



CMG Training

Safety Health and Welfare at Work

Construction Regulations 2013 - PSDP Role

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Turner & Townsend Ltd

- Overview of the SHWW Construction Regulations
- Legislation Background
- General Principles of Prevention
- Particular Risks
- Duties of Client, Designers and Project Supervisor Design Process
- Co-ordination of designers and organising co-operation between designers
- Information requirements from Designers – best practice
- Use of Approved Codes of Practice
- Designing for Safe Maintenance
- The Preliminary Safety and Health Plan
- Construction Stage PSDP duties
- Coordination of the Design of Temporary Works
- Preparation of Safety File
- Discussions & Q&A
- Assessment



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Legislation / Statistics

Regulations History

24 th June 1992	Temporary Mobile Construction Site Directive
6 th June 1995	Safety, Health and Welfare at Work (Construction) Regulations in Force
1 st January 2002	Safety, Health and Welfare at Work (Construction) Regulations 2001
6 th November 2006	Safety, Health and Welfare at Work (Construction) Regulations 2006
1 st August 2013	Safety, Health and Welfare at Work (Construction) Regulations 2013

Construction Related Workplace Injuries / Fatalities - Statistics

Figure 2.5b:

Rate of fatal work-related incidents per 100,000 workers in Construction, 2014–2024 (HSA)



Health and Safety Authority reports sharp rise in work-related fatalities in 2025



Monday 5th January 2026

- Fatalities rose from 36 in 2024 to 58 in 2025, with agriculture again the most dangerous sector in which to work
- The work-related fatality rate per 100,000 workers increased from 1.3 in 2024 to 2.1 in 2025, although the long-term trend remains downward
- Leading causes of fatalities were being hit or crushed by falling objects, incidents with machinery or vehicles, and falling from a height
- 19 of the 58 victims (33%) were aged 65 or over, with the oldest victim aged 88
- 23 of the 58 victims (40%) were self-employed

The Health and Safety Authority (HSA) has today (Monday 5th January) published provisional figures showing that 58 people died in work-related incidents in Ireland during 2025, representing a 61% increase on the 36 who died in 2024.

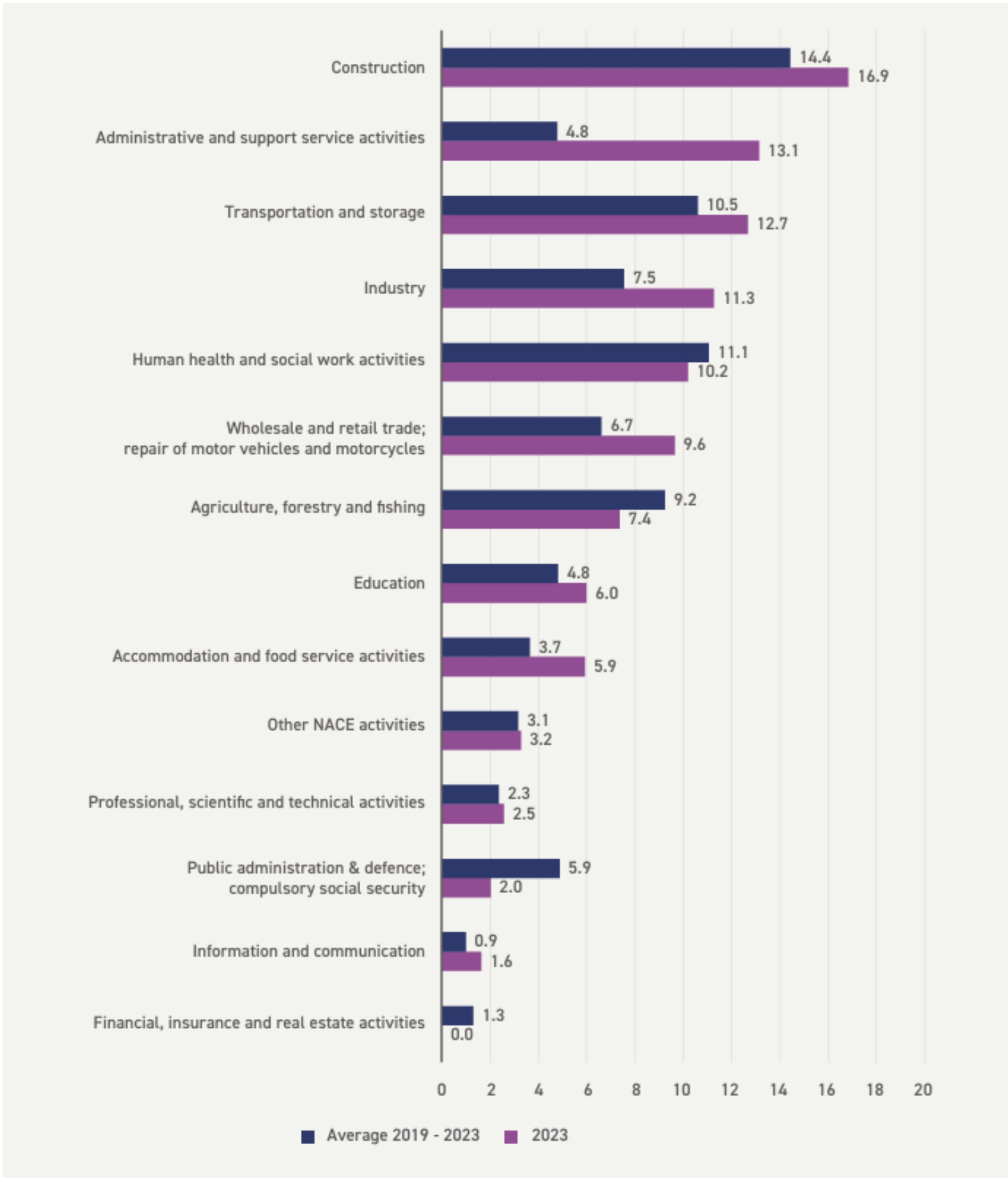
The agriculture sector, with 23 deaths, continues to account for the highest number of fatalities representing 40% of all work-related fatalities last year from a sector employing approximately 4% of the workforce.

The construction sector recorded 10 fatalities compared to 5 in 2024, while 5 fatalities were recorded in the manufacturing sector, compared to none last year.

Source: Health and Safety Authority | Annual Review of Workplace Injury, Illness and Fatality Statistics 2023 - 2024

Figure 1.7:

Rate of 4+ day work-related injuries per 1,000 workers by NACE economic sector in 2023 and five-year average 2019–2023 (CSO)

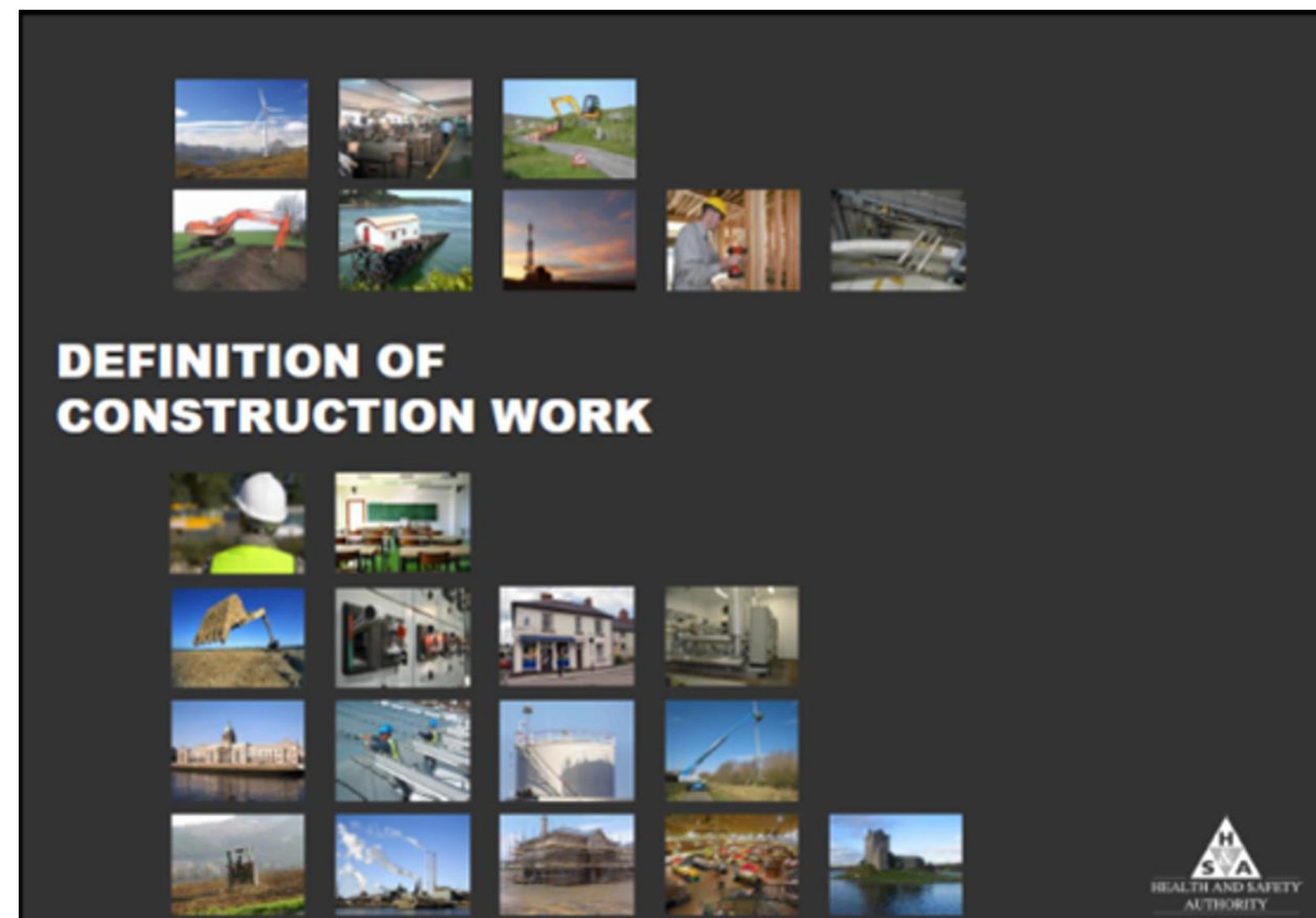


Safety, Health and Welfare at Work (Construction) Regulations 2013

- Part 1 - Interpretation & General
- **Part 2 - Design and Management**
- Part 3 - General Duties of Contractors and Others
- Part 4-14 - General Safety Provision & Construction Safety
- Schedules 1-6 - **Particular risks, General Principles of prevention**, Safety Awareness schemes etc.

Determine what is 'Construction'

- HSA have defined what is considered 'construction work' in detail on their website. The definition is broad.
- Includes: Construction, Demolition, Maintenance:



- HSA Definition of Construction Work 2012

Also see

- HSA Guidelines For Working On Roads 2008
- HSA Guide for Homeowners 2013

“construction work” means the carrying out of any building, civil engineering or engineering construction work, other than drilling and extraction in the extractive industries as defined by the Safety, Health and Welfare at Work (Extractive Industries) Regulations 1997, and includes but is not limited to each of the following:

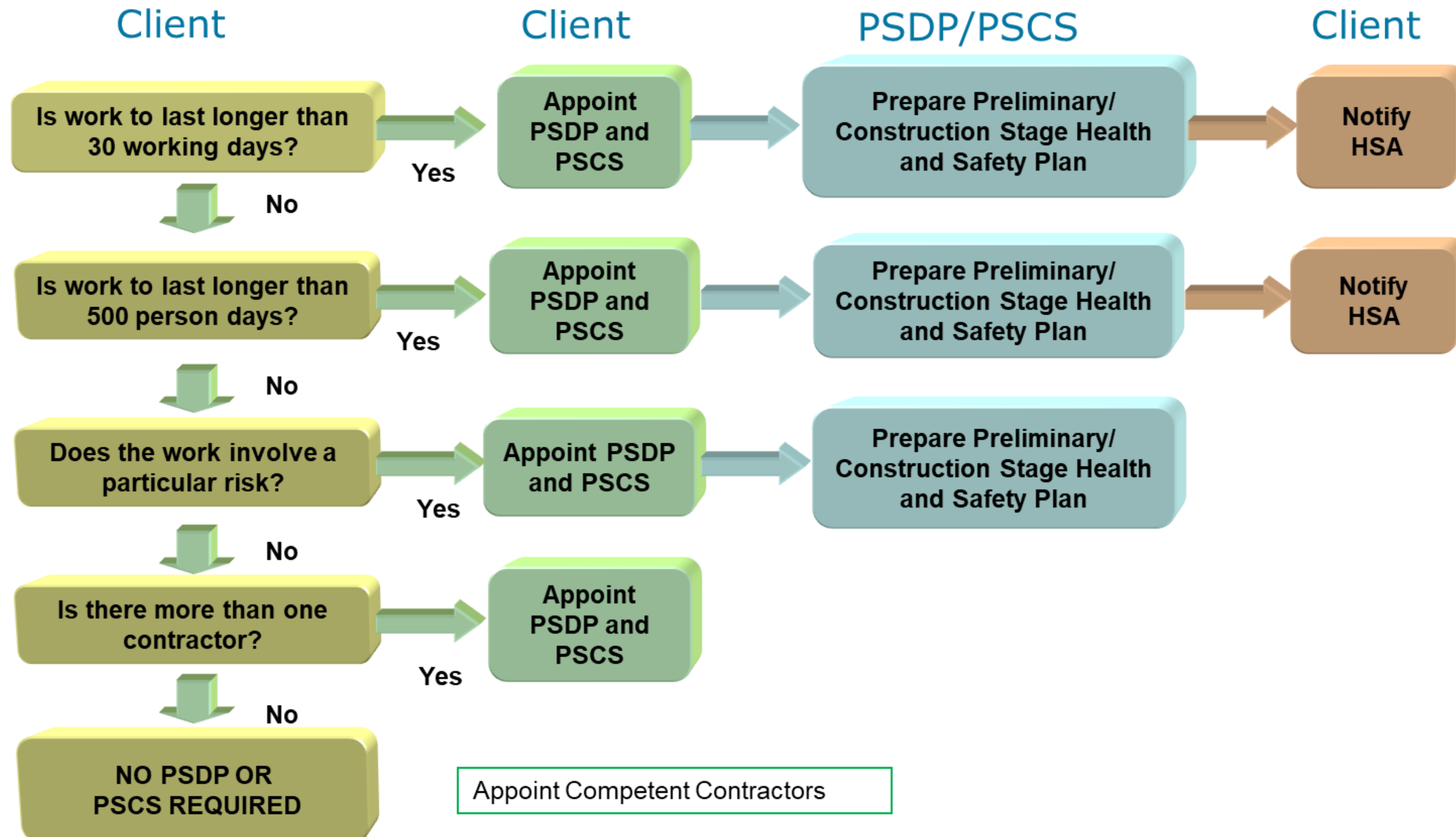
- (a) the doing of one or more of the following with respect to a structure:
 - (i) construction;
 - (ii) alteration;
 - (iii) conversion;
 - (iv) fitting out;
 - (v) commissioning;
 - (vi) renovation;
 - (vii) repair;
 - (viii) upkeep;



