

# Development Services

## From Concept to Construction

Phone: 503-823-7300 Email: [bds@portlandoregon.gov](mailto:bds@portlandoregon.gov) 1900 SW 4th Ave, Portland, OR 97201

More Contact Info (<http://www.portlandoregon.gov/bds/article/519984>)



### APPEAL SUMMARY

**Status:** Decision Rendered

<b>Appeal ID:</b> 20263	<b>Project Address:</b> 1715 SW Salmon St
<b>Hearing Date:</b> 4/17/19	<b>Appellant Name:</b> John Smith
<b>Case No.:</b> B-012	<b>Appellant Phone:</b> 503.445.7350
<b>Appeal Type:</b> Building	<b>Plans Examiner/Inspector:</b> Brian McCall, Joe Thornton
<b>Project Type:</b> commercial	<b>Stories:</b> 8 <b>Occupancy:</b> R-2, A,B,S <b>Construction Type:</b> I-A, III-A
<b>Building/Business Name:</b> 18S	<b>Fire Sprinklers:</b> Yes - Full NFPA 13
<b>Appeal Involves:</b> Erection of a new structure	<b>LUR or Permit Application No.:</b> 19-106743-CO
<b>Plan Submitted Option:</b> pdf [File 1]	<b>Proposed use:</b> mixed use housing

### APPEAL INFORMATION SHEET

#### Appeal item 1

<b>Code Section</b>	202, High-Rise Building Measurement
<b>Requires</b>	Section 202 defines a high-rise building as "a building with an occupied floor located more than 75 feet about the lowest level of fire department vehicle access".
<b>Proposed Design</b>	<p>The project is being developed in concert with TriMet and the City of Portland to create a transit-oriented development at this long-underutilized site in Goose Hollow. The site is adjacent to the Kings Hill Max Station, along SW Salmon Street between SW 17th and 18th Avenues. The proposed mid-rise building is an eight-story mixed-use apartment with a limited rooftop terrace, comprised of a three-story Type IA concrete podium supporting a five-story Type IIIA wood frame structure above. The two construction types are to be separated by a 3-hour rated horizontal assembly. Both buildings are to be fully sprinklered on all floors in accordance with NFPA 13.</p> <p>Fire department access is provided in accordance with Section 503 and Appendix D of 2016 Portland Fire Code. The definition of high-rise first requires the identification of the "lowest level of fire department vehicle access. Appendix D defines the requirements for fire apparatus access roads. The exception provided in Section D106, Multi-Family Residential Development, allows for buildings under 200 units to have only a single approved fire apparatus access road if served throughout with an automatic sprinkler system. The required fire apparatus access road was defined/approved by the projects Fire Official as occurring on SW Salmon Street as this is the primary elevation (Exhibit). In addition, aerial fire apparatus access is accommodated parallel to the building on SW Salmon Street. Per Appendix D, fire department vehicle access is not required along SW 17th or SW 18th Avenues; therefore, the lowest level of fire department vehicle access as required by code is located along SW Salmon at an elevation of +110.22. The upper residential floor level occurs at an elevation of +185', resulting in a height of 74'-10"; thus, eliminating the need for the building to meet high-rise provisions.</p>

3-hr Horizontal Separation – A 3-hr horizontal separation is provided between the 3rd and 4th levels, compartmentalizing the structure into two separate and distinct buildings; thus, minimizing the risk and improving the ability to fight fires.

Type IIIA Construction – The upper building is incorporating the full provisions of Type III construction and is not utilizing the City Portland Code Guide to eliminate the FRT wood structure or to alter other required fire provisions.

Stair/Standpipe Height – The stair/standpipe height is not increased due to the additional drop in grade along SW 18th Avenue, as neither stair enclosure provides egress at this location. Since both stair enclosure egress to SW Salmon Street, the time to extend hose lines vertically and/or provide rescue assistance in unaffected (Exhibit). In addition, as the stair enclosure height is unchanged by the lower elevation at SW 18th, the grade does not contribute further to the stack effect/smoke movement.

Rooftop Terrace (see Appeal #2) – The proposed rooftop terrace is limited to less than 750 square feet and 49 occupants and is incidental to the building. The roof terrace is considered a B occupancy but is not considered a story as it does not have a ceiling/roof. In addition to the building enhancements noted below, the roof terrace includes occupant notification in accordance with Section 907.5 and an extension of the standpipe with hose connection at the terrace. The provisions are expected to reduce time needed to fight fire from the rooftop and minimize additional occupant risk. This direction is in keeping with prior interpretations recently permitted by the City.

In addition, the building design includes the following enhancements relative to fire protection and occupant safety that improve capacity to protect building occupants:

Sprinklers: The building will be equipped with a sprinkler system in accordance with full NFPA 13 requirements in lieu of code allowed 13R.

Stair Enclosures: Exit enclosures will have a fire-resistance rating of 2-hrs min.

Roof: The roof is essential flat

Roof Access: The proposed design includes extending both stairways to the roof with access provided through rooftop penthouses.

Roof Covering Class: The proposed Class B roofing provides greater resistance to exterior ignition sources than the Class C required by code.

Standpipes: Stair 1 standpipe extends and terminates at roof with FDC.

