



News from
12d Solutions

The Dirt Digger



Welcome...

to the **May 2012** issue of the **Dirt Digger**.

In this issue we will look at:

- The rollout of 12d Model 10, plus its new features
- 12d Model International User Conference 2012
- 12d's new General Manager
- 12d Model International Innovation Awards - \$15,000 prize pool!
- Project - Heyford Hill Roundabout

This will be our last Dirt Digger before the 12d User Conference so don't miss out on your chance to attend - register online today at www.12d.com/aus/conference.

We hope you enjoy this issue of the Dirt Digger, and we look forward to any feedback you may have.

Regards,

Dr Lee Gregory
Managing Director
lee.gregory@12d.com

Mr Alan Gray
Technical Director
alan.gray@12d.com

Stop Press!

It's the news you've been waiting for...

12d Model 10 will begin its rollout to customers with a current Maintenance Subscription from June. Our programming team is adding the finishing touches to the Release Version as well as major enhancements to MTFs, Boxing, and the all-new Snippets, that have occurred since the 'What's New in V10' Seminars...stay tuned!

2012 12d® Model Conference
INTERNATIONAL USER CONFERENCE

PROUDLY SPONSORED BY

BROWN
Smart Consulting

C.R. KENNEDY
SURVEY SOLUTIONS

Stop Press again—12d Synergy

Following numerous client requests, we have been building an engineering document management and collaboration system, called 12d Synergy, that knows all about 12d Model. We will be giving a sneak preview of 12d Synergy at the 12d User Conference.

12d Model International User Conference 2012

The 12d Model International User Conference will be held on **Sunday 29th, Monday 30th and Tuesday 31st July 2012** at the Brisbane Convention and Exhibition Centre (BCEC) and registrations are coming in thick and fast.

The 12d User Conference consists of three days on 12d Model 10, future 12d directions, user papers, and more.

The Conference will be an excellent 12d educational tool with the bonus of talking and mixing with the developers of 12d Model, 12d Model training, sales and support staff, and experienced 12d Model users.

The theme for our fourth Conference is '**Bringing it all together**' which follows on from our previous themes:

- '12d Closes the Loop' (2005)
- 'Taming the Electronic Model' (2007)
- 'Banishing the Drafting Demon' (2010).

and also encapsulates 12d Model 10 as the platform to cover all areas of Civil Engineering, GIS and Surveying.

The ever popular Birds of a Feather, where we break into three technical streams - Design, Surveying and Drainage/Water - will be packed with

12d® Model
Do more with your software.



detailed presentations on using the new features in 12d Model 10, making this a fantastic opportunity for all 12d Model users to up-skill.

The Industry and 12d booths will again be present with staff and equipment on hand to demonstrate and answer questions on all areas of 12d Model.

There will be a variety of User papers on interesting 12d Model projects and techniques. This is your chance to see how other groups, large and small, are using 12d Model.

Our **Welcome Event** and **Conference Dinner** are good opportunities to socialise and network with other 12d users, developers, trainers, support and sales staff.

Accommodation - block bookings are again being run by OzAccom - email conference@12d.com for further information.

Visit www.12d.com/aus/conference for more information on this exciting upcoming event and to register online.

Note: Conference sponsorship opportunities are still available at a reasonable price. Please contact us at conference@12d.com for more details.

New General Manager in Sydney

We are delighted to see 12d Model's adoption growing globally. To assist with this growth, we have appointed a new General Manager in 12d's Headquarters in Sydney (the first of our three Sydney offices) - Mr Joel Gregory.

After six successful years promoting 12d Model in Europe, the Middle East and Africa, Joel has joined the growing 12d HQ team to share the knowledge he has gained and help with the continued expansion of 12d globally.

One of Joel's first initiatives has been the creation of the 12d Model International Innovation Awards.

