

Building Community, Building Capacity: Revitalization Through Reuse

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CONTENTS

<u>Introduction</u>	<u>1</u>
<u>Rainier Beach</u>	<u>2</u>
Physical Context	2
Historical Context	3
Demographic Context	5
<u>Recent Work in Rainier Beach</u>	<u>7</u>
Rainier Beach Neighborhood Planning	7
Southeast Transportation Study	9
Retail development Strategy for Rainier Valley	10
University of Washington Professional projects	11
Rainier Valley Community Development Fund	12
<u>Site</u>	<u>13</u>
Rainier Beach Site Analysis	13
Site Context	14
Parks & Open Spaces	17
Transit	18
Urban Form	19
Pedestrian Realm	19
Center	20
Site	22
Existing Structure	24
<u>Program</u>	<u>27</u>
Eat	27
Gather	28
Learn	28
Shop & Live	29
Public Space	29
<u>Design</u>	<u>30</u>
Design Strategy	31
<u>Conclusion</u>	<u>40</u>
<u>References</u>	<u>41</u>

FIGURES

Rainier Beach map	2
Location map	2
Rainier Beach Birdseye looking north, 1895	3
All-Time Route Map of the Seattle and Rainier Valley Railway	3
1936 Aerial Photo	4
1961 Aerial Photo	4
Seattle Demographic Migration	5
Race	6
Nativity by Citizenship Status	6
Ratio of Income in 2010 to Poverty Level	6
Age	6
Rainier Beach Urban Village	13
Land Use Typology Diagram	14
Public Amenities in Rainier Beach	15
Transit Routes	18
Narrow Sidewalks	19
Mapes Creek Walkway	20
Rainier Avenue South & South Henderson Street	20
Zoning	21
Site at southeast corner of Rainier & Henderson	22
Panorama of site from the northeast	22
North Elevation	23
Advertisements for the new Rainier Foodland Supermarket	24
Advertisement from the Seattle Times, May 1960.	30

Plan Diagram	31
Existing	32
Retaining	32
Walls	32
Roof	32
Canopies	33
Landscape	33
Corner	33
Site/Ground Plan	34
Longitudinal Section	35
Transverse Section	36
Transverse Section	36
View from Rainier Beach High School	37
View under canopy on market day	38
Roof garden terrace for housing	39

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And to Andrew, for being there.

INTRODUCTION

Rainier Beach is a culturally and economically diverse community situated in a scenic area on Lake Washington with views of the lake and the Cascade Mountains. Decades of economic divestment have left Rainier Beach lagging behind the growth of the region. The construction of the LINK light rail line brought with it the promise of transit-related development, which has yet to materialize in part due to the current economic recession. Even though Rainier Beach has its roots as a late-nineteenth-century streetcar suburb, much of the neighborhood's development occurred after World War II, creating the auto-oriented built environment evident today. Rainier Beach has a large concentration of youth under the age of 18 and very low auto-ownership, making quality public space and access to public transit key in this community, especially for this young demographic.

This thesis proposes the redevelopment of a supermarket site at the center of the Rainier Beach Urban Village at the intersection of Rainier Avenue South and South Henderson Street, reusing the existing supermarket structure, constructing an additional mixed-use building, and creating new public spaces. The goal of this project is to create a place that will physically and functionally anchor the Rainier Beach Urban Village, providing quality public space, encouraging positive community interactions, fostering economic development, and strengthening the connection from the Rainier Beach light rail station to the core and beyond to Lake Washington.

RAINIER BEACH

PHYSICAL CONTEXT

Rainier Beach is located at the south end of the Rainier Valley in southeast Seattle; it is bordered by Lake Washington to the east, Beacon Hill to the west, Othello/Seward Park to the north, and Skyway to the south. Rainier Beach is nine miles south of downtown Seattle and five miles north of downtown Renton. The nearest on-ramp to Interstate 5 is about a five-minute drive from the center of Rainier Beach. The proposed site sits at the center of the neighborhood at South Henderson Street and Rainier Avenue South.

Topography varies greatly over Rainier Beach. The commercial zone is located in the lowlands along the old streetcar line which once ran near the lake edge. Residential areas with views are found on the hill of southern Rainier Beach and along the lakeshore to the northeast. Residential areas without views are found in the lowlands, and low hills to the northwest and northeast.



Location map



Rainier Beach map



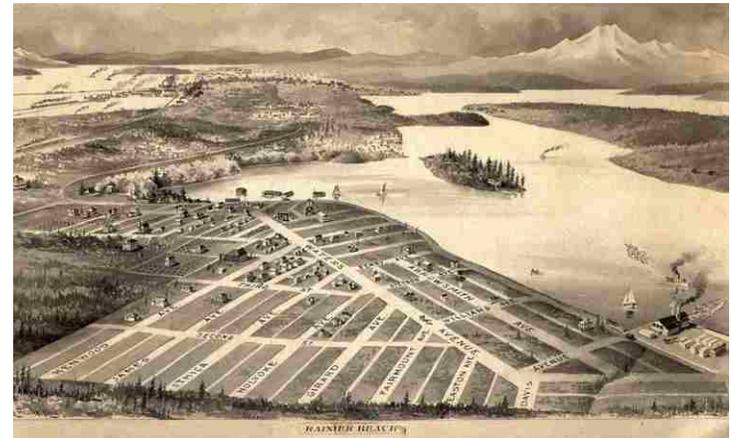
HISTORICAL CONTEXT

Originally home to a nomadic Duwamish tribe, the first white pioneer claim in the area was made by Joseph Dunlap in 1869 (Wilma 2011). The settlement was relatively isolated, but a few families logged the land and began to farm there.

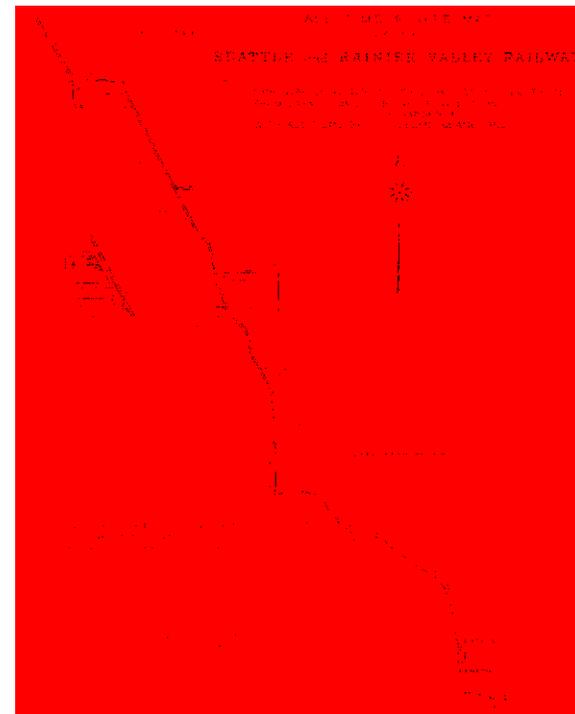
The area remained sparsely populated until the Rainier Avenue Electric Railway reached Rainier Beach (then called Atlantic City) in 1891, turning the isolated outpost into a small streetcar suburb of Seattle. The early settlers of the area platted the land and sold lots for building, and the area quickly began to grow. The streetcar line was extended south to Renton in 1896, carrying passengers by day and cargo of produce, timber and coal by night (Blanchard 1965).

Rainier Avenue was built along the floor of the Rainier Valley coming south from downtown, through Rainier Beach, and continuing south to become State Route 167. Due to a hill rising to the south at the end of the valley, Rainier turns east for several blocks before running along the shore to Renton. Before the streetcar was extended to Renton, however, the terminus of the rail line was at the intersection of Rainier and 57th Avenue South. This was the commercial center of the neighborhood in the late 19th and early 20th century, with a general store, pharmacy, and grocery, as well as a hotel and ice cream shop.

Seattle annexed Rainier Beach in 1907, along with several other suburbs in Rainier Valley. In 1912 there was a mix of farms and platted blocks, but many of the small



Rainier Beach Birdseye looking north, 1895 (artist unknown)



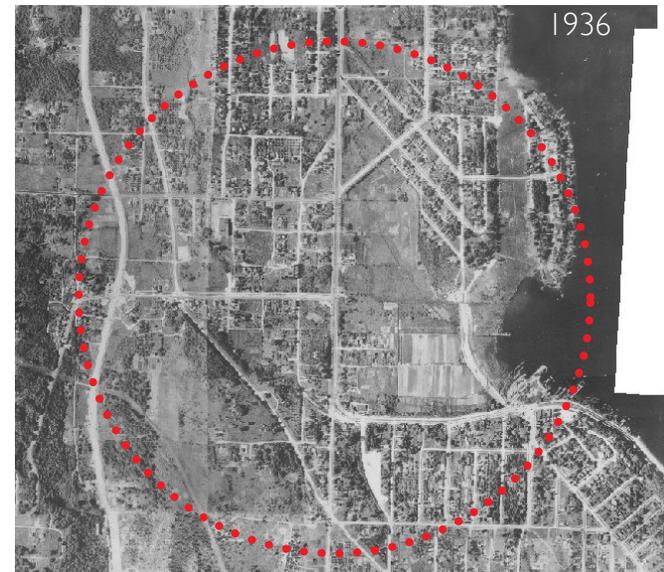
All-Time Route Map of the Seattle and Rainier Valley Railway (Blanchard)

lots remained vacant. Produce grown on the farms was taken into town to be sold.

