

# Sustainable asset management







John Hunter Hospital, which formed part of a NSWPW asset management maturity exercise.

## Sustainable asset management

NSW Public Works' (NSWPW) asset management plans, frameworks and systems assist you to clearly define and report on your assets.

Our Sustainable Asset Management team are experts in developing best practice strategies, plans and actions that guide you to meet your organisational objectives. We use a flexible approach and tailored reporting for you to achieve your specific goals whilst meeting asset data standards.

As a government agency, we are in a unique position to assess government and community infrastructure assets.

Our working knowledge of the regulatory requirements across state and local government agencies and authorities makes us an ideal partner.

We support you through asset planning, construction, maintenance, disposal or renewal to achieve an optimal life cycle for your assets.

By doing this, we help you to achieve long-term sustainable asset management practices that maximise returns on asset investments.

### Helen Carroll

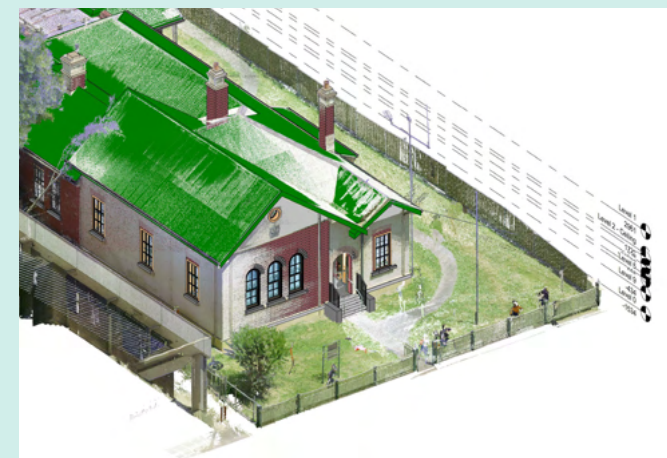
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## Our expertise

Our Sustainable Asset Management team specialises in flexible systematic processes that support **sustainable** and **cost-effective** asset management planning and operational performance.

We assess each specific project requirements and develop tailored **strategic** and **tactical** asset plans. These plans allow you to deliver best asset management practices that align with your organisations objectives.

- Asset management maturity assessment.
- Asset management maturity journey improvement plans.
- Strategic asset management plans.
- Asset management plans.
- Development of Asset Registers.
- Asset data validation and optimisation.
- Development of asset management framework.
- Asset management sustainability management.
- Maintenance planning and optimisation.
- Asset condition assessment surveys and risk analysis.
- Repair and maintenance estimations.
- Integrated operational asset management plans.
- Integrated asset management financial plans.
- Long term asset planning and life cycle cost analysis.
- Project management of asset management tasks and specialists.
- Capital works prioritisation planning.
- Specialist asset management class management such as heritage and data.
- GIS mapping and spatial data integration.



3D model of Barraba Court House, enabling efficient maintenance of asset.



