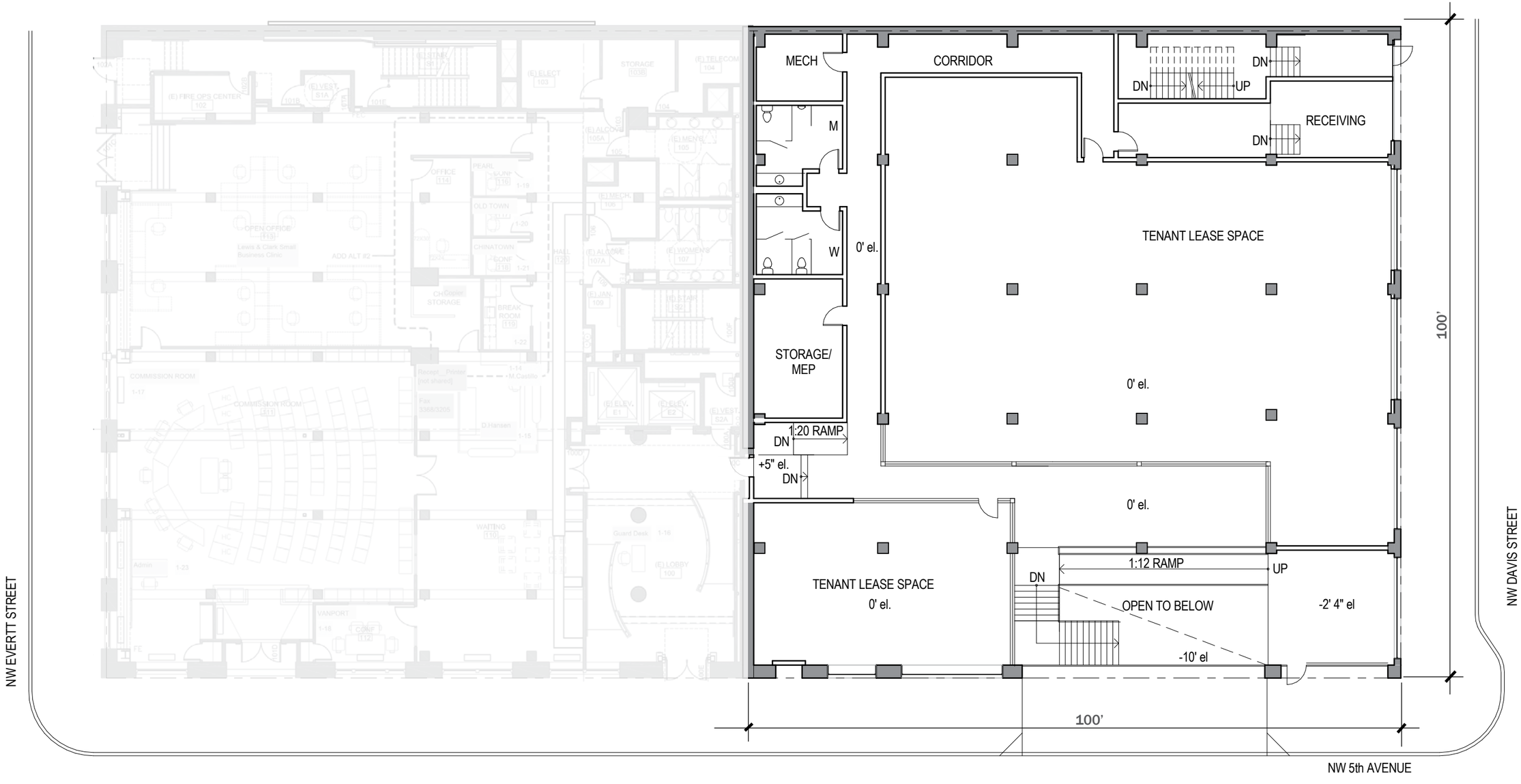
view of proposed building from southwest - doors open


KALBERER
ONE
WAY


New Chinatown / Japantown
Historic District
SITE
NW Glisan Street Ramp
NW Glisan St
N Steel Bridge
Waterfront Park Trail
NW 3rd Ave
NW Flanders St
NW Naito Pkwy
Bikepath
NW Park Ave
NW Broadway
NW 6th Ave
NW 5th Ave
NW 4th Ave
NW Everett St
NW 8th Ave
NW 2nd Ave
NW Davis St
NW Couch St
NW 1st Ave
Portland, OR
W Burnside St


nw 4th avenue
nw everett street
nw davis street
parking lot
209 4th avenue
Mason Ehrman Building
Mason Ehrman Building Annex
100'
100'
existing water service
existing combined sewer connection
nw 5th avenue

