

2019 SIPA Building Excellence Awards



Official Entry Form

APPLICATION DEADLINE: *January 11, 2019*

The Structural Insulated Panel Association (SIPA) is hosting the seventeenth annual Building Excellence Awards to recognize association members that build exemplary projects using structural insulated panels (SIPs). The competition allows SIPA members to showcase their best work while demonstrating the design flexibility, sustainability and energy efficiency possible with SIP construction.



**Structural Insulated
Panel Association**

**SelectSIPs
EXPO**  **2019**
A Better Way to Build

MARCH 4 - 6 / PHOENIX, ARIZONA

Winning entries will be showcased at the 2019 SIPA Annual Meeting and SelectSIPs EXPO

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PARTICIPANT INFORMATION

Company Name: Solid Ground Homes & Remodeling

Contact Name: Kelly Hemp

Address: 5300 Alpine Drive NW, Suite 240

City: Ramsey

State: MN

Zip: 55303

Phone: (763) 323-1334

Email: info@solidgroundhomes.com

Website: www.solidgroundhomes.com

CATEGORY ENTRY (check one category)

☐ Single Family 'Small House' under 900 sq. ft.

☐ Single Family Homes over 3,000 sq. ft.

☒ Single Family Homes under 3,000 sq. ft.

☐ Multifamily

☒ Agricultural

☒ Commercial/Industrial/Institutional Buildings under 10,000 sq. ft.

☐ Commercial/Industrial/Institutional Buildings over 10,000 sq. ft.

☐ Renovations

☐ Affordable Housing

☐ High Performance (multiple category entry permitted)

PROJECT INFORMATION

Project Name: Ames Farm

Address: 2425 Co. Rd. 127

City: Delano

State: MN

Zip: 55328

Date completed: 7/30/2018

Total cost of project (exclusive of land): \$649,700.00

Dimensions of building (all floors of multi-story building):

84'X40' Lower Level, 84' X 40' Main Level

Asking price/purchase price (Affordable Housing only):

Total sq. ft. of conditioned space:

6,720 Sq.Ft.

BUILT BY (if different than applicant)

Company Name:

Contact Name:

Phone:

Address:

City:

State:

Zip:

PANELS MANUFACTURED BY (SIPA members only)

Company Name: Extreme Panel Technologies

Continued

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DESIGNED BY (if different than applicant – SIPA will only recognize members)

Company Name: Solid Ground Homes & Remodeling

Contact Name: Kelly Hemp

Phone: (763) 323-1334

Address: 5300 Alpine Drive NW, Suite 240

City: Ramsey

State: MN

Zip: 55303

Please answer each question with as much detail as possible to help in the judging process.

Attach additional sheets if necessary.

Describe the end use of the building:

The end use of the building serves as both a high efficiency honey processing and packaging facility and high efficiency living quarters in one section of the building.

How did SIP construction help you get this job?

SIP construction provided the efficiency in the building shell that required multiple temperature zones needed for processing, as well as overall building expense efficiency.

SIP wall thickness and core material: 5-1/2" EPS Core

SIP roof thickness and core material: N/A - Spray foam truss system

Describe the benefits of using SIPs on this project. Did SIPs help save time, labor, construction costs, or energy?

SIPs save construction costs over a full ICF structure. SIPs provided an efficient way to put the main level together, saving both time and money. The efficiency of SIPs offers energy savings, which was critical to the decision of the owner, in light of his longterm business plans.

Describe any innovative design elements or structural engineering involved:

This project involved a full ICF foundation, with pre-cast decking for the floor, and sloped waterproofing, coupled with drain throughout. It includes a fully integrated mechanical system, utilizing boiler heat, mini splits, electric point of use heat, and specific dehumidification systems to meet the processing requirements. There are two rooms for honey processing that require a continuous temperature of 110 degrees, which is easily achieved with through the building design, building products, and mechanics put in place. There are integral wash-down stations designed to be hose cleaned on the walls and ceilings. The exterior was designed to match the natural feel of the

Continued



Please list any certifications the project received, such as ENERGY STAR, LEED, National Green Building Standard, WELL, Passive House, Green Globes or local green building programs. Only list certifications that are completed:

Energy Efficiency Certificate (Blower Door Test)

HERS Index (required only for High Performance Category and recommended for residential projects):

Blower door test results (ACH50) (required only for High Performance Category and recommended for residential projects):

See Attached

Energy use intensity in kBtu/ft² (required only for High Performance Category and recommended for commercial projects):

Describe the HVAC system used on the project:

Radiant in-floor heat in garage, lower level, and all of the main floor. 1-Bryant 13 Seer Condensing Unit, Renewaire 3-Air Exchangers - 1- April Aire Dehumidifier, Honeywell programmable thermostat, Bryant 3-ton Ductless AC.

