

Liberty Bank Building Methods

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This investigation was conducted as part of the Landscape Architecture Foundation's 2020 *Case Study Investigation* (CSI) program. CSI matches faculty-student research teams with design practitioners to document the benefits of exemplary high-performing landscape projects. Teams develop methods to quantify environmental, social, and economic benefits and produce Case Study Briefs for LAF's *Landscape Performance Series*.

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1. Research Strategy and Context

The Liberty Bank Building is an affordable housing project located in a formerly redlined and now rapidly-gentrifying area of Seattle known as Central District. As the first affordable housing project in the *Landscape Performance Series*, this project’s Methods document explores broader impacts the Liberty Bank Building has had on Central District and the Black community. Situating this project within its larger historical and geographic context underpinned the evaluation of its environmental, social, and economic benefits within and beyond the site boundary. Our team referenced current and historic maps from King County and City of Seattle for demographic and neighborhood information. This revealed multiple area definitions of Central District, which were used to define the larger neighborhood context and area of study for this research. Black community members of Central District have celebrated Liberty Bank Building as a first of hopefully many projects that seek to combat gentrification, reroot displaced Black community members, and work toward Black property ownership (Africatown and Garrett). Africatown Community Land Trust, formed in June 2016, is a community organization committed to maintaining strong roots for the Black community in Central District. As a key stakeholder in the project, its members are also working to make the neighborhood’s rich history visible.

Some Black Seattleites were limited to living only in the Central District area during redlining periods. According to a 1936 redlining map, the area where Liberty Bank Building is located was labeled as D4, or a “Hazardous” grade of security for white buyers because it was considered to be a Black neighborhood (Mapping Inequality, Figure 1.1).

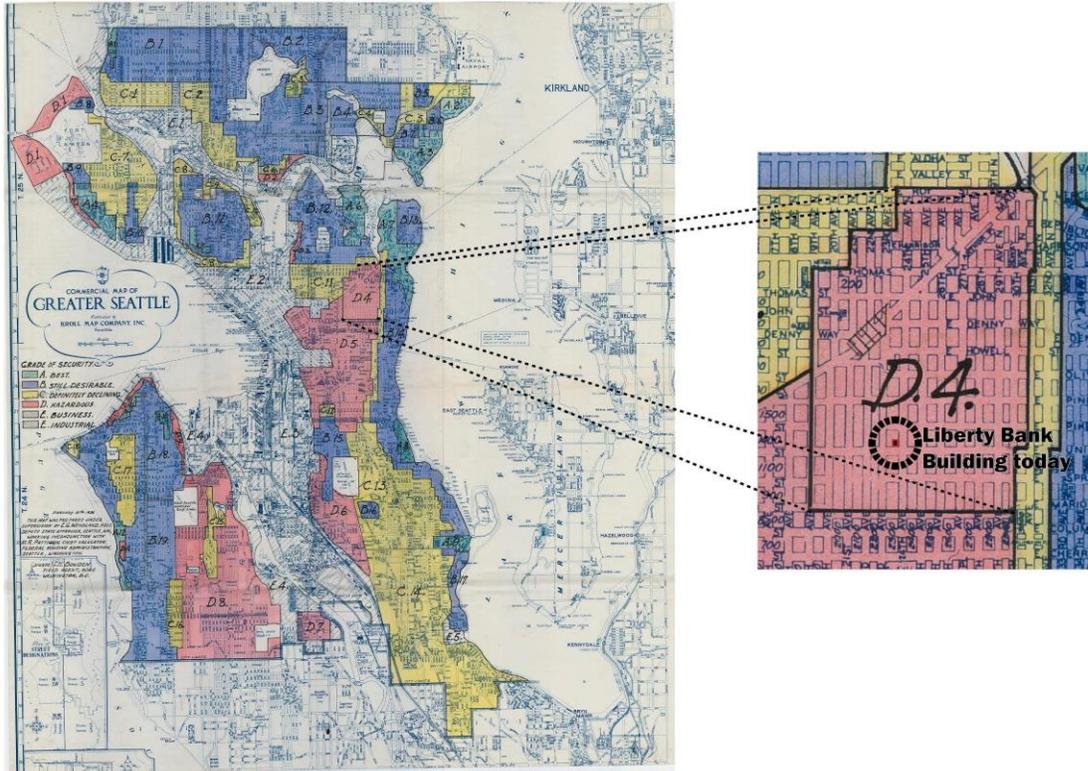


Figure 1.1: Original Redlining Map of Seattle, 1936 (source: Mapping Equality).

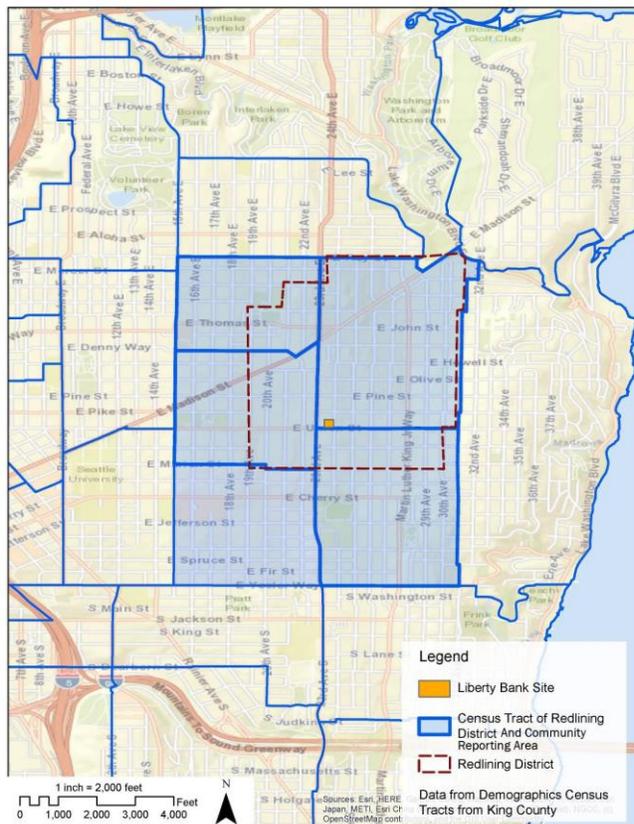


Figure 1.2: Modern census tracts (blue) intersecting with 1936 redlined area (red dash).

Today, census populations are used to examine city demographics. Figure 1.2 overlays the 5 census tracts (in blue) that intersect with the redlined boundary (red dashed line). Supported by the spatial cues taken from redlining maps and historical census data, we used the highlighted blue areas in Figure 1.2 to determine the broader geographic context for our research.

We tested this boundary by mapping the project's location with other affordable housing projects and the locations of events sponsored by Africatown (Figure 1.3). These events (in red) are one example of how Africatown works to create places that celebrate community culture and prevent losing it to displacement. Byrd Barr Place, another stakeholder for this project, is shown in yellow. To distinguish between other affordable housing locations, projects completed by the same developer as Liberty Bank Building are in purple, and others completed by different developers are in dark green. Lighter green illustrates more affordable housing developments in progress. Combined, this study reveals a lack of existing affordable housing in the immediate area surrounding the Liberty Bank Building.

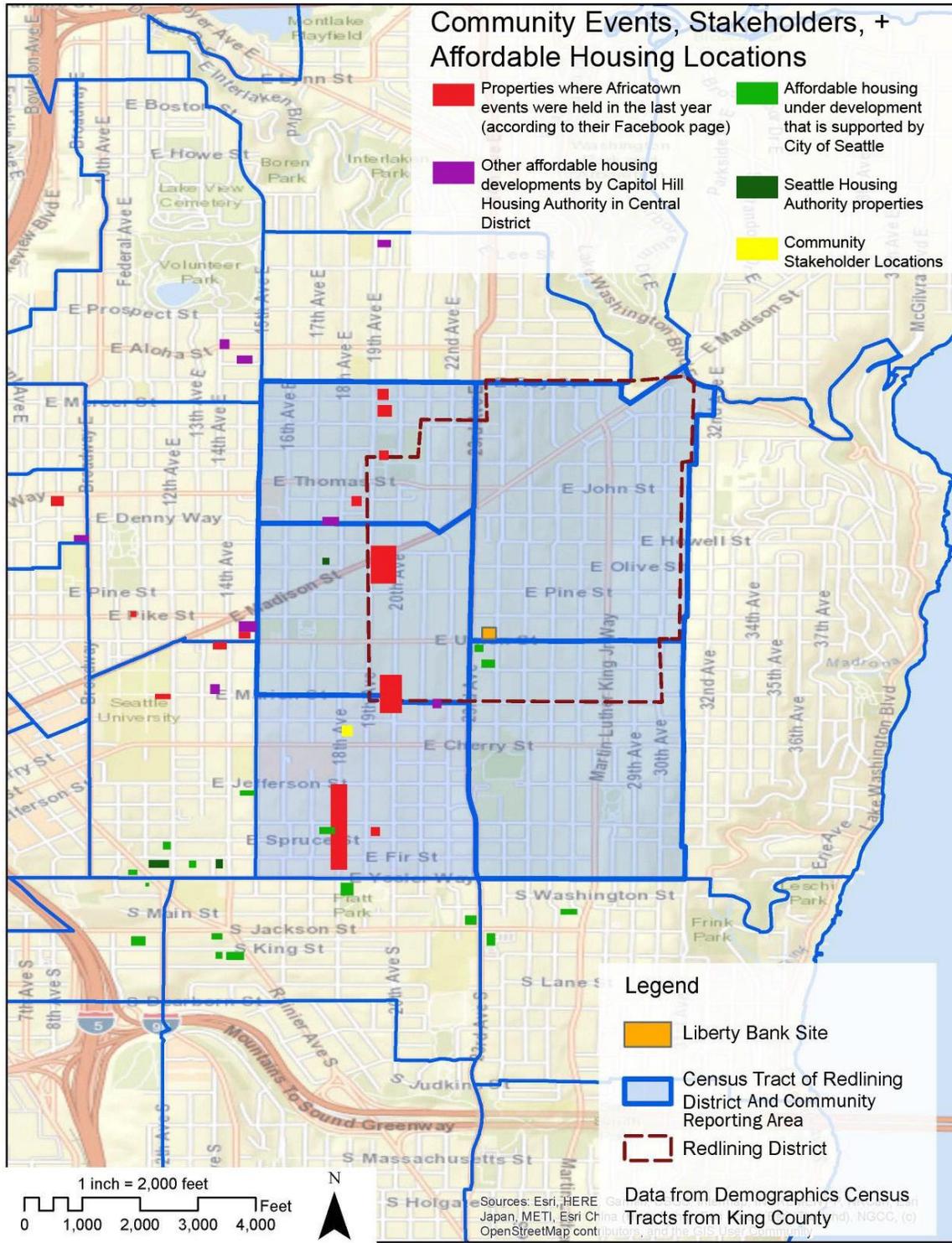


Figure 1.3: Africatown events and affordable housing in Central District

The following document presents a range of data collection and landscape performance benefits related to the Liberty Bank Building site and the surrounding Central District area as defined above. An activation study was done to understand how people used the ground-level

outdoor space. This research method was selected to help us understand community connection and how the space blends public space and residential amenities. Historical archives, stormwater calculations, code evaluation, sun/shade studies, and material lifecycle costs were used to document environmental, social, and economic benefits. A community and business survey was created to gain community feedback and hear from residents, community members, and local businesses owned by people of color. However, due to the coronavirus pandemic we were not able to visit and engage with community members to gain sufficient responses. The survey questions and benefits we had planned to examine are found in Appendices A, B, and C.

It is important to note the challenges and limitations of our work as we embarked on this study in the midst of both the coronavirus pandemic and the pandemic of structural racism, both of which have disproportionately and adversely affected Black Americans. The explosive support for the Black Lives Matter movement demonstrated through ongoing protests that began in late May 2020 after the killings of George Floyd, Breonna Taylor, Ahmaud Arbery, and many others have marked a critical turning point in civil rights as we confront our racist political and professional histories. As a result of the coronavirus pandemic, we were required to complete our work remotely. While we attempted to remotely engage with community members, Liberty Bank Building residents, and business owners in the immediate area through multiple avenues, we had a low response rate to our surveys. Under different circumstances, we believe we would have been able to complete a more comprehensive study.

Acknowledgements

Thank you to Mithun for your guidance in navigating this project during a pandemic. In particular, thank you to Amelia Jensen, Debra Guenther, Casey Huang, Doug Leigh, and Nina Mross for meeting with us and sharing your expert knowledge on the project. Additional thanks to Joah Snowden and Jeremy Wilkening with Community Roots Housing for working with us on this research. Lastly, thank you to Megan Barnes and Heather Whitlow at Landscape Architecture Foundation for your guidance, review, and support throughout the process.

We acknowledge the land where we do our work, and the Coast Salish peoples of this land, the land which touches the shared waters of all tribes and bands within the Suquamish, Tulalip, and Muckleshoot nations.

2. Environmental Benefits

- ***Retains 85% of rainfall on-site for a 24-hour, 20-year storm event from approximately 50% of the site's area through infiltration and bioplanters. Planned off-site detention and best management practices will ultimately eliminate surface runoff from 97% of the site.***

Background:

The City of Seattle requires all affordable housing developments to meet or exceed Evergreen Sustainable Development Standards through their point system. Evergreen Sustainable Development Standards are in place to ensure that affordable housing in Washington is built responsibly. The criteria promote health and safety, increase durability, enhance sustainable living, protect the environment, and increase energy and water efficiency standards (Washington State Department of Commerce, 2018). Evergreen Standards, along with the City of Seattle Stormwater code, require a stormwater management plan that details the amount of rainfall retained on-site. The plan encourages the use of best management practices (BMPs) on-site to retain stormwater and prevent site runoff. Higher amounts of stormwater retained on-site earn more points toward the Evergreen Sustainable Development Standards (80%=1 point, 85%=2, 90%=4, 95%=6 based on a 24-hour storm that is equivalent to a recent 20-year event).

Method:

The site was divided into surface water management categories by the design team (Figure 2.1). Water is either infiltrated into the soil, directed to the biplanter, used for planned detention and reuse, or drained off-site to the street. The civil engineer produced a Surface Water Management plan that maps the dispersion of water when it lands on the surface. Figure 2.1 and Table 2.1 illustrate the breakdown of each category on the site to determine where the water is going. The categories that do not produce surface runoff off-site are the infiltration (32.2%), biplanter (18.3%), and planned detention (46.5%) categories, which add up to 97.0% of the site's area. Because Evergreen Standards require BMPs to be designed for specific volumes based on a 24-hour storm event that is equivalent to a recent 20-year event, our review used the same metric. Infiltration shows the 4" allowance for stormwater on vegetative roof systems and holds 85% of stormwater for a 24-hour event in a 20-year storm event (1,835 gallons of stormwater) before overflow goes to planned detention. The biplanter has a 12" flood zone allowing water to fill up before it goes through the outfall process. It also collects 85% of the stormwater for a 24-hour event in a 20-year storm event (1,570 gallons of stormwater). Infiltration and the biplanter combined retain water from 50.5% of the surfaces on-site. Liberty Bank Building's designers chose to design for an 85th percentile of a 24-hour storm events, which are .47-inch storms requiring 290 gallons per 1,000 sf according to the Evergreen Standards. The infiltration and biplanter areas are designed to retain water on-site for no more than 72 hours. Volumetric calculations of those areas are found in Table 2.2 and fulfill or exceed Evergreen Standards for the 85th percentile storm or 0.47 inches. Runoff slated for planned off-site detention (46.5% of the site) currently goes directly into the combined stormwater/sewer system. The system connected to the site has capacity for direct input according to the City. Therefore, the site was allowed direct input to the stormwater system where BMPs were considered infeasible on-site. The process for sending it to the planned detention is slowed by collecting 951 gallons before water is piped into the combined stormwater/sewer system. This planned off-site detention will ultimately manage stormwater runoff from 97% of the site.

Calculations:

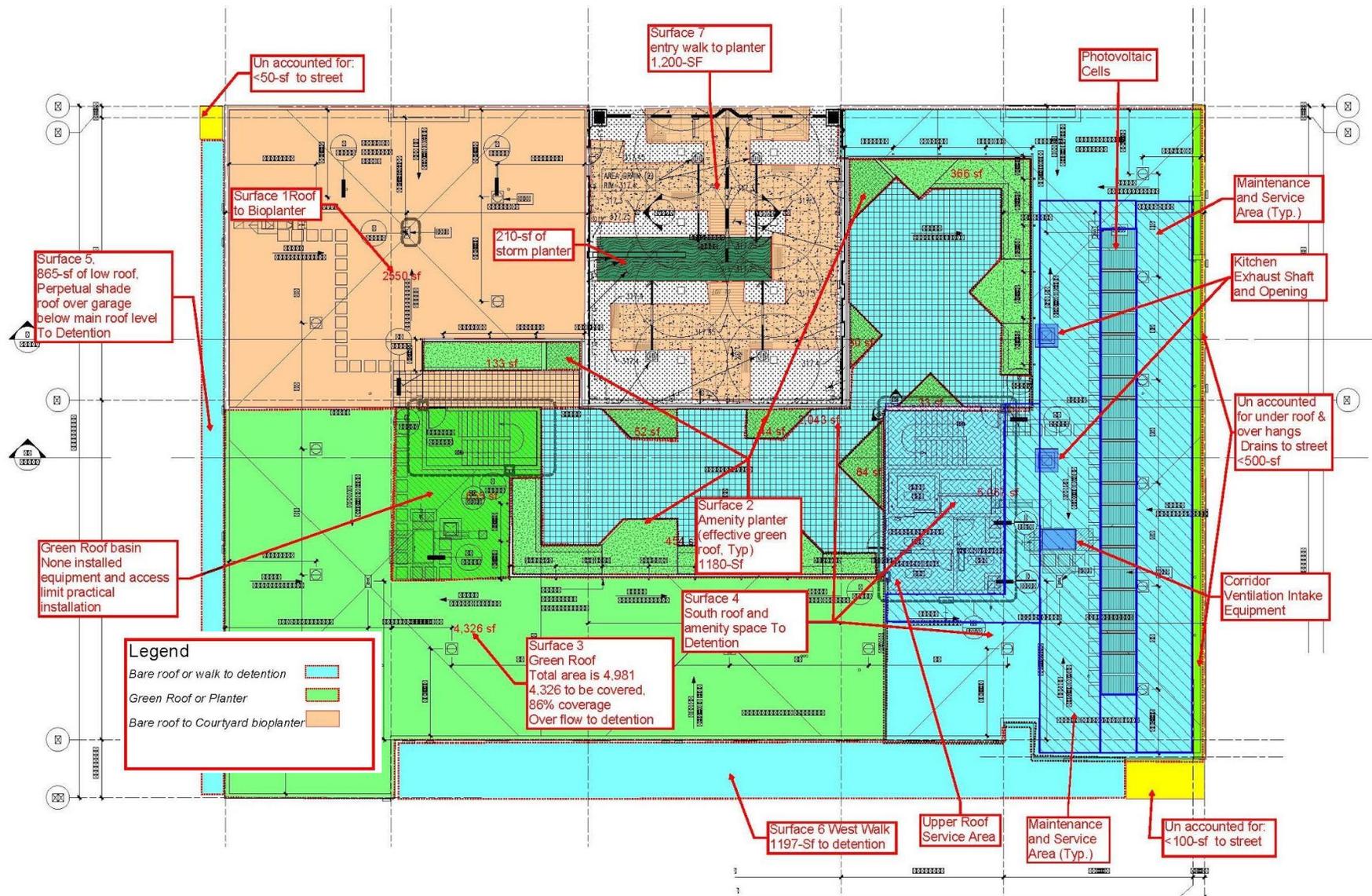


Figure 2.1: Stormwater diagram - blue areas (Surfaces 4, 5, and 6) are areas going to planned detention, green areas (Surfaces 2 and 3) are green roof or planters, peach areas (Surfaces 1 and 7) are hardscaped surfaces that flow into the biplanter (Surface 7; dark green), white areas (courtyard plantings) are open plants with infiltration, and yellow areas are unaccounted for runoff areas.

