Development Services

From Concept to Construction

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APPEAL SUMMARY

Status: Items 1, 2 and 3: Hold for Additional Information. Item 4: Decision Rendered - Reconsideration of ID 15543

Appeal ID: 20272	Project Address: 9101 SE Flavel St
Hearing Date: 4/17/19	Appellant Name: Mildred White
Case No. : B-016	Appellant Phone: 5032534283
Appeal Type: Building	Plans Examiner/Inspector: Kent Hegsted
Project Type: commercial	Stories: 1 Occupancy: F-1 Construction Type: V-B
Building/Business Name:	Fire Sprinklers: No
Appeal Involves: Reconsideration of appeal,occ Change from S-1 to F-1	LUR or Permit Application No.: 18-283675-CO
Plan Submitted Option: pdf [File 1] [File 2] [File 3]	Proposed use: cannabis extraction facility

APPEAL INFORMATION SHEET

[File 4] [File 5] [File 6] [File 7] [File 8] [File 9]

Appeal item 1

Code Section	Table 602, 705.5
Requires	Buildings of V-B construction and S-1 or F-1 occupancy that are located with 5' of the property line must have a two-hour fire rated construction and shall be rated for exposure to fire from both sides. The west wall of the existing building is located within 5' of the property line.

Proposed Design

The original appeal was approved. This appeal is for reconsideration of a revised detail.

Original approved appeal text: Current wall is one hour rated. A tilt up construction of steel stud and gypsum board will be erected inside the building at the exterior wall to achieve two-hour rating. Proposed design keeps the parapet portion of the wall "as-built" at the existing one hour rated construction. Included with this submission is a site plan, site photo and section at the parapet from the original permit drawings.

Reconsideration appeal text: The existing building is a pre-engineered metal building. The exterior walls are of noncombustible construction, with interior walls of both noncombustible and combustible construction. The primary structural frame is also noncombustible. The existing west exterior wall is one-hour rated and has no openings. The proposed design is to retain the existing assembly on the exterior side of the building but add two additional layers of 5/8" type 'x' gypsum board on the interior, for a total of three (3) layers of 5/8" type 'x' gypsum board on the interior. Please see attached detail 10/A1.2.

Reason for alternative Original text: This alternative will allow owner to not reconstruct the entire wall and parapet, which is not feasible.

The original appeal was granted. This appeal is for a revised detail.

Reconsideration text:

The requirement for fire rating is due to proximity to the property line and potential for an adjacent building to spread fire. As mentioned above, the project building structural components, and exterior wall assemblies, are non-combustible. The proposed detail is like UL Design No. W413 (see attached) for a two-hour rating, except that we have proposed to also have one layer of fire rated gypsum board on the exterior as well.

We are requesting the alternate in order to utilize the existing one-hour rated wall in lieu of building an entirely new, separate two-hour wall.

Original appeal was granted provided that an additional layer of Type X gypsum board is added to the inside face of the parapet wall at the time of the next re-roof. This note has been added to the drawings for this permit. See detail 10/A1.2.

Appeal item 2

Code Section

PCC 24.50.60.F.4

Requires

New construction and substantial improvement of any commercial, industrial, or other nonresidential structure shall either have the lowest floor, including basement, elevated to the level of the flood protection elevation

Proposed Design

The original appeal was granted and is included for reference as it pertains to our request to not have to elevate the western side of the building, which is to remain under the previously approved occupancy. No work is to occur on the western side except for the fire wall which will be constructed to meet FEMA material requirements.

Original Text: Structure to be built is a pre-fabricated web steel building with structural steel members bolted to

the foundation and is to be clad with steel.

Reconsideration Text: The eastern portion of the building which is being reviewed for occupancy under this permit will be elevated to the level of the floor protection elevation. The western portion of the building which is not being reviewed for occupancy under this permit will not be elevated to the level of the floor protection elevation.

Reason for alternative The original appeal was granted and is included for reference.

Original Text: The structure in question has already been built, but was built three feet too low. Denying occupancy will place undue hardship on the owner. The building meets a suitable level of wet flood proofing as it is because it is built out of materials that will not be affected by floodwater, it does not contain any carpeting or other materials that could be destroyed in a flood. This structure will only be used for the repair of automobile bumpers, all office facilities are located in another building on site that is built above flood level, so no important documents or office equipment will be damaged in a flood.

Responses to code requirements:

The structure is pre-manufactured steel building to be bolted to the foundation. In addition, the site

has a concrete wall surrounding it that will contain any floating debris on site. The building is made entirely of materials that will not be damaged in a flood. The facility, being used for auto repair, the owners possessions being metal tools are not susceptible to flood damage. None of the work being done inside involves materials or objects that can be damaged. The proposed facility, built out of steel and wood, is not susceptible to flood damage. A flood happening once every 10 to 20 years for a period of two days wouldn't damage the steel wood or concrete elements of the

The proposed facility provides a necessary service to the community by repairing automobile bumper. The facility does not need to be located on a waterfront. The facility is located in a flood zone which is zoned industrial and is an appropriate use for the facility. Other suitable locations are not readily available. This structure is to in an industrial area where there are other similar businesses already in operation, many of which are in existing buildings built below flood level on adjacent properties. Balanced cut and fill is required for this floodplain management plan. We comply with this because we are not cutting or filling on the land. The adjacent portion of SE 92nd avenue, as well as portions of SE Flavel and SE Henderson are above the flood plain and will allow safe access to the site. The pre-manufactured steel building can withstand the maximum predicted flood depth and wave action. We are not in the floodway but in the fringe of the flood, so wave action and current forces are negligible. The cost of government services will be minimal and all other conditions mentioned are acceptable and have been taken under consideration. In addition to these, this project meets the condition of variance listed under Title 24.50.070.C.1: The site is less than 1/2 acre and surrounding lots contain structures built below flood level.

