Development Services

From Concept to Construction

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

APPEAL SUMMARY

Status: Decision Rendered

Appeal ID: 18784	**Project Address:** 3582 SE Powell Blvd
Hearing Date: 12/19/18	**Appellant Name:** Erin Ziter
Case No.: B-009	**Appellant Phone:** 5102925399
Appeal Type: Building	**Plans Examiner/Inspector:** Steven Freeh
Project Type: commercial	**Stories:** 1 **Occupancy:** A-2, M, F-1, B, S-1 **Construction Type:** V-B
Building/Business Name: Powell Center	**Fire Sprinklers:** Yes - Throughout - phased
Appeal Involves: Alteration of an existing structure	**LUR or Permit Application No.:**
Plan Submitted Option: pdf [File 1]	**Proposed use:** A-2, F-1, M, S-1, B

APPEAL INFORMATION SHEET

Appeal item 1

Code Section	1014.2 903.2.1.1, Group A-2
Requires	An automatic sprinkler system shall be provided for Group A-2 occupancies where one of the following conditions exists: the fire area exceeds 5000 sf, the fire area has an occupant load of 100 or more, or the fire area is located on a floor other than a level of exit discharge serving such occupancies.
Proposed Design	The existing one-story building has three tenant spaces – a 5,612 sf restaurant (A-2), a 4,150 sf workshop (F-1), and a 6,577 sf nightclub (A-2). The building structure is primarily concrete and masonry with a wood-framed roof. There are no sprinklers in the current building. Previous permits include 99-00234BLD. This permit shows a 2 hr wood-framed fire wall demising the nightclub and workshop. The 8” cmu exterior walls, and demising walls separating the nightclub and restaurant inherently provide a 2 hr fire rating per the National Concrete Masonry Association fire resistance ratings. The new proposal will sprinkler and alarm the entire building and convert the workshop and part of the restaurant into a market and deli space, and turn the nightclub and the rest of the existing restaurant into a brewery and new restaurant. Final tenant occupancies will be a 6,380 sf market (M/A-2), an 8,526 sf restaurant/brewery (A-2/F-1), and a 666 sf office (B). However, the lease for the current nightclub does not expire until June, 2020 – 18 months from now. In order to not interrupt their lease or business operations, the sprinklers cannot be installed in their portion of the building until the occupants have vacated their tenant space. Until sprinklers can be installed in their space, the occupants of the nightclub are still protected by 2 hr fire walls, and are in no less safe a condition. In addition to the sprinkler scope, the structural design proposes to strengthen roof/wall connections, and provide a secondary support system for the existing concrete piers, thus making the entire building, including the nightclub, safer and stronger.

As an additional measure of safety we are proposing to decrease the spacing of the sprinkler heads along the demising walls of the nightclub to 6' on center (similar to a water curtain).

Reason for alternative The owner of the building wishes to begin improvements as soon as possible so that the unoccupied two thirds of the building do not sit vacant any longer. The property has become an eyesore and begun to attract acts of vandalism and homeless camping. In order to make improvements quickly, the owner wishes to renovate and upgrade the portions of the building which are currently unoccupied. This work includes new storefront, signage, structural upgrades, and sprinklers and fire alarm for the new retail spaces. Once the nightclub lease ends in 18 months, the complete upgrades can be done. At that time, sprinklers will be installed in the nightclub space and the entire building will be provided with NFPA 13 sprinklers throughout.

The work to be done immediately will create a safer, stronger building even though sprinklers cannot be installed in the entire building right away. Occupants will still be protected with the existing 2 hr fire wall construction, and will have further protection with increased sprinkler heads along the demising wall, and improved structural conditions. Thus, the occupants in the nightclub will be in safer conditions for the duration of their lease than they are currently.

For these reasons, we ask you allow the phasing of the entire sprinkler system to work around the existing tenant leases. Therefore, we kindly request the appeal be granted.