	Infiltration and Vegetated Roof System	Drains to BioPlanter	Planned Detention Off-site	Site Runoff
Surface 1		2,550 sf		
Surface 2	1,180 sf			
Surface 3	4,981 sf			
Surface 4			7,974 sf	
Surface 5			865 sf	
Surface 6			1,197 sf	
Surface 7		1,200 sf		
Unaccounted NE corner				<50 sf
Courtyard Plantings	784 sf*			
Storm planter		210 sf		
Unaccounted under roof and overhangs				<500 sf
Unaccounted for SW corner				<100 sf
Totals	6,945 sf	3,960 sf	10,036 sf	<650 sf
Total % area (out of 21,591)	32.2%	18.3%	46.5%	3.0%
Total managed stormwater on-site	50.5%		49.5%	
Total stormwater prevented from site runoff (planned)	97.0%			3.0%

*Overall courtyard (2244 sf) = entry walk (1250 sf) + storm planter (210 sf) + Courtyard plantings (784 sf)

Table 2.1: Managed Stormwater Chart (Source: created from Mithun and Coughlin Porter Lundeen documentation)

Project Surface Area Generating Runoff	Project Runoff Goal (Percentile and Points)	Gals/1000 sf	Number of Gallons design is required to hold*	BMP Type	BMP Volume (gallons)	BMP Success
3,960 sf (Surfaces 1, 7, and stormwater planter)	85th Percentile and 2 points	290	1,148 gallons	Storm Planter	1,570.91 (12" clear space for ponding)	Yes
6,161 sf (Surfaces 2, 3)	85th Percentile	290	1,787 gallons	Vegetated roof system	1,835 (4" single course on 5,505 sf of roof)	Yes
784 sf (courtyard plantings)	Infiltrates into the ground with soil and vegetation. Not an official BMP but does not provide runoff. Any surface runoff from here flows into the storm planter. (If 100% runoff, 1,376 gallons is required which it meets.)					
10,036 sf (Surfaces 4, 5, and 6)	85th Percentile and 2 points	290	2,910 gallons	Detention (BMP not feasible on-site. Control device slows outfall directly into the combined storm system [not a constrained system by the City of Seattle] and allowed through permit from King County)	951.3 (54" [4.5'] circular flow control with 24" [2'] depth. $4.5^2 * \pi = 127.17$ cu ft = 951.3 gal	Not planned as a BMP; planned detention off-site

*SF/1000 x "Gals/1000 Goal" = Design Requirement

Table 2.2: Stormwater volume calculations (Source: compiled based on information from Mithun and Coughlin Porter Lundeen documentation)

Sources:

Mithun and Coughlin Porter Lundeen. 2016. "Construction Documentation." Seattle.

Washington State Department of Commerce. 2018. "Evergreen Sustainable Development Standard."

Limitations:

1. This calculation does not include the streetscape adjacent to the property line.
2. Results are based on the Construction Documentation. Stormwater implementation has not been verified with on-site measurements.

- **Generates nearly 11,500 kWh of energy per year for the municipal electric grid with a photovoltaic solar rooftop array.**

Method:

To calculate the annual amount of energy produced from the rooftop photovoltaic solar array, we began with the maximum amount of energy that can be produced by the solar array. This energy feeds into the municipal electric grid. Each Itek Energy SE 300 solar module produces 0.3kW per hour when at maximum production according to the manufacturer specification sheet. There are 22 solar panels within the solar array atop Liberty Bank Building.

$$\begin{aligned} \text{Array kW per hour} &= \text{kW for each panel} * \text{number of panels} \\ 6.6 \text{ kW} &= 0.3\text{kW}*22 \end{aligned}$$

6.6 kW is the maximum production from the solar array for each hour of sunlight.

According to the National Oceanic and Atmospheric Administration (NOAA), there are 2170 hours of average sunshine annually for Seattle, Washington (Current Results Publishing Ltd). Therefore, to determine the maximum energy production possible for the full year from this array, we multiplied the energy production per hour by the hours of average sunlight in Seattle to get an annual kWh for the system.

$$\begin{aligned} \text{Maximum kWh/year} &= (\text{kW per hour}) * \text{average hours of sunlight per year} \\ 14,322 &= 6.6*2170 \end{aligned}$$

This tells us that under maximum efficiency in laboratory settings, the solar array could produce 14,322 kWh per year. However, solar panels are never under a maximum efficiency setting. Consequently, the kWh is multiplied by an efficiency rating. According to understandsolar.com, a conservative estimate for all efficiencies is 80% (0.8).

$$\begin{aligned} \text{Adjusted kWh/year} &= (\text{maximum kWh/year}) * \text{efficiency} \\ 11,457.6 \text{ kWh/year} &= 14,322 * 0.8 \end{aligned}$$

This formula was derived from understandsolar.com's formula to determine how many kWh are produced each day. This is demonstrated in Table 2.3. Because the sun levels vary per day and season, we used an annual number and converted to formula from kWh/day to kWh/year as seen above.

According to the U.S. Energy Information Administration, an average household uses 10,972 kWh per year, which we used to determine the solar energy equivalent to average households.

$$\text{\# of households} = \underline{(\text{Adjusted kWh/year produced from solar array})}$$

kWh/year used by an average household

$$1.14 = \frac{11,457.6}{10,072}$$

Energy production from the solar array at Liberty Bank Building is equivalent to the energy usage of 1.14 average households annually (Table 2.4).

Calculations:

Material Category	Maximum Energy Produced (kW)	Efficiency (percent)	Average Annual Hours of Sunshine in Seattle	Estimated Annual Energy Production (kWh)
(1) Itek Energy SE 300 solar module	0.3 kW	80%	2170 hours	520.8 kWh
(22) Itek Energy SE 300 solar modules	6.6 kW	80%	2170 hours	11,457.6 kWh

Table 2.3: Energy Calculations

Maximum energy produced x efficiency x average annual hours of sunshine = estimated annual energy

Estimated Annual energy production from Liberty Bank Building solar array	Amount of kWh an average household uses per year	Approximate number of household's power use per year equivalent to Liberty Bank Building solar array production in one year
11,457.6 kWh	10,072 kWh	1.14 households

Table 2.4: Energy production comparison to a typical family usage

Sources:

"Calculating the Kilowatt Hours Your Solar Panels Produce (Solar Panel Output)." n.d. Understand Solar. Accessed August 9, 2020. <https://understandsolar.com/calculating-kilowatt-hours-solar-panels-produce/>.

Current Results Publishing Ltd. 2020. "Average Annual Sunshine By City." Wwww.Currentresults.Com. 2020. <https://www.currentresults.com/Weather/US/average-annual-sunshine-by-city.php>.

Mithun. 2017. "Photovoltaic Submittal 2017-12-22." Seattle.

U.S. Energy Information Administration. 2018. "Frequently Asked Questions." 2018. <https://www.eia.gov/tools/faqs/faq.php?id=97&t=3>.

Limitations:

1. The estimates are based on potential energy production using average numbers. It does not include data from actual energy bills. Energy levels will vary based on specific locations and

angles of installation. Using the developer's energy bills to determine the amount of energy produced in the first year would provide greater accuracy, but these records were unavailable.

2. The average amount of energy a family uses per year is based on U.S. standards; these averages vary by state. Energy use varies significantly depending on type of building, when it was built, how often it is used, and how many people make up the household.

3. Social Benefits

- **Supported at least 10 events in the first year of opening, engaging an average of 188 attendees per event based on attendance reported via social media.**

Background:

One of the project goals for the Liberty Bank Building was to create a hub for Black community gatherings and events. The number of events and attendees in the first year demonstrates a swift adoption of the project for community events.

Method:

The Liberty Bank Building held numerous community events centered on celebrating Black culture and the historic community roots of the area. Exact numbers for events were not able to be gathered, so Facebook events was used to estimate attendance. From March to December 2019, 10 community events were promoted on Facebook with an average of 188 people reporting as attending. There were likely more events that occurred that were not promoted on Facebook.

1,692 total / 9 events [1 event has unknown attendee numbers] = 188 people

Community events included design meetings for Africatown Plaza (an outdoor plaza to be developed within the new mixed-use complex under construction across the street), an outdoor rooftop concert series held weekly for 5 weeks in August and September 2019 (Figure 3.1), and a winter holiday celebration. The events and number of attendees are based on events listed on the Liberty Bank Building, Africatown-Central District, Byrd Barr Place, Black Community Impact alliance, and Community Roots Housing Facebook pages, as well as the WESEAYOU.net website (Table 3.1). Additionally, at least 1 residential gathering featuring play time for children during the winter holidays was advertised on the Liberty Bank Building website.

Other activities that involved Liberty Bank Building but were not held on-site included a historical tour of the larger Central Area (Jimi Hendrix Park, Wa Na Wari, Liberty Bank Building, James and Janie Washington Cultural Center, Good Weather Bicycle & Cafe, the Downtown Basic Bike Network, and Northwest African American Museum), hosted by SLOW (Senior Ladies on Wheels). The Museum of History and Industry (MOHAI) at South Lake Union held *Partners in Civic Innovation: The Liberty Bank Building Project* to understand the challenges and successes of the model in larger civic collaboration.

The researchers expected to see an increase of activities this year and the continuation of the highly successful summer concert series, but due to COVID-19 restrictions, they were neither planned nor held.

Despite not being a large community gathering place, Liberty Bank Building has held recordings of podcasts and COVID-19 updates to get information out to people during “Stay at home” orders. In June 2020, a press conference was held with individuals that lost family members to police violence in King and Pierce County. The press conference was supported by NAACP, Africatown Community Land Trust, and Molly Moon’s Ice Cream.

Calculations:

Event	Date	Number of People (based on number of people responding “attending” on Facebook events)	Public or Resident
Ribbon Cutting Celebration	March 23, 2019	390	Public
Africatown Plaza Community Design Meeting	May 23, 2019	85	Public
Africatown Plaza Design Meeting	June 25, 2019	76	Public
Level R Events Rooftop Music Series: Marshall Law Band	August 15, 2019	213	Public
Level R Events Rooftop Music Series: CHAMEL	August 22, 2019	213	Public
Level R Events Rooftop Music Series: Roc Phizzle & Friends	August 29, 2019	213	Public
Level R Events Rooftop Music Series: Fysah	September 5, 2019	213	Public
Level R Events Rooftop Music Series: Shaina Shepherd Music	September 12, 2019	213	Public
Jam Session for Mo’ Jam Presents	September 20, 2019	unknown	Public
Holiday Paint, Sip & Celebrate	December 19, 2019	76	Public

Community Supply Holiday Play Time	December 21, 2019	unknown	Resident
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Table 3.1: Events at Liberty Bank Building (Source: Compiled from Facebook and WeSEAYOU.net)



Figure 3.1: 2019 Rooftop Live Music Series advertisement (Source: WESEAYOU.net)

Sources:

Liberty Bank Building, Africatown-Central District, Byrd Barr Place, Black Community Impact Alliance, Community Roots Housing, and WESEAYOU.net. 2019. "Event Posts." Facebook. 2019.

MOHAI. 2019. "Partners in Civic Innovation: The Liberty Bank Building Project." Museum of History and Industry. 2019. <https://mohai.org/event/partners-in-civic-innovation-the-liberty-bank-building-project/>.

Limitations:

1. Additional information from property management was not available at this time. There were likely more residential and other community events that were held, but not reported. We also reached out to WeSEAYOU.net but were not able to get more details on the Rooftop Concert Series.
 2. Numbers of participants were based on users marking "attending" on Facebook events and are likely inaccurate.
 3. It is unknown how many of the participants in community events were also residents of Liberty Bank Building.
- **Creates a community hub activated by residents and other community members as demonstrated by 48% of those observed using streetscape being associated with the development, indicating a balance of resident and community member use.**

Method:

We conducted four visual surveys to understand who is using the ground-level outdoor spaces and how they are being used. We intentionally chose four different times of day on four different days of the week to represent activities in the mornings through evenings. Three observation times occurred during weekdays, while one was on the weekend. The days and times that were observed are: Tuesday (5 pm to 6 pm), Wednesday (12 pm to 1 pm), Friday (9 am to 10 am) and Saturday (2 pm to 3 pm).

To avoid distracting people, interfering with how they used the space, and to maintain social distance during the COVID-19 pandemic, surveys were done from across the street. Using a hard copy of a site plan, observations were systematically recorded, mapping locations and activities of site users.

Our observations encompassed where people were standing, sitting, walking, or gathering. All those who were standing, sitting, or gathering were associated with the development: they either worked for the complex or one of the local businesses, were a resident, were visiting a resident, or simply walked into the space. Those not associated were people walking on the sidewalk and did not connect with the development. We also noted if people stayed in an area for more than 10 minutes. Those with extended stays often were on their phones, smoking, talking with others, or sitting and enjoying the day/weather.

From our observations, people used the benches (both when alone and in groups) primarily when they were spending more time on-site. Benches on the street side of the portal and outside of the barbershop were the most commonly used benches. The activated streetscape was a common place for people to smoke, talk on their phones, and/or wait for rides. Additionally, it was a place for casual interaction when people met on the streetscape, stopped to talk for a few minutes, and then proceeded on their way. The space was more active in the evenings and on the weekends as well as when it was a sunny day with pleasant temperatures. Lastly, from our observations, a majority of the people that used the site seemed to know each other. See the site maps in figures 3.3 - 3.6. Those observations were quantified in Table 3.4 to understand what the average number of people were for each category. We observed 48% of those walking through the streetscape on Union St as having an association with the site. Therefore, there is a relatively even mix of those associated with the property and those simply walking past. This demonstrates the development is creating a hub for the community in Central District. See the following pages for mapping.

