

Strategic Opportunities Committee

Communiqué 19

December 21, 2010

Requirements For As-Built and Record Drawings in ORC Contracts

The Importance of Producing As-Built Drawings On Time

Ontario Realty Corporation (ORC) is responsible for management of the province's real estate assets. To facilitate that, ORC is endeavouring to build a more complete, current and detailed database of information about those assets. They rely upon the Contractor to produce As-Built Drawings in accordance with timeframes established in the ORC Construction Contract, and upon the Prime Consultant then, working in part from those As-Built Drawings, to produce Record Drawings within timeframes set out in the ORC Consulting Contract.

ORC and Project Management Service Providers (PMSPs) are reporting that Contractors are not consistently meeting the timeframes in the construction contract for producing As-Built Drawings. This in turn prevents the Prime Consultant from producing Record Drawings on time.

All of this hampers the effective management of the province's real estate assets.

As-Built and Record Drawings - Industry Practice

The Ontario Association of Architects (OAA) and the Ontario General Contractors Association (OGCA) recently issued a Joint Best Practice Statement defining as-built and record drawings and generally setting out procedures for preparation of the as-built drawings by the General Contractor and the record drawings by the Architect, respectively.

This Joint Best Practice Statement is generally consistent with the requirements in the respective ORC contracts and thus provides a very useful reference.

While this Statement was issued by OGCA and OAA, the principles and procedures set out in it are equally applicable to Interior Designers and Consulting Engineers when acting as Prime Consultant on ORC projects.

The Statement can be found on the OGCA website <http://www.ogca.ca/posts/view/202> and on the OAA website <http://www.oaa.on.ca/client/oaa/OAAHome.nsf/web/OAA/OGCA+Best+Practice+Statements?OpenDocument>

Background re. Current Requirements for As-Built and Record Drawings in the ORC Construction and Consulting Contracts

Previous ORC construction contracts have required the submission of completed As-Built Drawings by the Contractor prior to submitting its application for Substantial Performance.

During discussions with the industry when ORC was developing its standard supplementary conditions to CCDC 2, the OGCA stated that it was unrealistic to expect the As-Built Drawings to be completed prior to submitting the application for Substantial Performance.

After much discussion with the OGCA and the three associations representing consultants, coordinated requirements were inserted into *both* the construction and consulting contracts that together:

- establish a realistic timeframe for the Contractor to submit completed As-Built Drawings
- set in place a process to help ensure that the Contractor is preparing the As-Built Drawings during the course of construction to ensure that important information is not missed from the As-Built Drawings
- establish a realistic timeframe for the Prime Consultant to complete the Record Drawings once the completed As-Built Drawings have been submitted by the Contractor

Given reports that As-Built Drawings are not consistently being submitted on time by Contractors, the Strategic Opportunities Committee (SOC) agreed to issue this Communiqué to specifically highlight those contract requirements and reinforce the importance of timely submission of completed As-Built Drawings by the Contractor.

Requirements for As-Built Drawings in the ORC Construction Contract

The requirements for preparation of as-built drawings by the Contractor are set out in ORC standard supplementary conditions to CCDC 2.

The definition of As-Built Drawings is found in the supplementary conditions under "Definitions":

"As-Built Drawings means drawings prepared by the Contractor by marking on a copy of the Drawings the changes from the Drawings which occur during construction including, but not limited to the exact location of major building components that were shown generally on the Drawings."

The requirement to maintain As-Built Drawings is set out in paragraph 5.2.10:

"The Contractor shall prepare current As-Built Drawings during the course of the Work, which current As-Built Drawings shall be maintained by the Contractor and made

available to the Consultant for review with each application for progress payment. The Consultant may retain a reasonable amount and up to a maximum of the amounts outlined in paragraph 5.4.7, from any progress payment for the value of the As-Built Drawings not presented for review until the As-Built Drawings are presented for review."

Note that the Contractor is required to prepare As-Built Drawings "... *during the course of the Work.*"

This requirement is intended to avoid concerns sometime expressed that important information is missed on the As-Built Drawings when the Contractor is not diligent in preparing them on a continuous basis starting from the beginning of construction.

Note that in order to help ensure that this requirement is met, the Contractor is to make the current As-Built Drawings "... *available to the Consultant for review with each application for progress payment.*"

This provision then states that "*The Consultant may retain a reasonable amount and up to a maximum of the amounts outlined in paragraph 5.4.7, from any progress payment for the value of the As-Built Drawings not presented for review until the As-Built Drawings are presented for review.*"

Paragraph 5.4.7 then sets out those dollar amounts that the Consultant may retain in a sliding scale depending on the Contract Price.

