

physical
& mental
restoration

In A Restorative Nature

a retreat
old frontenac, minnesota
justin johnson



problem statement

How can architecture influence a better preventative mental healthcare system as an alternative to the current arrangement of inaccessible and sometimes inadequate mental healthcare treatment programs?

problem statement

typology

A retreat for those looking for a restorative physical and mental need for the Minnesota Department of Human Services.

claim

Architecture could aid in the movement from the treatment type of mental healthcare system to a preventative care system.

unifying idea

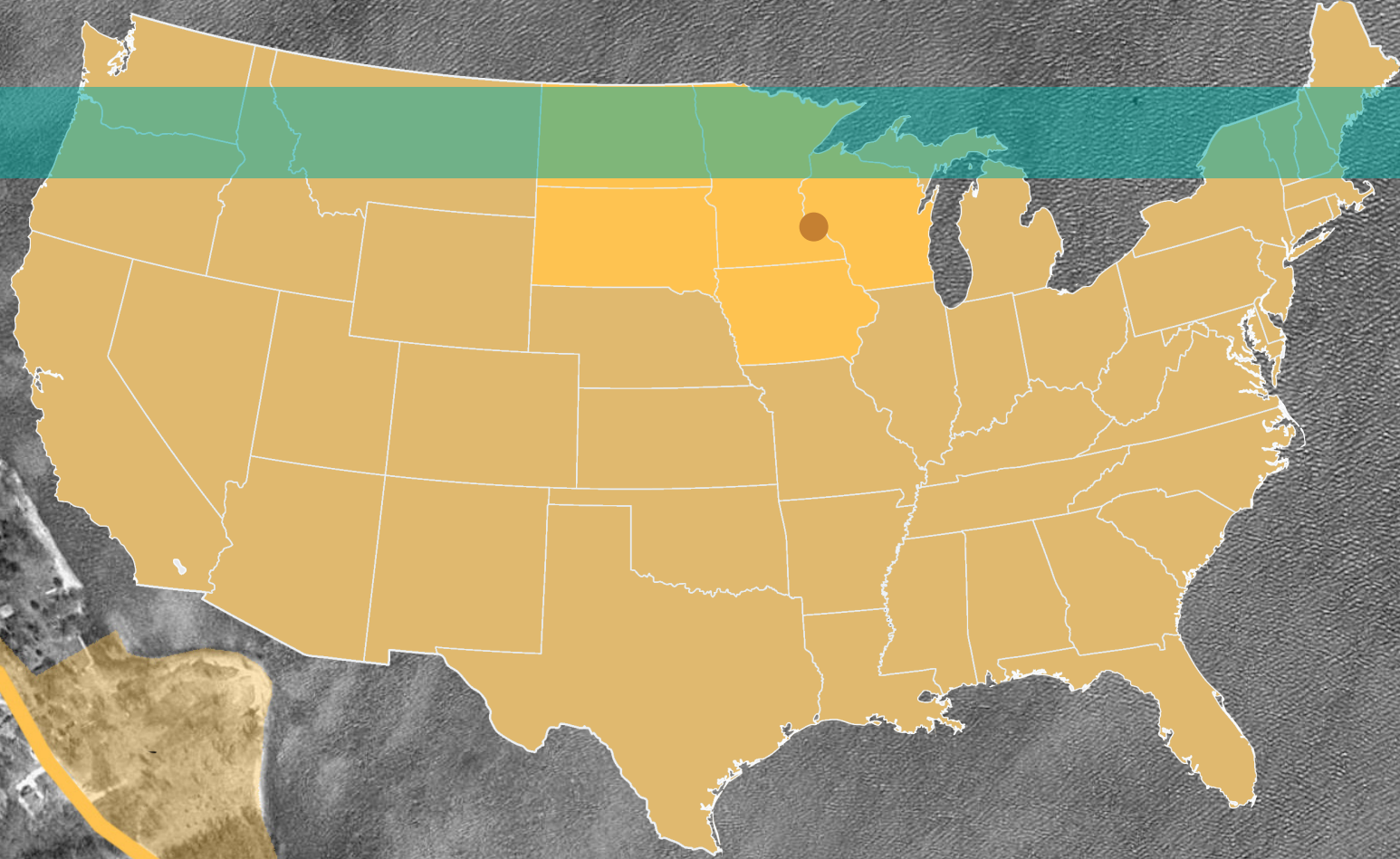
The treatment type of mental healthcare is expensive and can be avoided or become unnecessary if there were more alternative or preventative options. Architecture can help ease the hardships healthcare is going through by offering new and stress-free spaces through an environmental connection.

justification

The current mental healthcare program doesn't offer enough alternatives towards preventative care. If more unique preventative care options were available, especially those relating to the mental point of view, it may help people avoid incurring future financial and health problems.

statement of intent

site plan



lake pepin

county 2 blvd

Count Frontenac, Governor of New France (Montreal) sponsors explorers to the area.

1680

French construct Fort Beauhanois near present site of Villa Maria.

1727

James Wells establishes fur trading post at the future site of Frontenac.

1837

Frontenac stone quarry established, the limestone provided construction materials.

1854



The warehouse which eventually is converted into the Lakeside Hotel is built.

1856

The state of Minnesota is established.

1858

The village name is changed from Westervelt to Frontenac, in honor of Count Frontenac.

1859

The Lakeside Hotel is established by converting an old warehouse.

