



Australian Government

Department of Education, Employment and Workplace Relations

LGAWORK206A Measure and calculate civil materials

Release 2

LGAWORK206A Measure and calculate civil materials

Modification History

LGAWORK206A Release 2: Layout adjusted.

LGAWORK206A Release 1: Primary release.

Unit Descriptor

This unit covers the selection of materials and the calculation of quantities and measurements for civil works.

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 Interpret working drawings | 1.1 The range of drawings used by municipal workers is identified. 1.2 <i>Plan</i> elevations and sections are identified from supplied drawings. 1.3 Details are communicated to appropriate staff. |
| 2 Calculate quantities and measurements in setting out civil works | 2.1 Volumes and areas are calculated for various types of civil works. 2.2 Lines and levels are set to plan. 2.3 Units and <i>measurements</i> are converted as required. |
| 3 Apply civil materials | 3.1 Appropriate civil materials are identified for various types of civil works. 3.2 <i>Appropriate materials</i> are manufactured in accordance with civil works requirement. 3.3 Civil materials are placed and applied in accordance with drawings and specifications. |

Required Skills and Knowledge

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

Required Skills

- written and verbal communication
- numeracy and calculation skills

Required Knowledge

- written and verbal communication
- methods of measurement and calculation, tapes, rulers, levels and test equipment
- interpretation of drawings, plans and specifications
- occupational health and safety requirements
- recognition of civil materials

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 | Appropriate materials and correct quantities are selected for the construction and maintenance of civil works. Plans and specifications are interpreted accurately. Areas are adequately set out according to plans and specifications. Calculations of volumes and areas are accurate. Australian standards are used and met. |
| Context of assessment | May be assessed: <ul style="list-style-type: none">• on the job• simulated workplace environment• written assignment• short-answer test• oral questioning• observation• or any combination of the above |
| 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 | The following assessment methods are suggested: <ul style="list-style-type: none">• observation of the learner performing a range of workplace tasks over sufficient time to demonstrate handling of a range of contingencies• written and/or oral questioning to assess knowledge and understanding• completion of workplace documentation• third-party reports from experienced practitioners• completion of self-paced learning materials including personal reflection and feedback from trainer, coach or supervisor |
| Evidence required for demonstration of consistent performance | Evidence will need to be gathered over time across a range of variables. |

Resource implications 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.

Plans may include:

- works plans
- engineering drawings
- specifications

Measurements may include:

- length
- area
- volume
- scales

Appropriate materials may include:

- soils
- bitumen
- aggregates
- asphalt
- concrete
- timber

Unit Sector(s)

Operational Works