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Incomplete Plans and Specifications: Whose Problem Are They Really?

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Introduction

Incomplete plans and specifications, which, in this article, include errors and omissions as well as ambiguous plans and specifications, place a huge burden on construction projects. They are a major–if not *the* major–cause of disputes as they may result in changes, delays and disruption, lost productivity, increased costs, as well as animosity between the parties.

This is not a new problem. It has been the subject of many different articles and publications, notably *The Revay Report* entitled "The Pitfalls of Incomplete Contract Documents," issued in 2010.[1] This *Revay Report* has since become a widely used reference in the industry, especially by the contracting community, in an effort to remedy some of the underlying causes contributing to incomplete plans and specifications. However, this problem still persists.

One can argue that incomplete plans and specifications are now even more disruptive given the current market conditions. Supply chain disruptions and availability of workers are major issues that contractors are already dealing with. The late discovery of errors and omissions, and their late resolution, therefore place additional pressures on construction projects.

Wouldn't now be the time for the different parties within the construction industry to reflect on the role that they play in contributing, either directly or inadvertently, to this problem, and on what opportunities they each have to help alleviate the situation? In this article, we propose some solutions, which primarily pertain to traditional Design-Bid-Build projects, for consideration to: (1) improve the quality of plans and specifications; and (2) find more collaborative ways of dealing with incomplete plans and specifications.

While not novel nor earth shattering, these solutions reflect what we see as 'best practice' in the industry. In order for these solutions to be effective, they need to be embraced by all parties, parties who recognize that there is a problem in the first place and who have the desire to make a change.

1) Improve the quality of plans and specifications

Improving the quality of plans and specifications is not a burden that should be borne solely by the design professionals. In fact, the problem seldom stems from design professionals alone; it may in part result from the under-investment of funds, both in terms of cost and time, at the early stages of the project (which, in turn, can lead to the introduction of late changes).

First, regarding the cost component, certain owners, perhaps due to budgetary constraints, may invest less in the design effort in order to maximize investment in the construction. Diverting more funds to the design and design coordination amongst the various design disciplines can go a long way in ensuring less changes and cost overruns during construction. Owners may need to adopt a longer-term perspective, to view design as of capital importance, and not simply as an expense. This would mean hiring design professionals not on a lowest fee basis, as is often the case on public projects, but rather based on their competence and on the quality of their proposed design. This would also mean remunerating design professionals with a fair fee for their design services, including design coordination and changes. By 'nickel-and-diming' the upfront design work, are owners not merely encouraging design professionals to do the strict minimum? And, for their part, couldn't design professionals refuse to take on unrealistic, low-fee mandates?

Second, regarding the time component, owners may squeeze the timing of both the design and the construction phases, thereby fast-tracking projects, but more often than not, this ends up being detrimental to the project schedule. Indeed, political or economic factors can, at times, force decision makers to break ground before the design is completed without necessarily recognizing the full impact of doing so. However, it is important to allocate sufficient time in the beginning of the project to allow for the design to be completed, or at least as advanced as possible, before the start of construction. Projects could greatly benefit from a design phase during which the design can be developed, reviewed, coordinated amongst disciplines, revised, modified, and so on, until all parties are satisfied with the final design. For example, as best practice, the owner should:

- Include and monitor a detailed design schedule in its contract with the design professionals, which would outline important milestones, periods of design coordination, owner review and possible revisions, etc.;
- Ensure that the design professionals have sufficient time to develop and perform design coordination with the different design disciplines;
- Take the time to have the design reviewed by key members of the owner's team, including their operation and maintenance personnel;
- Be mindful of the impact of changes requested during the design phase and give design professionals the tools (time and money) to deal with these changes;
- Ensure that a constructibility review is performed before the design is completed.

As evidenced by the points raised above, there is a need for strong collaboration between the owner and the design professionals, the latter being ultimately responsible for the overall quality of the design.

Design professionals are members of professional orders which require them to act with competence, integrity, and diligence. Design professionals are governed by a standard of care (albeit not a standard of perfection), as explained below:

> "Unless expressly stated in the contract for professional services, in all the work done for the client, the architect or engineer owes a duty to exercise the skill, care and diligence which may reasonably be expected of a person of ordinary competence, measured by the professional standard of the time."[2]

As stated above, given the design professionals' obligation to abide by this standard of care, it is reasonable for all parties to expect a certain level of quality in the design.

In addition, design professionals should also be mindful of the consequences, that is the delays, disruptions and cost overruns, that their incomplete plans and specifications may have on construction.

2) Find more collaborative ways of dealing with incomplete plans and specifications

Beyond addressing incomplete plans and specifications at the source, there is also an opportunity to better deal with this problem during the tender phase or during the course of construction. It involves communication - honest, professional, reasonable communication from all parties involved. Could the parties work together to quickly find solutions through early notification of problems, fair assessment of impact, and cooperation?

During the bidding phase, if the contractor discovers errors, omissions or inconsistencies in the plans or specifications, it should inform the owner through requests for clarification. This permits the design professionals to remedy the error early on (i.e., before the construction contract is even awarded) and allows the contractor to bid the job more accurately and fairly.

During the construction phase, best practices suggest that the contractor should:

- Prepare early coordination drawings to identify potential issues as soon as possible;
- Inform the owner and/or design professionals of errors, omissions or inconsistencies in the plans and specifications as soon as they are discovered, typically through the RFI process;
- Inform the owner of the impact of such errors, omissions or inconsistencies on the project budget and schedule, as soon as possible;
- Properly track the additional costs incurred due to incomplete plans and specifications.

As discussed in the points above, it is important that the owner and design professionals be notified of the impact that incomplete plans and specifications may have on the project so that they can make informed decisions and take timely action. The contractor's assessment should include the impact of the incomplete plans and specifications in the contemporaneous schedule revision (e.g., time impact analysis), accompanied by a schedule narrative explaining the impact. Estimating the impact prospectively is often difficult and the actual impact may be different, particularly in the case of multiple changes where there may be an unforeseeable cumulative impact.

Nonetheless, the contractor should provide the owner with its best contemporaneous assessment of the impact, stating, for example, that if approval is received by X date, activity Y will be delayed by Z days, thereby delaying (or not) project completion.

The contractor's assessment must be fair and reasonable, and for their part, the design professionals must take accountability for design issues when due.

The same principle applies to late design changes. As soon as the contractor foresees a schedule impact caused by a late design change, it should notify the owner and/or the design professionals of the impact of such untimely changes. Design professionals and owners, for their part, should recognize that changes introduced late in the project may have disproportionate impacts on the project schedule.

Conclusion

Successful projects require the collaboration of all parties, working towards a common goal. In an ideal world, the parties should be able to rely on each other and have reasonable expectations of one another. An owner should be able to count on the fact that the design meets a certain standard of care. A contractor bidding on a project should be able to count on the fact that the design it receives is indeed constructible. Above all, the parties owe one another a duty of good faith and the duty to communicate and collaborate for the good of the project.

1 Bob Keen, "The Pitfalls of Incomplete Contract Documents," *The Revay Report*, Vol. 29, No. 1 (March 2010).

2 Beverley M. McLachlin and Arthur M. Grant, *The Canadian Law of Architecture and Engineering*, 3rd Edition, Toronto, LexisNexis Canada, 2020, p. 131.

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