Example HSA case relating to maintenance work

- A utilities manager at the factory fell from an internal roof while he was carrying out maintenance work
- When the HSA investigated the accident, they issued a notice prohibiting access to roofs throughout the factory. They also prosecuted the company, which pleaded guilty to:
 - *Failing to manage and restrict and prohibit maintenance work on the roof, contrary to section 8(2)(c) of the SHWW Act 2005, which requires places of work to be designed and maintained, in so far as reasonably practicable, in a condition that is safe*
- And for
 - ***Failing to appoint a project supervisor for the works relating to the repairs to fixed mechanical and electrical installations, contrary to the Construction Regulations 2006, reg 6 (1)(b).***

Legislative Requirements



The client must ascertain that **adequate competent resources**, specific to the project will be provided by:

- **PSDP**
- PSCS
- **Designers**
- Contractors

Resources include: **time, manpower, plant, equipment, technical facilities, key personnel, etc.**

PSDP / Designer Competency

BPC 1

- HSA Clients in Construction:
- Best Practice Guidance

BPC 1 Competency Assessment for PSDP/Designer

Client to assess competency, based on information submitted by the PSDP/Designer



Designer: Project:

Tick duties being assessed: ☐ PSDP and Designer ☐ PSDP only ☐ Designer only

Where details or evidence is specifically requested, these must be attached to this questionnaire and submitted to the client. Questions marked ** relate specifically to PSDP. All remaining questions must be answered by the Designer and PSDP.

Section 1:

Client ticks if response is adequate

If you answer "yes", proceed to Section 2. If you answer "no", respond to the remaining questions first.

1.1 Do you have a third-party accredited Safety Management System (e.g. OHSAS 18001)?

☐ Yes ☐ No

- ➔
- 1.2 Provide an outline of your Safety Statement (e.g. table of contents)
 - 1.3 Provide evidence of how you manage health & safety on your projects
 - 1.4 Provide an example of how risk assessments are undertaken at design
 - 1.5 Detail how you take account of the General Principles of Prevention
 - 1.6 Provide an example of how you have designed out hazards
 - 1.7 Detail how you assess competency for persons engaged in a project
 - 1.8 Detail how you assess the health and safety resources required
 - 1.9 Detail how you assess time required for completion of a project*
 - 1.10 Detail how you take corrective action and issue directions*

Section 2:

Answer all questions.

- 2.1 Provide details of similar projects previously completed
- 2.2 Provide details of previous PSDP* and/or Designer appointments
- 2.3 Provide details of experience of the staff you propose for this project
- 2.4 Provide evidence of relevant qualifications and/or relevant safety training for staff
- 2.5 Provide evidence of membership of professional bodies (e.g. RIAI, EI, ACEI)
- 2.6 Detail how design safety is communicated and coordinated*
- 2.7 Provide an example of a previous Preliminary Safety and Health Plan*
- 2.8 Describe your processes for preparing a Safety File*
- 2.9 Detail any accidents/incidents associated with your projects
- 2.10 Detail any previous convictions/enforcement action by the Health and Safety Authority

In accordance with the Statutory Declarations Act 1938, I/we attest to the completeness, accuracy and truthfulness of the statements I/we have made in completing this form and to any information I/we have attached.

Signed by Designer/PSDP:

Date:

Submission approved, signed by Client:

Date approved by Client:

PSCS / Contractor Competency

BPC 2

- HSA Clients in Construction:
- Best Practice Guidance

BPC 2 Competency Assessment for PSCS/Contractor

Client to assess competency, based on information submitted by the PSCS/Contractor

Contractor: Project:

Tick duties being assessed: ☐ PSCS and Contractor ☐ PSCS only ☐ Contractor only

Where details or evidence is specifically requested, these must be attached to this questionnaire and submitted to the client. Questions marked "*" relate specifically to PSCS. All remaining questions must be answered by the Contractor and PSCS.

Section 1:
If you answer "yes", proceed to Section 2. If you answer "no", respond to the remaining questions first.

1.1 Do you have a third-party accredited Safety Management System (e.g. Safe-T-Cert)?
☐ Yes ☐ No

1.2 Provide an outline of your Safety Statement (e.g. table of contents)

1.3 Provide evidence of how you manage health & safety on your projects

1.4 Provide an example of how you assess risks for construction activities

1.5 Detail how you take account of the General Principles of Prevention

1.6 Provide an example of how you managed hazards for a similar project

1.7 Detail how you assess competency for persons engaged in a project

1.8 Detail how you assess the health and safety resources required

1.9 Detail how you implement and manage time constraints for a project*

1.10 Detail how you take corrective action and issue directions*

Section 2:
Answer all questions.

2.1 Provide details of similar projects previously completed

2.2 Provide details of previous PSCS* and/or Contractor appointments

2.3 Provide details of experience for the staff you propose for this project

2.4 Provide evidence of relevant qualifications and/or relevant safety training for staff

2.5 Provide evidence of membership of trade associations (e.g. CIF, CIOB)

2.6 Detail how safety is communicated and coordinated*

2.7 Provide an example of a previous Safety and Health Plan*

2.8 Describe how you coordinate the implementation of safe working procedures*

2.9 Detail any accidents/incidents associated with your projects

2.10 Detail any previous convictions/enforcement action by the Health and Safety Authority

In accordance with the Statutory Declarations Act 1938, I/we attest to the completeness, accuracy and truthfulness of the statements I/we have made in completing this form and to any information I/we have attached.

Signed by Contractor/PSCS:

Date:

Submission approved, signed by Client:

Date approved by Client:

Client ticks if response is adequate

Client Checklist

BPC 3

- HSA Clients in Construction:
- Best Practice Guidance



BPC 3 Client Checklist

Client can use this checklist to track progress and health and safety compliance



Client: Project:

Tick the appropriate box as tasks are completed. Note you may need to discuss some of these tasks with the PSDP and/or PSCS.

Client ticks if task is completed

Section 1:

This section relates to procurement of the design team and PSDP.

- 1.1 Have you assessed the health and safety competencies and resources of each Designer?
- 1.2 Have you appointed each Designer in writing?
- 1.3 Have you assessed the health and safety competency and resources of the PSDP?
- 1.4 Have you appointed the PSDP in writing?
- 1.5 Has the PSDP confirmed acceptance of the PSDP role in writing?
- 1.6 Does the project need to be notified to the Health and Safety Authority?
- 1.7 Have you completed AF1 form and issued this to the Health and Safety Authority?

Section 2:

This section relates to the design process.

- 2.1 Have you issued the existing Safety File (if it exists) to the design team and PSDP?
- 2.2 Have you issued all relevant information to the design team and PSDP?
- 2.3 Have the design team and PSDP identified and assessed particular risks?
- 2.4 Has the PSDP prepared the preliminary Safety and Health Plan?

Section 3:

This section relates to procurement of the contractor and PSCS.

- 3.1 Has the preliminary Safety and Health Plan been issued to the tenderers?
- 3.2 Have you assessed the health and safety competencies and resources of the Contractor?
- 3.3 Have you appointed the Contractor in writing?
- 3.4 Have you assessed the health and safety competency and resources of the PSCS?
- 3.5 Have you appointed the PSCS in writing?
- 3.6 Has the PSCS confirmed acceptance of the PSCS role in writing?
- 3.7 Has the PSCS completed AF2 form and issued this to the Health and Safety Authority?

Section 4:

This section relates to the construction stage.

- 4.1 Has the PSCS developed the Safety & Health Plan?
- 4.2 Is health and safety managed on site and discussed at site meetings?
- 4.3 Is there checking and corrective action taken on site?
- 4.4 Has the format for the Safety File been agreed with the PSDP?



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General Principles of Prevention

General Principles of Prevention

- **Avoid the Risk**
 - selecting non-fragile roofing materials, or
 - by avoiding the disturbance of contaminated land where practicable
- **Evaluate Risks that Cannot be Avoided**
 - evaluating the likelihood of realisation and resultant consequences of such risks
- **Combat the Risks at Source**
 - by specifying brush application of a treatment rather than spraying to reduce solvent exposure, or
 - specifying finishing materials containing less harmful constituents
- **Adapt the Work to the Individual**
 - design of places of work,
 - the choice of work equipment and the choice of systems of work

General Principles of Prevention (Cont.)

- **Adapt to Technical Progress**
 - taking advantage of technical progress and opportunities for safe and more efficient working methods
- **Replace the Dangerous with Non or Less Dangerous**
 - replacing solvent-based paints with water-based ones where practicable
- **Provide Collective Protection over Individual Protection**
 - the provision of fixed guard rails on a maintenance walkway rather than safety harnesses
 - the provision of local exhaust ventilation in preference to personal protective equipment
- **Develop an Overall Prevention Policy**
 - which takes account of technology, organisation of work, working conditions, social factors and the influence of factors related to the working environment
- **Instruct and train Employees**



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Particular Risks (Schedule 1)

Particular Risks (Schedule 1)

- Work which puts persons at work at risk of burial under earthfalls, engulfment in swampland or falling from a height,
 - where the risk is **particularly aggravated** by the nature of the work or processes used or by the environment at the place of work or site
- Work which puts persons at work at risk from chemical or biological substances constituting a particular danger to the safety and health of such persons or involving a legal requirement for health monitoring
- Work with ionising radiation requiring the designation of controlled or supervised areas as defined in Article 20 of Directive 80/836/Euratom
- Work near high voltage power lines
- Work exposing persons at work to the risk of drowning
- Work on wells, underground earthworks and tunnels
- Work carried out by divers at work having a system of air supply
- Work carried out in a caisson with a compressed air atmosphere
- Work involving the use of explosives
- Work involving the assembly or dismantling of heavy prefabricated components.

Non-exhaustive list

“Particular Risks” are not explicitly defined in the Construction Regulations 2013.

- **Risk of Falling From a Height:** Where the risk associated with working at a height is likely *to be aggravated by the presence of another significant hazard*, then a particular risk may be present, for example:
 - *Work on or adjacent to fragile roofing materials,*
 - *Operations where the nature of the work or other restrictions make it impracticable to provide standard scaffolding or other suitable and sufficient means of support.*
- **Risk of Burial or Engulfment:**
 - *Where the risk associated with working in an excavation is aggravated by the presence of other significant hazardous underground services or where there is a risk of undermining existing foundations.*
 - *Exceptionally deep excavations and / or poor ground conditions*



“Particular Risks”

- **Risk of Drowning:**
- This category includes work involving:
 - Interaction with adjacent body of water (river, stream, sea);
 - High water table – deep excavations;
 - High pressure services – uncontrolled rupture;
 - Confined Spaces – uncontrolled in-flow of liquid or free flowing material; and
 - Flash flooding due to weather conditions or systems failure.

2013 HSA Guidance

“Particular Risks”

- **High Voltage Power Lines / Cables:**
- This category voltages over 1000v
 - Noting ESB terminology differs 10kv, 38kv, 110kv etc.





“Particular Risks”

- **Assembly or Dismantling of Heavy Prefabricated Components:**
- This category includes work involving:
 - steel sections;
 - pre-cast concrete framing elements;
 - pre-cast concrete floor units;
 - pre-cast concrete cladding units;
 - trussed rafters; and
 - some items of mechanical plant.