All provisions of Appendix D are intended to be met or exceeded with the proposed design.

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**Reason for alternative** In response to a Fire Checklist item, this appeal is being submitted for confirmation/verification of the described section intent and to provide clarity that the subsequent measurement of building height does not result in classification as a high-rise. Per ongoing discussions with the Building and Fire Officials, there appears to have been some prior miscommunication. Early in the design process, the design team requested the City's early assistance through a Preliminary Life-Safety Meeting to review significant building and fire code issues. During that meeting, the topic of building height and measurement was reviewed. It was agreed that the 75-foot high-rise restriction would be measured from the lowest point of vehicle access along SW Salmon as this is the only required access road; this was further confirmed by the project's Fire Official in response to the published meeting minutes (Exhibit). In connection with the building permit review, the Fire Official has since raised a question regarding an approximate 2-foot drop in elevation along SW 18th Avenue which would result in a building height measurement of 76'-11". However, Appendix D clearly states that fire department vehicle access is not required along SW 18th Avenue and

therefore the lowest level of vehicle access would be located along SW Salmon Street at an elevation of +110.22' (Exhibit).

MAX Hazards: SW 18th Avenue presents hazards to personnel and apparatus. The road width to the MAX track boundary is consistently less than 26-feet and narrows to approximately 16-feet along the building frontage. In addition to Appendix D only requiring a single fire department access road, agreed to occur along SW Salmon Street, it was understood that due to the adjacent Kings Hill Max Station, northbound tracks and high-voltage catenary wire running parallel to the western building elevation, that SW 18th Avenue would not be an acceptable/compliant access road and therefore the grade elevation should be immaterial.

The design team has taken every opportunity to reduce the overall building height. For budgetary purposes, the individual floors and the resulting elevation of the upper floor has already been reduced to the minimum allowed by building code, zoning and market constraints.

Per the above described design, no exceptions or alternates are being requested regarding fire department vehicle access or associated building height and we request confirmation that the lowest level of fire department vehicle access is located at the west end of SW Salmon Street (+110.22).

## Appeal item 2

<b>Code Section</b>	Table 503 Allowable Building Heights and Areas
<b>Requires</b>	Per table 503, B occupancy groups are limited to 5 stories (6 stories with frontage and sprinkler bonuses) above grade plane in Type III-A construction.
<b>Proposed Design</b>	<p>The proposed mid-rise building is an eight-story mixed-use apartment with a limited rooftop terrace, comprised of a three-story Type IA concrete podium supporting a five-story Type IIIA wood frame structure above. The two construction types are to be separated by a 3-hour rated horizontal assembly. Both buildings are to be fully sprinklered on all floors in accordance with NFPA 13. The project meets the requirements of Section 504 and Table 503, except for a proposed outdoor Group B terrace at the rooftop. This space will not feature a cover structure, and therefore will not be considered a story per clarification in the ICC approved 2018 IBC model code. This roof terrace will serve resident amenity uses only. The protection measures for the Group B terrace include the following:</p> <ol style="list-style-type: none"> <li>1 - The occupiable roof terrace area is limited to 750 square feet and 49 occupants.</li> <li>2 - Occupant notification in accordance with Section 907.5 will be provided at roof terrace area with manual pull station. The roof alarm notification devices will be activated by the smoke detection or sprinkler activation on the floors below.</li> <li>3 - The roof terrace will feature secured access and the use is restricted to residents and their occasional guests.</li> <li>4 - Two means of egress will be provided from the roof terrace.</li> <li>5 - Fire extinguisher and standpipe will be provided at exit stair enclosure adjacent to the roof terrace.</li> <li>6 - Readily visible exit signage will be provided above exit doors leading from the roof terrace to the exit stairs. Exit doors will remain unlocked in the direction of egress.</li> <li>7 - Emergency illumination will be provided on the roof deck and along the path to the exit stairs.</li> </ol>
<b>Reason for alternative</b>	The proposed rooftop terrace is limited to 750 square feet and 49 occupants and meets requirements of OSSC 1021.2 for handrail heights. The occupiable roof terrace will be considered an B occupancy but will not be considered a story per 2018 IBC 503.1.4 definition, as the space does not have a roof. The Oregon Building Codes Division has previously overruled the City of

Portland, stating that unoccupied roof areas should be assigned an occupancy but should not be considered a story, under 2014 OSSC. By applying the 2018 IBC code provisions, we are proposing a path that reflects the current consensus amongst the code development community. We believe this to be consistent with the City and the State's intent of life safety provisions that should be applied to new construction. The clarification of roof occupancies from the 2015 IBC code will be included in the 2018 IBC code:

**"503.1.4 Occupied Roofs"**

A roof level or portion thereof shall be permitted to be used as an occupied roof provided the occupancy of the roof is an occupancy that is permitted by Table 504.4 for the story immediately below the roof. The area of the occupied roofs shall not be included in the building area as regulated by Section 506.

**Exceptions:**

The occupancy located on an occupied roof shall not be limited to the occupancies allowed on the story immediately below the roof where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 and occupant notification in accordance with Section 907.5 is provided in the area of the occupied roof."