Reconsideration Text: The eastern area which is being reviewed for occupancy will be elevated per code. We are requesting the western side, which is not being reviewed for occupancy under this permit, to be permitted to remain at the lower (existing) level as approved under previous appeal 3923. The western side will have flood ventilation openings installed under this permit and any new materials installed below the flood elevation will meet FEMA flood damage resistantmaterials requirements. When/if a permit is applied for occupancy for the western area, at that time it would be reviewed for flood protection requirements.

In addition, future layouts may require fire walls running to the floor and would be difficult to install if the flood level already installed.

Appeal item 3

Code Section

414.2.4

Requires

The floor assembly of the control area and the construction supporting the floor of the control area shall have a fire-resistance rating of not less than 2 hours.

Proposed Design

The finish floor of the spaces is raised approximately 4' above the concrete slab-on-grade due to FEMA flood requirements. Support framing lifts the finish floor to this elevated height, with stairs leading from the exterior doors to the elevated floor level. The support framing is not fire-rated. Instead, the surrounding fire barriers are continuous to the slab-on-grade. The control areas do not have occupiable spaces below them. HVAC and electrical items are not permitted in this area.

Reason for alternative Creating a fire rated floor assembly and supporting construction of the platform framing throughout the area under this permit would be complex and would prove a challenge to ensure all connections have a tight, fire-resistive seal. Installing the fire-rated control area enclosures full

height from slab-on-grade to the roof would ensure a tight, fire-resistance separation between control areas.

The intent of OSSC 414.2, as stated in 414.2.1, is to separate the control areas from each other. The proposed alternate would meet the code intent since the areas below the floor are not permitted to be used in any way including HVAC or electrical.

Appeal item 4

Code Section

1101.2, 3411.6

Requires

1101.2: Buildings and facilities shall be designed and constructed to be accessible in accordance with this code and ICC A117.1.

3411.6: A facility that is altered shall comply with the applicable provisions in Chapter 11 of this code, unless technically infeasible.

Proposed Design

An accessible route from accessible parking and the public way will be provided to the main entry. The entry into the building will be accessible. Inside, two stairs meeting code are proposed. No ramp, lift, or elevator is proposed.

Reason for alternative 1104.4 At least one accessible route shall connect each story and mezzanine in multistory buildings and facilities.

> 1104.4 exception 1. Private buildings are not required to provide accessible access to stories less than 3,000 sf. Please see attached code interpretation by the International Code Council.

> 1104.4 exception 2. Levels that do not contain accessible elements or other spaces as determined by section 1107 (dwelling units) or 1108 (special occupancies that do not apply) are not required to be served by an accessible route from an accessible level.

1104.4 exception 7. In a building of fewer than three stories, an accessible route need not be provided in the portion of the building that is of the following occupancy classifications: Group F-1 and Group S-1.

We interpret that the code sections noted above were written with the intent that those exceptions would apply to floors above grade, with the assumption that the first floor would be at grade level. The project under review is an unusual situation because the first floor is above grade. The sections of the code noted above indicate that areas above grade that are private, and less than 3,000 sf are not required to provide an accessible route. Additionally, Group F-1 occupancies that are above grade are not required to provide an accessible route.

The area of alteration/change of occupancy under this permit is 1,290 sf. It is a private building with no visitors and is F-1 occupancy. The first level, that of entry into the building, must be linked by an accessible route to the accessible parking and public way, and will be. Under exceptions 1 and 7 described above, the first level is not required to have an accessible route to the second level, that of the F-1 occupancy area of work.

