



**Australian Government**

# **RIICWM502D Implement civil works maintenance program**

**Release: 2**

## RIICWM502D Implement civil works maintenance program

### Modification History

| Release | Comment                                                                                                                                                                                                                                                                                                         |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1       | This unit replaces RIICWM502A Implement civil works maintenance program                                                                                                                                                                                                                                         |
| 2       | Required frequency and volume of evidence amended in Performance evidence.<br>Substantial amendments made in Assessment Conditions field, including: references to Industry Sectors, assessor and subject matter expert experience requirements, how assessment should be conducted and what it should confirm. |

### Application

This unit describes a participant's skills and knowledge required to implement civil works maintenance programs in Civil construction.

This unit is appropriate for those working in management roles or as a technical specialist.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

### Unit Sector

Civil construction

### Elements and Performance Criteria

|                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Plan and prepare to implement a civil works maintenance program | <p>1.1 Access, interpret and apply the civil works maintenance program documentation and ensure the work activity is compliant</p> <p>1.2 Identify hazards and environmental issues associated with the work, evaluate risks and apply controls</p> <p>1.3 Confirm the current condition of the assets scheduled for maintenance and recommend reclassification of serviceability if appropriate</p> <p>1.4 Identify resources required to implement the civil works maintenance plan</p> |
| 2. Prepare the detailed civil works maintenance program            | <p>2.1 Identify the viable available options for the implementation of the specific civil works maintenance tasks</p> <p>2.2 Select the preferred option and draft the implementation program in consultation with relevant team members, and ensure best</p>                                                                                                                                                                                                                             |

|                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                         | <p>use of the available resources</p> <p>2.3 Identify contingency requirements to be allowed for in the implementation of the plan</p> <p>2.4 Monitor and coordinate the progress of other team members involved in the planning process</p> <p>2.5 Identify and schedule the resources required for the execution of the implementation plan</p> <p>2.6 Identify the key performance indicators to be used in the monitoring and assessment of the project performance</p> <p>2.7 Identify and clarify the maintenance works milestones required</p> <p>2.8 Prepare an accurate estimate of the cost of execution of the implementation plan in consultation with relevant team members</p> <p>2.9 Gain approval of the implementation plan</p> <p>2.10 Document the implementation plan</p> |
| 3. Initiate civil works maintenance implementation plans                                | <p>3.1 Acquire and make available the necessary resources</p> <p>3.2 Issue clear and timely instructions to team members and others involved</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 4. Monitor, adjust and report on the implementation of civil works maintenance programs | <p>4.1 Monitor the civil works maintenance implementation plan performance and ensure it achieves the required outcomes</p> <p>4.2 Provide ongoing clarification and advice to those applying the plan</p> <p>4.3 Complete and submit written and verbal reports</p> <p>4.4 Participate in performance review of the implementation plan</p> <p>4.5 Recommend improvements</p>                                                                                                                                                                                                                                                                                                                                                                                                                |

## Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit. Further information is available in the Resources and Infrastructure Industry Training Package Companion Volume.

## Unit Mapping Information

RIICWM502A Implement civil works maintenance program

## Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=88a61002-9a21-4386-aaf8-69c76e675272>

# Assessment Requirements for RIICWM502D Implement civil works maintenance program

## Modification History

| Release | Comment                                                                                                                                                                                                                                                                                                         |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1       | This unit replaces RIICWM502A Implement civil works maintenance program                                                                                                                                                                                                                                         |
| 2       | Required frequency and volume of evidence amended in Performance evidence.<br>Substantial amendments made in Assessment Conditions field, including: references to Industry Sectors, assessor and subject matter expert experience requirements, how assessment should be conducted and what it should confirm. |

## Performance Evidence

Evidence is required to be collected that demonstrates a candidate's competency in this unit. Evidence must be relevant to the roles within this sector's work operations and satisfy all of the requirements of the performance criteria of this unit and include evidence that the candidate:

- locates and applies relevant legislation, documentation, policies and procedures
- implements the requirements, procedures and techniques for the safe, effective and efficient implementation of civil works maintenance programs including, accessing, interpreting and applying:
  - legislative, organisation and site requirements and procedures
  - project plans and drawings
  - project specifications
  - project maintenance works briefs
  - project engineering survey information
  - project hydrological data
  - meteorological data
  - project geotechnical data
  - inspection data
  - innovative solutions and new technology
  - consultative processes
  - project scheduling and resource management technology
  - negotiation techniques
  - feedback techniques
- works effectively with others to implement the civil works maintenance programs that meets all the required outcomes including:

- providing clear and timely instruction and supervision using a range of communication techniques to those involved
- preparing for and conducting briefings, toolbox and site meetings
- maintaining clear and legible written records and the reporting systems
- consulting with stakeholders
- demonstrates completion of implementing civil works maintenance program that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:
  - successful implementation of civil works maintenance program including providing instruction to others using one (1) of the following methodologies:
    - project plans
    - briefings
    - handovers
    - work orders
    - toolbox meetings
    - site meetings
  - schedule of inspection programs
  - classify the levels of the serviceability of assets
  - prioritise maintenance works
  - provide team leadership and coordination
  - choose appropriate maintenance operational techniques
  - develop and apply works maintenance programs
  - calculate of maintenance works resource quantities and project costs
  - maintain maintenance works cost records
  - provide clarification and advice

## Knowledge Evidence

The candidate must demonstrate knowledge in implementing civil works maintenance programs through:

- accessing, interpreting and applying legislative, organization and site requirement and procedures for:
  - risk assessment and management
  - statutory compliance
  - work, health and safety
  - environmental management
  - quality management
  - communication
  - inspection program scheduling
  - inspection data interpreting
  - asset condition classification

- maintenance works prioritisation
- Industry and organisational maintenance works
- maintenance program review
- maintenance program documentation
- maintenance program reporting
- maintenance program approval
- maintenance program records filing
- performance review
- team leadership techniques
- principles of road user behavior

## Assessment Conditions

- An assessor of this unit must satisfy the requirements of the NVR/AQTF or their successors; and Industry regulations for certification and licensing; and,
- this unit must be assessed in the context of this sector's work environment; and,
- this unit must be assessed in compliance with relevant legislation/regulation and using policies, procedures, processes and operational manuals directly related to the industry sector for which it is being assessed; and,
- assessment may be conducted in conjunction with the assessment of other Units of Competency; and,
- assessment must confirm consistent performance can be applied in a range of relevant workplace circumstances; and,
- assessors must demonstrate the performance evidence, and knowledge evidence as outlined in this Unit of Competency, and through the minimum years of current\* work experience specified below in an Industry sector relevant to the outcomes of the unit; or,
- where the assessor does not meet experience requirements a co-assessment or partnership arrangement must exist between the qualified assessor and an Industry subject matter expert. The Industry subject matter expert should hold the unit being assessed (or an equivalent unit) and/or demonstrate equivalence of skills and knowledge at the unit level. An Industry technical expert must also demonstrate skills and knowledge from the minimum years of current work experience specified below in the Industry sector, including time spent in roles related to the unit being assessed; and,
- assessor and Industry subject matter expert requirements differ depending on the Australian Qualifications Framework Level (AQF) of the qualification being assessed and/or Industry Sector as follows:

| Industry sector                                                                            | AQF** Level | Required assessor or Industry subject matter expert experience |
|--------------------------------------------------------------------------------------------|-------------|----------------------------------------------------------------|
| Drilling, Metalliferous Mining, Coal Mining, Extractive (Quarrying) and Civil Construction | 1           | 1 Year                                                         |
|                                                                                            | 2           | 2 Years                                                        |

|                                                  |                                                                                                                                                                                                                                                                                                                                |         |
|--------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| Drilling, Coal Mining and Extractive (Quarrying) | 3-6                                                                                                                                                                                                                                                                                                                            | 3 Years |
| Metalliferous Mining and Civil Construction      | 3-6                                                                                                                                                                                                                                                                                                                            | 5 Years |
| Other sectors                                    | Where this Unit is being assessed outside of the Resources and Infrastructure Sectors assessor and/or Industry subject matter expert experience should be in-line with industry standards for the sector in which it is being assessed and where no Industry standard is specified should comply with any relevant regulation. |         |

\*Assessors can demonstrate current work experience through employment within Industry in a role relevant to the outcomes of the Unit; or, for external assessors this can be demonstrated through exposure to Industry by conducting frequent site assessments across various locations.

\*\*Where a unit is being delivered outside of a Qualification the first numeric character in the Unit code should be considered to indicate the AQF level

## Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=88a61002-9a21-4386-aaf8-69c76e675272>