1867

site views



Lakeside Hotel is enlarged by adding an 80 foot two story addition to the west end.

1870

Garrard family donates land to route railroad away from Frontenac to preserve the village.

1871

The Villa Maria Academy, a Roman Catholic Nun school is established just outside of town.

1889

The Lakeside Hotel was sold and operated as a summer resort complex.

1907



The Methodist Church buys the hotel complex and converts it into a retreat.

1939

Frontenac State Park is established and the Chapel on the complex is constructed.

1957

Minnesota Historic District Act is signed into law, allowing preservation of historic sites.

1971

Lakeside Hotel Complex is sold again and now sits abandoned.

1987-Current



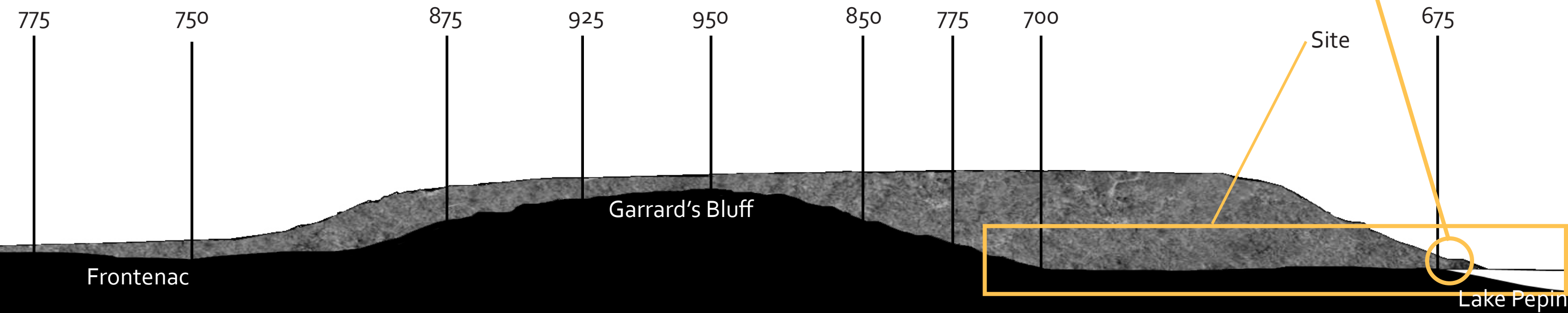
site views



site views

site section

The section of the site was done to better understand the relationship of the site to the surrounding environment. While the site is mostly flat, the surrounding area is much more dynamic, with Garrard's Bluff enclosing around much of the site.



The Minnesota Department of Human Services

the client

The Minnesota Department of Human Services was originally known as the ‘welfare agency’ since it’s inception in the mid 1800’s. The department has had the focus of helping people make transitions and overcoming obstacles in their lives.

The Minnesota Department of Human Services (MDHS) has listed seven priorities for which guide department planning efforts: at-risk adults, at-risk children, reducing disparities, health care, chemical and mental health, home and community-based services and organizational effectiveness.

The MDHS has a simple mission: “The Minnesota Department of Human Services, working with many others, helps people meet their basic needs so they can live in dignity and achieve their highest potential.” (MDHS, 2010)

Patients

Demographics

the users

With the nickname “The Land of 10,000 Lakes” Minnesota has a long standing reputation for it’s connection to the wilderness or nature. Even with it’s strong tie towards nature it still has a large population, with roughly 5.25 million people calling it home. At about 2.85 million people the Twin Cities area includes about half of the entire state’s population. With a consistent growing population in the area there is always a need for various types of mental health facilities.

staff

- 1 director
- 2 supervisors
- 2 licensed mental health clinicians
- 2 social workers
- 2 welcoming staff
- 1 IT staff
- 1 accounting
- 8 kitchen staff
- 12 servers, dining staff, etc.
- 2 maintenance
- 4 house keeping

Mental healthcare is a unique field in the fact that both the client and the staff often share the same spaces. There will also be necessary private spaces for staff.

Outdoor Spaces

A large focus for this project will be on the connection with nature that is often forgot within the city. There will be many outdoor spaces for the patients to enjoy including; walking paths, boat docks, gardens, meditating areas, many wooded areas and designated fishing locations.

Commons

The commons area will include many of the public entertainment spaces. There will be an area for meals and service. A lounge that is connected to the outdoors, with the focus again being the connection with nature.

Social Services Offices

The other offices are made public due to the fact that they are used for counseling. These are used by the licensed mental health clinicians and social workers. They vary in size but the licensed clinician offices should be a comfortable size to allow for a small group counseling.

Group Rooms

Group counseling and group meetings have become an important aspect for the mental health field. Many recent studies, especially within drug and alcohol abuse, have shown that the relapse rate of those who are in group counseling is much lower versus those who just do individual counseling.

Private Living Quarters

The retreat will have to accommodate the fact that the patients will be at least staying overnight. There will have to be private living quarters available for the patients that include; a bed, storage, and a shared bathroom.

Conference Room (Private)

It is necessary to have a small group conference room for the staff to use for meetings within the mental health division.

Staff Breakroom

The staff breakroom is separate from the public patient areas so the staff has an adequate get away from the work environment.

File Room

Security is an important aspect in a facility like this. It will need a large fire proof file room that is private and inaccessible to the public.

