

**Infiltrating the High-Tech Enclave:
Inhabiting South Lake Union Through A Network of Temporary Architecture**

Yang Su

A thesis

submitted in partial fulfillment of the

requirements for the degree of

Master of Architecture

University of Washington

2018

Committee:

Rick Mohler

Susan Jones

Juliette Dubroca

Program Authorized to Offer Degree:

Architecture

© Copyright 2018

Yang Su

University of Washington

Abstract

Infiltrating the High-Tech Enclave:

Inhabiting South Lake Union Through A Network of Temporary Architecture

Yang Su

Co-chairs of the Supervisory Committee:

Rick Mohler

Susan Jones

Department of Architecture

Over the past decade, Seattle has been one of the fastest growing cities in the United States in terms of economy and population. The South Lake Union neighborhood, close to downtown and dominated by newly constructed high-tech office buildings, illustrates the city's rapid development in terms of economic and social aspects. The speed of the urban transformation happening in SLU is a reflection of large changes brought about modernization and globalization, causing

some Seattleites to feel nostalgic for the past and making some people feel uncertain about the future and the role that technology will play in it.

Among all the development in SLU, the rapid growth of the high-tech companies in the city of Seattle has had a major impact, resulting in a fragmented urban condition. This thesis focuses on rethinking and reshaping the existing urban space in a way that responds to the impact of high technology companies such as Amazon and UW Medicine in order to make SLU an experiential and interactive neighborhood. The goal is to activate the urban fabric of the city both for workers and residents of the neighborhood in order to establish a new public realm. The proposed public network is a series of temporary architectural interventions that will transform these underutilized spaces to serve as a place for people to collectively experience the public spaces of the city.

Acknowledgements

To my instructors, Louisa Iarocci, Rick Mohler, Susan Jones, Juliette Dubroca (Washington State University), Chris Meek, special thanks for their kind and patient guidance for helping shape my small ideas into a coherent design.

To my parents, thanks for supporting me to have this wonderful journey in University of Washington in Seattle.

To my friends, Stan, Ting, Amy, Paul, Qichen, I might not be able to make it without your help.

Seattle Commons Proposal



Fig1. Seattle Commons site plan
Image source: Flickr Images

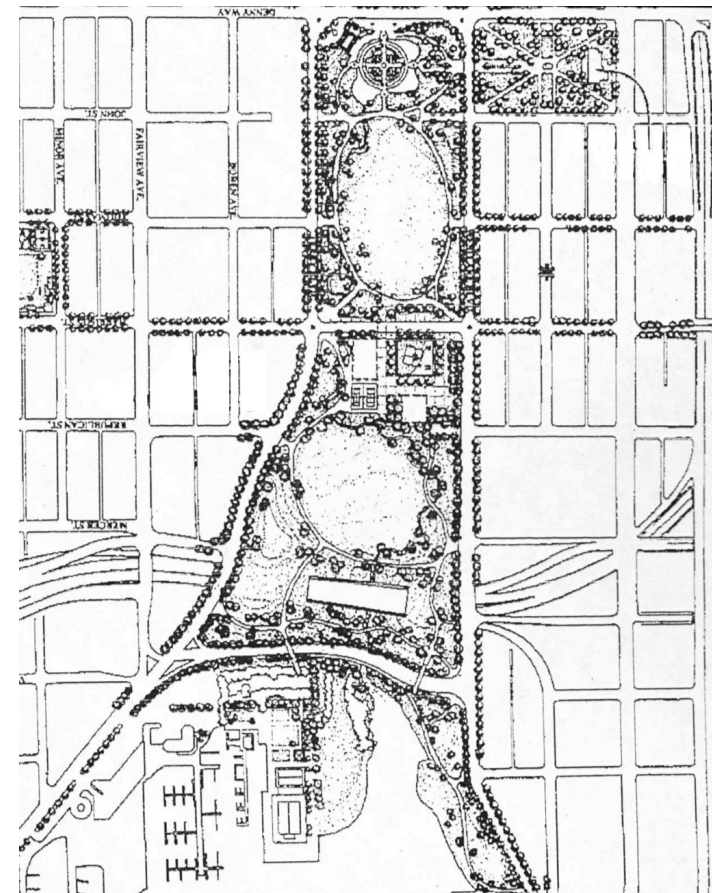


Fig2. Seattle Commons proposal
Image source: The Seattle Times

In the 1990s, the "Seattle Commons" plan was proposed by Seattle architect Fred Bassetti and Seattle Times columnist John Hinterberger that tried to transform South Lake Union with a large, centralized urban park. But the proposal was rejected in two separate public votes.

High-Tech Enclave in South Lake Union



Fig3. A collage about the current high-tech enclave situation in South Lake Union

Source: Google Images, The Seattle Times

Today the current condition in South Lake Union is described by this thesis as a high-tech enclave. The collage above (Figure 3) illustrates that high-tech firms are integral to the ecosystem of South Lake Union, affecting everything around them.

Table of Contents

List of Figures	4
Chapter 1: Introduction	
1.1 Introduction	9
1.2 Issue Statement	13
1.3 Proposition	16
Chapter 2: Theoretical Framework	
2.1 How High-Tech is changing the Face of American Cities	18
High-tech workers in the city	19
2.2 South Lake Union Neighborhood	20
The evolution of a dream	20
2.3 Urban design strategies studies	27
2.4 Precedents	30
Ambient 30 60 pavilions	30
Ridley's temporary restaurant	32
Chapter 3: Methodology	
3.1 Thesis Goals and Objectives	34
3.2 South Lake Union Area Mapping	34
3.3 Site Selection and Analysis	47
3.4 Program of Spaces	47
Chapter 4: Public Network Remaking and Proposed Architecture Design Interventions	
4.1 Underutilized Space Identify and Site Selections	51
4.2 Public Network Concept	56
4.3 Initial Design Concept	58
Design concept for each site typology	62
4.4 Proposed Temporary Architecture Designs	72
Chapter 5: Conclusion	108
Bibliography	111

Lists of Figures

All figures are created by the author unless otherwise noted.

- Figure 1 | Seattle Commons site plan - Image source: Flickr Images
- Figure 2 | Seattle Commons Proposal - Image source: The Seattle Times
- Figure 3 | A Collage about the current high-tech enclave situation in South Lake Union - Image source: Google Images, The Seattle Times
- Figure 4 | Fig3. Amazon high-rise office buildings - Image source: The Slate Group
- Figure 5 | Fig4. UW Medicine South Lake Union expansion - Image source: UW Medicine
- Figure 6 | Fig5. Amazon sphere
- Figure 7 | Fig6. Amazon lockers - Image source: Walking Redwood City
- Figure 8 | Parking lots in SLU
- Figure 9 | Alleys in SLU - Image source: Google Street view
- Figure 10 | Construction site in SLU - Image source: Google Street view
- Figure 11 | Future master plan of SLU - Image source: Urban Design Associate
- Figure 12 | NVIDIA's new home base designed by Gensler Architects - Image source: Gensler Architects Website
- Figure 13 | Amazon Sphere - Image source: USA Today
- Figure 14 | Maps showing the boundaries changes - Source: Wagda GIS Data
- Figure 15 | Collages showing from the past to present - Image Source: The Seattle Times
- Figure 16 | Historic images of SLU - Image Source: The Seattle Times
- Figure 17 | The Western Mill in 1882 - Image Source: The Seattle Times
- Figure 18 | Railway system - Image source: The Seattle Times
- Figure 19 | Lake Union Park (public life) - Image source: Visit Seattle
- Figure 20 | Boom in SLU - Image source: Alamy Images
- Figure 21 | University of Washington School of Medicine Campus in SLU - Image source: UW Medicine
- Figure 22 | Passive area overlay, city of Taipei - Image source: InVisibleCities
- Figure 23 | A collective framework containing individual, flexible and mobile pods. - Image source: Goes Soft (Issue Website)
- Figure 24 | Scaffolding City: Architectural Utopia of The future Past, Edward Dodington - Image source: Goes Soft (Issue Website)
- Figure 25 | The concept models of the project - Image source: Archdaily
- Figure 26 | Night-time activities of the project - Image source: Archdaily
- Figure 27 | Ridley's existing markets - Image source: The Decorators Website

Figure 28 | Ridley's temporary restaurant daytime - Image source: The Decorators Website
Figure 29 | Dinner Space on the 2nd floor - Image source: The Decorators Website
Figure 30 | Ridley's temporary restaurant daytime - Image source: The Decorators Website
Figure 31 | Main Roads in SLU - Source: Open Street Map
Figure 32 | Parking lots in SLU - Source: Open Street Map
Figure 33 | Construction site in SLU - Source: Seattle in Process
Figure 34 | Alleys and POPS in SLU - Source: Seattle Government
Figure 35 | Cultural Facilities in SLU - Source: Wagda GIS Data
Figure 36 | How Amazon is taking over SLU from 2007-2011 - Source: Wagda GIS Data, GeekWire
Figure 37 | How Amazon is taking over SLU from 2012-2018 - Source: Wagda GIS Data, GeekWire
Figure 38 | Amazon Office Buildings 2018 - Source: Wagda GIS Data
Figure 39 | Public access places map
Figure 40 | Places of public access - GH Source: Lvbianbian Wechat Account
Figure 41 | Informal walking path - GH Source: Lvbianbian Wechat Account
Figure 42 | Programs based on the issues in response-1 - Image source: InVisibleCities, Archdaily
Figure 43 | Programs based on the issues in response-2 - Image source: InVisibleCities, Archdaily
Figure 44 | Site typology: Mercer site - Image source: Wadga GIS Data, Google Street View
Figure 45 | Site typology: Parking lots - Image source: Wadga GIS Data, Google Street View
Figure 46 | Site typology: Alleys - Image source: Wadga GIS Data, Google Street View
Figure 47 | Site typology: Construction site - Image source: Wadga GIS Data, Google Street View
Figure 48 | Network concept sketch
Figure 49 | Network concept diagram
Figure 50 | Some scaffolding structures on construction site, resources from Vancouver's Best Painters - Image sources:
Vancouver's Best Painters
Figure 51 | Temporary structures from Loblolly House - Image sources: Loblolly House Book
Figure 52 | Temporary structures joints from Loblolly House - Image sources: Loblolly House Book
Figure 53 | Studies from Loblolly house scaffolding structure assembly
Figure 54 | Extruded olanlar polycarbonate sheet assembly diagrams
Figure 55 | 3D print joints studies
Figure 56 | BOREALIS lighting festival in SLU
Figure 57 | Street in the middle: Mercer concept drawing
Figure 58 | Modular structure
Figure 59 | Street sections

Figure 60 | Site plan
Figure 61 | Physical site model studies
Figure 62 | Axnom view
Figure 63 | Parking lots concept drawing
Figure 64 | Modular structure
Figure 65 | Street sections
Figure 66 | Site plan
Figure 67 | Physical site model studies
Figure 68 | Axnom view
Figure 69 | Parking lots concept drawing
Figure 70 | Modular structure
Figure 71 | Street sections
Figure 72 | Site plan
Figure 73 | Physical site model studies
Figure 74 | Axnom view
Figure 75 | Alley concept drawing
Figure 76 | Modular structure
Figure 77 | Street sections
Figure 78 | Site plan
Figure 79 | Physical site model studies
Figure 80 | Axnom view
Figure 81 | Construction site concept drawing
Figure 82 | Modular structure
Figure 83 | Street sections
Figure 84 | Site plan
Figure 85 | Physical site model studies
Figure 86 | Axnom view
Figure 87 | Site location
Figure 88 | View from Mercer street N - Image sources: Google Street View
Figure 88 | Concept drawings
Figure 89 | Street view
Figure 90 | Pedestrian bridge
Figure 91 | Physical model

Figure 92 | 2nd floor: Culture & Community
Figure 93 | Aerial view daytime
Figure 94 | Aerial view nighttime
Figure 95 | LED recessed tectonic drawings
Figure 96 | Street view daytime
Figure 97 | Street view nighttime
Figure 98 | Site location
Figure 99 | View from Thomas Street
Figure 100 | Concept drawings
Figure 101 | 1st floor: Commerce
Figure 102 | 3rd floor: Culture & Community
Figure 103 | 2nd floor: Culture & Community
Figure 104 | Aerial view daytime
Figure 105 | Aerial view nighttime
Figure 106 | Street view daytime
Figure 107 | Street view nighttime
Figure 108 | Site location
Figure 109 | View from Mercer Street
Figure 110 | Concept drawings
Figure 111 | 1st floor: Parking
Figure 112 | 3rd floor: Culture & Community
Figure 113 | 2nd floor: Culture & Community
Figure 114 | Aerial view daytime
Figure 115 | Aerial view nighttime
Figure 116 | Street view daytime
Figure 117 | Street view nighttime
Figure 118 | Site location
Figure 119 | View from Thomas street N - Image sources: Google Street View
Figure 120 | Concept drawings
Figure 121 | Physical model studies
Figure 122 | View from upper floor
Figure 123 | View from lower floor
Figure 124 | Aerial view daytime

Figure 125 | Aerial view nighttime with signage
Figure 126 | Street view daytime
Figure 127 | Street view nighttime
Figure 128 | Site location
Figure 129 | View from Dexter Ave N - Image sources: Google Street View
Figure 130 | Concept drawings
Figure 131 | 1st floor: Commerce
Figure 132 | 2nd floor: Culture & Community
Figure 133 | 2nd floor: Culture & Community
Figure 134 | Aerial view daytime
Figure 135 | Aerial view nighttime
Figure 136 | Street view daytime with signage
Figure 137 | Street view nighttime
Figure 138 | Public network of temporary architecture
Figure 139 | Final presentation

Chapter 1: Introduction

1.1. Introduction

In the 21st century, in the face of the greatest modernization and globalization in history, urban renewal has become an even more heated discussion for architects and urban planners. Metropolises are continuing to grow, occupying more and more public land. However, in many big cities, buildings are loosely spreading in a way that has left gaps in the urban fabric. South Lake Union in Seattle is a good example of this urban condition that has negatively impacted the relationship between local residents and their surroundings.

Seattle has long been a company town that has served as a perfect incubator for many large well-known firms across the country, such as Boeing, Microsoft, and most recently Amazon. The neighborhood of South Lake Union was once a low-rise area of warehouses and light industry with “poor mobility and a lack of public and private investment.”¹ However, in 2010, it experienced a significant overall boost when Amazon moved their headquarters to this area and bio-technology firms like UW Medicine followed. Because of its unique location in downtown and the fast-growing economy of Seattle, the high-tech retailer is expanding at unprecedented rates in the city. The South

1 Millman, Zosha. “New Study Looks at How Amazon’s Growth Fueled Seattle Rents.” *Seattlepi.com*, Seattle Post-Intelligencer, 2 Nov. 2017, www.seattlepi.com/realestate/article/Seattle-Amazon-rent-prices-increasing-12324622.php.

Lake Union (SLU) neighborhood experienced remarkable growth that is the result of significant commitments on the part of the City of Seattle (the City) and private property owners and developers.”² Since then, the city has continued to grow rapidly. In 2017, the Seattle Times reported that Seattle had the “most cranes in the country” for 2 years in a row. “The designation has come to symbolize - for better or worse - the rapid growth and changing nature of the city, as mid-rises and skyscrapers pop up where parking lots and single-story buildings once stood.”³ Many believe that the transformation in SLU has been “largely fueled by the growth of its highest-profile employer which has had a ripple effect that's reshaped the surrounding city, for better or worse.”⁴ In many cases, high tech workers in SLU are working inside a self-contained, isolated environment cut off from the city. The insertion of many large scale high-tech office buildings like those for Amazon into the original urban fabric in SLU has resulted in a disconnection between the two. Many office

2 Grinnell, Max, “The Urbanologist Calls South Lake Union 'Soulless'.” *The Seattle Times*, The Seattle Times Company, 1 Mar. 2015. www.seattletimes.com/life/the-urbanologist-calls-south-lake-union-soulless/.

3 Rosenberg, Mike. “Seattle Has Most Cranes in the Country for 2nd Year in a Row - and Lead Is Growing.” *The Seattle Times*, The Seattle Times Company, 11 July 2017, www.seattletimes.com/business/real-estate/seattle-has-most-cranes-in-the-country-for-2nd-year-in-a-row-and-lead-is-growing/?utm_content=buffercd680&utm_medium=social&utm_source=facebook.com&utm_campaign=owned_buffer_f_m.

4 Guy, Gene Balk / FYI. “Before-and-after Photos of Amazon's South Lake Union Turf.” *The Seattle Times*, The Seattle Times Company, 22 Nov. 2016, www.seattletimes.com/seattle-news/data/amazons-south-lake-union-turf-do-you-recognize-this-place/.

buildings are standing as isolated islands, not responding to each other or to the surrounding fabric. The similar appearance of these high-rise buildings has created an “inward-looking” corporate world. The rapid development has started to challenge the identity of Seattle urban culture. In 2016 Seattle Times noted: “So much of South Lake Union is sleek and new, it’s not surprising that it’s been derided as ‘soulless,’ all the gleaming glass buildings have an architectural sameness.”⁵

With the rise of this new inward looking, self-sustaining world, something is being lost. As the original urban fabric has been transformed into large volume office buildings, SLU has lost a part of its identity. The threats to the character of the neighborhood continue to increase as construction continues. Visitors to the neighborhood have remarked on this condition: “I was struck by the repeated architectural forms that seemed elegant, but a bit soulless, despite all attempts to create a vibrant sense of place and community.”⁶ These comments reflect how South Lake Union is in great need of a new approach that responds to the recent drastic changes of the neighborhood.

This thesis will identify the underutilized spaces that remain in the contemporary urban fabric in South Lake Union. These underutilized areas are characterized by the lack of public activity

5 Max, Grinnell, “The Urbanologist Calls South Lake Union ‘Soulless’.” *The Seattle Times*, The Seattle Times Company, 1 Mar. 2015. www.seattletimes.com/life/the-urbanologist-calls-south-lake-union-soulless/.

6 Ibid.

and minimal accessibility including construction sites, parking lots, green parks and alleys. The proposed design is a series of temporary design interventions which will transform these passive spaces into a network of public amenities. The intent is to reactivate the urban fabric of the city by creating public spaces both for workers and residents of the neighborhood. The proposed public network is designed based on “how people move, maximizing the opportunities to connect and enhance collaboration,”⁷ and to encourage casual interactions between workers and their neighborhoods. These revitalized spaces will become a network to help people explore the neighborhood and reconnect to the built environment.

7 Campbell-Dollaghan, Kelsey. “How the Tech Industry Is Quietly Changing the Face of American Cities.” *Gizmodo*, Gizmodo.com, 18 June 2013, www.gizmodo.com/how-the-tech-industry-is-quietly-changing-the-face-of-a-513266451.

1.2. Issue statement

The South Lake Union neighborhood in Seattle has undergone many changes since its beginnings as one of the earliest waterfront settlements in the city. It has been a low-rent neighborhood of warehouses and residences for decades. According to New York Times, high-tech firms are spelling out their 'City Maker' role by reshaping downtown cities in the U.S., Seattle is surely one of these cities. But the impact of the high-tech companies on SLU began to be felt nearly six years ago. High tech firms like Amazon has continued to explode in South Lake Union, the original urban fabric has been transformed into large volume office buildings with a single function. The rapid rate of development and addition of multiple large scale office and residential mid to high rises - has resolved into an urban fabric dominated by inactive space. South Lake Union is no longer seen as a neighborhood; it has become a boom town with many office buildings that have erased the original life of the area. Both people who live in Seattle and visitors have commented on the homogeneous nature of these high-tech office buildings:

According to Alexandra Lange, this has created "an 'inward-looking' corporate world with little

consideration of the urban context, separating itself from the community it inhabits,⁸ creating unseen spaces within the city.



Fig4. Amazon high rise office buildings
Image source: The Slate Group



Fig5. UW Medicine South Lake Union expansion
Image source: UW Medicine

This “ecstasy of consumerism”⁹ has been driven by the growth of a huge amount of high-tech employers. The reason behind it may be related to “the single link of high-tech works’ consumption systems” shifting from working to living, living to working.”¹⁰ This phenomenon makes the architecture itself becomes the spectacle, creating an image of the unnerving conditions of modern urban life.

8 Lange, Alexandra. The dot-com city. Silicon valley urbanism. *Strelka Press*. Kindle Edition. 2012.

9 Wang, Zigeng, "Turn a blind eye", *TEDxyouthtalk*, Chongqing, November, 2015, https://v.youku.com/v_show/id_XMTQ5OTE1OTk0OA==.html?f=26711786&from=y1.2-3.4.8.

10 Ibid.

The result of this process is a fragmented urban condition with underutilized spaces as depicted in Figures 6 to 10.



Fig6. Amazon spheres



Fig7. Amazon lockers
Image source: Walking Redwood City



Fig8. Parking lots in SLU

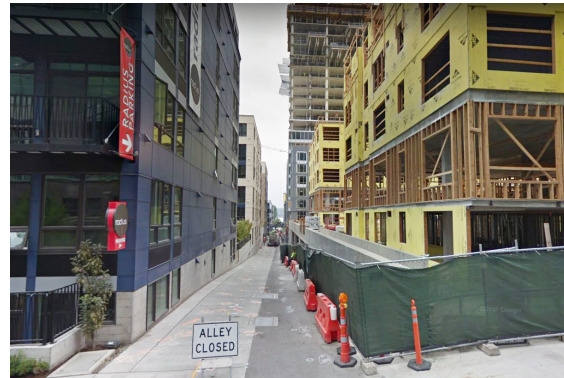


Fig9. Alleys in SLU
Image source: Google Street View



Fig10. Construction site in SLU
Image source: Google Street View

1.3. Proposition

This impact of high-tech enclave in South Lake Union has created an “High-rise office World” cut off from the life of the city, preventing people from connecting with the area. The potential future master plan of SLU (Figure 11) shows the disconnections in SLU. This thesis will focus on rethinking and reshaping the existing urban space in a way that responds to the impact of the high-tech industry on the contemporary built environment in order to make SLU an experiential and interactive neighborhood.

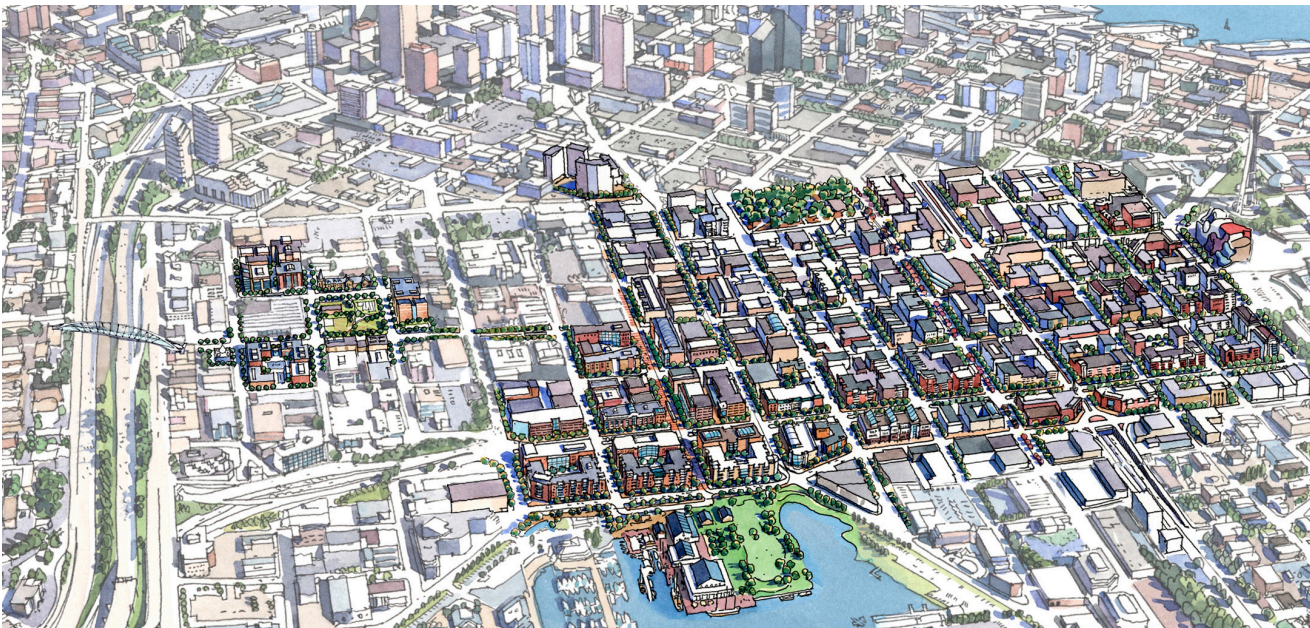


Fig11. Future master plan of SLU
Image source: Urban Design Associate

Firstly, this thesis uses a mapping study of SLU's current situation in order to identify the underutilized spaces that have potential to be activated for the neighborhood. This thesis proposes a public network through several temporary architecture designs which transform these underutilized spaces into a network of amenities that will allow people to share experiences of the city. By using this design strategy, the goal is to remake South Lake Union into an experiential and interactive neighborhood both for the workers and residents of the neighborhood there.

Chapter 2: Theoretical framework

This chapter focuses on three aspects: 1)the impact of high-tech enclave in the city, 2) the changes in South Lake Union from the past to present and 3)urban design strategies about underutilized spaces in the city. The goals of the studies are to better understand the current situation in SLU that has been strongly influenced by the recent arrivals in the area. While the new buildings are designed to create a comfortable and pleasant environment for the workers, they often fail to address the surrounding context. This thesis seeks to understand the impact of this high-tech enclave on the neighborhood itself. An understanding of the physical context is essential in order to respond to the current changes in the urban environment in a way that can be beneficial

to everyone.

2.1. How High-Tech firms are changing the Face of American Cities

According to a report from the NY times, high-tech enclave is spelling out its 'City Maker' role in reshaping downtown cities in the U.S. As Alexandra Lange explains in her book, *The Dot-Com City: Silicon Valley Urbanism*, high-tech industries are affecting the community in unexpected ways as they have taken over the downtown area. She observes that South Lake Union is experiencing a high-tech boom with many companies moving to the area in the last 10 years. With these high-rise office buildings in the downtown, "it's easy to say 'who are they harming? She notes that they are a paradise for workers."¹¹ But what is missing is the connection back to the people living in Seattle. As seen the widespread impact of high-tech firms in SLU, the technology industry is separating itself from the community it inhabits, creating a gap between workers and their neighborhoods. Lange states that with these "inward-looking" tech companies, "there is no city to turn one's back on"¹². Therefore, it is important to understand the working patterns of high-tech workers in order to challenge this "closed circuit" working environment.