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Coffee Break





Duties of Client, Designers and Project Supervisor Design Process

Client Duties

- Appoint in writing competent and adequately resourced PSDP and PSCS
- Terminate or change the appointments if necessary to do so;
- Be satisfied that contractors and designers engaged by the Client have adequate competence and resources.
- Retain any safety file and other relevant information and make available to any person who may legitimately need the information;
- Pass on the Safety File if the structure is disposed of;
- Provide information relevant to the project / structure.
- Cooperate with the Project Supervisors
- Notify the HSA (when notification is required) (AF1 form or on line)

Designer Duties

- Take account of the General Principles of Prevention
- Take account of Safety Plan / File
- Communicate necessary control measures, design assumptions or remaining risks in writing
- Co-operate with PSDP or PSCS ... as appropriate
- Provide information on Particular Risks in writing
- Comply with any direction from PSDP or PSCS as appropriate
- Where no PSDP has been appointed, **inform the Client that a PSDP must be appointed**
- Provide information that is necessary for the PSDP to prepare the safety file

PSDP Duties

- Take account of General Principles of prevention
- Take account of any existing Safety File / Safety Plan
- Co-ordinate the work of Designers involved ('...Organise co-operation between designers on the same project and, so far as is reasonably practicable, ensure co-ordination of their activities.....')
- Provide relevant information to the PSCS for inclusion in the Safety Plan
- For projects which require a Safety and Health Plan, prepare a Preliminary Safety and Health Plan
- Prepare the Safety File
- Coordinate the Design of Temporary Works
- Accept appointment 'in writing'

Required of PSDP and Designers

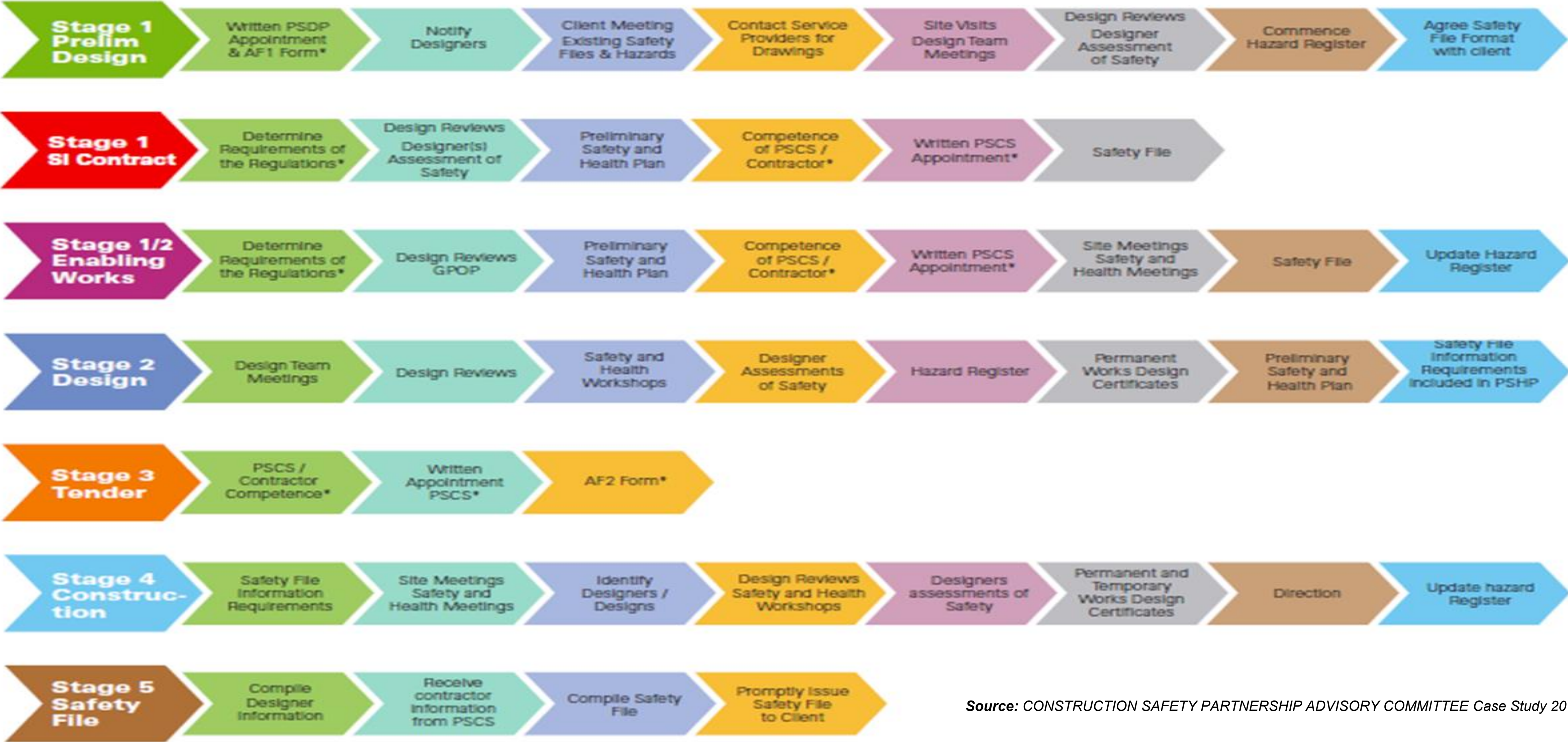
- Consider Buildability
- Identify safe methods of construction for unusual or complex designs?
- Design for Maintainability
- Structural Stability during Construction
 - identify if Temporary Works Design may be required
- Identify Key Hazards, Eliminate, Reduce where possible
- Identify Residual risks

- All should maintain good records



Co-ordination of designers and organising co-operation between designers

Approach to PSDP Role



* Items which are client responsibilities and not specifically a requirement of the PSDP.

Effective PSDP coordination

- Identify all designers
- Agree circulation and communication methods
- Review designs, design risk assessments, Identify risks
- Organise reviews / Workshops - design, design risk assessments....
 - *Best communication takes place if all are in the same meeting*
- Establish a means of tracking information - risk register
- Checking that the structure / construction project can be built safely by a competent contractor? Maintained safely?
- Check that key hazards been identified and assessed?
- Checking that issues being dealt with by one designer are not overlooked by other designers?
- Note that Different levels of projects require different levels of Coordination and record keeping
 - *From a complex IT system to keeping notes in a diary*



Information requirements from Designers – best practice

Provision of Information

- Designers should provide information (in writing) to
 - Convey information on risks to the PSDP who will pass it to the PSCS; and
 - Protect the practice / designer organisation
 - Satisfy legal requirements

Information required from Designers

- **Design Risk Assessments**
 - What are the significant hazards arising from the design?
 - What can be done / was done to eliminate / reduce the risk?
 - If not considered appropriate to take those steps, record the reasons.
- **Information to be passed to contractors**
 - Information on particular risks
 - Phasing requirements, Assumed methods of construction not obvious to a 'competent' contractor – for unique or awkward designs.

Design Constraints (issues to be considered by design team)

- **Timescale / Programme**
 - Are the client expectations achievable from a H&S perspective
- **Access to the site / Shared building access**
 - Will this be an issue and what are the options to address
- **Existing Services or lack there-of**
 - Existing Safety File / records
 - Commission Surveys to inform the design
- **Poor ground conditions**
 - Existing information
 - Commission ground investigation surveys
- **Contaminated ground / Asbestos containing materials**
 - Make sure appropriate surveys are carried out and / or
 - Provision is made for surveys to be carried out by the contractor.

Recording of information / design safety actions taken

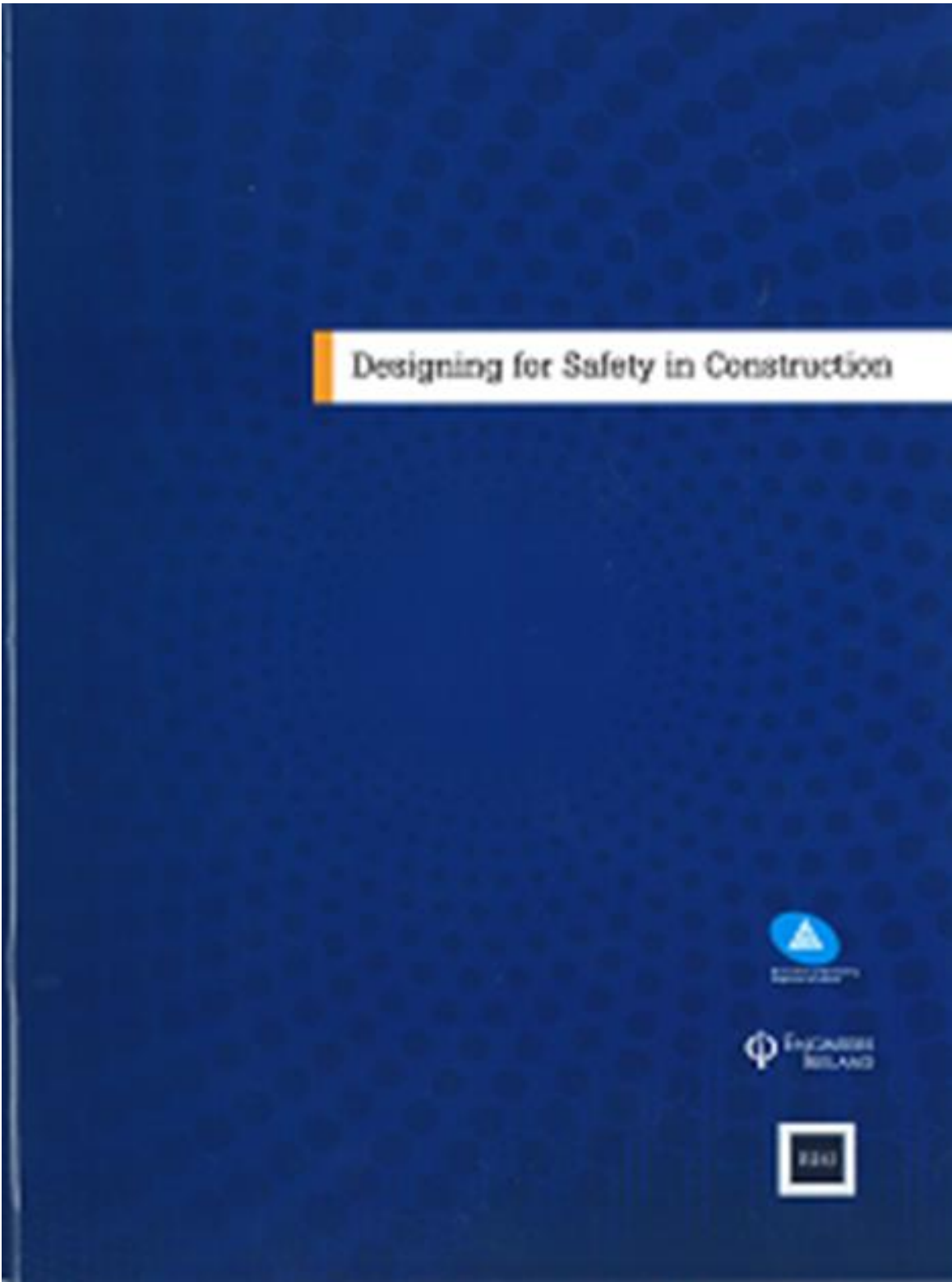
- Design Safety Risk Register
 - Records issues identified and responsibility for action taken:

Hazard Identification		Design Mitigation	
Project Element	Site	Measures to Eliminate or Minimise Risk (per location)	Owner
Environment			
Site location / layout & interface with others	Open space being used as LA material storage.	Planning data gathered and proposals being developed in line with current planning constraints / guidelines.	DT
Site entrances / exits (sight lines)	Proposed development entrance set back from junction and positioned to allow for sight lines.	Included as part of site option development and consultations with each local authority. Road Safety Audits undertaken to make sure final design option viable.	CS
Site establishment	N/A	Included as part of site option development	DT
Traffic impacts	Minimal traffic impact envisaged	Available traffic data used to inform likely impacts and traffic studies being undertaken to confirm assumptions.	CS
Local residents / users incl parking behaviours	Minimal impact envisaged	Should not be an issue, except for where access to future sports area could be through the site.	DT
Adjacent undertakings	Bounded by GAA facilities, development site and two main traffic routes to the city.	Adjacencies are considered as part of the design development	DT
Contamination	Potential from previous tunnelling operations on the site (launch pit) - Low Risk	Further review of East Wall site reports being undertaken	DT
Topography	Relatively flat	Site survey's information received and used to develop layouts.	DT
Existing services	Connections to all services will be outside the site.	Site Survey's commissioned to confirm records available. ESB contacted to confirm supply needs. Existing records for service obtained for each of the sites.	CS + ME
Existing structures (above & below)	Pit shaft for Dublin Port Tunnel located within the site.	Survey's commissioned have provided detailed information to inform the designs and costs for the project.	DT
Emergency access provision	No Issues	Provision requirements included in the design development.	DT
Fauna Flora Trees	No Issues	Survey's commissioned have provided detailed information to inform the designs and costs for the project.	DT
Wildlife / Birds	No Issues	Survey results informing design options.	DT
Protected structures (heritage)	No Issues	Surveys and reports informing emerging designs.	DT
All survey needs addressed.	Yes	Delay in Lot 2 Geotechnical Surveys due to contractor performance.	DT

Site Clearance / Groundworks			
Contamination	Unlikely	Survey's undertaken have provided detailed information.	DT
Services	No known services within the site	Survey's commissioned to provide detailed information	DT
Radon gas	1-5% low Radon Risk Area	Needs to be considered as part of the design criteria.	DT
Deep excavations	Can be avoided, except for service connections	Surveys of existing services will provide information on extent of risk. Cross sections of emerging designs to confirm extent of excavations needed.	DT
Unstable ground / undermining	Unlikely	Survey results providing detailed information	DT
Temporary works	Utility Connections / Site Compounds and Hoarding	DT to confirm any other TWD envisaged by providing DRA's	DT
Groundwater / Flooding	N/A	Survey's confirmed that there are no issues.	DT
Road / street work needs	Significant (500m) Foul connection needed outside the site.	Emerging designs to determine extent of works needed.	DT
Construction			
Material choices (Hazardous, size etc)	Works requirements and standards to be included in design requirements		
Prefabrication			
Masonry / concrete	Dictated by DCC Planning guidelines		
Steelwork / timber structures			
Glazing / windows	Dictated by DCC Planning guidelines		
Cladding	Dictated by DCC Planning guidelines		
Installation of building services	Design to meet current standards and best practice		
Tying into existing services	Connection details being developed to determine extent of works needed.		
Maintenance & Cleaning			
Roof services	Being avoided where possible		
Plant rooms	Ground level		
Loft spaces	Being avoided where possible		
Cleaning roof lights, gutters, roofs	Standard building heights, considered as part of design		
Street lighting	Design being coordinated by Design Team to find optimum solution		
Roads / common areas	Meeting current codes and standards		
Work at heights	Standard building heights, considered as part of design		
Landscaping	Specialist designer providing input in determining particular site needs		
Other			

Best Practice

- R.I.A.I. / A.C.E.I. / E.I. Designing for Safety in Construction
 - Common and accepted methods of recording information
 - Design Risk Assessment decisions



DRA #001 Form QM 3.1(b1)

Designer's assessment of safety and health hazards/risks			
Designer	Project: XXX	Designer: AB	Date: 08.10.2021
	Ref No: mc2000783	Checker: TB	Sheet no: 1
Design Stage: Design Note: review previous stage b/f items			
No.	Key construction hazards (or risks) identified	Evaluations. Design decisions made (or alternative actions)	
1.	Interaction of public with construction traffic, centre operational traffic and peak traffic	There is a car parking at the entrance to the site. The existing pedestrian routes are to be reviewed and may require new pedestrian crossing road markings. Control measures to be put in place during construction works to separate construction operations from the public. The site is currently crossed by a path used by walkers. Construction of the new pedestrian path along the west boundary should be coordinated with the client. Control measures to be put in place for centre vehicles and site vehicles to separate from the public. There may be congregation of public in the existing car park that should be considered.	
2.	Clearing of site	Control of noise and dust to be considered when clearing the site and possibility of hazardous material to be considered.	
3.	Depth of drainage works	It is proposed that surface water will be treated on site. Due to infiltration rates of the soil, a swale will be required. The topology of the site allows for minimum depths for the drainage. Location of pedestrian paths to be reviewed following design of drainage requirements.	
Notes re providing information [see DSC Chap 4]		Item Nos. (from above)	Remarks
a) for client's designers [section 4.3]		1, 2, 3	
b) "Schedule 1" hazards/particular risks [Box B]			
c) other 'particular risks' [Box C]		1	
d) re assumed construction methods [Box D]		1, 2, 3	
e) for Safety File [section 4.5]		3	
f) in-house: b/f to future stages		1, 2, 3	
Other parties please take note: These are designer's risk evaluations of design options (and ancillary notes) carried out in-house for the purpose of our complying with designers' duties under the Safety, Health and Welfare at Work (Construction) Regulations 2013. The evaluations relate only to those aspects/elements of the project which we are responsible for designing under the terms of our appointment by our client. Other parties should not rely on these evaluations for their own purposes; in particular, contractors, who must deal with and control all risks arising during construction, must carry out their own definitive risk assessments as little for that purpose.			



