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 - Held over from ID 20207 (4/10/19) for additional information

Appeal ID: 20276	**Project Address:** 4435 NE Campaign St
Hearing Date: 4/17/19	**Appellant Name:** Tiuu Magi
Case No.: B-017	**Appellant Phone:** 503-781-6695
Appeal Type: Building	**Plans Examiner/Inspector:** David Woods
Project Type: residential	**Stories:** 1 **Occupancy:** single family **Construction Type:** ranch
Building/Business Name:	**Fire Sprinklers:** No
Appeal Involves: Alteration of an existing structure,Addition to an existing structure	**LUR or Permit Application No.:** 19-119046-RS
Plan Submitted Option: mail [File 1] [File 2]	**Proposed use:** ADU

APPEAL INFORMATION SHEET

Appeal item 1

Code Section	R302.2.1.1
Requires	Firewalls must be continuous, from the foundation up to the roof sheathing.
Proposed Design	I propose to build a firewall with slightly overlapping sections on two sides of a shared wall. In the wall between kitchens, only the ADU kitchen wall cavity is accessible (indeed, I have removed the pre-existing cabinetry, sink, and walls for this very purpose). Between the ADU bathroom and the primary residence, only the wall of the primary residence is accessible at this time. A newly-tiled shower is on the ADU side, which I would like very much to keep intact. I am, however, willing to remove the existing drywall in the landing, stairway, and mudroom of the primary residence, in order to install the firewall system in that portion of the shared wall. Drawings elucidate this sectioned approach. I also propose to install a 1.5-hour fire resistant, self-latching, gasketed access door in place of the current unsealed wood door in the original crawl-space access hatch cutout of the primary residence' foundation stem wall. The specifications of the manufactured door are also attached.
Reason for alternative	Application of 5/8" drywall to both sides of the kitchen and bathroom walls would require extensive utility, trim, and storage removal/replacement, which is otherwise unnecessary and cost/time-prohibitive. The overlapping sectioned approach of the attached drawings provides 1+ hour of continuous fire protection between the two units of this address, while allowing the most valuable pre-existing features of both sides of the shared wall to remain intact.

APPEAL DECISION

Alternate 1 hour fire rated wall 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 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.

Proposed firewalls

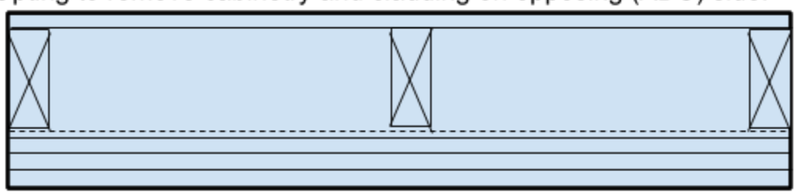
1-hour firewall proposed along south and west walls, as well as 4’ wide portion of wall between the ADU bathroom and primary residence mudroom.

West firewall:
See 11x14 drawing titled “1 HR fire wall applications: west wall” (page A5). This wall will be in accordance with GA File No. WP 8015.

Kitchen firewall:

One-hour fire-resistance rated and 45+ STC-rated interior wall assembly.

Primary residence kitchen: Original drywall on 2x4 wood studs. This wall must remain intact due to the presence of finished kitchen cabinetry. Opting to remove cabinetry and cladding on opposing (ADU) side.

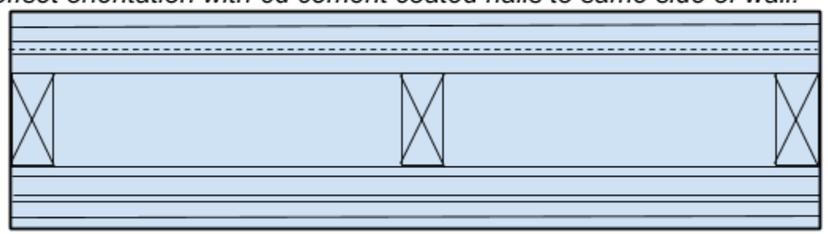


ADU kitchen: Original siding and shiplap removed to allow insertion of 3” mineral fiber insulation in stud space. *One layer ½” CDX attached to studs as required in engineer’s shear wall plan.* Resilient channels attached at right angles to 2x4 wood studs 16” OC with 1 ¾” Type S drywall screws. One layer ⅝” type X gypsum wallboard applied at right angles to channels with 1” Type S drywall screws 8” OC with vertical joints located midway between studs. *Appeal for additional layer of ⅝” type X gypsum wallboard applied at offset orientation with 6d cement coated nails to same side of wall. Requesting allowance of existing sink faucet, provided that both penetration firestop systems are sealed with fire-blocking foam, as per 302.4.1.2.*

South bathroom firewall:

Note: 1.5-hr fire-rated self-latching gasketed access door to replace existing wood door into crawl-space beneath primary residence kitchen. UL and ULC rated.