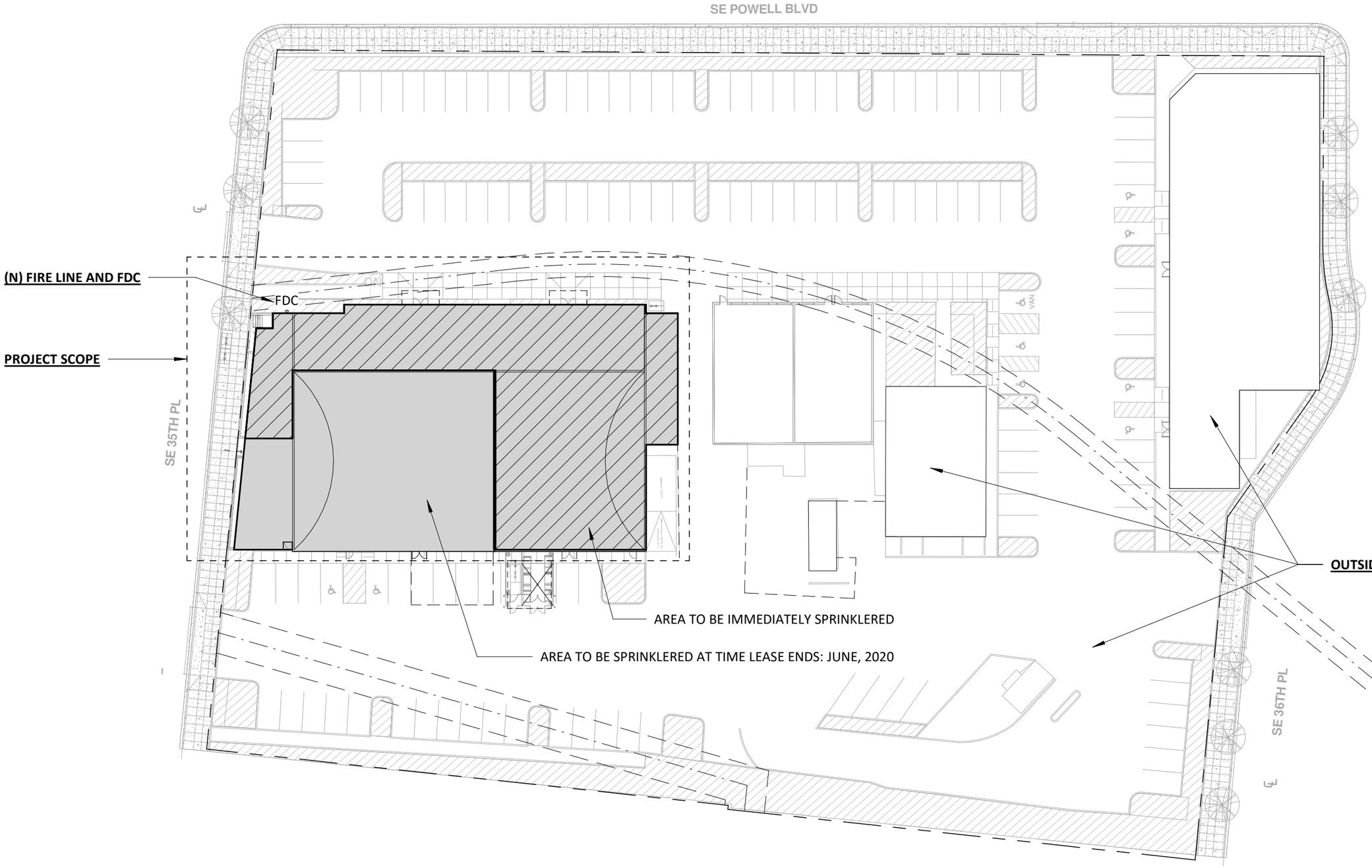
APPEAL DECISION

Restaurant / A2 fire area over 5,000 s.f. with full building sprinkler system phased over two years. Granted provided final phase of sprinkler installation is completed before January 01, 2021.

