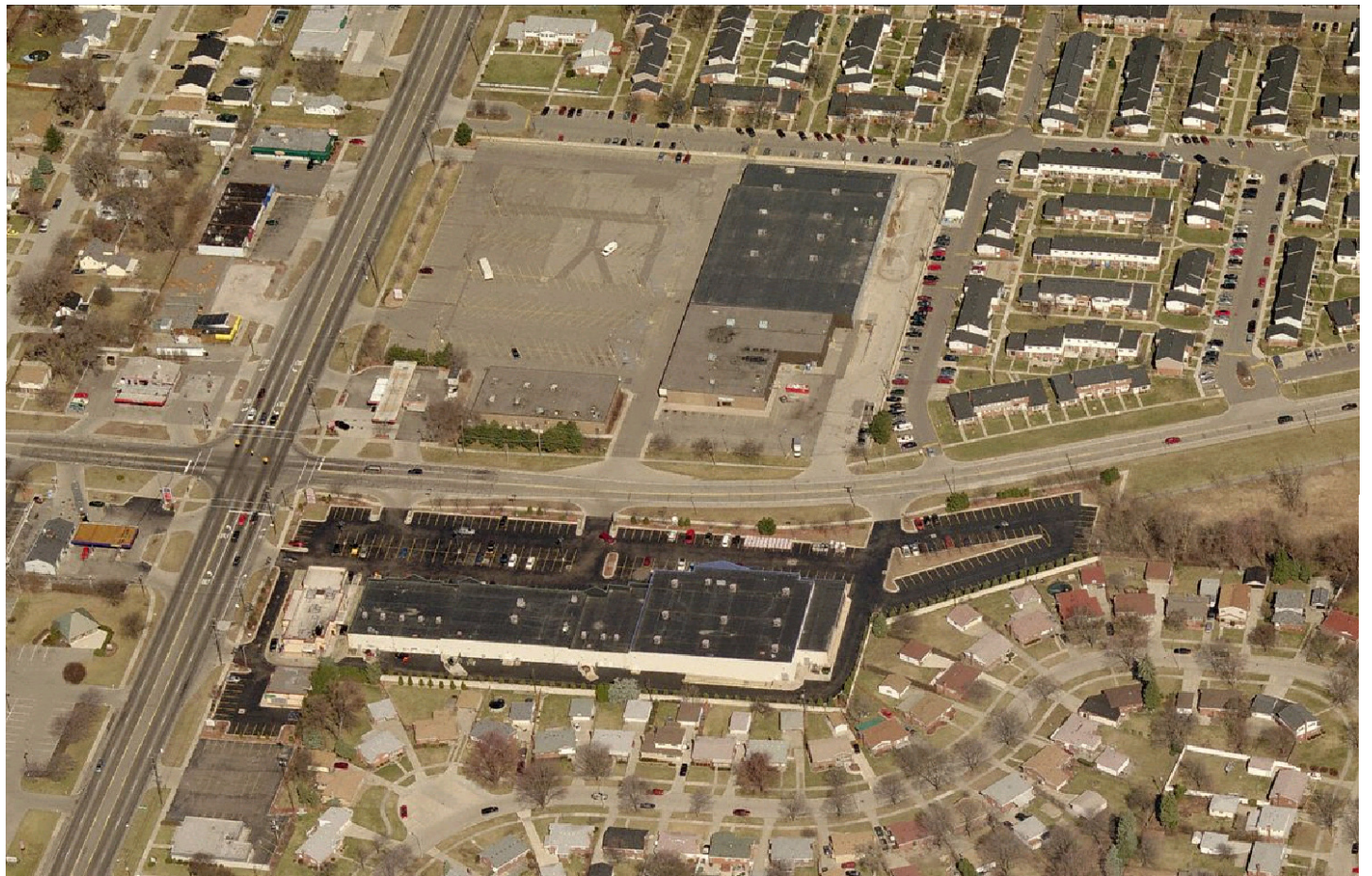
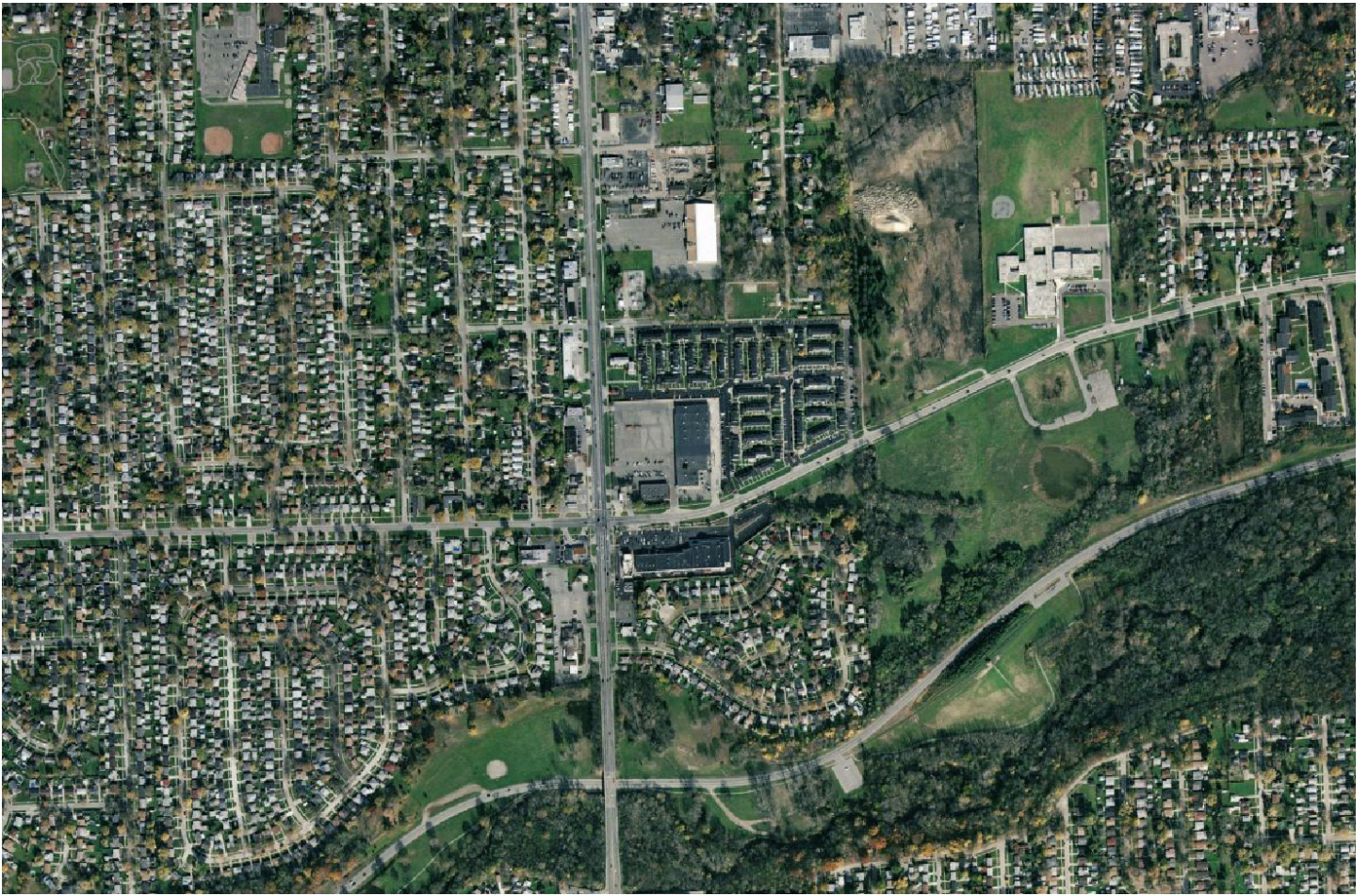
Nearby, to the south, is Edward Hines Drive, which can be called a driving park. It is a scenic route with destinations, like baseball fields, along the way.

### Spatial Summary

The abandoned big box store could offer retail or residential infill. Since there are already retail stores in the area that might be the better choice to give it more presence. The proximity to Edward Hines Drive offers the unique opportunity to connecting to an established linear park. The park has underutilized land as well that can be developed as density increases.

This brings up the theme of the adaptation of vehicular infrastructure to pedestrian infrastructure. The suburban landscape is a system oriented to serve cars. The modification of that system to make it pe

destrian friendly, or at least pedestrian capable, is integral to any improvements aimed at ameliorating the suburban landscape.



## **Site Candidates/Research**

### **Island Site**

#### **Commercial**

In the retail zone there are many smaller stores in strips with a Farmer Jacks, Dunham Sports and Target as the big box stores. None of them are abandoned.

#### **Housing**

Around the site is a sea of densely packed single family homes on all sides. There are no pedestrian pathways to the commercial zone from the backs of the stores.

#### **Civic**

A high school is located to the SE which has baseball fields, tennis courts, a track, and a football field.

#### **Parking**

The parking is isolated between the big box stores and the road, and therefore creates a huge setback for the stores.

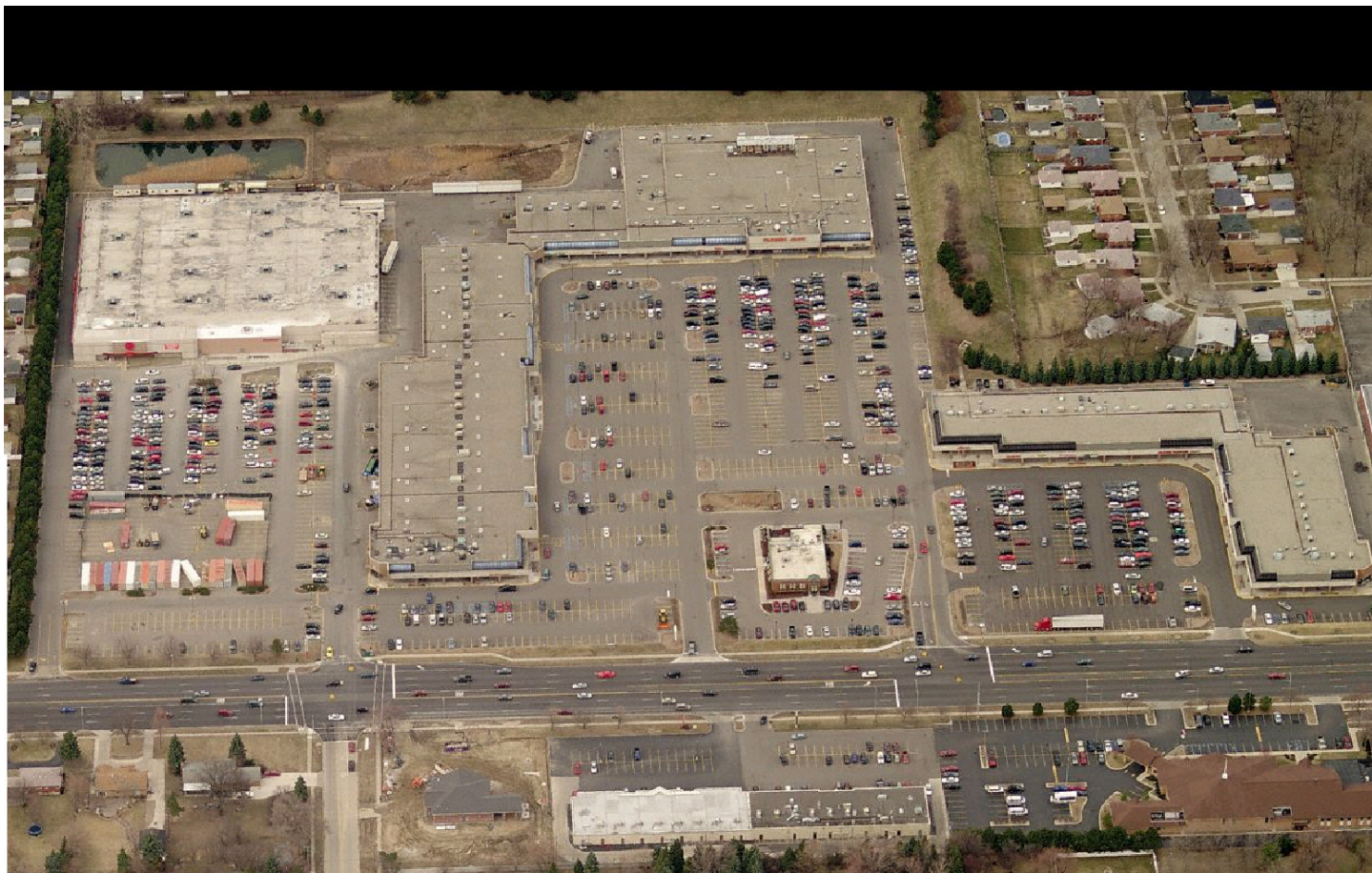
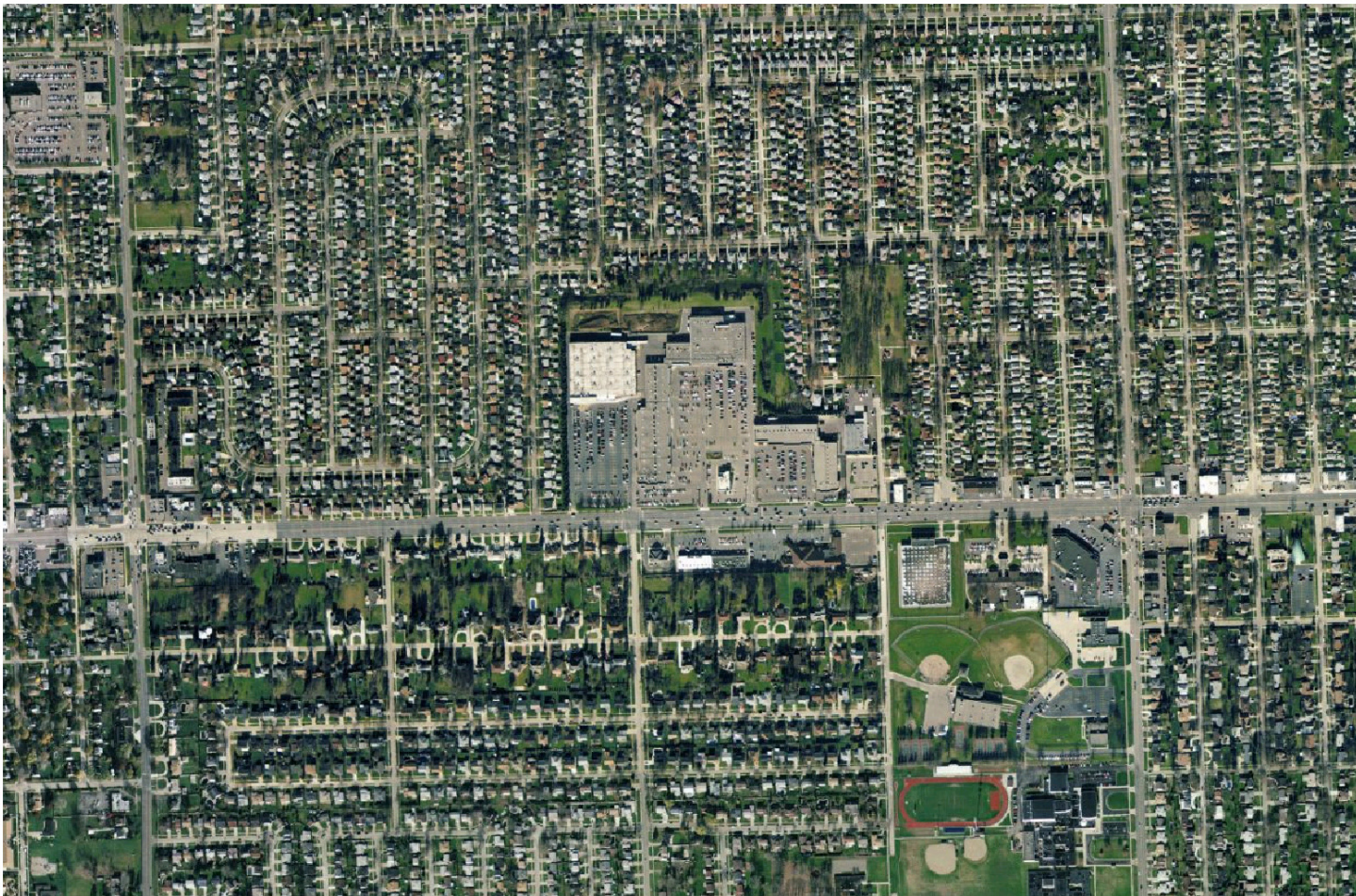
#### **Greenspace**

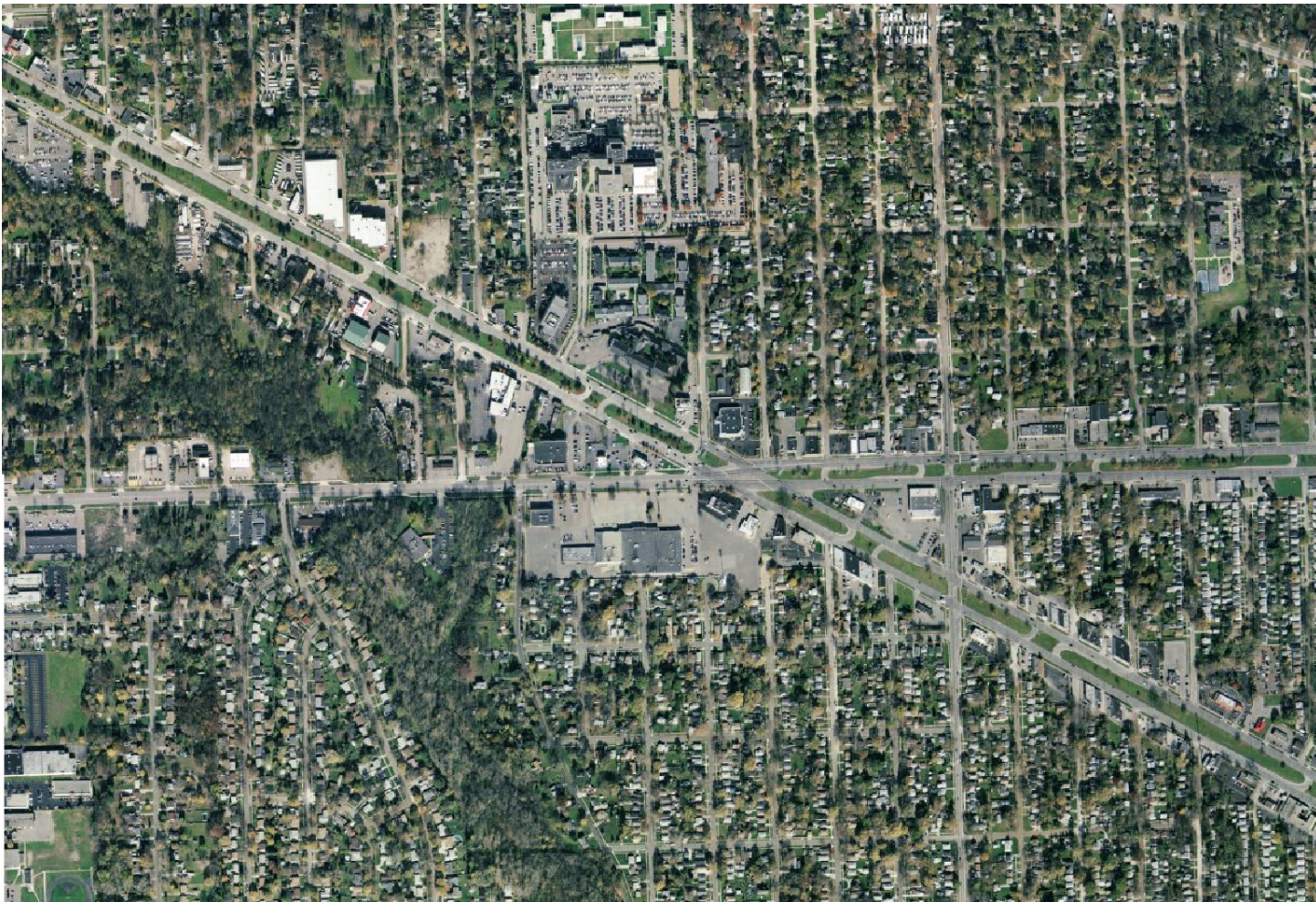
The only greenspace around the site is the negative space around the back of the stores which has trees to block the bland back walls of the stores.

#### **Spatial Summary**

Important to note is the orientation and layout of the buildings. The buildings are organized to define the parking lot in an elbow form with little relation to the street. The north and south oriented building only has a façade facing to the east, neglecting and creating an eyesore for the Target to the west. The parking lots are distinctly long and thin causing long walks through the parking lot to the stores.

### **Ford Road and Inkster Road**





## **Busy Site**

### **Commercial**

There are big box stores intermittently strewn around the intersection, but the one to the SW is abandoned.

### **Housing**

Thin single family housing surrounds the site but most of it is somewhat removed from the commercial without significant connections. Although there is a denser development to the N of the intersection, just south of the Botsford General Hospital.

### **Civic**

Botsford General Hospital is on the N orth side of the intersection.

### **Parking**

Parking spaces are individualized to each business in each compartment in each wedge of the intersection.

### **Greenspace**

There is a parkway from Botsford park to Shiawassee park up to heritage park the runs just adjacent to the site on the SW side.

### **Spatial Summary**

The most significant feature of the sight is the double boulevarded roads that cleave it, 8 Mile Road and Grand River Avenue. Overcoming the extreme disconnection from each side of the road is a significant task considering the distance and the speed and heavy traffic of the roads. The area as a whole is relatively landlocked and there are a multitude of axes created by the roads and buildings.

## **8 Mile Road and Grand River Ave.**

## Site Candidates/Research

### Livonia Mall

#### Commercial

In the middle of the site is the remnant of the Livonia Mall. All that remains of its tenants is Sears, all the rest have vacated and most of the mall is fenced off and the corridors are restricted.

#### Housing

The mall is surrounded by single family houses and some sparse retail.

#### Civic

There are no notable civic buildings in the area.