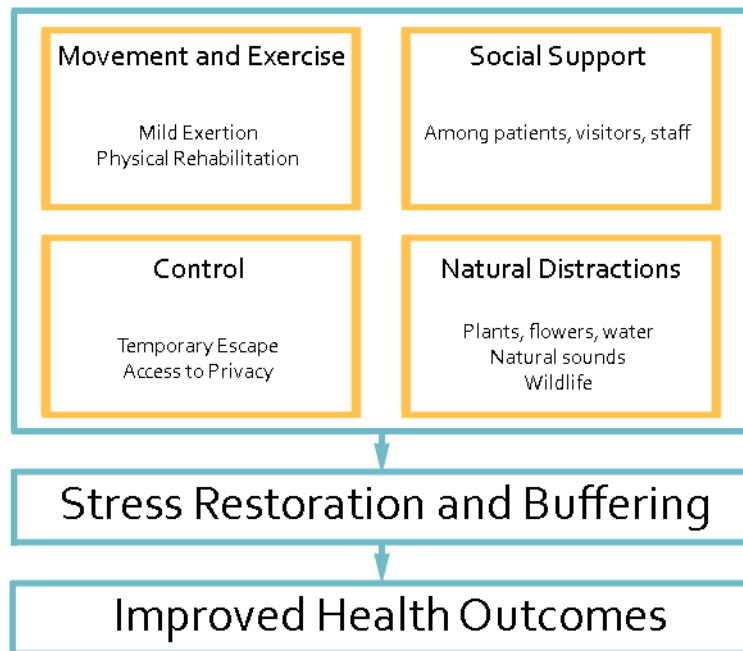
Administrative Offices

The administrative offices are used for accounting and bookkeeping, insurance, and IT. They are private and must accommodate up to date technological uses.

There are four main goals, or principals, that my project and the theory behind the “healing garden” represent. They are achieved throughout the project as a whole on different levels, both built environment and the natural environment.

- 1 Sense of control and access to privacy
- 2 Social support
- 3 Physical movement and exercise
- 4 Access to nature and other postive distractions

healing garden



The definition of the “healing garden” can be broad, Roger Ulrich refers to it as a “variety of garden features that have in common a consistent tendency to foster restoration from stress and have other positive influences on patients, visitors, and staff or caregivers.” (Ulrich, 1999) The type and quality of the garden should be composed of “real nature,” like real vegetation, flowers, trees, bushes, and water features. These healing gardens can be either an indoor or an outdoor space, small or big, and some of the best current examples of healing gardens are located in some healthcare facilities. The main rule for it to be defined as a healing garden is that it should have therapeutic or beneficial effects on it’s inhabitants. (Ulrich, 1999)

Stress is a critical component of the relationship between us and our surroundings. Stress also becomes important for us to control in our lives because it directly effects several other types of health outcomes such as; the feeling of helplessness, depression, social withdrawal and higher blood pressure. (Cohen, 1991) Under stimulation can also cause increased stress. Patients in nursing homes can suffer from depression due to boredom, because their environments are so under stimulated they become stressful, not unlike the opposite which is over stimulating and stressful. Studies have shown that in when healthcare facilities focus on stress relief or restoration using healing gardens it was widely considered the most important benefit of the patient’s stay. (Cooper, Marcus, Barnes, 1995)

Public Spaces

Entry and Reception:	1000 S.F.
Indoor Gathering Spaces:	4500 S.F.
Resource Room/Library:	1200 S.F.
Dining (Indoor):	3200 S.F.
Outdoor Dining:	600 S.F.
“Movement Spaces”:	Undefineable
Conference Room:	600 S.F. @ 2
Fire Circle & BBQ:	500 S.F.
Outdoor Meditation:	500 S.F. @ 2
<u>Healing Gardens:</u>	<u>Undefineable</u>
	13,200 S.F.

Private Spaces

Living Quarters:	600 S.F. @ 24
<u>Counseling Offices:</u>	<u>400 S.F. @ 4</u>
	16,000 S.F.

