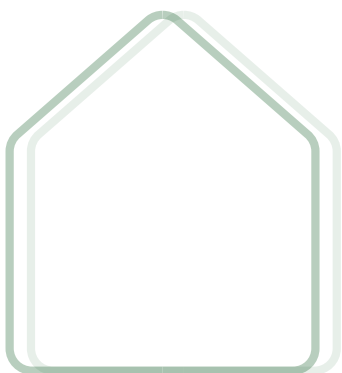


# Designing distinctive communities in DeForest

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*Landscape Architecture 351:  
Housing and Urban Design*

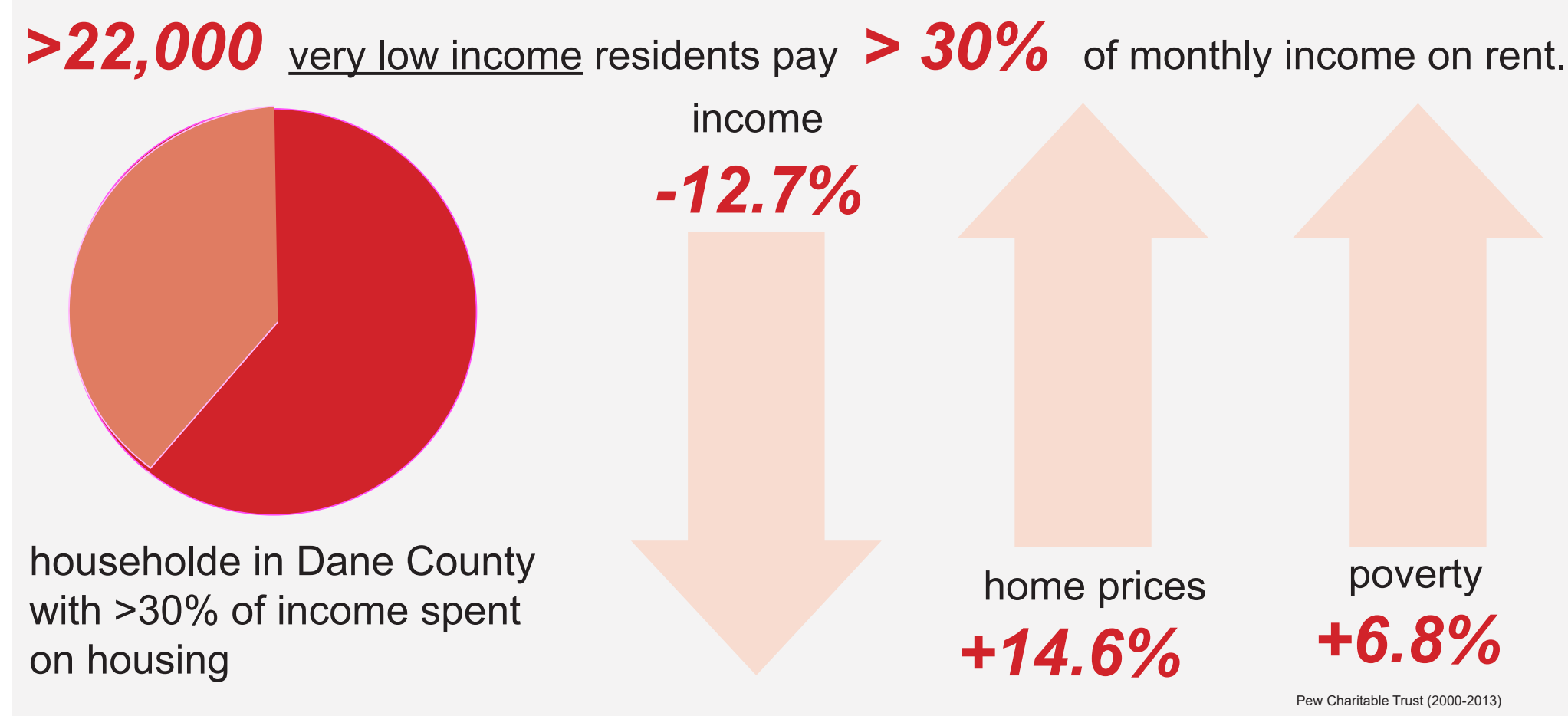


**Closing the Housing Gap—Spring 2018**





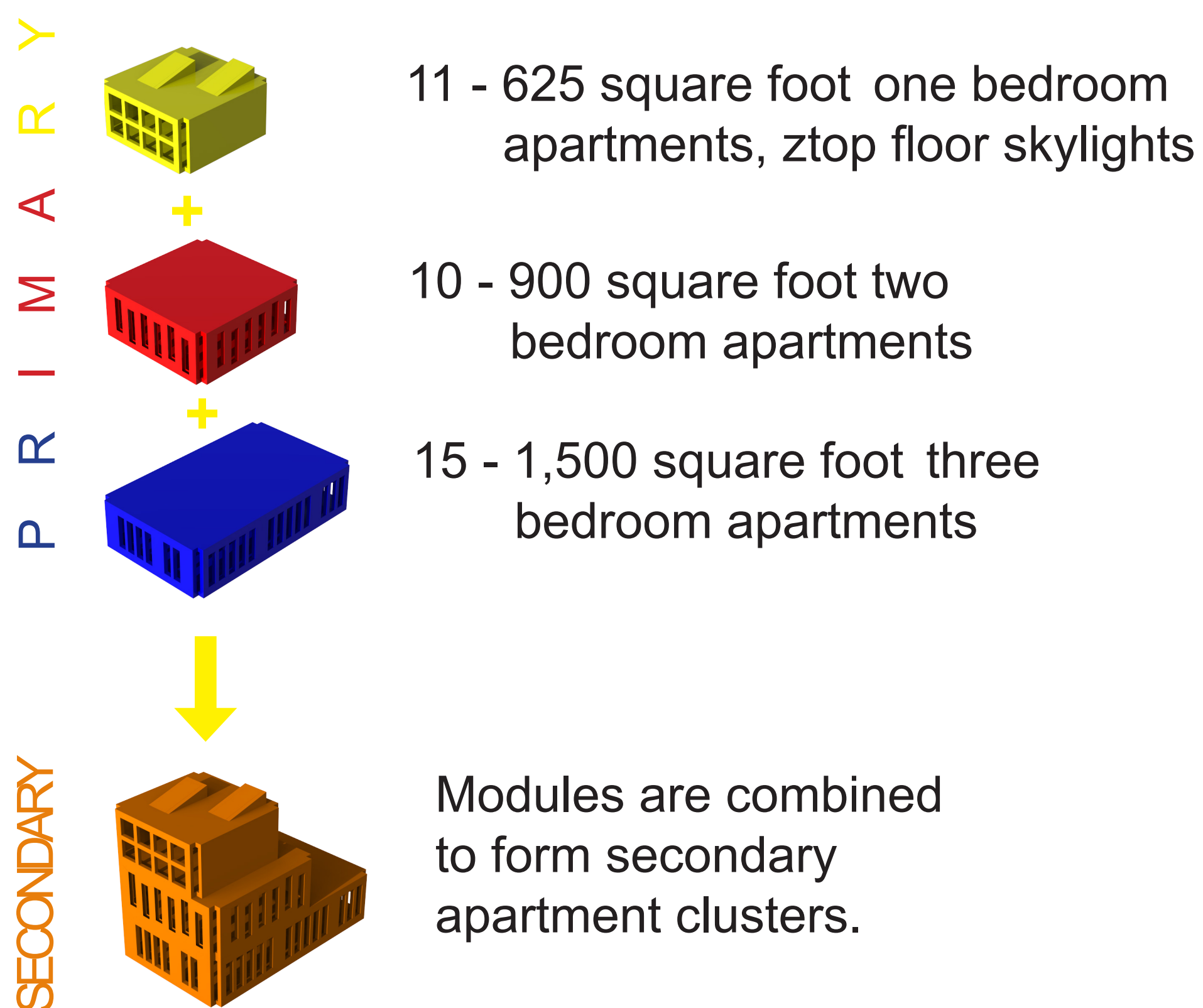
## CONTEXT & ANALYSIS



Dane County is facing a housing crisis. Income has decreased while housing costs and poverty have increased