

## RESOURCE SHEET



#### **NZIS** Award of Excellence

NZIS celebrates professional excellence with annual NZIS Awards and the Awards of Excellence at Gold, Silver or Merit level.

The purpose of the Awards is to:

- celebrate excellence and innovation in surveying and spatial professions
- give recognition to the achievements of members
- provide a medium for informing others of the achievements of members
- promote the work of members and the role of the surveyor
- raise the profile of the professions, both in New Zealand and overseas.

## 2014 Award of Excellence

The four entries received demonstrated significant professional responsibility, capability and innovation together with service to clients. This reflects the strong capability and versatility of NZIS members in a wide range of surveying. The judging panel included Jayne Perrin, Bill Robertson and new panel member, Tim James.

## **Surveying for SCIRT, Christchurch**

Gold Excellence Award

## Entered by Stronger Christchurch Infrastructure Rebuild Team, Christchurch

Survey Manager for Stronger Christchurch Infrastructure Rebuild Team (SCIRT), Chris Scott, submitted a detailed description of his role during his secondment to SCIRT and the role of the wider team. Chris and his team were involved setting up and managing a procurement system for survey resources, developing technical specifications, setting up a survey and civil software infrastructure to gather, control and discern post-earthquake data to be used by consultants.

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## Cable Undergrounding Project, St Kilda Development, Cambridge

#### Silver Excellence Award

## **Entered by Cogswell Surveys Lt, Cambridge**

Cogswell Surveys submitted an entry showcasing their involvement in a successful project to underground 110KVa Transpower cables through the centre of a subdivision under construction near Cambridge. The

undergrounding of 1.3km of mains power cables provided the developers the change to design and fully utilise the land without the obstruction of large transmission towers but first it involved Transpower accepting this proposal. This success of this project should have a positive impact on future developments nationwide.

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Merit Excellence Award

## **Motueka Sandspit Groyne**

### Entered by Tony Nikkel, Nikkel Surveying Lt, Motueka

The entry from Tony Nikkel demonstrated his experience and expertise in topographic surveys in a changeable foreshore environment then representing the data beyond the client scope or expectation. Tonys Groyne Removal Monitoring Survey was over the course of several years and n he then cleverly used Google Earth and captured data overlays to create visualisations and enable graphical comparisons between epochs.

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### 2013 Award of Excellence

This year's entries covered a range of surveying activity from land subdivision, internal theatre refurbishment and programming of a calculator for field surveyors. All of the entries demonstrated significant professional responsibility, complexity and innovation and service to clients. This reflects the strong capability and versatility of NZIS members in a wide range of survey activity.

## The Edge ASB Theatre Refurbishment

Gold Award Winner

Entered by Michael Tagg, Survey Manager Operations, Envivo, Auckland

This project involved major internal as-built refurbishing and construction of an iconic and busy Auckland venue.

The complexity of surveying requirements arose from the existing asymmetrical design, many overlapping vertical layers and the compact nature of the site and significant on-site obstructions.

Surveying innovations were developed to ensure fast and accurate 3D positioning in challenging sites and circumstance.

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## **The Sabina Apartments Complex**

Gold Award Winner

Entered by Maaike Duncan, Terramark Ltd., Dunedin.

This complex has transformed the former Santa Sabina Convent building and grounds into an up-market multistorey unit title development. The project involved the construction of 56 units over 3 stages with the convent building totally refurbished and unit titled to provide units of studio living.

During the project Maaike andTerramark provided guidance to the civil sub-contractors and subsequently took the lead as the key consultant responsible for tying together all aspects of the development maintaining oversight over the project.

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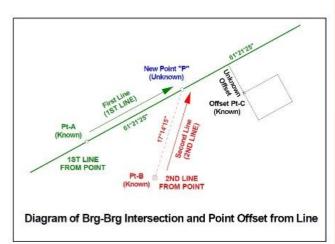
## **CADSAR Cadastral Surveying Field Program for the HP35S Calculator**

#### Merit Award Winner

## Entered by Tony Nikkel, Motueka

This project set out to provide the surveying profession with a program tool to fill a gap in the programmable scientific calculator market that resulted from the demise of the HP42s and HP33s calculators. Its purpose was to enable surveying students unlock the surveying potential of HP 35s and inspire them with a working example of the potential of programmable scientific calculators. Users responses demonstrate that it is valued by its users and fills a niche in surveying computing.