The occupiable roof terrace will include a fire alarm manual pull station, and audible and visual alarm notification devices, which will be automatically initiated by smoke detectors or sprinkler activation in either of the two buildings below the roof level. Two paths of egress will be provided for the roof terrace. All exit doors will have internally illuminated exit signs. Emergency illumination will be provided at the roof terrace and along the pathways to the 2-hour fire rated stair enclosures.

The roof terrace does not have public access. The area is part of a secure access building, and typical usage will be by authorized residents and staff of the building. This space will not be used for concentrated occupancy use similar to a restaurant. The proposed design provides a small occupiable area less than 4% of the roof area, 2 means of egress, and fire protection systems for the occupants and emergency personnel. We believe the cumulative effect of these protective measures meets the intent of the code, and therefore request approval of the proposed roof terrace design.

Please see granted precedent appeal 18667.

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## APPEAL DECISION

**1. Determination of the lowest point for calculating the lowest level of fire department vehicle access: Denied. Proposal does not provide equivalent Life Safety protection.**

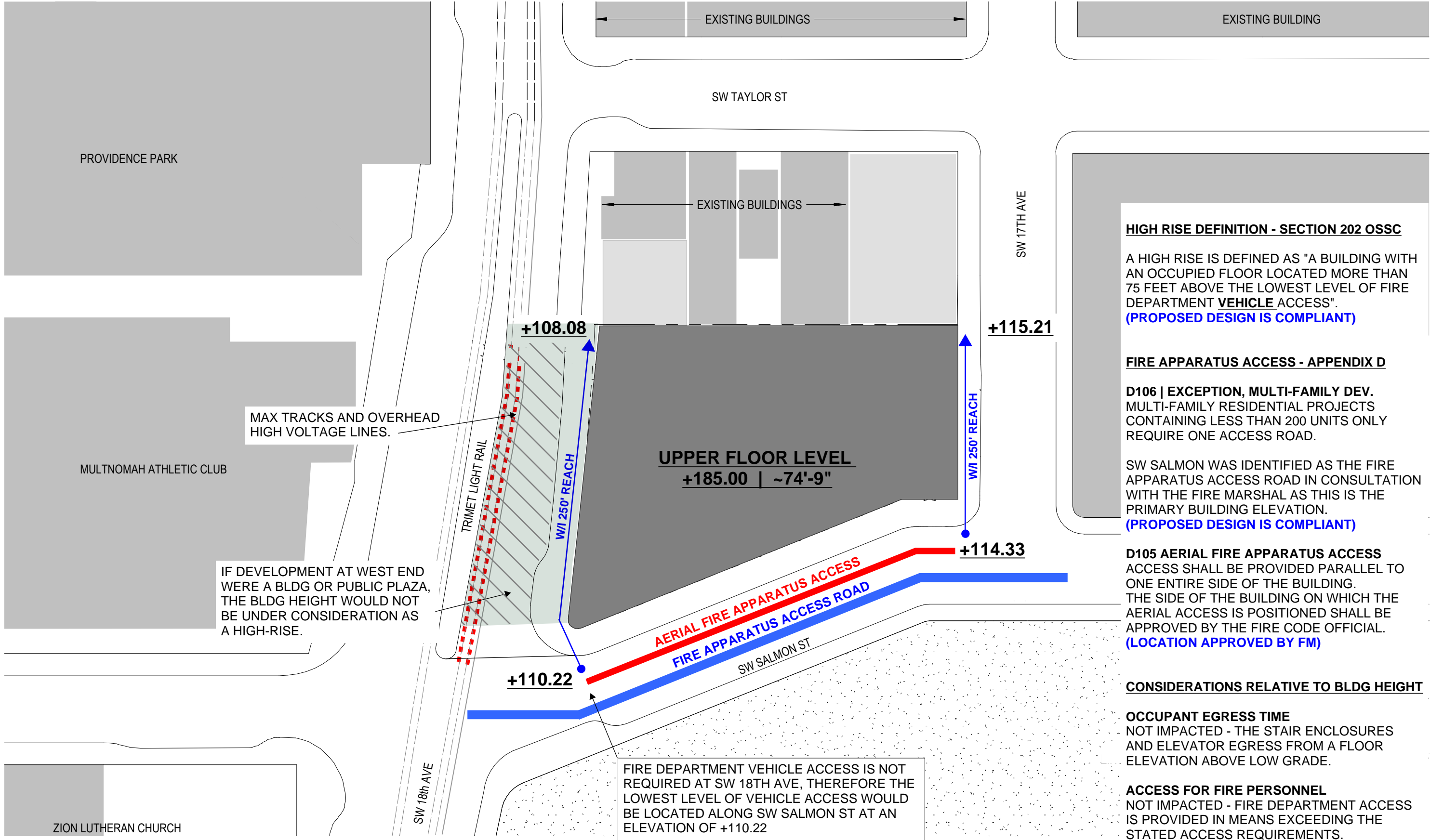
**2. Roof deck located above maximum number of stories: Granted as proposed per ICC approved 2018 IBC model code change lifting restriction on location of roof decks in a fully sprinkled building and with occupant notification in the area of the occupied roof. Elements or structures enclosing the occupied roof areas shall not extend more than 48" inches above the surface of the occupied roof. Fire Marshal's office may revoke if found to be in violation of this appeal.**

**For item 1 appellant may contact Corey Stanley (971 291-8919) with questions.**

For the item granted, the Administrative Appeal Board finds that the information submitted by the appellant demonstrates that the approved modifications or alternate methods are consistent with the intent of the code; do not lessen health, safety, accessibility, life, fire safety or structural requirements; and that special conditions unique to this project make strict application of those code sections impractical.