Describe any other energy-saving materials used in the building envelope other than SIPs. List U-values of windows used and the U or R-value of any insulation materials. (judged only for High Performance Category)

-ICF Foundation (Lower Level)	-Insulated Exterior Doors (Bayer)
-LP Siding	-Hayfield Low-E Argon Windows
-Insulated Steel Overhead Doors	-All LED Lighting. (Energy Star Disc LED Lights)
-2"Closed Cell Spray Foam (Ceiling)	

Please list any energy-efficient products or design features, such as lighting, hot water heating, appliances, passive solar (judged only for High Performance Category):

In-floor Heat
NI VM-153 153,000 btu Modulating Boiler 95%

Were any solar panels installed on the project? If so, indicate the size of the system (judged only for High Performance Category):

No - Has the future capability.

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Please list any sustainable materials or design features not listed above, such as recycled materials, low-VOC finishes, landscaping, etc. (judged only for High Performance Category):

Any additional comments on the project.

This was a very unique building project, designed to meet the needs of a Bee Owner who is passionate about the environment and the impacts on his livelihood. Energy considerations and conservation were key factors in his decision to build with high performance, Eco-friendly products.

CHECKLIST

- ☒ My company is a SIPA member. Panels for this project were manufactured by a SIPA member.
- ☒ I have answered ALL the questions completely
- ☒ I have enclosed the two required electronic images of the completed project meeting the requirements stated in the SIPA Building Excellence Awards guidelines

PLEASE CONFIRM: I have read and understand the rules for this competition. This entry is structural insulated panel construction as defined in the SIPA Building Excellence Awards guidelines. I understand by making this submission that my pictures will be used by the Structural Insulated Panel Association (SIPA) to promote the use of structural insulated panels. I hereby give permission to SIPA to use the enclosed pictures for any use they see fit in that endeavor. I understand that where possible, SIPA will give credit for pictures used to my company as listed above.

Signature: **Kelly R. Hemp** Kelly R. Hemp 2019.01.11 14:05:42 -06'00' 1/19/2019
Date:

Entries that do not contain all required materials or are received after January 11, 2019 will not be considered

Complete application and submit electronically to info@sips.org

Or send hard copy applications to SIPA office: P.O. Box 39848, Ft. Lauderdale, FL 33339



Structural Insulated
Panel Association

BUILDING EXCELLENCE AWARD SPONSOR



**MITSUBISHI
ELECTRIC**

COOLING & HEATING



Energy Efficiency Certificate

Address: 2425 County Rd 127
Delano, MN 55328
Builder: Cornerstone Construction Inc.
Installed: 7/3/2018
License: BC274759

Insulation



Location	R-Value ¹	Type
Attic	49*	Loosefill Fiberglass*
Rim/Band Joists	**	**
Ductwork	8*	Fiberglass*
Wall	**	**
Foundation Wall	**	**
Crawlspace Wall	**	**
Crawlspace Slab	**	**
Slab Floor	**	**

Windows



Location	U-Factor ¹	SHGC ¹
Front	**	**
Back	**	**
Left	**	**
Right	**	**

Calculated Heat Loss (Btu)	**
Calculated Heat Gain (Btu)	**
Calculated Cooling Load (Btu)	**