Calculations:

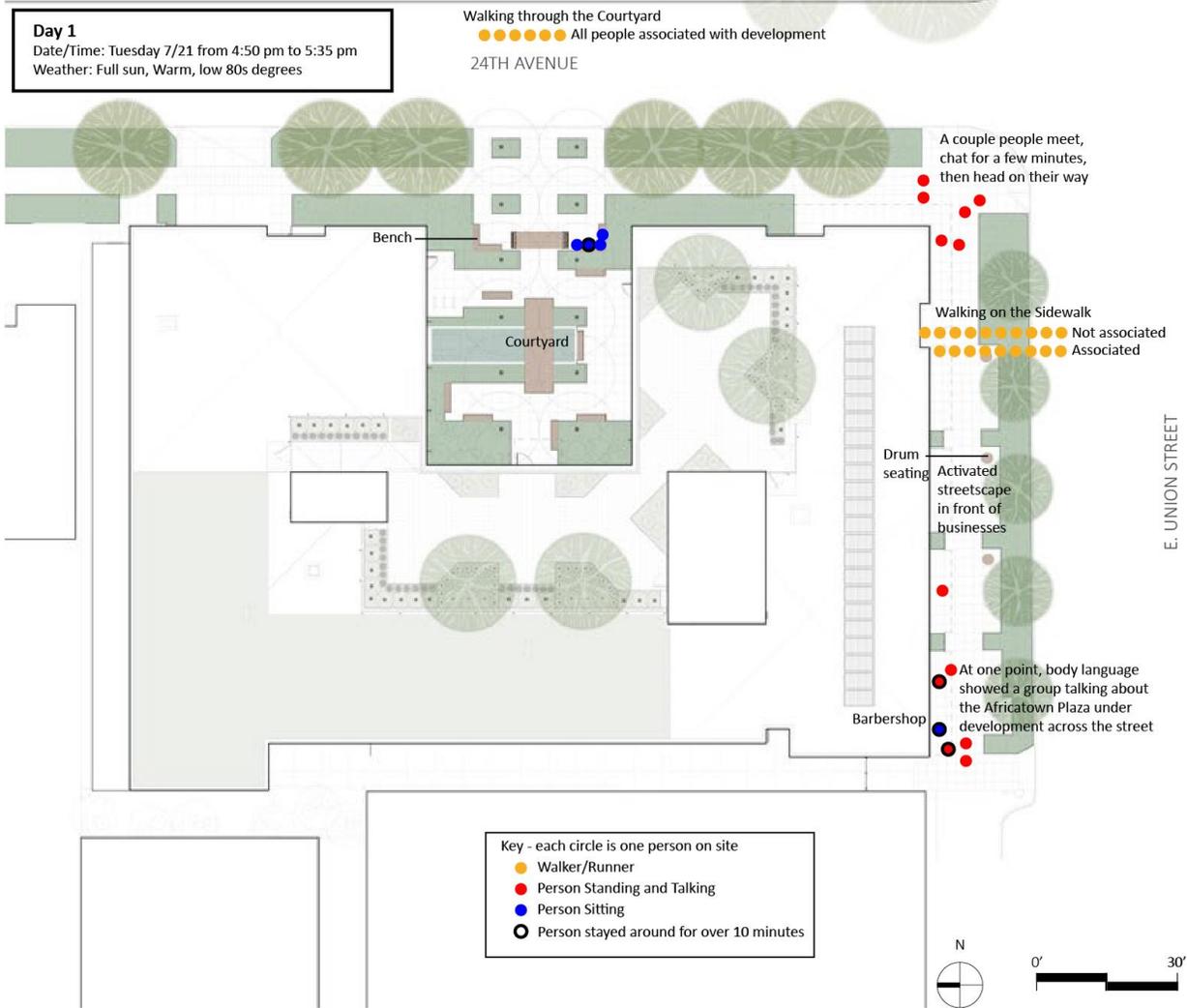


Figure 3.3: Day 1 - Tuesday 5 pm to 6 pm - Use of the ground-level outdoor community / resident spaces

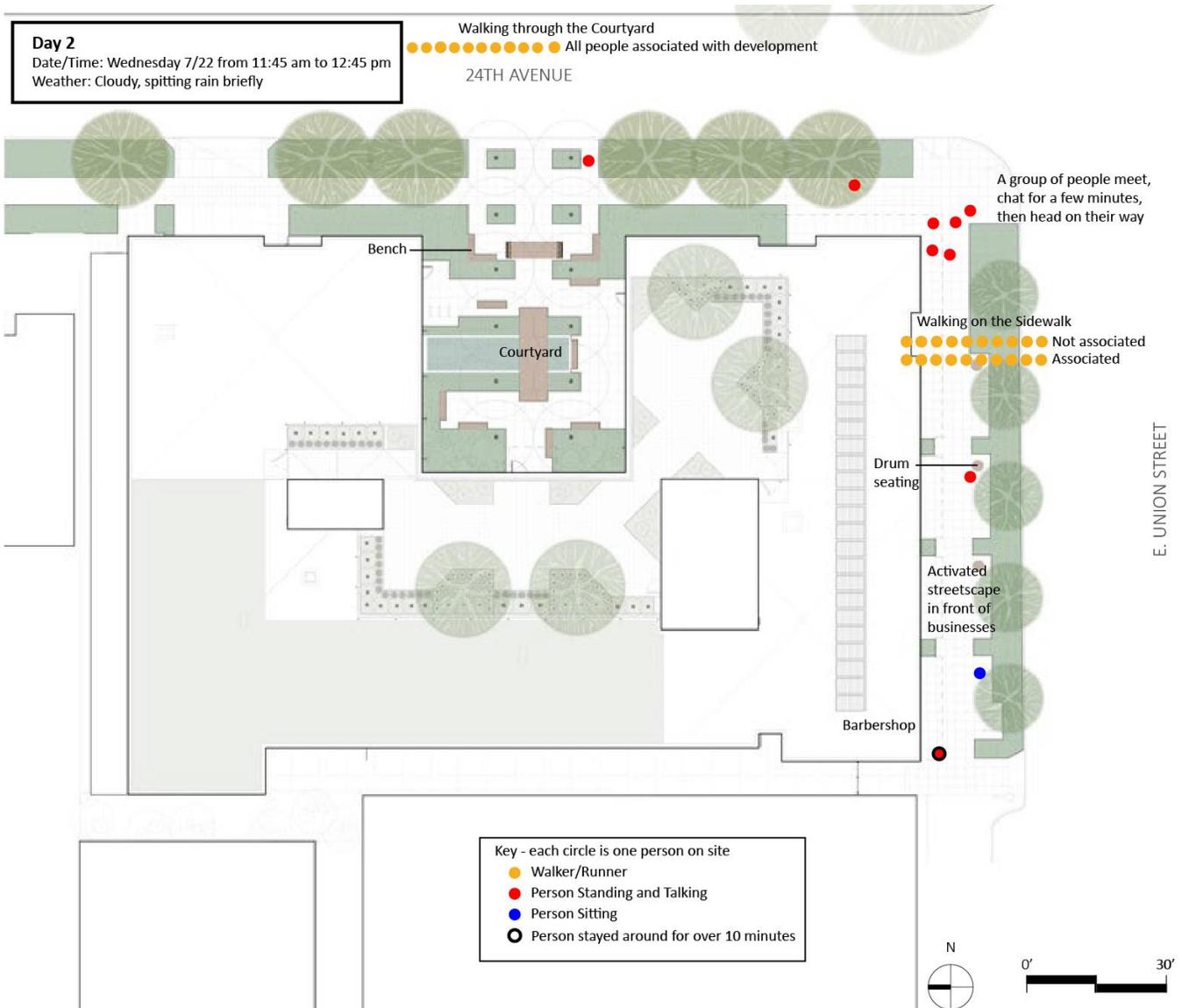


Figure 3.4: Day 2 - Wednesday 12 pm to 1 pm - Use of the ground-level outdoor community / resident spaces

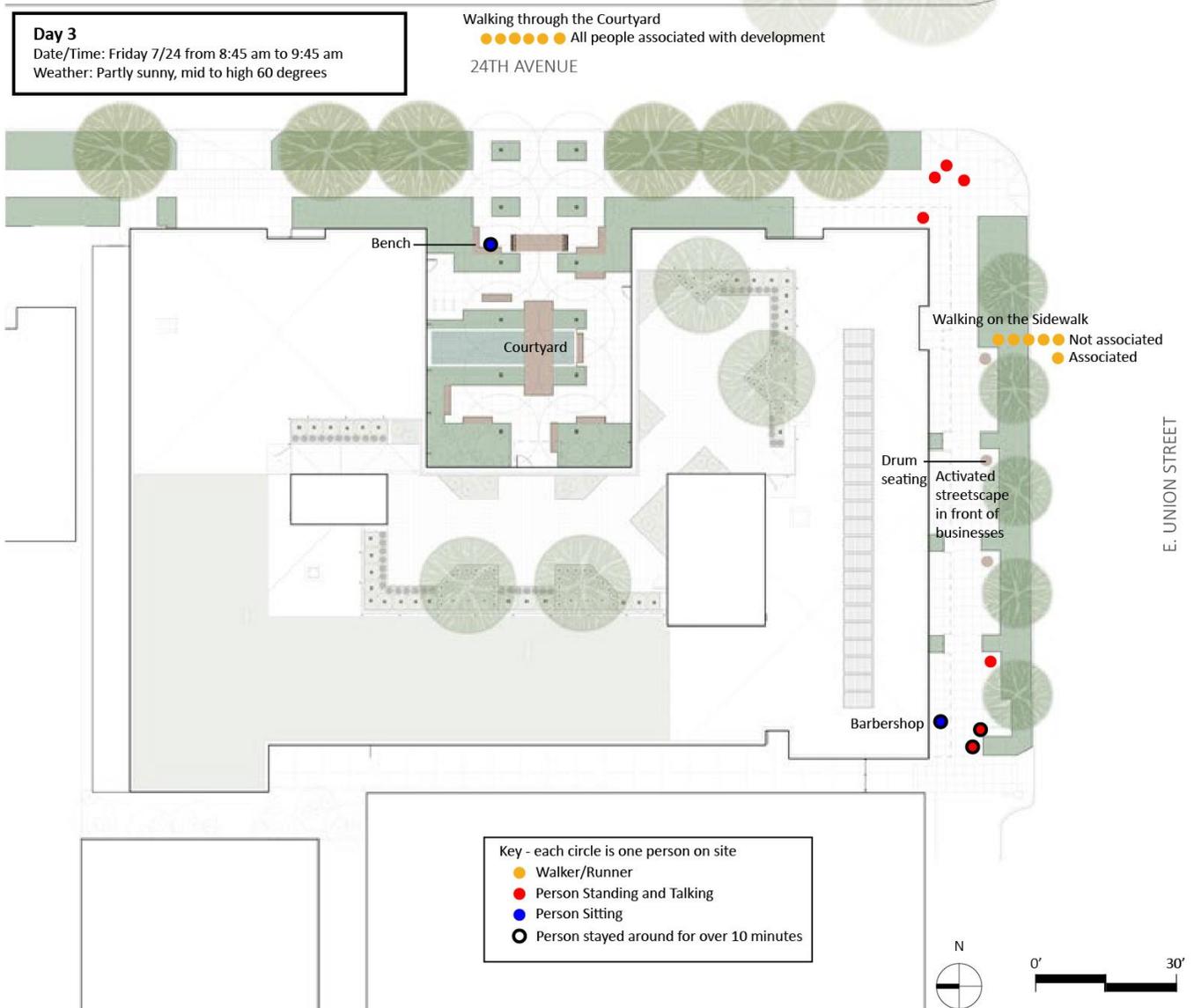


Figure 3.5: Day 3 - Friday 9 am to 10 am - Use of the ground-level outdoor community / resident spaces

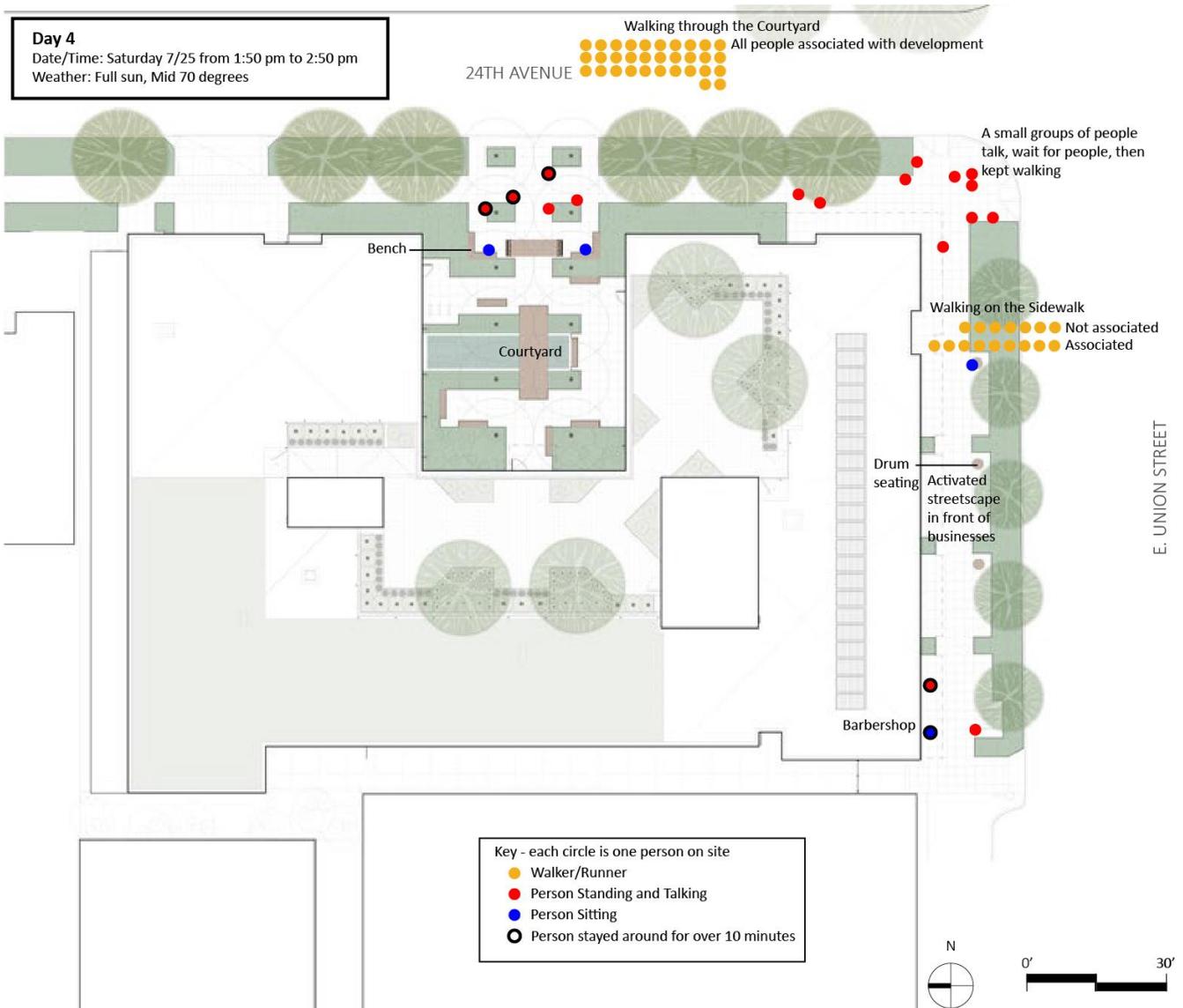


Figure 3.6: Day 4 - Saturday 2 pm to 3 pm - Use of the ground-level outdoor community / resident spaces

Activity	Day 1	Day 2	Day 3	Day 4	Average
Sitting	5	1	2	4	2.25
Standing	12	9	7	17	11.25
Staying for over 10 minutes	4	1	4	5	3.5
Walking through the Courtyard	6	11	6	32	13.75

Walking along Union St that were associated with the development	9 (47% of total walkers)	10 (50%)	1 (17%)	9 (56%)	29 (48%)
Total Walking along Union	19	20	6	16	61
Total people observed	42	41	21	69	173

Table 3.4: Observed Quantities of Site Users by Activity

Sources:

Mithun. 2019. "Site Plan." Seattle.

Planning_SeattleCityGIS. 2020. "A Census Tract Profile ACS 5-Year 2013-2017: American Community Survey." City of Seattle. 2020. <http://data-seattlecitygis.opendata.arcgis.com/datasets/a-census-tract-profile-acs-5-year-2013-2017?geometry=-122.605%2C47.583%2C-121.952%2C47.664>.

Limitations:

1. Due to social distancing measures related to the coronavirus pandemic, visual surveys were completed from a distance across the street and other distant, yet observable locations. Some sight lines into the courtyard were obscured due to distance, plantings, and cars.
2. Days and times were selected to study use and activity levels during a range days and times. They represent a sampling, not a comprehensive study.

- **Attempts to reverse the trend of a declining Black population in Central District. 86% of residents at Liberty Bank Building self-identify as Black. Only 11.2% of the Central District’s residents self-identified as Black in 2017, down from a high of 71.9% in 1970.**

Background:

Due to the lack of opportunities in other neighborhoods from historical land covenants and redlining, Central District was the home to the Black community in Seattle (Mapping Inequality). Over the last few decades, Seattle’s economic boom has caused significant changes to Central District. Community members that had been there for multiple generations could no longer afford to live in the neighborhood. They had to move outside the neighborhood to find affordable living. More information can be found in the Social Infrastructure tab of the Case Study Brief and the Research Strategy and Context section of this document.

As an affordable housing development, this site looked to provide an option to people who could not afford market rate rent prices in the neighborhood. One of the goals that came out of the community stakeholder working group was to target the marketing of this housing to Black community members, allowing people to either stay in or return to Central District.

Method:

Before looking to the demographics of present-day residents, we needed to understand the historic

residential demographics of the neighborhood. The historic census maps document demographics of each census tract since 1940. Information in Table 3.3 describes the number of Black or African American residents, total residential populations, and percentage of the residential population that identified as Black or African American in each tract. As discussed in the Research Strategy and Context section, there are 5 census tracts in the neighborhood first defined by redlining (Figure 3.2). For this research, the census tracts were combined to get a neighborhood total for each decade. A community survey conducted from 2013-2017 provides more recent demographic data for the area. This information, found in Table 3.2, demonstrates the historical demographic change that Central District has experienced since 1950. The specific census tracts we highlighted saw a historic high of 71.9% Black residents in 1970. The area continued to have a majority of Black residents through the 1990 census. In 2017, however, a community survey showed 11.2% Black residents.

Community stakeholders worked to target the Black community by “[getting] the word out and [handing] out flyers at youth football practices, churches and community meetings” (Jseattle). The contrast between the 86% Black residents at Liberty Bank Building compared with 11% Black residents in Central District demonstrates one way the development is attempting to reverse the trend of a declining Black population in Central District.