### 7 Mile Road and Middlebelt Road

#### Parking

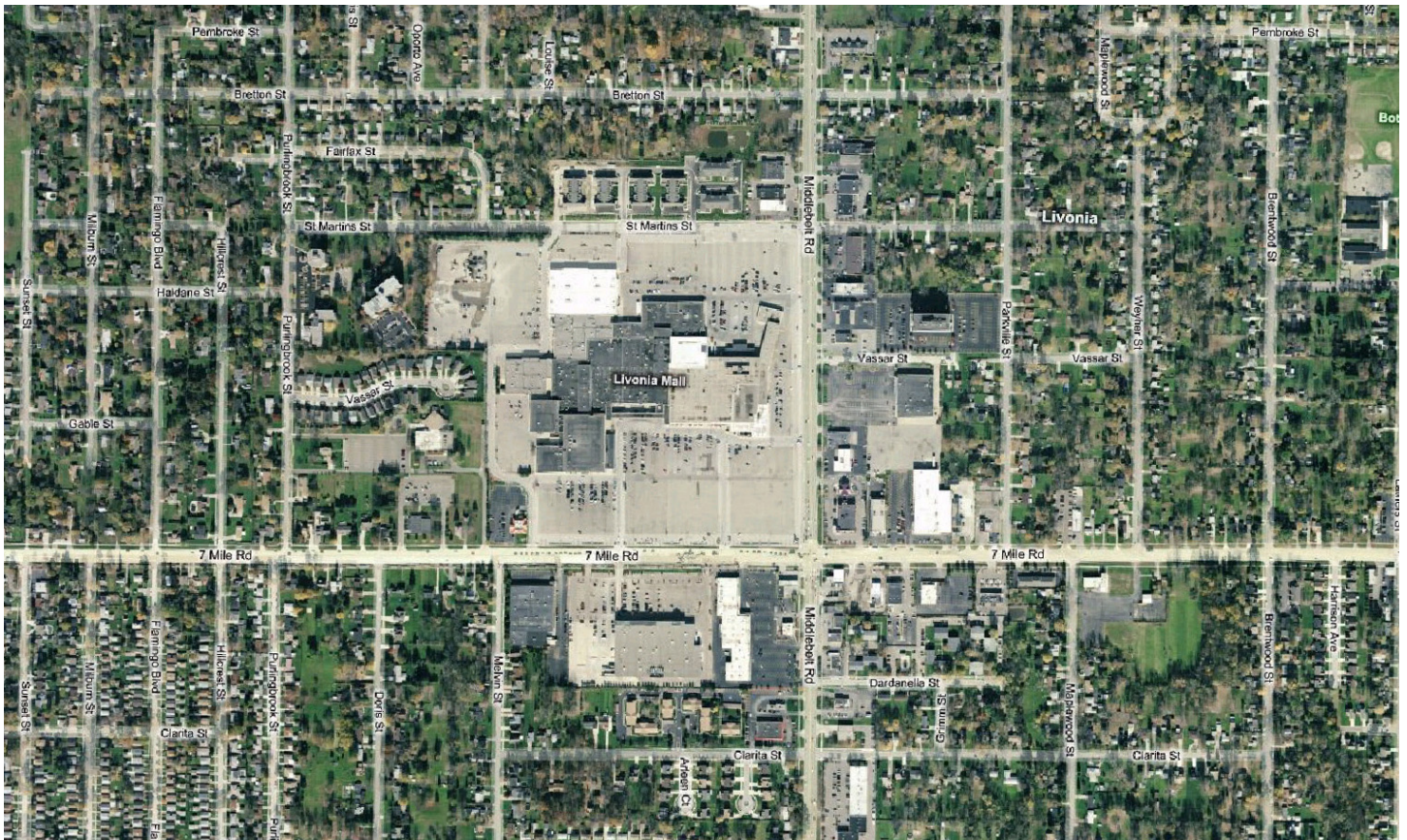
There is a massive number of unused parking spots because of the vacancy of all the tenants.

#### Greenspace

There is not much greenspace in the area except for a park to the east and a field to the east.

#### Spatial Summary

The abandoned mall offers a distinct opportunity to reuse what was once a suburban 'core' of the area. The open space around the mall is very appropriate to infilling other buildings.









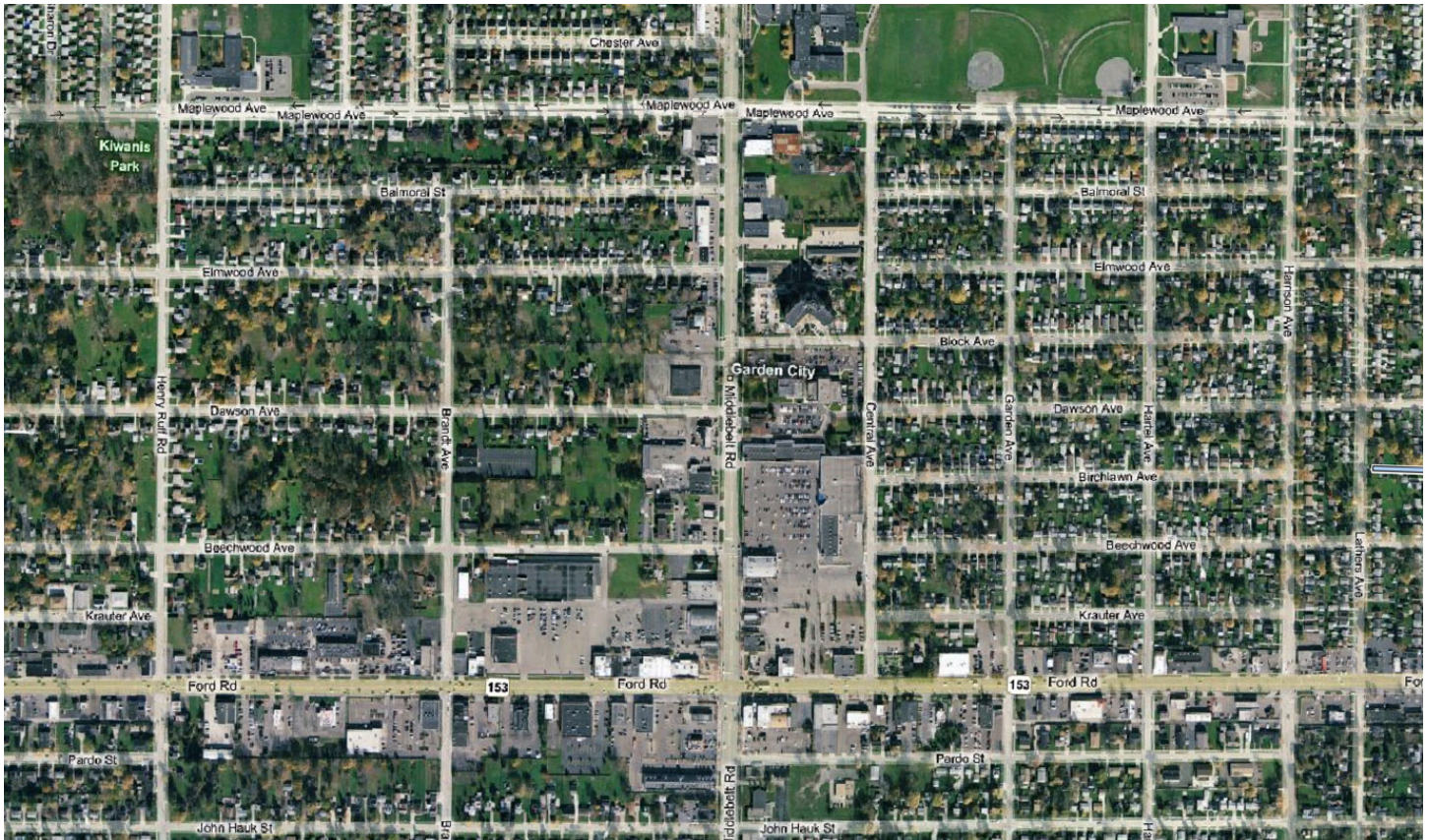


CINEMA 3

**Doritos**  
MADE WITH REAL CHEESE!  
0 GRAMS TRANS FAT  
100% GUARANTEED TASTY

# Chosen Sites

## Ford Road and Middle Belt Road



### Commercial

On the main portion of the site is a K-Mart, a bar which is bustling with activity on the weekends, and a strip mall development. There is an abandoned auto repair shop just to the south of the K-Mart, which is currently used for storage for the store. Across Middlebelt are a couple more big box stores in a strip mall around a parking lot.

### Housing

Single family housing is prevalent around the site but to the north east of the K-mart is a batch of apartments. In addition to those there is a large high rise apartment building just north of the site.

### Civic

There is a library to the south of the site and city hall to the north. Also to the north is Garden City High School, which has many amenities that the community can use.

### Parking

The organization of the site is of a typical suburban retail development; the parking lots are in between the stores and the roads. The commercial buildings are facing the parking lots. The big box stores to the east are elbowed around the parking lot. Even though there are only a few small abandoned stores it seems like the parking lot is under utilized.

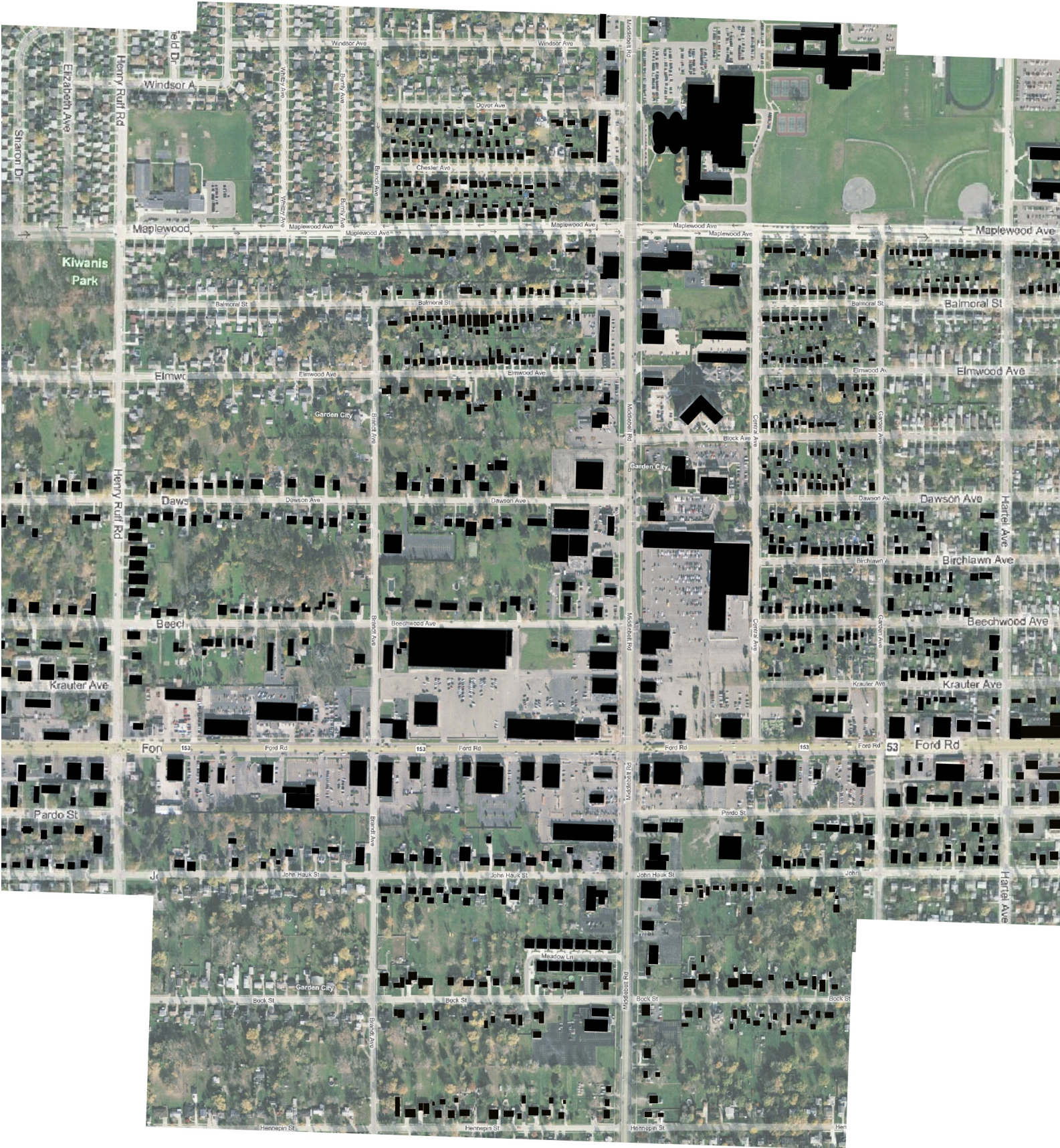
### Greenspace

Moller Park is located a few blocks to the south of the site and Moller High School to the north has some amenities. Other than that is the negative spaces on the site.

### Spatial Summary

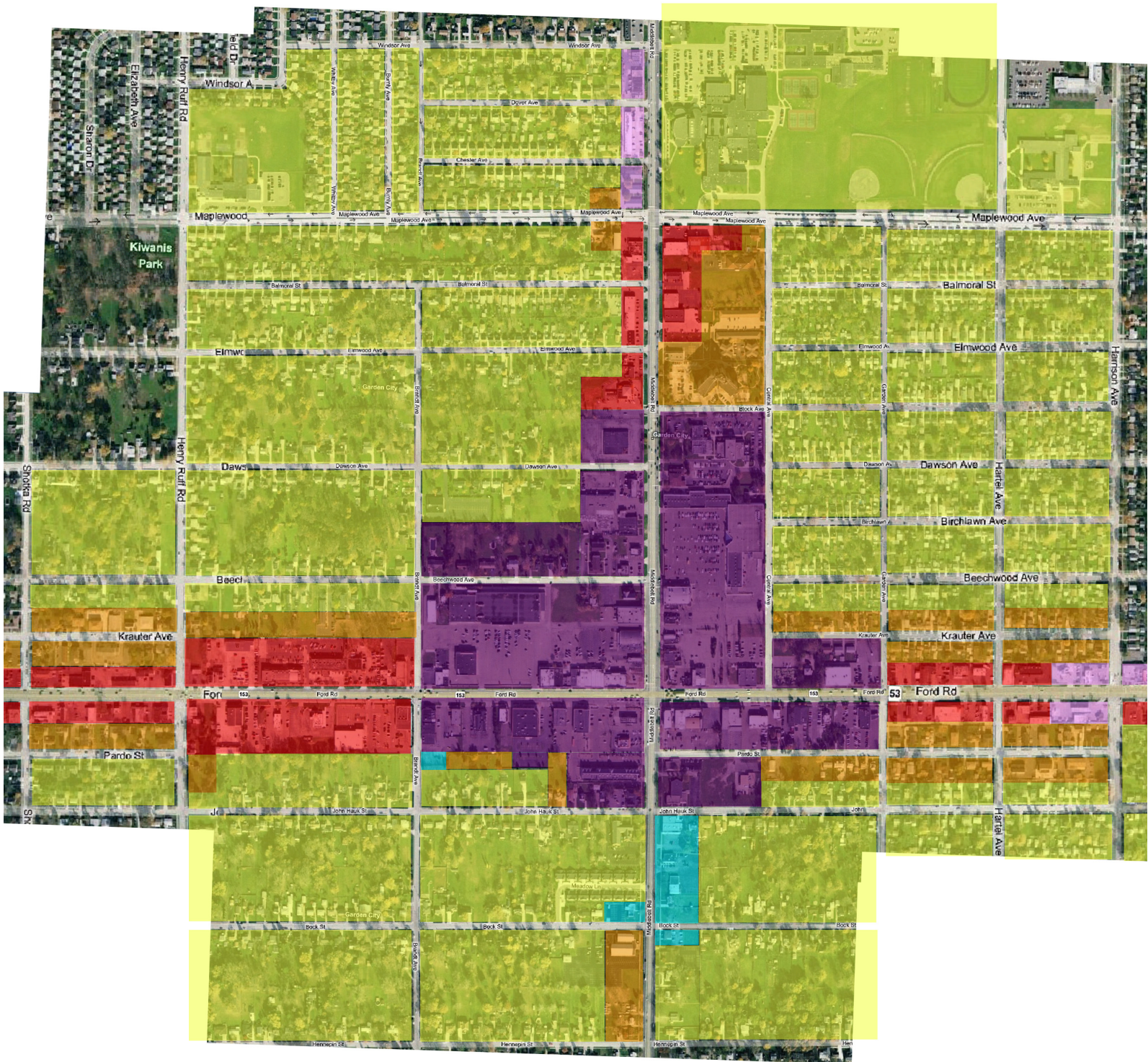
There are more awkward spaces on the sites even in comparison to similar sites. The development on Ford Road is sparse and could use infill development. The plentiful negative spaces coupled with nearby civic amenities and high density housing could turn this site into a nice community.

Chosen Sites



# Chosen Sites

## Figure Ground





# Chosen Sites

## Ford Road and Canton Center Road





**Commercial**

This site has a Target as well as a few other big box stores in the area.

**Housing**

The commercial area is partially surrounded by higher density apartments south, and single family homes to the distant west and north.

**Civic**

There are no notable civic buildings in the area.

**Parking**

The organization of the site is of a typical

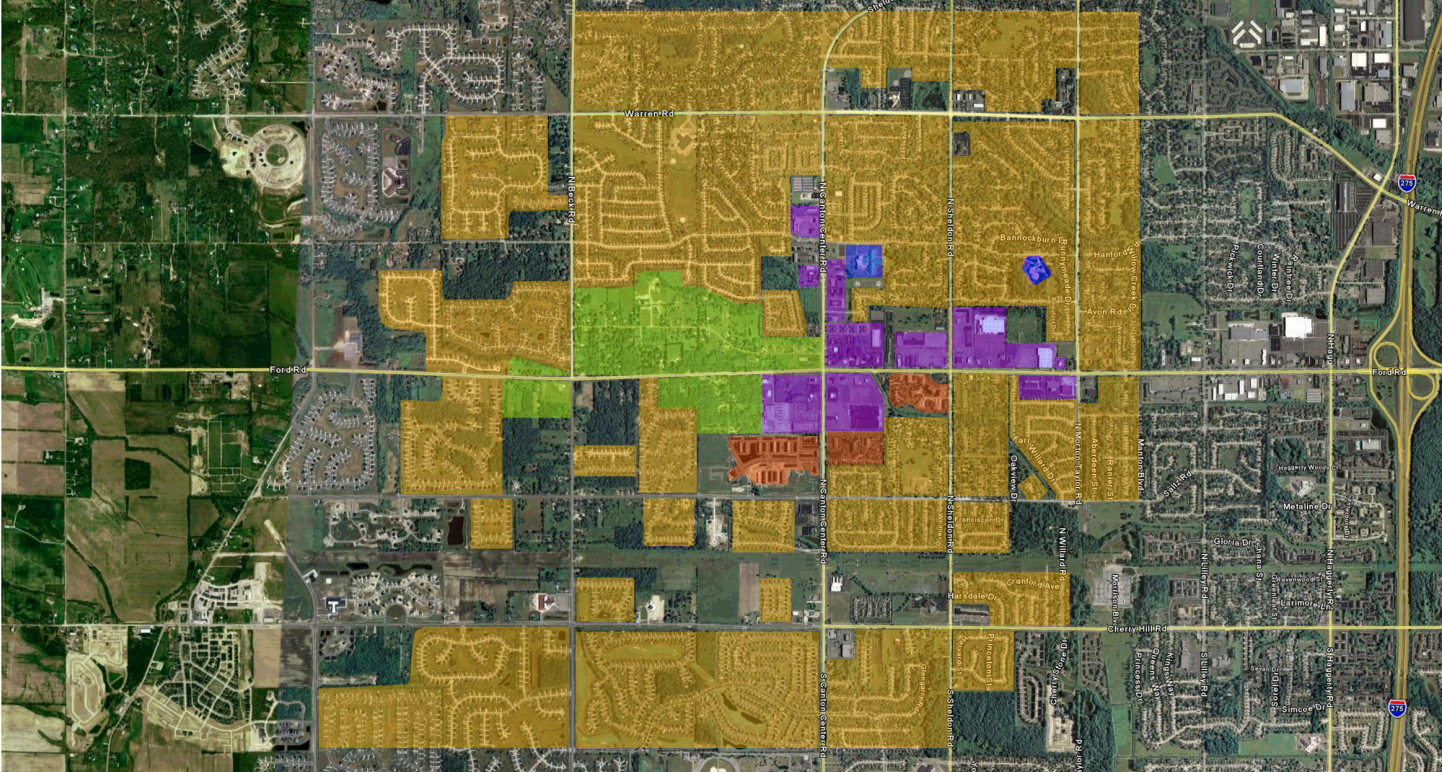
suburban retail development; the parking lots are in between the stores and the roads. The commercial buildings are facing the parking lots. Currently there is an abundance of underused land around the site, especially toward Ford Road.

**Greenspace**

Because of the excess of underused space much of it is green, but not developed, just empty.

**Spatial Summary**

The massive amount of underused land could offer the chance to steer the development of the area very specifically. The area is also growing in population and retail development.



## Chosen Sites

### Commercial

On the site is an abandoned Home Depot, a Farmer Jack, a CVS, and the usual gas stations and fast food places.

### Housing

The housing is almost exclusively single family with just a few apartments to the south east of the site. The space to the east of the site has very sparse housing on it, approximately less than one third less than the rest of the area.

### Civic

The presence of civic buildings in the area is minimal. This commercial zone is at the corner of a few cities and therefore not at the 'city core'.

### Industry

To the north of the site is an industrial area next to the railroad tracks. A large GM center lies just four blocks to the west of the site.

## Plymouth Road and Inkster Road

### Parking

Parking on the site is underutilized because of the abandoned Home Depot. The major parking on the site is divided into two areas, one for the Home Depot and one for the Farmer Jack and strip mall to the south.

### Greenspace

The only greenspace on the site would be the loose housing to the east of the site where there are not houses.

### Spatial Summary

The GM Inland Center creates opportunities in the development of an inclusive lifestyle, so that residents in the area would not have to have a car to be able to go to work and shop and experience recreational areas.

The development of the Home Depot could be a nice gesture to the methods of adaptation to the landscape I am suggesting.

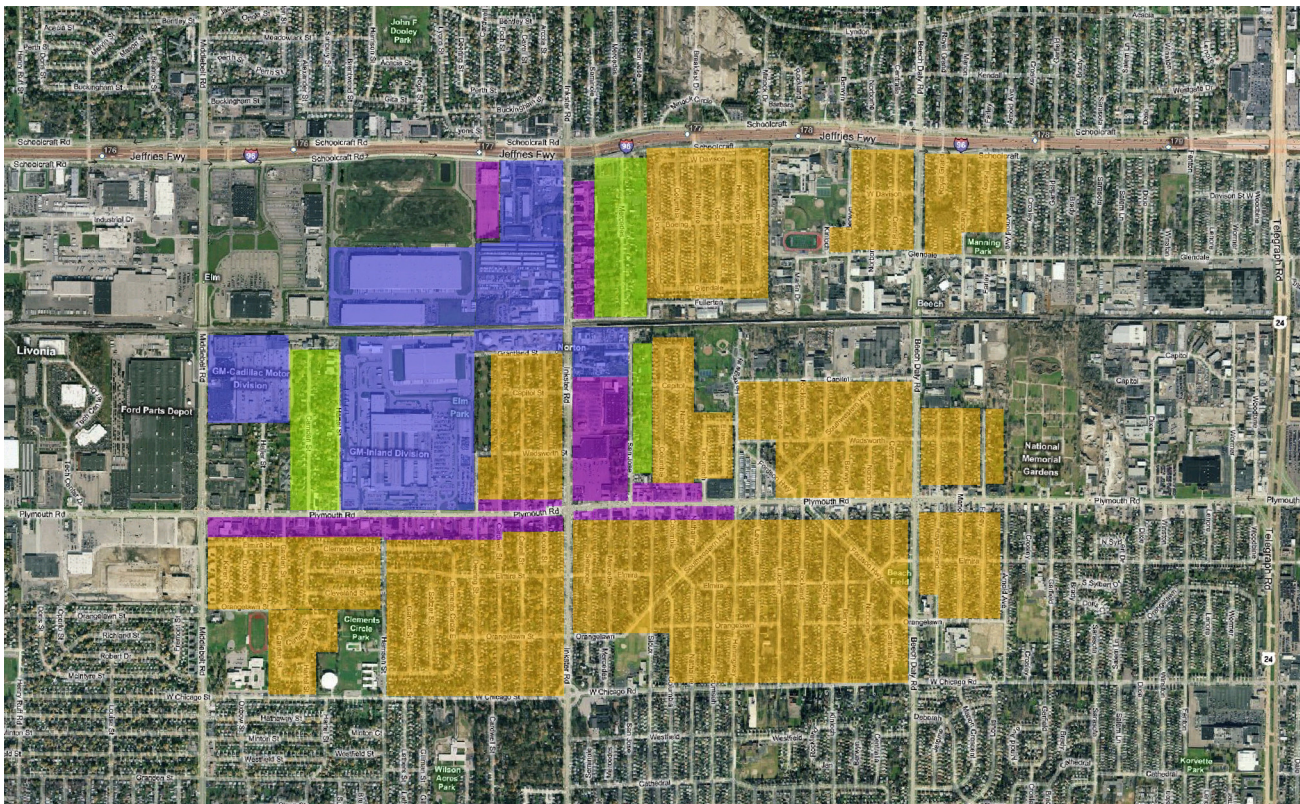




# Chosen Sites

Depicted on this page is the location of the abandoned Home Depot on the right, the zoning of the area on the bottom, and the location of the site on a road map above.