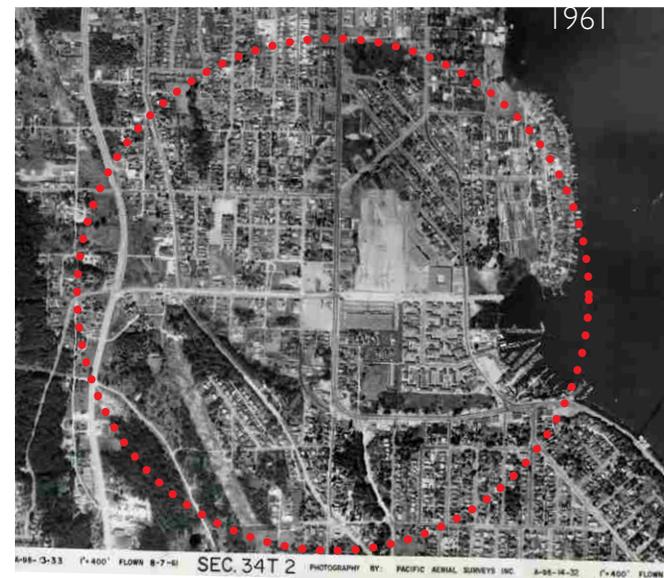
With the construction of the Lake Washington Ship Canal and Ballard Locks in 1917, the lake was lowered nine feet. A great deal of land was uncovered; the slough between the shore and Pritchard Island was drained, connecting the island to the mainland.

The Rainier Avenue rail tracks rested on a dirt base while a paved lane of car traffic ran on either side; the railway company ownership refused to pave the track bed despite public outcry about the dangers posed when trying to cross the tracks. After decades of financial instability and multiple owners, the City revoked the line's franchise, and in 1937 ordered the tracks be removed so Rainier could be widened and paved. The rest of Seattle's streetcar network would be paved over and replaced with "trackless trolley" buses by the early 1940s.

Much of Rainier Valley's growth occurred during and after World War II; Rainier Beach's proximity to Boeing drew many employees to the area. The post-war boom is visible in the many mid-century ranch-style homes built in the neighborhood. To house the large influx of population, a large apartment complex with more than 300 units was built on former farmland near the lake. Rainier Beach Junior-Senior High School was opened in 1960 with more than 1200 students.



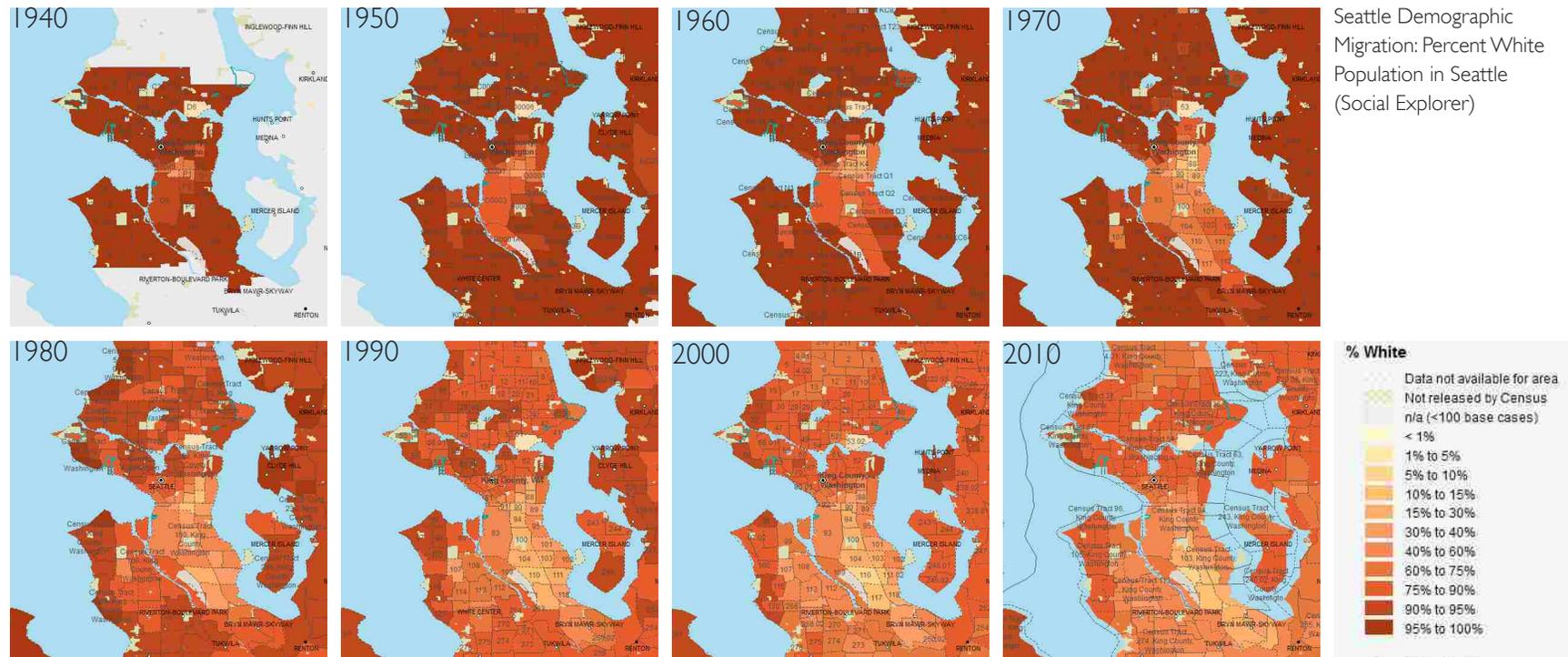
1936 Aerial Photo (King County GIS)

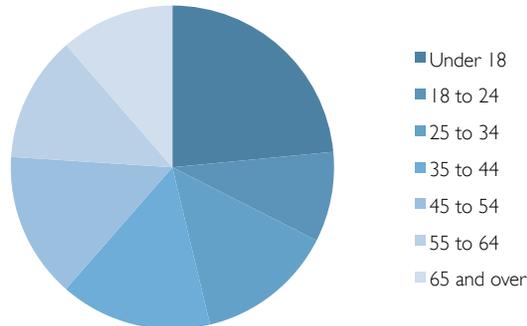
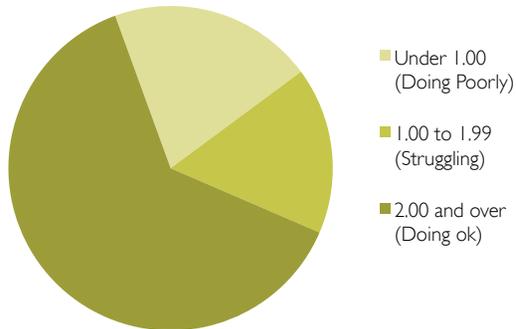
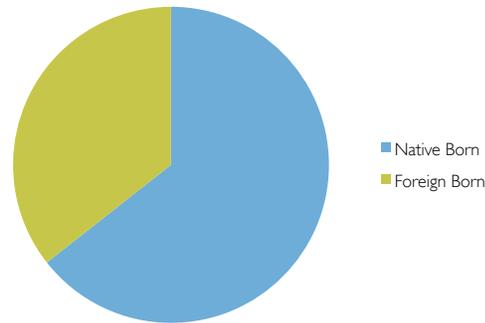
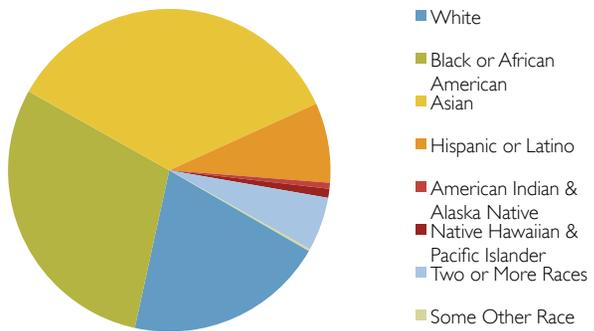


1961 Aerial Photo (UW Map Library)

DEMOGRAPHIC CONTEXT

Race-restrictive covenants in place in the first half of the 20th century limited neighborhoods in which Seattle's people of color could live to the International and Central Districts (Silva, 2009). When the Fair Housing Act was passed in 1968 and the covenants were outlawed, many white neighborhoods were still hostile to people of color. Japanese and Italian immigrants already occupied much of Southeast Seattle where race restrictive covenants were less common; diversity was more accepted, and Rainier Valley became the melting pot of the city as a result.





Top Left: 2010 Census, Race. [SE:T55].

Top Right: 2006-2010 American Communities Survey, Nativity by Citizenship Status [SE:T133].

Bottom Left: 2006-2010 ACS, Ratio of Income in 2010 to Poverty Level (Summarized) [SE:T118].

Bottom Right: 2010 Census, Age [SE:T8].

Data from the 2010 Census show great diversity in Rainier Beach¹. The 2006-2010 American Communities Survey estimates 36% of Rainier Beach residents are foreign-born, the majority of those being East and Southeast Asian, as well as East African (U.S. Census). 20% of people in Rainier Beach are living below the Federal Poverty Threshold, compared to 6% in all of Seattle. 23% of the population is under the age of 18. Over 1500 students go to the four schools in the Rainier Beach core (Seattle Public Schools).

¹ Demographic data were combined from census tracts 117, 118, and 119. These tracts cover a larger geographic area than the urban village boundaries of Rainier Beach, however this area could be considered a “catchment area” for people who work, shop, and go to school in Rainier Beach.

RECENT WORK IN RAINIER BEACH

Extensive time, energy, and money have been invested in planning for the future of Rainier Beach. The following is a synopsis of some of the work done in and around Rainier Beach to date.