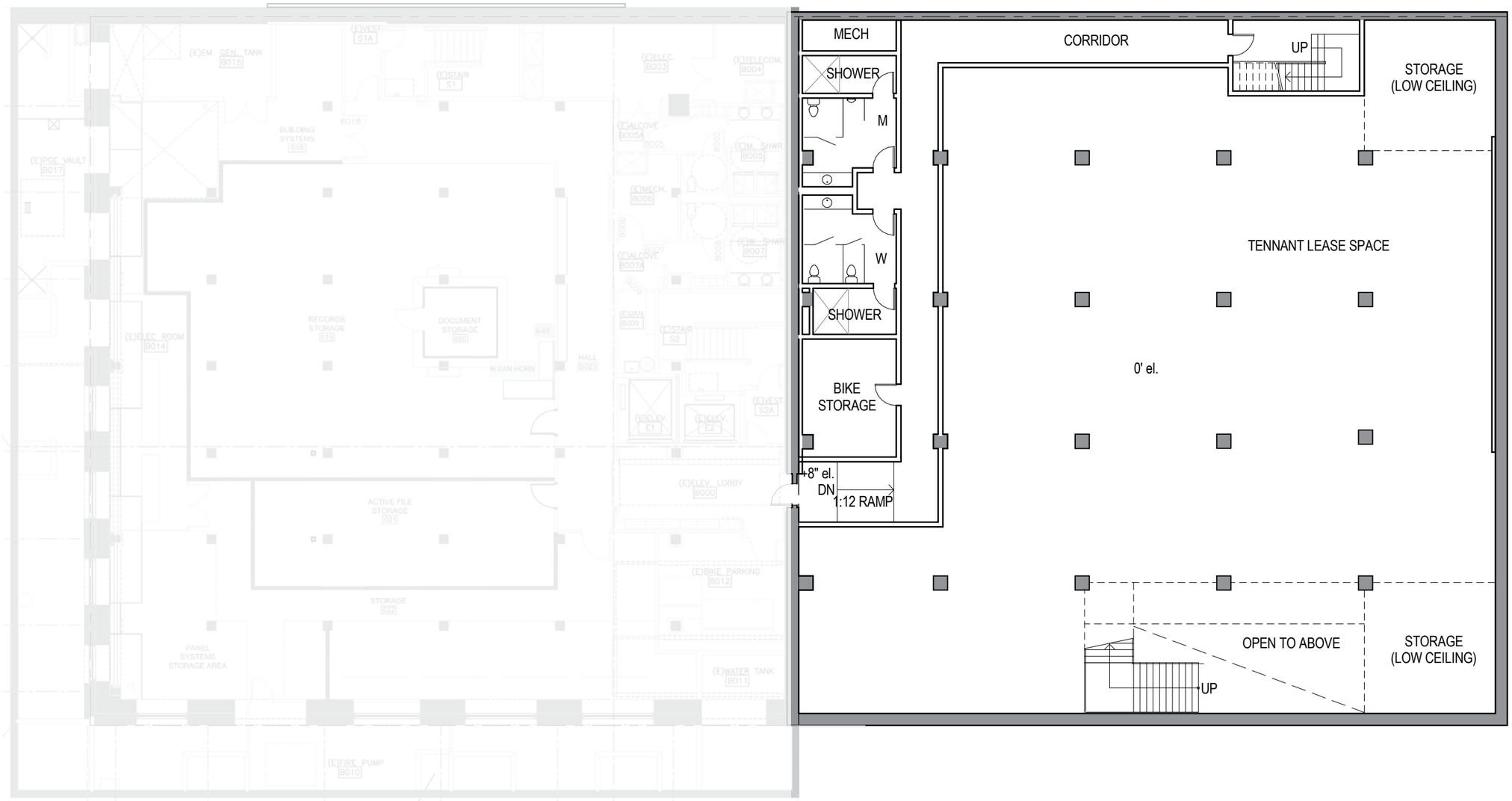

MECH
CORRIDOR
DN
DN
UP
DN
RECEIVING
M
W
0' el.
TENANT LEASE SPACE
STORAGE/
MEP
0' el.
1:20 RAMP
DN
+5" el.
DN
0' el.
1:12 RAMP
UP
DN
OPEN TO BELOW
-2' 4" el
-10' el
TENANT LEASE SPACE
0' el.
100'
100'
NW EVERTT STREET
NW DAVIS STREET
NW 5th AVENUE

