

BETWEEN ARCHITECTURE AND LANDSCAPE

Site Revitalization in Magnuson Park By An Integration of Landscape and Building Reuse

YE SUN

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ABSTRACT

BETWEEN ARCHITECTURE AND LANDSCAPE -Site Revitalization in Magnuson Park By An Integration of Landscape and Building Reuse

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What can a design based on dealing with the relationship between architecture and landscape, bring to a site, a community, and the urban environment? This thesis is a journey to explore the relationship between landscape and architecture, mainly focusing on historic context. A thorough study of history and conditions of the site and buildings reveals advantages for adapting and integrating them.

The design thesis aims to advocate the advantages and benefits of ecological design, and to create a distinct and considerable approach about building adaptive reuse, through the integrated design of two historic buildings and the surrounding landscape at Seattle's Magnuson Park. By integrating social and cultural functions, focusing on the landscape and architecture, respecting the history and the environment, the innovative design interventions envision a multifaceted revitalization of this currently latent site.

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I would like to express my sincere gratitude to my co-chairs: Julie M. Johnson and Kathryn Rogers Merlino. Your continuous support and excellent knowledge guide and inspire my study and research. Your thoughtful suggestions and critiques help me to think and form the topic, and refine the design and document.

And I would like to thank all the reviewers who came to the mid-review and final review. Your comments inspire me in different aspects and also helps me to refine my project.

Last but not least, I would send my thanks to my family, my friends and my partner. Thanks for always supporting me, cheering me up through the thesis time and also my entire life.

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CHAPTER 1 INTRODUCTION

1.1 Background

1.2 Main Questions and Framework



Figure 1. The garden shows the historic ruin and new facade in Kolumba Museum in Cologne, Germany | Peter Zumthor

1.1 BACKGROUND

Why focus between landscape and architecture?

I have been traveling to and visiting many different countries, cities, buildings, and parks. When I look back at the photos I took on the journey, I find out many of them focus on the light and view from the location, which records the time and location, gives life to the picture, and always can throw me back to the memory. The connections between interior and exterior, the place, and its context contribute to the memory or the experience of the place. Landscape exists everywhere. Architecture cannot be isolated from the environment but tightly attached. The experience for an individual wandering around a place is as a song: the landscape is the melody and architecture is the lyrics.

Figure 2. Extension of Städel museum in Frankfurt, Germany | Schneider + Schumacher



The architecture can be a building, a room in the building, or a group of buildings; while landscape includes the natural environment, the urban context, and the specific landscape design. The landscape affects people's experiences and impressions in architecture. Switzerland architect Zumthor, in his book *Atmosphere*, states nine factors which could influence the experiences and make the architecture real, there are four of them related or from the landscape - Sound, Surrounding Objects, The Tension

Between Exterior And Interior, Light On Things (2006).

The landscape is a language of architecture that can form the space, convey the spatial feelings to the audience. At the same time, architecture influences the landscape typically as a context. Landscape scholar Anne Whiston Spirn writes that landscape has to speak in the context, more than just imitating the form and material language, but to “respond to the rhythms and histories of each and to project those contexts into the future” (1992, p. 77).

The relationship of landscape and architecture varies. It could happen in a spatial relationship such as how Zumthor described; it also could happen with a contextual connection such as landscape urbanism. I have been obsessed with the relationship between architecture and landscape. Thus, in the thesis project, I explore the relationship in both theories and design methods of these relationships.

Why focus on building adaptive reuse?

1. Old buildings reuse contributes to the sustainability.

Building reuse saves energy. First, the primary source of energy use is the construction of new buildings (Smith and Elefante, 2009). As building reuse retains the old buildings, it saves a lot of energy compared to demolishing old ones and reconstructing new ones. What's more, by the development of technology and the standards of building reuse, upgrading old buildings could improve

energy efficiency. Second, old buildings have inherent characteristics to reduce energy usages. Many old buildings have less energy efficiency comparing to the contemporary ones, but they have a higher value of passive energy features, which affords greater resilience (Merlino,2018). They use natural light for the interior lighting environment and user operable windows for the ventilation, which requires fewer techniques and repair. In addition, the building material

and methods used feature greater thermal mass, which provides a more energy efficient interior environment (Smith and Elefante, 2009). When talking about sustainability, using recycled material is one of the main methods. To reuse old buildings itself is a recycle of materials. Reusing the structure and durable features of the building can reduce construction costs and also save resources and energy costs.

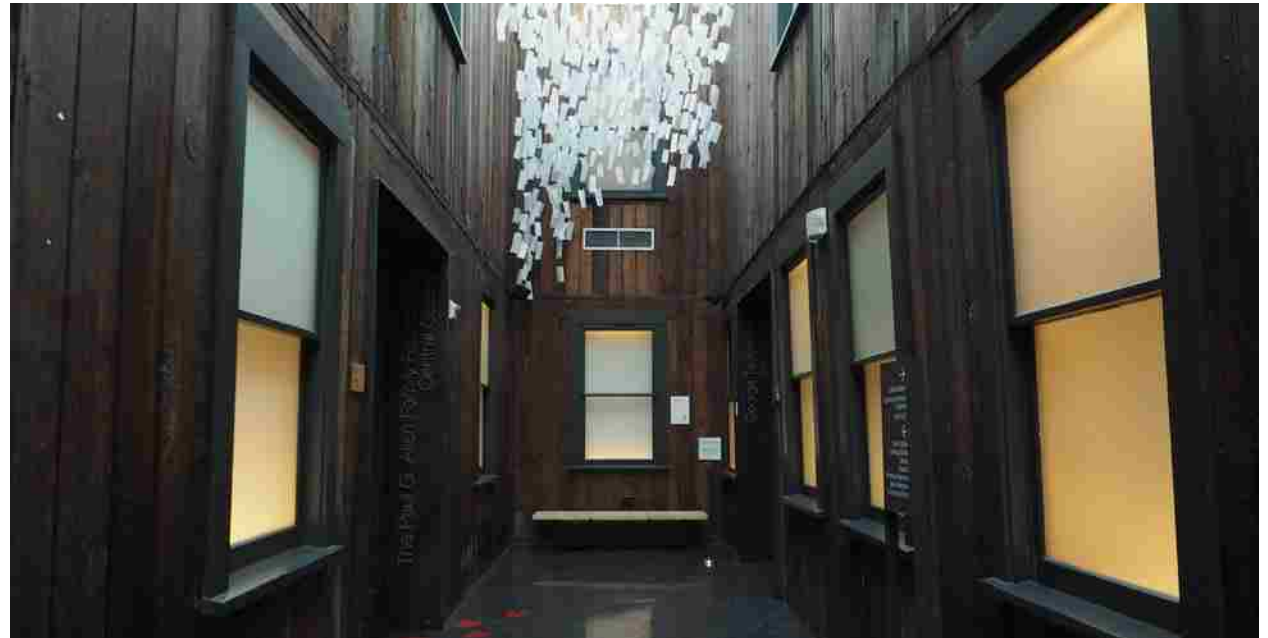


Figure 3. Wing Luke Museum in Seattle, WA, USA. It is designed based on a historical single room occupancy .
| OSKA Architects

2. The history of the building is a culture

An old building represents the culture and history of the community and individuals who have been using it. The historic building or place has a historic designation, which is often regarded as a landmark, or a particularness from residents' perspective in the community. It helps people to identify and value the place, also have a sense of ownership and belonging (House of Commons, 2004). Moreover, because it stores memories, the relationship between people and old buildings could be emotional, which is hard to articulate with language.

In his book *Design for Ecological Democracy*, Randolph Hester mentioned the importance of the particularness in the community, as "Particularness is the formal expression of the unique characteristics of the community" (p.132). He states that the particularness contributes to individual and communal awareness, orientation, and worldview, which could not be revealed only by the language. Additionally, he asserts that historic buildings and districts, national parks and monuments, national

cemeteries and memorials, wild and scenic rivers, mountains and lakes all belong to national sacred landscapes (p.118). The historic building, as part of the national sacred landscape, and the particularness in the community, plays an essential role in the community, in both physical and spiritual aspects.

Historic preservation scholar Randall Mason provides a term "memory/fabric connection" that refers to the emotional and intellectual connection between memory and environment, which he states as the heart of historic preservation (2004, p.64). What's more, as he indicates, the connection make the old buildings meaningful. And for the individual, historic preservation means to build up an emotional connection between memory and environment (2004).

3. City needs old buildings

The city needs old buildings to make vigorous streets and districts (Jacobs, 2002). Besides architectural value, they always play an important role

in a community's diversity, culture, and identity. The urban street will become homogeneous when there is only new construction. A replacement of old buildings always brings a replacement of local stores or restaurants and affordable housing, which cannot afford the higher rent after the new construction. There are times when the city all the sudden has a high-density population. Smaller existing buildings are demolished, and massive building blocks are built, which results in changing the urban scale and texture (Merlino, 2018). The action of demolishing existing buildings in exchange for building high rise apartments reduces the vibrancy of the community, due to a lack of diversity in users and functions, and the walkability of the city. It is like citizens suffocate in this concrete jungle and steel stream so-called "city". To follow the rule of urban development, it requires us to preserve and reuse the historic buildings, and interweave them into the urban fabric.

Why Magnuson Park?

As the second largest park in Seattle, Warren G. Magnuson Park (AKA: Magnuson Park) plays an essential and complex role in the community and city. The park is located on the Sand Point peninsula in Northeast Seattle. Once served as Sand Point Naval Air Station Puget Sound, the site now is occupied by National Oceanic and Atmospheric Administration (aka. NOAA) and the Magnuson Park which holds many features and functions, including the largest playground in Seattle, different sports fields and other outdoor activities facilities, restored grasslands and wetlands, walking trails, outdoor art, and a national registered historic district.

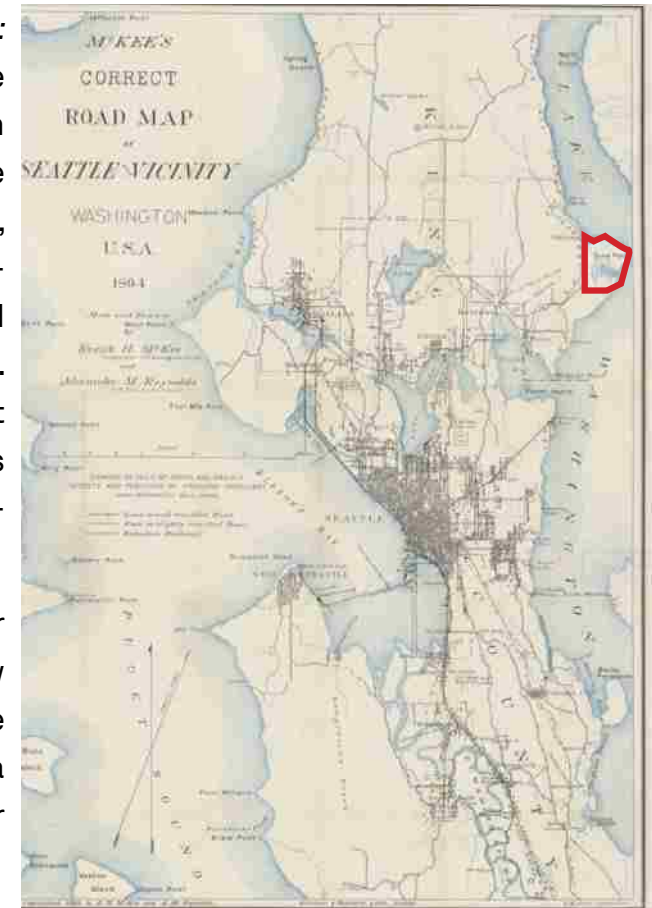
Undoubtedly, Magnuson Park provides a space to help individuals and wildlife escape from urban development. The park is also an educational site for the ecological environment and other experiments. The history of the park is perceptible, either from the distinctive style of architecture in the historic district or from the unique military features or theme-related artworks scattered in the

park. At the same time, instead of being a just monumental place, the park is being actively used by the citizens and is heavily embedded in their daily routines

However, there are substantial existing conflicts of public facilities between the on-campus residents and the visitors. In the *Magazine ARCADE Issue 36.2 feature "Seattle's Ethos: Changes in our Shared Space"*, there are articles about different voices from the park. A resident and an officer wrote about the current problem they are facing, which mostly address the inequity of on-campus resources for the community and the chaos development plan for the park. Due to the pay to play services, there is not much community service for the families living in the park – who are mostly low-income families.

How to balance the benefits for residents and out of park residents, how to create more public spaces for the diverse residents, which can create a better community, will be a challenge for the thesis project.

Figure 4. McKee's Correct Road Map of Seattle and Vicinity, 1894, source from Seattle Public Library Collection. Modified by author to locate site



1.2 MAIN QUESTIONS AND FRAMEWORK

The thesis project will focus on the two unused buildings in Magnuson Park, Building 18 and Building 41. Based on the historic district and the recent development of the park, the project will explore the relationship between landscape and architecture in the building adaptive reuse.

Thus, there are three main questions to guide the research and design:

How can the building's adaptive reuse respond to the surrounding landscape?

The historic building / old building is already in a steady environment. How

does the new design create a dialog between the landscape and architecture? How will the community be different because of the design

How will the existing landscape get woven/involved with the building reuse and site design?

The existing landscape and environment are related to every building in the context. How to utilize the landscape and build a connection with them into the site? Magnuson Park now has a lot of different types of landscape resources. Which is the priority? Which can represent the spirit of the park?

How can the integration of building reuse and site landscape design contribute to the community?

Good landscape design and building reuse project can benefit the community through the improvement of the environment and also an increase of recognition and belonging. Magnuson Park is facing conflicts between the community and the park's operations. How can design help to solve this problem? What can the design bring to the residents and the park?

In addressing these questions, the following chapters explore relationships between architecture and landscape; introduce the history of Magnuson Park and the two selected buildings within it; present an analysis of the park and the selected site; proposing design concepts and representing design proposals; and concludes with reflections on the project and these initial framing questions.

Specifically, Chapter 2 provides an overview of thoughts and projects on the relation between architecture and landscape from contemporary architects and landscape architects. Based on these, three types of relationship are summarized and illustrated by the author. The study provides a theory base for the design work and inspires the design to explore in different scales and dimensions. Chapter 3 is focusing on the history of the Site – both the Magnuson Park and the building 18 and 41. The history studies help on the understanding of current site condition and knowing the historical significance of the site and buildings. In the following Chapter, there are analytical diagram and

study on different aspects in the park – the environment, the buildings, and the activities, and focusing the conditions around building 18 and building 41. The analysis reveals the problem and challenge in the park and the site and gives the design the directions of site strategies and programs. Chapter 5 talks about the basic concept and illustrates the design proposals in detail. The proposal includes three different layers of interventions – at an urban scale, at the architectural scale, and through the ecological methods. Lastly, I rethink the study and design ideas, summarize the approaches which could be applied to other conditions, and makes the conclusion about the project's meaning, and further challenges in Chapter 6.

CHAPTER 2

THE RELATIONSHIP BETWEEN LANDSCAPE AND ARCHITECTURE

2.1 When the architecture contains the landscape

2.2 When the architecture and the landscape intersect

2.3 When the landscape contains the architecture

2.1 WHEN THE ARCHITECTURE CONTAINS THE LANDSCAPE

When landscape lies within the architecture, it could be described as an architectural space or the elements that contribute to space. As the landscape today covers the discourses of ecological design and urbanism, the ecological systems in the architecture also represent a relationship between architecture and landscape.

As an architectural space, the landscape can hold certain functions, such as the sculpture garden in New York's MOMA; it can also be a landscape feature which is different from the building's function that provides a view and a spiritual space, such as the water court in Glenstone Museum.

As an element, the landscape forms the space as the common architectural elements but also brings life to space and indicates the concept of the space. Such as in the KAIT workshop, the plants act as the separation of the space, also imitating the feeling of the forest- which can also be generated from the thin poles.

