

	<b>Unit ID: 810</b>
<b>Domain</b>	<b>ROAD CONSTRUCTION AND MAINTENANCE – BITUMEN ROAD MAINTENANCE</b>
<b>Title:</b>	<b>Install and maintain guardrails within road construction and maintenance operation</b>
<b>Level: 2</b>	<b>Credits: 8</b>

### 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 guardrails erection and maintenance; calculate material quantities; obtain material and store; install and maintain guardrails in a cost effective and safe manner; complete work related documents; and clean up work area.

### Special Notes

1. Entry information:
  - Prerequisite
    - Unit 712 - *Comply with health, safety and environmental rules and regulations in road construction and maintenance work operations*
2. Quality in this unit standard means adherence to contract requirements and workplace instructions.
3. Expected worksite production target are to be met.
4. 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.
5. Safe working practices include but are not limited to day-to-day observation of safety policies and procedures, and compliance with emergency procedures.
6. Performance of all elements in this unit standard must comply with all relevant legal and workplace requirements, contractual agreement and/or manufacturers' specifications.
7. Regulations and legislation relevant to this unit standard include but are not limited to the following:
  - Labour Act, No. 11 of 2007
  - 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. All approved unit standards, qualifications and national assessment arrangements are available on the Namibia Training Authority website [www.nta.com.na](http://www.nta.com.na).

## **Elements and Performance Criteria**

### **Element 1: Plan and prepare for work**

#### **Performance Criteria**

- 1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, explained, clarified and applied to the allocated task.
- 1.2 A programme for maintenance work or new erection is obtained and confirmed in line with workplace procedures.
- 1.3 Safety requirements, including personal protective clothing and equipment are obtained from the site safety plan, workplace policies and procedures, and applied to the allocated task.
- 1.4 Traffic control requirements are obtained and implemented according to workplace requirements.
- 1.5 Plant, tools, fuels, lubricants, equipment, attachments and accessories selected to carry out tasks are checked for consistency with the requirements of the job, their usability and any faults rectified or reported prior to commencement.
- 1.6 Environmental protection requirements are identified from the project environmental management plan and applied to the allocated task.

### **Element 2: Demonstrate knowledge of guardrails erection and maintenance**

#### **Performance Criteria**

- 2.1 The technologies of installing and maintaining guardrails are explained.
- 2.2 The criteria of where guardrails must be installed are explained.
- 2.3 The benefits of guardrails are explained in terms of safety.

### **Element 3: Obtain and store material**

#### **Performance Criteria**

- 3.1 Material quantities are calculated according to job requirements and confirmed.

- 3.2 Materials are obtained according to confirmed quantities.
- 3.3 Materials are transported and stored correctly and safely in line with workplace procedures.

**Element 4: Install and maintain guardrails in a cost effective and safe manner**

**Performance Criteria**

- 4.1 Guardrails are set out according to drawing details.
- 4.2 Quality control of work is carried out to ensure work complies with project specifications.
- 4.3 Productivity control is carried out to ensure compliance to targets.
- 4.4 Quality and/or product variations are rectified according to workplace procedures.
- 4.5 Maintenance is carried out as required according to instructions.

**Element 5: Complete work related documents**

**Performance Criteria**

- 5.1 Work related documents are completed in accordance with contract and workplace requirements.
- 5.2 Maintenance and service related documents are completed in accordance with manufacturer and workplace requirements.
- 5.3 Documents related to accidents or other incidents are completed in accordance with workplace requirements.

**Element 6: Clean up work area**

**Performance Criteria**

- 6.1 Work area is cleared and materials disposed of or recycled in accordance with project environment management plan.
- 6.2 Tools and equipments are cleaned, checked, maintained, serviced and stored in accordance with manufacturers' recommendations and standard work practices.
- 6.3 Unused materials are safely stored and stacked for future use.

**Registration Data**

<b>Subfield:</b>	Road Construction and Maintenance
<b>Date first registered:</b>	
<b>Date this version registered:</b>	
<b>Anticipated review:</b>	

<b>Body responsible for review:</b>	Namibia Training Authority