

# GUIDELINES FOR WORKING ON ROADS

STOP

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#### INTRODUCTION

The purpose of this document is to provide practical guidance to those responsible for the planning, designing, implementation and maintenance of safe systems of work for all construction work on roads, including clients, designers, contractors, employees, the Project Supervisor for the Design Process (PSDP) and the Project Supervisor for the Construction Stage (PSCS).

The objective of Part 13 of the Construction Regulations 2013 is to provide a legislative basis for ensuring the safety of road workers and road users during construction work affecting roads. Its intention is to clarify the relevant provisions in order to ensure that in respect of construction roadworks adequate guarding and lighting is provided, and traffic signs are placed and maintained, and where necessary operated, insofar as they are reasonably required for the safe guidance or direction of persons, having regard, in particular, to the needs of people with disabilities.

The background to this is that working on roads carries a potential of high risk, often aggravated by the unexpected and unforeseen (e.g. drivers on roads may not expect to encounter people at work, standing or slow moving vehicles, pedestrians or cyclists). In addition, workers involved in construction work may have limited protection from moving traffic.

#### Definitions:

- (i) 'road' corresponding to the definition in the Roads Act 1993,
- (ii) 'roadway' corresponding to the definition in the Roads Act 1993,
- (iii) 'footway' corresponding to the definition in the Roads Act 1993,
- (iv) 'cycle track' corresponding to the definition in Traffic Regulations 1997.

'Footpath' is already defined separately in the Construction Regulations 2013(S.I. No. 291 of 2013).

The Regulations requires that there must be on site at all times when the works are in progress and workers are present on site at least one person who has been issued with a valid construction skills registration card relating to either health and safety at roadworks or signing, lighting and guarding on roads, and that the works must be supervised by a competent person who has been issued with a valid construction skills registration card relating to signing, lighting and guarding on roads.

It also requires that where there is any construction work which obstructs the roadway or where pedestrians, people with disabilities or cyclists are diverted onto the roadway because of construction work, there must be at least one person who has been issued with a valid construction skills registration card relating to signing, lighting and guarding on roads on that site location at all times when road signing, lighting and guarding is being installed, modified or removed.

The objective of the Regulations is to ensure that there is available on site correctly qualified personnel with valid documentation assisting in the implementation of health and safety at roadworks.

Construction work on roads must be properly managed. Hazards must be identified and detailed risk assessments carried out in accordance with the requirements of Sections 19 and 20 of the Safety, Health and Welfare at Work Act 2005 (No. 10 of 2005) so that adequate and appropriate controls are implemented to protect the safety and health of workers and road users.



## BACKGROUND

Construction work on the road or on the roadway (including the carrying out of building, civil engineering or engineering construction work as provided for in the Construction Regulations 2013 (S.I. No. 291 of 2013)) can, in the absence of adequate planning, organisation and implementation, lead to unsafe conditions for workers and all road users, including pedestrians and cyclists.

The effect of construction work on roads is to reduce the available road width to road users, and the degree of reduction depends on the extent of the work involved. Such work includes:

- · erecting and using scaffolds and hoardings,
- maintaining and decorating street structures and street furniture,
- replacing paving slabs on footways,
- carrying out gas or water mains repair,
- · laying pipe work and cabling,
- repairing external walls, pavings and kerbing, and upgrading, repairing and surfacing roads.

What all of these road-related activities have in common is that both the workers and road users (pedestrians, people with disabilities, vehicle drivers, etc) are at risk. The extent of the risk depends primarily on the nature of the work and its location.

Note 1: All work construction work, must be properly managed at all times. Examples of non- construction work on roads activity on roads, including both construction and non-would include both litter picking and the manual or semi-manual sweeping of footways. As they are work activities the hazards they involve must be identified and detailed risk assessments upon them carried out, so that adequate and appropriate controls can be implemented to protect the safety and health of workers and road users. The outcome of a specific risk assessment will determine whether the selection of appropriate control measures for nonconstruction work activities on roads will include similar or identical controls to those involved in construction work.



