

# Assessment Requirements for CPPSIS6036 Monitor engineering structures

Release: 1

# Assessment Requirements for CPPSIS6036 Monitor engineering structures

# **Modification History**

Release 1.

Replaces superseded equivalent CPPSIS6036A Monitor complex engineering surveying structures.

This version first released with CPP Property Services Training Package Version 3.

## **Performance Evidence**

A person demonstrating competency in this unit must satisfy the requirements of the elements, performance criteria, foundation skills and range of conditions of this unit. The person must also monitor engineering structures for two projects.

While monitoring the above engineering structures, the person must:

- analyse surveying specifications, including:
  - cross-sections and plans
  - technical descriptions of surveying data and their collection and format requirements
- apply industry-accepted standards for performing surveying measurements and computations
- communicate clearly with others to clarify and report work information and negotiate task completion
- comply with industry-accepted standards for validating accuracy of surveying data and identifying errors and discrepancies
- comply with organisational, legal and statutory requirements for:
  - completing records and documentation
  - · recording, storing and filing data
  - · using, checking and storing surveying equipment
  - working safely and using personal protective equipment (PPE)
- conduct measurements and calculations to meet engineering specifications using two of the following pieces of surveying equipment:
  - current meter
  - global navigation satellite system (GNSS)
  - level
  - tape
  - theodolite
  - total station
- develop a project plan to monitor engineering structures, including detail of:
  - project objectives and deliverables
  - constraints

Approved Page 2 of 4

- risk management and contingency strategies
- work activities
- technologies and techniques to be used
- identify site hazards and control risks
- implement project management mechanisms to ensure monitoring activities are completed within required timeframes and comply with specifications
- interpret engineering design information and specifications to identify components to be measured and accuracy and precision tolerances to be applied
- plan and document data collection methodologies that allow for contingencies
- review project outcomes against specifications and objectives
- schedule work tasks and organise resources and equipment
- supervise staff to complete work tasks on time.

# **Knowledge Evidence**

A person demonstrating competency in this unit must demonstrate knowledge of:

- accuracy and precision requirements and tolerances for engineering structures
- data formatting, processing and reduction techniques
- industry-accepted methods for validating data to identify errors and discrepancies
- legislative, statutory and industry requirements, and standards relating to work tasks
- methods for calculating surveying data and verifying its accuracy using spatial reference systems
- methods for setting up, levelling and calibrating surveying equipment
- methods for identifying and reporting non-conformities
- organisational policies and procedures relating to:
  - health and safety relating to survey activities and work on construction sites
  - reporting and documentation
  - using and allocating resources
  - using the surveying equipment specified in the performance evidence
- processes to establish and use high-level survey control
- project management techniques for scheduling, measuring and monitoring work progress and planning for contingencies
- project zone design
- reference and coordinate systems for surveying data, including Australian Height Datum and Map Grid of Australia
- surveying data capture and set-out methodologies
- use and application of network and traverse adjustments.

#### **Assessment Conditions**

The following must be present and available to learners during assessment activities:

• equipment:

Approved Page 3 of 4

- as specified in the performance evidence
- specifications:
  - · survey specifications, including relevant engineering plans and drawings
  - organisational policies, procedures and documentation relating to work health and safety
- relationships with team members and supervisor:
  - lead role in a team.

#### Timeframe:

as specified by project requirements.

### Assessor requirements

As a minimum, assessors must satisfy the assessor requirements in the Standards for Registered Training Organisations (RTOs) current at the time of assessment.

### Links

Companion Volume implementation guides are found in VETNet - https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=6f3f9672-30e8-4835-b348-205dfcf13d9b

Approved Page 4 of 4