CoU, LLC

WEBER THOMPSON

WATERSHED

900 NORTH 34TH STREET

02.27.2017 | 16-009 SDCI Project #3024100

DESIGN RECOMMENDATION

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PHOTO CREDIT: MICHAEL MATTI VIA FLICKR

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INTRODUCTION & PROJECT OVERVIEW

PROJECT DESCRIPTION

The site is located within the Fremont Urban Center Village, with its address along N 34th Street, bounded by Troll Avenue N to the west and an alley to the north. The zoning is C1-65' with an adjacent property zoned C1-65. Across the alley to the north is an LR3 zone. The site is currently occupied by two small commercial retail tenants, a Turkish cafe and a coffee shop.

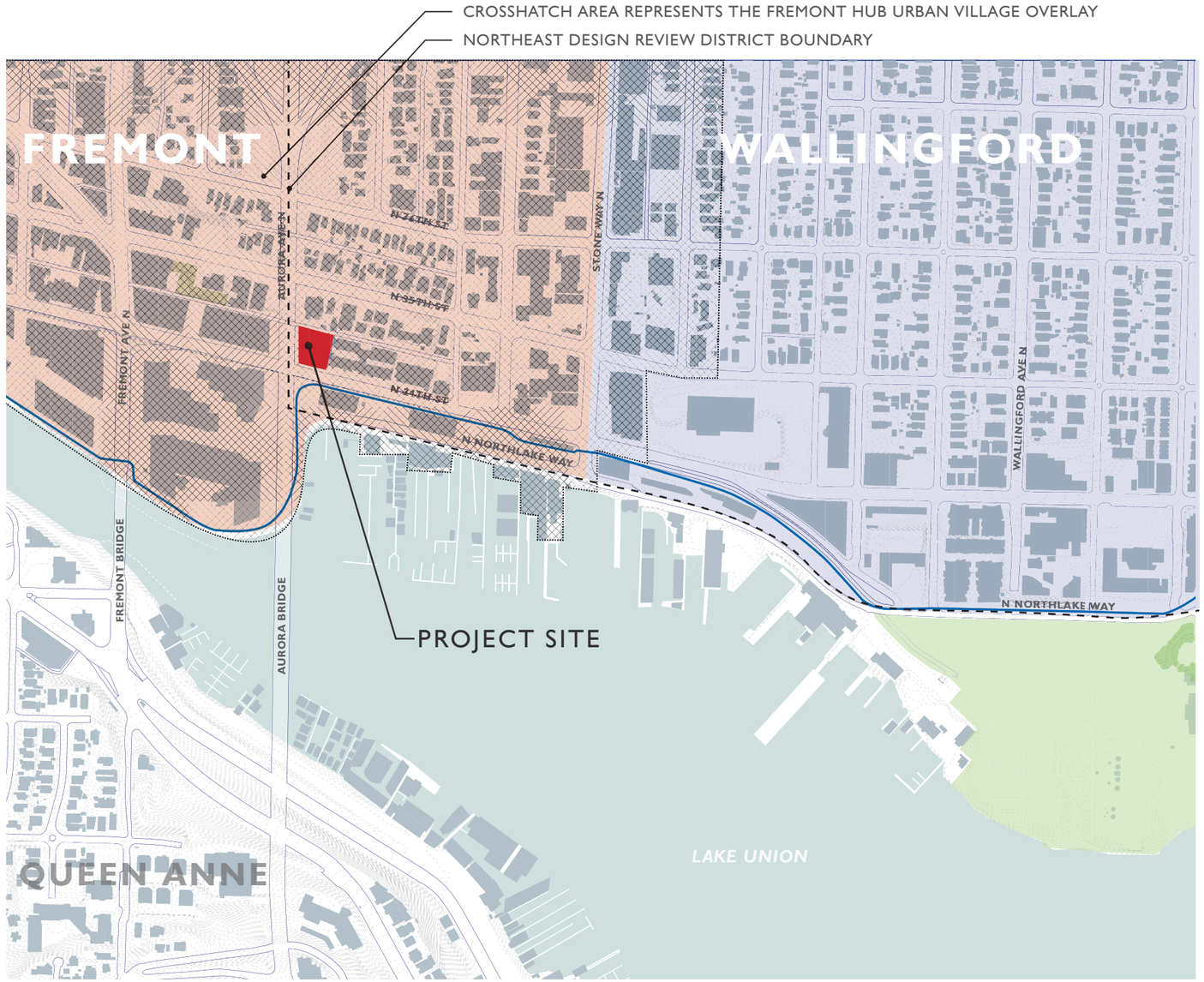
The project proposes demolition of existing structures on site, and new construction of seven levels above grade at N. 34th Street. At grade this includes service, bike storage and shower facilities, an office lobby and approximately 5,000 sf of retail space (11,000 total square feet) primarily located along N. 34th Street and Troll Avenue. Six levels of commercial office (approximately 53,000 gross square feet) will be provided above the ground floor – constructed as core and shell (both single tenant and multi-tenant arrangements will be considered by the owner for leasing). The project currently anticipates one level of at-grade parking (4,100 gross square feet) for approximately 14 vehicle stalls, accessed off of the alley on Level 3. The current preferred scheme includes approximately 87 bike stalls (19 bikes are required by Seattle Land Use code).

FREMONT/WALLINGFORD NEIGHBORHOODS

The Fremont neighborhood of Seattle is situated along the Fremont Cut of the Lake Washington Ship Canal to the north of Queen Anne, the east of Ballard, the south of Phinney Ridge, and the southwest of Wallingford. Its boundaries are not formally fixed, but they can be thought of as consisting of the Ship Canal to the south, Stone Way N. to the east, N. 50th Street to the north, and 8th Avenue N.W. to the west.

The Wallingford neighborhood of Seattle is bounded by the north shore of Lake Union to the south, the University District and I-5 to the east, N. 60th Street and Green Lake to the north, and the Fremont neighborhood from Aurora Ave. N. and Stone Way to the west.

The main thoroughfares are Fremont, Aurora Ave N. and Stone Way N. (north- and southbound) and N. 34th, 36th, 40th, 45th, and 46th Streets (east- and westbound). The Aurora Bridge (George Washington Memorial Bridge) carries Aurora Avenue (State Route 99) over the Ship Canal to the top of Queen Anne Hill, and the Fremont Bridge carries Fremont Avenue over the canal to the hill's base. Two major shopping districts are centered on Fremont Avenue N. just north of the bridge as well as along N. 45th Street between Stone Way and I-5.



VICINITY MAP

PROJECT VISION & GOALS

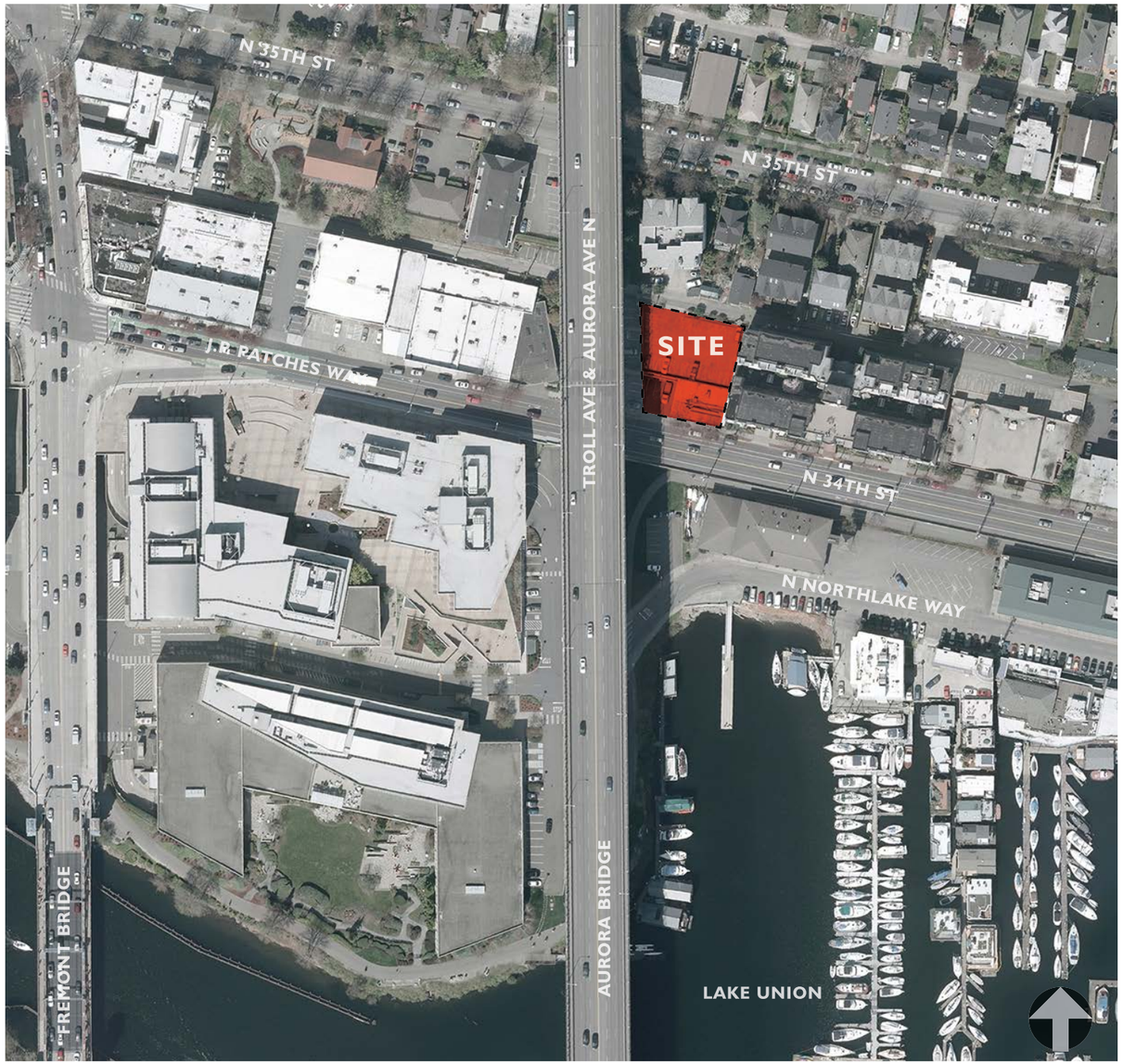
PROJECT VISION STATEMENT

The project will display elegance in simplicity, through a refined and restrained form and façade. The form will support the function, and the function will support the ecological context of the site.

The project will be a showcase for the Seattle Living Building Pilot Program, demonstrating achievable, high-quality, high-performance design and increased height and FAR executed in a way that is sensitive to context. It takes full advantage of its unique place, with excellent orientation and solar access, and as a confluence of rainwater finding its way to Lake Union. It will use an integrated design process to ensure consultant integration happens early, and synergies of systems can be realized.

The project will complete, complement and frame the improvements to the Troll Ave right of way, and create a gateway to The Fremont Troll, one of Seattle's iconic attractions.The project will reach beyond the site boundary to mitigate impacts of harmful highway stormwater runoff and help preserve the health of Lake Union similar to the project to the west of Troll Avenue. The project will strive to create a tangible narrative of the local water cycle and its importance to the environment and the community.

TOP PROJECT GOALS	STRATEGIES
1. STORMWATER MANAGEMENT	• Incorporate a bioswale and bioretention planters in Troll Ave ROW to clean Aurora Bridge and Troll Ave stormwater prior to Lake Union discharge. • Filter and treat building stormwater through stormwater planters integrated with the architecture. • Reclaim and reuse rainwater for building water needs.
2. REDUCED ENERGY USAGE	• Develop a glazing strategy that significantly reduces solar heat gain through the incorporation of advanced glazing technology. • Provide daylight autonomy to office space through careful placement of exterior courts and glazing. • Encourage occupant behavior that promotes energy efficiency, e.g. using the stairs instead of elevators.
3. ACHIEVE MATERIALS PETAL AS PART OF THE PETAL CERTIFICATION FOR THE LIVING BUILDING CHALLENGE	• Intensive materials research and vetting with participation of all project team members. • Selecting locally sourced, natural materials including salvage from the exisitng building when possible.



AERIAL PHOTOGRAPH

ZONING SUMMARY

Site Address
900 N 34th Street, Seattle WA 98103

King County Assessors Parcel Numbers
197220-2575 (Lot size: 12,900 SF) The Property is currently occupied by a paid parking lot, a small commercial building with rooftop, parking.

Zoning Classification: C1-65

Neighborhood / Overlay
Fremont Hub Urban Village
Frequent Transit Corridor (per SDCI GIS)
Not a Pedestrian Area (per SDCI GIS)

Environmental Critical Areas: None per SDCI GIS map

Approximate Site Dimensions:
120' depth from N 34th Street to alley
93' width along N 34th street
120' width along alley
123' along Troll Avenue N

Topography
The U.S. Geological Survey (USGS) Seattle North, WA 7.5-Minute Quadrangle Topographic Map (Figure 1), indicates that the ground surface of the Property is sloping down to the south towards Lake Union. The elevation of the Property is approximately 55 feet above mean sea level (msl).

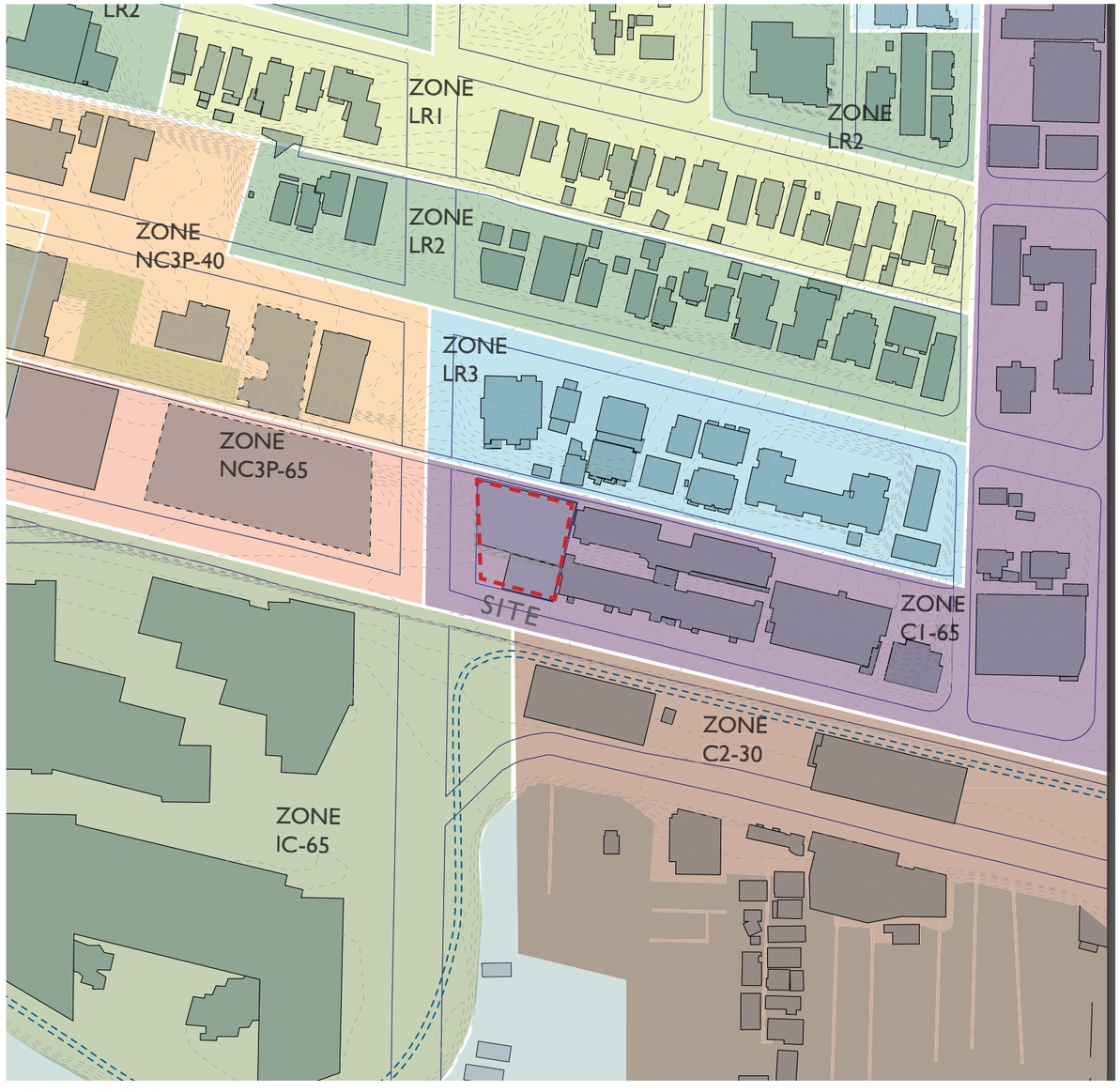
LAND USE CODE ANALYSIS:

Floor Area Ratio [23.47A.013]

Minimum FAR is 2.0
Gross area not counted toward minimum FAR:
- GFA below grade
- GFA containing parking

Maximum FAR is 4.25
12,811 SF site area x 4.25 FAR = 54,448 sq ft.
An additional 15% FAR may be added for projects participating in the Living Building Pilot Program per SMC 23.40.060
54,448 sq ft max X 15% = ***62,615 sq ft (4.89 FAR)***

Gross Floor Area (GFA)
Gross area not counted toward maximum FAR:
- Underground gross floor area
- All portions of a story that extend no more than 4' above existing or finished grade (whichever is lower) excluding access



ZONING PLAN

LAND USE ANALYSIS

Structure Height [23.47A.012]:
In addition to the departures allowed under subsection 23.41.012.B, departures for projects participating in the Living Building Pilot Program established under Section 23.40.060 may also be granted for additional structure height up to 20 feet for development in zones with height limits greater than 45 feet, to allow increased floor-to-floor heights so long as the additional height allowed for the structure will not allow an additional story beyond the number that could be built under the otherwise applicable height limit. Rooftop features may be allowed to extend above the structure height approved pursuant to this subsection 23.41.012.D.2. e, if they are consistent with the applicable standards established for rooftop features within the zone

Open railings, planters, skylights, clerestories, greenhouses, solariums, parapets and firewalls may extend as high as the highest ridge of a pitched roof permitted by subsection 23.47A.012.B or up to 4 feet above the otherwise applicable height limit, whichever is higher.

In zones with height limits of 65 feet or more, solar collectors may extend up to 7 feet above the otherwise applicable height limit, with unlimited rooftop coverage.

Except as provided below, the following rooftop features may extend up to 15 feet above the applicable height limit, as long as the combined total coverage of all features gaining additional height listed in this subsection 23.47A.012.C.4 does not exceed 20 percent of the roof area, or 25 percent of the roof area if the total includes stair or elevator penthouses or screened mechanical equipment:

a. Solar collectors;
b. Mechanical equipment;
c. Play equipment and open-mesh fencing that encloses it, as long as the fencing is at least 15 feet from the roof edge;
d. Wind-driven power generators;
e. Minor communication utilities and accessory communication devices, except that height is regulated according to the provisions of Section 23.57.012; and
f. Stair and elevator penthouses may extend above the applicable height limit up to 16 feet.

Structure Height [23.47A.012] continued:
Greenhouses that are dedicated to food production are permitted to extend 15 feet above the applicable height limit if the combined total coverage of all features gaining additional height listed in this subsection 23.47A.012.C does not exceed 50 percent of the roof area, and the greenhouse adheres to the setback requirements in subsection 23.47A.012.C.7.

The rooftop features listed in this subsection 23.47A.012.C.7 shall be located at least 10 feet from the north edge of the roof unless a shadow diagram is provided that demonstrates that locating such features within 10 feet of the north edge of the roof would not shade property to the north on January 21st at noon more than would a structure built to maximum permitted height and FAR:

a. Solar collectors;
b. Planters;
c. Clerestories;
d. Greenhouses and solariums;
e. Minor communication utilities and accessory communication devices permitted pursuant to the provisions of Section 23.57.012
f. Non-firewall parapets;
g. Play equipment.

PERMITTED AND PROHIBITED USES

Offices: Must meet NC3 zone standards per 23.47A.010.D, otherwise FAR limited to 1.0 or 35,000 sf.
Sales and rental of motorized vehicles: permitted outright
Sales and services, general and multipurpose, major durables, non-household: permitted outright
Commercial sales, heavy: permitted up to 25,000 SF
Commercial services, heavy: prohibited
Manufacturing, light: permitted up to 25,000 SF
Manufacturing, general and heavy: prohibited
Parks and open space: permitted outright

Amenity Area [23.47A.024]
N/A – only applies to GFA in residential use.