Note: The entire building must be provided with sprinklers, either concurrent with the tenant finish slated for June 2020 or if the existing tenant remains by January 1, 2021.
The phased sprinkler agreement must be reviewed and approved by the Fire Marshal's Office. Appellant may contact Corey Stanley (971 291-8919) with questions.

The Administrative Appeal Board finds with the conditions noted, 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, call (503) 823-7300 or come in to the Development Services Center.



1 SITE PLAN
1" = 40'-0"

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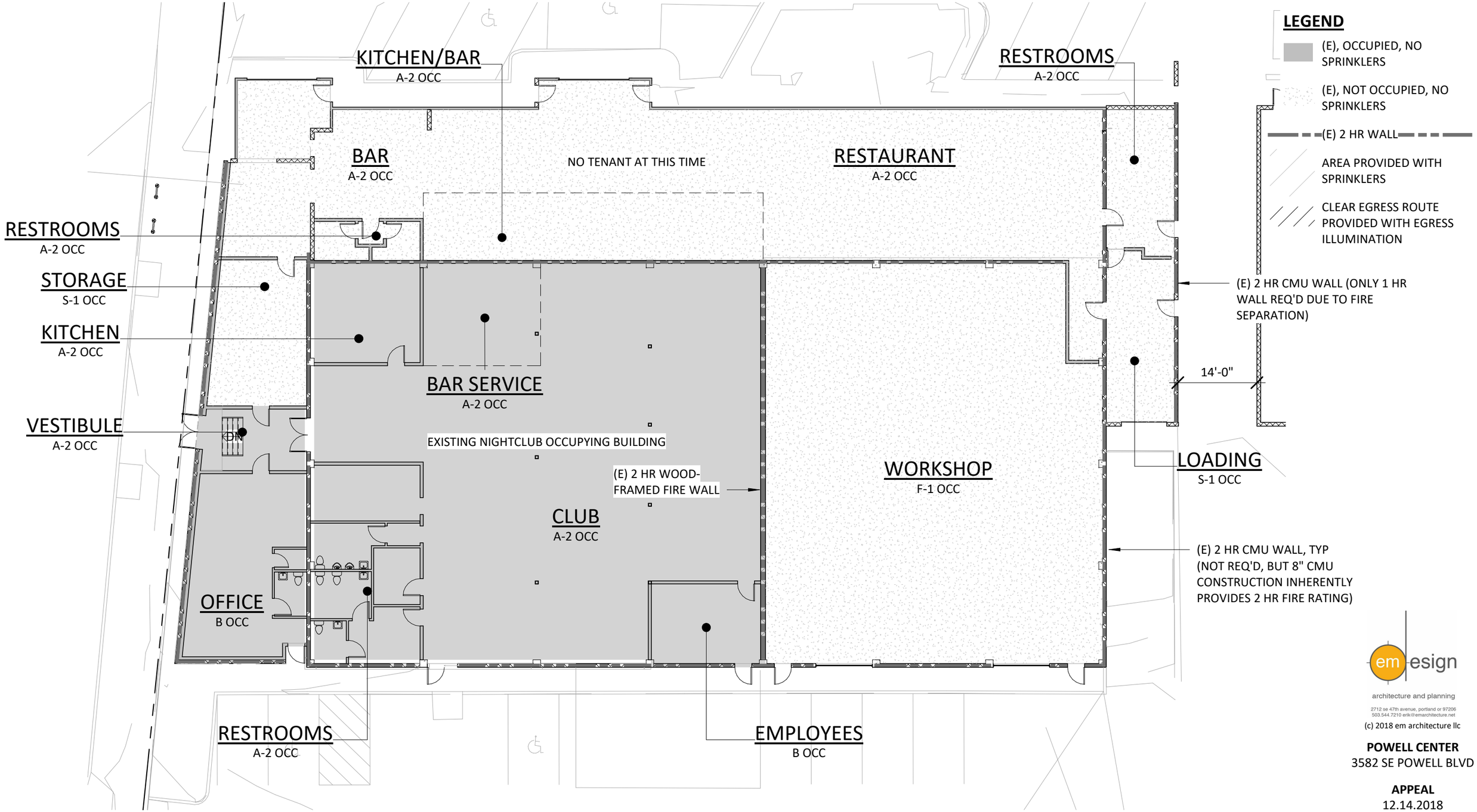
12.14.2018