"Visiting clients around the world, I have been consistently impressed by the innovative use of 12d Model on a wide variety of projects. I wanted a way to highlight our clients' innovations and 12d's International Conference was the perfect platform to launch our inaugural Innovation Awards," Joel said.

Joel will be presenting prizes to the winners of the Awards at our 12d Model International User Conference this coming July.

Dr Lee Gregory will continue to be our Managing Director for all 12d offices, and looks forward to enjoying more success as we continue our growth.

12d International Innovation Awards 2012 - \$15,000 prize pool!

The closing date for 12d's inaugural International Innovation Awards is fast approaching and to those who haven't yet entered, please remember to get your entries in before Thursday 11pm (AEST) on 31st May 2012 for a shot at the \$15,000 prize pool.

We have been impressed by the diverse entries that we have already received.

Recently, through many interesting conversations with users, we have realised that many of you are still unclear as to what is expected and why you should enter the Awards.

We have found that people are getting stuck on their own interpretations of the word 'innovation', feeling as though they have to have done something revolutionary to be eligible to enter.

An innovation (from a 12d perspective) can be:

- a small or large project or idea
- as simple or complex as you wish
- any way that you use 12d Model to resolve your unique challenges
- utilising one or multiple project disciplines
- local, regional or international entries are welcome
- a small part of a project or an entire project
- simply how you use 12d Model with its existing functionality
- customisations to 12d Model.

You can even enter old projects, as long as 12d Model was utilised.

Finally, how your entry is presented also plays a role in how successful you may be. We have seen a few entries that were not going to be submitted, as the entrants considered them too simple. The entries that were sent through measure up well against the complex entries because of how they have been presented, and the way in which they highlight the value that 12d Model adds.

Screen shots, videos, project files and simple explanations of the background, methodology and outcomes all play a role in submitting a winning entry.

Ultimately we would like to recognise as many entries as possible through publishing them via the 12d communication channels. We would like to thank all those who have submitted their entries, thereby supporting this initiative and the growing future of 12d Model.

For more information, clarification or any queries about the Awards and entries, please email innovation@12d.com.

IMPORTANT NOTICE REGARDING INNOVATION ENTRIES

We recently found that due to technical issues a small number of emails have not come through to us via the innovation@12d.com email address. If you have submitted an entry and have not received a confirmation email, then contact us ASAP on simon.tokic@12d.com or call +61 2 9970 7117.

12d® International
Innovation Awards

2012



Heyford Hill Roundabout (UK)

Significant traffic congestion at the Oxford bypass bottleneck, and the need for improved access to the Sainsbury's Supermarket site, led to the commissioning of an important project – a massive new roundabout. Independent transport consultancy Mayer Brown won the tender for this project, and elected to use 12d Model as their design software.

The proposed roundabout entailed the re-alignment of the existing roundabout and adjoining 'A' Roads, with the A4074 alignment being restricted by the existing railway overpass bridge to the South of the Oxfordshire site.

Traffic analysis and Site Surveys were carried out prior to design work being started. This initial work was critical in assessing how Mayer Brown could increase efficiency while reducing design development costs.

The new proposal entailed additional lanes being 'cut' through the centre of the Heyford Hill roundabout to ease congestion, thereby providing a 'through route' for the A4142 onto the A4074 (Southern Bypass Road). The roundabout was re-aligned to cater for additional lanes, as well as the incorporation of signalised junctions to assist with traffic movements .



12d Model was used to design the layout so that the proposal could be constructed accurately. The need to adhere to the UK's 'DMRB' K-values meant that the vertical design became 'somewhat challenging', as they had to tie in with existing roads, drainage, and crossfalls, while maintaining a design path that complied with the standards, without compromising the efficiency of the layout.

As with most design projects... 'for every action, there is an equal and opposite reaction'. Despite changing the roundabout dynamics, the existing drainage network had to be retained. This meant that cambers had to be designed to fit with both gullies and vehicle paths without adversely affecting the rideability around the roundabout.

