

**RRC  
Sample  
Study Text**

**NEBOSH**

Health and Safety Management  
for Construction (UK)

Unit CN1



## Morals and Money

### IN THIS SECTION...

- There are two main reasons for an organisation to manage health and safety: moral and financial.
- Construction has the largest number of fatal injuries of the main Great Britain (GB) industry groups. Although there is a downward trend in the number of deaths and major injuries, areas of high injury and ill-health incidence remain.

### Moral Expectations of Good Standards of Health and Safety

To prevent workplace accidents and illnesses, companies must stop viewing safety simply as complying with the law and start treating it as an ethical or moral issue. Keeping workers safe isn't just about avoiding prosecution; it's about upholding an employer's ethical obligations. Conscientious employers accept that it is an essential part of their corporate social responsibility.

The moral reasons for managing health and safety are based on a person's general duty of care not to cause harm to themselves or others in the workplace. The common law duty of care reflects the moral duty towards the other human who is working for you or with you. Employers and workers must take reasonable care to prevent situations that could cause injury or ill health to others.

The media ensures best practice is known by everyone and establishes a norm that people expect. In recent years, societal attitudes to issues such as drink driving and smoking have prompted changes that have improved standards of health and safety everywhere not just in the workplace. Better staff will only work for employers with better standards.

In simple terms, the moral reason can be summarised as, 'it's the right thing to do'. It is right and proper that workers going to work to earn a living should return home in the same state, not suffering from ill health or serious physical injury. People expect this as a fundamental right. Workers expect it. Society expects it. Over time, this societal expectation has been translated into legal standards. In this way, the moral argument drives legislation.

### The Financial Cost of Incidents (Insured and Uninsured Costs)

The financial reasons for health and safety can be difficult to calculate, but incidents cost money to the company (lost production, repair of damage, replacement workers), to the injured person (lost wages, lost opportunities) and to society (emergency services, hospitals).

Companies have gone out of business after major incidents.

Insurance companies often now take considerable interest in health and safety performance and employers who fail to identify hazards and manage risks properly may well find their insurance premiums significantly increased. Following prosecutions, fines imposed by the criminal courts can only be met from the employer's own funds as insurance cover is not possible against criminal penalties.

Although there has been a downward trend in the number of deaths and major injuries in GB's construction industry in the last few years, recent statistics show that:

- Construction is a relatively small sector for employment.
- The fatal injury rate is significantly higher than the All Industry rate.
- Construction consistently accounts for a high number of work-related fatalities.
- A significant cause of a fatal injury is a fall from height.
- Typically, injury or illness caused by construction activities accounts for one day's absence for everyone in the industry.



Manual handling injuries remain a cause for concern for inspectors on construction sites

Good construction health and safety is a large contributor to the fall in the number of injuries, but it must be maintained to ensure the number continues to fall. The hazards and risks of construction activities must be recognised and management systems put in place to eliminate or reduce those risks. Typical areas of high-injury incidence are:

- **Falls from height** - still a prime cause of fatalities and major injuries.
- **Slips, trips and falls occurring on the same level** - still causing a significant number of over-seven-day injuries.
- **Being struck by falling/moving objects** - materials and objects dropped from access equipment and building sites also a significant cause of fatalities and specified injuries for construction workers.
- **Manual handling** - lifting and carrying on construction sites - a major cause of lost work days due to specified injuries or over-seven-day injuries.

For the latest set of published statistics see:

<https://www.hse.gov.uk/statistics/assets/docs/construction.pdf>

### TOPIC FOCUS

Despite major advances in health and safety culture and awareness, the construction industry continues to deliver the highest single industry fatality rate in the annual HSE statistics bulletin. Since 1 February 2016, the Sentencing Council has issued guidelines on fines for health and safety offences, including corporate manslaughter, which apply to all sentences. These can be very substantial.

If the court establishes there was a deliberate breach of, or flagrant disregard for, the law, then this is regarded very seriously (high culpability) and large organisations in particular could be presented with an unlimited fine on conviction, or one at least ranging from £500,000 to £10 million.

Even small organisations that are convicted of causing death or injury to their employees by allowing them to work in an unsafe or negligent manner can now be fined up to £1.6 million.

So as you can see, the enforcing agencies and the judiciary are now drawing a clear link between the poor statistics of the construction industry and the punishments awarded. Any organisation, large or small, will, if convicted, now find itself appropriately and proportionately punished.

### STUDY QUESTIONS

1. Incidents will have a financial impact that affects the business and can also affect society. Give two examples of costs to:
  - (a) The business.
  - (b) Society.
2. Identify two risk areas in construction that have a high injury incidence rate.

