

Assessment Requirements for CPPSIS5046 Set out stormwater systems

Release: 1

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Modification History

Release 1.

Replaces superseded non-equivalent CPPSIS5046A Design a stormwater system.

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 set out stormwater systems and associated engineering structures for two different projects.

While setting out the above stormwater systems and associated engineering structures, the person must:

- plan work tasks by checking plans, drawings, maps, specifications and control marks
- set out marks and lines to define position and level of design points on site using two of the following pieces of equipment:
 - hand-held laser measuring device
 - global navigation satellite system (GNSS)
 - level
 - tape
 - total station
- use horizontal and vertical control techniques to position design points and markers
- measure and calculate data within industry-accepted tolerances for accuracy
- comply with manufacturer specifications when using equipment
- check measurements to ensure accuracy of plan position and reduced level of set-out and address identified discrepancies
- reduce and manipulate surveying data
- communicate clearly with others to clarify and report project information
- comply with organisational and legislative requirements for:
 - identifying hazards, using personal protective equipment (PPE), and working safely
 - recording, storing and filing data
 - setting up and using surveying equipment.

Knowledge Evidence

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

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- mathematical concepts relating to algebra, trigonometry and geometry and their use in calculating spatial measurements
- methods for calculating fall of land and volume relating to:
 - · contours and spot heights
 - cross-sections: mean area and end area using trapezoidal, prismoidal and Simpson's rules
 - regular objects, including cone, cylinder, pyramid, wedge, frustum and sphere
- methods for calculating surveying data and verifying its accuracy using primary and secondary controls
- methods for establishing a control network that meets specified tolerances
- methods for recording spatial data relating to set-out
- methods for setting up, levelling and calibrating equipment used to set out stormwater systems
- purpose of primary and secondary controls for set-out
- reference and coordinate systems for surveying data, including Australian Height Datum and Map Grid of Australia
- types of pegs and markers used during set-out and methods for ensuring their optimal placement on site
- types of stormwater systems and their purposes.

Assessment Conditions

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

- equipment:
 - as specified in the performance evidence, including PPE
- specifications:
 - task specifications, drawings, maps and plans
 - organisational policies, procedures and documentation relating to work health and safety
- relationships with team members and supervisor:
 - working 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

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