

ADU House Design

- Logan Van Daele
- 6450 Thomas Court, Bettendorf, IA
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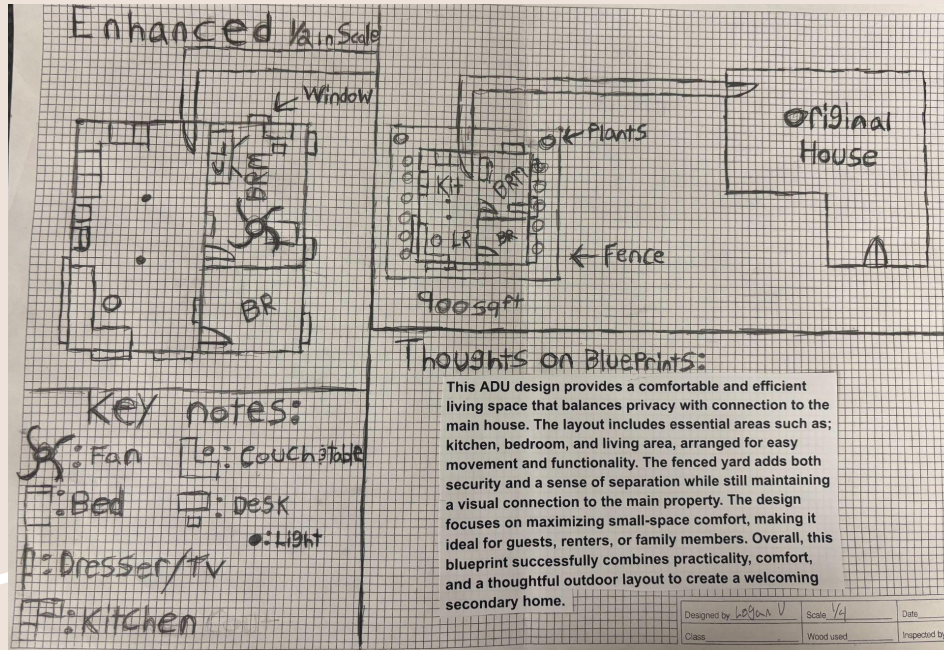
Haven ADU

“Accessory Dwelling Unit Design Proposal”

Design by: Logan Van Daele (Student)

Created: 10/8/2025

Located in: Bettendorf Iowa



Original Blueprint

Project Overview

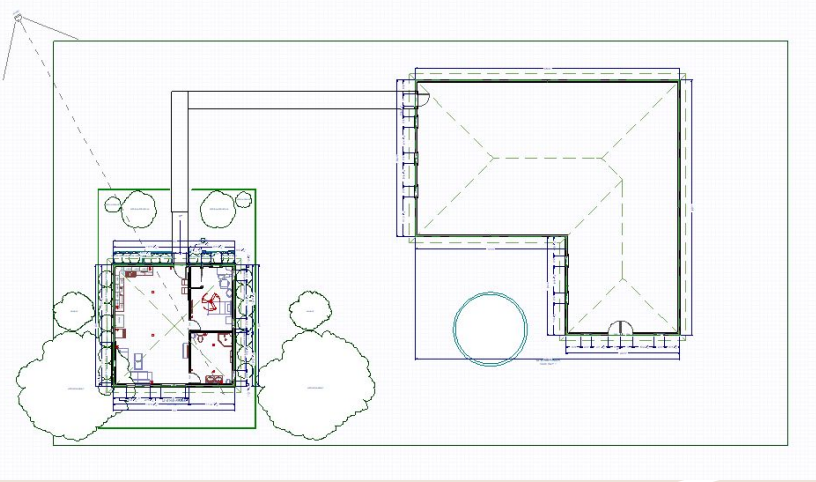
Purpose: The purpose of this ADU is to provide a flexible and functional living space that enhances the property's usability and long-term value. It serves as a private, self-contained unit suitable for guests, extended family, or as a potential rental opportunity. The design prioritizes comfort and independence while maintaining a strong connection to the main residence and surrounding outdoor space.

Square Footage: 900 Square Feet

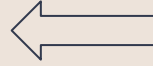
Lot Address: 6450 Thomas Court (Personal House - Intended for design purposes only, house is not realistic)

Design goal: The design goal is to create a modern, efficient layout that maximizes livability within a compact footprint. The plan emphasizes open flow, natural light, and sustainable material choices to achieve a bright, welcoming interior. Each element—from the floor plan arrangement to the finishes—was chosen to balance practicality, affordability, and visual appeal, resulting in a small home that feels spacious, cohesive, and thoughtfully designed.

