

PLANNING GUIDE

The Barndominium Process

Section 9:
Designing a Barndominium
That's Right for me

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DESIGNING A BARNDOMAINUM

That's Right for Me

In this section we will cover:

Structure Choices

What are my Plan Options?

Stock vs. Custom Plans

Sketching My own Design

How Design Choices affect my Budget

My Design Wishes and Priorities

Reading Design Plans + What to Look For?

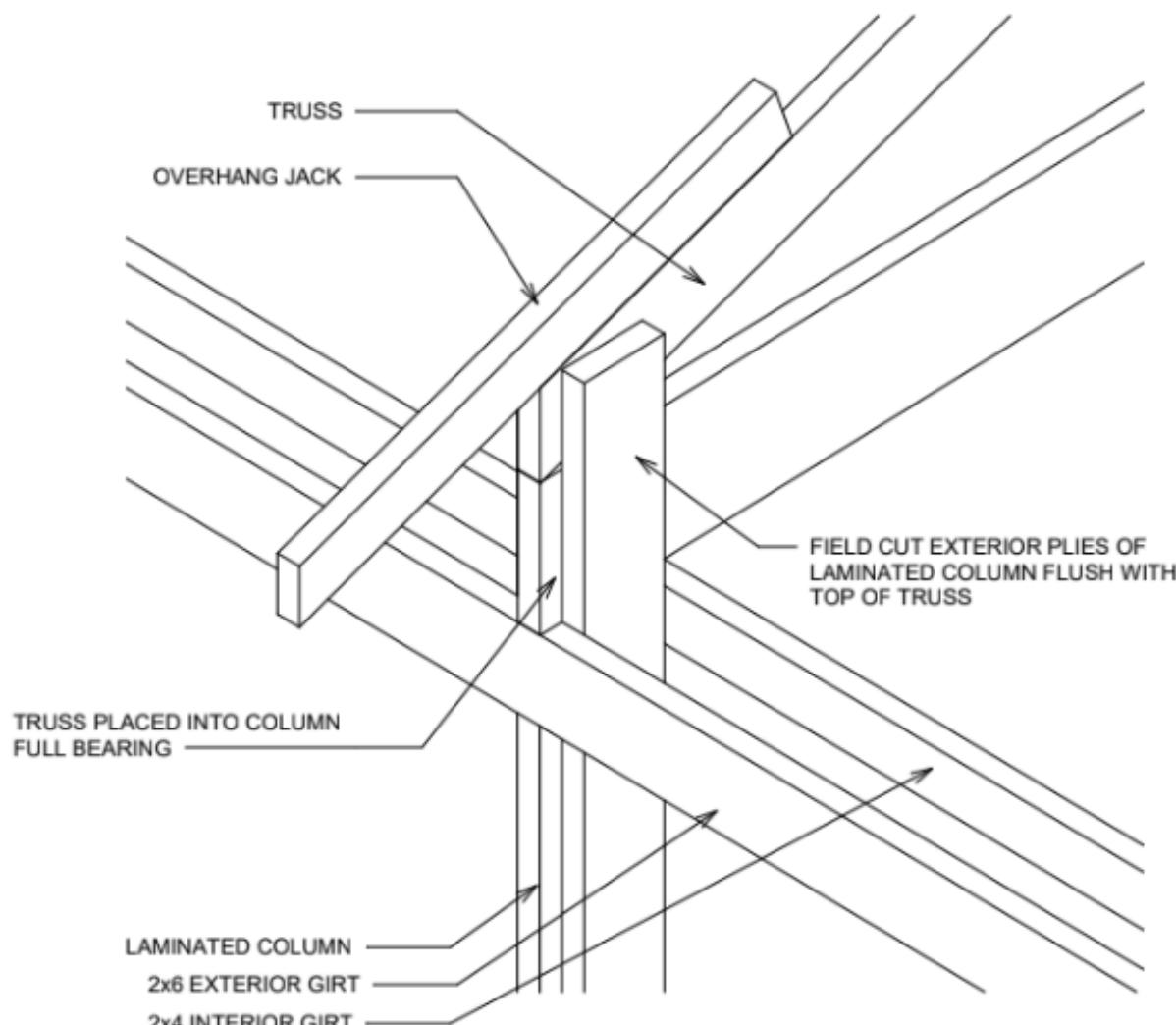
In the barndominium space you'll find debate on what you need when it comes to plans. For most of us, having a detailed set of prints for your home is going to be the way to succeed on every level.