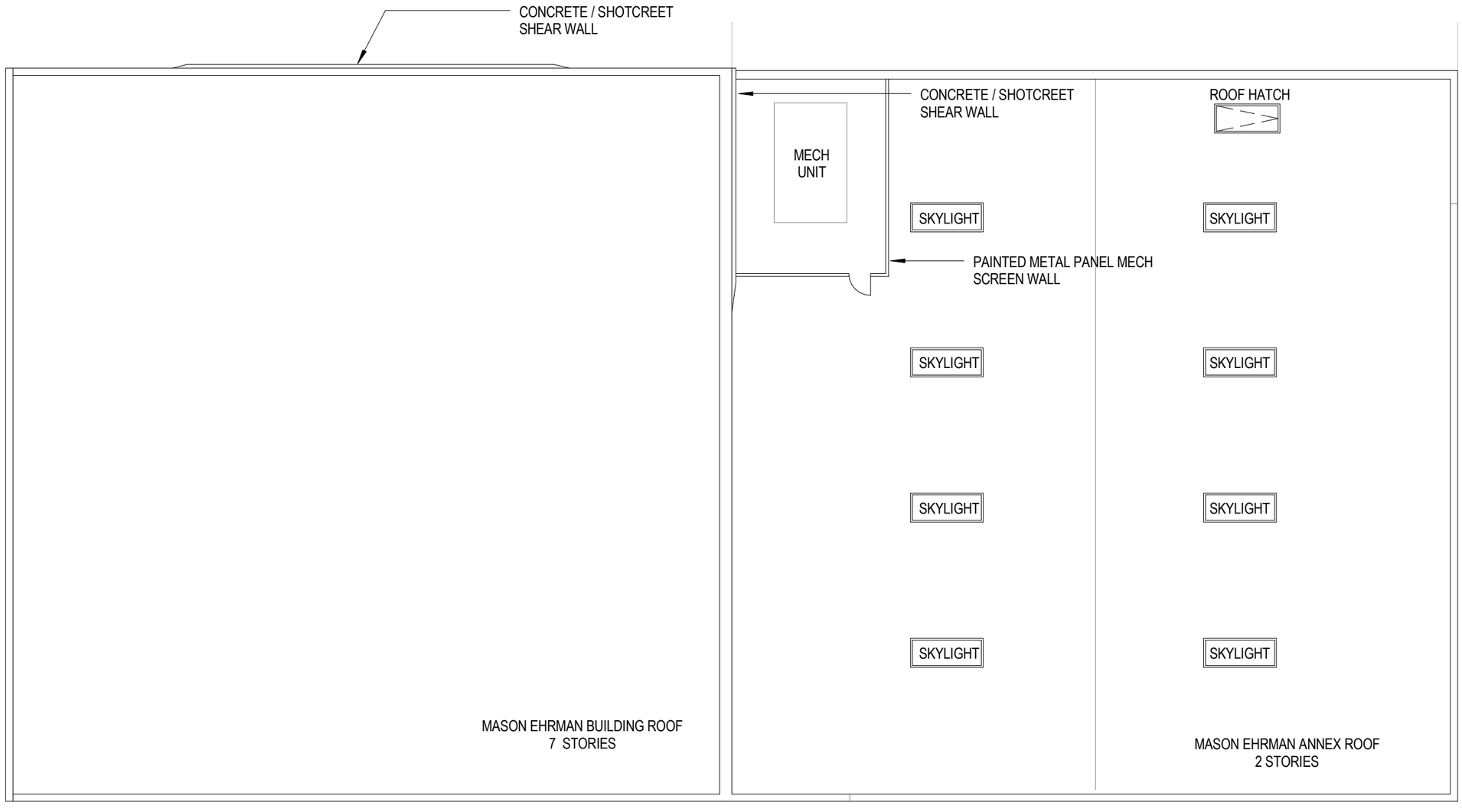
SERA

MASON EHRMAN ANNEX - DAR PACKAGE 15 - 105188 - EA
9 March 2015
NW 5th & Davis Street

0' 5' 10' 20'

second floor plan C6


MECH
SHOWER
M
W
SHOWER
BIKE STORAGE
+8" el.
DN
1:12 RAMP
CORRIDOR
UP
STORAGE (LOW CEILING)
TENNANT LEASE SPACE
0' el.
OPEN TO ABOVE
UP
STORAGE (LOW CEILING)


CONCRETE / SHOTCREET
SHEAR WALL
CONCRETE / SHOTCREET
SHEAR WALL
ROOF HATCH
MECH
UNIT
SKYLIGHT
SKYLIGHT
PAINTED METAL PANEL MECH
SCREEN WALL
SKYLIGHT
SKYLIGHT
SKYLIGHT
SKYLIGHT
SKYLIGHT
SKYLIGHT
MASON EHRMAN BUILDING ROOF
7 STORIES
MASON EHRMAN ANNEX ROOF
2 STORIES


