West Seattle

FIRE STATION 32

Replacement Project

Seattle Design Commission Meeting 2
Schematic Design

Presented by
Bohlin Cywinski Jackson
August 1, 2013

CLIENT

City of Seattle
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Mark Nakagawara, Senior Project Manager
Chief Michael H. Walsh, Battalion Chief, Retired

Seattle Fire Department
Chief William Hepburn, Deputy Fire Chief
Lt. Jared Fields, Station Representative
Sean Plattner, Station Representative
Michael Mann, Station Representative

DESIGN TEAM

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Sean Orlando
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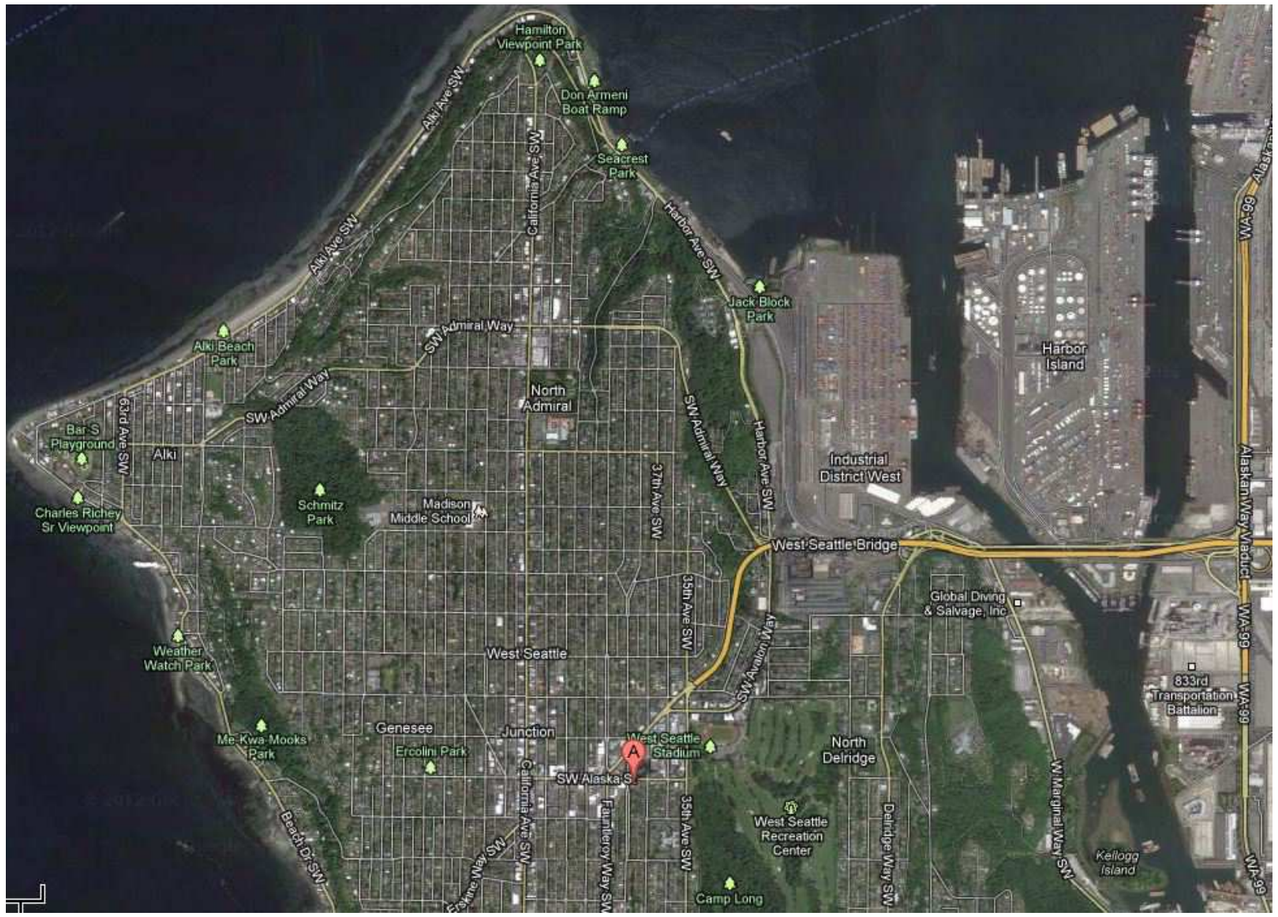
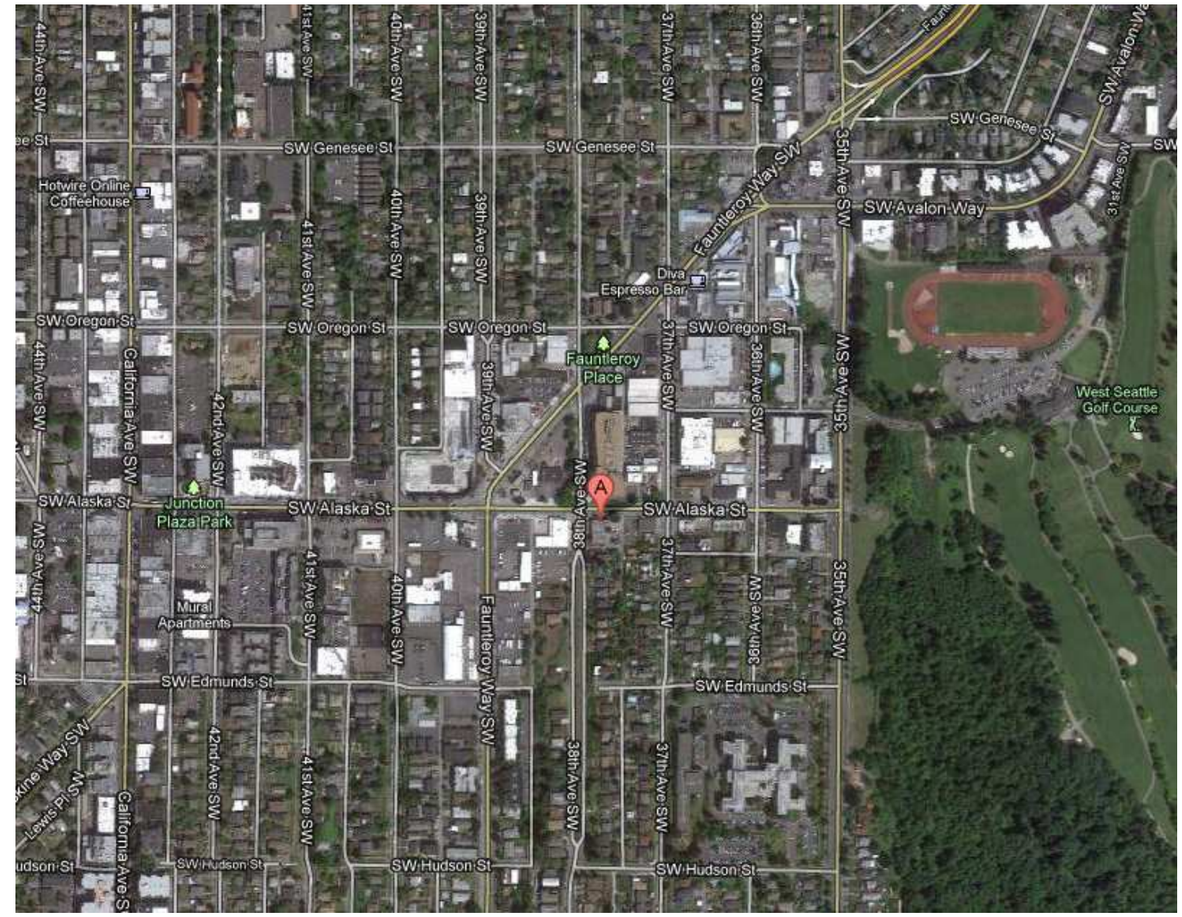
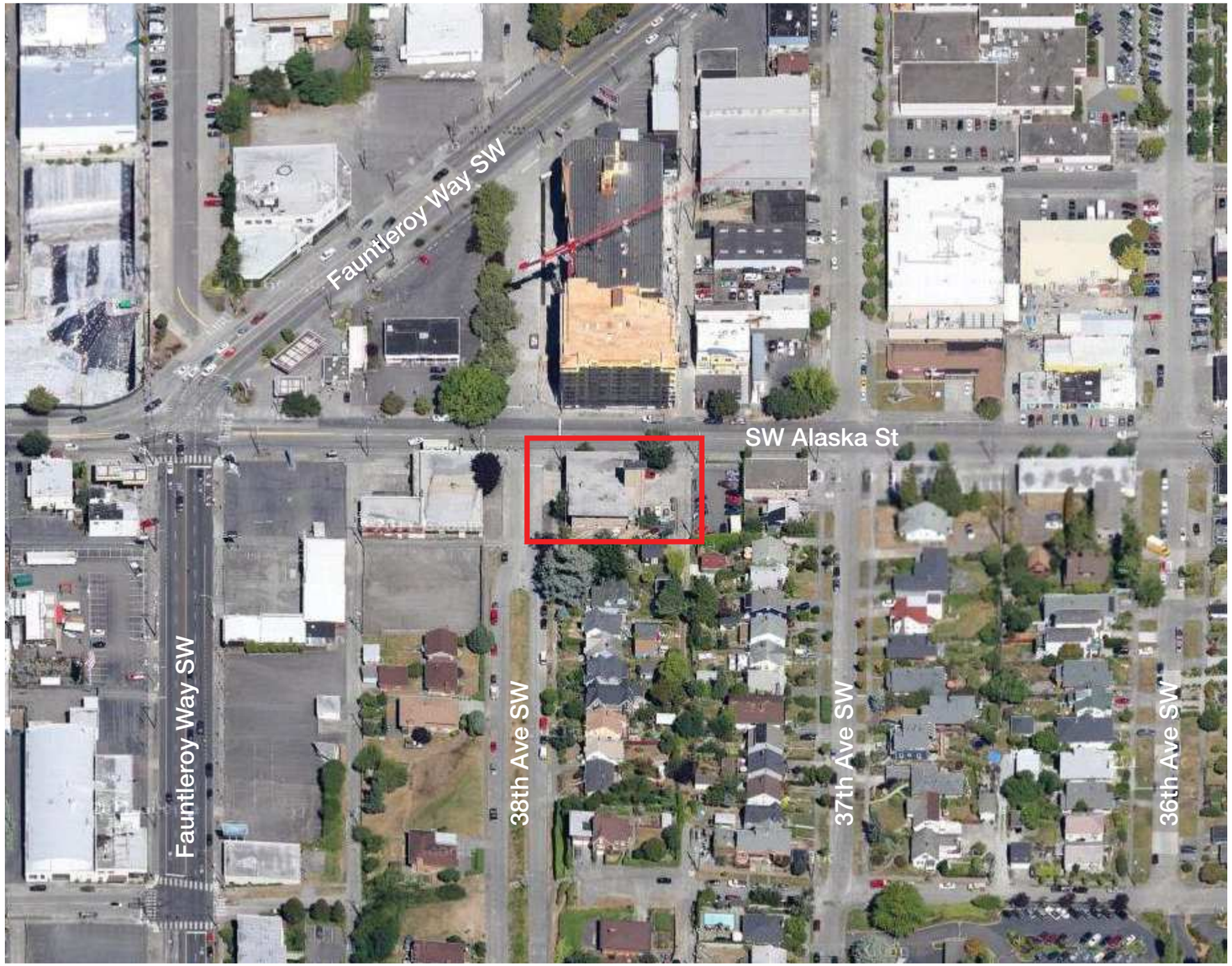
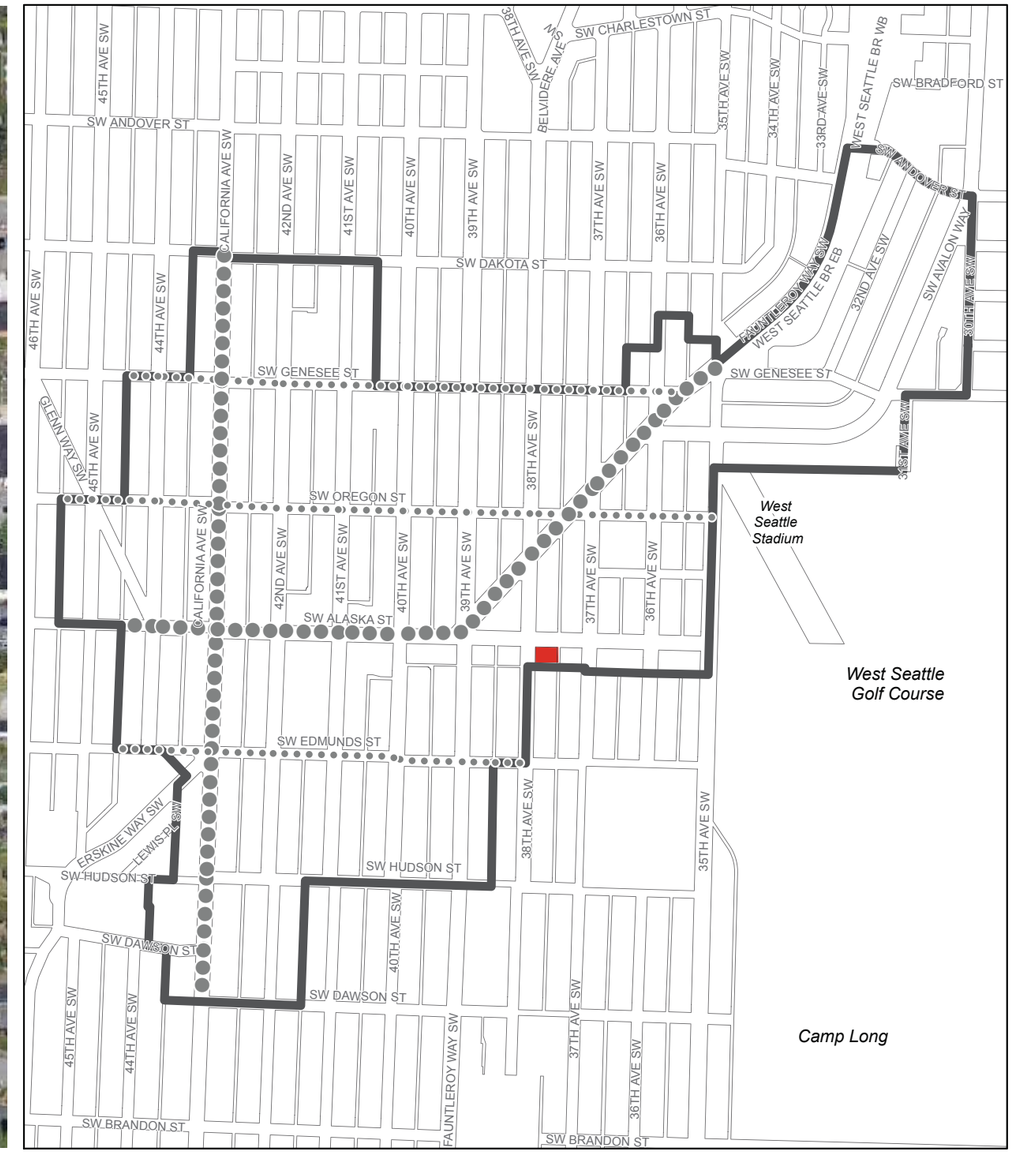
Oakland CA 94602

Seattle Office of Arts & Cultural Affairs
Marcia Iwasaki, Public Art Program


Hamilton Viewpoint Park
Don Armeni Boat Ramp
Seacrest Park
Alki Ave SW
California Ave SW
Harbor Ave SW
Jack Block Park
Alki Beach Park
SW Admiral Way
North Admiral
Harbor Island
Industrial District West
Bar S Playground
63rd Ave SW
Alki
Schmitz Park
Madison Middle School
Charles Richey Sr Viewpoint
37th Ave SW
West Seattle Bridge
Alaskan Way Viaduct
WA-99
Global Diving & Salvage, Inc
35th Ave SW
Weather Watch Park
West Seattle
SW Avalon Way
833rd Transportation Battalion
Me-Kwa-Mooks Park
Genesee
Junction
Ercolini Park
West Seattle Stadium
SW Alaska St
North Delridge
W Marginal Way SW
Beach Dr SW
Fauntleroy Way SW
West Seattle Recreation Center
Delridge Way SW
Kellogg Island
Camp Long


44th Ave SW
41st Ave SW
40th Ave SW
39th Ave SW
37th Ave SW
36th Ave SW
35th Ave SW
SW Genesee St
Hotwire Online Coffeehouse
Fauntleroy Way SW
SW Avalon Way
Diva Espresso Bar
SW Oregon St
Fauntleroy Place
West Seattle Golf Course
California Ave SW
42nd Ave SW
SW Alaska St
Junction Plaza Park
38th Ave SW
Mural Apartments
SW Edmunds St
Lewis Pl SW
SW Hudson St





