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TEN COMMON MISTAKES THAT SINK CONSTRUCTION PROJECTS

Construction is a costly undertaking. Many people, in an effort to reduce the cost, become penny wise and pound foolish. As in many other fields information is really the key to wise cost management. In general paying for information on your project will allow you to get better quality for less cost. Listed below are 10 common mistakes that can result in an unsatisfactory—and sometimes unfinished—project.

1. Failing to retain an architect when your project is still a twinkle in your eye. The architect can help you evaluate land and determine the kinds of construction that will be necessary for building on your land. They can help you determine what you can afford and how to get what you want. They can also identify things in your project that will likely increase the cost of construction. For example a moderately sloped site near a river or stream will require substantially more erosion control work than a similar site that is not near a stream.

2. Failing to limit your land lust. Why pay for what you don't need? Why pay for what you can't use? Having your architect help you set realistic requirements for space and land use can help you identify the right parcel of land. It makes evaluating any land under consideration easier. If it does not meet the minimum size requirements you need not buy it. Similarly it is not necessary to look for land any larger than what your projected needs are. You can include land for future expansion if you are so inclined, but there is no need to buy 40 acres if 10 acres will do. The cost of the additional acreage may be just enough to overburden project financing. In some cases selling the excess can actually help pay for your project.

3. Failing to have your architect help you envision your financing as part of the design process. There are many ways to achieve the same end. Having your architect assist you with determining phasing and value determination at this early stage may allow you to continue with a project that you might have thought could not occur. You might even want to have your architect suggest a cooperative and innovative lending institution. Or introduce your lender to your architect and get them to work things out together. Yes, this can occur before any plans are done by using averages and ranges based on historical data.

4. Failing to have your architect shine a realistic light on your project budget. Many people think that it is easy to build for less simply by declaring it so. They are often rudely surprised. Low budget projects that are not carefully planned often result in inadequate quality. Further, realistic opinions of project costs include more than simply the construction. There are legal and financing costs, moving costs, equipment costs at the new location (computer networks for example). The construction budget needs to allow for circulation and mechanical space as well as the space you actually intend to use. Otherwise the project may be designed to be too small at the outset. Building a building that is in need of replacement or expansion before it is even begun is madness.

5. Failing to allow for contingencies and worse case scenarios. What happens to your project if the builder goes bankrupt? What happens if the soils turn out to be too weak to support your building? Architects have dealt with these issues and more. It may cost a bit up front to have soil borings, percolation tests, and performance bonds, among other things. Having them ensures you that the worst case is being dealt with in design and contracting and not as a crises in the field which jeopardizes your project's successful completion.

6. Failing to give your architect enough freedom in determining a design. Architecture is more than drawing. To become an architect anywhere in this country a candidate must pass an exam of about four working days in length, part of which covers the cultural history of design in the western world. Many architects supplement this with continual education and reading on design innovations. Architects apply a lifetime to knowing about and creating better design. The best results in working with an architect occur when you allow the architect to share with you the experience they have gained. Be clear about what it is you want to achieve but allow the architect to suggest to you how to achieve it. There is a difference between telling an architect that you want to have two spaces relate in a certain way and telling them, "This is the plan." Let the architect help you to a design that would be what you would ask for if you knew all that the architect knows.

7. Failing to have at least two preliminary designs done for your project. Design is a creative endeavor much like music. There is no one right answer any more than there is one perfect song. Exploring two or more solutions to your problem increases the likelihood of finding innovative ways of achieving results. Even with the same preliminary diagram, changes in structural systems and visual emphasis can result in dramatically different buildings. What is learned from the two designs increases the quality of the final product. Often the final result will combine elements of each design.

8. Failing to have a clear design concept. A design concept is a simple statement which talks about what governing principles or ideas are essential to the project. This can be based on an aesthetic, structural, ideological or marketing concept. What is important is that the concept be clear so that it can be used to assist in making decisions about the design and construction. Any change order which is not technically needed and which does not support the concept should usually be disallowed. A strong concept will be useful right down to selecting furnishings after the construction is finished. What made Frank Lloyd Wright's work so stunning was his ability to form and use strong coherent concepts.

9. Not taking the time to coordinate between disciplines during design. Is there a downspout drawn in the same place as an electrical conduit? Modern buildings are complex, even small ones. To minimize problems in construction all the working drawings should be reviewed at a coordination conference. This allows mechanical, structural, plumbing, and electrical issues that were discovered during the design of the project to be cleared by the other trades. This prevents many problems in the field, reduces change orders, and allows for more predictable costs. Pay for the architect and the various engineering subconsultants to spend adequate time reviewing this. Insist on it.

10. Failing to have the architect closely involved in the construction phase. Unlike cars where a single design is tested and refined and then 80 thousand to 100 thousand of them are built, every design by an architect is a custom prototype. During construction, technical issues which were thought to be minimal may turn out to be a challenge. Sometimes this is the result of needing to substitute a type of material or piece of equipment because the item specified may be in short supply. Sometimes this is because a design opportunity occurs to the owner or architect while the building is being constructed. Sometimes it is because the poor quality work of a single subcontractor can affect the high quality work of others. Sometimes it is a response to concealed site conditions. Involving the architect in construction helps maintain the quality of the construction and allows you the opportunity to optimize the design. Control of these changes and their costs are essential for a successful project.

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