

Submission  
No 82

**INQUIRY INTO REGULATION OF BUILDING  
STANDARDS, BUILDING QUALITY AND BUILDING  
DISPUTES**

**Organisation:** Australian Foundation Systems Pty Ltd

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## Submission to Public Accountability Committee

### Inquiry into regulation of building standards, building quality building disputes.

**Submission by David Christie Managing Director Brooker Holdings Pty Ltd and Jonathan Boyle General Manager**

**Australian Foundation Systems Pty Ltd**

#### **Introduction**

I represent two businesses operating in the NSW building industry, primarily concerned with the manufacture and installation of screw pile, concrete foundations systems and steel sheet pile solutions. These companies are **Australian Foundation Systems Pty Ltd** and **MacDonald Sheet Piling Holdings Pty Ltd**.

My name is David Christie I am Managing Director and a shareholder of these businesses, I am accompanied by Jonathan Boyle, General Manager of our Foundation Systems Division. I have over 50 years of experience as an Engineer in the steel fabrication and building industry through the Brooker group of companies. Jonathan has over 15 years' experience in the foundations business in Christchurch New Zealand. We all know about the history of that city and earthquakes of the past and the risks inherent to life if building foundations design and installation are not up to the highest possible standard.

It pains me to say that at no time during all my years have I seen the regulatory environment so poor and toothless. At no time have I seen the risk to the consumer, insurers and banks so great.

I can truly say that the record levels of apartment/dwelling development and building we have seen over the last 4-5 years brought on by a "gold rush" mentality as land development approvals have cascaded through willing Councils, has also seen more shonky building, poor tradesmanship, poor regulation and unqualified developers and builders saturate the building market. The industry is full of \$2.00 companies, doing quick and dirty developments, with little oversight or control. In particular long-standing developers and builders, some like ourselves who have been in the industry for many many decades in some cases, have found it difficult if not at times impossible to maintain standards of good workmanship and quality, not to mention profitability.

In the case of our companies, we have walked away from potential business rather than compromise our professionalism, company standards and public safety. This has been to the detriment financially of ourselves and our shareholders.

We are encouraged that this inquiry has come about at this time, though I have to say that as usual it seems that a review only gets underway after the proverbial horse has bolted. We are not encouraged by the Governments recent response which we would categorise as quick and dirty, an attempt at really a band-aid solution and a cover up.

We are not surprised that it took the high profile failures of the Opal Tower and Mascot Towers to stir interest, when in truth we know that there are hundreds if not thousands of defects being notified every year, some minor perhaps in comparison to these high profile failures, but still none the less just as important.

Hopefully this Inquiry will lay bare the problems in this industry, initiate recommendations that set up new standards in areas where they are lacking and regulate the industry sufficiently to ensure public safety and long-term standards are guaranteed.

#### **Standards and Certification**

Within the screw piling industry in NSW there is no consistency in the implementation of and/or enforcement of the specifications provided to the contractor at tender time. A typical screw pile tender is based on the pile load that is specified by the structural engineer. The final engineering certification however is signed off by a geotechnical engineer. In the Case of AFS and other reputable companies within the industry this is completed independently. Other companies provide a certificate of compliance only. This is not worth the paper that it is written on.

Structural Engineers calculate and provide the load. However on projects that I have worked on in recent history that is as far as their input goes. It would be better and safer if legislation and subsequent regulation, was implemented and provide acceptance that the product and depth of pile that is being installed by the piling contractor meets the standard that is specified.

This needs to be backed up with engineering documentation by the contractor and supported by a report that they have been installed to the depth specified signed off by an independent design engineer.

An example of this is recently we had a project that our independent design engineer accepted and allowed that a 114mm diameter shaft would suffice for the specified load, however on this occasion the structural engineer reviewed this and decided that he wanted a 168mm shaft to be used to meet his specification.

In our opinion that is good engineering practice and not just a decision solely based on cost.