RAINIER BEACH NEIGHBORHOOD PLANNING

In 1990, the Washington State Legislature passed the Growth Management Act, which required counties and municipalities of a certain size to create Comprehensive Plans that would guide growth over the next several decades. Seattle's Comprehensive Plan, adopted in 1994, outlined an Urban Village Strategy intended to recognize existing neighborhoods and plan for their growth. Seattle also recognized neighborhoods by their intensity of development and activity, creating different classifications of urban center, manufacturing/industrial center, hub urban village and residential urban village. Rainier Beach is classified as a residential urban village, which is defined by the city as "a focus of goods and services for residents and surrounding communities but may not provide a concentration of employment" (City of Seattle, 2005)

Rainier Beach began its neighborhood planning process in the mid-1990s; the group named itself Rainier Beach Neighborhood 2014 for the vision 20 years into the future. The process included organization, information gathering, community engagement and visioning, and finally creation of a plan document with recommendations for

future development. The final plan was approved by the City Council in 1999. Rainier Beach was selected for a plan update in 2010, a process that concluded in early 2012. Both plans created a list of goals, seen below:

1999:

1. Henderson Street: Building A Better Boulevard. Development of a set of recommendations to link the community commercial and civic core to the future light rail station at Henderson & MLK, Jr. Way.
2. Beach Square: Commercial Core Revitalization. Transportation, Economic Development, Land Use, and Streetscape concepts to rejuvenate the commercial shopping center of Rainier Beach.
3. Community Education: The Building Block for the Future. Promote education as a means of improving the present and future For Rainier Beach's youth, adults, and seniors.

2012:

1. A Place for Everyone: Rainier Beach residents, long-term and new, will all have access to safe, healthy and affordable housing; access to transit; and a variety of vibrant commercial centers.
2. Life Long Learning: An innovative, connected learning system that is strategically integrated into the neighborhood's cultural life.
3. Growing Food to Develop Healthy Industry: Rainier Beach is an employment center for the agricultural products grown in the valley. Rainier Beach has a unique opportunity to combine its urban farms and light industrial zone to become a hub of food and agricultural production.
4. Rainier Beach is a Beautiful, Safe Place: Strengthening the neighborhood through increased public activity. Once we are all out in the neighborhood together, we have the opportunity to get to know each other; the more we know our neighbors, the safer we will be.

SOUTHEAST TRANSPORTATION STUDY

In anticipation of the light rail, the City of Seattle commissioned the Southeast Transportation Study (SETS), which was released in late 2008. The study examined existing conditions throughout the Rainier Valley and made recommendations for improvements to the built environment and transportation networks. SETS recognized the low auto-ownership and high percentage of children in Rainier Beach as two reasons to make Rainier Beach much more pedestrian friendly to improve the pedestrian realm. The study observes poor signage, lighting, little to no seating, and lack of bicycle infrastructure.

Conclusions included the need for more transit that crosses the light rail line rather than runs parallel to it, in order to connect people to the light rail line. The study also recognized high collision intersections and suggested ways to lessen the number of collisions at these locations, particularly better sidewalks and/or signalization. SETS suggests many physical improvements to the street network and infrastructure in order to promote accessibility throughout Rainier Valley by all users and all modes. This is an important issue, especially given the greater visibility that Rainier Valley has with the light rail carrying thousands of passengers through it every day, and in order to meet the goals of the city and regional comprehensive and transportation plans.

Since the release of this study, the city has made several improvements to both Rainier and Henderson. Rainier was repaved and the street section was adjusted in some

places, creating curb bulbs for pedestrian crossings and bus stops. The Henderson street section was adjusted from two lanes each way to one lane, a bike lane, and a parking lane each way. The sidewalks are only 4 feet wide, however, but with very wide planting strips, so the pedestrian is relatively cramped. More consideration needs to be given to this aspect of Henderson. The paving in the road is also riddled with large potholes, resulting in drivers steering unsafely into the bicycle lane.

RETAIL DEVELOPMENT STRATEGY FOR RAINIER VALLEY

In anticipation of light rail-related development, the City of Seattle commissioned a study of retail development for the Rainier Valley. The study was conducted by a group from Virginia, and was released in late 2008.

The study findings concluded that there was an oversaturation of some kinds of retail in the Valley, and a complete lack of others. It also found that without much more housing (ie a larger population) to support more retail, the amount of retail allowed in the proposed station area zoning would not survive.

There is also concern with maintaining affordability of retail and commercial space in new transit-related development. Many of the businesses in the Rainier Valley are locally-owned, independent, and immigrant-owned. Retail tenants reported having their rents raised as much as 50% over the few years prior to the study, and this was before the light rail even opened. New transit-related development would probably have even higher rents and not be accessible to local independent businesses. Chain

retail would be unlikely to lease space without favorable economic outlooks and even if they did they could potentially take business away from the local businesses.

UNIVERSITY OF WASHINGTON PROFESSIONAL PROJECTS

Three students in the MUP/MPA dual degree program at the University of Washington undertook a semi-joint professional project with the Seattle Office of Economic Development in 2009-2010. James Bush, Andrea Lehner, and John Vander Sluis each authored reports focusing on different topics within economic development in Rainier Beach.

James Bush: *Community Driven Economic Development Strategies for Rainier Beach*. Bush's report analyzed different community development models that have been utilized for revitalization in communities around the United States, and looked at how successful those models might be when applied in Rainier Beach.

Andrea Lehner: *Using Small Business Technical Assistance to Preserve Diversity in Rainier Beach*. Lehner's report analyzed the technical assistance offered by the City of Seattle and recommended strategies for making that assistance more accessible to minority- and immigrant-owned businesses.

John Vander Sluis: *Mixed Use Alternatives for Rainier Beach Economic Development: Low Impact Production Businesses*. Vander Sluis analyzed the potential for low-impact production businesses as economic drivers in Rainier Beach. Low-impact production

businesses are defined as those that do not require the physical space nor produce the negative effects of industrial uses, but that can still provide jobs and bring new economic energy to the neighborhood. Vander Sluis looks at several case studies both within and outside of Seattle, including bakeries, print production, craft workshops, food production, custom manufacturing, and media production, and found that many of these uses could be compatible with the surrounding neighborhood.

RAINIER VALLEY COMMUNITY DEVELOPMENT FUND

The Rainier Valley Community Development Fund was created in 2002 to help mitigate the effects of light rail construction on businesses throughout the light rail corridor. Because there had been no original mitigation plan for the disruption caused by at-grade construction, the federal government mandated the \$50 million fund be set up as a condition of the project, and it was funded by King County and the City of Seattle. The RVCDF now provides low-interest loans and technical assistance to small businesses to help stimulate economic development in Rainier Valley.

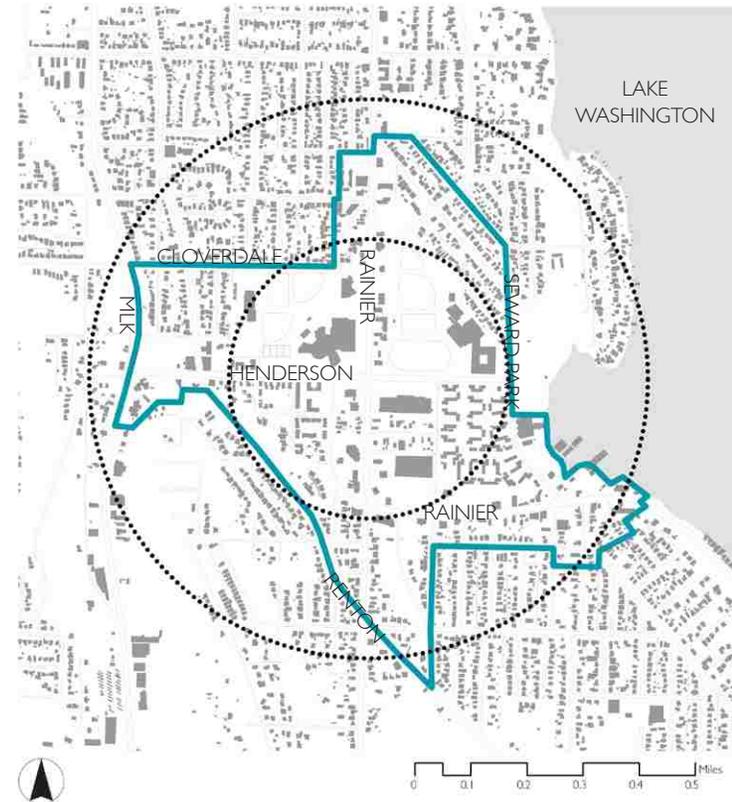
SITE

RAINIER BEACH SITE ANALYSIS

As defined by the City of Seattle, the Rainier Beach Residential Urban Village is roughly bordered by Lake Washington and Seward Park Avenue to the east, Renton Avenue and Fletcher Street to the south, Martin Luther King Jr. Way and Beacon Hill to the west, and Cloverdale Street to the north. The center of the urban village lies at the intersection of Rainier Avenue South and South Henderson Street. The urban village boundaries are nearly all inside of a half-mile radius of the Rainier and Henderson intersection. The Rainier Beach light rail station is nearly one half-mile to the west on MLK at Henderson. About one-third of a mile east is Beer Sheva Park and Atlantic City Boat Ramp.

Rainier Beach breaks down into six typological zones: a civic center, a commercial center, multi-family housing, single-family housing, park/open space, and industrial-commercial. The civic space, commercial space, and multi-family housing form the core of the urban village, with single-family housing surrounding the core and park space interspersed throughout.