11 Lange, Alexandra. *The dot-com city. Silicon valley urbanism. Strelka Press. Kindle Edition. 2012.*

12 Ibid.

High-Tech Workers in the City

Alexandra Lange describes the high-tech workplace as: “an inward-looking, hermetic, hetero-topic corporate world. An architecturally distinguished, technologically advanced retreat from the city, one complete enough to include its own consumption system.”¹³ Figure 8 shows NVIDIA’s new home base designed by Gensler Architects, which is a self-contained and mono-functional, more high-tech tent than big-nature oasis. High-tech workers usually have a single link consumption system which means they follow one flow of movement from private bus to private offices, from building to building. Most high-tech employees can be seen only at lunchtime in SLU, waiting in a long line outside of a restaurant or coffee shop, and going straight back to work. Workers typically get accustomed to this routine. Lange observes that high-tech employees often become “weaned from urban life by recreating its social qualities outside the city.”¹⁴ The recently completed Seattle headquarters of Amazon with its spheres is an example of this isolationist approach. As Kelsey Campbell – Dollaghan states, even though some public amenities are provided on the street, the design seems to “quarantine workers inside of a real-world Biodome.”¹⁵ The company plans to

13 Lange, Alexandra. *The dot-com city. Silicon valley urbanism. Strelka Press.* Kindle Edition. 2012

14 Ibid.

15 Campbell-Dollaghan, Kelsey. “How the Tech Industry Is Quietly Changing the Face of American Cities.” *Gizmodo*, Gizmodo.com, 18 June 2013, <https://gizmodo.com/how-the-tech-industry-is-quietly-changing-the-face-of-a-513266451>.

open the gardens twice a month to the public. But these spaces remain a private "controlled" environment. The growth of the company has created "an ecstasy of consumerism"¹⁶ that has had a huge impact on the way people interact in the city. Can high-tech companies like Amazon help to reshape public space in the neighborhoods they occupy rather than turn their back on the city?



Fig12. NVIDIA's new home base designed by Gensler Architects
Image source: Gensler Architects Website



Fig13. Amazon Sphere
Image source: USA Today

2.2. South Lake Union Neighborhood

The evolution of a dream

South Lake Union (SLU) is a neighborhood in Seattle, Washington, which is located at the southern tip of Lake Union. The lake forms the northern boundary of the SLU along with interstate

¹⁶ Wang, Zigeng, "turn a blind eye", *TEDxyouthtalk*, Chongqing, November, 2015, https://v.youku.com/v_show/id_XMTQ5OTE1OTk0OA==.html?&f=26711786&from=y1.2-3.4.8.

5 on the east and Aurora Avenue on the west. But like many Seattle neighborhoods, its precise boundaries are indeterminate. Over the past ten years, because of rapid development of tech giants SLU, it is booming in population and construction at an unprecedented rate.¹⁷ The mapping study in Figure 14 shows the boundaries of these changes.

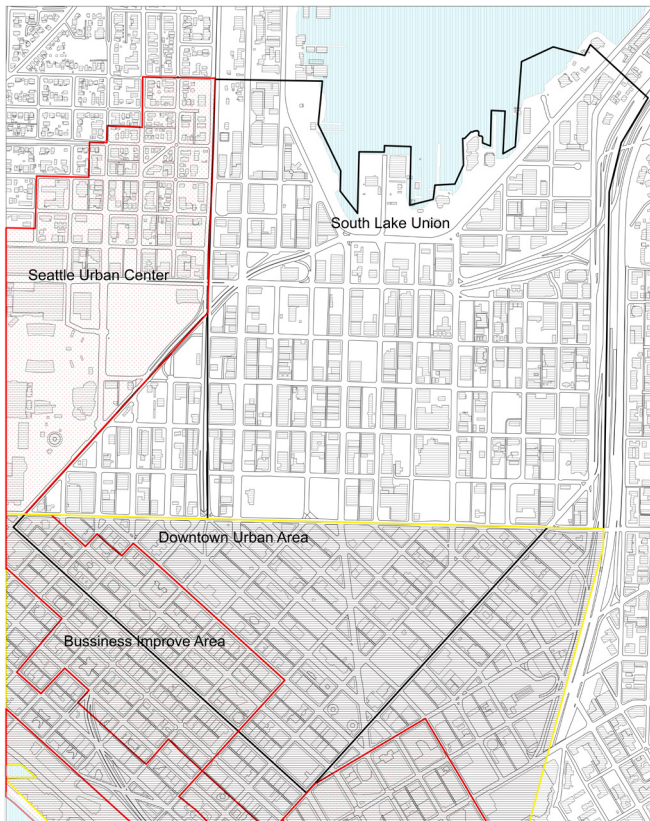


Fig14. Maps showing the boundaries changes
Source: Wagda GIS Data

17 "South Lake Union, Seattle." *Wikipedia*, Wikimedia Foundation, 12 June 2018, en.wikipedia.org/wiki/South_Lake_Union,_Seattle.

The changes of South Lake Union from past to present

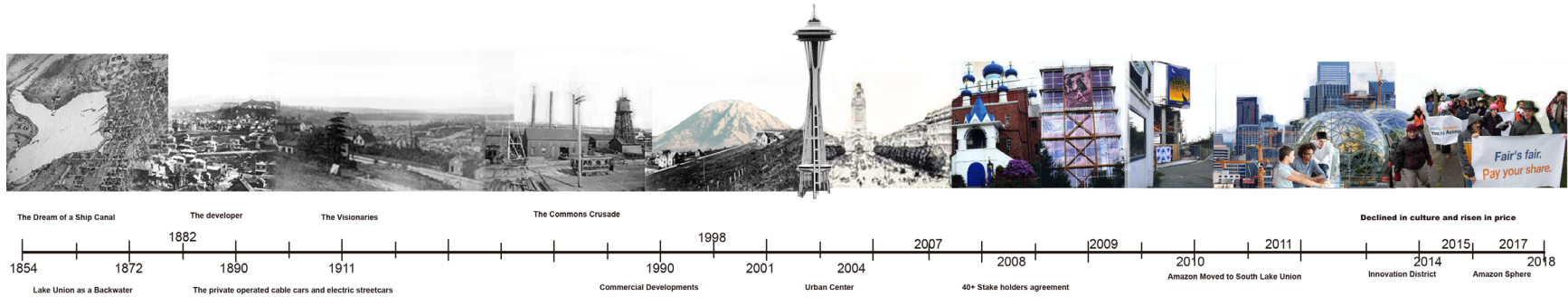


Fig15. Collages showing from the past to present in SLU
Image source: The Seattle Times

19th century

White settlers arrived in Seattle in the 1850s, Native Americans — likely Duwamish or Southern Coast Salish— were already encamped near the southwest corner of Lake Union near the present-day corner of 8th and Thomas; A major settlement continued to occupy the area until white settlers arrive, fishing the waters of the lake.



Fig16. Historic aerial view of SLU
Image source: The Seattle Times



Fig17. The Western Mill in 1882
Image source: The Seattle Times

The developer: the first phase of increasing density

The first major business in the area was milling lumber; in 1882 David Denny built the Western Mill, near the site of today's Naval Reserve Center, using a weir to float logs. Lake Union became a center for maritime industries with a focus on shipping and transportation. The construction of a narrow-gauge railroad completed in 1872 followed the route of present-day Westlake Avenue to Pike Street. It helped to connect the area to the rest of the city. In 1913, the North Pacific Railway added a railroad line around Lake Union and Terry Street to transport coal and timber.



Fig18. Railway system
Image source: The Seattle Times

20th century

In the early twentieth century, South Lake Union became a center of manufacturing of furniture, ships and airplanes. The 1903 Olmstead plan proposed a small park on the south share of the lake. Denny Park had already been donated back to the city by David Denny.



Fig19. Lake Union Park (public life)
Image source: Visit Seattle

The boom of industrial and commercial development

Developments in South Lake Union in the 1930s made SLU become even less residential, developing into an area of small businesses, warehouses and auto-related services. With the opening of the Lake Washington Ship Canal in 1917, the SLU neighborhood was connected by canal to Lake Washington and to Puget Sound. This helped to drive industrial and commercial development. The rise in industry resulted in a decrease in housing. The new construction of Interstate 5 in 1969 caused the separation of SLU from the neighborhood of Capitol Hill.



Fig20. Boom in SLU
Image source: Alamy Images

21st century

Only a few of the historic residential and light industrial structures of the SLU neighborhood retain their original uses today. In the late 1980s, cheap land values began to attract bio-tech industries to the area – followed by high tech companies. Elsewhere in South Lake Union the picture is similar: quite a few older buildings survive, but few retain their historic uses.¹⁸ The boundaries have been changed between public and private.

The opening of Lake Union Park in April 2008 provided green space and public walkways with a pedestrian bridge along the waterfront. The Museum of History and Industry was relocated from Seattle's Montlake neighborhood to the former Naval Reserve Training Center or "Armory" in December 2012.¹⁹ South Lake Union is also home to Denny Park, the oldest park in the city. While these parks and institutions provide important public amenities, they have been overshadowed by the takeover of the area by high tech industries.

Transformation and evolution period

In December 2007, Amazon announced "it would move its Seattle offices to South Lake

18 "South Lake Union, Seattle." *Wikipedia*, Wikimedia Foundation, 12 June 2018, en.wikipedia.org/wiki/South_Lake_Union,_Seattle.

19 Ibid.

Union with the goal of consolidating the Seattle offices, occupancy began in 2010.²⁰ Over last 20 years, the SLU neighborhood has dramatically changed as the area has become a center for new industries, especially bio-medical and high-tech. While Amazon CEO Jeff Bezos considered building a suburban campus in the company's annual meeting around 2010, he said, "the types of people Amazon employs are those who appreciate the energy and dynamism of an urban environment"²¹ as reported by Geekwire in September of 2017. Also, the University of Washington School of Medicine now employs over 1250 people in four buildings in SLU. "The plan for development of a biotechnology hub in South Lake Union has been somewhat controversial, as it is seen by some as an example of influential private companies receiving benefits from the city."²²



Fig21. University of Washington School of Medicine Campus in SLU
Image source: UW Medicine

20 "South Lake Union, Seattle." *Wikipedia*, Wikimedia Foundation, 12 June 2018, en.wikipedia.org/wiki/South_Lake_Union,_Seattle

21 *Ibid.*

22 *Ibid.*

2.3. Urban design strategies studies

The growth of the high-tech enclave in South Lake Union has resulted in a large amount of underutilized space and inactive places in the urban fabric. This section examines two case studies which are innovative in their approach to urban design. The first project focuses more on the study of passive space and the second will focus more on the innovative aspects of the high tech companies in the cities and how they are shaping our environment.

Passive space remake

Like Seattle SLU, the very dense vertical city of Taipei City has grown rapidly “Taipei’s living cost is higher, leaving many of its urban spaces “underutilized or passively used.” The IVC-Invisible Cities group posed the question to the government that: “perhaps the spaces in downtown Taipei were not insufficient, but ineffectively distributed.”²³

The group proposed a project was that about a new way of “thinking urban space from a more sensational aspect and also backed up with quantifiable and critical facts such as population flows, demographics, and land use.”²⁴ The Passive Space Remake project created maps

23 IVC – InVisibleCities, Passive space remake, *InVisibleCitiesOrganization*, 10 May. 2017. <https://ivc.city/blog/article/passivespace-eng>.

24 Ibid.

showing different kinds of passive space based on quantifiable facts related to population flow, demographics and land use.



Fig22. Passive area overlay, city of Taipei
Image source: InVisibleCities

Goes soft²⁵: urban design ideas called

Another urban design strategy that is used as a precedent in this thesis is the idea of soft urbanism. According to the book named *Goes soft*, this concept of adaptable and responsive infrastructure “offers the responsibility of fusing existing system with emergent ones to catalyze a network of ecological and economical for a new public realm: Portable, reconfigurable, and often soft on the level of tensile materials, the tent city is there when you need it. It is easily deployed.”²⁶ The approach of this thesis will also strive to create small scale interventions that “enable adaptation and evolution”.

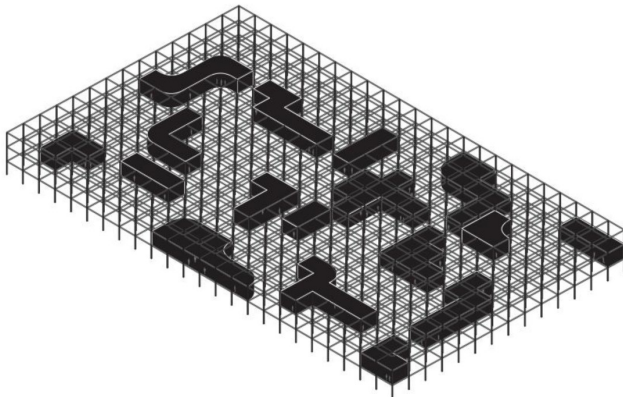


Fig23. A collective framework containing individual, flexible and mobile pods.
Image source: Goes Soft (Issuu Website)



Fig24. Scaffolding City: Architectural Utopia of The future Past,
Image source: Goes Soft (Issuu Website)

25 Neeraj Bhatia, 1980-; Lola Sheppard, 1972-; *Architect.com* (Firm); *InfraNet Lab* (Firm); 2012 Barcelona : Actar ; New York : Distributed by ActarD.

26 Ibid.

2.4. Precedents

Ambient thirty sixty pavilions²⁷, Santiago, Chile, 2014

Architect: Umwelt

This complex pavilion in Santiago, Chile designed by Chilean studio Umwelt is made up of white steel frames that provide a frame for artworks, seating and small trees beneath a series of skylights. The concept of the design is to transform itself into an opportunity to insert a free cultural program in the park, from its own temporal and eventual condition.

The design seeks to provide a comfortable climatic environment for experiencing culture in a public park in one of the city's wealthiest districts. The project was the winner of the 2013 Young Architect program in Chile. Architect Artur Scheidegger states that: "instead of creating an artificial landscape within a park, we created a cultural program inside the existing park which used to be dominated by commercial programs."²⁸ The aim of the temporary project was to create spaces that were active and adaptive and provide a "container for artworks and events."

The network of 35 space frames were laid out in a predetermined area measured in a predetermined area of 26 by 17 meters. 20 of the units were used for art installations over two

27 "Ambient 30 60 - YAP CONSTRUCTO 2014 / UMWELT." *ArchDaily*, 15 Apr. 2014, www.archdaily.com/495904/ambient-30-60-yap-constructo-2014-umwelt.

28 Ibid.

months.

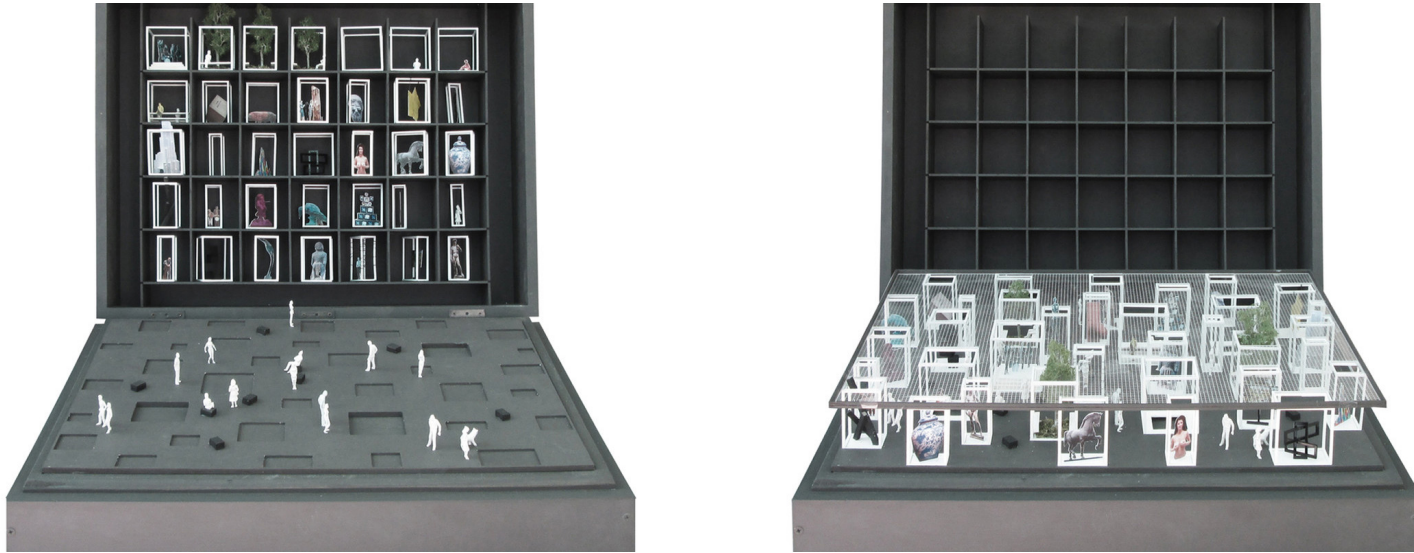


Fig25. The concept models of the project
Image source: Archdaily



Fig26. Night-time activities of the project
Image source: Archdaily

The other cubes contained green space with controlled environment conditions. All the units are joined by mesh and surrounded by a translucent curtain that can be opened and closed. This gives the ability to adjust the permeability of the structures and visibility to the park depending on the event taking place. The Ambient 36 pavilions project acts as a model for the proposed thesis project.

Ridley's Temporary Restaurant, London, UK

Architect: The Decorators in collaboration with Atelier Chan Chan

Ridley's Temporary Restaurant is "a public realm intervention that combined food and architecture, featuring a food-for-food exchange organism that is ideally located alongside a street market."²⁹ The project was designed based on "the market's existing infrastructure in order to negotiate its social and economic contingencies."³⁰ The project is also intended to be active during daytime and nighttime.

29 Ridley's Temporary Restaurant, *The Decorators*, September, 2011, the-decorators.net/Ridley-s-Temporary-Restaurant.

30 Ibid.



Fig27. Ridley's existing markets
Image source: The Decorators Website



Fig28. Ridley's temporary restaurant daytime
Image source: The Decorators Website



Fig29. Dinner Space on the 2nd floor
Image source: The Decorators Website



Fig30. Ridley's temporary restaurant nighttime
Image source: The Decorators Website

Chapter 3: Methodology

3.1. Thesis goals and objectives

These precedent studies help to provide a methodology for understanding the urban structure of SLU through a series of mapping studies. The intent of this study is to focus on the current condition of SLU, and the second part focuses on reviewing the urban transformation in SLU. The intent of this study is to identify the underutilized.

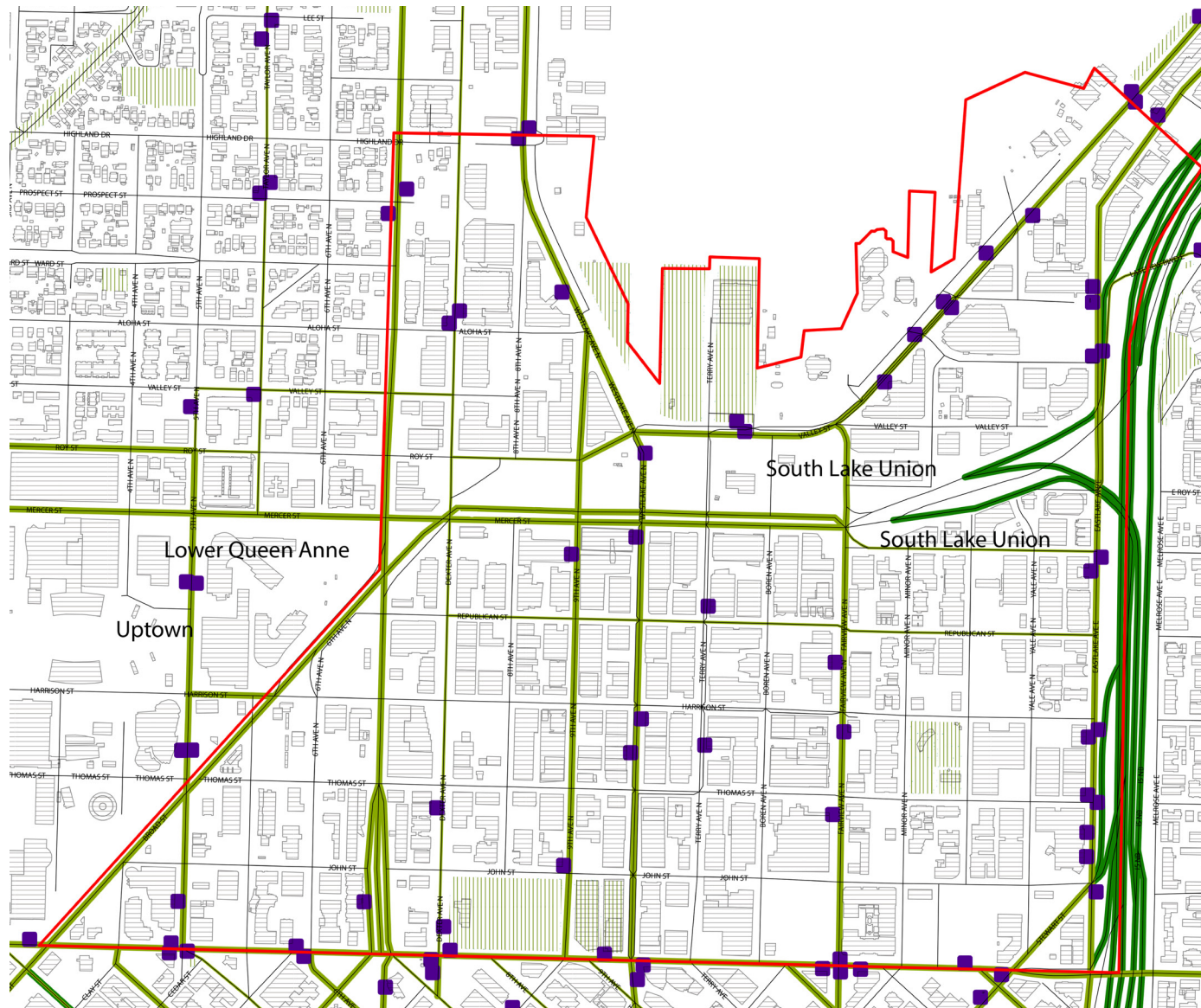
3.2. South Lake Union Area Mapping

The first series of mapping studies focus on the most common and current conditions in SLU. These are identified: streets, bus stop, green open space, parking lots, construction site, alleys, POPS (privately owned public space).