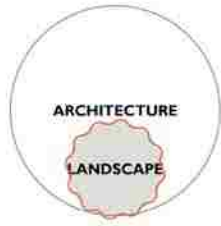


Figure 5. The diagram shows the interfaces when landscape lies in the architecture



Figure 6. MoMA sculpture garden in New York, USA | Philip Johnson. Source: The Museum of Modern Art



Figure 7. Glenstone Museum in Potomac, Maryland, USA | Thomas Phifer and Partners, PWP Landscape Architecture. Photograph by Iwan Baan



Figure 8. Kanagawa Institute of Technology Workshop in Atsugi, Japan | Junya Ishigami. Source: Topomazine

2.2 WHEN THE ARCHITECTURE AND THE LANDSCAPE INTERSECT

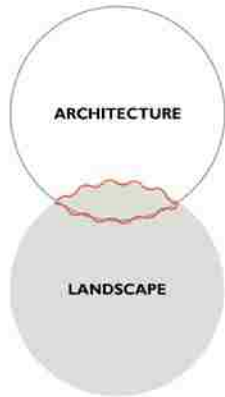


Figure 9. The diagram shows the interfaces when the landscape intersects with the architecture



Figure 10. Glenstone Museum in Potomac, Maryland, USA | Thomas Phifer and Partners, PWP Landscape Architecture



Figure 11. Louisiana Museum of Modern Art in Humlebæk, Denmark | Vilhelm Wohlert, Jørgen Bo. Photography by Jens Frederiksen.



Figure 12. Tacuri House in Quito, Ecuador | Gabriel Rivera Arquitectos. Photography by BICUBIK Photography. Source from Archineta.

When the two intersect, the relationship exists more in the details. It could be informed by the size or location of the opening, the material of the wall or the direction that space is oriented towards. The architecture uses, or sometimes rely on, the landscape to form the space, convey the spatial feelings to the audience. The relation lies in the reciprocity of interior and exterior space (Berrizbeitia,1999). Anne Spirn noted that the landscape always focuses on the details to approach the design. While architecture prefers more about space, form and order. But now, the architecture will need to focus on the detail as well to match the landscape. In Tacuri House, the circle opening on the ceiling provides spaces for the tree to grow. It shows how the architectural and landscape elements interact with each other. While in the Glenstone Museum and Louisiana Museum, the approach is different. By using the floor to ceiling glazing wall, the spaces own a landscape background.

2.3 WHEN THE LANDSCAPE CONTAINS THE ARCHITECTURE

In a broader scale, when viewing the relationship between the architecture and the landscape it sits in, there are more dialogs between the architectural form and the landscape topography. It is more about the form of architecture and how to treat the border of the architecture. The architecture is part of the landscape.

The border of the architecture could be simplified as three types – transparent, semi-transparent, and solid. It can be referred as the material, but also as the ways that inside and outside related. Junya Ishigami's Japanese Pavilion in 2008 Venice Architecture Biennale shows an experimental way for the border of the architecture which disappear in the landscape but exists. The architectural space is an interior landscape; in another way, the landscape could be described as a borderless architectural space. In the Nezu Museum, through a semi-transparent roof, the interior space is activated by the shadow of the trees but still feels enclosed.

Some architecture is designed to weaken the sense of architecture but display the landscape environment, such as the Louisiana Museum. When wandering through the museum, people will be hard to feel what the architecture looks like but instead, focuses on the experience of the different landscape around the site. On the other hand, some projects show the audience both

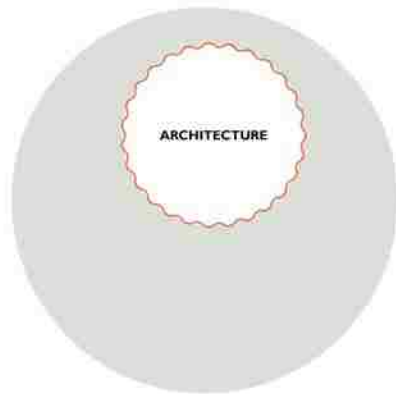


Figure 13. The diagram shows the interfaces when landscape contains the architecture



Figure 14. Nezu Museum in Tokyo, Japan | Kengo Kuma & Associates. Source: Architecture review website



Figure 15. Japanese Pavilion, Venice Architecture Biennale 2008, Italy | Junya Ishigami. Photography by Gallery Koyanagi.

the architectural appearance and the natural landscape of the place. The Glennstone Museum is integrated with the landscape by separating the architecture into discrete sections and embedding them into the weaving landscape. The natural landscape around the building could be observed in the single gallery room, but the museum also provides a great water feature in the middle, which organizes the different sections. Also, some projects combine the architectural form with the landscape to show the impact of the landscape, such as the Wenchuan Earthquake Memorial Museum.



Figure 16. Louisiana Museum of Modern Art | Vilhelm Wohlert, Jørgen Bo. Photography by Jennifer Ly.



Figure 17. Glennstone Museum in Potomac, Maryland, USA | Thomas Phifer and Partners, PWP Landscape Architecture Source: Thomas Phifer and Partners,



Figure 18. Wenchuan Earthquake Memorial Museum in Anren, Sichuan, China | Cai Yongjie. Source: Designboom

CHAPTER 3 SITE HISTORY

3.1 History of Sand Point Seattle and Magnuson Park

3.2 History of Building 18 and Building 41



Figure 19. Naval Air Station Sand Point 8/30/68 USGS aerial view. Source: Abandoned & Little-Known Airfields website



Figure 20. Magnuson Park 2019 Source : Google Earth



Figure 21. Sand Point, 1928. Source: Welma, David, Sand Point Naval Air Station: 1920-1970, HistoryLink.org Essay 2249, 2000. page 5.



Figure 22. Sand Point six years after Lake Washington was lowered, March 1923. Source: Lange, Greg, Sand Point: The Early Years, 1850-1920, HistoryLink.org Essay 2487, 2006, page 7.

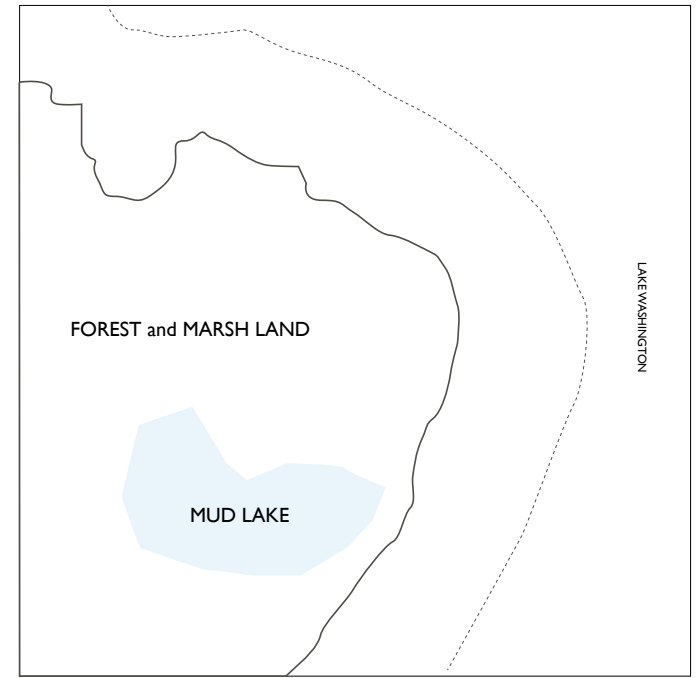


Figure 23. Figure Ground Map before 1920s

3.1 HISTORY OF SAND POINT SEATTLE AND MAGNUSON PARK

The First transformation: from natural habitat to a park (before the 1920s)

Before the first settlers arrived in the mid-1800s, the land was covered by old-grown cedar and douglas fir by its wetland. It also had a 30-acre mud lake connected to Lake Washington. This land was first recognized and utilized by the Duwamish tribe who lodged at the south of Sand Point for fishing and hunting (Ferguson, 2015). In the 1900s, places around the peninsula started to

be developed because of the growth of population. In 1918, Mr. and Mrs. Carkeek donated 25 acres of land in the peninsula to the city of Seattle as a public park to provide a “quiet resting spot amid the hustle and bustle of City life”. The Park was named as Carkeek Park and was the first public park supporting kid’s overnight camping in Seattle (Ferguson, 2015). This particular location started to transition

from its natural habitat and served the residents of Seattle for recreational purposes. Affected by the opening of the Lake Washington ship canal in 1917, which caused Lake Washington to be lowered eight feet, the Mud Lake in Sand Point was drained. The function of the ecological environment started to change based on the city of Seattle’s development and many other community needs. (Crowley, 2004)



Figure 24. The first Hanger at the Sand Point, March 1925. Source: Abandoned & Little-Known Airfields website



Figure 25. Aerial view looking west at NAS Seattle, 1953. Source: Abandoned & Little-Known Airfields website

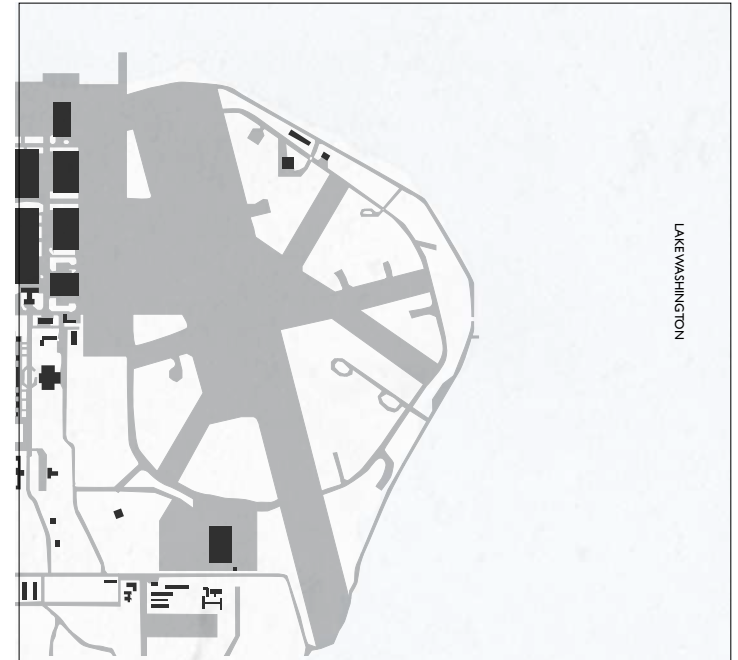


Figure 26. Figure ground map 1945

The Second transformation: from a recreational park to Naval Air Station (1920s-1970s)

After World War I, an airfield that could be utilized by both local pilots and aircraft factories was in demand because of civilian's and government's increasing interest in aircraft and flying activity in the Puget Sound area. After many discussions on the use of the peninsula for either aviation or recreation purpose in 1920, King County government decided to buy the land in Sand Point for building a municipal airport and the first landing strip in the park and the hanger 1. As a result, Carkeek Park was moved to the

northwestern part of Seattle. The Sand Point Airfield was in a significant role in American aviation history. It was chosen as the start point and the end point of the landmark around-the-world flight, which was seen as the second most important event in aviation history, only after Wright Brothers' first flight. Later the airport was transformed into Navy Air Station (aka. NAS) Seattle in 1927. From the 1930s, The Sand Point area was rapidly developed as a naval military base but later was decommissioned in the 1970s. During the

period of NAS Seattle, the forestry site was replaced with asphalt paved runways and service buildings. The art deco and colonial style buildings were built from the 1930s to 1940s and are now mostly preserved in the Sand Point Historic District. These military themed buildings represent as physical memories during the NAS period and still influence the subsequent life of this site. (McRoberts, 2000)



Figure 27. Figure ground map 2009



Figure 28. Sports field in the current Magnuson Park. Source: Berger Partnership.



Figure 29. Wetland restoration in the current Magnuson Park. Source: Berger Partnership.

The Third transformation: from a military base to a city park (1970s-present)

NAS Seattle ended the commission of flight operations in 1970 and provided the majority part of its base – the shoreline and landing fields to the City of Seattle and NOAA. The west campus was remained and used mostly for different departments of the Government for the Naval Station Seattle (renamed as Naval Station Puget Sound in 1986). The city of Seattle developed the shoreline beach and facilities in 1970 and named this as Sand Point Park in 1975. But in 1976, the

Sand Point Park was renamed Magnuson Park, in honor of Senator Warren Magnuson, who was also a former Seattle naval officer (Ferguson, 2015).

On June 16, 1997, the Seattle City Council approved a reuse proposal that was aiming to define the site's uses and access, including the following six areas: 1) educational and community area, 2) arts community and culture area, 3) Magnuson Park open space

and recreation expansion, 4) residential area, 5) federal institutional uses area, and 6) infrastructure development and site management area” (Golden, 2011, p.24). However, in 1999, the proposal was revised, and this “final plan” was executed by Berger Partnership in 2004. Besides the historic district, this 1999 design became the current Magnuson Park that we see today.

With a fully developed site plan In 2008, restoration of the wetland and construction on the new sports field were activated by Berger Partnership. The design proposed that human activities and environmental improvement could co-exist. The proposal consisted of 65 acres of wetland and upland habitats, a sports field complex and other elements. The integration of a system of five ecologically distinct but interconnected wetlands and built park facilities, including trails, fields, roads, and parking lots, brings visitors a unique and compelling experience. The proposal also claimed a new hydrological plan. The land, once flat as the landing field, was regraded to allow the stormwater to enter the Lake Washington and eventually move from west to east through a web of over 50 interconnected wetland ponds. The ecological plan has a large effect in the future both for urban habitats and environmental education through time. (McVicker, p.5)

The east side of the park was added to the National Register of Historic Places in 2010 as NAS Seattle and one

year later designated as the Sand Point Naval Air Station Historic District in Seattle landmark. Isolated from the Berger's design plan, NAS area is under its developing plan and have potential problems.

The landscape had a dramatic change in this phase, as "from a biological wasteland to critical wildlife habitat and from a concrete runway to a federally protected wetland". (McVicker, 2014, p.1) The ecological functions are not imitating the past but honor it. Instead of restoring the Mud Lake, design of the new habitats maximize the diversity in the site.

Figure 30. Wetland system, source from Berger Partnership.



Sand Point Historic Landmark district is mainly assigned for four different types of function: institution and public service, housing, culture and art, and community space. Preserving the buildings and advocating adaptive reuse for the four functions was always in the plan since the 1990s, it is a way to memorize the history of the site. With some functions inherited from the 1970s, such as the public service, the ongoing occupation of different buildings is the adaption for the present. Even now, most of the buildings are being reused in different functions compared to what the buildings once were used before, yet the architectural style and the pattern of the district still reminds visitors the historical value of this place.

Chapter Summary

The current Magnuson Park is a representation for its past. The history gave Magnuson park strong historical characteristics which are worth to keep in contemporary development. And the current plan for building preservation gave the community the identity and maintained a distinctive sense of the land; The preservation of the old military bunkers, along with the art contributing to different interaction with people. The wetland, sports fields, and other nature interacted functions show respect- to the past, correspond with ecological commitments, and meet the contemporary requirements for urban residents and spaces. The clear design guideline for the park is to respect the land's history and rethink how to fit new urban needs and design for diversity and multi-generation.

3.2 HISTORY OF BUILDING 18 AND 41

Building 18 and Building 41 belong to the Sand Point historic landmark district. The district contains a group of buildings built from 1928 to 1952, serving for the Naval Air station, and now mostly get reused as institutions, offices, housing or community services building.

