

# DIMENSIONS

## SNAPSHOT 98

It has been an auspicious year for us at Geocomp Systems, with new releases, new offices and new projects. We contacted some of our clients around Australia to compile this snapshot.

Mount Buller summit road in TerraVista  
 (courtesy of Keith Bennett & Associates).



### Anne Howard, ACER Forester, NT

Anne is working on health projects in Aboriginal communities. "Finding sources of materials, and then getting them to remote areas can be a big challenge," says Anne. "But it's much more rewarding than working on a 50-storey building where you are one of a hundred contractors."

Using Geocomp, they are also doing survey work for the Alice Springs to Darwin railway. "I'll believe it when I'm sitting on the train," says Anne.

### Andrew Thomson, Adrian Cummins & Assocs, Vic

Among the company's roads projects and sewerage plans, the highlight for Andrew in 1998 has been the Bendigo Mining Underground Decline. The idea is to establish a goldmine, 600–700 metres underground. This means designing a tunnel 8 km long to get there. By the end of the project (about 3 years), Andrew will be a TERRAMODEL master.

### Lee Briggs, Keith Bennett & Assocs, Melbourne

"My main TERRAMODEL project at the moment is the new summit road on Mount Buller," says Lee. "It's only 400 metres long, but it travels through very steep terrain with a hairpin bend and large cut and fill batters on both sides of the road."

The company specialises in mountain conditions. Most of this work happens over the summer, so the staff take their holidays in winter. "Preferably somewhere warm," says Lee.

### Carlos Waite, KLM Developments, Vic

KLM uses Geocomp and TERRAMODEL on civil works projects including sewers, and industrial and residential estates.

The office's main drama this year was winning the Lynbrook Estate subdivision job ... twice. They had secured the job, but the job was re-tendered when the client company changed hands. They won it again, this time for keeps.

### Mark Bowkett, Telstra, Vic

Mark has been working on radio tower design profiles. He has been using TERRAMODEL to set up prediction plots for mobile telephone base stations which could be 50 km apart.

### Allan Subritzky, Thiess, Qld

Thiess use Geocomp and TERRAMODEL for a long list of jobs including mining, roadworks and pipeline contracts. The main thing concerning Allan in December, though, is moving head office to Southbank. "Planning new office space is always a complicated process," he says.

### Ashley Hopp, DNR, Palm Is.

Ashley has used TERRAMODEL to calculate volumes of rock and concrete for a dam project on Palm Island, off Townsville. The water supply is not reliable so the dam is very important to the local Aboriginal community. He's spent a great deal of time on the island this year, but in 1999 he'll be working mainly in the Burdekin irrigation area.

### Ian Rose, contractor, NSW

Ian has been working on Section 2 of the Lake George road project, which is expected to continue next year. His new year's resolution is to do less in Geocomp and more in TERRAMODEL.

### Lee Woolhouse, Fremantle Port Authority, WA

The change to TERRAMODEL 2 years ago streamlined Lee's whole process of mapping the seabed around the Port of Fremantle. To make sure depths are maintained, they re-survey some areas every 6 months. Lee's job changes with the weather: fine and sunny makes it a good day to be out on the boat.

### Roger Hurley, SE Water, Vic

SE Water is using TERRAMODEL to produce plans for sludge drying pans and to calculate sludge stockpile volumes.

The highlight of Roger's year was their recent Australian Quality Assurance Award for Business Excellence.

**Au revoir**

After 5 years with Geocomp Systems, Dina Baumann recently bade farewell to take up a sales position with the leading internet firm, Connect. Staff and clients will miss her calm, thorough manner and wish Dina the very best in the next stage of her career.

Paul Fulton is now handling inquiries from Dina's former clients.

Fiona Miller has phased herself out of our office as her third baby phased itself in. Fiona worked with Geocomp Systems for 5 years as its Finance Manager, taking care of day-to-day operations as well as long-term financial planning. Ever the pragmatist, Fiona scaled down her duties gradually, making sure that by the time she left, systems would be functioning well without her. We wish her a joyous and satisfying time in her new role at home.



**The Directors  
and Staff of  
GEOCOMP SYSTEMS  
sincerely wish  
all of our clients  
and their families  
a safe Christmas season  
and a prosperous  
New Year.**



# INDUSTRY NEWS



## A test of man, machine — and software

So said the slogan of the Multi-Cad Rally staged at the Interact 98 PC trade show in Melbourne recently. Geocomp Systems staff hit the virtual race track, as one of five companies participating in the Rally.

