SpecSUITE©
Master Specification Library

USER'S MANUAL

SpecSUITE©

SpecSUITE© Master Specifications

CMS©, MiniSPEC©, OutlineSPEC©, MasterPROSPECTUS©, HomeSPEC

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Digicon Information Inc.
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SpecSUITE$^©$

SpecSUITE$^©$ represents a state of the art specification system which architectural and engineering offices in the public and private sectors have sought. SpecSUITE$^©$ is intended primarily for use by construction industry professionals as an efficient method for producing responsible and technically competent construction specifications.

SpecSUITE$^©$ is a complete package of specification libraries consisting of master specification documents assembled under the names CMS$^©$, MiniSPEC$^©$, OutlineSPEC$^©$, MasterProspectus$^©$, and HomeSPEC$^©$. SpecSUITE$^©$ files are available in three file formats; Word, WordPerfect, and Specnique.

Software choices to assist users in editing SpecSUITE$^©$ texts include:
- SpecMACROS$^©$ for MSWord or WordPerfect, which runs inside your word processor, and
- Specnique™ , a proprietary specification editing software.

As a comprehensive master specification system, SpecSUITE$^©$ presents in simple and easy to edit format, current technical references and current knowledge of building science principles. The text is presented in such a way as to permit maximum latitude in building design and material selection.

SpecSUITE$^©$ incorporates into each specification section text, tried and proven specification methods used by capable and technically competent specifiers. This is our effort to submit to the design professional, a sound yet flexible basis with which to develop project specifications. The brevity of SpecSUITE$^©$ text permits rapid and clear editing, yet allows cross referencing and "notes to the specifier" to minimize specification editing time; an obvious asset in our demanding and time limited working environment with its often impossible deadlines.

Maintenance and updating of SpecSUITE$^©$ is accomplished and distributed quarterly to registered subscribers. This effort is very critical to keeping you updated on industry changes. Digicon encourages constructive commentary from users regarding experiences of SpecSUITE$^©$ subscribers, in order that we may interpret these experiences into updated and improved technical sections for the benefit of all subscribers. Your version of SpecSUITE$^©$ contains ALL updates issued to date.

SpecSUITE$^©$ does not claim to make competent specifiers of individuals who do not already possess proficiency in this area. SpecSUITE$^©$ was written to assist specifiers, permitting them to profitably redirect their valuable time to materials research and devote their attention to the project at hand.

SPEX.CA is a Marketing Alliance by and between Construction Specifications Canada (CSC) and Digicon Information Inc.:

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SYSTEM ORGANIZATION

Introduction

SpecSUITE$^{©}$ was developed and copyrighted by Digicon Information Inc., and is marketed in electronic media form as a master specification system for preparing project specifications and as a basis for developing a comprehensive office master specification system.

SpecSUITE$^{©}$ is designed to offer architectural, engineering, and public agency offices access to a method of preparing accurate, competent construction specifications for their projects. Its content is oriented for the small, medium, and large sized construction projects (using MiniSPEC and CMS). Provisions are also included in CMS for multiple contract work, construction and project management work, and other variations in construction contract methods.

The text of the master sections is written to be used by an informed specifier. Knowledge of the fundamentals of construction practice and of document organization as recommended in the Construction Specifications Canada (CSC) Manual of Practice (noted as MOP in this manual) is assumed. It is recommended that the specifier have at hand copies of CSC and CCDC documents referenced in this Manual.

Purpose

SpecSUITE$^{©}$ masters are essentially an `edit and delete' master text system covering specification sections of Divisions 00 through 49 (MasterProspectus is modelled after the OmniClass 2006 classification and numbering system). The organization, style and language of SpecSUITE$^{©}$ masters conform to the latest developments of the CSC MOP (Manual of Practice). The 6-digit numbering system of the CSC/CSI MasterFormat - Master List of Section Titles and Numbers and OmniClass Table 21 - Elements classification allows for permanent cross referencing system used throughout the SpecSUITE$^{©}$ family of masters.

This system is coordinated with and relies upon provisions of industry used and endorsed Agreement and General Conditions document CCDC 2 - 1994 or 2008 Edition and other CCDC related documents.

SpecSUITE$^{©}$ masters are updated regularly and transmitted to participating subscribers accordingly. The updates contain revisions to existing sections reflecting changes in construction standards, methods, or practices and comments from users, in addition to new sections to expand the technical subject coverage of the system.

SpecSUITE$^{©}$ masters are available in a structured text file format to operate on microcomputer operating systems. SpecSUITE$^{©}$ is configured to WordPerfect and MSWord for Windows word processing programs. These files can also be read by most MAC PowerPC machines with text files readable directly into MSWord or WordPerfect for the MAC.

Relation to Other Documents

Under principles promoted by CSC, the specification sections in SpecSUITE$^{©}$ comprise basic groups of written construction contract documents which constitute the Project Manual. The content of SpecSUITE$^{©}$ includes bidding information, bid forms, agreement form, general and supplementary conditions and has a particularly close interrelationship with the administrative and procedural content of the sections of Division 01.

SpecSUITE$^©$ is designed for use with CCDC documents. Should other document forms be used, the content of Division 01 sections may require editing to adapt differing provisions from these other contract forms.

