

# Reviewing designs not using Deemed-To-Comply drawings

## 1. Overview

### 1.1. At a glance

#### What

The WSAA codes (Codes) are a performance based specification and do not contain sufficient engineering detail for construction purposes.

Sydney Water has Deemed To Comply Drawings (DTC) available that can be used for construction.

The designer can choose to use DTC drawings or provide their own engineered design solution.

### 1.2. Scope

#### Who

The main elements of this work instruction are:

- The WSC submits the design package for Sydney Water review
- Where DTC drawings have **not** been used, Urban Growth refers the design plan and the engineering details to relevant stakeholders for specialist review for the design (eg a specialist geotechnical review, structural or civil engineering certification etc.)
- Urban Growth consolidates the stakeholder comments and responds to the WSC.

#### Not covered in this Work Instruction

This work instruction does not change the process for reviewing design packages that **are** designed using the current Codes and DTC drawings.

### 1.3. Objective

#### Why

To ensure that the design provides the necessary detail for a constructor to build works to Sydney Water's requirements.

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### 3. Work Instruction

Step	Instruction
1.	<p><b>WSC Submits Design package not using DTC drawings</b></p> <p>1.1 Designer, during design preparation, identifies aspects that are not covered by DTC drawings.</p> <p>1.2 The aspects of the design that use DTC are finalised for submission.</p> <p>1.3 The design solution for non-DTC drawings is prepared. These must provide sufficient detail to be used as construction drawings. (The level of detail on the DTC's should be used as a base for design presentation and detail.)</p> <p>1.4 Where required, WSC obtains relevant specialist certification e.g. geotechnical review, structural or civil engineering sign off, detailed engineering design etc. for that part of the design that does not use DTC drawings.</p> <p>1.5 Submit design package in e-Developer which includes supporting information/certification for review of the non-DTC design component.</p> <p>1.6 Go to step 2.</p>
2.	<p><b>DSO review for required stakeholder input</b></p> <p>2.1 Reviews the design package which includes the non-DTC design solution and supporting documentation (certification/assessment and specialist information).</p> <p>2.2 Do one of the following:</p> <ul style="list-style-type: none"> <li>• If sufficient information for stakeholder review go to step 3.1</li> <li>• If not, go to step 8.</li> </ul>
3.	<p><b>DSO sends to stakeholders for review</b></p> <p>3.1 Retrieve the <i>Engineering &amp; Environmental Services (EES) request form</i> from e-Developer Case related Templates.</p> <p>3.2 Detail on <i>Engineering Services request form</i> the part of the design that does not use DTC drawings and requires specialist review.</p> <p>3.3 Email <i>Engineering Services the request form</i> to the email address on the request form.  <i>Note: If additional stakeholder input is required, email a request to stakeholders as required e.g. standards.</i></p> <p>3.4 Go to step 4.</p>
4.	<p><b>Stakeholders respond to proposal</b></p> <p><b>4.1 Engineering &amp; Environmental Services</b></p> <p>4.1.1 Complete the review on the (<i>EES</i>) request form and return via email to DSO.</p> <p><b>4.2 Other stakeholders</b></p> <p>4.2.1 Other stakeholders complete their review through email.</p> <p>4.3 Go to step 5.</p>
5.	<p><b>DSO determines if a meeting is required?</b></p> <p>5.1 Receive and review all responses and determine if a stakeholder meeting is required to further review the design solution. The Stakeholder review may also include the WSC and the developer's other consultants.</p>

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Step	Instruction
	<p>5.2 Do one of the following:</p> <ul style="list-style-type: none"> <li>• If meeting is required, go to step 5.3</li> <li>• If not, go to step 7.</li> </ul> <p>5.3 Schedule meeting to discuss non-DTC design proposal.</p> <p>5.4 Go to step 6.</p>
6.	<p><b>DSO conducts meeting with stakeholders</b></p> <p>6.1 Conduct meeting and record minutes/decisions and actions.</p> <p>6.2 Go to step 7.</p>
7.	<p><b>DSO responds to WSC on proposal</b></p> <p>7.1 Consolidate all responses and determine if the non-DTC solution is acceptable.</p> <p>7.2 Do one of the following:</p> <ul style="list-style-type: none"> <li>• Where the proposal is not acceptable, go to step 8.1</li> <li>• Where acceptable, go to 8.2</li> </ul>
8.	<p><b>DSO determines if the proposal is accepted?</b></p> <p>8.1 If no, email the response to the WSC and return the Design Package through e-Developer. Then go to step 9.</p> <p>8.2 If yes, go to OP: DSO Review Design Audits in e-Developer.</p>
OP	<p><b>DSO Review Design Audits in e-Developer</b></p> <p>Follow the process for acceptable design packages and completes the relevant Job Specific Letter.</p>
9.	<p><b>Does WSC need to develop a different design solution</b></p> <p>9.1 WSC reviews the response from the DSO.</p> <p>9.2 Do one of the following:</p> <ul style="list-style-type: none"> <li>• If more information is required, go to step 10</li> <li>• If alternate design solution is required, go to step 11.</li> </ul>
10.	<p><b>WSC provides more information</b></p> <p>10.1 Compile required information to support the non-DTC design solution.</p> <p>10.2 Go to step 1.</p>
11.	<p><b>WSC develops different design solution</b></p> <p>Where the non-DTC design solution is unacceptable to Sydney Water, the WSC is required to provide a different solution that complies to the existing Standards, Codes and DTC drawings, OR develop an alternative design solution for consideration.</p> <p>11.1 Develop alternative design solution that meets all stakeholders needs.</p> <p>11.2 Go to step 12.</p>
12.	<p><b>Does the new design solution use DTC drawings?</b></p> <p>12.1 If no, go to step 1.</p> <p>12.2 If yes, go to OP: WSC submits design package in e-Developer.</p>
OP	<p><b>WSC Submits Design Package in e-Developer.</b></p> <p>The WSC follows the process to submit Design package in e-Developer.</p>

