



RAIC Syllabus Design Documentation Coversheet

Submission deadlines ~ to be received by: Term 1 – June 15 Term 2 – December 15

Fill-in the following information:

Submission Date: 12/14/2021 Student Name & ID# Nicholas Cross ON110019
Term 1 (year) Studio/Chapter Location: Ottawa
OR Term 2 2021 (year) Course: RAIC 690B
Final Mark (if known): Coordinator: Stephen Pope & Ian Wilson
Mentor(s): Stephen Pope and Paul Kulig

IN YOUR OWN WORDS, type a concise description in your own words of the intent, concept, process and resolution to assignment(s) given during the studio course. **LIMIT your typed text report to this coversheet only**

Intent: My thesis identified a problem of social isolation within housing. The intent was to address this problem and propose a response. My thesis statement is: Establishing Roots: how housing can impact isolation and cultivate community to realize a social resilience.

Concept: The research identified community as a response to isolation. The concept was to design places that could support interaction and allow people's natural social tendencies to build community. In the parti, the concept is illustrated with the housing community raised on a semi-public ground plane with areas in between the built form allowing for interaction and place to be integrated. The raised ground plane defines the housing community through a threshold-like experience allowing space below for the broader community to connect in the form of Third Places.

Process: Once the research was complete and the site chosen, the process began by sketching the programming on the site to determine a efficient layout that also met the design intent. Through this process I was challenged to determine whether the design options were feasible. I completed a high level proforma and compared it to the existing building on the site. I found it was a economically feasible. 3D modelling and rendering software helped demonstrate the design intent.

Resolution: The resolution establishes that housing can encourage interaction which in turn can cultivate community and result in an outcome of social resilience. Community can be cultivated through strategies of fostering circulation, where chance encounters can occur, providing places for activities as transitional areas off of circulation paths within a physical and social scale that allows for connection between people. When place is integrated in the form of light, air, nature, materiality and shared culture, it can improve the spatial quality and increase the likelihood of attracting people to public areas. All of which breaks down inadvertent barriers to social connection helping people establish roots in their community.

- **Digital submissions only:** Design Documentation should be uploaded through your online student portal. For instructions please contact the RAIC Syllabus Registrar at infor@raic-syllabus.ca.

The file should read as: DESDOC_Studio_LAST name, FIRST name_Student ID_Submission Date
Sample: DESDOC_D4_SMITH, Jane_NY110011NYC_2011Dec21

Establishing Roots

How housing can impact isolation
and cultivate community to realize
a social resilience



The Beginning



Cellphone Video of Tornado at Gatineau Multi-Unit Residential Building a few km's away from where I resided in September 2018. CBC News (2018).

What if housing encouraged interaction that could facilitate building community?

The Problem

Social Isolation



Unmarked Graves. (AP Archive, 2003)

Isolation Architecture



Comparison of Hong Kong Residential
Towers and Levittown, New York
(Ogle, Alex, AFP/Getty, 2014 &
Britannica, Hulton Archive/Getty,
c.1955)

Graffiti On a New York subway train in 1982
(Brown, Paul/REX/Shutterstock, 1982)



A young couple look through the window of a graffiti-covered subway car in 1980 (Shabazz, Jamel/Getty Images, c.1980)



The built environment influences behaviour



Graffiti on the inside of a subway train (Alper, Barbara/Getty Images, circa 1980)



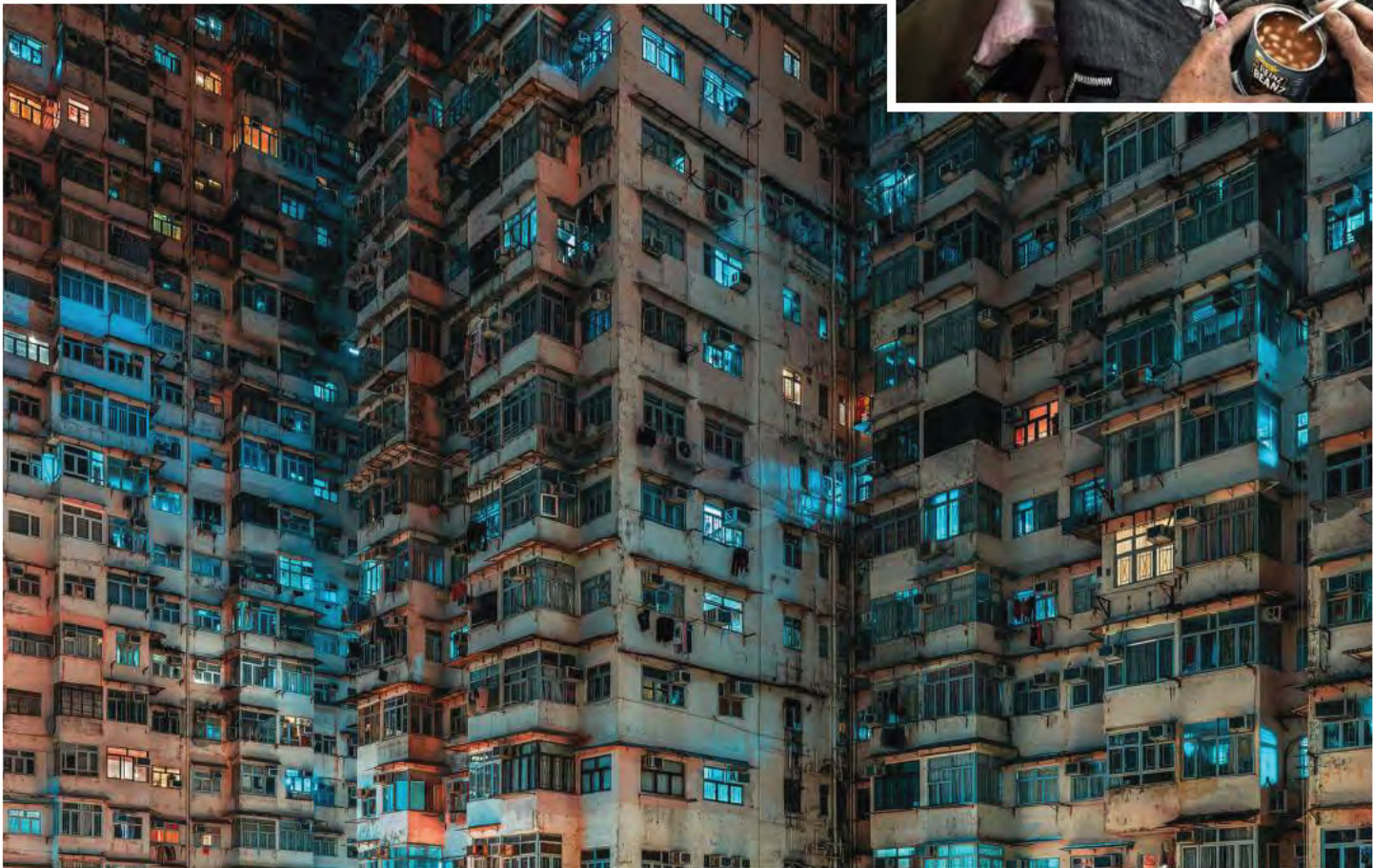
Typical Levittown Street, New York (Bettmann/Corbis, c.1950's)

**Levittown,
Archetypal Suburb**

**Inadvertent
barriers
to social
connection**



Coffin Cubicle (Lam, 2017)



Montane Mansion. Quarry Bay, Hong Kong Island (Stewart, n.d.)

**Hong Kong,
'the Concrete
Forest'**

The Response

Isolation Alternative



Harlem block party (Herman, Elizabeth D., 2019)



“Before the previous block party people didn’t communicate. People were judgmental of each other. After the first one we became one big family”

- Paul Padarat, a resident of 102nd Avenue, Queens



Defined Place



Undefined Space

o



Confined Space

Community Cultivation



Jan Gehl, b.1936 (AIA International, n.d.)