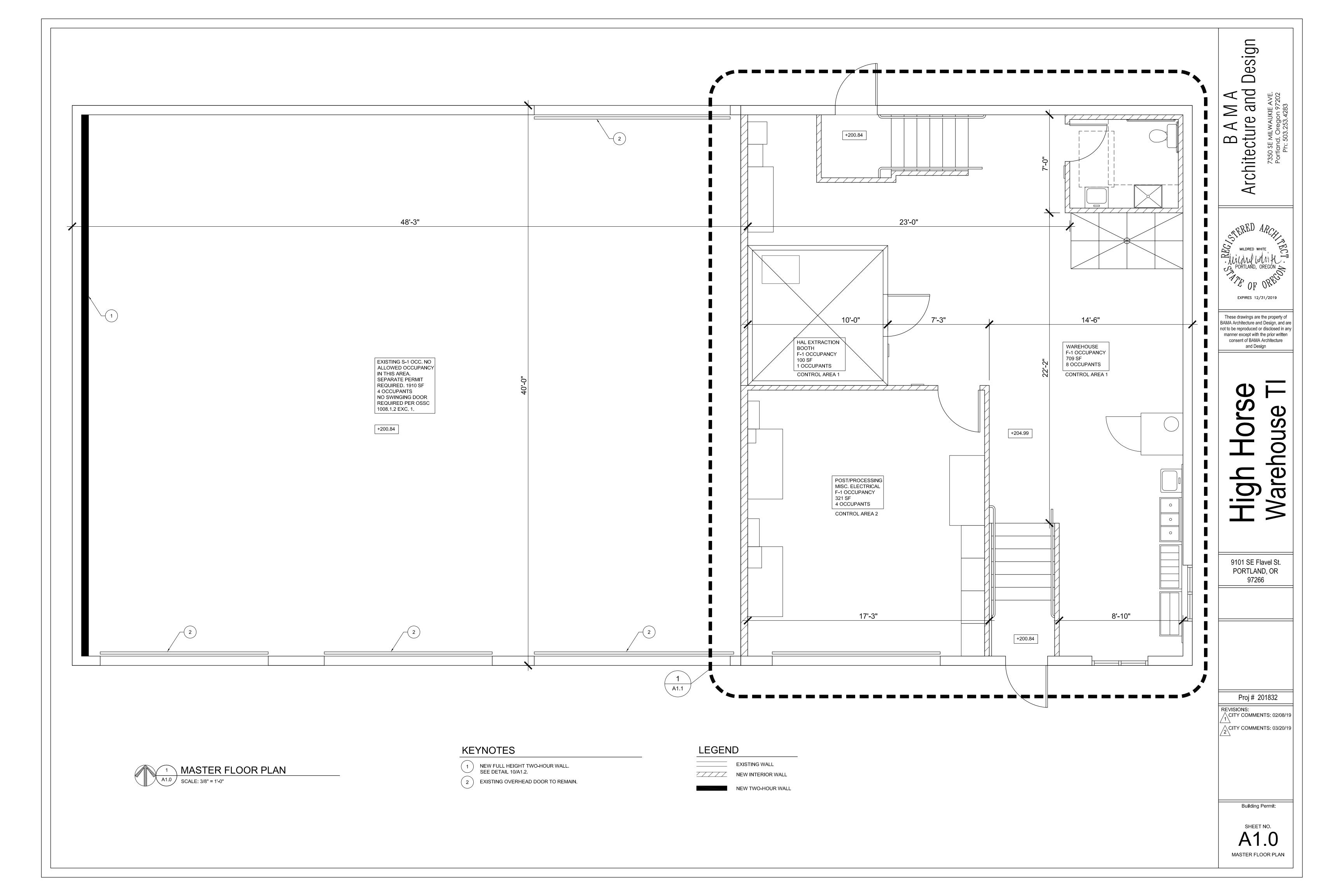
APPEAL DECISION

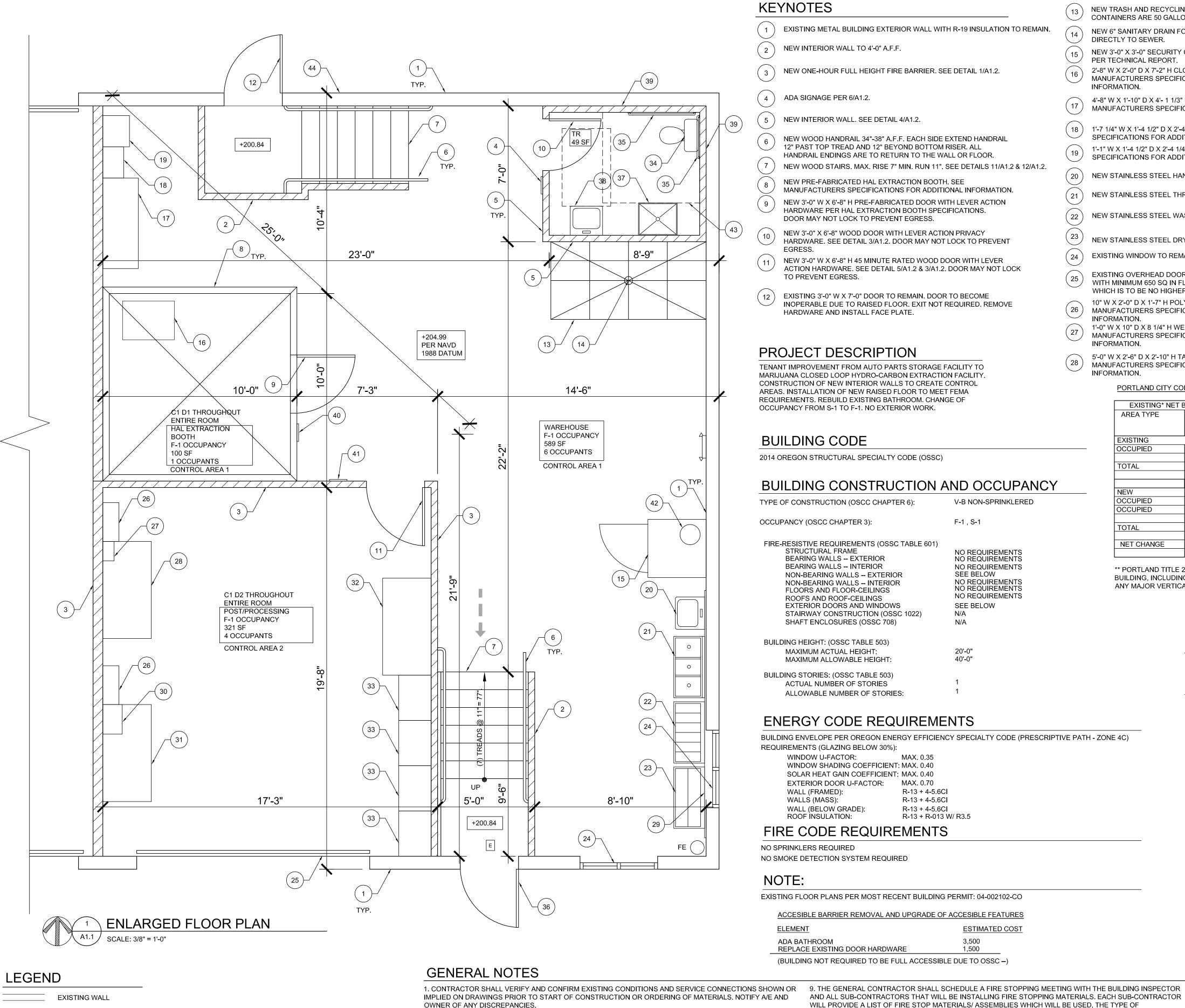
1. Alternate 2 hour assembly for existing exterior wall at property line: Hold for additional information.