The buildings and structures in the district were constructed for supporting and maintaining the overall function of the former naval air station. There are also important buildings stemming from the nation's pre-war infrastructure expansion. (Gorden, 2011, p.29)

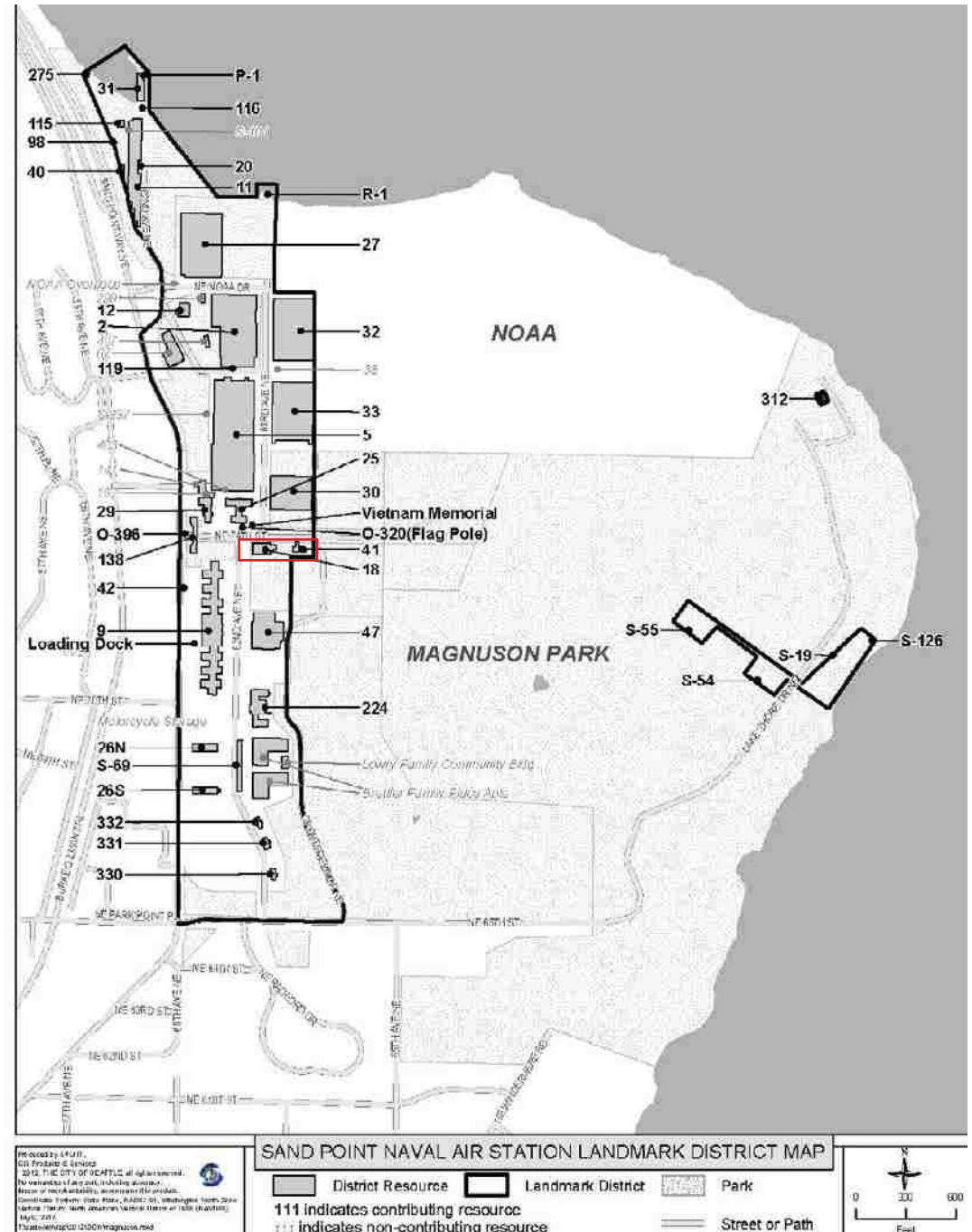


Figure 31. Landmark district Map by SPU-IT, Site outline added by author.

Building 18 and 41 are a former fire station and gas station. They are located at the center of the campus, connecting the entrance of the campus to the landing field (which now is the recreational area). They were utilitarian buildings for the NAS when the station was in commission. Even when the two buildings did not serve the neighbors, the taps and other duty calls played from the top of the hose tower could be heard by the neighborhood for many years. (Ferguson,2015,p.29)

Building 18 is a modern masonry building with influences from the Art Deco Style. It was built in 1936, added in 1945-1952. The tower might be the highest point in the park, and its original purpose was used tow dry hoses which are really rare in today’s era. The building 41 was built in 1939 as a modern, minimalist style building. Both of them are defined as contributing historic buildings in the landmark district. (Ferguson,2010)

Even though the two buildings have a relatively short history compared to the site and other main buildings for NAS Seattle, they are worthy of keeping and reusing.



Figure 32. South side of the building. Source :Sand Point Magnuson Park Building 18 Firehouse Studio Project Feasibility Study Report By Arc Architects, page 10



Figure 33. North side of Building 18 in 2009, Photography by Artifacts Consulting, Inc., 2009. Source: Sally Bagshaw, Blog Archive, Parks



Figure 34. South side of the building. Source :Sand Point Magnuson Park Building 18 Firehouse Studio Project Feasibility Study Report By Arc Architects, page 1

CHAPTER 4
SITE ANALYSIS

4.1 Magnuson Park and the historic district

4.2 Building 18 and Building 41



Figure 35. Figure ground map for current Magnuson park, which shows the relationship between the buildings and the park.

4.1 MAGNUSON PARK AND THE HISTORIC DISTRICT

The green spaces in the park

The green environment in the park includes three different parts: the rigid vegetation in the historic landmark district, the open space for the sports field, and the wild wetland restoration. From the analysis,(figure 28) it is not hard to find out that there is a gap around the site, between the historic district and the new Magnuson Park area. In the east side, there are open lawn area and formally street trees, which represents the history of this place. The sports field and the wetland system are connected through the ground runoff and underground stream. They are designed as an entire system. How to connect the two parts would be a challenge for future development in the park. From a detailed analysis of the green spaces around the site (figure 29), the parking lots and the tennis center are the reasons which result in the reduction of the green space in this area. The large parking lots are without any trees or greeneries, and the tennis center took over the former lawn area. Build a connection through linking the green spaces will be an achievable opportunity to rejoin the historic district and the park.

Figure 37. The change of green space from 2002 to 2018

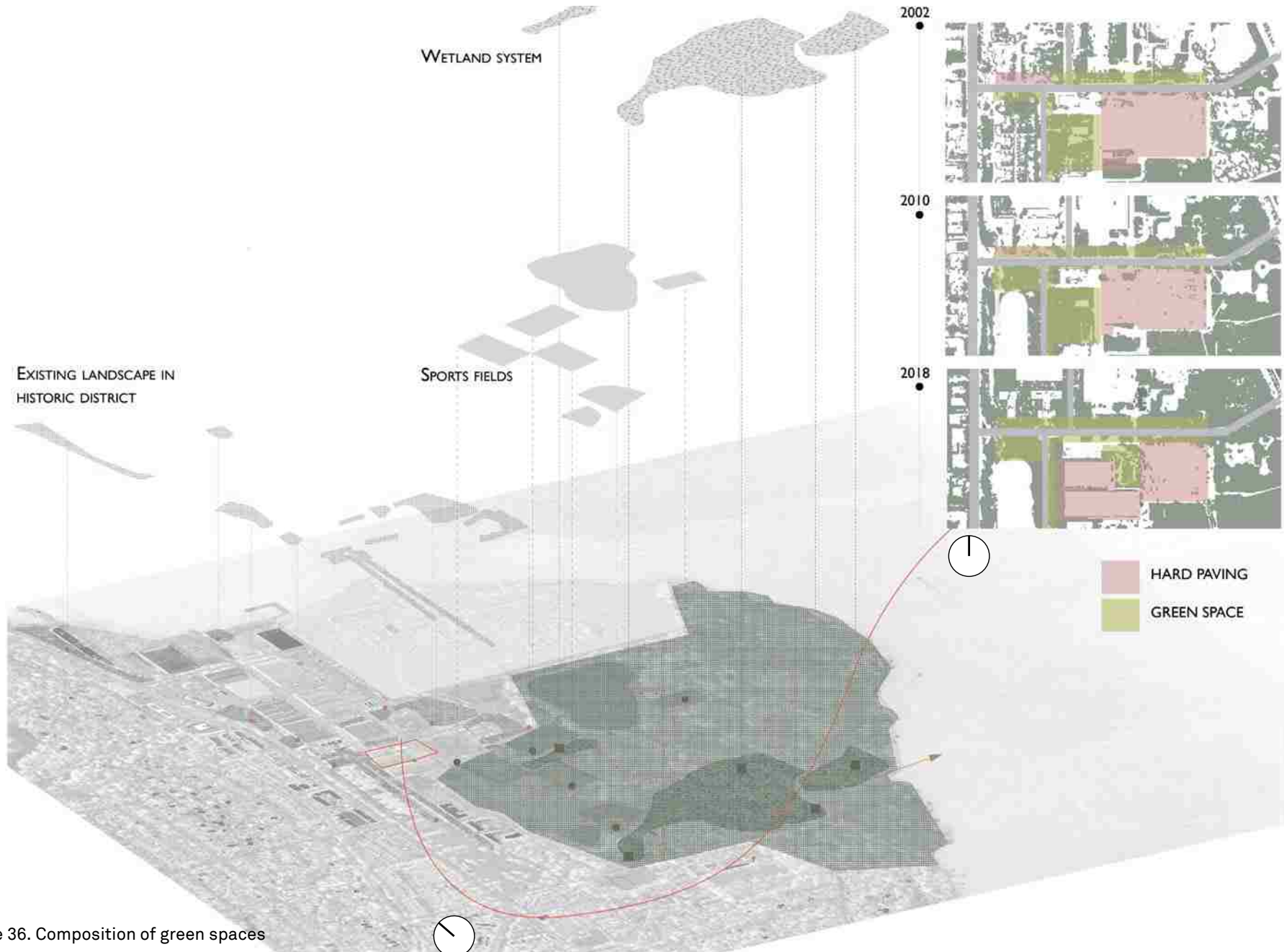
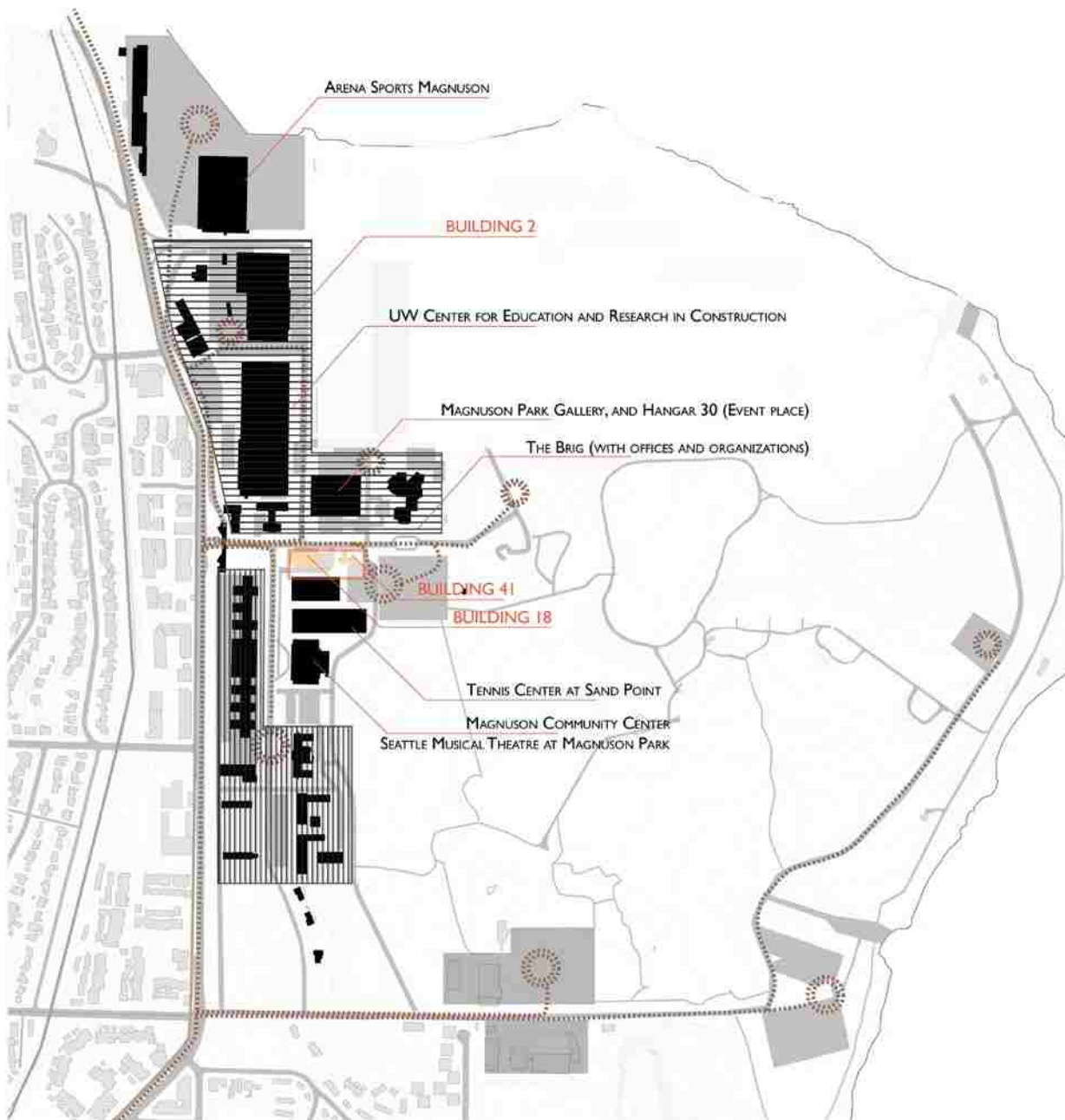


Figure 36. Composition of green spaces



The buildings in the historic district

The historic district now could be divided into three different functional zones: sports center and clubs, institutions, art and culture organizations, housing and community services. Each of them is isolated from each other and has its parking areas. Moreover, the historic buildings in the district got mostly adaptive reused for the new programs and functions, but the Building 18, Building 41, and Hanger 2. Due to the separated condition of different zones in the park, the site, which is locating on the main street, now is just a passing-by spot where no one stops. (Figure 30)

Figure 38. Building uses in the historic district.

“The district retains an important collection of Public Works Administration and Works Progress Administration funded structures and buildings stemming from the nation’s pre-war infrastructure expansion, and includes examples of Modern and Colonial Revival style buildings.” - NAVAL AIR STATION SEATTLE Landmark Nomination Report, 2010, page 36

The consistent architectural style contributes to the identity of the place. It is a heritage of the history.