"More than architecture is needed for (...) interactions to develop. Design that is conducive to such interaction will, however, **encourage it**"

- Jan Gehl, 2011

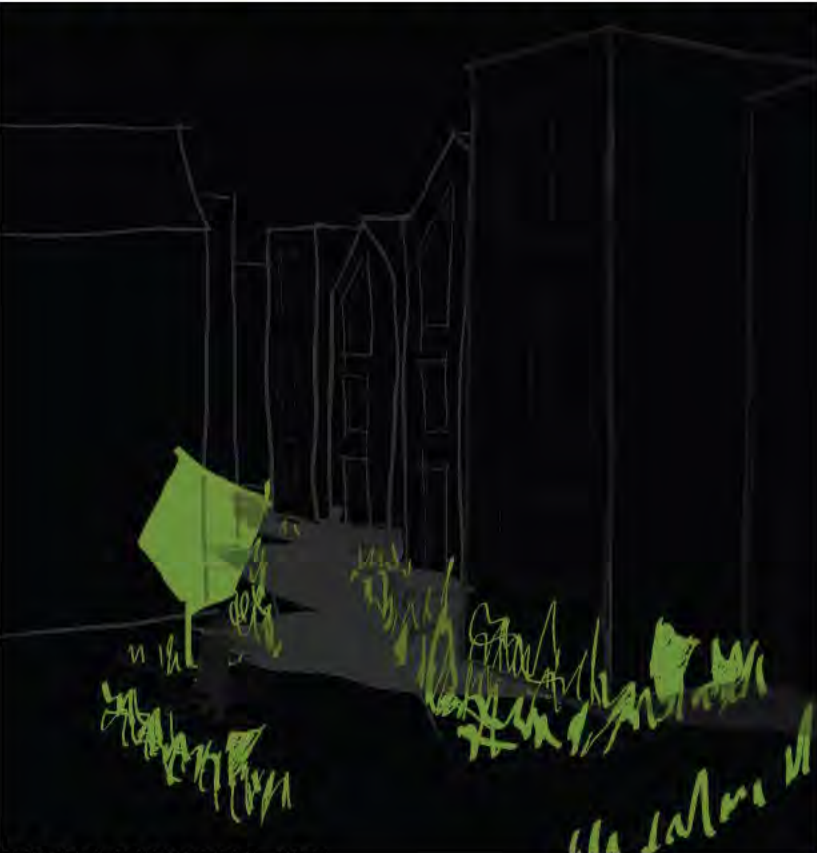
Community cultivation strategies with integrated place could lead to a Social Resilience



St. Cloud (Arbre) (Atget, Eugène, 1915-19)

Community Cultivation Strategies

Foster Circulation



Opportunity for chance encounters

Transitional places that support activities



Place for Everyday Activities

Urban Farming Gardening



Sitting, Reading, Eating



Building, Maintaining

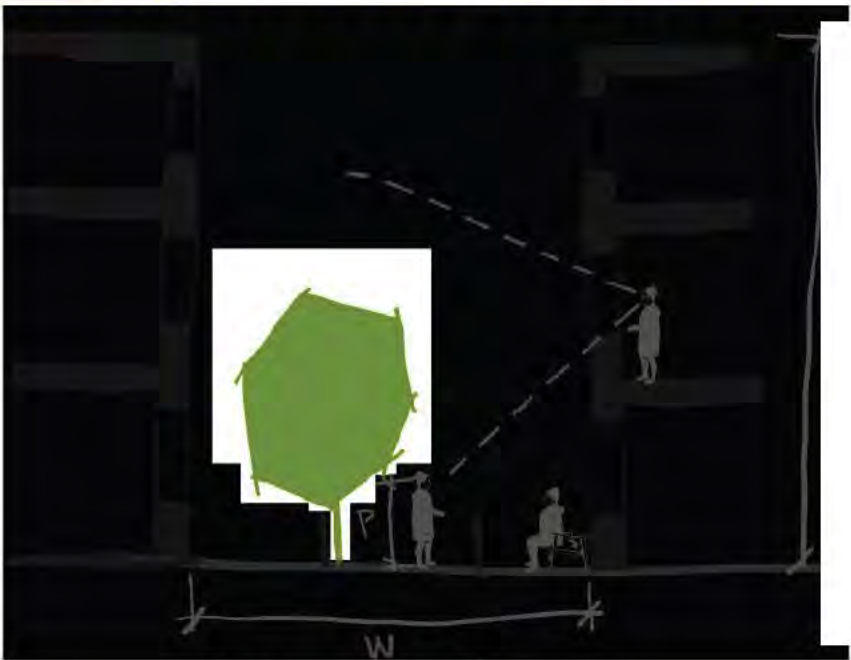


Children Playing



Activities increase likelihood of interaction

Scaled for Humans



Physical Scale



Social Scale

for

Community Cultivation

Scale improves contact and connection with windows being closer to the ground plane