The mapping studies on the following pages are included in the order:

- 1)Main Roads
- 2)Parking lots
- 3)Construction site
- 4)Alleys and POPS
- 5)Cultural Facilities

1) Main Roads

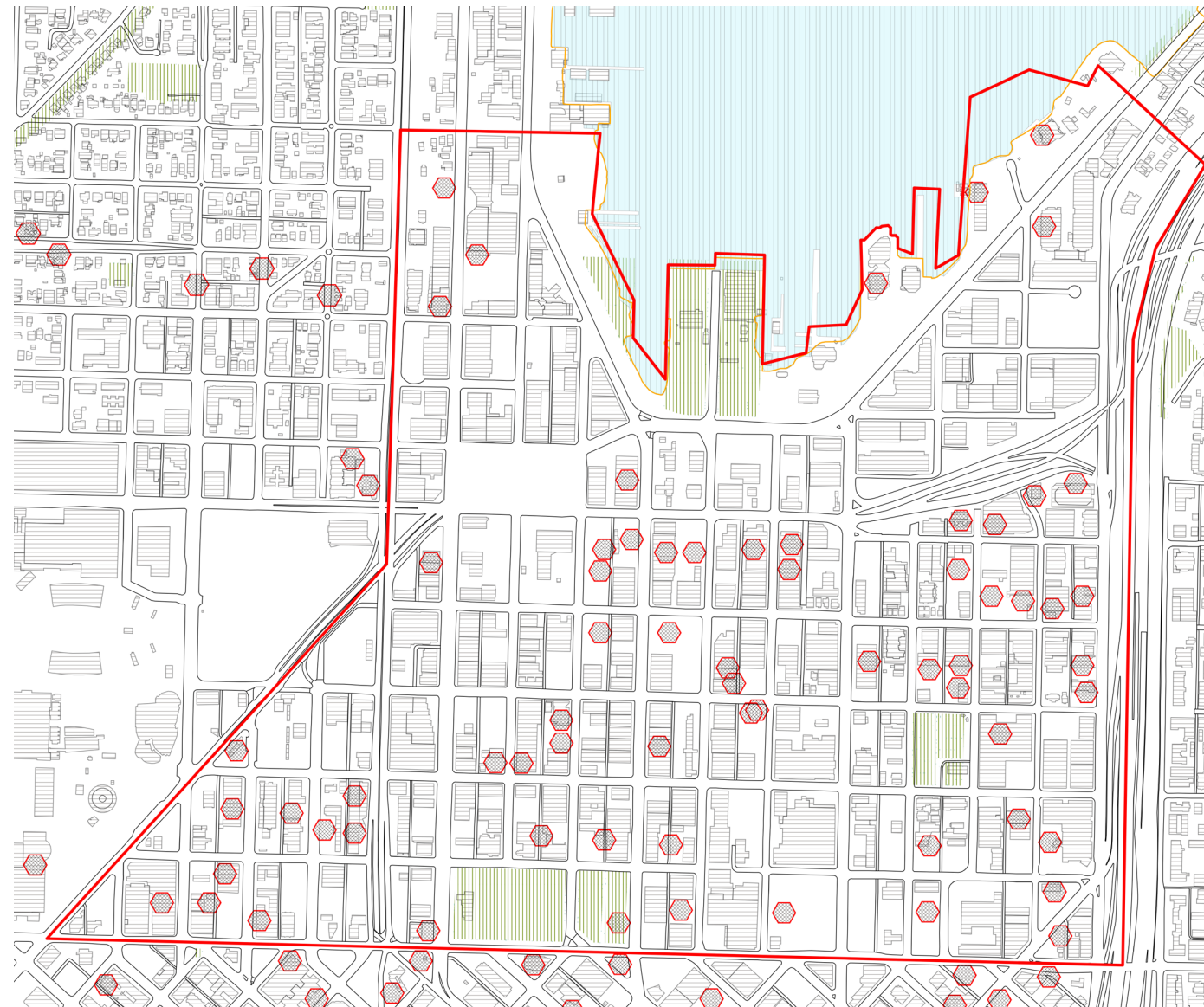


Legend

- SLU Boundary
- ▨ Green Space
- ◆ Parking Lots
- Principal Transit Routes
- Bus Stops

Fig31. Main Roads in SLU
Source: Open Street Map

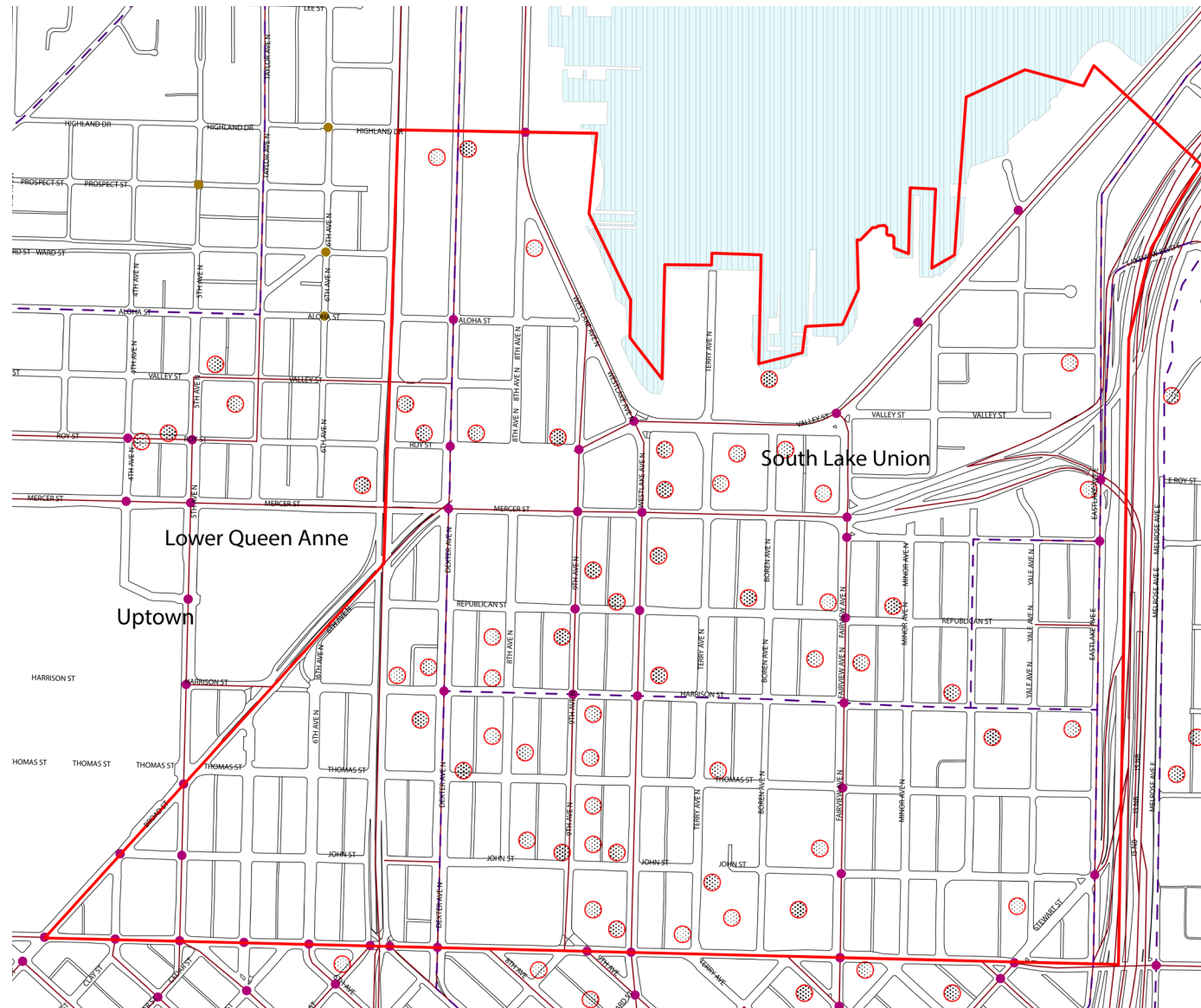
2) Parking lots



- Legend
- SLU Boundary
 - ▨ Green Space
 - Parking Lots

Fig32. Parking lots in SLU
Source: Open Street Map

3)Construction site



- Legend
- SLU Boundary
 - Construction Site
 - Nov. 13th 2018
 - - - Traffic Circle
 - Oneway Street
 - Principal Transit Routes
 - Routes

Fig33. Construction site in SLU
Source: Seattle in Process

4) Alleys and POPS

Legend

- SLU Boundary
- Alleys Are Being Used
- Alleys with Designs
- Alleys Are Not Being Used
- Used

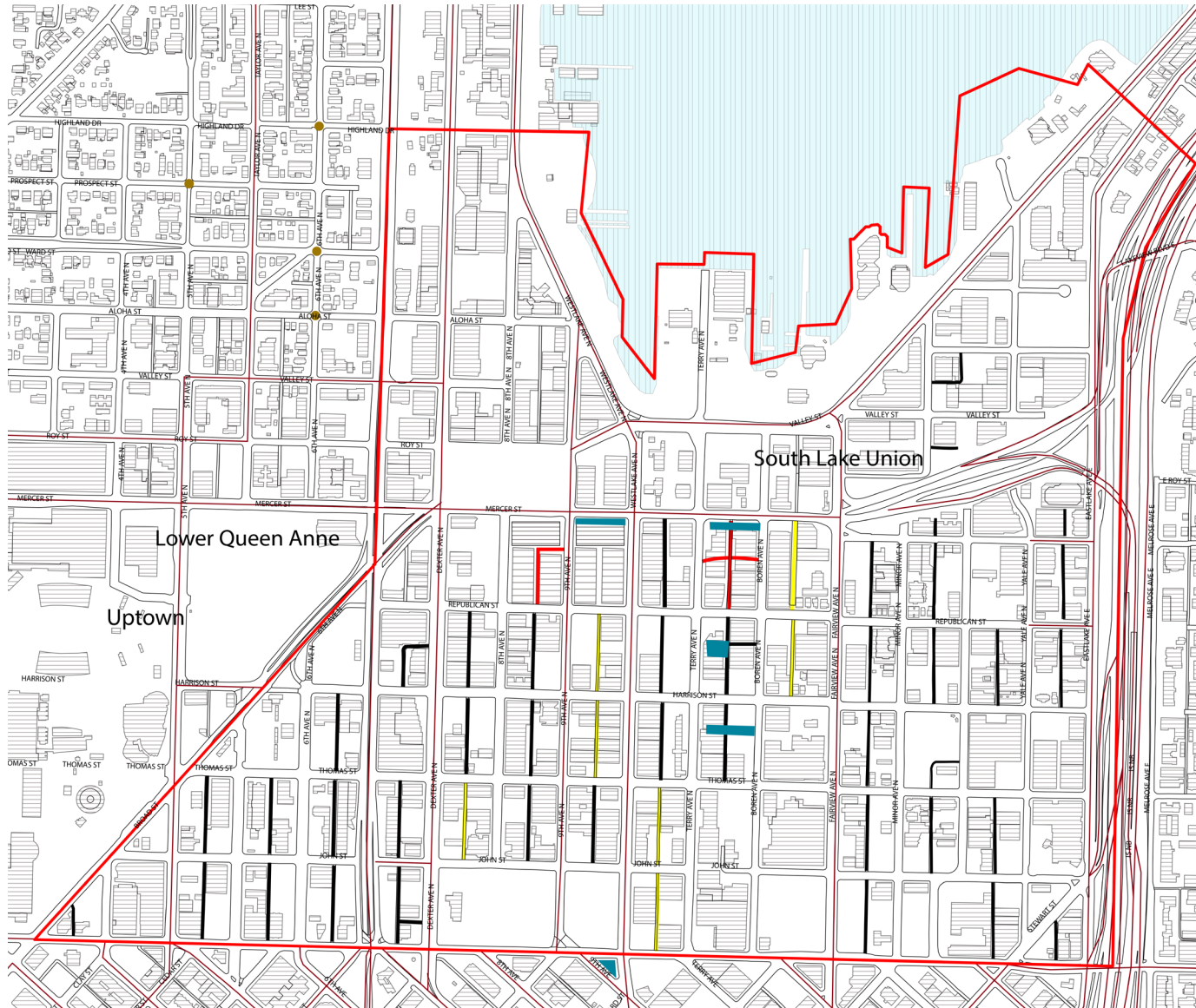
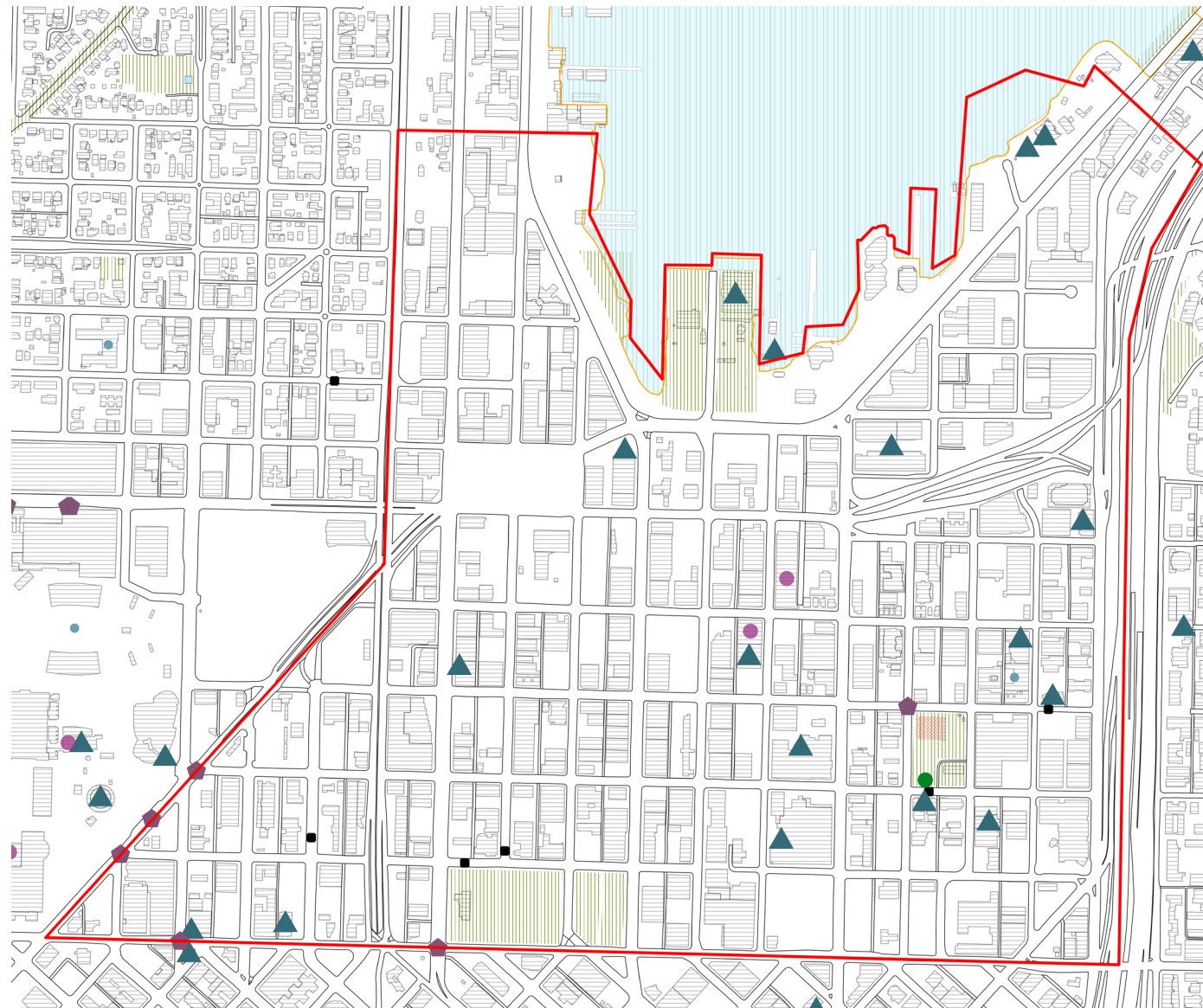


Fig34. Alleys and POPS in SLU
Source: Seattle Government

5) Cultural Facilities



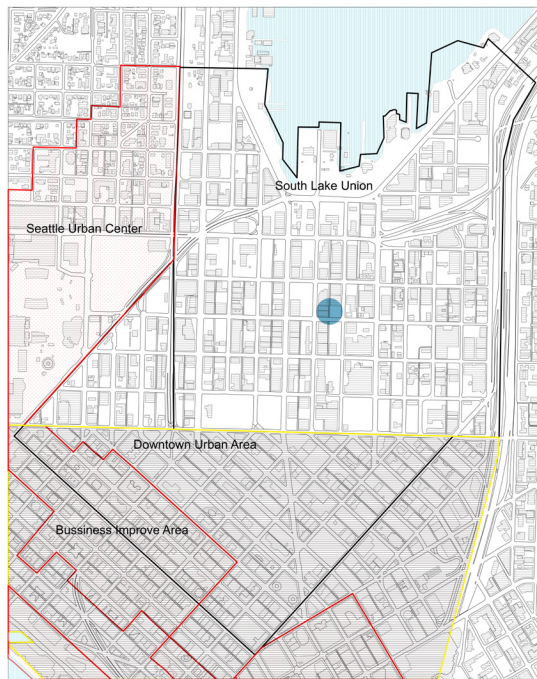
Legend

- SLU Boundary
- ▨ Green Space
- ▲ Land Marks
- Theatres
- ◆ Public Art
- Churches
- P-Patch

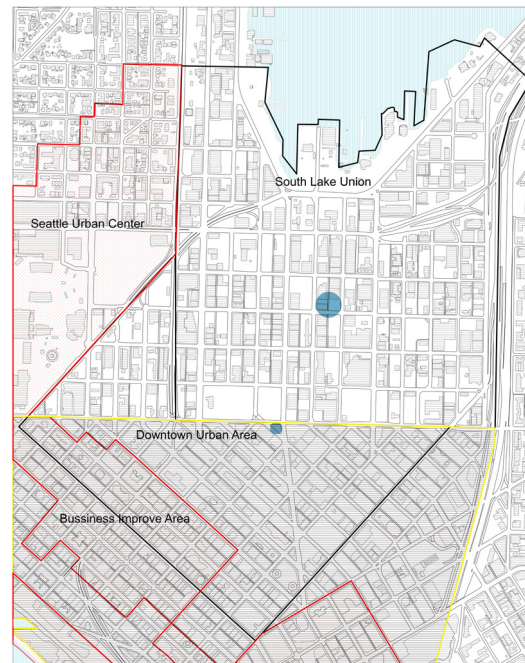
Fig35. Cultural Facilities in SLU
Source: Wagda GIS Data

The second series of mapping studies focus on reviewing the urban transformation in SLU. These mapping studies are as follows:

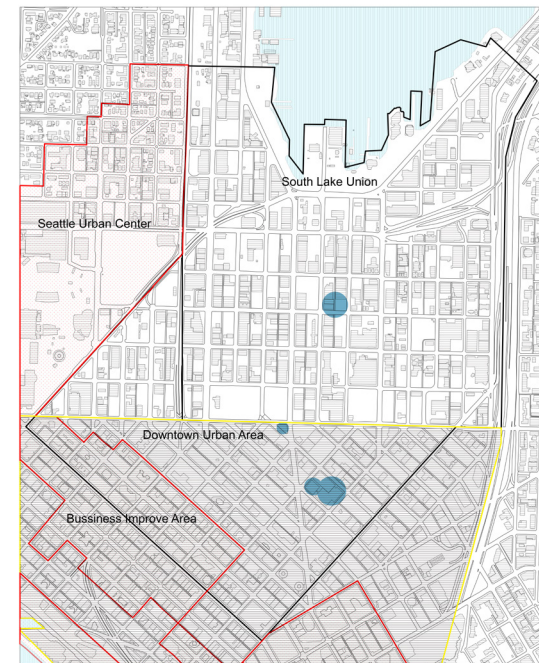
1)How High-Tech Enclave is taking over SLU: this mapping series studies the development of Amazon offices in SLU over 10 years.



2007-2009

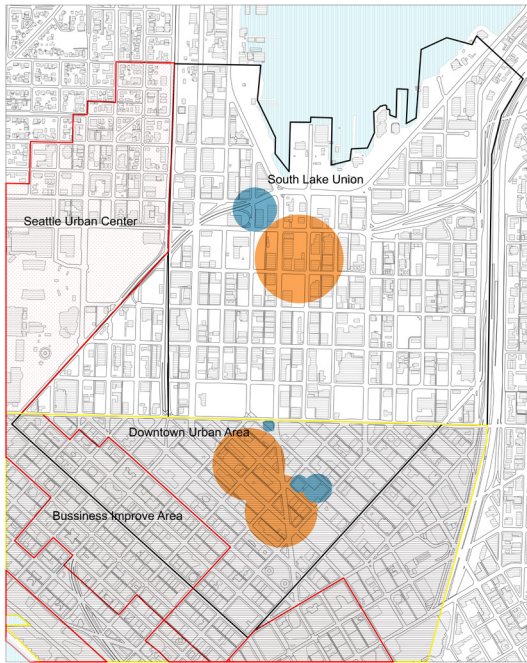


2010

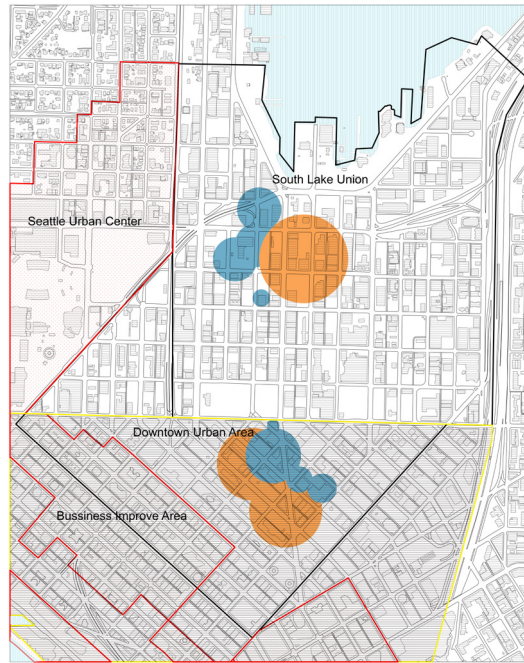


2011

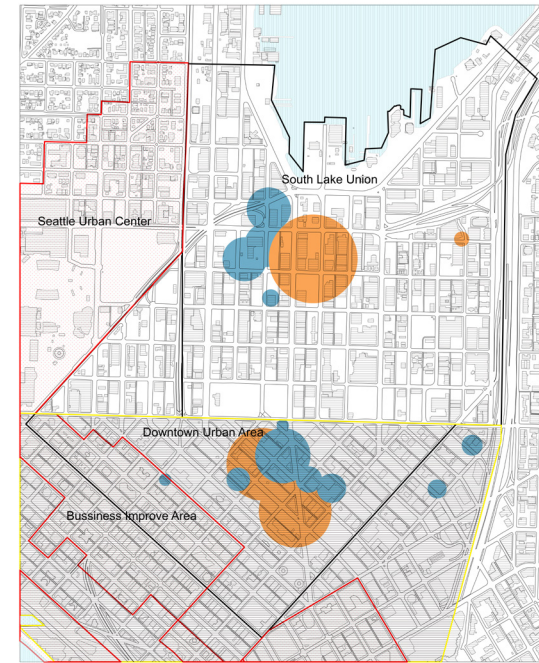
Fig.36 How Amazon is taking over SLU from 2007-2011
Source: Wagda GIS Data, GeekWire



2012



2013



2014-2015

Fig.37 How Amazon is taking over SLU from 2012-2018
Source: Wagda GIS Data, GeekWire

Today one of the most obvious representations of the high-tech enclave is created by Amazon which occupies 8.1 million square feet across 33 buildings, and is more than four times its original campus footprint in South Lake Union (see Figure 38). The Seattle Times recently called the city “America’s Biggest Company Town.”³¹

31 Levy, Nat. “Amazon's Original Boomtown: How the Tech Giant Has Transformed and Outgrown Seattle.” *GeekWire*, 14 Sept. 2017. www.geekwire.com/2017/amazons-original-boomtown-tech-giant-transformed-outgrown-seattle/.

1) Amazon Office Buildings 2018

Legend

- SLU Boundary
- Green Space
- Amazon Office Buildings

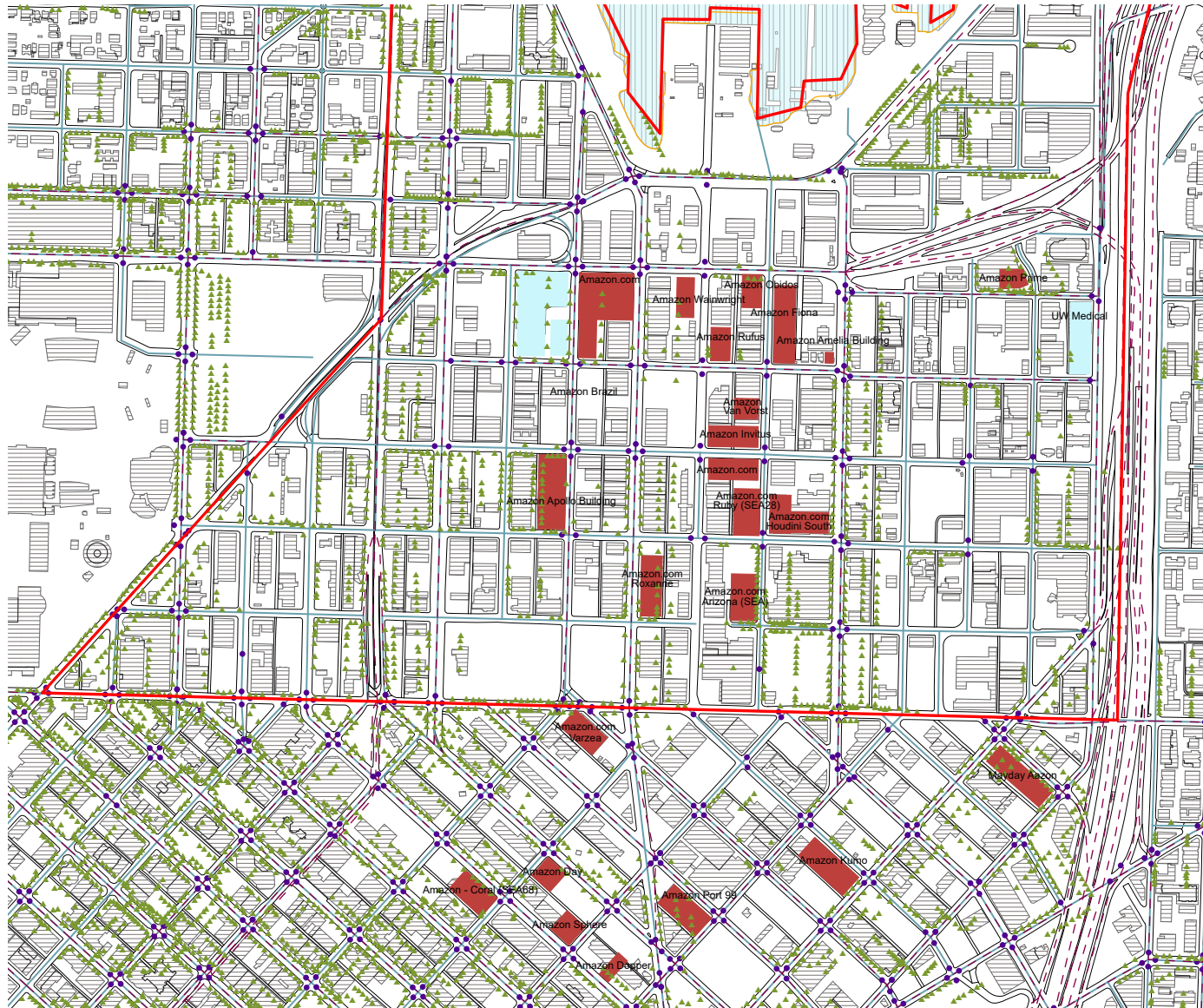


Fig38. Amazon Office Buildings 2018
Source: Wagda GIS Data

The next map shown in Figure 39 is a hand sketch of SLU area, showing that the author had access to when walking the neighborhood on foot. It is easy to walk into those places on the perimeter of the rectangular black lines, but inside of this boundary is mostly office buildings and streets. The highlighted areas become potential sites for the thesis design proposal. The intent in making this map is to understand how people are circulating through SLU. The public places marked on this map include: restaurants, stores, groceries, bus stop, churches, public arts, public storage, coffee, theaters, p-patch, parks and schools.

Based on this map certain public spaces are identified and assigned different values based on how often they are being used. For example, people spend more time in places like schools and parks, so these were given 2 stars instead of just one. In this study I created this map showing which parts of SLU are lacking in public activities. The map shown in Figure 41 is the final version of the people's circulation studies, the purple lines showing how people walk around SLU on the street, the thicker the line, the more people that gather there. The areas highlighted with a black rectangle show a lack of public activities and will be the potential sites for the thesis design.

