GUIDE TO TECHNICAL SPECIFICATION WRITING

TENDER DOCUMENT MANAGEMENT SYSTEM
All RFT Specification documents are prepared using TDMS (Tender Document Management System). TDMS is managed by Contract and Procurement Services (CAPS). Consultants producing Project Specifications for the DCI should contact the Manager of Documentation Services, who will advise them on Specification production and provide draft Specification documentation. A Guidelines document titled “Guide to Specification Production” is available on the Technical Specifications Internet website (Assistance section). This guideline Specification document also contains an RFT Check-list to assist in the process of producing Project Specifications.

GUIDELINES
The Guideline document provides assistance and information for Technical staff, Consultants, Contractors and Builders in the preparation of Project Specifications and the writing of new Specification sections.

The Technical Master Specifications used by the Department of Construction and Infrastructure in the production of contract documentation; aligns with the National Building Specifications (NATSPEC). This format has been developed in accordance with the Commercial sections available internally through the Tender Document Management System (TDMS), or on the DCI website at: www.nt.gov.au/infrastructure/techspecs/index.shtml#assistance

Some of the key points for specification writers are set out below.

FORMAT
The use of word processing styles has made Specification Formatting a simple task. Blank formatted documents are attached to the “Roadworks” and “Natspec Basic” Master Specifications. This enables new sections to be formatted more simply, to match existing Specification sections.

NUMBERING
The numbering is sequential in Project Specifications, following-on from the preliminaries and Quality Assurance sections (where applicable). The numbering is automatically closed up, when sections are deleted. Clauses and sub-clauses are numbered sequentially within sections, and are automatically closed up when clauses are deleted. Roads, Master Specification sections and clauses; are numbered to a maximum of 3 levels. For example 3.2.1 where 3 is the section number, 2 is the clause number and 1 is the sub-clause number.
In Building Specification; only sections and clauses are numbered. Paragraphs within a clause are highlighted using key words.

IMPERATIVE MOOD STYLE
The Specification should be addressed to the Contractor in the Direct Instruction style; Imperative mood of the verb; second person, singular; subject suppressed.
The Imperative mood style is adopted as policy by all the major National and Guide Specifications including, Masterspec (USA), NBS (UK), CSC (Canada) and Natspec - Australia. (It is difficult for lawyers to misread unintended meanings into this writing style).
The words “the Contractor shall” are usually made redundant, by putting the verb in the Imperative mood.
For example we should write; “(Supply and Install)”, rather than “you shall Supply and Install”, or “Supply and Install shall be done”. The active verb is usually the first word in each sentence.

**PLAIN LANGUAGE**
Everyday language is easily understood by both the Layman and the Specialist.
Familiar and precise words and terms are to be used, rather than vague or abstract words and terms.
Un-necessary words should be avoided. Clearly convey the meaning, and avoid using Legal or Commercial phrases.

**TECHNICAL TERMS**
Technical terms should only be used when there is no other equivalent everyday term or phrase.
Use the same Technical term or phrase as those used in Australian Standards References; Use the same term or phrase for the same item or items, in the same context, throughout the document.

**GUIDENOTES**
The styles allow Guide-notes to be inserted in hidden text. Guide-notes do not appear in the final Project Specifications. Guide notes are shown in “green italics” within [square brackets] and are set back from the margin (indented) to the right hand side of the page.
Guide-notes inserted into Master Specifications should be brief, so as to provide an alert or prompt to the Specification writer.
The Guide-notes in hidden text can be viewed, by ticking the hidden text box in the “tools”, “options”, “view” tabs.