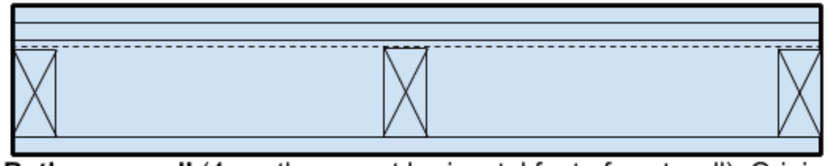
Primary residence: Original drywall removed to allow insertion of 3” mineral fiber insulation in stud space. *One layer ½” CDX attached to studs as required in engineer’s shear wall plan.* Resilient channels attached at right angles to 2x4 wood studs 16” OC with 1 ¾” Type S drywall screws. One layer ⅝” type X gypsum wallboard applied at right angles to channels with 1” Type S drywall screws 8” OC with vertical joints located midway between studs. *Appeal for additional layer of ⅝” type X gypsum wallboard applied at offset orientation with 6d cement coated nails to same side of wall.*



ADU bathroom south wall: Original drywall on top of existing plaster leveling bevelled edges of pre-existing cedar siding, on top of pre-existing shiplap. Note this wall must remain intact to allow current shower and tile to remain in place. Tile is installed on about 1/2 of this surface. *Appeal for 18”x24” 1.5-hour fire resistant door to be installed in foundation stemwall crawlspace access.*

West bathroom firewall:

Mudroom wall: Original wood paneling to be removed to allow for insertion of 3” mineral fiber insulation in stud space. Resilient channels attached at right angles to 2x4 wood studs 16” OC with 1 ¼” Type S drywall screws. One layer ⅝” type X gypsum wallboard applied at right angles to channels with 1” Type S drywall screws 8” OC with vertical joints located midway between studs. *Appeal for additional layer of ⅝” type X gypsum wallboard applied with 6d cement coated nails to same side of wall.*



Bathroom wall (4 southernmost horizontal feet of east wall): Original drywall on 2x4 wood studs 16” OC. *Requesting allowance of existing shower fixture (faucet and head), provided that both penetration firestop systems are sealed with fire-blocking foam, as per 302.4.1.2.*

BEST ACCESS DOORS

Quality Access Doors - FAST !

FIRE-RATED INSULATED
BA-FW-5050

Application
- For all types of walls and ceilings
- This door should be used in walls when temperature rise or heat transmission is a factor.

Product Features
- Insulated door panel • Concealed hinge • Self-closing • Self-Latching
- Inside latch release

BA-FW-5050 Access Door Specifications:
Door / Door Frame: Steel or Stainless Steel: 20 gage door,16 gage mounting frame Door filled with 2" thick fire rated insulation, flange to be 1" wide

Hinge: Concealed

Fire Rating (Walls): UL — 1-1/2 hour "B" label. ULC — 2 hour "B" label. Max size: 36 x 48. (Ceilings): Warnock Hersey International 3 hour rated in a non-combustible ceiling. 1 hour rated in a combustible ceiling. Max size: 24 x 36

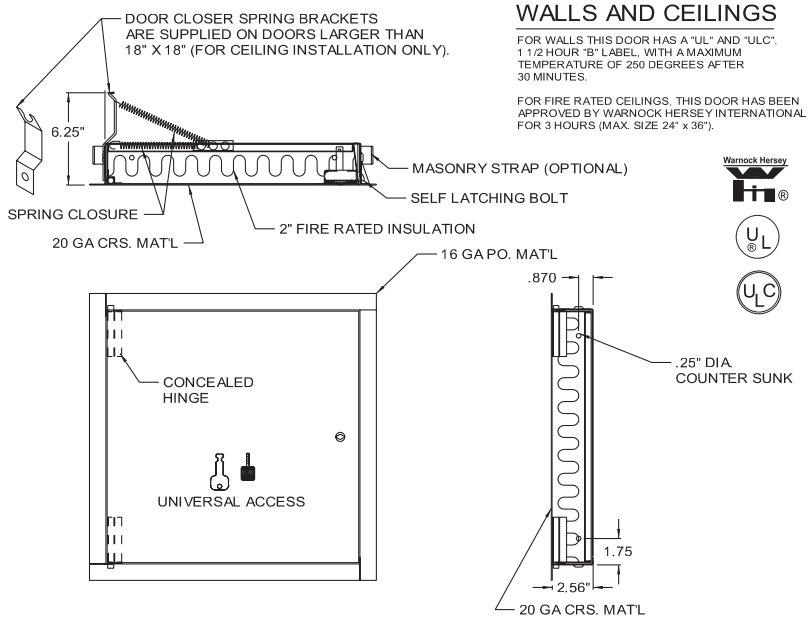
Standard Latch: Universal self-latching bolt, operated by either a knurled knob or flush key. When master keying is required, doors can be prepared for mortise cylinder locks.

Finish: Steel: 5 stage iron phosphate preparation with prime coat of white baked-on enamel. Stainless Steel: #4 satin polish

STANDARD SIZES *(Special sizes available upon request)*

NOMINAL DOOR SIZE W X H			WEIGHT PER DOOR	
inches	mm	Latches	lbs.	kg.
8 X 8	203 X 203	1	8	3.6
10 X 10	254 X 254	1	9	4.1
12 X 12	305 X 305	1	10	4.8
14 X 14	355 X 355	1	12	5.4
16 X 16	406 X 406	1	15	6.8
18 X 18	457 X 457	1	20	9.1
22 X 30	560 X 762	1	32	14.5
22 X 36	560 X 914	2	35	15.9
24 X 24	610 X 610	1	28	12.7
24 X 36	610 X 914	2	38	18.1
24 X 48	610 X 1220	2	48	21.3
30 X 30	762 X 762	2	38	18.1
36 X 36	914 X 914	2	54	24.5
36 X 48	914 X 1220	2	76	34.5

Wall or ceiling opening is W + 3/8" (9 mm)
For detailed specifications see submittal sheet



