

DESIGN BULLETIN No. 33/2006 (Revised March, 2008)

DRAWING SUBMISSION REQUIREMENTS ON TRANSPORTATION PROJECTS

March 2008 Amendment to Design Bulletin No. 33/2006

This amendment is issued to update the requirement for professional member stamps on "Issued for Tender" Drawings on Alberta Infrastructure and Transportation projects. The original Design Bulletin No. 33, issued in February, 2006, attempted to bring the Department's standard for authenticating documents into alignment with APEGGA's Practice Standard for Authenticating Professional Documents V2.0 – April 2002, by introducing the requirement for "Issued for Tender" and "Issued for Construction" drawings. However, the original bulletin allowed the use of an electronic seal on "Issued for Construction" drawings that had not been modified since the submission of the "Issued for Tender" drawings. This practice is not in compliance with the APEGGA's Practice Standard noted above.

Therefore, the design bulletin has been modified to require that both the "Issued for Tender" and the "Issued for Construction" drawings be authenticated by both the designer and checking engineer, whether modifications have been made during the tender period or not.

SUMMARY

This design bulletin is issued as both a modification and formalization of the current engineering drawing submission requirements as contained in the "*Engineering Consultant Guidelines for Highway and Bridge Projects - Volume 1 - Design and Tender*" (ECG Vol 1), the "*Engineering Consultant Guidelines for Highway and Bridge Projects – Volume 2 Construction Contract Administration*" (ECG Vol 2), and the "*Engineering Drafting Guidelines for Highway and Bridge Projects Draft - November, 2002*".

The Department's current processes require the submission of signed and stamped "design drawings" as part of the tender submission, as well as signed and stamped "As-Built" drawings as part of the final details submission. These two mandatory Department requirements are not consistent with APEGGA's "Practice Standard for Authenticating Professional Documents v2.0 – April 2002".

APPROVED PROCESS

To make Alberta Infrastructure and Transportation's document Authentication requirements consistent with APEGGA's Practice Standard, while simultaneously meeting the Department's requirements, effective immediately the following process is implemented:

1. Design drawings (P-Drawings) shall be submitted to the Department on mylar sheets at the time of tender submission. Each drawing shall be Authenticated (signed and stamped) by both the designer and checking engineer. In addition, each drawing will be clearly marked "**ISSUED FOR TENDER**". Both the "**ISSUED FOR TENDER**" mylars and the corresponding Microstation digital CADD files shall to be submitted to the Department as part of the Consultant's initial tender submission.

2. After the tender closes, the Consultant shall produce a new set of mylar P-Drawings clearly marked “**ISSUED FOR CONSTRUCTION**”. Each drawing shall be authenticated by both the Designer and the Checking Engineer, regardless of whether the drawings were revised during the tender period or not.

The “**ISSUED FOR CONSTRUCTION**” mylars and the corresponding Microstation CADD files shall be submitted to the Department no later than 2-weeks after the Award of the Contract. Paper copies of the “**ISSUED FOR CONSTRUCTION**” P-Drawings shall be provided to the Contractor and the Project Sponsor in accordance with Section 11.1.7 of the ECG Vol 1.

3. Within 2-weeks of the Contract Award, the Consultant shall provide six full-size sets of the “**ISSUED FOR CONSTRUCTION**” drawings (four to the Contractor and two to the Project Sponsor) for construction purposes.
4. After all work has been completed, as part of the Final Details Submission, the Consultant shall submit “Record” drawings (C-Drawings) to the Department on mylar sheets. The “Record” drawings shall be Authenticated by the design engineer and an independent checking engineer.

For projects where the Consultant receives as-built information from third parties, the Consultant’s Authenticated “Record” drawings may include the following disclaimer:

<p>This Record Drawing was completed using information from other sources including <i>name of contractor</i>, who was the contractor for the work. This information has not been verified and may not be complete or accurate. <i>name of consultant</i> Signature _____ Date _____</p>

For bridge construction projects, “Record” Drawings shall be Authenticated in accordance with “Engineering Consultant Guidelines for Highway and Bridge Projects - Volume 2 – Construction Contract Administration. Authenticated drawings may not include a disclaimer without the prior approval of the Department.

The Consultant’s final submission package shall include both the “Record” drawings on 3 mil mylar film, and the corresponding microstation digital CADD files.

BACKGROUND

The Department’s previous drawing submission process included the following:

1. Authenticated “design” drawings on 3 mil mylar film and the corresponding microstation CADD files are to be submitted to the Department as part of the tender submission. The Department requires design drawings be Authenticated by both the designer and an independent checker as a milestone event. This requirement is mandated because the design may be placed on the shelf for extended periods of time and the Department wants assurance that the design has been fully completed.

2. The supply of 6-sets of full size construction drawings (4 to the Contractor and 2 to the Project Sponsor) is currently a requirement of the Engineering Consultant Guidelines – Volume 1. The Department only provides 11x17 size drawings with the tender documents and does not supply any drawings with the executed Contract.

The full-size construction drawings provided by the Consultant are to include any drawing revisions made by addendum during the tender period. The intent of this requirement is so that the Contractor is able to work from a “clean and current” set of construction drawings.

3. The submission of Authenticated “Record” drawings on 3 mil mylar film and the corresponding microstation CADD files as part of the Final Details submission. This requirement is necessary for historical and archival purposes.

The Department’s current requirements are not consistent with APEGGA’s accepted practices. APEGGA’s “Practice Standard for Authenticating Professional Documents v2.0 – April 2002” states the following:

- Preliminary documents should not be Authenticated. If the Owner requires preliminary documents to be authenticated, the documents shall be clearly identified for their intended purpose (i.e. “for planning only”, “issued for tender”, etc...);
- APEGGA does not prohibit the Authentication of drawings other than as described above provided the professional member clearly identifies any limitations and/or the intended purpose of the document.
- Authentication shall consist of applying the professional member's stamp, his or her signature and the date of authentication. The use of an electronic stamp is prohibited unless the electronic signature can enable verification that the document came from the professional member whose stamp and signature appear on it (identification) and that the information in the document has not changed since it was signed (integrity).

ISSUES

The recommended process will have the following new requirements:

- The preparation and submission of a new set of Authenticated “issued for Construction” drawings on mylar.

The primary concern from CEA representatives in 2002 was the difficulty and time constraints associated with the Authentication of “Issued for Construction Drawings” by both the designer and the checking engineer. As the original solution of allowing an electronic stamp to be used, is not compliant with APEGGA, all “Issued for Construction” drawings must be authenticated, whether they have been revised during the tender period or not. For any drawing that is revised during the tender period, Authentication of the revised drawing is deemed to be reasonable given that the Engineering Consultant Guidelines already requires the Consultant prepare the revised drawing.

IMPLEMENTATION OF BULLETIN

Effective immediately on all projects currently tendered, or awaiting tender, Consultants will be required to submit to the Department on mylar sheets Authenticated “Issued for Tender”, “Issued for Construction” and “Record” drawings complete with their associated Microstation CADD files.

CONTACTS AND COMMITTEE MEMBERS

Any questions with regard to this Design Bulletin should be directed to Alberta Infrastructure and Transportation's Professional Services Section (Attention: Specifications and Tendering Specialist)

Recommended:

*Original Signed by
Ranjit Tharmalingam*

Ranjit Tharmalingam
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Approved:

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