



blainmikkonen

rural transitions

a supplemental community

rural transitions

What do rural dwellers value about their lifestyle and how can these values be capitalized on in order to help struggling communities maintain a rural presence or even help supplement growth?

problem statement

A design that understand and responds to the values of rural dwellers will offer a unique opportunity for rural dwellers to simplify their lifestyle with the conveniences of an urban setting. The project will provide a location for surrounding communities to benefit and residents an environment where they can live, shop, work, and play.

The typology chosen for this thesis project is a self sustaining, mixed use facility that will supplement struggling rural communities and provide the missing resources for people to live, work, shop, and dine.



site information
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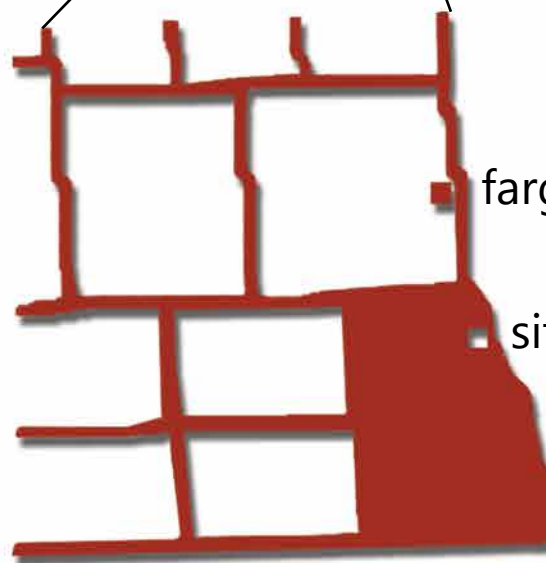
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geographic location



north dakota

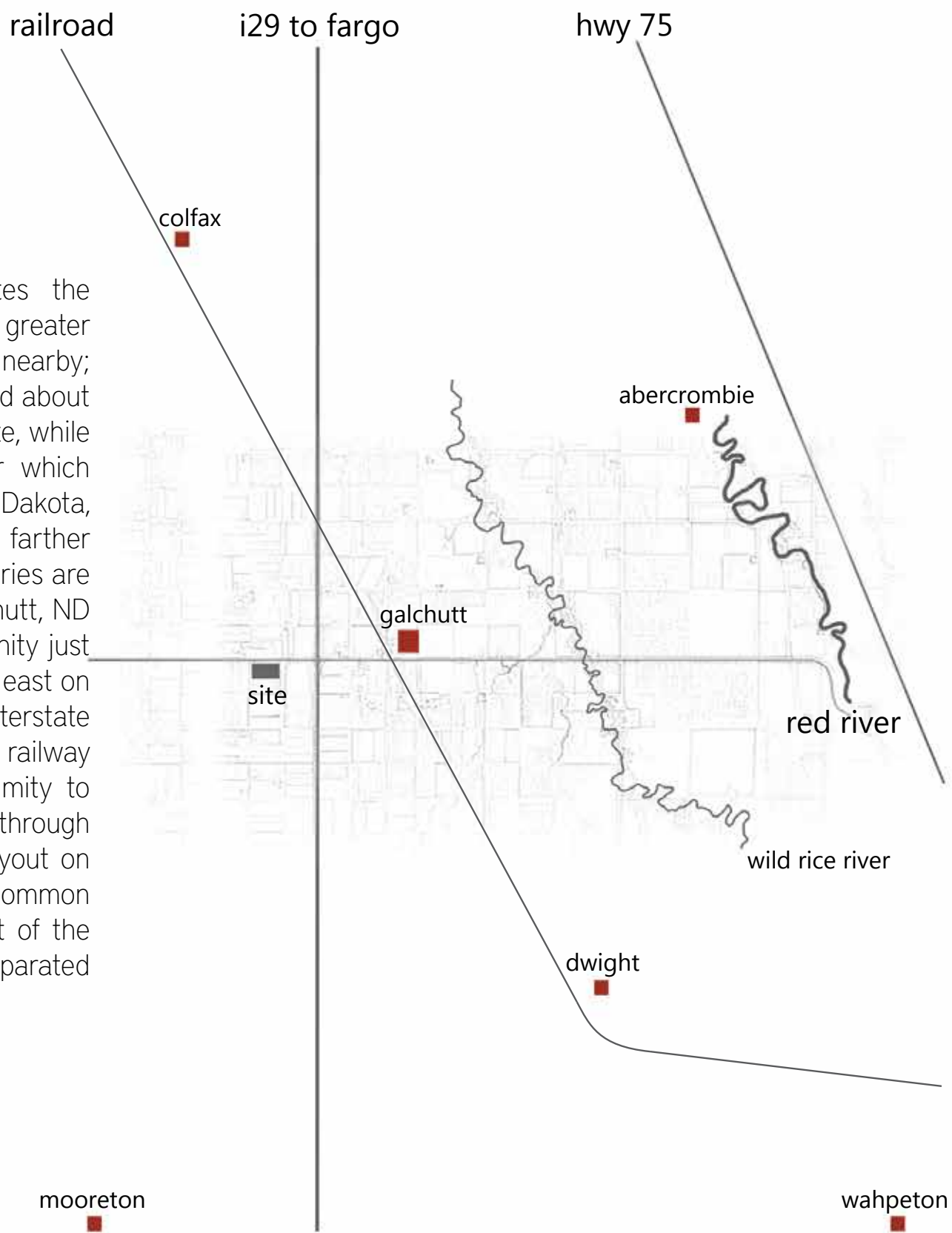


fargo, nd

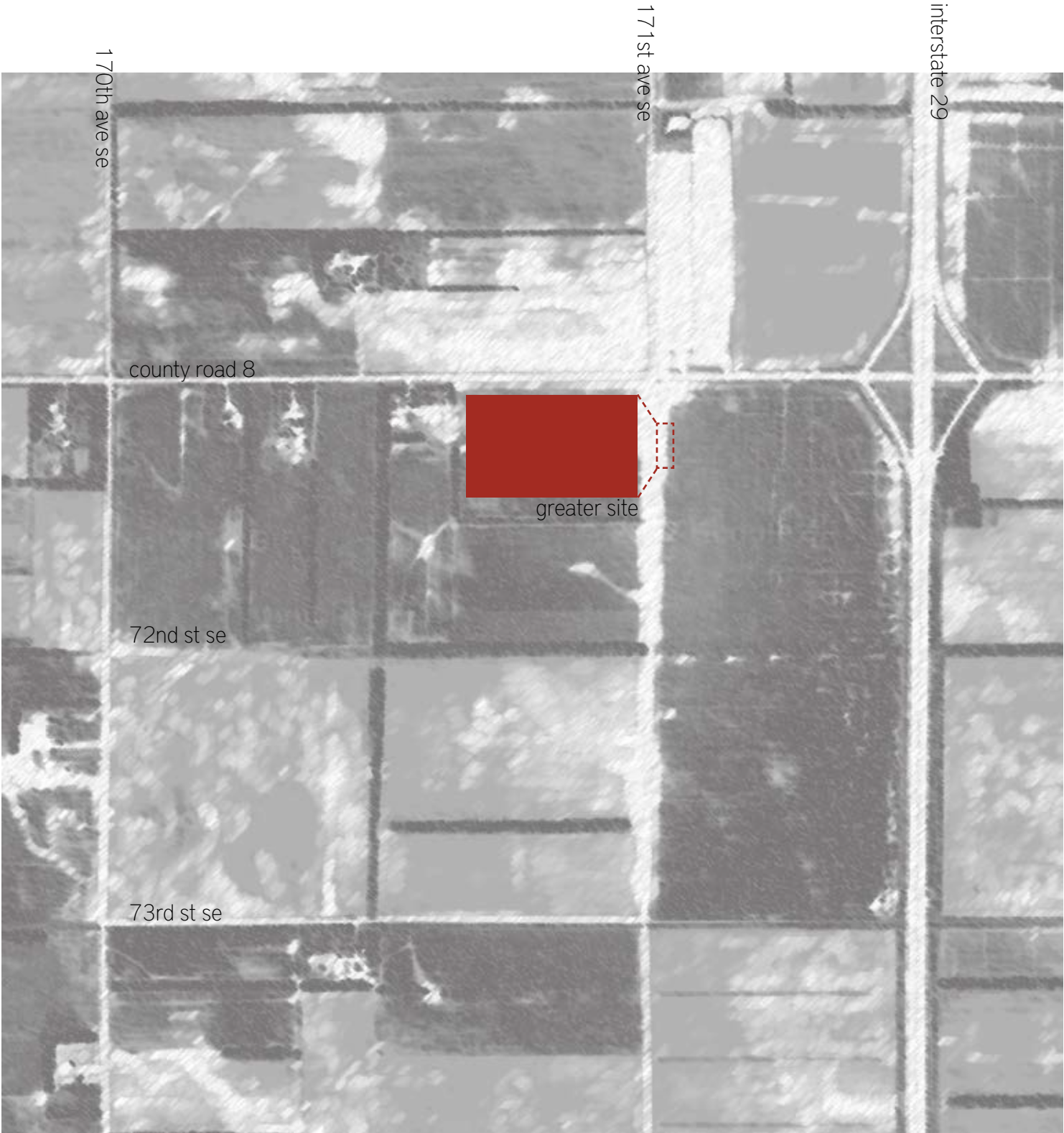
site

richland county

The graphic illustrates the regional layout of the greater site area. Two rivers are nearby; the Wild Rice is located about 4 miles east of the site, while the larger Red River which creates the North Dakota, Minnesota border is farther east. Main traffic arteries are labeled as well. Galchutt, ND is the closest community just a mere 2 miles to the east on the opposite side of Interstate 29. A lightly utilized railway is also in close proximity to the site which runs through Galchutt. The grid layout on the map shows the common quarter/section layout of the area farm ground separated by roadways.