The solutions evolved from utilising superalignments, modifiers, and additional 'forced break' superalignments – all within 12d Model. While conventional design tries to utilise the application of templates from centrelines, Mayer Brown found that the optimal approach varied depending on which junction they were at. In some cases, the split carriageways assisted with deciding on template use, while others were best suited to superalignments being used as kerb alignments. Forced contours were used to enhance the final surface finish.

The implementation of a specific design strategy, incorporating chains was critical to the success of delivery. Due to late changes, the 'chain setups' allowed for a practical resolution and efficient delivery of product. This was of further assistance in delivery of the visualisation at the conclusion of design works.

Sales & Support

AUSTRALIA

NSW, ACT & SA

Extra Dimension Solutions

support@exds.com.au

Ph. (02) 9452 6771 (Sales)

(02) 9453 9449 (Support)

WA - Design

Critical Image/12d WA

wa.sales@12d.com

Ph. 0411 601 066 (Sales)

wa.support@12d.com

(08) 9574 6816 (Support)

WA - Survey

12d Solutions

graham.wirth@12d.com

Ph. (02) 9970 7117 (Sales & Support)

VIC & TAS

12d Victoria

vic.sales@12d.com

vic.support@12d.com

Ph. (03) 9530 2753 (Sales & Support)

QLD & NT

12d Queensland

qld.sales@12d.com

Ph. (02) 9970 7117 (Sales)

qld.support@12d.com

(07) 3040 3000 (Support)

UK, EUROPE, MIDDLE EAST & AFRICA

12d UK

sales@12d.co.uk

support@12d.co.uk

Ph. +44 (0) 845 051 0372 (Sales & Support)

NEW ZEALAND

12d NZ

lane@12d.co.nz

Ph. +64 27 477 7787 (Sales)

+64 4 564 3288 (Support)

ASIA

12d Asia

phil.davies@12d.com.sg

Ph. +65 9026 0402 (Sales & Support)

JAPAN

Forum8

anita@forum8.co.jp

Ph. +61 2 9130 1448 (Sales)

MALAYSIA - Design

Astasoft

caru@astasoft.com.my

Ph. +60 3 8075 6133 (Sales)

FIJI

Lukemine Enterprises

lukemine@connect.com.fj

Ph. +679 337 0858 (Sales)

OTHER REGIONS

12d Solutions

info@12d.com



Welcome Aboard to our New Licences and Upgrades from...

