	Unit ID: 454
Domain	**PLUMBING**
Title:	**Read and interpret basic building drawings as part of plumbing operations**
Level: 2	**Credits: 3**

Purpose

This unit standard is intended for those who read and interpret basic building drawings as part of plumbing operations. People credited with this unit standard are able to identify types and functions of drawings, recognise amendments to drawings, recognise amendments to drawings, recognise commonly used symbols and abbreviations, locate and identify key features on a site plan.

This unit standard is intended for those who work as plumbers.

Special Notes

1. Entry information:

   Prerequisite
   - 434 - Apply Occupational Health and Safety in Working Environment.
   - 440 - Plan and organise as part of plumbing operation or demonstrated equivalent knowledge and skills.

2. To demonstrate competence, at a minimum:
   - read and interpret building drawings for two different plumbing projects, including:
     - confirmation of amendment status
     - orientation of plans to the ground
     - six key features on both the plan and the site
     - confirmation of six items of information from the title block of the project plans
     - Six construction dimensions, levels and locations from the project plans.

4. Assessment evidence may be collected from a real workplace or simulated real workplace or an appropriate simulated realistic environment in which bricklaying operations are carried out.

5. Drawings may include site plans, construction plans, cross sectional plans, longitudinal plans, structural detail and specifications providing illustrations and dimensions and project plans, drawings, specifications, illustrations, dimensions and notes.

6. Key features of plans and specifications may include type of product/service, quantities, characteristics, sizes, pattern dimension, location, construction and compatibility.

7. Material attributes may include but not limited to types, characteristics, construction requirements, treatments and finishes.

8. Performance of all elements in this unit standard must comply with all relevant workplace requirements and/or manufacturers' specifications.

9. Regulations and legislation relevant to this unit standard include the following:
   - Labour Act No. 11 of 2007
   - Regulations relating to the health & Safety of employees at work under Schedule 1 (2) of the Labour Act No.11 of 2007 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: Identify types and functions of drawings

Performance Criteria

1.1 Main types of plans and drawings used in plumbing operations are identified.

1.2 Key functions of each type of drawing are identified.

1.3 Quality requirements of company operations are recognised and adhered to.

1.4 Environmental controls are identified from the job plans, specifications and environmental plan.

Element 2: Recognise amendments to drawings

Performance Criteria

2.1 Title panel is checked to verify latest amendments to drawing.

2.2 Amendments to specifications are checked to ensure currency of information.

Element 3: Recognise commonly used symbols and abbreviations

Performance Criteria

3.1 Symbols and abbreviations used on drawings are identified and correctly interpreted.

3.2 Legend is located on project drawings.

3.3 Symbols and abbreviations are correctly interpreted.

Element 4: Locate and identify key features on a site plan

Performance Criteria

4.1 Orientation of the plan with the site is achieved.

4.2 Key features of the site are identified and located.

4.3 Municipal connection points (MCP) are identified in the site plan.

4.4 Access to site is gained and services, main features, contours and datum are identified.

Registration Data

Subfield:	Civil and Building Services Engineering
Date first registered:	15 November 2007
Date this version registered:	31 May 2018
Anticipated review:	2023
Body responsible for review:	Namibia Training Authority