Yellow is residential, purple is retail, blue is industrial, and green is green space.







The  
**GOLDEN  
LEATHER**  
Cocktails  
BAR & BISTRO FACILITY

100

ROBERT LEE  
**DANCE  
STUDIO**

**PIZZA**





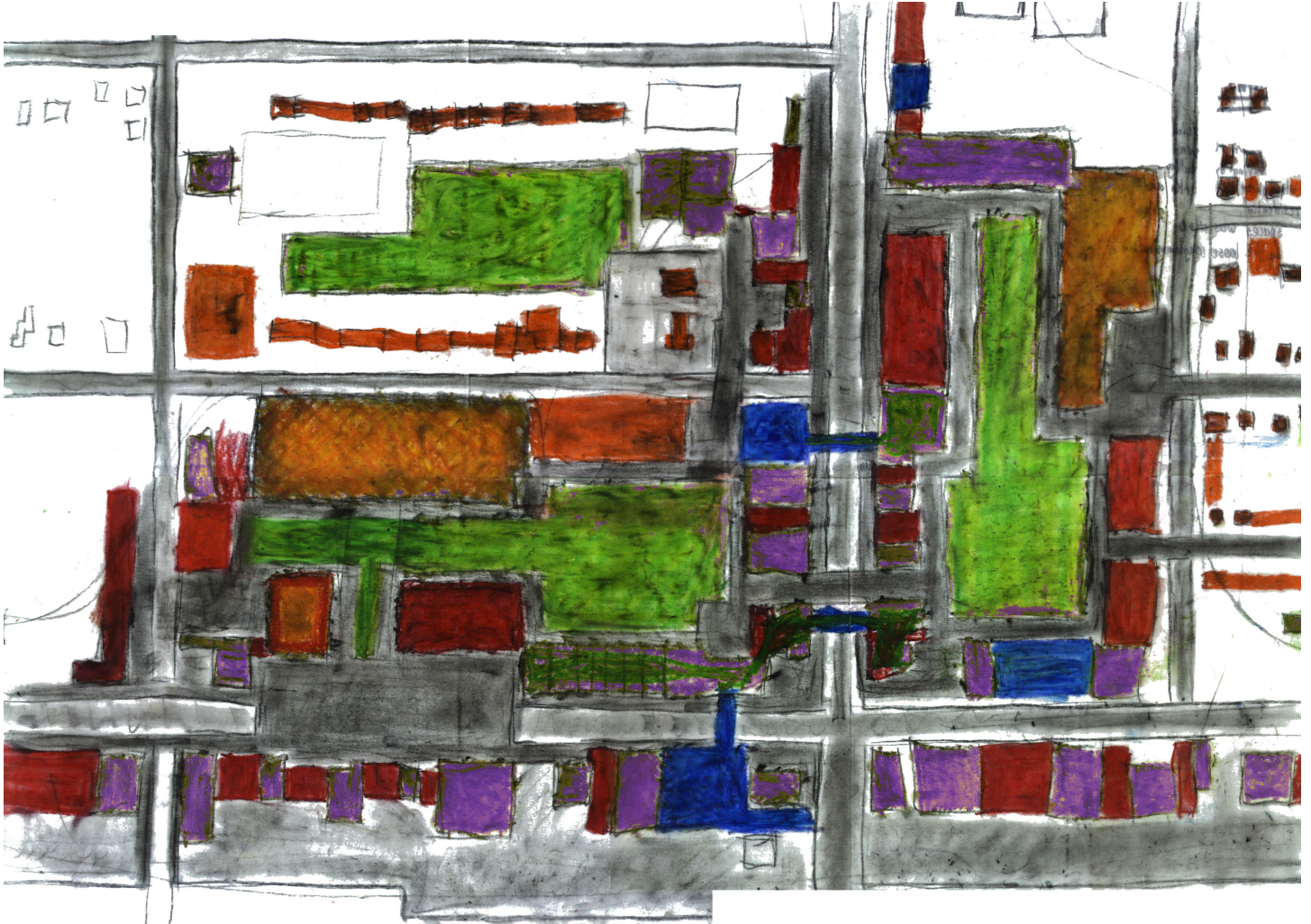


## **Part Two - Design Process**

# Master Planning Experiments

## Retail Plazas

## Ford Road and Middlebelt Road



### Strategy

### Critique

Conceptually the main point of this master plan is to reconsider how people define the functions of commercial zones, from being hyper efficient in terms of time and money to instead fostering more social interaction.

This project utilizes the massive amount of space on the site by creating a defined green space. This utilized the space without immediate extreme infill while offering a relaxed atmosphere to enjoy the environment. This design also ponders why people moved to the suburbs. One can speculate that suburbanites desire open, green spaces so why not integrate them into the retail areas? Another tactic used was the use of the parking structure to make a path across the road to a green roof on the retail on the other side.

Many critiques can be applied to several of the master plans including the absence of phasing, which is the basis of any design like this, and often a lack of necessary parking, both of which detract from the realism of the project.

For this design the scale of the spaces are too large. The paved parts near the retail stores are excessively wide and the facades of the big box stores are likely to be bland and thus not pedestrian friendly.

The sense of enclosure is completely lost because of such a small height to width ratio of the spaces. There is no aerial enclosure either that could be applied by trees or canopies. Anchoring objects or focal points can help give more of sense of place and thus should be considered for contributing to the space and local identity.

Finally, the proliferation of the density of the site does not seem to be resolved.

## StreetScape

### Strategy

The emphasis for this design was developing the street. A standard 60' building to building distance was applied with 10' each for sidewalk, parking, lane, parking, and sidewalk.

The typical building use configuration indicated retail on the ground floor, with two stories of parking above followed by two additional levels of housing. This allowed for a high level of multiuse and density.

This was to be seen not so much as a proposal as an experiment in creating multiuse and densely urban spaces.

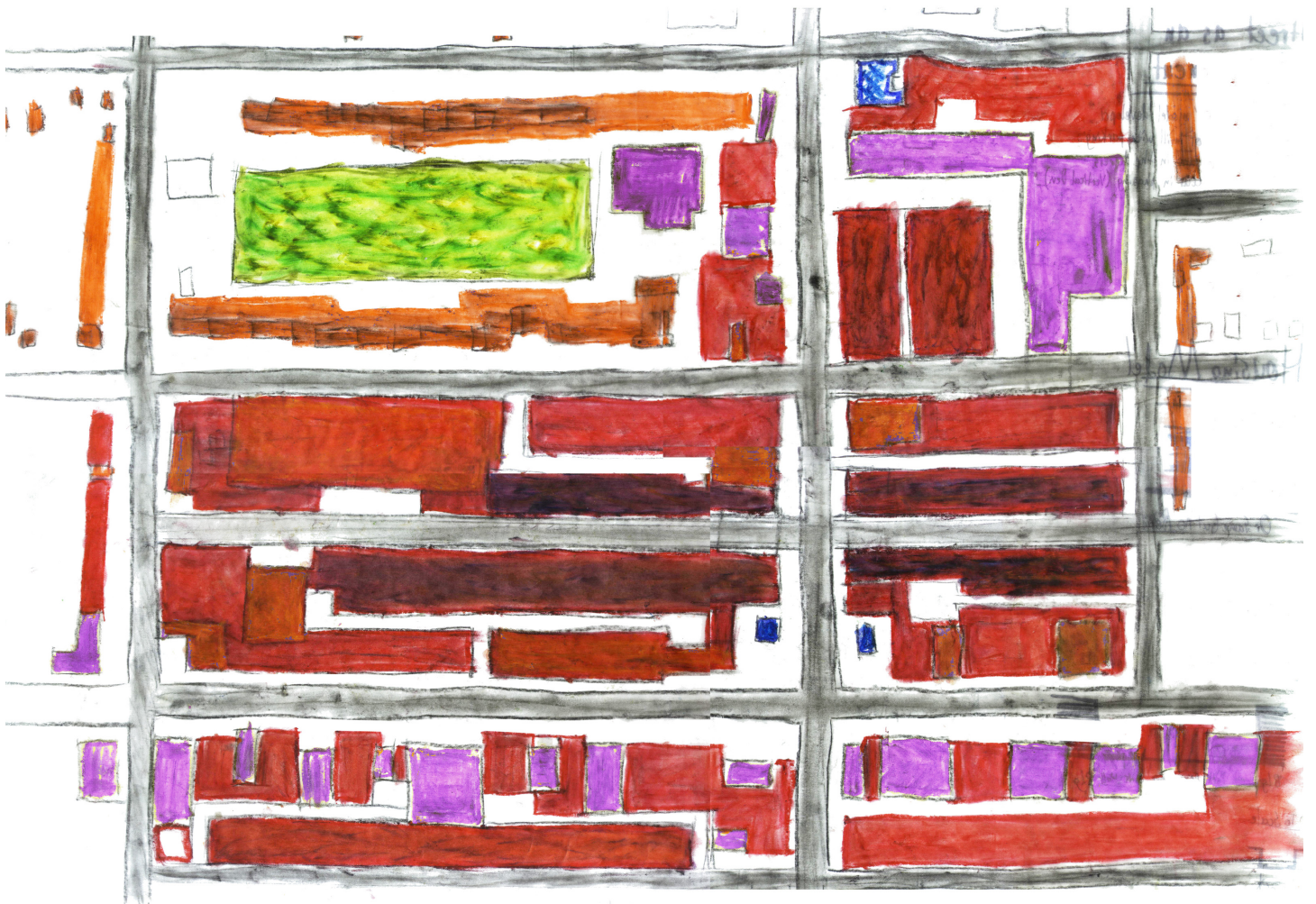
## Ford Road and Middlebelt Road

### Critique

In this design there is an obvious lack of realism; this kind of density is reserved for large cities. In contrast to "Retail Plazas", "Streetscapes" has too high of a height to width ratio resulting in a pinched space. The length of the blocks is massive, and the ability to cross over, and thus the enforcement of a spatial geometry, is reduced.

There is also a lack of public space, and the design has minimal relief from the tight streets.

The extreme density does not have an explained method of how to spread to surrounding areas.



## Master Planning Experiments

### Park and Walk

#### Strategy

As the name would suggest you park and then walk to your destination thus maximizing the amount of time any travelers spend on the street. A new approach is taken in this design as well: the creation of a pedestrian grid as opposed to a vehicular grid. It is the new creation of a pedestrian city inside of a vehicular one. The green spaces of the grid provide visual relief, an opportunity to see those others in the community, and orientation. They also provide lead ins to the site for the nearby neighborhoods.

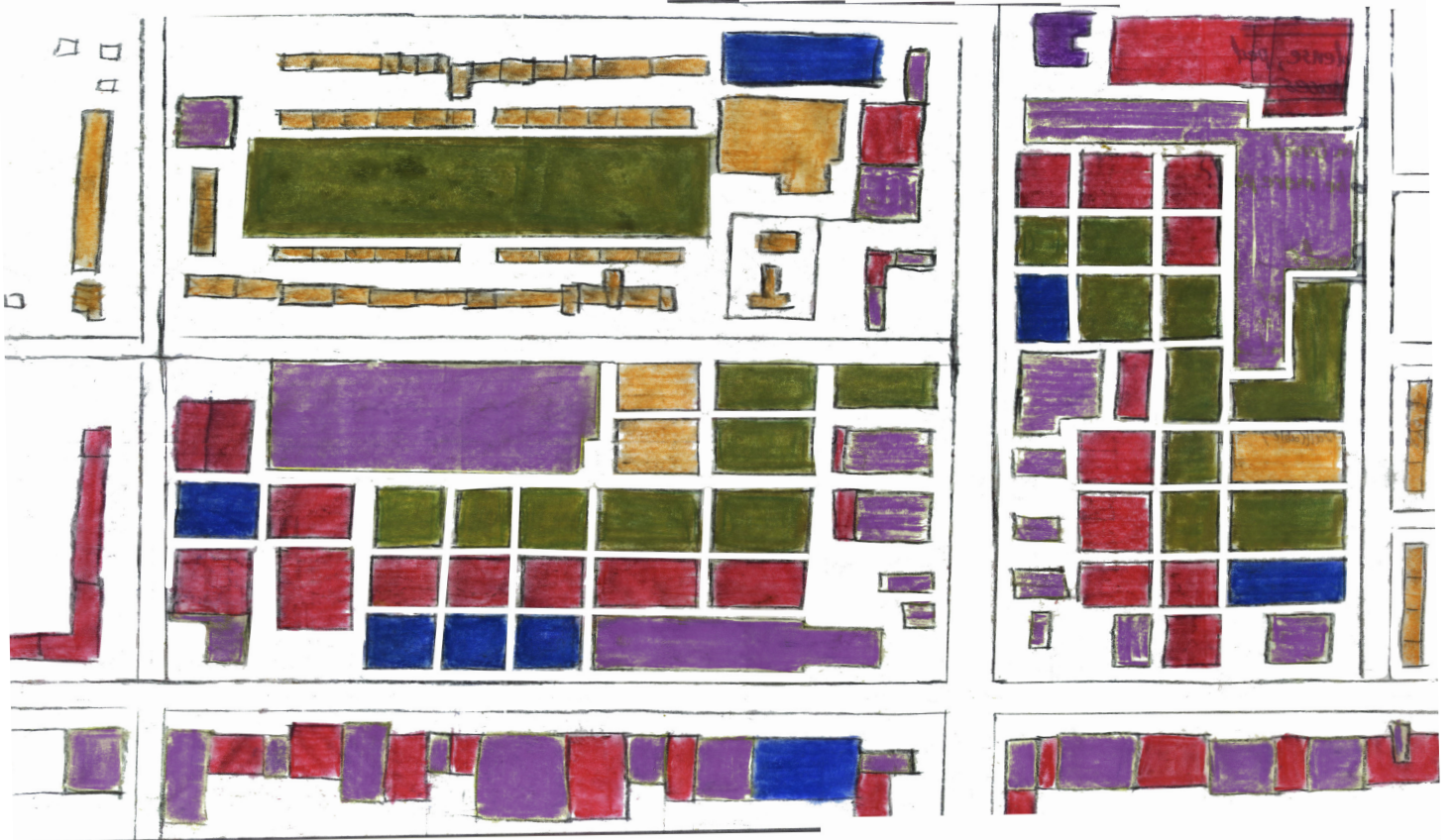
### Ford Road and Middlebelt Road

#### Critique

Another criticism that can be applied to many of these plans is that they do not address the heights of the buildings, that is, the three dimensionality of the spaces, which is important in this design to determine the nature of the spaces.

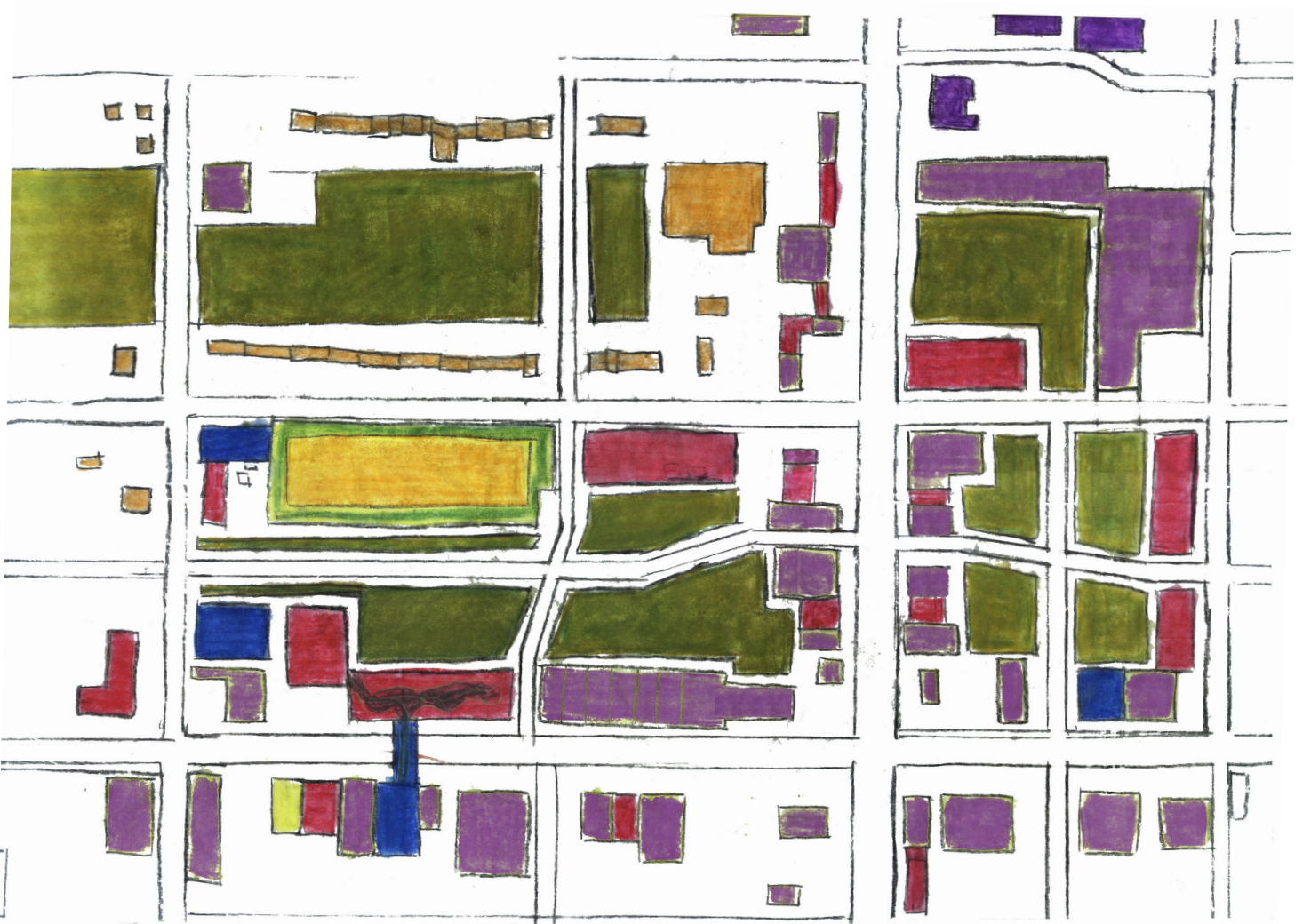
The paths that people take to get to the site are hard to read, inhibiting comfortable walkability. Furthermore, the lack of on-site residential makes the area a destination which limits the creation of a walkable lifestyle.

The stiff grid created would make it difficult to try to maintain continuity off site. This style would have to be modified once it left the site revealing a different style of retail and residential.



**BreakDown**

**Ford Road and Middlebelt Road**



**Strategy**

This design is evaluating how the density of an area can be relieved from the constraints of the island of the big plot. To do this, a model was developed that broke down the large plot into smaller blocks.

The idea of phasing out surface parking to be replaced with green spaces and parking structures was utilized in this project.

**Critique**

One consequence of the permissance of cars to roam freely through the site is the division of quadrants, especially when there is a green space at the core. There are benefits to having a green space as a core including the ability for the users to see each other for a community experience, but in this scenario it boils down to a 30 second scenic drive without definite program in the spaces.

To solve the division into quadrants pedestrian connections need to be specified and designed.

## Master Planning Experiments

### Strip Parks

#### Strategy

Parking lots are an awkward byproduct of suburban spaces because of their non-pedestrian friendly atmosphere. This design seeks to invite people to engage a more relaxed environment. The main concept of the design was to engage the community in the park(ing) by integrating program, including a half soccer field or a basketball court. This is rooted in the goal of creating a multiuse space that is not so based on rabid consumerism. The production of a meaningful community experience in people's everyday lives is something that is very valuable and lacking in most suburban areas.