KALBERER
ONE WAY

nw everett street

MASON EHRMAN BUILDING

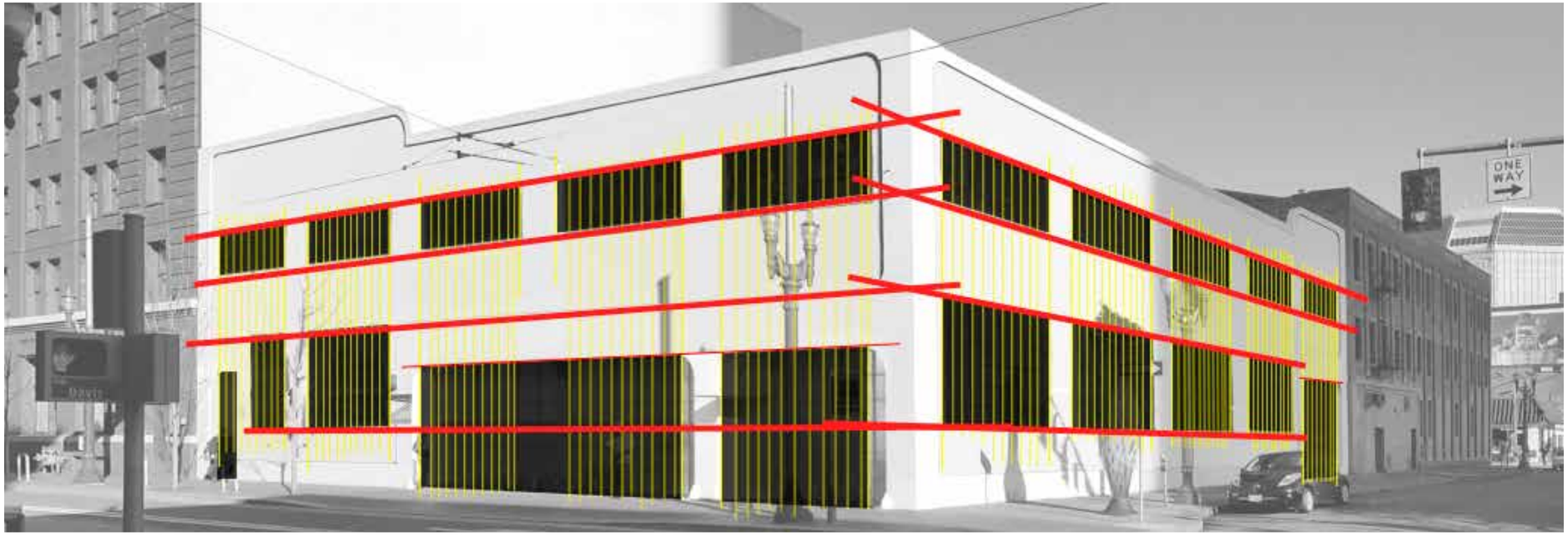
MASON EHRMAN BUILDING ANNEX

nw davis street

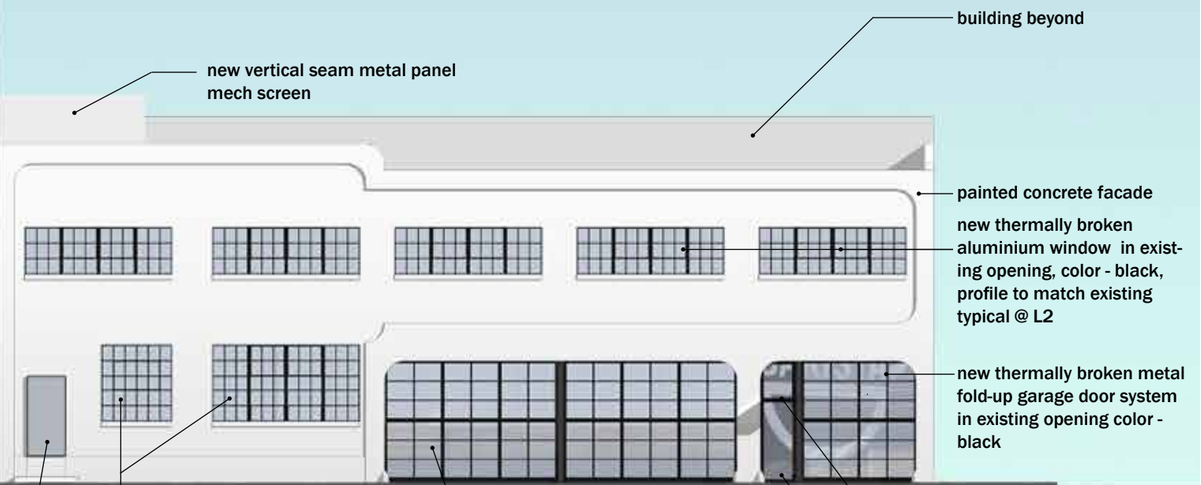

KALBERER
nw 5th avenue
MASON EHRMAN BUILDING ANNEX
nw 4th avenue

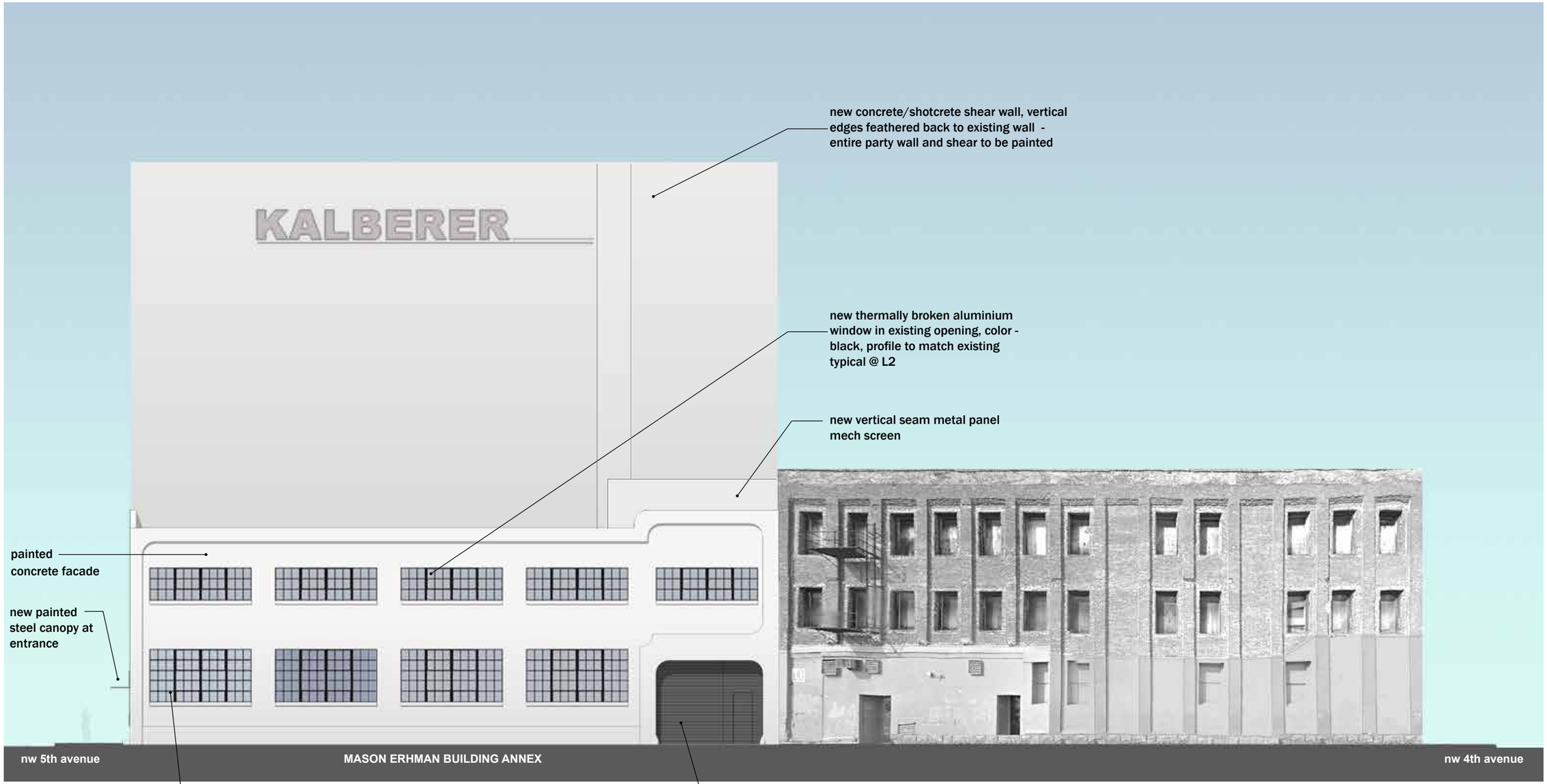

nw davis streert
MASON EHRMAN BUILDING
nw everett street

facade diagram - existing



facade diagram - proposed


building beyond
new vertical seam metal panel mech screen
painted concrete facade
new thermally broken aluminium window in existing opening, color - black, profile to match existing typical @ L2
new thermally broken metal fold-up garage door system in existing opening color - black
nw evrett street
MASON EHRMAN BUILDING
MASON EHRMAN BUILDING ANNEX
nw davis street
new glass infill in modified existing recess with new infill panel below
new thermally broken aluminium window in modified, opening color - black, profile to match existing with new sill also to match existing profile