and vacancy rates are at an all time low. Affordable housing is in desperate need. <sup>1</sup>

## UNIFY

### CARBICRETE MODULAR UNITS

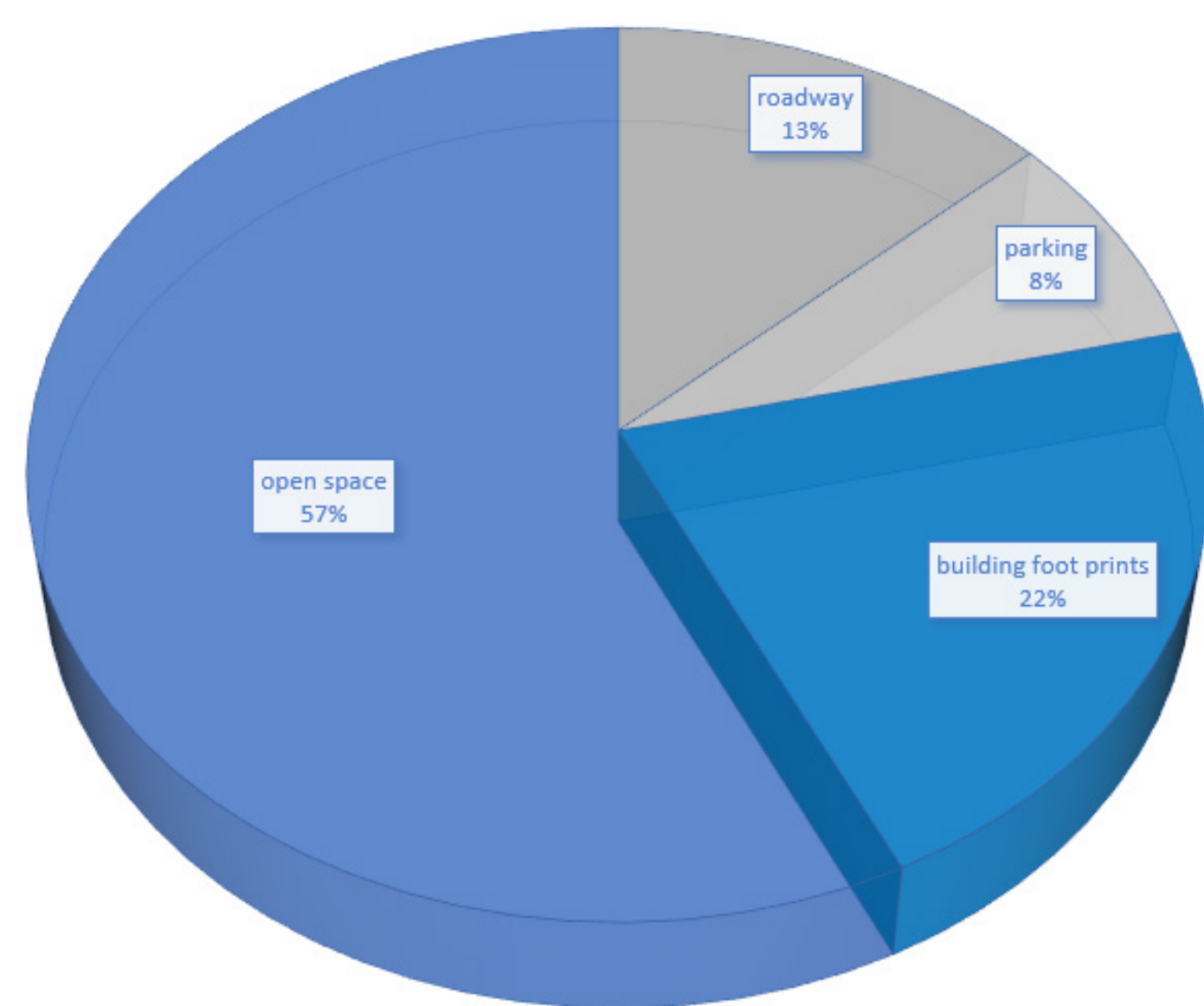


### CONCEPT STATEMENT

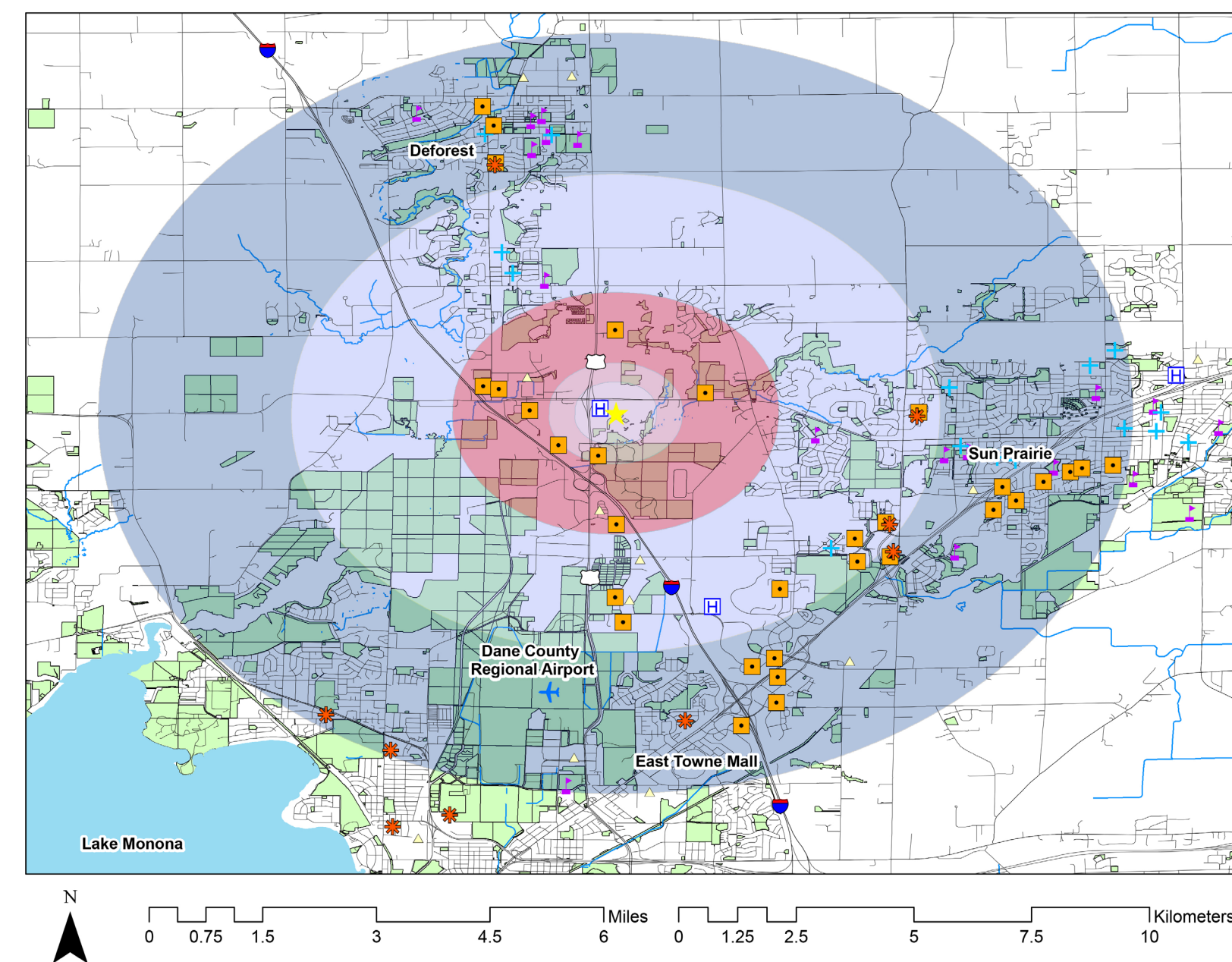
To make whole, to become united. Modular units unite to create an affordable, vibrant, unique community. Color is used to communicate this idea in the landscape and give cluster, and the unified whole, identity.