SITE PLAN

001



1 EXISTING PLAN DIAGRAM
1/16" = 1'-0"

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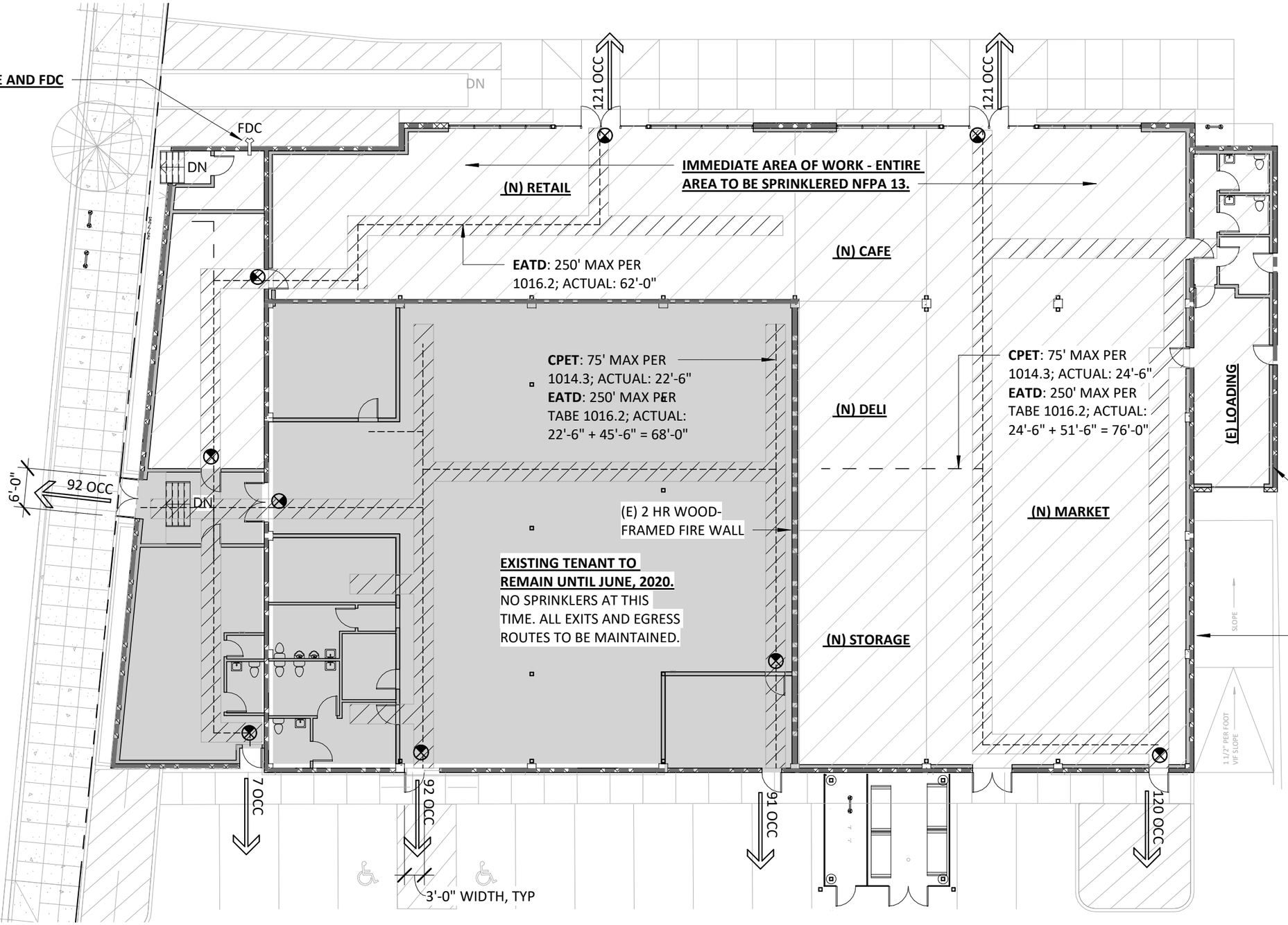
FLOOR PLANS