new thermally broken metal fold-up garage door system in existing opening, color - black
new painted steel canopy at entrance
new thermally broken glazed entry door and transom, color - black

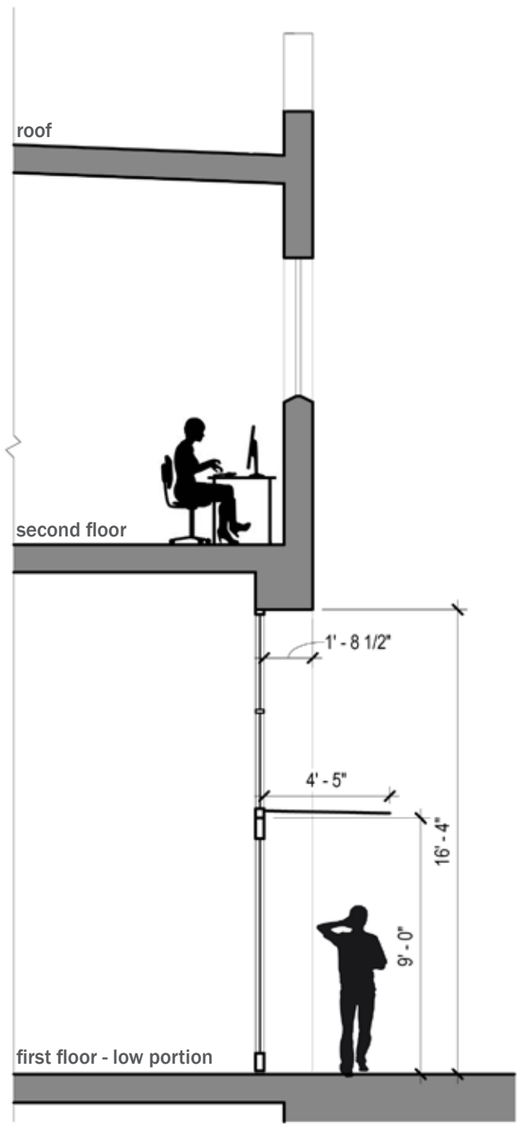

KALBERER
new concrete/shotcrete shear wall, vertical edges feathered back to existing wall - entire party wall and shear to be painted
new thermally broken aluminium window in existing opening, color - black, profile to match existing typical @ L2
new vertical seam metal panel mech screen
painted concrete facade
new painted steel canopy at entrance
nw 5th avenue
MASON ERHMAN BUILDING ANNEX
nw 4th avenue
new thermally broken aluminium window in modified opening, color - black, profile to match existing with new sill also to match existing profile typical @L1
new rollup door in existing opening incorporating egress door