Opportunity for chance encounters reinforced by adjacent places for activities

Activity places can support storage for things like children's toys

Low fence supports contact and possible interaction

3 - 4 Storey physical scale maintains human connection at openings

Activities increase likelihood of interaction

Transitional places off of circulation that support activities

Circulation provides opportunities for chance encounters

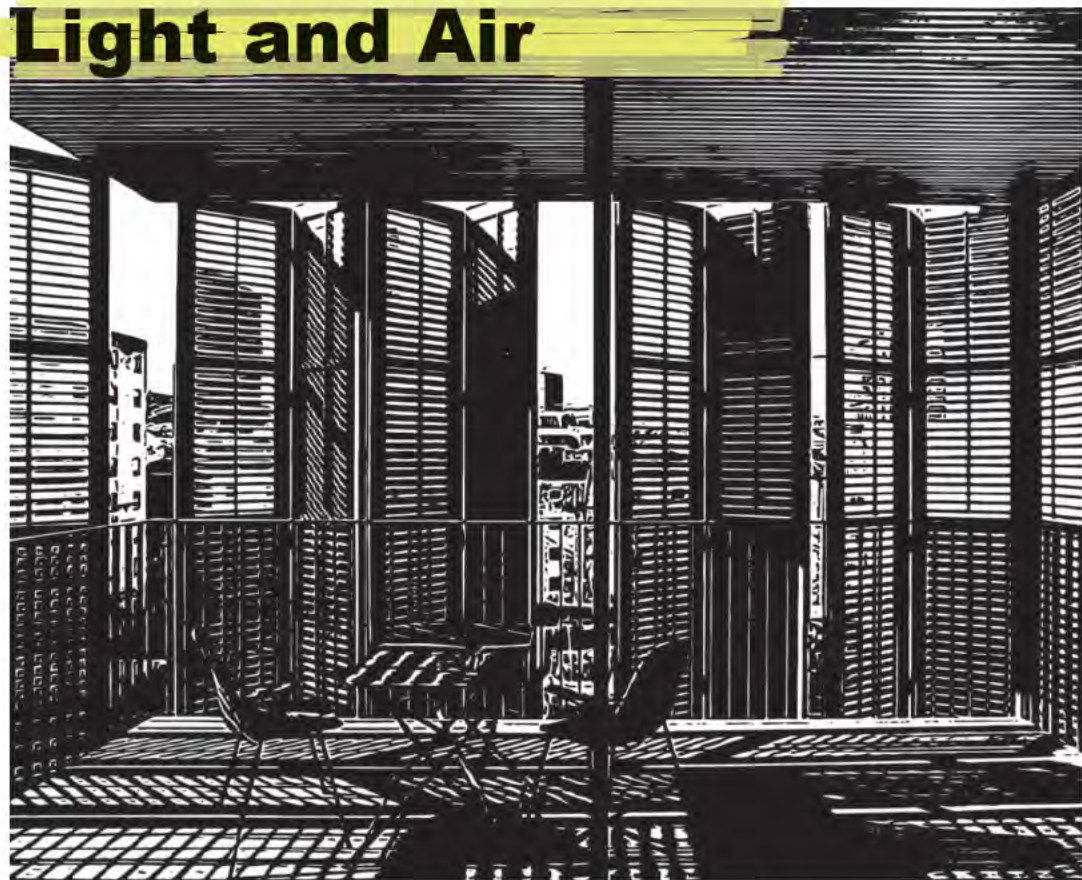
Children playing in circulation areas

Cute Dog

Places that encourage interaction

Place Integration

Light and Air



Esstential to day to day life



je

Materiality



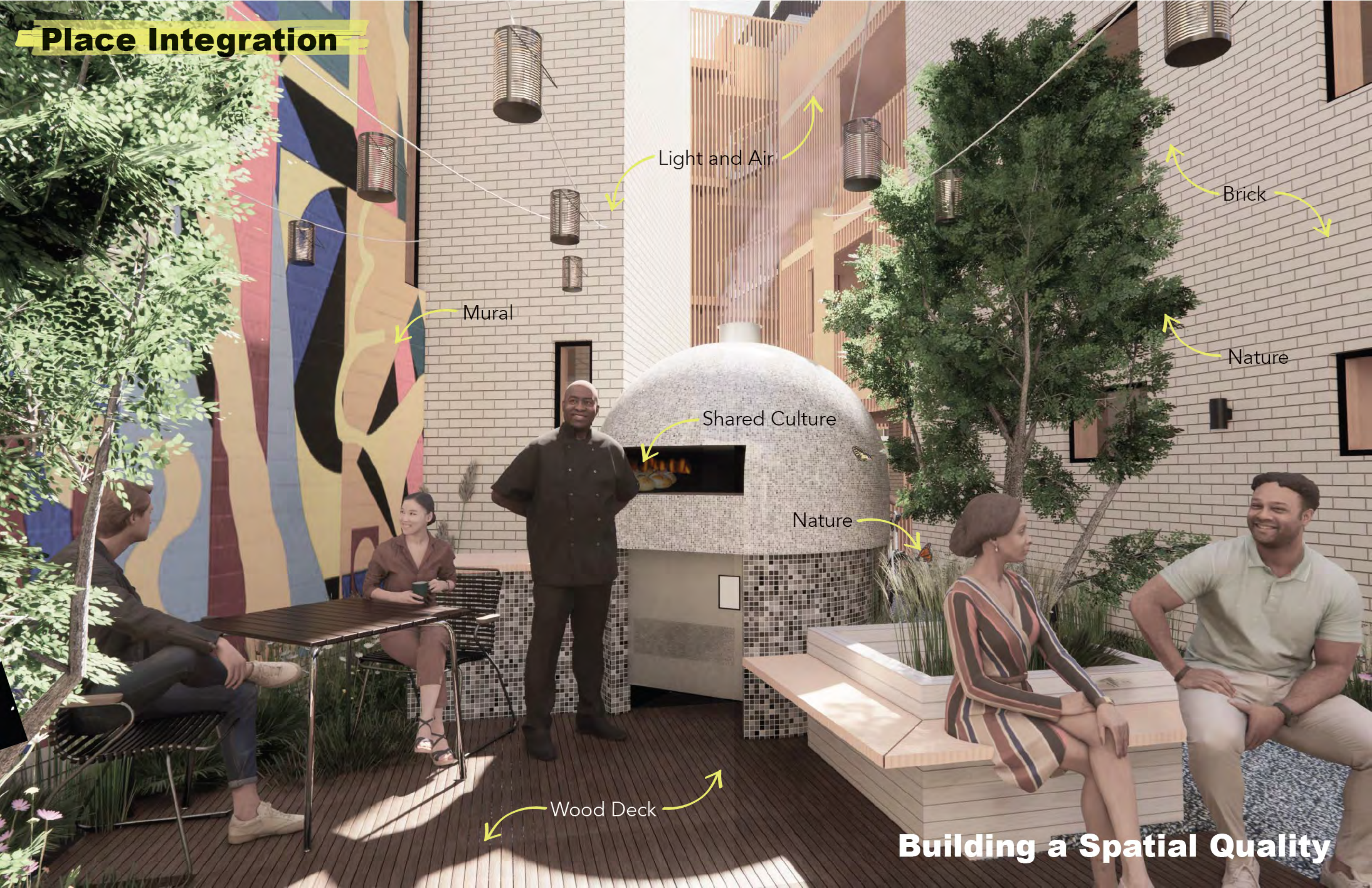
Texture, Craft, Scent