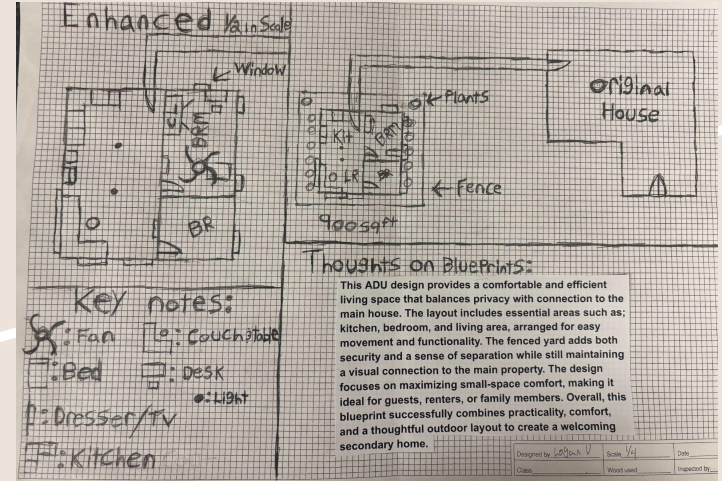
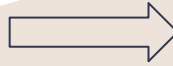
Site Layout



Computer
Layout



Hand Drawn
Blueprint



Notes:

Parking will be accessible through the driveway/road of the original house.
There is a walkway connecting the ADU to the original house.

Floor Plan

Types of rooms:

- Bedroom
- Bathroom
- Livingroom
- Kitchen

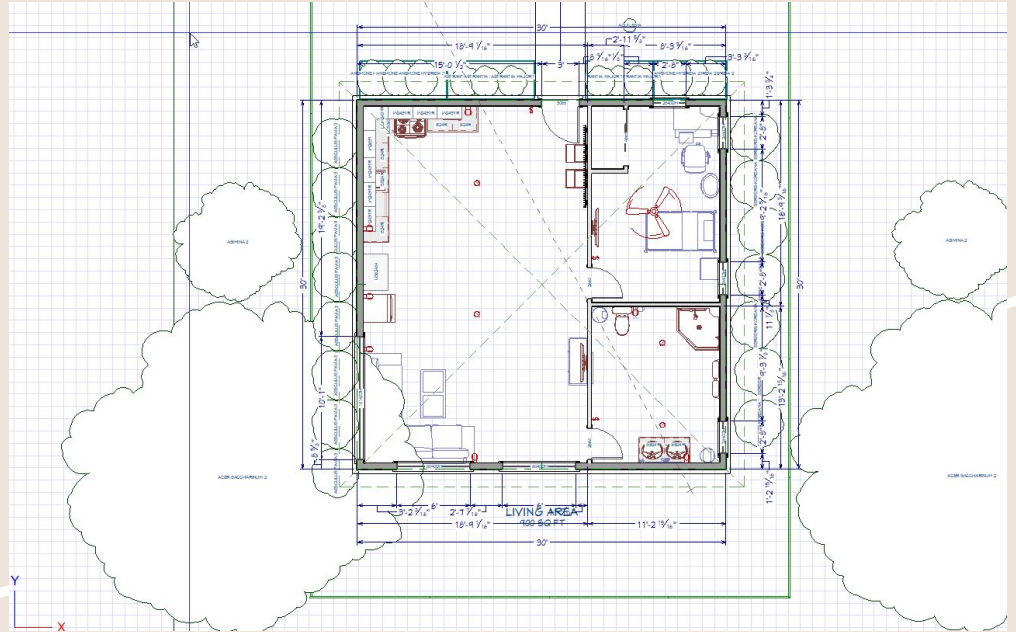
Dimensions:

30ft*30ft=900 Sq Ft

(Exact room dimensions on page 24)

Design Features:

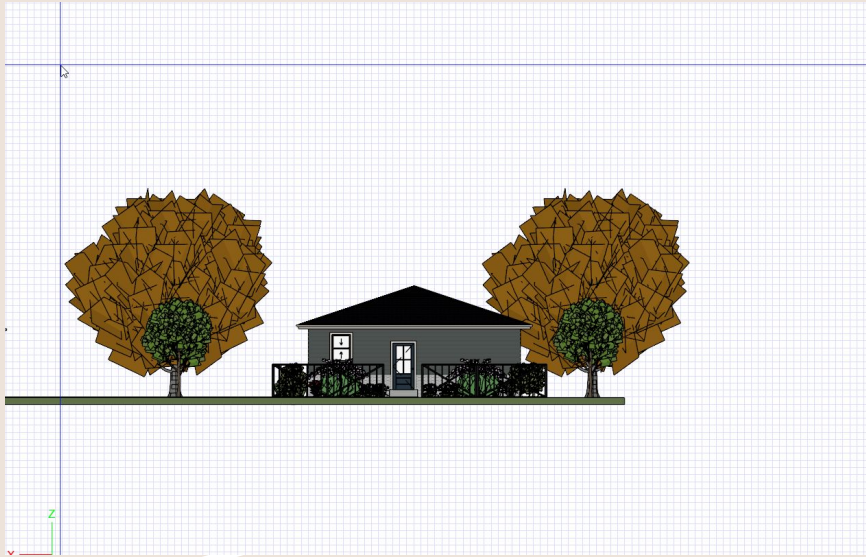
The layout includes an open living and kitchen area, a full bathroom, and a cozy bedroom with natural light from large south-facing windows. Durable, low-maintenance materials keep upkeep simple, while energy-efficient insulation and windows help reduce costs.



Exterior Layout & Design

The exterior design focuses on creating a private, comfortable space that still feels connected to the main property. The purpose of the ADU, is for a recent graduate from Bettendorf. The fence defines the ADU's boundary, offering both security and independence from the original house. The pony wall and landscaping add visual depth while keeping maintenance simple. Windows are positioned to bring in natural light and outdoor views without sacrificing privacy. Trees and flower beds soften the structure, giving the space a welcoming, home-like feel year-round.

Exterior Views



Front Elevation View



Back Elevation View

Exterior Views



Side elevation view



Top View

Exterior Views



Corner View



Corner View 2

Interior Layout & Design

Kitchen Design: The kitchen is designed to be compact yet fully functional, featuring modern appliances and efficient storage. Its open layout connects to the living space, creating an easy flow for daily routines and entertaining.

Living Room Design:

The living room offers a bright and comfortable space with large windows for natural light. It's designed for flexibility, perfect for relaxing, studying, or hosting small gatherings.

Bedroom: The bedroom provides a private, quiet retreat separate from the main living areas. Soft lighting and neutral colors create a calm atmosphere ideal for rest and personal space.

Bathroom: The bathroom combines simplicity and functionality, with a walk-in shower, modern fixtures, and easy-to-clean surfaces. It's compact but efficient, maximizing comfort in a small footprint.

Interior Views



Kitchen View



Living Room View

Interior Views



Bedroom View 1



Bedroom View 2

Interior Views



Bathroom View 1



Bathroom View 2

Material List explanation

The material list provided represents the costs and quantities for the bare structure of the ADU only. It includes all construction materials such as framing, siding, roofing, windows, doors, drywall, flooring, and finishes that are part of the house itself. Furniture, appliances, and personal items have been excluded from this list.

Material Lists and Costs

2	Subfloor												
3	SF1		1			48"x96"x3/4"	OSB-Hrz	29				\$11.88	
4												Subtotal: \$344.52	
5	Framing												
6	F1		1			2" x 6"	ceiling joists	630		ft		\$0.80	
7	F2		1			2" x 10"	header	26		ft		\$1.50	
8	F3		1			2" x 12"	header	21		ft		\$2.00	
9	F4		1			2" x 6"	header	43		ft		\$0.83	
10	F5		1			2" x 8"	header	10		ft		\$1.13	
11	F6		1			2" x 4"	plate	135		ft		\$0.50	
12	F7		1			2" x 6"	plate	384		ft		\$0.80	
13	F8		1			2" x 4"	stud	446		ft		\$0.50	
14	F9		1			2" x 6"	stud	851		ft		\$0.80	
15												Subtotal: \$1740.29	
16	Siding												
17	S1		1			2 1/4"x7 5/8"x3"	Dark Red Brick	3149				\$0.55	
18	S2		1			7" wide	Fiber Siding Neu	1153		ft		\$4.50	
19	S3		1				Housewrap	1026.38		sq ft		\$0.22	
20	S4		1			48"x96"x7/16"	OSB-Hrz	35				\$11.88	
21												Subtotal: \$7562.05	

