

Unit ID 1144

Domain

**ROAD CONSTRUCTION AND
MAINTENANCE - SUPERVISION**

Title:

**Coordinate the supply and oversee
the availability and utilisation of plant,
equipment and vehicles for road
construction and maintenance work**

Level: 5

Credits: 15

Purpose

This unit standard is intended for General Foremen working on a significant road construction or maintenance site. People credited with this unit standard are able to: interpret plans and specifications to determine plant, equipment and vehicle requirements for a works project; coordinate the requisition and delivery of plant, equipment and vehicles; oversee the utilisation of plant, equipment and vehicles; and assess the utilisation of plant, equipment and vehicles.

This unit standard builds on the competencies relating to knowledge of contract documents and specifications and the supervision of the use of plant and equipment for road construction and maintenance covered by other unit standards in this Domain.

Special Notes

1. Entry information

Prerequisite

- Unit 712 - *Comply with health, safety and environmental rules and regulations in road construction and maintenance work operations* or demonstrated equivalent skills and knowledge.
2. The credits for this unit standard have been calculated on the assumption that the competencies specified in the following unit standards have been acquired to industry requirements:
 - Unit 1049 *Supervise the use and storage of plant and equipment for road construction and maintenance work*
 - Unit 1059 *Read and interpret specific conditions in contracts for road construction and maintenance work as a Foreman.*
 3. This unit standard is to be assessed on the basis of evidence from demonstrated performance on a worksite or worksites. Assessment parameters will depend on company and site specific equipment, procedures, and practices. Practices must reflect industry best practice and comply with legislative requirements. Evidence is required from one works site.

4. Definitions

- a) *Costs* associated with acquisition choices for plant, equipment and vehicles may be both hourly and daily and could be influenced by fuel consumption, repair and maintenance schedules and sources, cost of ground engaging replaceables, transport to and from site, etc.
- b) *Organisational procedures* means all documented policies, procedures, and methodologies of the candidate's employer at the time of assessment and include but are not limited to those relating to health, safety, environment, quality, administration, and operations. All stipulated requirements, including legal requirements, must be adhered to at all times.
- c) *Project conditions* may be indicated by and or influenced by logistics, ground conditions, climate and weather conditions, ground temperatures, altitude, environmental protection needs, proximity to public facilities, traffic flows, etc.
- d) *Restrictions* on the use of plant and equipment could arise because of location, material characteristics, topography and geology, health, safety and environmental requirements, proximity to public facilities, proximity to adjacent work, time restrictions, and legal restrictions, etc.
- e) *Suitability* of plant, equipment and vehicles could be influenced by time, capacity, performance, productivity, serviceability and maintenance needs, quality, etc.

5. Regulations and legislation relevant to this unit standard include but are not limited to the following:

- Labour Act, No. 11 of 2007 as amended
- Regulations relating to the Health and Safety of employees at work, 1997
- Road Traffic and Transport Regulations No. 52, 1999 and Government Notice No. 53 on Road Traffic and Transport Regulations
- Road Ordinance 30 of 1960 and 17 of 1972 and other similar legislation 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

Elements and Performance Criteria

Element 1: Interpret plans and specifications to determine plant, equipment and vehicle requirements for a works project

Performance Criteria

- 1.1 The scope, cost parameters, time scales and quality expectations for the project are verified as specified in the relevant contract documentation.
- 1.2 Prospective and/or anticipated project conditions are determined as relevant to the proposed project.
- 1.3 Characteristics of required plant and equipment are determined in accordance with the contract specifications.
- 1.4 Potential restrictions that could be imposed on the use of plant, equipment and vehicles are determined in accordance with contract specifications, works location and company requirements.
- 1.5 Plant, equipment and vehicles needed to meet task, work quality and site characteristics are selected on the basis of optimum suitability for completing the works to specifications and maximum productive utilisation.
- 1.6 Current availability of desired and functional plant, equipment and vehicles is determined in accordance with organisational procedures.
- 1.7 Skills and/or licences of available operators and drivers are checked against project requirements in accordance with organisational procedures.
- 1.8 Cost and time for the use of desired plant, equipment and vehicles is estimated in accordance with organisational procedures.
- 1.9 Comparative costs of ownership versus lease, hire and/or outsourcing are estimated and verified with others in the organisation in accordance with organisational procedures.

Element 2: Coordinate the requisition and delivery of plant, equipment and vehicles

Performance Criteria

- 2.1 Ordering of plant, equipment and vehicles is confirmed as complying with project requirements and organisational procedures.
- 2.2 Any conditions imposed by the owners of hired or leased plant, equipment or vehicles are checked as complying with organisational procedures and practices.

- 2.3 Any plant, equipment or vehicle hired or leased is requisitioned in accordance with organisational procedures.
- 2.4 Instructions for the delivery of plant, equipment and vehicles are verified as meeting work requirements and having been received by relevant suppliers or transporters.
- 2.5 Delivery of ordered plant, equipment and vehicles is checked in terms of type, quality, quantity and condition and is documented in accordance with organisational procedures. Any discrepancies are dealt with and reported in accordance with organisational procedures.
- 2.6 Coordination of supply and delivery ensures that planned work activities are able to proceed in accordance with the programme of work for the project.
- 2.7 Coordination ensures that plant, equipment and vehicles stored on site are secure and in appropriate locations as required by the work schedule, environmental management plan, and product safety instructions.

Element 3: Oversee the utilisation of plant, equipment and vehicles

Performance Criteria

- 3.1 Observations and checks ensure that induction and competence of operators of all plant, equipment and vehicles are confirmed in accordance with company requirements and relevant legislation.
- 3.2 Observations and checks ensure that deployment, performance, and monitoring instructions given to operators of plant, equipment and vehicles is in accordance with company and any hire or lease company requirements.
- 3.3 Observations and checks ensure that all plant, equipment and vehicles are operated and/or utilised in accordance with their operational capacity and conditions.
- 3.4 Observations and checks ensure that all protective equipment on plant, equipment or vehicles and/or to be worn by operators is fitted and used in accordance with organisational procedures and/or manufacturer's specifications.
- 3.5 Observations and checks ensure that all use of plant, equipment and vehicles is measured and recorded in accordance with organisational and any third party requirements.
- 3.6 Observations and checks ensure that all maintenance and servicing schedules and requirements are being complied with and wear and tear records are being maintained.
- 3.7 Liaison with plant management personnel confirms that maintenance and repair is being conducted in accordance with supplier and/or manufacturer's instructions.

- 3.8 Liaison with specialist service agents is established and maintained in accordance with organisational procedures and plant and equipment usage.
- 3.9 Observations and checks gather sufficient and reliable information for valid and meaningful comparisons of actual against plant productivity targets.
- 3.10 Any non-compliance in the utilisation of plant, equipment or vehicles is taken up with the work team and/or relevant Foreman in a timely manner and in accordance with organisational procedures.
- 3.11 Plant and equipment becoming available for other uses and/or removal from the site are notified in accordance with organisational procedures.

Element 4: Assess the utilisation of plant, equipment and vehicles

Performance criteria

- 4.1 Productivity outputs are recorded and are compared against organisational historical records and/or manufacturer's instructions.
- 4.2 Alternative use and or sourcing options are identified where relevant and compared in terms of productivity and cost.
- 4.3 Recommendations are made in accordance with organisational procedures on the suitability of plant, equipment, and vehicles sources and/or usage for future company projects.

Registration Data

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