SpecSUITE$^©$ masters use the term `Consultant' in the technical sections for referring to the design authority as does the CCDC 2, 3, or 18 documents. However to minimize editing it is recommended that any desired redefinition be accomplished once, in Supplementary Conditions and of course in the agreement. Recommended wording for such an example provision could be as follows:

•   Section 00 73 03, 00 73 06, 00 73 09, or 00 73 12 - Supplementary Conditions

•   ADD: The term `Consultant' used in the Contract Documents shall mean 'The Design Consultant of Record'.

Internal Relationships

Sections of Division 01 specify temporary facilities, administrative and procedural matters, which often expand on provisions broadly stated in general conditions. These sections of Division 01 govern related topics in each of the technical sections of Division 02 through 49. Following the CSC MOP principle of stating a requirement only once, a Division 02 - 49 section incorporates the Division 01 provisions by cross reference and includes detailed statements appropriate to the particular needs of the individual sections.

Since SpecSUITE$^©$ technical sections of Divisions 02 - 49 are dependant upon Division 01 sections to specify administrative and procedural matters, and sections of Divisions 02 - 49 contain references to Division 01 sections, the specifier must include the appropriate Division 01 section by direct reference, or the specification will be incomplete.

Formats

SpecSUITE$^©$ adheres closely to the formats offered in chapters of CSC/CSI MasterFormat, SectionFormat, and PageFormat plus the new OmniClass classification of subjects that cover the entire design and construction processs. These documents can be obtained from www.spex.ca. Both MasterFormat and OmniClass are available free for the download from www.spex.ca.

MasterFormat - Revised 2004

MasterFormat is used as an organizational foundation for CMS$^©$, MiniSPEC$^©$, OutlineSPEC$^©$, and HomeSPEC$^©$.   OmniClass Table 21 is used as an organizational foundation for MasterProspectus$^©$. The specifier should refer to MasterFormat and OmniClass Table 21 to establish titles and numbers when drafting additional project or master sections.

Specifiers should be familiar with the Levels concept, and by an evaluation of the complexity and scope required for a project specification, select the more appropriate text. A project specification may contain all Levels of sections, a combination of Level 2, 3, and 4 sections (the most common specification) or all Level 4 sections.
SpecSUITE$^©$ section titles and numbers are selected to reflect the manner in which specifications are normally prepared for projects of various types, size and complexity. Specifiers are cautioned against changing the permanently assigned section numbers since permanent cross references are included in other section texts.

OmniClass Edition 1 - 2006

The fifteen (15) Tables of OmniClass are used to classify any subject associated with the construction industry. Table 21 - Elements is used as an organizational foundation for MasterProspectus©. The specifier should refer to this Table to establish titles and numbers when drafting additional project or master documents.

Specifiers are cautioned against changing the permanently assigned section numbers since permanent cross references are included in other section texts.

SectionFormat Revised 1997

CSC/CSI SectionFormat (three parts) for construction specifications is the basis for content and arrangement of technical sections. These Parts are:
• 	Part 1 - General,
• 	Part 2 - Products, and
• 	Part 3 - Execution
with appropriate articles expand these headings. SpecSUITE© uses the flexibility of SectionFormat in listing all part and article titles.

PageFormat Revised 2000

SpecSUITE© page formatting is an interpretation of the CSC "PageFormat". The minimal paragraphing and indentation is designed to facilitate the output (automated) process.

PageFormat presents the information for ease of reading and specific data easy to find.

SYSTEM DEVELOPMENT - EDITING

Specification Language

SpecSUITE© masters conform to recommendations of CSC Manual of Practice Part 5 - Construction Documents, that addresses "language of the Project Manual". The text is written primarily in the imperative mood. Since the entire specification is addressed to the contractor, the words "The Contractor shall ....." are always omitted. They are used only in certain sections of Division 01 for clarity when any two of the parties to the contract are mentioned in the same article or paragraph. Note also that references to "subcontractor", "mechanical contractor", "electrical contractor", "roofing trades", and similar terminology are avoided. Whenever reference to work of another section is appropriate, the reference is to the section number and title.

Part 1 - General and Part 3 - Execution of the SectionFormat are written almost exclusively in the imperative mood. Part 2 - Products uses a colon (:) in place of "shall be" in product designation. The language is designed to be accurate, reliable, clear, and concise.

Specification Methods and Options

Depending on the type of product, the text of various sections of SpecSUITE© provide wording for optional specification methods: Reference standards, descriptive, and proprietary. The "spec note" at the beginning of each section generally provides information about the material or product types used in that section. The text of a section should be edited to use only one of the optional methods. When more than one method is used in a section, the possibility of conflict exists between a consensus standard, the material description, or the specified manufacturers product. While the knowledgeable specifier may conscientiously elect to specify both consensus standards and the manufacturers product, it should be carefully accomplished only with full knowledge of all the details and options under both the consensus standard and the product specified.

The options within a section permit editing into either the proprietary (trade names) or non-proprietary (consensus standards or generic descriptions) method of specifying. This allows specifying for private owners by inserting trade names, or specifying for public agencies where trade names are normally not permitted.

Specifying by criteria or performance is evident in a few of the CMS sections where performance specifying can be reasonably used and understood by the reader. Obviously the methods will vary from section to section within the project specification, as appropriate to the product and the project requirements.