### Ford Road and Canton Center

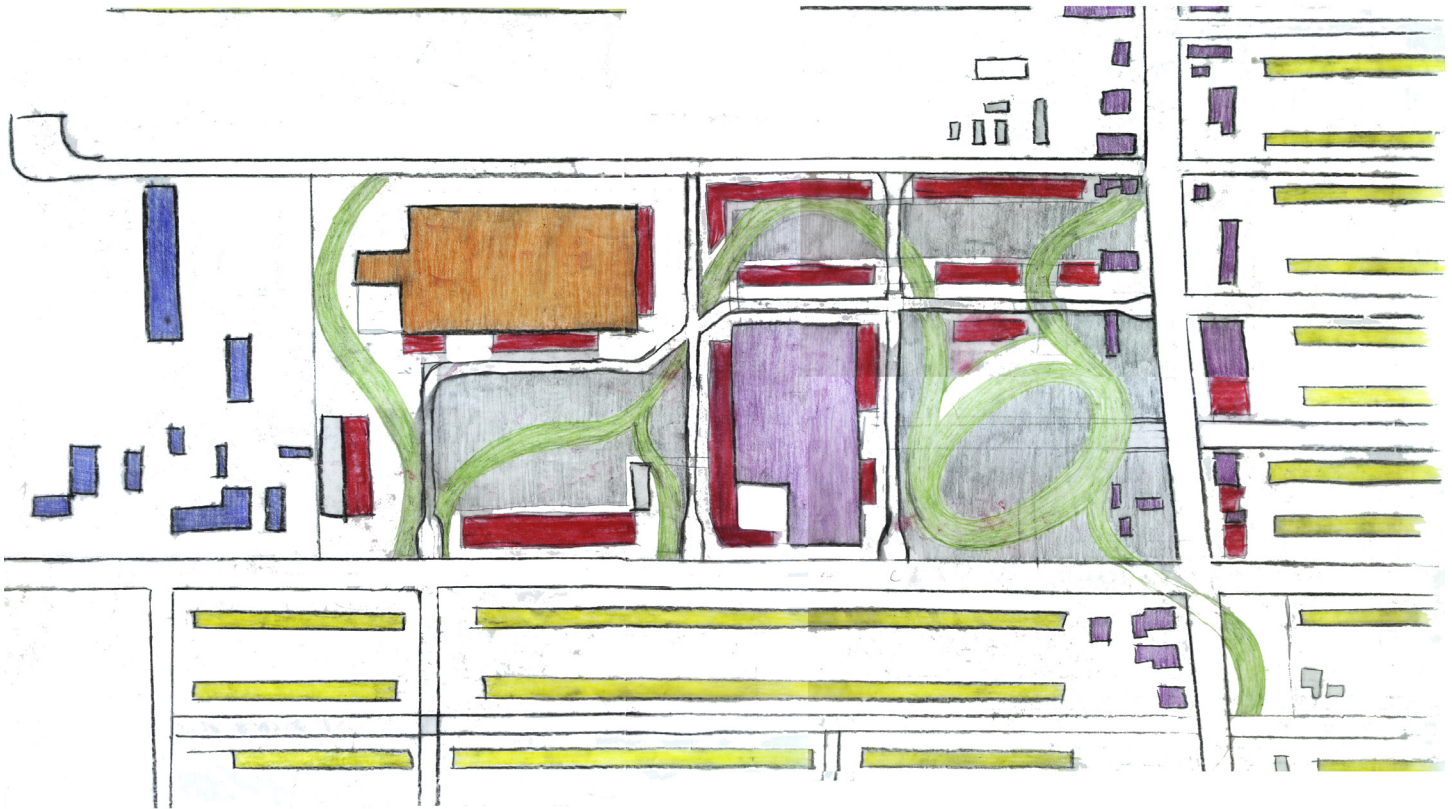
#### Critique

The sense of enclosure is once again lacking in this design. The transformation of parking lots to parks is admirable, but a more comprehensive plan, including more street development and consistent space is necessary for an ultimately successful plan.



**Path Lots**

**Inkster Road and Plymouth Road**



**Strategy**

These next few designs consider more specifically the parking lot and the experiences incurred there. This design is attempting to create a community experience while traveling from the parking lot to the retail store by integrating a green path through the site and connecting to adjacent green spaces.

Another interesting tactic is the addition of small, local stores on the exterior of the big box stores to visually and functionally densify the bland façade.

This design was not to be seen as a finished system but an exploration of ideas.

**Critique**

The specifics of how the cars cross the ribbon parks can undermine the whole design concept. Another issue is that the ribbons avoid literal connections to the community, even though this seems implied.

There is also a lack of street definition and pedestrian crossings.

## Master Planning Experiments

### Parking Spaces

### Inkster Road and Plymouth Road



#### Strategy

Here is another exploration in variations that parking lots can take. To break down the scale of the parking lots 'rooms' were created with evergreen trees which help with runoff, block expansive views and enclose the spaces.

This design is also looking at creating smaller retail that shares walls with the existing big box stores, thus breaking down the scale and adding to the local economy since these types of stores provide much greater community investment than the national big box stores.

#### Critique

The creativity of the design is limited to the parking lots and add on storefronts. The paths from the parking lot to the stores/main pedestrian way are not defined creating a listless feeling in the parking lot.

Pedestrian walking paths should be emphasized. A sensitivity to the experiential feel of the space and feeling of enclosure should be maintained throughout the site.



# Site Perspectives

These perspectives were created when considering the programming of the spaces around the Ford Road and Middlebelt Road site.

They range from a basic juxtaposition of mutually exclusive elements to a more expressive notion of possible program.







# Guiding Principles

To further the exploration of the master plans one site was chosen to develop a more focused and well thought out design. This site is the Plymouth Road and Inkster Road site.

This site was chosen because it seemed to have the most consistent characteristics to the typical types of spaces which are being addressed, including leftover spaces, an abandoned big box store, a community around the site, and the potential to create a local identity based on local jobs.

In the development of the site a few 'guidelines' were adopted that would serve to assist other designers in the adaptation of these areas.

These are **Enclosure, Viscosity, Vehicular Control, and Community Connection.**

These are not only ends in themselves, but they help to create more elaborate conditions that their effects imply. They are often experiences that have architectural implications necessary to carry them out.

Built into these themes are traditional urban planning themes such as mixed use and increased density.

There is the hope that these themes refer to more experiential aspects of an urban plan and therefore provide greater specificity, and encourage similar ideas, in designing.

Note: These themes were used throughout the rest of the term and remain in the final design.

## Enclosure

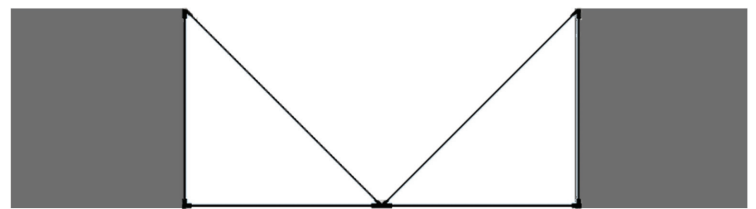
Enclosure refers to the experience of being inside of something, and in an urban condition it commonly refers to the build up on either side of the street.

In urban design, enclosure is often quantified by the angle in which one has to look up to see sky or bypass the silhouette of a building. Full enclosure is considered to occur at 45 degrees vertically from eye level, the threshold of enclosure is at 30 degrees, the minimum angle for the experience is 18 degrees and it is completely lost at 14 degrees.<sup>1</sup>

The feeling of enclosure (when outside) is almost non-existent in most suburban situations. The greatest tragedy of this is the loss of an enclosure's ability to establish a sense of place.

The most common expression of enclosure is buildings but other elements, like trees or canopies can create a horizontal enclosure.

<sup>1</sup>: Spreiregen, Paul D. *Urban Design: The Architecture of Towns and Cities*. New York: McGraw-Hill, (1965): 75



**1:1 Full Enclosure**



**1:2 Threshold of Enclosure**



**1:3 Minimum Enclosure**



**1:4 Loss of Enclosure**

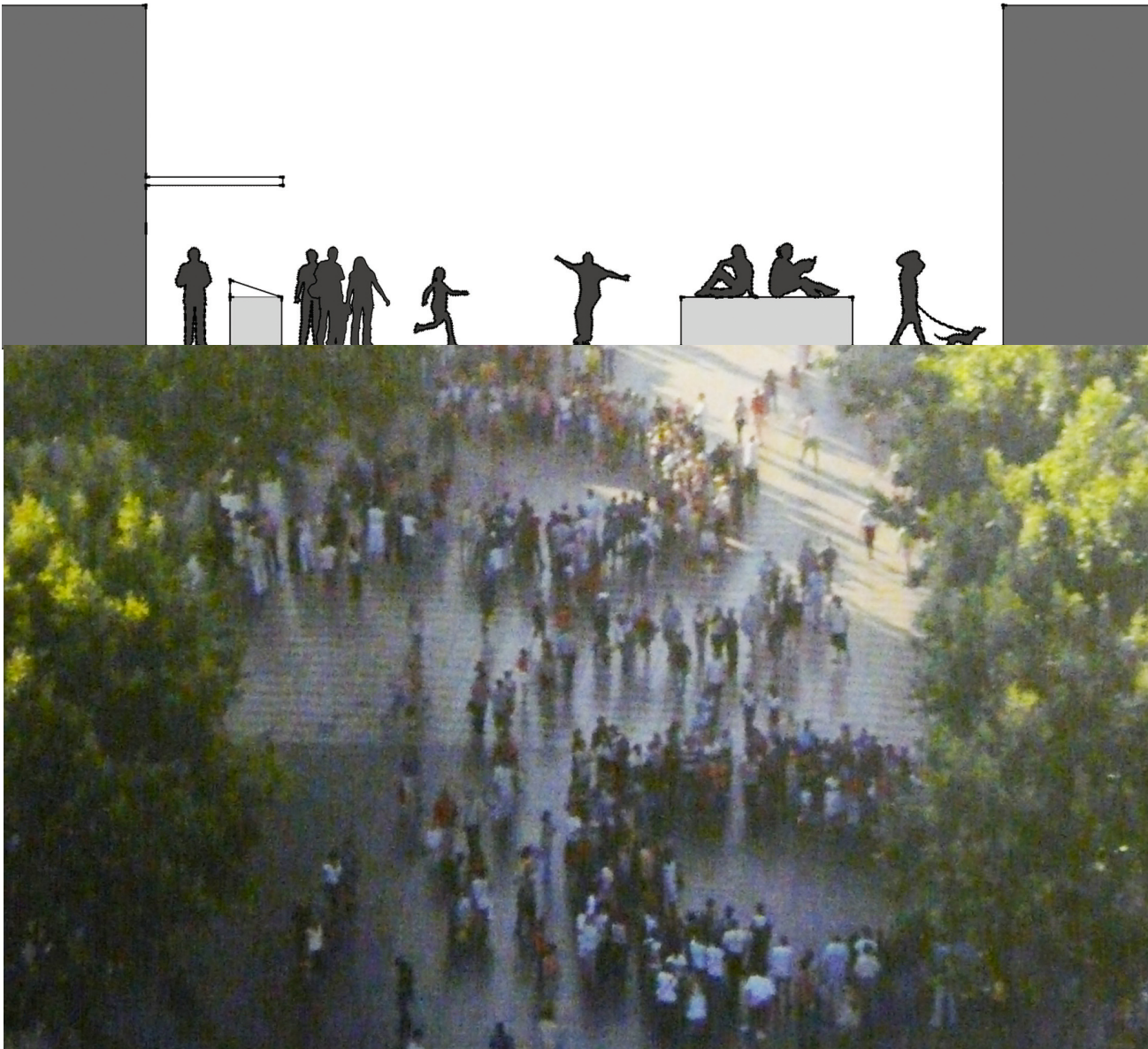
## Guiding Principles

### Viscosity

Viscosity defines the fluidity of a liquid, syrup is called viscous because it pours slowly. The desirable quality here is evaluating circulation based on viscosity, pedestrian and vehicular. <sup>1</sup>

Viscous pedestrian circulation occurs when there are things going on, people stopped, engaged in something maybe eating or street shopping or having a conversation with friends, and people walking by them. This creates a situation that is distinctly urban and incites social collisions, as described earlier. A dynamic and diverse atmosphere is created which is an important aspect to community space to create a community experience.

: Cullen, Gordon. *Townscape*. New York: Reinhold Publishing. (1961): 24



## Vehicular Control

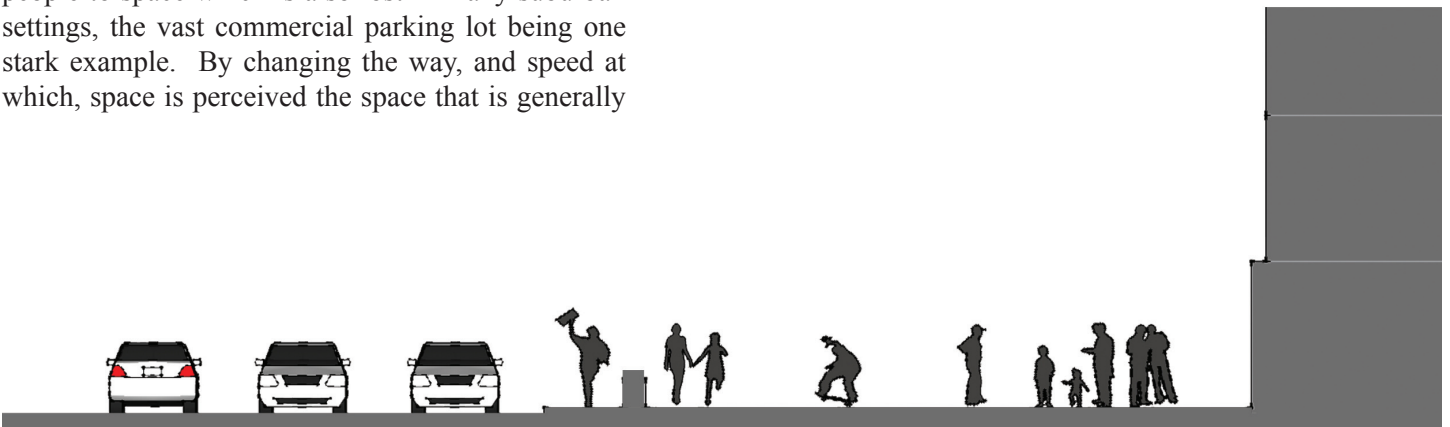


Vehicular control is important because it is completely absent in the current setting. The efficiency and speed of cars have won out over the human.

Instead of speed I believe the emphasis should be on connectivity not only to buildings but people to space which is also lost in many suburban settings, the vast commercial parking lot being one stark example. By changing the way, and speed at which, space is perceived the space that is generally

lost or brushed aside in suburbia can become niches or havens when explored on the human scale.

The creation of pedestrian and bike paths, and zones that are free from cars are embodiments of this condition.



## Guiding Principles

### Community Connection

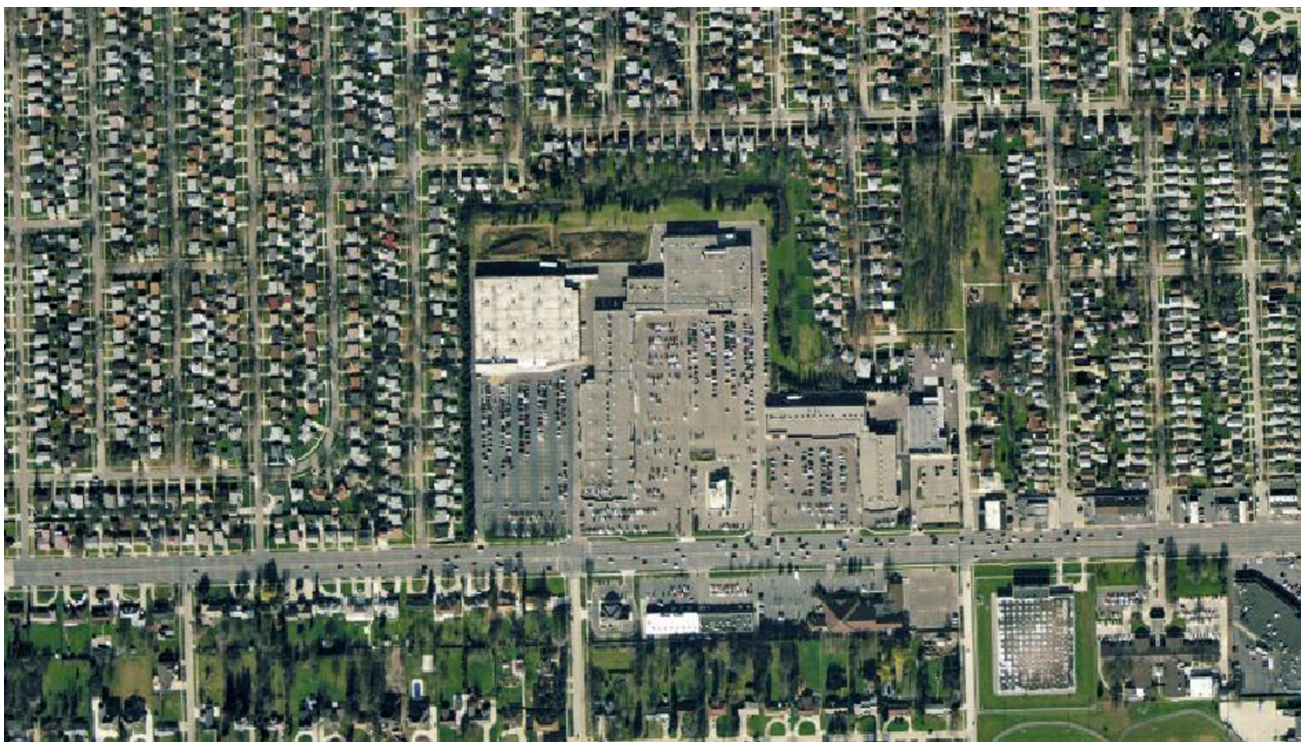
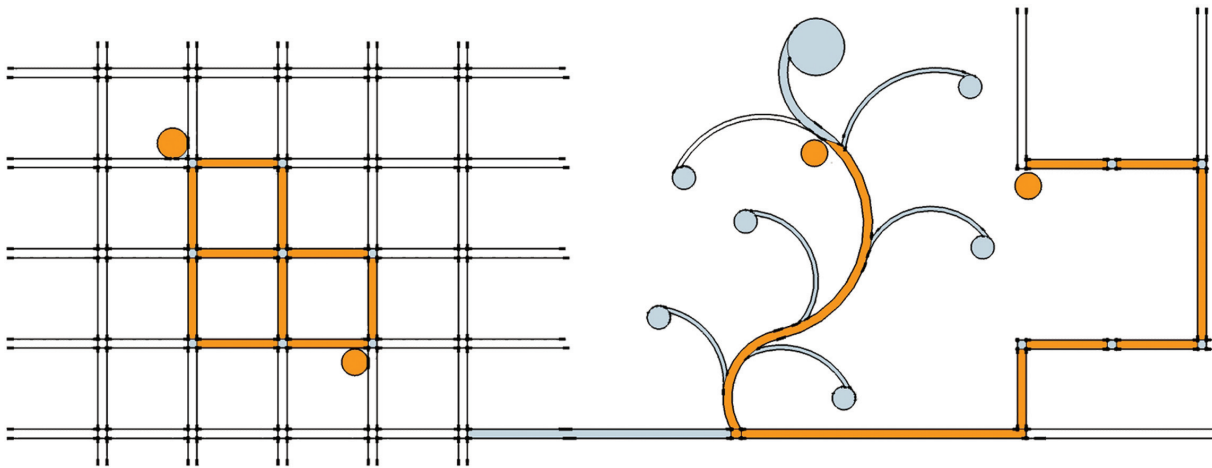
As you can see on this map taken from the metro Detroit area, there are several big box stores completely surrounded by a sea of single family housing, a common condition in suburbia. But the detail investigated in this guideline is the lack of connections from the housing to the stores. To access the stores by foot the residents would have to walk through a neighbor's back yards or walk to the main road and walk back to the entry.

This arrangement discourages walking as a mode of transportation and thus degrades the walkability of the site as a whole.

This guideline insists that connections be

made to the commercial core of a neighborhood to encourage walking as a means to arrive there and explore the site.

To encourage walking to as well as through these sites very efficient and direct paths must be created. The common cul de sac subdivision does not provide efficient paths and needs to be modified to create such through ways. Something close to a grid creates efficient paths in any direction and should be seen as a valuable arrangement in an urban setting.







# Master Plan Development

These guidelines have influenced the development of the master plan of the Plymouth Road and Inkster Road site.

Enclosure is reflected in the creation of well defined streets that evoke the experience.

Community connections are most notable to the east of the site where pedestrian and bike paths have been created where there were no roads. Also a path was made (off of the map to the right) to the north of the site, across the railroad tracks to a gridded subdivision that was lacking an efficient connection.

Vehicles have been controlled, and let through on the site. The hardscape to the south of the modified Home Depot is the most significant example of a pedestrian only zone.

Here in the hardscape vendors or anyone with a permit can set up shop in the coves provided, thus making a very lively and engaging atmosphere.

The sheer size of the area influenced many decisions on the site. For example, the new retail on the site is broken down to a small shop for every thirty feet of street frontage. This makes for a rapidly changing experience of merchandise, commodities, and dining opportunities.

Two different major public spaces were created on the site; the green space to the south and the hardscape to the east. These spaces would offer the opportunity to participate in a multitude of activities and hobbies.

The blocks to the east of the site have sparse housing on them. This area is available for phasing to occur. Initially this could serve as parking as other businesses and residences around the site fill up, and eventually this area could be developed into other mixed use functions with parking structures.

## Inkster Road and Plymouth Road

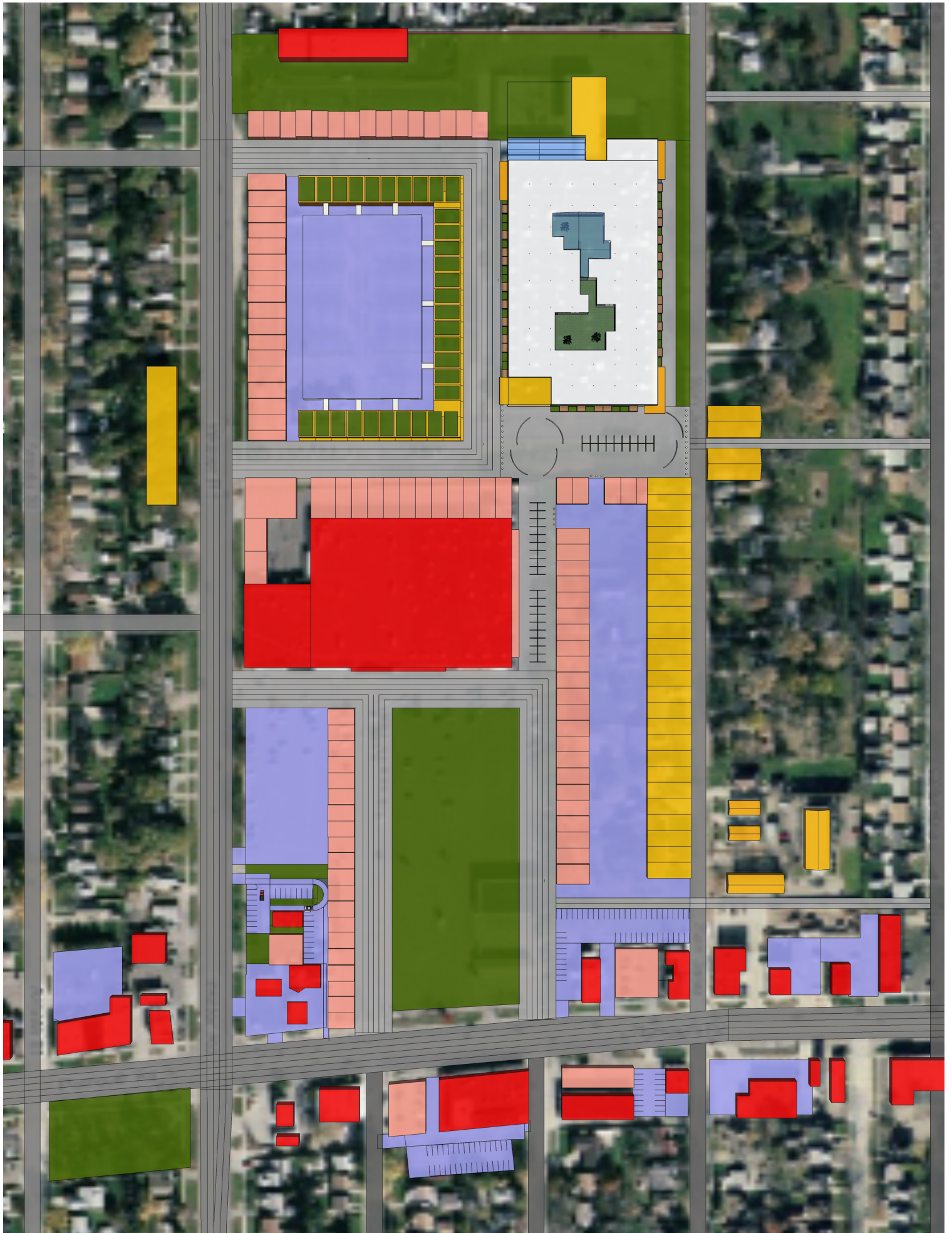
The development of Plymouth Road has been a critical part of the design, and has provided some specific test cases for the transformation of existing suburban streets that can support much more infill and building frontage than they currently do.