# Core asset management services

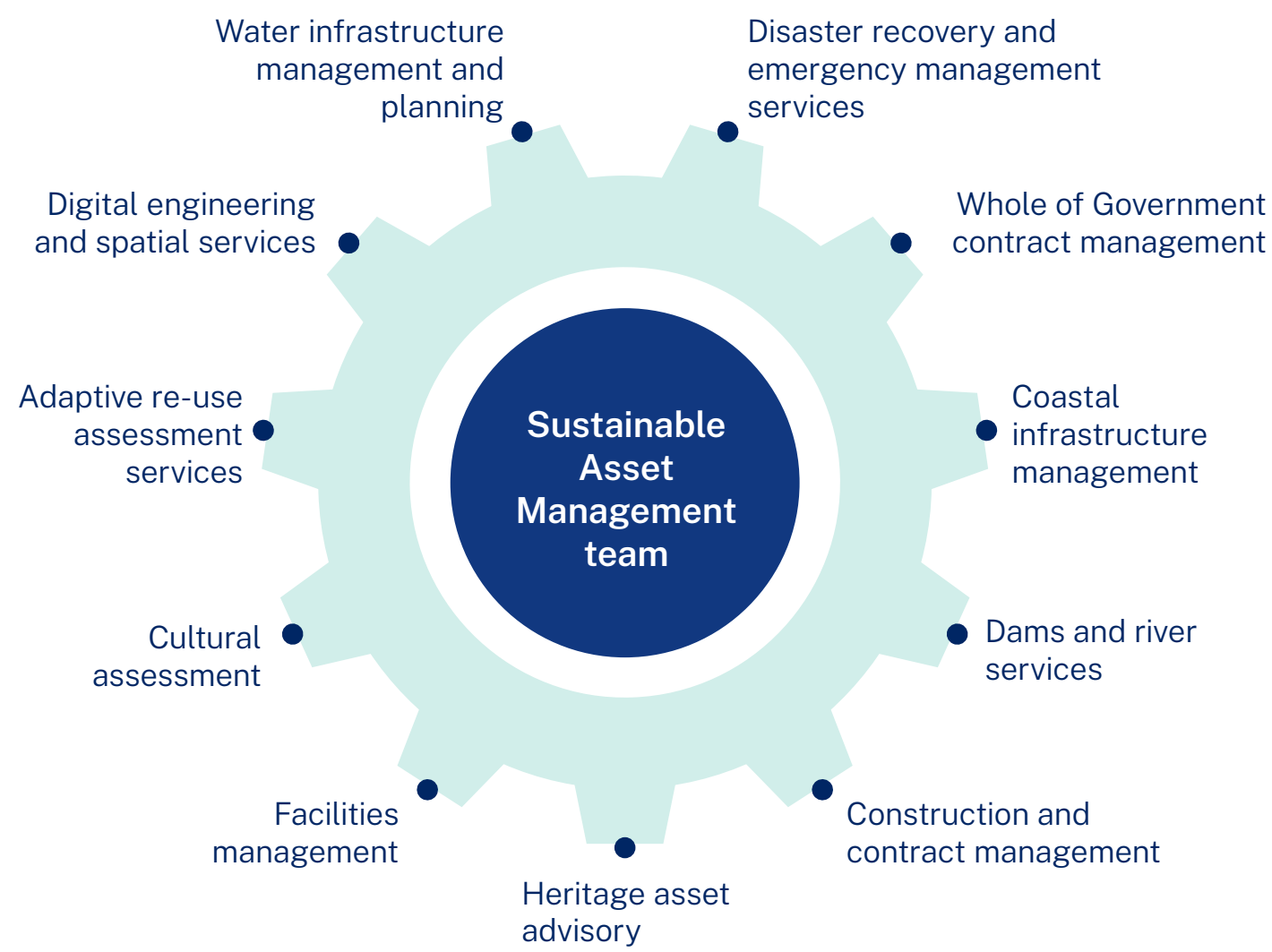
<div>1</div> <div>Asset management maturity assessments</div>	<div><b>Evaluation framework:</b></div> <div>utilises structured criteria to evaluate an organisation's current proficiency.</div>	<div><b>Benchmarking:</b></div> <div>against industry best practices or established standards to identify gaps and areas for improvement.</div>	<div><b>Scalability and sustainability:</b></div> <div>assesses ability to scale practices, ensuring sustainability outcomes are met.</div>	<div><b>Improvements plan:</b></div> <div>identifies development areas and timelines.</div>	<div><b>Roadmap for growth:</b></div> <div>maps the advancement of maturity and asset management practices, improving effectiveness.</div>
<div>2</div> <div>Strategic asset management plans (SAMP)</div>	<div><b>Strategy:</b></div> <div>outlines the path for managing an organisation's assets over an extended period including improvements.</div>	<div><b>Resource optimisation:</b></div> <div>driving performance of assets while minimising risks and costs.</div>	<div><b>Lifecycle:</b></div> <div>considers lifespan, from acquisition to disposal, maintenance, upgrades, and replacements.</div>	<div><b>Risk management:</b></div> <div>identifies and addresses potential risks ensuring resilience and continuity.</div>	<div><b>Alignment with organisational goals:</b></div> <div>aligns with objectives and priorities of the organisation to enhance strategic outcomes.</div>
<div>3</div> <div>Asset management plans (AMP)</div>	<div><b>Tactical:</b></div> <div>describes the practical plans for managing assets, including improvements.</div>	<div><b>Resource allocation:</b></div> <div>details the allocation of resources.</div>	<div><b>Performance metrics and KPIs:</b></div> <div>establishes key performance indicators (KPIs) and metrics to measure effectiveness in real-time.</div>	<div><b>Financial control:</b></div> <div>budgets detailed by asset class and amalgamation into primary data.</div>	<div><b>Compliance and regulatory:</b></div> <div>outlines protocols to ensure that practices align with treasury and industry standards, regulations, and compliance requirements.</div>
<div>4</div> <div>Condition assessment surveys</div>	<div><b>Inspection and data collection:</b></div> <div>inspection and cataloguing of asset data, capturing asset elements, performance, defects and hazards.</div>	<div><b>Objective evaluation:</b></div> <div>assessment using standardised criteria, capturing rating and descriptive data.</div>	<div><b>Servicing:</b></div> <div>identifies maintenance and repairs, prioritising actions to extend lifespan and optimise performance.</div>	<div><b>Asset planning:</b></div> <div>provides data for development of maintenance, upgrade and replacement plans, budgets and management strategies.</div>	<div><b>Valuations:</b></div> <div>supporting data for the appraisal of assets based on current state and potential performance.</div>
<div>5</div> <div>Repair and maintenance estimates</div>	<div><b>Accurate cost projections:</b></div> <div>allows for the estimation of repair costs and more accurate budgeting.</div>	<div><b>Prioritisation of repairs:</b></div> <div>repair plans based on urgency and severity of the identified issues.</div>	<div><b>Informed decision-making:</b></div> <div>provides valuable data to make informed choices and enables strategic planning and budgeting.</div>	<div><b>Optimised lifecycle management:</b></div> <div>supports a proactive approach, potentially extending lifespans and reduces emergency costs.</div>	<div><b>Enhanced safety and compliance:</b></div> <div>ensures compliance with safety regulations and minimises risks.</div>