Pursuant to City Code Chapter 24.10, you may appeal this decision to the Building Code Board of Appeal within 180 calendar days of the date this decision is published. For information on the appeals process and costs, including forms, appeal fee, payment methods and fee waivers, go to [www.portlandoregon.gov/bds/appealsinfo](http://www.portlandoregon.gov/bds/appealsinfo), call (503) 823-7300 or come in to the Development Services Center.

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**HIGH RISE DEFINITION - SECTION 202 OSSC**

A HIGH RISE IS DEFINED AS "A BUILDING WITH AN OCCUPIED FLOOR LOCATED MORE THAN 75 FEET ABOVE THE LOWEST LEVEL OF FIRE DEPARTMENT **VEHICLE ACCESS**".  
**(PROPOSED DESIGN IS COMPLIANT)**

**FIRE APPARATUS ACCESS - APPENDIX D**

**D106 | EXCEPTION, MULTI-FAMILY DEV.**  
MULTI-FAMILY RESIDENTIAL PROJECTS CONTAINING LESS THAN 200 UNITS ONLY REQUIRE ONE ACCESS ROAD.

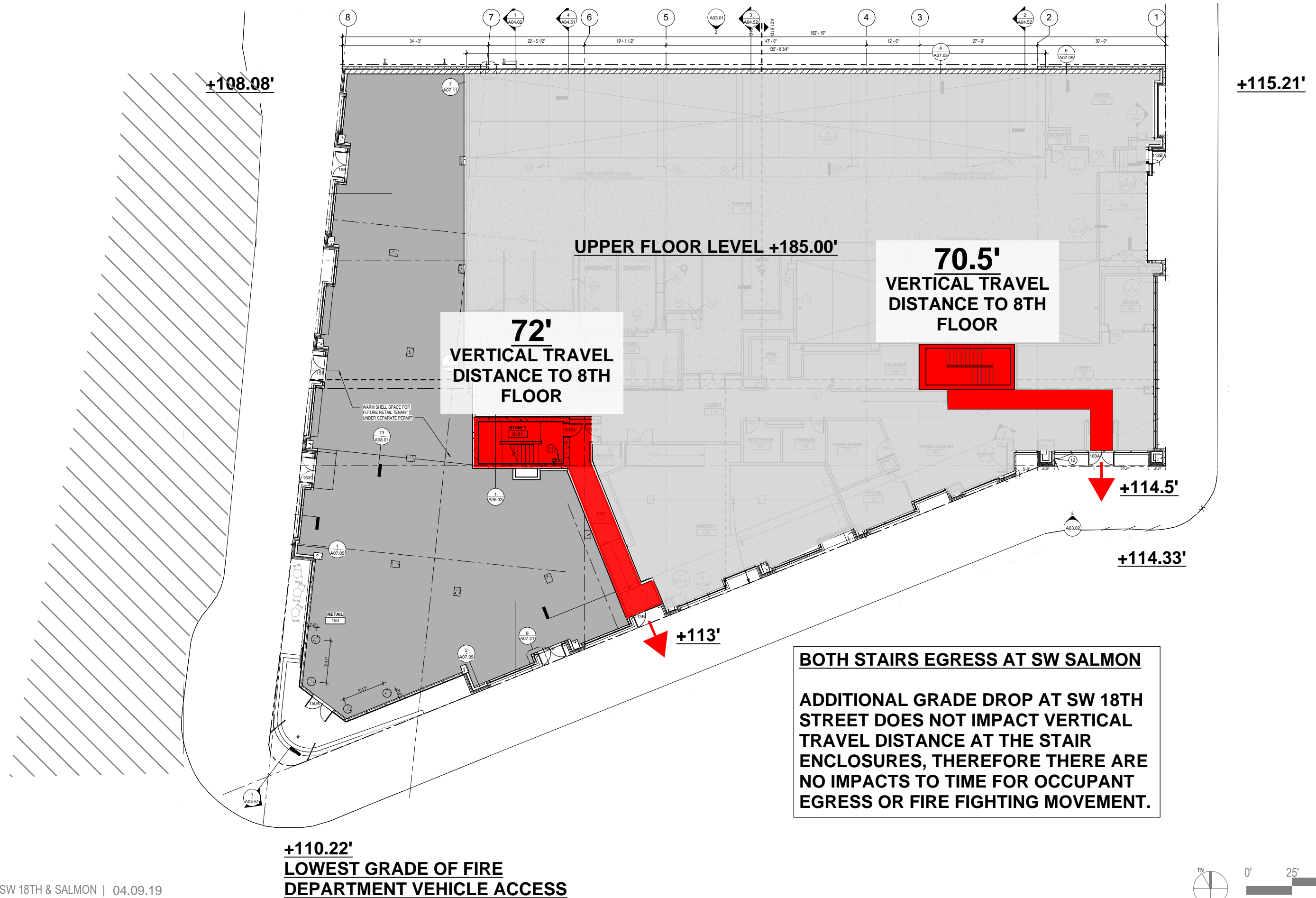
SW SALMON WAS IDENTIFIED AS THE FIRE APPARATUS ACCESS ROAD IN CONSULTATION WITH THE FIRE MARSHAL AS THIS IS THE PRIMARY BUILDING ELEVATION.  
**(PROPOSED DESIGN IS COMPLIANT)**

