

Development Services

From Concept to Construction

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APPEAL SUMMARY

Status: Decision Rendered

Appeal ID: 16550	Project Address: 2634 NE Broadway
Hearing Date: 2/28/18	Appellant Name: Alan Armstrong
Case No.: B-006	Appellant Phone: 5034426786
Appeal Type: Building	Plans Examiner/Inspector: Jerry Engelhardt
Project Type: commercial	Stories: 3 Occupancy: R-2 Construction Type: V-B
Building/Business Name: 2634 NE Broadway	Fire Sprinklers: Yes - throughout
Appeal Involves: occ Change from E to R-2	LUR or Permit Application No.: 17-274787-CO
Plan Submitted Option: pdf [File 1]	Proposed use: 5 unit apt building

APPEAL INFORMATION SHEET

Appeal item 1

Code Section OSSC 1207.2

Requires Walls and partitions separating dwelling units from each other or from public areas shall have a STC rating of not less than 50 (45 if field tested).

Proposed Design The building was built as an apartment building in 1925. Occupancy was changed to E in 1986. We propose to return the occupancy to the original R-2.

Propose that existing dwelling unit separation walls serve as adequate assembly. Existing walls are 2x4 studs @ 16" o.c. with wood lath and plaster each side and blown-in loose fill cellulose insulation filling each cavity.

Reason for alternative The existing wall assembly is comparable to assembly GA No. WP 3341 and GA No. WP 3260 shown on page 5 of the attached drawings.

GA No. WP 3341 consists of ¼" gypsum wallboard base layer and ½" gypsum wallboard face layer. It tests to 45-49 STC with no insulation.

GA No. WP 3260 consists of ¼" gypsum wallboard base layer and 5/8" type x gypsum wallboard face layer and laminating compound. It tests to 50-54 STC with 1 ½" batt insulation.

Therefore, it can be extrapolated that, in the worst case, the STC rating of the existing assembly would be no lower than 45 STC which would meet the code requirement for a tested assembly and that the probable STC is closer to the code required 50 STC.

Appeal item 2

Code Section OSSC 708

Requires	Walls separating dwelling units shall be 1-hour fire rated.
Proposed Design	<p>The building was built as an apartment building in 1925. Occupancy was changed to E in 1986. We propose to return the occupancy to the original R-2.</p> <p>Propose that existing dwelling unit separation walls serve as adequate assembly. Existing walls are 2x4 studs @ 16" o.c. with wood lath and plaster each side and blown-in loose fill cellulose insulation filling each cavity.</p>
Reason for alternative	<p>The entire building is equipped with sprinklers and fire alarm. Therefore, the exception listed in OSSC 708.3 (2), which allows a ½ hour fire rating between dwelling units in buildings equipped with an automatic fire sprinkler, would apply.</p> <p>The existing separation wall assembly is comparable to GA WP 3341, GA WP 3260, and OSSC Table 720.1(2) 12-1.3, assemblies that all are tested to a 1 hour fire rating which is above and beyond the required ½ hour rating.</p>

Appeal item 3

Code Section	OSSC 1207.2 and 1207.3
Requires	Floors separating dwelling units shall have a STC rating of 50 (field tested 45) and IIC rating of 50 (field tested 45).
Proposed Design	<p>The building was built as an apartment building in 1925. Occupancy was changed to E in 1986. We propose to return the occupancy to the original R-2.</p> <p>Propose that existing dwelling unit floor separation serves as adequate assembly. Existing floor assembly is ¾" hardwood floor on 1" wood sleepers on ¾" T&G diagonal ship-lap sheathing on 2x10 joists @ 16" o.c. with ¼" lath and ½" gypsum plaster ceiling finish.</p>
Reason for alternative	<p>Existing wall assembly is comparable to GA No. FC 5250 which consists of a double wood floor on 2x10 wood joists with RC channels and ½" gyp board ceiling and lists a STC of 45-49 and IIC of 39.</p> <p>Additional wood sleepers in the existing floor assembly push the extrapolated STC value to the upper end of the range which is close to the code required 50 STC. The additional wood sleepers also help boost the IIC rating as the wood to wood contact is reduced by the sleepers.</p>

APPEAL DECISION

1. Alternate Sound Transmission Class (STC) rating of wall assembly: Denied. Proposal does not provide equivalent Life Safety protection.