Shared Culture



collective
experience

Place Integration



Light and Air

Mural

Shared Culture

Brick

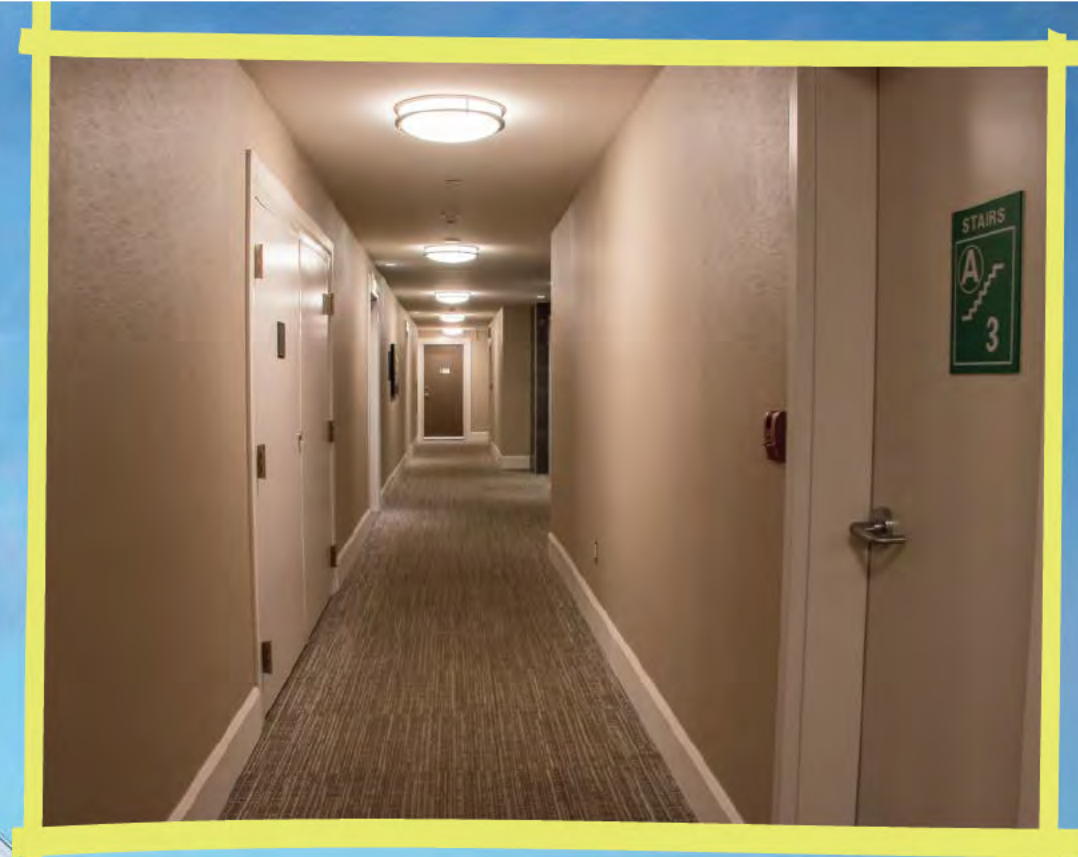
Nature

Nature

Wood Deck

Building a Spatial Quality

(Reinterpreted) Project Site



Typical Corridor

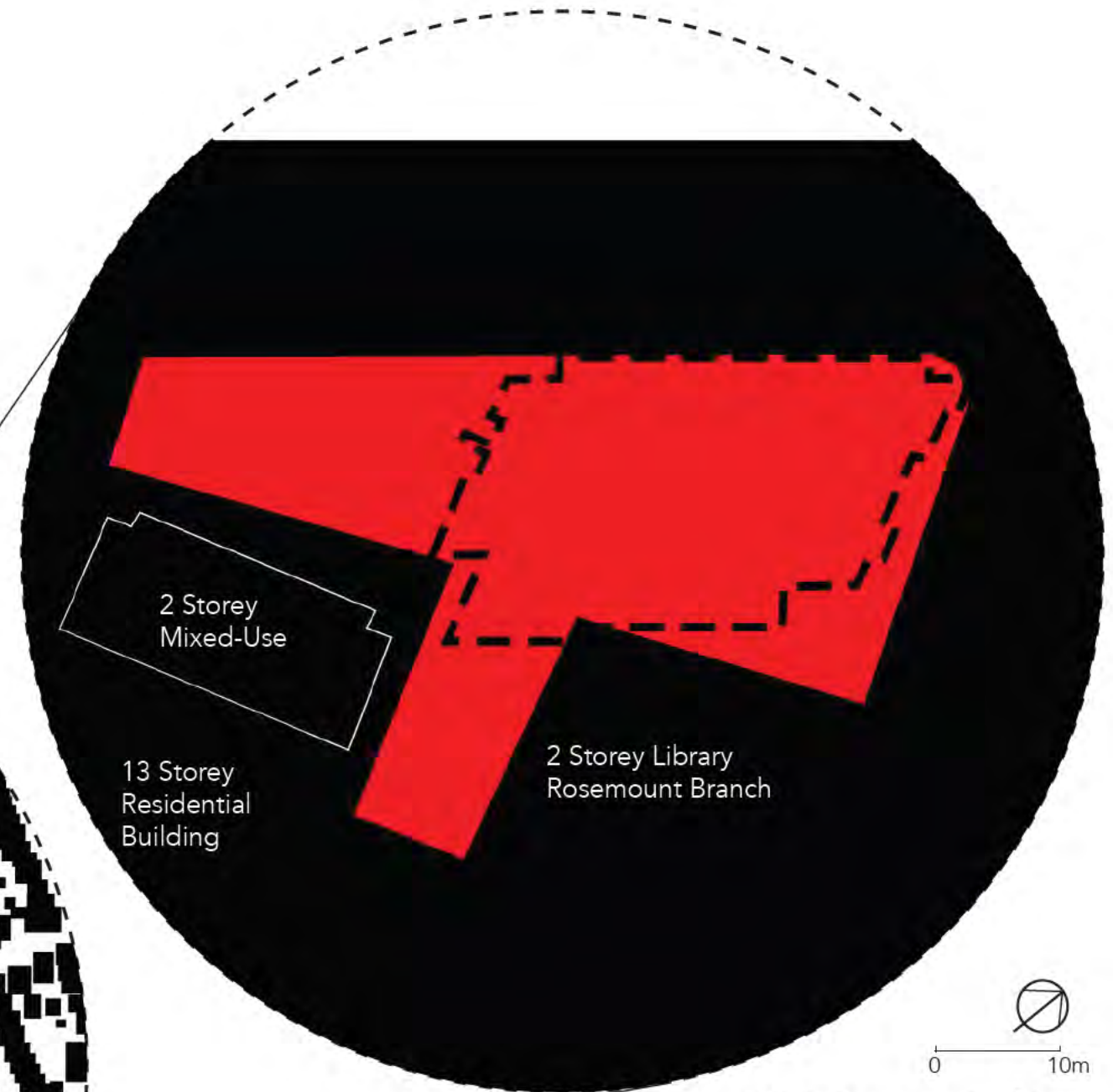
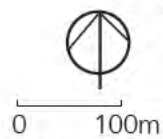


The Wellington (2015) by Barry Hobin

The Wellington (Hobin Architecture, 2020)

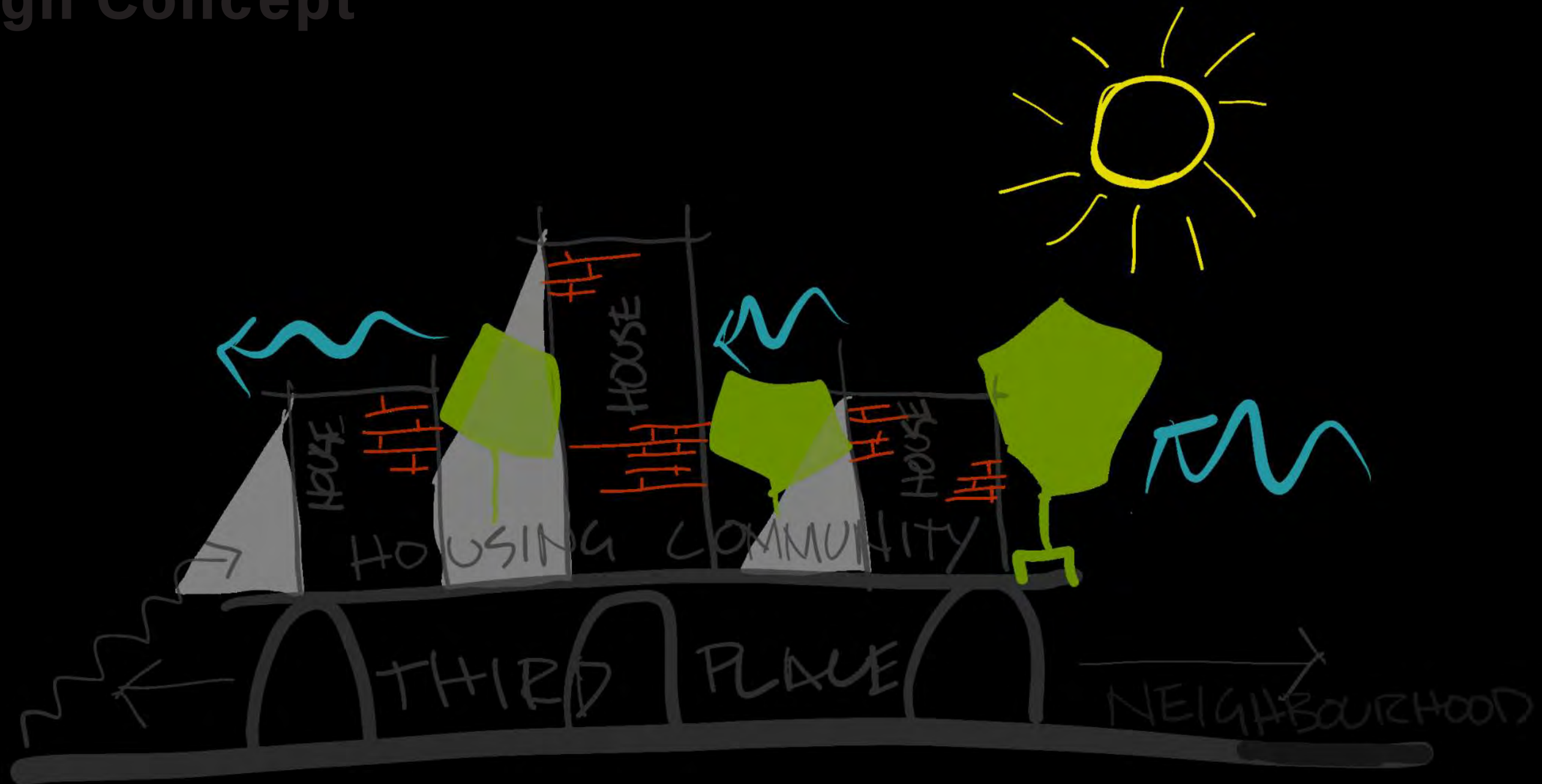
Site Location

Hintonburg
Neighbourhood



(Reinterpreted)
Project Site

Design Concept



Section Parti

The Numbers

Is this type of housing **feasible?**

Also provides a higher diversity of unit types, more commercial & all within a richer public spatial quality

