



Temporary Works
forum

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Can a client's permanent works designer be the contractor's temporary work designer?

Three similar questions have been received by the TWf Secretariat:

- 1. I've always lived by the principle that the permanent works designer (PWD) for the client cannot act as the temporary works designer (TWD) for the contractor. It's simply a conflict of interest. We're being asked to do exactly that and I'm struggling to find the legislation that outlines why it isn't legal or shouldn't be done. Any help would be appreciated.*
- 2. I work in a civil and structural design consultancy and am looking for clarity on a question posed a few times recently. If we are the permanent works designer (PWD) are we also allowed to act as a temporary works designer (TWD) if and when the Contractor approaches us for assistance? Will the answer be the same or different when considering a traditional design contract (hired by the client) and a design-and-build contract? I have struggled to find guidance on this (I'm aware of the independence of design checking depending upon the complexity of the works, etc.).*
- 3. Is there a legislative restriction on the temporary works design being undertaken by a permanent works designer (PWD)?*

1.0 Response:

- 1.1 In short, there is no issue if that's what the PWD wants to do and is capable of doing. There is no 'conflict of interest' but there might be a 'difference of interest'. There are several issues to consider:

2.0 Legislation

- 2.1 The legislative requirement is CDM2015, Reg. 8(1), i.e. the PWD must be 'competent':

"... A designer (including a principal designer) or contractor (including a principal contractor) appointed to work on a project must have the skills, knowledge and experience and, if they are an organisation, the organisational capability, necessary to fulfil the role that they are appointed to undertake, in a manner that secures the health and safety of any person affected by the project. ..."



3.0 Competence

- 3.1 Some temporary works design has very little in common with permanent works design (e.g. scaffolding, formwork, falsework, etc.). In these cases, it is rare that the PWD would be the right organisation to design the temporary works. However, there should be no conflict of interest - from a safety perspective - as long as the TWD has the competence (knowledge, skills, experience and training) to also act as TWD.
- 3.2 Some temporary works has more of an interface with the permanent works, e.g. piling platforms, tower crane foundations, basement excavations, etc. In these cases, the PWD could be the right organisation to design the temporary works. However, the contractor needs to be satisfied that the design is economic. The interface between the temporary works and permanent works has to be understood and taken into account. If a scheme designer 'imposes' an uneconomic design - or even an economic design that the contractor regards to be uneconomic - and expects the contractor to build it within their original price, this may cause issues. This is a risk to be mitigated.
- 3.3 Some temporary works is the permanent works in a temporary strength or loading condition (e.g. construction loads on building floor slabs and/or frames, temporary stability of partially complete structures such as a slip-formed core, etc.). In this case, there is a strong argument that the PWD is best placed to be the TWD as well.
- 3.4 A PWD must not be placed under pressure to provide a temporary works design service conditional on winning the contract for any permanent works design; or as an afterthought as a client seeks to save costs. There is a long history of incidents occurring where the PWD had neither the budget nor the capability to undertake temporary works design work.

4.0 Professional Indemnity Insurance

- 4.1 Some policies (contract law) may exclude the actual design of temporary works. However, the PWD still has a statutory duty (criminal law) to understand how their structure can be built. Criminal law takes precedence. Essentially, this is about 'method engineering' - applying the 'general principles of prevention'. These can be summed up as 'ERIC' (**E**liminate; **R**educe; **I**nform; **C**ontrol), i.e. eliminate hazards, reduce risk from residual hazards, provide residual hazard/risk information and ensure that the PC knows how to control the work on site. The passing on of the right information is important.



5.0 Design check categories

- 5.1 There are recommendations in BS 5975: 2019, Table 2, on design check categories. For example, a third-party check is recommended in some instances (Cat 3).

6.0 Methodology

- 6.1 On occasion, the PWD is the ideal person to undertake temporary works design for the contractor. Not least because they will have a sound structural knowledge of what is to be constructed. By being clear about constructability the PWD will have thought about the temporary works, a good thing.
- 6.2 However, the PWD acting as TWD may constrain the contractor's methodology. For instance, the temporary works may be well enough designed in themselves, but have interrelated effects - e.g. cranes, available materials, site constraints, etc. - may not be considered fully. Temporary works needs to be designed 'in the round' and the design of temporary works is much more involved than most PWDs realise.

7.0 Safe by design

- 7.1 In general, at least one methodology for construction should be proposed by the PWD so they can be sure they are not proposing a design which is unsafe to build. A natural part of this would be to assess temporary works sufficiently to know there is a practical solution; especially important in bridge construction. With this in mind, proposing a concept is 'design' (according to CDM), but is not "designing the temporary works".
- 7.2 It is to be hoped that all PWDs will take greater interest in the temporary state of their structures. There are many examples where this does not already happen despite the PWD legal duty under CDM. This would lead to more sharing of permanent and temporary load paths and, ideally, a reduction in the use of materials. There would be advantages in constructability; and this opportunity is all too often lost due to the black-and-white line between PWD and TWD. This said, the contractor should not be blocked from seeking input from their own temporary works engineers.

8.0 Safe workplace

- 8.1 The contractor retains an overarching responsibility for a safe workplace and must develop confidence that the design is fit for purpose, viz. good enough to do the job it was designed to do before accepting the



temporary works as such (much as they would if outsourcing temporary works design).

9.0 Differences in interest

9.1 A PWD may defend the completeness and excellence of their design and see the contractor as being obstructive if the contractor sees shortcomings or seeks improvements. Where a PWD has TWD design experience this is less likely to be the case.

10.0 Contract

10.1 In the prevalent Design-and-Build Contracts - when a design consultancy is employed by (say) a Tier 2 or lower-level Contractor who doesn't possess design capability at all - the consultancy may well be expected to carry out both PWD and TWD. This should be made clear in tender documents, during negotiation and set out in their contract, so that there is little chance of incorrect appointment or conflict of interest.

10.2 However, when a design consultancy specialising in permanent works design is employed by a Contractor who has a TWD (or a Temporary Works Department), then there is more potential for conflict of interest between the PWD and the TWD.

11.0 Conclusion

11.1 Overall, the pros and cons are not written in stone. A proactive team which works well together can make something very good from a shared PWD/TWD. Relationships need to be very open and collaborative, in order to enable the best efficiency for both client and contractor. There must be clarity on who has what responsibility and, if work is shared, how it is assured that everything is covered.

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