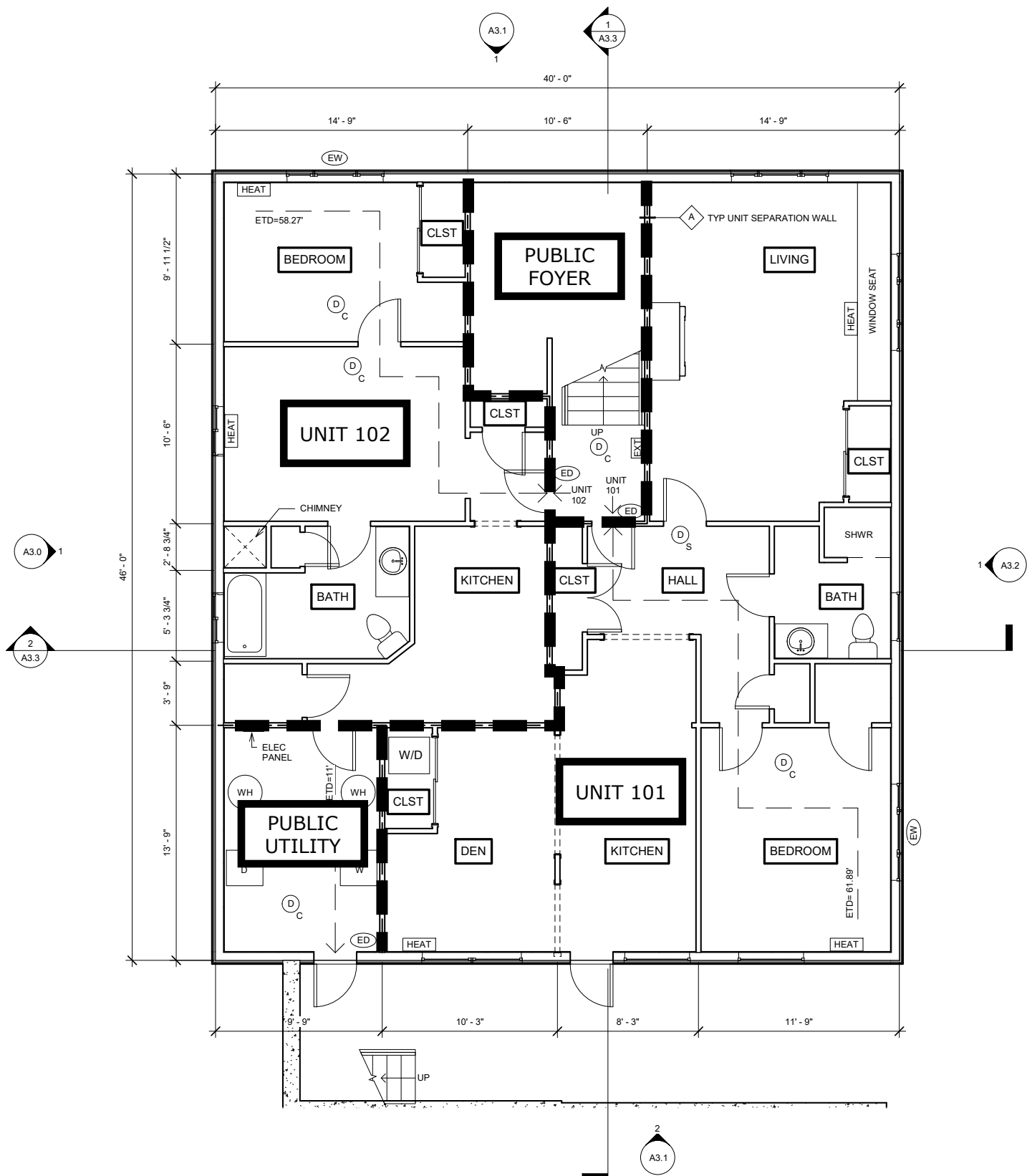
2. Alternate one hour wall assembly: Denied. Proposal does not provide equivalent Life Safety protection.