(Suggested Answers are at the end.)

## The Construction (Design and Management) Regulations 2015

### IN THIS SECTION...

- The **CDM Regulations 2015** apply to **all** construction projects in Great Britain.
- Duties are placed upon clients, designers, principal designers, principal contractors and contractors.
- The management of projects can be divided into two distinct stages:
  - Development of pre-construction health and safety information.
  - Development of a construction phase health and safety plan.
- Pre-construction (and other) information must be enough to ensure that all significant risks foreseen in the project are anticipated and planned for.
- The health and safety file becomes the manual for future construction projects and is required for projects involving more than one contractor.
- The extent to which domestic clients must carry out the client duties in **CDM Regulations 2015** is limited and most of the duties are passed to other duty holders.

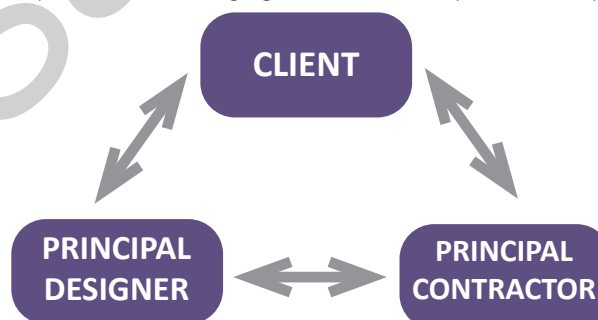
### Roles, Competence and Duties under the CDM Regulations

The **Construction (Design and Management) (CDM) Regulations 2015** provide a detailed framework for managing construction projects. They specifically target planning and design issues, as these areas hold the underlying causes of accidents, as well as the actual construction phase management; this includes good fire risk management. The intention is to 'design out' the problems from the start.

**CDM Regulations 2015** develop the roles of people involved in construction projects (clients, designers, principal designers, principal contractors and contractors) and places particular duties upon each of them.

In particular:

- The client has a duty to ensure that both the principal designer and principal contractor comply with their duties.
- The principal designer is responsible for managing the pre-construction phase of the project.
- The principal contractor is responsible for managing the construction phase of the project.



Based on original image from *Industry guidance for principal contractors* ([www.citb.co.uk/documents/cdm%20regs/2015/cdm-2015-principal-contractors-printer-friendly.pdf](http://www.citb.co.uk/documents/cdm%20regs/2015/cdm-2015-principal-contractors-printer-friendly.pdf))

They apply to all construction projects, but identify specific types of projects as 'notifiable'.

## Clients (Regulations 4, 5 and 6)

Clients must make suitable arrangements for managing a project, including the allocation of sufficient time and other resources, and ensure that these arrangements are maintained and reviewed throughout the project. They must also provide pre-construction information as soon as is practicable to every designer and contractor appointed to the project; this must include existing fire precautions and building layout; and identify the presence of flammable and combustible materials.

In addition, they must ensure that, before the construction phase begins, a construction phase plan is drawn up by the contractor or principal contractor which includes project-specific fire risks and procedures in case of fire; and that the principal designer prepares a health and safety file for the project.

## Designers (Regulation 9)

A designer can be any person who specifies construction work, or specifies materials to be used. Typical examples include architects, surveyors and design and build contractors. The designer must ensure the client is aware of their CDM duties and seek to avoid hazards or minimise risk by effective design.

Designers must consider the risk of fire at design stage, including in their choice of building materials and methods of construction. For example, specifying materials that can be fixed together by mechanical means rather than hot means. They should also consider the impact on neighbouring properties and their emergency escape routes. Where risks cannot be avoided, adequate information must be provided with design drawings and specifications.

## Principal Designers (Regulation 11)

Principal designers are responsible for planning, managing, monitoring and co-ordinating health and safety in the pre-construction phase of a project. This includes identifying, eliminating or controlling foreseeable risks and ensuring that designers carry out their duties. They must ensure risk of fire is identified, eliminated, and controlled.

They are also responsible for preparing and providing relevant information to other duty holders, including that relating to fire risk and control; in particular, principal contractors, to help them plan, manage, monitor and co-ordinate health and safety in the construction phase.

## Principal Contractor (Regulation 13 and 14)

The principal contractor is the main contractor involved and is normally a specialist in managing construction projects. Significant to this role is the planning, managing and monitoring of the construction phase, and co-ordinating matters relating to health and safety during the construction phase to ensure that, so far as is reasonably practicable, construction work is carried out without risks to health or safety. This includes ensuring a site-specific fire risk assessment forms part of the construction phase plan, that programming of work considers fire mitigation measures and that those measures are implemented.