Spec Notes

SpecSUITE© contains notes to the specifier (spec notes) in coloured "boxes" when viewed on-screen, to provide a brief overview of the content of the section, to bring certain options to the attention of the specifier, to assist the specifier with supplementary information, and to point out coordination and cross reference requirements. In some cases a consensus standard and the options within it are listed for information, permitting the specifier to make an appropriate decision. Spec notes need not be deleted by the typist in the final printout or typing process as they do not affect the printed text.

> *This is an example of a Spec Note as seen on-screen. These notes can be printed or not, depending on how you wish to use them. These notes can be turned ON or OFF as you decide, simply by selecting "hiding" or "not-hiding" hidden text. Look for "hidden text" feature in the "View" menu of your word processor - in blue highlight.*

Spec notes affecting an entire article are located immediately after the article title and prior to the relevant text. Notes affecting individual paragraphs precede the affected paragraph. When a choice between a single paragraph and several are involved, the spec note will advise the specifier.

Greening and Sustainability

SpecSUITE© master specification sections now include environmentally friendly or sustainable design content, for use on a "green" project. "Greening" a project requires that the process begin at the very start of a project at the concept stage, and then be carried through all subsequent stages of design planning and development, design document preparation, bidding, and construction.

Specifically, SpecSUITE© master specification sections are all impacted by our Division 01 sections. These Division 01 sections are intended to have "precedence" over the Division 02 to 49 sections with regard to incorporating environmentally friendly, sustainable design, or waste management requirements to a construction contract.

- If an owner wishes to address the issues surrounding waste and waste management, then several CMS sections establish a contractual requirement for this subject.
- If an owner wishes to protect an environment surrounding the work of the project, CMS has sections that address that requirement.
- If an owner desires to consider LEED criteria and LEED certification for their project, a CMS section (01 35 18 and others) is structured for that purpose. This LEED section, when edited, will require a contractor (and ergo subcontractors) to comply with all requirements associated with certified LEED recognition to the stated level of accomplishment.
- If a project site has contaminated areas of concern, CMS has specification sections that address this difficult subject in coordination with the standard forms of contract which identify this subject.

Alternative Choices

Option brackets within the word processing text are identified by enclosure in square brackets [option 1] [option 2] [..an empty spot for another option..]. The specifier must delete the inappropriate option, or may delete all of those listed and insert the appropriate word or phrase in the "another option". Blank spaces enclosed by brackets [_____] provide for information to be inserted by the specifier, as appropriate.

NOTE: Alternative choices in the Specnique software are offered as electronic drop-down lists. Users may also opt to add their own custom option if it is not shown in the list.

Where specifiers should select between two related but optional paragraphs, a bracketed [OR] is situated between them;   such an option may or may not be associated with a "spec note".

Section Includes and Related Sections

"Section Includes" and "Related Sections" are important articles in the section structure as they convey what is and is not in the current section.

SpecSUITE© relies on "Section Includes" and "Related Sections" in Divisions 02 - 49 as integral parts of each section. If the specifier elects to delete these articles from the specifications, he/she should edit each section to ensure that all provisions in the deleted articles are included elsewhere in the text.

"Section Includes" is a very short word summary of the section content, similar to a Table Of Contents. Consistent with the CSC/CSI (3-part) SectionFormat standard, this article is **not** intended to "scope" the section, nor imply a trade responsibility. It is merely a listing of significant items in the section to allow the reader of the project specifications to quickly assess the section content. It can identify items which may be referenced elsewhere in the specifications.

"Related Sections" is a listing of cross referenced items directly affecting the work of that section or other sections with same or similar items. The "Related Sections" may be mandated by their existence in other sections, or it may be provided by an outside party. The specifier must make sure that such referenced items, as an inherent part of the total project, are properly covered in other sections of the specifications. When an item is a part of a construction contract covered by the specifications, the referenced section listed under "Related Sections" must properly cover that item. When an item is provided by an outside party, Section 01 10 00 - Summary of Work or 01 12 00 - Multiple Contract Summary must identify the outside party who will provide or install the item, specify the extent of that party's responsibilities, and any coordinated responsibilities of the Contractor under the specification.

References

Under this article, all SpecSUITE© sections refer to consensus standards which establish product, installation, and quality standards of CSA, ULC, ITS (formerly Warnock-Hersey), CGSB, and other industry recognized Canadian associations and institutes. When Canadian standards are not available, ASTM and other industry standards may be cited. Standards of trade and special interest associations (such as MPI for paint and coating subjects) are sometimes used in recognition that those groups reflect a considerable background of experience in their respective fields.

A specifier must use extreme caution when specifying any of these standards, to ascertain the level of quality required by each standard, and determine whether they are consistent to the requirements of a specific project. In many instances, supplementary statements are necessary to modify the standard in order to reflect specific project requirements. Standards incorporated in SpecSUITE© sections have been researched to this degree, and where applicable, modifications or supplements are included in the section text. Use of other standards will require a specifier to research and provide the necessary information in their respective project specification.

Publication or edition dates of reference standards are now being included in SpecSUITE© updated sections in the REFERENCES article. If not noted in sections not updated yet, Division 01 establishes the edition date as that being in effect on the bid closing date, except where a specific date may be specified. All SpecSUITE© sections are now including issue dates for standards.