Calculations:

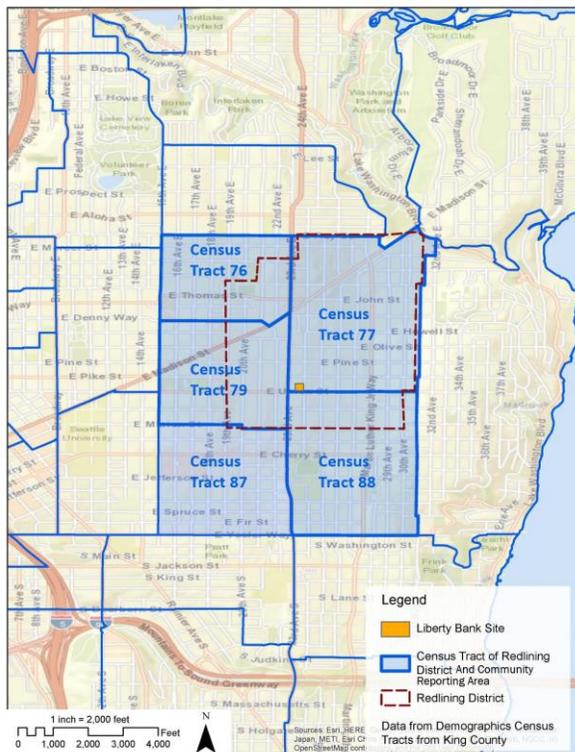


Figure 3.2: Census tracts in formerly redlined neighborhood

Year	Populations	Tract 77 (1)	Tract 88 (3)	Tract 87 (5)	Tract 79 (3)	Tract 76 (2)	Total
2017	Black or African American alone	602	519	895	685	172	2,773

	(not Hispanic or Latino)						
	Total residential population	5,308	4,236	4,727	6,339	4,257	24,867
	Percent	11.3%	12.3%	18.9%	10.8%	4.0%	11.2%

Table 3.2: Black or African American Population in Neighborhood, from 2017 community survey. (source: Planning_CityGIS, 2020)

Year	Populations	Tract 77 (1)	Tract 88 (3)	Tract 87 (5)	Tract 79 (3)	Tract 76 (2)	Total
1950	Black	1,854	893	2,003	973	457	6,180
	Total residential population	4,133	4,789	5,296	4,869	4,294	23,381
	Percent	44.9%	18.6%	37.8%	20.0%	10.6%	26.4%
1960	Black	3,811	3,299	2,632	1,913	1,077	12,732
	Total residential population	4,523	4,785	4,421	4,512	3,798	22,039
	Percent	84.3%	68.9%	59.5%	42.4%	28.4%	57.8%
1970	Black	3,377	3,535	2,500	1,847	1,437	12,696
	Total residential population	3,738	3,896	3,339	3,367	3,324	17,664
	Percent	90.3%	90.7%	74.9%	34.9%	43.2%	71.9%
1980	Black	2,767	2,988	2,057	1,514	1,047	10,373
	Total residential population	3,628	3,516	3,175	3,407	3,259	16,985
	Percent	76.3%	85.0%	64.8%	44.4%	32.1%	61.1%
1990	Black	2,458	2,457	1,920	1,489	842	9,166
	Total residential population	3,779	3,278	3,300	3,872	3,137	17,366
	Percent	65.0%	75.0%	58.2%	38.5%	26.8%	52.8%

2000*	Black						
	Total residential population						
	Percent	~40%	~50%	~40%	~20%	~20%	
2010	Black	853	1,138	905	772	377	4,045
	Total residential population	4,476	3,503	3,843	5,147	3,498	20,467
	Percent	19.1%	32.5%	23.5%	15.0%	10.8%	19.8%

Table 3.3: Census Tract Populations from 1950 - 2010 from the Interactive Map of Race Seattle/King County 1940 - 2010 (Data Source: Elwood-Faustino et al)

* The data for 2000 was only reported as approximate percentages and not numbers

Sources:

Elwood-Faustino, Sarah, Anna Yoon, Brian Lam, Gihoon Du, Jiang Wu, and Yurika Harada. 2017. "Interactive Map of Race Seattle/King County 1940-2010." University of Washington Civil Rights & Labor History Consortium. 2017. <http://depts.washington.edu/labhist/maps-race-seattle.shtml>.

Jseattle. 2019. "Want to Be Part of the 110 Affordable New Apartments above Capitol Hill Station? Here's How to Join the Station House Crowd." Capitol Hill Seattle Blog, December 6, 2019. <https://www.capitolhillseattle.com/2019/12/want-to-be-part-of-110-affordable-new-apartments-above-capitol-hill-station-heres-how-to-join-the-station-house-crowd/>.

Planning_SeattleCityGIS. 2020. "A Census Tract Profile ACS 5-Year 2013-2017: American Community Survey." City of Seattle. 2020. <http://data-seattlecitygis.opendata.arcgis.com/datasets/a-census-tract-profile-acs-5-year-2013-2017?geometry=-122.605%2C47.583%2C-121.952%2C47.664>.

Limitations:

1. Census data does not include information from 2020 as the census was underway at the time of this study. The most recent demographic data reported was from a community survey completed 2013 to 2017, which may have a lower response rate than the national census.
2. Census information in the community survey is based respondents self-reporting as 100% Black or African American and does not include mixed race individuals.
3. Affordable Housing is selected on a first-come, first-serve basis for anyone that is eligible. The selection and options for people to choose affordable housing is not the same process as market-rate housing.
4. During the design/construction process, community stakeholders targeted their promotion of the affordable housing development to the Black community. Therefore, the number of Black residents is likely higher than if it had not been advertised in a targeted way.

4. Economic Benefits

- **Directly prevented the displacement of 1 Black-owned business that is a neighborhood icon while providing 2 additional affordable commercial spaces for new local Black-owned businesses.**

Background:

Black-owned businesses in Central District have been impacted by gentrification as well. Rising rent prices and new developments are causing businesses to move to more affordable locations.

Furthermore, with more residents of color leaving the neighborhood, these businesses have been disproportionately affected by losing clientele.

The new Liberty Bank Building created spaces for three local Black-owned businesses to rent at affordable prices. These businesses establish social infrastructure and offer amenities for the residents of the Liberty Bank Building and other neighborhood residents. We sought to examine the impact Liberty Bank Building has had on the local business district.

Method:

We began by researching websites of businesses in the Liberty Bank Building. Table 4.2 shows when they opened or were expected to open, what types of business they are, and whether they were a new business or moved from elsewhere. This provides an initial history of who the business owners are that are serving the Black community and whether they were displaced from another location within Central District. Earl's Cuts and Styles was previously located across the street, and when the Midtown Commons development beginning the building was set to be demolished (Earl's Cuts and Styles).

Calculations:

Business	Opening Date	Function/type of business
Cafe Avole	2020 (moved from 5.8 miles south)	Ethiopian Coffee shop and cafe that offers gathering for the community. Also offers catering for local events and fundraisers
Communion	2020 (New restaurant location)	A local restaurant by Chef Kristi Brown (That Brown Girl Cooks!) that is her own take on Soul Food with worldly inspiration. Also offers catering for local events and works to provide Community Meals in Seattle.
Earl's Cuts and Style	2019 (moved from across the street and has been there since 1992)	Barbershop that has been a landmark in Central District. (Lancaster, Earl)

Table 4.1: Businesses in Liberty Bank Building

Sources:

“A Bold Plan to Keep Black Residents in Seattle’s Central District!” 2019. Earl’s Cuts and Styles. 2019. <https://earlscutsandstyles.com/index.php/barber-shop-blog>.

Brown, Kristi. n.d. “That Brown Girl Cooks!” Accessed June 27, 2020. <http://www.thatbrowngirl.com/#home-2>.

Dubie, Solomon. n.d. “Avole Coffee.” Cafe Avole. Accessed June 27, 2020. <https://avolecoffee.com/>.

Lancaster, Earl. n.d. “Earl’s Cuts and Styles.” Accessed June 27, 2020. <https://earlscutsandstyles.com/index.php>.

“Liberty Bank Building.” n.d. Community Roots Housing. Accessed June 27, 2020. <https://communityrootshousing.org/building/liberty-bank-building/>.

Luna, Ruby de. 2019. “This ‘Brown Girl’ Is Cooking up a Restaurant in Seattle’s Central District.” KUOW/Npr, September 30, 2019. <https://www.kuow.org/stories/this-brown-girl-is-cooking-up-a-new-restaurant>.

Limitations:

1. The COVID-19 pandemic has slowed the opening of a Cafe Avole and Chef Kristi Brown’s restaurant. Their impact is not fully measurable yet.
- **Accounts for 36% of the affordable units developed in Central District between 2000 and 2019.**

Background:

When the tech boom in Seattle transpired, the cost of housing in Seattle rapidly increased. As mentioned in the Research Strategy and Overview section of this document and the Social Infrastructure tab, individuals with higher income moved to Central District to assume lower housing costs (Beason 2016). This led to an overall increase to cost of living that many of the existing residents could no longer afford. Four new affordable housing developments were constructed in the neighborhood between 2000 and 2019.

Method:

We researched two affordable housing authorities that have buildings in the larger Central Area - Seattle Housing Authority and Community Roots Housing - as illustrated in Figure 4.1, to determine where the affordable housing developments are and what has been built since 2000. There were four developments (including Liberty Bank Building) added to the Central District, which has 318 affordable units (Table 4.1). 36.2% (115 Liberty Bank Building Units / 318 total units) of the affordable units built in the last 20 years were from the addition of Liberty Bank Building to Central District.

Calculations:

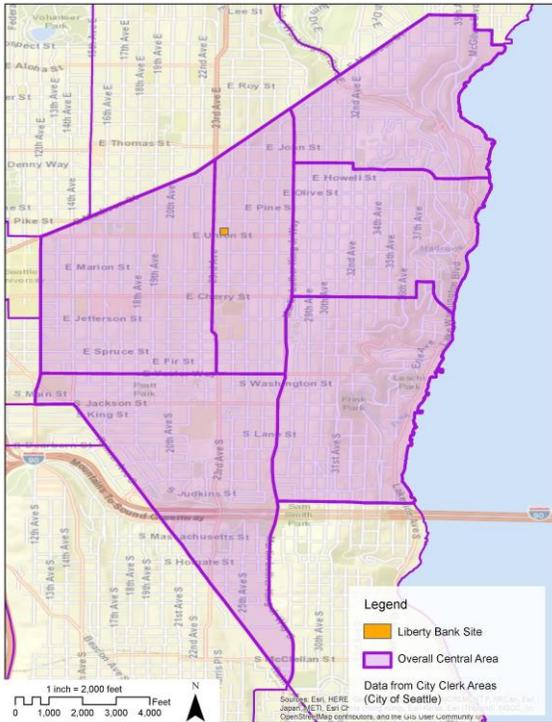


Figure 4.1: Central Area (Source: area boundaries from City of Seattle)

Property Name	Number of Affordable Units	% of Total Affordable Units Built From 2010 - 2019	Owner (Year Built)
Squire Park Plaza	60 units	18.8% (60/318)	CRH (2008)
Jefferson	40 units	12.6% (40/318)	CRH (2012)
Kebero Court	103 units	32.4% (103/318)	SHA (2015)
Liberty Bank Building	115 units	36.2% (115/318)	CRH / Rise Together (2019)
<i>Total</i>	<i>318 units</i>	<i>100%</i>	

Table 4.1: New affordable housing in Central District built from 2000 - 2019

Sources:

Beason, Tyrone. 2016. "Central District's Shrinking Black Community Wonders What's Next." Seattle Times, May 28, 2016. <https://www.seattletimes.com/seattle-news/central-districts-shrinking-black-community-wonders-whats-next/>.

Limitations:

1. Does not include renovation projects in Central District from 2000 to 2019.

5. Cost Comparison

- **Siting the courtyard at ground level and opening it to the street was \$137,700 less expensive than siting it at podium-level at the back of the building, which would have been in line with standard practice. Although both options were considered during preliminary design, the courtyard facing 24th Avenue offered many benefits: an activated entry to welcome the community; 600 sf of additional commercial space, maximizing street frontage along East Union Street; a smoother transition between the building and the surrounding neighborhood with its low-density residential zoning; and increased daylight and views for residential units. This single decision created an art-filled courtyard entry with social, aesthetic, environmental, and economic benefits at a lower cost than a traditional back-of-property siting of private outdoor space for residents. The ground-level courtyard is a publicly accessible “front porch” that facilitates community connections.**

Background:

Early on in concept development, different building layouts and orientations were considered to determine the most appropriate design and site layout for this property. Some options considered included a “U-shaped” building that opened to the alley (Option 1) as well as a “U-shaped” building that opened to 24th Street (Option 3). See Figure 5.1 for a visual comparison between Option 1 and 3. Option 2 was a full rectangle with a light well courtyard. While that was an option, it was not ultimately considered as a viable alternative.

The opening to the alley, Option 1, was on pedestals (raised) and typical of prototypes seen in past affordable housing projects. This space was fenced off for residents and did not require any variances for current City of Seattle Codes. During a community design meeting, a community member suggested making the courtyard at ground level as the main building entrance. The design team worked to determine if Option 3 was enough of a benefit (in terms of physical design and cost) and whether it was worth applying for code variances. The setback of the building entrance was more than what was allowed for the code.

When comparing the two design proposals, the design firm considered future development in terms of commercial space, surrounding residential lower density zoning, and amount of daylight that the courtyard provides. This zoning assessment is based on the current City of Seattle Codes to show how the building complies and blends into the surrounding area.

Method:

For comparing the costs of options 1 and 3, preliminary cost estimates were provided by Mithun and Walsh Construction. Option 1 courtyard came in at \$202,305 for a full product estimate. Option 3 was estimated at \$64,605. A cost comparison is shown in Table 5.1. While economics was one benefit in favor of Option 3, further analysis was done to determine the social consequences of that decision.

Having commercial space on the first floor of the Liberty Bank Building brings more community into the space and helps to reinforce social infrastructure. This is a space intended for local businesses owned by

people of color. Commercial space comparison was based on preliminary layout plans that are able to calculate square footage and Union Street frontage. There is a 600 sf difference, a 20% increase, in commercial space with Option 3 (Table 5.2). Union Street is a minor arterial and most visible to a larger community for commercial frontage (City of Seattle, n.d.). Financially, that would bring in more rent/sf for income on the development as well.

Next, we needed to understand the community and neighborhood impact of the open space. When comparing which option was most accessible to the community, Option 1 is fenced in and only accessible to residents. The interaction between residents and the surrounding neighborhood would be minimal due to non-resident community members only having access if they are invited by a resident. Option 3 is accessible to the general public and was deemed more likely to create an exchange and connection between the surrounding neighborhood and the residents. There was some perception or concern that if this did not turn out to be an amenity for the building, it could be fenced in, if needed, in the future.

Liberty Bank Building is zoned as Neighborhood Commercial, but the adjacent neighborhood is zoned as Single-family Residence, Low-rise Multi-family, and Residential Small Lot. Liberty Bank Building is on the boundary between the two land use zones, and should serve as a transition between a commercial area and single-family housing. See current zoning in Figure 5.2. When considering the different options of the building site and design, Option 1 and 3 offered different zoning implications. Option 1 provided a building and site design that fit into the current building codes without applying for building variances. Option 3 would need to apply for a setback variance. An additional 3' setback was added to the commercial spaces to provide opportunities for vendor activity and interaction. The courtyard offers an extra 51' 6" setback which offers a break in the façade and represent a further setback than the housing codes allow for in the surrounding neighborhoods. While Option 3 required a zoning variance, it provides a better transition with the surrounding neighborhood and creates an illusion of less density and more open space often seen in single-family housing. The plans for Liberty Bank Building were for a 6 story tall building. That matches a few newly developed market rate mixed-use complexes at the corner of 23rd and Union, but the surrounding single-family development does not exceed 3 stories. The zoning variance allows for a greater setback and community green space that mitigates the harsh presence of a 6-story building with few breaks in the facade.

Lastly, daylight studies were done by the CSI team using SketchUp to visually show the differences between the light levels provided to the courtyard space as well as to residents with windows facing the courtyard. In Table 5.3, a shadow study using SketchUp compares Options 1 and 3 on the first day of each season to understand what the light levels are in the courtyard. Option 1 shows more shade from the neighboring buildings. Especially in December, the shadows are extreme and there is no sign of sun at 9 am, 12 pm, and 3 pm hours. Option 3 has the courtyard facing the street. Therefore, there are no buildings to provide additional shade beyond what the U-shaped Liberty Bank Building provides.

Ultimately, it was decided that Option 3 offered a less expensive building and outdoor amenity cost, more commercial space development, a better relationship to the surrounding single family housing, and more light in the courtyard. This required that the developers apply for a variance, but it was worth it for stronger economic and social benefits.

Calculations:

Design Proposal

Comparison of Design Options



Option 1

- commercial street-level uses along E Union Street
- residential units around podium-level
- courtyard opens to the west.

