





The Ultimate Guide to Design/Build in New England

The how and why of design/build planning, costs, and execution for home building and renovation

GMT Home Designs — Premier New England Architects and Designers

Is design/build the right choice for your home construction project?

Home construction or remodeling is a significant investment, and the results are really close to the heart. The better informed you are as a homeowner, the easier it is to make good decisions and communicate clearly with everyone involved.

If you're considering a major home construction or renovation project in New England, you've surely heard the term "design/build" thrown around. The traditional way of doing construction was to hire a designer, then bid out the designs to multiple construction firms. Design/build is different, hiring both designer and builder up front, as a unified team.

This guide will walk you through everything you need to know about the design/build approach, including:

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Along the way we'll share experiences from our past design/build projects across New England — how decisions were made, some cost-control measures, and more, to give you a real-world sense of when it's a good fit and how to make it work to your advantage.

CHAPTER 1

Understanding Design/Build

What Is design/build?

Design/build is a unified approach to home construction projects where the designer and builder are chosen together and work together starting early in the project. This may be done via one contract covering both phases, or through separate but coordinated contracts that give you clear ownership of your completed construction documents.

The design/build approach aims to streamline communication, increase teamwork, and decrease the chances of needing to make costly changes during the construction phase.



The traditional alternative: design-bid-build

Design-bid-build is the more conventional project delivery method. It separates the design and construction phases into distinct contracts. The key word in understanding this method is "bid," because it's structured to let you look for the lowest bidder from a home design firm, and then again for the lowest bidder on construction.

The process usually follows these steps:

1. your home's design based on your requirements and specifications. When the design is complete, the designer may basically be done (though smart contracts often include some involvement throughout construction).
2. The completed design is sent out for bidding, and contractors submit proposals to compete for the construction contract.
3. You select a contractor who will be responsible for doing the construction work.

Sounds simple, right? Sometimes it is, but sometimes it isn't. There's often a fourth step: **change orders!**

Because of unexpected developments in the construction project — a site challenge, a cost overrun, materials that aren't available, a desired upgrade or change of heart — you may need to re-engage the designer to modify the design. This can cause delays and additional costs, both of which tend to cause heartburn and tense email exchanges.

CHAPTER 1

Key Differences: Design/Build vs. Design-Bid-Build

The main distinction between these approaches lies in how responsibilities are organized. Design/build combines design and construction under a coordinated team, while design-bid-build separates them into distinct contracts with an emphasis on finding the low-cost providers.

Instead of focusing on finding the lowest bidders, design/build focuses on:

Single Point of Responsibility

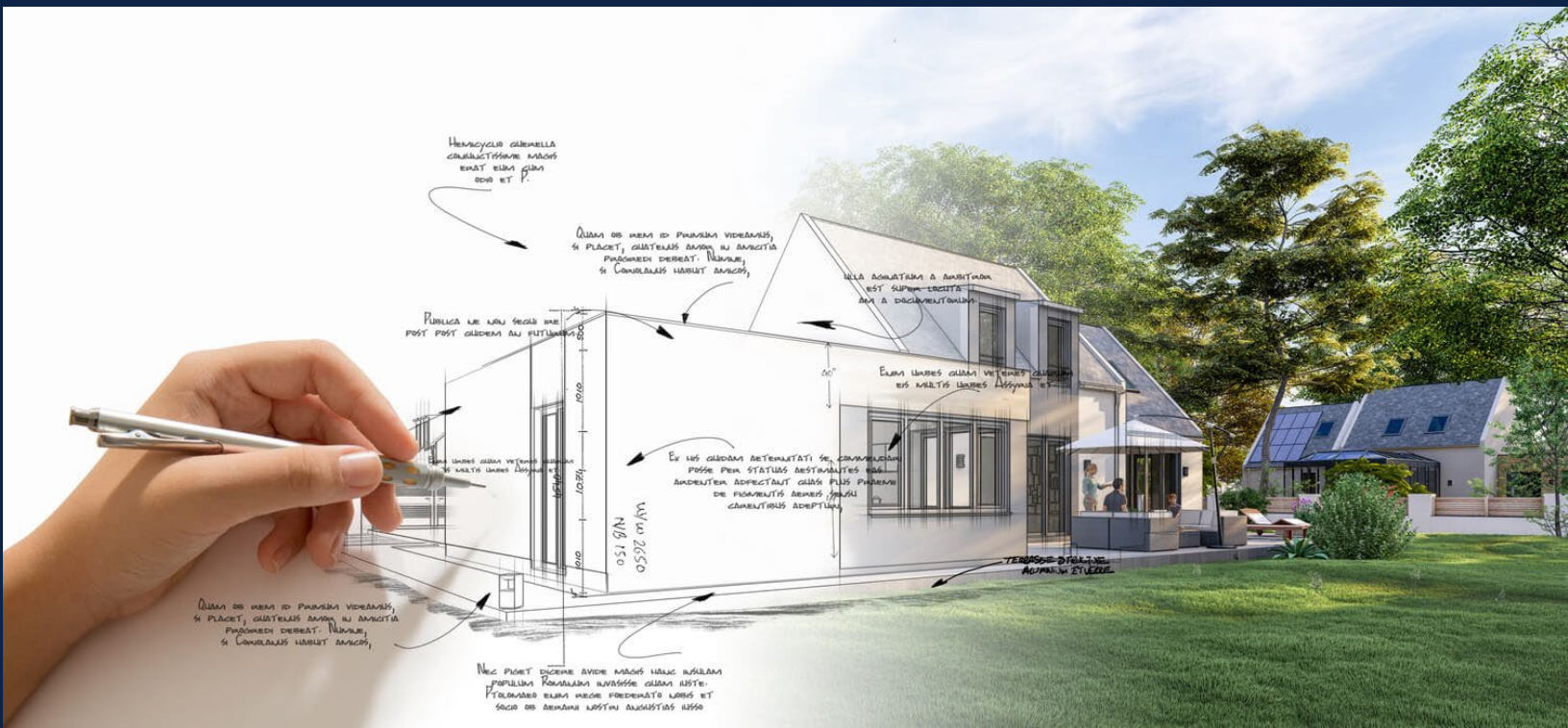
You have a single, coordinated team that you know from the beginning of the project, which simplifies communication.

Faster Overall Project Delivery

The design and construction phases can overlap, allowing for a streamlined and accelerated timeline. There's no interruption for construction bidding. Late-phase changes are less likely in design/build, but if you do want to alter the design, you don't suffer lengthy delays.

Budgeting Clarity

When design/build is done right, the builder provides input from early in the process. When you reach the stage for design approval, you have confidence that the plan is truly buildable and that the cost expectations are highly accurate.



CHAPTER 2

Understanding the Costs

Is design/build more expensive?

Design/build isn't inherently cheaper or more expensive than the traditional approach.

The initial "sticker price" may be higher, but better collaboration on estimates means that the contracted price in design/build is more likely to match your final cost. That's one of the goals: to make sure you know real costs up front.

Here's a nice comment from one GMT client on Houzz, regarding both visibility and cost for a significant home renovation:

> *"The design fee is set up front, and ended up being lower overall than a by-the-hour professional we had on another project…. In a meeting with GMT, the General Contractor presented a very detailed timeline and budget (both were met with very few changes). Fast forward six months, and we are thrilled with our new modern space."*
>
> — GMT Client, via Houzz

That shows what you want from design/build. Good collaboration from the beginning yielded an accurate understanding of the work and the costs, as well as on-schedule delivery. At GMT, for example, our collaboration includes a site walkthrough with the prime contractor *and* their subcontractors. That on-site knowledge helps them with accurate pricing as well as a great understanding of the schematics and the overall plan.

Why people think design/build costs more

There are three main reasons for this perception:

1. **The perception that design/build companies are premium firms:** This may have started with a kernel of truth. The design/build method first gained traction with companies doing more complex projects, which tend to have higher costs.
2. **The lack of a separate, competitive bidding stage:** In design-bid-build, multiple contractors bid to build the completed design, and this competition can bring in some low bids.
3. **Higher initial "sticker prices":** The design/build price you see up front is typically closer to the final price you will pay. If the initial contract is offered without sufficient visibility into construction costs, you often wind up paying more at the end.

