



Seattle Fire Department
Neighborhood Fire Station #21

Design Commission DD Review
2 April 2009



Fire Station #21

7304 Greenwood Avenue N

Neighborhood I Station

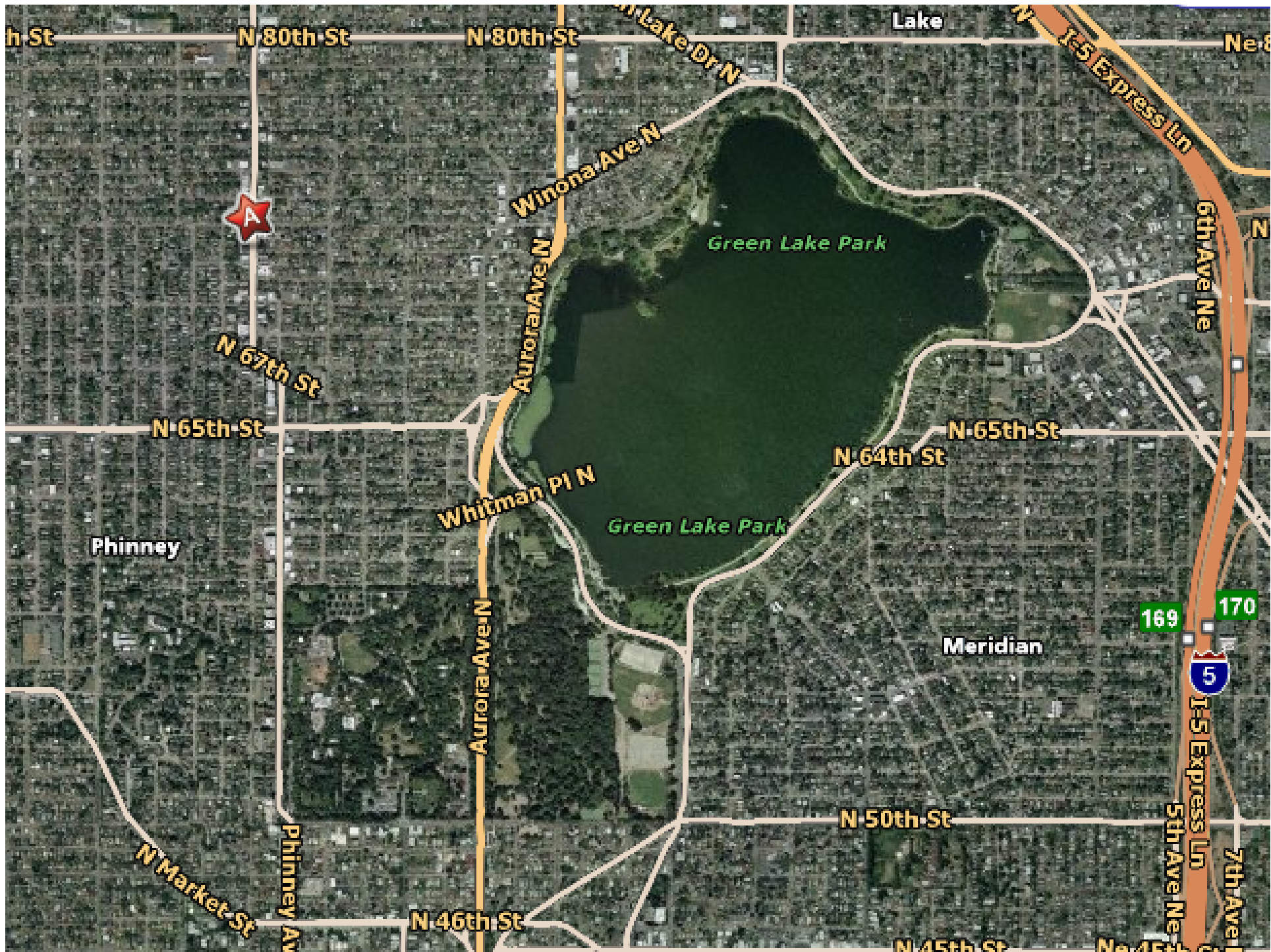
FS21 houses one engine company and the Department's Mass Casualty Unit

The existing station is obsolete and not suited for renovation due to its age (built in 1951), code deficiencies and outdated systems.

FS21 will be rebuilt in the same location but on an expanded site.

Program calls for approximately 7900sf.

An interim facility will be provided during construction to ensure continued emergency service to the neighborhood.





A close-up photograph of a hand holding a pencil, poised to draw on a blueprint. The blueprint is spread out on a light-colored surface, and the hand is positioned in the upper left quadrant. The background is a soft, out-of-focus light brown or beige color.

schematic
design

Function / Operations

Community / Site

Budget

This option is predicated on providing a new traffic light at the alley



Visibility from Apparatus Bay

ALLEY

GREENWOOD AVENUE NORTH

Support Bar "storage functions"

TRASH / RECYL

Parking in Lower Tray

Apparatus Bay directly engages the Street

Apparatus Bay "response functions"

SECURE PARKING

APPARATUS ENTRY / EXIT

FIREFIGHTER ENTRY

SITE UTILITIES

Station House "people functions"

View East to Green Lake & Cascade Mountains

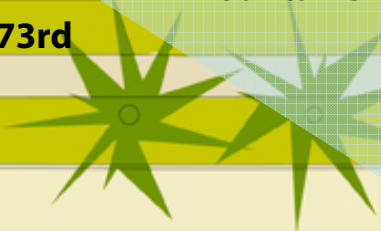
PUBLIC ENTRY

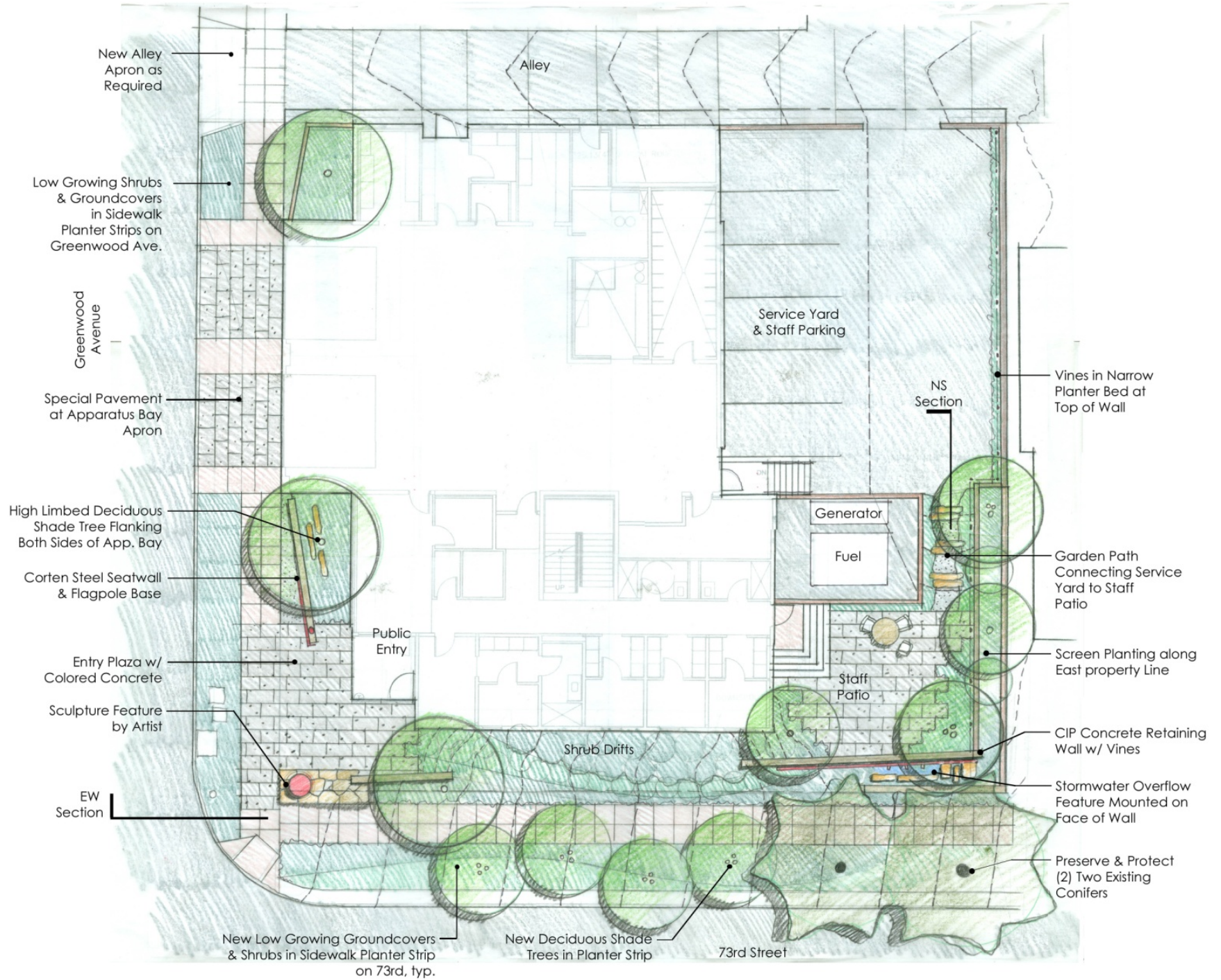
Public Entry addresses the Urban Corner & Engages the Intersection

Pedestrian Scale on N 73rd



N 73RD STREET





New Alley Apron as Required

Alley

Low Growing Shrubs & Groundcovers in Sidewalk Planter Strips on Greenwood Ave.