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greater site area



panorama



west



east



south

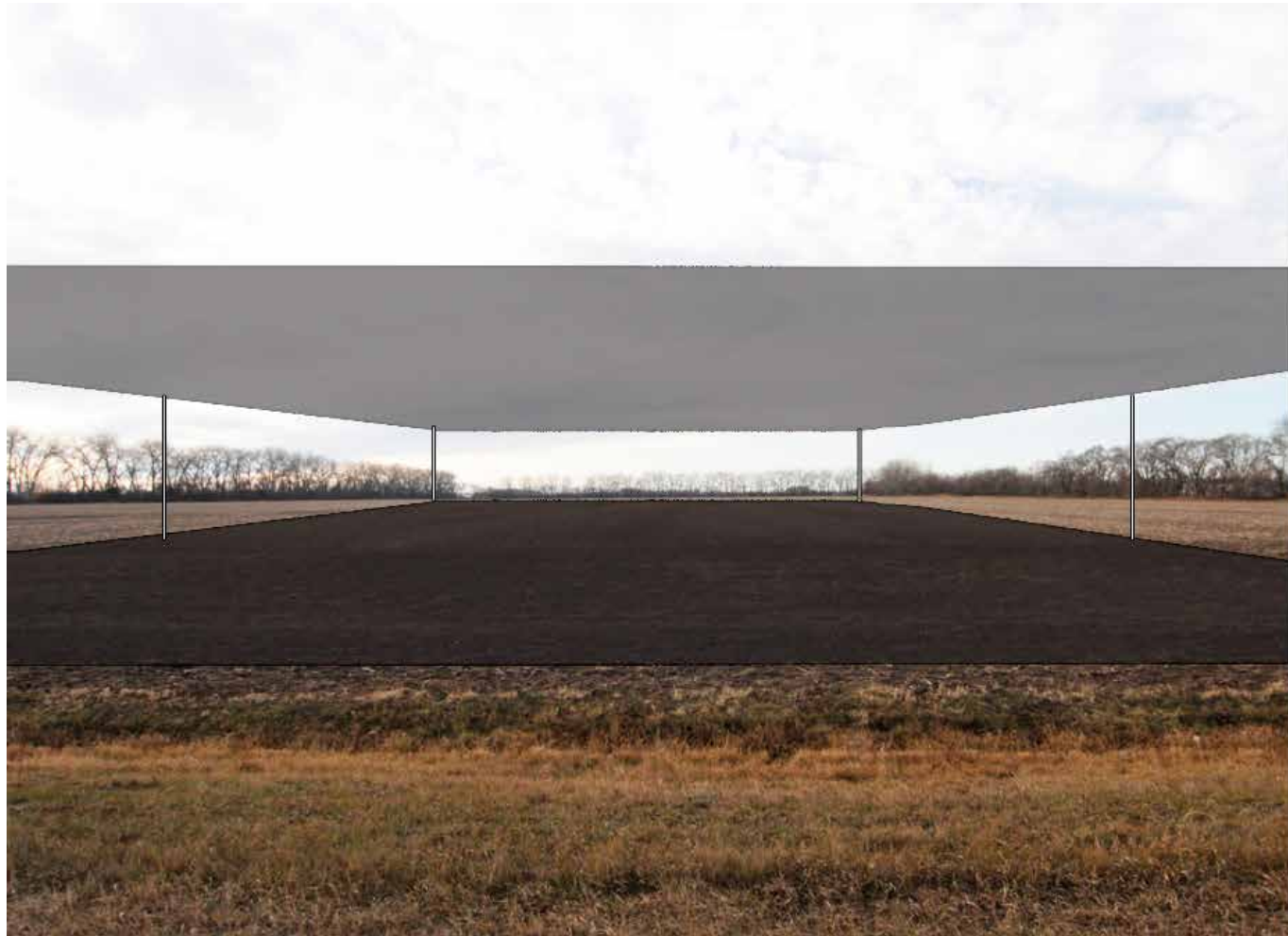


north

The site was chosen because of its proximity to a large city center, its access to a main transportation byway, and most importantly it's rural setting. There aren't any immediate site limitations because the project is envisioned on land that is currently tillable among an agricultural backdrop. However, the project is small enough that it doesn't impose on a large area of tillable land (totaling less than one acre). It is also protected by trees to the south and west.

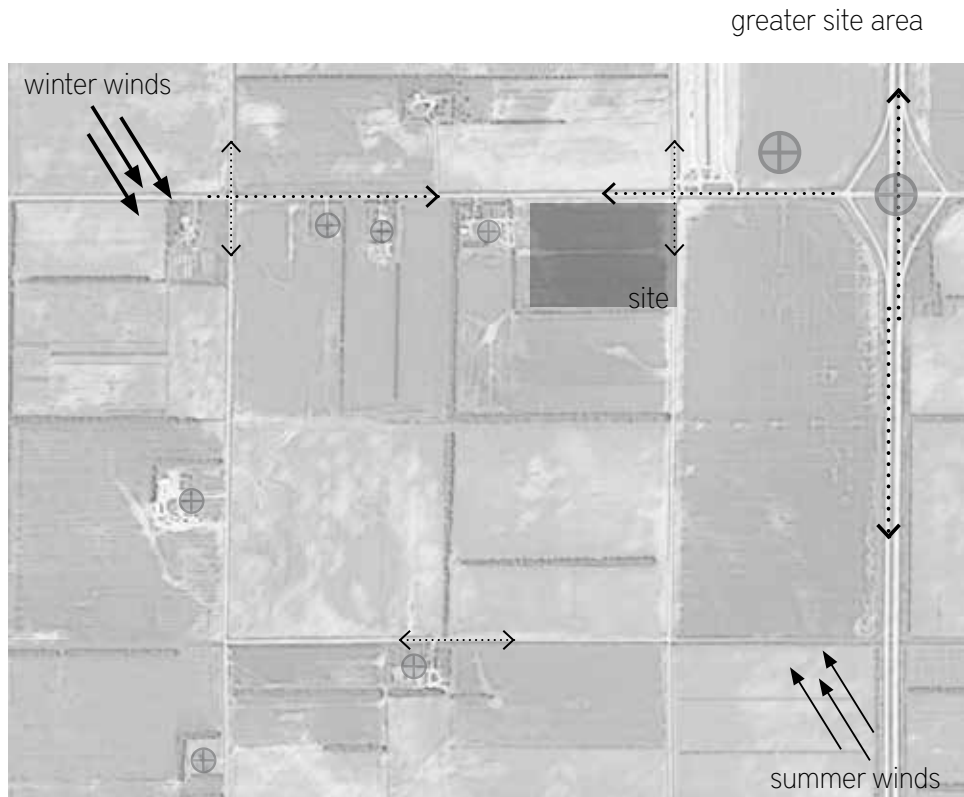


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panorama view from 171st ave se

site perspective

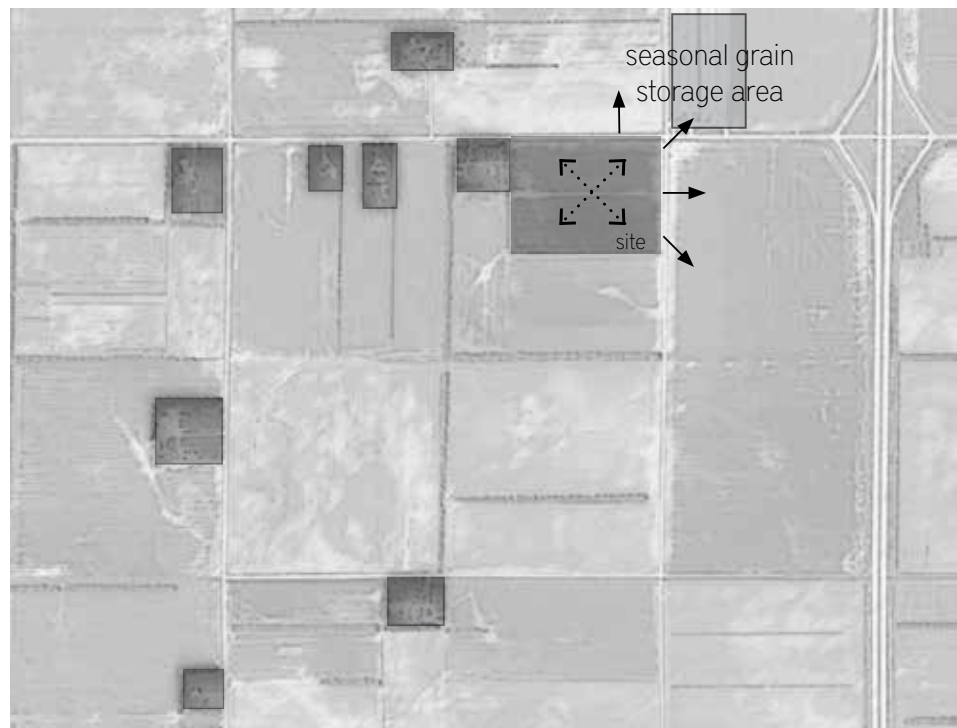


The site is nestled on a piece of tillable land which is bordered to the south and west with trees. It is open to the east and north where the site is accessed. This also will allow cooling summer breezes into the site. Circles on the map denote areas of potential noise from local farmsteads. Traffic is light in the immediate area of the site but picks up significantly during the farming seasons. The seasonal traffic will need to be considered in the site design to prevent noise, safety hazards, and site interruptions. Other areas of concern are the heavy traffic, and noise from Interstate 29 one mile to the east. The larger circles indicate areas of heavier or more concentrated noise.

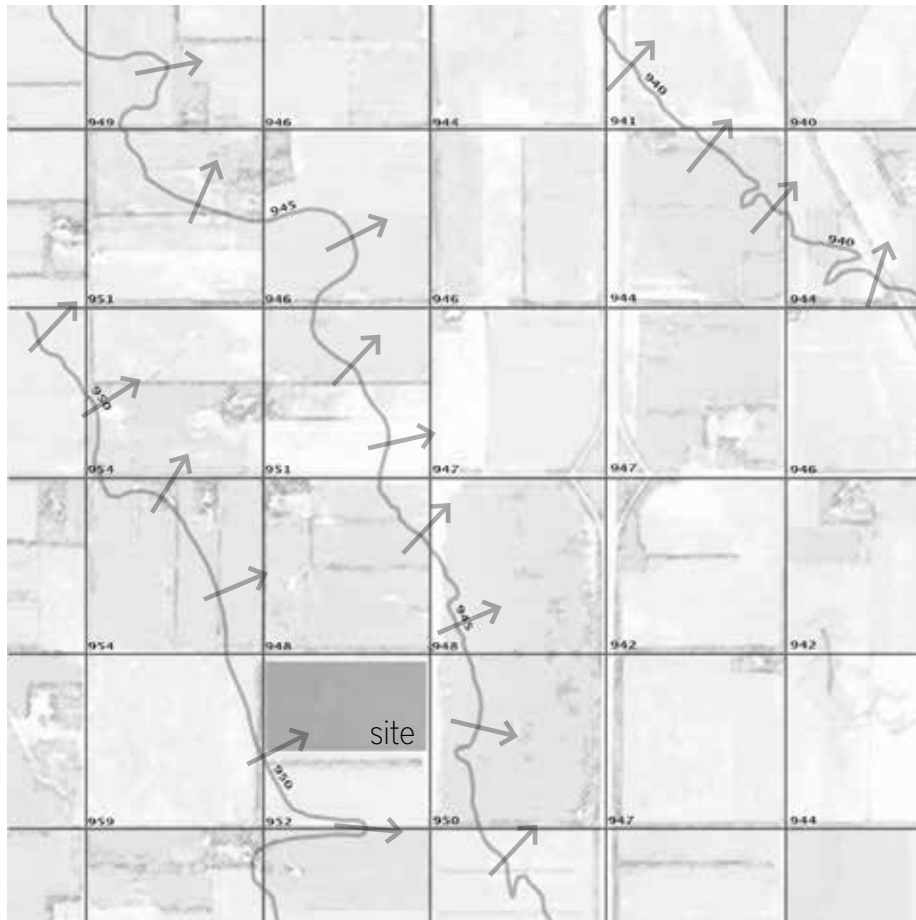
-> traffic
- ⊕ noise
- wind

Similar to the previous graphic, this map illustrates potential views for the site as well as local farmsteads with-in the greater site area. The local farmsteads were denoted as potential noise concerns while the seasonal grain storage area was indicated as an area of greater noise interruptions. Views within the site are created by the trees and landscaping buffers that will enclose the site and create privacy in the final design. Expansive views out of the site are limited to the easterly and northerly directions.