West Seattle Junction Hub Urban Village Pedestrian Connectors

Hub Urban Village Boundary

Major Pedestrian Street

Important Pedestrian Connectors

N

0 250 500 1,000 Feet

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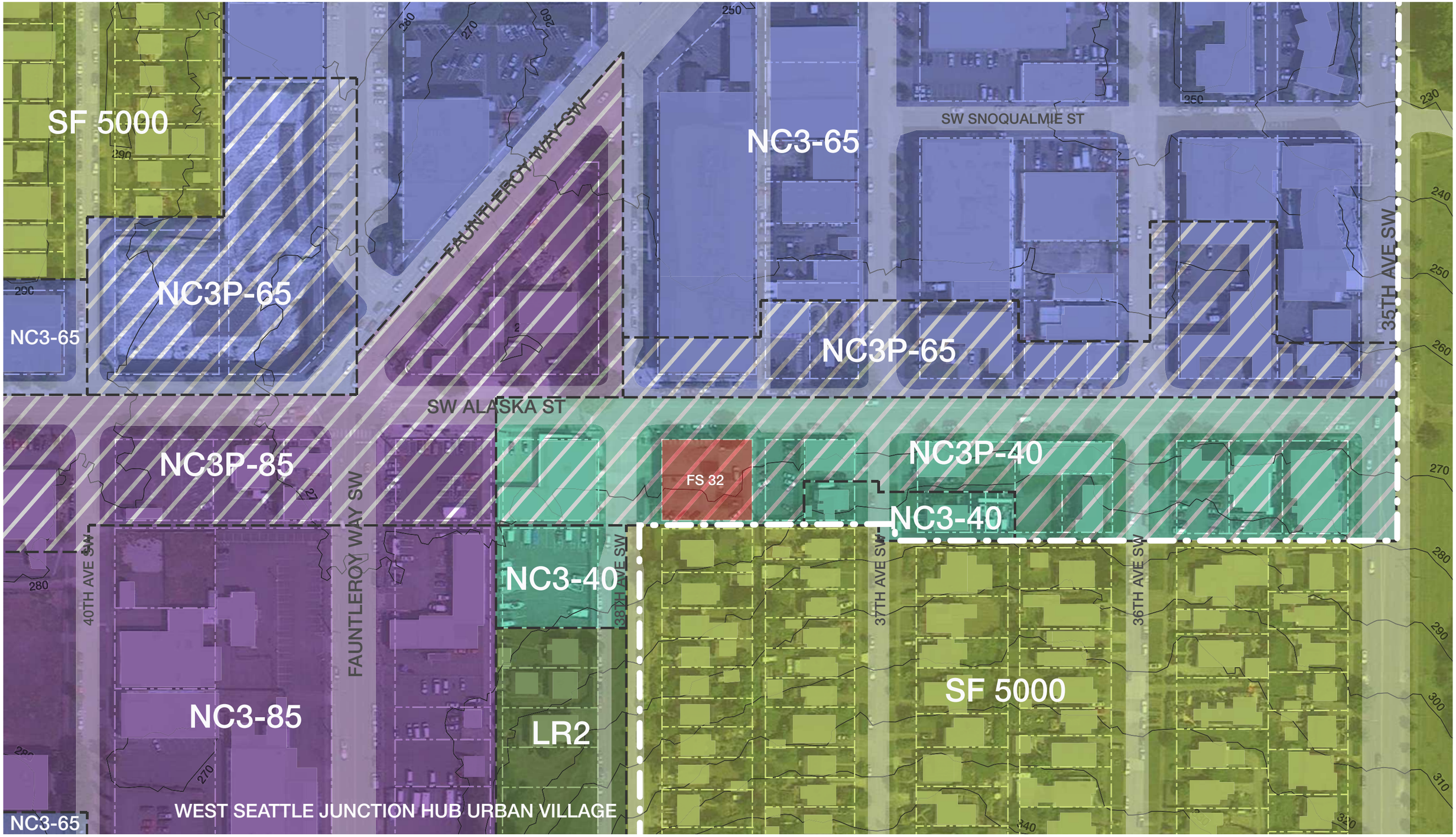
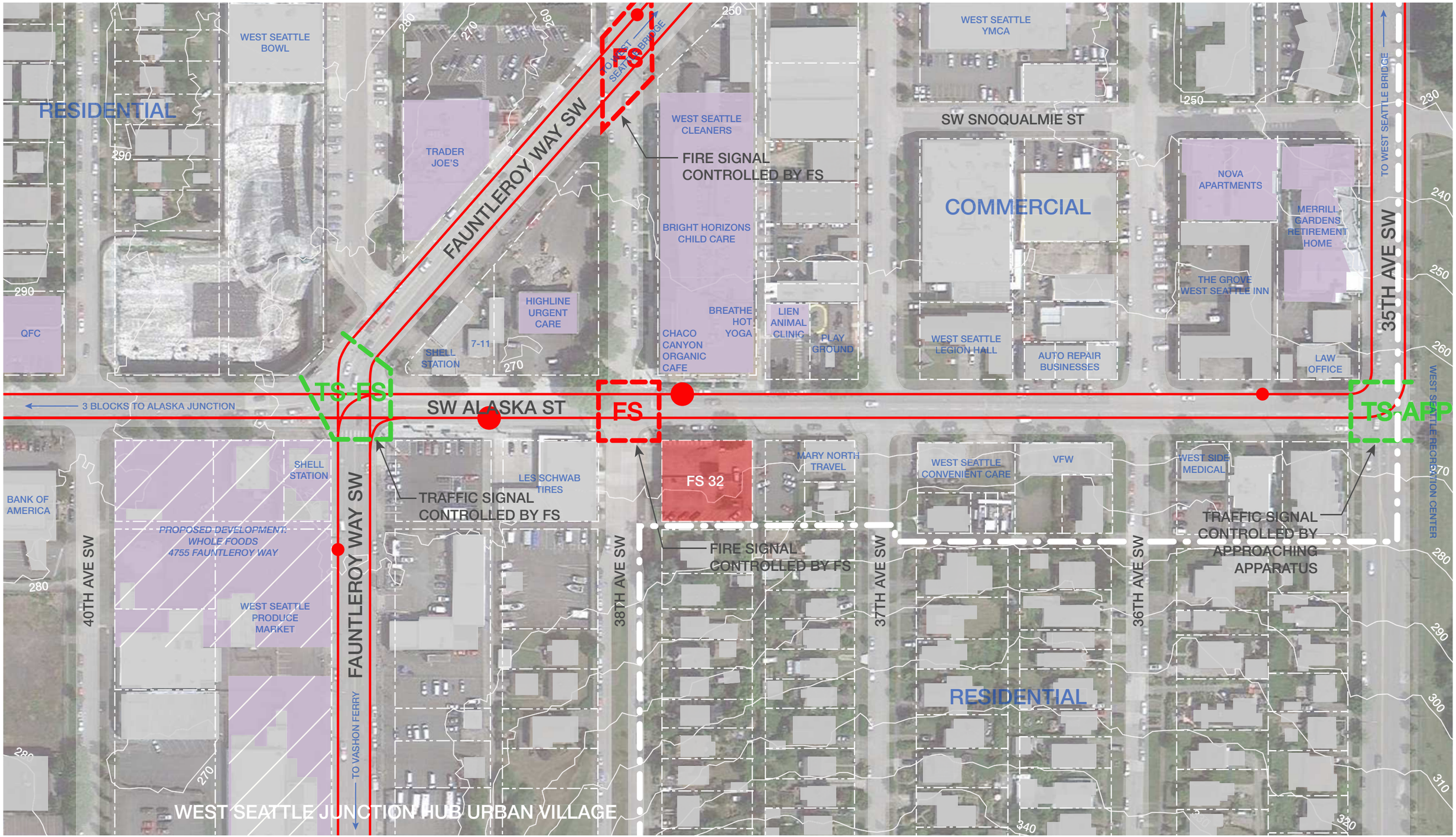
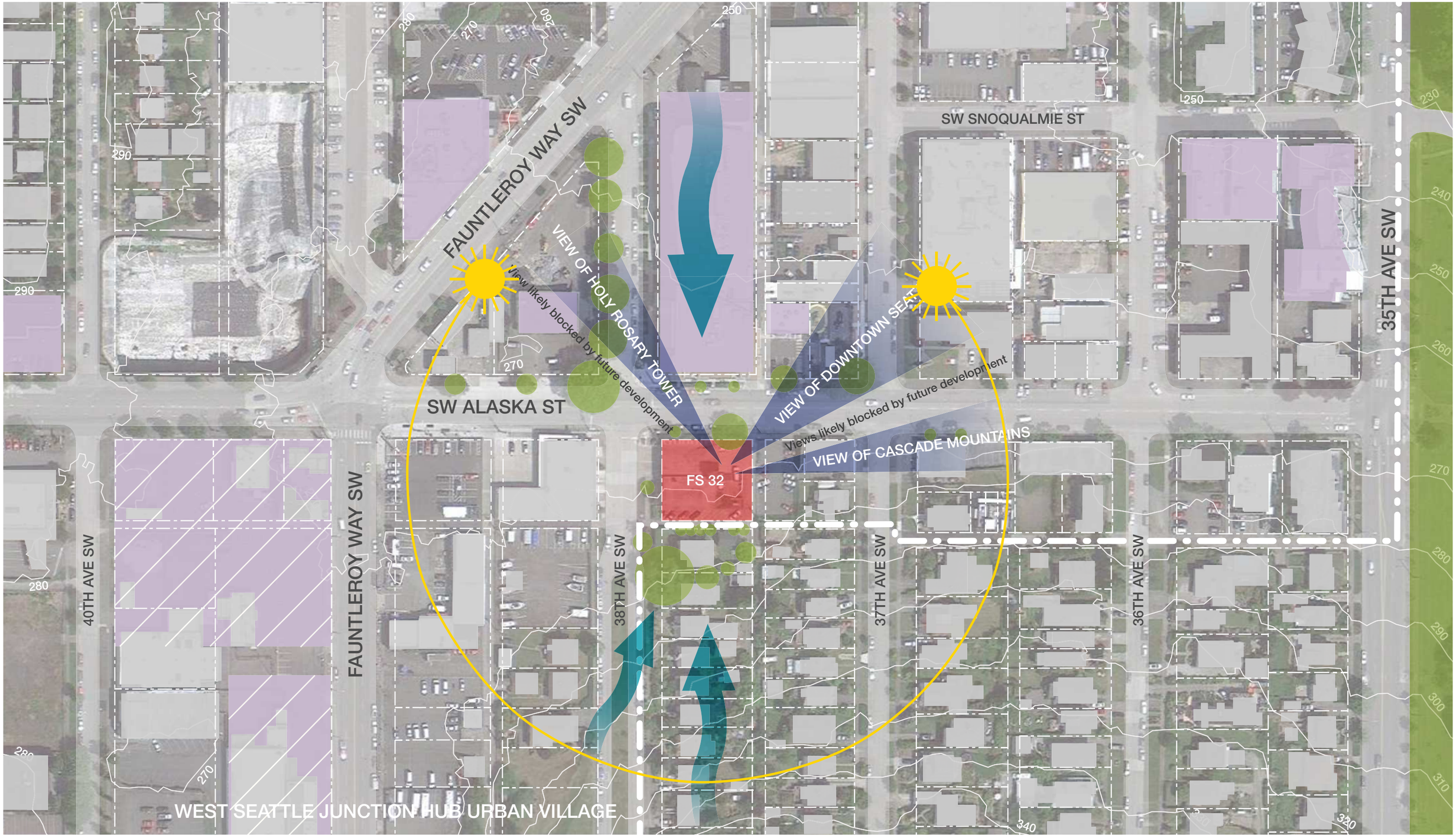