Finally, paragraph 5.4.8 states that any amounts retained will be forfeited to the Owner should the Contractor fail to produce the completed As-Built Drawings by the earlier of 60 days following issuance of the Certificate of Substantial Performance and the Contractor's application for final payment:

"Should the As-Built Drawings not be delivered in accordance with subparagraph 5.2.10 or any documents or materials not be delivered in accordance with paragraph 5.4.5 by the earlier of 50 days following publication of the certificate of Substantial Performance of the Work and the submission of the Contractor's application for final payment under 5.7.1 of General Condition 5.7 - FINAL PAYMENT, then the amount previously retained pursuant to paragraph 5.2.10 or 5.4.7 shall be forfeit to the Owner as compensation for the damages deemed to have been incurred by the Owner, and not as a penalty, arising from the failure to deliver the documents or materials and the Contract Price shall be reduced accordingly."

The retention amounts listed in paragraph 5.4.7 were determined by ORC in part as representing the cost to engage another party to attempt to recreate As-Built Drawings after construction is complete.

Requirements for Record Drawings in the ORC Consulting Contract

The requirements for record drawings by the Prime Consultant and its team are set out in the ORC standard supplementary conditions to OAA Document 600.

The definition of Record Drawings is found in the supplementary conditions under "Definitions":

"Record drawings means the drawings that are prepared by the Prime Consultant by revising the editable CAD files prepared to current ORC standards to reflect changes from the construction drawings made during construction based on:

- *content of as built drawings prepared by the contractor; and*
- *changes in response to site instructions, change orders, change directives and other direction given by the Prime Consultant. "*

The requirement for the Prime Consultant to prepare Record Drawings is set out in the supplementary conditions at GC 15. It applies to all projects, unless the requirement has been varied using a Project Specific Supplementary Condition.

"The Prime Consultant shall prepare Record drawings and provide a writable copy of the digital files in addition to a PDF copy of the digital files to the client within 20 days of the date it receives the completed as-built drawings prepared by the contractor.

Unless otherwise agreed in writing, until the completed Record drawings are submitted to it, the client will retain an amount from payments to the Prime Consultant as follows:

- *for Projects where the professional fees are less than \$25,000 the amount retained will be \$2,500;*
- *for Projects where the professional fees are greater than \$25,000 but less than \$100,000 the amount retained will be \$2,500, or 5% of the fee, whichever is greater; and*
- *for projects where the professional fees are greater than \$100,000, the amount retained will be \$5,000 or 4% of the fee, whichever is greater.*

Unless otherwise agreed in writing, should the Prime Consultant fail to produce completed Record drawings within 45 days of the date it receives the completed as-built drawings prepared by the contractor, the amount retained will be forfeited to the client for the damages deemed to have been incurred by the client, and not as a penalty."

Additional Note re. Contractor Submittals Prior to Contractor's Application for Certificate of Substantial Performance

While not the subject of this Communiqué, it should be noted that there are also requirements in the ORC supplementary conditions under paragraphs 5.4.5, 5.4.6 and 5.4.7 which list specific items which the contractor must submit prior to making its application for Certificate of Substantial Performance. These requirements include

provisions dealing with a circumstance where the contractor may be unable to provide submittals at that time, establishing a later deadline for their submission. Further, the retention amounts set out in 5.4.7 may be applied by the consultant in the case of a delayed submittal, or a failure to ultimately submit any items.

Conclusion

Members of the SOC believe that by clearly communicating and reinforcing requirements in the ORC contracts related to As-Built and Record Drawings, the industry will provide its support to ORC's objective of assembling a current and detailed database of information on the province's real estate assets.

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Ontario Realty Corporation is a crown corporation providing customer-focused real estate services to the Ontario government. ORC manages one of the largest real estate portfolios in Canada.

The Strategic Opportunities Committee (SOC) was originally initiated in 2003 and was re-energized in 2007 at the invitation of ORC President and CEO David Glass to facilitate constructive consultation between ORC and the design and construction industry. Participants in this standing liaison committee now include:

Association of Registered Interior Designers of Ontario
Consulting Engineers of Ontario
Ontario Association of Architects
Ontario General Contractors Association
Representatives of ORC's 3 Project Management Service Providers
 CB Richard Ellis Global Corporate Services
 MHPM Project Managers Inc.
 SNC-Lavalin Operations & Maintenance Inc.
Ontario Realty Corporation

Additional background on the SOC is available by reviewing all previous SOC Communiqués on the ORC website www.ontariorealty.ca - click on "What's New" and "News Archives".

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