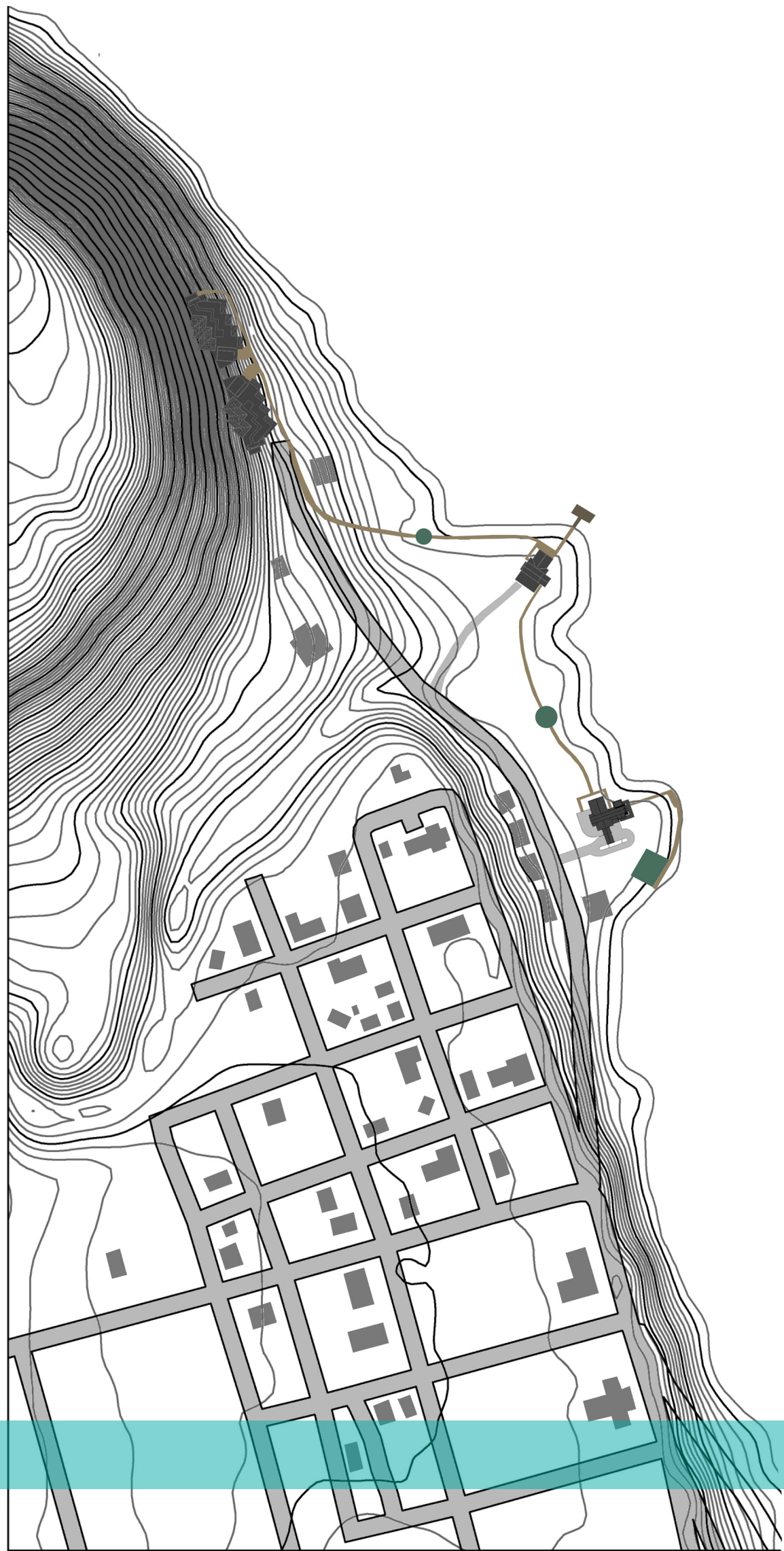
Employee Spaces

Breakroom:	800 S.F.
Commercial Kitchen:	1300 S.F.
Laundry:	1200 S.F.
<u>Maintenance:</u>	<u>1600 S.F.</u>
	6,700 S.F.

