Red Fox Construction & Contracting

Comprehensive Temporary Works Management

by Andrew Sharp

Temporary Works Management

- What are Temporary Works?
- Examples of temporary works
- Key roles in the management of temporary works
- Effective management of temporary works
- Pre-construction considerations
  - Temporary Works Register
    - Temporary Works Risk Categorisation
      - Temporary Works Design Brief
        - Temporary Works Design
          - Temporary Works Design Check
            - Temporary Works Design Check Certificate
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                - Review & feedback
- Effective management of temporary works for small contractors
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What are Temporary Works?

Defined in BS5975:

Parts of the works that:

- Allow or enable **construction** of, **protect**, **support** or provide **access** to, the permanent works
- Might or might not remain in place at the completion of the works

Defined in SIM 02/2010/04 (*revision expected soon*):

An '**engineered** solution' used to:

- **Support** or **protect** an existing structure or the permanent works during construction
- **Support** an item of plant or equipment
- **Support** an excavation
- Provide **access**

'The construction of most types of permanent works will require the use of some form of temporary works.'

What are Temporary Works?

History of BS5975

- A series of reports commissioned following a number of significant falsework collapses in the 1970s.
  - Report on falsework by the Joint Committee of the Institute of Structural Engineers and the Concrete Society in 1972
  - The Bragg Reports in 1974/5

- BS5975: 1982 codified and described procedures as well as technical aspects.

- The Bragg Report first recommended the duty of ensuring relevant checks and procedures be given to one individual known as the ‘Temporary Works Co-ordinator’.

- BS5975: 1982 “Code of practice for falsework” adopted the recommendation but used the term ‘Falsework Coordinator’.

- BS5975: 2008 + A1:2011 “Code of practice for temporary works procedures and…” scope widened to include all temporary works and adopted the term ‘Temporary Works Coordinator’.

- BS5975: 2019 updated to include CDM 2015 and expand on the client’s, permanent works designer’s and temporary works designer’s responsibilities.

What are Temporary Works?

Why are we talking about it?

- The notion of a Temporary Works Coordinator or Falsework Coordinator has been around since 1970s.
- Reduction in the number of contractors with in-house temporary works design capabilities.
- Gradual loss of traditional skills and knowledge of ‘what works’ in regards to temporary works.
- Temporary works is becoming more specialist and less widely understood.
- Change in the way we design temporary works – move towards proprietary systems.
- Procurement methods are leading to the separation of design, erection, inspection responsibilities.

What are Temporary Works?

Enable **Construction**

Support

Protect

Access

Examples of temporary works

1) **Site establishment** – mesh fencing, hoarding, site gates

2) **Scaffolds and access** – tube and fitting scaffolds, system scaffolds, tied and untied

3) **Excavations** – slope stability, trench / manhole boxes, trench sheets, cofferdams, basements, dewatering

4) **Plant mobility** – working platforms, crane / pump outrigger foundations, tower crane foundations, lifting operations

5) **Concrete work** – single / double sided formwork, falsework, propping, permanent metal decks, reinforcement cage stability

6) **Structural stability** – freestanding masonry, demolition, modification of existing structures, steel erection

7) **Affects of permanent works** – temporary loads, temporary conditions

Examples of temporary works

Scaffold loading bay and access

Timber concrete falsework with metal propping

Examples of temporary works

Crane outrigger mat foundation

Temporary plant loading on permanent works

Proprietary trench and manhole box

Key roles in the management of temporary works

Temporary Works Coordinator (TWC)

Temporary Works Supervisor (TWS)

Temporary Works Designer / Design Checker (TWD)

Key roles in the management of temporary works

Temporary Works Coordinator – BS5975 Best Practice requirements

- Principal Contractor must have one TWC responsible for the project
- Other contractors might have their own TWCs and manage their own temporary works process for that same project
- UPDATE BS5975: 2019 – PC's TWC retains overall responsibility

A TWC should:

- Have experience and competence of the relevant types of temporary works
- Have completed formal TWC training (CITB)
- Ideally hold a Degree / HND in Civil / Structural Engineering
- Ideally be a Chartered Civil / Structural Engineer
- Significant authority on the project to stop works without referral elsewhere
- Be formally appointed

Key roles in the management of temporary works

Temporary Works Coordinator – key responsibilities

- Coordinate all temporary works activities
- Ensure subsequent responsibilities i.e. TWS, TWD & TWDC are allocated and accepted
- Review and accept qualifications, competence and experience for above responsibilities
- Maintain a Temporary Works Register
- Produce detailed and comprehensive design briefs
- Ensure temporary works designs are correctly categorised according to risk
- When necessary, ensure; a temporary works design has been produced, design check carried out and check certificate issued
- Ensure the design identifies residual risk (where necessary) construction methodology
- Inspect temporary works on site and issue Permit to Load
- Ensure a temporary works regular inspection regime is in place and being carried out
- When necessary, issue a Permit to Unload / Dismantle

Key roles in the management of temporary works

Temporary Works Supervisor – BS5975 Best Practice requirements

- On larger projects, the Principal Contractor may appoint one or more TWSs
- Other contractors might have their own TWSs to help their own / PCs TWC
- Temporary Works Supervisors with specific experience / qualifications can be appointed to support the TWC.