Use of Approved Codes of Practice

Status of HSA ACoPs and Guidelines

- ACoPs and Guidelines form third tier of legislation.
- Codes have special legal status*
 - You may use alternative methods, but you will have to show you complied with the law.
- Following guidance is not compulsory
 - Free to take other actions to achieve compliance.
- But if you do follow the guidance, you will normally be doing enough to comply with the law
- HSA inspectors seek to confirm compliance with the law and may refer to ACoP's and Guidelines as illustrating good practice and compliance.

Relevant ACoPs and Guidelines

ACoPs

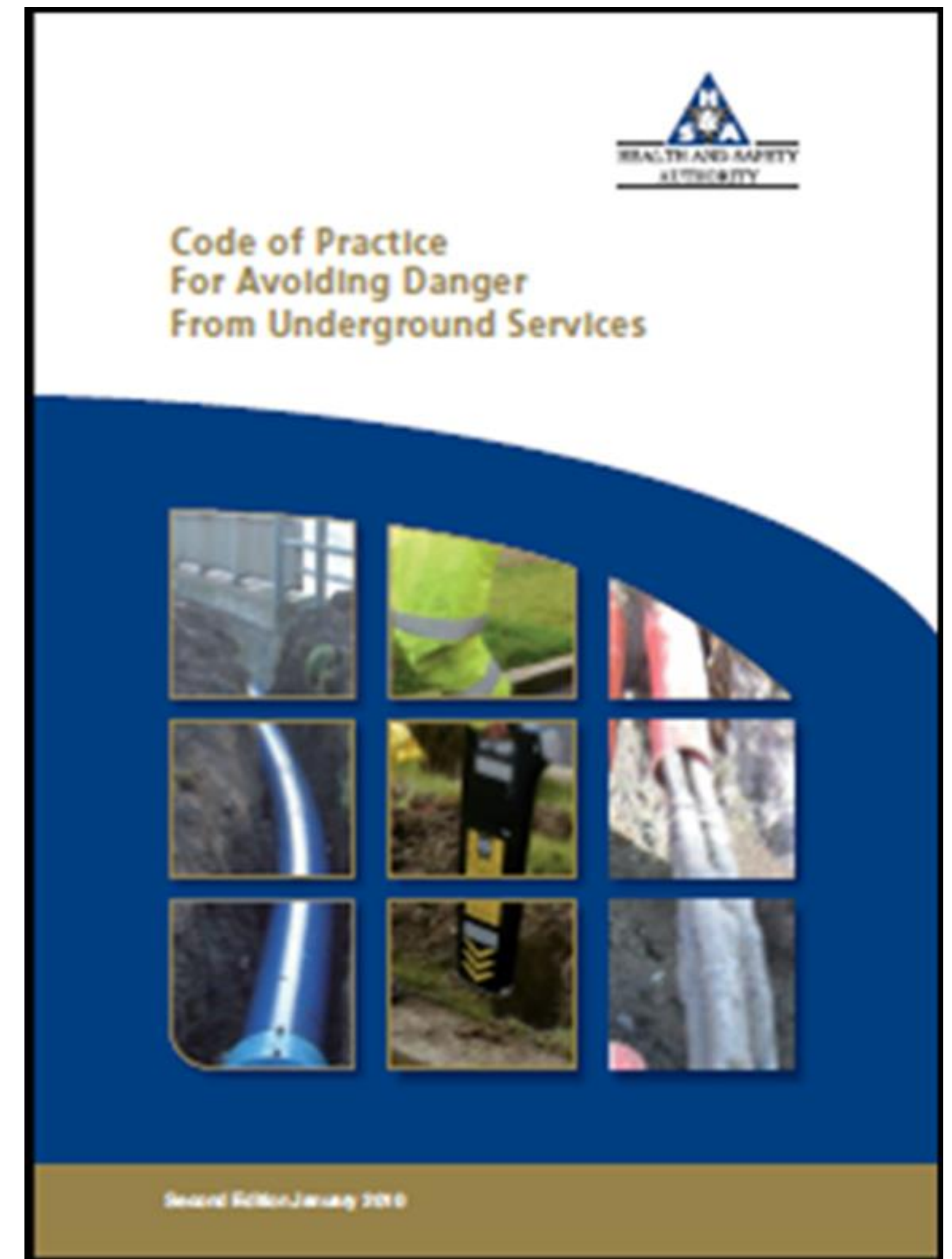
- Access and working scaffolding
- Working in confined spaces
- Avoiding danger from underground services
- ESB Code of Practice for Avoiding Danger from Overhead Electricity Lines
- Safety in roofwork
- Design and installation of anchors
- Code of Practice for indoor air quality*

Guidelines

- Guidelines to Construction Regulations
- Client guidance
- Asbestos
- Working at Height

Underground Services ACoP

- Reference to placing services too close together....
For future maintenance / access
- Where possible, the designers should obtain up-to-date maps and records of all potentially hazardous underground services in order to allow them consider, at the design stage, the risks posed by those services
- Trained operators using detection equipment



Overhead Electricity Lines ACoP

- Introduces The “Hazard Zone” and the ‘Exclusion Zone’
- Methods to prevent access into Hazard Zones is ‘Temporary Works’ – design of temporary works must be coordinated by the PSDP
- In coordinating the design of temporary works, the PSDP should ensure that relevant designers include on their drawings the routes of all overhead lines that:
 - (a) Cross over the site or
 - (b) cross over the access routes to the site or
 - (c) are adjacent to the site boundaries.

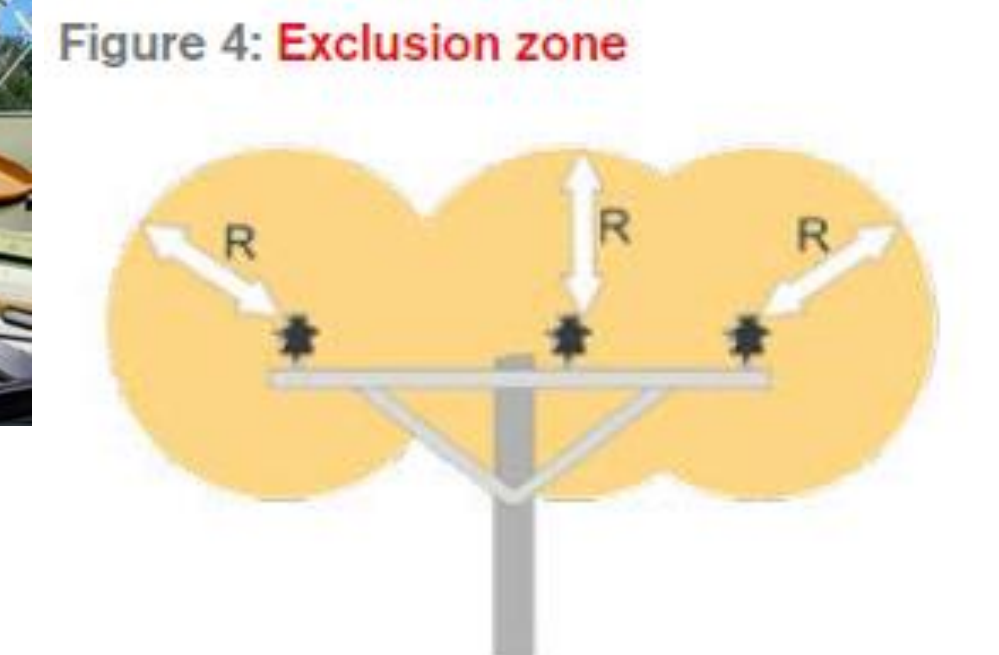
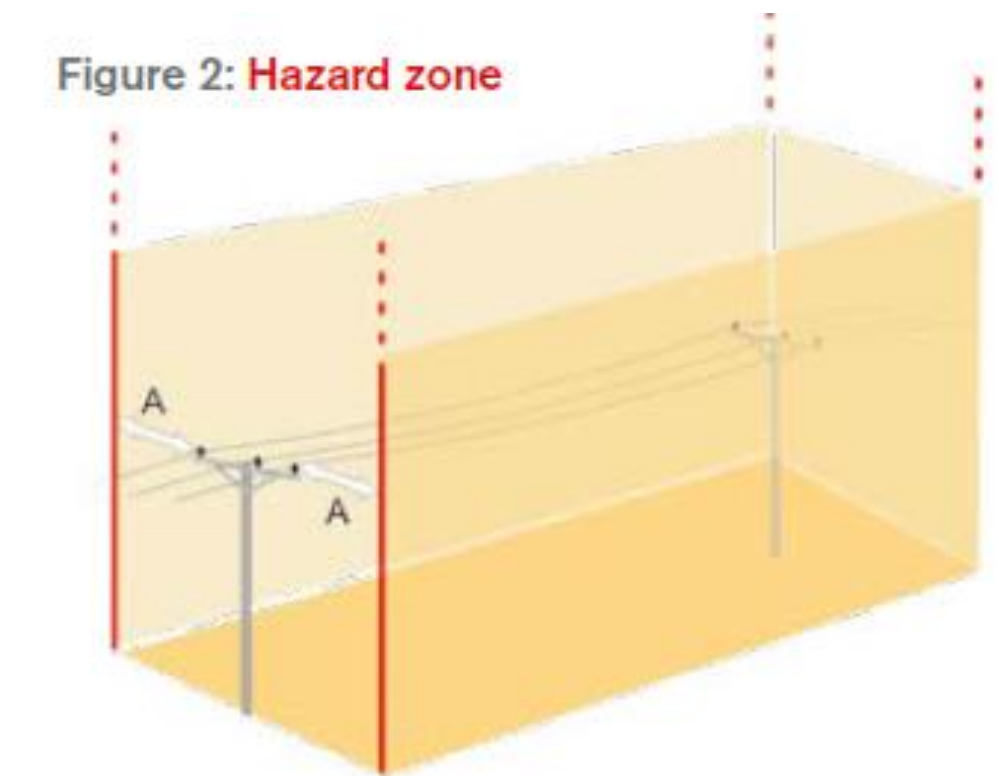
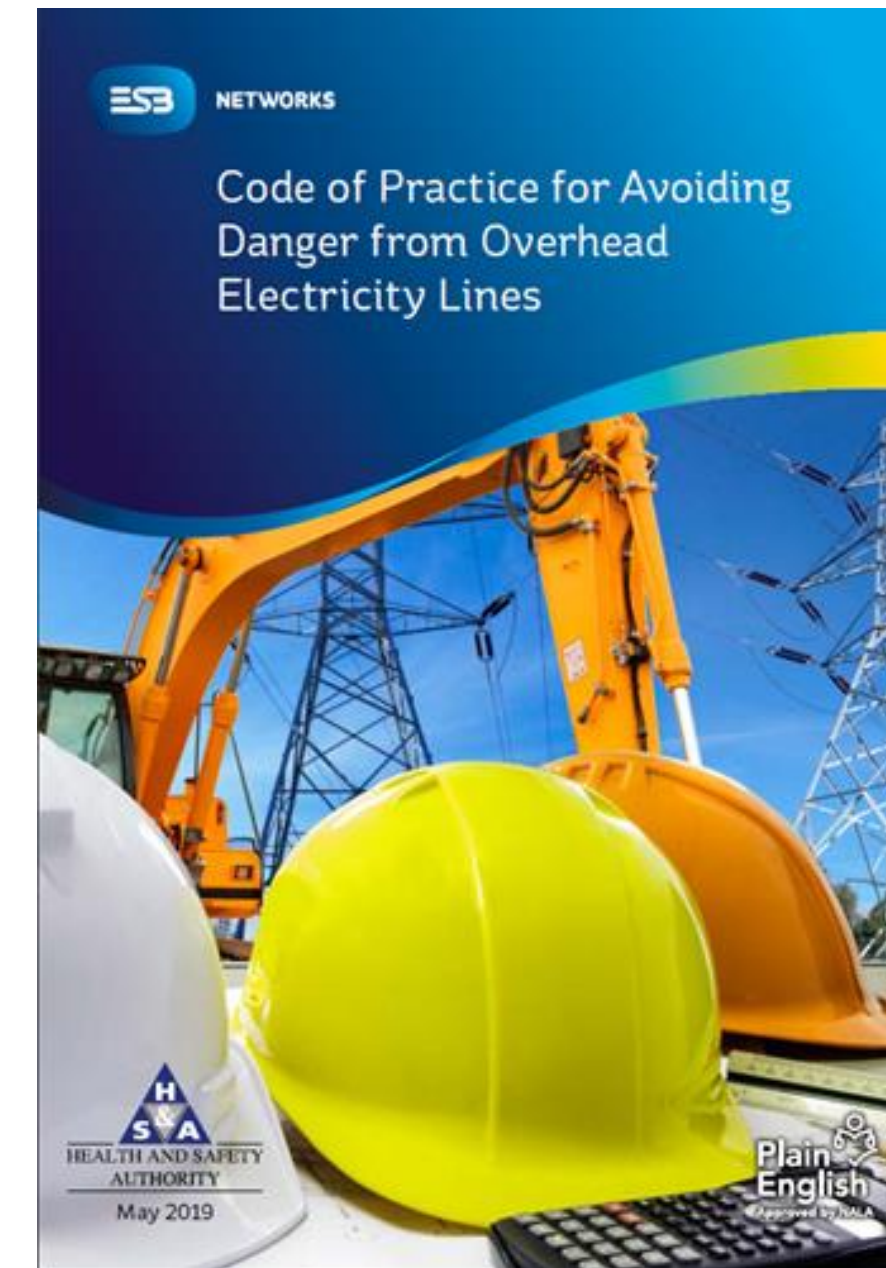