2) Hand sketch map of public places

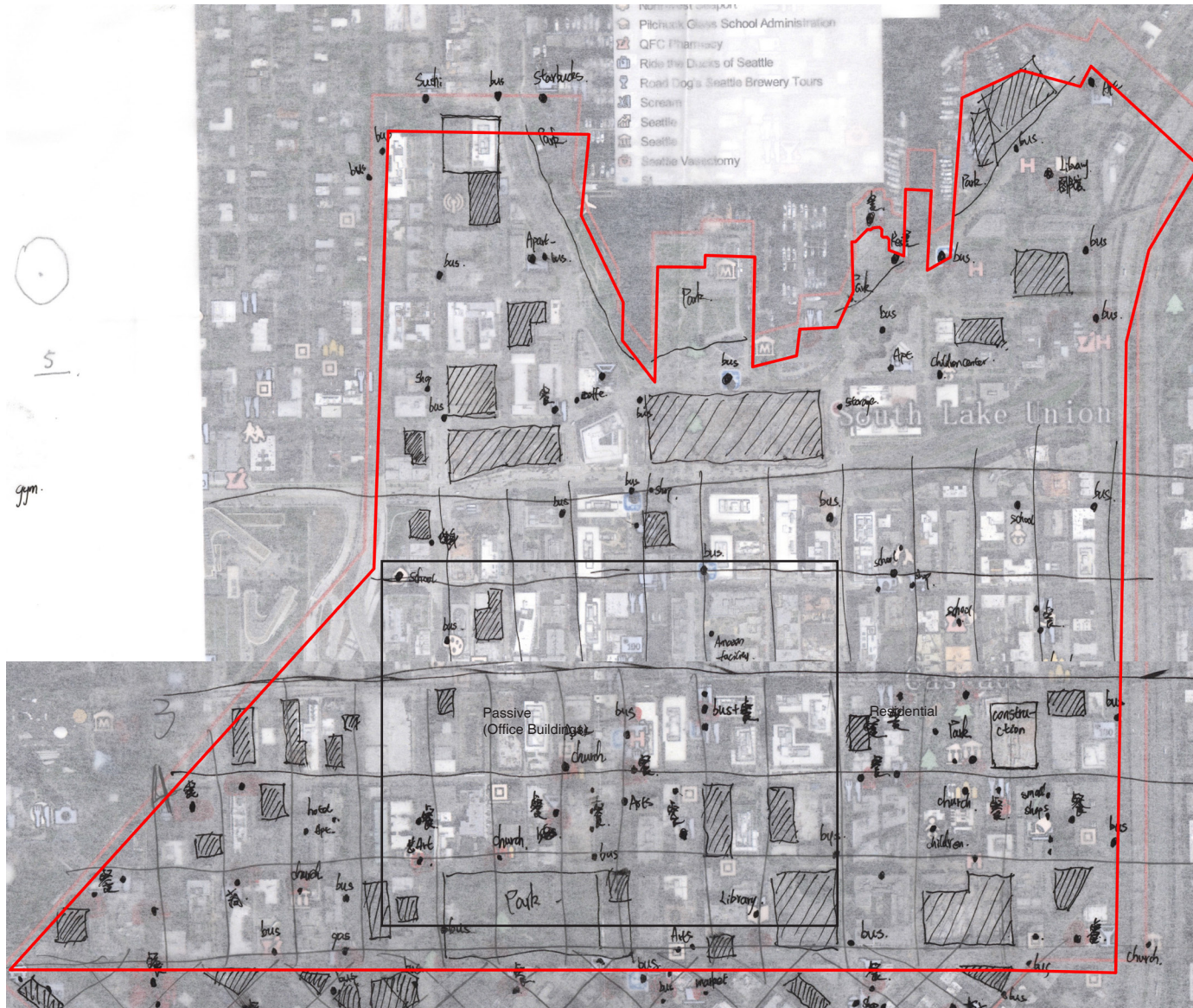
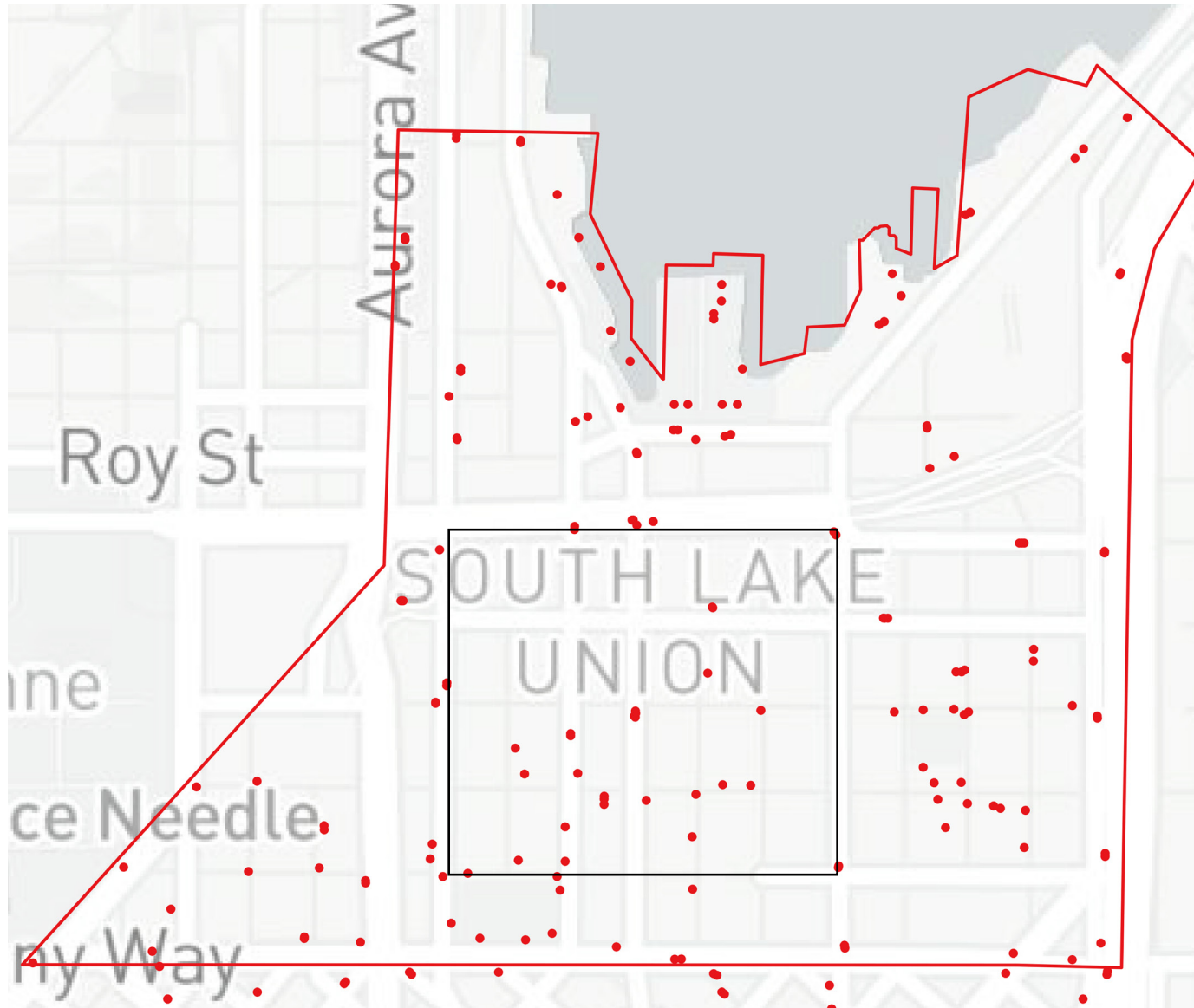


Fig.39 Public access places map

3) Places of public access mapping



- Restaurants, Stores, Groceries, Coffee
- Public storage, P-patch
- Bus stop, Churches, Public arts, Theaters
- Parks, Schools

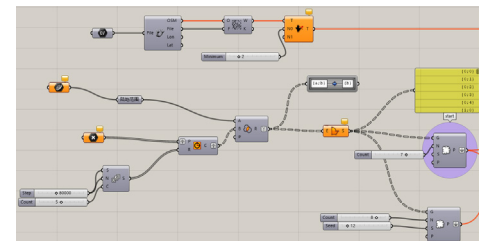


Fig.40 Places of public access
GH Source: Lvbianbian Wechat Account

4) Final version of people's circulation in SLU study

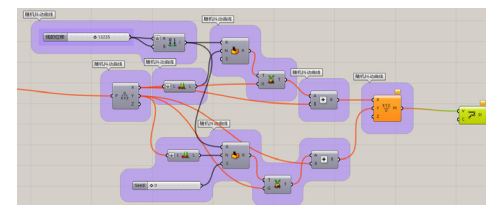
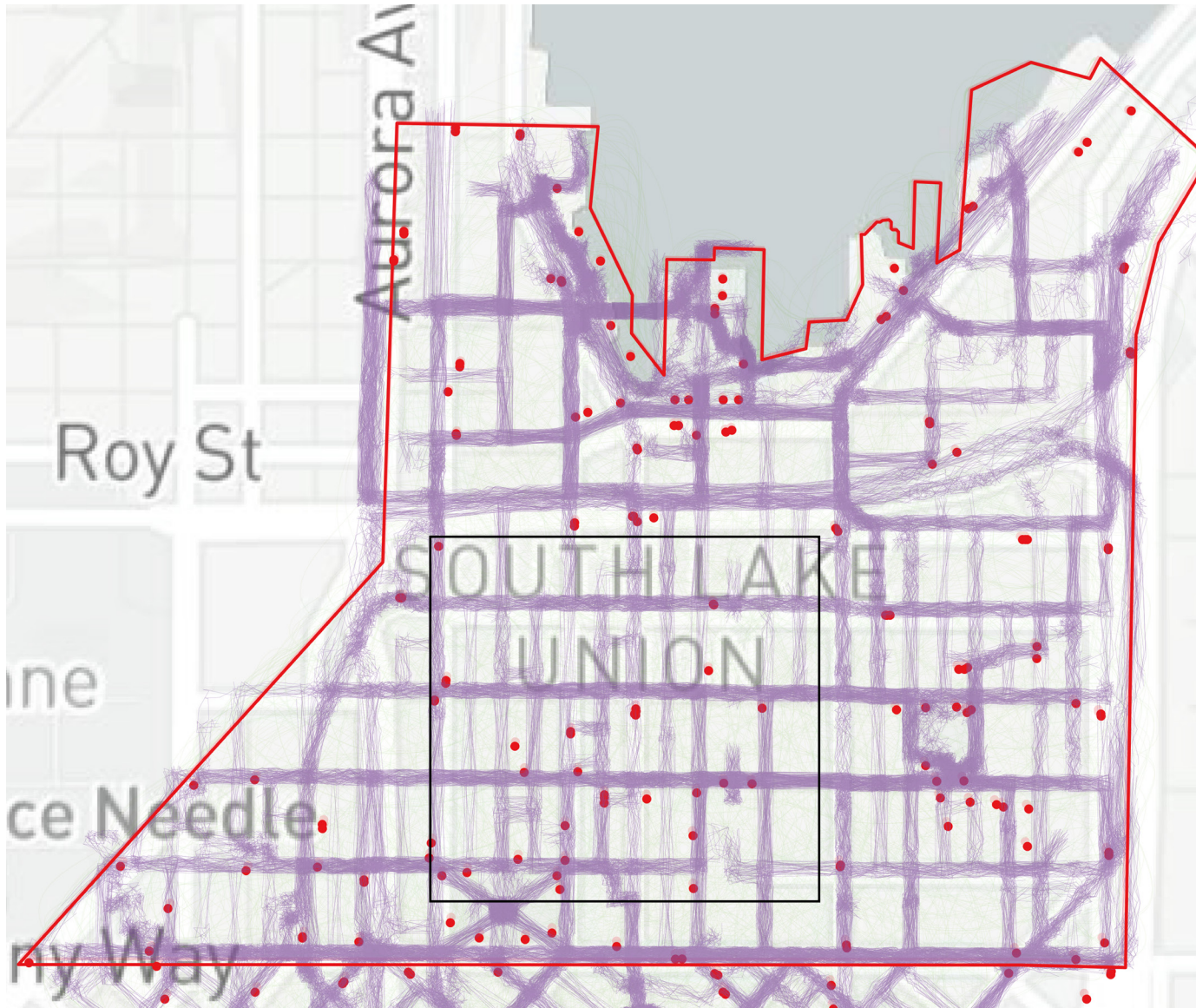


Fig.41 Informal walking path
GH Source: Lvbianbian Wechat Account

3.3. Site Selection and Analysis

The site selection process is based on the mapping studies from the previous chapters. It will identify the underutilized space in the highlighted area in order to create a network of amenities to provide better public space.

3.4. Program of Spaces

The high-tech enclave has created an isolated campus in SLU, segregating the neighborhood from the city. In order to reactivate underutilized spaces, the public network is “designed to maximize the opportunities to connect and enhance collaboration.”³² The idea is to increase spontaneous encounters in the neighborhood. The programs are also introduced based on the issues studied in the first chapter and the following list of characteristics: community, culture and commerce.

Community

Because of the loss of public life, community-oriented facilities should be introduced into SLU which may include a community workshop, shared garden, idea exchange center, or temporary facilities

32 Campbell-Dollaghan, Kelsey. “How the Tech Industry Is Quietly Changing the Face of American Cities.” *Gizmodo*, Gizmodo.com, 18 June 2013, www.gizmodo.com/how-the-tech-industry-is-quietly-changing-the-face-of-a-513266451.

like a public library or a resting space.

Culture

Because of the rapid development of high-tech offices and huge amount of high-tech workers in SLU, the diversity of public life has gradually been lost, and the imprint of history has failed to develop within the neighborhood. Cultural spaces including exhibition space, outdoor cinema and art exhibition will help to establish public life in this neighborhood.

Commerce

Because of the central location of the SLU, some commercial activities are still necessary. Food stands and informal markets are good choices due to the high volume of people working in this area.

The following Figures 42 and 43 portray the kind of programs proposed. These programs will be inserted into the public network transforming the underutilized spaces into a network of amenities that will serve as a place for people to experience the public spaces of the city.

For community, it uses as workshops, idea exchange centers, knowledge incubator. Culture can take place in exhibition, outdoor cinema and green space. For commerce, it could be food stand and informal markets. These programs will be inserted into the public network transforming

the underutilized spaces into a network of amenities that will serve as a place for people to experience the public life of the city.

Community:



Workshop:

- 1) Functions combined with partition
- 2) Versatile
- 3) Gathering celebration
- 4) Transformative
- 5) Educational interactive

Culture:



Outdoor Cinema:

- 1) Experience
- 2) Multi-functions
- 3) Gathering Celebration
- 4) Lights and Shows
- 5) Distinctive

Commerce:



Food stand:

- 1) Self-service
- 2) Linear space
- 3) Fast-paced
- 4) Versatile
- 5) Space definition

Fig.42 Programs based on the issues in response-1
Image source: InVisibleCities, Archdaily

Community:



Knowledge Incubator:

- 1)Exchange
- 2)Multi-functions
- 3)Meditation secret space
- 4)Operative
- 5)Intensive extensive

Culture:



Green Open Space:

- 1)Multi-functions
- 2)Flexible
- 3)Gathering celebration
- 4)Culture breathable
- 5)Sanctuary

Commerce:



Informal Market:

- 1)Art nature culture
- 2)Communication
- 3)Gathering celebration
- 4)Family
- 5)Space defining

Fig.43 Programs based on the issues in response-2
Image source: InVisibleCities, Archdaily

Chapter 4: Public Network Remaking and Proposed Architecture Design Interventions

4.1. Underutilized Space Identify and Site Selections

Based on the mapping studies in Chapter 3, the site selection process focuses on unutilized spaces which have the most potential to connect with and activate their surroundings. Several site typologies have been chosen to show the potential of underutilized spaces in these highlighted areas (See Figures 44 - 47).

1)Site typology: Mercer Street

Mercer street, as seen in the photographs, is a huge barrier that disconnects the northern side from the rest of the urban fabric of SLU. The Mercer street median is identified as a potential underutilized site.

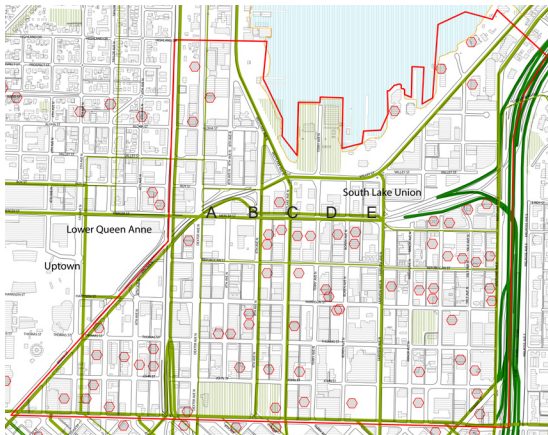


Fig.44 Street site typology: Mercer site
Image source: Wadga GIS Data, Google Street View



Site A



Site B



Site C



Site D



Site E

2)Site typology: Parking Lot

The second potential location are the parking lots. Because of its temporary use, these sites provide the potential to be activated during daytime and nighttime. Thus, value could be added to the space without tampering with the existing condition.

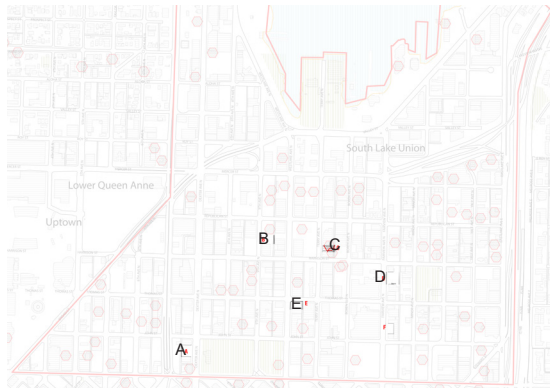


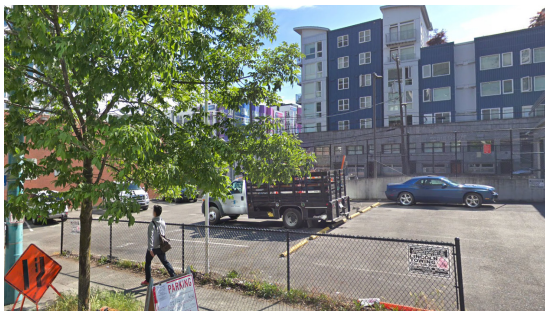
Fig.45 Site typology: Parking lots
Image source: Wadga GIS Data, Google Street View



Site A



Site B



Site C



Site D



Site E

3)Site typology: Alleys

While alleys are integral to functioning of the city at ground level, they have a lot of underutilized airspace. This gives them great potential for temporary architectural interventions.

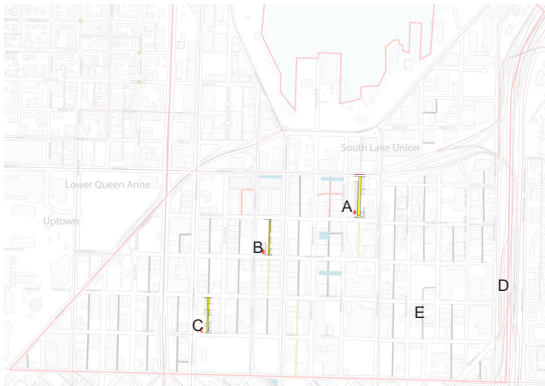


Fig46. Site typology: Alleys
Image source: Wadga GIS Data, Google Street View



Fig. Site A

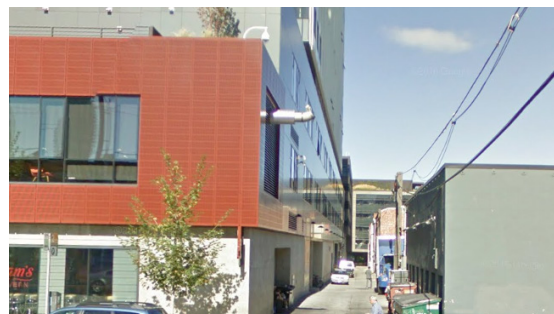


Fig. Site B



Fig. Site C

4)Site typology: Construction site

Lastly, construction sites offer great potential for interventions. Figure 47 show the construction scaffolding that occupies the pedestrian space which has potential for activation.



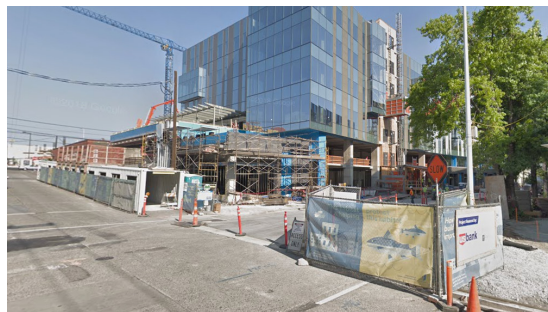
Fig.47 Site typology: construction site
Image source: Wadga GIS Data, Google Street View



Site A



Site B



Site C



Site D



Site E

4.2. Public Network Concept

With the selection of the sites, the next task was to connect them into a public network. The concept of the public network starts from a sketch of the SLU area. Many of the existing public parks exist in the perimeter of SLU. The red rectangle as mentioned in the mapping studies which is in the middle (see Figure 49) shows the potential area of intervention for my temporary architecture design. The image below (Figure 48) shows the potential location of these underutilized spaces.

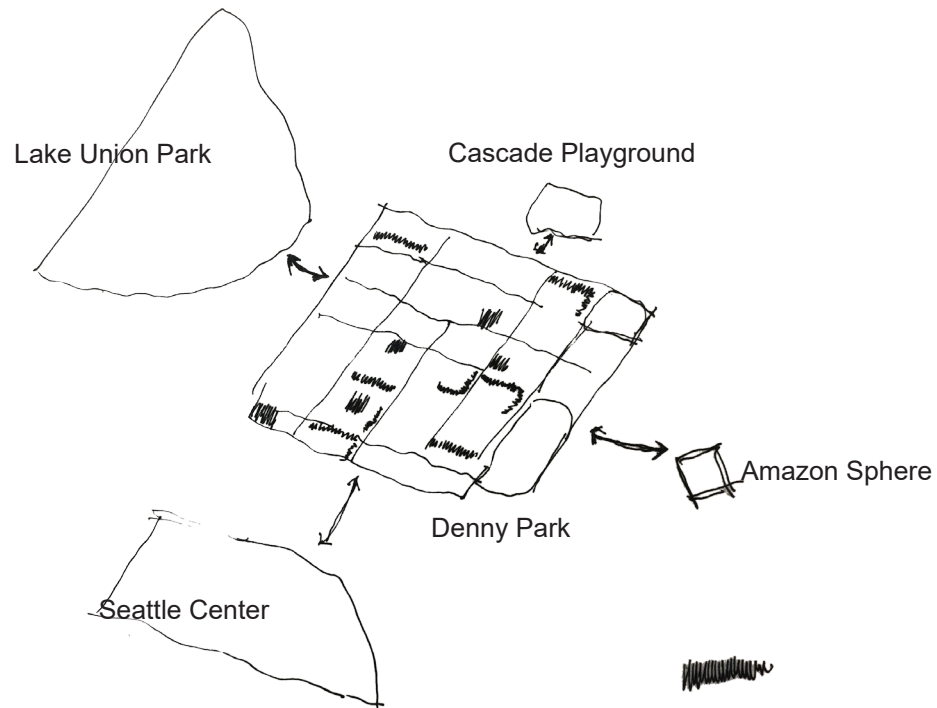


Fig48. Network concept sketch

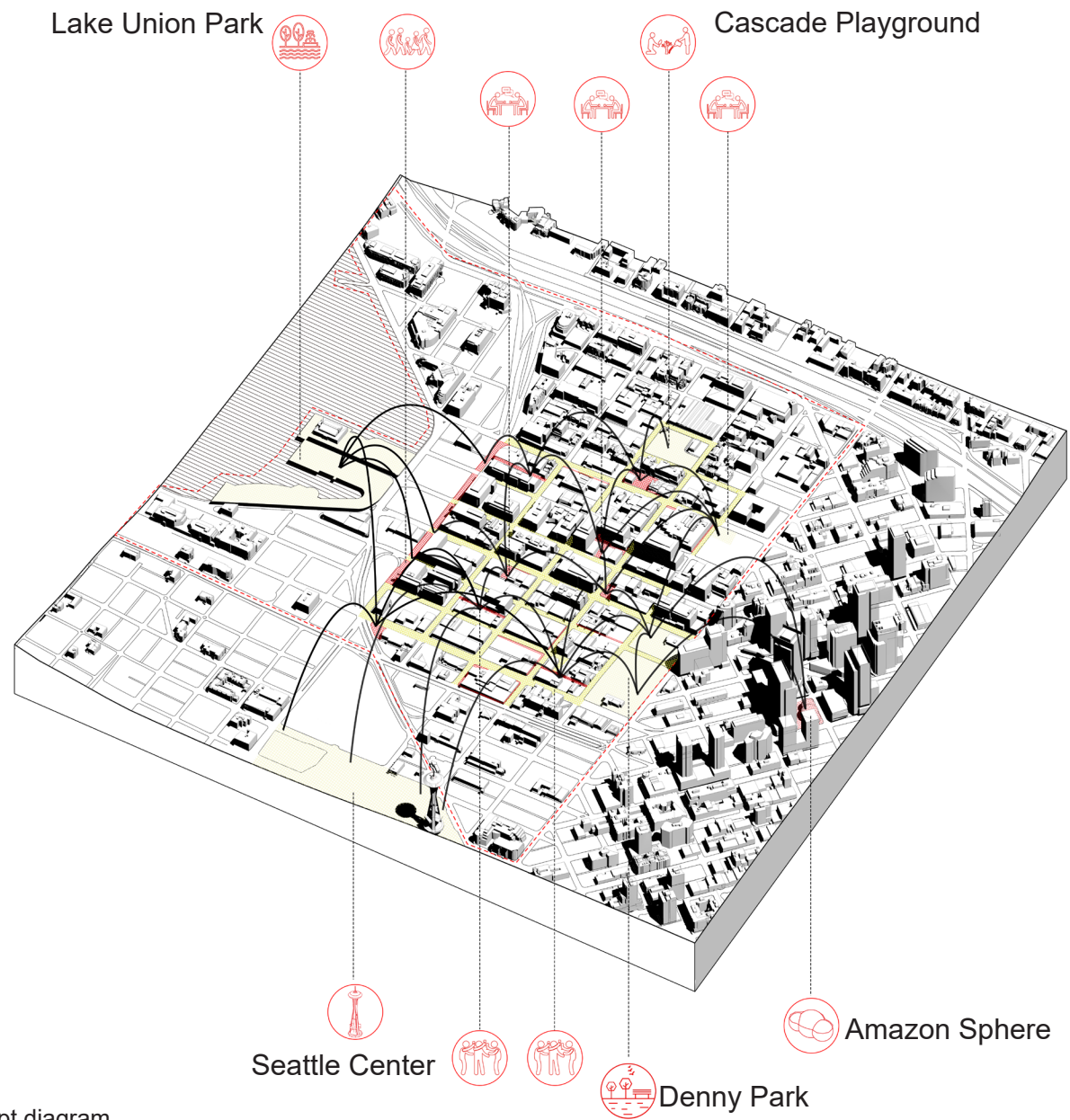


Fig49. Network concept diagram

4.3. Initial Design Concept

The proposed public network of temporary architecture is to serve the SLU neighborhood to create a changed experience of public life. Inspired by the current transformation of SLU, the project proposes a flexible, visible network, where multiple activities happen simultaneously to activate the spaces. The proposal combines these characteristics of spontaneity and daily life; "Temporary, transportable architecture – also referred to as temporary structures - has functioned as a reliable barometer of spatial design for centuries."³³

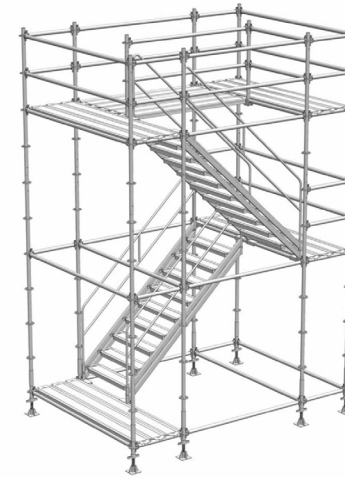
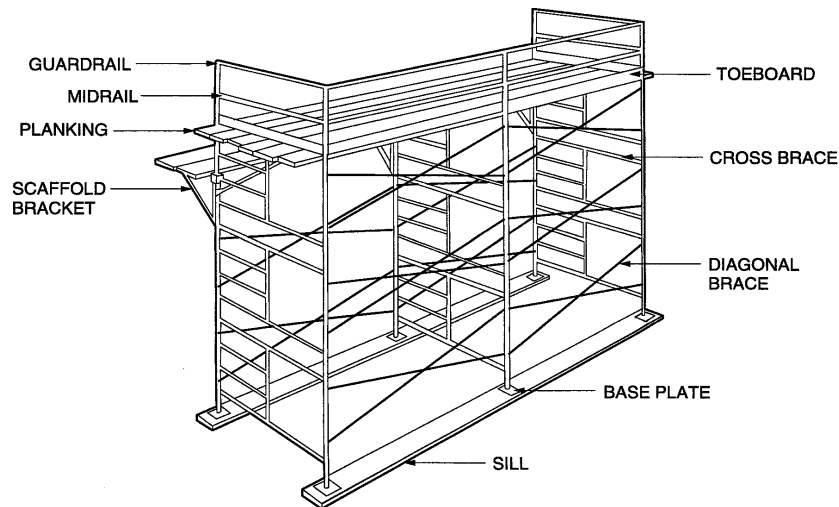


Fig50. Some scaffolding structures on construction site
Image sources: Vancouver's Best Painters

33 Burkhardt Leitner Constructiv GmbH. Temporary architecture, *Burkhardt Leitner Constructiv; Ludwigsburg : Avedition*. 2011 Stuttgart : Burkhardt Leitner Constructiv.