Greenwood Avenue

Special Pavement at Apparatus Bay Apron

Service Yard & Staff Parking

Vines in Narrow Planter Bed at Top of Wall

NS Section

High Limbed Deciduous Shade Tree Flanking Both Sides of App. Bay

Generator
Fuel

Garden Path Connecting Service Yard to Staff Patio

Corten Steel Seatwall & Flagpole Base

Screen Planting along East property Line

Entry Plaza w/ Colored Concrete

Public Entry

Staff Patio

Sculpture Feature by Artist

CIP Concrete Retaining Wall w/ Vines

EW Section

Shrub Drifts

Stormwater Overflow Feature Mounted on Face of Wall

Preserve & Protect (2) Two Existing Conifers

New Low Growing Groundcovers & Shrubs in Sidewalk Planter Strip on 73rd, typ.

New Deciduous Shade Trees in Planter Strip

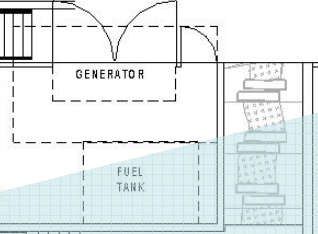
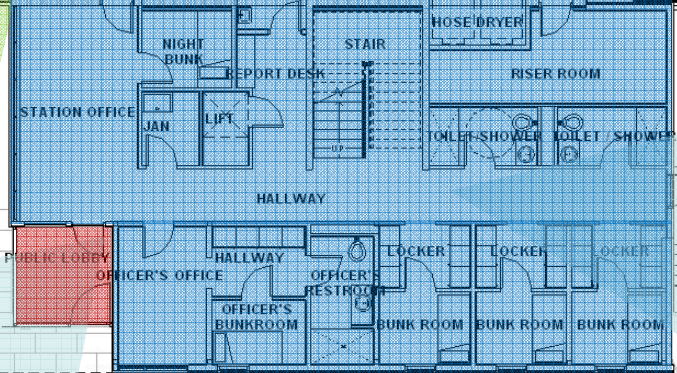
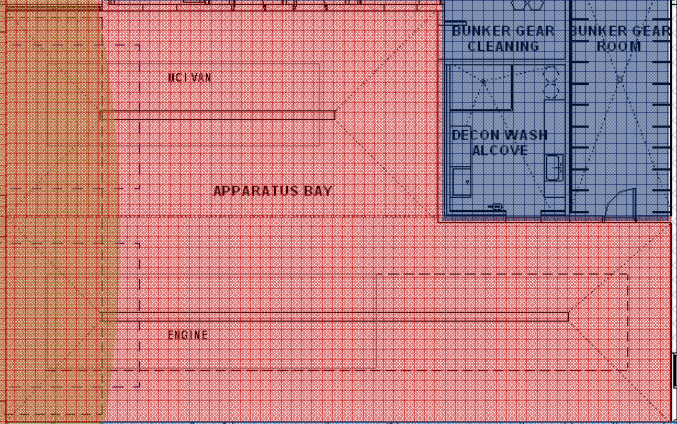
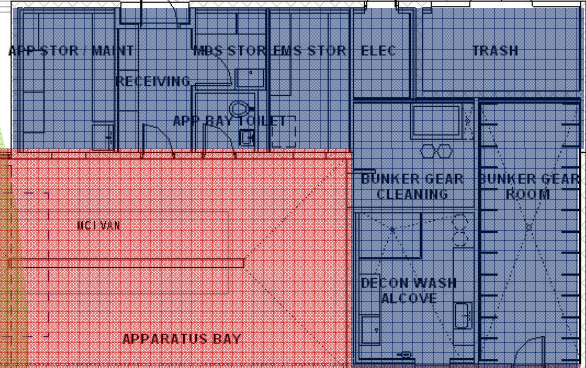
73rd Street

APPARATUS DRIVEWAY

PUBLIC ENTRY COURTYARD

STAFF PARKING

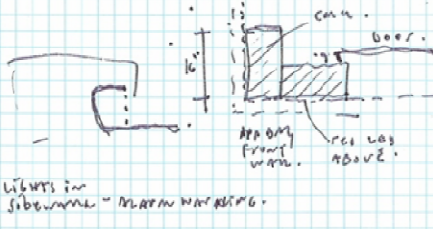
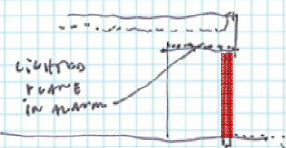
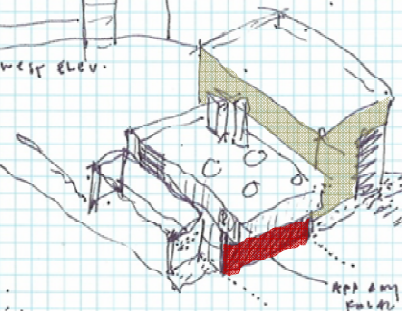
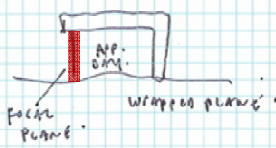
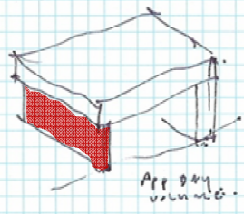
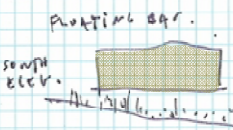
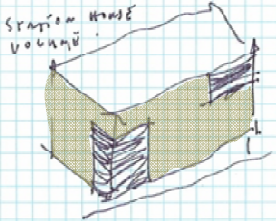
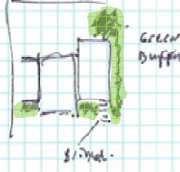
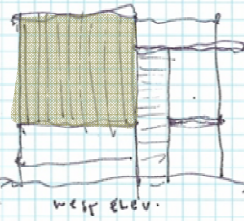
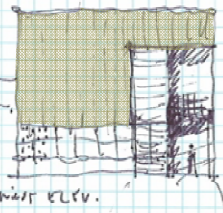
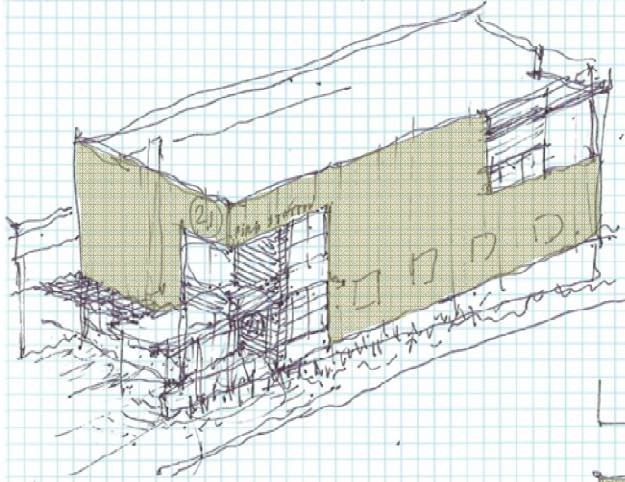
STAFF COURTYARD



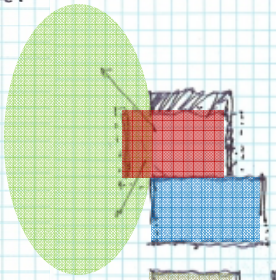
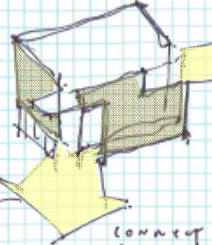
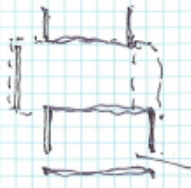
FS 21
 Our home after Org. info session.



