



URBANFINITY

# CONTEXT MAP

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PRODUCT DESCRIPTION | 2021

Urbanfinity Pty Ltd

# ABOUT OUR COMPANY

At Urbanfinity we are a team of innovation driven architects and data scientists who passionately believe that everyone should have easy access to the latest geospatial technology and data. We do this by working together with multiple geospatial data providers and CAD platforms to transform all project site specific information into one CAD Contextual model package. Our Context Map is tailored to the need of design professionals such as Architects and Urban Planners to jumpstart their design process with a suite of geospatial CAD data and analytics.

We believe in order to achieve the best possible solutions for our clients we must empower modern professionals with easy to use CAD workflows that integrate to their CAD platform of choice to deliver information-driven designs for sustainable optimised developments across Australia.



**JAMIE BONNEFIN**  
Director & Entrepreneur



**DR SEBASTIAN HAAN**  
Director & Research

W E L C O M E T O  
**U R B A N F I N I T Y**

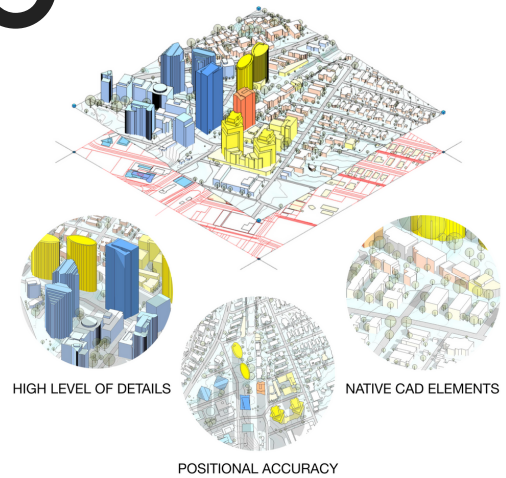


# INTRODUCING CONTEXT MAP

Launched in 2019, **Context Map** is a revolutionary new tool for design professionals to jumpstart their project work with a suite of geospatial data - providing all contextual layers as 3D models for your project site in your favourite CAD format.

Our next generation **Context Map** transforms high-resolution aerial and LiDAR 3D data rapidly into accurate and regular updated 3D models. This allows a much higher level of details for buildings structures and site accuracy.

**Context Maps** is natively supported and fully compatible with all major CAD platforms, making it easier for Architects and Planners to adapt to the Context Map technology which in turns speeds up their design and planning process.



## KEY FEATURES

- Detailed 3D building structures
- Property layouts and titles
- Terrain and topography
- Trees and vegetation
- 3D native native CAD formats
- Current and Contextual
- Real World 3D Features

\*\* Context Map is not a legal survey and there are no licensed surveyors responsible for the creation of Context Map contextual models. We recommend obtaining a legal survey from a professional for every project.



# SUPPORTED BY



**Australian Government**  
**Department of Industry,  
Innovation and Science**

## Business Entrepreneur's Programme

Supported by Australian Government through Accelerating Commercialisation, an element of the Entrepreneurs' Programme

PARTNERS

**OUR DATA  
PARTNER  
NETWORK**



# HOW IT WORKS



## SITE SELECTION

Select site address and extent (from 250m x 250m to 1km x 1km tiles), or provide custom shape (available on contextmap.com.au)

## DATA FUSION

Context Map Pipeline: geospatial processing of satellite + Nearmap 2D/3D + ground measurements

## MODELING

3D modeling and parametrisation, CAD processing, and multiple QA checks verify all features are accurate

## DELIVERY

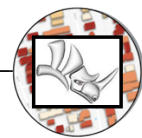
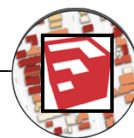
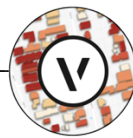
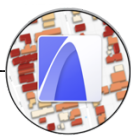
Download CAD Model Package. Delivery typically within 1-2 business days (depending on size)