- 43 Below - NZ
 AAM Group - WA
 Abigroup - NSW, Qld, Vic
 Acor Appleyard Consultants - NSW
 Acor Consultants - NSW
 AD Drafting - Vic
 ADW Johnson - NSW
 AECOM - NSW, Qld, WA; NZ
 AgSystems Design - Vic
 Al Ryum Group - UAE
 Alexander and Symonds - SA
 All Site Surveyors - NSW
 Alluvium Consulting - Qld, Vic
 Alpha Civil and Engineering Surveys - WA
 AMEC Minproc - Qld
 Anchor Consulting - NZ
 Apex Surveying - NZ
 Arup - NSW, Qld
 Ascension Surveyors - NZ
 Asset Mapping and Surveying - NSW
 AT & L - NSW
 ATC Williams - Qld, Vic
 Aurecon Group - Qld, Vic; NZ
 Ausenco - Qld
 Auspat Australia - NSW
 Australian Survey Hire - Qld
 AWJ Earthmoving - NSW
 Ayson & Partners - NZ
 B T W South - NZ
 Baker Drafting Services - WA
 Bateman Engineering - WA
 Baulderstone Abigroup Joint Venture - NSW
 Beca - NSW, Vic; NZ
 Bennett and Bennett - Qld
 Bereza Civil Surveys - ACT
 Beveridge Williams - Vic
 BG & E Consulting Engineers - Qld, WA
 BGC Contracting - WA
 BHP Billiton - Mt Arthur Coal - NSW
 Blacktown City Council - NSW
 Bloxam Burnett and Olliver - NZ
 BMD Group - Brisbane, Townsville
 Bolte Civil - NSW
 Bonacci Group - Qld, Vic
 Boundary Hunter - NZ
 BPA Engineering - WA
 Brazier Motti - Qld
 Brierty Contractors - WA
 Brock & Associates - Qld
 Brown Consulting - ACT, NSW, Qld, Vic
 BT Survey - Qld
 Budget Setouts - NZ
 Bundaberg Regional Council - Qld
 Buro Happold - UK
 Calder Projects - Qld
 Calibre Projects - WA
 Calibre Rail - Qld, WA
 Cape Crushing and Earthmoving Contractors - WA
 Cardno - NSW, Qld, Vic, WA; NZ
 Cato Bolam Consultants - NZ
 CE Survey Solutions - Qld
 CH2M Hill - NSW
 Cheal Consultants - Fielding, Taupo (NZ)
 CID Consultants - WA
 City of St Paul Public Works - USA
 City Survey - UAE
 Civil Design Services - NSW
 Civil Drafting Services - Qld
 Civil Services - NZ
 CKL Surveys - NZ
 Clark Fortune McDonald & Associates - NZ
 Clark Land Surveyors - NZ
 Coastal Constructors - NZ
 Complete Urban - NSW
 Concept Engineering Design and Project Management - Qld
 Cossill and Webley - WA
 Coudrey Surveys - NZ
 Covey & Associates - Qld
 CPG - Vic; NZ
 Craig and Rhodes - NSW
 Cross Roads Civil Design - NSW
 CTC Surveys - NZ
 Custom Spatial Solutions - SA
 Cuttriss Consultants - NZ
 Dalton Consulting Engineers - Vic
 Daracon Group - NSW
 David Smith Surveyors - NZ
 Davie Lovell Smith - NZ
 De Nada Engineering Surveys - WA
 Decmil Australia - Qld
 Department of National Roads - Fiji
 Department of Transport and Main Roads - Qld
 Department of Services, Technology and Administration - NSW
 Desert Landscape - UAE
 Development Engineering Consultants - WA
 Devine Surveys - NZ
 Dinas Pu Bina Marga Medan - Indonesia
 Don Stizza & Associates - Vic
 Downes Survey Group - Qld
 Downes Survey - Qld
 DPI - Construction Division NT - NT
 DTEI - SA
 e2 Environmental - NZ
 East Coast Pipeline and Welding - Qld
 Ed. Zublin AG Abu Dhabi - UAE
 Eliot Sinclair & Partners - NZ
 Emirates Nortech Surveys - UAE
 Empire Engineering - Qld
 Engenium - WA
 Engineering Geology - NZ
 Engineering Surveys - SA
 Entura - Qld
 Environment Canterbury - NZ
