City of Seattle Neighborhood Fire Station 9

Design Commission Review - Design Development May 20, 2010

MITHŪN

Fire Station 9

3829 Linden Avenue N

Located along Linden Ave N. between N. 38th Street and 39th Street, in Fremont

Station type - Neighborhood I (the smallest of all stations)

Replacement station - The existing station is in poor condition due to its age. Replacement would be more cost-effective than remodel.

Station 9 will be rebuilt on the site of existing station and expanded from 5,700 sf to approx. 8,700 sf.

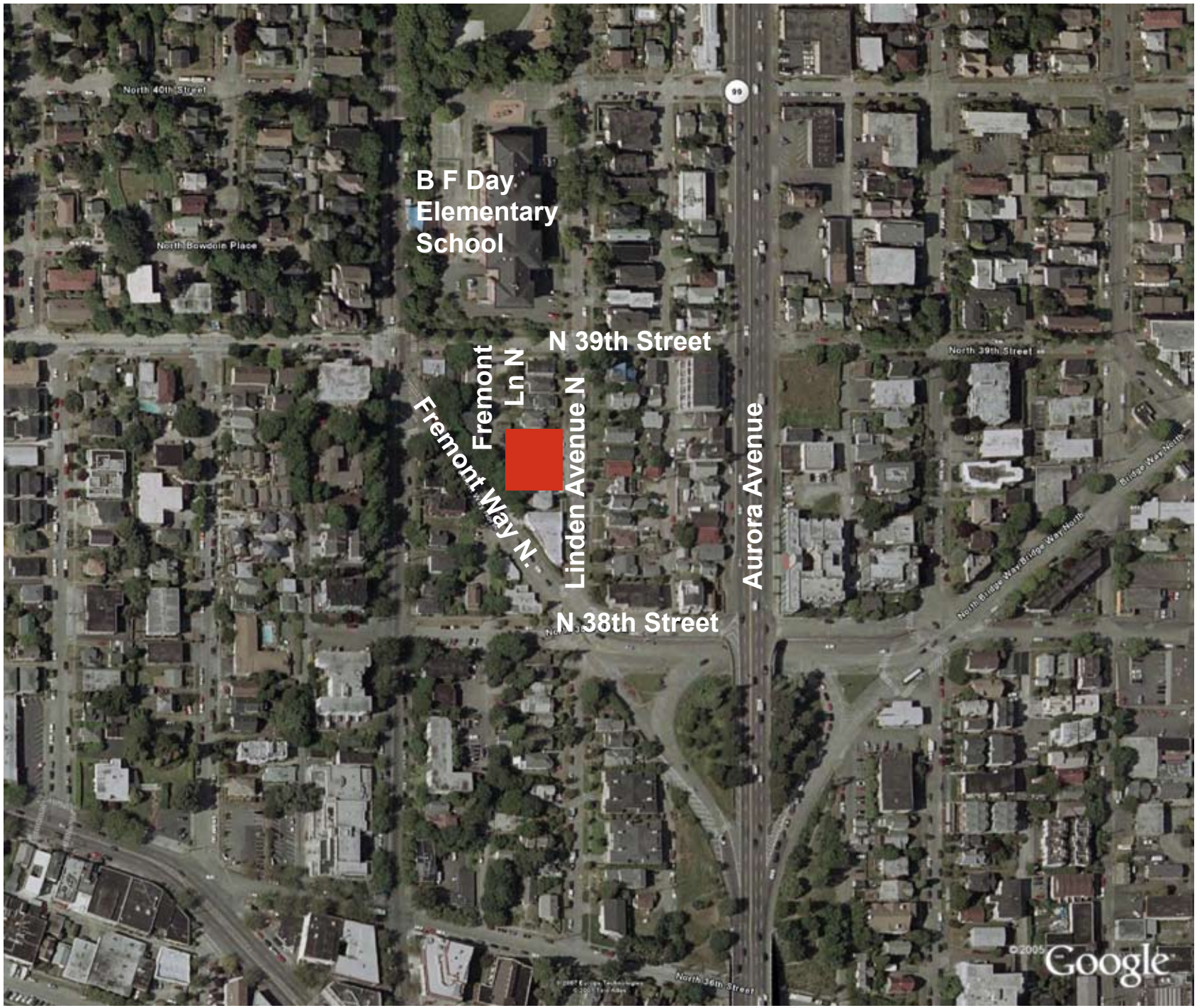
Station 9 will continue to provide compressed air fill service for the North end. It will also continue to house one engine company.

An interim facility will be provided in different location during construction.

Sustainability goal - LEED silver or higher.

Peter Reiquam is the artist.

Currently, at Design Development.



North

looking west to Fire Station 9 site & adjacent buildings

looking east along Fremont Way N.

Design Commission Comments

Schematic Design Preseatation
January 21, 2010

Encouraged team to:

Use greater articulation and further integration of the art to bring more character to the building

Provide a stronger and more authentic acknowledgement of the historic Annex Building

Use the textured brick

Extend the more naturalistic landscape of the buffer area into the polished, predictable landscape of the site with an element of surprise

Further inetgrate artwork into building design

Design Development Process

Function / Operation

Working meetings with SFD & FFD

Community

2nd public open house on 5/15/2010

Positive support

Working with Peter to integrate art and architecture

Public art was approved by PACC in Feburary

Historical exhibit coordination

Budget

Project is on budget at SD

Fire Station 9 built circa 1901, designed to resemble a large Four Square house

Fire Alarm Sub-Station No. 1 built circa 1921, modernist interpretation of Mediterian or Mission Revival

Fire Station 9 built circa 1952, a modern post-war design

The use of the site as Fire Station 9 since 1901 is a significant historical characteristic of the property

Technology has been the impetus for change on the site

4 - 1 - 2 - 8 Fremont Ave N & N 43rd St

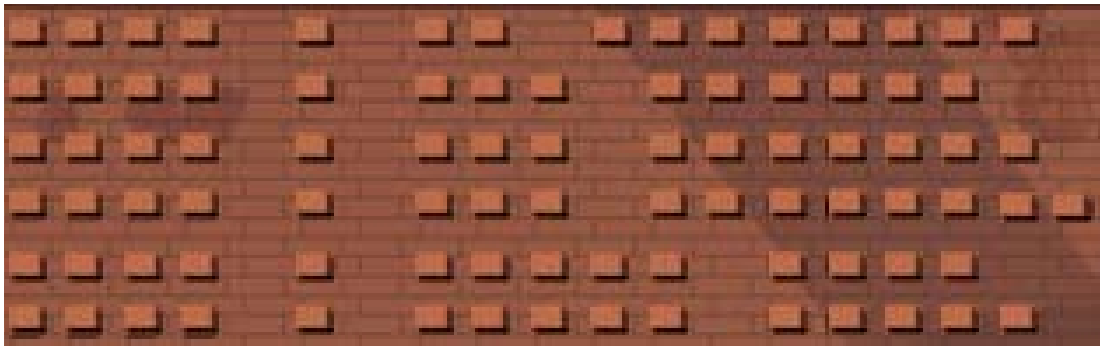
4 - 1 - 3 - 6 Francis Ave N & N 43rd St

4 - 1 - 3 - 7 Phinney Ave N & N 45th St

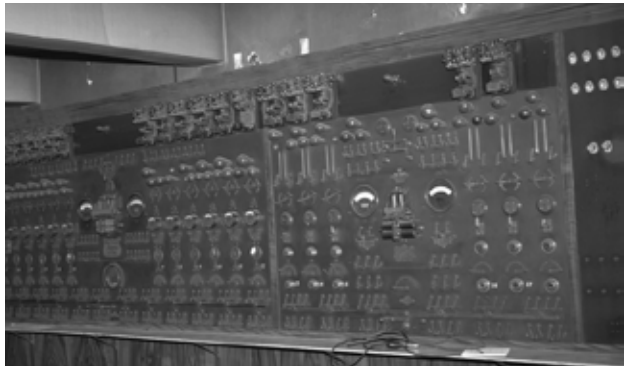
4 - 1 - 3 - 8 Linden Ave N & N 39th St

4 - 1 - 5 - 4 6th Ave NW & Leary Way NW

4 - 1 - 5 - 5 Leary Way NW & NW 44th St



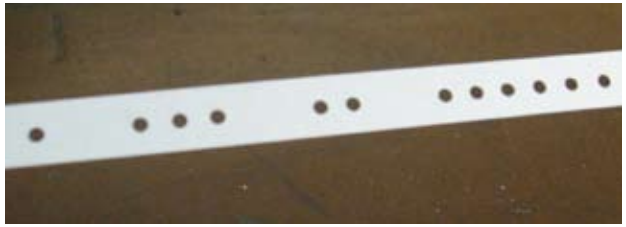
Sample of Brick Detailing with embedded tapper code



