Electronic Document Requirements

The Building Management division in the Department of Planning, Transport and Infrastructure (DPTI) has developed guidelines outlining the technical requirements for electronic documents including drawings and specifications.

The information provided in this guide note should be understood and adhered to by professional service contractor (PSC) and subcontractor employees.

Drawings – Technical Requirements

DPTI Drawing Title Blocks

AutoCAD and Revit Drawing Title blocks must be used for all contract drawings. The folder CAD Drawing Titleblocks (D03) can be downloaded from the Building Project Information Management System (<u>BPIMS</u>) Project Library or from the DPTI Building Management website at

http://www.infrastructure.sa.gov.au/buildingmanagement/information for contractors/plan servi ces.

The preferred size for drawings is A1 (A0, B1, A2, A3 and A4 are also available). Refer to Attachment 1 for an example of the DPTI title block.

Title Block Information

All PSC logos and contact details must be clearly shown in the space provided above the revision column. This must be in CAD format as images will not bind to the drawing. The size of the revision column should be reduced to suit.

All relevant information within the title block must be completed. The DPTI logo and copyright information is to be included on all drawings in the title block.

DPTI Drawing Registration

All contract drawings must be registered with the Plan Officer before tender call. A DPTI drawing number and contract number will be supplied by the Plan Officer which must be entered in the title block.

The Plan Officer must be informed of any changes to DPTI drawing numbers or drawing titles after initial registration. Extra drawing numbers will be issued on request however if any drawing numbers allocated are not used, the Plan Officer should be advised.

Fonts

Only fonts from the standard AutoCAD and Windows installation may be used.

Xrefs

AutoCAD

If used, all xrefs are to be bound. This is done in AutoCAD via *Insert – Xref Manager*. Select all xrefs and then *Bind* with the *Insert* option. (Note that when inserting xrefs ensure that the *Overlay* option is used as the *Attach* option can cause problems when binding.)





Revit

When exporting sheets to .dwg format, ensure views are not Xref, i.e. export as a single file.

Layouts

The .dwg files submitted should only contain a single layout e.g. one DPTI registered drawing per .dwg file.

The files should be saved in the layout view (paperspace) showing a preview of the entire drawing sheet. If multiple layouts have been used, each layout view must be saved as an individual .dwg and .pdf file with its correct registration number as the file name e.g. 2889-AR-2006.dwg.

Purge

At completion, drawings must be purged.

File Name

Ensure that the file is saved with the DPTI Registration Number as the file name e.g. 2889-AR-2006.dwg.

Tender Documents

- .dwg (and .rvt if used) and .pdf files (@scale 1:1) are required on CD or DVD for all registered drawings that form part of the contract documents.
- Documentation to be provided to DPTI in AutoCAD format for tender and construction. If .rvt model has been produced, it can be provided for information only.
- Complete all cross referencing to other drawings and specifications.
- Do not include notes such as 'for tender' or 'for construction' on the drawings. Any drawings that contain this notation will be returned for removal of the notation prior to tender call.
- Remove all references to drawing revisions and amendments made prior to tender except for managing contractor projects.
- Delete all references to 'work by others' unless the Principal is undertaking such works outside of the contract.
- Ensure that the scale(s) nominated on the drawings correspond to the scale(s) of the drawing.
- DPTI standard drawings are to be used. Ensure that the latest version of relevant DPTI standard drawings are downloaded from <u>BPIMS</u> or obtained from the Drawing Files Officer.
- When requesting drawing numbers it is important to specify the design discipline associated with each drawing. The disciplines available for assignment are listed below.

Drawing	Discipline Code	Description
Architectural	AR	Floor plan, room layout, elevations, sections, building dimensions, furniture layout, floor coverings, room functions, wet areas, ceiling layout.
Electrical Engineering	EE	Lighting layout, line diagrams, switchboards, schematic line diagrams, power and emergency lighting, communication

Electronic Document Requirements

Drawing	Discipline Code	Description
		layout, security and fire detection, photo voltaic system.
Mechanical Engineering	ME	Water, gas, hydraulics, air-conditioning ventilation, air- conditioning ducts layout and fire sprinkler layout.
Site Development Civil Engineering	SD	Site layout, paving, landscaping, stormwater layout, planting guide.
Structural Engineering	SE	Footings, columns and beams, roof structure, suspended floors, steel layout.
Survey	SU	Cadastral data, contours, topographical information, site services, location of sumps, sewer IP's, grid levels (height markers), datum and temporary benchmarks.