CHAPTER 2

What Really Affects the Price

What really affects the price:

Design/build involves close collaboration throughout the project between architectural design and construction. The involvement of people with expertise in both functions, particularly at the onset of the project, takes time, Design/build factors this collaboration into the costs from the beginning, and also fleshes costs out earlier in the process, during the schematic design phase. If the design needs to be tweaked due to budget constraints, those changes can be made easily since the construction documents haven't been started. This kind of iterative work is a natural part of the design/build approach.



The change order problem:

At the beginning of any home construction or renovation project, you'll sign a contract that reflects the work to be done, in detail, and the price you'll be charged. If those details change in a meaningful way as the work proceeds, you'll need to amend the initial contract with a change order.

Change orders can occur for several legitimate reasons:

- You may change your mind or have new ideas as the project progresses, deciding to upgrade materials, alter the layout, or add features.
- During construction, unexpected problems may arise, such as discovering structural damage or mold that wasn't visible during the initial assessment.
- Specific materials or products may become unavailable or experience significant price fluctuations.

In the (hopefully rare) worst-case scenario, some contractors may do this on purpose, planning to offer a bargain price up front and then make their margin back with "unexpected" change orders as the project rolls on. With work underway, you're not likely to want to go looking for a different contractor, so most homeowners grit their teeth and sign the change orders.

CHAPTER 3

Value Engineering — Getting the Most for Your Money

Before committing to a custom home build or a major renovation, every homeowner asks this vital question: "What can I get for my budget?" It's a great, practical question. Everybody has big ideas and dreams, and everybody has some budget limitations, and sometimes there's a gap between those two things.

What Is value engineering?

In the construction business, figuring out how to meet design goals in the most cost-efficient way — giving you the most bang for your buck — is known as "value engineering," or VE.

Done right, design/build includes value engineering from the very start.

That's a big reason why the design/build approach to home projects is a natural fit for value engineering. Having your architect/designer and your construction company on the same page from the beginning means you start seeing realistic options and costs early on.

Making cost-efficient choices

"Choice" is a big word in value engineering. Because designers and builders work in collaboration, they can help you ask the right questions about your goals and priorities, and offer creative solutions you might never consider on your own.

One example: often homeowners who want a new first-floor primary suite think that the only way to get it is via a large addition to their home. However, adding to an existing foundation is expensive — approximately **twenty percent of your project cost goes "straight into the ground."**

But experienced design/build providers know there are other options. We pride ourselves on creative problem-solving from the very first site consultation, helping clients see the full possibilities, For example:

- **Right-sizing an expected addition** (for example, adding 1,000 square feet instead of 1,500) while "reclaiming" some space from the existing footprint to still give you all the space and function you actually need. In one case, a GMT client described a master plan that would have cost roughly **$750,000** — more than the total current value of the home! Instead of adding more square feet, the design repurposed about 25% of the first floor space, taking out one load-bearing wall and adding a beam and a repositioned wall. The client loves it — it gives them what they need, faster, and at much lower cost.
- **Full foundations aren't necessary for every addition.** If you have enough storage already and want a new family room, you might be able to use a crawl space, concrete piers, or helical screws instead. These aren't the right solution for every project, but when they are, they're much less expensive.
- **"Phasing"** — identifying which parts of the envisioned dream home are most important now, and which can be efficiently set aside for a second project down the road when budget allows. Good design can make phase one look and feel fully complete, while also making the construction of phase two easier.

CHAPTER 3

Big Ticket Items to Consider

Big ticket items to consider:

After the question of the project's overall size (how many rooms, how many square feet), on larger homes the big-ticket options in terms of pure cost are:

- Windows
- Roofing
- Millwork (molding, window frames, and so on)
- Cabinetry

If your dreams are stretching your budget, those are places to look for lower cost options that still give you the space, function, and look you need.

For instance, a large custom home might have 30 to 40 windows; the difference in cost between a very good window and a super premium line can add up quickly. And for siding, fiber cement is durable and fairly inexpensive; brick and stone can cost five to ten times as much!



