



Australian Government

Department of Education, Employment and Workplace Relations

NWP525B Implement and manage asset construction and maintenance

Revision Number: 2

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Modification History

NWP525B Release 2: Layout adjusted. No changes to content.

NWP525B Release 1: Primary release.

Unit Descriptor

This unit of competency describes the outcomes required to implement and manage asset construction and maintenance projects. This requires the ability to conduct often complex planning of activities including the scheduling and resourcing of projects and the monitoring of the project to ensure the completion of the work in line with the organisation's requirements and to the required quality.

Application of the Unit

This unit supports the attainment of skills and knowledge required for senior managers with responsibility for coordinating, planning and managing construction and maintenance works.

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 Prepare for asset construction.	<ul style="list-style-type: none">1.1 Identify and apply site investigation and construction guidelines, standards and other regulatory requirements.1.2 Identify stakeholder requirements that impact on the construction.1.3 Undertake <i>site inspections</i> according to organisation and stakeholder requirements.1.4 Collate and check <i>project documentation</i> and assess for impact on work planning and management.1.5 Identify and investigate potential hazards and safety risks and report recommendations for preventative action according to organisational requirements.1.6 Identify and specify roles and responsibilities of all <i>stakeholders</i>.
2 Plan construction operations.	<ul style="list-style-type: none">2.1 Identify organisational strategies for implementing construction operations.2.2 Implement organisational Health and Safety (OHS) policy and procedures, including hazard and risk management.2.3 Implement procedures for securing the required plant and equipment.2.4 Determine and record labour requirements with reference to the work plan and/or contract documentation.2.5 Evaluate, select and source materials to complete the job.2.6 <i>Sequence and schedule work</i> to meet organisational requirements and the efficient completion of the project.2.7 Follow procedures for the control of the project.
3 Implement quality assurance measures.	<ul style="list-style-type: none">3.1 Monitor tasks and jobs to ensure compliance with plans in terms of time frames, quality assurance issues and organisational requirements.3.2 Provide guidance to contractors or employees in a timely manner and according to the plan.3.3 Monitor construction activities to ensure compliance with occupational health and safety and environmental regulations.3.4 Monitor construction progress and maintain records according to organisational standards.3.5 Promptly communicate changes to meet unforeseen requirements, resources reallocation or rescheduling and the extent of the change according to organisational procedures.3.6 Confirm and certify completion of construction or installation according to enterprise procedures.

Required Skills and Knowledge

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

Required skills:

- develop planning processes
- monitor work progress
- apply relevant legislation
- conduct investigations
- conduct site inspections
- prepare reports
- interpret design plans
- make adjustments and alterations to designs

Required knowledge:

- enterprise contract procedures
 - procedures for site inspections
 - evaluation and investigation requirements
 - enterprise reporting procedures and reporting requirements
 - characteristics, technical capabilities and limitations of relevant materials
 - material handling procedures
 - relevant legislation
 - planning processes
 - occupational health and safety and environmental legislation, Acts and procedures
- legislation

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

The candidate should demonstrate the ability to implement and manage asset construction and maintenance projects including:

- implement an asset construction or maintenance project, including the planning of the project that entails:
- identifying and securing the human resources, plant&equipment and materials to complete the work
- the scheduling and sequencing of the project
- ensuring organisational, planning and statutory obligations are met
- manage an asset construction or maintenance project, including:
- providing targeted, timely and constructive feedback to contractors or staff
- monitoring adherence to the project plan/schedule
- exercising judgement if the project plan or schedule requires revision due to unforeseen circumstances
- overseeing and ensuring quality outcomes are achieved
- reporting the outcomes

Context of and specific resources for assessment

Access to the workplace and resources including:

- documentation that should normally be available in a water industry organisation
- relevant codes, standards, and government regulations

Where applicable, physical resources should include equipment modified for people with disabilities.

Access must be provided to appropriate learning and/or assessment support when required.

Assessment processes and techniques must be culturally appropriate, and appropriate to the language and literacy capacity of the candidate and the work being performed.

Validity and sufficiency of evidence requires that:

- competency will need to be demonstrated over a period of time reflecting the scope of the role and the practical requirements of the workplace
- where the assessment is part of a structured learning experience the evidence collected must relate to a number of performances assessed at different points in

time and separated by further learning and practice

- a decision of competence should only be made when the assessor has complete confidence in the person's competence over time and in various contexts
- all assessment that is part of a structured learning experience must include a combination of direct, indirect and supplementary evidence
- where assessment is for the purpose of recognition (RCC/RPL), the evidence provided will need to be authenticated and show that it represents competency demonstrated over a period of time
- assessment can be through simulated project-based activity and must include evidence relating to each of the elements in this unit

In all cases where practical assessment is used it will be combined with targeted questioning to assess the underpinning knowledge. Questioning will be undertaken in a manner appropriate to the skill levels of the operator, any cultural issues that may affect responses to the questions, and reflecting the requirements of the competency and the work being performed.

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, if used in the Performance Criteria, is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts.

Site inspections may be conducted to confirm:

- planning
- inspect preparation work
- assess compliance with specifications
- assess compliance with occupational health and safety requirements

Project documentation may include:

- design and construction plans
- specifications
- briefs
- drawings
- pricing schedules
- permits
- instruments of agreement
- acceptance of contract
- general and special conditions of contract
- operational manuals
- maintenance manuals
- as constructed drawings
- plans of other authorities
- financial plans
- project plans

Stakeholders may include:

- contractors
- Government agencies
- property owners
- utility organisations
- customers
- the general public
- asset users

Sequence and schedule work according to organisational procedures and may use tools including:

- manual planning tools
- Critical Path Method, PERT or GANTT charts
- project management or scheduling software

Unit Sector(s)

Not applicable.

Competency field

Collection and distribution.