It is a requirement that if the design discipline associated with the drawing number issued is changed, the Plan Room Services group **must** be notified.

As Built Drawings

Within four weeks after the Date of Practical Completion (or the equivalent) of the construction contract, the lead PSC is to supply to the DPTI Project Risk Manager .dwg (and .rvt if used) and .pdf files of all 'as built' drawings for architectural and civil engineering disciplines.

The lead PSC shall ensure that the construction contractor supplies .dwg (and .rvt if used) and .pdf files of all 'as built' drawings for the building services engineering that formed part of the construction contract.

Electronic copies of 'as built' drawings must also be sent to the Drawing Files Officer.

Specification – Technical Requirements

All specifications and associated documents shall be prepared in Microsoft Office 2007 (or compatible).

Specifications must be prepared using current Natspec texts supplemented where required with Natspec Services texts and including current DPTI Amended Worksections. The file NATSPEC - DPTI Amendments (227) can be downloaded from the <u>BPIMS</u> Project Library or obtained from the DPTI Project Risk Manager or the Natspec Officer.

Reference is to be made only to the Principal, Superintendent, Superintendent's Representative and the Contractor. No reference should be made to the Architect, Engineer, Builder, Electrical Contractor, Proprietor, Building Owner etc.

Page Numbering

Page numbering shall be consecutive for the document including discipline and trade sections. They must have the correct page layout, be identified correctly in the contents and be of the format 'page x of y'. Appendices can be separately numbered however they must be identified correctly in the contents.

Layout of Page

Project title to appear in the bottom left corner.

Name of trade section to appear in top right corner.

Page number to appear in bottom centre.

Contract number to appear in bottom of page.

Title Page

A title page is to be provided at the front of the specification document and is to contain the correct project name, the correct contract number and the type of tender e.g. General Building Contractor.

Table of Contents

A table of contents is to be provided listing all trade sections contained in the specification.

Preliminaries

Preliminaries and the general requirements are to be prepared based on NATSPEC - DPTI Amendments (227) and are required to include the specific DPTI clauses un-amended except for project specific information.

Drawing List

DPTI drawing numbers are to be listed in the specification. Drawing titles in the specification are to be consistent with the actual drawing titles.

Delivery

Deliver to:

Project Risk Manager Building Management Project Services Department of Planning, Transport and Infrastructure Level 2, 211 Victoria Square, Adelaide SA 5000 GPO Box 967, Adelaide SA 5001

Contact

For further information contact:

Plan Officer

Drawing Registration, PDF/TIFF, Contract No's Phone: 08 8226 5636 Email: plan.officer@sa.gov.au

Drawing Files Officer

AutoCAD DWG Files, DPTI Standard Drawings Phone:08 8226 5344 Email: drawing.officer@sa.gov.au

Natspec Officer

DPTI Amended Natspec Worksections Phone: 08 8226 5183 Email: <u>natspec.officer@sa.gov.au</u>

	Attachment 1
PSC LOGO/ CONTACT DETAILS	Professional Service Contractor (PSC) logo/contact details to be inserted at top of page – reduce revision column to suit
PSC LOGO/ CONTACT DETAILS	
X XX.XX.XX XXXXXXXXXXX ISSUE XX Rev. date amendments init.	Revision Letter, Date, Revision Description and Initials
Government of South Australia Department of Planning, Transport and Infrastructure	Government of South Australia logo (Do not move or edit)
© COPYRIGHT - GOVERNMENT OF SOUTH AUSTRALIA - DPTI SETTING OUT OF THE WORK IS THE RESPONSIBILITY OF THE CONTRACTOR ALL DIMENSIONS TO BE VERIFIED ON SITE DISCREPANCES TO BE REPORTED IMMEDIATELY TO THE SUPERINTENDENT THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DOCUMENTS CONTRACT EXECUTION	
CONTRACTOR DATE	DPTI Use Only – to be completed at Contract execution
CONTRACT NAME PROJECT NAME	Official Project Name must be used
SITE ADDRESS SITE ADDRESS	Full site address is required
DRAWING TITLE DRAWING TITLE	Description of drawings on the sheet
CONTRACT NO. DRAWN BY - CHECKED BY XXXX-A-20XX XX	Contract No., initial and check by signed
PSC JOB NO. SCALE AND SHEET SIZE XXXXX 1:100 @ A1	PSC job/ref no, scale and page size
OPTLASSET NO. SHEET NO. XXX	Asset no. and PSC sheet no.
DPTI DRAWING NO. REVISION XXXX-AR-20XX X	DPTI dwg no. and revision letter