## BACKGROUND

## **Examples of Construction Work on Roads**



**Example 1** Inadequate protection of this construction work on the roadway, resulting in elderly road users having to step over an open trench. Adequate signing, lighting and guarding measures should have been implemented to prevent this situation occurring.



**Example 2** Three workers carrying out construction work at busy bend on roadway. Insufficient and inadequate signing, lighting and guarding measures in place to protect the work crew and other road users.



**Example 3** Worker attempting to cross a roadway. There are no arrangements to warn public vehicles or control their movement close to workers.



**Example 4** A worker carries out work activity with his back to oncoming traffic on the roadway. No arrangements are in place to control the movement of public vehicles close to site workers.



#### DEFINITIONS

The application of Regulation 97 of the Construction Regulations 2013 requires an understanding of the following terms:

- road,
- roadway,
- footway,
- cycle track on roadway and cycle track off roadway,
- footpath.

'road' means a road as defined in the Roads Act 1993 (No. 14 of 1993).

That Act defines road as follows:-

'road' includes:

(a) any street, lane, footpath, square, court, alley or passage,

(b) any bridge, viaduct, underpass, subway, tunnel, overpass, overbridge, flyover, carriageway (whether single or multiple), pavement or footway,

(c) any weighbridge or other facility for the weighing or inspection of vehicles, toll plaza or other facility for the collection of tolls, service area, emergency telephone, first-aid post, culvert, arch, gulley, railing, fence, wall, barrier, guardrail, margin, kerb, lay-by, hard shoulder, island, pedestrian refuge, median, central reserve, channelliser, roundabout, gantry, pole, ramp, bollard, pipe, wire, cable, sign, signal or lighting forming part of the road, and

(d) any other structure or thing forming part of the road and

(i) necessary for the safety, convenience or amenity of road users or for the construction, maintenance, operation or management of the road or for the protection of the environment, or

(ii) prescribed by the Minister.

'roadway' means that portion of a road which is provided primarily for the use of vehicles.

In general terms the 'road' includes everything between the fences or between buildings, including footways, grass margins and verges, whereas the 'roadway' is that part of the road normally used by vehicles, typically between the kerbs and including any hard shoulder (see photographs 1 and 2 below).

Road



**Photograph 1** A street showing the extent of the roadway, including dedicated parking bays. The road is also shown and includes the roadway and the associated footways.

The road can extend a significant distance from the roadway, see photograph 2 below.



**Photograph 2** Section of carriageway showing how the road can extend way beyond the roadway.

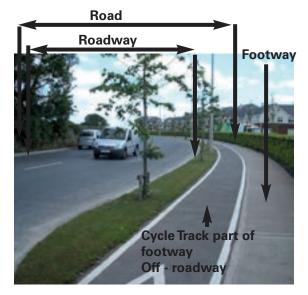


#### DEFINITIONS

'footway' means that portion of any road associated with a roadway which is provided primarily for use by pedestrians;

A footway is part of the road, but is always associated with a roadway. Footways are provided primarily for the safe movement of pedestrians. Footways may also be accompanied by grass margins that are situated on either side of the footway and are provided for the growing of grass, trees or shrubbery of any kind. Photographs 3 and 4 show the locations of footways associated with roadways. 'cycle track' means part of a road, including part of a footway or part of a roadway, which is reserved for the use of pedal cycles and from which all mechanically propelled vehicles, other than mechanically propelled wheelchairs, are prohibited from entering except for the purpose of access to and egress from such a road.

Cycle tracks are also part of the road; however, they can be part of the footway, i.e. off-roadway (as can be seen in photograph 3 below) or they can be part of the roadway (as shown in photograph 4 below).



**Photograph 3** Section of road showing both that the cycle track is part of the footway and that the footway is associated with a roadway.