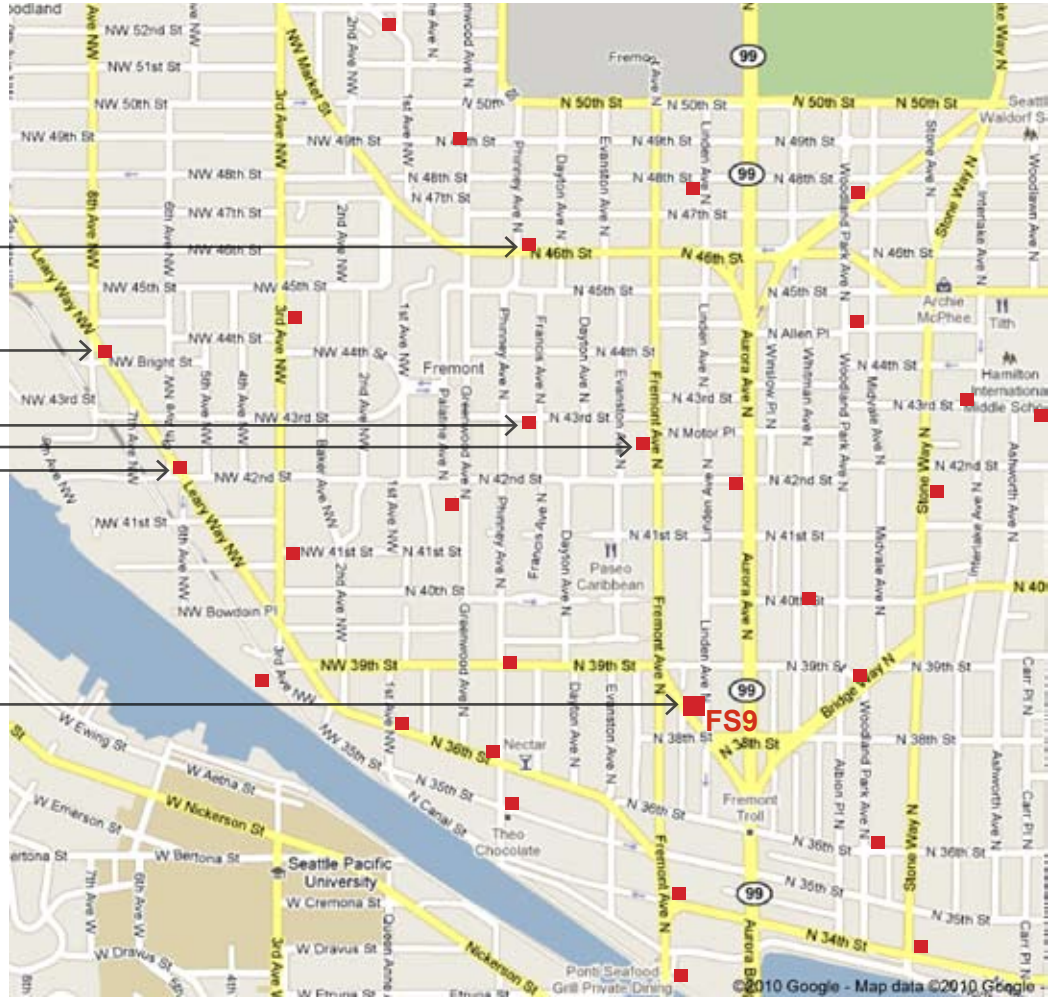
Historic photo of the Alarm Box Circuit Board