- 2. Wet floodproofing: Hold for Additional Information. Appellant may contact Ian LaVielle with questions at 503-823-7953
- 3. Omission of fire rating of 2 hour floor supporting construction: Hold for additional information.
- 4. Omission of accessible route in F1 occupancy: Denied. Proposal does not provide equivalent accessibility.

Appellant may contact John Butler (503 823-7339) with questions.

For Item 4. 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, call (503) 823-7300 or come in to the Development Services Center.





EXISTING METAL BUILDING EXTERIOR WALL WITH R-19 INSULATION TO REMAIN.

NEW INTERIOR WALL TO 4'-0" A.F.F.

NEW ONE-HOUR FULL HEIGHT FIRE BARRIER. SEE DETAIL 1/A1.2.

NEW WOOD HANDRAIL 34"-38" A.F.F. EACH SIDE EXTEND HANDRAIL 12" PAST TOP TREAD AND 12" BEYOND BOTTOM RISER. ALL HANDRAIL ENDINGS ARE TO RETURN TO THE WALL OR FLOOR.

NEW WOOD STAIRS. MAX. RISE 7" MIN. RUN 11". SEE DETAILS 11/A1.2 & 12/A1.2. NEW PRE-FABRICATED HAL EXTRACTION BOOTH, SEE

MANUFACTURERS SPECIFICATIONS FOR ADDITIONAL INFORMATION. NEW 3'-0" W X 6'-8" H PRE-FABRICATED DOOR WITH LEVER ACTION

NEW 3'-0" X 6'-8" WOOD DOOR WITH LEVER ACTION PRIVACY HARDWARE. SEE DETAIL 3/A1.2. DOOR MAY NOT LOCK TO PREVENT

NEW 3'-0" W X 6'-8" H 45 MINUTE RATED WOOD DOOR WITH LEVER ACTION HARDWARE. SEE DETAIL 5/A1.2 & 3/A1.2. DOOR MAY NOT LOCK

EXISTING 3'-0" W X 7'-0" DOOR TO REMAIN. DOOR TO BECOME INOPERABLE DUE TO RAISED FLOOR, EXIT NOT REQUIRED, REMOVE HARDWARE AND INSTALL FACE PLATE.

TENANT IMPROVEMENT FROM AUTO PARTS STORAGE FACILITY TO MARIJUANA CLOSED LOOP HYDRO-CARBON EXTRACTION FACILITY. CONSTRUCTION OF NEW INTERIOR WALLS TO CREATE CONTROL AREAS. INSTALLATION OF NEW RAISED FLOOR TO MEET FEMA REQUIREMENTS. REBUILD EXISTING BATHROOM. CHANGE OF OCCUPANCY FROM S-1 TO F-1. NO EXTERIOR WORK.

2014 OREGON STRUCTURAL SPECIALTY CODE (OSSC)

BUILDING CONSTRUCTION AND OCCUPANCY

V-B NON-SPRINKLERED

F-1 , S-1

FIRE-RESISTIVE REQUIREMENTS (OSSC TABLE 601) NO REQUIREMENTS NO REQUIREMENTS NO REQUIREMENTS SEE BELOW NON-BEARING WALLS -- EXTERIOR NO REQUIREMENTS NON-BEARING WALLS -- INTERIOR NO REQUIREMENTS NO REQUIREMENTS

N/A SHAFT ENCLOSURES (OSSC 708) 40'-0"

BUILDING STORIES: (OSSC TABLE 503) ALLOWABLE NUMBER OF STORIES:

ENERGY CODE REQUIREMENTS

BUILDING ENVELOPE PER OREGON ENERGY EFFICIENCY SPECIALTY CODE (PRESCRIPTIVE PATH - ZONE 4C)

SEE BELOW

PENETRATIONS WHERE EACH MATERIAL/ ASSEMBLY WILL BE USED; AND THE LISTING AND APPROVAL INFORMATION. THIS INFORMATION MUST BE SUBMITTED TO, AND APPROVED BY, THE BUILDING INSPECTOR

10. ON-SITE VERIFICATION OF EXTRACTION EQUIPMENT INSTALLATION WILL BE ACCOMPLISHED IN

11, ELECTRICAL, HEATING, VENTILATION, PLUMBING, AND AIR-CONDITIONING EQUIPENT AND OTHER SERVICE

FACILITIES ARE REQUIRED TO BE ELEVATED TO BE AT OR ABOVE THE FLOOD PROTECTION ELEVATION.

ACCORDANCE WITH THE CITY OF PORTLAND CODE GUIDE FOR CANNABIS FACILITIES.

WINDOW SHADING COEFFICIENT: MAX. 0.40 SOLAR HEAT GAIN COEFFICIENT: MAX. 0.40 EXTERIOR DOOR U-FACTOR: R-13 + 4-5.6CI R-13 + 4-5.6CI R-13 + 4-5.6CI R-13 + R-013 W/ R3.5

PRIOR TO ANY INSTALLATION.