Material Lists and Costs

QTY	EXTERIOR FINISH												
23	EX1		1			119W1 1/2D	Baluster X	1				\$17	
24	EX2		1			120W1 1/2D	Baluster X	15				\$17	
25	EX3		1			124W1 1/2D	Baluster X	1				\$17	
26	EX4		1			94W1 1/2D	Baluster X	1				\$17	
27	EX5		1			96W1 1/2D	Baluster X	1				\$17	
28	EX6		1			98W1 1/2D	Baluster X	1				\$17	
29	EX7		1			36"	door threshold	1				\$13	
30	EX8		1			3/4"x3 1/2"	ext. door casing	18		ft		\$3	
31	EX9		1			6 7/16"x3/4"	ext. door jamb -	17		ft		\$8.86	
32	EX10		1			3/4"x3 1/2"	ext. window casing	97		ft		\$6.43	
33	EX11		1			1"x1 3/4"	exterior sill - Drift	37		ft		\$12.40	
34	EX12		1			3/4"x3 1/2"	window apron - L	37		ft		\$8.15	
35												Subtotal: \$1,941.68	
36	Roofing												
37	R1		1			1/8" thick	Asphalt Roofing	1148.14		sq ft		\$3.43	
38	R2		1				downspout	4				\$8.00	
39	R3		1			1"x8"	eave fascia	132		ft		\$6.98	
40	R4		1				gutter: Default G	132		ft		\$3.11	
41	R5		1				metal drip edge	132		ft		\$0.53	
42	R6		1			48"x96"x1/2"	OSB-Hrz	36				\$11.88	

Material Lists and Costs

42	R6		1			48"x96"x1/2"	OSB-Hrz	36			\$11.88	
43	R7		1			2" x 10"	rafters	573		ft	\$1.27	
44	R8		1			2" x 6"	rafters	132		ft	\$0.99	
45	R9		1			2" x 12"	ridge board	96		ft	\$1.25	
46	R10		1				ridge cap: Defau	96		ft	\$8.69	
47	R11		1			3/8" thick	Soffit - Color - W	190.55		sq ft	\$1.11	
48												
49	Insulation										Subtotal: \$7,784.56	
50	IN1		1			6"x16" cavity	ceiling insulation	823.2		sq ft	\$1.11	
51	IN2		1			11 7/8"x16" cavit	floor insulation	618		ft	\$0.33	
52	IN3		1			6"x24" cavity	wall insulation	449		ft	\$0.33	
53												
54	Flooring										Subtotal: \$1265.86	
55	FL1		1			1/8" thick	Foam Underlay	826.91		sq ft	\$0.29	
56	FL2		1			5" wide	Walnut 3-4-5" Pl	1985		ft	\$3.75	
57												
58	Wall Board										Subtotal: \$7,633.35	
59	WB1		1				Color - White	823.2		sq ft	\$1.50	
60	WB2		1			48"x96"x1/2"	Drywall	52			\$0.42	
61	WB3		1			48"x96"x5/8"	Drywall	27			\$0.56	

Material Lists and Costs

61	WB3		1			48"x96"x5/8"	Drywall	27			\$0.56	
62											Subtotal: \$1271.76	
63	Windows											
64	W1		1			121"x48"	Double Hung	1			\$249	
65	W2		1			32"x48"	Double Hung	4			\$149.99	
66	W3		1			72"x48"	Double Hung	2			\$249	
67											Subtotal: \$1,346.96	
68	Doors											
69	D1		1			36"x80"x1 3/4"	Ext. Hinged-750.	1			\$73.39	
70	D2		1				handle: Knob	1			\$11.49	
71	D3		1				handle: Lever	2			\$24.98	
72	D4		1				handle: Lever (e	3			\$24.98	
73	D5		1				hinge: Standard	7			\$3.77	
74	D6		1			30"x80"x1 3/8"	Hinged-Door P0.	2			\$169.42	
75	D7		1			(2) 28"x80"x1 3/4"	Slider-Door P04	1			\$183	
76											Subtotal: \$758.01	
77	Cabinets											
78	C1		1			24"x24"x36"	base cabinet	8			\$250	
79	C1.1		1				material - W	8			\$2.12	
80	C1.2		1			23 7/8"x24	door - Fram	8			\$8.80	