Two main arterials intersect at the center of the neighborhood: Rainier Avenue South and South Henderson Street. Henderson is an intra-neighborhood connector, running essentially from Lake Washington to Martin Luther King Jr. Way. West of



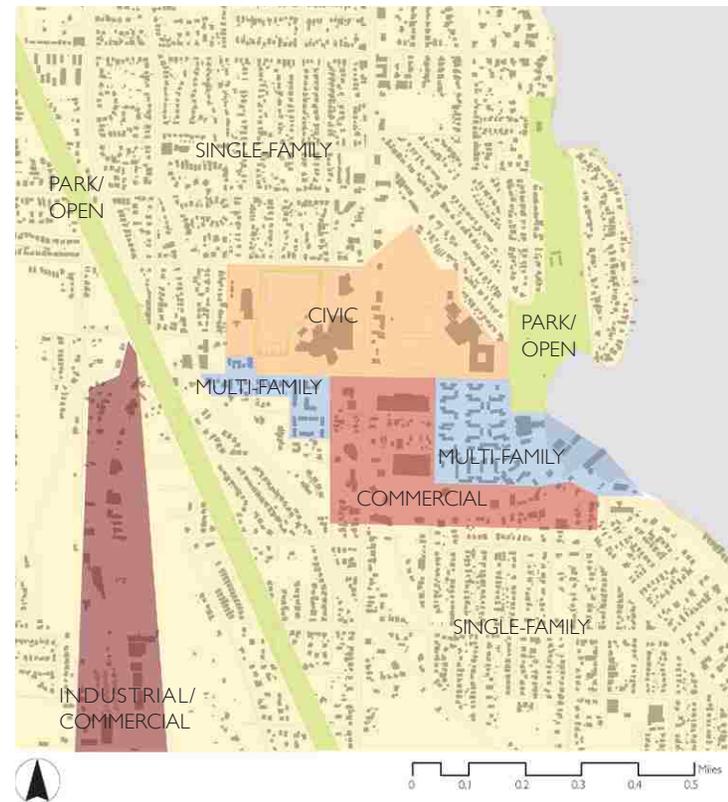
Rainier Beach Urban Village with 1/4- & 1/2-mile walking radii

MLK, Henderson turns into Carkeek Drive, which winds up to the top of Beacon Hill. Rainier Avenue is an inter-neighborhood connector between communities along the Rainier Valley and beyond to Renton. A few blocks south of Henderson, Rainier turns ninety degrees and runs east, turning south again to follow the shoreline of Lake Washington to Renton.

SITE CONTEXT

The civic center of Rainier Beach is situated between Henderson and Cloverdale on either side of Rainier Avenue, and is home to four schools and the community center, discussed here from west to east. Dunlap Elementary School was built in 1924, landmarked by the City of Seattle in 1998, and renovated and expanded in 2000. The Rainier Beach Playfields separate Dunlap from South Shore K-8, South Lake Alternative High School, and the Rainier Beach Community Center.

The east side of this block will soon be all new and recent construction. Rainier Beach Community Center and South Shore Middle School were co-located in a 1970s open-concept building. The school portion of the building was demolished and replaced with a new building in 2008, which now houses a Kindergarten-8th grade program. The remaining community and aquatic center portion of the building was just demolished as well, to be replaced with a new building opening in 2013. South Lake Alternative High School is located on the northeast corner of the block, and was completed in 2008.



Land Use Typology Diagram

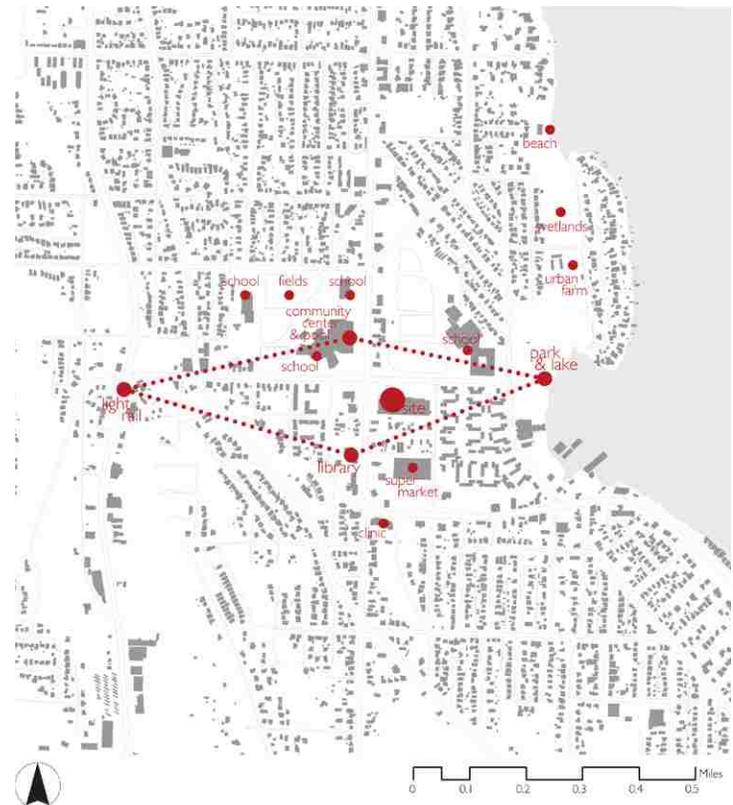
Rainier Beach High School is located on the east side of Rainier Avenue. Built in 1959, the school served as a junior-senior high until South Shore was built to relieve overcrowding. Except for a few commercial and apartment buildings along Rainier Avenue, the high school's buildings and athletic fields take up much of the block between Henderson and Cloverdale east of Rainier Avenue.

Additional civic amenities in the urban village include the Rainier Beach branch of the Seattle Public Library on Rainier Avenue at South Fisher Place, and a new medical and dental clinic for low-income and uninsured patients on Rainier Avenue at 51st Avenue South.

Most of the neighborhood's commercial activity is located along Rainier Avenue, especially south of Henderson Street and west of 57th Avenue. Development is auto-oriented, with parking lots fronting the sidewalks and buildings set far back from the street. Drive-through businesses are common along Rainier, which include several fast food restaurants, banks, and a pharmacy.

At the intersection of Rainier and 57th Avenues, small commercial buildings line the sidewalk and parking is either limited to a few spaces behind the buildings or on the street. This area is the site of the former streetcar stop and its human-scaled architecture, however atypical for the neighborhood, has been maintained.

Other businesses tend to be beauty-related (i.e. salons/barbers or supply stores),



Public Amenities in Rainier Beach

ethnic groceries, and auto supply/repair. There are few to no clothing, home furnishing, hardware or other service businesses.

Multi-family housing is concentrated in the center of the urban village, especially along Henderson. The housing varies from midrise condominiums on the lake to multi-building low-income apartment complexes owned by public housing agencies to individual low-rise apartment buildings.

The Lake Washington Apartments, a large multi-family housing development, are located along Seward Park Avenue between Henderson and Rainier. This complex is significant because it houses a large low-income population on a desirable site across the street from the lake, and adjacent to schools and shopping, yet access is limited due to safety concerns. Indeed, the Lake Washington Apartments were extremely run-down and crime ridden prior to the purchase and renovation of the property by South East Effective Development (SEED) in 1997. The complex consists of 34 buildings covering 16 acres, with 366 units for residents below 30, 50, and 60% of the area median income. Two-story apartment buildings are interspersed with parking throughout the site. The complex is fenced on all sides, with one auto access point on Seward Park Avenue, and two pedestrian-only access points: one on the north end of the complex on Henderson and one in the southwest corner of the complex, onto the Mapes Creek Walkway near the Safeway.

The Seattle Housing Authority owns a number of smaller affordable housing

complexes in the area, including a midrise senior housing building on Rainer adjacent to the library, a small cluster of townhomes and a few apartment buildings on two blocks south of Henderson across the street from South Shore School.

Single-family housing is largely located north of Cloverdale, south and west of Rainier, and east of Seward Park Avenue to the lake. Property values vary greatly from very low to well over \$100 per square foot—lakefront properties having the highest values and the majority of properties inland worth \$20 per square foot or less.

PARKS & OPEN SPACES

Rainier Beach is home to several outdoor facilities. Mentioned previously, the Rainier Beach Playfields occupy part of the block with Dunlap, South Shore, South Lake, and the community center and include two baseball diamonds, a soccer/football field, four tennis courts and a playground. Rainier Beach High School has a football field and track, football practice field, baseball field, softball field, and tennis courts. How available these are for public use is unclear; however the public has been witnessed using the track and football field for recreational purposes.

Beer Sheva Park and the Atlantic City boat ramp occupy 11 acres at the eastern terminus of Henderson Street on Lake Washington, and are popular in the summer with both boaters and picnickers. Adjacent to Beer Sheva but only accessible from a nearby Cloverdale Street is the newly opened Rainier Beach Urban Farm. Formerly used as a nursery and still owned by the Seattle Parks Department, the farm is the

product of efforts by neighbors and Seattle Tilth to utilize the land as a community-based learning farm. The Pritchard Wetlands, a neighbor-sponsored reclamation project, and Pritchard Beach, which is lifeguarded—and popular—in the summer, are located just north of the farm. The farm, wetlands, and beach are all on land that was exposed when Lake Washington was lowered in 1917.

Running southeast to northwest on the west side of Rainier Beach is the Seattle City Light power transmission easement. Development beneath the high-voltage transmission towers is not permitted, however a new multi-purpose trail was recently completed running through southeast Seattle along the easement.

TRANSIT

The LINK light rail line opened in 2009, and runs from the Seattle-Tacoma International Airport to downtown Seattle. Construction is underway to extend the line north to Capitol Hill, the University District, and Northgate Mall. Future plans will extend the light rail south to Tacoma, north to Everett, and east to Bellevue and Redmond. The light rail station on Martin Luther King Jr. Way South at Henderson is on the western edge of the urban village and is one half mile from the proposed site.

Six King County Metro bus routes serve Rainier Beach, connecting Rainier Beach with many parts of Seattle, as well as communities south of Seattle such as Skyway and Renton. Two routes connect the light rail station along Henderson to the proposed site.