The design concept of this thesis is to advertise flexibility as the solution. The design employs a lightweight scaffolding structure which can be inserted in any of the chosen sites mentioned previously. The loblolly house which was designed by Kieran Timberlake located in Taylors Island, Maryland serves as a case study.



Fig51. Temporary structures from Loblolly House
Image sources: Loblolly House, Elements of A new Architecture

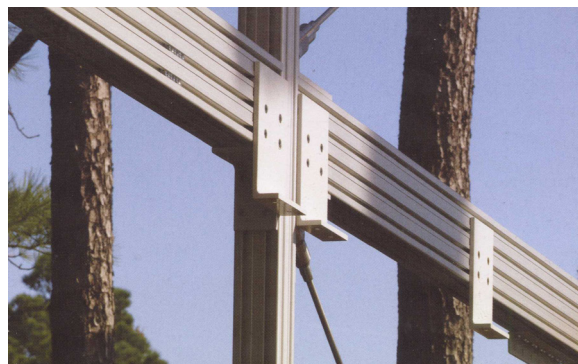
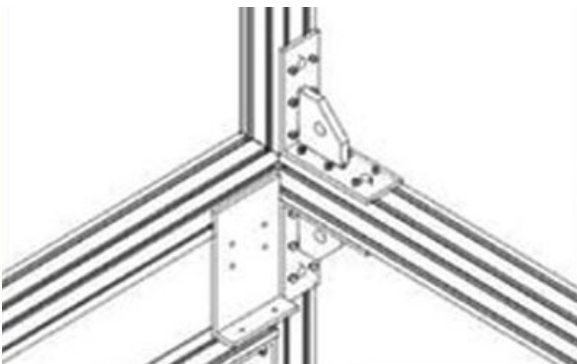


Fig52. Temporary structures joints from Loblolly House
Image sources: Loblolly House, Elements of A new Architecture

Figure 53 shows some tectonic studies from the Loblolly house scaffolding structure assembly of Loblolly House in order to have a better understanding of temporary structures. They also provide precedents of materials which could be used for the projects.

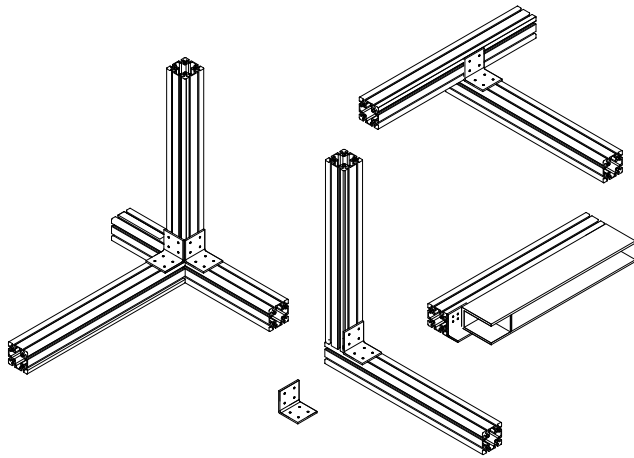


Fig53. Studies from Loblolly house scaffolding structure assembly

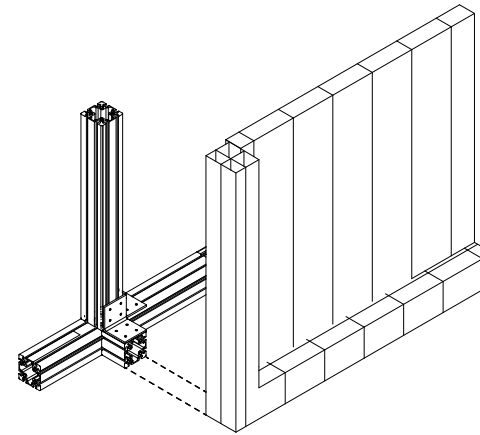


Fig54. Extruded olanlar polycarbonate sheet assembly diagrams

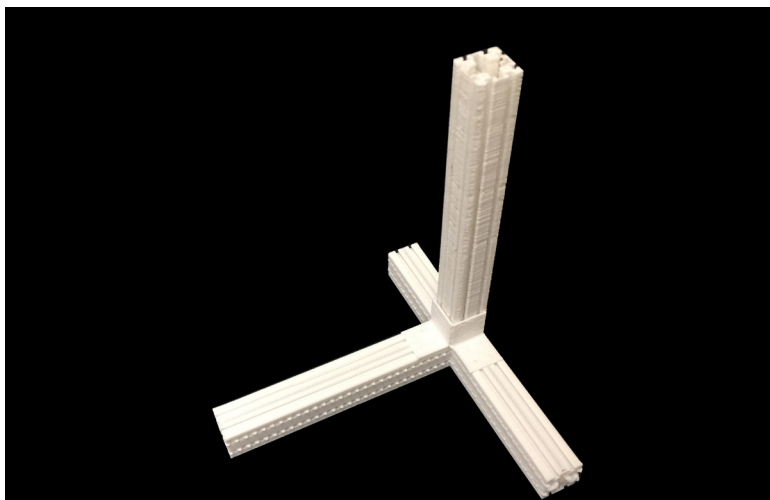


Fig55. 3D print joints studies

Another important design concept relates to the nighttime activities. On evenings and weekends, the SLU area feels like a ghost town. An lighting event named BOREALIS (Figure 56) was recently launched in SLU and was a spectacular success. It gathered people together to enjoy and celebrate the local community, and is also another way to highlight the essence and the cultural characteristics of the area.

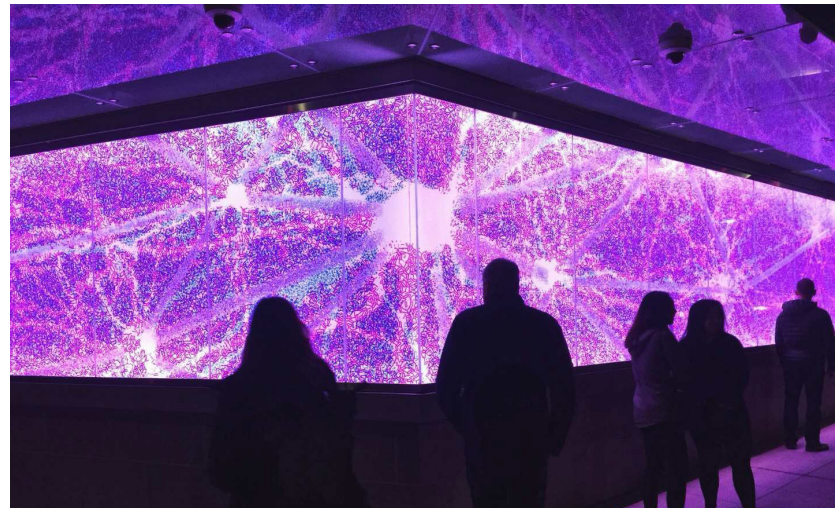


Fig56. BOREALIS lighting festival in SLU

Design concept for each site typology:

1) Street in the middle: Mercer concept drawing

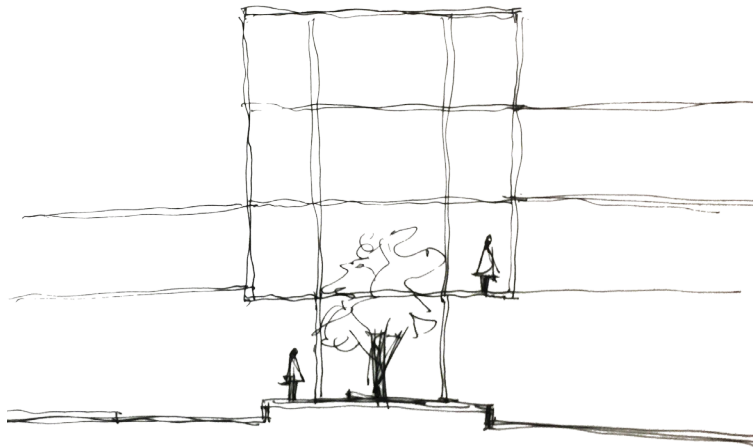


Fig57. Street in the middle: Mercer concept drawing

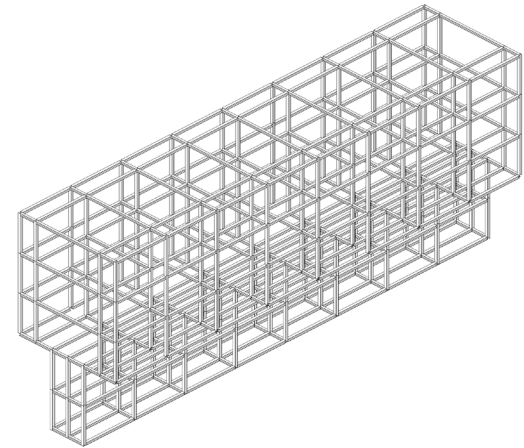


Fig58. Modular structure

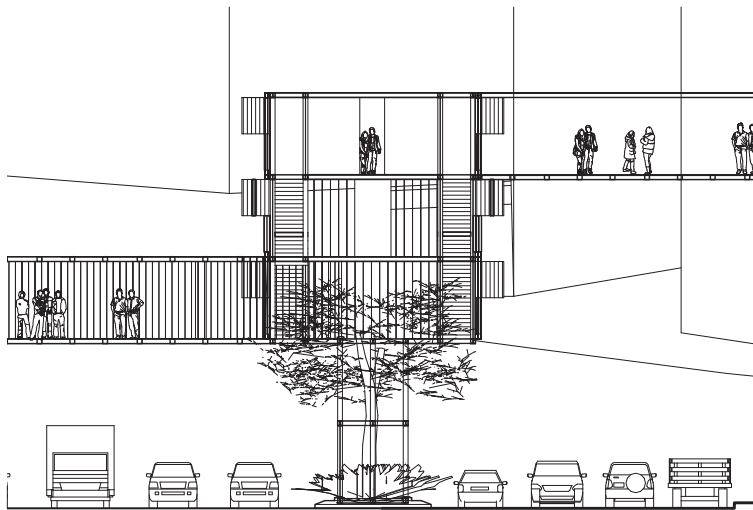


Fig59. Street sections

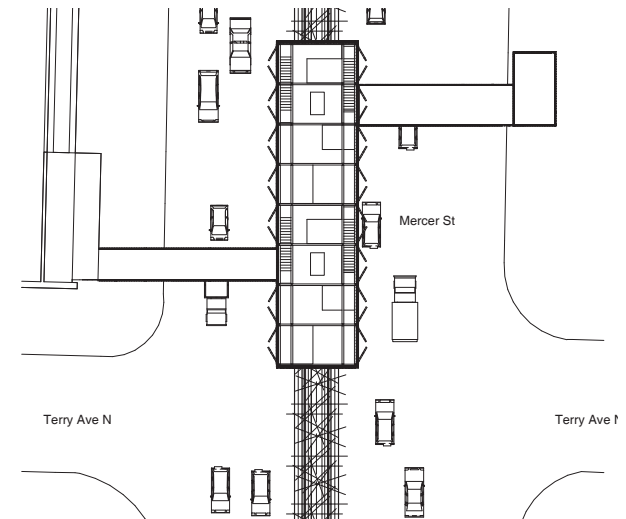


Fig60. Site plan

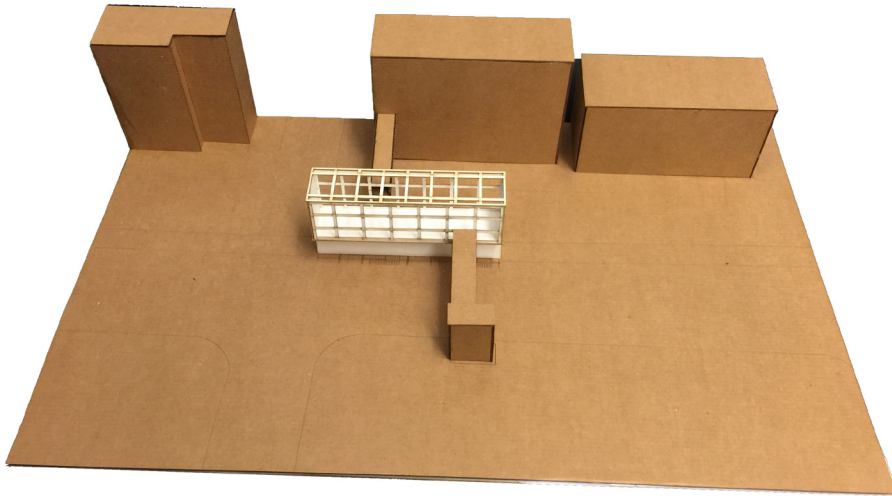


Fig61. Physical site model studies

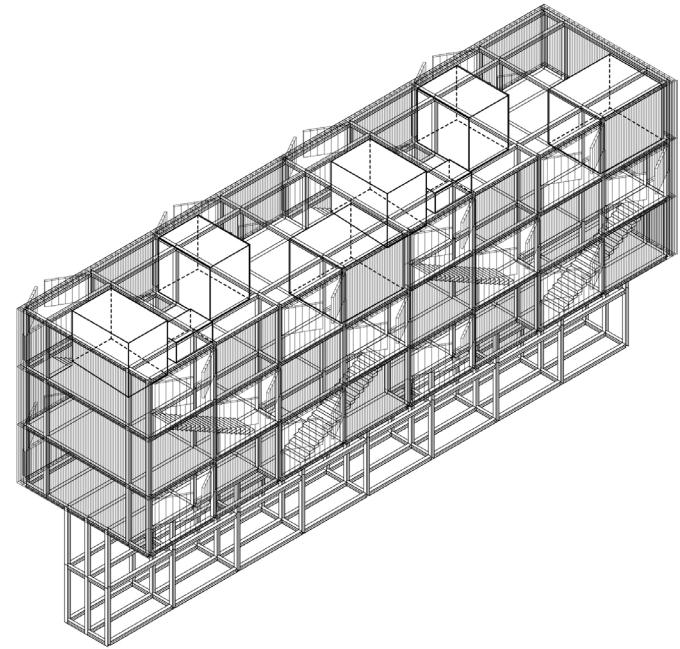


Fig62. Axnom view

As shown in Figures 57 - 62, the first site typology concept for Mercer street is to place a modular structure system in middle of the street that seeks to take advantage of the space above the road median without disrupting the existing conditions and reducing the impact for traffics.

2) Parking lots concept drawing

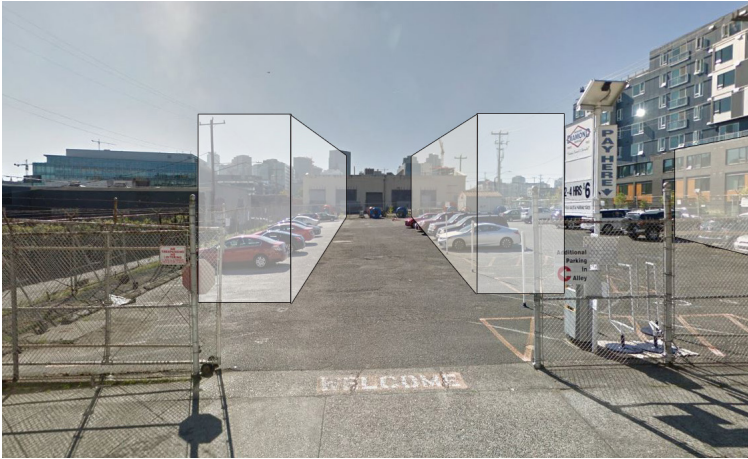


Fig63. Parking lots concept drawing

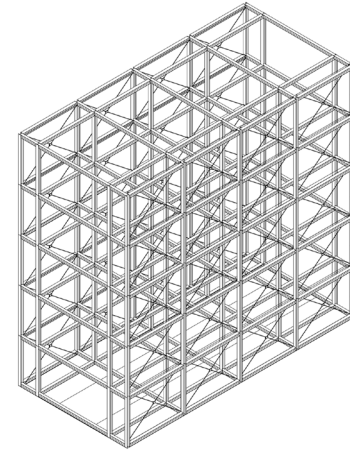


Fig64. Modular structure

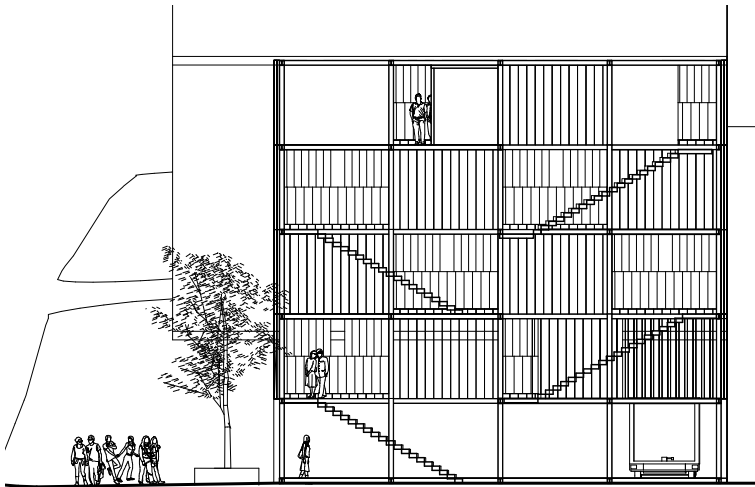


Fig65. Street sections

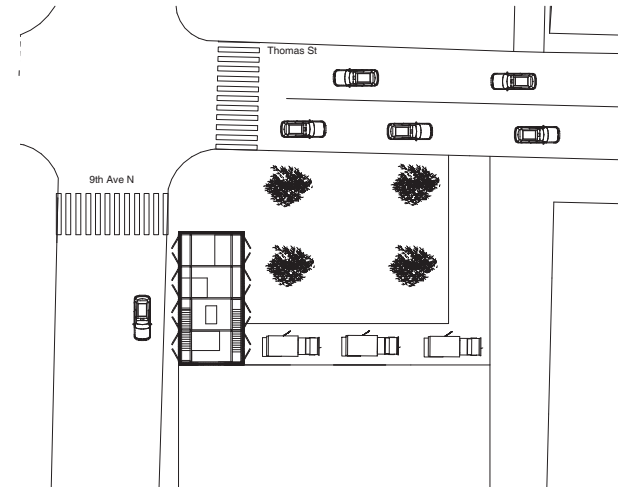


Fig66. Site plan

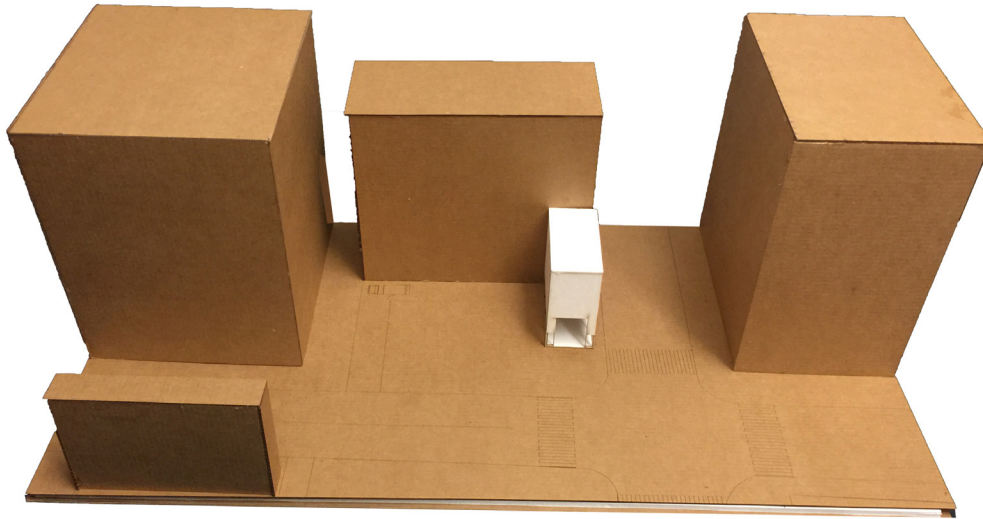


Fig67. Physical site model studies

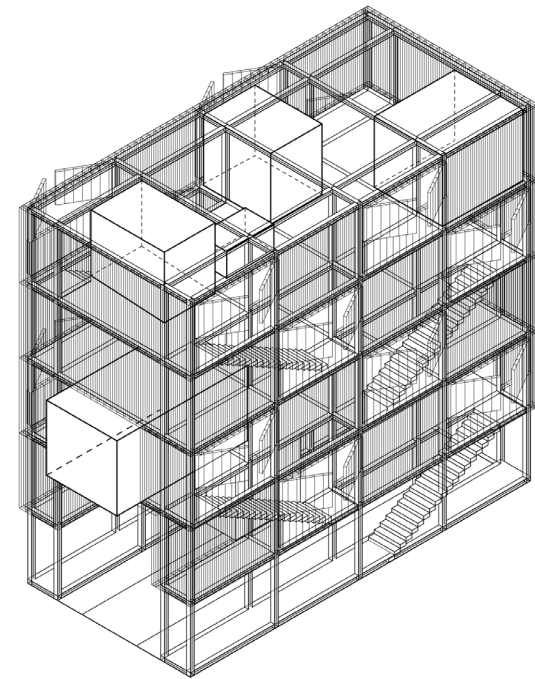


Fig68. Axnom view

As shown in Figures 63 - 68, the second concept for the parking typology is to locate on the existing parking lots and use the minimum space, the designs are more about using the space above the parking lots. The strategy is also using the modular structure so that parking functions are not interrupted, either.

3) Parking lots concept drawing



Fig69. Parking lots concept drawing

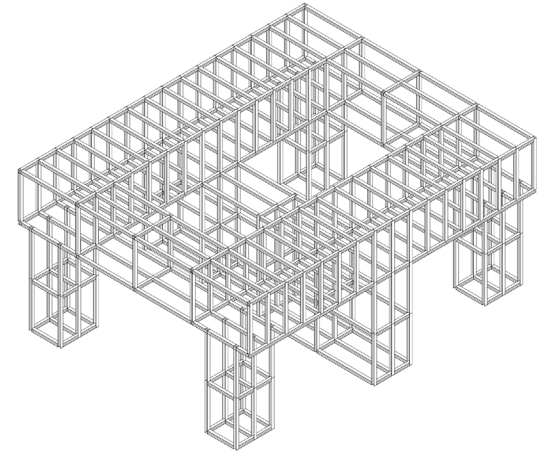


Fig70. Modular structure

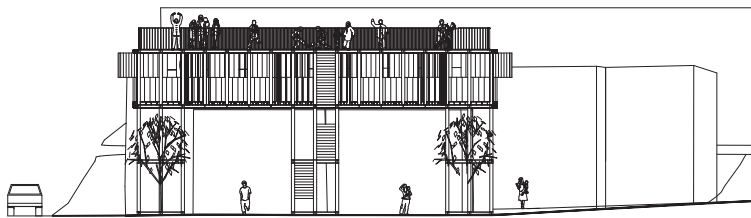


Fig71. Street sections

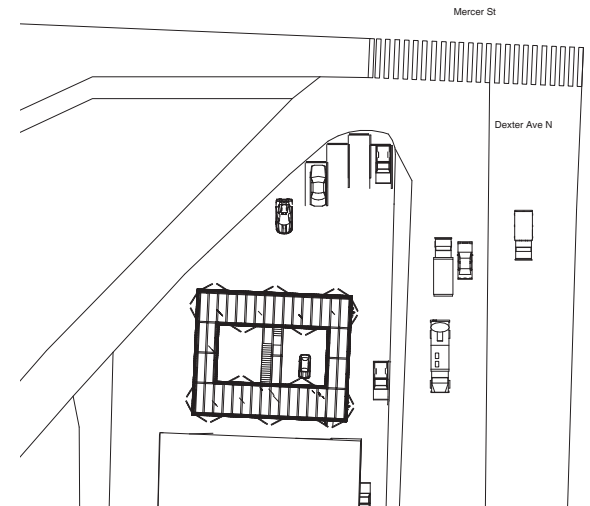


Fig72. Site plan

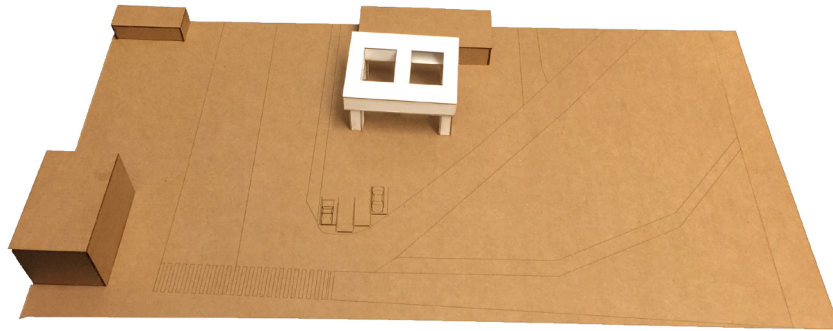


Fig73. Physical site model studies

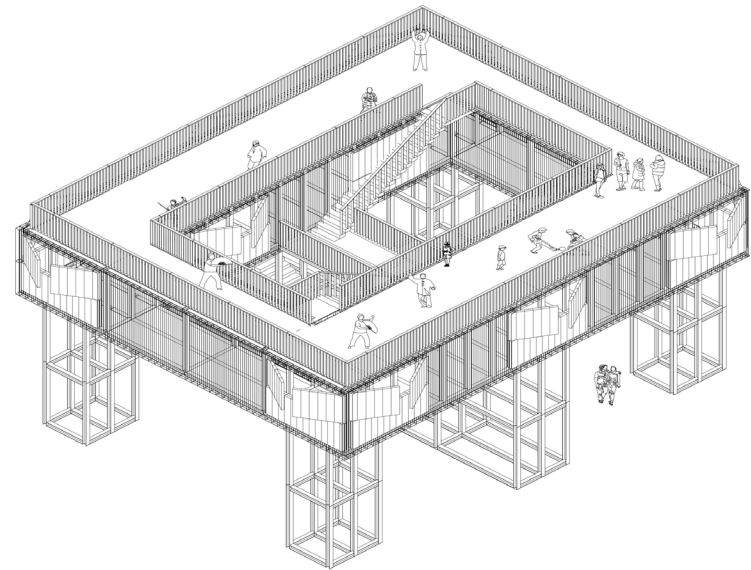


Fig74. Axonometric view

As shown in Figures 69 - 74 above, the third concept for another parking lots site is similar to the second one. Because it is located in different places, the modular structure system is slightly different, this specific one is occupying more space on the ground but retains its the same parking lots function as well.