Street Level Uses [23.47A.005C Map 8]
N/A (property is subject only to Street-level residential use limits identified in 23.47A.005.C)

Street Façade Requirements [23.47A.008]
To meet NC3 zone standards per 23.47A.010.D**,** Blank segments of street facing facade between 2 and 8 feet above sidewalk Transparency & Blank Facades may not exceed 20' in width. Total of all blank facade segments may not exceed 40% of width of facade along the street.

Street-level street-facing facades shall be located within 10' of the street lot line, unless wider sidewalks, plazas, or other approved landscaped or open spaces are provided.

Non-residential street-level requirements:
Transparency: 60% of street-facing facade between 2' and 8' shall be transparent, i.e. designed and maintained to allow unobstructed views from outside into structure (or for L/W units into display windows with 30" min. depth).

Non-residential uses shall extend an average depth of 30' and a minimum depth of 15' from street-level street-facing facade.

Non-residential uses at street level shall have a floor-to-floor height of 13' min.

Landscaping and screening standards [23.47A.016]
Green Factor score of 0.30 or greater is required.
Street trees are required and existing street trees retained unless approved by SDOT.

D.3. Table D
Parking garage occupying any portion of the street-level street-facing facade between 5 and 8 feet above sidewalk grade requires:

- A 5-foot-deep landscaped area along the street lot line; or
- Screening by the exterior wall of the structure; or
- 6-foot-high screening between the structure and the landscaped area (Exhibit B for 23.47A.016)

Parking requirements [23.47A.030]

Non-residential uses in urban villages that are not within an urban center or the Station Area Overlay District – *No Minimum Requirement,* if non-residential use is located within 1,320' of a street with frequent transit service, measured as the walking distance from the nearest transit stop to the lot line of the lot containing the non-residential use.

Bicycle Parking required per Table E:
Offices & laboratories: 1 space per 4,000 sq ft long-term; 1 per 40,000 sq ft. short term.

Sales & Services, general: per 12,000 sq ft long term; 1 per 4,000 sq ft short term.

Minimum Bike Parking Requirement for project:
Short Term: (Retail + Office): 4 stalls
Long Term (Retail + Office): 15 stalls
Total: 19 bike stalls required

Parking location & access [23.47A.032]
The following rules apply in NC zones and to Office use in C1 in excess of 35,000 SF, except as provided under subsections 23.47A.032.A.2 and 23.47A.032.D:

a. Access to parking shall be from the alley if the lot abuts an alley improved to the standards of Section 23.53.030.C, or if the Director determines that alley access is feasible and desirable to mitigate parking access impacts.
b. If access is not provided from an alley and the lot abuts only one street, access is permitted from the street, and limited to one two-way curb cut.
c. If access is not provided from an alley and the lot abuts two or more streets, access is permitted across one of the side street lot lines pursuant to subsection 23.47A.032.C, and curb cuts are permitted pursuant to subsection 23.54.030.F.2.a.1.
d. For each permitted curb cut, street-facing facades may contain one garage door, not to exceed the maximum width allowed for curb cuts.

Within a structure, street-level parking shall be separated from street-level, street-facing facades by another permitted use. This requirement does not apply to access to parking meeting the standards of subsection 23.47A.032.A.

Parking shall be screened according to the provisions of Section 23.47A.016

Loading berth requirements and space standards [23.54.035]
Offices, business incubator, and business support services are considered low demand per Table for 23.54.035.A:
For 40,001 to 60,000 sq ft of GFA, 1 loading berths required

THE LIVING BUILDING PILOT PROGRAM

PROJECT VISION (FROM P.5):

THE PROJECT WILL BE A SHOWCASE FOR THE SEATTLE LIVING BUILDING PILOT PROGRAM, DEMONSTRATING HIGH-PERFORMANCE DESIGN AND INCREASED HEIGHT AND FAR EXECUTED IN A WAY THAT IS SENSITIVE TO CONTEXT.

THE LIVING BUILDING CHALLENGE

The Living Building Challenge™ is a building certification program, advocacy tool and philosophy that defines the most advanced measure of sustainability in the built environment possible today and acts to rapidly diminish the gap between current limits and the end-game positive solutions we seek.

The Challenge is comprised of seven performance categories called Petals: Place, Water, Energy, Health & Happiness, Materials, Equity and Beauty. Petals are subdivided into a total of twenty Imperatives, each of which focuses on a specific sphere of influence. This compilation of Imperatives can be applied to almost every conceivable building project, of any scale and any location—be it a new building or an existing structure. *For more information, go to:* http://living-future.org/lbc

SEATTLE LIVING BUILDING PILOT PROGRAM

The goal of the Living Building Pilot Program is to encourage the development of buildings that meet the Living Building Challenge by allowing departures from code requirements that might otherwise discourage or prevent buildings from meeting this standard.

To be eligible for this program, your project must achieve Living Building Challenge full certification, or achieve Petal Recognition, including:

- Achieve at least three of the seven petals (place, water, energy, health, materials, equity, and beauty), including at least one of the following petals: energy, water, or materials.
- Reduce total energy usage by 25 percent, or more of the energy consumed by a standard reference design building as compared to the Seattle Energy Code in effect when you submit your building permit.
- Reduce total building water usage by 75 percent, not including harvested rainwater, as compared to baselines estimated by Seattle Public Utilities or other baseline approved by the Seattle DCI director.
- Capture and use at least 50 percent of stormwater on site.

For more information, go to: http://www.seattle.gov/dpd/permits/greenbuildingincentives/livingbuildingpilot/

PETAL & INTENT

(SELECTED PETALS FOR ILFI PETAL RECOGNITION)

PLACE

The Place Petal clearly articulates where it is acceptable for people to build, how to protect and restore a place once it has been developed, and how to encourage the creation of communities that are once again based on the pedestrian rather than the automobile.

MATERIALS

The intent of the Materials Petal is to help create a materials economy that is non-toxic, ecologically regenerative, transparent and socially equitable.

BEAUTY

The intent of the Beauty Petal is to recognize the need for beauty as a precursor to caring enough to preserve, conserve and serve the greater good.

IMPERATIVES	IMPERATIVE REQUIREMENTS	PROJECT DESIGN APPLICATION
02 – URBAN AGRICULTURE	A narrative describing the methods of agriculture used and an annotated and dimensioned site plan, keyed to I02-1 Narrative, showing agricultural locations, and including a calculation of the agricultural area used to fulfill the Imperative.	The project will provide offsite beekeeping for 1% of project area, and identify the required infrastructure, harvest, and end use.
03 – HABITAT EXCHANGE	For each hectare of development, an equal amount of land away from the project site must be set aside in perpetuity through the Institute's Living Habitat Exchange Program or an approved Land Trust organization.	The ownership team will be participating in a land trust with local ties if possible.
04 – HUMAN POWERED LIVING	Each new project should contribute toward the creation of walkable, pedestrian-oriented communities and must not lower the density of the existing site.	The project is proposing 87 bike stalls and six showers in a shared facility in the building, exceeding the recommendation to provide storage for 15% of occupants.
10 – RED LIST	The project cannot contain any Red List materials or chemicals. Documentation demonstrating a genuine effort to exclude Red List products must be provided. Communications must include requests to the parties supplying, and/or requiring the noncompliant material, as well as the response from those parties.	The integrated project team includes a specifications writer with deep green product specification experience, and a Living Building faciliation consultant; both will assist in vetting materials for red list compliance. Discussions between owner, architect, and contractor regarding the materials selection and vetting process began very early in the project timeline.
11 – EMBODIED CARBON FOOTPRINT	The project must account for the total embodied carbon (tCO_2e) impact from its construction through a onetime carbon offset in the Institute's new Living Future Carbon Exchange or an approved carbon offset provider.	The ownership team will be purchasing a onetime carbon offset to account for the project's embodied carbon impact.
12 – RESPONSIBLE INDUSTRY	The project must advocate for the creation and adoption of third-party certified standards for sustainable resource extraction and fair labor practices.	All timber is to be FSC certified or salvaged and the project will use 1 Declare listed product per 500 sq meters of gross area and send Declare information to 10 non-Declare maufacturers.
13 – LIVING ECONOMY SOURCING	The project must incorporate place-based solutions and contribute to the expansion of a regional economy rooted in sustainable practices, products and services.	The integrated project team is documenting the source of each product listed in the project to meet the travel distance requirements and favor local materials.
19 – BEAUTY & SPIRIT	All projects, regardless of program, must incorporate elements that celebrate local culture. The intent is to deliberately create architecture that contributes to the occupants' and community's sense of place through a connection to the regional vernacular.	The project will contain public spaces that promote reflection and interaction with the building and site. An integrated art and educational experience will be created to tell the story of the site and the Living Building Pilot Program.
20 – INSPIRATION & EDUCATION	Educational materials about the operation and performance of the project must be provided to the public to share successful solutions and to motivate others to make changes.	Interpretive signage will be incorporated into the design to teach visitors about the project, performance goals, major systems and concepts. The material pallette will reflect the industrial history of the site.

THE LIVING BUILDING PILOT PROGRAM

PRELIMINARY WATER ANALYSIS | CONSUMPTION & WATER BALANCE – LBPP COMPLIANCE

STUDY OVERVIEW

The purpose of this early water study for Titan Office Building is to evaluate how effective current design strategies are relative to the LBPP performance goals. The two primary requirements address potable water consumption and stormwater mitigation. Our analysis involves a year long simulation of rainfall conditions as well as typical building demand schedules. Based on the simulation and typical assumed values for occupant behavior we can predict that the building is on track to meet the 75% potable water reduction requirement, while using more than 50% of the stormwater on-site per LBPP. The study is based on an assumed occupancy of 368 occupants in the commercial portion of the building, or approximately 130 SF/person. The retail portion spaces have been excluded.

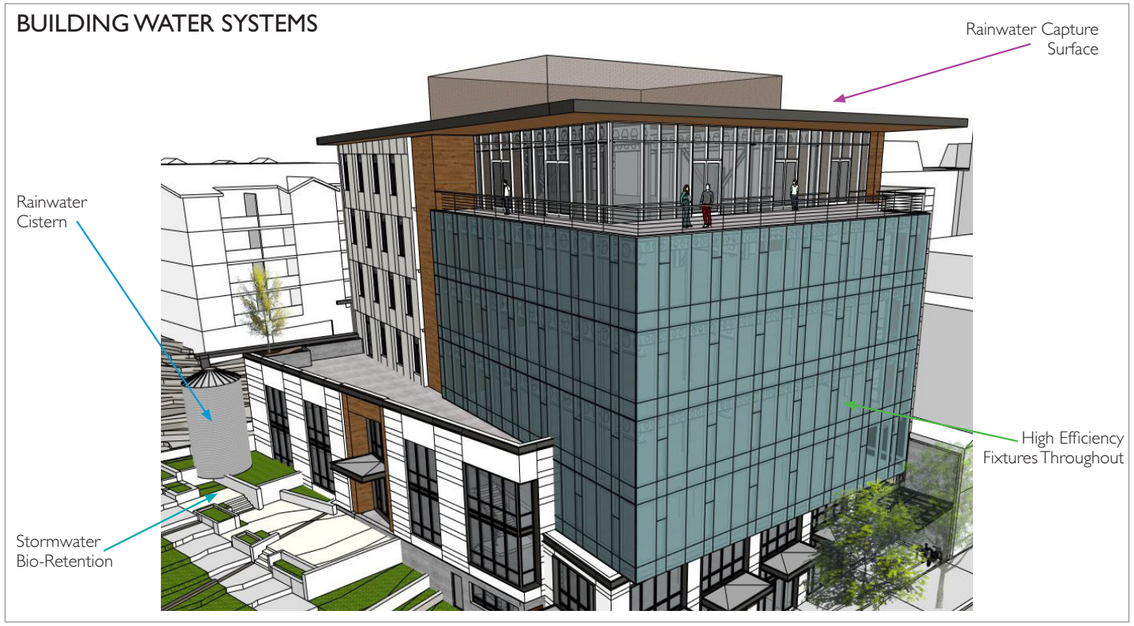
WATER SAVINGS STRATEGY

The primary approach for this building, as designated by early design team meetings and the decision to pursue the Living Building Pilot Program under the Seattle energy code, is to reduce internal water demand as far as reasonably possible. The project has selected some of the highest efficiency fixtures for all types including pint flush urinals, low flow shower heads and faucets, and best available WC's.
In the proposed design, potable water consumption will be further reduced by employing a large rainwater catchment system, supplying otherwise wasted fresh water to demand categories that don't inherently require municipal potable water (e.g. toilet flushing).

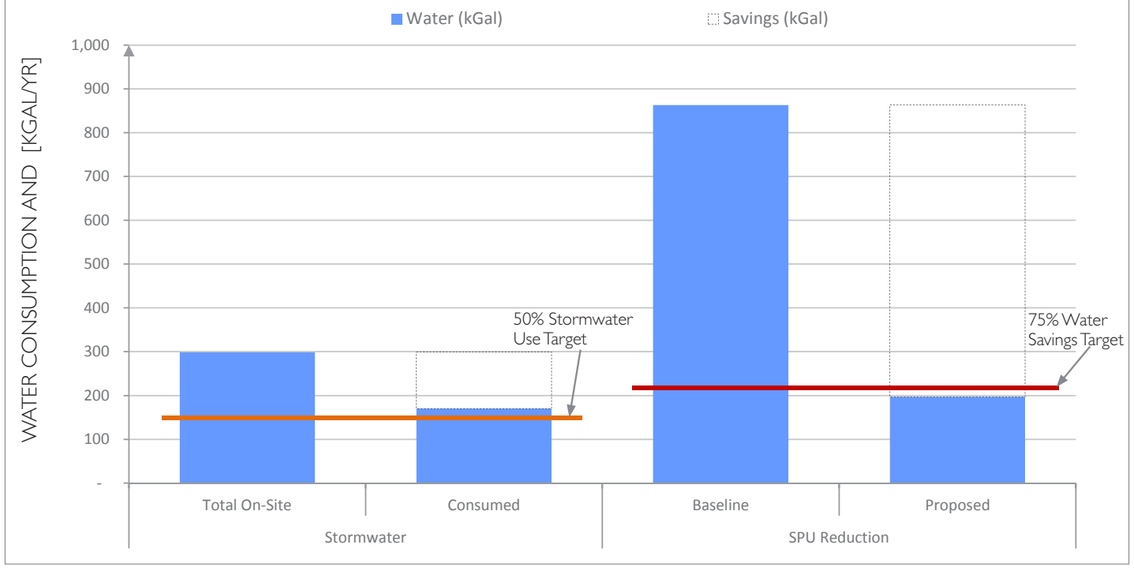
LBPP BENCHMARKS

The Baseline water demand for this study was determined using the Seattle Public Utilities 2030 District water use baseline for office buildings. For comparison, the fixture flow rates in the table to the far right are compared to LEED baseline figures. According to the Seattle 2030 District values a typical office building consumes 14.21 kGal/SF/yr or just over 5 gallons per day per person. Comparatively the proposed design is predicted to reduce potable water consumption by 77%. In line with preliminary discussions with the City of Seattle the baseline has been adjusted slightly to include provisions for end of trip shower facilities in the building. Such facilities are very much non-standard in commercial office buildings which make up the SPU Baseline value, while encouraging low impact and active transportation is a core part of Titan's sustainability strategy. Additionally the current calculation includes a provision for irrigating the right of way plantings. As this is a public space we would prefer to exclude this from the buildings' total water balance. The project will also capture and use around 57% of the stormwater that falls on site thanks to the large rainwater capture area and 20kGal cistern. Additionally stormwater from the site and the adjacent bridge will be directed through a bio-retention area to mitigate runoff.

BUILDING WATER SYSTEMS



LIVING BUILDING PILOT PROGRAM BENCHMARKS

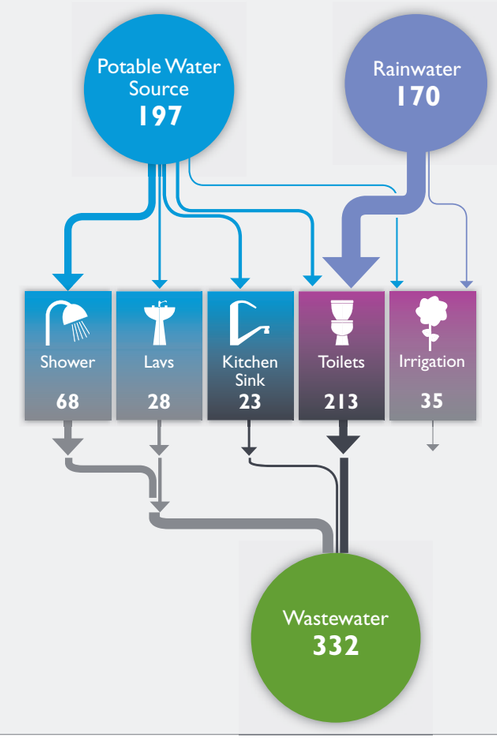


DESIGN ASSUMPTIONS

PARAMETER	LBPP BASELINE	ALT 1
Office Floor Area	52,000 SF	52,000 SF
Occupants	-	368
Roof Collection Area	-	9,800 SF
Water Closet	1.6 GPF	1.28 GPF
Urinals	1.0 GPF	0.125 GPF
Lavatory Faucet	0.5 GPM 30 second cycle	0.5 GPM 12 second cycle
Shower	2.5 GPM	1.5 GPM
Kitchen Sink	2.2 GPM	1.8 GPM
Irrigation	-	High Efficiency Rotor Sprinklers
TOTAL DEMAND (kGal/yr)	863	197

PROPOSED DEMAND & FLOW DIAGRAM

192,000 GALLONS POTABLE WATER PER YEAR



THE LIVING BUILDING PILOT PROGRAM

PRELIMINARY ENERGY ANALYSIS | ENERGY MODEL – LIVING BUILDING PILOT PROGRAM

RESULTS SUMMARY

A preliminary energy study was completed to understand how the Titan project could comply with the Living Building Pilot Program (LBPP) requirements under the 2012 Seattle Energy Code (SEC). At this stage, our goal is to exceed the SEC Baseline performance by 30%. The current Proposed design was tested against a code-compliant Baseline model resulting in energy savings of 33%.

The analysis was conducted using IES energy modelling software and a full 8760 hour thermal simulation for the SEC Baseline, and Proposed Design energy models. The proposed model includes a VRF heat pump system with a Dedicated Outside Air System (DOAS) and high efficiency heat recovery. The baseline model includes the SEC required system of VAV with parallel fan power boxes and electric reheat.

Outside of the HVAC system, significant savings are shown in the Proposed case with improvements to the lighting design. LED fixtures allow the design team to target a much lower lighting power density (LPD) of around 0.6 W/SF.

MODEL ASSUMPTIONS

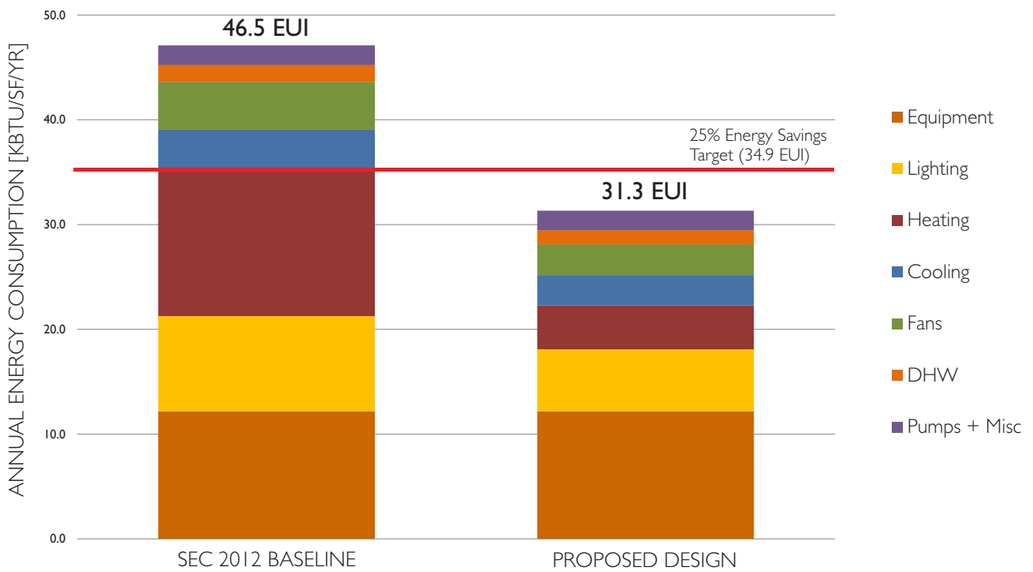
Key inputs used in the Baseline and Proposed models are tabulated at the right. The modelling approach and Baseline model is based on SEC section C407 Total Building Performance values and schedules. The Proposed model inputs are based around the DD level documentation. Where information was not provided by the team or was unknown at this stage of the design, reasonable assumptions were made and noted.

