

APPROACH PRINCIPLES COLLABORATION DEVELOPMENT



# the Kent design guide

making it happen - risk assessment & safety audit

# Overview

This part of making it happen includes advice and guidance about risk assessment and road safety audits.



**risk assessment and safety audit**

## General

It is your responsibility to be fully aware of all obligations and duties under health and safety legislation.

## Client Duties

Clients must make appropriate arrangements to ensure that their projects are properly managed at all stages. Under the Construction (Design and Management) Regulations 1994, clients who do not have sufficient knowledge or resources, must appoint one or more competent people to help them.

A client is an organisation or individual for whom a construction project is carried out whether by others or in-house.

## Designer's Duties

Designers have specific duties under the Construction (Design and Management) Regulations 1994 and must be familiar with those requirements.

### In general, they must:

- Ensure that their clients are aware of their duties under CDM;
- Seek to eliminate or reduce hazards and risks in their design;
- Co-operate with the planning supervisor and other designers; and
- Provide information for the pre-tender health and safety plan and health and safety file.

Designers should be aware that clients are required to provide the planning supervisor with information that they could reasonably be expected to obtain, which will be relevant to the management of hazards and risks.

## Design Risk Assessment

The client and/or designer needs to examine ways in which hazards can be avoided or mitigated. If neither is possible, the design must ensure that the level of risk is acceptable (given proper controls), applying the principles of prevention and protection.

This process is known as design risk assessment and is an iterative process whereby a designer can logically identify, assess and manage risks.

### The main stages of the assessment are:

- Identify the hazards in a proposed design;
- Eliminate each hazard, if feasible (or substitute a lower risk hazard);
- Reduce the risk during construction work – this includes cleaning, maintenance or demolition; and
- Provide information necessary to identify and manage the remaining risks.

The assessment process involves making judgements between possible courses of action and may significantly influence design. The approach should be structured to suit the particular project, including consideration of foreseeable hazards, the site and the local environment.

## Safety Audit

Our guidance note (KCC Design and As-Built Assessment Process for Scheme Promoters) dated Sept 2004, contains information regarding what is required in terms of safety audit.

The Design Manual for Roads and Bridges, Volume 5, Section 2, Part 2, HD19/03 is the Department of Transport's standard for safety audits. Paragraph 1.5 says: "Road safety audits are intended to ensure that operational experience is applied during the design and construction process in order that the number and severity of accidents is kept to a minimum. Auditors identify and address problem areas using experienced gained from accident reduction schemes, accident investigation and research work."

Paragraph 1.21 of HD19/03 says: "[An] Audit Team works together on all aspects of the audit, independent of the Design Team [designing the works]..."

Safety audits are checks to ensure that a road is designed and operates as safely as is possible in order to keep crashes to a minimum. They must be carried out separately by people who are not involved with the design of the proposed works.

Safety audits should only consider road safety matters – they are not a technical check to determine whether the design conforms to standards, and they do not consider structural safety.

Paragraph 2.8 of HD19/03 says: "Although the Audit Team's contribution to design [of the proposed works] is limited, in making recommendations they may be considered to have undertaken design work under health and safety legislation. It is therefore recommended that audit teams make themselves aware of current health and safety legislation and consider the implications of their recommendations for the health and safety of others."

### Before construction begins (stage 1 and stage 2 safety audits)

Stage 1 safety audits must be carried out at the preliminary design stage and can incorporate design and land acquisition before the design is finalized.

Stage 2 safety audits must be carried out when the detailed design is completed. This audit is concerned with more detailed aspects, for example the provision of signs, road markings and street lighting.

Where we require Stage 1 and Stage 2 safety audits, scheme approval will not be given until the audits have been satisfactorily completed and we are satisfied with any changes that have been requested.

### After construction has begun (stage 3 and stage 4 safety audits)

Stage 3 safety audits should be carried out only when the works have been substantially completed and preferably before the roads are used by the public or before the houses are occupied. This audit should look at the works from all road users' points of view and should be carried out both in daylight and during the hours of darkness. Neither a provisional certificate (S.278) or a Part 2 Certificate (S.38) will be issued until the stage 3 safety audit has been completed to our satisfaction, including any changes that have been requested.

Stage 4 safety audits should look at how the works are operating and examine the crash record. They should normally be carried out 12 and 36 months after the works are opened to the public. Based on the crash record and observations made during any site visits, these audits should identify any road safety problems and recommend remedial measures.

Stage 4 safety audits are our responsibility. **You are not required to provide a stage 4 safety audit monitoring report.**

## Requirement

A safety audit is required for all work carried out under agreement (S.278 or S.38) with us.

## Your responsibility

When an agreement under S. 278 or S.38 is entered into with us, you will be required to indemnify (protect us from legal responsibility) against any claims arising from the works.

### You will be responsible for:

- commissioning and paying for all safety audits;
- ensuring that the audits are carried out by an accredited safety auditor or team that is independent from those designing the scheme;
- submitting the safety audits to us, along with the designers' response (we will not consider the safety audit report until it has received the designers' response); and
- ensuring any safety audit recommendations that are required to be implemented, are completed to our satisfaction.

In all cases you must also comply with all aspects of the Construction (Design and Management) Regulations 1994 and indemnify (protect us from legal responsibility) against all claims, liabilities and actions.