Transit Routes
2010 average daily traffic counts, Seattle Dept. of Transportation

URBAN FORM

Street blocks are relatively large at the center of Rainier Beach; blocks are as long as one-quarter mile in some places. This may be due to the ways landowners chose to plat the land at the time, but it may also have to do with the historic shoreline of the lake. Before it was lowered in 1917, Lake Washington inundated the land much closer to Rainier Avenue and created large marshy areas in low topography. The land that was uncovered was not subdivided into smaller lots, rather, it was left to be the large lots that exist today. The uses that currently occupy these large blocks are such that, short of razing everything and starting again, the blocks are unlikely to be subdivided to create a finer-grain street network.

PEDESTRIAN REALM

Sidewalk coverage in Rainier Beach is adequate along main arterials, and lacking along some local streets. Reconstruction and repairs of the arterials in the last decade have included sidewalks, thus these sidewalks are in good repair. Quality of features such as lighting, street furniture, and foliage, however, can be lacking. Some sidewalks are narrow while the adjacent planting strips are wide, making it difficult for more than two people to walk alongside or to pass one another. Some sidewalks have no planting strips at all.

Concerns for safety on the street have resulted in removal of foliage and places to sit, and street lighting that is overpowered and out of scale with pedestrians. Presumably



Narrow sidewalks

the rationale for this kind of streetscape is that if “unsavory” characters are left without places to hang out unnoticed, they will not hang out at all. Unfortunately this line of thinking makes the streets undesirable for all pedestrians, not just the “unsavory” ones, and generally doesn’t solve the problem of safety on the street.

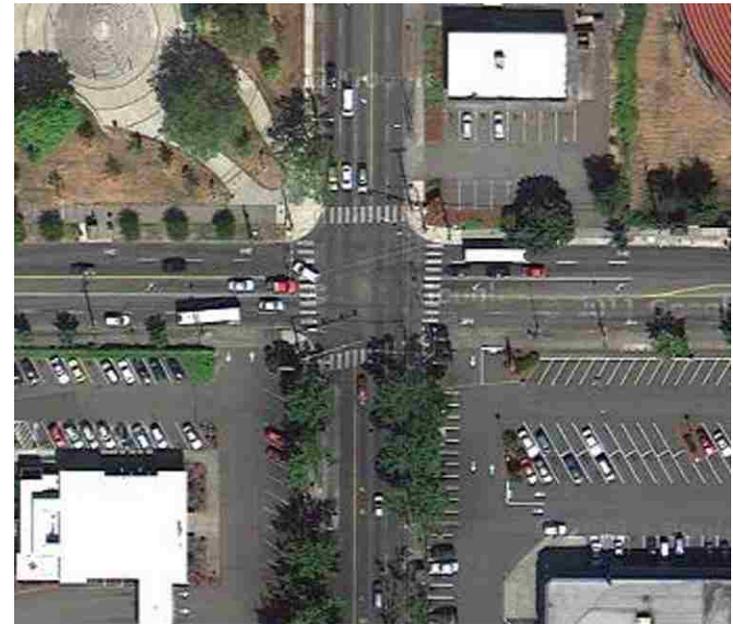
There is one formalized pedestrian path, Mapes Creek Walkway, that runs north-south through the southeast block bound by Rainier, Henderson, and Seward Park Avenue, between the commercial properties on the west and the Lake Washington Apartments on the east. While it provides a vital pedestrian connection across the neighborhood, it is also regarded as unsafe because there are no businesses or residences that face directly onto the path, depriving it of “eyes on the street.” Other pedestrian connections through the large blocks at the center of the neighborhood are informal pathways through park space or nonexistent.

CENTER

The intersection of Rainier Avenue South and South Henderson Street exemplifies the auto-oriented character of the neighborhood: a discount shoe store sits behind its associated parking at the northeast corner. The northwest corner features a public plaza that will be adjacent to the community center once it is rebuilt but is currently unprogrammed and empty much of the time. A bank sits behind a fenced parking lot at the southwest corner. Finally, a grocery store, drug store, and beauty supply store are located in a large, strip-style retail building behind a deep parking lot



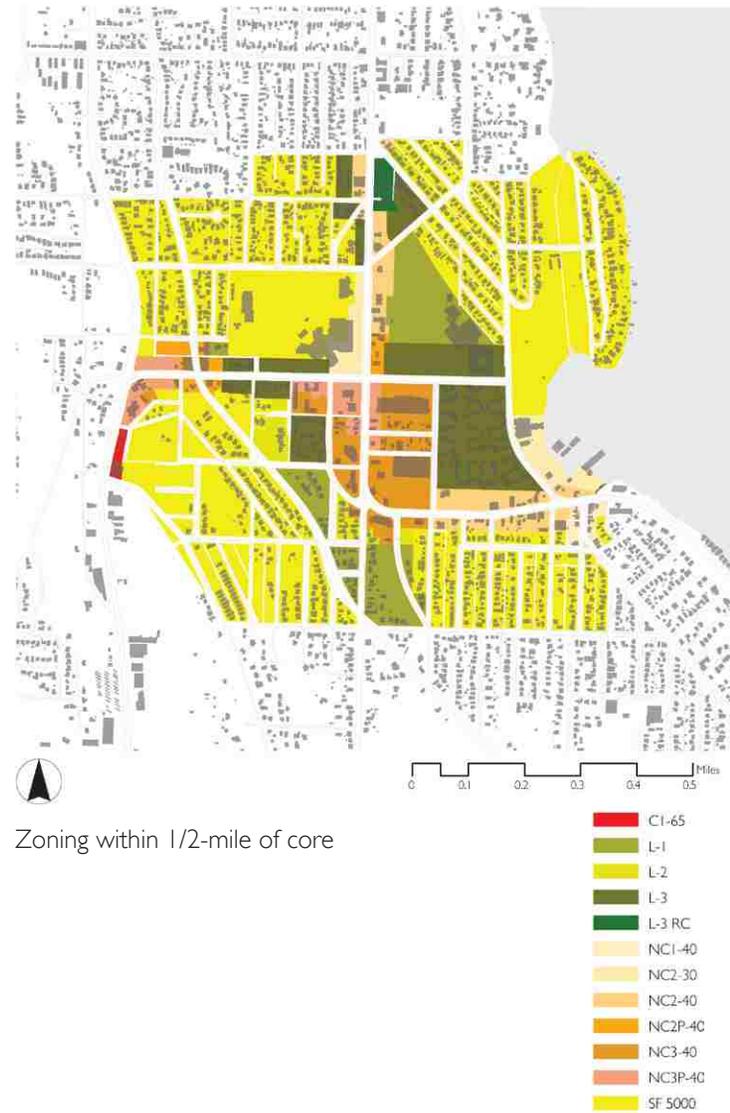
Looking south down Mapes Creek Walkway



Rainier Avenue South & South Henderson Street (Google)

on the southeast corner, which is the proposed site of this thesis.

Zoning is Neighborhood Commercial in the core and near the light rail station with height limits of 30-40 feet; otherwise Low-Rise zones line the arterials and Single Family zones surround the core. A pedestrian designation has been assigned to the areas at the station and at the core. The zoning at the proposed site is Neighborhood Commercial 3, with a 40-foot height limit and a pedestrian designation along Rainier Avenue. Bus stops are sited on either side of Rainier south of Henderson, and on either side of Henderson east of Rainier. Henderson east of Rainier is also a layover site for three bus routes; there are usually 2-4 buses parked in the curb lane at any given time of the day.



SITE

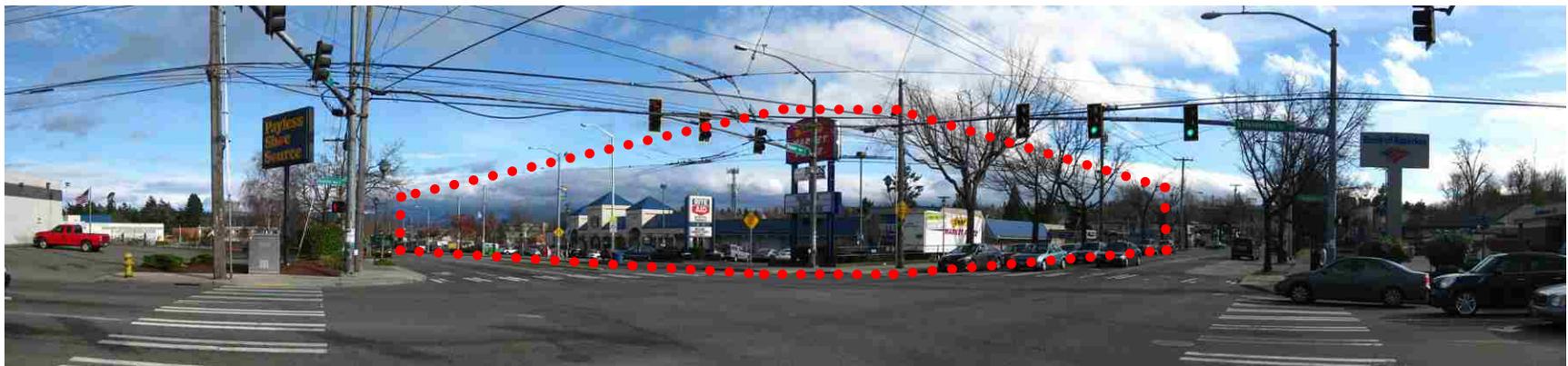
The proposed project site is at the southeast corner of Rainier Avenue South and South Henderson Street, the intersection at the physical and societal center of the neighborhood. The site was chosen for its centrality, prominence, and location along the axis connecting the light rail station to Lake Washington. The site was chosen for its centrality, prominence, and location along the axis connecting the light rail station to Lake Washington.

The 4-acre lot is rectangular in shape, approximately 308'x 590' with the long side running along Henderson. The site slopes gently down from west to east, with some steep slopes at the southwest corner of the site. The existing building was built in 1960 and is situated along the south edge of the site. A taco bus has taken semi-permanent residency on the eastern edge of the site.