At the south west of the site is an Arbys and a gas station. By rerouting the drivethrough of the Arbys, while maintaining an acceptable turning radius, over 3,600 square feet of ground space was made available for development.

Directly to the south of the site is a Murrays auto parts. The parking was located just next to it on the street. By relocating it behind the store in an empty lot the street space could be opened up for a new store.

Just to the east of the Murrays is a storage building for the Murrays. This building is so far back from the road that a whole new building could be placed in the space, with parking shifted to the side of the buildings.

To the north of the Murrays storage building, and the south east of the site, is a fast food restaurant and a pizza store. In a similar method to the main Murrays store the parking was moved behind the eateries and a new building was placed between them.



# Proportions of Program

These are the proportions of the programs for the Master Plan development for Plymouth and Inkster. All are measured in square feet.

Evaluating the proportions of functions on the site allows the designer a perspective into the land use that reading a 2d plan does not offer.

## **New Retail**

232,316  
22,788 Across Street

## **Kept Retail**

134720  
x127820 Home Depot  
30942 Across Street

## **New Housing**

254232  
+127820 Home Depot  
382052

## **Existing High Density Housing**

18080

## **Parking**

540891  
42976 Across. Street  
583867

## **Major Public Spaces**

72852 Hardscape  
135783 Greenspace

## **Roads through site**

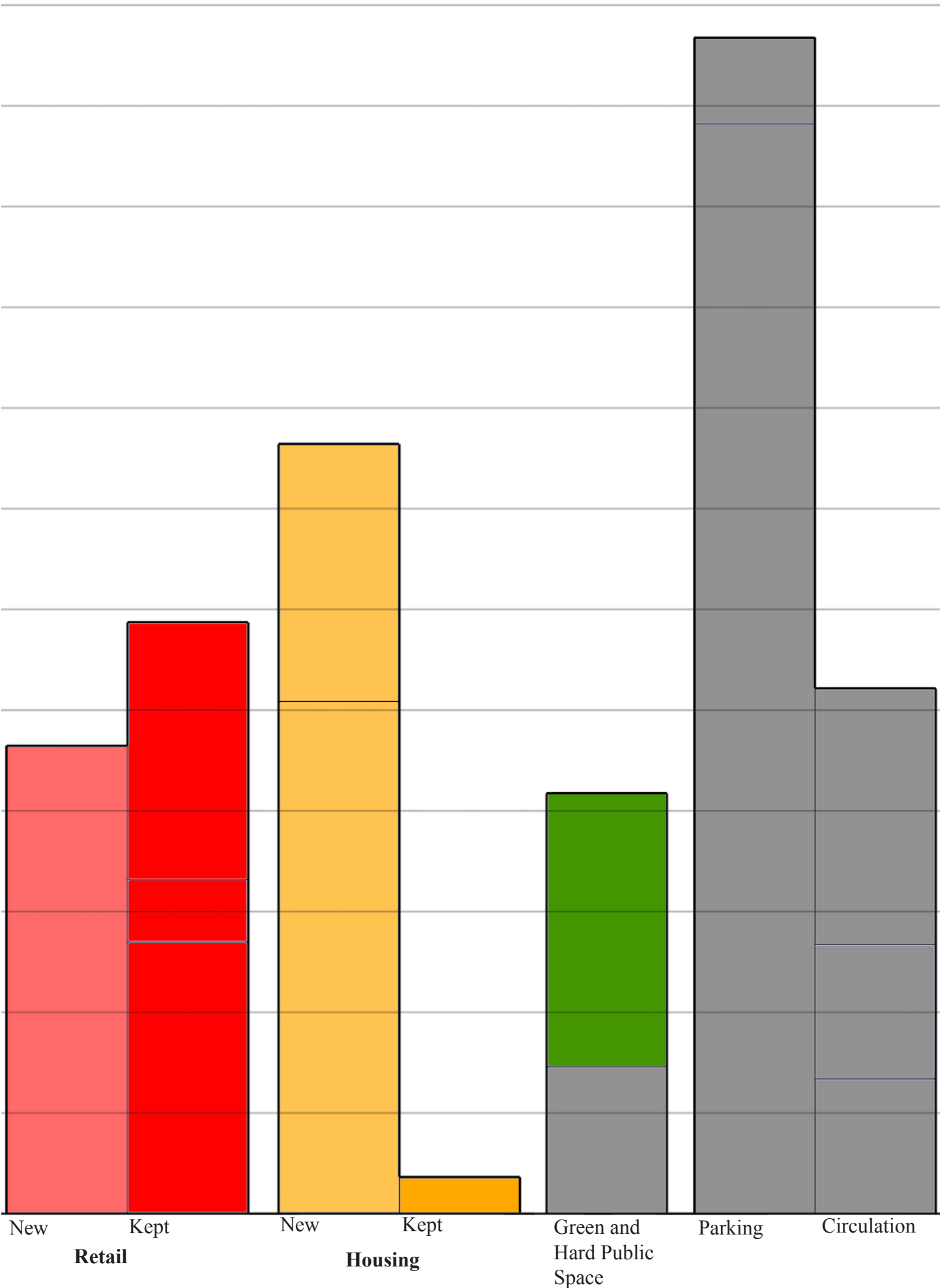
66840

## **Surface parking**

66840

## **Sidewalks**

127046



# Home Depot Design

This next phase looks at the abandoned home depot from the Inkster Road and Plymouth Road site to look at how the adaptability of similar abandoned buildings and spaces could actually occur architecturally.

The premise of the sketch project was the placement of residential units inside of the Home Depot shell.

The benefits this would offer would include: sustainable reuse of the building, ease of construction inside a controlled environment, mitigated thermal loads on the units, reduced construction costs because of the reuse of the existing shell, utilization of the existing HVAC, offered denser form of housing to support the goal of mixed use, and finally a reconsideration of the usage of these types of buildings.

This design calls for the development of a prefab module that can be assembled on site in a

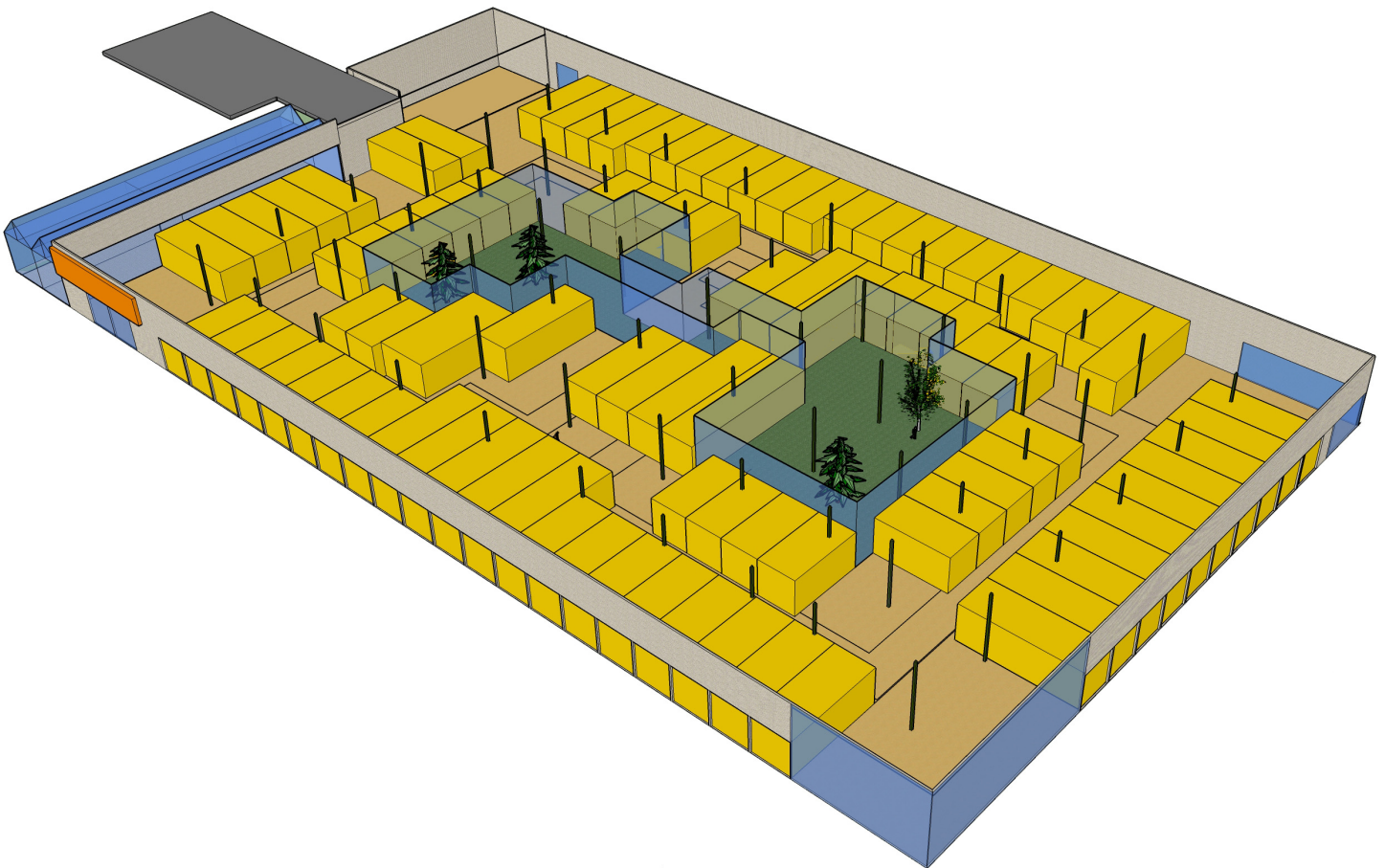
controlled and efficient environment. This module is based off of a 8' x 8' grid for traditional material sizings.

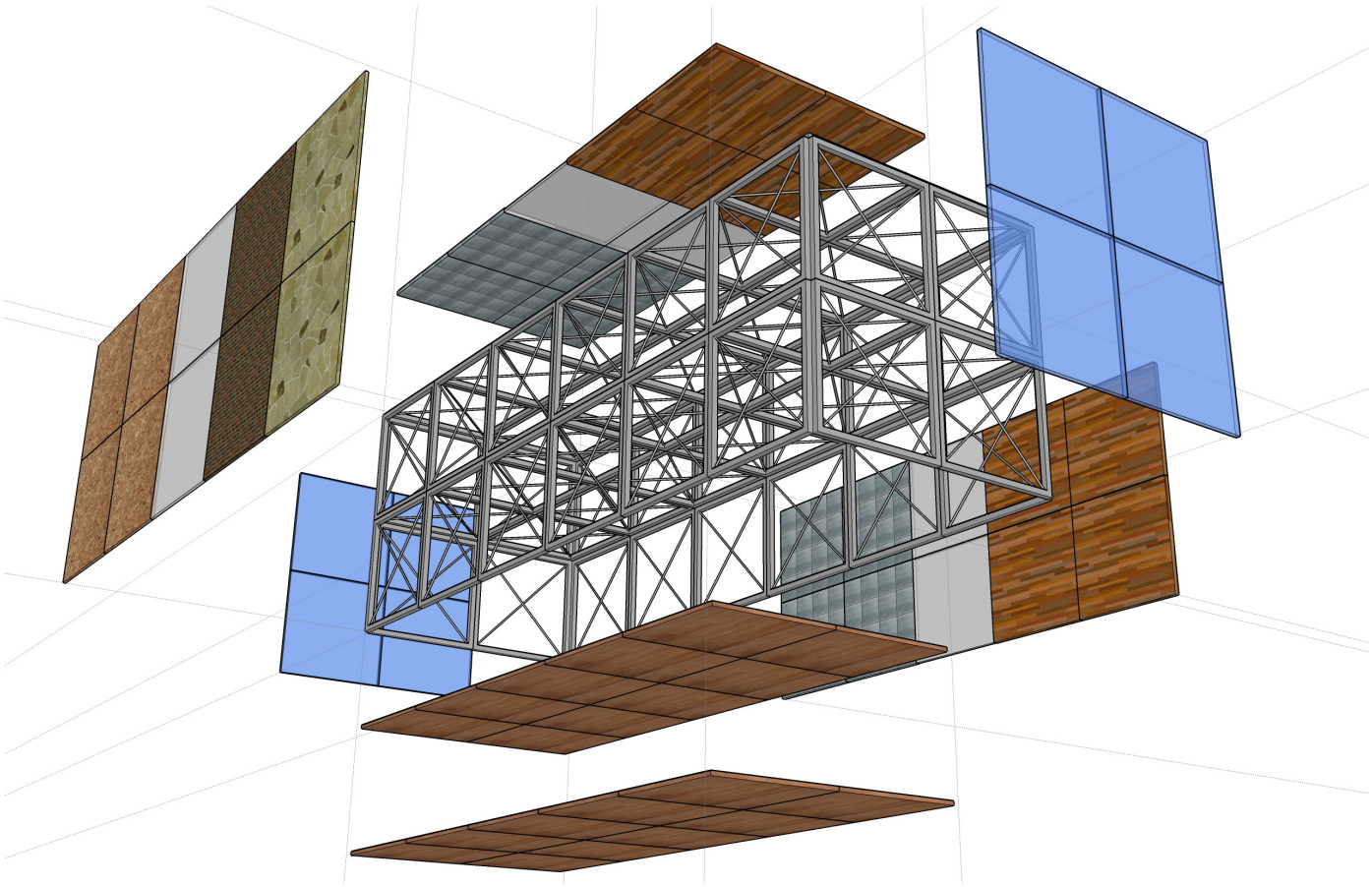
A theme in the project is the establishment of the front porch on the interior street for the units. Because of the natural protection from the elements this offers a unique opportunity to the residents to individualize their space.

The units' interiors are to be designed with smaller spaces to contrast the openness of the big box store.

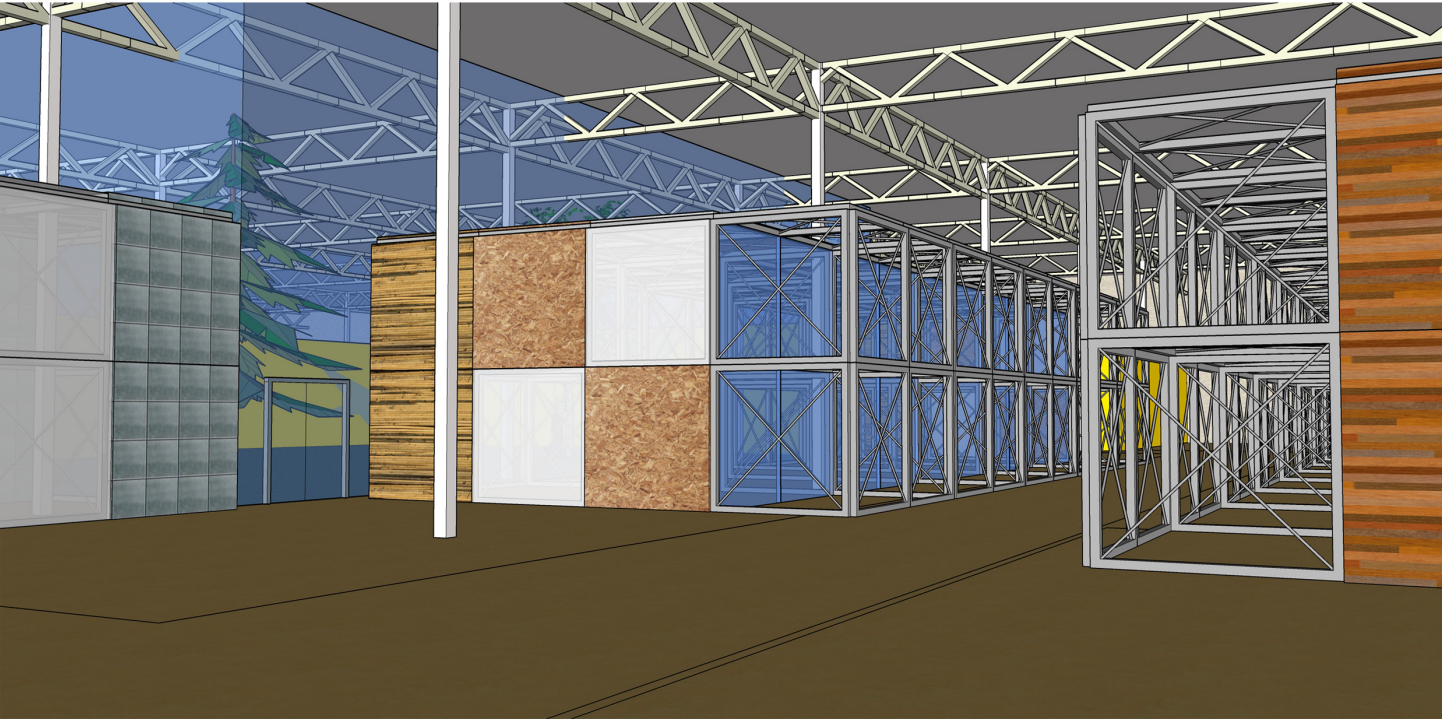
Daylighting was an obvious issue so an atrium was included.

Contrasting the warehouse feel, the spatial organization tries to break down the sight lines while having the units break down the space to a human scale.

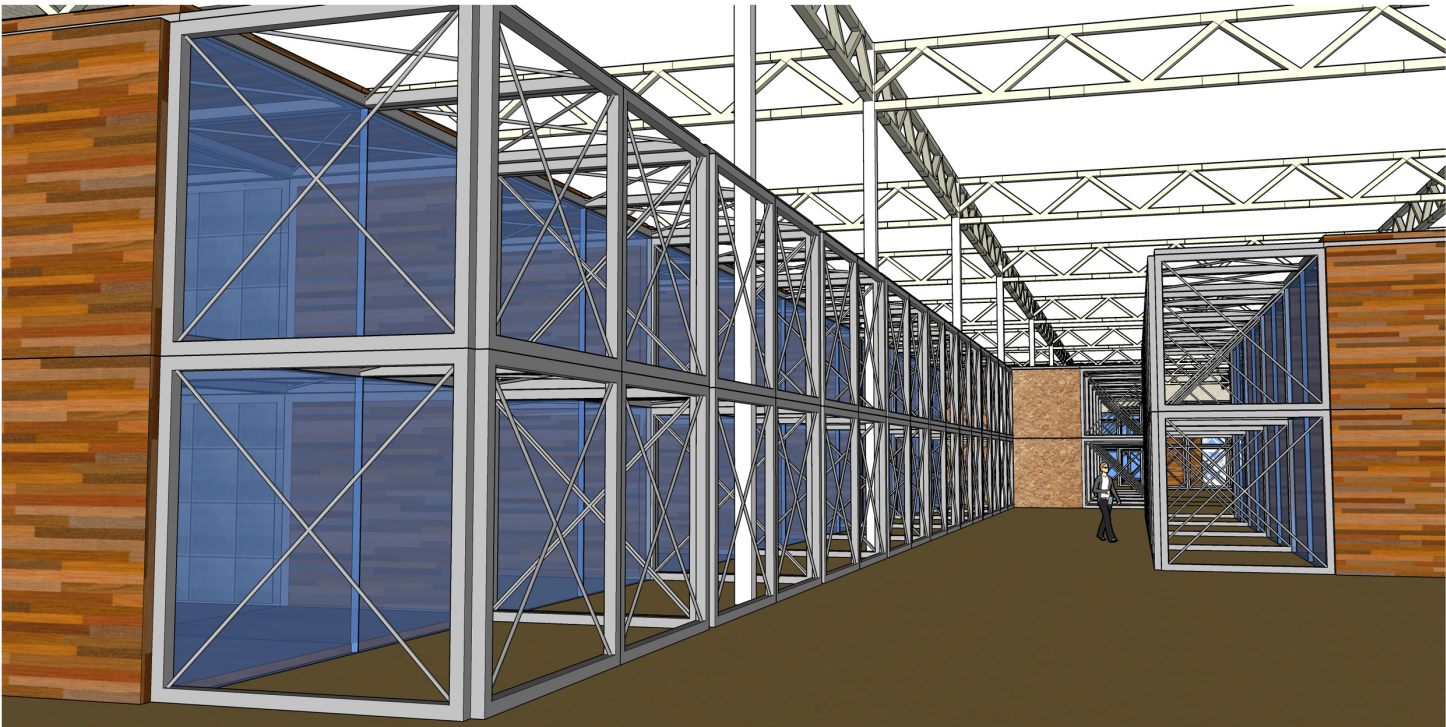




Home Depot Design







# Home Depot Design Development

In further developing the Home Depot Project a few changes were made.