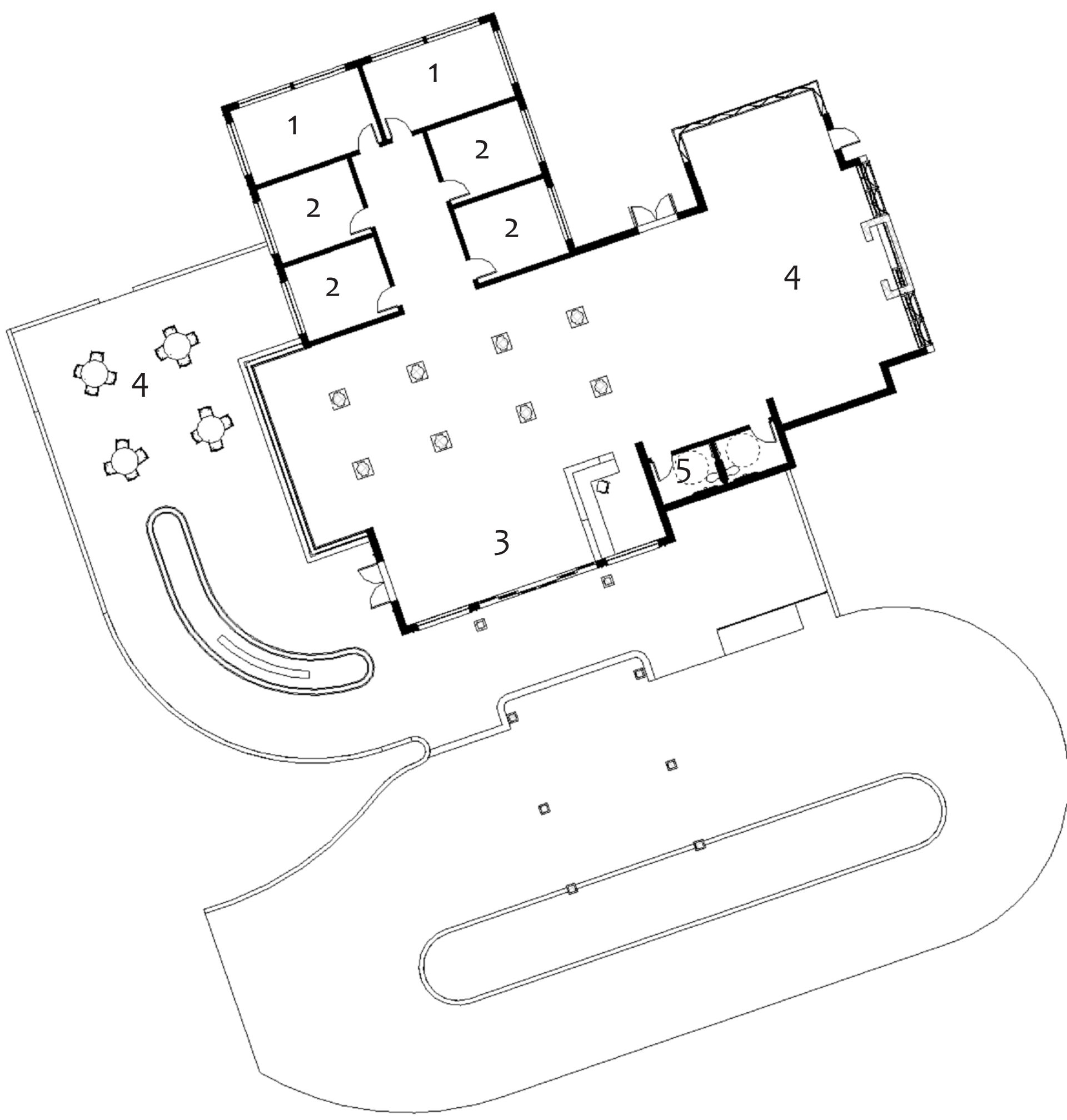
Other

Circulation:	2800 S.F.
Restrooms:	200 S.F. @ 4
Mechanical:	1800 S.F.
<u>Storage:</u>	<u>1900 S.F.</u>
	7,300 S.F.

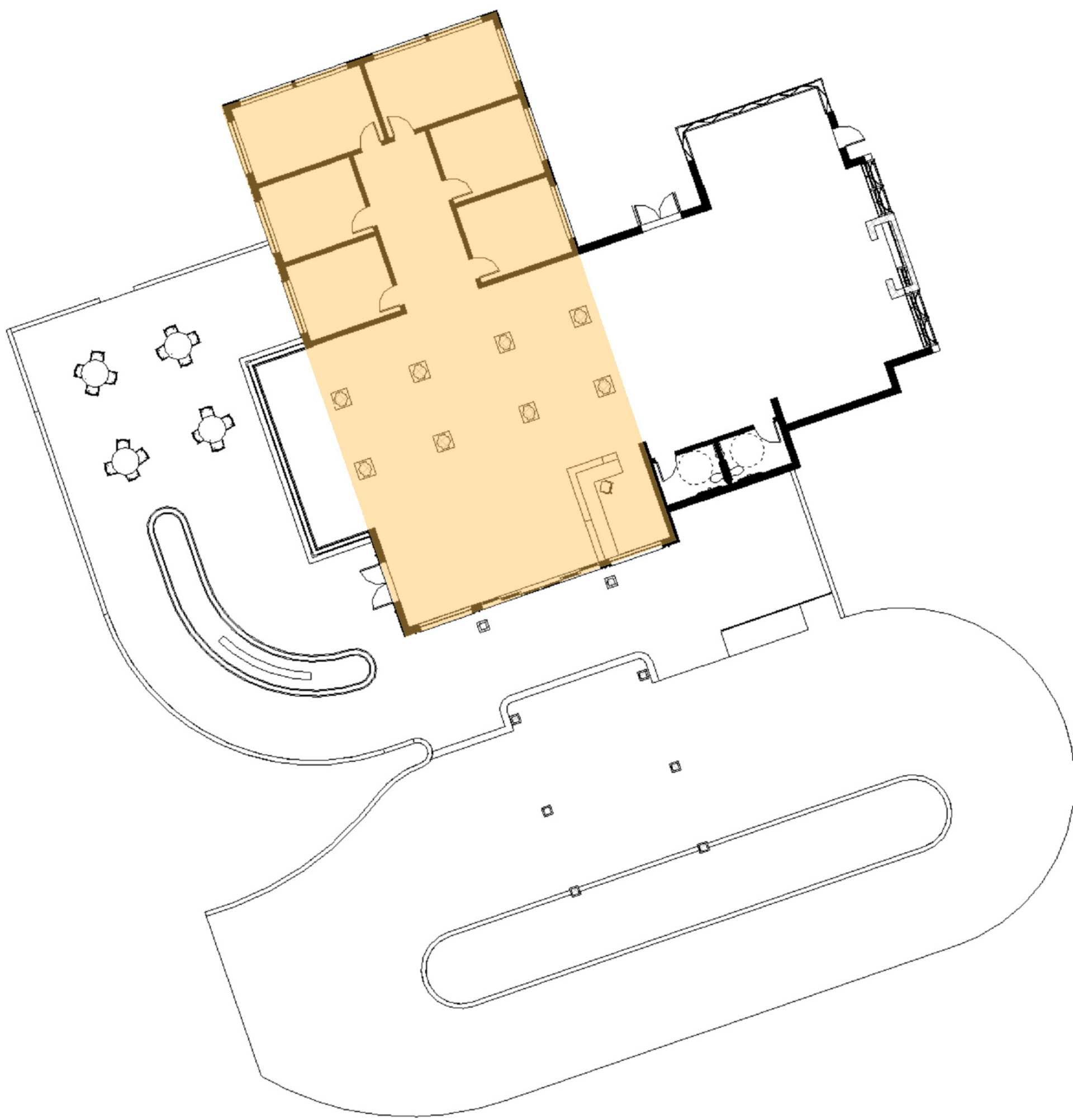
Grand Total: 43,200 S.F.