## SUPPORTED CAD FORMATS

AUTOCAD

VECTORWORKS

RHINO 3D



REVIT

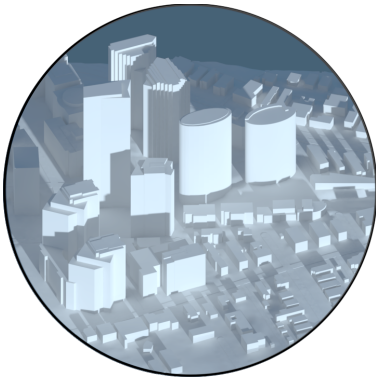
ARCHICAD

SKETCHUP



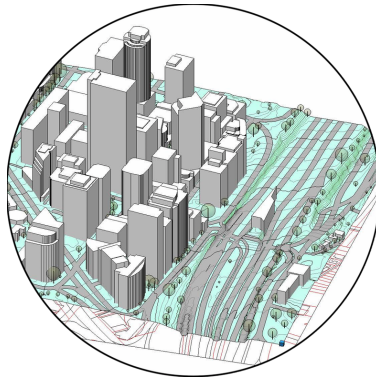


# FEATURES



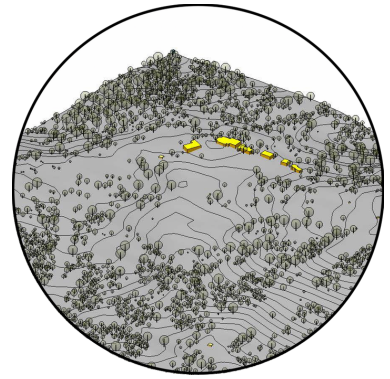
### BUILDINGS

Footprints  
Heights ()  
Multi-Level Structure



### TERRAIN & TOPOGRAPGY

3D Terrain Model  
Roads  
Hydro



### VEGETATION

Tree Models  
Tree Positions  
Tree Heights



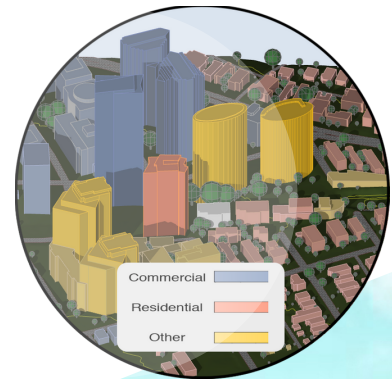
### 3D GEOREFERENCED

Nearmap 3D Height  
VerificationPositional  
VerificationGeoreferences



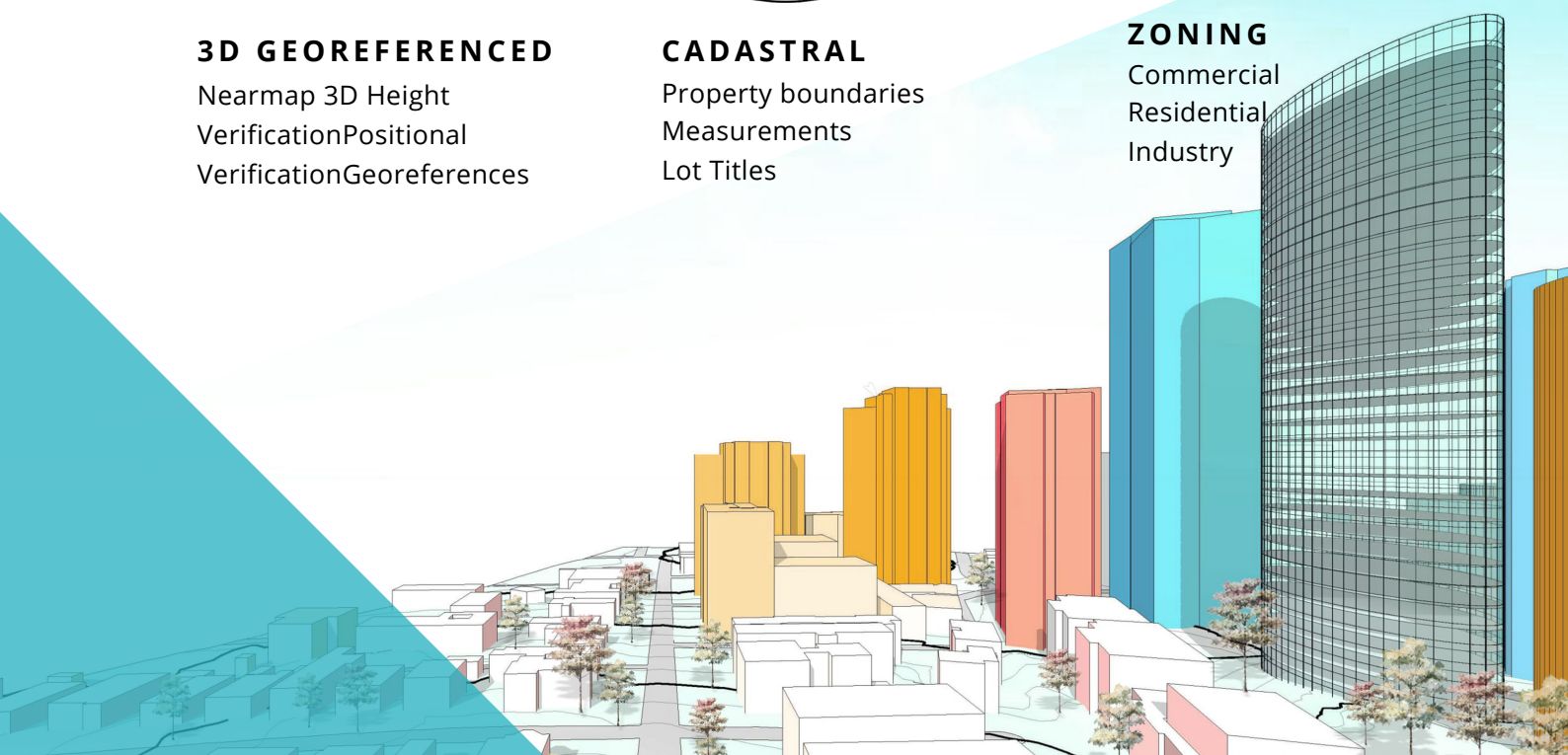
### CADASTRAL

Property boundaries  
Measurements  
Lot Titles



