

# Housing Support – Pre-Approved Plans

**Matt Tucker & Shannon Davis, Building Inspection Division**  
**Housing Policy Committee, January 22, 2026**



# *Housing* **FORWARD**

## **#1** Increase Housing Choice

- Develop pre-approved plan models for Accessory Dwelling Units (ADUs)



# First, let's talk about primary dwellings

What do we know

- Need a supply of infill vacant lots (*don't have*)
- Need a supply of builders (*don't have*)
- Need partners (architects and code designers) to prepare the plans and sell them to builders (copyright problems, revisions)



There are cities with significant availability of infill vacant lots

These places have identified that building plans could be a barrier to delivering needed housing

Kalamazoo, Michigan  
South Bend, Indiana



What their programs appear to do:

- City has worked with a designer to have plans prepared that are pre-approved
- Customer purchases plans from designers
- Customer wants changes, that affects pre-approval, but there are some minor modifications worked into plans



For Madison, this would be an expensive program resulting in very few (if any) homes built

Our limited staff time and financial resources need to be wisely spent

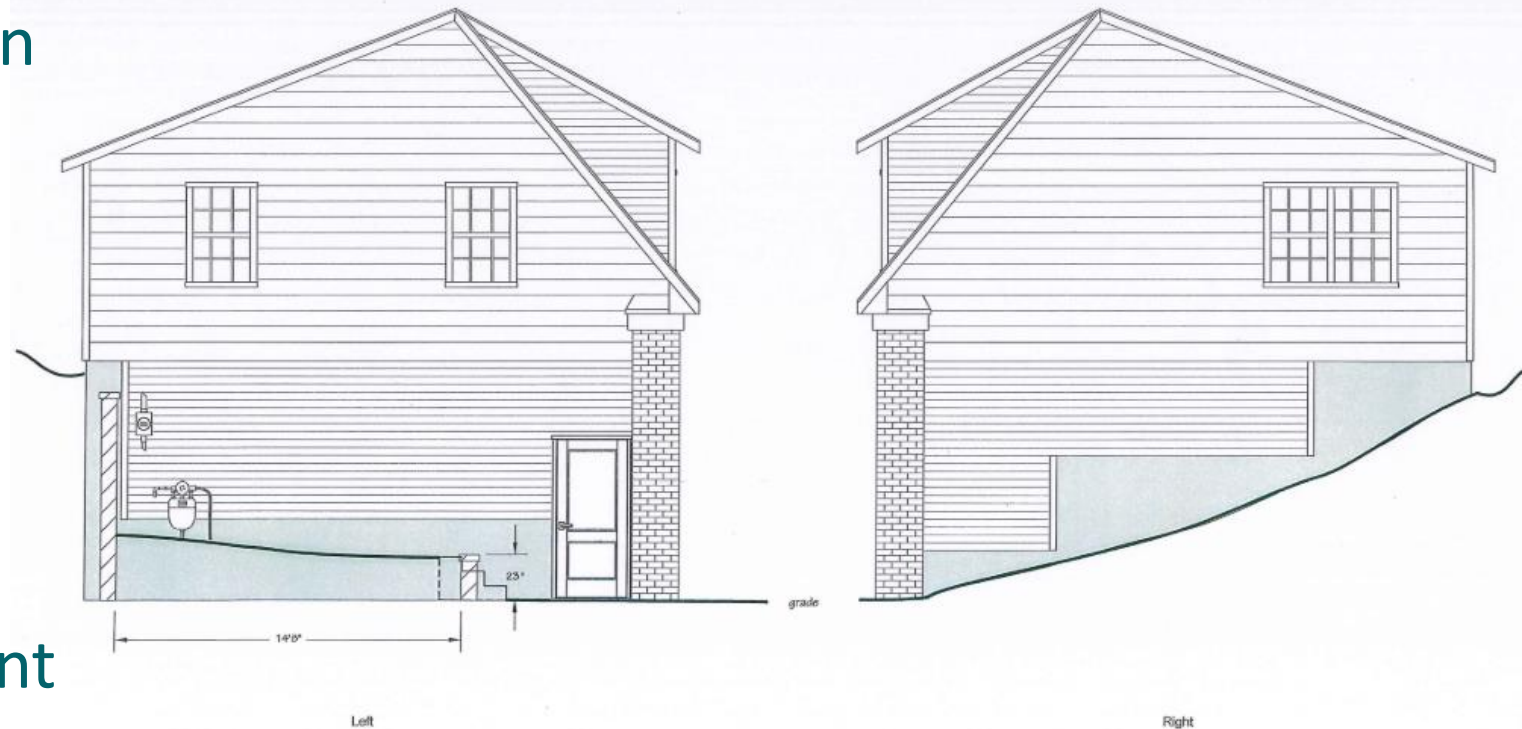
However, backyard opportunities exist on nearly every residential lot in the City... ADU opportunity



# Our Experience with Pre-approved Plans

## Site specific elements

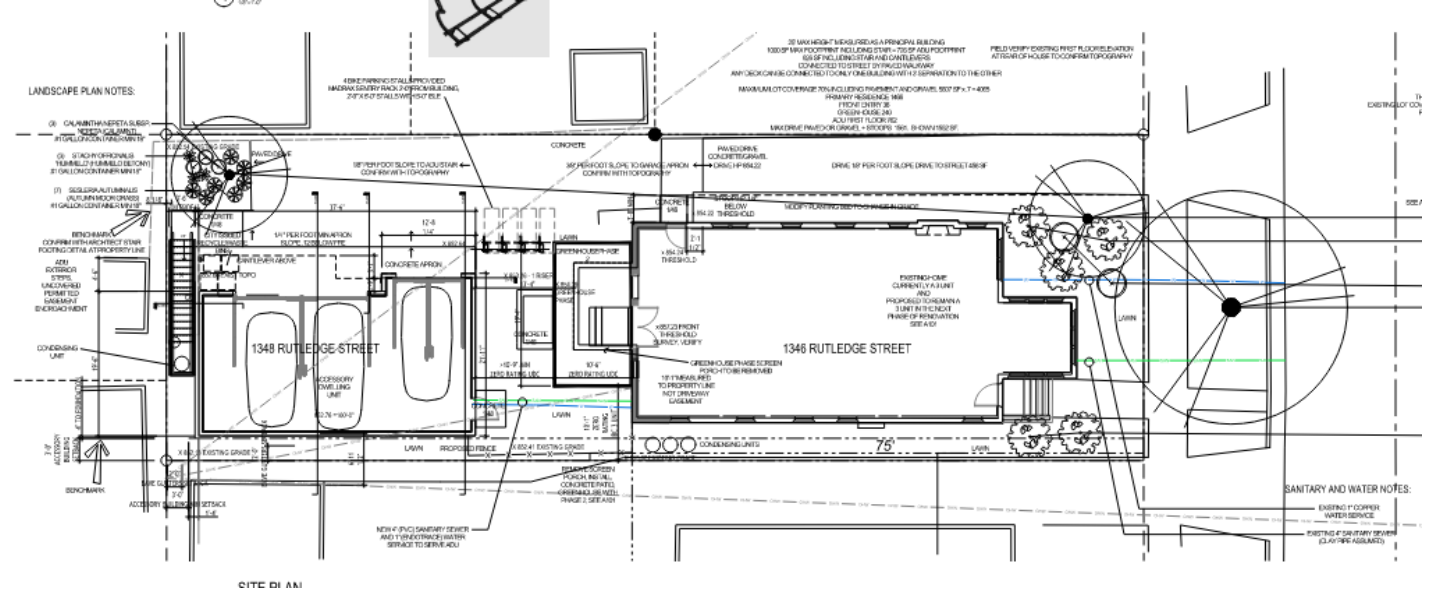
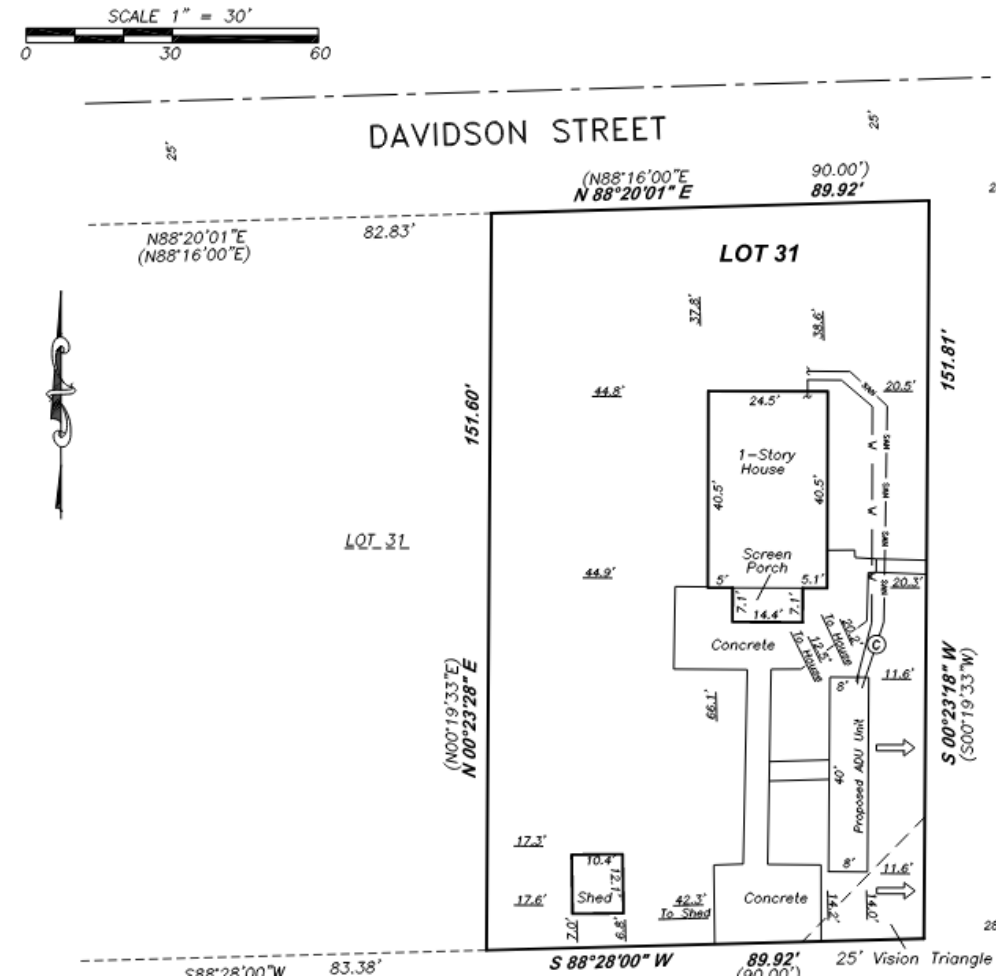
- Slope, grade, exposure
- Soil composition
- Retaining walls
- Foundation
- Wind load
- Fire separation
- Zoning
- Utility placement
- Street access/curb cuts