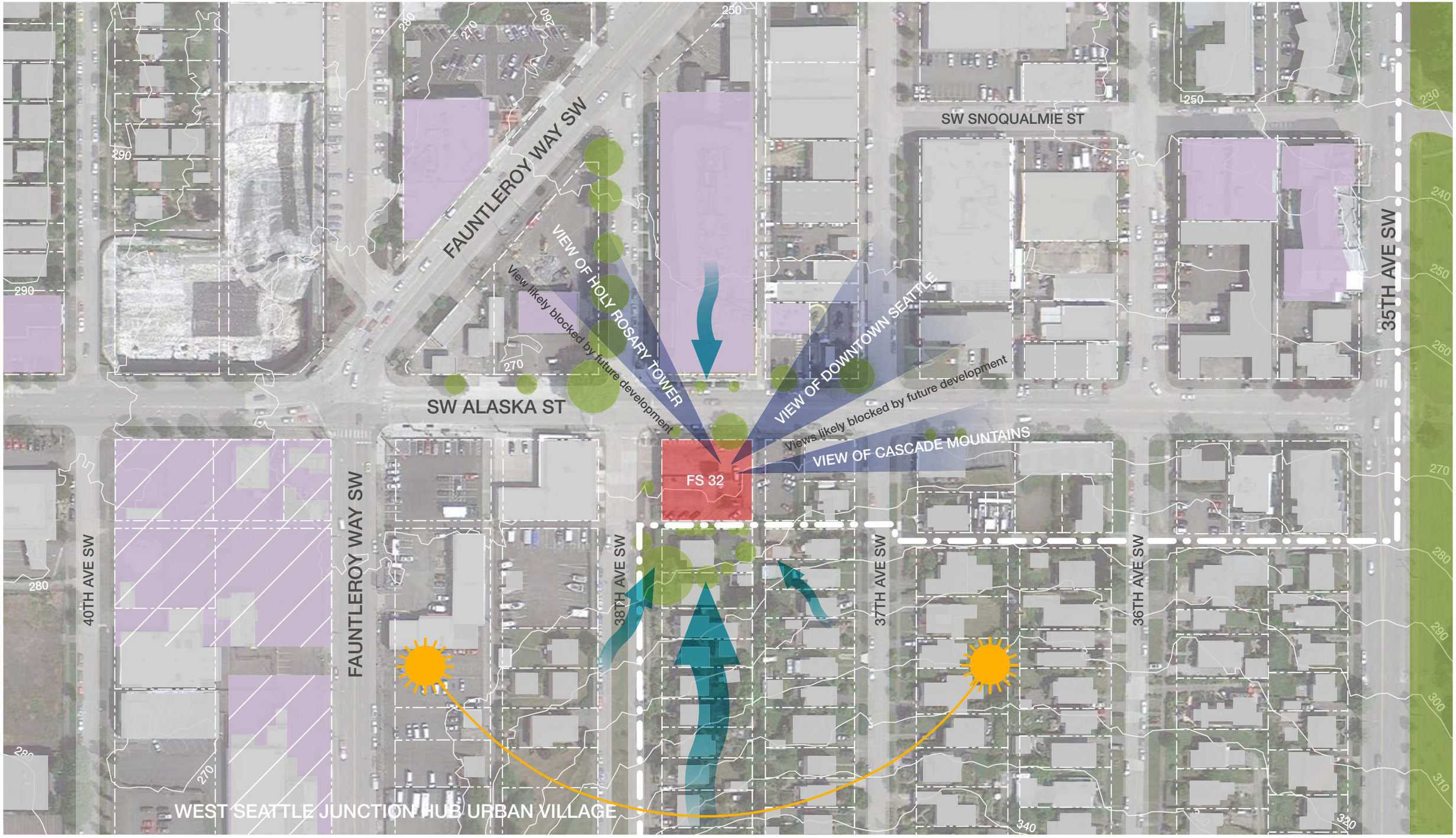
SITE EVALUATION - ZONING



SITE EVALUATION - TRAFFIC



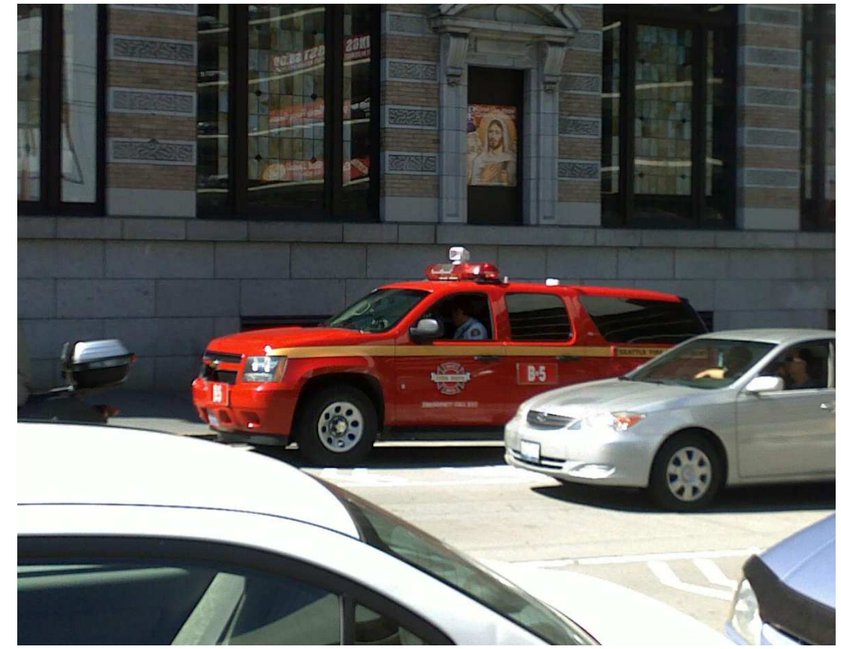
SITE EVALUATION - SUMMER CONDITIONS



SITE EVALUATION - WINTER CONDITIONS

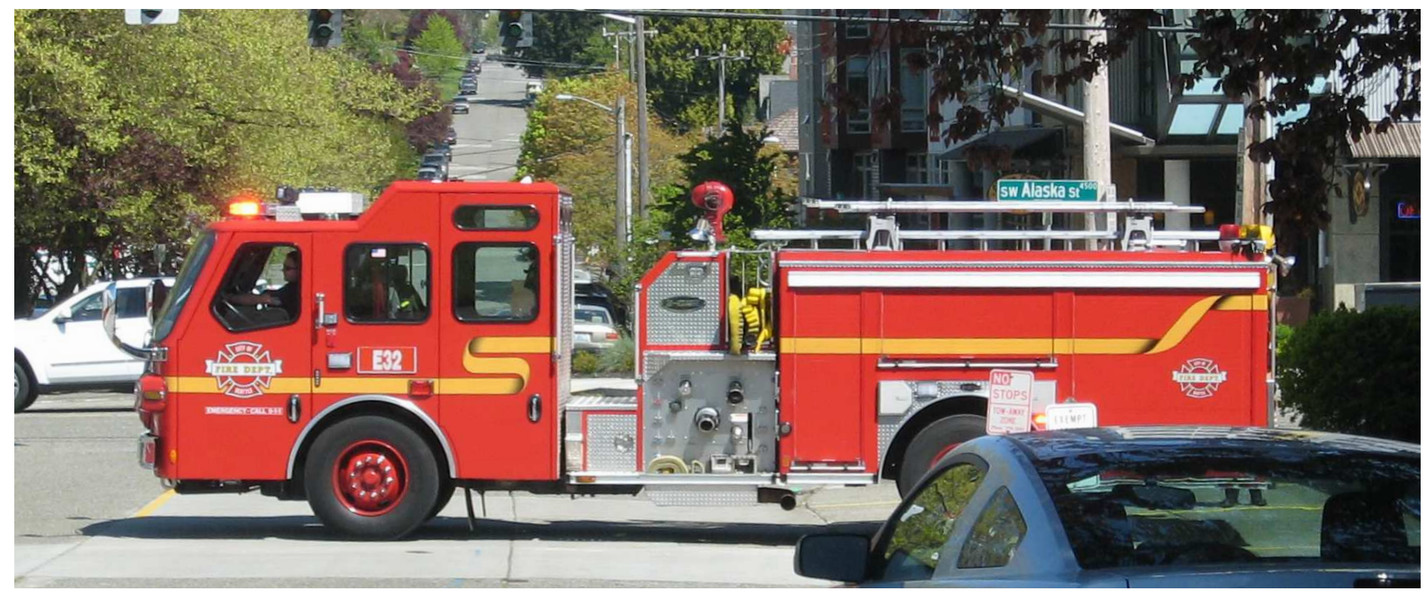
EXISTING STATION 32 - WEST ELEVATION

TILLERED LADDER TRUCK



BATTALION CHIEF'S VEHICLE

MEDIC TRUCK



ENGINE

APPARATUS

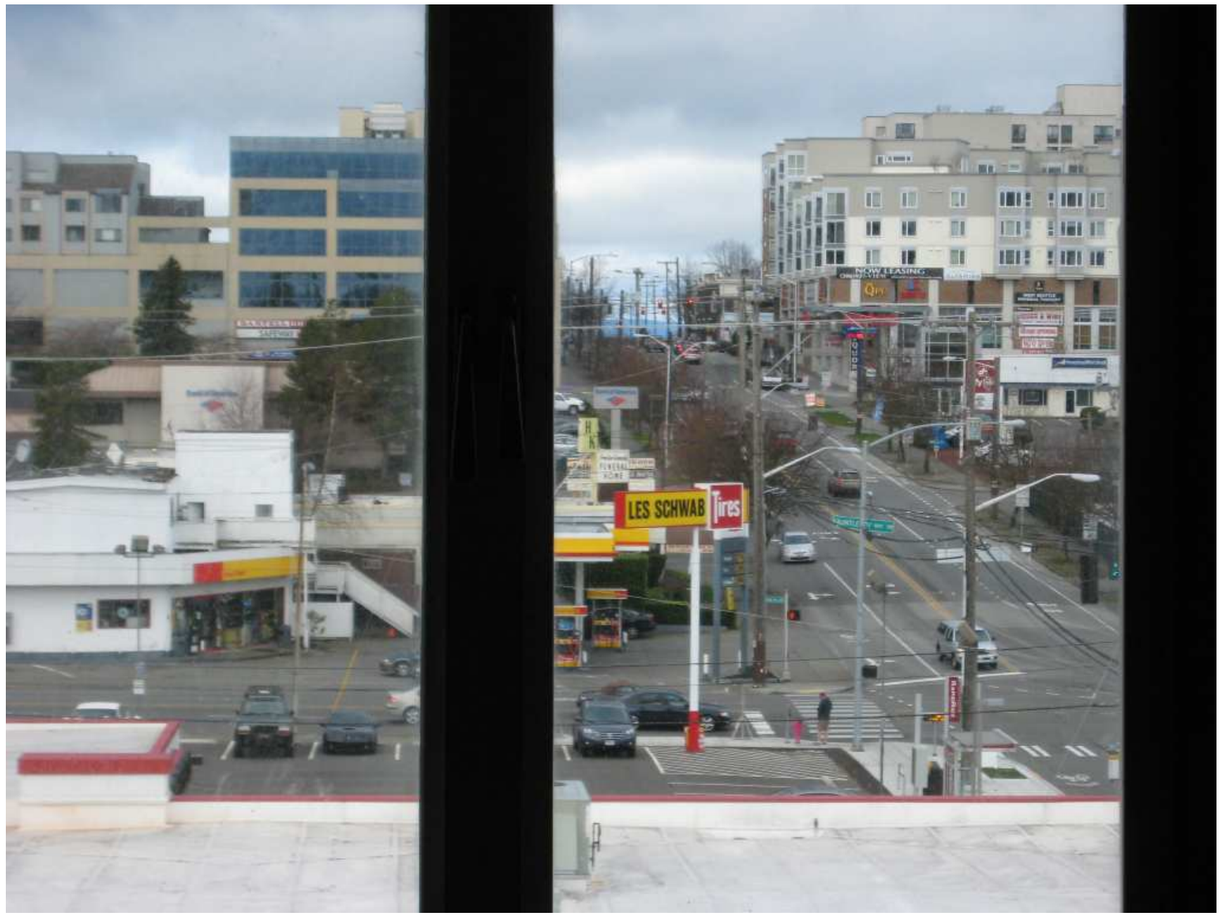
VIEW OF STATION, FACING EAST

VIEW OF STATION, FACING SOUTHWEST

VIEW TO SOUTH

SOUTH ALLEY

VIEW FROM DRILL TOWER LOOKING EAST

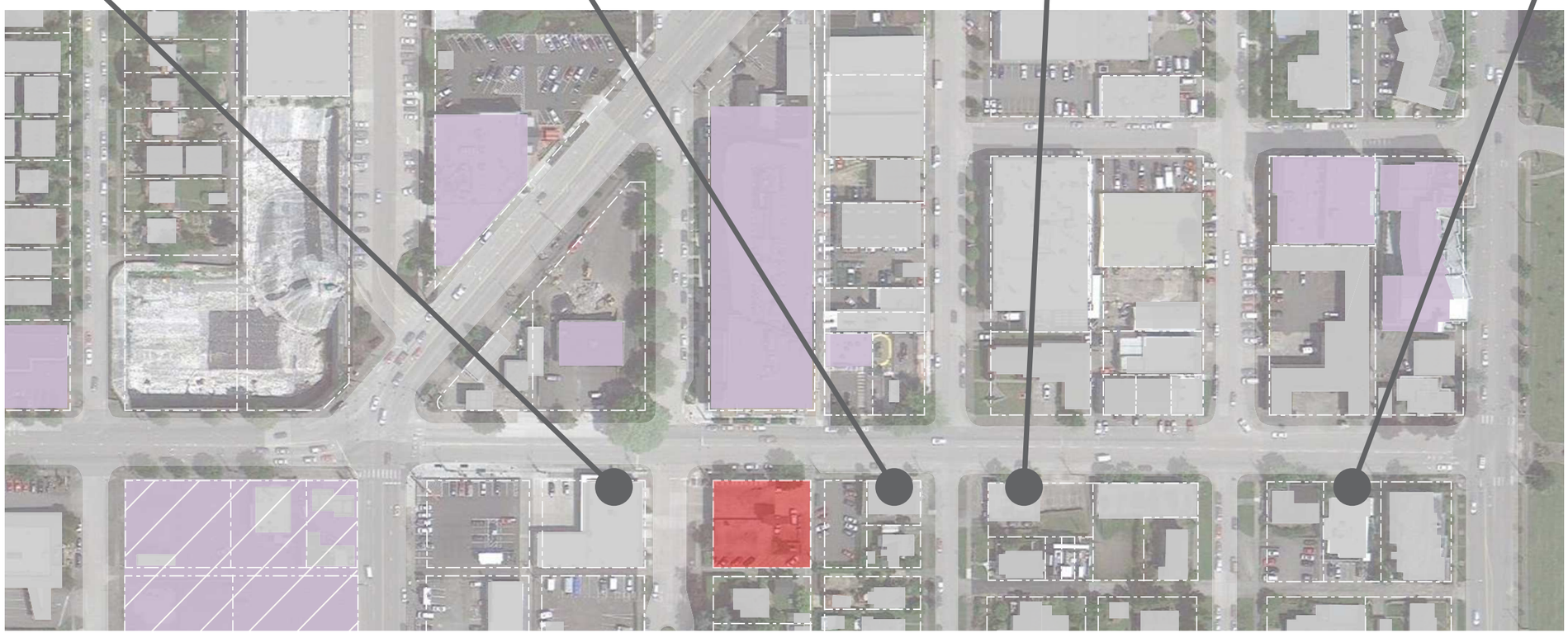


VIEW FROM DRILL TOWER LOOKING WEST

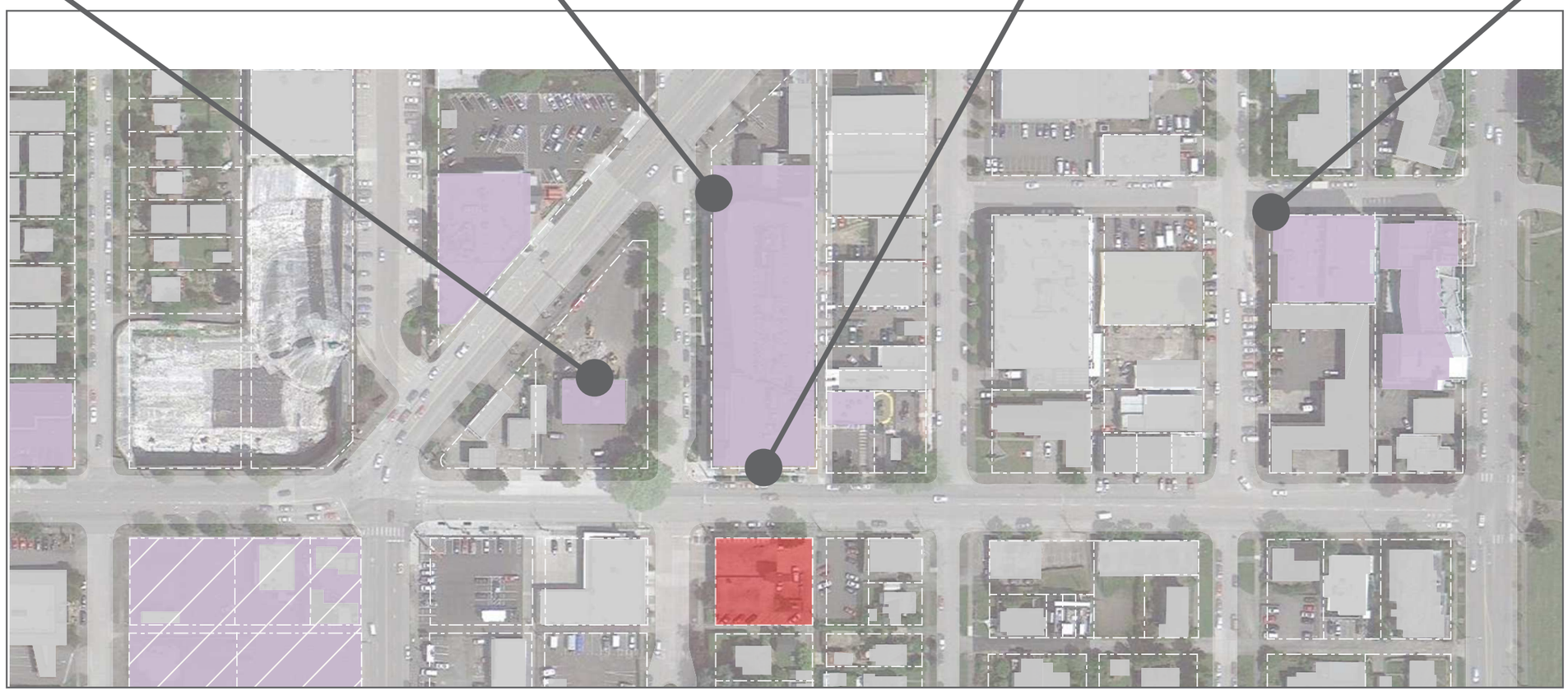
VIEW FROM DRILL TOWER LOOKING NORTHEAST

VIEW OF STATION, FACING NORTHEAST

VIEW OF STATION, FACING NORTH ON 38TH AVE SW

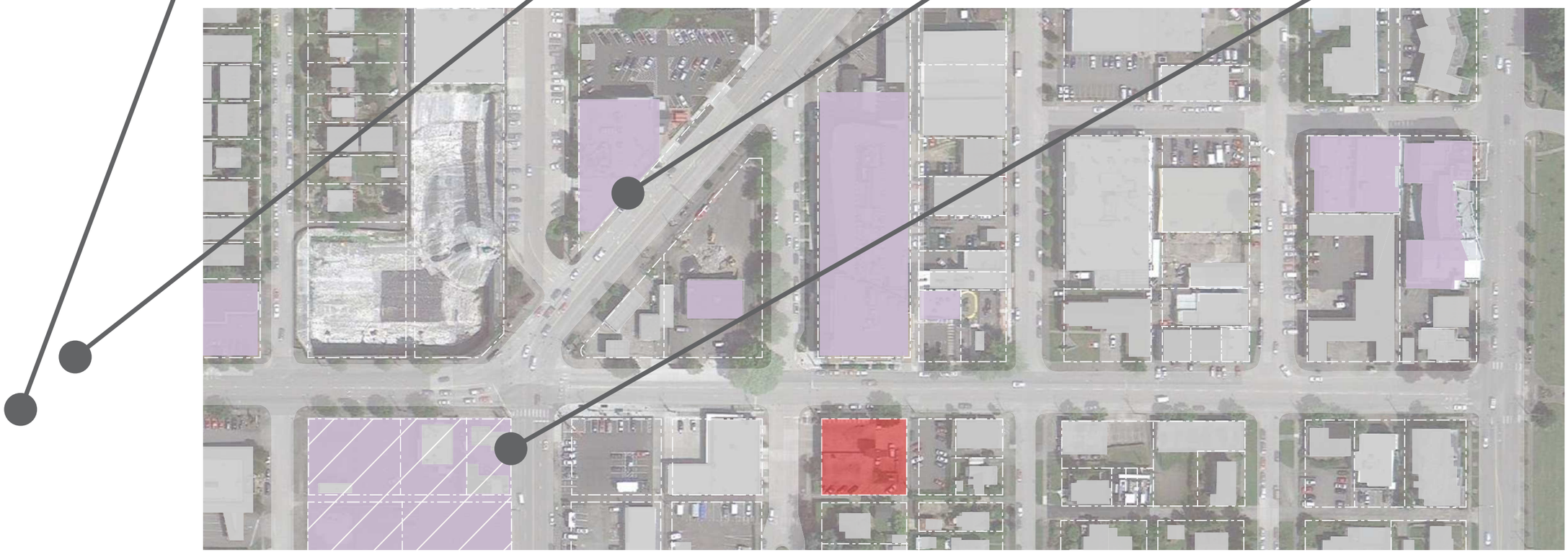


EXISTING NEIGHBORHOOD BUILDINGS - OLDER

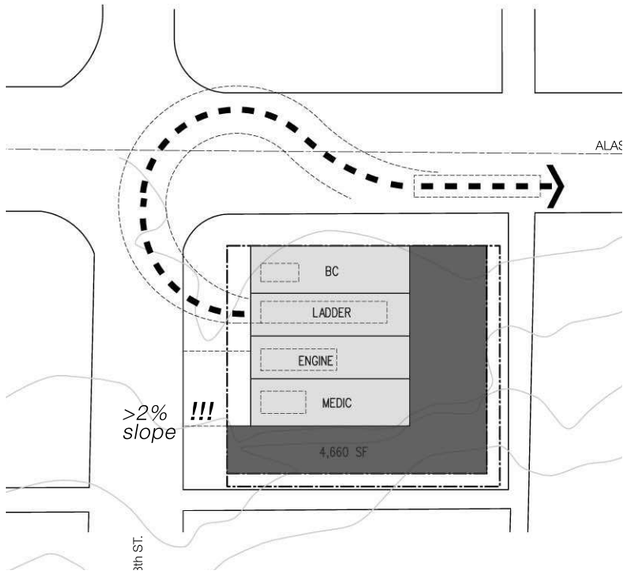


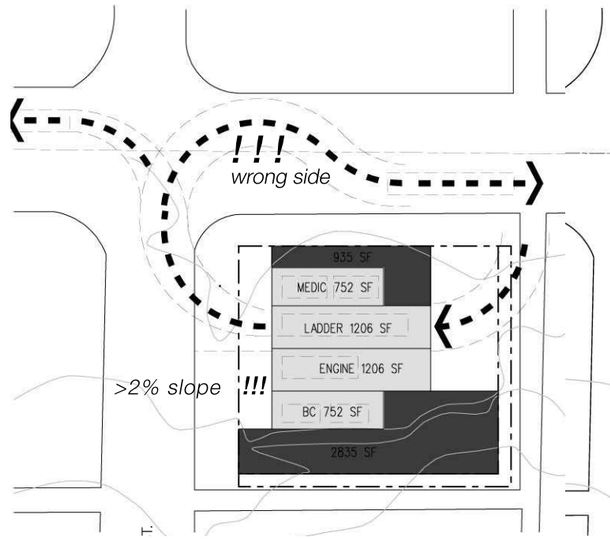
EXISTING NEIGHBORHOOD BUILDINGS - NEWER

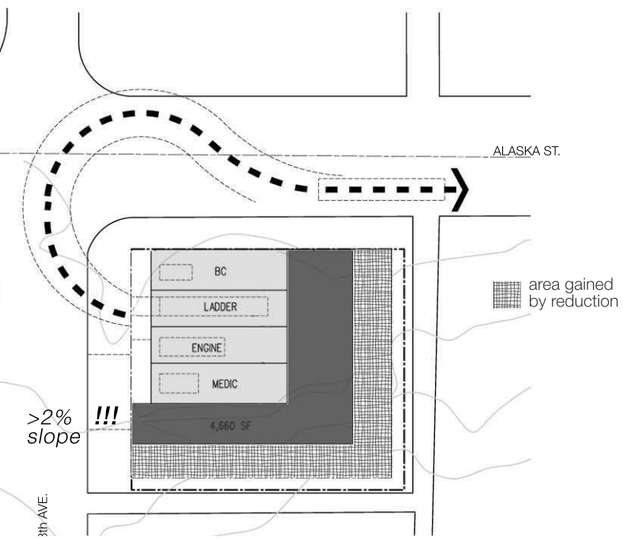
RENDERING OF FUTURE DEVELOPMENT

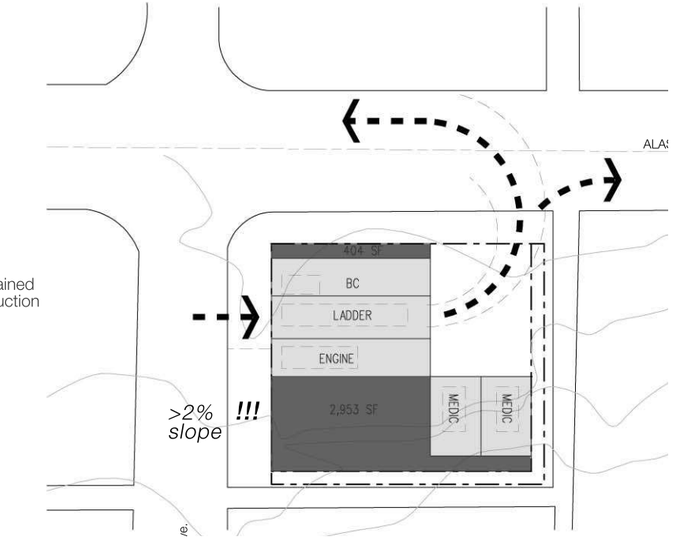


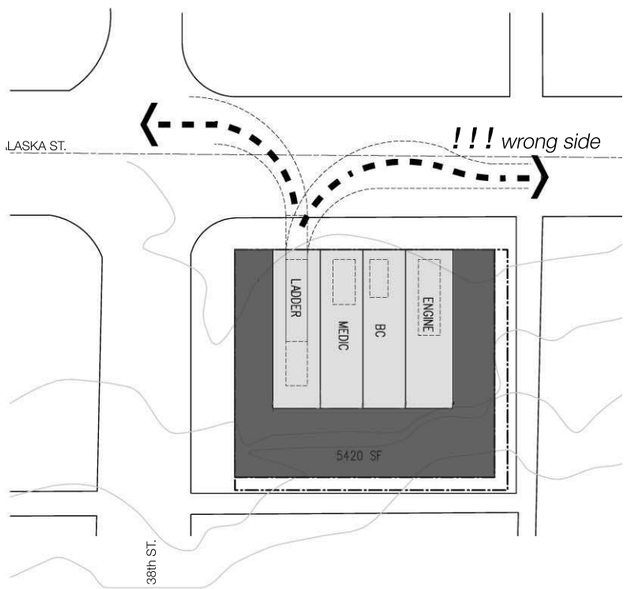