SERA

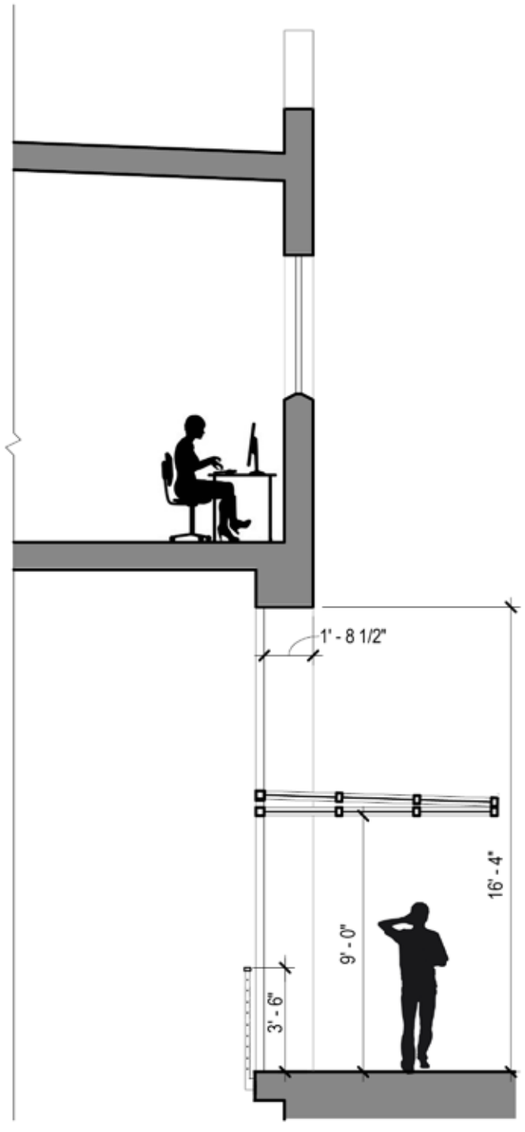
MASON EHRMAN ANNEX - DAR PACKAGE 15 - 105188 - EA
9 March 2015
NW 5th & Davis Street

0' 5' 10' 20'