# Our Experience with Pre-approved Plans



Site design: drainage, water/sewer, electric service, connection to street

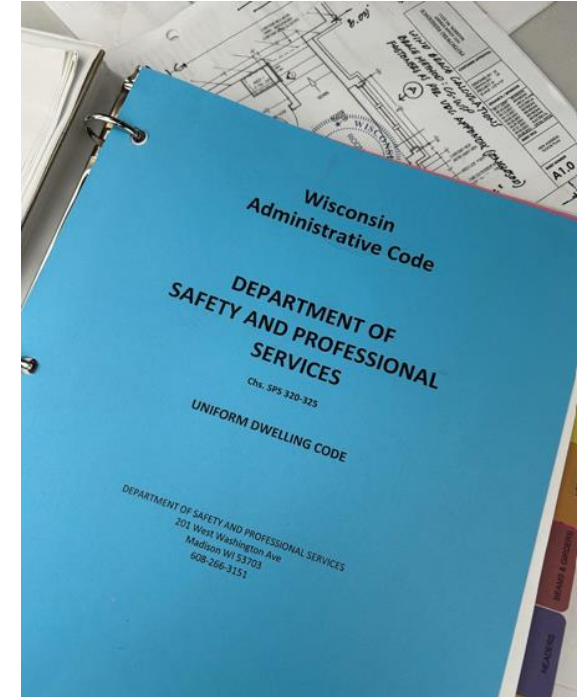




# Our Experience with Pre-approved Plans

## Building Code:

- Adopted by the State legislature
- Administered by the Department of Safety and Professional Services (DSPS)
- Madison is required to adopt the state Uniform Dwelling Code (UDC)
- Cannot be more or less restrictive than the state adopted building code



Welcome to  
**Department of Safety & Professional Services**

Protecting the Public, Promoting Progress

The mission of the Department of Safety and Professional Services is to promote economic growth and stability while protecting the citizens of Wisconsin as designated by statute.





# Our Experience with Pre-approved Plans

- Few options for customization
- Minor changes have big consequences
  - Window & door size, precise location
  - Exact ceiling & wall height
  - Interior layout
    - Closet size, Shower addition, Office vs. Bedroom



# Our Experience with Pre-approved Plans

- Changing window height from 5'-4" to 5'-5"

**Table 321.25-H<sup>a, b</sup>**

**MINIMUM WIDTHS OF CS-WSP AND CS-SFB BRACED WALL PANELS**

Maximum Opening Height Adjacent to Braced Wall Panel	Minimum Width of Full-Height Braced Wall Panel (inches)			
	8' Tall Wall	9' Tall Wall	10' Tall Wall	12' Tall Wall
5'-4"	24	27	30	36
6'-8"	32	30	30	36
8'	48	41	38	36
9'	-	54	46	41
10'	-	-	60	48
12'	-	-	-	72

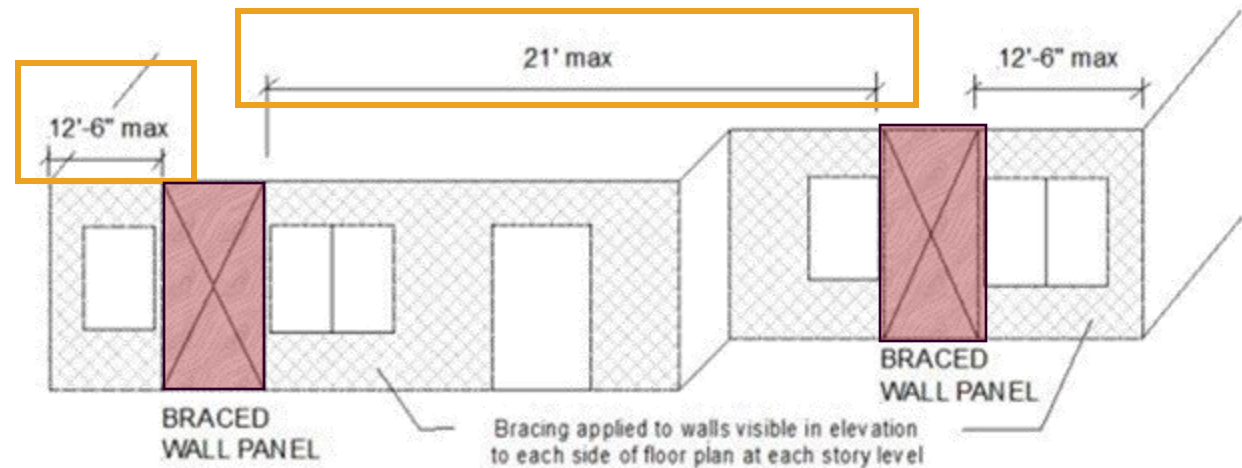
<sup>a</sup>Sheathing shall extend from the top of the top plate to the bottom of the bottom plate and may be multiple sheets. All joints shall be blocked.

<sup>b</sup>Interpolation is permitted.

# Our Experience with Pre-approved Plans

- Slight adjustments to windows/doors impact bracing plans

Figure 321.25-C  
LOCATION OF BRACED WALL PANELS ALONG A BUILDING SIDE\*



\*A braced wall panel can be anything from one-half to one brace panel.

# A Local Designer's Experience with Pre-Approved Plans for a 24' x 24' Detached Garage



Each customer wanted customization

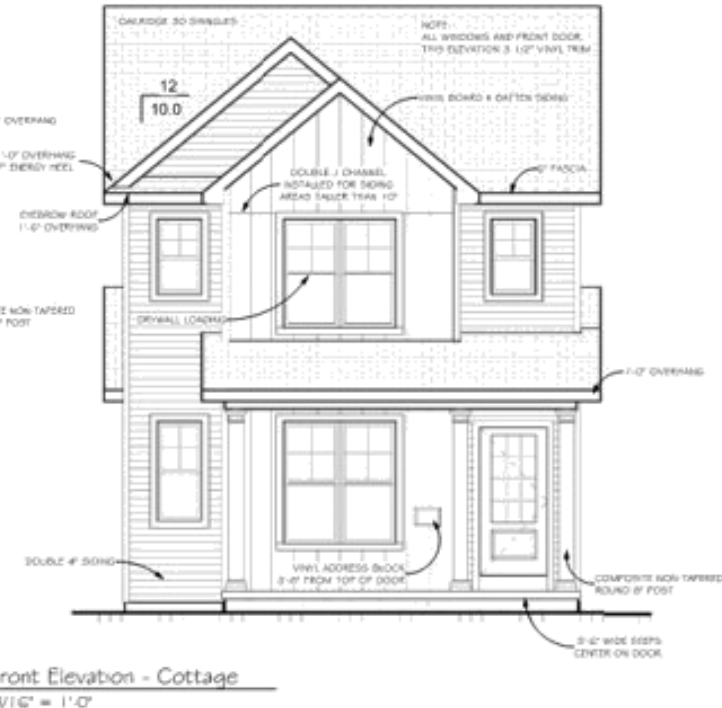
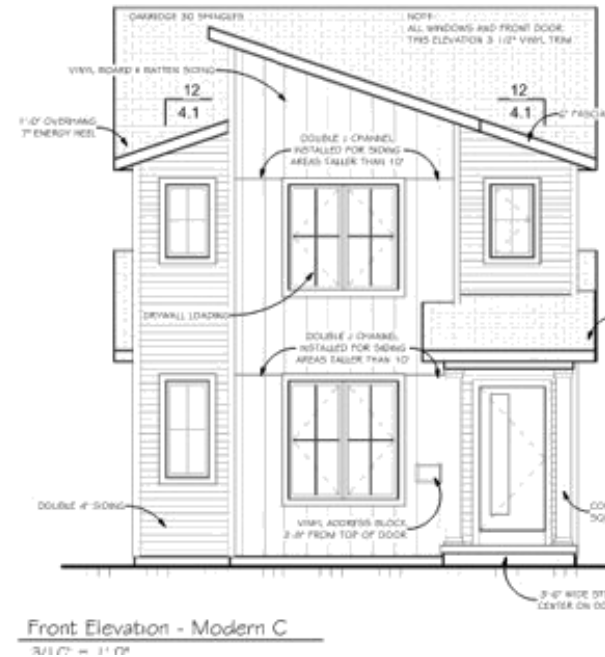
- Add/delete a window/door
- Move a door
- Flip side of door, flip gable end of roof

Bottom line, no interest from customers, pre-approved plan idea abandoned

# Our Experience with Pre-approved Plans

## Veridian Homes

- 2021 - City pre-approved 12 model home plans



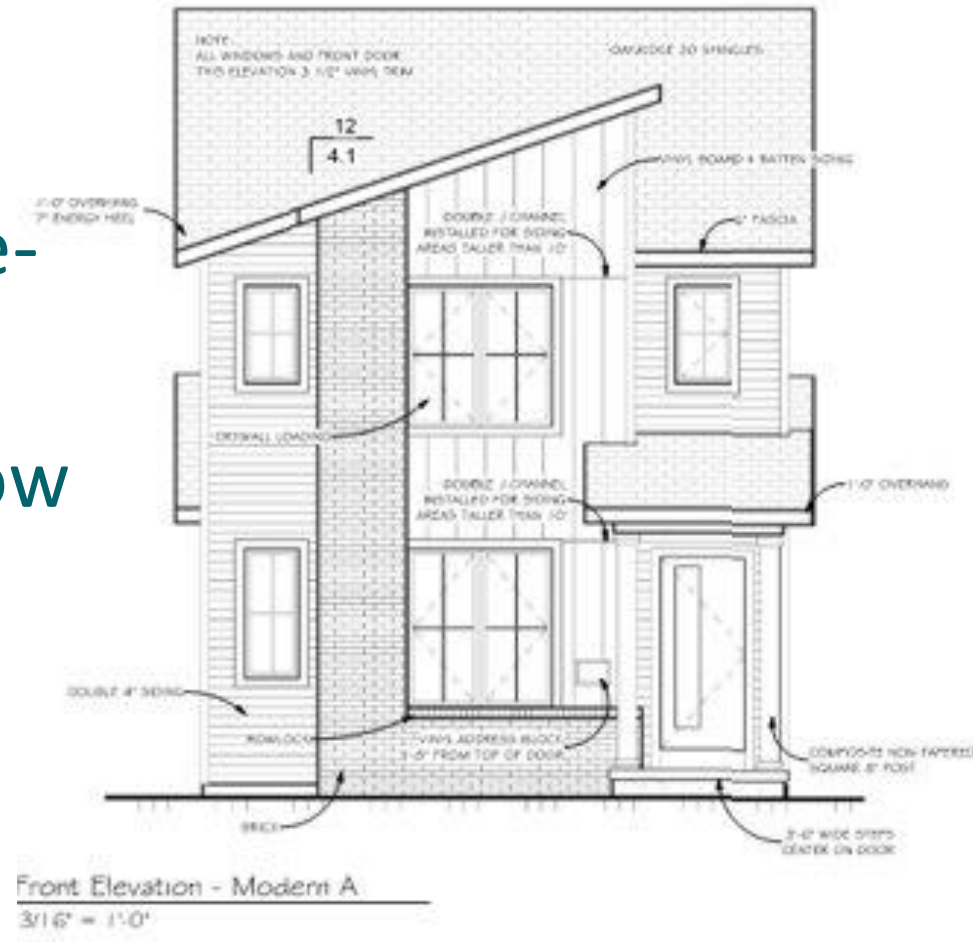




# Our Experience with Pre-approved Plans

## Veridian Homes

- Due to customization demands, no pre-approved plans were used
- Small changes (2" door move or window enlargement) have big implications