Table 1: **Hazard zone** minimum distances

Nominal phase-to-phase voltage of overhead line	Minimum horizontal distance (A) in metres
LV, 10kV, 20kV and 38kV	6.0
110kV, 220kV, 400kV (and other voltages in this range)	10.0

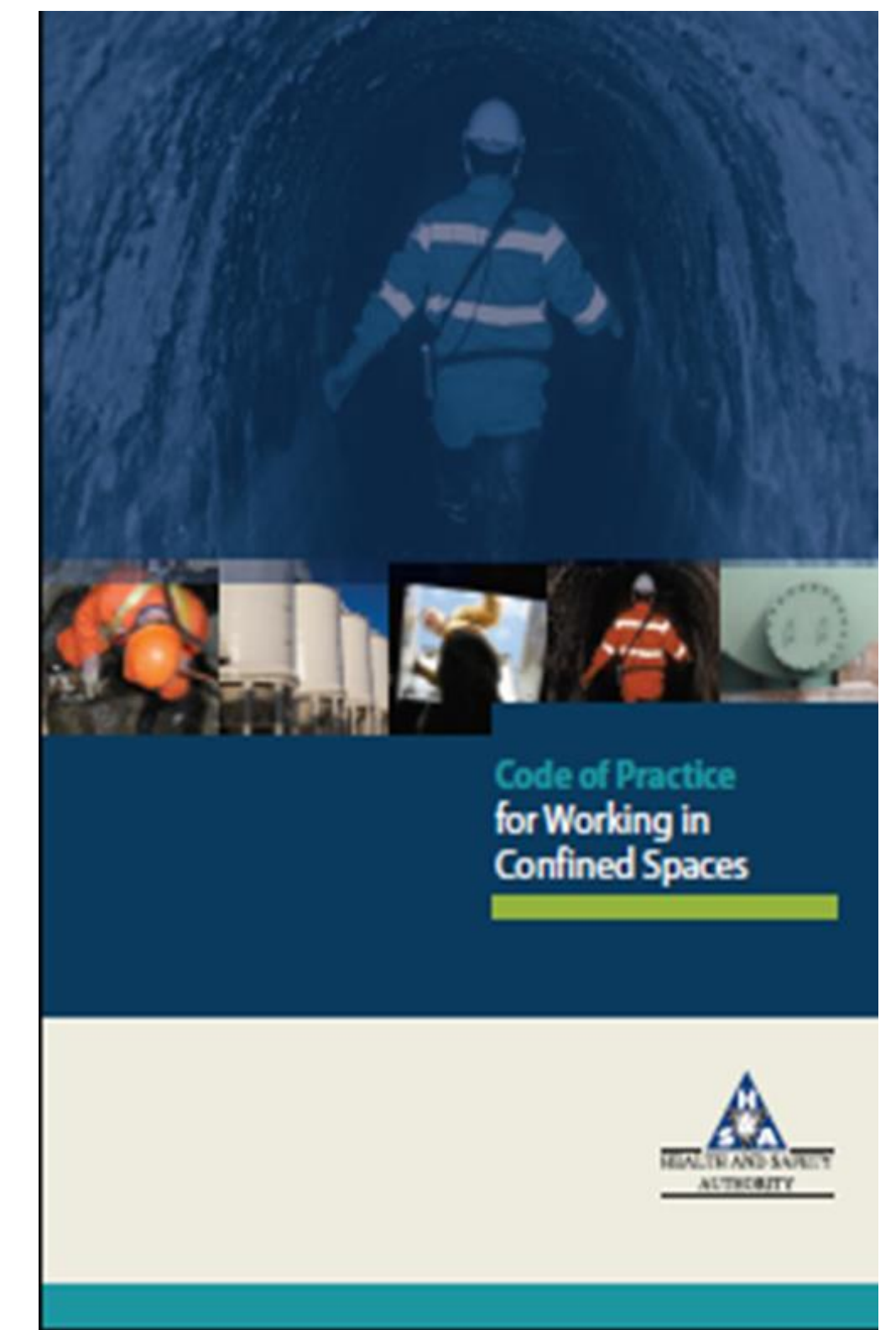
Confined Spaces ACoP

- Designers should, where elimination of the need for persons to enter a confined space is impracticable, ensure that entry and exit can be achieved with as much ease as possible.
- The size of openings used for access to and egress from confined spaces needs to be adequate to allow ready passage.

CONFINED SPACE – Definition

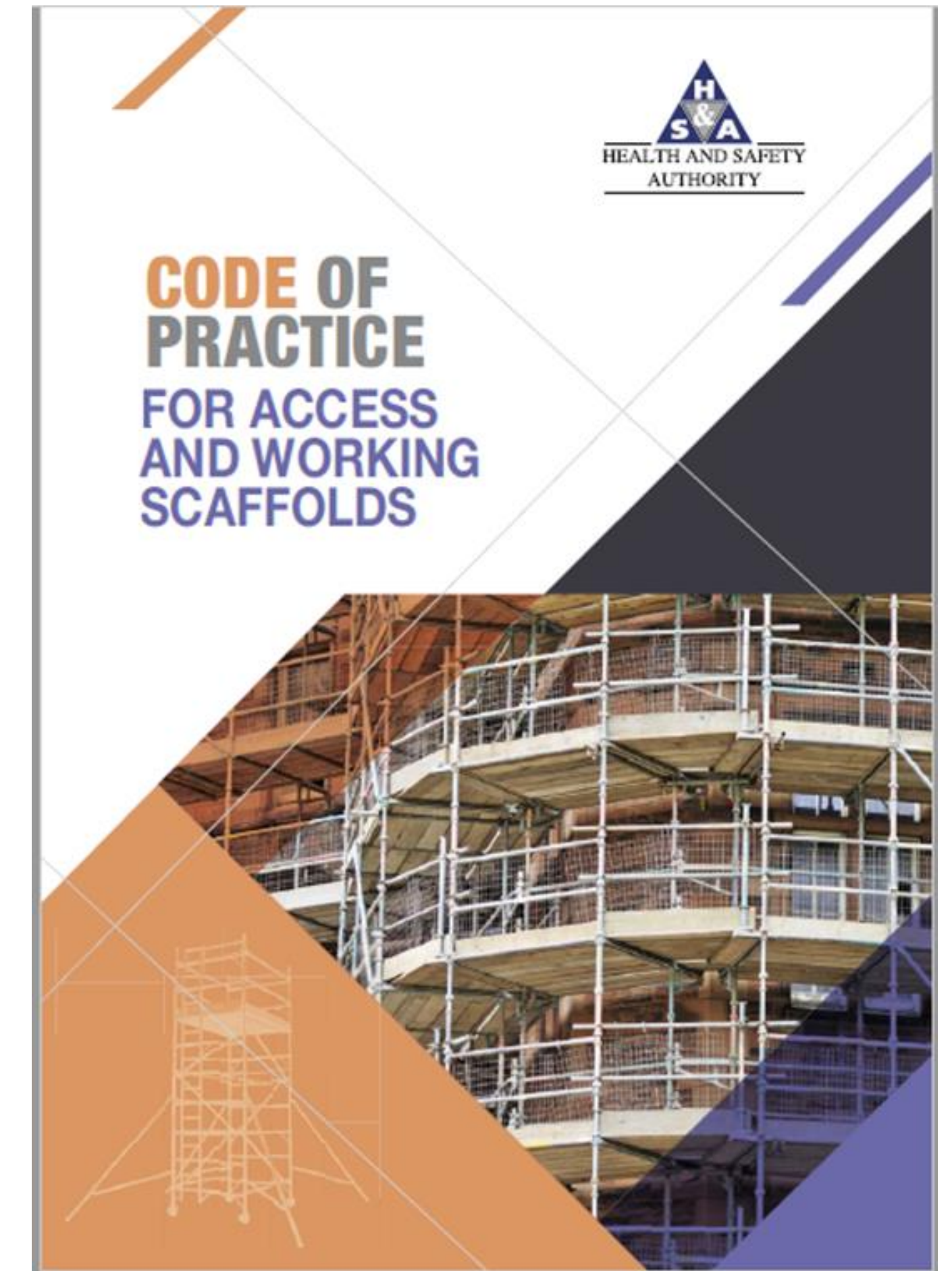
The term CONFINED SPACE means any place, including any vessel, tank, container, vat, silo, hopper, pit, bund, trench, pipe, sewer, flue, well, chamber, compartment, cellar or other similar space which, by virtue of its enclosed nature creates conditions which give rise to a likelihood of accident, harm or injury of such a nature as to require emergency action due to:

- a) The presence or reasonably foreseeable presence of:
 - i. flammable or explosive atmospheres,*
 - ii. harmful gas, fume or vapour,*
 - iii. free flowing solid or an increasing level of liquid,*
 - iv. excess of oxygen,*
 - v. excessively high temperature.**
- b) The lack or reasonably foreseeable lack of oxygen.*



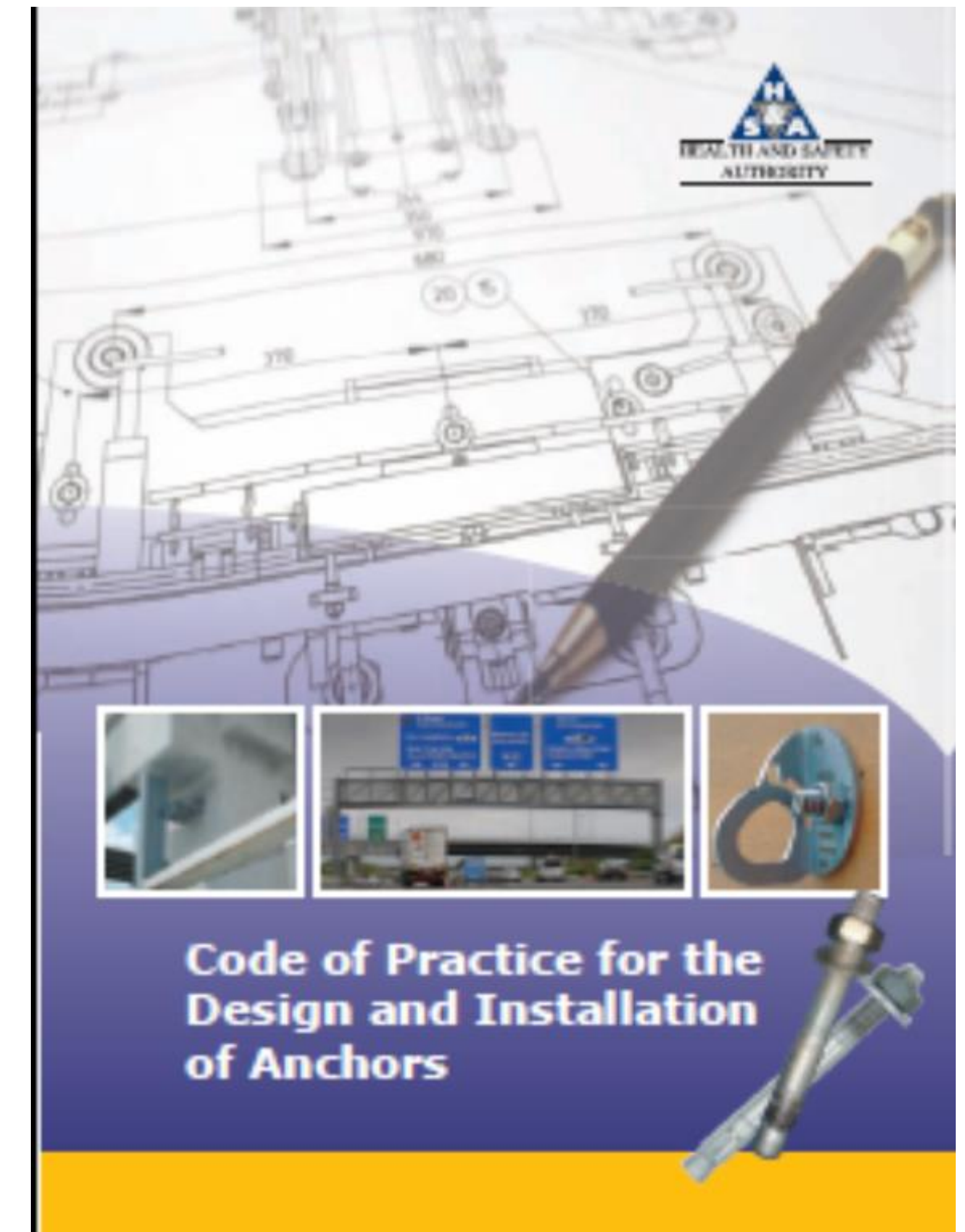
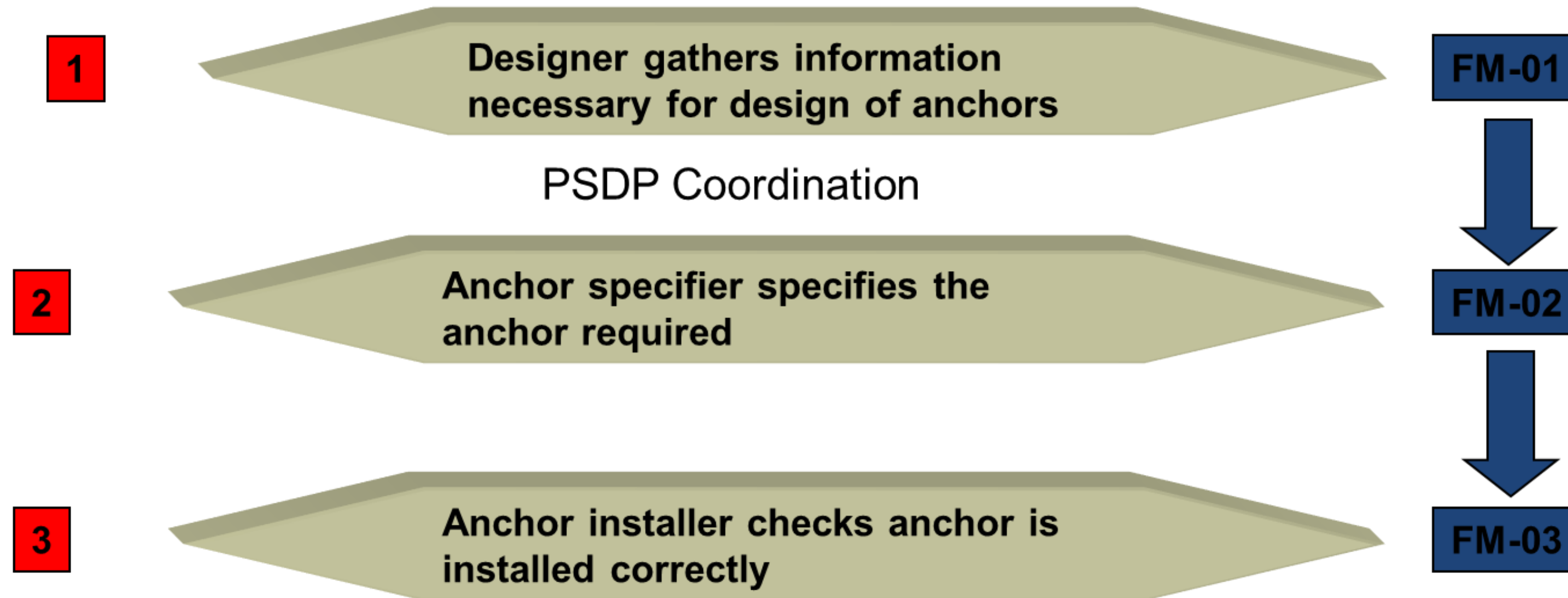
Access and Working Scaffolds ACoP