NEXT STEPS

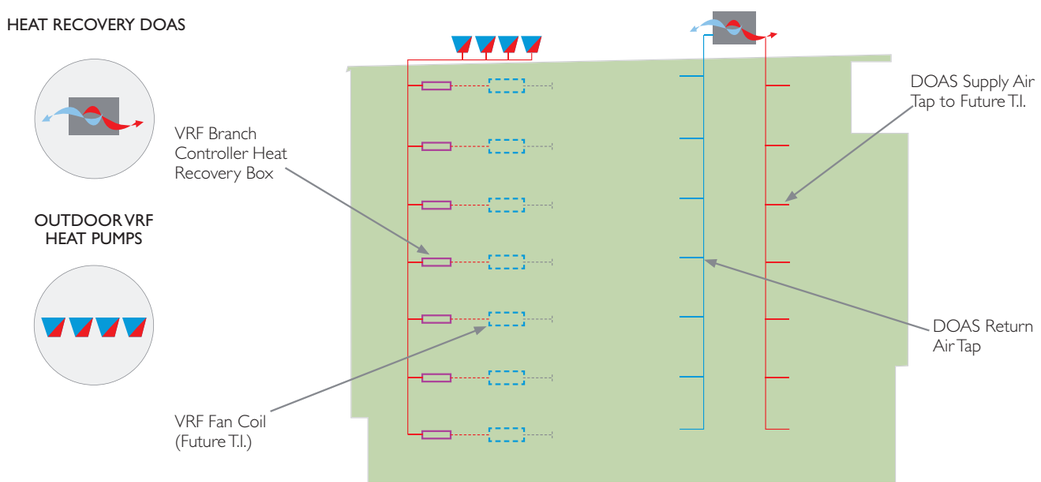
This study offers a preliminary look at current energy savings in the proposed design. As the final compliance under the LBPP is based on actual energy performance, it is especially important to continue to improve the accuracy of the assumptions used in the energy model.

Ideally the model corresponding to the final design should indicate a minimum of 30% improvement over the standard reference case, so as to insure that there is a 5% buffer for actual energy performance measured by the LBPP.

ANNUAL ENERGY CONSUMPTION
ENERGY USE INTENSITY – KBTU/SF/YR



HVAC SYSTEM DIAGRAM



KEY ENERGY MODEL INPUTS

ENVELOPE	BASELINE	PROPOSED
Roof	U-0.026	Same as baseline
Walls, above grade	Steel framed, U-0.055	U-0.044
Floors	Steel joists, U-0.029	Same as baseline
Slab on grade	Unheated, F-0.520	Same as baseline
Window to wall ratio	30%	38%
Glazing U-value	Metal framed, U-0.38	Same as baseline
Glazing SHGC	0.35	Same as baseline

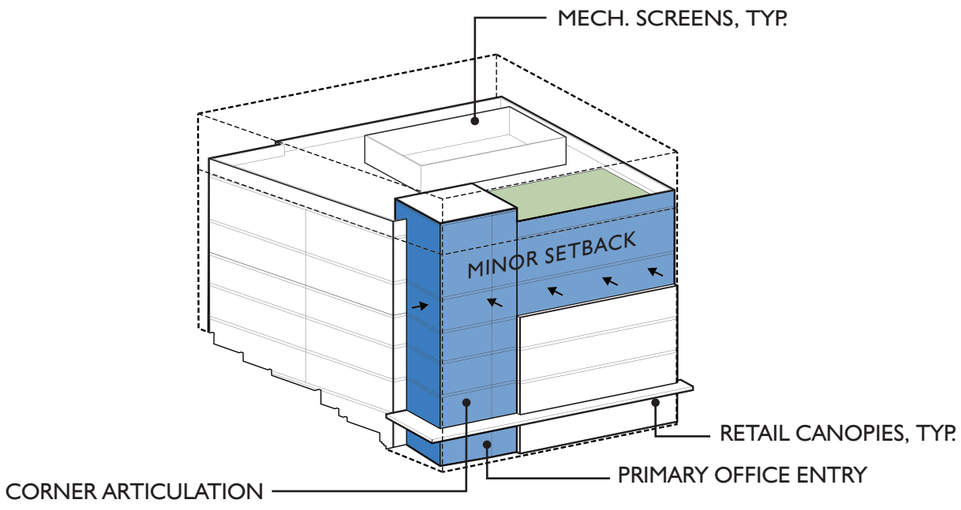
INTERNAL GAINS	BASELINE	PROPOSED
Lighting [W/ft^2]	Corridor: 0.66 Office: 0.98 Lobby: 0.90 Elec/Mech: 0.95 Stairway: 0.69 Restrooms: 0.98	Corridor: 0.66 Office: 0.60 Lobby: 0.80 Elec/Mech: 0.7 Stairway: 0.69 Restrooms: 0.7
Equipment [W/ft^2]	Office: 1.5	Same as baseline
Schedule	SEC Office	Same as baseline
Density [ft^2/person]	Office: 120	Same as baseline

HVAC SYSTEM	BASELINE	PROPOSED
System type	System 3: Packaged VAV w/ PFP boxes & electric reheat	Air cooled VRF
Ventilation Type	Constant volume	DOAS
Ventilation flow rate	Same as Proposed	12,000 CFM
Heating	Packaged VAV w/ PFP boxes & electric reheat	3.54 COP
Cooling	Direct expansion 3.125 COP	3.34 COP
Energy recovery	No	70% HRV
Economizer	Yes	No

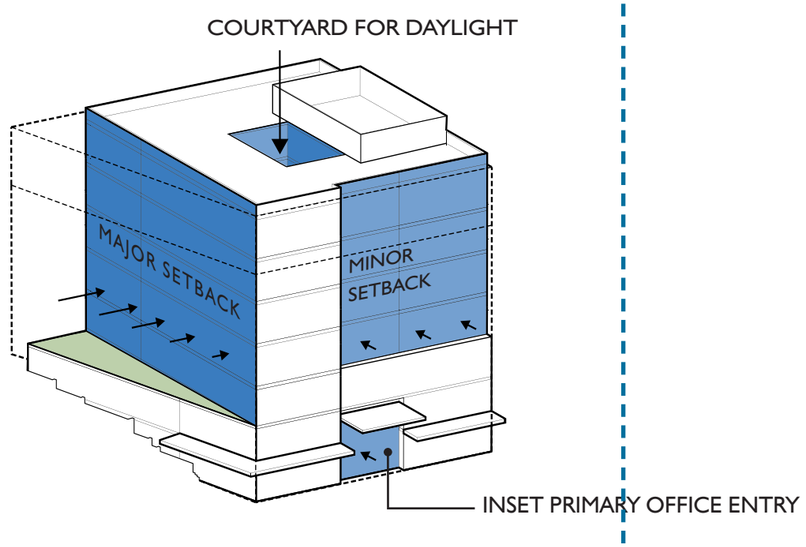
OTHER END USES	BASELINE	PROPOSED
Domestic hot water	1.4 kBtu/SF/yr (CarQuest)	Condensing gas boiler
Elevators	0.4 kBtu/SF/yr (CarQuest)	Same as baseline

EDG MASSING SCHEME ALTERNATES

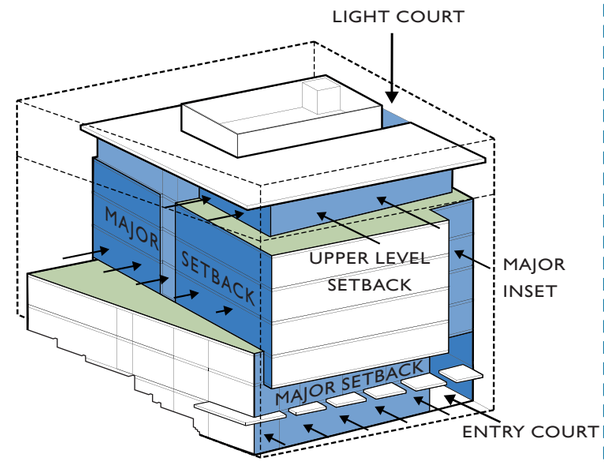
SCHEME A

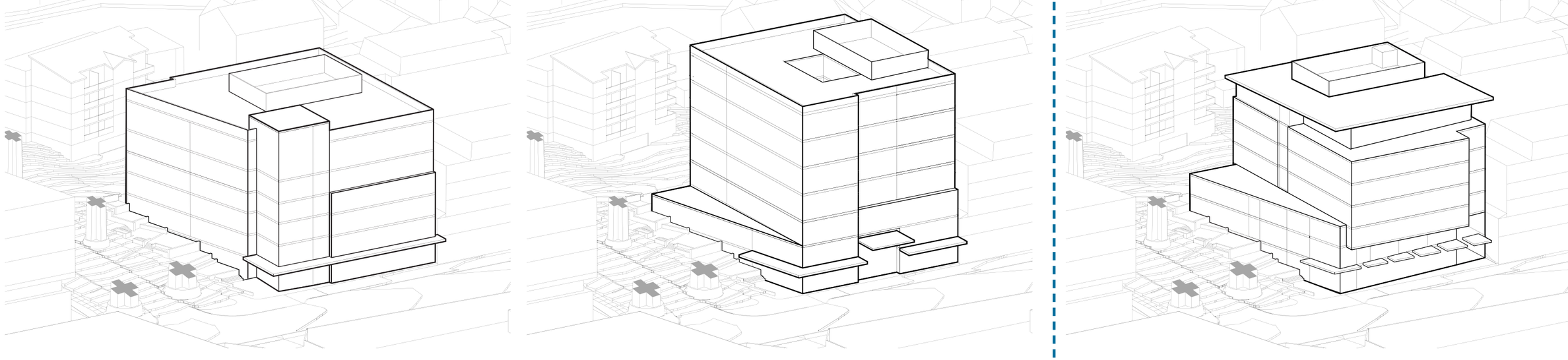


SCHEME B



SCHEME C – PREFERRED





LEGEND

SETBACK/MODULATION

OUTDOOR AMENITY SPACE

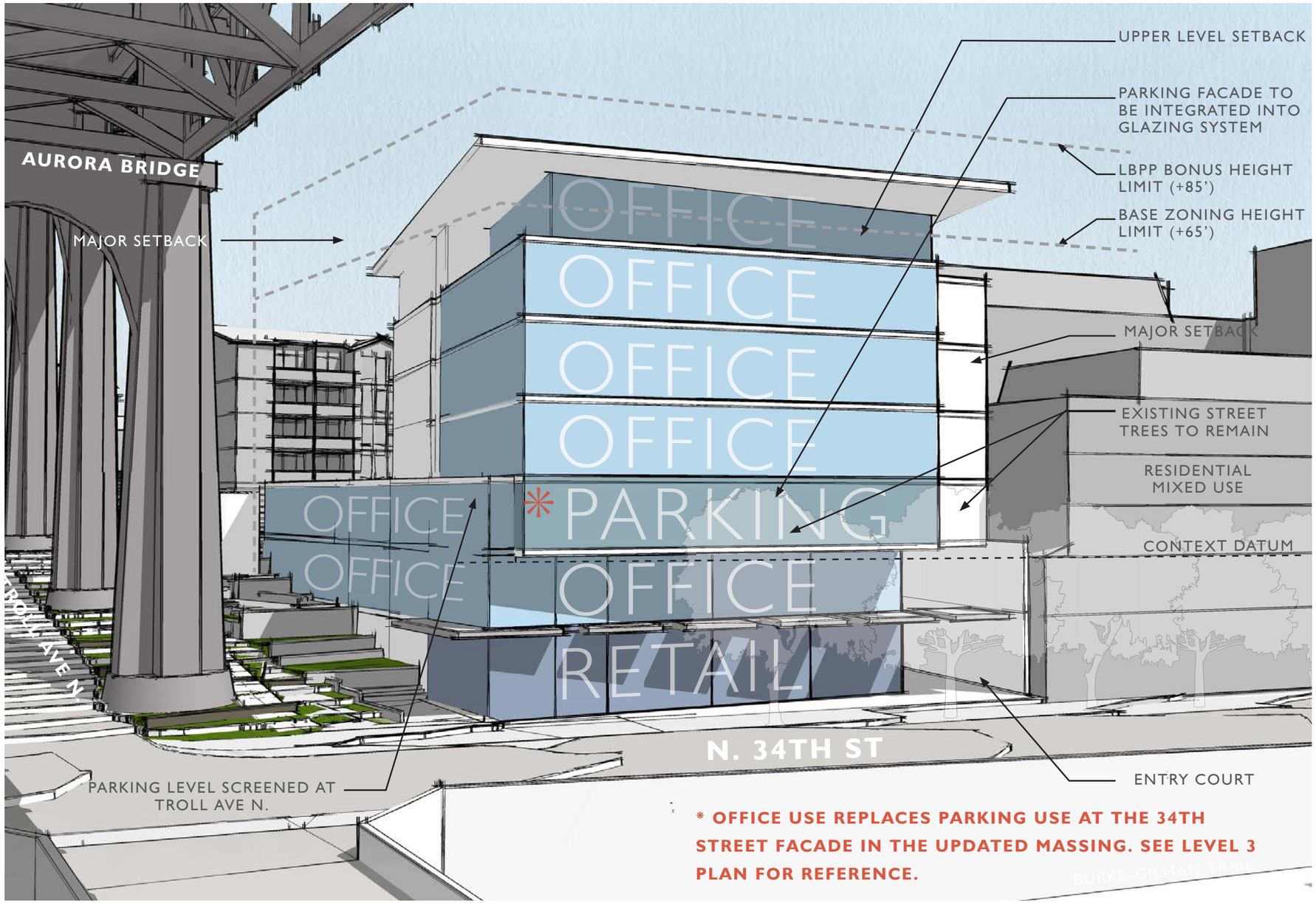
SUPPORTED MASSING SCHEME

PREFERRED SCHEME C FROM AUGUST 8TH EDG

1. MASSING/DESIGN CONCEPT:

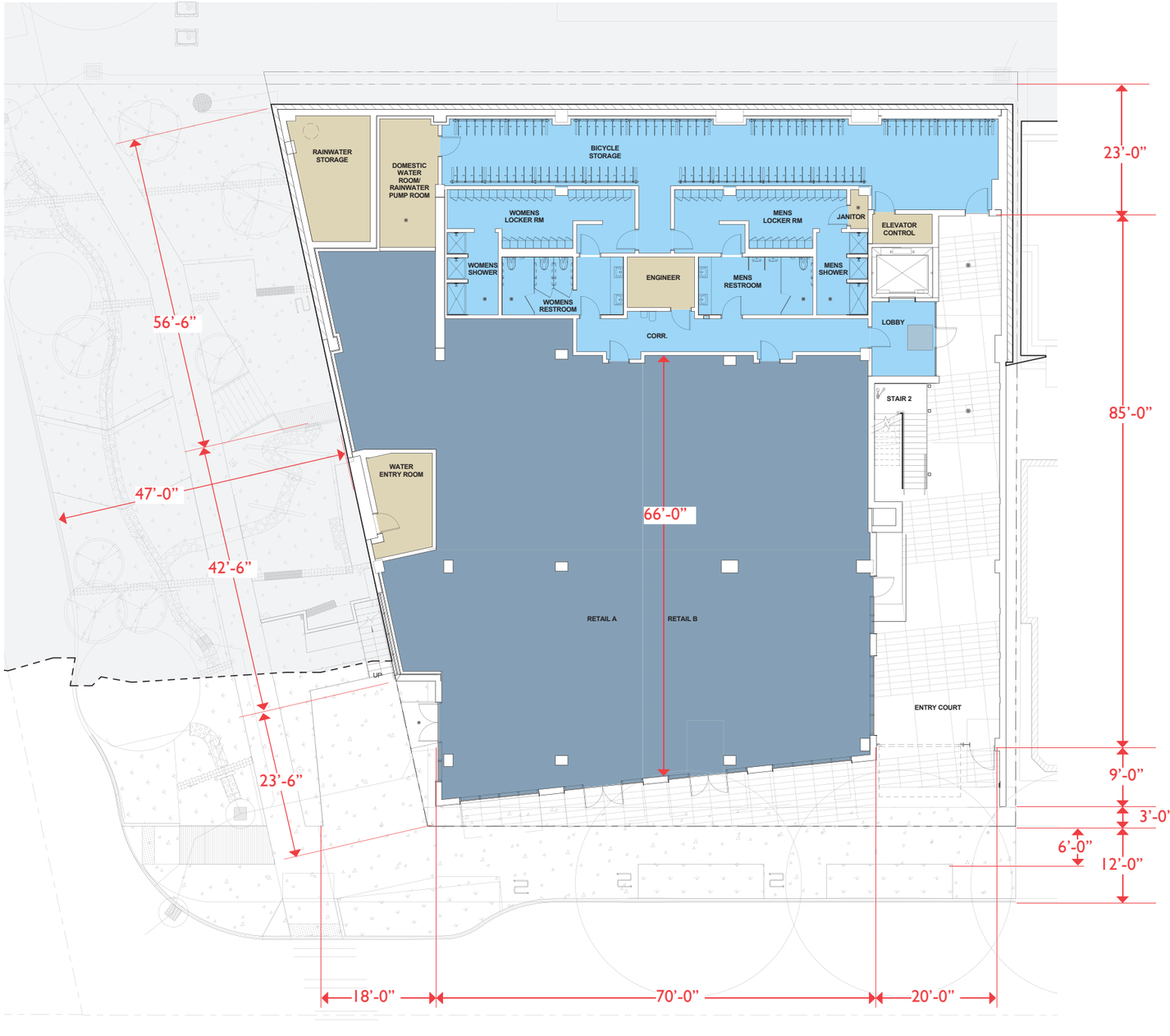
The Board echoed public's support for a living building concept and pursuing the green building pilot program. The Board expressed unanimous support for the preferred option with the following guidance:

- The preferred option was the most interesting massing form which responded the topography changes and surrounding site context. CS1-B, CS1-C, CS2-B-1, DC2-A
- Agreed with public comment to support the narrowing of the upper massing as this reduced the height, bulk, and scale, as well as, reducing shading. B-2, CS2-D, DC2-A
- Supported the proposed ground floor along both Troll Ave and N 34th Street, noting the opportunities to activate the open space along Troll Ave. CS2-B
- Agreed that the rotated setback along Troll Ave was positive and created further visual interest at the corner. CS2-C
- Agreed with public comment and supported the building mass opening towards the adjacent courtyard to the east maintaining light and air access into the adjacent courtyard space. CS2-D
- Supported proposed massing noting the additional FAR was integrated into the overall design and created an appropriate height, bulk, and scale at this site; creating an interesting form which accommodated the living building construction. CS1-A-1, CS2-D
- **With the next submittal, provide a window/privacy study and sections to clarify the relationship of the proposed building with adjacent buildings (east building adjacency) CS2-D-5** *SEE PAGES 28-30 FOR RESPONSE*
- **With the next submittal, provide information on how the east blank walls will be treated and further detail of the north wall at the alley. DC2-B-2** *SEE PAGES 28-30 FOR RESPONSE*