Real examples from recent projects:

- Recently, one client planning a whole-house remodel wanted a stone veneer on the chimney. The mason came back with a price tag of $90,000 for materials and labor — just for the chimney! It looked fantastic in the renderings, but to keep the overall budget down, the client decided to remove that veneer and go with something simpler. To this homeowner, the stone veneer wasn't worth the extra cost.
- On the other hand, for one homeowner tasked with combining two smaller bedrooms into a single primary suite, the original plan was to work around the existing ductwork. However, with a second design we showed how moving the ductwork would improve movement in the house and bring in more natural light. The client (and the builder!) loved the result, and the owner decided it was worth paying an additional $7,500 to have the ducts moved.
- Cabinetry prices have gone to the moon in recent years. For a client who wants custom cabinets in a kitchen, mudroom, powder room, pantry, and more throughout the home, the cost estimate just for cabinets might be $150,000 or more. An alternative approach is to create built-in shelves in some or all of those areas; these can be built on site, still adding a nice New England touch but for quite a bit less money.

CHAPTER 3

What Value Engineering Isn't

Some construction industry people joke that VE actually stands for "vicious elimination" or describe it as "a process where architectural design dreams get dashed."

These jokes arise from the many cases where value engineering is done poorly, late in the process, or both.

VE should NOT mean using the cheapest building materials. Cheap stuff often requires more maintenance and still has to be replaced sooner. Worst case, it's also less safe. This isn't engineering value, it's just raw cost-cutting that doesn't save you money in the long term.

A true design/build project should apply a VE mindset throughout. This will help you think through your options early on, consider creative ideas, and figure out the most cost-effective way to get all the "bang" your bucks can deliver.



CHAPTER 4

How Design/Build Contracts Work

Your building contract should reflect the process that the designer and builder are going to follow. If not, it's easy for details to be forgotten, or for expectations to get mismatched, or (worst case) empty promises to be ignored.



Where design/build contracts can fail

Some homeowners worry: Won't I face a loss of control if the designer isn't independent from the builder? Who can I trust to provide quality control or advocate for my interests through the construction process?

These are fair questions. The solution is a contract structure that protects your interests while maintaining the collaborative benefits of design/build.

Important questions to ask

If you're considering working with a single company offering both design and build services, ask:

- **Who is doing the design for my project?** Sometimes, a single source company is essentially a "build-design" company. They see the value in design, but may have little expertise or training in it. You'll want to understand the specific individuals responsible for the design and their qualifications, and require that the design includes fully buildable plans, not just nice-looking drawings.
- **Who is my design advocate during the construction phase?** If the designer is completely beholden to the contractor, how do you know that someone is in your corner?

If you're considering a two-company design/build partnership, ask:

- Have you worked together previously? Good communication is absolutely indispensable for successful design/build work. Every team has to start with a shared first project, but you don't want your project to be a blind test-run.
- At what point will the builder start providing input on the design and projected costs? If the builder doesn't see the schematic design before construction drawings are finalized, you're more likely to hit unanticipated change orders or budget overruns.
- Who is my design advocate during the construction phase? How will the design firm's involvement be documented?

CHAPTER 4

GMT's Approach: A Better Contract Structure

To eliminate uncertainty, stress, and miscommunication, we break design/build contracts into two parts:

Part 1: The schematic design agreement

This agreement includes three "deliverables":

1. The schematic design — floor plans, elevations, and renderings. (This is NOT the same as a full buildable plan yet; those construction drawings will be completed AFTER you sign off on the schematic design.)
2. A construction cost estimate from the build partner
3. A construction schedule from the builder

The schematic design is an iterative process. Starting with an understanding of your building site, vision for your home, and overall budget, the design team creates the addition or custom home, which raises questions and decision points that help you refine your ideas, while being mindful of your budget. These decisions are incorporated into new iterations of the design until you arrive at the final agreed version.

Early involvement from the build partner makes this work. They give input on material and labor estimates, understand your goals, and help build a trusted relationship among all three parties.