3. Alternate Sound Transmission Class and Impact Insulation Class (STC / IIC) rating of floor / ceiling assembly: Denied. Proposal does not provide equivalent Life Safety protection.

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

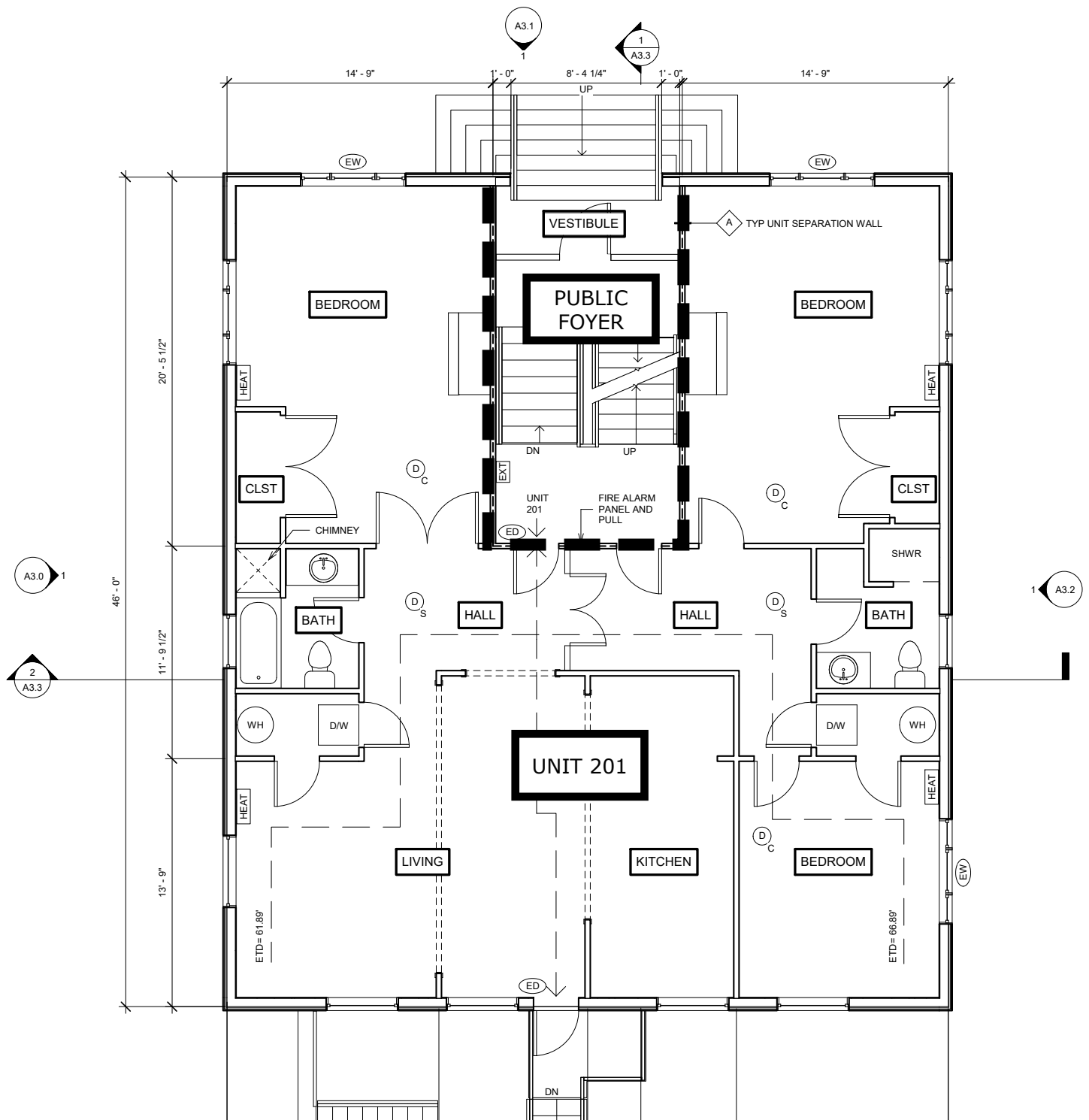
Pursuant to City Code Chapter 24.10, you may appeal this decision to the Building Code Board of Appeal within 180 calendar days of the date this decision is published. For information on the appeals process and costs,