Acceptable Manufacturers

SpecSUITE© sections can be edited to specify by either the referenced standard or by the prescriptive method, without use of proprietary product names if so desired. Should the proprietary method be appropriate for a project specification, this article provides for insertion of one or more manufacturers names in the Manufacturers article in Part 2. In order to avoid limiting the choice, SpecSUITE© does not list manufacturers or trade names (except BrandedSPEC, which are based on specific manufacturers). However, SpecSUITE© does have provision in the initial text of product or material sections to insert one or more manufacturer names.

Appropriate model numbers, as determined by a specifier, may be listed with the manufacturer names and alternate choices and accessories should be inserted as appropriate. Remember that Product Substitutions may be considered during the time for bid submission or after contract award - refer to Section 01 62 00 - Product Exchange Procedures for the options to select and edit depending on the decision made.

Metric and Imperial Expressions

SpecSUITE$^©$ sections provide both metric (SI) values and inch-pound (IP) equivalents, throughout our master specification sections. Editing of these units may be handled globally, using one of our software solutions (SpecMACROS for the word processors, or Specnique); refer to those user manuals for more information. Users are able to select IP, SI units, or both if desired (both units are not recommended for project specifications, as the potential for conflict may exist).

The metric units of measure generally follow the requirements of the Metric Commission of the federal government. To prevent problems with the use of special characters that may not display or print properly on different computers or different word processors, SpecSUITE$^©$ sections avoid superscript or subscript characters, and instead will express the term as "sq m" instead of "m²".

Schedules

SpecSUITE$^©$ recognizes the practice of using schedules to communicate detailed information. This article, located at the end of Part 3 - Execution, is commonly used to list details of items such as a variety of concrete types, a finish hardware types, and various paint or specially finished surfaces, equipment, and similar items that are sometimes cumbersome to deal with on drawings or in specifications. Other items such as room finishes, mechanical fans, and electrical panelboards may also be scheduled here.

Optionally, office practice may determine that these types of detailed lists be shown on the drawings in the form of a schedule. Please note the precedence article in Section 01 19 00 - Specifications and Documents - that places specifications (and its schedules) ahead of drawing schedules in order of legal precedence.

Development of an Office Master Specification

Design firms may require certain procedures, methods, or materials not contained in our SpecSUITE$^©$ sections. For certain products, a firm may use a particular specification method or may establish certain manufacturers for various products. Such preferences can be edited into SpecSUITE$^©$ when developing an office master.

In creating such a master section, when tailored to the firm's practice, the special section can be used efficiently from project to project, eliminating much of the repetitive editing and proofreading required if working from the clean master section that does not specifically address the specialty subject.

SYSTEM MAINTENANCE

Maintaining Your System

SpecSUITE© masters have been developed according to construction standards and practices current as of the date of issue of each section. Further, SpecSUITE© relies on material published by different sources (standards in particular), none of which are under the control of Digicon. When such data is revised or discrepancies become apparent, SpecSUITE© masters will be revised in due course. Updates will include revisions to existing sections reflecting changes in:
- construction standards,
- new methods or practices, and
- comments from users,

along with new sections to expand the coverage of the system. Subscribers are urged to submit their suggestions, on content and coverage of existing sections, and suggestions for new sections to us. It is our on-going practice to welcome suggestions from subscribers for new sections so that we can develop them for incorporation into our systems.

System Quality

The success of our specifications also based upon user comments on the text itself (errors, omissions, paragraphs or clauses repetitively edited in, etc); subscriber contributions are welcomed and appreciated.

Notes to Users

Because Digicon has no control over subscribers' actions, nor the nature of requirements for specific projects, we therefore cannot assume responsibility for use or abuse of any SpecSUITE© master document system.

Subscribers may reproduce our master specification sections for use in preparing office-specific master specification sections, or for producing their project specifications. Any other usage is restricted under international Copyright laws.

APPENDICES

Appendix A - CROSS REFERENCE RULES

In Part 1 - Related Sections

> Provide the section number, a hyphen "-", the section title, a colon ":", followed by a brief description of the related work except where the section title is self explanatory.

> eg: Section 07600 - Flashing and Sheet Metal: Weather protection to base flashings.

> eg: Section 08800 - Glass and Glazing.

> Note: Capitalize the first word of the description following the colon.

In Part 1 - References

> Our References are usually listed in alphabetical/numerical order with number then title, either with or without indication of the date of issue. Only list the reference number (and optionally the reference title) in specification text. The date of issue or last revision is identified in the section itself or referenced in Division 01 to be the date of issue at time for bid submission. The specification text may or may not identify a selection of options from within the referenced standard.

> Refer to the indicated association or institute manuals or standards for use of any acronyms. Verify that the acronym and the association's or institute's full name are included in Division 01.

In Part 1 - Submittals (and Samples)

> Where PART 2 or PART 3 requires an item to be submitted, it should be listed as an article item in PART 1 under Submittals. The text statements should describe precisely what is being requested and any peripheral requirements. Avoid use of "for Consultant's review (or approval)" or words to that effect. Division 01 specifically identifies this responsibility as well as to identify administrative and procedural requirements - so do not repeat this statement elsewhere.

In Part 2 and Part 3

> References to other specification sections in Parts 2 and 3 should include the reference number only. (Example: "Refer to Section 05 55 00.") Ensure that section number and title are included in Part 1 - Related Sections, excluding Division 01 sections, which specify requirements.