002



LEGEND

- (E), OCCUPIED, NO SPRINKLERS
- (E), NOT OCCUPIED, NO SPRINKLERS
- (E) 2 HR WALL
- AREA PROVIDED WITH SPRINKLERS
- CLEAR EGRESS ROUTE PROVIDED WITH EGRESS ILLUMINATION

(E) 2 HR CMU WALL (1 HR WALL REQ'D DUE TO FIRE SEPARATION)

(E) 2 HR CMU WALL, TYP (NOT REQ'D, BUT 8" CMU CONSTRUCTION INHERENTLY PROVIDES 2 HR FIRE RATING)

1 INTERIM CONSTRUCTION PLAN DIAGRAM

1/16" = 1'-0"

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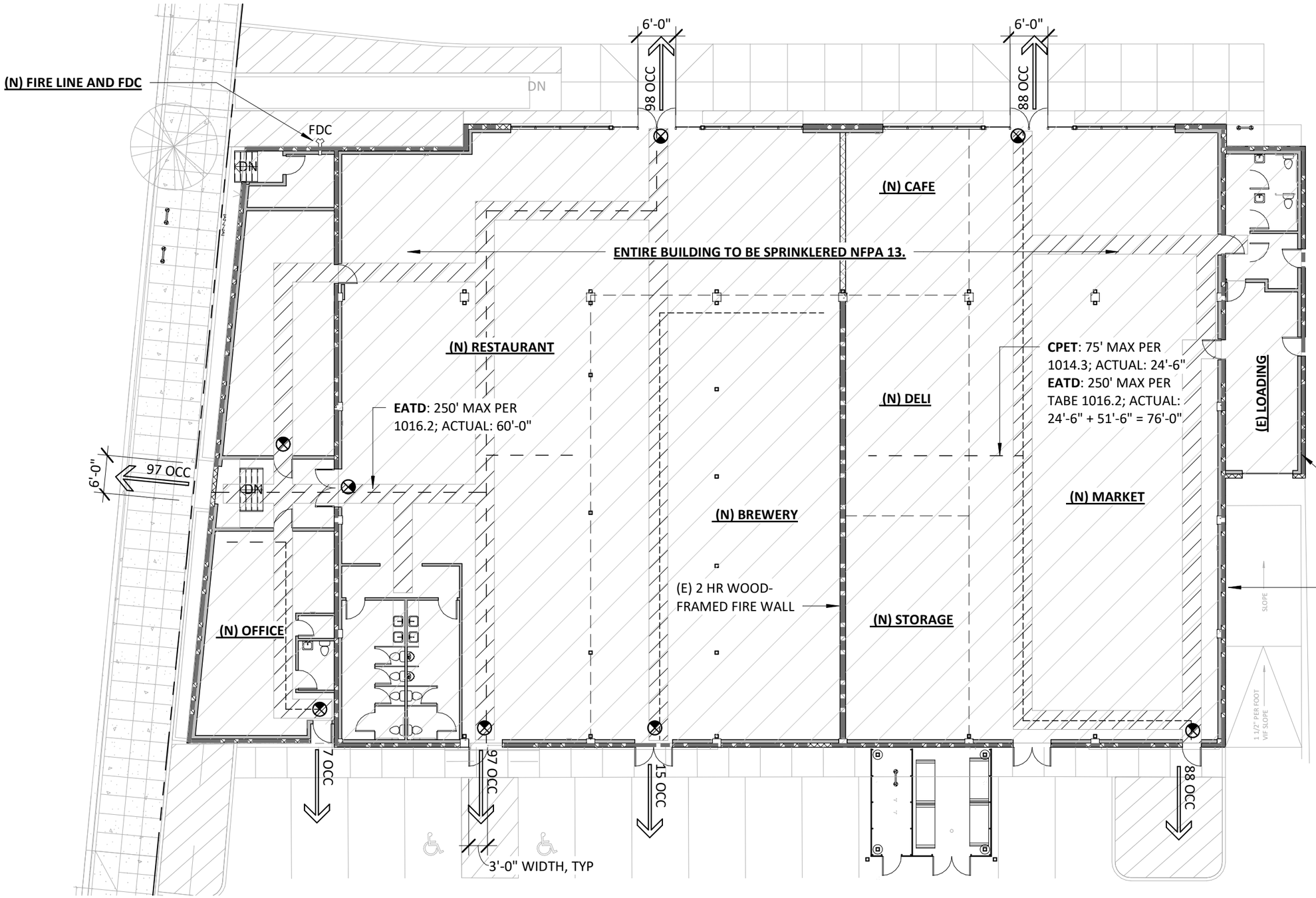
FLOOR PLANS