greater site area

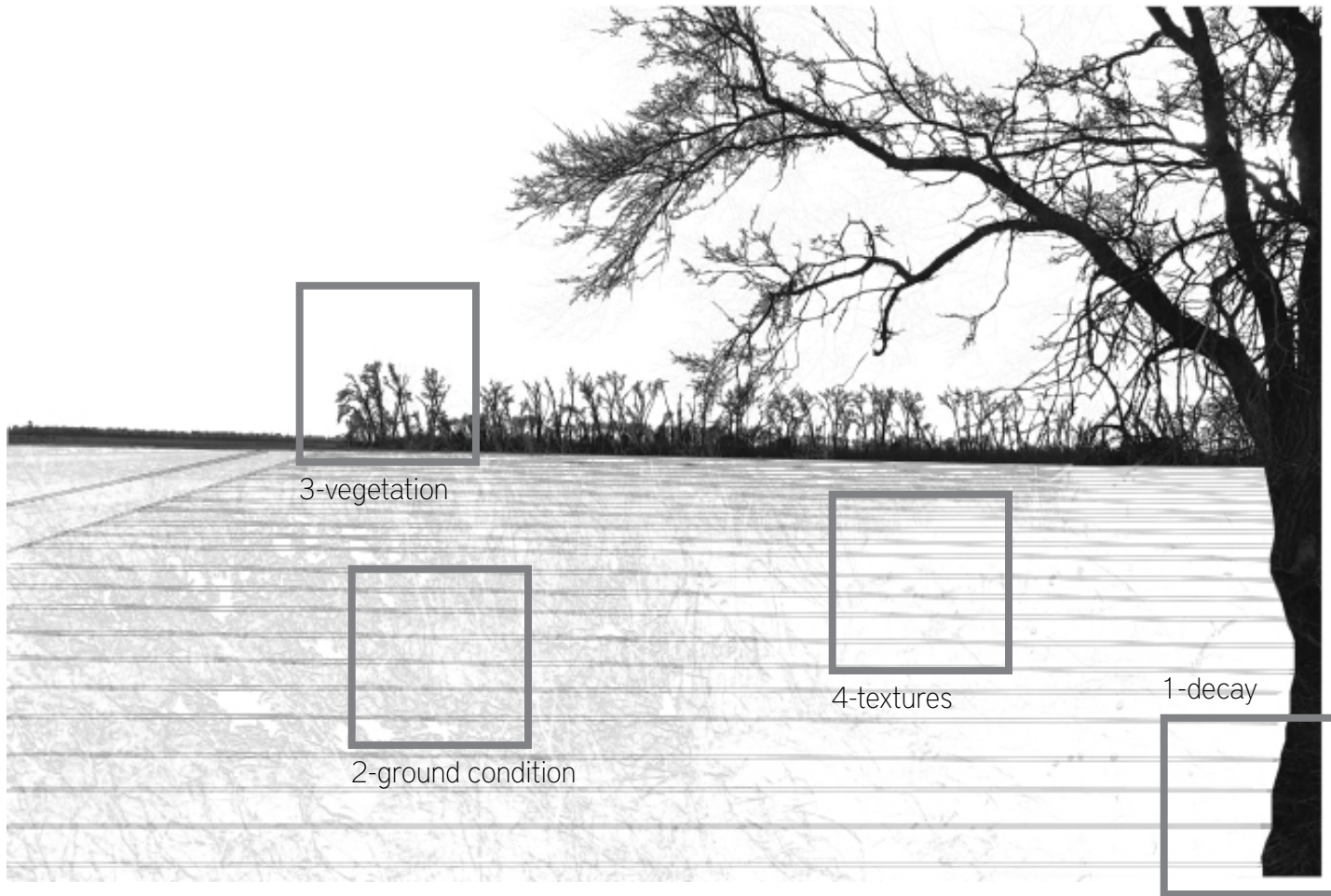


-> internal views
- local farmsteads
- external views



topography

A soil survey from the National Resources Conservation Service indicates that there are three distinct topographic areas in Richland County. One is in the form of moraines formed by the glacial till deposits, another is made of up lacustrine deposits of Lake Agassiz, and the last is comprised of delta deposits from the Sheyenne River. The site region is on the border of the Sheyenne Delta area and the Lake Agassiz region. Drainage is towards the Red River and Richland county is part of the Red River basin. As the map indicates, elevation changes are very gradual ranging from 950 ft to 940 ft sloping eastward. The lake plain has little natural drainage and a large portion of the drainage is through man-made drains. Much of the agricultural land in the area utilizes drain tile to help with drainage. The site itself is very flat and shows minimal signs of natural drainage or water sloughs.



1-decay



2-ground conditions

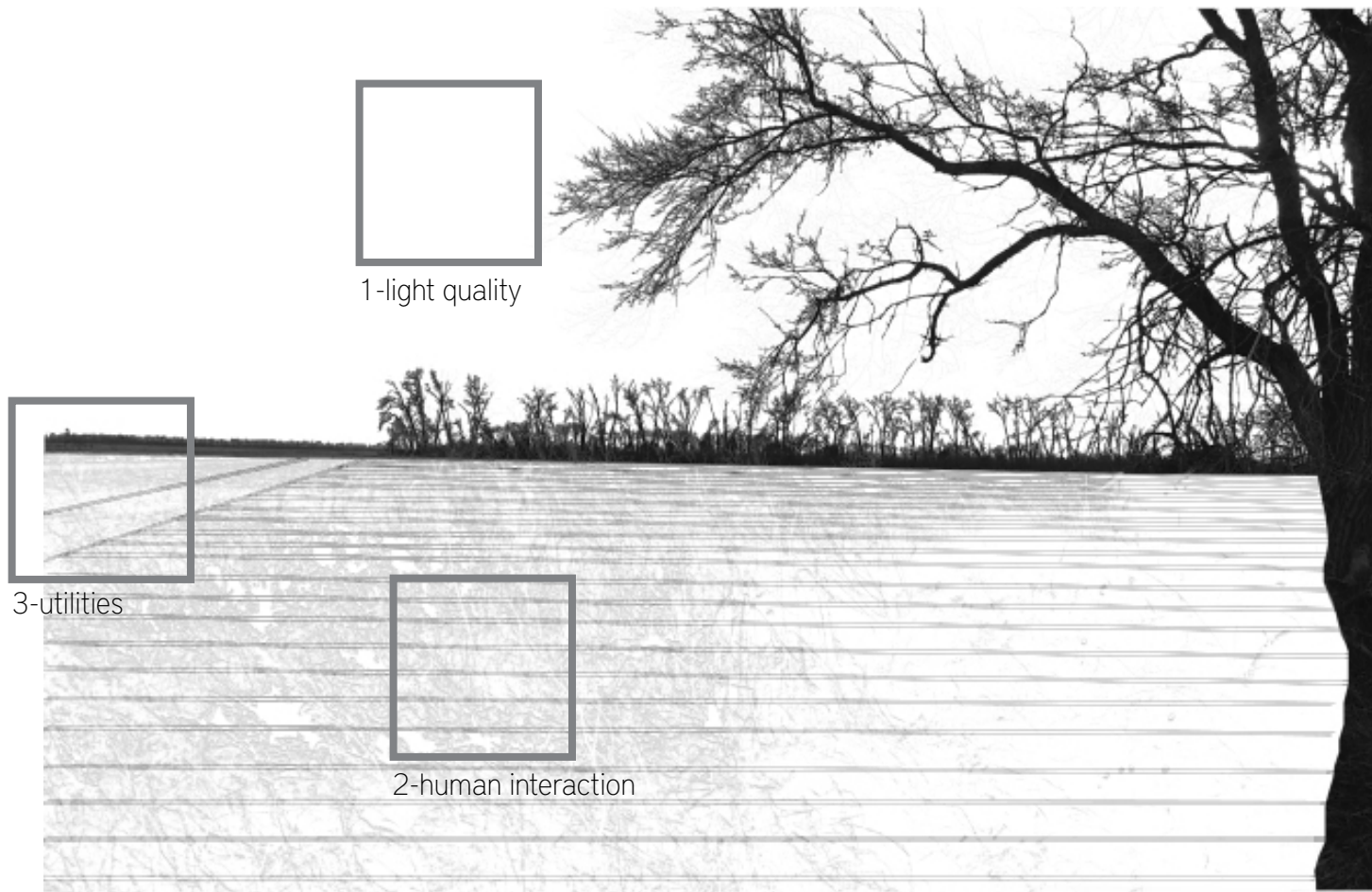


3-vegetation



4-textures





1-light quality



2-human interaction



3-utilities



1873 - Northern Pacific Railway was built to the Missouri River

- Sparked the movement to the area
- Farm steading began

1879-1886- First great settlement "boom"

- Development of bonanza farms.