Material Lists and Costs

80	C1.2		1				23 7/8"x24	door - Fram	8			\$8.80
81	C1.3		1				23 7/8"x6 1	drawer	8			\$25
82	C1.4		1					drawer glide	16			\$10
83	C1.5		1				1 1/8"	CK 04 (pull	8			\$5
84	C1.6		1					hidden hing	16			\$2
85	C1.7		1				4 15/16"	CP04 Bar F	8			\$5.27
86	C2		1				24"x24"x36"	base cabinet	3			\$250
87	C2.1		1					material - W	3			\$2.12
88	C2.2		1				23 7/8"x24	door - Fram	3			\$8.80
89	C2.3		1				23 7/8"x6 1	drawer	3			\$25
90	C2.4		1				1 1/8"	CK 04 (pull	3			\$5
91	C2.5		1					hidden hing	6			\$2
92	C2.6		1				4 15/16"	CP04 Bar F	3			\$5
93	C3		1				36"x30"x36"	corner base cabi	1			\$350
94	C3.1		1					material - W	1			\$2.12
95	C3.2		1				5 1/8"x30 3	door - Fram	1			\$11.87
96	C3.3		1				11 1/8"x30 :	door - Fram	1			\$15.82
97	C3.4		1					hidden hing	2			\$2
98	C3.5		1				1 1/8"	CK 04 (pull	1			\$5
99	C4		1				24"x24"x39"	corner wall cabir	1			\$250
100	C4.1		1					material - W	1			\$2.12

Material Lists and Costs

99	C4		1			24"x24"x39"	corner wall cabin	1			\$250
100	C4.1		1				material - W	1			\$2.12
101	C4.2		1			11 1/8"x38"	door - Fram	2			\$16.82
102	C4.3		1				hidden hing	3			\$2
103	C4.4		1			1 1/8"	CK 04 (pull)	1			\$5
104	C5		1	Cambria			Countertop - Eve	64.51		sq ft	\$50
105	C6		1				countertop finish	50		ft	\$5.25
106	C7		1			36"x24"x84"	utility cabinet	1			\$400
107	C7.1		1				material - G	1			\$9.05
108	C7.2		1			16 7/8"x78"	door - Fram	2			\$9.98
109	C7.3		1			1 1/8"	CK 04 (pull)	2			\$5
110	C7.4		1				hidden hing	6			\$2
111	C8		1			24"x12"x39"	wall cabinet	6			200\$
112	C8.1		1				material - W	6			\$2.12
113	C8.2		1			23 7/8"x38"	door - Fram	6			\$22.23
114	C8.3		1			1 1/8"	CK 04 (pull)	6			\$5
115	C8.4		1				hidden hing	18			\$2
116	C9		1			26 3/16"x12"x39"	wall cabinet	1			\$200
117	C9.1		1				material - W	1			\$2.12
118	C9.2		1			13"x38 7/8"	door - Fram	2			\$22.59

Material List/Cost Summary

The total material cost for the ADU is \$44,332.42. This amount reflects the construction materials only, excluding all furniture, appliances, and interior décor. The pricing includes essential components such as framing lumber, sheathing, roofing, siding, insulation, drywall, flooring, doors, windows, trim, and other necessary building materials to complete the structure of the ADU. All pricing was based on current retail and contractor-rate estimates from trusted suppliers, including:

- Home Depot
 - Menards
 - Lowe's
 - Walmart (for select household building materials and finishes)
- and other local material suppliers in the Bettendorf, Iowa area

Sustainability Features

Window Placement: Window placement in this ADU is guided by both functional and environmental considerations. Openings are oriented to optimize natural light, cross ventilation, and passive heating while maintaining visual privacy from the primary residence. The mix of window sizes enhances spatial comfort, framing outdoor views and improving the overall livability of the compact layout.

Energy Efficient Highlights: Energy efficiency is achieved through high-performance building materials and passive design strategies. The compact footprint reduces energy demand, while quality insulation, double-pane windows, and sealed construction maintain interior comfort. Orientation and window placement take advantage of natural daylight and ventilation to lower heating and cooling loads.

Final Design

Key Benefits:

- Compact, efficient layout that's affordable to build and easy to maintain
- Private living space with a strong connection to the main property
- Energy-efficient design that reduces long-term costs
- Bright, modern interior with plenty of natural light
- Functional for independent living while staying close to family

Final Thoughts: In conclusion, this ADU demonstrates how compact design and thoughtful planning can create a highly functional, efficient, and attractive living space. Through careful attention to layout, privacy, and environmental performance, the project enhances the property's value while providing a warm, independent home environment. While still following Iowa regulations.