OVERVIEW FROM SOUTHWEST

GROUND FLOOR PLAN



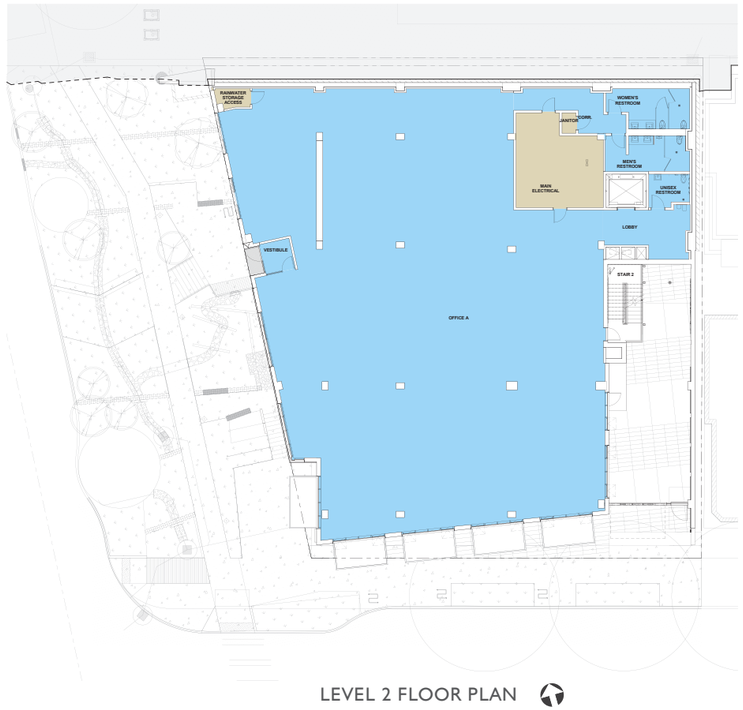
MECH. / PARKING

STORAGE

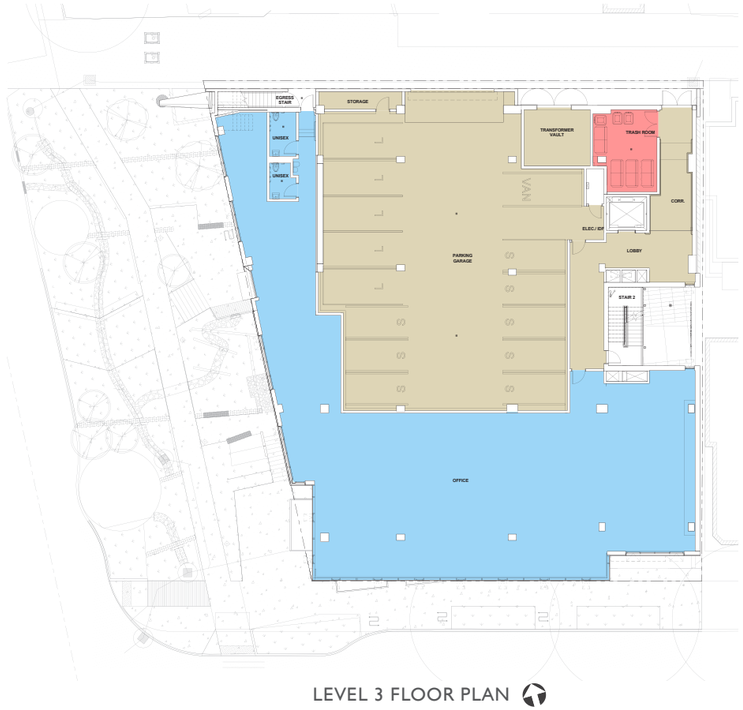
OFFICE USE

RETAIL USE

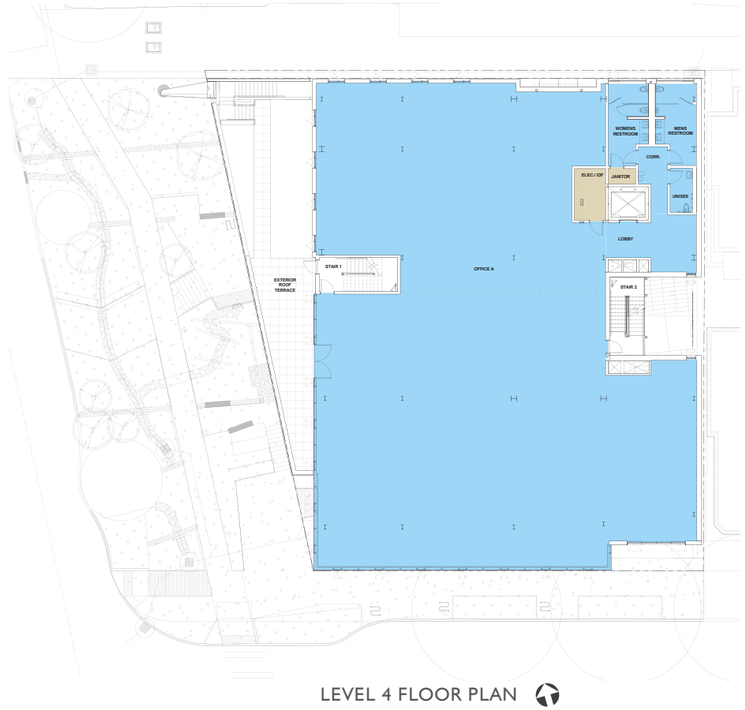
FLOOR PLANS



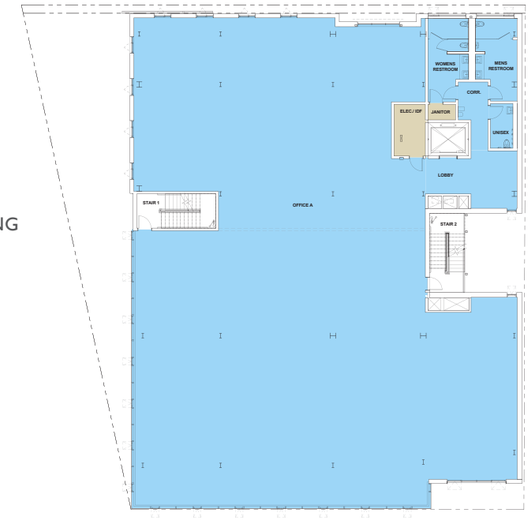
LEVEL 2 FLOOR PLAN



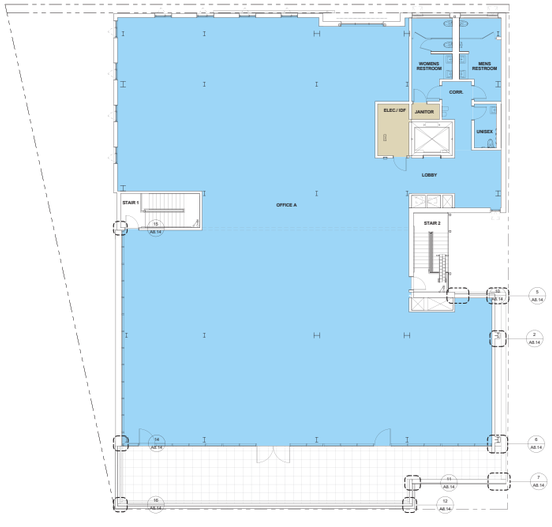
LEVEL 3 FLOOR PLAN



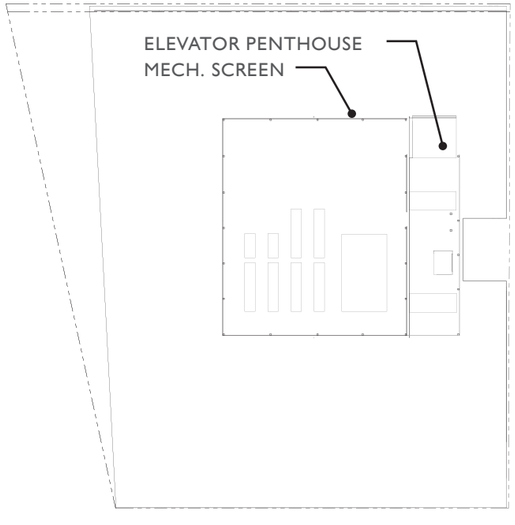
LEVEL 4 FLOOR PLAN



LEVEL 5-6 FLOOR PLAN



LEVEL 7 FLOOR PLAN



ROOF PLAN

MECH. / PARKING

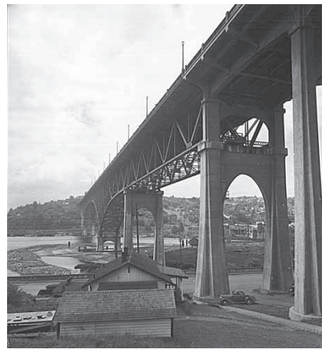
STORAGE

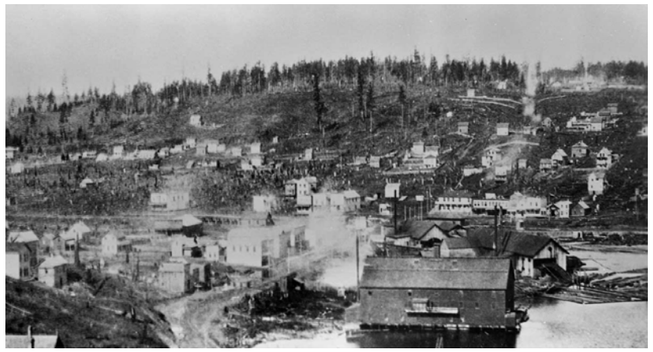
OFFICE USE

RETAIL USE

PROPOSED DESIGN

VIEW FROM SOUTHWEST





HISTORICAL CONTEXT– The overall material palette is informed by the historic context of the site. The industrial past of this area of Fremont live on in the honest use of wood, steel and concrete to create a backdrop for the vibrant activity in the neighborhood. Natural, non-toxic materials create a healthy environment that support the goals of the Living Building Pilot Program and brings occupants closer to the predevelopment conditions of the forest that once flourished on the site.

The proposed design expresses an honesty of structure by using castellated steel beams that pay homage to the iconic structure of the Aurora Bridge and it's unique concrete and steel framework. Cedar cladding and soffits create warmth and draw a connection to the former forest lining the northern shores of Lake Union.

CS1-A-1 ENERGY CHOICES At the earliest phase of project development, examine how energy choices may influence building form, siting, and orientation, and factor in the findings when making siting and design decisions.

BOARD DIRECTION AT EDG: The Board indicated preliminary support for the departure granted the additional FAR continues to be utilized to accommodate the living building systems, which inform the overall building design.

APPLICANT RESPONSE: By participating in the Living Building Pilot Program, the project has committed to a 25% reduction in energy below the Seattle Energy Code baseline. The south and west-facing glazed facades will use electrochromic glass to reduce heat gain and glare, and contribute to overall energy efficiency. The viability of PV panels on the roof has been analyzed, and infrastructure for future panels will be in place as required by the Seattle Energy Code.

PROPOSED DESIGN

CS2-D-5 RESPECT FOR ADJACENT SITES Respect adjacent properties with design and site planning to minimize disrupting the privacy of residents in adjacent buildings.

BOARD DIRECTION AT EDG: With the next submittal, provide a window/privacy study and sections to clarify the relationship of the proposed building with adjacent buildings (east building adjacency.)

APPLICANT RESPONSE: We conducted a study of the windows of the adjacent residential building to the east in both plan and section. The project responds to this proximity first through the massing of the eastern light court, referencing the adjacent building's courtyard and providing relief and additional sunlight. Also, the patterning in the east party wall of our project has been developed to provide visual interest for the neighbors.(See pages 24-25)

STREET FRONTAGE ALONG N. 34TH STREET

VIEW FROM THE SOUTH EAST

TROLL AVENUE DESIGN

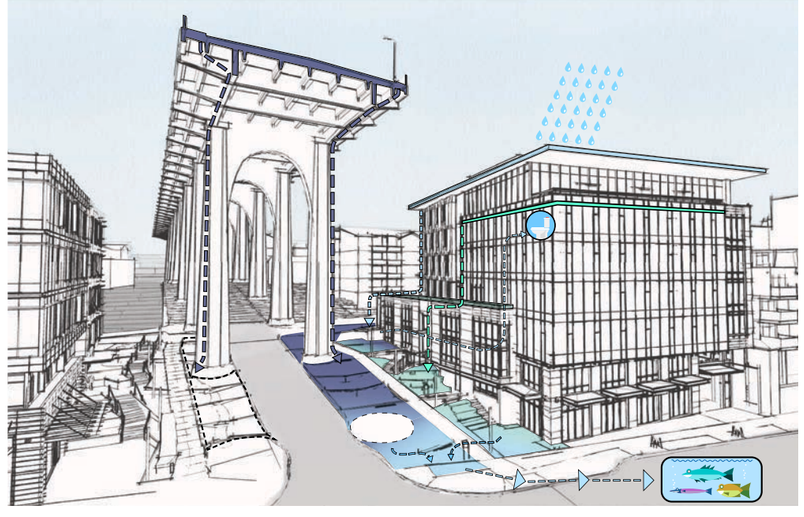
VIEW FROM SOUTHWEST

CS1-E-2 ADDING INTEREST WITH PROJECT DRAINAGE Use project drainage systems as opportunities to add interest to the site through water-related design elements.

BOARD DIRECTION AT EDG: The Board supported the innovative strategies of incorporating Stormwater treatment into the site design, however, echoed the public's concerns related to the viability and functionality of the proposed Stormwater design and landscaping.

APPLICANT RESPONSE: The project will capture rainwater falling on the large overhanging roof, and deliver this to a detention tank for non-potable reuse in the building (toilets and irrigation). The rainwater capture is celebrated through activated rain leaders on the north facade, and with a water feature inset at the northwest corner of the project, facing the Troll Ave sidewalk.

The design of the ROW adjacent to the building on the east will voluntarily treat Troll Ave and SR-99 runoff through bio-swales and bio-retention before the water is discharged to the dedicated storm sewer. The bio-retention scheme has been developed since EDG through collaboration between the civil engineer and landscape architect.



TROLL AVENUE EXPERIENCE

VIEW AT ALLEY & TROLL AVENUE – LOOKING SOUTH

PL1-B-3 PEDESTRIAN AMENITIES Opportunities for creating lively, pedestrian oriented open spaces to enliven the area and attract interest and interaction with the site and building should be considered.

BOARD DIRECTION AT EDG: The next submittal should include perspectives from the pedestrian viewpoint to provide a clear picture of the experience of the pedestrian as they move up/down along both Troll Ave. and N. 34th street.

The Board supported this departure granted the proposed design made the public realm and right of way improvements a priority along this reduced transparent façade, which would activate this edge and serve as a gateway.

APPLICANT RESPONSE: Pedestrian-level perspectives in both directions on Troll Ave and N 34th Street are provided in the packet.

The architecture and landscape design at grade integrates public and private infrastructure, especially at the primary and secondary building entries and plazas. Signage, lighting, hardscape and planting contribute to a comprehensive streetscape design with good interaction with pedestrians.

Ample space is provided for pedestrian flow and circulation at the SW corner sidewalk crossing in both directions, where heavy pedestrian traffic is anticipated in the future.

VIEW AT TROLL AVENUE – LOOKING NORTH

N. 34TH STREET DESIGN

VIEW FROM SOUTHWEST

VIEW FROM SOUTHEAST

CS2-C-1 CORNER SITES Corner sites can serve as gateways or focal points; both require careful detailing at the first three floors due to their high visibility from two or more streets and long distances.

BOARD DIRECTION AT EDG: Agreed that the rotated setback along Troll Ave was positive and created further visual interest at the corner.

APPLICANT RESPONSE: As the project has been developed between EDG and Recommendation, the corner "node" has been further emphasized through the expanded hardscape design at the pedestrian crossing and connection to the outdoor plaza associated with the SW corner retail.

N. 34TH STREET EXPERIENCE

PL1-A-2 ADDING TO PUBLIC LIFE Seek opportunities to foster human interaction through an increase in the size and quality of project-related open space available for public life.

BOARD DIRECTION AT EDG: The next submittal should include perspectives from the pedestrian viewpoint to provide a clear picture of the experience of the pedestrian as they move up/down along both Troll Ave. and N. 34th street.

The Board supported this departure granted the proposed design made the public realm and right of way improvements a priority along this reduced transparent façade, which would activate this edge and serve as a gateway.

APPLICANT RESPONSE: Pedestrian-level perspectives in both directions on Troll Ave and N 34th Street are provided in the packet. The transparency departure (#4) is no longer being pursued, however high priority is still given to the right of way improvements along Troll Avenue, with activation through the ground-floor retail and secondary office entries, with stairs and accessible entries.

VIEW AT ALLEY & TROLL AVENUE–LOOKING SOUTH

N. 34TH STREET EXPERIENCE

ENTRY COURT AND RETAIL

PL2-B-3 STREET-LEVEL TRANSPARENCY Ensure transparency of street-level uses (for uses such as nonresidential uses or residential lobbies), where appropriate, by keeping views open into spaces behind walls or plantings, at corners, or along narrow passageways.

BOARD DIRECTION AT EDG: The next submittal should include perspectives from the pedestrian viewpoint to provide a clear picture of the experience of the pedestrian as they move up/down along both Troll Ave. and N. 34th street.

APPLICANT RESPONSE: The pedestrian-level perspectives in this packet show the experience moving up and down Troll Avenue, as well as across N 34th Street. Street-level uses are enhanced with views into and out of spaces, and enhanced by the landscape design.

N. 34TH STREET EXPERIENCE - ENTRY COURT

CS2-B-2 CONNECTION TO THE STREET Identify opportunities for the project to make a strong connection to the street and public realm.

BOARD DIRECTION AT EDG: The Board commented that the gate should be thoughtfully designed and remain open during business hours.

APPLICANT RESPONSE: The gate design has been developed and designed to contribute to public space through porosity and an illustrative pattern depicting the character and land forms of the neighborhood, both in daytime hours when it will be open and nighttime hours when it will be closed. (See page 36 for more details.)

CS3-B-1 PLACEMAKING Explore the history of the site and neighborhood as a potential placemaking opportunity. Look for historical and cultural significance, using neighborhood groups and archives as resources.

BOARD DIRECTION AT EDG: The Board encouraged the applicant to explore how materials and design details could create further connection to Fremont's unique neighborhood character.

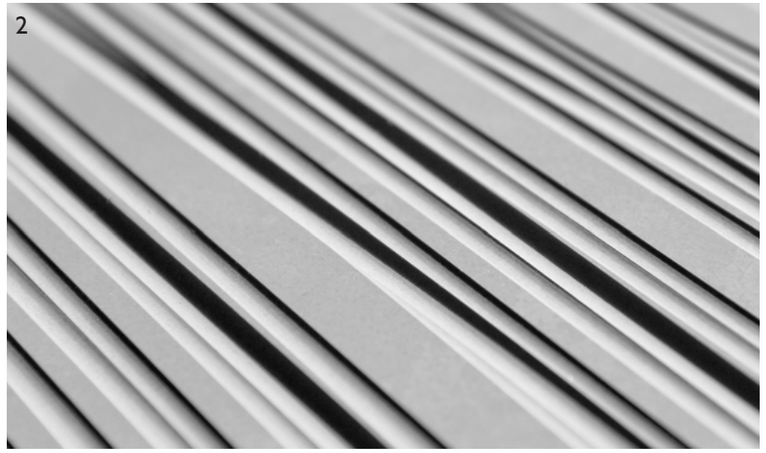
APPLICANT RESPONSE: The stained cedar used on the façade references the site's mill past as an integral part of the Seattle lumber industry. The gabion walls in the landscape design are a nod to the earthmoving project to raise N 34th street to today's current elevation.

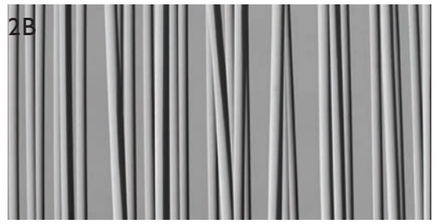
Weathering steel is used in the water feature, the entry court, and entry gate to highlight the passage of time and provide patina in contrast with smoother textures.