- Design (in this ACoP) means conception and calculation to produce a scheme for erection
- Not all scaffolding requires a design:
 - General access scaffolding, erected in accordance with the manufacturer's instructions, does not require any further design.
- Details of scaffolding which requires 'Structural Design and Calculation' is provided in Section 2.3.2 of the Code of Practice.



Structural Anchor ACoP

- To be used in 'Safety Critical Situations' - where the failure of such connections would cause risk of human injury or death



Code of Practice for Indoor Air Quality

This Code of Practice should be consulted in the planning and design of new work environments and in the refurbishment or upgrading of existing work environments.

1. (1) These Regulations may be cited as the Safety, Health and Welfare at Work (General Application) (Amendment) Regulations 2023.

(2) These Regulations shall be included in the collective citation the Safety, Health and Welfare at Work (General Application) Regulations 2007 to 2023.

(3) In these Regulations “Principal Regulations” means the Safety, Health and Welfare at Work (General Application) Regulations 2007 (S.I. No. 299 of 2007).

2. (1) Regulation 2 of the Principal Regulations is amended in paragraph (1) by the insertion of the following definition:

““relevant code of practice” means a code of practice, relating to these Regulations, published under section 60 of the Act;”.

(2) Regulation 2 of the Principal Regulations is amended by the insertion after paragraph (4) of the following:

“(5) For the purposes of these Regulations, an employer shall take into account those measures set out in a relevant code of practice.”.

(3) Regulation 6 of the Principal Regulations is amended by the insertion after subparagraph (d) of the following:

“(e) for the purposes of this Regulation, those measures to ensure sufficient fresh air is provided in enclosed places of work shall take into account those set out in a relevant code of practice.”.

*2023 amendment to
the General Application Regulations*



Code of Practice for Indoor Air Quality



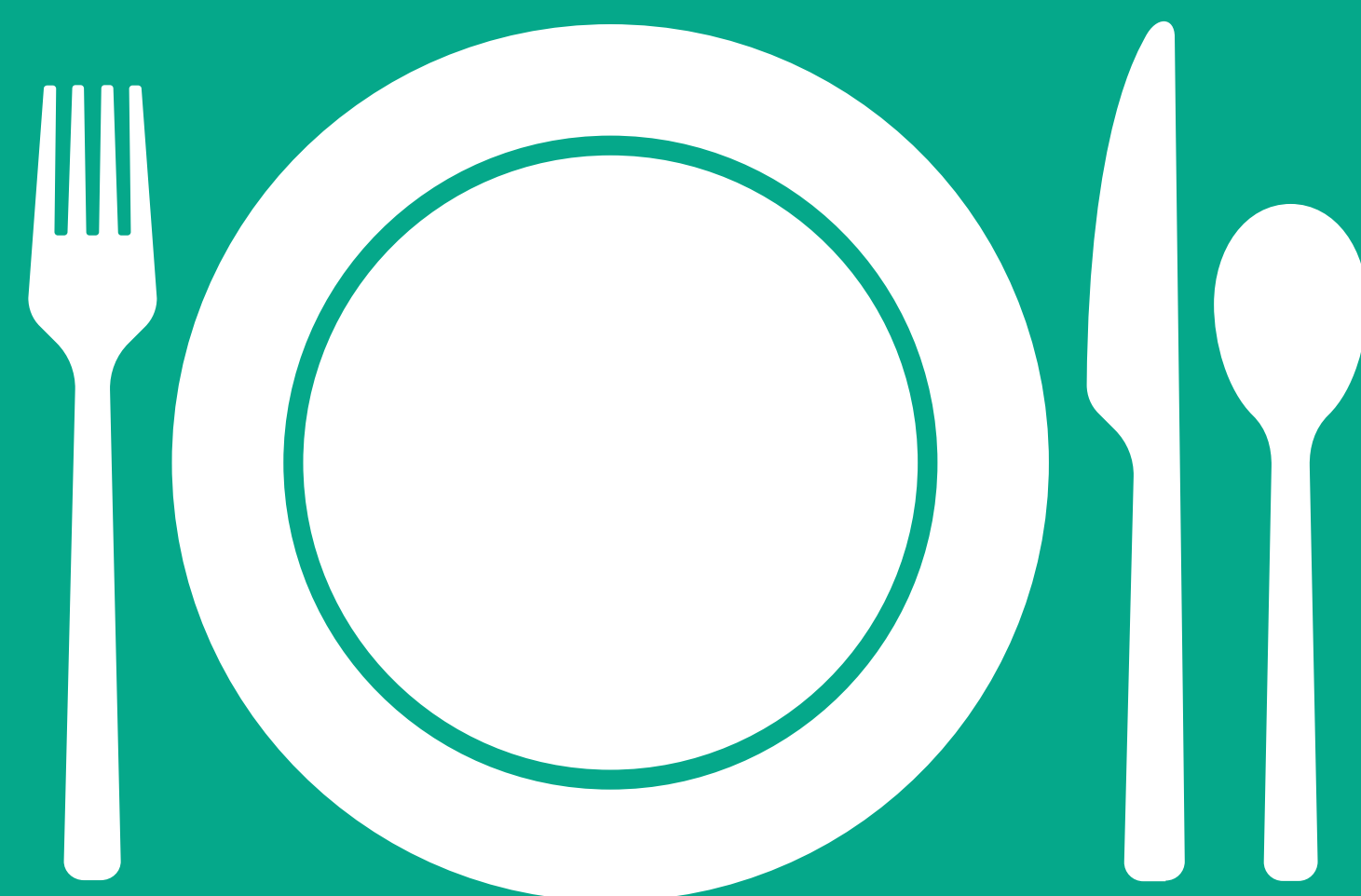
www.hsa.ie





CMG Training

Lunch





The Preliminary Safety and Health Plan

Preliminary Safety and Health Plan

2013 Regulation (12)

- i. a general description of the project and of the time within which it is intended that the project will be completed
- ii. appropriate information on any other work activities taking place on the site
- iii. where appropriate, work related to the project which will involve particular risks to the safety, health and welfare of persons at work including but not limited to those referred to in Schedule 1
- iv. the basis upon which the time in subparagraph (i) was established, taking into account Regulation 11(1)(a),
- v. the conclusions drawn by designers and the project supervisor for the design process as regards the taking account of the general principles of prevention and any relevant safety and health plan or safety file, and
- vi. the location of electricity, water and sewage connections, where appropriate, to facilitate adequate welfare facilities.

Preliminary Safety and Health Plan – Sample Contents

- **General Description Of Project**
 - Project Details
 - Who is Client, PSDP, Current designers, PSCS?
 - Timescale of Project - anticipated start and finish dates, Basis this timescale was estimated on
- **Project Safety Objectives**
- **Reference To Drawings / Specifications**
- **Relevant Adjoining Land Uses – Schools, Hospitals, Construction Sites ...**
- **Site Restrictions**
 - Any particular site rules (e.g. pharmaceutical)
 - Local emergency procedures
 - Local security arrangements
- **Phasing of Works**
- **Other Work Activities on site**
- **Known Existing Services**
- **Information On Particular Risks**

Preliminary Safety and Health Plan – Sample Contents (continued)

- **Identification of Particular Design Requirements**
 - Anticipated Temporary Works Requiring Design
 - Scaffolding (list as per ACoP)
 - Structural Anchors, Examples of Safety Critical Situations likely to occur (list as per ACoP)
- **Recommendations / Specific Measures For Reducing Particular Risks**
 - Any particular work methods that are recommended for safe construction (where a method may not be obvious to a competent contractor)
 - Features of the design and sequences of assembly or disassembly that are crucial to safe working
 - Specified Materials requiring particular precautions
 - Location of welfare facilities –water, electricity, sewer
- **The Safety File**
 - Arrangements for gathering information for the Safety File
 - Contents of the Safety File
- **Continuing PSDP Liaison During Construction Stage**
 - Procedures Required
 - Site meeting - proposed agenda to include PSDP / Design Safety matters

Preliminary Safety and Health Plan / Construction Stage Plan for Domestic projects

- See HSA Guide for Contractors and Project Supervisors

CONSTRUCTION SAFETY AND HEALTH PLAN

(Template for domestic project)

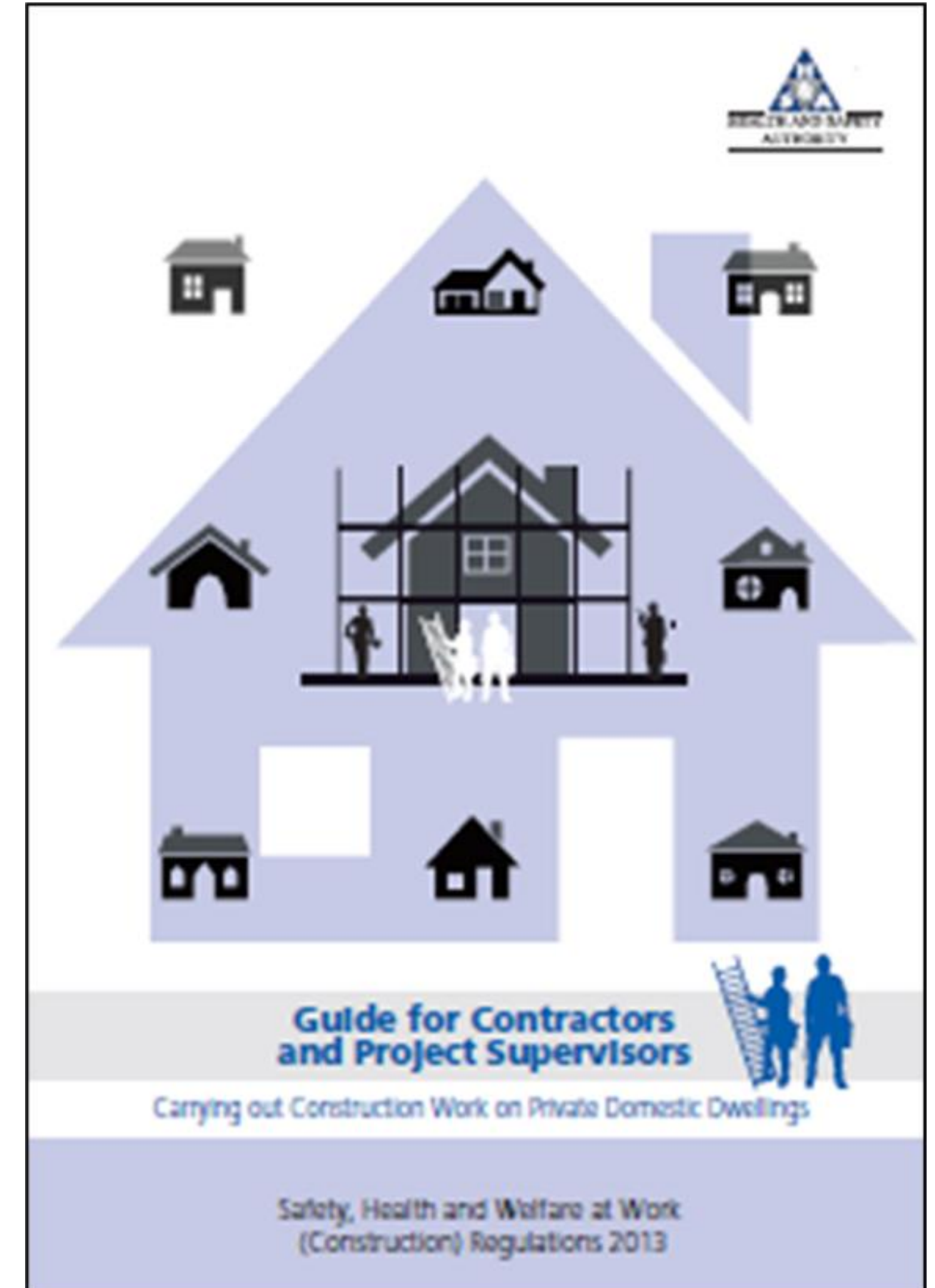


Indicates to be completed by Project Supervisor Design Process



Indicates to be completed by Project Supervisor Construction Stage

Project Supervisor Design Process (PSDP):



Typical Fire Safety Information for the Preliminary Safety and Health Plan

- Identify any adjacent fire fuel sources
- Existing Emergency planning
- Existing fire permitting requirements
- Nature of nearby activities, especially if they are sensitive to site-generated fire risks or pose fire risks to the construction work
- Details of any likely continued occupation of the site
- Details of any design assumptions or suggested construction processes or methods which lead to high / increased fire risk



PSDP Duties During Construction

PSDP Duties during Construction

- **Co-ordination of designers**

- Any particular risks associated with design changes during construction
- Specialist designers – design safety impact on other elements of the design
- Temporary Works Design – reliance / impact on permanent works design

- **Safety File**

- Liaison with PSCS in gathering information
- Liaison with Assigned Certifier*
- Liaison with client for Safety File Handover



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Temporary Works

HSA 2013 Construction Regulations Guide:

- 'Temporary works may include such matters as trench shoring, scaffolding, propping, working platforms, gangways and access stairs / ladders, etc. Persons who make decisions on site in respect of these may be deemed to be designers.'
- 'the contractor has the duty to comply with the technical requirements relating to excavations, scaffolding and other specific element of the Regulations'

Temporary Works / Permanent Works

- **It may make sense that design / design coordination is not required for any Temporary Works / Permanent works which:**
 - Are assembled in conformity with a generally recognised standard configuration
 - e.g. in accordance with manufacturer's specifications or drawings, or standard layouts (2017 Guidance, Scaffolding ACoP)

And / or

- Can be built in accordance with manufacturer's specifications or drawings, or standard layouts prepared by recognised organisations. These guidelines must be available. (2017 Guidance, Scaffolding ACoP)
 - E.g. National Access and Scaffolding Confederation (UK) - TG20: Guide to Good Practice for Scaffolding with Tube and Fittings

Temporary Design Certificates

- Included in the Guidelines to the Regulations
- Not an absolute requirement
- Records coordination??
- Definitely focus the mind!