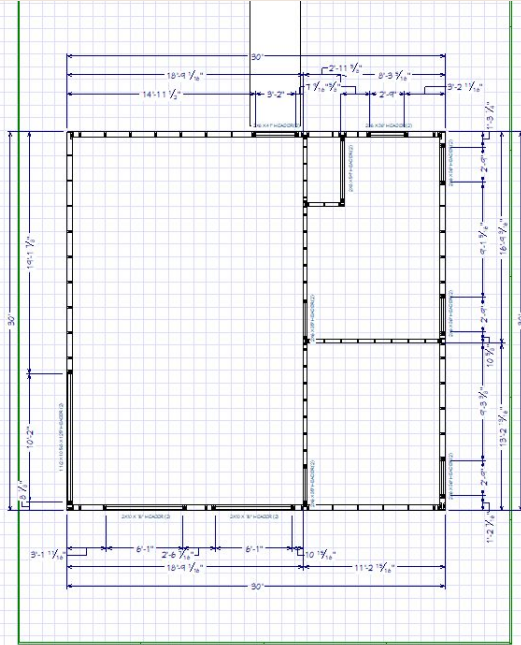
Contact Info:

Logan Van Daele

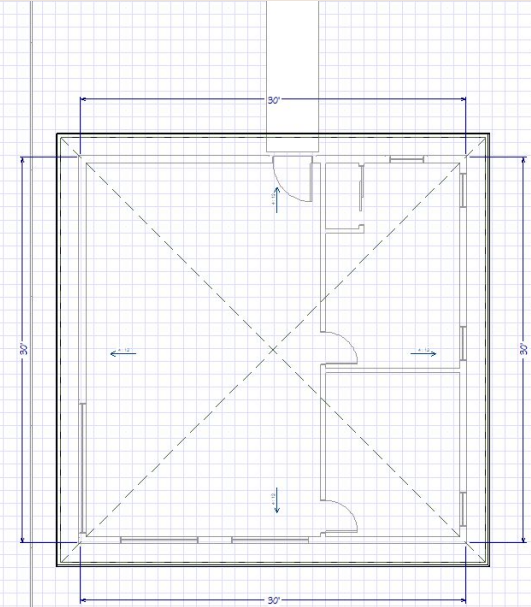
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Extra Photos

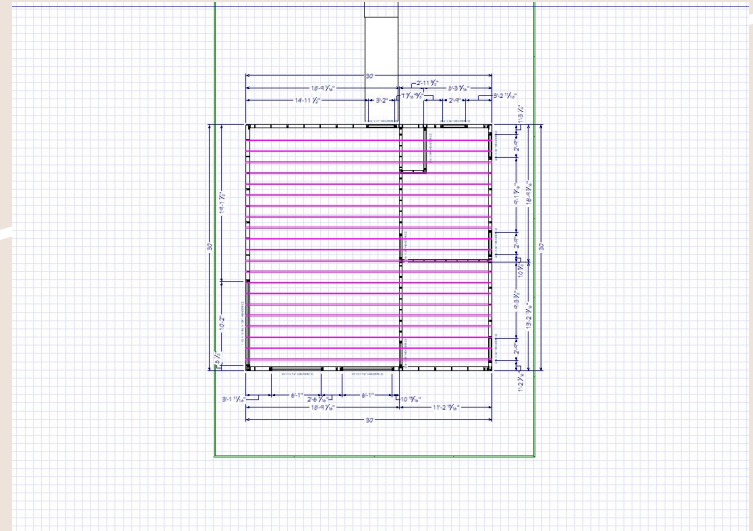
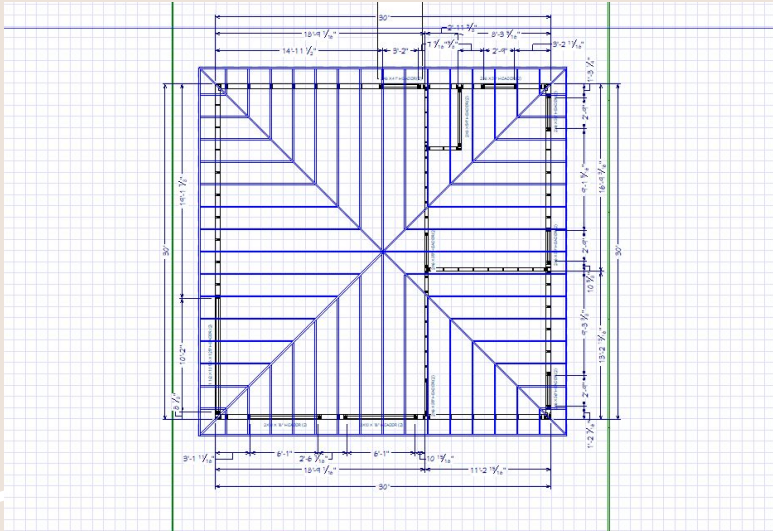


