Signing, lighting and guarding

Certificate Aim

This certificate has been designed to allow the candidate to demonstrate the skills and knowledge required to successfully select, install, maintain and remove signing, lighting and guarding on a work site. The candidate will be able to survey the location and traffic conditions to ensure that suitable provision is selected and installed for the work site requirements. The candidate must be able to select, install and maintain the appropriate equipment, including portable traffic signals and stop/go boards, to protect pedestrians, site personnel, vehicular traffic and those with special needs including cyclists and horse riders.

Learning Outcome 1 Survey the work site
Assessment criteria: 1.1 conduct a site-specific risk assessment to identify the hazards, risks and suitable control measures relating to the installation and removal of signing, lighting and guarding 1.2 identify the appropriate provision for the requirements of the site location and its users 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 the site location, vehicles and plant within the confines of the working space.

Learning Outcome 2 Understand how to survey the work site
Assessment criteria: 2.1 state the purpose of work site surveys and site-specific risk assessments in relation to the installation and removal of signing, lighting and guarding 2.2 state the potential requirements of the location and its users when selecting and installing signing, lighting and guarding 2.3 define the factors that influence provision for: (a) the safe passage of pedestrians (b) potential requirements of people with special needs (c) vehicles and plant within the working area (d) work near tramways and railway crossings 2.4 state how to minimise disruption to and ensure the safety of vehicular traffic 2.5 identify the circumstances in which mobile and short duration works would be applicable.

Learning Outcome 3	Protect pedestrians, vehicular traffic and site personnel

Assessment criteria:

3.1 select and use personal protective equipment appropriate 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 space
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 a specified sequence.

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

Assessment criteria:

4.1 define the personal protective equipment required for signing, lighting and guarding activities
4.2 state how to control the movement of pedestrians, vehicles and plant within the confines of the working area
4.3 define the distances and dimensions to accommodate advance signing
4.4 define the distances and dimensions to accommodate pedestrian walkways, traffic lanes, safety zones and portable pedestrian crossing facilities
4.5 state the requirements for the installation and use of warning lights
4.6 define how signs, barriers, footway boards, ramps and road plates are securely installed
4.7 state how to check that equipment is fit for purpose.
4.8 specify the sequences for installing, 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 and timings 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 define the checks carried out to ensure that signals are operating correctly
6.2 state how the site location requirements affect the positioning of signals
6.3 specify the correct sequence for installing, positioning, dismantling and removing signals
6.4 define how the traffic conditions affect the adjustment of signal controls and timings
6.5 specify the appropriate site conditions for using:
- (a) Stop/Go boards
- (b) priority traffic control
- (c) give and take
- (d) stop work signs.

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. **Site location requirements** 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; pedestrianised 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 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, lights, footway boards, barriers/enhanced barriers)
   (b) high visibility safety wear
   (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 and Guidance

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 or one that would represent a real road where all performance criteria can be assessed. (Desktop or computer simulated scenarios are not permitted)

Current requirements for practical observations, including Assessor and Internal Quality Assurer qualifications and facilities requirements are provided in the HAUC (UK) The Street Works Assessment Strategy and The Streetworks Centre Compliance Document.