# Ted's News March 2019

Deadly Sin No 6 at Jimna Fire Tower

A boardwalk that planned to succeed

Costal Deck Course

Timber Consultant

## Deadly Sin No 6 at Jimna Fire Tower

(Not a paid advertisement)





Image by Heritage branch staff - State of Queensland: Queensland Heritage Register: Jimna Fire Tower (2013), CC BY 3.0, https://commons.wikimedia.org/w/index.php?curid=53101579

A couple of years ago, I received a call from one of the Queensland Government departments asking if I could do an inspection of the Jimna fire tower. I know my limitations and this was way outside them so I referred them on to Wood Research and Development (Australia) whose team then abseiled the complete tower doing their inspections.

I remember when this now <u>heritage listed tower</u> was built in 1977. The three legged design, of which Jimna was the tallest at 47 m was hailed at the time as being a remarkable bit of timber

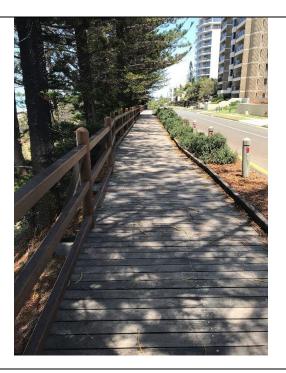
engineering. In 1968 the Department reported on "the wisdom of converting to this type of structure. Costs per foot at \$66 was about 25 per cent down on the 4-legged design, formerly adopted, and the structure is very stable and firm" but the years have not been too kind to that original claim. You see, the builder committed No. 6 of My Seven Deadly Sins of External Timber Design. He set the posts in concrete. Now I have never been to the site but I can tell you this, the posts will have severe decay at groundline and a good gust of wind could blow the tower over. There is no other possible outcome.

The Department had the wisdom to engage <u>Wood Research and Development (Australia)</u> to undertake a level 2 condition report on the tower in 2016 using their EPHOD® compression wave technology to look inside the timber. Presently WRD are finalising the drawings for the refurbishment. Saving the tower will be a worthwhile project. It will be interesting work fixing the base of the posts.

You can purchase my book, <u>The Seven Deadly Sins of External Timber Design</u> for only \$33 or, if not too far from Brisbane, have this CPD course delivered in your office by Outdoor Structures Australia. Phone Stuart Madill on 0403 385 707. <u>Did you see last month's newsletter where I discussed Sin No. 7</u>

### A Boardwalk that Planned to Succeed





Point Cartwright Boardwalk built for the then Caloundra City Council. Images 2000 and 2019

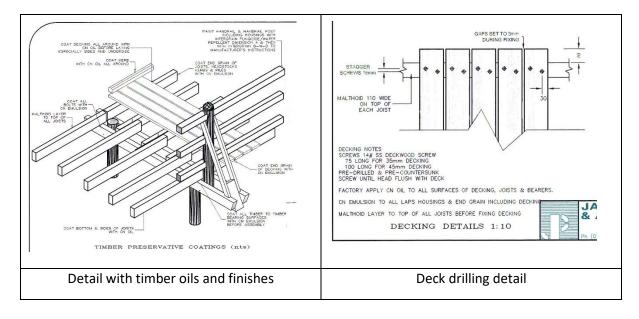
Brother James sent me an image of a job plate, No. 277 and asked, "Where am I." I recognised the pine trees behind and it could only be Point Cartwright. We built this boardwalk in 2000 and is an almost rare example of a weather exposed timber structure where the asset owner planned to succeed. My brother commented on how good the boardwalk looked and I have to agree.

#### The tender documents said

Your quotation shall also take the following into consideration:-

- all fixings are to be stainless steel
- timber to be Gatton Sawmill Co Deckwood or approved equivalent
- boardwalk to be designed in accordance with Gatton Sawmill Co Boardwalk Design Guide or similar equivalent
- boardwalk to be engineered in accordance with Gatton Sawmill Co Boardwalk Engineering Guide or similar equivalent
- boardwalk to be constructed in accordance with Gatton Sawmill Co Boardwalk Construction Guide or similar equivalent

None of this posed any restrictions for a competitor as our guides were available free of charge from the web. We won the tender and very detailed were produced by a specialist timber engineer with no wriggle room for slap dash construction. The boardwalk was almost completely prefabricated off site down to pre-docking, pre-oiling the timber and predrilling the decking.



When we hear of cases where the structure is short lived they are just not trying. Loosly worded design and construct tenders and purchasing on price is the worst thing that can happen with a timber project.

#### **New Coastal Decks Course**

# Handrail – as good as it gets



A very well designed handrail

I have now completed my coastal deck course. The main part of the seminar takes you through the design checklist in my Deck and Boardwalk Design Essentials, line by line and explains and illustrates why that line is there and why that aspect of the design must be attended to. There are three supplementary sections:

- A look at the alternatives to traditional hardwoods and discuss their weakness and strengths (if they have any)
- A look at two very different boardwalks in Cairns and discuss the strengths and weaknesses of each design
- A look at a boardwalk I built at Point Cartwright in 2000

Unlike the free CPD sessions, there is a charge for this course, but it is "very small bickies" compared to what you could spend if you get the basics wrong and end up with a very unsatisfactory result. From the course you will see just how logical and easy it is to do well. Contact me on 0414 770 261 or email me

## Need a Timber Consultant or Expert Witness?

I have over 40 years' experience in the industry and can assist you with many of your timber needs.

**Inspection** – I can assess timber products on their performance, fitness for purpose or cause of failure. I also examine whether best practice was used in design and construction.

**Grading** - Quite literally, I have written the book on the subject

**Design** - I can provide detailed technical drawings and advice.

**Reports** - I have authored many books on timber and can prepare a report providing recommendations and practical instructions on to how to rectify issues.

Please note as I am now employed a Senior Timber Consultant with the firm BCRC all large and complex consultancies and requirements for an expert witness will be handled in conjunction with them. Existing consulting arrangements remain unchanged and I am also available to assist on small projects. For more information see <a href="https://www.bcrc.com.au">www.bcrc.com.au</a>



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