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.



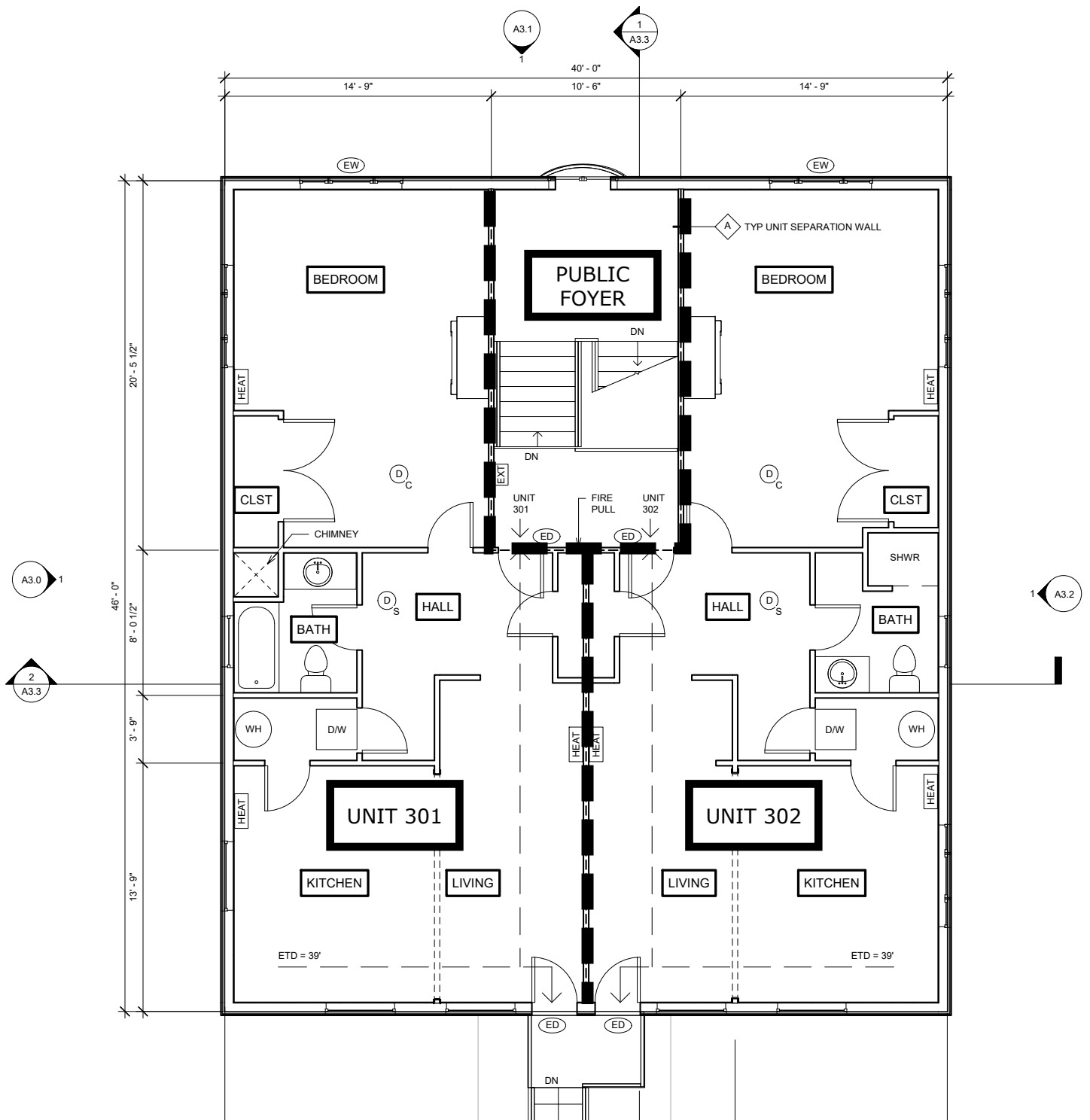
SEPARATION WALL

FIRST FLOOR PLAN
1/8" = 1'-0"