003



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(E) 2 HR CMU WALL, TYP (NOT REQ'D, BUT 8" CMU CONSTRUCTION INHERENTLY PROVIDES 2 HR FIRE RATING)

1 FINAL PLAN DIAGRAM
1/16" = 1'-0"

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FLOOR PLANS

004

NATIONAL CONCRETE MASONRY ASSOCIATION
Sustainable Concrete Products for Structures and Hardscapes

FIRE RESISTANCE RATINGS OF CONCRETE MASONRY ASSEMBLIES

TEK 7-1C
Fire Resistance (2009)

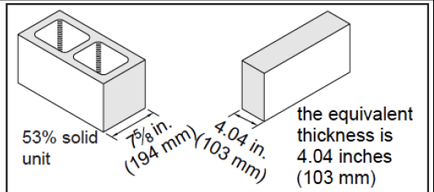
CALCULATED FIRE RESISTANCE RATINGS

Background

The calculated fire resistance method is based on extensive research and testing of concrete masonry walls. Fire testing of wall assemblies is conducted in accordance with the *Standard Test Methods for Fire Tests of Building Construction and Materials*, ASTM E119 (ref. 4), which measures four performance criteria, as follows:

- resistance to the transmission of heat through the wall assembly,
- resistance to the passage of hot gases through the wall, sufficient to ignite cotton waste,
- load-carrying capacity of loadbearing walls, and
- resistance to the impact, erosion and cooling effects of a hose stream on the assembly after exposure to the standard fire.

The fire resistance rating of concrete masonry is typically governed by the heat transmission criteria. From the standpoint of life safety (particularly for fire fighters) and salvageability, this failure mode is certainly preferable to a structural collapse endpoint, characteristic of many other building materials.



The equivalent thickness (a solid unit with the same amount of material) of this particular unit is 4.04 in. (103 mm).

Figure 1—Equivalent Thickness

Table 2—Equivalent Thicknesses of Concrete Masonry Units, in. (mm)

Nominal width, in. (mm)	Based on typical hollow units[A]		Based on percent solid (75%)	(100%)
4 (102)	2.7 (69)	[73.8]	2.7 (69)	3.6 (91)
6 (152)	3.1 (79)	[55.0]	4.2 (107)	5.6 (142)
8 (203)	4.0 (102)	[53.0]	5.7 (145)	7.6 (193)
10 (254)	4.5 (113)	[46.3]	7.2 (183)	9.6 (244)
12 (305)	5.1 (129)	[44.0]	8.7 (221)	11.6 (295)
14 (356)	5.5 (139)	[40.2]	10.2 (259)	13.6 (345)
16 (406)	6.0 (152)	[38.4]	11.7 (297)	15.6 (396)

[A] Values in brackets [ ] are percent solid values based on typical two-core concrete masonry units.