Figure 39. Administration for the hanger and gallery, next to the Hanger 30, located on the historic corridor



Figure 40. Hanger 30, located in the north of the site, across the main street



Figure 41. The community center, located in the south of Tennis center



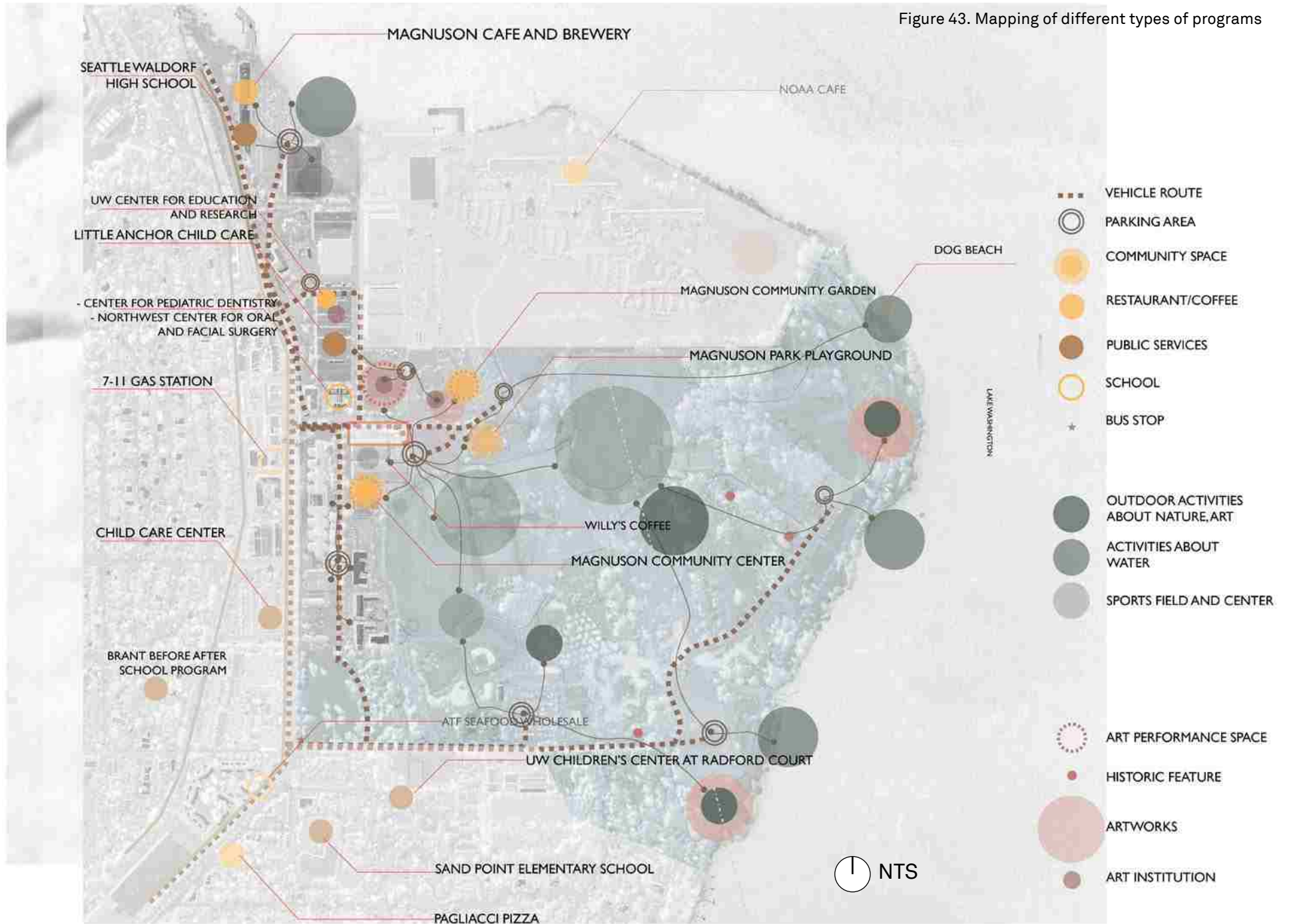
Figure 42. The Mercy affordable housing, located in the west of Building 18

Analysis of the programs

The program analysis focuses on three types of functions: the community services, which is related to the on-campus residents and workforce; the environmental related activities, which is as a reference of the ecology in the park; the artworks which are installed throughout the park. Given that the range of on-site residents and activities, community services at this location should support all different groups. While the other parts of the park have a significant commitment to ecological processes, this site's design also could incorporate ecological functions and connect to the larger park. Finally, the role of art across the park is amplified in this location, with surrounded artist's studio, a small gallery, theater, and other performing spaces. It is evident that the site is in art and culture center in the district. Besides a commitment to the ecology, the new park also integrates with artworks related to the history of the park.

From the analysis, it shows that the park lacks community services like restaurants and shops. The park needs a larger art exhibition space that can assist the artists in the park and also create a dialog with the artworks on the coast. The analysis also indicates that there is a potential for the site to have an outdoor activity or an ecological function that could link to the west park.

Figure 43. Mapping of different types of programs



4.2 BUILDING 18 AND BUILDING 41

Great location

Building 18 and Building 41 are located on the main street, on one end of the historic corridor. Building 18 is the first building to see when entering the entrance. The site is on the joint of the historic district and the new park. The critical location is the benefit and the challenge for the site. It is crucial to maintain the historic feature, at the same time gradually introduce the visitors about the new life in the park.

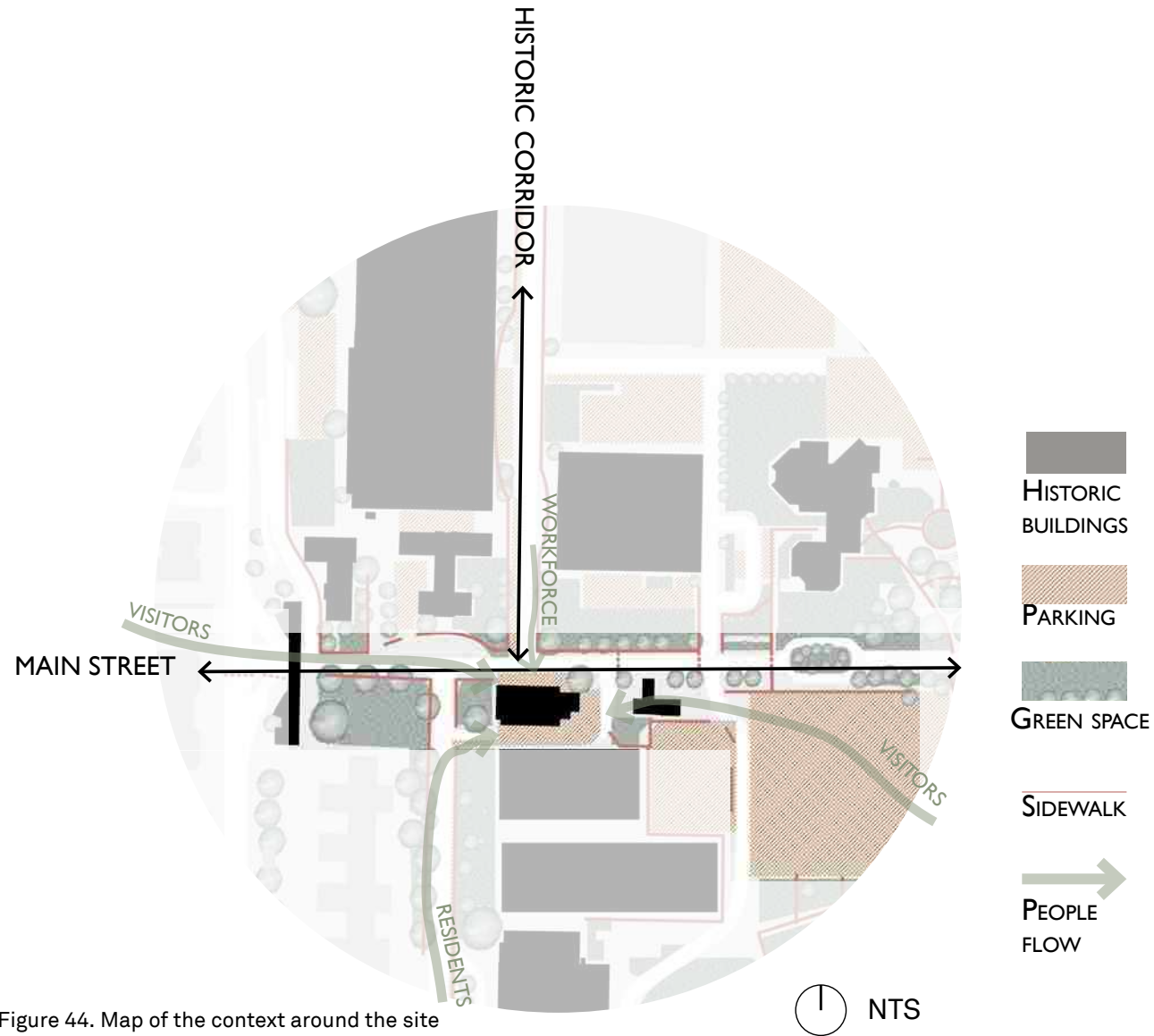


Figure 44. Map of the context around the site

Poor public access and redundant parking spaces

Driving is the most convenient way to access the park. The pedestrian way is intermittent from the main entrance to the recreational area. And there is no biking lane for visitors. Lack of diverse accessibility is the main issue in this area which influences the use of the site. What's more, around the site, there are no green spaces but redundant open parking lots. Lack of shade creates an uncomfortable experience to walk through the site and the parking lots. To provide a pedestrian and biker friendly environment is necessary for the diversity of visitors and uses of the site.

Figure 45. Site pictures



Figure 46. Aerial picture
Source: Google Map

Essential structural and spatial advantages

Building 18 has a significant advantage in reforming the space because of the great open space on the ground floor. It has huge potential for all kinds of functions alternatives. The concrete and steel structure gives steady and strong support for the building. The six openings on the north facade indicate more possibilities in connecting to the street and the landscape. Besides, the building is also with equally arranged windows around the first floor and second floor, which provides a good foundation of the lighting environment and passive ventilation system for the interior. The dry-hose tower is a significant feature of the building or the site which provide a great view of the park and the historic district.

It is one of the art-deco style buildings in the historic district. As the building is in the vital position that gives the audience the first impression of the district. It is worthy to be preserved.

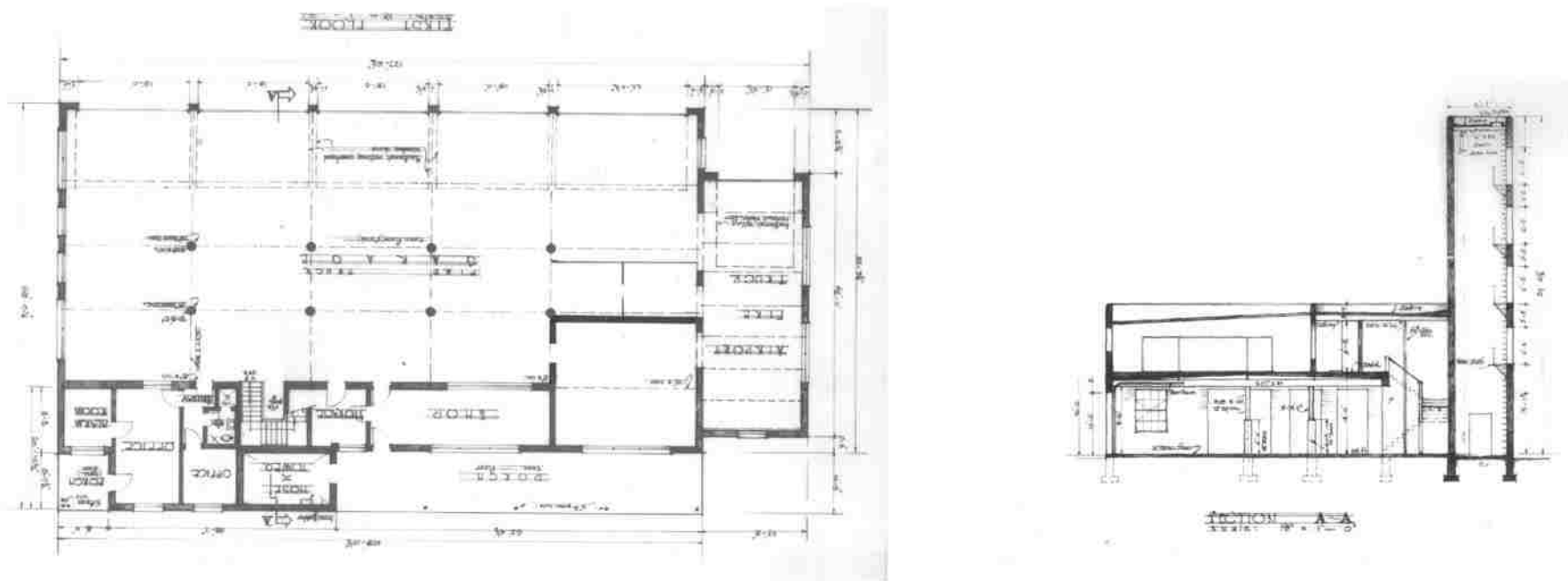


Figure 47. Historic drawings of ground floor plan and section of Building 18

The porte cochere of Building 41 is the essential feature of the building which shows the former functions of the place and has an inherent welcome to people. The south facade is kept in good condition, with a beautiful combination of windows and brick wall. It plays a role of way finder to the historic district for coming people from the parking lots.

The site around Building 18 and Building 41 also has great potential in the adaption — the paved parking lots could be taken over due to the abundant parking spaces around this area, and the ground is sloping towards the east which offers a good condition



Figure 48. Significant feature - Porte cochere



Figure 49. Significant feature - South facade of Building 41

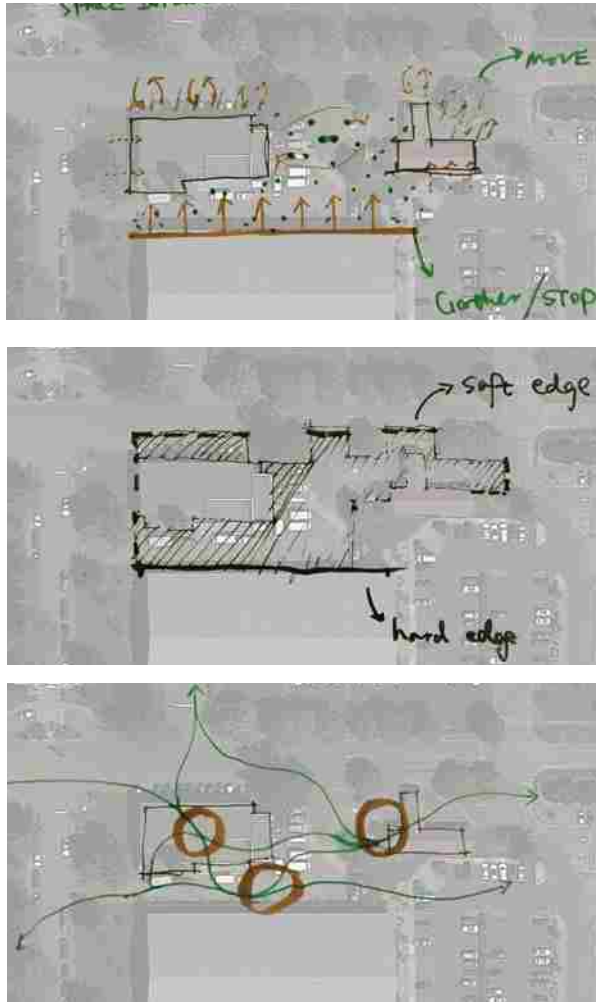


Figure 50. Back Alley between building 18 and the Tennis Center



Figure 51. Parking space between two buildings and the roof top area

Figure 52. Three diagrams of analysis on site condition



Complex conditions of the context

In the site's long sides, the north side is facing the main street, which has various opportunities to interact with the visitors and provide multiple spaces for them. While the south side is facing the new tennis center solid steel-panel wall, the south side can only be accessed from the two ends. The alley between the tennis center and Building 18 has plenty of spaces which could accommodate new functions that can active the alley and invite people to visit. Building 18 and Building 41 are isolated now. There is potential to create a dialog between the two buildings through a change in the space between them.

Figure 53. Collage and analysis of main street views. Green dash line indicates large garage doors area, which has a huge potential to be developed.



CHAPTER 5 DESIGN

5.1 Interweaving Landscape and Architecture

5.2 Interweaving in an urban scale

5.3 Interweaving between space and function

5.4 Interweaving through ecological performance

Figure 54. Conceptual model showing the idea of building connection from the park to the entrance, and between Building 18 and Building 41



5.1 INTERWEAVING LANDSCAPE AND ARCHITECTURE

in-ter-weave

“To weave together” (Merriam-Webster Dictionary)

“To mix or blend together”(Merriam-Webster Dictionary)

“To put together or combine two or more things so that they cannot be separated easily ”(Cambridge Academic Content Dictionary)

According to the study of the site history and condition, reuse the Building 18 and Building 41 is an ideal approach to reactivate the site and connect the visitors and residents with the park. The park is already a mix of buildings and landscape, indoor functions and outdoor activities, and architectural sustainability and landscape sustainability. Base on this, the concept of the design is interweaving landscape and architecture through different scales to embrace different groups of people, building environmental connections and display the history of the park as an art.

A joint that could gather and also act as the start for different types of users.

