

EDITORIAL

Stakeholders— How Good is Good Enough?

When we commenced reporting in depth on the introduction of GPS guidance for earthmoving machinery, it was an expensive novelty. Over the four years since then, it has become entrenched as an essential tool. There's no major roadworks project starting in Australia this year that's not depending upon GPS, usually with final trim being executed under laser control by robotic total stations (LPS).

To borrow a phrase, we can say that we are now at the end of the beginning. Perhaps a good time to stand back and take a broad view of where we are heading?

These two technologies, working in tandem, can deliver unprecedented accuracy and great savings. In future years, GPS alone will deliver the same accuracy, but that's down the track.

The question that we now hear raised with increasing frequency by many people in the industry is whether this technology is fuelling an obsession with accuracy, to the exclusion of other important factors. It's an issue that needs to be addressed by engineers, surveyors, and supervisors, but particularly by stakeholders, the people commissioning the work.

Chasing accuracy for accuracy's sake is the criticism we hear. It's being reflected in tougher specs in recent contracts. Irrespective of the brand involved—Trimble, Topcon, APS, or Leica, we are hearing the same criticism.

*When GPS is used alone on the construction of roads, railways, racetracks and the like, perhaps first on dozers and finally on graders, it's easily capable of an accuracy of 30mm in the vertical axis. An equally important factor that's emerged is the consistency of results over the whole job — that is, between say plus 30mm and minus 30mm the typical average falls within a much tighter range. In Queensland, where 'rideability' of roads is an outcome incorporated into many contracts and often attracts a bonus, this consistency has translated into dollars. **With that in mind, is 5mm or 10mm compliance to the design a really important concern in the broad scheme of things?***

The point is that this technology can deliver jobs much more quickly and generate substantial savings. Should those savings, once achieved on a project, then be eroded by the unnecessary pursuit of precision? How good is good enough?

Critics say that stakeholders need to keep their priorities in focus, and that supervisors who work on behalf of these stakeholders should keep their responsibilities in perspective. This is not to advocate slack supervision. But in justifying their slice of the cake, those in a supervisory role of one type or another can often fritter away their client's savings, and should keep the big picture in mind.

If the economies achieved on half a dozen projects by a council will permit another major job to be completed in this year's budget, surely that's an outcome worth focussing on?

Allan Archbold of Ultimate Positioning points out that, in some cases, stakeholders and supervisors would be better off ensuring that the actual road-building techniques are up to scratch, meaning the issues of compaction, choice of appropriate material, and long-term stability.

"Unfortunately, I'm noticing that a lot of the older, highly experienced road-builders are retiring. These guys knew how to construct a road that'd last fifty years or more. Our technology will deliver much faster results and accurate final trim, but the road isn't going to stay within specs for long if sufficient attention wasn't paid to sound construction principles." 