### ZONING

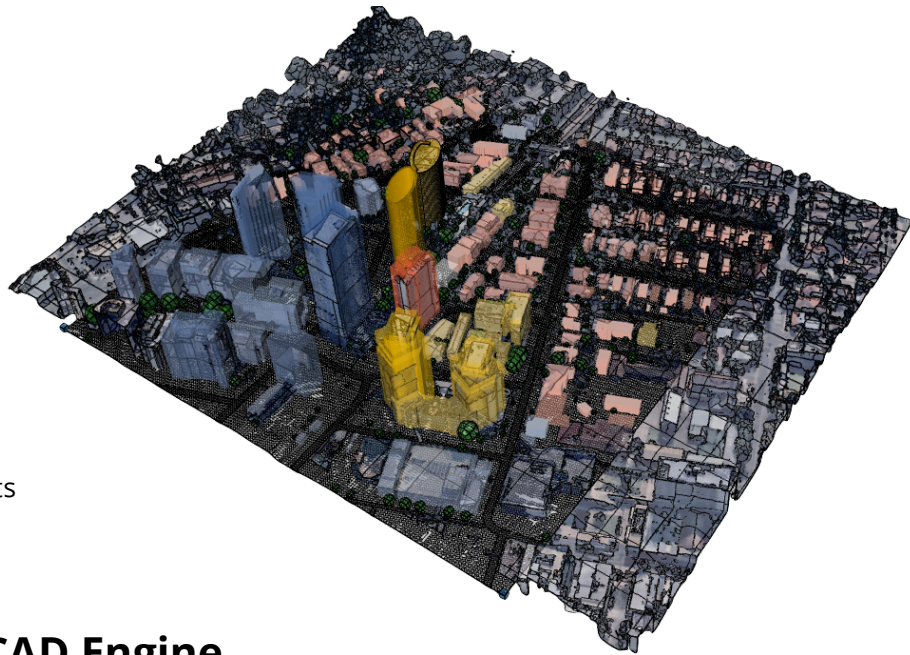
Commercial  
Residential  
Industry



# NEARMAP 3D INTEGRATION

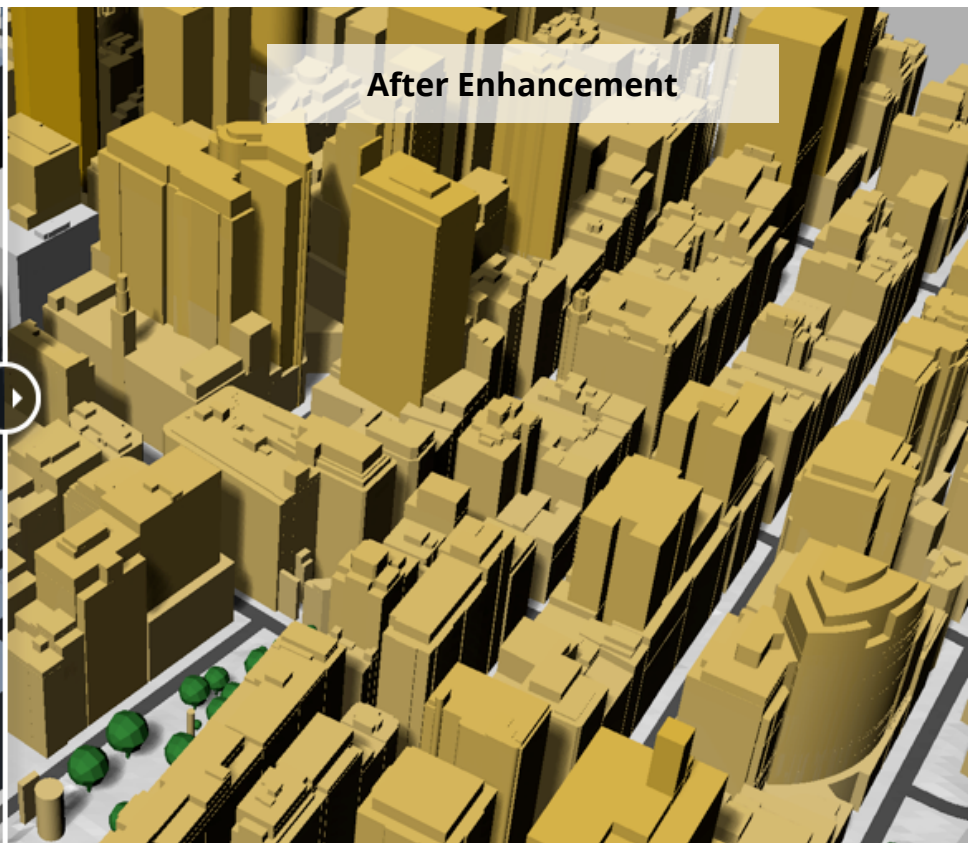
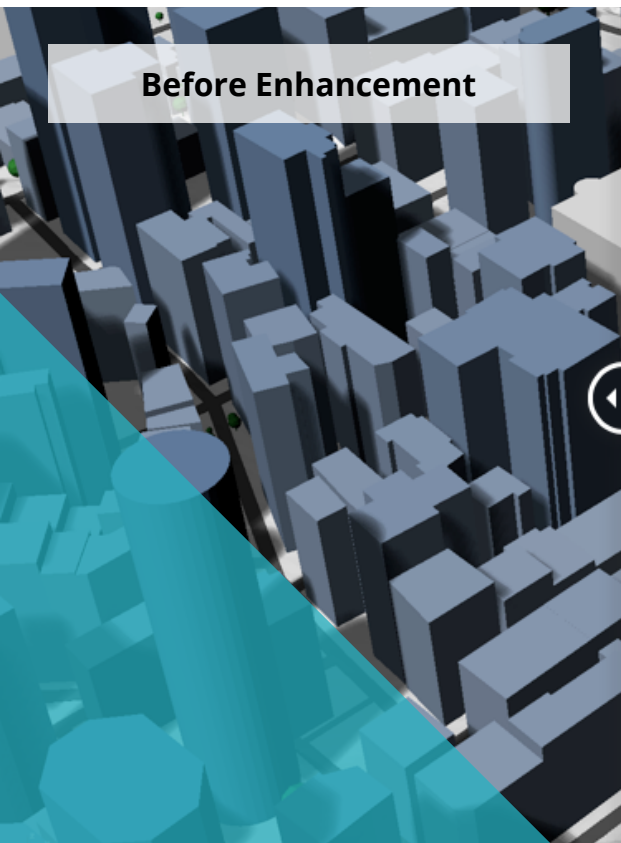
## ADVANTAGES:

- **Latest Imagery and Data**
- **Nearmap 2D:** clear, high-resolution orthographic imagery for building identification and footprint extraction
- **Nearmap 3D:** Multi-level building structure identification and high-resolution building height measurements



## Context Map 3D Mesh-to-CAD Engine

Parametrisation of building structure and building / terrain optimisation for cross-platform CAD models



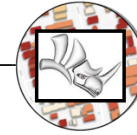
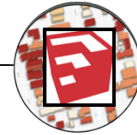