You own the schematic design plan, know why design choices are made, and have confidence that the cost and schedule estimates are realistic. Years of experience have shown us at GMT that this separate design agreement brings clarity to the project. Our clients love it.

Part 2: The construction process and contract

Once you've signed off on those three elements from the Schematic Design agreement, the builder produces a construction contract to be signed. Due to the collaborative work on design, budget and schedule that's already happened, there shouldn't be major surprises in this contract.

Two key aspects of the construction process deal with design issues and involvement:

- Construction drawings/buildable plans. This contract will include the design firm's work to turn schematic design into final construction drawings — the buildable plans. Payment for this work comes from the contractor, and you can see those costs as line items in the contractor's overall budget.
- If changes are necessary (and it does happen, although a good design/build approach minimizes it), the construction drawings are updated to ensure that everyone — homeowner, builder, designer — has accurate drawings at every phase and a record of what's being produced.
- Review of construction milestones. During construction, designers and architects review the build, materials, and quality to make sure they are accurate to the final construction drawings.

CHAPTER 4

Three Fundamentals of Design/Build Relationships

While contracts create legal agreements and help set expectations, relationships are still the heart of home construction projects. Your house is too personal for it to be any other way.

Here are three things to remember:

1

Trust & Communication

You want a designer and builder with a great working relationship — defined by trust, good communication, and compatible work styles.

2

Commitment to Cost Management

You want both designer and builder who are committed to helping you manage cost. Whatever general contractor you use can help manage the cost of their subcontractors … or not. But in design/build, having both on the same page about costs makes everything else easier.

3

Transparency & Visibility

You absolutely need transparency about costs and visibility into details. Not every homeowner wants to scrutinize every line item or choose every fixture, but the information has to be documented and available, so there's no confusion.



CHAPTER 5

Choosing Your Design/Build Team

The intent of design/build is to not only determine what your finished project will look like, but also improve the quality AND manage the cost at the same time. That's quite an ambitious goal! And, because "design/build" is a hot term these days, you'll see designers and builders, big and small, all using it to describe their services. So it can be a real challenge to figure out which firms are really able to deliver on all three elements: great design, great construction, and careful cost management.

Local expertise and excellence in both disciplines

This goes without saying, right? Actually this is a place where some companies offering "design/build" services fall short.

Sometimes a bigger contracting company may offer design/build "all under one roof" and have some design capability on staff, but lack the mix of architectural and design expertise to really nail the design details. This can result in a final product that's functional, but looks generic or underwhelming. Some contractors see the value in design services, but don't really have qualified designers and architects on staff. The question to ask is, do they have the necessary education and experience regarding structure, roof lines, ratios, window placement, the flow of the exterior, and so on.

If a design/build contractor charges minimal design fees, they either don’t have the best designs or are charging you on the back end in their construction fees.

Conversely, a large design firm might be depending on its local construction partner for the region-specific knowledge that you only gain by working "on the ground" in New England's distinctive cities, towns, and neighborhoods. You may get a design that looks good on screen, but hits snags in the permitting and construction phase (or, worse, after the project ends and the changing seasons start to reveal problems with the house). Conservation regulations, setback requirements, ledge and soil concerns — these differ significantly from Kingston RI to Metrowest Boston to Cape Cod to Manchester NH (and so on).

Another shortfall can happen if a design firm and a construction firm join up, but lack experience working together. This can result in communication and process problems, poor budget planning, or even finger-pointing — the sorts of issues that design/build was supposed to help fix in the first place.

What you should be getting in true design/build services is great design expertise working seamlessly with great construction expertise.

CHAPTER 5

Practical Budget Visibility and Designer-Builder Collaboration

Practical budget visibility and guidance — starting early!

In the old design-bid-build process, homeowners rely on competition between builders to keep construction costs low. Sometimes that works just fine.

Once in a while, though, it doesn't work, and there's a big unhappy surprise when you discover that ALL the construction bids are way above your actual budget. Source of problem? The designer or design firm has created drawings without realistic and informed input from a builder.

Budget (and schedule) disconnects like that shouldn't happen in a good design/build process.