A combination of the rigid historic feature and dynamic ecological improvements.

A place in connection with the art & culture of the park.

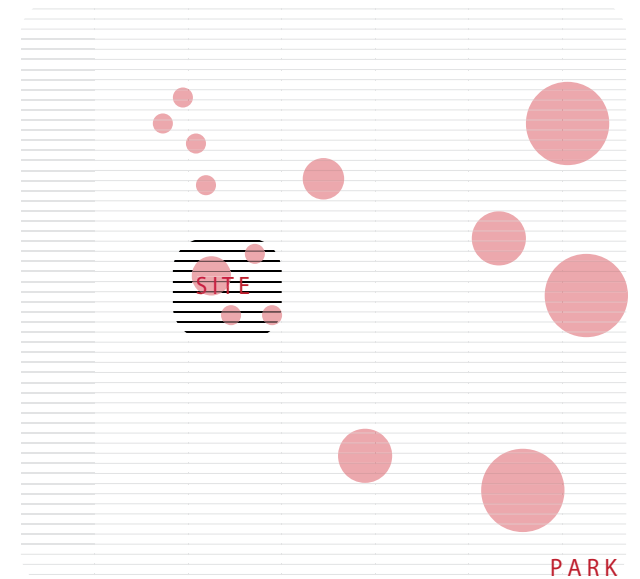
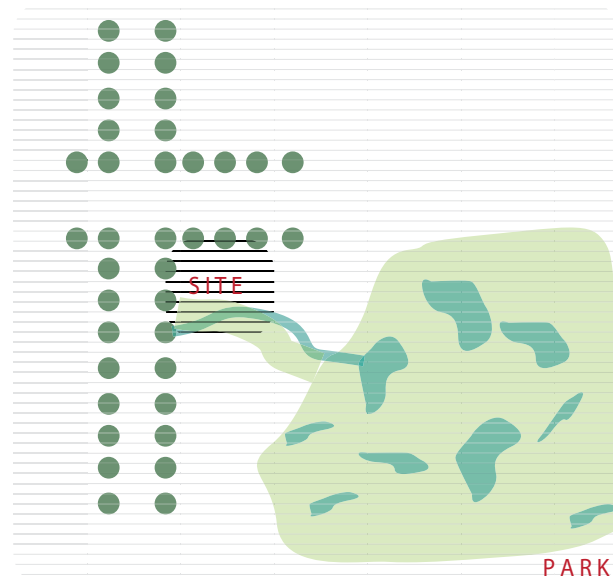
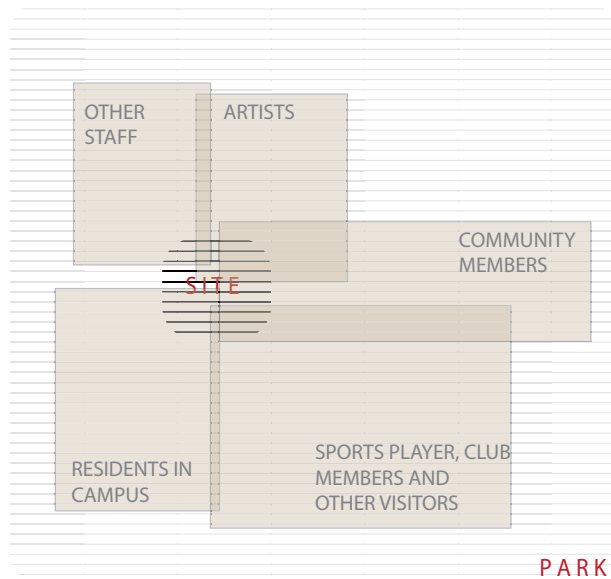


Figure 55. Diagrams of the concept -Interweaving Landscape and Architecture
44

5.2 INTERWEAVING IN THE URBAN SCALE - A TRANSITION BETWEEN THE HISTORIC DISTRICT AND THE PARK

From an urban perspective, the proposal aims to build a connection between the historic district and the park through increasing accessibility, improving the ecological environment and creating a hub for the visitors and residents.

Access

The proposed continuous and more accessible pedestrian and biking system connects visitors from the entrance through the site, the vast parking lots to the recreation area, and so increases the accessibility to the park. The primary pedestrian way is woven into space in front of the garage doors and the old Porte cochere of Building 41. By engaging pedestrian and bikers into the site, the site will be a stop for people who are entering the park by walking or biking. What's more, the system extends through the parking lots, which will direct people to other parts of the park – the community center, the playground, and the sports field, and further to the trail in the natural area. Thus, With the new hub built, the public activities in the park are linked. Painted bike lane can separated bikers or pedestrian from vehicles easily (figure 57). And by utilizing the spaces in front of Building 18, there is a potential to create a visitor plaza like Figure 58.



Figure 56. Painted Bike lane Photo by VALERIO ROSATI.



Figure 57. Mexico city plaza. Photo by Public Space Authority (AEP).



Figure 58. A more pedestrian and biker friendly environment . Base source: Google Map.

Ecological Environment

By introducing green infrastructure meandering through the site and the parking areas, the historic district connects with the park through the ecological system. Greening the parking lot makes up the gap in the green spaces. The new vegetation and bio-retention system can not only reduce the ground runoff but also slow down the driving speed within the community and provide more shading area for the users. As the leading landscape feature within site, the bio-swale and the ecological pond connect to the extensive wetland system and activate the site. By keeping the rigid street trees on north of the site and creating dynamic environmental treatment on the south, the site become the ecological joint of “natural” park and historic district. Figure 59-60 show examples of green parking lots.

Figure 59. Ecological treatment in the parking lot, source from <http://taylorsvilletimes.info/Green-Parking-Lot-Design.html>



Figure 60. A shaded parking lot, Source: https://www.harvard.ma.us/sites/harvardma/files/uploads/harvard_commercial_design_guidelines_10-3-2016_3.pdf, page 10.



Figure 61. A green transition between the historic district and the park. Base source: Google Map.

A Hub for Magnuson Park

By bringing new life to Building 18 and Building 41, the different parts of Magnuson Park reunite. The hub is designed to provide multiple functions and create various spaces for groups of visitors, residents, and artists. Located at the joint of the natural area, the residential area and the institutional area, with the signature historic characteristics, the hub will become an essential part of the way-finding system in the park – as a visitor center that introduces the contemporary functions in the park to the public at the same time address the history. The architecture and landscape in the hub will reflect the interweaving relation on a human scale that users could experience. The Hub will rejoin the different zones in the park, the historic architecture and the ecological environment, and the people in the park.

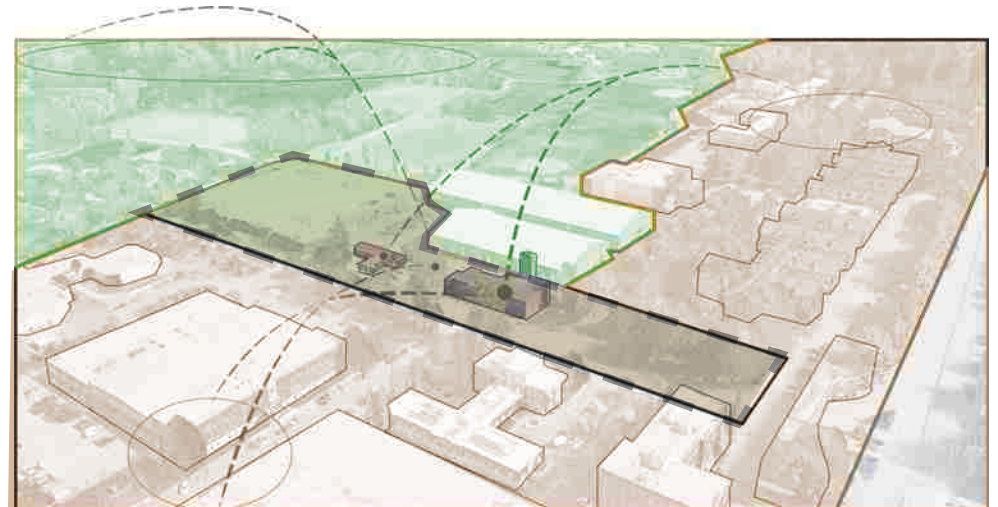
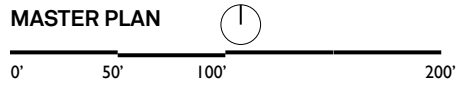


Figure 62. An educational, social and culture center that the park's visitors, art community and residents meet. Base source: Google Map.

Figure 63.

MASTER PLAN



- 1 WAY-FINDING SIGNS
- 2 MAGNUSON HUB -MAIN BUILDING
- 3 HUB- GALLERY BY THE POND
- 4 GREEN WALKWAY
- 5 HUB- GREEN HOUSE CAFE
- 6 PEDESTRIAN PLAZA
- 7 PARENT PARKING PLAZA
- 8 MID-POINT RAIN GARDEN
- 9 SMALL PLAZA
- 10 ENTRANCE TO PLAYGROUND
- 11 PLAZA OF SPORTS FIELD
- 12 EXISTING PARKING LOT
- 13 BIO-SWALE
- 14 GRATING ABOVE THE SWALE
- 15 RAINGARDEN





Figure 64. View from main street, towards to the Hub



5.3 INTERWEAVING AT THE ARCHITECTURAL SCALE

– Building spatial and functional relation between inside and outside spaces

The architecture section of the Hub includes Building 18, Building 41, and new added pavilions and landscape between the two historic buildings. The design of the extension buildings serves as a landscape intervention based on the integration with the site's landscape design. The renovation of the existing buildings is aimed to remain the critical character while interacting with the landscape. By providing multiple entrances and openings, the design blurs the edge of the buildings and invites people to enter the site and pass through the site in different ways. No matter serving as a community center or a garden, it could be a hub that people stop by, or a destination for the visitors and residents.

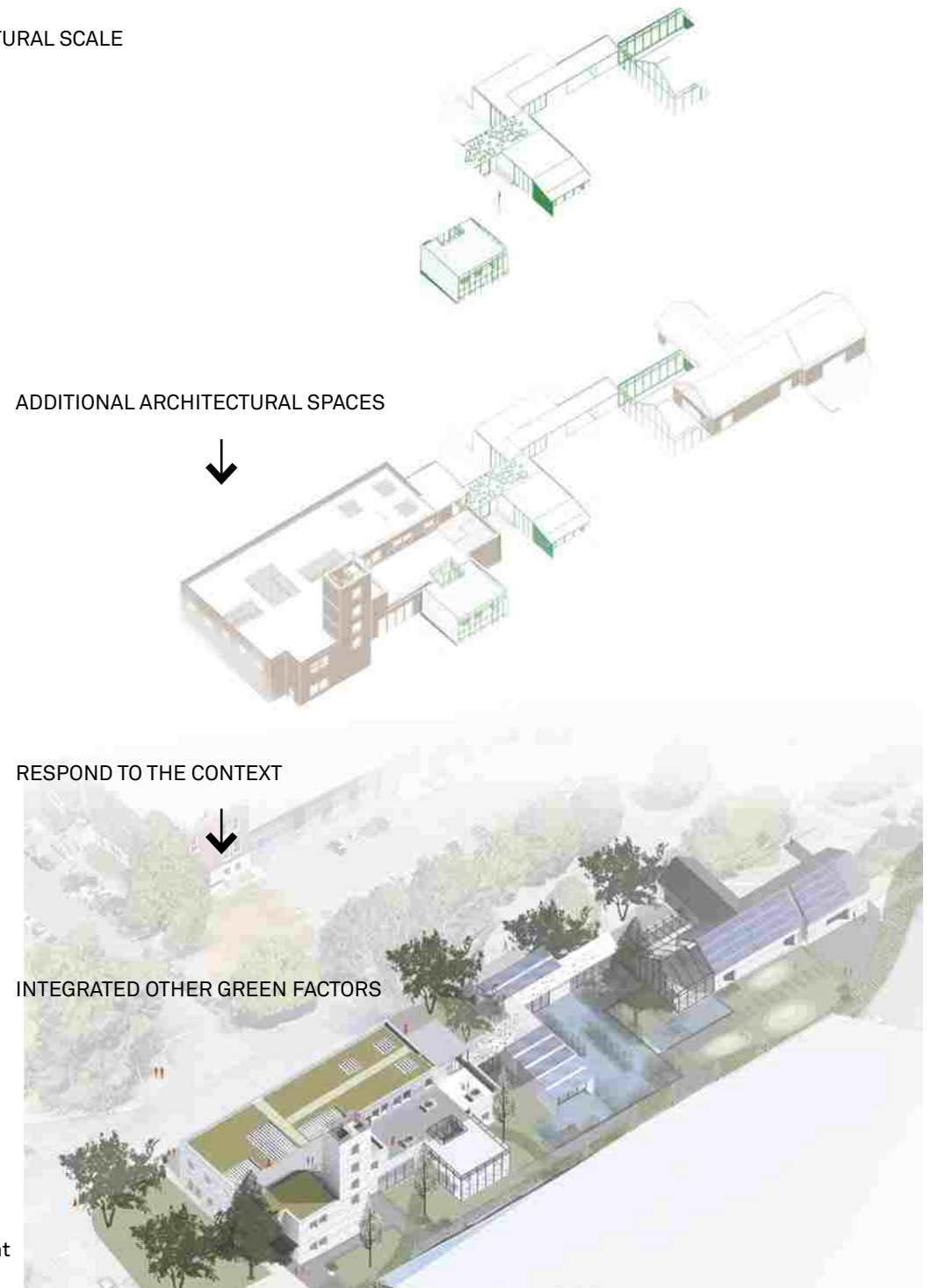


Figure 65. Exploded diagram that shows the different building sections. Base map source: Google Map

Different programs scatter in the site. In general, there are six main functions in the Hub, and each of them associate with different landscape ideas. The landscape design, besides respond to the interior, also is based on the context and the existing condition.

1. The library provides a community reading room and study place for the residents.
2. The gallery is the host for multiple activities to the visitors and acts as a

community spot for the residents. It also becomes a starting point for the artworks in the park and completes the art map in the park.

3. The co-working spaces can bring a different energy to the park besides tourists and club members, which supports the small business and independent artists.

4. The maker space is an additional space for workers, artists, and community members.

5. The coffee shop and restaurants provide convenience to all the users, which make the park a more friendly place to stay, work, and live.

6. The observatory, originally as the hose tower, now becomes a “light tower” in the community, and provide a overview to the park.



Figure 66. Model photo showing different function zones

The site's landscape design responds to the old building's facade and interior functions through THREE INTERFACES.

1. On the north side of Building 18, around the five-garage doors are multiple treatments for entirely different uses. The main entrance gate got pushed inside the facade, which creates transitional spaces between the brick wall and the glazing door, and so addresses the visual difference and gives a transition for the visitors. The space in front of the coffee shop provides a shaded place that gives customers outdoor seatings on rainy days. The doors for the maker space and gallery are operable, which could be open to connecting the indoor and outdoor spaces for different events.