ENTRY COURT AND RETAIL

MATERIALS / ELEVATIONS

MATERIAL PALETTE





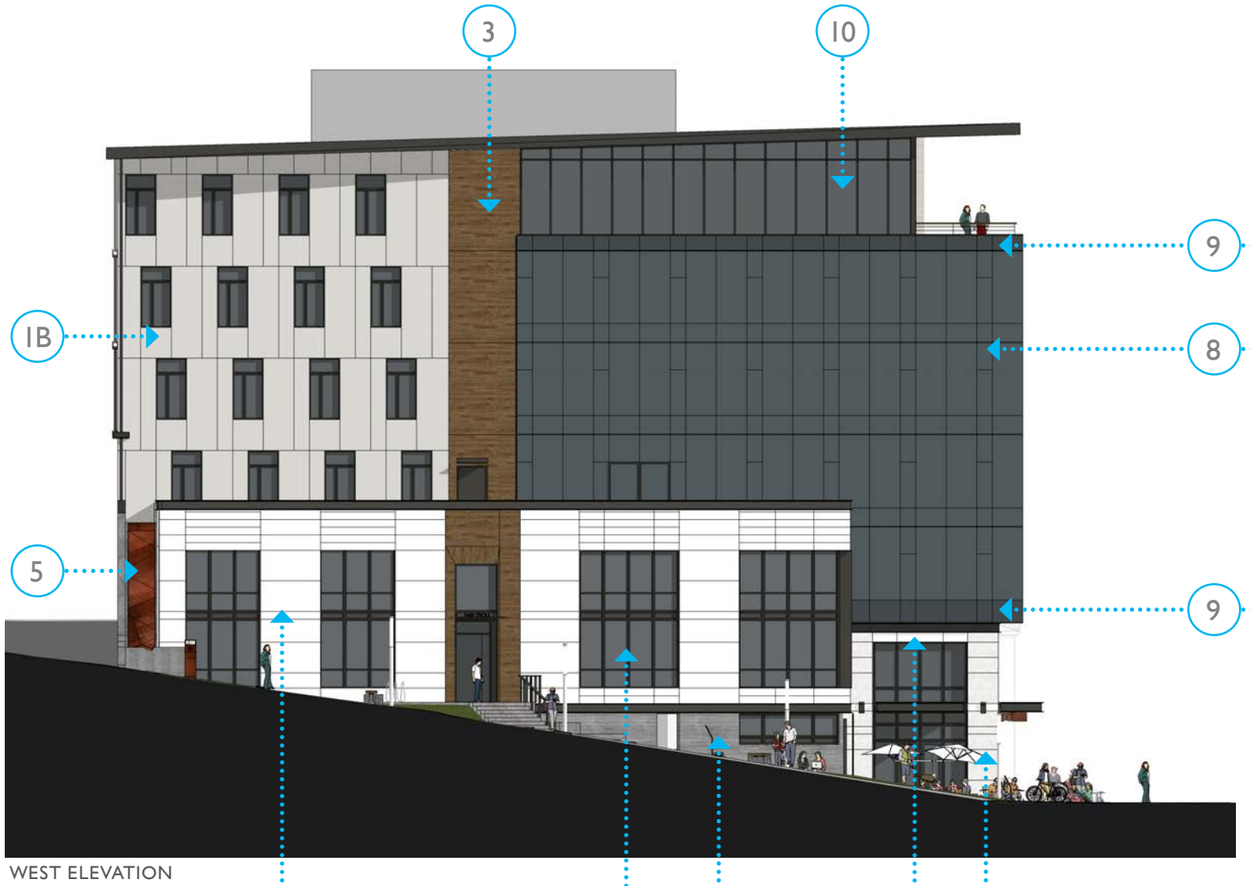
1: HIGH DENSITY FIBER CEMENT PANEL – THROUGH COLOR
2: HIGH PERFORMANCE CONCRETE PANEL – THROUGH COLOR

3: HORIZONTAL WOOD OR METAL CLADDING
4: CONCRETE – BOARD FORMED
5: WEATHERING STEEL
6: STEEL – PAINTED BLACK
7: CONCRETE MASONRY – NATURAL COLOR, SMOOTH & SPLIT FACED

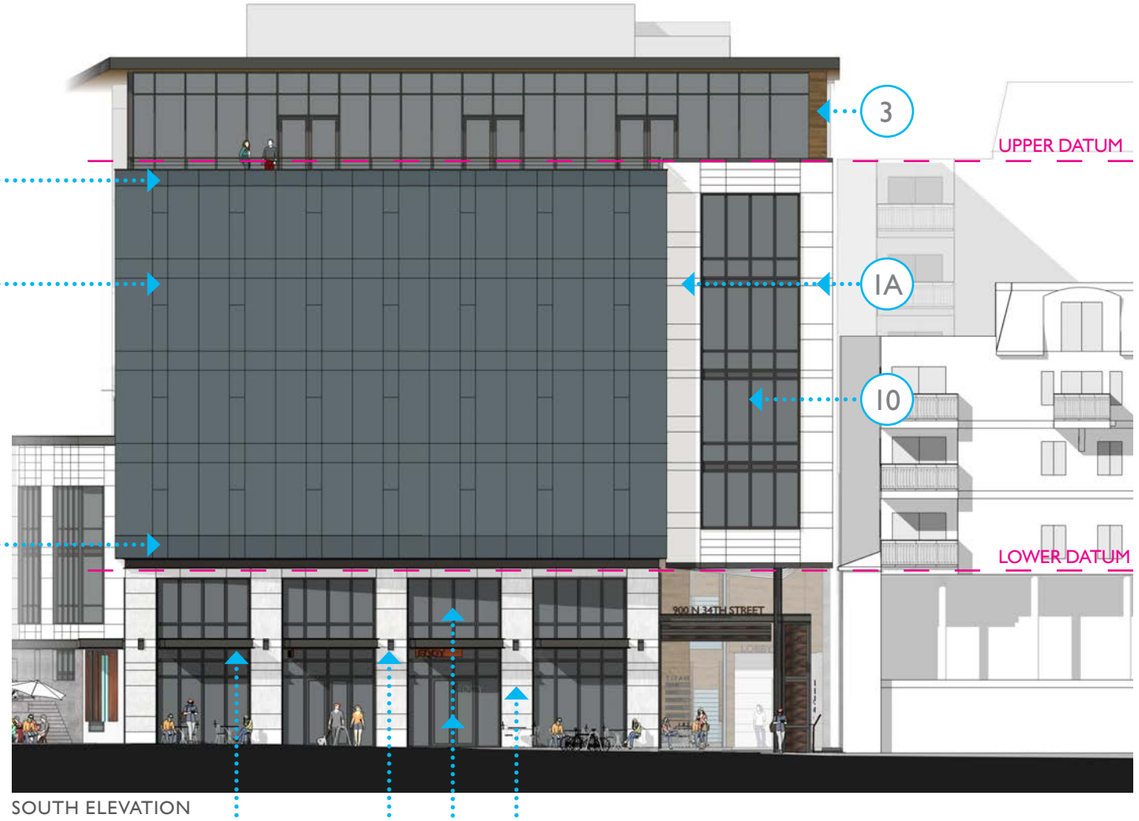
GLAZING COLORS:

8: CURTAIN WALL, ELECTROCHROMIC GLASS (STRUCTURAL SILICONE GLAZED)
9: CURTAIN WALL, CHARCOAL SPANDREL GLASS (STRUCTURAL SILICONE GLAZED)
10: CURTAIN WALL, SOLARBAN 60 GLASS (BLACK ALUMINUM FRAMES)