**LISTS**
Where several items need to be itemised within a single paragraph, the items need to be in “list or point or Alpha” format.
Specification styles contain a heading for lists. These are set back from the margin (indented) and follow a dash or a bracketed, lower case letter.
For example;
Spread Topsoil to the following typical depths:
- Planting areas: 300mm
- Irrigated grassed areas generally: 150mm
(a) Grass areas: 100mm

**KEY WORDS**
A key word followed by a colon; readily identifies the content of a paragraph. This allows the faster scanning of the text by the reader. Key words may also be used to make reference to an Australian Standard, etc.
For example;
Cement: to AS 3972, type GP.

**TABLES**
Keep tables in the portrait or upright format (when possible) and keep the complete table on one page. If a table overruns the page, repeat the table headings on the following page. (where possible)

**ABBREVIATIONS**
Avoid using abbreviations as a matter of NATSPEC and DCI policy. Only use universally and Construction Industry accepted abbreviations.
For example: NPWC3, NATA, PVC etc.

**REPETITION**
- Write item information only once.
- Write the item information in one place only within the contract documents.
- Do not repeat or paraphrase (repeating information, written in a different style, may lead to confusion).
- Do not repeat Conditions of Contract or Preliminaries in the Technical Specification.
- Do not copy Specification Text onto the Drawings.

**CROSS REFERENCES**

It is not necessary to continuously make cross reference, to items specified elsewhere in the Specification document.
Each item of the Specification text is part of the Contract in its own right.
Consistent formatting of Master Specifications, allows users to become familiar with the location of commonly specified items.
A cross reference is only necessary; when calling up text from another part of the Specification, into a context where it would not otherwise apply, or where its application may be in doubt.
When using cross references; do not refer to a clause or section numbers. These items change in the Master Specification, as the Project Specification is edited. Preferably refer to the text by word reference for example;
“Refer to the EXCAVATION clause in the EARTHWORKS section” instead of “Refer to clause 4.12.2”
Always check that; where a cross reference is made, the section referred to is included in the Project Specification.

**BY OTHERS**

Using the words “by others” in a Project Specification means that it is not required in that contract.
Specification Writers use the words “by others” when they mean by “another trade” within that contract.

**UNLESS OTHERWISE SPECIFIED**

Do not use the phrase “as otherwise specified” as it requires the reader to scan the whole Project Specification to check for any exceptions. Specify the General Requirement and any exceptions, in any one part of the specification.

**SUPERENDENTENT**

Refer only to the Superintendent (or to the Principal in specific cases) and not to the Superintendent’s representative, Engineer, Architect or Supervisor.
The Contract is being run by the Superintendent who will seek the assistance of the relevant Specialists’, when required.

**OR EQUIVALENT**

Do not use the words “or equivalent” or “or equal” as this is covered in the “Proprietary Items clause” in the Conditions of Contract.

**SPECIFICATION OF NUMBERS**

Use numbers instead of words, except when one number follows another. (Use dash to separate).
For example use;
- Provide 6 copies
  or
- Use five - 12mm bolts.
Do not repeat a number in brackets.
For example do not use “Provide six (6) copies

**STRUCTURE OF SECTIONS**

The Department of Construction & Infrastructure’s Technical Master Specifications are structured in a methodical format. When writing new Specification sections; write them using the same manner and format.
An example of the structure and format and general flow of a typical Specification section is as follows;
- Section Title
- General clauses
- References
- Materials and standards
- Inspections, approvals and tests
- Construction generally
- Unique construction
- Completion and commissioning.

TEXT FORMATTING
Do not insert large blocks of text into the Specification without attention to the formatting. Remember that the Specification needs to be easy to interpret and read by Consultants, Contractors, Builders and administrative staff in the field. Break up the text into simple and logical sentences, and group into relevant paragraphs, clauses and sub-clauses.

STANDARDS & DEFINITIONS
Where Specifications are published, printed and bound into book form (Standard Specification for Small Building Works); The Australian Standards are listed at the back of the book. This practice also applies to the Master Specifications for Building Works which contains many definitions.

FURTHER INFORMATION
For further information regarding the preparation of new Specification sections or the editing of existing Master Specifications contact;

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