EXISTING NEIGHBORHOOD BUILDINGS - NEWER

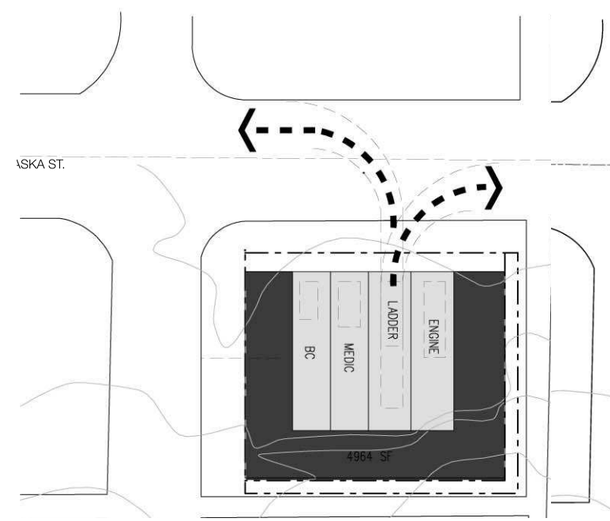


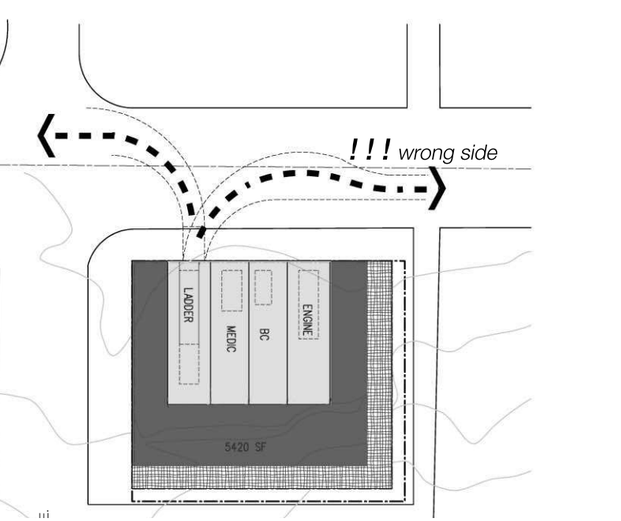












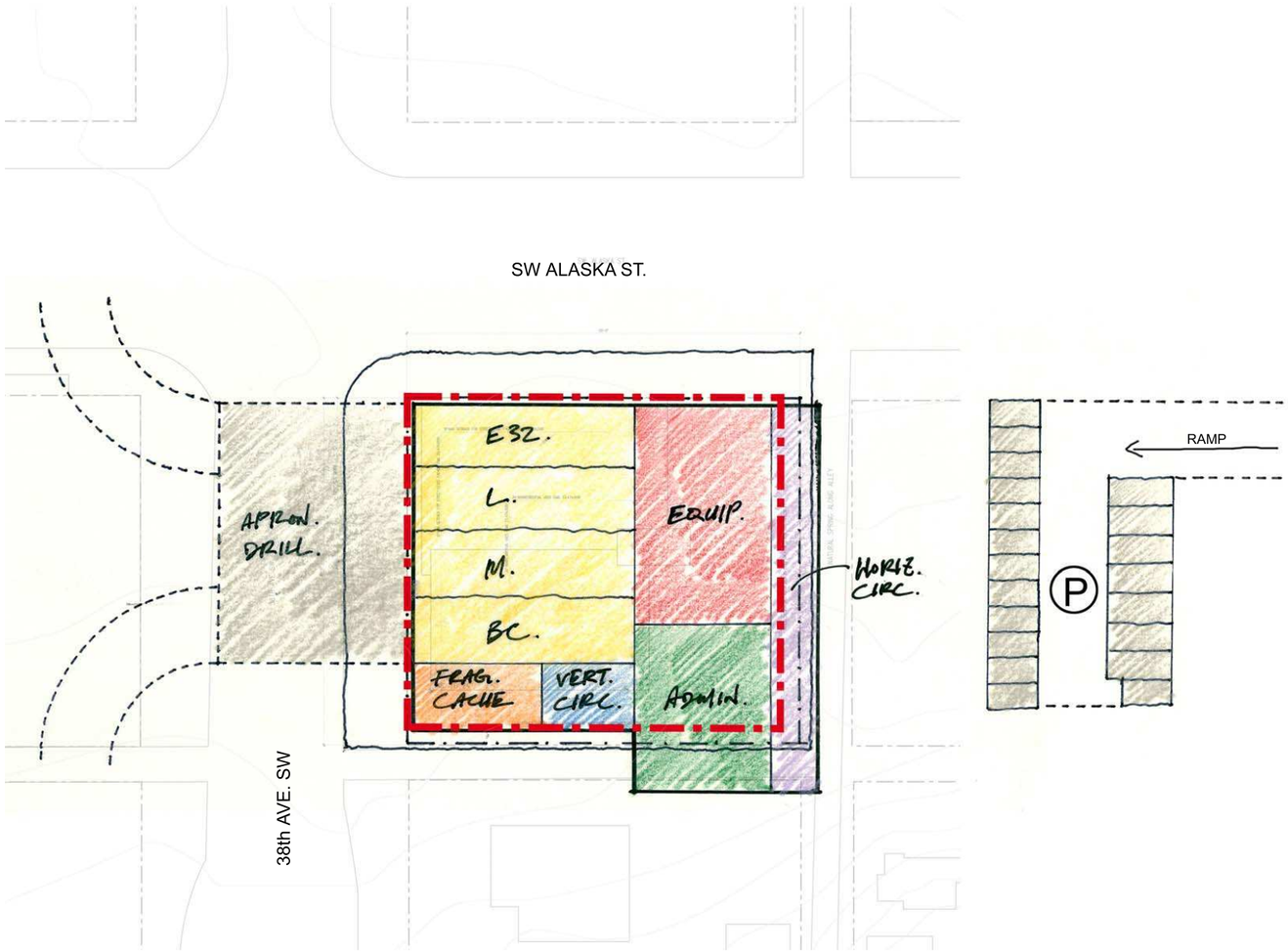
1. Maximum Build Out

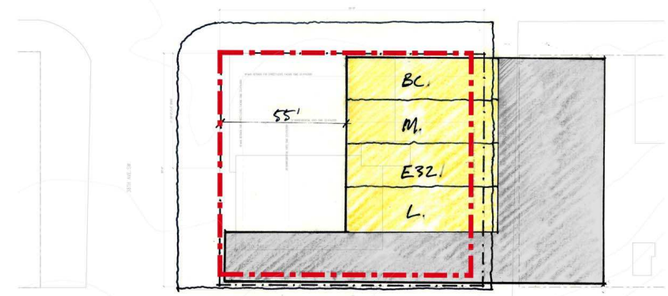
2. Drive-through | Apron

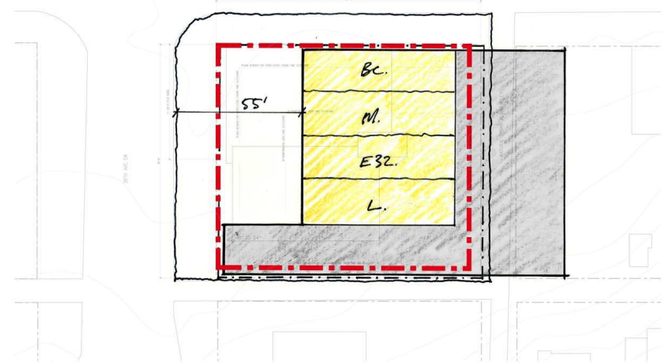
3. Area Reduction

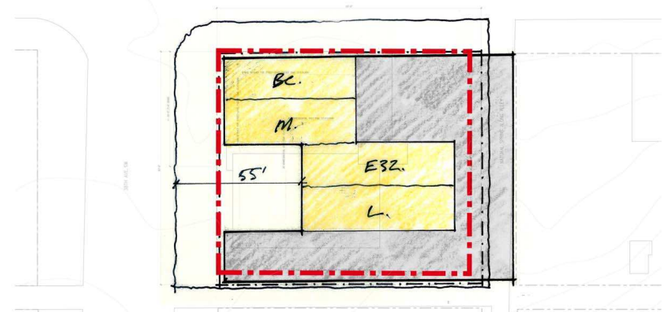
4. Split Bays

APPARATUS BAY LOCATION TEST FITS

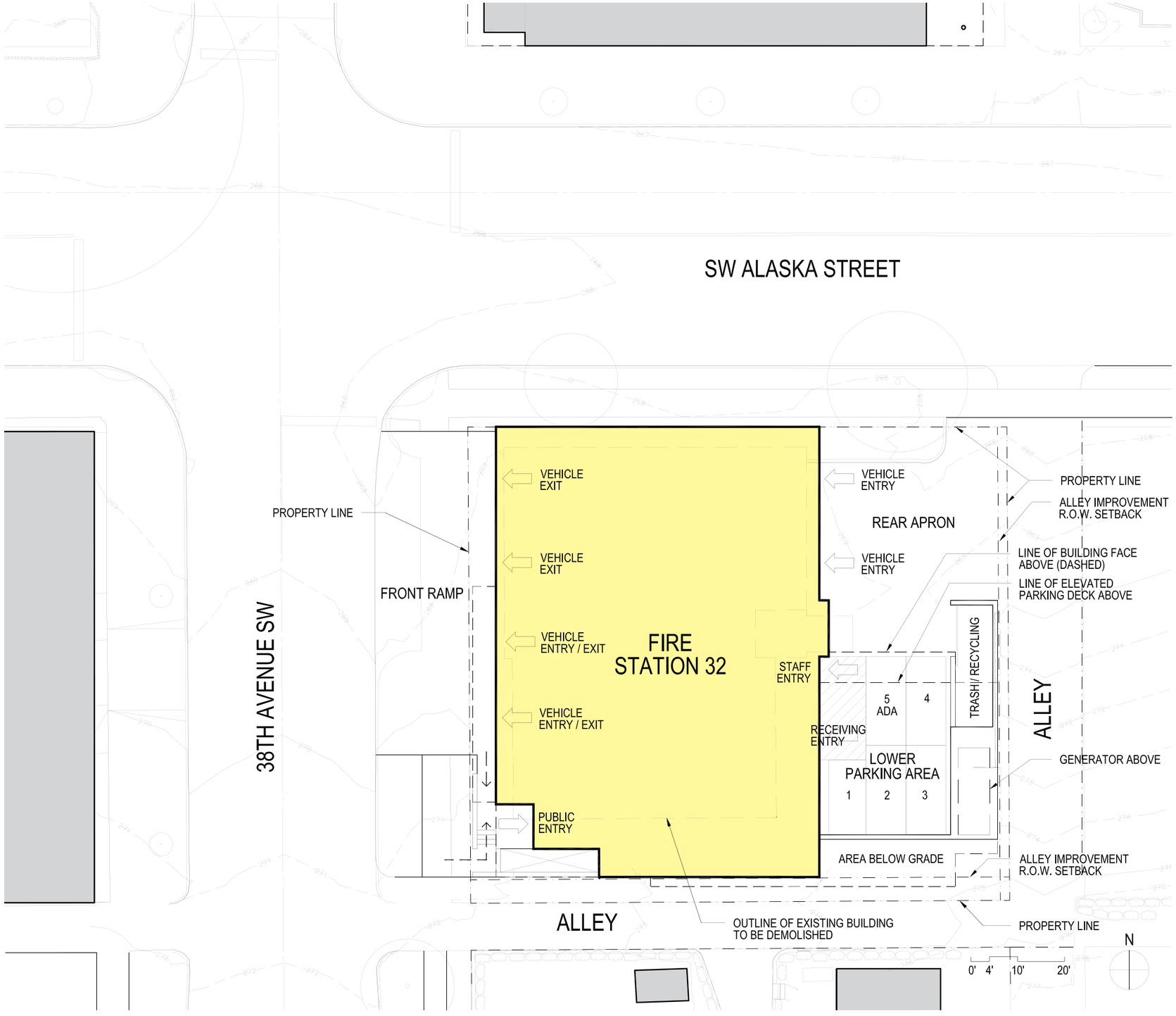




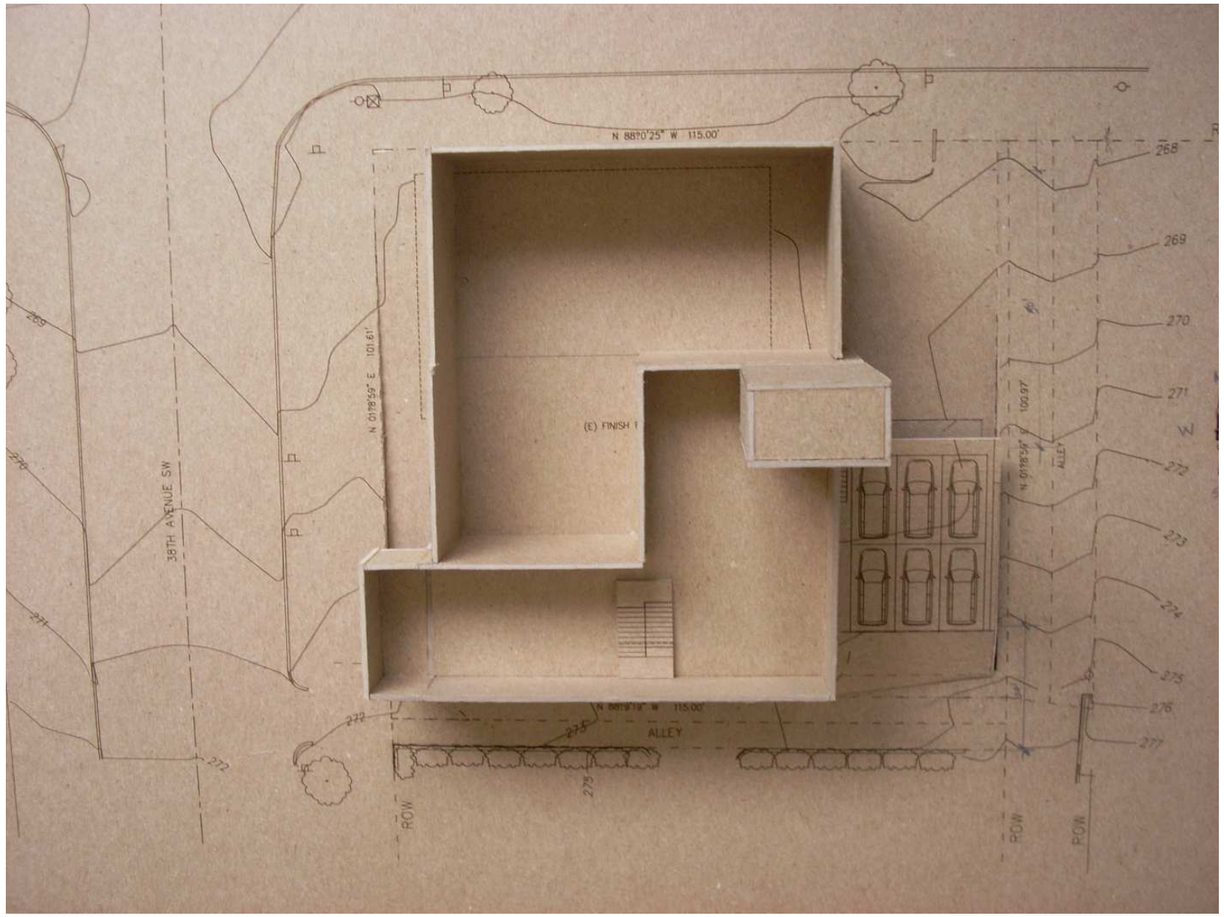


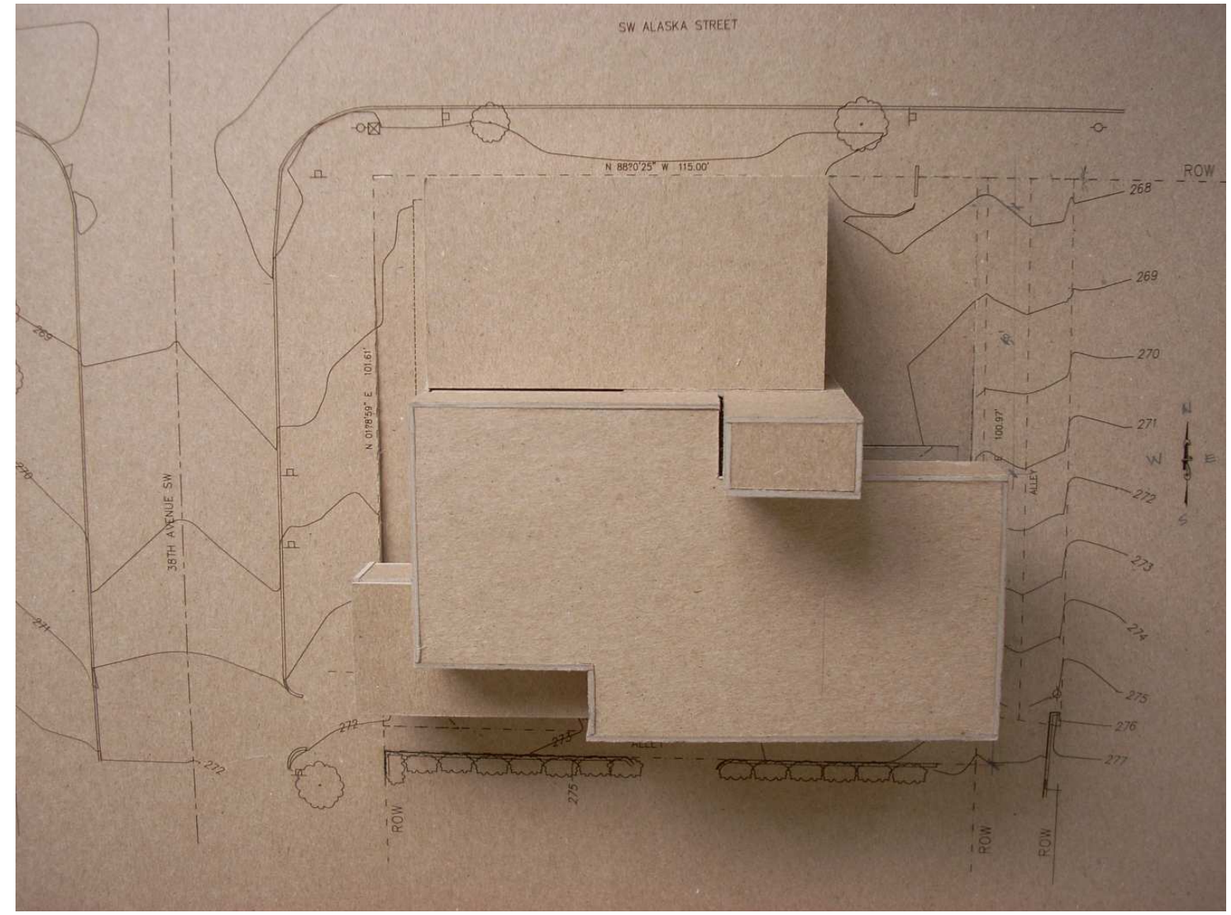


SITE VS. PROGRAM ANALYSIS

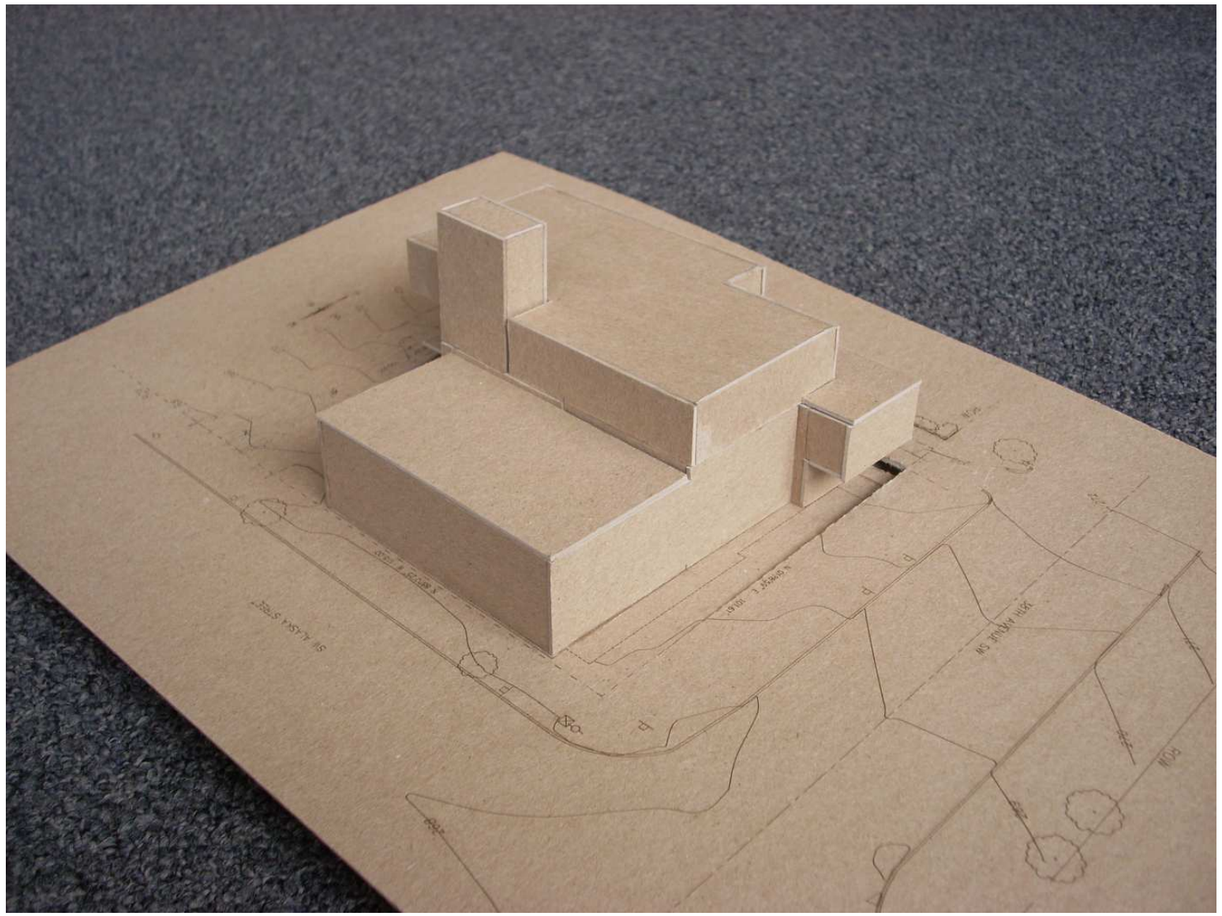

SW ALASKA STREET
38TH AVENUE SW
ALLEY
ALLEY
FIRE STATION 32
VEHICLE EXIT
VEHICLE EXIT
VEHICLE ENTRY / EXIT
VEHICLE ENTRY / EXIT
PUBLIC ENTRY
FRONT RAMP
PROPERTY LINE
VEHICLE ENTRY
VEHICLE ENTRY
REAR APRON
STAFF ENTRY
RECEIVING ENTRY
5 ADA
4
LOWER PARKING AREA
1
2
3
TRASH/ RECYCLING
AREA BELOW GRADE
OUTLINE OF EXISTING BUILDING TO BE DEMOLISHED
PROPERTY LINE
ALLEY IMPROVEMENT R.O.W. SETBACK
LINE OF BUILDING FACE ABOVE (DASHED)
LINE OF ELEVATED PARKING DECK ABOVE
GENERATOR ABOVE
ALLEY IMPROVEMENT R.O.W. SETBACK
PROPERTY LINE
N
0' 4' 10' 20'