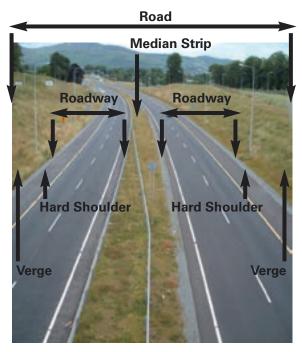


**Photograph 4** Suburban street, showing road, roadway, cycle track on roadway, grass margins and footways.



#### **DEFINITIONS**

On a motorway, each carriageway (part of a public road where traffic proceeds in a single direction) is separated by a median strip (the boundary between two carriageways) and as a consequence there are two identifiable roadways. Each roadway includes the hard shoulder. A motorway is generally completed with a road verge: that is, a part of the public road that is not a footway, a grass margin, a median strip or a roadway. Photograph 5 below shows typical motorway elements.



**Photograph 5** View of motorway, showing each roadway with accompanying hard shoulder, the median strip and the extent of the road, including verge.

'footpath' means a road over which there is a public right of way for pedestrians only, not being a footway;

A footpath is in itself a road; it is not a footway as it is not associated with a roadway (see photograph 6 below).



**Photograph 6** A pedestrian footpath is away from the roadway.



## **Regulation 97 of the Construction Regulations 2013**

97 (1) A contractor responsible for a construction site shall ensure in respect of that site, that –

This provision applies to:

- a contractor who undertakes, carries out or manages construction work as defined in the Construction Regulations 2013,
- an employer whose employees undertake, carry out or manage construction work as defined in the Construction Regulations 2013,
- a person who supplies materials, labour or both to the contractor's own labourers or to those of another employer for the purpose of carrying out construction work,
- a contractor carrying out work on a site over which another contractor has control.

97(1)(a) for that site any part of a road that is opened, excavated, broken up or obstructed by plant or equipment or by materials for the purpose of performing construction work, the following measures are taken to protect persons at work and others in the course of the work being carried on:

Where the available road width is restricted by any construction-related activity and, in particular, where such work activity has created or is likely to create a hazard (potential to cause harm) for either workers or road users, suitable and adequate measures must be implemented to protect them. Typical hazards associated with construction work on roads include live traffic, road surfaces, use of construction plant, excavations, electricity, and gas.

The answers to the following questions will help decide whether a particular work activity is provided for under Regulation 97:

- 1. Does the work come under the definition of construction work in S.I. No. 291 of 2013?
- 2. Is the work to be carried out on the road (on-roadway or off-roadway)?

3. Is the road being opened, excavated or broken up, or is the road being obstructed by plant or equipment or materials for the purposes of carrying out construction work?

If the answer to all three questions is yes, then the Regulation will apply.

The flow chart in the Appendix (see page 16) will help you to find the extent to which the provision will apply in your situation.

**Note 2:** This provision excludes an individual carrying out manual sweeping off-roadway, litter picking offroadway and legally parked vehicles solely used to transport workers and their tools to site.

**Note 3:** 'Opened' includes, but is not limited to, removal of manhole covers and the opening of other access to utility services.

97(1)(a)(i) adequate guarding and lighting, appropriate to the circumstances, is provided, and traffic signs are placed and maintained, and where necessary operated, as reasonably required for the safe guidance or direction of persons, having regard, in particular, to the needs of people with disabilities,

Measures to protect all workers and road users should generally include the provision of suitable and adequate guarding with associated warning signs and, where necessary, appropriate lighting. Warning signs should be provided to 'warn and inform' all road users in advance of any hazard. All measures must take into consideration the needs of people with disabilities and where possible the needs of those people whose first language is not English or Irish. These needs can be facilitated by signboards with symbols as distinct from text-only directional supplementary signboards. Chapter 8 of the Department of Transport's Traffic Signs Manual gives details on the signs to be used for roadwork activities.