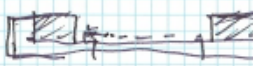
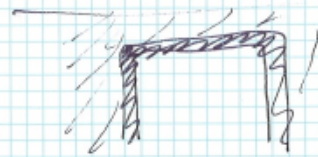
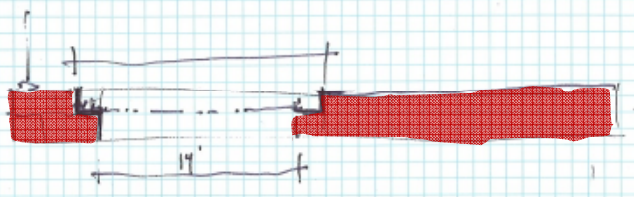
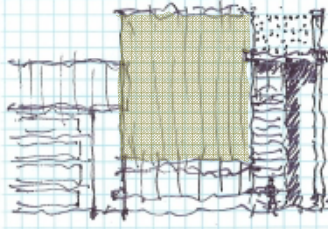
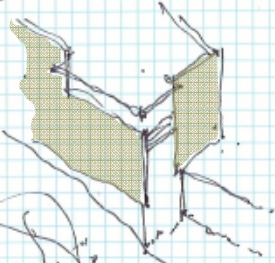
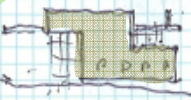
Bits out of
 APPLE - form
 put in volume.



FS 21
 Bus ride home.



connect to
 Wrenn & Wrenn
 @ Greenview + 73rd





Design Commission Comments

Schematic Design Presentation

4 September 2008

Commended the project for:

the overall design direction
site plan, art & architectural integration
glazing the sides of the app bay to encourage views
a unique expression of a civic building

Encouraged team to:

simplify the various elements
resolve the “wrapped box” vs. “planar” expression of
the forms
make the staff patio accessible and bolder
study location and visibility of street trees

Noted concerns about:

entry door oriented towards 73rd Street
further study the app bay canopy to distinguish
between civic and retail character along Greenwood
the MUP & Council Conditional Use Process

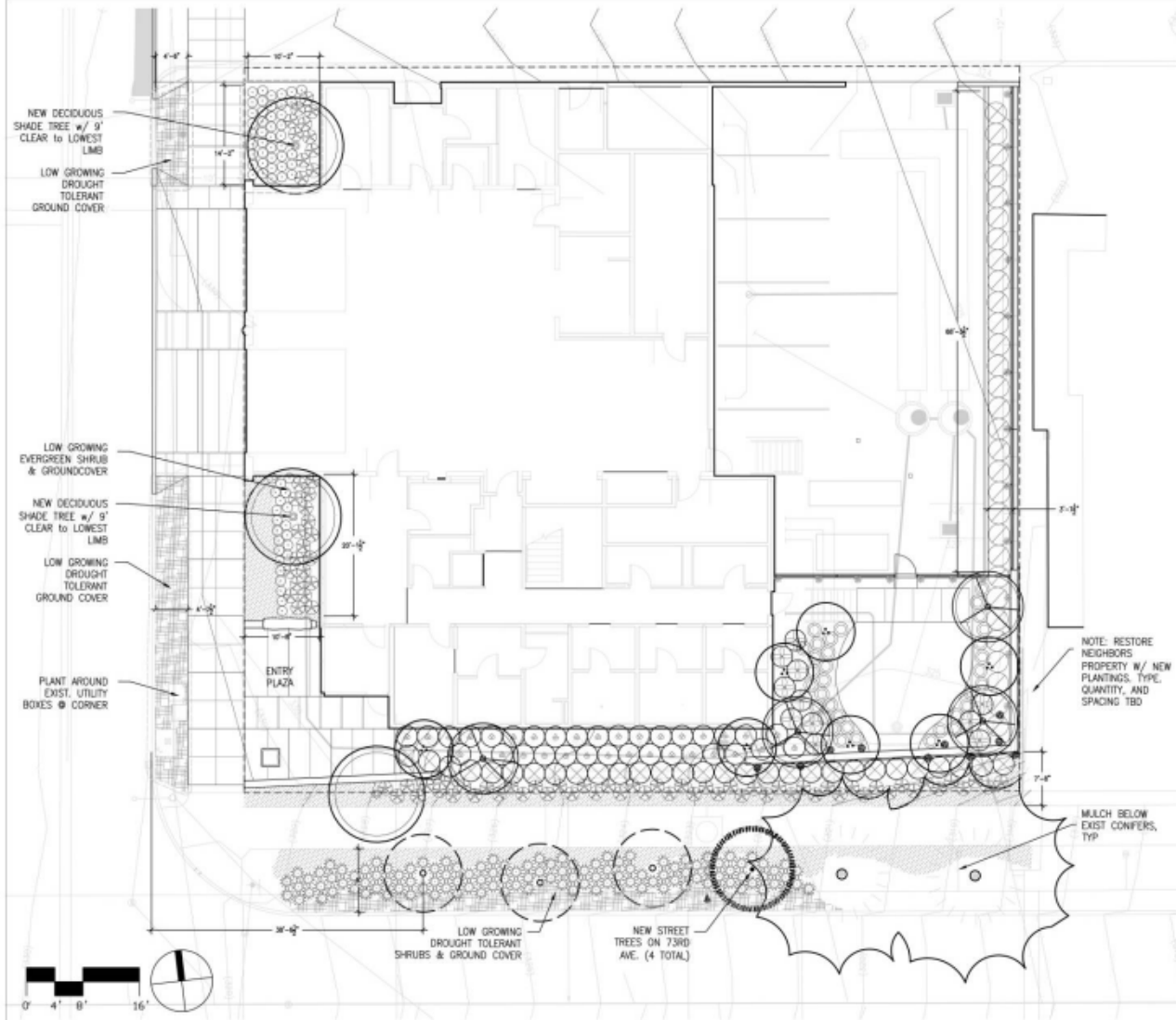
Design Development Focus

- Resolve the formal expression of building
- Strengthen integration of art, landscape and structure
- Develop details that support the concept
- Simplify to stay on budget





rendering looking NE from Greenwood & 73rd



PLANTING NOTES

GENERAL: THESE NOTES ARE HIGHLIGHTS FROM THE SPECIFICATIONS AND INTENDED TO PROVIDE CLARIFICATION AND DIRECTION TO CERTAIN ASPECTS OF THE PLANTING. IF THESE NOTES ARE IN CONFLICT WITH THE SPECIFICATIONS AND DRAWINGS, THE SPECIFICATIONS WILL PREVAIL.