**D105 AERIAL FIRE APPARATUS ACCESS**  
ACCESS SHALL BE PROVIDED PARALLEL TO ONE ENTIRE SIDE OF THE BUILDING. THE SIDE OF THE BUILDING ON WHICH THE AERIAL ACCESS IS POSITIONED SHALL BE APPROVED BY THE FIRE CODE OFFICIAL.  
**(LOCATION APPROVED BY FM)**

**CONSIDERATIONS RELATIVE TO BLDG HEIGHT**

**OCCUPANT EGRESS TIME**  
NOT IMPACTED - THE STAIR ENCLOSURES AND ELEVATOR EGRESS FROM A FLOOR ELEVATION ABOVE LOW GRADE.

**ACCESS FOR FIRE PERSONNEL**  
NOT IMPACTED - FIRE DEPARTMENT ACCESS IS PROVIDED IN MEANS EXCEEDING THE STATED ACCESS REQUIREMENTS.



**BOTH STAIRS EGRESS AT SW SALMON**

**ADDITIONAL GRADE DROP AT SW 18TH STREET DOES NOT IMPACT VERTICAL TRAVEL DISTANCE AT THE STAIR ENCLOSURES, THEREFORE THERE ARE NO IMPACTS TO TIME FOR OCCUPANT EGRESS OR FIRE FIGHTING MOVEMENT.**

## Memorandum

SERA

ARCHITECTURE  
URBAN DESIGN + PLANNING  
INTERIOR DESIGN

**Date** 26 October 2018  
**Project Name** 18S  
**Project Number** 1803002  
**Attention** Brett Hulstrom  
  
**Address** City of Portland – Bureau of Development Services  
Process Management – Plan Review and Permitting Services  
1900 SW 4<sup>th</sup> Avenue, Suite 5000  
Portland, OR 97201  
  
**Email** brett.hulstrom@portlandoregon.gov  
**FAX**  
  
**Subject** FLS Meeting Notes – 18S w/ SERA Architects  
  
**Remarks** The SERA team for the 18S project (Artur Grochowski, John Smith, and Andrew Pulliam) met with Brett Hulstrom, Joe Thornton, and Brian McCall for preliminary discussion of fire life safety issues.

SERA provided a brief introduction to the project to illustrate layout and program.

### 1 - BUILDING HEIGHT

Group discussed building height. It was confirmed by Joe Thornton (JT) that measurement of height based on 75' to highest occupied floor from lowest point of aerial access on SW Salmon St. was acceptable. Per JT, code compliance sheets should include graphic illustration and calculation of compliance of building height with this measurement as well as the overall building height with the average grade plane/average roof height measurement.



Mon 10/29/2018 1:40 PM

Thornton, Joe <Joe.Thornton@portlandoregon.gov>

RE: 18S Preliminary FLS Meeting Notes from SERA Architects

To: Nielsen, Alice; Andrew Pulliam

Cc: Hulstrom, Brett; McCall, Brian



I have no issues with these notes...

**From:** Nielsen, Alice

**Sent:** Monday, October 29, 2018 1:12 PM

**To:** [andrewp@seradesign.com](mailto:andrewp@seradesign.com)

**Cc:** Hulstrom, Brett <[Brett.Hulstrom@portlandoregon.gov](mailto:Brett.Hulstrom@portlandoregon.gov)>; McCall, Brian <[Brian.McCall@portlandoregon.gov](mailto:Brian.McCall@portlandoregon.gov)>; Thornton, Joe <[Joe.Thornton@portlandoregon.gov](mailto:Joe.Thornton@portlandoregon.gov)>

**Subject:** FW: 18S Preliminary FLS Meeting Notes from SERA Architects

Good afternoon,

Please see the attached prelim fire and life/safety meeting minutes from last weeks meeting regarding the 18S project and let us know if there should be any changes or additions. Thanks for your help!