A TWS should:

- Have experience and competence of the relevant types of temporary works for which they are a supervisor
- Have completed formal TWS training (CITB)
- Hold other relevant trade specific experience / qualifications i.e. scaffold inspection
- Ideally hold a Degree / HND in Civil / Structural Engineering
- Be formally appointed

Key roles in the management of temporary works

Temporary Works Supervisor – key responsibilities

- Help the TWC to coordinate all / some temporary works activities
- Help the TWC to produce detailed and comprehensive design briefs
- Ensure temporary works are built in accordance to the design
- Inspect temporary works on site **The TWC still issues the final Permit to Load*
- Assist the TWC in communicating with the contractors and provide feedback
- Ensure the temporary works regular inspection regime is carried out

Key roles in the management of temporary works

Temporary Works Designer / Design Checker - BS5975 Best Practice requirements

- Temporary Works Designers are likely to be different from Permanent Works Designers
- A TWC should appoint TWDs and TWDCs based on their relevant experience in different types of temporary works

A TWD should:

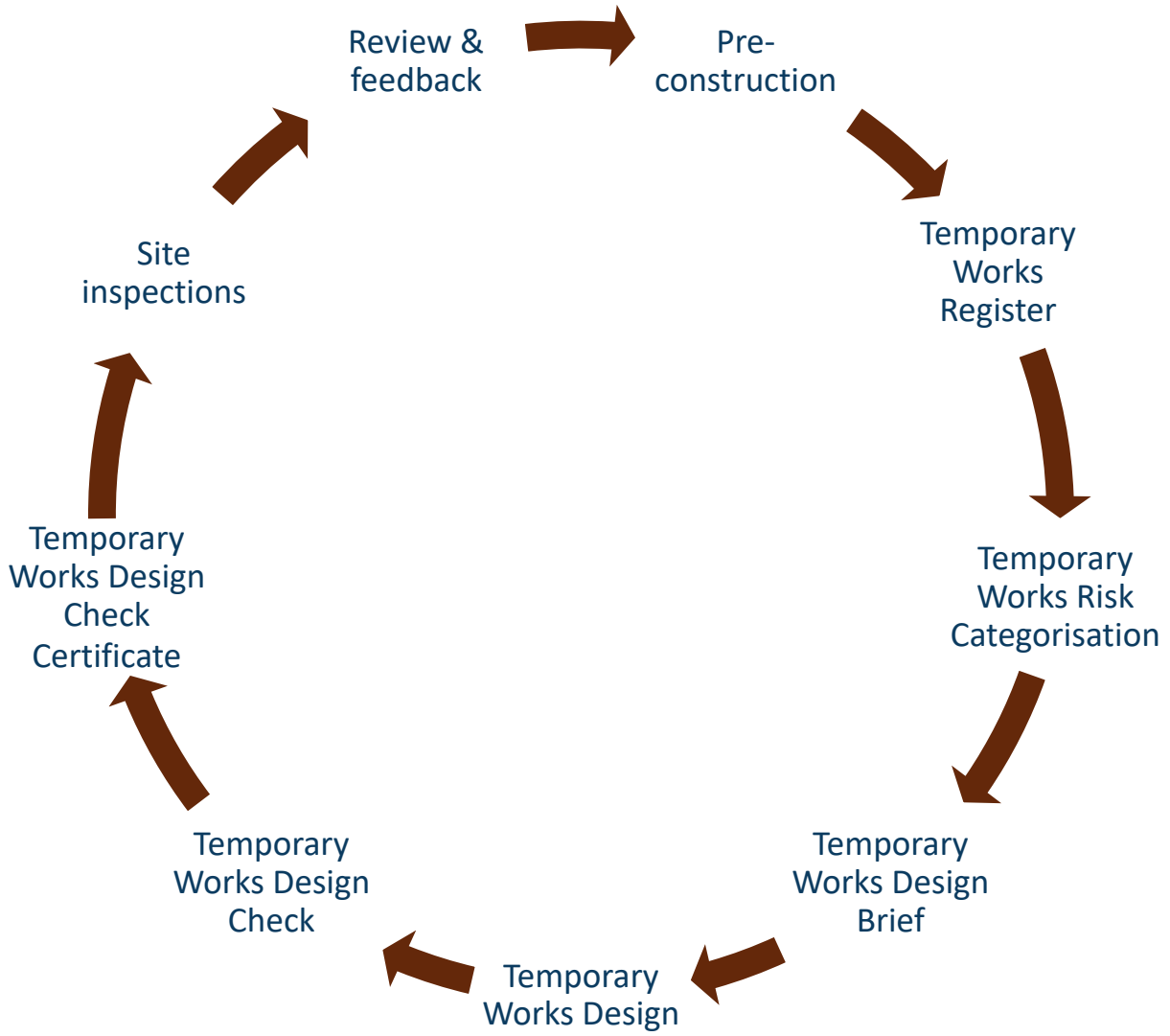
- Have significant experience and competence of the relevant types of temporary works for which they are an approved designer / checker
- Ideally hold a Degree / HND in Civil / Structural Engineering
- Ideally be a Chartered Civil / Structural Engineer
- Be formally appointed