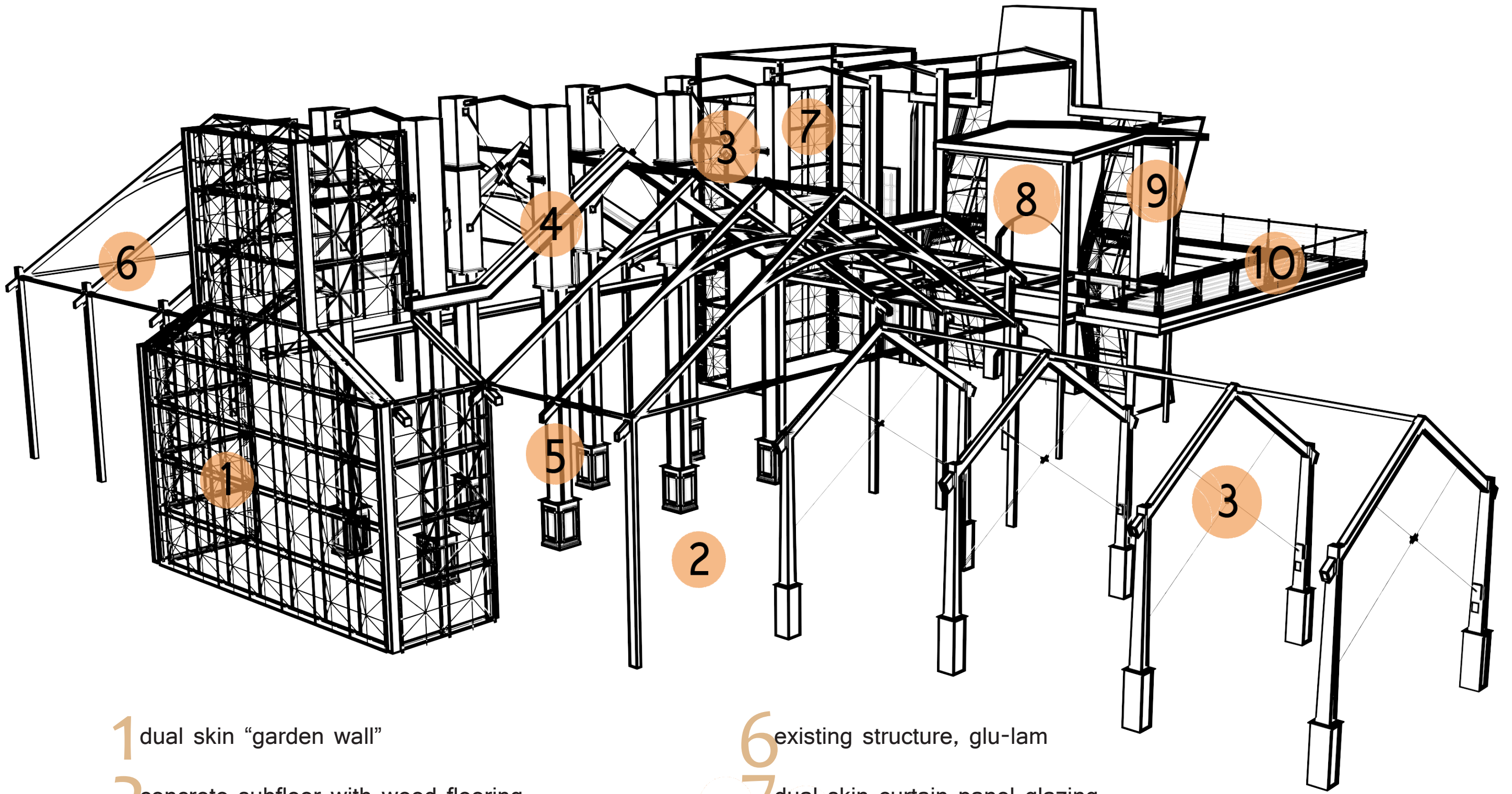
site plan



- 1 Group Rooms
- 2 Offices
- 3 Reception/Entry
- 4 Group Gathering Spaces
- 5 Restrooms



existing structure



1 dual skin "garden wall"