97(1)(a)(ii) the works are supervised by a competent person who has been issued with a valid construction skills registration card referred to in Schedule 4 for the tasks specified in clause (r) of paragraph 1(1) of that Schedule,

Clause (r) refers to signing, lighting and guarding on roads

Construction work on roads will often involve several contractors carrying out different tasks or else working together on a single task. But whether performed by one contractor or many, the requirement remains that the full extent of the construction works must be supervised and coordinated. Signing, lighting and guarding at the roadworks must be supervised by a least one competent person. This person must have completed the Signing, Lighting and Guarding at Roadworks Construction Skills Certification Course (SLG CSCS) and possess a valid and relevant registration card.

The Project Supervisor for the Construction Stage (PSCS) must coordinate arrangements to ensure the provision of the Signing, Lighting and Guarding at Roadworks CSCS card holder(s) (sometimes referred to as the Temporary Traffic Operations Supervisor). The SLG CSCS card holder(s) (person(s) provided) must be named in the Employer's (Contractor's) own safety statement and in the Construction Stage Safety and Health Plan.

The SLG CSCS card holder has the responsibility for the implementation of the temporary traffic management plan on site during the construction work, including responsibility for installing, modifying, maintaining and removing the temporary traffic management arrangements. To meet the requirements of the role, a SLG CSCS card holder must be available at short notice to deal with issues at the particular site locations (more than one card holder may be required where shift work is involved).

It is important that the signing, lighting and guarding aspects of the works are coordinated for the duration of the project. The requirement rests upon the contractor responsible for the signing, lighting and guarding and/or the CSCS card holder to liaise directly with the PSCS and, where required, with the Temporary Traffic Management Designer, with regard to the effectiveness of the temporary traffic management arrangements.

Note 4: The roles of both the person possessing the Signing, Lighting and Guarding Construction Skills Certification Scheme card and the person possessing the Health and Safety at Road Works Construction Skills Certification Scheme card do not in any way negate the normal obligations of all duty holders. Project Supervisors for the Design Process (PSDPs), designers, Project Supervisors for the Construction Stage (PSCSs) and all contractors have specific duties under the Design and Management part of the Construction Regulations which remain through the life of the project. Safety at roadworks starts long before any specific construction activity takes place. Hazard identification, risk assessment, and the elimination and control of identified hazards must take place through all stages of construction from the planning stage, to the design process, the tendering process and the construction stage so that each specific construction activity will have had safety built in.

Note 5: The SLG CSCS card holder should hold a position within their organisation entrusted with the authority necessary to enable them to fully discharge their duties as required under this amendment.

97(1)(a)(iii) where the person referred to in clause (ii) is not on site, there is on site, at all times when the works are in progress and workers are on site, at least one person who has been issued with a valid construction skills registration card referred to in Schedule 4 for the tasks specified in clause (u) of paragraph 1(1) of that Schedule,

Clause (u) refers to assisting in the implementation of health and safety at roadworks.

When work activity is being carried on and the SLG CSCS card holder (person provided) is not on site, there must be on each site at least one person who has successfully completed the Health and Safety at Road Works Construction Skills Certification Scheme



#### **REGULATION 97**

and who possesses a valid and relevant registration card. This course gives a broad overview of road work safety and will raise site awareness on: signing, lighting and guarding, excavation safety, underground services, plant and equipment, handling and storage of materials, and emergency procedures.

One of the main roles of this person will be to make minor repairs to the signing, lighting and guarding as necessary. The role will also include:

- reporting to his or her employer or supervisor or the SLG CSCS card holder:
  - any work being carried on that may endanger persons,
  - any defects relating to the system of work, including those relating to signing, lighting and guarding, and
  - o any related contraventions that he or she may be aware of.
- being available to make minor repairs to the signing, lighting and guarding, which may include the correcting of signs and replacing cones or barriers that may have been moved or dislodged.

Refer to Note 4 on page 11.