 Ertech - WA
 ESO Surveyors - NSW, Qld
 Farr Engineers Associates - Qld
 FK Gardner & Sons - Qld
 Fletcher Construction Company - NZ
 Fluor Australia - WA
 Fox & Associates - NZ
 Frogzy - NZ
 Fyfe - SA
 Geleon Consulting - Qld
 GEO Image Services - NSW
 Geo-Metric Surveying - NSW, Qld
 George Bourne & Associates - Qld
 GHD - Qld
 Gladstone Regional Council - Qld
 GM-CCS - Qld
 Gold Coast City Council - Qld
 Graham Read Consultants - NZ
 GRD Minproc - WA
 Greenhill Engineers - SA
 Grow Consulting - Qld
 Gunung Samarabat Perkasa - Indonesia
 Haigh Consultants - NZ
 Halcrow - Qld
 Halls Frupp Surveying - Qld
 Hard and Forester - NSW
 Harrison Grierson - Qld; NZ
 Hatch Associates - Qld
 Hawkins Hook & Co. - NSW
 Heb Contractors - NZ
 Hewatt Earthworks - ACT
 Hick Bros Civil Construction - NZ
 Highland Infrastructure Group - Qld
 Hood Civil Engineers - Qld
 Hopkins Consultants - NSW
 HSV Land Surveys - WA
 Hughes Trueman - NSW
 Hutchinson Builders - Qld
 Hyder - Qld
 I³ Consulting - Qld
 Indesco Consulting Engineers - ACT
 Industrial Measurement and Surveying - NSW
 Insight Survey - WA
 Intelara - Qld
 Ipswich City Council - Qld
 J. Wyndham Prince - NSW
 Jacobs - Qld, Vic; UK
 Japher Kiongoli - NSW
 Jensen Bowers Group - Qld
 JK Williams & Company - NSW
 John Holland Group - Qld, WA
 John West Surveyors - NZ
 J.P. Engineering Surveys - Qld
 Juffermans Surveying - NZ
 Juta Consulting - NZ
 KBS Survey - Qld
 Kellogg Brown and Root - NSW, NT, Qld, WA
 Kempsey Shire Council - NSW
 Kerry Surveys - NSW
 Kevin Lodge Engineering - WA
 Khansaheb Civil Engineering - UAE
 King and Campbell - NSW
 Laing O'Rourke - NSW
 Lambert and Rehbein - Qld, Vic
 Land Dimensions - NZ
 Land Surveys No Problems Just Solutions - Qld, WA
 Landform Surveys - NZ
 Landmark Consulting - Qld
 LCJ Engineers - Qld
 LCJ Engineers - Qld
 Leighton Contractors - NSW, Qld, WA
 Lendrum & Associates - NZ
 Linke and Linke - NSW
 Loddon Shire Council - Vic
 Logan City Council - Qld
 Longrun Transport Developments - WA
 Lucas Earthmovers - SA
 Luxonline - Vic
 Lycopodium Engineering - WA
 Lynton Surveys - NSW
 McConnell Dowell - Qld; NZ
 McCosker Contracting - Qld
 McDowall Affleck - WA
 Mackay Regional Council - Qld
 McMullen Nolan & Partners Surveyors - WA
 McPherson and Goodwin - NZ
 McVeigh Consulting Engineers - Qld
 Malcolm Smith - NSW
 Map Surveying - NZ
 Martens & Associates - NSW
 Meinhardt - Vic
 Meridian Surveys - NSW
 Michael Slinger & Associates - NSW
 Millar | Merrigan - Vic
 Mine Survey Services - WA
 MinStaff Survey - Qld
 Mir Akbar - Vic
 MLEI Consulting Engineers - SA
 Monteath and Powys - NSW
 MPA Surveying - Qld
 MPN Consulting - Qld
 Multi Surveying - NSW
 Murray Hislop Surveyors - NZ
 MWH - Qld, NZ
 Newell Engineering Group - Qld
 Nexus Surveys - WA
 Nikkel Surveying - NZ
 Northrop Engineers - NSW
 On-Site Engineers - Qld
 Opus - NT, Qld; NZ
 OSD Pipelines - WA
 Oswald Bros Civil - Qld
 Pacific Survey - NSW
 Paroissien Grant & Associates - Vic
 Parsons Brinckerhoff - NSW, Qld, Vic
 Paterson Pitts Partners - NZ
 PDM Surveys - Qld
 Pegasus Civil - NZ