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## 2012 Award of Excellence

## Gold Award Winner

**Canary Wharf Crossrail Station** - Entered by Eric Zeeven, Senior Engineering Surveyor, Canary Wharf Contractors Limited, London,

The Crossrail project is unique to Canary Wharf in nature and complexity and brought with it many new challenges from a surveying perspective. This major project involved aspects of deformation and structural monitoring, geodetic, hydrographical, topographical, and engineering surveying. It also featured construction activities that were in some cases a first in the United Kingdom. The mid dock location was challenging being bounded on three sides and in close proximity to existing buildings ranging from 18th century wooden piled listed buildings, to 52 storey modern high rise towers. The surveying performance for the project contributed to its successful delivery 5 months ahead of programme within tolerance and with a high level of client satisfaction. The assessors in giving this project the Gold Award rated it markedly superior in terms of professional and technical challenges, complexity, innovation, and client satisfaction.

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## Silver Award Winner

## The Redwoods Whakarewarewa Forest Recreation Maps - Entered by Canmap Hawley Ltd, Rotorua

This innovative mapping project involved a new concept of a high utility recreation map which allowed for regular updates, contributed to sustainable recreational use of the forest and was highly collaborative and cost effective. It has led to Canmap Hawley and Rotorua District Council becoming project partners for a five year period. The products of this project were maps and trail profiles provided through a Recreation Guide, trail map sign boards at key positions in the forest and a concept of a cross between a map and a hanky (Manky) printed on durable fabric. This is an ongoing project with data steadily being updated allowing new versions of the products to be released regularly including mobile applications additional efficiencies and timeliness. The assessors in giving this project the Silver Award rated it highly in terms of professional and technical challenges, complexity, innovation, environmental and client satisfaction.

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## Merit Award Winner

Innovation in Dynamic Deformation Monitoring - Entered by Benjamin David Dash, Spiire Ltd, Wellington

This work involved a non-contact survey monitoring component of a project required by Transpower NZ Limited. This project sought to gain knowledge about a specific tower type in the network in regard to the risk to the network of these towers.

The issues to be resolved were the amount of displacement, movement related to deformation or failure of the towers and the maintenance cost implications. The survey work involved a survey control network, terrestrial photogrammetry system design and operation, data processing and project management. This work was undertaken in an interdisciplinary setting with a specially designed customer monitoring and analysis system. The successful use of time lapse terrestrial photogrammetry ensured that the requirements of this dynamic monitoring exceeded the clients project expectations. This project is assessed as being worthy of a merit award by the assessors.

#### Additional Entries

Forsyth Barr Stadium - Entered by Beca Christchurch,

The Forsyth Barr Stadium entry consisted of a technically and complex matrix of survey requirements. These were subject to tight timelines, accuracy standards and budget limits. The survey challenges included cadastral, control, monitoring for subsidence, pile set out and as build surveying. Adhesive reflective targets were used in establishing multiple secondary stations throughout the construction site for ensuring accuracy and controlling errors. There was good client satisfaction with the best-for-project mentality, proactive approach and achievement of reliable accuracy being noted. The assessors noted the good performance of the surveying component of this project.

#### Newhaven Subdivision - Entered by Staig and Smith, Nelson

This entry is for a high quality coastal-residential development situated at Marahau adjacent to Abel Tasman National Park. It consists of a 25 lot subdivision in a sensitive coastal environment containing pre-European Maori heritage features. The sensitive coastal environment required innovative and non-traditional approaches

some of which were used to enhance and create additional marketing opportunities for the completed development. The nature of the design approach resulted in additional challenges in gaining local authority acceptance. The resource consent required extensive consultation with the Council and Iwi in the design, construction and land transfer processes. Features of the design included low impact stormwater management, secondary standard treatment of wastewater integrated with on-site wastewater disposal areas. The assessors noted the successful design and development of this subdivision in a sensitive coastal and cultural environment.

# Spatially Enabling Tonga - A New National Mapping System and CBD Infrastructure Survey - Entered by Beca, Auckland

This project follows from the earlier World Bank funded Cyclone Emergency Recovery and Management Project. It was funded by the European Union and involved a detailed topographic survey and the creation of an infrastructure database for the urban area of Nukualofa as a basis for sound planning and development decisions. The range of project components included assessment of current records, land information and GIS data relating to infrastructure of the Central Business District (CBD), the undertaking of topographic and infrastructure survey and training and capacity building for local staff. An innovative approach in this project was the use of the existing GIS as the basis of the infrastructure database. This had the benefit of maintaining and upgrading the software and personnel skills as an alternative to introducing a new system. The project was completed within the project timeframe and budget. The assessors noted the achievement of this project in providing infrastructure and building effective capacity in a developing country.