A lot of what you need will depend on your skill level, financing needs, and permitting requirements.

Whether you plan on DIYing your design or hiring a firm like Back Forty Buildings you'll want to think through every aspect of your project prior to starting construction.

STRUCTURE CHOICES

In Section 1 we covered the different types of barndominium construction.



When it comes time to create plans for your project you'll want to start with an understanding of the type of construction you'll be using.

This is especially important when hiring a professional to draft plans. Not all are knowledgeable about post, steel, and stick frame construction. Hiring someone that does not truly understand your construction type can lead to inaccuracies with your design, delays in permitting, + an overall frustrating experience.

Another benefit that a skilled team can offer is knowing how the various parts of the process will work together. For example, when designing a steel frame building the supplier will put together an engineered kit based on your floor plan.

When designing post frame, your drafting team needs to be comfortable with the correct structural details so that they can guide you in making decisions about things like window placement, foundations, and more.

WHAT ARE MY Design Plan Options?

Hand-drawn floor plans

Purchasing graph paper and getting to work on a floor plan design can be a wonderful start to knowing what you want in your build. Some jurisdictions accept this for permitting, but we recommend that this is just a launching point for obtaining a full set of plans.

Pros: Inexpensive, and great for smaller DIY projects.

Cons: Incomplete details, hard to use for financing/permitting, not ideal for working with contractors.

Home use drafting or sketch program

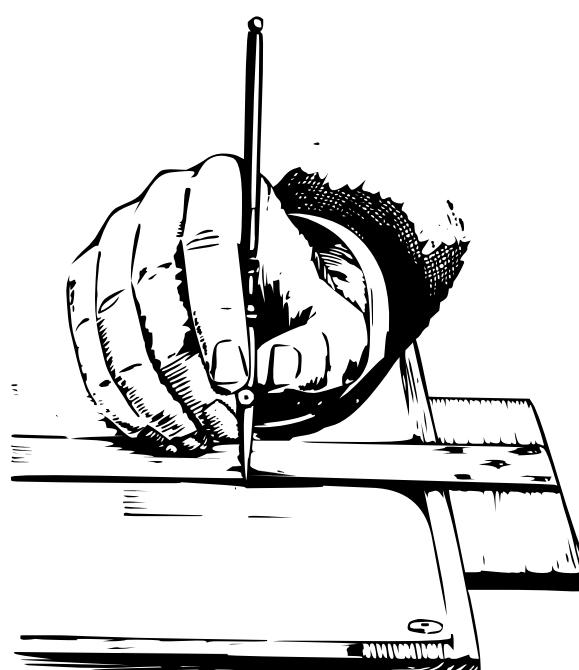
There are a lot of home use versions of drafting programs. These include programs such as Sketch Up and Magic Plan.

Pros: Low cost, great to see more detail with 3D tools, slightly more likely to be accepted by lenders and permitting departments.

Cons: Usually a learning curve to use the software, incomplete details, and room for significant errors when you go to build.

Both hand drawn and home use software plans are great to start with before hiring a designer.

It gives you time to discuss the details of your home with family members and decide on important things you'd like to see before working with a professional.



WHAT ARE MY Design Plan Options?

Professionally designed plans

Professionally designed plans we believe are the best option for your construction process. A good designer will be able to help you create spaces accurately, work through details like making space for the functionality of utilities and more.

Pros: Reasonably priced, high level of detail, easy to use for financing and permitting. Builders will be able to work off of a good set of plans.

Cons: Higher cost than DIY options, not all drafters understand all types of construction.

Engineer Stamped plans

Some jurisdictions require stamped plans by a structural engineer.

The plans still need to be designed by a qualified designer, and engineer stamping typically will be an additional step and cost in the process. After design you will need to send your completed plans to an engineer licensed in your state, who will likely require some alterations to be made which your designer can do, and then the engineer will stamp applicable pages.

Pros: Overcomes questions about code compliance, and specifies structural elements based on your location.

Cons: A more costly option, and design will be conservative to account for “worst possible scenarios.”

Back Forty Buildings is the architectural firm co-owned by Paul + Emily Marshall along with their partner, Liv Berg.