97(1)(b)without prejudice to the generality of subparagraph (a), where-

- (i) any construction work which obstructs a roadway, or
- (ii) pedestrians, people with disabilities or cyclists on a cycle track that forms part of a footway are diverted onto a roadway due to construction work,

that there is on that site at all times when road signing, lighting and guarding is being installed, modified or removed, at least one person who has been issued with a valid construction skills registration card referred to in Schedule 4 for the tasks specified in clause (r) of paragraph 1(1) of that Schedule. This part of the Regulation applies because of the increased risks in the management of construction work on roadways with live traffic in such situations as the restriction by the works of the available width of the roadway or the works causing users of footways, such as pedestrians, people with disabilities and cyclists, to divert onto the roadway. At least one competent person who possesses the valid Signing, Lighting and Guarding CSCS card (sometimes referred to as the Temporary Traffic Operations Supervisor) must be present at the particular site location when the signing, lighting and guarding (temporary traffic management arrangements) are installed, modified or removed.

Photographs 7 and 8 below show construction works on footways to which this part of the Regulation applies because they lead directly to the diversion of users of the footway onto the roadway. And Photograph 9 shows an example of where the Regulation applies because construction work on the roadway results in the reduction of the width of the roadway. On the other hand, photographs 10, 11 and 12 show construction works where this part of the Regulation does not apply because the works do not divert users of the footway onto the roadway.



**Photograph 7** Footway is closed off; users including people with disabilities must find alternative route.



## **REGULATION 97 OF THE CONSTRUCTION REGULATIONS**



**Photograph 8** Footway closed at busy bend; no alternative provided for users to pass construction work. No safe access to or from bus stop.



Photograph 11 Scaffold erected on a wide footway.



**Photograph 9** Roadway open at busy junction; available width of road reduced; no traffic management plan in place.



**Photograph 12** Construction work on footway; access around the footway for users is on the grass margin a safe distance from the roadway.



**Photograph 10** Removal of a paving stone on a footway.



#### **REGULATION 97**

97(2) A person referred to in paragraph (1)(b) shall have responsibility for the implementation of the signing, lighting and guarding, so as to protect the safety of persons at work and others in the course of the work being carried on there and shall monitor the said arrangements and take any necessary corrective action in respect of same,

The competent person who possesses the valid SLG CSCS card (sometimes referred to as the Temporary Traffic Operations Supervisor) has responsibility for the implementation of the signing, lighting and guarding (temporary traffic management arrangements): that is, to ensure that the full requirements of the design traffic management plan (including any revisions to the plan) and of the relevant risk assessment are met. Where the relevant Signing, Lighting and Guarding CSCS card holder has concerns about the traffic management plan (particularly the implementation of the plan) or relevant risk assessments, they should make their supervisor aware or notify the PSCS directly of these problems. Where problems are notified to the PSCS, the PSCS must consult with the Project Supervisor for the Design Process (PSDP) and the Traffic Management Designer to revise or modify the traffic management plan, as necessary. The Signing, Lighting and Guarding CSCS card holder is required to regularly check the signing, lighting and guarding arrangements for the duration of the construction work to ensure continued compliance with the plan and the relevant risk assessment, and to ensure that appropriate corrective action takes place in the event of non-compliance.

Complying with Regulation 97 will enhance the safety of road workers and will also ensure that all other road users are safely and efficiently conveyed through a roadworks site.

Photographs 13 and 14 opposite clearly show that construction work on the roadway can, with adequate planning, organisation and implementation, lead to safe conditions for both workers and road users alike.



**Photograph 13** Properly implemented signing, lighting and guarding protects all road users.



**Photograph 14** Properly implemented traffic management plans provide safety for all and are good business.



## **Schedule 5 to the Construction Regulations**

CSCS Skills relevant to Road Works Signing, lighting and guarding:

'(u) assisting in the implementation of health and safety at roadworks;

(v) such other construction related tasks as may be prescribed by the Minister'.

Schedule 5 of the Safety, Health and Welfare at Work (Construction) Regulations 2013(S.I. No. 291 of 2013) lists construction tasks which require the persons carrying them out to possess valid Construction Skills Certification Scheme registration cards.