The principal contractor must also consult and engage with the workforce to ensure that measures for their health, safety and welfare are developed, promoted and checked for effectiveness.



The principal contractor will put the site rules in place



### TOPIC FOCUS

Principal contractors' duties under the **CDM Regulations 2015** include:

- Preparing the construction phase plan.
- Organising co-operation between contractors (including successive contractors on the same construction site).
- Co-ordinating implementation by the contractors of legal requirements for health and safety.
- Ensuring that employers and self-employed persons apply the general principles of prevention in a consistent manner and follow the construction phase plan.
- Ensuring that a suitable site induction is provided, steps are taken to prevent access by unauthorised persons to the site, and adequate welfare facilities are provided throughout the construction phase.
- Liaising with the client and the principal designer and sharing information relevant to the planning, management and monitoring of the pre-construction phase and the co-ordination of health and safety matters during the pre-construction phase.
- Ensuring workers are being consulted and engaged in securing their health and safety.

### Contractors (Regulation 15)

Contractors are those actually carrying out the construction work.

They are responsible for planning, managing and monitoring construction work under their control so that it is carried out without risks to health and safety. They must ensure fire mitigation measures are maintained and additional risks are not created.

For projects involving more than one contractor, they must co-ordinate their activities with others in the project team and, in particular, comply with directions given to them by the principal designer or principal contractor. They must assess and manage fire risks under their control, such as the use of solvents or fire spread.

For single-contractor projects, it is their responsibility to prepare a construction phase plan and ensure that a site-specific fire risk assessment is carried out and is reviewed.

Contractors are also responsible for ensuring that persons they employ to work on a construction site have the necessary skills, knowledge, training and experience to secure their health and safety, and also have appropriate supervision, instructions and information.

### TOPIC FOCUS

The competence of contractors is to be assessed by the client. This is usually done using a checklist, covering areas such as:

- Are they experienced in the type of work to be carried out?
- Do they have a suitable health and safety policy in place?
- Do they have suitable arrangements in place?
- What is the quality and extent of their risk assessments?
- What is their recent health and safety performance (number of accidents, etc.)?
- Has any enforcement action been taken against them?
- Do they provide suitable, up-to-date method statements?
- Do they monitor health and safety and carry out site inspections?
- What are the qualifications and skills that they bring to the project?
- Do their employees carry Construction Skills Certification Scheme (CSCS) cards?
- Are they members of a professional body or trade association?
- Do they have employers' liability and public liability insurance?
- Do you have any references about them from previous clients?
- How do they appraise and select subcontractors?
- What are their client liaison arrangements?

The principal contractor may choose not to use a contractor who cannot meet required standards, and exclude them from future lists if their performance is seen to be poor.

### Workers

Workers are defined in the **CDM Regulations 2015** as "...the people who work for or under the control of contractors on a construction site".

The duties imposed on workers by the **CDM Regulations 2015** are a repeat of those placed on employees by the **Management of Health and Safety at Work Regulations 1999** to:

- Take care of their own health and safety and others who may be affected by their actions.
- Co-operate with any other person working on, or in relation to, a project at the same or an adjoining construction site.
- Comply with site rules and requirements including fire and emergency procedures.
- Report anything they are aware of in relation to the project which is likely to endanger their own health or safety or that of others.

### Domestic Clients (Regulation 7)

Domestic clients are people who have building work carried out in their own home that is not business related. The importance here is the client, not the property. Landlords, charities, housing associations, etc. may own dwellings, but they are NOT domestic clients. Likewise, the owner of a shop being altered that is attached to their home is NOT a domestic client.

The extent to which domestic clients must carry out the client duties in the **CDM Regulations 2015** is limited and most of the duties are passed to other duty holders. A domestic client is not required to carry out the duties placed on commercial clients such as managing projects, notification and the general duties in Regulation 8 of **CDM Regulations 2015**. If the project involves only one contractor, the contractor must carry out the client duties, as well as the duties they already have as contractor, i.e. manage the work to ensure health and safety. If the project involves more than one contractor, the principal contractor must carry out the client duties as well as the duties they already have as principal contractor. If the domestic client has not appointed a principal contractor, the duties of the client must be carried out by the contractor in control of the construction work.

A domestic client has the flexibility of agreeing (in writing) with their designer that the designer co-ordinates and manages the project. Where no such agreement is made, the principal contractor will automatically take over the project management responsibilities.

## When the HSE Need to be Notified

The relevant enforcing authority (HSE, Office of Rail Regulation (ORR) or Office for Nuclear Regulation (ONR)), must be informed (using Form F10) if the project is expected to:

- last longer than 30 working days and have more than 20 workers working on the project at any one time;
- or exceed 500 person days.