4) Alley concept drawing



Fig75. Alley concept drawing

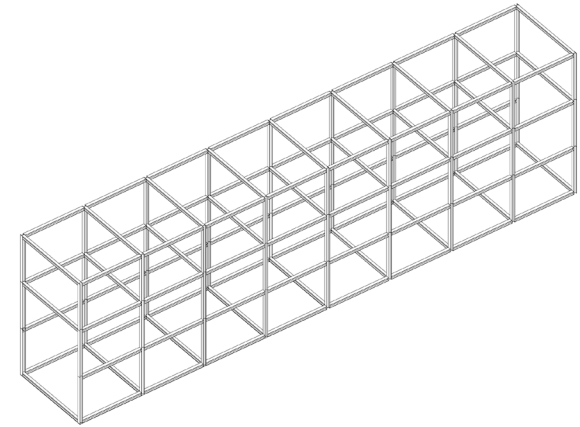


Fig76. Modular structure

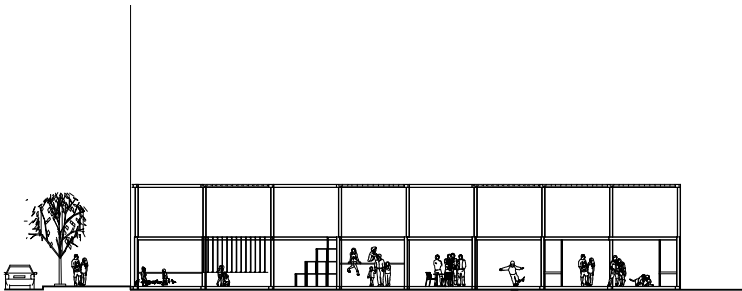


Fig77. Street sections

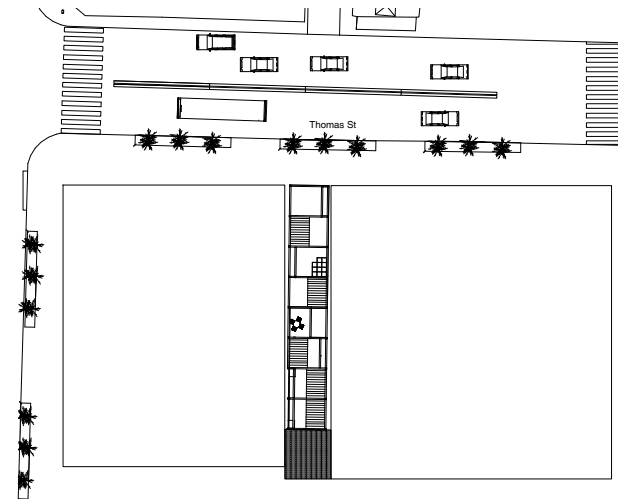


Fig78. Site plan

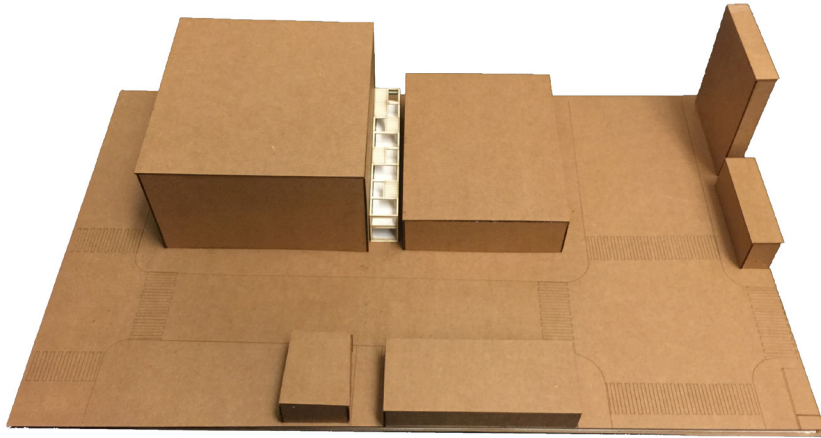


Fig79. Physical site model studies

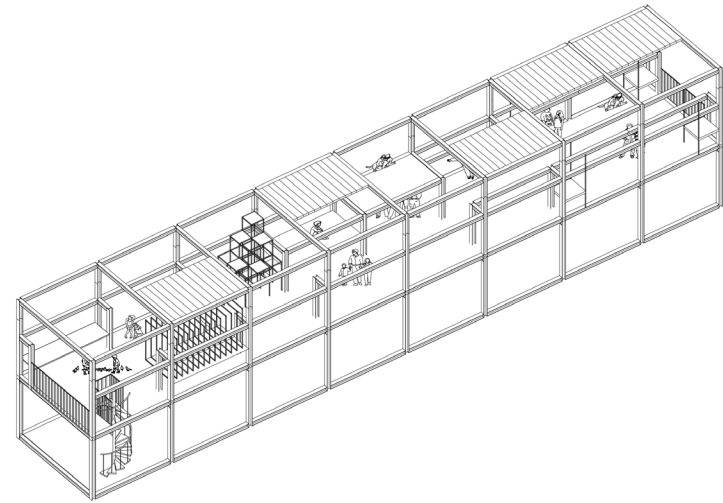


Fig80. Axnom view

As shown in Figures 75 - 80, the fourth concept for the alley site typology is to utilize airspace without disrupting the alley functions. The modular structure system will have the least impact on the ground because the ground conditions are essential to alleys.

5)Construction site concept drawing

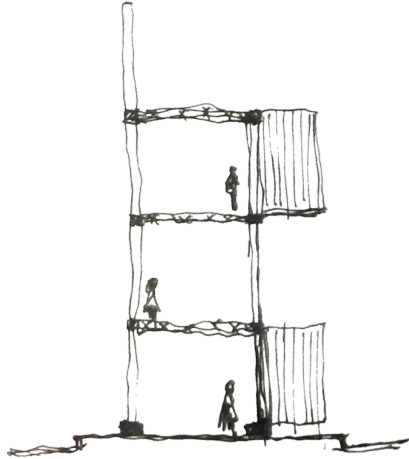


Fig81. Constuction site concept drawing

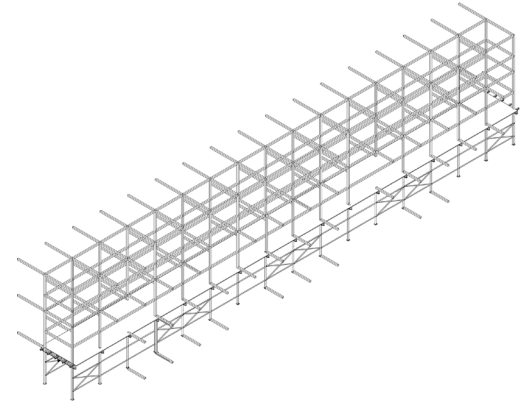


Fig82. Modular structure

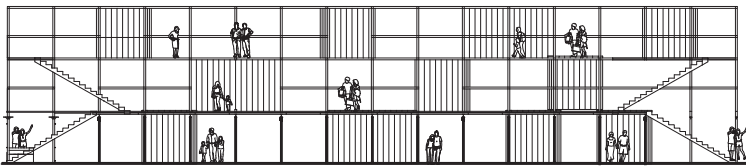


Fig83. Street sections

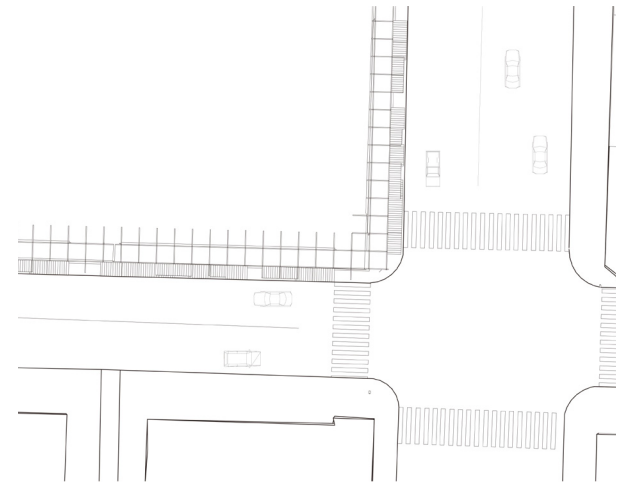


Fig84. Site plan

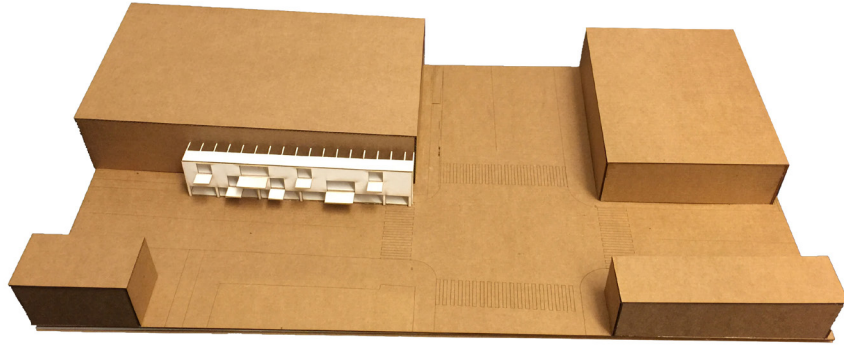


Fig85. Physical site model studies

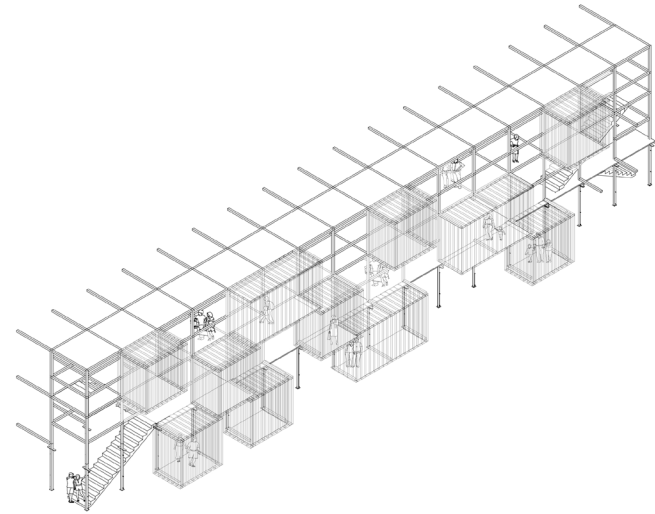


Fig86. Axnom view

As shown in Figures 81 - 86, the last site typology concept for the construction site is to make full use of the existing scaffolding structure and propose a multilevel temporary building programs growing off the sidewalk. The ground condition will still be the safety hub for the pedestrians, the upper levels will have more culture and community programs.

4.4. Proposed Temporary Architecture Designs

1) Mercer street

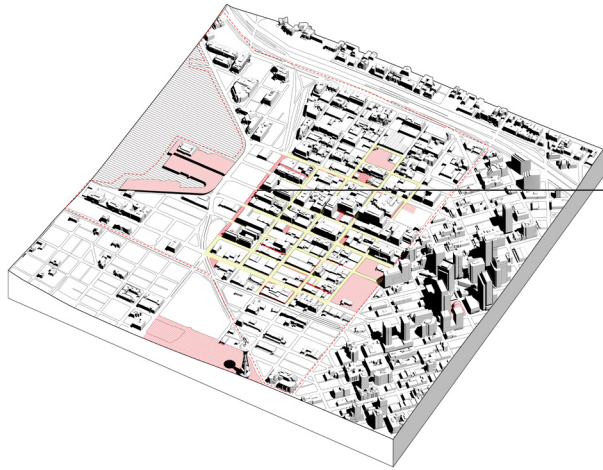


Fig87. Site location



Fig.88 View from Mercer street N
Image sources: Google Street View

As mentioned, Mercer Street serves the urban fabric of SLU. The heavy traffic disconnects the two sides of the road. The structure is placed on the road median without disrupting the traffic patterns and provides a pedestrian connection for the two sides of the road (see Figures 89 - 90).



Fig.89 Street view



Fig.90 Pedestrian bridge

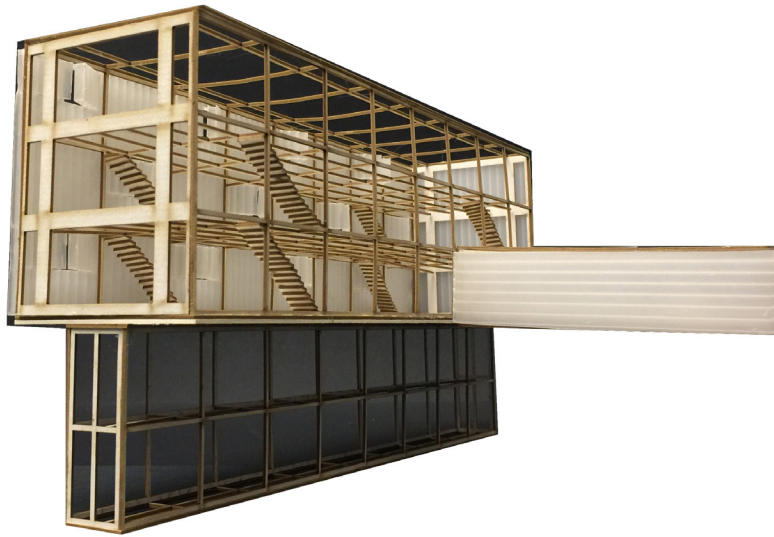


Fig.91 Physical models



Fig.92 2nd floor: Culture & Community

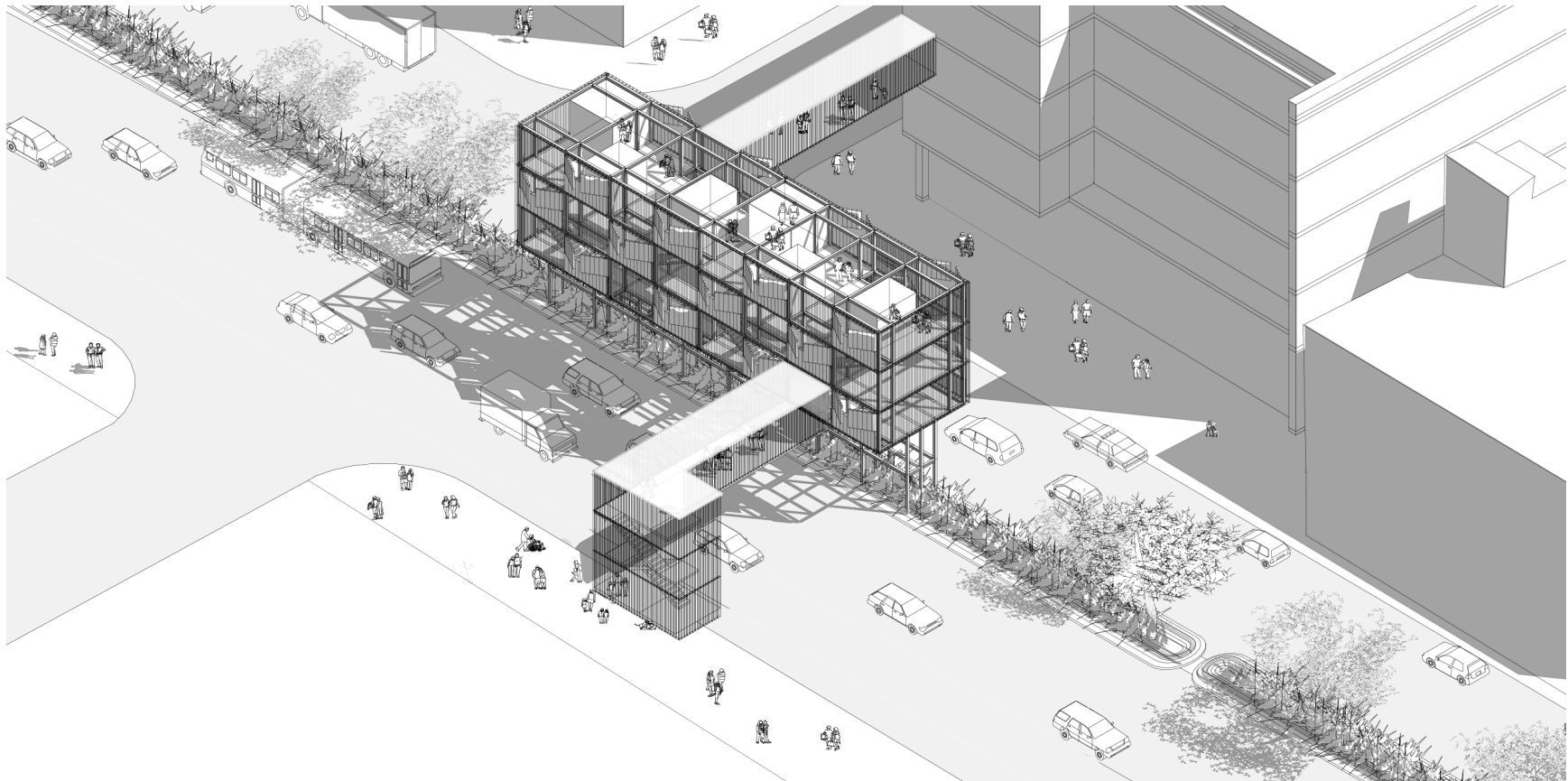


Fig.93 Aerial view daytime

The daytime rendering (Figure 93) shows the proposed project in the urban context and the connections to the buildings and roads. The nighttime rendering (Figure 94) shows how the LED lights on the street edges during night is used to provide directions.

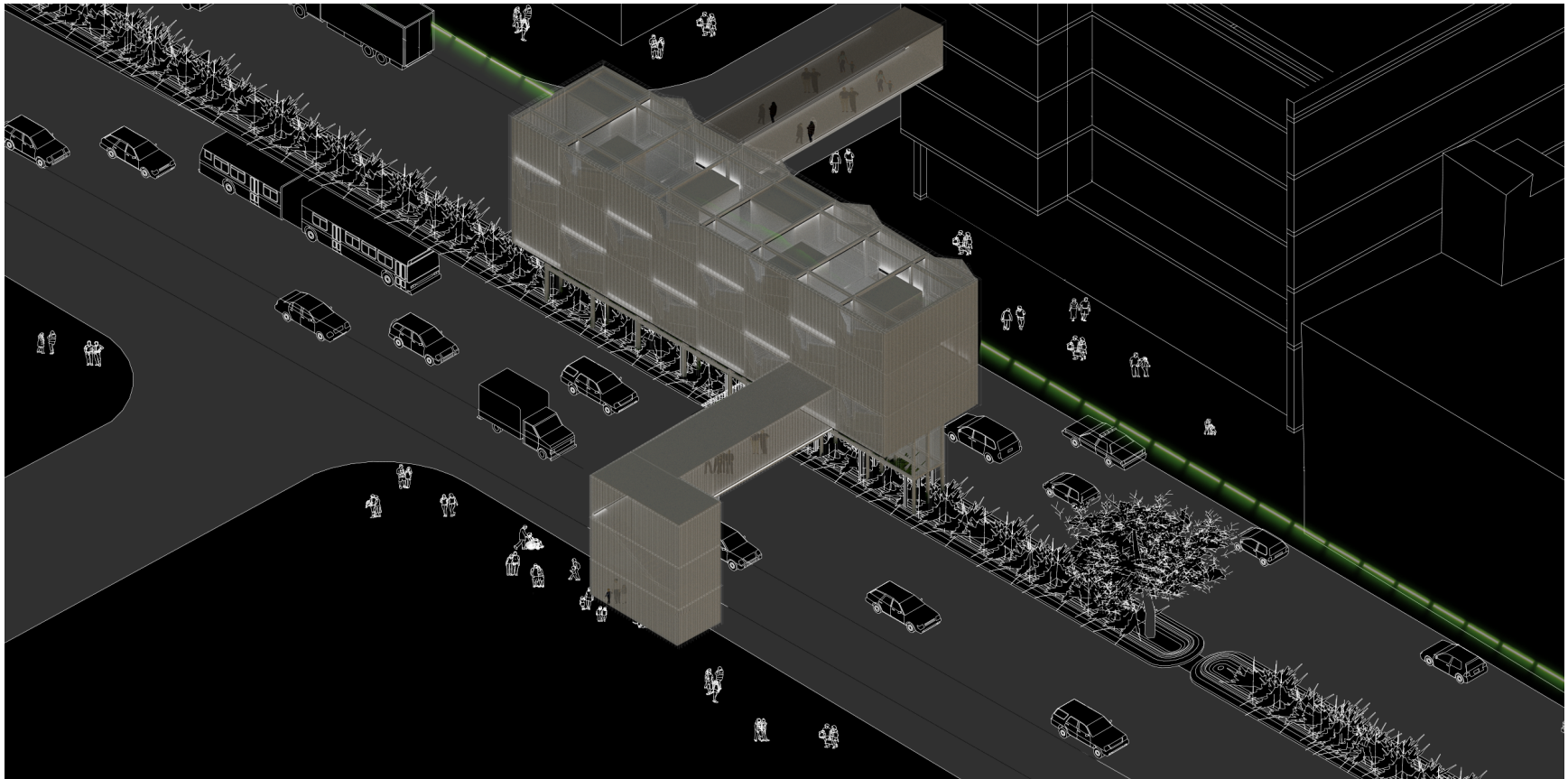


Fig. 94 Aerial view nighttime

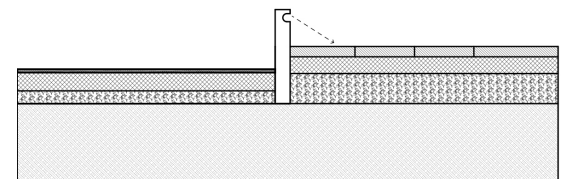


Fig.95 LED recessed tectonic drawings



Fig.96 Street view daytime

The view from the southern side of the street, illustrates the signage providing directions to the next nearest interventions while connecting people to the public network.