Exact Dimensions per room



Roof Plan View

Extra Photos



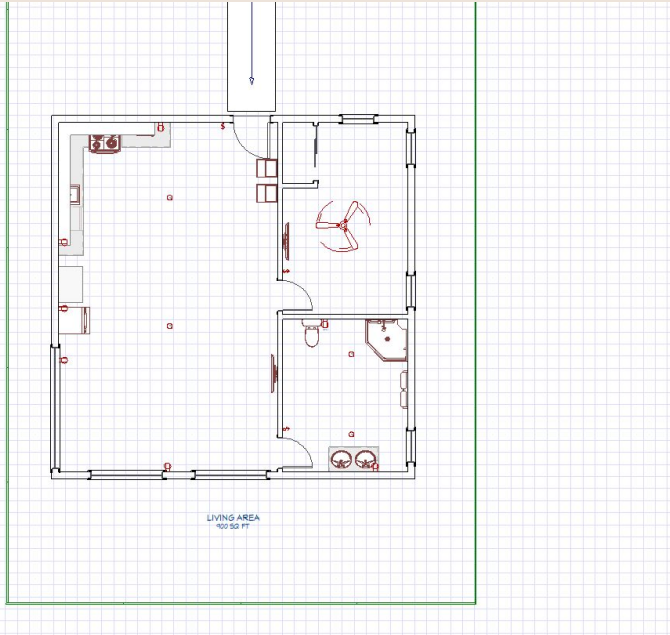
Framing Views

Extra Photos

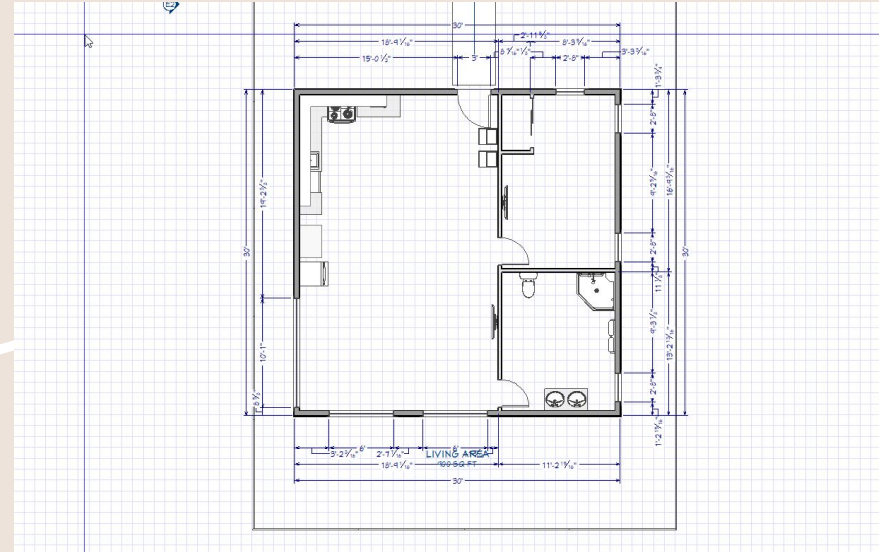


3D Framing Views

Extra Photos

