



Australian Government

Department of Education, Employment and Workplace Relations

LGAWORK211A Perform field support duties in the construction and maintenance of drainage systems

Release: 2

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Modification History

LGAWORK211A Release 2: Layout adjusted.
LGAWORK211A Release 1: Primary release.

Unit Descriptor

This unit covers undertaking relevant field support duties in the construction and maintenance of drainage systems within council areas. The unit looks at establishing the facilities required for drainage work and excavation operations, the installation of pipes and the requirement to keep appropriate records.

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 ability to use appropriate materials, excavation methods and processes and adhere to relevant standards 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 site facilities for drainage and concrete construction	1.1 Work is planned and programmed to be undertaken in accordance with drawings, specifications and other documentation. 1.2 Work site is prepared and maintained in accordance with occupational health and safety (OHS) requirements and regulations. 1.3 Traffic control is planned at job site and signed in accordance with relevant Australian standards. 1.4 Underground and overhead obstructions and other utility services are identified. 1.5 Appropriate signage is selected, established and maintained at work site.
2 Construct appropriate pits and manholes	2.1 Plant, equipment, tools and materials to construct manholes and pits are selected. 2.2 Pits and manholes are constructed according to council requirements.
3 Carry out excavation operations associated with stormwater drainage	3.1 Appropriate tools, plant and equipment are used to perform trenching operations. 3.2 Excavation is undertaken, shoring installed and trenches are battered back according to OHS requirements. 3.3 Appropriate drainage is provided to allow for the diversion of uncontaminated stormwater from the work site. 3.4 Environmental protector devices are installed as required to meet environmental regulations.
4 Install a variety of drainage pipes	4.1 Appropriate drainage pipes for stormwater and subsoil drainage are installed to meet specified requirements. 4.2 Trench bottoms are prepared and laid using appropriate tools, control devices, equipment, bedding and drainage materials, in accordance with drawings and specifications. 4.3 Trenches are backfilled using appropriate backfill, in accordance with specified requirements.
5 Maintain records relating to drainage	5.1 Information is recorded in accordance with council and legislative requirements. 5.2 Details are recorded clearly, accurately and legibly. 5.3 Records are secured, accessible and up to date.

Required Skills and Knowledge

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

Required Skills

- written and verbal communication skills
- reading and interpreting plans and specifications, and plant and equipment capabilities
- civil works construction techniques and methods
- calculating quantities
- trade-specific skills related to work undertaken
- material testing

Required Knowledge

- OHS requirements
- construction and maintenance practices
- materials technology associated with drainage systems
- work scheduling, inspection, testing and monitoring
- work site traffic management
- monitoring and testing methods and procedures

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

Demonstrated ability to:

- use appropriate materials, excavation methods and processes for the construction and maintenance of drainage systems
- Demonstrated ability to adhere to plans and specifications
- Demonstrated ability to adhere to relevant OHS practices on site
- Demonstrated ability to adhere to Australian standards, codes of practice and advisory standards

Context of assessment

Competency is demonstrated by performance of all stated criteria, with particular attention to the critical aspects of evidence and the knowledge and skills elaborated in the Evidence Guide, and within the scope of the Range Statement. Assessment must take account of the endorsed Assessment Guidelines in the Local Government Training Package. Assessment of the performance requirements in this unit should be undertaken in an actual workplace or simulated environment. Assessment should reinforce the integration of the key competencies for the particular AQF level. Refer to the key competency levels at the end of this unit.

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:

- 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 should be collected over a set period of time, which is sufficient to include dealings with an appropriate range and variety of situations.

Resource implications

The learner and the trainer should have access to appropriate documentation and resources normally used in the workplace.

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.

Signage may include:

- statutory
- directional and information
- road lines and road markings
- reflectors
- centre lines
- directional lines
- shoulder lines

Drainage may include:

- table drains
- mitre
- kerb and channelling
- gullies
- run-offs
- culverts
- sump baskets
- end walls
- gabions
- subsoil drains
- stormwater drains
- manholes and pits
- leaching
- leachate control

Pipes may include:

- polyvinyl chloride (PVC) pipes, fibre reinforced concrete (FRC) pipes, reinforced and unreinforced concrete pipes, and corrugated and slotted PVC pipes
- concrete joints: butt, socket mortar, socket mastic and socket rubber ring
- PVC joints: insert and flared compression rubber gasket
- FRC joints: gibault, machined and rubber joints

Types of records may include:

- test reports
- job diaries
- instructions
- correspondence
- time sheets
- accident reports
- costing sheets

Unit Sector(s)

Operational Works