

## Monitoring signing, lighting and guarding

### Certificate Aim

This certificate has been designed to allow the candidate to demonstrate the skills and knowledge required to successfully monitor the signing, lighting and guarding of a work site. The candidate will be able to monitor a work site survey to ensure that suitable provision is in place for the site location requirements. The candidate will be able to monitor the protection of pedestrians, site personnel and vehicular traffic on site. The candidate be able to monitor the provision and control of portable traffic signals in line with site location requirements and traffic conditions. The candidate will also be able to monitor site safety throughout the signing, lighting and guarding operation.

### Learning Outcome 1 Monitor a work site survey

#### **Assessment criteria:**

- 1.1 ensure that the planned provision of footways, traffic lanes and safety zones from a site survey and risk assessment meet the requirements of:
  - (a) the site location
  - (b) vehicular traffic and site traffic, including plant and machinery
  - (c) pedestrians and site personnel, including people with special needs
  - (d) road/highway authority/recognised codes of practice and specifications.
- 1.2 ensure that the planned provision of footways, traffic lanes and safety zones minimises disruption to traffic and provides for the safe passage of pedestrians
- 1.3 ensure that the planned provision for vehicles and plant within the confines of the working area provides adequate coverage for the safety of people and vehicles in the vicinity
- 1.4 check for issues with the planned provision arising from the site survey and confirm the appropriate action required
- 1.5 carry out a site specific risk assessment in accordance with current health and safety regulations and codes of practice to determine the requirements for footways, traffic lanes, safety zones, works area and working space.

### Learning Outcome 2 Understand how to monitor a work site survey

#### **Assessment criteria:**

- 2.1 define the requirements of the Code of Practice in respect of surveying the work site
- 2.2 state the health and safety requirements relating to surveying the work site
- 2.3 state the planning requirements for the provision of footways, traffic lanes and safety zones to meet the needs of:
  - (a) the site location
  - (b) vehicular and site traffic including plant and machinery
  - (c) pedestrians and site personnel, including people with special needs
  - (d) road/highway authority/recognised codes of practice and specifications.
- 2.4 define how disruption to traffic can be minimised whilst ensuring the safe passage of pedestrians when planning provision of footways, traffic lanes and safety zones
- 2.5 state the planning requirements for the provision for vehicles and plant within the confines of the working area to ensure that it is adequate for:
  - (a) traffic lanes
  - (b) safe passage through the site

- (c) advance signing
- (d) type of traffic
- (e) volume of traffic
- (f) working near tramways and railway crossings
- 2.6 state the problems that can occur with planned provision arising from a work site survey, and the appropriate remedial action to resolve them
- 2.7 define the appropriate site conditions for the use of stop/go, priority signing, and give and take systems of working
- 2.8 state the conditions or limitations for using the Stop Works sign
- 2.9 define the appropriate circumstances for using mobile and short duration works.

**Learning Outcome 3 Monitor the protection of pedestrians, vehicular traffic and site personnel**

**Assessment criteria:**

- 3.1 ensure that personal protective equipment is selected to meet the job requirements
- 3.2 assess the provision of footways, traffic lanes and safety zones for:
  - (a) the requirements of the site location
  - (b) the safe passage of pedestrians and vulnerable users
  - (c) minimising disruption to and ensuring safety of vehicular traffic
  - (d) any identified special needs
- 3.3 confirm that the provision for controlling the movement of pedestrians, vehicles and plant within the confines of the working area:
  - (a) minimises delay and inconvenience
  - (b) makes adequate safety provisions
- 3.4 ensure that equipment selected meets the site location requirements and any special needs
- 3.5 ensure that pre-use inspection checks of equipment are completed
- 3.6 monitor the positioning and removal of equipment according to the specified sequence
- 3.7 check for problems with the protection of pedestrians, vehicular traffic and site personnel, and confirm the appropriate action required.