NO SMOKE DETECTION SYSTEM REQUIRED

EXISTING FLOOR PLANS PER MOST RECENT BUILDING PERMIT: 04-002102-CO

ACCESIBLE BARRIER REMOVAL AND UPGRADE OF ACCESIBLE FEATURES **ESTIMATED COST** 3,500

NEW INTERIOR WALL

2A-10BC FIRE EXTINGUISHER. MUST BE WITHIN 75 FEET OF TRAVEL DISTANCE THROUGHOUT. COORDINATE LOCATIONS WITH FIRE MARSHAL.

EXIT SIGN. INSTALL IN ACCORDANCE WITH IBC SECTION 1011. VERIFY LOCATIONS WITH FIRE MARSHAL

EGRESS PATH OF TRAVEL. MIN HALL WIDTH OF 44" MAXIMUM TRAVEL DISTANCE 46'-9"

> EMERGENCY EGRESS LIGHT WITH (2) LED BUG EYES AND WITH MIN 90 MINUTE BATTERY BACK UP PER OSSC 1006.3. EGRESS LIGHT SHALL PROVIDE A MIN OF 1 FOOT CANDLE AT THE WALKING SURFACE.

OWNER OF ANY DISCREPANCIES.

2. ALL ITEMS SHOWN ARE EXISTING UNLESS NOTED OTHERWISE.

3. FIRE EXTINGUISHER TO BE 2A-10BC RATED AND SHALL BE MOUNTED WITH THE TOP NO HIGHER THAN 5' AND THE BOTTOM AT LEAST 4" FROM THE FLOOR.

INSTALL LOCKS PER OWNER. 5. ON-SITE VERIFICATION OF THE EXTRACTION EQUIPMENT INSTALLATION SHALL BE PROVIDED BY A THIRD PARTY MECHANICAL ENGINEER IN ACCORDANCE WITH THE CITY OF PORTLAND GUIDE FOR CANNABIS

4. INSTALL NEW HARDWARE LEVER STYLE IN ACCORDANCE WITH OSSC SECTION 1109.3 AT EXISTING DOORS.

6. LOW BOY WATER HEATER TO BE INSTALLED ABOVE TOILET ROOM.

7. MECHANICAL AND ELECTRICAL BY OTHERS.

8. NO CO2 ENRICHMENT.

NEW 3'-0" X 3'-0" SECURITY CABINET FOR STORAGE OF CHEMICALS

PER TECHNICAL REPORT. 2'-8" W X 2'-0" D X 7'-2" H CLOSED LOOP EXTRACTOR. SEE MANUFACTURERS SPECIFICATIONS FOR ADDITIONAL

CONTAINERS ARE 50 GALLONS.

DIRECTLY TO SEWER.

4'-8" W X 1'-10" D X 4'- 1 1/3" H ROTARY SCREW COMPRESSOR. SEE MANUFACTURERS SPECIFICATIONS FOR ADDITIONAL INFORMATION. (33)

NEW TRASH AND RECYCLING AREA PER BES STANDARDS. ALL

NEW 6" SANITARY DRAIN FOR NEW TRASH AREA. CONNECT

1'-7 1/4" W X 1'-4 1/2" D X 2'-4 1/4" H CHILLER. SEE MANUFACTURERS SPECIFICATIONS FOR ADDITIONAL INFORMATION. 1'-1" W X 1'-4 1/2" D X 2'-4 1/4" H HEATER. SEE MANUFACTURERS SPECIFICATIONS FOR ADDITIONAL INFORMATION.

(20) NEW STAINLESS STEEL HAND SINK PER OWNER.

NEW STAINLESS STEEL THREE COMPARTMENT SINK PER OWNER.

NEW STAINLESS STEEL DRYING RACK PER OWNER.

NEW STAINLESS STEEL WASHBOARD PER OWNER.

EXISTING WINDOW TO REMAIN. EXISTING OVERHEAD DOOR TO REMAIN. INSTALL NEW LOUVER

WITH MINIMUM 650 SQ IN FLOOD VENTING OPENING, BOTTOM OF WHICH IS TO BE NO HIGHER THEN 1'-0" ABOVE GRADE. 10" W X 2'-0" D X 1'-7" H POLY SCIENCE LS CHILLER. SEE

MANUFACTURERS SPECIFICATIONS FOR ADDITIONAL INFORMATION. 1'-0" W X 10" D X 8 1/4" H WELCH DRYFAST VACUUM PUMP. SEE MANUFACTURERS SPECIFICATIONS FOR ADDITIONAL

5'-0" W X 2'-6" D X 2'-10" H TABLE FOR ROTOVAP. SEE MANUFACTURERS SPECIFICATIONS FOR ADDITIONAL

INFORMATION.

(29) NEW 6' HIGH PLASTIC LAMINATE WAINSCOT IN LOCATION

1'-0" W X 1-6 1/4" D X 1'-1" H WELCH DUOSEAL VACUUM PUMP. SEE MANUFACTURERS SPECIFICATIONS FOR ADDITIONAL

5'-0" W X 2'-6" D X 2'-10" H TABLE FOR SHORT PATH DISTILLER. SEE

MANUFACTURERS SPECIFICATIONS FOR ADDITIONAL INFORMATION. 5'-0" W X 2'-6" D X 5'-0" H VACUUM OVEN RACK. SEE MANUFACTURERS SPECIFICATIONS FOR ADDITIONAL INFORMATION.

2'-4" W X 1'-8" D X 1'-10" H VACUUM OVEN. SEE MANUFACTURERS SPECIFICATIONS FOR ADDITIONAL INFORMATION.

NEW RELOCATED ADA COMPLIANT WATER CLOSET PROVIDED WITH 56" X 60" OF CLEAR FLOOR SPACE PER ANSI 117.1 604.3. SEE DETAIL

NEW ADA COMPLIANT GRAB BAR. SEE DETAIL 9/A1.2.