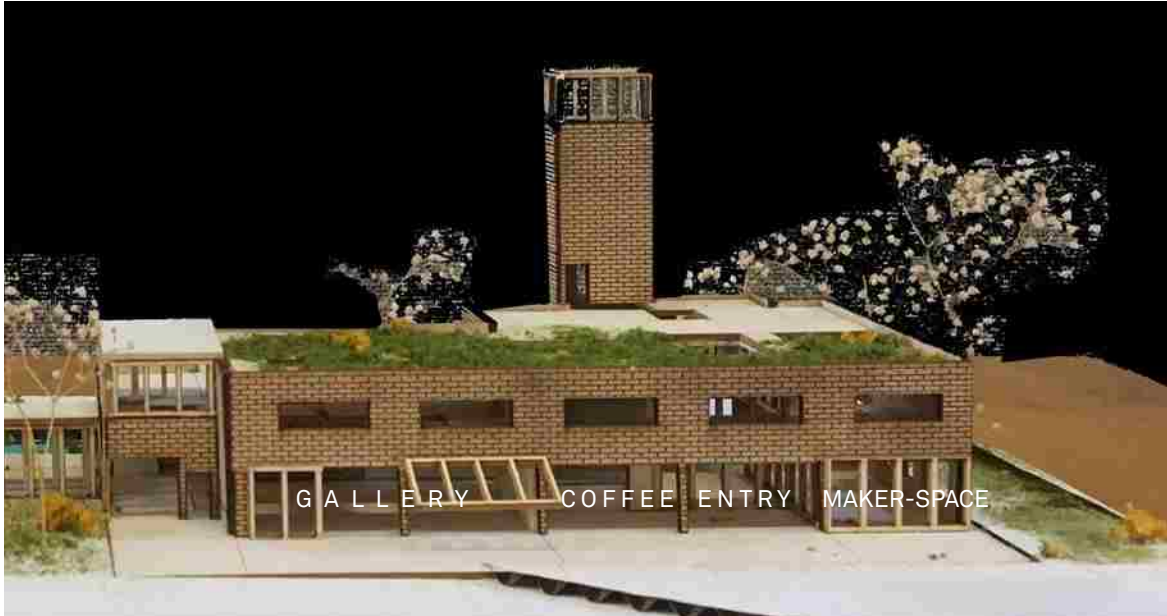


Figure 67. Model photo for the first interface engine bays showing that different functions face the main street.

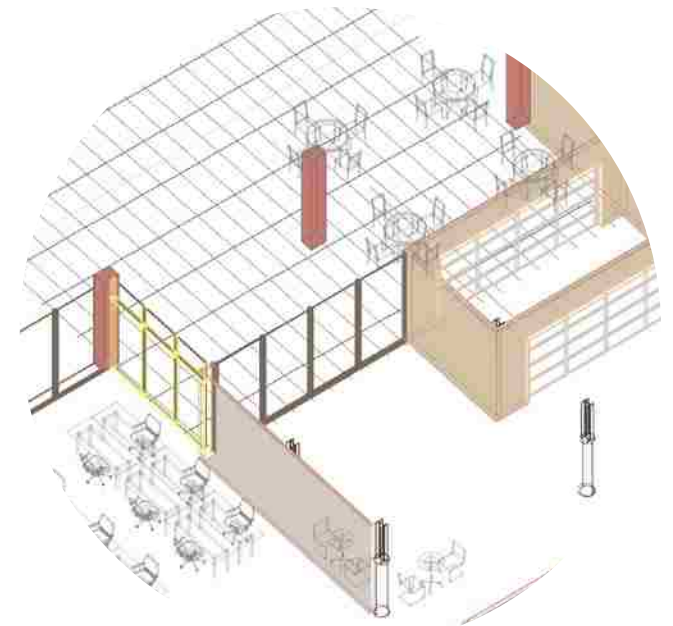


Figure 68. Isometric for the entrance showing the relationship between the entrance and the existing facade

2. Second interface is between the building and the back alley. The new alleyway becomes a green corridor that connects to the extensive park system, also as a green garden that serves green spaces to the residents on campus, and an architectural space in between the Hub and the tennis center. The bio-swale intertwines with the paths, the water and the building gives people a rich experience when walks through the park.



Figure 69. Model photo for the alley showing the bio-swale in going through the alley, and the hidden glazing reading room.

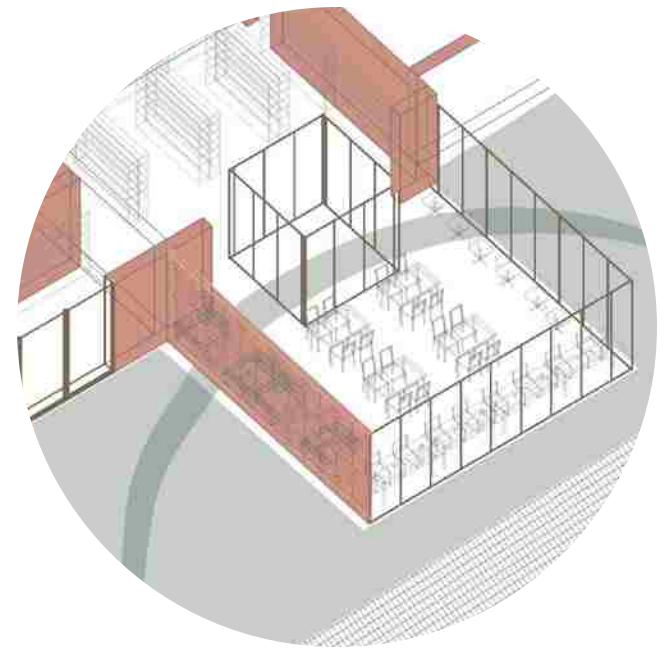


Figure 70. Isometric for the reading room and the alley showing the relationship among the extension, the old building and the landscape

3. The third one is the space in between the new ecological pond and the buildings. The water feature in the site is surrounded by the pavilion, ecological corridor, and restaurant, which provides fantastic water views and highlights the interaction to the gallery and the restaurants. Not only with an aesthetic function, but the water yard is also integrated with the ecological system and provides an educational purpose for visitors by demonstrating the seasonal precipitation change throughout the year.



Figure 71. Model photo for looking at the middle water court from the alley

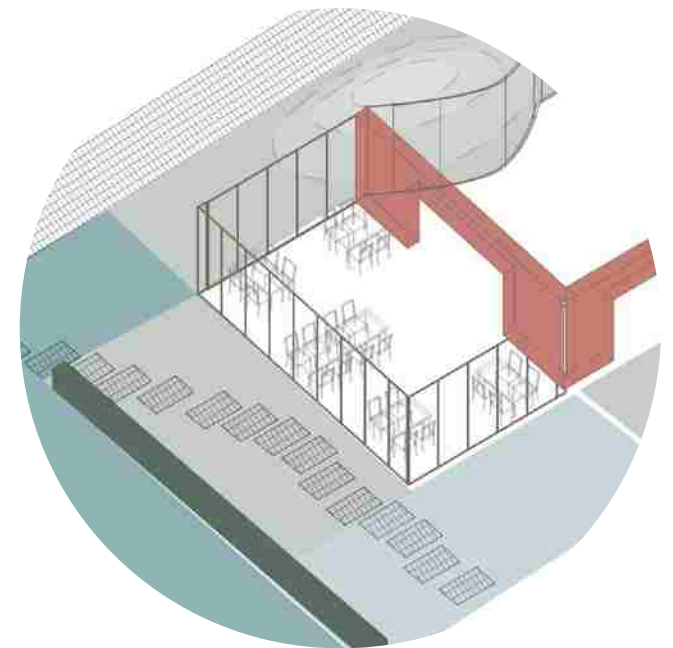
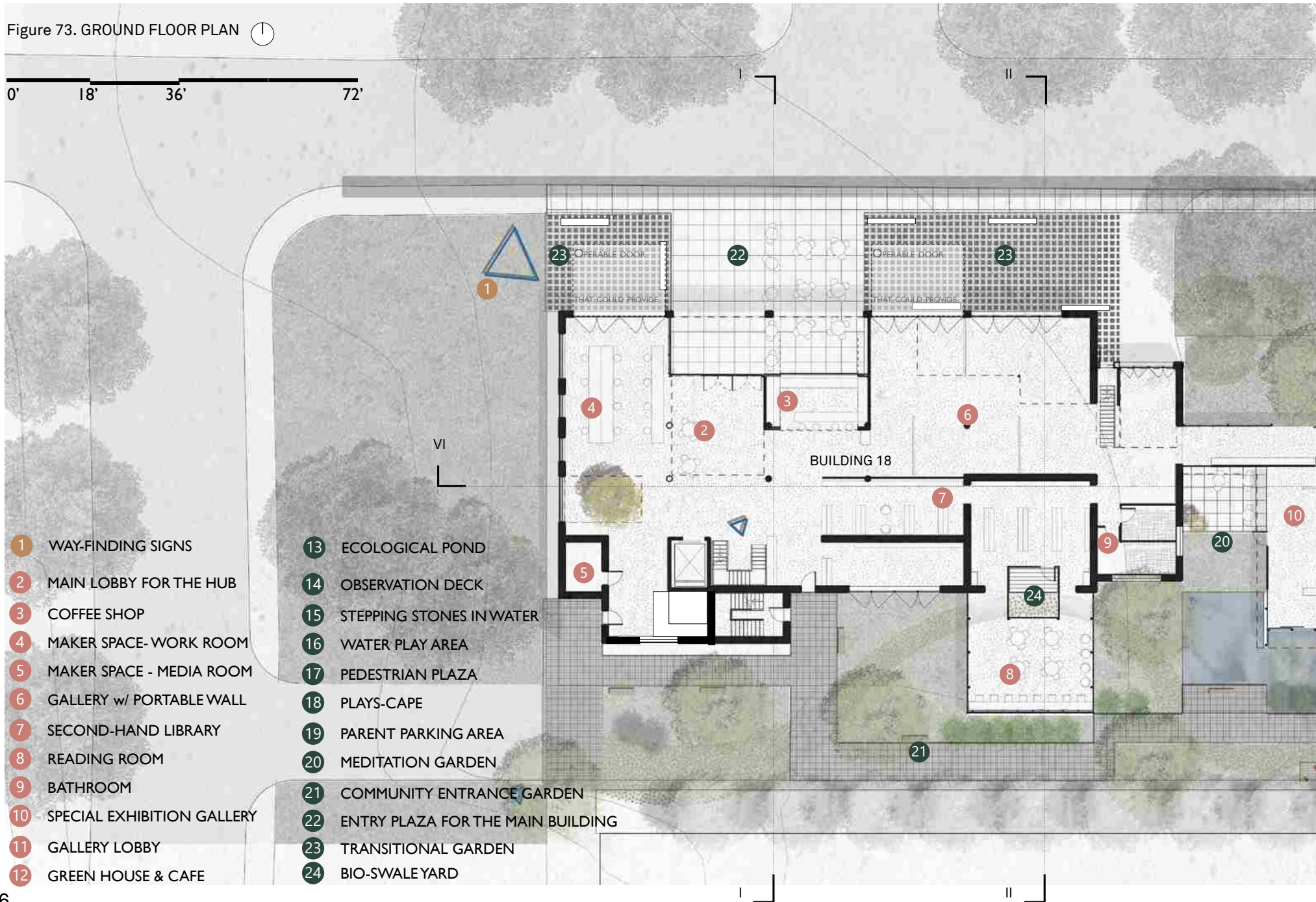
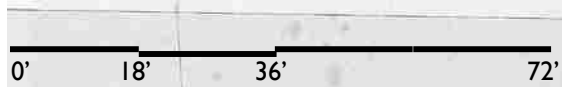


Figure 72. Isometric for new dining room surrounded by different landscapes

Figure 73. GROUND FLOOR PLAN ①



- | | |
|------------------------------|-------------------------------------|
| ① WAY-FINDING SIGNS | ⑬ ECOLOGICAL POND |
| ② MAIN LOBBY FOR THE HUB | ⑭ OBSERVATION DECK |
| ③ COFFEE SHOP | ⑮ STEPPING STONES IN WATER |
| ④ MAKER SPACE- WORK ROOM | ⑯ WATER PLAY AREA |
| ⑤ MAKER SPACE - MEDIA ROOM | ⑰ PEDESTRIAN PLAZA |
| ⑥ GALLERY w/ PORTABLE WALL | ⑱ PLAYS-CAPE |
| ⑦ SECOND-HAND LIBRARY | ⑲ PARENT PARKING AREA |
| ⑧ READING ROOM | ⑳ MEDITATION GARDEN |
| ⑨ BATHROOM | ㉑ COMMUNITY ENTRANCE GARDEN |
| ⑩ SPECIAL EXHIBITION GALLERY | ㉒ ENTRY PLAZA FOR THE MAIN BUILDING |
| ⑪ GALLERY LOBBY | ㉓ TRANSITIONAL GARDEN |
| ⑫ GREEN HOUSE & CAFE | ㉔ BIO-SWALEYARD |



The ground floor plan (Figure 73) shows the balance of preserving the original features and creating interaction with the landscape. The community second-hand book trading library is located on the south side, adjacent to the alley and closer to the residential area. It is aiming to provide more reading/studying spaces more than book storage. The additional reading room extends beyond the boundary of the building and inserts into the alley garden. Having the gallery space on the east side facing the main street engages visitors through a display of arts. The large open spaces from the former apparatus bays give the flexibility to arrange the exhibition or events. The main lobby is in the center of all different functional zones on the first floor and the stairs toward the second floor. The coffee shop by the lobby can provide a short break and quick bite for people and activate the space in front of the building. By opening the east wall, the design creates a smooth transition from the lobby and main gallery space to the middle water garden and pavilion gallery

for the audience.

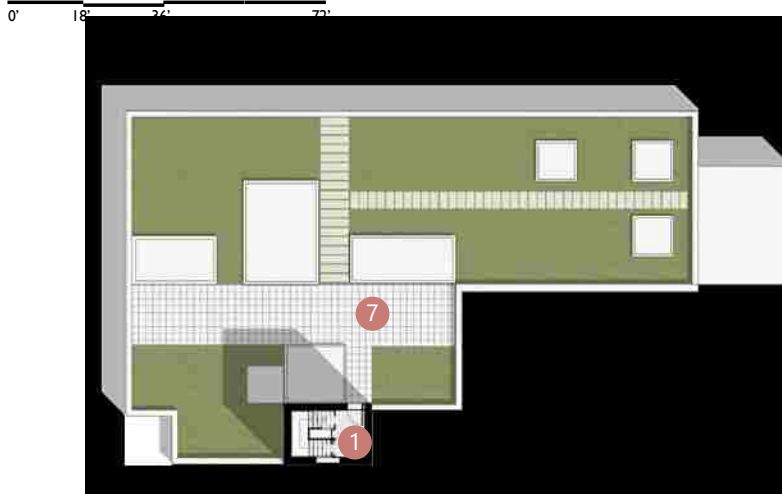
The new experiencing gallery aims to provide a unique attraction for the audience to learn the historical building while experiencing about a different ecological environment. Surrounded by water and vegetation, the gallery provides a different experience for touring through different rooms. The large area of glazing and sliding door provides a strong feeling of contrast with the substantial brick buildings for the visitors. It could be opened as a landscape structure which welcomes everyone passing the site; while it could also be closed to hold exhibitions.

Building 41 is changing to a restaurant that will allow pedestrian access through its opening on the main street to the gallery and the sports field. With an additional glazing structure, the building interacts with the existing and new landscape environment. Utilizing the existing opening on the facade, the restaurant provides a place for the parents from the sports field and playground to stop, gather, and talk.

On the second floor of Building 18, there are co-working spaces on the west side and gallery spaces on the east which associates with the exhibition spaces on the first floor. The gallery on the second floor has interior and exterior sections. The new rooftop becomes a space for people to hang out and for special exhibitions. The gallery inside is separated into different rooms which can accommodate multi-media exhibitions (Figure 75).

On the upper floor, there is a rooftop garden that provides a more broad view of the park and an observatory that is renovated from the old dry-hose tower (Figure 74).

