

Duelling Programmers

The old adage that time is money rings very true for construction projects, where time- or delay-related claims are a regular and familiar feature. For a contractor aggrieved by delays, this sounds in extensions of time and, where the contract permits, a claim for delay-related damages — often, but not always, prescribed as a daily rate. This entitlement also allows the contractor to avoid liability for liquidated damages for delaying completion. It is axiomatic that the longer the contractor is on-site carrying out a project, the greater its overheads and costs related to the project. Similarly, a delay to the handover of a project caused by the contractor can sound in loss for the principal. This is commonly addressed by inserting in a contract an entitlement to liquidated damages claimed at a daily rate.

In this tussle between delay-related damages on the one part and liquidated damages on the other, it is not uncommon for parties to employ expert programmers to prepare reports containing widely divergent opinions about whether there was any delay and what may have caused it. Those familiar with such reports would also be familiar with having to wade through the reasoning and arguments from the arcane world of programming centred on a critical path analysis to demonstrate delay. In this often familiar scenario, the opposing programming experts adopt certain theoretical assumptions (rather than a factual analysis of the traditional "cause-and-effect" or "but for" type for assessing damages) to analyse programmes created under the contract, "rectify errors" in such programmes and identify a "critical path" based on opinions about which activities were critical to the attainment of practical completion.

Recently, in *White Constructions Pty Ltd & PBS Holdings Pty Limited* [2019] NSWCS 1166 (6 September 2019), the Supreme Court of New South Wales was confronted with this familiar scenario.

Facts

The plaintiff (White), a developer, claimed that the defendants, IWS (a sewer designer) and SWC (a water servicing coordinator), failed to produce a sewerage design that was compliant with the requirements of Sydney Water, such that the approval for the designs was delayed, causing the project to be delayed. This, claimed White, caused it to suffer loss and damage.

White and IWS engaged programmers. In their reports, the programmers found little upon which they could agree. They disagreed on what was the appropriate delay analysis method. They disagreed about each other's application of the selected method. The only agreements they could reach were on the "as-built" programme and that nothing had occurred prior to and including 18 May 2016 to delay the project.

White's expert reached the conclusion that the project would have been completed by 15 July 2016 but for the delay in obtaining design approval, which caused a critical delay of 240 calendar days.

IWS's expert, on the other hand, concluded that the project would not have been completed before 10 February 2017 because of other matters unrelated to the sewer works. He concluded that at best the project would have been completed only 19 days earlier than it was.

Value of Programming Reports

His Honour Justice Hammerschlag rejected both opinions. It is instructive to read the following observations made by his Honour in relation to their work:

- "18. Plainly, both experts are adept at their art. But both cannot be right. It is not inevitable that one of them is right."
- "21. It is not inevitable that one of these methods is the appropriate one for use in this case.
- 22. The expert reports are complex. To the unschooled, they are impenetrable. It was apparent to me that I would need significant assistance to be put in a position to critically evaluate their opinions and conclusions."

His Honour then proceeded to appoint another expert, which all the parties agreed upon. In noting the assistance the Court-appointed expert had provided to his Honour, his Honour remarked, "His advice demonstrated that the complexity that has been introduced is a distraction." [26] His Honour went on to express the view that White's claim for damages based on delay was "...not the type of subject upon which precise evidence cannot be adduced. It is not a subject which involves the Court having to make an estimation or engage in some degree of guesswork. It is not the kind of case where it is necessary for the Court to do its best, in the absence of evidence which White was capable of adducing. ..." [185]

Whilst the parties' experts relied upon two of the six methods of delay analysis prescribed by the UK Society of Construction Law, The Delay and Disruption Protocol (Protocol), his Honour found that reliance upon such methods was not determinative of the question at hand. In other words, the traditional analysis of "cause-and-effect" or the "but for" test based on facts must be preferred rather than some slavish adherence to the Protocol. In coming to this conclusion, his Honour did not follow *Alstom Limited & Yokogawa Pty Limited* (No. 7) [2012] SASC 49 in which Justice Bleby of the South Australian Supreme Court rejected a method of delay analysis that did not fall within the Protocol.

His Honour went on to observe:

- "196. [The Court-appointed expert's] opinion, upon which I propose to act, is that close consideration and examination of the actual evidence on what was happening on the ground will reveal if the delay in approving the sewerage design actually played a role in delaying the project and, if so, how and by how much
- 197. The Court is concerned with common law notions of causation. The only appropriate method is to determine the matter by paying close attention to the facts, and assessing whether White has proved, on the probabilities, that delay in the under boring solution delayed the project as a whole and, if so, by how much."
- "201. This case demonstrates the importance of paying close attention to the actual facts rather than opinions about what the evidence establishes."

His Honour then proceeded to find that White's case had not been established (for reasons that do not matter for the purposes of this article). It is worth noting, however, his Honour's comment that scant regard was given by the parties to the site diary that recorded, contemporaneously, facts about activities on the site. His Honour considered this to be a more reliable source for "raw data", which would have assisted the parties more than the opinions that were expressed in the reports of their programmers.

Lessons Learnt

So, where does this leave the practice of reliance upon programming experts to prove delay claims?

This case reinforces the importance of adopting the traditional common law and common sense approach, employing facts on a "cause-and-effect" or "but for" basis, to establish delay and consequent loss. It does not necessarily make the role of programmers redundant, but it emphasises the importance of programmers expressing opinions within a set of established or provable facts, rather than based upon a purely theoretical exercise utilising arcane protocols or methodology.

As is evident from the reliance placed upon the site diary by the Court, keeping a reliable and regular site diary can prove to be an invaluable asset, not only in claims related to delay, but also in respect of most conceivable disputes relating to a construction project. It is a good habit to develop.