	Cost	Revenue	Profit
Existing	-\$33.6m	\$46.0m	\$12.4m

Conventional poured concrete construction
Below grade parking garage

Higher unit count

	Existing	Proposal
Units	52	42
Beds	76	108
Beds:1/2/3+	25/27/0	4/24/14

	Cost	Revenue	Profit
Proposal	-\$21.0m	\$32.2m	\$11.1m

Less gross area, repeated circulation eliminated, pile foundation
2.2% savings expected with panelized CLT

**This can be done
and has been done**

Case Studies

Elaa (2018) by Kanva

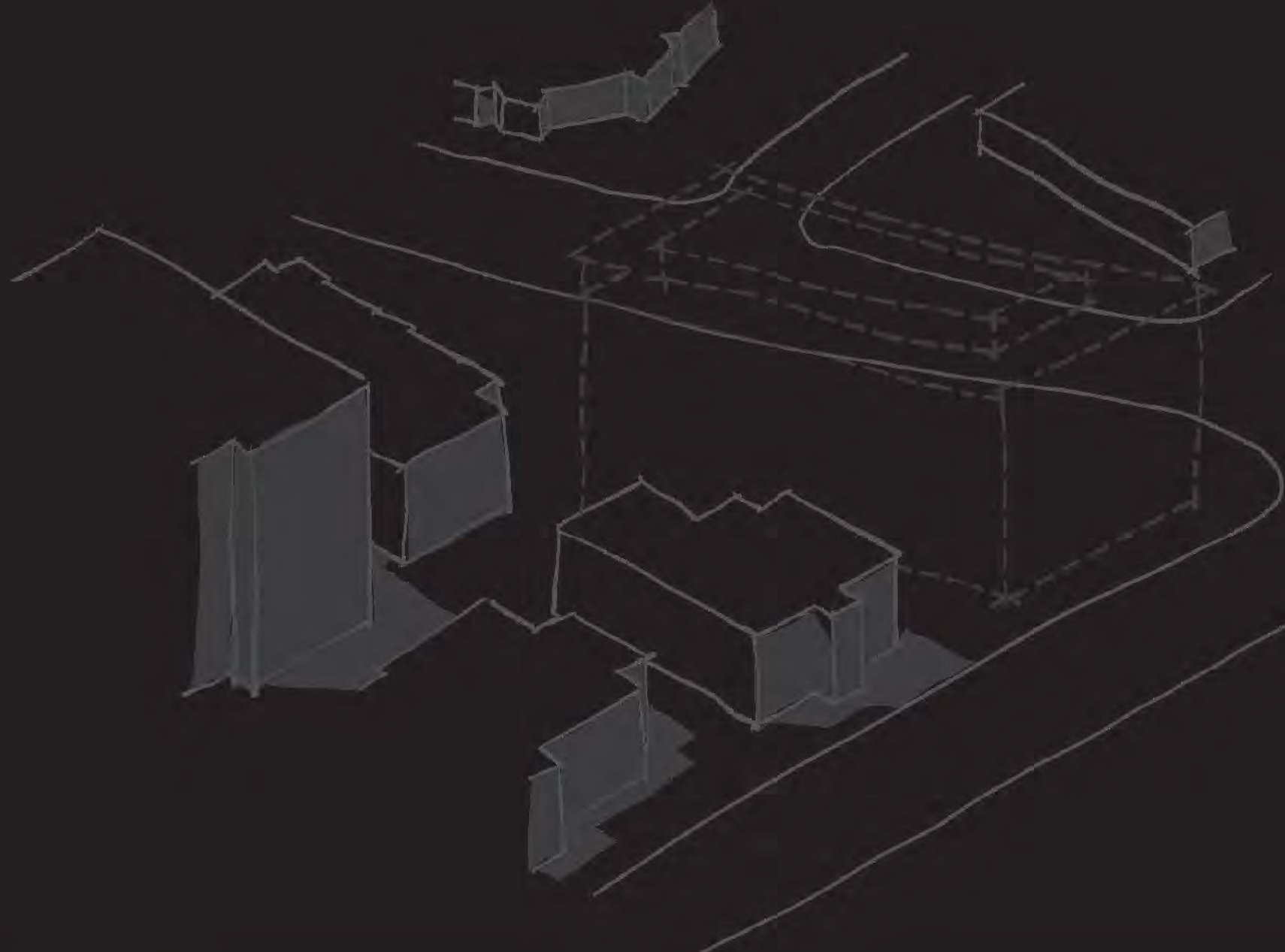


Case Studies

youCube (2015) by 5468796



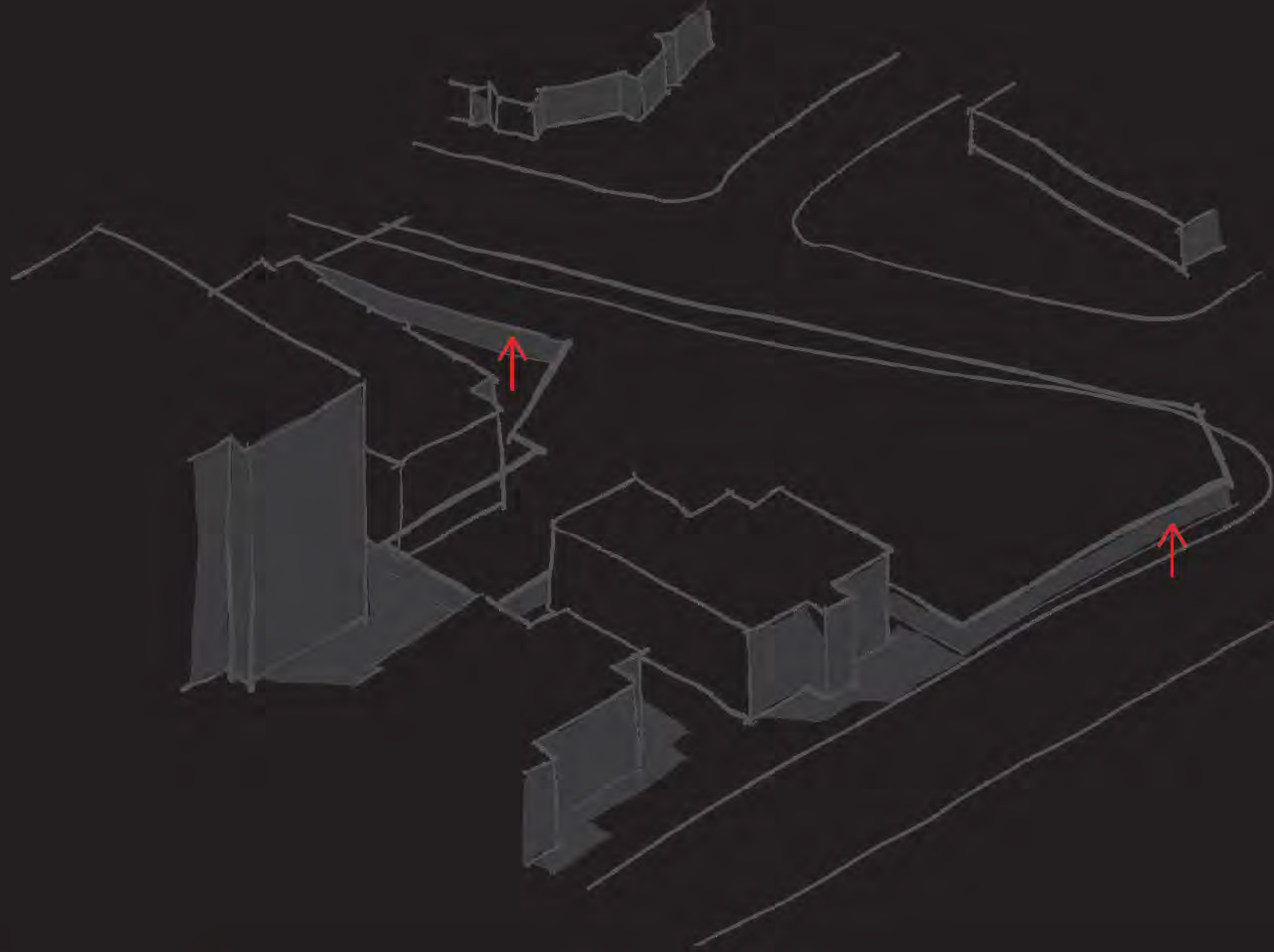
Design Rationale



Site

Located at the corner of Rosemount Ave and Wellington St W, the project is a reinterpretation of the site with a community cultivated, socially resilient housing