Appendix B - CAPITALIZATION

The use of capital letters in SpecSUITE© generally conforms to principles described in CSC Manual of Practice (MOP) and to format requirements cited in SectionFormat and PageFormat. In addition, the following recommendations should be considered for consistency of style and language.

1.   Capitalize defined words cited in CCDC 2 Definitions when used in reference to specific terms of the Contract.

2.   Terms relating to elements of the Contract when used in a general context within the text, should not be capitalized. These include "shop drawings", and similar references.

3.   Capitalize the first letter of words in a definitive phrase preceding a colon, and capitalize the word following the colon.
                example: Face Brick: Solid units of .....

4.   Capitalize proper names, first letters in words of a title, and other words designated by recommendations of CSC MOP.

5.   The words "subcontract" or "subcontractor" are not capitalized since the words do not apply to a specific party defined in the Contract Documents.

6.   Use capitals sparingly and only for specific reasons in order to avoid confusion. Using capitals unnecessarily can detract from clear communication. Capitalized words should mean something, impart extra importance, and attract special attention when used.

Appendix C - INSTRUCTIONS FOR COMPUTER SCREEN EDITING

This Appendix is directed to persons who screen edit SpecSUITE© documents on a micro-computer using word processor software. The specific procedures may vary with the word processing software program and the hardware storage devices used. This Appendix is directed specifically to micro-computer users and persons who work directly on-screen. The following process describes, in an overview form, our recommended procedures for editing specification sections.

FILE MANAGEMENT

File management of the master specification, master copy sections transmitted to SpecSUITE© subscribers as "disk files" or "soft copy", require care and attention to avoid problems. The master documents have been compiled into a Windows-based install program, which will prompt the user for the desired folder or subfolder for the documents on your work station hard drive or on your server's hard drive.

SpecSUITE© document files can be used to further develop or enhance an "office working master specification", or directly for project editing purposes.

Managing a Master Specifications Folder

In order to help prevent any unintended contamination of master specification files (by human error or otherwise), it is wise to copy you SpecSUITE files into a designated folder. One simple, yet effective, way to ensure that master specification files are not erased or over-written, is to mark the files "Read-Only". Your software will normally prevent you from accidentally deleting or overwriting a master specification file thus marked.

Optionally, if you work in a Windows 2000 or higher environment, you can apply folder security to the "master" folder, to ensure that files may be "read" (or opened) by specifiers or casual users, while allowing authorized personnel to delete or edit the master files as required (such as the chief specifier, or librarian).

Note: Specnique databases are read-only by default; there is no special management required.

Commencing a Project

Before commencing the project text editing process, perform the following tasks:
• create a new project folder with an identifying label (a project number and name),
• select the specification sections required for the project and copy them from the office working master specification section folder to this new project folder, and
• use the new project folder for this particular project use only.

Create an Audit Trail

Whenever milestones are reached, we recommend copying section files into a new sub-folder, leaving the last version intact and unchanged. Include the date of creating that subfolder as the folder name. Example: "2006-01-25_Draft-2". If you use this naming convention (year, month, day - which is an ISO international standard), the folders will sort themselves automatically in numeric order by date. The cost

of hard-drive space for a new subfolder for each draft version is very low, and older version can be archived at any time.

This procedure will protect you in the event that someone says "we don't need that section any more" and you delete it, but a short time later that person wants that section back in. This is a scenario that does not need to happen. An audit trail of folders will allow you to re-insert the deleted section.

Following these guidelines will provide you with an accurate record of document development over time. Such folders can be archived (or deleted) as desired when the project is complete.

Backup Regularly

Backup the project folder and all subfolders regularly - at least daily or weekly, depending on the frequency of file changes and your desire to avoid catastrophic disaster in the event of computer equipment or other failure. There are two very efficient ways to backup:
- Backup files to a removable disk (or tape cartridge if a tape backup facility is available). If speed or disk size is an issue, it is possible to backup only changed files (refer to "incremental" or "differential" backup types in your backup software manual).
- Create another subfolder on a different hard drive (or a different computer) each time the project specification changes.

Label Backups: Label the backup media with the project name, project number, date and time of backup.

Archiving

Where a backup is defined as a copy of data to a secondary location (for security reasons), archiving is the process of copying completed files or folders into a permanent storage medium. Archiving may be done periodically, or at the end of a project, as desired.

Today, text files occupy very little space compared to the available storage media available; thus, archiving ALL files generated over the development of a project (including all incremental subfolders recommended above) is highly recommended. Even if a project is left on your working computer's hard disk, an archive can serve as a permanent snapshot of the state of your project's files at an instant in time (usually the end of the project).

EDITING

The text format standards used in SpecSUITE© are as follows:
- CSC/CSI MasterFormat or OmniClass for section name and number organization,
- CSC/CSI SectionFormat for the organization of the text within the section, and
- CSC/CSI PageFormat for the placement of text on the written page.

After loading the desired SpecSUITE© document, perform editing in the following recommended sequence:
- Choose the preferred unit of measurement and edit the not-selected unit out of the project specification. SpecSUITE© master documents have an optional, at extra small cost, SpecMACRO to automatically select SI, I-P or both units. If Specnique is used, the project units MUST be selected prior to copying sections into a project.