# NATIVE CAD

AUTOCAD

VECTORWORKS

RHINO 3D



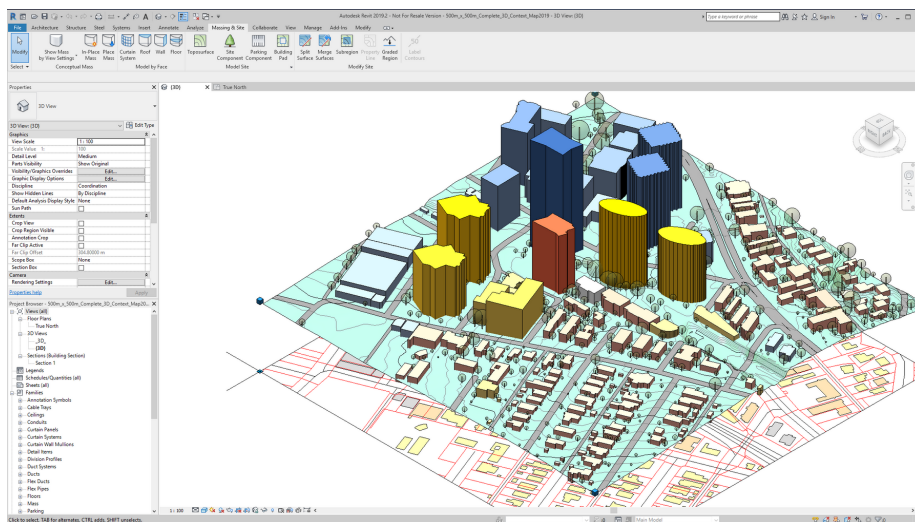
REVIT

ARCHICAD

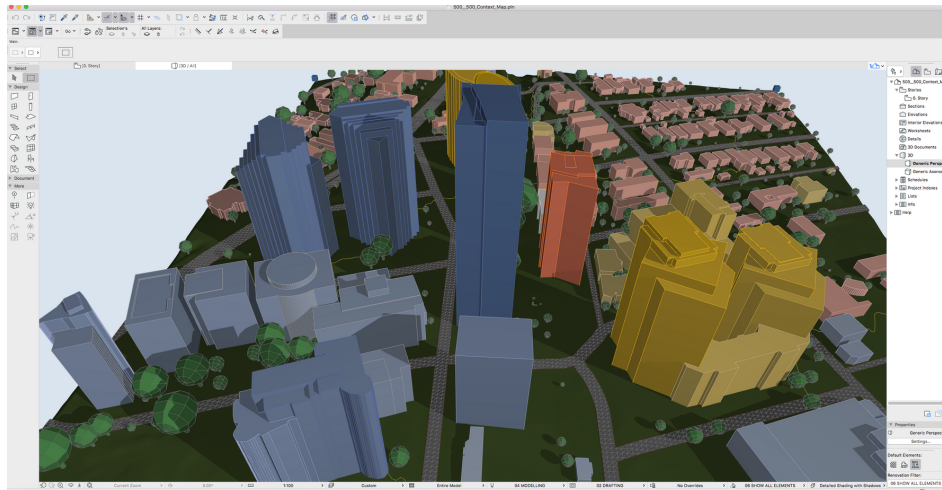
SKETCHUP

Optimised, native editable CAD elements. **Samples available now!**

## Revit Sample



## ArchiCAD Sample



# APPLICATIONS



**MODIFY AND  
INTEGRATE  
YOUR OWN SITE  
DESIGN EASILY**



**FIND OUT MORE  
DETAILS ABOUT  
YOUR SITE BEFORE  
VIEWING**



**JUMPSTART  
YOUR  
PROJECT  
DEVELOPMENT**



**TREE AND  
LANDSCAPE  
DATA**

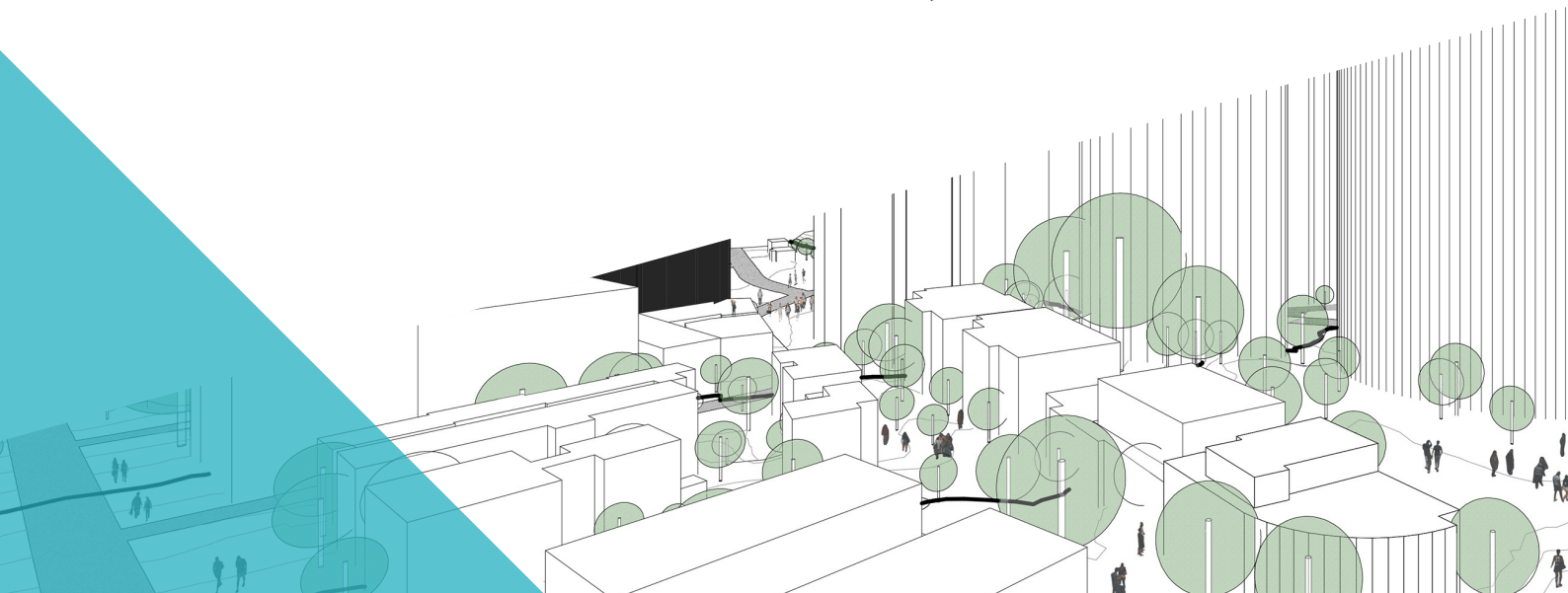
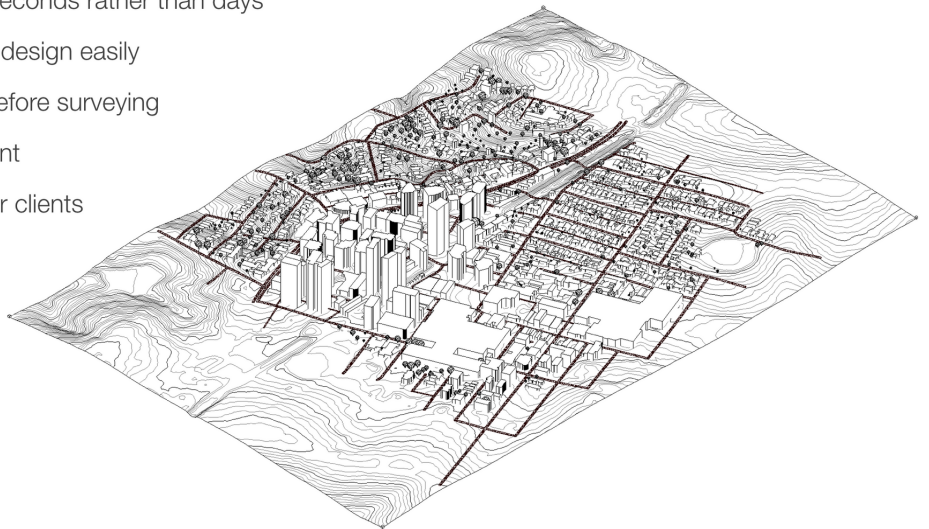


