# **Development Services**

## From Concept to Construction







APPEAL SUMMARY

Status: Do	ecision R	Rendered
------------	-----------	----------

Appeal ID: 20748	Project Address: 525 SE MLK Jr Blvd	
Hearing Date: 8/14/19	Appellant Name: Tyler Nishitani	
Case No.: B-028	Appellant Phone: 503-227-1254	
Appeal Type: Building	Plans Examiner/Inspector: John Cooley	
Project Type: commercial	Stories: 6 Occupancy: A-2, A-3, S-2, B Construction Type: III-A	
Building/Business Name:	Fire Sprinklers: Yes - All floors	
Appeal Involves: Erection of a new structure	LUR or Permit Application No.: 16-289173-LU	
Plan Submitted Option: pdf [File 1] [File 2]	<b>Proposed use:</b> Office building with retail/restaurant uses at ground floor, single level below grade parking	

### APPEAL INFORMATION SHEET

### Appeal item 1

Code Section OSS	C 2014 – Section 602.3
------------------	------------------------

Requires	Construction Type of proposed building is IIIA and per table 601, Roof construction and associated

secondary members are required to have a 1-hour rating.

### CONTEXT: This project is a 6-story office building with a composite roof structure consisting of **Proposed Design**

3-layer cross-laminated timber (CLT) panels topped with a 3" reinforced concrete slab supported by glulam beams and columns and a pair of concrete cores. Construction is underway with

anticipated TCO near the end of the year.

PROPOSED CONDITION: For constructability purposes, instead of the typical composite roof assembly, we are proposing that a small portion (~242 sf) of the roof structure, located solely on top of one of the concrete cores, be a 5-Layer CLT panel. The proposed edge support for the CLT 5 panels are steel ledgers hung from the 2-hour rated concrete stair core walls. Any exposed conditions of the Steel ledgers are to be fire proofed per code defined means.

Reason for alternative The entirety of the roof surface has already been erected and the topping slab has been poured with the exception of the portion of the roof being proposed to be CLT 5. This area has been left open to allow for stair elements to be lowered into the concrete core via crane. It is the preference of the construction team to switch the assembly at this location so that a topping slab and the associated 30-day curing time can be avoided so that roofing membranes and subsequent roofing layers can be installed immediately after the CLT 5 panels have been installed.

> The 2012 National Design Specifications for Wood Construction does not address a char rating design procedure for exposed CLT panels. We propose that the CLT floor installation matches the

testing materials and parameters used in WFCi Report #16046a "Fire Resistance Testing of CLT Floor/Ceiling Assemblies" conducted for Oregon State University dated December 2, 2016. Testing conforms to ASTM E119-15, Standard Test Methods for Fire Tests of Building Construction and Materials."

Note this assembly includes CLT 5, splices/splines are half-lap spines with 6" SDWS screws @ 8" o.c., and  $\frac{1}{2}$ " plywood topping with 8d nails. Span = 13.5' Load=113 psf for a 2-hour assembly (although in the proposed application only a 1-hour rating is required.)

