
Presentation Drawings for Design-Build

by Carl Hagstrom



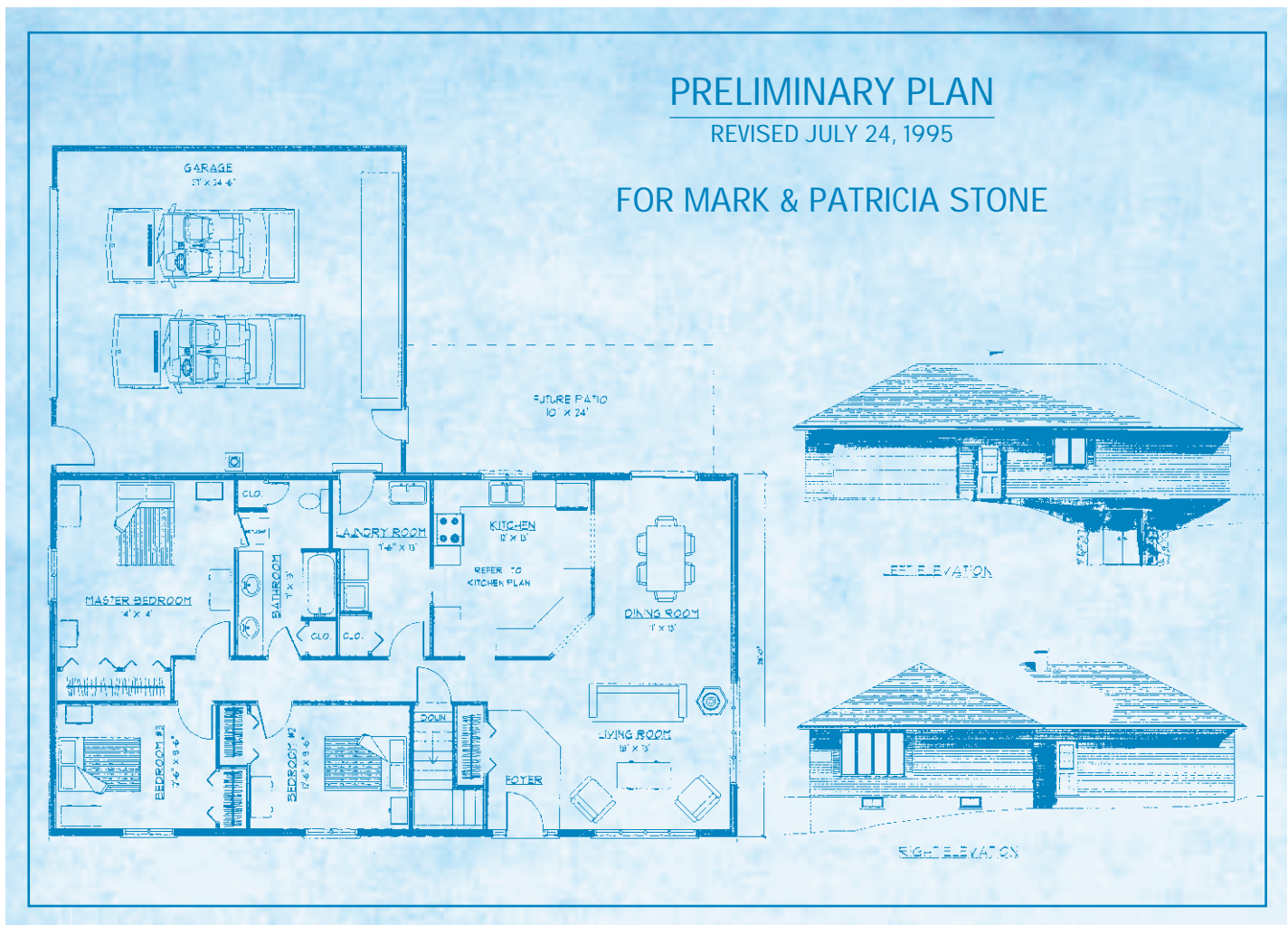
This conceptual drawing helped the author's clients visualize the completed project (photo inset).

