



Canadian Construction Association

# **Quality of documents workshops**

Executive summary

*April 2016*

**In 2015, the Canadian Construction Association embarked on a series of “Quality of Documents” workshops across Canada to discuss the issue of poor quality documentation in the Canadian building industry. The twelve workshops involved participants who represented all stakeholder groups in the industry, including owners, consultants, contractors, and engineers, who discussed the causes, and potential solutions to address poor quality and incomplete construction documents.**

Throughout the workshops, a number of themes emerged when discussing the issue. It was noted that all parties have a role to play, and need to understand their responsibilities as it relates to the construction project and the coordination of high quality documentation. At the same time, education, training and experience are potential impediments to improving quality, particularly as experienced employees reach retirement age or leave the industry. Additionally, technology, while helpful, can also be a hindrance to quality control, as it can suppress critical analyses of constructability. It was also noted that standardized industry best practices, as well as communication, trust, and collaboration are all key to improving quality of documents.

In addition to open workshop discussions, participants were provided with an anonymous questionnaire outlining 12 potential issues that affect the quality of documentation on construction projects. In analyzing the results of these surveys, several key themes and causes of poor documentation emerge. These causes/ issues include:

- ➔ Lack of final coordination, checking and proofreading
- ➔ Insufficient time for design
- ➔ Lack of coordination between architects and engineers
- ➔ Owners’ (unnecessary) pressure
- ➔ Insufficient fee/design contingency

The role of coordination, as well as reviews of design documents before they are issued as bid documents, was identified as one of the most frequent and highly impactful issues as it relates to poor quality documentation. All parties identified this issue, indicating a need for increased review of documentation to help achieve better quality documentation. The relationship between time and quality was also cited during roundtable discussions and on surveys, as all parties recognized the need for an appropriate amount of time to prepare design documents, review the documents, and issue the documentation as a bid package.

Regarding the lack of coordination between architects and engineers, all groups ranked this highly, once again suggesting that all parties recognize the importance of communication and coordination as it relates to quality documentation. Part of the issue cited is that engineering design time is sometimes compressed after sign-off between architect and owner, or drawings are at times almost complete before engineers are able to start design.

The relationship between consultants and owners also remains a significant factor in the quality of documents. In cases where there is little communication, or an ineffective detail of expectations, the quality of documents often suffers. Consultants noted on several occasions that the ability to understand owner expectations, and communicate throughout the design phase is critical to ensuring the success of a project and higher quality documentation.

Primarily, the importance of communication and collaboration between all parties remains a very important element in facilitating high quality documentation. At the same time, peer reviews, checklists and proofreading have also been identified as areas that can enhance, or in their absence be detrimental, to the quality of documents. Skilled and knowledgeable workers also remain critical, suggesting that training, education and mentorship are extremely important in addressing this issue.

It should once again be emphasized that quality of construction documents remains an industry-wide issue, and one that affects owners, consultants and contractors alike. There is no party that is infallible, and all stakeholders have an important role to play in addressing this issue.