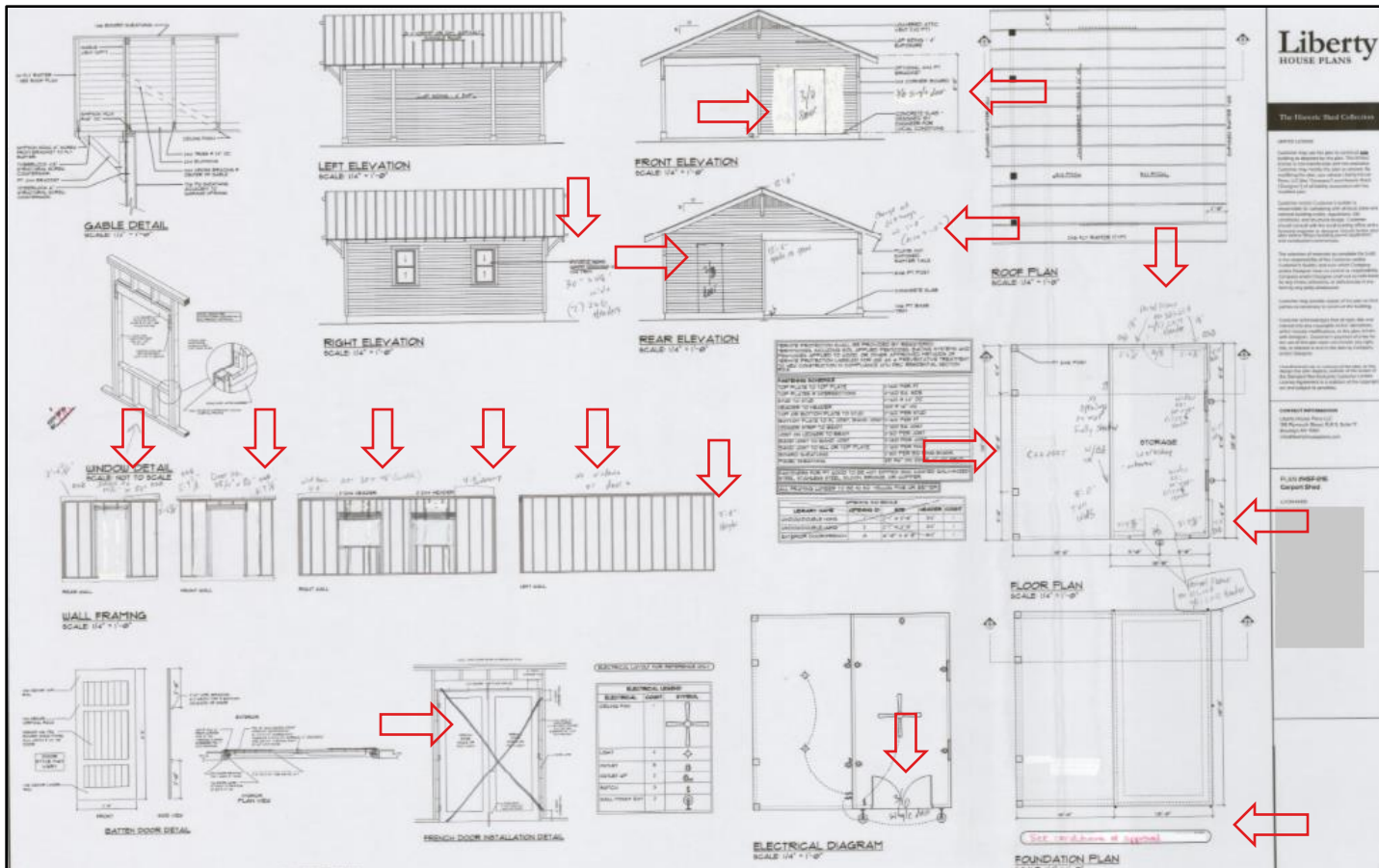


# Our Experience with Pre-approved Plans

## Simple shed/carport plan

- 2024 - local contractor attempted to work with a model plan purchased by a homeowner
- Customization to meet homeowner's needs resulted in **4 months** of revisions/review

# Our Experience with Pre-approved Plans



- Foundation design
- Add windows
- Change door from double to single
- Change overhang
- Update wind bracing
- Update framing



# Our Experience with Pre-approved Plans

- Plans could not be altered enough to meet Zoning requirements (minimum setback not met due to structure size)
- Builder hired local architect who drew new plans
- New plans designed by architect to suit the site and customer were approved within one week







# Our Experience with Pre-approved Plans

Beyond building plans, new home design requires:

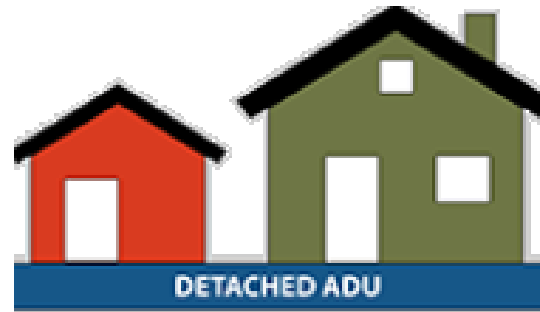
- WI state licensed builders and mechanical contractors
- Supply chain logistics
- Site design
- Updates as minimum codes change



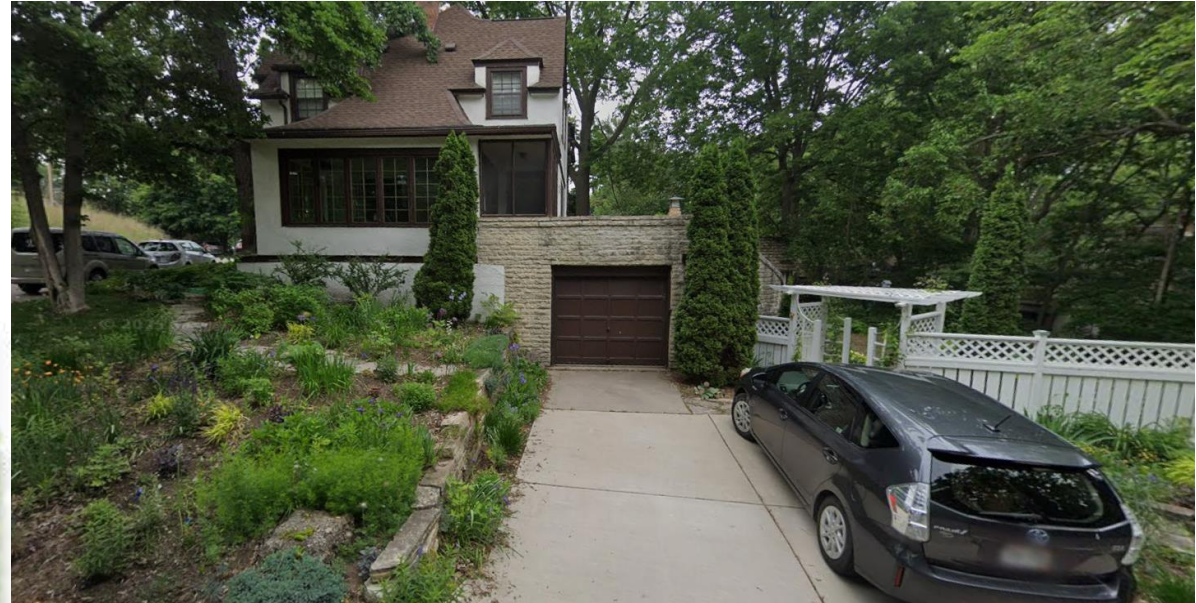
Let's move past primary dwellings because this is not an issue in Madison

Let's talk about ADU's.

# ADUs come in many forms

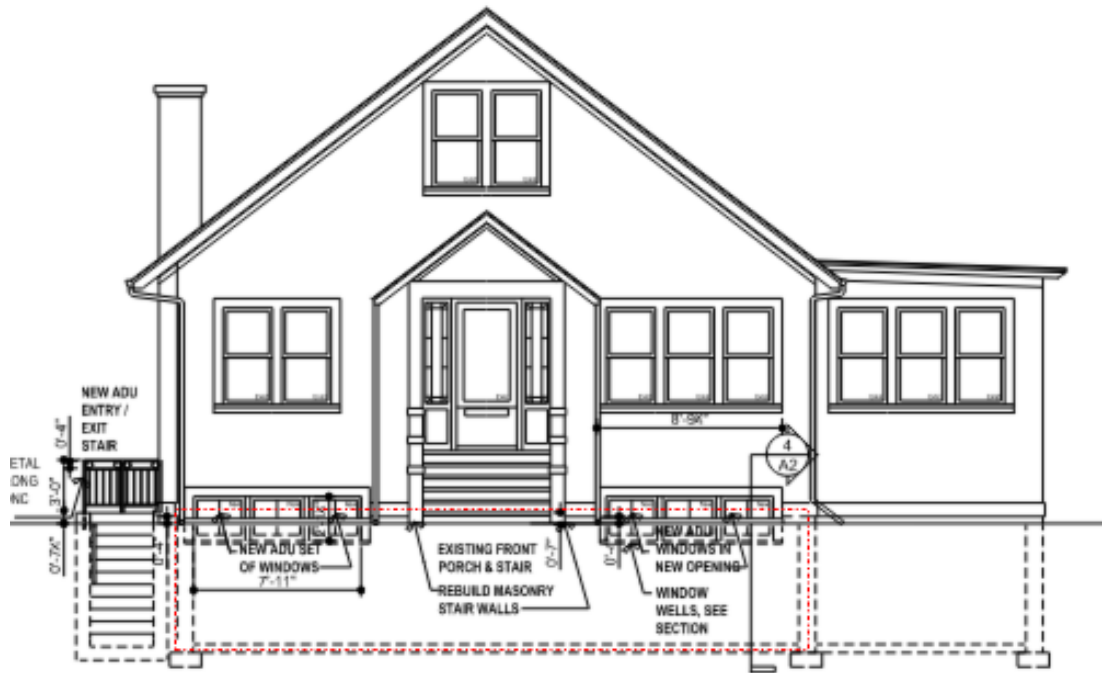


## Examples - Attached ADUs





# Examples - Basement ADUs



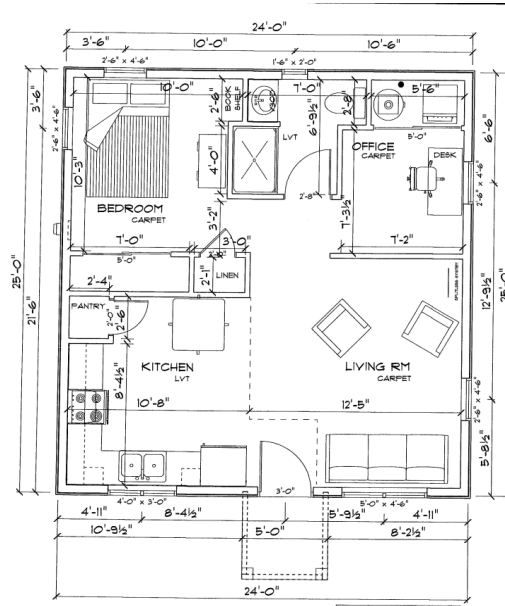
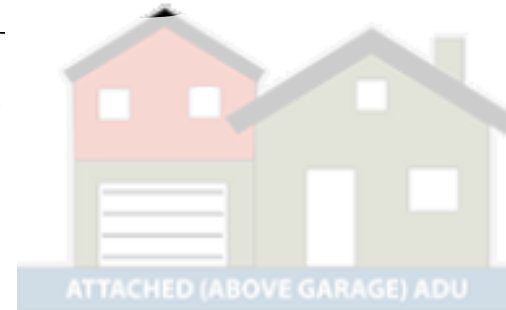