Pull Box

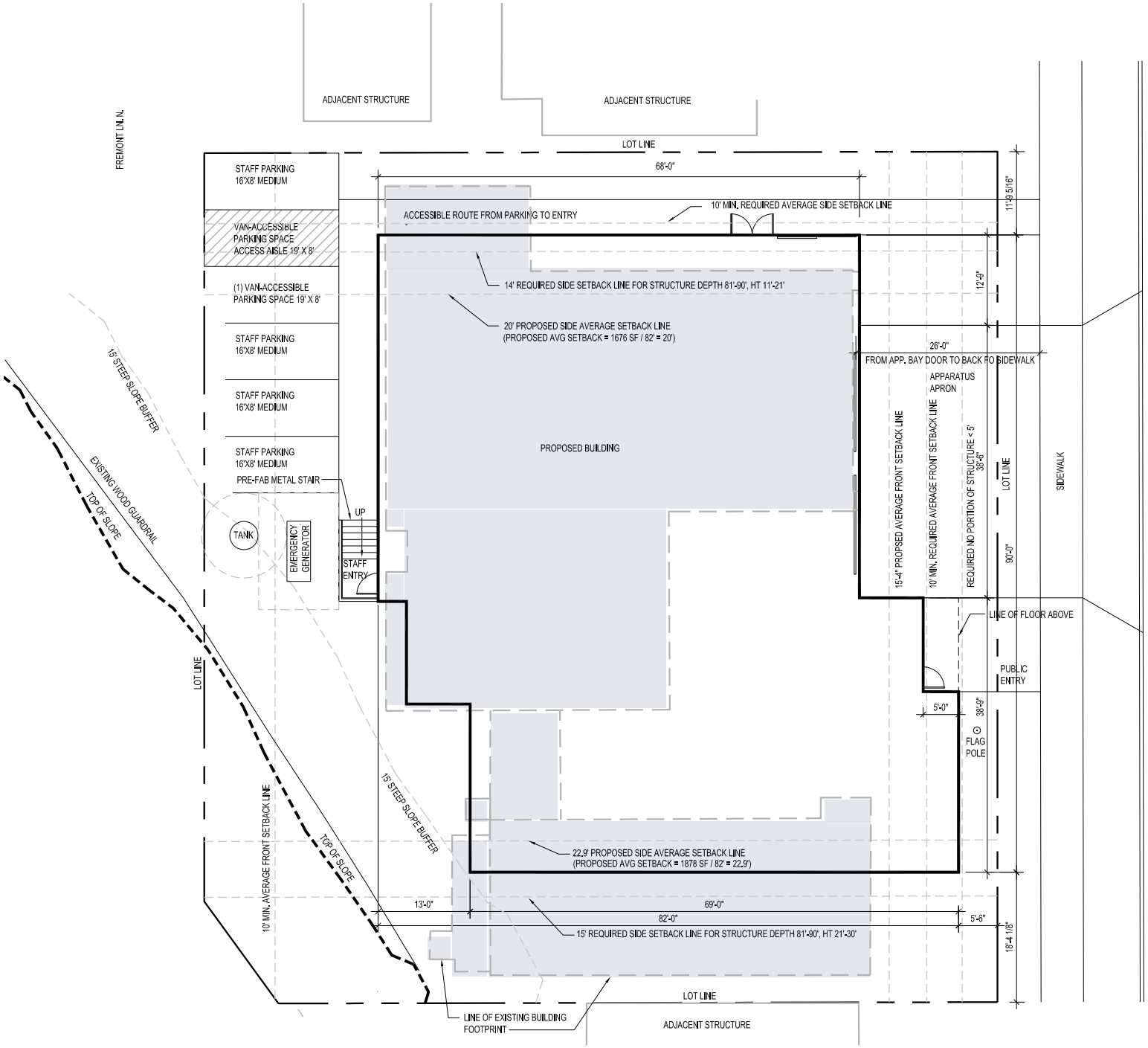
Address card catalog

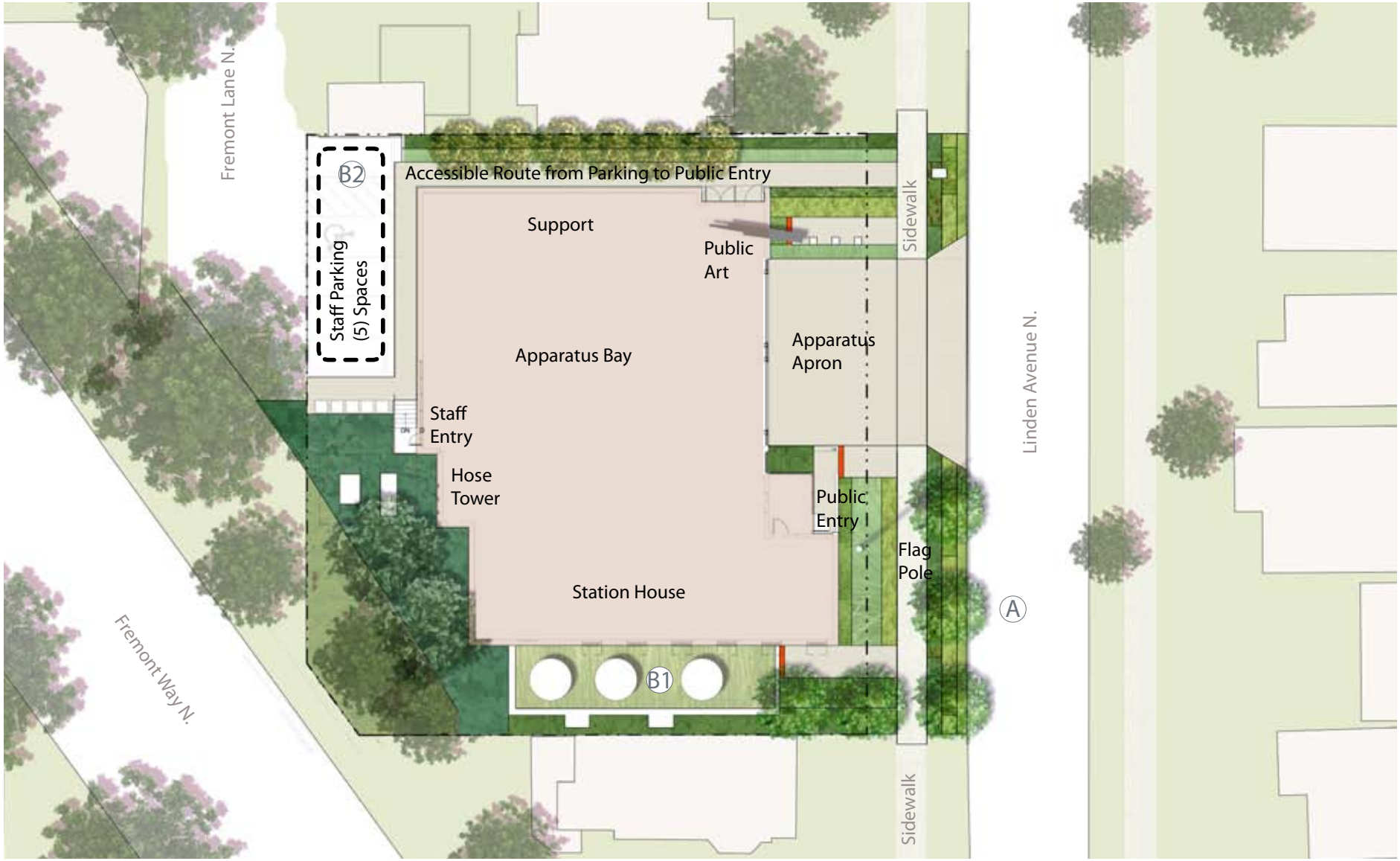


Tapper Code “1-3-2-6” punched on reel tape



Map of Pull Boxes locations in Fire Station 9 service area

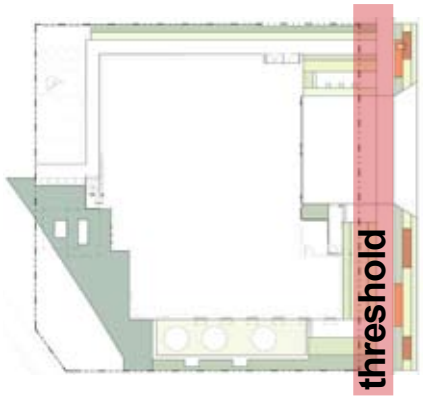


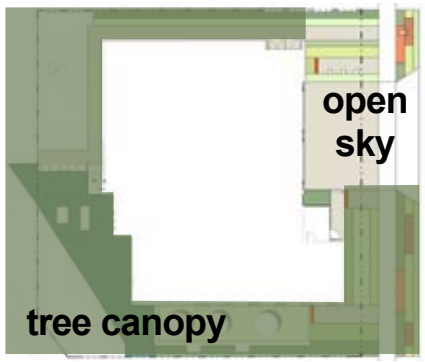


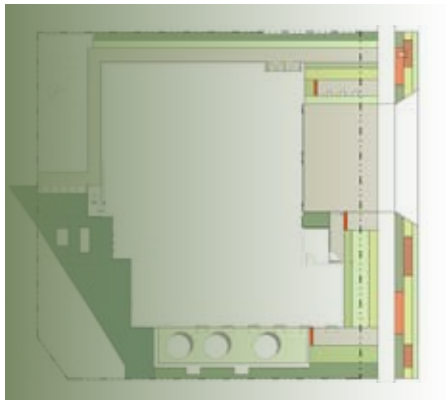
(A) New Street Trees (3)