**PRESENTABLE 3D IMAGE  
TO SHOW TO  
YOUR CLIENTS**

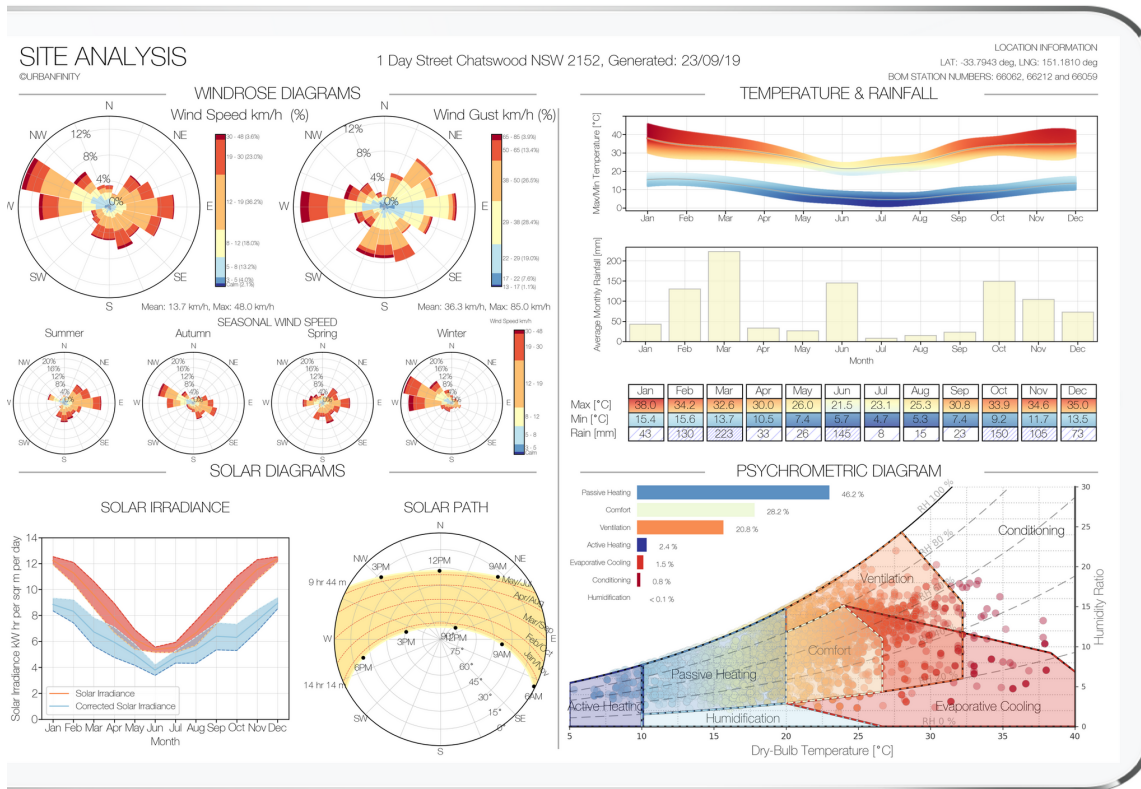


**DIRECT  
SUN  
POSITIONING**

- ✓ Build a base model of your site in seconds rather than days
- ✓ Modify and integrate your own site design easily
- ✓ Find out more details of your site before surveying
- ✓ Jump start your project development
- ✓ Presentable 3D image to show your clients
- ✓ Tree and landscape data
- ✓ Direct sun positioning
- ✓ Available to you within 1 - 3 days



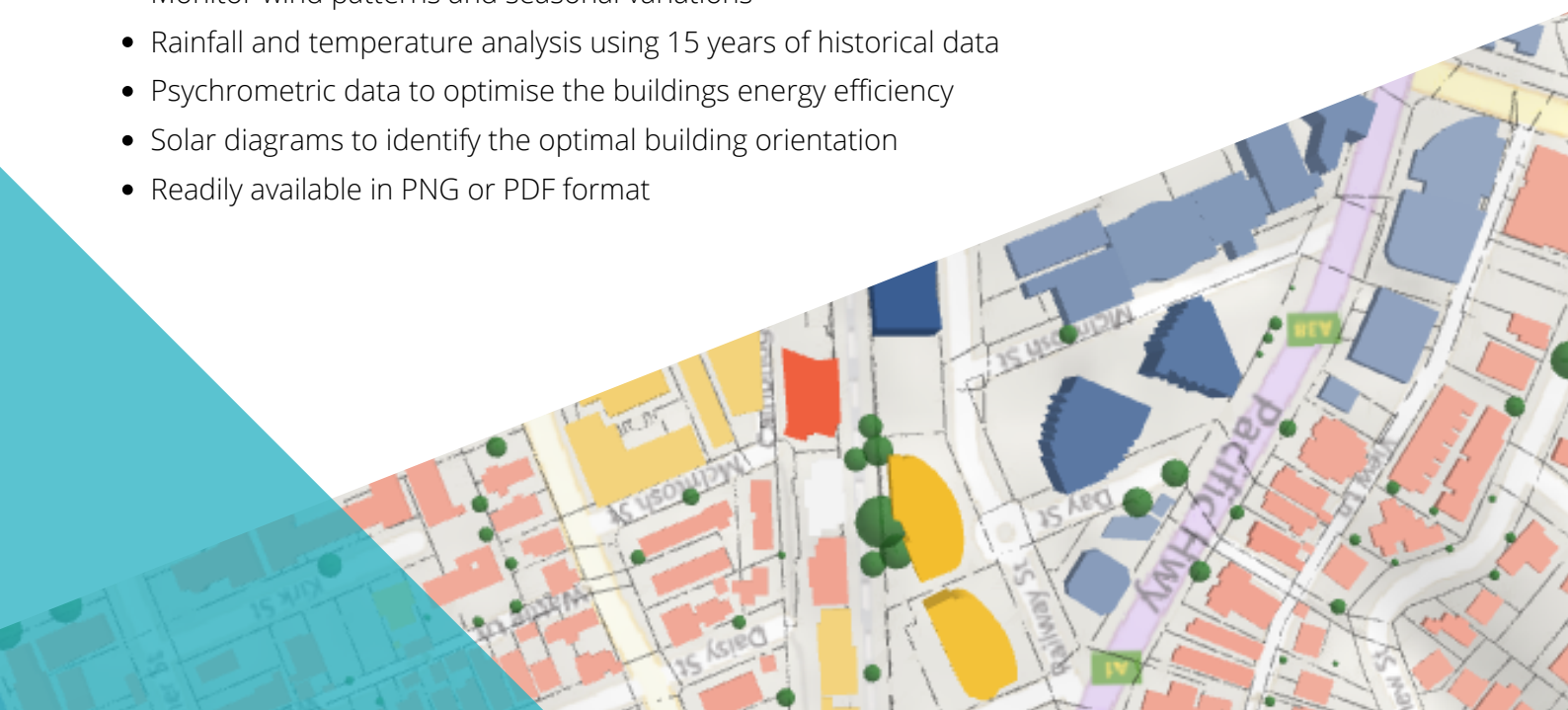
# SITE ANALYTICS



## Gain insights of weather patterns across Australia

Site Analysis machine learning tech is based on more than 600 weather station across Australia and provides you with the most accurate weather analysis to date.

- Monitor wind patterns and seasonal variations
- Rainfall and temperature analysis using 15 years of historical data
- Psychrometric data to optimise the buildings energy efficiency
- Solar diagrams to identify the optimal building orientation
- Readily available in PNG or PDF format