### LAND CHANGE STATISTICS

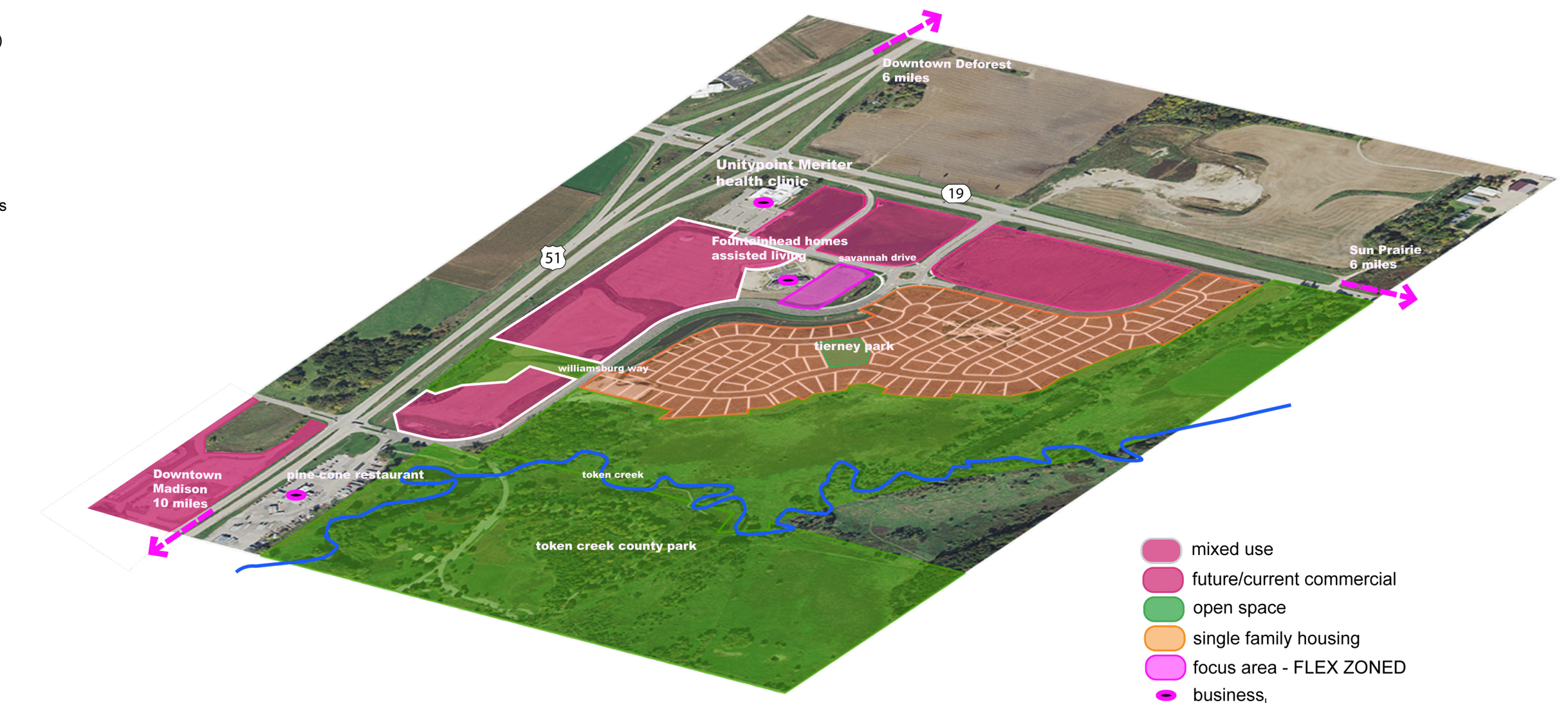
Land Use (% of total)