- LANDSCAPE ARCHITECT WILL APPROVE FINISH GRADES AT ALL LANDSCAPE AREAS PRIOR TO PLANTING. FINISH GRADES AT PLANTING AREAS SHALL MEET THE SPECIFIED CRITERIA FROM TOP OF ADJACENT HEADER, WALL, CURB, OR FINISHED SURFACE OF WALK.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR FINAL PLANT COUNTS, QUANTITIES, OR AREA CALCULATIONS. THE QUANTITIES OR AREA COUNTS HEREIN ARE FOR THE CONTRACTORS CONVENIENCE ONLY.
 - ANY ROCK, CLODS, OR DEBRIS GREATER THAN 3/4" SHALL BE REMOVED FROM SHRUB, LAWN, OR GROUND COVER AREAS.
 - FINISHED INSTALLATIONS AT THE CROWN OF PLANTS SHALL BE HIGHER THAN ADJACENT FINISH GRADE AS DETAILED.
 - PLANT TREES LARGER THAN 2" CALIPER OR SPECIMEN CLUMPS PRIOR TO INSTALLATION OF IRRIGATION MAINLINES OR LATERALS, IF APPLICABLE.
 - TREES AND SHRUBS SHALL BE INSTALLED PRIOR TO GROUNDCOVERS.
 - TOPSOIL DEPTH:
 - NEW SHRUB BEDS TO RECEIVE 6" DEPTH MIN. NEW TOPSOIL.
 - MULCH DEPTH:
 - NEW SHRUB BEDS TO RECEIVE 3" DEPTH OF NEW MULCH PRODUCT. MULCH PRODUCT TO BE CLEAN SHREDDED WOOD CHIPS OR HOG FUEL.
 - SHRUB BED PREPARATION: REMOVE ALL ROCK CLODS AND DEBRIS AS STATED ABOVE. ROTOTILL SUBGRADE TO A DEPTH OF 8" MINIMUM. INSTALL TOPSOIL IN TWO LIFTS OF EQUAL AMOUNTS. FIRST LIFT OF TOPSOIL TO BE ROTOTILLED 6" DEPTH INTO SUBGRADE TO PROPERLY MIX THE TWO SOIL TYPES. UPON COMPLETION OF ROTOTILLING, INSTALL REMAINING TOPSOIL AND FINISH GRADE SMOOTH PRIOR TO PLANTING.
 - PLANTING AREAS TO BE CROWNED IN THE CENTER AT 1/4-INCH PER FOOT FROM THE EDGE UNLESS OTHERWISE NOTED. GRADES SHALL FLOW SMOOTHLY INTO ONE ANOTHER AND PRODUCE POSITIVE DRAINAGE. SLOPE ALL BEDS AWAY FROM BUILDING WALLS UNLESS OTHERWISE INDICATED.
 - CONTRACTOR SHALL ALLOW FOR THE ADDITION OF THE SPECIFIED QUANTITIES OF SOIL AMENDMENTS AND CONDITIONERS IN SOIL PREPARATION AND FINISH GRADING.
 - ALL PLANTS SHALL BE SPOTTED BY THE LANDSCAPE ARCHITECT AT THE TIME OF INSTALLATION.
 - LANDSCAPE ARCHITECT RESERVES THE RIGHT TO ADJUST THE LOCATION OF PLANT MATERIAL DURING INSTALLATION AS APPROPRIATE TO THE PROJECT. ADJUSTMENTS IN LOCATION IN THESE AREAS SHALL BE FIELD SPOTTED BY LANDSCAPE ARCHITECT.
 - FINAL LAYOUT OF ALL PLANT MATERIALS WILL BE COORDINATED WITH LANDSCAPE ARCHITECT. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND ACCOUNTING FOR ALL BID QUANTITIES IN EACH CATEGORY AS OUTLINED ABOVE. ANY PLANTS THAT ARE NOT USED AS PART OF THIS ALLOWANCE SHALL BE CREDITED TO THE OWNER.
- ** NOTE: FOR GREEN FACTOR WORKSHEET AND ALL REQUIRED CALCULATIONS - SEE SHEET L601

| CHECKED | REVISIONS | STAMP | CONSULTANT |
|---------|-------------|-------|------------|
| No. | Description | Date | |
| | | | |
| | | | |
| | | | |

Issue Date: 27 March 2009
 Drawn: JJ
 Checked: JJ
 M/JH Project No.: 0740

outdoor architects, LLC
 landscape architecture & planning
 4000 Lake Avenue NE, Seattle, WA 98105
 PH: 206.522.2221 | jgordon@outdoorarch.com

Fire Station 21
 7304 Greenwood Avenue North | Seattle, Washington 98103

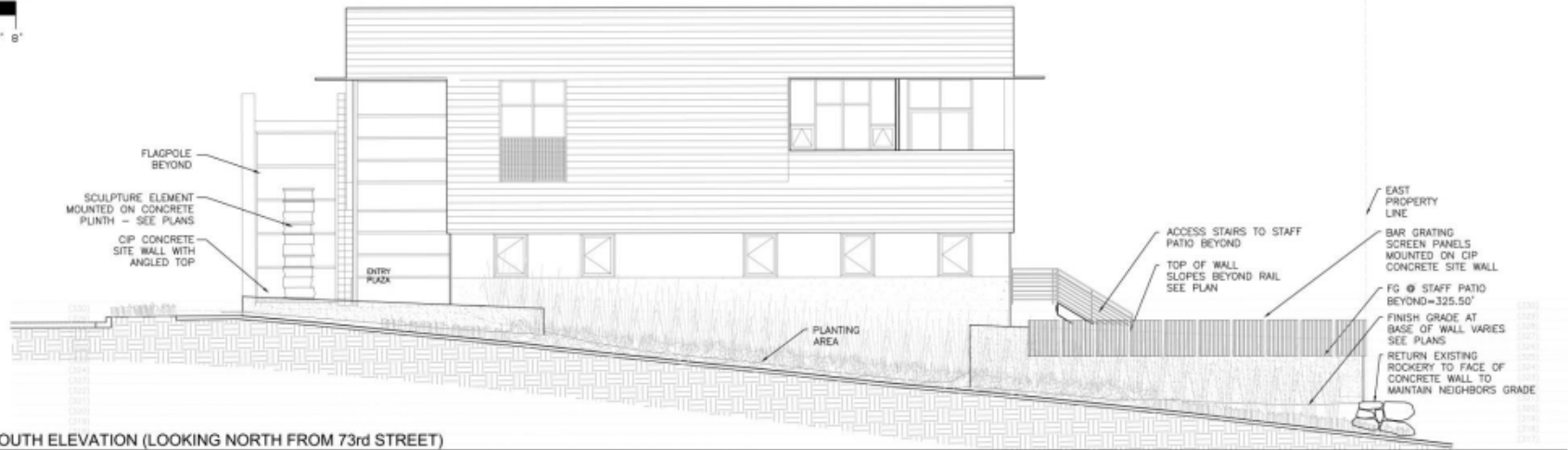
100% DESIGN DEVELOPMENT
 27 March 2009

ARCHITECT
 The MillerHull Partnership, LLP
 Architecture and Planning
 Poplar Building
 Phone: 206.462.6827 | 71 Columbia, Sixth Floor
 Fax: 206.462.2652 | Seattle, WA 98104

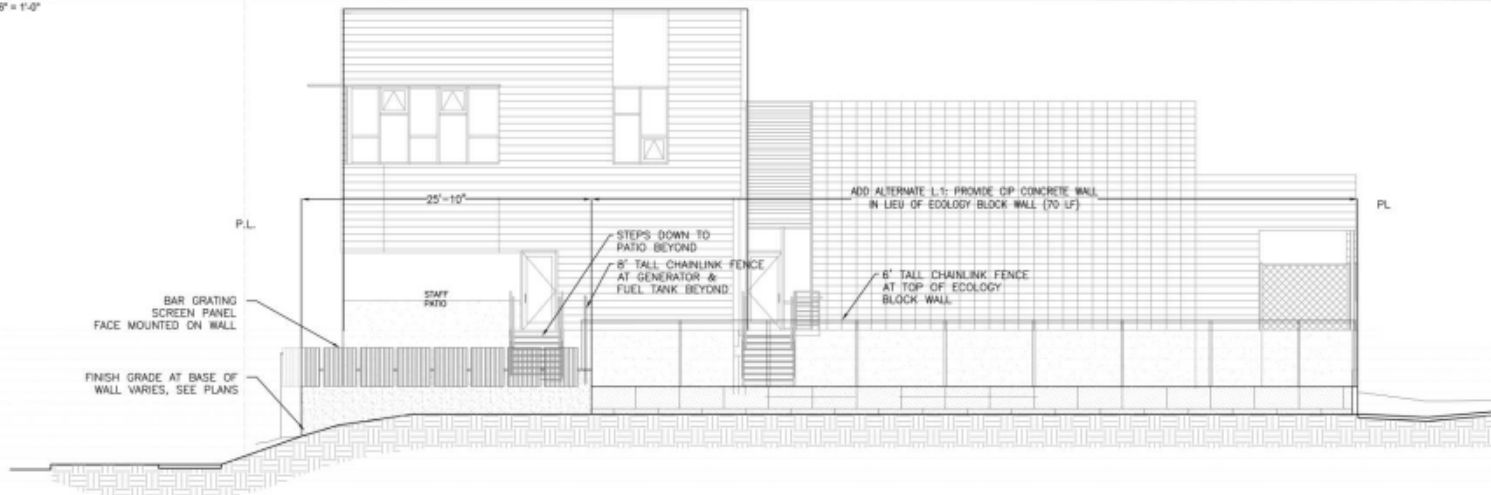
MillerHull

SHEET
PLANTING PLAN
L-600

scale: 1/4" = 1'-0" @ full size



1 SOUTH ELEVATION (LOOKING NORTH FROM 73rd STREET)
SCALE: 3/16" = 1'-0"



2 EAST ELEVATION
SCALE: 3/16" = 1'-0"

| CHECKED | REVISIONS | STAMP | CONSULTANT |
|---------|-------------|-------|------------|
| No. | Description | Date | |
| | | | |
| | | | |
| | | | |
| | | | |