Key roles in the management of temporary works

Temporary Works Designer/ Design Checker – key responsibilities

- Read and understand the Temporary Works Design Brief (TWDB)
- Raise any questions on the TWDB with the TWC, before submitting the design, to ensure the requirements are complied with
- When required, carry out a design check with the appropriate level of independence
- Issue a Temporary Works Design Check Certificate
- Always design in accordance with recognised engineering principles / standards
- Prepare designs in good time to allow for subsequent activities
- Issue structural calculations with all designs
- Minimise risk and clearly identify any residual risk, where these cannot be removed

Effective management of temporary works



Effective management of temporary works

Pre-construction considerations

- Appoint a TWC early.
- Ideally, the TWC will be dedicated to the role but this will depend on the size of the project.
- Pre-construction activities should include; construction methodology, scheduling out temporary works, engaging and appointing designers, contributing to sub-contractor scope of works.
- A Principal Contractor and their TWC should work with the permanent works designers and Principal Designer to help design out temporary works and minimise risk.
- The Principal Contractor must ensure that their temporary works procedure conforms to the contract, Employer's Requirements and identify specific document approval procedures.

Effective management of temporary works

Temporary Works Register (TWR) Link

Temporary Works Register

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Project Name:		Document Number:	
Project Number:		Document Revision:		Revision Date:	
Temporary Works Coordinator:		Contractor:		Client:	

TW Design Brief reference number	Brief description of Temporary Works	Temporary Works Design status	Comments	Risk Class	Date TW required on site	Temporary Works Design Brief				Temporary Works Design					CAT 2 & 3 Temporary Works Design Brief		Temporary Works Design Check (CAT 2 & 3)					Temporary Works Design Check Certificate (TWDCC) reference number	3rd Party Temporary Works review (if required)				Most recent Permit to Load reference number
						Planned TWDB issue date to TWD	Originator/ issuer name	Originator/ Issuer role (i.e. TWC)	Date of issue	Expected design duration	Required TWD return date	TWD name	TWD company	Date completed TWD returned	Planned TWDB issue date to TWDC	Date of issue	Expected design duration	Required TWDC return date	TWDC name	TWDC company	Date completed TWDC returned		Expected 3rd Party review duration	Required 3rd Party acceptance date	First issue date to 3rd Party	First acceptance date	
		(Fill green if TW in use on site)		0-3	Date	Date	Name	Role	Date	Working Days	Date	Name	Company	Date	Date / Blank	Date	Working Days	Date	Name	Company	Date		Working Days	Date	Date	Date	

Effective management of temporary works

Temporary works risk categorisation Link

Risk Class Category	Risk Class 0 Basic construction methods	Risk Class 1 Routine construction methods	Risk Class 2 Specialist construction methods	Risk Class 3 Bespoke construction methods
BS 5975 Scope	Restricted to standard solutions only, to ensure the site conditions do not conflict with the scope or limitations of the chosen standard solution.	For simple designs. These may include: formwork; falsework (where top restraint is not assumed); needling and propping to brickwork openings in single storey construction.	On more complex or involved designs. Designs for excavations, for foundations, for structural steelwork connections, for reinforced concrete.	For complex or innovative designs, which result in complex sequences of moving and/ or construction of either the temporary works or permanent works.
Independence of Design Checker	Because this is a site issue, the check may be carried out by another member of the site or design team, i.e. TWC.	The check may be carried out by another member of the design team.	The check should be carried out by an individual not involved in the design and not consulted by the original designer. The check must be performed from design drawings, calculations to be redone by the Checker.	The check should be carried out by another organisation, independent of the original design company. The check must be performed from design drawings, calculations to be redone by the Checker.
Explanation of design checking requirements	Risk Class 0 temporary works do not require an additional design where standard/ proprietary designs and details are used, as long as the installation of the works is strictly in accordance with the manufacturer's guidance. A check should be made that the standard/ proprietary solution is supported by design drawings and calculations, and a TWDCC should still be issued (can be by a TWC). All RAMS documents must be prepared and reviewed as per normal best practice.	Risk Class 1 temporary works designs also include any Class 0 methods used in an unusual (non-standard) or higher risk situation, for example; any interface with members of the public or other 3rd party users. Class 1 can be design checked by another member of the same design team that was involved in the original design.	Risk Class 2 temporary works designs also include any Class 1 method used in an unusual or high risk situation. Class 2 must be design checked by someone independent of the original design team (i.e. not involved in or consulted by the original design team). Note: Class 2 and 3 design checks should be performed from design drawings and the documents provided in the original TWDB. The Design Checker must reproduce calculations independently as part of the check.	Risk Class 3 temporary works also include any Class 2 method used in an unusual or high risk situation. Class 3 must be design checked by a completely separate design agency, independent of the design agency that produced the original TWD, and that was not consulted during the design process. Note: Class 2 and 3 design checks should be performed from design drawings and the documents provided in the original TWDB. The Design Checker must reproduce calculations independently as part of the check.