Pros:

- commercial space is located along 80% of E Union Street facade (approx. 90')
- 3' setback from lot line to enhance pedestrian experience
- reinforces urban edge along 24th Ave & E Union Street

Cons:

- Incompatible use at the adjacent property to the west a podium-level courtyard
- views of blank walls from courtyard toward existing buildings
- lack of daylight & views out for residential units at courtyard when the property to the west fully develops

Code Complying option - no departures

Unit Count: 115
 Parking Stall Count: 18
 Commercial Area: 2,800 sq. ft



Option 3 (preferred)

- commercial street-level uses along E Union Street & at the corner of E Union Street & 24th Ave
- residential units surround an at-grade entry courtyard facing east onto 24th Ave

Pros:

- commercial space is maximized along full length of E Union Street facade (approx. 110')
- 3' setback from lot line along E Union Street to enhance the pedestrian experience
- commercial space wraps corner to respond to the same commercial use diagonally across E Union Street & 24th Ave
- courtyard opens to 24th Ave to break-up the massing & responds to lower density zone opposite the site along 24th Ave
- at-grade courtyard is activated with residential entry and outdoor landscaped amenity space. It is connected to the street sidewalk, helping to activate 24th Ave and keep a consistent residential character along 24th Ave
- courtyard opens to 24th Ave to maximize daylight & views for residential units

Cons:

- less building area at street level due to at-grade courtyard

Potential Departures:

- Courtyard at street level
- Residential entry at street level
- Sight triangle

Unit Count: 115
 Parking Stall Count: 18
 Commercial Area: 3400 sq. ft

Figure 5.1: Mithun Option Comparisons (Mithun)

Cost Comparison	Option 1	Option 3	Difference
Concrete Paving	\$20,700	\$9,200	\$11,500
Planting	\$7,105	\$7,105	-
Planter Walls	\$15,800	\$15,800	-
Benches	\$22,500	\$22,500	-
Bridge Elements	\$10,000	\$10,000	-
Concrete Deck Structure	\$99,600	-	\$99,600

Waterproofing/Roof Structure	\$26,600	-	\$26,600
Early Cost Estimate	\$202,305	\$64,605	\$137,700 in favor of Option 3

Table 5.1: Cost comparison table between Option 1 and Option 3 (Source: Data provided by Mithun and Walsh Construction)

	Option 1	Option 3	Difference	Percent Difference
Amount of defined commercial space	2,800 sf	3,400 sf	600 sf in favor of Option 3	20% increase in commercial space for Option 3
Amount of street frontage to Union St	~90 ft	~110 ft	~20 ft in favor of Option 3	22% increase in street frontage for Option 3

Table 5.2: Commercial Space comparisons (Source: Data provided by Mithun)

City of Seattle Zoning Map

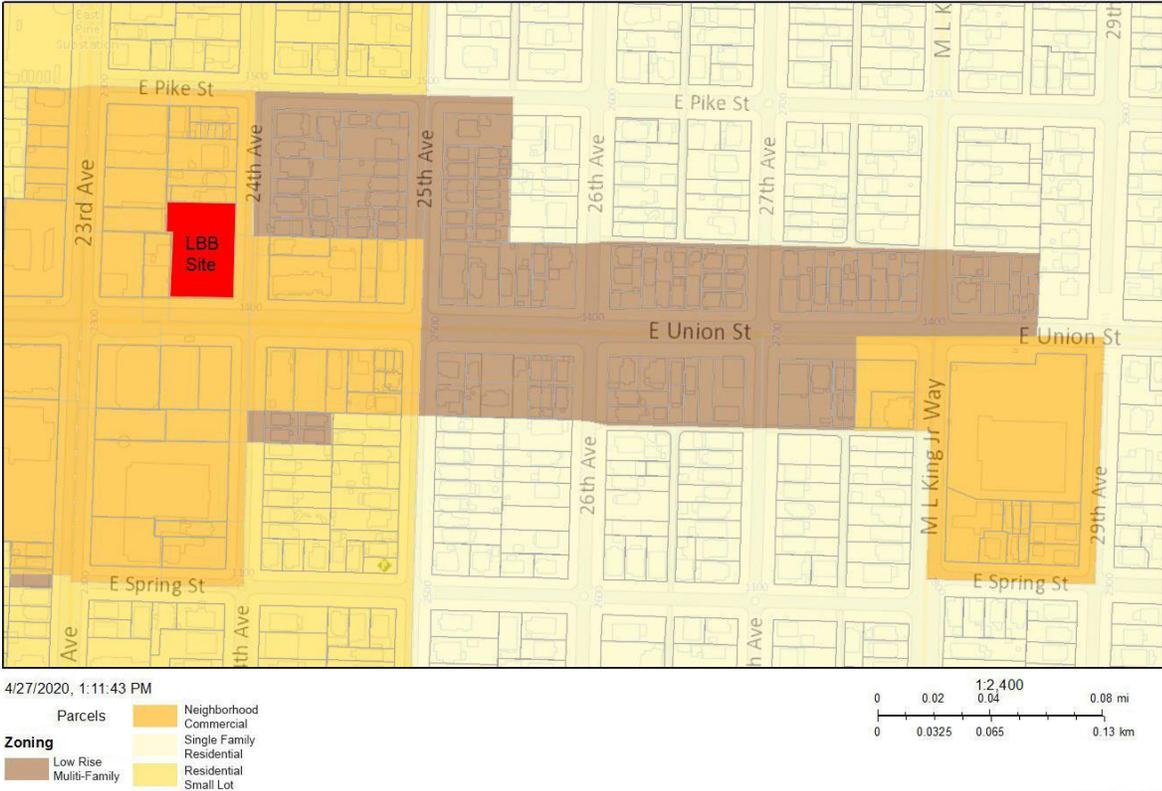
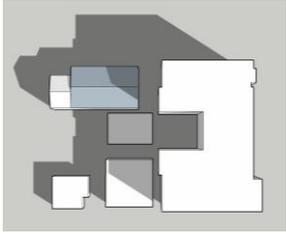
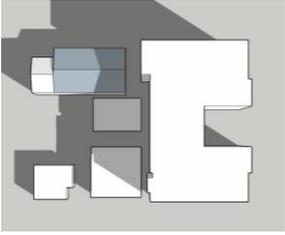
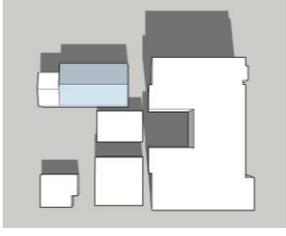
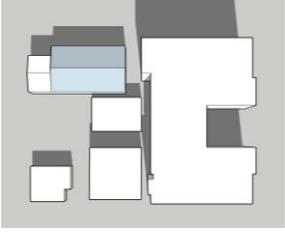
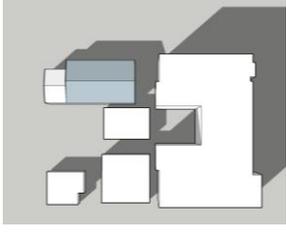
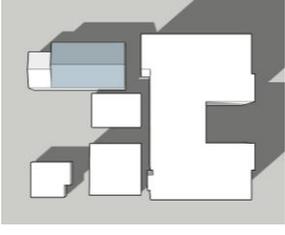
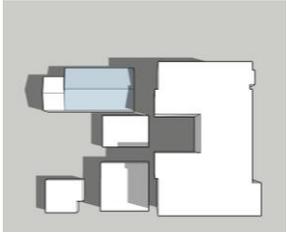
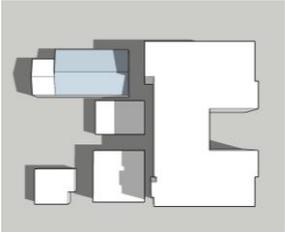
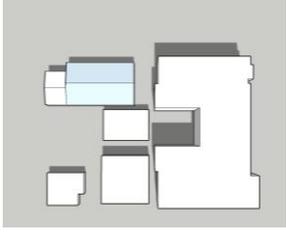
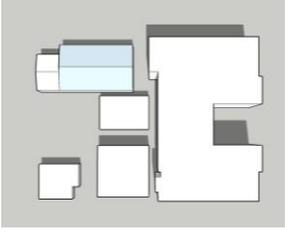
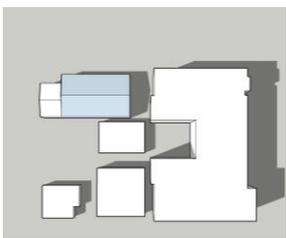
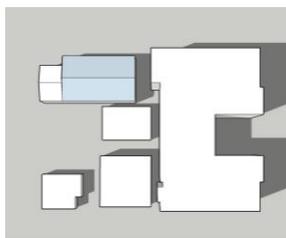
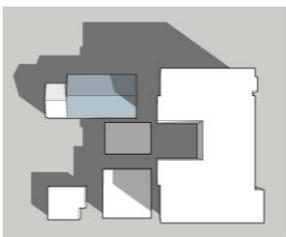
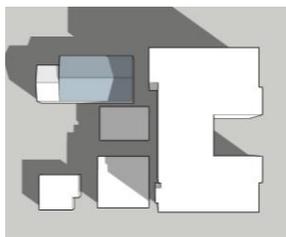
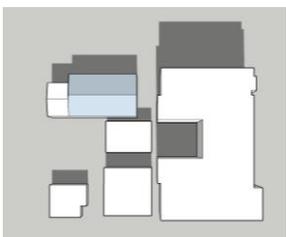
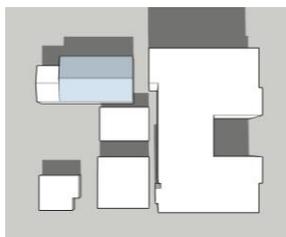
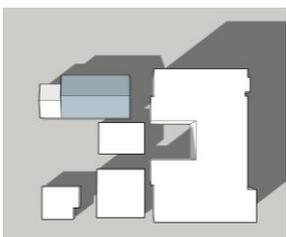
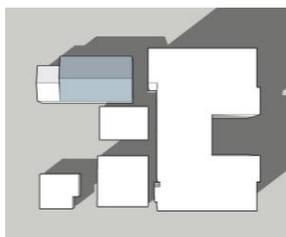
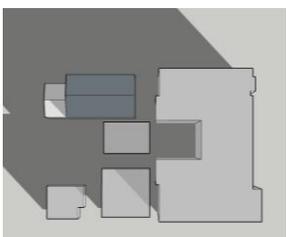
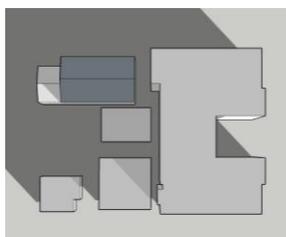


Figure 5.2: Current Zoning map (Source: City of Seattle)

Shade Study	Option 1	Option 3	Analysis
First day of Spring (3/19/2020) - 9 am			When analyzing, compare 9 am of Option 1 with 3 pm of Option 3; 3 pm of Option 1 with 9 am of Option 3; and 12 pm of Option 1 with 12 pm of Option 3. The building is on a North, South, East, West grid. Option 1 has the courtyard facing west and opens to an alley. Option 3 has the courtyard facing east and open to 24th Street. The buildings from next door are providing a moderate amount of shade to the courtyard in Option 1. Option 3 opens to 24th Street and does not have added shadow from the surroundings. With the sun being higher in the sky, there is less influence from the buildings next door and only late in the evenings, will the courtyard receive shade from the buildings next door.
First day of Spring (3/19/2020) - 12 pm			
First day of Spring (3/19/2020) - 3 pm			
First day of Summer (6/20/2020) - 9 am			
First day of Summer (6/20/2020) - 12 pm			

<p>First day of Summer (6/20/2020) - 3 pm</p>			
<p>First day of Fall (9/22/2020) - 9 am</p>			<p>Moderate amount of shade finds the courtyard in Option 1 as a result of the neighboring buildings.</p>
<p>First day of Fall (9/22/2020) - 12 pm</p>			
<p>First day of Fall (9/22/2020) - 3 pm</p>			
<p>First day of Winter (12/21/2020) - 9 am</p>			<p>In all images, the courtyard in Option 1 is shaded. In Option 3, there is a still 50% sun in the morning.</p>
<p>First day of Winter (12/21/2020) - 12 pm</p>			

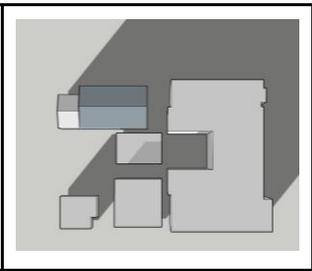
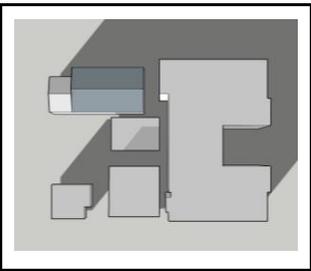
<p>First day of Winter (12/21/2020) - 3 pm</p>			
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Table 5.3: Sun/Shade Study between Option 1 and Option 3 (Source: Create by CSI team)

Sources:

City of Seattle. n.d. “Seattle Streets Illustrated: Street Types Map.” Seattle Right-Of-Way Improvements Manual. Accessed April 27, 2020. <https://streetsillustrated.seattle.gov/map/>.

City of Seattle. 2020. “Municipal Codes.” 2020. https://library.municode.com/wa/seattle/codes/municipal_code?nodeId=TIT23LAUSCO_SUBTITLE_IILA_USRE.

Jensen, Amelia. 2020. “LBB CSI Presentation.” In *LAF Case Study Investigation*. Seattle: Mithun.

Mithun. 2016. “Construction Documentation.” Seattle.

Limitations:

1. The cost estimates provided were rough estimates based on standard cost per sf amounts and the desired amount of sf. Additional changes to stormwater BMPs and vegetation size were not accounted for in the cost estimates.
2. The connections and transitions were perceived as benefits by the design team, but further understanding of whether or not this is considered a benefit by neighbors was not included in this study.
3. At the time of the study the courtyard was open, but it was designed such that it could be fenced in if needed. The safety and connectivity perception to the neighborhood would change if that occurs.

6. Inconclusive Benefits

Inconclusive Environmental Benefit

- ***Saved an estimated 0.62 cu yds of high-quality soil and an estimated 0.06 gallons of water through the reuse of 390 salvaged bricks.***

Background:

The original Liberty Bank is significant to the history of the Black community in Seattle, as it was the first bank west of the Mississippi River to provide Black Americans with loans. Prior to the demolition of the original building, the founders’ families and the Black community tried to get Liberty Bank acknowledged on the National Register of Historic Places, but it was denied recognition. In the community-driven design process, Black community members recommended the reuse of brick to have a physical connection to

the historic Liberty Bank. The community wanted to ensure that the bricks were highly visible from E Union Street (Mithun, 2016). Brick reuse was recommended by the artists, with the goal of using the bricks with a basket-weave pattern in highly visible places to distinguish between the original and new brick. Not only did this accentuate cultural references of the previous building and Afrocentric design, it also reduced the use of raw materials, primarily high quality soil and freshwater, that are used in the brickmaking process.

Method:

Reusing the brick from the former Liberty Bank was one strategy to physically connect people to the original building. In addition to cultural value, reusing brick can mitigate larger environmental lifecycle costs by preserving raw materials. We documented the inputs of two raw material sources required during the brickmaking process: high quality soil and large quantities of water.

The Brick Industry Association's illustration (Figure 6.1) provides an overview of the process. It begins with the mining high-quality soils (clays, shales, and fire clays) with power equipment and transferring it to storage. Size reduction and screening includes the preparation of raw materials to reduce the size and make the materials more usable. During the forming and cutting process, there are three different methods used. The stiff-soil process adds 10-15% of the mixture volume in water and sends the brick through a de-airing chamber that removes air pockets, allowing the clay to be workable with greater strength. The soft-soil process has extra water included in the soil, so they are able to mold a brick with sand or water lubricant. The final process option, dry-press process, uses low plasticity clay and mixes with 10% water to press into a mold under pressure. For this study, we used an average amount of 10% to determine the water quantity used. The next step is drying the material where the water gets evaporated. Firing and cooling goes through a heating, fire, then cooling phase and can be done in kilns that use natural gas, coal, sawdust, and methane gas from landfills. Since this process and type of kiln used is so variable, the raw materials in the firing and cooling stage were not calculated. The storage and shipping stages include removing the bricks from the kiln and either storing until they are ready to be used or shipping them to the site.

To calculate the amount of soil used in the process, we started with the cubic volume of a brick when it is installed (Table 6.2). According to the Brick Industry Association, the drying process shrinks the brick by 2 to 4 percent while the firing process causes an additional 2.5 to 4 percent of shrinkage. Using the average size of a final brick, we calculated the original amount of soil used by comparison (Table 6.3). For water quantity calculations, the Brick Industry Association provides a percentage of water used for each step of the process as mentioned above. By taking the volume of soil in a pre-dried brick, we calculated the amount of water used throughout the process. For this process, we used an average of 10% water. We calculated individual quantities of soil and water needed for one brick, then multiplied it by 390 bricks to document the impact that reuse has on preserving soil and water. This water use is estimated to be 0.6 gallons of water for 390 bricks.

This benefit was deemed inconclusive because of the minor savings and significant limitations to the comparison.

Calculations:

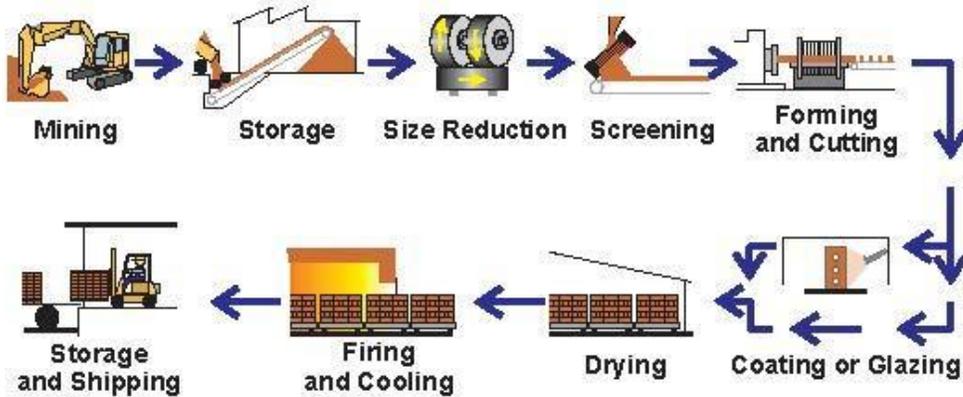


Figure 6.1: Diagrammatic representation of Manufacturing Process (Source: The Brick Industry Association)

Soil Dimensions	Final Size	Brick Shrinkage (using amounts of 3% for drying and 3% for firing)	Original Soil amounts
Width of one brick	3-5/8 in 92 cm	6%	3.8 in
Length of one brick	7-5/8 in	6%	8.1 in
Depth of one brick	2-1/4 in	6%	2.4 in
Cubic in of one brick	62.2 in ³		73.9 in ³
390 Bricks (with yd ³ conversion)	73.9 x total number of reused bricks (390) = 28,810 in ³ = 0.62 yd ³		0.62 yd ³

Table 6.2: Calculation of original soil volumes (source: brick size from Belden Brick)

Step process	Material Size (with water)	Amount of water
Soil/mining material	0.62 yd ³	
Stiff-Soil Process	0.68 - .71 yd ³ (0.06 - gallons)	+10-15%
Soft-Soil Process	0.62 yd ³	0%
Dry-Soil process	0.68 yd ³ (0.06 gallons)	+10%
All processes (average)	0.68 yd ³ (0.06 gallons)	+10%

Table 6.3: Water use in brick making

Sources:

Belden Brick. n.d. "Brick Dimension Guide." Accessed April 28, 2020. <https://www.beldenbrick.com/brick-dimensions-guide.asp>.

City of Philadelphia. n.d. "Gallons Used Per Person Per Day." Philadelphia.
https://www.phila.gov/water/educationoutreach/Documents/Homewateruse_IG5.pdf.

Dalkilic, Neslihan, and Adnan Nabikoglu. 2017. "Traditional Manufacturing of Clay Brick Used in the Historical Buildings of Diyarbakir (Turkey)." *Frontiers of Architectural Research*, 346–59.
<https://doi.org/10.1016/j.foar.2017.06.003>.