## Examples – Detached ADUs





# Pre-approved plans/designs would focus on *detached* ADUs

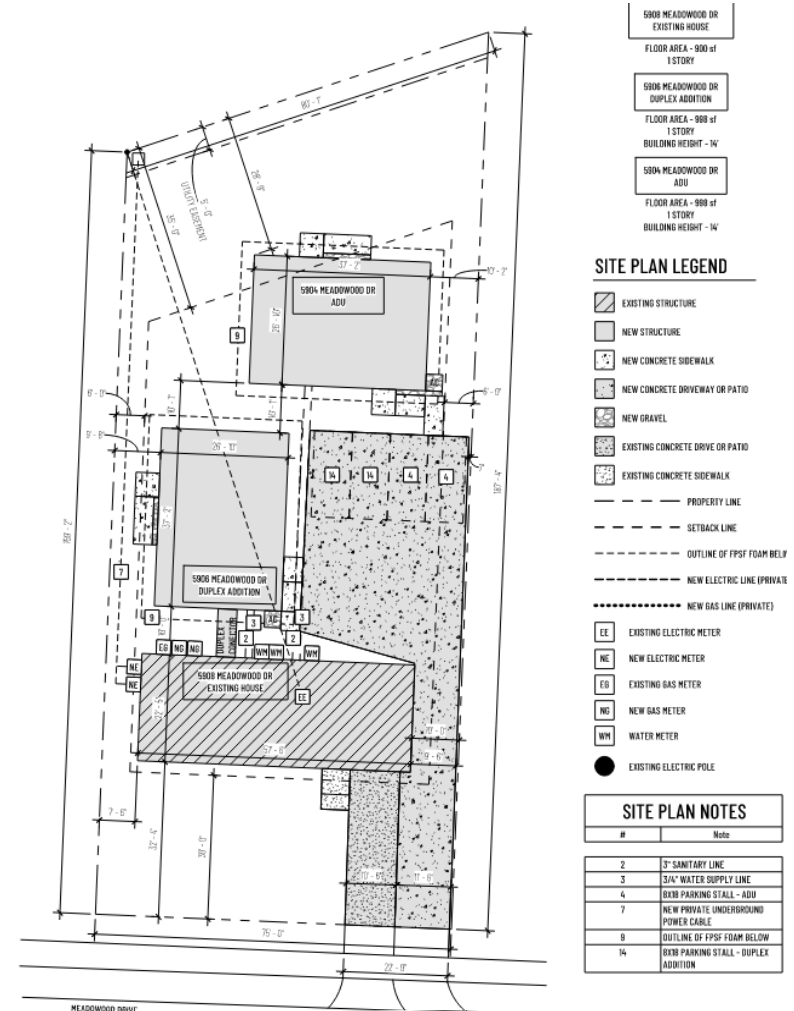


<https://madison.legistar.com/View.ashx?M=F&ID=4459542&GUID=28395B00-A1C2-4098-B694-EBFB59E02D83>

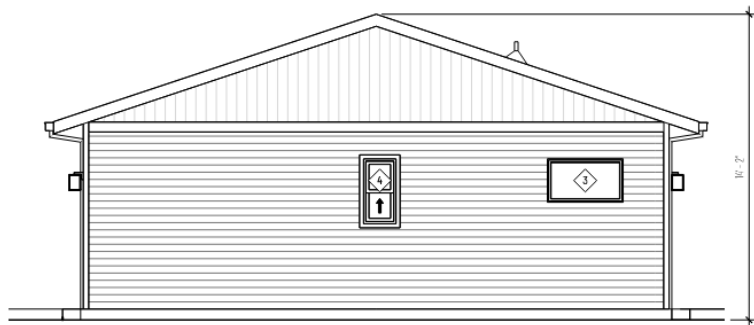
# Example - Plans for new ADU



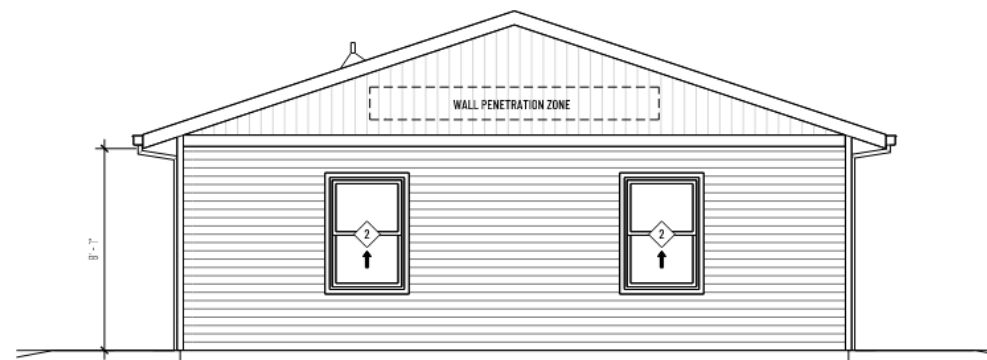
**1 FRONT ELEVATION**  
1/4" = 1'-0"



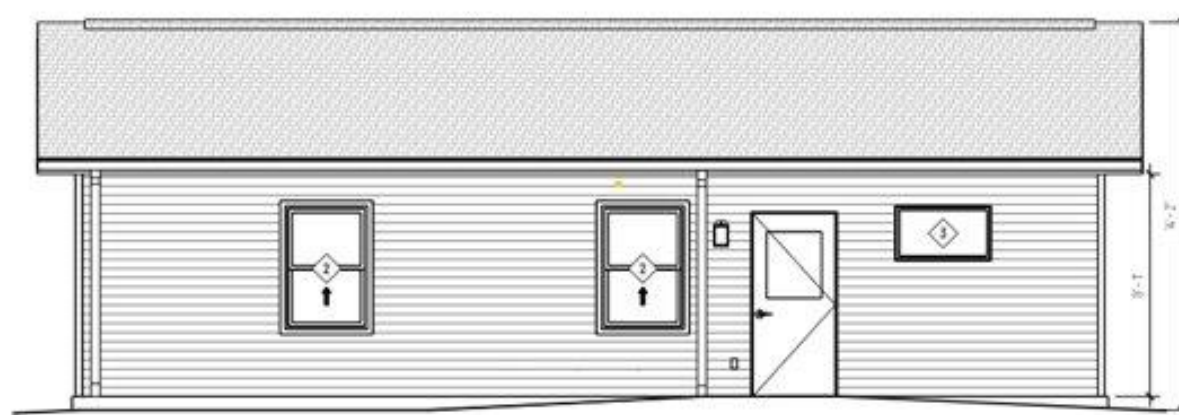




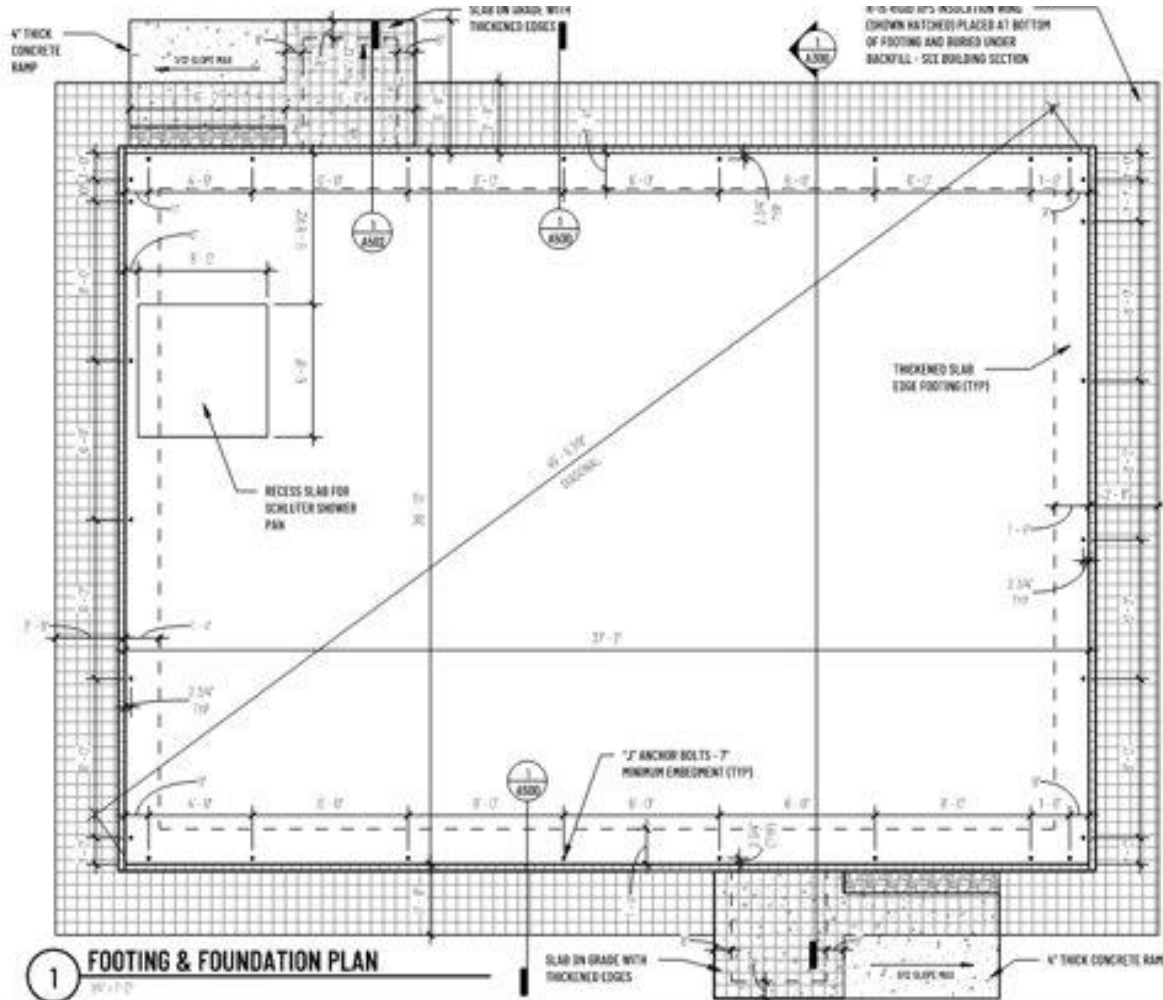
1 RIGHT ELEVATION  
1/4" = 1'-0"