Heating System



Type	**
Model	**
Efficiency	**
Manufacturer	**
Input Rating	**

Water Heater



Conventional
GPVL 50 201
72 EF
AO Smith
40000 BTU's

Air Conditioner



Central Air
113ANA018-G
13 SEER
Bryant
18000 BTU's

Ventilation



Type	Balanced
Location	Mechanical Room
Exhaust Air	**
Intake Air	**

Make Up Air



Type	**
Location	**
Size	**

Radon Mitigation



System Type	**
Fan Location	**

Blower Door ²	514	CFM @50 Pa
Air Changes at 50 Pa ²	2.92	ACH @50 Pa
Total Duct Leakage	**	
Designed Continuous Ventilation	113	CFM
Designed Total Ventilation	226	CFM
Volume (Cu ft) ²	10549	
Area (Sq ft) ²	1160	

$$\text{ACH Calculation: } \frac{\text{CFM@50} \times 60}{\text{Volume}} = \text{ACH@50}$$

Total Duct Leakage Allowable:

W/ Furnace: Sq ft/100 X 4	or	W/O Furnace: Sq ft/100 X 3
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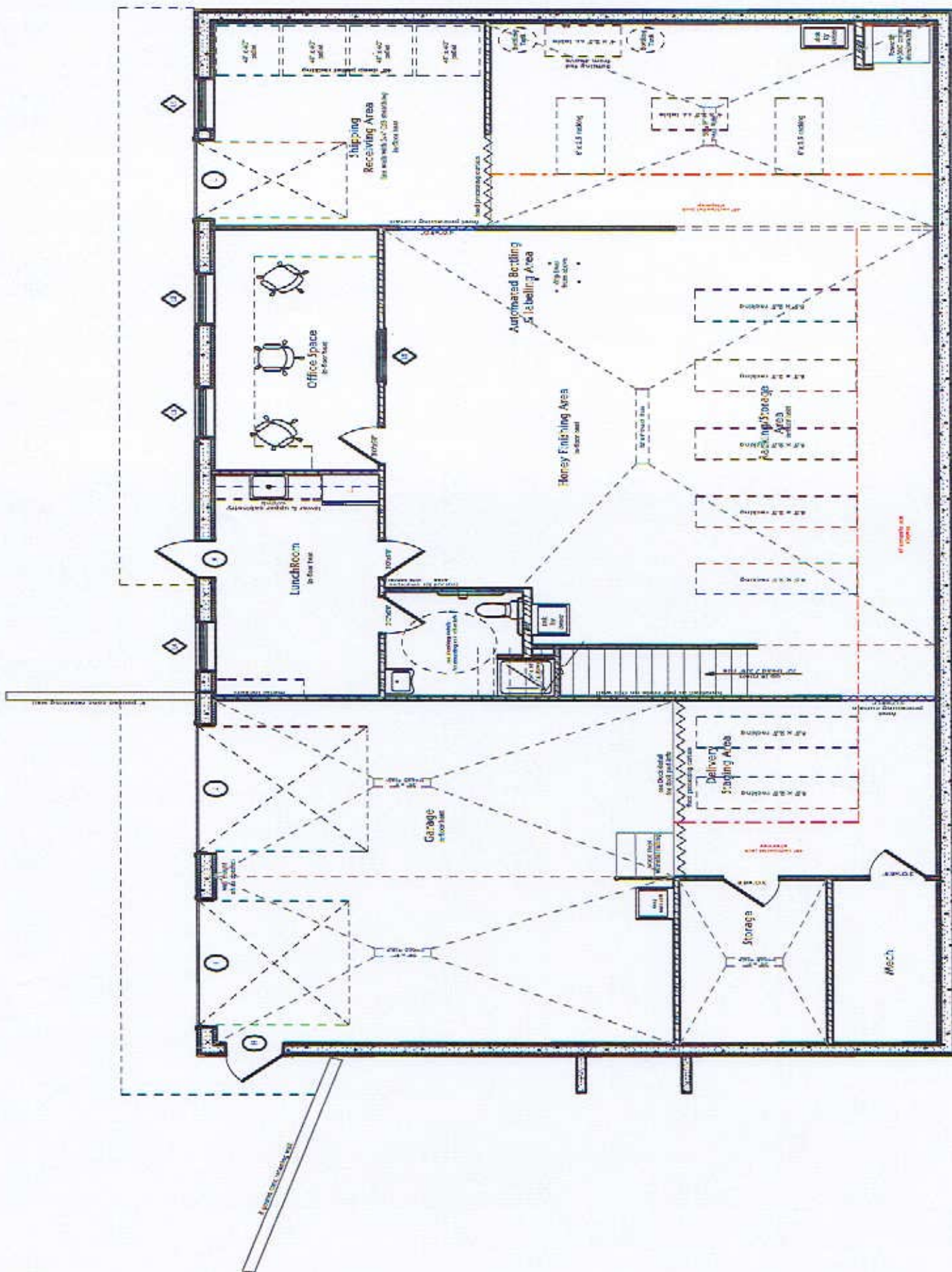
Verified By