# A gateway to a broad range of expert services

Our sustainable asset management services can serve as a central access point to connect clients to different NSWPW services.

As asset management work progresses, clients often require assistance in other areas, identified through our comprehensive assessments. Our service can act as a gateway, providing assurance and ease by directly linking clients to the broader network of expert NSWPW teams and resources.





# Planning maintenance and repair liability of National Parks and Wildlife Services’ heritage assets

**Client:** National Parks and Wildlife Services (NPWS), Historic Heritage, Aboriginal Partnerships, Planning and Heritage Branch

**Location:** Statewide

**Services provided:** Data review, prioritisation, assessment and liability methodologies, inspection checklists and estimation models.

NSWPW, in partnership with Heritage NSW, developed specialised methodologies for assessing 3,670 NPWS assets listed on State, National and World Heritage Registers. As part of the project, NSWPW analysed diverse heritage elements including buildings, works and relics of historical, cultural and architectural significance, adapting processes to account for varying asset types, conditions and locations, while complying with statutory obligations.

A comprehensive model was created for repair estimates, ongoing maintenance costs and a predictive dilapidation model to assess future liabilities.

The final report outlined the methodologies, inspection procedures, bespoke integrity and condition ratings, an inspection checklist framework and maintenance plan.

The project is expected to provide NPWS with a detailed, actionable suite of methods for assessing its heritage asset liabilities.



Examples of NPWS’s diverse assets. Above, from top: Goat Island Complex and Smoky Cape Lighthouse.

# Asset Management Maturity Assessment for Muswellbrook Shire Council

**Client:** Muswellbrook Shire Council (MSC)

**Location:** Muswellbrook

**Services provided:** Asset management maturity assessment and detailed report.

MSC improved its asset management framework using the Asset Management Maturity Assessment (AMMA) tool, developed by NSWPW. This tool, tailored for resource-limited councils, enabled MSC to evaluate its asset management maturity across key functions.

With NSWPW’s guidance, MSC’s asset owners and stakeholders completed the assessment in a single day. NSWPW then provided a detailed report that included maturity scores, summaries and a comprehensive improvement plan.

The assessment process aligns with the NSW Integrated Planning & Reporting (IP&R) framework and ISO 55000 standards, which support better decision-making and sustainability.

The asset maturity assessment is expected to improve MSC’s planning and overall service delivery.



Examples of MSC’s extensive assets. Above, from top: Hunter Beach and Williams Bridge.