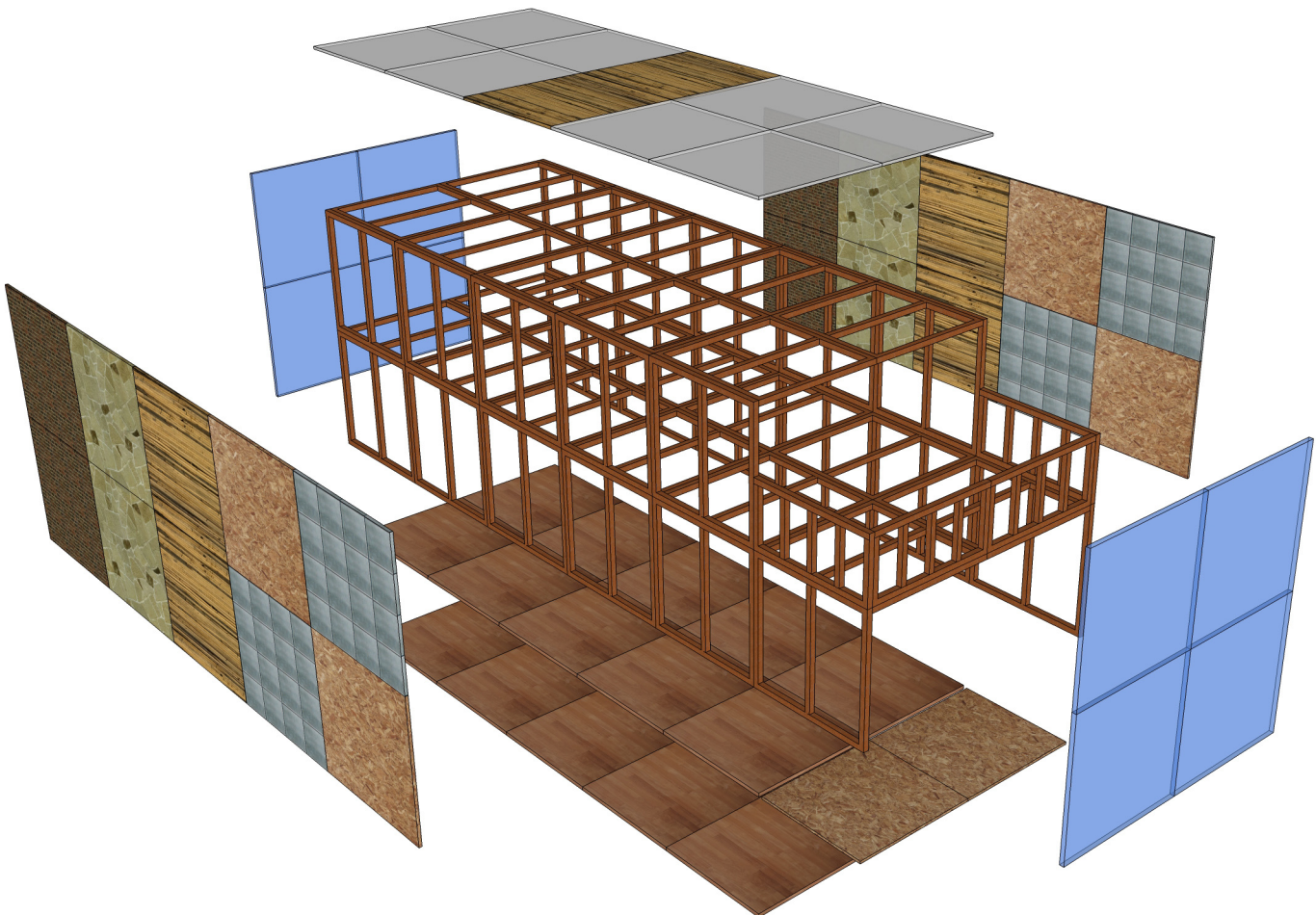
1. The structural model for the units was changed from metal framing to wood stud framing, similar to conventional housing.

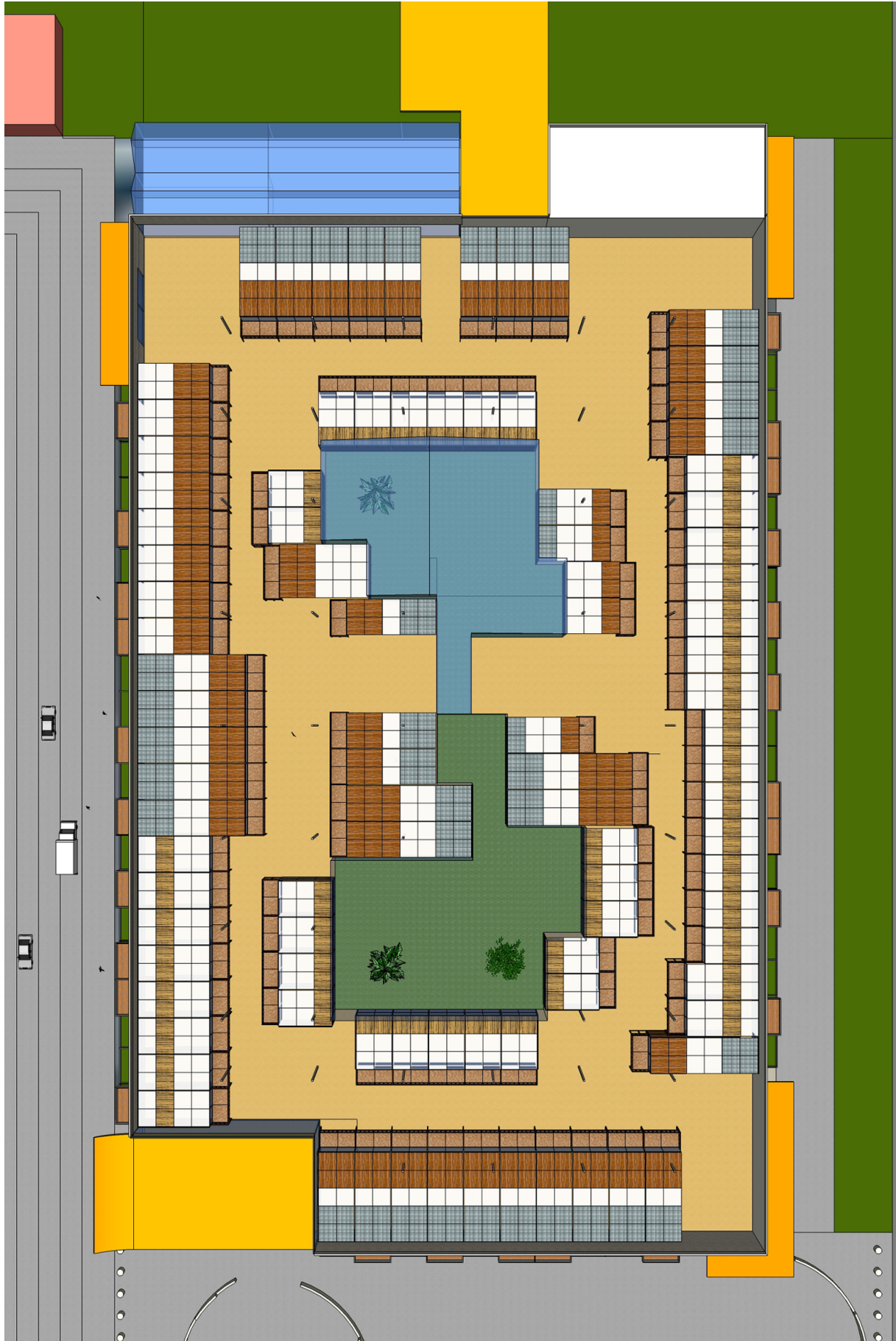
2. The units were more carefully manipulated to avoid intersections with the existing columns of the building.

3. The atriums were developed so that one is covered, with operable air vents, and the other open. This would offer different experiences for use and opportunities throughout the year.

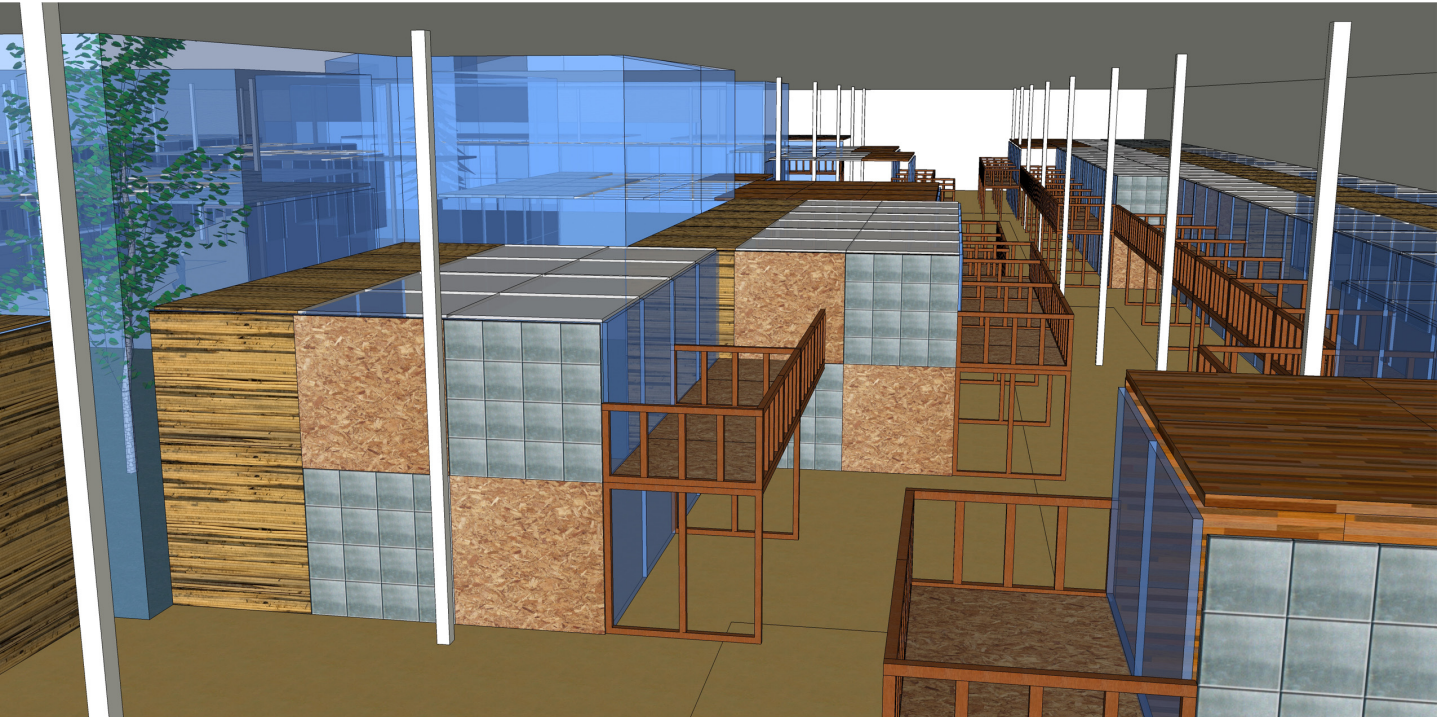
4. The building now offers garden space and sometimes exterior balconies for residents on the exterior. This breaks down the scale of the facade and can inspire community experiences between the street and the units.

5. The entries of the building were developed to be more approachable, especially in relation to the hardscape to the south.





# Home Depot Design Development



Home Depot Design Development





## **Part Three - Final Design**



Step 1



Step 2



Step 3



Step 4



# Neighborhood Development

In addition to the 4 core principles I also adopted a general method of phasing for the master plan of the community, which involves 4 steps.

## Step 1

Define the neighborhood that is being developed. The community should be based on walkability and bikability to the site, which can roughly equate to a 6/10 of a mile radius from the core or 15 minutes walking.

This is the community and unique distinctions and qualities, such as local industries or products or other defining characteristics are encouraged.

## Step 2

Develop the new city core with the aforementioned themes.

## Step 3

Connect core to neighborhood by providing practical methods of getting to the core that are not by car, for example by bicycle or on foot.

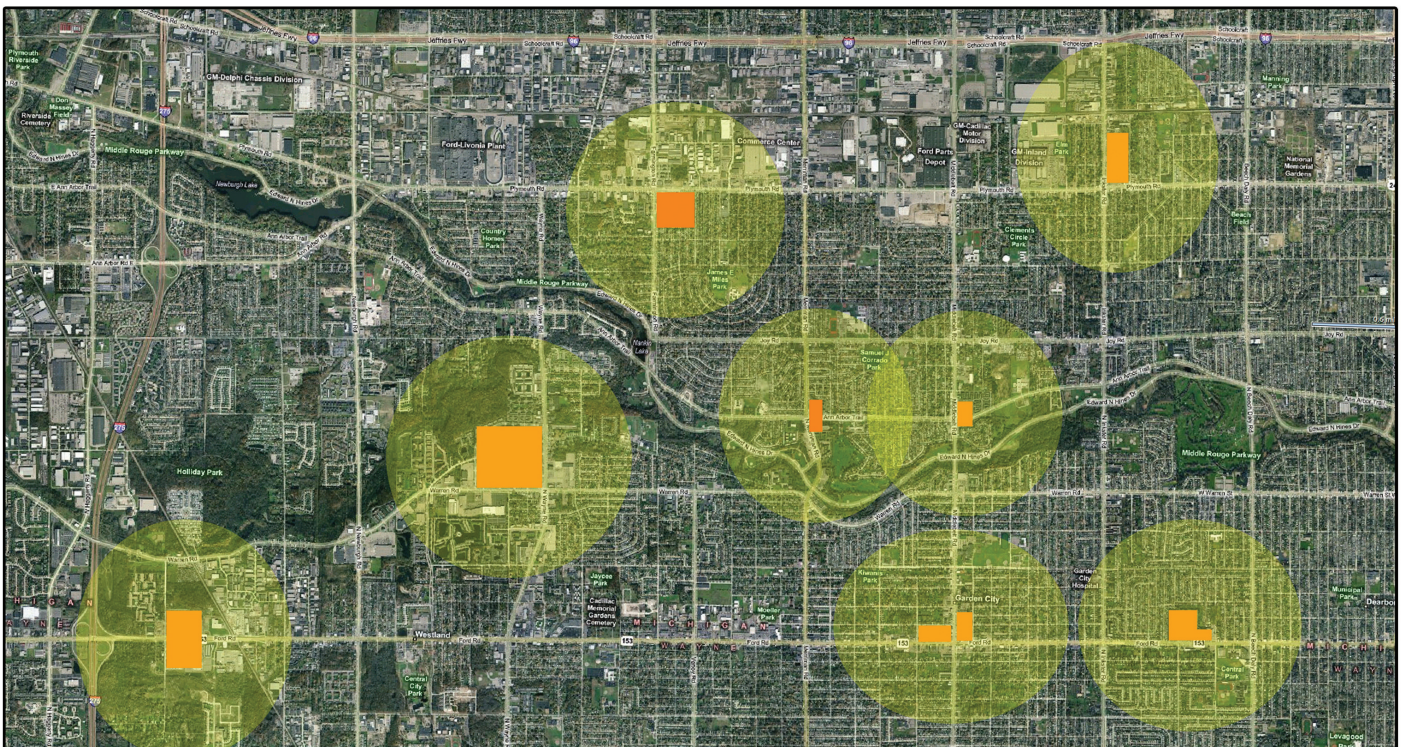
## Step 4

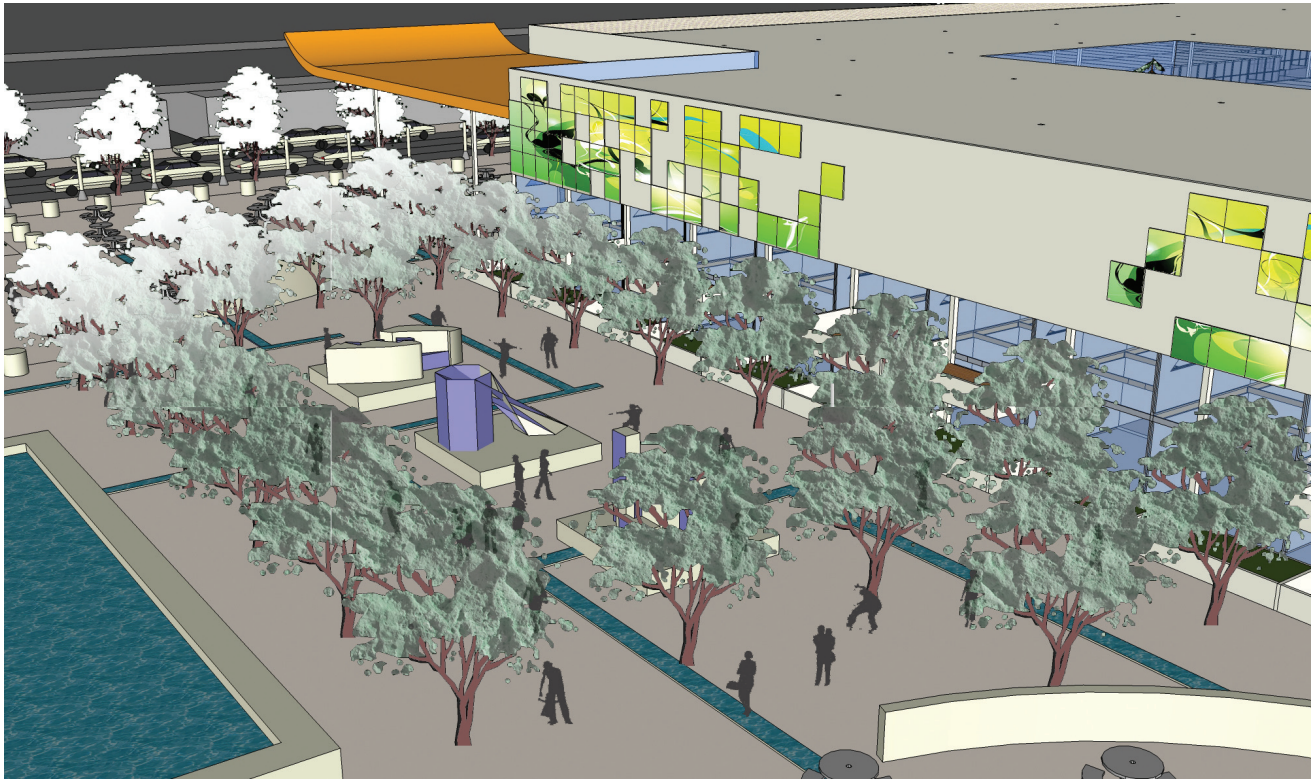
Spread the Density of the core, to a lesser degree,

throughout the community. This should relate naturally to land values.

The final design occurs at the beginning of the fourth step in the process, after the core is fully developed.

This diagram is mapping out a variation of the areas of development that could occur if this system was applied several times across the western metro Detroit area. Note that there is still plenty of 'suburbia' around the developments, the proposal is not to create little cities everywhere.





# Final Master Plan

There are many significant ideas that are occurring in the final Master Plan:

Running roads through the site to establish connectivity,

Densifying the area around those roads to create a sense of enclosure and atmosphere,

Adapting the existing abandoned big box store into a residential building,

And the establishing of parks and hardscape which offer different opportunities for leisure and create social, public space on the site, which it currently has none of.

Also notable is the technique of latching new retail on the backs and empty areas of big box stores.

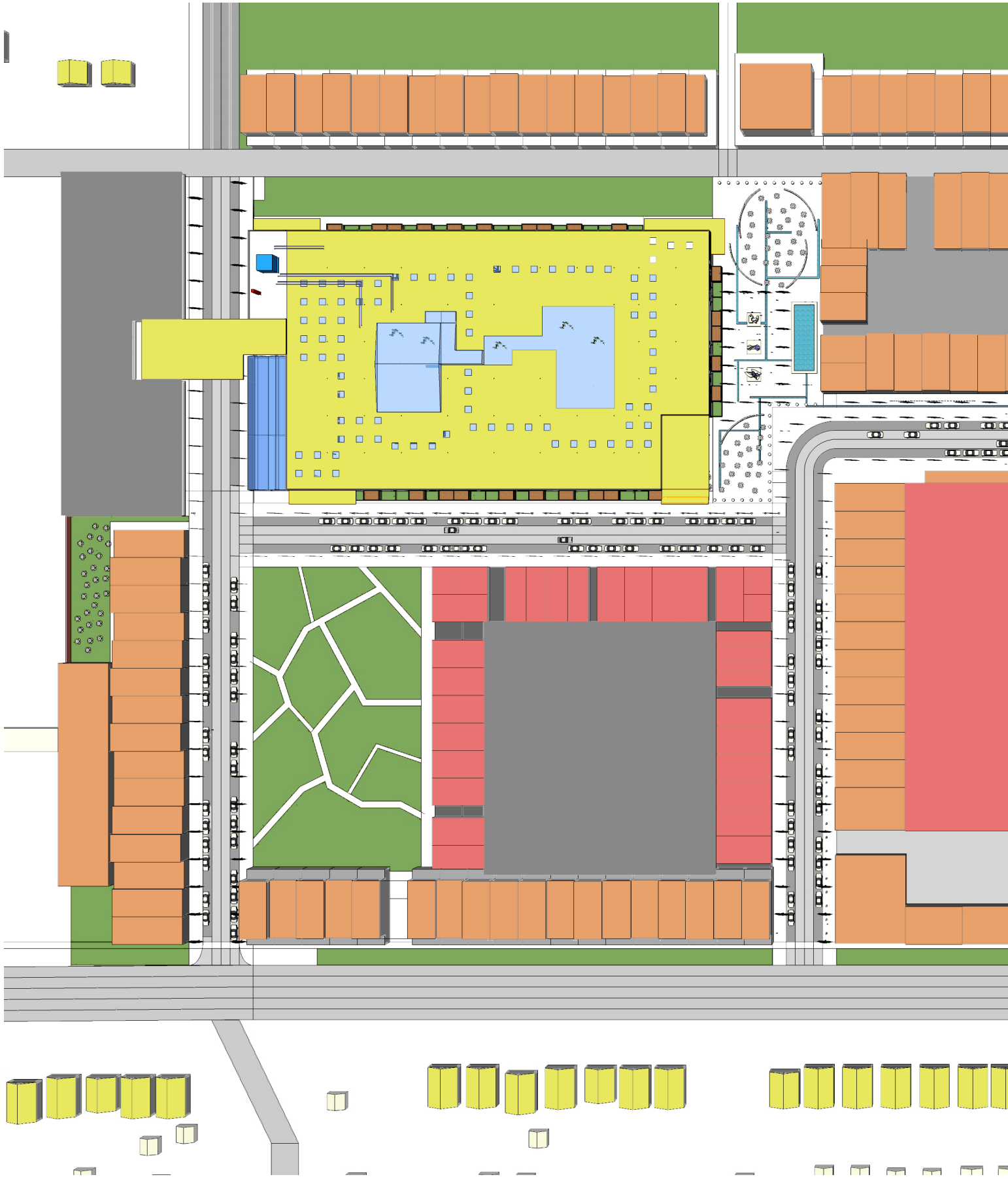
The areas around the site with loose housing can be used in conjunction with phasing. The idea is that the housing can remain while first steps are being taken with the site, then as people leave or possibly when the denser development gains momentum, the land can be converted to green space, then as the residential units and retail are filling up the land can be made into parking and eventually evolve into mixed use developments, as depicted in the final phase of the master plan.

## The Street

Developing Plymouth road, and working in conjunction with what is already there, was one of the challenges of the project. My main goal was to try to infill into the lost space caused common suburban systems, like each establishment having their own parking rather than sharing lots. For instance, on the road there is an existing fast food restaurant and a gas station. By manipulating the drive thru for the restaurant over 3,500 sqft of ground space was made available, and here, there is a Murrays auto parts. By putting the parking into open space behind the building another building can be made on the street, and just next to it is a storage building for the Murrays, it had a significant setback, enough to put a whole new building in front of it, one that is much more pedestrian friendly than an auto part storage building.









# Master Plan Phasing

## Phase 1

In the first phase the Home Depot will be modified, the homes to the east will be demolished over time for a park, roads will be run through the site, and an area that was once parking in the north will become park and the Home Depot will have its own parking lot. The streets will undergo infill as well.