1905 - Second great settlement boom

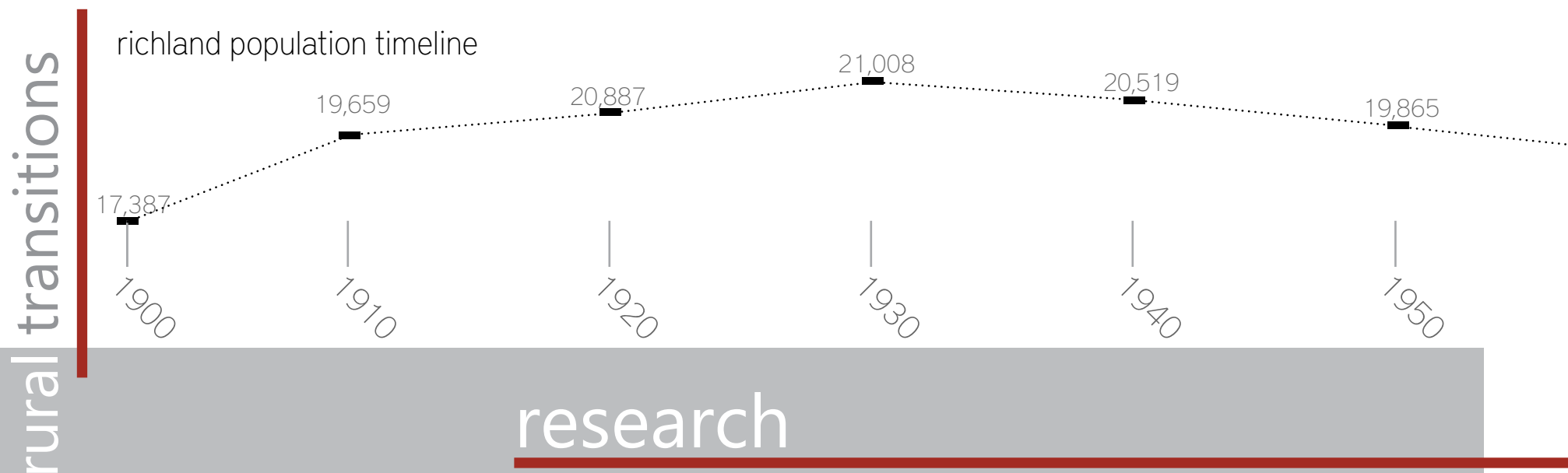
- Scandinavian and German immigrants
- Oil Developments
- Eastern half remained engrained in agriculture

1930s - Great Depression

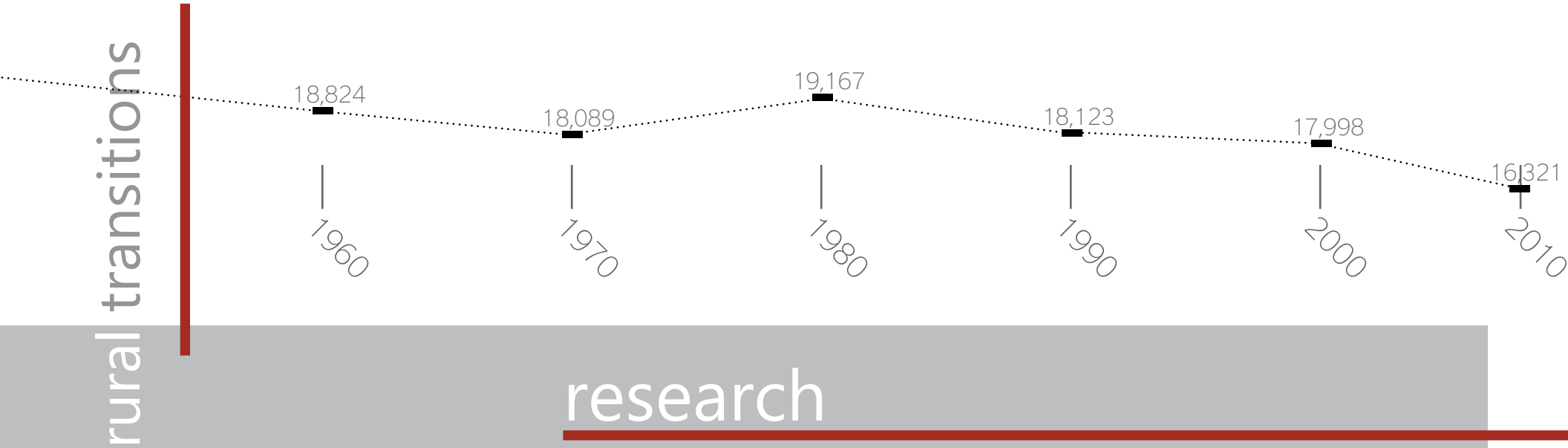
- population drops due to impact on the farming economy
- Unions and Co-ops grain elevators help stabilize economy
- Use of Railroad to transport grain

** In 1908 there were 75 elevators in the county

(State Historical Society of North Dakota) (Claud H. Baker)



“Perhaps the most striking change, however, is reflected by a 1987 census figure. According to census estimates, more North Dakotans now live in cities and towns than in rural areas, an alteration with dramatic implications for the structure of the state’s economy and the composition of its government.”
(State Historical Society of North Dakota)



Richland County and agriculture by the numbers

-1,453 square miles in the southeastern corner of the state.

-Richland County is 927, 424 acres (1997 Soil Survey of Richland County).

-93% in farms

Trends are showing fewer are larger farms ranging in size from less than 100 acres to more than 6,000 acres in size. (United States Department of Agriculture and Soil Conservations Service)

1970- 1,627 farms were operated in Richland County, which was a decrease of nearly 700 farms in the last 15 years (Claud H. Baker).

These two statistics alone support the changing rural demographics as cities continue to sprawl.

Unlike urban areas, the source of rural economics is widespread through agriculture and is scattered into small communities that are vital to the existence of a rural lifestyle. (Hillyard)

Current trends indicate more people are moving into areas of greater density from rural areas. The efficient and convenient access to amenities and necessities in the rural setting is dwindling, moving people to cities and causing small communities to suffer. This creates an opportunity for a new mixed-use facility to be the transitional space to help sustain rural communities and create a new living environment where people can live a more sustainable centralized lifestyle. The solution is to integrate the values and living patterns of rural life into a single project while retaining a rural location quickly accessible to the full benefits of city living. The solution begins to bring the conveniences of the city back to the rural communities but avoids the chaos often associated with the city.