EXISTING 3'-0" W X 7'-0" H DOOR WITH LEVER ACTION HARDWARE. DOOR MAY NOT LOCK TO PREVENT EGRESS.

NEW MOP SINK PER OWNER.

NEW ADA COMPLIANT HAND SINK PER OWNER. SEE DETAIL 8/A1.2.

2X4 INTERIOR WALL FOR HARD LID SUPPORT AND GRAB BAR ATTACHMENT. SEE DETAIL 4/A1.2. PROVIDE INTERIORS OF WALLS WITH A SMOOTH CLEANABLE SURFACE UP TO 4'-0" A.F.F. MINIMUM AND A SMOOTH, HARD, NON-ABSORBANT SURFACE WITH A 4" COVE BASE AT FLOORS.

INSTALL NFPA 704 WARNING SIGN STATING: CAUTION- FLAMMABLE GAS $^{\prime}$ IN USE. 8" W AND 6" H LOCATED 42" A.F.F.

INSTALL WARNING SIGN STATING: CAUTION-FLAMMABLE LIQUIDS IN USE. 8" W AND 6" H LOCATED 42" A.F.F.

100 LBS 23.6 GALLONS PROPANE TANK IN SECURE STORAGE.

60" X 56" CLEAR FLOOR SPACE AT TOILET PER ANSI 117.1 FIGURE 604.3.

INSTALL NEW LOUVER IN EXTERIOR WALL WITH MINIMUM 650 SQ IN FLOOD VENTING OPENING, BOTTOM OF WHICH IS TO BE NO HIGHER THEN 1'-0" ABOVE GRADE.

1,290 SF

3,200 SF

PORTLAND CITY CODE- CHAPTER 24.85 SEISMIC OCCUPANCY CALCULATIONS

EXISTING* NET	「BUILDING AREA**= 3200) SF		ALTERED NET	BUILDING AREA**=	1290 (40%) SF
AREA TYPE	OCCUPANCY CLASSIFICATION	RELATIVE HAZARD CLASSIFICATION	AREA SF	LOAD FACTOR	OCCUPANT LOAD	% BUILDING NET AREA
XISTING	•					
CCUPIED	S-1	2	3200	500	7	100%
OTAL			3200		7	100%
IEW						
CCUPIED	S-1	2	1910	100	4	60%
CCUPIED	F-1	2	1290	30	13	40%
OTAL			3200		17	100%
NET CHANGE		NO CHANGE	NO CHANGE		+10	

** PORTLAND TITLE 24 - NET FLOOR AREA DEFINITION: NET FLOOR AREA MEANS THE ENTIRE AREA OF A STRUCTURALLY INDEPENDENT BUILDING, INCLUDING AN OCCUPIED BASEMENT, MEASURED FROM THE INSIDE OF THE PERMANENT OUTER BUILDING WALLS, EXCLUDING ANY MAJOR VERTICAL PENETRATIONS OF THE FLOOR, SUCH AS ELEVATOR AND MECHANICAL SHAFTS.

BUILDING AREA

CURRENT TENANT (UNDER THIS PERMIT): 1,290 SF ENTIRE BUILDING: 3,200 SF

BUILDING OCCUPANCY

CURRENT TENANT (UNDER THIS PERMIT): F-1 F-1, S-1 ENTIRE BUILDING:

EXTERIOR WALLS AND OPENINGS (OSSC TABLE 602 AND 705.8)

WALLS	DIST. TO P.L.	RATED WALL REQ.	AREA/RATED OPNG. REQ.	ACTUAL AREA OF OPNO
N	92'-0"	NO REQUIREMENTS	NO LIMIT	-
S	44'-0"	NO REQUIREMENTS	NO LIMIT	-
Е	20'-0"	NO REQUIREMENTS	NO LIMIT	-
W	0'-8"	TWO HOUR	NOT PERMITTED	0%

PLUMBING FIXTURE COUNT

PLUMBING FIXTURE COUNT (IBC TABLE 2902.1

USE	AREA	occ	TOTAL	WATER	WATER	LAVATORY	LAVATORIES
002	IN SF	LOAD RATIO	occ.	CLOSET RATIO	CLOSETS REQ.	RATIO	REQ.
FACTORY- F-1	1,290	100 SF/OCC	13	1:100	0.13	1:100	0.13
TOTAL REQUIRED					0.13		0.13
TOTAL REQUIRED TOTAL PROVIDED					1		1

CHEMICALS/HAZARDOUS MATERIALS

- PROPANE/BUTANE MIX: 150 LBS.

** THERE ARE NO EXCEEDANCES OF THE MAXIMUM ALLOWABLE QUANTITY FOR STORAGE USE IN THE CONTROL AREAS. SEE ATTACHED TECHNICAL REPORT AND HMIS CLASSIFICATIONS AND SUMMARIES BY RICH MILLER.

- ISOPROPYL ALCOHOL: 20 GAL. - d-LIMONENE: 5 GAL. - PROPYLENE GLYCOL: 5 GAL.