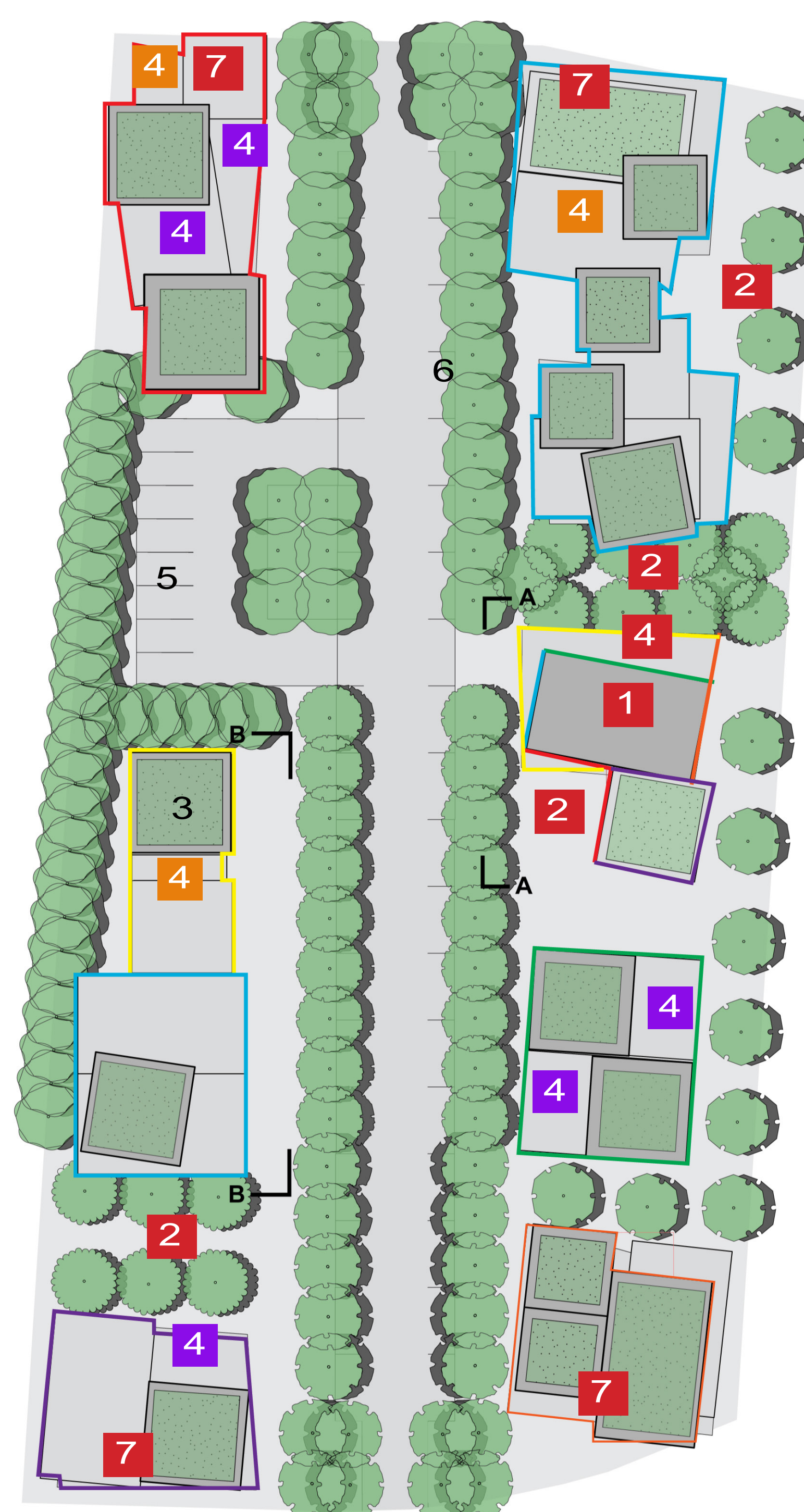
total parking - 48 spaces  
48,527 ft<sup>3</sup> of built floor space  
10,152 ft of flex space - commercial, community, or residential use



## SITE CONTEXT AND ZONING



## SITE PLAN

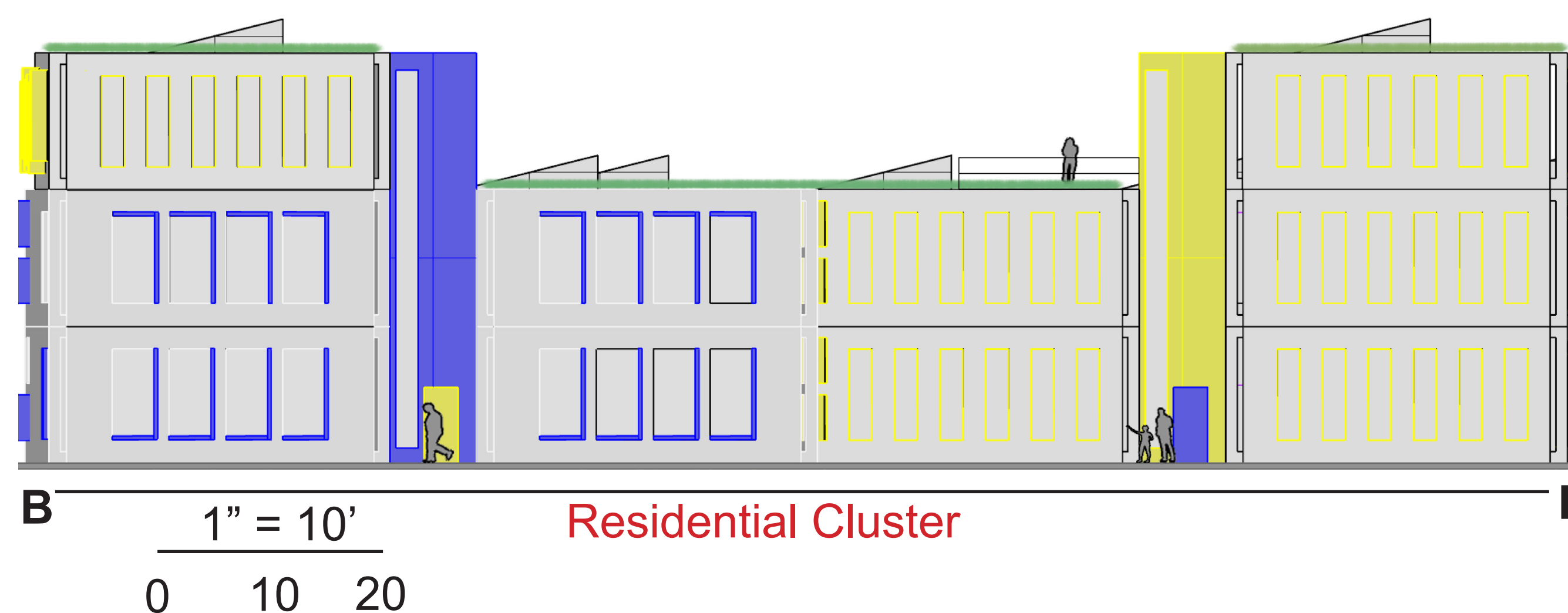
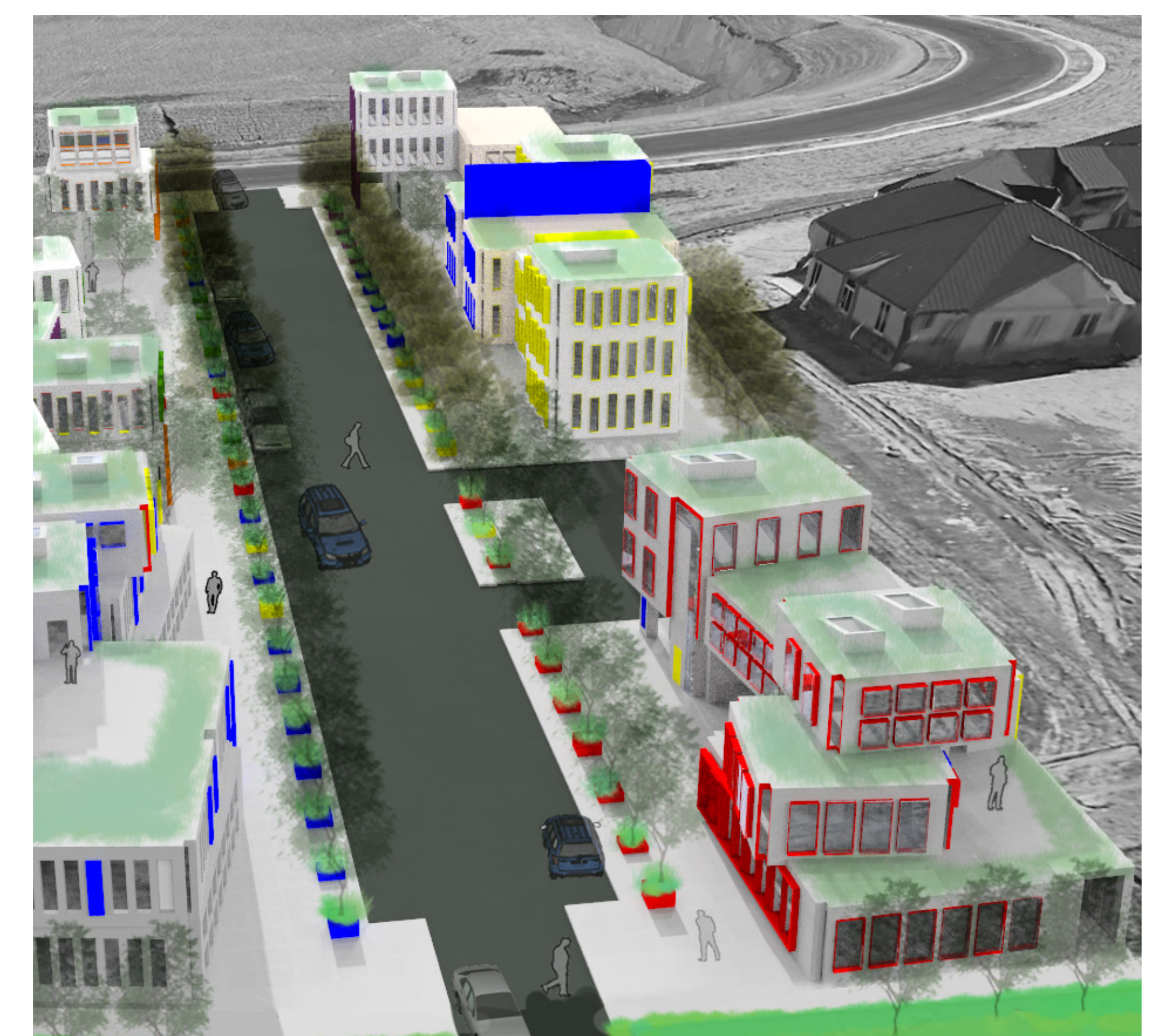