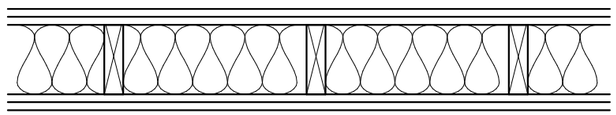
Table 1—Fire Resistance Rating Period of Concrete Masonry Assemblies (refs. 1, 2, 3)

Aggregate type in the concrete masonry unit[C]	Minimum required equivalent thickness, in. (mm), for fire resistance rating, hours[A, B] 4	3 3/4	3 1/2	3 1/4	3	2 3/4	2 1/2	2 1/4	2	1 3/4	1 1/2	1 1/4	1	3/4	1/2
Calcareous or siliceous gravel	6.2	6.0	5.8	5.5	5.3	5.0	4.8	4.5	4.2	3.9	3.6	3.2	2.8	2.4	2.0
Limestone, cinders or unexpanded slag	5.9	5.7	5.5	5.2	5.0	4.8	4.5	4.3	4.0	3.7	3.4	3.1	2.7	2.3	1.9
Expanded clay, shale or slate	5.1	4.9	4.8	4.6	4.4	4.2	4.0	3.8	3.6	3.4	3.3	2.9	2.6	2.2	1.8
Expanded slag or pumice	4.7	4.5	4.4	4.2	4.0	3.8	3.6	3.4	3.2	3.0	2.7	2.5	2.1	1.9	1.5

[A] Fire resistance rating between the hourly fire resistance rating periods listed may be determined by linear interpolation based on the equivalent thickness value of the concrete masonry unit. The requirements of ASTM C55, ASTM C73, ASTM C90 or ASTM C744 (refs. 13, 14, 6, 15) shall apply. Include equivalent thickness of finishes where applicable: see section "Effects of Finishes on Fire Resistance Ratings."

[B] Where combustible members are framed into the wall, the thickness of solid material between the end of each member and opposite wall face, or between members set in from opposite sides, must be at least 93% of thickness shown.

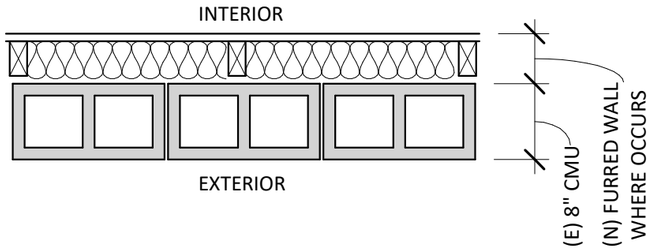
[C] Minimum required equivalent thickness corresponding to the hourly fire resistance rating for units made with a combination of aggregates shall be determined by linear interpolation based on the percent by volume of each aggregate used in the manufacture.



2 HR WALL PER PERMIT 99-00234BLD:
(2) LAYERS 5/8" GYP BD
2X6 WD STUDS @ 16" O.C.
SOUND INSULATION
(2) LAYERS 5/8" GYP BD
EXTEND FROM FOOTING TO 50" ABOVE ROOF DECK. SOLID BLOCK AT FLOOR, CEILING AND ROOF

REFERENCE GA FILE NO. WP 4135

2 (E) 2 HR WOOD FRAME WALL
1" = 1'-0"



TO ACHIEVE A 2 HR FIRE RATING, A CINDER CONCRETE MASONRY UNIT MUST HAVE AN EQUIVALENT THICKNESS OF 4.0. THE EXISTING NOMINAL 8" CINDER CMU'S (ASSUMED TO BE HOLLOW) HAVE AN EQUIVALENT THICKNESS OF 4.0 THUS PROVIDING A (2) HR RATING.

1 (E) 2 HR RATED CMU WALL
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ASSEMBLIES

005