1 LEFT ELEVATION  
1/4" = 1'-0"



1 BACK ELEVATION  
1/4" = 1'-0"



#### FROST PROTECTED SHALLOW FOUNDATION NOTES & ASSUMPTIONS:

1. ALL DESIGN PARAMETERS FOR FROST-PROTECTED SHALLOW FOUNDATIONS, INCLUDING INSULATION DEPTH, HORIZONTAL INSULATION WIDTH, AND ANY ADJUSTMENTS FOR HEATED VERSUS UNHEATED STRUCTURES, MUST ADHERE TO ASCE 32-01 PER WISCONSIN SPS 321.18.
2. THE DESIGN ASSUMES A MINIMUM SOIL BEARING CAPACITY OF 2,000 PSF USING NON-FROST-SUSCEPTIBLE SOIL.
3. THE DESIGN IS BASED ON AN AIR-FREEZING INDEX OF 2,500 DEGREE °F-DAYS OR LESS, WITH A MEAN ANNUAL AIR TEMPERATURE OF 42.4°F OR GREATER.
4. INSULATION R-VALUES, LOCATIONS, AND DIMENSIONS ARE CONSIDERED THE MINIMUM AS DESIGNED AND SHALL NOT BE REDUCED.
5. INSULATION EXPOSED TO THE EXTERIOR SHALL BE PROTECTED AGAINST DAMAGE AND WATER INFILTRATION PER ASCE 32-01 STANDARDS.
6. BACKFILL MATERIAL SHALL BE COMPACTED AND CONSIST OF NON-FROST-SUSCEPTIBLE SOIL, AS SPECIFIED IN SPS 321.
7. THE INTERIOR OF THE HOME MUST BE CONTINUOUSLY HEATED TO A MINIMUM TEMPERATURE OF 64°F OR HIGHER, PER ASCE 32-01, TO ENSURE FROST PROTECTION.

**1 FOOTING & FOUNDATION PLAN**

HAMILTON HOME DESIGN LLC

10720 HAMILTON HOME DESIGN  
NORTH BEND, WI

AARON CONTRACTING LLC  
ACCESSORY DWELLING UNIT

5404-75 (REVISED) DR., MADISON, WI

FOOTING & FOUNDATION PLAN

Project number  
Date

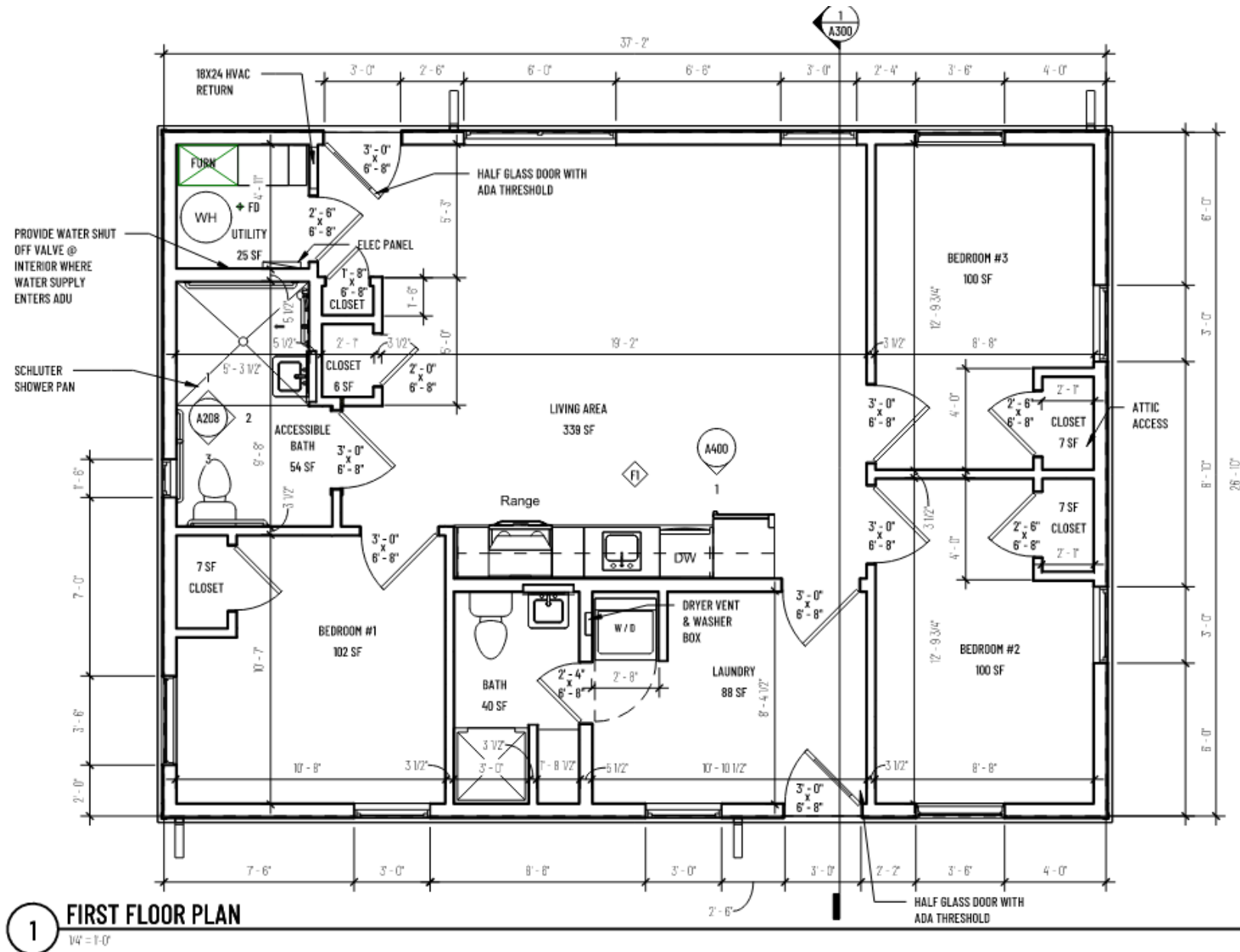
25-A  
11/15/2025

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**A100**









## WALL, FLOOR, AND ROOF TYPE NOTES:

1. ALL WALLS TO BE TYPE P1 UNO.
2. INSTALL ALL PRODUCTS PER MANUFACTURERS PREFERRED RECOMMENDATIONS.
3. FOUNDATION WALL & FOOTING THICKNESS, DIMENSIONS, REINFORCEMENT, AND CONCRETE MIX TO MEET OR EXCEED ALL APPLICABLE CODES - CALCULATE HEIGHT OF UNBALANCED FILL AND SIZE FOUNDATION WALL THICKNESS AS REQUIRED.

### WALL ASSEMBLIES

TYPE	WALL ASSEMBLY
P1	1/2" GWB 2X4 WOOD STUDS @ 16" OC MAX R-11 UNFACED FIBERGLASS INSULATION 1/2" GWB (OMIT AT CONCEALED SPACES)
P2	1/2" GWB 2X6 WOOD STUDS @ 16" OC MAX R-11 UNFACED FIBERGLASS INSULATION 1/2" GWB
P3	SIDING (SEE ELEVATIONS FOR MATERIALS) WEATHER BARRIER 7/16" WOOD SHEATHING 2X6 STUDS @ 16" OC R-21 FIBERGLASS BATT INSULATION BETWEEN VAPOR BARRIER 1/2" GWB

### FLOOR ASSEMBLIES

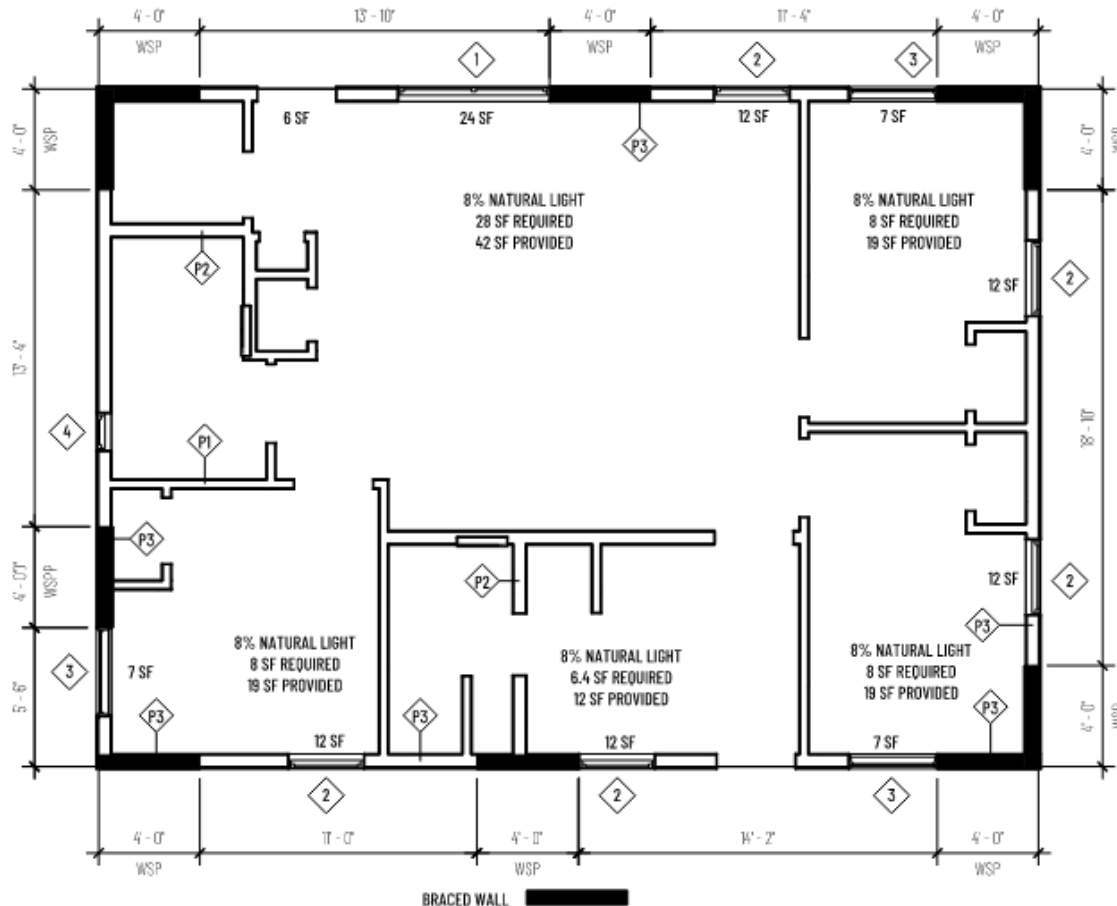
TYPE	FLOOR ASSEMBLY
F1	4" CONCRETE SLAB (3500 PSI MIN) 10 MIL MIN UNDERSLAB VAPOR BARRIER R-10 RIGID INSULATION (R-15 SLAB EDGE & WING INSULATION) 6" MIN GRAVEL WITH LESS THAN 6% OF MASS PASSING A #200 SIEVE PER SECTION 4.2 ASCE 32-01