We specialize in barndominium design and can draft stick, steel, or post frame construction. Our team of project managers work with our clients to create a design that fits the client's needs.

We have a referral network when an engineer stamp is required.



READING DESIGN PLANS

Plumbing + Electrical Pages

These pages will display locations for drains, electrical distribution and fixture locations etc. For your under-slab rough-in, these pages are crucial to be correctly dimensioned.

After interior framing your electrician will likely give you the opportunity to walk through the house and discuss details. Your plumber will typically accomplish his/her finish work without additional guidance.

A great set of plans does not have to include every pipe or wire run as there are multiple ways to perform the work. Often some of the decisions are driven by local requirements and the exact position of the building on the property. It is uncommon for permitting to require extensive information that would include fitting sizes or other details.

HVAC Plans

Your design plans may not have a full mechanical plan, rather the mechanical layout will be noted in the utility room. During the design phase you should consider how ducts and other lines will go from your utility room to their destination. Consider consulting your HVAC contractor or other trades to gain a better understanding of what to expect during the rough in process.

Schedules

A schedule is essentially a list of materials or items. You should see this for windows, doors, and anything else your designer provides in that section.

Structural Details

Making sure your designer has experience with the type of framing you're intending, whether it be post frame, steel frame or stick frame is crucial. These pages will normally include typical details meaning that it shows how it's meant to come together. The exact measurements and dimensions will be dependent on your project, but a contractor should have no issue using the detail pages as a guide.



READING DESIGN PLANS

When it comes to building a barndominium, whether you are DIYing or hiring a builder, there are a few important things you'll need to have a good understanding of.

Elevations

This is an external view of the structure, typically all sides will be shown.

Floor Plan

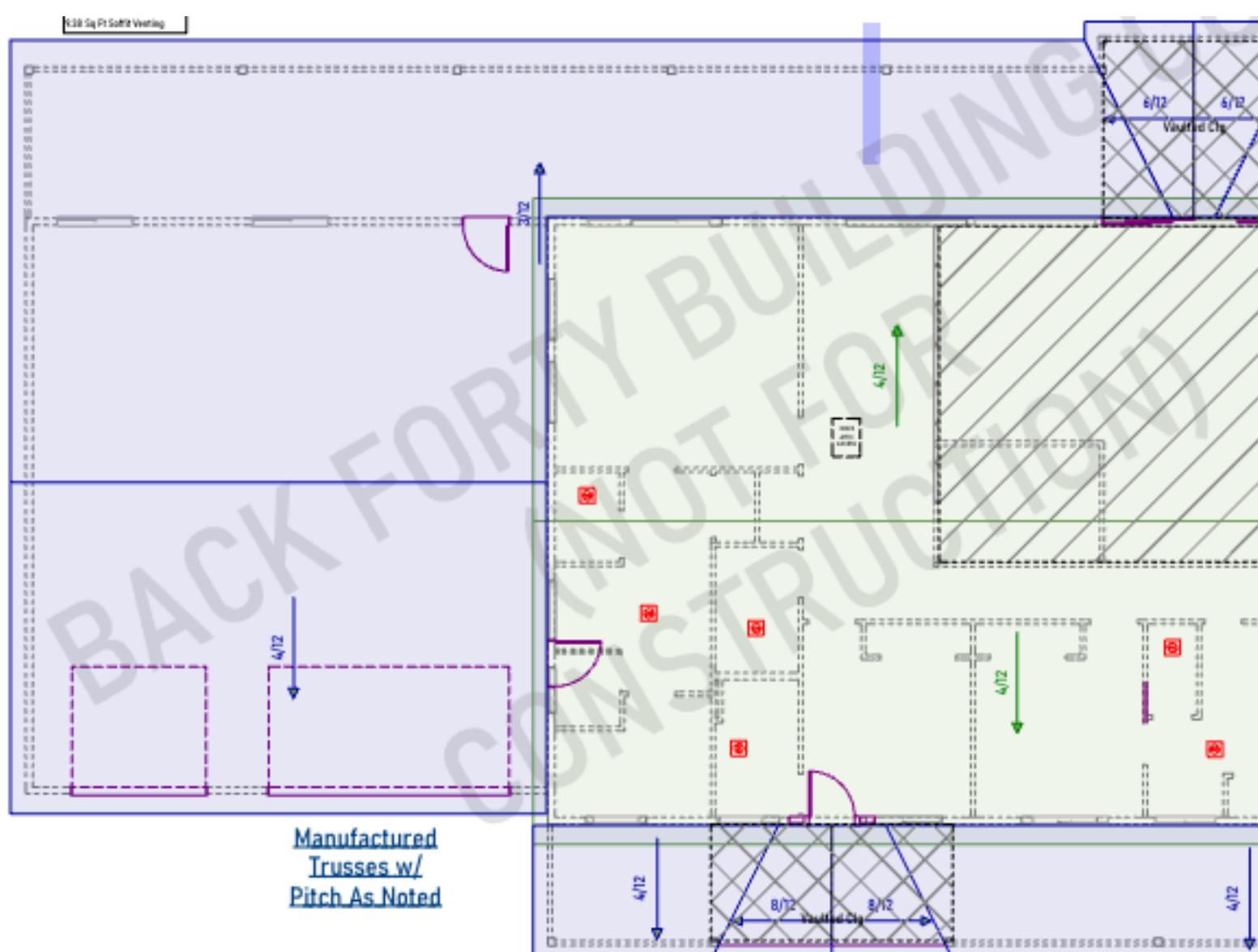
These pages will display the interior layout of your structure, with window and door locations and detailed dimensions.