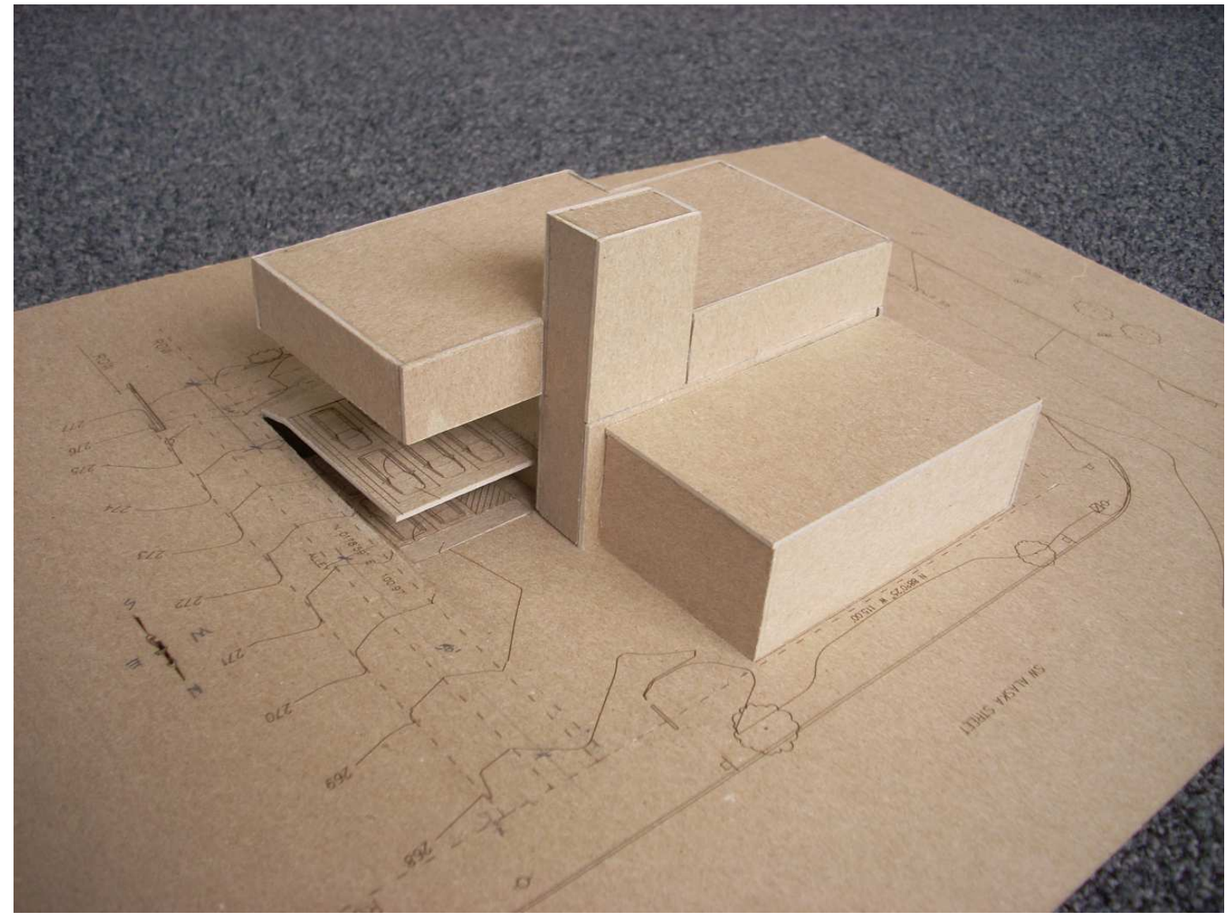
SITE PLAN



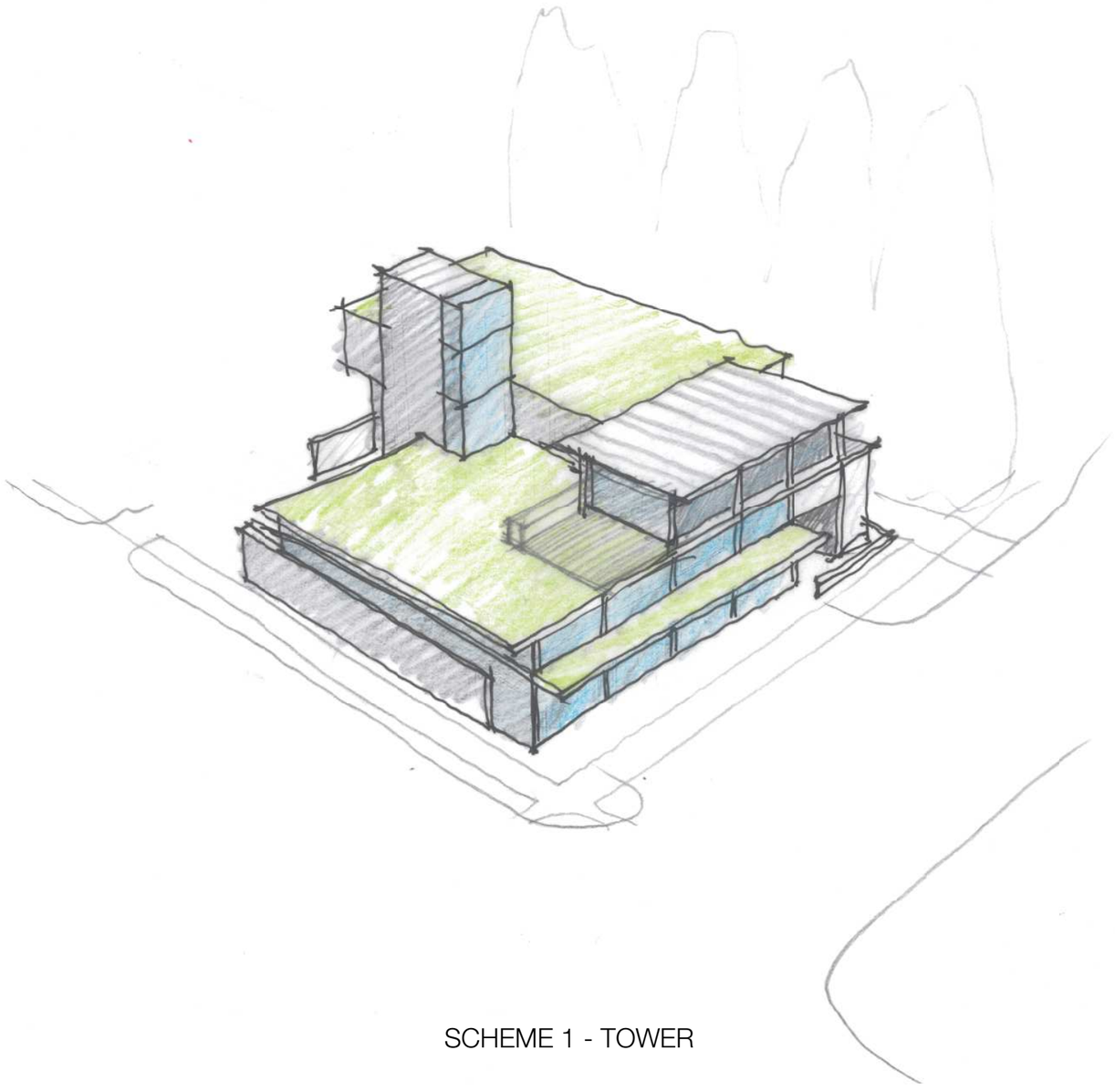


PRE-DESIGN CONCEPT MODEL

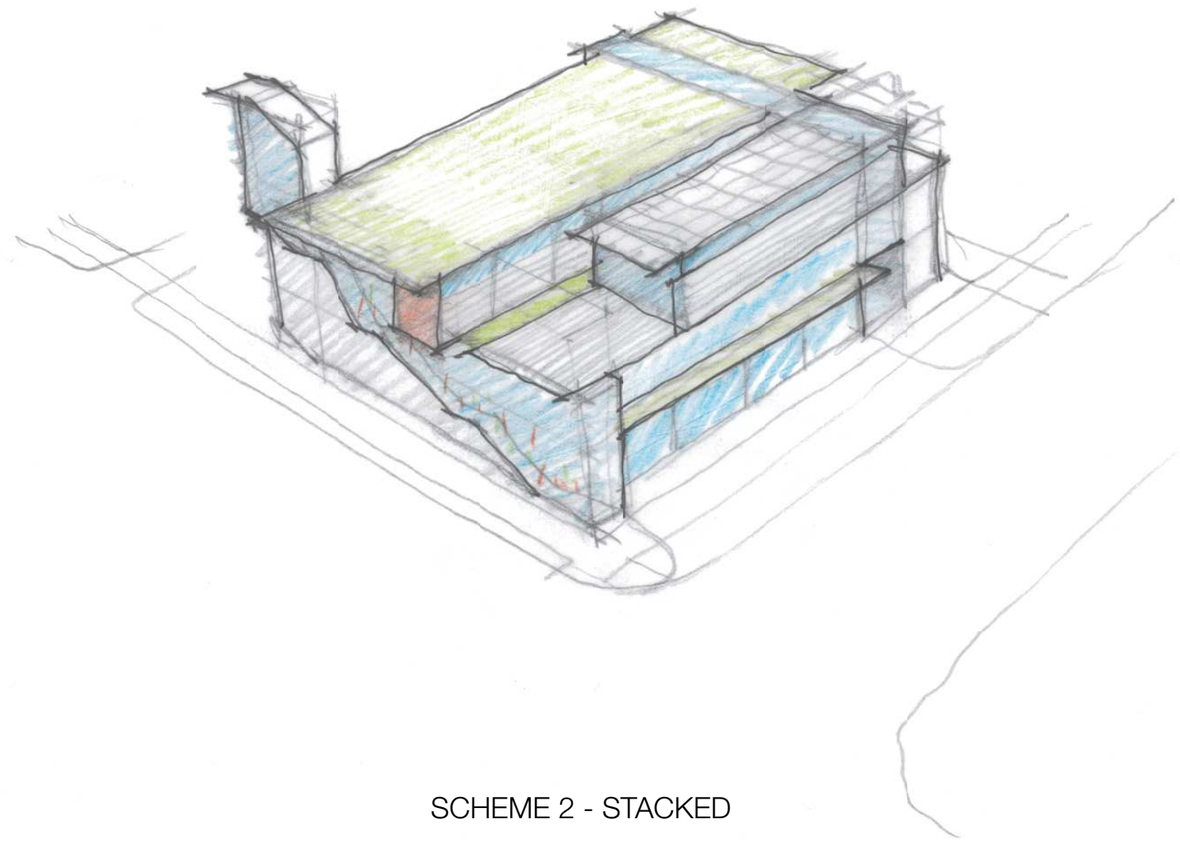




PRE-DESIGN CONCEPT MODEL

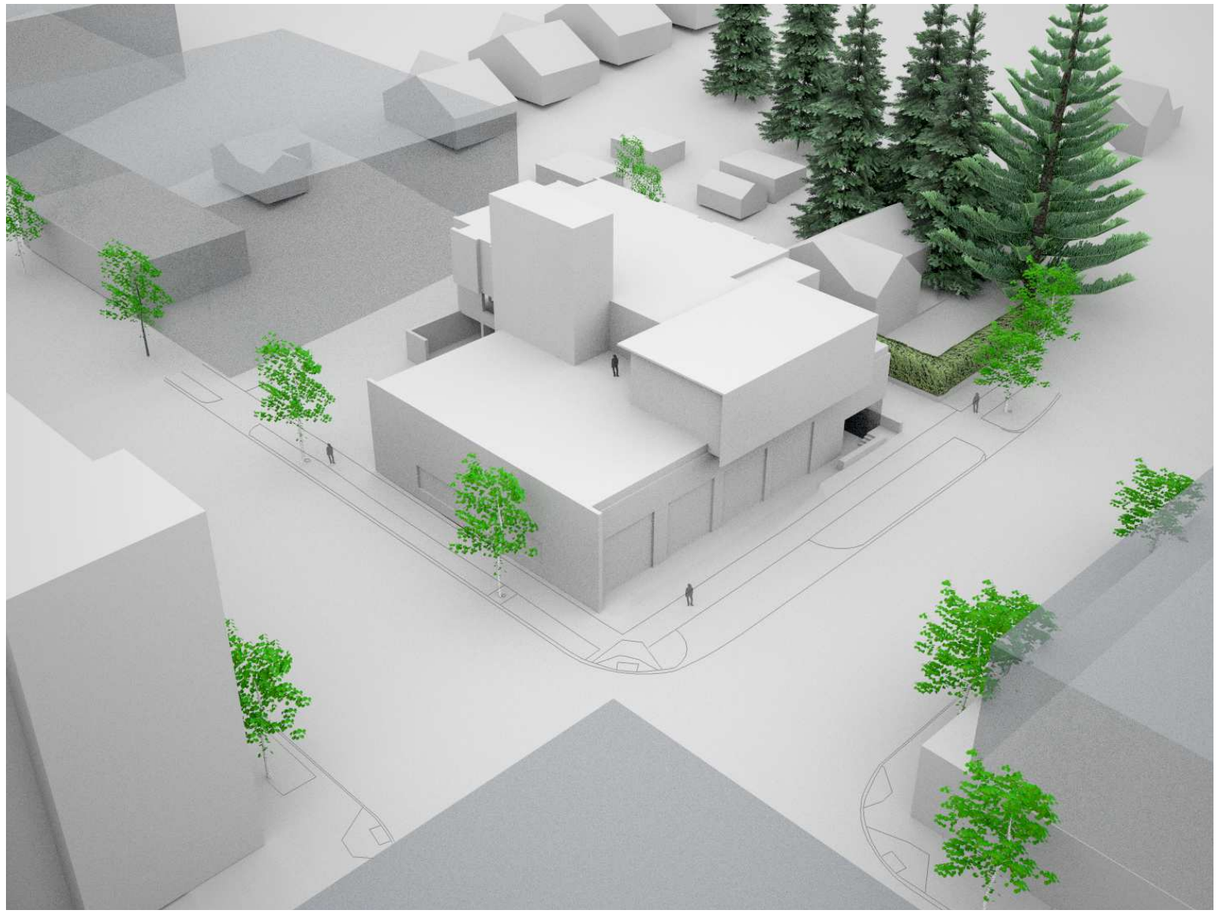


SCHEME 1 - TOWER

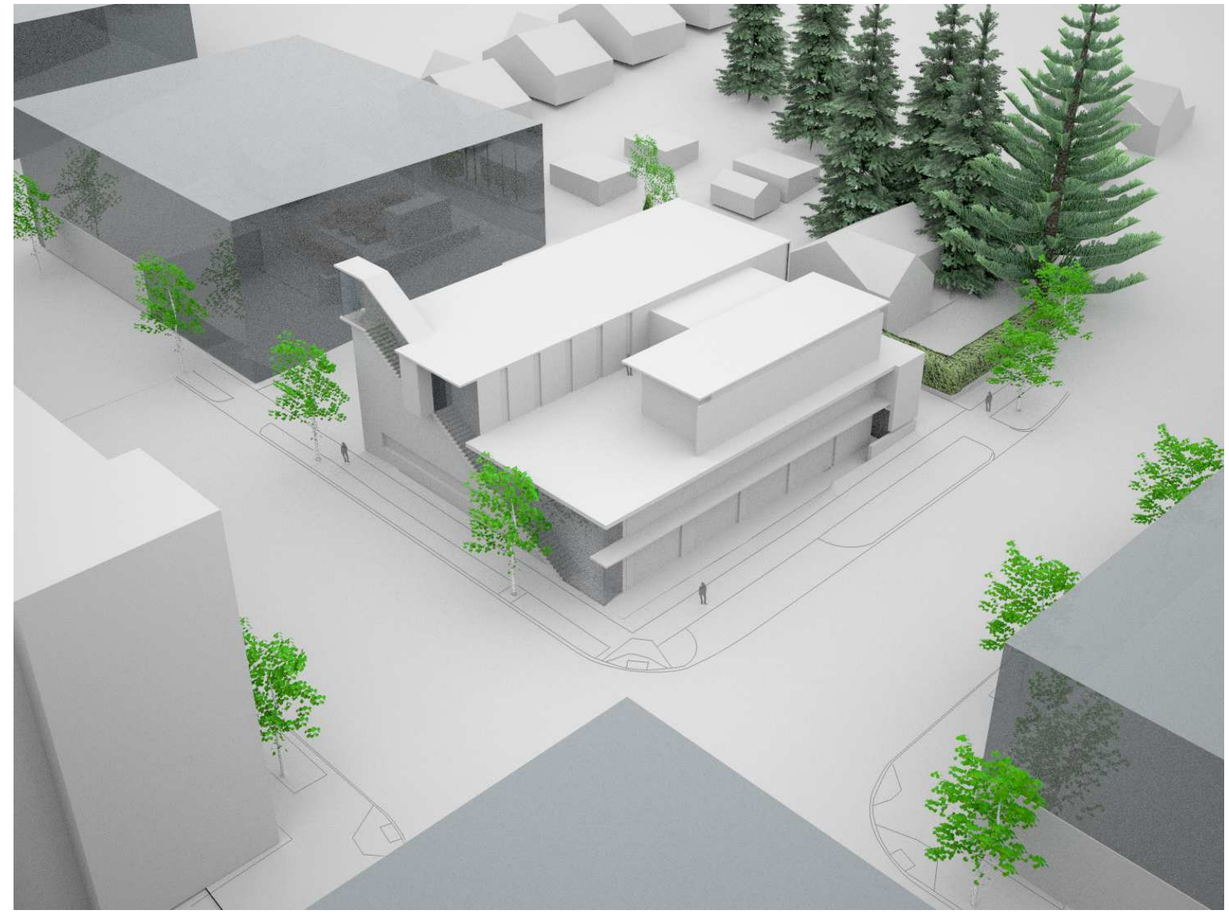


SCHEME 2 - STACKED

DESIGN ALTERNATIVES



SCHEME 1 - TOWER



SCHEME 2 - STACKED

DESIGN ALTERNATIVES

AERIAL LADDER CHECK

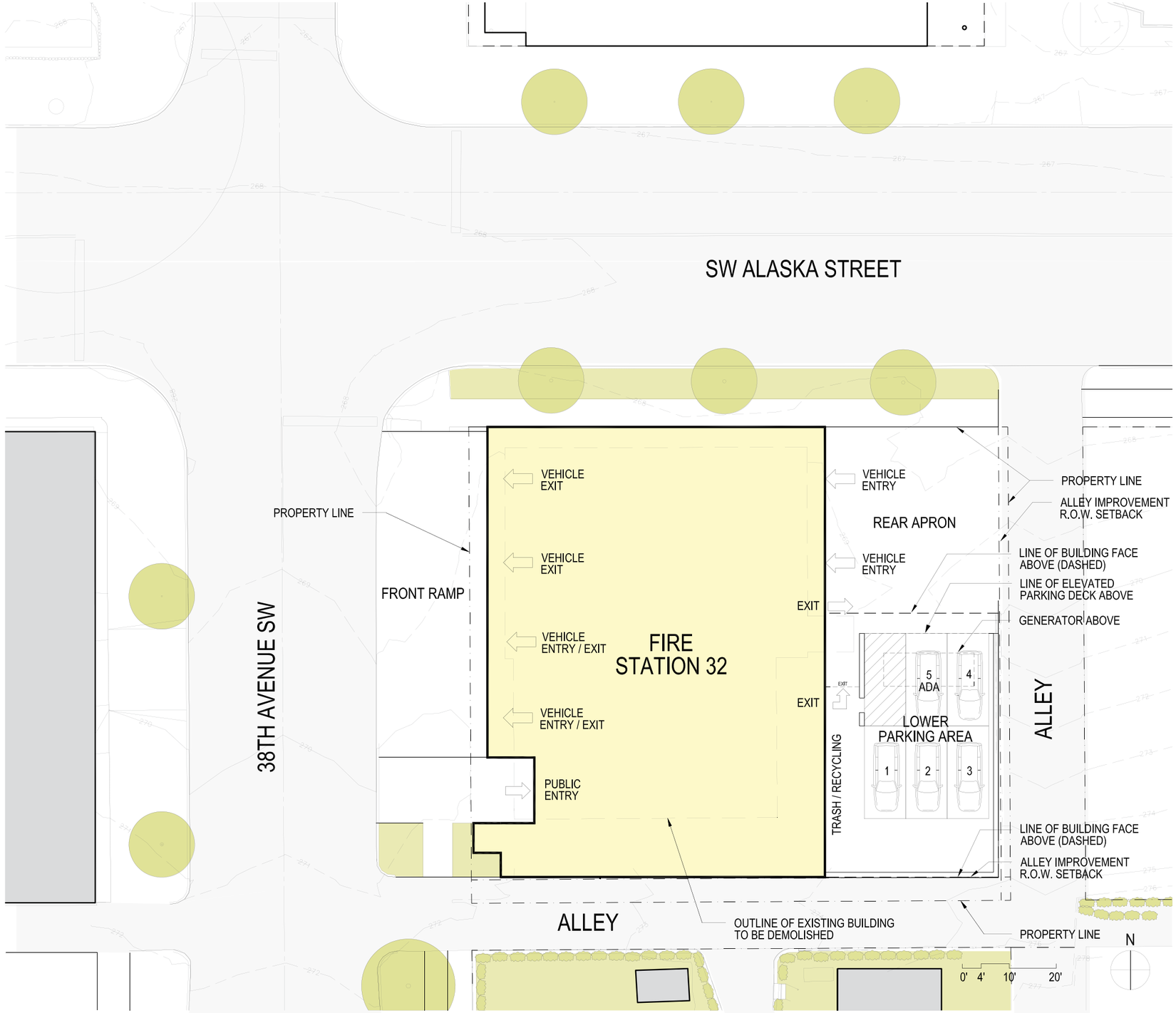
LADDER DRILL

EQUIPMENT CHECK

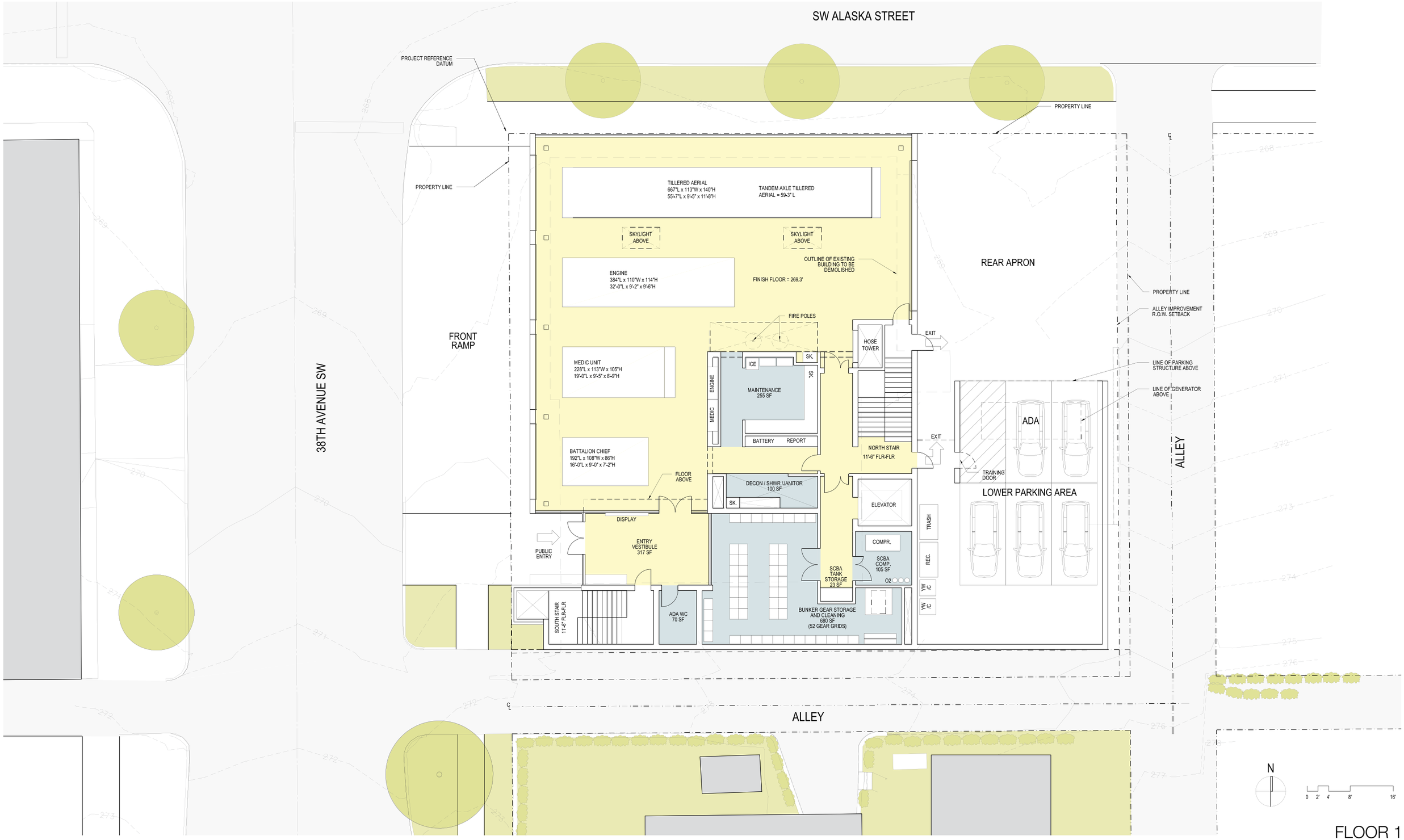
SHIFT CHANGE

STATION ACTIVITIES

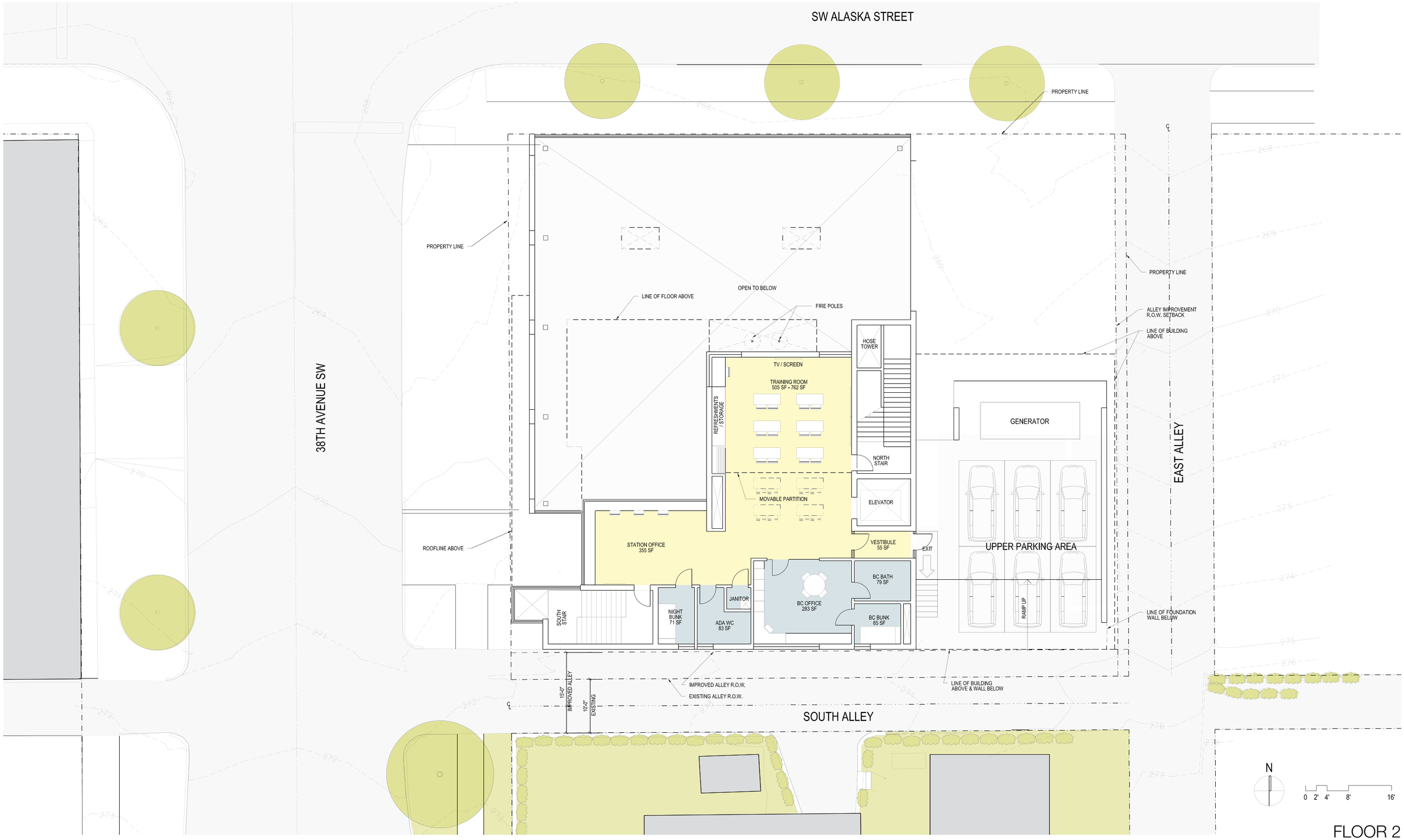
VIEW OF STATION FROM NORTHWEST


SW ALASKA STREET
38TH AVENUE SW
ALLEY
ALLEY
FIRE STATION 32
FRONT RAMP
PROPERTY LINE
VEHICLE EXIT
VEHICLE EXIT
VEHICLE ENTRY / EXIT
VEHICLE ENTRY / EXIT
PUBLIC ENTRY
VEHICLE ENTRY
REAR APRON
VEHICLE ENTRY
EXIT
EXIT
EXIT
TRASH / RECYCLING
LOWER PARKING AREA
5 ADA
4
1
2
3
PROPERTY LINE
ALLEY IMPROVEMENT R.O.W. SETBACK
LINE OF BUILDING FACE ABOVE (DASHED)
LINE OF ELEVATED PARKING DECK ABOVE
GENERATOR ABOVE
LINE OF BUILDING FACE ABOVE (DASHED)
ALLEY IMPROVEMENT R.O.W. SETBACK
OUTLINE OF EXISTING BUILDING TO BE DEMOLISHED