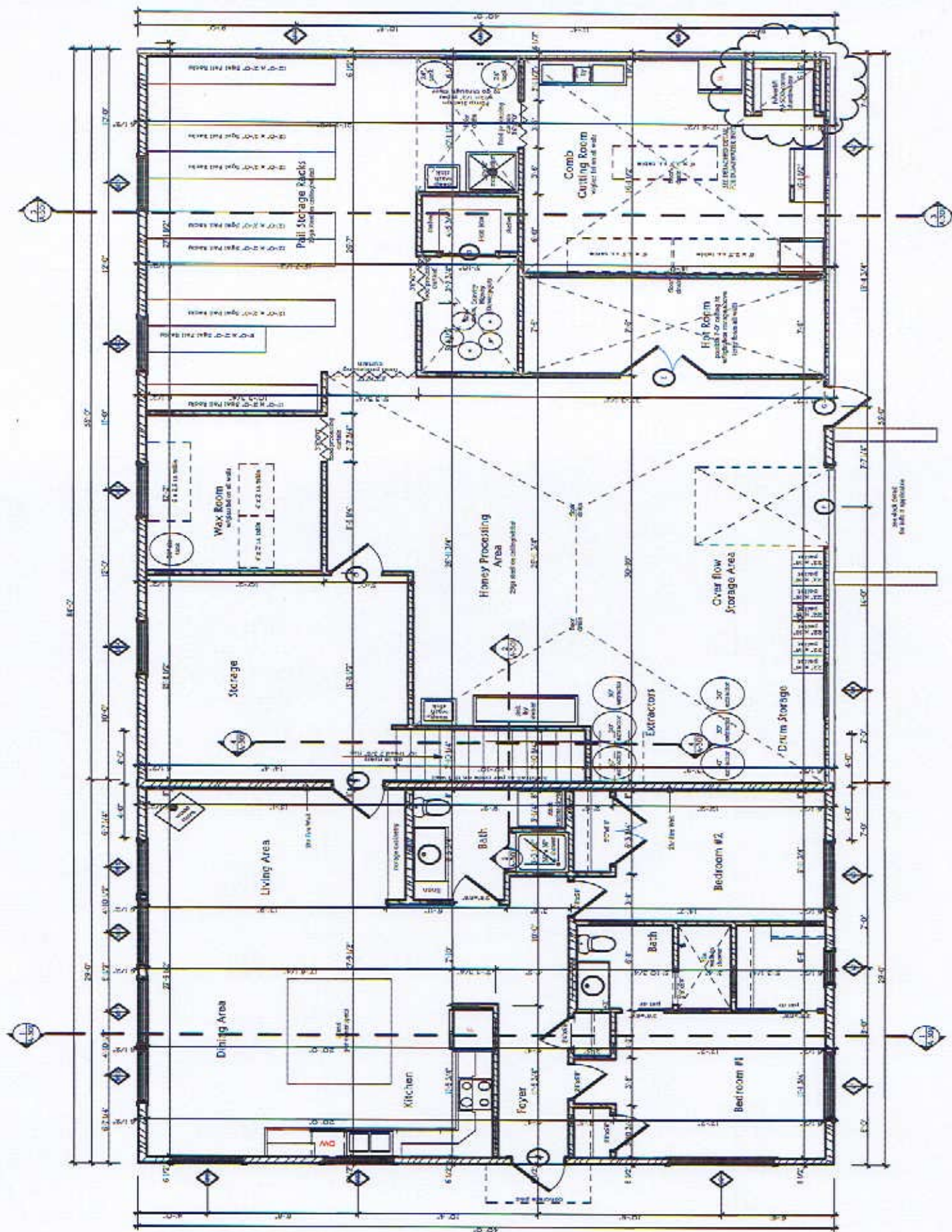


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C D I





After



After