Mithun. 2016. "Design Development." In *Liberty Bank Building*. Seattle.

The Brick Industry Association. 2006. "Manufacturing of Brick."

Limitations:

1. Brick processes have changed over the years making it hard to compare the lifecycle costs between the original brick and new brick. Additionally Quantities of raw materials and resources are difficult to calculate since they vary based on the number of bricks produced in one instance, where the bricks are being produced, the type of native soils, and processes required to produce brick given the quality of clay in the soil.
2. Where suppliers source raw materials from, where the materials are stored, how the supplies are transported to the manufacturing site vary from plant to plant.
3. Soil and water were the only raw materials considered in the lifecycle cost of bricks. Natural gas, coal, sawdust, or methane gas are used to heat kilns. Furthermore, transportation of the materials can add significant emissions and costs to the process. Travel from mining to the plant and from the plant to the site are typically within 500 miles with the use of semi-truck or rail transportation but can be further.

Inconclusive Social/Economic Benefit

- **Serves as a precedent for future affordable housing amenity spaces as the first affordable housing development in the area designed with a public ground level entry courtyard to serve as an amenity space. Sets precedent for designing to include a courtyard, green roof, and activated streetscape for public/semi-public use.**

Background:

Traditional affordable housing developments in Seattle typically have open spaces designed for residents that promote physical activity or social interactions. Evergreen Sustainable Development standards for affordable housing developments require at least 10% of the common, outdoor open space on the site for residents or a 0.75 acre minimum of public open space within a 0.5-mile distance of the development. A courtyard space is typically designed as an amenity deck above the first level and is intended for only residents or their guests to use (Mithun) (see Option 1 in Cost Comparison).

The design team compared the traditional siting option to an option that created a ground level courtyard at the building entry. Ultimately, the ground level courtyard created better community connection and was less expensive. More information can be found in the Cost Comparison section.

Method:

To determine the impact this development has had on the design, planning, and implementation of future affordable housing development trends, we started by examining affordable housing developments in Central District to better understand what about the outdoor design amenities and the design process is unique. Table 6.2 shows Liberty Bank Building as the only prior development with a green roof, courtyard space, and an activated streetscape. Liberty Bank Building is also the only development that used the courtyard amenity space as a welcome feature for the building.

To determine if this was a change in standards or if the developer was going above and beyond for community amenities, the amount of open space was compared to the overall development requirements by Evergreen Development. Based on the square footage of the courtyard, green roof, and amenity roof, the development standard would have been nearly (9.8% out of 10%) satisfied by the entry courtyard alone. Table 6.4 shows the amount of additional open space included in the design.

Once we understood how the amenities of affordable housing developments compare in Central District, we studied how these elements are being designed into future projects. Additionally, we researched if the development recognized Liberty Bank Building as a precedent study for their site. All planned developments have at least two if not three of the amenity categories identified from prior affordable housing developments and Liberty Bank Building (Table 6.5).

The developer partnered with community stakeholder organizations to develop Liberty Bank Building. The partnership between Africatown Community Land Trust, Black Community Impact Alliance, Community Roots Housing, and Byrd Barr Place was confirmed by a Memorandum of Understanding signed July 2016. More information on the Memorandum of Understanding can be found in the Social Infrastructure tab. This same group of organizations formed a collaborative around a community campaign with two additional non-profits to focus on equitable, community-driven development. While Liberty Bank Building is considered the first project for this campaign, because the Memorandum of Understanding was formed with these organizations prior to development, it was also the catalyst for the campaign and future planned equitable developments.

While Liberty Bank Building certainly served as a catalyst and example for surrounding affordable housing projects, the extent to which it has done so was unable to be quantified, so this benefit may be considered inconclusive.

Calculations:

	Amenity Roof	Green Roof	Entry Courtyard	Total
Liberty Bank Building Amenity sf	3,423 sf	4,085 sf	2,194 sf	9,702 sf
Development Square footage	22,330 sf	22,330 sf	22,330 sf	22,330 sf
Percentage	15.3%	18.3%	9.8%	43.4%

Evergreen Standard	10.0%	10.0%	10.0%	10.0%
Percentage above	5.3%	8.3%	-	33.4%

Table 6.4: Outdoor Common Space Calculations at Liberty Bank Building

Property	Number of Units	Green Roof	Entry Courtyard/ Garden Area	Active Streetscape	Play-ground	Art work	Developer
El Nor	55		x (garden)				CRH (1907/2020 interior renovation)
Olive Ridge	105						SHA (1969)
Ponderosa	23		x (garden)				CRH (1969/2020 interior renovation)
412	12				x		CRH (1971)
The Baldwin	15						SHA (1976)
Union/James	24						CRH (1982)
18th Ave	9						CRH (1982/2020 interior renovation)
Miller Park	12						CRH (1998)
Squire Park Plaza	60	x		x			CRH (2008)
Jefferson	40			x			CRH (2012)
Kebero Court	103		x (complex space)				SHA (2015)
Liberty Bank Building	115 units	x	x	x		x	CRH / Rise Together (2019)
Station House (2020 - Capitol Hill Neighborhood)	110 units	x	x				CRH/ Gerding Edlen

23Calvery (beginning design process)	(64 units total with an unknown percentage affordable)	Amenities are unknown as this is so early in the process, but developers plan to pay tribute to the Black church that was previously on the site.					Gardner Global/Onpoint
Midtown Commons (under construction - Central District)	130 units (30% of the 432 units)		x	x		x	Lake Union Partners
Africatown Plaza (in Midtown commons)	Community Plaza		x	x		x	CRH / Africatown Land Trust / Rise Together
The Eldridge (Under development - Capitol Hill)	125 units	x	x	x		x	CRH / GenPRIDE / Rise Together
Byrd Barr Place (under development - Central District)	Community action agency that provides a historic and cultural anchor for the community	Too early to know design outcomes, but community-based development tools are being used in the design process.					Byrd Barr Place / Rise Together Campaign
Capitol Hill Arts Stabilization Fund	Community Center focused on arts organizations	Too early to know design outcomes, but community-based development tools are being used in the design process.					CRH / Capitol Hill Arts Stabilization Fund
Boylston-Howell Family Housing Rehabilitation (Rehab under development - Central Seattle)	30 units				x		CRH / Rise Together
		Too early to know design outcomes, but community-based development tools are being used in the design process.					
White Center Community HUB (Under	86 units + health care services	Too early to know design outcomes, but community-based development tools are being used in the design process.					CRH / White Center Community

design - White Center)			Development Association / Southwest Youth & Family Services / Rise Together
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Table 6.5: New affordable housing properties supported by City of Seattle

Sources:

Community Roots Housing. 2020. "Central District." 2020.
<http://www.capitolhillhousing.org/ourproperties/central.php>.

Community Roots Housing. 2020. "Reinvesting in Our Buildings." Www.Communityrootshousing.Org, March 19, 2020. <https://communityrootshousing.org/2020/03/reinvesting-in-our-buildings/>.

Seattle Housing Authority. n.d. "SHA Housing." Accessed May 9, 2020.
<https://www.seattlehousing.org/housing/collaborative-housing>.

Washington State Department of Commerce. 2018. "Evergreen Sustainable Development Standard."
<https://www.capitolhillseattle.com/2019/03/next-affordable-project-for-capitol-hill-housing-station-house/>

City of Seattle. 2020. "New Affordable Homes." Regulated Affordable Housing. 2020.
<http://www.seattle.gov/housing/underdevelopment>.

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Goldstein-Street, Jake. 2019. "With Vision for 'African American Communities and Spaces for the Future,' Africatown Plaza Will Be next to Take Shape in the Central District." Capitol Hill Seattle Blog, August 15, 2019. <https://www.capitolhillseattle.com/2019/08/with-vision-for-african-american-communities-and-spaces-of-the-future-africatown-plaza-will-be-next-to-take-shape-in-the-central-district/>.

Jseattle. 2020. "Developer behind 23rd Ave Church Land Buy and Mixed-Use Project Says 'Contending Gentrification in Seattle's Central District.'" Capitol Hill Seattle Blog, January 16, 2020.
<https://www.capitolhillseattle.com/2020/01/developer-behind-23rd-ave-church-land-buy-and-mixed-use-project-says-contending-gentrification-in-seattles-central-district/>.

Lake Union Partners, Berger Partnership, DLR Group, and Weinstein A+U. 2019. "Midtown Commons." Seattle.
<http://www.seattle.gov/dpd/AppDocs/GroupMeetings/DRProposal3028872AgendaID7197.pdf>.

"Rise Together." n.d. Accessed June 24, 2020. <https://risetotheternow.org/>.

Seattle Housing Authority. n.d. "SHA Housing." Accessed May 9, 2020.
<https://www.seattlehousing.org/housing/collaborative-housing>.

Limitations:

1. Data only includes current affordable housing. More affordable housing is being planned but has not been built.
 2. Community Roots Housing and Seattle Housing Authority were the only affordable housing organizations found in the area. If other independent organizations exist, they were not included.
 3. While the affordable housing developments post-Liberty Bank Building point to being influenced by the Liberty Bank Building development, they also still need to meet open space requirements set by Evergreen Sustainable Development Standards. It is inconclusive which has greater influence in the decision-making and design process.
 4. Often, the designs of these projects have open space amenities to get tax credits. It is unknown whether these projects have the new open space amenities to help with their tax credits or because they have seen the success of the elements at the Liberty Bank Building, or any other reason.
-

7. Features

- **Exceeds required amount of landscape area per Seattle Green Factor codes by 173%, and is 13% from reaching the adjacent zone's Low Rise Development score.**

Background:

The City of Seattle uses the Seattle Green Factor to set code requirements for increasing the quantity and quality of landscaping (City of Seattle). From the City's perspective, an increase in required landscape "improves the look and feel of a neighborhood, reduces stormwater runoff, cools cities during heat waves, provides habitat for birds and beneficial insects, supports adjacent businesses, and decreases crime (City of Seattle)." The required area of landscaping varies based on the land use category and is enforced through Seattle Municipal Code.

Method:

The research team used construction documents to calculate the Green Factor for the Liberty Bank Building. Zoning classification of properties determines the Green Factor requirement. Liberty Bank Building is zoned as Neighborhood Commercial (NC), which has a required Green Factor score of 0.3. The adjacent zoning categories are Low-rise Multi-family Residential (LR) and Residential Small Lot. LR has a required Green Factor of 0.6. Single-family Residential like Residential Small Lot is not regulated by the Green Factor.

The Green Factor is determined by the number of plants, deep planting areas, green roofs, and permeable surfaces on the site. Calculations for determining the Green Factor for Liberty Bank Building are in Table 7.1. The Green Factor calculations define the categories of small, medium, and large vegetation. Each vegetation category has an assigned square footage that is applied to each plant within that category. This gives points to the project that count towards the Green Factor Score. In order to determine what category of the Green Factor Scale plants are in, the plant list was compared with the plant lists supplied by the City of Seattle. For the plants not on that list, a plant height was determined from academic, botanic garden, or nursery sources. The plants were then placed into the appropriate category according to the Green Factor regulations. For information on how the plant list was calculated into the Green Factor, see Table 7.3.

Other categories in the Green Factor include the bioretention planter, green roof, and plants visible from the right-of-way (ROW). In this case, the square footage of the courtyard outside of the ROW was counted as visible. Once all the Green Factor categories are multiplied by their respective factor, the points are then added to determine a subtotal. The Green Factor subtotal is divided by the total square footage of the site. This produces the site's Green Factor Score. Figure 7.1 illustrates the landscape elements included in the calculation.

The Green Factor for Liberty Bank Building is 0.52, which is 0.22 above the 0.3 required for the zoning. That is 173% of what is required for the site. To compare, we tested the calculations in Table 7.2 to see what is needed to meet the standard 0.3 score. Even if the entire green roof, rear building planting, and some of the trees were removed, the zoning requirement would still be achieved (Figure 7.1). One of the goals of the project is to offer a transition between the NC higher density area and the surrounding LR and single-family residential area. With a required Green Factor of 0.6 for LR properties, the Liberty Bank Building is 13% short of reaching the LR requirement, offering a transition between the NC and LR zoning requirements.

Calculations:

Green Factor Landscape Element	Area (sf)	Multiplier	Green Factor amount
Planted Area (24" of soil depth or more)	Medium to tall planters on Roof = 868 sf Courtyard Planting = 727.83 sf ROW Planting = 2,560.21 sf Rear Planting = 590 sf Total = 4,746.04 sf	0.6	2,847.624
Bioretention Planter	210 sf	1.0	210
Plants less than 2 ft tall at maturity	1,219 sf	0.1	121.9
Shrubs or perennials between 2 ft and 4ft tall at maturity	3,123 sf	0.3	936.9
Shrubs or perennials larger than 4 ft tall at maturity	5,580 sf	0.3	1,674

Small trees	7,005 sf	0.3	2,101.5
Medium trees	3,000 sf	0.7	2,100
Large trees	2,100 sf	0.9	1,890
Green roof planted at least 4 inches but less than 8 inches of growth medium	4,921 sf	0.6	2952.6
Courtyard landscaping visible from adjacent ROW or public open space	727.83 sf	0.1	72.783
GF Subtotal			14,907.307
Site sf			22,177
ROW sf			6,495.6667
Total sf			28,672.6667
Green Factor (GF Subtotal/Total sf)			0.52

Table 7.1: Green Factor calculation



Figure 7.1: Full calculation (left) and minimum hypothetical requirements (right) of Green Factor for Liberty Bank Building (Source: base on Mithun's site plan)

Green Factor Landscape Element	Area (sf)	Multiplier	Green Factor amount
Planted Area (24" of soil depth or more)	Courtyard Planting = 727.83 sf ROW Planting = 2,560.21 sf	0.6	1,973
Bioretention Planter	210 sf	1.0	210
Plants less than 2 ft tall at maturity	1,166 sf	0.1	117
Shrubs or perennials between 2 ft and 4ft tall at maturity	2,160 sf	0.3	648
Shrubs or perennials larger than 4 ft tall at maturity	4,140 sf	0.3	1,242
Small trees	6,255 sf	0.3	1,877
Medium trees	3,000 sf	0.7	2,100
Large trees	700 sf	0.9	630
Green roof planted at least 4 inches but less than 8 inches of growth medium	0 sf	0.6	0
Courtyard landscaping visible from adjacent ROW or public open space	727.83 sf	0.1	73
GF Subtotal			8,870
Site sf			22,177
ROW sf			6,495.6667
Total sf			28,672.6667
Green Factor (GF Subtotal/Total sf)			0.31

Table 7.2: Testing ability of LBB to meet Green Factor minimum with hypothetical removal of entire green roof, rear building planting, and some trees

Category	Common Name	Scientific Name	Average Plant Height (ft)	Quantity	sf multiplier	Final sf
<i>Trees</i>						
Small Tree	Vine Maple	<i>Acer circinatum</i>	25'	10	75	750
Small Tree	Loebner Magnolia	<i>Magnolia x Loebneri</i>	20'	5	75	375
Small Tree	Eddie's White Wonder Dogwood	<i>Cornus 'Eddie's White Wonder'</i>	25'	4	75	300
Medium Tree	Princeton Sentry Gingko	<i>Gingko biloba 'Princeton Sentry'</i>	40-50'	12	250	3000
Large Tree	Allee Elm	<i>Ulmus parvifolia 'Emer Li'</i>	50'	6	350	2100
<i>Shrubs</i>						
Small Shrub	Sweet Box	<i>Sarcococca hookeriana var. humilus</i>	1-2'	28	1	28
Medium Shrub	Arctic Fire Red-twigged Dogwood	<i>Cornus stolonifera 'Farrow'</i>	3-4'	22	9	198
Medium Shrub	Moonlight Parfait Winter Daphne	<i>Daphne odora 'monstrik'</i>	3-4'	8	9	72
Medium Shrub	Pink Tip Podocarpus	<i>Podocarpus nivalis 'Pink Tip'</i>	2-3'	47	9	423
Medium Shrub	Fragrant Sweet Box	<i>Sarcococca ruscifolia</i>	3-4'	14	9	126
Large Shrub	Daisy Bush	<i>Brachyglottis greyi</i>	4-5'	94	36	3384
Large Shrub	Red-flowering Currant	<i>Ribes sanguineum</i>	8-10'	61	36	2196
Vine	Miranda Climbing Hydrangea	<i>Hydrangea anomala petiolaris 'Miranda'</i>	30-40' long	5	1	5
<i>Perennials</i>						
Small Perennials	Fireball Avens	<i>Geum 'Fireball'</i>	1'	90	1	90
Small Perennials	Winter Jewels Golden Sunrise Hellebore	<i>Helleborus 'Golden Sunrise'</i>	1-2'	4	1	4

Small Perennials	Ginger Ale Coral Bells	<i>Heuchera 'Ginger Ale'</i>	1'	19	1	19
Small Perennials	Brother Stefan Hosta	<i>Hosta 'Brother Stefan'</i>	1-2'	7	1	7
Medium Perennials	Bridal Veil Astilbe	<i>Astilbe x Arendsii 'Bridal Veil'</i>	2-3'	16	9	144
Medium Perennials	Tall Verbena	<i>Verbena bonariensis</i>	2-4'	15	9	135
<i>Grasses/ Sedges/ Rushes/ Ferns</i>						
Small	Evercolor Everest Variegated Sedge	<i>Carex osmimensis 'evercolor Everest'</i>	1-1.5'	92	1	92
Small	Fortune's Holly Fern	<i>Cyrtomium fortunei</i>	1-2'	27	1	27
Small	Brilliance Autumn Fern	<i>Dryopteris erythrosa 'brilliance'</i>	1-2'	11	1	11
Small	California Grey Rush	<i>Juncus patens</i>	1-3'	23	1	23
Medium	New Zealand Wind Grass	<i>Anemanthele lessoniana</i>	3'	85	9	765
Medium	Karl Foerster Feather Reed Grass	<i>Calamagrostis x acutifolia 'Karl Foerster'</i>	3-5'	92	9	828
Medium	Slough Sedge	<i>Carex obnupta</i>	2-5'	10	9	90
Medium	Sword Fern	<i>Polystichum munitum</i>	2-4'	38	9	342
<i>Groundcover</i>						
Groundcover	Kinnikinnick	<i>Arctostaphylos uva-ursi</i>	0.5-1'	101		197
Groundcover	Gaultheria Shallon	<i>Gaultheria shallon</i>	1-2'	111		600
Groundcover	Green Roof Sedum Mix	<i>Sedum Sp.</i>				4085
Groundcover	Japanese Spurge	<i>Pachysandra terminalis</i>	<1'	59		116
Groundcover	Sedum Mix	<i>Sedum Sp.</i>				836

Table 7.3: Plant Calculations for Seattle Green Factor (City of Seattle, Missouri Botanical Garden, Nursery Trees, Department of Horticulture, Monrovia, and Seven Oaks Native Nursery were used to supply standard vegetation height)

Sources:

City of Seattle. n.d. "Seattle Green Factor." Seattle Department of Construction & Inspections. Accessed June 27, 2020. [http://www.seattle.gov/sdci/codes/codes-we-enforce-\(a-z\)/seattle-green-factor](http://www.seattle.gov/sdci/codes/codes-we-enforce-(a-z)/seattle-green-factor).