Data was supplied for an area of hilly terrain built from about 16,000 points. The tasks were to design a dam with a given volume; to conduct a feasibility proposal to determine how much material could be extracted



*"Er ... Paul and Jerry, could you boys turn the Play Station down a bit until the others finsh?"*

from a quarry site over 10 years; and to redesign an existing road to given vertical alignments and traffic speeds.

It was "highly desirable" for the software to be able to demonstrate visualisation and "fly through". Contestants were reminded that "it's not a race".

"We knew that," said Paul and Jerry. But they still finished an hour ahead of the competition and did everything that was required. Of the five rallyists, four could complete all of the tasks.

## Web sites

Most of the main roads corporations in each state list the road projects that are out for tender, or which have had tenders awarded. Here are some that you might like to investigate:

**Victoria: VicRoads**  
[www.vicroads.vic.gov.au](http://www.vicroads.vic.gov.au)

**NSW: Road Traffic Authority**  
[www.sta.nsw.gov.au](http://www.sta.nsw.gov.au)

**Qld: Mainroads**  
[www.mainroads.qld.gov.au](http://www.mainroads.qld.gov.au)

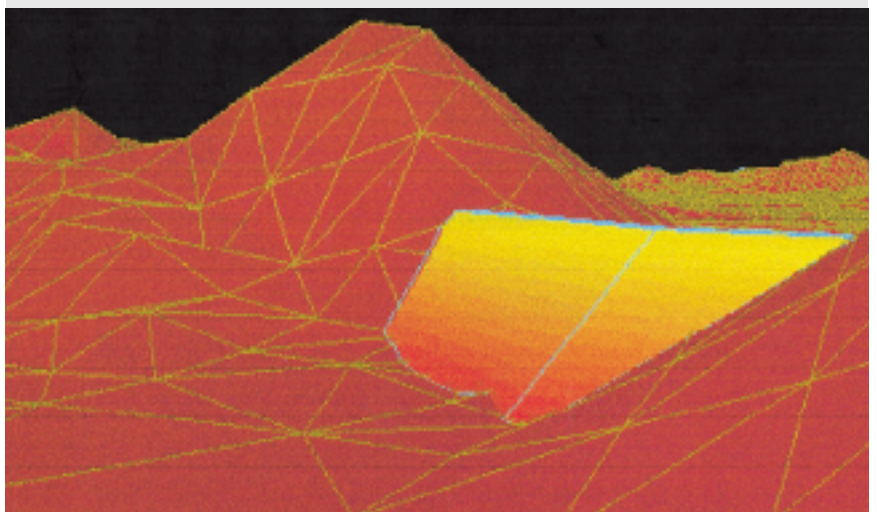
**WA: Main Roads**  
[www.mrwa.wa.gov.au](http://www.mrwa.wa.gov.au)

## Now you see it ...

This photo produced in TerraVista shows a dam wall across a valley. It was produced to demonstrate our software to a client who specialises in hydrological works. We loaded

our client's data into TERRAMODEL to design the wall, then sent it to TerraVista to view it.

If you would like to see how our software would handle your particular projects, please contact Paul Fulton or Jerry Cresp.



# EXPERT ADVICE



Here is a brief overview of concepts used in colour and pen settings. There is much more detail in the **TERRAMODEL Users Guide**.

## Colour

Colour is defined by values of red, green and blue, each in a range of 0–255. For example, black = 0 0 0, red = 255 0 0.

**Palette:** list of up to 64 display colours to choose from.

**ColourMap:** List of 0–255 numbered colours. Each colour number is mapped to a display colour in the current palette. Both palettes and colourmaps are set manually in TMODWIN.INI. So, changing either the current colourmap or palette will change the display appearance of the record.

## Record Attribute Colours

The colour attribute of a record is the colour number assigned to that record. This is initially the current colour assigned by the method of creation (eg for a point, the current point colour of the current layer). If this = 0, the colour will change if the colour of its layer changes; otherwise its appearance will depend on the

colour number. The colour is retained until modified.

## Pen Map

A list of pen numbers mapped to numbered colours. This determines how the record will plot. It is defined in Plot Setup ... Plot Parameters.

## Pen Carousel

This is where you choose what the pens are going to place on the paper. Each pen number is allocated an RGB value and width. This pen information is sent to initialise the plotter before the data.

## TML Debug Level

For fastest TML processing speed, set the TML debug level under File ... Config System ... System to a low value. The level ranges from 0 (no messages) up to 9 (detailed error messages). Increase the number if you have trouble finding problems running TMLs and decrease the number to remove mysterious messages or increase speed.

## Modify Reference

Use Modify Reference to select objects which you want to have the same reference object. For example, to have chainages along kerb profiles, match an alignment and reference the kerbs to the alignment.