(B1) Above-ground Rainwater Cisterns located within adapted Annex foundation

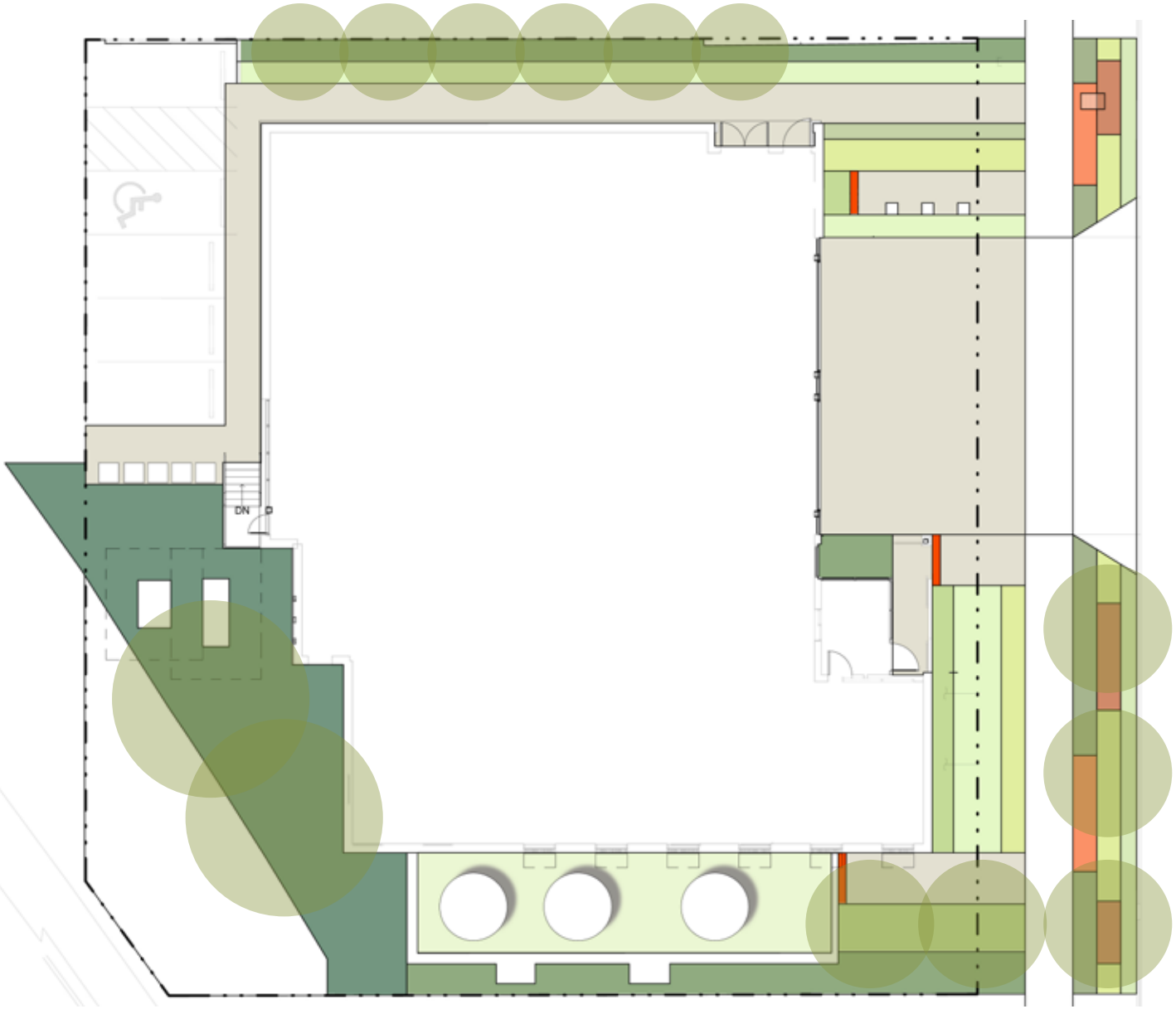
(B2) Alternate cistern location: beneath parking stalls







native gradient



PLANTING

Trees


Acer macrophyllum
Bigleaf Maple


Acer circinatum
Vine Maple


Carpinus japonica
Japanese Hornbeam

Shrubs and Groundcover


Polystichum munitum
Sword Fern


Blechnum spicant
Deer Fern


Adiantum pedatum
Maidenhair fern


Cornus sericea 'Kelseyi'
Kelsey Dogwood (winter)

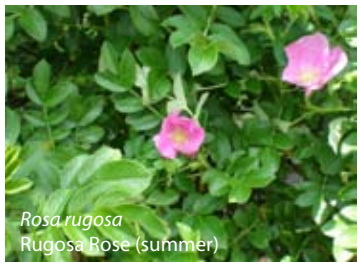

Cornus sericea 'Kelseyi'
Kelsey Dogwood (spring)


Lonicera nitida
Boxleaf honeysuckle


Hebe sp.
Hebe

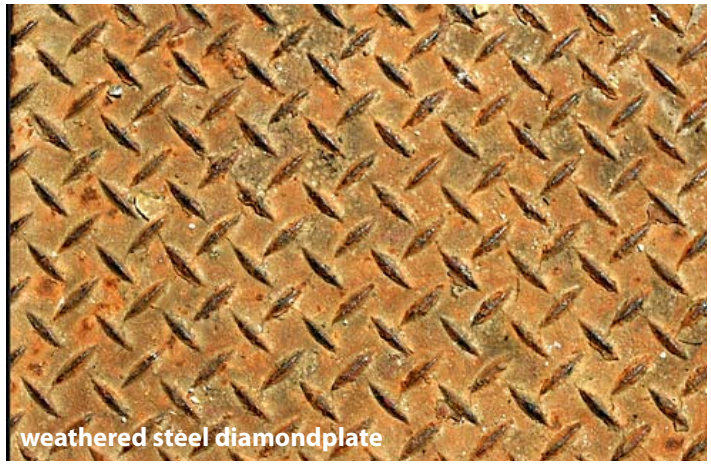

Salix purpurea 'Nana'
Dwarf Arctic Willow


Helictotrichon sempervirens
Blue Oat Grass


Rosa rugosa
Rugosa Rose (summer)


Rosa rugosa
Rugosa Rose (fall)


Seslaria autumnalis
Autumn Moor Grass


weathered steel diamondplate


cut and stacked concrete


porous concrete


standard concrete sidewalk

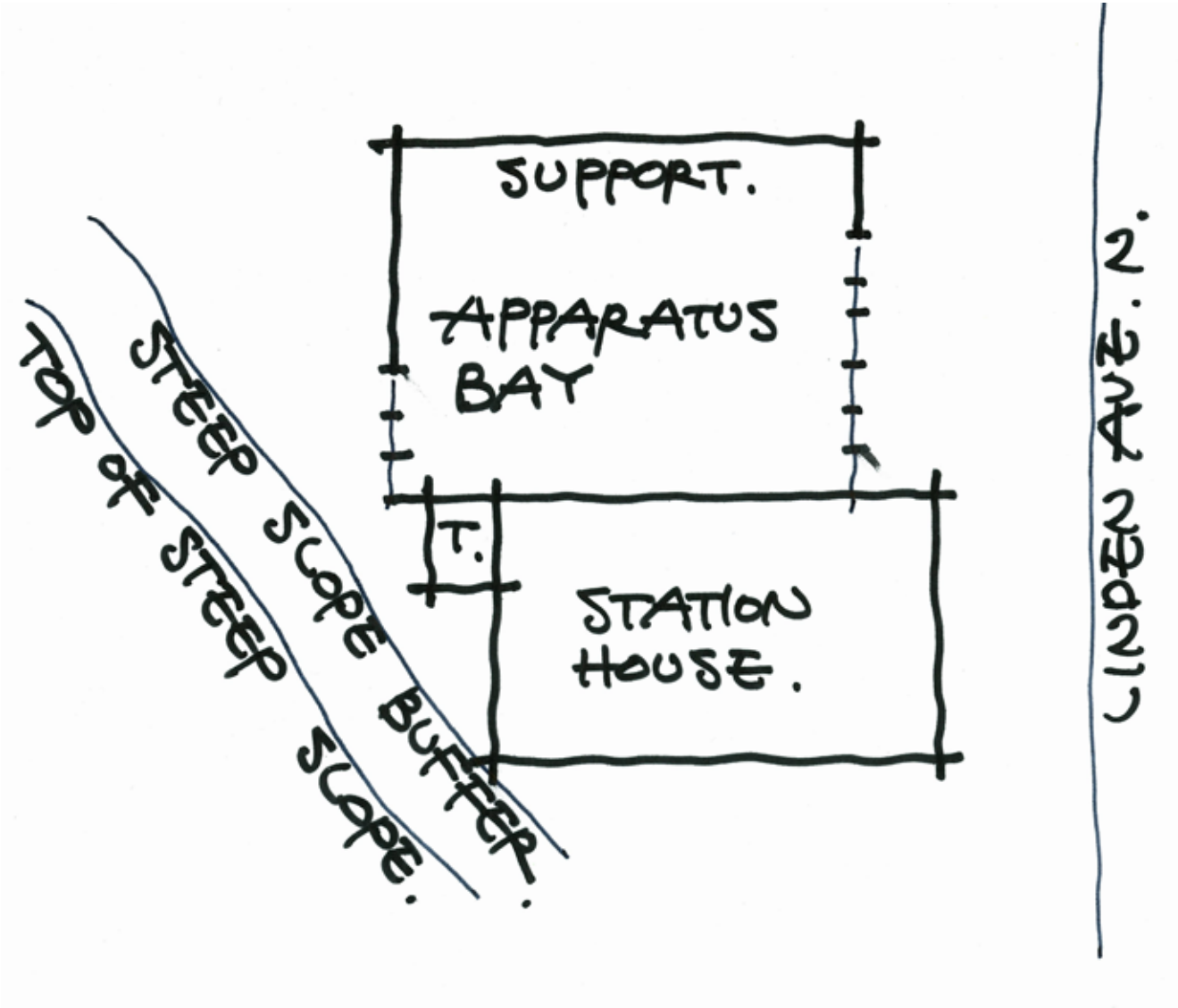

cut concrete pavers


cut concrete walls

Massing diagram - Operation Box + Station House Box

Respond to site, program & function

Balance between celebrating the civic significance and responding to the residential neighborhood