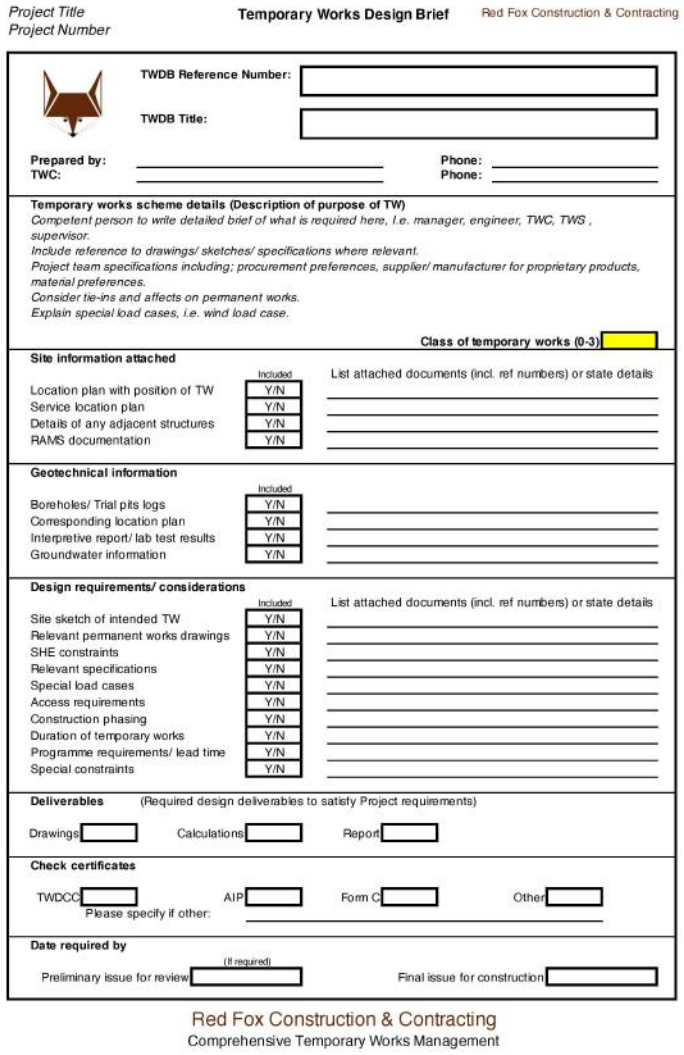
Effective management of temporary works

Temporary works risk categorisation Link

Item	Description	Risk Class 0 Basic construction methods	Risk Class 1 Routine construction methods	Risk Class 2 Specialist construction methods	Risk Class 3 Bespoke construction methods
1.0	**Site establishment**				
1.1	Site mesh fencing	Not on a public interface and less than 2m high. See note 1.	On a public interface or exceeding 2m high.	Mesh with banners, signs, netting etc. fixed to the panels.	
1.2	Site hoarding Including; surface kentledge & water ballast systems, conventional hole and post solutions	Not on a public interface and less than 2m high including solutions generated using CES automatic computer programme. See note1	On a public interface or exceeding 2m high including solutions generated using CES automatic computer programme.	When required by third party organisations such as Highways England, Network Rail, EA etc.	When required by third party organisations such as Highways England, Network Rail, EA etc.
1.3	Site gates	System designs up to 2 m high built in accordance with the manufacturer's user manual.	Solid gates with an area below 42m^2 or a weight less than 400 kg.	Solid gates with an area above 42m^2 or a weight above 400 kg.	
2.0	**Scaffolds and access**				
2.1	Tube and fitting scaffolds - tied	Unsheeted TG20:13 compliant scaffolds. Not exceeding 6m high or 12m long. Face tied to structure as TG20:13. See note 1.	Sheeted TG20:13 compliant scaffolds. Not exceeding 6m high or 12m long. Face tied to structure as TG20:13.	Scaffolds not conforming to a TG20:13 compliance sheet. Not exceeding 12m in height or 25m in length. Additional details that are not covered by TG20:13 compliance sheets (separate designs, drawings/ sketches will be required).	All others.
2.2	Tube and fitting scaffolds - freestanding	Hop ups and stairs not exceeding 1.25 m high and braced on all sides.	Unsheeted. Not exceeding 6m high or 12m long.	Sheeted. Not exceeding 6m high or 12m long.	All others.
2.3	System scaffolds, tied or freestanding	Not exceeding 3m high in accordance with the product user manual. See note 1.	Unsheeted less than 6m high or 12 m long in accordance with a user manual.	Sheeted. Not exceeding 6m high or 12m long in accordance with a user manual.	All others.
3.0	**Excavations**				
3.1	Excavations with trench/ manhole boxes	Single stacked boxes with battered end slopes and minimal ground water. Installed in accordance with product user manual.	With extension boxes or retained soil at ends and minimal ground water. Installed in accordance with product user manual.	Used near existing structures (where the structure must be protected) and minimal ground water. Installed in accordance with product user manual.	