For more information, contact Best Access Doors

www.BestAccessDoors.ca

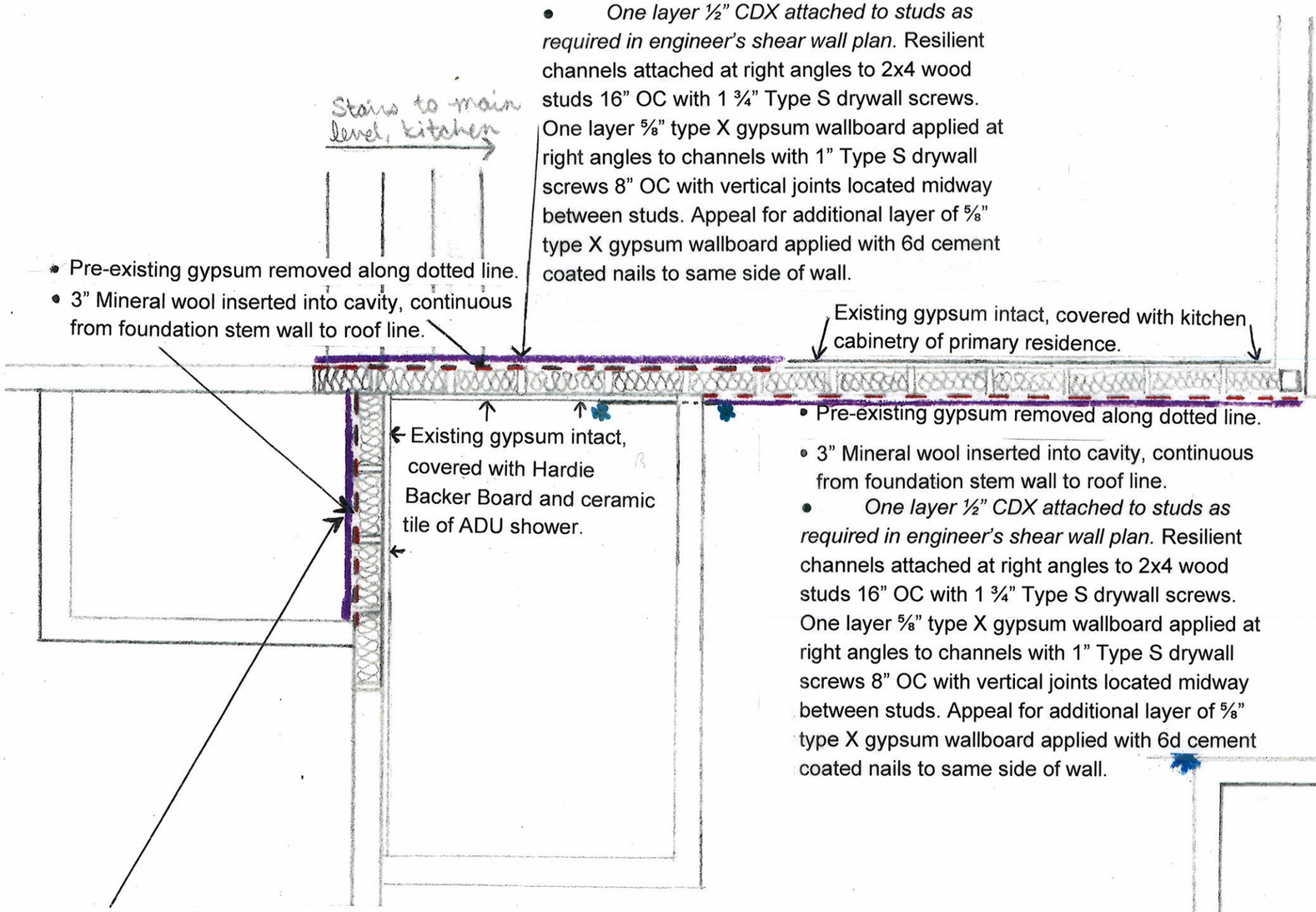
Phone: 1-800-483-0823
Fax: 1-888-828-6021
Email: info@BestAccessDoors.ca

Firewall Detail

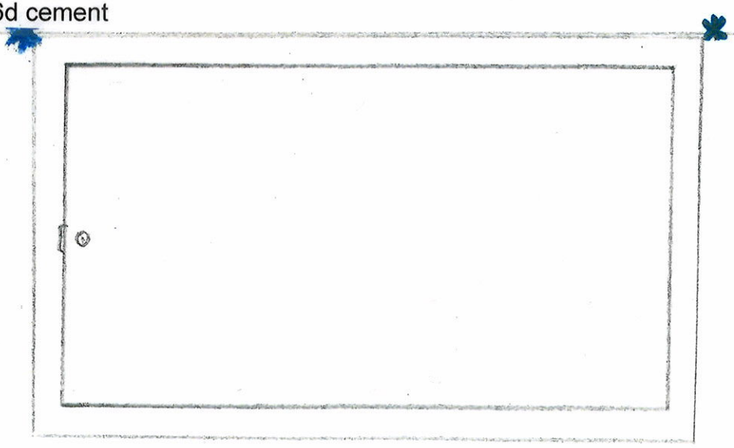
Appeal to modify GA File No. WP 3242 for interior firewall, wood framed.