### program elements

- community center
- plaza/open space
- extensive green roof
- intensive green roof
- off street parking & rideshare
- on street parking
- flex space 1st floor

- primary space (public)
- secondary space (semi-private)
- tertiary space (private)

## PERSPECTIVES

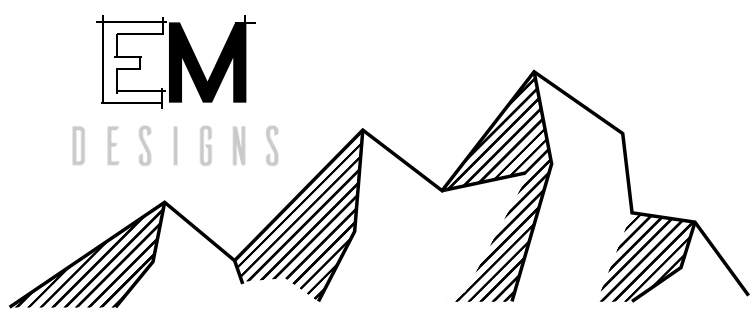




# Micro-Community of Deforest

## Site 1

LA 351 Housing and Urban Design 3/14/18



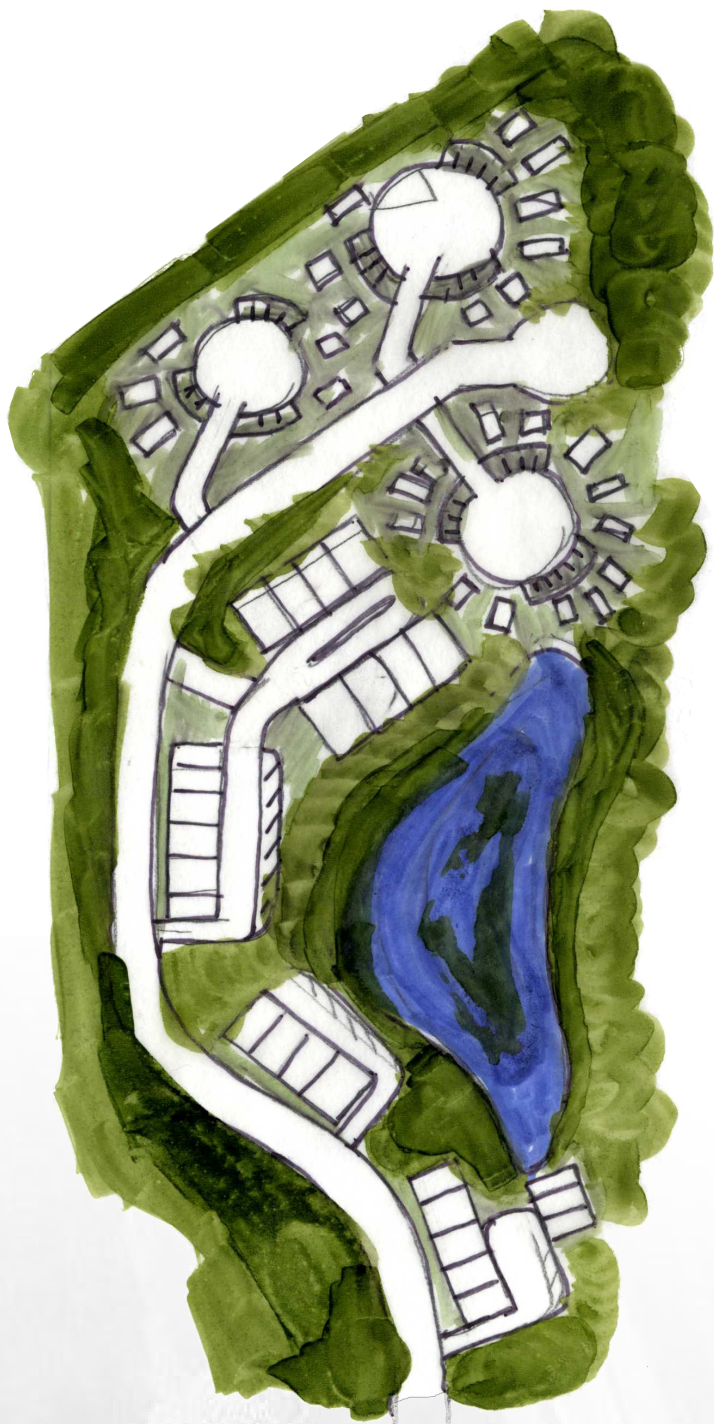
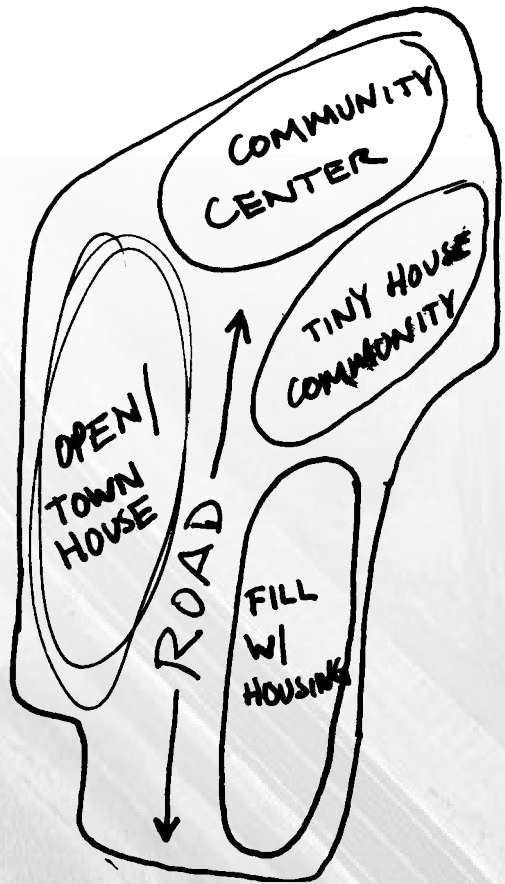
Problem: Large increases in population in the Deforest area, due to its proximity to Madison, have created a need for affordable housing. Site 1 offers a potential location for development of this housing, and has been deemed suitable for low income housing financing by UW Real Estate students. This phase of the project focuses on development of program elements and final design of the site.