Parking surrounds the building on the north and west sides. Vehicular access is provided via three driveways off of Henderson and one off of Rainier. Freight access



Site at southeast corner of Rainier & Henderson (Google)



Panorama of site from the northeast.

is provided at loading docks on the south and east elevations, accessed via an alley that runs behind the building along the south property line, as well as through the parking lot on the east side of the building. A drive-through lane was built on the west elevation for Rite Aid's pharmacy service.

Immediately adjacent to the east is the Mapes Creek Walkway, with the Lake Washington Apartments just beyond. South of the site is a small cluster of homes that date back to the early twentieth century, situated along a dead-end road entered off of Rainier. On Rainier just south of the site are two small, standalone commercial buildings from the mid-twentieth century. The Rainier Beach High School football field is across the street to the north.

Atlantic City Boat Ramp, Beer Sheva Park, and Lake Washington are less than a block from the site. Given the site's location in some of the lowest topography of the area there are no exceptional views. The site is approximately one half mile to the light rail station on Martin Luther King Jr Way South by way of South Henderson Street.



North Elevation

EXISTING STRUCTURE

There is an existing building on the site, which will be reused for the project. The building was originally built as a Foodland store in 1960, with groceries as well as home goods and hardware. Ads in the Seattle Times from the grand opening heralded the store as the largest supermarket on the west coast, with parking for 7000 cars daily (likely based on space availability over the course of the day, as there were only 150 parking spaces in the lot). Ownership has changed many times over the last fifty years, but there has always been a grocery store of one kind or another in the building.

The building measures roughly 480'x140' and is just under 68,000ft². It is set back 140 feet from Henderson Street and 75 feet from Rainier Avenue. Currently, a supermarket occupies a 43,000 ft² space in the east side of the building; a drugstore and a beauty supply store share the remaining 25,000 ft² in the west side of the building.

The division of the building into separate units is relatively recent. A discount/bulk grocery store occupied the whole footprint for many years until the late 1990s, when the building was redeveloped to house local grocery chain Quality Food Centers (QFC) and Rite Aid with smaller retail space between the two larger stores.

The roof structure is an in-plane system of glue-laminated girders and beams beneath a wood-framed flat roof. The underside of the glulam structure is 14'-4" above

Advertisements for the new Rainier Foodland Supermarket
Seattle Times, May 1960.

the floor, and the structure had been exposed until the QFC/Rite Aid renovations when the new stores installed dropped ceilings. Concrete columns are spaced on a roughly 40'x45' grid. The foundation is structural concrete slab-on-grade atop spread footings with pilings below. The exterior walls are 8" concrete block; there is no indication in available drawings that the structure is reinforced, however there may be reinforcement in the pilasters spaced at twenty feet all around the exterior wall, creating a frame and infill situation.

The decision to keep the existing building stems from an interest in utilizing buildings that may not have much aesthetic value but do have a significant investment in embodied energy. The existing building is just over fifty years old, but was built of durable materials that still have a useful life, and those materials can be architecturally interesting.

The National Trust for Historic Preservation's Preservation Green Lab released a report in 2011 looking at the environmental impacts of building reuse versus new construction. They found that "building reuse almost always yields fewer environmental impacts than new buildings when comparing buildings of similar size and functionality." Furthermore, with a new, energy efficient building, it can take 10-80 years to overcome the negative environmental impacts of its construction that would be saved with the reuse and efficiency retrofit of an existing building.

The May T. Watts Appreciation Society's Embodied Energy Calculator can be used

to estimate the embodied energy investment in a building based on typology and gross floor area. According to the web-based application, the embodied energy—“the total energy spent in the production of a building, from the manufacture of materials to their delivery to construction”—of a 68,000ft² Store/Restaurant building is 63,920,000 kBtu (thousands of British thermal units). 63,920,000 kBtu is equivalent to the energy in 555,826 gallons of gas. At today's gas prices of \$4.25/gallon, that's over \$2 Million worth of embodied energy. Not only does the existing building have a large investment of embodied energy, demolishing it would send about 5900 tons of waste material to the landfill.

Reusing this building prevents massive amounts of waste, and makes the most of the embodied energy in the materials. One aim of this project is to show the versatility of banal buildings such as this, an early “big box” store, thus helping to showcase the value in creative building reuse--historically significant or not.

PROGRAM

The program developed as a response to the needs of the community as identified in the neighborhood planning process, as well as the studies mentioned in Recent Work in Rainier Beach. Priorities identified through study of these elements include: healthy lifestyles, community interaction, and lifelong learning, as well as economic development, affordable housing, walkability and safety.

Another factor in program development was the issue of adaptive reuse. The reuse strategy for this building was to open the building up to express the aesthetic qualities of the glu-lam and concrete structure. A high priority in adaptive reuse is maintaining the flexibility of a building for future uses. Initial efforts at developing program that addressed the community's needs resulted in chopping up the building into many small pieces, defeating the idea of flexibility of use. Realizing this, it became apparent that the stronger move would be to divide the building into three large, flexible spaces, each housing a different aspect of the community program: eat, gather, and learn. A "service bar" runs along the south wall of the building, housing restrooms, mechanical, administrative and other spaces necessary for the flexible spaces to run.

EAT

Because the existing building is currently home to one of two supermarkets in Rainier Beach, it was important to maintain the presence of a market in this project.

The link between poverty and obesity risk is well documented (Parsons 2012); access to affordable, healthy food is critical to promoting healthy communities. The program therefore includes a 20,000 square foot market space in the eastern portion of the existing building, as well as space for a farmers market in the parking area in front. In addition to the service bar on the south wall, more service space necessary for the market such as compressors and cold storage are located along the east wall, reusing existing equipment in situ.

GATHER

During the neighborhood plan update process, community members expressed the need for more community gathering spaces that support the many cultures of Rainier Beach. Possible uses include community meals, dances, meetings, celebrations, and the like. The gathering space in this building is 12,000 square feet, with space in the service bar for a kitchen. Adding to this space is the exterior covered area in front of the gathering space. Some cultures have a tradition of outdoor gatherings for meetings and celebrations; this space gives a sheltered area for those activities. It can also be used as covered market space on market days.

LEARN

Both the 1999 and 2012 neighborhood plans indicate the commitment of the neighborhood to community education at all levels and for all ages. The 20,000 square foot learning center can serve as a complement to the other learning institutions in

the neighborhood, and provide more opportunities for community interaction in an educational setting. Possible uses include tutoring, vocational instruction, daycare/preschool, adult education, or a mixture of some of these.

SHOP & LIVE

Part of the urban design strategy of this project is to build out to the sidewalks along Rainier Avenue and part of Henderson Street, thereby creating a street wall and increasing activity on the street. The corner addition includes retail spaces at the street level, with housing above. New retail and restaurants can help propel economic development in the neighborhood, augmenting sidewalk activity, and housing can ensure activity and eyes on the street at all hours of the day and night.

PUBLIC SPACE

Rainier Beach does not have much covered public space, so being outside in the winter months is not always pleasant. The creation of human scaled, inviting public space will help to activate the area, providing places to sit, stand, and enjoy the community. The three outdoor public spaces vary in levels of enclosure to provide a variety of environments in which to be.

DESIGN

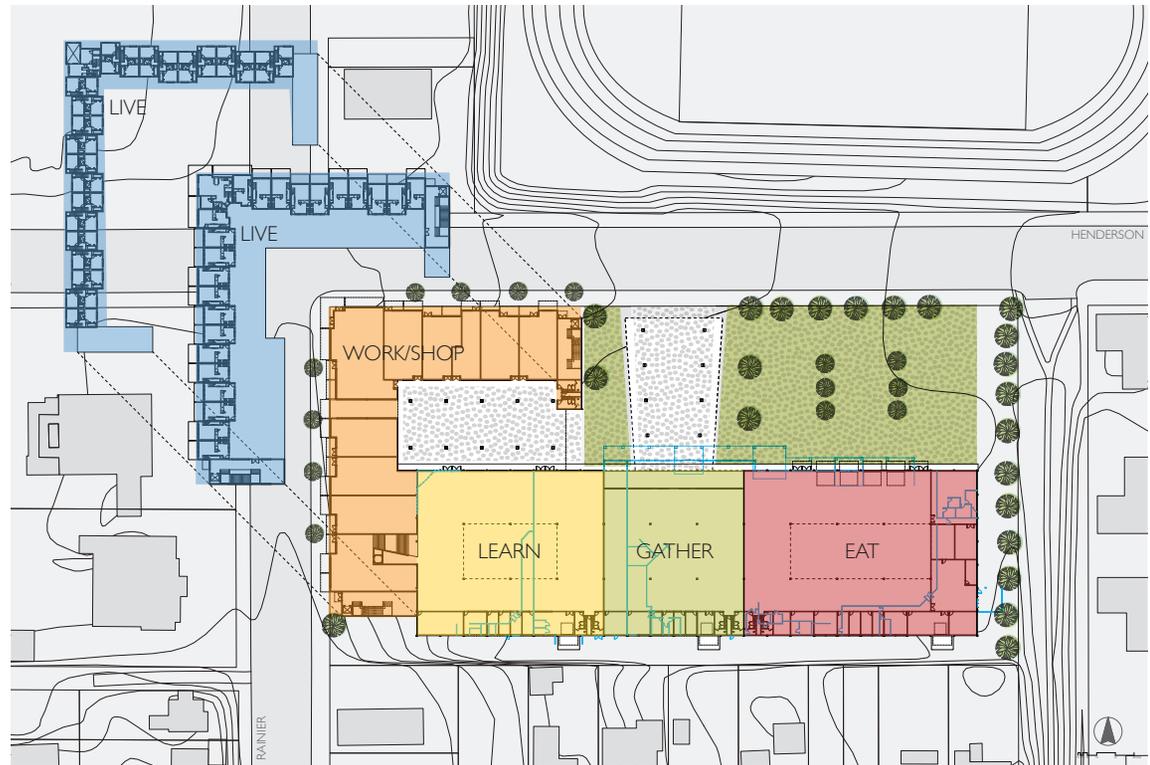
When it opened in 1960, the Foodland supermarket was considered an asset to the Rainier Beach community. However, 1960s-era auto-oriented suburban design (or lack thereof) has proven to be an unsuccessful model for today's standards for livable, sustainable neighborhoods. Indeed, the intersection of Rainier Avenue South and South Henderson Street is dangerous: several shootings have occurred at or near the intersection in the last year, and vehicle-pedestrian collisions are high. With this community's large population of youth, low auto-ownership, and high transit-ridership, the center of Rainier Beach ought to be more pedestrian-focused. The goal of this design project is to take a site that was once seen as an asset to the neighborhood and reassert its community value in a new way, creating a more pedestrian friendly, safe corner.