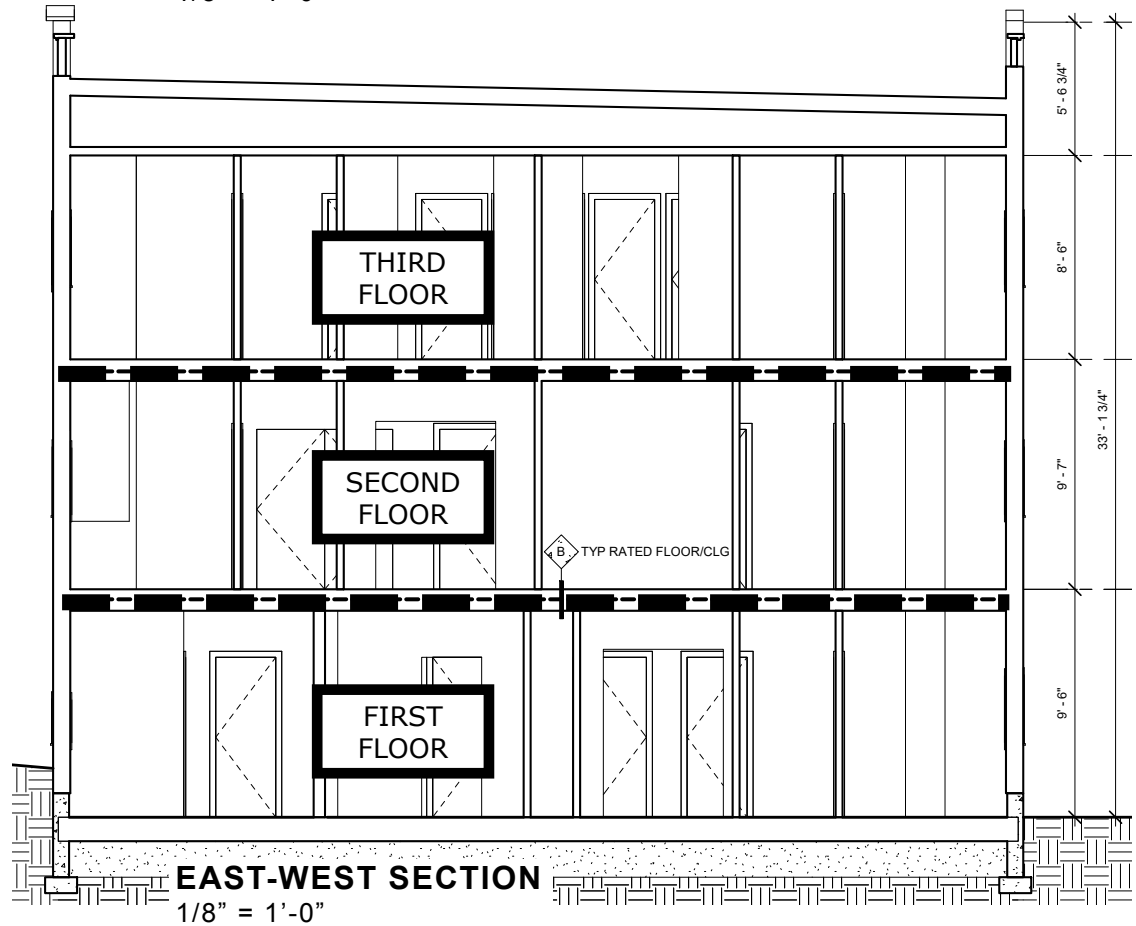