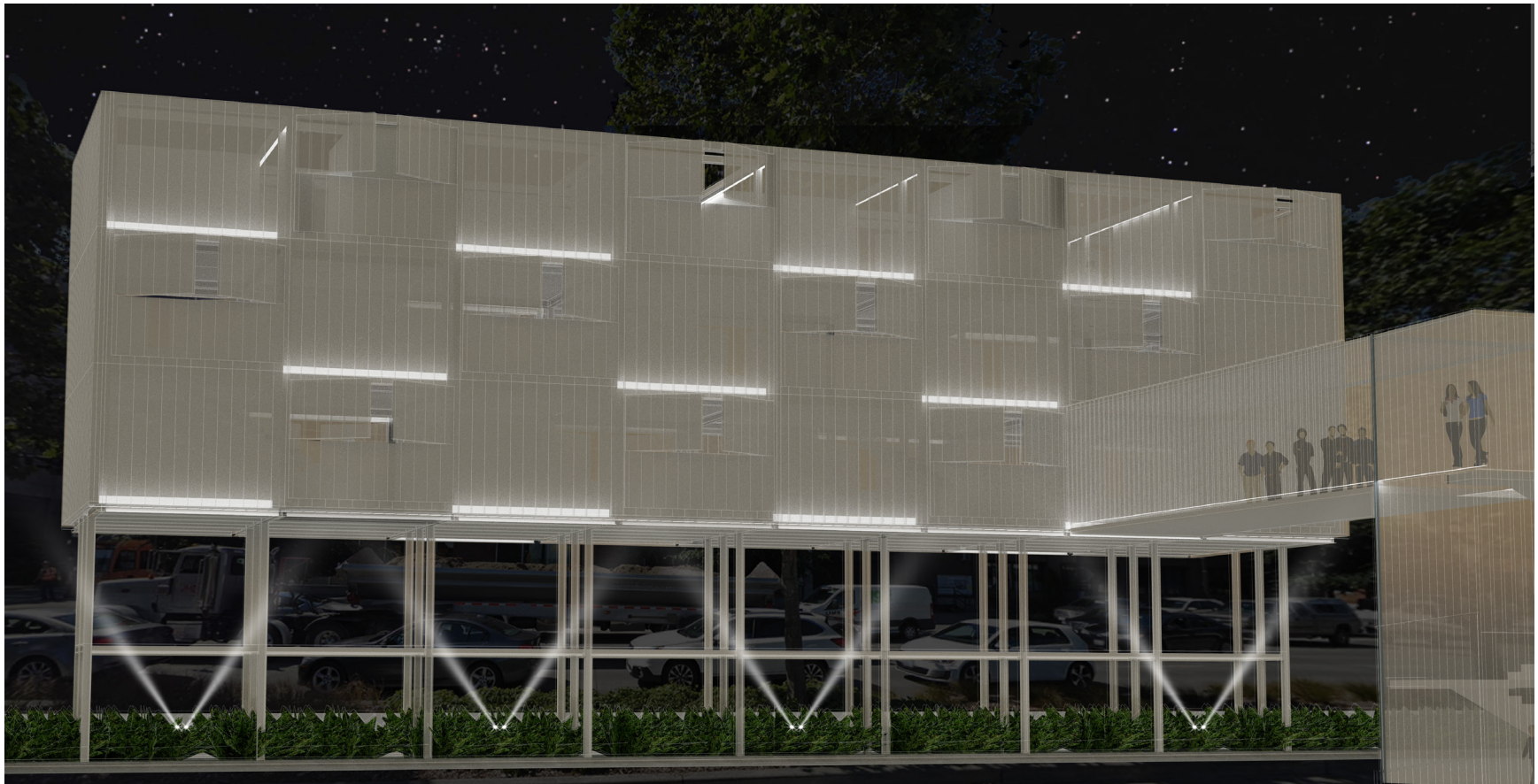


Fig.97 Street view nighttime

2) Parking lots

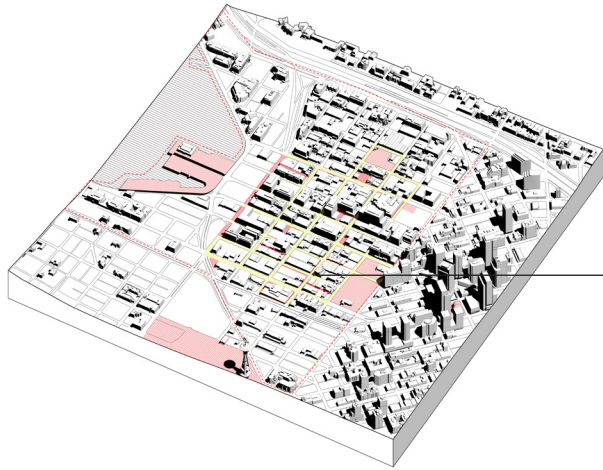


Fig.98 Site location

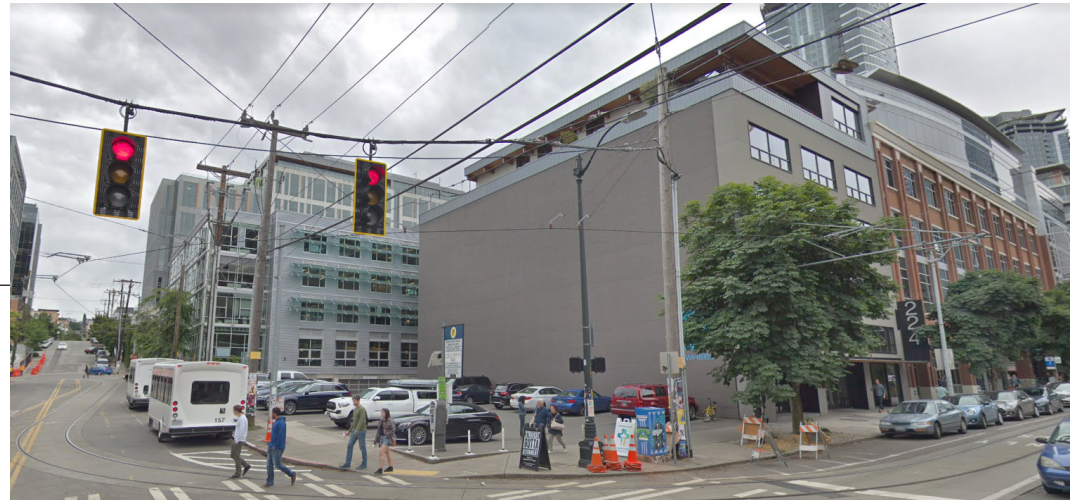


Fig.99 View from Thomas Street

As mentioned previously, parking lots offer significant potential because of their temporary day usage. The image (Figure 101) on the next page reimagines parking as both an event space along with its daily parking function that is made possible by the modular space created by the scaffolding structures.

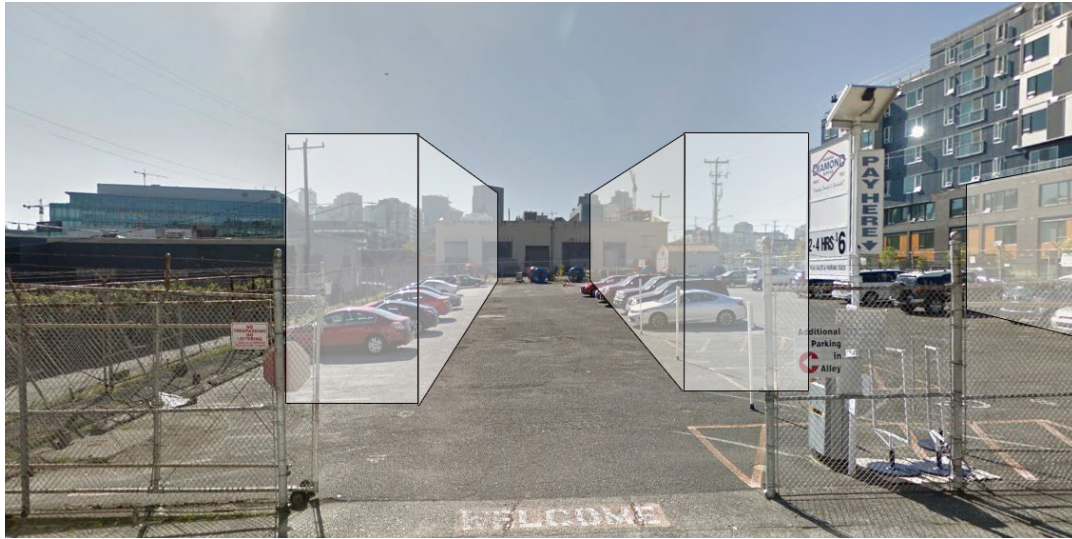


Fig.100 Concept drawings



Fig.101 1st floor: Commerce



Fig.102 3rd floor: Culture & Community



Fig.103 2nd floor: Culture & Community

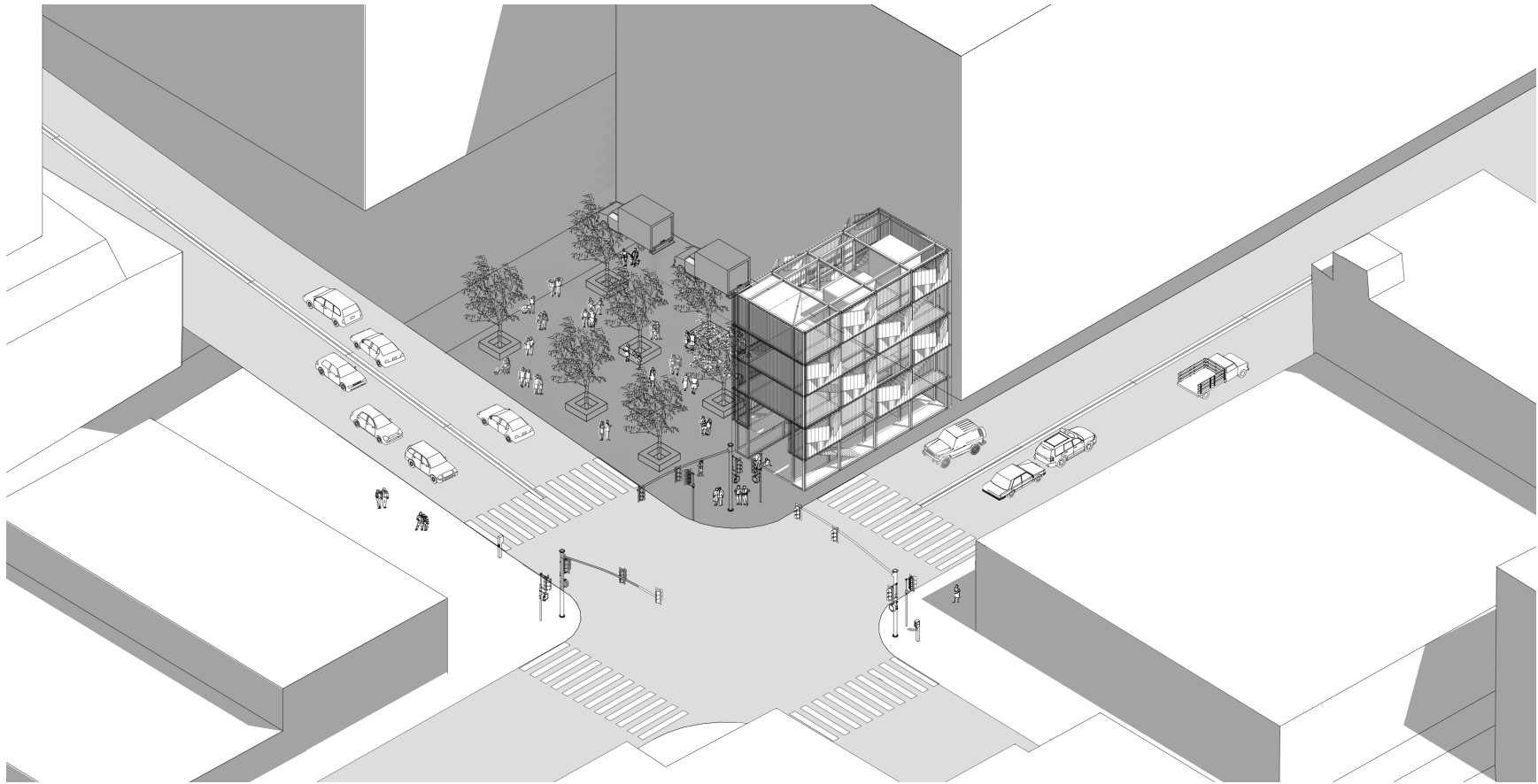


Fig.104 Aerial view daytime

The daytime rendering (Figure 104) shows the project in the urban context. The nighttime rendering (Figure 105) shows the LED lights is used to provide directions.

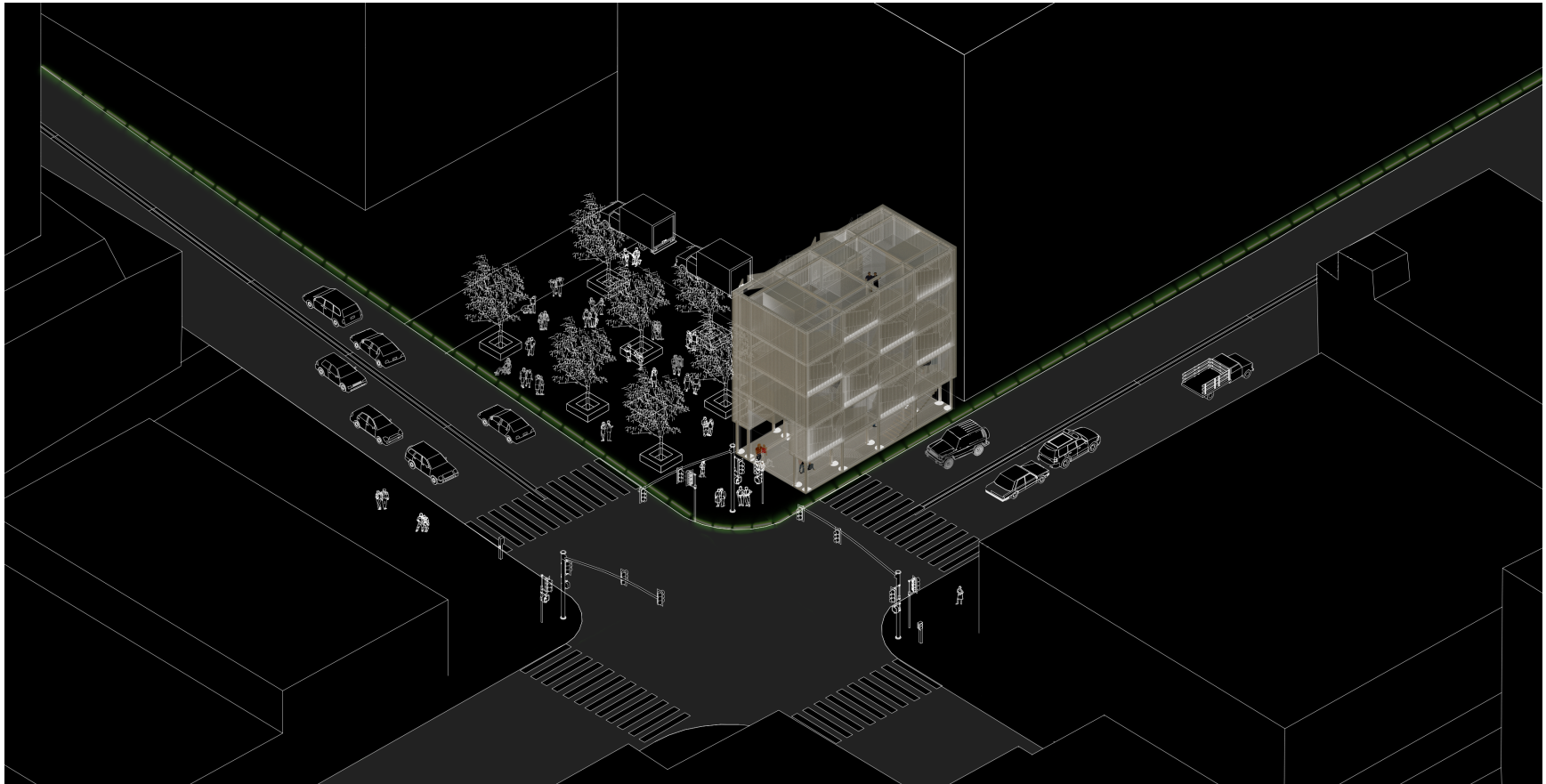


Fig.105 Aerial view nighttime



Fig.106 Street view daytime



Fig.107 Street view nighttime

3) Parking lots

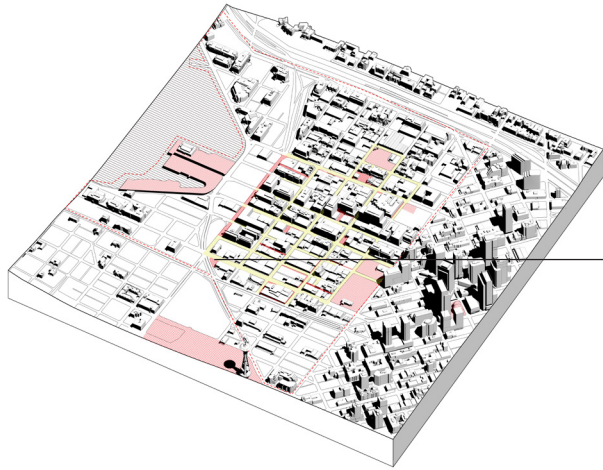


Fig108. Site location



Fig.109 View from Mercer Street

The parking lot site at Dexter Ave N has a very different character as it is along a less busy vehicular street. This corner block has a large amount of foot traffic being near the intersection and also has access to much sunlight and airspace. The image (Figure 111) on the next page reimagines parking as secondary to human activities (Figure 112) and the following image (Figure 113) also shows the use of the modular spaces created by the scaffolding structures.



Fig.110 Concept drawings



Fig111. 1st floor: Parking



Fig112. 3rd floor: Culture & Community



Fig113. 2nd floor: Culture & Community

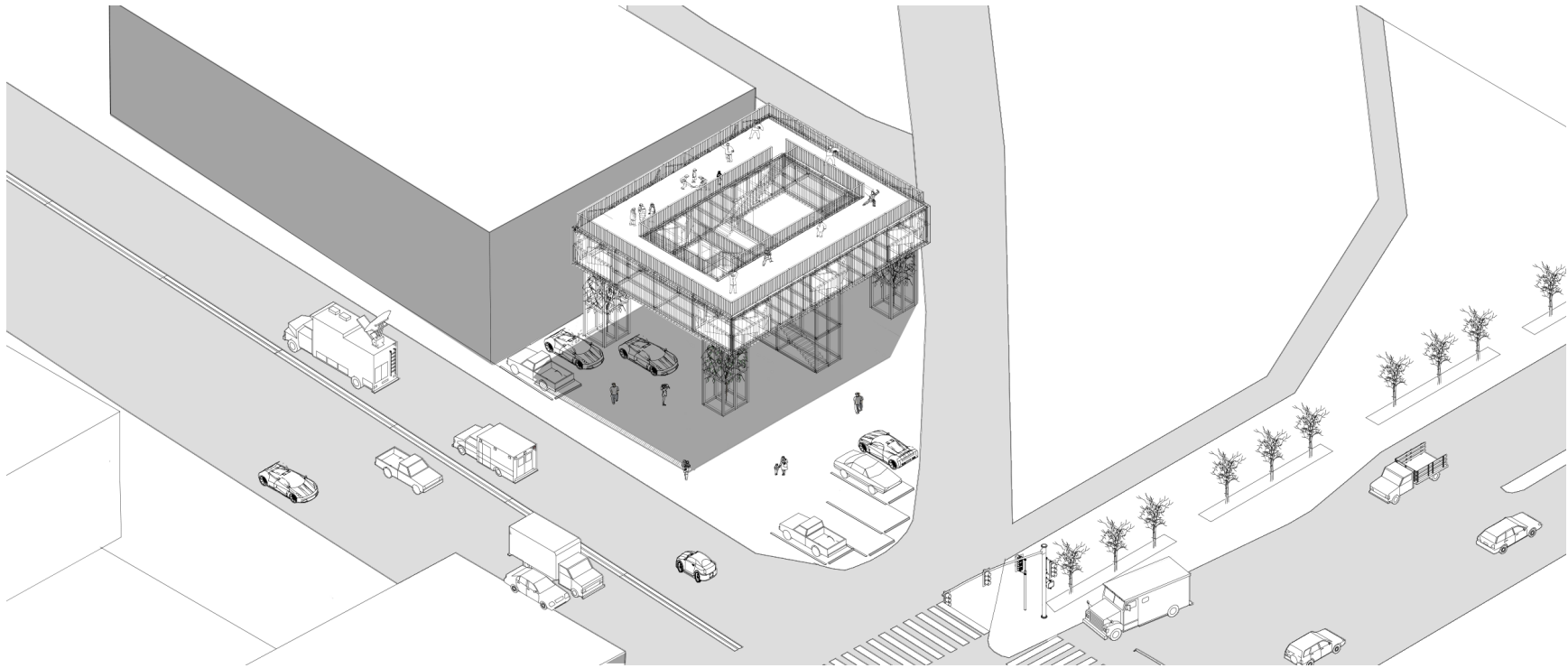


Fig114. Aerial view daytime

The daytime rendering (Figure 114) shows the project in the urban context. The nighttime rendering (Figure 115) shows the LED lights is used to provide directions.

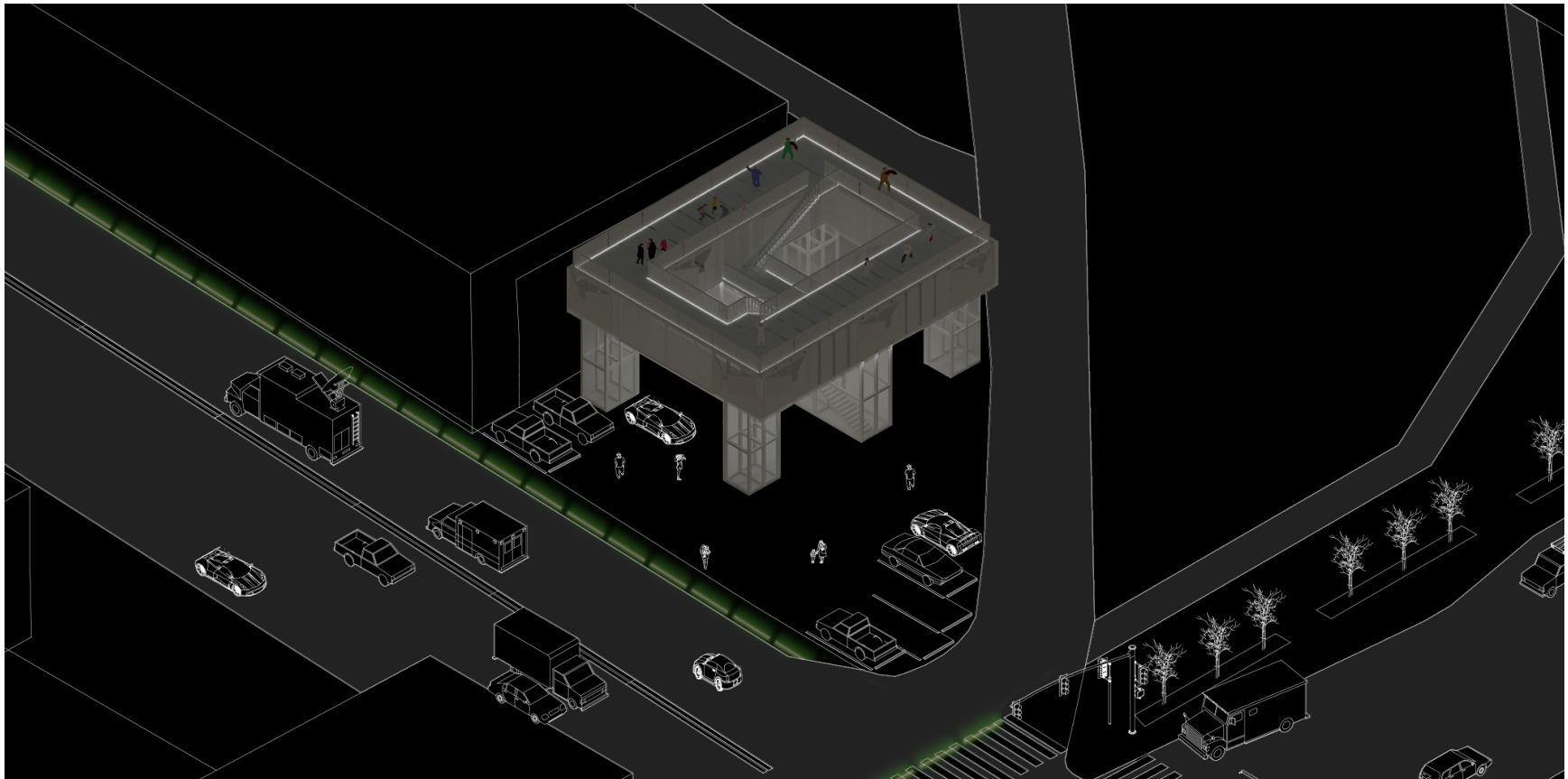


Fig.115 Aerial view nighttime



Fig.116 Street view daytime

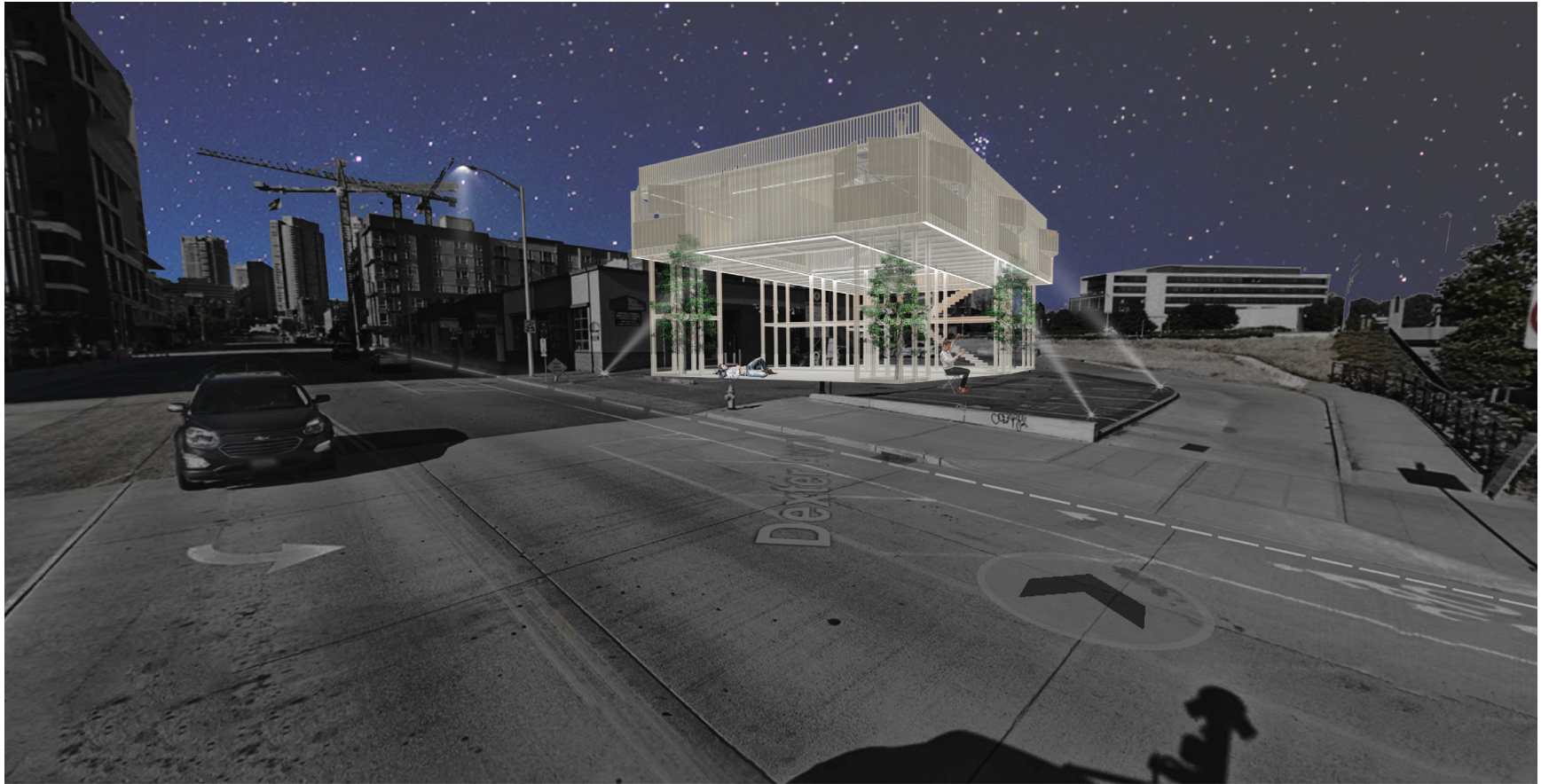


Fig.117 Street view nighttime

4) Alleys

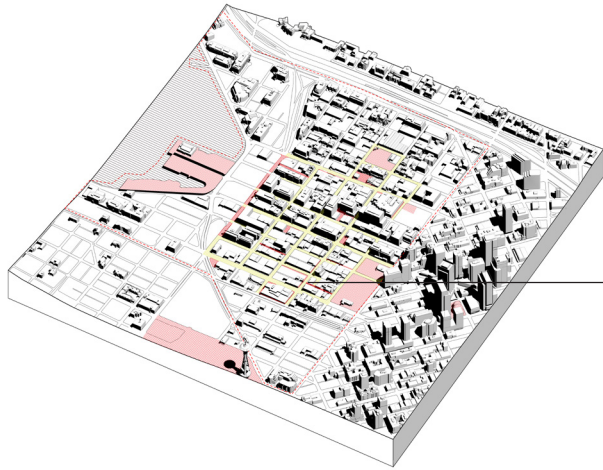


Fig.118 Site location



Fig.119 View from Thomas street N
Image sources: Google Street View

Except their use for garbage collection, the alleyways in SLU seem to be totally unused, making them a perfect spot for temporary architectural interventions. The image (Figure 122) shows this idea of using upper floor's activities to reactivate this neighborhood. At the same time the image (Figure 123) on the next page shows the lower part of the alleys keep their current function.