## Phase 2

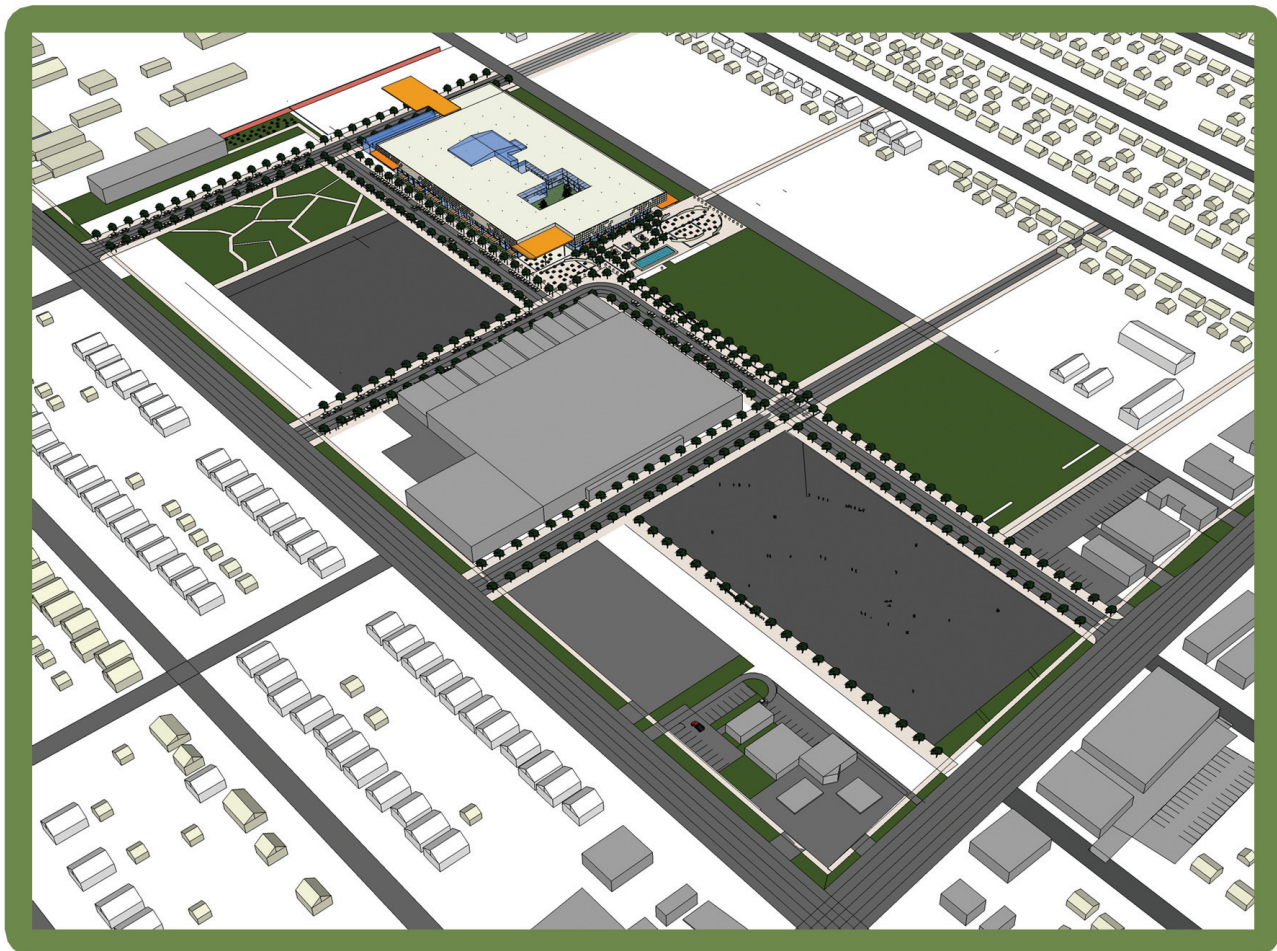
In phase 2 the park to the east will be changed to a parking lot and the parking lot to its west will become a park, also retail will begin to fill in and define the street.

## Phase 3

At phase 3 a good amount of the streets are defined, Home Depot will have its own parking structure and the area once parking to the east will become mixed use and parking.

## Final Phase

In the final phase of densifying the core the mixed use density around the site will intensify and claim most of the available land remaining. It will also spread off of the block to the neighborhood. The area to the west of the Home Depot will become a parking structure as well.



Phase 1



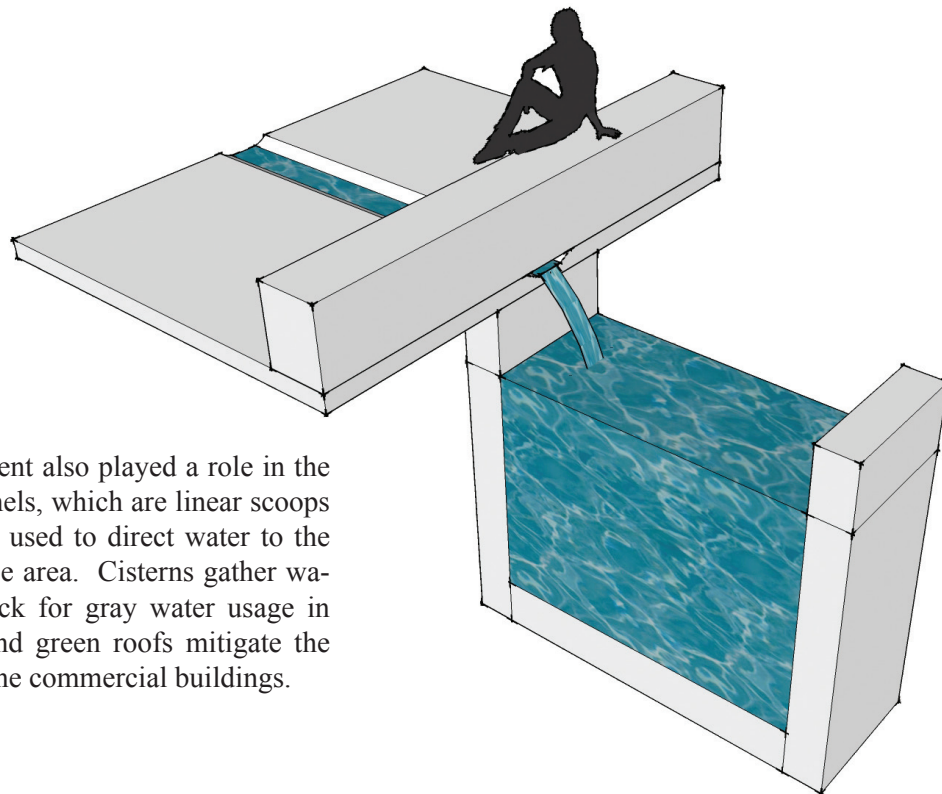
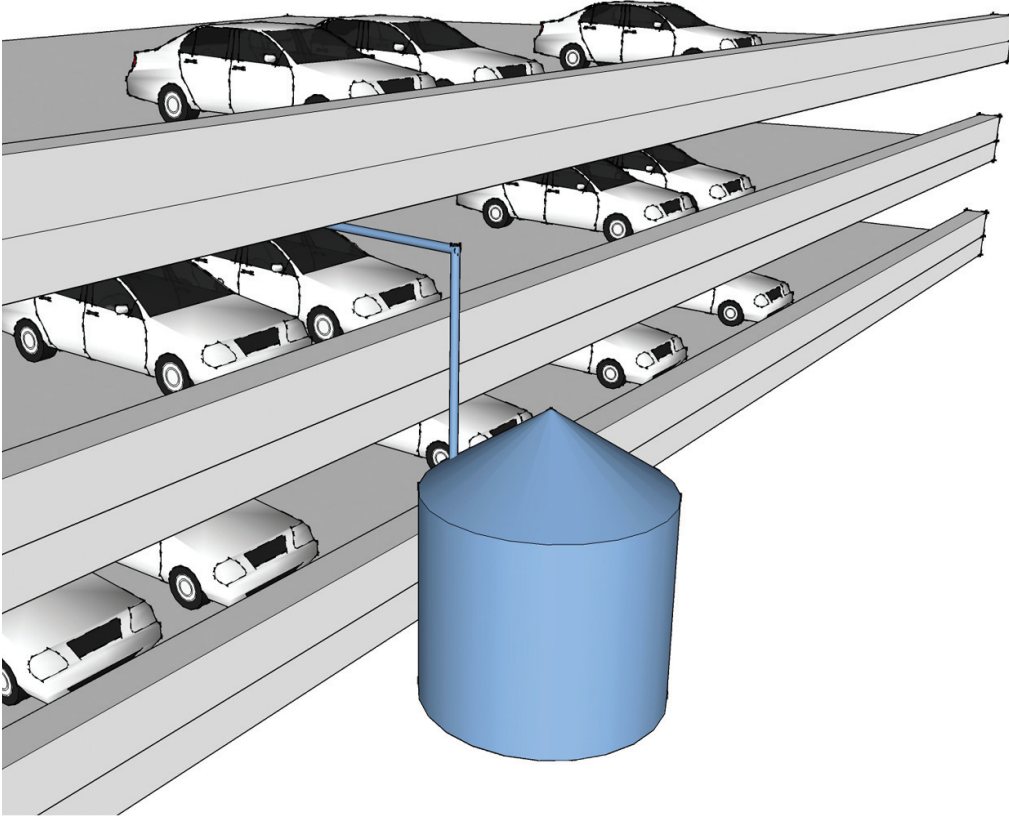
Phase 2



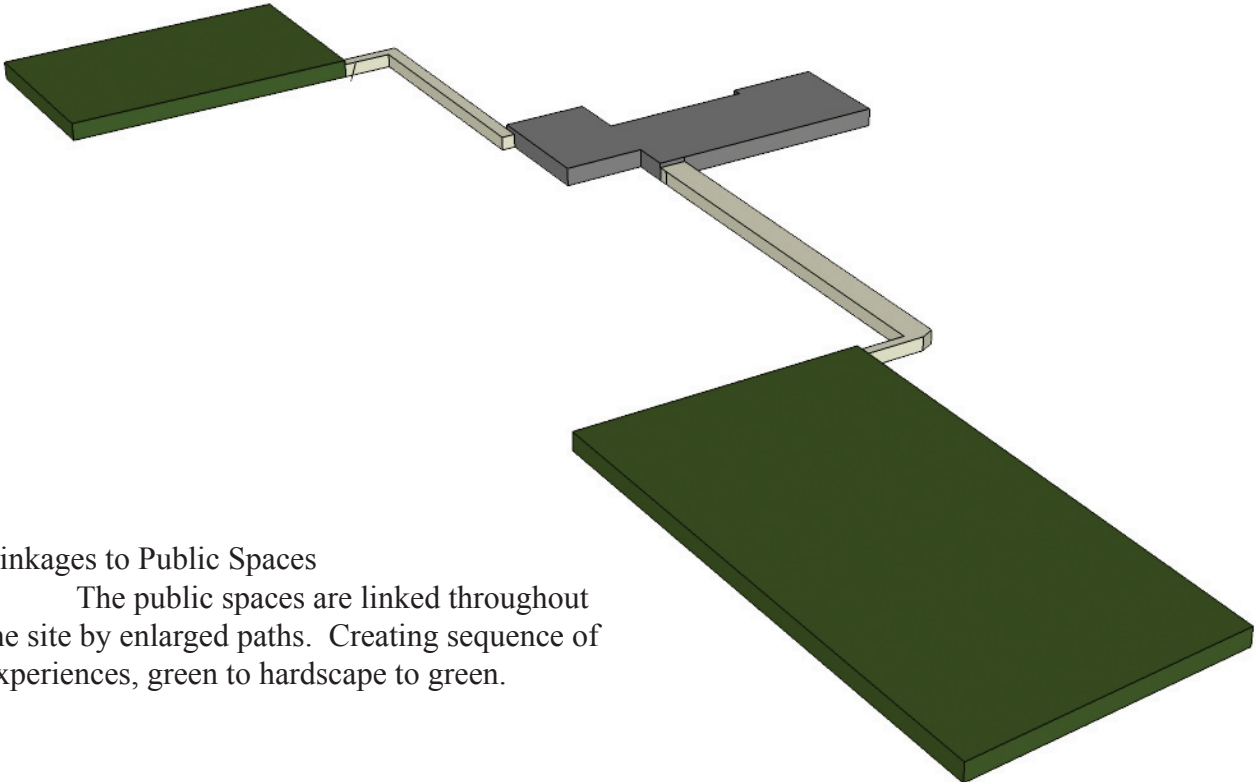
Phase 3



## Water Management

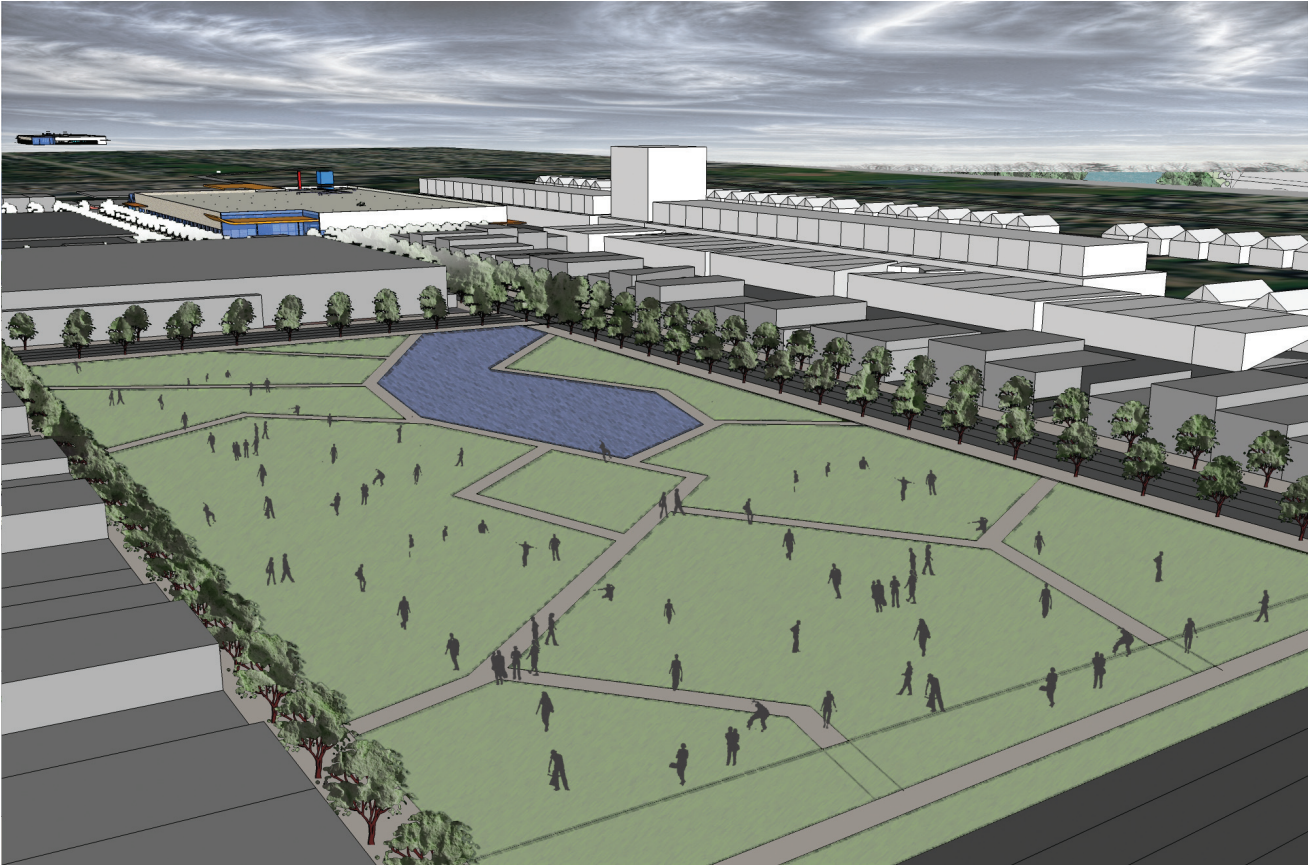


Water Management also played a role in the design of the area. Runnels, which are linear scoops in the ground, are being used to direct water to the reservoir in the hardscape area. Cisterns gather water from the parking deck for gray water usage in the nearby residences and green roofs mitigate the amount of runoff off of the commercial buildings.



**Linkages to Public Spaces**

The public spaces are linked throughout the site by enlarged paths. Creating sequence of experiences, green to hardscape to green.



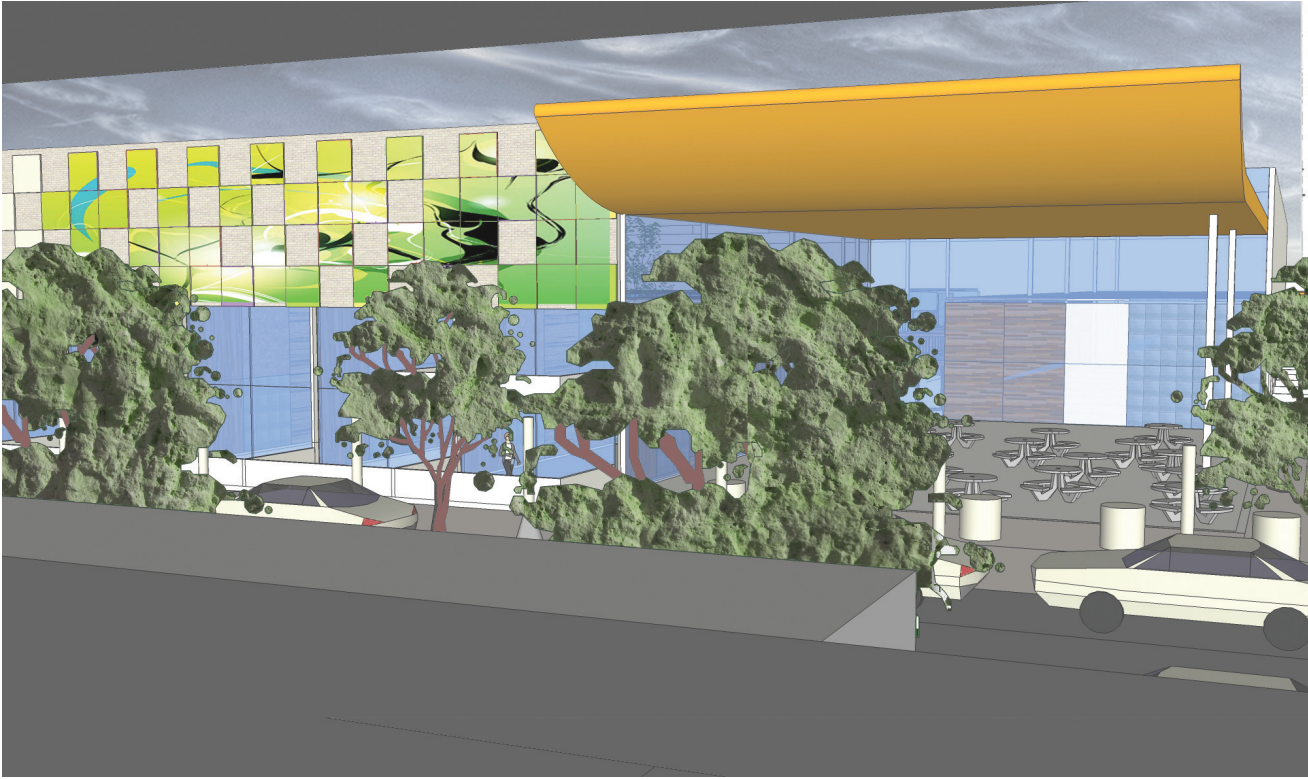
Final Master Plan





# Final Master Plan









# Final Home Depot Design

This is the final design of the aforementioned abandoned home depot on the site.

I took advantage of this vacancy which is not uncommon as some of these developments fall out of fashion, to zoom in and test out how you might reinvent a specific building inside one of these reprogrammed districts.

The design calls for residential units to be created inside it to reuse it and introduce mixed use on the site.

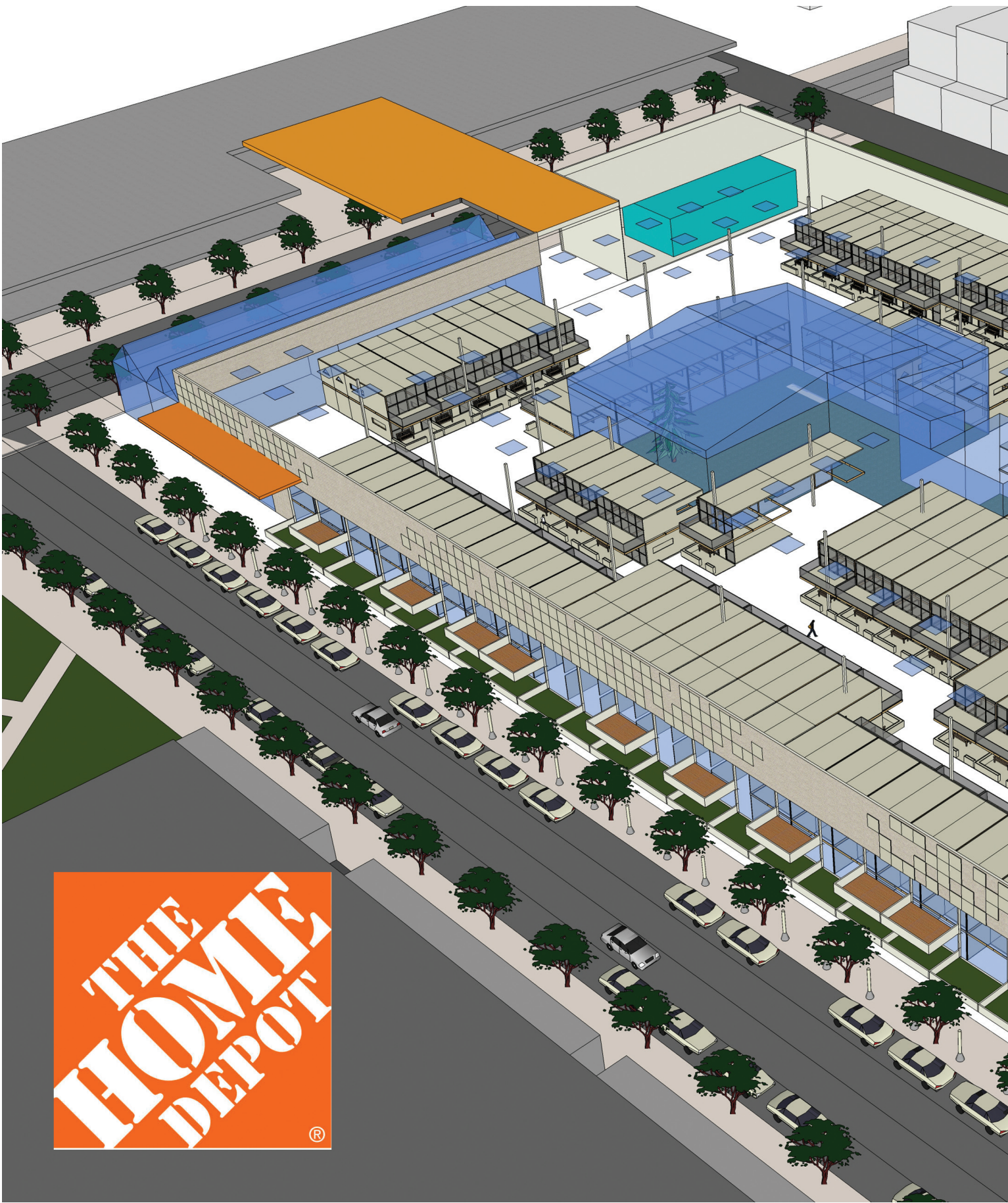
Day lighting was an obvious issue, so a pair of courtyards were inserted, one with an open ceiling the other has a closed glass roof, these offer different experiences throughout the year for the home depot residents. Sky lights also illuminate the interior streets of the building