# Capital Works Prioritisation Tool for City of Canterbury Bankstown

**Client:** City of Canterbury Bankstown (CBCity)

**Location:** Canterbury and Bankstown

**Services provided:** Capital works investment prioritisation tool and guidelines.

NSWPW partnered with CBCity to develop a practical and transparent tool for evaluating and prioritising capital works investments. This tool, tailored to the council’s requirements, assesses projects across four asset portfolios, ranking them for inclusion in the annual work program for tier two and three new and renewal projects. It considers urgency, strategic fit, risk, safety compliance and service levels.

The tool collects both quantitative and qualitative responses, resulting in a prioritisation output sheet with ranked projects, ensuring transparency and objective decision-making.

Developed with best industry practices, it supports CBCity in making informed decisions, allocating resources effectively, and delivering safe, functional assets that meet community needs.



Examples of CBCity’s assets. Above, from top: Bankstown Library and Knowledge Centre, and Canterbury Leisure and Aquatic Centre, a project that NSWPW is helping to deliver.

# Urban water asset management plan for Ballina Shire Council

**Client:** Ballina Shire Council (BSC)

**Location:** Ballina

**Services provided:** Asset management plan for urban water.

Ballina Shire Council engaged NSWPW to develop a ten-year Urban Water Asset Management Plan integrated into their strategic planning documents.

The Plan aligns with the Regulatory and Assurance Framework for water utilities, promoting best practice in integrated water cycle management.

In collaboration with the council’s asset managers, NSWPW documented the required activities and resources to provide safe, reliable and efficient water and wastewater services to the community. The plan, written in clear, straightforward language, summarises current practices, service levels, required resources and an improvement strategy, in an accessible format.

This plan will help to ensure the long-term sustainability and compliance of Ballina Shire’s water and wastewater services.



Ballina Heights Reservoir, a project that NSWPW helped to design and deliver.



# Crown Lands Asset Management Maturity Program

**Client:** NSW Crown Lands

**Location:** Statewide

**Services provided:** Building condition assessments, data collection, digital mapping of assets, preparation of repair and maintenance forecasting, strategic asset development, asset management plans per region and asset class.

**Project summary:**

In 2022/2023, NSW Public Works (NSWPW) conducted condition assessments on more than 550 built assets for NSW Crown Lands. A flexible scope empowered assessors to plan access, with NSWPW enabling system adjustments based on discoveries during assessments. Project plans were effectively communicated to regional NSW Crown Lands teams and building occupants. Geographic areas were segmented into regions for efficiency, with adaptable planning accommodating the dynamic operational requirements of the active estate.



Barraba Court House.

**Key projects components:**

Assessing building conditions to identify risk and repair costs

NSWPW completed condition reports using our surveying system, which collects data and collates photographs via a frontend application, bespoke for each project. A financial risk is estimated for repair or replacement. Specific hazards are also noted in the report to aid safe and continued operation.

Collecting maintainable asset data to develop asset maintenance schedules

In line with ISO41000 (Facilities Management System Standards), data was collected to input into a management system that will allow planning and execution of maintenance and provide proper record keeping.

Forecast maintenance based on collected asset data

Maintainable systems and components data allows for maintenance schedules to be prepared, both for statutory maintenance requirement and planned maintenance, based upon the manufacturer's guidelines and industry best practices.

Strategic development plans for specific building assets with potential community benefits

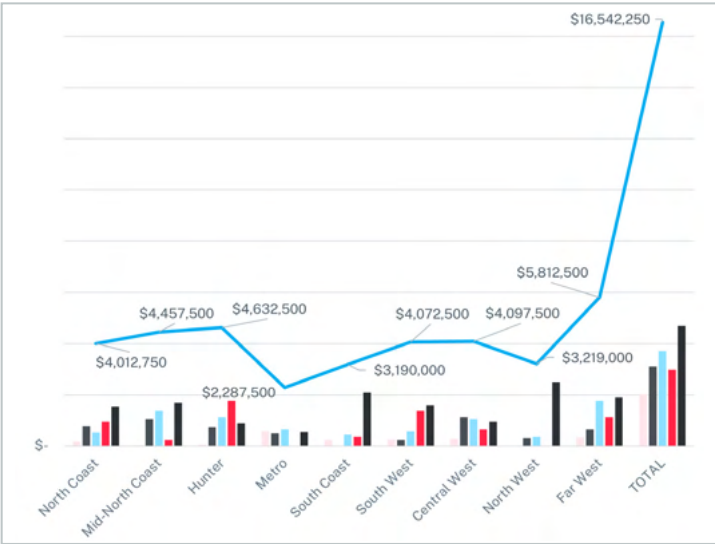
As part of the discovery process, specific sites were identified for potential development. NSW Crown Lands engaged NSWPW to develop plans for such sites with a key focus on the benefit for the local community.