Project: Siloetta

Project Type:
Housing/Mixed Use

Location: Logten, Denmark

Architects:
C. F. Møller Architects
with Christian Carlsen
Arkitektfirma



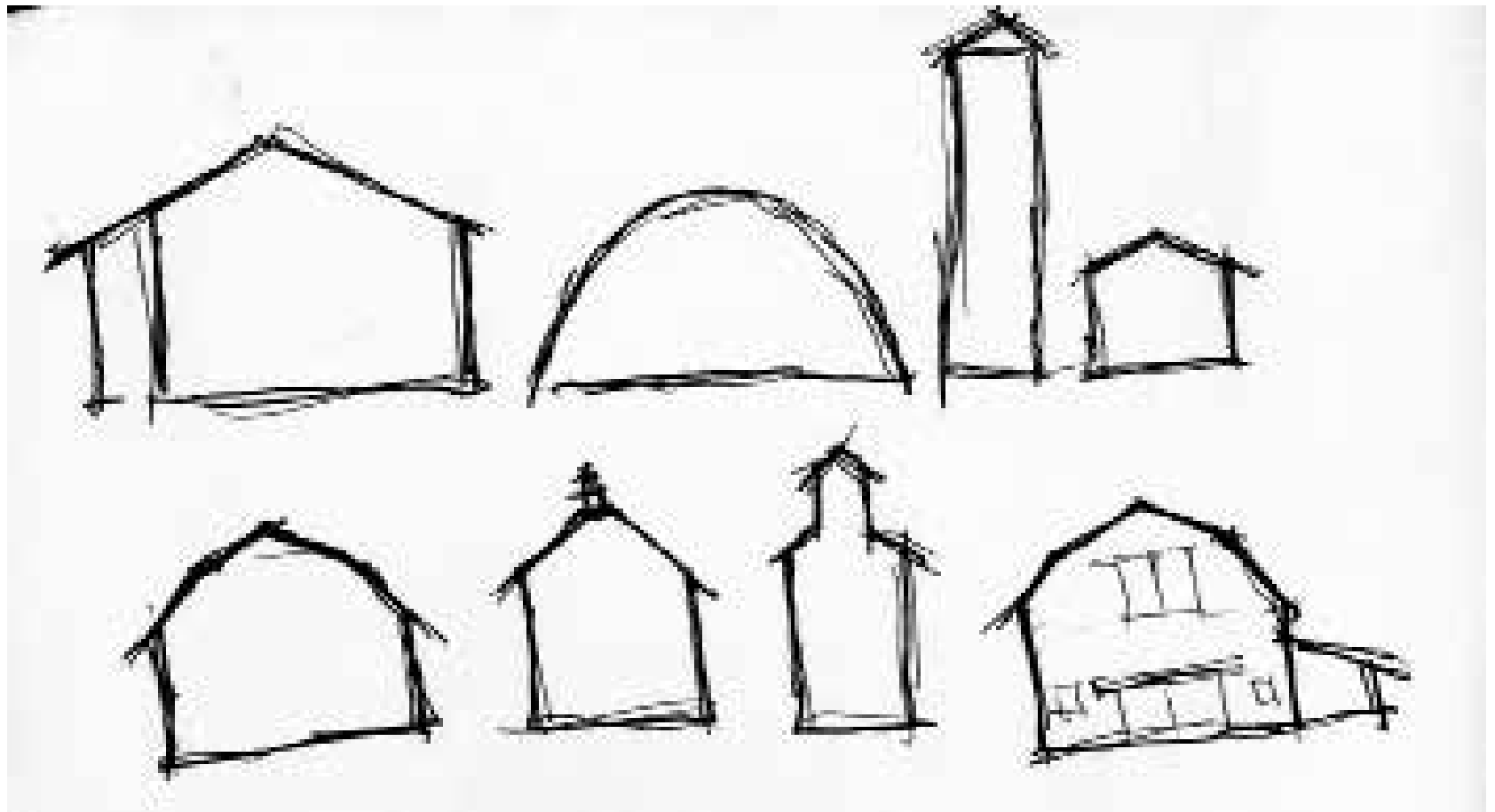
Project: Newlands Community Centre

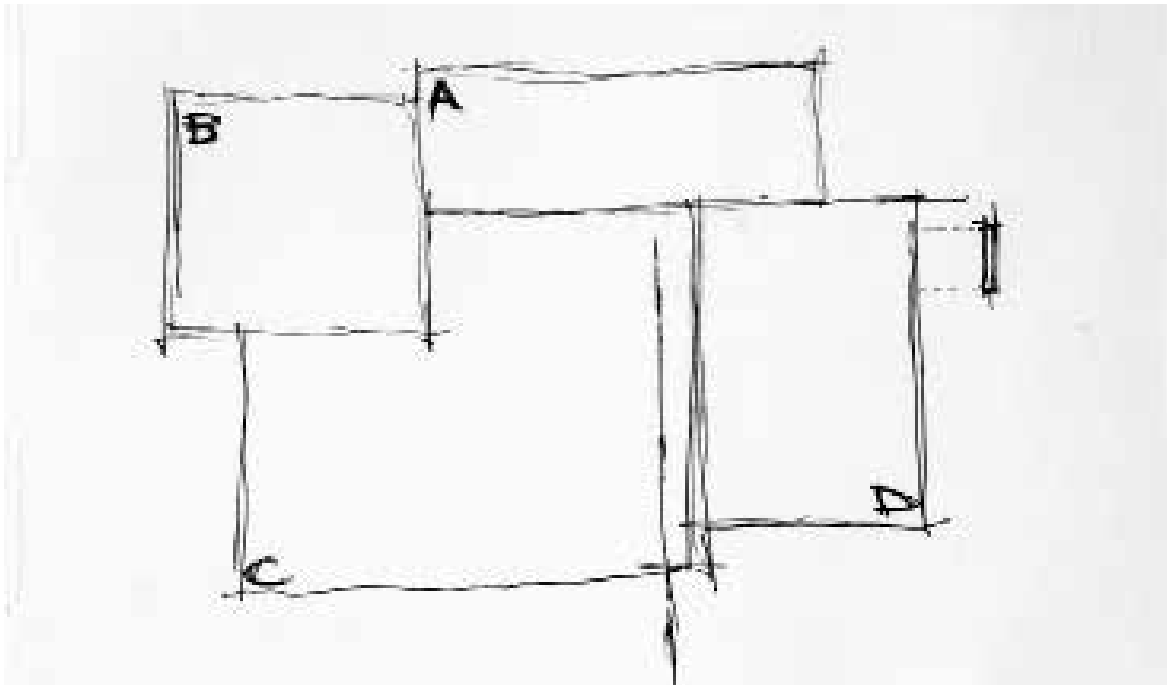
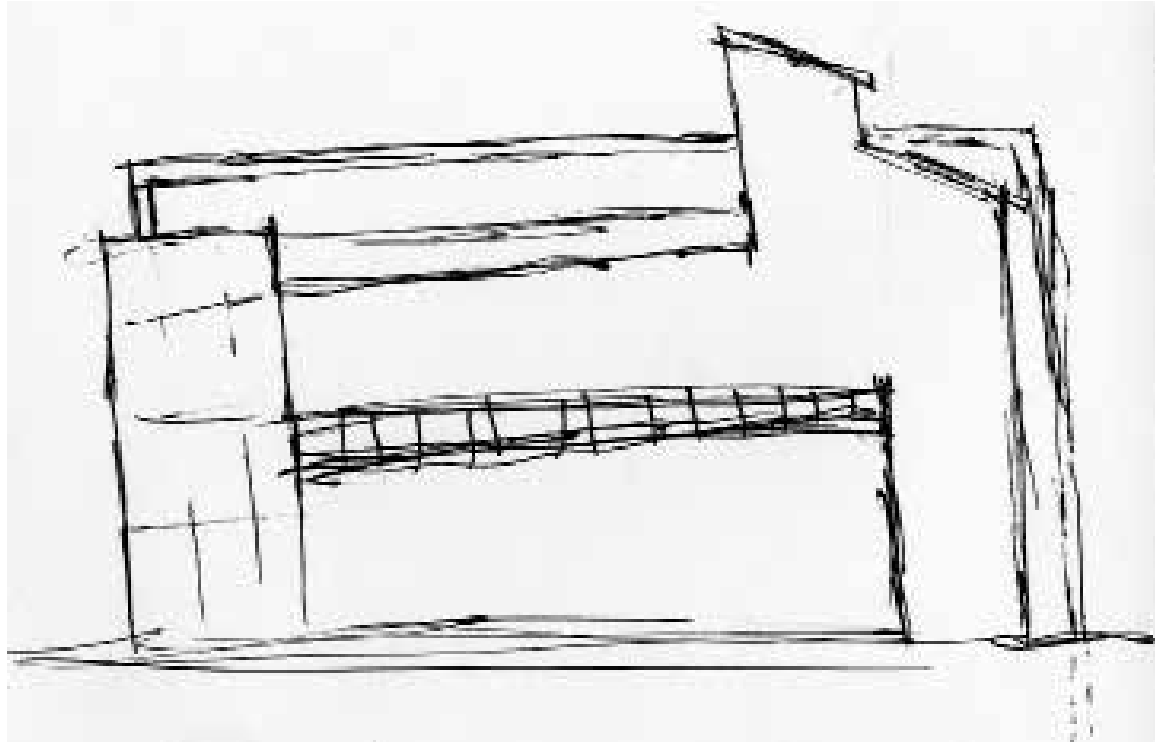
Project Type: Mixed Use