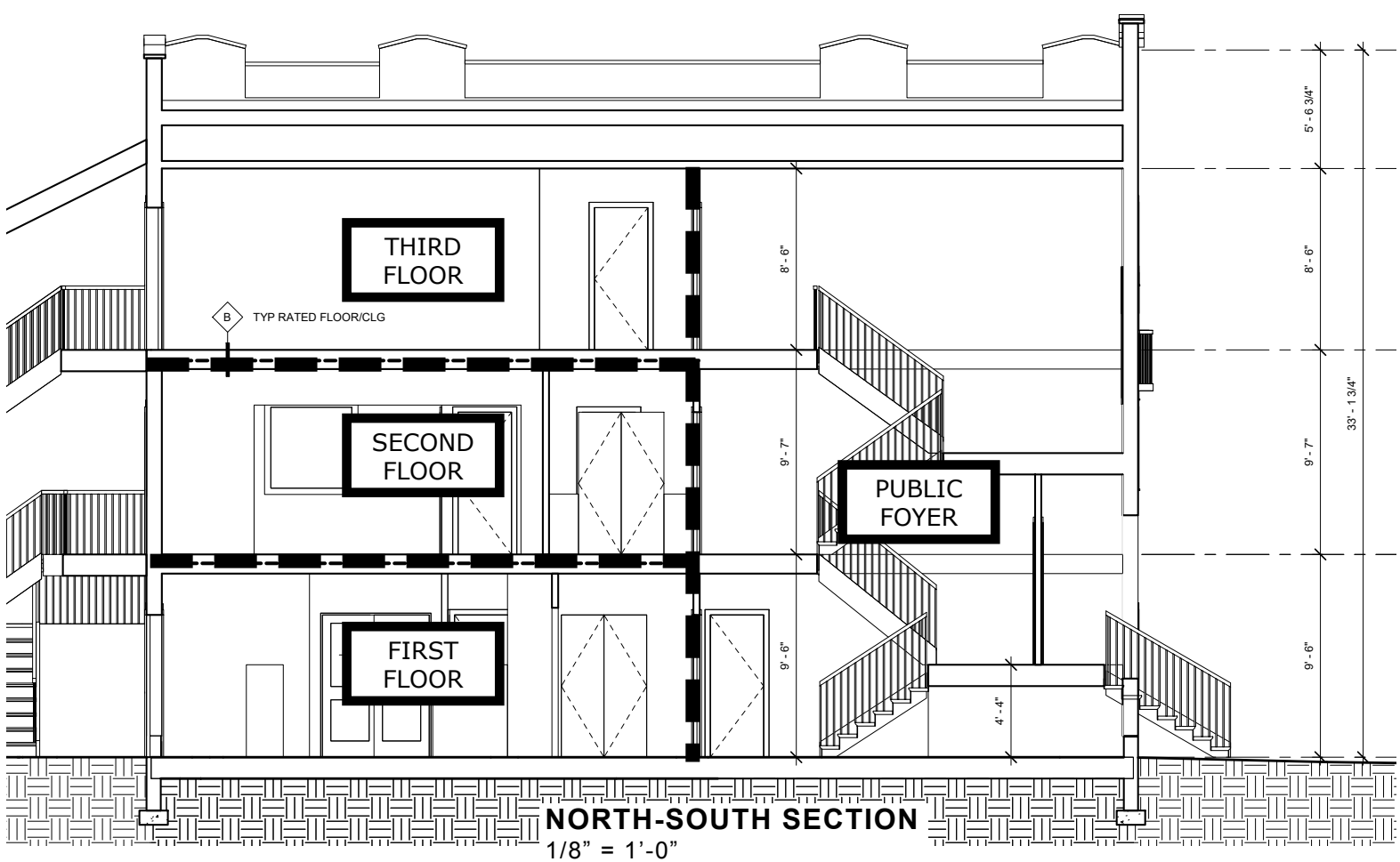
SEPARATION WALL