### ROOF ASSEMBLIES

TYPE	ROOF ASSEMBLY
R1	40 YEAR ARCHITECTURAL SHINGLES SYNTHETIC UNDERLAYMENT 1/2" SPAN RATED WOOD SHEATHING WITH H CLIPS WOOD TRUSSES @ 24" OC R-48 BLOWN CELLULOSE INSULATION VAPOR BARRIER 5/8" GWB

## WINDOW & DOOR NOTES:

1. WINDOW SIZES R/O TO BE VERIFIED W/ OWNER SELECTED MANUFACTURER
2. OWNER / CONTRACTOR RESPONSIBLE FOR VERIFYING SELECTED MANUFACTURERS WINDOWS MEET APPLICABLE CODES CONCERNING EGRESS, NATURAL LIGHT, & SAFETY GLAZING



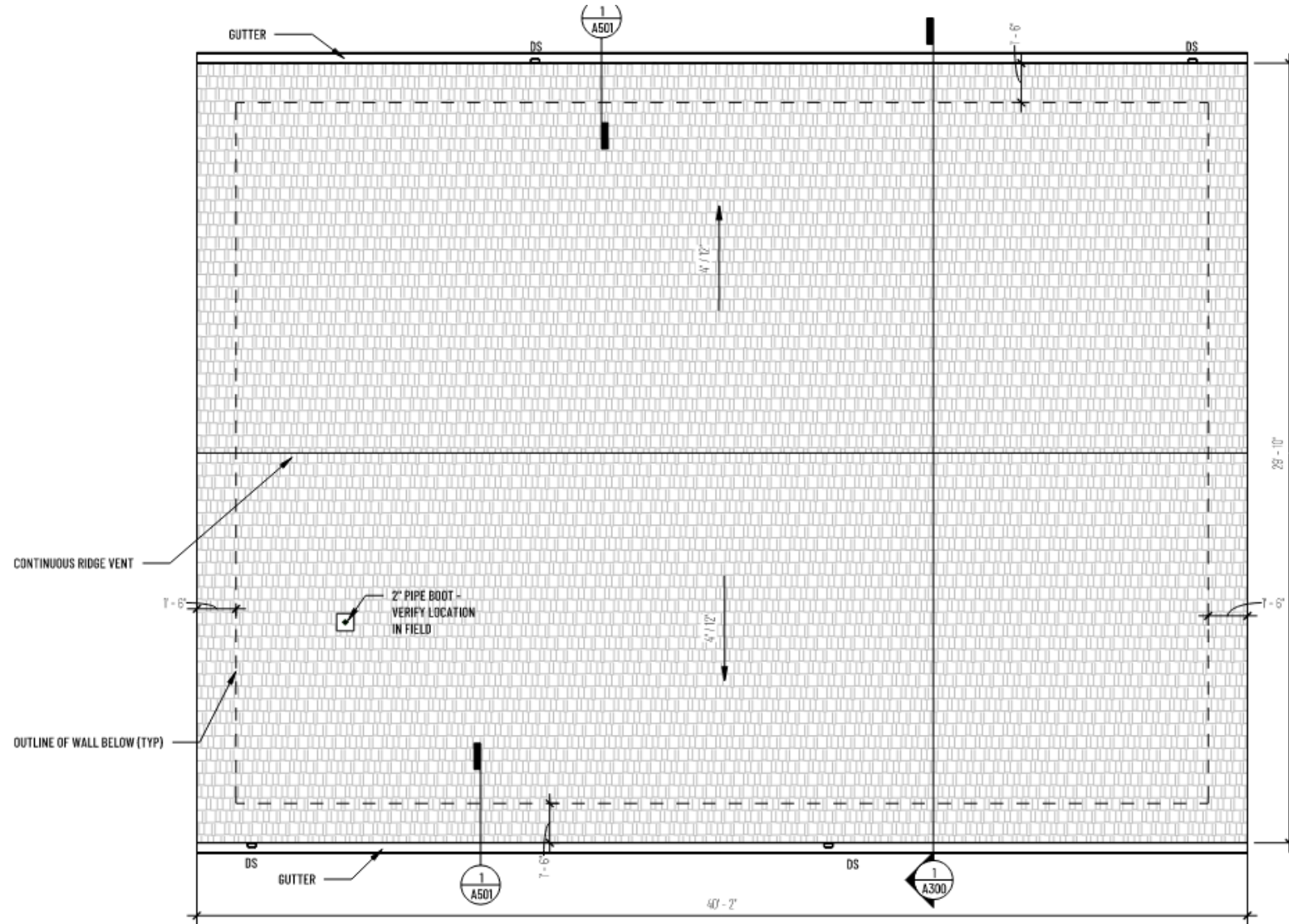
### WINDOW SCHEDULE

#	Height	Width	Sill Height
1	4' - 0"	6' - 0"	2' - 9 1/8"
2	4' - 6"	3' - 0"	2' - 5 3/8"
3	2' - 0"	3' - 6"	4' - 11 3/8"
4	3' - 0"	1' - 6"	3' - 11 3/8"

1

## FIRST FLOOR WALL BRACING PLAN

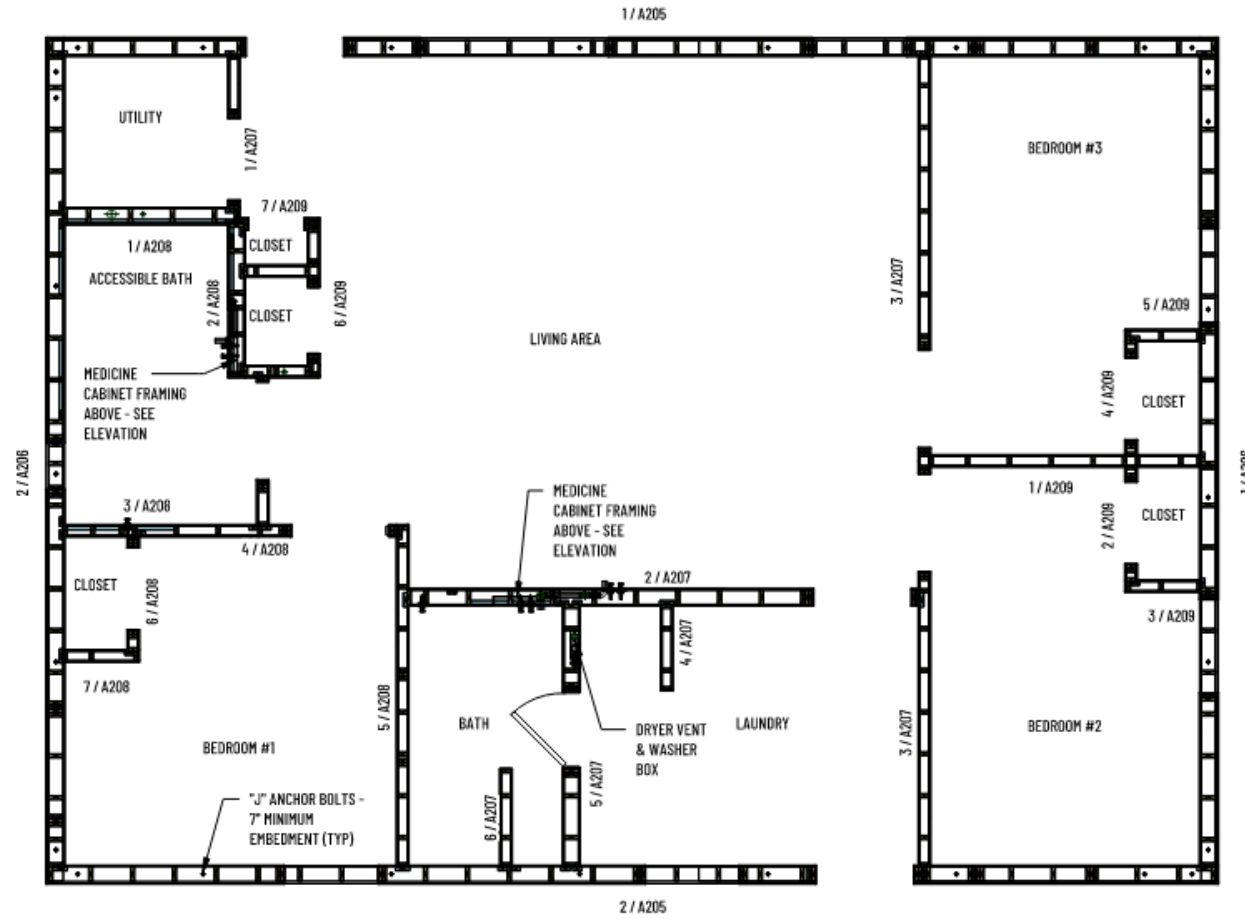
3/16" = 1'-0"



**1 ROOF PLAN**  
3/4" = 1'-0"



**MATERIAL QUANTITY DISCLAIMER:** THIS CUT LIST IS PROVIDED FOR SCHEMATIC REFERENCE ONLY AND DOES NOT CONSTITUTE A FINAL BILL OF MATERIALS. QUANTITIES SHOWN ARE THEORETICAL ESTIMATES FOR VERTICAL STUD FRAMING ONLY AND EXPRESSLY EXCLUDE HEADERS, SILL PLATES, TOP PLATES, WINDOW SILLS, BLOCKING, ROOF FRAMING, BRACING, AND OVERHANG FRAMING. COUNTS DO NOT ACCOUNT FOR ON-SITE WASTE, CULLING OF DEFECTIVE LUMBER, OR SPECIFIC CONSTRUCTION MEANS AND METHODS. THE GENERAL CONTRACTOR IS SOLELY RESPONSIBLE FOR PERFORMING AN INDEPENDENT MATERIAL TAKE-OFF FOR ALL FRAMING MEMBERS AND VERIFYING QUANTITIES PRIOR TO ORDERING. THE DESIGNER ASSUMES NO LIABILITY FOR MATERIAL SHORTAGES, OVERAGES, OR ASSOCIATED COSTS RESULTING FROM RELIANCE ON THIS LIST.