 Peter Robinson & Associates - Qld
 Philip Conway Surveyors - NZ
 Philip Xeros - NSW
 Phoenix AG - Vic
 Pilbrow Surveying - NZ
 Pirie Surveying - NZ
 Pitt and Sherry - Vic
 Platinum Surveys - WA
 Portarlington Holdings - NZ
 Power Survey - NSW
 Precision Enterprises - WA
 Pritchard Francis - WA
 Probuild Civil - Qld
 Projex North - Qld
 ProSurv - NSW, Qld
 PT Bumi Kaliman Sejahtera - Indonesia
 PT Freeport - Indonesia
 PT Kalimantan Prima Persada - Indonesia
 PT Pama Persada Nusantara - Indonesia
 PT Sumber Mitra Jaya - Indonesia
 Public Transport Authority - WA
 Pulver Cooper and Blackley - NSW
 Punj Lloyd - Qatar
 Queensland Rail - Qld
 R & C Surveys - NSW
 Ray Surveys - ACT
 Reeds Consulting - Vic
 Reyburn and Bryant - NZ
 Richard Wood - Vic
 Riley Consultants - NZ
 Rio Tinto - WA
 Road Construction Surveys - Vic
 RoadNet - Qld
 Roads and Traffic Authority - NSW
 Robert Bird Group - Qld; UK
 Robert Bird - Qld; UK
 Robson Civil Projects - NSW
 Ross Robinson Surveys - NSW
 RPC - NZ
 RPS - Airlie Beach, Brisbane, Cairns, Gladstone, Mackay, Sunshine Coast (Qld)
 Sagittarius Mines - Philippines
 SCIRT - NZ
 Scope Surveying - NSW
 SEE Civil - NSW
 Shadforth's Civil Contractors - Qld
 Shamrock Civil Engineering - Qld
 Sheehy & Partners - Qld
 Simon Palmer - Vic
 Simpson Shaw & Co. - NZ
 Sinclair Knight Merz - NSW, Qld, SA, Vic, WA; NZ; UK
 Singleton Shire Council - NSW
 Sirva R Consultancy - NZ
 SKS Surveys - SA
 SMEC - NSW, Qld, Vic, WA
 SNC-Lavalin - Qld; Indonesia; Canada
 Somerset Regional Council - Qld
 South Burnett Regional Council - Qld
 Southern Land CKL - NZ
 Southfront Consulting - SA
 Spatial Engineering Consultants - NZ
 Staig and Smith - NZ
 Steven Foley - WA
 Stratasurv - NSW
 Stringer Surveys - Qld
 Sunshine Coast Regional Council - Qld
 Survey Dynamics - WA
 Survey Group - WA
 Survey North - WA
 Surveying The Bay - NZ
 Survus Contracting - NZ
 Sydney Water - NSW
 Tadors Dixon - WA
 Techno Engineering Services - UAE
 Terraco - Vic
 TGM Group - Vic
 The LandPlan Group - Vic
 Thiess - NSW, Qld
 Thompson McRobert Edgeloe - WA
 Tincon - NSW
 TMK Consulting Engineers - SA
 Tomlinson and Carruthers Surveyors - NZ
 Tonkin and Taylor Group - NZ
 Toowoomba Regional Council - Qld
 Total Property Developments - Vic
 TRACC Civil - WA
 Traffic Design Group - NZ
 TransGrid - NSW
 TRN Group - NSW
 TSS Surveyors - NSW
 Twenty20 Surveys - WA
 UDP Consulting Engineers - Qld
 Universitas Negeri Makassar - Indonesia
 URS - NSW, Qld, Vic; USA
 Vassallo Constructions - Qld
 VDM Group - Qld, WA
 VEKTA - NSW, Qld, WA
 Vuksich and Borich - NZ
 Waimakariri District Council - NZ
 Wallbridge and Gilbert - SA
 Ward Civil Engineering - NSW
 Warner Land Surveys - UAE
 Water Technology - Vic
 Waterman Group - UK
 Watsons - Vic
 Weefee - Qld
 Whelans Survey and Mapping Group - WA
 Whybird & Partners - Qld
 Wilson Survey Group - Qld
 WML Consultants - WA
 Wollongong City Council - NSW
 Wood and Grieve - WA
 Wood and Jepsen Consultants - Fiji
 Wood & Partners - NZ
 WorleyParsons - NSW, Qld, Vic, WA
 Worsley Alumina - WA
 Zorn Surveying - NZ