Quality perspectives and elevations — not detailed construction drawings — sell designs

Builders who also offer design services can increase sales, target a more high-end market, and exert more control over the project. But design adds a new level of complexity to your business operations, and if you're not careful, you can end up doing design work for free.

Before you take the plunge into design work, honestly ask yourself if you or someone on your staff has the talent and knowledge required to bill

themselves as a designer. Most customers don't expect builders to produce architectural-level drawings, and will accept mediocre drawings as long as they're functional. But those same customers will expect quality drawings from a company that calls itself design-build. And don't be fooled into thinking that CAD is the silver bullet: Most CAD drawings appear sterile, and lack the hand-drawn quality that is important in presentation drawings. People



The author always includes furniture and fixtures in preliminary floor plans, to help clients understand the scale of the rooms. It's also easier to visualize overhangs and offsets if elevations are shaded.

are looking for creative abilities in a designer, not computer skills.

Over the years, I've developed an approach that helps recover the costs of design by dividing the process according to three distinct types of drawings: conceptual drawings, preliminary drawings, and working drawings.

Stage One: Conceptual Drawings

The most important part of the entire design process is the early conceptual stage. During this time you are trying to sell your company to your clients, so the drawings you use must be first-rate. Don't even think about using graph paper. An amateurish drawing may raise doubts in your client's mind about your ability. If that happens, you're doomed no matter how good a builder you are.

Conceptual drawings should focus on form, not detail (see drawing). Quality drawings will encourage your

clients to continue working with your company, even if the drawings don't portray exactly what they had in mind. The time you spend explaining the design and talking about changes gives you additional opportunities to land the job.

Conceptual drawings are a walking endorsement of your company. Customers get excited looking at drawings of a project they're planning. Like the photos from their vacation, they will show your drawings to anyone they can. Your company's logo prominently displayed on the drawing is the most effective advertising space you can buy.

