



Australian Government

FWPFGM3208 Construct and maintain forest roads and tracks

Release: 1

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Modification History

Release	Comments
Release 1	This version released with FWP Forest and Wood Products Training Package Version 6.0.

Application

This unit of competency describes the skills and knowledge required to plan, construct and maintain roads and tracks in a forest environment. The unit includes monitoring road or track conditions and coordinating maintenance work.

The unit applies to individuals who work as bulldozer operators, forestry technicians, harvesting technicians and mobile equipment operators in a commercial forest environment and are involved in forest road and track construction operations.

All work must be carried out to comply with workplace procedures, according to state/territory health and safety regulations, legislation and standards that apply to the workplace.

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

Pre-requisite Unit

Nil

Unit Sector

Forest Growing and Management (FGM)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for road or track construction work	1.1 Determine job requirements from work order or instruction, and where required, seek clarification from appropriate personnel 1.2 Confirm safety and environmental protection requirements according to workplace procedures

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Identify, assess and take actions to mitigate risks and hazards associated with road and track construction operations 1.5 Identify and report existing and potential environmental risks and hazards to relevant personnel 1.6 Consult and maintain communication with team members and other appropriate personnel to ensure that work is coordinated effectively with others in the workplace 1.7 Obtain tools and equipment needed for the work, and check for correct operation and safety
2. Plan road or track	2.1 Obtain topographical map of area and assess details in relation to environmental management considerations 2.2 Plan road or track, including drainage and entry points that provide vehicle and equipment access, turning and loading space 2.3 Prepare forest road or track construction plan that includes timelines, resources and equipment according to workplace procedures
3. Construct road or track	3.1 Establish line of road and remove obstacles according to plans 3.2 Establish and maintain communication with others to ensure safe work 3.3 Remove soil to establish base that has suitable width, slope and stability 3.4 Construct water crossing points and drains and install fish ladders if required according to environmental requirements, workplace procedures and engineering designs 3.5 Prepare and construct intersection points to provide suitable entry and exit levels and control water flow 3.6 Place pipes or culverts and backfill and compact and armour outlets as required, consistent with predicted water volume 3.7 Transfer, spread and compact base and surface material to meet planned road or track design 3.8 Control and manoeuvre equipment to compact road material and stabilise adjacent soil during construction 3.9 Prepare road or track surface suitable for moving logs, and for the manoeuvre and traction of equipment
4. Maintain road or track	4.1 Monitor condition of road or track to identify specific damage likely to lead to safety or environmental issues, and report to

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	appropriate personnel 4.2 Redesign and remake areas of consistent damage with assistance from appropriate personnel 4.3 Plan and carry out maintenance with minimal disruption to other work activities 4.4 Record and report construction operations and maintenance according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret workplace documentation to determine requirements
Writing	Use technical and workplace specific vocabulary to accurately and legibly complete workplace records and forms
Oral communication	- Ask questions and actively listen to clarify contents of work plans - Select and use appropriate spoken communication strategies with work colleagues and other personnel on site
Numeracy	Complete routine calculations to determine volume of road construction materials to construct and maintain tracks and roads

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FWPFGM3208 Construct and maintain forest roads and tracks	FWPFGM3209 Construct and maintain forest roads and tracks	Minor updates to Application, Performance Criteria and Knowledge Evidence Added a new Element	Equivalent

Code and title current version	Code and title previous version	Comments	Equivalence status
		Updated Foundation Skills, Performance Evidence and Assessment Conditions	

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509ff8d3d47>

Assessment Requirements for FWPFGM3208 Construct and maintain forest roads and tracks

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Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that, on one occasion, the individual has:

- planned and constructed one forest road or track according to workplace tolerances in an operational forest
- planned, carried out and reported on maintenance of one forest road or track according to workplace tolerances in an operational forest.

In completing this work, the individual has followed a work order or instruction, workplace policy and procedures and current workplace health and safety legislation, regulations and related industry standards and codes of practice applicable to forest road and track construction operations.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- legislation, regulations, standards, codes of practice and established safe practices for constructing and maintaining forest roads and tracks:
 - data relating to road requirements and restrictions
 - maximum road loads
 - likely weather conditions
 - expected timeframes
 - survey locations and requirements
 - water courses
 - location of log landings
 - road entry points
 - crossing or entry points for other roads and tracks
 - budget

- environmental protection requirements relating to:
 - roadside conditions and climate
 - habitat trees
 - ground growth
 - canopy
 - general forest lean
 - wind speed and direction
 - fallen trees
 - density of trees
 - ground slope
 - soil and water protection
 - ground hazards
 - obstacles
- environmental values and aquatic ecosystems to be protected
- workplace procedures, checks and routine maintenance to be carried out on construction equipment
- forestry road construction methods
- risks and hazards associated with forest road and track construction
- road transport equipment requirements and capabilities in forest operations
- ground water behaviour that impact on the construction of forestry roads and tracks
- workplace health and safety requirements, fire protocols and emergency evacuation procedures relevant to forest road and track construction operations.

Assessment Conditions

Assessment of the skills in this unit of competency must take place under the following conditions:

- physical conditions:
 - skills must be demonstrated in an operational forest or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - tools and equipment required for forest road and track construction operations
 - personal protective equipment
 - communication system
- specifications:
 - access to work order or instruction detailing forest road and track construction operations to be carried out by operator
 - access to workplace safety and environmental protection policies and procedures applicable to forest road and track construction operations
 - access to workplace procedures and forms for recording information related to constructing and maintaining forest roads and tracks.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

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