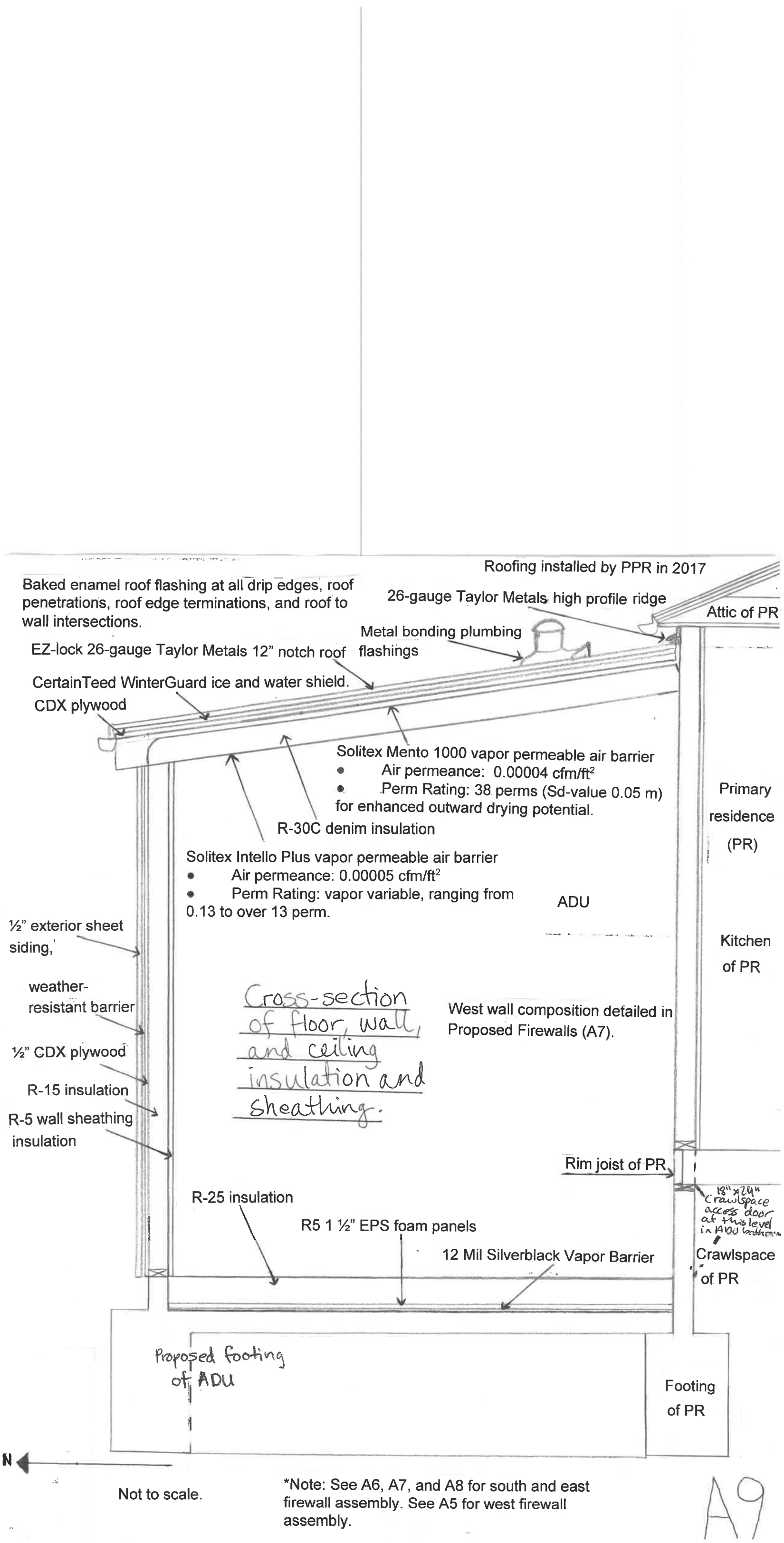
All electrical receptacles along these walls will meet fire-resistant penetration requirements.