PROPERTY LINE
N
0' 4' 10' 20'

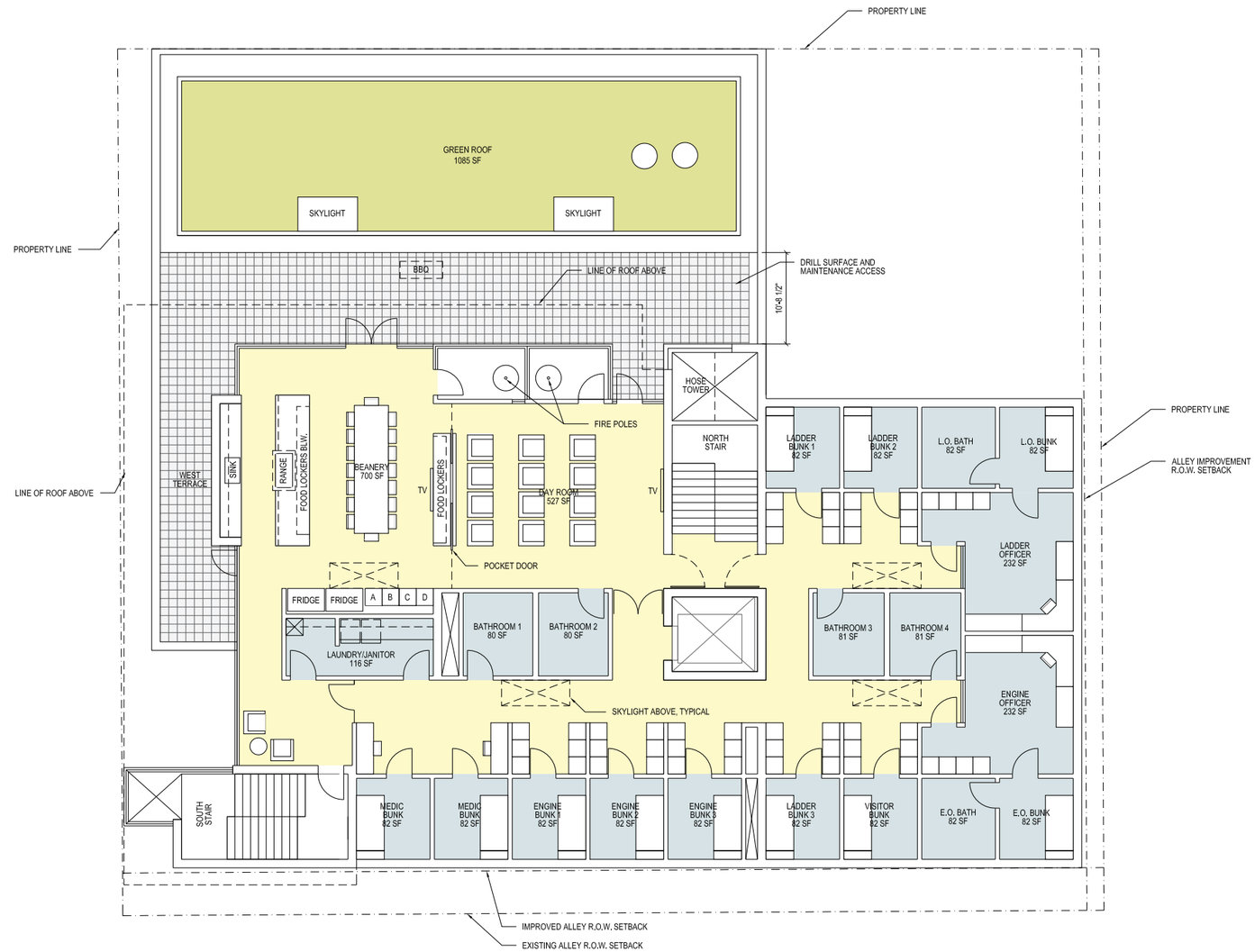
SITE PLAN

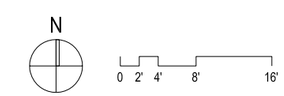

SW ALASKA STREET
PROJECT REFERENCE DATUM
PROPERTY LINE
PROPERTY LINE
TILLERED AERIAL
667"L x 113"W x 140"H
55'-7"L x 9'-5" x 11'-8"H
TANDEM AXLE TILLERED
AERIAL = 59-3" L
SKYLIGHT ABOVE
SKYLIGHT ABOVE
OUTLINE OF EXISTING BUILDING TO BE DEMOLISHED
ENGINE
384"L x 110"W x 114"H
32'-0"L x 9'-2" x 9'-6"H
FINISH FLOOR = 269.3'
REAR APRON
PROPERTY LINE
ALLEY IMPROVEMENT R.O.W. SETBACK
FIRE POLES
FRONT RAMP
HOSE TOWER
EXIT
MEDIC UNIT
228"L x 113"W x 105"H
19'-0"L x 9'-5" x 8'-9"H
ICE
SK.
SK.
ENGINE
MEDIC
MAINTENANCE
255 SF
LINE OF PARKING STRUCTURE ABOVE
LINE OF GENERATOR ABOVE
ADA
38TH AVENUE SW
BATTERY
REPORT
EXIT
NORTH STAIR
11'-6" FLR-FLR
BATTALION CHIEF
192"L x 108"W x 86"H
16'-0"L x 9'-0" x 7'-2"H
FLOOR ABOVE
TRAINING DOOR
ALLEY
DECON / SHWR /JANITOR
100 SF
SK.
ELEVATOR
LOWER PARKING AREA
DISPLAY
TRASH
PUBLIC ENTRY
ENTRY VESTIBULE
317 SF
COMPR.
REC.
SCBA COMP.
105 SF
SCBA TANK STORAGE
23 SF
O2
YW /C
YW /C
SOUTH STAIR
11'-6" FLR-FLR
ADA WC
70 SF
BUNKER GEAR STORAGE AND CLEANING
680 SF
(52 GEAR GRIDS)
ALLEY
N
0 2' 4' 8' 16'