Effective management of temporary works

Temporary Works Design Brief (TWDB) Link



Project Title
Project Number

Temporary Works Design Brief Red Fox Construction & Contracting

TWDB Reference Number:

TWDB Title:

Prepared by: **Phone:**
TWC: **Phone:**

Temporary works scheme details (Description of purpose of TW)
Competent person to write detailed brief of what is required here, I.e. manager, engineer, TWC, TWS , supervisor.
Include reference to drawings/ sketches/ specifications where relevant.
Project team specifications including; procurement preferences, supplier/ manufacturer for proprietary products, material preferences.
Consider tie-ins and affects on permanent works.
Explain special load cases, i.e. wind load case.

Class of temporary works (0-3)

Site information attached

	Included	List attached documents (incl. ref numbers) or state details
Location plan with position of TW	Y/N	
Service location plan	Y/N	
Details of any adjacent structures	Y/N	
RAMS documentation	Y/N	

Geotechnical information

	Included	
Boreholes/ Trial pits logs	Y/N	
Corresponding location plan	Y/N	
Interpretive report/ lab test results	Y/N	
Groundwater information	Y/N	

Design requirements/ considerations

	Included	List attached documents (incl. ref numbers) or state details
Site sketch of intended TW	Y/N	
Relevant permanent works drawings	Y/N	
SHE constraints	Y/N	
Relevant specifications	Y/N	
Special load cases	Y/N	
Access requirements	Y/N	
Construction phasing	Y/N	
Duration of temporary works	Y/N	
Programme requirements/ lead time	Y/N	
Special constraints	Y/N	

Deliverables (Required design deliverables to satisfy Project requirements)

Drawings Calculations Report

Check certificates

TWDCC AIP Form C Other
Please specify if other:

Date required by

Preliminary issue for review (If required) Final issue for construction

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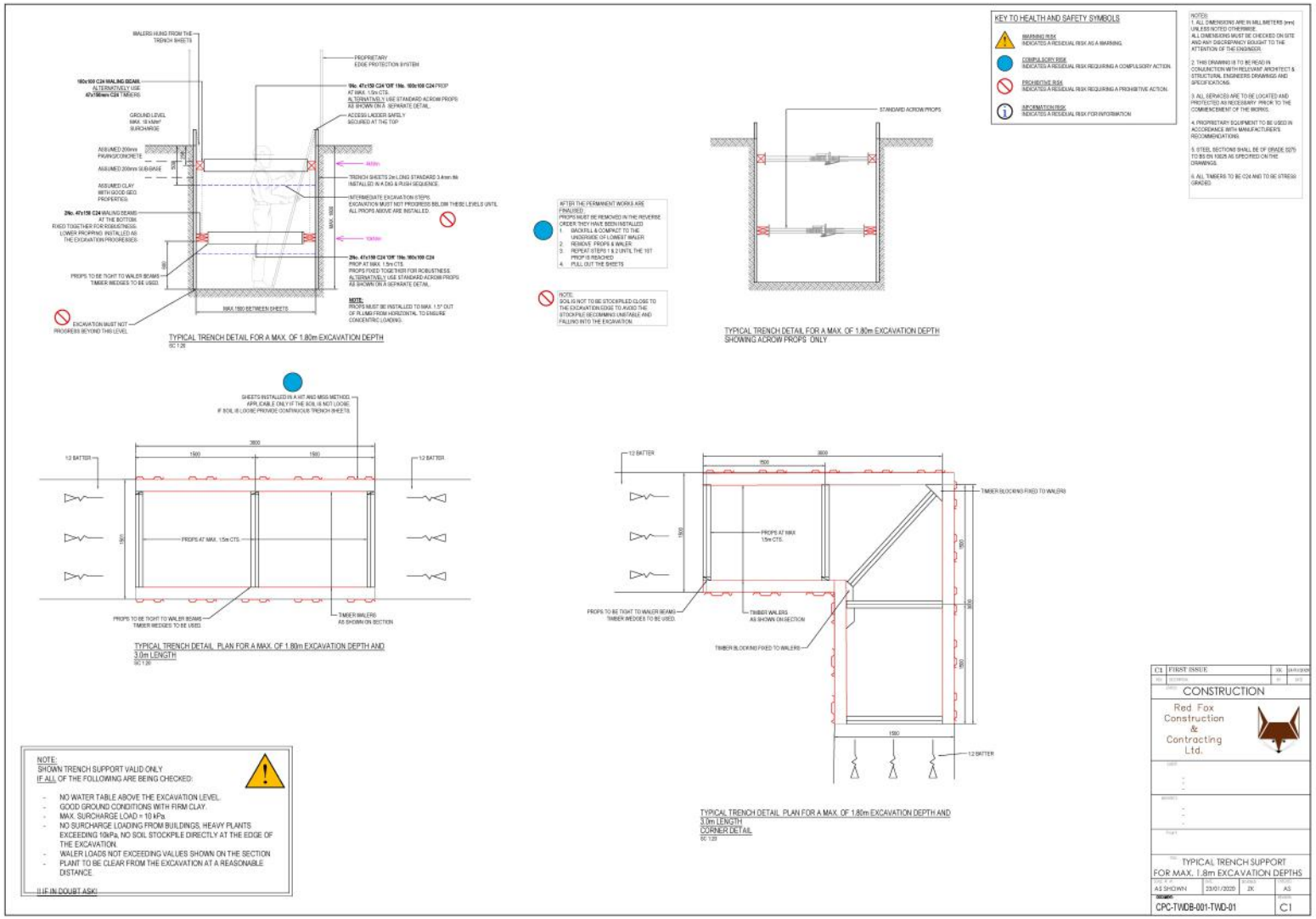
- TWCs responsibility to make sure the TWDB is produced.
- Should be produced / inputted to by competent and most relevant person i.e. TWC, TWS, engineer, works' supervisor.
- A design brief should be prepared for EACH different TWD.
- State risk category and duration temp structure will be in place.
- Include reference to drawings / sketches / specifications / SI.
- Include procurement preferences, supplier / manufacturer for proprietary products, material preferences.
- Consider tie-ins and affects on permanent works.
- Explain special load cases, i.e. wind load case.
- Deliverables: drawings, calculations, CDM report.
- Specify design return date.