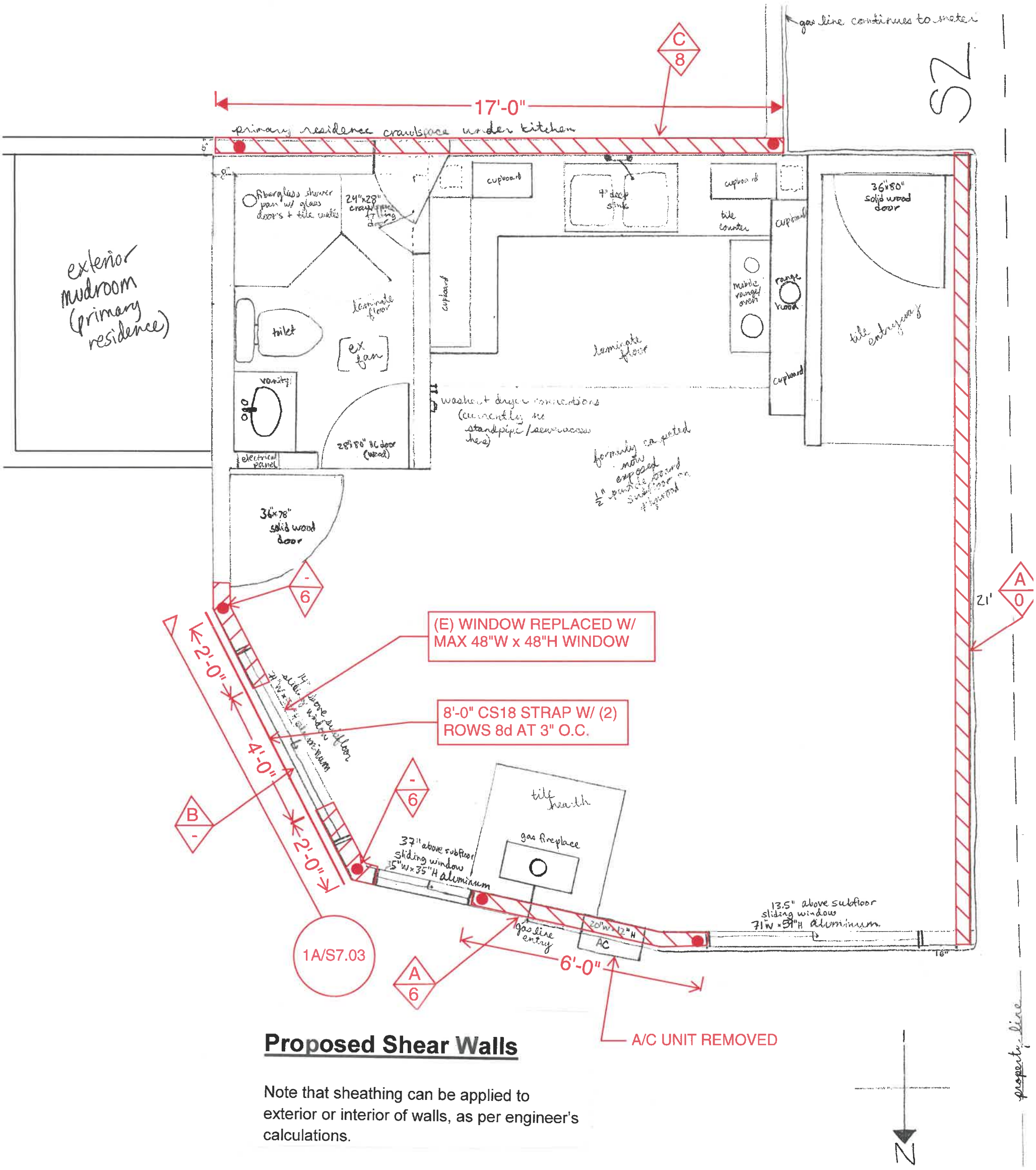
This firewall assembly to be used on common wall, from foundation stem wall to roof sheathing of ADU.



• Pre-existing gypsum removed along dotted line.
• 3" Mineral wool inserted into cavity, continuous from foundation stem wall to roof line.
• One layer ½" CDX attached to studs as required in engineer's shear wall plan. Resilient channels attached at right angles to 2x4 wood studs 16" OC with 1 ¾" Type S drywall screws. One layer ⅝" type X gypsum wallboard applied at right angles to channels with 1" Type S drywall screws 8" OC with vertical joints located midway between studs. Appeal for additional layer of ⅝" type X gypsum wallboard applied with 6d cement coated nails to same side of wall.




Roofing installed by PPR in 2017
Baked enamel roof flashing at all drip edges, roof penetrations, roof edge terminations, and roof to wall intersections.
26-gauge Taylor Metals high profile ridge
Attic of PR
Metal bonding plumbing flashings
EZ-lock 26-gauge Taylor Metals 12" notch roof
CertainTeed WinterGuard ice and water shield.
CDX plywood
Solitex Mento 1000 vapor permeable air barrier
• Air permeance: 0.00004 cfm/ft²
• Perm Rating: 38 perms (Sd-value 0.05 m) for enhanced outward drying potential.
Primary residence (PR)
R-30C denim insulation
Solitex Intello Plus vapor permeable air barrier
• Air permeance: 0.00005 cfm/ft²
• Perm Rating: vapor variable, ranging from 0.13 to over 13 perm.
ADU
½" exterior sheet siding,
Kitchen of PR
weather-resistant barrier
½" CDX plywood
R-15 insulation
R-5 wall sheathing insulation
Cross-section of floor, wall, and ceiling insulation and sheathing.
West wall composition detailed in Proposed Firewalls (A7).
Rim joist of PR
18" x 24" Crawlspace access door at this level in ADU
Crawlspace of PR
R-25 insulation
R5 1 ½" EPS foam panels
12 Mil Silverblack Vapor Barrier
Proposed footing of ADU
Footing of PR
N
Not to scale.
*Note: See A6, A7, and A8 for south and east firewall assembly. See A5 for west firewall assembly.
A9



Proposed Shear Walls

Note that sheathing can be applied to exterior or interior of walls, as per engineer's calculations.

Sheathing to be applied to interior of kitchen wall, as illustrated in page A7.

Sheathing to be applied to the exterior walls, where required, everywhere else, as described in A1.

Existing window to be replaced with smaller one, as per engineer's calculations. See P5.