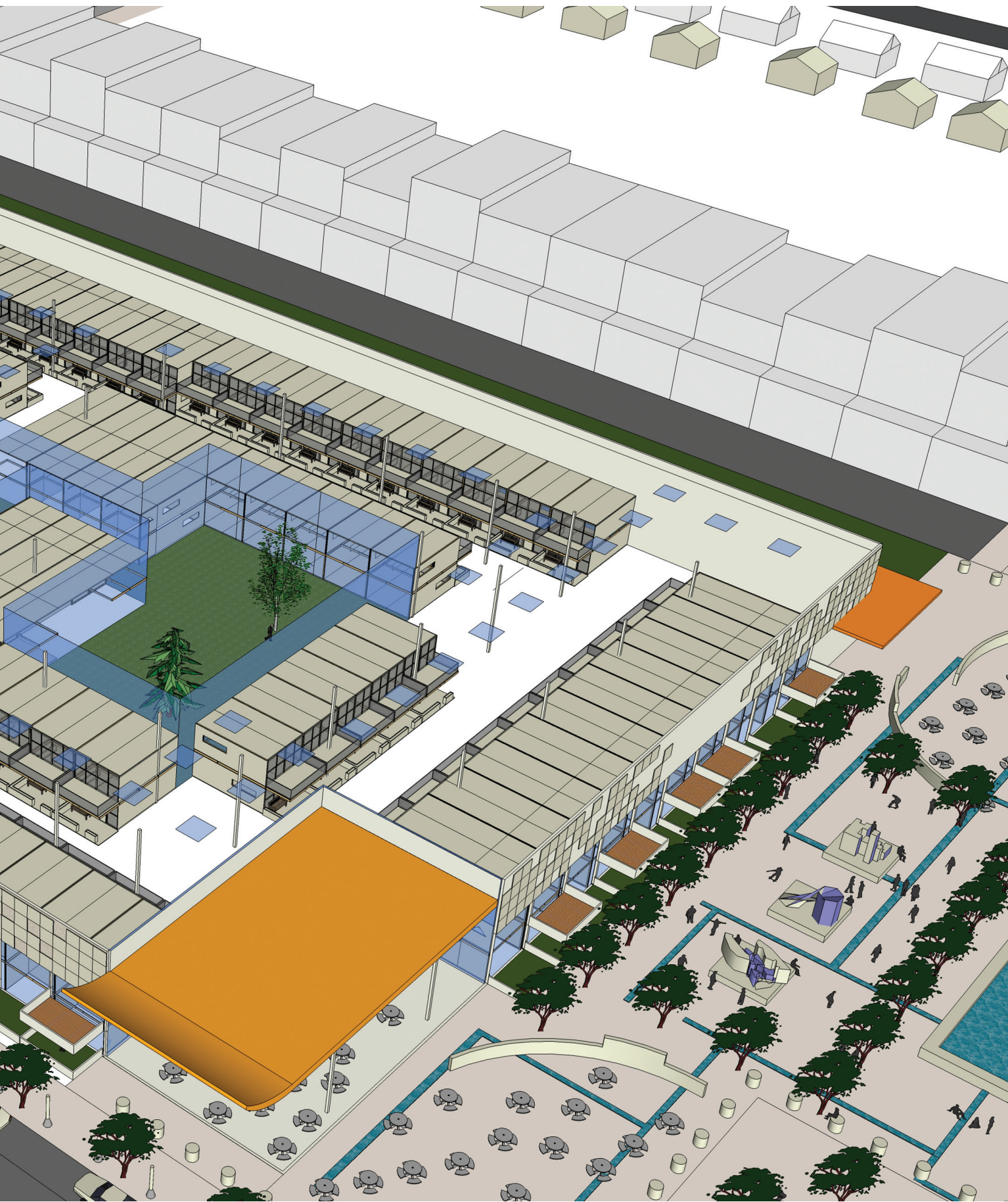
In the amenities of the units, every exterior unit also has access to their own garden plot and some have balconies.

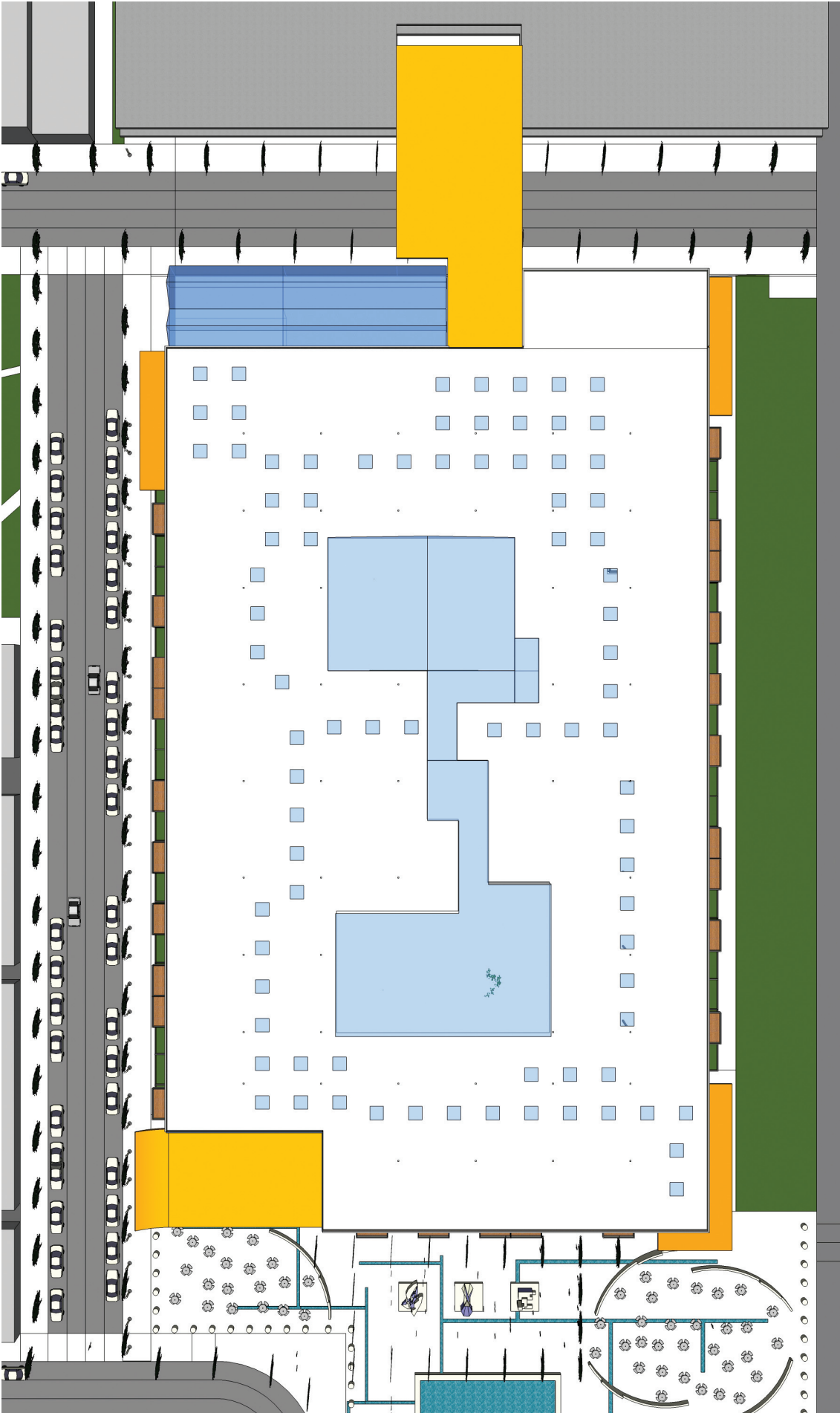
Externally the private, but communally aware garden plots and balconies break up the long exterior. But in addition to this is the implementation of a system of graphic cladding panels which encourages the community to view the building, and maybe all commercial buildings and spaces as adaptable to something potentially better. The cladding panels were the reincarnation of the ideas of the cube sketch problem which was completed at beginning of the year.

The units have a standard wood frame construction and share walls where possible. There are several building forms that are used intermittently throughout the building, all of which would be built inside the building in a controlled environment for greater speed and efficiency of materials. A system of quasi pre-fab construction would involve making a standard wall piece that every unit would use and then adding what is necessary to complete the unit.

Also there is great flexibility in the material selection and manipulation of the cladding for the units since there is no weathering inside the building. This would allow for a great expression of individuality in their community in the Home Depot because of this and the units all have a front porch arrangement that creates an interior street.

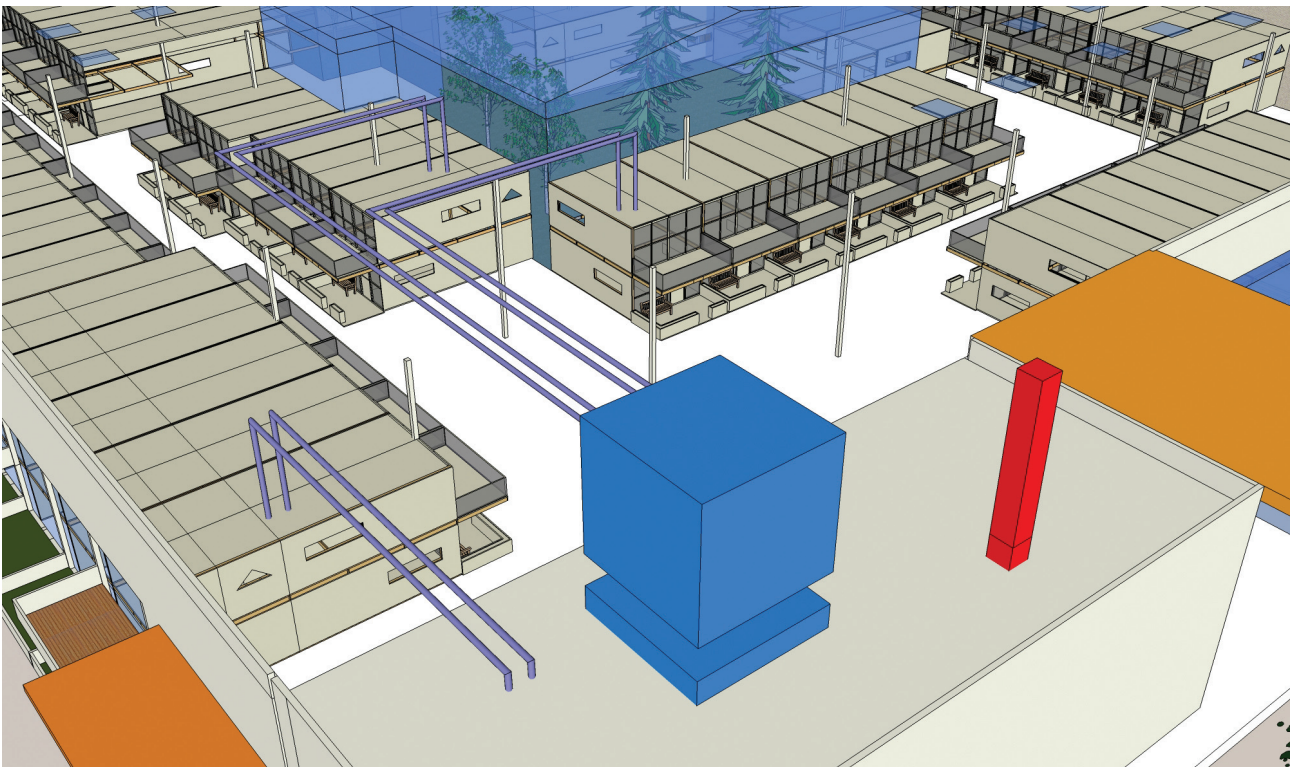
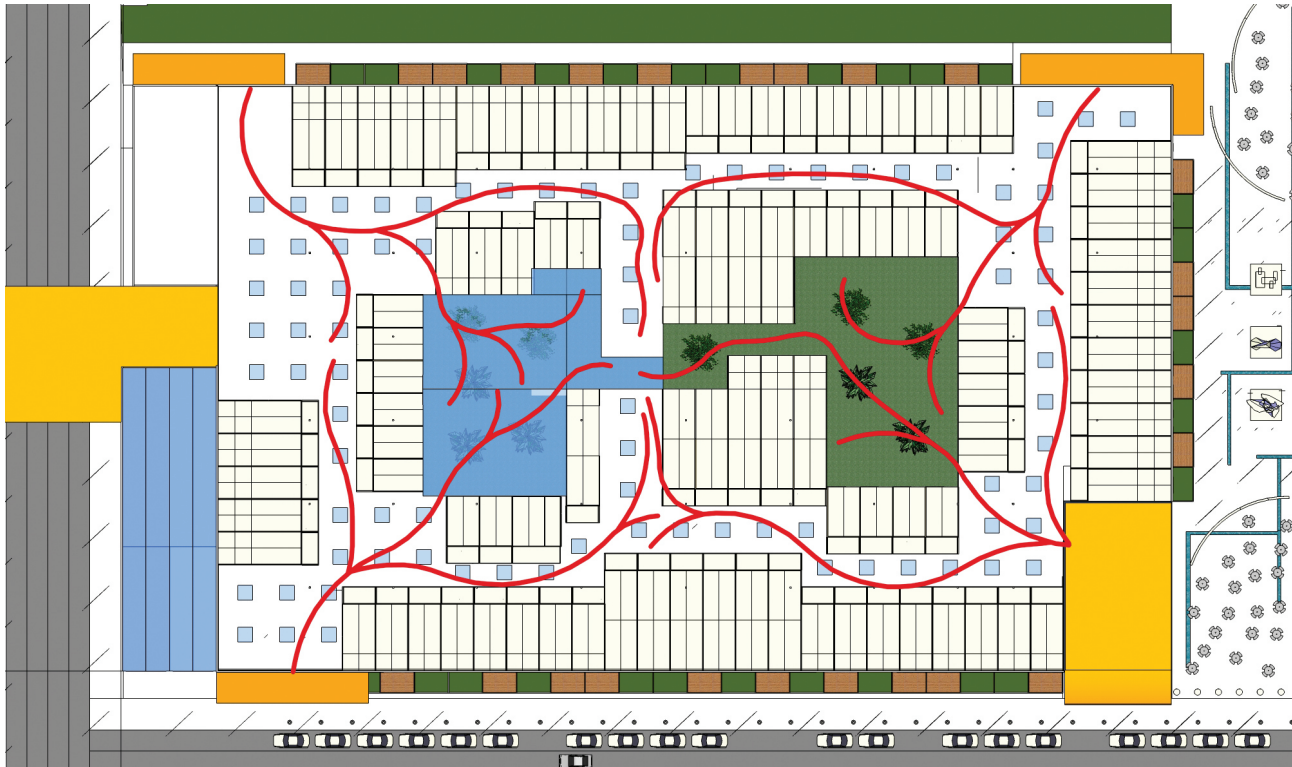




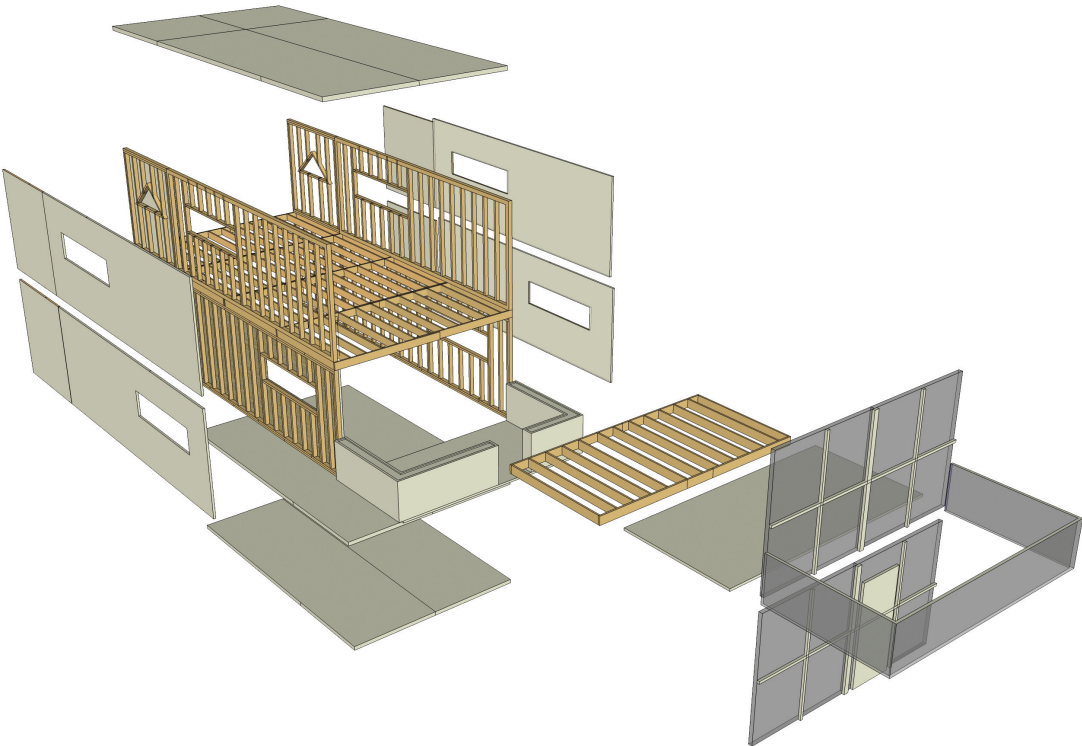


The HVAC and Egress were evaluated in the Home Depot design. The HVAC system for the new apartments would utilize the existing air heating and cooling is its current funtion of maintaining the tem-

perature of the space while a supplemental system would supply thermal control for the units.



**Final Home Depot Design**









# Conclusion

The question of how these areas can be redeveloped is very pertinent in the near future for our society. Although the execution of some urban design issues, most notably density, are not very appropriate to the existing area, it does not neutralize the initial question.

In continuing the project more sites would be chosen and the guiding themes would be tested on them. Most likely the guides would be adjusted and some sites would prioritize the themes for themselves.

Although a lot of attention was paid to specific conditions on this site the project should serve as an idea generator for how to reclaim the space in these areas and these communities. There is of course widespread awareness of the problems of suburbia but constructive modifications have yet to transpire.



# Bibliography

Arnold, Henry F. Trees in Urban Design. Cincinnati: Van Nostrand, 1980.

The role of Trees in Urban Design in my project is relatively obvious. Trees can establish a horizontal plane of enclosure that is beneficial for public spaces.

Bahamon, Alejandro. PreFab: Adaptable, Modular, Dismountable, Light, Mobile Architecture. New York: Loft Publications, 2002.

The units in the Home Depot were prefabricated in the final design and this book of case studies helped review some examples of this technique in action.

Christensen, Julia. Big Box Reuse. Cambridge, Mass.: The MIT Press, 2008

Julia Christensen has found and researched several situations where big box stores have been reused and reprogrammed. These examples include a church, museum, school, retirement home, and a civic justice center.

Cullen, Gordon. Townscape. New York: Reinhold Publishing, 1961.

This book focuses on the experiential aspects of cities including the sequence of entering a case study town and a multitude of possible themes in a city. This book contributed specifically to the themes of viscosity of pedestrian circulation and pedestrian-only plazas.

Curran, Raymond. Architecture and the Urban Experience. Cincinnati: Van Nostrand, 1983.

Experiential aspects of the urban design of the project were prioritized very highly. This book helped me explore what kind of experiences occur in urban spaces thus urbanizing the space by its experiences.

Duany, Andreas, Plater-Zyberk, Elizabeth, and Jeff Speck. Suburban Nation: The Rise of Sprawl and the Decline of the American Dream. New York: North Point Press, 2000.

Suburban Nation describes different elements of suburbia: housing subdivisions, shopping centers, office parks, civic institutions, and roadways. From these components the authors explore differences in layout and organization and describe the qualities of successful cities.

Gallion, Arthur B. and Eisner, Simon. The Urban Pattern: City Planning and Design. Cincinnati: D. Van Nostrand, 1980.

The Urban Pattern describes some of the history of city development and layouts and also considers zoning, land use, transit, commerce, and recreation, to name a few, in current urban planning.

Haas, Tigran, ed. New Urbanism and Beyond: Designing cities for the Future. New York: Rizzoli, 2008.

Tigran Haas has assembled an assortment of essays from many authors on a range of different topics dealing with new urbanism and its implications and interpretations. There are five essays that specifically describe suburbia and sprawl, and its implications and how to readapt it.

Hayden, Dolores. A Field Guide to Sprawl. New York: W.W. Norton and Company, 2004.

This book offers a dictionary to some of the buildings, organizations and deficits of the suburban condition.

## Bibliography

- Lateral Architecture. "Flat Space: Nine Networks of Infrastructure Landscapes" Dichotomy 16: Margins and Edges. Fall 2006.
- Levine, Jonathan. Zoned Out. Washington DC: Resources for the Future, 2006.
- Lukez, Paul. Suburban Transformations. New York: Princeton Press, 2007.
- Shaftoe, Henry. Convivial Urban Spaces: Creating Effective Public Places. Sterling, VA: Earthscan, 2008.
- Spreiregen, Paul D. Urban Design: The Architecture of Towns and Cities. New York: McGraw-Hill, 1965.
- Radiant City. Writer/Director: Gary Burns, Producer: Burns Films Ltd. 2007
- Willis, Daniel. "The Social-Climbing Brick: On the Class of Building Materials" Harvard Design Magazine. Summer 2000.
- TOADs, temporary obsolete and derelict structures; Zoomburbs, rapidly developing suburbs; and Power Centers, clusters of big box stores; are all mentioned in the text.
- Interpretative ways to rethink the layouts of big box stores and power centers are explored in this article. The qualities of non-spaces, called 'flat spaces' in the text are also considered.
- Jonathan Levine looks to why land-use has developed the way it has, primarily looking to how it is driven by the market. He also looks at the 'planning failures' of this type of system, which he describes as failures of the policies to "allocate resources in a socially desirable manner so as to maximize aggregate . . . well-being." (Levine 8).
- Lukez is seeking to create a model for modification to existing suburban areas to densify the area into a more urban environment. This model is applied to several different cities and is based on making connections and developing the area spatially.
- Convivial Urban Spaces furthered my understanding of viscosity and how this can be implemented in an urban environment. Also, it developed my ideas of how to define a good plaza.
- This book helped with a basic understanding of urban history, form, modern concepts, pedestrian and vehicular circulation, plaza development, enclosure and city character. Many of these topics are described simultaneously in the text and sketches in the margins.
- Radiant City is a documentary about some of the psychological issues facing the inhabitants of suburbia, from straining for complete control of their lives to rush hour traffic. Searching for a viable, affordable alternative is a common theme in the film.
- This article ponders the use of brick, historically and current, in suburban housing. Brick is evaluated as a symbol of social and societal status, from its expensive original construction techniques to its common current applications in an inexpensive and readily available to the middle class brick veneer.





