



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **RIICCM203A Read and interpret plans and specifications**

**Release: 1**



## **RIICCM203A Read and interpret plans and specifications**

### **Modification History**

Not applicable.

### **Unit Descriptor**

This unit covers the reading and interpreting of plans and specifications in the civil construction industry. It includes: identifying types of drawings and their functions; recognising amendments and commonly used symbols and abbreviations; locating and identifying key features on a site plan; and reading and interpreting job specifications.

### **Application of the Unit**

This unit is appropriate for those working in a operational roles, at worksites within:

- Civil construction

### **Licensing/Regulatory Information**

Refer to Unit Descriptor.

### **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 performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify types of drawings and their functions	<ul style="list-style-type: none"><li>1.1. Identify the main types of plans and <b><i>drawings</i></b> used in the industry</li><li>1.2. Identify the key functions of each type of drawing</li><li>1.3. Recognise and adhere to quality requirements of company operations</li><li>1.4. Identify environmental controls from the job plans, specifications and environmental plan</li></ul>
2. Recognise amendments	<ul style="list-style-type: none"><li>2.1. Check title panel to verify latest amendments to drawing</li><li>2.2. Check amendments to <b><i>specifications</i></b> to ensure currency of information</li></ul>
3. Recognise commonly used symbols and abbreviations	<ul style="list-style-type: none"><li>3.1. Recognise civil construction symbols and abbreviations</li><li>3.2. Locate and correctly interpret legend on project drawings, symbols and abbreviations</li></ul>
4. Locate and identify key features on a site plan	<ul style="list-style-type: none"><li>4.1. Achieve orientation of the plan with the site</li><li>4.2. Identify and locate <b><i>key features</i></b> of the site</li><li>4.3. Gain access to site and identify services, main features, contours and datum</li></ul>
5. Read and interpret job specifications	<ul style="list-style-type: none"><li>5.1. Job specifications are identified from drawings, notes and descriptions</li><li>5.2. Standards of work, finishes and tolerances are identified from the project specifications</li><li>5.3. Material attributes are identified from specifications</li></ul>



## Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

### Required skills

Specific skills are required to achieve the performance criteria in this unit, particularly for the application in the various circumstances in which this unit may be applied. This includes the ability to carry out the following as required to read and interpret plans and specifications:

- apply legislative, organisation and site requirements and procedures
- speaking clearly and directly, listening carefully to instructions and information
- applying teamwork to a range of situations, particularly in a safety context
- solving problems such as recognising clear discrepancies between the documents (map, plan, specifications) and the actual site and taking action to correct these
- showing initiative in adapting to changing work conditions or contexts particularly when working across a variety of work areas
- managing time, particularly in organising priorities and planning work
- taking responsibility for self organisation of work priorities
- applying mathematical skills, including basic calculations of heights, areas, volumes and grades
- showing a willingness to learn and to use a range of mediums to learn
- using workplace technology including the use of communication systems and the reporting/recording of results

### Required knowledge

Specific knowledge is required to achieve the Performance Criteria of this unit, particularly its application in a variety of circumstances in which the unit may be used. This includes knowledge of the following, as required to read and interpret plans and specifications:

- features of plans and elevations including direction, scale, key, contours, symbols and abbreviations
- commonly used civil construction symbols and abbreviations
- the processes for application of scales in plan preparation/interpretation
- techniques for orienting/confirming the orientation of a plan
- key features of formal job specifications
- site and equipment safety requirements
- project quality requirements
- basic calculations of heights, areas, volumes and grades
- civil construction terminology
- drawing conventions
- JSA's/Safe work method statement



## Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

### Overview of assessment

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

The evidence required to demonstrate competency in this unit must be relevant to worksite operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit and include evidence of the following:

- knowledge of the requirements, procedures and instructions for reading and interpreting of plans and specifications
- implementation of requirements, procedures and techniques for the safe, effective and efficient completion of the reading and interpreting of plans and specifications
- working with others to undertake and complete the reading and interpreting of plans and specifications that meet all of the required outcomes
- consistent timely completion of the reading and interpreting of plans and specifications that safely, effectively and efficiently meets the required outcomes

#### Context of and specific resources for assessment

- This unit must be assessed in the context of the work environment. Where personal safety or environmental damage are limiting factors, assessment may occur in a simulated environment provided it is realistic and sufficiently rigorous to cover all aspects of workplace performance, including task skills, task management skills, contingency management skills and job role environment skills.
- The assessment environment should not disadvantage the participant. For example, language, literacy and numeracy demands of assessment should not be greater than those required on the job.
- Customisation of assessment and delivery environment to sensitively accommodate cultural diversity.



	<ul style="list-style-type: none"> <li>• Aboriginal people and other people from a non English speaking background may have second language issues.</li> <li>• Assessment of this competency requires typical resources normally used in the work environment. Selection and use of resources for particular worksites may differ due to site circumstances.</li> <li>• Where applicable, physical resources should include equipment modified for people with disabilities.</li> <li>• Access must be provided to appropriate learning and/or assessment support when required.</li> </ul>
<b>Method of assessment</b>	<p>This unit may be assessed in a holistic way with other units of competency. The assessment strategy for this unit must verify required knowledge and skill and practical application using more than one of the following assessment methods:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of the candidate's required knowledge</li> <li>• observed, documented and/or first hand testimonial evidence of the candidate's: <ul style="list-style-type: none"> <li>• implementation of appropriate requirement, procedures and techniques for the safe, effective and efficient achievement of required outcomes</li> <li>• consistently achieving the required outcomes</li> </ul> </li> <li>• first hand testimonial evidence of the candidate's: <ul style="list-style-type: none"> <li>• working with others to undertake and complete the reading and interpreting of plans and specifications</li> </ul> </li> </ul>
<b>Guidance information for assessment</b>	<p>Consult the SkillsDMC User Guide for further information on assessment including access and equity issues.</p>



## 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. 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) may also be included.

<b>Drawings</b> may include:	<ul style="list-style-type: none"> <li>• site plans</li> <li>• locality plans</li> <li>• cross sectional plans</li> <li>• longitudinal plans</li> <li>• structural detail and specification providing illustrations and dimensions and project plans</li> <li>• drawings</li> <li>• specifications</li> <li>• illustrations</li> <li>• dimensions and notes</li> </ul>
<b>Specifications</b> may include:	<ul style="list-style-type: none"> <li>• materials and quality of work</li> <li>• quality assurance</li> <li>• nominated sub-contractors</li> <li>• provision of site access/facilities</li> <li>• details relating to performance including:               <ul style="list-style-type: none"> <li>• standards of work</li> <li>• tolerances</li> <li>• material types</li> <li>• characteristics</li> <li>• treatments and finishes</li> </ul> </li> </ul>
<b>Key features</b> may include:	<ul style="list-style-type: none"> <li>• type of product/service</li> <li>• quantities</li> <li>• characteristics</li> <li>• sizes</li> <li>• pattern dimension</li> <li>• location</li> <li>• surfaces and compatibility</li> </ul>

## Unit Sector(s)

Civil Works (Common Units)



## **Competency field**

Refer to Unit Sector(s).

## **Co-requisite units**

Not applicable.