ELEVATIONS

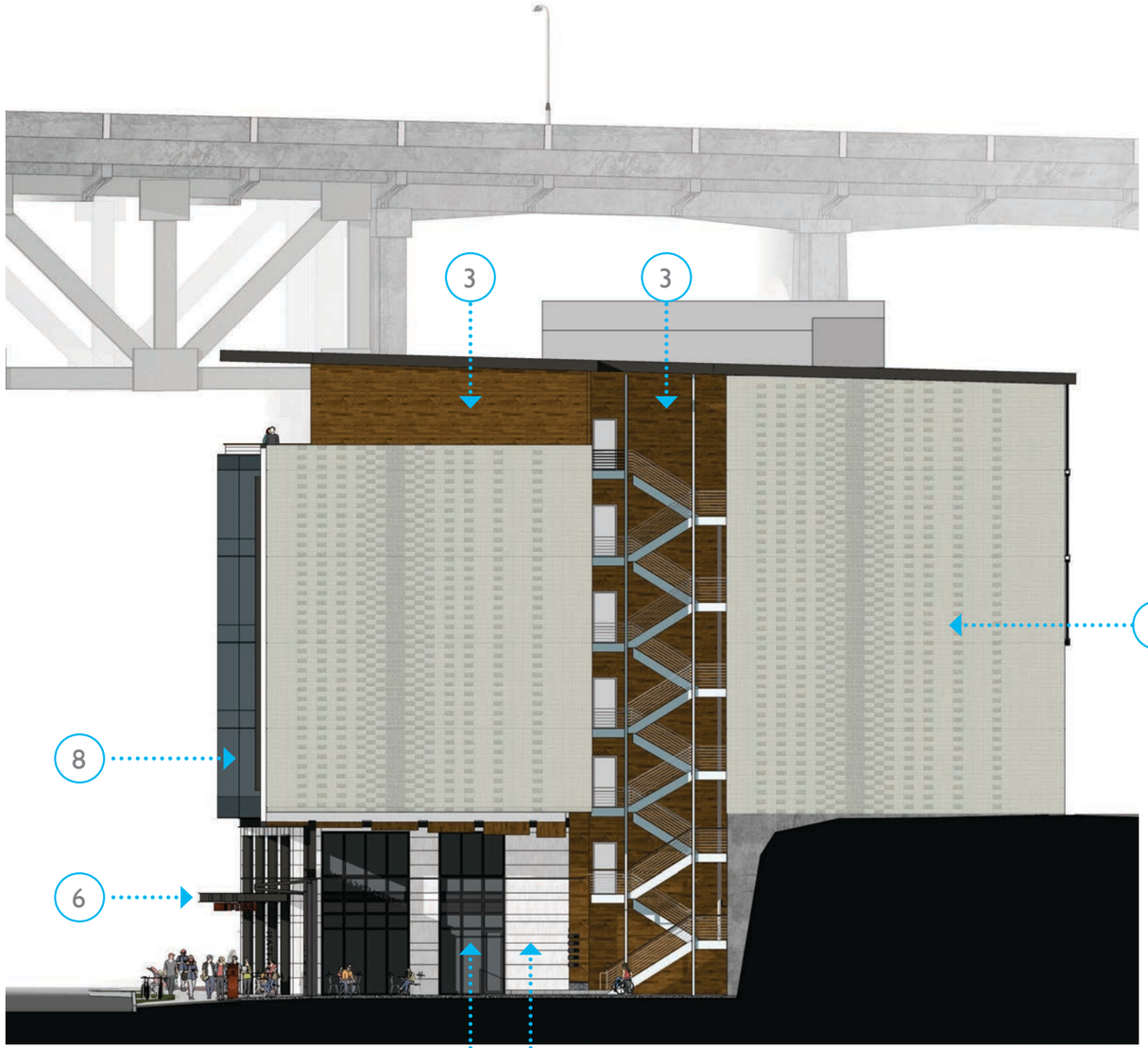


WEST ELEVATION

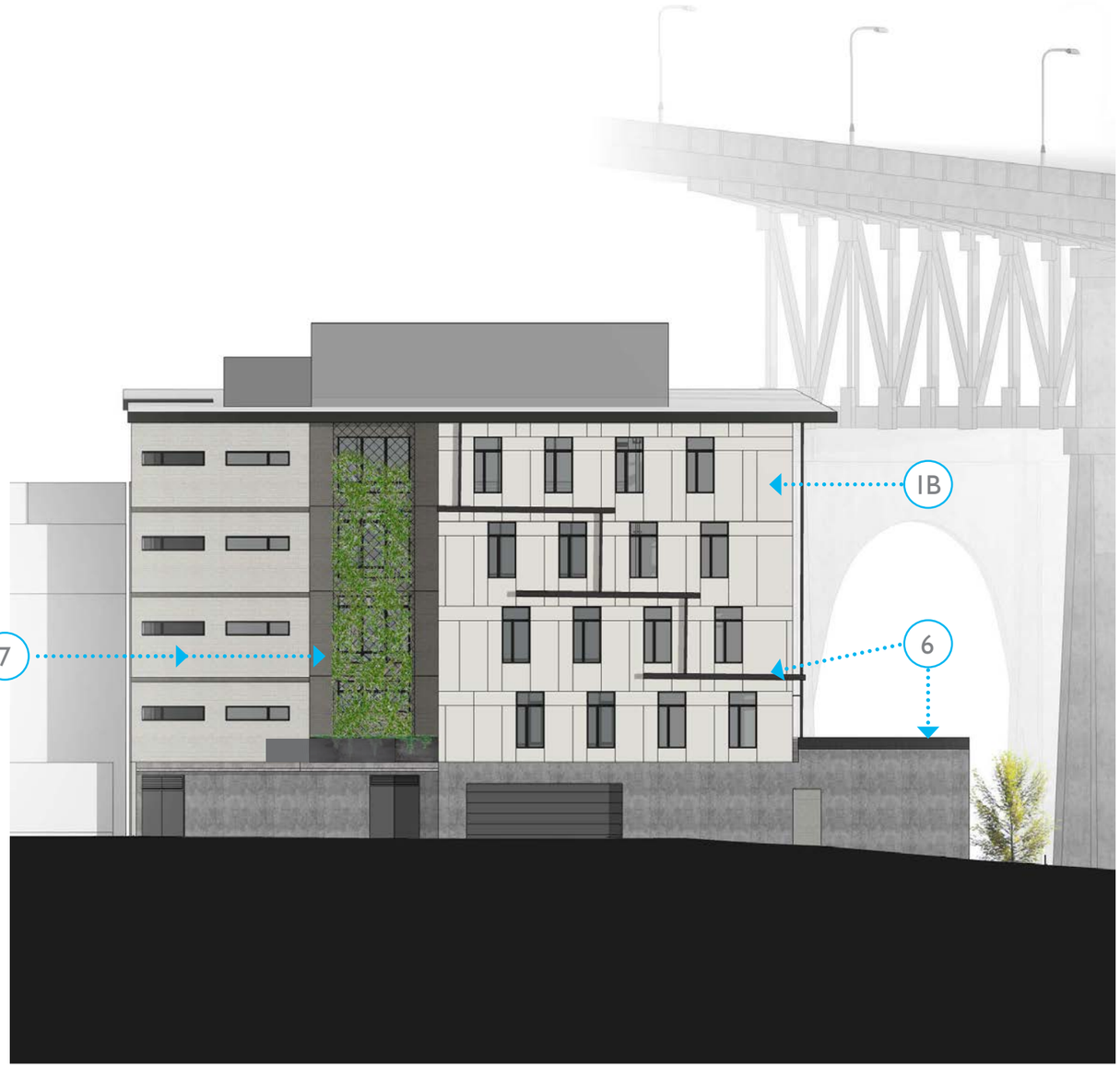


SOUTH ELEVATION

ELEVATIONS



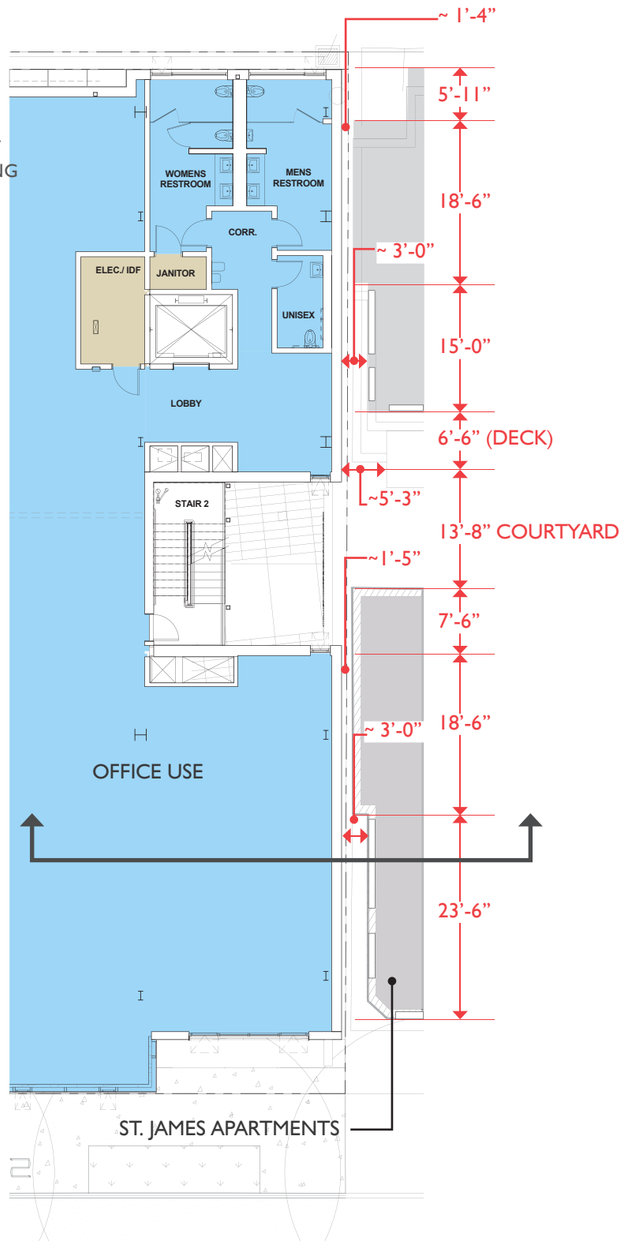
EAST ELEVATION



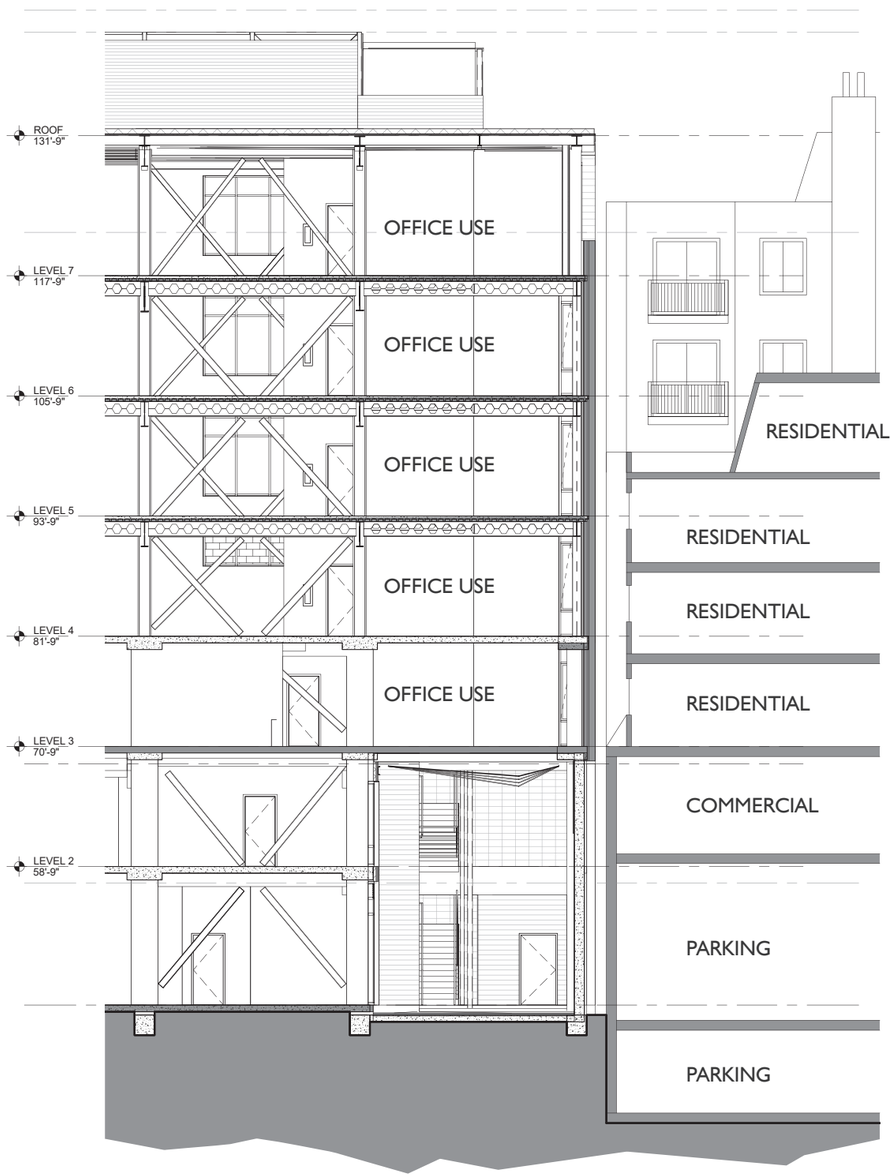
NORTH ELEVATION

EAST FACADE DESIGN

SOUTHEAST VIEW

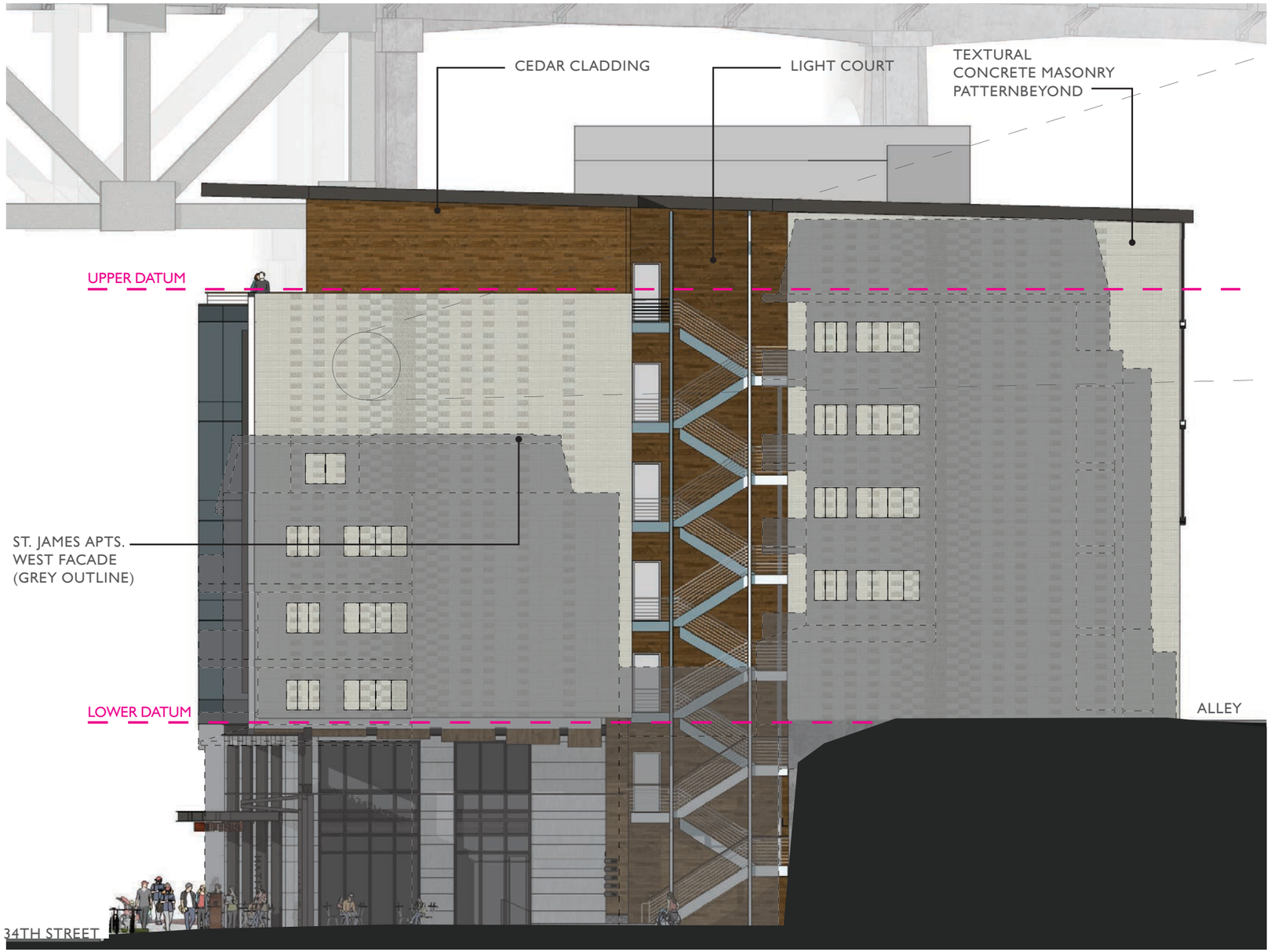


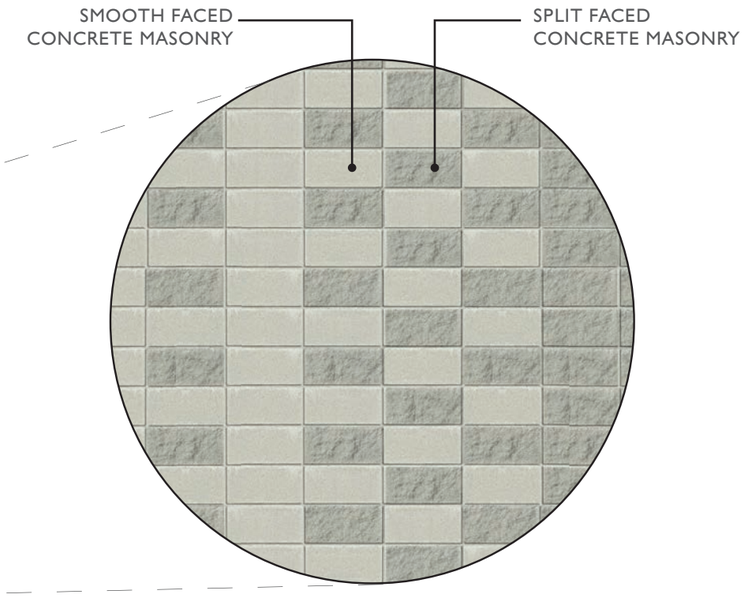
TYPICAL OFFICE PLAN (LEVELS 4-6)



EAST FACADE SECTION

EAST FACADE DESIGN STUDY





EAST FACADE DETAIL

DC2-B-2 BLANK WALLS Avoid large blank walls along visible façades wherever possible. Where expanses of blank walls, retaining walls, or garage facades are unavoidable, include uses or design treatments at the street level that have human scale and are designed for pedestrians.

BOARD DIRECTION AT EDG: With the next submittal, provide information on how the east blank walls will be treated and further detail of the north wall at the alley.

APPLICANT RESPONSE: The proposed design highlights the water capture strategy of the Living Building Pilot Program by integrating a series of steel channels that transports rainwater from the upper roof down the north facade. This creates a visible element that breaks down the facade and integrates with the punched window pattern. Window elements were placed carefully to minimize visual conflicts to the low rise neighborhood to the north. A cable vine trellis has been integrated to screen views from the upper floors and to naturally soften the facade facing north.

The east walls, on either side of the light court, are required to have a fire rated assembly and windows are not allowed on these faces. The blank walls have been mitigated through the arrangement of a gradient CMU pattern between smooth and split-face units, creating a subtle, textural pattern that will provide visual interest for the adjacent residential units to the east. The southeast portion of the top floor is recessed three feet and clad in a warm cedar cladding.

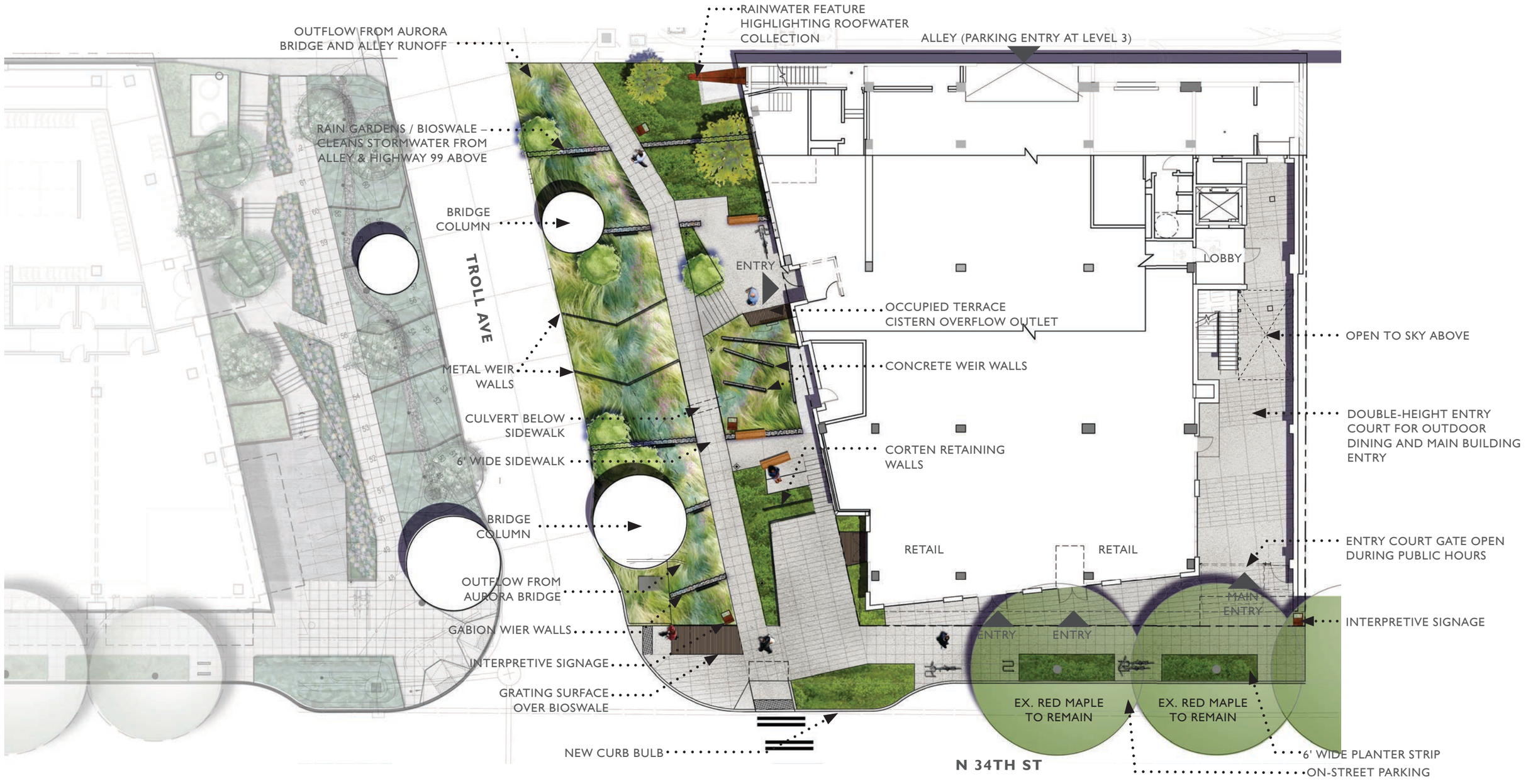
NORTH FACADE DESIGN

NORTH ELEVATION

NORTHWEST VIEW

LANDSCAPE DESIGN

LANDSCAPE CONCEPT

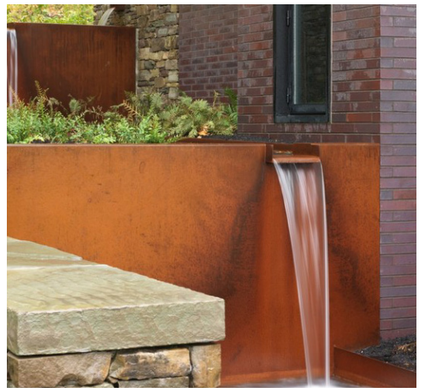


COMPOSITE SITE PLAN AND GROUND FLOOR PLAN

TROLL AVE STREETSCAPE

GABION WEIR WALLS

CONCRETE WEIR WALLS

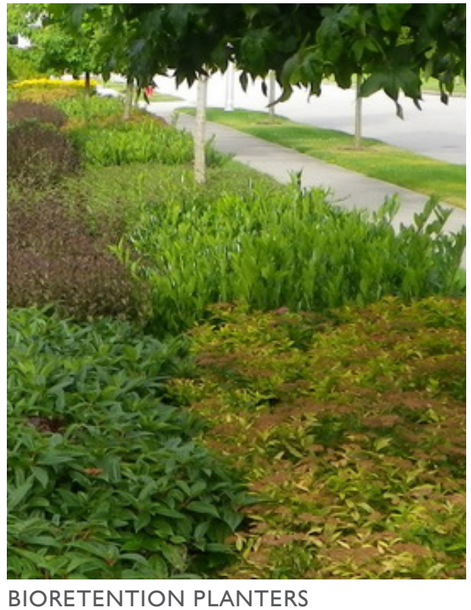


METAL WEIR WALLS

CONCRETE CULVERT
BELOW SIDEWALK

34TH STREETSCAPE AND ALLEY

34TH STREET & TROLL AVENUE



BIORETENTION PLANTERS

METAL GRATING AT SIDEWALK

ACTIVATED STREETSCAPE & BUILDING ENTRANCE

PLANTING

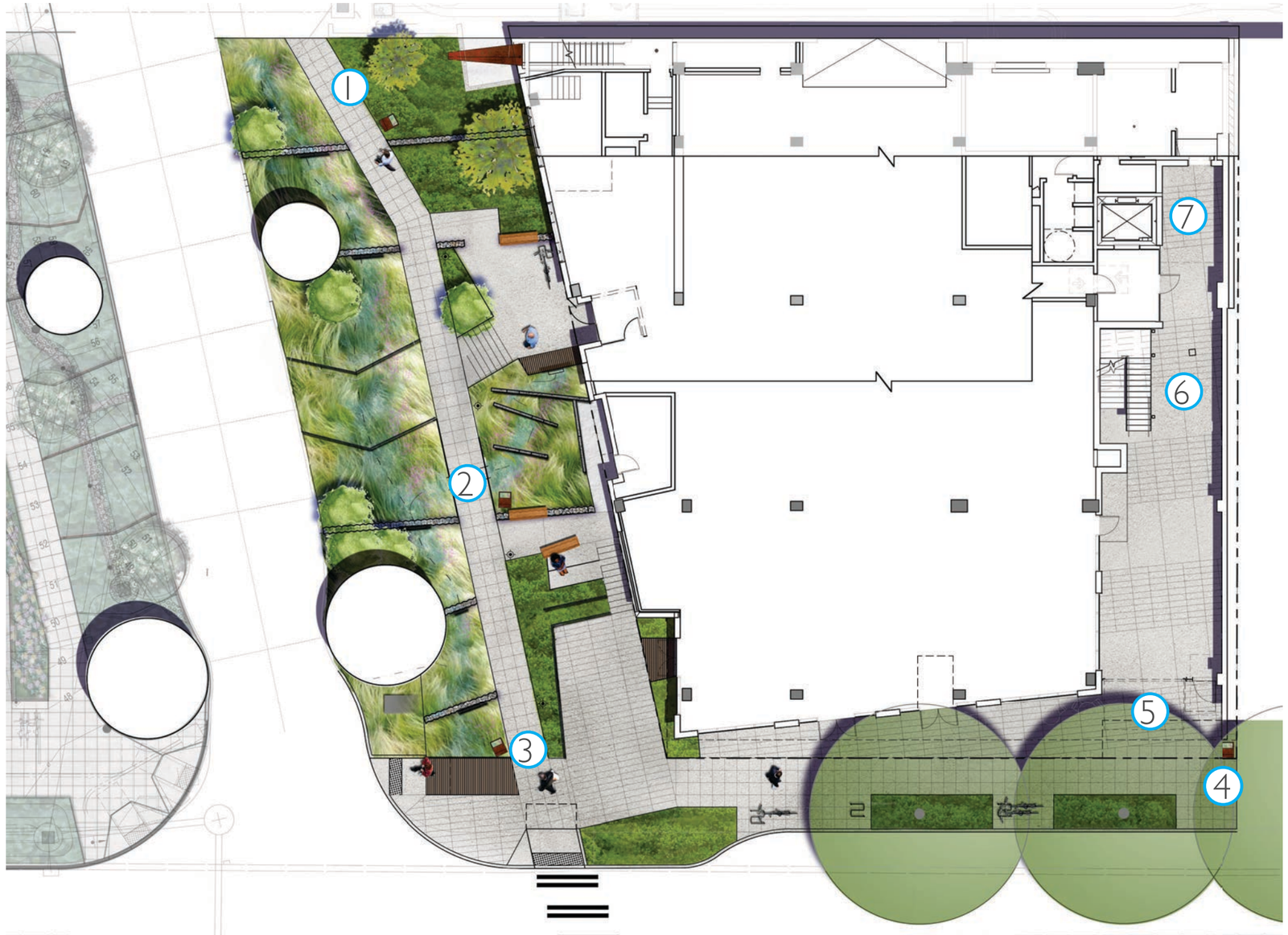
STEWARTIA PSEUDOCAMELLIA

PERENNIAL MIX PLANTING

ACER CIRCINATUM

SHRUB MIX

LIVING BUILDING NARRATIVE AND ART EXPERIENCE



To highlight the ecological artwork and to tie into the artisitc character of Fremont, the project will incorporate five key public art installations. These elements will educate the public on the ways the project will benefit the neighborhood through the Living Building Pilot Program. The elements numbered 1-4 will be a weathered steel interpretive sign that provides information on that element and a textural relief that can be transfered to paper via artisitic rubbing. When combined, these four rubbings will create an image related to the sustainibility goals of the project.

From the Living Building Beauty Handbook:
To ensure that beautiful Living Buildings contribute to their communities' sense of place, delighting and inspiring their occupants for generations to come. The project must contain design features intended solely for human delight and the celebration of culture, spirit and place appropriate to its function and meaningfully integrate public art. To teach and encourage project occupants and visitors, as well as other design teams and the public, by providing explanatory information about the project.

ARTWORK KEY AND NARRATIVE:

1. Capture: The rain that falls on the large upper roof is transferred down channels on the north wall to a cistern buried within the building.

2. Evaporate: Like the forest canopy, water droplets from the upper terraces travel down to the grate and scupper and are separated into smaller droplets through the act of splashing and passing through a grate near the Troll Avenue entrance. This encourages evaporation of the water before it makes its way into the storm system.

3. Filter: Bioswales use wier walls and plantings to clean and filter the runoff from the Aurora Bridge and the alley.

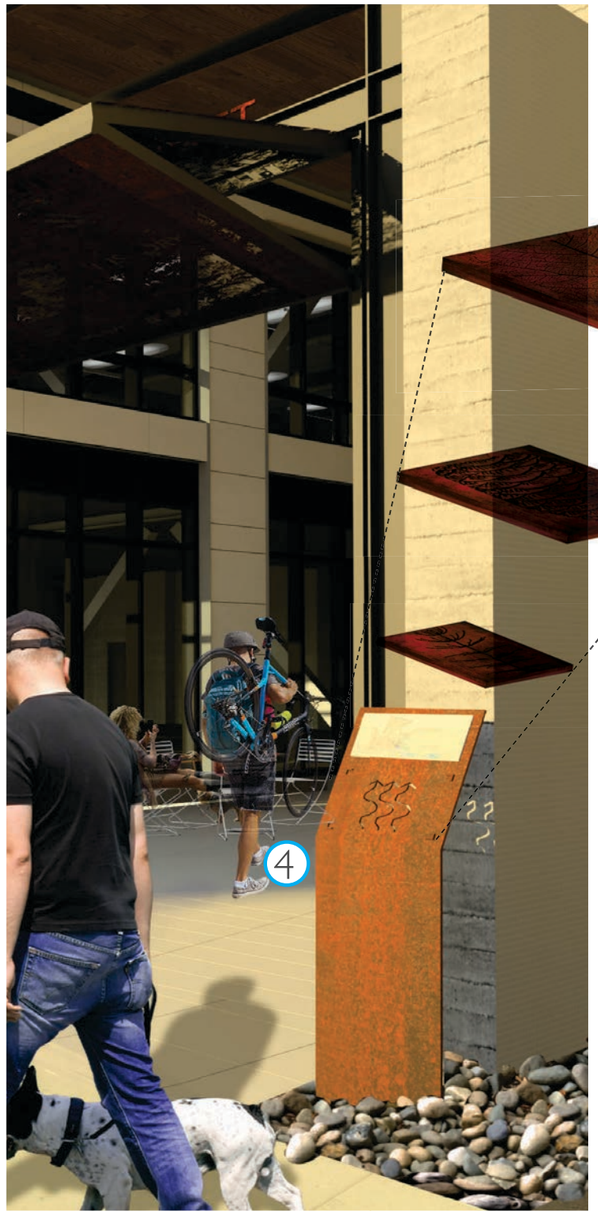
4. Conservation: High efficient plumbing fixtures and irrigation reuse water captured from the rainwater cistern to reduce the need for domestic water.