OTHER FLOOR PLANS



- 1 STAIRCASE TO THE OBSERVATORY
- 2 STAIRCASE TO THE OBSERVATORY, EXIT STAIR
- 3 CO-WORKING SPACE
- 4 MEETING ROOM
- 5 SEPARATED WORKING OFFICE
- 6 GALLERY SPACE
- 7 ROOFTOP GARDEN

Figure 74. THIRD FLOOR PLAN

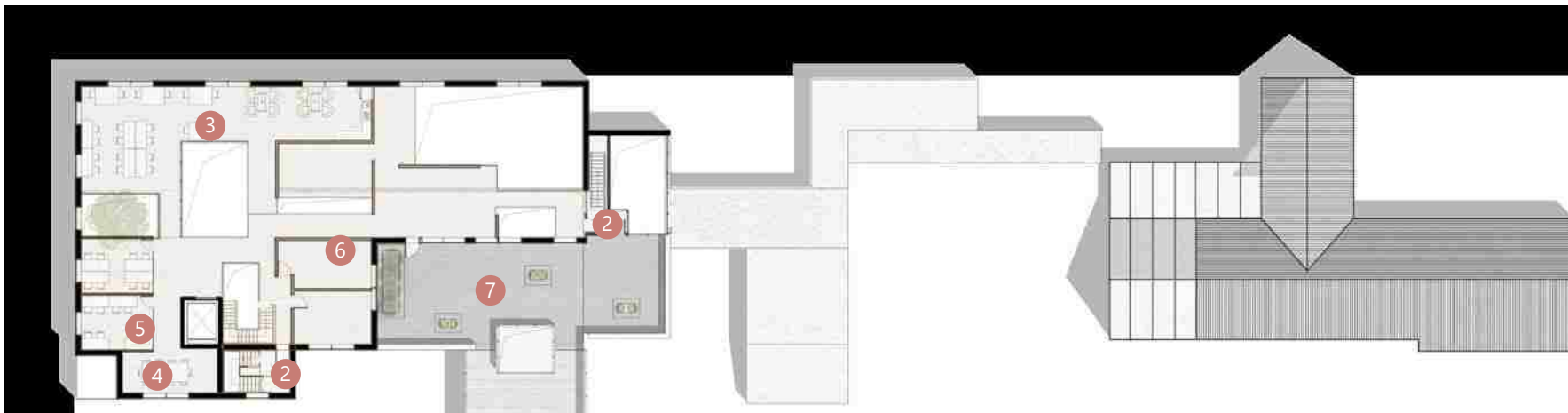
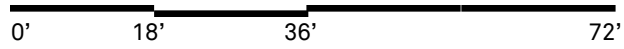


Figure 75. SECOND FLOOR PLAN

Figure 76. SECTION VI-VI



MAIN BUILDING

(Education, innovation, art&culture, leisure, work)

- Different scales of place for different functions
- Utilization of daylight
- Bring landscape inside and extend interior space into landscape

OPENING SKYLIGHT ABOVE EXISTING STRUCTURE
TO UTILIZING NATURAL LIGHT.



CHAPTER 5 DESIGN REPRESENTATION - 5.3 INTERWEAVING AT THE ARCHITECTURAL SCALE

GALLERY IN THE POND

(Education, meditation, art&culture)

- A mix of historic facade and modern gallery space
- Dynamic water level and wetland plants in the pond
- Indoor and outdoor spaces interweaved

GREEN HOUSE CAFE

(Ecology, playscape,dining)

- A combination of historic and modern space
- The architecture form interacts with the new landscape
- Interesting plants selection for playful place



Between inside and outside, new and old

The different sections show the different strategies of the design between inside and outside, new and old — the landscape scale correspondingly changes while the related architectural space changes. And as the historic building's features become less significant, the landscape permeates into the building and brings people outside.

At the section 1-1 (Figure 77), the landscape and the architecture are touched in the hard surface. Preservation of the buildings' historic feature is the main task here. While landscape acts as a lead on the main street side, it softens the edge of the building as an active space between building 18 and the tennis center on the alley side.

Then the landscape starts to permeate into the building as Figure 78. Adding a light structure with a similar scale of the Building 18, the landscape is brought into the old architectural spaces. The structure is merged into the landscape as well.

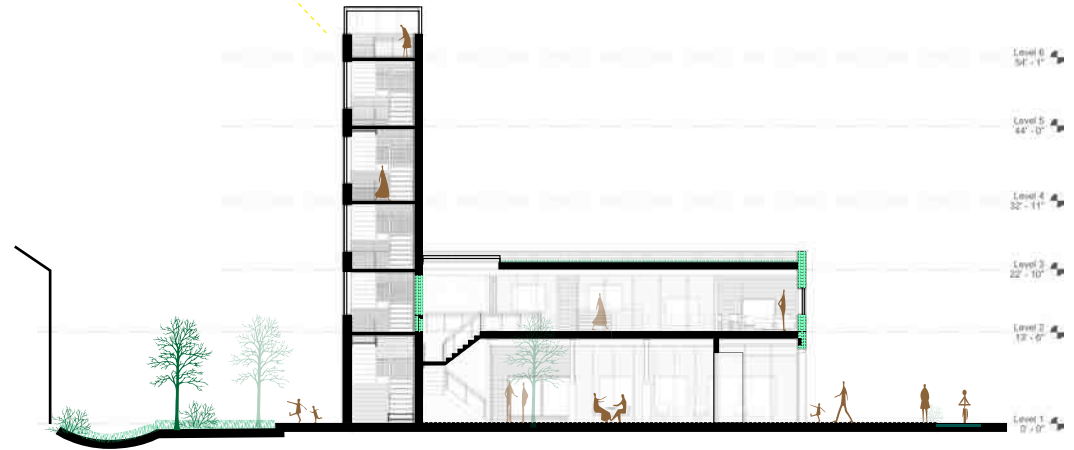


Figure 77. SECTION 1-1, preserving

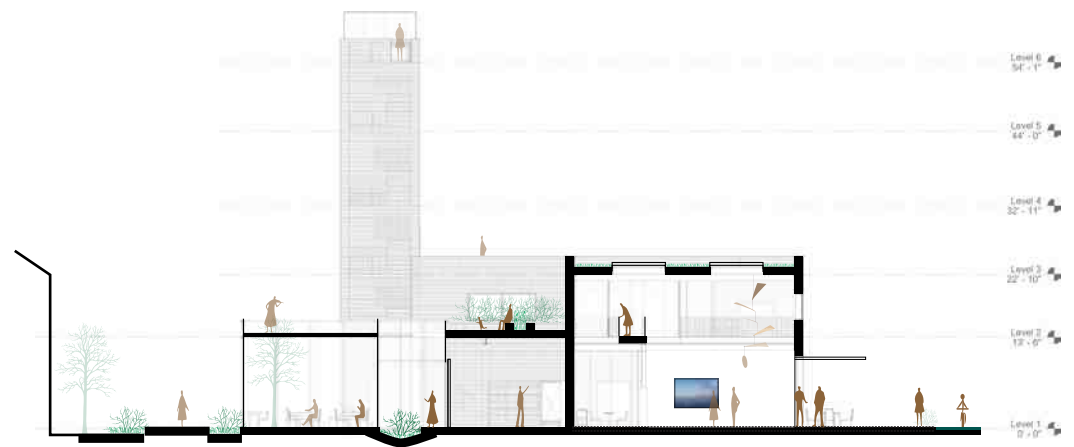


Figure 78. SECTION 11-11, permeating

As Figure 79 indicated, the landscape treatment in the open space between two buildings create a different contrast between the landscape and architecture. Landscape dominates the space. Architecture provides the shelter and directs people towards the water.

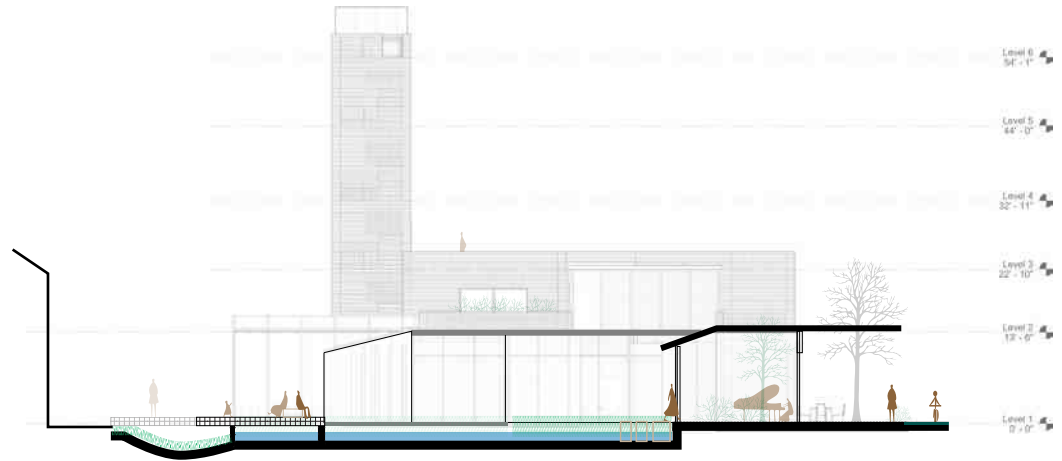


Figure 79. SECTION III-III, contrasting

Around the building 41, while preserving the architectural details, Figure 80 shows that the landscape becomes more diverse. The context becomes more diverse on the east side of the site, and so this portion of the site serves as a transition to this larger park context.

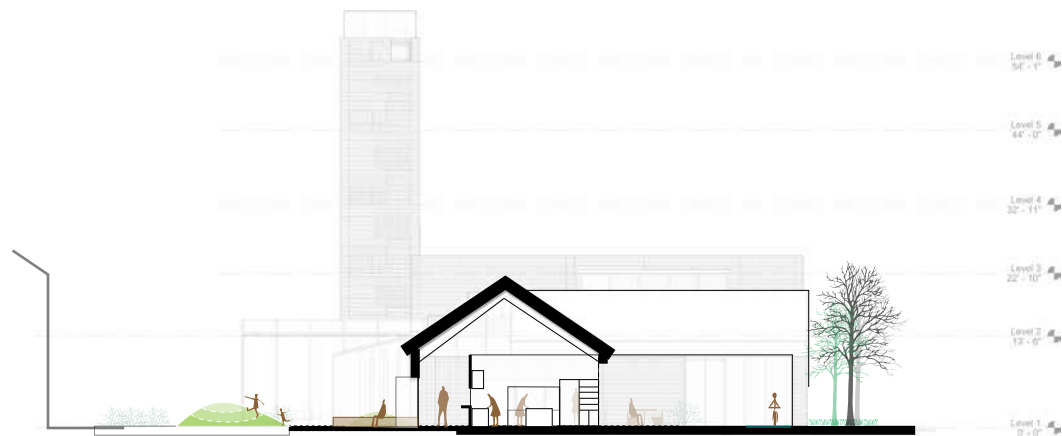


Figure 80. SECTION IV-IV, transitioning

A Dialog between the Building 18 and Building 41

By opening the facing walls between Building 18 and Building 41, the two buildings are connected visually, through the new pavilions and programs, the two are linked in space and functions. The dialog between the two buildings activates and utilizes the landscape in the middle.

Figure 81. Visual connection - to create a dialog between two buildings and the new



Figure 82. View to water, glass dining place, and the building 41



Figure 83. View to the glazing gallery, and the building 18



Display the art through displaying the historic buildings and integrating exhibition spaces within the site

The main functions of the Hub is an exhibition space. The design itself aims to show the visitors about the history of the buildings, which can be extended to the history of the site. There are different spots for people to experience different feeling and functions of historic buildings.

Besides exhibiting the historic features, there are also indoor and outdoor spaces for exhibiting artworks, which also contributes to interweave the indoor and outdoor spaces.

Figure 84. Viewpoints to feel the history (orange), and outdoor art walk (green)

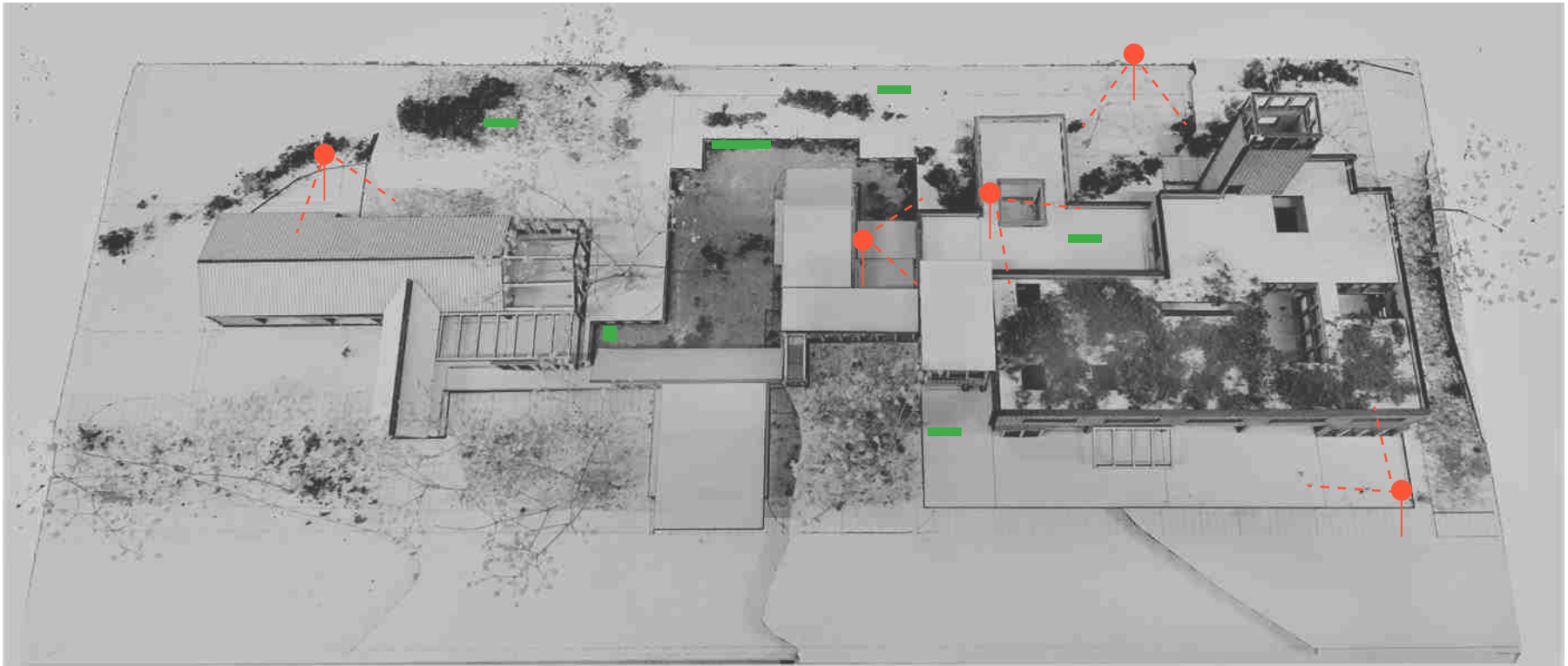
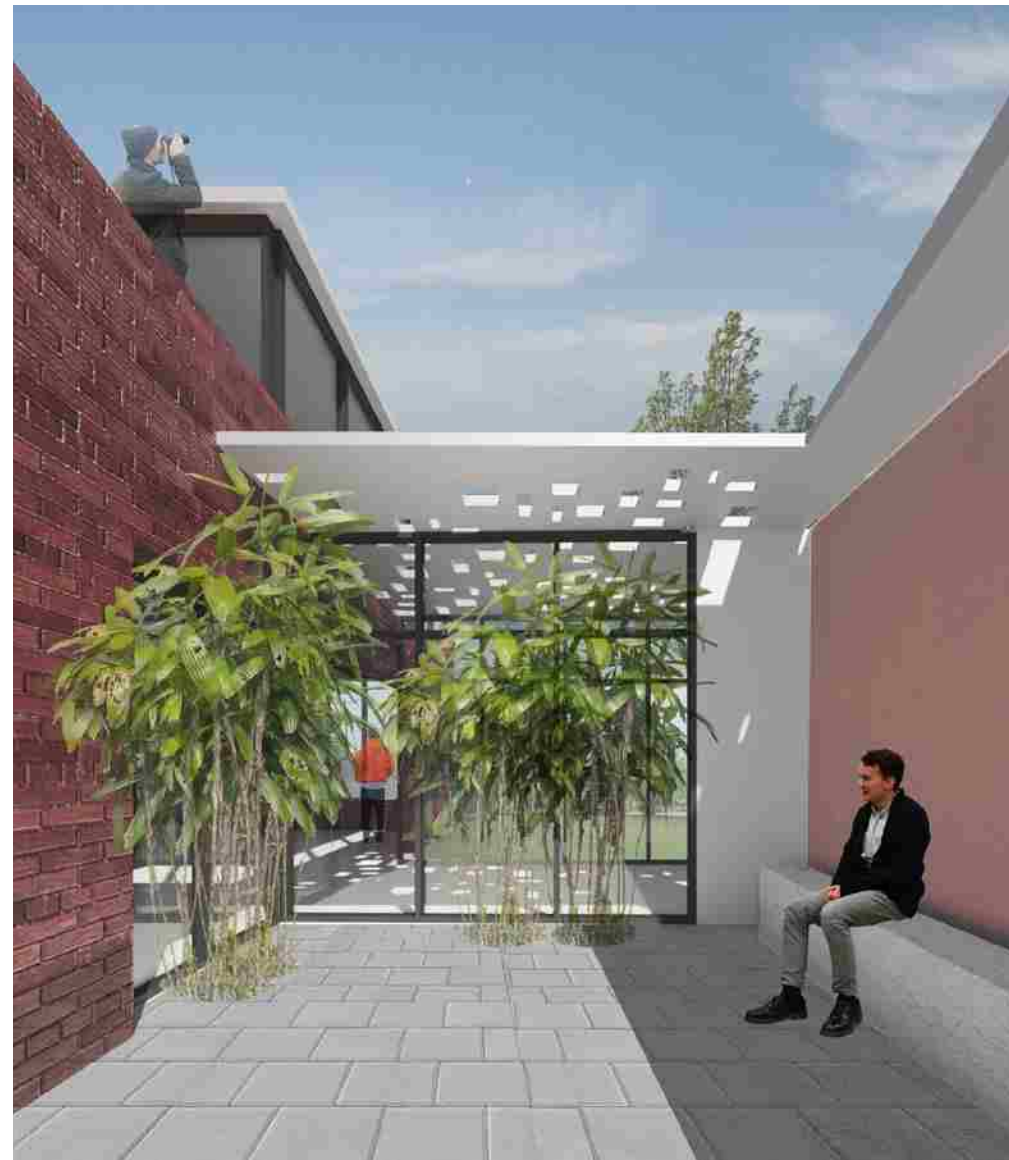


Figure 85. View to the tower and the brick facade at roof garden



Figure 86. View at the meditation garden between the old and new buildings



5.4 INTERWEAVING THROUGH ECOLOGICAL PERFORMANCE

Figure 87. View to the back alley, which is designed as a green corridor towards the west park.