2 concrete subfloor with wood flooring

3 diagonal tensial cross bracing

4 large timber framing

5 locally quarried limestone, polished

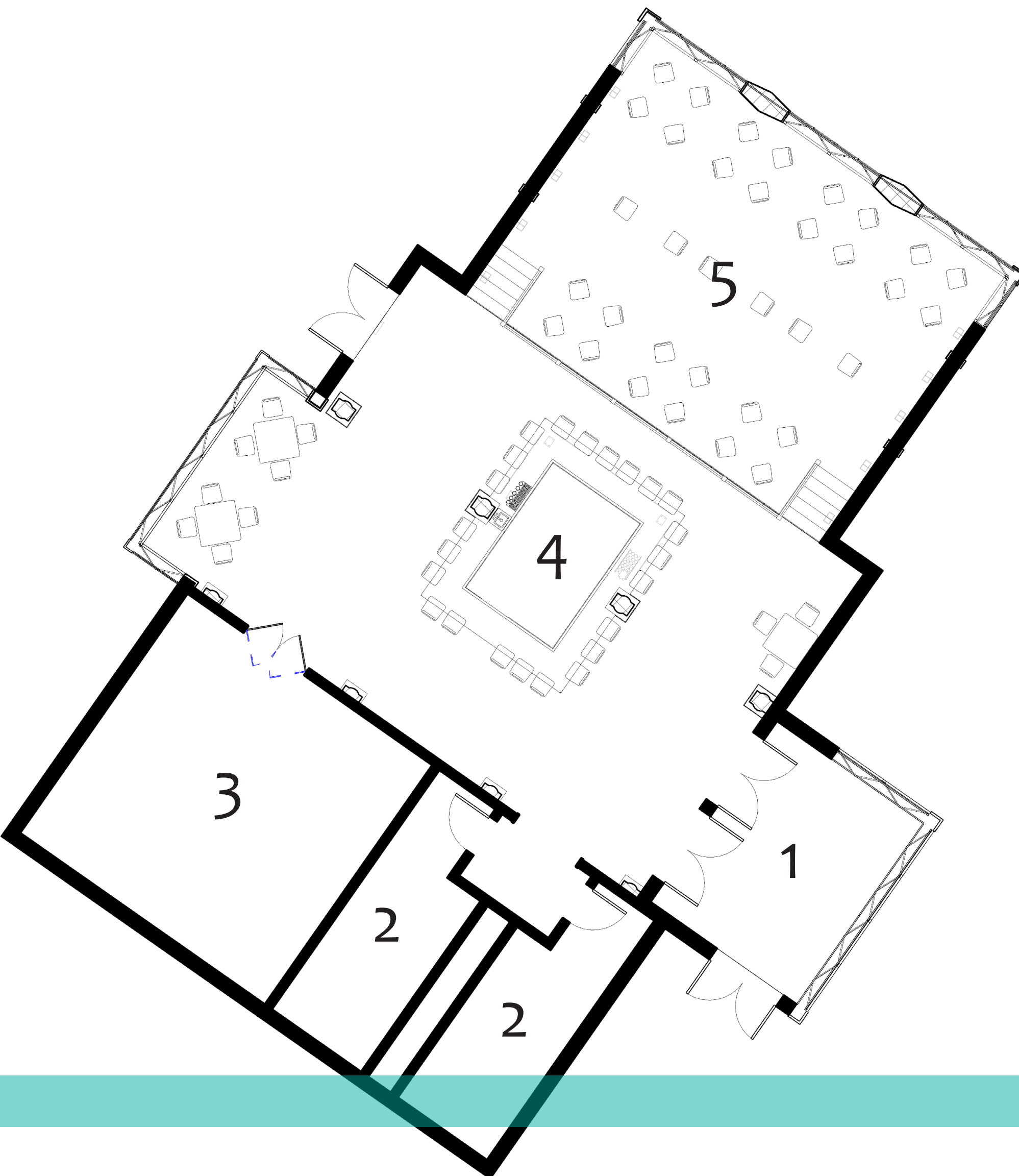
6 existing structure, glu-lam

7 dual skin curtain panel glazing

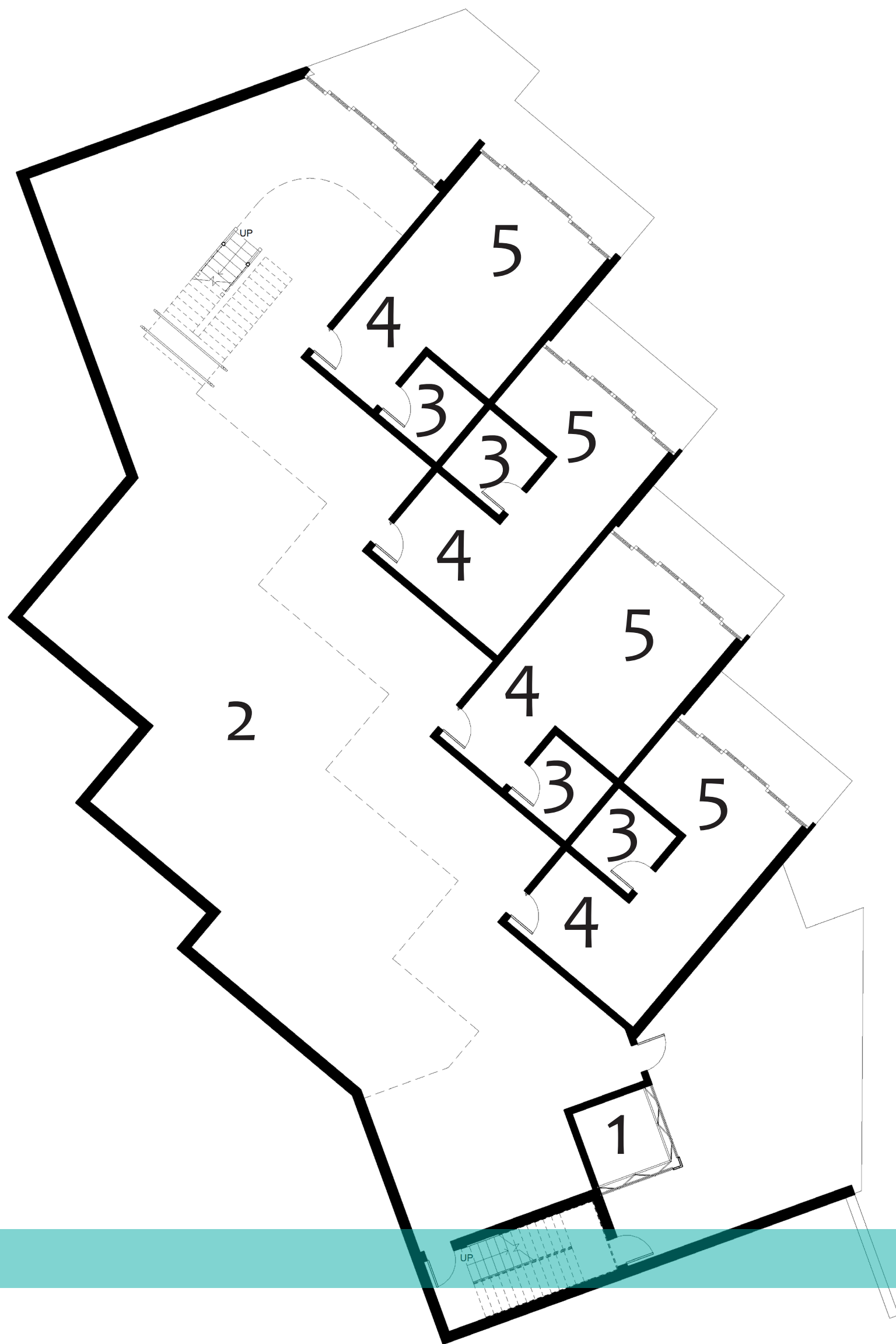
8 recycled limestone fireplace

9 structure limestone bearing walls