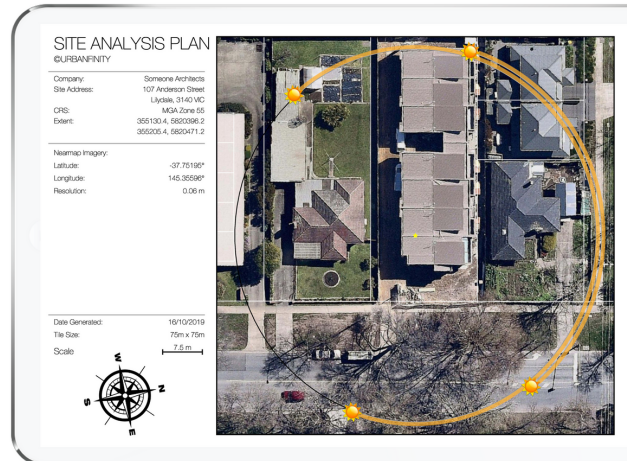
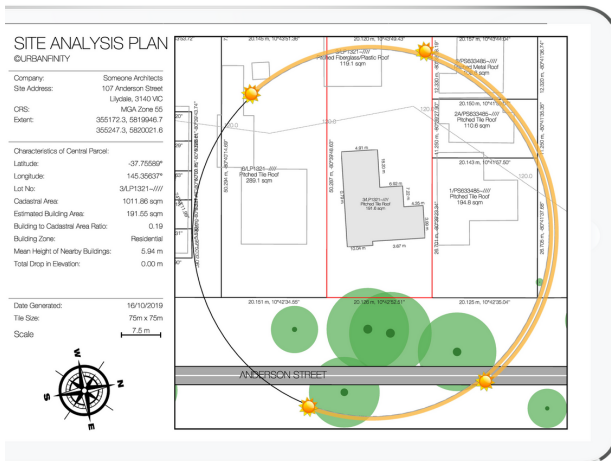
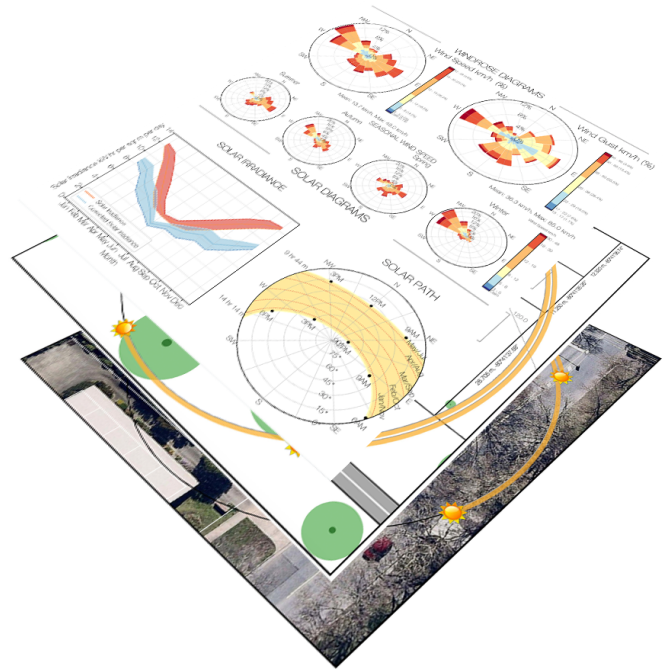


# SITE PLANS

## Gain Rapid Insight about your Site

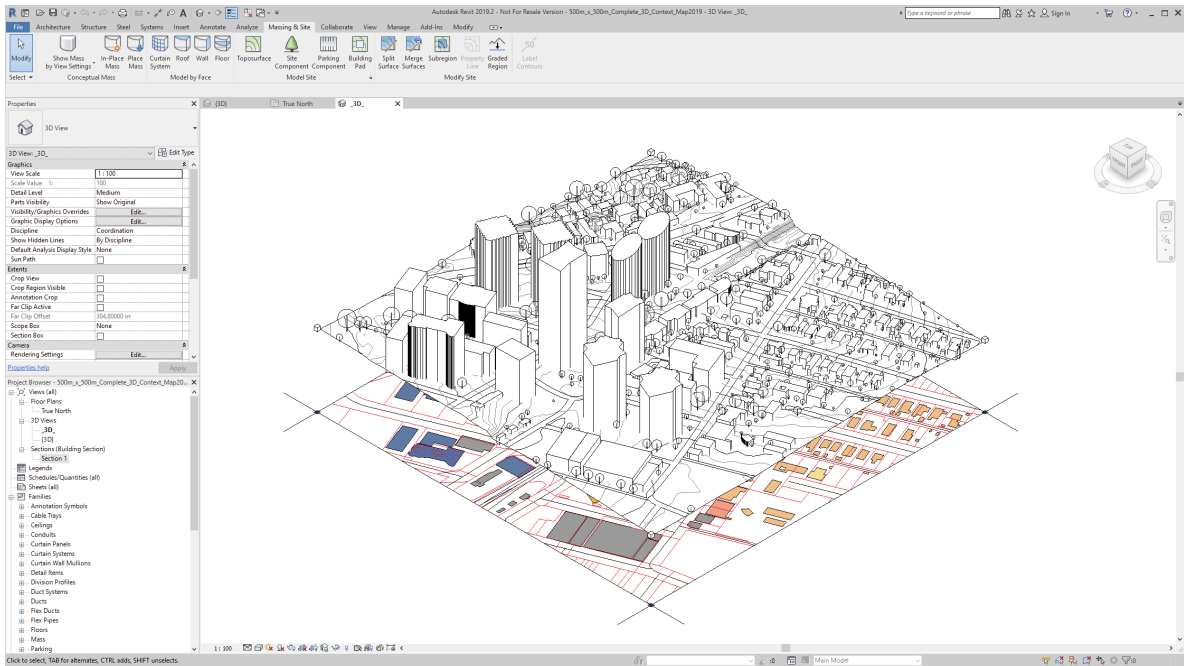
Create instant visual reports and implement the optimal design that respond to site specific environmental and physical features.

- Built Environment Specifications
- Cadastral Measurements and Angles
- High Resolution Nearmap Imagery
- Solar Path
- Instant Download