Suburban mindset. Advertisement from the Seattle Times, May 1960.

DESIGN STRATEGY

This thesis proposes reuse of the existing building, a mixed-use addition, and outdoor public spaces. The original building is divided into three large flexible spaces: a learning center, a gathering space, and a market. A new addition fills out the corner at Rainier and Henderson, with retail at street level and housing above. Public space includes a covered courtyard between the corner addition and the original building, a large canopy in front of the gathering space, and a flexible parking lot with permeable paving and landscaping to invite multiple uses.



Plan diagram.

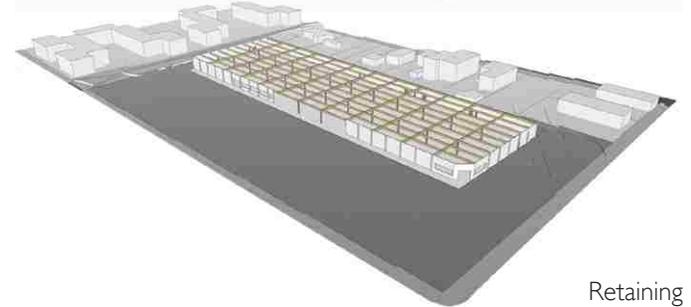
The façade of the existing supermarket building is a relic of the late 1990s supermarket and drugstore renovation, and are typical architectural expressions of those brands. Façade elements to be removed include the towers, canopies, and pharmacy drive-through structure, as well as the central section of wall that protrudes from the plane of the north elevation. Interior partition walls are removed, as well as any unneeded equipment. The retained structure includes the exterior walls (with the exception of the central portion of the north wall), as well as the columns and beam system.

The building is divided into three sections, with partitions framed in line with girders. Openings are cut into the exterior walls to provide natural light and access to the spaces within. The chamfered corner that resulted from the drugstore renovation is rebuilt to its original condition. Entry to the central space is pulled inside the line of the exterior structure. On the interior, a service bar lines the south wall of the building, housing restrooms, mechanical spaces, and any necessary administration spaces.

The roof is lifted to bring more light and air into the space. Roof monitors run east-west in the east and west spaces, and the entire roof over the central space is lifted with clerestory windows surrounding; all have operable windows for passive ventilation. The east and west wings are white “cool roofs” to reflect heat, and the central roof is an extensive green roof for stormwater control as well as insulation.



Existing



Retaining



Walls



Roof

A large wood canopy extends from the gathering space to extend the space outside as a covered outdoor room. The space can be used for gathering, or as a covered market. A second canopy covers the courtyard created with the corner addition. This courtyard is accessible via the retail spaces in the corner building, the learning center, as well as gated entries from the east and west so the space can be secured at night.

Permeable paving and generous landscaping replace the existing asphalt parking lot on the east side of the site. Market parking can occur here, as well as a farmers market, food trucks, or other activities. Taken together, the three public spaces—the covered courtyard, the canopy, and the landscaped parking—provide public space at three different levels of enclosure, each with different relationships to the adjacent interior and exterior spaces.

Finally, the corner is built out with ground level retail and housing above, creating the courtyard behind, as discussed earlier. The housing consists of 24 two-story townhomes. Residents can use the stairs and elevators in the private lobbies at the south and east ends of the corner building to get up to the second floor terrace. The terrace has raised beds for gardening, as well as seating and semi-private areas in front of most units. Because of the pedestrian zoning designation on the site along Rainier Avenue, the housing does not require parking, and the retail spaces are smaller than the minimum square footage requiring parking.