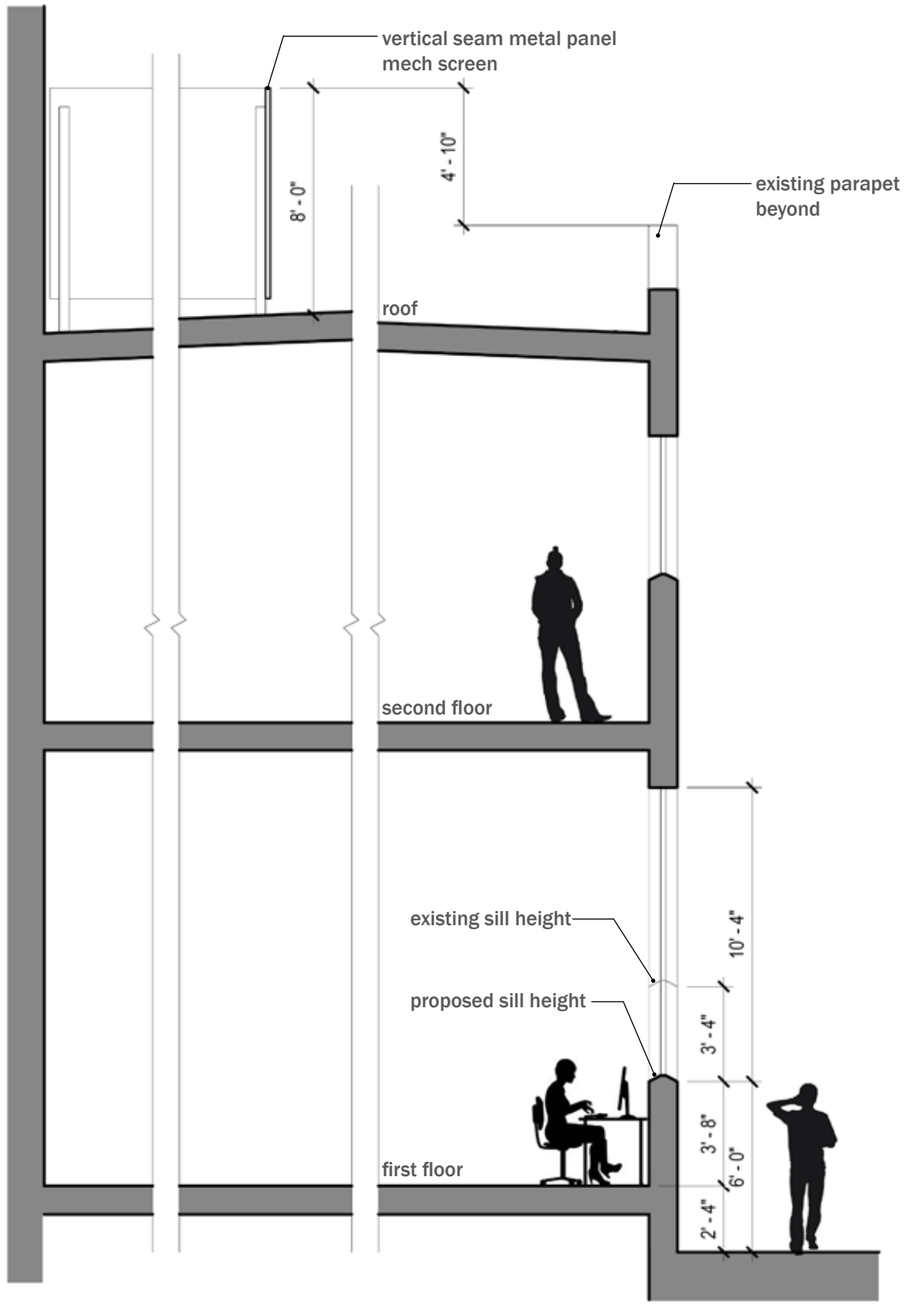
proposed - east elevation **C16**



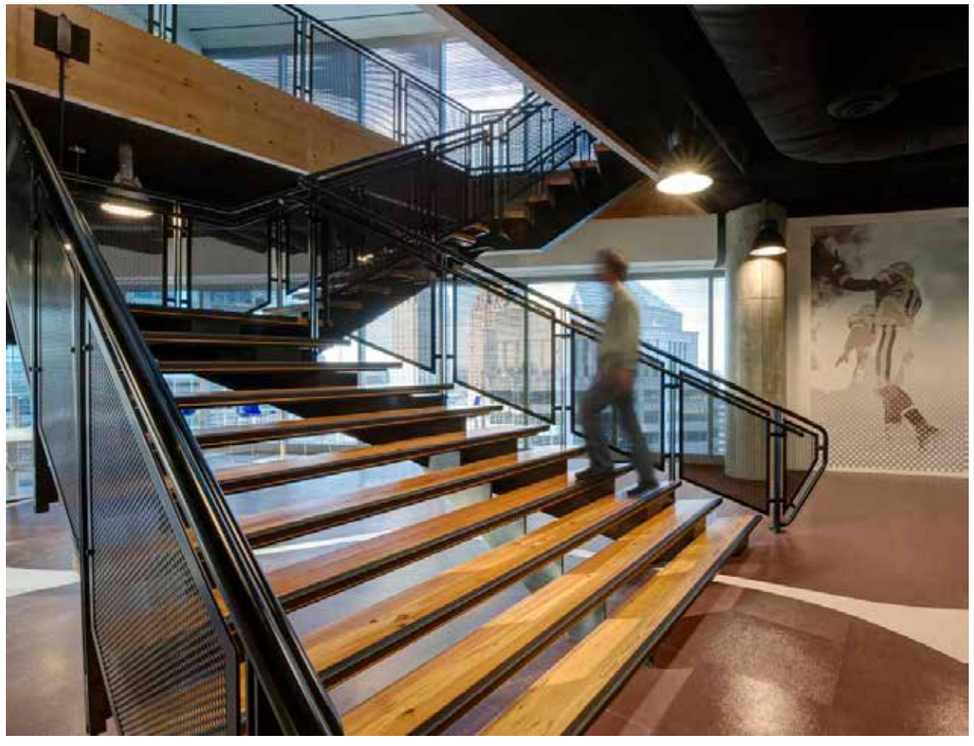
section at 5th avenue entrance

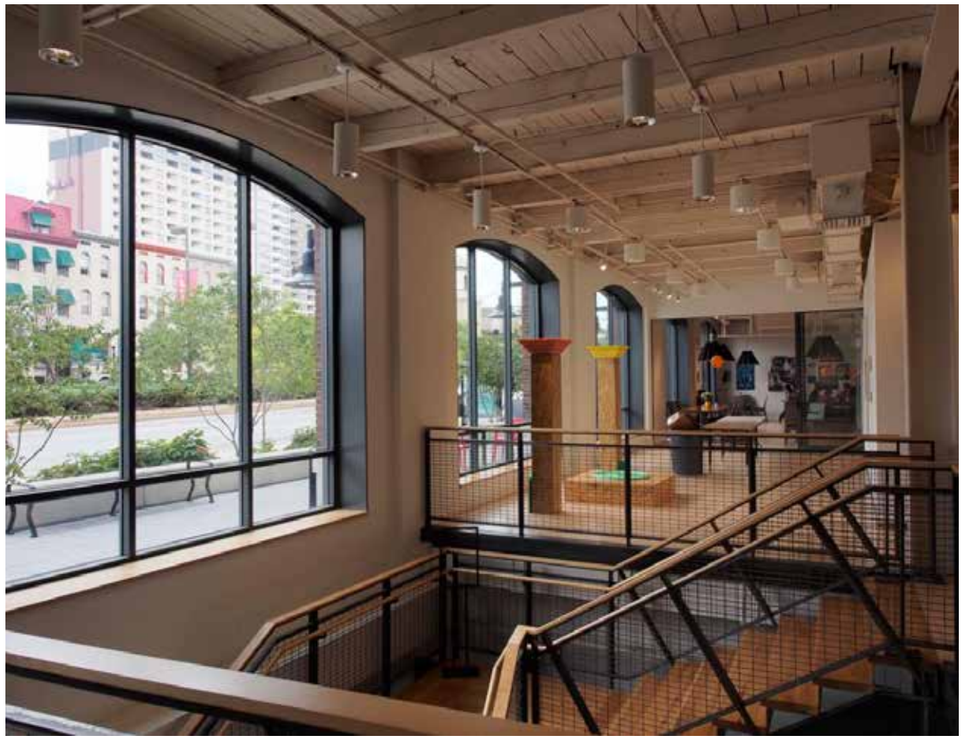


section at 5th avenue garage doors



section at davis street





painted steel canopy - shown in historic concrete building

vertical seam metal panel mech screen

metal garage doors - fold up mechanism

metal rollup garage door with concealed man door

ANALYSIS

The conversion of the Mason Ehrman Annex from a semi-conditioned storage space to an appropriately conditioned office work space will include upgrades to the building envelope and a new HVAC system. The upgrades to the envelope will significantly improve energy efficiency and occupant comfort within the space. Although not visible from the exterior, significant improvements will be made by adding thermal insulation at the inside face of the exterior walls and above the roof, as well as minimizing air leakage at the walls and roof.