- Do not paginate the section text until AFTER the screen editing process and the "draft" creation process is reasonably complete. SpecSUITE© documents normally have widow/orphan and other paragraph protection features turned on. When necessary, use a Page Break (or Hard Page) command in your word processor to force a new page.

- Modify the project header with project specific references. In word processors, this can be performed automatically using (SpecMACROS©), on a single file or the entire project folder. In Specnique, headers for the entire project are controlled from one screen.

- Spec notes in SpecSUITE© sections utilize a "hidden text" attribute. If printing a draft project section, users can hide spec notes using the word processor "View" command, or use the macro included with SpecMACROS© to hide them. Spec notes can be left in until printing a final copy (or left in permanently as hidden text). In Specnique, specnotes are shown as a green 'window' adjacent to the text and do not print; you can hide them from view or modify their position using the toolbar button.

- Scroll through the text on screen, deleting **only** unwanted option words and statements, using a selected word, sentence or paragraph "block" delete feature. If you have SpecMACROS©, you do not need to waste screen editing time removing the "[" and "]" brackets individually; they can be deleted automatically using the "SpecNote" macro. In Specnique, you select text options from drop-down lists, or overtype the choices, as desired.

- Create any new text as required for the project. Parts, articles, and paragraphs will automatically re-number themselves as you insert or delete text. Refer to the "Automatic Numbering" section for more information about paragraph numbers.

- Use a search and replace function to delete all right and left square bracket ("[" and "]") characters by replacing them with "nothing", leaving the desired option statement intact within the text. (This function can be performed automatically with a "Cleanup" routine in SpecMACROS©.)

- Review and proof-read the text, to correct punctuation within the paragraphs and remove unwanted space characters. Perform a spelling check if desired.

- Create a table of contents. If you are using SpecMACROS©, you can do this automatically by running the Table of Contents macro. HINT: If you run this macro, you can elect to apply hypertext links to the section entries, allowing you to use the table of contents file to open section files. Specnique users do not need to concern themselves with tables of contents; they are generated automatically by the software.

AUTOMATIC NUMBERING

SpecSUITE© master documents all utilize automatic article and paragraph numbering as internal styles in the word processing documents. Numbering formats meet the requirements of industry's CSC/CSI SectionFormat standard.

With automatic numbering, article and paragraph numbers will re-number automatically as you edit, add, or delete text.

- Deleting a paragraph is a simple process; simply block select the text and delete it. Subsequent paragraphs will automatically re-number themselves.
- Adding a new paragraph is as simple as moving the cursor to the end of an existing paragraph preceding where you want the new paragraph, and pressing the Enter key. A new paragraph with an automatic number will appear, ready for your text input.

The word processors use "Outline" styles to determine the number position and formatting. Users can change number format by changing or editing the number styles. New or existing paragraphs can be 'promoted' or 'demoted' in paragraph level by placing the cursor at the beginning of any paragraph and using Tab or Shft-Tab key combinations.

- WordPerfect: SpecSUITE files use an Outline numbering style called "CSC Numbers".   Each paragraph is formatted with a paragraph style associated with it's paragraph level.   Foreign paragraphs can be inserted by applying one of the outline paragraph styles (CSC[#] style name, where # represents the level of paragraph).
- Word: SpecSUITE paragraphs are formatted using the built-in "Heading" paragraph styles; each paragraph is formatted with paragraph styles titled "Heading #", where # represents the level number. New or existing paragraphs formatted by applying the appropriate "Heading #" style to the paragraph.

Specnique: Numbering of sections and parts are mostly automated, although the software does allow for editing of these. Article numbers are automatically assigned sequentially; users can move articles up and down as desired in the Article Pane. Paragraphs are also numbered automatically, and a 'renumber' toolbar button is provided if necessary (for paragraphs pasted from other sources).

Be aware that straying from the styles used in SpecSUITE files may interrupt the operation of SpecMACROS©.

Appendix D - INTRODUCTION TO BID AND CONTRACT DOCUMENTS

Introduction

SpecSUITE© provides bid and contract master specification documents intended for use by specifiers who use Canadian Construction Documents Committee (CCDC) documents. SpecSUITE© master documents assist specifiers in providing a format for clear, concise, procedural documents to accompany CCDC and other contract documents used in our industry today. These documents are sufficiently flexible to be used or modified to suit specific project stipulated price, project management, construction management, or other project delivery contract conditions.

The words, terms and phrases used in these documents are designed to provide consistent and accurate meanings with the CCDC document series. The definitions identified in this introduction will serve as an introduction to several new terms not specifically defined or elaborated in the CCDC documents. The term "Bid Documents" is defined to be consistent with CCDC Definitions. SpecSUITE© documents provide an empirical yet accurate approach to organizing the total contract specification and drawing elements as well as peripheral documents involved in every day use in our construction industry.

The bid and contract documents which accompany this introduction are based primarily on the Stipulated Price Contract CCDC 2. Very little will be required by a specifier to reword or realign the guide documents to be applicable to Cost-Plus, Unit Price or some other negotiated contract form. The offer and acceptance documents are, in principle, as applicable to one contract form as to another. Duties and responsibilities to parties at contract are essentially the same with the only variation being the method of payment.