## CUTLIST (STUDS ONLY)

Type	Length	Count
<b>2x4 STUD</b>		
CLOSET BACK STUDS	8' - 11"	5
CLOSET FRAMING 1	9' - 2 1/8"	1
CLOSET FRAMING 2	9' - 0 1/2"	1
CLOSET FRAMING 3	9' - 3 3/4"	2
CLOSET FRAMING 4	9' - 5 3/4"	2
CLOSET FRONT STUDS	8' - 10"	3
ELECTRICAL BOX BLOCKING	1' - 6"	2
FRONT CLOSET BLOCKING	0' - 10 3/8"	1
FRONT CLOSET HEADER STUDS	1' - 11"	6
GRAB BAR BLOCKING	2' - 6"	1
INTERIOR HEADER STUD	0' - 9 5/8"	42
INTERIOR JACK STUD	6' - 9 1/2"	22
PRE-CUT STUD	7' - 8 5/8"	117
<b>2x6 STUD</b>		
ADA MIRROR HEADER STUD	1' - 7 7/8"	1
ADA MIRROR SILL STUD	2' - 3"	1
ADA MIRROR STUD	4' - 5 3/8"	2
ELECTRICAL BOX BLOCKING	1' - 6"	1
INTERIOR JACK STUD	6' - 9 1/2"	4
JACK STUD	6' - 9 7/8"	24
MIRROR HEADER STUD	0' - 11 5/8"	2
MIRROR SILL STUDS	3' - 10"	2
MIRROR STUDS	2' - 9"	1
PRE-CUT STUD	7' - 8 5/8"	135
WINDOW 1 SILL STUDS	2' - 8 3/8"	7
WINDOW 2 SILL STUDS	2' - 2 3/8"	12
WINDOW 3 SILL STUDS	4' - 8 3/8"	13
WINDOW 4 SILL STUDS	3' - 8 3/8"	3

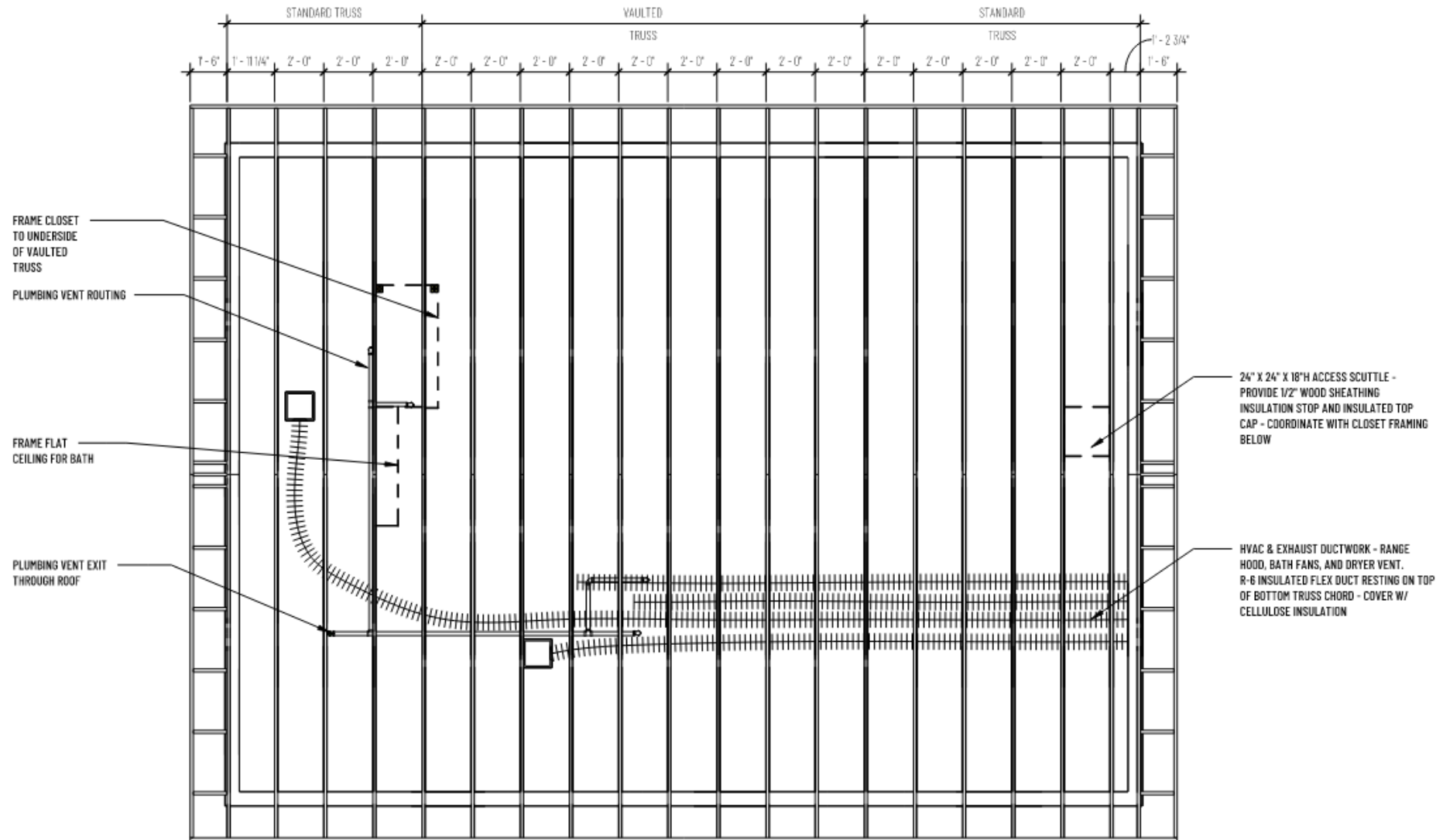
## FRAMING LEGEND

	PRE-CUT STUD - 92 5/8"
	JACK STUD
	SILL STUD
	HEADER STUD
	HEADER, SILL PLATE, TOP PLATE, WINDOW SILL

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## 1 FIRST FLOOR FRAMING PLAN

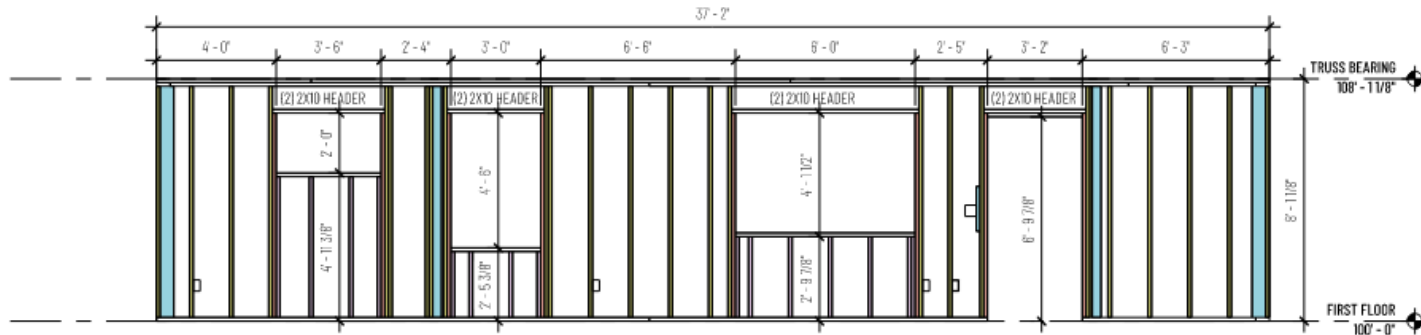
1/4" = 1'-0"



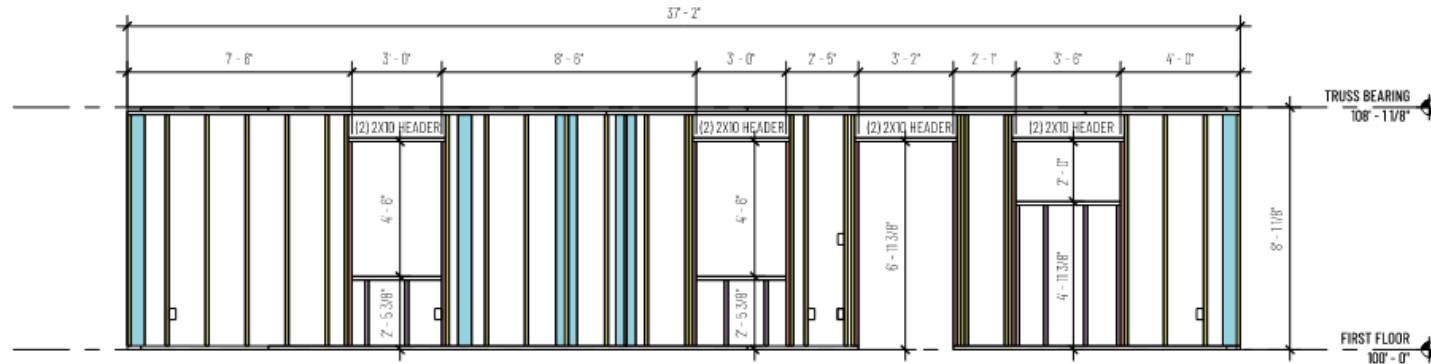
# 1 ROOF PLAN

1/4" = 1'-0"





1 FRONT FRAMING ELEVATION  
1/4" = 1'-0"



2 BACK FRAMING ELEVATION  
1/4" = 1'-0"

### FRAMING LEGEND

	PRE-CUT STUD - 92 5/8"
	JACK STUD
	SILL STUD
	HEADER STUD
	HEADER, SILL PLATE, TOP PLATE, WINDOW SILL

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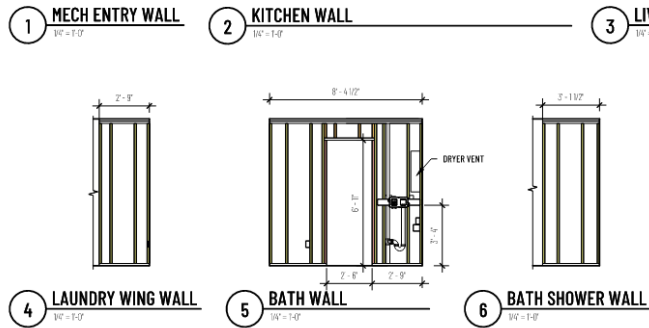
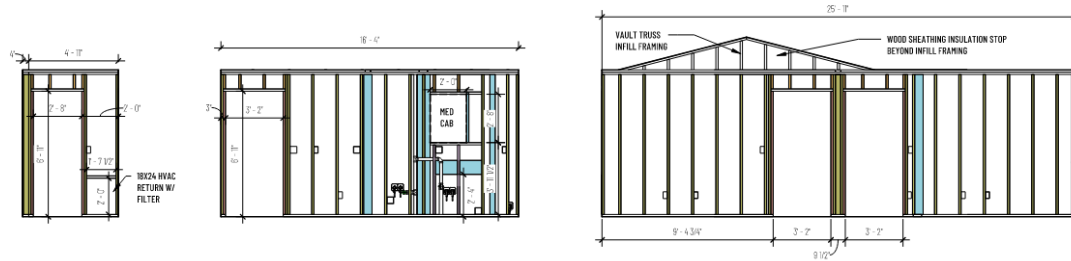
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EXTERIOR FRAMING ELEVATIONS