## HELPLINE

### Upgrade & Support

Toll free: 1800 800 754 (in Australia)  
Tel: +61 3 9877 8400  
Fax: +61 3 9877 8411  
BBS: +61 3 9882 2011  
Email: support@geocomp.com.au

8 am – 6 pm EST every working day

For help with all queries about using our software, including:

- installation
- systems compatibility
- converting data to or from other applications.

### 2 hour response time

We aim to respond to your call 95% of the time within 30 minutes, and 100% of the time within 2 hours.

*Ian Rose, contractor, Sydney*  
Geocomp Systems staff helped me to get started with TERRAMODEL. Their great strength is fantastic after-sales support.

*Carlos Waite, KLM Developments, Melbourne*  
I use the Help system all the time. They're always there and always get back to me with answers. I'm sure they're getting sick of me. [We're not—Ed.]

*Ashley Hopp, DNR, Palm Island*  
We've been very happy with support from Geocomp Systems staff.

## Calling Garth Coverdale

Garth Coverdale will be known to most Geocomp Systems clients. He dispenses help and advice on using our software to hundreds of callers each month and writes our Expert Advice section.

**Q:** How long have you worked with Geocomp?

**A:** I first started working at Survey Computing Consultants, back when Geocomp was at Version 5.1 running on APCIII computers.

**Q:** Are calls to the Helpline tracked in any way, or logged, or registered?

**A:** We log calls on a database so we often know the situation's history.

**Q:** What's the wackiest call you've ever received?

**A:** The winner would have to be the person who had inserted a 5.25-inch floppy into the space between the floppy drives.

**Q:** What is the longest time you have dealt with a client you haven't met?

**A:** I've never seen the vast majority of our customers. If they are outside Australia, I generally never speak to them in person either, as we handle most of the queries by fax and email.

**Q:** What is your favourite lunch?

**A:** Lunch? What lunch?

**Q:** Who would you like to hear from?

**A:** Those who don't call when they need to. No question is too simple.

To contact Garth, see the Helpline box on this page.





# IN ACTION



## GEOCOMP SYSTEMS

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### Help Hotline

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### Staff

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Brad Quick

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Account Manager Gerry Dimatos

TRAINING/CONSULTING Jerry Cresp

SUPPORT  
Client Services Garth Coverdale  
Engineers Bill Lazaris

OFFICE  
Office Manager Denita MacDonald

### Products

Geocomp Systems supports:  
GeoCalc GeoNav Geocomp  
TERRAMODEL TerraVista Paydirt®

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## COLLISION COURSE

**A trivia question: at the scene of Princess Diana's fatal road accident, how did the investigators measure up the site?**

The more observant among you will remember news pictures of police using ... measuring tapes.

And the Accident Trivia experts would know that this puts Australian police at least 8 years ahead of their French counterparts. Australian police forces are setting standards world-wide for using survey equipment and computer software to investigate accidents.

Traditionally, crime or accident scenes were measured up by hand, using string lines and measuring tapes, taking 2 measurements to locate every point. Plans were then drafted by hand.

Civil engineer Sgt Peter Bellion was part of a team of pioneers who were the first in Australia to use total survey stations and CAD packages in road accident investigation.

"I'd worked with a surveying and engineering company before joining the Victoria Police," said Peter. "It seemed logical to apply surveying techniques to

the work we do here, so Bill Keramides, Ralph Waverley and I developed the process that we began using in 1992."

"We use Geodimeter Total Survey Stations to measure up, then we load the data into Geocomp to produce scale plans of collision sites."

They then export the data to other programs to determine impact speed and the direction and distance of travel. The final plans are drawn in Geocomp and form part of the brief of evidence for court hearings in the Magistrate's, County or even Supreme courts.

**"We now need far less time to measure up at accident sites where the area is sealed off and traffic is diverted. Traffic gets back to normal more quickly."**

In contrast to road collisions, crime scenes generally occur indoors and are still measured up the traditional way. However, crime scene investigators enlisted the Accident Investigations Branch to measure up the scene where two Victoria Police were recently murdered.

"We've added major outdoor crime situations to our on-call duties," said Peter. "And we are now using robotic total survey stations to make our on-site work even more efficient."

With the leaps in efficiency that this system offers, it's not surprising that all police accident investigators around Australia are using this process.

What is surprising is how little this technique is used overseas. "Last year I gave a technical paper to the US Society of Automotive Engineers conference," Peter tells. "And while I was there I visited Detroit Police and Michigan State Police ... who were still using tapes." Peter gave them a crash course in Aussie know-how.