FLOOR 1

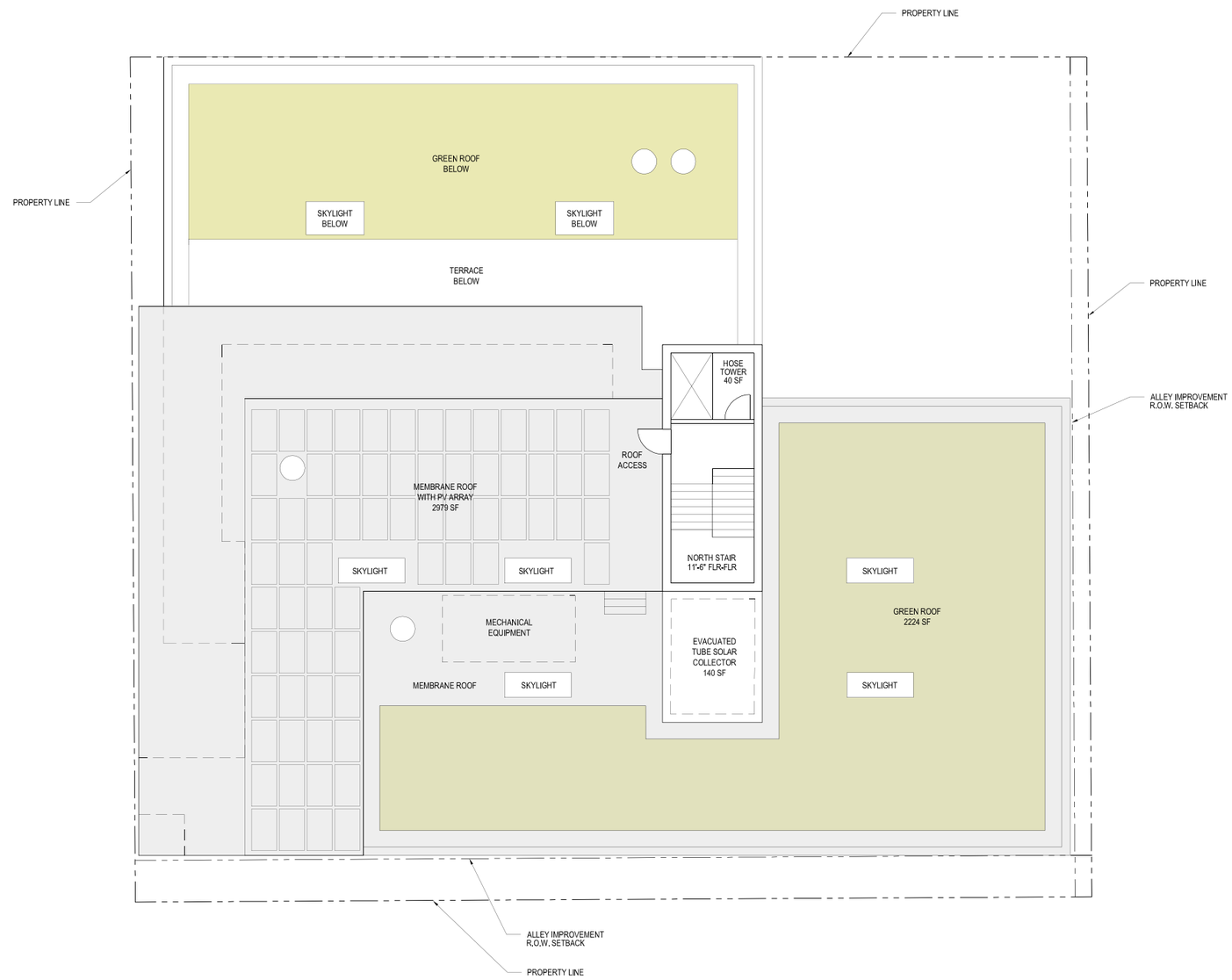

SW ALASKA STREET
PROPERTY LINE
PROPERTY LINE
PROPERTY LINE
38TH AVENUE SW
EAST ALLEY
OPEN TO BELOW
LINE OF FLOOR ABOVE
FIRE POLES
ALLEY IMPROVEMENT R.O.W. SETBACK
LINE OF BUILDING ABOVE
HOSE TOWER
TV / SCREEN
TRAINING ROOM
505 SF - 762 SF
REFRESHMENTS / STORAGE
NORTH STAIR
GENERATOR
MOVABLE PARTITION
ELEVATOR
ROOFLINE ABOVE
STATION OFFICE
355 SF
VESTIBULE
55 SF
EXIT
UPPER PARKING AREA
BC BATH
79 SF
JANITOR
BC OFFICE
283 SF
SOUTH STAIR
NIGHT BUNK
71 SF
ADA WC
83 SF
BC BUNK
65 SF
RAMP UP
LINE OF FOUNDATION WALL BELOW
15'-0" IMPROVED ALLEY
10'-0" EXISTING
IMPROVED ALLEY R.O.W.
EXISTING ALLEY R.O.W.
LINE OF BUILDING ABOVE & WALL BELOW
SOUTH ALLEY
N
0 2' 4' 8' 16'

FLOOR 2


PROPERTY LINE
GREEN ROOF
1085 SF
SKYLIGHT
SKYLIGHT
PROPERTY LINE
BBQ
LINE OF ROOF ABOVE
DRILL SURFACE AND
MAINTENANCE ACCESS
10'-8 1/2"
HOSE
TOWER
FIRE POLES
PROPERTY LINE
ALLEY IMPROVEMENT
R.O.W. SETBACK
LINE OF ROOF ABOVE
WEST
TERRACE
SINK
RANGE
FOOD LOCKERS BLW.
BEANERY
700 SF
TV
FOOD LOCKERS
DAY ROOM
527 SF
TV
NORTH
STAIR
LADDER
BUNK 1
82 SF
LADDER
BUNK 2
82 SF
L.O. BATH
82 SF
L.O. BUNK
82 SF
LADDER
OFFICER
232 SF
POCKET DOOR
FRIDGE
FRIDGE
A
B
C
D
LAUNDRY/JANITOR
116 SF
BATHROOM 1
80 SF
BATHROOM 2
80 SF
BATHROOM 3
81 SF
BATHROOM 4
81 SF
ENGINE
OFFICER
232 SF
SKYLIGHT ABOVE, TYPICAL
SOUTH
STAIR
MEDIC
BUNK
82 SF
MEDIC
BUNK
82 SF
ENGINE
BUNK 1
82 SF
ENGINE
BUNK 2
82 SF
ENGINE
BUNK 3
82 SF
LADDER
BUNK 3
82 SF
VISITOR
BUNK
82 SF
E.O. BATH
82 SF
E.O. BUNK
82 SF
IMPROVED ALLEY R.O.W. SETBACK
EXISTING ALLEY R.O.W. SETBACK

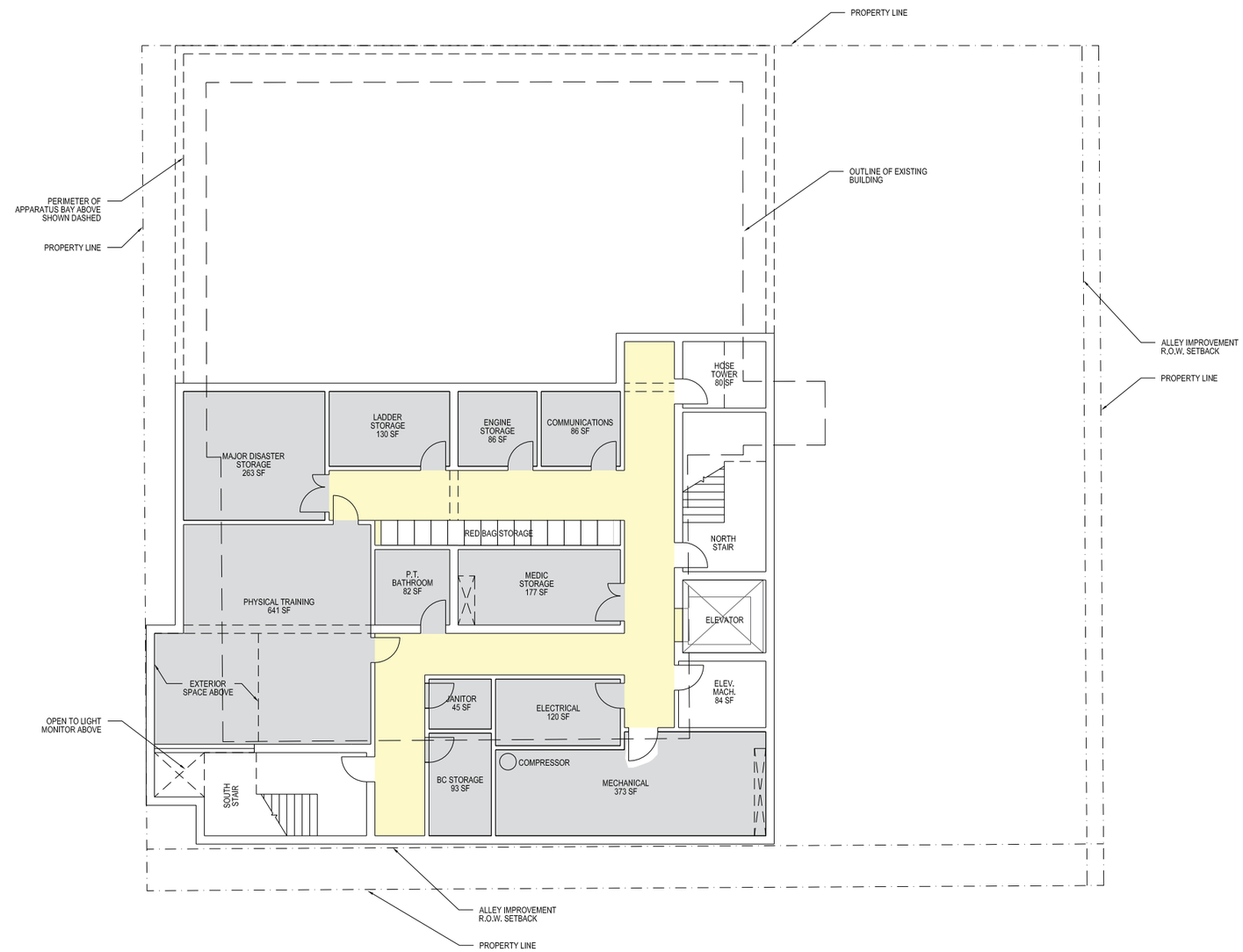

N
0
2'
4'
8'
16'

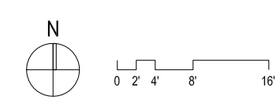
FLOOR 3


PROPERTY LINE
PROPERTY LINE
PROPERTY LINE
ALLEY IMPROVEMENT
R.O.W. SETBACK
GREEN ROOF
BELOW
SKYLIGHT
BELOW
SKYLIGHT
BELOW
TERRACE
BELOW
HOSE
TOWER
40 SF
ROOF
ACCESS
MEMBRANE ROOF
WITH PV ARRAY
2979 SF
NORTH STAIR
11'-6" FLR-FLR
SKYLIGHT
SKYLIGHT
SKYLIGHT
GREEN ROOF
2224 SF
MECHANICAL
EQUIPMENT
EVACUATED
TUBE SOLAR
COLLECTOR
140 SF
MEMBRANE ROOF
SKYLIGHT
SKYLIGHT
ALLEY IMPROVEMENT
R.O.W. SETBACK
PROPERTY LINE

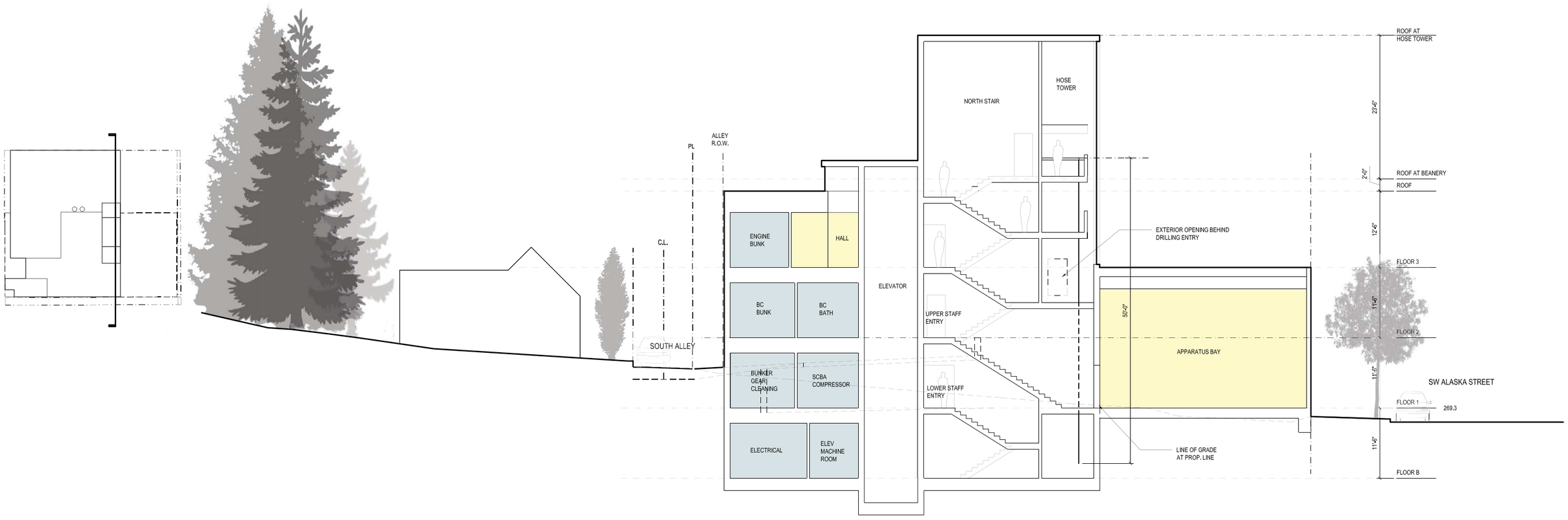
N
0
2'
4'
8'
16'

ROOF PLAN

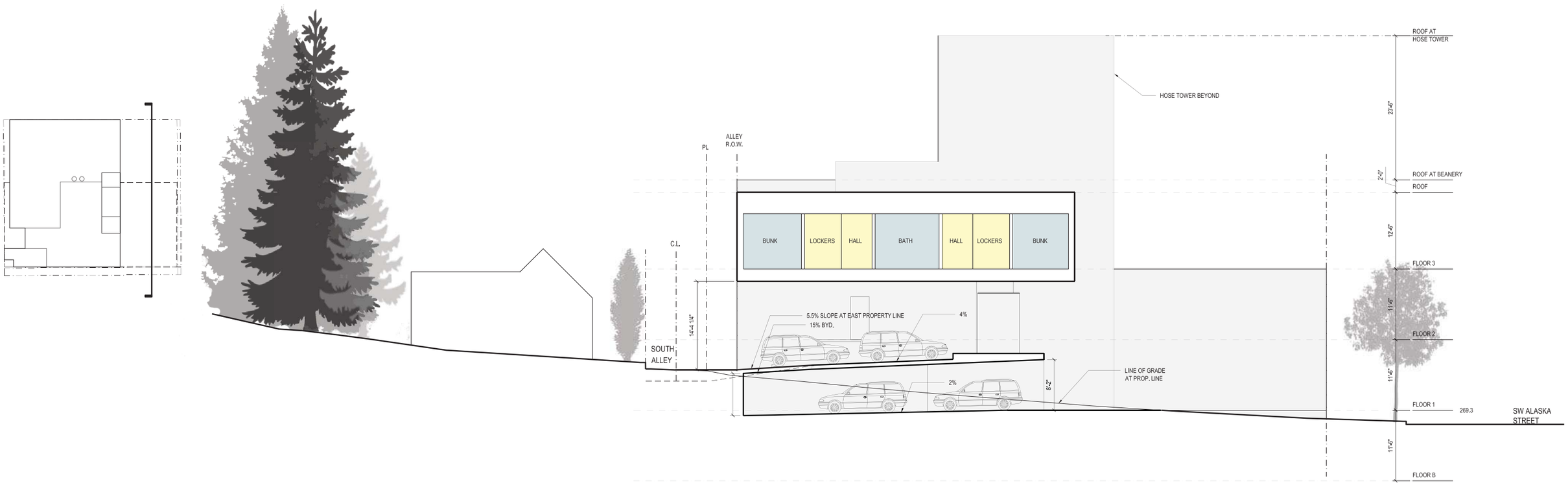

PROPERTY LINE
OUTLINE OF EXISTING BUILDING
PERIMETER OF APPARATUS BAY ABOVE SHOWN DASHED
PROPERTY LINE
ALLEY IMPROVEMENT R.O.W. SETBACK
PROPERTY LINE
HOSE TOWER 80 SF
LADDER STORAGE 130 SF
ENGINE STORAGE 86 SF
COMMUNICATIONS 86 SF
MAJOR DISASTER STORAGE 263 SF
RED BAG STORAGE
NORTH STAIR
P.T. BATHROOM 82 SF
MEDIC STORAGE 177 SF
PHYSICAL TRAINING 641 SF
ELEVATOR
EXTERIOR SPACE ABOVE
ELEV. MACH. 84 SF
JANITOR 45 SF
ELECTRICAL 120 SF
OPEN TO LIGHT MONITOR ABOVE
COMPRESSOR
BC STORAGE 93 SF
MECHANICAL 373 SF
SOUTH STAIR
ALLEY IMPROVEMENT R.O.W. SETBACK
PROPERTY LINE


N
0 2' 4' 8' 16'