Effective management of temporary works

Temporary Works Design (TWD)



- Designed with similar rigour to the procedures applied to the design of permanent works.
- Design in accordance with the design brief.
- Eliminate risk and identify residual risk.
- Design drawings supported by calculations.
- Include specifications and construction methodology where necessary.

Effective management of temporary works

Temporary Works Design - proprietary solutions

Considerations for proprietary solutions

- They WILL have been designed.
- They WILL have design drawings and calculations.
- Suppliers should advise on the correct use of their equipment.
- Have they designed foundations?
- What assumptions have been made that must be confirmed?
- Are they being used in a standard way?
- Is independent checking required? i.e. non-standard use
- What are the correct checking procedures on site?

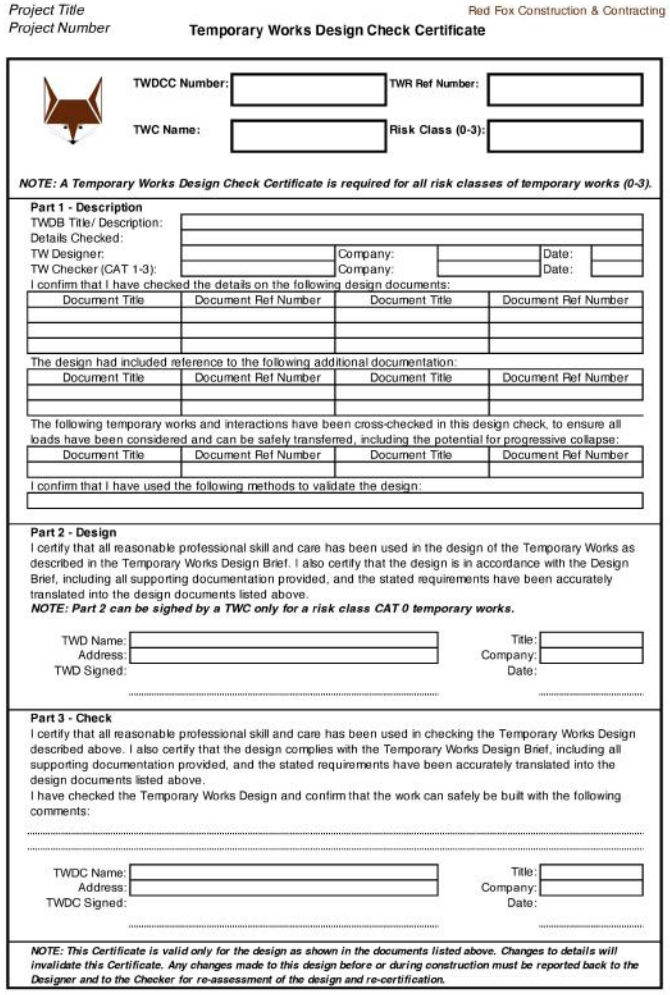
Effective management of temporary works

Temporary Works Design Check (TWDC) Link

Risk Class Category	Risk Class 0 Basic construction methods	Risk Class 1 Routine construction methods	Risk Class 2 Specialist construction methods	Risk Class 3 Bespoke construction methods
Explanation of design checking requirements	Risk Class 0 temporary works do not require an additional design where standard/ proprietary designs and details are used, as long as the installation of the works is strictly in accordance with the manufacturer's guidance. A check should be made that the standard/ proprietary solution is supported by design drawings and calculations, and a TWDCC should still be issued (can be by a TWC). All RAMS documents must be prepared and reviewed as per normal best practice.	Risk Class 1 temporary works designs also include any Class 0 methods used in an unusual (non-standard) or higher risk situation, for example; any interface with members of the public or other 3rd party users. Class 1 can be design checked by another member of the same design team that was involved in the original design.	Risk Class 2 temporary works designs also include any Class 1 method used in an unusual or high risk situation. Class 2 must be design checked by someone independent of the original design team (i.e. not involved in or consulted by the original design team). Note: Class 2 and 3 design checks should be performed from design drawings and the documents provided in the original TWDB. The Design Checker must reproduce calculations independently as part of the check.	Risk Class 3 temporary works also include any Class 2 method used in an unusual or high risk situation. Class 3 must be design checked by a completely separate design agency, independent of the design agency that produced the original TWD, and that was not consulted during the design process. Note: Class 2 and 3 design checks should be performed from design drawings and the documents provided in the original TWDB. The Design Checker must reproduce calculations independently as part of the check.

