**MODULE CON2010: SITE PREPARATION**

**Level:** Intermediate

**Theme:** Building Systems (Processes and Applications)

**Prerequisite:** CON1070 Building Construction

**Module Description:** Students develop the knowledge and skills to acquire a building permit and to locate and prepare a site for excavation and foundation work.

**Module Parameters:** Access to a building site and/or construction facility and to instruction from an individual with specialized training in carpentry.

**Curriculum and Assessment Standards**

| Module Learner Expectations | Assessment Criteria and Conditions | Suggested Emphasis |
|---|---|---|
| *The student will:* | *Assessment of student achievement should be based on:* | |
| • identify and describe typical building site layout and excavation processes | • presentation of an independently researched report that includes:<br>– identification and use of batterboards, building lines, plumb bob, builder's level and transit<br>– use of the 3, 4, 5 principle (Pythagorean Theorem)<br>– description of excavation methods and equipment<br>– safety precautions with an emphasis on shoring.<br>*Assessment Tool*<br>*Research Process: Preparing a Building Site, CON2010–1*<br>*Standard*<br>*Performance rating of 2 for each applicable task* | 15 |
| • complete an application for a building permit | • completion of a building permit using a recognized form that includes all information required to meet local building standards | 15 |
| • apply site preparation skills to assist in the location of building site lines and features | • demonstration of site preparation and teamwork skills to:<br>– establish building lines using batterboards and plumb bobs<br>– lay out building features using a builder's level or transit and the 3, 4, 5 squaring method.<br>*Assessment Tool*<br>*Activity Assessment: Building Site Layout, CON2010–2*<br>*Standard*<br>*Specific dimensions are within ± 3 mm over 6 metres*<br>*Performance rating of 2 for each applicable task* | 70 |

**MODULE CON2010: SITE PREPARATION** (continued)

| Module Learner Expectations | Assessment Criteria and Conditions | Suggested Emphasis |
|---|---|---|
| *The student will:*<br>• demonstrate basic competencies. | *Assessment of student achievement should be based on:*<br>• observations of individual effort and interpersonal interaction during the learning process.<br>*Assessment Tool*<br>*Basic Competencies Reference Guide and any assessment tools noted above* | Integrated throughout |

| Concept | Specific Learner Expectations | Notes |
|---|---|---|
| Orientation | *The student should:* | |
| • Building Regulations | • explain the purpose of local, provincial and national building regulations<br>• identify local zoning regulations that limit the type, size and location of new buildings | Point out that in addition to structural regulations, building codes also deal with fire and health issues. |
| • Site Selection | • identify the parameters for selecting a building site | |
| • Site Layout | • describe a typical method of establishing lot and building lines as well as grade levels | Students should be able to use the 3–4–5 rule, builder's level, transit and batterboards. |
| • Lay Out Tools | • explain the use of a plumb bob, builder's level, transit and string line. | Discuss other methods of leveling such as hydro and laser levelling techniques. |
| Planning and Management | | |
| • Estimating | • identify the information that is needed to complete an application for a building permit<br>• use site plan and elevation drawings to determine the amount of soil to be excavated | |
| • Worker Safety | • locate and mark all underground and overhead services<br>• identify soil conditions that may require shoring. | Discuss the importance of having the utility companies mark the location of all underground services. |

**MODULE CON2010: SITE PREPARATION** (continued)

| Concept | Specific Learner Expectations | Notes |
|---|---|---|
| Implementation | *The student should:* | |
| • Building Layout | • use an approved method to:<br>– position batterboards<br>– locate lot and building lines<br>– excavate<br>– establish locations and elevations for wall and pier footings. | This work can be simulated if a construction site is not available. In this case, a tour of a construction site will enhance this module. |
| Assessment | | |
| • Career Information | • identify career opportunities related to the work of a/an:<br>– developer<br>– urban planner<br>– surveyor<br>– excavator | |
| • Career Preparation | • maintain a record of completed activities within a portfolio. | |