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Seven Oaks Native Nursery. n.d. "Native Plants." Accessed May 4, 2020. <https://www.sevenoaksnativenursery.com/native-plants/grasses-rushes-and-sedges/>.

Limitations:

1. Seattle Green Factor calculations were based on plants at installation and not field verified.
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8. Appendix A: Survey Methodology

As mentioned in the introduction, the survey was ultimately not conducted due to the coronavirus pandemic and the pandemic of structural racism, both of which have disproportionately and adversely affected Black Americans. As a result, we were required to complete our work remotely and reassess the engagement strategy. While we attempted to remotely engage with community members, Liberty Bank Building residents, and business owners in the immediate area through multiple avenues, we understandably had a low response rate to our surveys. Under different circumstances, we believe we would have been able to complete a more comprehensive study. Although the results were not reportable, information about the survey and the Benefits it was designed to evaluate are provided below for future reference.

Proposed Environmental Benefits for evaluation

- **X% of surveyed respondents (residents and community) said they are aware that the courtyard collects and treats stormwater runoff. Additionally, X% of survey respondents notice the stormwater when it is raining.**
- **Educated X% of survey respondents users about the reuse of the brick, and X% felt the process of reusing brick was more important for cultural reasons than economic or environmental.**

Proposed Social Benefits for evaluation (selected based on project goals):

- **Creates a sense of belonging and community interaction most in the [courtyard, rooftop, or sidewalk] according to X% of residents that responded to the survey. Positively influenced Y% of residents' decision to live at Liberty Bank Building. Z% residents feel the courtyard, rooftop, art work, and other outdoor amenities are higher quality compared to other affordable housing they looked.**
- **Creates positive event experiences for X% of surveyed community members (resident and non-resident), and Y% are likely to come back for another event.**
- **Creates a welcoming environment for the larger Central District community according to X% of community and resident respondents.**
- **Reflects the history of the Liberty Bank well according to X% of surveyed residents, and reflects the larger history of the Black community and Central District well according to Y%. The Courtyard reminds Z% of the respondents about [the history of Liberty Bank and/or the Black community in Central District.]**
- **Brought the community together for events at least X times in 2020 (before COVID-19 restrictions were implemented).**
- **Used the [rooftop and/or courtyard] [more/less] during the COVID-19 pandemic according to X% of residents.**
- **Positively impacts the neighborhood culture according to X% of survey respondents, while Y% of respondents feel the neighborhood culture impacted the development.**
- **Gives X% of surveyed residents a sense of safety when they are in the [courtyard, rooftop, or sidewalk].**

Proposed Economic Benefits for evaluation

- **Positively influenced X% of surveyed residents' housing choice because of the access to the green roof, courtyard, and streetscape.**

Overall Survey Background:

To gain an understanding of current environmental, social, and economic observations and opinions from residents, community members, and businesses, we developed a survey for these groups. One survey was created for residents and community members and one for businesses. In this case, “community members” refers to participants that responded to the survey due to survey promotion by stakeholder groups. The goal of the resident/community survey is to understand the perspective of people who live in and around the Liberty Bank Building, individuals who see and interact with the space on a daily basis. The business survey goals included understanding how business owners feel supported by the community, how they feel the new Liberty Bank Building has impacted the neighborhood, and if they feel the historical Liberty Bank is appropriately honored.

Overall Survey Method:

The survey was created by CSI researchers, then vetted by the University of Washington’s Institutional Review Board (IRB), the design team, and the client. Due to the COVID-19 pandemic, the survey was posted on the Community Roots Housing and Liberty Bank Building Facebook pages in collaboration with the client and building management rather than being distributed in person. The survey was created using the Catalyst survey platform, which was provided by the University, and all responses were collected and reported anonymously. Categories of questions were used to guide participants through the survey, including general information about the respondent, site history, community impact, events at

Liberty Bank Building, outdoor amenities, the rooftop, the courtyard, and a resident-only section focusing on living at Liberty Bank Building. The “about the respondent” section focused on understanding background information and the impacts of gentrification on the community and residents of Liberty Bank Building. The “site history” section gauged participant knowledge of the history and whether the design reflects or celebrates that history. “Community impact” focused on how the development was integrated into the neighborhood and local businesses both prior to and during the COVID-19 pandemic. “Events at Liberty Bank Building” reflected on how people were involved in resident and community events that are held on the site. The “outdoor amenities” delved into the design, artwork, cultural expression, and safety of the property. The “rooftop” focused on how and why people use that outdoor space. The “courtyard” also looked at how and why people use that outdoor space in addition to how they feel the courtyard connects with the neighborhood. The final section, “living at Liberty Bank Building,” was for residents to compare the development to other places they have looked at and why they enjoyed this space. As the survey developed, it was modified to reflect how and why people are using specific spaces during the COVID-19 pandemic may look different from how they did prior to the pandemic.

Overall Survey Calculations:

See Appendix B for full community and resident survey questions.

See Appendix C for full business survey questions.

Overall Survey Limitations:

1. This survey and period of research was done during the COVID-19 pandemic. The survey results were 100% dependent on people who could be reached virtually through stakeholder organizations.
2. The COVID-19 pandemic may have also impacted results as people were likely to be using the spaces abnormally (either less or more than “normal”) when they responded to the survey.
3. All surveys that were completed had to be completed digitally due to “Stay at Home” orders in place from the State of Washington. There was no ability to pass out surveys to people or recruit responses in person. This created a gap in our data to understand broader neighborhood perceptions of the Liberty Bank Building.
4. Late in the survey process, the developer/site manager informed us they did not have a mass email to send to residents. Therefore, we had to rely on Facebook posts by Liberty Bank Building and Community Roots Housing.
5. The distribution of the survey was delayed due to the Black Lives Matter protests and national activism calling to end systematic racism. Researchers felt the timing of sending the survey needed to be pushed back in order to be sensitive to the context, as many respondents and stakeholders are activists. Surveys were distributed to residents during July 2020. This could have impacted the number of survey results and as well as the responses from the community being more positive or more negative.

Additional Social Benefit for evaluation

- **Effectively celebrates Afrocentric culture through 9 outdoor art installations according to X% of community respondents.**

Background:

As highlighted in the Features and Social Infrastructure Tab, the community-driven design process advocated for art and the incorporation of Afrocentric design into the development. The goal was to

remind users and celebrate the historic Liberty Bank. The Liberty Bank was the first bank west of the Mississippi River dedicated to serving the Black community. Additionally, as noted in the Research Strategy and Context section, Central District community has a long history of making it home. That home has changed as the neighborhood has experienced gentrification. A project goal was to celebrate Afrocentric culture and the history of the neighborhood through art.

The project team included 9 Black artists from Seattle that created art in an Afrocentric style for inside and outside of the building. A unified collective expression, balanced asymmetry, continuous back and forth rhythm, non-hierarchy, expression of individual stories, and grounded in the earth principles from Dr. Sharon Sutton’s Principles of Afrocentric Design were central to the design as a response to community feedback (Mithun 2020).

Method:

In this project, the Afrocentric design principles and history of the site were highlighted through the commissioned artwork. Table 7.1 shows nine examples of exterior artwork around the site that celebrate the history of the Black community and the historic Liberty Bank. Additional pieces (murals, portraits, and the bank vault door) are inside the building and visible through exterior windows. In the survey, we asked the respondents if they felt the artwork celebrated Afrocentric culture to understand if the intent of the artwork was successful. As previously mentioned in this appendix, the survey was not successful, but we were seeking to understand if people felt that the art celebrated Afrocentric culture as intended by the artists and design team.

Calculations:

Photo of Element	Art Element	Artist	Artist Goal/Statement
	Reuse of Salvaged Brick	Minnie Collins	Brings a physical connection from the original Liberty Back into the new building in a basket weave pattern that references Black culture.
	Story Plaques	Minnie Collins	The prose or poetry tells the legacy of Liberty Bank, their continued significance to Pan-African communities, and other Black entrepreneurial accomplishments

	<p>Historic "LB" Logo</p>		<p>Continue to historic logo that Liberty Bank used on the new building to pay homage to the previous building.</p>
	<p>Art in Building Canopy</p>	<p>Al Doggett</p>	<p>The Afrocentric design motif that captures the spirit of Central District wraps the building canopy and has a prominent presence on Union Street.</p>
	<p>Glass Canopy Inserts</p>	<p>Esther Ervin</p>	<p>The neighborhoods within Central District are identified with the addition of a Salish canoe to pay homage to the original inhabitants.</p>
	<p>Drum Benches</p>	<p>Ester Ervin and Al Doggett</p>	<p>The benches use a weave pattern with a safe deposit box door in the middle of the Afrocentric motif built into the concrete. Drums are used for accompaniment for ceremonies in Africa. The full drum bench was built and installed by the artists.</p>

	<p>Linear Bench Art</p>	<p>Al Doggett</p>	<p>The Afrocentric design motif was built into the bench. The design creates unity with the canopy and the drum benches.</p>
	<p>Stormwater Planter Art</p>	<p>Esther Ervin</p>	<p>The salmon sculptures in the water are symbolically related to the Fountain of Triumph sculpture by prominent Black Seattle artist James W. Washington, Jr. Prior to relocation due to development, the Fountain of Triumph sculpture at 23rd and Union served as a symbol of racial struggle for Black Americans that is similar to a salmon's journey to make their way upstream to spawn (Lloyd, 2017).</p>
	<p>Exterior Building Mural</p>	<p>Ashby Reed</p>	<p>The mural consists of Afrocentric imagery that was inspired by African patterns found in mud-cloth and quilts. The goal is it is a visual motif that is identifiable as Afrocentric that residents can be proud of.</p>

Table 7.1: 9 Exterior Artwork by local Black Artists (Sources: Al Doggett Studio and Jensen, 2020)

Sources:

Al Doggett Studio. n.d. "Liberty Bank Art Plan Summary." Seattle.

Jensen, Amelia. 2020. "LBB CSI Presentation." In LAF Case Study Investigation. Seattle: Mithun.

Lloyd, Sarah Anne. 2017. "23rd and Union Project Will Include Historic Sculpture Restoration." Curbed Seattle, November 15, 2017. <https://seattle.curbed.com/2017/11/15/16658410/central-district-james-washington-jr-sculpture>.

Limitations:

1. See overall survey limitations outlined in Appendix 1.
- **Allowed X% of the Liberty Bank Building resident respondents to stay in Central District and Y% to return to Central District after previously being displaced.**

Method:

In the resident/community, respondents were asked a series of questions in the “About You” section of the survey to determine if they had lived in Central District prior to 2019, how long had they been there, did they ever move away, if so why, and where they lived immediately before Liberty Bank Building. Through that questioning, the researchers hoping to understand whether the Liberty Bank Building helped former residents to stay in the neighborhood.

- **Supports X different local businesses owned by people of color, with Y% of surveyed residents visiting local businesses owned by people of color at least one time per week. Z% of area businesses owned by people of color that were surveyed feel supported by the LBB community.**

Method:

Similar to the survey methods described in the social benefits section of this document, we sent out a survey to local businesses owned by people of color to get their input and feedback on how the Liberty Bank Building development has been incorporated into Central District community and what impact it has had on their business. The survey had an “about you” section to collect background information on the business owner. That was followed by a “site and location history” to get their feedback on the history of the Liberty Bank Building development, how it celebrates Afrocentric culture, and how it connects to the history of Central District. The final section, “business questions,” is focused on understanding who is the business’ clientele, have they felt supported by the community, and if that has changed since the Liberty Bank Building opened.

To determine the businesses owned by people of color in the neighborhood, we looked at the events of stakeholder groups to begin our list of businesses. Additionally in the resident/community survey, we asked what businesses owned by people of color people frequented. We also researched the Washington state registration of Women and Minority Owned Business Enterprises (WMBE). Lastly, we included other restaurants and services listed on a Google map by Tina Nguyen. These are all shown in Figure 7.1. Ultimately we focused on businesses that could be commonly used by the public on a daily basis.

Calculations:

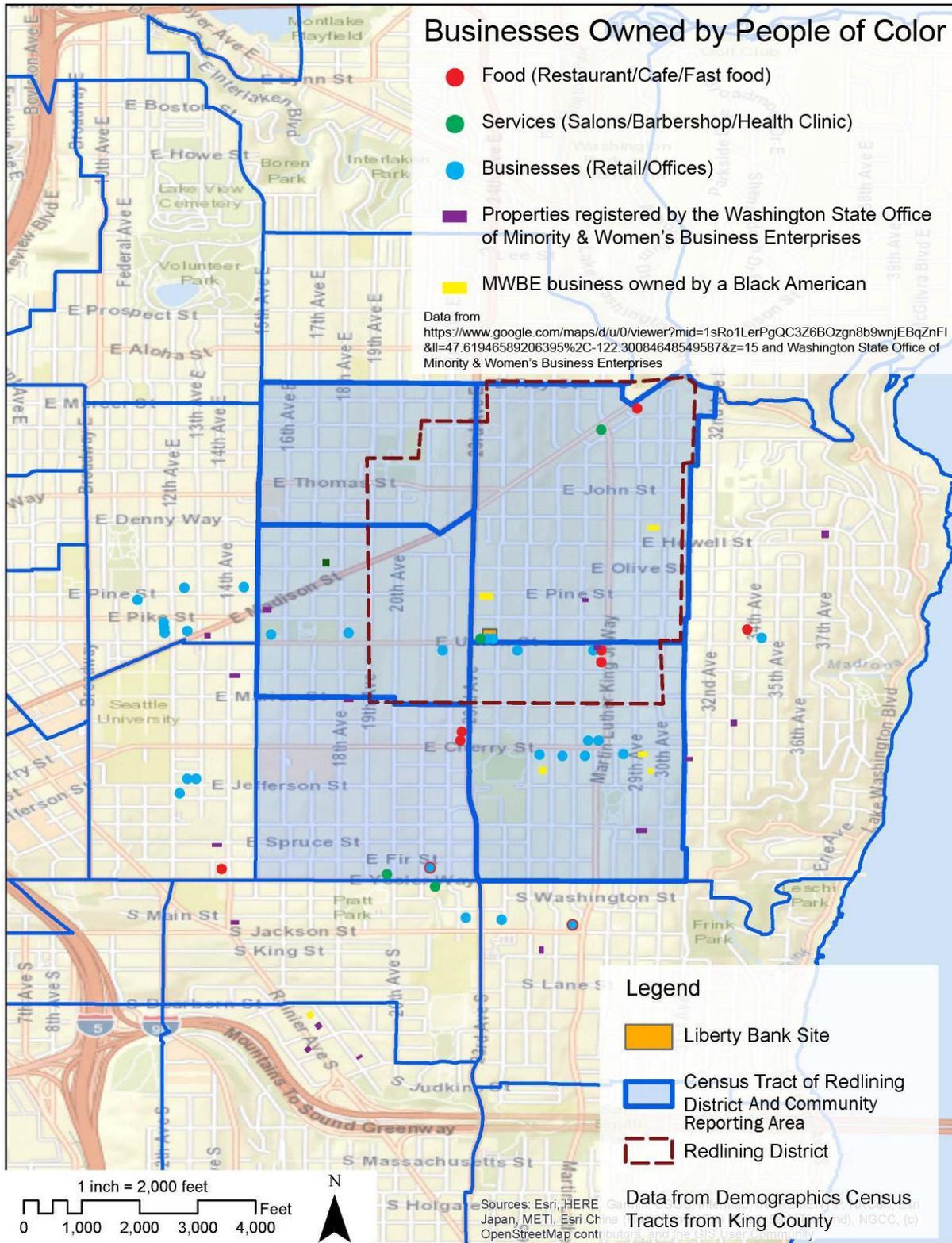


Figure 7.1: Map of local business owned by people of color

Sources:

Nguyen, Tina. 2020. "Black-Owned Businesses & Restaurants." Google Map. 2020.

<https://www.google.com/maps/d/u/0/viewer?mid=1sRo1LerPgQC3Z6BOzgn8b9wnjEBqZnFI&ll=47.60834021218436%2C-122.27277454679167&z=14>.

Limitations:

1. This survey and period of research was done during the COVID-19 pandemic. The survey results were 100% dependent on people who could be reached through these organizations.
2. All surveys that were completed had to be completed digitally due to “Stay at Home” orders in place from the State of Washington. There was no ability to pass out surveys to people or recruit responses in person. The survey was not ultimately successful.
3. We relied on knowledge from residents and community events to determine which businesses owned by people of color to reach out to. Additional information was found in the map of “Black-owned Businesses & Restaurants” by Tina Nguyen Further conversation and in person surveying could have revealed more businesses.

9. Appendix B: Community and Resident Survey

Print view of 'Liberty Bank Building'

[Print this page](#)

Welcome, and thank you for your participation in this survey! By continuing forward, you agree to participate and are aware that your personal information will not be collected.