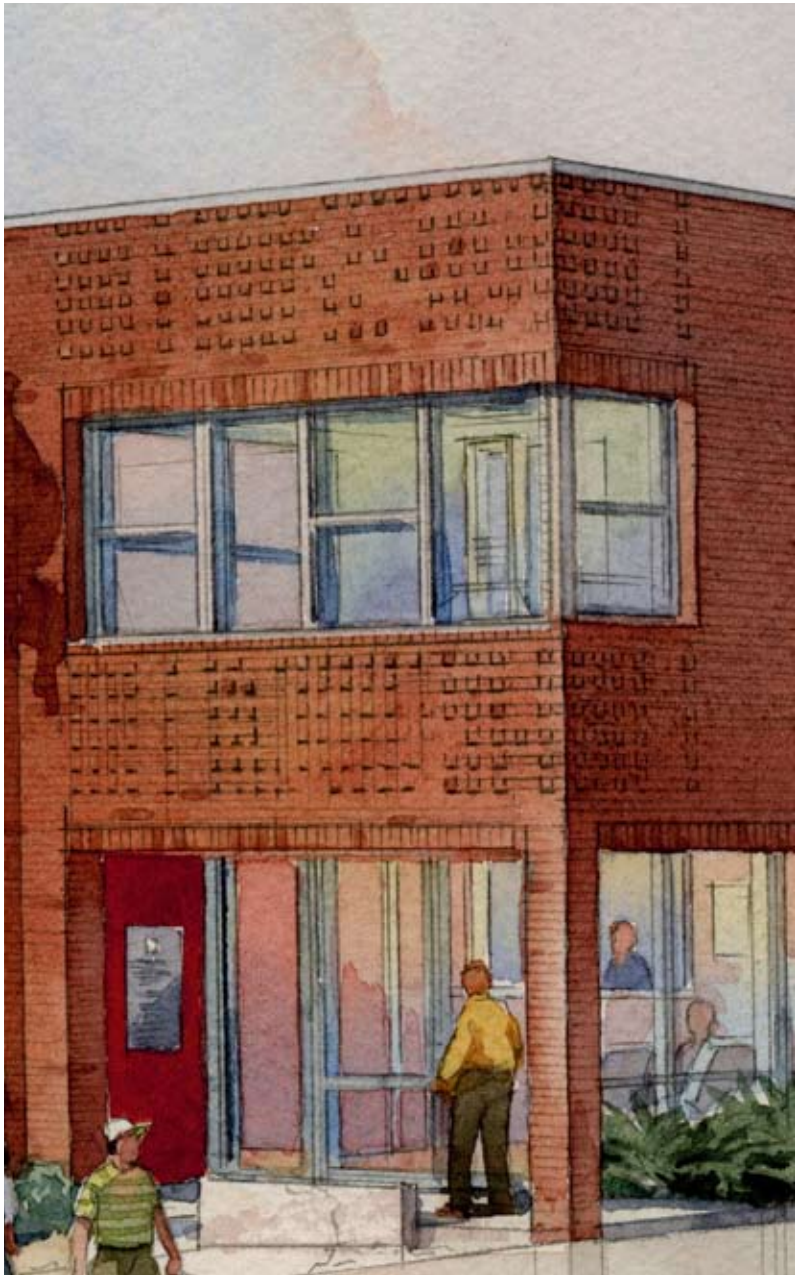


Operation Box
- transparency at apparatus bays East & West Elevations
- showcase EVERY READY (fire trucks & actions)
- civic presence

Station House Box
- support BE EVERY READY

Contrast between solid & transparent

use of **brick**
responds to residential neighborhood at building material & its scale & texture level



Tapper Code brick pattern above Public Lobby area

Tapper Code brick pattern under the art “Cat” at the front facade

Existing brick building in downtown Fremont

Brick & window colors in downtown Fremont

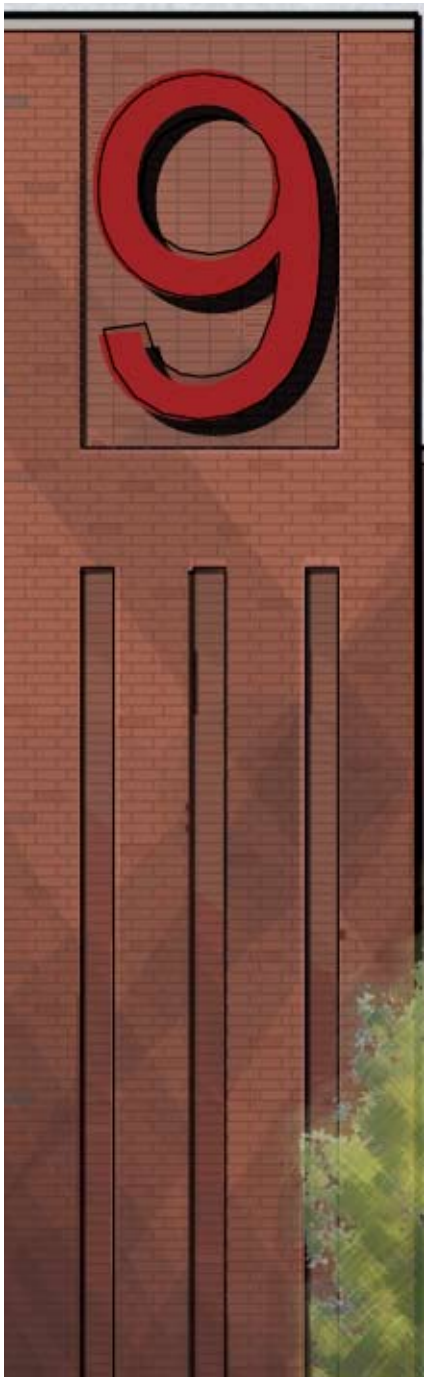
Existing brick building in downtown Fremont

Respond to Fremont & neighborhood
Bring more character to the building

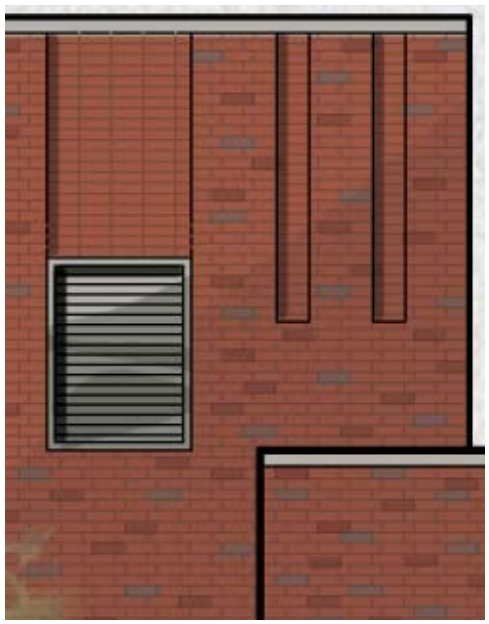
Brick color & texture
mixed color
variation of textures - mission & rugged texture
e.g. brick buildings in Fremont commeicial area