5. Entry Gate: A laser cut steel hangar door that depicts a mural of the Fremont history and character.

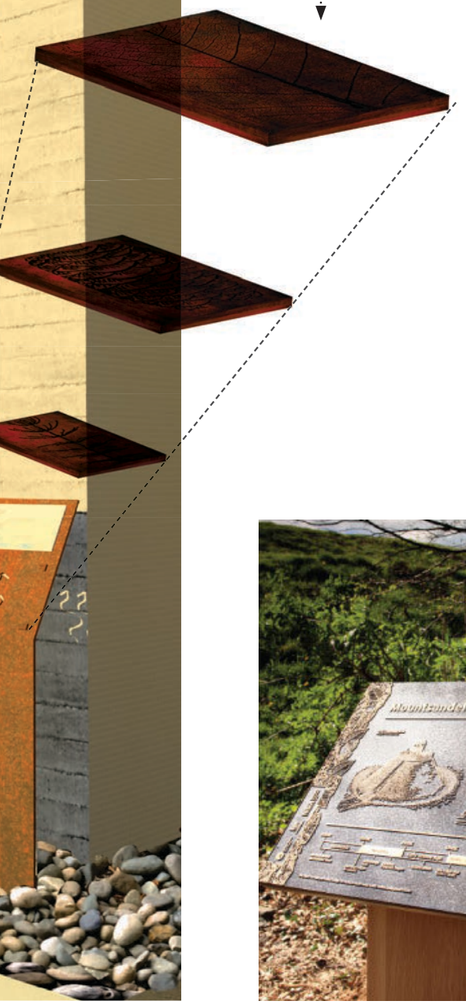
6. Poetic Wall Art: *"When the well runs dry, we learn the worth of water." – Benjamin Franklin*

7. Living Building Dashboard: A dynamic display that illustrates the strategies and building performance related to the Living Building Pilot Program.

ECOLOGICAL ART EXPERIENCE



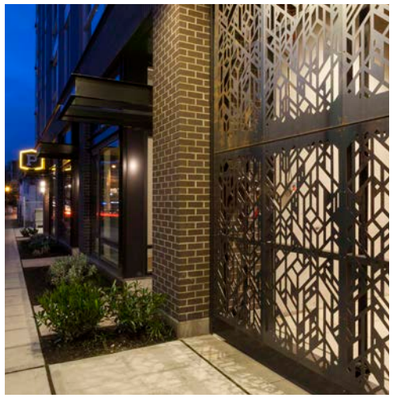
The weathered steel blade signs will include a textural relief that can be transfered to paper via artisitic rubbing. When combined, these rubbings will create an image related to the sustainability goals of the project.



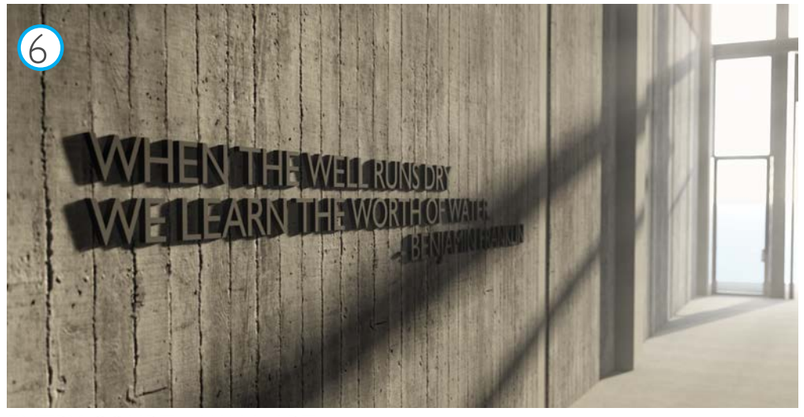
RUBBING RELIEF EXAMPLES

RUBBING RELIEF EXAMPLES

ENTRY COURT EXPERIENCE



ENTRY GATE – CONCEPT IMAGES



ENTRY COURT – WALL ART

ENTRY GATE – CONCEPTUAL PANEL MURAL

ENTRY GATE

The entry gate is a key element of the pedestrian experience of the project. It will be open during business hours and frame an gracious and inviting view into the shared entrance and internal retail space.

The gate is a hangar door that will be slightly taller than the adjacent canopies, giving the entry court more prominence and light when open. Panels facing the hangar door will be made of cut mild steel that is allowed to patina, a nod to the indutrial past of the site. At night, the cut steel panels will allow light to spill out from within, illuminating an abstract mural that activates the street frontage and provides a discoverable art experience after hours.

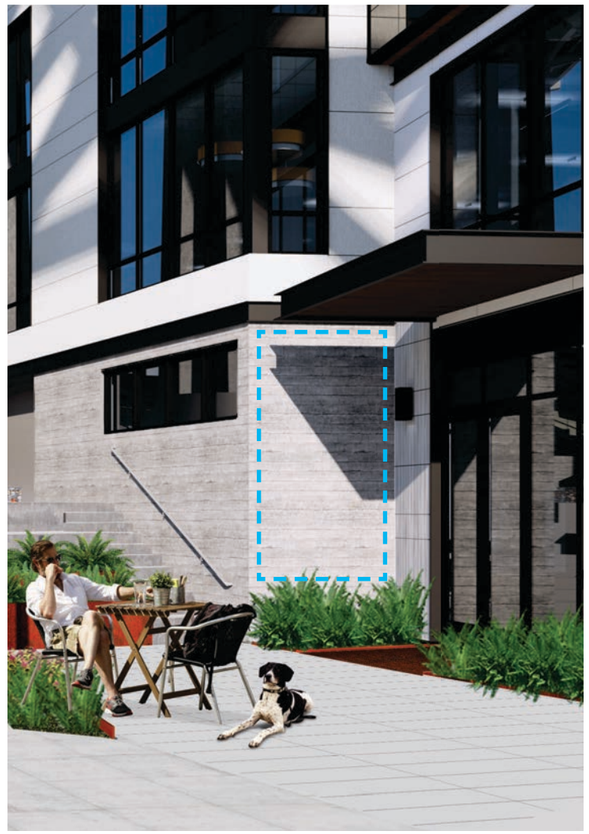
The gate's panel design references the ecological history, unique industrial character and site forms that make up this area of the Fremont Neighborhood.

RETAIL SIGNAGE

RETAIL SIGNAGE

Areas reserved for retail signage will include blade signs hanging from retail canopies, extruded lettering signage above or below canopies, wall mounted blade signs and wall mounted retail signage at the plaza on 34th Street & Troll Avenue.

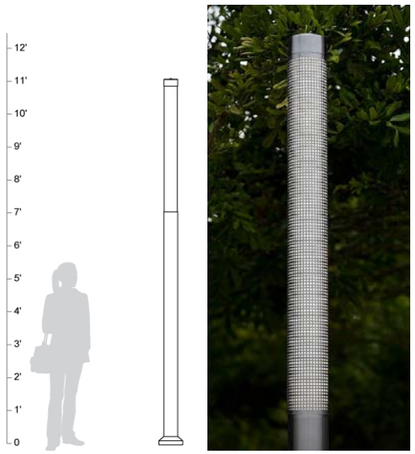
Cut steel letters noting the building address will be located above the entry gate as well as the canopy at the Troll Avenue office entrance.



LIGHTING DESIGN – STREETSCAPE

1 PLINTH MOUNTED
LED PROJECTOR

2 PEDESTRIAN POLE
LIGHT



E WALL MOUNT
UP/DOWN LIGHT

G WALL MOUNT LED
DIRECT FIXTURE

WSP | PARSONS BRINCKERHOFF

LIGHTING DESIGN – BUILDING

3 

FE4
WALL RECESSED LED
STEPLIGHT***

4 

FE11
GROUND MOUNTED
LED PATHLIGHT***

6 

FE3
WALL MOUNT LED
LINEAR DIRECT
FIXTURE

7 

FE11
WALL MOUNT LED
LINEAR GRAZER

A 

FE1
IN-GRADE LED
FLOODLIGHT*

M 

F5
WALL MOUNT LED
LINEAR
DIRECT/INDIRECT

*Fixture depth to be confirmed
***Fixture quantity to be confirmed

PROPOSED DEPARTURES

LIVING BUILDING PILOT PROGRAM ALLOWABLE DEPARTURES

DEPARTURE 1

23.47A.013.B FLOOR AREA RATIO

DEPARTABLE UNDER 23.41.012.D.2

"In addition to the departures allowed under subsection 23.41.012.B, departures for projects participating in the Living Building Pilot Program established under Section 23.40.060 may also be granted for the following... Floor area ratios up to 15 percent above the otherwise applicable limit:"

The design team is seeking a departure to allow for an increase of 15% to the allowable Floor Area Ratio (FAR) for participation in the Living Building Challenge Pilot Program per 23.40.060. The increased FAR will allow for increased area needed for enhanced plumbing and filtration systems needed to provide rainwater reuse and maximum flexibility for vertical shafts for the mechanical system. The bonus FAR would also provide a financial offset to allow for the higher cost of these high efficiency systems.

DEPARTURE 2

23.47A.012 STRUCTURE HEIGHT

DEPARTABLE UNDER 23.41.012.D.2

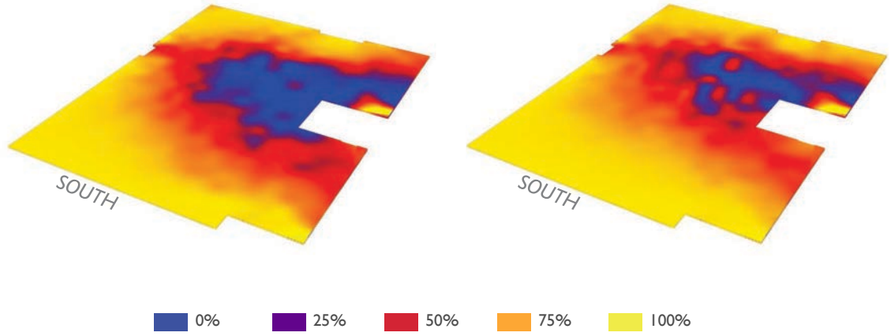
"In addition to the departures allowed under subsection 23.41.012.B, departures for projects participating in the Living Building Pilot Program established under Section 23.40.060 may also be granted for the following...Structure height up to 20 feet for development in zones with height limits greater than 45 feet, to allow increased floor-to-floor heights. The additional height allowed for the structure will not allow an additional story beyond the number that could be built under the otherwise applicable height limit and rooftop features may be allowed to extend above the structure height approved pursuant to this subsection 23.41.012.D.2. e, if they are consistent with the applicable standards established for rooftop features within the zone"

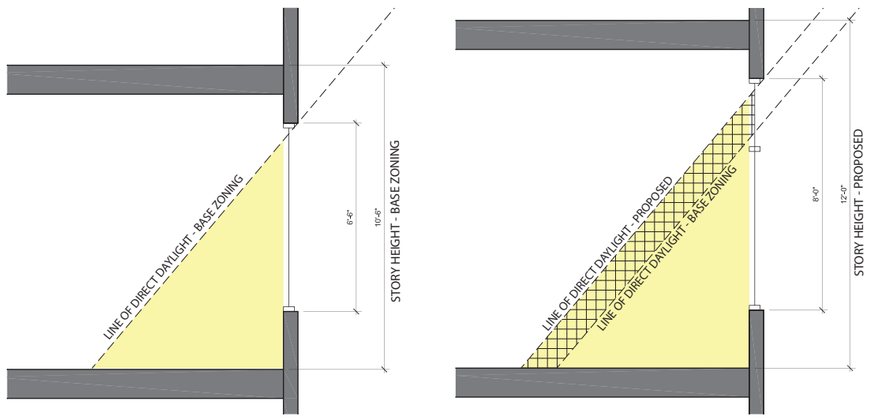
The design team is seeking a departure to allow for an increase of approximately 10' to the allowable structure height for participation in the Living Building Challenge Pilot Program per 23.40.060. The proposed structure would not gain an additional story over what would be allowed by the existing zoning code. The added height will allow for higher floor-to-floor heights which will increase the daylighting opportunites and decrease energy needs in order to meet the requirements of the LBPP.

10'-6" FLOOR HEIGHT

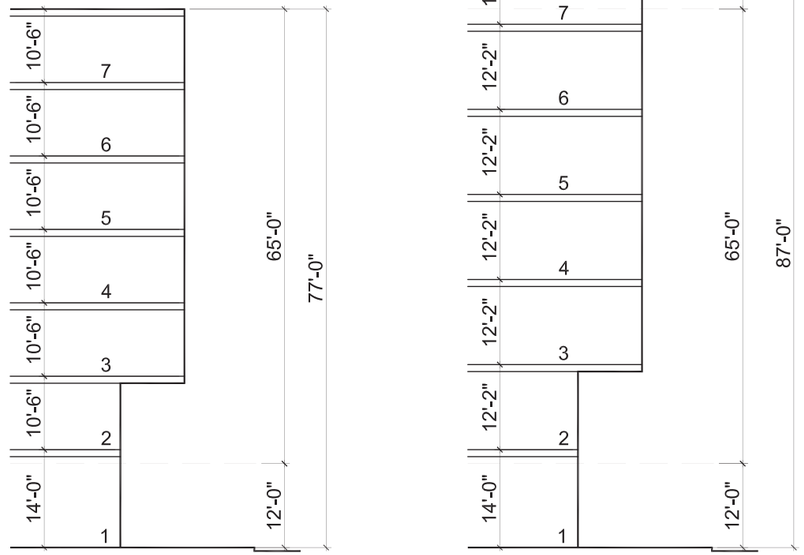
12' FLOOR HEIGHT

Percentage of occupied hours where illuminance is at least 28 footcandles, measured at 2.79 feet above the floor level.





DEPARTURE 2 – BUILDING HEIGHT DIAGRAM



BASE ZONING HEIGHT

12' average grade plane + 65' height = +77' from grade at N. 34th St

77' - 14' for L1 retail @ N. 34th St = 63' remaining.

63' / 6 stories = 10.5' per story above level 1.

1 story @ 14' + 6 stories @ 10.5' = 7 stories @ +77'

PROPOSED LBPP HEIGHT

12' average grade plane + 65' height = +77' from grade at N. 34th St

77' +10' for LBPP = 87'.

87' - 14' for L1 retail @ N. 34th St = 73' remaining.

73' / 6 stories = 12.2' per story above level 1.

1 story @ 14' + 6 stories @ 12.2' = 7 stories @ +87'

PROPOSED DEPARTURES

DEPARTURE 3

23.54.035.A LOADING BERTH REQUIREMENTS

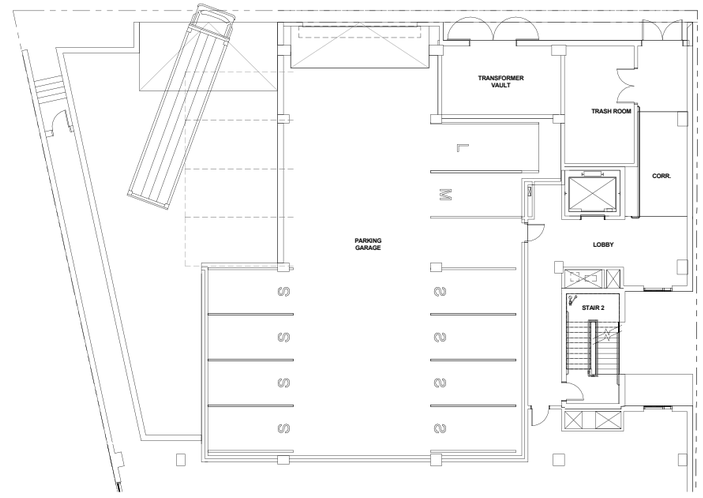
DEPARTABLE UNDER 23.41.012.D.2

"In addition to the departures allowed under subsection 23.41.012.B, departures for projects participating in the Living Building Pilot Program established under Section 23.40.060 may also be granted for the following... Quantity of parking required:"

The design team is seeking a departure to remove the requirement for a loading berth for participation in the Living Building Challenge Pilot Program per 23.40.060. We are applying for a commercial loading space with SDOT to be located on N. 34th St. directly in front of the main entry court and elevator lobby in lieu of a loading berth at the alley. With 10 year leases being typical, the office use will not require frequent loading. The retail use located along N. 34th St. will use the loading space more frequently and benefit from a shorter path to deliveries than a loading berth two floors above at the alley.

The alley is already congested with monthly residential move-ins for the St. James Apartments, garbage and recycling pick up and residential access for the condominiums to the north. Given the site geometry, topography and the intent to significantly set back the building along Troll Avenue to better adhere to the design guidelines, there is little room remaining for loading, parking and utility access at the north frontage. The inclusion of a loading berth would make the Level 3 office plate infeasible. This loss in office area would also result in a loss of transparency and activation along Troll Avenue. It would also require the lost area to be captured in the floors above with a reduction in the proposed modulation. Additonally, if a loading berth were located off of the alley, the proposed building would need to be increased by approximately 5 feet in height in order to meet loading berth requirements at Level 3 and meet our daylighting goals as stated in Departure 2.

DEPARTURE 3 – LOADING DIAGRAM



DEPARTURE 4

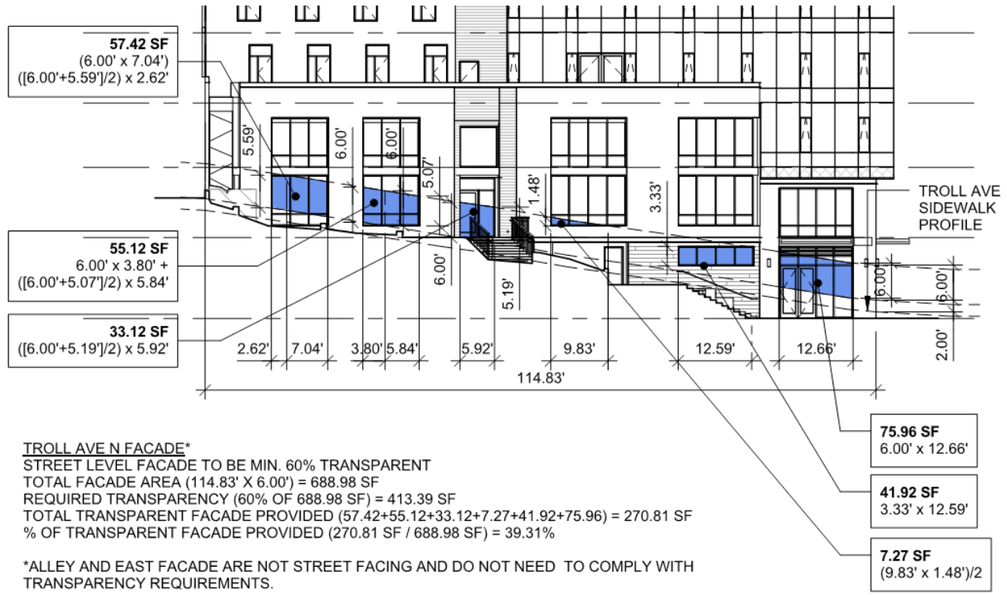
4. 23.47A.008.B.2 TRANSPARENCY (STREET-LEVEL DEVELOPMENT STANDARDS)

DEPARTABLE UNDER 23.41.012

"Sixty percent of the street-facing facade between 2 feet and 8 feet above the sidewalk shall be transparent."

The design team is seeking a departure to allow for a lower percentage of transparency along Troll Avenue N. due to the significant grade change from N. 34th Street to the alley. The sidewalk is located between 18' and 25' away from the building facade. The project proposes to extensively enhance the adjacent right-of-way with landscaping, public plazas and terraces that will activate the frontage where transparency can't be achieved.

DEPARTURE 4 – TRANSPARENCY DIAGRAM

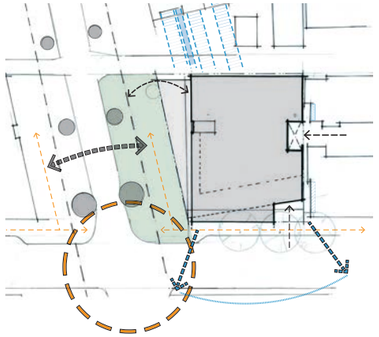


TROLL AVE N FACADE*
STREET LEVEL FACADE TO BE MIN. 60% TRANSPARENT
TOTAL FACADE AREA (114.83' X 6.00') = 688.98 SF
REQUIRED TRANSPARENCY (60% OF 688.98 SF) = 413.39 SF
TOTAL TRANSPARENT FACADE PROVIDED (57.42+55.12+33.12+7.27+41.92+75.96) = 270.81 SF
% OF TRANSPARENT FACADE PROVIDED (270.81 SF / 688.98 SF) = 39.31%

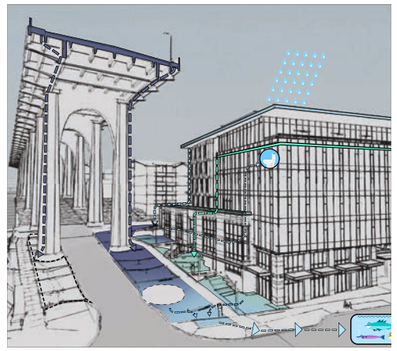
*ALLEY AND EAST FACADE ARE NOT STREET FACING AND DO NOT NEED TO COMPLY WITH TRANSPARENCY REQUIREMENTS.