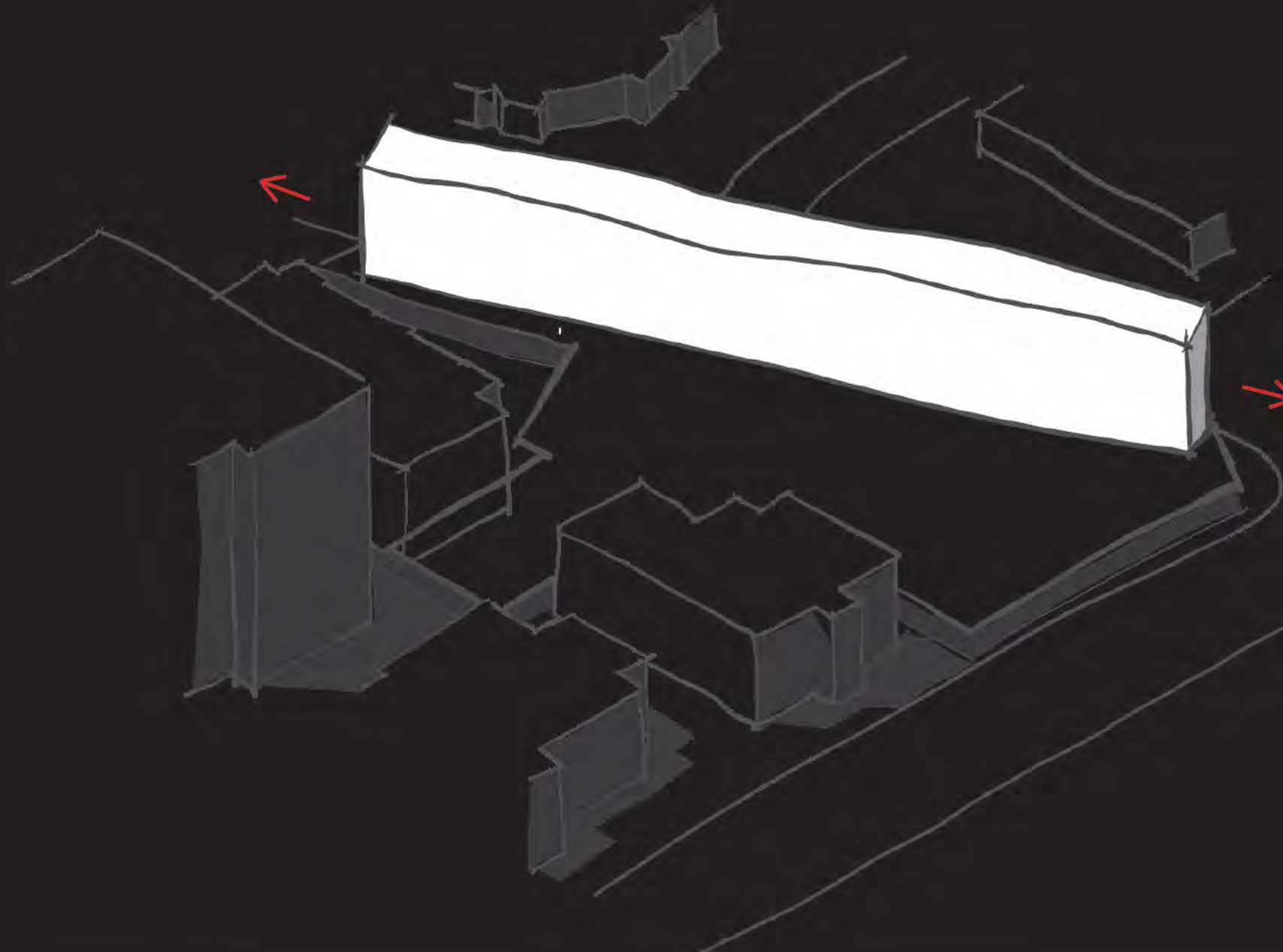
Design Rationale



Move 1

Lift ground plane to provide continuity of Public Realm for Third Places and by doing so, create a semi-private residential level a platform for circulation and everyday activities.