The Division 01 master specification sections accompanying these documents are directly related with the intent that they can be used as a coordinated document package in most Canadian construction contracts.

Definitions

The following definitions parallel the definitions of the CCDC Documents:

> **Contract Documents**: Consist of the executed Agreement between the Owner and Contractor, Definitions, the General Conditions of the Contract, Supplementary Conditions (if any), Division 01 - General Requirements, technical specifications (Division 02 through 49), Drawings and other documents listed in the Agreement, which will include issued Addenda and Bid Revisions.

> **Bid Documents**: Consist of the Contract Documents, Instructions to Bidders, Bid Form, Supplementary Bid Information (if any), and other information issued for the benefit of bidders.

MasterFormat 2004

Construction documents need to be consistently and logically organized to include bid information; separate from contractual, administrative and technical specifications. These documents as currently organized in MasterFormat, recognizes very clearly the distinct separation of information required for bidding purposes, and that required for legal and administrative purposes, once a contract has been conceived.
CCDC "Definitions" and the definitions offered in this introduction separate subjects and pertinent information applicable only and necessary to the bidding process as distinct from subjects and

information required for the purpose of establishing a contract and the enforcement of requirements that follow subsequent to signing an Agreement.

These documents will assist in understanding proper 'offer' and 'acceptance' activities and supportive documents leading to properly executed construction contracts.

Explanation

Contract documents should be grouped in the following order to provide a natural flow of information and a logical sequence. These groups are:

Instructions to Bidders: Should include information that effects all bidders during the bidding period such as the following:
- bid call describing the date, time and place of receipt of bids, Owners rights regarding bids,
- a general statement of scope of contract documents, requirements for deposit cheques and requirements for return of contract documents,
- a general description of Agreement and General Conditions, security requirements,
- Consent to Surety or Agreement to Bond and statements regarding requirements of bidder after acceptance of proposal to provide Performance and Labour and Materials Payment Bond,
- statement of approval of products during bid or post-bid period and statements regarding proprietary products specified, and consideration of alternative materials and products,
- requirements for contract and completion of work,
- explanations of bid and supplementary bid form breakdown when requested and statement regarding escalator clauses,
- statement regarding incorporation of Addenda, availability of documents, microfilm, planning or take-off services and local or required bid depository requirements.

Bid Form: Should include the name and address of the party to whom the bid is directed, the name and address of the party submitting the proposal, project identification and description of documents used to prepare the offer, acknowledgement of receipt of document amendments by an Addendum, statements of intended duration of offer, statement of price and signature/corporate seal of bidder indicating a bonafide and legitimate offer.

Supplementary Bid Information Form: Is a document often used to include information requested from bidders; requesting such data as unit prices, materials or product alternatives, list of proposed subcontractors, subcontractors, prices, tax or rebate information. The document preamble should include name and address of Owner and Bidder and should be duly signed by an authorized agent of the Bidder.

Agreement: This document normally found in conjunction with General Conditions, includes all statements binding parties of the contract, describing in strict terms their mutual financial arrangement, commencement and completion responsibilities, with the Arrangement signed by authorized persons or agents of the two parties in Contract.

Definitions: Include work or terms having specific meaning in the contract.

General Conditions: General Conditions of contract normally describe all parties of the contract, their responsibilities jointly and separately. SpecSUITE has been written to complement the Canadian industry standard CCDC standard contract forms, which include a General Conditions of Contract.

Supplementary Conditions: Supplementary Conditions of contract are used clarification or modification of the standard clauses in a standard contract (such as the CCDC General Conditions of

Contract) are desired for a project. SpecSUITE CMS includes a sample Supplementary Conditions section, but the content of this document will normally vary for every project.

END OF INTRODUCTION

Appendix E - INTRODUCTION TO DIVISION 01

Introduction

Division 01 - General Requirements is probably the most important part of the CSC/CSI 49 division (Masterformat Revised 2004). SpecSUITE© Division 01 sections are coordinated with Canadian Construction Documents Committee CCDC 2 - Stipulated Price Contract, and other CCDC documents for Cost Plus (CCDC 3) and Unit Price (CCDC 4) contracts.

SpecSUITE© assumes that the General Conditions of the Contract should include only legal requirements and that administrative, procedural, and temporary requirements of the contract be included in Division 01. CCDC 2 does contain General Conditions that tend to duplicate certain Division 01 subjects. These administrative subjects may be supplemented if so chosen by the Consultant, by editing Division 01 sections to complement those conditions.

SpecSUITE© Division 01 sections will permit including non-legal requirements in the text of each of the sections. Division 01 in its composition includes administrative, procedural, and temporary requirements necessary to construction contracts. Broad coverage of General Conditions and related articles in CMS© have been modified to adapt to local practices, project requirements, and permit varying design office policies to be included in the text.

The benefits of using Division 01 as a coordinated package are the same as using the existing division format described in MasterFormat; to maintain an arrangement for clarity and greater assurance that specifications are complete. Efficiency in writing and using specifications is also increased. However the rationale supporting the proper use of Division 01 goes even further.

Division 01 is the key to integrating bidding requirements, Agreement, General Conditions and the technical specification Sections from Division 02 through 49 inclusive. The Division 01 portion of the Contract Documents should contain:
- Non-legal administrative and procedural requirements directed to the contractor or the party contracted to do the Work;
- Requirements for activity on the jobsite related to technical specification Sections describing quality of materials;
- Overall quality of installation.