Effective management of temporary works

Temporary Works Design Check Certificate (TWDCC) Link



Project Title
Project Number

Red Fox Construction & Contracting

Temporary Works Design Check Certificate

TWDCC Number: | TWR Ref Number:

TWC Name: | Risk Class (0-3):

NOTE: A Temporary Works Design Check Certificate is required for all risk classes of temporary works (0-3).

Part 1 - Description

TWDB Title/ Description:
Details Checked:
TW Designer: Company: Date:
TW Checker (CAT 1-3): Company: Date:

I confirm that I have checked the details on the following design documents:

Document Title	Document Ref Number	Document Title	Document Ref Number

The design had included reference to the following additional documentation:

Document Title	Document Ref Number	Document Title	Document Ref Number

The following temporary works and interactions have been cross-checked in this design check, to ensure all loads have been considered and can be safely transferred, including the potential for progressive collapse:

Document Title	Document Ref Number	Document Title	Document Ref Number

I confirm that I have used the following methods to validate the design:

Part 2 - Design

I certify that all reasonable professional skill and care has been used in the design of the Temporary Works as described in the Temporary Works Design Brief. I also certify that the design is in accordance with the Design Brief, including all supporting documentation provided, and the stated requirements have been accurately translated into the design documents listed above.

NOTE: Part 2 can be sighed by a TWC only for a risk class CAT 0 temporary works.

TWD Name: | Title:
Address: | Company:
TWD Signed: | Date:

Part 3 - Check

I certify that all reasonable professional skill and care has been used in checking the Temporary Works Design described above. I also certify that the design complies with the Temporary Works Design Brief, including all supporting documentation provided, and the stated requirements have been accurately translated into the design documents listed above.

I have checked the Temporary Works Design and confirm that the work can safely be built with the following comments:

TWDC Name: | Title:
Address: | Company:
TWDC Signed: | Date:

NOTE: This Certificate is valid only for the design as shown in the documents listed above. Changes to details will invalidate this Certificate. Any changes made to this design before or during construction must be reported back to the Designer and to the Checker for re-assessment of the design and re-certification.

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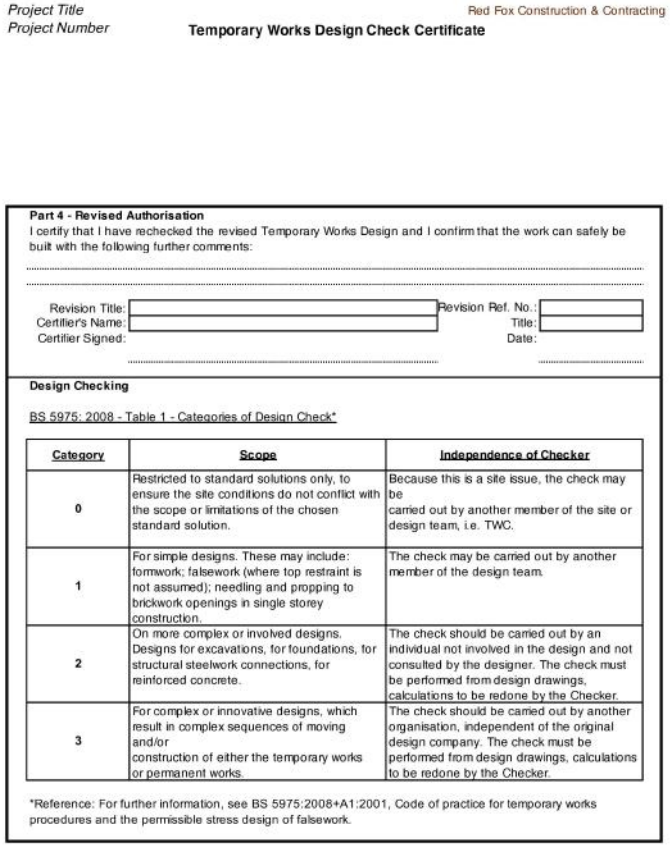

