Attachment 5

# Electronic Document Requirements

The Department for Infrastructure and Transport (DIT) Building Projects division has developed guidelines outlining the technical requirements for Electronic Documents such as Drawings and Specifications.

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

# Drawings – Technical Requirements

## DIT Drawing Title Blocks

AutoCAD and Revit Drawing Title blocks templates must be used for all contract drawings. The title blocks can be downloaded from the Building Project Information Management System (BPIMS) Project Library or from the DIT website at [www.](http://www/)[infrastructure.sa.gov.au](http://www.infrastructure.sa.gov.au/buildingmanagement/information_for_contractors/plan_services).

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 DIT 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 so images will 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 DIT logo and copyright information is to be included on all drawings in the title block.

## DIT Drawing Registration

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

The Plan Room must be informed of any changes to DIT 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 Room 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 DIT registered drawing per .dwg file.

The files should be saved in the layout view (paper space) 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, all AutoCAD drawings must be purged. All Revit (rvt) or other format files shall contain all the drawing information in one file.

## File Name

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

## Tender Documents

* .*dwg* (derived from Revit *rvt*. file) and .pdf files (@scale 1:1) are required to be provided via USB or other approved electronic transfer to DIT for all registered drawings that form part of the contract documents.
* Documentation to be provided to DIT in AutoCAD format or other DIT approved format for tender and construction.
* 3D ‘federated’ Models, Revit files (rvt) or other IFC compliant file formats may also be provided for “information reference only “as part of any formal tender briefings.
* 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.
* DIT standard drawings are to be used. Ensure that the latest version of relevant DIT standard drawings are downloaded from BPIMS 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.

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|  |  |  |
| --- | --- | --- |
| **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 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 **must** be notified.

## Record Drawings

At the Date of Practical Completion (or the equivalent) of the construction contract, the lead PSC is to supply to the DIT Project Review Officer .dwg (. rvt if used) and .pdf files of all Record Drawings for architectural, civil, structural and building services engineering disciplines.

In addition to the record drawings, (pdf and AutoCAD dwg files) as required by DIT Completion Documents a ‘federated’ 3D Models are to be submitted to DIT stating for “information reference only” and include the date of issue to DIT, revision number and DIT contract number for the project.

# 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 Building and Natspec Services texts and including current DIT Amended Natspec Worksections. A zip file containing the DIT Amended Natspec Worksections can be downloaded from the BPIMS Project Library or obtained from the DIT Project Review Officer 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.

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## 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 center. 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 DIT Natspec and are required to include the specific DIT clauses un-amended except for project specific information.

## Drawing List

DIT 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 Review Officer Building Projects

Department for Infrastructure and Transport

Level 2, 77 Grenfell Street, Adelaide SA 5000

PO Box 1533, Adelaide SA 5000

**Contact**

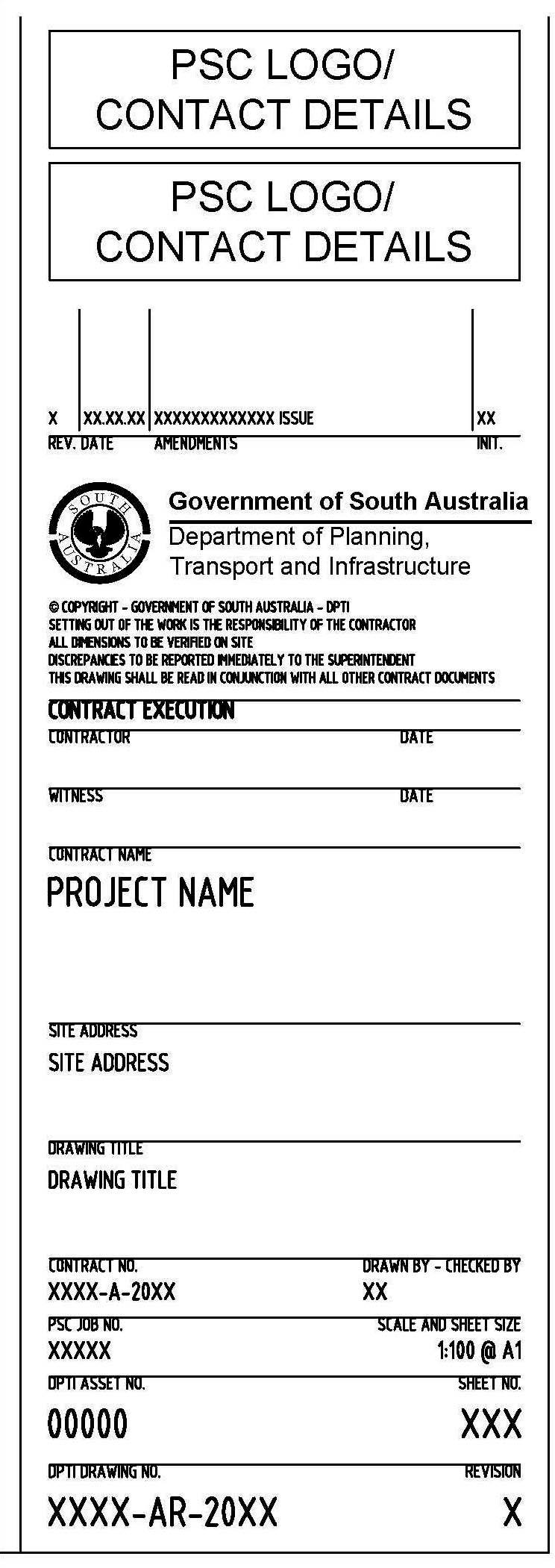
For further information contact:

### Plan Room

Drawing Registration, PDF/TIFF, Contract No’s

AutoCAD DWG Files, DIT Standard Drawings Phone: 08 8343 2057 or 08 8343 2058

Email: [DIT.PlanRoom@sa.gov.au](mailto:DIT.PlanRoom@sa.gov.au).



**Attachment 1**

Professional Service Contractor (PSC) logo/contact details to be inserted at top of page – reduce revision column to suit.

Revision Letter, Date, Revision Description and Initials

Government of South Australia logo (Do not move or edit)

DIT Use Only – to be completed at Contract execution

Official Project Name must be used

Full site address is required

Description of drawings on the sheet

Contract No., initial and check by signed PSC job/ref no, scale and page size

Asset no. and PSC sheet no.

DIT dwg no. and revision letter