Guidelines on the Assessment, Design and Management Requirements of the Safety Health and Welfare at Work (Construction) Regulations 2005

Temporary Works Design Certificate
(to be completed by the Temporary Works Designer, Permanent Works Designer(s) and the PSDP)

Project: _____ Certificate Reference Number: _____

Element of Temporary Works to which this certificate applies: _____

Detail design codes adopted or complied with for these temporary works: _____

Reference numbers for calculations, completed & checked: _____

Drawings Numbers completed & checked: _____

Provide the assumed construction sequence required by the Temp Works Design: _____

Requirements for temporary stability, propping, bracing, loading: _____ Fully detailed on drawings: ☐ Yes ☐ No
Additional information attached: ☐ Yes ☐ No

We hereby confirm that we have to date carried out, and will continue to carry out as necessary, the design of those parts of the works which we are appointed to design and that we have exercised reasonable professional skill, care and diligence with due regard to our duties under the Safety, Health and Welfare at Work Act, 2005 and under the Safety, Health and Welfare at Work (Construction) Regulations, 2006, and:

1. have taken account of the General Principles of Prevention and any existing Safety File;
2. have provided the PSDP and PSCS as appropriate with all relevant information as required by the Regulations; and
3. have cooperated with the PSDP and PSCS and with other Designers, as necessary.

Signed: _____ for & on behalf of the Temporary Works Designer: _____ Date: _____

We hereby confirm that we have communicated our design assumptions to the Temporary Works Designer. We are satisfied that our permanent works design can be constructed to be safe and without risk to health in accordance with Section 17 of the Safety, Health and Welfare at Work Act, 2005.

Signed: _____ for & on behalf of the Permanent Works Designer: _____ Date: _____

We hereby confirm that we have coordinated the activities of the Designers responsible for this element of the works, in respect of the taking into account the General Principles of Prevention and with due regard to our duties as PSDP under the Safety, Health and Welfare at Work (Construction) Regulations, 2006.

Erection of the Temporary Works may proceed, subject to the provision of a Temporary Works Method Statement agreed by the Contractor, Temporary Works Erector and PSCS as being adequate.

Signed: _____ for & on behalf of the PSDP: _____ Date: _____

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Form: HST1

Temporary Works Designer's Certificate

(For use in connection with the Safety Health and Welfare at Work (Construction) Regulations 2006. Nothing in this certificate shall be construed as imposing on the designer any liability whether in negligence, for breach of duty or otherwise that would not otherwise attach and the certificate is provided on this basis)

PSDP's Certificate Ref. No.: _____

1. Project:	
2. Designer:	
3. Designer's client:	
4. Elements/features of the temporary works for which we were/are appointed:	
5. Main design codes adopted: (if applicable)	
6. Drawings: (schedule may be appended)	
7. The intended construction sequence is detailed in:	
8. Requirements for temporary stability, propping, bracing, loading restrictions etc are detailed in:	
9. Certificate(s) by permanent works designer(s) which we have taken particular account of in respect of item 9: (if applicable, quote the PSDP's Certificate Ref. No.)	

We hereby confirm that we have to date carried out, and will continue to carry out as necessary, the design of those parts of the works which we are appointed to design exercising reasonable professional skill, care and diligence and with due regard to our duties under the Safety Health and Welfare at Work Act 2005 and under the Safety Health and Welfare at Work (Construction) Regulations, 2006 (the 'Regulations') in that we:

1. have taken account of the General Principles of Prevention and any existing Safety File,
2. have provided the PSDP & PSCS as appropriate with relevant information as required by the Regulations, and
3. have cooperated with the PSDP & PSCS and with other designers as necessary.

We confirm we have received all information and cooperation which we required from the designer(s) noted in item 9.

Signed: _____ for and on behalf of (temporary works designer) _____ Date: _____

We hereby confirm that we have coordinated the activities of the designer named above and the other designers on the project in respect of the taking account of the General Principles of Prevention during the design of the element(s) of the works described above with due regard to our duties as PSDP under the Safety Health and Welfare at Work (Construction) Regulations, 2006.

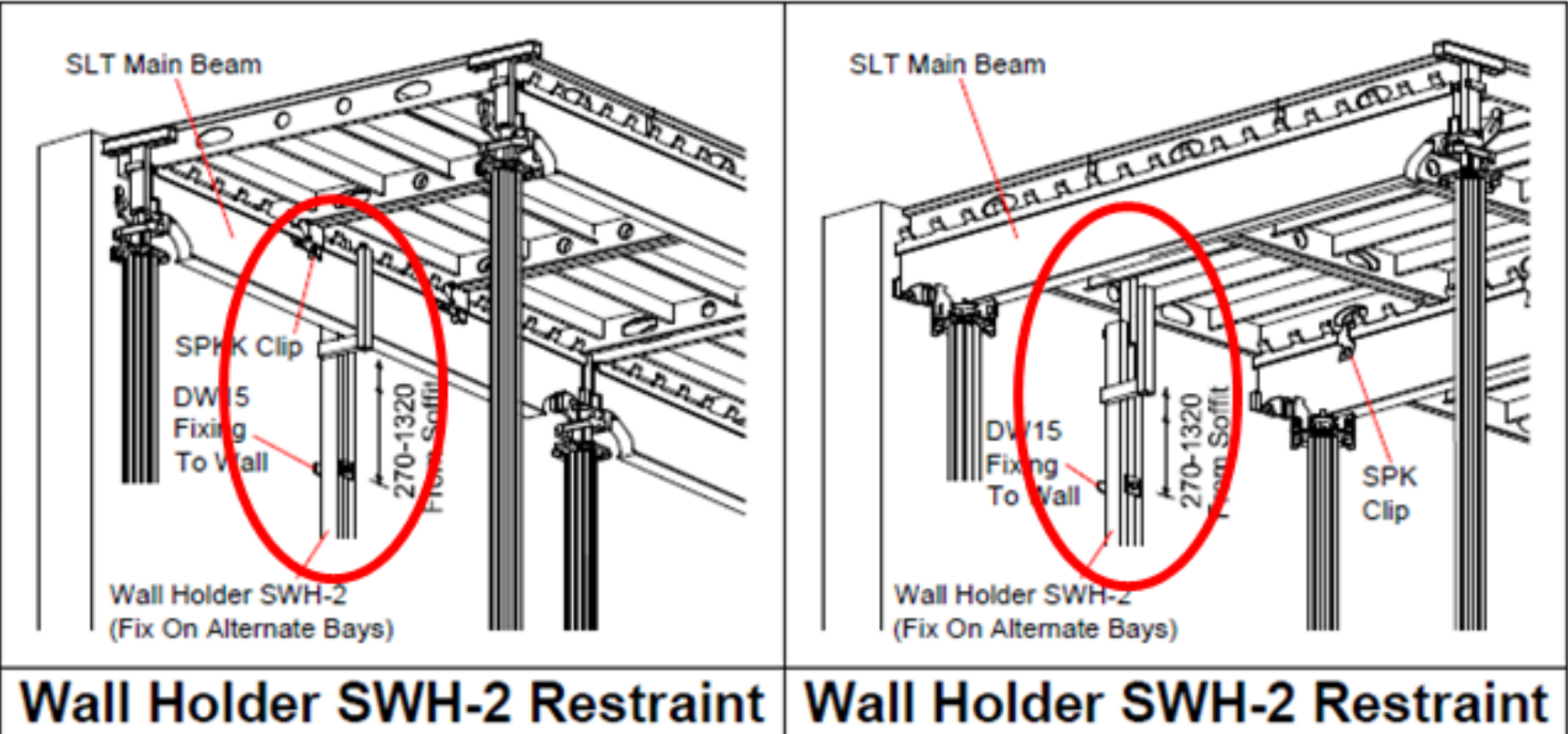
Erection of the Temporary Works may proceed, subject to the provision of a Temporary Works Method Statement agreed by the Contractor, Temporary Works Erector and PSCS as being adequate.

Signed: _____ for and on behalf of (PSDP) _____ Date: _____

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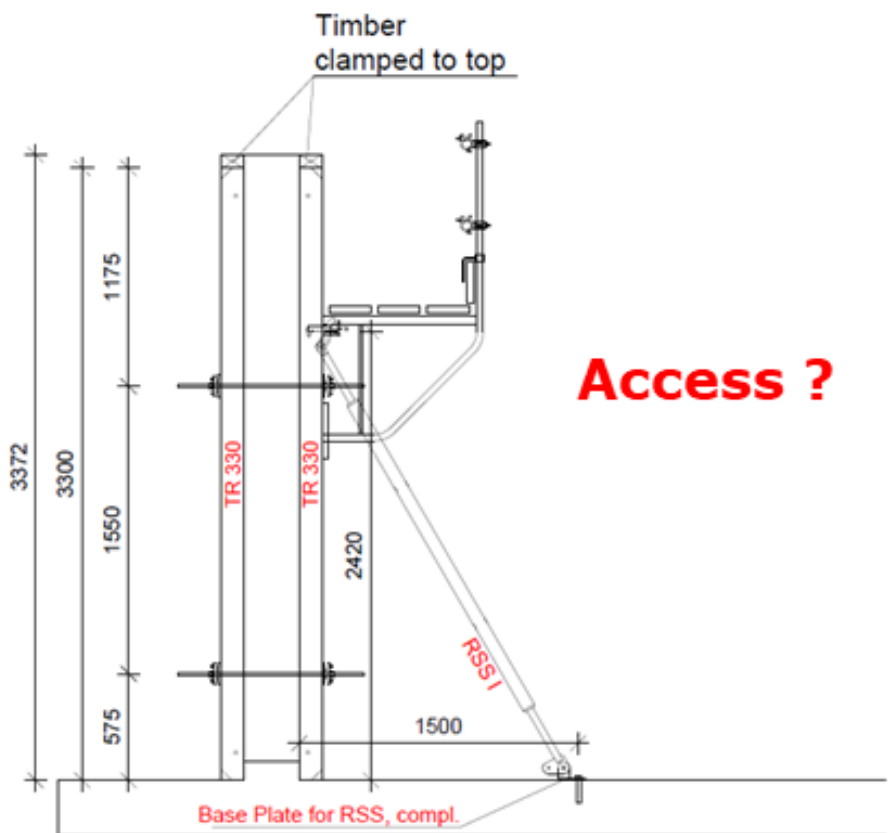
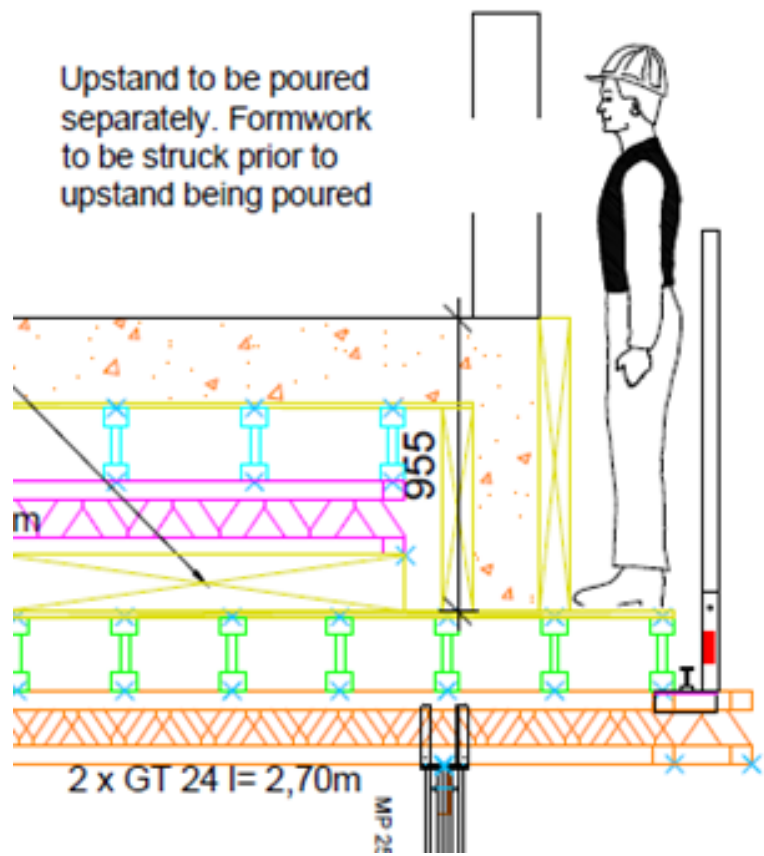
EI, ACEI, RIAI alternative Certificate

Shuttering and Decking - TWD



!!Additional Fall protection may be needed to ensure safety when working for top of slab.