Site Plan

Address:

4435 NE Campaign Street
Portland, OR 97218

Lot area: 0.2 acres (8,757 ft^2)
Zone: R5
Elevation: 218 ft
County: Multnomah
Property ID: R317947
Tax Roll: Section 19 1N 2E,
TL 3400 0.20 ACRES
Lot: TL 3400

Impervious area:

Driveway: 552 ft^2
Patio: 452.5 ft^2
Walk: 672 ft^2
Roof area:
1825 ft^2 primary building
284 ft^2 shed
42 ft^2 porch
464 ft^2 ADU
2615 total roof cover
Total: 4291.5 ft^2

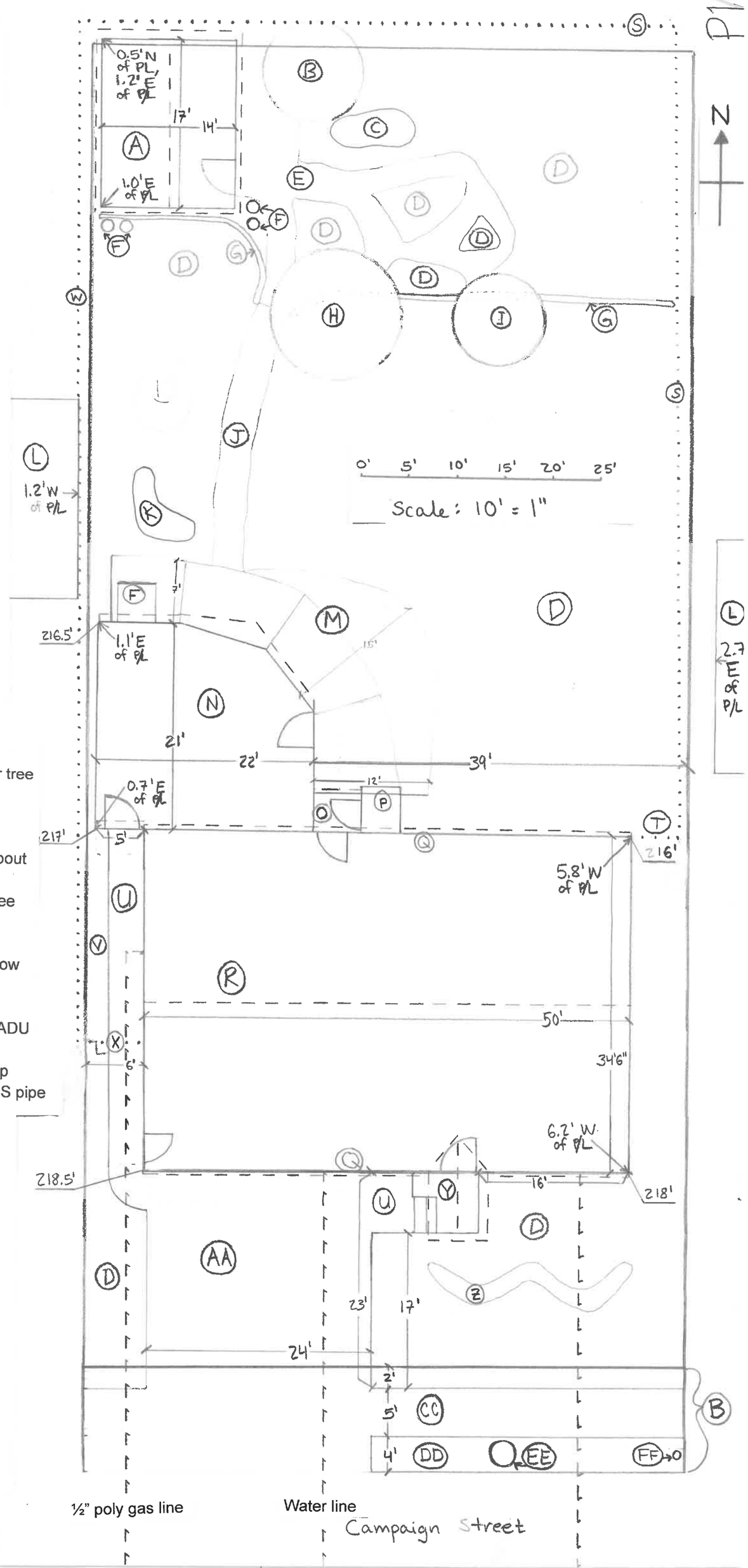
Building coverage:

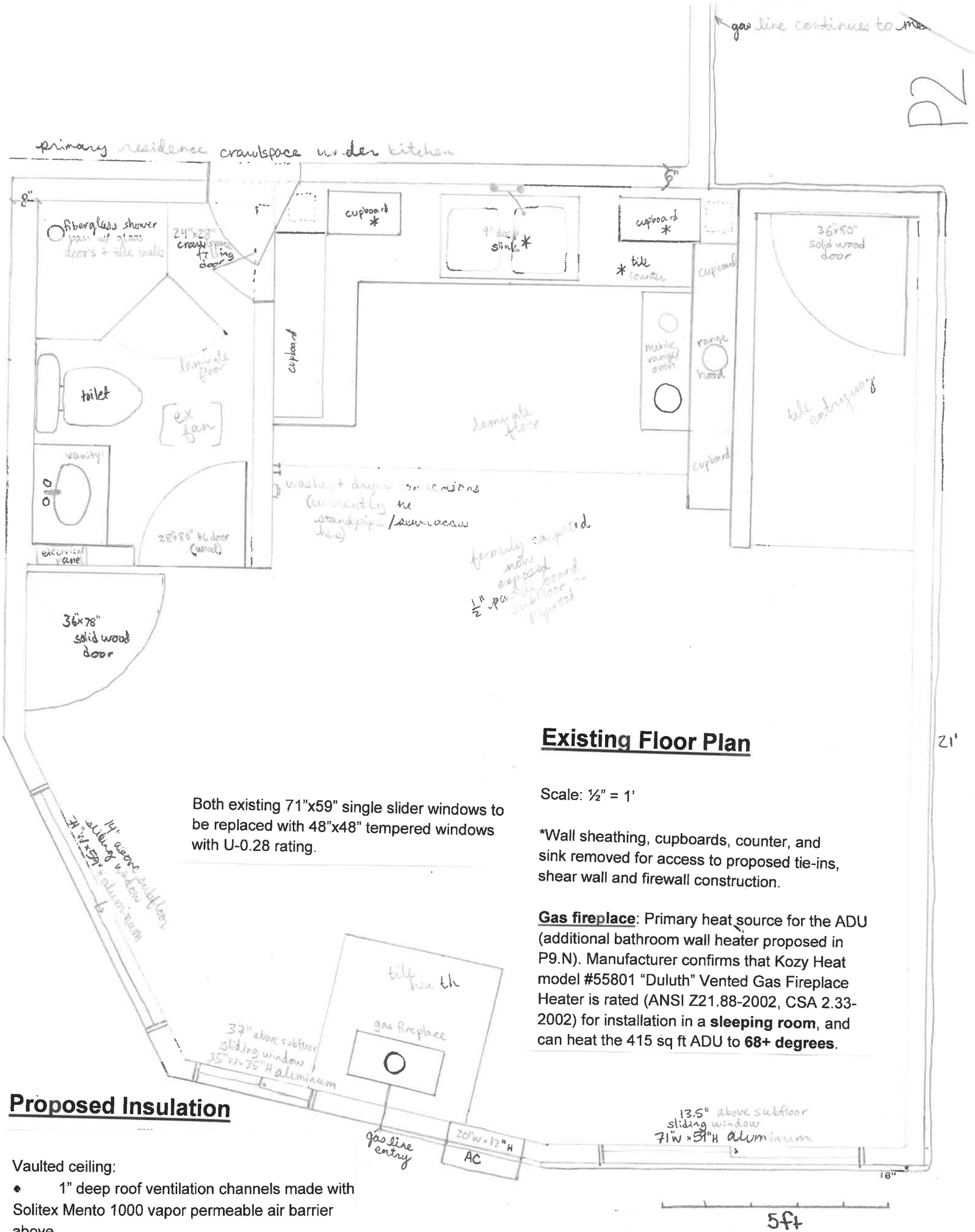
Primary building footprint: 1745 ft^2
Shed footprint: 239 ft^2
ADU footprint: 415 ft^2
Total: 2399 ft^2

Legend

A. Shed
B. 11" diameter Port-Orford cedar tree
C. Prefabricated pond
D. Garden area
E. Brick pathway
F. Rain tank connected to downspout
G. Ornamental cinder block wall
H. 8" diameter Japanese maple tree
I. 8" diameter rhododendron
J. Natural stone pavers
K. Rain garden for rain tank overflow
L. Neighbor's adjacent garage
M. Cement patio
N. ***Pre-existing nonconforming*** ADU
O. Mudroom
P. Wood porch and 1 concrete step
Q. Downspout into pre-existing ABS pipe and drain system
R. Primary residence, built 1951
S. 5' tall fence
T. 5' tall gate
U. Concrete walk
V. 1'x1' pavers
W. 4' tall fence
X. 4' tall gate
Y. Covered porch
Z. Rain garden for gutter overflow
AA. Concrete driveway
BB. Right of way
CC. Concrete sidewalk
DD. Planting strip
EE. Choctaw crepe myrtle, permitted 2016 via Friends of Trees
FF. Street light

– – – –Roof line





Existing Floor Plan

Scale: ½" = 1'

*Wall sheathing, cupboards, counter, and sink removed for access to proposed tie-ins, shear wall and firewall construction.

Gas fireplace: Primary heat source for the ADU (additional bathroom wall heater proposed in P9.N). Manufacturer confirms that Kozy Heat model #55801 "Duluth" Vented Gas Fireplace Heater is rated (ANSI Z21.88-2002, CSA 2.33-2002) for installation in a **sleeping room**, and can heat the 415 sq ft ADU to **68+ degrees**.

Proposed Insulation

Vaulted ceiling:

- 1" deep roof ventilation channels made with Solitex Mento 1000 vapor permeable air barrier above
- R-30C* denim insulation above
- Pro-Clima Intello Plus vapor permeable air barrier.

*Note that this is allowed, because the roof of the ADU is only 20% of the entire roofed housing at this property.