**Alice C. Nielsen**

Development Liaison

City of Portland – Bureau of Development Services

DevTeam - Plan Review and Permitting Services

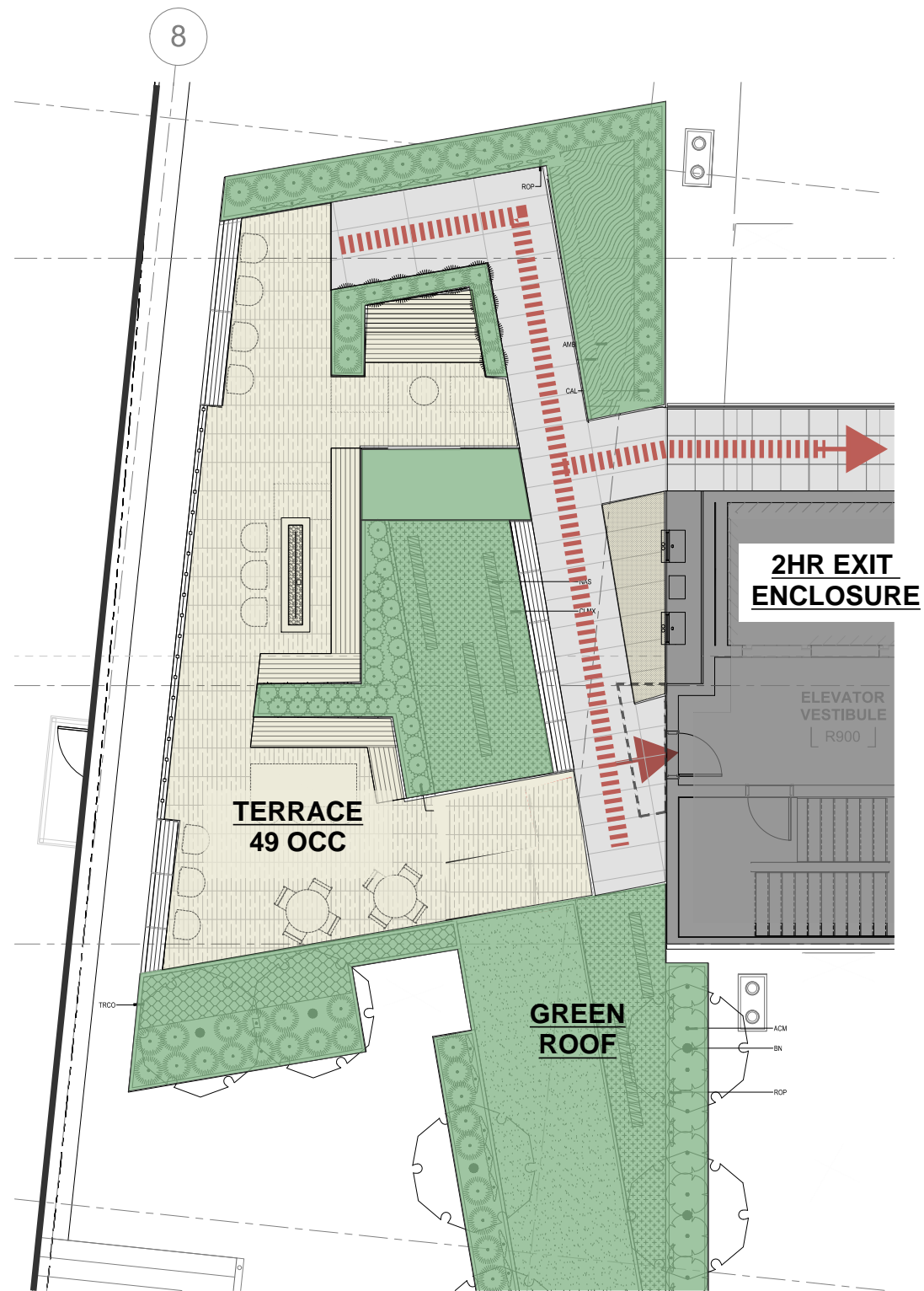
1900 SW Fourth Avenue, Suite 5000

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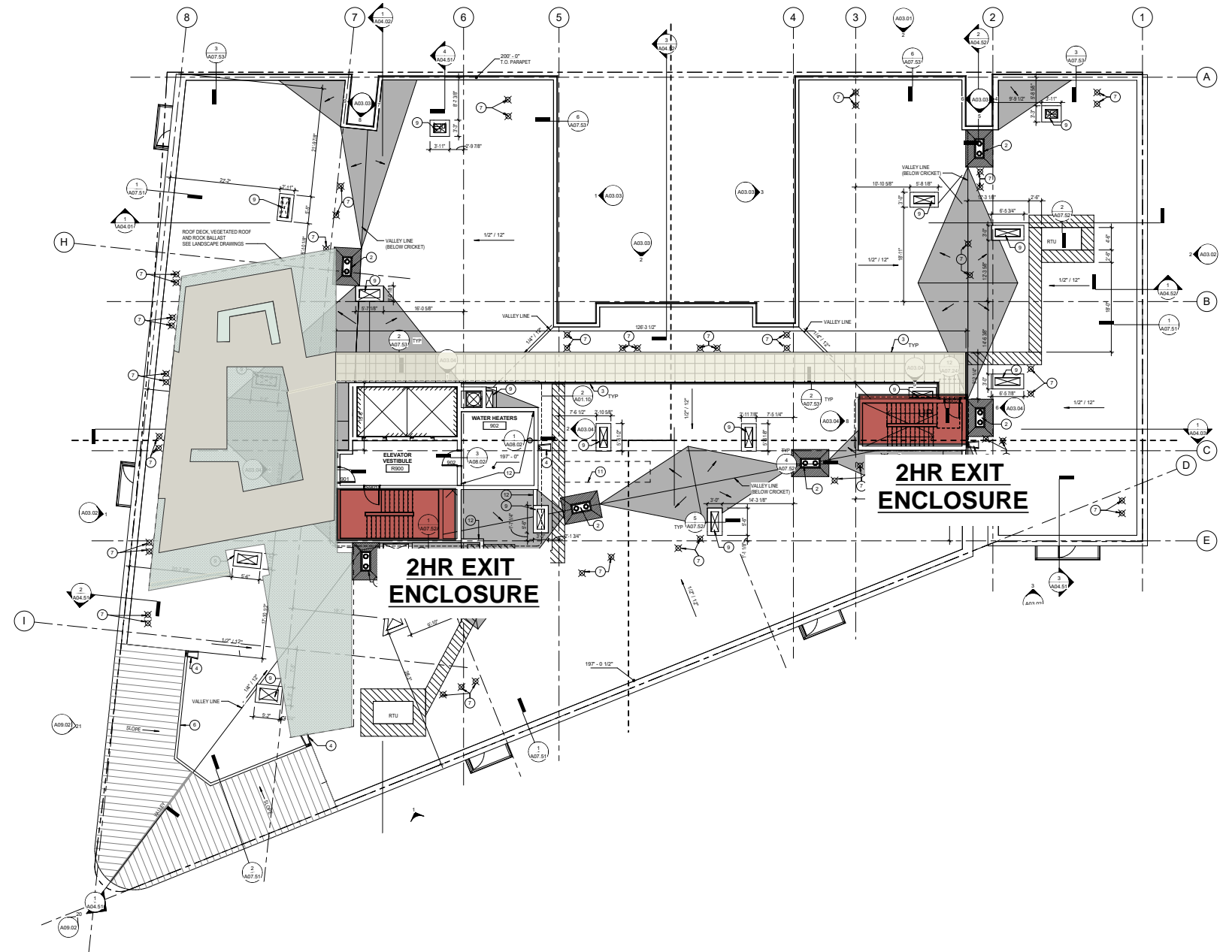
E: [Alice.Nielsen@portlandoregon.gov](mailto:Alice.Nielsen@portlandoregon.gov)