Foundation Plan:

A detailed foundation plan will help you start your build off right! Regardless of the type of foundation you plan to go with, we highly recommend having a detailed foundation in your set of design plans.

Roof and/or Truss Plan

This will show the pitches and other details related to the roof framing. It may also include truss information depending on the project.



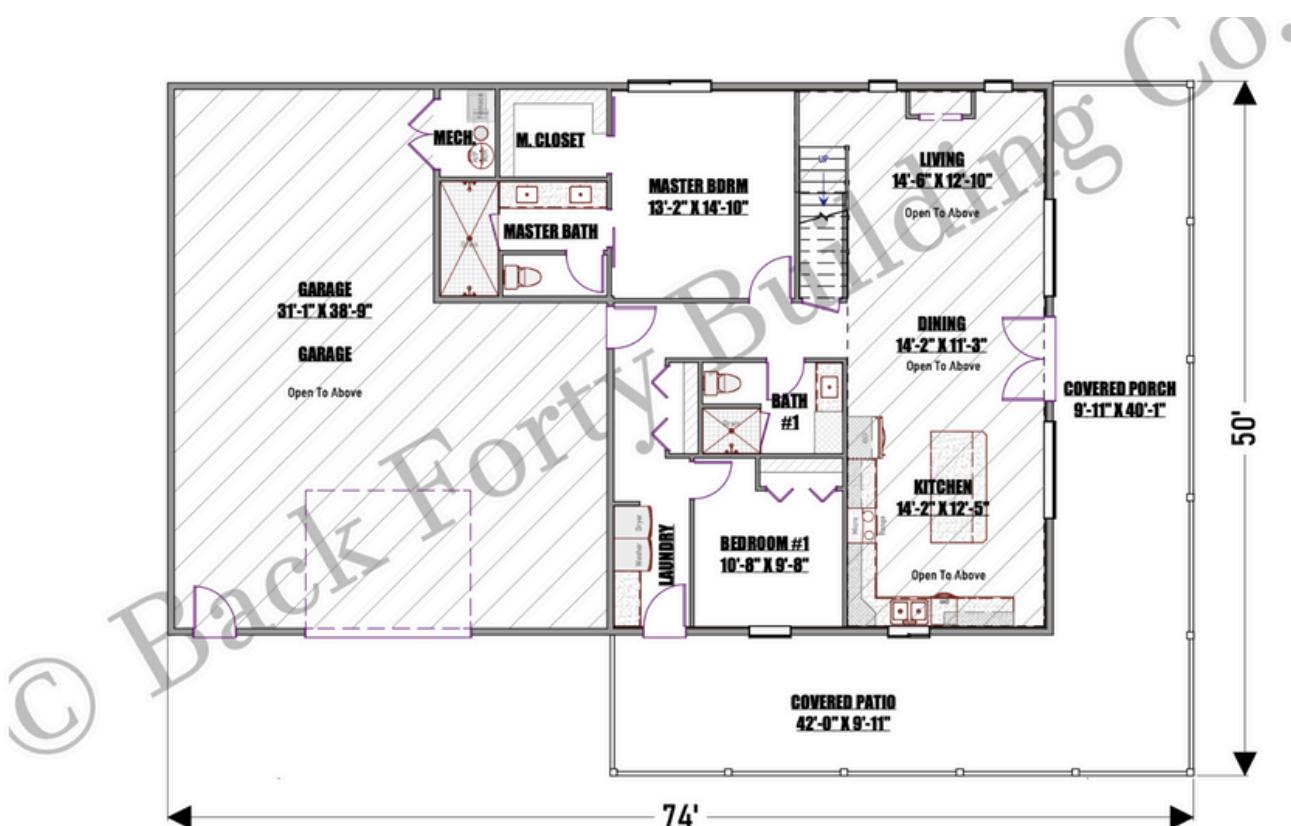
STOCK VS. CUSTOM PLANS

We often get asked what the difference is between stock and custom design, aside from the cost. It isn't uncommon for a custom design to be twice as expensive as a stock plan of the same size.

A stock plan is an option that has already been drawn and is ready for immediate use. The reason why it is less expensive than a custom design is that the time spent to draft was done once even though the plan can be sold time and again.

Stock plans with modifications are also more cost effective than a custom design if they are minimal. Again, the bulk of the work has already been done prior to your interest in the plan so there is less cost in tweaking it to fit what you were looking for.

Custom design is exactly as it sounds. Every part of the exterior and interior will be designed according to your specifications. It is helping you bring to life what you have dreamed up in your mind as the ideal layout for your barndominium. The cost is reflective of the drastic increase in time that will be spent drafting and working with the client.



SKETCHING YOUR OWN DESIGN

If you're interested in doing some preliminary brainstorming on how you would like your barndominium laid out, there are a couple things you'll need to be aware of.

For a stick frame design, your options for placement are for the most part unlimited.

For steel frame, the column spacing may vary but will need to be taken into consideration for placement of things like windows and doors.

For post frame, we design and recommend 8 foot on center post spacing. So if you would like to begin sketching out your own design, consideration for window and door placement is necessary every 8 feet. Keeping the overall size/shape divisible by 8 will maximize your materials and labor costs.

How Design Choices Affect my BARNDOMINUM BUDGET

As with any type of home build, there is a range of design/cost options available when building a barndominium.



MY DESIGN WISHES + PRIORITIES



The link above will take you to the contact page for Back Forty Buildings.

With a great selection of stock plans as well as the experience creating custom plans - we really have something for everyone!

Below is a list of some preliminary questions to help you consider all of your needs and wishes!

MAIN STRUCTURE

Must Have Really Like Can Do Without Not Needed

Square Feet: _____

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Stories: _____

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Total Bedrooms: _____

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Total Bathrooms: _____

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Full Structure Size: _____

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Garage Size: _____

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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MY DESIGN WISHES + PRIORITIES