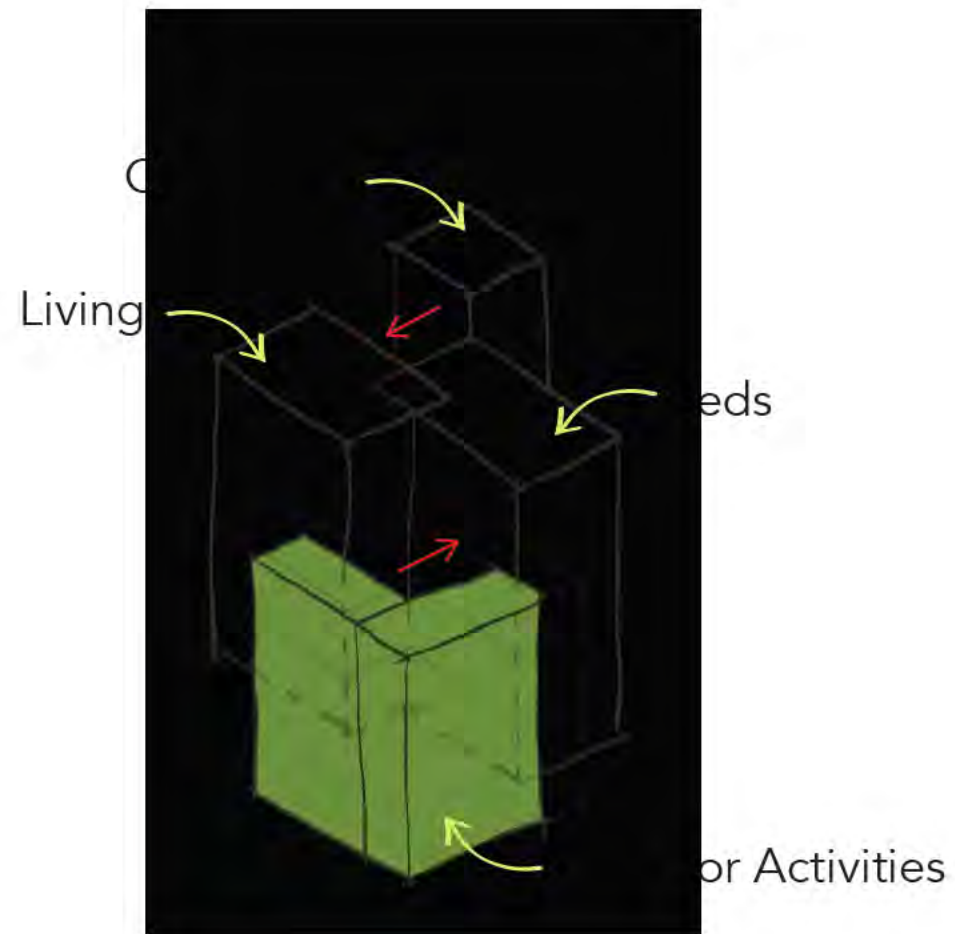
Design Rationale



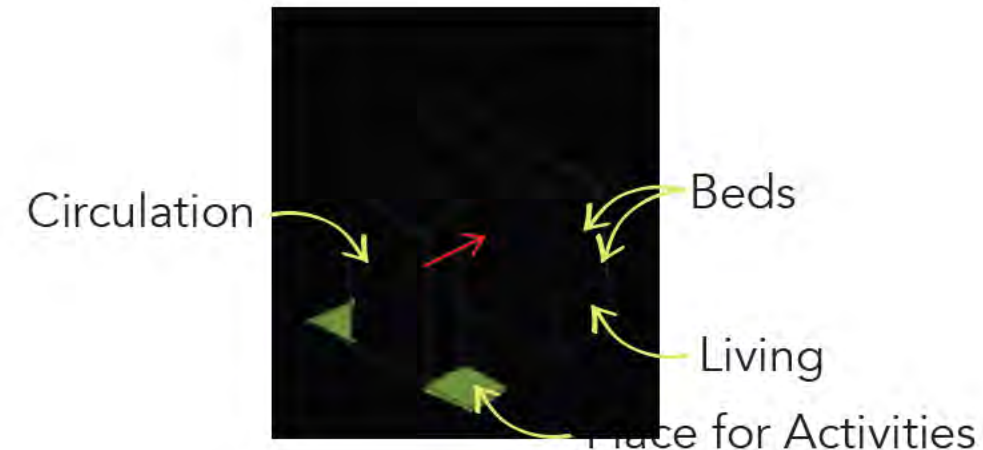
Move 2

Place building mass at the street to establish a boundary for the residential level as well as maintaining a physical human scale

Design Rationale



Multi-Storey 2 Bed Single Level Flat Units

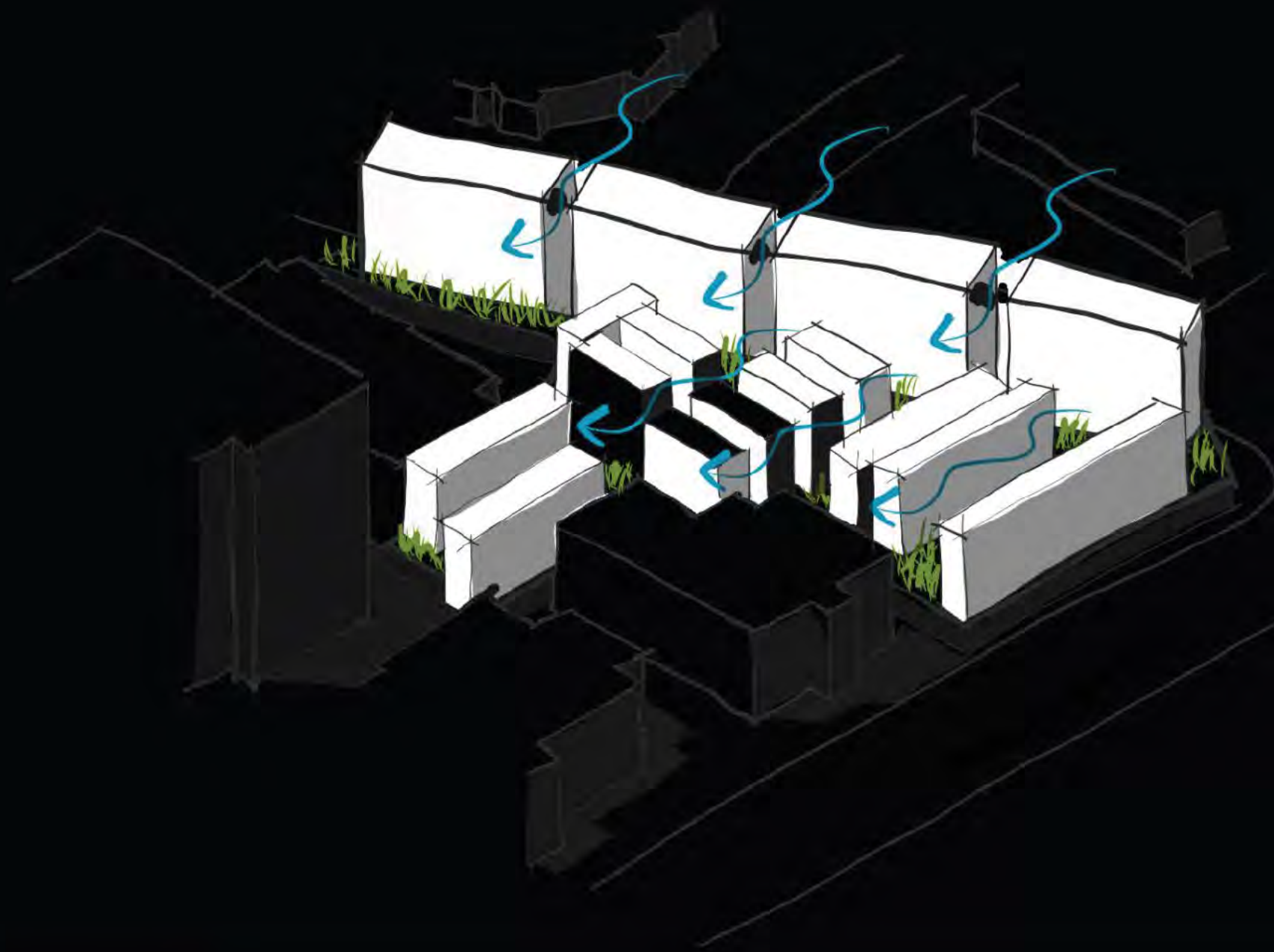


Multi-Storey 4 Bed Single Stack Unit

Move 2.5

Create two main unit types for a wider variety of people: 2 bedroom and 4 bedroom units. Organize 2 bedroom's on multiple one level 'Flats' and 4 bedroom's on multi-level 'Stacks', limited to a human social scale.

Design Rationale



Move 3

Create openings for circulation and everyday activities to cultivate community as well as address spatial quality by integrating place with light, air, and nature. Allows for individualization, reducing monotony