10 cantilevered balcony



- 1 Vestibule
- 2 Restrooms
- 3 Kitchen
- 4 Bar
- 5 Dining



- 1 Elevator
- 2 Gathering Space
- 3 Bathroom
- 4 Kitchenette
- 5 Sleeping



welcoming center



old frontenac RETREAT

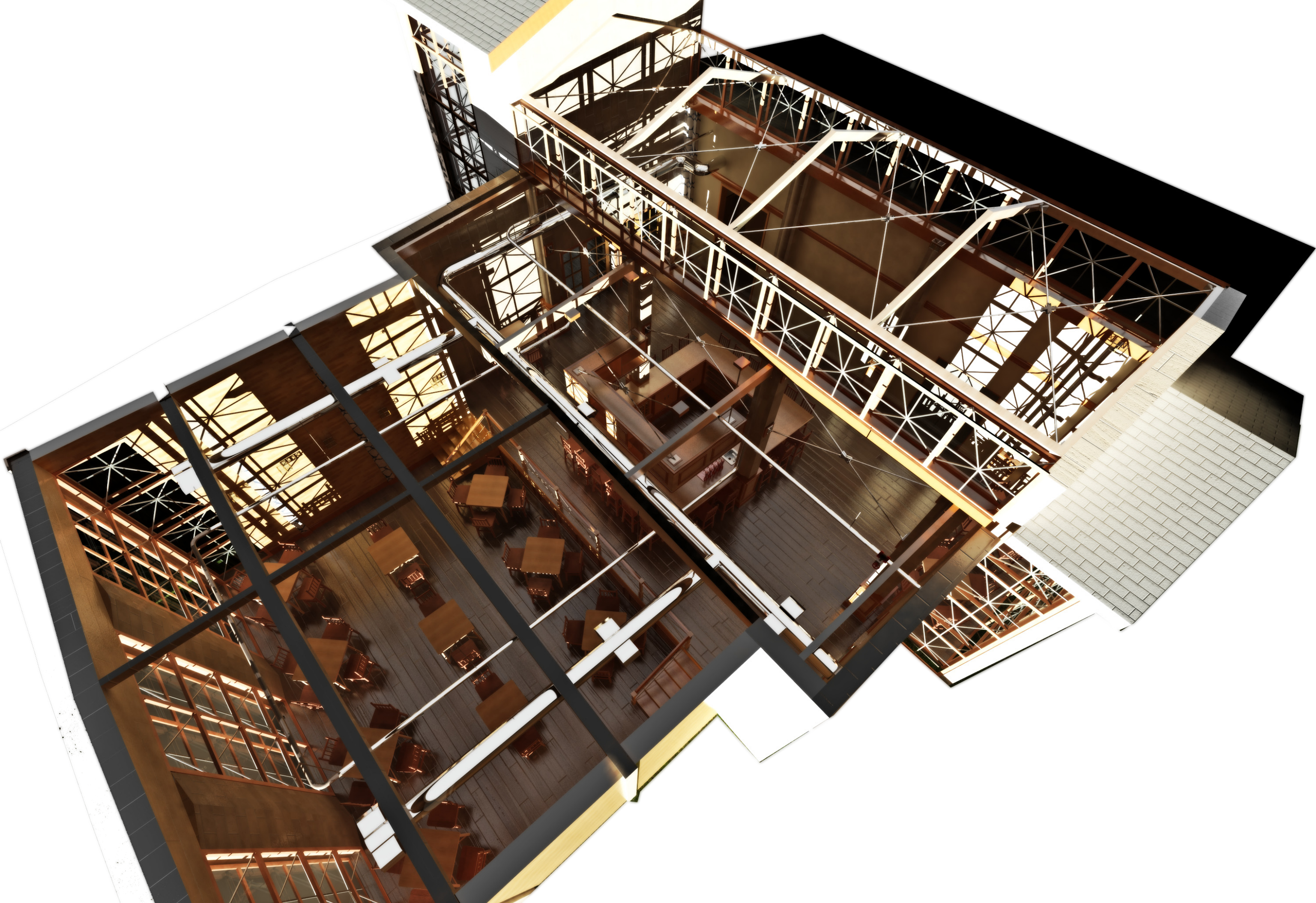
welcoming center



dining



dining



dining

living quarters



living quarters



healing garden