### Analysis

- Opportunities**
- + Blank slate lot
  - + Dahl park next door
  - + Nearby soccer fields, conservatory
  - + 15 miles from Madison
  - + 2 blocks from Deforest Schools
- Constraints**
- Surrounded by suburbs/ farm
  - Drainage runs through site
  - Close to freeway
  - Somewhat poor soils

### Program Elements

- Community Function as an Ecosystem**
- Generate reusable energy (Solar)
  - Geothermal Heat
  - Capture/ Reuse water locally
  - Community spaces for recreation
  - Gardens for food production
- Co-op Modern Housing (owner-occupied)**
- Tiny House living options
  - Higher density Townhouses
- Connected nature and built environment (Dahl Park)**
- Pedestrians are priority



**Concept 1**  
This concept explores the dead end road and central organic pond, which could become a swimming area as well as habitat for wildlife. Tiny houses are arranged radially off the main road.



**Concept 2**  
In this concept the road is looped around the perimeter of the site, along with a path connecting to Dahl Park. The large central area is designated as open space with large canopy trees.

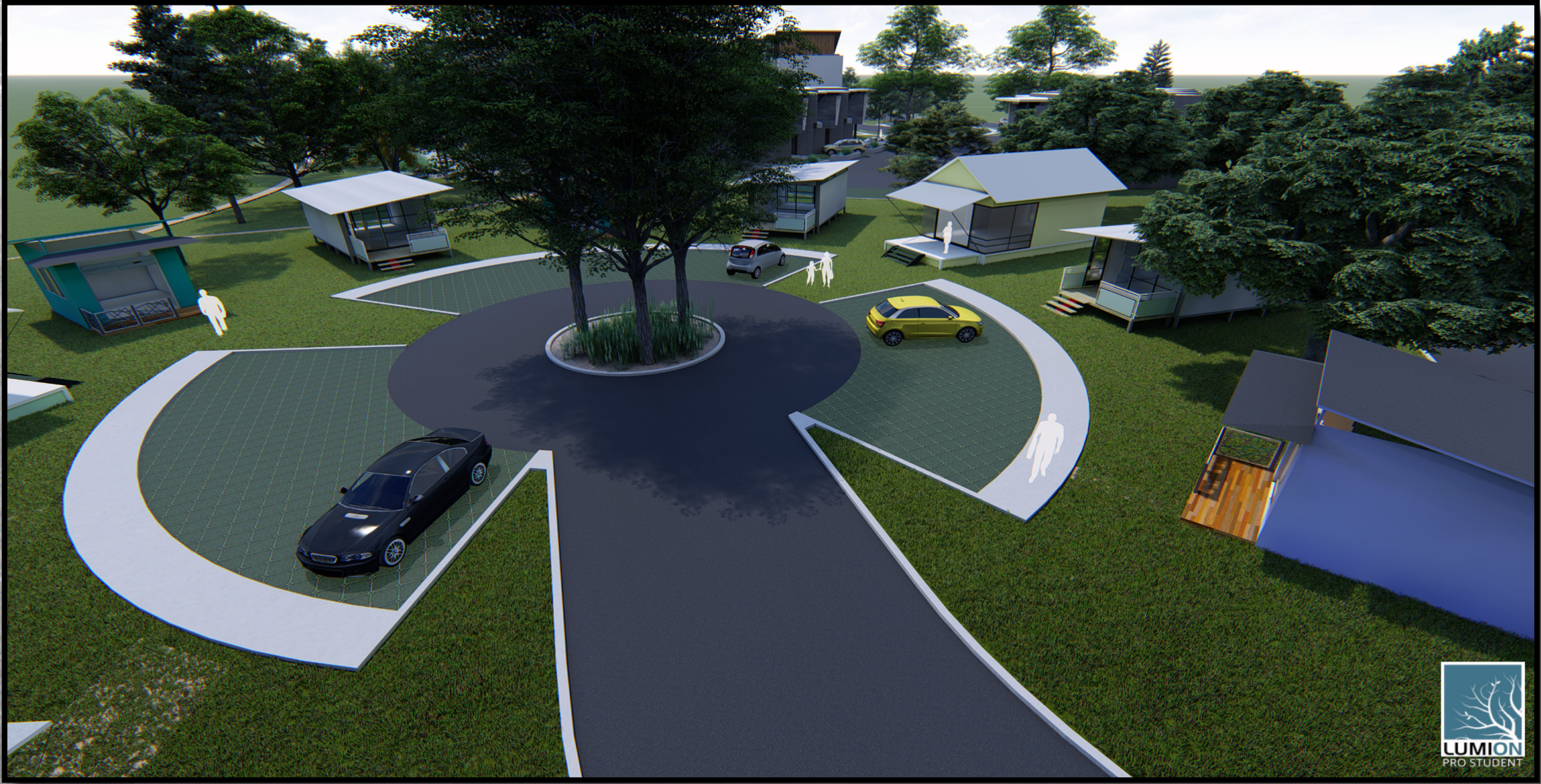
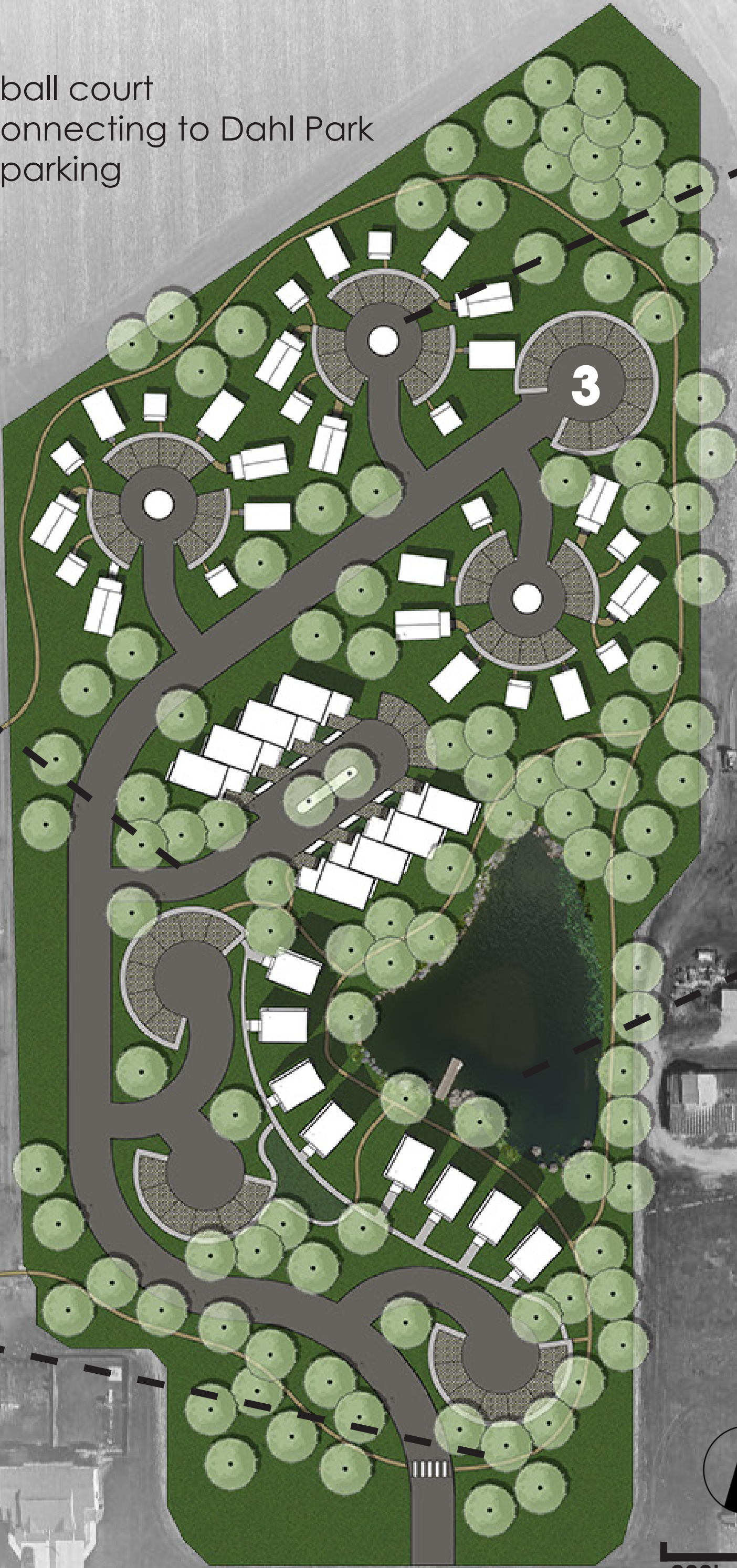