Solar Energy

There are two treatments for using solar energy. The first one is utilizing the natural light for the interior lighting environment. Since the main facade for Building 18 is facing North, skylights can collect more natural daylight for the co-working space and the exhibition space. The second method is placing solar panels on the south facing roof. Based on the site lighting study, the lot between two buildings and the south side roof of Building 41 are the ideal places for the solar panels. The landscape strategy also corresponds with the location of the panels, as to avoid creating shaded areas.

Figure 88. March to September lighting study



Figure 89. September to March lighting study

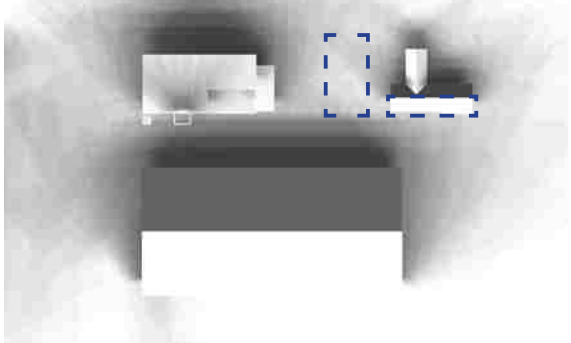
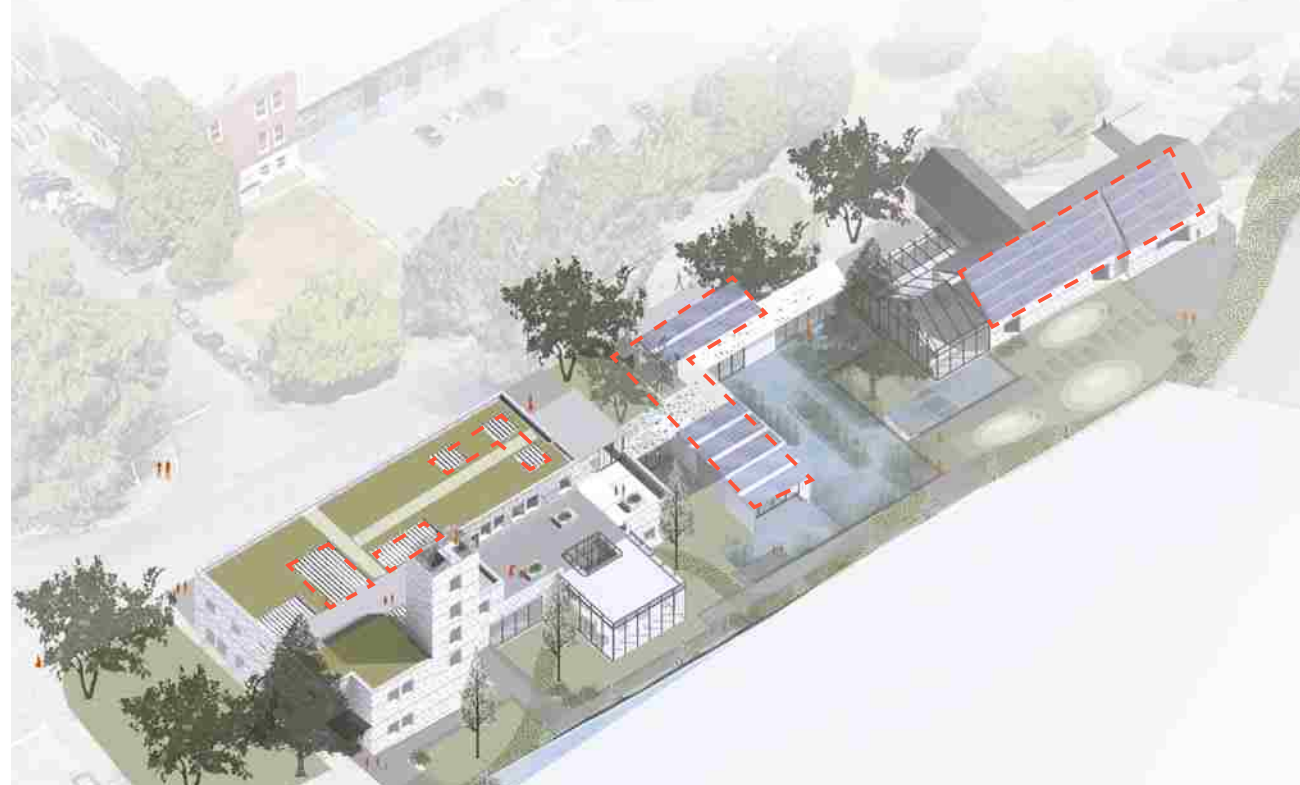


Figure 90. Location of the skylights and solar panels



Stormwater Treatment

The stormwater treatment system includes two sections : a bio-swale and an ecological pond. The bio-swale is constructed to follow the existing topography, run along the back alley and connect to the parking lot green infrastructure system. The pond can hold and filter the water with aquatic plant or similar wetland plants to those used in wetlands in the park. At the same time, serving as a water feature, it can provide great views for both interior or the landscape. What's more, as it can be regarded as another small wetland system, it can provide an educational experience for visitors to learn about the wetland and the seasonal change in rainfall. The pond is connected to the bio-swale with overflows. As the bio-swale eventually merges with the large ecological system on the park, the stormwater system in site becomes part of the park's system.

Figure 91. Location of the bio-system and green infrastructure system



- 1 BIO-SWALE
- 2 POROUS PAVING-GRATING
- 3 12"DEPTH PLANTER W/10"SOIL
- 4 OVERFLOW
- 5 PLANTS
- 6 DYNAMIC GRAVEL DECK
- 7 OVERHANG - WATER DRIPPING
- 8 EXISTING PLANTING STRIP

The stormwater from rooftops and other surface stream can all be combined into the bio-swale. The water courtyard also acts as a stormwater collecting area. There will be a significant difference between summer and winter water level in the pond as the rain volume will increase a lot in Winter Seattle. So an overflow is designed between the pond and the bio-swale which can help the pond to control water level in winter. Utilizing the changing water level, the architectural deck becomes dynamic since it will be covered by water in winter and exposed in summer.



Figure 92. Stormwater Flow diagram

Green Roof

The green sedum roof is located on the roof of Building 18. By adding the green roof, the rainwater runoff could be reduced and slowed down in winter. What's more, the green roof can improve the air quality and also positively control the heat, which can save energy in summer. It can provide habitat for pollinators which increases the biodiversity.

Figure 93. Sedum Rooftop by Roofing Superstore



Figure 94. Location of the green roof



CHAPTER 6 REFLECTION

6.1 Conclusion

6.2 Meaning of the project

6.3 Summary of the methods

6.4 Challenges



Figure 95. The signature gallery space , which could be a lecture room for the community and artists. It is a place where the new and the old join.

6.1 CONCLUSION

The thesis project explores the relationship between landscape and architecture. The design aims to bring new life and meaning to the site by using the advantages of the old buildings and the park. Through the design, comprehensive design methods over different scales and dimensions are established and could be used to answer the questions which are listed at the beginning.

The reuse project responds to the existing landscape through different aspects. Located in a historical context, the reuse strategy retains the historic look and maintains the unified historic landscape. Besides, the design creates a transition between the historic district and the large park by implementing related programs and dynamic landscape features. The art and culture function of the new design is also a response to the large park environment.

The design project engages the large landscape environment by implementing the green infrastructure in the site. The bio-swale system connects

to the park, which at the same time bring the park's system into the site. The ecological system attaches and embeds in the building's design. The bio-swale and ecological pond are located outside of the buildings but influence how the buildings orient and are used. Building connection with the existing landscape happens in both physical connections and functional connections.

The focus on interweaving architecture and landscape in this building reuse project makes the site spontaneously a part of the community. The site landscape is attached to the buildings and make the site belong to both the historic district and the ecological system. Spatially and functionally, the hub welcomes both visitors and residents at the same time, which rejoin the park and provide a harmonious and convenient environment among different groups. The integration of building reuse and site design not only reactivates the community, but maintains the community's identity.

Besides the great meaning of the project, the research methods and design methods could also be applied in or referred to other adaptive reuse projects. However, different projects have different site conditions, building codes, etc. The old buildings are already in a more restricted condition compared to new construction projects. There will be more challenges when focusing on building a connection between the architecture and landscape in a building reuse project.

6.2 MEANING OF THE PROJECT

This project is intended to revitalize and create meaning for the site through interweaving landscape and architecture, both as a different approach for adaptive reuse and as a method of creating a stronger place identity.

An example of a different approach for the building adaptive reuse

Compared to the typical adaptive reuse projects, this thesis project explores more on the space, user experience, and relationship with the context, while improving the sustainability of the buildings and the site. Landscape, as the primary intervention of the project, shapes the narrative of the project and also influences design choices. The architecture is the leading role of this project, but the landscape is the storyteller,

Interweaving architecture and landscape here is a two-way penetration. By introducing different interior spaces through a different landscape and connecting with the context through the

landscape, Building 18 and Building 41 keep the historic district's spirit, get merged into the community, and become a transition from the historic district to the park. By transforming and translating the existing architectural spaces, the landscape design gets more attached to the site and the history, gains uniqueness and identity, at the same time becomes part of the large park ecosystem.

The analysis and design methods are across different scales and dimensions, which shows the potential approaches for more projects. Starting from the urban context, it helps to build a connection to the large environment and respect the present context. Zooming into the architectural spaces and specific sustainable treatment scales can help the building to be real – a place for people to use and experience, and a contribution to the urban sustainability.

Place making in the old community

It is the cognitive, behavioral, and emotional interactions between human and place that help to build the sense of the place. (Hashemnezhad,2013). The project contributes to the site's sense of place through the spatial experience, functions of the places, and the satisfactory from the users

By utilizing the garage doors and providing access to the alley and water yard, the transition of inside and outside happens smoothly and spontaneously. People are welcome to enter the buildings and also wander from inside to outside. It happens with the spatial connection and also functional connection. The interweaving increases the site's activeness and gives the audience diverse spatial experiences, which enhances the cognitive interactions between users and the site.

Besides providing diverse functions which can attract diverse groups of people, the site has a sustainable function for the park and environment after the reuse. The

renovation of the buildings can increase energy efficiency, through using natural lighting, recycled energy, and passive ventilation. (Merlino, 2018) The site landscape features and vegetation on the ground and roof re-naturalize the former asphalt parking lot and alleyway, and so enhance the site's ecological functions and creating natural habitats. By interweaving the architecture and landscape, the functions and roles of the project are well-balanced in the community, which increases the sustainability of community development.

If the design can increase the satisfaction of the users is hard to calculate at once but needs time to prove. The multi-functions of the building have potentials to solve the problems between the on-campus residents and visitors through balancing the community services with the public activities. The overall plan aims to solve the disjointed condition in the park and to help in building a more integrated plan for the future.

6.3 SUMMARY OF THE DESIGN METHODS

In urban scale

Applying landscape treatments on site which combine or integrate with the broader environment. It could be treatments on vegetation, green infrastructure and landscape feature.

In this project, the bio-retention system is related to the wetland restoration and also combined with it as a entity. The new vegetation on the main street follows the order of the existing historic district. The water yard indicates that there is a relation between the site landscape and the park landscape.

Having programs that could be related with the environment.

The observatory connect visitors to the park by providing a overview over the park. The Art exhibition and related events make up the gap of the art circle in the park.

From the human perspective

Utilizing the existing feature of the old buildings and interpret it in a landscape language.

The rooftop garden is renovated from the existing rooftop. Corresponding to the gallery space inside, it is designed as an outdoor sculpture garden. The old facade of building 18 and building 41 are acting landscape elements in the garden which could form the sense of place.

Fill the interior spaces with light, air, other environmental elements to connect people with the place.

Opening the skylight and the garage doors, the building's interior space starts to connect with outside. The bio-swale and the water pond create a similar feeling as a 'wild' environment, which can remind people about the wetland system in the park.

Match landscape's scale and detail with the related architectural spaces. The landscape's scale can be related to the size of the space and the size of the vegetation, which can form the space.

In the project, the landscape has two scales. There is an intimate scale which invites people to interact, such as the back alley garden, and other small gardens scattered in the site. People can move spontaneously between these landscapes and the interior spaces. There is also a wide-open pond which changes the rhythm of the space and attracts people. The details include paving, the planting, and the furniture material.

Sustainable treatment

Sustainable intervention is one of the main methods of building adaptive reuse. The landscape can be designed in relation to architectural methods such as stormwater treatment. Moreover, the landscape itself could be regarded as a sustainable intervention which can green the site and relates the building to the site.

6.4 CHALLENGES

There are also challenges for interweaving landscape and architecture in the adaptive reuse. The project in the thesis applies most treatments between inside and outside on the edge of the building – which requires an existing open condition of the facade or extra spaces around the buildings. Magnuson Park also provides an existing environmental condition that the design could refer to. However, the conditions of old buildings and the condition of sites are varied

First, not every old building features large openings to the street or free and open interior spaces. There are a lot of old buildings with small windows and enclosed facades. How to build a connection with the landscape for these type of buildings? Keeping existing features may not help on connecting inside and outside, more innovative treatments need to be created.

Second, a lot of old buildings are located in an urban environment. Due to the increasing density in the city, the site size is limited. A site like this will be hard to add additional structures and a

large landscape feature. Additionally, the urban environment provides more hard streetscape and less natural environment. The landscape design for the site will be limited due to the contextual environment and may need to shift the reference towards a larger scale of urban environment or nature.

Last but not least, many building adaptive reuse projects occur in stable context settings. The reuse is typically aimed at the building itself. It might require more investment for the site landscape design. How to prove that landscape can bring more sustainability to the site, more benefits for the investors will be a next-step challenge.

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