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9101 SE Flavel St. PORTLAND, OR 97266

Proj # 201832

SHEET NO. **ENLARGED FLOOR PLAN**

Building Permit:



Technical Service Hotline 1.800.225.6119 or www.gpgypsum.com

Manufacturer

Georgia-Pacific Gypsum 133 Peachtree Street Atlanta, GA 30303

Georgia-Pacific Canada 2180 Meadowvale Boulevard, Suite 200 Mississauga, ON L5N 5S3

Technical Service Hotline: 1-800-225-6119

Description

DensGlass® Sheathing is a gypsum panel made of a treated, water-resistant core, surfaced with fiberglass mats and a GOLD colored primer coating. Providing superb protection from the elements, DensGlass Sheathing is resistant to delamination and deterioration due to weather exposure—even during construction delays that last as long as twelve months after installation and are backed by a limited warranty against delamination and deterioration for up to 12 months of exposure to normal weather conditions.* DensGlass Sheathing panels are also mold-resistant, and have scored a 10, the highest level of performance for mold resistance under ASTM D3273 test method.

DensGlass Sheathing exhibits a dimensional stability that assures resistance to warping, rippling, buckling and sagging for a flat and even substrate and is noncombustible as defined and tested in accordance with ASTM E136 or CAN/ULC S114. Since DensGlass Sheathing is strong in both directions, it may be installed either parallel or perpendicular to wall framing members (always follow specific assembly installation instructions).

Primary Uses

Because of the superior performance of DensGlass Sheathing, it is specified for exterior walls, ceilings and soffits in a wide variety of applications. These include exterior insulation and finish systems (EIFS); cavity brick or stone veneer applications; cladding such as wood siding, vinyl siding, composition siding, wood shingles, shakes, conventional stucco systems, plywood siding panels; and interior finish systems that require a substrate panel with superior fire and moisture resistance.

For EIFS applications, DensGlass Sheathing is an ideal substrate for adhesive or mechanical application of expanded polystyrene or extruded polystyrene insulation, and is recommended in all climate zones.

Manufacturers of water and air resistive barriers, which include attached flexible membranes, self-adhered membrane and liquid applied, have found DensGlass Sheathing to be a suitable substrate for their systems.

DensGlass Sheathing is an ideal product for exterior ceilings and soffits for both cold and warm climate zones. It resists sagging, even under exceptionally humid conditions. Panels are applied directly to structural framing. Surface and joints may be finished and painted, or surfaced with an exterior finish system.

Limitations

DensGlass Sheathing is resistant to normal weather conditions, but it is not intended for immersion in water. Cascading roof/floor water should be directed away from the sheathing until appropriate drainage is installed.

Avoid any condition that will create moisture in the air and condensation on DensGlass Sheathing. The use of forced air heaters creates volumes of water vapor which, when not properly vented, can condense on building materials. The use of these heaters and any resulting damage is not the responsibility of Georgia-Pacific Gypsum. Consult heater manufacturer for proper use and ventilation. When DensGlass Sheathing panels are used in slanted wall applications, that portion of the wall must be temporarily protected from the elements. Do not allow water to pond or settle on sheathing. Also, exposed wall ends must be covered to prevent water from infiltrating the cavity.

Georgia-Pacific Gypsum does not warrant and is not responsible or liable for the performance of the cladding or exterior systems applied over DensGlass Sheathing. The suitability and compatibility of any system is the responsibility of the system manufacturer or design authority.

Do not laminate masonry surfaces to DensGlass Sheathing; use furring strips or framing.

DensGlass Sheathing is not intended for roof applications. For roof applications, consult our DensDeck® Roof Board brochure.

DensGlass Sheathing is not intended for interior or exterior tile applications. For interior tile applications, consult our DensShield® Tile Backer brochure.

DensGlass Sheathing should not be used in lieu of plywood where required.

Do not apply DensGlass Sheathing below grade.

For all installations, design details such as fasteners, sealants and control joints per system specifications must be properly installed. Openings and penetrations must be properly flashed and sealed. Failure to do so will void the warranty.

Do not use DensGlass Sheathing as a base for nailing or mechanical fastening. Fasteners should be flush to the face of the board, not countersunk.

Technical Data

DensGlass Sheathing is noncombustible as described and tested in accordance with ASTM E136 or CAN/ULC S114.

DensGlass Sheathing exceeds ASTM C1396 sheathing standards for humidified deflection by a factor of 10 in tests over the standard for regular gypsum sheathing.

5/8" (15.9 mm) DensGlass® Fireguard® Sheathing is UL and ULC classified **Type DGG**. DensGlass Sheathing is manufactured to meet ASTM C1177.

Flame spread and smoke develop rating of 0/0 when tested in accordance with ASTM E84 or CAN/ULC S102.

Handling and Use-CAUTION

This product contains fiberglass facings which may cause skin irritation. Dust and fibers produced during the handling and installation of the product may cause skin, eye and respiratory tract irritation. Avoid breathing dust and minimize contact with skin and eyes. Wear long sleeve shirts, long pants and eye protection. Always maintain adequate ventilation. Use a dust mask or NIOSH/ MSHA approved respirator as appropriate in dusty or poorly ventilated areas.

Material Safety Data Sheet (MSDS) is available at www.buildgp.com/safetyinfo or call 1-404-652-5119.

Product Data

Thicknesses: 1/2" (12.7 mm); 5/8" (15.9 mm) is Type X (ASTM C1177) Width: 4' (1220 mm) standard, tolerance up to $\pm 1/8''$ (3.2 mm) Lengths: 8' (2438 mm), 9' (2743 mm) or 10' (3048 mm) standard Edges: Square

*	For	complete	warranty	details,	visit	www.gpgypsum.	.com.