**Learning Outcome 4 Understand how to monitor the protection of pedestrians, vehicular traffic and site personnel**

**Assessment criteria:**

- 4.1 define the personal protective equipment to meet the job requirements
- 4.2 define the factors governing the provision of footways, traffic lanes and safety zones and when it is necessary to liaise with the highway authority
- 4.3 state how the equipment meets the requirements of the site location and any special needs, including:
  - (a) the safe passage of pedestrians and vulnerable users
  - (b) minimising disruption to and ensuring safety of vehicular traffic
  - (c) site specific hazards.
- 4.4 define the range of pre-use checks used to establish if equipment is fit for purpose and the required actions where equipment is deemed unfit for purpose
- 4.5 identify the specified sequences for positioning and removing equipment
- 4.6 define the potential problems with the protection of pedestrians, vehicular traffic and site personnel, and the appropriate remedial action.

**Learning Outcome 5 Monitor the provision of portable traffic signals and Stop/Go traffic control**

**Assessment criteria:**

- 5.1 monitor the inspection and testing of signals for correct operation
- 5.2 ensure that signals are positioned in the correct sequence, and to meet the requirements of the site location
- 5.3 monitor the adjustment of signal controls to suit the prevailing traffic conditions
- 5.4 ensure that signals are dismantled and removed in line with current relevant specifications and procedures
- 5.5 ensure that Stop/Go traffic control is installed in a specified sequence
- 5.6 check for any problems with the provision of portable traffic signals and Stop/Go traffic control and confirm the appropriate action required.

**Learning Outcome 6 Understand how to monitor the provision of portable traffic signals and stop/go traffic control**

**Assessment criteria:**

- 6.1 define the specifications used to identify that portable traffic signals are suitable for use on the highway
- 6.2 state the procedures for inspecting and testing signals for correct operation
- 6.3 define how the site location requirements affect the positioning of signals, and the circumstances under which the highway authority must be consulted
- 6.4 state the correct sequence for positioning signals
- 6.5 state how the prevailing traffic conditions affect the adjustment of signal controls
- 6.6 define the requirements for dismantling and removal of portable traffic signals
- 6.7 define the requirements for installation and removal of stop/go traffic control
- 6.8 state potential problems with the provision of portable traffic signals and stop/go traffic control and the appropriate remedial action.

**Learning Outcome 7 Monitor site safety**

**Assessment criteria:**

- 7.1 ensure that a site specific risk assessment has been carried out
- 7.2 monitor site operations in accordance with health and safety requirements
- 7.3 assess site conditions in accordance with health and safety requirements
- 7.4 ensure that safety equipment is available and fit for purpose
- 7.5 ensure that safe working practices are followed in line with current relevant specifications
- 7.6 check for risks to site safety, and confirm the appropriate action required.

## Learning Outcome 8 Understand how to monitor site safety

### **Assessment criteria:**

- 8.1 define the purpose of a site specific risk assessment
- 8.2 state the health and safety requirements for site operations
  - (a) Works at or near railway property
  - (b) Mobile and short duration works
  - (c) Temporary traffic light equipment failure
- 8.3 state the safety equipment required during site operations and how to ensure that it is fit for purpose
- 8.4 describe safe working practices on site
- 8.5 describe the potential risks to site safety and the appropriate remedial action.

### **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, etc.)
  - (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, etc.; 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, minor works and short duration 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).
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** include:
  - (a) safe use of tools and equipment
  - (b) use of PPE (including, as necessary: high visibility jacket or waistcoat, hard hat, gloves, protective footwear, waterproof clothing)
  - (c) use of risk assessment methods to identify and control hazards on site
  - (d) precautions to minimise danger or inconvenience to road users

- (e) precautions to minimise danger or inconvenience to site personnel
- (f) 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, signals, warning lights, footway boards, barriers, portable traffic signals)
- (b) high visibility safety equipment
- (c) suitable materials to construct ramps.

5. **Signals** include:

- (a) proprietary 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 a multiple-choice knowledge examination 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 Quality Assurer 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.

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.