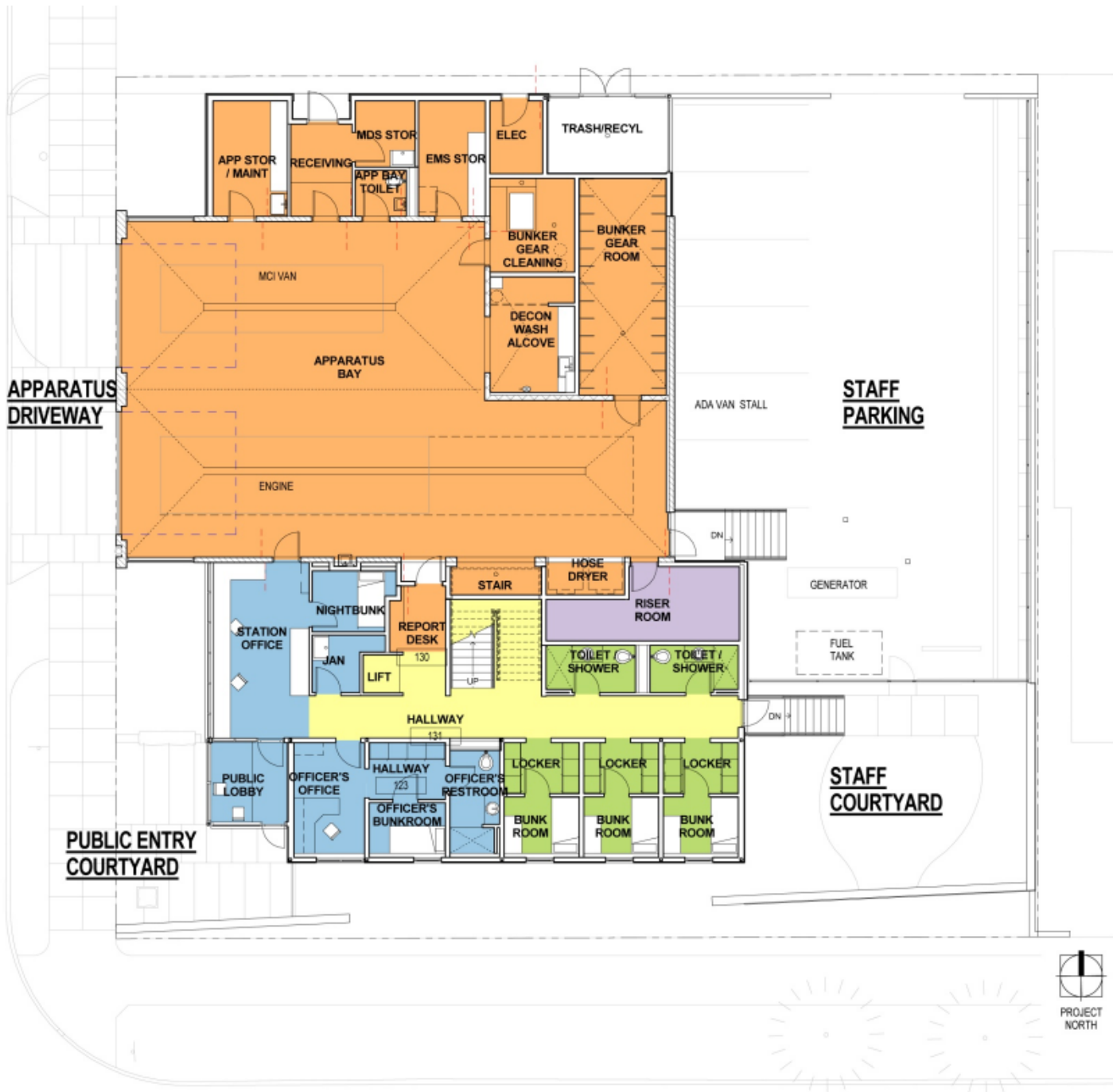
| No. | Description | Date |
|-----|-------------|------|
| | | |
| | | |
| | | |
| | | |
| | | |



Fire Station 21
7304 Greenwood Avenue North | Seattle, Washington 98103
100% DESIGN DEVELOPMENT
27 March 2009

ARCHITECT
The Millennial Partnership, LLP
Architecture and Planning
Palmer Building
71 Columbia, Sixth Floor
Seattle, WA 98104
Phone: 206.882.8837
Fax: 206.882.9552

SHEET
SECTIONS & ELEVATIONS
L-200



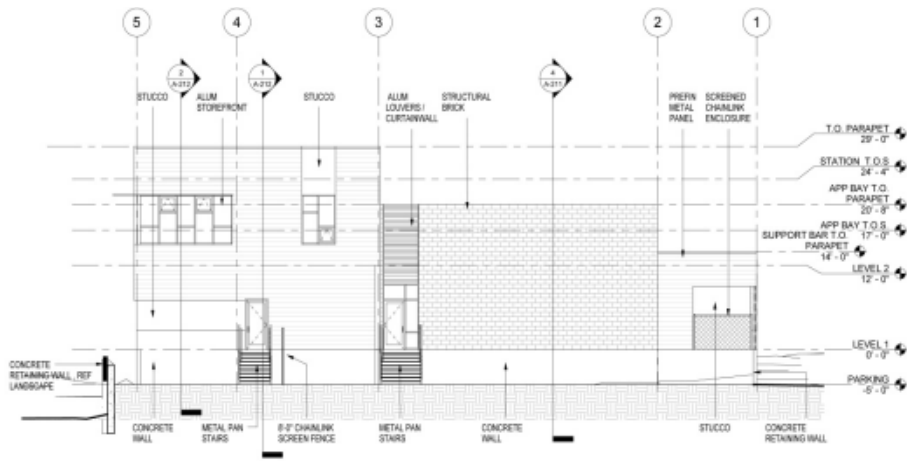
- ADMIN
- CIRCULATION
- CREW
- MECH / STOR
- OPERATIONS



- ADMIN
- CIRCULATION
- CREW
- MECH / STOR
- OPERATIONS

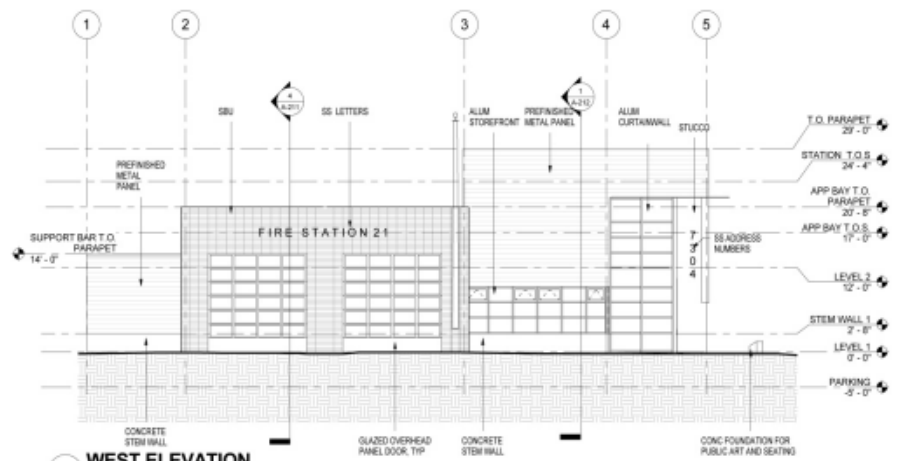


PROJECT
NORTH



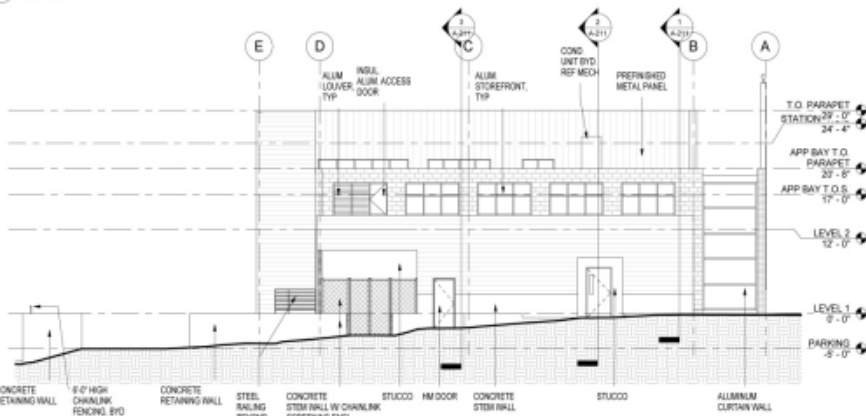
EAST ELEVATION

1/8" = 1'-0"