DESIGN GUIDELINES

DC2 | ENTRY COURT EXPOSED STRUCTURE



CS-2: GATEWAY LOCATION



CS-1: STORMWATER MITIGATION

CS-2: SIMPLE MASSING; QUALITY MATERIALS

CS-3: PUBLIC ART AND ENGAGEMENT

CONTEXT & SITE

CS1 NATURAL SYSTEMS AND SITE FEATURES

CS1-A-1 ENERGY CHOICES At the earliest phase of project development, examine how energy choices may influence building form, siting, and orientation, and factor in the findings when making siting and design decisions.

BOARD DIRECTION AT EDG: The Board indicated preliminary support for the departure granted the additional FAR continues to be utilized to accommodate the living building systems, which inform the overall building design.

APPLICANT RESPONSE: By participating in the Living Building Pilot Program, the project has committed to a 25% reduction in energy below the Seattle Energy Code baseline. The south and west-facing glazed facades will use electrochromic glass to reduce heat gain and glare, and contribute to overall energy efficiency. The viability of PV panels on the roof has been analyzed, and infrastructure for future panels will be in place as required by the Seattle Energy Code.

CS1-B-1 SUN AND WIND Take advantage of solar exposure and natural ventilation. Use local wind patterns and solar gain to reduce the need for mechanical ventilation and heating where possible.

CS1-B-2 DAYLIGHT AND SHADING Maximize daylight for interior and exterior spaces and minimize shading on adjacent sites through the placement and/or design of structures on site.

BOARD DIRECTION AT EDG: The Board indicated preliminary support for the departure granted the additional FAR continues to be utilized to accommodate the living building systems, which inform the overall building design.

APPLICANT RESPONSE: The occupied roof decks are programmed and located where sun exposure is the best, and have considered the shading from the Aurora Bridge and adjacent apartment building to the east.

Operable windows have been designed into the exterior glazing on all exposed sides of the project, to give occupants more envrionmental control. The versatile VRF mechanical system will be supplemented with natural ventilation to decrease the total mechanical load. The “notch” in the eastern façade provides daylighting for interior common areas and office.

CS1-C-1 LAND FORM Use natural topography and desirable landforms to inform project design.

CS1-C-2 ELEVATION CHANGES Use the existing site topography when locating structures and open spaces on the site.

BOARD DIRECTION AT EDG: The preferred option was the most interesting massing form which responded to the topography changes and surrounding site context.

APPLICANT RESPONSE: Because of topographical constraints, the project locates the building parking garage on floor three with access from the alley, with occupied program on floors below and above the garage level. The integrated landscape and building design along the Troll Ave right-of-way accommodates the steep grade and enhances relationships to interior. The primary office entry is located at the eastern facade along N 34th Street, while a secondary, independent office entry is located on Troll Ave, with stair and ramp access.

CS1-E-1 NATURAL WATER FEATURES If the site includes any natural water features, consider ways to incorporate them into project design, where feasible.

CS1-E-2 ADDING INTEREST WITH PROJECT DRAINAGE Use project drainage systems as opportunities to add interest to the site through water-related design elements.

BOARD DIRECTION AT EDG: The Board supported the innovative strategies of incorporating Stormwater treatment into the site design, however, echoed the public’s concerns related to the viability and functionality of the proposed Stormwater design and landscaping.

APPLICANT RESPONSE: The project will capture rainwater falling on the large overhanging roof, and deliver this to a detention tank for non-potable reuse in the building (toilets and irrigation). The rainwater capture is celebrated through activated rain leaders on the north facade, and with a water feature inset at the northwest corner of the project, facing the Troll Ave sidewalk.

The design of the ROW adjacent to the building on the east will voluntarily treat Troll Ave and SR-99 runoff through bioswales and bioretention before the water is discharged to the dedicated storm sewer. The bioretention scheme has been developed since EDG through collaboration between the civil engineer and landscape architect.

DESIGN GUIDELINES

CS2 URBAN PATTERN & FORM

CS2-B-1 SITE CHARACTERISTICS Allow characteristics of sites to inform the design, especially where the street grid and topography create unusually shaped lots that can add distinction to the building massing.

CS2-B-2 CONNECTION TO THE STREET Identify opportunities for the project to make a strong connection to the street and public realm.

BOARD DIRECTION AT EDG: The Board commented that the gate should be thoughtfully designed and remain open during business hours.

The Board supported this [transparency] departure granted the proposed design made the public realm and right of way improvements a priority along this reduced transparent façade, which would activate this edge and serve as a gateway.

APPLICANT RESPONSE: The gate design has been developed and designed to contribute to public space through porosity and a visually interesting pattern, both in daytime hours when it will be open and nighttime hours when it will be closed.

Since the EDG meeting, it has been determined that the minimum street-level transparency requirement does not apply to this zone, therefore we are not pursuing departure #4. However, we have made the western facade as transparent as possible given the extreme slope, and have provided architectural detailing, activation, lighting and planting to enhance the public experience of the facade.

CS2-C-1 CORNER SITES Corner sites can serve as gateways or focal points; both require careful detailing at the first three floors due to their high visibility from two or more streets and long distances.

BOARD DIRECTION AT EDG: Agreed that the rotated setback along Troll Ave was positive and created further visual interest at the corner.

APPLICANT RESPONSE: As the project has been developed between EDG and Recommendation, the corner "node" has been further emphasized through the expanded hardscape design at the pedestrian crossing and connection to the outdoor plaza associated with the SW corner retail.

CS2-D-5 RESPECT FOR ADJACENT SITES Respect adjacent properties with design and site planning to minimize disrupting the privacy of residents in adjacent buildings.

BOARD DIRECTION AT EDG: With the next submittal, provide a window/ privacy study and sections to clarify the relationship of the proposed building with adjacent buildings (east building adjacency.)

APPLICANT RESPONSE: We conducted a study of the windows of the adjacent residential building to the east in both plan and section. The project responds to this proximity first through the massing of the eastern light court, referencing the adjacent building's courtyard and providing relief and additional sunlight. Also, the patterning in the east party wall of our project has been developed to provide visual interest for the neighbors.

CS3 ARCHITECTURAL CONTEXT AND CHARACTER

CS3-B-1 PLACEMAKING Explore the history of the site and neighborhood as a potential placemaking opportunity. Look for historical and cultural significance, using neighborhood groups and archives as resources.

BOARD DIRECTION AT EDG: The Board encouraged the applicant to explore how materials and design details could create further connection to Fremont's unique neighborhood character.

APPLICANT RESPONSE: The stained cedar used on the façade references the site's mill past as an integral part of the Seattle lumber industry. The gabion walls in the landscape design are a nod to the earthmoving project to raise N 34th street to today's current elevation.

Weathering steel is used in the water feature, the entry court, and entry gate to highlight the passage of time and provide patina in contrast with smoother textures.

PUBLIC LIFE

PL1 OPEN SPACE CONNECTIVITY

PL1-A-1 ENHANCING OPEN SPACE Design the building and open spaces to positively contribute to a broader network of open spaces throughout the neighborhood.

PL1-A-2 ADDING TO PUBLIC LIFE Seek opportunities to foster human interaction through an increase in the size and quality of project-related open space available for public life.

PL-1: WALKWAYS & CONNECTIONS

PL-2: PEDESTRIAN OPEN SPACES & ENTRANCES

PL-2: WAYFINDING

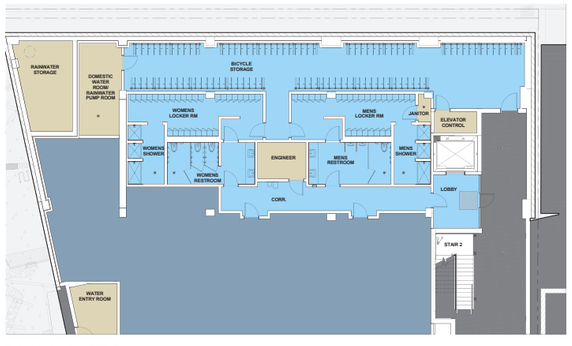
PL-2: PEDESTRIAN OPEN SPACES & ENTRANCES

DESIGN GUIDELINES

PL-3: HUMAN ACTIVITY

PL-3: HUMAN ACTIVITY

PL-3: RETAIL EDGES



PL-4: PLANNING FOR BICYCLISTS

PL1 OPEN SPACE CONNECTIVITY (CONTINUED)

BOARD DIRECTION AT EDG: The next submittal should include perspectives from the pedestrian viewpoint to provide a clear picture of the experience of the pedestrian as they move up/down along both Troll Ave. and N. 34th street.

The Board supported this departure granted the proposed design made the public realm and right of way improvements a priority along this reduced transparent façade, which would activate this edge and serve as a gateway.

APPLICANT RESPONSE: Pedestrian-level perspectives in both directions on Troll Ave and N 34th Street are provided in the packet. The transparency departure (#4) is no longer being pursued, however high priority is still given to the right of way improvements along Troll Avenue, with activation through the ground-floor retail and secondary office entries, with stairs and accessible entries.

PL1-B-1 PEDESTRIAN INFRASTRUCTURE Connect on-site pedestrian walkways with existing public and private pedestrian infrastructure, thereby supporting pedestrian connections within and outside the project.

PL1-B-2 PEDESTRIAN VOLUMES Provide ample space for pedestrian flow and circulation, particularly in areas where there is already heavy pedestrian traffic or where the project is expected to add or attract pedestrians to the area.

PL1-B-3 PEDESTRIAN AMENITIES Opportunities for creating lively, pedestrian oriented open spaces to enliven the area and attract interest and interaction with the site and building should be considered.

BOARD DIRECTION AT EDG: The next submittal should include perspectives from the pedestrian viewpoint to provide a clear picture of the experience of the pedestrian as they move up/down along both Troll Ave. and N. 34th street.

The Board supported this departure granted the proposed design made the public realm and right of way improvements a priority along this reduced transparent façade, which would activate this edge and serve as a gateway.

APPLICANT RESPONSE: Pedestrian-level perspectives in both directions on Troll Ave and N 34th Street are provided in the packet.

The architecture and landscape design at grade integrates public and private infrastructure, especially at the primary and secondary building entries and plazas. Signage, lighting, hardscape and planting contribute to a comprehensive streetscape design with good interaction with pedestrians.

Ample space is provided for pedestrian flow and circulation at the SW corner sidewalk crossing in both directions, where heavy pedestrian traffic is anticipated in the future.

PL2 WALKABILITY

PL2-B-3 STREET-LEVEL TRANSPARENCY Ensure transparency of street-level uses (for uses such as nonresidential uses or residential lobbies), where appropriate, by keeping views open into spaces behind walls or plantings, at corners, or along narrow passageways.

BOARD DIRECTION AT EDG: The next submittal should include perspectives from the pedestrian viewpoint to provide a clear picture of the experience of the pedestrian as they move up/down along both Troll Ave. and N. 34th street.

APPLICANT RESPONSE: The pedestrian-level perspectives in this packet show the experience moving up and down Troll Avenue, as well as across N 34th Street. Street-level uses are enhanced with views into and out of spaces, and enhanced by the landscape design.

PL2-D-1 DESIGN AS WAYFINDING Use design features as a means of wayfinding wherever possible.

BOARD DIRECTION AT EDG: Encouraged the applicant to continue the thoughtful design of this space as the project evolved and with the next submittal provide:

i. Detailed information on how the storytelling of the Stormwater treatment would be further integrated as an educational element through designed signage.

The Board supported the overall concept of the entry and asked to see further detail on how this space would be activated and draw people to this space.

APPLICANT RESPONSE: Wayfinding is incorporated into the design, especially at the exterior entry lobby, starting with the building name adjacent to the entry gate and address. Through design cues (geometry and light), the entry court directs visitors and regular occupants ahead to the primary exterior stair at the light court, with tenant signage informing the destination. It also provides direction to the

DESIGN GUIDELINES

primary office elevator lobby and bike room. Additionally, the board-form concrete wall incorporates artwork telling the story of the building performance and Living Building Pilot Program.

Protected pedestrian entries, with lighting and continuous, well-scaled overhead weather protection, are planned for both 34th Street (the primary office entry), 34th Street retail, and the secondary office entry along Troll Ave.

The project will provide enhanced security measures through pedestrian-scale lighting, while attempting to minimize spill on to adjacent sites.

DESIGN CONCEPT

DC2 ARCHITECTURAL CONCEPT

DC2-A-1 SITE CHARACTERISTICS AND USES Arrange the mass of the building taking into consideration the characteristics of the site and the proposed uses of the building and its open space.

DC2-A-2 REDUCING PERCEIVED MASS Use secondary architectural elements to reduce the perceived mass of larger projects.

BOARD DIRECTION AT EDG: The preferred option was the most interesting massing form which responded the topography changes and surrounding site context.

APPLICANT RESPONSE: The project retains the massing of the preferred option C from EDG guidance, and develops it further into a unified composition.

The secondary features of the building – including the rainwater system, canopies, shading devices, artwork and signage, complement the simple, restrained facades. Distinctive building features and signage provide architectural detail and interest.

DC2-B-2 BLANK WALLS Avoid large blank walls along visible façades wherever possible. Where expanses of blank walls, retaining walls, or garage facades are unavoidable, include uses or design treatments at the street level that have human scale and are designed for pedestrians.

BOARD DIRECTION AT EDG: With the next submittal, provide information on how the east blank walls will be treated and further detail of the north wall at the alley.

APPLICANT RESPONSE: The design minimizes retaining wall heights, and provides a well-proportioned, textured surface, with board-form patterning at the west-facing Troll Ave, and carefully placed reveal lines in alley concrete walls.

The east wall is mitigated through a gradient CMU pattern between smooth and split-face units, and the top floor in a recessed cedar wall cladding.

DC3 OPEN SPACE CONCEPT

DC3-A-1 INTERIOR/EXTERIOR FIT Develop an open space concept in conjunction with the architectural concept to ensure that interior and exterior spaces relate well to each other and support the functions of the development.

BOARD DIRECTION AT EDG: Supported the integration of the right-of-way improvements (landscaping, seating, textured pavement) and widened sidewalk into the overall project concept and design.

APPLICANT RESPONSE: Open spaces around the project, specifically the entry plaza for the Troll Ave office entry, the retail plaza at the southwest corner, the expanded sidewalk, and entry court, craft negative space in conjunction with the architectural façade, and are sized and sited to perform functional needs for each indoor use, e.g. seating for the retail, in the case that it is leased by a restaurant.

DC4 EXTERIOR ELEMENTS AND FINISHES

DC4-A-1 EXTERIOR FINISH MATERIALS Building exteriors should be constructed of durable and maintainable materials that are attractive even when viewed up close. Materials that have texture, pattern, or lend themselves to a high quality of detailing are encouraged.

DC4-A-2 CLIMATE APPROPRIATENESS Select durable and attractive materials that will age well in Seattle's climate, taking special care to detail corners, edges, and transitions.

BOARD DIRECTION AT EDG: The Board commented that the gate should be thoughtfully designed and remain open during business hours.

The Board encouraged the applicant to explore how materials and design details could create further connection to Fremont's unique neighborhood character.

APPLICANT RESPONSE: The concrete panels with vertical grooved texture,

DC-2: MASSING

DC-2: ARCHITECTURAL CONCEPT

DC-1: ARRANGEMENT OF INTERIOR USES

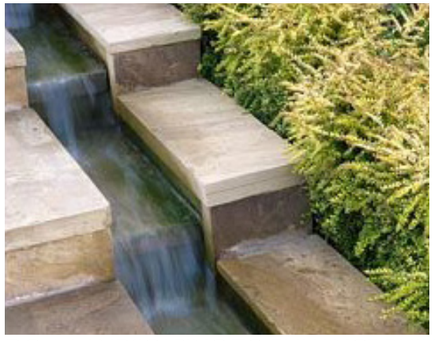
DC-2: RETAINING WALLS

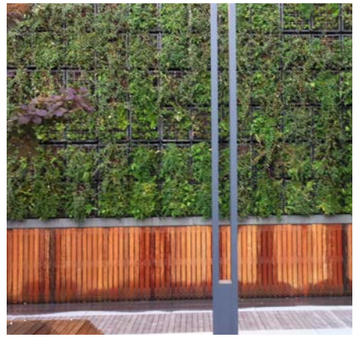
DESIGN GUIDELINES

DC-3: DESIGN

DC-4: BUILDING MATERIALS

DC-4: DESIGN CONTINUITY WITH ADJACENT SITES





DC-4: LANDSCAPING TO ENHANCE BUILDING

DC4 EXTERIOR ELEMENTS AND FINISHES (CONTINUED)

the through-color high-density fiber cement panels, concrete masonry units varied between smooth and split-face, and cedar siding are all selected with texture and durability in mind, in a complementary palette. Weathering steel is used in the water feature, the entry court, and entry gate to emphasize the passage of time and provide patina to contrast with smoother textures.

DC4-B-1 SCALE AND CHARACTER Add interest to the streetscape with exterior signs and attachments that are appropriate in scale and character to the project and its environs.

DC4-B-2 COORDINATION WITH PROJECT DESIGN Develop a signage plan within the context of architectural and open space concepts, and coordinate the details with façade design, lighting, and other project features to complement the project as a whole, in addition to the surrounding context.

BOARD DIRECTION AT EDG: Encouraged the applicant to continue the thoughtful design of this space as the project evolved and with the next submittal provide:

i. Detailed information on how the storytelling of the Stormwater treatment would be further integrated as an educational element through designed signage.

APPLICANT RESPONSE: Wayfinding signage, in conjunction with carefully placed lighting, activates the exterior entry lobby. A portion of the lobby design includes artwork that explains the Living Building aspects of the Pilot, and ties in to art pieces within the landscape, to provide moments of discovery for building visitors and the public.

DC4-C-1 FUNCTIONS Use lighting both to increase site safety in all locations used by pedestrians and to highlight architectural or landscape details and features such as entries, signs, canopies, plantings, and art.

DC4-C-2 AVOIDING GLARE Design project lighting based upon the uses on and off site, taking care to provide illumination to serve building needs while avoiding off-site night glare and light pollution.

BOARD DIRECTION AT EDG: At the next meeting, provide information regarding site lighting design.

APPLICANT RESPONSE: Architectural lighting plans have ben developed with a lighting consultant to achieve functionality, safety, and security in the right of way improvements, in the entry court, and on the roof decks. The resulting concepts are also included in nighttime renderings in this book.

DC4-D-1 CHOICE OF PLANT MATERIALS Reinforce the overall architectural and open space design concepts through the selection of landscape materials.

DC4-D-2 HARDSCAPE MATERIALS Use exterior courtyards, plazas, and other hard surfaced areas as an opportunity to add color, texture, and/or pattern and enliven public areas through the use of distinctive and durable paving materials. Use permeable materials wherever possible.

DC4-D-3 LONG RANGE PLANNING Select plants that upon maturity will be of appropriate size, scale, and shape to contribute to the site as intended.

DC4-D-4 PLACE MAKING Create a landscape design that helps define spaces with significant elements such as trees.

BOARD DIRECTION AT EDG: At the next meeting, provide detail on landscaping and hardscaping materials.

The Board supported the innovative strategies of incorporating Stormwater treatment into the site design, however, echoed the public's concerns related to the viability and functionality of the proposed Stormwater design and landscaping.

APPLICANT RESPONSE: The landscape and hardscape have been further developed since the EDG meeting, with careful attention to balance between ground cover and tree planting, open hardscape, sidewalks, seating, retaining walls, and the bioretention system.

The concrete paving pattern is carried from private property out into the ROW to integrate and blur distinctions between private and public, and enhance the pedestrian environment for passersby in addition to building visitors.

The stormwater bioretention elements have been designed and vetted in partnership between landscape architecture and civil engineering. The system is viable, and treats stormwater beyond the site boundary from the Aurora Bridge as well as on-site runoff.