Fig.120 Concept drawings

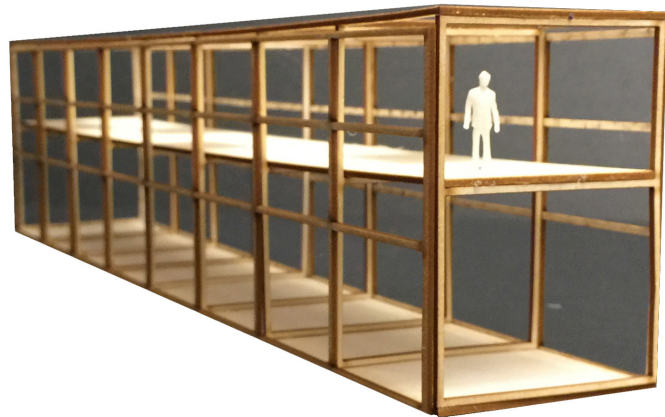


Fig.121 Physical model studies



Fig.122 View from upper floor



Fig.123 View from lower floor

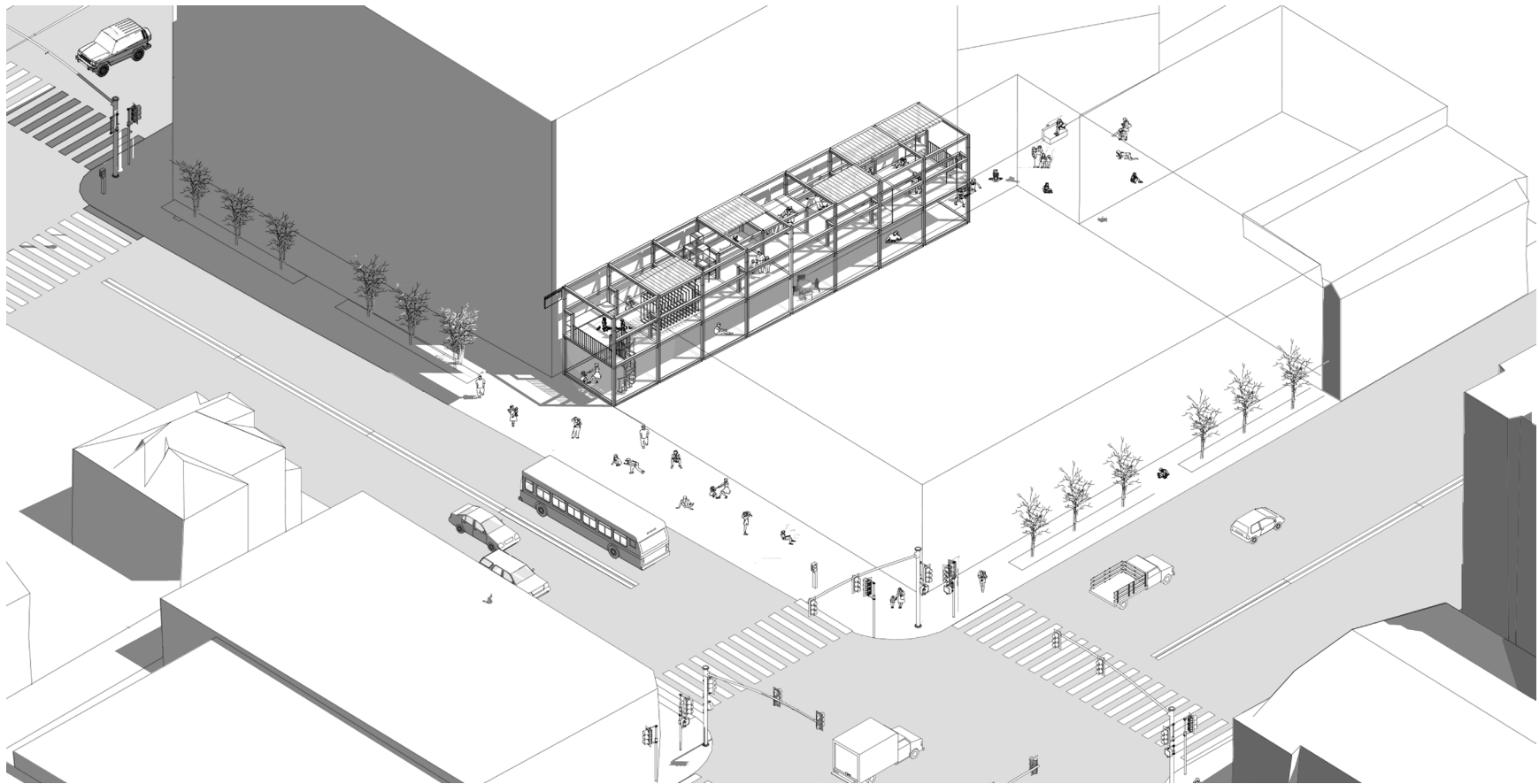


Fig.124 Aerial view daytime

The daytime rendering (Figure 124) shows the project in the urban context. The nighttime rendering (Figure 125) shows the LED lights is used to provide directions along with the different kinds of signage that will be used in this project.

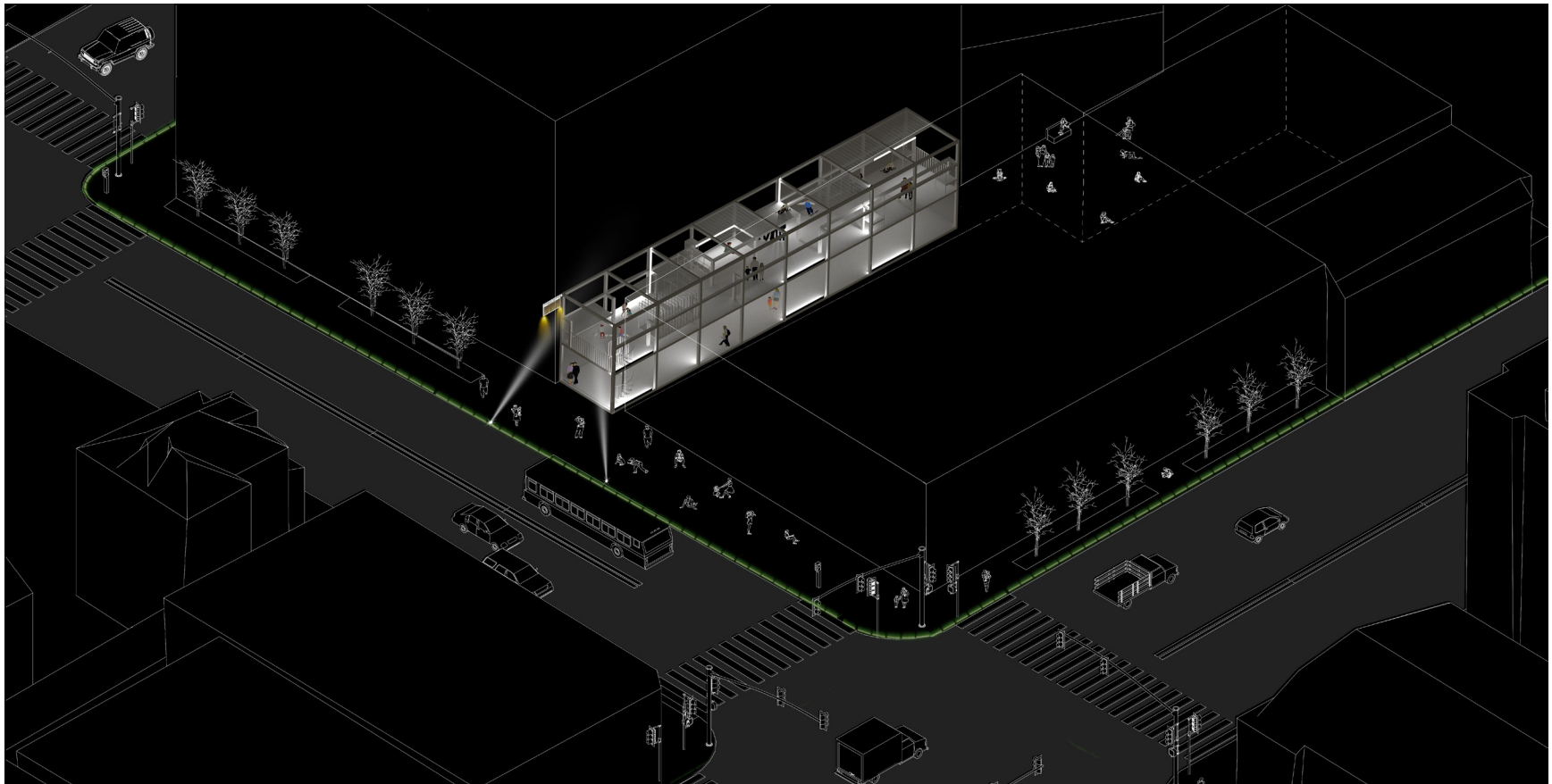


Fig.125 Aerial view nighttime with signage



Fig.126 Street view daytime



Fig.127 Street view nighttime

5)Construction site:

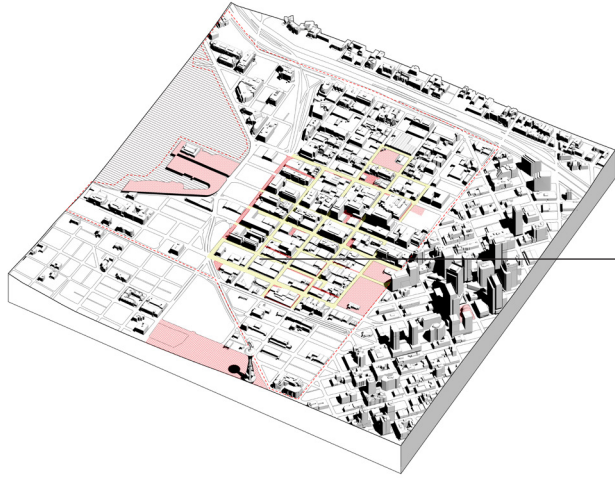


Fig.128 Site location



Fig.129 View from Dexter Ave N
Image sources: Google Street View

This construction site is located on the corner of Dexter Avenue North and Thomas Street. As seen in the photos, the construction has completely taken over the sidewalk and pushed pedestrian activity to a temporary sidewalk. The image (Figure 131) on the next page, reimagines construction scaffolding as a potential activity hub and provides a shelter space for pedestrians. The images (Figures 132 - 133) show the activities in the modular spaces created by the scaffolding structures.

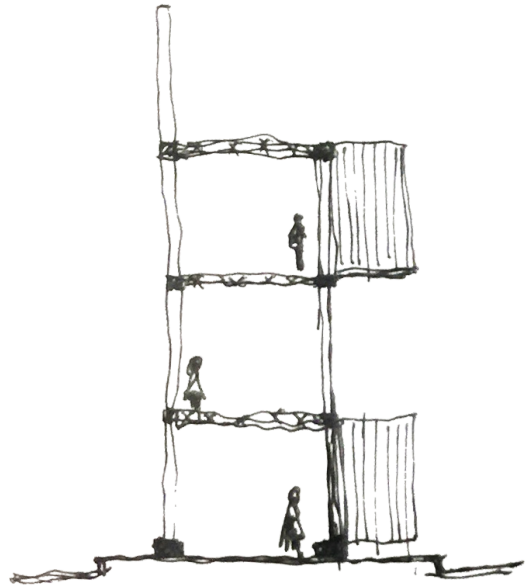


Fig.130 Concept drawings



Fig.131 1st floor: Commerce



Fig.132 2nd floor: Culture & Community



Fig.133 3rd floor: Culture & Community

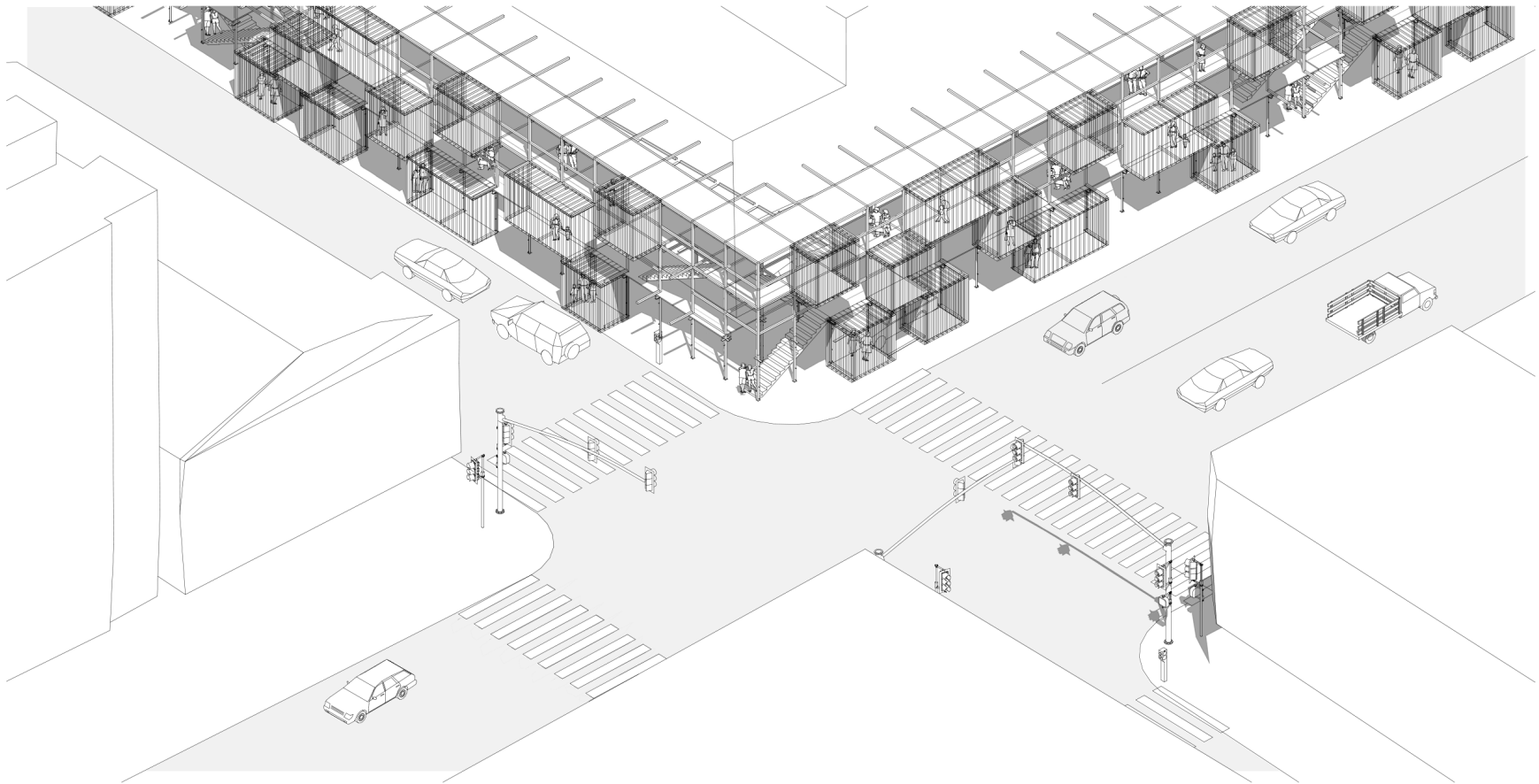


Fig. 134 Aerial view daytime

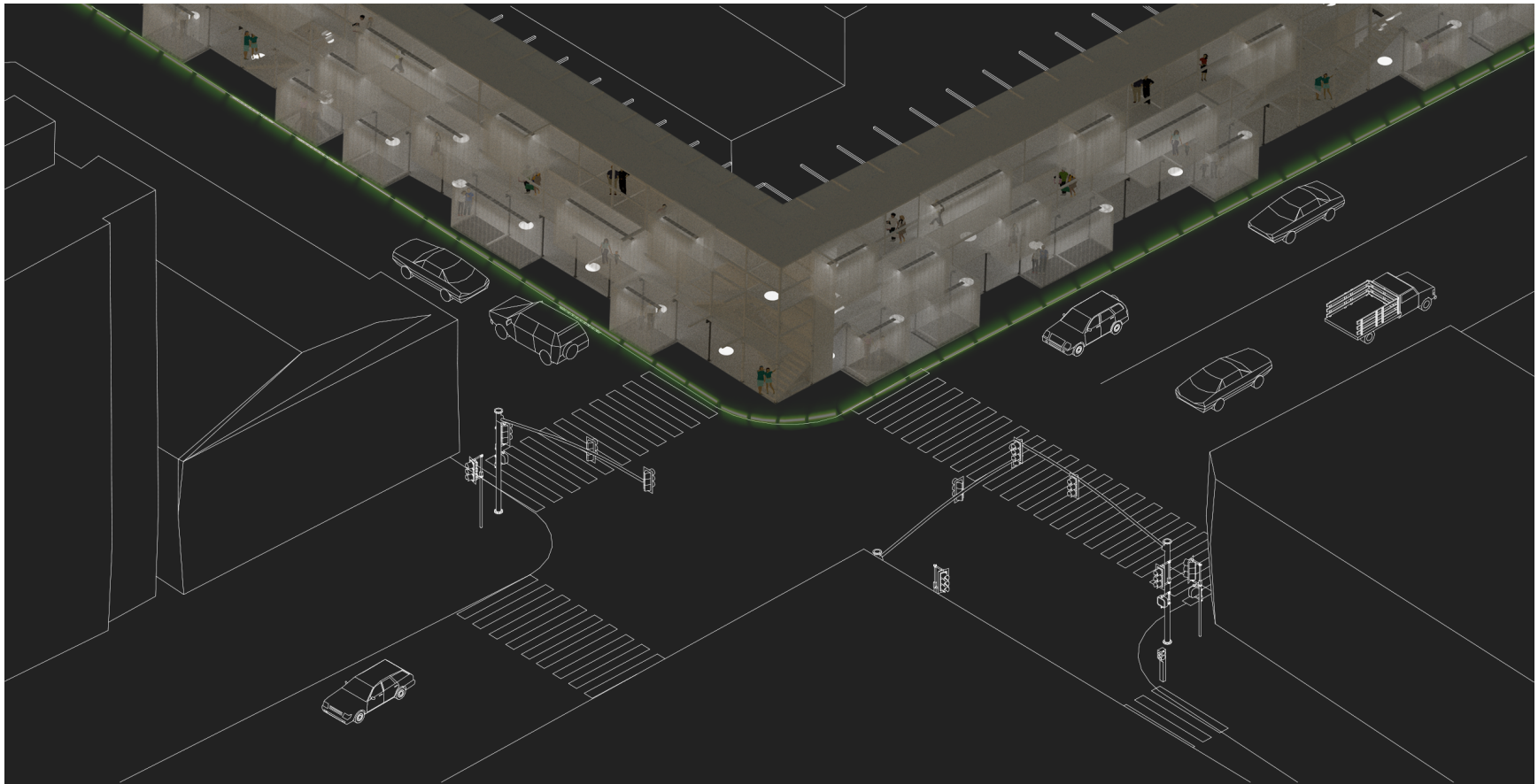


Fig.135 Aerial view nighttime



Fig.136 Street view daytime with signage



Fig.137 Street view nighttime



Fig.138 Public network of temporary architecture

The diagram shown in Figure 138 shows the final version of the proposed public network of temporary architecture, the interventions shown with black solid lines are the temporary architecture designs which are proposed by the thesis. The red cross lines indicate the location of the designs. The buildings with dash lines are current cultural facilities in this area, such as a church, museums, public art, a P-Patch and cinema. The arrows on the existing streets indicate the potential connections between them, most of them are these are signage shown in the previous renderings.

Chapter 5: Conclusion

This thesis was inspired by the film *Mon oncle* made by directed by Jacques Tati in 1958. At the beginning of the film, when foreign tourists are arriving in Paris, they are shocked because many areas in the cities have the same appearance which contradict to their memories of Paris. People in the city shift between working to living and living to working, creating an image of the unnerving conditions of modern urban life. Later in the film, Tati shows scene of people working in a large of divided open office. Everyone works in the same cubicle but without any communication like different machine parts serving for a single purpose.

This thesis explores problematic sites in South Lake Union. The conditions in SLU are

similar to the movie as are most of the cities which are in the transition of urban renewal and modernization leading to a loss of identity and public life. After choosing the sites, the thesis has sought the architectural solutions in response to the issues brought about the urban renewal there. Through a series of studies, a public network of temporary architecture emerges as the best solution for this particular problem. This thesis proposes a framework for workers and residents in SLU in order to encourage them be more engaged in the public spaces of SLU and to better experience public life. This proposal for public space in the rapidly growing city, encourages people to think about the changes happening around them. Eventually, the project will provide a potential enjoyable living environment to improve the quality of life and help to create an identity of being in SLU. The study of SLU area has illuminated many aspects from private to public, indoor to outdoor, daytime to night and permanent to temporary. As a conclusion, exploring the character of public space interventions can help people discover the changing situation around them and bring more enjoyment of living in the SLU area through a network of temporary architecture design interventions.



Fig.139 Final presentation

Bibliography

Millman, Zosha. "New Study Looks at How Amazon's Growth Fueled Seattle Rents." *Seattlepi.com*, Seattle Post-Intelligencer, 2 Nov. 2017, www.seattlepi.com/realestate/article/Seattle-Amazon-rent-prices-increasing-12324622.php.

Grinnell, Max, "The Urbanologist Calls South Lake Union 'Soulless'." *The Seattle Times*, The Seattle Times Company, 1 Mar. 2015. www.seattletimes.com/life/the-urbanologist-calls-south-lake-union-soulless/.

Rosenberg, Mike. "Seattle Has Most Cranes in the Country for 2nd Year in a Row - and Lead Is Growing." *The Seattle Times*, The Seattle Times Company, 11 July 2017, www.seattletimes.com/business/real-estate/seattle-has-most-cranes-in-the-country-for-2nd-year-in-a-row-and-lead-is-growing/?utm_content=buffercd680&utm_medium=social&utm_source=facebook.com&utm_campaign=owned_buffer_fm.

Guy, Gene Balk / FYI. "Before-and-after Photos of Amazon's South Lake Union Turf." *The Seattle Times*, The Seattle Times Company, 22 Nov. 2016, www.seattletimes.com/seattle-news/data/amazons-south-lake-union-turf-do-you-recognize-this-place/.

Max, Grinnell, "The Urbanologist Calls South Lake Union 'Soulless'." *The Seattle Times*, The Seattle Times Company, 1 Mar. 2015. www.seattletimes.com/life/the-urbanologist-calls-south-lake-union-soulless/.

Campbell-Dollaghan, Kelsey. "How the Tech Industry Is Quietly Changing the Face of American Cities." *Gizmodo*, Gizmodo.com, 18 June 2013, www.gizmodo.com/how-the-tech-industry-is-quietly-changing-the-face-of-a-513266451.

Lange, Alexandra. *The dot-com city. Silicon valley urbanism*. *Strelka Press*. Kindle Edition. 2012.

Zigeng Wang, "turn a blind eye", *TEDxyouthtalk*, Chongqing, November, 2015, https://v.youku.com/v_show/id_XMTQ5OTE1OTk0OA==.html?&f=26711786&from=y1.2-3.4.8.

"South Lake Union, Seattle." *Wikipedia*, Wikimedia Foundation, 12 June 2018, en.wikipedia.org/wiki/South_Lake_Union,_Seattle.

IVC – InVisibleCities, *Passive space remake*, *InVisibleCitiesOrganization*, 10 May. 2017. <https://ivc.city/blog/article/>

Neeraj Bhatia, 1980-; Lola Sheppard, 1972-; *Architect.com* (Firm); *InfraNet Lab* (Firm); 2012 Barcelona : Actar ; New York : Distributed by ActarD

“Ambient 30 60 - YAP CONSTRUCTO 2014 / UMWELT.” *ArchDaily*, 15 Apr. 2014, www.archdaily.com/495904/ambient-30-60-yap-constructo-2014-umwelt.

Ridley's Temporary Restaurant, *The Decorators*, September, 2011, the-decorators.net/Ridley-s-Temporary-Restaurant.

Levy, Nat. “Amazon's Original Boomtown: How the Tech Giant Has Transformed and Outgrown Seattle.” *GeekWire*, 14 Sept. 2017. www.geekwire.com/2017/amazons-original-boomtown-tech-giant-transformed-outgrown-seattle/.

Burkhardt Leitner Constructiv GmbH. Temporary architecture, *Burkhardt Leitner Constructiv; Ludwigsburg : Avedition*. 2011 Stuttgart : Burkhardt Leitner Constructiv.