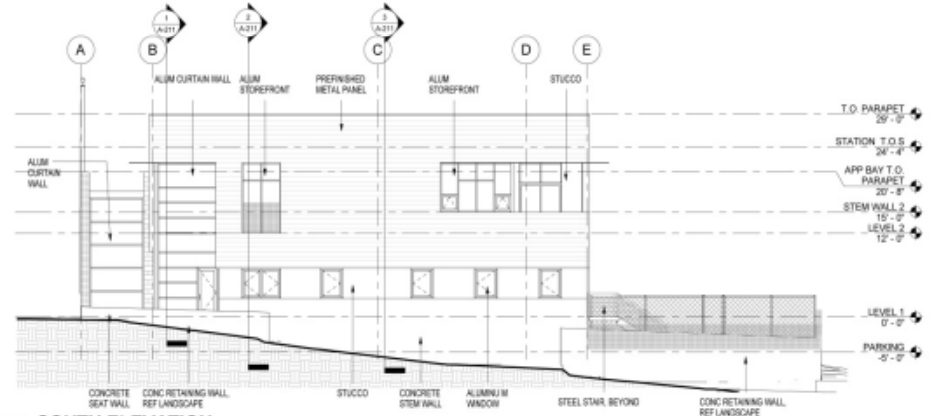
WEST ELEVATION

1/8" = 1'-0"



NORTH ELEVATION

1/8" = 1'-0"



SOUTH ELEVATION

1/8" = 1'-0"

| CHECKED | | REVISIONS | | STAMP | CONSULTANT |
|---------|-------------|-----------|--|-------|------------|
| No. | Description | Date | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Fire Station 21
 7304 Greenwood Avenue North | Seattle, Washington 98103
100% DESIGN DEVELOPMENT
 27 MARCH 2009

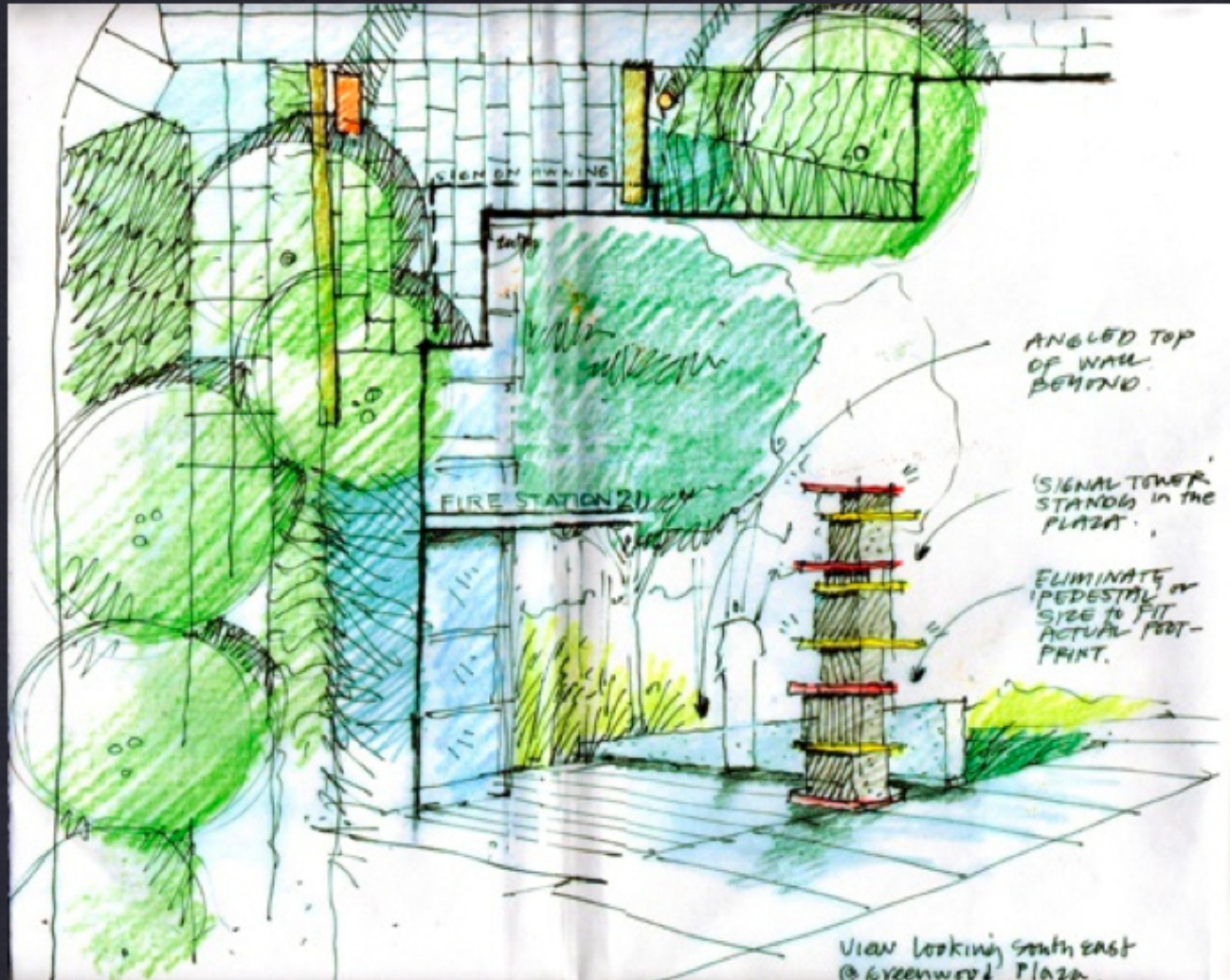
| | |
|---|--|
| ARCHITECT The Miller/Hull Partnership, LLP Architecture and Planning Floor Building 71 Columbia, Sixth Floor Seattle, WA 98104 Phone 206.682.8837 Fax 206.682.9082 | BUILDING ELEVATIONS A-202 |
|---|--|



perri lynch
artist

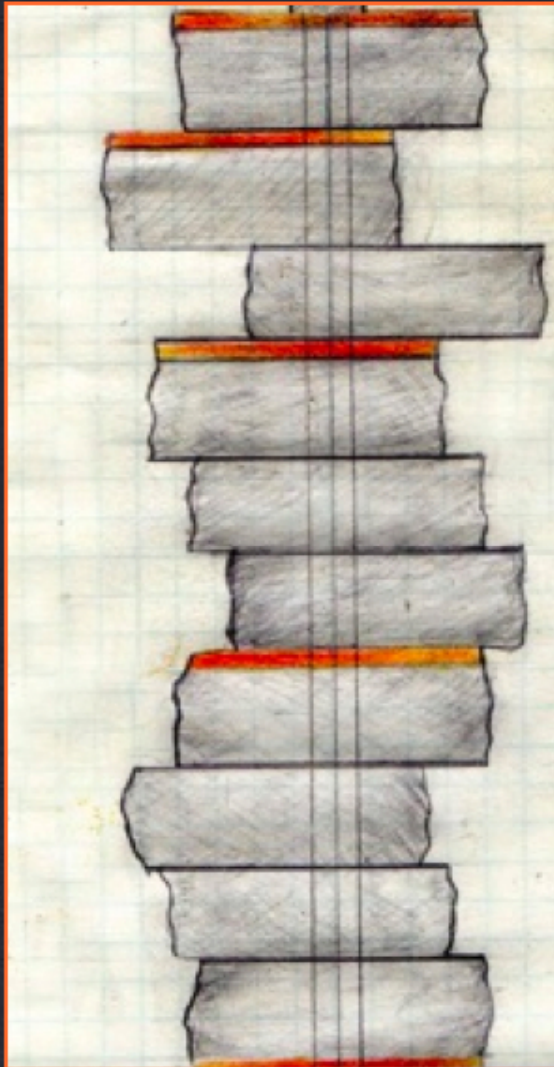
artwork proposal
approved by the PAAC
17 March 2009

DESIGN STRATEGY PLACEMENT



LANDSCAPE/ART INTEGRATION SCHEMATIC
BY JACK JOHNSON, OUTDOOR STUDIO.