During cold periods of the year, the space will be heated, and because warm air can hold significantly more moisture due to relative humidity, management of condensation at cold interior surfaces of the roof, walls, and windows will need to be addressed.

The existing steel-framed windows are not thermally broken and are a single pane with a variety of types of vision-obscuring glass. While appropriate for semi-conditioned storage space when they were in decent condition, the windows pose multiple issues for the new use: significant energy loss, thermal discomfort for the occupant, and moisture management due to increased condensation. The windows frames and glass are in poor condition and would require significant reconstruction including the replacement of all the glass and glazing compound. The frames need to be stripped to remove rust, damaged paint (likely to contain lead), and glazing, and require refinishing prior to the installation of new glass. Because reconstruction of the existing windows would provide minimal performance improvement, it is unlikely to be cost effective.

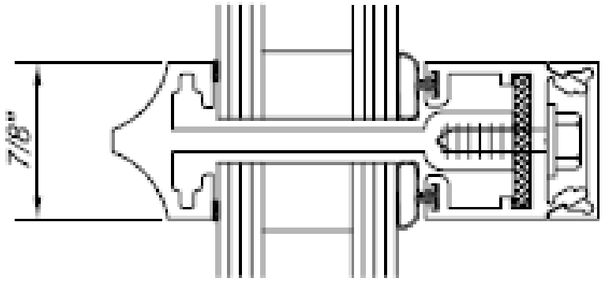
The design team recommends a complete replacement of the windows with steel or aluminum replica frames with insulating glass. From the exterior, the replacements would match the profile and pattern of the existing windows including the narrow sightlines. Replacement windows will improve energy efficiency, thermal comfort, and minimize moisture management concerns. Clear insulating low-e glass which complement the historic windows but provide significantly improved performance are recommended.

images of existing second floor windows

existing steel window mullion

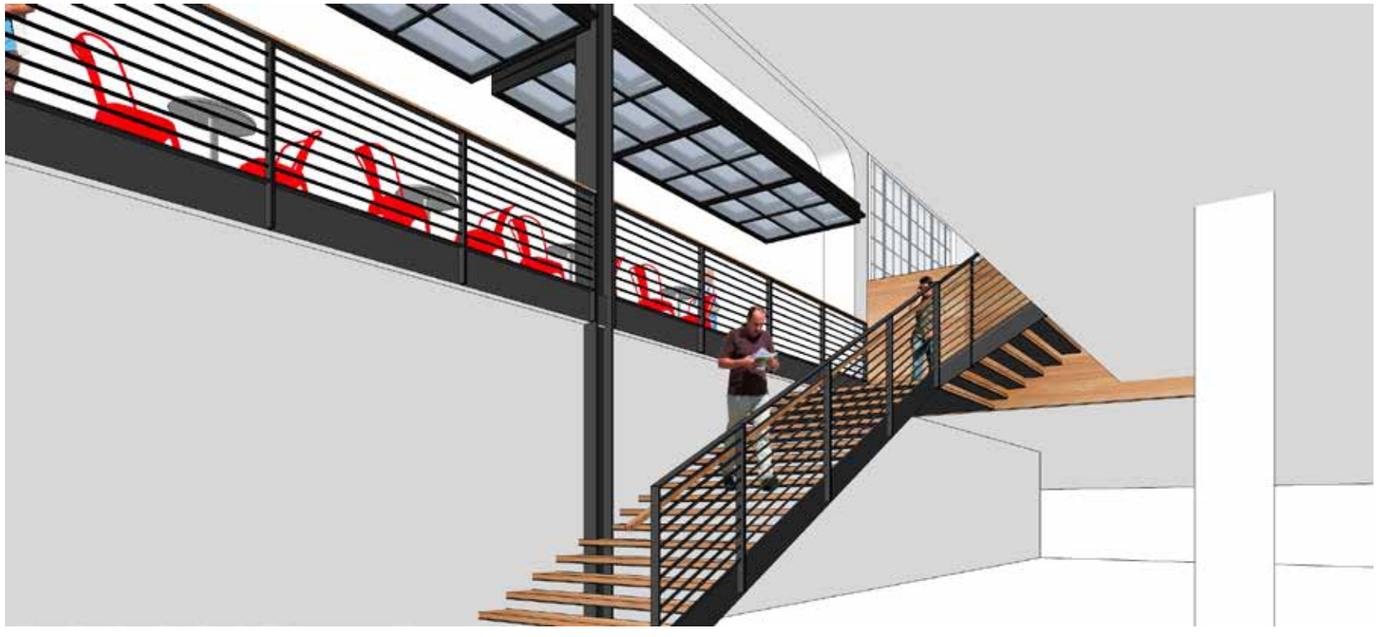
replacement window image

existing steel window



replacement aluminium window mullion section


BARIS



view of interior basement to level 1 connection stair