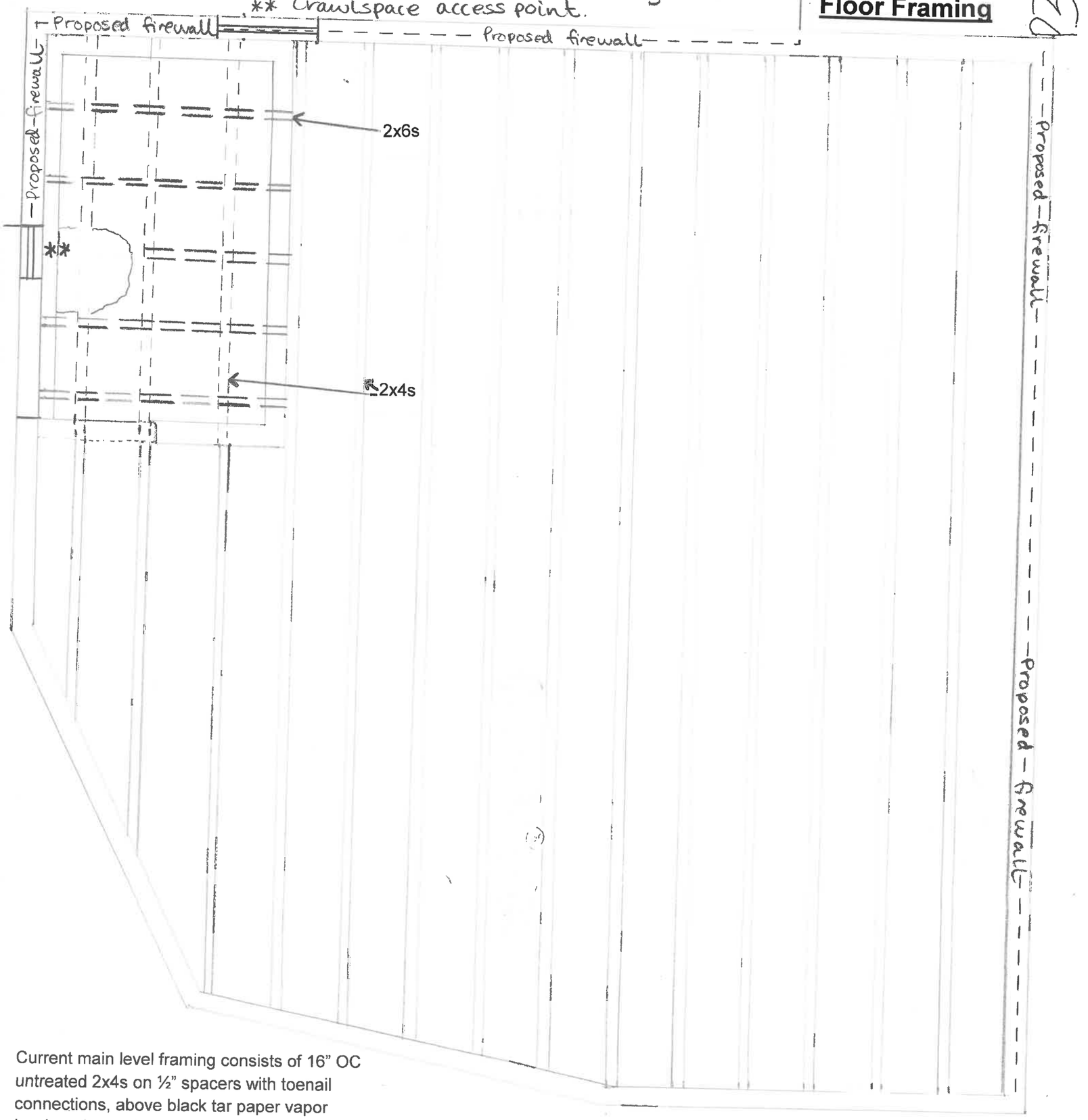
Floor:

- Current floor is too shallow for sufficient insulation. Proposed 2x10 framing on existing concrete slab, to allow R-30 insulation to be inserted into floor frame.

Exterior walls:

- Stud bays of main room are all open, allowing for insulation to be inserted into stud bays and with rigid board sheathing on top of that. Insulation with R-value of 15 in wall cavity with R-5 sheathing under ½" interior drywall. Exterior sheathing includes ½" CDX plywood, weather-resistant barrier, and ½" exterior sheet siding, as detailed in A1.
- West wall composition detailed in Proposed Firewalls (A7).

Floor Framing



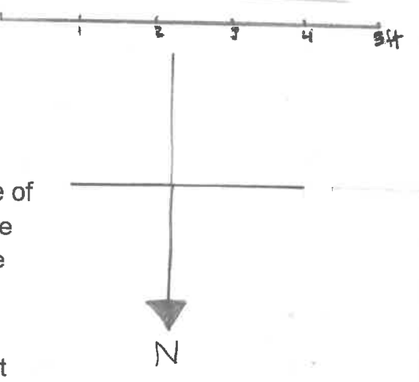
Current main level framing consists of 16" OC untreated 2x4s on ½" spacers with toenail connections, above black tar paper vapor barrier, above slab.

Bathroom floor consists of ½" subfloor, above 16" OC 2x6s on ½" spacers with toenail connections, above two layers of main level subfloor, above 16" OC untreated 2x4s on ½" spacers, above black tar paper vapor barrier, above slab. Note that floor is supported by 2x4s instead of 2x6s in immediate plumbing service area, for accessibility. Concrete slab and main level 2x4 framing is also removed in this area.

**Crawlspace access here. Changes proposed to crawlspace access points:

- South access: Proposed conversion to 1.5-hour fire-resistant self-latching gasketed door at crawl-space entry, consistent with proposed south firewall.
- East access: Proposed removal of exterior plumbing service access door.

Scale: ½" = 1'



Propose to lift floor higher, for increased volume of insulation, and to bring the living area floor to the same level as the bathroom. Space will be more ADA accessible as one-level. This will in turn require modification of existing doors and gas fireplace duct height. New framing would consist of 16" OC pressure treated 2x10s on new 12 Mil vapor barrier atop existing concrete slab.

Firewall Detail

Appeal to modify GA File No. WP 3242 for interior firewall, wood framed.

All electrical receptacles along these walls will meet fire-resistant penetration requirements.

This firewall assembly to be used on common wall, from foundation stem wall to roof sheathing of ADU.