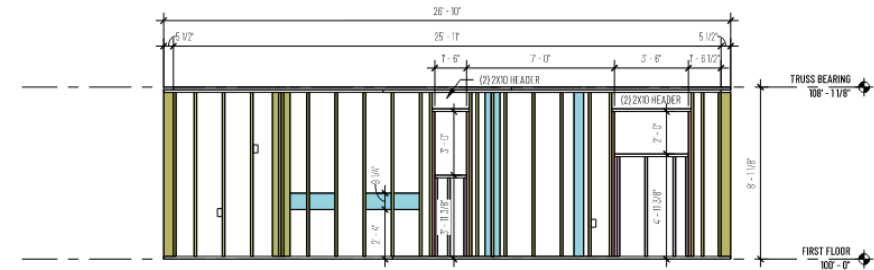
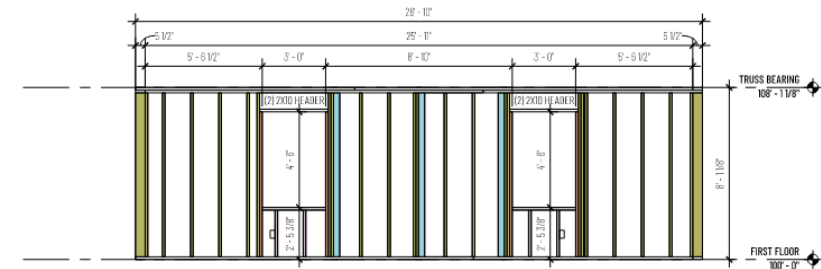
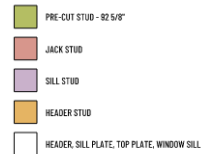
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#### FRAMING LEGEND



#### FRAMING LEGEND



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INTERIOR FRAMING ELEVATIONS

Project number: 25-14  
Date: 10/10/2025

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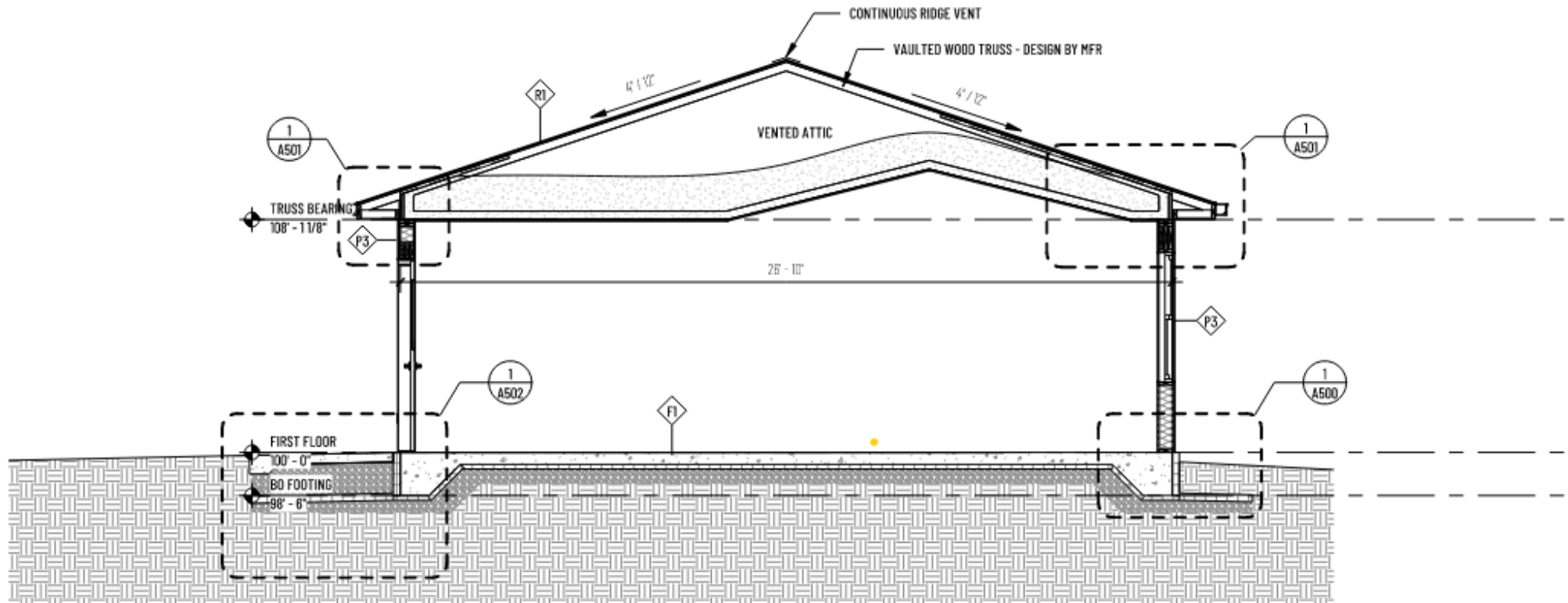
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ACCESSORY DWELLING UNIT  
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EXTERIOR FRAMING ELEVATIONS

Project number: 25-14  
Date: 10/10/2025

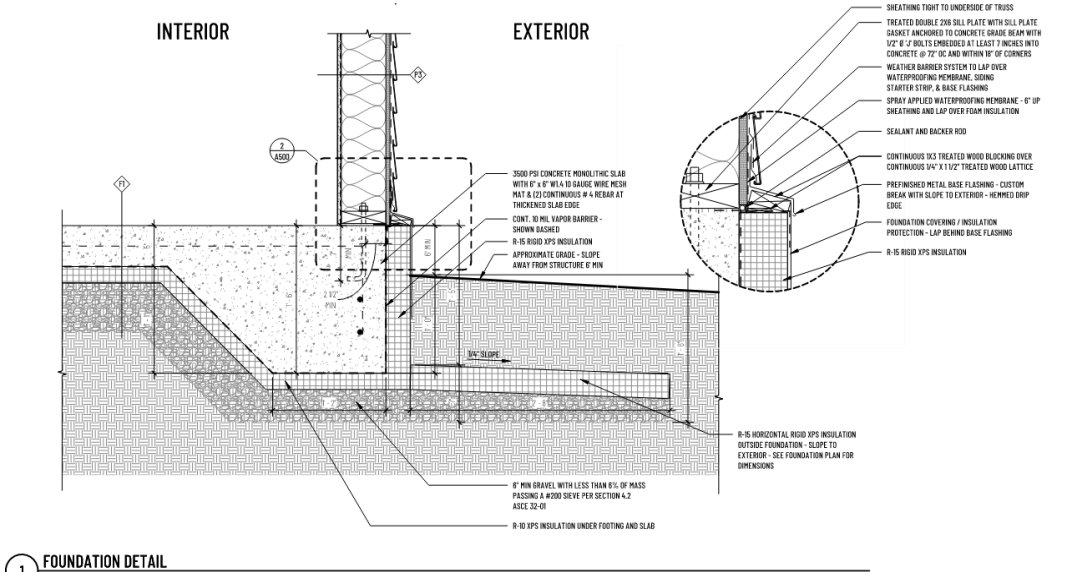
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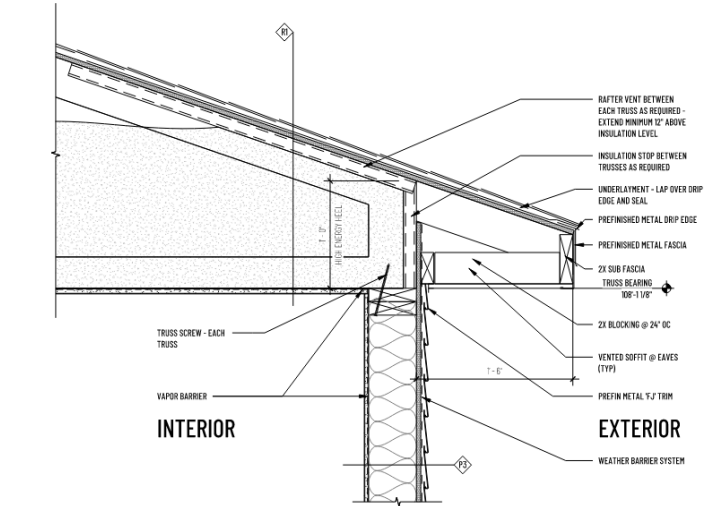
# 1 BUILDING SECTION

1/4" = 1'-0"

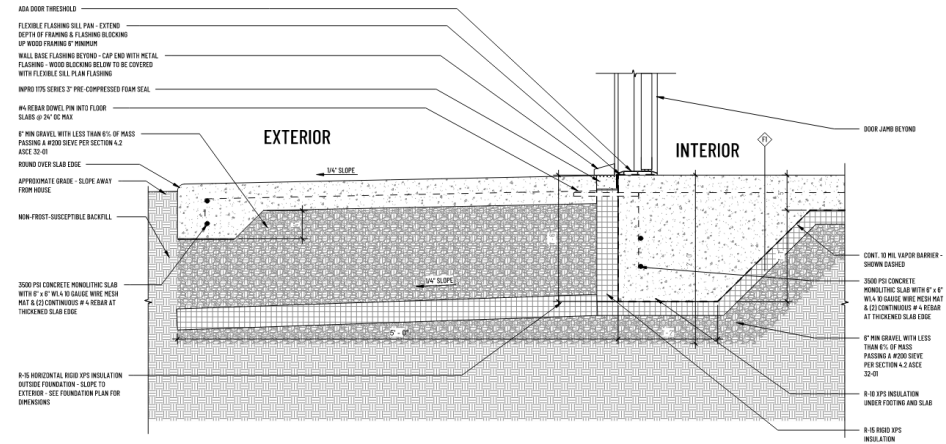


1 FOUNDATION DETAIL  
1/2" = 1'-0"

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	INFO@HAMILTONHOMEDESIGN.COM 508.693.2644	ACCESSORY DWELLING UNIT	Project number 25-14 Date 07/19/2025		



1 EAVE DETAIL  
1/2" = 1'-0"



1 TYPICAL PORCH DETAIL  
1/2" = 1'-0"

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	INFO@HAMILTONHOMEDESIGN.COM 508.693.2644	ACCESSORY DWELLING UNIT	Project number 25-14 Date 07/19/2025		



# Opportunity – Shallow-Foundation ADU



## Aaron Contracting

- Streamlined, replicable design elements
- Plans adapted to each site by local architect
- Focused on infill & maximizing homes per lot
- Higher level of accessibility

- [illegible]

**ADU**  
 $\tau = 20.0^{\circ}$







# Opportunity – More ADUs

- Demand for builder & designer education
- Building codes & zoning regulations
- More streamlined designs
- Shorter review time
- Availability of designs open-source
- Design Contests that result in open-source designs

# Opportunity – CopyLEFT

*An arrangement whereby software or artistic work may be used, modified, and distributed freely on condition that anything derived from it is bound by the same condition*

Some building designs are starting to become available under Copyleft, at the discretion of the designer



# Q & A

**Matt Tucker & Shannon Davis, Building Inspection Division**  
**Housing Policy Committee, January 22, 2026**