**Townhomes**  
Efficient space, built for families, 3 bedroom units



**Porous Radial Parking**  
Parking that allows for best stormwater retention

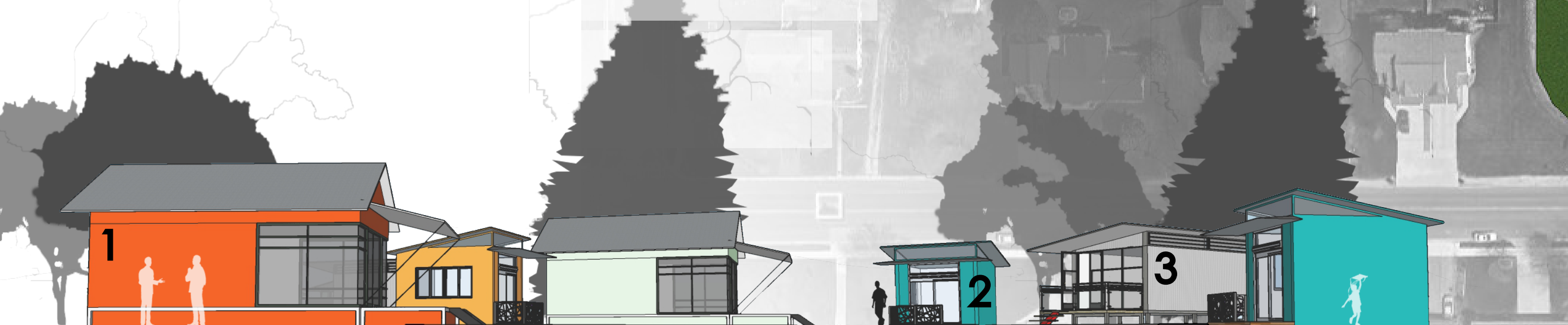
- Key**
1. Basketball court
  2. Path connecting to Dahl Park
  3. Guest parking



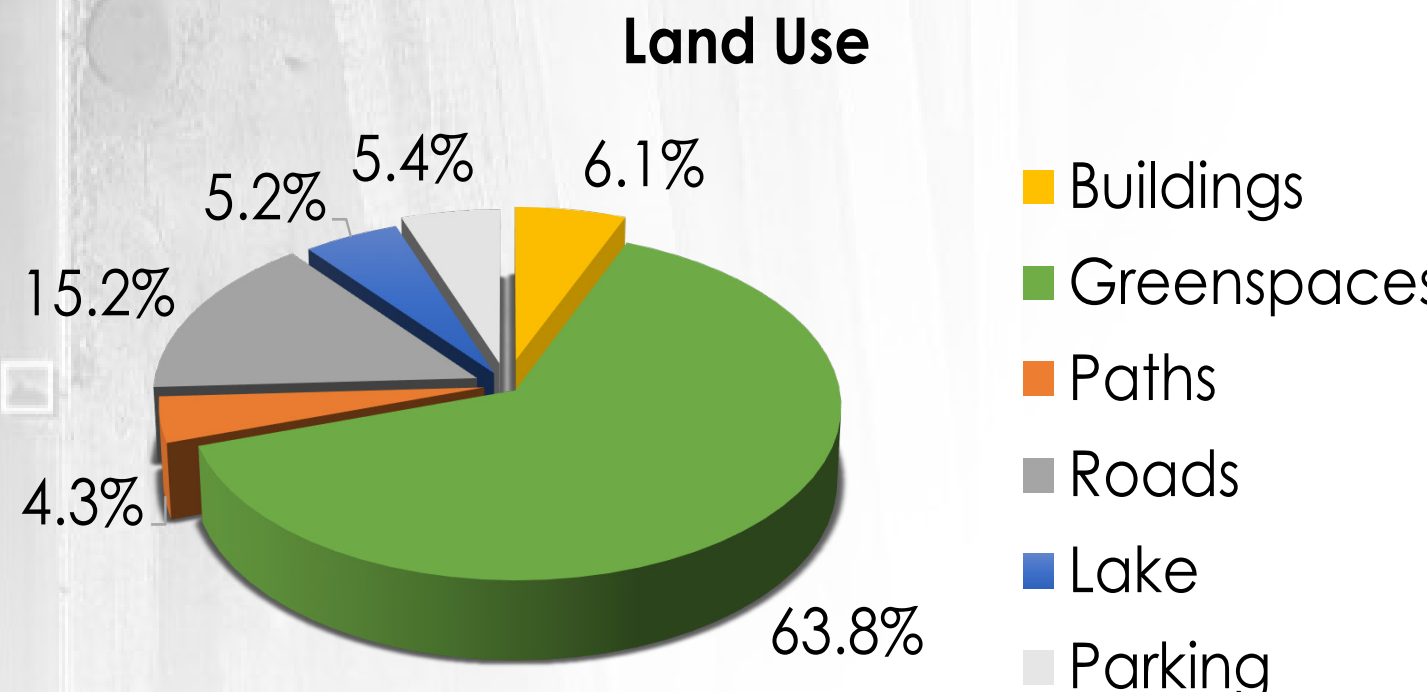
**Tiny House Communities**  
(10) Tiny Houses offer a cheaper, more sustainable alternative to traditional housing