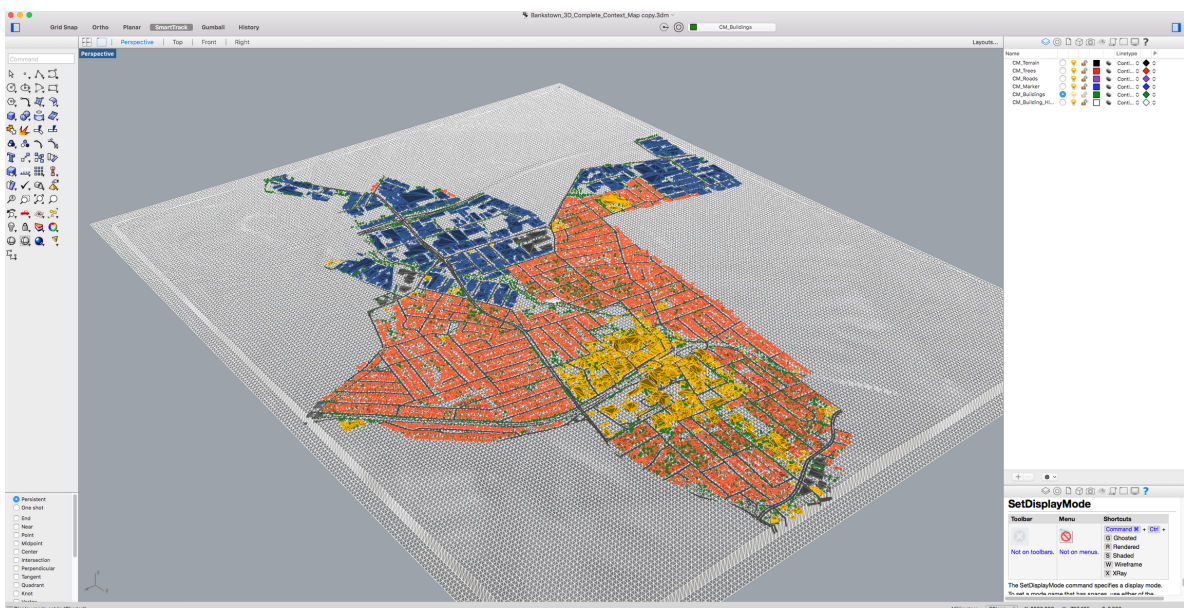


# DESIGNED FOR

## Architects: Context Models & Design Analysis



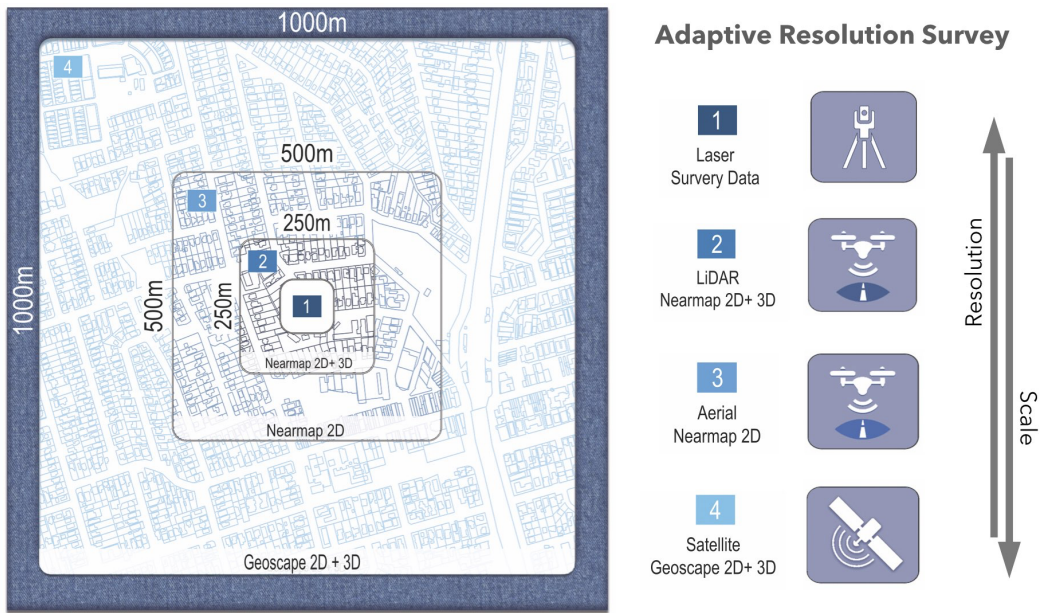
## Urban Planning: Development & Optimisation



