

Project Manual (Specifications) Preparation Instructions for Alberta Infrastructure Projects

Application

These instructions apply where the Alberta Infrastructure Basic Master Specification System (BMS), Technical Specification System (TS), and all other requirements are used by consultants to assist in the preparation of a project manual (specifications) for Alberta Infrastructure projects. The BMS documents must be used in the development of the project manual for Infrastructure projects. The TS documents may be used, or the consultant can use their own technical specification sections. If the consultant uses their own specifications, they must review and incorporate the requirements from the TS documents.

Note:

Basic Master Specification System (BMS) consists of Divisions 00 – 01. Technical Specification System (TS) consists of Division 02 -49.

Overview

Failure to follow these instructions may require unnecessary re-work and project delays.

The Project Manual (Specifications) purpose is to:

- Establish and convey the department's bidding, contracting, and technical standards,
- Ensure consistency in the content and quality of project specifications for the department's projects,
- Serve as the department's 'corporate memory', and
- Provide the specifier with a 'production tool' or starting point for project specification preparation.

- Alberta Infrastructure assumes that qualified and experienced construction specifiers, in each discipline, will prepare the project specifications. This responsibility must **not** be delegated to persons lacking specification writing knowledge and skills.
- The consultant remains fully responsible for the project specifications. Deviations from the Alberta Infrastructure requirements must be identified and justified by the consultant to The Province, and subject to review prior to release for tender.
- Specifications and drawings/models (digital formats) perform complementary functions and must be properly coordinated. Do not include specifications on drawings/models.
- One person should, on behalf of the prime consultant, be responsible for interdisciplinary review, co-ordination, and assembly of the entire project specification, in accordance with these instructions, and for co-ordination of the specifications with the drawings/models.

About the specification systems

The <u>Technical Resource Centre</u> on the Infrastructure website at: <u>https://www.alberta.ca/infrastructure-technical-resources.aspx</u> contains BMS and TS specification sections, and other documents that comprise the requirements for Alberta Infrastructure projects.

- Review the current "Technical Design Requirements for Alberta Infrastructure Facilities" (TDR) document and incorporate requirements into the specifications.
 - o https://www.alberta.ca/assets/documents/infra-technical-design-requirements.pdf
- Select and download the individual Sections required for your project.
- Early involvement of Technical Services Branch and Procurement Branch staff in planning the project specifications is encouraged to ensure that proper procurement issues are identified and implemented into the Project Manual.
- Because new and updated specification sections are uploaded to the website on a "as need" basis, and use of the most current sections is required, always download current sections for each project when starting to prepare project specifications.
- Before editing the BMS and TS, review the Cover Page, Data Sheets and specification text of each section to:
 - gain an overview of section content,
 - o identify subjects that may require further investigation,
 - o identify decisions that may need to be made, and
 - o determine the best editing sequence for that section.

Editing

- Specification sections must be submitted during the design review process in ".doc" format.
- With a few exceptions, sections **not** meant to be edited are provided in Adobe Acrobat portable document format (PDF). Include these in your project specifications submissions as required.
- Fonts, font sizes, margins, indents, numbering, style sheets, 3 part Section format, page format, streamlined point form style, active voice, are to be consistent.
- Maintain a consistent format and writing style when editing or creating new Sections.
- When creating new Sections, organize content into narrower scope Sections, to limit Section length to a maximum of 10 pages.
- Avoid splitting clauses between pages, separating introductory clauses or headings from a following clause on subsequent pages. Do not insert forced page breaks or multiple paragraph spaces to accomplish these.
- Specification text within square brackets ([]) indicates that an informed choice must be made from the options provided. Empty square brackets indicate that information must be inserted.

Specifying Techniques

- Cross-referencing should be done very selectively and only where it will serve a useful purpose. Review that all cross-referenced sections are actually included, particularly when cross-referencing is interdisciplinary.
- If a referenced standard is not current or some other part of the text is in need of correction or updating, make the necessary modifications for the project specification.
- Alberta Infrastructure specifications and requirements typically reflects a non-proprietary
 approach to specifying products. Avoid specifying trade names if the required
 quality/performance can be obtained with a non-proprietary specification. If trade names
 are used, specify names of at least three acceptable, competitive, products. Discuss with,
 and obtain approval from, Technical Services Branch and Procurement Branch staff
 before specifying only a single trade name.
 - When specifying a product by trade name, always include a cross-reference to the Division 01 Section entitled 'Product Options and Substitutions'.

- Delete inapplicable text. Beware of the natural tendency to over-specify by retaining text when in doubt as to its necessity or appropriateness. Including such text can:
 - obscure the true nature or requirements of the work, causing bidders to include unnecessary cost contingencies when pricing the work,
 - o create ambiguities and conflicts, and
 - o detract from the overall credibility of the project specification.

Before submitting specifications for review

- Follow the "<u>Design Principles</u>" requirements in Section 0.0 of the TDR and submit the "<u>Design Review Deliverable Summary and Checklist</u>"
 - o https://www.alberta.ca/assets/documents/infra-technical-design-requirements.pdf
 - <u>https://www.alberta.ca/assets/documents/tr/tr-</u> <u>designreviewdeliverysummarychecklist.docx</u>
- Prepare a Table of Contents and a List of Drawings.
- After editing, proofread each Section for errors and omissions, such as numbering sequences, cross-referencing and formatting.
- Prior to submittal, check the <u>Technical Resource Centre</u> to see if any Alberta Infrastructure requirements have been updated since previous submittal. If so, re-edit those requirements.

Submitting specifications and drawings/models for tender

- After an appropriate consultation and review period by Procurement and Technical Services staff, and adaptation of comments resulting from reviews, the prime consultant is expected to submit, in a single submission, a 100% complete set of project specifications and drawings, ready to be issued for bidding. Tender-ready documents will not be accepted from sources other than the prime consultant (e.g. sub-consultants).
- Submit the electronic files in the required formats as set forth in the contract requirements.
- For "Digital Project Delivery" requirements refer to the "<u>Guidelines and Standards</u>" webpage:
 - https://www.alberta.ca/guidelines-and-standards-owned-and-supported.aspx

Inquiries

For inquiries related to project manual development procedures contact:

Standards and Specifications

- Technical Services Branch, CSS
- Alberta Infrastructure
- 780-422-7456
- 3rd Floor, 6950 113 Street NW
- Edmonton, Alberta T6H 5V7
- Email: infras.trc@gov.ab.ca

Procurement

- Procurement Branch, CSS
- Alberta Infrastructure
- 780-427-3962
- 2nd Floor, 6950 113 Street NW
- Edmonton, Alberta T6H 5V7
- Email: <u>askprocurement@gov.ab.ca</u>

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