

Australian Government

Department of Education, Employment and Workplace Relations

# LGAWORK501A Prepare preliminary design for operational works

Release 2



#### LGAWORK501A Prepare preliminary design for operational works

#### **Modification History**

LGAWORK501A Release 2: Layout adjusted. LGAWORK501A Release 1: Primary release.

#### **Unit Descriptor**

This unit covers preparing works related to preliminary design for community consultation and council approval.

## **Application of the Unit**

This unit supports the attainment of skills and knowledge required for competent workplace performance in councils of all sizes. Knowledge of the legislation and regulations within which councils must operate is essential. The unique nature of councils, as a tier of government directed by elected members and reflecting the needs of local communities, must be appropriately reflected.

#### **Licensing/Regulatory Information**

Not applicable.

#### **Pre-Requisites**

Not applicable.

#### **Employability Skills Information**

This unit contains employability skills.

#### **Elements and Performance Criteria Pre-Content**

Elements describe the essential outcomes of a Unit of Competency Performance criteria describe the required performance needed to demonstrate achievement of the element. Where *bold italicised* text is used, further information is detailed in the Range Statement. Assessment of performance is to be consistent with the Evidence Guide.

### **Elements and Performance Criteria**

ELEMENT		PERFORMANCE CRITERIA
1	Establish design criteria	<ol> <li>1.1 Project objectives are defined so that the preliminary design can address required outcomes.</li> <li>1.2 Regulations and restrictions on design are identified to ensure design meets relevant standards and codes.</li> <li>1.3 The physical dimensions of the project are specified to enable the design to proceed.</li> <li>1.4 An appropriate level of design detail is established to enable a preliminary design to be prepared.</li> </ol>
2	Prepare alternative concepts	<ul> <li>2.1 Similar projects are examined to build on existing knowledge and improve efficiency.</li> <li>2.2 Feasible concept layouts and supporting statements are prepared that satisfy design objectives within design parameters.</li> <li>2.3 <i>Alternative concepts</i> are prepared with supporting statements.</li> <li>2.4 Indicative <i>cost estimates</i> are prepared.</li> </ul>
3	Conduct a safety design audit	<ul> <li>3.1 <i>Agents or authorities</i> relevant to the <i>design</i> are identified.</li> <li>3.2 A safety design audit is conducted.</li> <li>3.3 Safety design audit feedback is incorporated into the preliminary design.</li> </ul>
4	Obtain project approvals	<ul><li>4.1 Relevant utilities that are to be affected, or whose assistance is required, are notified.</li><li>4.2 Necessary approvals and permits from relevant authorities are obtained.</li></ul>
5	Finalise public consultation and prepare report to council	<ul> <li>5.1 An accurate preliminary design report is prepared.</li> <li>5.2 Consultation opportunities are provided for interested parties to view plan.</li> <li>5.3 Public feedback is reported in accordance with statutory and legislative requirements.</li> <li>5.4 Modifications are made to incorporate amendments, and design criteria are adjusted accordingly.</li> <li>5.5 Final concept plan is submitted to council.</li> </ul>

## **Required Skills and Knowledge**

This describes the essential skills and knowledge and their level, required for this unit

#### **Required Skills**

- preparing preliminary design to meet specifications
- interpreting relevant government legislation and council policies
- presenting material to council and customers
- computer application of design aid
- interpreting plans, maps, level sheets and specifications
- chart reading
- financial estimations and alternate concepts

#### **Required Knowledge**

- relevant government authorities and council procedures and policies
- relevant legislation, codes of practice and standards
- contractual and legal requirements
- environmental management strategy
- design standards

## **Evidence Guide**

Overview of assessment requirements	A person who demonstrates competency in this unit will be able to perform the outcomes described in the Elements to the required performance level detailed in the Performance Criteria. The knowledge and skill requirements described in the Range Statement must also be demonstrated. For example, knowledge of the legislative framework and safe work practices that underpin the performance of the unit must be demonstrated.
Critical aspects of evidence to be considered	Australian design standards are applied. Review of environmental factors for maintenance and construction projects is conducted. Safety design audit is undertaken.
Context of assessment	<ul> <li>May be assessed through:</li> <li>on the job</li> <li>simulated workplace environment</li> <li>written assignment</li> <li>short-answer test</li> <li>oral questioning</li> <li>observation</li> <li>or any combination of the above</li> </ul>
Relationship to other units(prerequisite or co- requisite units)	To enable holistic assessment this unit may be assessed with other units that form part of the job role.
Method of assessment	<ul> <li>The following assessment methods are suggested:</li> <li>observation of the learner performing a range of workplace tasks over sufficient time to demonstrate handling of a range of contingencies</li> <li>written and/or oral questioning to assess knowledge and understanding</li> <li>completion of workplace documentation</li> <li>third-party reports from experienced practitioners</li> <li>completion of self-paced learning materials including personal reflection and feedback from trainer, coach or supervisor</li> </ul>
Evidence required for demonstration of consistent performance	Evidence will need to be gathered over time across a range of variables.
<b>Resource implications</b>	In accordance with a range of variable requirements.

#### **Range Statement**

The Range Statement relates to the Unit of Competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording in the Performance Criteria is detailed below.

<i>Alternative concepts</i> may include:	<ul> <li>visuals</li> <li>environment</li> <li>design</li> <li>style</li> </ul>
<i>Cost estimates</i> may include:	<ul> <li>cost</li> <li>review of existing project costs</li> <li>industry journals</li> <li>contractor quotes</li> </ul>
	<ul> <li>cost assessors</li> <li>estimating and quantity surveying firms</li> <li>data services</li> </ul>
<i>Agents or authorities</i> may include:	<ul> <li>service providers (gas, water, electricity, utilities and communications)</li> <li>environment protection authorities</li> <li>planning bodies</li> <li>ateta road authorities</li> </ul>
<i>Design</i> may include:	<ul> <li>state road authorities</li> <li>community organisations</li> <li>erosion and sediment control plan references</li> <li>Australian design standards</li> </ul>

#### **Unit Sector(s)**

**Operational Works**