The client must ensure that an up-to-date copy of the notice submitted is displayed in the construction site office so it is accessible to anyone working on the site, and it must be in a form that can be easily understood. The client can either do this themselves, or ask the principal contractor or contractor to do so.

## Form F10

This is the form from the HSE called the 'Notification of a Construction Project' that is completed by the client before a project starts. When completed, it is sent to the HSE, and a copy is displayed on the site. It can be re-sent if further information regarding the project becomes available.

## Pre-Selection and Management of Contractors Including Third-Party Auditing Schemes

Before engaging any contractor it is essential to confirm their competence and their procedures that are in place to ensure that the work can be carried out safely. Arrangements will have to be put into place to ensure the effective management of sub-contractors.

Information to prove competence includes:

- health and safety policy;
- suitable and sufficient risk assessments;
- method statements/permit-to-work procedures for dealing with identified hazards;
- suitability of plant and equipment;
- sufficient number of workers allocated to the project;
- past health and safety record;
- checking references with previous clients; and
- membership of trade associations or professional bodies that offer independent assessment of competence such as the Asbestos Removal Contractors Association (ARCA).



A site contact for the contractor should be established before work begins. The site contact will then be responsible for ensuring that:

- regular safety meetings are held;
- health and safety information is communicated;
- the contractor has received and agreed a copy of the site rules;
- agreed working practices, such as permits to work, are being followed;
- regular inspections are completed;
- any accidents are reported and, if necessary, investigated; and
- a thorough review is conducted on completion of the work.

## Effective Planning and Co-ordination of Contracted Work Including Interaction with Existing Staff

The **Management of Health and Safety at Work Regulations 1999** require that, where there is more than one employer working together, that they must co-operate with each other and ensure that procedures are in place to keep other employers and their employees informed about any risks that might arise out of their undertaking. Where construction work takes place in occupied or part-occupied buildings, construction managers and other dutyholders need to take account of the implications for occupiers.

Co-operation between client, contractor and occupier is very important. The occupier will have a detailed knowledge of any site-specific hazards that may not be obvious to a contractor undertaking construction works and this may impact upon the works. Furthermore, the client or occupier has the authority to place controls and restrictions on the site. Those precautions must take into account those employees who work at the site but are not involved in the construction work. Erecting barriers and warning signs, informing employees about the work or doing the work outside of normal working hours should be part of the planning process.

Co-operation will also be required where site activities need to be controlled or access restricted, or where a shared knowledge is required to undertake a task, for example, decommissioning or removal of machinery.