CONCEPTUAL APPROACH



TIME DILATION

When seconds become minutes in times of crisis

ORDER & CHAOS

Calming charged situations

CUT & FLOW

When crisis interrupts the rhythm of daily life

**DESIGN STRATEGY
MATERIAL**

TENINO GRANITE

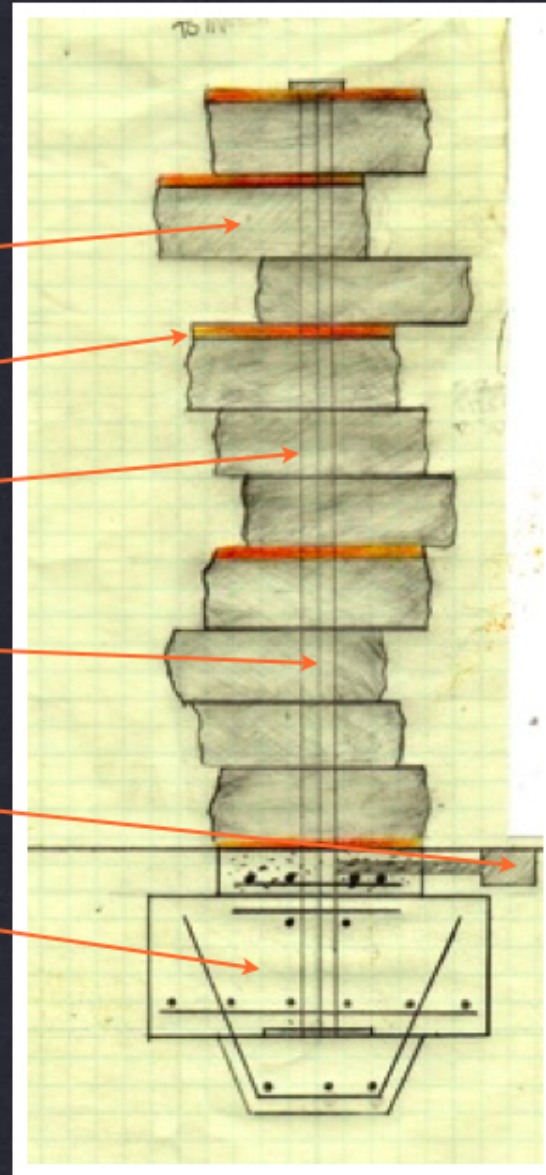
FUSED GLASS PANELS

STEEL SUPPORT

LEDs AND ARMATURE

ELECTRICAL

CONCRETE FOOTING



FORM

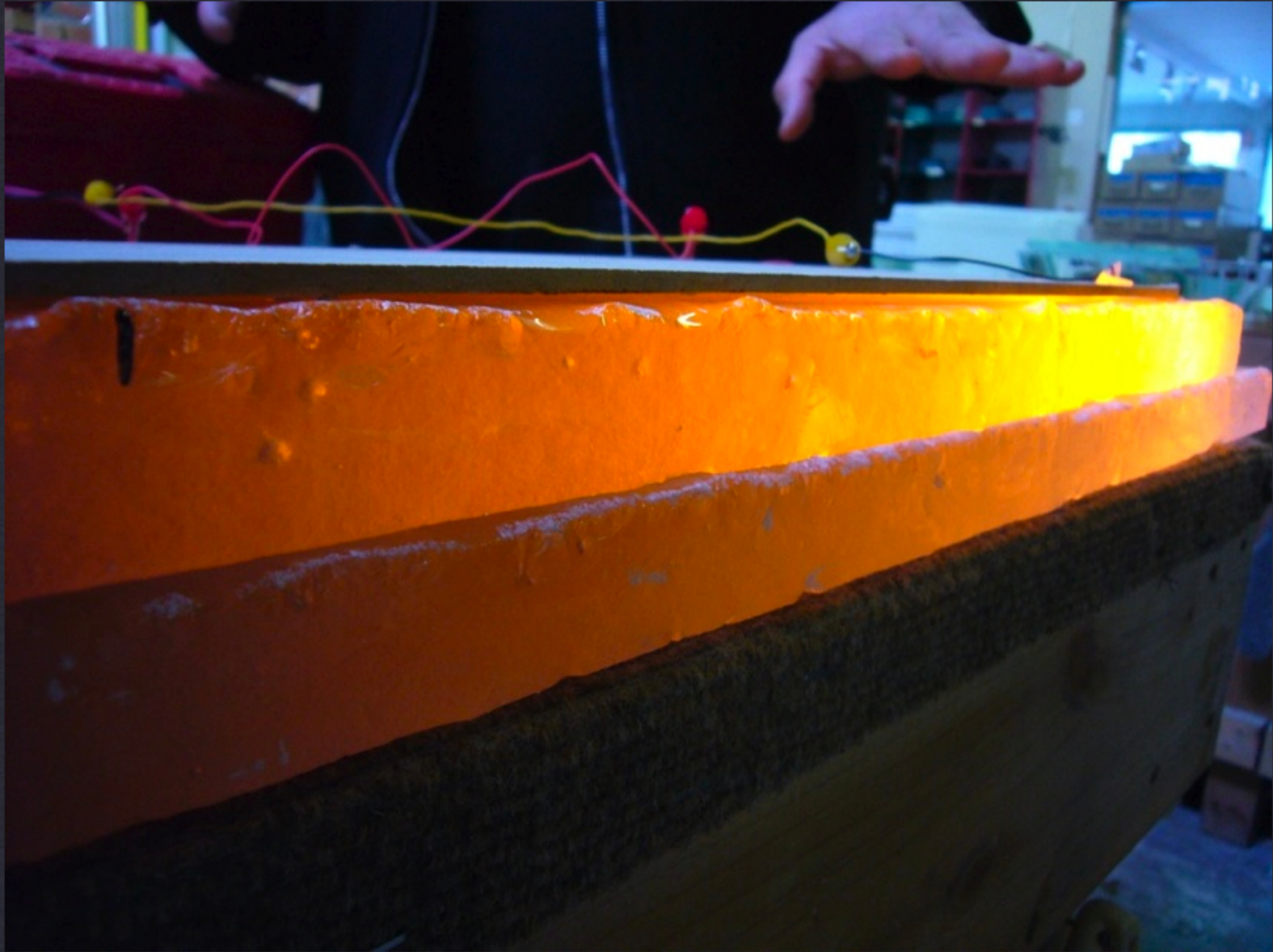
11'H X 30"W X 30"D

WEIGHT

3,600 LBS. (1.8 TONS)

<FOOTING NOT INCLUDED>

NITTY-GRITTY
ELECTRICAL



NITTY-GRITTY
ELECTRICAL





LEED status



LEED-NC

LEED-NC Version 2.2 Registered Project Checklist

Fire Station 21
Seattle, WA

| | | | | | | |
|-----|---|----|--------------------------|--|--|--------|
| Yes | ? | No | | | | |
| 9 | 3 | 2 | Sustainable Sites | | | 14 Pts |

| Y | | | Prereq | | Req'd |
|---|---|---|------------|---|-------|
| 1 | | | Prereq 1 | Construction Activity Pollution Prevention | 1 |
| 1 | | | Credit 1 | Site Selection | 1 |
| 1 | | | Credit 2 | Development Density & Community Connectivity | 1 |
| | | 1 | Credit 3 | Brownfield Redevelopment | 1 |
| 1 | | | Credit 4.1 | Alternative Transportation, Public Transportation Access | 1 |
| 1 | | | Credit 4.2 | Alternative Transportation, Bicycle Storage & Changing Rooms | 1 |
| 1 | | | Credit 4.3 | Alternative Transportation, Low-Emitting/Fuel-Efficient Vehicles | 1 |
| | 1 | | Credit 4.4 | Alternative Transportation, Parking Capacity | 1 |
| | 1 | | Credit 5.1 | Site Development, Protect or Restore Habitat | 1 |
| 1 | | | Credit 5.2 | Site Development, Maximize Open Space | 1 |
| 1 | | | Credit 6.1 | Stormwater Design, Quantity Control | 1 |
| | | 1 | Credit 6.2 | Stormwater Design, Quality Control | 1 |
| | 1 | | Credit 7.1 | Heat Island Effect, Non-Roof | 1 |
| 1 | | | Credit 7.2 | Heat Island Effect, Roof | 1 |
| 1 | | | Credit 8 | Light Pollution Reduction | 1 |

