

Surveying





Surveying

The NSW Public Works surveying team plays an integral role in government infrastructure projects throughout NSW.

We undertake all types of land surveys and provide expert land titling and land subdivision strategy advice to support NSW Public Works project delivery.

To ensure efficiency and accuracy across all our projects we utilise the latest surveying, 3D scanning and aerial survey technology to capture the project environment for project planning, design and implementation.

We possess a strong team of Registered Surveyors to ensure all our surveys are carried out to best practice standards and can also procure locally based surveyors to ensure value for money is achieved for our government clients.

John Anderson

0412 393 480

john.anderson@pwa.nsw.gov.au

Jarad Cannings

0418 208 985

jarad.cannings@pwa.nsw.gov.au

Our expertise

NSW Public Works provides a comprehensive range of **surveying, property and spatial information** products and services tailored to Local and State government asset and **infrastructure** projects.



- Control surveys & least squares data analysis
- Topographic & mapping surveys
- Spatial asset data capture & analysis
- Land & easement acquisition
- Aerial surveys using Remotely Piloted Aircraft (RPA)
- Utility service & property investigations
- Digital terrain modelling & volumes
- Laser scanning & point cloud data modelling
- CAD drafting & GIS products
- Precision surveys & dam monitoring
- Consultant engagement

Dam monitoring

Nominated dams within NSW require regular deformation surveys under the Dams Safety Regulation 2019 to ensure the dam wall and its associated components are stable and secure. NSW Public Works has a long history of undertaking deformation surveys over critical dam assets on behalf of local and state government based agencies. A typical dam survey network will consist of a combination of concrete pillars, steel survey instrument plates and settlement pins placed strategically around the dam and surrounds to



Laser scanning

We provide Terrestrial Laser Scanning (TLS) services to accurately capture 3D information on both natural and built environments. TLS offers the benefits of rapid and safe data capture where traditional survey techniques may not be suitable. The captured 'point cloud' containing millions of surveyed points can be used multiple times over in a CAD environment to integrate, measure and model the 3D data. Valuable outputs can be produced to inform project decisions and design such as volume calculations, building footprints, facade elevations, reality modelling, walk through and other visualisation products.



Drone - Remote Piloted Aerial Systems

Remote Piloted Aerial Systems or commonly known as drones provide the opportunity to source aerial imagery and video for inspections and asset management. Drones allow imagery and measurements to be gained in areas which may not be accessible or safe for a person to physically access. With the use of photogrammetric techniques and incorporation of a LIDAR scanner, 3D models of the real world can be created. Our surveyors are licensed remote pilots and will ensure that all flights are carried out safely and in accordance with current CASA regulations. With our expertise, we can provide final products such as orthophotos, oblique images, videos, textured 3D meshes, and point clouds.



Cadastral surveys

Land titling is a critical part of all infrastructure projects. Matters typically encountered are the acquisition of land and easements for infrastructure and services, creation of rights of access and carriageways, leasing of property, subdivision, consolidations and boundary adjustments, road opening and closing, dealing with old system titled and limit titled land, and many more.

Our Registered Surveyors with their wide expertise and experience can assist with all these matters, including carrying out of boundary surveys and preparation of plans, preparation of easement instruments, gaining of approvals from various agencies, and lodging of documentation with NSW Land Registry Services for registration and issuing of titles via their electronic portal. From big to small, our team will ensure to provide cost effective and efficient solutions to your land titling needs.



Port Botany expansion

NSW Ports required the development and establishment of a major survey control network utilising least squares analysis, static GNSS, and precision total station observations to collect high precision survey data on more than 1000 monitoring marks at the new port terminal.

High-end survey data analysis and quality reporting supports further analysis by structural engineers. Monitoring continues at the site.



Wyangala sewerage

NSW Public Works completed survey and design of a gravity sewer scheme for Wyangala Village. Our Registered Surveyors completed land and easement acquisition surveys and plans.

Our Infrastructure Property team are completing the acquisition of land and easements for power and sewerage infrastructure via negotiation and the compulsory process pursuant to the Land Acquisition (Just Terms Compensation) Act 1991.



Why choose NSW Public Works?



**Accredited
for planning
and delivery of
capital works**

NSW Public Works is accredited under the NSW Government Agency Accreditation Scheme for Construction to manage the planning and delivery phases of construction and capital works procurement. NSW State and Local Government entities can directly engage the services of NSW Public Works under the provision of NSW Government Procurement Board Direction PBD 2020-04 and Section 55 of the Local Government Act 1993, providing efficiencies and cost savings.



**Strong focus
on quality,
environmental
and safety
management**

NSW Public Works operates under triple certification for quality, occupational health and safety (WHS) and environmental (QSE) management systems. These systems and processes provide the foundation for delivering quality projects and a continuous improvement culture, that embraces QSE leadership at all levels and integrates QSE into all activities. NSW Public Works' Project Management Framework is the backbone of our quality system and is used to manage our projects and ensure we deliver to agreed requirements.



**State-wide
resources**

Regional clients benefit from our state-wide network of offices enabling them to source expert project management personnel familiar with the conditions and construction industry issues in their area. This proximity reduces servicing costs, facilitates improved stakeholder communications and enables us to respond quickly to your needs, providing a single point of contact for all services.



**Government
relationships
and knowledge**

Successful delivery of complex infrastructure projects relies on effective interaction with stakeholders and regulatory government agencies. NSW Public Works' unique position within NSW Government enables us to bridge the gap between our clients and Government stakeholders to ensure necessary consultations and approvals are undertaken efficiently and effectively.



Managed risks

We place considerable emphasis on advising clients of their risks on projects, including the options and costs to manage these risks. Wherever possible, risks are identified early and inform our planning and procurement strategy development processes. Risks are continuously monitored and updated as projects progress and discussed and managed with clients and contractors.

Working across NSW

HUNTER NEW ENGLAND REGION

Newcastle
117 Bull Street
Newcastle West NSW 2302

Tamworth
155-157 Marius Street
Tamworth NSW 2340

Inverell
240 Byron St
Inverell NSW 2360

Armidale
85 Faulkner St
Armidale NSW 2350

NORTH COAST REGION

Lismore
120 Dally Street
Lismore NSW 2480

Coffs Harbour
359 Harbour Drive
Coffs Harbour NSW 2450

Port Macquarie
Level 2, 41-47 Horton Street
Port Macquarie NSW 2444

SYDNEY METRO REGION

Parramatta
4 Parramatta Square
12 Darcy Street
Parramatta NSW 2150

The Rocks
66 Harrington Street
Sydney NSW 2000

SOUTH COAST REGION

Wollongong
Level 3, Block E
84 Crown Street
Wollongong NSW 2500

Goulburn
Suite 5, 167 Auburn Street
Goulburn NSW 2580

Moruya
66 Campbell Street
Moruya NSW 2537

Queanbeyan
Ground Floor East
11 Farrer Place
Queanbeyan 2620

Nowra
5 O'Keefe Avenue
Nowra NSW 254

RIVERINA/WESTERN REGION

Bathurst
Level 1, 346 Panorama Avenue
Bathurst NSW 2795

Dubbo
34 White Street
Dubbo NSW 2830

Broken Hill
Level 1, 32 Sulphide Street
Broken Hill NSW 2880

Griffith
104 - 110 Banna Avenue
Griffith NSW 2680

Wagga Wagga
2-6 Coleman Street
Wagga Wagga NSW 2650

Dareton
1998 Silver City Highway
Dareton NSW 2717



T 1300 00 88 88

E publicworks@pwa.nsw.gov.au