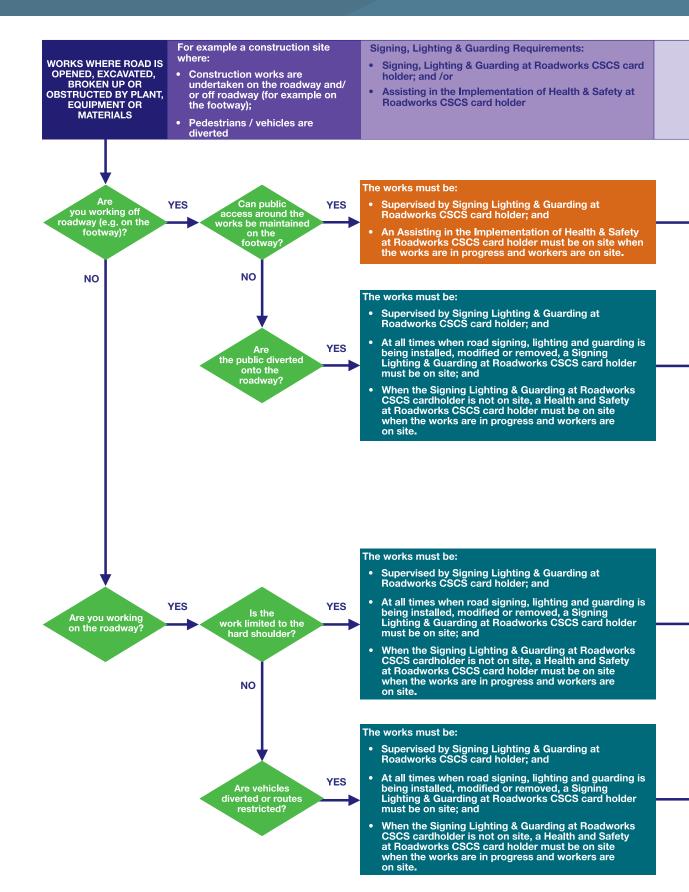
In conjunction with Regulation 97(1)(a)(iii) (see page 12) the schedule requires that when work activity is being carried on there must be on each site at least one person who has successfully completed the Health and Safety at Road Works Construction Skills Certification Scheme training course and possesses a valid and relevant registration card. The role of this person is to assist the contractor in implementing the safety management system; in particular, by reporting any concerns regarding health and safety on the site to the employer/supervisor. The programme in Schedule 5 for the Health and Safety at Road Works Construction Skills Certification Scheme will provide participants with the appropriate skills to carry out this role.

The relevant training course gives a broad overview of roadwork health and safety, and is intended to raise site awareness on signing, lighting and guarding, excavation safety, underground services, plant and equipment, handling and storage of materials, and emergency procedures. One of the main roles of persons who have completed the course and obtained a registration card will be to make minor repairs to the signing, lighting and guarding as necessary. This may include the correcting of signs and replacing cones or barriers that may have been moved or dislodged. The role of this person will also include:

- reporting to his or her employer or supervisor:
  - o any work being carried on that may endanger persons,
  - any defects relating to the system of work, including those relating to signing, lighting and guarding, and
  - o any related contraventions that he or she may be aware of.

Note 6: The roles of both the person possessing the Signing, Lighting and Guarding Construction Skills Certification Scheme card and the person possessing the Health and Safety at Road Works Construction Skills Certification Scheme card do not in any way negate the normal obligations of all duty holders, including those of all employees and persons in control of a roadworks site. Site managers, foremen and employees still need to ensure that they remain vigilant and take reasonable care of their own safety and the safety of those around them. In particular, it is important to point out that the Regulations do not prohibit employees at roadworks from correcting a fallen sign or replacing a dislodged cone. Nor do they prohibit them from assisting the cardholders in carrying out their roles.







# APPENDIX

#### Examples:

- The examples below are generic and are intended to demonstrate the principles of pedestrians being diverted onto the roadway and vehicles being diverted from an existing traffic lane;
- Construction works and traffic management omitted for clarity.













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