



Australian Government

Department of Education, Employment and Workplace Relations

LGAWORK306A Construct roads and pavements

Release 2

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Modification History

LGAWORK306A Release 2: Layout adjusted.

LGAWORK306A Release 1: Primary release.

Unit Descriptor

This unit covers the construction of roads and pavements.

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 Divert or drain water from the work site	1.1 Appropriate <i>drainage</i> is provided to allow for the diversion of uncontaminated stormwater from the work site and to prevent damage to the environment. 1.2 Environmental protection devices are installed as required to meet environmental regulations.
2 Set up for road construction	2.1 Levels and construction lines and pegs are set out to plans. 2.2 Site is grubbed and cleared of scrub and topsoil and <i>subgrade</i> is prepared according to plans and specifications. 2.3 Construction site is secured to prevent injury to the public and workers and damage to property. 2.4 Traffic control and warning signs are put into place in accordance with regulations.
3 Construct roads	3.1 Sub-grade is checked for soft spots, excavated and backfilled with selected materials and compacted in layers to specifications. 3.2 Subsoil and stormwater drainage are laid according to plans and excavation is backfilled with selected materials and compacted in accordance with the specifications. 3.3 Earth <i>stabilisation</i> is completed to specifications. 3.4 <i>Pavement</i> structure is constructed and completed in accordance with plans and specifications. 3.5 Road is shaped, contoured, compacted and prepared for road finish in accordance with plans and specifications. 3.6 Wearing <i>surface</i> materials are applied using selected equipment and tools in accordance with specifications. 3.7 Pavement lines are spotted in accordance with the traffic plan and applied to the surface in accordance with specifications. 3.8 Traffic control and warning signs are removed when all risks have ceased.
4 Install signage and furniture/appurtenances	4.1 <i>Signage</i> is positioned in accordance with the traffic plan and <i>relevant standards</i> . 4.2 Guard and handrails are placed in accordance with the traffic plan, specifications and relevant standards. 4.3 Light poles are placed and connected in accordance with the lighting plan and specifications. 4.4 Road fencing and noise insulation are constructed in accordance with plans and specifications. 4.5 <i>Furniture</i> /appurtenances are placed in accordance with plans and specifications.
5 Rehabilitate works area	5.1 Verges and medians are surfaced and planted or turfed according to landscaping plans and specifications. 5.2 Site is restored to the required condition in accordance with

ELEMENT	PERFORMANCE CRITERIA
	plans and specifications.
	5.3 Private and public property areas and structures are restored in accordance with instructions.
6 Maintain records	6.1 Information is recorded in accordance with council and legislative requirements.
	6.2 Details are recorded clearly, accurately and legibly.
	6.3 Records are secured, made accessible and kept up to date.

Required Skills and Knowledge

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

Required Skills

- reading and interpreting plans, drawings and specifications, and plant and equipment capabilities
- measurement
- calculating quantities
- state and local environmental requirements

Required Knowledge

- occupational health and safety requirements
- work site traffic management
- materials technology related to road construction
- appropriate drainage options
- work scheduling, testing and inspection
- working in a team

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	<p>Sub-grade materials are identified and appropriate treatments are selected.</p> <p>Appropriate materials are selected for the construction of the works.</p> <p>Appropriate construction resources and processes are used.</p> <p>Plans and specifications are adhered to.</p> <p>Safety on work sites is ensured.</p> <p>Australian standards are met.</p>
Context of assessment	<p>May be assessed:</p> <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	<p>The following assessment methods are suggested:</p> <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	Evidence will need to be gathered over time across a range of variables.

consistent performance

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.

- Drainage*** may include:
- table drain
 - mitre
 - kerb and channelling
 - run-offs
 - culverts
 - sump baskets
 - end walls
 - gabions
 - subsoil drains
 - leaching
 - weirs
 - leachate control
- Subgrade*** may include:
- clay, sand or gravel
 - modification treatments
 - soft spots
 - levelling
 - compaction
 - preparation
- Stabilisation*** may include:
- synthetics
 - soil and clay geomixes
 - concrete
 - cribblock
 - gabions
 - reinforced earth
 - stone pitching
 - stone blocking
 - sand bagging
 - geotextile fabrics
 - spray seeding
- Pavement*** may include:
- crushed rock
 - soil aggregate
 - grader-placed
 - paver-placed
 - compacted by static roller, vibratory roller, pneumatic roller or concrete train
- Surface type*** may include:
- sealed
 - unsealed

- gravel
 - bitumen
 - concrete
 - segmental pavers
 - asphalt
 - pre-mix
- Earthworks*** may include:
- clearing
 - grubbing
 - excavating
 - grading
 - levelling
 - trenching
 - compacting
- Signage*** may include:
- statutory
 - directional
 - information
 - road lines
 - road markings
 - reflectors
 - centre lines
 - directional lines
 - shoulder lines
- Relevant standards*** may include:
- AS1742.3
 - and other relevant standards
- Furniture*** may include:
- bins
 - bus shelters
 - guide posts
 - bollards
 - benches
 - seats
 - fences
 - guardrails
 - historical lamp posts
 - tables
 - rest areas
 - utility poles
 - handrails
 - noise suppressors

Unit Sector(s)

Operational Works