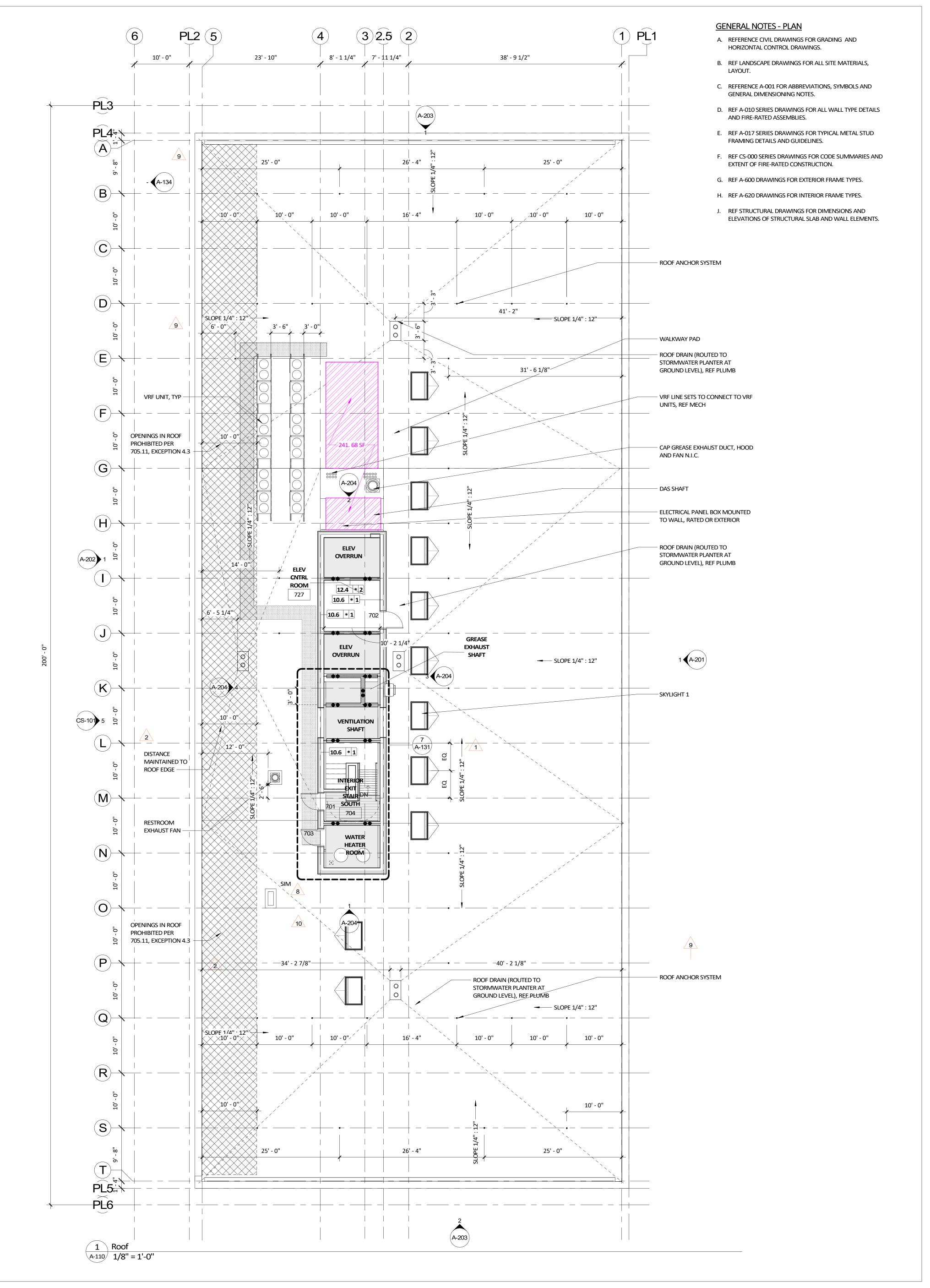
See the attached drawing set and WFCi Report #16046a for reference.

### APPEAL DECISION

### Type IIIA construction with alternate 1 hour roof assembly: Granted as proposed.

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 90 calendar days of the date this decision is published. For information on the appeals process, go to www.portlandoregon.gov/bds/appealsinfo, call (503) 823-7300 or come in to the Development Services Center.



(3)2.5 (2)

1/2" : 12"

A-303

2 ROOF PAN - High Roof A-110 1/8" = 1'-0" - Roof Penthouse

Charles M. Dorn
PORTLAND, OR
License 4158
OF OR OR

ARCHITECTS

CONSULTANT

HACKER

1615 SE 3rd Ave., 5th Floor, Portland, OR 97214

REVISI	ON NO.	DATE
1	ADD 1	11/10/17
2	ADD 3 / Permit Responses	02/13/18
3	ADD 6 / Permit Responses	03/19/18
4	RFI 0029	06/14/18
5	RFI 0058	8/14/18
6	RFI 0062	8/16/18
7	ASI 8 / Permit Revision	10/05/18
8	ASI 015 - Hacker TI	6/10/19
9	0194	6/13/19
10	ASI 016	7/16/19

KEY PLAN - (NTS)

TRUE PLAN NORTH

DISTRICT OFFICE

PMC Building LLC 525 SE MLK Jr BLVD Portland, OR 97214

PROJECT NUMBER 01618

ISSUANCE

DATE

As indicated

DRAWING TITLE

ROOF PLAN

SHEET NUMBER

A-110