| | | | | | | |
|-----|---|----|-------------------------|--|--|-------|
| Yes | ? | No | | | | |
| 5 | | | Water Efficiency | | | 5 Pts |

| | | | | | |
|---|--|--|------------|---|---|
| 1 | | | Credit 1.1 | Water Efficient Landscaping, Reduce by 50% | 1 |
| 1 | | | Credit 1.2 | Water Efficient Landscaping, No Potable Use or No Irrigation | 1 |
| 1 | | | Credit 2 | Innovative Wastewater Technologies | 1 |
| 1 | | | Credit 3.1 | Water Use Reduction, 20% Reduction | 1 |
| 1 | | | Credit 3.2 | Water Use Reduction, 30% Reduction | 1 |

| | | | | | | |
|-----|---|----|--------------------------------|--|--|--------|
| Yes | ? | No | | | | |
| 6 | 3 | 8 | Energy & Atmosphere | | | 17 Pts |

| Y | | | Prereq | | Req'd |
|---|---|---|----------|---|---------|
| Y | | | Prereq 1 | Fundamental Commissioning of the Building Energy Systems | Req'd |
| Y | | | Prereq 2 | Minimum Energy Performance | Req'd |
| Y | | | Prereq 3 | Fundamental Refrigerant Management | Req'd |
| 4 | 2 | 4 | Credit 1 | Optimize Energy Performance | 1 to 10 |
| | | 3 | Credit 2 | On-Site Renewable Energy | 1 to 3 |
| 1 | | | Credit 3 | Enhanced Commissioning | 1 |
| | | 1 | Credit 4 | Enhanced Refrigerant Management | 1 |
| | 1 | | Credit 5 | Measurement & Verification | 1 |
| 1 | | | Credit 6 | Green Power | 1 |

| | | | | | | |
|-----|---|----|----------------------------------|--|--|--------|
| Yes | ? | No | | | | |
| 4 | 2 | 7 | Materials & Resources | | | 13 Pts |

| Y | | | Prereq | | Req'd |
|---|---|---|------------|--|-------|
| | | | Prereq 1 | Storage & Collection of Recyclables | Req'd |
| | | 1 | Credit 1.1 | Building Reuse, Maintain 75% of Existing Walls, Floors & Roof | 1 |
| | | 1 | Credit 1.2 | Building Reuse, Maintain 95% of Existing Walls, Floors & Roof | 1 |
| | | 1 | Credit 1.3 | Building Reuse, Maintain 50% of Interior Non-Structural Elements | 1 |
| 1 | | | Credit 2.1 | Construction Waste Management, Divert 50% from Disposal | 1 |
| 1 | | | Credit 2.2 | Construction Waste Management, Divert 75% from Disposal | 1 |
| | | 1 | Credit 3.1 | Materials Reuse, 5% | 1 |
| | | 1 | Credit 3.2 | Materials Reuse, 10% | 1 |
| 1 | | | Credit 4.1 | Recycled Content, 10% (post-consumer + 1/2 pre-consumer) | 1 |
| | 1 | | Credit 4.2 | Recycled Content, 20% (post-consumer + 1/2 pre-consumer) | 1 |
| 1 | | | Credit 5.1 | Regional Materials, 10% Extracted, Processed, Manuf'd Regionally | 1 |
| | 1 | | Credit 5.2 | Regional Materials, 20% Extracted, Processed, Manuf'd Regionally | 1 |

| | | | | | | |
|--|--|--|---|----------|------------------------------------|---|
| | | | 1 | Credit 6 | Rapidly Renewable Materials | 1 |
| | | | 1 | Credit 7 | Certified Wood | 1 |

| | | | | | | |
|-----|---|----|-------------------------------------|--|--|--------|
| Yes | ? | No | | | | |
| 12 | 2 | 1 | Indoor Environmental Quality | | | 15 Pts |

| Y | | | Prereq | | Req'd |
|---|---|---|------------|--|-------|
| Y | | | Prereq 1 | Minimum IAQ Performance | Req'd |
| Y | | | Prereq 2 | Environmental Tobacco Smoke (ETS) Control | Req'd |
| 1 | | | Credit 1 | Outdoor Air Delivery Monitoring | 1 |
| | 1 | | Credit 2 | Increased Ventilation | 1 |
| 1 | | | Credit 3.1 | Construction IAQ Management Plan, During Construction | 1 |
| 1 | | | Credit 3.2 | Construction IAQ Management Plan, Before Occupancy | 1 |
| 1 | | | Credit 4.1 | Low-Emitting Materials, Adhesives & Sealants | 1 |
| 1 | | | Credit 4.2 | Low-Emitting Materials, Paints & Coatings | 1 |
| 1 | | | Credit 4.3 | Low-Emitting Materials, Carpet Systems | 1 |
| 1 | | | Credit 4.4 | Low-Emitting Materials, Composite Wood & Agrifiber Products | 1 |
| | | 1 | Credit 5 | Indoor Chemical & Pollutant Source Control | 1 |
| 1 | | | Credit 6.1 | Controllability of Systems, Lighting | 1 |
| 1 | | | Credit 6.2 | Controllability of Systems, Thermal Comfort | 1 |
| 1 | | | Credit 7.1 | Thermal Comfort, Design | 1 |
| | 1 | | Credit 7.2 | Thermal Comfort, Verification | 1 |
| 1 | | | Credit 8.1 | Daylight & Views, Daylight 75% of Spaces | 1 |
| 1 | | | Credit 8.2 | Daylight & Views, Views for 90% of Spaces | 1 |

| | | | | | | |
|-----|---|----|--|--|--|-------|
| Yes | ? | No | | | | |
| 3 | 2 | | Innovation & Design Process | | | 5 Pts |

| | | | | | |
|---|---|--|------------|---|---|
| | 1 | | Credit 1.1 | Innovation in Design: VRV First Use SFD? | 1 |
| 1 | | | Credit 1.2 | Innovation in Design: Water Use Reduction - 40% | 1 |
| 1 | | | Credit 1.3 | Innovation in Design: Green Power - 100% | 1 |
| | 1 | | Credit 1.4 | Innovation in Design: Alternative Vehicle Charging Stations - 100% | 1 |
| 1 | | | Credit 2 | LEED Accredited Professional | 1 |

| | | | | | | |
|-----|----|----|---|--|--|-----------|
| Yes | ? | No | | | | |
| 39 | 12 | 18 | Project Totals (pre-certification estimates) | | | 69 Points |

Certified: 26-32 credits
 Silver 33-38 credits
 Gold: 39-51 credits
 Platinum: 52-69 credits

Fire Station 21
39 Credits
 per checklist review
 at 100% DD Phase



Council Conditional Use Issues

Fire Stations are not permitted outright as a use in this location and will therefore be require a Type V City Council Action. We are seeking departures from two other zoning code issues, and have been advised by DPD planners to include those for Council review in the Type V application.

Departures that will be Proposed to Council:

1) Street Level Uses

Fire Station is not a Pedestrian Zone street-level use, and therefore can not exceed 20% of frontage except thru a Type V City Council Action.

2) Street-Level Development Standards

60% of street-facing façade between 2' and 8' above sidewalk shall be transparent. Because of slope along 73rd, we do not meet this requirement on the south side of the building.

3) Street-Level Floor Height Requirements

Floor to floor height for nonresidential uses must be 13-foot minimum. In order to meet the project budget, the floor-to-floor height was reduced to 12-feet.



Schedule

| | |
|-----------------------------|--------------|
| DD Phase Complete | April 2009 |
| CD Phase Complete | July 2009 |
| Council Review | Fall 2009 |
| Temporary Station Available | March 2010 |
| Bid/Award | Feb/Mar 2010 |
| Construction Start | April 2010 |

Budget

The MACC is \$3.6m.

The project is on budget at 100% DD.