

Documenting Design Intent

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1. Make construction documents, not contract documents;
2. Understand that Thoroughness hinders Relevance;
3. Make sure that your documents set clear limits and expectations.

I'm an architect who works as the "Owner." Specifically, I work for a public Owner who is bound by a raft and web of contractual procurement rules, customs, directives, policies, and laws.

The public bid process aims for transparency and fairness. It seeks the best price for construction services provided by the most qualified contractor: the responsive and responsible bidder who bids the lowest price on the documents issued for bid to the entire bidding community.

Per publicly bid design contracts, Final Design documents, (which correspond to "Contract Documents" (CDs), are required to be "*completely coordinated, checked and cross-checked,*" construction details are "*completely shown*" with "*dimensions given,*" and, of course, specifications are "*completely stated so as to enable prospective bidders to make accurate and reliable estimates of the quantities, quality and character of the labor and materials required to complete the project and to install project equipment in a first class manner*". In summary, "*... comprehensiveness and constructability are key to the Consultant's successful completion of Final Design.*"

Notice this language's emphasis on comprehensiveness and constructability and its silence on design intent.

These Final Design requirements, by emphasizing constructability, require expertise that belongs primarily to the construction community, not to the design community. The designers, now required to assume expertise on the (unknown-prior-to-bid) contractor's ability to successfully execute the work, determine that their only recourse is to cover themselves professionally by striving for "comprehensiveness" in the CDs.

"Comprehensiveness" leads to CDs that include several thousand, or tens of thousands, of pages of drawings, details, texts, charts, and proprietary data that collectively embody a contractual thicket of statements, re-statements, typographical errors, mislabeling, contradictions, busy work, and minutiae that doesn't understand or try to distinguish between, on the one hand, what's really critical in getting the project built the way the Architect solved the Owner's program and, on the other hand, the Owner's, or Architect's, protection from contractors' estimating errors in preparing a winning bid. Yes, that is a cynical statement.

"Comprehensiveness" means that contractors receive (and sometimes pay to receive) pounds and pounds of papers, drawings, and books that comprise the Contract Documents. They must very quickly complete the process of weighing, allocating, assessing, identifying, and pricing the direct and

subcontracted labor and materials needed to construct the project that they understand from the CDs, and prepare a complete bid. According to the Owner's consultant agreement, it's all "constructible" (or it wouldn't be bid), but "ways and means" are the bidder's purview, and the designers won't comment on this aspect of the work. The joke that the winning bidder is the contractor who missed the most scope includes too much truth to be funny.

In short, at construction contract award, we have "Contract Documents" that are "comprehensive," but they are so dense and repetitive as to cloud a clear identification of the true, inclusive limits of the work. Consider how often these two statements are made in relation to change orders:

- a. The change is invalid: All work incidentally required to complete a working assembly is included in the bid whether or not shown in the Contract Documents.
- b. The change is valid: You couldn't expect the bidders to understand that information shown in spec xx-xxx-xxx.##.xx would supersede the information shown on detail xxx-##.###.##/x# but not keyed in on sheet xxx-##.###.##. Besides, they don't recognize the US Society of blablabla's results as standard practice.

Appearance of these statements: "how could I have known" and "you should have known," indicate that *construction support* is giving way to *contract protection*. In the latter, Task One is risk swapping between the parties, or, better(?), divesting one's risk onto others. We have comprehensive, constructible contract documents, but current practice hides, and even loses the gem of the project in the dross of the contract and arguments of who knew what and when did they know it.

My proposal going forward is for architects to prepare Construction Documents and leave Contracts to the attorneys. Construction Documents let the contractors understand what they are signing up for. Of course, they indicate the codes and the performance requirements, but architects should also use the documents to refine, understand, explain, and broadcast the Design Intent. The construction documents are the first step in developing a collaborative relationship on the project. Describe the aesthetic and programmatic decisions that inform the design, for example: the curtain wall is designed to be as taut and smooth as possible; exposed MEP/FP piping must run within the plane of the exposed roof structure; window heads, door heads, and tops of devices shall run at the same height above finished floor. The architects can't know everything, but if the documents faithfully describe the "why" in addition to the "what" of the design, then maybe we can start to reach out to our partners in the design and construction process and reap the benefit of our collective knowledge and ingenuity.