Brick size
Standard 2 1/4” x 7 5/8”, residential scale

Brick & window colors in downtown Fremont



Stack bond pattern



Stack bond pattern

Stack bond, solider coursing & rowlock

Respond to Fremont & neighborhood
Bring more character to the building

Brick patterns

variation of patterns
running bond - as background

stack bond
3/4” recessed stack bond under punched windows, above louver & behind supersized “9” on Hose Tower

3/4” recessed & 8” wide vertical reveals
with stack bond pattern on Hose Tower

Brick details

3/4” recessed solider coursing at window heads & openings
3/4” projected rowlock bricks at window sills

create shadows & more depth to the facades
wall surfaces look more articulated & lively

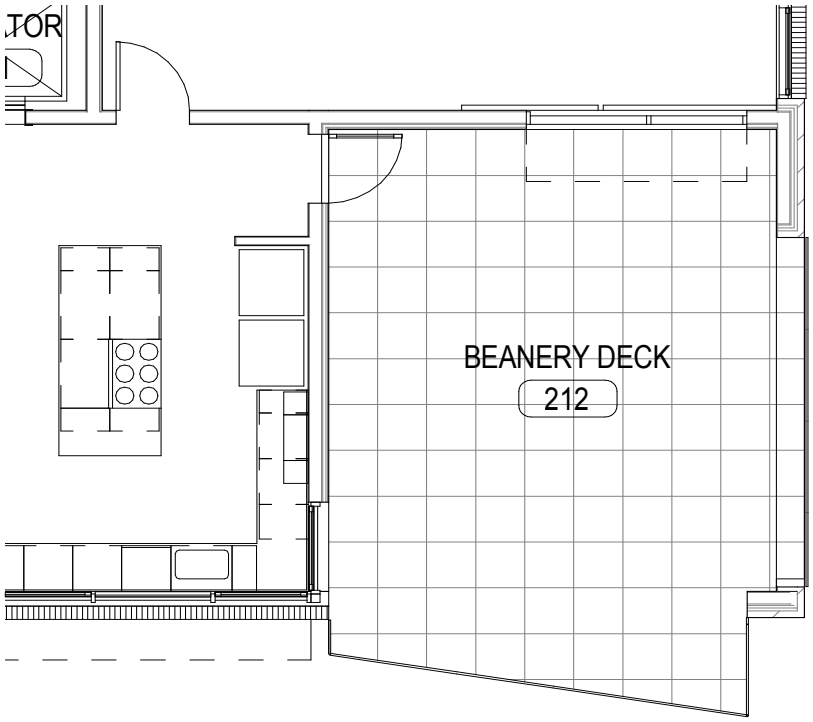
East Elevation

West Elevation

South Elevation

North Elevation

Supersized graphic “9” on Hose Tower

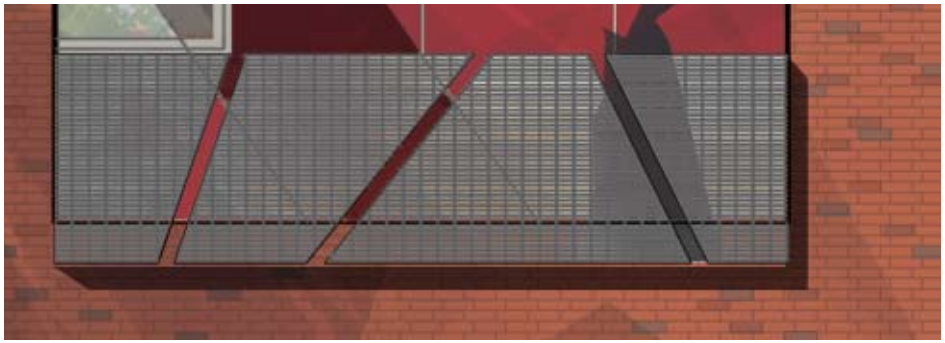


Beanery Deck Plan

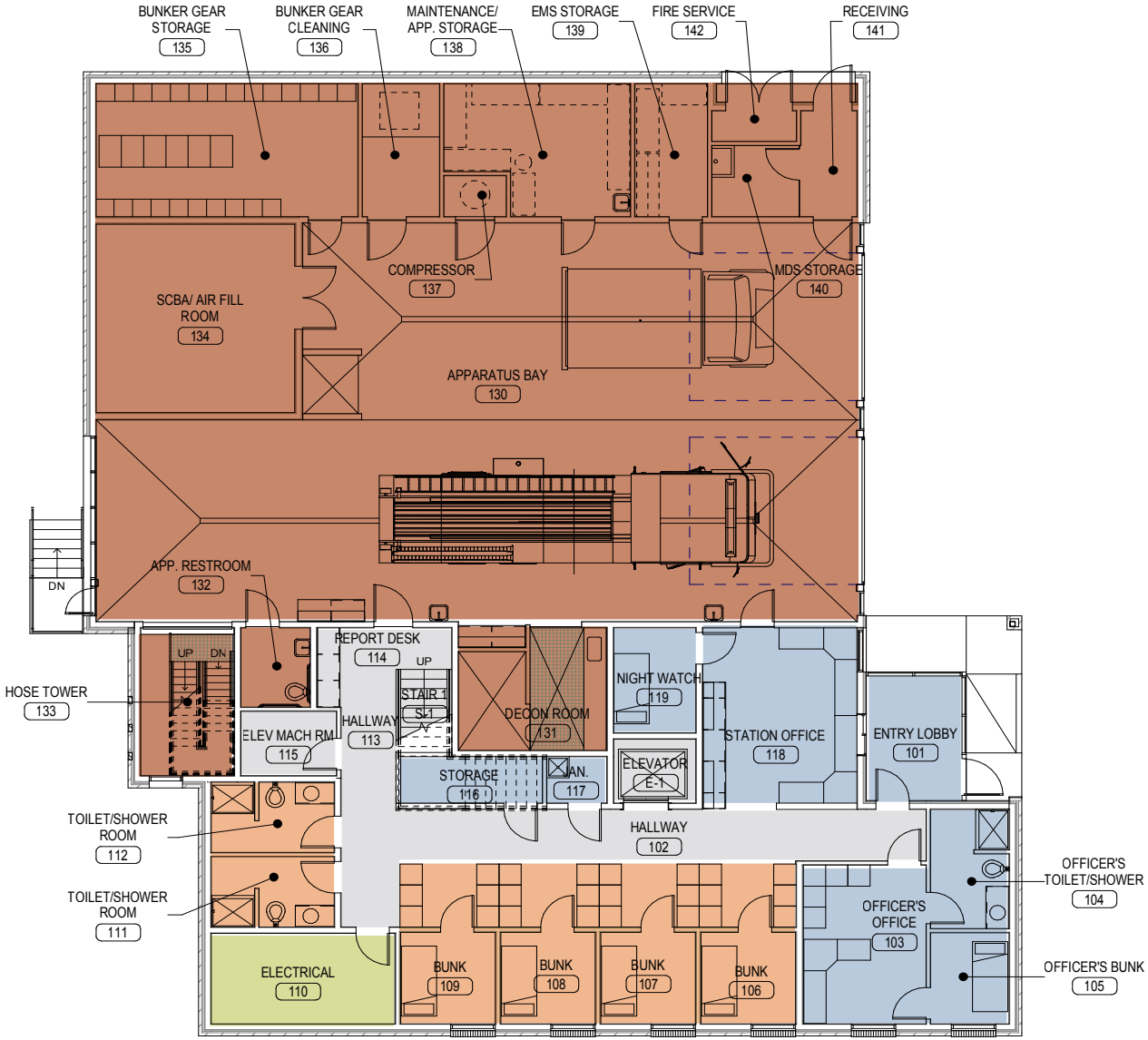
Respond to Fremont & neighborhood
Bring more character to the building

Supersized graphic “9” on Hose Tower
an element of surprise
visible from Fremont Way
reinforce the urban connection to the West

Guardrail panels at Beanery Deck
semi-transparent metal grating panels
reflect industrial root of Fremont
panels slanted and deck cantilevered at the corner
in a Fremont funky & artsy character
in an expression of the speed & movement of the Fire Station functions



Guardrail panel detail at East Elevation, South Elevation similar



Response to program

Compact building footprint

All operation support spaces are accessed directly from Apparatus Bay.