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Ap	pro	va	ls
	•		

Job Name	
Contractor	
Date	



Physical Properties

Properties	1/2" (12.7 mm) DensGlass® Sheathing	5/8″ (15.9 mm) DensGlass® Fireguard® Sheathing
Width, nominal	4' (1219 mm) ± 1/8" (3 mm)	4' (1219 mm) ± 1/8" (3 mm)
Length, standard	8' (2440 mm), 9' (2743 mm), 10' (3048 mm), ± 1/4" (6 mm)	8' (2440 mm), 9' (2743 mm), 10' (3048 mm), \pm 1/4" (6 mm)
Weight, nominal, lbs./sq. ft. (Kg/m²)	1.9 (9)	2.5 (12)
Edges	Square	Square
Bending radius ⁵	6' (1829 mm)	8' (2438 mm)
Racking strength ⁶ , lbs./ft. (dry) (N/m), Ultimate-not design value	>540 (7878)	>654 (9544)
Flexural strength ^{1,4} , parallel, lbf. (N), 4' weak direction	≥80 (356)	≥100 (445)
Compressive strength	min. 500 psi (3445 kPa)	min. 500 psi (3445 kPa)
Humidified deflection ^{1, 4}	<2/8" (6 mm)	<1/8" (3 mm)
Permeance ² , Perms (ng/Pa•s•m ²)	>23 (1300)	>17 (970)
R Value³, ft²•°F•hr/BTU (m²•K/W)	.56 (0.099)	.67 (0.118)
Combustibility ⁷	Noncombustible	Noncombustible
Linear expansion with moisture change, in/in %RH (mm/mm %RH)8	6.25 x 10 ⁻⁶	6.25 x 10 ⁻⁶
Surface burning characteristics per ASTM E84 or CAN/ULC S102: flame spread/smoke developed	0/0	0/0
Coefficient of thermal expansion, in/in/°F (mm/mm/°C)	8.5 x 10 ⁻⁶ (15.3 x 10 ⁻⁶) ⁹	8.5 x 10 ⁻⁶ (15.3 x 10 ⁻⁶) ⁹

¹ Tested in accordance with ASTM C473



Georgia-Pacific Gypsum LLC U.S.A. Georgia-Pacific Gypsum II LLC Georgia-Pacific Canada LP

SALES INFORMATION AND ORDER PLACEMENT

U.S.A. 1-800-824-7503 Midwest: 1-800-876-4746 South Central: 1-800-231-6060 1-800-327-2344 Southeast: Northeast: 1-800-947-4497 CANADA Canada Toll Free: 1-800-387-6823

Quebec Toll Free: 1-800-361-0486

TECHNICAL INFORMATION

U.S.A. and Canada: 1-800-225-6119, www.gpgypsum.com

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WARRANTIES, REMEDIES AND TERMS OF SALE For current warranty information for this product, please go to www.gpgypsum.com and select the product for warranty information. All sales of this product by Georgia-Pacific are subject to our Terms of Sale available at www.gpgypsum.com.

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CAUTION For product fire, safety and use information, go to www.buildgp.com/safetyinfo or call 1-800-225-6119.

FIRE SAFETY CAUTION Passing a fire test in a controlled laboratory setting and/or certifying or labeling a product as having a one-hour, two-hour, or any other fire resistance or protection rating and, therefore, as acceptable for use in certain fire rated assemblies/systems, does not mean that either a particular assembly/system incorporating the product, or any given piece of the product itself, will necessarily provide one-hour fire resistance, two-hour fire resistance, or any other specified fire resistance or protection in an actual fire. In the event of an actual fire, you should immediately take any and all actions necessary for your safety and the safety of others without regard for any fire rating of any product or assembly/system.

² Tested in accordance with ASTM E96 (dry cup method)

³ Tested in accordance with ASTM C518 (heat flow meter)

⁴ Specified values per ASTM C1177

⁵ Double fasteners on ends as needed

⁶ Tested in accordance with ASTM E72

⁷ As defined and tested in accordance with ASTM E136 or CAN/ULC S114

⁸ As stated by Gypsum Association GA-235

⁹ Tested in accordance with ASTM E228-85

SECTION BUILDING #2

METAL WALL CAP & TOP OF PARAPET

SHOW THE WAY

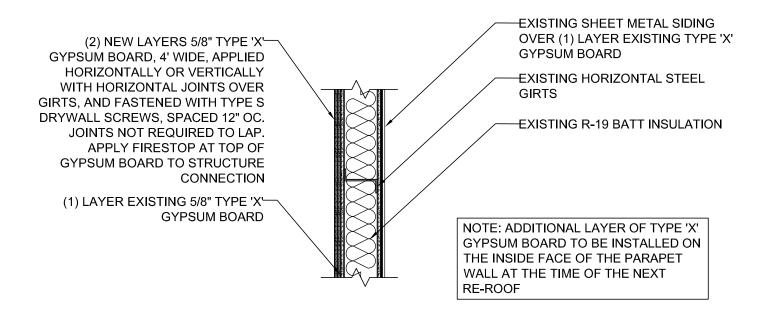
TOTAL STUDE ON 24 VERTICAL STUDE

METAL SEDENG

City of Portland APPROVED

STAPKON CLIP SEE VALHETINE DRAWFIND

KKOF PUBLISHE - KOE WEREFEEL CHANGE



NOTE: FRAMED WALL ONLY OCCURS
ABOVE EXISTING TWO-HOUR RATED
CMU STEM WALL THAT IS
APPROXIMATELY 4'-0" HIGH. FIELD
VERIFY. IF ANY PORTION OF FRAMED
WALL OCCURS BELOW 4'-0" AF.F.,
EXTERIOR RATED 5/8" DENSGLASS
FIREGUARD SHEATHING MUST BE
INSTALLED IN LIEU OF GYPSUM
BOARD TO MEET FEMA FLOOD
HAZARD MATERIAL REQUIREMENTS

WEST EXTERIOR FIRE WALL