Production of the asset management plan's (AMP's) per region and asset class

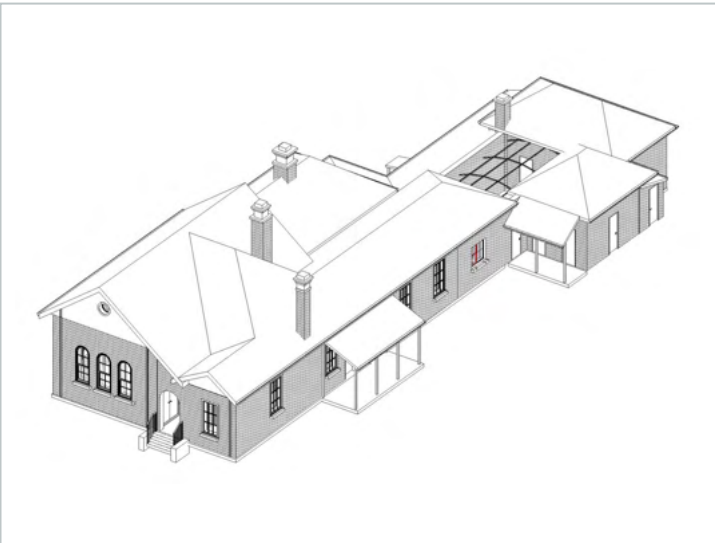
NSW Crown Lands engaged NSWPW to produce asset class and regional asset management plans, with the data from the condition assessments underpinning part of the plans.

Digital capture and mapping producing technical drawings of building assets

A specific site was designated for development and was selected for 3D and 2D mapping utilising NSWPW's specialist cameras and scanning equipment. The 2D and 3D technology scans both internally and externally and creates floor plans and plans of the fascia of the building.



Example of a total CapEx expenditure chart. All figures used are for example purposes only and do not reflect actual data.



Barraba Court House documentation.



# Hunter New England Local Health District asset management journey

**Client:** Hunter New England Local Health District (HNELHD)

**Location:** Hunter New England region

**Services provided:** Asset management maturity assessment and analysis, strategic asset management plan and asset management plans.

In partnership with Health Infrastructure, NSWPW undertook an asset management maturity exercise across HNELHD. Working together, a robust scoring system and improvement plan was produced that linked directly to the strategic asset management plan (SAMP) and asset management plan (AMP). NSWPW composed the SAMP and AMP on behalf of HNELHD, in collaboration with both client teams from HNELHD and Health Infrastructure who ensured the consistency across the LHD's using our final copies.



John Hunter Hospital, which formed part of a NSWPW asset management maturity exercise.

# Armidale Regional Council's asset management plans

**Client:** Armidale Regional Council

**Location:** Armidale

**Services provided:** Multiple asset management plans, per asset class, asset maturity assessment analysis.

NSWPW undertook an asset management maturity exercise across all departments of Armidale Regional Council. Analysis was undertaken concurrently to determine the quality of information, including consistency of financial reporting.

On completion, an overall assessment of council policies, key strategic documents and departmental operational information was undertaken. NSWPW then developed the strategic asset management plan (SAMP) and several asset management plan's (AMP's) per asset class, using the preferred National Asset Management Strategy (NAMS+) templates, supporting council's asset management objectives.



# Strategic asset management plan for Broken Hill hospital

**Client:** Far West Local Health District (FWLHD)

**Location:** Broken Hill

**Services provided:** Asset management maturity assessment, strategic asset management plan and asset management plans, asset maturity assessment analysis

As a Health entity, FWLHD needed to invest in flexible infrastructure that supports patient care. NSWPW reviewed asset management practices and processes including consultation, interrogation of data, and collaboration with the Broken Hill Hospital team. As a result, a number of improvement recommendations were made to address the FWLHD's objectives and implemented in the tactical asset management plan.



Broken Hill Community Health Centre.



# 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 2021-04 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 Dalley 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**  
257 Crawford Street  
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**  
4 Coleman Street  
Wagga Wagga NSW 2650

**Dareton**  
1998 Silver City Highway  
Dareton NSW 2717





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