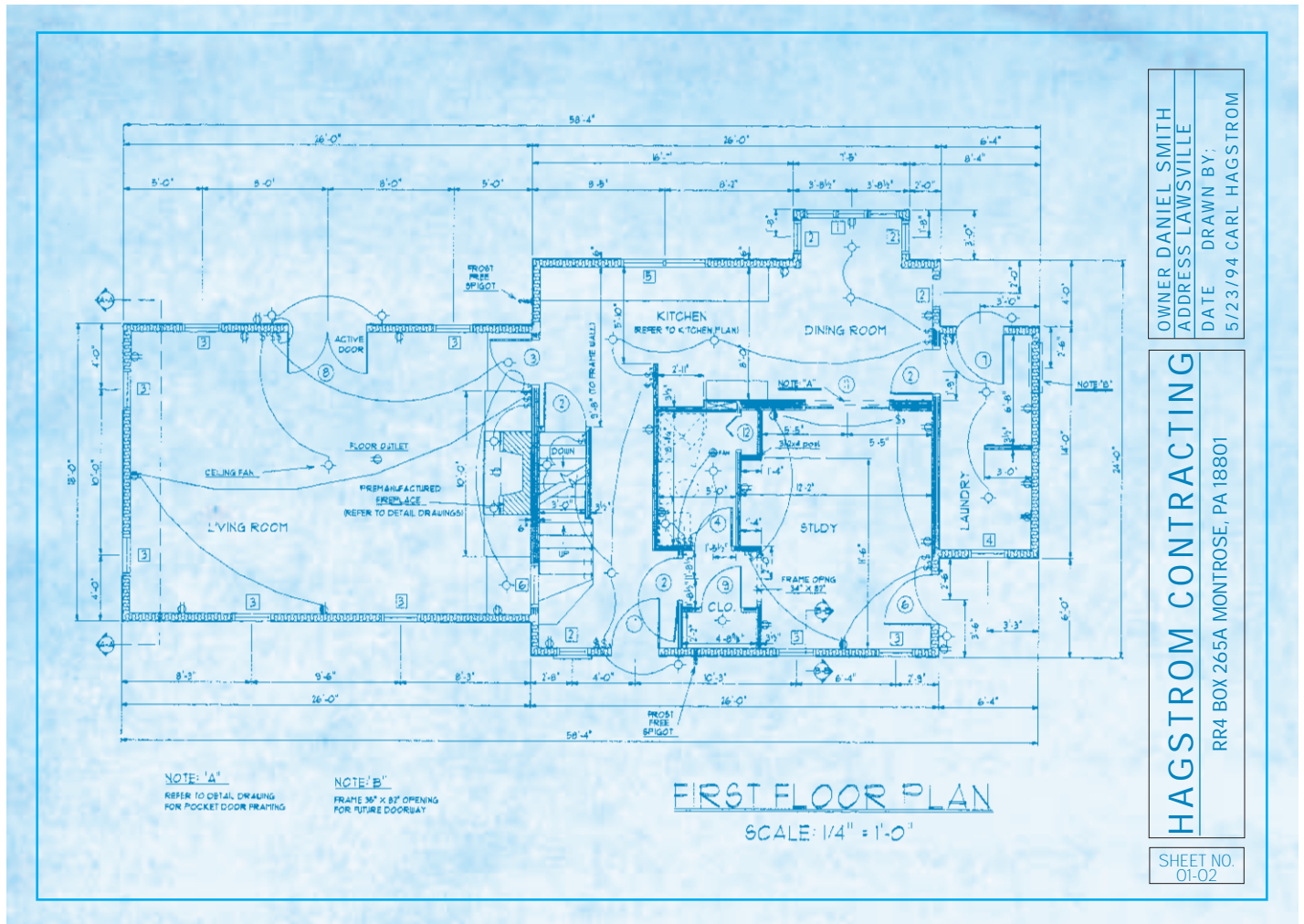
Stage Two: Preliminary Drawings

If the client likes your ideas and the proposed budget, it's time to get serious. Generally, I provide preliminary floor plans and elevations at this stage. Don't make the mistake of producing

construction drawings too early. The purpose of preliminary drawings is to provide customers with a series of "pictures" that accurately portray the finished project.

Floor plans. Most people have difficulty visualizing the finished project from a two-dimensional drawing. Keep preliminary floor plans free of wall dimension lines and similar clutter, and include furniture instead (see drawing, above). Room dimensions are meaningless to most people. By including furniture, fixtures, and cabinets, your clients will be able to judge the room size in context. I also fill in all double-line walls — the solid heavy lines make it easier for people to see the layout at a glance.

Elevations. The difference between drafting and drawing is shading. Without shading, an elevation will appear flat and confusing, and building offsets will tend to disappear.



For the design-builder, construction drawings are the culmination of the design process. A good set of construction prints should provide all information needed by subtrades, code officials, and permitting agencies.

I also include grade lines. I've had many customers argue that they weren't going to need a deck and stairs, for instance, at the front entrance of an addition. But after looking at an elevation that included the finished grade lines, they changed their minds.

Stage Three: Construction Drawings

If the truth be known, most customers couldn't care less about the construction drawings. It's your crew, your subs, and the building inspectors who need construction drawings (above). (If things go sour, the lawyers will also want a set.) Good construction drawings allow subs to execute their portion of the work with very little dialogue, and building inspectors use the drawings to approve permits and perform inspections as painlessly as possible.

By the time you're ready for construction drawings, the job contract should be signed and most of the details should be covered in the specifications. Details left out of the preliminary drawings to avoid clutter can be written into the contract as allowances. You might include an electrical allowance, for example, that provides for 45 device boxes at \$36 each, and additional boxes at \$43 each. This enables you to set the contract price before the exact location of the outlets is determined. After the contract has been signed, you can "walk through" the preliminary plans with the client and sketch in the exact placement of the switches and fixtures.

Bigger Is Better

If you're considering design services, make sure you can provide large-format drawings. Few things look worse than a small-scale drawing crammed onto an

undersized sheet of paper. The smallest format I'd recommend is a D-size drawing (18x24 inches). You'll have plenty of room for notes and a splashy title block with your company name. If you plan to design entire homes, step up to an E-size drawing (24x36 inches).