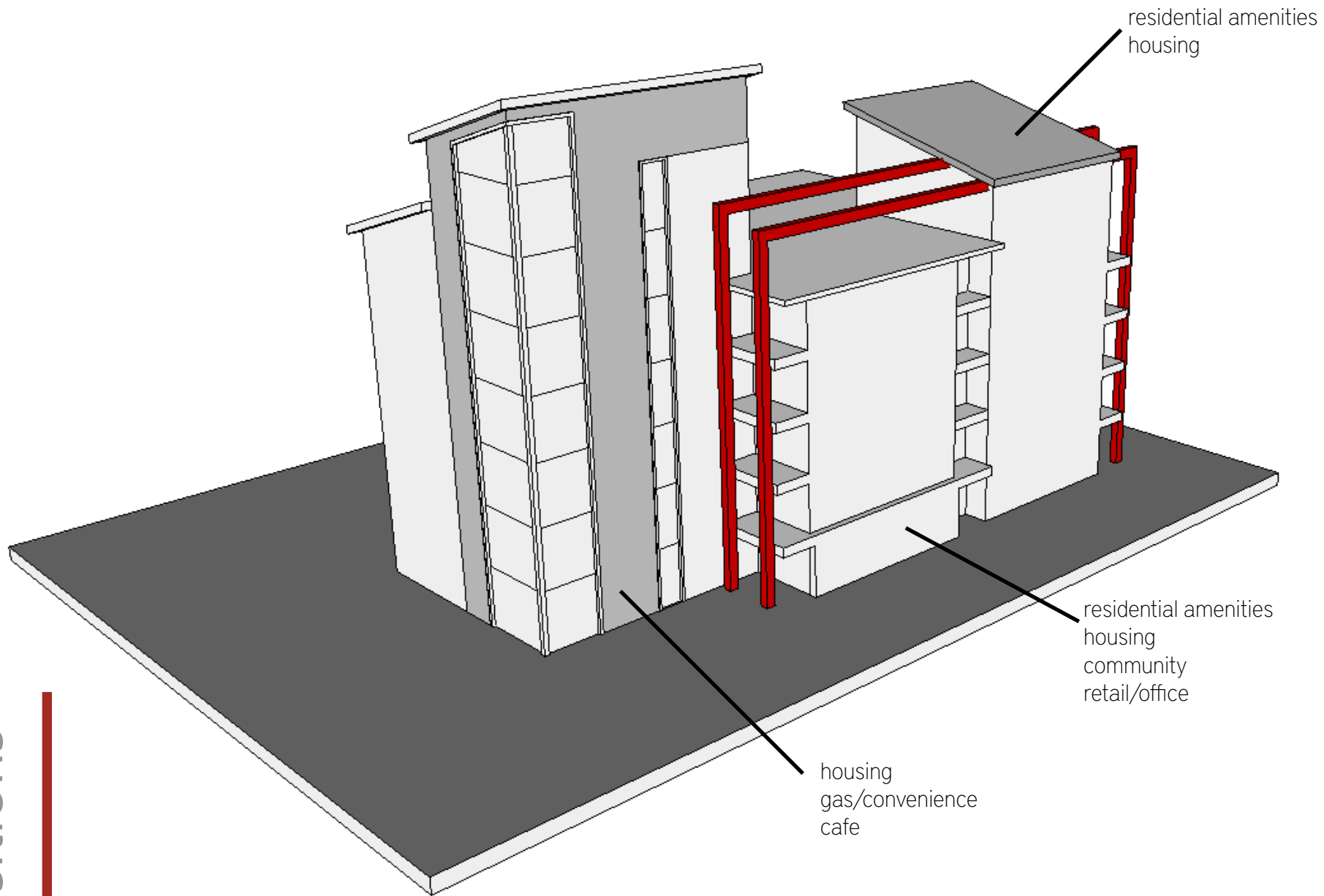
Location:
Newlands, Wellington NZ

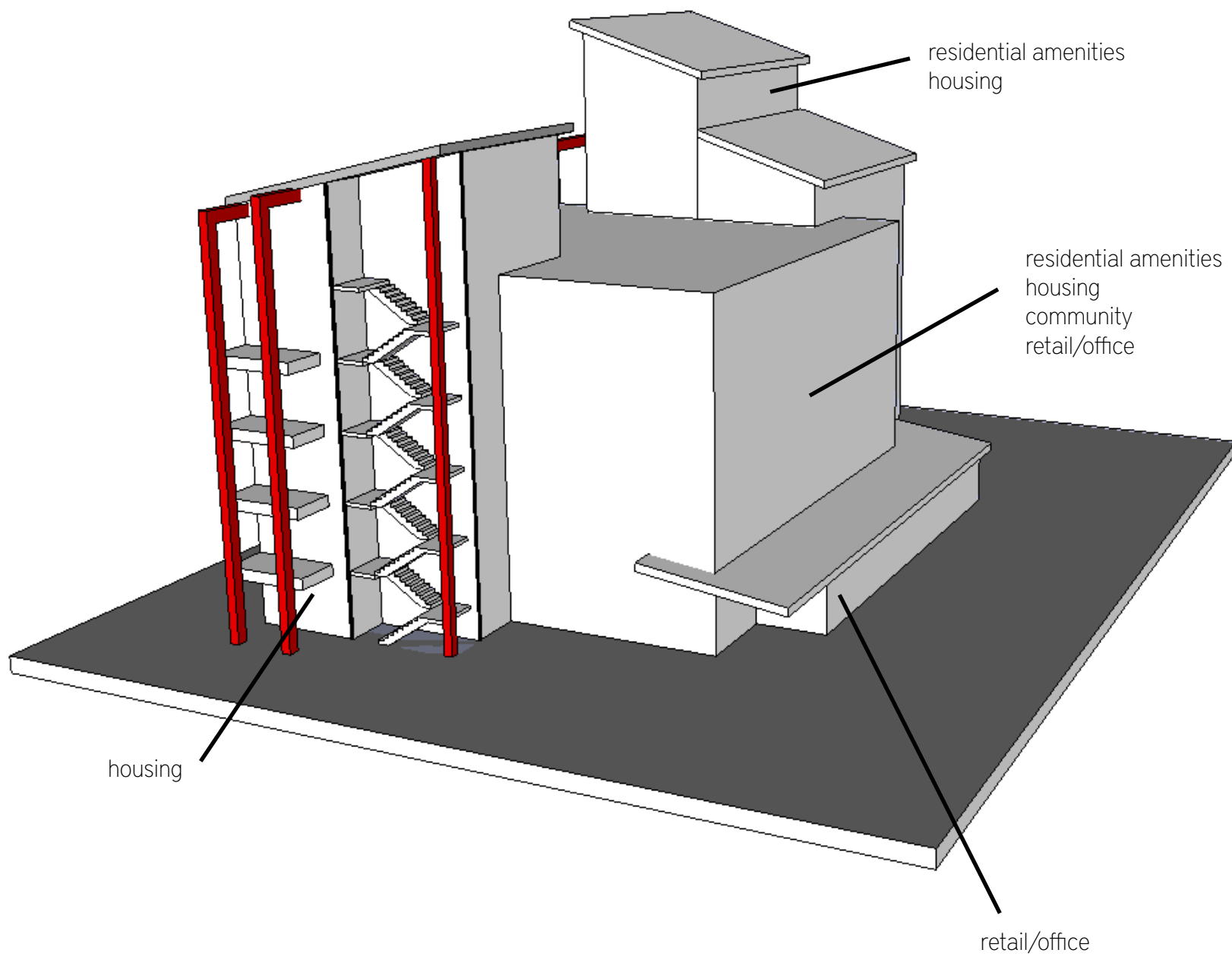
Architects: CCM Architects











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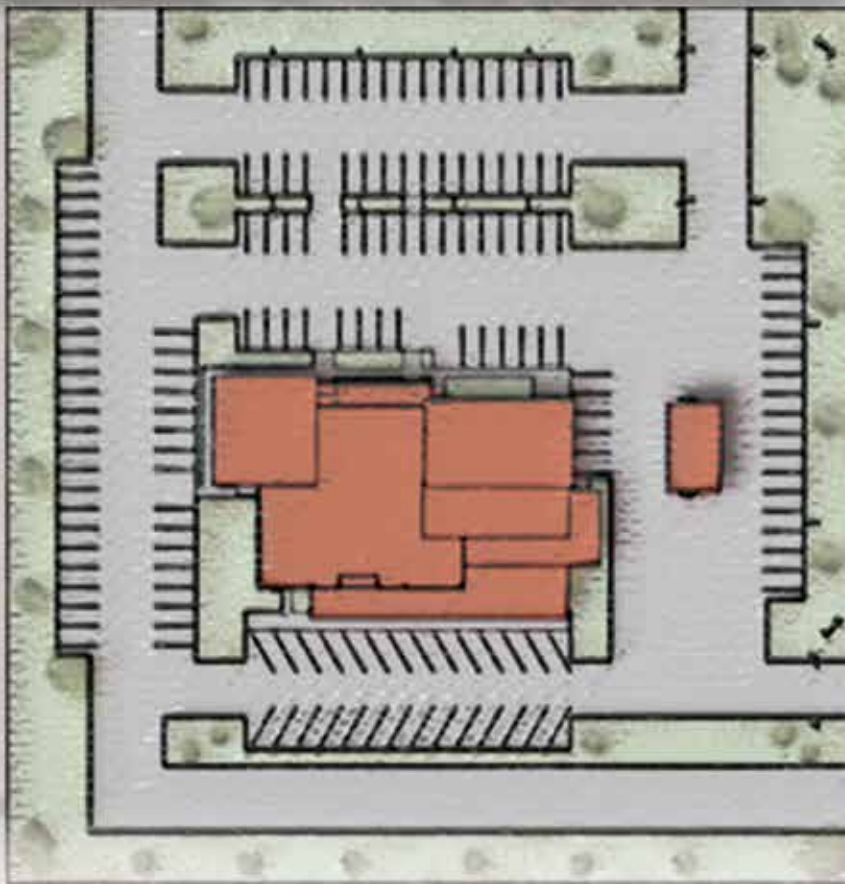


design

residential units	25,000 sq ft
22 units	(avg 1,140 sq ft)
residential amenities	
outdoor terrace	6,000 sq ft
residential amenities	1,350 sq ft
offices.....	4,420 sq ft
6 units	(avg 740 sq ft)
community center	5,800 sq ft
recreation	(2,200 sq ft)
meeting/conference	(3,600 sq ft)
gas/convenience.....	3,400 sq ft
lounge.....	890 sq ft
cafe	1,500 sq ft
storage/loading.....	1,100 sq ft
mechanical	3,520 sq ft
circulation.....	9,510 sq ft
project total	60,600 sq ft

*parking to accommodate 22 residential units, community center, gas station and cafe.

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site plan

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basic structure

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structure with egress

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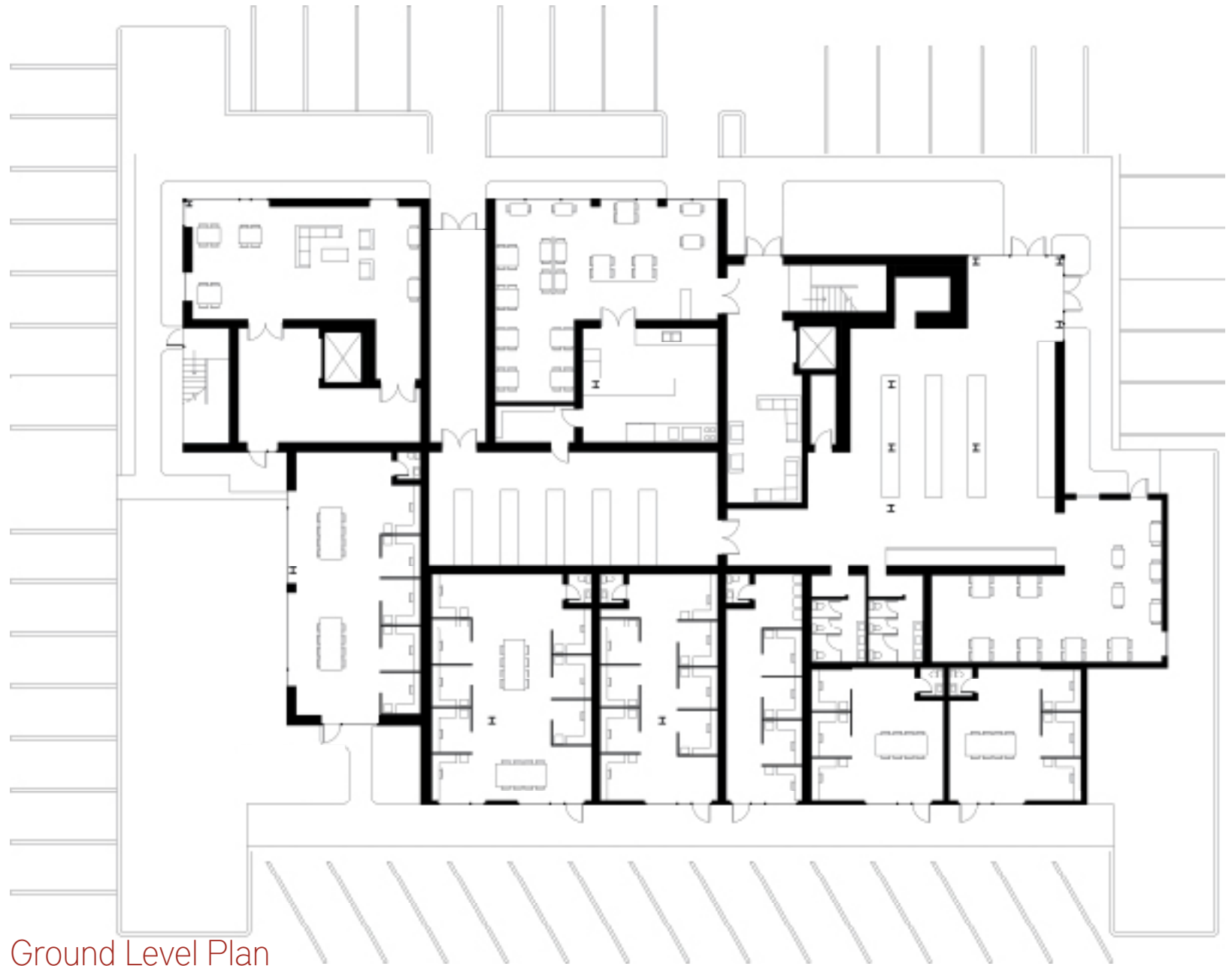


structure with floors

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structure with exterior



Ground Level Plan

-11,360 sq. ft.

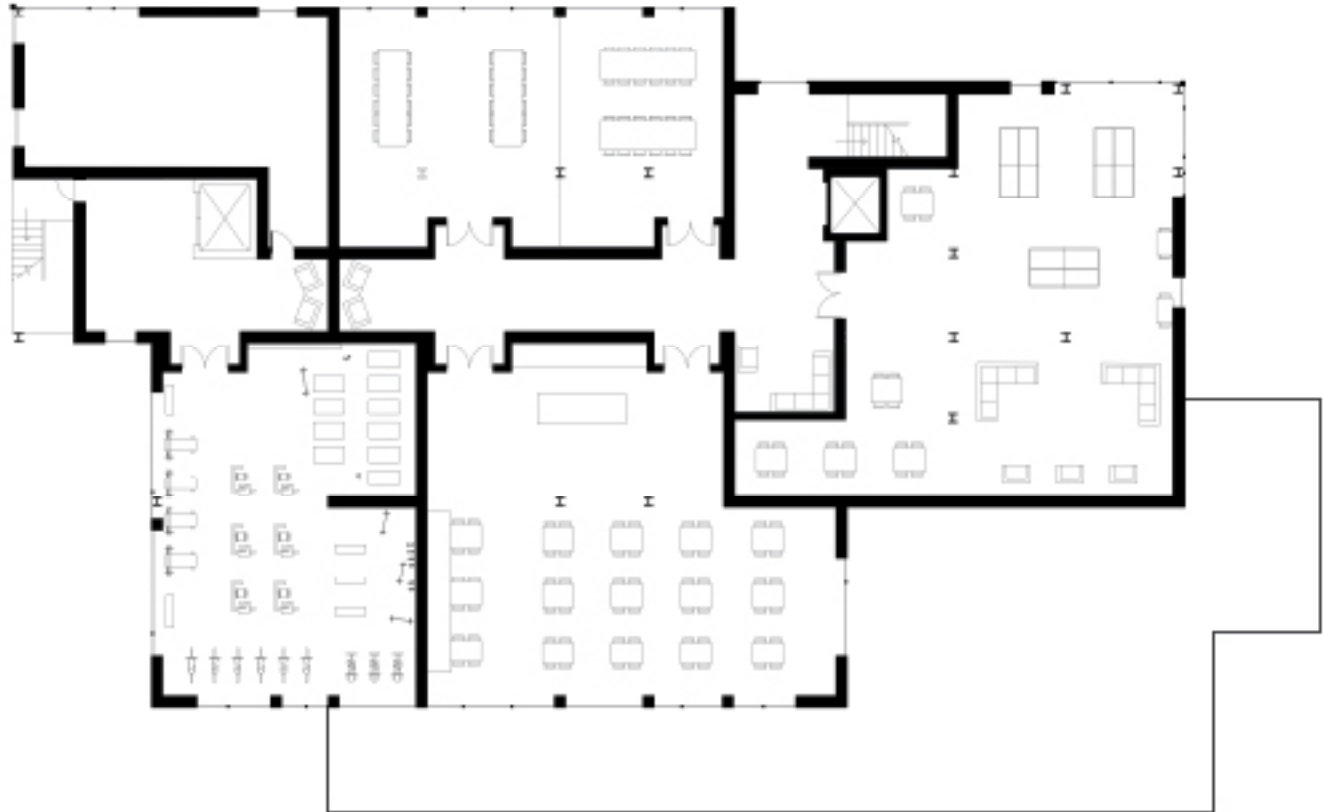
lobbies

residential lounge

gas/convenience

offices

ground floor plan



second level plan
-8,850 sq. ft.
residential amenities
community meeting
community recreation

