

ReCap 360 Success Story

COMPANY

Atlas Engineering Group

LOCATION

Sydney, Australia

SOFTWARE

Autodesk® ReCap 360 Pro
Civil 3D, Plant 3D, Navisworks

WEBSITE

<http://atlasengineeringgroup.com.au/>

“Autodesk ReCap combined with other Autodesk 3D CAD packages have allowed us to work accurately in brownfield sites where existing information was out of date or not available. Project comprehension, stakeholder engagement and safety outcomes have all improved as a consequence. That saves everyone time and money”

— **Scott Rudram**
Director, Atlas Engineering Group

Project comprehension, stakeholder engagement and safety outcomes have all improved as a consequence.



Image courtesy of Atlas Engineering Group

Introduction

Atlas Engineering Group is an internationally accredited engineering design firm, delivering value throughout the design, construction and asset ownership phases of projects. Core capabilities are in brownfield design engineering, 3D scanning, building information model (BIM) modelling and long term asset strategies. Atlas Engineering's Water Group have partnered with John Holland, Lendlease and Sydney Water to provide engineering design and advisory services on an extensive program of upgrades, modifications and new works across Australia's largest water and waste water networks, treatment plants, reservoirs and pumping stations.

Technology Used

FARO Focus3D X 330 camera

- Over 60 complete scanned projects, larger projects consisting of 50+ laser scans.
- Each of these projects were processed using Autodesk Recap 360 Pro and shared with our team using Recap360.

Our point cloud uses vary from project to project.

- For reference and visualization, including clash detection using Navisworks
- Creation of Scan to As-Built 3D models and 2D drawings
- Design review tool and to collaborate with the team and our clients
- Used to augment our Safety in Design processes

Modelling tools,

- Plant 3D to manage and create any equipment, pipework and steel structures, including P&IDs
- Civil 3D to manage and create any surfaces, roads, pavements, stormwater and rising/gravity main designs.

Deliverables: Range from conceptual analysis and optioneering reports to Issued for Construction and As-Built engineering documentation.

Results

* Increased stakeholder buy-in through the use of visualization and fly-throughs created from point clouds and 3D models; operations and maintenance staff understand the proposed projects and provide valuable input to design decisions

* Increased design efficiency: using point clouds saved time for our engineers on site and reduces multiple site visits.

* Elimination of reliance upon inaccurate information: RECAP helps us create accurate as-built information where existing legacy information is poor quality, out of date or unavailable.

* Reduction of emergent work and cost to our clients': RECAP's ability to eliminate reliance on legacy information means less nasty surprises on site!