Project Title
Project Number

Red Fox Construction & Contracting

Temporary Works Design Check Certificate

Part 4 - Revised Authorisation

I certify that I have rechecked the revised Temporary Works Design and I confirm that the work can safely be built with the following further comments:

Revision Title: | Revision Ref. No.:
Certifier's Name: | Title:
Certifier Signed: | Date:

Design Checking

BS 5975: 2008 - Table 1 - Categories of Design Check*

Category	Scope	Independence of Checker
0	Restricted to standard solutions only, to ensure the site conditions do not conflict with the scope or limitations of the chosen standard solution.	Because this is a site issue, the check may be carried out by another member of the site or design team, i.e. TWC.
1	For simple designs. These may include: formwork; falsework (where top restraint is not assumed); needling and propping to brickwork openings in single storey construction.	The check may be carried out by another member of the design team.
2	On more complex or involved designs. Designs for excavations, for foundations, for structural steelwork connections, for reinforced concrete.	The check should be carried out by an individual not involved in the design and not consulted by the designer. The check must be performed from design drawings, calculations to be redone by the Checker.
3	For complex or innovative designs, which result in complex sequences of moving and/or construction of either the temporary works or permanent works.	The check should be carried out by another organisation, independent of the original design company. The check must be performed from design drawings, calculations to be redone by the Checker.

*Reference: For further information, see BS 5975:2008+A1:2001, Code of practice for temporary works procedures and the permissible stress design of falsework.

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- A TWDCC should be issued for each and every TWD
- References all documents used and produced in the design
- Declaration by designer that all reasonable **skill** and **care** had been used in production of the design
- A TWDCC should still be produced for CAT 0, can be signed by TWC
- Includes section for design checker
- Includes section for additional signature if design is revised

Effective management of temporary works

Site inspections – Permit to Load Link

First site inspection

- All temporary works should be inspected once installed on site, before being put into use.
- The PC's TWC is ultimately responsible for the inspection and signing off the Permit to Load (PtL). The actual inspection may be delegated to a TWS (or sub-contractor TWC).
- The TWC should issue a PtL for each temporary works built on site.
- A new PtL should be issued for each occasion that the temporary works are built i.e. there may be multiple PtLs for each TWD.
- The PtL should state any special conditions and if there is a requirement for a Permit to Unload.
- The PtL should state the ongoing site inspection regime that is required.

Effective management of temporary works

Site inspections

Ongoing site inspections

- Ongoing site inspections are recommended for all temporary works, especially when remaining in place for more than 7 days.
- The construction site is a continually changing environment and so different loads may be acting on the temporary works.
- Some inspection regimes, i.e. scaffold 7-day inspections, are common practice.
- Others are more open to decisions by the TWC.
- Best practice is to inspect temporary works every 7 days, or after significant change in loading i.e. heavy rain, high wind, significant vibration.
- Ongoing inspections are a great way to gather feedback on the suitability of the temporary works for site operatives.

Effective management of temporary works

Review & feedback

Sources of feedback:

- ☆ From Temporary Works Designers to comment on design brief and information distributed.
- ☆ From TWC to persons filling out design briefs.
- ☆ From project team, designers, checkers, reviewers on dates stated in the Temporary Works Register.
- ☆ From other project stakeholders / 3rd party reviewers on dates stated in the register.
- ☆ To Temporary Works Designers on information they produced and suitability of design.
- ☆ From operatives building and using temporary works on site.
- ☆ From TWC / TWS inspecting temporary works in accordance with the design drawings.
- ☆ From Quantity Surveyors on how much everything is costing!

Effective management of temporary works

… for small contractors

HSE comment on temporary works management for small contractors (SIM 02/2010/04)

The **principles** of BS5975 should be in place, if not the formal and specific procedures. In particular:

- Ensuring a suitably competent temporary works designer / adviser is in place to supply an engineered solution.
- Adequate information flow to relevant stakeholders.
- Design checking to an appropriate level.
- Suitable verification of correct erection of the temporary works and someone overseeing and coordinating the whole process.
- Clear evidence that appropriate external expertise has been engaged. This includes obtaining the services of a suitably competent TWC and TWD to ensure temporary works are effectively designed, constructed, inspected, loaded and managed.

References and further information

Health & Safety Executive , SIM 02/2010/04, "*The management of temporary works in the construction industry*. Link

Health & Safety Executive, "*Management of Temporary Works*" presentation. Link

Red Fox Construction & Contracting, "*Resources*" page. Link

Temporary Works Forum, "*Community Libraries*" page. Link

Summary

- ✓ What are Temporary Works?
- ✓ Examples of temporary works
- ✓ Key roles in the management of temporary works
- ✓ Effective management process of temporary works
- ✓ Pre-construction considerations
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Questions & Answers

Thank you for listening!

Red Fox Construction & Contracting

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