## 4. Definitions

Term	Definition
Codes	The Sydney Water editions of the Water Services Association of Australia (WSAA) Codes to plan, design and construct water mains, gravity wastewater mains and sewage pumping stations.
Design	Design for Major Works, the design prepared by the Designer and included as part of the Design Package.
Designer	Person within a Design company to carry out the role of the Designer
Design Package	The package described in the Instructions to Water Servicing Coordinators – Major Works.
Design Plan	The plan released by Sydney Water (as a part of the Design Package) showing works to be constructed as a requirement of a Notice Of Requirements Letter or Letter of Approval.
Development Services Officer (DSO)	Staff member of the Urban Growth business unit who manages the development case.
DTC	Deemed To Comply drawings are drawings that are a specific engineering solution to a design issue.
e-Developer	Sydney Water's web-based software that WSCs use to manage and distribute applications and related documents about Developer activity.
Non-DTC design	A design that is not covered by the relevant water or sewer Codes and is not addressed in the DTC drawings.
Engineering & Environmental Services	Sydney Water's technical/engineering/environmental section that provide specific specialist review of non-standard design options.
Standards	<ul style="list-style-type: none"> <li>The Building Code of Australia, Australian Standards and Codes by the Water Services Association of Australia.</li> <li>Any other documents published or adopted by Sydney Water setting out its requirements for the design, construction, manufacture and supply of works or products.</li> </ul>
Urban Growth (UG)	A business unit within Sydney Water that manages the asset creation process for developers.
Water Servicing Coordinator (WSC)	The Listed Provider who will manage the design and construction of any water, wastewater or stormwater works and asset protection.

## 5. Context

### 5.1. Accountabilities

Position	Responsibilities
Development Services Officer	Application of the work instruction
Designer	Application of the work instruction
Water Services Coordinator	Application of the work instruction
Land Development Manager	Authorisation of the work instruction
Assurance Manager	Maintenance of the work instruction

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## 5.2. Training and Competencies

Name/Business	Level of training ( e.g. awareness; face to face; etc..)
Operations	Face to face
Land Development Team, Urban Growth	Face to face
Property Development Team, Urban Growth	Face to face
Water Servicing Coordinators	Awareness Session at WSC Forum.

## 5.3. References

Document type	Title
<b>Policies and procedures</b>	<ul style="list-style-type: none"> <li>• Instructions to Designers - Major Works</li> <li>• Instructions to Water Servicing Coordinators - Major Works</li> <li>• Design submission with DTC or engineering certification work instruction</li> <li>• Risk Categorisation Roles &amp; Responsibilities for Submitting Drinking, Recycled and Waste Water Design Packages work instruction.</li> </ul>
<b>Forms and checklists</b>	Engineering Services request form Operational Review form Job Specific Letter
<b>Other documents</b>	<u>Deemed-To-Comply Drawings</u> available from Provider Information on the Sydney Water website <u>WSAA Codes</u> link available from Provider Information on the Sydney Water website

## 6. Document control

Title:	Add Title of document	
<b>Current review date:</b> 01-09-2013	<b>Review Period:</b> 3 years <b>Risk Rank</b> = Medium	<b>Registered file:</b> N/A
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<b>Approved by:</b>	<b>(Team or Process Leader)</b> Norbert Schaeper – Assurance Manager, Urban Growth	Digitally signed in BMIS

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## 6.1. Change History

Version	Date Revised	Author/s	Approved By	Brief description of change
1	01/03/2012	Peter Jansen	N Schaeper	Initial document
2	01/10/2013	Kathy Bain	N Schaeper	PAMS Audit - Action Request ARAMQ0204

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