In GMT's design/build approach, we provide rough initial input on cost based on historical data of past projects. We verify this initial budget range with our build partner. The deliverables for schematic design are not only the design itself (floorplans, elevations and renderings), but also a preliminary budget from the contractor and a schedule as to how long the build will take. The contractor will walk through the site with the schematic drawings, together with the subcontractors — that's a twist in our design/build model that really helps avoid surprises and nail down costs.

Using industry-leading design programs into the design – we use Chief Architect, the industry standard-setter – designers and builders together can generate reliable cost estimates.

Once you approve of the schematic design and budget, the contractor brings in their subcontractors to see your home along with the design, and refine the cost numbers. This way no one is guessing about costs, and the contractor can nail down a fixed price for your project.

Designer-builder collaboration throughout the whole process

In design/build, you pull in one contractor partner to determine not only what your project will look like, but what it will cost as well.

The design and construction teams work hand in glove throughout the build process to answer any questions that come up in the field. The designer remains available to you throughout the build. They don't "go away," even as your project moves into the build phase and the construction team takes the lead.

Good design/build teams care equally about the aesthetics and the function of the design. They care about the bottom line investment as well. They don't want to add a box to your house and call it a day. Happy clients are the only way to build their business!

That means staying involved, available, and communicative until your project is truly complete.

CHAPTER 6

A Handy Reference of Key Design/Build Terms and Concepts

Here's a glossary of terms you'll hear when you consider choosing a design/build approach to your project. We've kept it concise and focused on what it all means to you as a homeowner.

Construction project methods and stages

Architectural design

The creative process of developing the aesthetic and functional aspects of a home, defining its appearance, layout, and features. What will your house look like, what is the layout of rooms, where will basics like appliances, plumbing and HVAC be placed? Great architectural design is based not only on your style but also how the home will meet your daily living needs and preferences.

Design-bid-build

The traditional project delivery method where the owner contracts separately with a designer and a contractor. The design is completed first, then contractors bid on the construction documents, and after choosing a contractor, finally construction begins.

Design/build (or design-build)

A unified approach where the designer and builder are chosen together, and work together starting early in the project. This may be done via one contract covering both phases (design and build) or through coordinated separate contracts. The design/build approach aims to streamline communication, increase teamwork, and decrease the chances of needing to make costly changes during the construction phase.

Design-assist

A less-common variation on design/build where contractors participate during the design phase to provide constructability input and cost estimating before construction documents are finalized. It may be less contractually defined, or less fully collaborative, than a design/build team.

Integrated Project Delivery (IPD)

An approach usually used in really big construction projects for commercial or multi-tenant buildings. Similar to design/build in its intent, IPD aligns people (including multiple subcontractors), complex systems, and business practices throughout the project.

Site consultation

Step One in home construction projects — regardless of project method! An on-site meeting where professionals evaluate the property's characteristics, constraints, and opportunities before beginning any design or construction work. Sometimes also called a site walkthrough, site assessment, site evaluation, or "job walk." You should get lots of information and some creative new ideas from a good site consultation.

CHAPTER 6

Different Types of Design/Build Documents



Blueprints

An outdated term! This word isn't used much anymore. A person asking about blueprints could mean any sort of document. It's better to use the more specific terms below to help ensure everyone is talking about the same thing.

Buildable plans, AKA construction drawings or documents

Used in late (construction) stages of the project. Should only be created after Schematics have been approved by you and the builder.

Comprehensive package used for permitting, bidding, and building. Contains sufficient detail for contractors to finalize prices and build. Includes dimensions, materials, assembly methods, drawings, specifications, schedules, and product details. Legal instruments that form part of the construction contract. Often comprise multiple drawing sets across disciplines.

Even though they are technically synonymous, "buildable plans" is a better term because "construction documents" is sometimes used informally to mean any number of different kinds of documentation. If a designer, architect, builder or contract refers to construction documents, it's valuable to ask: "Does this refer to fully buildable plans?"

Schematic drawings

Used in the early stages of a project. Preliminary sketches showing layout and spatial relationships. Typically include floor plans, elevations, and how the home is positioned on the lot. GMT's schematics are actually quite detailed.