second level plan



3rd and 4th level plan
-9,290 sq. ft. each
residential

3rd and 4th level plan

fifth level plan
-9,290 sq. ft. each
residential
mechanical

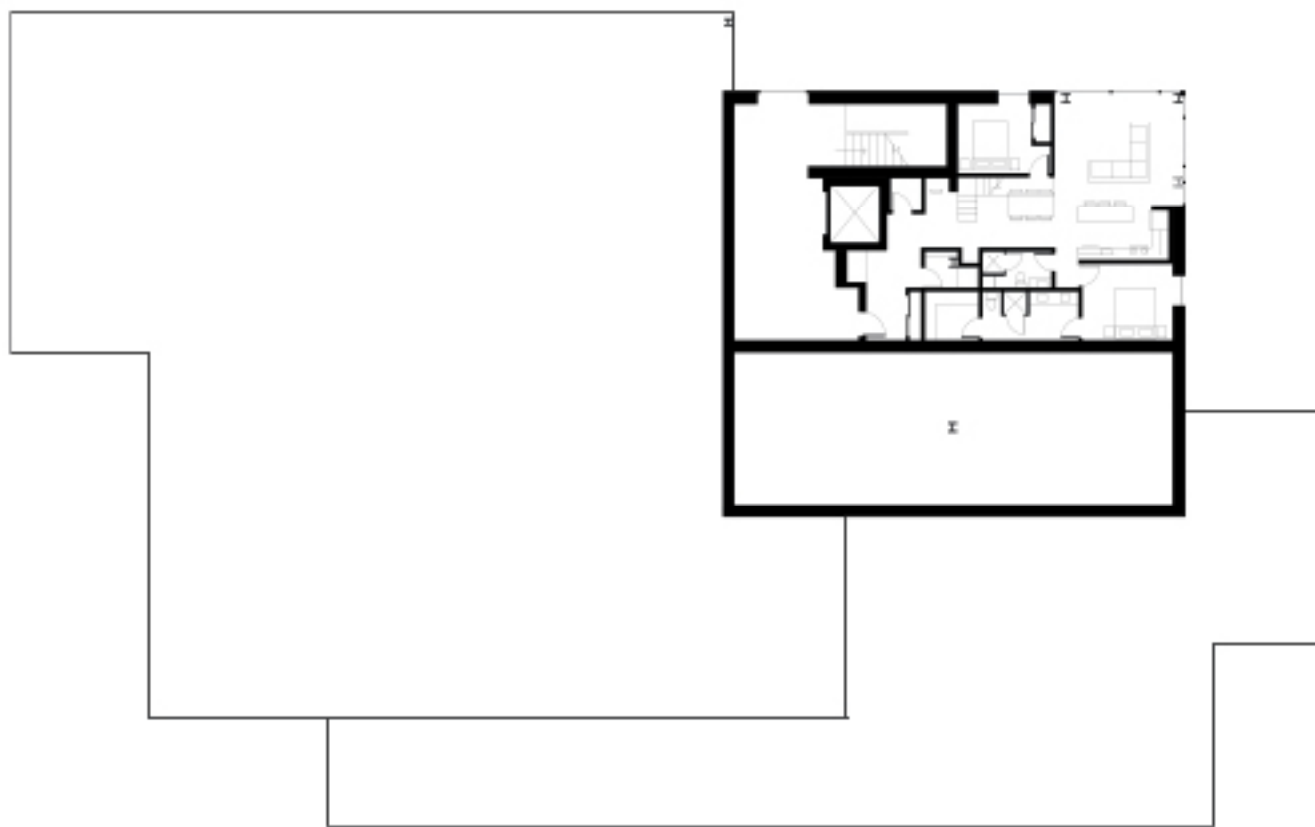


fifth level plan

sixth level plan
-9,880 sq. ft.
residential
rooftop terrace
mechanical



seventh level plan
-2,800 sq. ft.
residential
mechanical



eighth level plan
-320 sq. ft.
residential



north elevation



south elevation

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elevations



east elevation



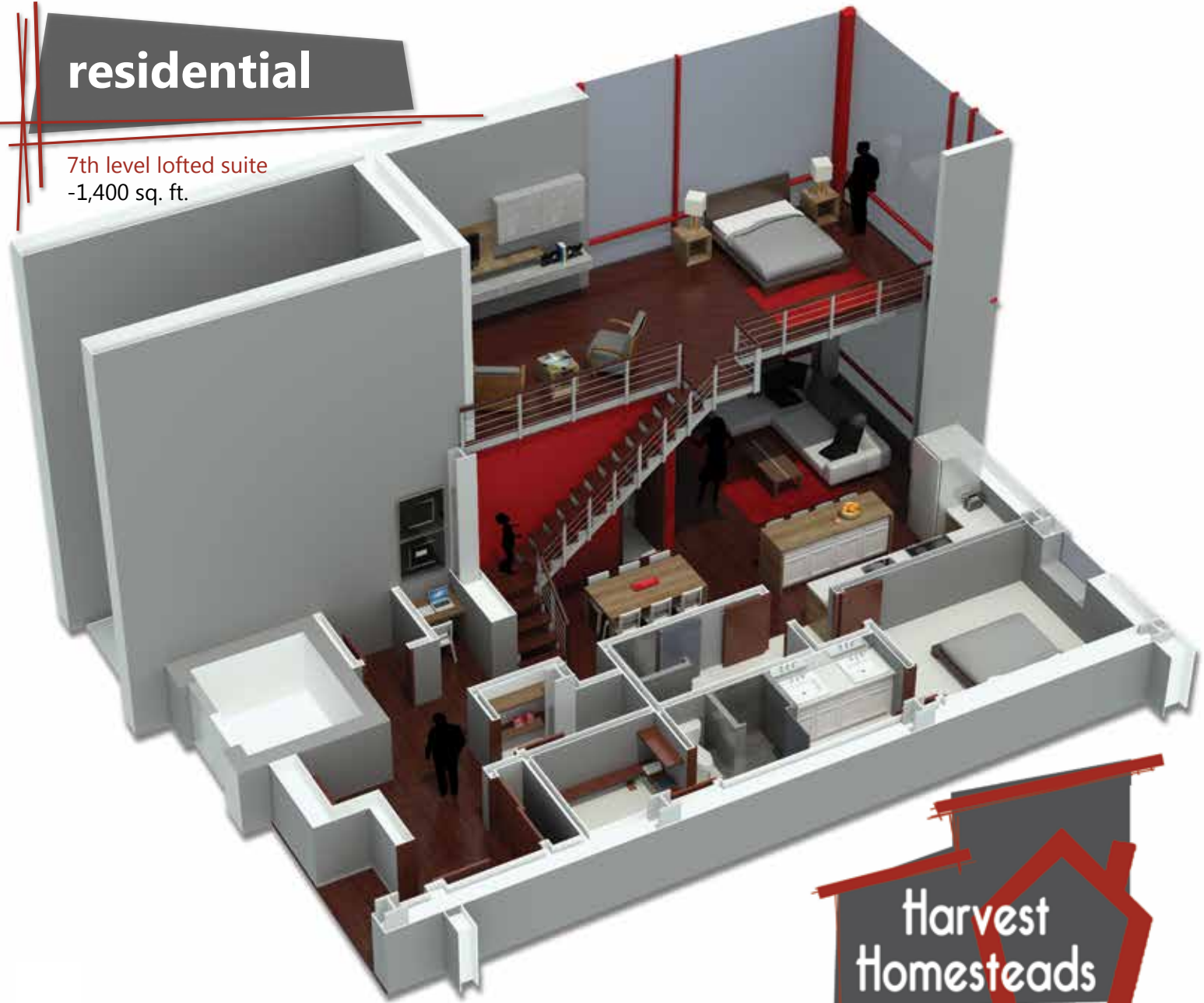
west elevation

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elevations

residential

7th level lofted suite
-1,400 sq. ft.