All sleep rooms are located on 1st floor for quick response time.

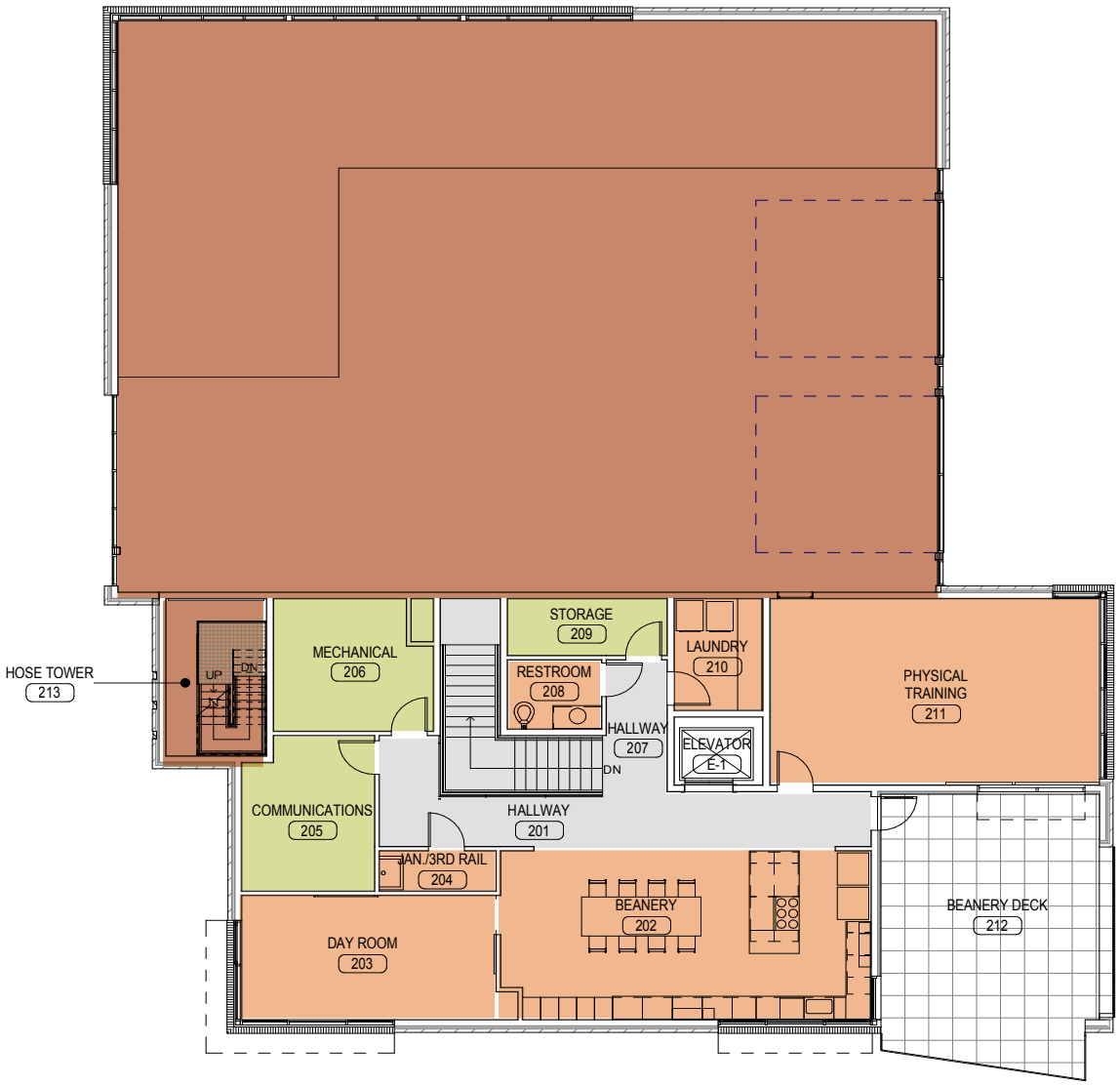
Rest of crew spaces & outdoor beanery area are located on 2nd floor to take advantage of city view & stay away from traffic noise from Fremont Way N.

Extra wide “L” shaped open stair is designed for quick response time with visual connection & min. turns.

Public Lobby & Physical Training are more visible while the rest spaces are more private.

OPERATION ADMINISTRATION CREW AREA EQUIPMENT CIRCULATION

North



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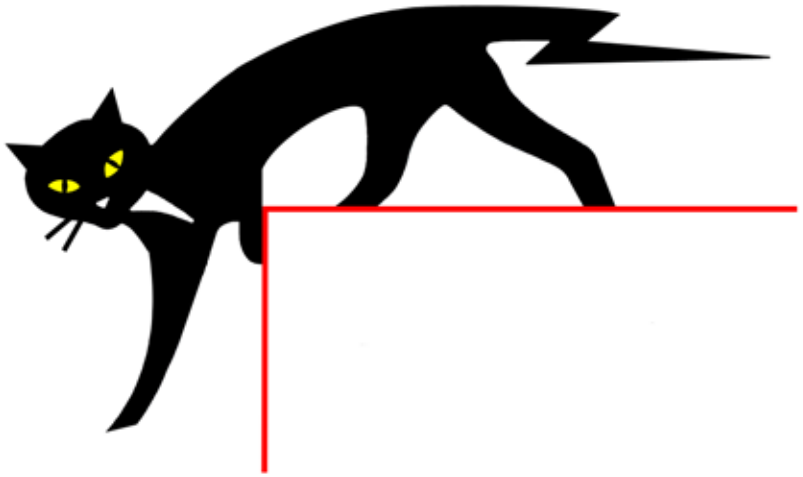

Working closely with artist to refine the placement of the art

Building design supports art by providing an appropriate wall surface to highlight the art