This stage is always iterative: the designer gets your feedback on initial drawings, makes adjustments, and works with you to zero in on the perfect design. Your designer should be able to use schematic drawings to offer a "3D walkthrough" of your space, allowing you to visualize how it all fits together. If you have to make changes after construction has started, that's more costly.

In design/build, the contractor is already involved in reviewing these schematic drawings, to help estimate costs and ensure that the final plan will actually fit your budget.

Schematic drawings do NOT include enough construction detail to guide the full building process — for example, framing information isn't included at this stage.

Technical drawings or MEP plans

Mid to late project stages, if needed (usually for commercial projects). Detailed drawings focusing on specific building systems, most often for commercial projects – including Mechanical, Electrical, or Plumbing details. Often show how systems integrate and connect. Contains technical specifications and measurements. Used by specialized trades to understand requirements.

Basics for each of these systems are already incorporated into the buildable plans for a home. For example, the buildable plans will already include outlet locations, construction notes for any recessed lighting, and other electrical fundamentals.

CHAPTER 6

Other Processes, Steps, People and Things

3D rendering

Computer-generated images or animations that provide realistic visual representations of the proposed design before construction begins, helping you understand how the finished project will look. Initially based on schematic drawings.

Change order

A formal document that modifies the original construction contract by adding, deleting, or revising the scope of work, affecting project timeline, cost, or both. Must be agreed upon by both you and the contractor. Change orders apply once you've already agreed on final construction documents, and usually add cost to the project. (That's one reason why some people choose the design/build approach, with early contractor input plus 3D-rendered documents helping get the details right prior to construction, thus minimizing or avoiding change orders.)

Construction administration

The management and oversight of the construction process to ensure work is completed according to design specifications, including site visits, progress reviews, and quality control. In a good design/build project, both builder and designer are involved in construction administration, working as partners but with their specific responsibilities clearly defined on your behalf.

General contractor (GC)

The person (or company) in charge of the construction work. This person is ultimately accountable for the quality of the build, including parts done by subcontractors.

Subcontractor

A specialized contractor hired by the general contractor to perform specific parts of the construction project, such as electrical, plumbing, framing, or HVAC installation. Pretty much every significant home construction job involves subcontractors.

Preconstruction services

All the work needed before breaking ground, including constructability reviews, scheduling, budgeting, and procurement planning.

Value engineering

The systematic analysis of designs, systems, equipment, and material selections to reach your goals at the lowest total cost, ideally without sacrificing quality, performance, or aesthetic features. (In other words, "getting the most bang for your buck.") Design/build should inherently include value engineering from the beginning. If it's a late-stage process done because the project is running over budget, that's not ideal – it often leads to unhappy compromises.

Conclusion: Your Next Steps

Now that you understand the design/build approach, how it compares to traditional methods, what it costs, and how to evaluate firms, you're ready to start your project with confidence.

The first step in any home construction, addition or remodeling project is a conversation with a qualified design/build team. Look for teams that:

Proven Expertise

Have proven expertise in both architectural design and construction

Early Collaboration

Work collaboratively from the very beginning of your project

Budget Transparency

Provide transparent budget visibility and value engineering

Clear Contracts

Offer clear contract structures that protect your interests

New England Experience

Have extensive experience working in New England

Your home is one of your biggest investments, and you deserve a process that respects your budget, your vision, and your time. The right design/build team will make your construction or renovation project not just successful, but genuinely enjoyable.



Ready to Begin?

Building a custom home is a journey — one filled with important decisions, exciting milestones, and ultimately, the creation of something uniquely yours.

At GMT Home Designs, we've guided families all over New England through this process. We believe that clear communication, expert craftsmanship, honest conversation about challenges, and genuine partnership are the foundations of every successful project.

When you're ready to take the next step, we'd love to hear about your vision.

Schedule Your Consultation

Schedule your consultation with GMT

Call Us

508-881-7992

Email Us

info@gmthomedesigns.com

Visit Us Online

www.gmthomedesigns.com

Sources

- The-New-Englanders-Guide-to-Planning-Your-Custom-Home.pdf