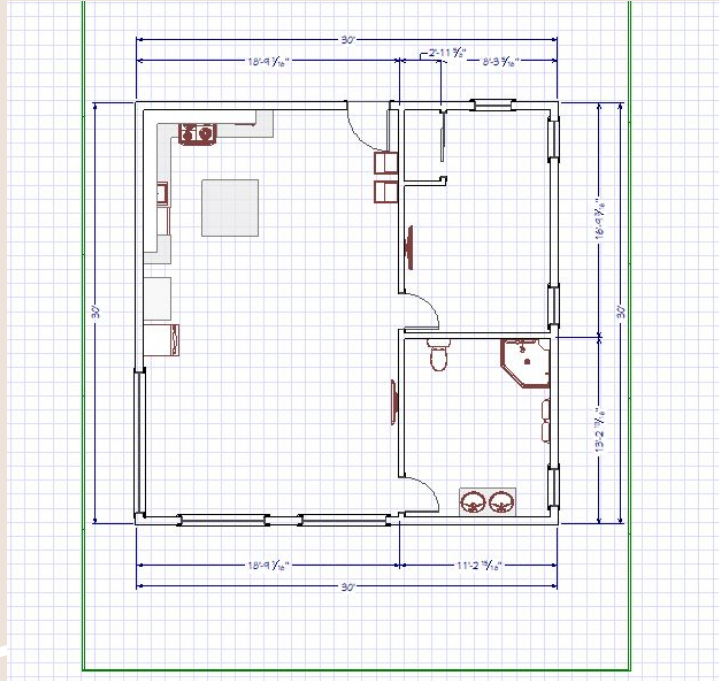


Electrical View

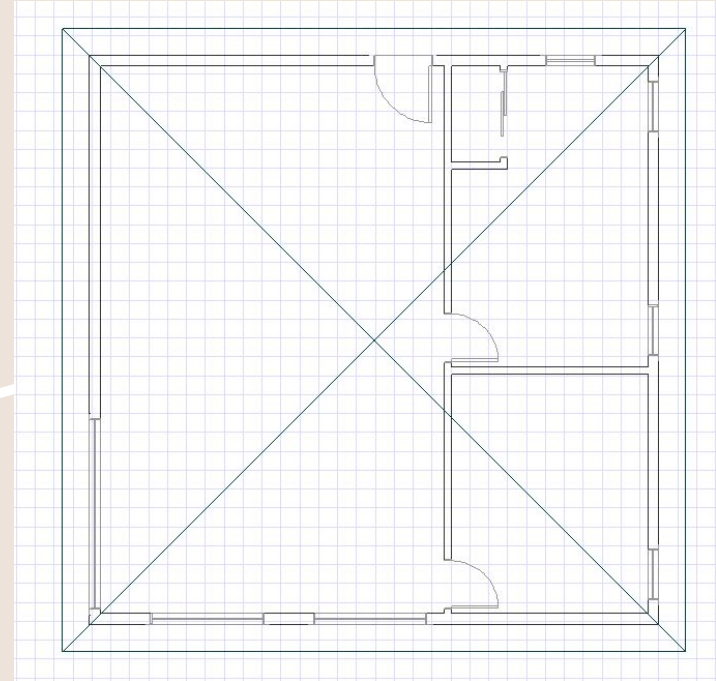


Appliance view

Extra Photos

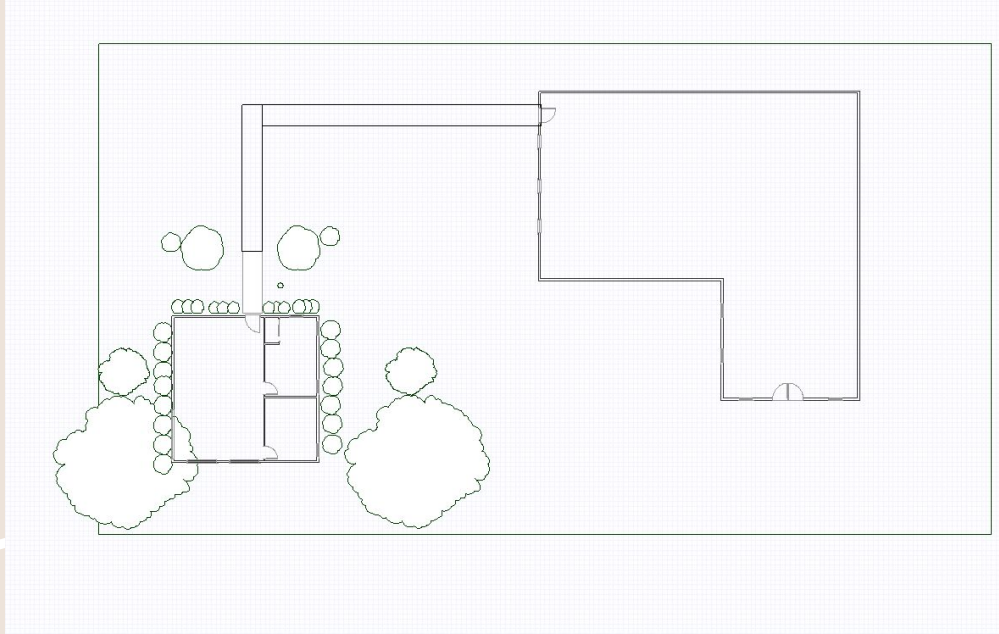


Mechanical View



Plot View

Extra Photos



Terrain View