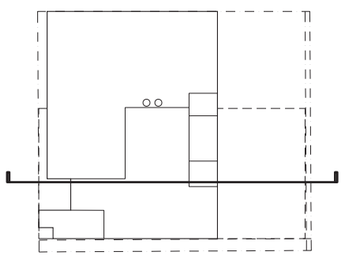
BASEMENT

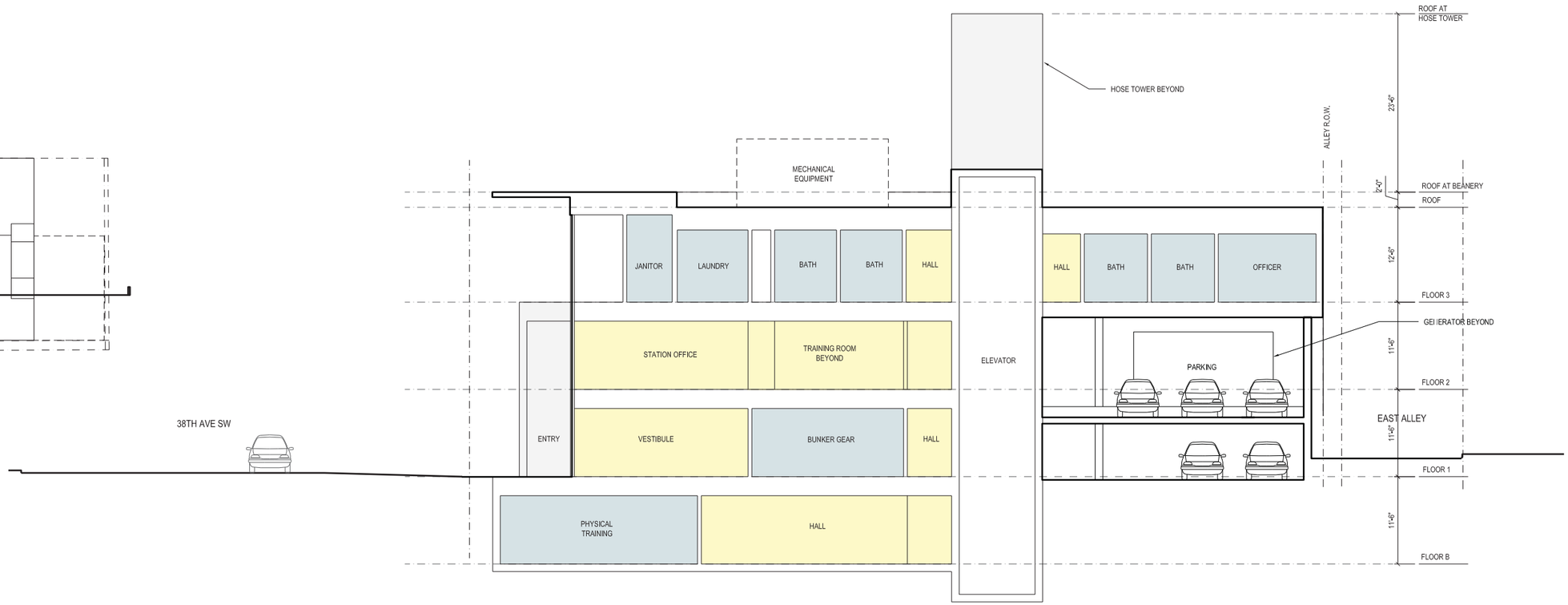


SECTION A THROUGH HOSE TOWER LOOKING WEST

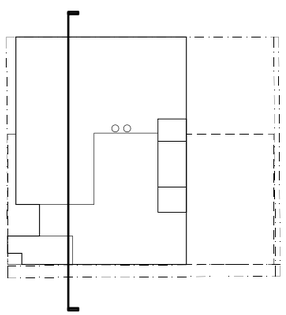


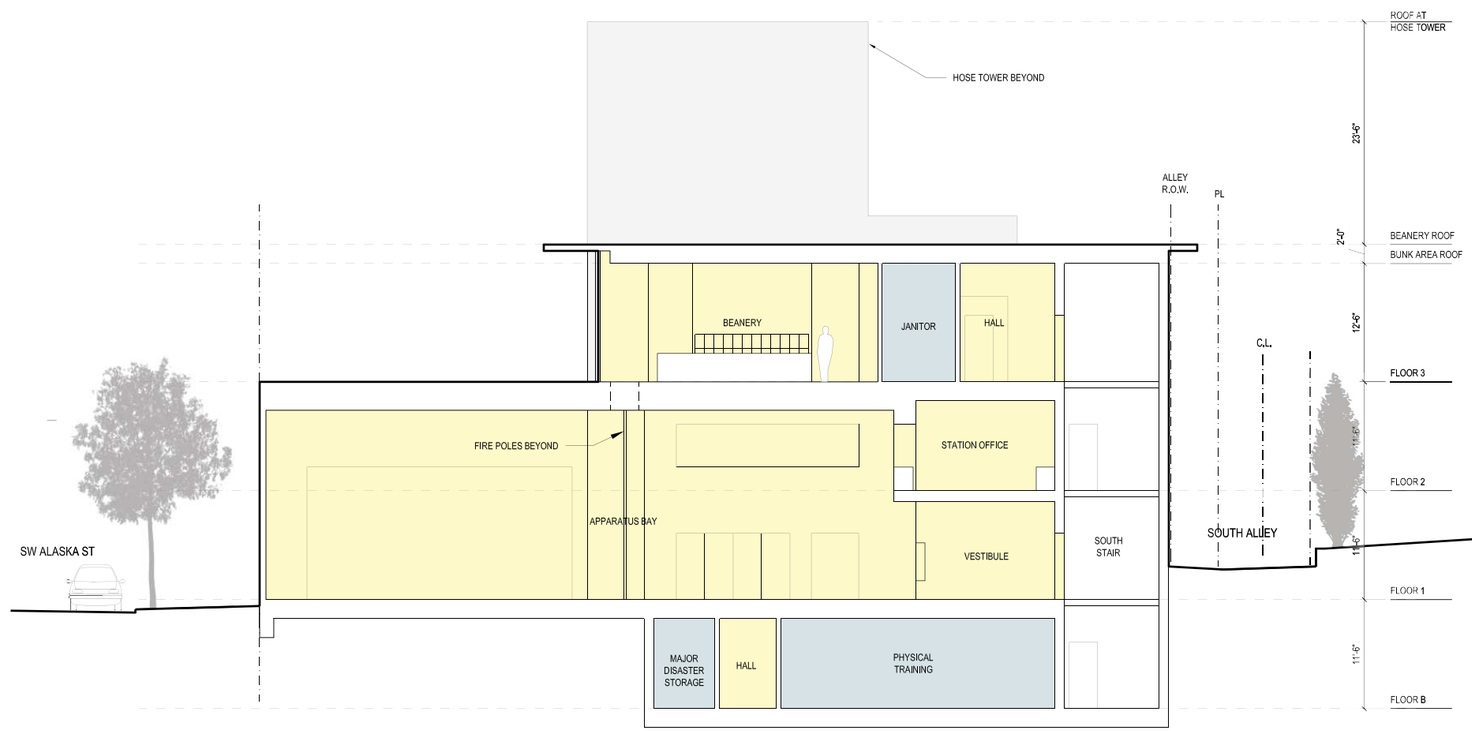
SECTION B THROUGH PARKING LOOKING WEST

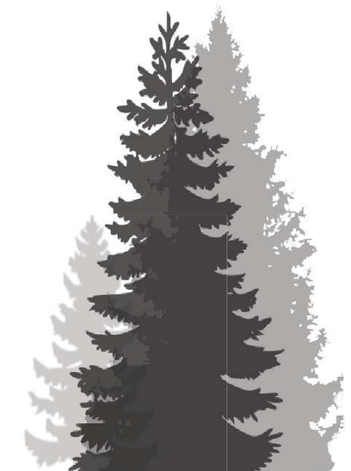




SECTION THROUGH ENTRY LOOKING NORTH







SECTION THROUGH PUBLIC SPACES LOOKING EAST

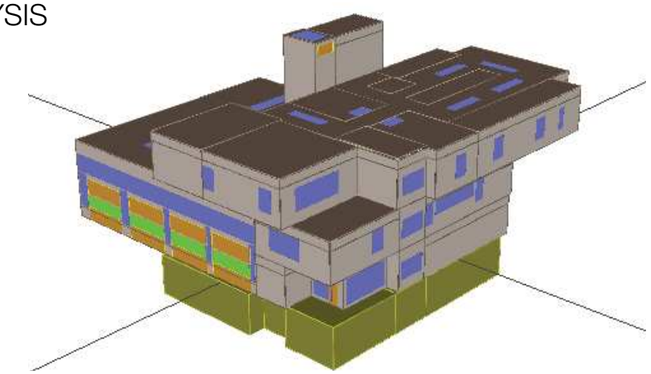
AERIAL VIEW FROM NORTHWEST

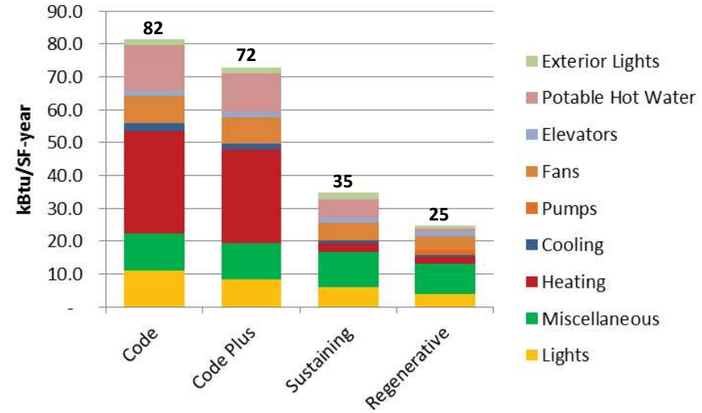
AERIAL VIEW FROM SOUTHWEST

AERIAL VIEW FROM SOUTHEAST

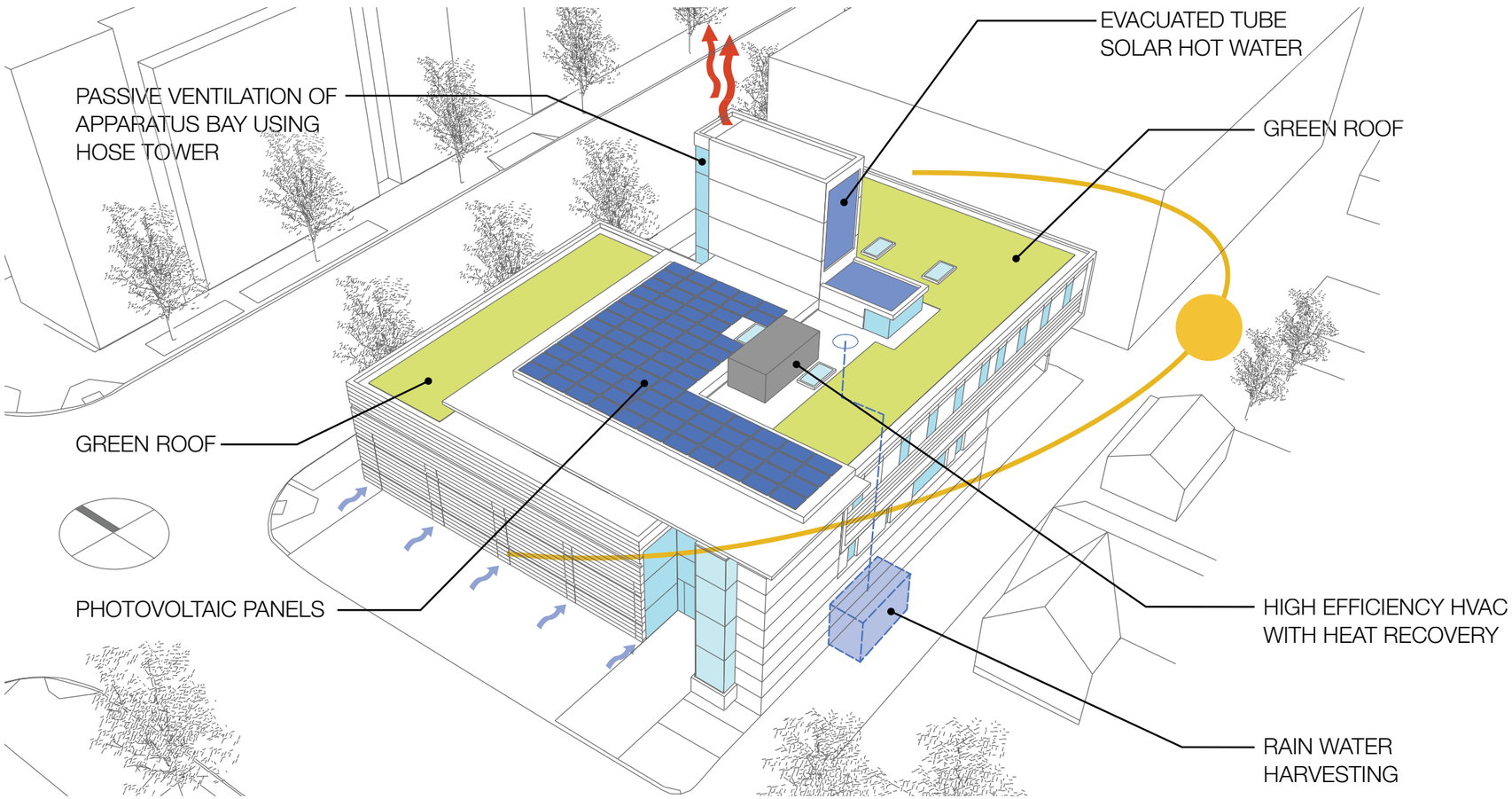
AERIAL VIEW FROM NORTHEAST

ENERGY ANALYSIS





BUILDING SYSTEMS



SUSTAINABILITY STRATEGIES

ENERGY

- Highly insulated building envelope
- High performance glazing
- Passive ventilation
- Thermal mass
- Daylighting of occupied spaces
- Lighting and power outlet controls
- High efficiency appliances and HVAC system
- Waste water heat recovery
- Solar thermal domestic water heating
- Photovoltaic energy production

WATER

- Low-flow plumbing fixtures
- Drought-tolerant, native vegetation
- Rainwater for toilet flushing and truck washing

SITE AND NEIGHBORHOOD

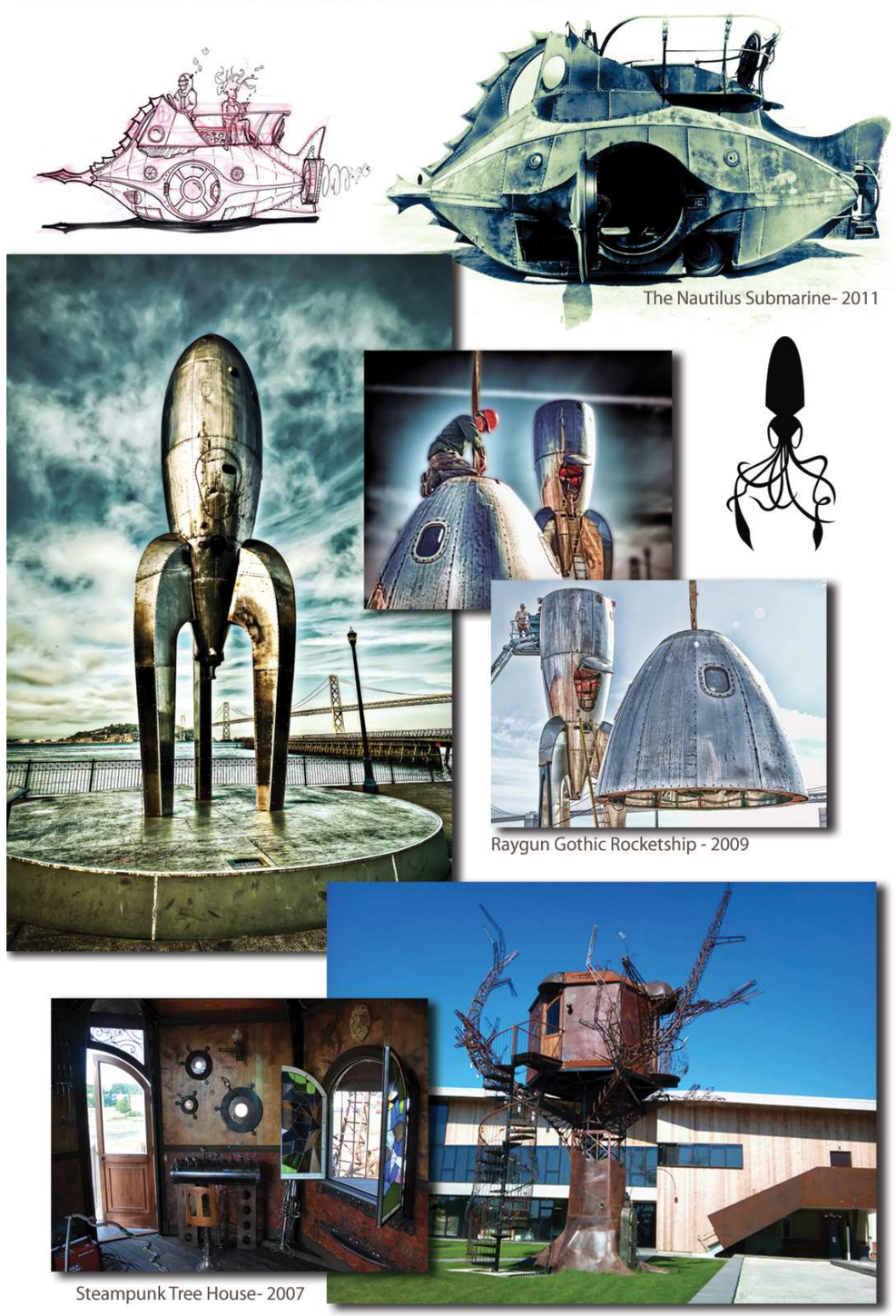
- Green roofs and wall
- Street trees and low planting
- Permeable pedestrian paving
- Electric car charging station
- Bicycle parking

MATERIALS

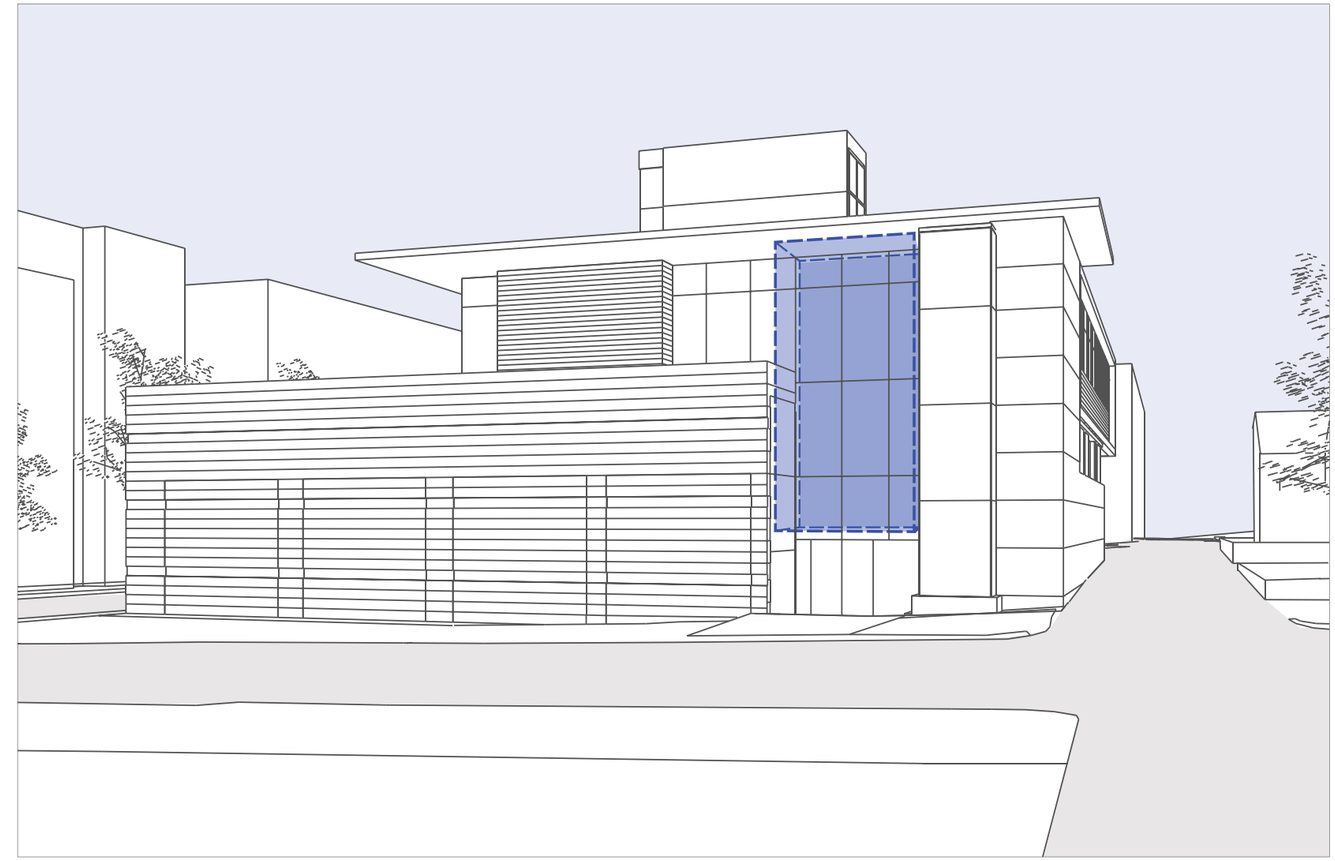
- Durable, low-maintenance materials
- Low-VOC finishes
- Sustainably harvested wood products
- Red list material awareness
- Construction material reuse

LEED

Required Certification:	Gold	60-79 Points
Target Certification:	Platinum	80+ Points
Anticipated LEED Credits:		73-95 Points



PREVIOUS WORKS



PROPOSED FIRE STATION 32 INSTALLATION LOCATION

FIRE STATION ARTIST: SEAN ORLANDO

VIEW OF PUBLIC ENTRY LOOKING EAST

VIEW ALONG SW ALASKA ST LOOKING EAST

VIEW ALONG SW ALASKA ST LOOKING WEST

VIEW OF STATION FROM NORTHWEST