MASTER SUITE

	Must Have	Really Like	Can Do Without	Not Needed
Oversized/Additional Space	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dedicated Sitting/Office Space	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Access to the Exterior	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Walk-in Closet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
His/Hers Closets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Soaker Tub	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Standard Tub/Shower Combo	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wet Room	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Toilet Closet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cosmetic Counter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
His/Hers Sinks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Notes:

KITCHEN

Walk-in Pantry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Butler's Pantry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Island Sized to Seat: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sink with Window View	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Notes:

MY DESIGN WISHES + PRIORITIES

ADDITIONAL SPACES	Must Have	Really Like	Can Do Without	Not Needed
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Secondary Family/Living Space	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Office with Closet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Office without Closet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Separate Formal Dining Room	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Open Loft	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bonus Room	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sun Room	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Theater Room	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Screened in Porch	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outdoor Kitchen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Desk/Computer Nook	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mudroom 'Drop Zone'	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dedicated Foyer Entry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Breakfast Nook	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wet Bar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pet Wash Station	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Notes:

MY DESIGN WISHES + PRIORITIES

GARAGE/SHOP SPACE	Must Have	Really Like	Can Do Without	Not Needed
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hot/Cold Water Hookup	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
House Generator Hookup	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bathroom	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sink/Prep Station	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outdoor Shower	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dedicated Gym/Sport Space	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wet Bar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Describe any porch or outdoor space desires:

MY PRIORITY LIST

Take your Must Have Items and List Them in Priority



ADDITIONAL NOTES

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