**Organic Pond**  
Swimming area that is completely natural, water is filtered biologically by plants



### Tiny Houses

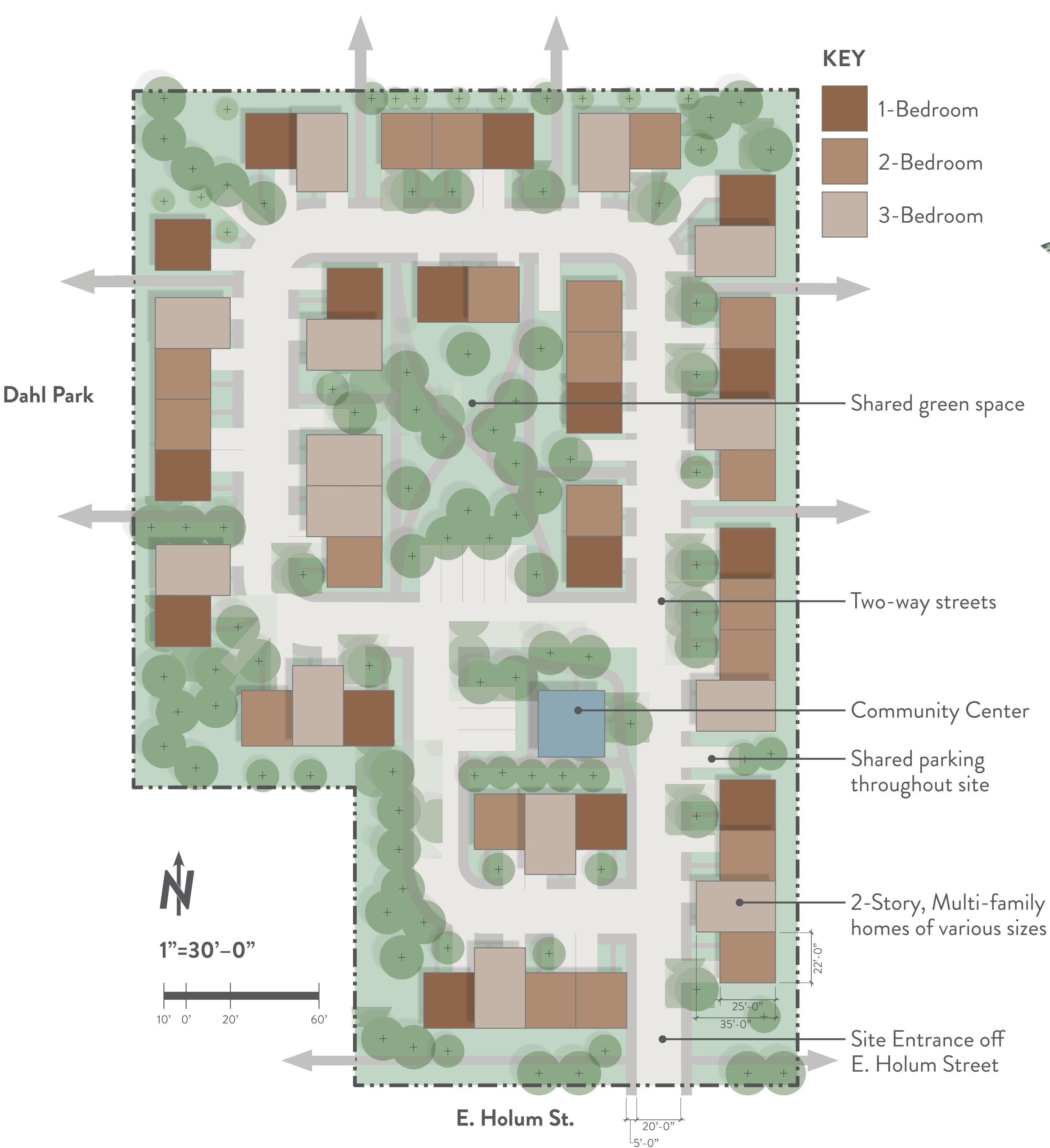


Total Surface Area of Site	8.875 acres
Number of Units	54 units
(8) Townhouse Option 1	1840 sq ft/ unit
(16) Townhouse Option 2	1000 sq ft/ unit
(9) Tiny House Option 1	395 sq ft/ unit
(12) Tiny House Option 2	190 sq ft/ unit
(9) Tiny House Option 3	420 sq ft/ unit



# AFFORDABLE HOUSING COMMUNITY

DEFOREST, WISCONSIN



LAND USE DATA TABLE		
Dwelling Units (DU)	Single Family	0
	Multi-Family	50
	1-Bedroom	20
	2-Bedroom	16
	3-Bedrooms	14
	<b>Total DU</b>	<b>50</b>
Density	(DU/3.62 Ac)	13.81
Parking	Surface	14
	Garage	50
	<b>Total Parking</b>	<b>64 (1.28 cars/household)</b>
Land Cover	Buildings	30%
	Vehicles	30%
	Open Space	40%



Sources:  
1. "Web Soil Survey" United States Department of Agriculture, February 20, 2018, <https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>  
2. "Comprehensive Plan" Village of DeForest, Wisconsin, February 15, 2018, <http://www.vi.deforest.wi.us/index.asp?SEC=F8D439BC-F444-432A-992F-D714CE3556C0&DE=6EAD0905-C160-4C67-B8B6-B2859457FD5E>  
3. Eplans, March 1, 2018, <http://www.eplans.com>  
4. Sketchup, March 10, 2018 <https://app.sketchup.com/app?hl=en>  
5. "Architectural Design Awards", Affordable Housing Conference of Montgomery County, Maryland, February 13, 2018, <https://www.affordablehousingconference.org/architectural-design-awards/>





## About UniverCity Year

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UniverCity Year is a three-year partnership between UW-Madison and one community in Wisconsin. The community partner identifies sustainability and livability projects that would benefit from UW-Madison expertise. Faculty from across the university incorporate these projects into their courses with graduate students and upper-level undergraduate students. UniverCity Year staff provide administrative support to faculty, students and the partner community to ensure the collaboration's success. The result is on-the-ground impact and momentum for a community working toward a more sustainable and livable future.

### UniverCity Alliance

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**UniverCity Alliance**  
UNIVERSITY OF WISCONSIN-MADISON