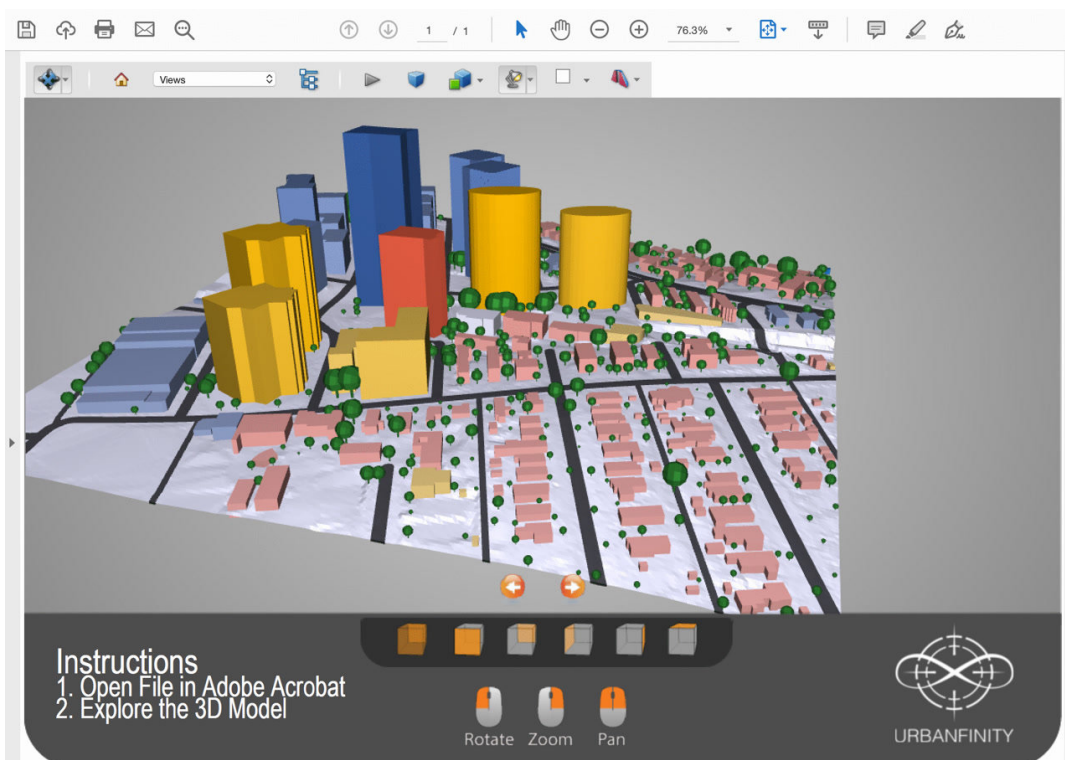


# DESIGNED FOR

## Site Survey Integration

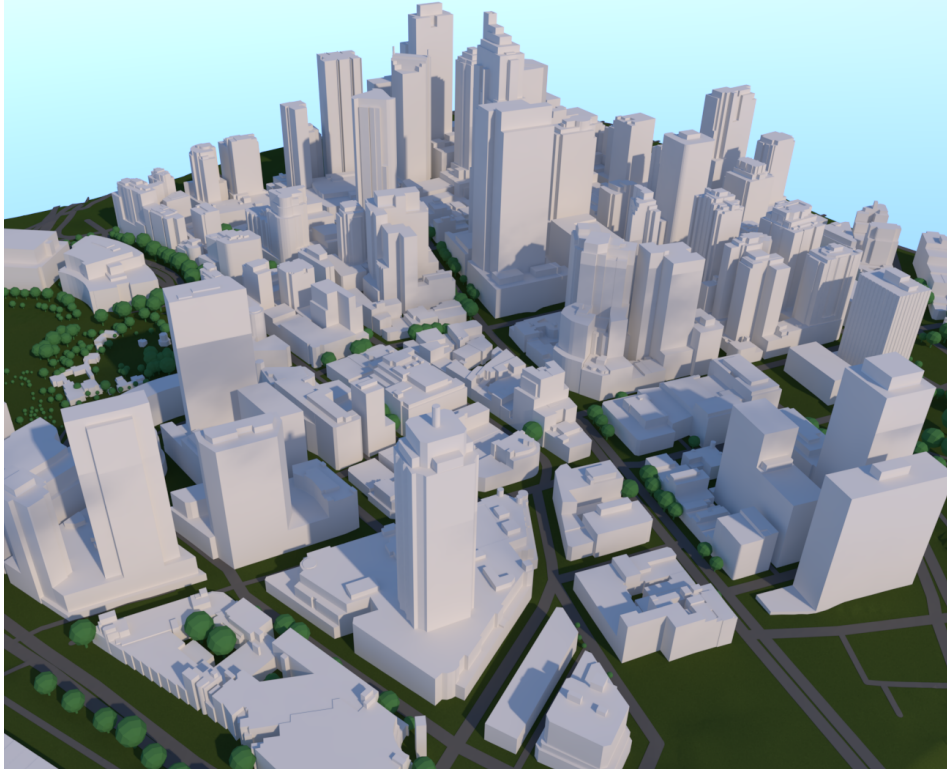


## Town Planners: Interactive 3D PDF Report



# EXAMPLE PORTFOLIO

Southern CBD, Sydney



Surry Hills, Sydney





# FEATURE SPECIFICATIONS

	3D	2D
Buildings	Enhanced Level of Detail	Zone Representation
	Height Visualisation	Building Position
	Zone Representation	Building Footprints
	Building Position	
Cadastre	Overlay	Lot Titles
		Lot Lengths
Vegetation	Native Tree Elements	Tree Position and Size
Zoning	Visual Colour based on Building Zone	Visual Colour based on Building Zone
Topography	Road Representation	Street Names
	Native Terrain Element	Road Cadastre
	Terrain Contours	Terrain Contours
		Hydrolines and Hydro Polygons

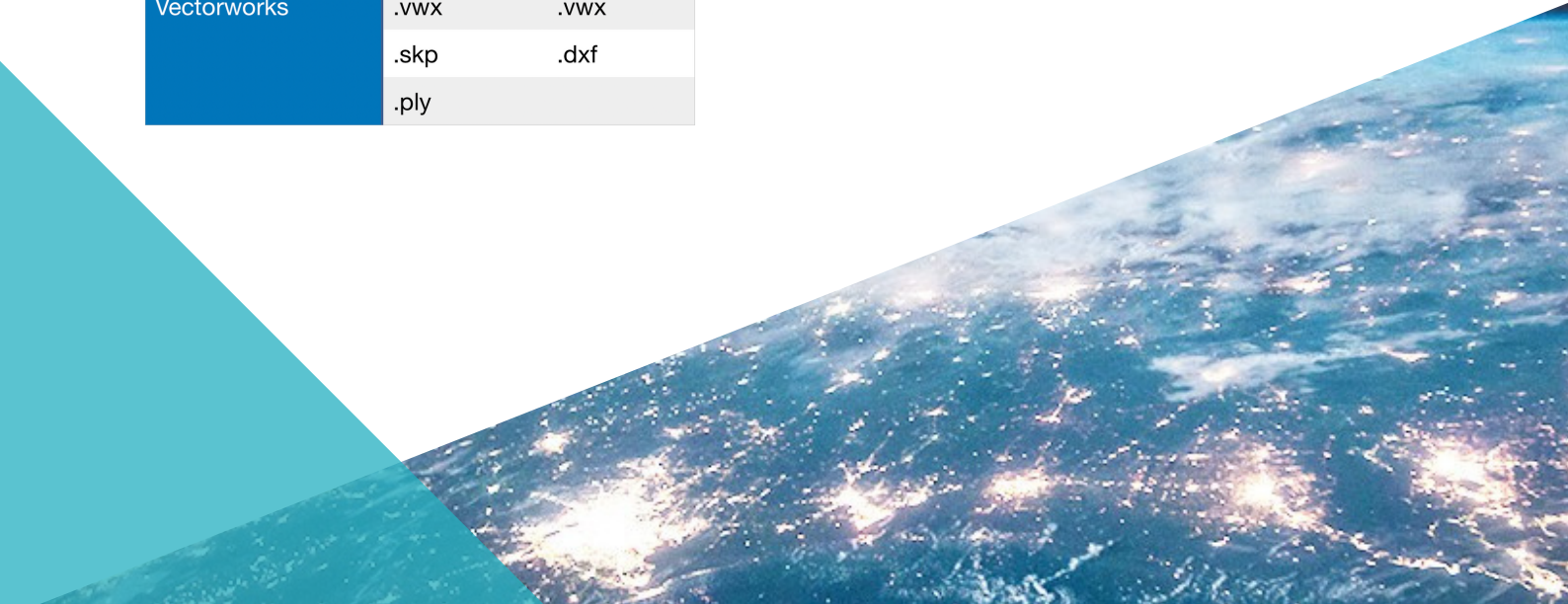


# DATA SPECIFICATIONS

Accuracy	3D Nearmap	2D Nearmap	Terrain
Ground sampling distance (GSD)	15cm	5.8-7.5cm (or better)	1m (where available), otherwise 5m
Absolute horizontal accuracy	28cm RMSE <sub>x/y</sub>	25.3-61.7cm RMSE <sub>x/y</sub> 11.5-15cm within one photo	45cm
Absolute vertical accuracy	40cm RMSE <sub>z</sub>		15cm
Georeference	GDA94/UTM; other possible on request		

Cad Format Availability		
	3D	2D
Archicad	.pln	.pln
	.3dm	.dxf
	.skp	
Revit	.rvt	.rvt
	.skp	.dxf
Autocad	.dwg	.dwg
		.dxf
Vectorworks	.vwx	.vwx
	.skp	.dxf
	.ply	

Context Maps are derived from multiple data sources with location dependent availability and accuracy. Urbanfinity applies detailed quality verification and completeness tests to achieve the best possible Context Map model for your site. However, Urbanfinity does not warrant a 100% feature completeness and multiple factors can contribute to the effective final accuracy of the Context Map model features.



# DISCLAIMER

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# CONTACT US

START WORKING WITH REAL-WORLD  
INSIGHT OF YOUR SITE TODAY.



**1300 429 205**



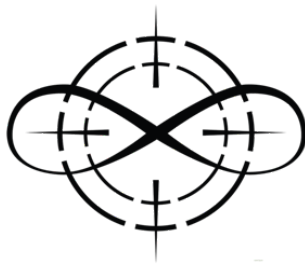
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**www.urbanfinity.com.au**

or order directly online:

**<https://contextmap.com.au>**



**URBANFINITY**  
BECAUSE INNOVATION  
HAS NO LIMITS.

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