### **Lack of oversight and compliance**

Valid certification of piling installation is almost non-existent, as mentioned above regarding the allowance of compliance certificates only that are issued by some piling contractors. Within the pile installation industry we can name any number of site examples (for the protection of the property owners we will not name specific sites).

In our opinion the approach that needs to be adopted for ensuring correct product installation in compliance with specifications being achieved by installers could be compulsory installation monitoring on a smart phone that can be connected to the excavator. This would provide real time information on torque and depth, this would cut out the cheating of hand written records and submitting them where required. Certifiers are doing their job based on the information that they are receiving from the builder/installer/sub-contractor.

The problem is that the industry knows that in particular with hand written records they can be manipulated to ensure that they look viable, in other words falsified.

Further, without visual inspections by certifiers this is giving builders and piling contractors in this instance far too much opportunity to cheat and then inform the certifier that the product and installation has met a specification required by the engineer. There is no auditable trail that ensures compliance other than the information that comes from the independent certifier, who in 99% of cases has not completed a visual inspection or is a verifiable document certifying compliant installation.

A better practice that was always used during my time in the industry in New Zealand, was that the Geotech and/or the structural engineer that designed the piles and building would have to attend the site at the start to witness the first piles being installed. Further they would make regular site visits unnotified to ensure that their design specifications and parameters were being met.

This is also a simple fix yet it is ignored.

### **Bad industry practice**

The main reason that we see a lot of these practices is that the builders can too easily get out of their responsibility for what is being installed, by relying only on false compliance certificates, backed up by insurance cover, should the piles fail. It is completely understandable that they take this path as there is a lot of money to be saved by using inferior products that are not fit for purpose, or sub optimal installation.

Recently for example we won a tender for a job at \$152,000. The builder had a discussion with us and thankfully for us they used a common sense, good practice approach. They had our price and one other that was within 1% of ours and a third price that was \$72,000 cheaper. The approach that they took was, how can two contractors be so similar and one be so cheap, that raised alarm bells for them and rightfully so. In this instance the builder rejected the low price and accepted our lump sum offer. Just to note on this job our cost were in excess of \$100,000. You have to ask yourself how this other 'shonky' installer is doing it for that price. This is one of the few instances where good engineering practice has won in the end. Unfortunately for the industry these actions are not regular practice and quite rare.

### **Recommendations**

With regard to the steel screw piling industry there needs to be regulation put in place to ensure that all companies are providing a product and installing it adequately and professionally in compliance with standards to avoid failures. This can be achieved by,

1. Increased testing to ensure products are meeting specification
2. Jobs are signed off by an independent engineer
3. Builders and structural engineers to have more accountability, not just relying on the paperwork provided by the installer.
4. Independent comparative testing of products in the industry.
5. Engineers inspecting pile installation.
6. No pile install to be started until a confirmed design
7. Creation of legally recognised industry standards and compliance
8. Independent regulator overseeing a strict regime with penalties for non-compliance

## **Conclusion**

We note that there has been much said by the Premier and her Ministers of recent times after the high profile problems that have arisen and that have come into the public arena regarding major building failures of one type or other. The problems we have outlined above are but a microcosm of the problems that exist in this “free for all” we call the NSW building industry.

We see similar problems in the sheet piling side of our business, lack of accountable regulation and control, not to mention that payment of subcontractors in general is a major problem that also needs addressing and continues to this day. The Security of Payments Act 1999 needs major review and overhaul, to simplify claims and speed up the process.

There are literally at least over 100,000 steel screw piles installed in the last 10 years, many under spec, too shallow and poorly designed and installed.

Further we are very distressed that the government has offered no comprehensive response the Shergold and Weir report of February 2018 and its excellent recommendations.

We sincerely hope that Sydney does not experience another Newcastle earth quake style event, the results of which could be extremely tragic.

We look forward to reading the Committee Report and its Recommendations.