SECOND FLOOR PLAN
1/8" = 1'-0"

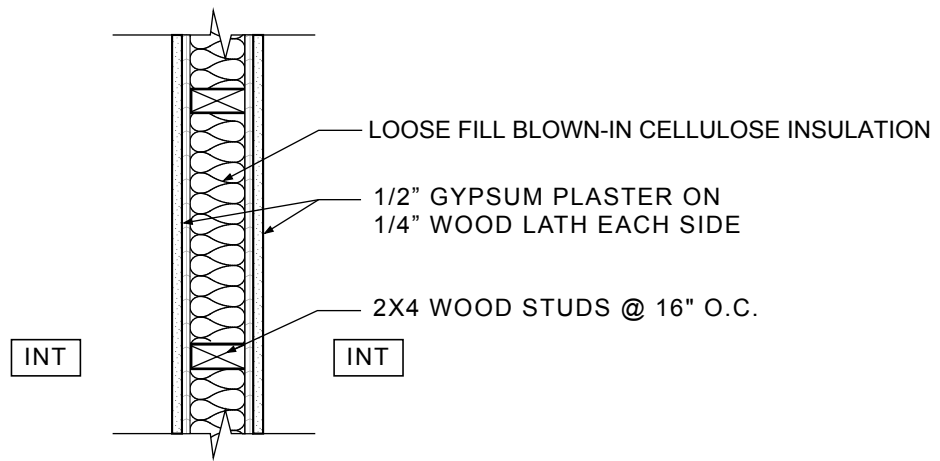


SEPARATION WALL

THIRD FLOOR PLAN
1/8" = 1'-0"



SEPARATION WALL/FLOOR



SEPARATION WALL ASSEMBLY

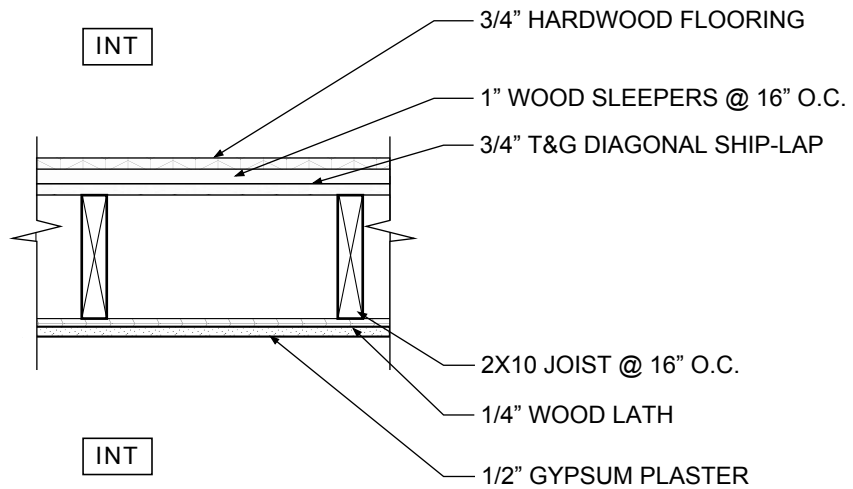
1" = 1'-0"

GA FILE NO. WP 3341	GENERIC	1 HOUR FIRE	45 to 49 STC SOUND
GYPSUM WALLBOARD, WOOD STUDS Base layer 1/4" gypsum wallboard applied parallel to each side of 2 x 4 wood studs 16" o.c. with 4d coated nails, 1 1/2" long, 0.099" shank, 1/4" heads, 12" o.c. Joints staggered 16" on opposite sides. Face layer 1/2" type X plain or predecorated gypsum wallboard or gypsum veneer base applied parallel to each side with 1/4" beads of adhesive 2" o.c. and 6d coated nails, 1 7/8" long, 0.0915" shank, 1/4" heads, 6" o.c. at top and bottom plates only. Offset joints 24" from base layer joints. (LOAD-BEARING)			
		Thickness: 5 1/8" Approx. Weight: 7 psf Fire Test: FM WP-147, 1-2-69 Sound Test: NGC 2321, 8-29-68	