Getting Paid for Your Design

Right or wrong, the majority of your clients will not expect to pay for design. Until you've established a solid track record in design, follow these guidelines.

Conceptual drawings. Qualify the lead before beginning a drawing. In your first meeting with the customer, find out how many other bids they plan to get, and make sure the budget is realistic.

Consider your design time as part of your advertising costs. Whether you get the job or not, the drawing will be shown to a lot of people (remember,

You, Design, and the Law

Before you add the line “Design-Build” to your logo and letterhead, it’s important to do some legal homework. The laws governing design vary greatly from state to state. In some states, managing a construction project violates the architectural statute. Before taking the design-build plunge, discuss the following issues with your lawyer.

Investigate state statutes. Many states exempt design of single-family residences from the architectural licensing requirement; others severely restrict non-licensed design. Where I work in Pennsylvania, for example, preparing preliminary sketches or floor plans without a license carries a maximum penalty of 30 days in prison and \$500 fine. These stricter statutes are often ignored by builders, architects, and law enforcement officials, but you’re taking a chance if you ignore the strict language of the law.

To help understand the law, get a copy of *The National Summary of State Architectural Licensing Laws*, available for \$20 from The American Institute of Building Design (800/366-2423) and the Remodelers Council of the National Association of Home Builders (800/368-5242).

Check your insurance policy. Most insurance companies will tell you that your current general liability policy was not intended to cover “professional liability” or “malpractice,” such as design errors. Unless professional liability was specifically excluded from your policy’s coverage, however, courts have generally ruled against insurance companies when cases involving builder’s design errors have been litigated.



Minimize your risk. Depending on how strict your state’s architectural laws are, the following steps may lessen your liability:

- Avoid the appearance of practicing architecture. Don’t use the word “architecture” or anything like it on letterheads or advertising. Many state laws specifically bar the use of the terms “architect” or “architectural” by non-licensed persons when describing their services.

- State clearly that your design services are offered only in conjunction with your building services.
- Bill any preliminary work as “pre-construction services,” not “design services.”
- Put a stamp on all drawings stating that they are intended only for your use as builder.
- Consider bringing in a licensed engineer or architect. If the project is unusually large or complicated, you might want to have a licensed engineer or architect “supervise” your design work and put his or her seal on the plans. This may comply with your state’s licensing law and would also give you a stronger position if an unhappy client sues you for problems with the design.

Get certified. The following organizations may help you gain certification for design work in your state: American Institute of Building Design (991 Post Rd. East, Westport, CT 08880; 800/366-2423); American Society of Interior Designers (608 Massachusetts Ave. NE, Washington, DC 20002; 202/546-3480); National Kitchen & Bath Association (687 Willow Grove St., Hackettstown, NJ 07840; 908/852-0033).

— C.H.

your company name should be displayed prominently on the drawing).

Use your drawings to build your sales portfolio. Display them prominently in your office, and make them part of any home show booth display. After you’ve accumulated a substantial collection, consider charging a design fee for these early drawings.

Preliminary drawings. Before starting the preliminary drawings, agree in principle on the scope of the project and the budget. Request a nonrefundable deposit to cover your pre-construction services, such as developing the floor plans and related paperwork.

I also apply a red-lettered stamp to all my preliminary drawings that states “For estimating purposes only. NOT for construction.” If the customer bails out and gets someone else to build the project, this message lets everyone know that the drawings are not construction documents.

Construction drawings. Include the cost of construction drawings as a line item in your estimate. If your clients balk, dump the clients: They’re only going to make your life miserable throughout the entire project. Don’t forget to include the cost of the preliminaries in this line item.

Subcontracting the Design

If you lack drawing expertise but want the control that in-house design offers, consider subcontracting the design work or a portion of it. Paying a designer to produce a knock-out presentation sketch should be viewed as part advertising expense and part sales overhead. If you’re marketing to the right clientele, the cost will be more than offset by the increased close rate. ■

Former contractor Carl Hagstrom is a Certified Professional Building Designer, and an assistant editor at the Journal of Light Construction.