## Health and Safety Planning

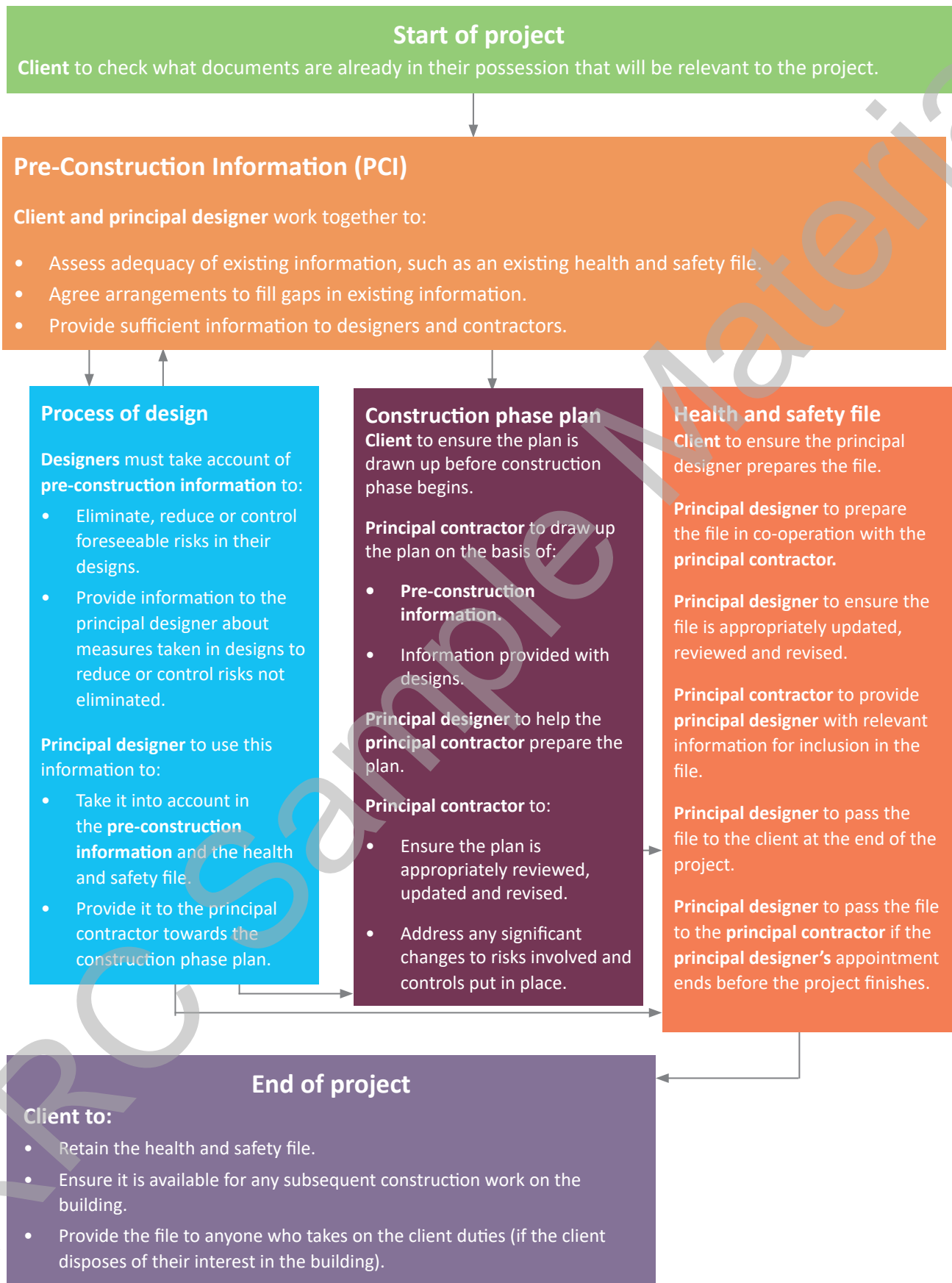
There are two distinct stages in the management of a construction project. The first is the development of pre-construction health and safety information which is then developed into a construction phase health and safety plan.

The amount of pre-construction (and other) information that is provided must be enough to ensure that all significant risks foreseen in the project are anticipated and planned for. This information should go beyond what designers and contractors might reasonably be expected to identify, rather than concentrate on the obvious and most likely hazards. As well as those issues mentioned above, it should focus on environmental hazards, restrictions and existing on-site risks, health hazards, design and construction hazards.

Construction fire safety needs to be managed from the earliest stages of design and before work starts. It needs to address the risks both to site workers and to persons living or working in neighbouring buildings. Fire prevention measures must be embedded within project planning because, during the construction phase, the permanent fire prevention measures have either been temporarily removed, or they have yet to be installed and commissioned.

The information should be in a convenient form that is clear, concise and easily understood by all parties. There is no reason why existing sources of information (specifications, site plans, etc.) cannot be used, providing they cover the relevant health and safety issues.

The following diagram is taken from Appendix 5 of the guidance on **CDM Regulations 2015** (*Managing health and safety in construction* L153) and summarises how different types of information relate to and influence each other in a construction project.



## Pre-Construction Information

Pre-construction information provides the health and safety information needed by:

- Designers and contractors to enable them to carry out their duties.
- Principal designers and principal contractors to plan, manage, monitor and co-ordinate the work of the project.

It also provides a basis for the preparation of the construction phase plan and some material may also be relevant to the preparation of the health and safety file. It is information about the project that the client is already aware of or which is reasonably obtainable by the client. However, the information must:

- Be relevant to the particular project.
- Have an appropriate level of detail.
- Be proportionate to the risks involved.

It should be gathered and added to as the design process progresses, and reflect new information about the health and safety risks and how they should be managed. Preliminary information gathered at the start of the project is unlikely to be sufficient.

The information should be presented in a convenient form and be clear, concise and easily understandable to help other duty holders involved in the project to carry out their duties.

### TOPIC FOCUS

When pre-construction information is complete, it should include proportionate and relevant information about:

- The project, such as the client brief and key dates of the construction phase.
- The planning and management of the project, such as:
  - Resources and time being allocated to each stage of the project.
  - Arrangements to ensure there is co-operation between duty holders and that the work is co-ordinated.
- The health and safety hazards of the site, including design and construction hazards.
- How health and safety hazards will be addressed.
- Any relevant information in an existing health and safety file.

## Construction Phase Plan

The construction phase plan sets out the arrangements for securing health and safety during the period in which construction work is carried out. These arrangements include site rules and any specific measures put in place where work involves particular risks listed in Schedule 3 of **CDM Regulations 2015**.