

Domain	ROAD CONSTRUCTION AND MAINTENANCE – BLADING OPERATIONS	Unit ID: 830
Title:	Operate a grader	
Level: 3		Credits: 10

Purpose

This unit standard is intended for those who work in road construction and maintenance operations. People holding credit for this unit standard are able to: Plan and prepare for work; demonstrate knowledge of the functions of a grader; start and shutdown grader; operate a grader and prepare grader for transport to and from site.

Being credited with this unit standard does not enable a person to drive the vehicle on an open, public road. In order to do so, a person must be in possession of a valid and current driving licence relevant to this vehicle type.

Special Notes

1. Entry information:

Prerequisite

- Unit 712 – *Comply with health, safety and environmental rules and regulation in road construction and maintenance work operations*

2. Assessment evidence may be collected from a real workplace, a simulated workplace or an appropriately simulated environment in which road construction and maintenance operations are carried out.
3. This unit standard is to be assessed in the context of road construction and maintenance operations and should be assessed in conjunction with other relevant technical unit standards selected from this subfield.
4. Safe work practices include but are not limited to recognising and preventing hazards associated with the operation of a grader and/or associated equipment and attachments, and using and applying protective clothing and safety procedures.
5. All inspection, operation and maintenance procedures associated with the use of tools and equipment shall comply with manufacturers' guidelines and instructions and shall be executed in a cost effective and safe manner.
6. Maintenance includes cleaning, authorised servicing and the monitoring, recording and reporting of faults. It may also include the conduct of authorized, minor replacements and the provision of assistance to maintenance and repair activities.
7. '*Specifications*' refers to any, or all of the following: manufacturers' specifications and recommendations, site and workplace specific requirements.
8. Regulations and legislation relevant to this unit standard include but are not limited to the following:

- Labour Act, No. 11 of 2007 as amended
- Occupational Health and Safety Regulations No. 18, 1997
- Road Traffic and Transport Regulations No. 52, 1999 and Government Notice No 53 Road Traffic and Transport Regulations
- Road Ordinance 1972 and other relevant legislations and all subsequent amendments.

Quality Assurance Requirements

This unit standard and others within this subfield may be awarded by institutions which meet the accreditation requirements set by the Namibia Qualifications Authority and the Namibia Training Authority and which comply with the national assessment and moderation requirements. Details of specific accreditation requirements and the national assessment arrangements are available from the Namibia Qualifications Authority and the Namibia Training Authority on www.nta.com.na

Elements and Performance Criteria

Element 1: Plan and prepare for work

Performance Criteria

- 1.1 Sequence of operation is determined according to site operational requirements.
- 1.2 Required equipment and/or attachments to perform the work activity is selected according to site operational requirements.
- 1.3 Traffic control requirements are obtained and implemented according to workplace requirements.
- 1.4 Work area is inspected and prepared according to site operational requirements.

Element 2: Demonstrate knowledge of the functions of a grader

Performance Criteria

- 2.1 The main functions of a grader are described in line with manufacturer's specifications.
- 2.2 The operation of all major components is described in terms of their functions.
- 2.3 The applications of a grader are described in terms of earthmoving activities.
- 2.4 All safety features and warning devices on the grader are identified, and their purposes explained in accordance with manufacturer's specifications.
- 2.5 The maximum operating capacities are described in terms of the designed grader capabilities.
- 2.6 Warning from grader indicators and gauges are interpreted according to manufacturer's specifications.

- 2.7 Knowledge of corrective measures is applied in terms of neutralising warnings received.

Element 3: Start and shut down grader

Performance Criteria

- 3.1 Pre-operational checks are carried out according to appropriate checklist and workplace procedures.
- 3.2 Daily and weekly operator maintenance is performed according to appropriate checklist and workplace procedures.
- 3.3 Start-up and shutdown procedures are followed according to manufacturer's specifications.
- 3.4 Grader is parked according to manufacturer and workplace requirements.
- 3.5 Grader hours are recorded in accordance with workplace requirements.
- 3.6 Grader maintenance and faults are reported in accordance with workplace requirements.

Element 4: Operate grader

Performance Criteria

- 4.1 The purpose of the various controls is described in accordance with their designed use.
- 4.2 Functions of the various controls are demonstrated in accordance with manufacturer's specifications.
- 4.3 Temporary safety signs are explained in relation to their use and placement.
- 4.4 Grader performance is monitored and corrective action is taken when necessary, in accordance with manufacturer's specifications.

Element 5: Prepare grader for transport to and from site

Performance criteria

- 5.1 Methods of loading a grader for transport are demonstrated according to safety requirements, manufacturer's specifications and transport configuration.
- 5.2 Methods for securing a grader for transport are demonstrated in relation to lashing points and safety requirements.

Registration Data

Subfield:	Road Construction and Maintenance
Date first registered:	

Date this version registered:	
Anticipated review:	2014
Body responsible for review:	Namibia Training Authority