21	3		2	**Sustainable Sites**	
Y				SS Prereq 1	**Construction Activity Pollution Prevention**
1				SS Credit 1	**Site Selection**
5				SS Credit 2	**Development Density & Community Connectivity**
	1			SS Credit 3	**Brownfield Redevelopment**
6				SS Credit 4.1	**Alternative Transportation**, Public Transportation Access
1				SS Credit 4.2	**Alternative Transportation**, Bicycle Storage & Changing Rooms
3				SS Credit 4.3	**Alternative Transportation,** Low-Emitting and Fuel-Efficient Vehicles
2				SS Credit 4.4	**Alternative Transportation**, Parking Capacity
	1			SS Credit 5.1	**Site Development**, Protect or Restore Habitat
			1	SS Credit 5.2	**Site Development**, Maximize Open Space
			1	SS Credit 6.1	**Stormwater Design**, Quantity Control
1				SS Credit 6.2	**Stormwater Design,** Quality Control
1				SS Credit 7.1	**Heat Island Effect**, Non-Roof
1				SS Credit 7.2	**Heat Island Effect,** Roof
	1			SS Credit 8	**Light Pollution Reduction**
2	1	7		**Water Efficiency**	
Y				WE Prereq 1	**Water Use Reduction**, 20% Reduction
2				WE Credit 1.1	**Water Efficient Landscaping**, Reduce by 50%
		2		WE Credit 1.2	**Water Efficient Landscaping**, No Potable Use or No Irrigation
		2		WE Credit 2	**Innovative Wastewater Technologies**
	1	3		WE Credit 3	**Water Use Reduction**
9	6	1	19	**Energy & Atmosphere**	
Y				EA Prereq 1	**Fundamental Commissioning of the Building Energy Systems**
Y				EA Prereq 2	**Minimum Energy Performance**, 10% New Bldgs or 5% Ex. Bldg Renovatic
Y				EA Prereq 3	**Fundamental Refrigerant Management**
5	1	1	12	EA Credit 1	**Optimize Energy Performance**
			7	EA Credit 2	**On-Site Renewable Energy**
2				EA Credit 3	**Enhanced Commissioning**
2				EA Credit 4	**Enhanced Refrigerant Management**
	3			EA Credit 5	**Measurement & Verification**
	2			EA Credit 6	**Green Power**
5	2		7	**Materials & Resources**	
Y				MR Prereq 1	**Storage & Collection of Recyclables**
			1	MR Credit 1.1	**Building Reuse,** Maintain 55% of Existing Walls, Floors & Roof
			1	MR Credit 1.2	**Building Reuse,** Maintain 75% of Existing Walls, Floors & Roof
			1	MR Credit 1.3	**Building Reuse,** Maintain 95% of Existing Walls, Floors & Roof
			1	MR Credit 1.4	**Building Reuse,** Maintain 50% of Interior Non-Structural Elements
1				MR Credit 2.1	**Construction Waste Management**, Divert 50% from Disposal
1				MR Credit 2.2	**Construction Waste Management**, Divert 75% from Disposal
			1	MR Credit 3.1	**Resource Reuse**, 5%
			1	MR Credit 3.2	**Resource Reuse**, 10%
1				MR Credit 4.1	**Recycled Content**, 10% (post-consumer + ½ pre-consumer)
1				MR Credit 4.2	**Recycled Content**, 20% (post-consumer + ½ pre-consumer)
1				MR Credit 5.1	**Regional Materials**, 10% Extracted, Processed & Manufactured Regionally
	1			MR Credit 5.2	**Regional Materials**, 20% Extracted, Processed & Manufactured Regionally
			1	MR Credit 6	**Rapidly Renewable Materials**, 2.5%
	1			MR Credit 7	**Certified Wood**
12	2	1		**Indoor Environmental Quality**	
Y				EQ Prereq 1	**Minimum IAQ Performance**
Y				EQ Prereq 2	**Environmental Tobacco Smoke** (ETS) **Control**
1				EQ Credit 1	**Outdoor Air Delivery Monitoring**
1				EQ Credit 2	**Increase Ventilation**
1				EQ Credit 3.1	**Construction IAQ Management Plan**, During Construction
	1			EQ Credit 3.2	**Construction IAQ Management Plan**, Before Occupancy
1				EQ Credit 4.1	**Low-Emitting Materials**, Adhesives & Sealants
1				EQ Credit 4.2	**Low-Emitting Materials**, Paints & Coatings
1				EQ Credit 4.3	**Low-Emitting Materials**, Flooring Systems
	1			EQ Credit 4.4	**Low-Emitting Materials**, Composite Wood & Agrifiber Products
1				EQ Credit 5	**Indoor Chemical & Pollutant Source Control**
1				EQ Credit 6.1	**Controllability of Systems**, Lighting
		1		EQ Credit 6.2	**Controllability of Systems**, Thermal Comfort
1				EQ Credit 7.1	**Thermal Comfort**, Design
1				EQ Credit 7.2	**Thermal Comfort**, Verification
1				EQ Credit 8.1	**Daylight & Views**, Daylight 75% of Spaces
1				EQ Credit 8.2	**Daylight & Views**, Views for 90% of Spaces
3	2	1		**Innovation & Design Process**	
1				ID Credit 1.1	**Innovation in Design:** Sustainable Education
1				ID Credit 1.2	**Innovation in Design**: Green Housekeeping
	1			ID Credit 1.3	**Innovation in Design**: Green Operations and Management
		1		ID Credit 1.4	**Innovation in Design**: **Carbon Neutral** Building
	1			ID Credit 1.5	**Innovation in Design**: Community Involvement/Connection - Exemplary Construction Waste, Exemplary Water Conservation.…
1				ID Credit 2	**LEED® Accredited Professional**
1		2	1	**Regional Priority Credits**	
1				RP Credit 1.1	**Regional Priority Credit:** Specific Credit SS 1
		1		RP Credit 1.2	**Regional Priority Credit:** Specific Credit SS 6.1
			1	RP Credit 1.3	**Regional Priority Credit:** Specific Credit EA 1 & 2
		1		RP Credit 1.4	**Regional Priority Credit:** MR 7

Yes	Eas	Hard	No	
53	16	12	29	**Project Totals (pre-certification estimates)**

53 credits LEED silver

Above grade cistern options

Cistern images

	Seattle Municipal Code Requirements	Departure request	Decision type
Departure No.1 **Parking quantity**	**Parking quantity per SMC 23.45.570** G.1. Requirement for fire stations is not shown on Chart A, B or C of 23.54.015.	To meet the program needs, 5 spaces are proposed for staff parking, 1 space per staff.	Director determination based on the requirements for the most comparable use per SMC 23.54.015. H.
Departure No.2 **Right of Way**	**Fremont Lane N. Right of Way improvement per SMC 23.53.015**	No Right of Way improvement along Fremont Lane N. is proposed because environmentally critical area and it is adequate for current & potential pedestrian and vehicular traffic.	Director rule in consultation with Director of Transportation during MUP to waive or modify requirements.
Departure No.3 **Parking location**	**Parking location per SMC 23.45.570** G.2. "Parking areas and facilities may not be located in the required front setback." Proposed staff parking at Fremont Lane N. is not allowed in the required front setback unless it is determined to be an undeveloped street per 23.40.030 and a front setback is not required.	To meet the program needs, the proposed staff parking is located in the required front setback along Fremont Lane N.	Type I or II Directors rule during MUP. Or if 23.40.030 does not apply to the site, Type V Council decision during MUP to waive or modify development standard for City facilities per SMC 23.45.504, B.
Departure No.4 **Structure width & depth**	**Structure width & depth per SMC 23.45.570** D.1. Maximum width with modulation or landscape option in Lowrise 1 zone is 75'. E. "The maximum depth of institutional structures shall be 65% of lot depth." 72.8'	To meet the program needs & steep slope buffer requirement, the proposed width is 89'-6"; depth is 80'. To reduce the appearance of bulk, the front facade is modulated , landscaping is provided & the proposed average front setback is 15', 5' more than 10' minimum average front setback requirement.	Type V Council decision during MUP to waive or modify development standard for City facilities per SMC 23.76.004A.
Departure No.5 **Landscaping of required stebacks**	**Screening of required stebacks per SMC 23.45.570** G.3.a. "Screening shall be provided on each side of the parking area which abuts, or faces across a street, alley or access easement, a lot in a residential zone."	Screening is not provided for front setback at Fremont Lane N. due to conflict with meeting steep slope buffer requirement & the program needs to provide staff parking, staff entry access, trash & recycle area.	Type V Council decision during MUP to waive or modify development standard for City facilities per SMC 23.45.504, B.
Departure No.6 **Noise**	**Curb cuts per SMC 23.54.030** F.1.b.1) 20' curb cut is allowed.	To meet the program needs & steep slope buffer requirement, the proposed curb cut is 48' for 5 parking spaces along Fremont Lane N.	Type V Council decision during MUP to waive or modify development standard for City facilities per SMC 23.45.504, B.
Departure No.7 **Curb cuts**	**Structure Height per SMC 23.45.009** A. maximum hright for L1 zone 25'.	To meet the program needs, additonal height is proposed for Station House portion of the structure.	Type V Council decision during MUP to waive or modify development standard for City facilities per SMC 23.76.004A.
Departure No.8 **Structure Height**	**Flagpole per SMC 23.45.009** D.1. Flagpoles are exempt from height controls, provided they are no closer than 50 percent of their height above existing grade to any adjoining lot line.	To meet the program needs, we propose to place the flagpole adjacent to the front entry of the building, approx. 1' from the lot line.	Type V Council decision during MUP to waive or modify development standard for City facilities per SMC 23.45.504, B.


ENGINE
discussion
EVER READY