P: 503.823.3448

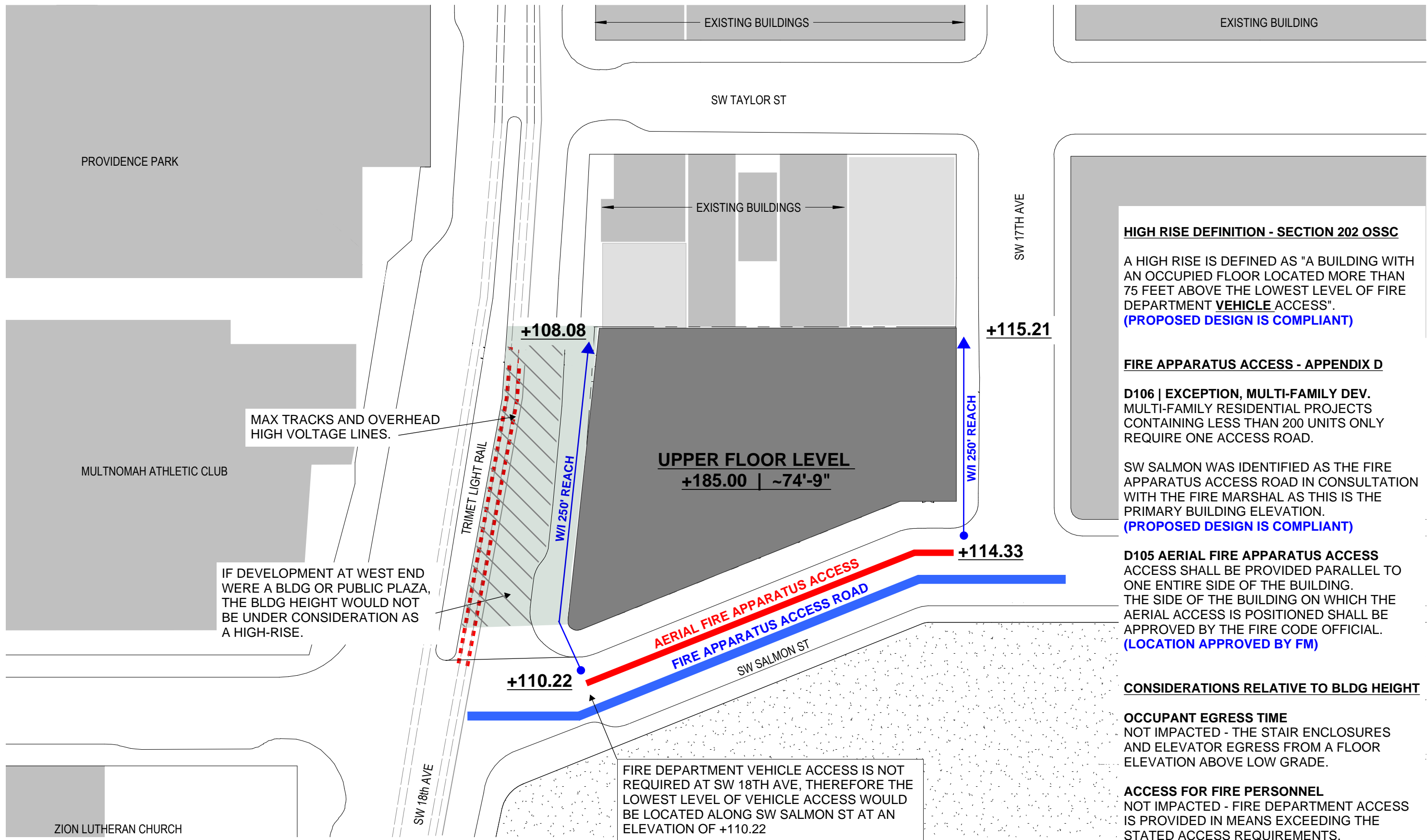


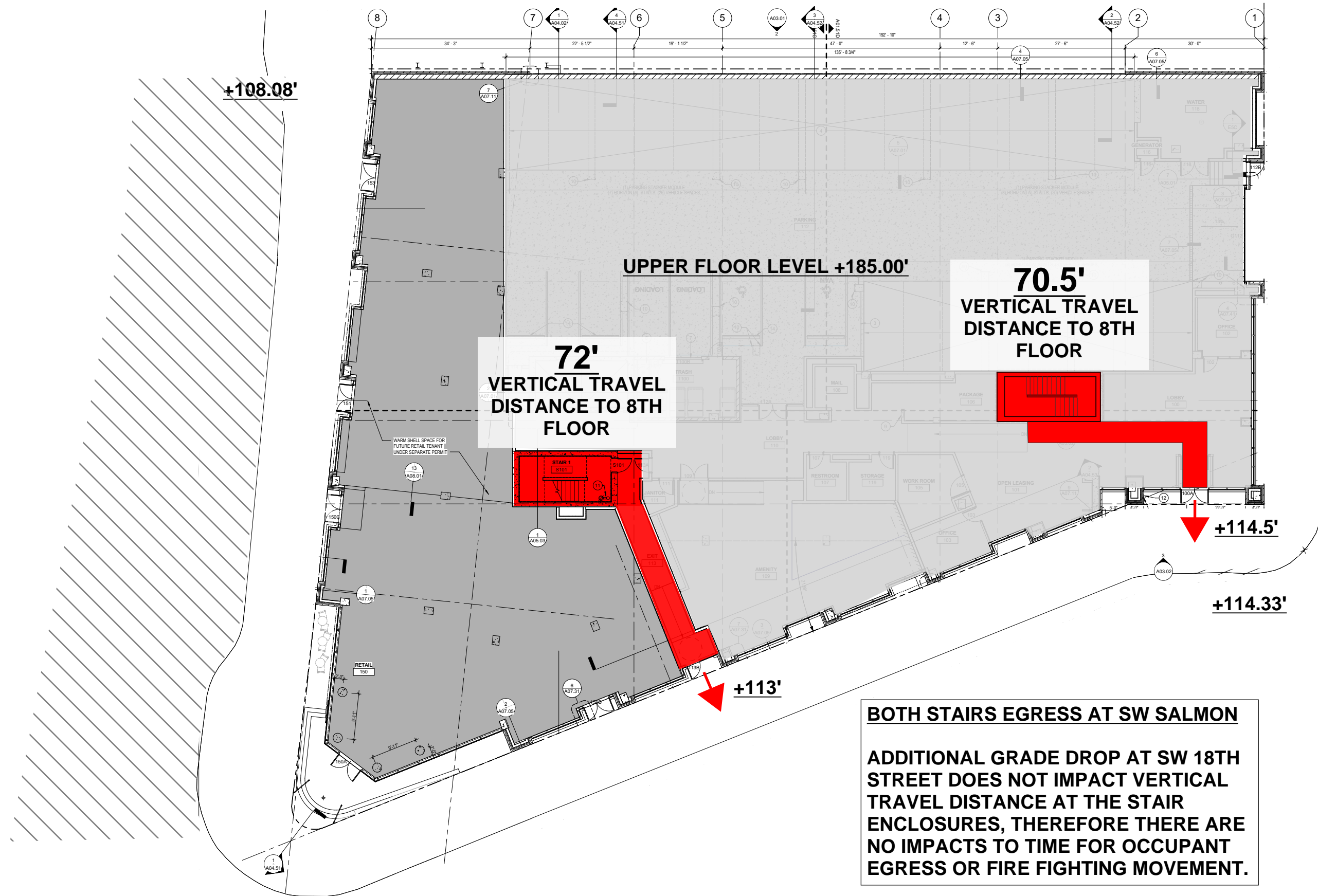


1 ENLARGED TERRACE PLAN



2 ROOF PLAN





**72'**  
VERTICAL TRAVEL  
DISTANCE TO 8TH  
FLOOR

**70.5'**  
VERTICAL TRAVEL  
DISTANCE TO 8TH  
FLOOR

**BOTH STAIRS EGRESS AT SW SALMON**

**ADDITIONAL GRADE DROP AT SW 18TH STREET DOES NOT IMPACT VERTICAL TRAVEL DISTANCE AT THE STAIR ENCLOSURES, THEREFORE THERE ARE NO IMPACTS TO TIME FOR OCCUPANT EGRESS OR FIRE FIGHTING MOVEMENT.**

**+110.22'**  
**LOWEST GRADE OF FIRE  
DEPARTMENT VEHICLE ACCESS**

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P: 503.823.3448