-SQA- SCOTTISH QUALIFICATIONS AUTHORITY

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NATIONAL CERTIFICATE MODULE DESCRIPTOR

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-Module Number- -Superclass-	4120571 TG	-Session- 1991-92
-Title-	GENERAL BUILDING OPERATIVES: PATHS AND PAVING	
-DESCRIPTION-		
Purpose		ule is designed to develop the knowledge and ired to construct paths or paved areas.
		ed at those following a career as a General operative or similar position in the Building and astries.
Preferred Entry Level	4120551	General Building Operatives: Lifting and Handling Skills
	4120511	General Building Operatives: Construction
	4120591	Materials General Building Operatives: Scaffolding
	4120631	Safety General Building Operatives: Use of Hand
	4120641	and Power Tools General Building Operatives: Use of Small
	4120561	Construction Plant General Building Operatives: Mixing, Placing, Compacting and Finishing Concrete
Outcomes	The student should:	
	1. inter	rpret a simple drawing of a project for paving;
	2. set	out an area to be paved;
	3. cons	struct a small path or a paved area;
	4. reinstate paving.	
Assessment Procedures	Acceptable performance in the module will be satisfactory achievement of all the Performance	

Criteria specified for each Outcome.

The following abbreviations are used below:

PC Performance Criteria

IA Instrument of Assessment

Note: The Outcomes and PCs are mandatory and cannot be altered. The IA may be altered by arrangement with SQA. (Where a range of performance is indicated, this should be regarded as an extension of the PCs and is therefore mandatory.)

OUTCOME 1 INTERPRET A SIMPLE DRAWING OF A PROJECT FOR PAVING

PCs

- (a) The interpretation is correct in terms of:
 - (i) the orientation;
 - (ii) the established datum;
 - (iii) the relationship with the surrounding structures.

IA Structured Question

The student will be presented with an exercise consisting of structured questions, to test the knowledge required to interpret a simple drawing of a project for paving.

The exercise will consist of 3 questions based on a given drawing concerning the following:

- (i) the orientation;
- (ii) the established datum;
- (iii) the relationship with the surrounding structures.

Satisfactory achievement of the Outcome will be based on the student attaining all the Performance Criteria.

OUTCOME 2 SET OUT AN AREA TO BE PAVED

PCs

- (a) The setting out is as specified in the working drawing.
- (b) The setting out is by an approved method appropriate to the working environment.
- (c) The transfer of level is correct to the agreed tolerance.
- (d) The tools and equipment used are appropriate to the task.
- (e) The working practices followed by the student are safe.

IA Practical Exercise

The student will be set a practical exercise to test the knowledge and skills required to set out an area to be paved.

The exercise will consist of 2 tasks as follows:

- (i) use boning rods to effect falls/levels from site rails erected by others;
- (ii) set out by line and pins establishing a reference line and level.

Satisfactory achievement of the Outcome will be based on the student attaining all the Performance Criteria.

OUTCOME 3 CONSTRUCT A SMALL PATH OR A PAVED AREA

PCs

- (a) The excavation is correct in terms of levels.
- (b) The edge restraints are in place.
- (c) The compacting of sub-base materials is to the specified depth.
- (d) The bedding materials are of the type and condition specified.
- (e) The laying of the bedding materials is as specified.
- (f) The tools and equipment used are appropriate to the task.
- (g) The working practices followed by the student are safe.

IA Practical Exercise

The student will be set a practical exercise to test the knowledge and skills required to construct a small path or a paved area.

The exercise will consist of 2 tasks as follows:

- (i) lay paving blocks including preparing a sand bed by use of a profile with blocks consolidated by means of a plate vibrator and sand dressed in the approved manner (minimum area to be paved 5 square metres).
- (ii) lay a minimum of 5 square metres of paving slabs (bond as specified) using either sand or whin dust bed or spot mortar method on a properly compacted sub-base. The joint detail to be one of the following: butt joint or 10mm dry mortar joint. Exercise to include cutting a slab or slabs to make provision for a service cover. Cutting can be by hand or machine.

Satisfactory achievement of the Outcome will be based on the student attaining all the Performance Criteria.

OUTCOME 4 REINSTATE PAVING

PCs

- (a) The removal of the damaged area is as specified.
- (b) The removal of the original bedding material is complete.
- (c) The reinstatement of the sub-base is as specified.
- (d) The reinstatement of the paved area is correct in terms of matching the existing area both in appearance and level as in specification.
- (e) The tools and equipment used are appropriate to the task.
- (f) The working practices followed by the student are safe.

IA Practical Exercise

The student will be set a practical exercise to test the knowledge and skills required to reinstate paving.

The exercise will consist of a task simulating removal and reinstatement work. The student will be required to carry out <u>one</u> of the following tasks (either A or B). In both A and B the bedding material is to be removed to the sub-base level.

- A Position a service pipe or cable throughout a paved area.
- B Repair a damaged section within a paved area. (The paved area should not be less than a 1m run).

Satisfactory achievement of the Outcome will be based on the student attaining all the Performance Criteria.

The following sections of the descriptor are offered as guidance. They are not mandatory.

CONTENT/CONTEXT

Corresponding to Outcomes 1-4:

Range of paving materials to include pre-cast concrete slabs, natural stone slabs, concrete paving blocks and setts laid on sub-base materials such as hardcore or slag with a bedding material such as sand, whin dust or mortar.

The range of activities should include the activities that would be needed to lay a straight run of footpath or rectangular area of paving.

SUGGESTED LEARNING AND TEACHING APPROACHES

This module should be undertaken under site conditions where possible. Students will be expected to gain experience in laying paths and paving, using a range of paving materials that would be found on a small housing development.

Practical activities may take place under actual or simulated site conditions, with student participation following a practical demonstration of the task.

Manufacturers' literature and videos may be made available to the students, prior to the task being undertaken, and used as the basis for discussion.

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