Bidding instructions and bid forms must be closely coordinated with sections of Division 01. Alternatives, substitutions, and other sections contain provisions which directly affect the bidding and activities prior to the award of Contract.

Certain subjects in sections of Division 01, such as work under multiple contracts, work by owner, and owner occupancy may require coordination in General Conditions or Supplementary Conditions to cover special contractual or legal aspects of those projects with special or "out of the ordinary" contractual arrangements. The two sections on "Summary of the Work" are intended to cover this subject.

Within the body of the text in Division 01 sections and in Divisions 02 through 49, items of co-ordination must be maintained as follows:
- Among several sections of Division 01, interdependent administrative requirements must be coordinated. For example, the section on shop drawings, samples, product data, may well require coordinated provisions in sections on coordination, construction schedules, project site

administration, and project record documents and should be referenced to those sections when applicable.

- Sections of Division 02 through 49 which depend on provisions of certain Division 01 Sections such as Allowances and testing laboratory services must be coordinated with provisions of appropriate sections and should be cross referenced accordingly.
- Those portions of Divisions 02 through 49 containing general provisions which are unique to the specific work, (such as mechanical and electrical) require particular coordination of content to avoid repetition, omissions or conflict with Division 01. The problem is compounded when as is frequently the case, different consulting design offices prepare separate portions of the project specifications. Requirements stated in Division 01 should never be repeated in other sections.

The concept for SpecSUITE© Division 01 sections is to permit smaller sections with information that is easily and readily obtained by the reader, to permit flexibility to insert, change, delete, modify or dramatically revise Division 01 section information from project to project with minimal interruption to basic philosophy or tendering practices. It can also be realized within Division 01, that if following this philosophy, revisions from stipulated price contracts to sequenced management work (or fast tracking) can be achieved without major changes to text to specification sections.

SpecSUITE© Division 01 sections permit incorporation of "non-legal" administrative, procedural, and temporary requirements. The complementary subject articles in edited text form, can be found in sections of SpecSUITE© Division 01.

Preparing Division 01 Sections

Sections of Division 01 should be organized and written in the same style and arrangement as technical sections. The SectionFormat arrangement should be followed, but obviously the administrative requirements may not include PART 2 - PRODUCTS or PART 3 - EXECUTION of the three part CSC/CSI SectionFormat. Therefore, Parts 2 and 3 are often not used.

The technical sections in Division 02 through 49 denote basic units of work. SpecSUITE© sections in Division 01 denote basic requirements, whether they be administrative or work related. The advantages of specifying a basic unit of work or requirement in a known location, identified in a Table of Contents, are the same in Division 01 as in other divisions.

Division 01 requirements which control work or products of Division 02 through 49 such as allowances, alternatives, shop drawings, product data and samples, quality control, and substitutions can be more comprehensively and concisely organized as a basic unit and can be more readily administered when specified in that fashion.

Other Division 01 requirements such as coordination, project meetings, project closeout and cleanup, specified as basic units, facilitate administration of the project by providing an inherent checklist for each activity.

Using Division 01

SpecSUITE© Division 01 specification sections permit a very flexible usage in varying types of construction bidding techniques from the Stipulated Price Contract, Unit Price Contract, Cost Plus Contract, Construction Management Contract, Project Management Contract and varying forms of Upset Price Contracts where sequential bidding methods are often used.
An example of specification sections used for a small, straight forward stipulated price contract, could be sections on Allowances, Quality Control, Construction Facilities and Temporary Controls, Material and

Equipment and Contract Closeout or all of these could be grouped into one specification section, Section 01 00 01 - General Requirements. A small group of Division 01 sections is available in a master specification form as part of our MiniSPEC™ subsystem.

An example of a very large stipulated price contract extending over several years, would be to use all listed Division 01 specification sections with most or all requirements specified within each of the respective sections or with text expanded in accordance with MasterFormat.

An example of a project management contract for a particular trade or activity of work such as structural steel framing could include the following sections: Multiple Contract Summary, Project Meetings, Submittals, Schedules, Quality Control, Material and Equipment, and Contract Closeout.

As demonstrated in the above examples, the outline of Division 01 is intended to provide a basic framework from which to select specification sections that would be required for a particular project, with particular needs, without being limited to grouping all of it within one or two Division 01 sections. This will provide flexibility for developing the sections, and provide the opportunity to add or revise last minute information as often happens when writing or drafting specification sections just prior to a deadline for bid call.

Coordination with Other Divisions

All sections within Division 01 are designed to be used with all technical sections in Divisions 02 through 49 inclusive, either separately or collectively. The content of the sections in Division 01 are intended to be administrative, non-technical requirements applying to technical specification sections. In this way, these items need not be repeated in each of the technical specification sections.

A specification section titled `Mechanical Provisions' or `Electrical Provisions' or similar, has often preceded each of the mechanical and electrical specification section groups. CMS© strongly recommends that repetitive general administrative requirements be included in Division 01. Mechanical or electrical requirement's sections, if required at all, should be exclusively limited to requirements specifically tailored for each of the subject divisions respectively, without duplicating Division 01 information.

END OF USER'S MANUAL