We are researchers and Landscape Architects at the University of Washington interested in understanding the important landscape benefits and community impacts of the Liberty Bank Building. This research is being funded by the [Landscape Architecture Foundation](#) as part of their [Case Study Investigation](#), which partners academics with professionals to do a post-occupancy evaluation of exemplary projects.

We are not associated with Community Roots Housing (formerly Capitol Hill Housing). This is an independent research study.

We would like to hear from you about your perspectives and opinions as residents and Central District community members on the impacts and design of the Liberty Bank Building. The survey should take approximately 10 to 15 minutes to complete.

Thank you very much for your consideration and the time you will spend participating in this survey. Your feedback will help designers and developers build better developments and amenities in the future. If you have any questions or concerns, please contact Catherine De Almeida, Assistant Professor of Landscape Architecture: cdealmei@uw.edu.

Questions about you

Question 1.

Select your age group:

- 18-25
- 26-35
- 36-45
- 46-55
- 56-65
- 66+

Question 2.

How do you identify?

- American Indian and Alaska Native
- Asian
- Black or African American
- Hispanic or Latino
- Native Hawaiian and Other Pacific Islander
- White alone
- Other race
- Two or more Races

Question 3.

Did you live in the Central District at any point prior to 2019?

- Yes
- No

Question 4.

If yes, how many **total** years have you lived in the Central District?

- I have never lived in the Central District

- Less than 5 years
- 5 - 10 years
- 10 - 15 years
- 15 - 20 years
- 20 - 25 years
- 25 - 30 years
- 30+ years

Question 5.

Did you at any point move away from the Central District?

- Yes
- No

Question 6.

If so, why?

Question 7.

Are you a resident of the Liberty Bank Building?

- Yes
- No

Question 8.

If you are a resident, where did you live before moving into the Liberty Bank Building?

- Not a resident
 - Central District
 - Seattle (but not Central District)
 - King County (but not Seattle)
 - State of Washington (but not King County)
 - Outside of Washington State
-

Site History

Question 9.

Are you familiar with the history of the Black community in the Central District?

- Yes
- No

Question 10.

Are you familiar with the history of the Liberty Bank?

- Yes
- No

Question 11.

How did you learn about the history of the Liberty Bank?

- I had a bank account at Liberty Bank
- I know someone that worked at Liberty Bank
- I learned from walking around the Liberty Bank Building development
- I learned about the history from family or other community members
- I learned about the history from the media or internet

- I don't know about the history of Liberty Bank
 Other (Please specify):

Question 12.

On a scale of 1 to 10, answer the following questions:

Rows

How well do you feel the overall design of the development reflects the history of the Black community in the Central District?

How well do you feel the overall design of the development reflects the history of the Liberty Bank?

- 1 (unsatisfactorily)
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 (exceptionally)

Question 13.

Rows

What kind of impact do you feel the Liberty Bank Building development has had on the neighborhood culture?

What kind of impact do you feel the neighborhood culture has had on the development?

- 1 (strong negative impact)
- 2
- 3
- 4
- 5 (no impact)
- 6
- 7
- 8
- 9
- 10 (strong positive impact)

Question 14.

Answer yes or no to the following questions:

Rows

Did you know that the courtyard entry portal has lock boxes from the original Liberty Bank?

Did you know that the Liberty Bank Building sign (on the corner of the building) is based on the original Liberty Bank logo?

Did you know that the bricks from the old Liberty Bank were reused in the construction of this new building?

- Yes
- No

Question 15.

In your opinion, what is the most important reason for reusing the brick?

- Reduces environmental waste
 - Saves money on the construction
 - Forms a cultural connection to the original Liberty Bank
 - Serves as an education element for the project development
 - Reusing the brick is not important
-

Community Impact

Question 16.

How often does the overall community use the development as a gathering place?

Rows

- More than once a day
- Once a day
- 2-3 times a week
- Once a week
- Once every two weeks
- Once a month
- Once every few months
- Once a year
- Never

Question 17.

On a scale of 1 to 10, how well do you feel the Liberty Bank Building welcomes the larger Central District community?

Rows

- 1 (strongly unwelcomed)
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 (strongly welcomed)

Question 18.

What new minority or African-American owned businesses have opened in or relocated to the Central District in the last two years? List as many as you can.

Question 19.

How often did you visit these new businesses prior to COVID-19?

- More than once a day
- Once a day
- 2-3 times a week
- Once a week
- Once every two weeks
- Once a month
- Once every few months
- Once a year
- Never

Question 20.

How often did you visit any (new or long-term) African-American owned businesses in the Central District prior to COVID-19?

- More than once a day
- Once a day
- 2-3 times a week

- Once a week
- Once every two weeks
- Once a month
- Once every few months
- Once a year
- Never

Question 21.

What kind of impact do you feel the Liberty Bank Building development has had on minority or African-American owned businesses?

Rows

- 1 (strong negative impact)
 - 2
 - 3
 - 4
 - 5 (no impact)
 - 6
 - 7
 - 8
 - 9
 - 10 (strong positive impact)
-

Events at Liberty Bank Building

Question 22.

Have you ever attended an event at Liberty Bank Building? If so, what type of event was it? (Choose all that apply)

- Resident Only
- Private Group Event
- Community Event
- I have never been to an event at Liberty Bank Building

Question 23.

If you attended an event, what spaces have been used for events you have attended? (Choose all that apply)

- Rooftop
- Courtyard
- Indoor Community Room
- I have never been to an event at Liberty Bank Building

Question 24.

Prior to COVID-19, how often did you attend organized events in the courtyard or rooftop?

- 2-3 times a week
- Once a week
- Once every two weeks
- Once a month
- Once every few months
- Once a year
- Never

Question 25.

If you attended an event, how would you rate your experience at the event you attended?

Rows

- 1 (Strongly negative)
- 2
- 3
- 4
- 5 (Neutral)
- 6
- 7
- 8
- 9
- 10 (Strongly positive)
- I have never been to an event at Liberty Bank Building

Question 26.

Please explain.

Question 27.

How likely are you to attend a future event at Liberty Bank Building?

Rows

- 1 (extremely unlikely)
 - 2
 - 3
 - 4
 - 5
 - 6
 - 7
 - 8
 - 9
 - 10 (extremely likely)
-

Outdoor Amenities at Liberty Bank Building

Question 28.

On a scale of 1 to 10, how would you rate the appearance of the sidewalk, courtyard, and rooftop of the Liberty Bank Building?

Rows

- 1 (extremely unappealing)
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 (extremely appealing)

Question 29.

Please explain.

Question 30.

How often do you notice the artwork outside the building?

- More than once a day
- Once a day
- 2-3 times a week
- Once a week
- Once every two weeks
- Once a month
- Once every few months
- Once a year
- Never

Question 31.

How successfully does the artwork celebrate Afro-centric culture?

Rows

- 1 (unsatisfactorily)
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 (exceptionally)

Question 32.

Which outdoor space best encourages community interaction and gives you a sense of belonging?

- Courtyard
- Rooftop
- Sidewalk

Question 33.

Please explain.

Question 34.

Which outdoor spaces give you a sense of safety? (Choose all that apply)

- Courtyard
- Rooftop
- Sidewalk
- None of the above

Question 35.

Please explain.

The Rooftop at Liberty Bank Building

Question 36.

How often did you use the rooftop prior to COVID-19?

- More than once a day
- Once a day

- 2-3 times a week
- Once a week
- Once every two weeks
- Once a month
- Once every few months
- Once a year
- Never

Question 37.

How often do you currently use the rooftop in the building (during COVID-19)?

- More than once a day
- Once a day
- 2-3 times a week
- Once a week
- Once every two weeks
- Once a month
- Once every few months
- Once a year
- Never

Question 38.

On a scale of 1 to 10, do you enjoy using the rooftop?

Rows

- 1 (do not use)
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 (strongly enjoy using)

Question 39.

How do you typically use the rooftop?

- Individually
- With Family
- In Small Groups
- In Resident Events
- In Large Community Events
- Not At All

Question 40.

What activities have you used the rooftop for? (Choose all that apply)

- Getting outside
- Talking on the phone
- Reading a book
- Enjoy sunlight
- Gathering or meeting spot
- Resident events
- Community events
- I don't use it
- Other (please specify):

Question 41.

Do you find the rooftop to be a welcoming space?

- Yes
- No

Question 42.

How else would you describe the way(s) the rooftop makes you feel?

The Courtyard at Liberty Bank Building

Question 43.

How often did you use the courtyard prior to COVID-19?

- More than once a day
- Once a day
- 2-3 times a week
- Once a week
- Once every two weeks
- Once a month
- Once every few months
- Once a year
- Never

Question 44.

How often do you currently use the courtyard in the building (during COVID-19)?

- More than once a day
- Once a day
- 2-3 times a week
- Once a week
- Once every two weeks
- Once a month
- Once every few months
- Once a year
- Never

Question 45.

On a scale of 1 to 10, do you enjoy using the courtyard at Liberty Bank Building?

Rows

- 1 (don't use)
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 (strongly enjoy using)

Question 46.

How do you typically use the courtyard?

- Individually
- In small groups
- In large events
- Only for entering/exiting the building
- Not at all

Question 47.

What activities have you used the courtyard for? (Choose all that apply)

- Getting outside
- Talking on the phone
- Reading a book
- Enjoy sunlight
- Gathering or meeting spot
- Resident events
- Community events
- Solely as a pass through space
- I don't use it
- Other (please specify):

Question 48.

Do you find the courtyard to be a welcoming space?

- Yes
- No

Question 49.

How else would you describe the way(s) the courtyard makes you feel?

Question 50.

What do you like most about the courtyard?

- Entry portal with lock boxes
- Stormwater collection with salmon sculptures
- Mosaic on the benches
- Colorful mural on building
- Trees, plants, and vegetation
- Welcoming spirit of the place
- Connection it creates between the residents and the neighborhood
- Other (please specify):

Question 51.

In your opinion, is the courtyard:

- A private residential space
- A shared public space
- Both
- Neither

Question 52.

Do you feel there is a strong connection between the courtyard and the sidewalk?

- Yes
- No

Question 53.

Why or why not?

Question 54.

Are you aware that the courtyard collects and treats the building's stormwater?

- Yes
- No

Question 55.

Do you notice the stormwater collection working in the courtyard when it is raining or within 3 days after a rain event?

- Always
- Often
- Sometimes
- Rarely
- Never

Question 56.

Rows

How well does the courtyard design remind you of the history of Liberty Bank?

How well does the courtyard design remind you of the history of the Black community in the Central District?

- 1 (unsatisfactorily)
 - 2
 - 3
 - 4
 - 5
 - 6
 - 7
 - 8
 - 9
 - 10 (exceptionally)
-

Living at Liberty Bank Building

If you do not live here, skip to the end.

Question 57.

When looking for a place to live, what other options did you consider? (Choose all that apply)

- 18th Avenue
- 412
- El Nor
- Jefferson
- Liberty Bank Building
- Miller Park
- Ponderosa
- Squire Park Plaza
- Union+James
-  Other (please specify):

Question 58.

On a scale of 1 to 10, how does the courtyard, rooftop, art work, and other outdoor amenities at the Liberty Bank Building compare to other affordable housing buildings you looked at?

Rows

- 1 (extremely low quality)
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 (extremely high quality)

Question 59.

Which factors were most important in your decision to live at the Liberty Bank Building? (Choose all that apply)

- Close to work
- Close to community and family
- Outdoor building amenities (courtyard, rooftop)
- Cost of Housing
- Artwork and Connection to History
- Other (please specify):

Question 60.

Answer yes or no to the following questions:

Rows

Do you feel your overall well-being has improved since you have been living at the Liberty Bank Building?

Do you feel your overall sense of safety has improved since you have been living at the Liberty Bank Building?

Do you feel you have better access to outdoor spaces when compared to other places you have lived?

Do you enjoy your experience of entering the building?

- Yes
- No

Question 61.**Rows**

Do you feel at home within the Liberty Bank Building community?

Do you feel a sense of ownership living here?

- Always
- Often
- Sometimes
- Rarely
- Never

Question 62.

As a resident, how welcomed do you feel by the neighborhood around the Liberty Bank Building?

Rows

- 1 (strongly not welcomed)
- 2
- 3
- 4
- 5
- 6
- 7
- 8

9

10 (strongly welcomed)

Question 63.

Have you participated in events with Africatown or other community organizations that were outside of the Liberty Bank Building?

Yes

No

Question 64.

What are three words that describe your perception of the outdoor spaces at Liberty Bank Building?

Question 65.

What amenity is missing that would improve your living experience?

Question 66.

Any other comments or feedback on the outdoor spaces at Liberty Bank Building?

Thank you for taking the survey about Liberty Bank Building and the Central District. After clicking the submit button below, your results will be anonymously included with the other results and analyzed in a Landscape Performance Series study being conducted by the Landscape Architecture Foundation and University of Washington. We appreciate your feedback!

Questions or comments?
[Contact us](#) or email catalysthelp@uw.edu

10. Appendix C: Business Survey

Print view of 'Liberty Bank Building Business Survey'

[Print this page](#)

Welcome, and thank you for your participation in this survey! By continuing forward, you agree to participate and are aware that your personal information will not be collected.

We are researchers and Landscape Architects at the University of Washington interested in understanding the important landscape benefits and community impacts of the Liberty Bank Building. This research is being funded by the [Landscape Architecture Foundation](#) as part of their [Case Study Investigation](#), which partners academics with professionals to do a post-occupancy evaluation of exemplary projects.

We are not associated with Community Roots Housing (formerly Capitol Hill Housing). This is an independent research study.

We would like to hear from you about your perspectives and opinions as business owners on the impacts and design of the Liberty Bank Building. The survey should take approximately 5 to 10 minutes to complete.

Thank you very much for your consideration and the time you will spend participating in this survey. Your feedback will help designers and developers build better developments and amenities in the future. If you have any questions or concerns, please contact Catherine De Almeida, Assistant Professor of Landscape Architecture: cdealmei@uw.edu.

About you

Question 1.

Select your age group:

- 18-25
- 26-35
- 36-45
- 46-55
- 56-65
- 66+

Question 2.

How do you identify?

- American Indian and Alaska Native
- Asian
- Black or African American
- Hispanic or Latino
- Native Hawaiian and Other Pacific Islander
- White
- Other race
- Two or more races

Question 3.

Do you live in the Central District?

- Yes
- No

Question 4.

If yes, how many **total** years have you lived in the Central District?

- I have never lived in the Central District

- Less than 5 years
- 5 - 10 years
- 10 - 15 years
- 15 - 20 years
- 20 - 25 years
- 25 - 30 years
- 30+ years

Question 5.

Did you at any point move away from the Central District?

- Yes
- No

Question 6.

If so, why?

Question 7.

How long have you been in business?

- Less than 1 year
- 1 Year
- 2-3 Years
- 4-5 Years
- 5-10 Years
- 10+ Years

Question 8.

Have you always had a location in the Central District?

- Yes
- No

Question 9.

Have you had to move your Central District business location? If so, where?

- Not moved the business location
 - Elsewhere in Central District
 - Seattle (but not Central District)
 - King County (but not Seattle)
 - State of Washington (but not King County)
 - Outside of Washington State
-

Site and Location History

Question 10.

Answer yes or no to the following questions:

Rows

Are you familiar with the history of the Black community in the Central District?

Are you familiar with the history of the Liberty Bank?

- Yes
- No

Question 11.

How did you learn about the history of the Liberty Bank?

- I had a bank account at Liberty Bank
- I know someone that worked at Liberty Bank
- I learned from walking around the Liberty Bank Building development
- I learned about the history from family or other community members
- I learned about the history from the media or internet
- I don't know the history of the building
- Other (please specify):

Question 12.

Are you familiar with the Liberty Bank Building development?

- Yes
- No

If you answered "No" skip to "Business Questions".

Question 13.

On a scale of 1 to 10, answer the following questions:

Rows

How well do you feel the overall design of the Liberty Bank Building development reflects the history of the Black community in the Central District?

How well do you feel the overall design of the development reflects the history of the Liberty Bank?

- 1 (unsatisfactorily)
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 (exceptionally)

Question 14.

Rows

What kind of impact do you feel the development has had on the neighborhood culture?

What kind of impact do you feel the neighborhood culture has had on the development?

- 1 (strong negative impact)
- 2
- 3
- 4
- 5 (no impact)
- 6
- 7
- 8
- 9
- 10 (strong positive impact)

Question 15.

Can you describe the impact Liberty Bank Building has had on your business?

Business Questions

Question 16.

What percentage of your customers do you think live in the Central District?

- 0-10%
- 11-25%
- 26-50%
- 51-75%
- 76-100%

Question 17.

On a scale of 1 to 10, prior to COVID-19, has your business felt supported by the Central District community?

Rows

- 1 (strongly unsupported)
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 (strongly supported)

Question 18.

During COVID-19, has your business felt supported by the Central District community?

Rows

- 1 (strongly unsupported)
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 (strongly supported)

Question 19.

Prior to COVID-19, did you see any change in your business in the last year?

- Yes
- No

Question 20.

If so, in what way? (Choose all that apply)

- Increase in business
- Decrease in business
- Overall business hasn't changed
- Greater celebration of the African American culture in the community
- More support for local businesses and residents
-  Other (please specify):

Question 21.

How has your business changed since COVID-19? (Choose all that apply)

- Increase in business
- Decrease in business
- Overall business hasn't changed
- Greater celebration of the African American culture in the community
- More support for local businesses and residents
-  Other (please specify):

Question 22.

Can you describe the impact your business has experienced in the last two years?

Question 23.

In three words, how would you describe the Central District business culture?

Question 24.

Any other information about the Liberty Bank Building development or your business that you would like to share with us?

Thank you for taking the survey about Liberty Bank Building and the Central District. After clicking the submit button below, your results will be anonymously included with the other results and analyzed in a Landscape Performance Series study being conducted by the Landscape Architecture Foundation and University of Washington. We appreciate your feedback!

Questions or comments?
[Contact us](#) or email catalysthelp@uw.edu