1 Storey
Ottawa West
Community
Support

McCormick
Park

2 Storey
Mixed-use
Bethany
Hope
Centre

Typical 2 Bed Flat

13 Storey
Residential
Building

Wellington Street West

Main Entry

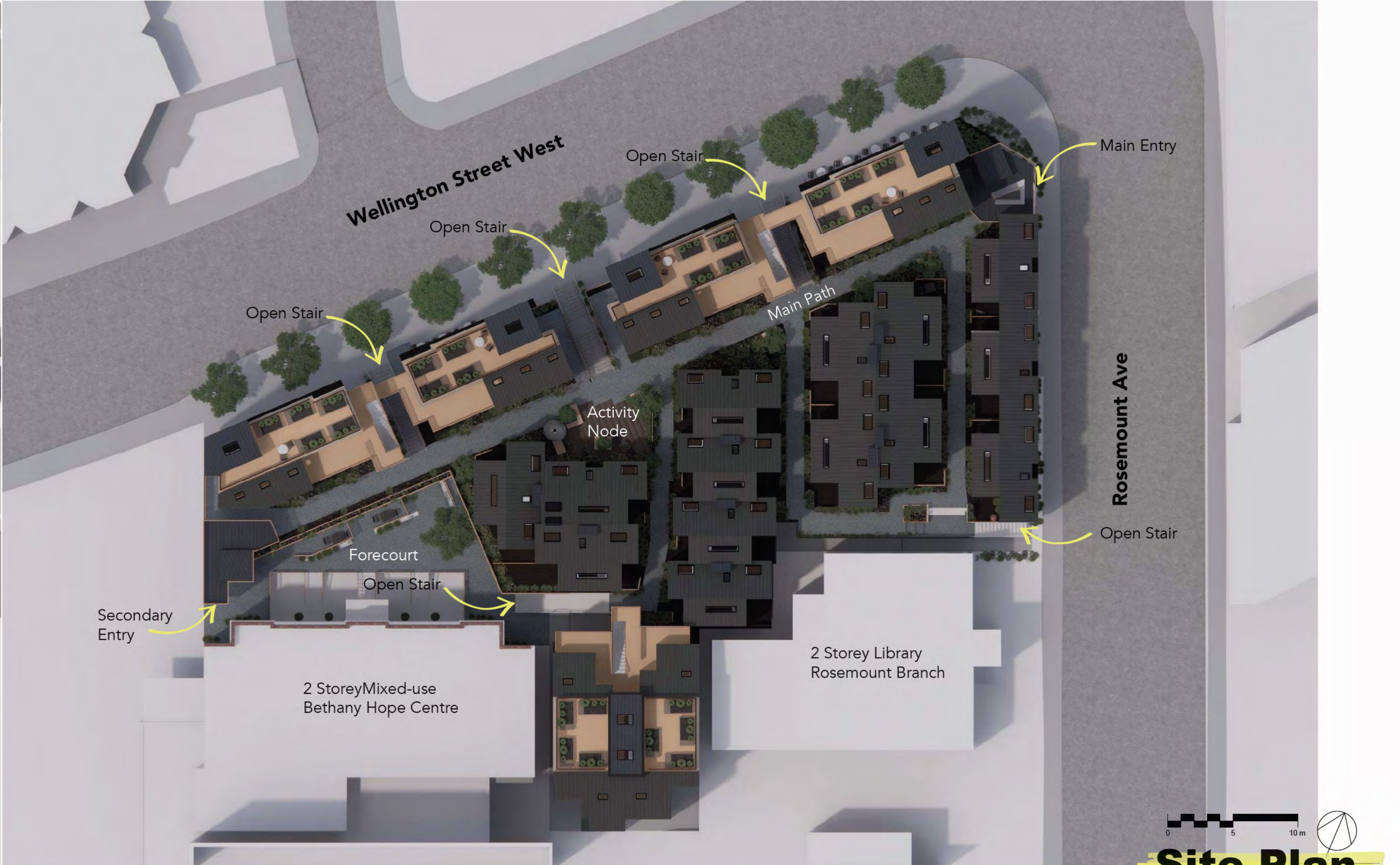
Typical 4 Bed
Stack

2 Bed Flats

Site Context

2 Storey Library
Rosemount Branch

Rosemount Ave





Wellington Street West

Rosemount Ave

Tavern

Book Store

Grocery

Workshop

Comm. Gar./Re.

Home Goods

Coffee

Bakery

Small Goods

2 Storey Mixed-use
Bethany Hope Centre

2 Storey Library
Rosemount Branch

Bicycle Storage

Stor.

Gar./Re.

Boilers/
Water Entry

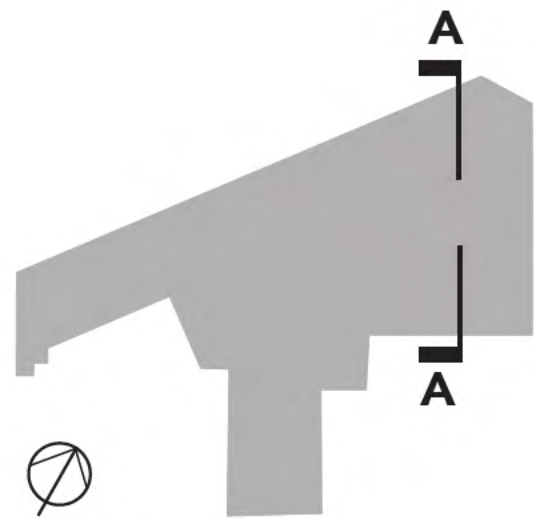
Hydro V.

Parking Garage Ramp to
13 Storey Residential

Level C1



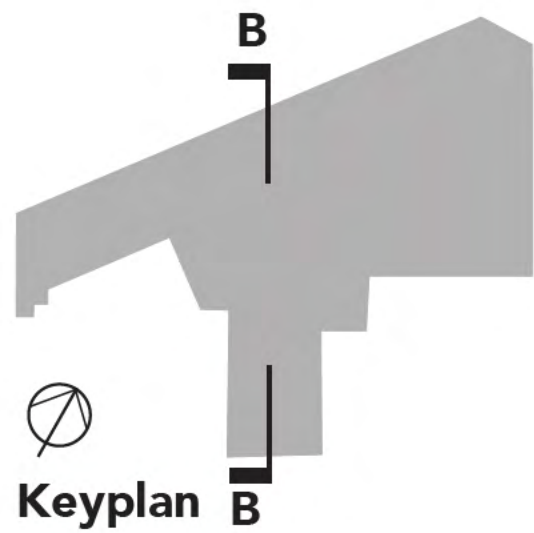




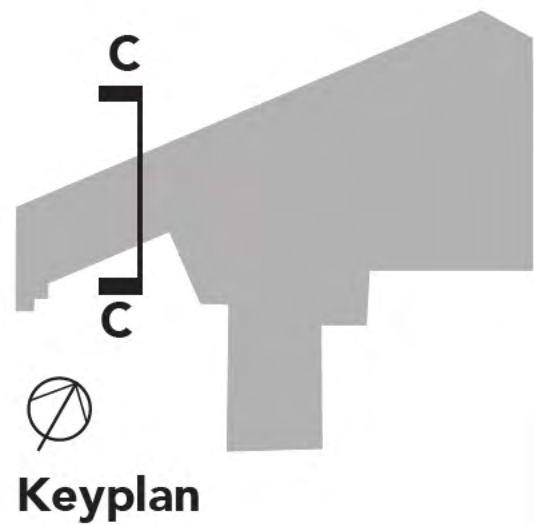
Keyplan



Section A



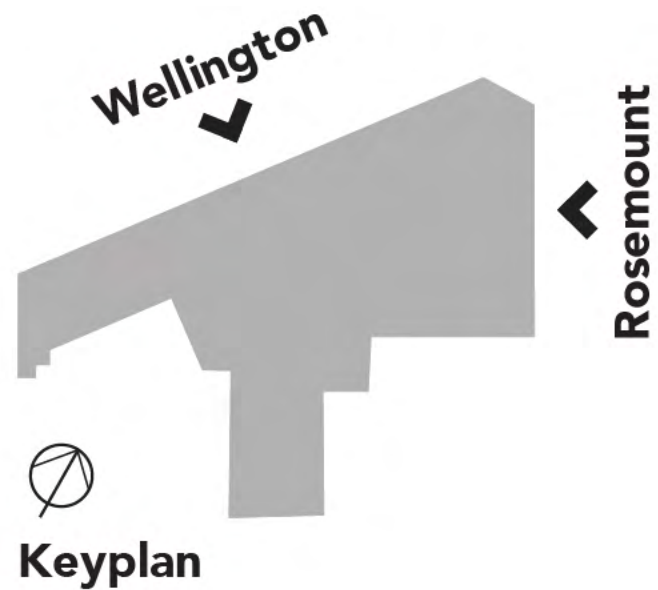
Section B



Section C



Wellington St W Elevation



Rosemount Ave Elevation



Wellington St West/
Rosemount Approach



Main Path View



Path View at Night



Activity Node



Activity Node Winter



2 Bed Flat Interior Ground Unit

4 Bed Stack Interior Ground





Wellington St West Sidewalk



Open Stair to Residential
Level and Entry to Forecourt



Forecourt



Wellington St West Sidewalk
in the Evening

Establishing Roots

How housing can impact isolation and cultivate community to realize a social resilience

The future of housing
can encourage
interaction