GA FILE NO. WP 3260	PROPRIETARY*	1 HOUR FIRE	50 to 54 STC SOUND
GYPSUM WALLBOARD, GLASS FIBER INSULATION, WOOD STUDS Base layer 1/4" proprietary gypsum wallboard applied parallel to each side of 2 x 4 wood studs 16" o.c. with 4d coated nails, 1 1/2" long, 0.099" shank, 1/4" heads, 12" o.c. Face layer 5/8" proprietary type X gypsum wallboard or gypsum veneer base applied parallel to each side with 6" wide strips of laminating compound along the edges and centerline of each board and 6d coated nails, 1 7/8" long, 0.0915" shank, 1/4" heads, 16" o.c. at top and bottom plates only. 1 1/2" glass fiber insulation, 0.8 pcf, in stud space. Joints staggered 16" each layer and side. (LOAD-BEARING)			
PROPRIETARY GYPSUM BOARD Georgia Pacific Gypsum LLC - 1/4" ToughRock® Sound Deadening Gypsum Board - 5/8" ToughRock® Fireguard C® Gypsum Board Lafarge North America Inc. - 1/4" Soundcheck® - 5/8" Firecheck® Type C National Gypsum Company - 5/8" Gold Bond® Brand FIRE-SHIELD C™ Gypsum Board		Thickness: 5 3/8" Approx. Weight: 9 psf Fire Test: See WP 3340 (UL R2717-52, 9-9-68, UL Design U312; ULC Design W300) Sound Test: G&H BW-35ST, 4-16-69	

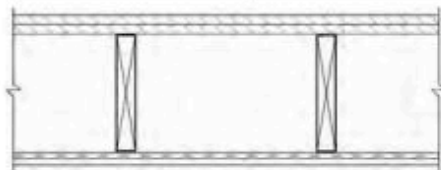
12-1.3 ¹	2" x 4" wood studs 16" on center with 3/8" perforated or plain gypsum lath and 1/2" gypsum plaster each side. Lath nailed with 1 1/8" by No. 13 gage by 19/64" head plaster-board blued nails, 4" on center. Plaster mixed 1:2 by weight, gypsum to sand aggregate.	—	—	—	5 1/4
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OSSC Table 721.1 (2) Item 12.1.3



SEPARATION FLOOR ASSEMBLY

1" = 1'-0"

GA FILE NO. FC 5250	GENERIC	1 HOUR FIRE	45 to 49 STC SOUND
WOOD JOISTS, GYPSUM WALLBOARD, RESILIENT CHANNELS <p>One layer 1/2" type X gypsum wallboard or gypsum veneer base applied at right angles to resilient furring channels 24" o.c. with 1" Type S drywall screws 12" o.c. Gypsum board end joints located midway between continuous channels and attached to additional pieces of channel 60" long with screws 12" o.c. Resilient furring channels applied at right angles to 2 x 10 wood joists 16" o.c. with 6d coated nails, 2" long, 0.113" shank, 17/64" heads. Wood joists supporting 1" nominal wood subfloor and 1" nominal wood finish floor, or 19/32" plywood finished floor with long edges T & G and 15/32" interior plywood with exterior glue subfloor perpendicular to joists with joints staggered.</p>		 <p>Approx. Ceiling Weight: 2 psf</p> <p>Fire Test: UL R2717-29, 1-24-64, UL Design L502; ULC Design M501</p> <p>Sound Test: RAL TL64-155, 2-7-64</p> <p>IIC & Test: 39 (67 C & P) See FC 5240 (CK 6512-6, 4-15-65)</p>	