Access ?



Typical Section

(3.3m high)

Scale 1:33.3

Access ?

2.3.2 Structural Design of Scaffolds

Bespoke drawings, designs and calculations for scaffolding must be prepared for scaffolding unless:

- the scaffolding is to be assembled in conformity with the manufacturers design, appropriate designs by competent designers or TG20.



CODE OF PRACTICE
FOR ACCESS
AND WORKING
SCAFFOLDS



Trench Works – Bespoke Designs



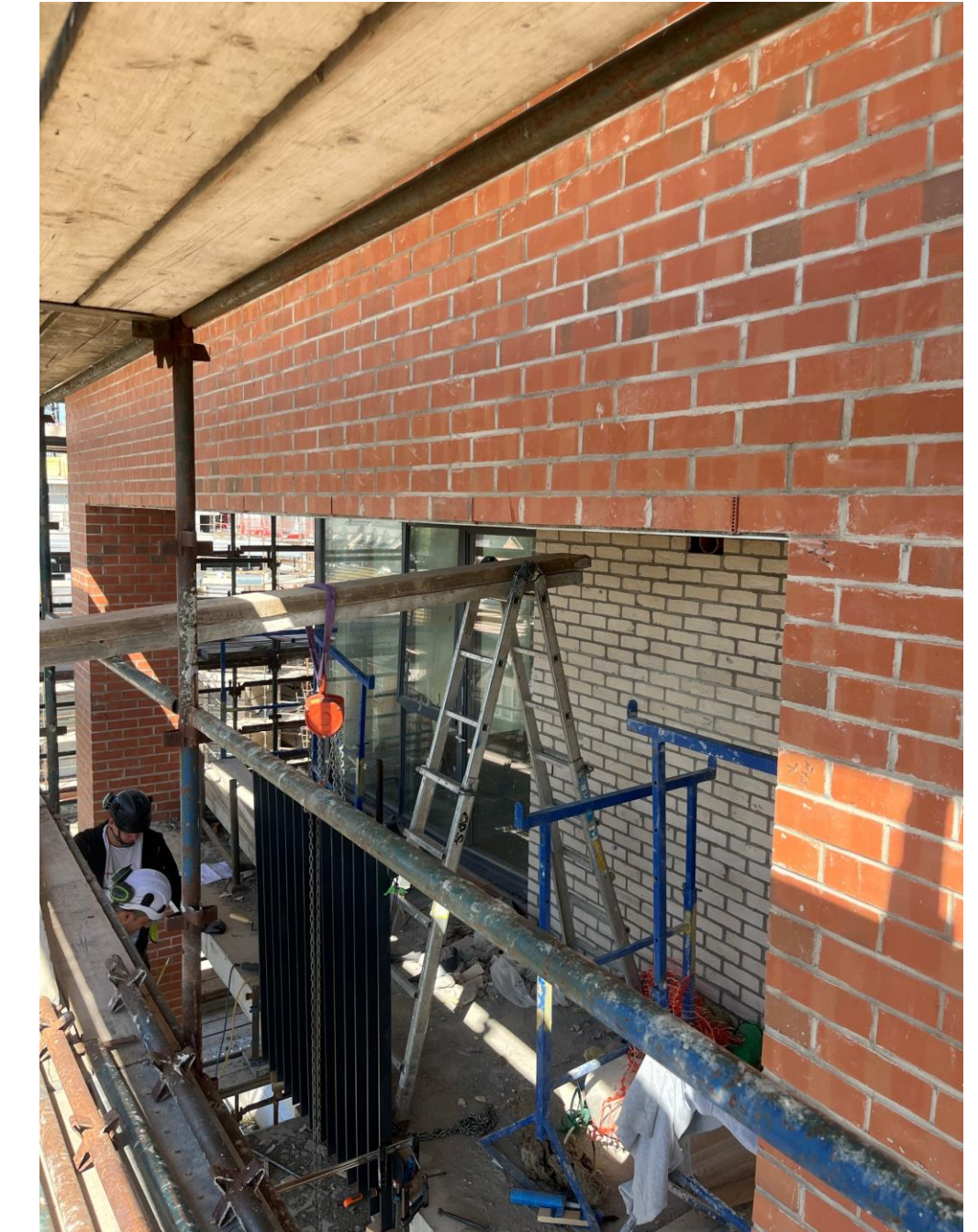
Crane relying on podium slab – coordination between PW and TW designers



Services Support over excavation + ground conditions



Additional Propping for Secant Pile Wall – interface with PW



? Coordination of design needed, how PW designer envisaged balconies would be installed – PSDP input

Heavy Lifting – Design Changes



You expect this (details included in RAMS)



And you get this (because it was 'available')



The Safety File

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The Safety File

- As-built drawings of the structure and services, Specifications and bills of quantities (where relevant)
- General design criteria / plans and specific design criteria / plans such as loading of roofs, floors, cranes, etc.
- Details of materials used, Information on any known hazardous materials
- Maintenance manuals and instructions for plant and equipment including Requirements for Maintenance procedures
- Instructions for routine maintenance especially where it may require particular safety measures
- Manuals and where required, certificates (BC(A)R)
- Residual risks: eg. Details of fragile materials and any incorporated facility to protect those working in close proximity, such as anchor points
- Future Demolition Hazards
- **Safety File may exist in the form of computer files or as paperwork**
 - needs to be determined early
- **Safety File is for future construction, demolition, maintenance**

Contributors to the Safety File

- Information for the Safety File can come from:

- Client
- PSCS
- Contractors
- Designers
- PSDP?

- Asset management systems

- Sharepoint
- A-Site
- Aconex
- DFM
- Fexillon
- Viewpoint
- Zutec

- Section 1 Design Details

- 1. Architect
- 2. Civil Eng
- 3. Electrical Eng
- 4. Mech Eng
- 5. Structural Eng
- 6. Facade
- 7. PSDP

- Section 2 Sub Contractor Files

- Section 3 Material Submittals

- Section 4 Quality

- Section 5 Temporary Works

- Section 6 BAM Docs

- Section 7 BCAR

- Offices

- 1 Project Particulars

- 1.1 Architect
- 1.2 C&S
- 1.3 Pack - M&E
- 1.4 Grant Planning
- 1.5 Grant FSC
- 1.6 Grant DAC
- 1.7 Landscaping
- 1.8 RAF & RCP's

- 2 Building Construction

- 2.1 Constr. Details
- 2.2 Compliance Certs
- 3 Operational Matters
- 3.2 Electrical O&M
- 3.3 Mechanical O&M

- 4 Building - Operational Documentation

- 4.1 As Built Drainage Drawings
- 4.2 As Built Electrical Drawings
- 4.3 As Built Mechanical Drawings
- 4.4 Specialist Drawings & Documents

- 5 BCAR Docs

- 1.0 Project Information

- 1.01 Project Consultants
- 1.02 Sub Contractors
- 1.03 Suppliers
- 1.04 Emergency Contracts and Procedures

- 2.0 Building Fabric

- 2.01 Project Design Details
- 2.02 Construction Details - Shell & Core
- 2.03 Construction Details - Fitout
- 2.04 Construction Details
- 2.05 Fire Safety

- 3.0 Building Operations

- 3.01 Services Description
- 3.02 Electrical O&M
- 3.03 Mechanical O&M
- 3.04 Lifts O&M
- 3.05 Plant Schedules & Asset Registers
- 3.06 Test Commissioning

- 4.0 Drawings & Records

- Ancillary Certs and Register



Examples for discussion

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Example 1

House extension, Single storey

- Anticipated to take longer than 30 working days
 - PSDP and PSCS required
 - HSA Notification Required
- Hazards
 - Access to rear of house
 - Depth of drainage close to existing foundations
 - Maintenance requirements
 - access to a sewer pipe was almost obstructed
- PSDP coordination
 - Met with Designer and Builder
 - Design Risk Assessments
 - Discussed issues
 - Prepared Preliminary Safety & Health Plan
 - Prepared Safety File
 - as-builts and manuals for boiler, windows etc.



Example 2

Two Storey Industrial Development

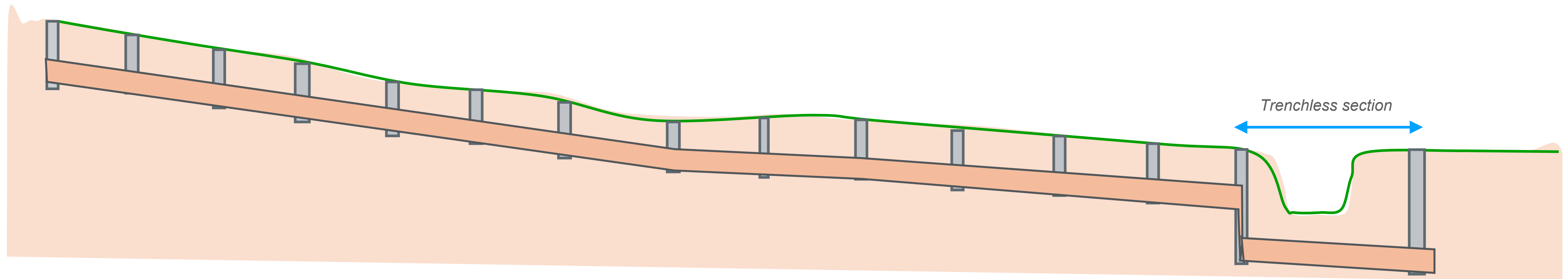
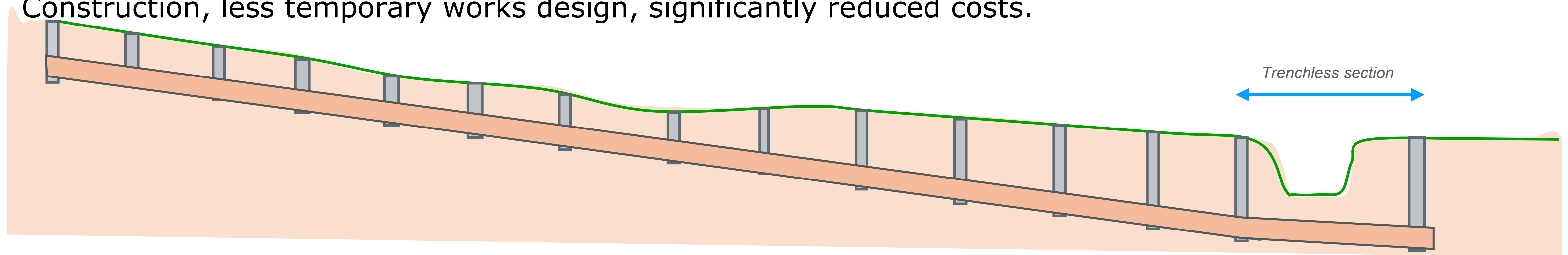
- Anticipated to take longer than 30 working days
 - PSDP and PSCS required
 - HSA Notification Required
- Hazards / Design Safety Considerations
 - Depth of drainage
 - Scaffolding requirements
 - Maintenance requirements
 - Replacement, smoke detectors , fire dampers
 - Window cleaning
 - Roof maintenance, gutters
 - Access to manholes, sumps
 - Door widths, floor loading, equipment
- PSDP coordination
 - Met with M&E, Structural, Architectural Designers
 - Reviewed risk assessments, gave feedback, maintained design risk register
 - Prepared Preliminary Safety & Health Plan
 - Used Design Certificates
 - Temporary works design coordinated through Construction stage meetings
 - Prepared Safety File
 - as-builts, Certificates, O+M Manuals



Example 3

Pipeline Design – Design Safety Review

- 800m of 1200mm dia. pipeline with poor ground conditions
- Need to cross under Channel (Trenchless)
- Software used for initial design – hydraulically feasible, open cut trench depth from 2.5m – 7.0m
- Following Design Safety Review – hydraulically feasible, open cut trench depth averaged 3.5m, Safer Construction, less temporary works design, significantly reduced costs.



Domestic Clients

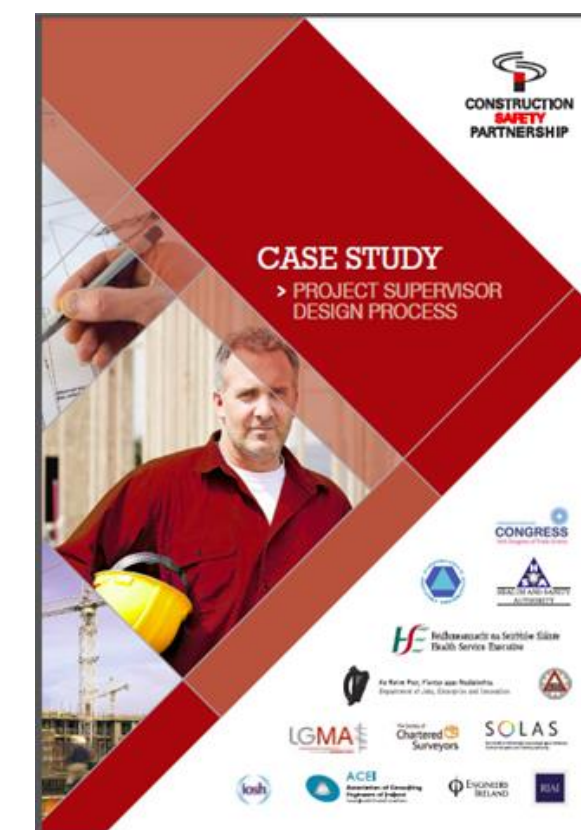
- The project supervisors, designers or contractors must demonstrate to the client that they are competent and have allocated or will allocate adequate resources...
- There is a duty of care placed on the Contractor to be fully compliant with H&S requirements and by extension fully aware of same
- **Ignorance is no defence.**

Useful Guidance

- ACEI / EI / RIAI Guidelines and Briefing Notes
- Construction Safety Partnership
- HSA ACoPs and Guidance
- APS, safetyindesign.org
- Red, Amber and Green lists
- HSA 2017 Guidance
- CIRIA C662, C686



Summary of Key Duties under the
Procurement, Design and Site Management
Requirements of the Safety Health and
Welfare at Work (Construction)
Regulations, 2013





Assessment!