UNIT 002 Signing, lighting and guarding

Unit Aim

This unit is designed to allow the candidate to demonstrate the skills and knowledge required to successfully sign, light and guard a work site. The candidate will be able to survey the work site to put in place suitable provision for the site location requirements, ensuring the safe passage of pedestrians and site personnel, the safety of vehicular traffic, provision for any special needs, including cyclists and horse riders, and provision for vehicles and plant in the working area. They will be able to put in place suitable equipment to protect pedestrians, vehicular traffic and site personnel, and will be able to provide and control portable traffic signals and Stop/Go traffic control in line with site location requirements and traffic conditions.

Candidates undertaking this unit must use the current version of *Safety at Street Works and Road Works: A Code of Practice*.

Learning Outcome 1 Survey the work site

Assessment criteria:

1.1 carry out a survey of the work site and risk assessment, in accordance with Health and Safety regulations and requirements, to determine footways, traffic lanes and safety zones
1.2 identify provision for the **requirements of the site location**
1.3 identify provision for the safe passage of pedestrians
1.4 identify ways to minimise disruption to and ensure the safety of vehicular traffic
1.5 identify provision for any **special needs**
1.6 produce a plan and **equipment** list that makes provision for vehicles and plant within the confines of the working area.

Learning Outcome 2 Understand how to survey the work site

Assessment criteria:

2.1 describe the purpose of a work site survey and risk assessment
2.2 explain the potential **requirements of the site location** when signing, lighting and guarding the site
2.3 identify the factors that affect provision for:
  (a) the safe passage of pedestrians
  (b) potential requirements of people with **special needs**
  (c) vehicles and plant within the working area
2.4 identify how to minimise disruption to and ensure the safety of vehicular traffic.

Learning Outcome 3 Protect pedestrians, vehicular traffic and site personnel

Assessment criteria:

3.1 select and use personal protective equipment required for the task
3.2 create footways, traffic lanes and safety zones to provide for:
  (a) the requirements of the site location

(b) the safe passage of pedestrians
(c) minimising disruption to and ensuring safety of vehicular traffic
(d) identified **special needs**

3.3 control the movement of pedestrians, vehicles and plant within the confines of the working area
3.4 select **equipment** that meets the **requirements of the site location** and any **special needs**
3.5 check that the **equipment** to be used is fit for purpose
3.6 position and remove **equipment** according to the specified sequence.

Learning Outcome 4	**Understand how to protect pedestrians, vehicular traffic and site personnel**

Assessment criteria:

4.1 identify the personal protective equipment required for signing, lighting and guarding activities
4.2 explain how to control the movement of pedestrians, vehicles and plant within the confines of the working area
4.3 identify distances and dimensions to accommodate advance signing,
4.4 identify distances and dimensions to accommodate pedestrian walkways, traffic lanes and safety zones
4.5 explain how to check that **equipment** is fit for purpose
4.6 identify the specified sequences for positioning and removing **equipment**.

Learning Outcome 5	**Provide portable traffic signals and Stop/Go traffic control**

Assessment criteria:

5.1 inspect and test **signals** for correct operation
5.2 position **signals** to meet the site location requirements
5.3 position **signals** in the correct sequence
5.4 adjust signal controls to suit traffic conditions
5.5 dismantle and remove **signals** in the correct sequence
5.6 install and remove Stop/Go traffic control.

Learning Outcome 6	**Understand how to provide portable traffic signals, Stop/Go and priority traffic control**

Assessment criteria:

6.1 describe how to check that **signals** are operating correctly
6.2 explain how the site location requirements affect the positioning of **signals**
6.3 identify the implications of using an incorrect sequence for positioning **signals**
6.4 explain how the traffic conditions affect the adjustment of signal controls
6.5 describe the site conditions for using Stop/Go boards
6.6 describe the site conditions for using priority traffic control
6.7 describe the site conditions for using Give and Take and Stop Works traffic control.

Learning Outcome 7 Follow safe working practices

Assessment criteria:

7.1 follow current relevant health and safety regulations, standards and other legislation relating to:
- (a) **working practices** within the construction environment
- (b) **working practices** specific to any practical task that they are required to carry out

7.2 identify the current relevant health and safety regulations, standards and other legislation that must be applied in relation to:
- (a) **working practices** within the construction environment
- (b) **working practices** specific to any practical task that they are required to carry out.

Evidence Requirements / Scope

Some terms, used in the assessment criteria, cover a range of situations, as follows:

1. **Requirements of the site location** include:
   - (a) proximity to schools and hospitals
   - (b) users of the route (including those with special needs)
   - (c) weather conditions (including icy roads, heavy rain, snow, fog)
   - (d) volume of traffic
   - (e) speed of traffic
   - (f) lighting on highways
   - (g) highway situations (including lack of footways; pedestrianized areas; emergency service access; width of traffic lanes, footways and safety zones; inadequate lane widths; serious congestion; private access; bus stops, parking places, obstruction of driver's view at bends and summits; roundabouts and junctions; footways, ramps, boards and road plates; railway level crossings; tramways; cycle lanes and cycle tracks)
   - (h) different requirements for working at day and night
   - (i) mobile works and minor works
   - (j) the safety zone (length of lead-in taper of cones (T); sideways clearance (S); longways clearance (L); length of exit taper of cones)
   - (k) distances and dimensions and sizes for advance signing, traffic lanes, walkways and safety zones.

2. Those with **special needs** include:
   - (a) visually impaired people
   - (b) people with disabilities
   - (c) users of prams and pushchairs
   - (d) users of wheelchairs and other physically impaired people
   - (e) cyclists
   - (f) young children
   - (g) horse riders.

3. Safe **working practices** may include:
   - (a) safe use of tools and equipment
   - (b) use of PPE including, as necessary: high visibility clothing, hard hat, gloves, protective footwear, waterproof clothing
   - (c) precautions to minimise danger or inconvenience to road users
   - (d) precautions to minimise danger or inconvenience to site personnel
   - (e) precautions to minimise damage to equipment or apparatus.

4. **Equipment** may include as necessary:
   (a) adequate range of signing, lighting and guarding equipment (including signs, cones, lamps, footway boards, barriers)
   (b) high visibility safety equipment
   (c) suitable materials to construct ramps or proprietary ramps used.

5. **Signals** include:
   (a) proprietary two-way electrical or engine powered portable traffic lights
   (b) set of Stop/Go boards.

Assessment Requirements

Assessment for this unit consists of practical observations and knowledge questioning to cover the requirements of the learning outcomes.

For safety reasons, observed assessments of candidates undertaking signing, lighting and guarding activities must take place at a centre, or a location linked to a centre, that has been approved by the centre's external verifier prior to use for assessment. The site used for assessment must be a real road with unpredictable traffic flows.

Current requirements for practical observations, including assessor and verifier qualifications and facilities requirements are provided in the joint awarding organisation centre document.