Harvest
Homesteads

AT THE RURAL COMMONS

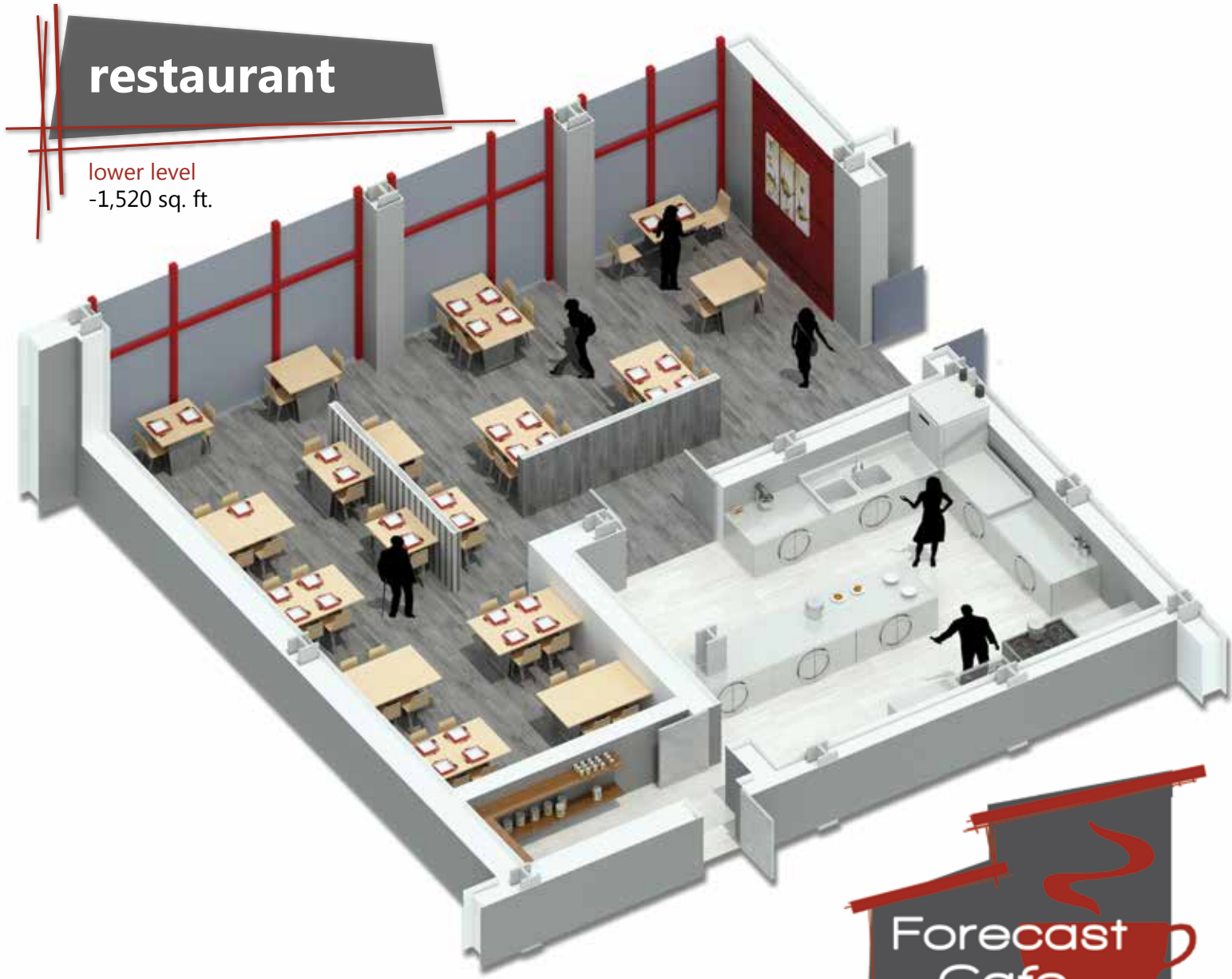
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residential

recreation

2nd level
-2,200 sq. ft.





restaurant

lower level
-1,520 sq. ft.



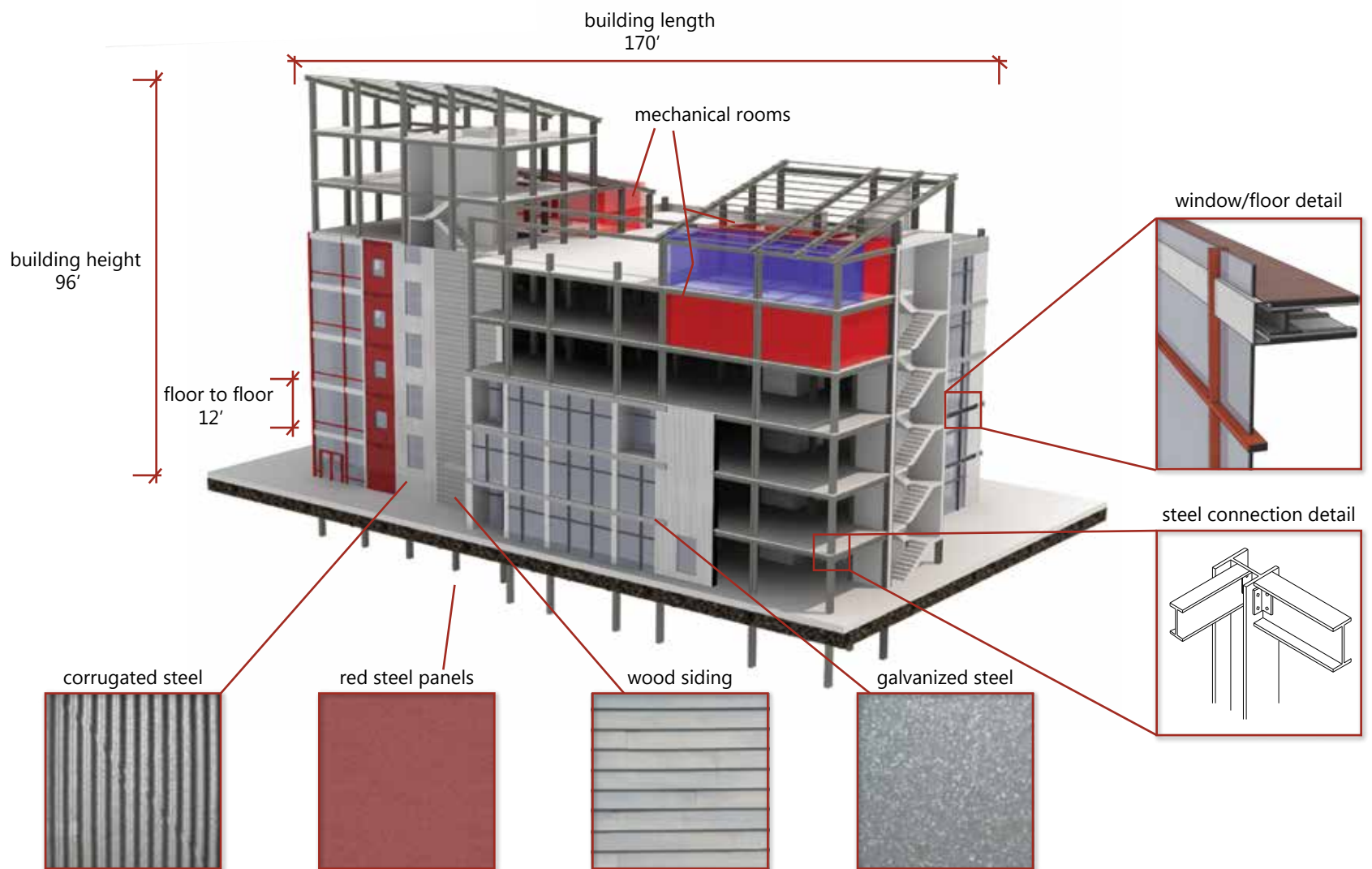
convenience

lower level
-3,400 sq. ft.

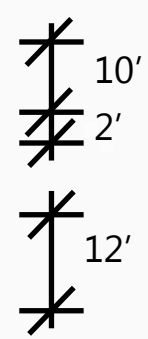
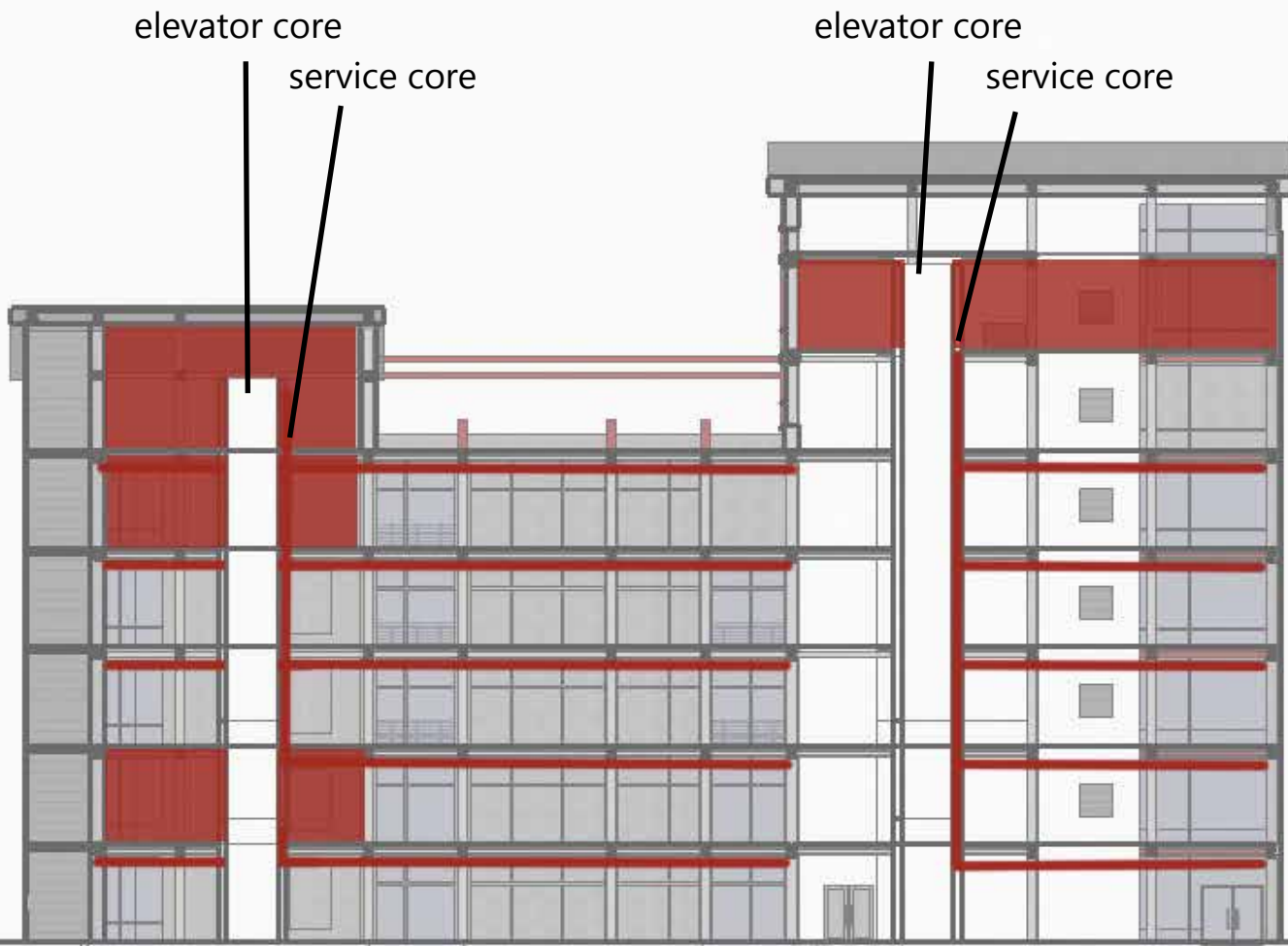


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convenience store



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■ Mechanical Rooms

HVAC section



- Water service from floor
- - - Air service from ceiling
- Mechanical Room

HVAC floor plans



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exterior rendering

rural transitions



night rendering

THE RURAL COMMONS



Questions or Comments?