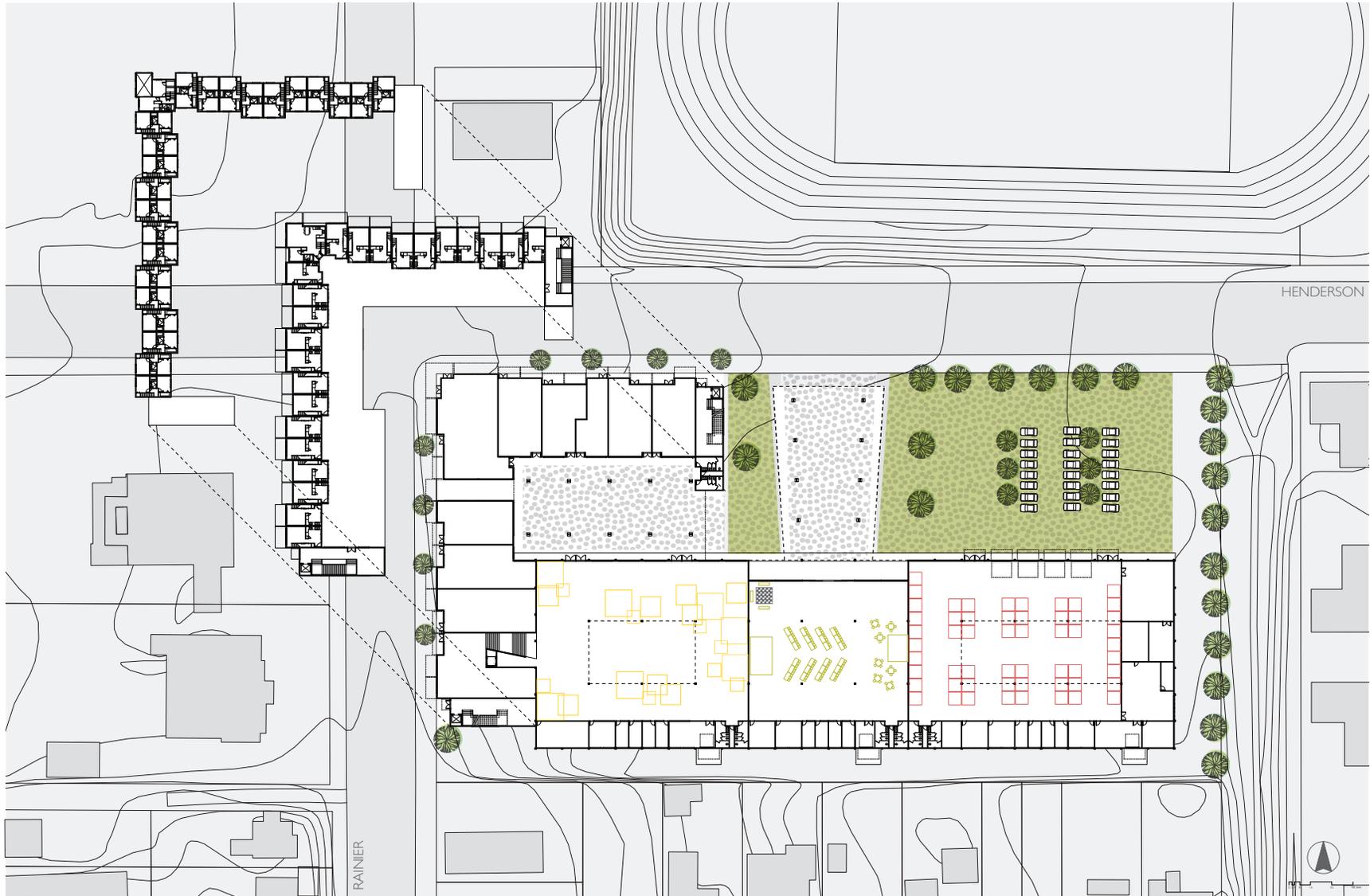
Canopies



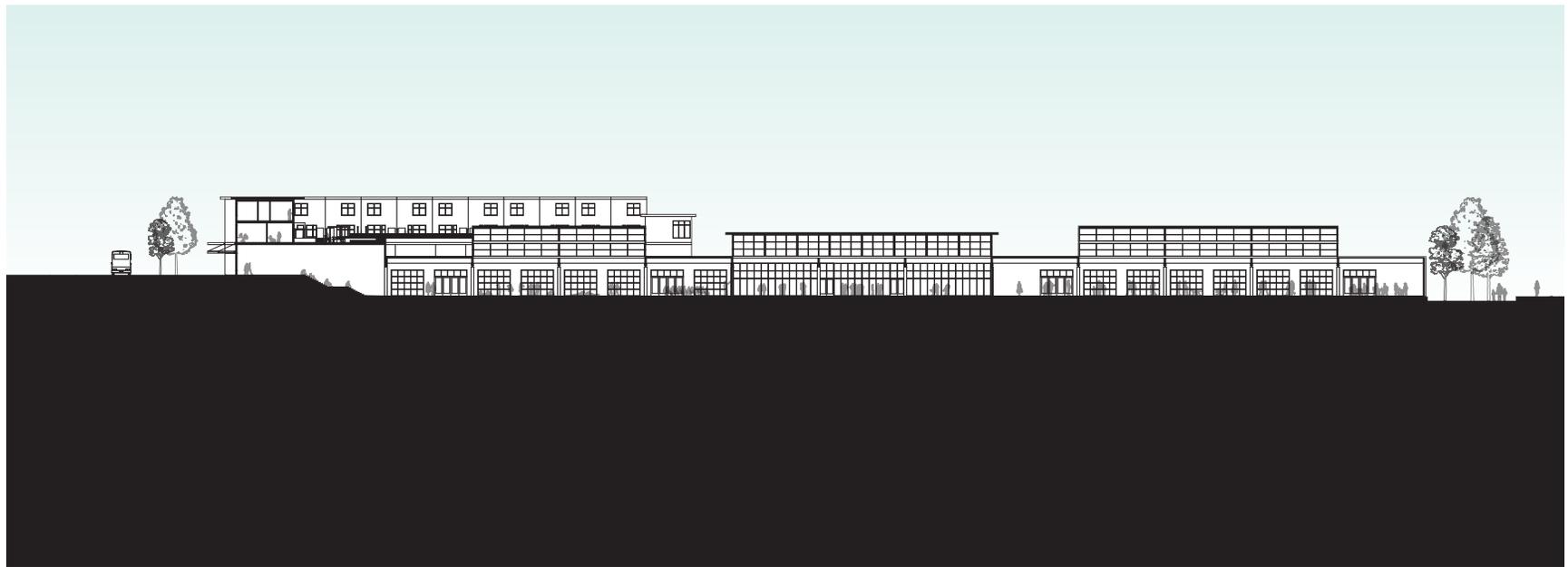
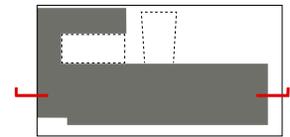
Landscape



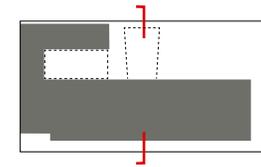
Corner



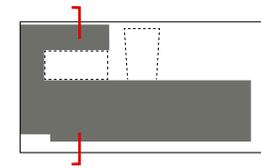
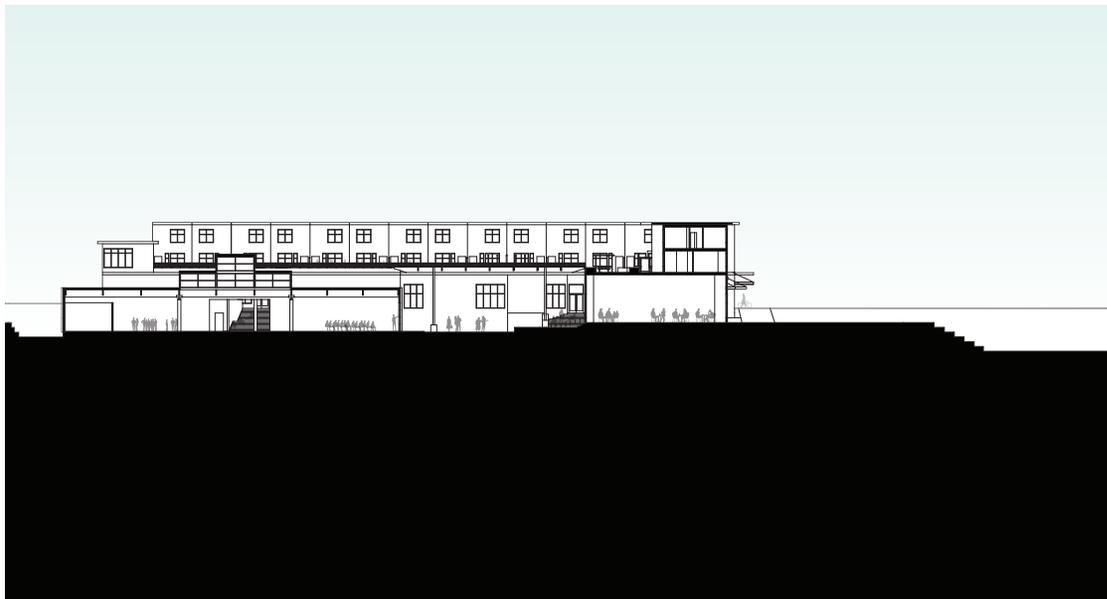
Site/Ground Plan, upper floor plans pulled up and left



Longitudinal section through learning center, gathering space, and market, looking north

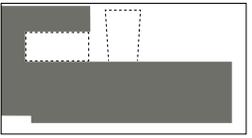


Transverse section through gathering space & canopy, looking west

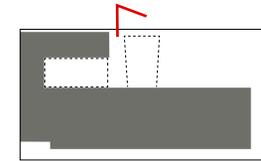


Transverse section through learning center & mixed use, looking west

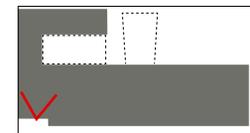
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View from Rainier Beach High School



View under canopy on market day



Roof garden terrace for housing

CONCLUSION

Perhaps due to its relative distance from downtown Seattle, Rainier Beach never developed as other streetcar suburb neighborhoods did, with small street blocks and a dense commercial area. Instead, Rainier Beach developed at the same time as the rise of the automobile, greatly expanding individuals' range and ease of travel. This timing is evident in the built environment: stretched out, in automobile scale, in a suburban fabric.

Some things about Rainier Beach are not likely to change, such as the size of the street blocks in the center of the neighborhood. However there is potential in the approach taken to existing lots and buildings in the future to make Rainier Beach human scaled rather than automobile scaled.

This thesis addresses one possible way to create human scaled space while also preserving the resources invested in existing buildings. With the adaptive reuse of a mid-20th century supermarket building as a flexible community facility, the project provides some of the space Rainier Beach needs to come together and to thrive, while reducing the negative environmental impacts of teardown and reconstruction. By repurposing the parking lot surrounding that building, the project provides much needed small-scale retail space as well as housing and public space, all of which help to create more activity at a corner that could most certainly benefit from more eyes on the street.

REFERENCES

- Blanchard, Leslie F. *Trolley Days in Seattle: The Story of the Seattle and Rainier Valley Railroad*. Los Angeles: Trans-Anglo Books, 1965. Print.
- Blanchard, Leslie F. *The Street Railway Era in Seattle: A Chronicle of Six Decades*. Forty Fort, PA: H.E. Cox, 1968. Print.
- Bush, James. *Community Driven Economic Development Strategies For Rainier Beach*. Seattle, 2010. PDF.
- City of Seattle. *City of Seattle Comprehensive Plan: Toward a Sustainable Seattle*. Seattle Department of Planning and Development, 2005. Web. 04 March 2012.
- Crowley, Walt. *Routes: A Brief History of Public Transportation in Metropolitan Seattle*. Seattle: Municipality of Metropolitan Seattle, 1993. Print.
- Dunham-Jones, Ellen, and June Williamson. *Retrofitting Suburbia: Urban Design Solutions for Redesigning Suburbs*. Hoboken, N.J.: John Wiley & Sons, 2009. Print.
- Farr, Douglas. *Sustainable Urbanism: Urban Design with Nature*. Hoboken, N.J.: Wiley, 2008. Print.
- Gehl, Jan. *Life Between Buildings: Using Public Space*. New York: Van Nostrand Reinhold, 1987. Print.
- Jacobs, Jane. *The Death and Life of Great American Cities*. New York: Random House, 1961. Print.
- Lehner, Andrea. *Using Small Business Technical Assistance to Preserve Diversity in Rainier Beach*. Seattle, 2010. PDF.
- National Trust for Historic Preservation, Preservation Green Lab. *The Greenest Building: Quantifying the Environmental Value of Building Reuse*. 2011. PDF.
- Parsons, Sarah. "Beyond the Food Desert: Why We Can't Get Healthy Foods in Poor Communities." *Good Magazine*, 2012. Web. 05 May 2012.
- Rainier Beach 2014 Neighborhood Planning Committee, Urban Works. *Rainier Beach 2014: A Plan for a Sustainable Future*. Seattle, 1999. Print.
- Rainier Valley Community Development Fund. "About Us." RVCDF. Web. 04 March 2012.

- Seattle Department of Design, Construction, and Land Use Seattle Planning Commission. *Urban Village Case Studies*. Seattle: City of Seattle, 2003. Print.
- Seattle Department of Planning and Development. *Rainier Beach Neighborhood Plan Update*. Seattle: City of Seattle, 2012. PDF.
- Seattle Department of Transportation. *Southeast Seattle Transportation Study*. City of Seattle, 2008. PDF.
- Seattle Office of Economic Development, Community Land Use and Economics Group. *Retail Development Strategy for Rainier Valley*. City of Seattle, 2009. PDF.
- Seattle Public Schools. *Annual Report for Dunlap Elementary, South Shore K-8, South Lake High, and Rainier Beach High Schools*. Seattle Public Schools, 2009. PDF.
- Silva, Catherine. "Racial Restrictive Covenants: Enforcing Neighborhood Segregation in Seattle." Seattle Civil Rights & Labor History Project, 2009. Web. 04 March 2012.
- Tobin, Caroline, and Beanne Hull. *Seattle's Character*. Seattle: City of Seattle, 1991. Print.
- Thompson, Nile, and Carolyn Marr. *Building for Learning: Seattle Public School Histories, 1862-2000*. Seattle, WA: Seattle Public Schools, 2002. Print.
- U.S. Census Bureau. "American Community Survey, 2006-2010 (5-year Estimates)." Social Explorer. Web. 28 February 2012.
- U.S. Census Bureau. "Census, 2010." Social Explorer. Web. 28 February 2012.
- Vander, Sluis John. *Mixed Use Alternatives for Rainer [sic] Beach Economic Development: Low-impact Production Businesses*. Seattle, 2010. Print.
- Wilma, David "Seattle Neighborhoods: Rainier Beach Thumbnail History" HistoryLink, 2011. Web. 04 March 2012.